MAgPIE run analysis

Aperture Science Enrichment Center

May 29, 2018

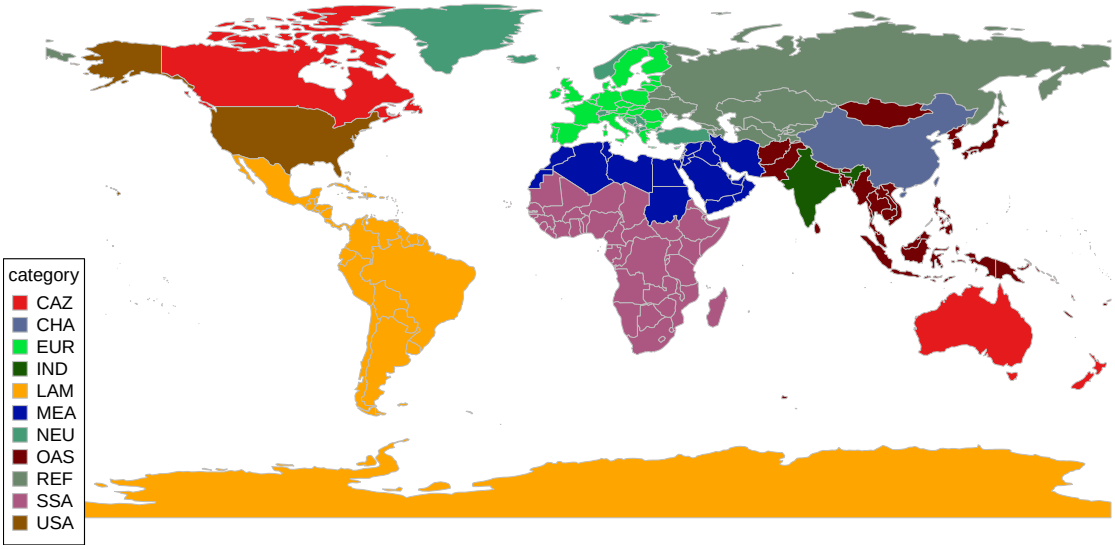
Contents

Part I
Warnings

```
## Warning message:
## Installed Rcpp (0.12.17) different from Rcpp used to build dplyr (0.12.11).
## Please reinstall dplyr to avoid random crashes or undefined behavior.
```

Part II
Basics

0.1 World regions



0.2 Modelstat

Table 1: main

	GLO
y1995	2.00
y2005	2.00
y2010	2.00
y2015	2.00
y2020	2.00
y2025	2.00
y2030	2.00
y2035	2.00
y2040	2.00
y2045	2.00
y2050	2.00
y2055	2.00
y2060	2.00
y2070	2.00
y2080	2.00
y2090	2.00
y2100	2.00

0.3 Food Modelstat

Table 2: main

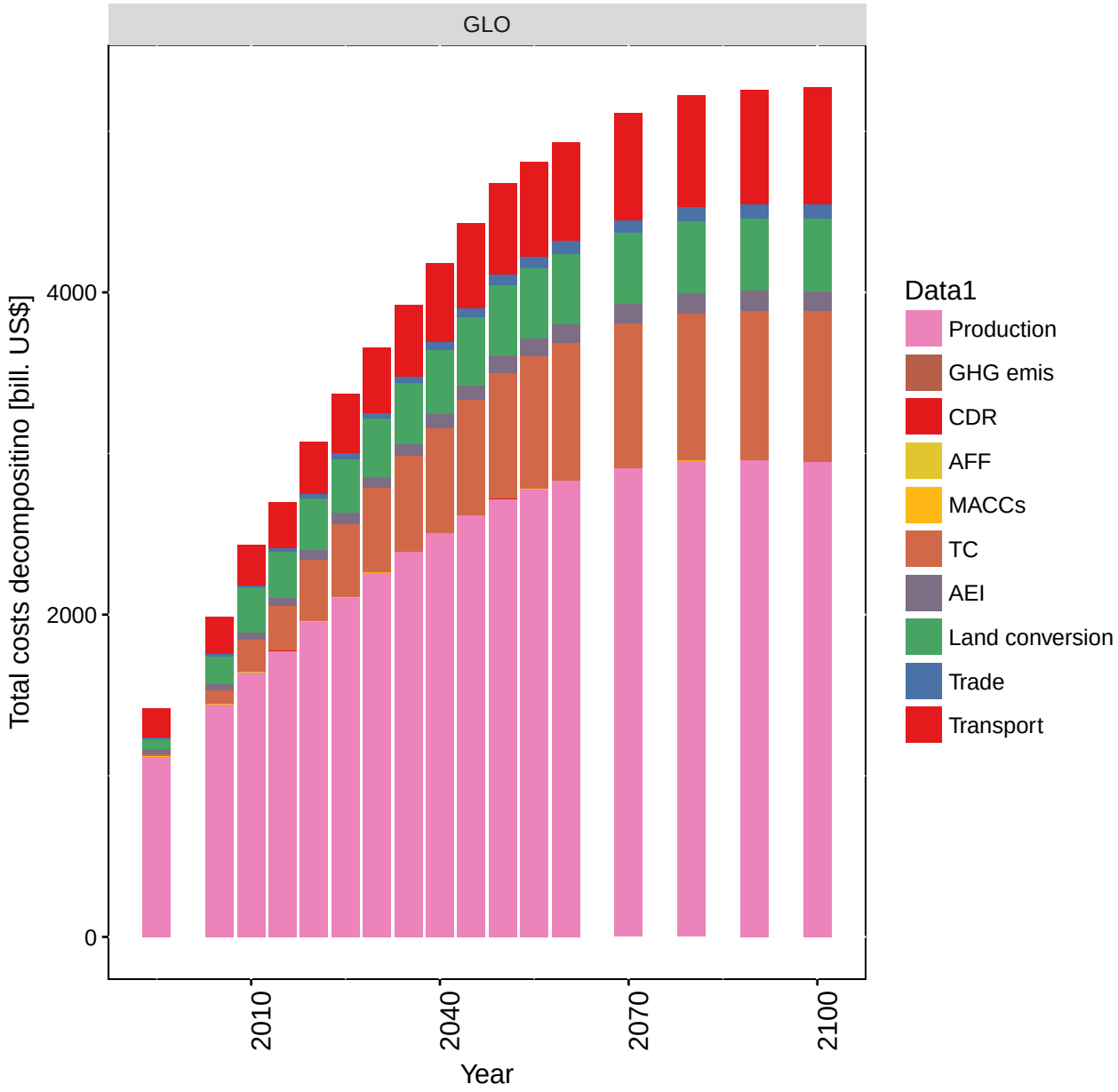
	y1995	y2005	y2010	y2015	y2020	y2025	y2030	y2035	y2040	y2045	y2050
convergence (limit = 0.05)	0.04	0.03	0.04	0.02	0.01	0.02	0.02	0.01	0.02	0.01	0.01
iterations (limit = 5)	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

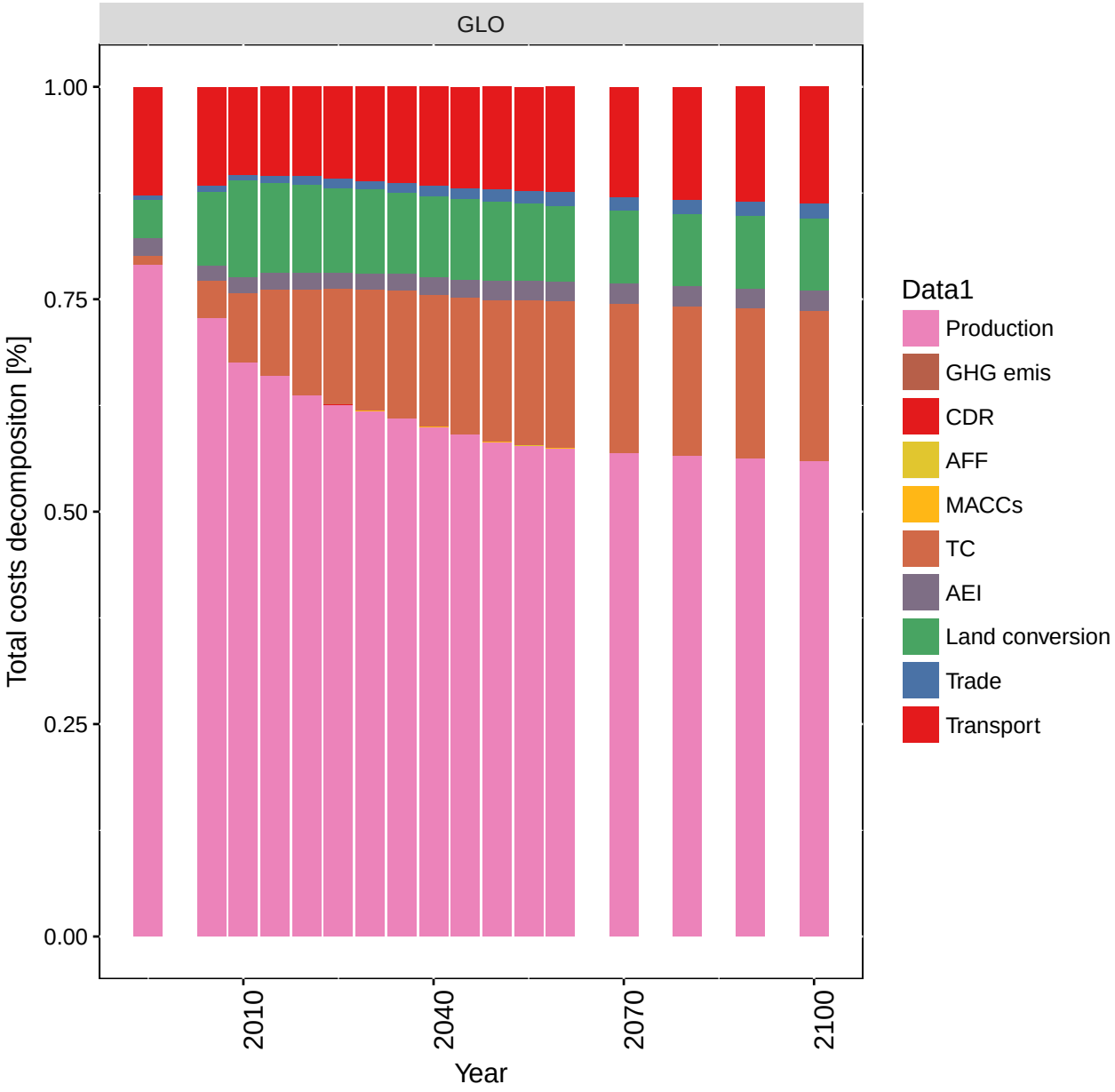
0.4 Goal function value

Table 3: Global costs (billion USD)

	GLO
y1995	1719.58
y2005	2366.40
y2010	2890.81
y2015	3223.37
y2020	3708.93
y2025	4083.70
y2030	4455.46
y2035	4790.79
y2040	5104.85
y2045	5401.35
y2050	5685.21
y2055	5849.97
y2060	5997.97
y2070	6229.06
y2080	6370.18
y2090	6419.09
y2100	6435.64

0.4.1 Total costs decomposition



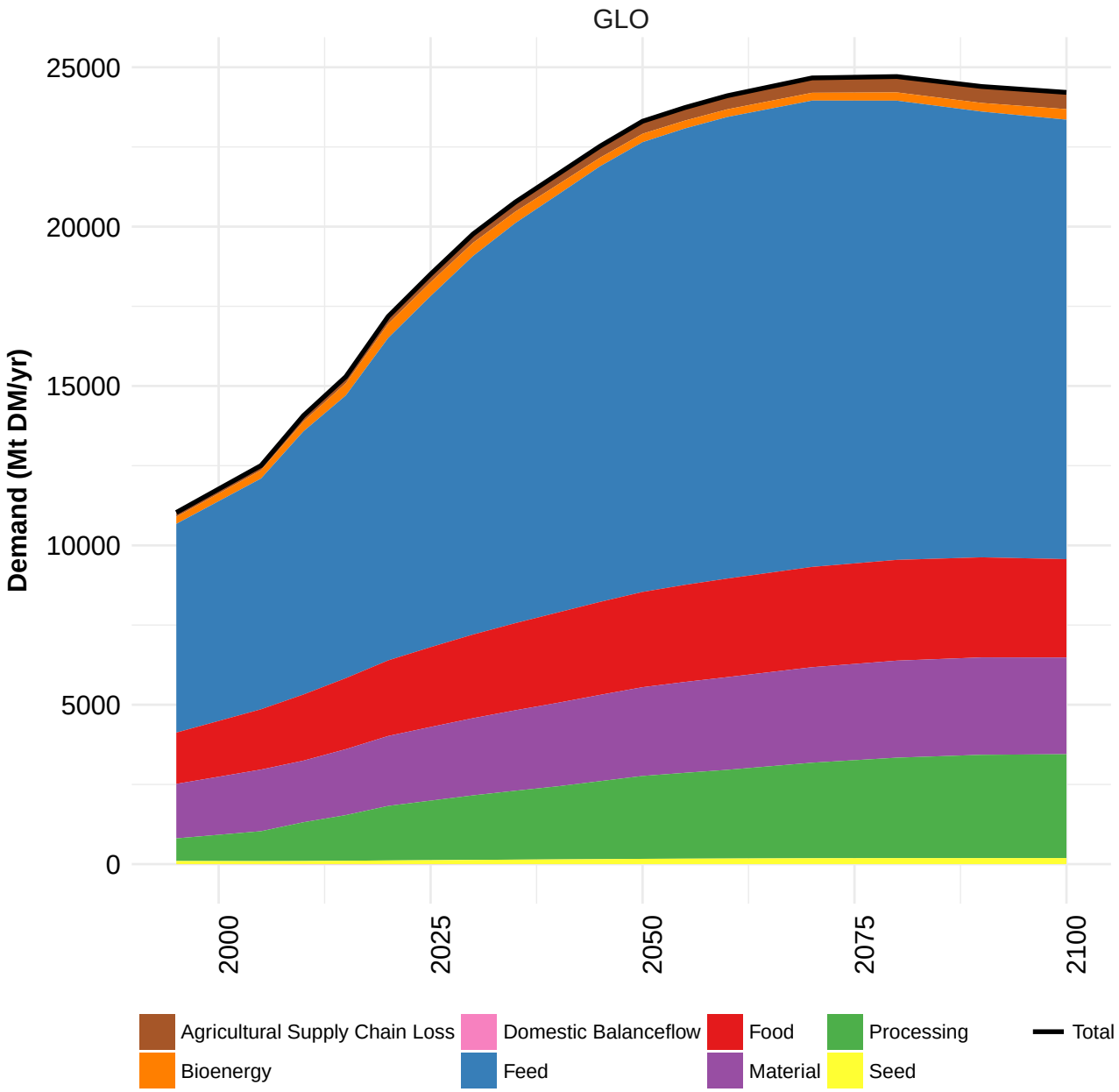

GLO
1.00
0.75
0.50
0.25
0.00
Total costs decompositon [%]
2010
2040
2070
2100
Year
Data1
Production
GHG emis
CDR
AFF
MACCs
TC
AEI
Land conversion
Trade
Transport

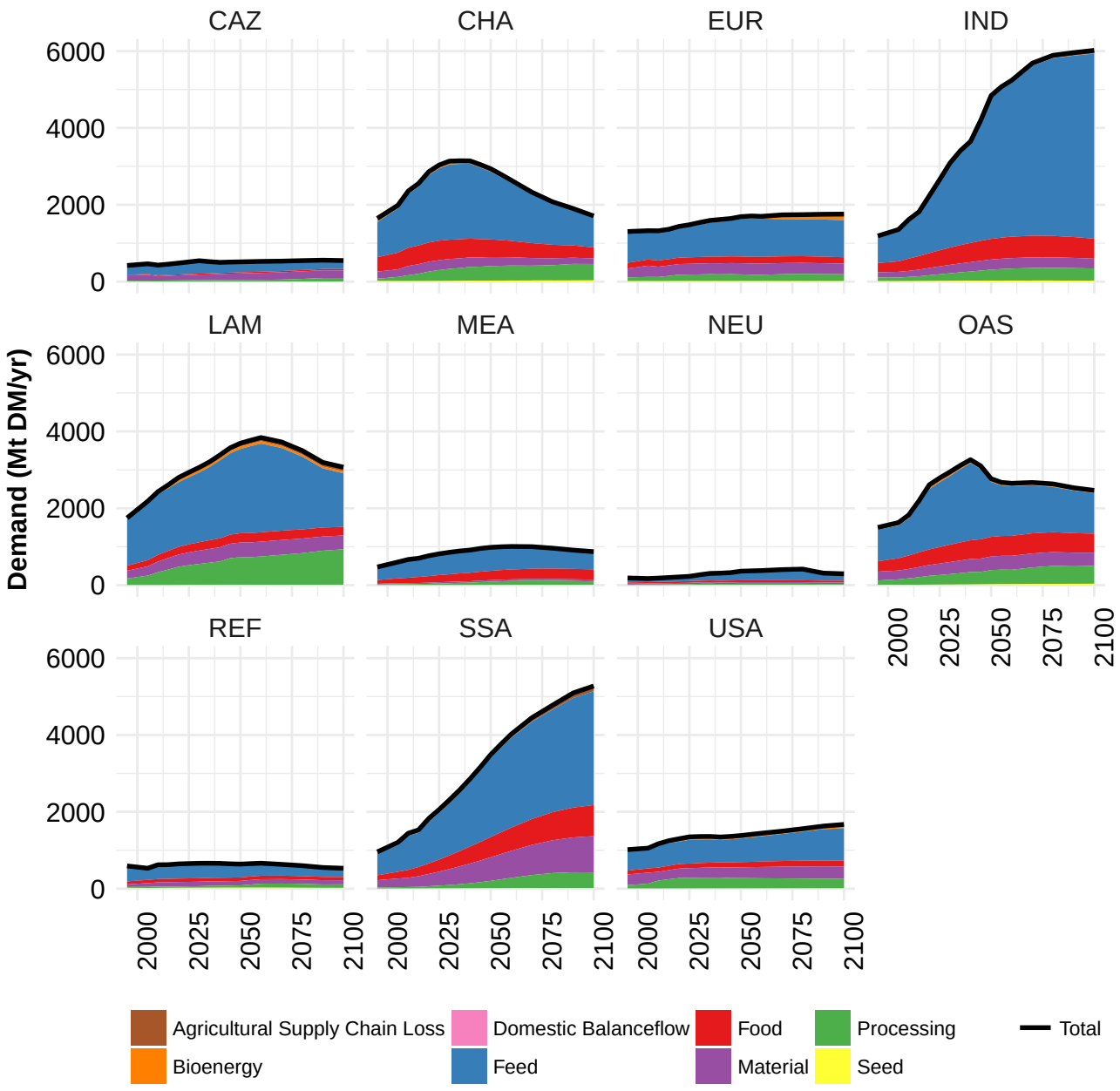
Part III
Costs

1 MainSolve

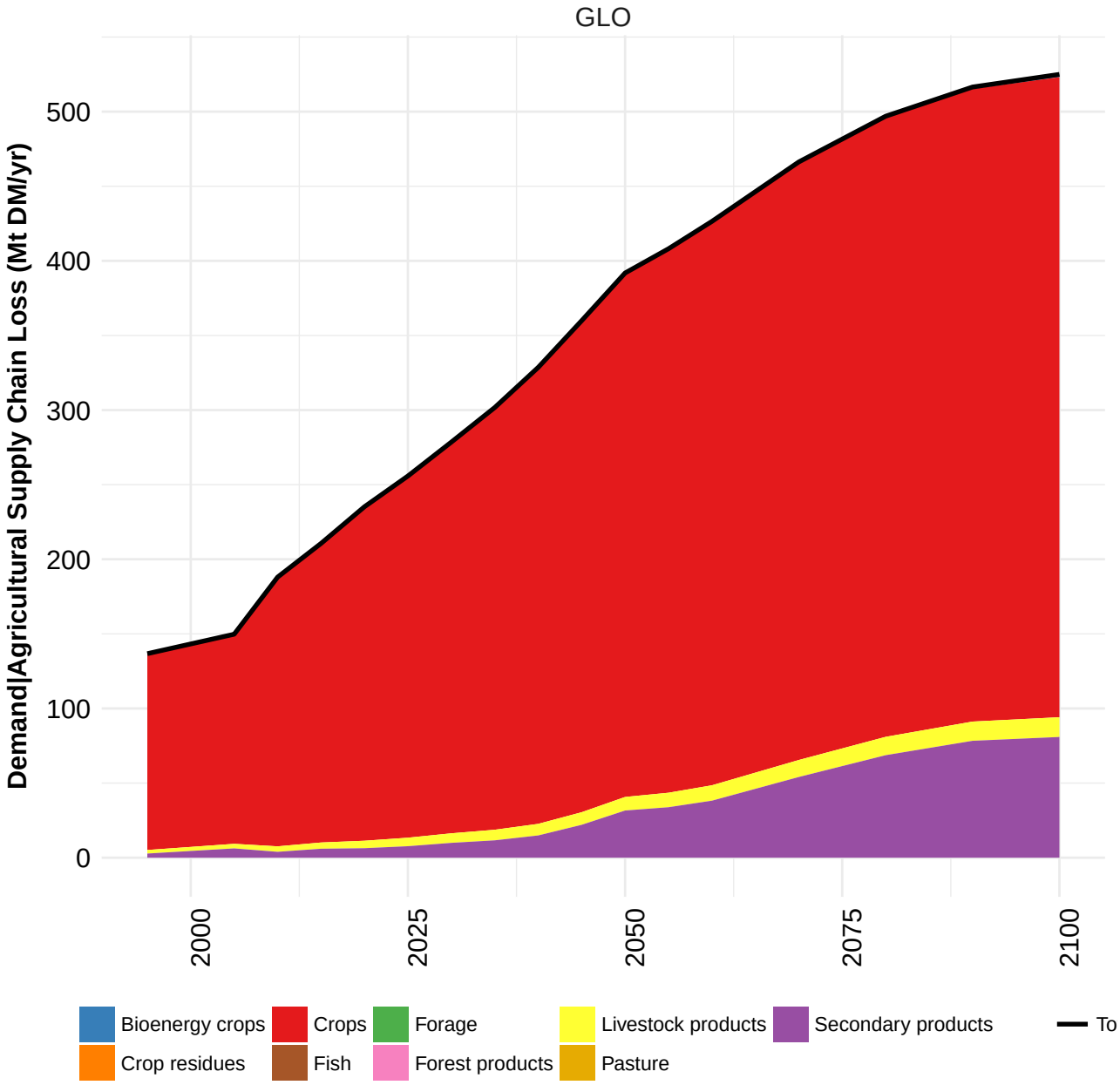
2 MainSolve w/o GHG Emissions

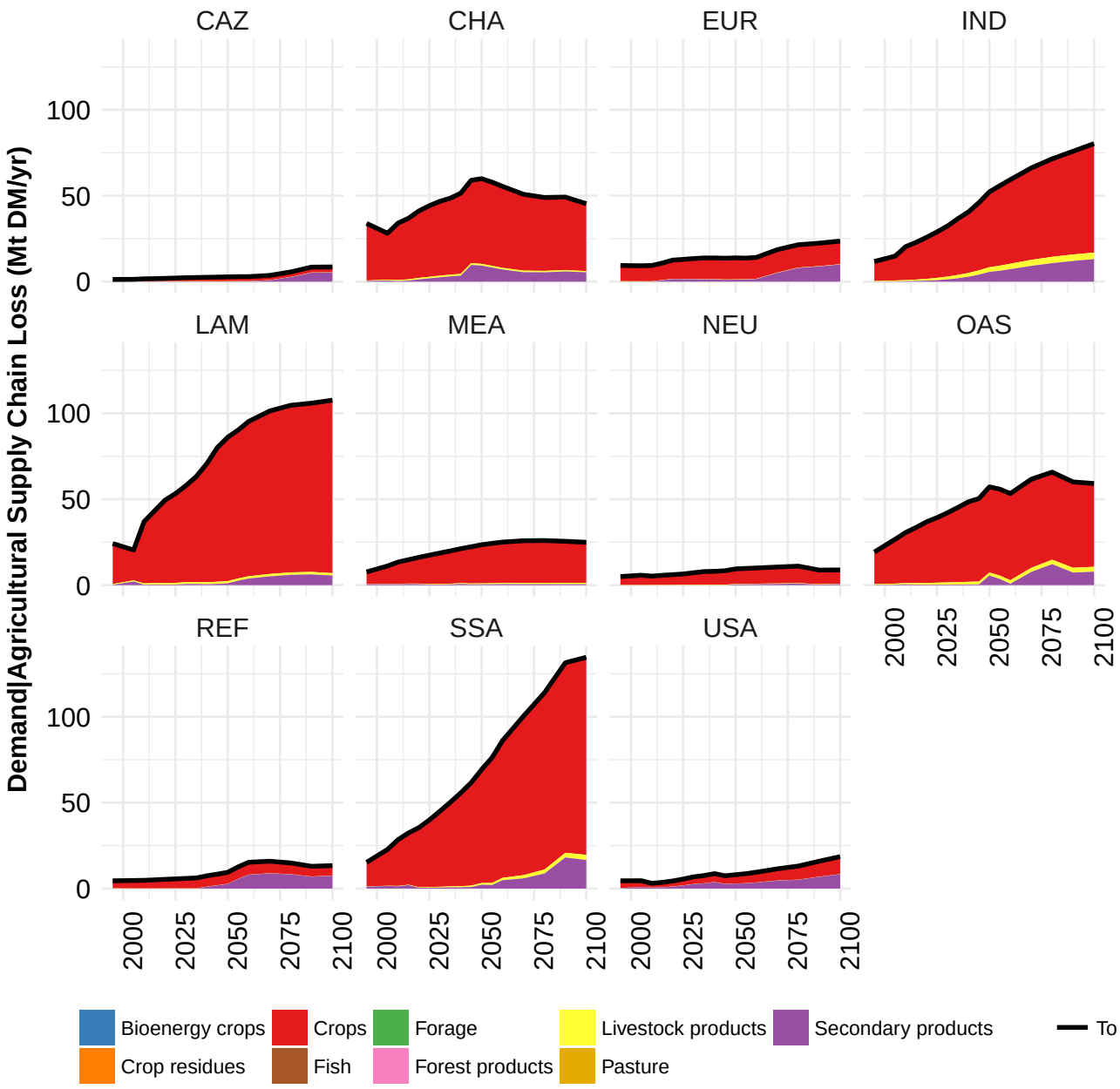
Part IV
Demand

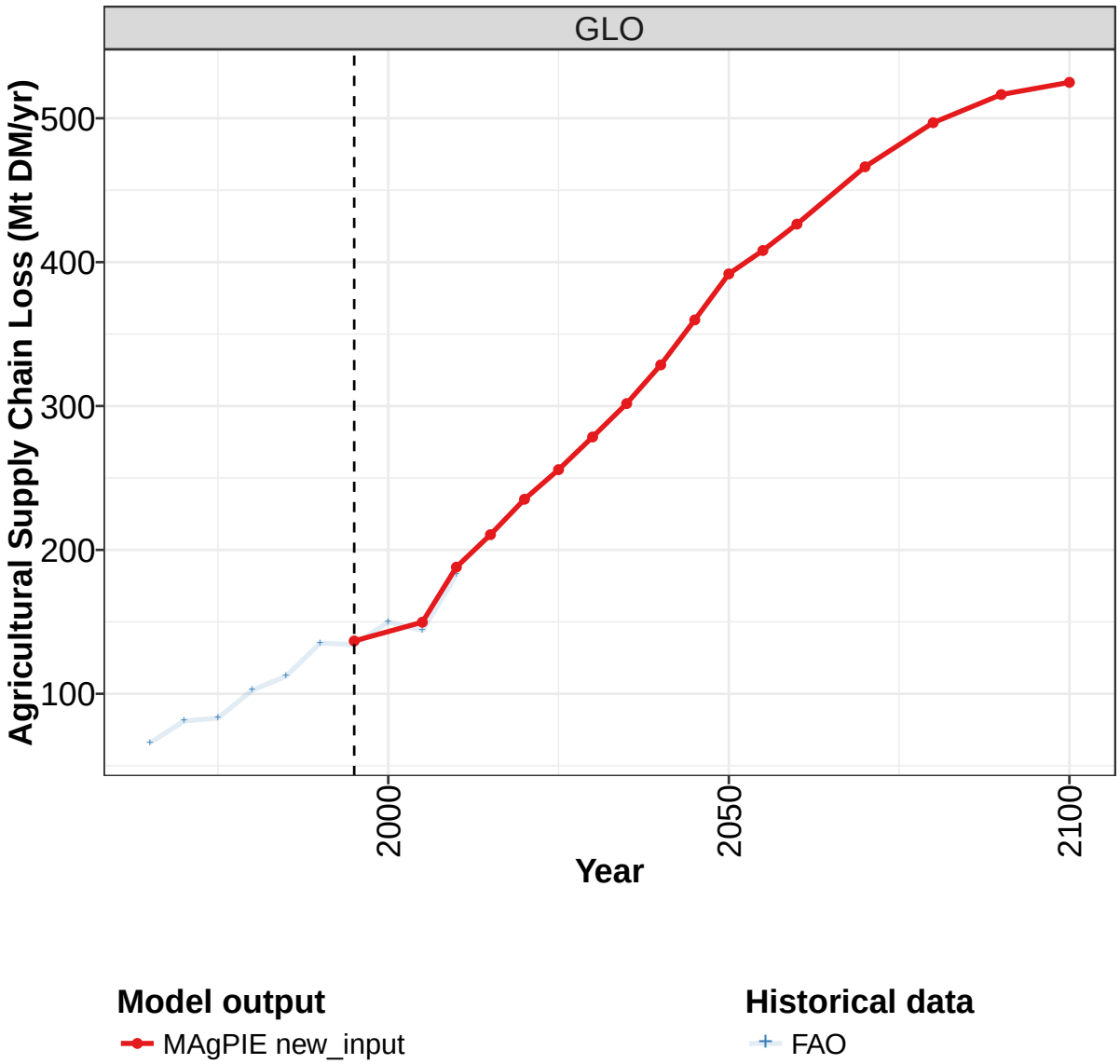



CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand (Mt DM/yr)
6000
4000
2000
0
2000
2025
2050
2075
2100
Agricultural Supply Chain Loss
Bioenergy
Domestic Balanceflow
Feed
Food
Material
Processing
Seed
Total

3 Agricultural Supply Chain Loss




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Agricultural Supply Chain Loss (Mt DM/yr)
100
50
0
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


GLO
Agricultural Supply Chain Loss (Mt DM/yr)
500
400
300
200
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

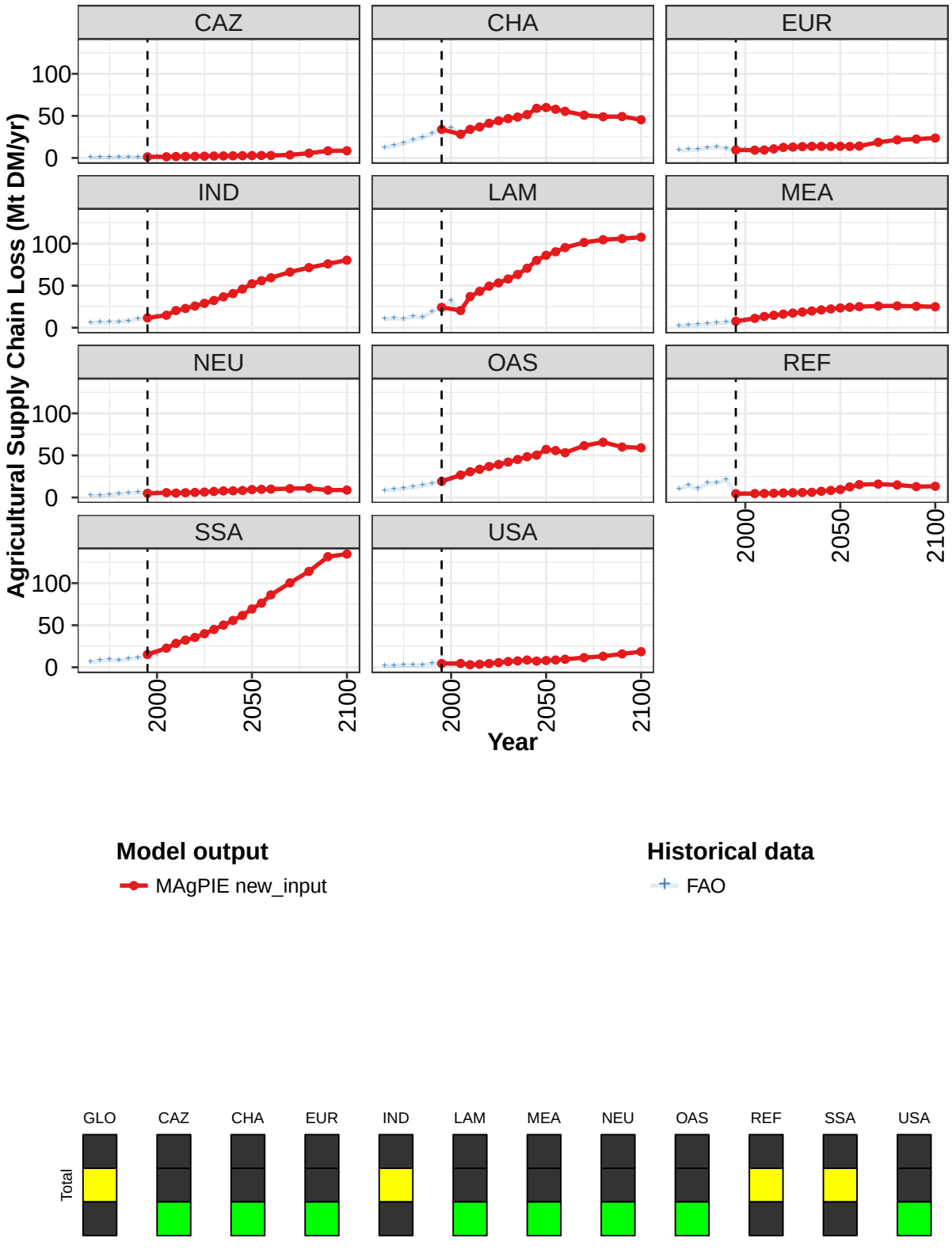


Figure 1: MAgPIE new_input — Demand—Agricultural Supply Chain Loss (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	137	150	188	211	235	256	279	302	329	360	392
CAZ	1	1	2	2	2	2	2	2	3	3	3
CHA	34	28	34	37	41	44	47	49	51	59	60
EUR	9	9	9	11	13	13	13	14	14	14	14
IND	12	15	20	23	26	29	32	37	41	46	52
LAM	24	20	37	43	49	53	58	63	71	80	86
MEA	8	11	13	15	16	17	19	20	21	22	23
NEU	5	6	5	6	6	6	7	8	8	8	9
OAS	19	27	31	34	37	39	42	45	48	50	57
REF	5	5	5	5	5	6	6	6	7	8	9
SSA	15	23	28	32	35	40	45	50	56	62	69
USA	5	5	3	4	4	6	7	8	9	7	8

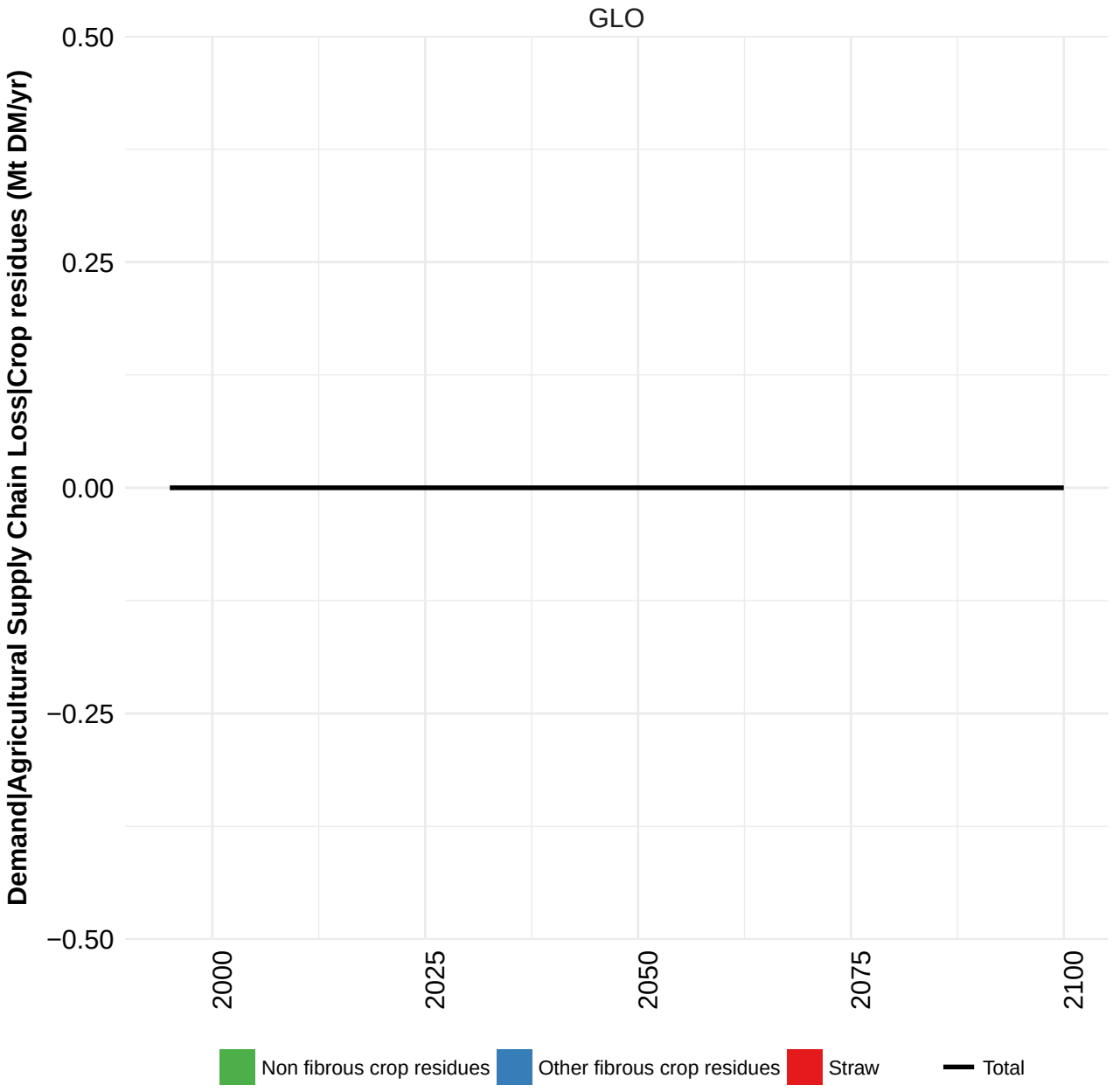
Table 4: MAgPIE new_input — Demand—Agricultural Supply Chain Loss (Mt DM/yr) [PART 1/2]

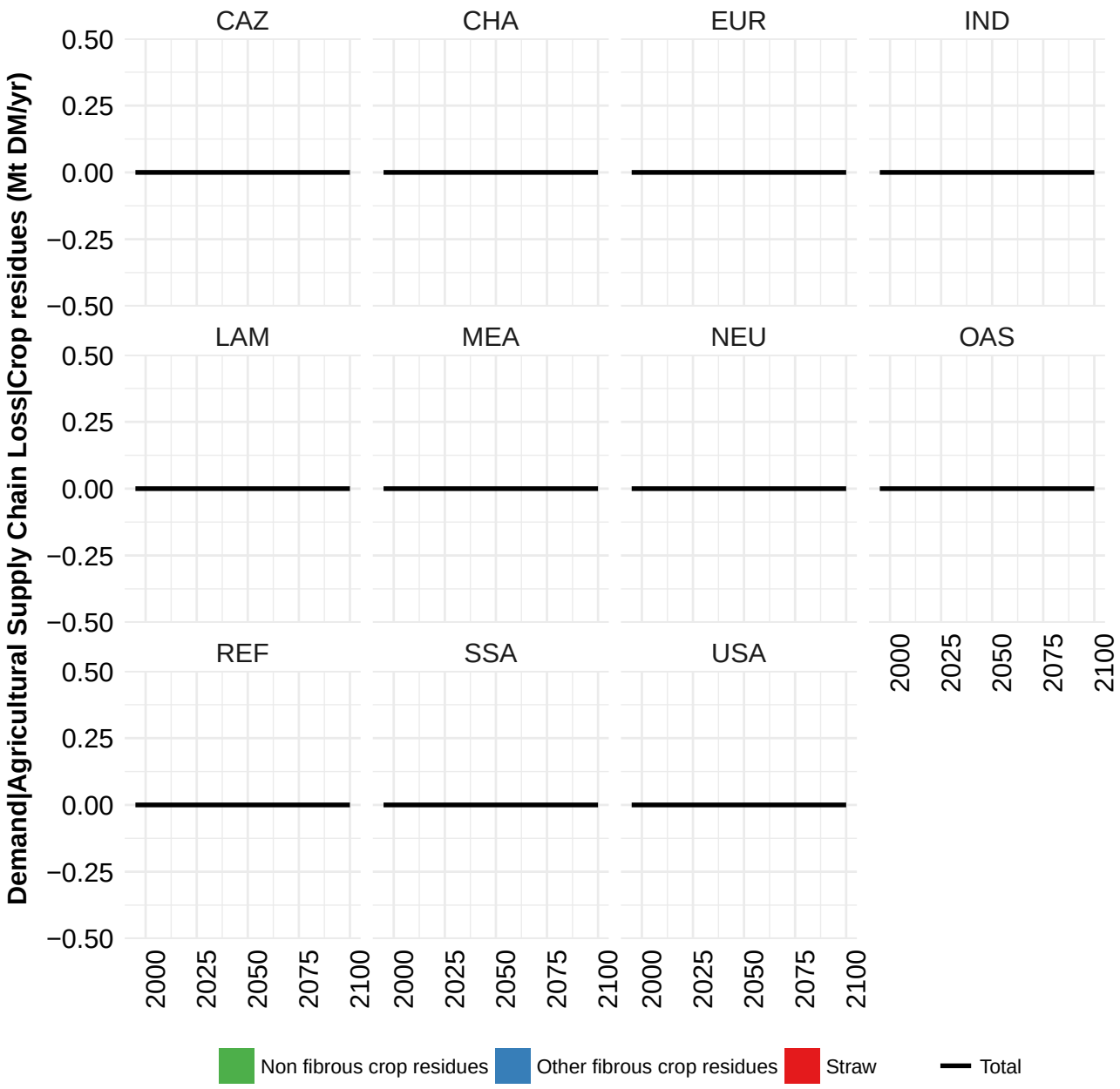
	2055	2060	2070	2080	2090	2100
GLO	408	426	466	497	516	525
CAZ	3	3	4	6	8	9
CHA	58	55	51	49	49	45
EUR	14	14	19	21	22	24
IND	56	59	66	71	76	80
LAM	90	95	101	105	106	108
MEA	24	25	26	26	25	25
NEU	10	10	11	11	9	9
OAS	56	53	62	66	60	59
REF	13	15	16	15	13	13
SSA	76	86	100	114	131	135
USA	9	10	11	13	16	19

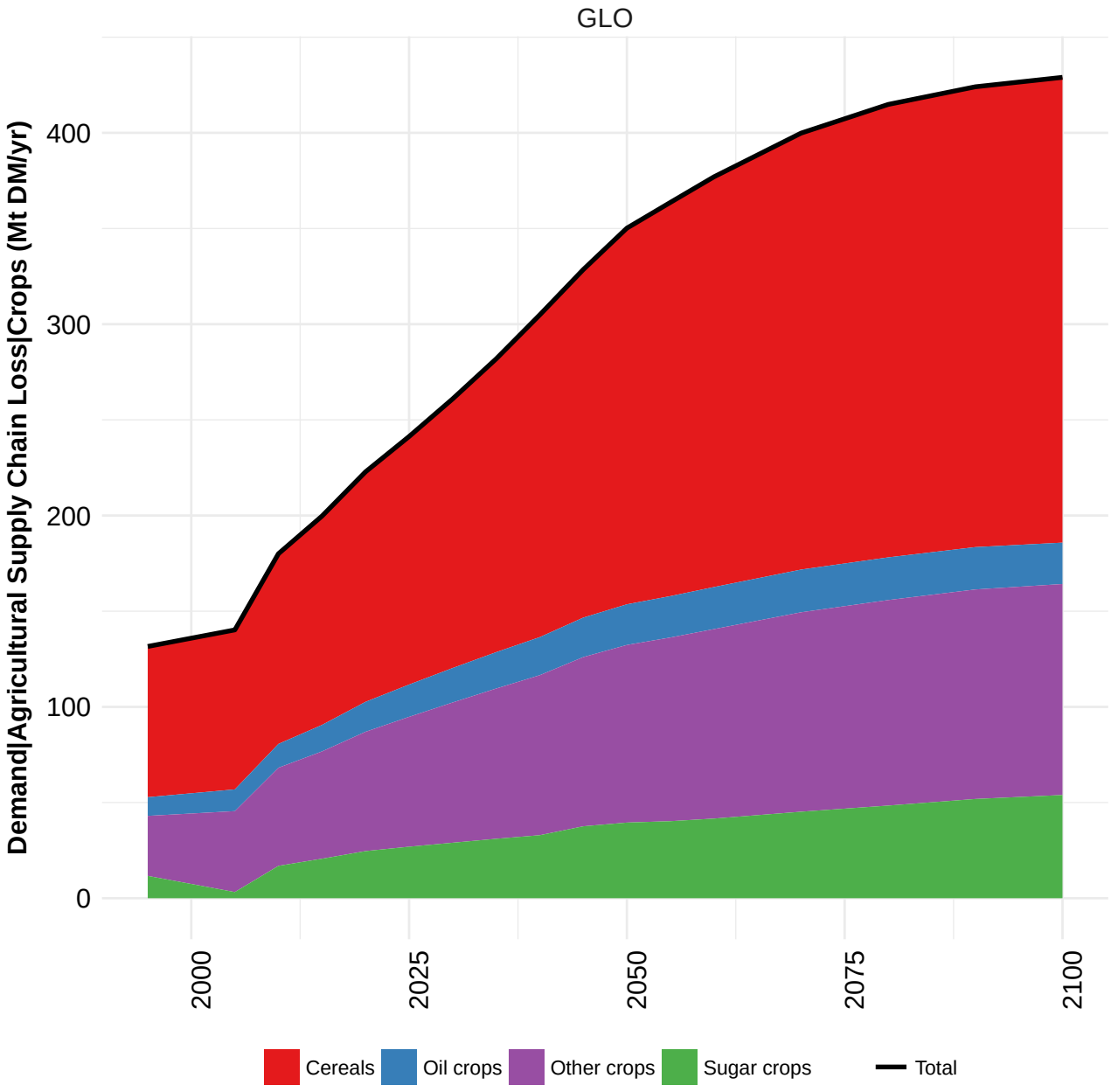
Table 5: MAgPIE new_input — Demand—Agricultural Supply Chain Loss (Mt DM/yr) [PART 2/2]

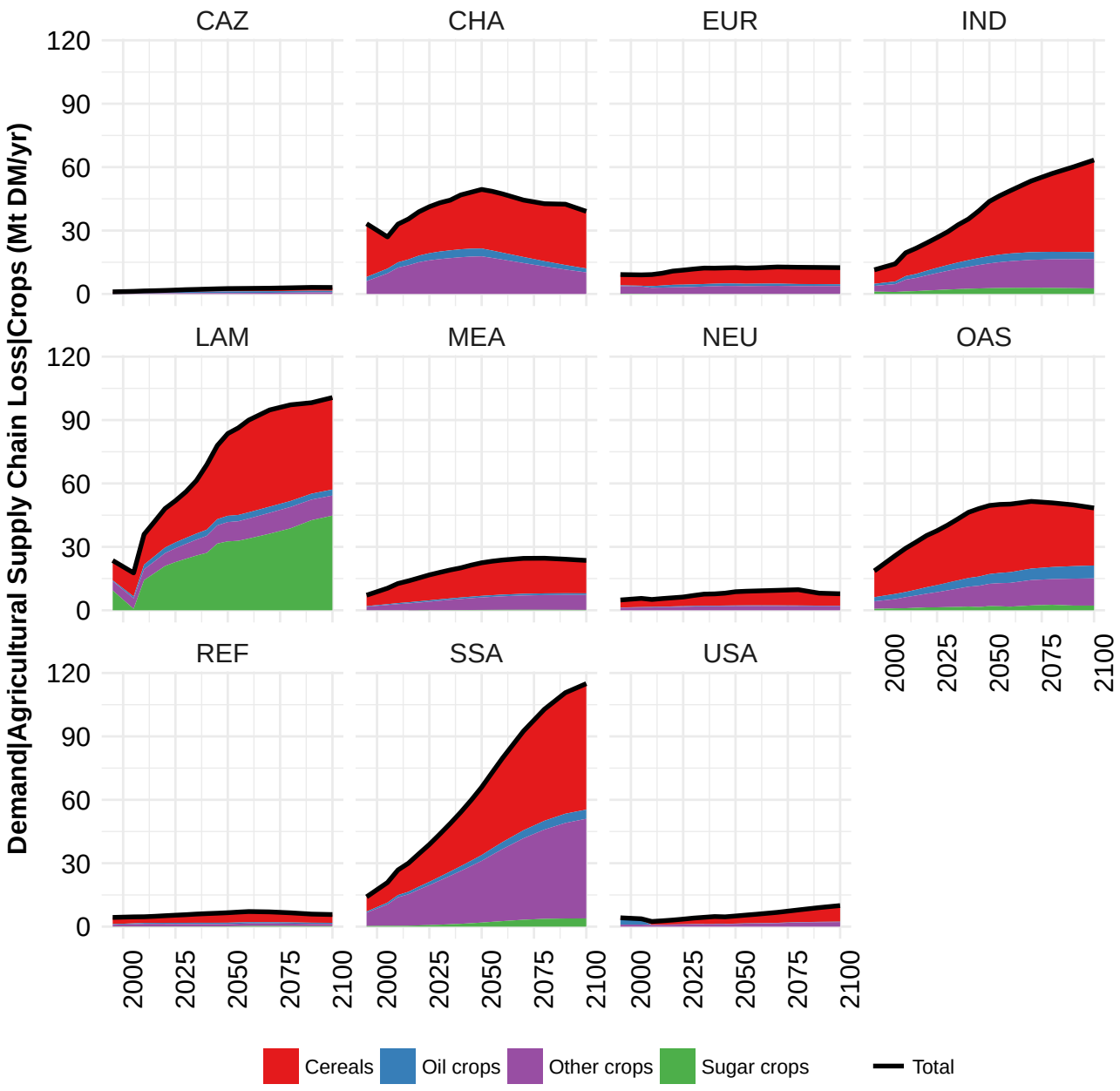
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	66	81	83	102	112	135	134	150	144	183
CAZ	0	1	1	1	1	1	1	1	1	2
CHA	12	15	17	21	24	29	35	35	29	34
EUR	9	10	10	12	13	11	9	10	9	9
IND	5	6	7	7	8	10	12	13	15	20
LAM	10	11	10	13	12	19	24	32	19	37
MEA	2	3	4	4	5	6	7	8	10	12
NEU	2	2	3	4	5	6	5	5	6	5
OAS	8	9	11	12	14	16	18	22	26	30
REF	9	15	10	17	17	21	5	4	5	5
SSA	6	8	9	8	10	11	13	16	20	26
USA	2	2	2	2	2	4	4	3	5	3

Table 6: FAO — Demand—Agricultural Supply Chain Loss (Mt DM/yr)

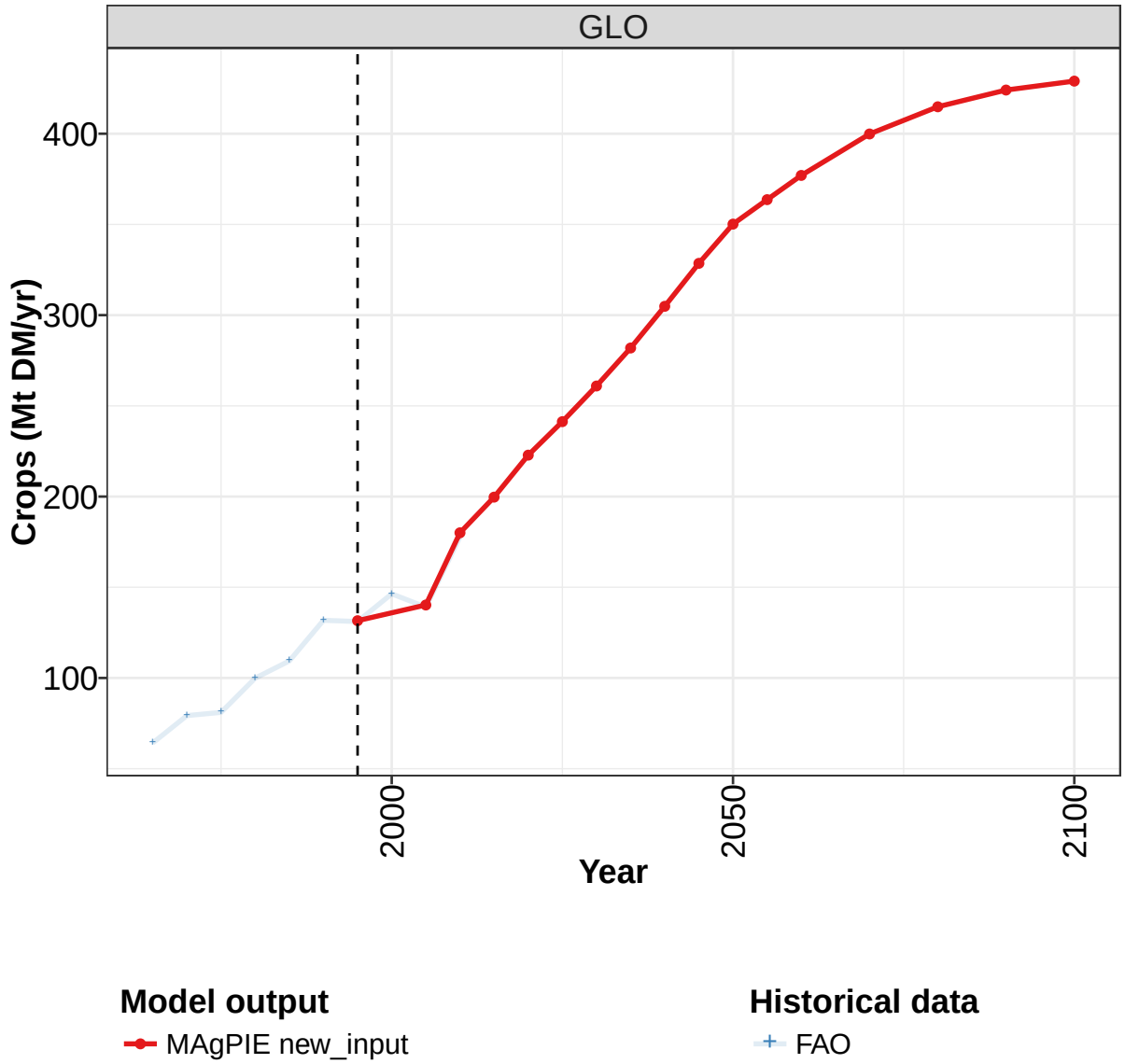

GLO
Demand|Agricultural Supply Chain Loss|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Agricultural Supply Chain Loss|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


GLO
Demand|Agricultural Supply Chain Loss|Crops (Mt DM/yr)
400
300
200
100
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Agricultural Supply Chain Loss|Crops (Mt DM/yr)
0
30
60
90
120
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

3.1 Crops


GLO
Crops (Mt DM/yr)
400
300
200
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

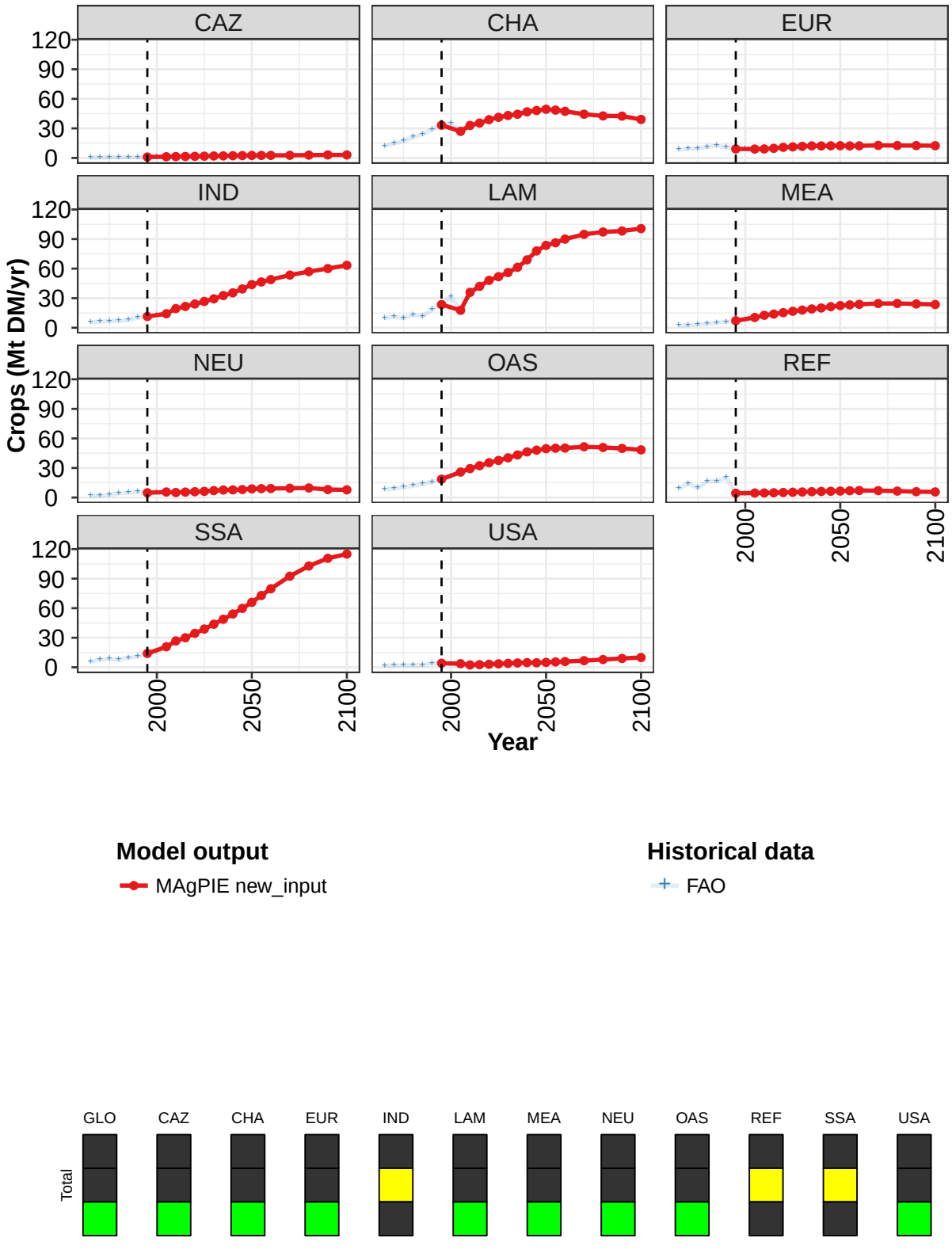


Figure 2: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	132	140	180	200	223	241	261	282	305	329	350
CAZ	1	1	1	2	2	2	2	2	2	2	3
CHA	33	27	33	35	39	41	43	44	47	48	49
EUR	9	9	9	10	11	11	12	12	12	12	12
IND	11	14	19	22	24	27	29	33	35	39	44
LAM	24	18	36	42	48	52	56	61	69	78	84
MEA	7	10	13	14	15	17	18	19	20	21	22
NEU	5	6	5	6	6	6	7	8	8	8	9
OAS	19	26	29	32	35	38	40	43	46	48	50
REF	4	5	5	5	5	5	6	6	6	6	7
SSA	14	21	27	30	34	39	44	49	54	60	66
USA	4	4	2	3	3	4	4	4	5	5	5

Table 7: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr) [PART 1/2]

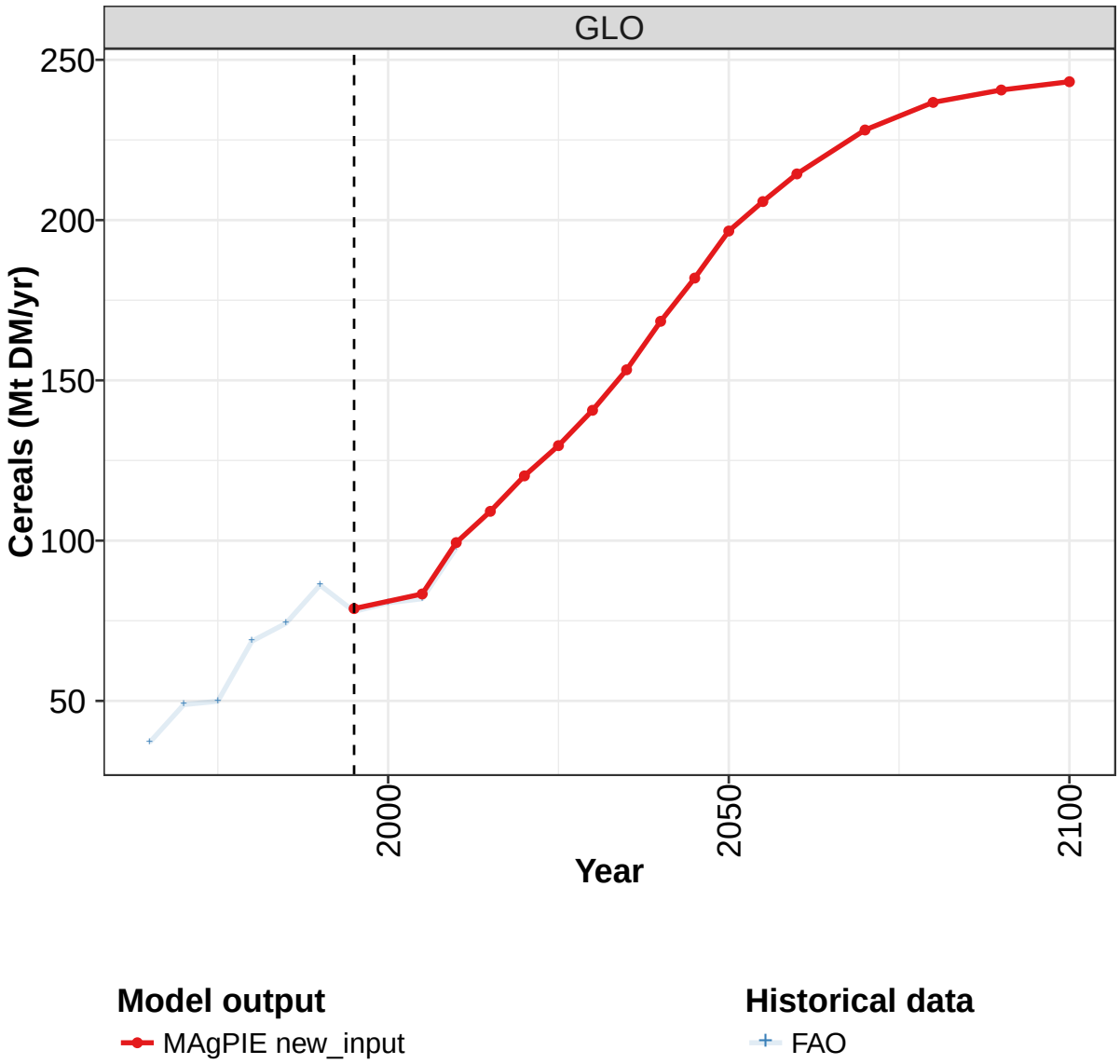
	2055	2060	2070	2080	2090	2100
GLO	364	377	400	415	424	429
CAZ	3	3	3	3	3	3
CHA	49	47	44	43	42	39
EUR	12	12	13	13	13	12
IND	46	49	53	57	60	63
LAM	86	90	95	97	98	101
MEA	23	24	25	25	24	24
NEU	9	9	9	10	8	8
OAS	50	50	52	51	50	48
REF	7	7	7	7	6	6
SSA	73	80	93	103	111	115
USA	5	6	7	8	9	10

Table 8: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	64	79	81	100	109	132	131	146	139	178
CAZ	0	0	1	1	1	1	1	1	1	1
CHA	12	15	17	21	24	29	34	35	28	34
EUR	8	9	10	11	12	11	9	9	9	9
IND	5	6	7	7	8	10	11	13	14	19
LAM	10	11	10	13	12	18	24	31	18	36
MEA	2	3	3	4	5	6	7	8	10	12
NEU	2	2	3	4	5	6	5	5	5	5
OAS	8	9	10	12	14	16	18	22	25	29
REF	9	14	10	16	17	20	5	4	5	5
SSA	6	8	9	8	10	11	13	16	20	25
USA	2	2	2	2	2	4	4	3	4	2

Table 9: FAO — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr)

3.1.1 Cereals


GLO
250
200
150
100
50
Cereals (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

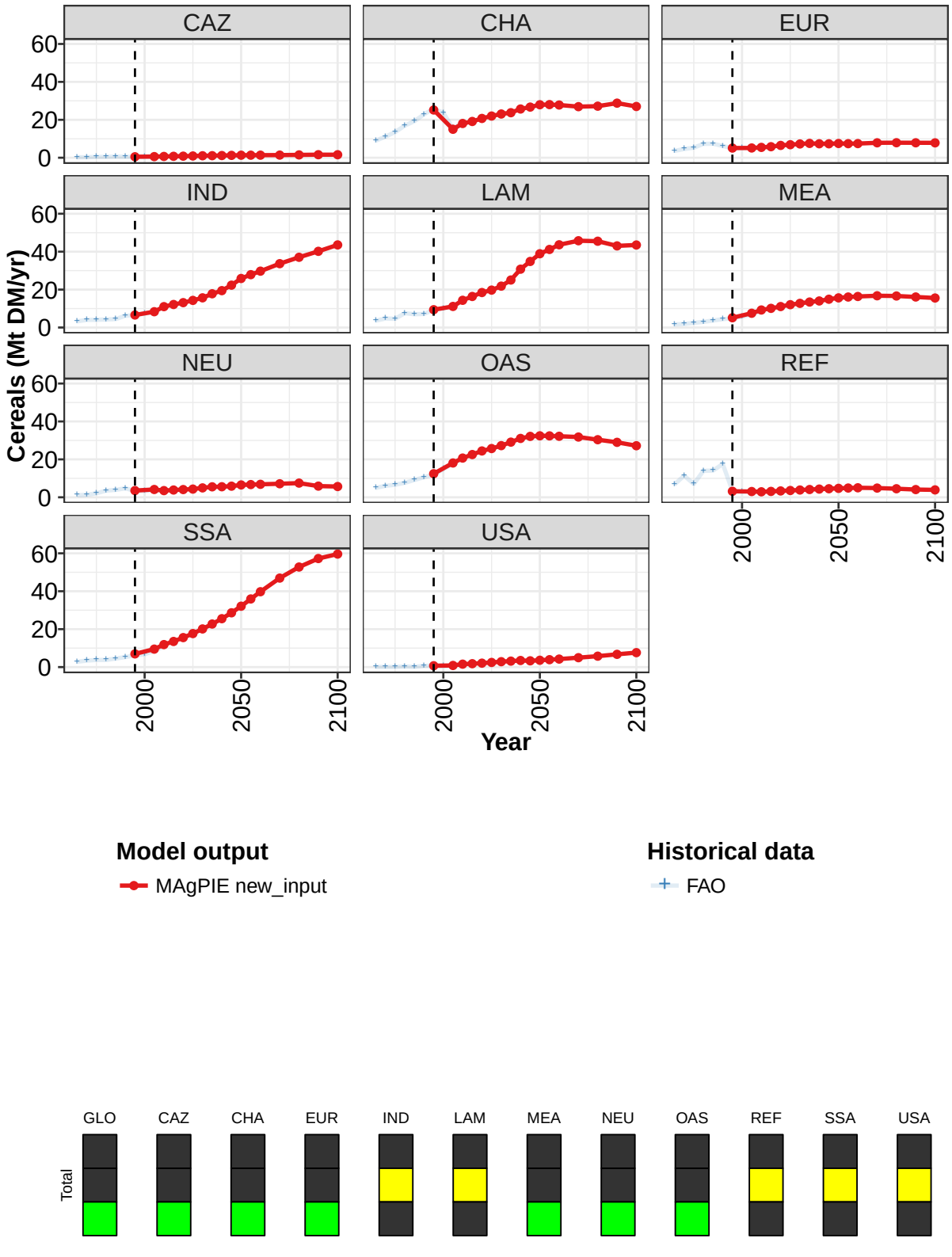


Figure 3: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	79	83	99	109	120	130	141	153	168	182	197
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	25	15	18	19	21	22	23	24	26	27	28
EUR	5	5	5	6	7	7	7	8	7	7	8
IND	7	8	11	12	13	14	16	18	19	22	26
LAM	9	11	14	16	18	20	22	25	31	35	39
MEA	5	8	9	10	11	12	13	13	14	15	16
NEU	4	4	4	4	4	4	5	6	6	6	7
OAS	12	18	21	23	24	26	27	29	31	32	32
REF	3	3	3	3	3	4	4	4	4	5	5
SSA	7	9	12	14	16	18	20	23	26	29	32
USA	1	1	2	2	2	2	3	3	3	3	4

Table 10: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr) [PART 1/2]

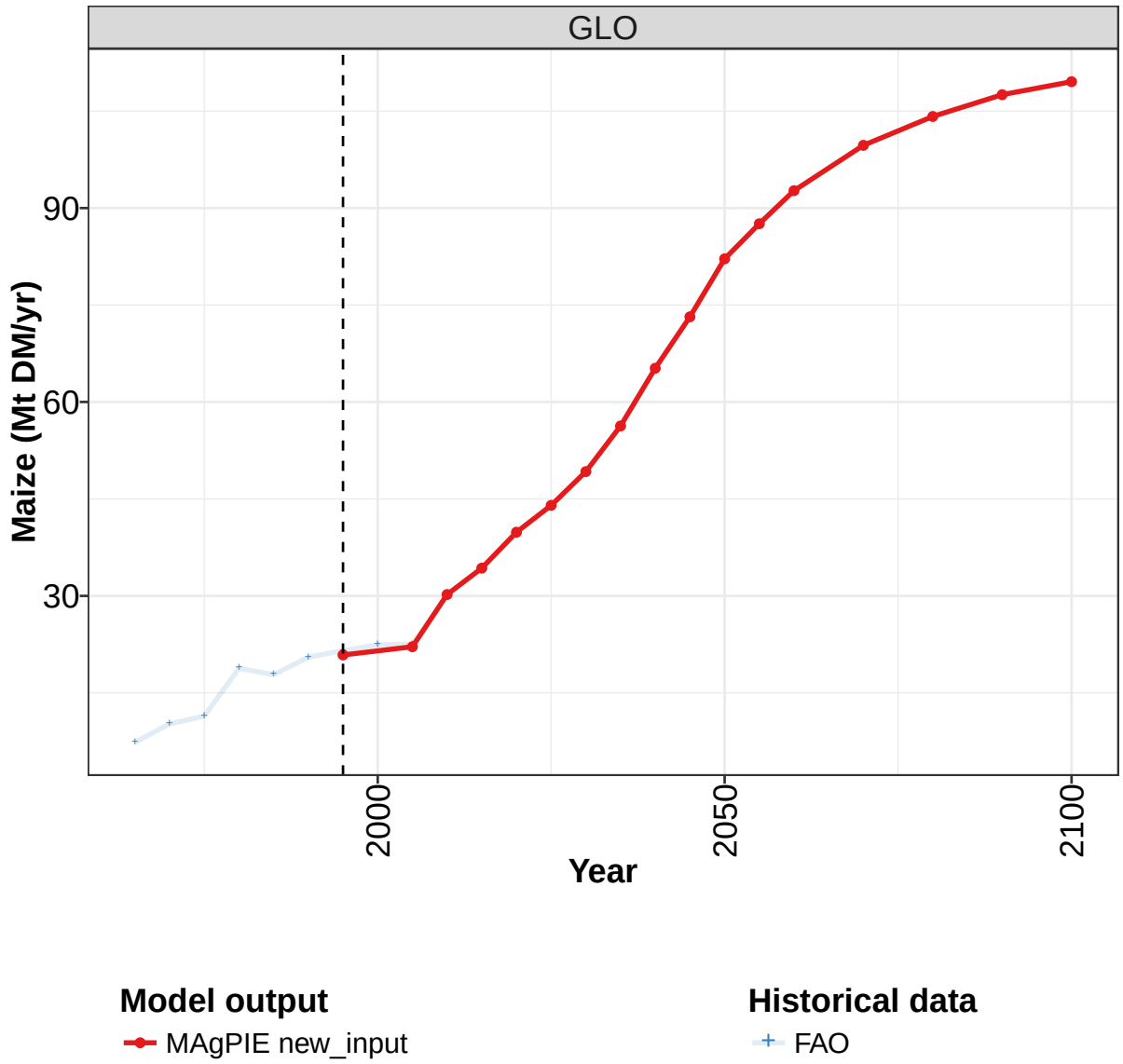
	2055	2060	2070	2080	2090	2100
GLO	206	214	228	237	241	243
CAZ	1	1	1	1	2	2
CHA	28	28	27	27	29	27
EUR	7	7	8	8	8	8
IND	28	30	34	37	40	44
LAM	41	44	46	46	43	44
MEA	16	16	17	17	16	16
NEU	7	7	7	7	6	6
OAS	32	32	32	30	29	27
REF	5	5	5	5	4	4
SSA	36	40	47	53	57	60
USA	4	4	5	6	7	8

Table 11: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	37.1	48.8	49.9	68.6	74.2	86.1	77.9	80.6	81.9	97.7
CAZ	0.2	0.3	0.4	0.4	0.6	0.5	0.5	0.6	0.7	0.7
CHA	9.0	11.1	13.5	16.9	19.3	22.9	26.0	23.7	15.5	18.5
EUR	3.6	4.6	5.3	7.3	7.4	6.2	5.0	5.1	5.0	5.3
IND	3.3	4.0	4.1	4.2	4.4	6.2	6.5	7.3	8.3	11.0
LAM	3.6	4.8	4.6	7.6	7.0	7.1	9.3	10.0	11.2	14.2
MEA	1.6	1.9	2.4	3.0	3.7	4.4	4.9	5.7	7.0	8.7
NEU	1.1	1.3	2.1	3.5	3.9	4.7	3.4	3.4	4.0	3.5
OAS	5.0	6.1	6.6	7.6	9.1	10.6	11.9	14.9	17.7	20.6
REF	6.8	11.4	7.0	14.0	14.1	17.6	3.4	2.8	3.1	2.9
SSA	2.8	3.4	3.8	3.8	4.5	5.3	6.2	6.7	8.6	10.8
USA	0.1	0.1	0.1	0.3	0.1	0.7	0.7	0.5	0.9	1.6

Table 12: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr)

3.1.2 Cereals—Maize



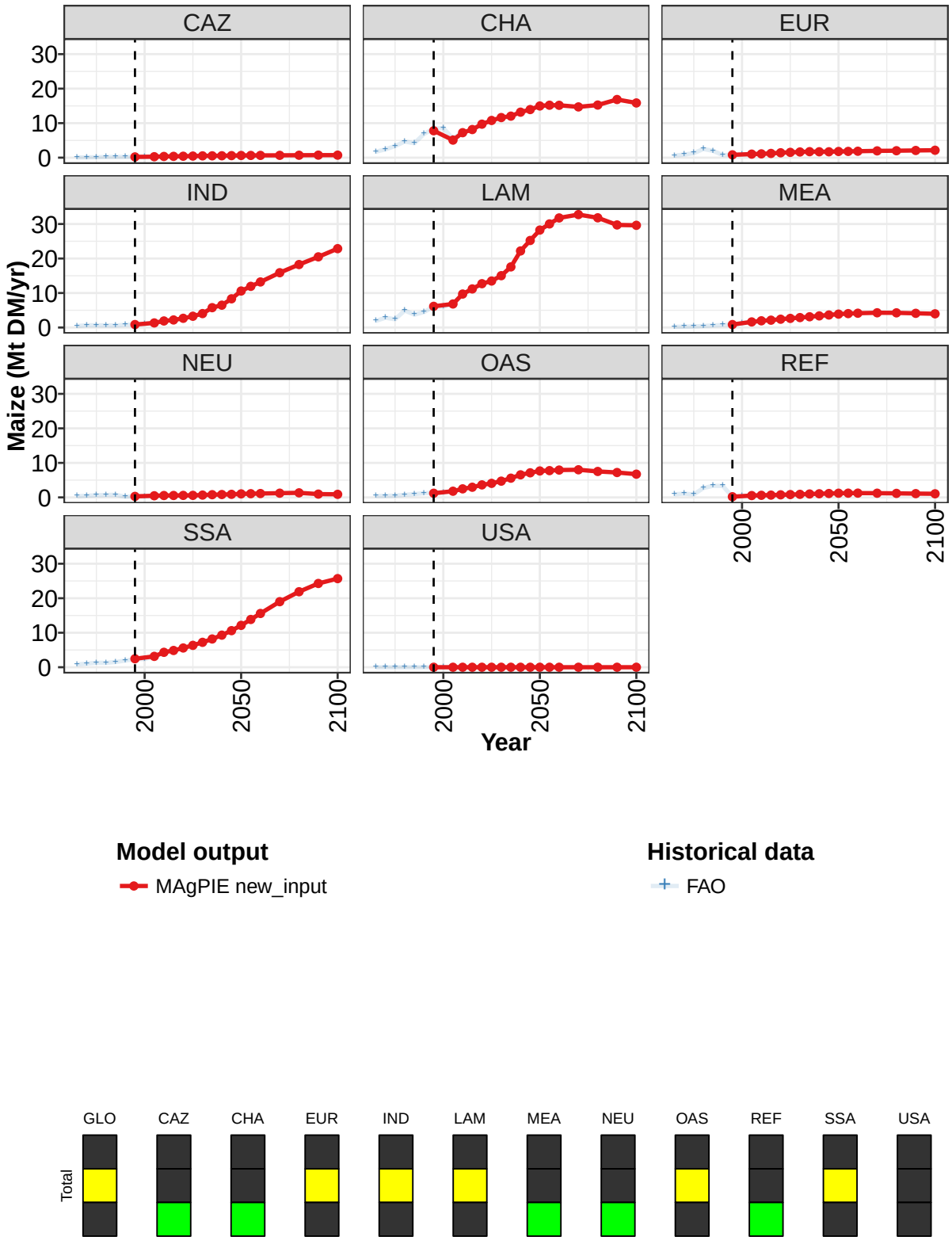


Figure 4: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	21	22	30	34	40	44	49	56	65	73	82
CAZ	0	0	0	0	0	0	1	1	1	1	1
CHA	8	5	7	8	10	11	12	12	13	14	15
EUR	1	1	1	1	1	2	2	2	2	2	2
IND	1	1	2	2	3	3	4	6	6	8	11
LAM	6	7	10	11	13	13	15	18	22	25	28
MEA	1	2	2	2	2	3	3	3	3	4	4
NEU	0	0	1	1	1	1	1	1	1	1	1
OAS	1	2	2	3	4	4	5	6	7	7	8
REF	0	1	1	1	1	1	1	1	1	1	1
SSA	2	3	4	5	6	6	7	8	9	11	12
USA	0	0	0	0	0	0	0	0	0	0	0

Table 13: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

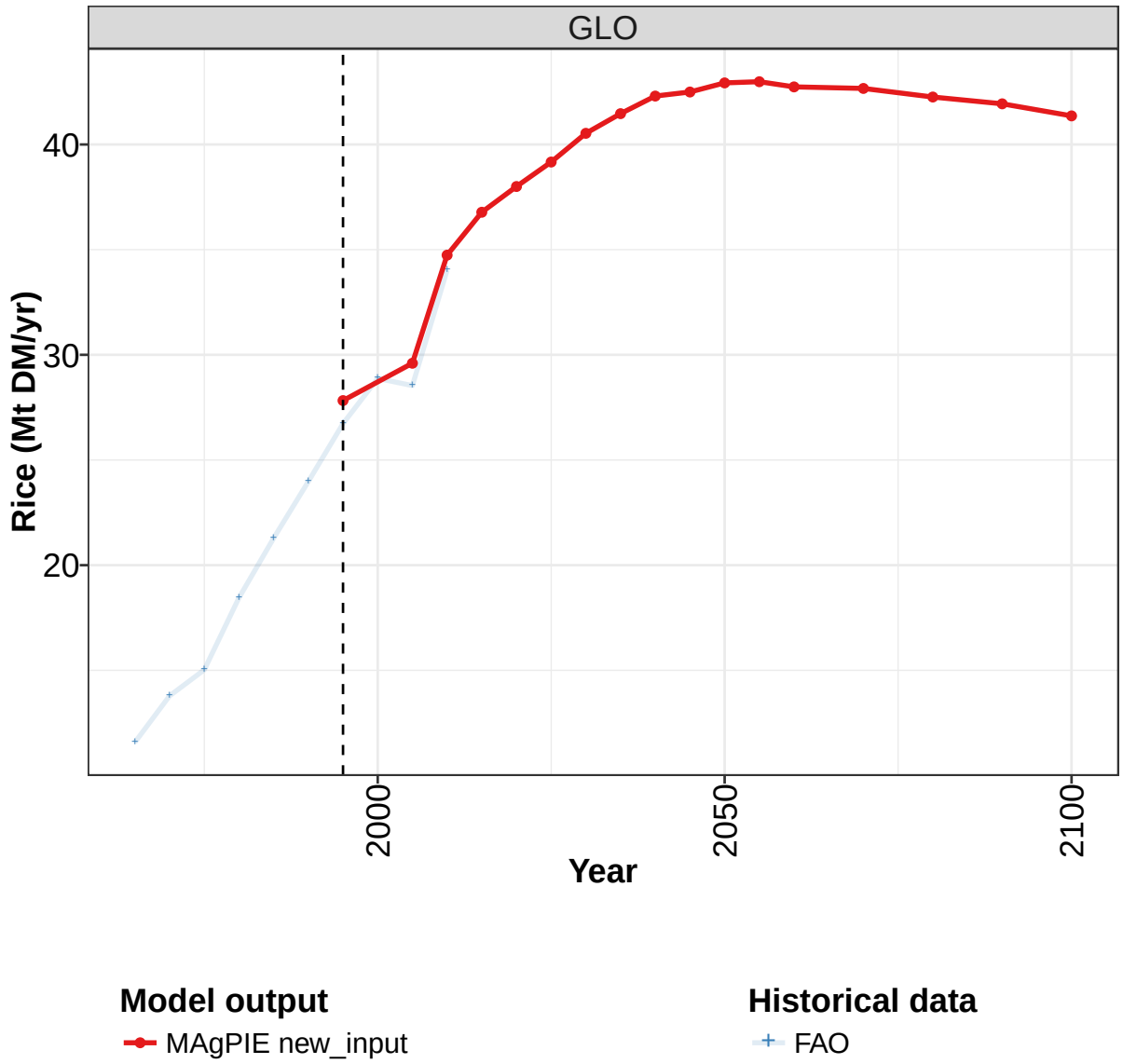
	2055	2060	2070	2080	2090	2100
GLO	88	93	100	104	108	110
CAZ	1	1	1	1	1	1
CHA	15	15	15	15	17	16
EUR	2	2	2	2	2	2
IND	12	13	16	18	20	23
LAM	30	32	33	32	30	30
MEA	4	4	4	4	4	4
NEU	1	1	1	1	1	1
OAS	8	8	8	8	7	7
REF	1	1	1	1	1	1
SSA	14	16	19	22	24	26
USA	0	0	0	0	0	0

Table 14: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.3	10.2	11.4	18.8	17.8	20.5	21.5	22.4	22.5	30.1
CAZ	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4
CHA	1.7	2.4	3.4	4.7	4.2	6.9	8.4	8.6	5.5	7.5
EUR	0.6	0.9	1.3	2.5	2.0	0.7	0.8	0.9	1.0	1.1
IND	0.4	0.7	0.6	0.6	0.6	0.8	0.8	1.1	1.3	1.9
LAM	1.9	2.8	2.4	4.9	3.7	4.5	6.1	6.0	6.9	9.6
MEA	0.2	0.2	0.3	0.4	0.6	0.7	0.8	1.2	1.5	1.9
NEU	0.3	0.5	0.6	0.7	0.7	0.2	0.4	0.3	0.5	0.5
OAS	0.4	0.4	0.5	0.7	0.9	1.2	1.3	1.4	1.8	2.5
REF	0.9	1.1	0.8	2.7	3.3	3.3	0.2	0.4	0.6	0.6
SSA	0.8	1.1	1.3	1.3	1.5	1.9	2.4	2.4	3.1	4.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 15: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr)

3.1.3 Cereals—Rice



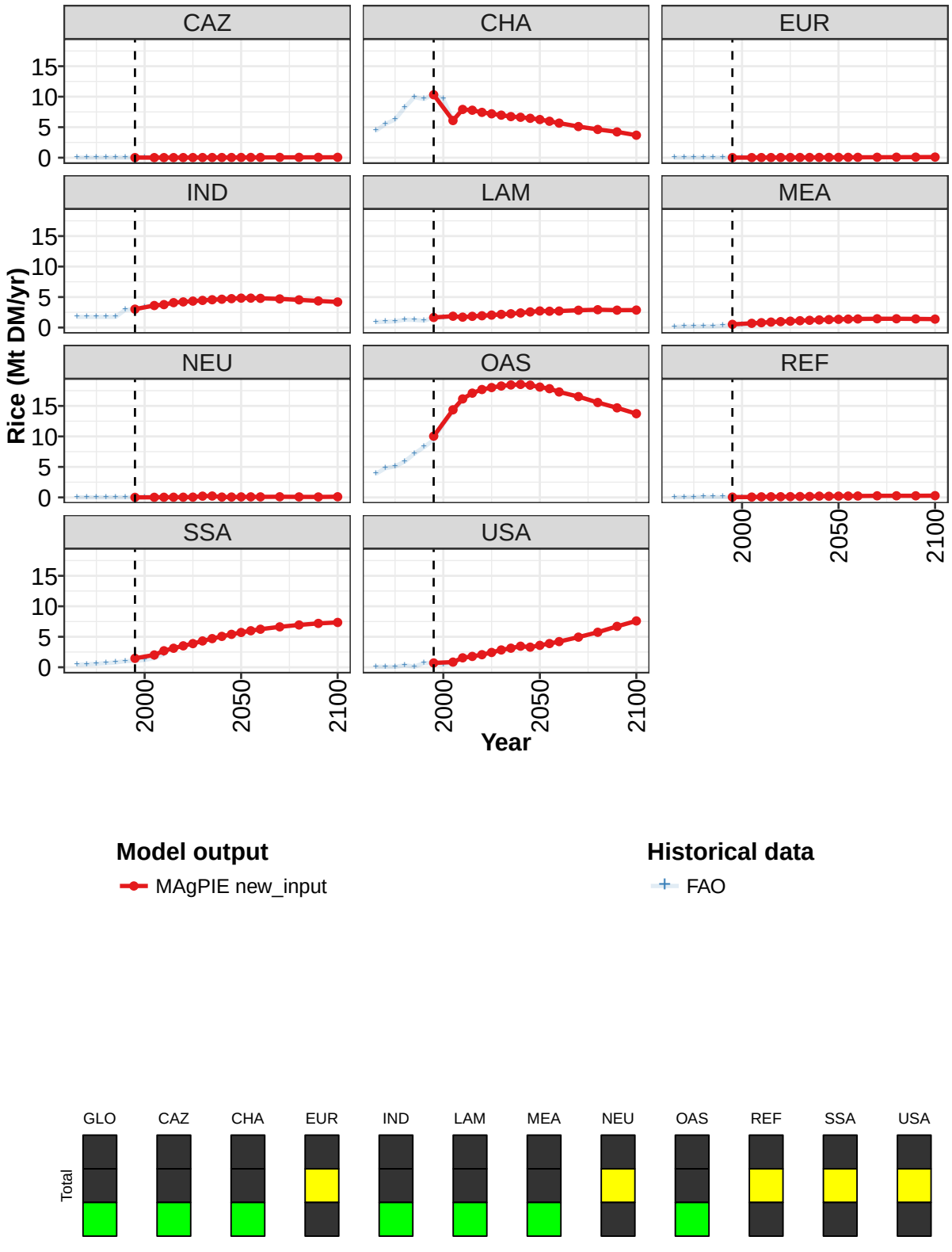


Figure 5: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	27.8	29.6	34.7	36.8	38.0	39.2	40.5	41.5	42.3	42.5	42.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	10.3	6.1	7.9	7.8	7.4	7.2	7.0	6.7	6.6	6.5	6.3
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
IND	3.0	3.6	3.8	4.1	4.2	4.3	4.5	4.6	4.6	4.7	4.8
LAM	1.7	1.9	1.7	1.8	1.9	2.0	2.2	2.3	2.4	2.6	2.7
MEA	0.5	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.1
OAS	10.0	14.4	16.2	17.1	17.7	18.0	18.3	18.4	18.5	18.4	18.1
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
SSA	1.5	2.0	2.7	3.1	3.5	3.9	4.3	4.7	5.1	5.4	5.7
USA	0.7	0.8	1.5	1.8	2.1	2.4	2.8	3.1	3.5	3.3	3.6

Table 16: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

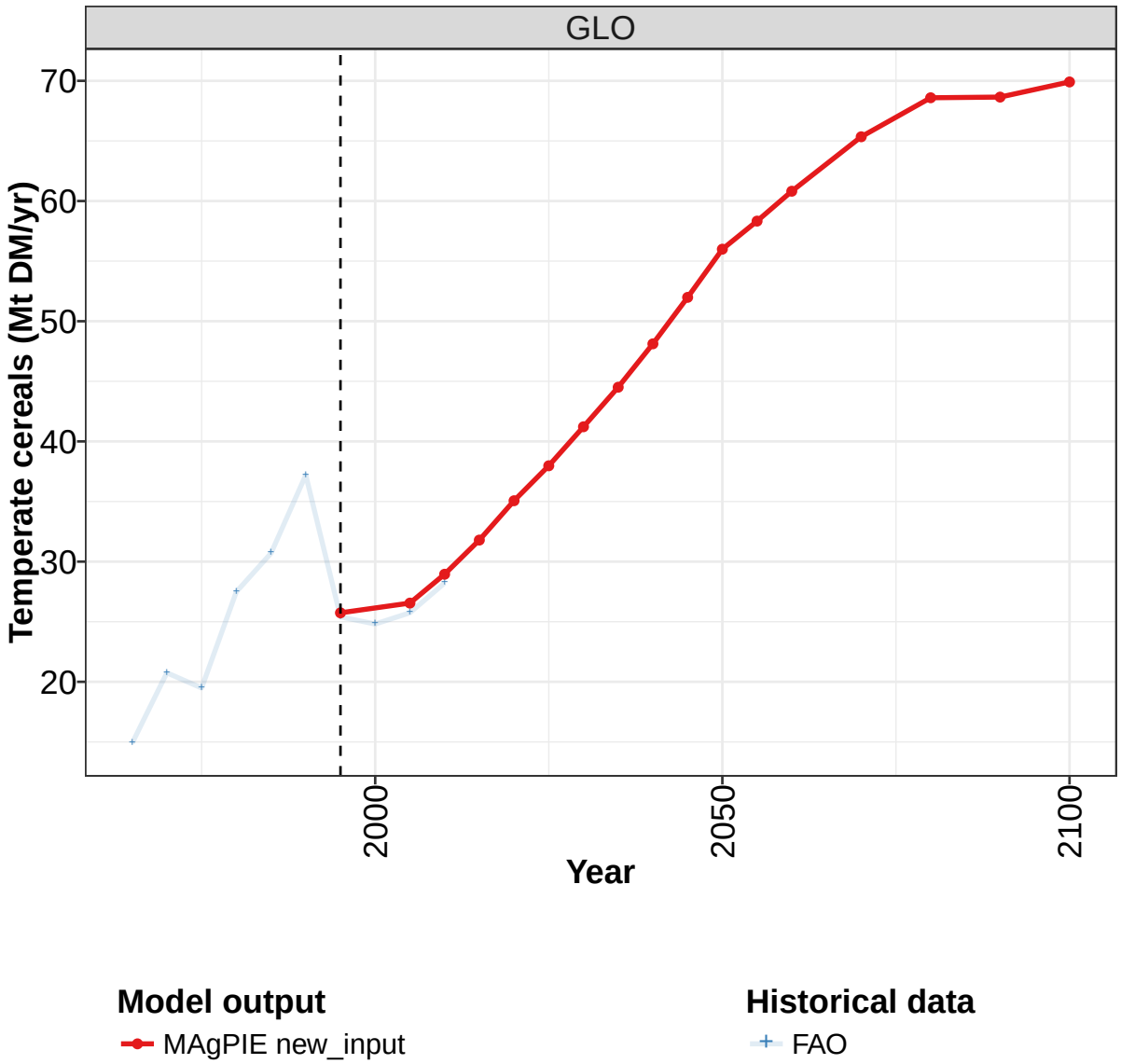
	2055	2060	2070	2080	2090	2100
GLO	43.0	42.7	42.7	42.3	41.9	41.4
CAZ	0.0	0.0	0.0	0.1	0.1	0.1
CHA	6.0	5.7	5.1	4.6	4.2	3.7
EUR	0.1	0.1	0.1	0.1	0.1	0.1
IND	4.8	4.8	4.7	4.5	4.4	4.2
LAM	2.7	2.7	2.8	2.9	2.9	2.9
MEA	1.4	1.4	1.4	1.4	1.4	1.4
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	17.8	17.3	16.5	15.6	14.7	13.7
REF	0.2	0.2	0.3	0.3	0.3	0.3
SSA	6.0	6.2	6.6	6.9	7.2	7.4
USA	3.9	4.2	4.9	5.7	6.7	7.6

Table 17: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.6	13.8	15.0	18.4	21.3	24.0	26.7	28.9	28.5	34.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.4	5.5	6.3	8.2	9.9	9.6	10.4	9.6	6.1	8.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.7	1.7	1.7	1.7	1.7	2.9	3.0	3.3	3.6	3.8
LAM	0.9	0.9	1.0	1.3	1.2	1.1	1.6	1.7	1.8	1.7
MEA	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.6
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.9	4.8	5.1	5.9	7.2	8.3	9.4	12.1	14.0	16.1
REF	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
SSA	0.4	0.5	0.6	0.7	0.8	1.0	1.0	1.2	1.5	2.2
USA	0.1	0.1	0.1	0.3	0.1	0.7	0.7	0.4	0.8	1.5

Table 18: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr)

3.1.4 Cereals—Temperate cereals



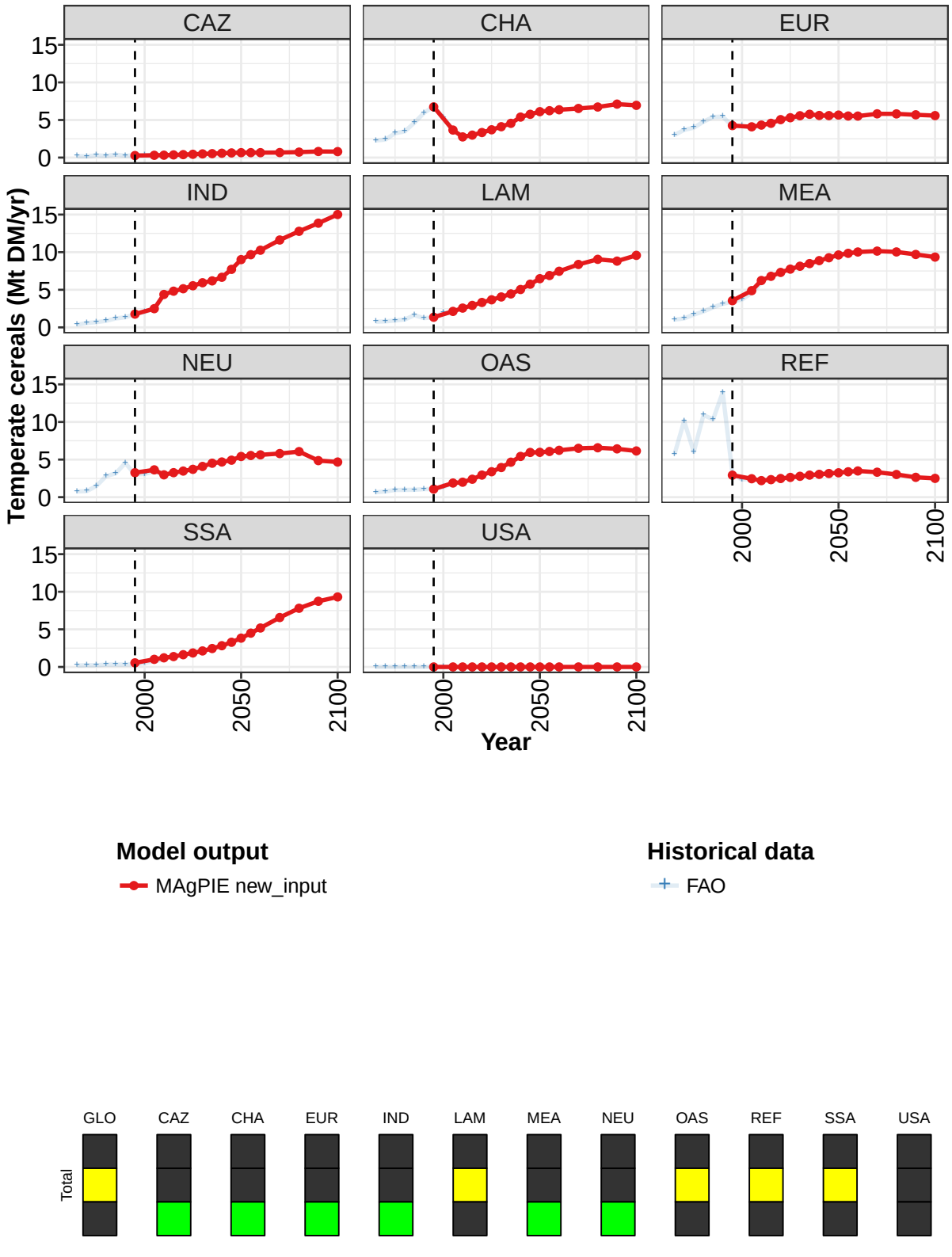


Figure 6: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	25.7	26.6	29.0	31.8	35.1	38.0	41.2	44.5	48.1	52.0	56.0
CAZ	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7
CHA	6.7	3.7	2.8	3.0	3.3	3.7	4.1	4.6	5.4	5.8	6.1
EUR	4.3	4.1	4.3	4.6	5.0	5.3	5.6	5.8	5.6	5.6	5.7
IND	1.8	2.5	4.4	4.8	5.1	5.5	5.9	6.2	6.7	7.7	9.0
LAM	1.4	2.1	2.6	2.9	3.3	3.7	4.0	4.4	5.0	5.7	6.5
MEA	3.6	4.9	6.2	6.8	7.3	7.7	8.1	8.5	8.9	9.3	9.6
NEU	3.3	3.6	3.0	3.3	3.5	3.7	4.1	4.5	4.7	4.9	5.4
OAS	1.1	1.9	2.0	2.4	2.9	3.4	3.9	4.7	5.4	5.9	6.0
REF	2.9	2.5	2.2	2.3	2.5	2.6	2.8	2.9	3.0	3.2	3.2
SSA	0.5	1.0	1.2	1.4	1.6	1.9	2.1	2.4	2.8	3.3	3.8
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 19: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

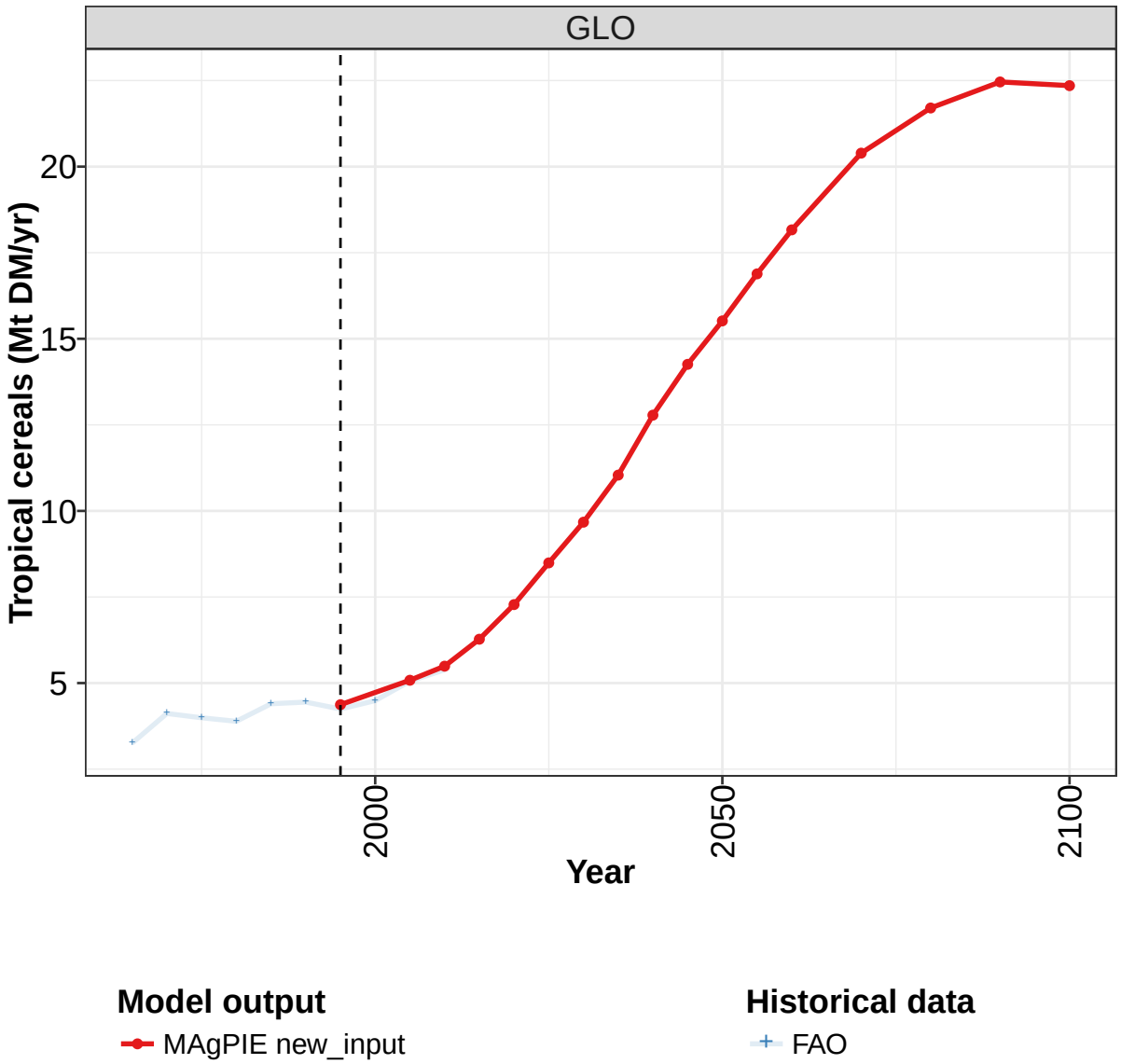
	2055	2060	2070	2080	2090	2100
GLO	58.3	60.8	65.3	68.6	68.6	69.9
CAZ	0.7	0.7	0.7	0.7	0.8	0.8
CHA	6.2	6.4	6.5	6.7	7.1	6.9
EUR	5.5	5.5	5.8	5.8	5.7	5.6
IND	9.7	10.3	11.6	12.8	13.9	15.0
LAM	6.9	7.5	8.4	9.1	8.8	9.6
MEA	9.9	10.0	10.1	10.0	9.7	9.3
NEU	5.5	5.6	5.8	6.1	4.9	4.7
OAS	6.1	6.2	6.5	6.6	6.4	6.1
REF	3.4	3.5	3.3	3.0	2.6	2.5
SSA	4.5	5.2	6.6	7.8	8.7	9.3
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 20: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	14.9	20.7	19.5	27.5	30.7	37.2	25.4	24.8	25.7	28.2
CAZ	0.2	0.2	0.3	0.2	0.4	0.3	0.3	0.3	0.4	0.3
CHA	2.3	2.4	3.2	3.5	4.6	5.9	6.8	5.3	3.7	2.8
EUR	3.0	3.7	4.0	4.8	5.4	5.4	4.2	4.2	4.0	4.2
IND	0.4	0.6	0.7	0.9	1.2	1.3	1.8	2.0	2.5	4.4
LAM	0.8	0.8	0.9	1.1	1.6	1.2	1.3	1.9	2.1	2.6
MEA	1.0	1.2	1.7	2.1	2.7	3.1	3.4	3.7	4.6	6.0
NEU	0.8	0.8	1.5	2.8	3.2	4.5	3.0	3.1	3.4	2.9
OAS	0.7	0.8	1.0	1.0	1.0	1.1	1.1	1.4	1.9	2.0
REF	5.7	10.1	6.0	10.9	10.4	13.9	3.1	2.3	2.5	2.2
SSA	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.8	1.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 21: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr)

3.1.5 Cereals—Tropical cereals



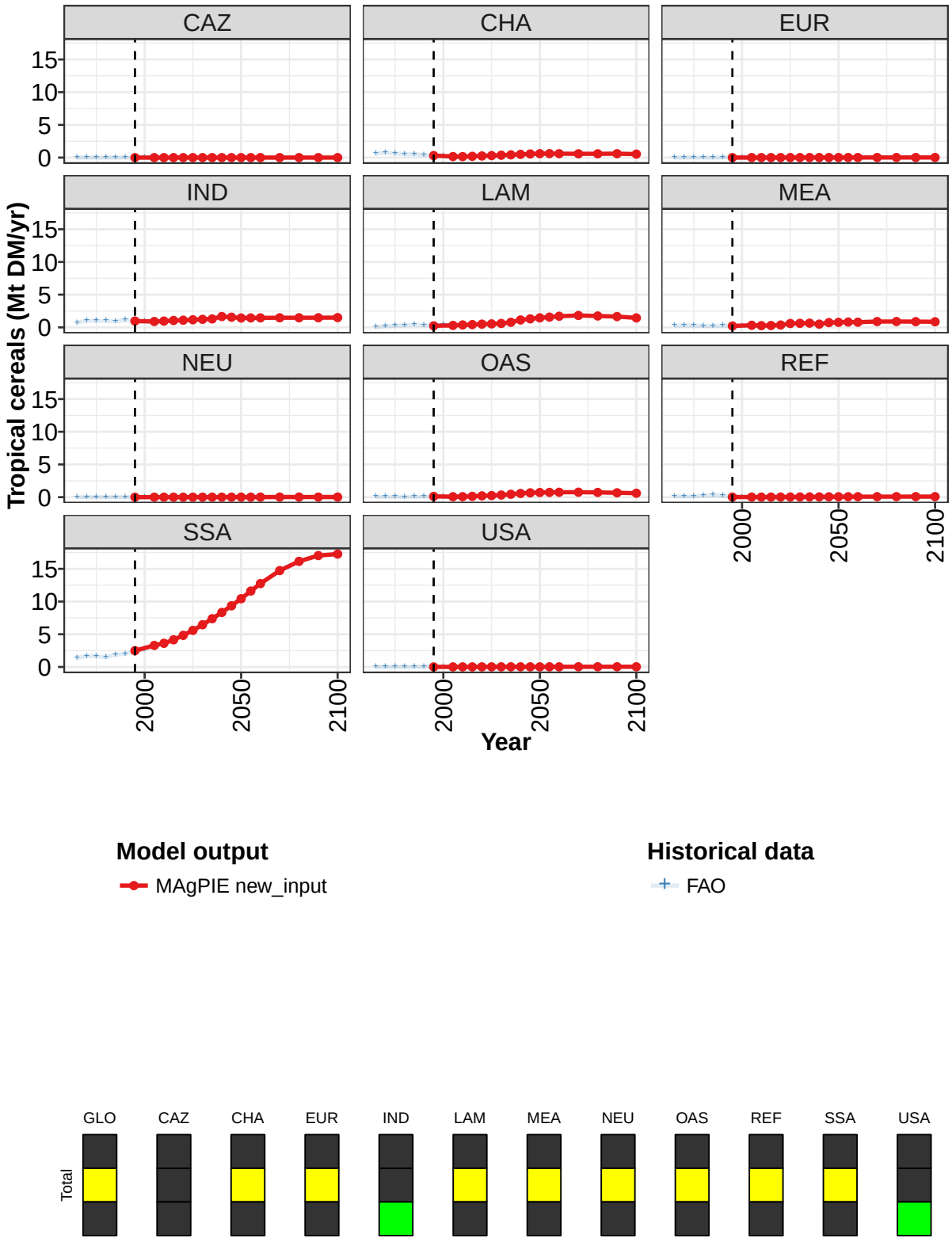


Figure 7: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.4	5.1	5.5	6.3	7.3	8.5	9.7	11.0	12.8	14.3	15.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.0	0.9	1.0	1.1	1.1	1.2	1.2	1.3	1.7	1.6	1.4
LAM	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.8	1.1	1.3	1.5
MEA	0.2	0.3	0.3	0.3	0.4	0.6	0.6	0.7	0.5	0.7	0.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.6	0.7	0.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SSA	2.5	3.3	3.6	4.2	4.8	5.6	6.5	7.4	8.3	9.3	10.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 22: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

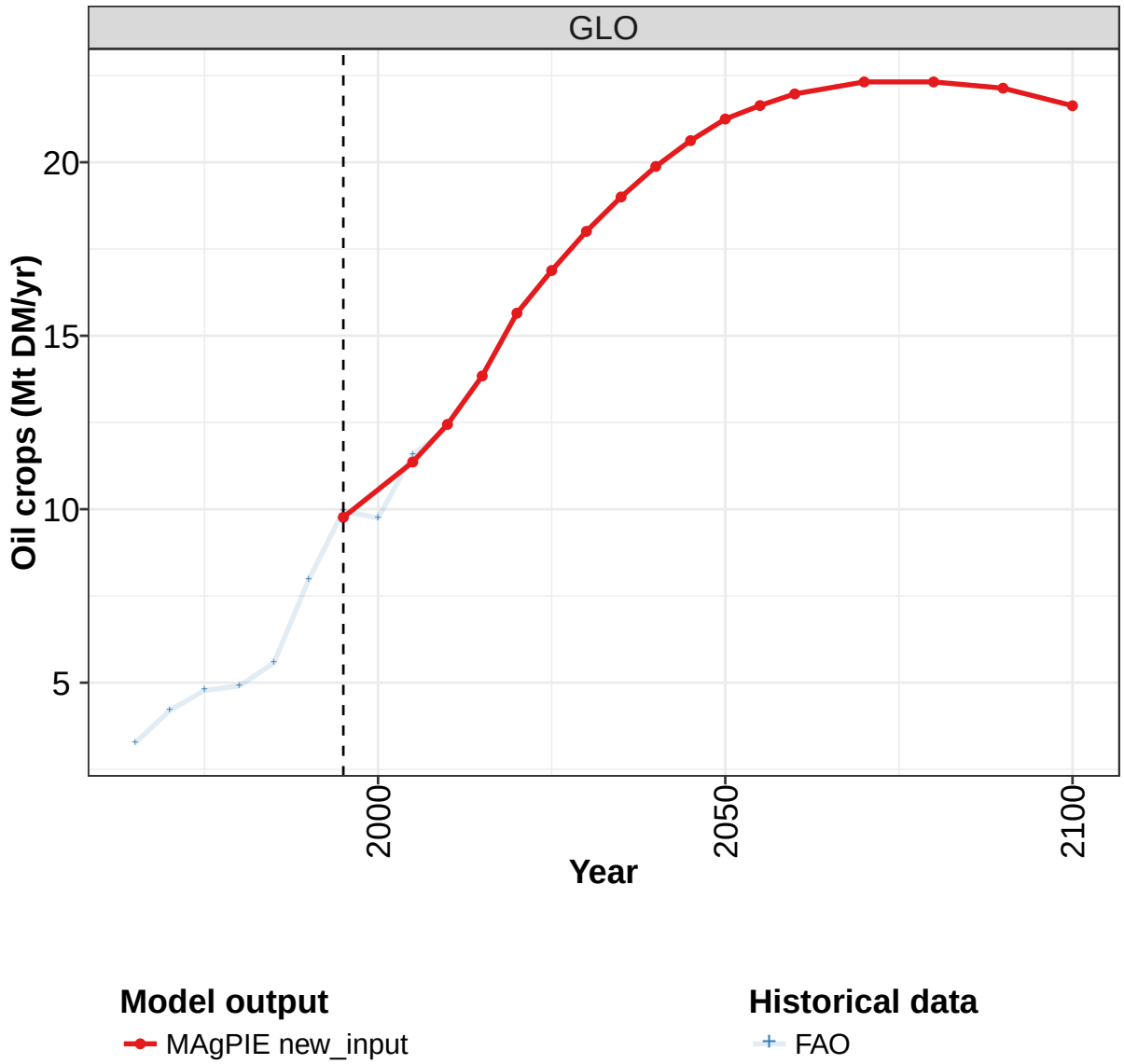
	2055	2060	2070	2080	2090	2100
GLO	16.9	18.2	20.4	21.7	22.5	22.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.6	0.6	0.6	0.6	0.6	0.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.4	1.5	1.5	1.5	1.5	1.5
LAM	1.6	1.7	1.8	1.7	1.7	1.4
MEA	0.8	0.8	0.9	0.9	0.9	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.7	0.8	0.7	0.7	0.6
REF	0.1	0.1	0.1	0.1	0.1	0.1
SSA	11.6	12.7	14.7	16.1	17.0	17.3
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 23: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.26	4.12	3.99	3.89	4.40	4.45	4.25	4.49	5.05	5.39
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.61	0.78	0.63	0.53	0.52	0.42	0.32	0.20	0.17	0.16
EUR	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00
IND	0.72	1.02	0.99	1.01	0.93	1.15	0.92	0.89	0.89	0.97
LAM	0.07	0.17	0.27	0.30	0.42	0.31	0.27	0.39	0.32	0.37
MEA	0.25	0.27	0.27	0.25	0.23	0.26	0.20	0.23	0.30	0.25
NEU	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.05	0.06	0.06	0.05	0.07	0.06	0.06	0.07	0.07	0.08
REF	0.16	0.15	0.10	0.26	0.33	0.25	0.02	0.03	0.02	0.01
SSA	1.39	1.66	1.66	1.49	1.90	1.99	2.44	2.65	3.27	3.54
USA	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 24: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr)

3.1.6 Oil crops



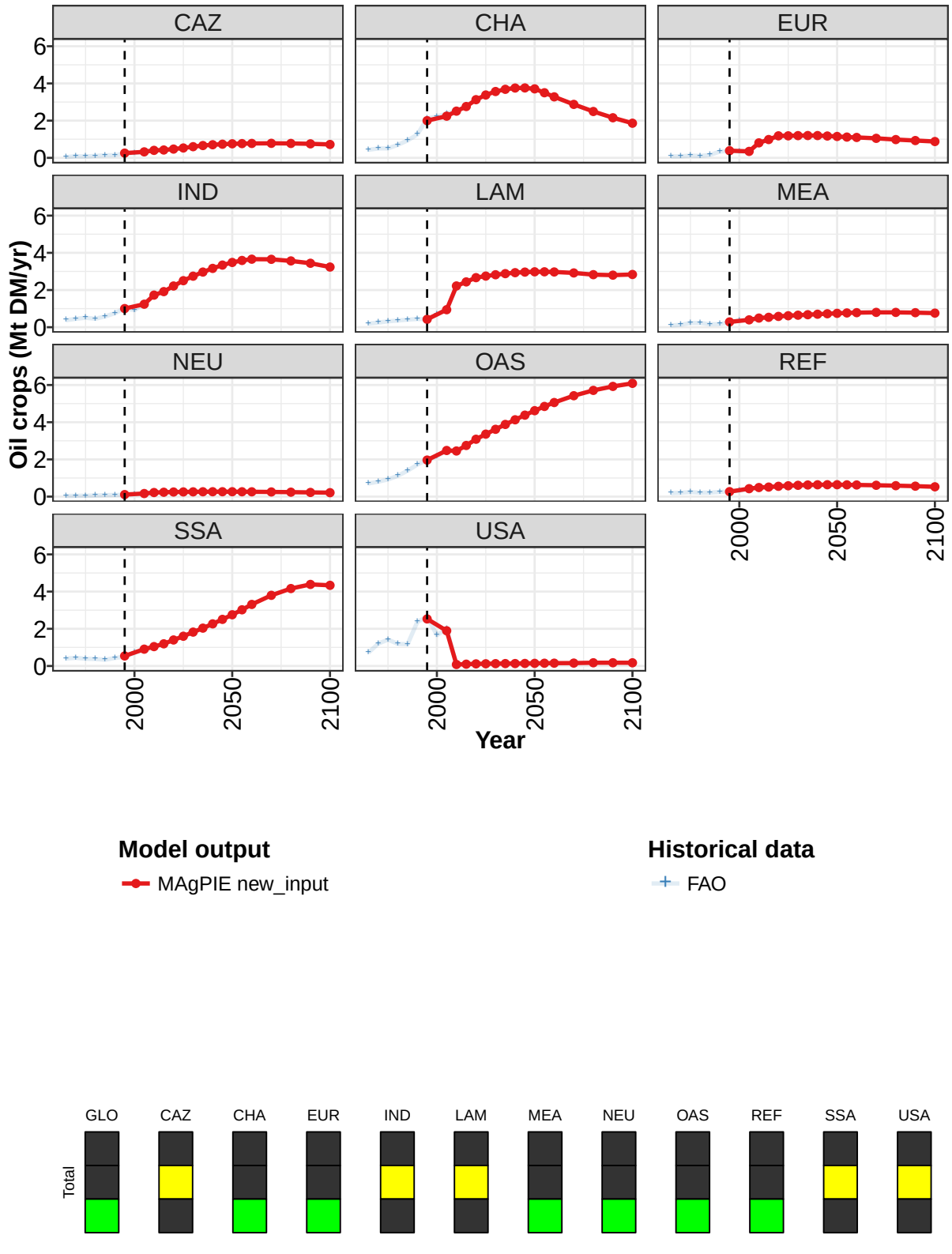


Figure 8: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.8	11.4	12.4	13.8	15.7	16.9	18.0	19.0	19.9	20.6	21.2
CAZ	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.8
CHA	2.0	2.2	2.5	2.8	3.1	3.4	3.6	3.7	3.8	3.8	3.7
EUR	0.4	0.3	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.1
IND	1.0	1.2	1.7	1.9	2.2	2.5	2.7	3.0	3.2	3.3	3.5
LAM	0.4	0.9	2.2	2.4	2.7	2.8	2.8	2.9	2.9	3.0	3.0
MEA	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7
NEU	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.0	2.5	2.5	2.8	3.1	3.4	3.6	3.9	4.1	4.4	4.6
REF	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
SSA	0.5	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.3	2.5	2.8
USA	2.5	1.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 25: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr) [PART 1/2]

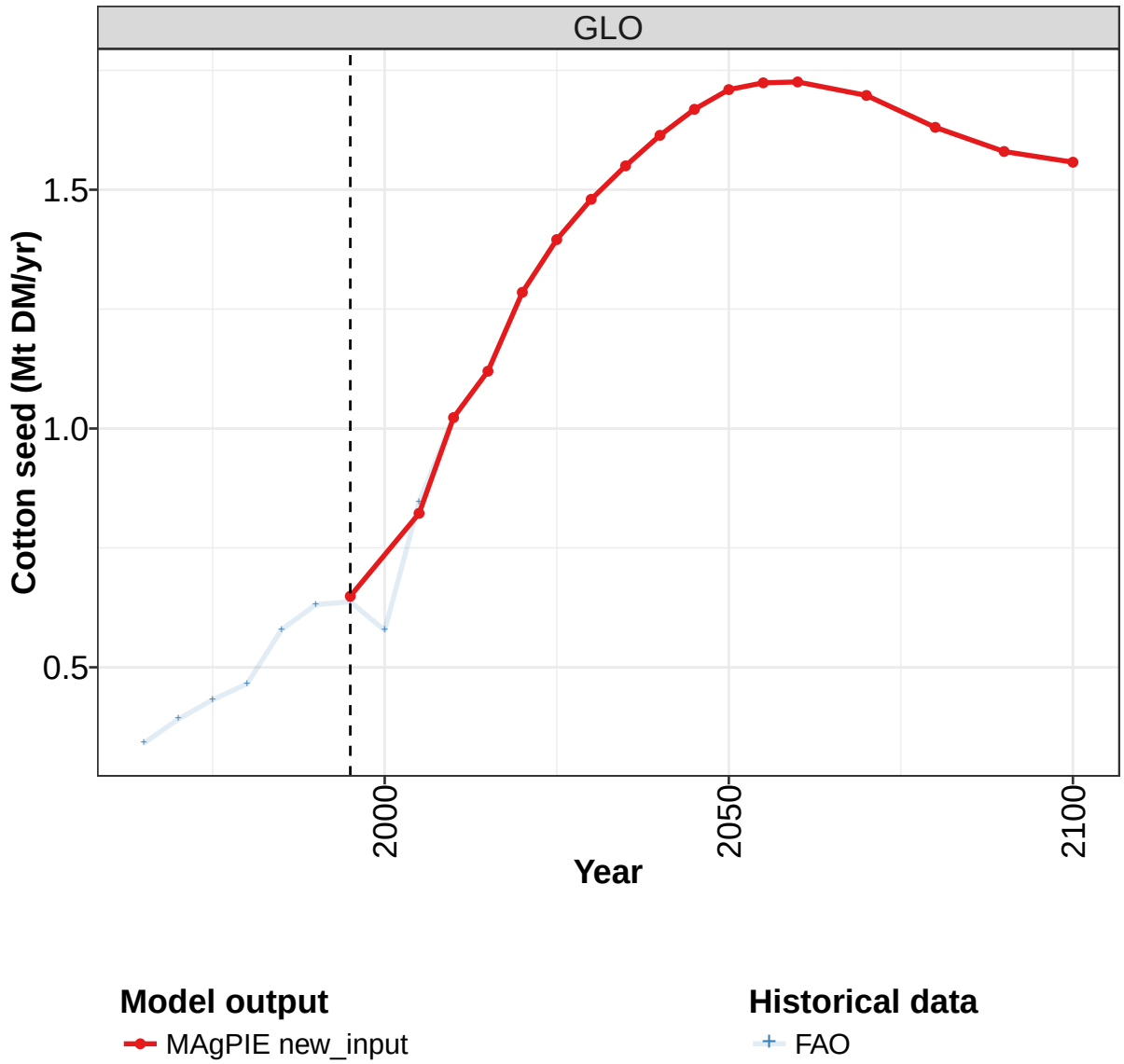
	2055	2060	2070	2080	2090	2100
GLO	21.6	22.0	22.3	22.3	22.1	21.6
CAZ	0.8	0.8	0.8	0.8	0.8	0.7
CHA	3.5	3.3	2.9	2.5	2.2	1.9
EUR	1.1	1.1	1.0	1.0	0.9	0.9
IND	3.6	3.7	3.7	3.6	3.4	3.2
LAM	3.0	3.0	2.9	2.8	2.8	2.8
MEA	0.8	0.8	0.8	0.8	0.8	0.8
NEU	0.3	0.3	0.3	0.2	0.2	0.2
OAS	4.8	5.1	5.4	5.7	5.9	6.1
REF	0.6	0.6	0.6	0.6	0.6	0.5
SSA	3.0	3.3	3.8	4.2	4.4	4.3
USA	0.1	0.2	0.2	0.2	0.2	0.2

Table 26: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.3	4.2	4.8	4.9	5.6	8.0	10.0	9.7	11.6	12.3
CAZ	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4
CHA	0.4	0.5	0.5	0.7	0.9	1.3	2.1	2.2	2.4	2.6
EUR	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.3	0.8
IND	0.4	0.5	0.5	0.5	0.6	0.8	1.0	0.9	1.3	1.7
LAM	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.7	1.0	2.1
MEA	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5
NEU	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2
OAS	0.7	0.8	0.9	1.1	1.4	1.7	2.0	2.2	2.5	2.5
REF	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5
SSA	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.7	0.9	1.0
USA	0.7	1.2	1.4	1.2	1.2	2.4	2.7	1.7	2.0	0.1

Table 27: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr)

3.1.7 Oil crops—Cotton seed



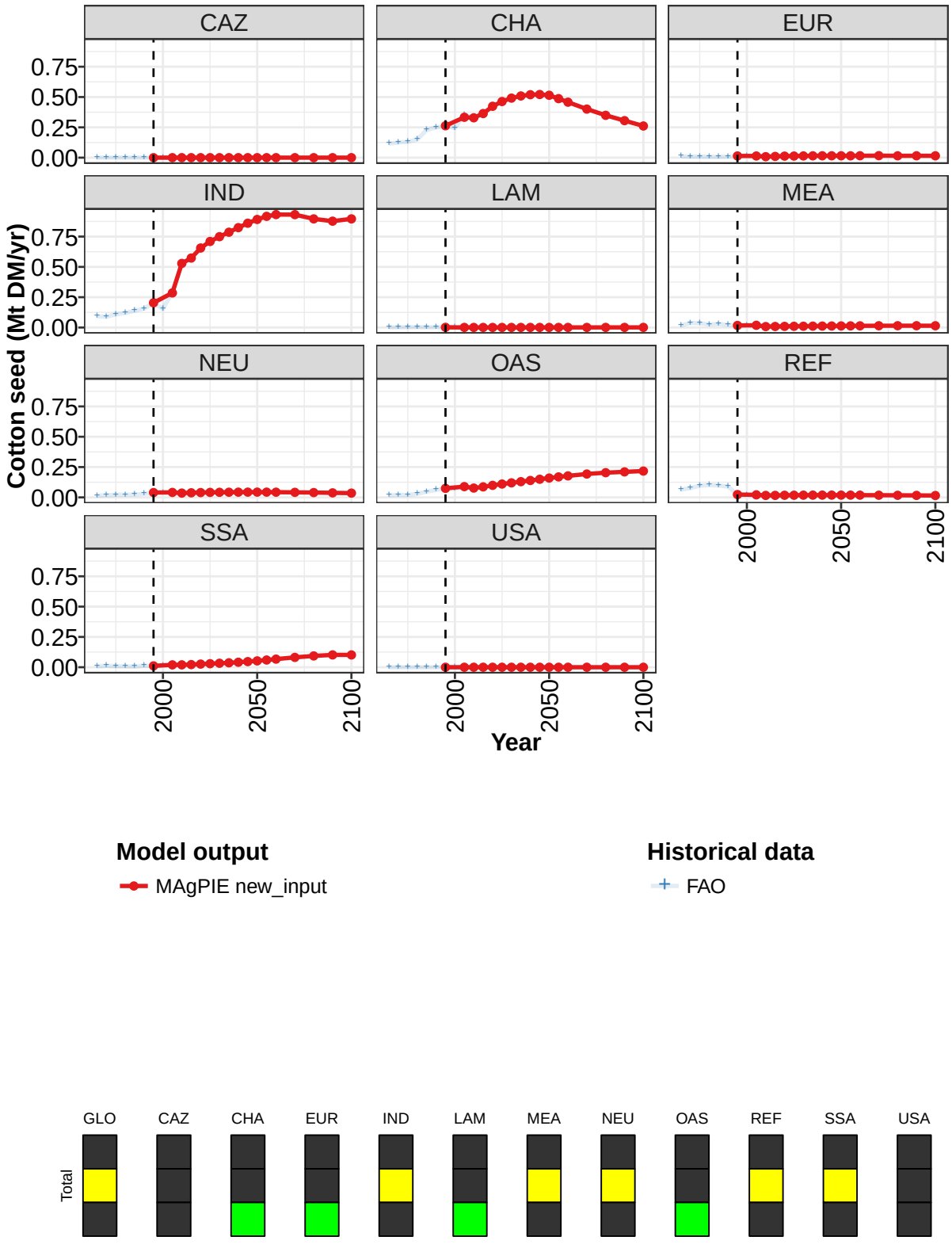


Figure 9: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.65	0.82	1.02	1.12	1.29	1.40	1.48	1.55	1.61	1.67	1.71
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.26	0.33	0.33	0.36	0.42	0.46	0.49	0.51	0.52	0.52	0.51
EUR	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
IND	0.20	0.29	0.53	0.57	0.66	0.71	0.75	0.79	0.82	0.86	0.89
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
OAS	0.07	0.09	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16
REF	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
SSA	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.05
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 28: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

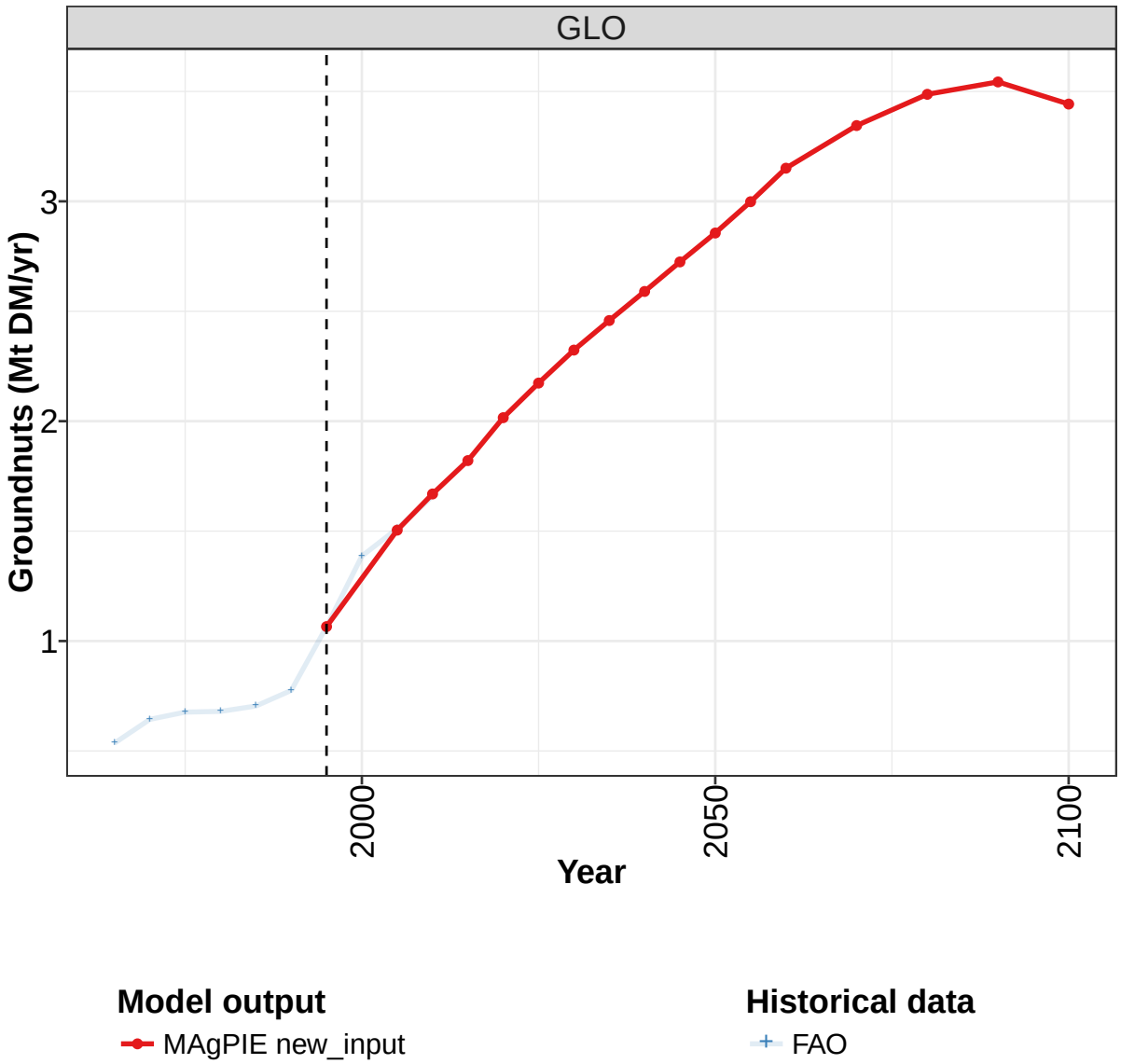
	2055	2060	2070	2080	2090	2100
GLO	1.72	1.73	1.70	1.63	1.58	1.56
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.49	0.46	0.40	0.35	0.31	0.26
EUR	0.02	0.02	0.02	0.02	0.02	0.02
IND	0.92	0.93	0.93	0.90	0.88	0.90
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.04	0.04	0.04	0.04	0.04	0.04
OAS	0.17	0.18	0.19	0.20	0.21	0.22
REF	0.02	0.02	0.02	0.02	0.02	0.02
SSA	0.06	0.07	0.08	0.09	0.10	0.10
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 29: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.34	0.39	0.43	0.47	0.58	0.63	0.64	0.58	0.85	1.02
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.12	0.13	0.13	0.15	0.23	0.25	0.26	0.24	0.36	0.33
EUR	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01
IND	0.09	0.09	0.11	0.12	0.14	0.16	0.20	0.15	0.29	0.53
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.02	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01
NEU	0.01	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.04	0.04
OAS	0.02	0.02	0.02	0.03	0.05	0.06	0.07	0.07	0.09	0.08
REF	0.06	0.08	0.10	0.10	0.10	0.09	0.02	0.02	0.02	0.02
SSA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 30: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr)

3.1.8 Oil crops—Groundnuts



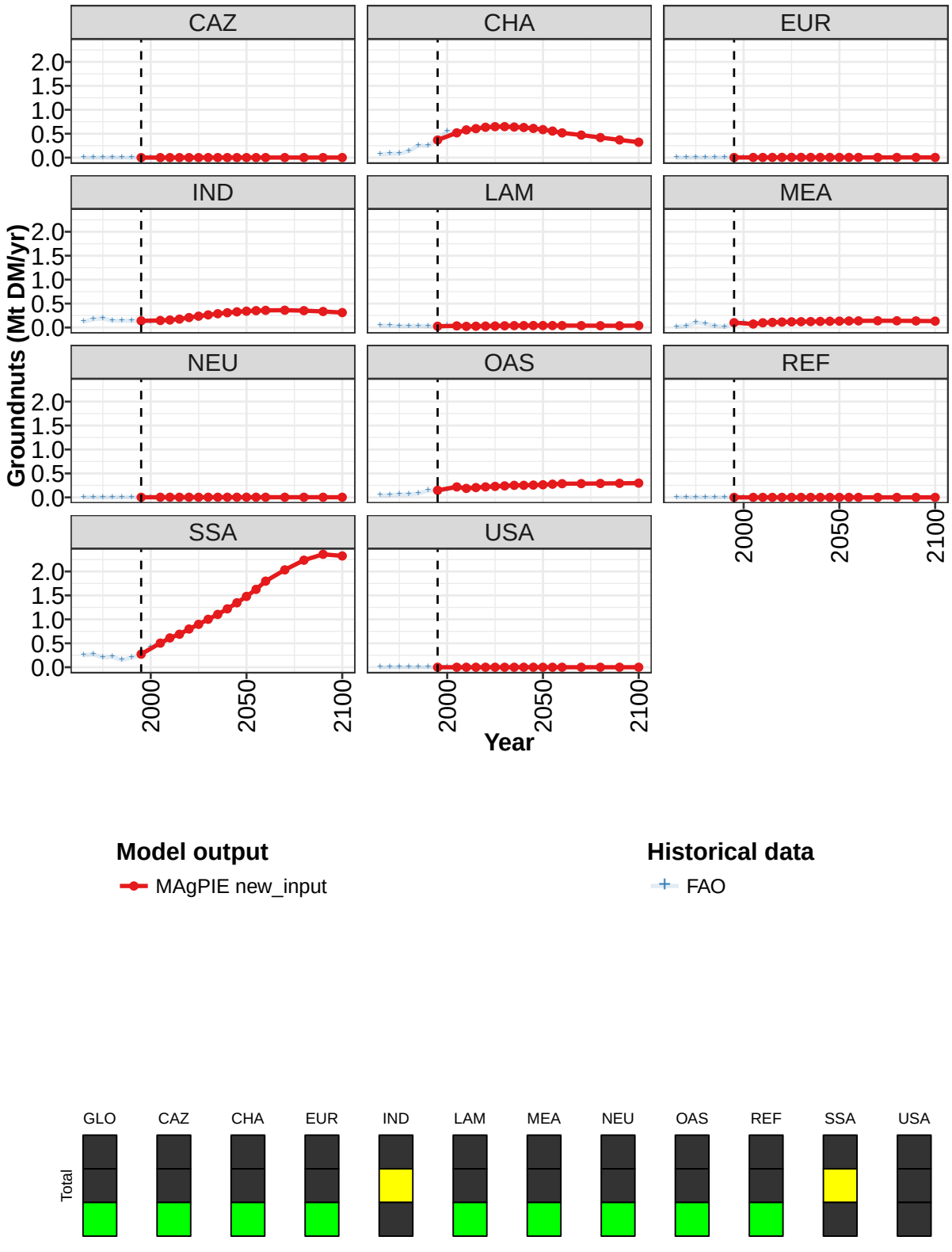


Figure 10: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.07	1.50	1.67	1.82	2.02	2.17	2.32	2.46	2.59	2.72	2.86
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.37	0.52	0.58	0.61	0.63	0.65	0.65	0.64	0.63	0.61	0.59
EUR	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.14	0.15	0.16	0.18	0.21	0.24	0.26	0.29	0.31	0.33	0.34
LAM	0.03	0.03	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
MEA	0.10	0.07	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.15	0.22	0.19	0.21	0.22	0.23	0.24	0.25	0.25	0.26	0.26
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.27	0.50	0.61	0.69	0.80	0.90	1.00	1.10	1.22	1.35	1.48
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 31: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

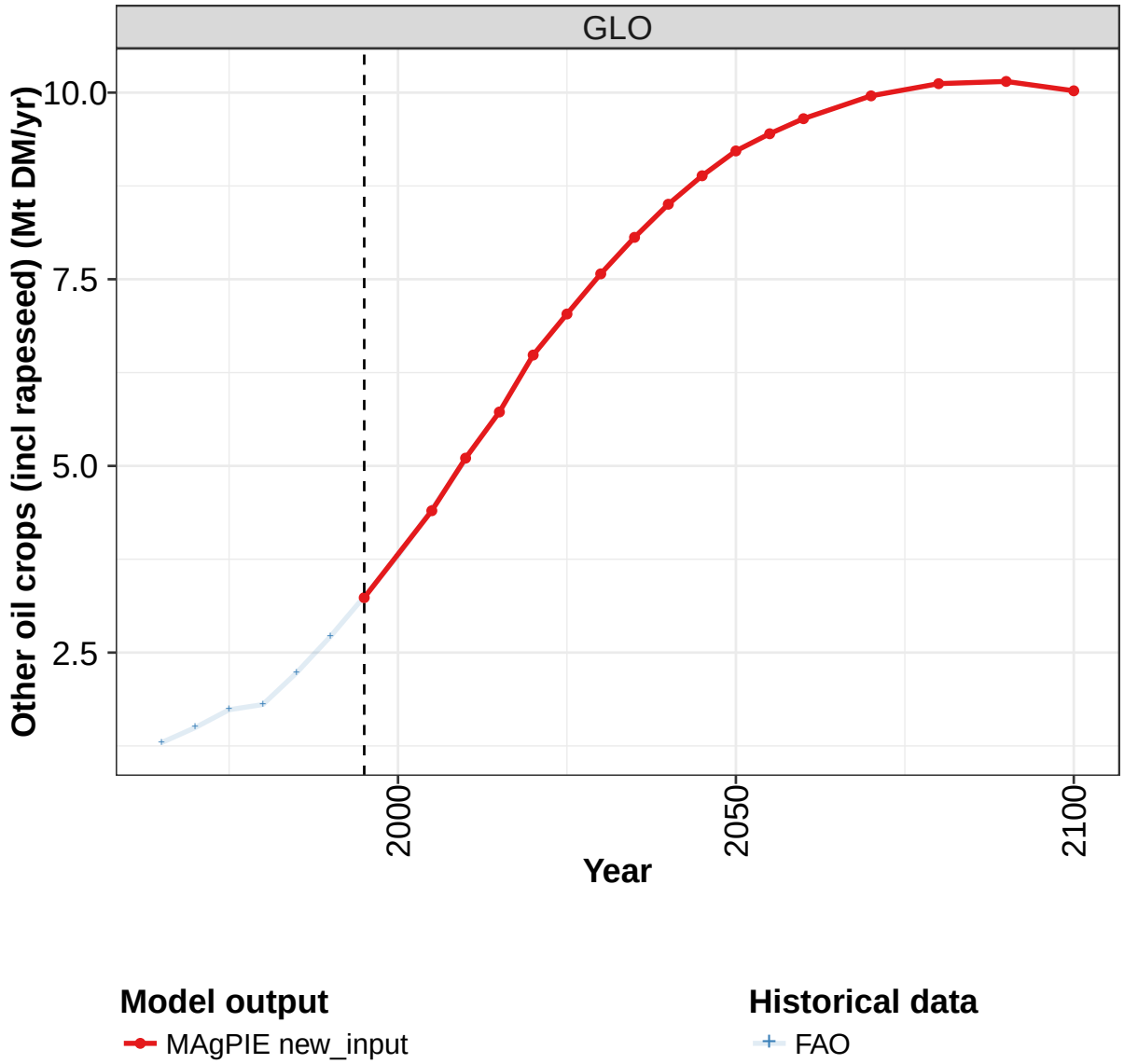
	2055	2060	2070	2080	2090	2100
GLO	3.00	3.15	3.34	3.49	3.54	3.44
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.56	0.52	0.47	0.42	0.37	0.32
EUR	0.01	0.00	0.00	0.00	0.00	0.00
IND	0.35	0.36	0.36	0.35	0.34	0.31
LAM	0.04	0.04	0.04	0.04	0.04	0.04
MEA	0.14	0.14	0.14	0.14	0.14	0.13
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.28	0.29	0.29	0.29	0.29	0.30
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.63	1.80	2.03	2.24	2.36	2.32
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 32: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.54	0.64	0.68	0.68	0.70	0.78	1.07	1.39	1.51	1.66
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.07	0.08	0.09	0.14	0.25	0.24	0.39	0.54	0.54	0.59
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.12	0.17	0.19	0.14	0.14	0.14	0.14	0.12	0.15	0.16
LAM	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.04
MEA	0.01	0.03	0.10	0.08	0.03	0.02	0.09	0.10	0.07	0.09
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.04	0.05	0.06	0.06	0.08	0.14	0.15	0.17	0.22	0.19
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.25	0.27	0.20	0.22	0.15	0.20	0.26	0.41	0.49	0.59
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 33: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr)

3.1.9 Oil crops—Other oil crops (incl rapeseed)



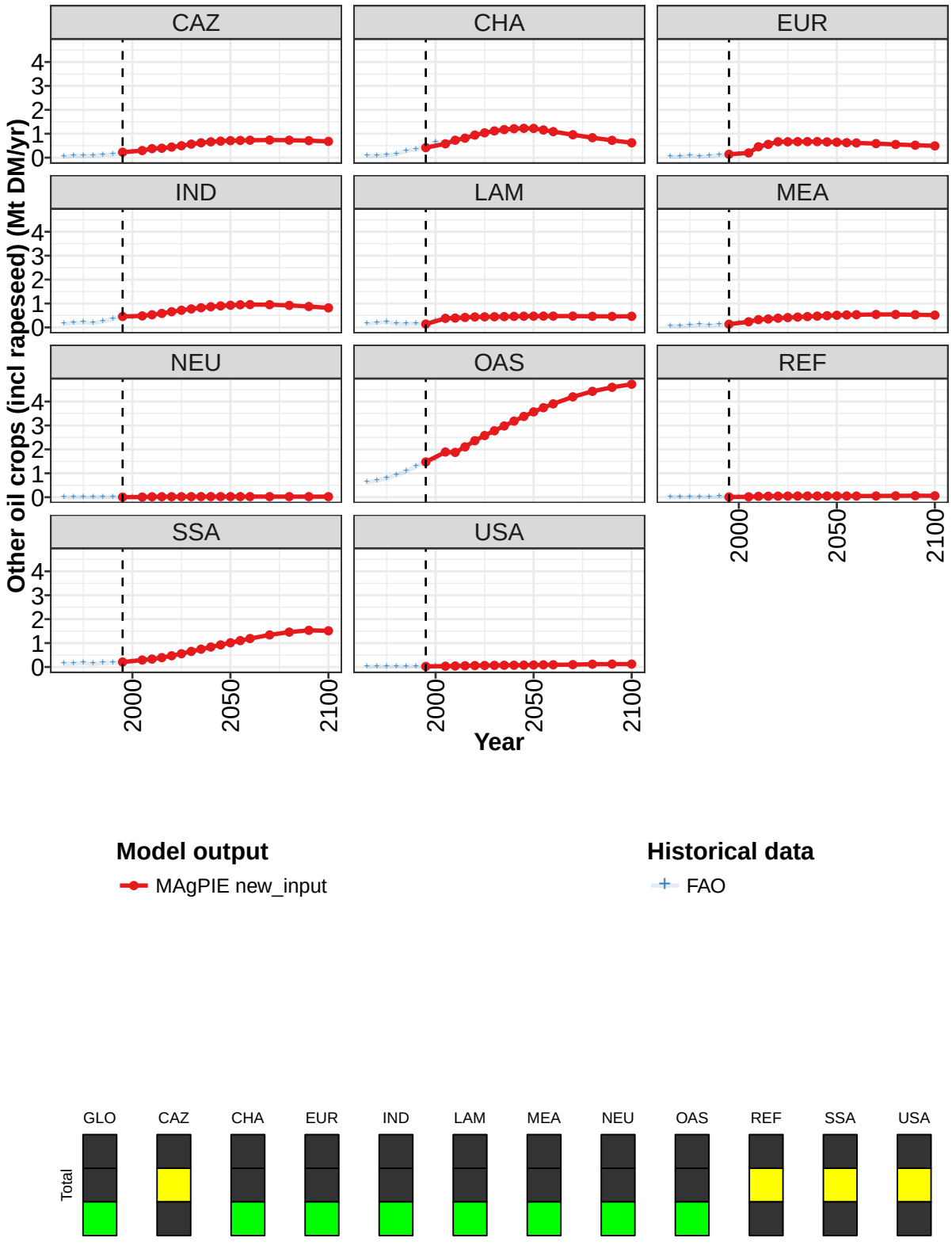


Figure 11: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.2	4.4	5.1	5.7	6.5	7.0	7.6	8.1	8.5	8.9	9.2
CAZ	0.2	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.7
CHA	0.4	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.2	1.2
EUR	0.1	0.2	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6
IND	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9
LAM	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
MEA	0.1	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.5	1.9	1.9	2.1	2.4	2.6	2.8	3.0	3.2	3.4	3.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SSA	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.7	0.8	0.9	1.0
USA	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 34: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

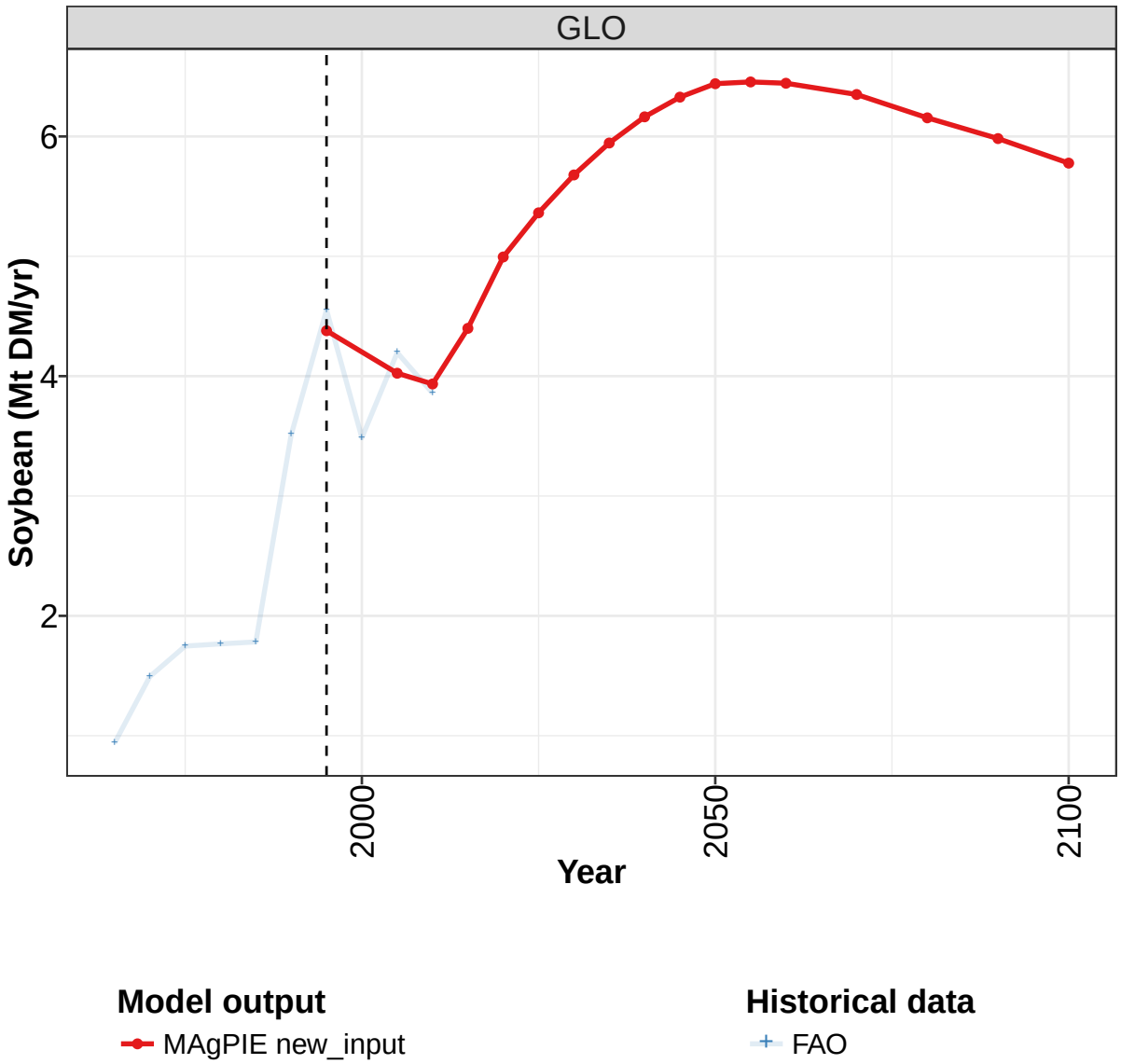
	2055	2060	2070	2080	2090	2100
GLO	9.4	9.7	10.0	10.1	10.1	10.0
CAZ	0.7	0.7	0.7	0.7	0.7	0.7
CHA	1.2	1.1	1.0	0.8	0.7	0.6
EUR	0.6	0.6	0.6	0.5	0.5	0.5
IND	0.9	1.0	1.0	0.9	0.9	0.8
LAM	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.7	3.9	4.2	4.4	4.6	4.7
REF	0.0	0.0	0.1	0.1	0.1	0.1
SSA	1.1	1.2	1.3	1.5	1.5	1.5
USA	0.1	0.1	0.1	0.1	0.1	0.1

Table 35: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.29	1.50	1.73	1.80	2.23	2.72	3.25	3.79	4.42	5.08
CAZ	0.03	0.08	0.06	0.09	0.12	0.13	0.21	0.23	0.29	0.40
CHA	0.08	0.08	0.10	0.15	0.29	0.35	0.45	0.65	0.62	0.74
EUR	0.03	0.04	0.08	0.04	0.06	0.10	0.14	0.15	0.19	0.45
IND	0.16	0.19	0.21	0.18	0.25	0.35	0.46	0.42	0.49	0.53
LAM	0.15	0.19	0.23	0.15	0.15	0.17	0.14	0.27	0.38	0.38
MEA	0.06	0.05	0.08	0.10	0.08	0.11	0.13	0.19	0.22	0.31
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
OAS	0.61	0.69	0.79	0.93	1.08	1.29	1.49	1.60	1.90	1.88
REF	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.04
SSA	0.14	0.15	0.17	0.14	0.17	0.18	0.19	0.22	0.27	0.30
USA	0.01	0.01	0.02	0.02	0.02	0.03	0.02	0.04	0.04	0.04

Table 36: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

3.1.10 Oil crops—Soybean



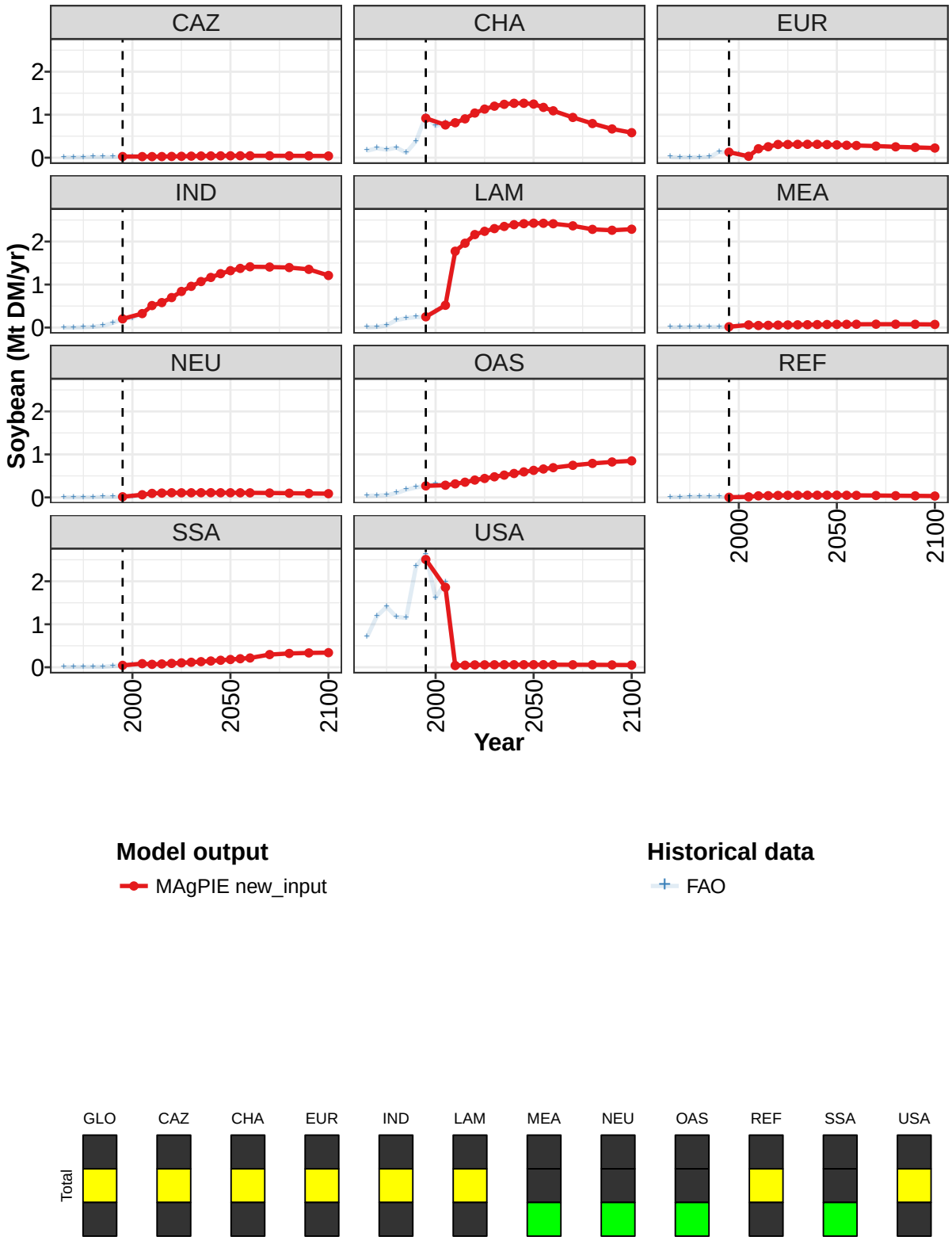


Figure 12: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.38	4.02	3.93	4.40	4.99	5.36	5.68	5.95	6.16	6.33	6.44
CAZ	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
CHA	0.92	0.76	0.81	0.90	1.04	1.13	1.20	1.24	1.27	1.27	1.25
EUR	0.13	0.03	0.21	0.25	0.31	0.31	0.31	0.31	0.31	0.30	0.30
IND	0.20	0.32	0.51	0.58	0.70	0.84	0.96	1.07	1.17	1.25	1.32
LAM	0.25	0.52	1.78	1.96	2.16	2.24	2.30	2.35	2.39	2.42	2.43
MEA	0.02	0.06	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07
NEU	0.01	0.06	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11
OAS	0.27	0.28	0.31	0.35	0.40	0.44	0.48	0.52	0.56	0.59	0.63
REF	0.00	0.01	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.04	0.08	0.07	0.08	0.09	0.10	0.12	0.13	0.15	0.16	0.18
USA	2.51	1.86	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06

Table 37: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

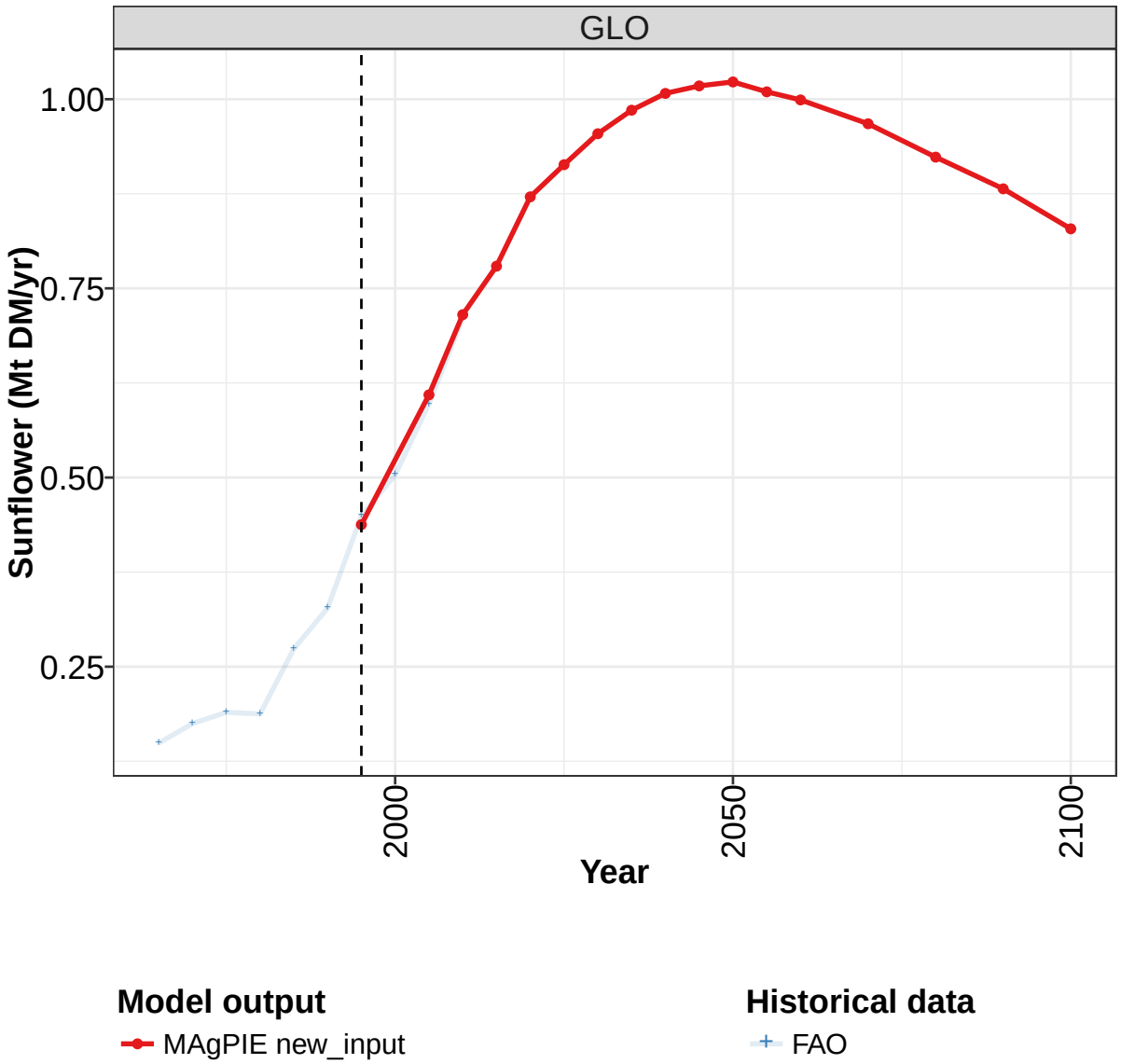
	2055	2060	2070	2080	2090	2100
GLO	6.45	6.44	6.35	6.16	5.98	5.78
CAZ	0.04	0.04	0.04	0.04	0.04	0.04
CHA	1.17	1.09	0.94	0.79	0.67	0.58
EUR	0.29	0.28	0.27	0.25	0.24	0.22
IND	1.38	1.41	1.41	1.40	1.35	1.21
LAM	2.43	2.41	2.37	2.28	2.26	2.29
MEA	0.07	0.08	0.08	0.08	0.08	0.07
NEU	0.11	0.11	0.10	0.10	0.09	0.09
OAS	0.66	0.69	0.75	0.79	0.82	0.85
REF	0.05	0.05	0.04	0.04	0.04	0.03
SSA	0.20	0.22	0.30	0.32	0.33	0.34
USA	0.06	0.06	0.06	0.06	0.05	0.05

Table 38: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	1.49	1.75	1.77	1.78	3.51	4.55	3.49	4.20	3.86
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.03
CHA	0.16	0.22	0.19	0.23	0.12	0.38	0.97	0.74	0.81	0.83
EUR	0.01	0.01	0.01	0.01	0.01	0.13	0.13	0.08	0.03	0.20
IND	0.00	0.00	0.00	0.02	0.04	0.10	0.20	0.22	0.33	0.51
LAM	0.00	0.01	0.05	0.17	0.22	0.24	0.25	0.37	0.53	1.70
MEA	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.04	0.06	0.05
NEU	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.06	0.09
OAS	0.03	0.04	0.05	0.10	0.18	0.23	0.27	0.32	0.29	0.32
REF	0.00	0.01	0.01	0.02	0.01	0.01	0.00	0.00	0.01	0.04
SSA	0.01	0.01	0.01	0.01	0.01	0.03	0.04	0.06	0.08	0.06
USA	0.70	1.18	1.40	1.17	1.15	2.34	2.63	1.61	1.97	0.04

Table 39: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr)

3.1.11 Oil crops—Sunflower



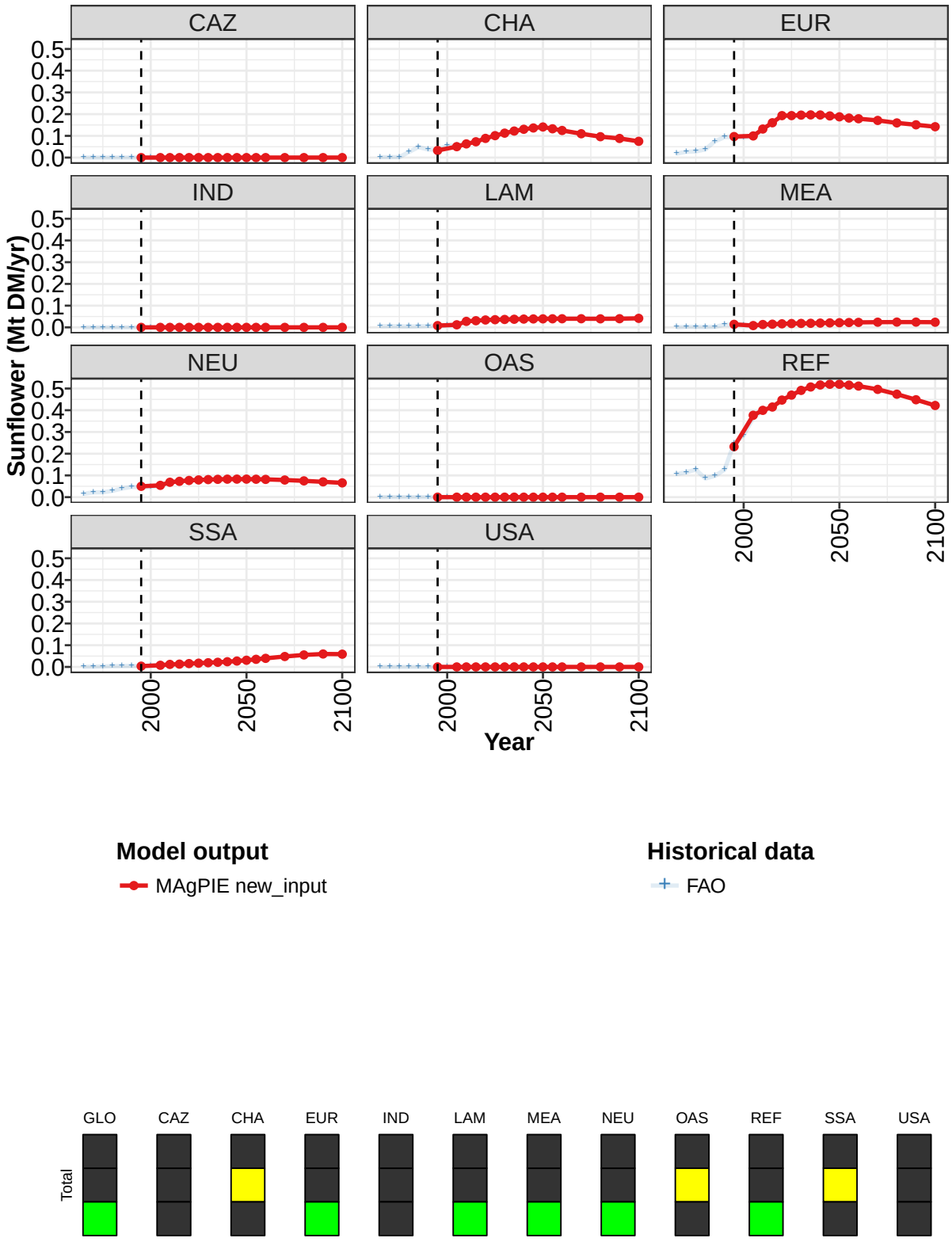


Figure 13: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.44	0.61	0.72	0.78	0.87	0.91	0.95	0.99	1.01	1.02	1.02
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.03	0.05	0.06	0.07	0.09	0.10	0.11	0.12	0.13	0.14	0.14
EUR	0.10	0.10	0.13	0.16	0.19	0.19	0.20	0.20	0.20	0.19	0.19
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
MEA	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
NEU	0.05	0.05	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.23	0.38	0.40	0.41	0.45	0.47	0.49	0.51	0.52	0.52	0.52
SSA	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 40: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

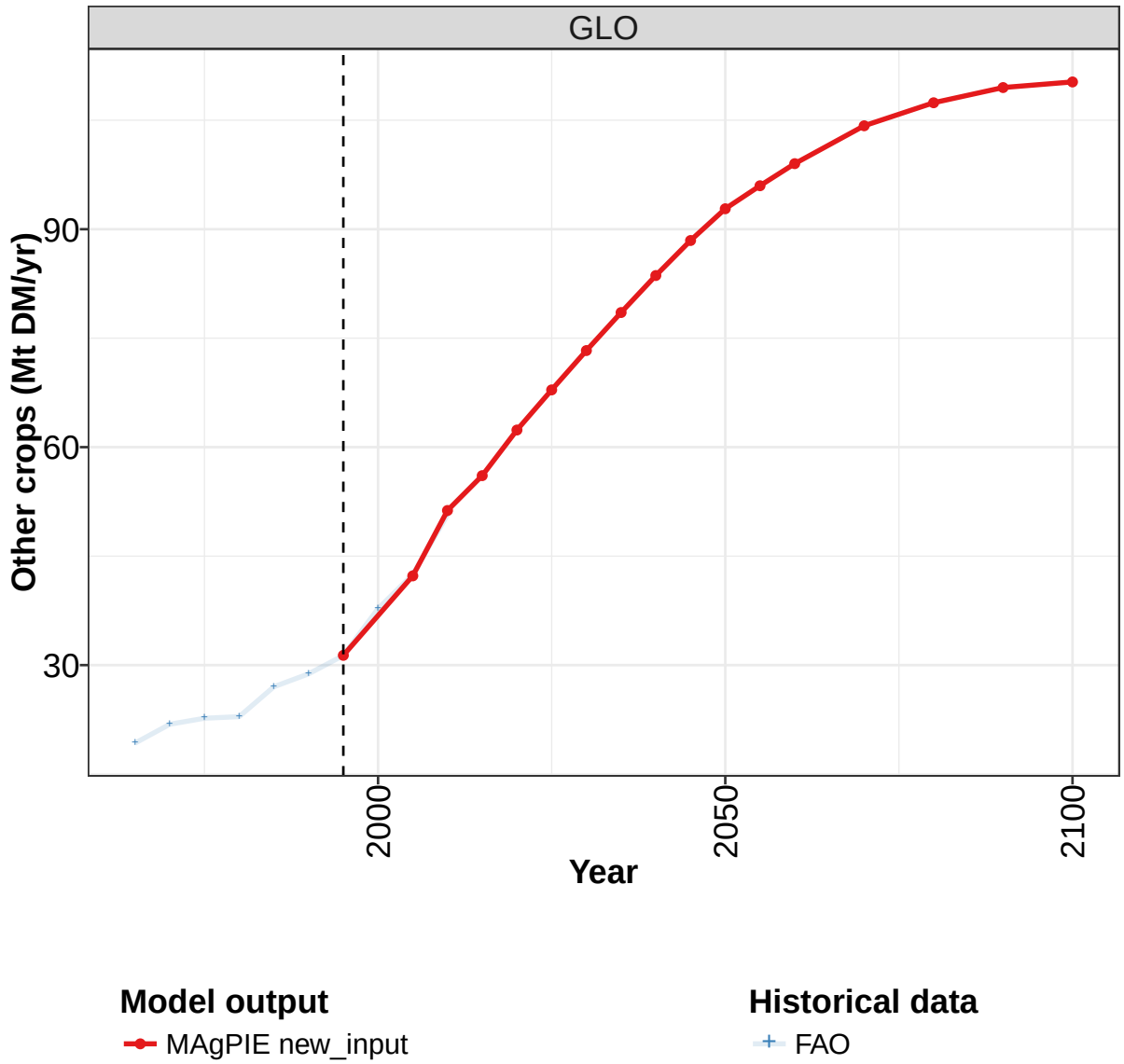
	2055	2060	2070	2080	2090	2100
GLO	1.01	1.00	0.97	0.92	0.88	0.83
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.13	0.12	0.11	0.10	0.09	0.07
EUR	0.18	0.18	0.17	0.16	0.15	0.14
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.04	0.04	0.04	0.04	0.04
MEA	0.02	0.02	0.02	0.02	0.02	0.02
NEU	0.08	0.08	0.08	0.07	0.07	0.07
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.52	0.51	0.50	0.47	0.45	0.42
SSA	0.04	0.04	0.05	0.06	0.06	0.06
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 41: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.149	0.175	0.190	0.188	0.274	0.328	0.449	0.503	0.597	0.710
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.002	0.002	0.002	0.025	0.048	0.037	0.035	0.055	0.054	0.064
EUR	0.018	0.027	0.028	0.038	0.075	0.094	0.096	0.092	0.098	0.129
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.005	0.006	0.005	0.004	0.005	0.006	0.008	0.008	0.012	0.026
MEA	0.000	0.003	0.002	0.002	0.003	0.012	0.013	0.010	0.007	0.013
NEU	0.016	0.022	0.022	0.029	0.040	0.047	0.045	0.047	0.052	0.068
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.107	0.114	0.127	0.086	0.098	0.126	0.248	0.285	0.366	0.398
SSA	0.001	0.001	0.002	0.004	0.004	0.005	0.004	0.006	0.008	0.011
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 42: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr)

3.1.12 Other crops



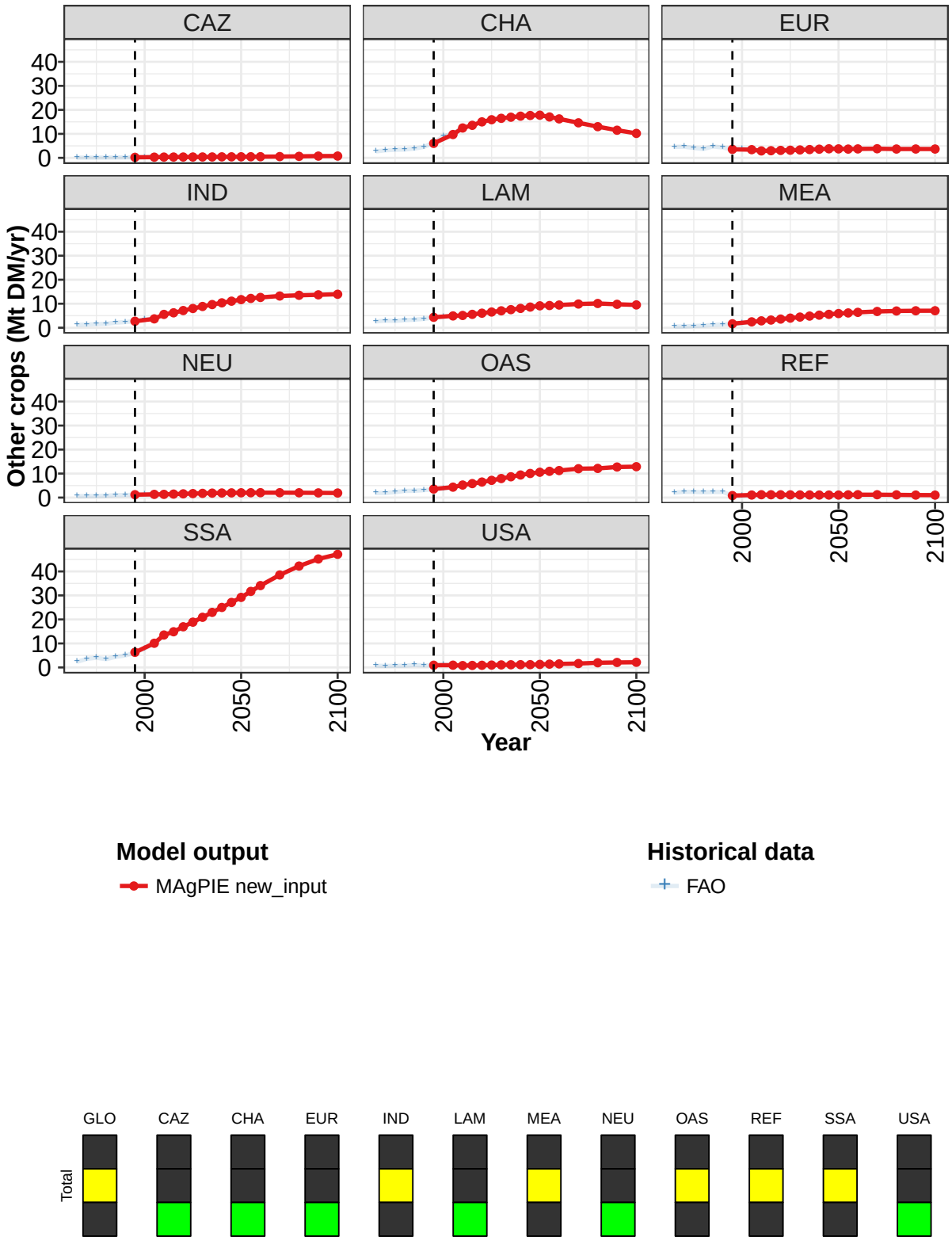


Figure 14: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	31	42	51	56	62	68	73	79	84	88	93
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	6	10	12	14	15	16	16	17	17	18	18
EUR	4	3	3	3	3	3	3	3	4	4	4
IND	3	4	6	6	7	8	9	10	10	11	12
LAM	4	5	5	6	6	7	7	8	8	9	9
MEA	2	2	3	3	4	4	4	5	5	6	6
NEU	1	1	1	1	2	2	2	2	2	2	2
OAS	4	4	5	6	6	7	8	9	9	10	11
REF	1	1	1	1	1	1	1	1	1	1	1
SSA	6	10	14	15	17	19	21	23	25	27	29
USA	1	1	1	1	1	1	1	1	1	1	1

Table 43: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr) [PART 1/2]

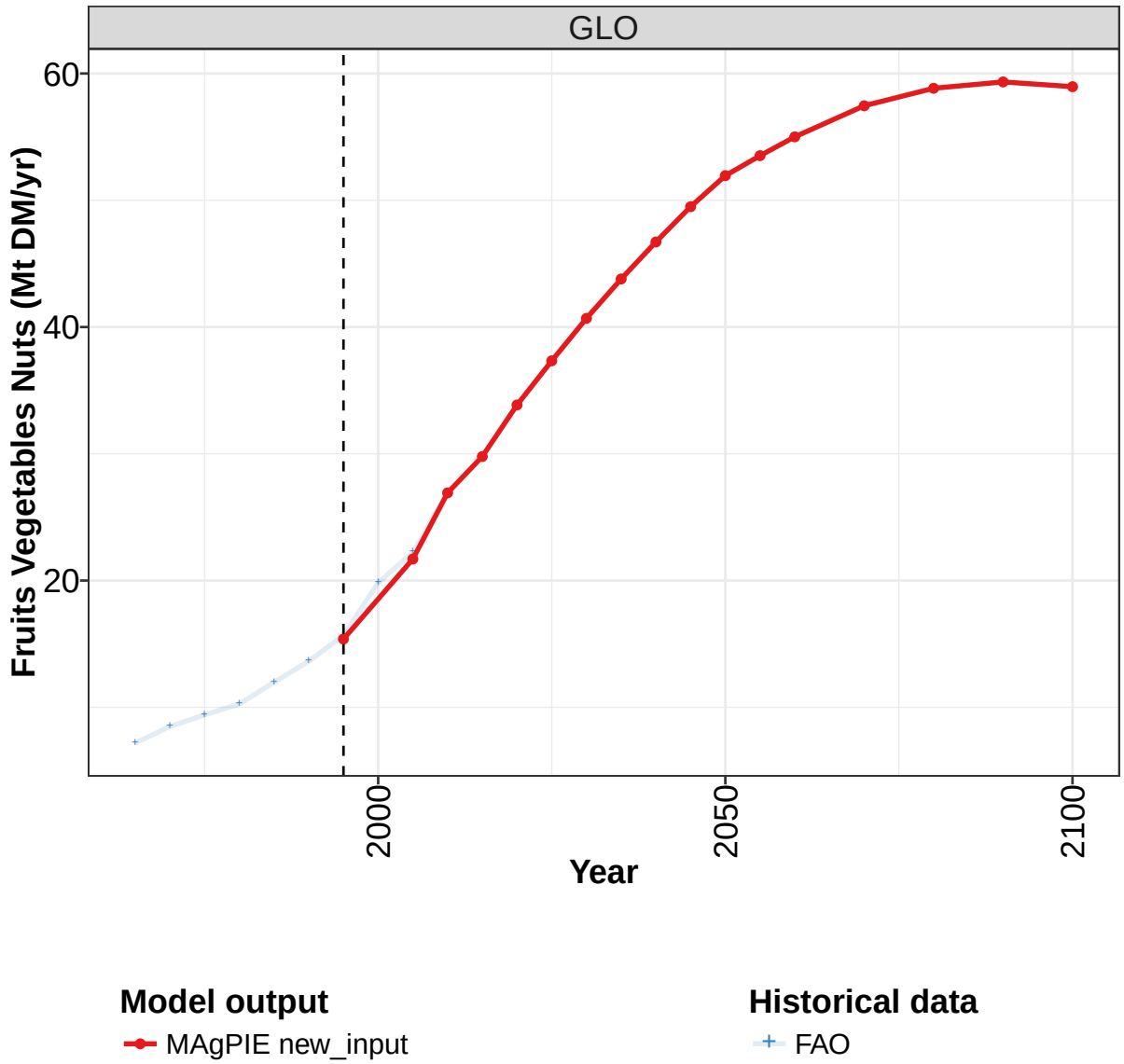
	2055	2060	2070	2080	2090	2100
GLO	96	99	104	107	109	110
CAZ	0	0	1	1	1	1
CHA	17	16	15	13	12	10
EUR	4	4	4	4	4	4
IND	12	13	13	14	14	14
LAM	9	9	10	10	10	10
MEA	6	6	7	7	7	7
NEU	2	2	2	2	2	2
OAS	11	11	12	12	13	13
REF	1	1	1	1	1	1
SSA	32	34	39	42	45	47
USA	1	1	2	2	2	2

Table 44: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	19.3	21.9	22.7	22.9	27.0	28.8	31.3	37.8	42.5	50.7
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3
CHA	2.7	3.1	3.4	3.5	3.9	4.6	6.3	8.9	10.2	12.6
EUR	4.6	4.6	4.1	3.7	4.8	4.3	3.5	3.9	3.4	2.9
IND	1.2	1.3	1.5	1.7	2.1	2.4	2.7	3.4	3.8	5.5
LAM	2.6	3.0	2.9	3.1	3.3	3.7	4.3	4.6	4.9	5.0
MEA	0.5	0.5	0.7	0.9	1.2	1.4	1.6	1.9	2.3	2.7
NEU	0.6	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.3	1.4
OAS	1.9	1.9	2.3	2.8	2.8	3.1	3.5	3.8	4.3	5.2
REF	2.1	2.4	2.4	2.2	2.3	2.3	0.9	0.7	1.1	1.2
SSA	2.4	3.6	4.0	3.4	4.4	5.0	6.2	7.9	10.0	13.1
USA	0.7	0.6	0.7	0.7	1.0	0.8	0.9	1.2	0.9	0.8

Table 45: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr)

3.1.13 Other crops—Fruits Vegetables Nuts



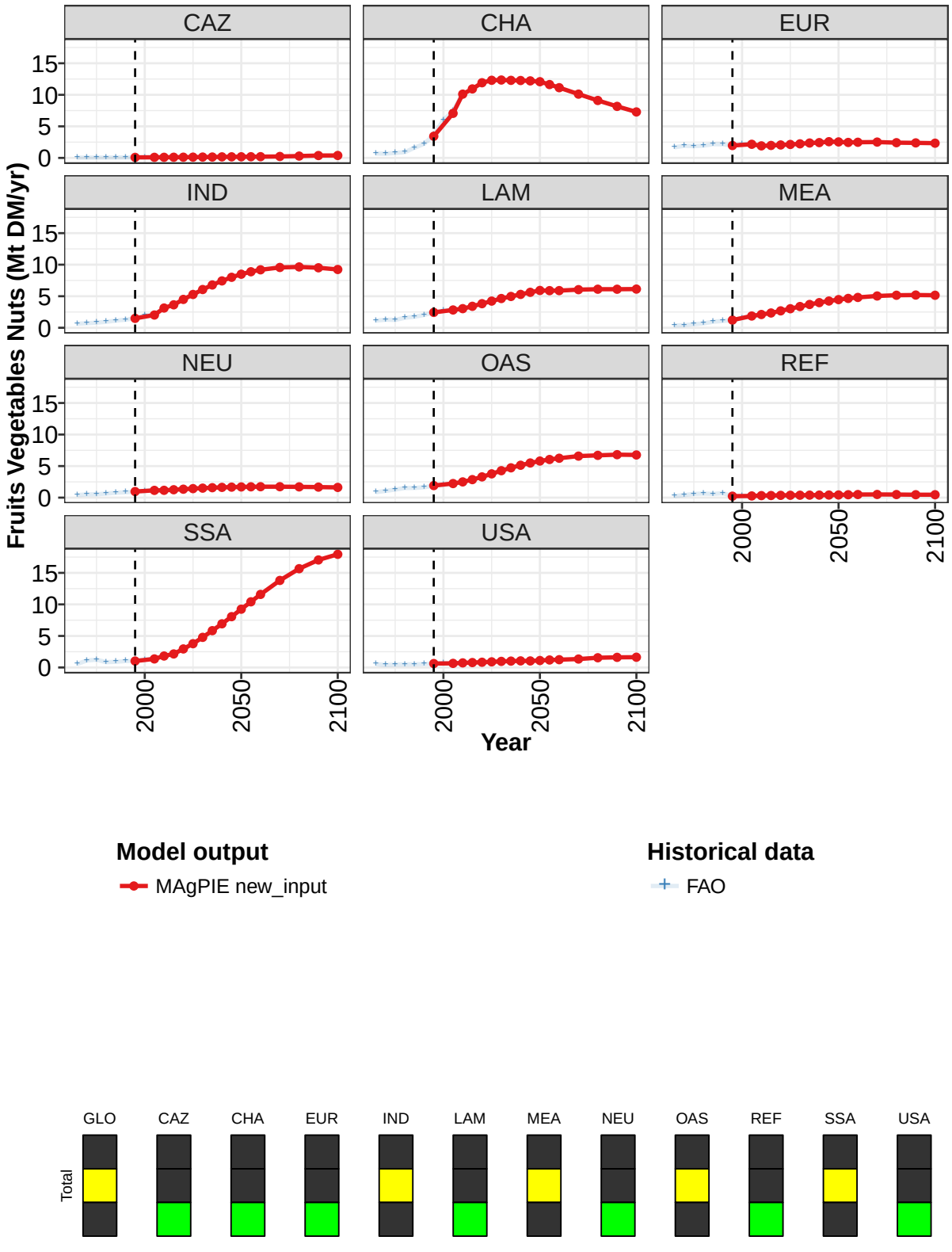


Figure 15: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	15.4	21.7	26.9	29.8	33.9	37.3	40.7	43.8	46.7	49.5	51.9
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
CHA	3.4	7.1	10.1	10.9	11.9	12.3	12.3	12.3	12.3	12.2	12.1
EUR	2.0	2.2	1.9	2.0	2.1	2.1	2.2	2.4	2.4	2.6	2.5
IND	1.5	2.0	3.1	3.6	4.5	5.3	6.1	6.8	7.4	8.0	8.5
LAM	2.4	2.8	3.0	3.4	3.8	4.2	4.6	5.0	5.3	5.6	5.9
MEA	1.2	1.9	2.1	2.3	2.7	3.0	3.4	3.7	4.0	4.2	4.5
NEU	1.0	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.6	1.7	1.7
OAS	1.9	2.2	2.5	2.9	3.3	3.8	4.3	4.7	5.1	5.5	5.8
REF	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SSA	1.0	1.4	1.8	2.1	2.9	3.8	4.8	5.8	6.9	8.1	9.2
USA	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.0	1.0	1.1

Table 46: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

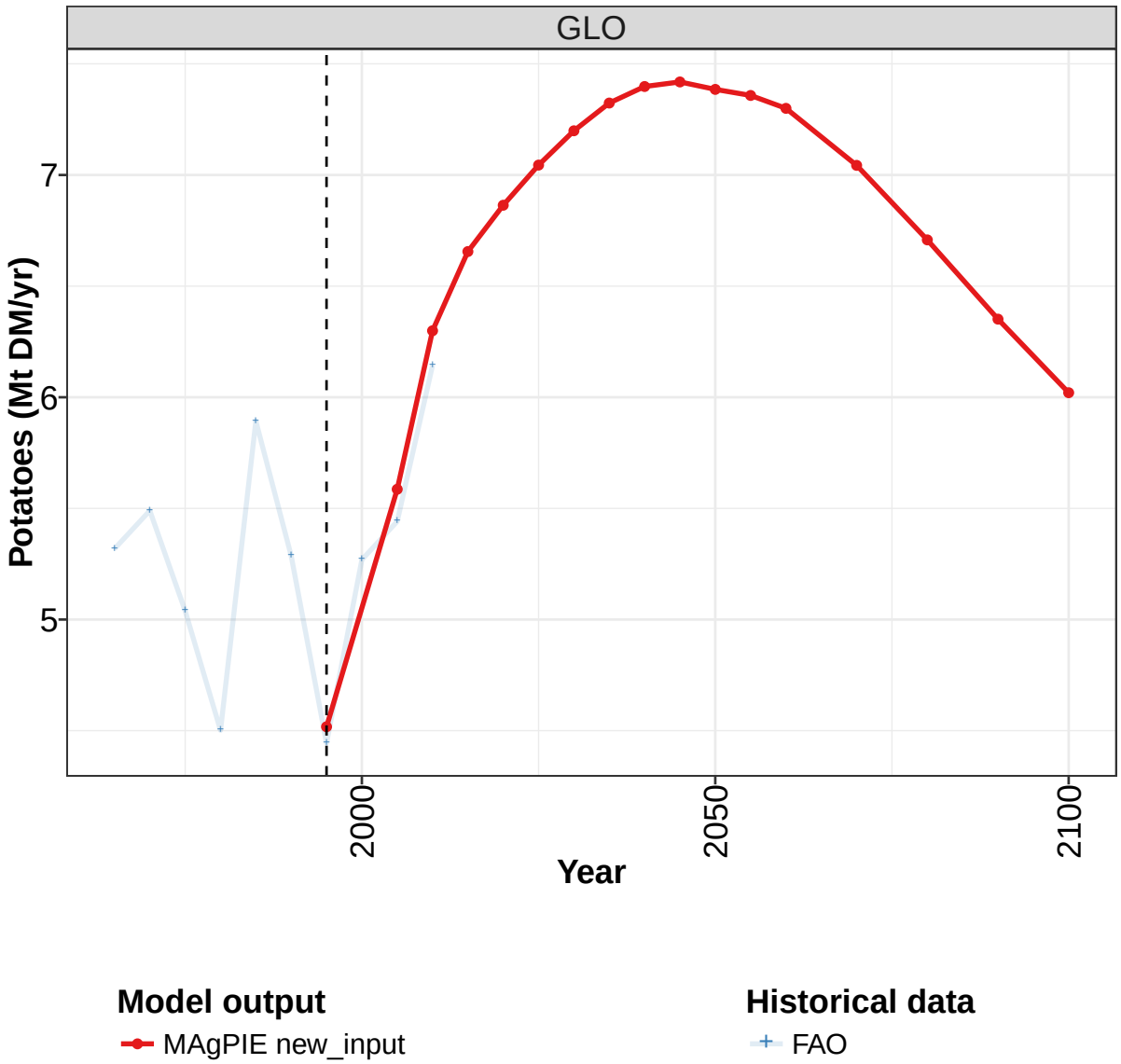
	2055	2060	2070	2080	2090	2100
GLO	53.5	55.0	57.5	58.8	59.3	59.0
CAZ	0.2	0.2	0.2	0.3	0.4	0.4
CHA	11.6	11.1	10.1	9.1	8.2	7.3
EUR	2.5	2.5	2.5	2.4	2.4	2.3
IND	8.9	9.2	9.6	9.6	9.5	9.2
LAM	5.9	5.9	6.0	6.1	6.1	6.1
MEA	4.7	4.8	5.0	5.2	5.2	5.2
NEU	1.7	1.7	1.7	1.7	1.7	1.6
OAS	6.0	6.2	6.6	6.7	6.8	6.8
REF	0.5	0.5	0.5	0.5	0.5	0.5
SSA	10.4	11.6	13.8	15.7	17.0	17.9
USA	1.2	1.2	1.3	1.5	1.6	1.6

Table 47: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.2	8.5	9.4	10.3	12.0	13.6	15.7	19.8	22.2	26.9
CAZ	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.7	0.7	0.8	0.9	1.6	2.2	3.6	6.0	7.4	10.3
EUR	1.7	1.9	1.9	1.9	2.2	2.2	2.0	2.2	2.2	1.9
IND	0.6	0.7	0.8	0.9	1.1	1.3	1.5	1.9	2.1	3.1
LAM	1.1	1.3	1.2	1.6	1.7	2.0	2.5	2.7	2.8	3.0
MEA	0.4	0.4	0.6	0.7	1.0	1.1	1.2	1.6	1.8	2.0
NEU	0.4	0.5	0.5	0.6	0.8	0.8	1.0	1.1	1.2	1.2
OAS	0.9	1.1	1.3	1.5	1.5	1.6	1.9	2.0	2.2	2.5
REF	0.2	0.4	0.6	0.6	0.6	0.7	0.3	0.2	0.3	0.3
SSA	0.6	1.1	1.2	0.8	0.9	1.0	1.1	1.2	1.4	1.8
USA	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.7	0.7

Table 48: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

3.1.14 Other crops—Potatoes



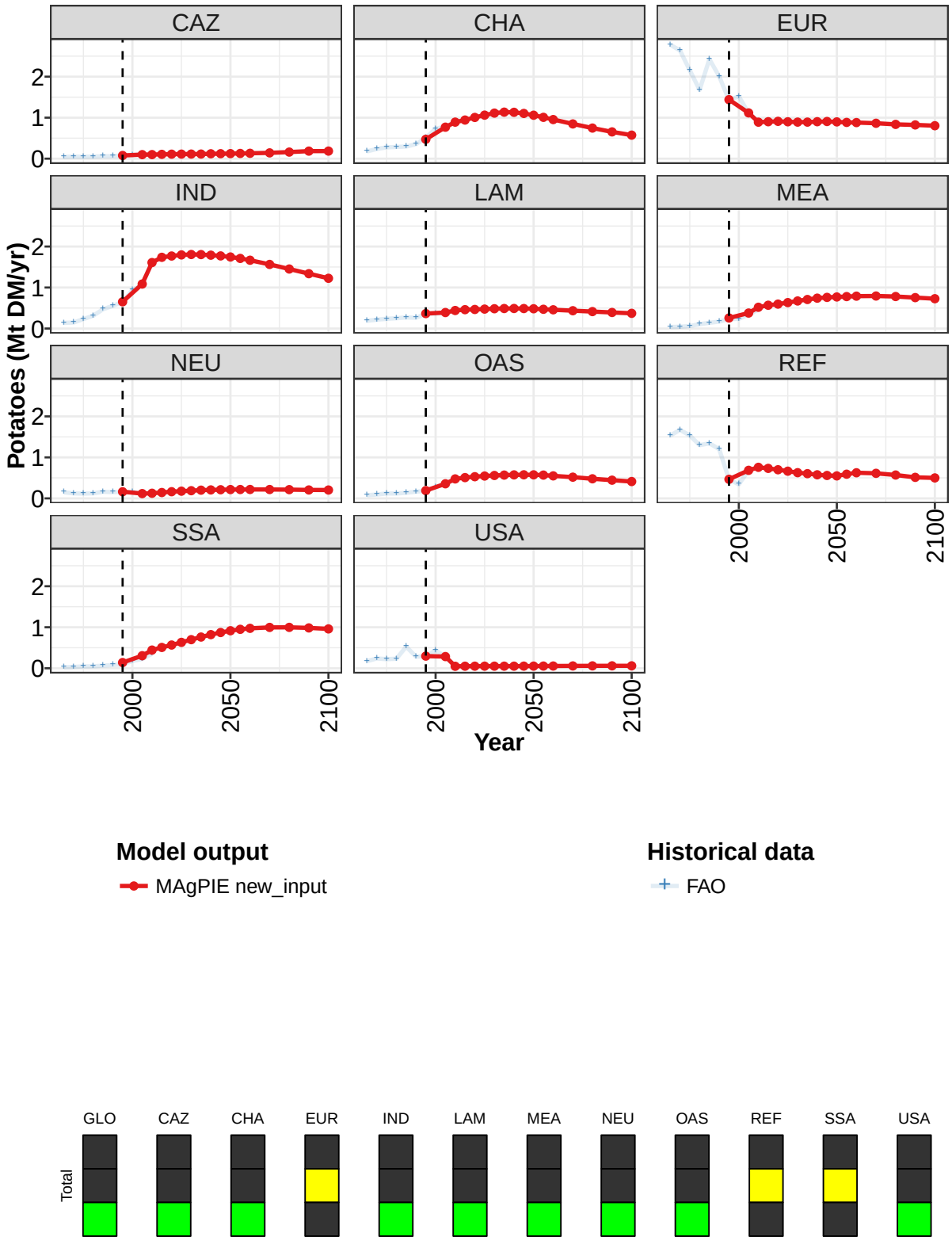


Figure 16: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.52	5.59	6.30	6.66	6.86	7.04	7.20	7.32	7.40	7.42	7.39
CAZ	0.08	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12
CHA	0.47	0.77	0.89	0.94	1.01	1.06	1.11	1.13	1.13	1.10	1.06
EUR	1.44	1.12	0.89	0.90	0.91	0.90	0.89	0.89	0.90	0.91	0.90
IND	0.65	1.09	1.61	1.74	1.77	1.80	1.81	1.80	1.79	1.77	1.75
LAM	0.36	0.39	0.44	0.46	0.47	0.47	0.48	0.49	0.49	0.49	0.48
MEA	0.26	0.38	0.52	0.57	0.60	0.63	0.67	0.71	0.74	0.76	0.77
NEU	0.16	0.12	0.13	0.14	0.16	0.18	0.19	0.20	0.21	0.21	0.22
OAS	0.19	0.36	0.48	0.51	0.53	0.55	0.56	0.57	0.57	0.58	0.57
REF	0.47	0.68	0.76	0.73	0.70	0.66	0.63	0.60	0.58	0.56	0.55
SSA	0.14	0.31	0.44	0.51	0.57	0.63	0.70	0.76	0.82	0.87	0.92
USA	0.30	0.29	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

Table 49: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

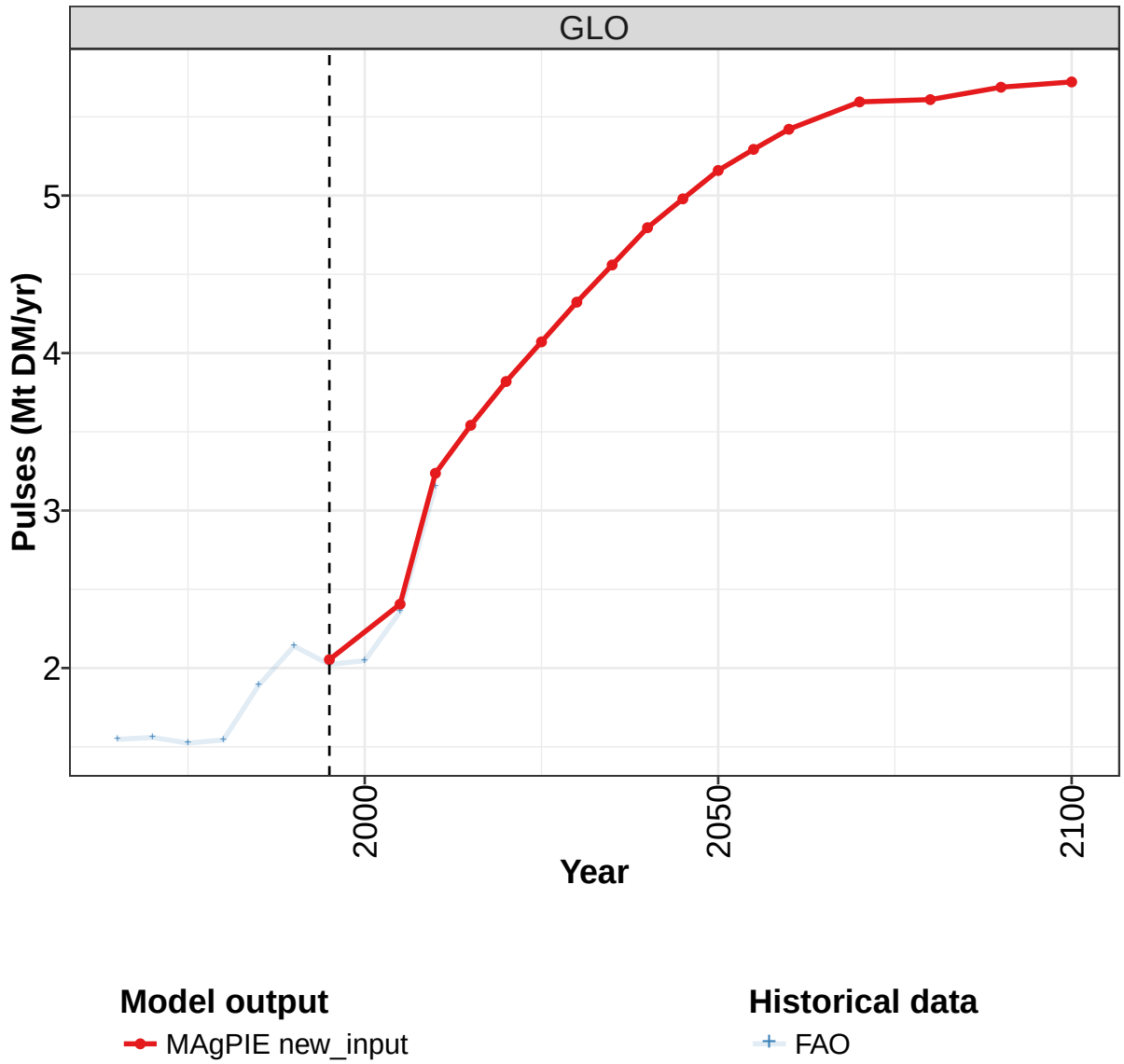
	2055	2060	2070	2080	2090	2100
GLO	7.36	7.30	7.04	6.71	6.35	6.02
CAZ	0.13	0.13	0.14	0.16	0.18	0.18
CHA	1.01	0.95	0.85	0.75	0.65	0.57
EUR	0.88	0.88	0.86	0.84	0.82	0.80
IND	1.71	1.67	1.56	1.45	1.34	1.23
LAM	0.47	0.46	0.43	0.41	0.39	0.37
MEA	0.78	0.79	0.79	0.78	0.75	0.73
NEU	0.22	0.22	0.22	0.21	0.21	0.20
OAS	0.57	0.55	0.52	0.48	0.44	0.41
REF	0.59	0.63	0.61	0.57	0.51	0.50
SSA	0.95	0.97	1.00	1.00	0.98	0.96
USA	0.05	0.05	0.06	0.06	0.06	0.06

Table 50: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.32	5.49	5.04	4.50	5.89	5.29	4.44	5.27	5.44	6.14
CAZ	0.04	0.05	0.05	0.05	0.06	0.06	0.08	0.09	0.10	0.10
CHA	0.18	0.24	0.28	0.29	0.30	0.35	0.51	0.73	0.78	0.90
EUR	2.78	2.64	2.15	1.68	2.43	2.01	1.42	1.52	1.11	0.89
IND	0.14	0.15	0.23	0.31	0.47	0.55	0.65	0.94	1.08	1.61
LAM	0.19	0.22	0.24	0.25	0.27	0.26	0.36	0.36	0.38	0.44
MEA	0.04	0.04	0.06	0.11	0.14	0.17	0.23	0.24	0.34	0.46
NEU	0.15	0.12	0.12	0.12	0.16	0.15	0.16	0.16	0.12	0.12
OAS	0.08	0.09	0.12	0.12	0.14	0.16	0.19	0.28	0.35	0.46
REF	1.53	1.67	1.53	1.30	1.34	1.20	0.46	0.34	0.68	0.76
SSA	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.18	0.22	0.35
USA	0.17	0.24	0.22	0.23	0.53	0.28	0.30	0.44	0.29	0.05

Table 51: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr)

3.1.15 Other crops—Pulses



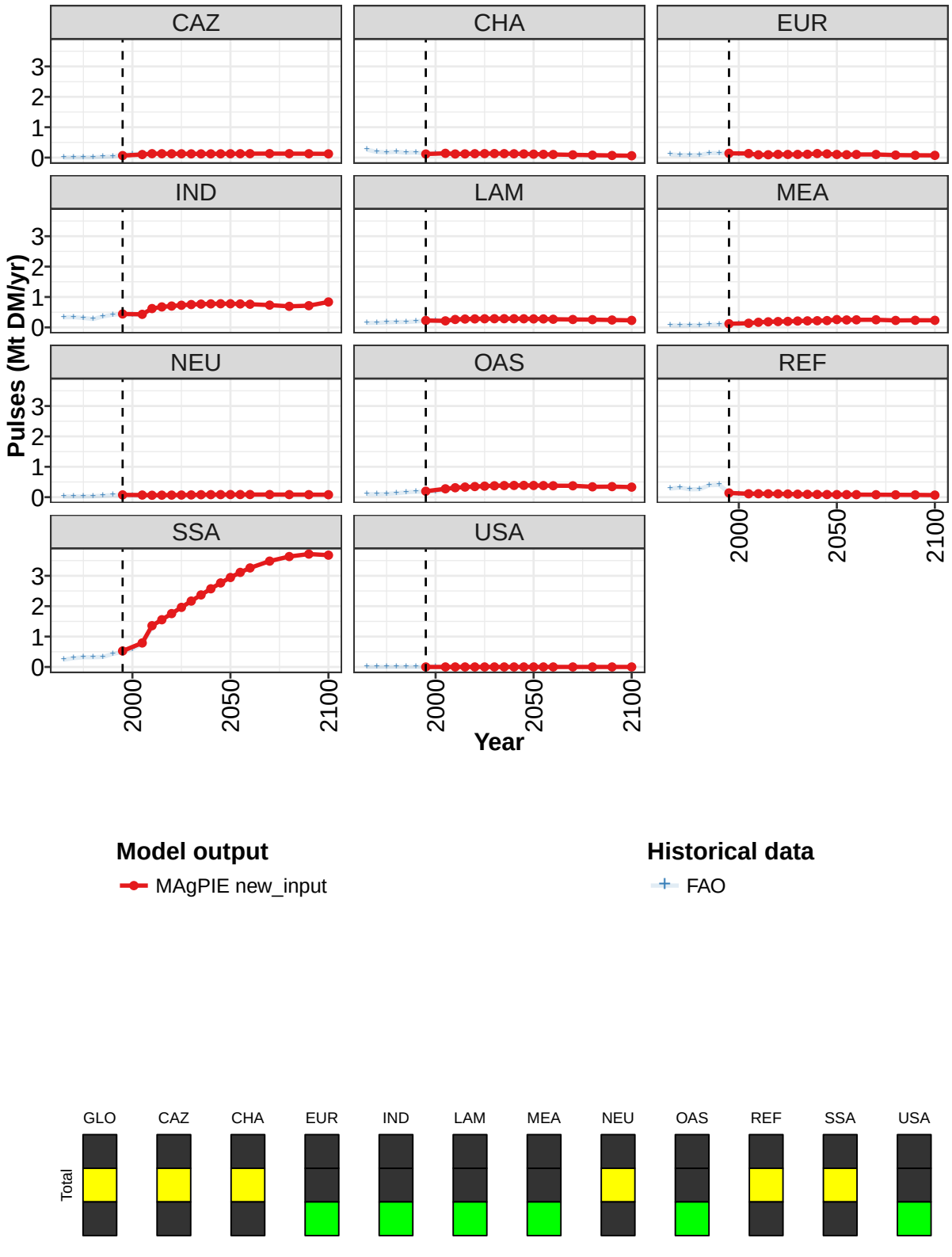


Figure 17: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.05	2.41	3.24	3.54	3.82	4.07	4.32	4.56	4.80	4.98	5.16
CAZ	0.07	0.10	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.13
CHA	0.12	0.14	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.12	0.11
EUR	0.14	0.13	0.09	0.09	0.11	0.10	0.11	0.11	0.13	0.12	0.10
IND	0.44	0.43	0.62	0.67	0.70	0.73	0.75	0.77	0.77	0.78	0.78
LAM	0.23	0.21	0.26	0.27	0.28	0.28	0.29	0.29	0.29	0.28	0.28
MEA	0.12	0.14	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.26
NEU	0.08	0.07	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09
OAS	0.20	0.28	0.31	0.33	0.35	0.36	0.37	0.38	0.39	0.39	0.39
REF	0.14	0.11	0.11	0.11	0.11	0.10	0.10	0.09	0.09	0.09	0.09
SSA	0.53	0.79	1.36	1.55	1.76	1.96	2.17	2.37	2.57	2.77	2.94
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 52: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

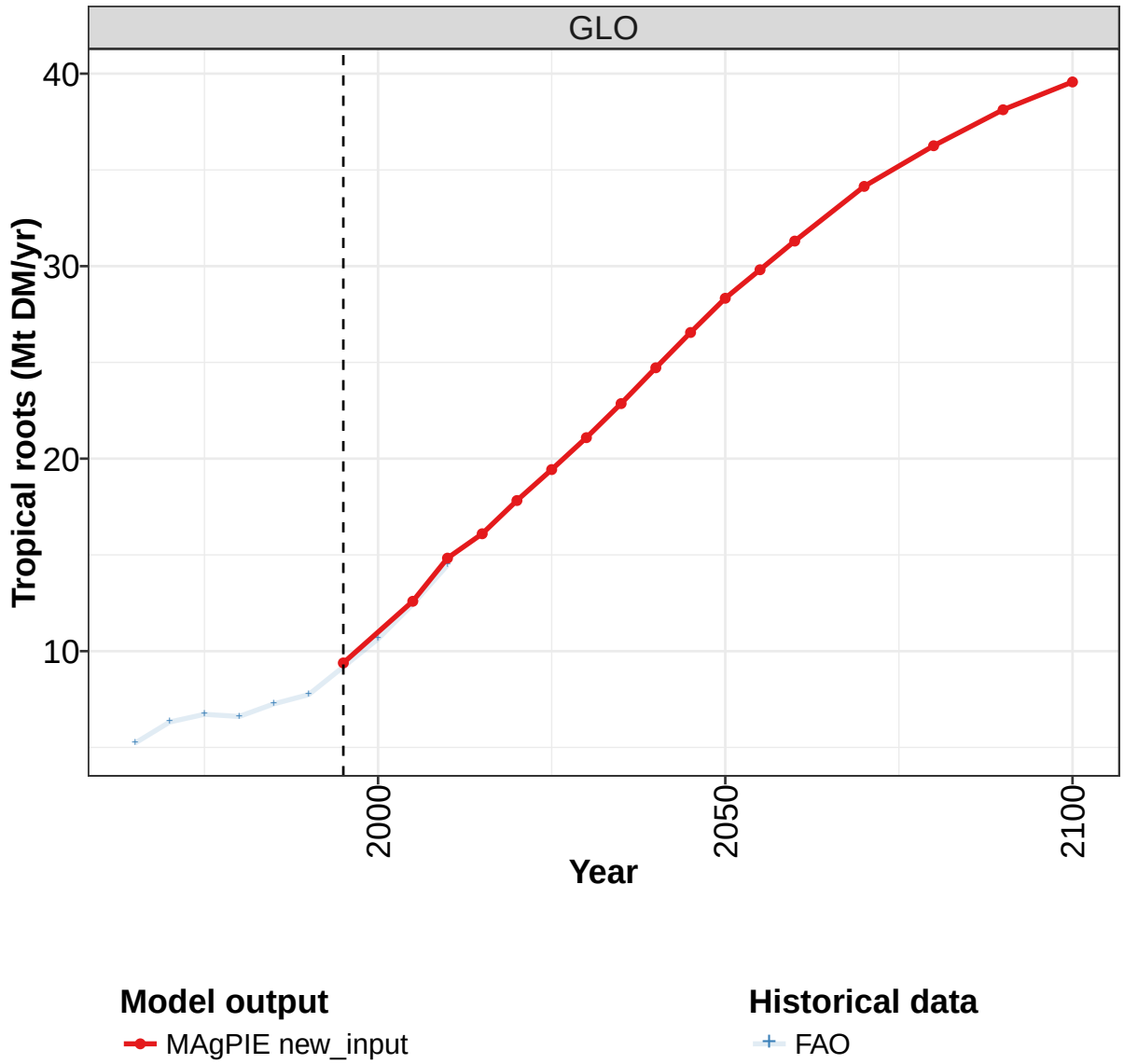
	2055	2060	2070	2080	2090	2100
GLO	5.29	5.42	5.60	5.61	5.69	5.72
CAZ	0.13	0.13	0.13	0.13	0.13	0.12
CHA	0.11	0.10	0.09	0.08	0.07	0.06
EUR	0.09	0.10	0.10	0.08	0.08	0.07
IND	0.77	0.76	0.73	0.69	0.71	0.84
LAM	0.28	0.27	0.26	0.26	0.24	0.23
MEA	0.25	0.25	0.25	0.23	0.23	0.23
NEU	0.09	0.09	0.09	0.09	0.08	0.08
OAS	0.38	0.38	0.38	0.34	0.35	0.33
REF	0.08	0.08	0.08	0.08	0.07	0.07
SSA	3.11	3.26	3.48	3.63	3.72	3.68
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 53: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.55	1.56	1.52	1.54	1.89	2.14	2.02	2.05	2.36	3.15
CAZ	0.00	0.00	0.01	0.01	0.02	0.04	0.09	0.12	0.13	0.14
CHA	0.26	0.19	0.17	0.19	0.16	0.17	0.12	0.13	0.15	0.12
EUR	0.10	0.09	0.09	0.09	0.15	0.14	0.14	0.12	0.13	0.09
IND	0.33	0.34	0.31	0.27	0.36	0.42	0.44	0.42	0.43	0.62
LAM	0.14	0.15	0.16	0.18	0.18	0.19	0.22	0.21	0.21	0.26
MEA	0.07	0.06	0.07	0.06	0.08	0.09	0.11	0.11	0.12	0.15
NEU	0.02	0.02	0.02	0.03	0.05	0.07	0.07	0.06	0.07	0.06
OAS	0.10	0.10	0.11	0.13	0.16	0.18	0.18	0.19	0.24	0.31
REF	0.28	0.32	0.26	0.26	0.39	0.41	0.15	0.11	0.12	0.12
SSA	0.24	0.29	0.32	0.32	0.33	0.43	0.49	0.59	0.76	1.29
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 54: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr)

3.1.16 Other crops—Tropical roots



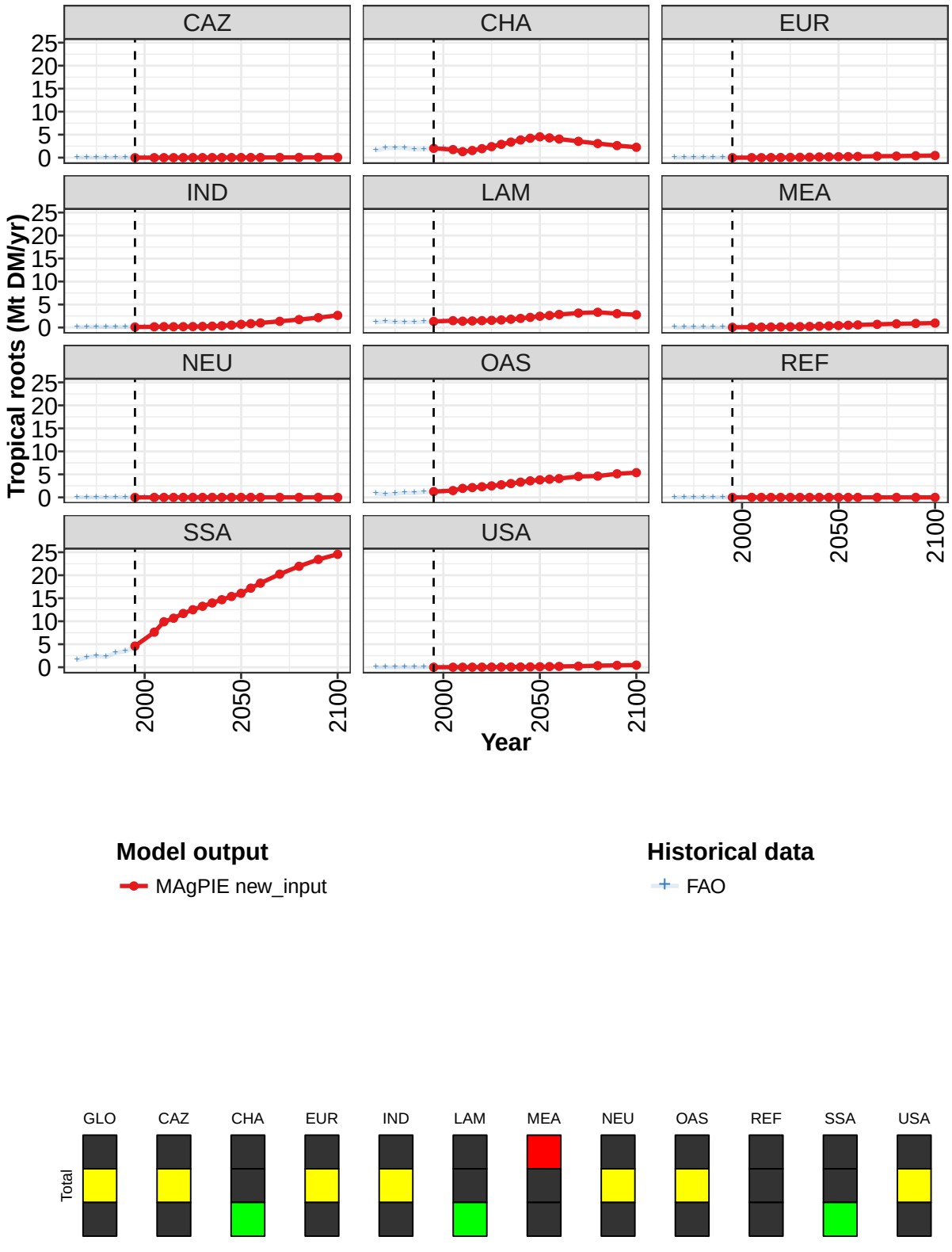


Figure 18: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.4	12.6	14.8	16.1	17.8	19.4	21.1	22.9	24.7	26.6	28.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.0	1.8	1.3	1.6	2.0	2.4	2.9	3.4	3.8	4.2	4.5
EUR	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
IND	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.7
LAM	1.3	1.5	1.4	1.4	1.5	1.6	1.6	1.8	2.0	2.2	2.5
MEA	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.3	1.5	2.0	2.1	2.3	2.5	2.7	3.0	3.3	3.6	3.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	4.6	7.6	9.9	10.7	11.7	12.5	13.3	14.0	14.7	15.4	16.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1

Table 55: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

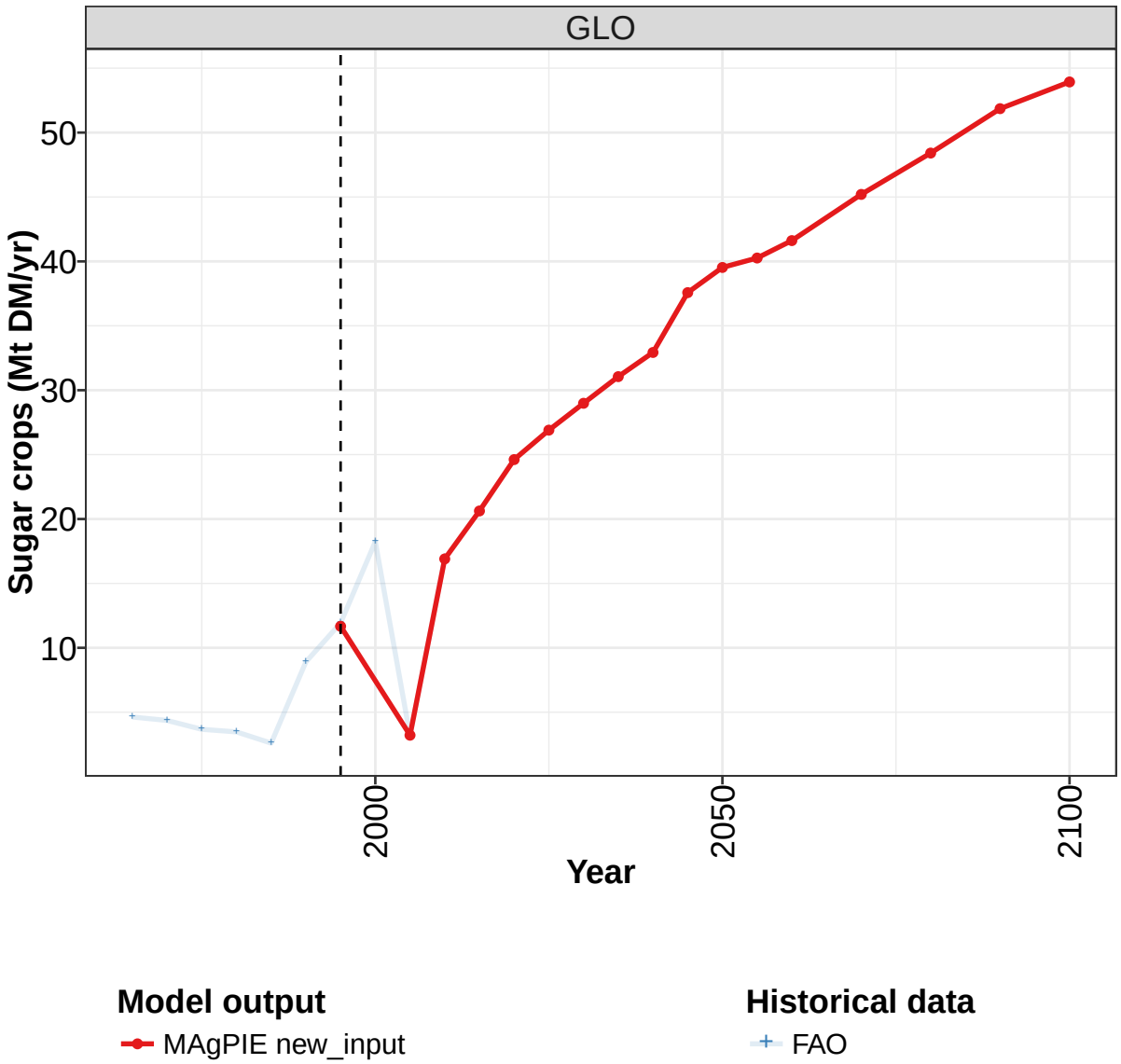
	2055	2060	2070	2080	2090	2100
GLO	29.8	31.3	34.1	36.3	38.1	39.6
CAZ	0.0	0.0	0.0	0.1	0.1	0.1
CHA	4.3	4.1	3.6	3.1	2.6	2.3
EUR	0.2	0.3	0.3	0.3	0.4	0.5
IND	0.8	1.0	1.4	1.7	2.1	2.6
LAM	2.6	2.8	3.1	3.3	3.0	2.8
MEA	0.5	0.6	0.7	0.8	0.9	1.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	4.0	4.1	4.5	4.6	5.1	5.4
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	17.2	18.3	20.2	21.9	23.4	24.6
USA	0.2	0.2	0.2	0.3	0.4	0.5

Table 56: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.2	6.3	6.7	6.6	7.3	7.7	9.2	10.6	12.4	14.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.6	2.1	2.1	2.1	1.8	1.8	2.1	2.1	1.8	1.3
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
LAM	1.1	1.3	1.2	1.1	1.2	1.2	1.3	1.3	1.5	1.3
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.9	0.7	0.8	1.0	1.0	1.1	1.2	1.3	1.4	1.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.6	2.1	2.4	2.2	3.1	3.4	4.5	5.9	7.5	9.7
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 57: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr)

3.1.17 Sugar crops



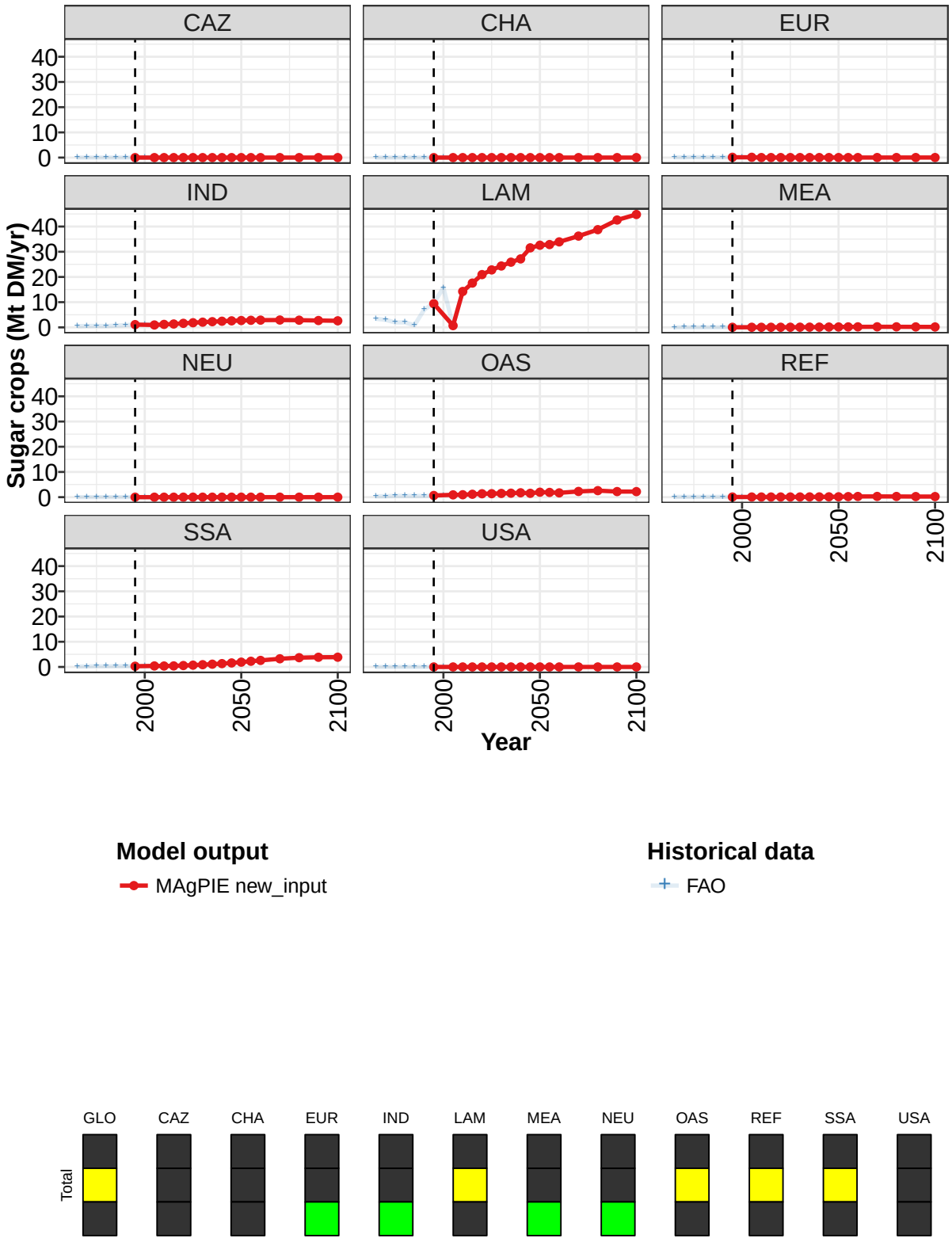


Figure 19: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	11.7	3.2	16.9	20.6	24.6	26.9	29.0	31.1	32.9	37.6	39.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	0.9	1.2	1.3	1.6	1.8	2.1	2.3	2.4	2.6	2.7
LAM	9.4	0.7	14.3	17.6	20.9	22.8	24.4	25.9	27.2	31.5	32.6
MEA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.9	1.0	1.2	1.4	1.4	1.5	1.6	1.7	1.5	2.0
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
SSA	0.3	0.4	0.4	0.4	0.6	0.7	0.9	1.1	1.3	1.6	1.9
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 58: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

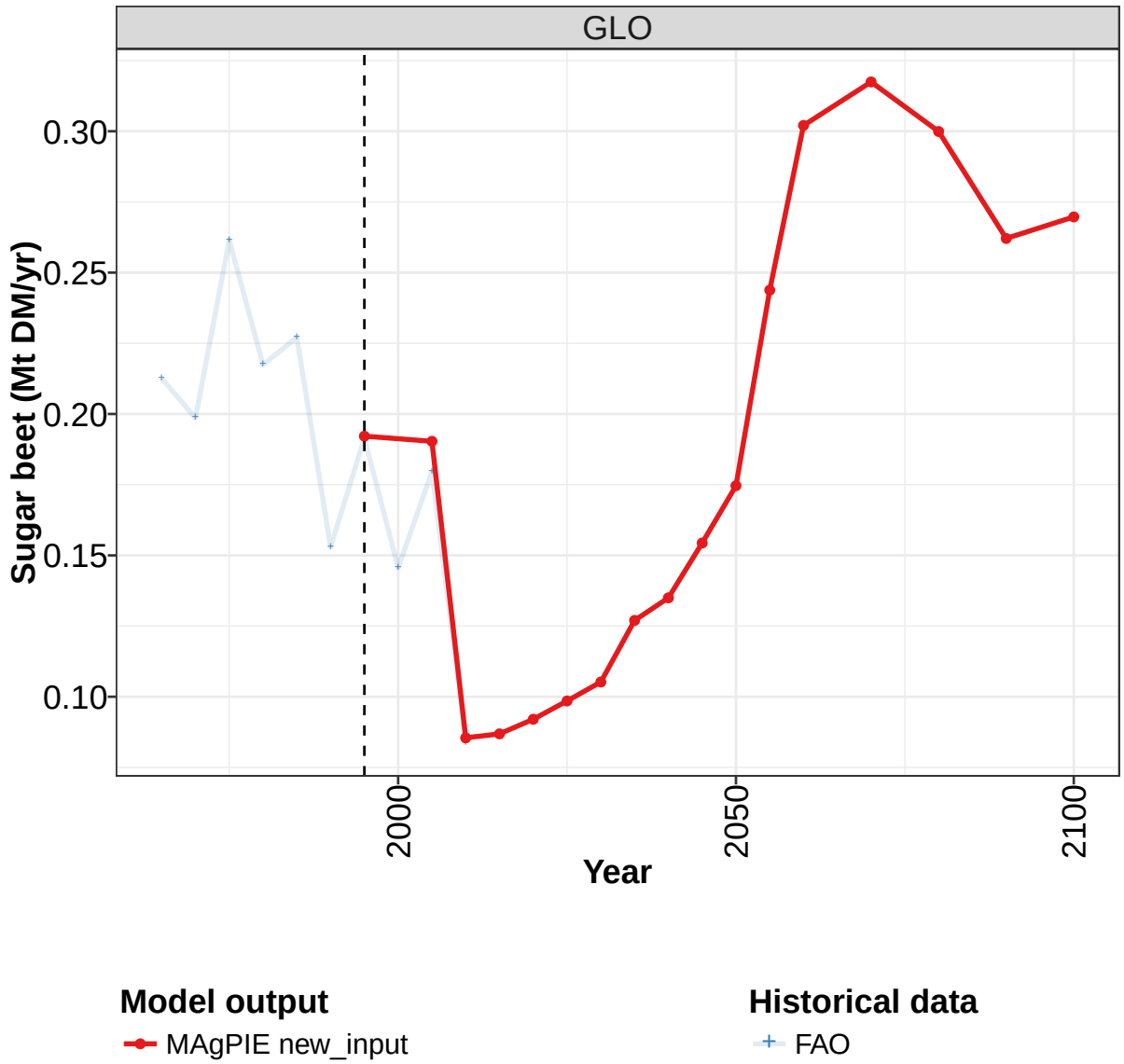
	2055	2060	2070	2080	2090	2100
GLO	40.3	41.6	45.2	48.4	51.9	53.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.8	2.9	2.9	2.9	2.7	2.6
LAM	32.9	33.9	36.2	38.8	42.6	44.8
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.9	1.7	2.3	2.6	2.2	2.2
REF	0.2	0.3	0.3	0.3	0.2	0.2
SSA	2.3	2.6	3.2	3.7	3.9	3.9
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 59: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.6	4.4	3.7	3.5	2.6	8.9	11.9	18.2	3.2	17.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0
IND	0.5	0.5	0.6	0.5	0.7	0.9	1.1	1.2	1.0	1.2
LAM	3.4	3.0	2.0	2.0	0.9	7.0	9.7	15.7	0.7	14.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.9
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
SSA	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 60: FAO — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr)

3.1.18 Sugar crops—Sugar beet



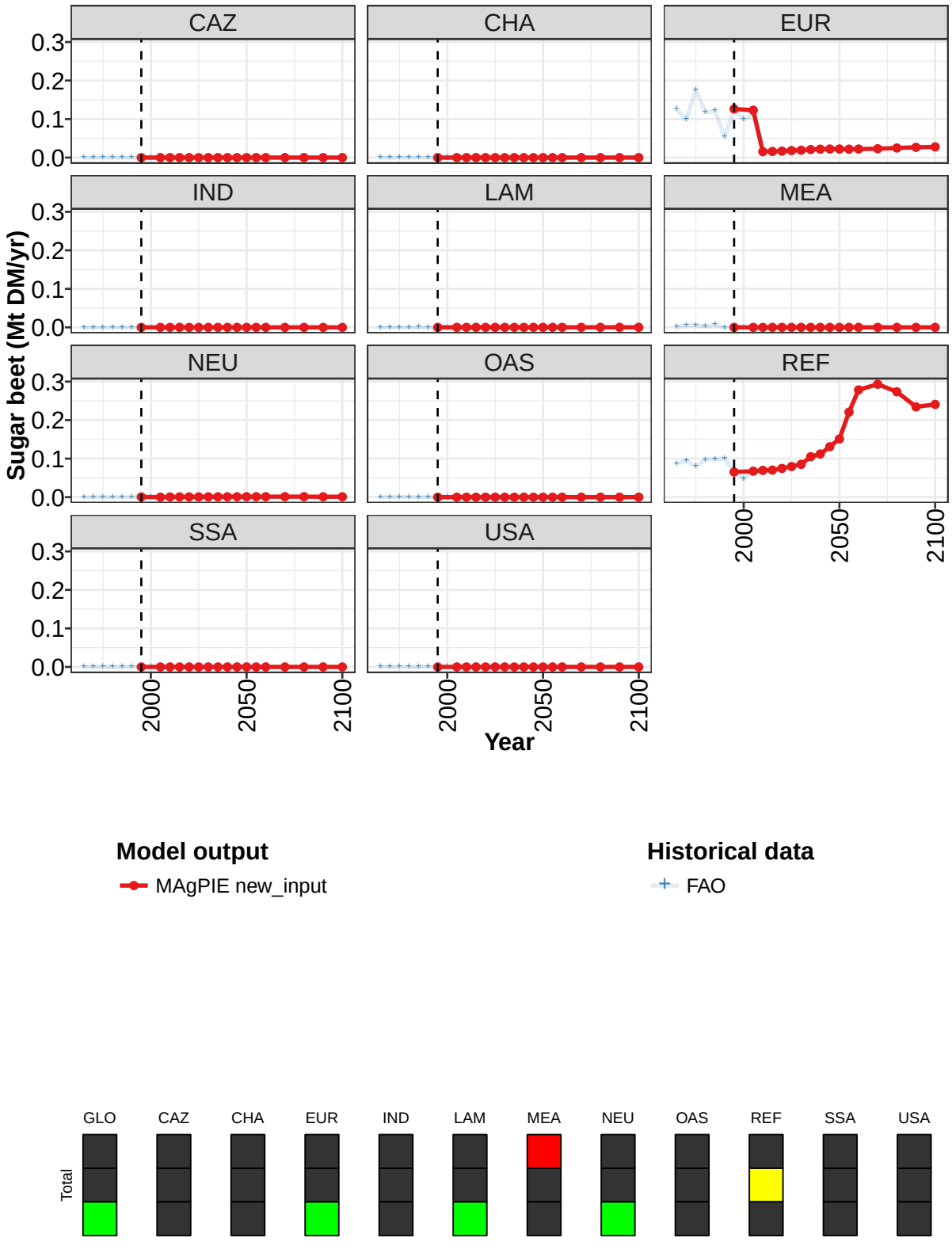


Figure 20: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.192	0.190	0.085	0.087	0.092	0.099	0.105	0.127	0.135	0.154	0.175
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.126	0.123	0.015	0.016	0.017	0.018	0.019	0.021	0.022	0.022	0.022
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.065	0.067	0.069	0.070	0.075	0.080	0.085	0.105	0.112	0.131	0.151
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 61: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

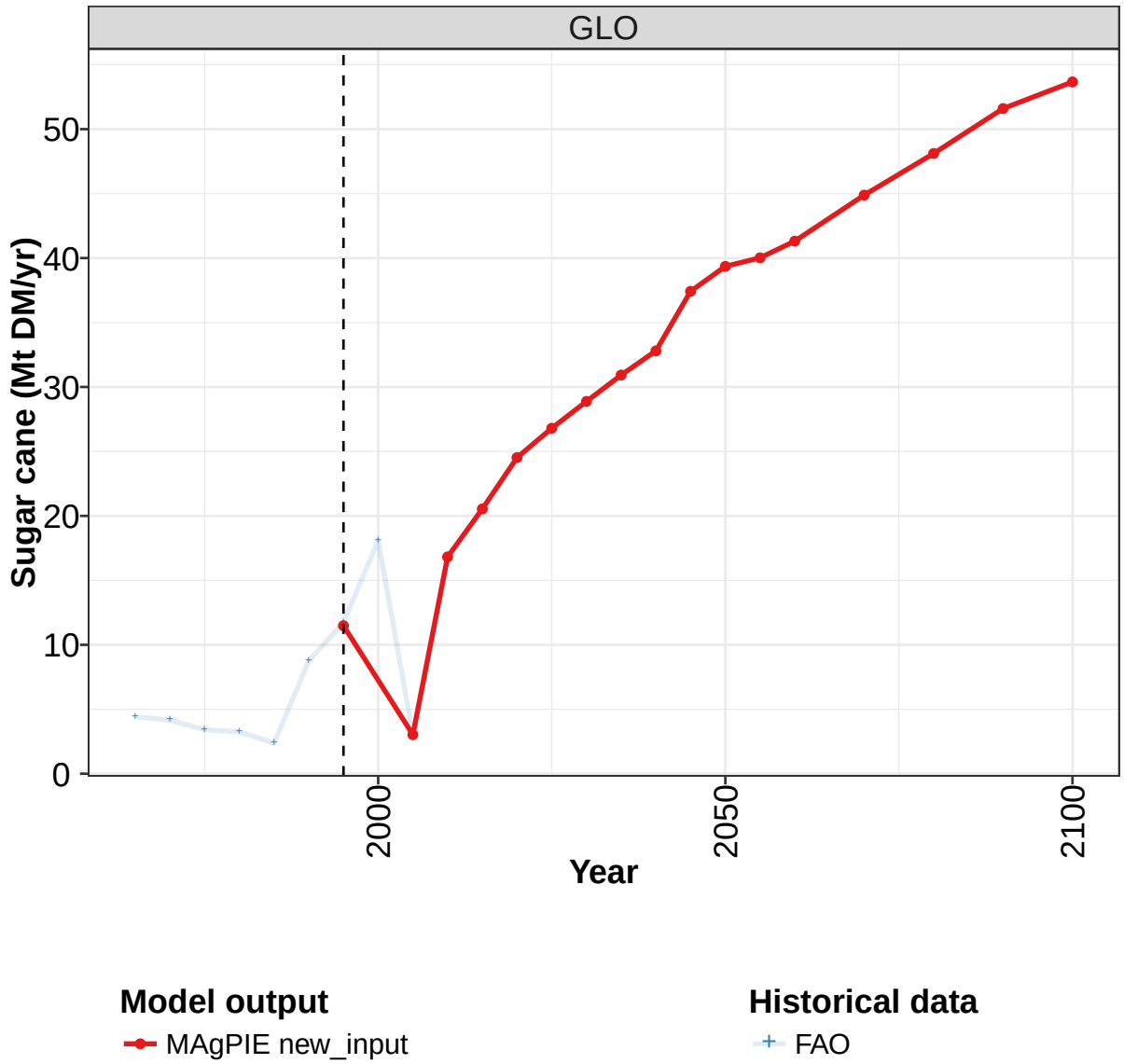
	2055	2060	2070	2080	2090	2100
GLO	0.244	0.302	0.317	0.300	0.262	0.270
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.022	0.022	0.023	0.025	0.027	0.028
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.221	0.279	0.293	0.274	0.234	0.241
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

Table 62: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.213	0.199	0.262	0.217	0.227	0.153	0.192	0.146	0.180	0.084
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.125	0.099	0.176	0.117	0.121	0.053	0.125	0.099	0.109	0.015
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.001	0.005	0.006	0.003	0.007	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.087	0.095	0.080	0.097	0.099	0.100	0.066	0.047	0.071	0.069
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 63: FAO — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr)

3.1.19 Sugar crops—Sugar cane



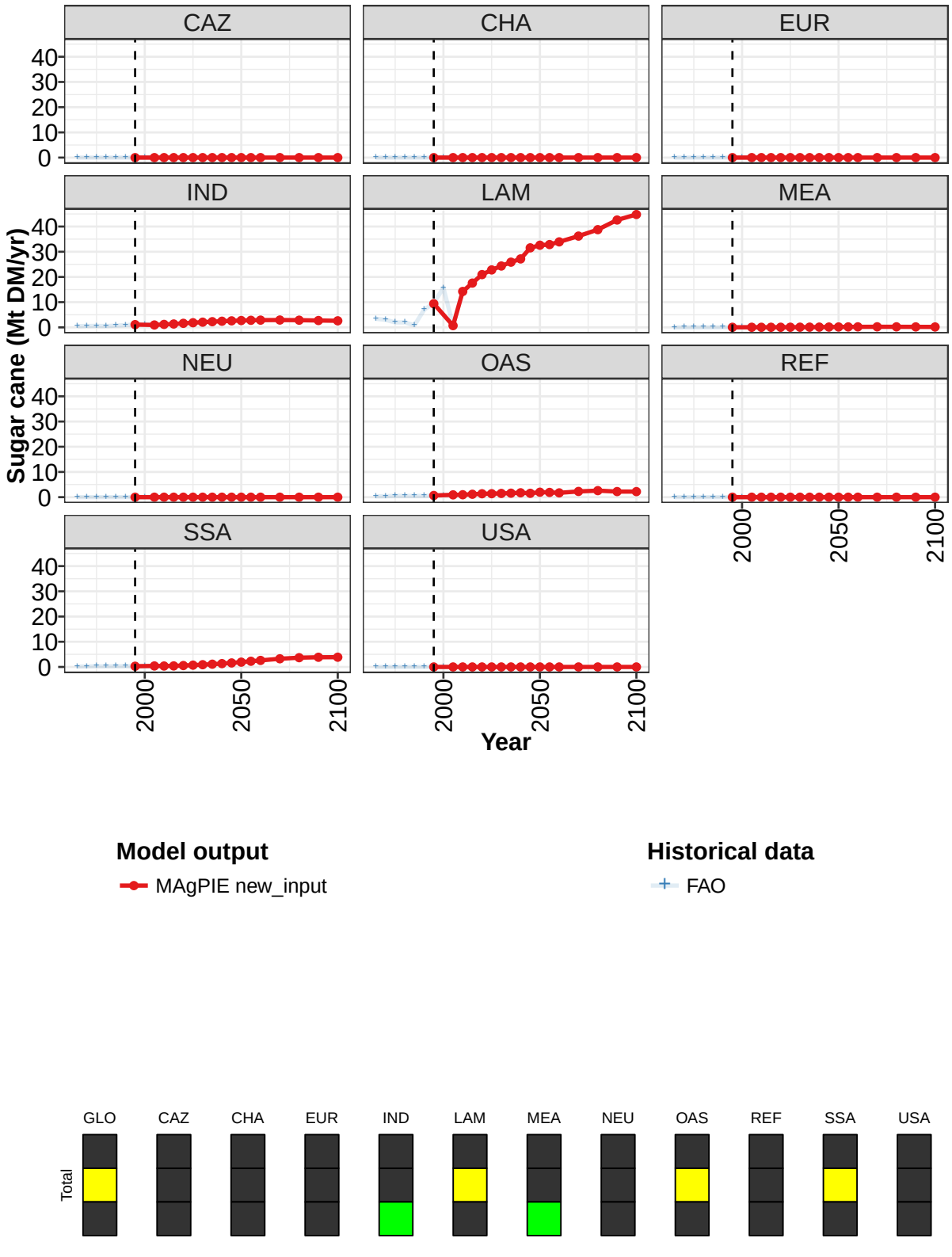


Figure 21: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	11.5	3.0	16.8	20.5	24.5	26.8	28.9	30.9	32.8	37.4	39.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	0.9	1.2	1.3	1.6	1.8	2.1	2.3	2.4	2.6	2.7
LAM	9.4	0.7	14.3	17.6	20.9	22.8	24.4	25.9	27.2	31.5	32.6
MEA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.9	1.0	1.2	1.4	1.4	1.5	1.6	1.7	1.5	2.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.3	0.4	0.4	0.4	0.6	0.7	0.9	1.1	1.3	1.6	1.9
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

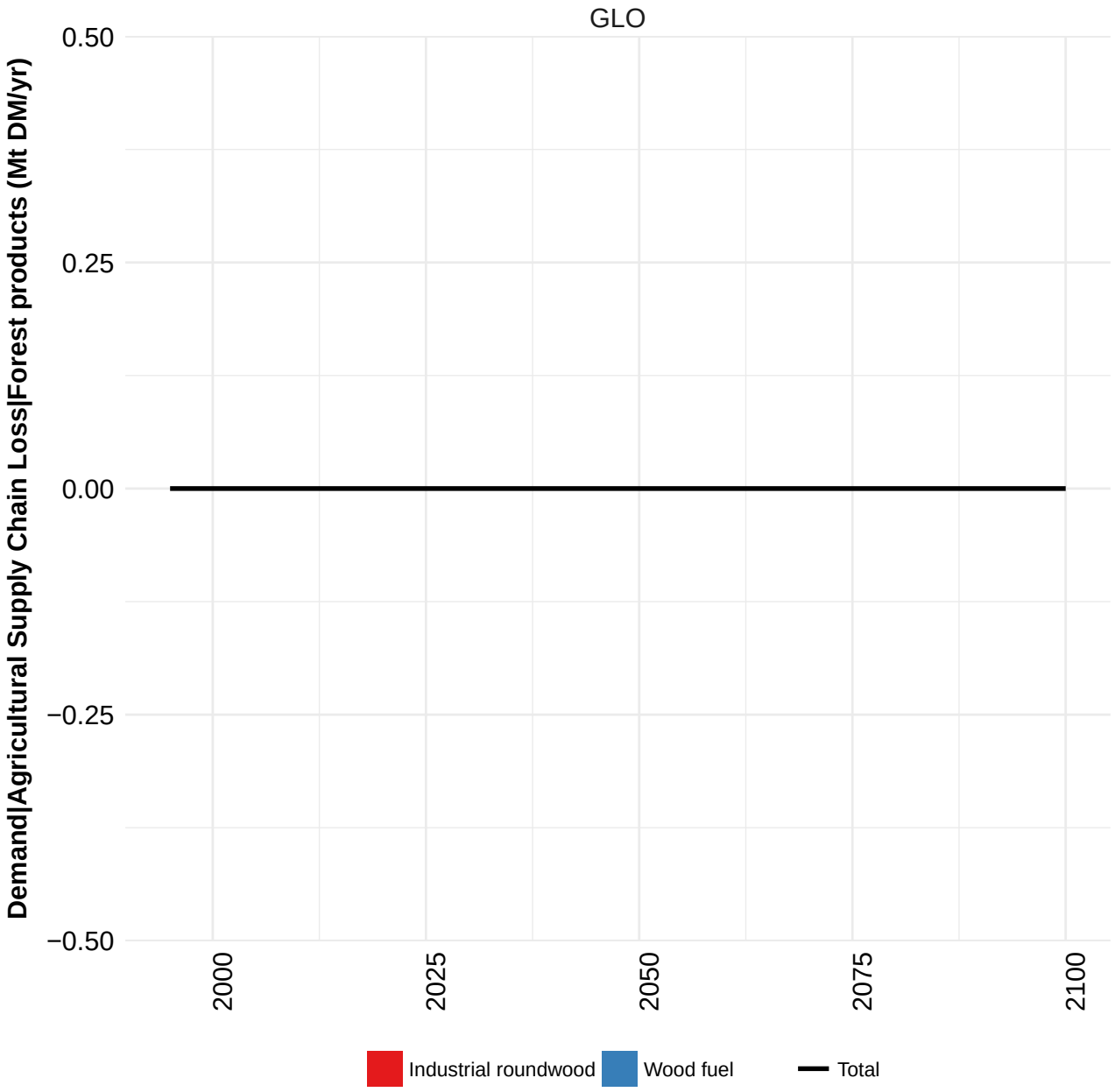
Table 64: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

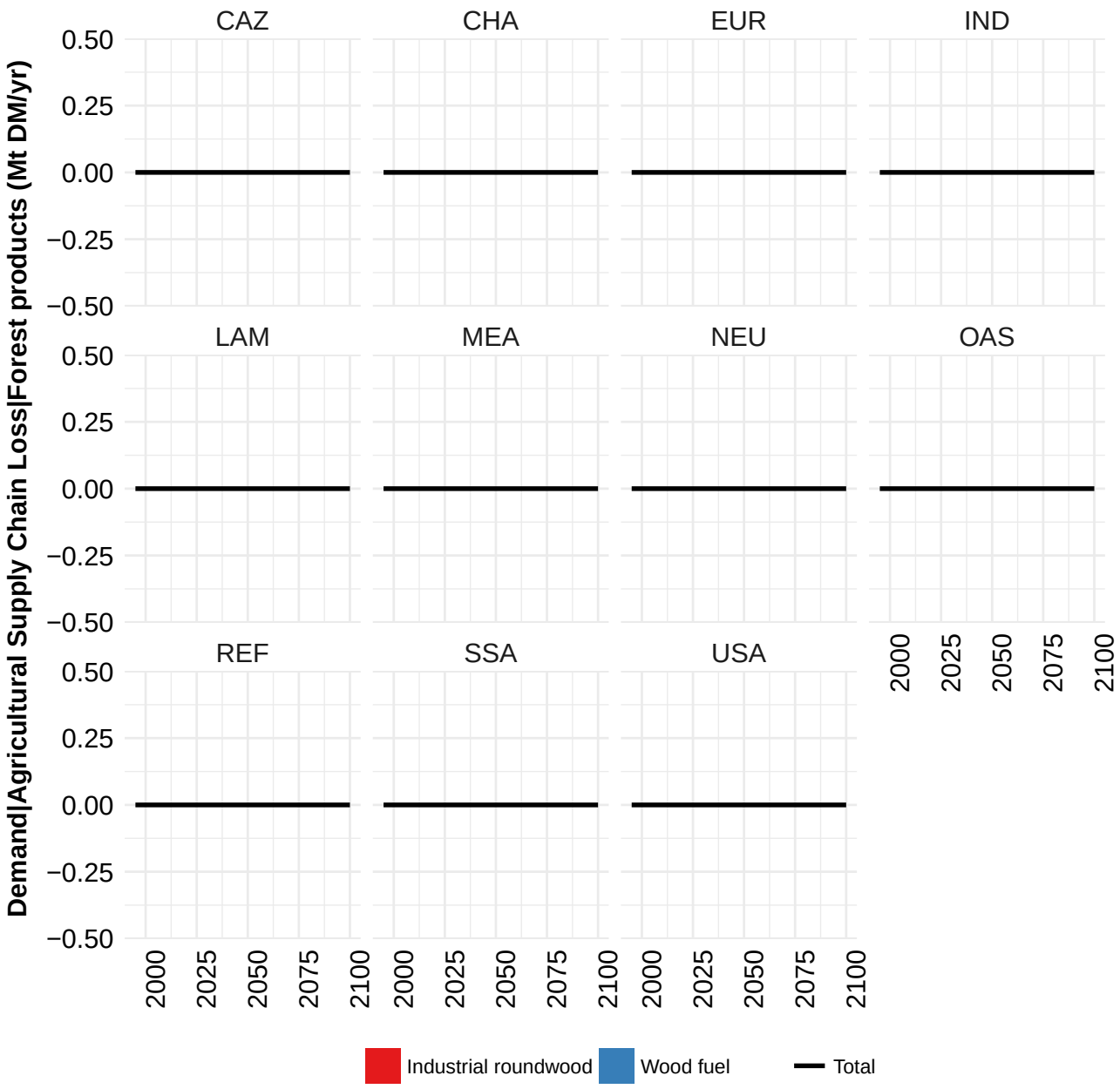
	2055	2060	2070	2080	2090	2100
GLO	40.0	41.3	44.9	48.1	51.6	53.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.8	2.9	2.9	2.9	2.7	2.6
LAM	32.9	33.9	36.2	38.8	42.6	44.8
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.9	1.7	2.3	2.6	2.2	2.2
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.3	2.6	3.2	3.7	3.9	3.9
USA	0.0	0.0	0.0	0.0	0.0	0.0

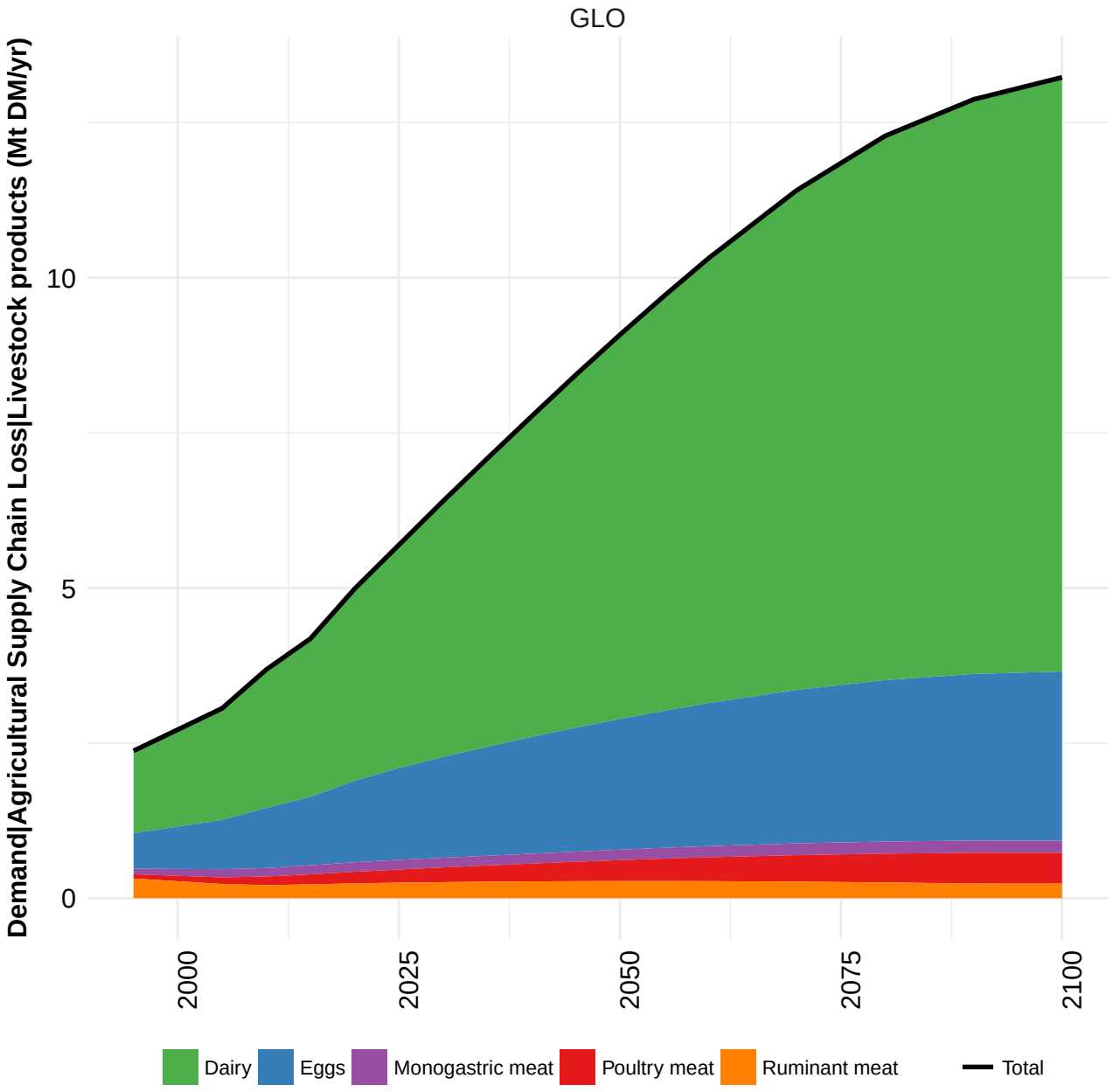
Table 65: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

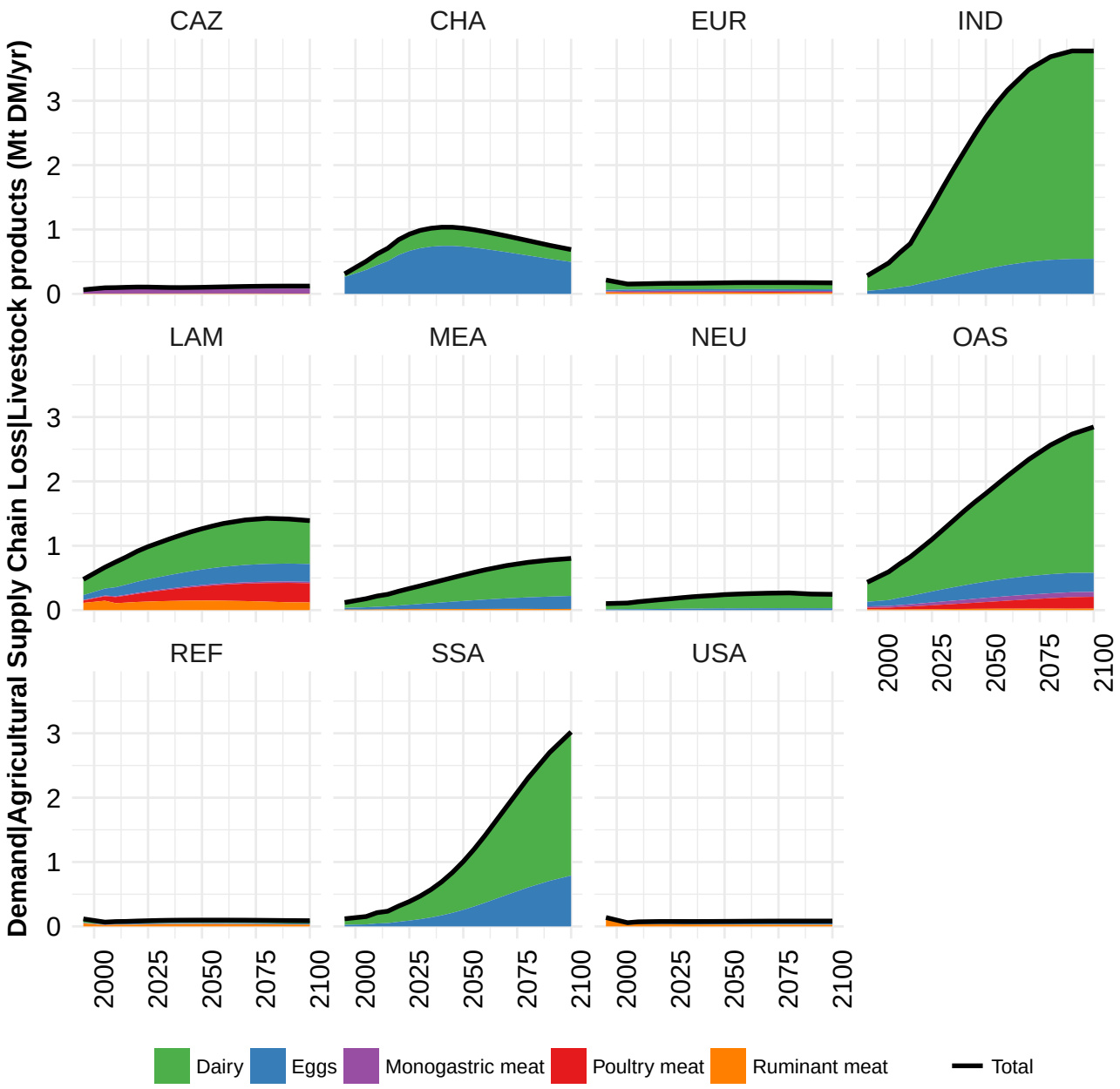
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.4	4.2	3.4	3.3	2.4	8.8	11.7	18.1	3.0	16.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.5	0.5	0.6	0.5	0.7	0.9	1.1	1.2	1.0	1.2
LAM	3.4	3.0	2.0	2.0	0.9	7.0	9.7	15.7	0.7	14.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 66: FAO — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr)

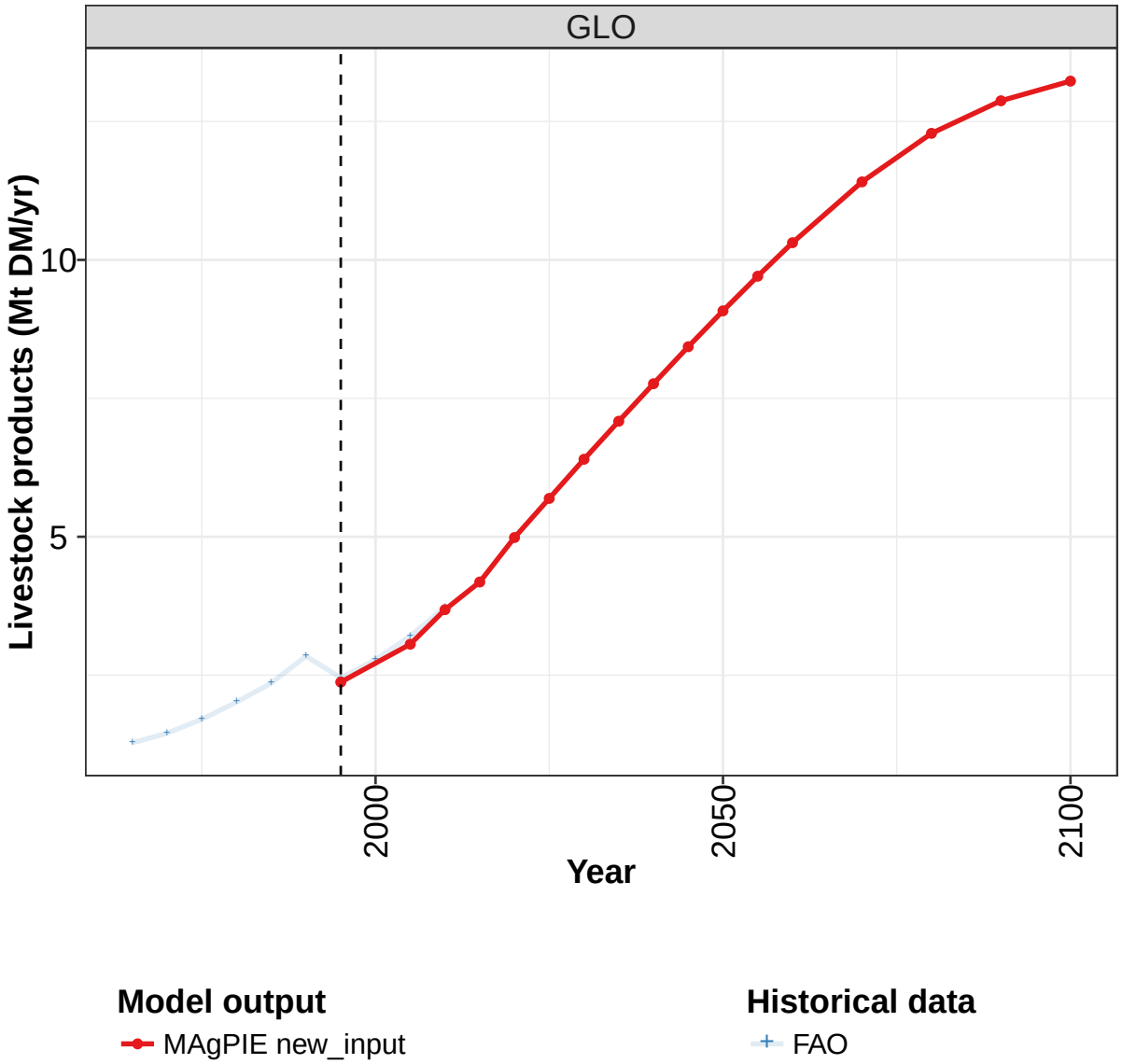

GLO
Demand|Agricultural Supply Chain Loss|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Agricultural Supply Chain Loss|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


GLO
Demand|Agricultural Supply Chain Loss|Livestock products (Mt DM/yr)
10
5
0
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Agricultural Supply Chain Loss|Livestock products (Mt DM/yr)
0
1
2
3
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total

3.2 Livestock products



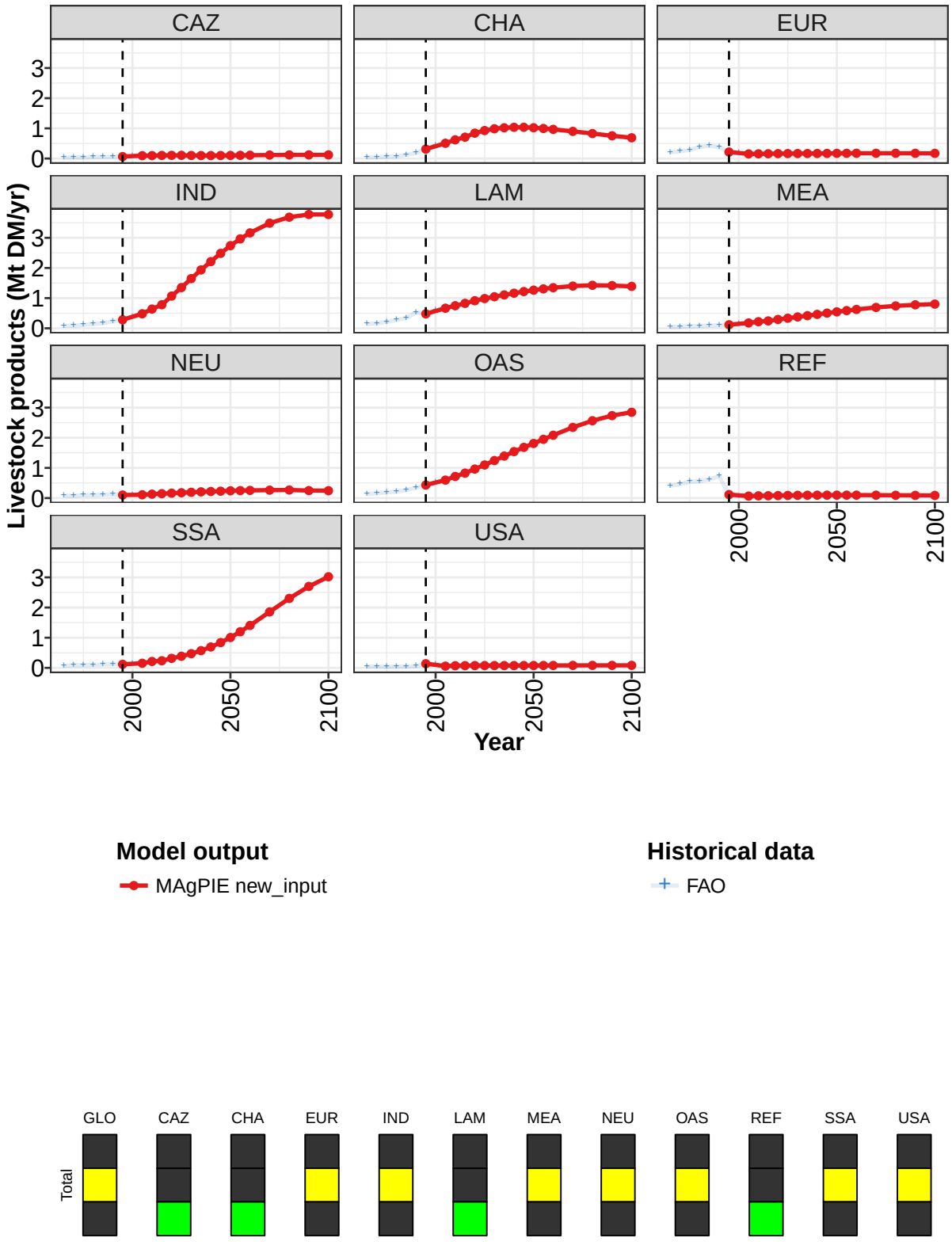


Figure 22: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.4	3.1	3.7	4.2	5.0	5.7	6.4	7.1	7.8	8.4	9.1
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.3	0.5	0.6	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.0
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.3	0.5	0.6	0.8	1.1	1.4	1.6	1.9	2.2	2.5	2.7
LAM	0.5	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.3
MEA	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.4	0.6	0.7	0.8	1.0	1.1	1.2	1.4	1.5	1.7	1.8
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 67: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr) [PART 1/2]

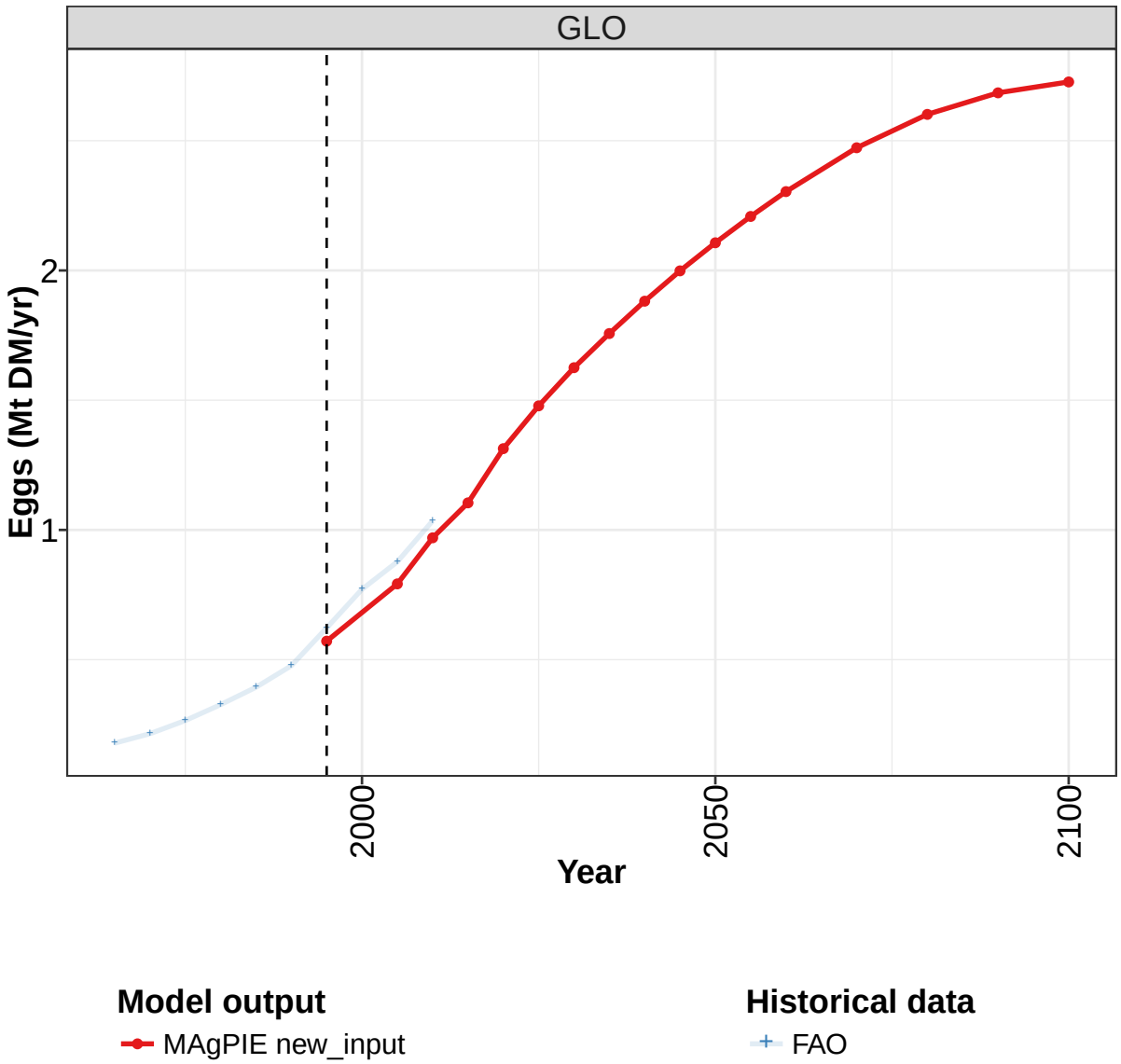
	2055	2060	2070	2080	2090	2100
GLO	9.7	10.3	11.4	12.3	12.9	13.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.0	1.0	0.9	0.8	0.8	0.7
EUR	0.2	0.2	0.2	0.2	0.2	0.2
IND	3.0	3.2	3.5	3.7	3.8	3.8
LAM	1.3	1.3	1.4	1.4	1.4	1.4
MEA	0.6	0.6	0.7	0.7	0.8	0.8
NEU	0.2	0.3	0.3	0.3	0.2	0.2
OAS	1.9	2.1	2.3	2.6	2.7	2.8
REF	0.1	0.1	0.1	0.1	0.1	0.1
SSA	1.2	1.4	1.9	2.3	2.7	3.0
USA	0.1	0.1	0.1	0.1	0.1	0.1

Table 68: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.28	1.45	1.70	2.01	2.36	2.84	2.45	2.78	3.21	3.72
CAZ	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.08	0.10	0.10
CHA	0.04	0.04	0.05	0.07	0.13	0.18	0.34	0.44	0.55	0.64
EUR	0.21	0.24	0.28	0.38	0.42	0.38	0.22	0.18	0.15	0.16
IND	0.08	0.09	0.11	0.14	0.17	0.23	0.29	0.40	0.52	0.64
LAM	0.14	0.16	0.21	0.28	0.34	0.52	0.49	0.60	0.69	0.76
MEA	0.04	0.05	0.06	0.08	0.09	0.10	0.12	0.15	0.18	0.21
NEU	0.08	0.07	0.10	0.10	0.11	0.12	0.10	0.10	0.11	0.13
OAS	0.14	0.16	0.19	0.22	0.27	0.34	0.43	0.52	0.60	0.72
REF	0.41	0.46	0.54	0.56	0.62	0.73	0.13	0.06	0.07	0.08
SSA	0.07	0.08	0.09	0.10	0.11	0.13	0.13	0.14	0.17	0.21
USA	0.05	0.05	0.04	0.04	0.05	0.06	0.14	0.12	0.06	0.08

Table 69: FAO — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr)

3.2.1 Eggs


GLO
Eggs (Mt DM/yr)
2
1
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

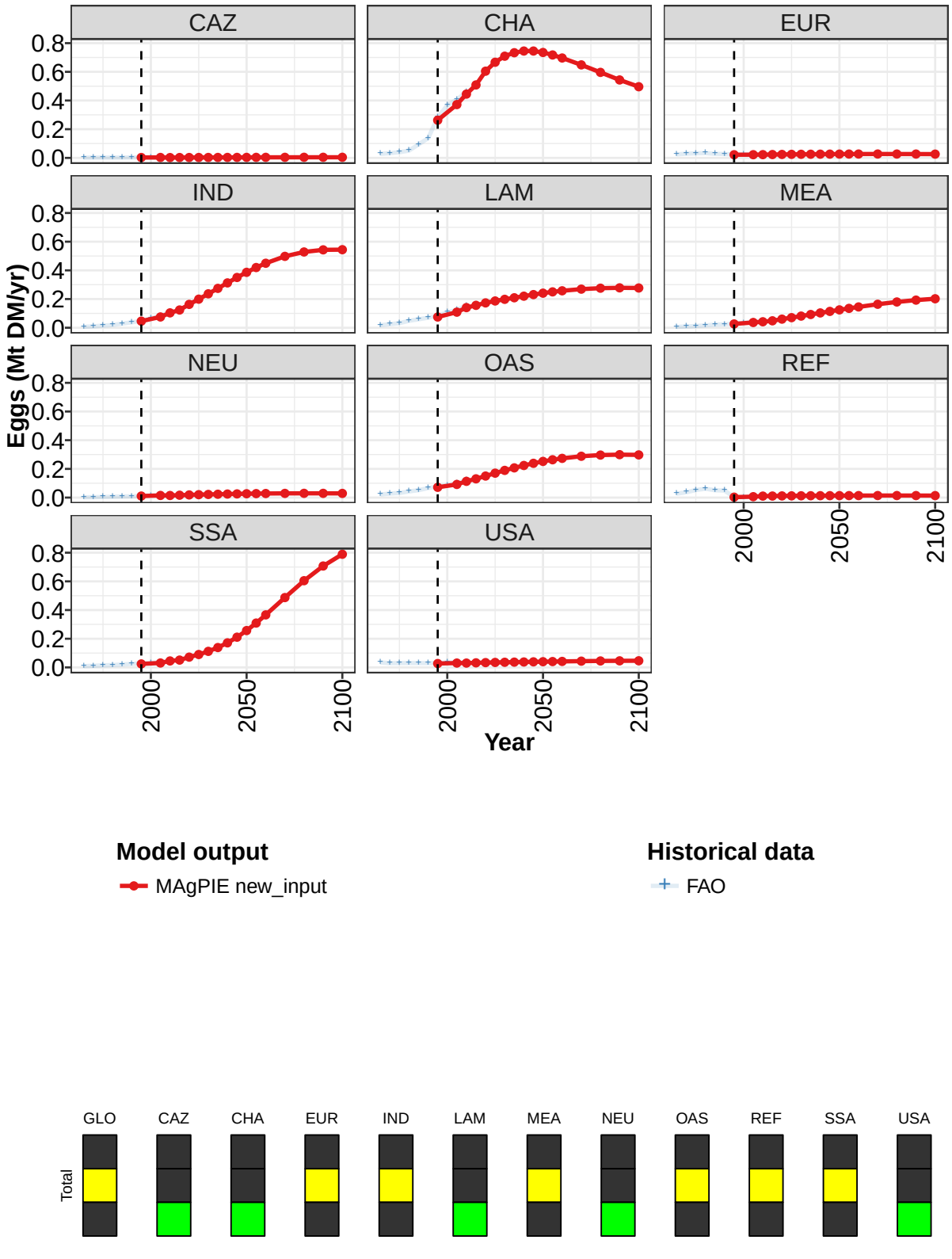


Figure 23: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.57	0.79	0.97	1.10	1.31	1.48	1.63	1.76	1.88	2.00	2.11
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.26	0.37	0.44	0.51	0.60	0.67	0.71	0.73	0.75	0.75	0.73
EUR	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
IND	0.05	0.08	0.10	0.12	0.16	0.20	0.24	0.27	0.31	0.35	0.39
LAM	0.07	0.11	0.14	0.16	0.17	0.19	0.20	0.21	0.22	0.23	0.24
MEA	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12
NEU	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
OAS	0.07	0.09	0.11	0.13	0.15	0.17	0.19	0.21	0.22	0.24	0.25
REF	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.02	0.03	0.05	0.05	0.07	0.09	0.11	0.14	0.17	0.21	0.26
USA	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04

Table 70: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

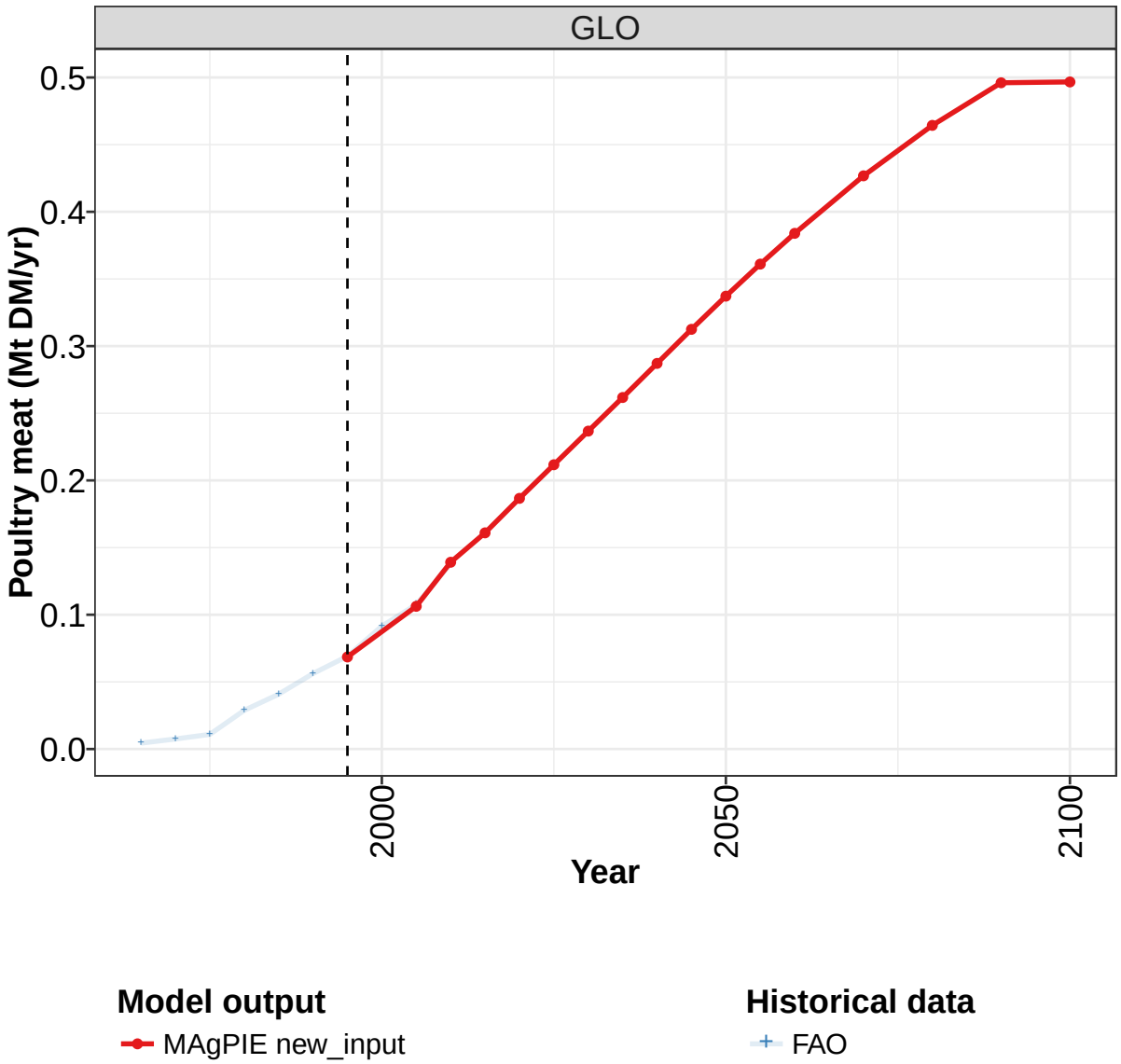
	2055	2060	2070	2080	2090	2100
GLO	2.21	2.30	2.47	2.60	2.68	2.73
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.72	0.70	0.65	0.60	0.54	0.50
EUR	0.03	0.03	0.03	0.03	0.03	0.03
IND	0.42	0.45	0.50	0.53	0.54	0.54
LAM	0.25	0.26	0.27	0.28	0.28	0.28
MEA	0.13	0.15	0.16	0.18	0.19	0.20
NEU	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.26	0.27	0.29	0.30	0.30	0.30
REF	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.31	0.37	0.49	0.60	0.71	0.79
USA	0.04	0.04	0.04	0.05	0.05	0.05

Table 71: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.18	0.21	0.27	0.33	0.39	0.48	0.62	0.77	0.88	1.04
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.03	0.03	0.04	0.05	0.09	0.14	0.28	0.37	0.41	0.46
EUR	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
IND	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.11
LAM	0.02	0.02	0.03	0.05	0.06	0.07	0.08	0.11	0.12	0.16
MEA	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05
NEU	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
OAS	0.02	0.03	0.03	0.04	0.05	0.07	0.08	0.09	0.10	0.12
REF	0.03	0.04	0.05	0.06	0.05	0.05	0.00	0.00	0.01	0.01
SSA	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05
USA	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04

Table 72: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr)

3.2.2 Poultry meat



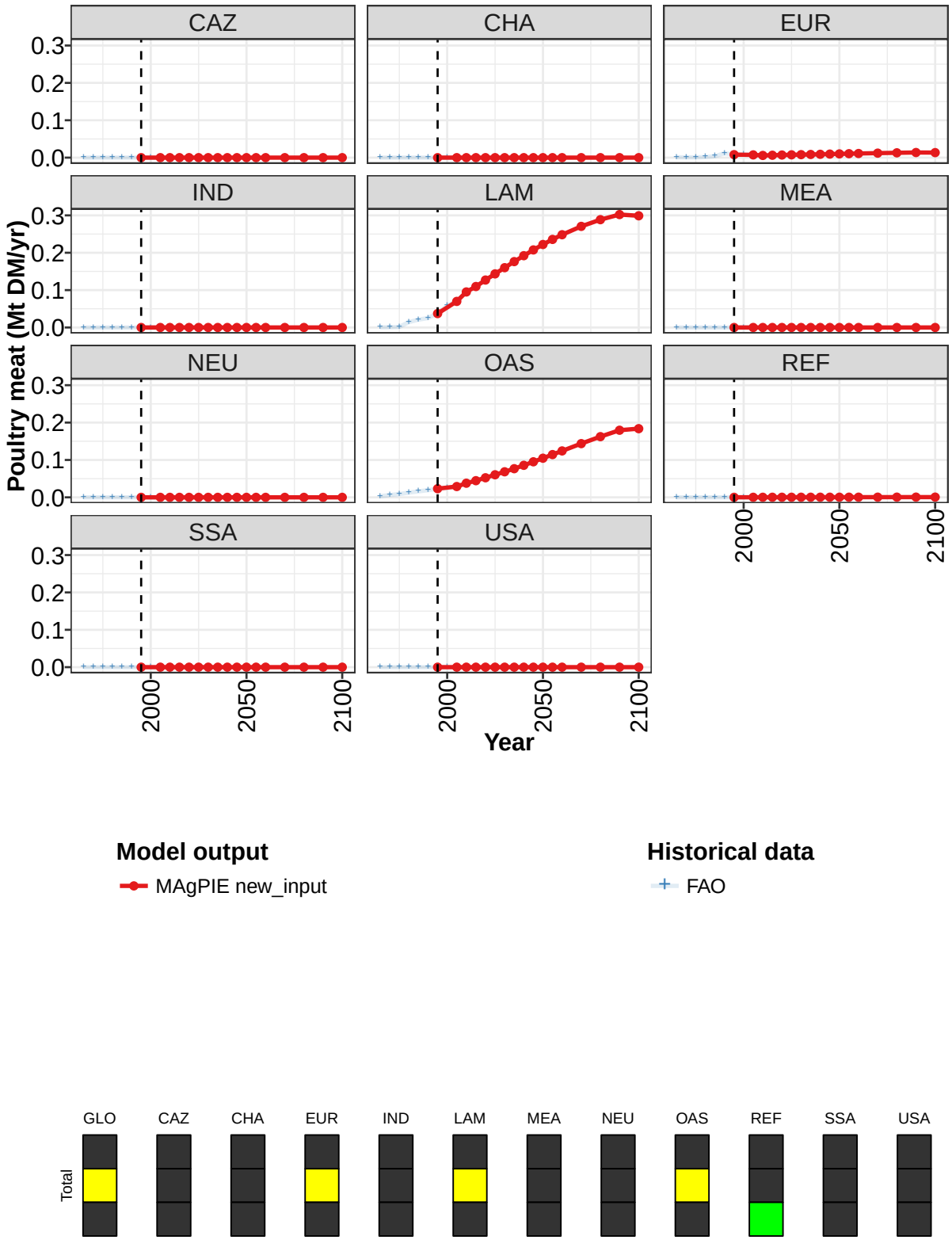


Figure 24: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.069	0.106	0.139	0.161	0.187	0.212	0.237	0.262	0.287	0.313	0.337
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.008	0.007	0.006	0.006	0.007	0.008	0.008	0.008	0.009	0.010	0.010
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.037	0.070	0.095	0.110	0.127	0.143	0.160	0.176	0.192	0.208	0.222
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.023	0.029	0.038	0.045	0.052	0.060	0.068	0.077	0.086	0.095	0.105
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 73: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

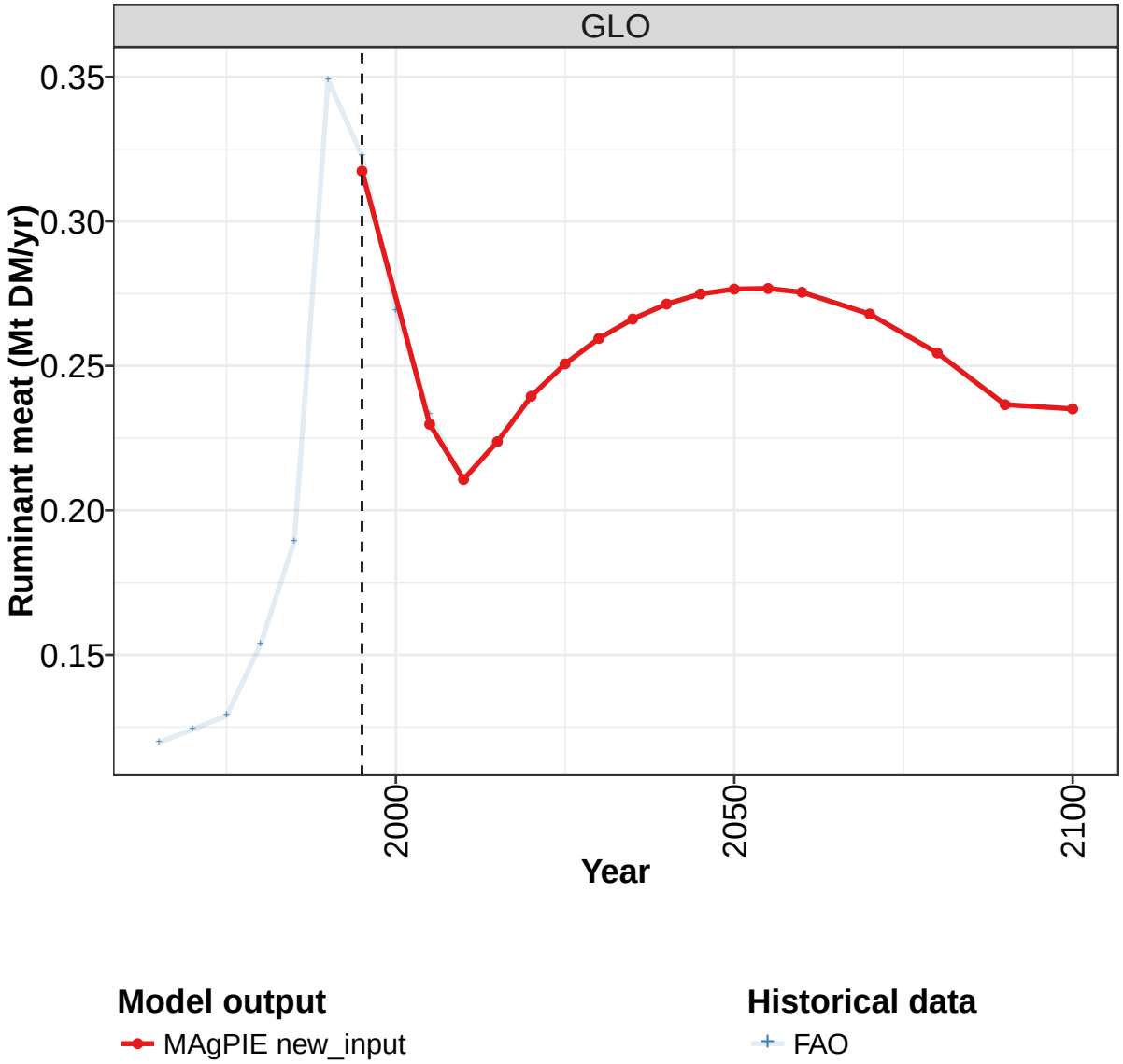
	2055	2060	2070	2080	2090	2100
GLO	0.361	0.384	0.427	0.464	0.496	0.497
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.011	0.011	0.012	0.013	0.014	0.014
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.236	0.248	0.271	0.289	0.302	0.299
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.114	0.124	0.144	0.162	0.180	0.184
REF	0.000	0.000	0.000	0.001	0.001	0.001
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

Table 74: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.004	0.007	0.011	0.029	0.041	0.056	0.069	0.091	0.108	0.138
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.001	0.001	0.002	0.004	0.012	0.008	0.008	0.007	0.006
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.001	0.001	0.002	0.014	0.021	0.025	0.038	0.058	0.071	0.095
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.003	0.006	0.009	0.013	0.016	0.019	0.023	0.025	0.029	0.037
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 75: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr)

3.2.3 Ruminant meat



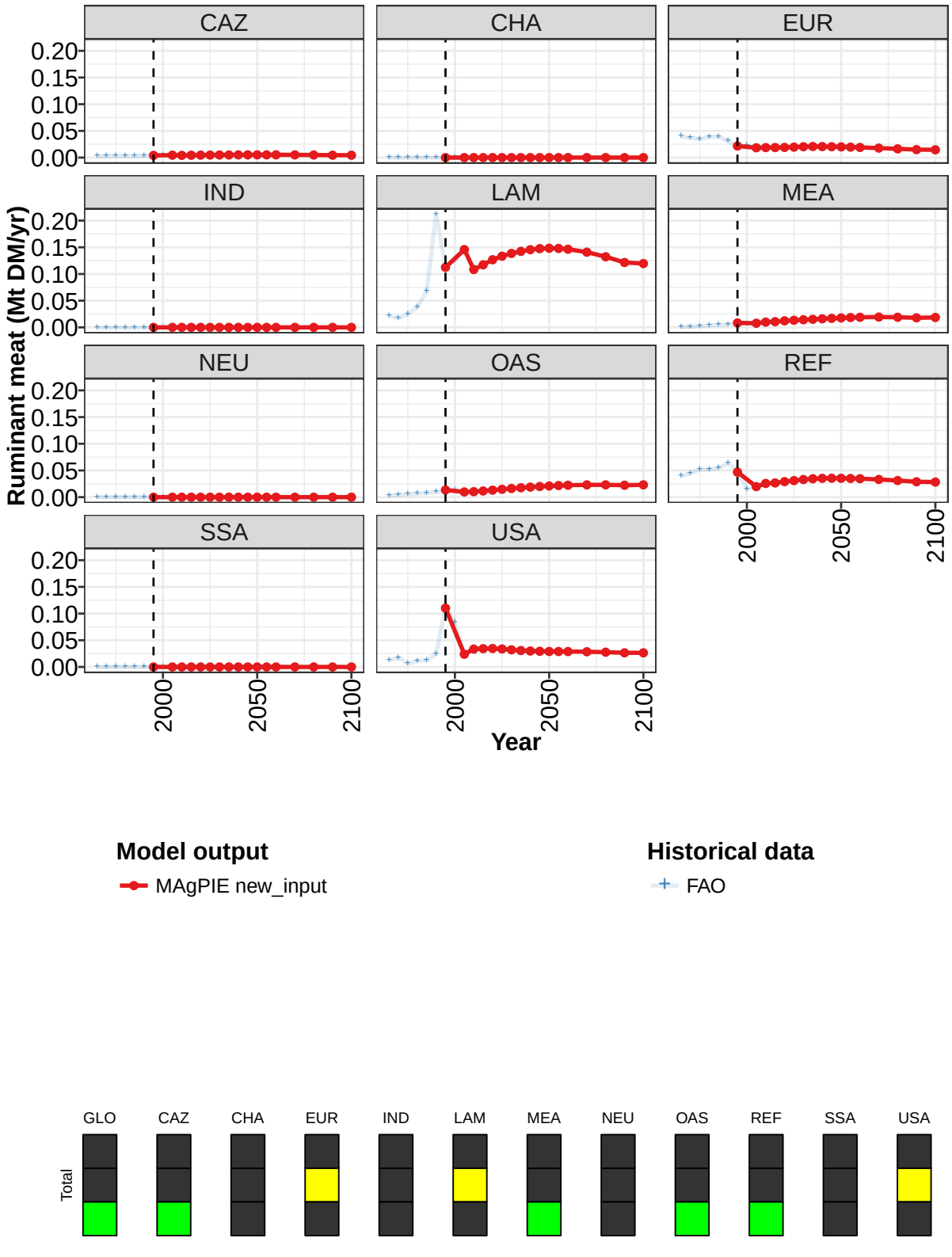


Figure 25: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.317	0.230	0.211	0.224	0.239	0.251	0.259	0.266	0.271	0.275	0.277
CAZ	0.004	0.005	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.022	0.018	0.019	0.019	0.019	0.020	0.020	0.021	0.021	0.020	0.020
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.113	0.146	0.108	0.117	0.127	0.133	0.138	0.142	0.146	0.148	0.148
MEA	0.008	0.008	0.010	0.011	0.012	0.013	0.014	0.015	0.016	0.017	0.018
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.013	0.010	0.010	0.012	0.013	0.015	0.016	0.018	0.019	0.020	0.021
REF	0.047	0.020	0.026	0.027	0.029	0.031	0.033	0.035	0.035	0.036	0.035
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.110	0.024	0.034	0.034	0.035	0.034	0.032	0.031	0.030	0.029	0.029

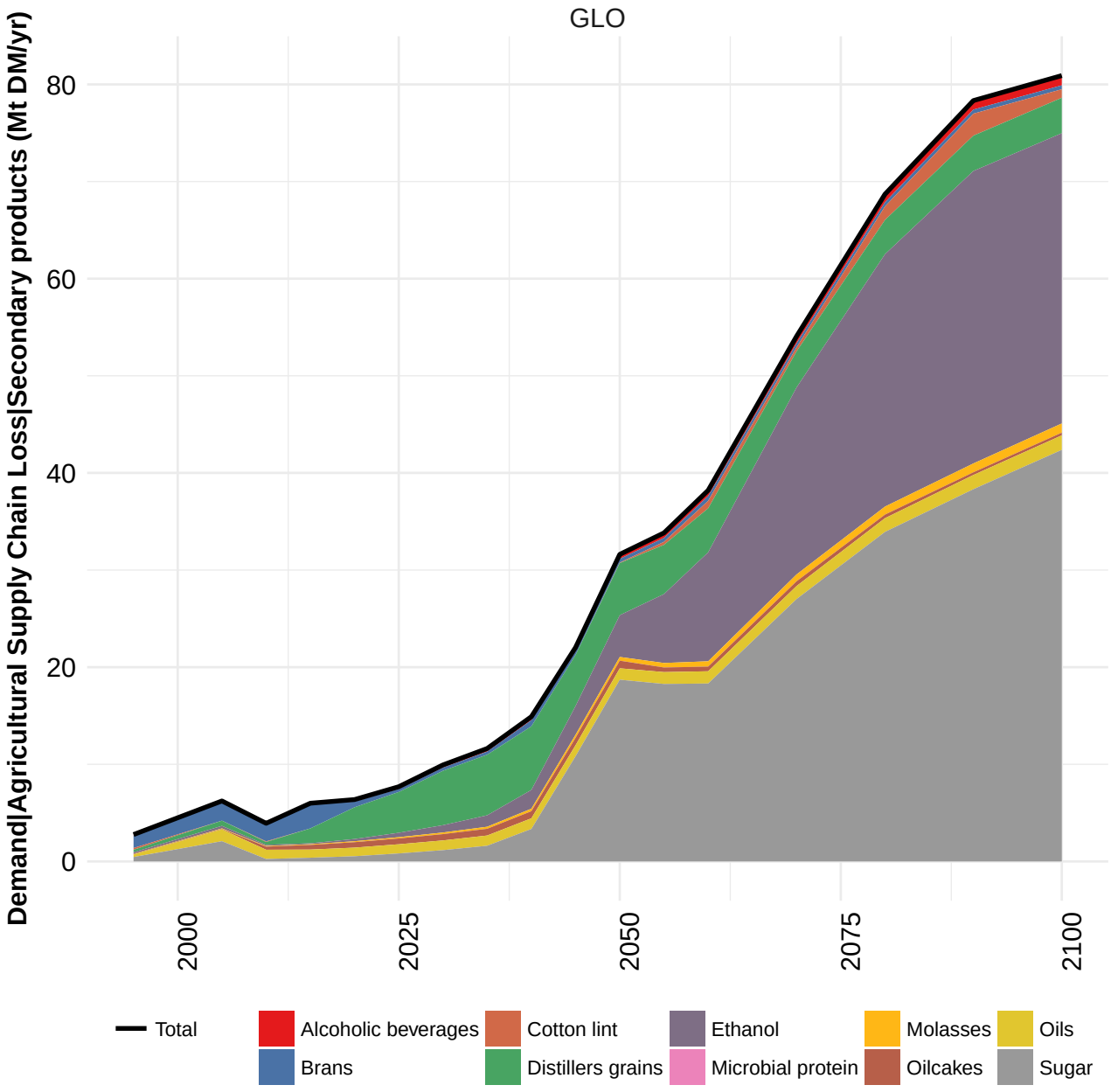
Table 76: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

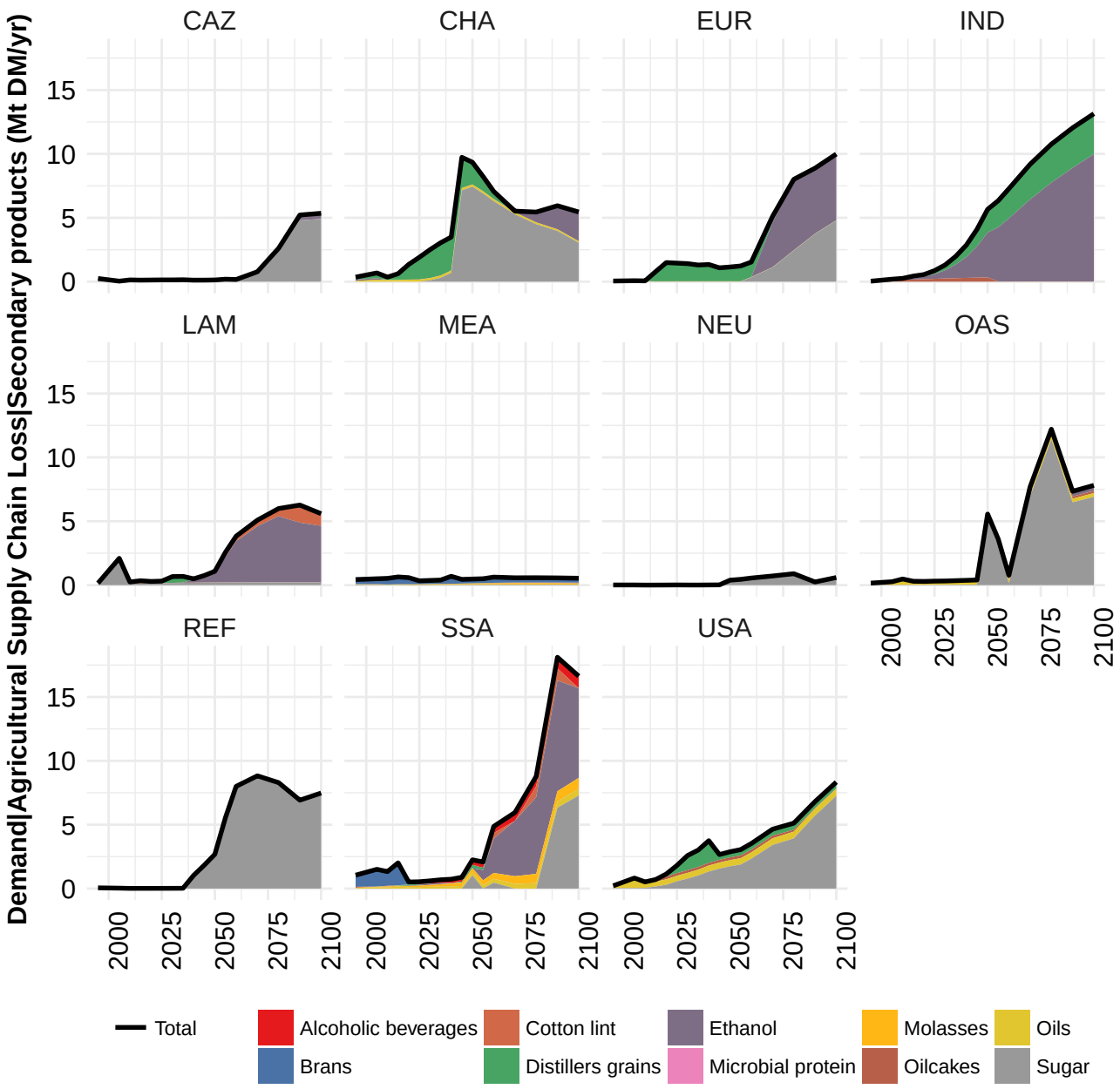
	2055	2060	2070	2080	2090	2100
GLO	0.277	0.275	0.268	0.254	0.237	0.235
CAZ	0.005	0.005	0.005	0.005	0.005	0.005
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.020	0.019	0.018	0.016	0.015	0.015
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.148	0.146	0.141	0.132	0.122	0.120
MEA	0.018	0.019	0.019	0.019	0.018	0.019
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.022	0.022	0.023	0.023	0.022	0.023
REF	0.035	0.035	0.033	0.031	0.029	0.028
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.029	0.029	0.028	0.028	0.026	0.026

Table 77: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

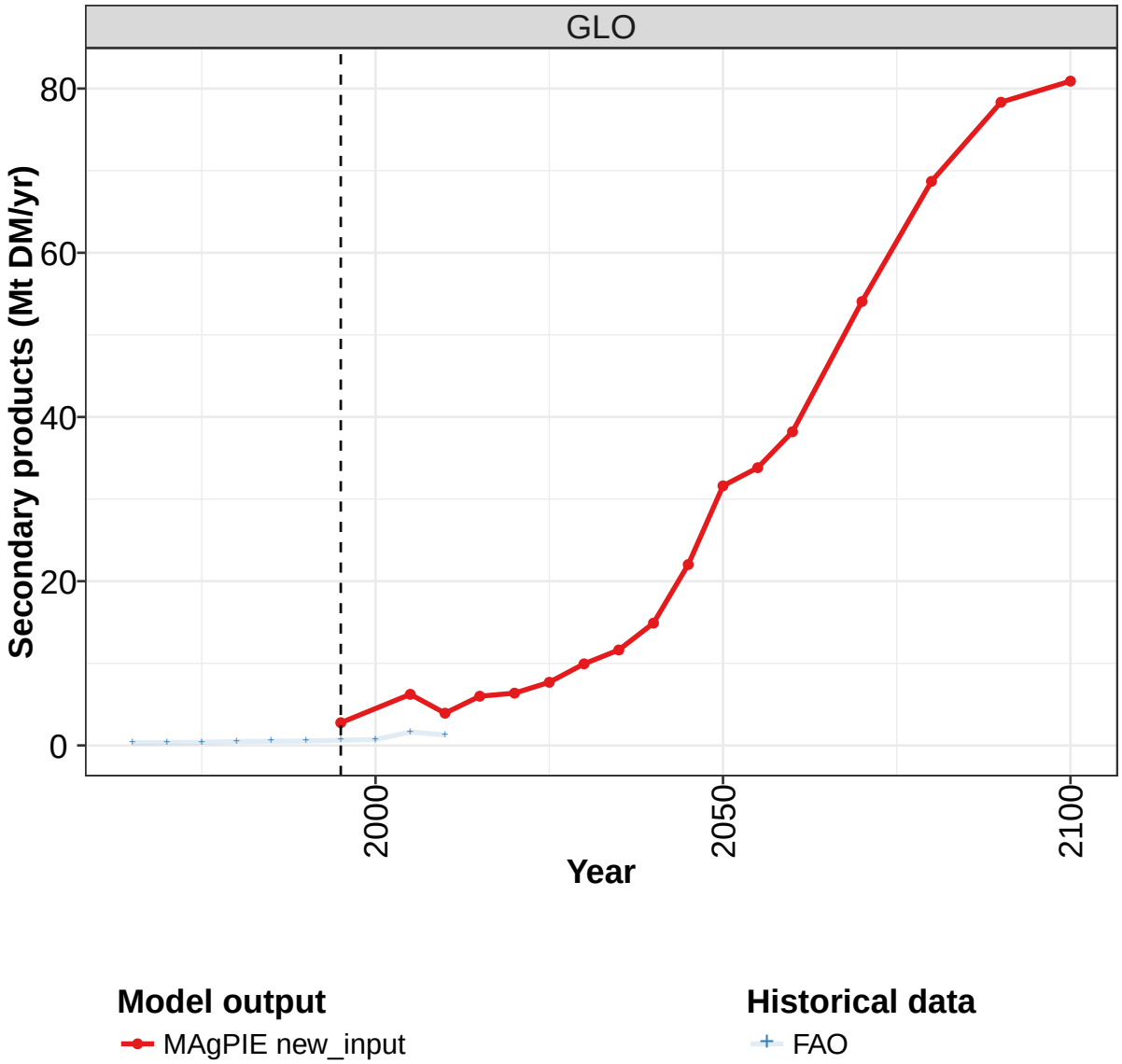
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.120	0.124	0.129	0.154	0.189	0.349	0.323	0.269	0.233	0.210
CAZ	0.003	0.003	0.004	0.004	0.003	0.004	0.004	0.004	0.005	0.004
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.040	0.037	0.035	0.039	0.039	0.031	0.022	0.022	0.018	0.019
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.021	0.017	0.024	0.038	0.068	0.211	0.115	0.125	0.148	0.108
MEA	0.001	0.001	0.003	0.003	0.005	0.005	0.008	0.007	0.008	0.009
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.003	0.004	0.005	0.007	0.008	0.010	0.013	0.013	0.010	0.010
REF	0.039	0.044	0.052	0.051	0.055	0.064	0.050	0.015	0.021	0.026
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.012	0.017	0.006	0.011	0.012	0.024	0.111	0.083	0.024	0.034

Table 78: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr)


GLO
Demand|Agricultural Supply Chain Loss|Secondary products (Mt DM/yr)
80
60
40
20
0
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Agricultural Supply Chain Loss|Secondary products (Mt DM/yr)
0
5
10
15
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

3.3 Secondary products



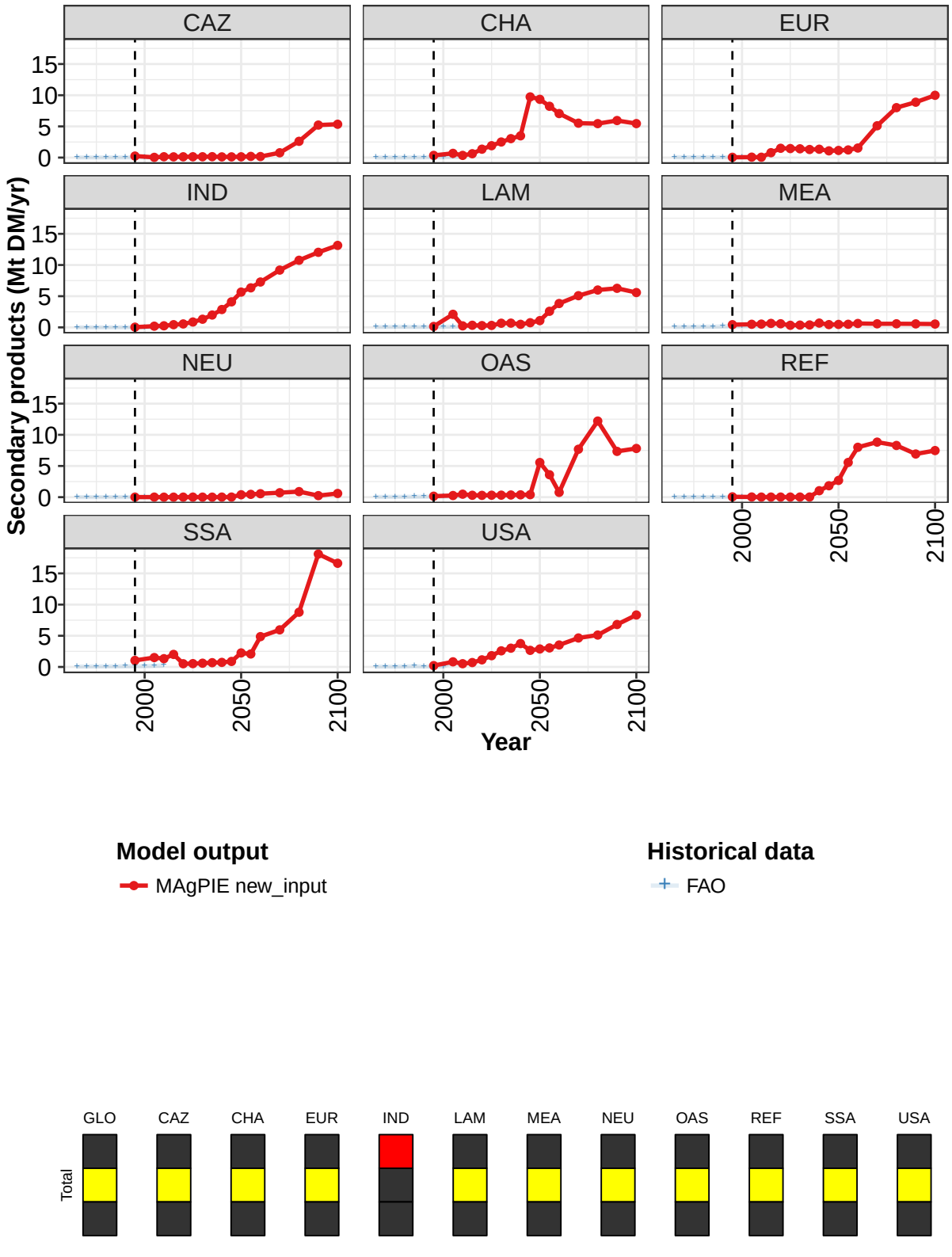


Figure 26: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.8	6.2	3.9	6.0	6.4	7.7	9.9	11.6	14.9	22.0	31.6
CAZ	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.4	0.7	0.4	0.6	1.3	1.9	2.5	3.0	3.5	9.7	9.3
EUR	0.1	0.1	0.1	0.8	1.5	1.4	1.4	1.3	1.3	1.1	1.1
IND	0.0	0.2	0.3	0.4	0.6	0.9	1.3	2.0	2.9	4.1	5.7
LAM	0.2	2.1	0.2	0.3	0.3	0.3	0.7	0.7	0.5	0.7	1.1
MEA	0.4	0.5	0.5	0.6	0.6	0.3	0.4	0.4	0.7	0.4	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
OAS	0.2	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	5.6
REF	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.8	2.7
SSA	1.0	1.5	1.3	2.0	0.5	0.5	0.6	0.7	0.7	0.9	2.3
USA	0.2	0.8	0.5	0.7	1.1	1.8	2.6	3.0	3.7	2.7	2.9

Table 79: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr) [PART 1/2]

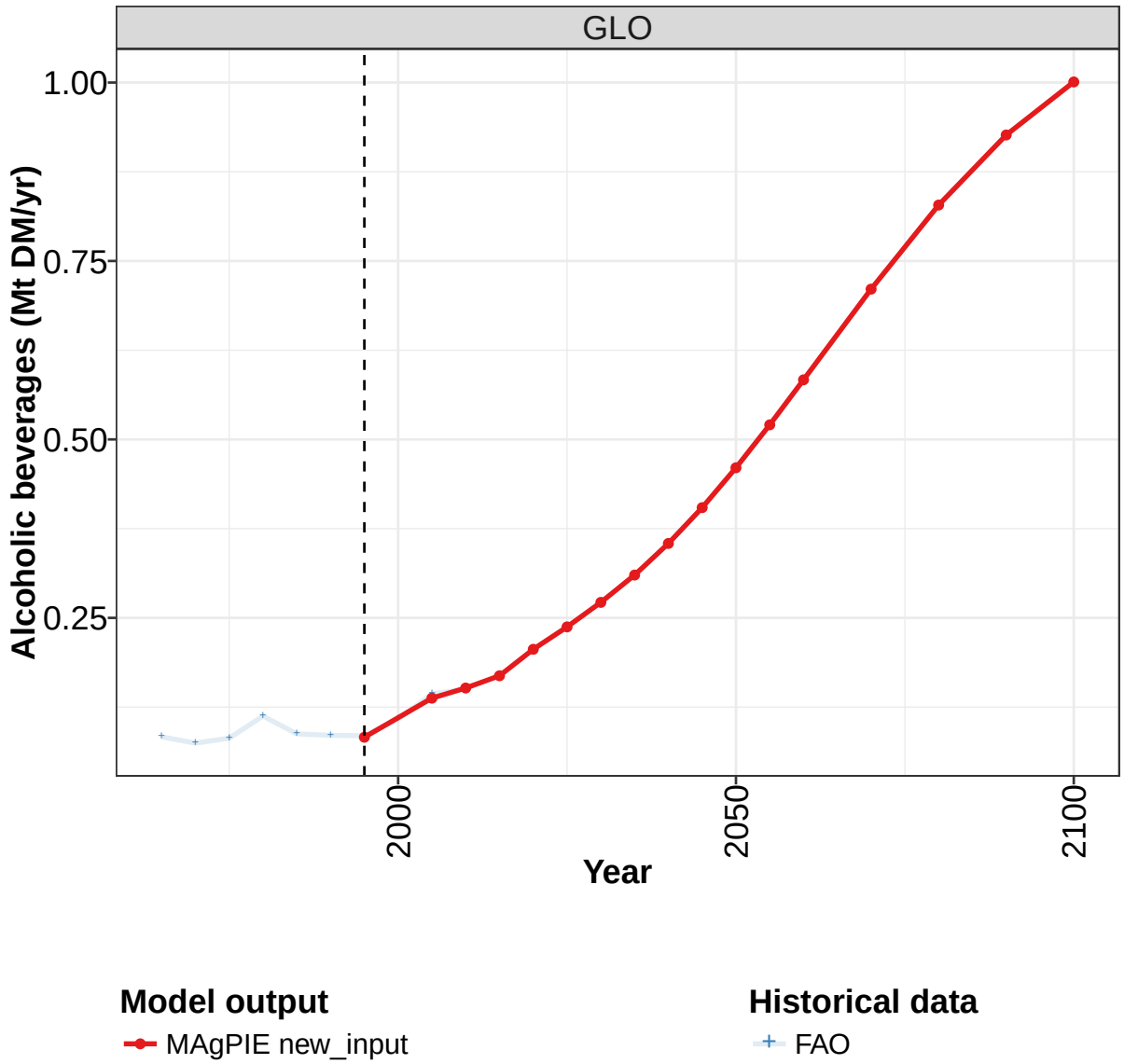
	2055	2060	2070	2080	2090	2100
GLO	33.8	38.2	54.1	68.7	78.3	80.9
CAZ	0.2	0.2	0.8	2.6	5.2	5.4
CHA	8.2	7.1	5.5	5.4	5.9	5.5
EUR	1.2	1.5	5.1	8.0	8.9	10.0
IND	6.3	7.3	9.2	10.8	12.0	13.1
LAM	2.6	3.8	5.1	6.0	6.3	5.6
MEA	0.5	0.6	0.6	0.6	0.6	0.5
NEU	0.5	0.6	0.7	0.9	0.2	0.6
OAS	3.6	0.8	7.7	12.2	7.3	7.8
REF	5.6	8.0	8.8	8.3	6.9	7.5
SSA	2.1	4.9	6.0	8.8	18.1	16.6
USA	3.1	3.5	4.6	5.1	6.8	8.3

Table 80: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.31	0.35	0.38	0.48	0.50	0.53	0.63	0.71	1.63	1.28
CAZ	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
CHA	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.04	0.10	0.12
EUR	0.07	0.04	0.03	0.05	0.04	0.05	0.03	0.03	0.04	0.03
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.06	0.07	0.09	0.09	0.07	0.06	0.07	0.09	0.11	0.14
MEA	0.05	0.06	0.08	0.10	0.11	0.16	0.20	0.22	0.21	0.22
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.02	0.04	0.04	0.05	0.06	0.07	0.08	0.10	0.13	0.16
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.01
SSA	0.06	0.07	0.08	0.10	0.10	0.10	0.11	0.13	0.19	0.23
USA	0.04	0.05	0.03	0.07	0.11	0.05	0.06	0.06	0.81	0.34

Table 81: FAO — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr)

3.3.1 Alcoholic beverages



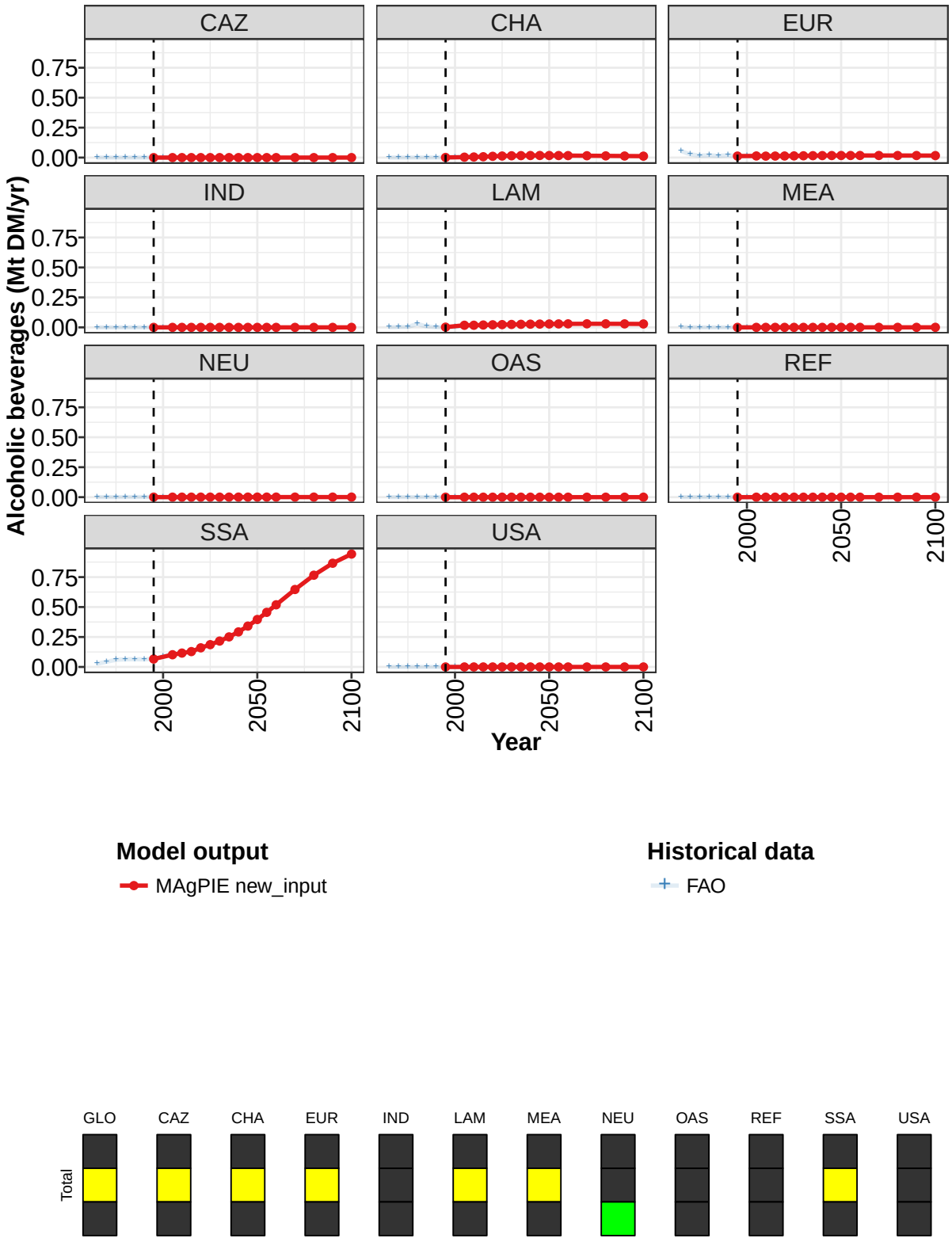


Figure 27: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.08	0.14	0.15	0.17	0.21	0.24	0.27	0.31	0.35	0.40	0.46
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
EUR	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.07	0.10	0.12	0.13	0.16	0.19	0.22	0.25	0.29	0.34	0.40
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 82: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

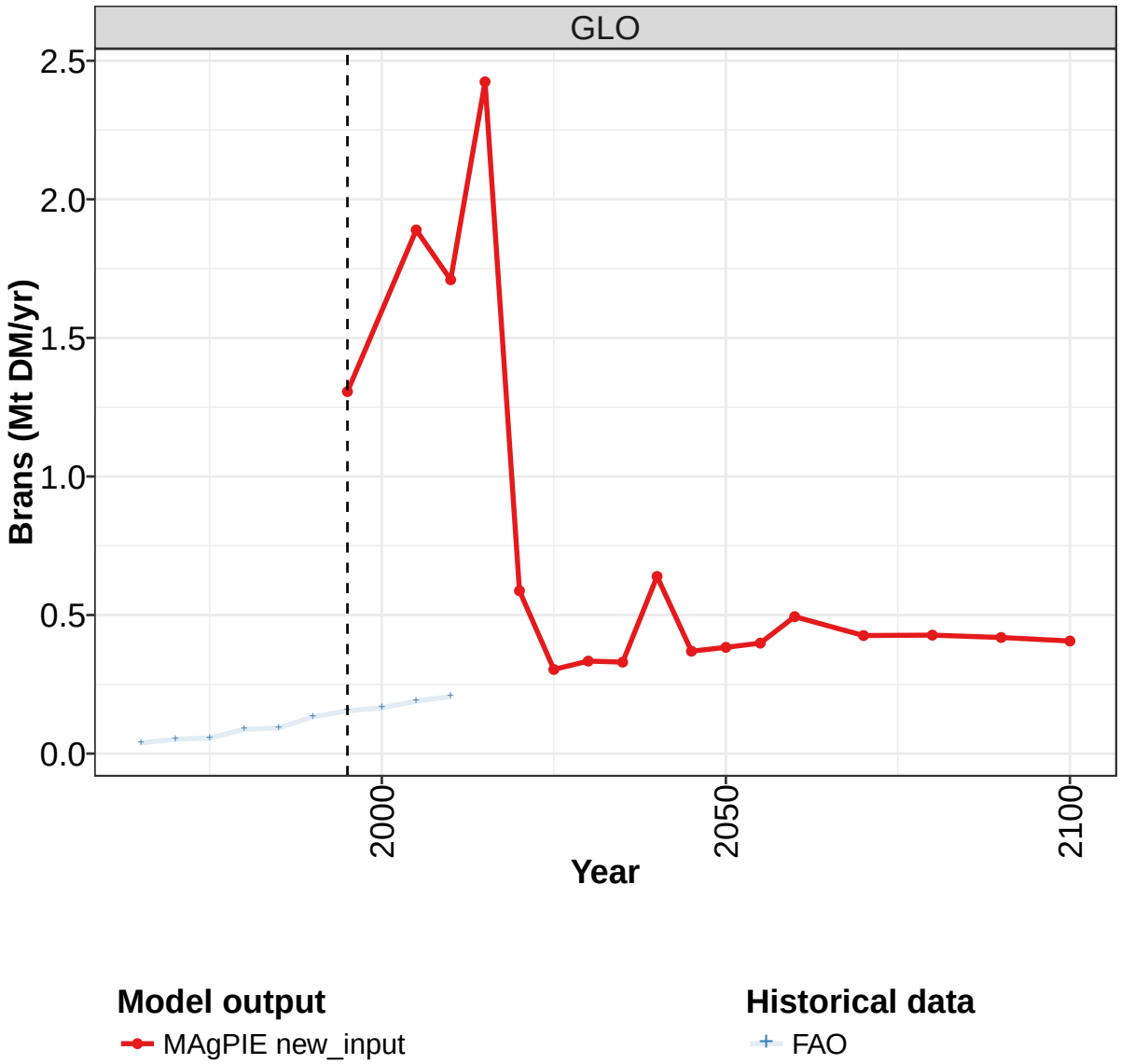
	2055	2060	2070	2080	2090	2100
GLO	0.52	0.58	0.71	0.83	0.93	1.00
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.02	0.02	0.02	0.01	0.01	0.01
EUR	0.02	0.02	0.02	0.02	0.02	0.02
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.03	0.03	0.03	0.03	0.03	0.03
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.46	0.52	0.65	0.77	0.87	0.94
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 83: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.083	0.074	0.082	0.112	0.087	0.085	0.085	0.108	0.143	0.150
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.004	0.005	0.005
EUR	0.054	0.027	0.017	0.019	0.015	0.019	0.013	0.014	0.014	0.013
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.002	0.003	0.004	0.029	0.007	0.001	0.002	0.002	0.018	0.018
MEA	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.026	0.044	0.060	0.064	0.065	0.063	0.068	0.088	0.107	0.115
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 84: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr)

3.3.2 Brans


GLO
Brans (Mt DM/yr)
2.5
2.0
1.5
1.0
0.5
0.0
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

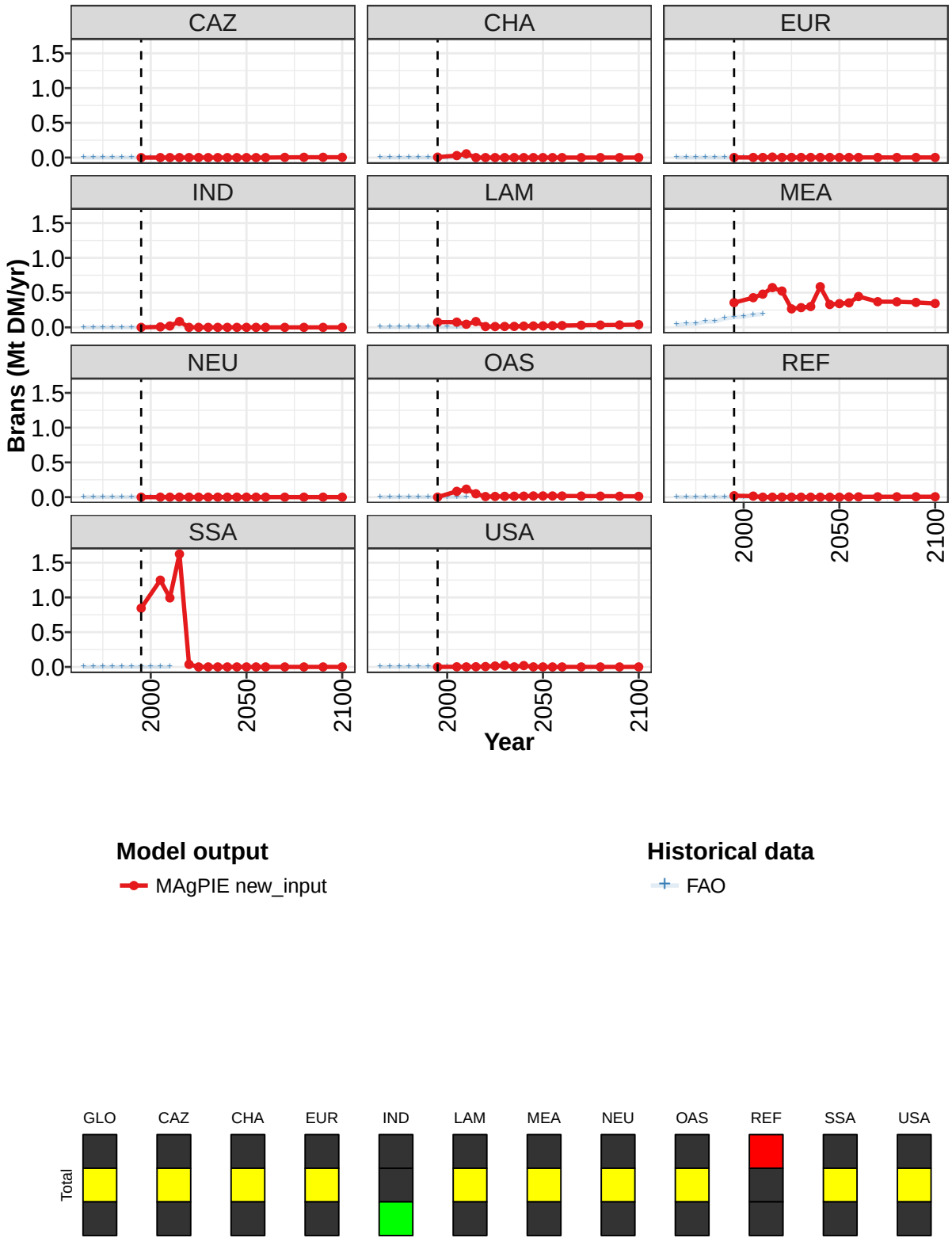


Figure 28: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.31	1.89	1.71	2.42	0.59	0.30	0.33	0.33	0.64	0.37	0.38
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.01	0.03	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.01	0.02	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.07	0.08	0.04	0.08	0.01	0.01	0.01	0.01	0.02	0.02	0.02
MEA	0.36	0.43	0.48	0.57	0.52	0.27	0.28	0.30	0.59	0.33	0.34
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.08	0.12	0.05	0.01	0.01	0.01	0.01	0.01	0.02	0.02
REF	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.85	1.25	0.99	1.62	0.04	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.00	0.00

Table 85: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr) [PART 1/2]

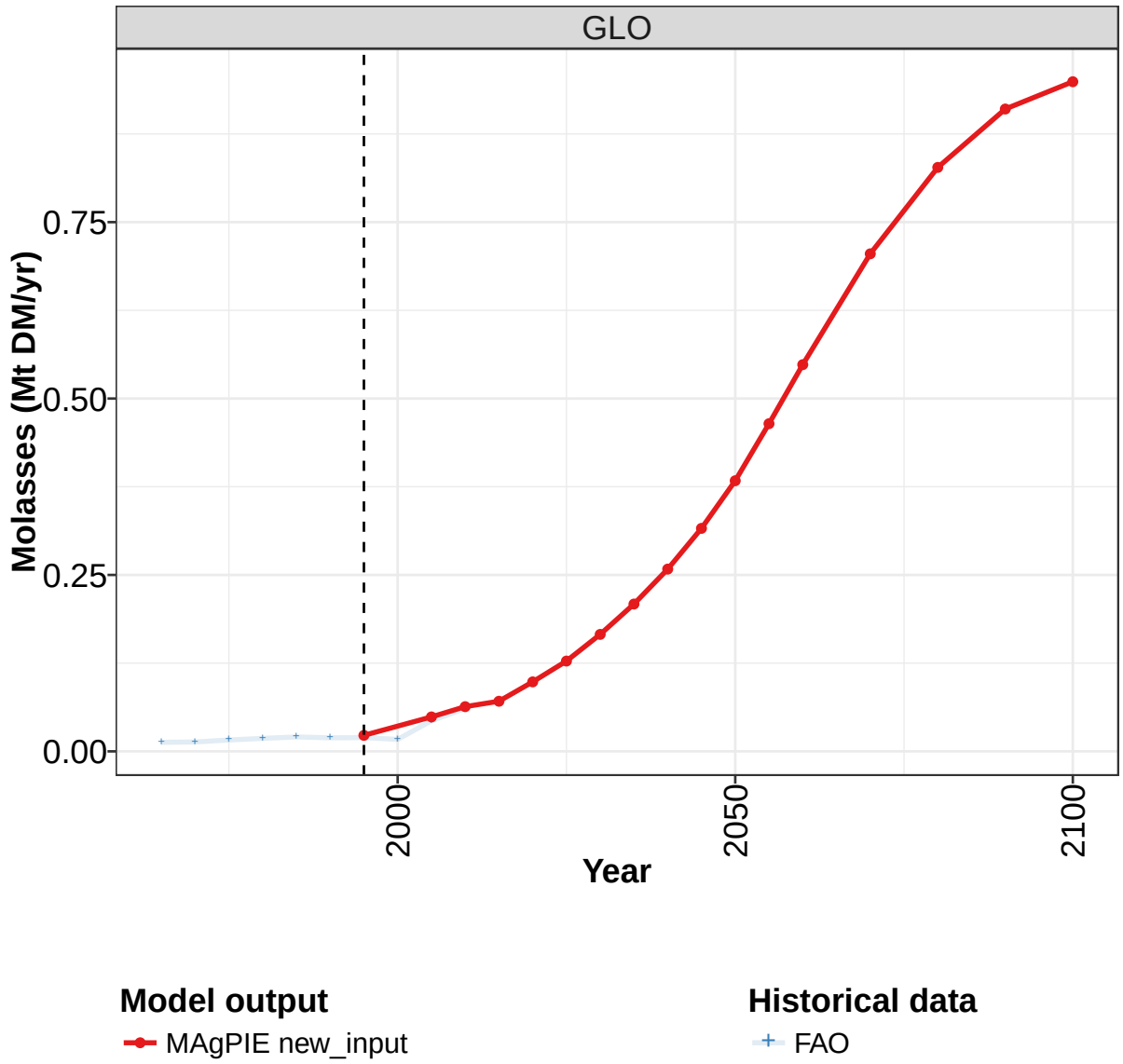
	2055	2060	2070	2080	2090	2100
GLO	0.40	0.49	0.43	0.43	0.42	0.41
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.02	0.03	0.03	0.03	0.03	0.04
MEA	0.35	0.44	0.37	0.37	0.36	0.34
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.02	0.02	0.02	0.01	0.01	0.01
REF	0.00	0.00	0.01	0.01	0.01	0.01
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 86: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.038	0.052	0.057	0.087	0.093	0.133	0.155	0.165	0.189	0.206
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.002	0.003	0.004	0.004	0.004	0.005	0.006	0.007	0.007	0.009
MEA	0.035	0.048	0.052	0.082	0.086	0.126	0.147	0.157	0.178	0.194
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.003
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 87: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr)

3.3.3 Molasses



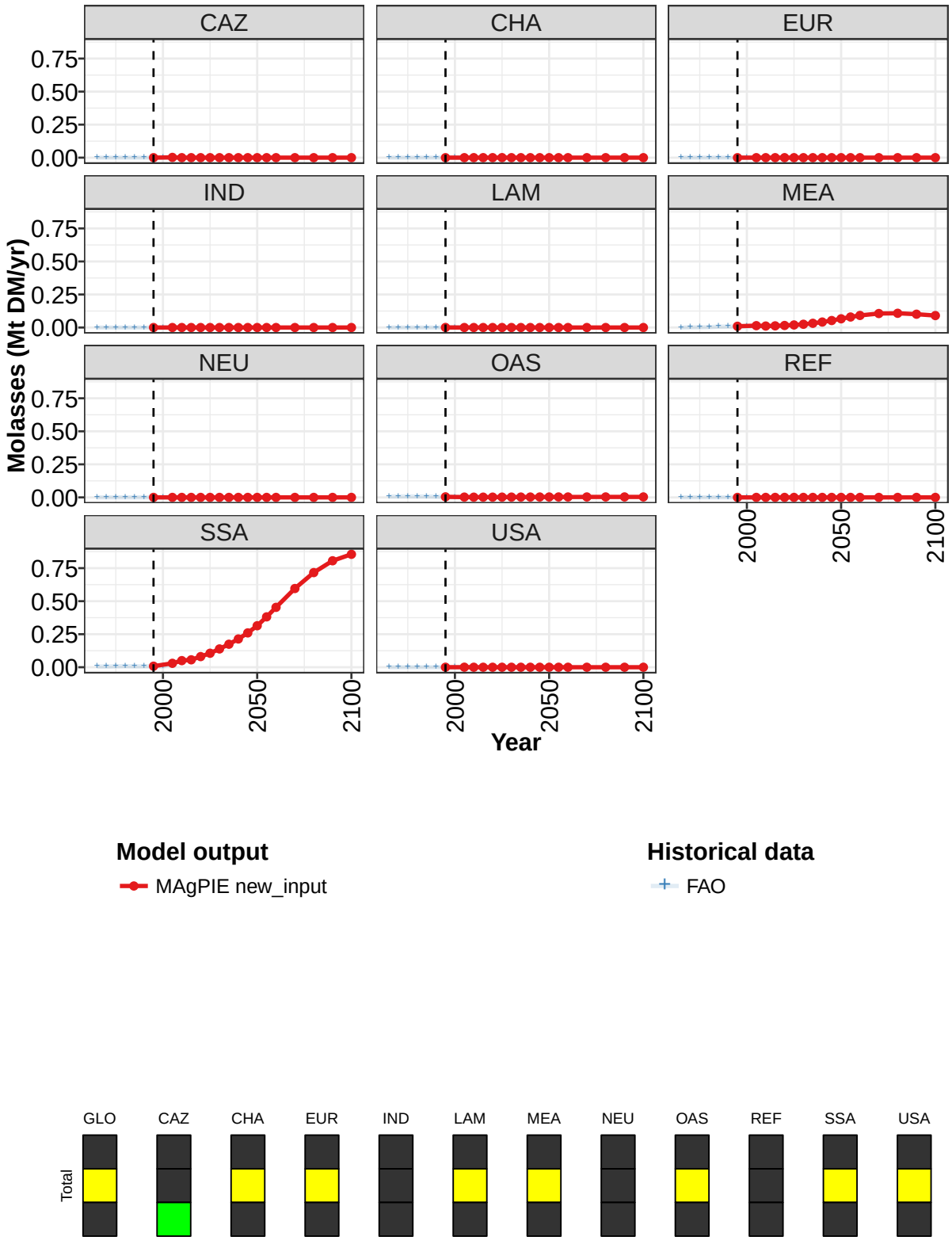


Figure 29: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.023	0.049	0.063	0.071	0.098	0.128	0.166	0.209	0.258	0.316	0.384
CAZ	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.010	0.014	0.011	0.013	0.016	0.019	0.025	0.032	0.042	0.053	0.066
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.008	0.030	0.050	0.056	0.081	0.106	0.139	0.174	0.214	0.260	0.314
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 88: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

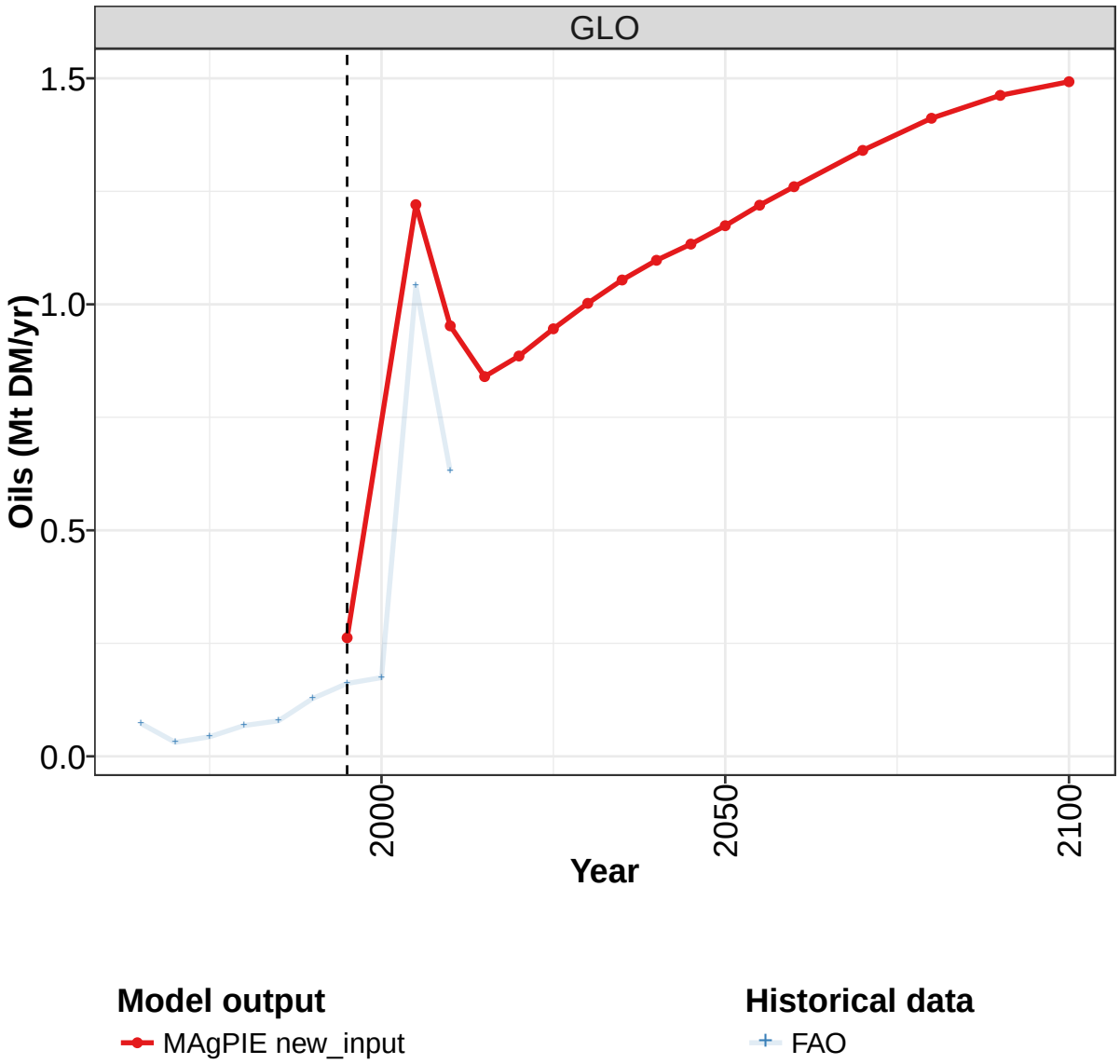
	2055	2060	2070	2080	2090	2100
GLO	0.464	0.548	0.705	0.828	0.910	0.949
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.080	0.091	0.106	0.108	0.101	0.091
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.003	0.003	0.003	0.003	0.003	0.004
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.381	0.453	0.596	0.716	0.806	0.855
USA	0.000	0.000	0.000	0.000	0.000	0.000

Table 89: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0128	0.0133	0.0161	0.0184	0.0204	0.0192	0.0195	0.0169	0.0433	0.0608
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0002	0.0010	0.0017	0.0028	0.0066	0.0075	0.0087	0.0094	0.0107	0.0098
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0063	0.0071	0.0073	0.0069	0.0069	0.0045	0.0037	0.0022	0.0020	0.0016
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0062	0.0051	0.0072	0.0087	0.0069	0.0071	0.0071	0.0054	0.0306	0.0494
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 90: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr)

3.3.4 Oils


GLO
1.5
1.0
0.5
0.0
Oils (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

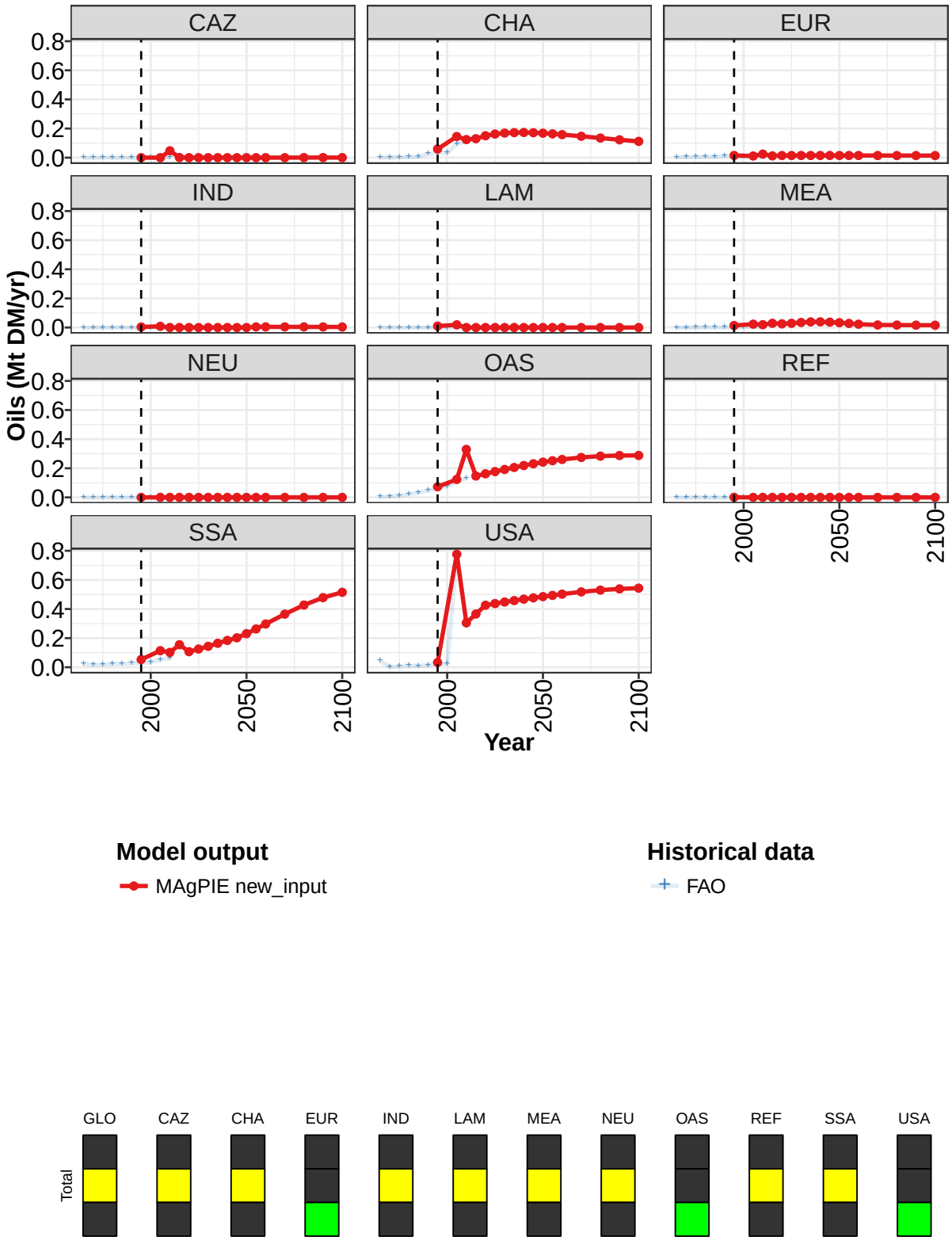


Figure 30: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.26	1.22	0.95	0.84	0.89	0.95	1.00	1.05	1.10	1.13	1.17
CAZ	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.06	0.15	0.12	0.13	0.15	0.16	0.17	0.17	0.17	0.17	0.17
EUR	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.03
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.07	0.12	0.33	0.15	0.16	0.18	0.19	0.21	0.22	0.23	0.24
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.05	0.11	0.10	0.15	0.11	0.13	0.14	0.16	0.18	0.20	0.23
USA	0.03	0.78	0.30	0.37	0.43	0.44	0.45	0.46	0.47	0.48	0.49

Table 91: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr) [PART 1/2]

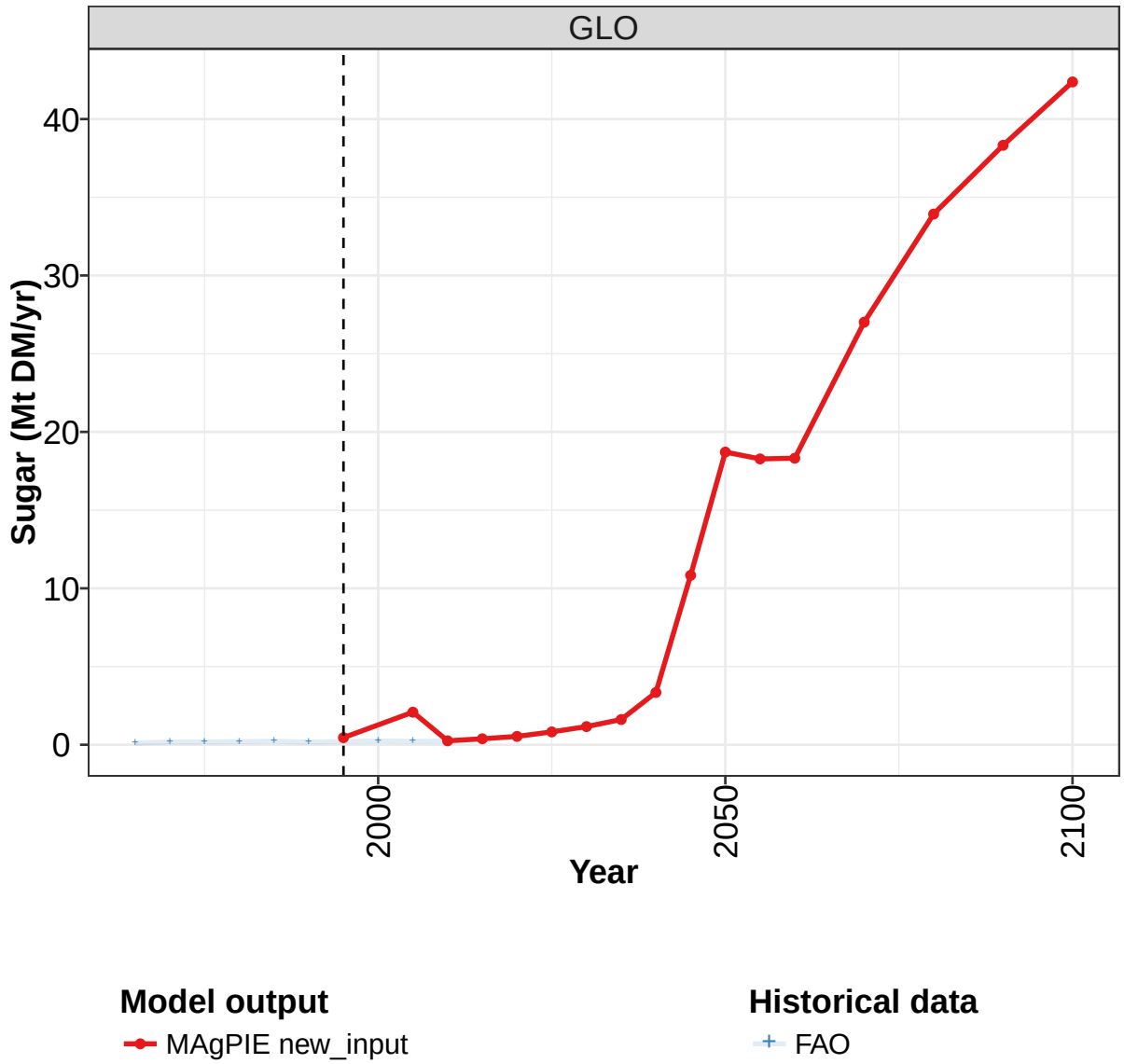
	2055	2060	2070	2080	2090	2100
GLO	1.22	1.26	1.34	1.41	1.46	1.49
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.16	0.16	0.15	0.13	0.12	0.11
EUR	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.03	0.02	0.02	0.02	0.02	0.02
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.25	0.26	0.27	0.28	0.29	0.29
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.26	0.30	0.36	0.43	0.48	0.51
USA	0.49	0.50	0.52	0.53	0.54	0.54

Table 92: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.07	0.03	0.04	0.07	0.08	0.13	0.16	0.17	1.04	0.63
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.03	0.09	0.12
EUR	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.01	0.01	0.02	0.03	0.05	0.06	0.08	0.11	0.13
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.05	0.06
USA	0.04	0.00	0.01	0.01	0.01	0.01	0.03	0.02	0.77	0.30

Table 93: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr)

3.3.5 Sugar


GLO
Sugar (Mt DM/yr)
0
10
20
30
40
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

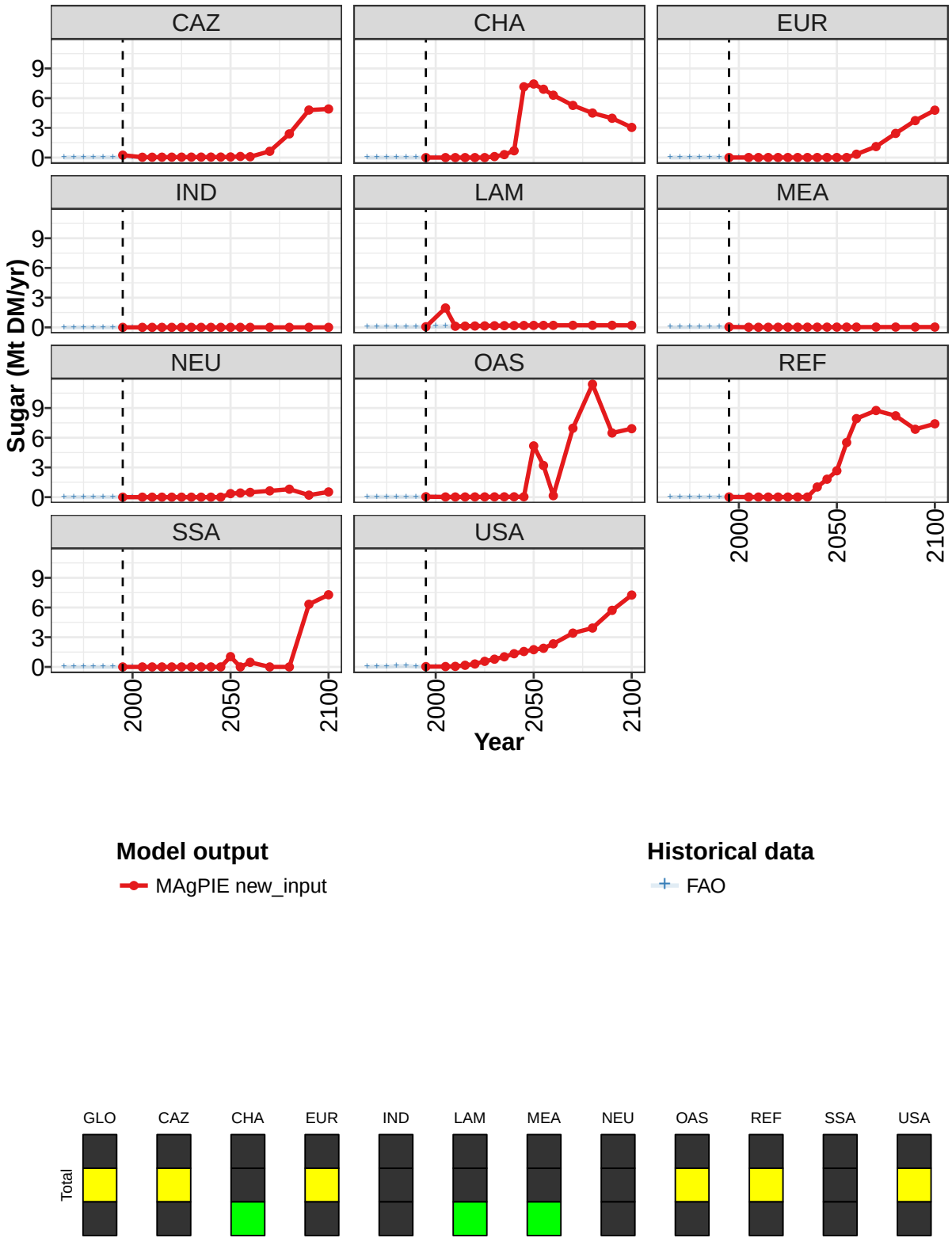


Figure 31: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.5	2.1	0.3	0.4	0.5	0.8	1.2	1.6	3.3	10.8	18.7
CAZ	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.7	7.1	7.4
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	2.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.8	2.7
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
USA	0.0	0.0	0.1	0.2	0.3	0.6	0.8	1.0	1.3	1.6	1.7

Table 94: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

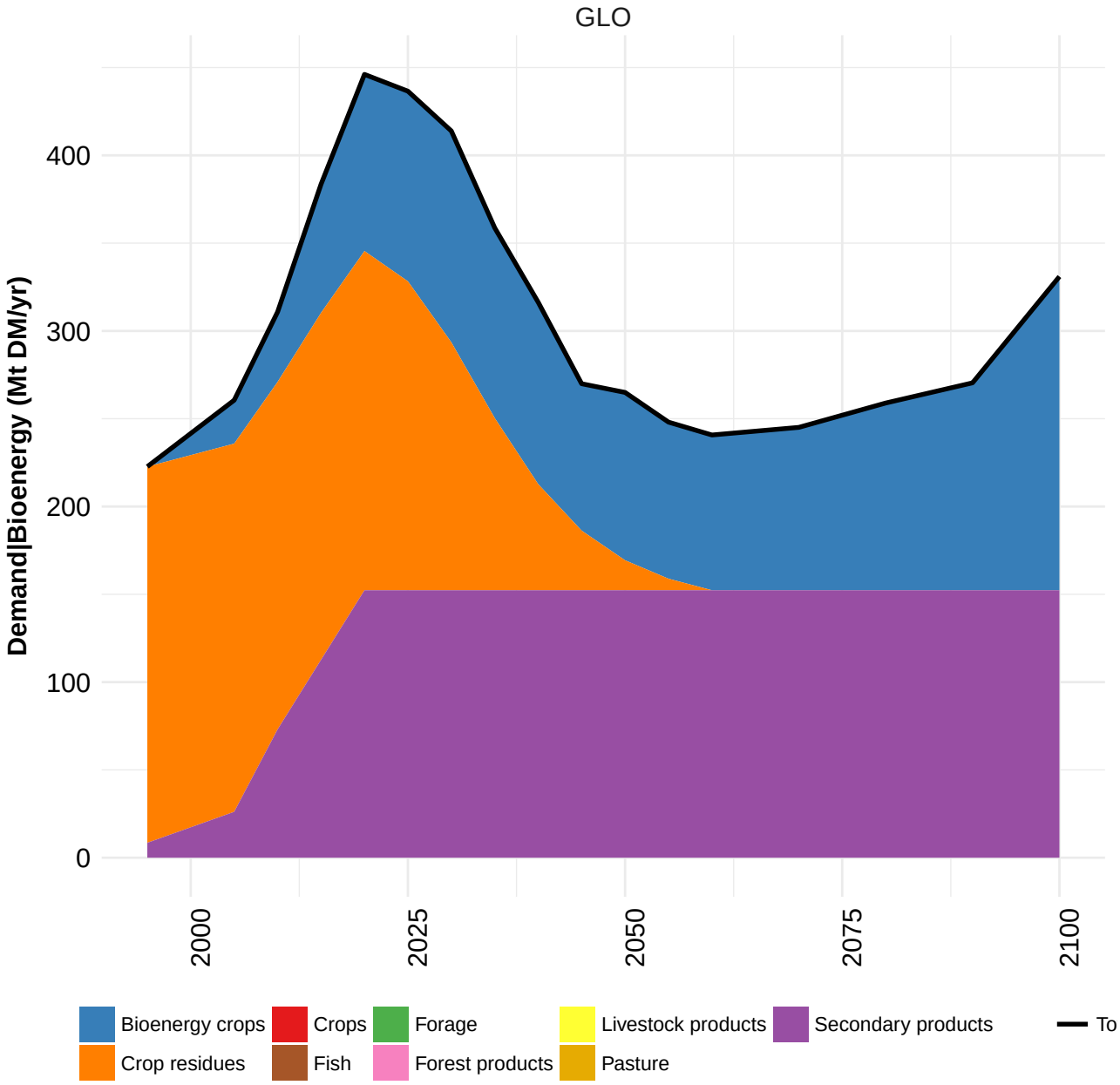
	2055	2060	2070	2080	2090	2100
GLO	18.3	18.3	27.0	33.9	38.3	42.4
CAZ	0.1	0.1	0.6	2.4	4.8	4.9
CHA	6.9	6.3	5.3	4.5	4.0	3.0
EUR	0.0	0.3	1.1	2.4	3.7	4.8
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.2	0.2	0.2	0.2	0.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.4	0.5	0.6	0.8	0.2	0.5
OAS	3.2	0.1	7.0	11.4	6.5	6.9
REF	5.5	7.9	8.7	8.2	6.9	7.4
SSA	0.0	0.5	0.0	0.0	6.3	7.3
USA	1.9	2.3	3.4	3.9	5.7	7.3

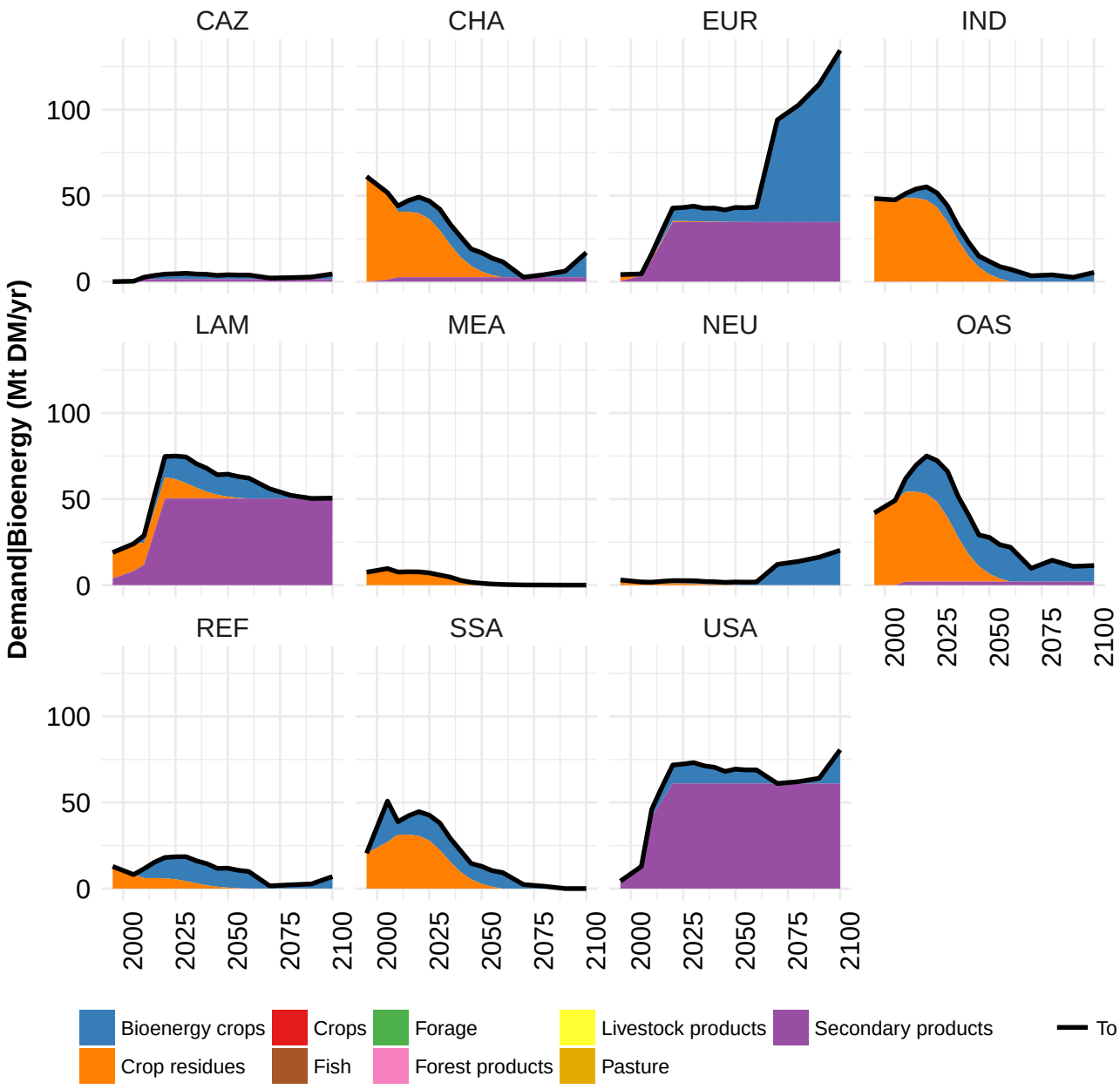
Table 95: MAgPIE new_input — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

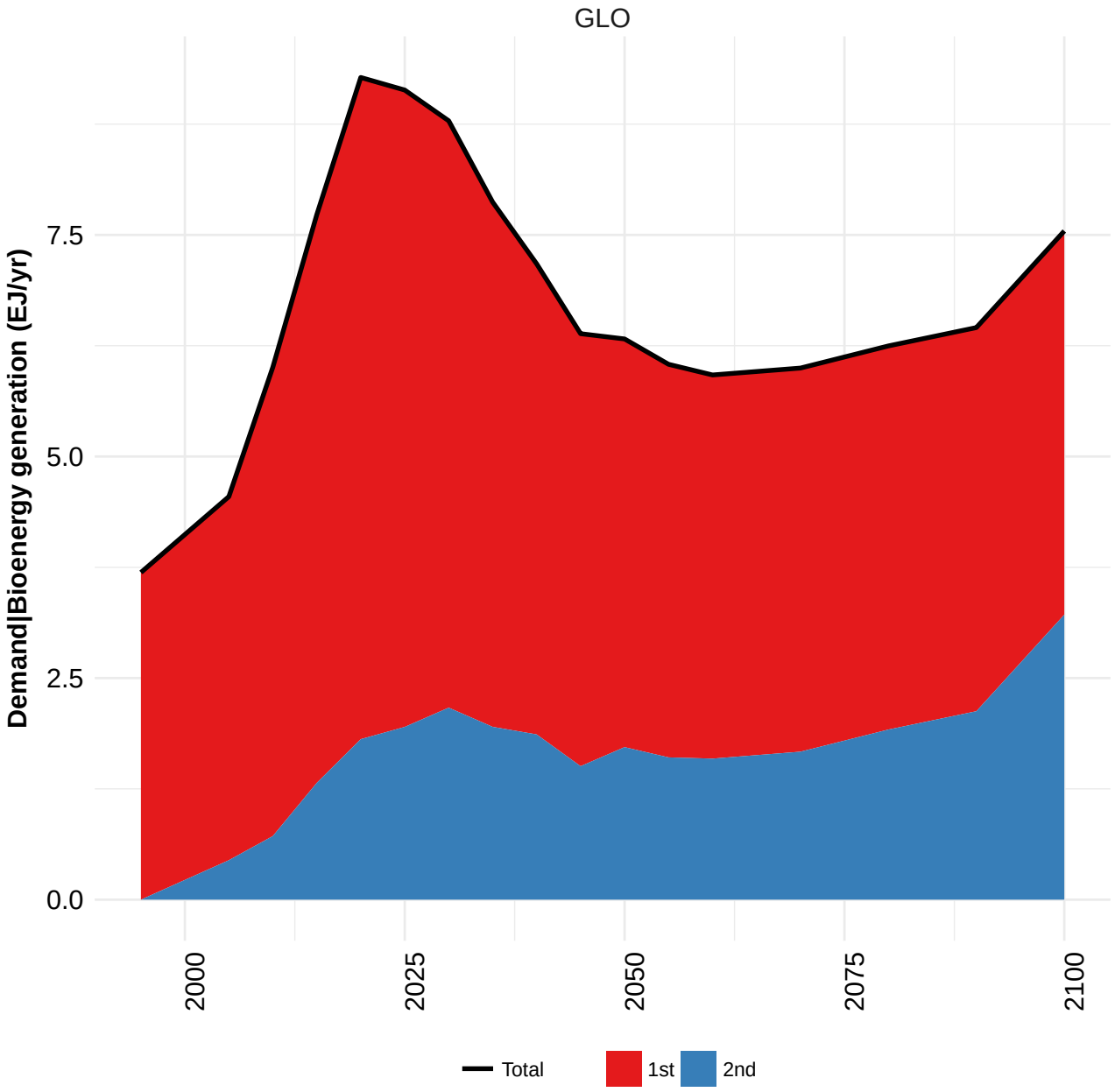
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.104	0.174	0.180	0.196	0.225	0.164	0.208	0.244	0.214	0.230
CAZ	0.014	0.021	0.016	0.021	0.017	0.017	0.020	0.033	0.035	0.038
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
EUR	0.007	0.008	0.011	0.022	0.018	0.014	0.008	0.009	0.010	0.007
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.057	0.060	0.083	0.054	0.056	0.055	0.064	0.085	0.089	0.110
MEA	0.011	0.014	0.021	0.015	0.016	0.021	0.042	0.049	0.012	0.008
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.014	0.022	0.021	0.020	0.020	0.020	0.018	0.019	0.019	0.018
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.008	0.010	0.008
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.049	0.029	0.064	0.100	0.038	0.035	0.040	0.040	0.040

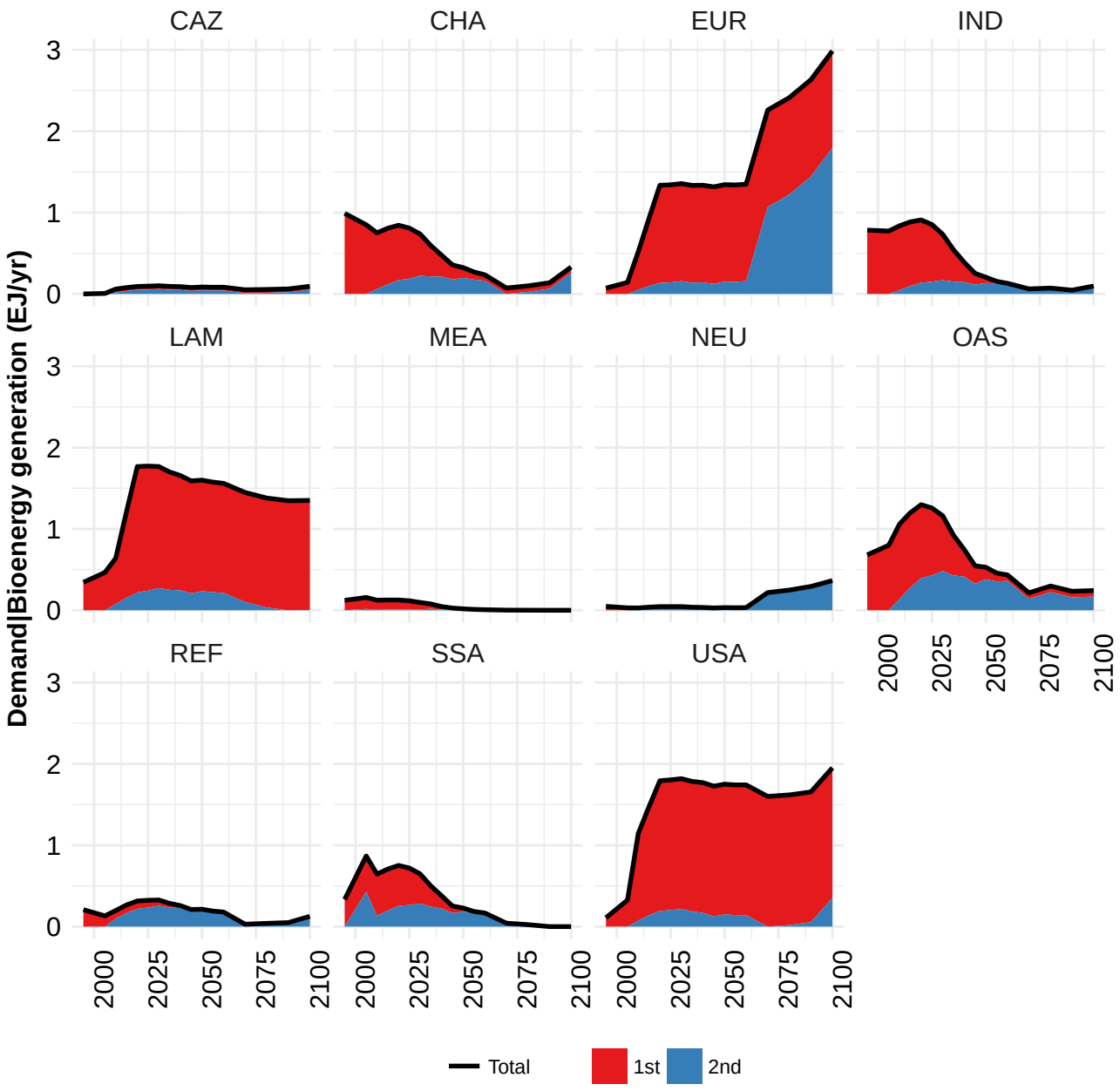
Table 96: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr)

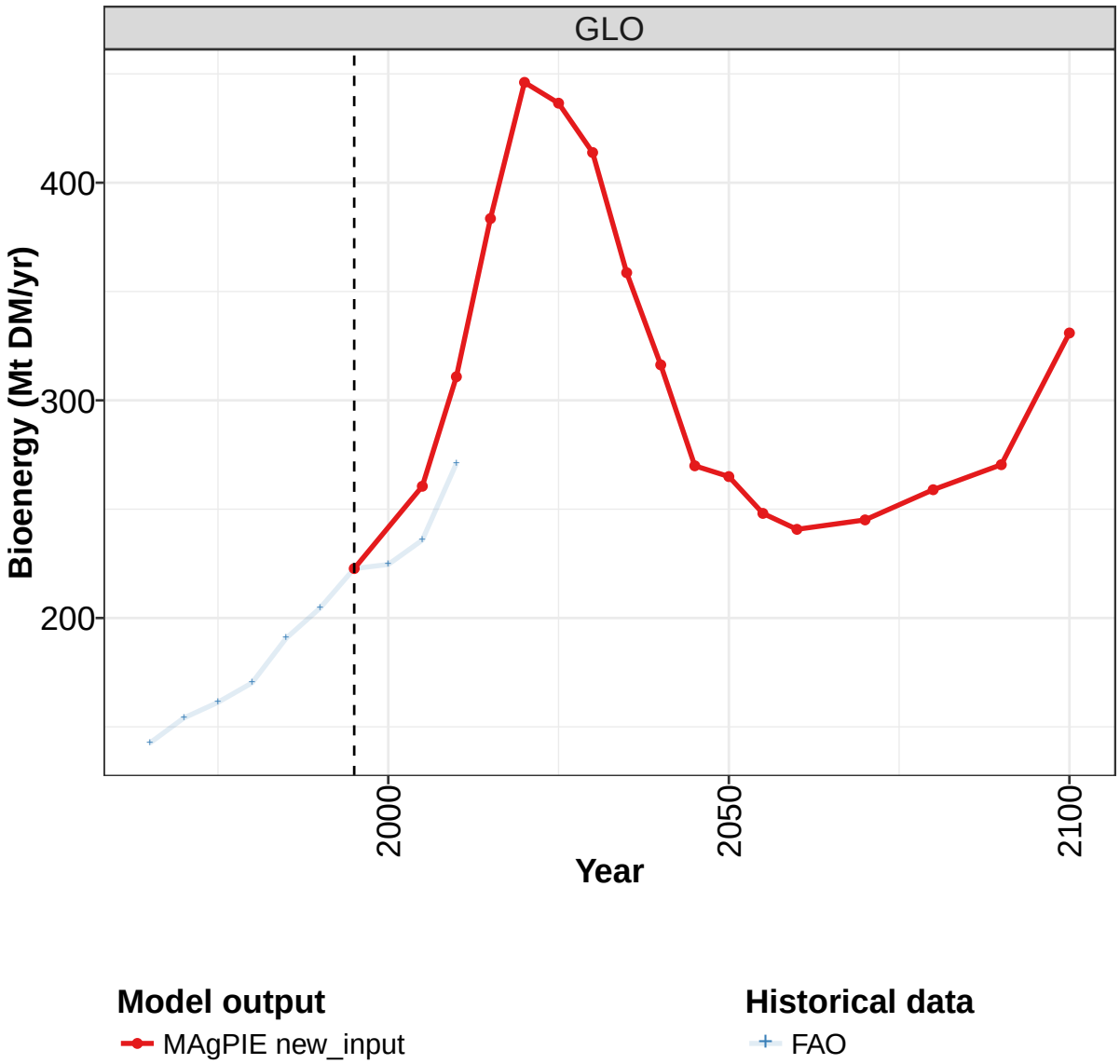
4 Bioenergy


GLO
Demand|Bioenergy (Mt DM/yr)
400
300
200
100
0
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Bioenergy (Mt DM/yr)
100
50
0
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


GLO
Demand|Bioenergy generation (EJ/yr)
7.5
5.0
2.5
0.0
2000
2025
2050
2075
2100
Total
1st
2nd


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Bioenergy generation (EJ/yr)
0
1
2
3
2000
2025
2050
2075
2100
Total
1st
2nd


GLO
Bioenergy (Mt DM/yr)
400
300
200
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

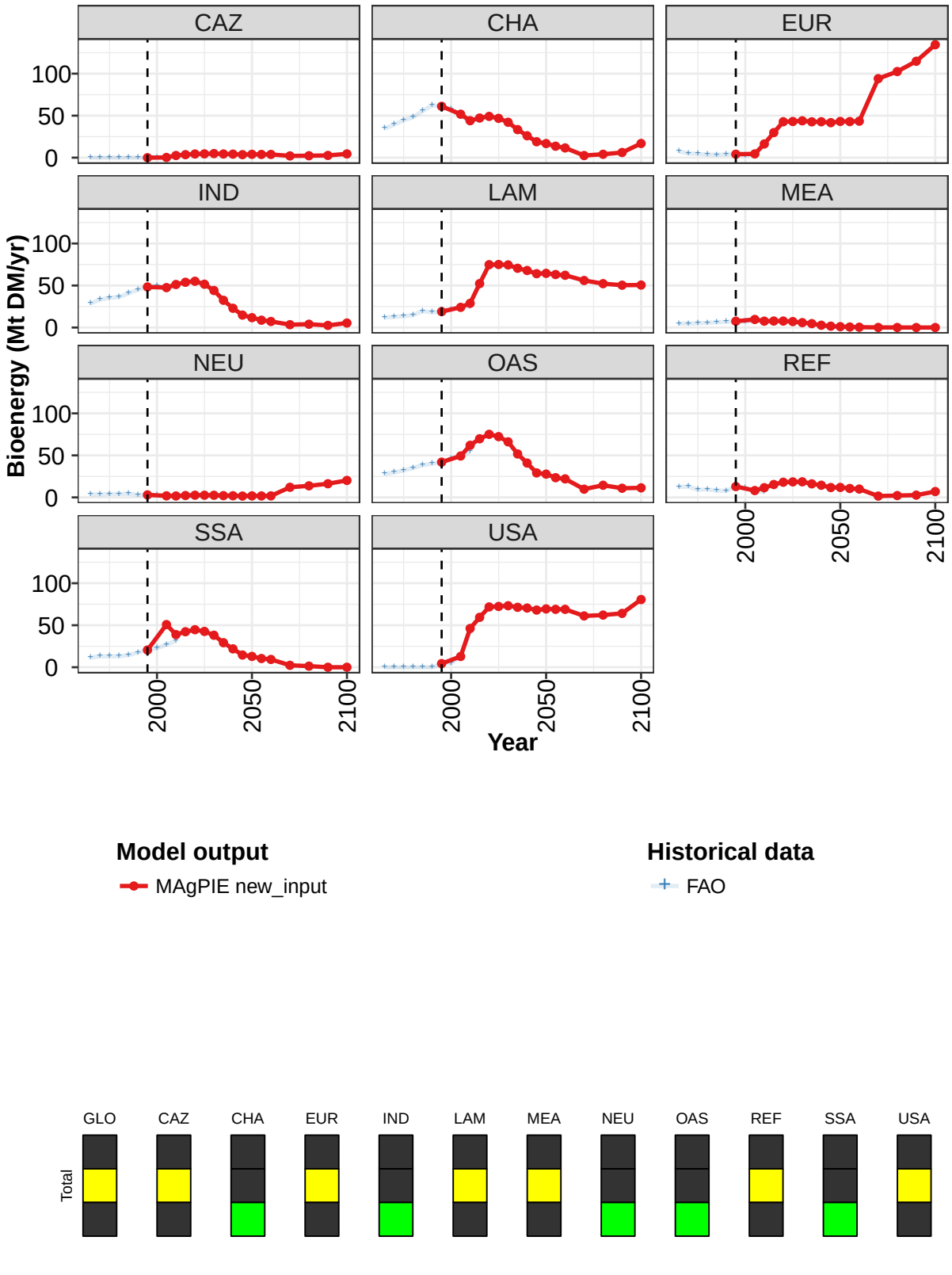


Figure 32: MAgPIE new_input — Demand—Bioenergy (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	223	261	311	384	446	437	414	359	316	270	265
CAZ	0	0	3	4	4	5	5	4	4	4	4
CHA	61	52	44	47	49	47	42	33	26	19	17
EUR	4	4	16	30	43	43	44	43	43	42	43
IND	48	48	51	54	55	52	44	32	23	15	12
LAM	19	24	29	52	75	75	75	71	68	64	64
MEA	8	10	8	8	8	7	6	5	3	2	1
NEU	3	2	2	2	3	3	3	2	2	2	2
OAS	42	49	62	70	75	72	66	52	41	29	28
REF	13	8	12	15	18	18	19	16	14	12	12
SSA	21	51	39	42	45	43	38	29	22	15	13
USA	4	13	46	59	72	72	73	71	70	68	69

Table 97: MAgPIE new_input — Demand—Bioenergy (Mt DM/yr) [PART 1/2]

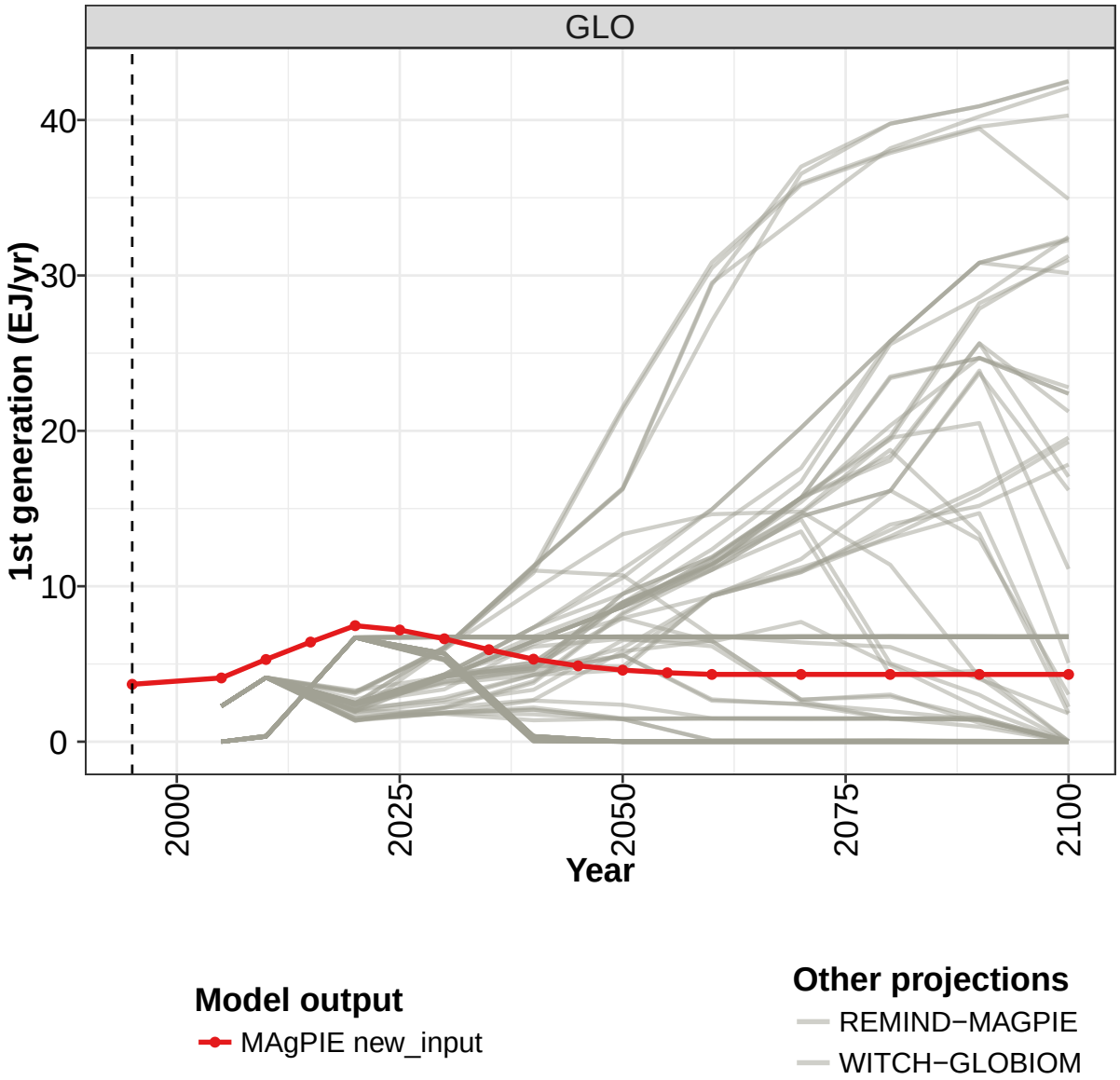
	2055	2060	2070	2080	2090	2100
GLO	248	241	245	259	270	331
CAZ	4	4	2	2	3	4
CHA	14	12	3	4	6	17
EUR	43	43	94	103	115	134
IND	9	7	3	4	3	5
LAM	63	62	56	52	50	51
MEA	1	0	0	0	0	0
NEU	2	2	12	14	16	20
OAS	23	22	10	14	11	11
REF	11	10	2	2	3	7
SSA	10	9	2	1	0	0
USA	69	69	61	62	64	81

Table 98: MAgPIE new_input — Demand—Bioenergy (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	143	154	161	170	191	205	223	225	236	271
CAZ	0	0	0	0	0	0	0	0	0	2
CHA	35	39	45	48	56	62	61	57	52	41
EUR	7	5	4	4	3	4	4	3	4	13
IND	29	33	35	36	41	45	48	50	48	49
LAM	12	13	14	15	20	18	19	21	24	25
MEA	5	5	5	6	6	7	8	7	9	7
NEU	3	3	4	4	4	3	3	2	2	1
OAS	28	30	32	35	38	40	42	46	49	54
REF	13	13	9	10	8	8	13	11	8	6
SSA	12	13	13	13	15	18	21	23	27	31
USA	0	0	0	0	0	0	4	5	13	42

Table 99: FAO — Demand—Bioenergy (Mt DM/yr)

4.1 1st generation



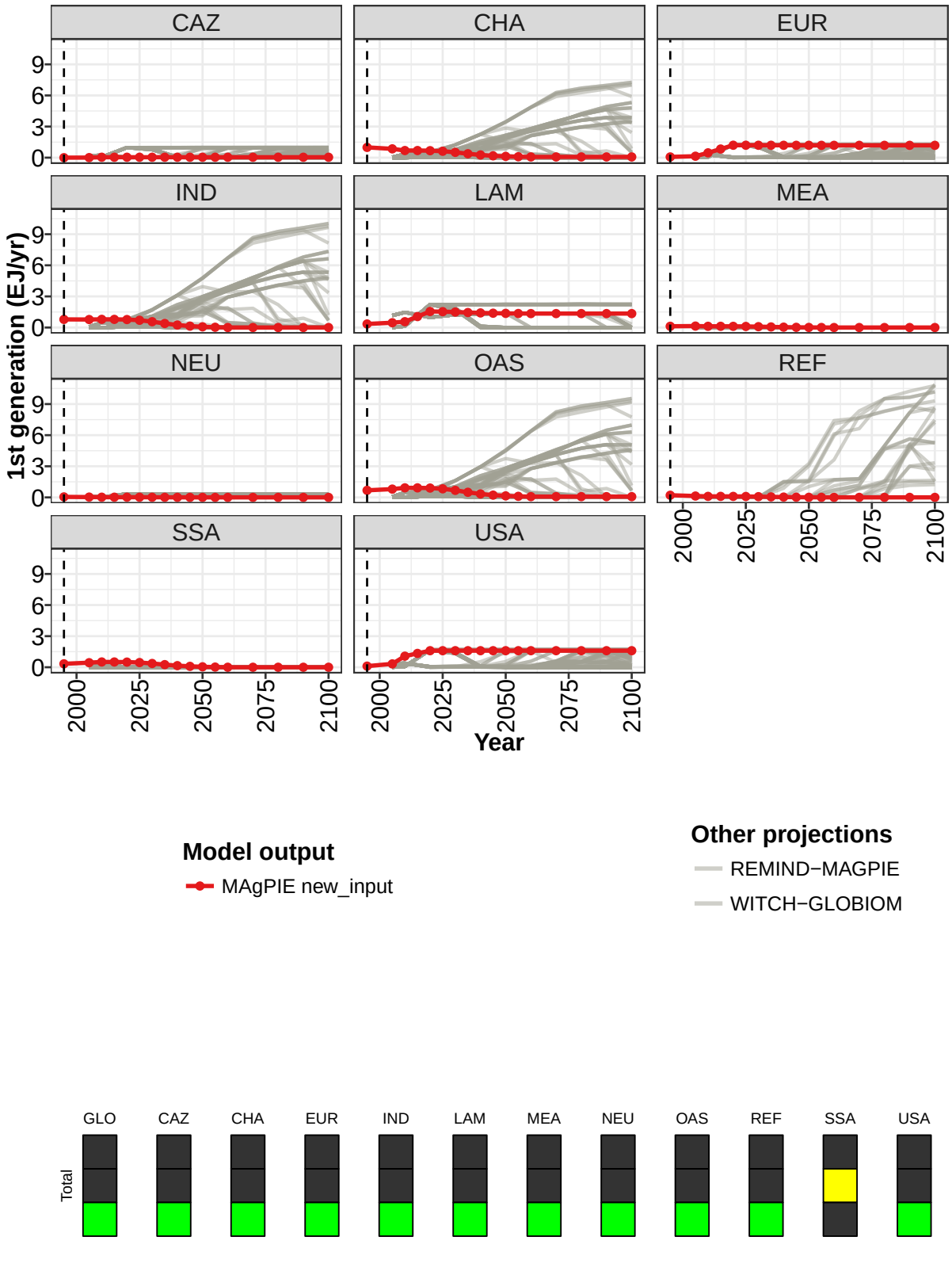


Figure 33: MAgPIE new_input — Demand—Bioenergy—1st generation (EJ/yr)

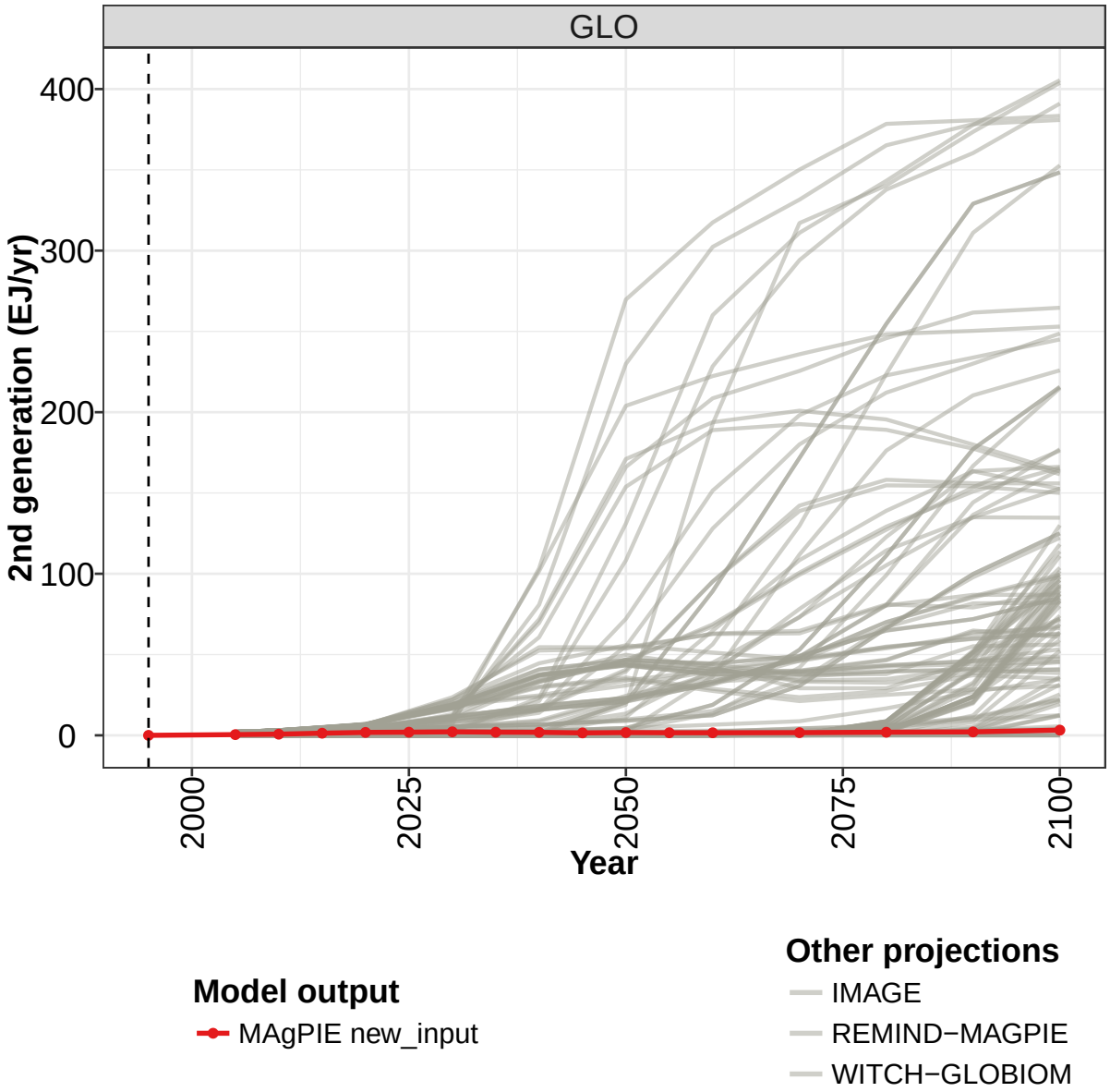
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.69	4.10	5.29	6.41	7.47	7.19	6.62	5.92	5.31	4.88	4.61
CAZ	0.00	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
CHA	0.99	0.85	0.69	0.69	0.68	0.62	0.51	0.38	0.26	0.18	0.13
EUR	0.07	0.14	0.47	0.83	1.20	1.20	1.20	1.20	1.19	1.19	1.19
IND	0.78	0.77	0.79	0.79	0.77	0.70	0.56	0.39	0.24	0.14	0.07
LAM	0.34	0.46	0.56	1.06	1.55	1.53	1.49	1.45	1.41	1.38	1.36
MEA	0.12	0.14	0.12	0.12	0.12	0.11	0.08	0.06	0.04	0.02	0.01
NEU	0.05	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
OAS	0.68	0.80	0.92	0.92	0.90	0.83	0.68	0.49	0.33	0.22	0.15
REF	0.21	0.13	0.10	0.10	0.10	0.09	0.07	0.05	0.03	0.02	0.01
SSA	0.33	0.44	0.51	0.51	0.50	0.45	0.36	0.25	0.16	0.09	0.04
USA	0.11	0.33	1.07	1.34	1.60	1.60	1.60	1.60	1.60	1.60	1.60

Table 100: MAgPIE new_input — Demand—Bioenergy—1st generation (EJ/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	4.43	4.33	4.33	4.33	4.33	4.33
CAZ	0.04	0.04	0.04	0.04	0.04	0.04
CHA	0.09	0.07	0.07	0.07	0.07	0.07
EUR	1.19	1.19	1.19	1.19	1.19	1.19
IND	0.03	0.00	0.00	0.00	0.00	0.00
LAM	1.35	1.35	1.35	1.35	1.35	1.35
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.10	0.07	0.07	0.07	0.07	0.07
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.02	0.00	0.00	0.00	0.00	0.00
USA	1.60	1.60	1.60	1.60	1.60	1.60

Table 101: MAgPIE new_input — Demand—Bioenergy—1st generation (EJ/yr) [PART 2/2]

4.2 2nd generation



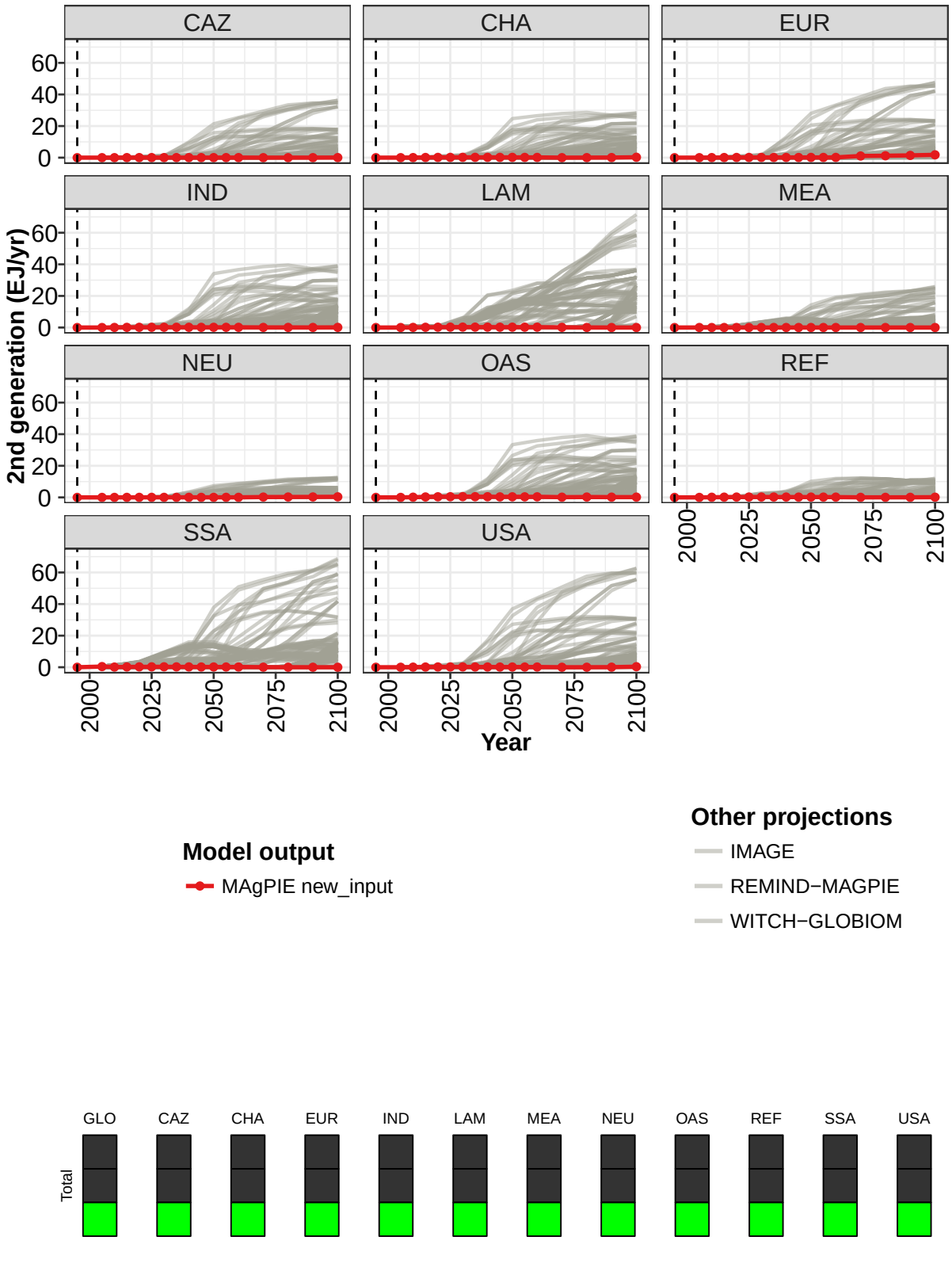


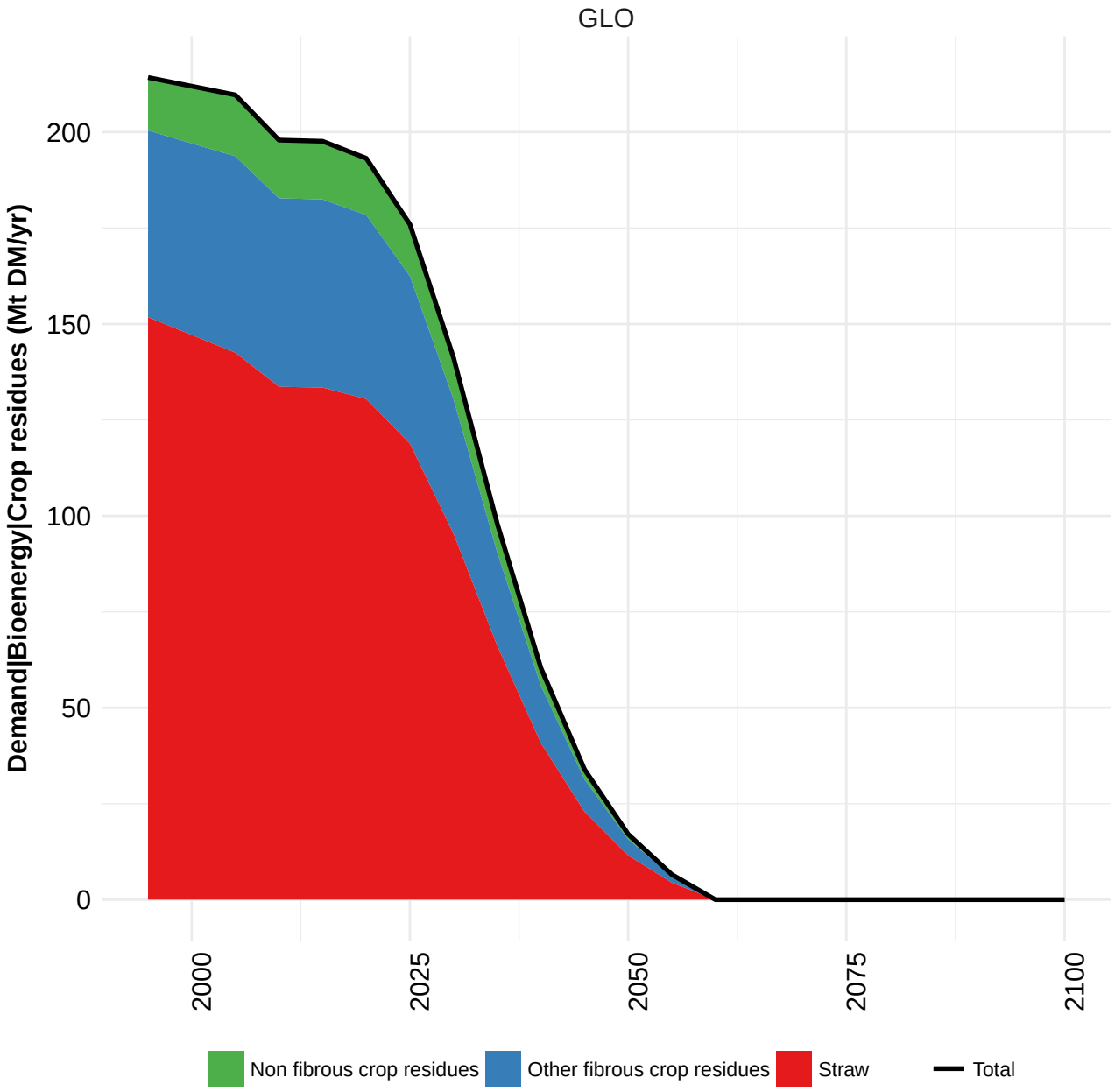
Figure 34: MAgPIE new_input — Demand—Bioenergy—2nd generation (EJ/yr)

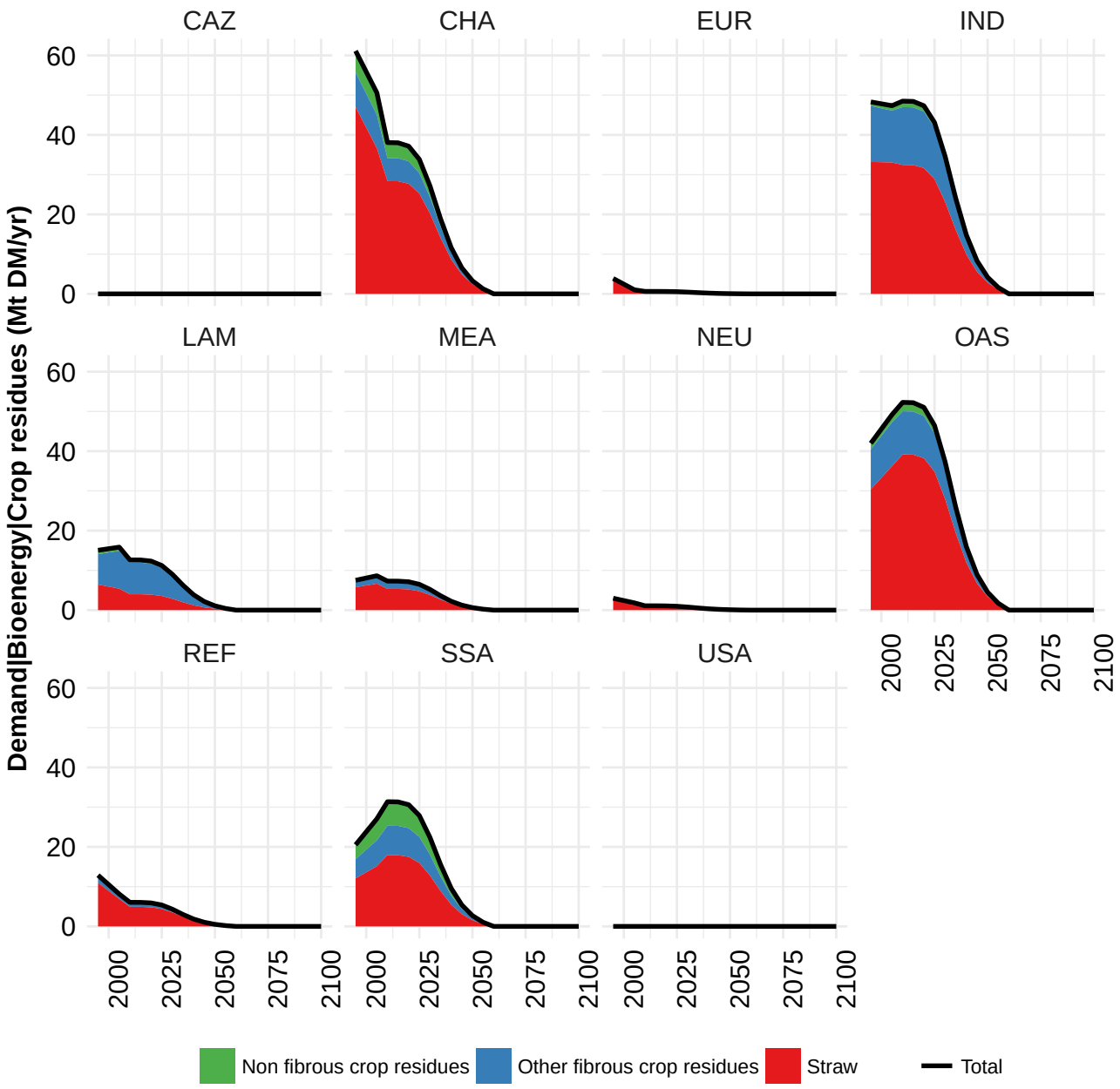
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.00	0.45	0.72	1.32	1.81	1.95	2.17	1.95	1.86	1.51	1.72
CAZ	0.00	0.00	0.02	0.04	0.05	0.05	0.06	0.05	0.05	0.04	0.04
CHA	0.00	0.00	0.06	0.12	0.17	0.19	0.22	0.22	0.21	0.18	0.20
EUR	0.00	0.00	0.05	0.10	0.14	0.14	0.16	0.14	0.14	0.12	0.15
IND	0.00	0.00	0.05	0.10	0.14	0.15	0.17	0.15	0.15	0.12	0.14
LAM	0.00	0.00	0.08	0.15	0.22	0.24	0.27	0.25	0.25	0.21	0.24
MEA	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
NEU	0.00	0.00	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.00	0.00	0.14	0.28	0.40	0.43	0.48	0.43	0.41	0.33	0.38
REF	0.00	0.00	0.10	0.17	0.22	0.23	0.26	0.24	0.23	0.19	0.20
SSA	0.00	0.43	0.13	0.20	0.25	0.27	0.28	0.25	0.22	0.17	0.18
USA	0.00	0.00	0.07	0.14	0.19	0.20	0.22	0.18	0.17	0.13	0.15

Table 102: MAgPIE new_input — Demand—Bioenergy—2nd generation (EJ/yr) [PART 1/2]

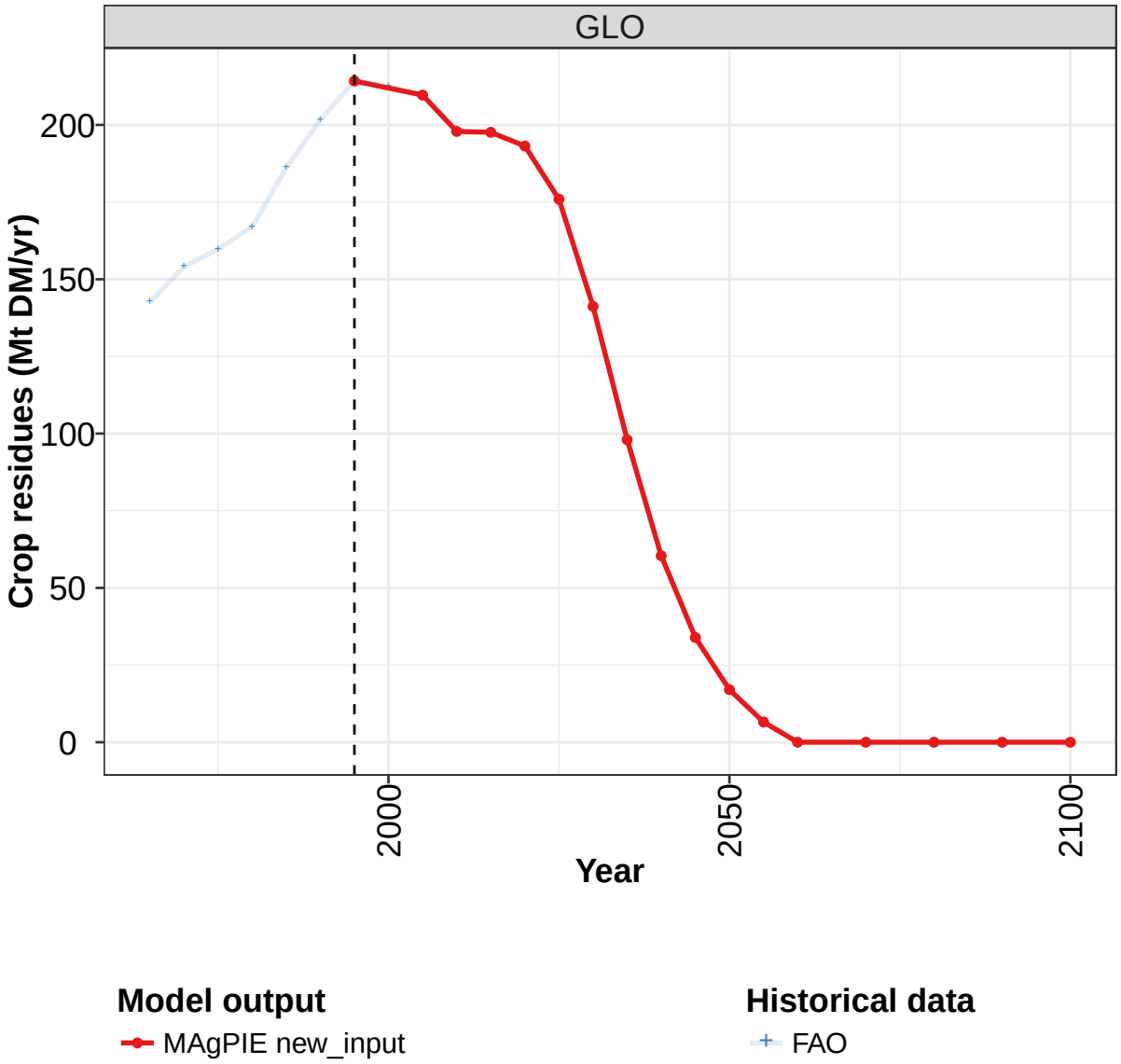
	2055	2060	2070	2080	2090	2100
GLO	1.61	1.59	1.67	1.92	2.13	3.22
CAZ	0.04	0.04	0.01	0.01	0.02	0.05
CHA	0.18	0.16	0.00	0.03	0.06	0.26
EUR	0.15	0.16	1.07	1.22	1.44	1.80
IND	0.13	0.13	0.06	0.07	0.04	0.10
LAM	0.22	0.21	0.10	0.03	0.00	0.00
MEA	0.01	0.01	0.00	0.00	0.00	0.00
NEU	0.03	0.03	0.22	0.25	0.29	0.36
OAS	0.35	0.36	0.14	0.22	0.16	0.17
REF	0.19	0.18	0.03	0.04	0.05	0.12
SSA	0.17	0.17	0.04	0.02	0.00	0.00
USA	0.14	0.14	0.00	0.02	0.05	0.35

Table 103: MAgPIE new_input — Demand—Bioenergy—2nd generation (EJ/yr) [PART 2/2]


GLO
Demand|Bioenergy|Crop residues (Mt DM/yr)
200
150
100
50
0
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Bioenergy|Crop residues (Mt DM/yr)
0
20
40
60
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total

4.3 Crop residues



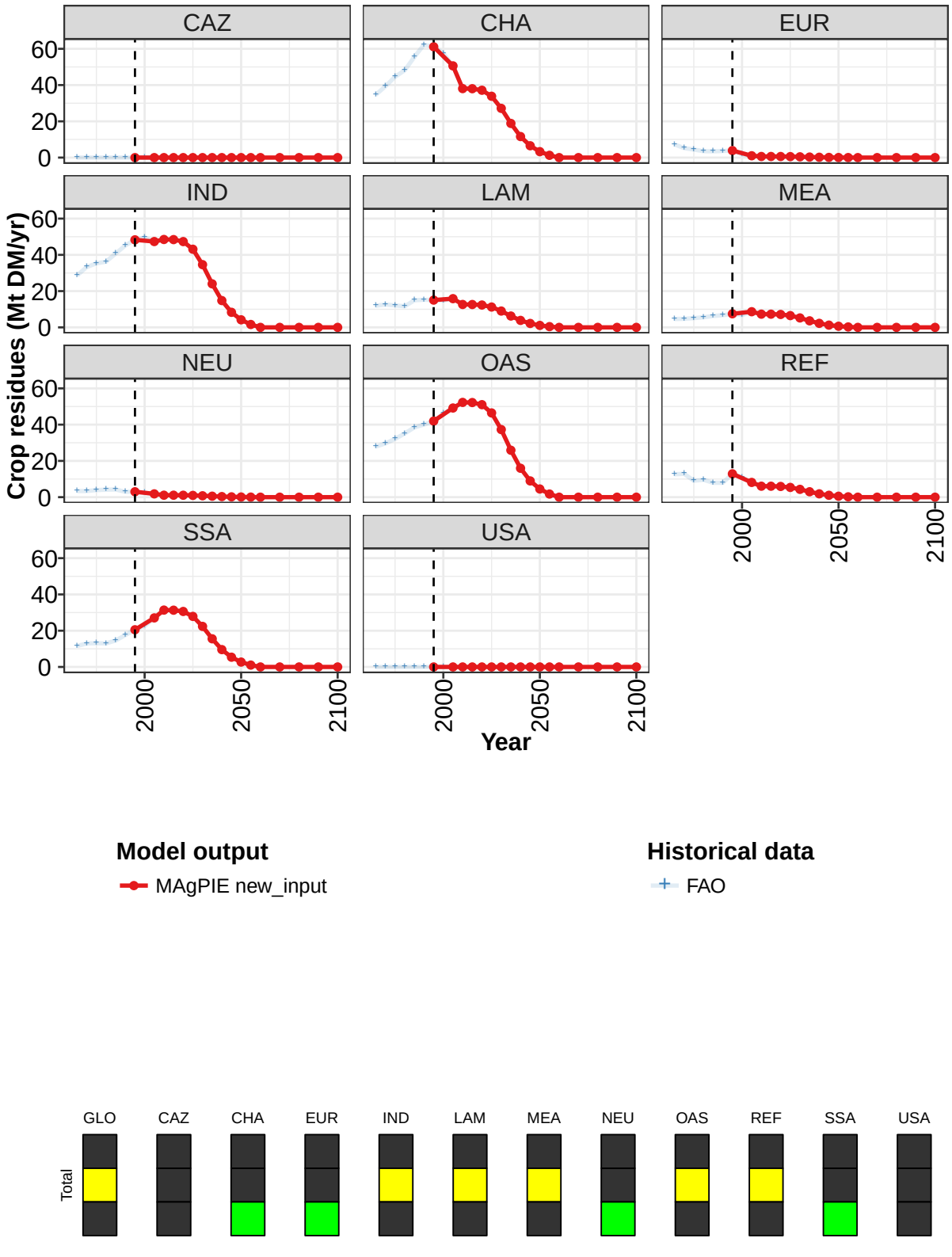


Figure 35: MAgPIE new_input — Demand—Bioenergy—Crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	214	210	198	198	193	176	141	98	60	34	17
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	61	51	38	38	37	34	27	19	12	7	3
EUR	4	1	1	1	1	1	0	0	0	0	0
IND	48	47	48	48	47	43	35	24	15	8	4
LAM	15	16	13	13	12	11	9	6	4	2	1
MEA	8	9	7	7	7	6	5	4	2	1	1
NEU	3	2	1	1	1	1	1	1	0	0	0
OAS	42	49	52	52	51	46	37	26	16	9	5
REF	13	8	6	6	6	5	4	3	2	1	1
SSA	21	27	31	31	31	28	22	16	10	5	3
USA	0	0	0	0	0	0	0	0	0	0	0

Table 104: MAgPIE new_input — Demand—Bioenergy—Crop residues (Mt DM/yr) [PART 1/2]

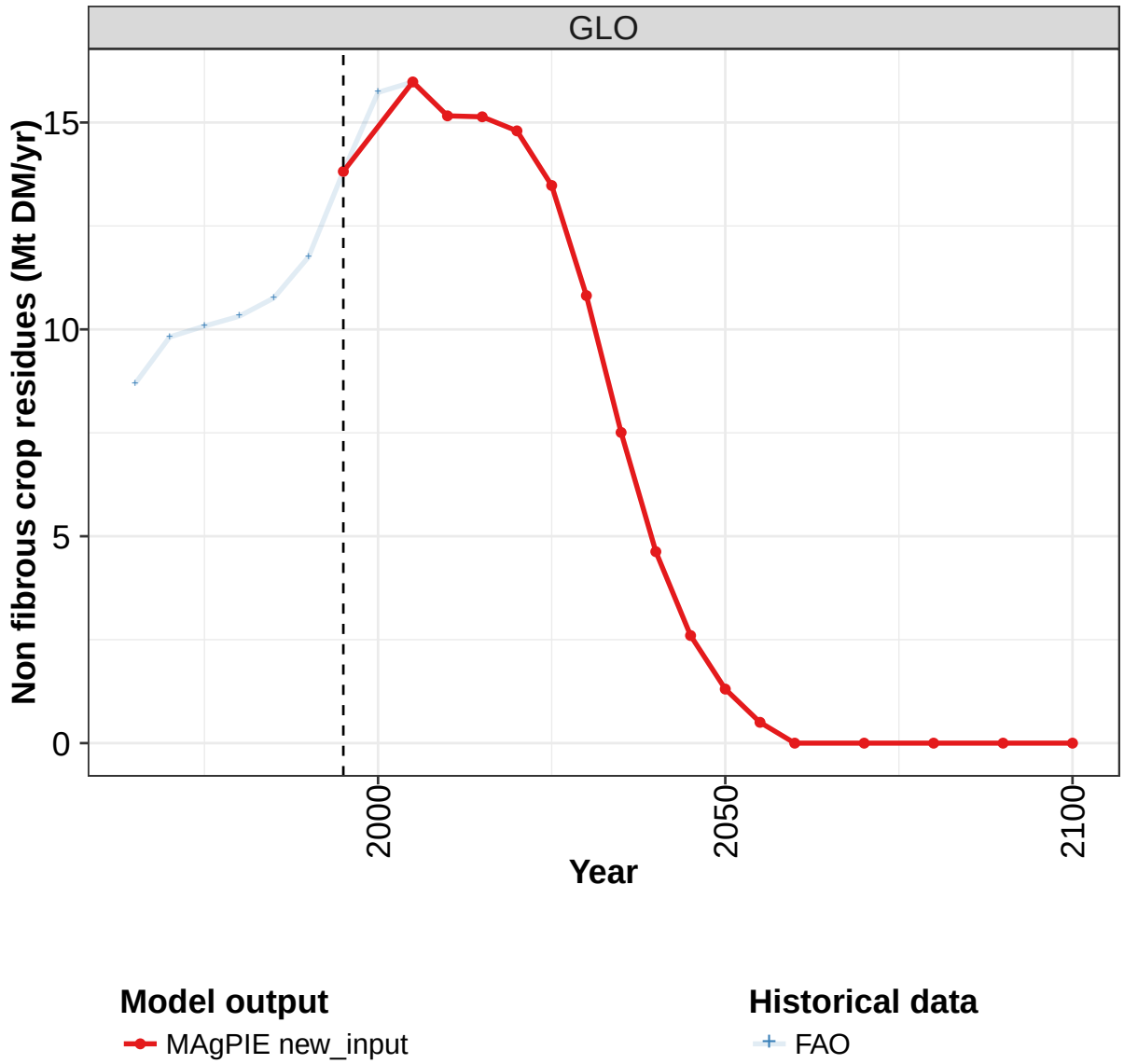
	2055	2060	2070	2080	2090	2100
GLO	7	0	0	0	0	0
CAZ	0	0	0	0	0	0
CHA	1	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	2	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	2	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	1	0	0	0	0	0
USA	0	0	0	0	0	0

Table 105: MAgPIE new_input — Demand—Bioenergy—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	143	154	160	167	186	202	214	213	210	198
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	35	39	45	48	56	62	61	57	51	38
EUR	7	5	4	4	3	4	4	2	1	1
IND	29	33	35	36	41	45	48	50	47	48
LAM	12	13	12	12	15	15	15	15	16	13
MEA	5	5	5	6	6	7	8	7	9	7
NEU	3	3	4	4	4	3	3	2	2	1
OAS	28	30	32	35	38	40	42	46	49	52
REF	13	13	9	10	8	8	13	11	8	6
SSA	12	13	13	13	15	18	21	23	27	31
USA	0	0	0	0	0	0	0	0	0	0

Table 106: FAO — Demand—Bioenergy—Crop residues (Mt DM/yr)

4.3.1 Non fibrous crop residues



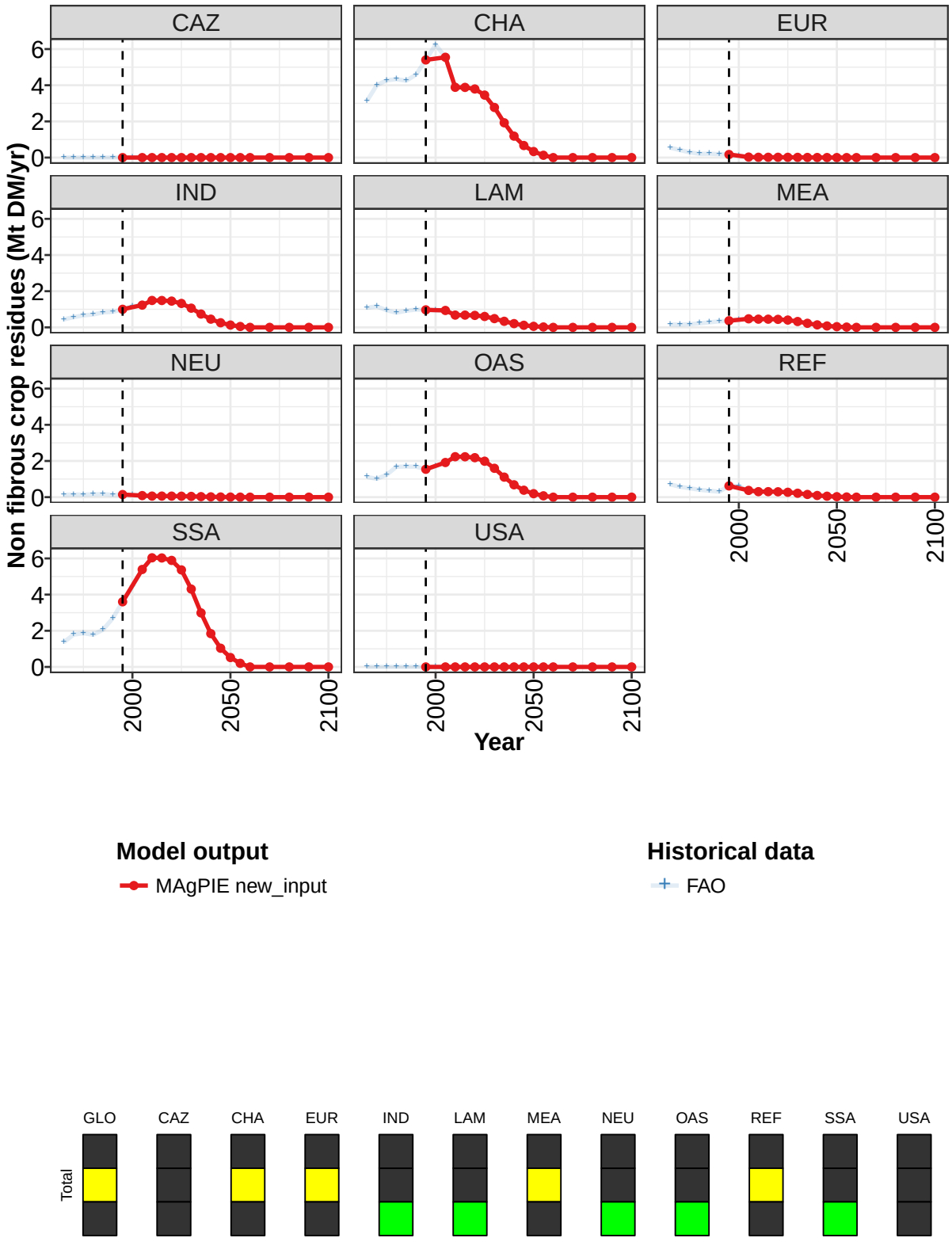


Figure 36: MAgPIE new_input — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	13.8	16.0	15.2	15.1	14.8	13.5	10.8	7.5	4.6	2.6	1.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.4	5.5	3.9	3.9	3.8	3.5	2.8	1.9	1.2	0.7	0.3
EUR	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.0	1.2	1.5	1.5	1.5	1.3	1.1	0.7	0.5	0.3	0.1
LAM	1.0	0.9	0.7	0.7	0.7	0.6	0.5	0.3	0.2	0.1	0.1
MEA	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.1	0.0
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
OAS	1.5	1.9	2.2	2.2	2.2	2.0	1.6	1.1	0.7	0.4	0.2
REF	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0
SSA	3.6	5.4	6.0	6.0	5.9	5.4	4.3	3.0	1.8	1.0	0.5
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 107: MAgPIE new_input — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 1/2]

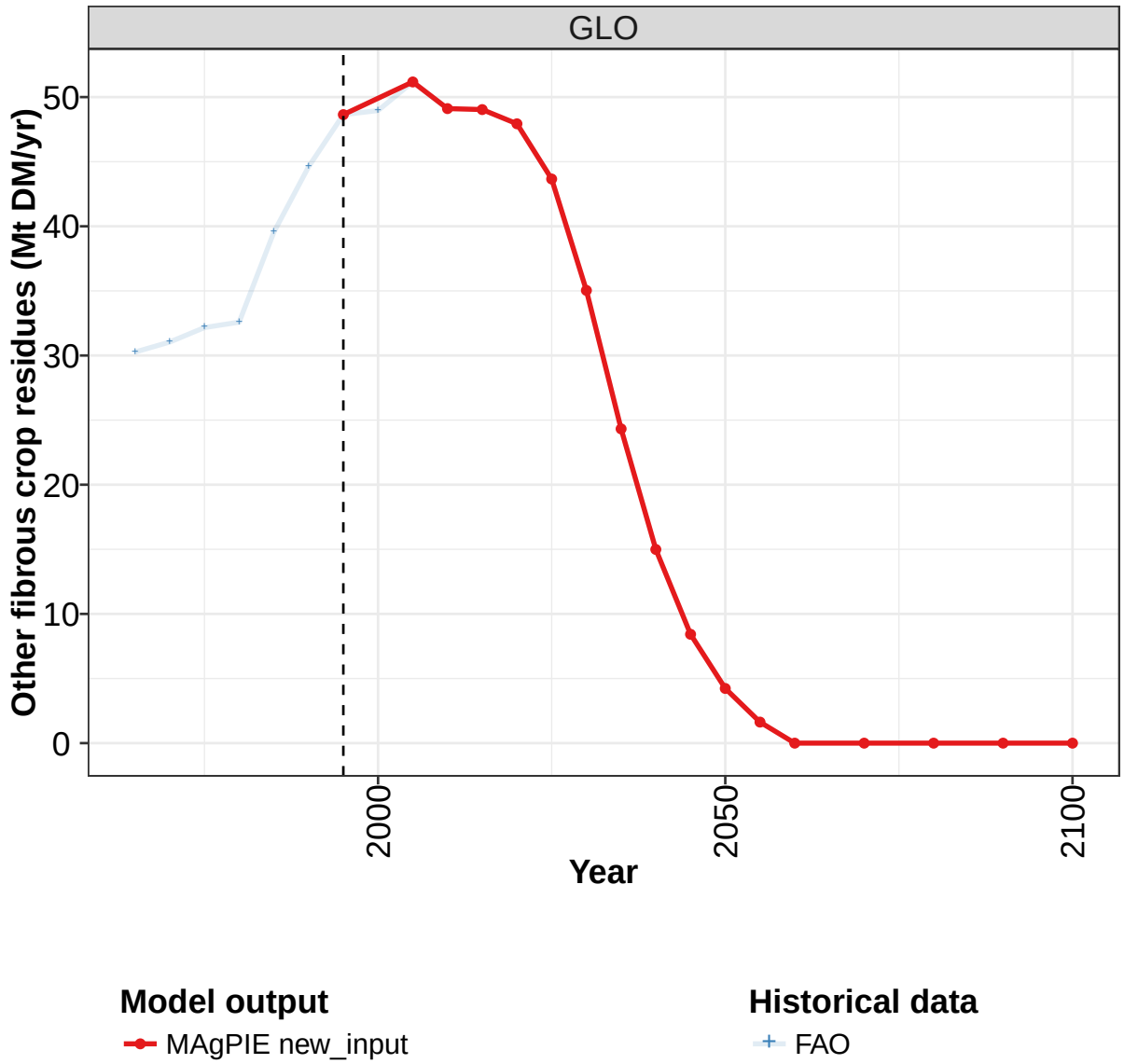
	2055	2060	2070	2080	2090	2100
GLO	0.5	0.0	0.0	0.0	0.0	0.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.0	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.2	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 108: MAgPIE new_input — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.7	9.8	10.1	10.3	10.8	11.8	13.8	15.7	16.0	15.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.1	4.0	4.3	4.3	4.3	4.6	5.4	6.2	5.5	3.9
EUR	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.0	0.0
IND	0.4	0.6	0.7	0.7	0.8	0.9	1.0	1.2	1.2	1.5
LAM	1.1	1.2	0.9	0.8	0.9	1.0	1.0	0.9	0.9	0.7
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5
NEU	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
OAS	1.1	1.0	1.2	1.7	1.7	1.7	1.5	1.7	1.9	2.2
REF	0.7	0.6	0.5	0.4	0.4	0.3	0.6	0.6	0.4	0.3
SSA	1.4	1.8	1.9	1.8	2.1	2.7	3.6	4.5	5.4	6.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 109: FAO — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr)

4.3.2 Other fibrous crop residues



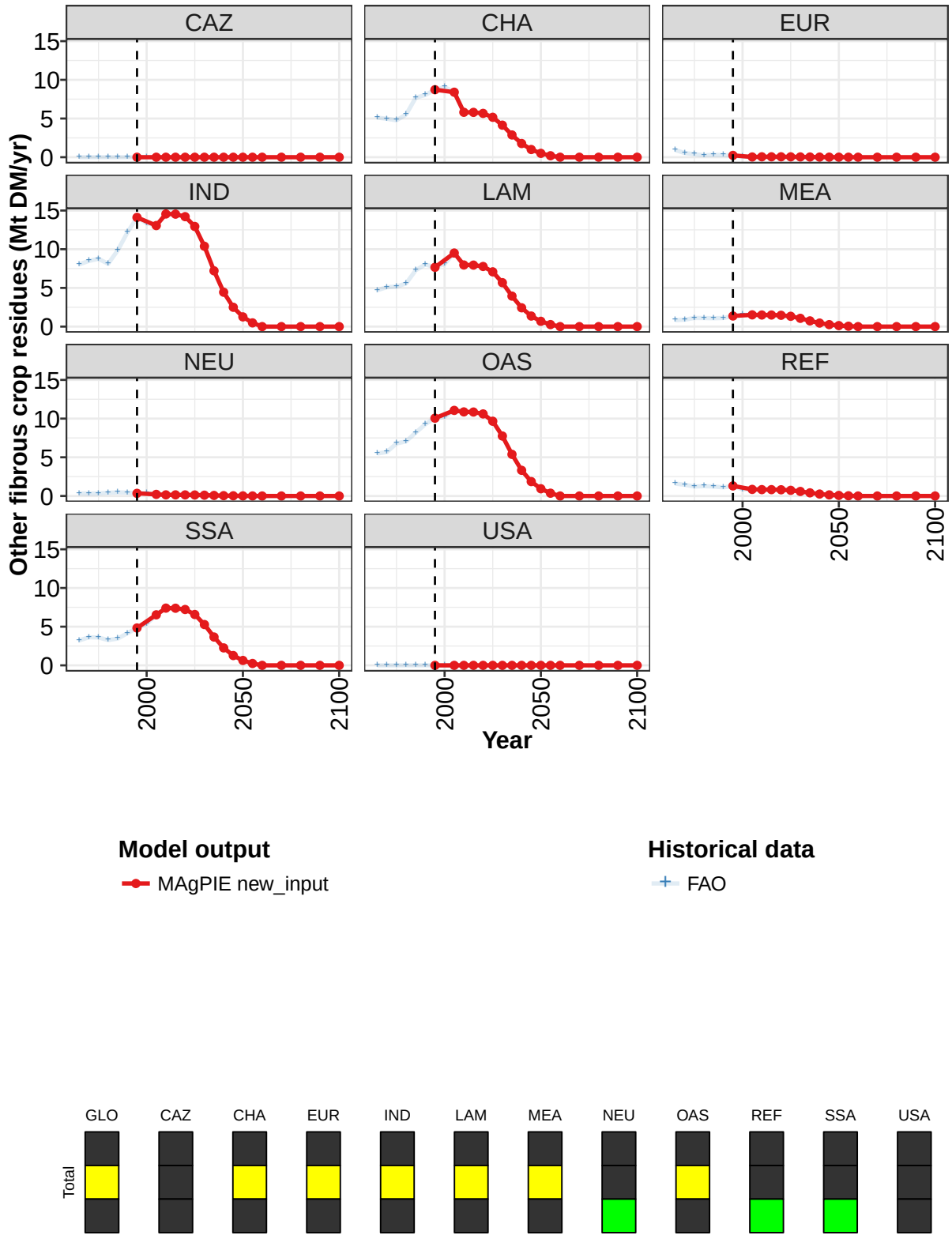


Figure 37: MAgPIE new_input — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	48.6	51.2	49.1	49.0	47.9	43.7	35.0	24.3	15.0	8.4	4.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	8.7	8.4	5.8	5.8	5.7	5.2	4.1	2.9	1.8	1.0	0.5
EUR	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
IND	14.1	13.1	14.6	14.5	14.2	12.9	10.4	7.2	4.4	2.5	1.3
LAM	7.7	9.5	8.0	7.9	7.8	7.1	5.7	3.9	2.4	1.4	0.7
MEA	1.4	1.5	1.5	1.5	1.5	1.3	1.1	0.7	0.5	0.3	0.1
NEU	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
OAS	10.1	11.1	10.9	10.8	10.6	9.7	7.8	5.4	3.3	1.9	0.9
REF	1.3	0.9	0.8	0.8	0.8	0.7	0.6	0.4	0.3	0.1	0.1
SSA	4.8	6.5	7.4	7.4	7.2	6.6	5.3	3.7	2.3	1.3	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 110: MAgPIE new_input — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 1/2]

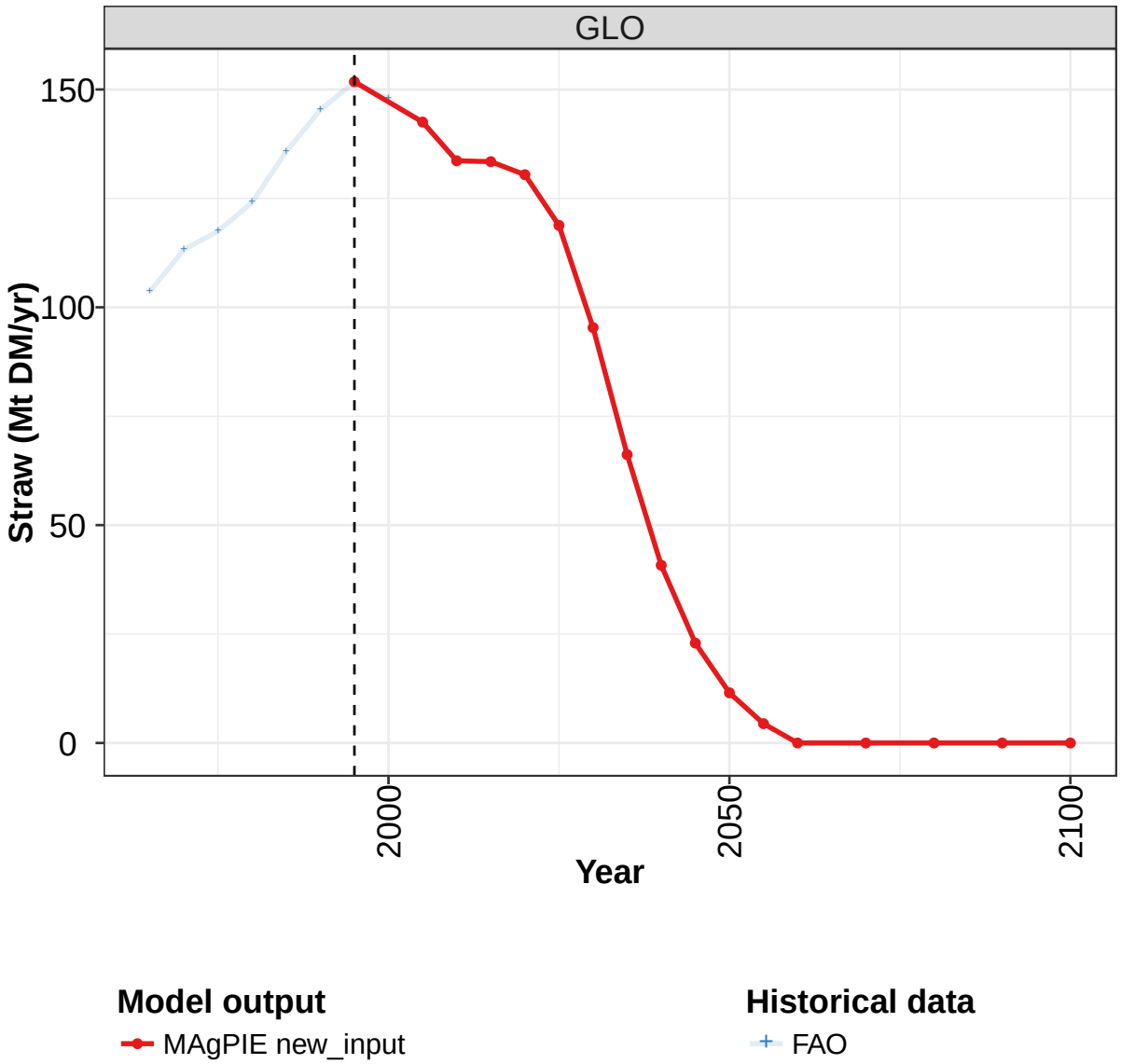
	2055	2060	2070	2080	2090	2100
GLO	1.6	0.0	0.0	0.0	0.0	0.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.2	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.5	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.4	0.0	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.2	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 111: MAgPIE new_input — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	30.3	31.0	32.2	32.6	39.5	44.6	48.6	49.0	51.2	49.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.1	5.0	4.8	5.5	7.7	8.0	8.7	9.1	8.4	5.8
EUR	0.9	0.5	0.4	0.3	0.3	0.3	0.2	0.1	0.0	0.1
IND	8.0	8.5	8.8	8.1	9.9	12.2	14.1	13.4	13.1	14.6
LAM	4.7	5.1	5.2	5.6	7.3	8.0	7.7	8.1	9.5	8.0
MEA	0.8	0.9	1.1	1.1	1.1	1.1	1.4	1.6	1.5	1.5
NEU	0.3	0.3	0.3	0.4	0.5	0.4	0.3	0.4	0.2	0.1
OAS	5.5	5.7	6.8	7.1	8.2	9.3	10.1	10.2	11.1	10.9
REF	1.6	1.4	1.2	1.3	1.2	1.1	1.3	0.9	0.9	0.8
SSA	3.2	3.6	3.6	3.3	3.5	4.1	4.8	5.4	6.5	7.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 112: FAO — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr)

4.3.3 Straw


GLO
150
100
50
0
Straw (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

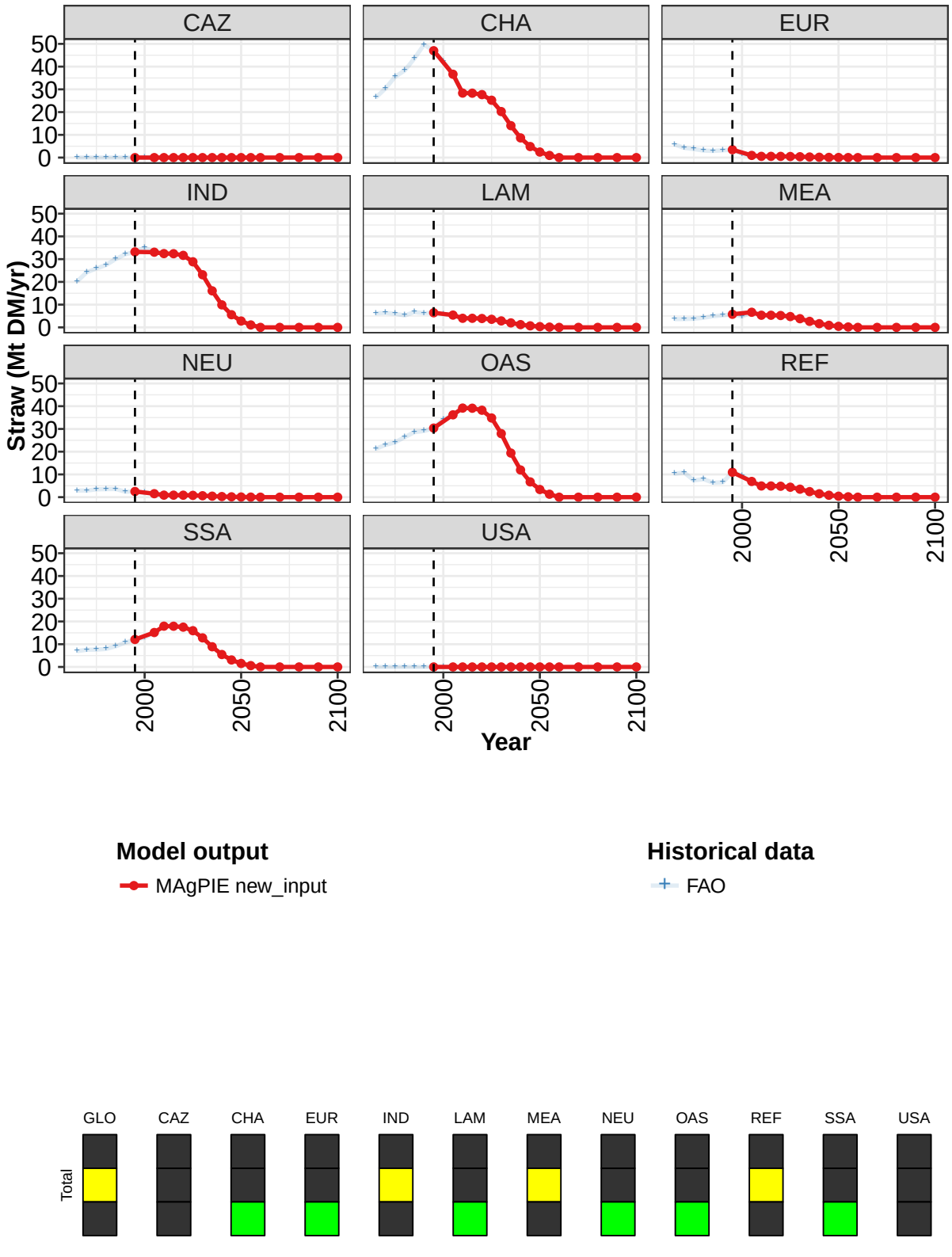


Figure 38: MAgPIE new_input — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	152	143	134	133	130	119	95	66	41	23	12
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	47	37	28	28	28	25	20	14	9	5	2
EUR	3	1	1	1	1	0	0	0	0	0	0
IND	33	33	32	32	32	29	23	16	10	6	3
LAM	6	5	4	4	4	4	3	2	1	1	0
MEA	6	7	5	5	5	5	4	3	2	1	0
NEU	3	2	1	1	1	1	1	0	0	0	0
OAS	30	36	39	39	38	35	28	19	12	7	3
REF	11	7	5	5	5	4	4	2	2	1	0
SSA	12	15	18	18	18	16	13	9	5	3	2
USA	0	0	0	0	0	0	0	0	0	0	0

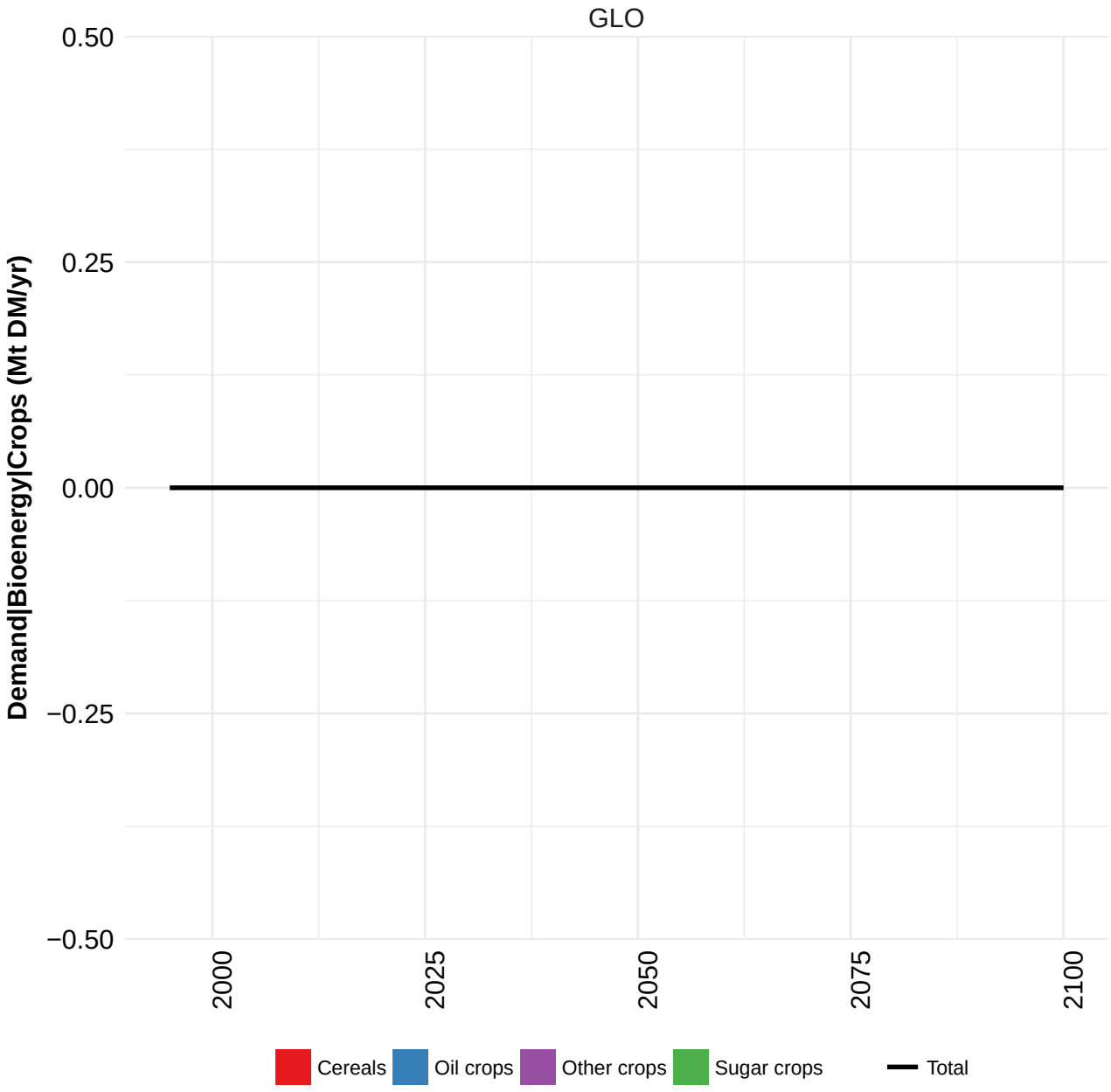
Table 113: MAgPIE new_input — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr) [PART 1/2]

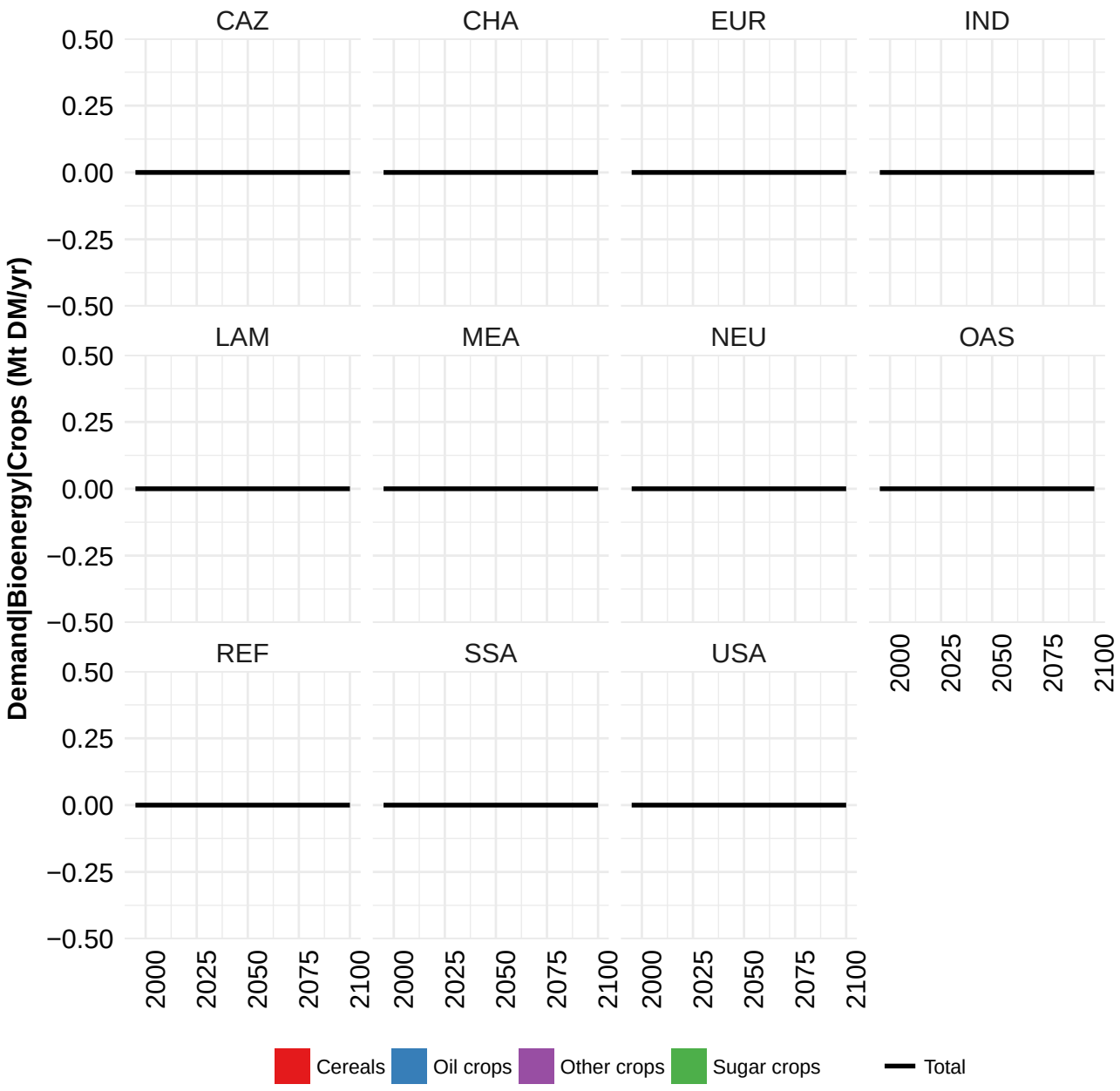
	2055	2060	2070	2080	2090	2100
GLO	4	0	0	0	0	0
CAZ	0	0	0	0	0	0
CHA	1	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	1	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	1	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	1	0	0	0	0	0
USA	0	0	0	0	0	0

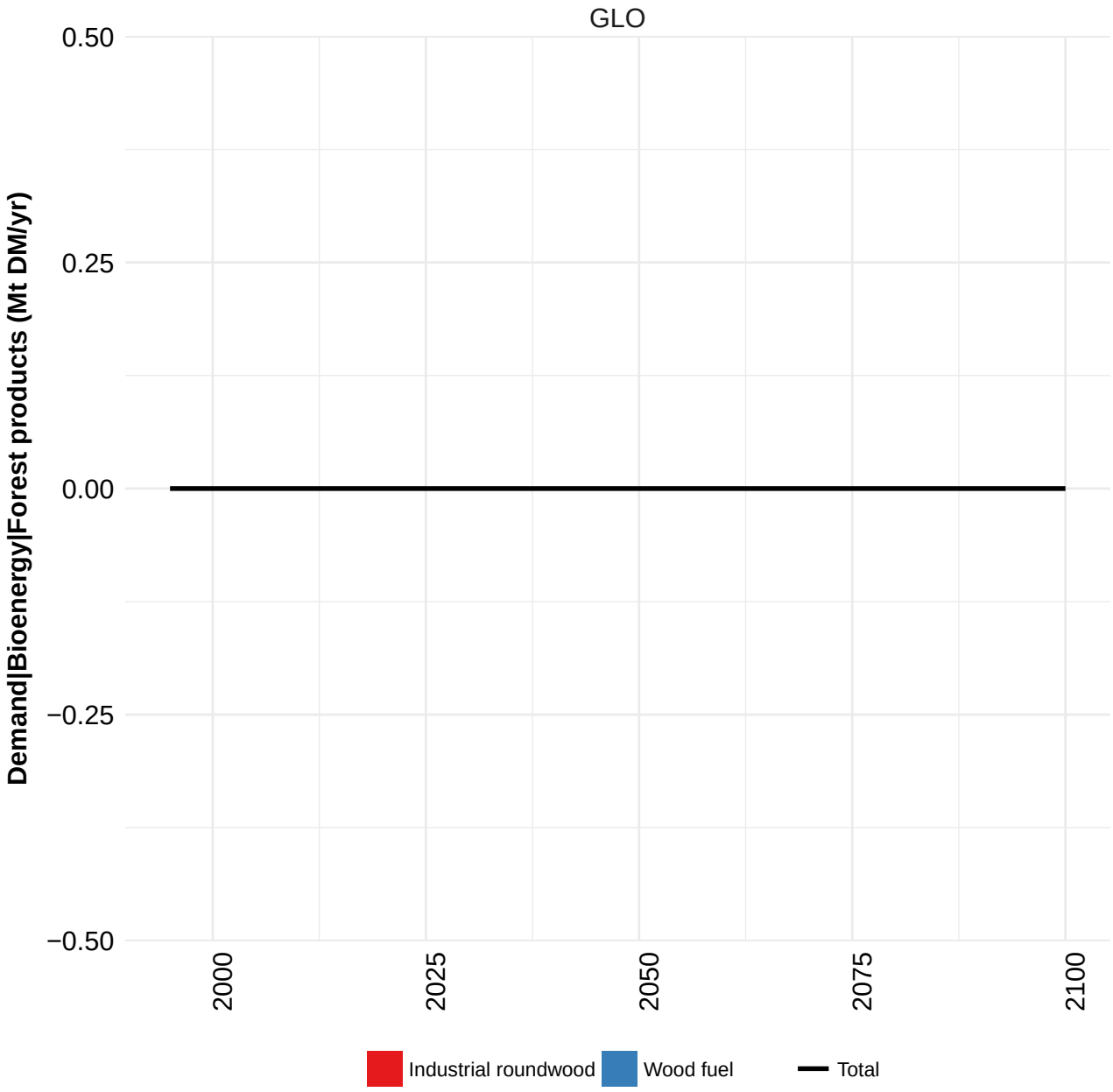
Table 114: MAgPIE new_input — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr) [PART 2/2]

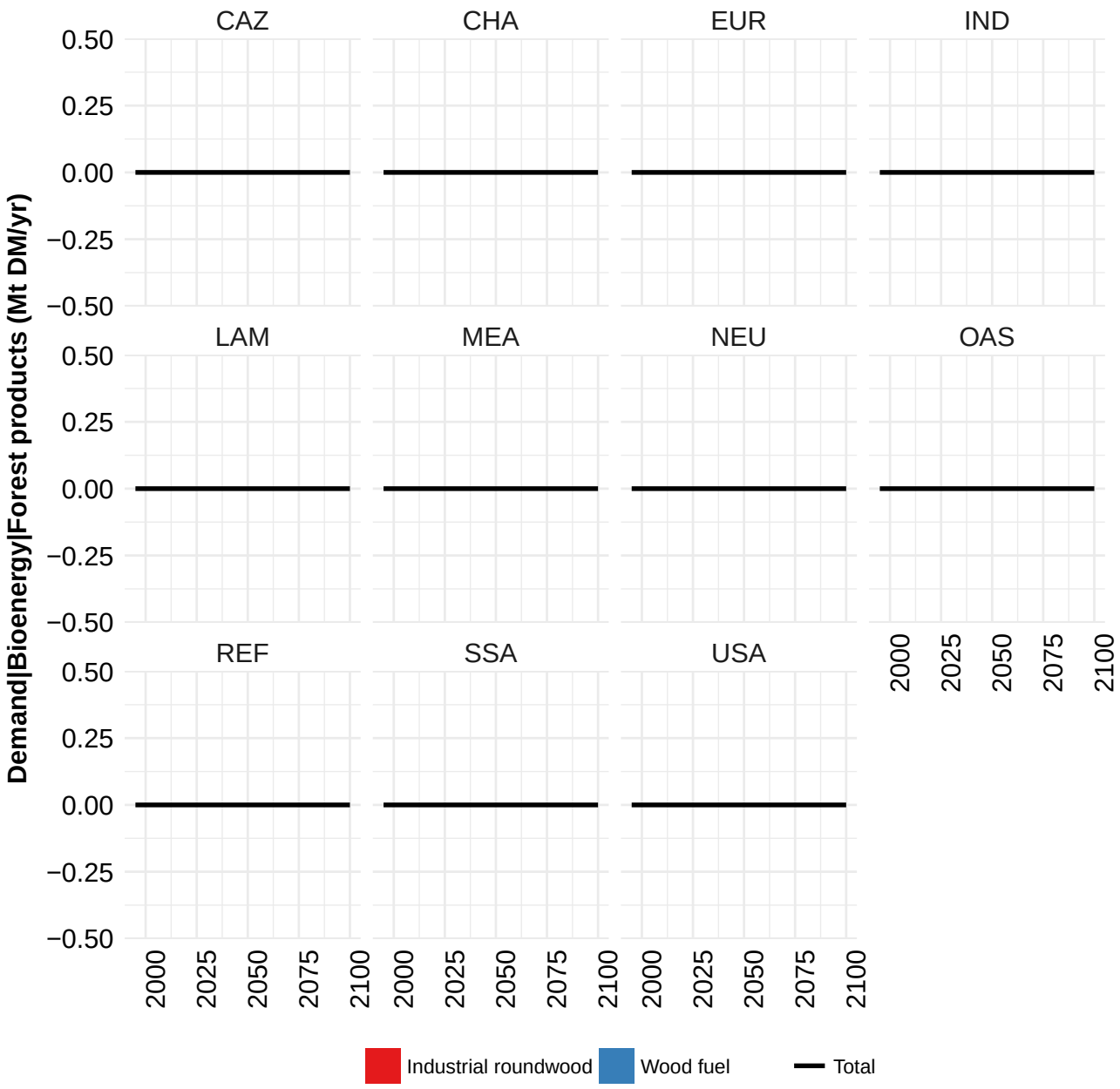
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	104	113	117	124	136	145	152	148	143	134
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	26	30	36	38	44	50	47	42	37	28
EUR	6	4	4	3	3	3	3	2	1	1
IND	20	24	26	27	30	32	33	35	33	32
LAM	6	6	6	5	7	6	6	6	5	4
MEA	4	4	4	4	5	5	6	5	7	5
NEU	3	3	3	4	4	2	3	2	2	1
OAS	21	23	24	26	29	29	30	34	36	39
REF	10	11	7	8	6	6	11	9	7	5
SSA	7	8	8	8	9	11	12	13	15	18
USA	0	0	0	0	0	0	0	0	0	0

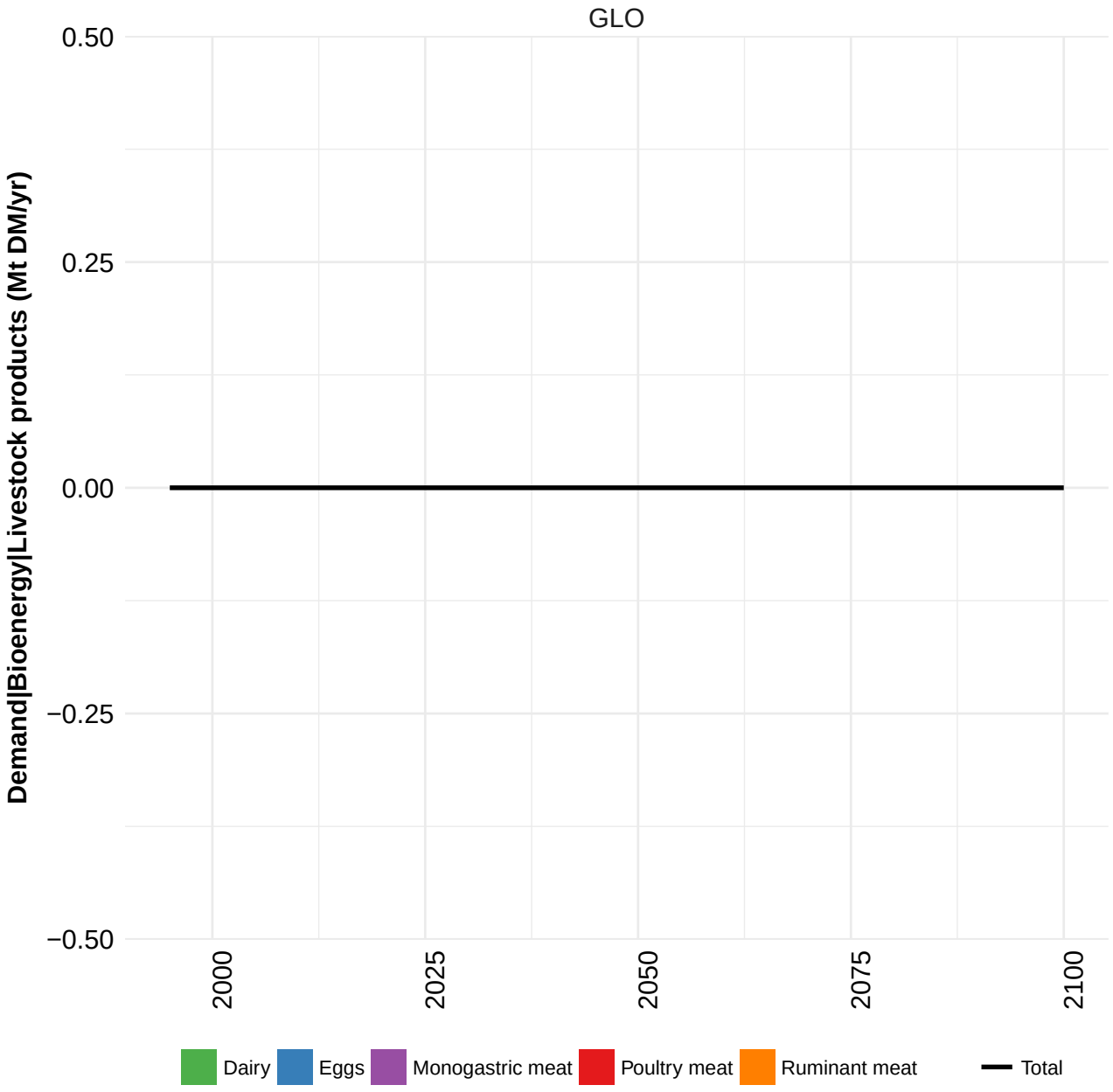
Table 115: FAO — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr)

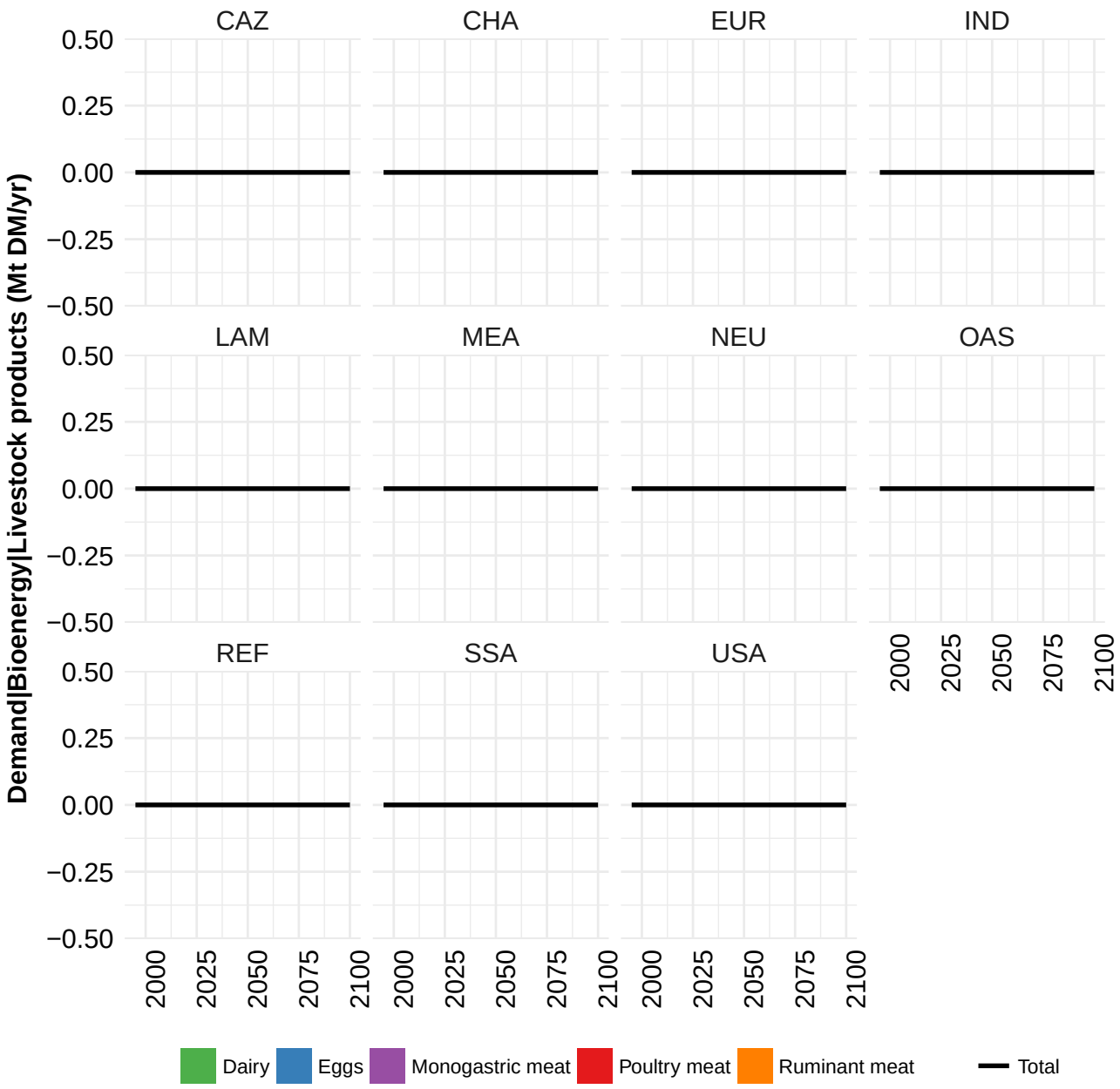

GLO
0.50
0.25
0.00
−0.25
−0.50
Demand|Bioenergy|Crops (Mt DM/yr)
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

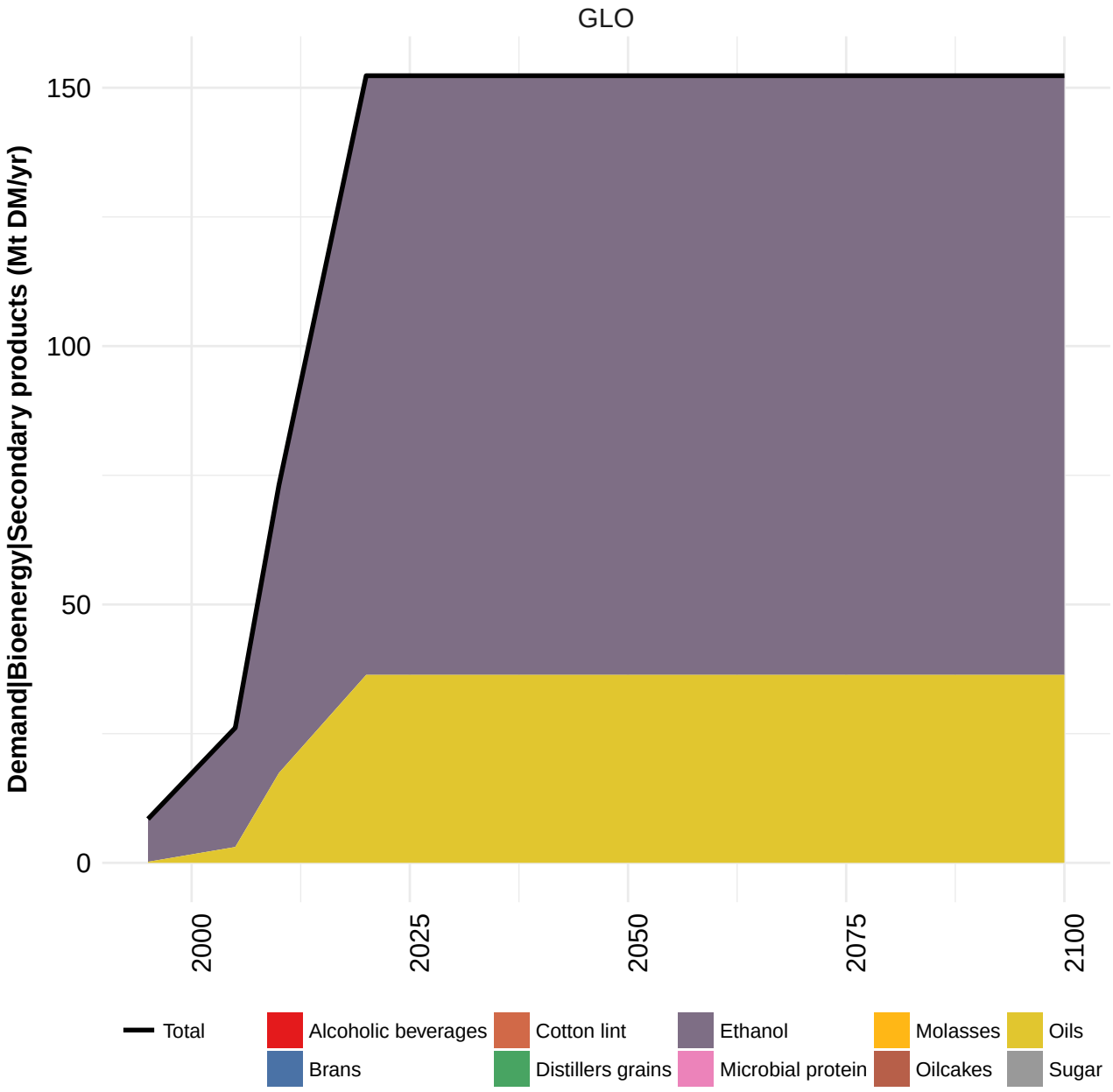

CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Bioenergy|Crops (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

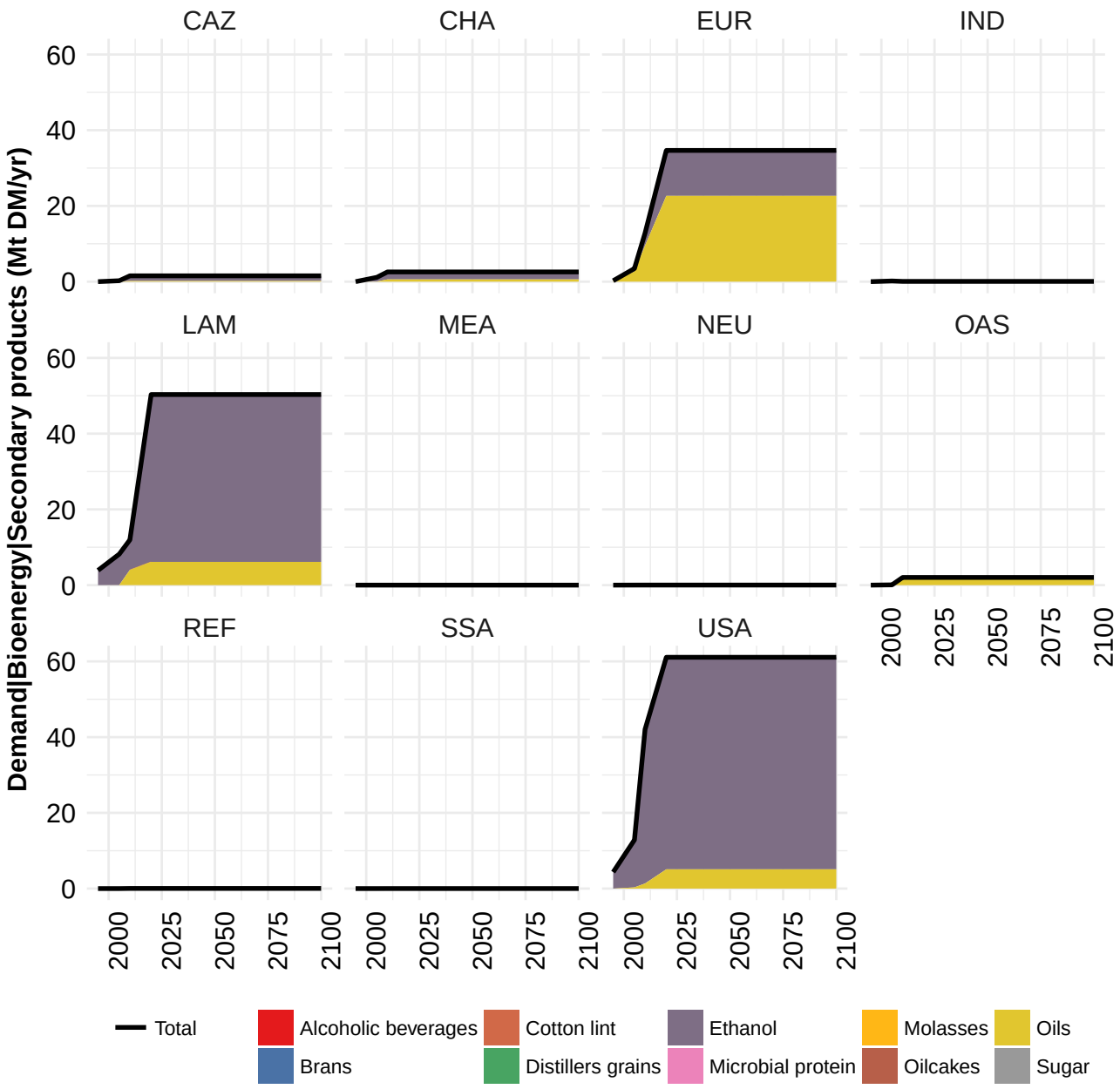

GLO
Demand|Bioenergy|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Bioenergy|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total

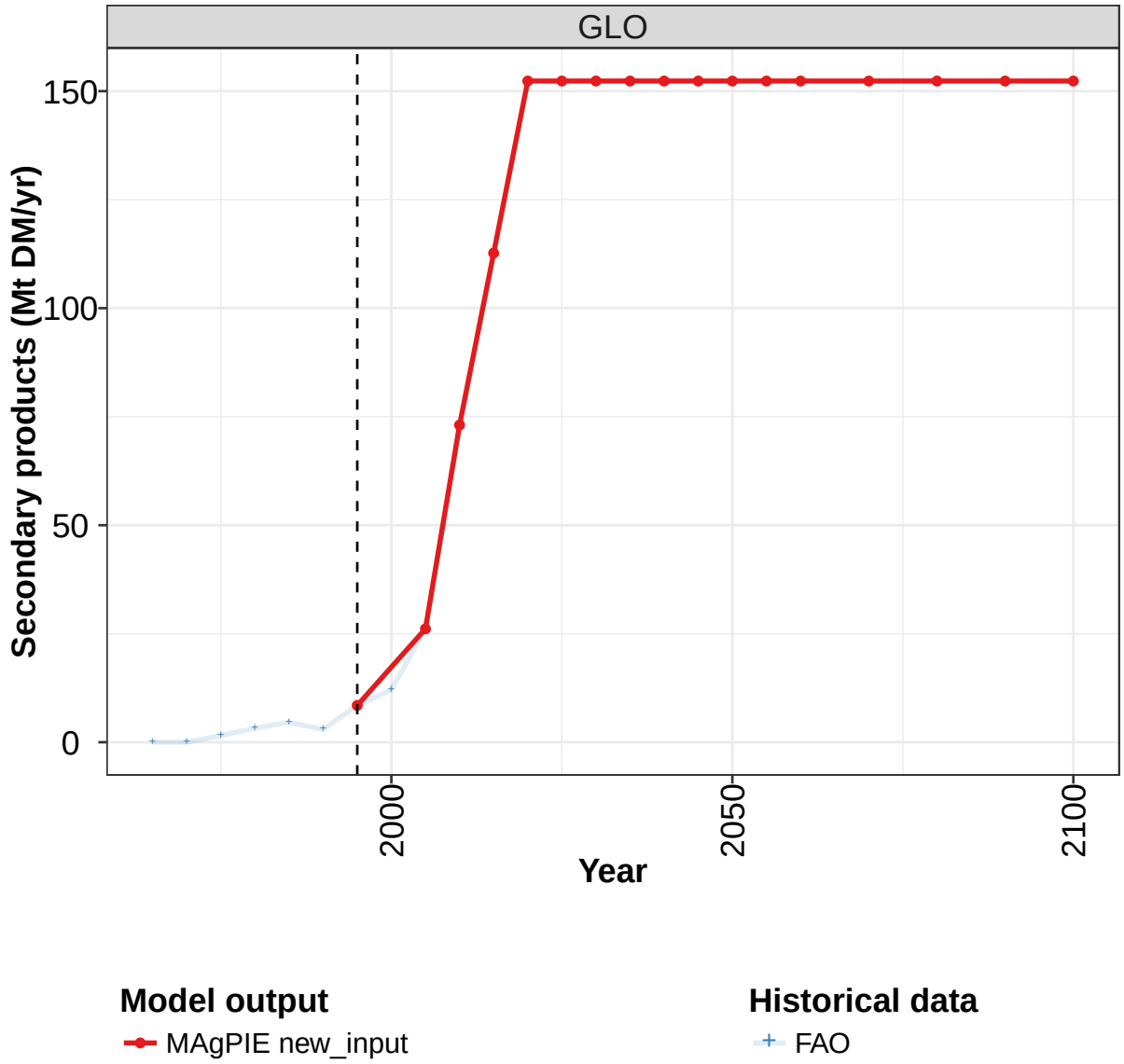

GLO
0.50
0.25
0.00
−0.25
−0.50
Demand|Bioenergy|Livestock products (Mt DM/yr)
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Bioenergy|Livestock products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


GLO
Demand|Bioenergy|Secondary products (Mt DM/yr)
150
100
50
0
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Bioenergy|Secondary products (Mt DM/yr)
0
20
40
60
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

4.4 Secondary products



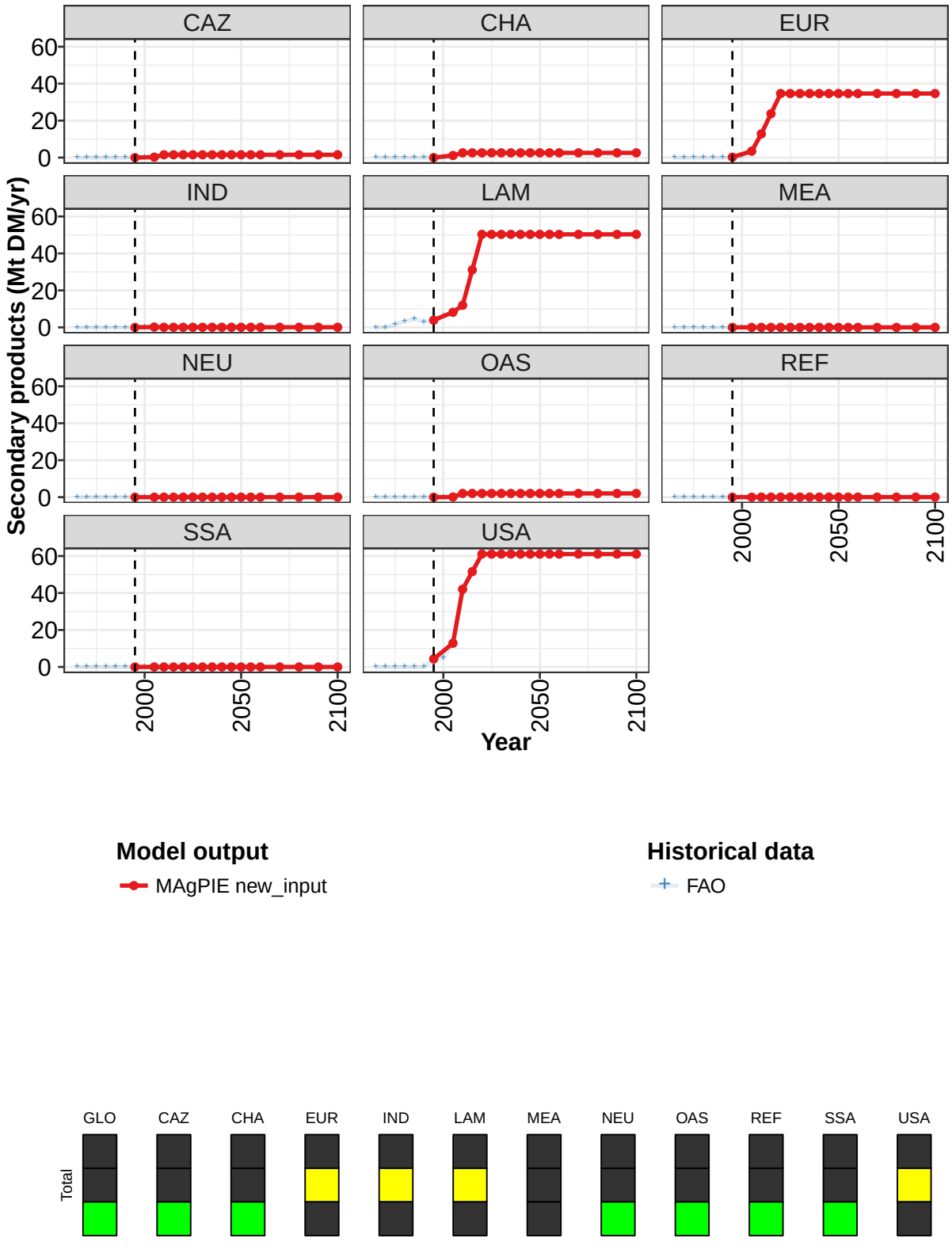


Figure 39: MAgPIE new_input — Demand—Bioenergy—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8	26	73	113	152	152	152	152	152	152	152
CAZ	0	0	2	2	2	2	2	2	2	2	2
CHA	0	1	3	3	3	3	3	3	3	3	3
EUR	0	3	13	24	35	35	35	35	35	35	35
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	4	8	12	31	50	50	50	50	50	50	50
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	2	2	2	2	2	2	2	2	2
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	4	13	42	52	61	61	61	61	61	61	61

Table 116: MAgPIE new_input — Demand—Bioenergy—Secondary products (Mt DM/yr) [PART 1/2]

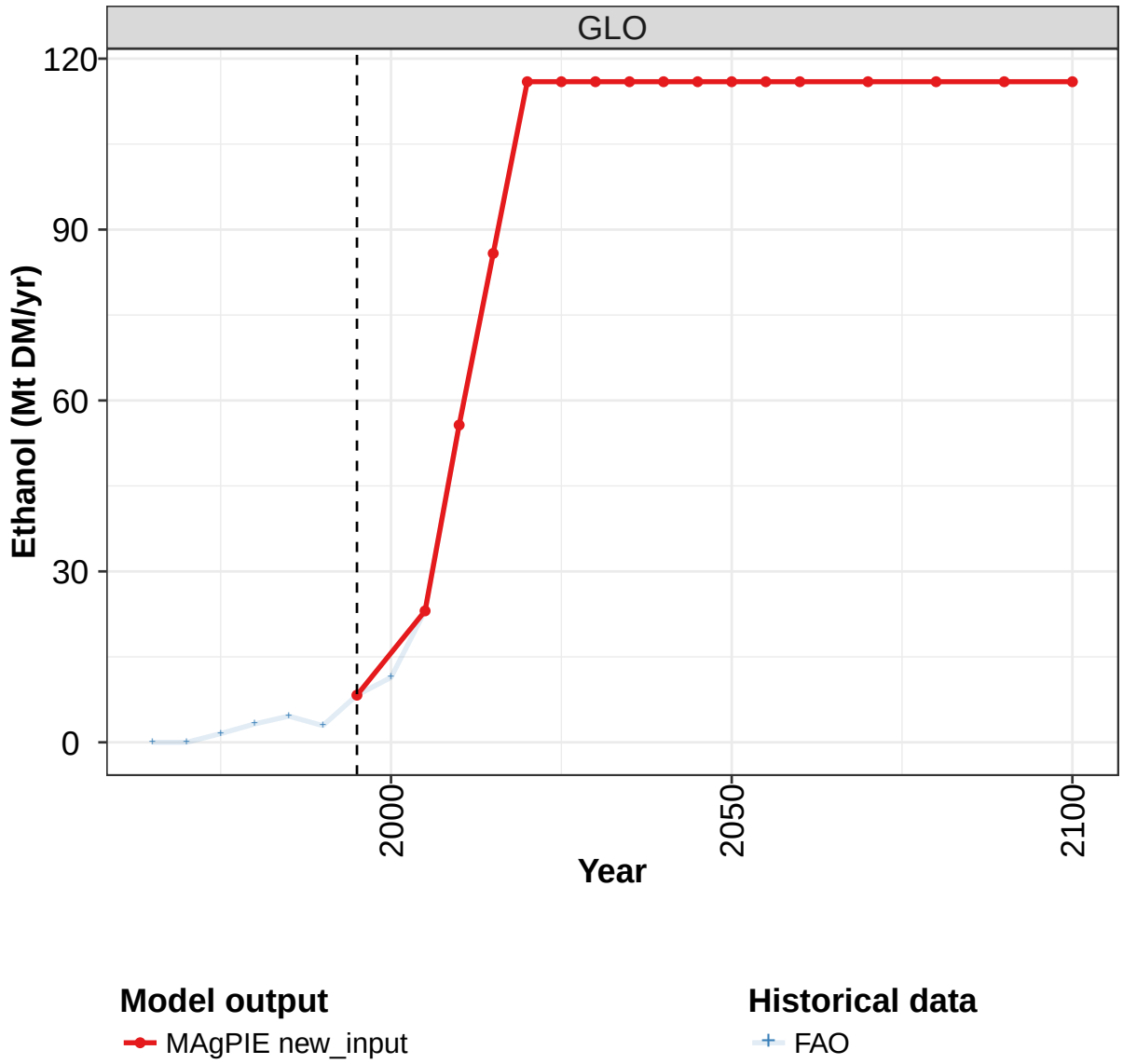
	2055	2060	2070	2080	2090	2100
GLO	152	152	152	152	152	152
CAZ	2	2	2	2	2	2
CHA	3	3	3	3	3	3
EUR	35	35	35	35	35	35
IND	0	0	0	0	0	0
LAM	50	50	50	50	50	50
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	2	2	2	2	2	2
REF	0	0	0	0	0	0
SSA	0	0	0	0	0	0
USA	61	61	61	61	61	61

Table 117: MAgPIE new_input — Demand—Bioenergy—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	1.5	3.2	4.6	2.9	8.5	12.1	26.1	73.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.5
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.6
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	3.5	12.8
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1
LAM	0.0	0.0	1.5	3.2	4.6	2.9	3.9	6.2	8.2	12.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.8	12.8	42.0

Table 118: FAO — Demand—Bioenergy—Secondary products (Mt DM/yr)

4.4.1 Ethanol


GLO
120
90
60
30
0
Ethanol (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

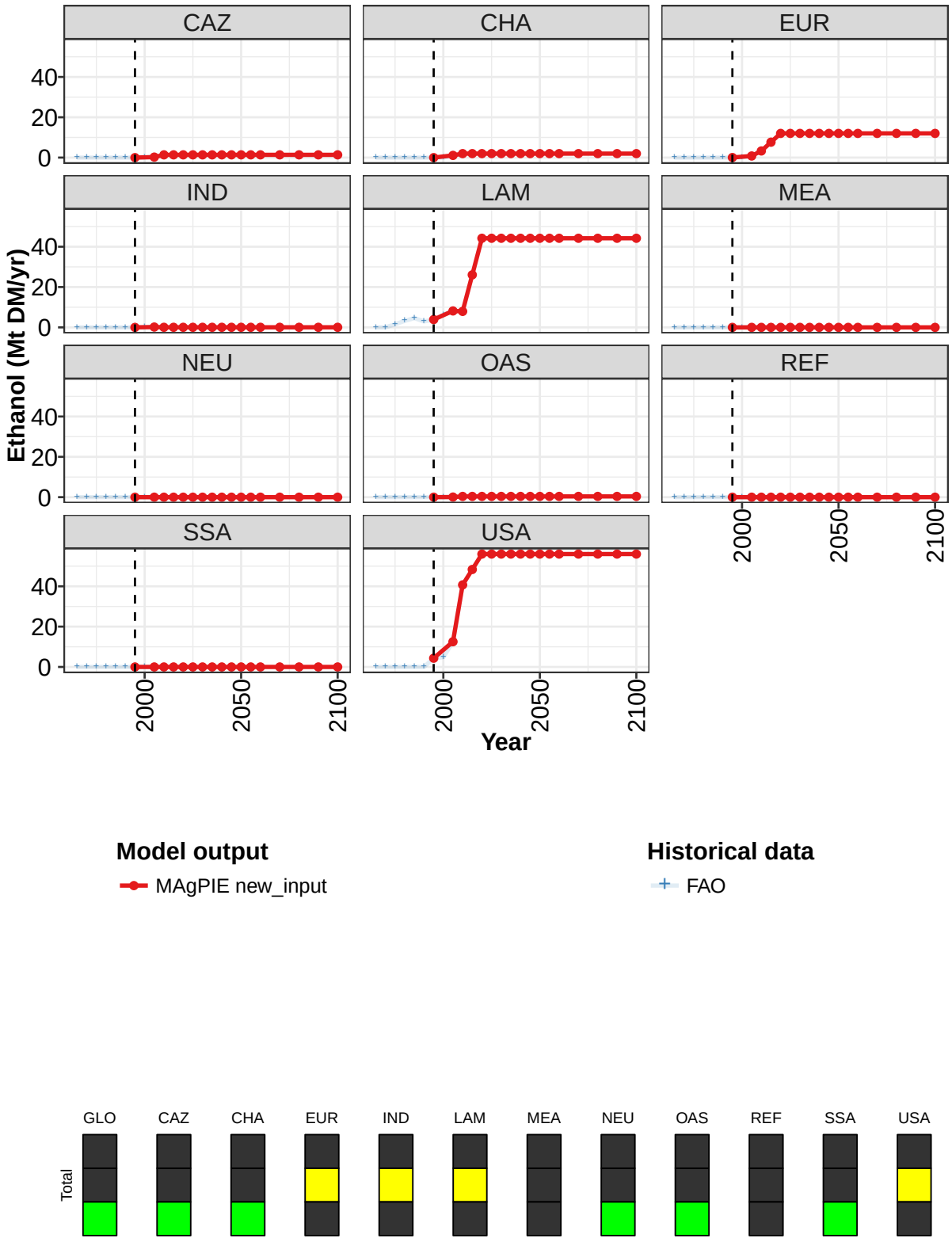


Figure 40: MAgPIE new_input — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8	23	56	86	116	116	116	116	116	116	116
CAZ	0	0	1	1	1	1	1	1	1	1	1
CHA	0	1	2	2	2	2	2	2	2	2	2
EUR	0	1	3	8	12	12	12	12	12	12	12
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	4	8	8	26	44	44	44	44	44	44	44
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	4	13	41	48	56	56	56	56	56	56	56

Table 119: MAgPIE new_input — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr) [PART 1/2]

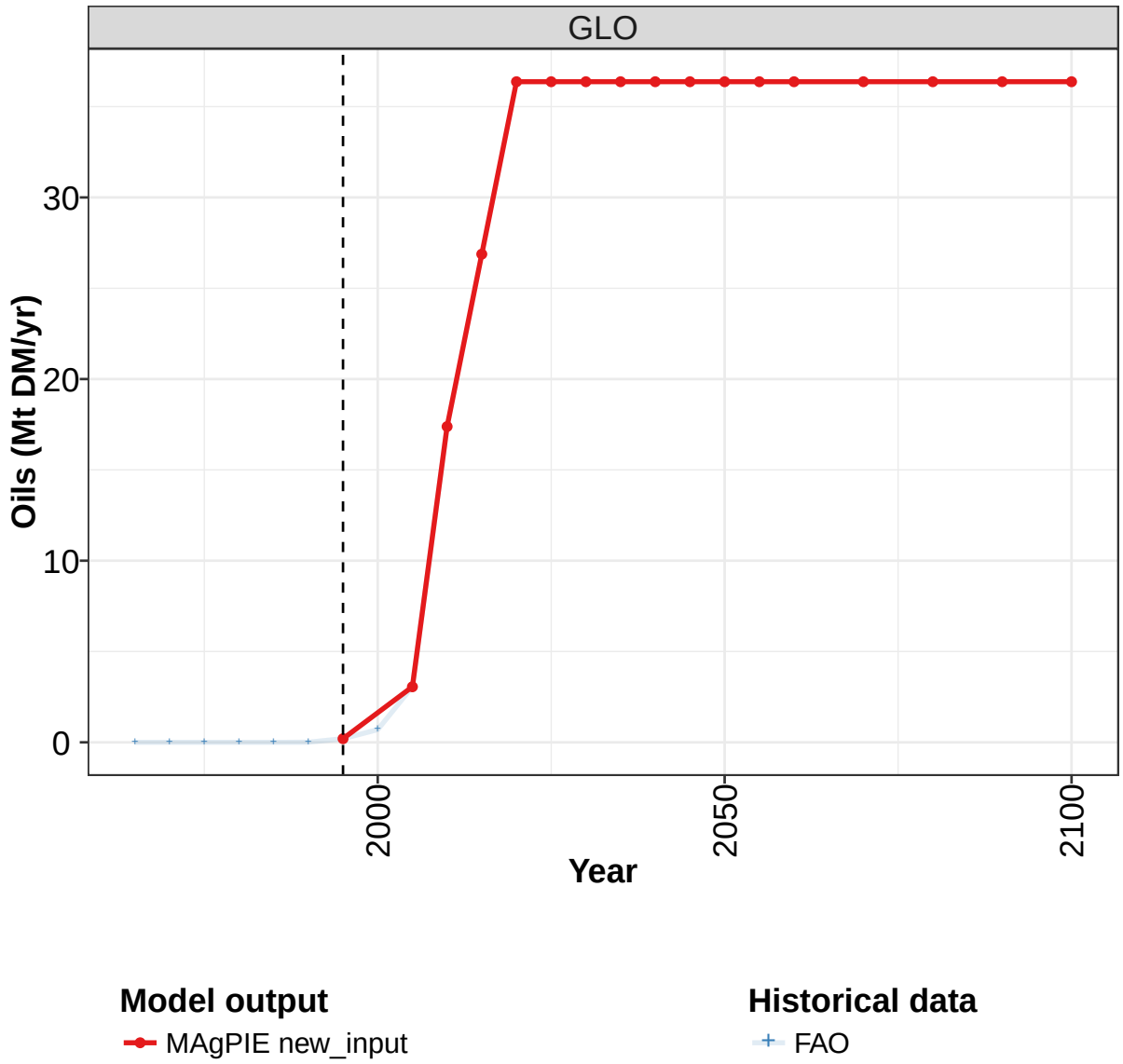
	2055	2060	2070	2080	2090	2100
GLO	116	116	116	116	116	116
CAZ	1	1	1	1	1	1
CHA	2	2	2	2	2	2
EUR	12	12	12	12	12	12
IND	0	0	0	0	0	0
LAM	44	44	44	44	44	44
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	0	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	0	0	0	0	0	0
USA	56	56	56	56	56	56

Table 120: MAgPIE new_input — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	1.5	3.2	4.6	2.9	8.3	11.4	23.1	55.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.4
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	3.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
LAM	0.0	0.0	1.5	3.2	4.6	2.9	3.9	6.2	8.2	7.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.8	12.5	40.7

Table 121: FAO — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr)

4.4.2 Oils


GLO
Oils (Mt DM/yr)
30
20
10
0
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

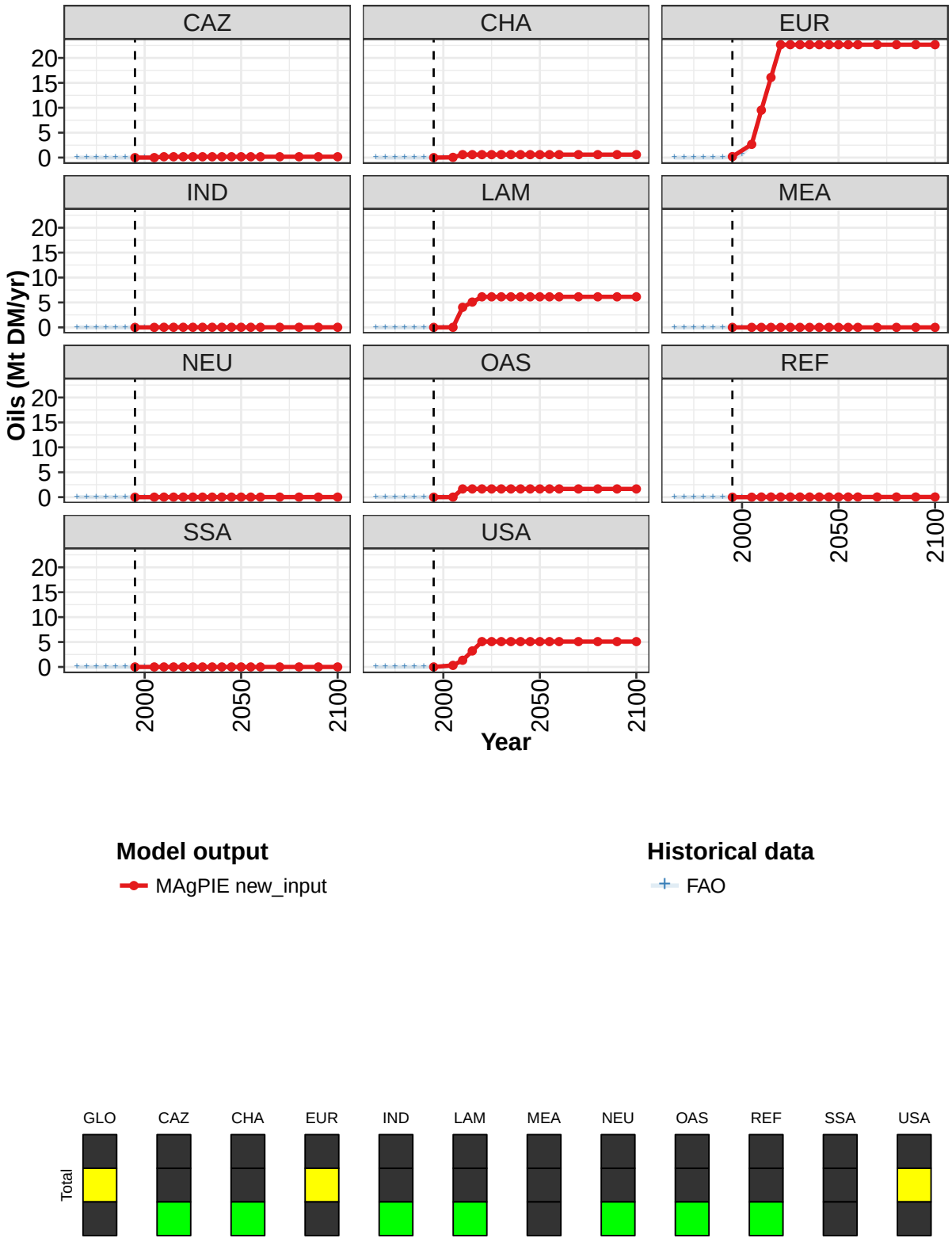


Figure 41: MAgPIE new_input — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.2	3.1	17.4	26.9	36.4	36.4	36.4	36.4	36.4	36.4	36.4
CAZ	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
EUR	0.2	2.7	9.5	16.1	22.7	22.7	22.7	22.7	22.7	22.7	22.7
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	4.0	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.3	1.3	3.2	5.1	5.1	5.1	5.1	5.1	5.1	5.1

Table 122: MAgPIE new_input — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr) [PART 1/2]

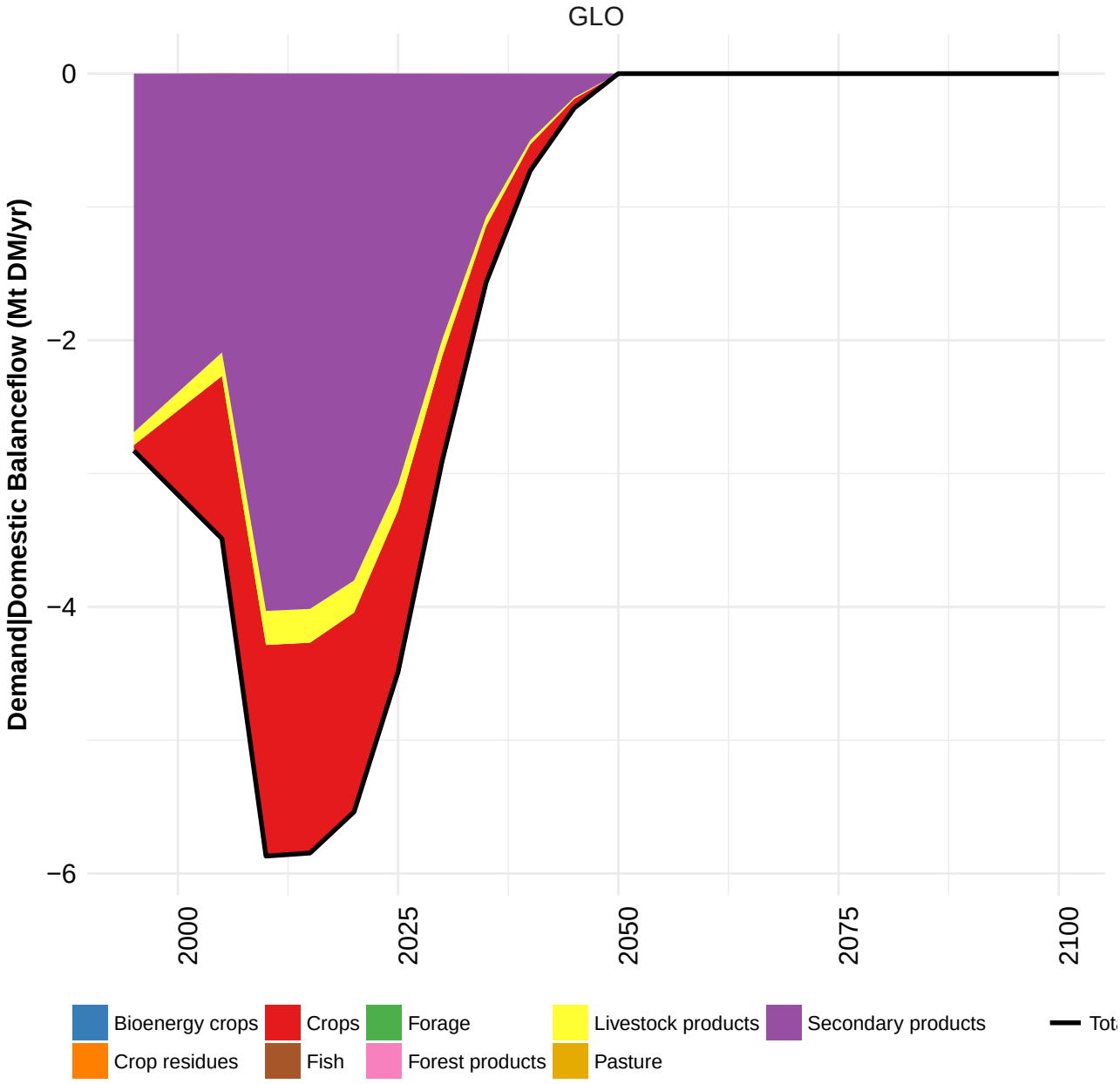
	2055	2060	2070	2080	2090	2100
GLO	36.4	36.4	36.4	36.4	36.4	36.4
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.6	0.6	0.6	0.6	0.6	0.6
EUR	22.7	22.7	22.7	22.7	22.7	22.7
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	6.1	6.1	6.1	6.1	6.1	6.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.7	1.7	1.7	1.7	1.7	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0
USA	5.1	5.1	5.1	5.1	5.1	5.1

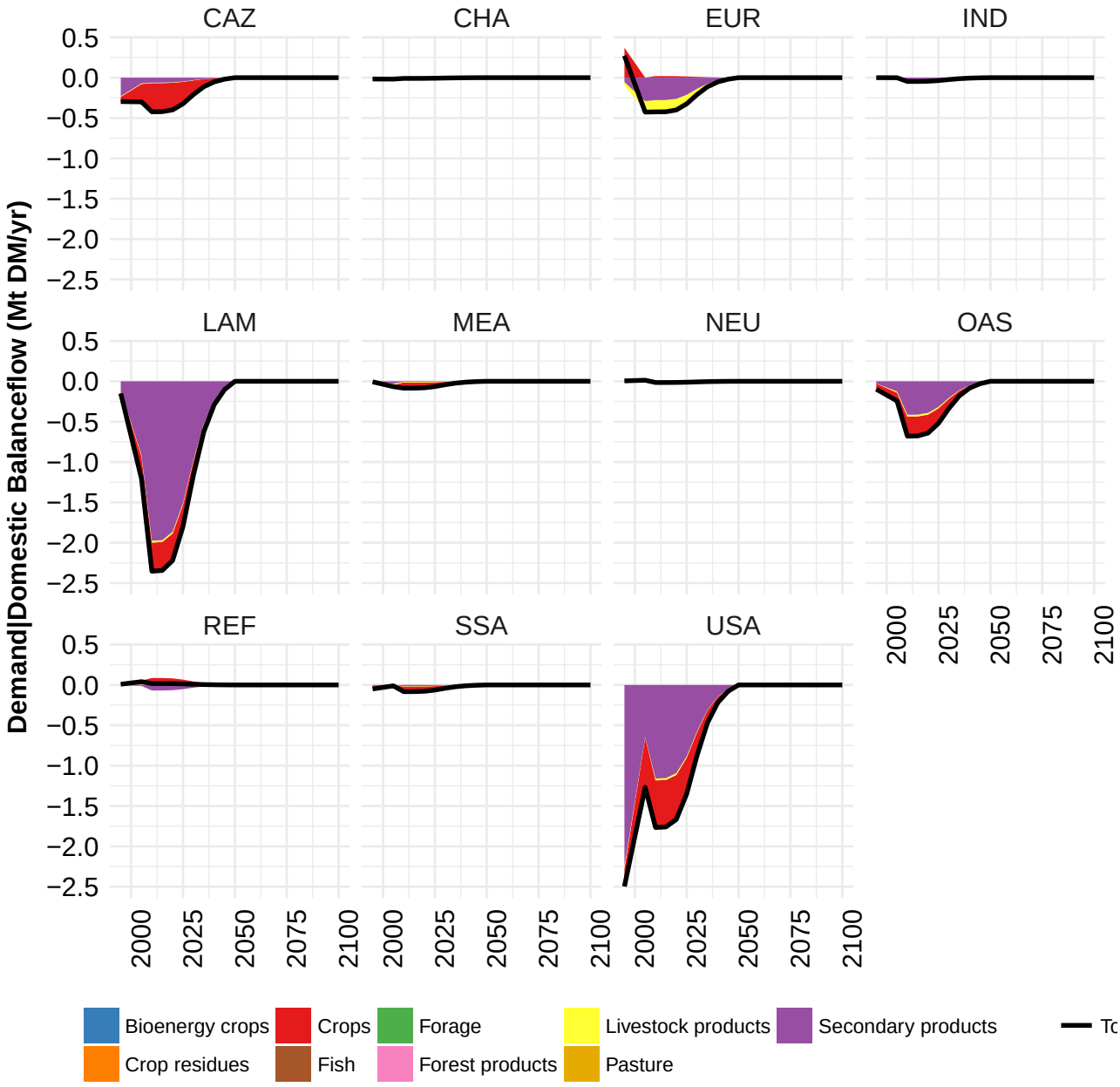
Table 123: MAgPIE new_input — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr) [PART 2/2]

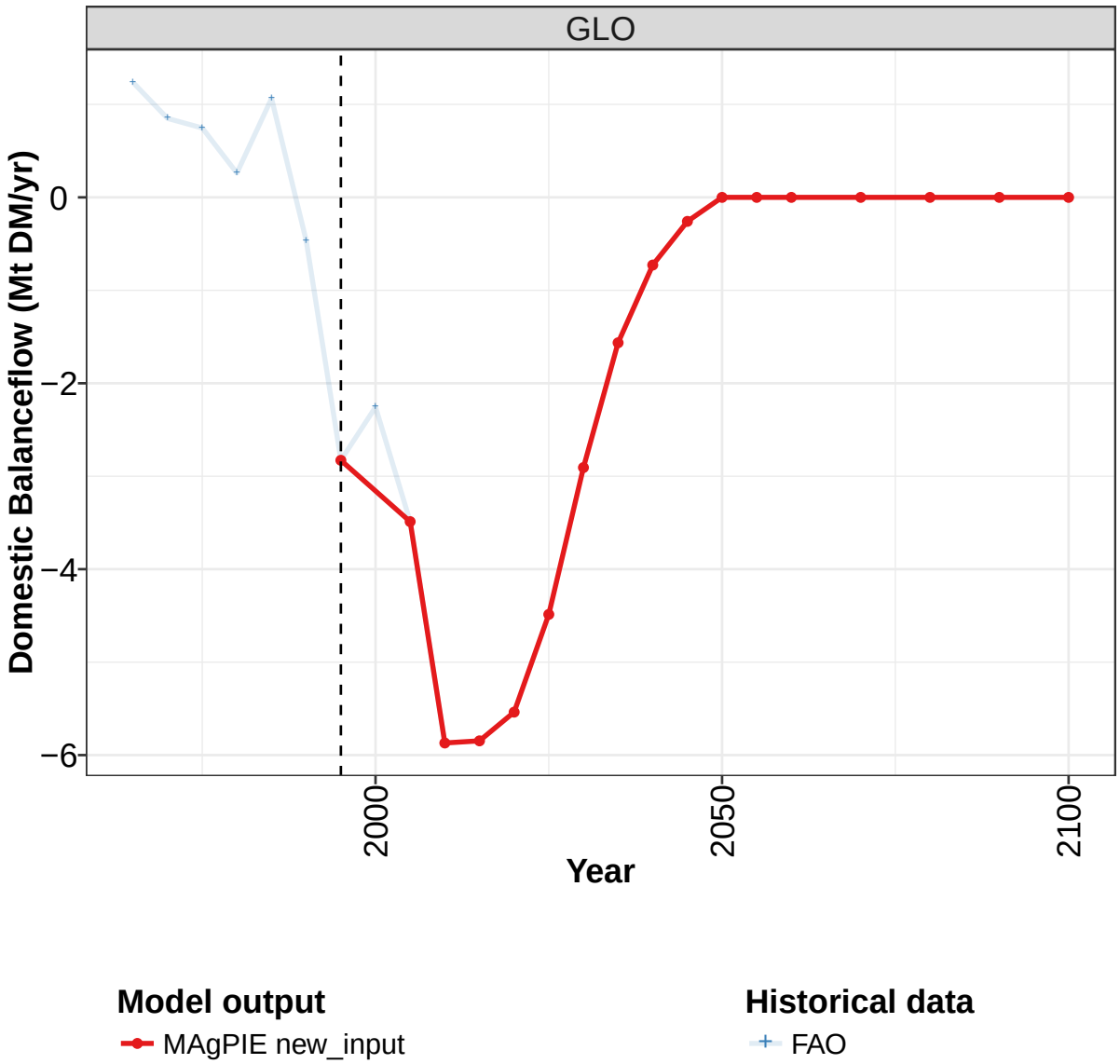
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	3.1	17.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	2.7	9.5
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.3

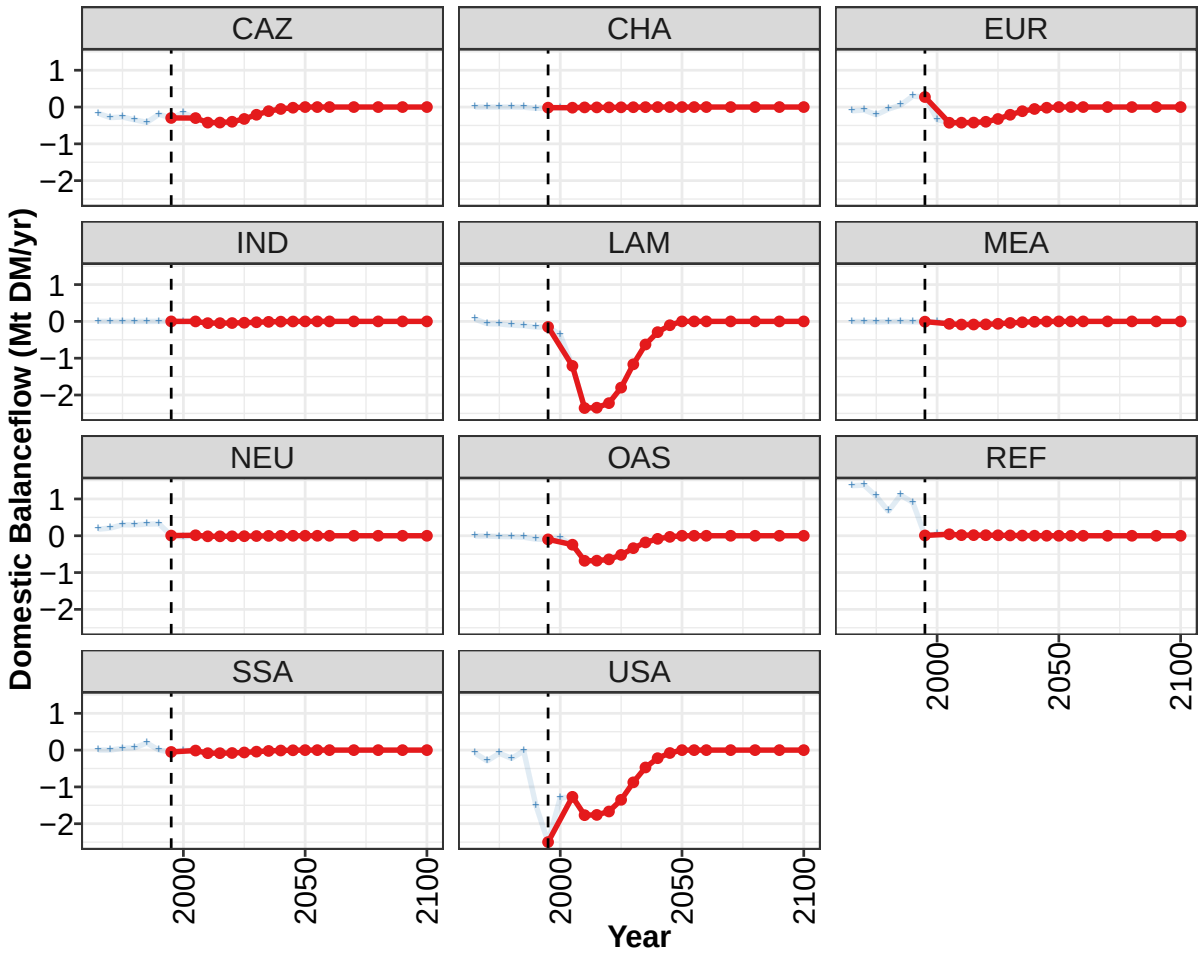
Table 124: FAO — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr)

5 Domestic Balanceflow




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Domestic Balanceflow (Mt DM/yr)
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


GLO
Domestic Balanceflow (Mt DM/yr)
0
−2
−4
−6
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



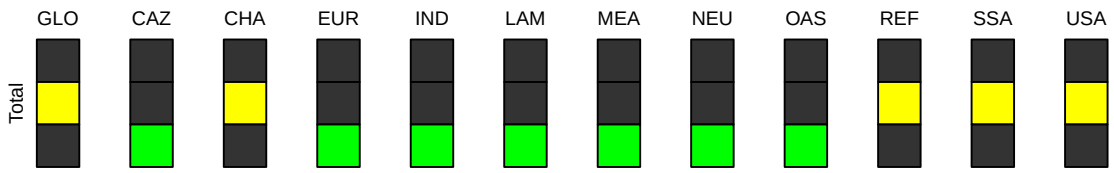


Figure 42: MAgPIE new_input — Demand—Domestic Balanceflow (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-2.829	-3.489	-5.870	-5.847	-5.538	-4.486	-2.907	-1.564	-0.728	-0.258	0.000
CAZ	-0.296	-0.300	-0.423	-0.421	-0.399	-0.324	-0.210	-0.113	-0.052	-0.019	0.000
CHA	-0.017	-0.018	-0.009	-0.009	-0.009	-0.007	-0.004	-0.002	-0.001	-0.000	0.000
EUR	0.272	-0.427	-0.424	-0.423	-0.400	-0.324	-0.210	-0.113	-0.053	-0.019	0.000
IND	0.000	-0.001	-0.047	-0.047	-0.044	-0.036	-0.023	-0.013	-0.006	-0.002	0.000
LAM	-0.150	-1.209	-2.354	-2.345	-2.220	-1.799	-1.166	-0.627	-0.291	-0.104	0.000
MEA	-0.006	-0.066	-0.085	-0.085	-0.081	-0.065	-0.042	-0.023	-0.011	-0.004	0.000
NEU	0.005	0.013	-0.015	-0.015	-0.014	-0.011	-0.007	-0.004	-0.002	-0.001	0.000
OAS	-0.098	-0.243	-0.680	-0.677	-0.641	-0.520	-0.337	-0.181	-0.084	-0.030	0.000
REF	0.009	0.041	0.017	0.017	0.016	0.013	0.009	0.005	0.002	0.001	0.000
SSA	-0.050	-0.011	-0.083	-0.083	-0.078	-0.064	-0.041	-0.022	-0.010	-0.004	0.000
USA	-2.498	-1.269	-1.767	-1.760	-1.667	-1.350	-0.875	-0.471	-0.219	-0.078	0.000

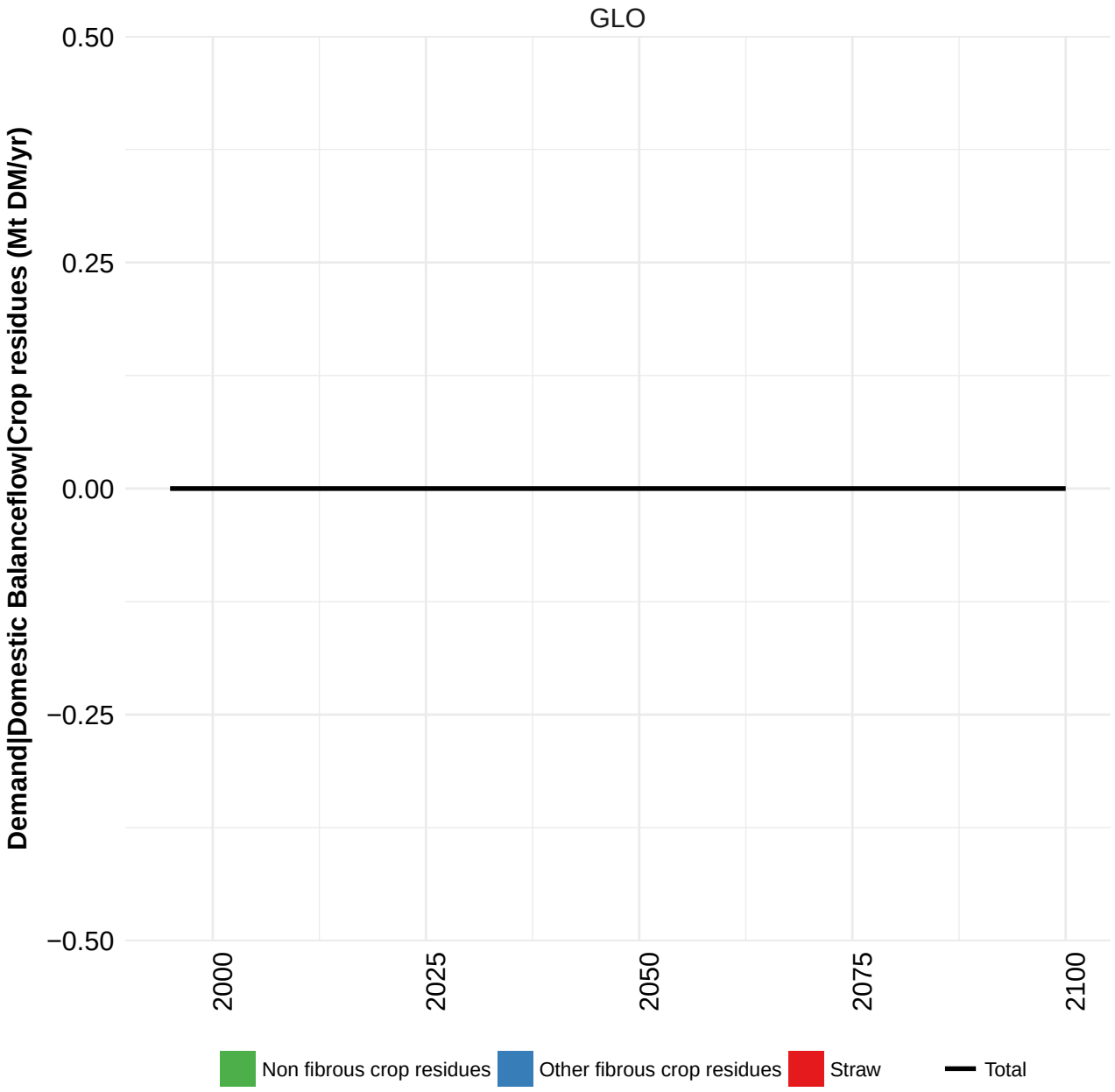
Table 125: MAgPIE new_input — Demand—Domestic Balanceflow (Mt DM/yr) [PART 1/2]

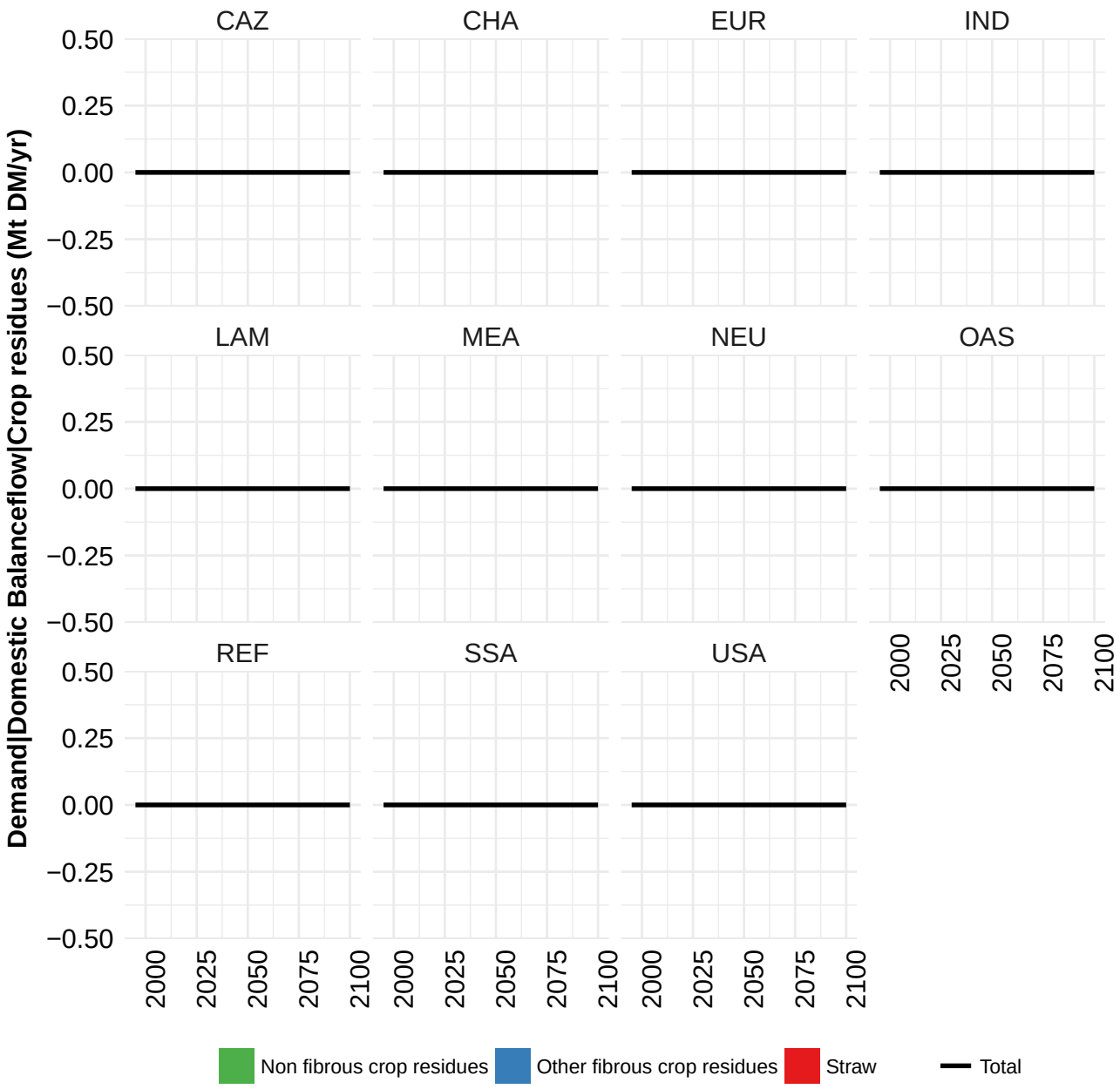
	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

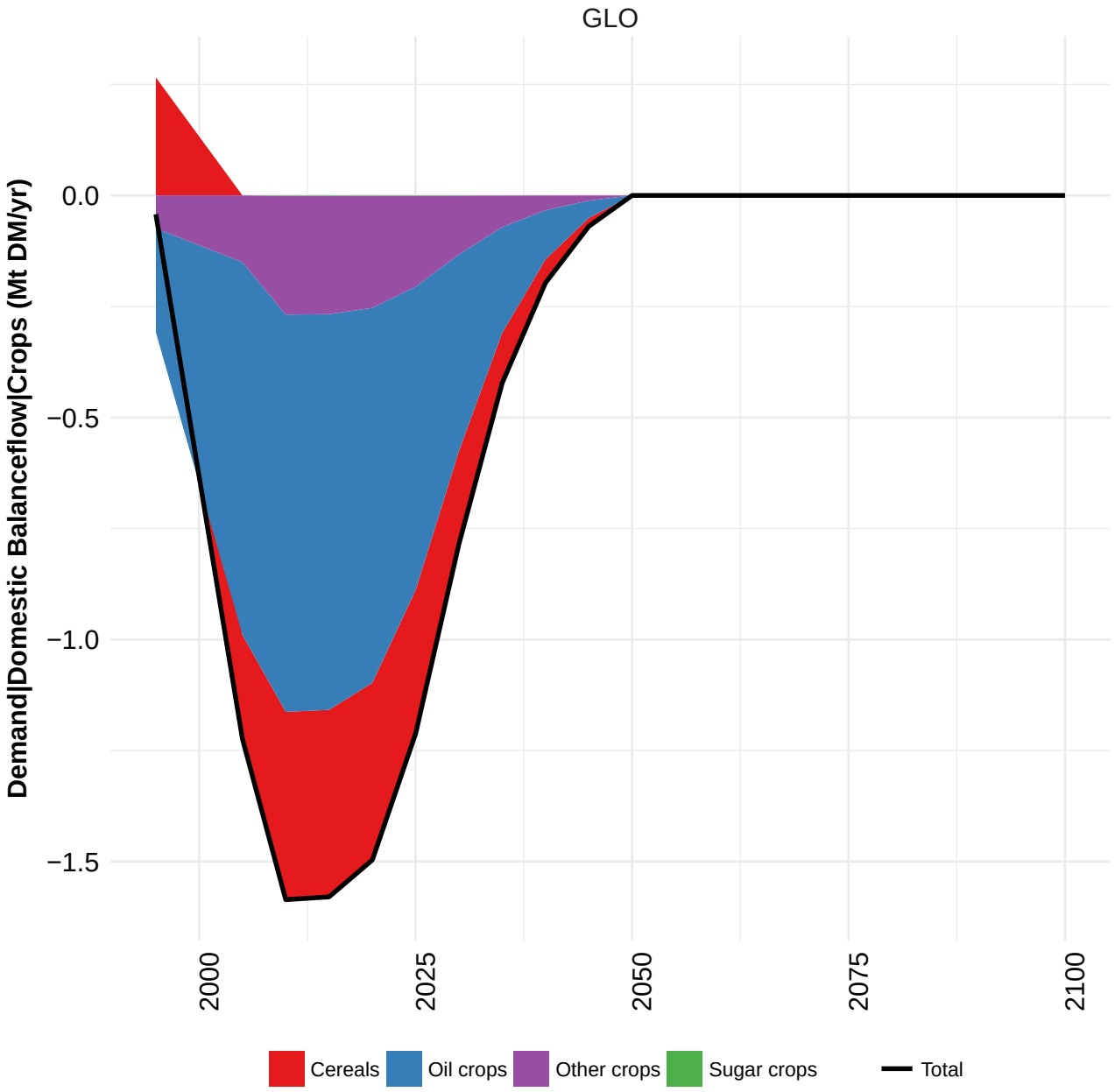
Table 126: MAgPIE new_input — Demand—Domestic Balanceflow (Mt DM/yr) [PART 2/2]

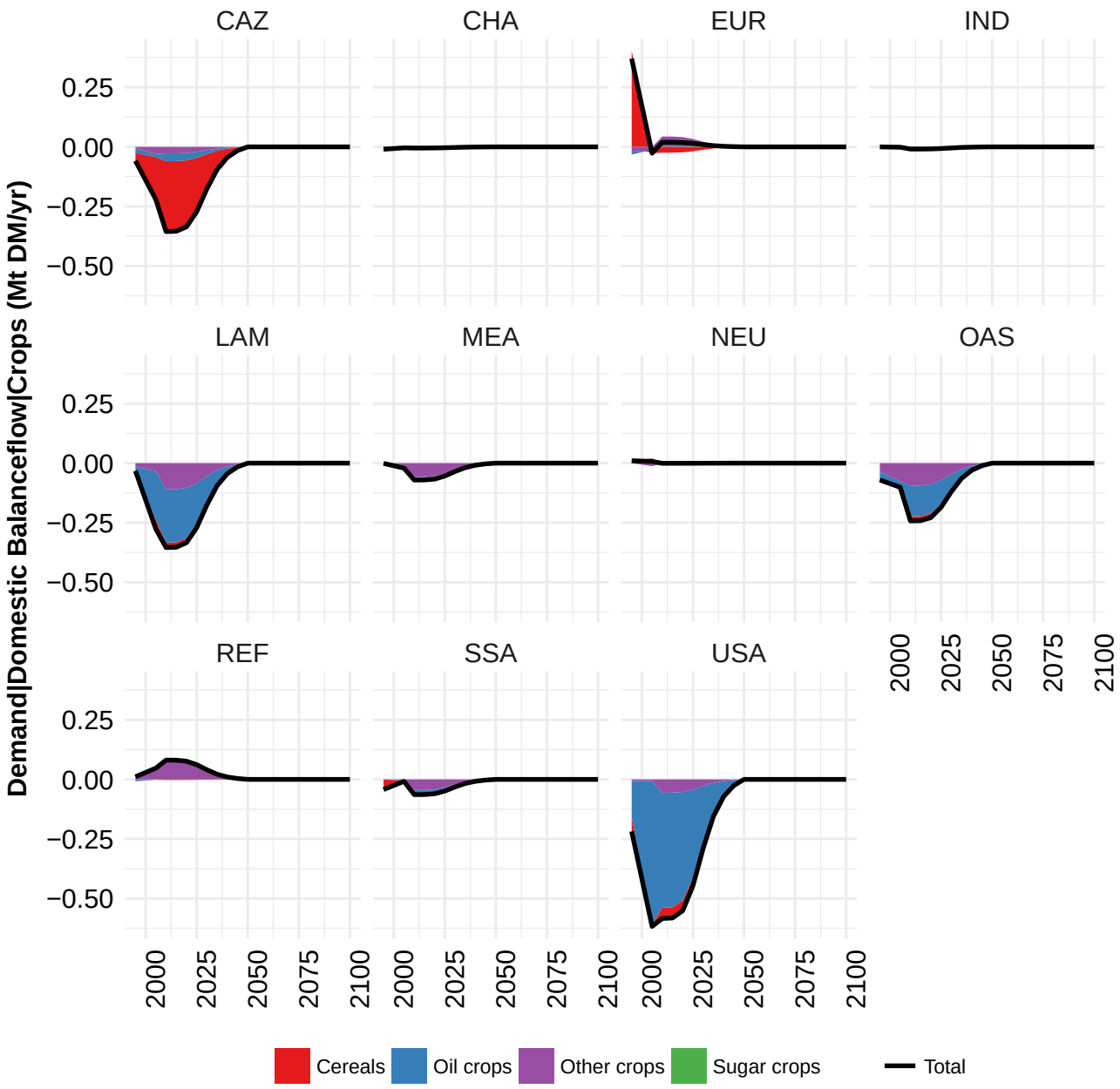
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.24	0.85	0.75	0.26	1.06	-0.47	-2.83	-2.26	-3.49	-5.87
CAZ	-0.17	-0.29	-0.27	-0.35	-0.42	-0.20	-0.30	-0.16	-0.30	-0.42
CHA	-0.00	-0.00	-0.00	-0.00	-0.00	-0.04	-0.02	-0.02	-0.02	-0.01
EUR	-0.10	-0.08	-0.21	-0.06	0.05	0.30	0.27	-0.34	-0.43	-0.42
IND	0.00	0.00	-0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.00	-0.05
LAM	0.06	-0.06	-0.07	-0.10	-0.12	-0.15	-0.15	-0.36	-1.21	-2.35
MEA	-0.00	-0.00	-0.02	-0.01	-0.00	-0.01	-0.01	-0.01	-0.07	-0.09
NEU	0.18	0.21	0.30	0.29	0.32	0.32	0.01	-0.04	0.01	-0.01
OAS	-0.01	-0.01	-0.02	-0.03	-0.04	-0.09	-0.10	-0.06	-0.24	-0.68
REF	1.36	1.38	1.07	0.67	1.10	0.91	0.01	0.05	0.04	0.02
SSA	0.00	0.00	0.05	0.06	0.19	0.00	-0.05	-0.01	-0.01	-0.08
USA	-0.08	-0.29	-0.09	-0.22	-0.03	-1.50	-2.50	-1.30	-1.27	-1.77

Table 127: FAO — Demand—Domestic Balanceflow (Mt DM/yr)

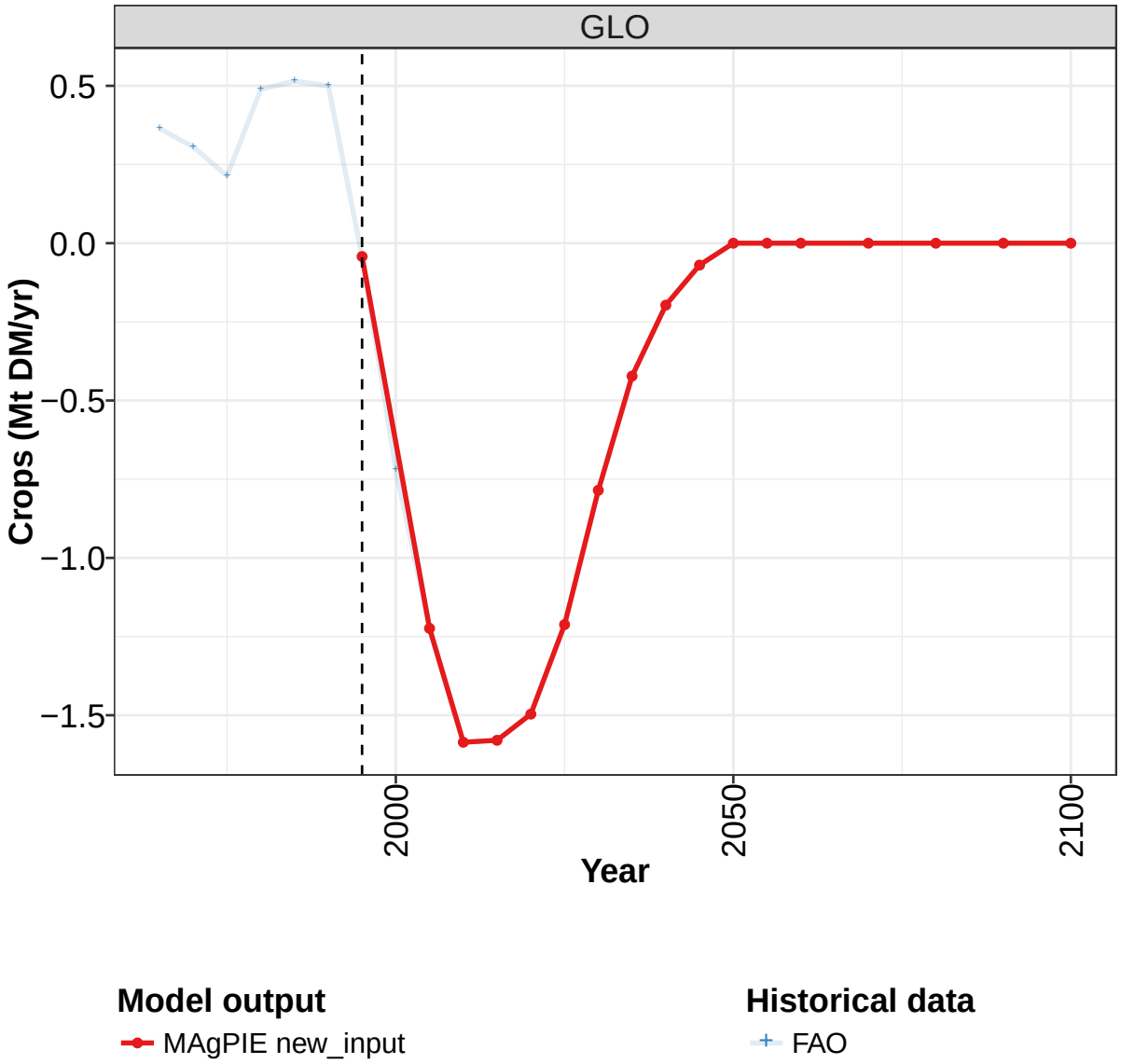

GLO
Demand|Domestic Balanceflow|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total

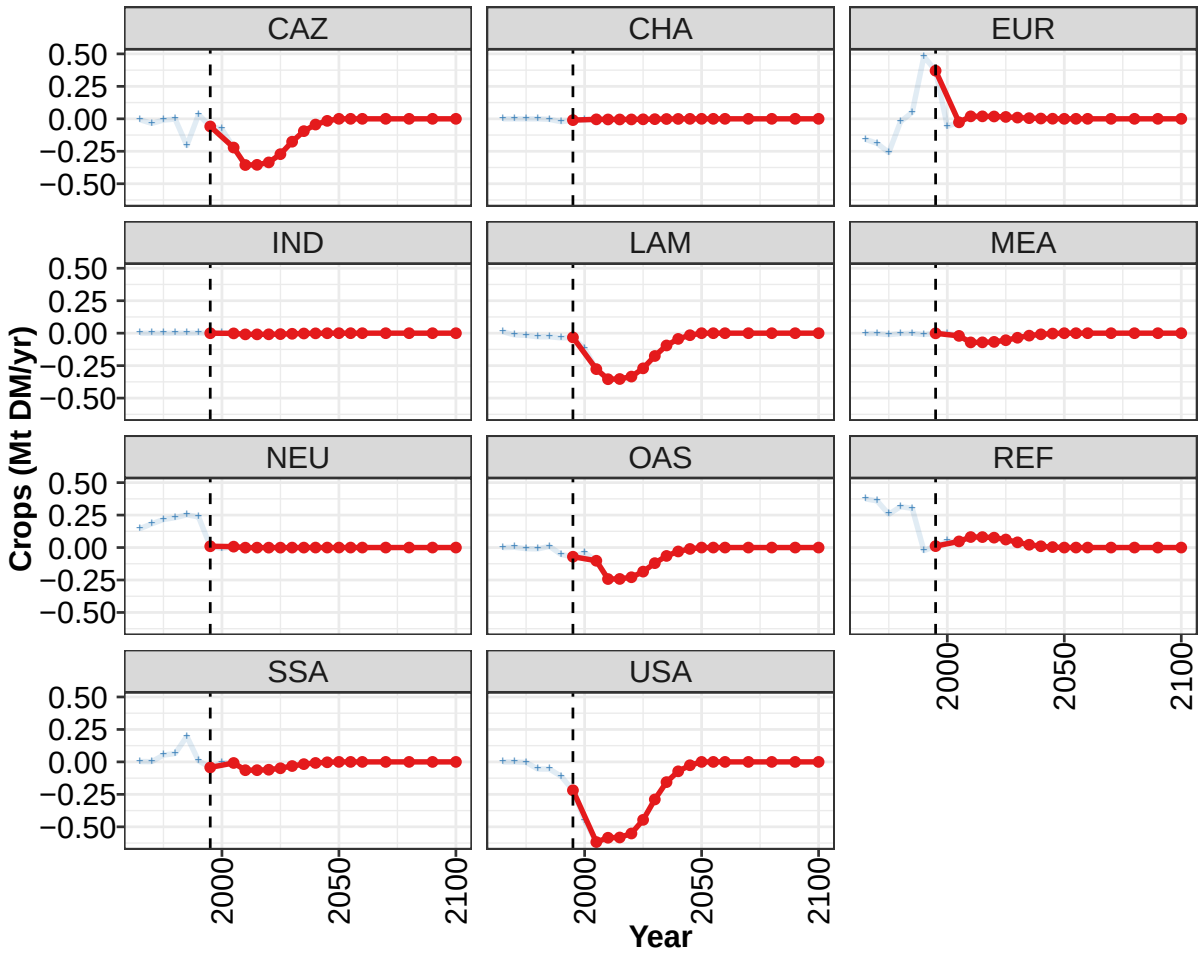

CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Domestic Balanceflow|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


GLO
Demand|Domestic Balanceflow|Crops (Mt DM/yr)
0.0
−0.5
−1.0
−1.5
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Domestic Balanceflow|Crops (Mt DM/yr)
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

5.1 Crops


GLO
0.5
0.0
−0.5
−1.0
−1.5
Crops (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



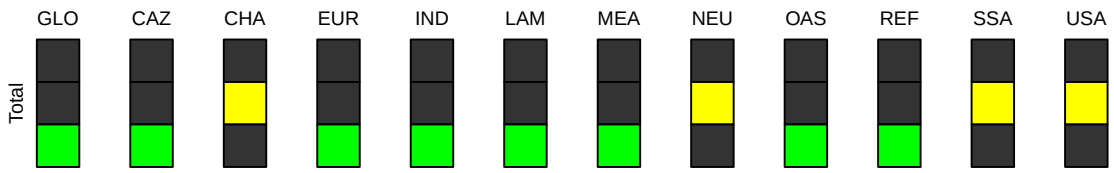


Figure 43: MAgPIE new_input — Demand—Domestic Balanceflow—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0.042	-1.224	-1.586	-1.580	-1.496	-1.212	-0.785	-0.422	-0.197	-0.070	0.000
CAZ	-0.059	-0.221	-0.356	-0.354	-0.336	-0.272	-0.176	-0.095	-0.044	-0.016	0.000
CHA	-0.010	-0.004	-0.005	-0.005	-0.005	-0.004	-0.002	-0.001	-0.001	-0.000	0.000
EUR	0.370	-0.027	0.019	0.019	0.018	0.015	0.010	0.005	0.002	0.001	0.000
IND	-0.000	-0.002	-0.009	-0.009	-0.009	-0.007	-0.005	-0.002	-0.001	-0.000	0.000
LAM	-0.032	-0.277	-0.354	-0.353	-0.334	-0.271	-0.176	-0.094	-0.044	-0.016	0.000
MEA	-0.001	-0.021	-0.071	-0.071	-0.067	-0.054	-0.035	-0.019	-0.009	-0.003	0.000
NEU	0.010	0.007	-0.001	-0.001	-0.001	-0.001	-0.000	-0.000	-0.000	0.000	0.000
OAS	-0.071	-0.102	-0.242	-0.242	-0.229	-0.185	-0.120	-0.065	-0.030	-0.011	0.000
REF	0.011	0.047	0.081	0.081	0.076	0.062	0.040	0.021	0.010	0.004	0.000
SSA	-0.043	-0.008	-0.064	-0.064	-0.060	-0.049	-0.032	-0.017	-0.008	-0.003	0.000
USA	-0.218	-0.617	-0.584	-0.582	-0.551	-0.446	-0.289	-0.156	-0.072	-0.026	0.000

Table 128: MAgPIE new_input — Demand—Domestic Balanceflow—Crops (Mt DM/yr) [PART 1/2]

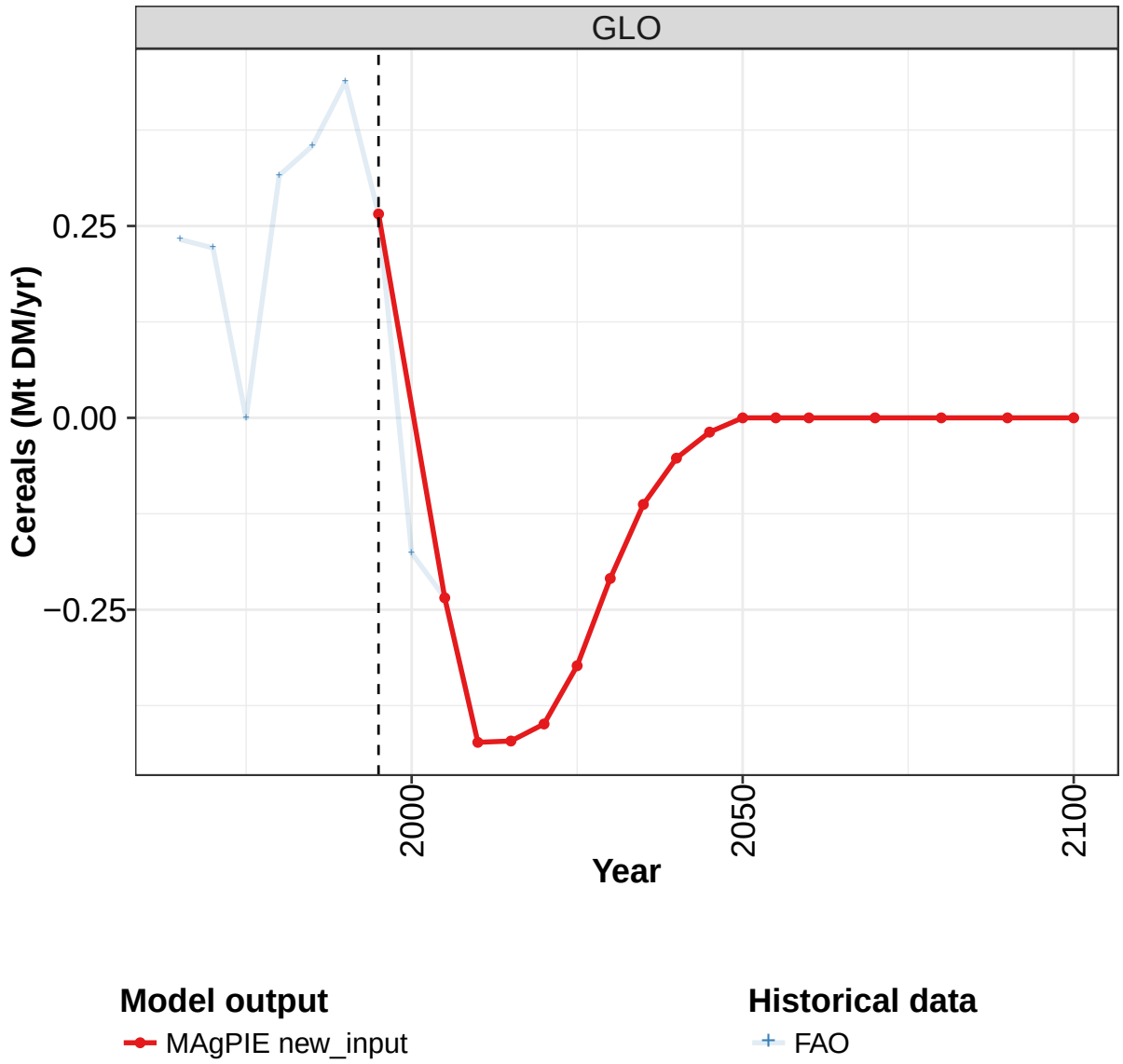
	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

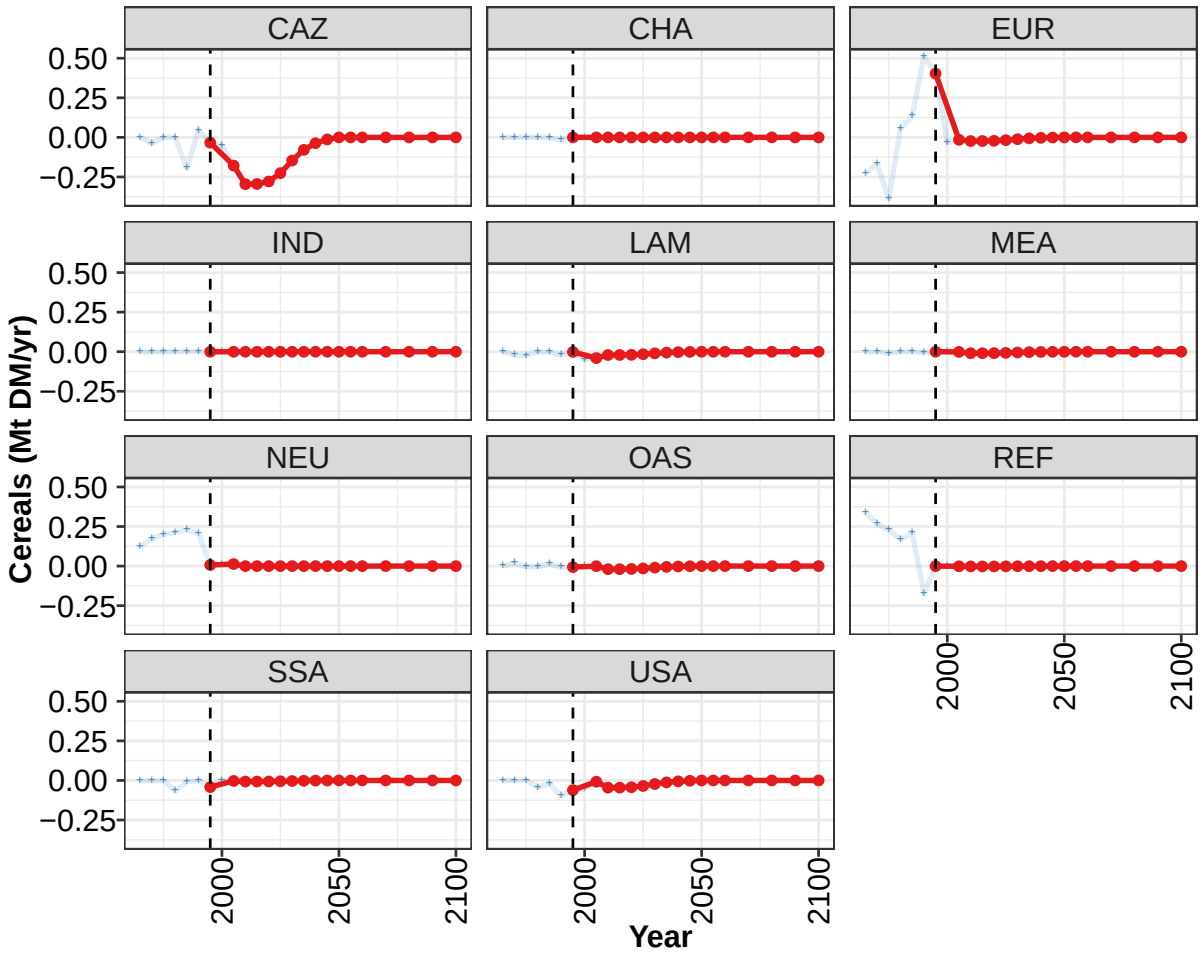
Table 129: MAgPIE new_input — Demand—Domestic Balanceflow—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.364	0.306	0.214	0.489	0.515	0.500	-0.042	-0.720	-1.224	-1.586
CAZ	-0.007	-0.035	-0.010	-0.001	-0.206	0.033	-0.059	-0.079	-0.221	-0.356
CHA	-0.001	0.000	-0.000	-0.000	-0.004	-0.022	-0.010	-0.010	-0.004	-0.005
EUR	-0.158	-0.189	-0.260	-0.022	0.050	0.481	0.370	-0.058	-0.027	0.019
IND	0.000	0.000	-0.000	0.000	0.000	0.001	-0.000	-0.001	-0.002	-0.009
LAM	0.012	-0.013	-0.017	-0.028	-0.028	-0.036	-0.032	-0.117	-0.277	-0.354
MEA	-0.004	-0.003	-0.011	-0.003	-0.001	-0.011	-0.001	-0.001	-0.021	-0.071
NEU	0.146	0.183	0.216	0.230	0.252	0.235	0.010	-0.007	0.007	-0.001
OAS	-0.001	0.002	-0.009	-0.011	0.009	-0.054	-0.070	-0.039	-0.102	-0.242
REF	0.375	0.359	0.257	0.315	0.302	-0.024	0.011	0.049	0.047	0.081
SSA	0.003	0.002	0.052	0.065	0.197	0.008	-0.043	-0.007	-0.008	-0.064
USA	-0.001	-0.000	-0.004	-0.055	-0.055	-0.111	-0.218	-0.450	-0.617	-0.584

Table 130: FAO — Demand—Domestic Balanceflow—Crops (Mt DM/yr)

5.1.1 Cereals


GLO
Cereals (Mt DM/yr)
0.25
0.00
−0.25
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



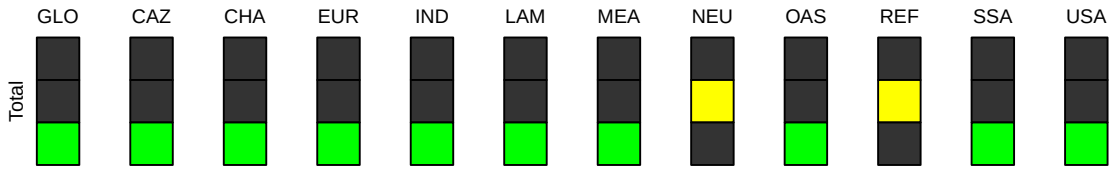


Figure 44: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.266	-0.234	-0.423	-0.421	-0.399	-0.323	-0.209	-0.113	-0.052	-0.019	0.000
CAZ	-0.033	-0.178	-0.295	-0.294	-0.279	-0.226	-0.146	-0.079	-0.037	-0.013	0.000
CHA	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000
EUR	0.403	-0.015	-0.023	-0.023	-0.022	-0.018	-0.011	-0.006	-0.003	-0.001	0.000
IND	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000	0.000
LAM	-0.001	-0.040	-0.021	-0.020	-0.019	-0.016	-0.010	-0.005	-0.003	-0.001	0.000
MEA	0.000	-0.001	-0.009	-0.009	-0.009	-0.007	-0.005	-0.003	-0.001	-0.000	0.000
NEU	0.007	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	-0.006	-0.001	-0.019	-0.019	-0.018	-0.015	-0.010	-0.005	-0.002	-0.001	0.000
REF	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002	-0.001	-0.001	-0.000	-0.000	0.000
SSA	-0.042	-0.003	-0.007	-0.007	-0.007	-0.005	-0.003	-0.002	-0.001	-0.000	0.000
USA	-0.061	-0.008	-0.045	-0.045	-0.043	-0.035	-0.023	-0.012	-0.006	-0.002	0.000

Table 131: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr) [PART 1/2]

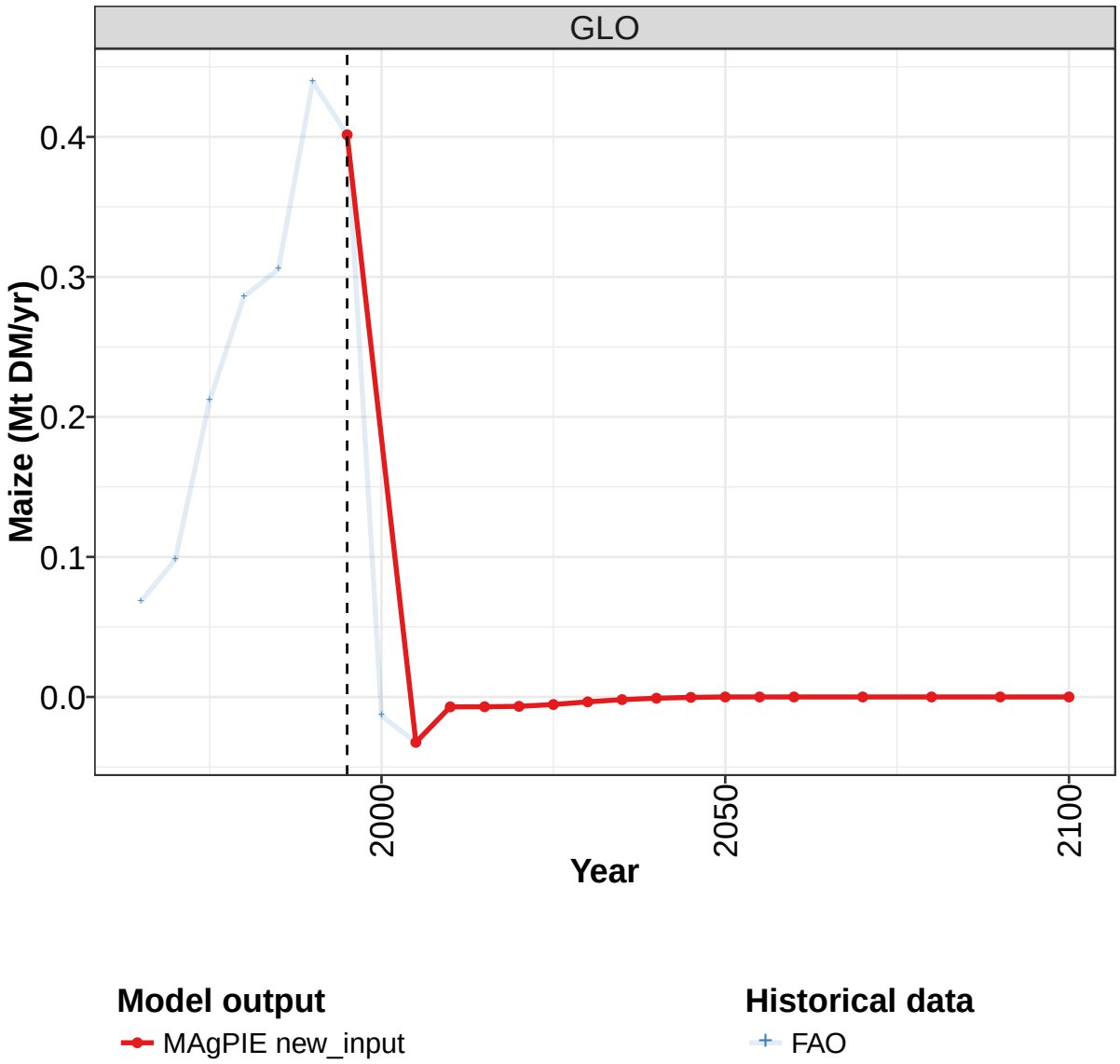
	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

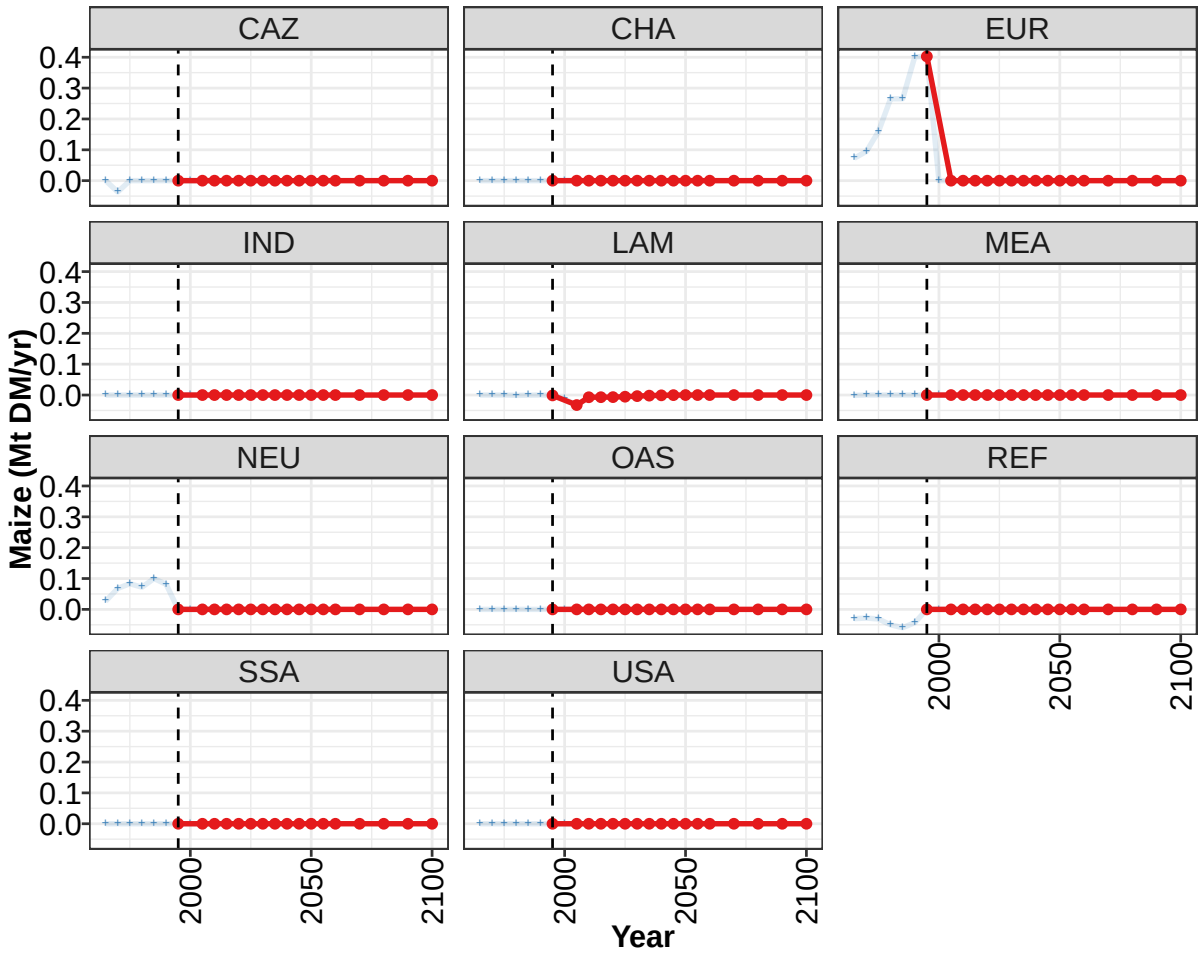
Table 132: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.232	0.221	-0.001	0.316	0.354	0.438	0.266	-0.176	-0.234	-0.423
CAZ	0.000	-0.040	-0.001	-0.000	-0.195	0.045	-0.033	-0.051	-0.178	-0.295
CHA	0.000	0.000	0.000	0.000	-0.001	-0.018	0.000	-0.000	0.000	-0.000
EUR	-0.227	-0.169	-0.389	0.054	0.134	0.511	0.403	-0.031	-0.015	-0.023
IND	0.000	0.000	0.000	0.000	0.000	0.001	0.000	-0.000	-0.000	-0.000
LAM	-0.000	-0.021	-0.026	-0.003	-0.002	-0.021	-0.001	-0.048	-0.040	-0.021
MEA	-0.002	-0.000	-0.010	-0.001	-0.000	-0.005	0.000	-0.000	-0.001	-0.009
NEU	0.122	0.172	0.201	0.211	0.229	0.205	0.007	0.006	0.013	0.000
OAS	0.000	0.018	-0.004	-0.003	0.013	-0.007	-0.006	0.000	-0.001	-0.019
REF	0.340	0.265	0.229	0.168	0.209	-0.175	-0.001	0.000	-0.001	-0.002
SSA	-0.000	-0.003	-0.000	-0.067	-0.011	0.000	-0.042	-0.001	-0.003	-0.007
USA	0.000	0.000	0.000	-0.043	-0.021	-0.098	-0.061	-0.051	-0.008	-0.045

Table 133: FAO — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr)

5.1.2 Cereals—Maize





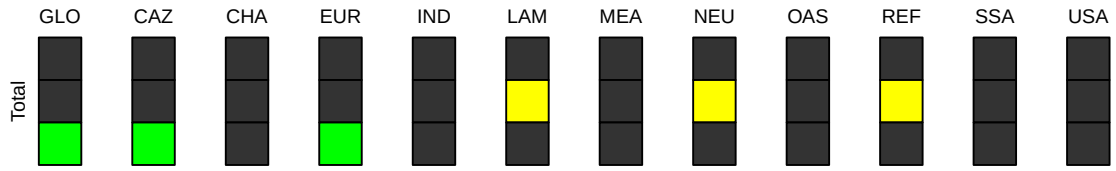


Figure 45: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.402	-0.032	-0.007	-0.007	-0.007	-0.005	-0.004	-0.002	-0.001	-0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.403	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	-0.001	-0.032	-0.007	-0.007	-0.007	-0.005	-0.004	-0.002	-0.001	-0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 134: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

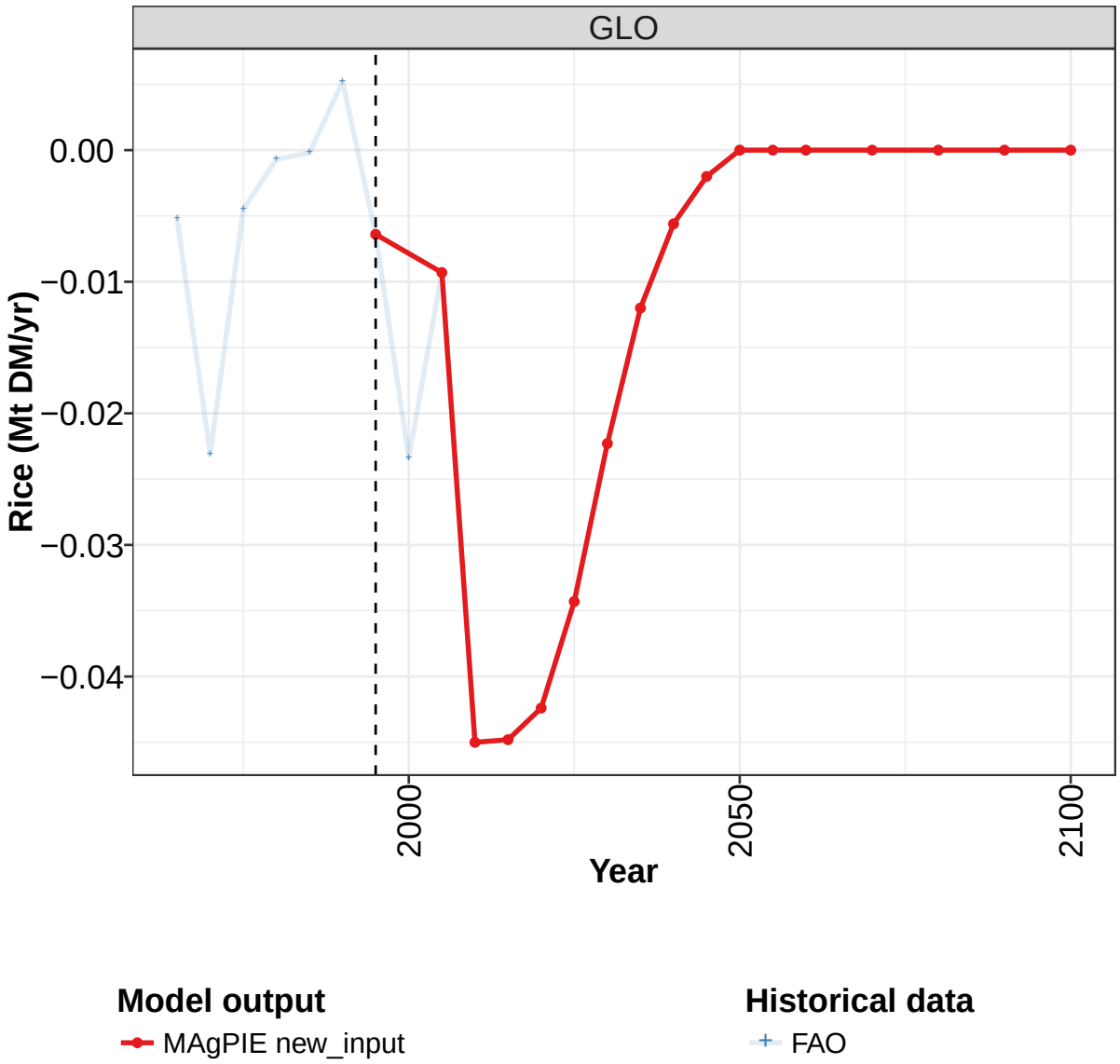
	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

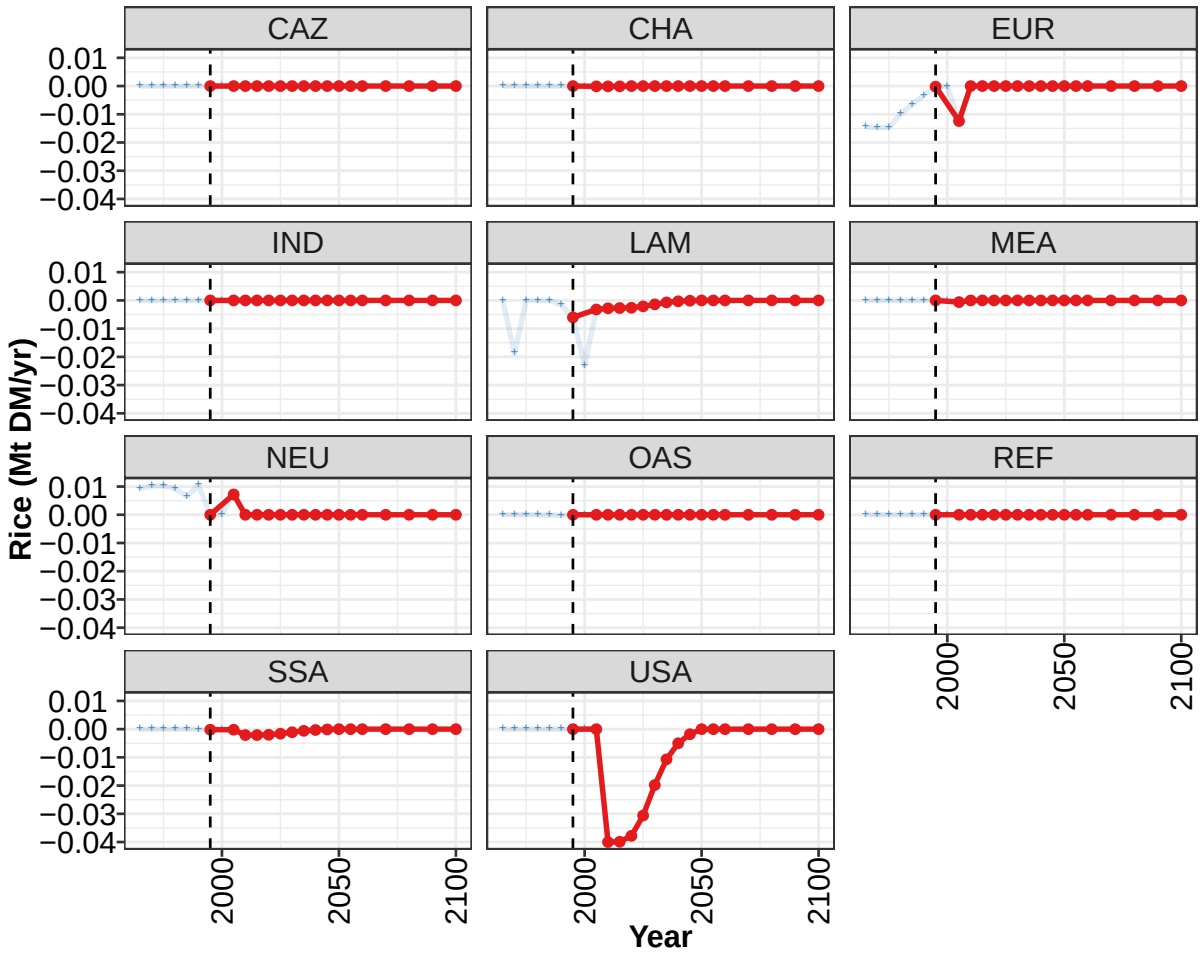
Table 135: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.068	0.098	0.212	0.286	0.305	0.439	0.402	-0.013	-0.032	-0.007
CAZ	0.000	-0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.073	0.095	0.159	0.265	0.266	0.401	0.403	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	-0.000	0.000	-0.001	-0.001	0.000	-0.001	-0.013	-0.032	-0.007
MEA	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.027	0.068	0.083	0.072	0.100	0.081	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	-0.030	-0.028	-0.031	-0.050	-0.059	-0.043	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 136: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr)

5.1.3 Cereals—Rice





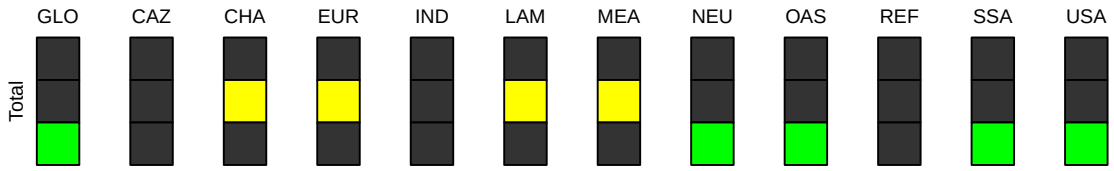


Figure 46: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.00640	-0.00930	-0.04500	-0.04480	-0.04240	-0.03430	-0.02230	-0.01200	-0.00560	-0.00200	0.00
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
CHA	0.00000	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
EUR	-0.00020	-0.01240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
LAM	-0.00600	-0.00320	-0.00280	-0.00270	-0.00260	-0.00210	-0.00140	-0.00070	-0.00030	-0.00010	0.00
MEA	0.00000	-0.00060	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
NEU	0.00000	0.00720	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
SSA	-0.00020	-0.00020	-0.00210	-0.00210	-0.00200	-0.00160	-0.00110	-0.00060	-0.00030	-0.00010	0.00
USA	0.00000	0.00000	-0.04000	-0.03990	-0.03780	-0.03060	-0.01980	-0.01070	-0.00500	-0.00180	0.00

Table 137: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

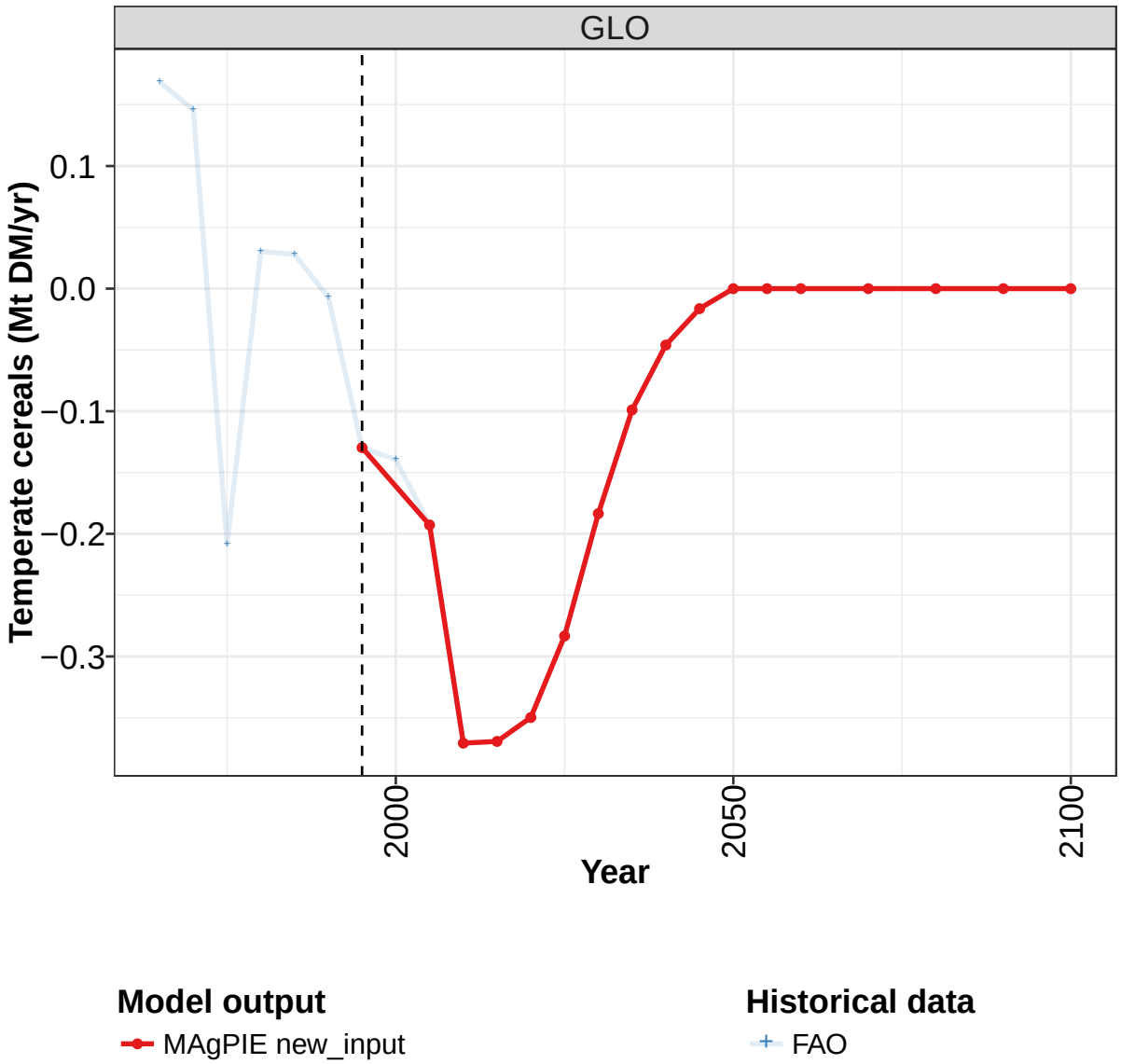
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

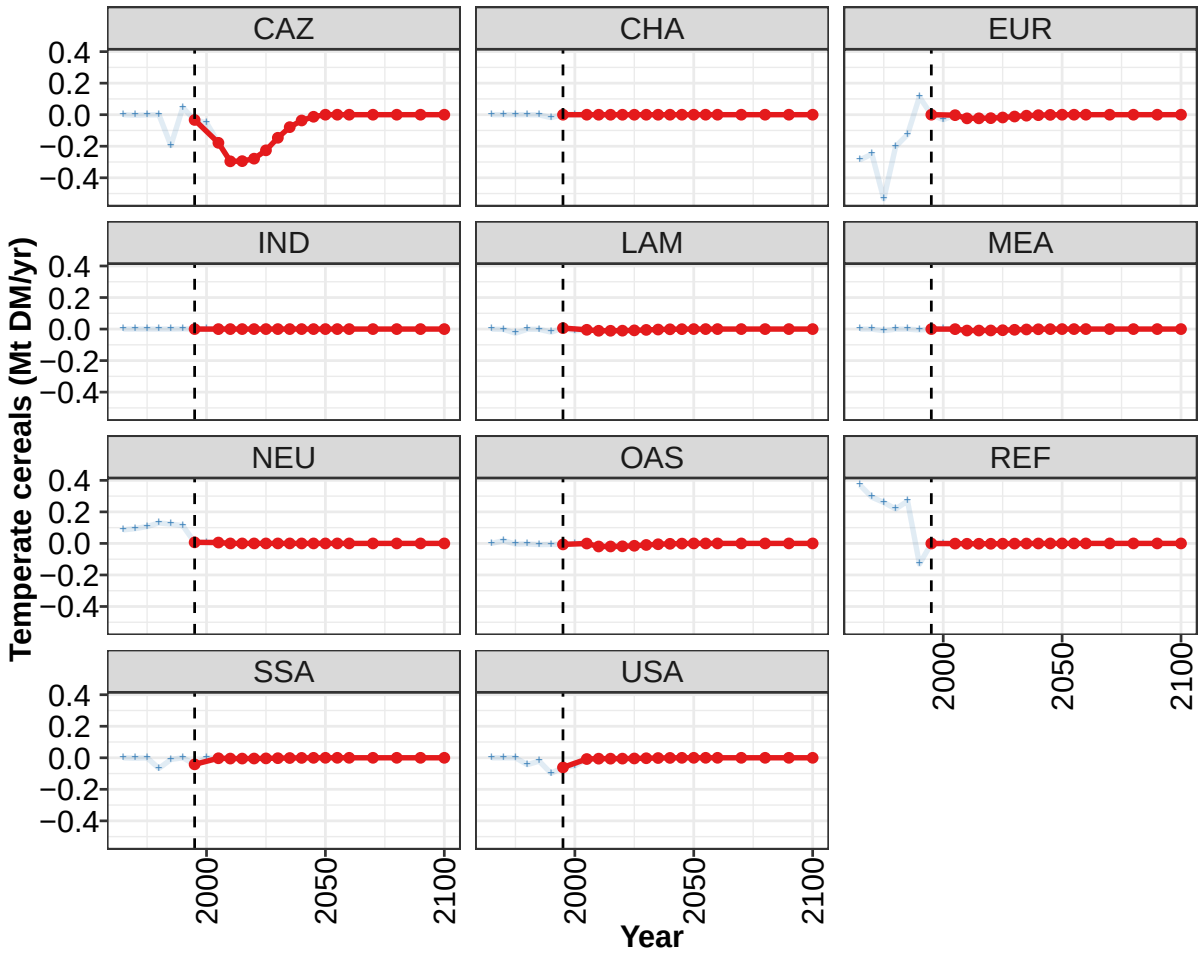
Table 138: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0052	-0.0231	-0.0045	-0.0007	-0.0002	0.0052	-0.0064	-0.0234	-0.0093	-0.0450
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001
EUR	-0.0144	-0.0147	-0.0147	-0.0100	-0.0065	-0.0033	-0.0002	-0.0001	-0.0124	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	-0.0187	0.0000	0.0000	0.0000	-0.0016	-0.0060	-0.0230	-0.0032	-0.0028
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0006	0.0000
NEU	0.0092	0.0102	0.0102	0.0093	0.0065	0.0105	0.0000	0.0001	0.0072	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0003	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0002	-0.0001	-0.0002	-0.0021
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0400

Table 139: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr)

5.1.4 Cereals—Temperate cereals





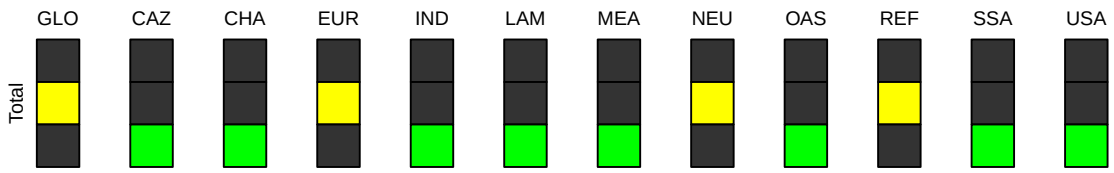


Figure 47: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.12970	-0.19280	-0.37070	-0.36930	-0.34980	-0.28330	-0.18350	-0.09890	-0.04600	-0.01630	0.00
CAZ	-0.03320	-0.17820	-0.29550	-0.29440	-0.27880	-0.22580	-0.14630	-0.07870	-0.03660	-0.01300	0.00
CHA	0.00000	0.00000	-0.00020	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000	0.00
EUR	0.00000	-0.00290	-0.02310	-0.02300	-0.02180	-0.01760	-0.01140	-0.00620	-0.00290	-0.00100	0.00
IND	0.00000	-0.00020	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00
LAM	0.00610	-0.00450	-0.01080	-0.01070	-0.01010	-0.00820	-0.00530	-0.00290	-0.00130	-0.00050	0.00
MEA	0.00000	-0.00040	-0.00930	-0.00930	-0.00880	-0.00710	-0.00460	-0.00250	-0.00120	-0.00040	0.00
NEU	0.00690	0.00570	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
OAS	-0.00630	-0.00060	-0.01930	-0.01920	-0.01820	-0.01480	-0.00960	-0.00510	-0.00240	-0.00090	0.00
REF	-0.00050	-0.00110	-0.00210	-0.00210	-0.00200	-0.00160	-0.00100	-0.00060	-0.00030	-0.00010	0.00
SSA	-0.04160	-0.00290	-0.00480	-0.00480	-0.00460	-0.00370	-0.00240	-0.00130	-0.00060	-0.00020	0.00
USA	-0.06110	-0.00770	-0.00550	-0.00550	-0.00520	-0.00420	-0.00270	-0.00150	-0.00070	-0.00020	0.00

Table 140: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

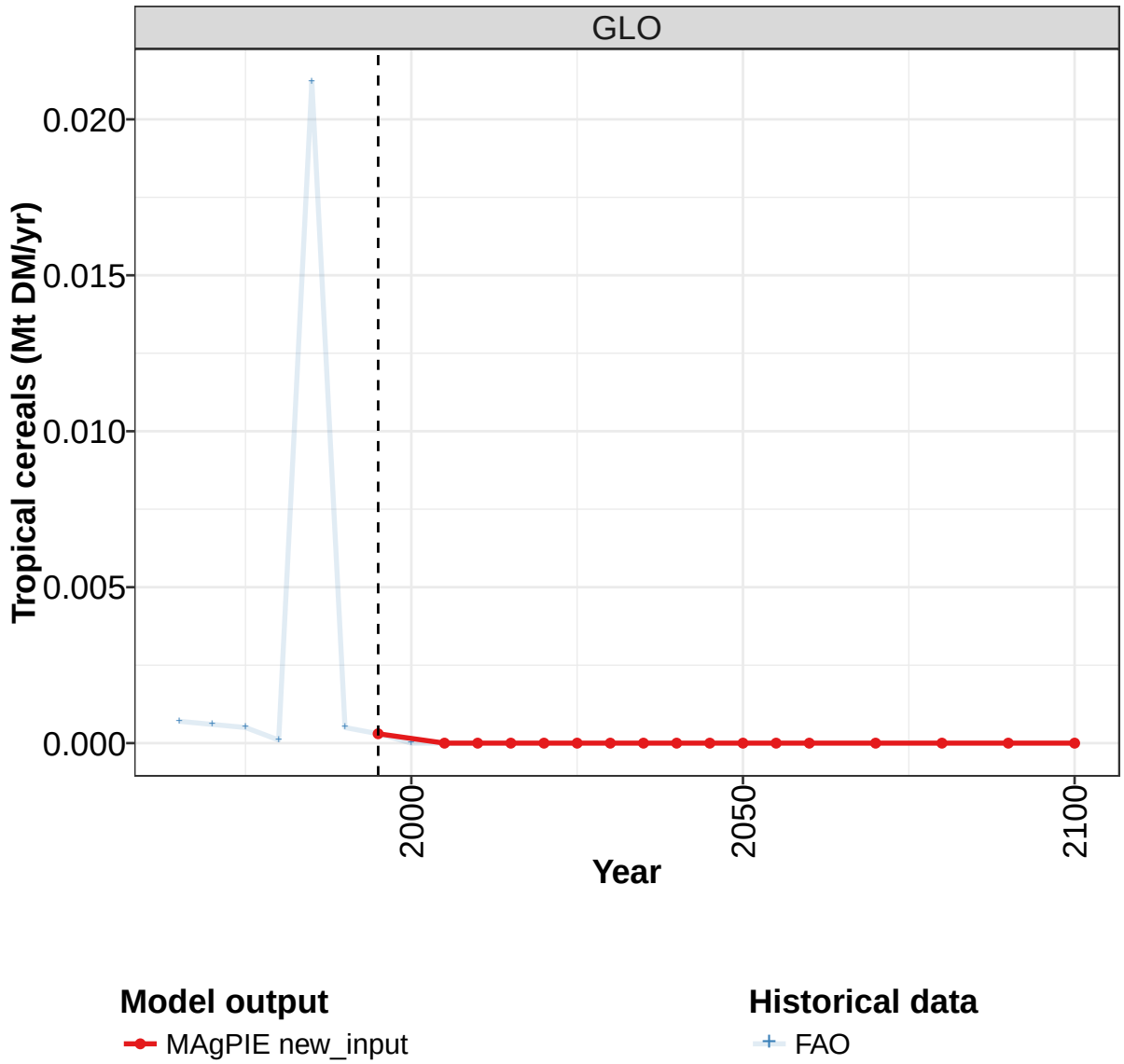
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

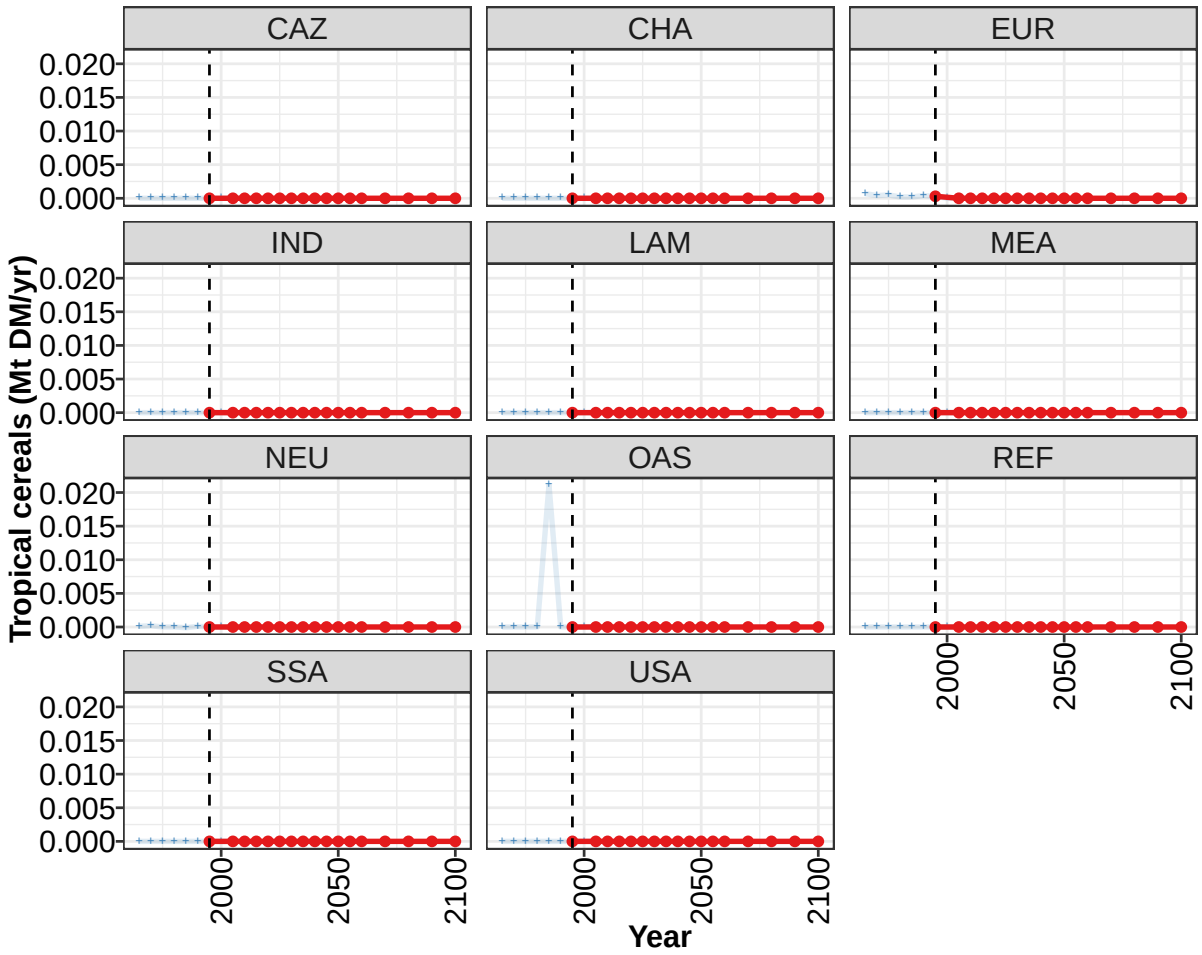
Table 141: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.169	0.146	-0.208	0.030	0.028	-0.007	-0.130	-0.140	-0.193	-0.371
CAZ	0.000	-0.004	-0.001	-0.000	-0.195	0.045	-0.033	-0.051	-0.178	-0.295
CHA	0.000	0.000	0.000	0.000	-0.001	-0.018	0.000	-0.000	0.000	-0.000
EUR	-0.286	-0.250	-0.534	-0.202	-0.126	0.113	0.000	-0.031	-0.003	-0.023
IND	0.000	0.000	0.000	0.000	0.000	0.001	0.000	-0.000	-0.000	-0.000
LAM	-0.001	-0.002	-0.026	-0.001	-0.002	-0.019	0.006	-0.012	-0.004	-0.011
MEA	-0.000	-0.000	-0.010	-0.001	-0.000	-0.005	0.000	0.000	-0.000	-0.009
NEU	0.086	0.094	0.107	0.130	0.122	0.113	0.007	0.006	0.006	0.000
OAS	0.000	0.018	-0.004	-0.003	-0.007	-0.006	-0.006	0.000	-0.001	-0.019
REF	0.370	0.293	0.260	0.218	0.269	-0.132	-0.001	0.000	-0.001	-0.002
SSA	-0.000	-0.003	-0.000	-0.067	-0.011	0.000	-0.042	-0.000	-0.003	-0.005
USA	0.000	0.000	0.000	-0.043	-0.021	-0.098	-0.061	-0.051	-0.008	-0.005

Table 142: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr)

5.1.5 Cereals—Tropical cereals





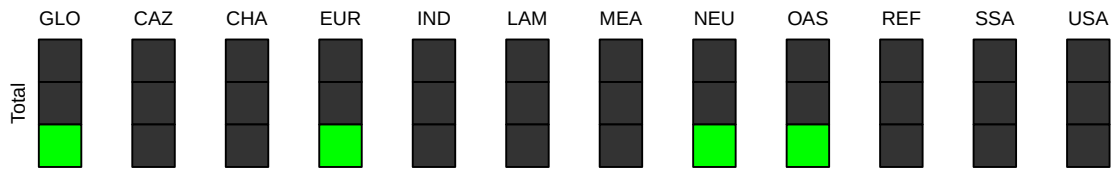


Figure 48: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.000300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
EUR	0.000300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
REF	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 143: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

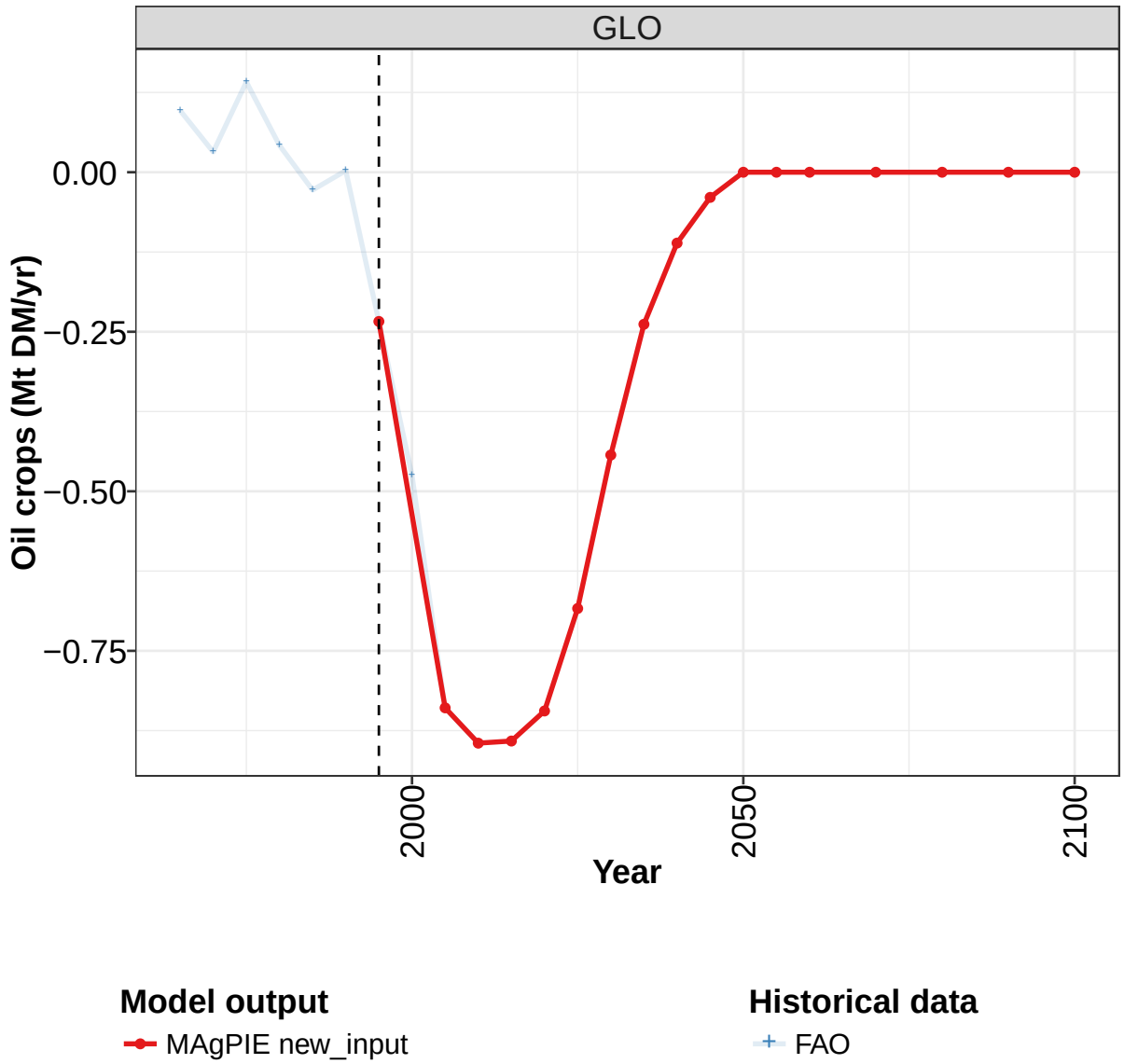
	2055	2060	2070	2080	2090	2100
GLO	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
EUR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
REF	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

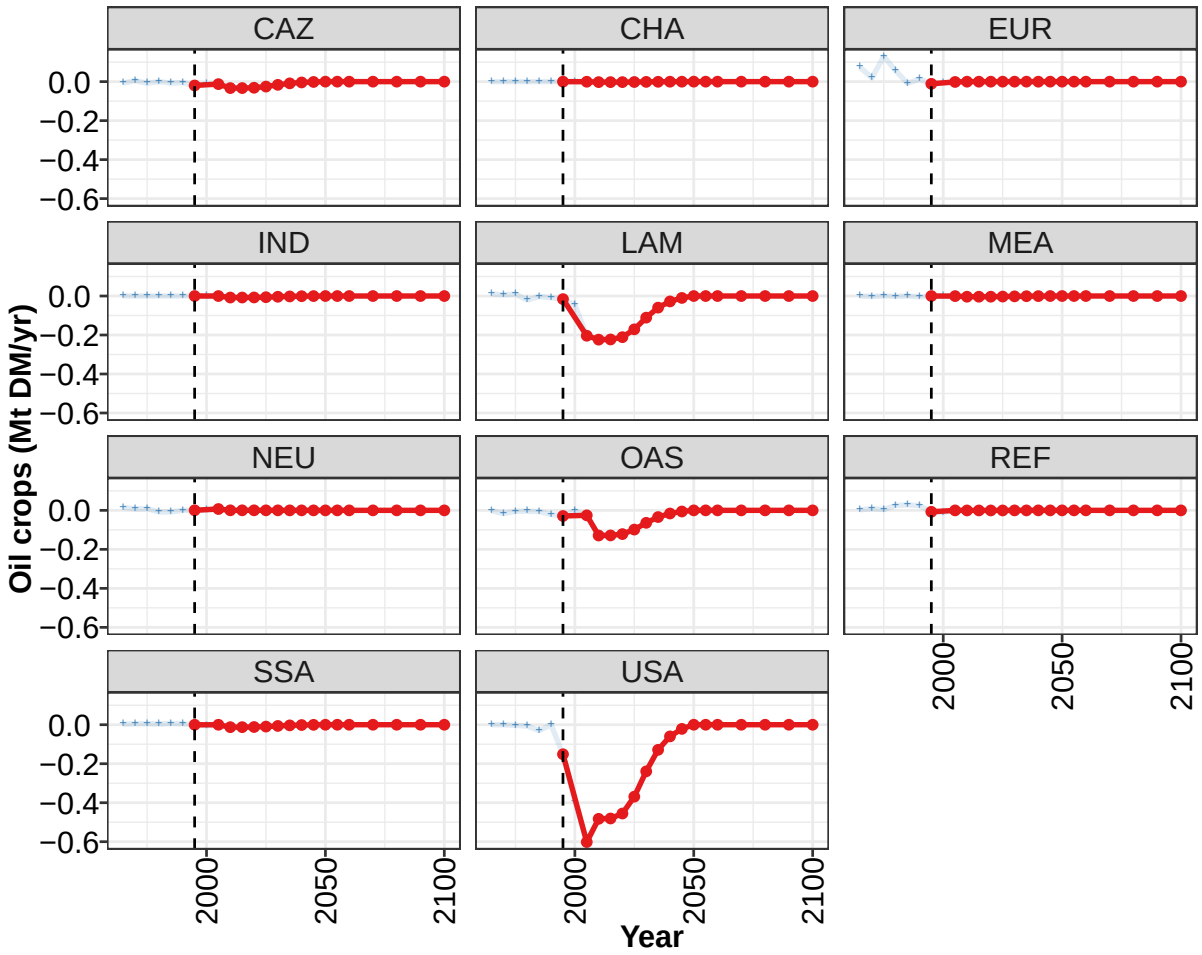
Table 144: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0007	0.0006	0.0005	0.0001	0.0212	0.0005	0.0003	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0007	0.0004	0.0005	0.0002	0.0002	0.0004	0.0003	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0001	0.0002	0.0000	0.0000	-0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0211	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 145: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr)

5.1.6 Oil crops





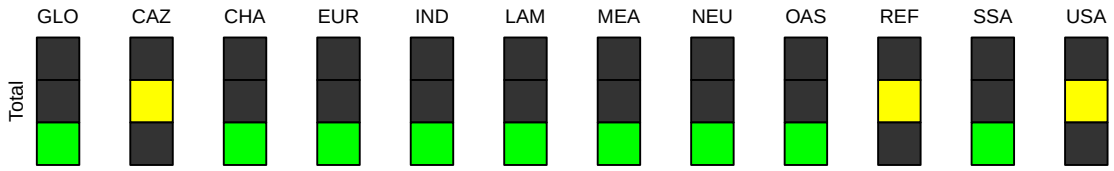


Figure 49: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.23380	-0.83930	-0.89460	-0.89130	-0.84420	-0.68360	-0.44310	-0.23820	-0.11100	-0.03940	0.00
CAZ	-0.01950	-0.01270	-0.03300	-0.03290	-0.03120	-0.02530	-0.01640	-0.00880	-0.00410	-0.00150	0.00
CHA	0.00000	-0.00040	-0.00240	-0.00240	-0.00230	-0.00180	-0.00120	-0.00060	-0.00030	-0.00010	0.00
EUR	-0.01110	-0.00160	-0.00010	-0.00010	-0.00010	0.00000	-0.00000	-0.00000	-0.00010	0.00000	0.00
IND	0.00000	0.00000	-0.00780	-0.00780	-0.00740	-0.00600	-0.00390	-0.00210	-0.00100	-0.00030	0.00
LAM	-0.01590	-0.20370	-0.22370	-0.22290	-0.21100	-0.17090	-0.11090	-0.05960	-0.02780	-0.00990	0.00
MEA	-0.00010	-0.00040	-0.00360	-0.00360	-0.00350	-0.00280	-0.00180	-0.00090	-0.00040	-0.00010	0.00
NEU	0.00040	0.00700	0.00030	0.00030	0.00030	0.00020	0.00020	0.00010	0.00000	0.00000	0.00
OAS	-0.02880	-0.02550	-0.12890	-0.12840	-0.12160	-0.09850	-0.06380	-0.03430	-0.01600	-0.00570	0.00
REF	-0.00730	-0.00010	-0.00040	-0.00040	-0.00040	-0.00030	-0.00010	-0.00010	0.00000	0.00000	0.00
SSA	-0.00020	-0.00020	-0.01240	-0.01230	-0.01170	-0.00940	-0.00620	-0.00330	-0.00150	-0.00050	0.00
USA	-0.15130	-0.60170	-0.48260	-0.48080	-0.45530	-0.36880	-0.23900	-0.12860	-0.05980	-0.02130	0.00

Table 146: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr) [PART 1/2]

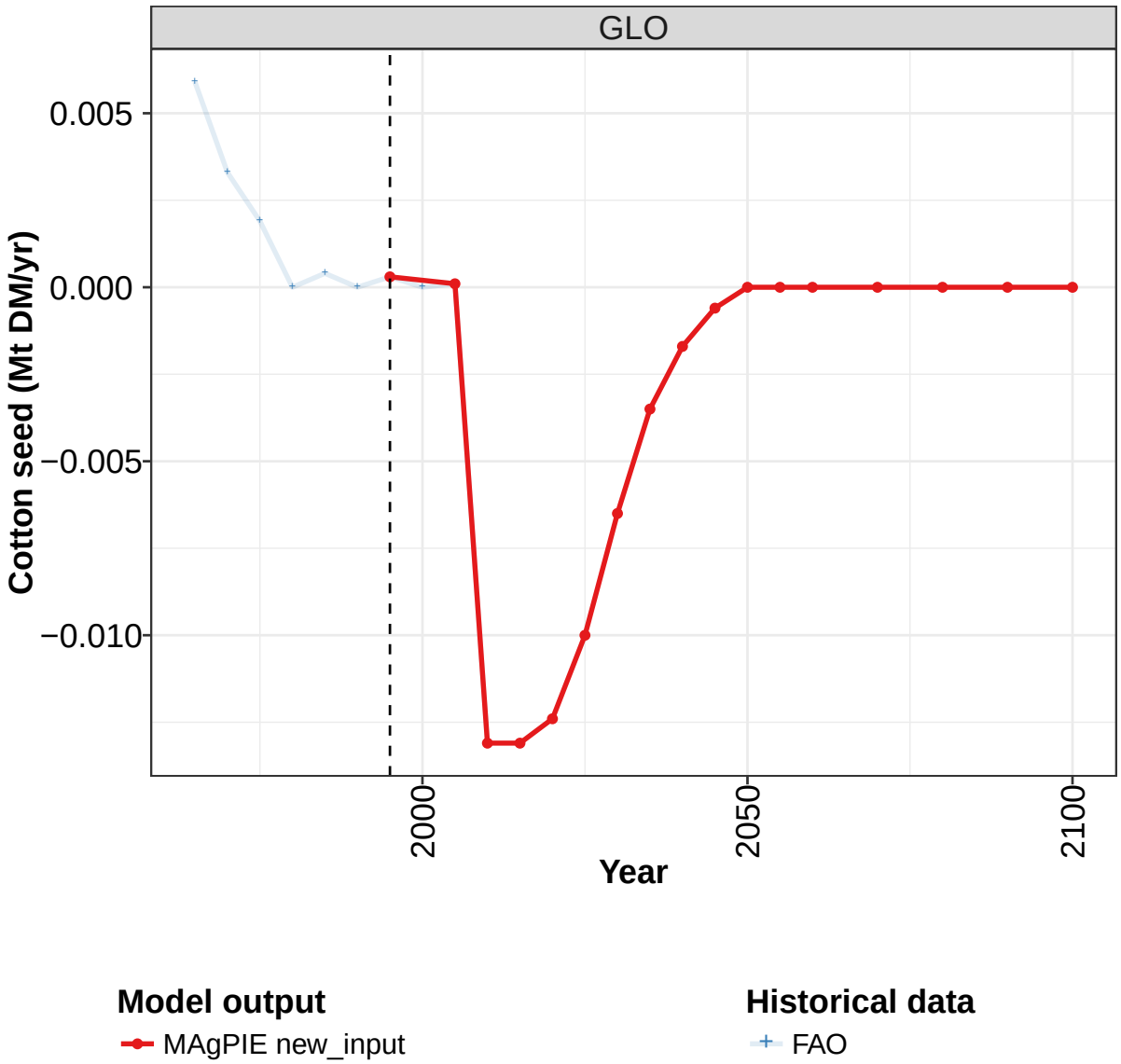
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

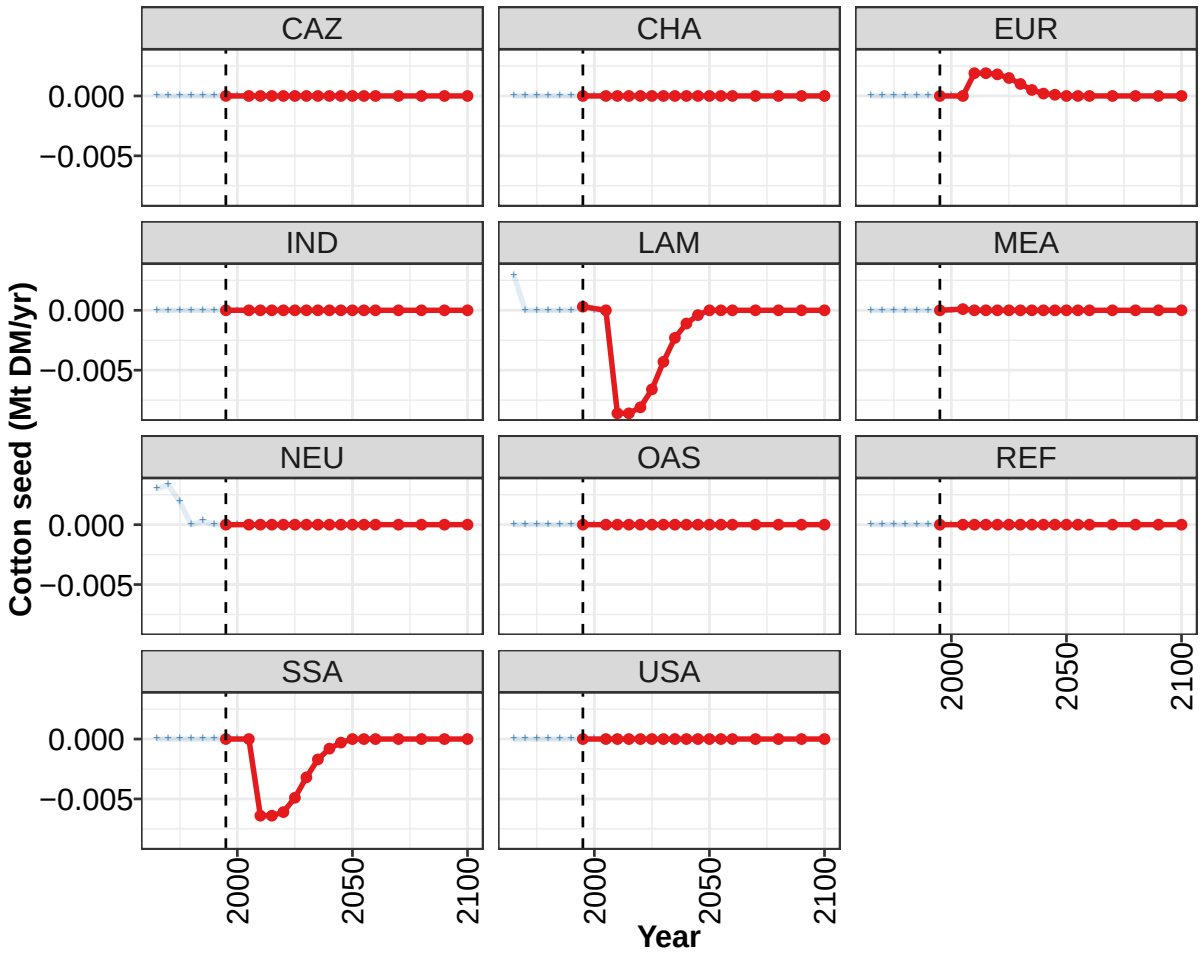
Table 147: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.097	0.032	0.141	0.042	-0.028	0.003	-0.234	-0.475	-0.840	-0.895
CAZ	-0.007	0.005	-0.008	0.000	-0.007	-0.005	-0.019	-0.013	-0.013	-0.033
CHA	-0.001	0.000	0.000	0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.002
EUR	0.074	0.019	0.129	0.056	-0.009	0.013	-0.011	-0.005	-0.002	-0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.008
LAM	0.010	0.006	0.009	-0.021	-0.002	-0.009	-0.016	-0.046	-0.204	-0.224
MEA	0.000	-0.002	-0.000	-0.002	-0.000	-0.004	-0.000	0.000	-0.000	-0.004
NEU	0.015	0.007	0.009	-0.009	-0.008	0.000	0.000	0.002	0.007	0.000
OAS	-0.001	-0.016	-0.005	-0.004	-0.006	-0.021	-0.029	-0.003	-0.025	-0.129
REF	0.003	0.008	0.004	0.025	0.028	0.024	-0.007	-0.011	-0.000	-0.000
SSA	0.003	0.005	0.005	0.004	0.007	0.005	-0.000	-0.006	-0.000	-0.012
USA	0.000	0.000	-0.003	-0.007	-0.030	0.000	-0.151	-0.394	-0.602	-0.483

Table 148: FAO — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr)

5.1.7 Oil crops—Cotton seed





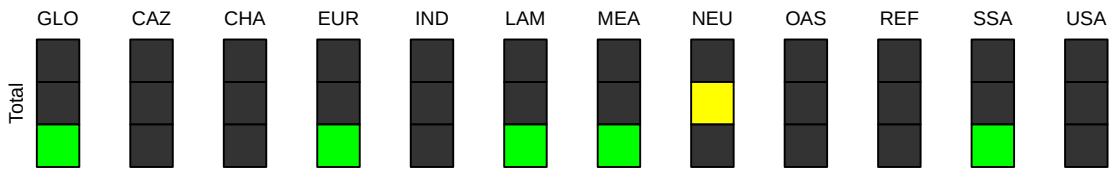


Figure 50: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	205
GLO	0.00030	0.00010	-0.01310	-0.01310	-0.01240	-0.01000	-0.00650	-0.00350	-0.00170	-0.00060	0.0000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
EUR	0.00000	0.00000	0.00190	0.00190	0.00180	0.00150	0.00100	0.00050	0.00020	0.00010	0.0000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
LAM	0.00030	0.00000	-0.00860	-0.00860	-0.00810	-0.00660	-0.00430	-0.00230	-0.00110	-0.00040	0.0000
MEA	0.00000	0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
SSA	0.00000	0.00000	-0.00640	-0.00640	-0.00610	-0.00490	-0.00320	-0.00170	-0.00080	-0.00030	0.0000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000

Table 149: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

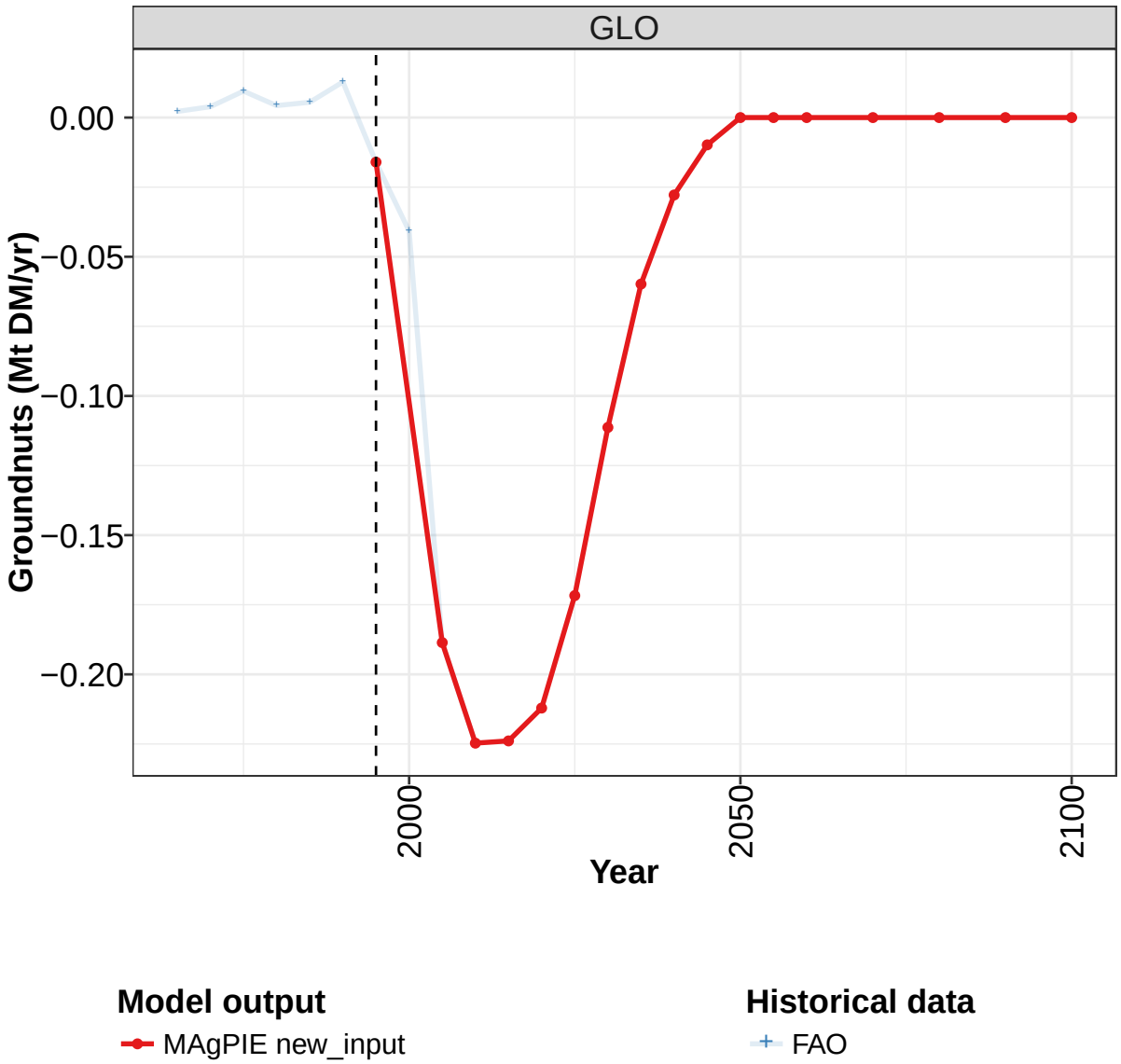
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

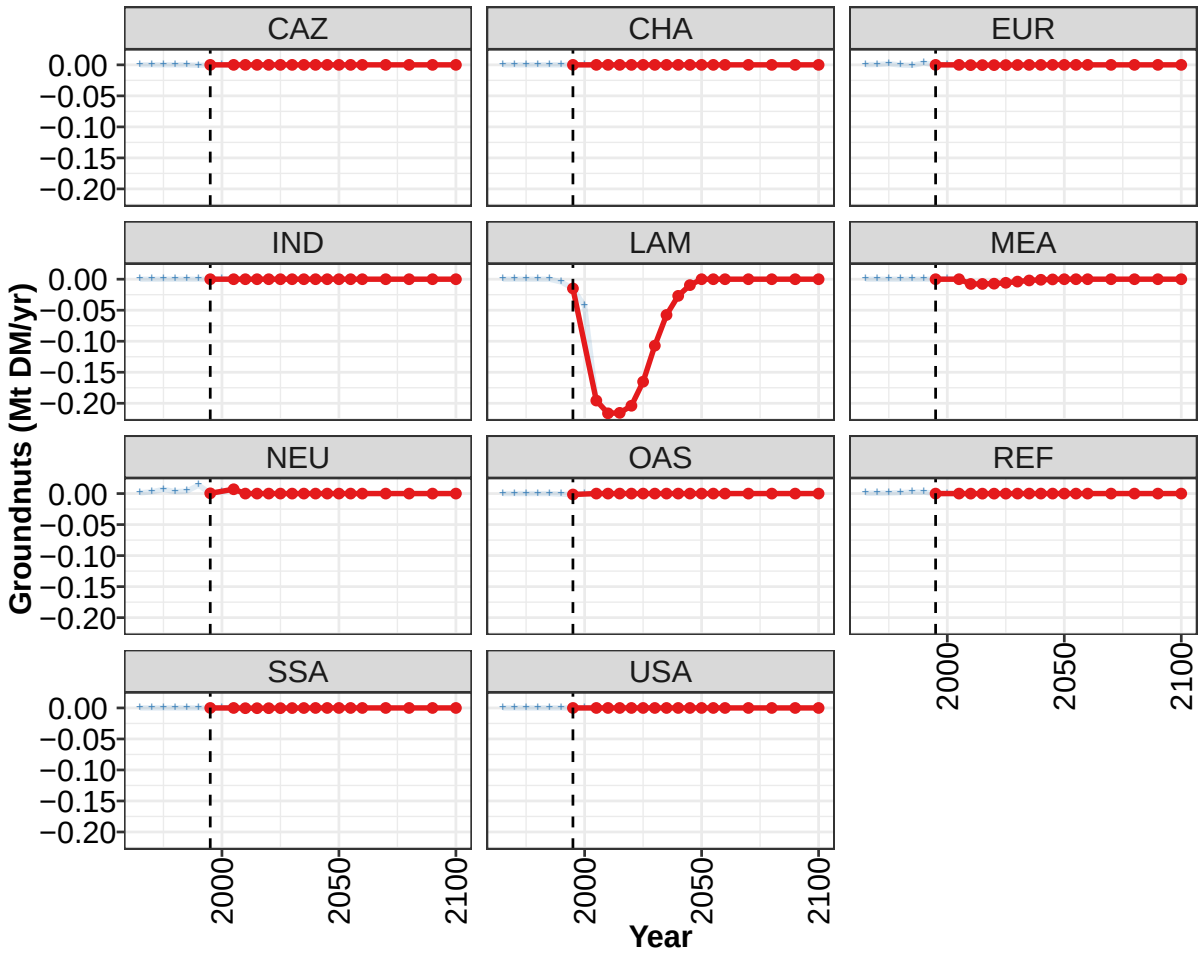
Table 150: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00590	0.00330	0.00190	0.00000	0.00040	0.00000	0.00030	0.00000	0.00010	-0.01310
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00190
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00290	0.00000	0.00000	0.00000	0.00000	0.00000	0.00030	0.00000	0.00000	-0.00860
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00010	0.00000
NEU	0.00300	0.00330	0.00190	0.00000	0.00030	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00640
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 151: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr)

5.1.8 Oil crops—Groundnuts





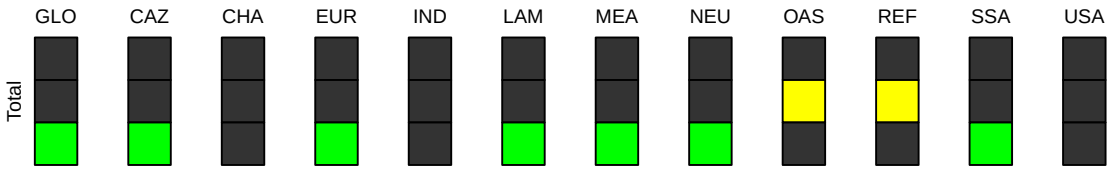


Figure 51: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.01600	-0.18860	-0.22470	-0.22390	-0.21210	-0.17170	-0.11130	-0.05980	-0.02780	-0.00980	0.00
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
EUR	0.00000	0.00000	-0.00040	-0.00040	-0.00040	-0.00030	-0.00020	-0.00010	-0.00010	0.00000	0.00
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
LAM	-0.01490	-0.19560	-0.21620	-0.21540	-0.20400	-0.16520	-0.10710	-0.05760	-0.02680	-0.00950	0.00
MEA	0.00000	0.00000	-0.00760	-0.00760	-0.00720	-0.00580	-0.00380	-0.00200	-0.00090	-0.00030	0.00
NEU	0.00040	0.00700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
OAS	-0.00150	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
REF	0.00000	0.00000	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00
SSA	0.00000	0.00000	-0.00040	-0.00040	-0.00040	-0.00030	-0.00020	-0.00010	0.00000	0.00000	0.00
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00

Table 152: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

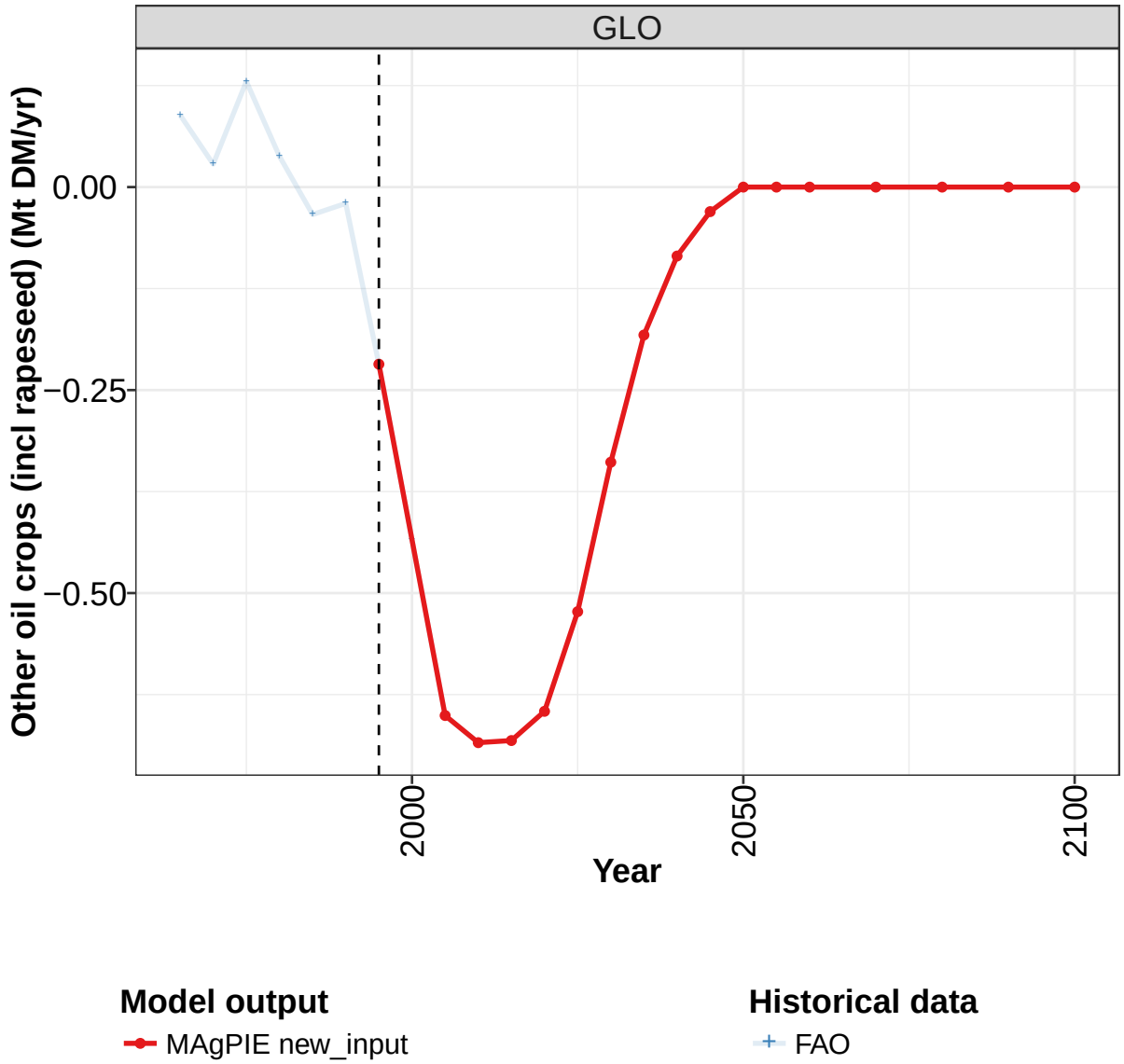
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 153: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0022	0.0039	0.0095	0.0043	0.0055	0.0128	-0.0160	-0.0408	-0.1887	-0.2247
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0008	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0003	0.0005	0.0018	-0.0003	-0.0008	0.0030	0.0000	-0.0001	0.0000	-0.0004
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0044	-0.0149	-0.0435	-0.1956	-0.2162
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	0.0000	-0.0076
NEU	0.0012	0.0028	0.0068	0.0031	0.0039	0.0136	0.0004	0.0025	0.0070	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0010	-0.0015	0.0000	0.0000	0.0000
REF	0.0007	0.0006	0.0009	0.0015	0.0024	0.0023	0.0000	-0.0001	0.0000	-0.0001
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0004
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 154: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr)

5.1.9 Oil crops—Other oil crops (incl rapeseed)



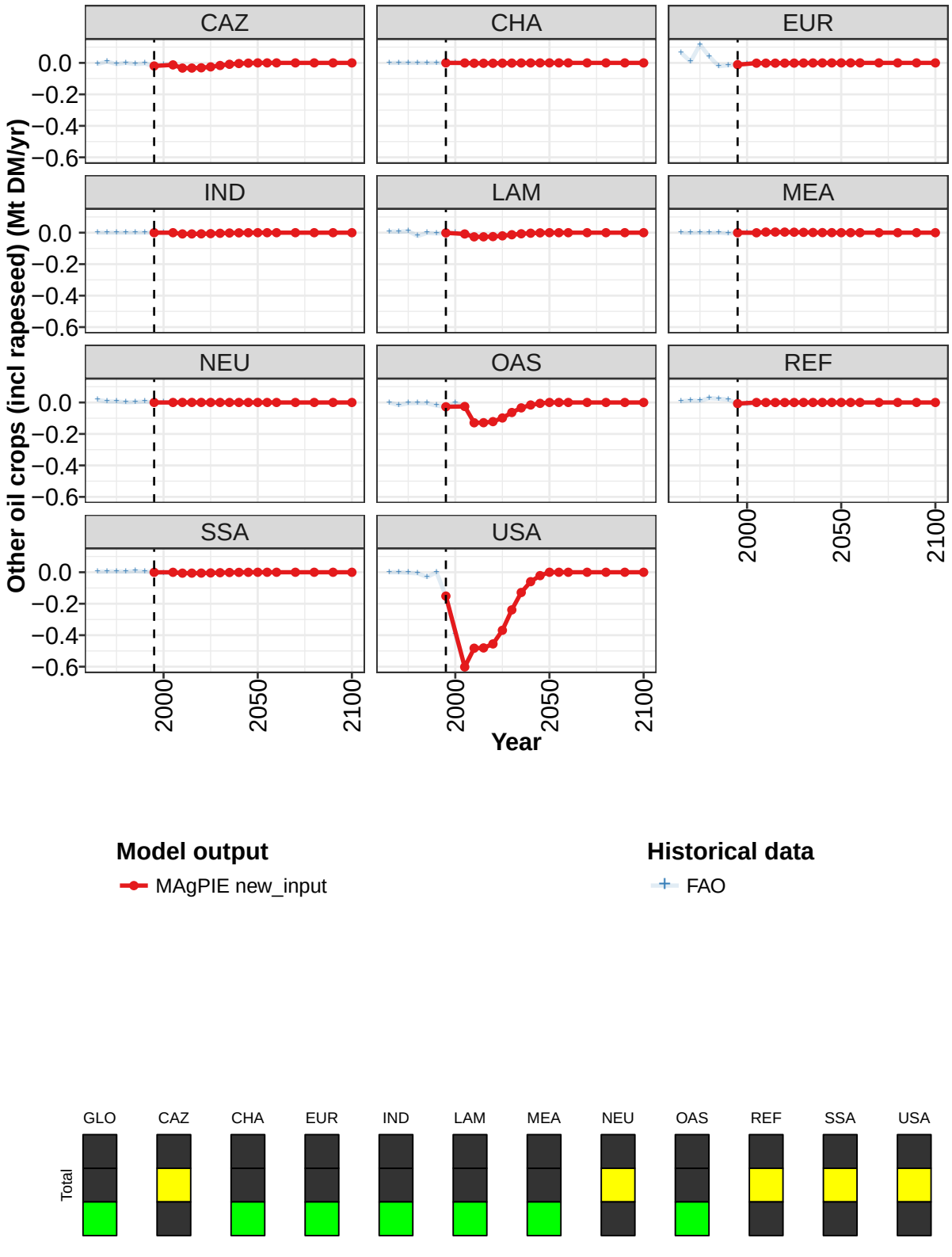


Figure 52: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.21810	-0.65080	-0.68420	-0.68160	-0.64560	-0.52290	-0.33880	-0.18220	-0.08490	-0.03020	0.00
CAZ	-0.01950	-0.01270	-0.03300	-0.03290	-0.03120	-0.02530	-0.01640	-0.00880	-0.00410	-0.00150	0.00
CHA	0.00000	-0.00040	-0.00240	-0.00240	-0.00230	-0.00180	-0.00120	-0.00060	-0.00030	-0.00010	0.00
EUR	-0.01110	-0.00160	-0.00160	-0.00160	-0.00150	-0.00120	-0.00080	-0.00040	-0.00020	-0.00010	0.00
IND	0.00000	0.00000	-0.00780	-0.00780	-0.00740	-0.00600	-0.00390	-0.00210	-0.00100	-0.00030	0.00
LAM	-0.00130	-0.00810	-0.02630	-0.02620	-0.02480	-0.02010	-0.01300	-0.00700	-0.00330	-0.00120	0.00
MEA	-0.00010	-0.00050	0.00400	0.00400	0.00370	0.00300	0.00200	0.00110	0.00050	0.00020	0.00
NEU	0.00000	0.00000	0.00030	0.00030	0.00030	0.00020	0.00020	0.00010	0.00000	0.00000	0.00
OAS	-0.02730	-0.02550	-0.12890	-0.12840	-0.12160	-0.09850	-0.06380	-0.03430	-0.01600	-0.00570	0.00
REF	-0.00730	-0.00010	-0.00030	-0.00030	-0.00030	-0.00020	-0.00010	-0.00010	0.00000	0.00000	0.00
SSA	-0.00020	-0.00020	-0.00560	-0.00550	-0.00520	-0.00420	-0.00280	-0.00150	-0.00070	-0.00020	0.00
USA	-0.15130	-0.60170	-0.48260	-0.48080	-0.45530	-0.36880	-0.23900	-0.12860	-0.05980	-0.02130	0.00

Table 155: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

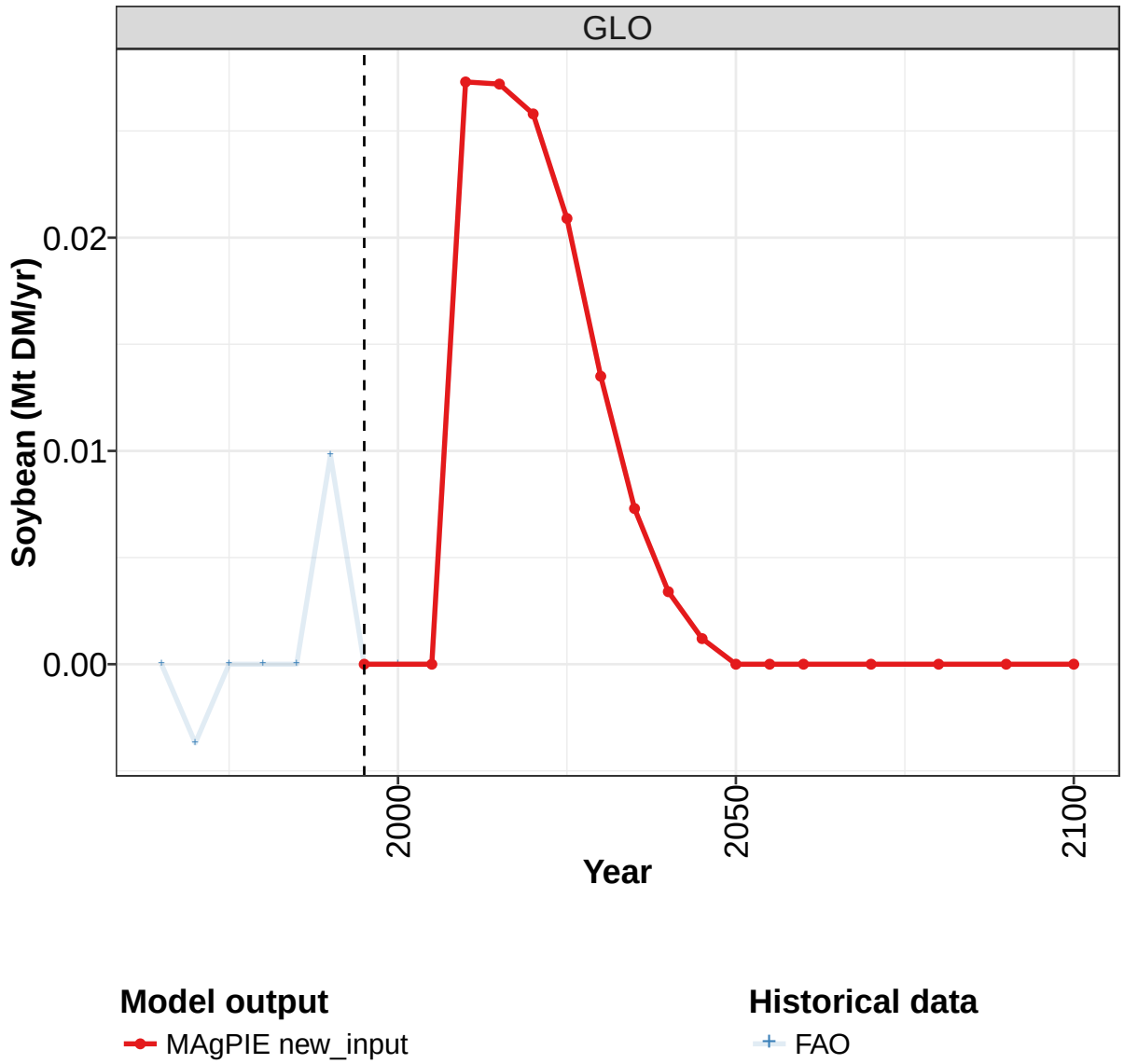
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

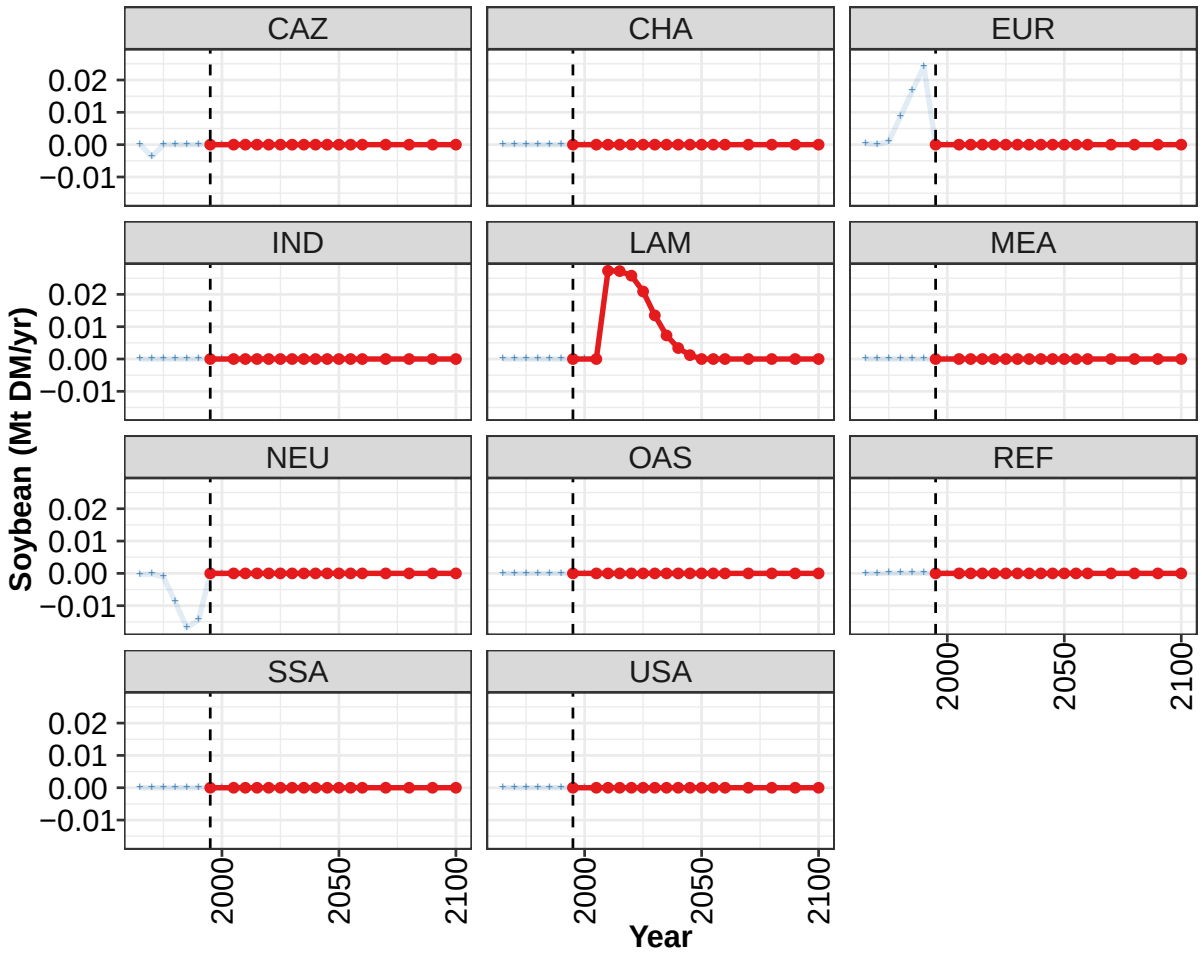
Table 156: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.089	0.028	0.130	0.038	-0.034	-0.020	-0.218	-0.434	-0.651	-0.684
CAZ	-0.007	0.009	-0.008	0.000	-0.007	-0.004	-0.019	-0.013	-0.013	-0.033
CHA	-0.001	0.000	0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.002
EUR	0.063	0.009	0.116	0.040	-0.021	-0.015	-0.011	-0.005	-0.002	-0.002
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.008
LAM	0.007	0.006	0.009	-0.021	-0.002	-0.005	-0.001	-0.002	-0.008	-0.026
MEA	0.000	-0.002	-0.000	-0.002	-0.000	-0.004	-0.000	-0.000	-0.001	0.004
NEU	0.017	0.006	0.006	0.001	0.003	0.005	0.000	-0.001	0.000	0.000
OAS	-0.001	-0.016	-0.005	-0.004	-0.006	-0.020	-0.027	-0.003	-0.025	-0.129
REF	0.007	0.013	0.010	0.028	0.024	0.018	-0.007	-0.011	-0.000	-0.000
SSA	0.003	0.005	0.005	0.004	0.007	0.005	-0.000	-0.006	-0.000	-0.006
USA	0.000	0.000	-0.003	-0.007	-0.030	0.000	-0.151	-0.394	-0.602	-0.483

Table 157: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

5.1.10 Oil crops—Soybean





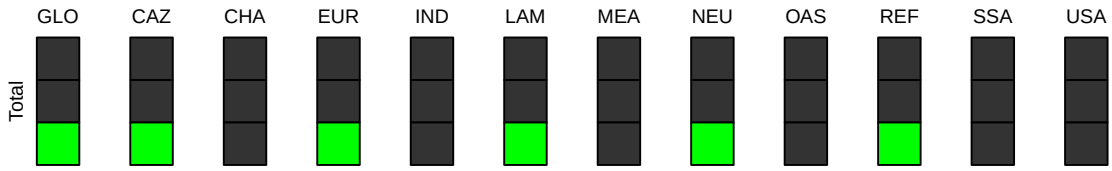


Figure 53: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0000	0.0000	0.0273	0.0272	0.0258	0.0209	0.0135	0.0073	0.0034	0.0012	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0273	0.0272	0.0258	0.0209	0.0135	0.0073	0.0034	0.0012	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 158: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

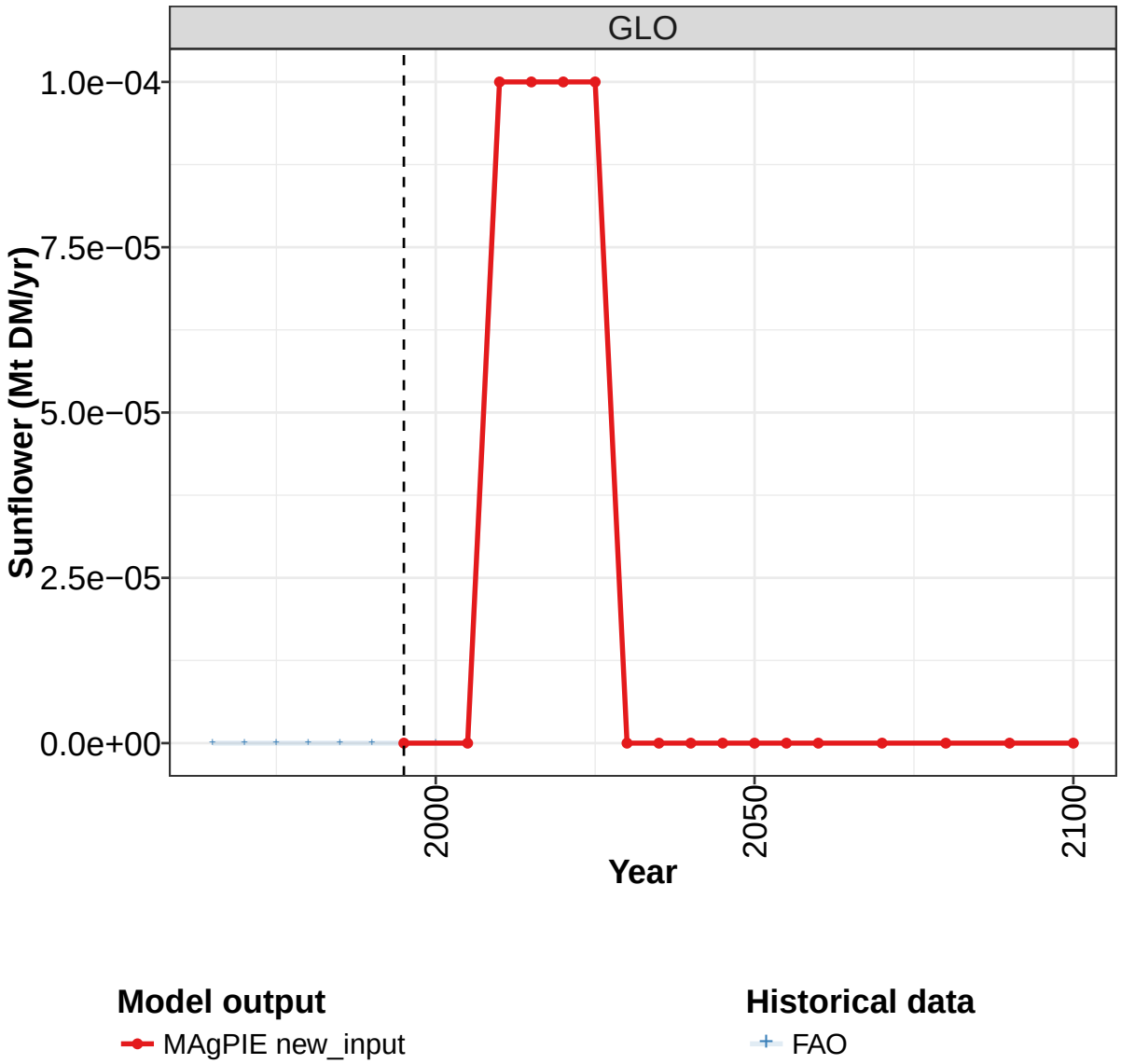
	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 159: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0000	-0.0037	0.0000	0.0000	0.0000	0.0098	0.0000	0.0000	0.0000	0.0273
CAZ	0.0000	-0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0003	0.0001	0.0010	0.0087	0.0166	0.0241	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0273
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	-0.0003	-0.0002	-0.0011	-0.0088	-0.0168	-0.0144	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 160: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr)

5.1.11 Oil crops—Sunflower



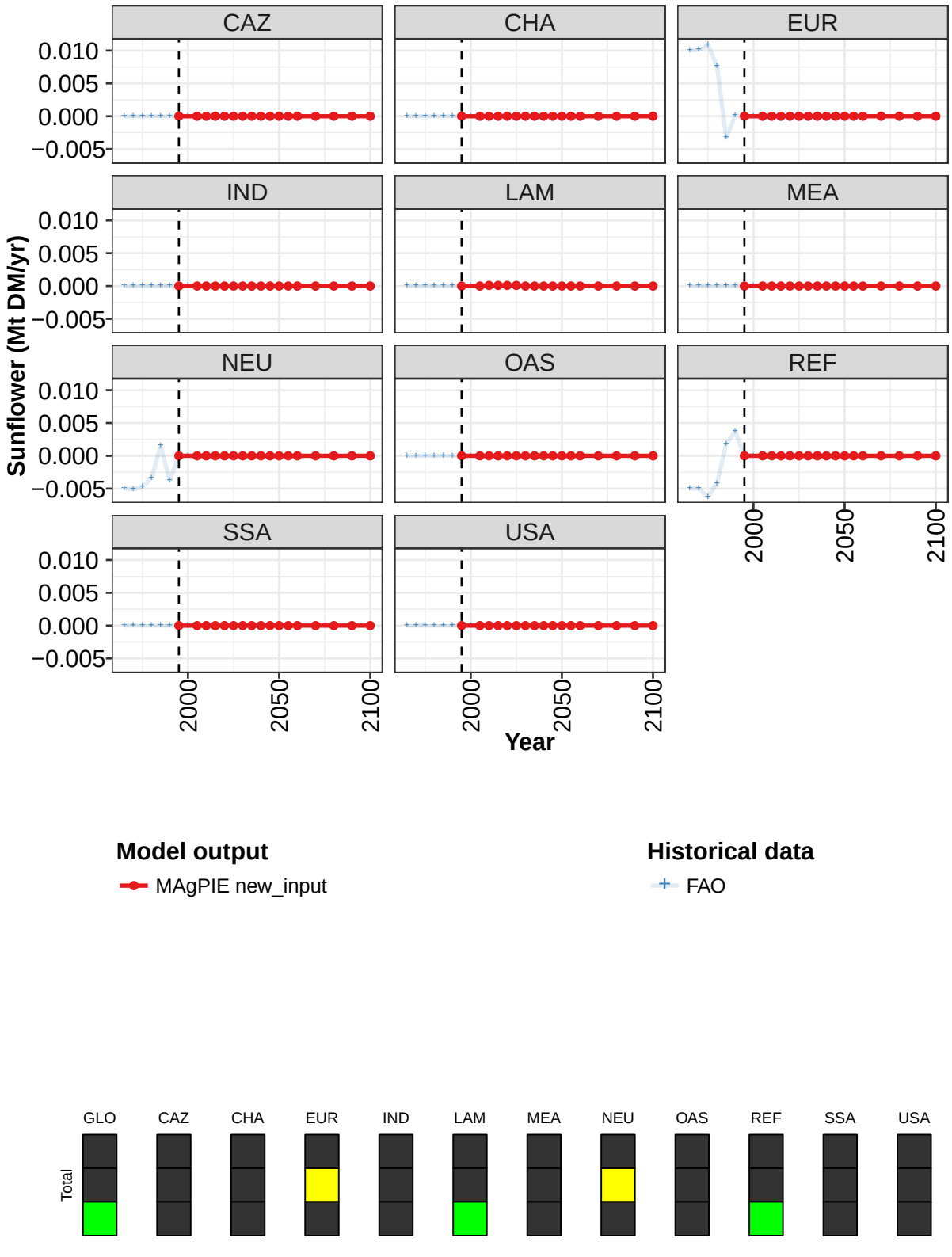


Figure 54: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	
GLO	0.0000000	0.0000000	0.0001000	0.0001000	0.0001000	0.0001000	0.0000000	0.0000000	0.0000000	0.
CAZ	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
CHA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
EUR	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
IND	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
LAM	0.0000000	0.0000000	0.0001000	0.0001000	0.0001000	0.0001000	0.0000000	0.0000000	0.0000000	0.
MEA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
NEU	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
OAS	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
REF	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
SSA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
USA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.

Table 161: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

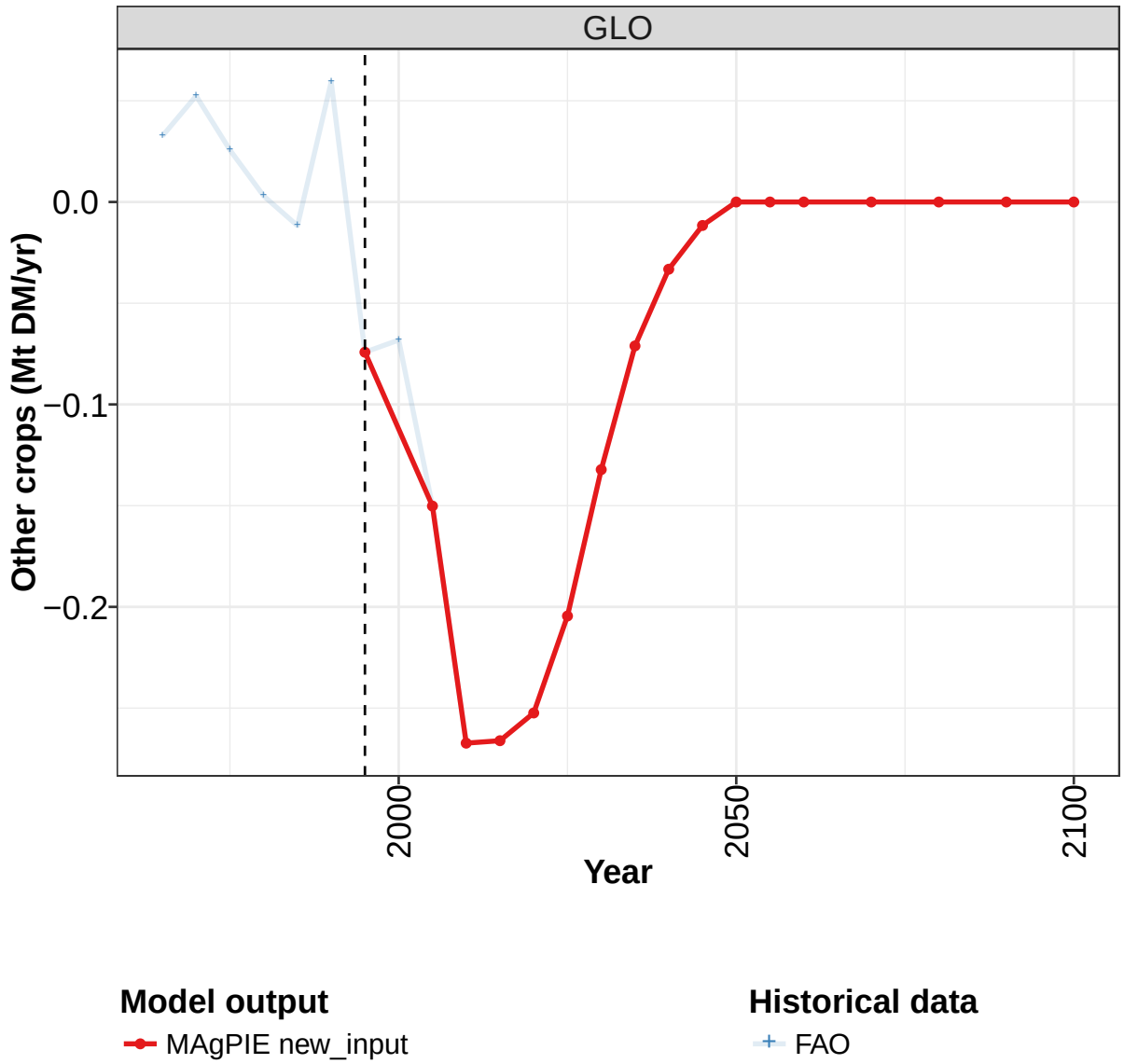
	2055	2060	2070	2080	2090	2100
GLO	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
CAZ	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
CHA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
EUR	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
IND	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
LAM	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
MEA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
NEU	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
OAS	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
REF	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
SSA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
USA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

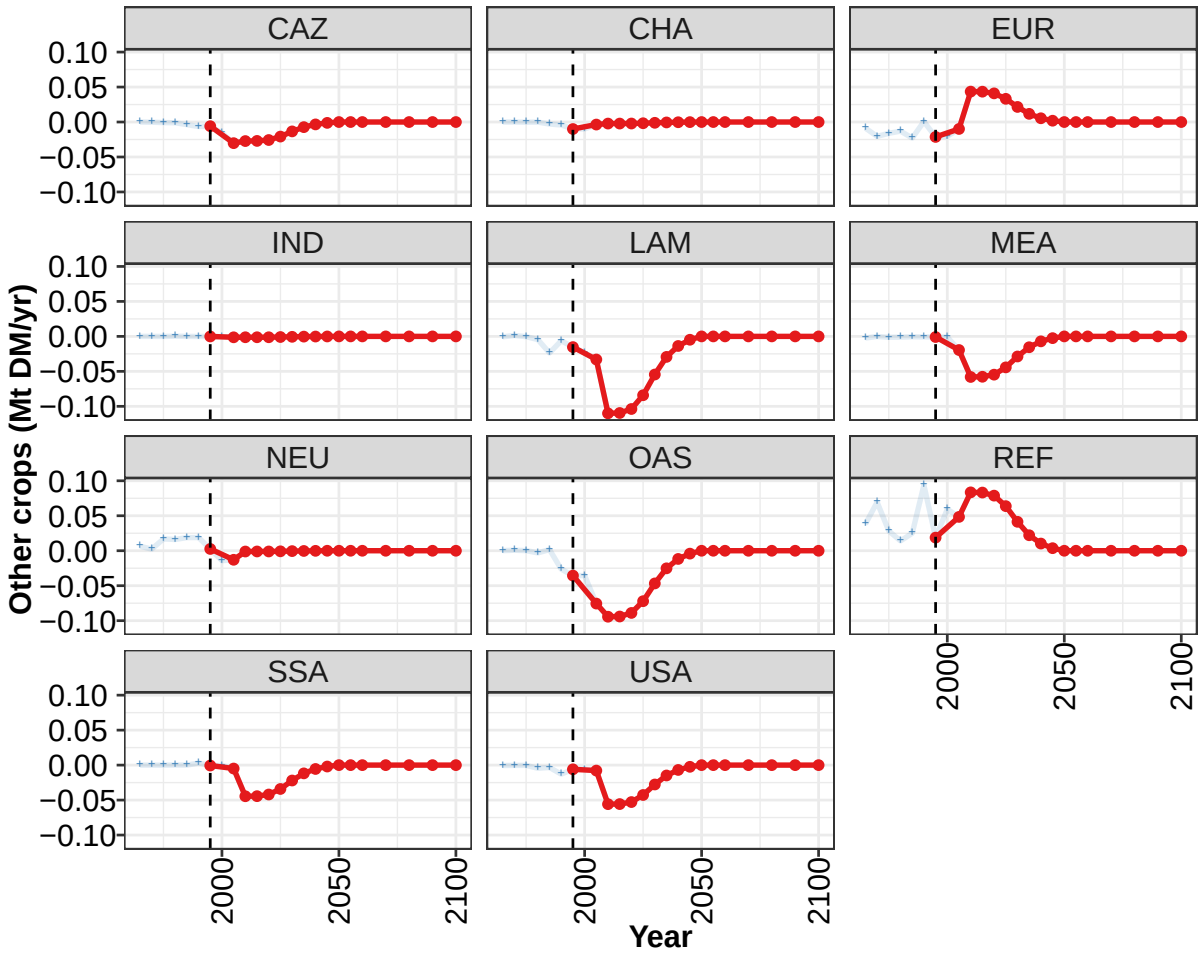
Table 162: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0100	0.0101	0.0109	0.0076	-0.0033	0.0001	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	-0.0050	-0.0051	-0.0047	-0.0034	0.0015	-0.0038	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	-0.0050	-0.0050	-0.0063	-0.0042	0.0018	0.0037	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 163: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr)

5.1.12 Other crops





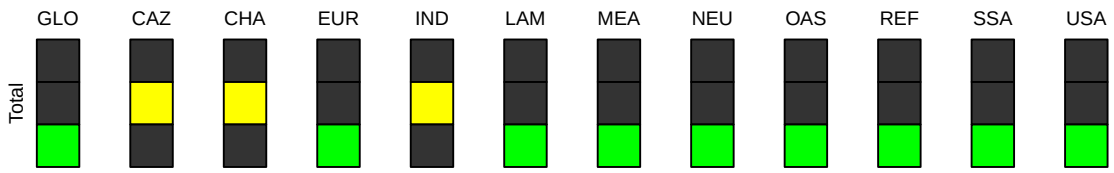


Figure 55: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0.0742	-0.1502	-0.2673	-0.2661	-0.2524	-0.2045	-0.1322	-0.0711	-0.0332	-0.0116	0.0000
CAZ	-0.0059	-0.0302	-0.0272	-0.0270	-0.0257	-0.0208	-0.0134	-0.0073	-0.0034	-0.0012	0.0000
CHA	-0.0100	-0.0036	-0.0022	-0.0022	-0.0021	-0.0017	-0.0011	-0.0006	-0.0003	-0.0001	0.0000
EUR	-0.0213	-0.0099	0.0435	0.0434	0.0410	0.0332	0.0216	0.0117	0.0054	0.0019	0.0000
IND	-0.0001	-0.0013	-0.0012	-0.0012	-0.0012	-0.0009	-0.0006	-0.0003	-0.0002	-0.0001	0.0000
LAM	-0.0153	-0.0330	-0.1100	-0.1095	-0.1038	-0.0841	-0.0545	-0.0293	-0.0137	-0.0048	0.0000
MEA	-0.0009	-0.0195	-0.0580	-0.0577	-0.0547	-0.0443	-0.0287	-0.0155	-0.0071	-0.0025	0.0000
NEU	0.0026	-0.0129	-0.0011	-0.0010	-0.0010	-0.0008	-0.0005	-0.0003	-0.0001	0.0000	0.0000
OAS	-0.0355	-0.0755	-0.0943	-0.0940	-0.0889	-0.0721	-0.0467	-0.0251	-0.0117	-0.0041	0.0000
REF	0.0188	0.0484	0.0835	0.0832	0.0788	0.0638	0.0414	0.0222	0.0103	0.0037	0.0000
SSA	-0.0006	-0.0049	-0.0445	-0.0444	-0.0420	-0.0341	-0.0220	-0.0118	-0.0055	-0.0020	0.0000
USA	-0.0060	-0.0078	-0.0558	-0.0557	-0.0528	-0.0427	-0.0277	-0.0148	-0.0069	-0.0024	0.0000

Table 164: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr) [PART 1/2]

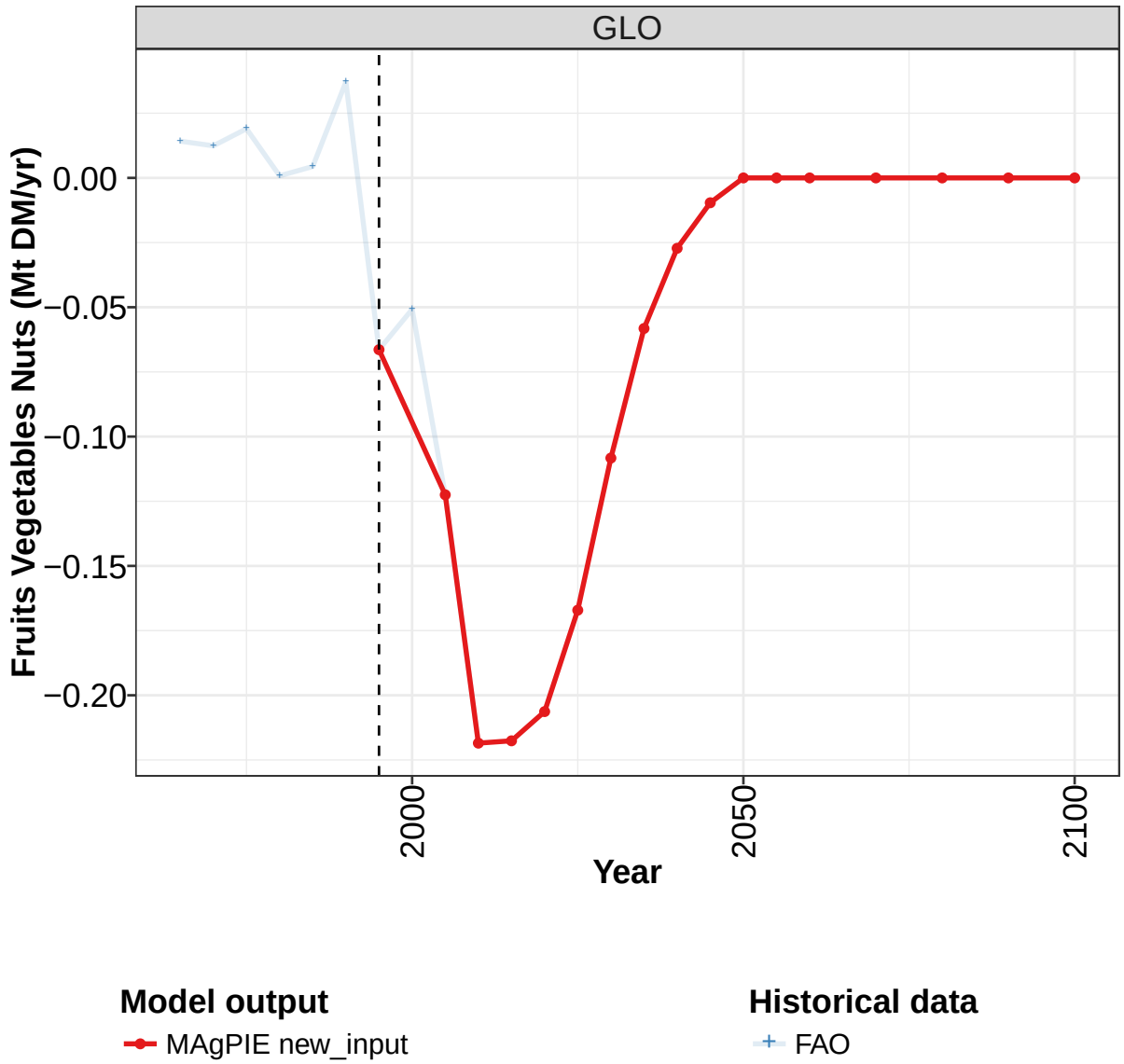
	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 165: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0326	0.0524	0.0257	0.0030	-0.0117	0.0593	-0.0742	-0.0682	-0.1502	-0.2672
CAZ	0.0000	-0.0003	-0.0008	-0.0011	-0.0037	-0.0064	-0.0060	-0.0157	-0.0303	-0.0272
CHA	0.0000	0.0000	-0.0002	-0.0001	-0.0029	-0.0042	-0.0100	-0.0099	-0.0036	-0.0022
EUR	-0.0087	-0.0205	-0.0162	-0.0130	-0.0229	0.0006	-0.0213	-0.0205	-0.0099	0.0435
IND	0.0000	0.0000	-0.0001	0.0003	0.0000	-0.0002	-0.0001	-0.0003	-0.0013	-0.0012
LAM	-0.0006	0.0013	-0.0004	-0.0045	-0.0237	-0.0062	-0.0153	-0.0236	-0.0330	-0.1099
MEA	-0.0023	-0.0002	-0.0013	-0.0011	-0.0006	-0.0008	-0.0009	-0.0010	-0.0196	-0.0580
NEU	0.0064	0.0024	0.0169	0.0161	0.0188	0.0189	0.0025	-0.0142	-0.0129	-0.0010
OAS	0.0002	0.0007	0.0002	-0.0031	0.0016	-0.0263	-0.0355	-0.0355	-0.0754	-0.0943
REF	0.0382	0.0694	0.0283	0.0141	0.0250	0.0938	0.0188	0.0593	0.0484	0.0835
SSA	0.0000	0.0000	-0.0001	0.0001	0.0000	0.0029	-0.0005	-0.0007	-0.0049	-0.0445
USA	-0.0006	-0.0004	-0.0004	-0.0045	-0.0034	-0.0129	-0.0060	-0.0060	-0.0078	-0.0559

Table 166: FAO — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr)

5.1.13 Other crops—Fruits Vegetables Nuts



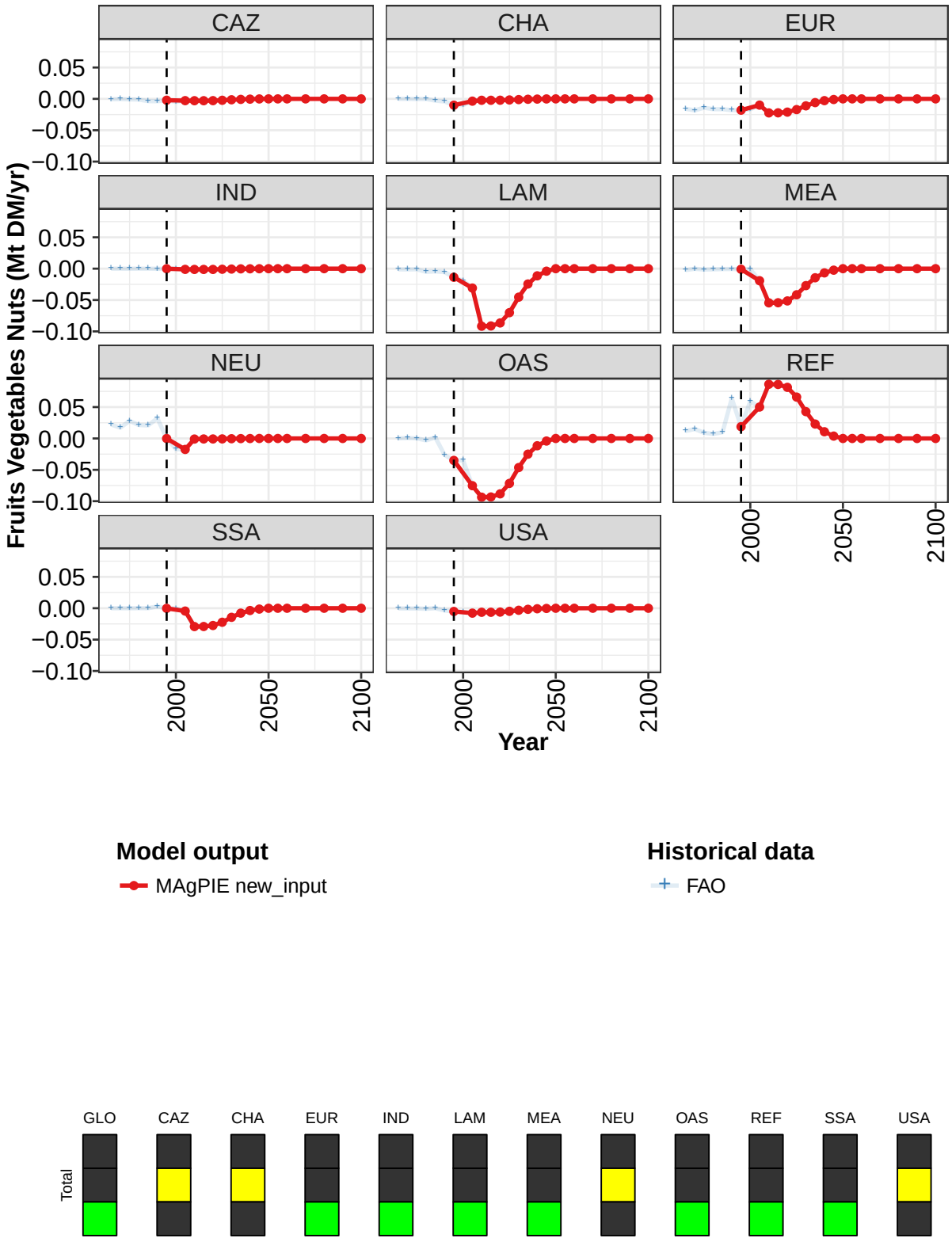


Figure 56: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0.0664	-0.1225	-0.2185	-0.2176	-0.2063	-0.1671	-0.1083	-0.0582	-0.0272	-0.0096	0.0000
CAZ	-0.0021	-0.0028	-0.0029	-0.0029	-0.0028	-0.0022	-0.0014	-0.0008	-0.0004	-0.0001	0.0000
CHA	-0.0100	-0.0036	-0.0022	-0.0022	-0.0021	-0.0017	-0.0011	-0.0006	-0.0003	-0.0001	0.0000
EUR	-0.0180	-0.0099	-0.0223	-0.0222	-0.0211	-0.0171	-0.0111	-0.0059	-0.0028	-0.0010	0.0000
IND	-0.0001	-0.0011	-0.0012	-0.0012	-0.0012	-0.0009	-0.0006	-0.0003	-0.0002	-0.0001	0.0000
LAM	-0.0137	-0.0309	-0.0917	-0.0913	-0.0865	-0.0701	-0.0454	-0.0244	-0.0114	-0.0040	0.0000
MEA	-0.0009	-0.0192	-0.0545	-0.0543	-0.0514	-0.0416	-0.0270	-0.0145	-0.0067	-0.0024	0.0000
NEU	-0.0001	-0.0175	-0.0009	-0.0008	-0.0008	-0.0007	-0.0004	-0.0002	-0.0001	0.0000	0.0000
OAS	-0.0350	-0.0753	-0.0936	-0.0933	-0.0883	-0.0716	-0.0464	-0.0250	-0.0116	-0.0041	0.0000
REF	0.0188	0.0501	0.0864	0.0861	0.0815	0.0660	0.0428	0.0230	0.0107	0.0038	0.0000
SSA	-0.0002	-0.0045	-0.0292	-0.0291	-0.0275	-0.0223	-0.0145	-0.0078	-0.0036	-0.0013	0.0000
USA	-0.0051	-0.0078	-0.0064	-0.0064	-0.0061	-0.0049	-0.0032	-0.0017	-0.0008	-0.0003	0.0000

Table 167: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

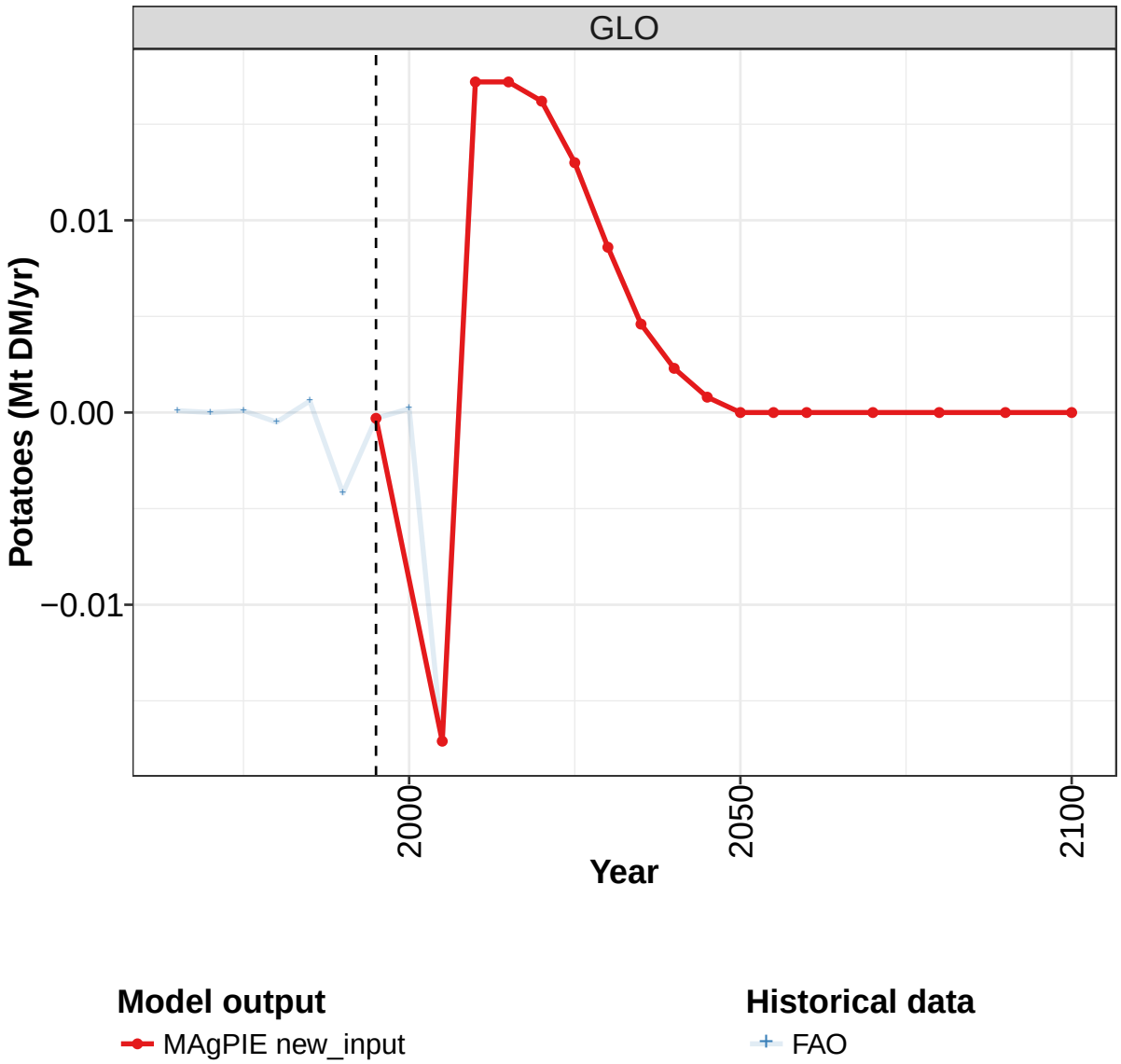
	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

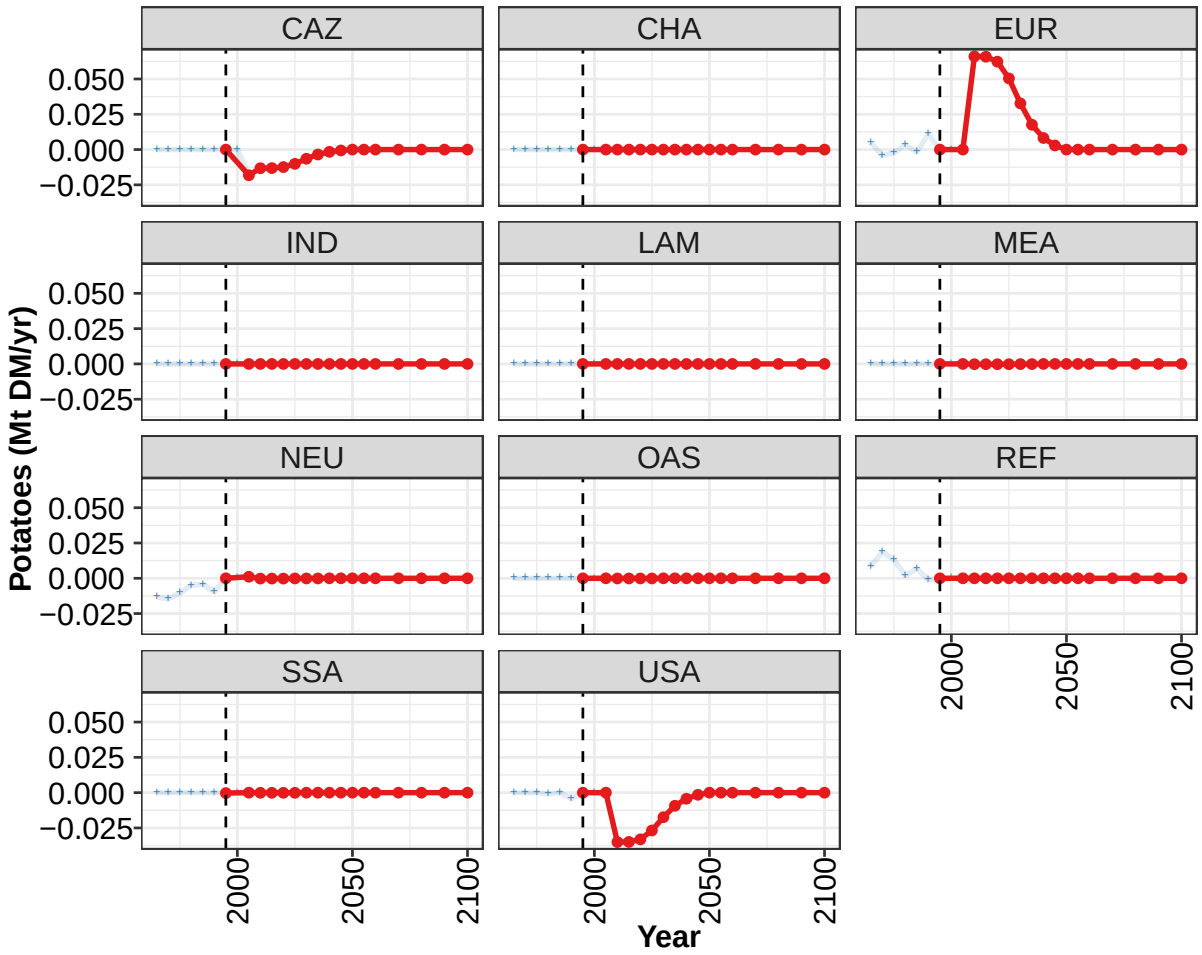
Table 168: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0142	0.0124	0.0190	0.0008	0.0044	0.0371	-0.0664	-0.0508	-0.1225	-0.2185
CAZ	-0.0006	-0.0003	-0.0008	-0.0011	-0.0036	-0.0038	-0.0021	-0.0048	-0.0028	-0.0029
CHA	0.0000	0.0000	-0.0002	-0.0001	-0.0028	-0.0042	-0.0100	-0.0099	-0.0036	-0.0022
EUR	-0.0158	-0.0183	-0.0141	-0.0164	-0.0164	-0.0180	-0.0180	-0.0165	-0.0099	-0.0223
IND	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0002	-0.0001	-0.0003	-0.0011	-0.0012
LAM	-0.0011	-0.0013	-0.0010	-0.0051	-0.0043	-0.0055	-0.0137	-0.0193	-0.0309	-0.0917
MEA	-0.0023	-0.0002	-0.0014	-0.0011	-0.0006	-0.0005	-0.0009	-0.0008	-0.0192	-0.0545
NEU	0.0222	0.0172	0.0279	0.0214	0.0207	0.0322	-0.0001	-0.0170	-0.0175	-0.0009
OAS	0.0002	0.0007	0.0002	-0.0031	0.0016	-0.0262	-0.0350	-0.0349	-0.0753	-0.0936
REF	0.0118	0.0150	0.0091	0.0072	0.0099	0.0638	0.0188	0.0593	0.0501	0.0864
SSA	0.0000	0.0000	-0.0001	0.0001	0.0000	0.0029	-0.0002	-0.0005	-0.0045	-0.0292
USA	-0.0002	-0.0004	-0.0004	-0.0009	0.0000	-0.0035	-0.0051	-0.0060	-0.0078	-0.0064

Table 169: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

5.1.14 Other crops—Potatoes





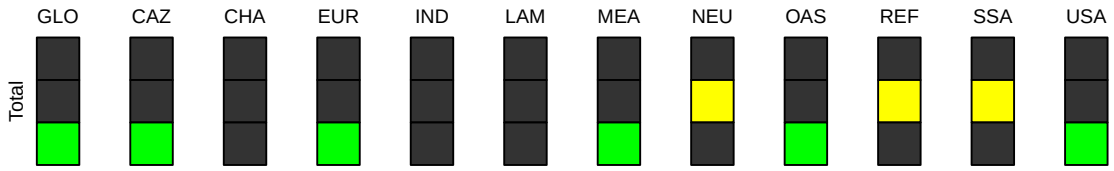


Figure 57: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0.0003	-0.0171	0.0172	0.0172	0.0162	0.0130	0.0086	0.0046	0.0023	0.0008	0.0000
CAZ	0.0000	-0.0182	-0.0132	-0.0131	-0.0124	-0.0101	-0.0065	-0.0035	-0.0016	-0.0006	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0660	0.0658	0.0623	0.0504	0.0327	0.0176	0.0082	0.0029	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	0.0000	0.0000
NEU	0.0000	0.0011	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	-0.0003	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	-0.0350	-0.0349	-0.0331	-0.0268	-0.0174	-0.0093	-0.0043	-0.0015	0.0000

Table 170: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

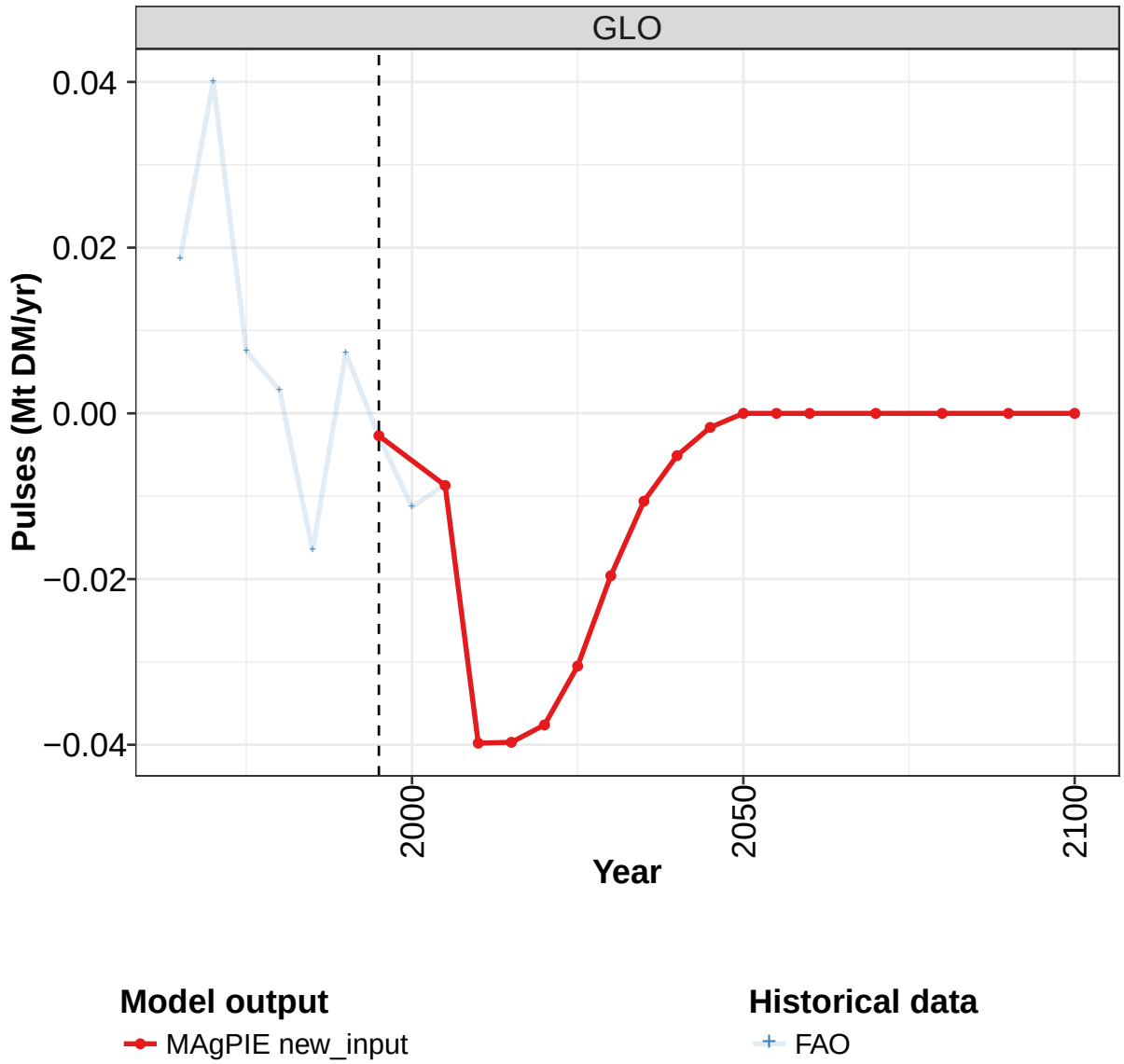
	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 171: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0001	0.0000	0.0001	-0.0005	0.0006	-0.0042	-0.0003	0.0002	-0.0172	0.0172
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0182	-0.0132
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0049	-0.0042	-0.0024	0.0034	-0.0018	0.0109	0.0000	0.0000	0.0000	0.0660
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000	-0.0002
NEU	-0.0133	-0.0146	-0.0106	-0.0050	-0.0043	-0.0095	0.0000	0.0004	0.0011	-0.0002
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000	-0.0001
REF	0.0085	0.0188	0.0131	0.0020	0.0068	-0.0011	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0003	0.0000	0.0000	-0.0001
USA	0.0000	0.0000	0.0000	-0.0009	0.0000	-0.0043	0.0000	0.0000	0.0000	-0.0350

Table 172: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr)

5.1.15 Other crops—Pulses



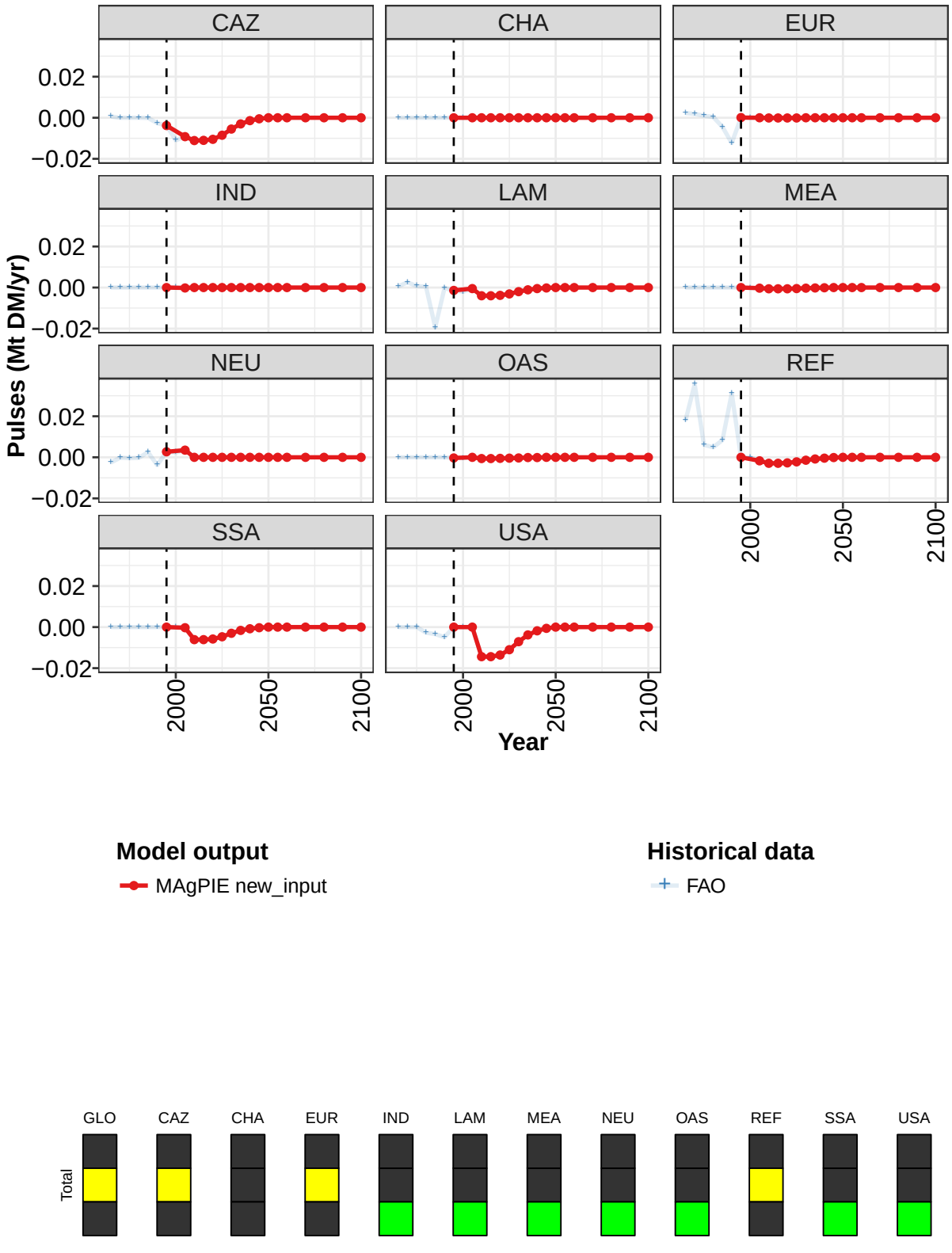


Figure 58: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.00270	-0.00870	-0.03980	-0.03970	-0.03760	-0.03050	-0.01960	-0.01060	-0.00510	-0.00170	0.00
CAZ	-0.00380	-0.00920	-0.01110	-0.01100	-0.01050	-0.00850	-0.00550	-0.00300	-0.00140	-0.00050	0.00
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
EUR	0.00010	0.00000	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00
IND	0.00000	-0.00020	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
LAM	-0.00140	-0.00050	-0.00400	-0.00400	-0.00380	-0.00310	-0.00200	-0.00110	-0.00050	-0.00020	0.00
MEA	0.00000	-0.00030	-0.00060	-0.00060	-0.00060	-0.00050	-0.00030	-0.00020	-0.00010	0.00000	0.00
NEU	0.00270	0.00350	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
OAS	-0.00030	0.00000	-0.00060	-0.00060	-0.00050	-0.00040	-0.00030	-0.00010	-0.00010	0.00000	0.00
REF	0.00000	-0.00170	-0.00290	-0.00290	-0.00270	-0.00220	-0.00140	-0.00080	-0.00040	-0.00010	0.00
SSA	0.00000	-0.00030	-0.00610	-0.00610	-0.00580	-0.00470	-0.00300	-0.00160	-0.00080	-0.00030	0.00
USA	0.00000	0.00000	-0.01440	-0.01440	-0.01360	-0.01100	-0.00710	-0.00380	-0.00180	-0.00060	0.00

Table 173: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

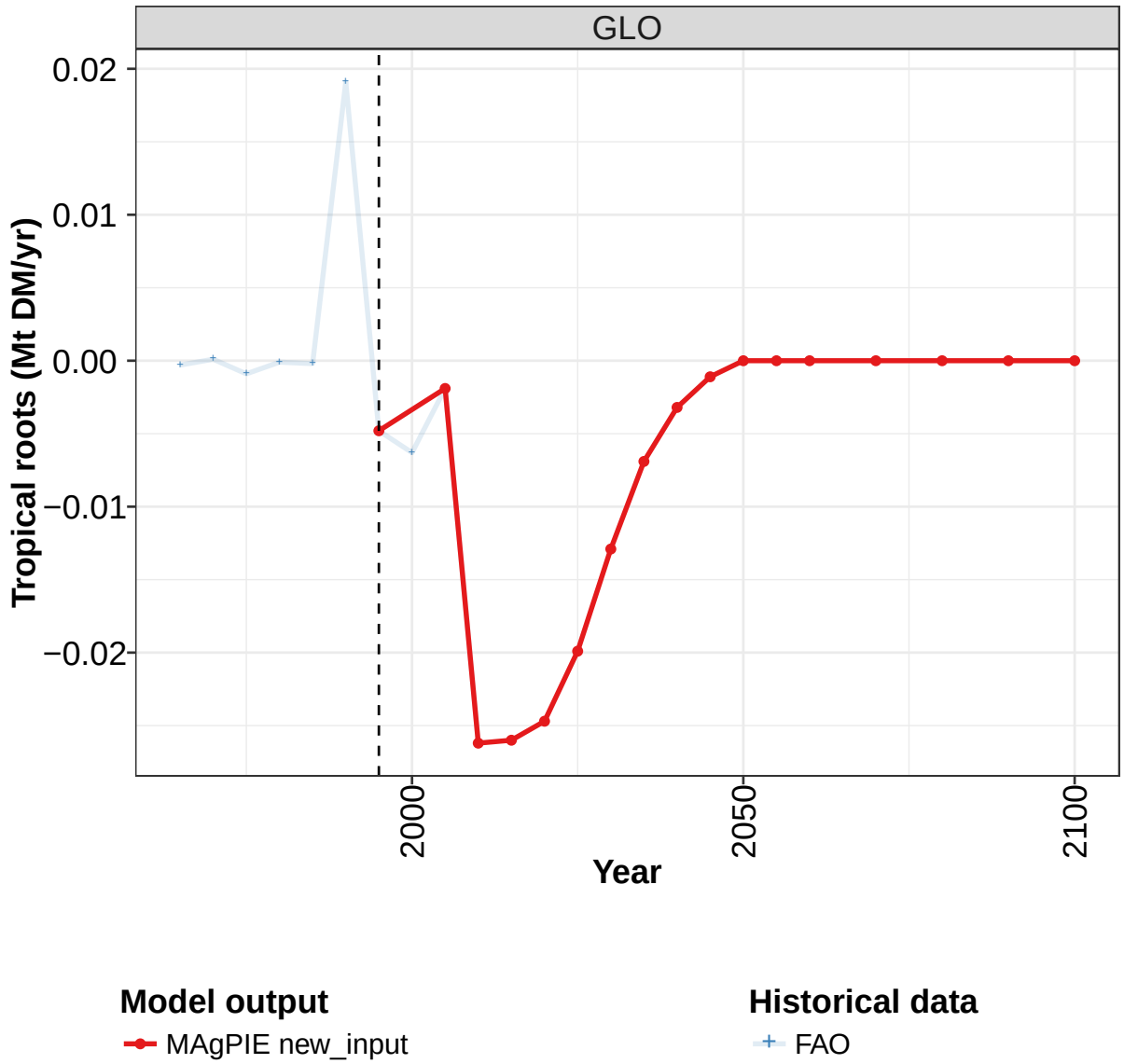
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 174: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0186	0.0400	0.0075	0.0028	-0.0165	0.0073	-0.0028	-0.0113	-0.0086	-0.0398
CAZ	0.0006	0.0000	0.0000	0.0000	-0.0001	-0.0026	-0.0038	-0.0110	-0.0092	-0.0111
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0023	0.0019	0.0010	0.0004	-0.0045	-0.0123	0.0001	-0.0001	0.0000	-0.0001
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0002	0.0000
LAM	0.0005	0.0026	0.0007	0.0005	-0.0194	-0.0003	-0.0014	-0.0021	-0.0005	-0.0040
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0002	-0.0003	-0.0006
NEU	-0.0025	-0.0002	-0.0004	-0.0003	0.0025	-0.0038	0.0027	0.0024	0.0035	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0003	-0.0004	0.0000	-0.0006
REF	0.0178	0.0356	0.0061	0.0049	0.0084	0.0312	0.0000	0.0000	-0.0017	-0.0029
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0003	-0.0061
USA	0.0000	0.0000	0.0000	-0.0027	-0.0034	-0.0049	0.0000	0.0000	0.0000	-0.0144

Table 175: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr)

5.1.16 Other crops—Tropical roots



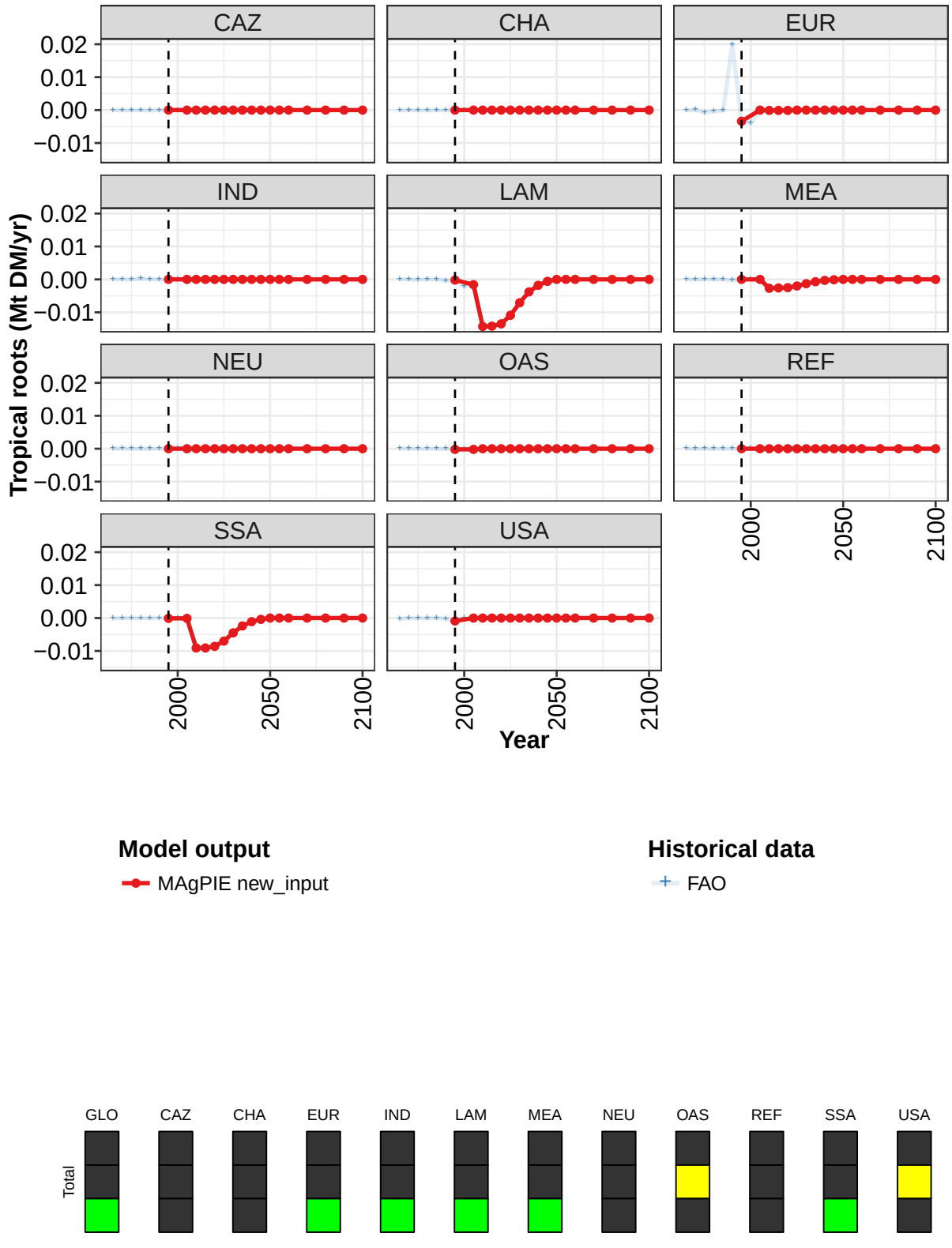


Figure 59: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	-0	0	-0	-0	-0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
MEA	0	0	-0	-0	-0	-0	-0	-0	-0	-0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	-0	-0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
USA	-0	0	0	0	0	0	0	0	0	0	0

Table 176: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

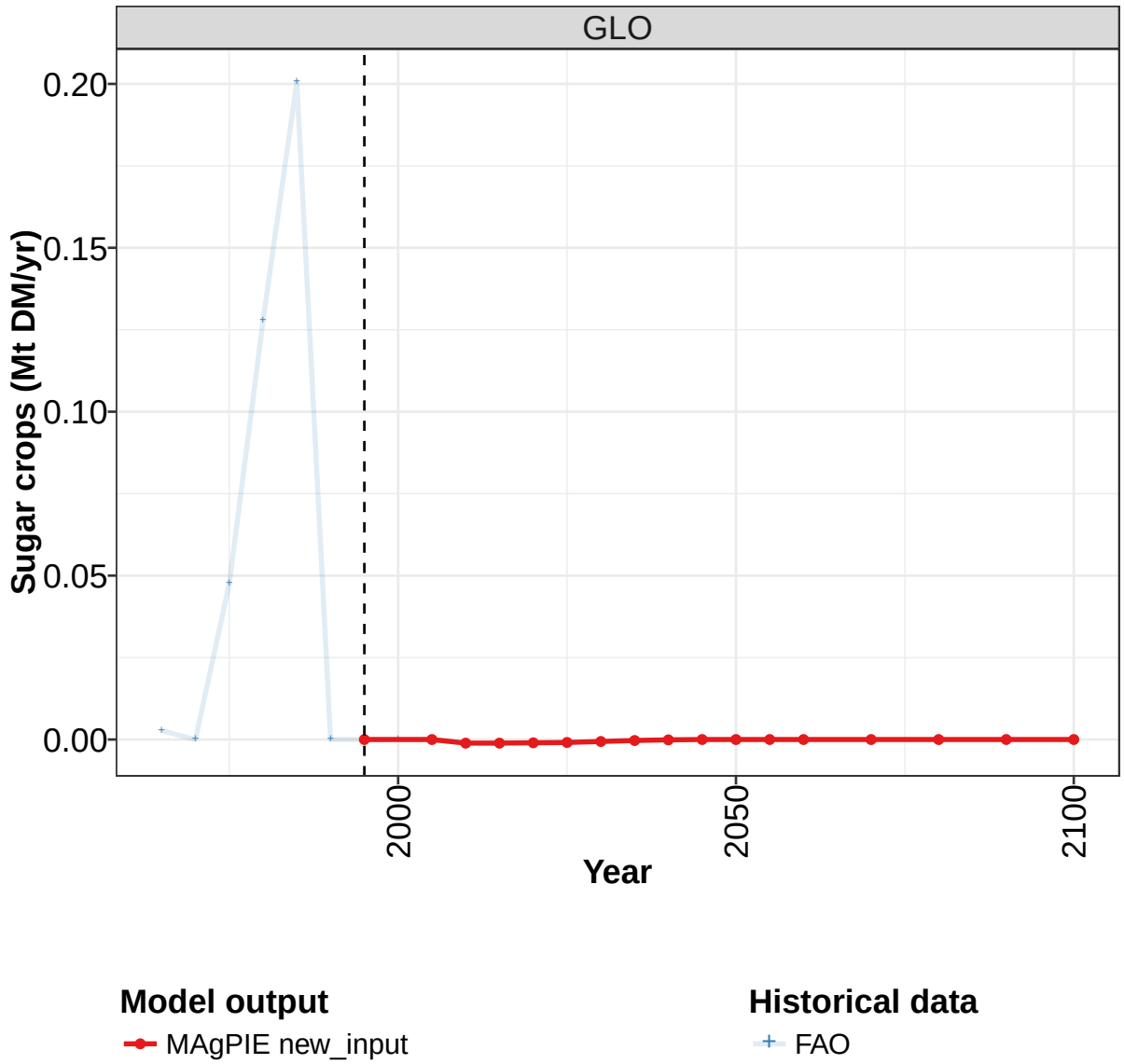
	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0
CAZ	0	0	0	0	0	0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	0	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	0	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	0	0	0	0	0	0
USA	0	0	0	0	0	0

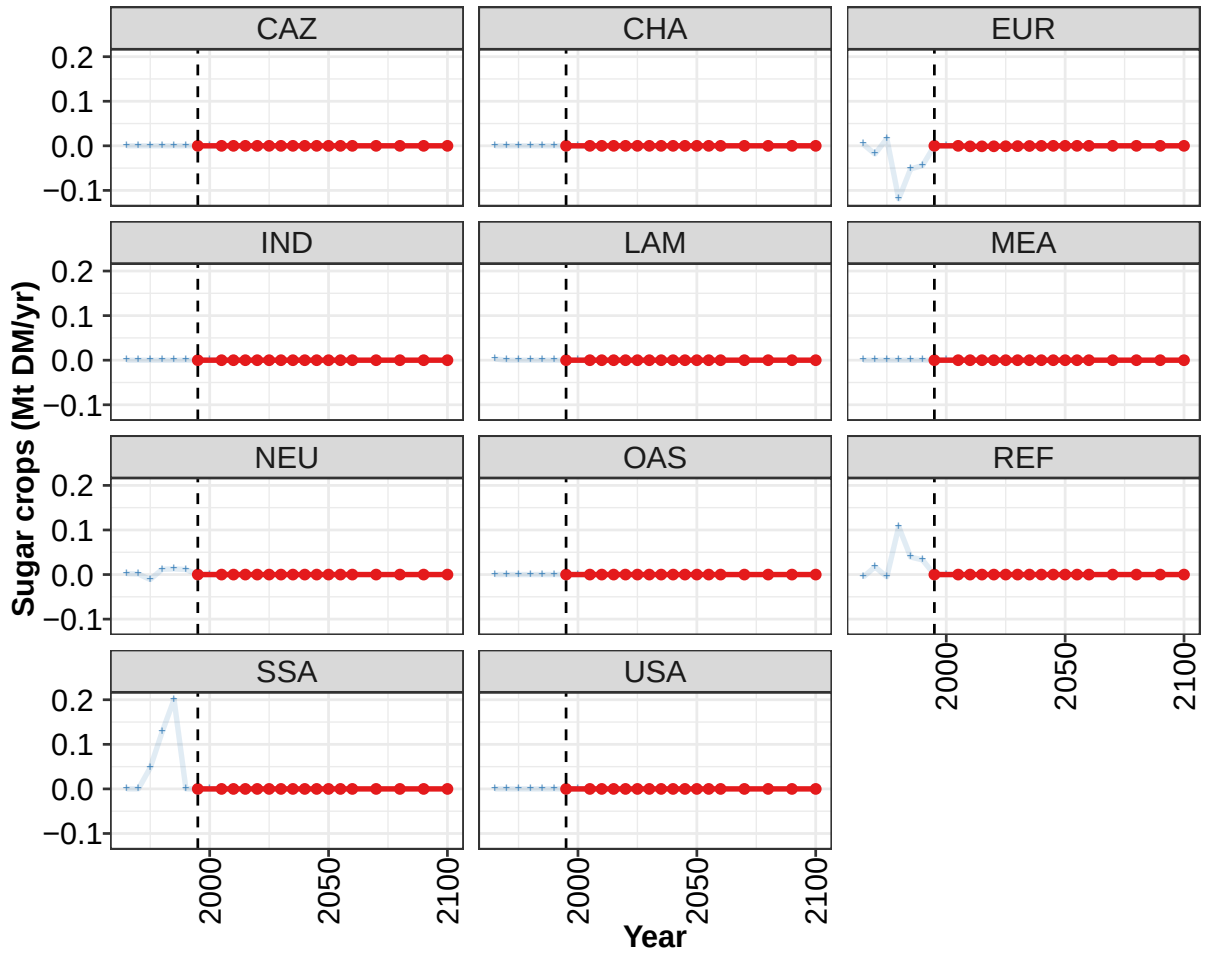
Table 177: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0003	0.0001	-0.0009	-0.0001	-0.0002	0.0191	-0.0048	-0.0063	-0.0019	-0.0261
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0001	-0.0008	-0.0004	-0.0002	0.0199	-0.0034	-0.0040	0.0000	-0.0001
IND	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0004	-0.0002	-0.0022	-0.0016	-0.0143
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0002	0.0000	0.0000	0.0000	-0.0027
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0002	-0.0001	-0.0002	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0091
USA	-0.0003	0.0000	0.0000	0.0000	0.0000	-0.0002	-0.0009	0.0000	0.0000	0.0000

Table 178: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr)

5.1.17 Sugar crops





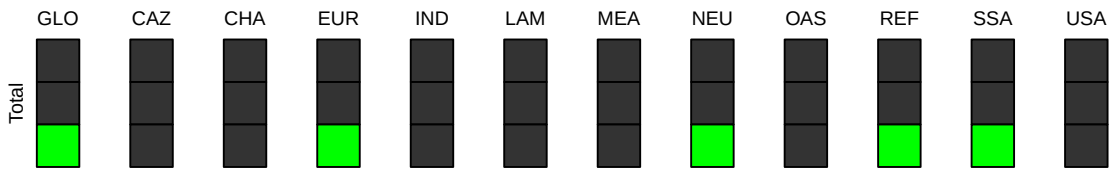


Figure 60: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	0	-0	-0	-0	-0	-0	-0	-0	0	0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	-0	-0	-0	-0	-0	-0	-0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 179: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

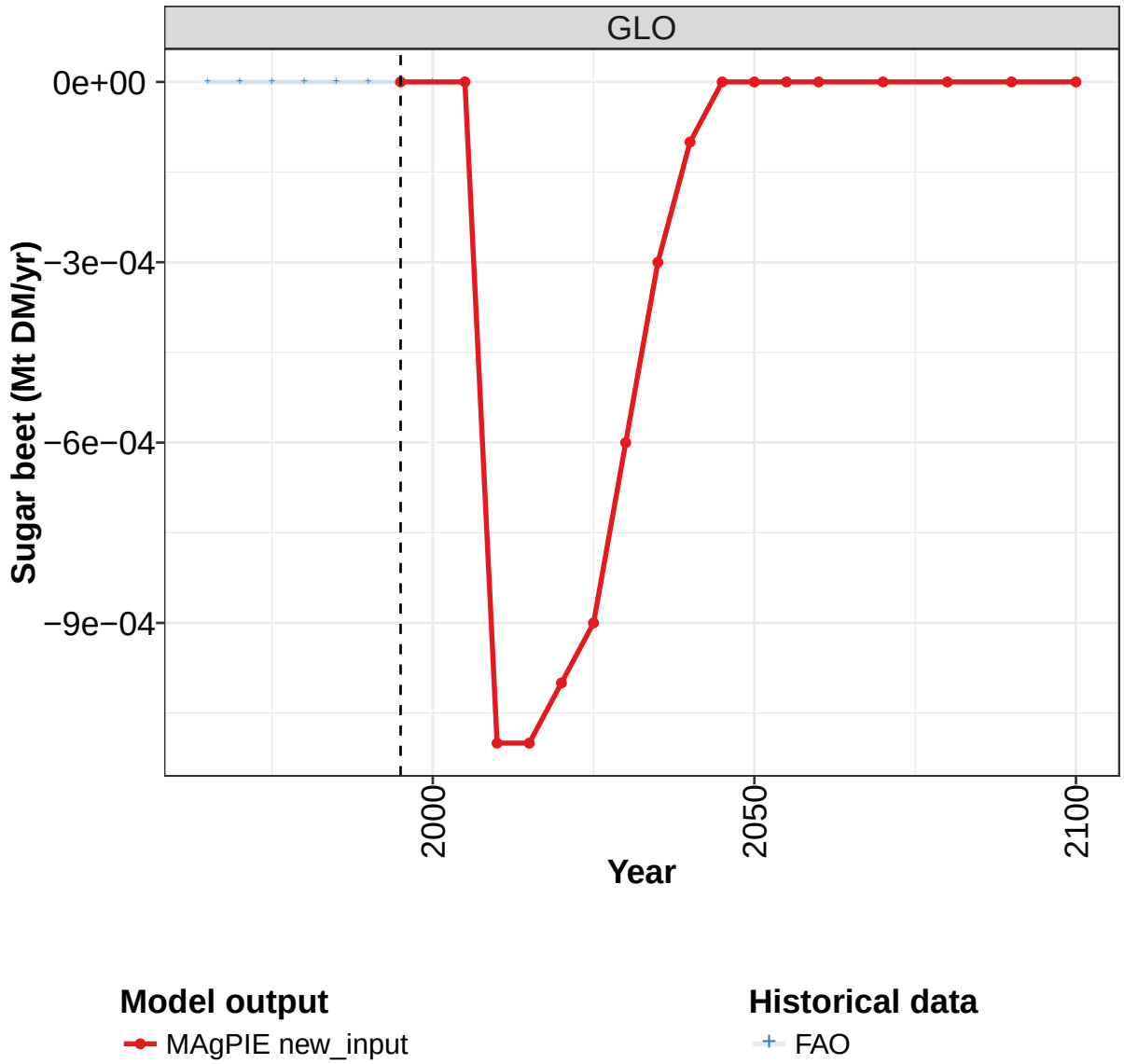
	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0
CAZ	0	0	0	0	0	0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	0	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	0	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	0	0	0	0	0	0
USA	0	0	0	0	0	0

Table 180: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.003	0.000	0.048	0.128	0.201	0.000	0.000	0.000	0.000	-0.001
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.004	-0.018	0.016	-0.119	-0.052	-0.044	0.000	0.000	0.000	-0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.002	0.001	-0.011	0.012	0.013	0.011	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	-0.006	0.017	-0.005	0.107	0.039	0.033	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.048	0.128	0.201	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 181: FAO — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr)

5.1.18 Sugar crops—Sugar beet



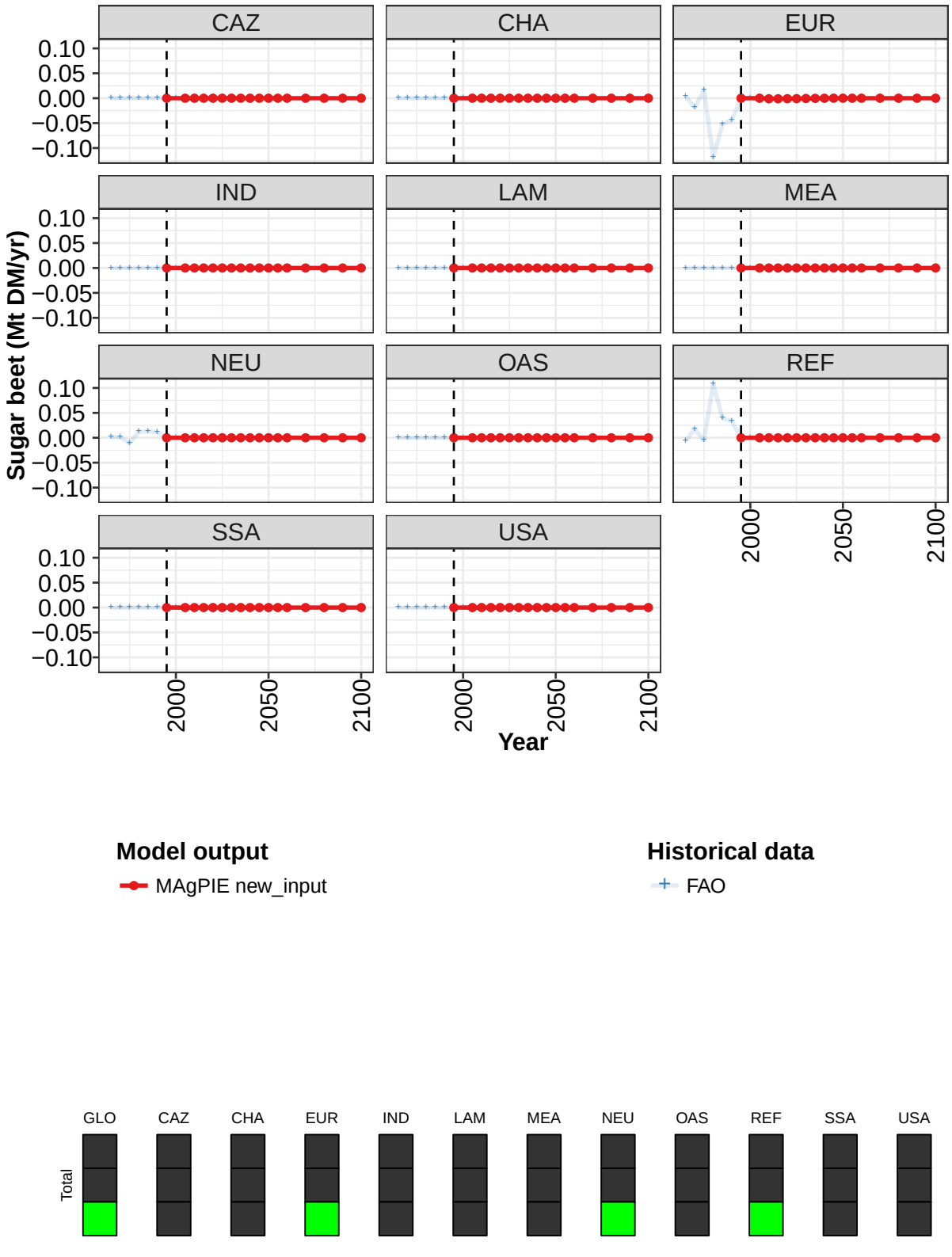


Figure 61: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	0	-0	-0	-0	-0	-0	-0	-0	0	0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	-0	-0	-0	-0	-0	-0	-0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 182: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

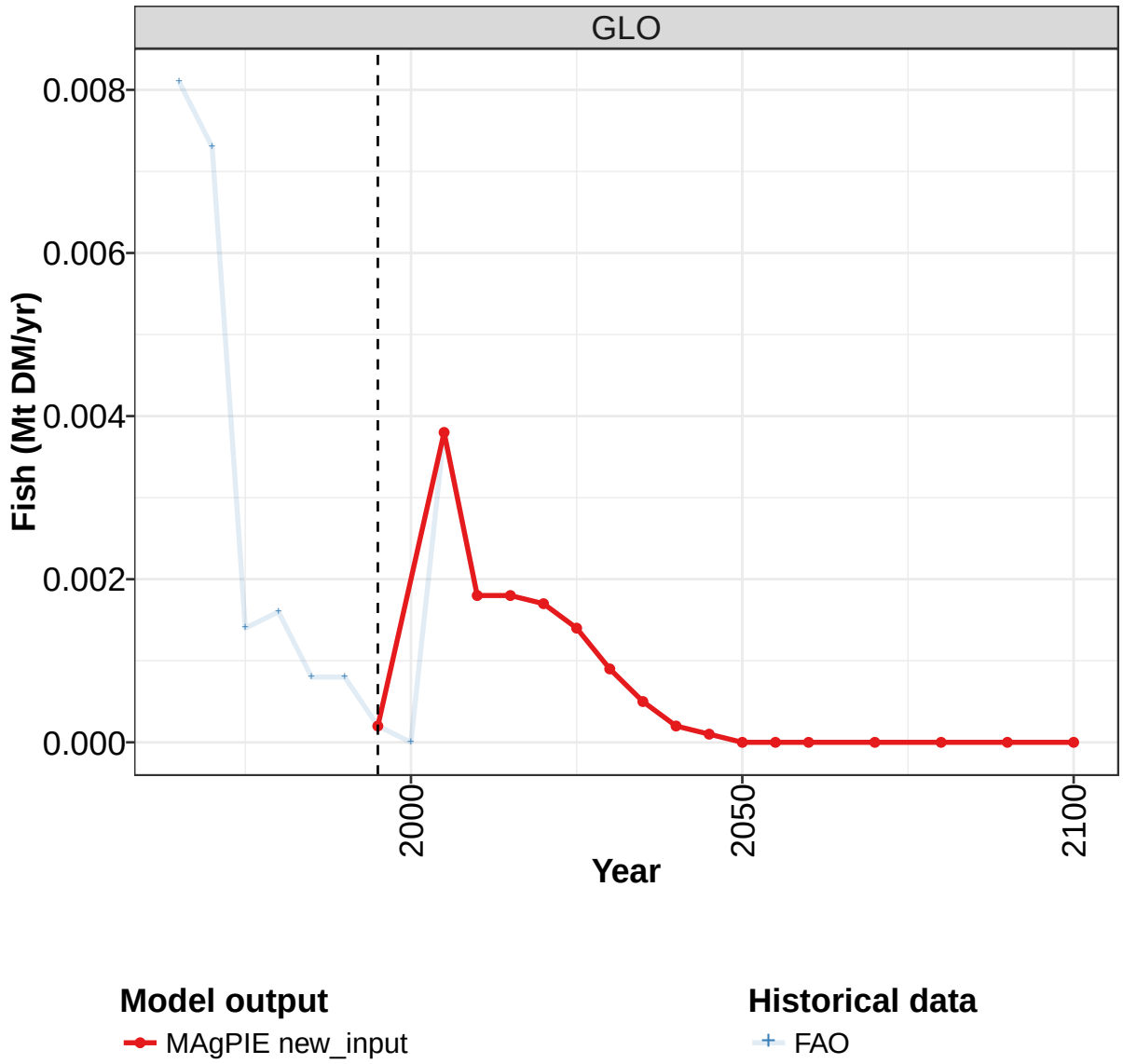
	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0
CAZ	0	0	0	0	0	0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	0	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	0	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	0	0	0	0	0	0
USA	0	0	0	0	0	0

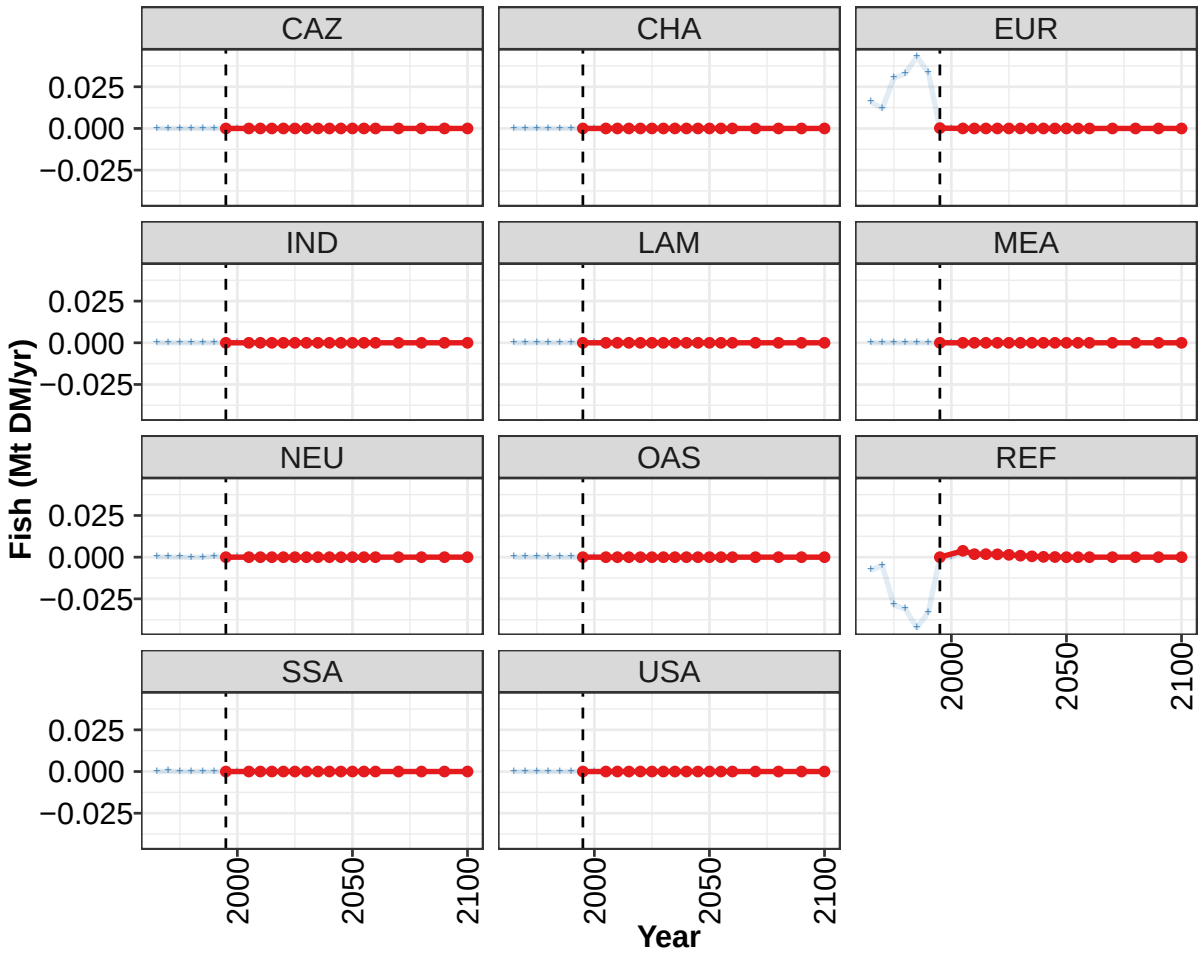
Table 183: MAgPIE new_input — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.001
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.004	-0.018	0.016	-0.119	-0.052	-0.044	0.000	0.000	0.000	-0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.002	0.001	-0.011	0.012	0.013	0.011	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	-0.006	0.017	-0.005	0.107	0.039	0.033	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 184: FAO — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr)

5.2 Fish


GLO
0.008
0.006
0.004
0.002
0.000
Fish (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



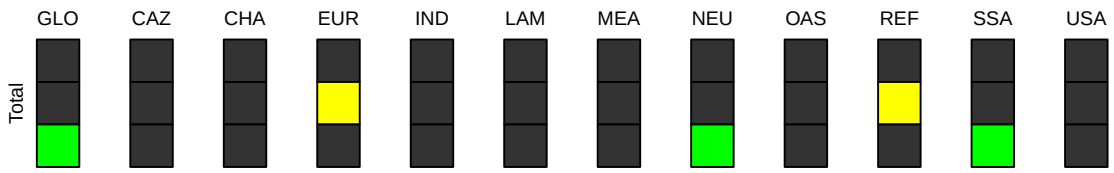


Figure 62: MAgPIE new_input — Demand—Domestic Balanceflow—Fish (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.00020	0.00380	0.00180	0.00180	0.00170	0.00140	0.00090	0.00050	0.00020	0.00010	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00020	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00380	0.00180	0.00180	0.00170	0.00140	0.00090	0.00050	0.00020	0.00010	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

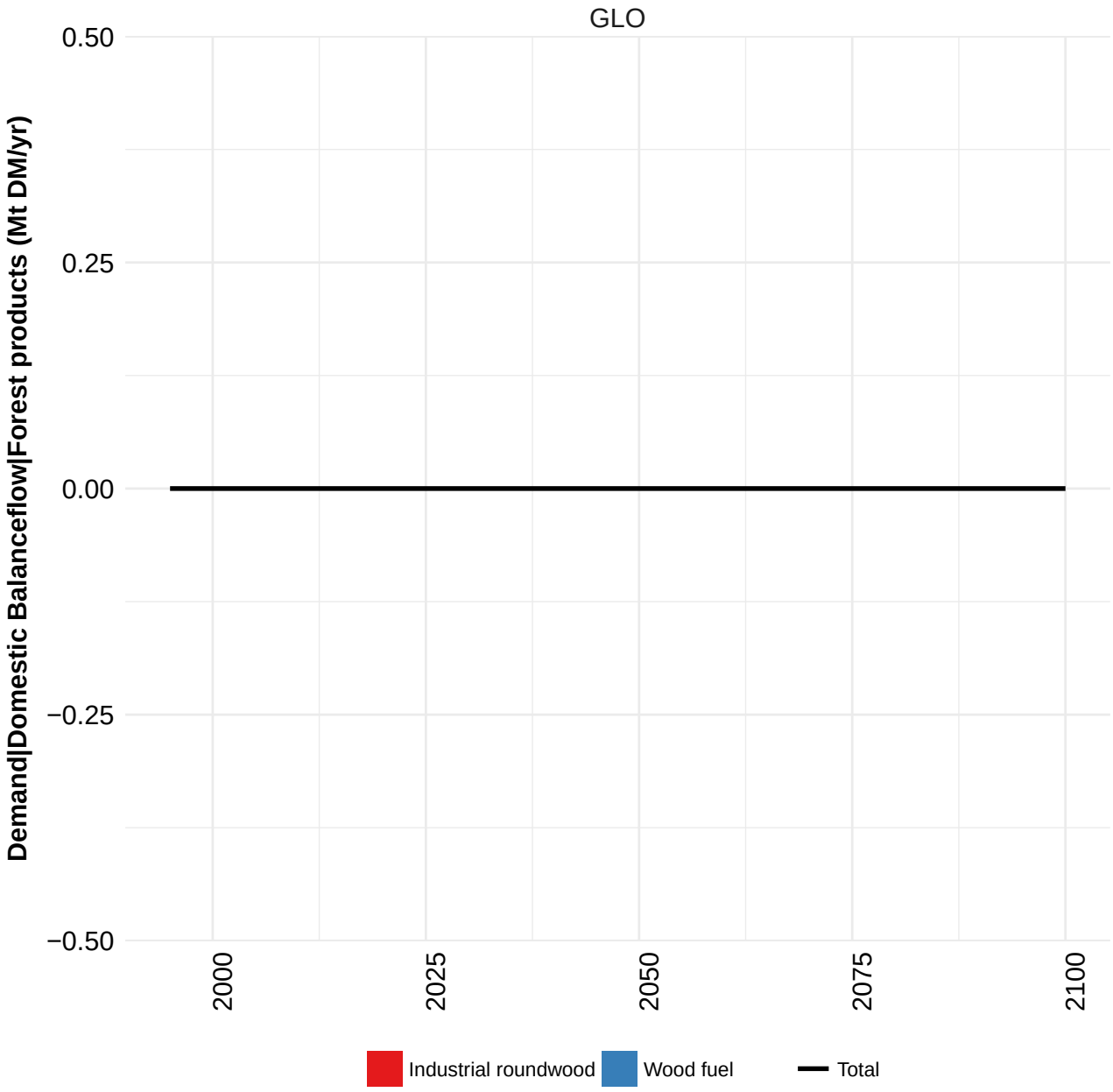
Table 185: MAgPIE new_input — Demand—Domestic Balanceflow—Fish (Mt DM/yr) [PART 1/2]

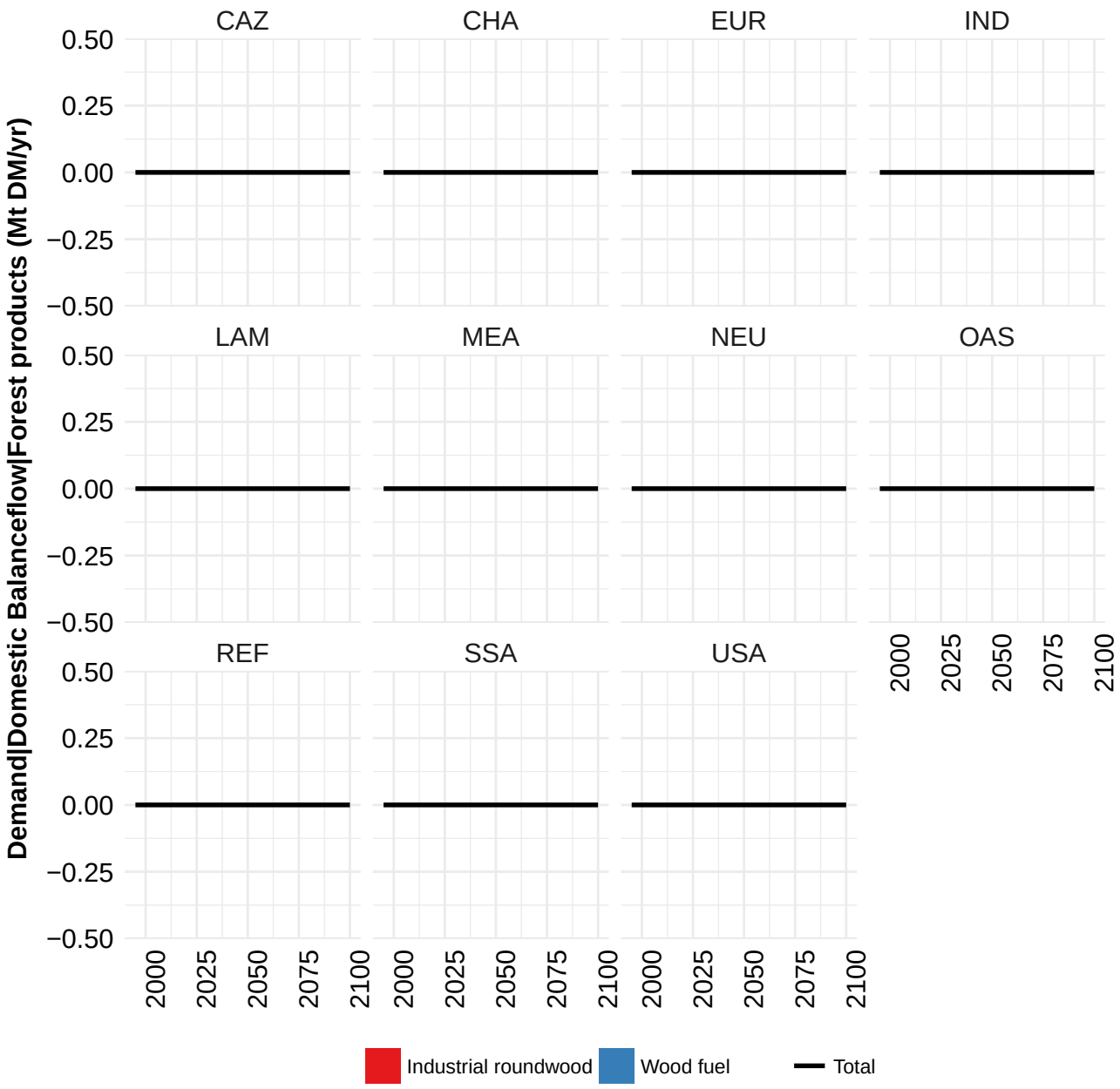
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

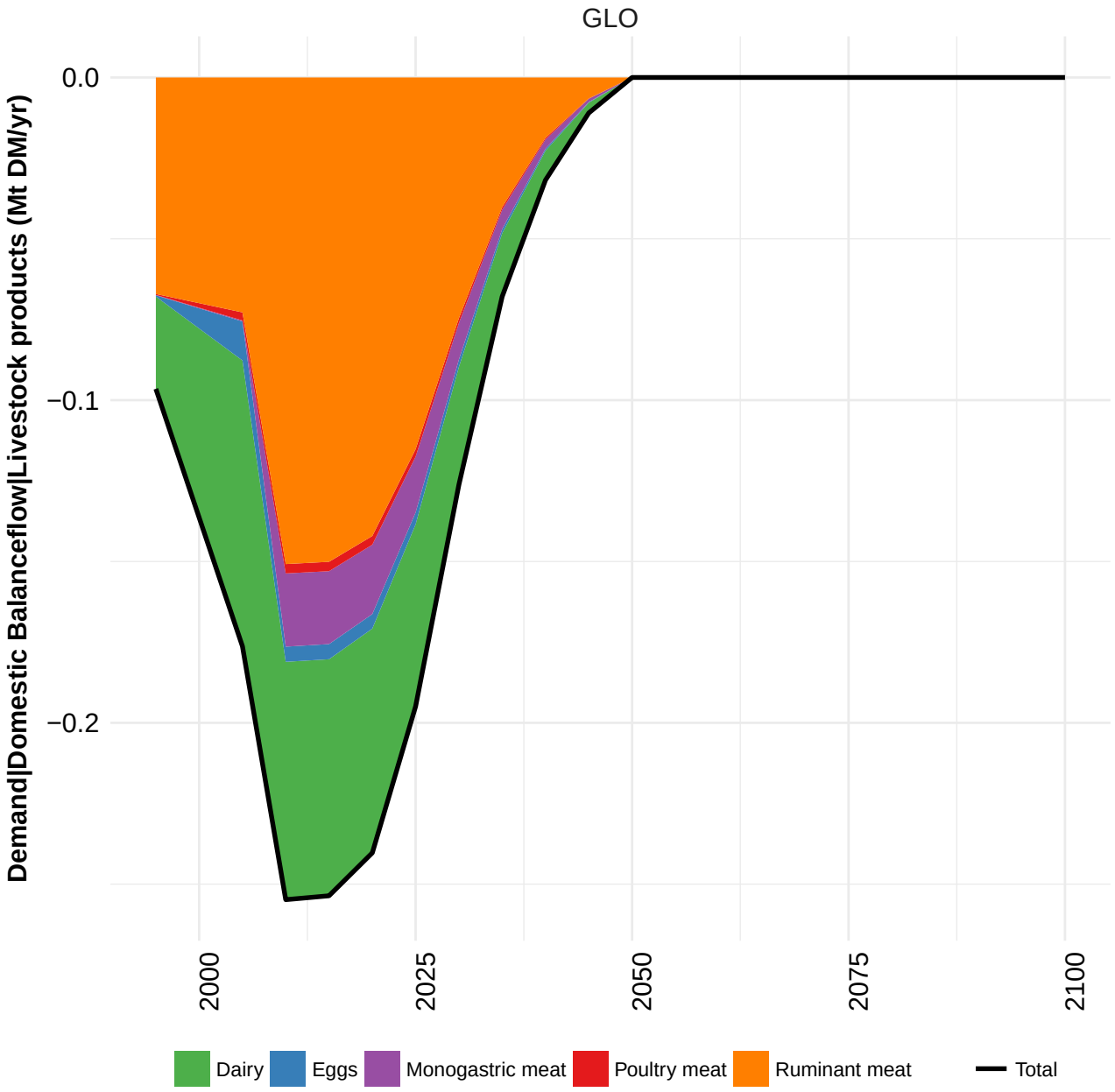
Table 186: MAgPIE new_input — Demand—Domestic Balanceflow—Fish (Mt DM/yr) [PART 2/2]

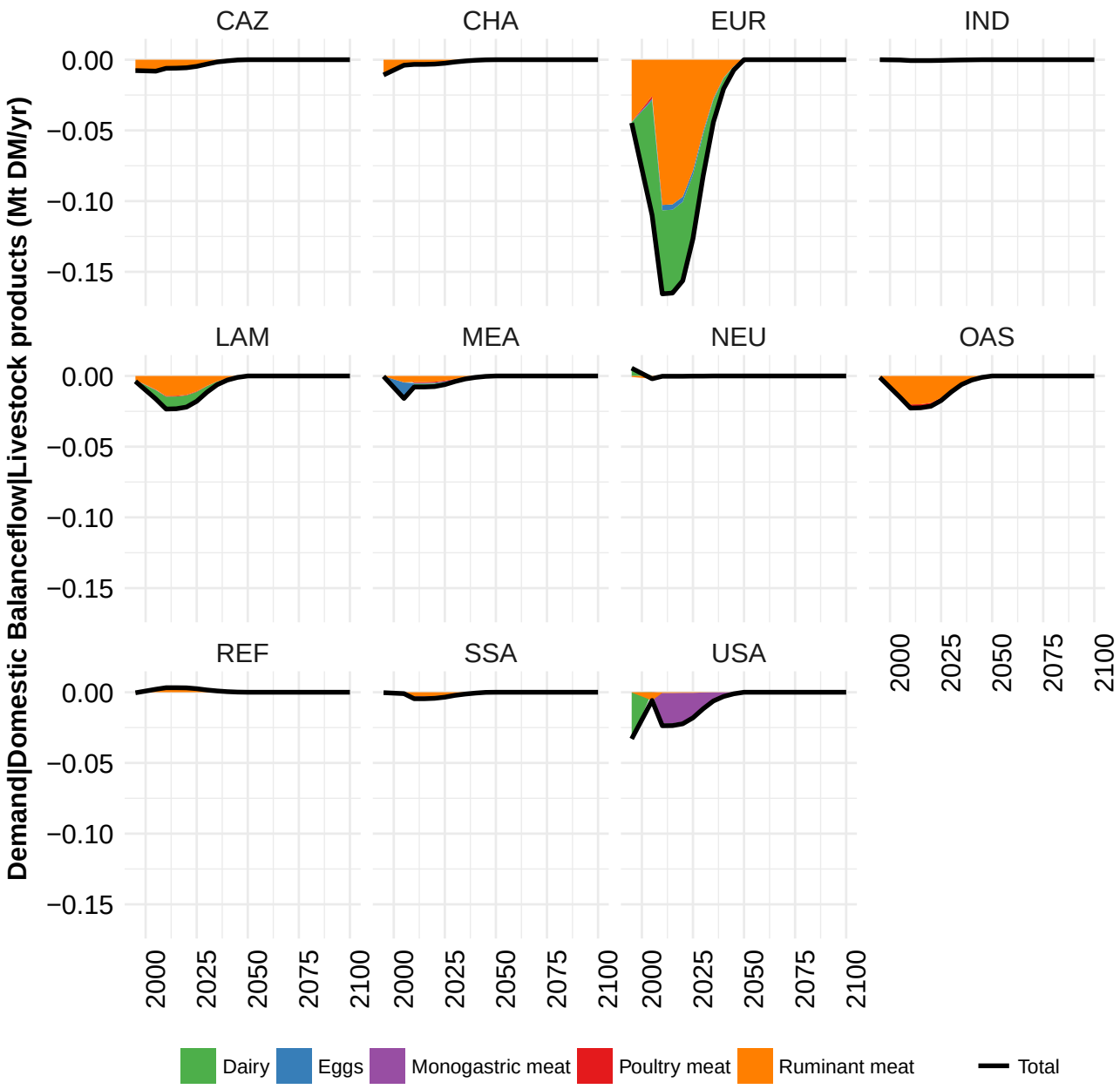
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0081	0.0073	0.0014	0.0016	0.0008	0.0008	0.0002	0.0000	0.0038	0.0018
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0157	0.0120	0.0303	0.0328	0.0432	0.0334	0.0002	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0002	0.0001	0.0000	-0.0001	-0.0001	0.0005	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	-0.0078	-0.0050	-0.0288	-0.0311	-0.0423	-0.0331	0.0000	0.0000	0.0038	0.0018
SSA	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 187: FAO — Demand—Domestic Balanceflow—Fish (Mt DM/yr)

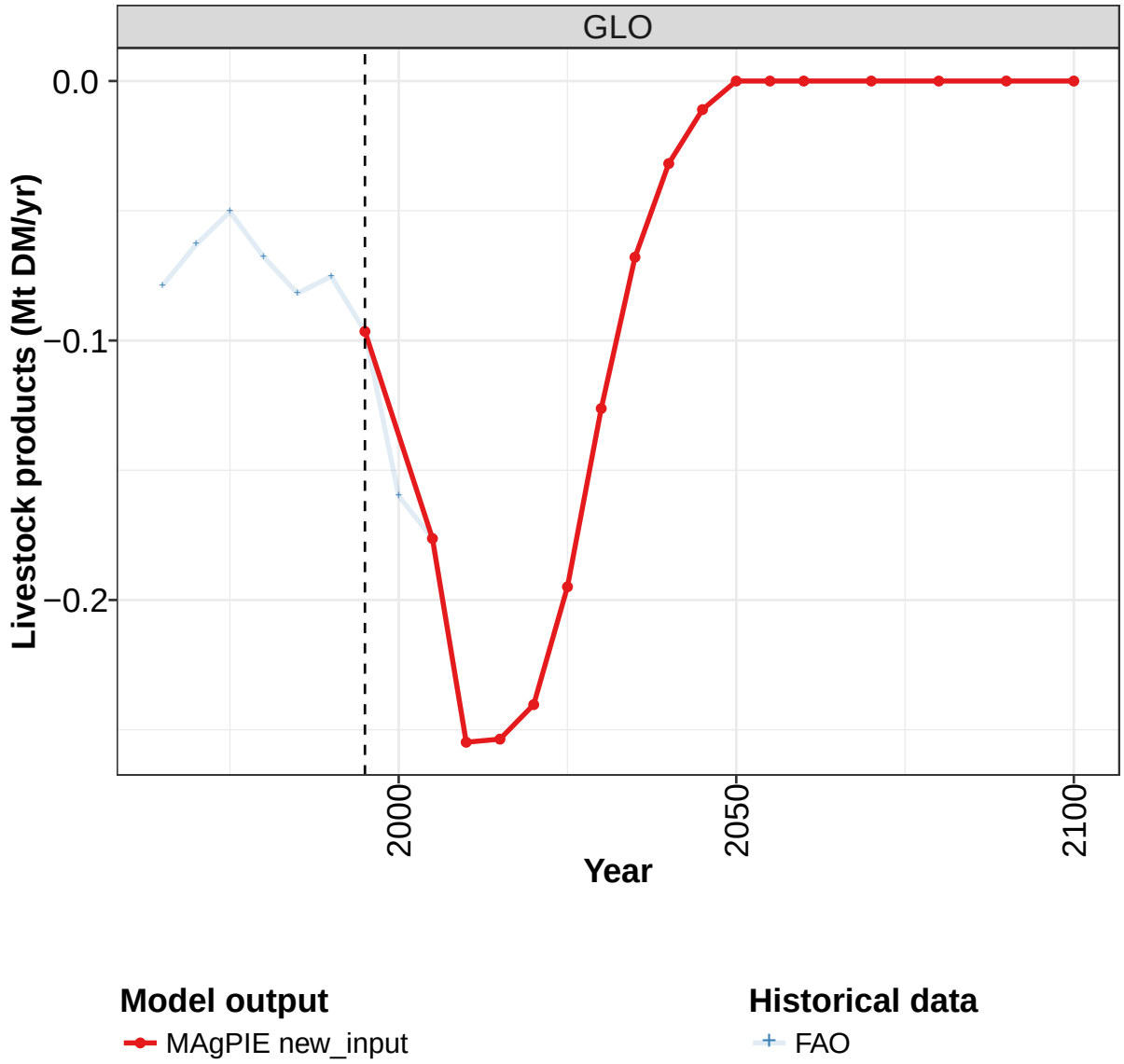

GLO
Demand|Domestic Balanceflow|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Domestic Balanceflow|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


GLO
Demand|Domestic Balanceflow|Livestock products (Mt DM/yr)
0.0
−0.1
−0.2
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Domestic Balanceflow|Livestock products (Mt DM/yr)
0.00
−0.05
−0.10
−0.15
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total

5.3 Livestock products



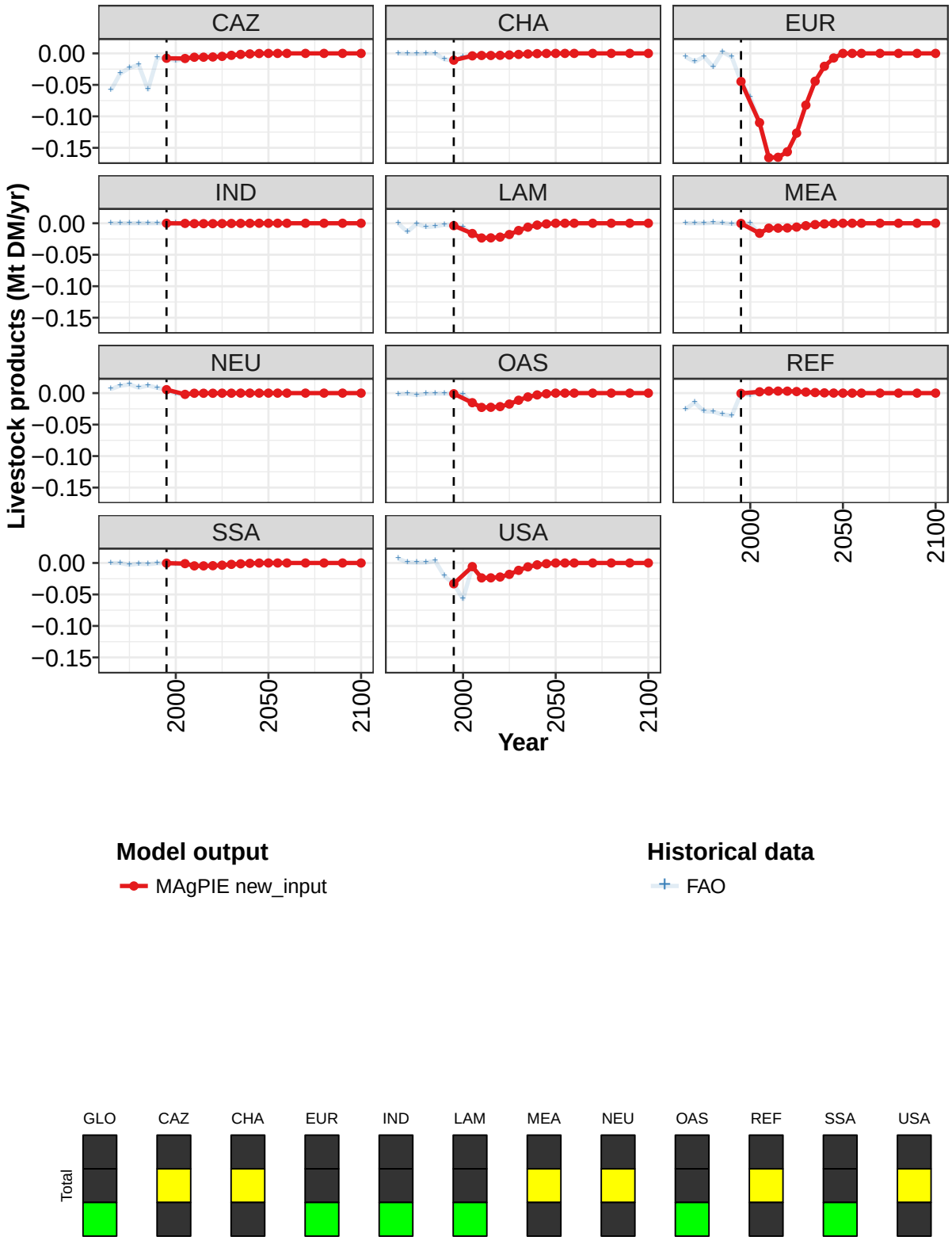


Figure 63: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.09650	-0.17630	-0.25480	-0.25360	-0.24030	-0.19490	-0.12620	-0.06790	-0.03180	-0.01100	0.00
CAZ	-0.00770	-0.00810	-0.00610	-0.00600	-0.00570	-0.00470	-0.00310	-0.00160	-0.00080	-0.00020	0.00
CHA	-0.01080	-0.00390	-0.00330	-0.00330	-0.00310	-0.00250	-0.00160	-0.00090	-0.00040	-0.00010	0.00
EUR	-0.04470	-0.11000	-0.16560	-0.16500	-0.15630	-0.12660	-0.08210	-0.04420	-0.02050	-0.00730	0.00
IND	0.00000	-0.00020	-0.00060	-0.00060	-0.00060	-0.00050	-0.00030	-0.00020	-0.00010	0.00000	0.00
LAM	-0.00380	-0.01630	-0.02340	-0.02320	-0.02200	-0.01790	-0.01150	-0.00620	-0.00290	-0.00100	0.00
MEA	-0.00030	-0.01590	-0.00780	-0.00780	-0.00750	-0.00610	-0.00390	-0.00210	-0.00100	-0.00030	0.00
NEU	0.00550	-0.00200	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00
OAS	-0.00100	-0.01520	-0.02270	-0.02250	-0.02140	-0.01740	-0.01130	-0.00610	-0.00290	-0.00100	0.00
REF	-0.00040	0.00210	0.00320	0.00320	0.00310	0.00250	0.00160	0.00090	0.00040	0.00010	0.00
SSA	-0.00030	-0.00100	-0.00460	-0.00460	-0.00430	-0.00350	-0.00220	-0.00130	-0.00060	-0.00010	0.00
USA	-0.03300	-0.00580	-0.02370	-0.02360	-0.02230	-0.01810	-0.01170	-0.00620	-0.00300	-0.00110	0.00

Table 188: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr) [PART 1/2]

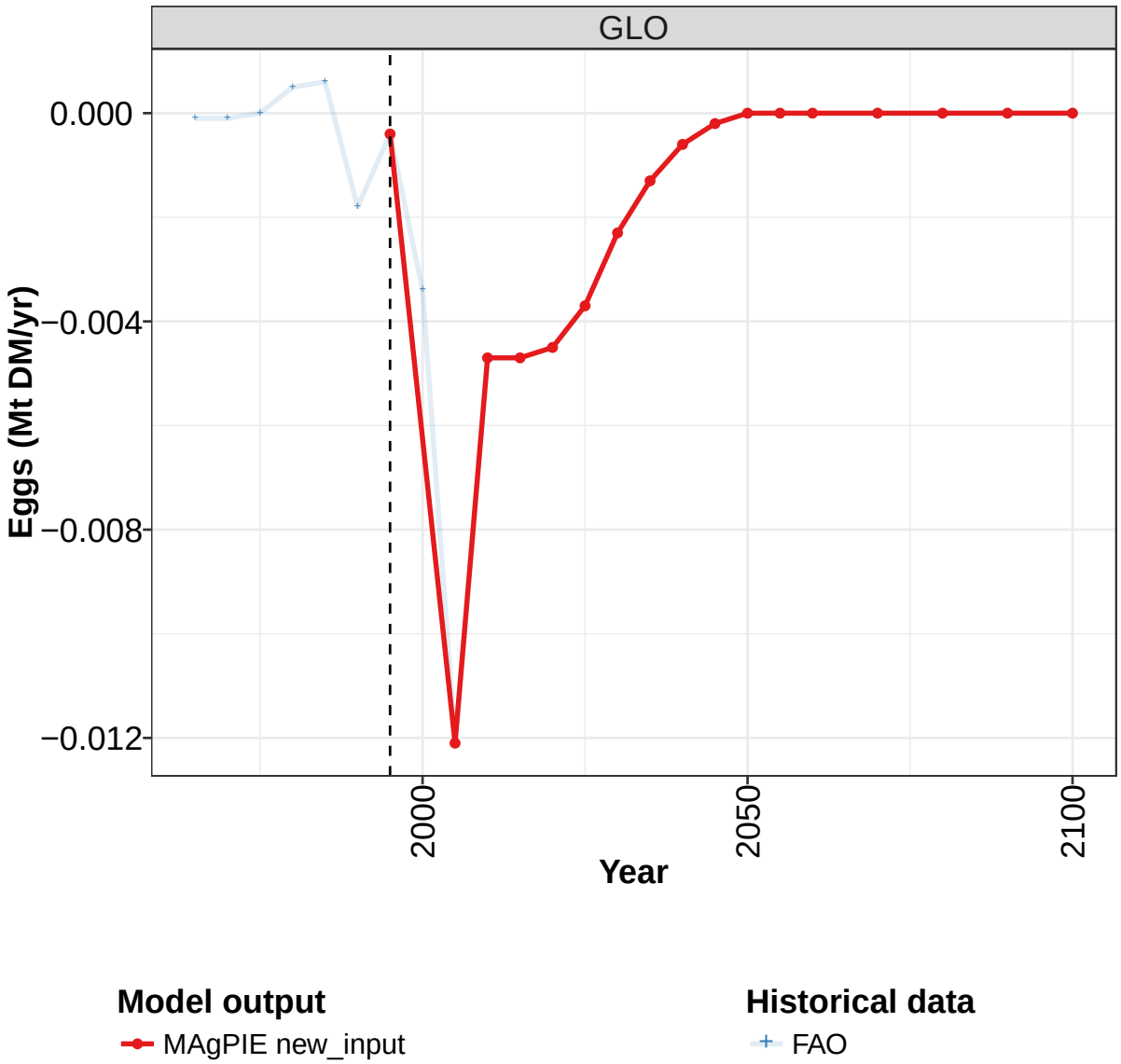
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 189: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0789	-0.0630	-0.0504	-0.0678	-0.0818	-0.0753	-0.0965	-0.1599	-0.1763	-0.2548
CAZ	-0.0588	-0.0320	-0.0230	-0.0183	-0.0577	-0.0069	-0.0077	-0.0119	-0.0080	-0.0061
CHA	0.0000	-0.0009	-0.0011	-0.0002	-0.0002	-0.0096	-0.0108	-0.0057	-0.0038	-0.0033
EUR	-0.0055	-0.0133	-0.0051	-0.0215	0.0023	-0.0058	-0.0448	-0.0696	-0.1100	-0.1656
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0005	-0.0001	-0.0006
LAM	-0.0003	-0.0137	-0.0008	-0.0060	-0.0050	-0.0023	-0.0038	-0.0067	-0.0163	-0.0234
MEA	0.0000	0.0000	0.0000	0.0006	0.0004	-0.0012	-0.0002	-0.0005	-0.0160	-0.0079
NEU	0.0065	0.0117	0.0138	0.0086	0.0122	0.0084	0.0055	-0.0007	-0.0020	-0.0002
OAS	-0.0016	-0.0010	-0.0030	-0.0013	-0.0007	-0.0007	-0.0010	-0.0018	-0.0152	-0.0227
REF	-0.0258	-0.0149	-0.0290	-0.0294	-0.0340	-0.0356	-0.0005	-0.0033	0.0021	0.0032
SSA	-0.0001	-0.0001	-0.0029	-0.0012	-0.0020	-0.0005	-0.0003	-0.0016	-0.0009	-0.0046
USA	0.0068	0.0011	0.0007	0.0008	0.0030	-0.0211	-0.0330	-0.0575	-0.0058	-0.0236

Table 190: FAO — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr)

5.3.1 Eggs


GLO
0.000
−0.004
−0.008
−0.012
Eggs (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

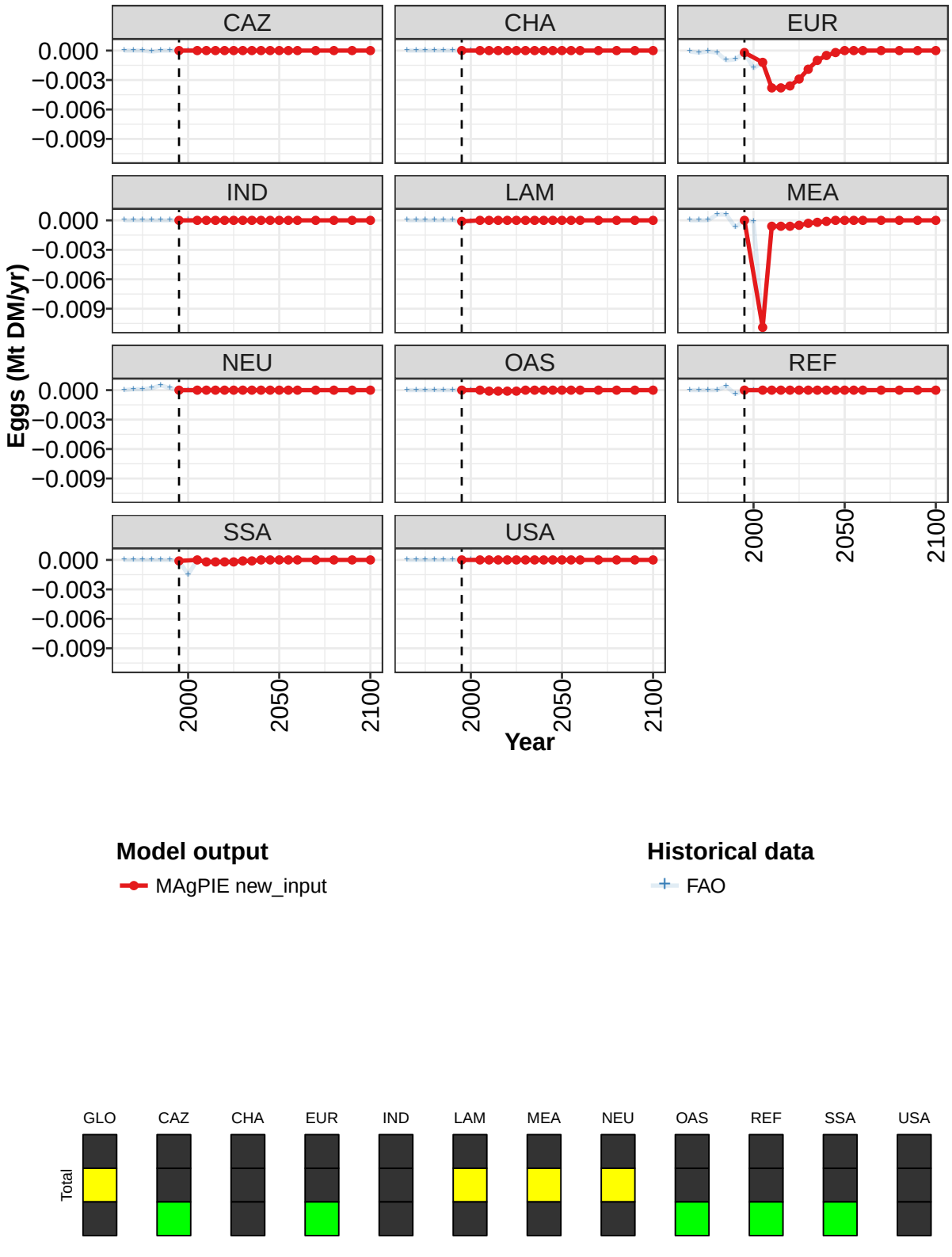


Figure 64: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	-0	0	0	0	0	0	0	0	0	0	0
MEA	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	-0	-0	-0	-0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	-0	0	-0	-0	-0	-0	-0	-0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 191: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

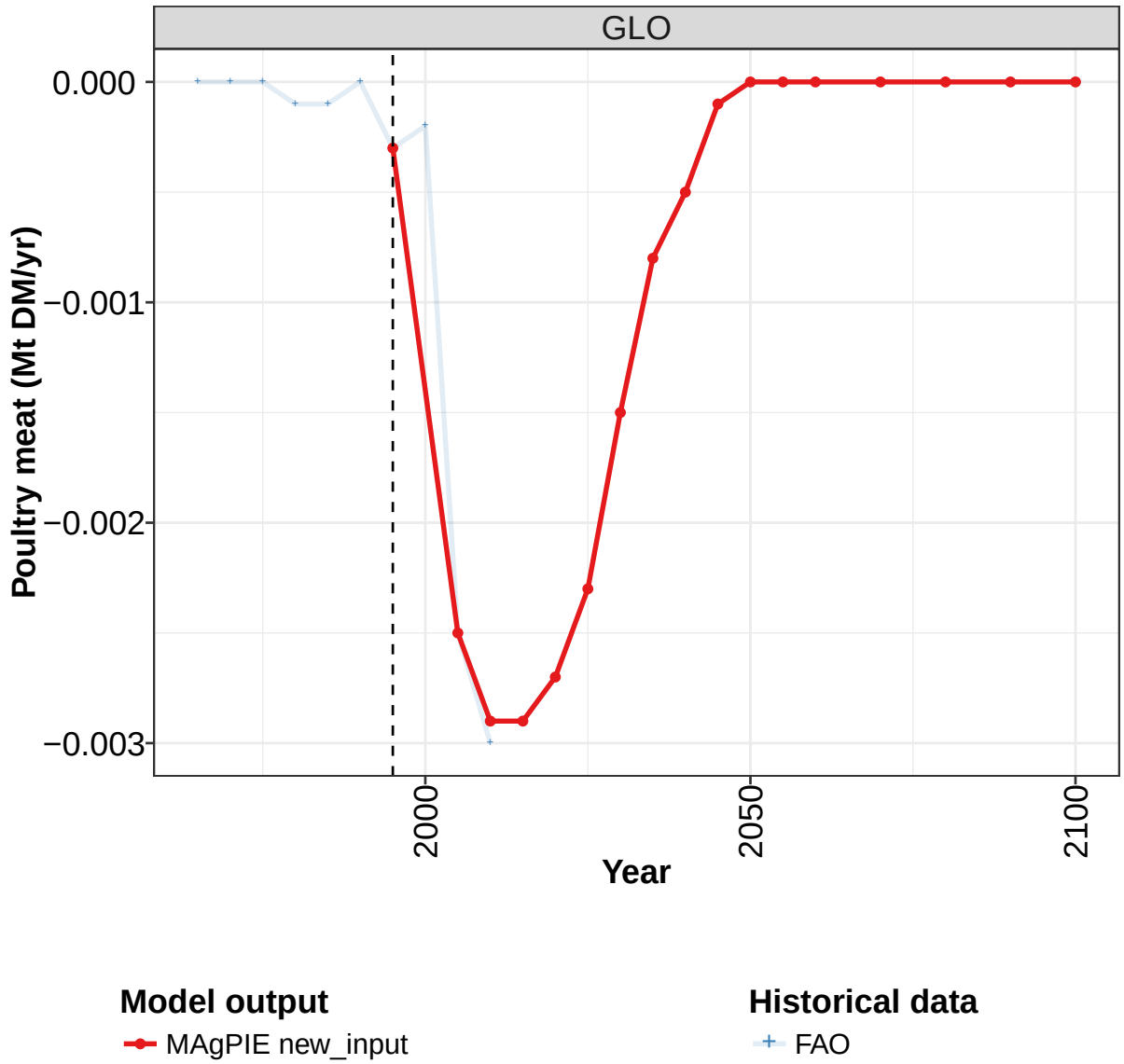
	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0
CAZ	0	0	0	0	0	0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	0	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	0	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	0	0	0	0	0	0
USA	0	0	0	0	0	0

Table 192: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	
GLO	-0.000100	-0.000100	0.000000	0.000500	0.000600	-0.001800	-0.000400	-0.003400	-0.012100	-0.00
CAZ	0.000000	0.000000	0.000000	-0.000100	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
EUR	-0.000100	-0.000200	-0.000100	-0.000200	-0.001000	-0.000900	-0.000200	-0.001800	-0.001200	-0.00
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	-0.000100	0.000000	0.00
MEA	0.000000	0.000000	0.000000	0.000600	0.000600	-0.000700	0.000000	-0.000100	-0.010900	-0.00
NEU	0.000000	0.000100	0.000100	0.000200	0.000500	0.000200	0.000000	0.000000	0.000000	0.00
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.00
REF	0.000000	0.000000	0.000000	0.000000	0.000400	-0.000400	0.000000	0.000000	0.000000	0.00
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	-0.001500	0.000000	-0.00
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00

Table 193: FAO — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr)

5.3.2 Poultry meat



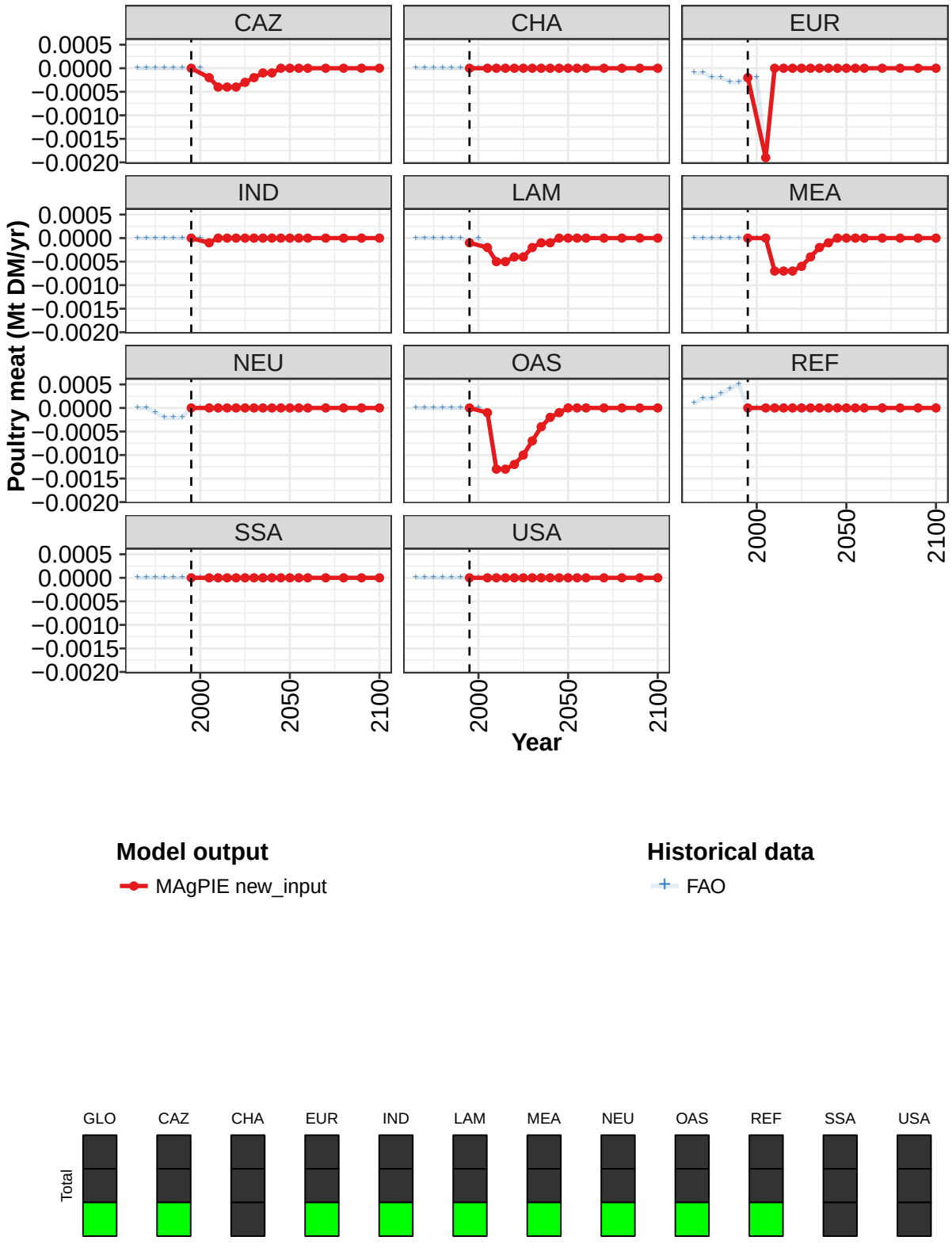


Figure 65: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
CAZ	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	-0	-0	0	0	0	0	0	0	0	0	0
IND	0	-0	0	0	0	0	0	0	0	0	0
LAM	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0
MEA	0	0	-0	-0	-0	-0	-0	-0	-0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 194: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

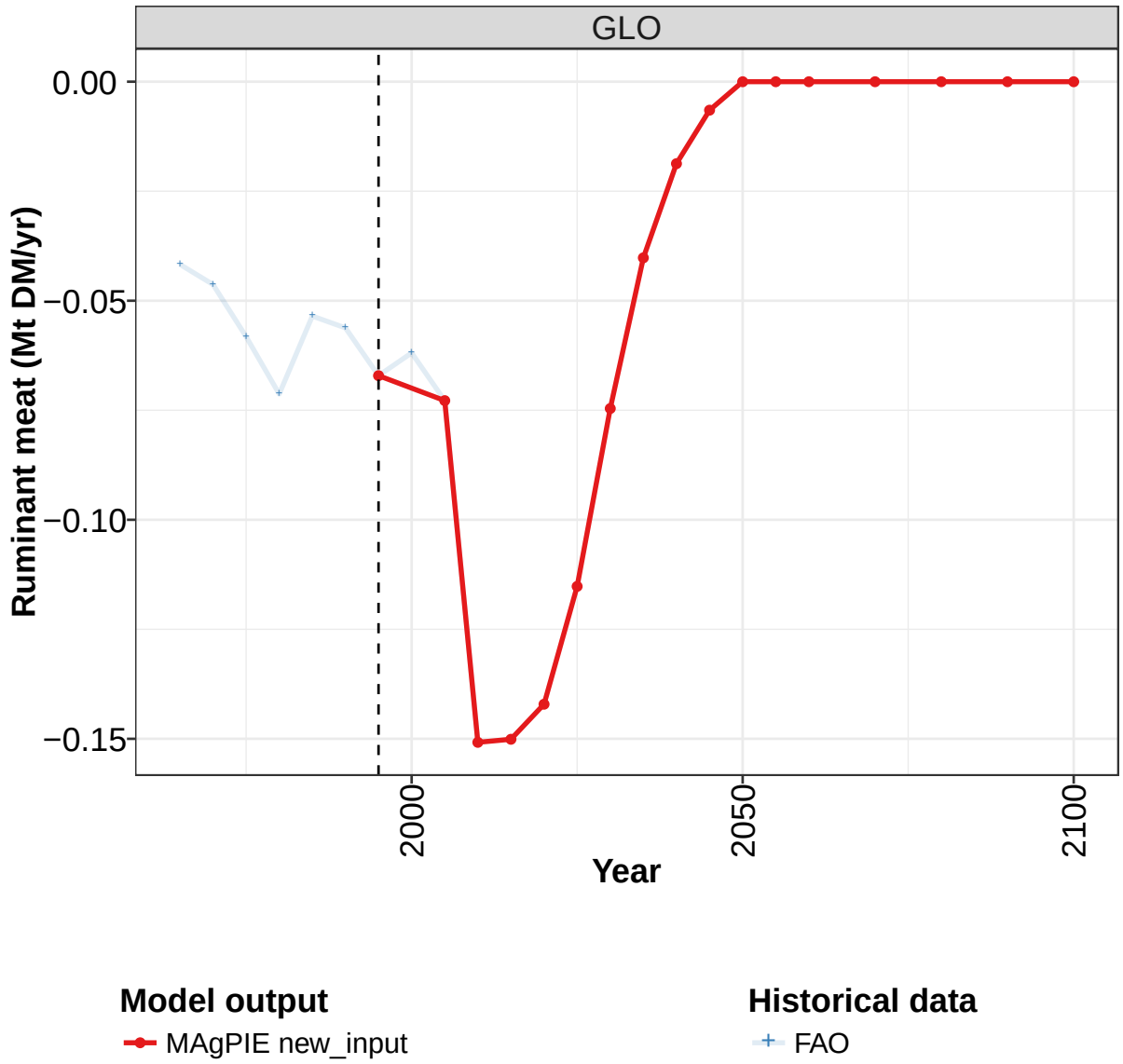
	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0
CAZ	0	0	0	0	0	0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	0	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	0	0	0	0	0	0
REF	0	0	0	0	0	0
SSA	0	0	0	0	0	0
USA	0	0	0	0	0	0

Table 195: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	
GLO	0.000000	0.000000	0.000000	-0.000100	-0.000100	0.000000	-0.000300	-0.000200	-0.002500	-0.00
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000200	-0.00
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
EUR	-0.000100	-0.000100	-0.000200	-0.000200	-0.000300	-0.000300	-0.000200	-0.000200	-0.001900	0.00
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	0.00
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	0.000000	-0.000200	-0.00
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.00
NEU	0.000000	0.000000	-0.000100	-0.000200	-0.000200	-0.000200	0.000000	0.000000	0.000000	0.00
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	-0.00
REF	0.000100	0.000200	0.000200	0.000300	0.000400	0.000500	0.000000	0.000000	0.000000	0.00
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00

Table 196: FAO — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr)

5.3.3 Ruminant meat



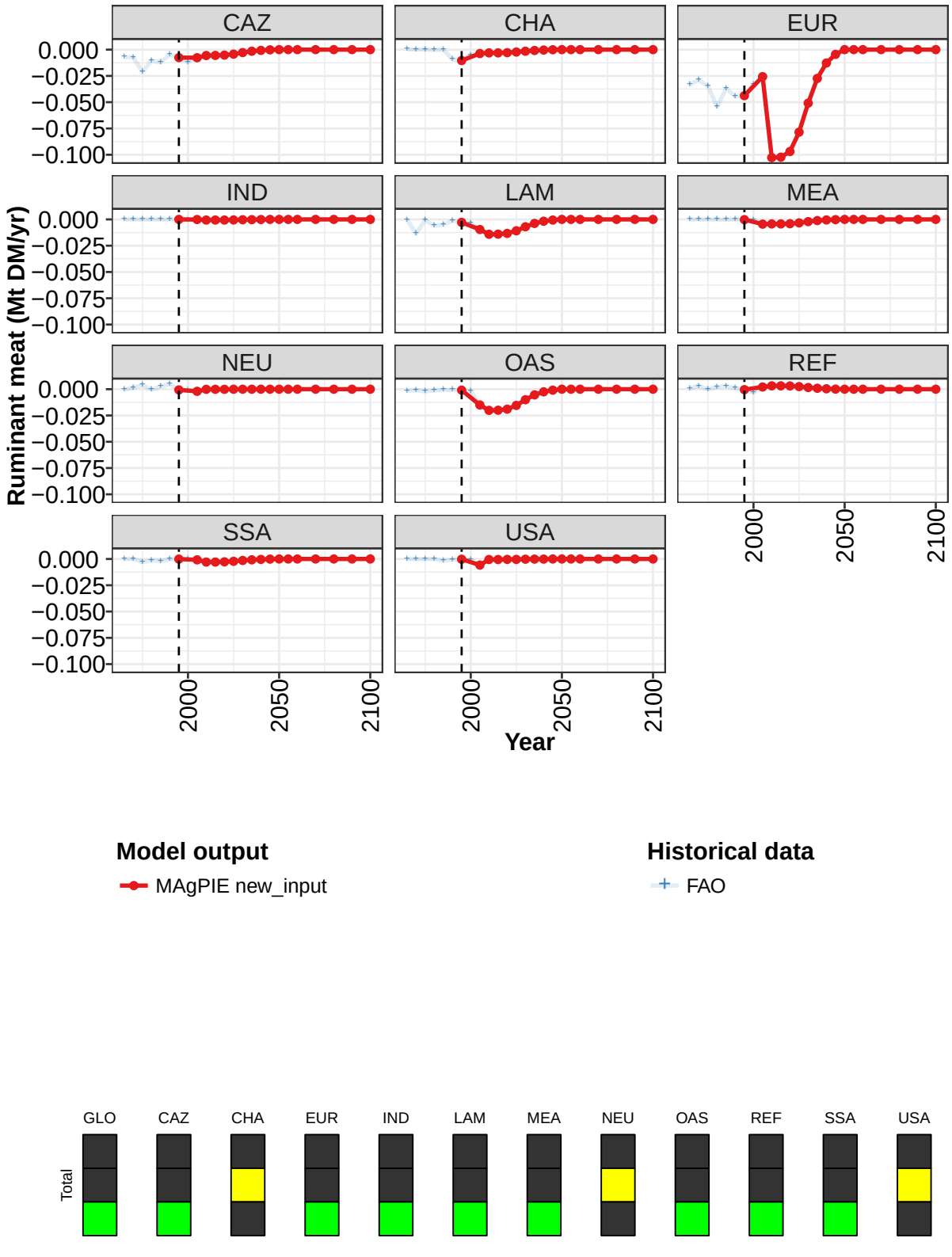


Figure 66: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.06710	-0.07280	-0.15080	-0.15010	-0.14210	-0.11520	-0.07460	-0.04020	-0.01870	-0.00650	0.00
CAZ	-0.00760	-0.00770	-0.00560	-0.00550	-0.00520	-0.00430	-0.00280	-0.00150	-0.00070	-0.00020	0.00
CHA	-0.01040	-0.00370	-0.00310	-0.00310	-0.00290	-0.00230	-0.00150	-0.00080	-0.00040	-0.00010	0.00
EUR	-0.04380	-0.02570	-0.10270	-0.10230	-0.09690	-0.07850	-0.05090	-0.02740	-0.01270	-0.00450	0.00
IND	0.00000	-0.00010	-0.00060	-0.00060	-0.00060	-0.00050	-0.00030	-0.00020	-0.00010	0.00000	0.00
LAM	-0.00280	-0.00960	-0.01410	-0.01400	-0.01330	-0.01080	-0.00700	-0.00380	-0.00170	-0.00060	0.00
MEA	-0.00020	-0.00450	-0.00430	-0.00430	-0.00410	-0.00330	-0.00210	-0.00110	-0.00050	-0.00020	0.00
NEU	-0.00070	-0.00200	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
OAS	-0.00090	-0.01500	-0.02010	-0.02000	-0.01900	-0.01540	-0.01000	-0.00540	-0.00250	-0.00090	0.00
REF	-0.00040	0.00210	0.00320	0.00320	0.00310	0.00250	0.00160	0.00090	0.00040	0.00010	0.00
SSA	-0.00010	-0.00080	-0.00290	-0.00290	-0.00270	-0.00220	-0.00140	-0.00080	-0.00040	-0.00010	0.00
USA	-0.00020	-0.00580	-0.00050	-0.00050	-0.00040	-0.00040	-0.00020	-0.00010	-0.00010	0.00000	0.00

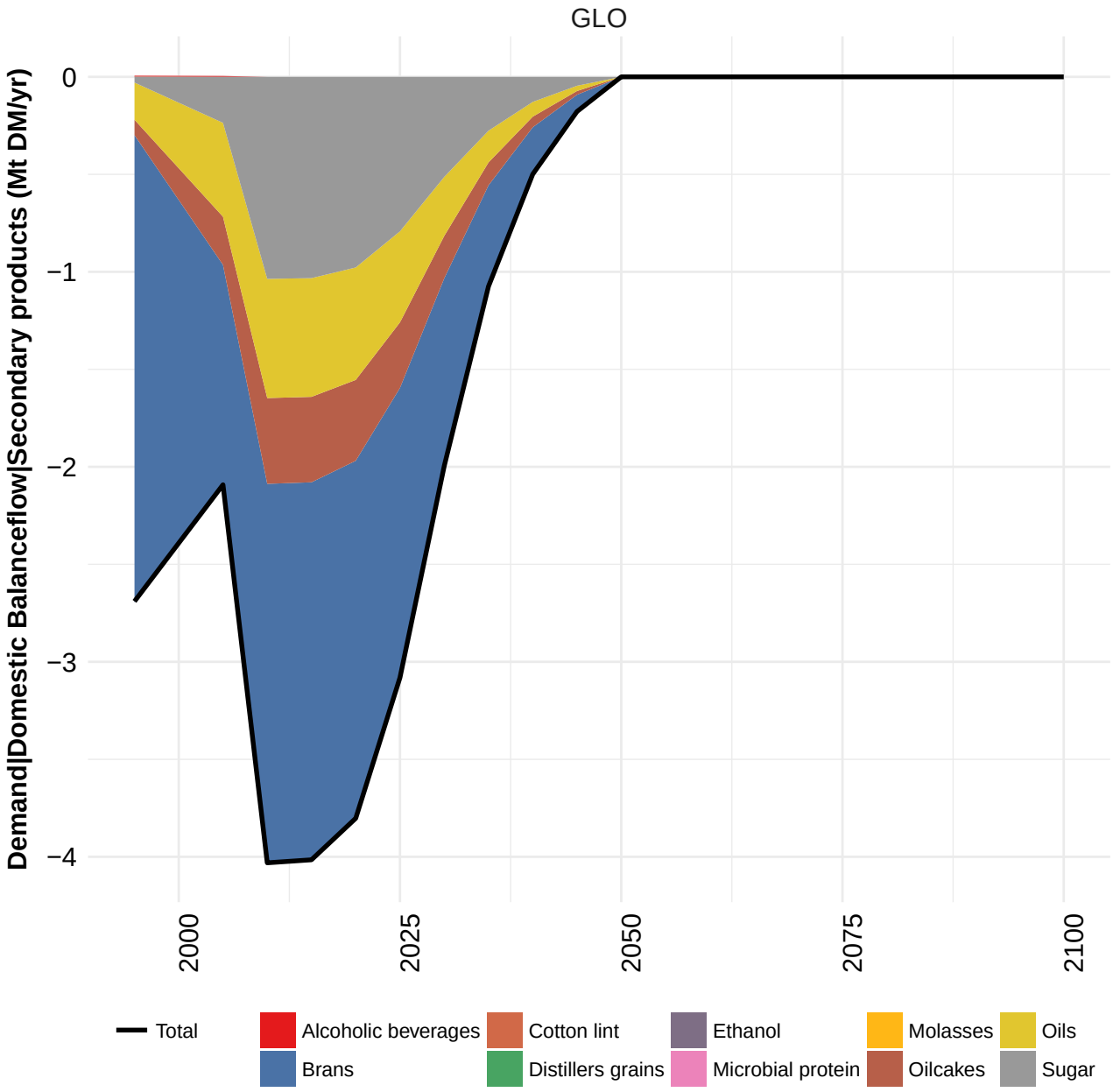
Table 197: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

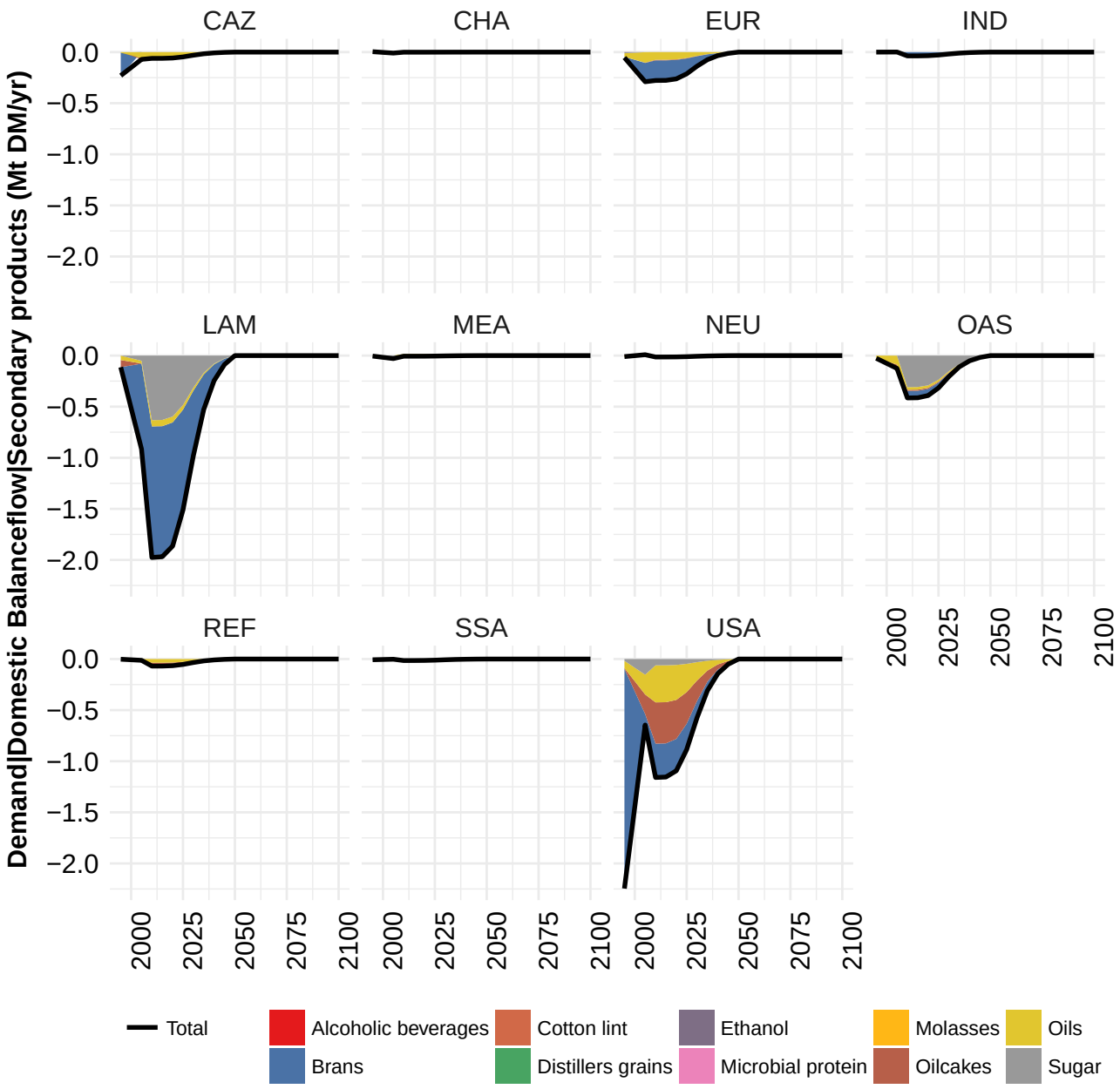
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 198: MAgPIE new_input — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

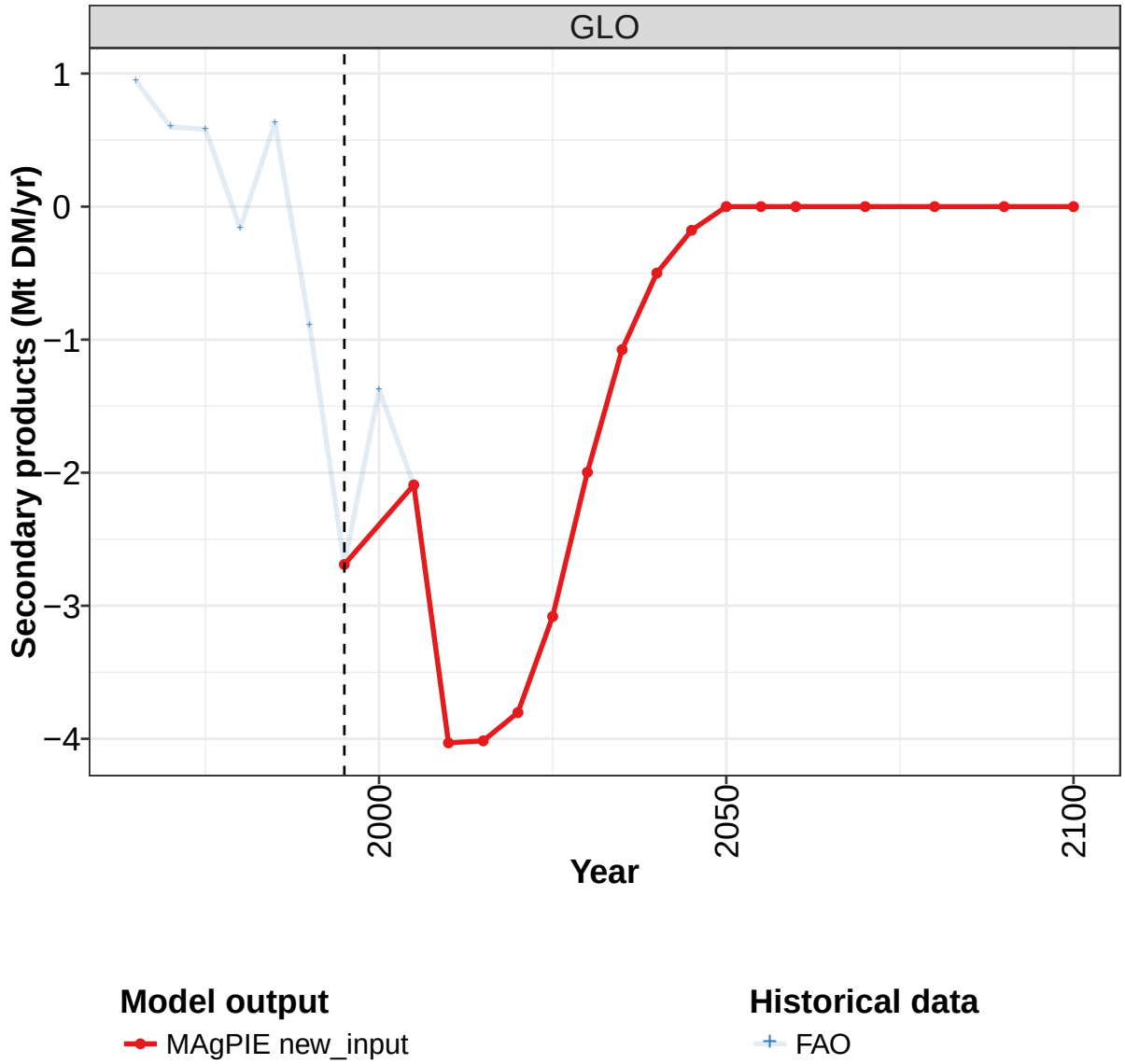
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.04170	-0.04630	-0.05820	-0.07130	-0.05350	-0.05620	-0.06710	-0.06190	-0.07280	-0.15060
CAZ	-0.00720	-0.00730	-0.02130	-0.01030	-0.01210	-0.00490	-0.00760	-0.01190	-0.00770	-0.00560
CHA	0.00030	0.00020	0.00000	-0.00020	-0.00020	-0.00940	-0.01040	-0.00510	-0.00370	-0.00310
EUR	-0.03310	-0.02900	-0.03490	-0.05430	-0.03700	-0.04440	-0.04380	-0.03330	-0.02570	-0.10270
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00050	-0.00010	-0.00060
LAM	-0.00030	-0.01360	-0.00070	-0.00600	-0.00490	-0.00140	-0.00280	-0.00370	-0.00960	-0.01410
MEA	0.00000	0.00000	0.00000	0.00000	-0.00020	-0.00010	-0.00020	-0.00040	-0.00450	-0.00430
NEU	-0.00040	0.00150	0.00390	-0.00050	0.00260	0.00470	-0.00070	-0.00110	-0.00200	-0.00010
OAS	-0.00160	-0.00100	-0.00210	-0.00120	-0.00060	-0.00060	-0.00090	-0.00170	-0.01500	-0.02010
REF	0.00080	0.00300	0.00000	0.00230	0.00290	0.00100	-0.00040	-0.00330	0.00210	0.00320
SSA	-0.00010	-0.00010	-0.00290	-0.00120	-0.00200	-0.00040	-0.00010	-0.00010	-0.00080	-0.00290
USA	0.00000	-0.00010	-0.00020	0.00000	-0.00190	-0.00070	-0.00020	-0.00080	-0.00580	-0.00050

Table 199: FAO — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr)


GLO
Demand|Domestic Balanceflow|Secondary products (Mt DM/yr)
0
−1
−2
−3
−4
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Domestic Balanceflow|Secondary products (Mt DM/yr)
0.0
−0.5
−1.0
−1.5
−2.0
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

5.4 Secondary products



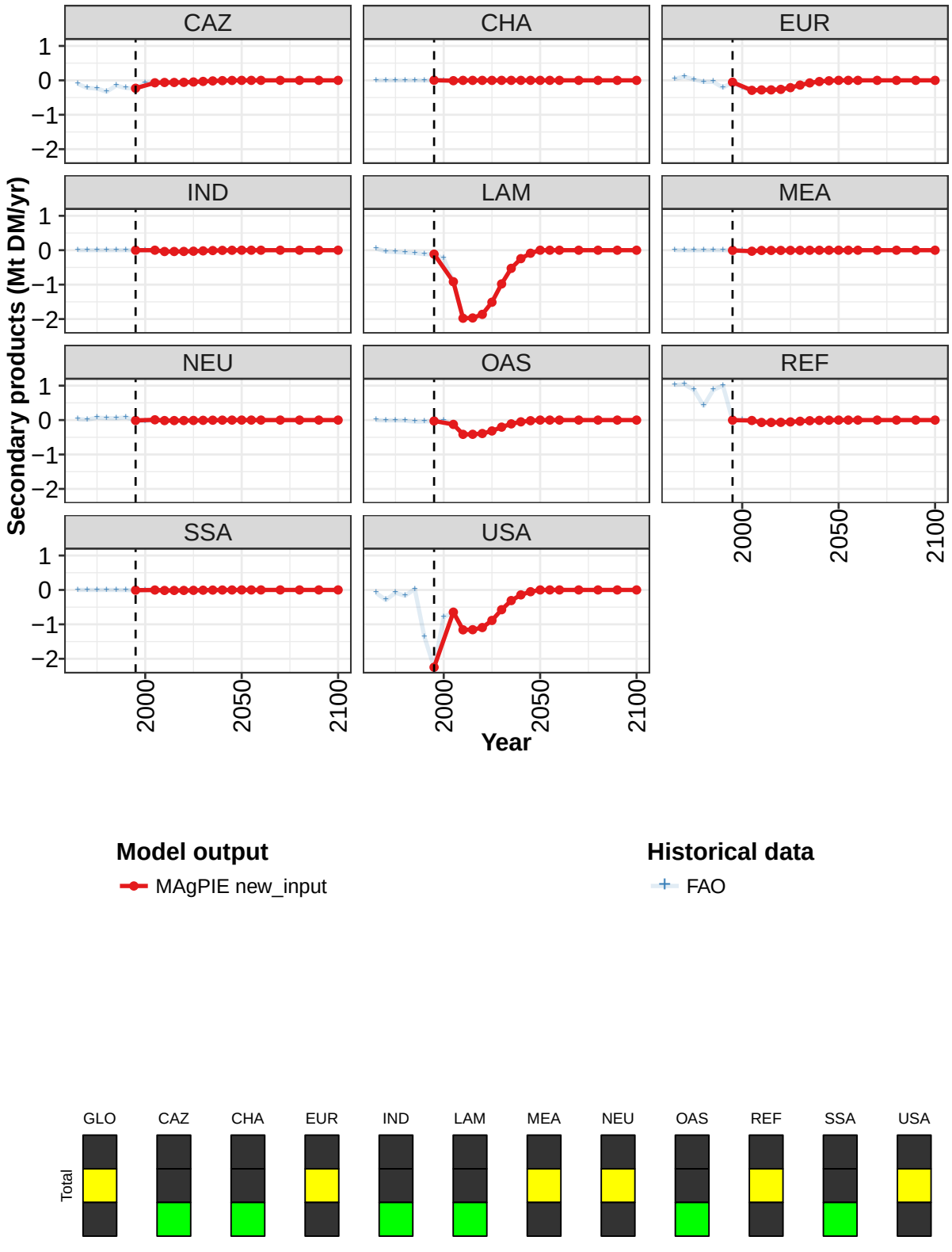


Figure 67: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-2.69000	-2.09200	-4.03080	-4.01540	-3.80250	-3.08080	-1.99630	-1.07450	-0.49940	-0.17780	0.00
CAZ	-0.23000	-0.07080	-0.06140	-0.06120	-0.05790	-0.04700	-0.03050	-0.01640	-0.00760	-0.00270	0.00
CHA	0.00420	-0.00960	-0.00090	-0.00090	-0.00090	-0.00070	-0.00050	-0.00020	-0.00020	0.00000	0.00
EUR	-0.05380	-0.28980	-0.27780	-0.27670	-0.26200	-0.21240	-0.13760	-0.07410	-0.03440	-0.01230	0.00
IND	0.00010	0.00090	-0.03720	-0.03710	-0.03510	-0.02850	-0.01850	-0.00990	-0.00460	-0.00160	0.00
LAM	-0.11360	-0.91570	-1.97580	-1.96850	-1.86410	-1.51020	-0.97860	-0.52670	-0.24460	-0.08720	0.00
MEA	-0.00520	-0.02940	-0.00630	-0.00620	-0.00600	-0.00480	-0.00310	-0.00180	-0.00080	-0.00030	0.00
NEU	-0.01010	0.00840	-0.01400	-0.01390	-0.01320	-0.01070	-0.00690	-0.00370	-0.00180	-0.00060	0.00
OAS	-0.02640	-0.12570	-0.41450	-0.41280	-0.39090	-0.31680	-0.20530	-0.11060	-0.05130	-0.01820	0.00
REF	-0.00200	-0.01260	-0.06900	-0.06870	-0.06510	-0.05280	-0.03410	-0.01830	-0.00860	-0.00300	0.00
SSA	-0.00700	-0.00200	-0.01480	-0.01460	-0.01380	-0.01120	-0.00720	-0.00390	-0.00190	-0.00070	0.00
USA	-2.24620	-0.64570	-1.15910	-1.15480	-1.09350	-0.88570	-0.57400	-0.30890	-0.14360	-0.05120	0.00

Table 200: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr) [PART 1/2]

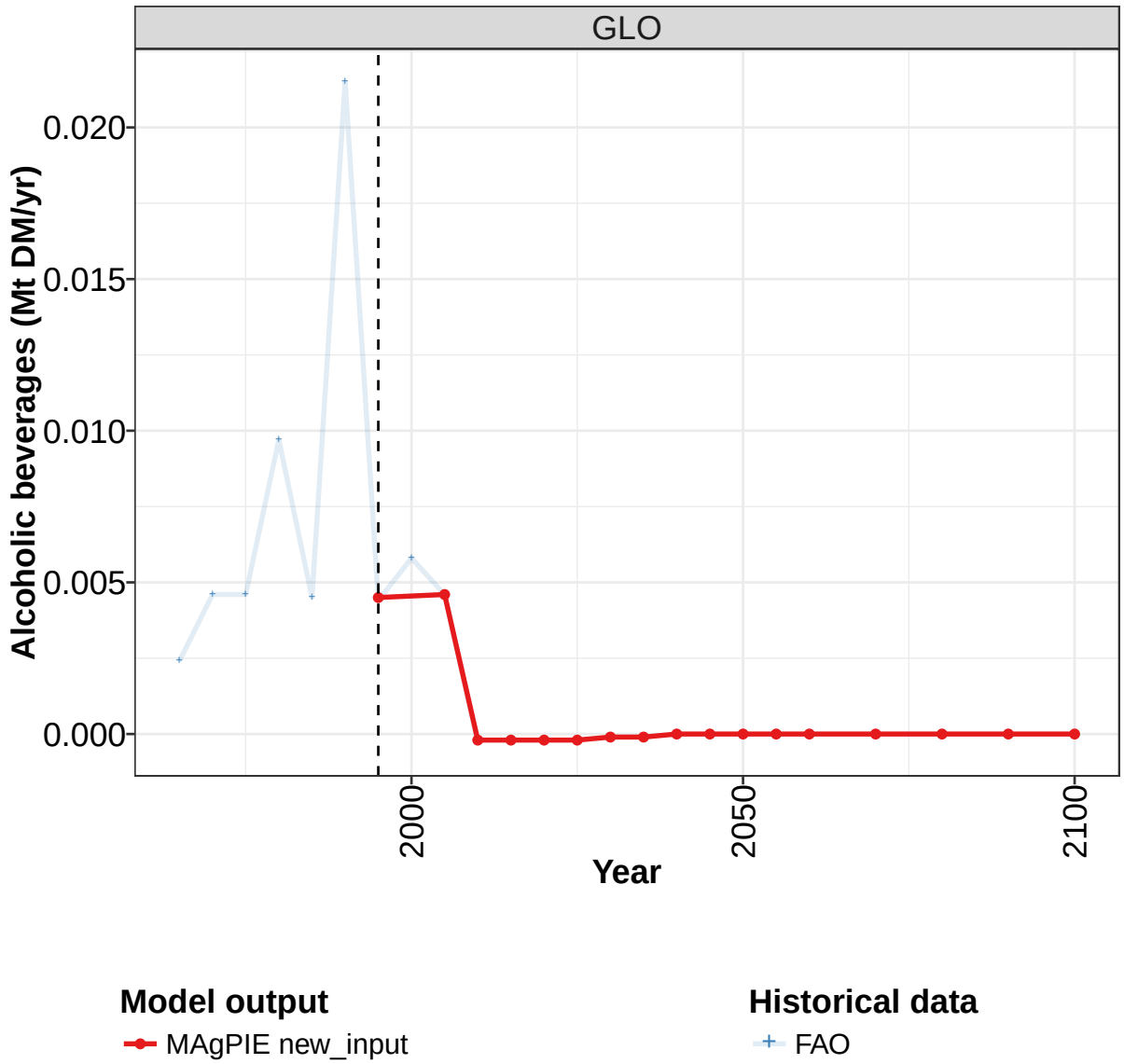
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 201: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	0.60	0.58	-0.16	0.63	-0.89	-2.69	-1.38	-2.09	-4.03
CAZ	-0.10	-0.22	-0.24	-0.33	-0.15	-0.22	-0.23	-0.07	-0.07	-0.06
CHA	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	-0.01	-0.01	-0.00
EUR	0.04	0.11	0.02	-0.04	-0.04	-0.21	-0.05	-0.21	-0.29	-0.28
IND	0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00	-0.00	0.00	-0.04
LAM	0.05	-0.04	-0.05	-0.07	-0.08	-0.12	-0.11	-0.24	-0.92	-1.98
MEA	0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.01	-0.01	-0.03	-0.01
NEU	0.03	0.01	0.07	0.06	0.05	0.08	-0.01	-0.03	0.01	-0.01
OAS	-0.00	-0.01	-0.01	-0.01	-0.05	-0.04	-0.03	-0.02	-0.13	-0.41
REF	1.02	1.04	0.88	0.41	0.88	1.00	-0.00	-0.00	-0.01	-0.07
SSA	0.00	0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.00	-0.00	-0.01
USA	-0.09	-0.29	-0.08	-0.17	0.03	-1.37	-2.25	-0.79	-0.65	-1.16

Table 202: FAO — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr)

5.4.1 Alcoholic beverages



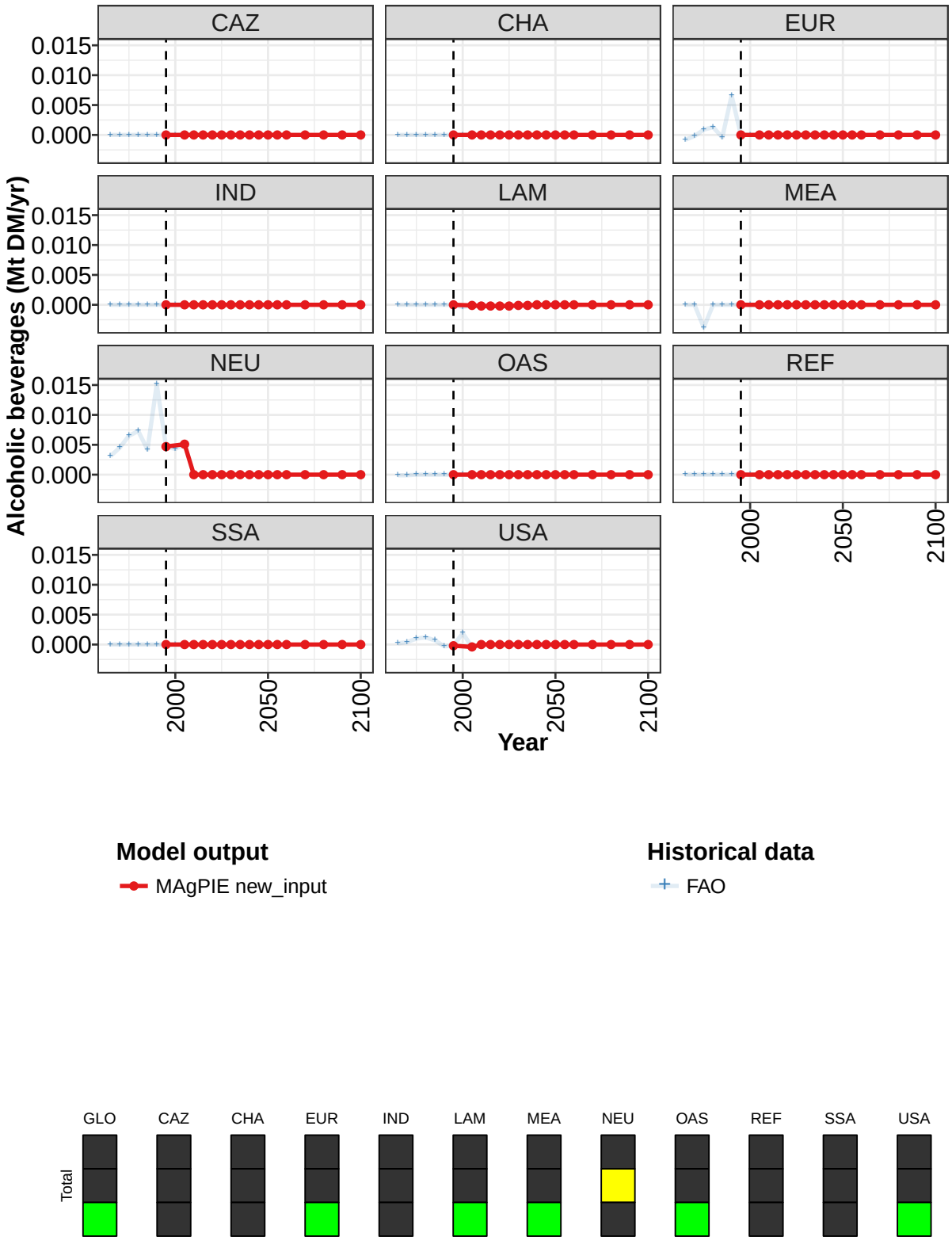


Figure 68: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	205
GLO	0.00450	0.00460	-0.00020	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000	0.0000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
LAM	0.00000	-0.00010	-0.00020	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000	0.0000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
NEU	0.00470	0.00510	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
USA	-0.00020	-0.00040	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000

Table 203: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

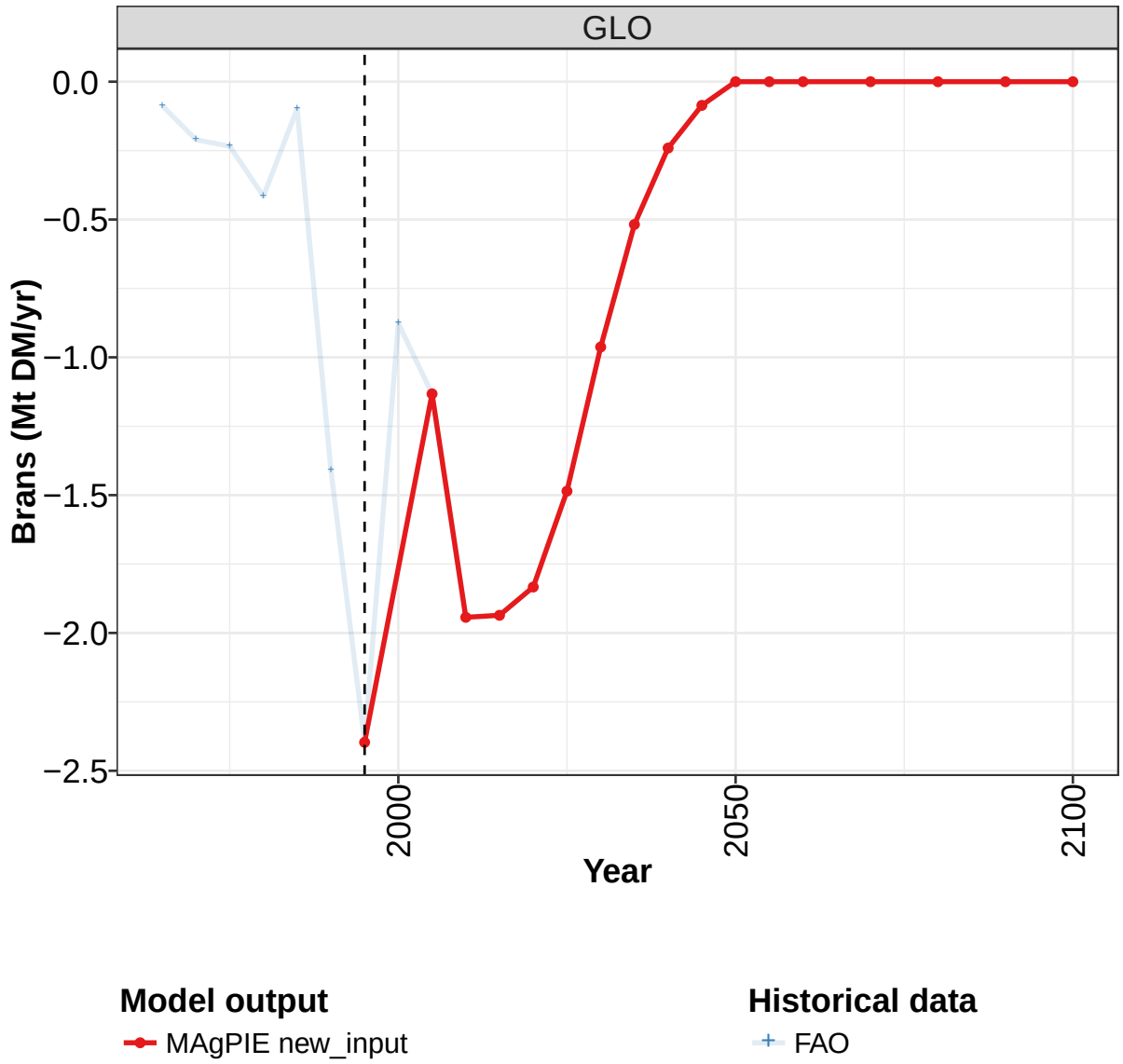
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 204: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0024	0.0046	0.0046	0.0097	0.0045	0.0215	0.0044	0.0058	0.0046	-0.0003
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	-0.0008	-0.0002	0.0009	0.0013	-0.0004	0.0066	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0004	-0.0001	-0.0002
MEA	0.0000	0.0000	-0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0031	0.0045	0.0065	0.0073	0.0042	0.0151	0.0047	0.0043	0.0051	0.0000
OAS	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0002	0.0004	0.0010	0.0012	0.0007	-0.0003	-0.0002	0.0019	-0.0004	0.0000

Table 205: FAO — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr)

5.4.2 Brans


GLO
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
Brans (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

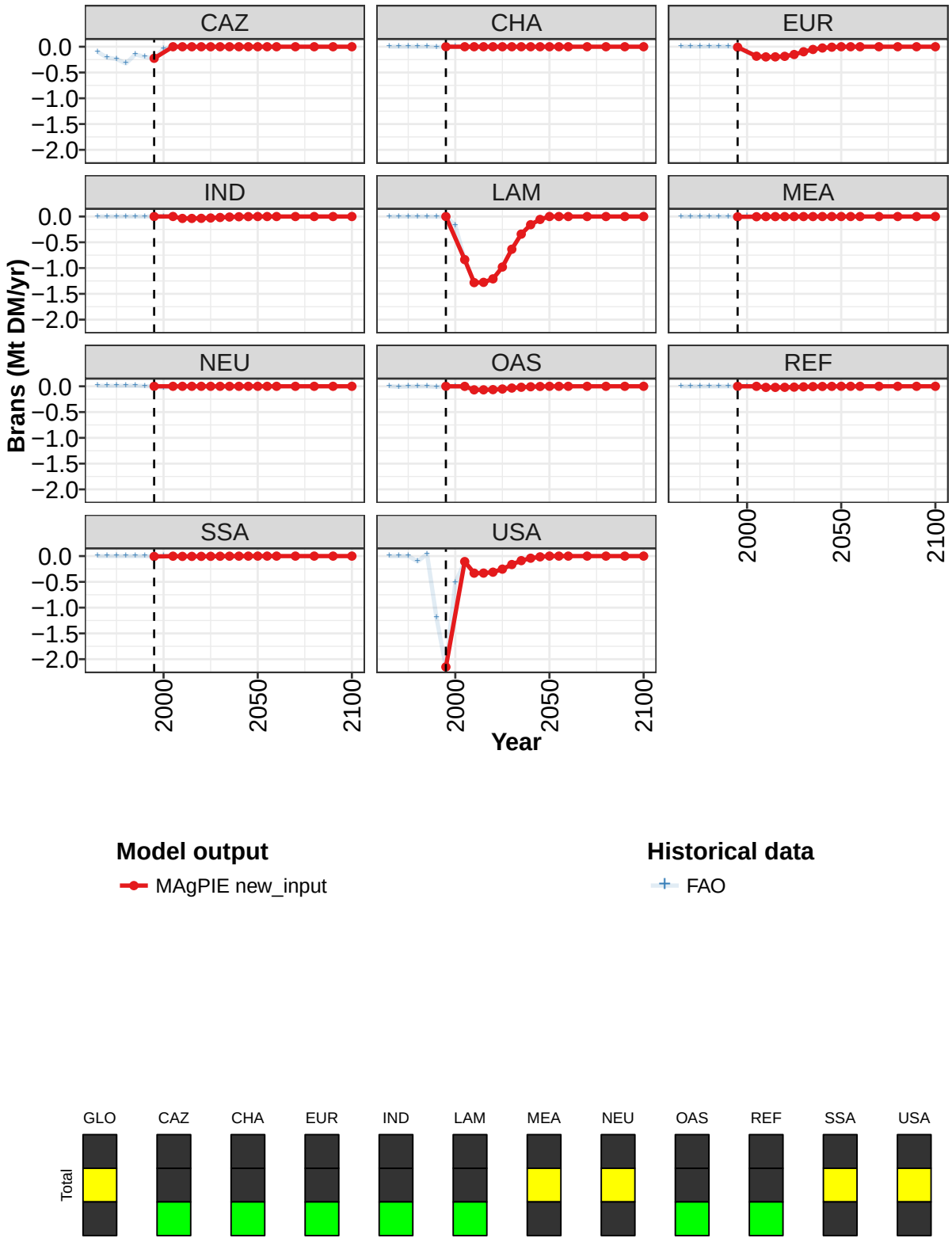


Figure 69: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	
GLO	-2.396800	-1.132400	-1.943300	-1.935900	-1.833300	-1.485400	-0.962500	-0.518000	-0.240700	-0.08
CAZ	-0.224100	0.000000	-0.000300	-0.000300	-0.000300	-0.000300	-0.000200	-0.000100	0.000000	0.00
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
EUR	-0.009000	-0.184000	-0.197300	-0.196500	-0.186100	-0.150800	-0.097700	-0.052600	-0.024400	-0.00
IND	0.000100	0.001000	-0.037100	-0.037000	-0.035000	-0.028400	-0.018400	-0.009900	-0.004600	-0.00
LAM	-0.000400	-0.836200	-1.281700	-1.276900	-1.209200	-0.979600	-0.634800	-0.341600	-0.158700	-0.05
MEA	-0.005800	-0.003600	-0.001400	-0.001400	-0.001400	-0.001100	-0.000700	-0.000400	-0.000200	-0.00
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
OAS	0.000000	-0.001200	-0.068500	-0.068200	-0.064600	-0.052400	-0.033900	-0.018300	-0.008500	-0.00
REF	0.000000	-0.000200	-0.020600	-0.020500	-0.019400	-0.015800	-0.010200	-0.005500	-0.002600	-0.00
SSA	-0.006900	-0.001800	-0.005700	-0.005600	-0.005300	-0.004300	-0.002800	-0.001500	-0.000700	-0.00
USA	-2.150700	-0.106400	-0.330700	-0.329500	-0.312000	-0.252700	-0.163800	-0.088100	-0.041000	-0.01

Table 206: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr) [PART 1/2]

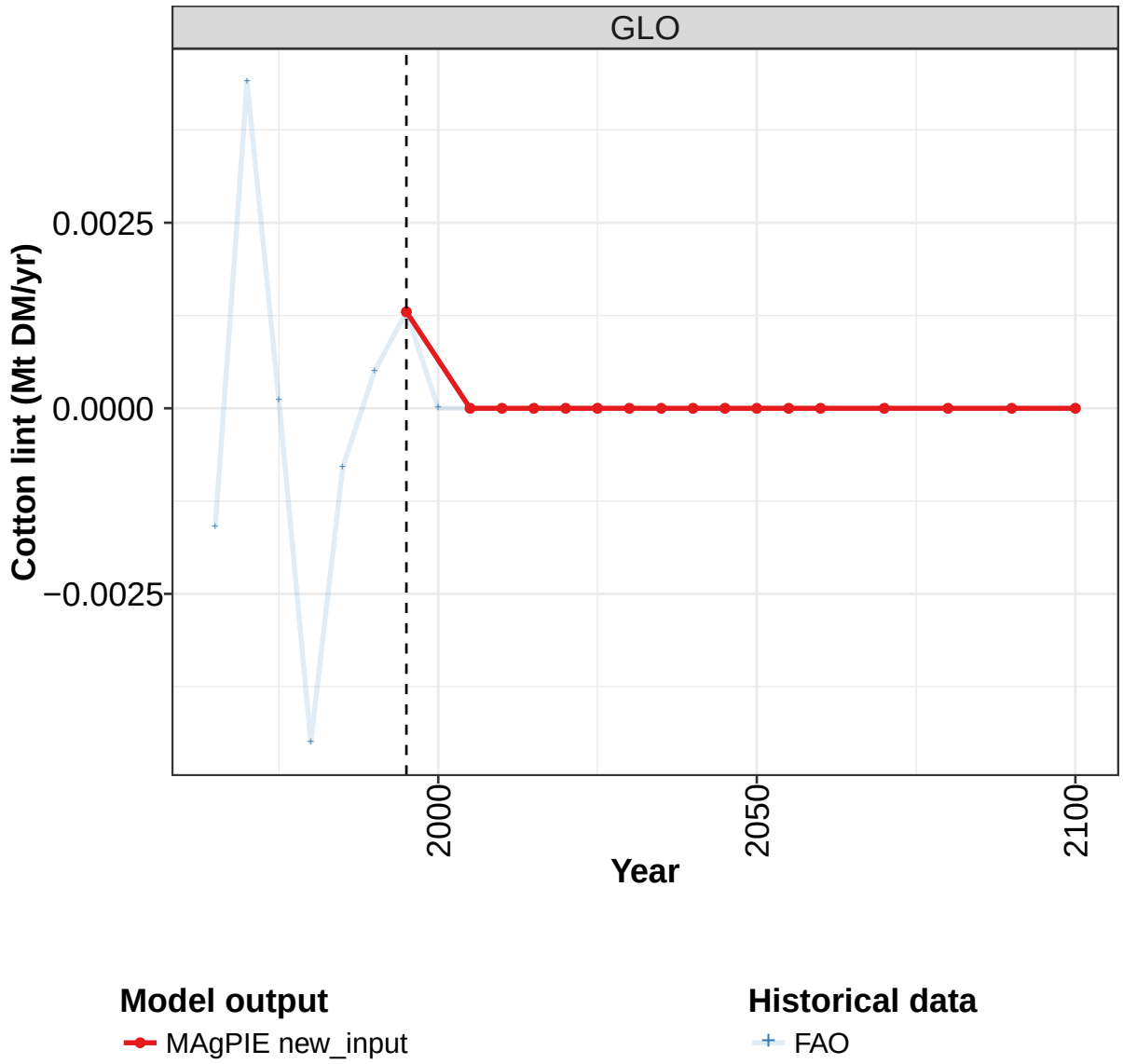
	2055	2060	2070	2080	2090	2100
GLO	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
EUR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
REF	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 207: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0867	-0.2104	-0.2342	-0.4157	-0.0979	-1.4087	-2.3967	-0.8771	-1.1324	-1.9433
CAZ	-0.0994	-0.2118	-0.2376	-0.3255	-0.1498	-0.1954	-0.2241	-0.0433	0.0000	-0.0003
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0044	0.0000	0.0000	0.0000	0.0000
EUR	0.0050	0.0047	0.0022	0.0044	0.0042	0.0026	-0.0090	-0.1085	-0.1840	-0.1973
IND	0.0000	0.0000	0.0000	0.0008	-0.0003	-0.0011	0.0001	0.0001	0.0010	-0.0371
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0050	-0.0004	-0.1739	-0.8362	-1.2817
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0058	0.0013	-0.0036	-0.0014
NEU	0.0095	0.0085	0.0087	0.0106	0.0114	0.0036	0.0000	-0.0308	0.0000	0.0000
OAS	0.0000	-0.0098	-0.0059	-0.0018	-0.0014	-0.0136	0.0000	-0.0038	-0.0012	-0.0685
REF	-0.0019	-0.0019	-0.0016	-0.0015	-0.0016	-0.0019	0.0000	0.0000	-0.0002	-0.0206
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0069	0.0000	-0.0018	-0.0057
USA	0.0000	0.0000	0.0000	-0.1026	0.0396	-1.1936	-2.1507	-0.5183	-0.1064	-0.3307

Table 208: FAO — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr)

5.4.3 Cotton lint



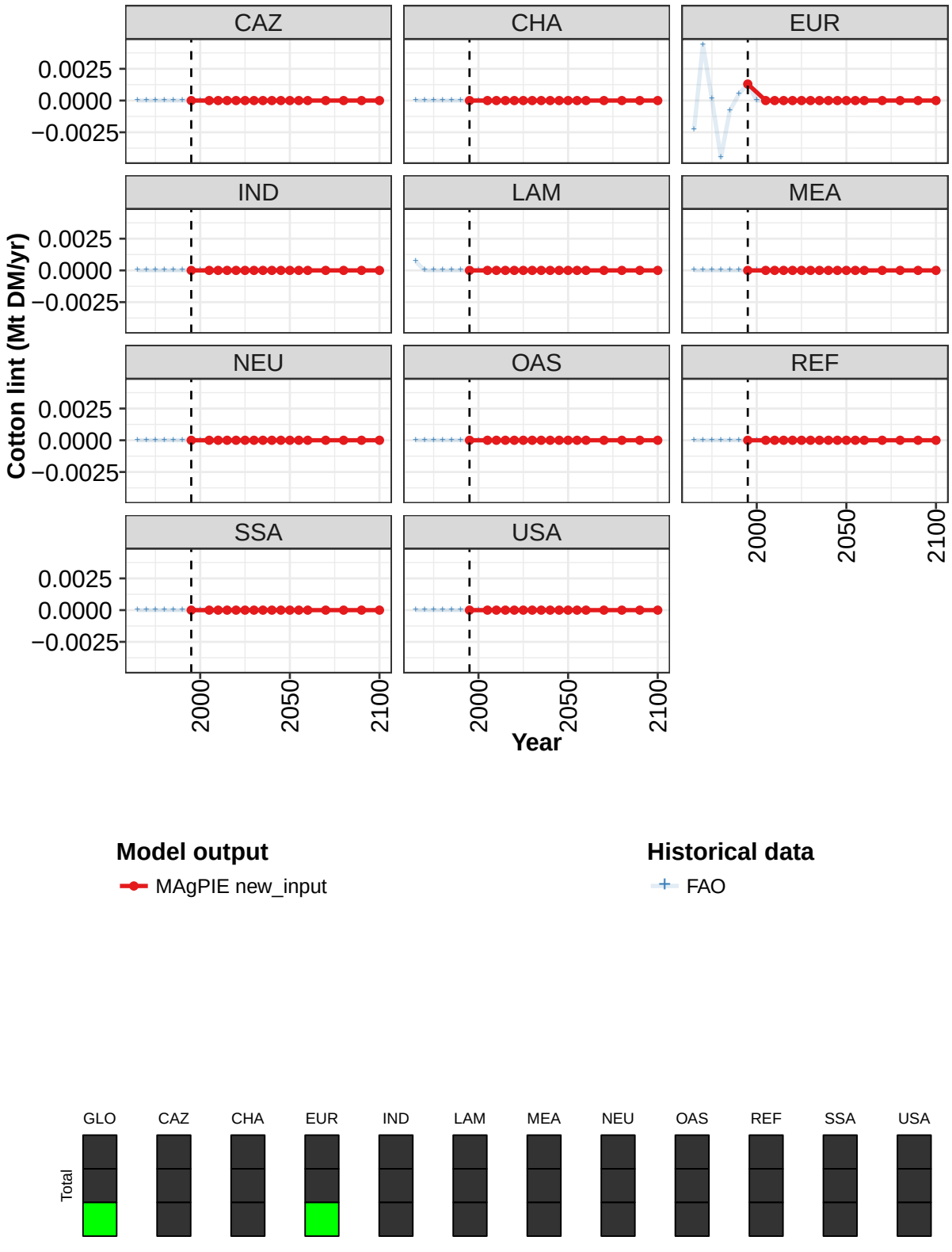


Figure 70: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.00130	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00130	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 209: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

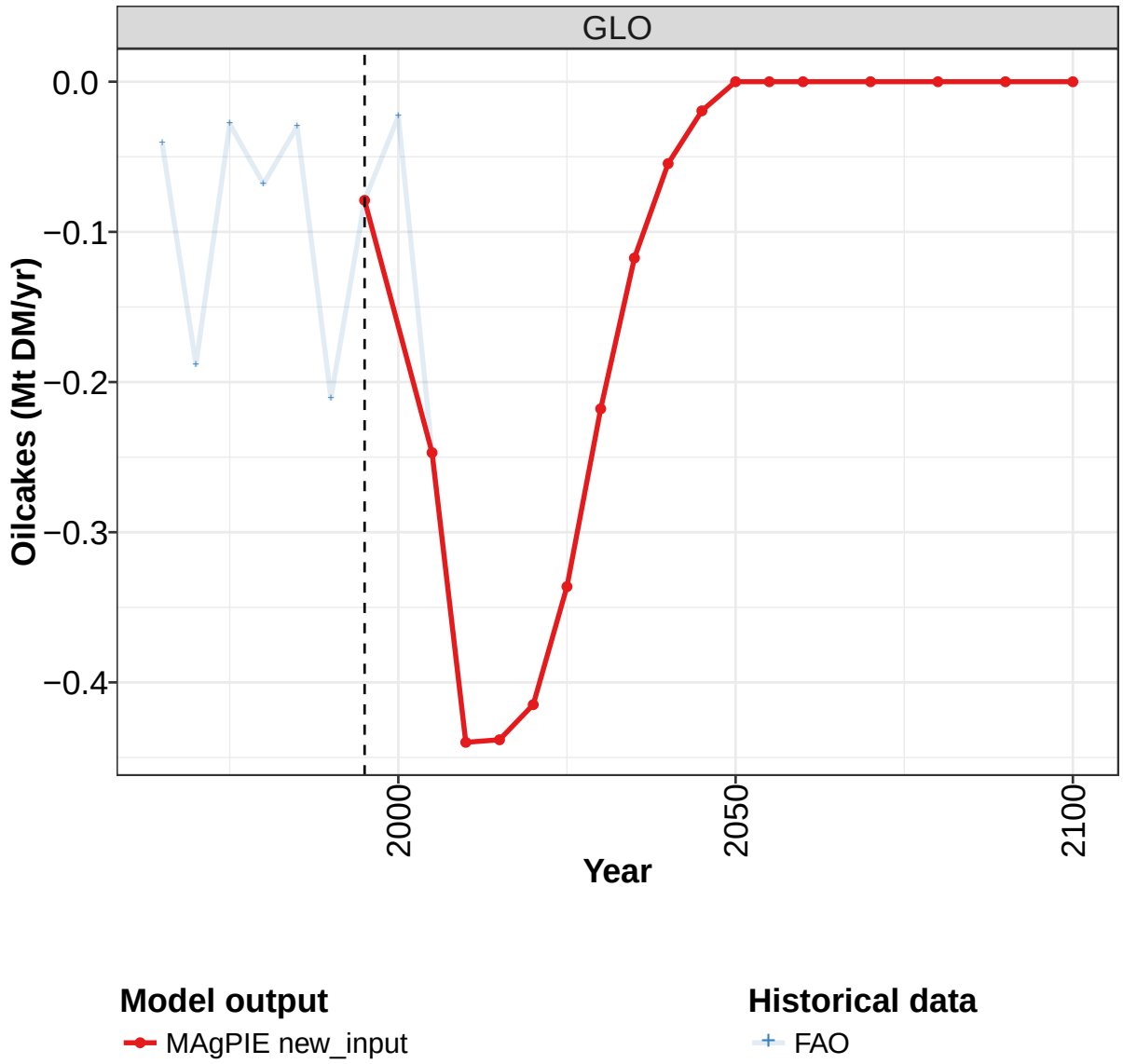
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 210: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.00160	0.00440	0.00010	-0.00450	-0.00080	0.00050	0.00130	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	-0.00230	0.00440	0.00010	-0.00450	-0.00080	0.00050	0.00130	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00070	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 211: FAO — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr)

5.4.4 Oilcakes



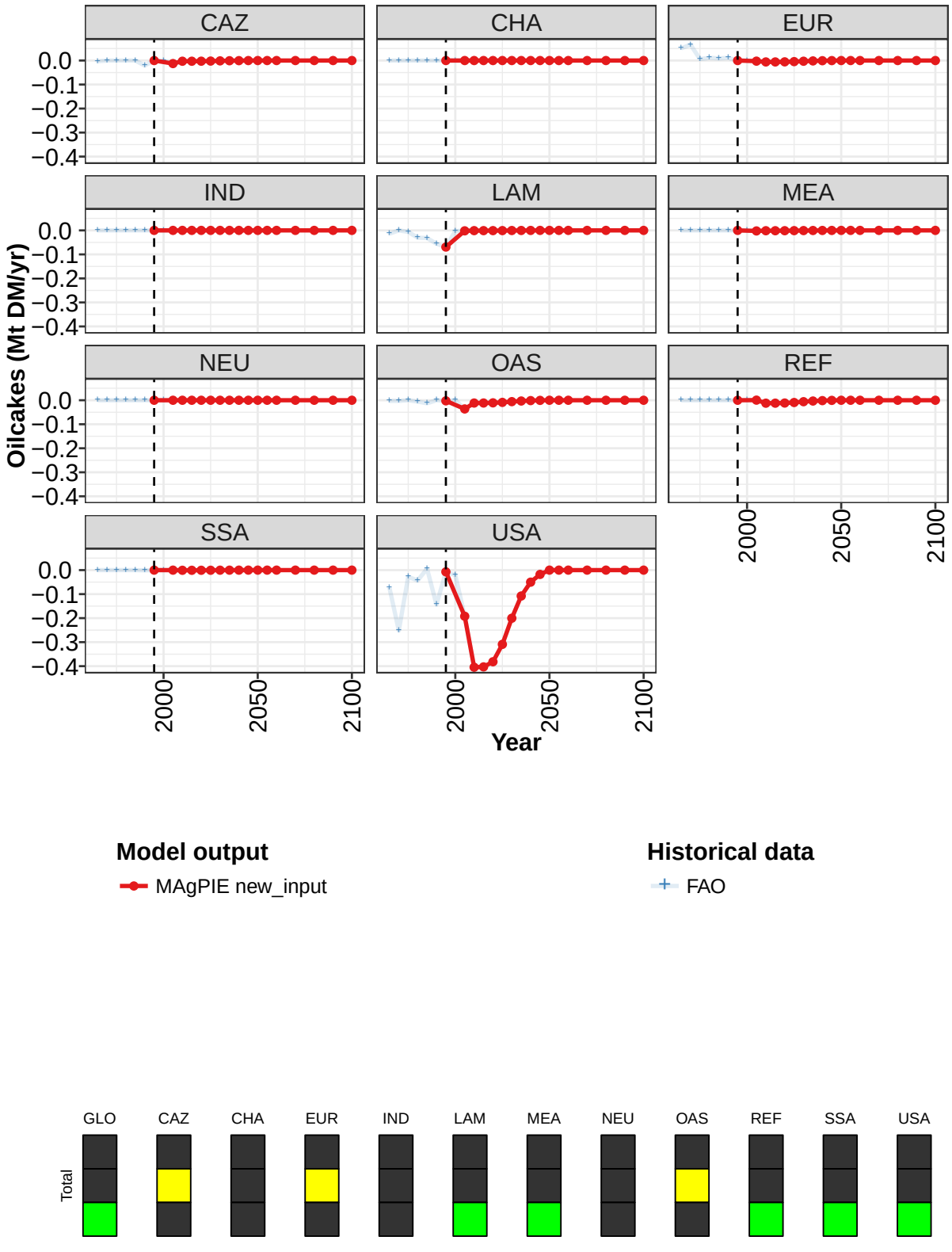


Figure 71: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	
GLO	-0.079000	-0.247000	-0.439900	-0.438200	-0.414800	-0.336200	-0.217800	-0.117400	-0.054500	-0.01
CAZ	0.000000	-0.012600	-0.002900	-0.002900	-0.002700	-0.002200	-0.001400	-0.000800	-0.000400	-0.00
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
EUR	0.000000	-0.002500	-0.005800	-0.005800	-0.005500	-0.004500	-0.002900	-0.001600	-0.000700	-0.00
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
LAM	-0.069400	-0.001800	-0.001000	-0.001000	-0.000900	-0.000800	-0.000500	-0.000300	-0.000100	0.00
MEA	0.000000	-0.002200	-0.001300	-0.001300	-0.001200	-0.001000	-0.000700	-0.000400	-0.000200	-0.00
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
OAS	-0.002400	-0.036200	-0.011500	-0.011400	-0.010800	-0.008800	-0.005700	-0.003100	-0.001400	-0.00
REF	0.000000	0.000500	-0.012200	-0.012100	-0.011500	-0.009300	-0.006000	-0.003200	-0.001500	-0.00
SSA	0.000000	-0.000100	-0.000700	-0.000700	-0.000600	-0.000500	-0.000300	-0.000200	-0.000100	0.00
USA	-0.007200	-0.192100	-0.404500	-0.403000	-0.381600	-0.309100	-0.200300	-0.107800	-0.050100	-0.01

Table 212: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

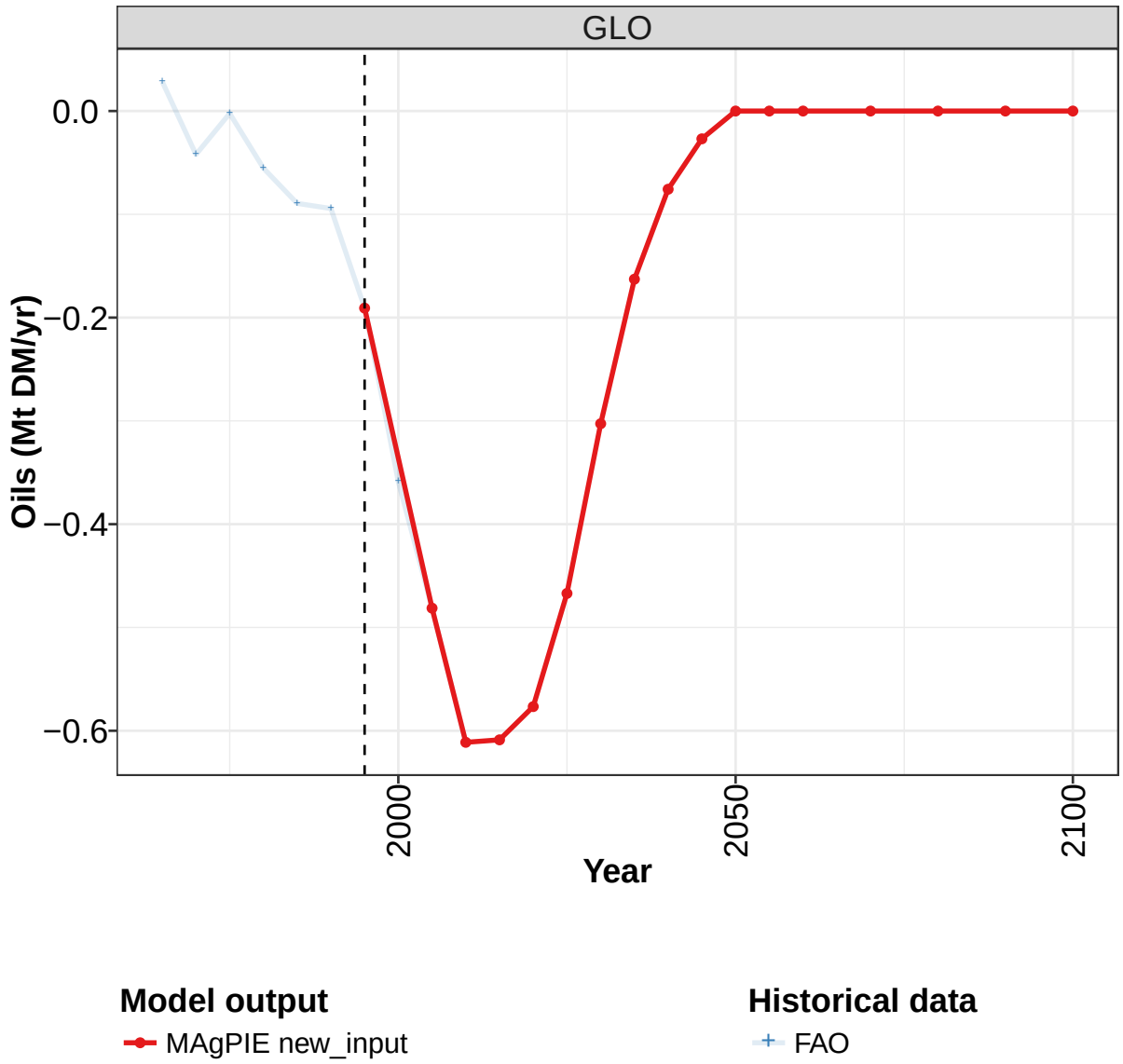
	2055	2060	2070	2080	2090	2100
GLO	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
EUR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
REF	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 213: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0413	-0.1884	-0.0281	-0.0681	-0.0298	-0.2108	-0.0790	-0.0231	-0.2469	-0.4398
CAZ	-0.0030	0.0000	0.0000	0.0000	0.0000	-0.0211	0.0000	0.0000	-0.0126	-0.0029
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0509	0.0659	0.0060	0.0112	0.0088	0.0110	0.0000	-0.0002	-0.0025	-0.0058
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0138	0.0000	-0.0062	-0.0305	-0.0318	-0.0558	-0.0694	-0.0028	-0.0018	-0.0010
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0022	-0.0013
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	-0.0026	-0.0026	0.0000	-0.0054	-0.0127	0.0000	-0.0024	0.0000	-0.0362	-0.0115
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	-0.0122
SSA	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0011	0.0000	0.0000	-0.0001	-0.0007
USA	-0.0729	-0.2518	-0.0279	-0.0434	0.0061	-0.1438	-0.0072	-0.0202	-0.1921	-0.4045

Table 214: FAO — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr)

5.4.5 Oils


GLO
0.0
−0.2
−0.4
−0.6
Oils (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

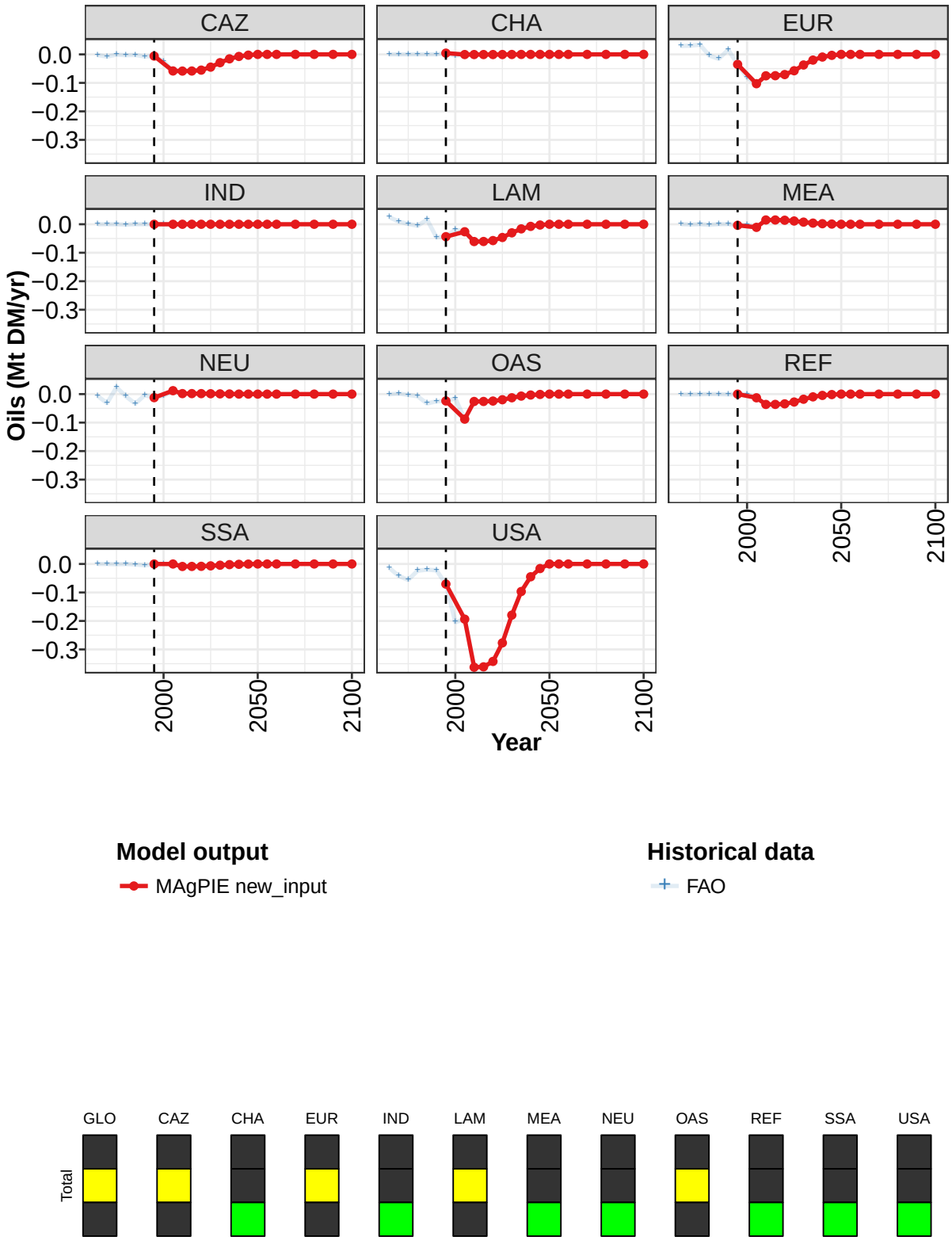


Figure 72: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0.1908	-0.4813	-0.6112	-0.6088	-0.5766	-0.4670	-0.3027	-0.1628	-0.0757	-0.0269	0.0000
CAZ	-0.0058	-0.0582	-0.0585	-0.0583	-0.0552	-0.0447	-0.0290	-0.0156	-0.0072	-0.0026	0.0000
CHA	0.0044	-0.0005	-0.0005	-0.0005	-0.0005	-0.0004	-0.0003	-0.0001	-0.0001	0.0000	0.0000
EUR	-0.0351	-0.1029	-0.0751	-0.0748	-0.0708	-0.0574	-0.0372	-0.0200	-0.0093	-0.0033	0.0000
IND	0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0436	-0.0263	-0.0607	-0.0605	-0.0573	-0.0464	-0.0301	-0.0162	-0.0075	-0.0027	0.0000
MEA	-0.0037	-0.0109	0.0150	0.0150	0.0142	0.0115	0.0075	0.0040	0.0019	0.0007	0.0000
NEU	-0.0124	0.0121	0.0018	0.0018	0.0017	0.0014	0.0009	0.0005	0.0002	0.0001	0.0000
OAS	-0.0240	-0.0878	-0.0258	-0.0257	-0.0243	-0.0197	-0.0128	-0.0069	-0.0032	-0.0011	0.0000
REF	0.0000	-0.0129	-0.0362	-0.0361	-0.0342	-0.0277	-0.0179	-0.0096	-0.0045	-0.0016	0.0000
SSA	-0.0001	-0.0001	-0.0087	-0.0086	-0.0082	-0.0066	-0.0043	-0.0023	-0.0011	-0.0004	0.0000
USA	-0.0705	-0.1937	-0.3625	-0.3611	-0.3420	-0.2770	-0.1795	-0.0966	-0.0449	-0.0160	0.0000

Table 215: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr) [PART 1/2]

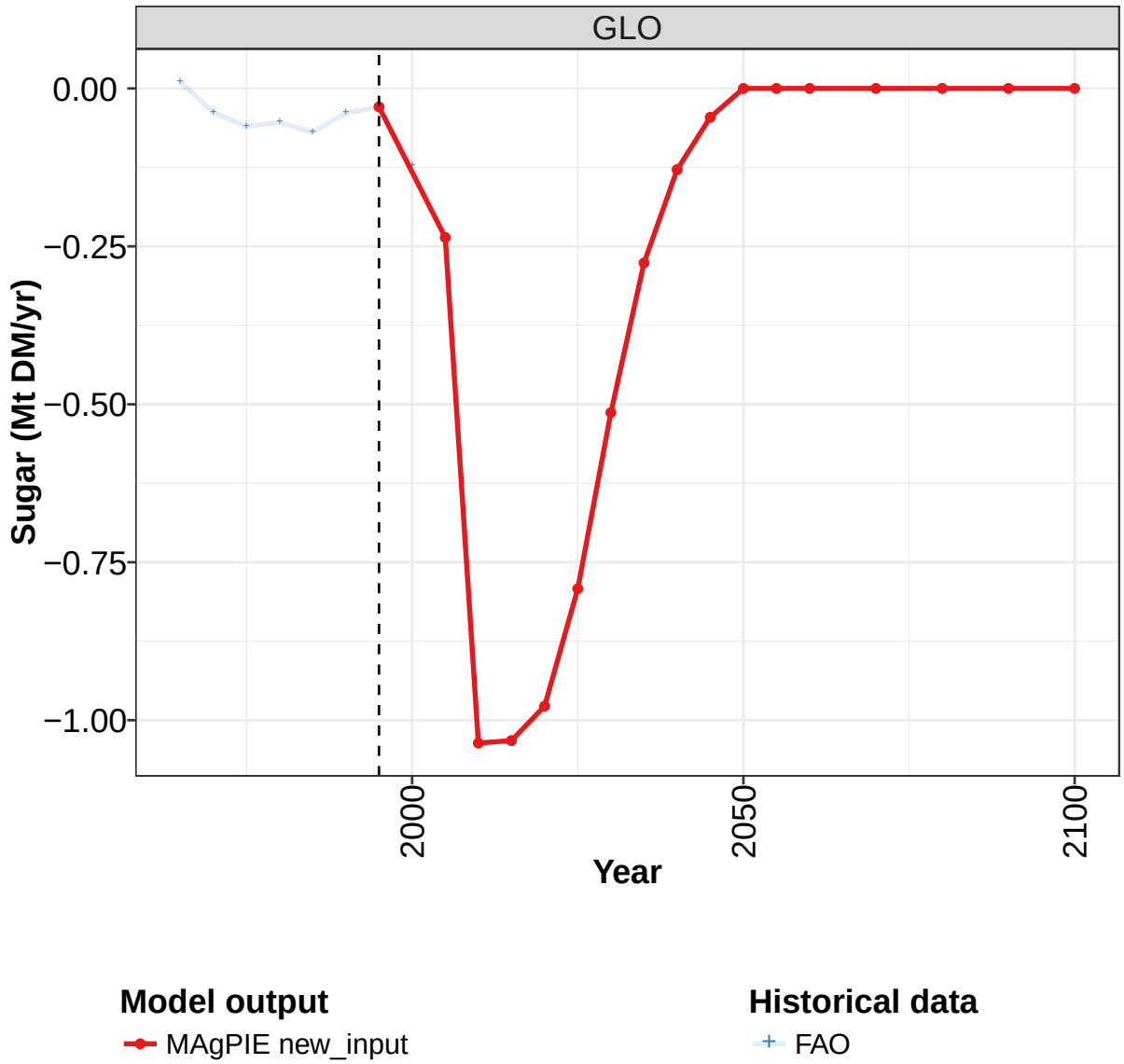
	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 216: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0284	-0.0421	-0.0023	-0.0553	-0.0894	-0.0944	-0.1906	-0.3589	-0.4814	-0.6111
CAZ	-0.0023	-0.0076	-0.0009	-0.0028	-0.0020	-0.0074	-0.0058	-0.0245	-0.0582	-0.0585
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0044	-0.0047	-0.0005	-0.0005
EUR	0.0296	0.0307	0.0340	-0.0043	-0.0156	0.0163	-0.0351	-0.0814	-0.1029	-0.0751
IND	0.0000	0.0000	-0.0002	-0.0015	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000
LAM	0.0245	0.0095	0.0012	-0.0055	0.0163	-0.0459	-0.0436	-0.0188	-0.0263	-0.0607
MEA	0.0001	-0.0010	0.0000	-0.0021	0.0003	0.0004	-0.0037	-0.0035	-0.0109	0.0150
NEU	-0.0067	-0.0316	0.0241	-0.0081	-0.0336	-0.0039	-0.0124	-0.0063	0.0121	0.0018
OAS	-0.0006	0.0018	-0.0028	-0.0076	-0.0330	-0.0253	-0.0240	-0.0151	-0.0878	-0.0258
REF	-0.0018	-0.0016	-0.0006	0.0002	-0.0001	-0.0014	0.0000	0.0000	-0.0129	-0.0362
SSA	0.0000	0.0000	-0.0013	-0.0001	-0.0017	-0.0049	-0.0001	0.0000	-0.0001	-0.0087
USA	-0.0143	-0.0423	-0.0559	-0.0236	-0.0199	-0.0223	-0.0705	-0.2045	-0.1937	-0.3625

Table 217: FAO — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr)

5.4.6 Sugar


GLO
0.00
−0.25
−0.50
−0.75
−1.00
Sugar (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

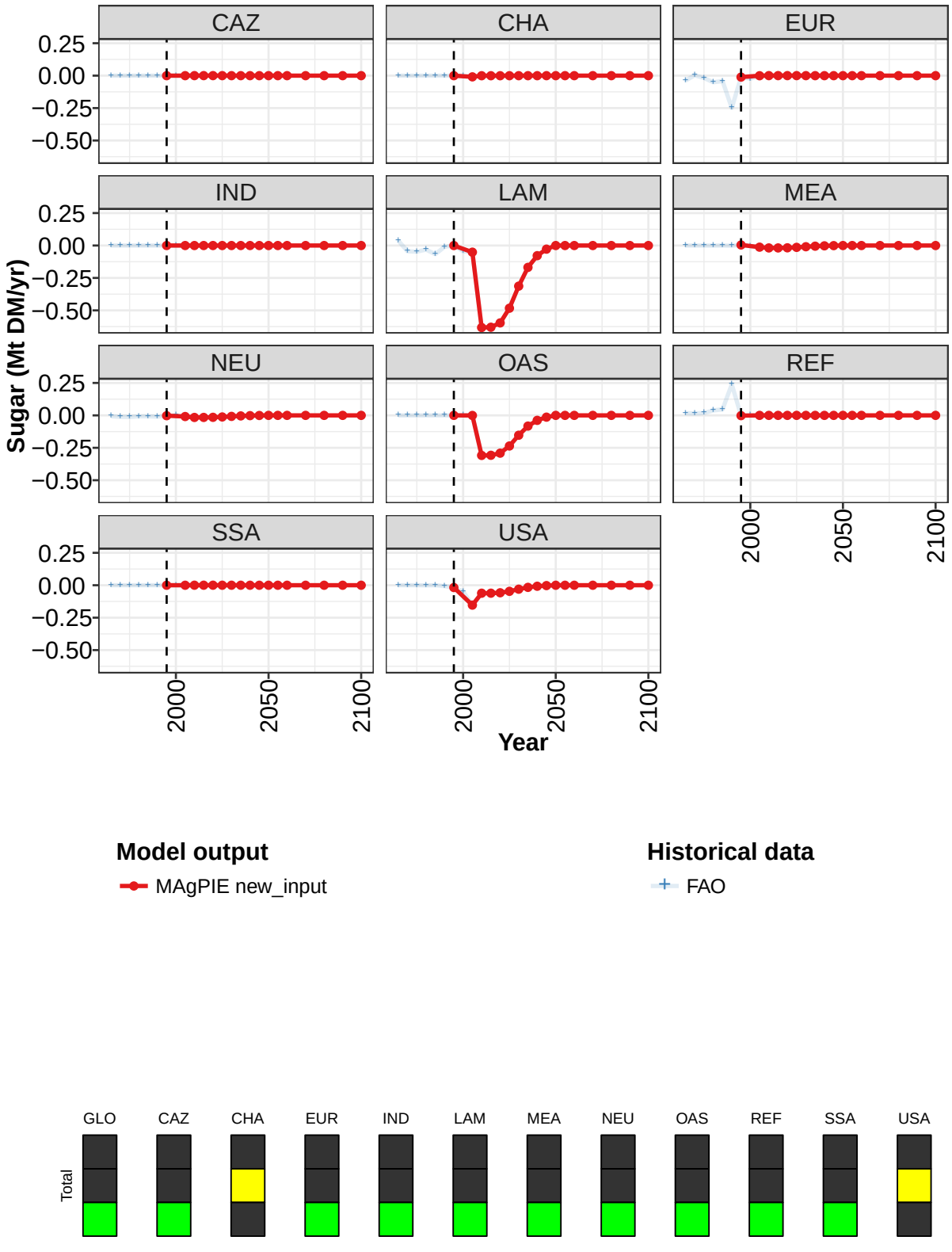


Figure 73: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2
GLO	-0.02920	-0.23590	-1.03620	-1.03230	-0.97760	-0.79200	-0.51320	-0.27620	-0.12850	-0.04570	0.00
CAZ	-0.00010	0.00000	0.00030	0.00030	0.00030	0.00020	0.00010	0.00010	0.00000	0.00000	0.00
CHA	-0.00020	-0.00910	-0.00040	-0.00040	-0.00040	-0.00030	-0.00020	-0.00010	-0.00010	0.00000	0.00
EUR	-0.01100	-0.00040	0.00040	0.00040	0.00040	0.00030	0.00020	0.00010	0.00000	0.00000	0.00
IND	0.00000	0.00000	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00
LAM	-0.00020	-0.05130	-0.63220	-0.62990	-0.59650	-0.48320	-0.31310	-0.16850	-0.07830	-0.02790	0.00
MEA	0.00430	-0.01270	-0.01860	-0.01850	-0.01760	-0.01420	-0.00920	-0.00500	-0.00230	-0.00080	0.00
NEU	-0.00240	-0.00880	-0.01580	-0.01570	-0.01490	-0.01210	-0.00780	-0.00420	-0.00200	-0.00070	0.00
OAS	0.00000	-0.00050	-0.30870	-0.30750	-0.29120	-0.23590	-0.15290	-0.08230	-0.03820	-0.01360	0.00
REF	-0.00200	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
SSA	0.00000	0.00000	0.00030	0.00030	0.00030	0.00020	0.00020	0.00010	0.00000	0.00000	0.00
USA	-0.01760	-0.15310	-0.06140	-0.06120	-0.05790	-0.04690	-0.03040	-0.01640	-0.00760	-0.00270	0.00

Table 218: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

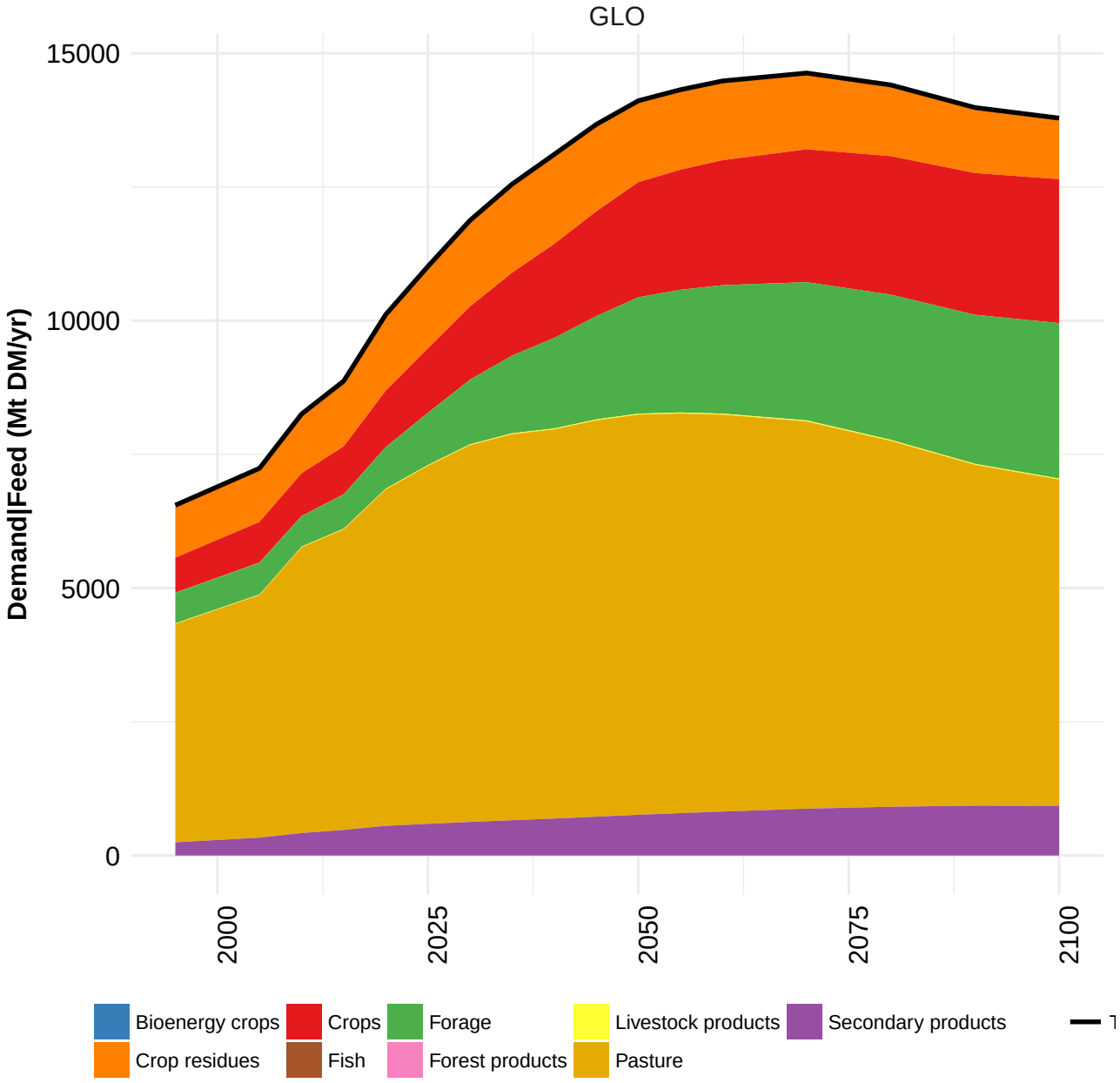
	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

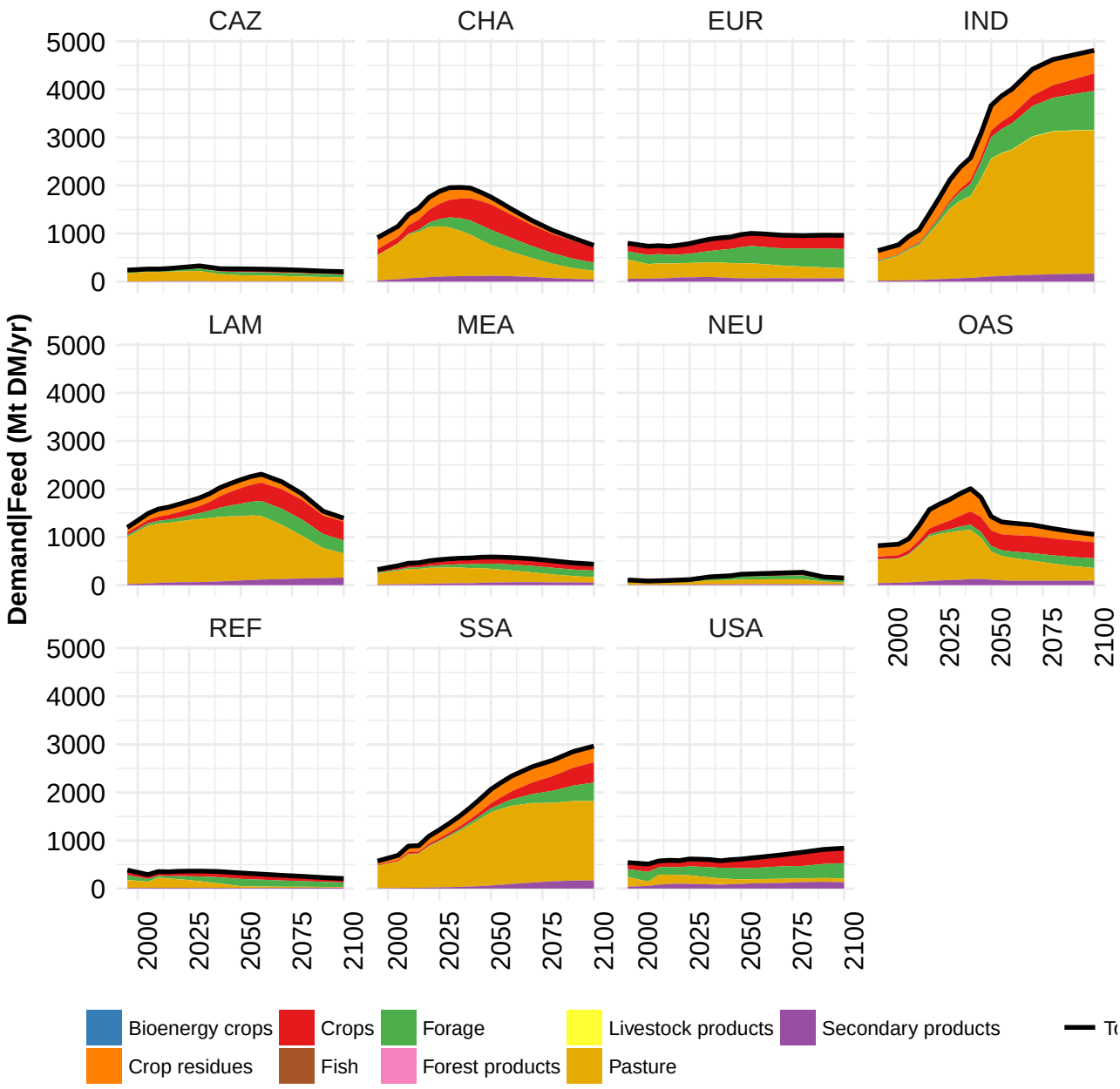
Table 219: MAgPIE new_input — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

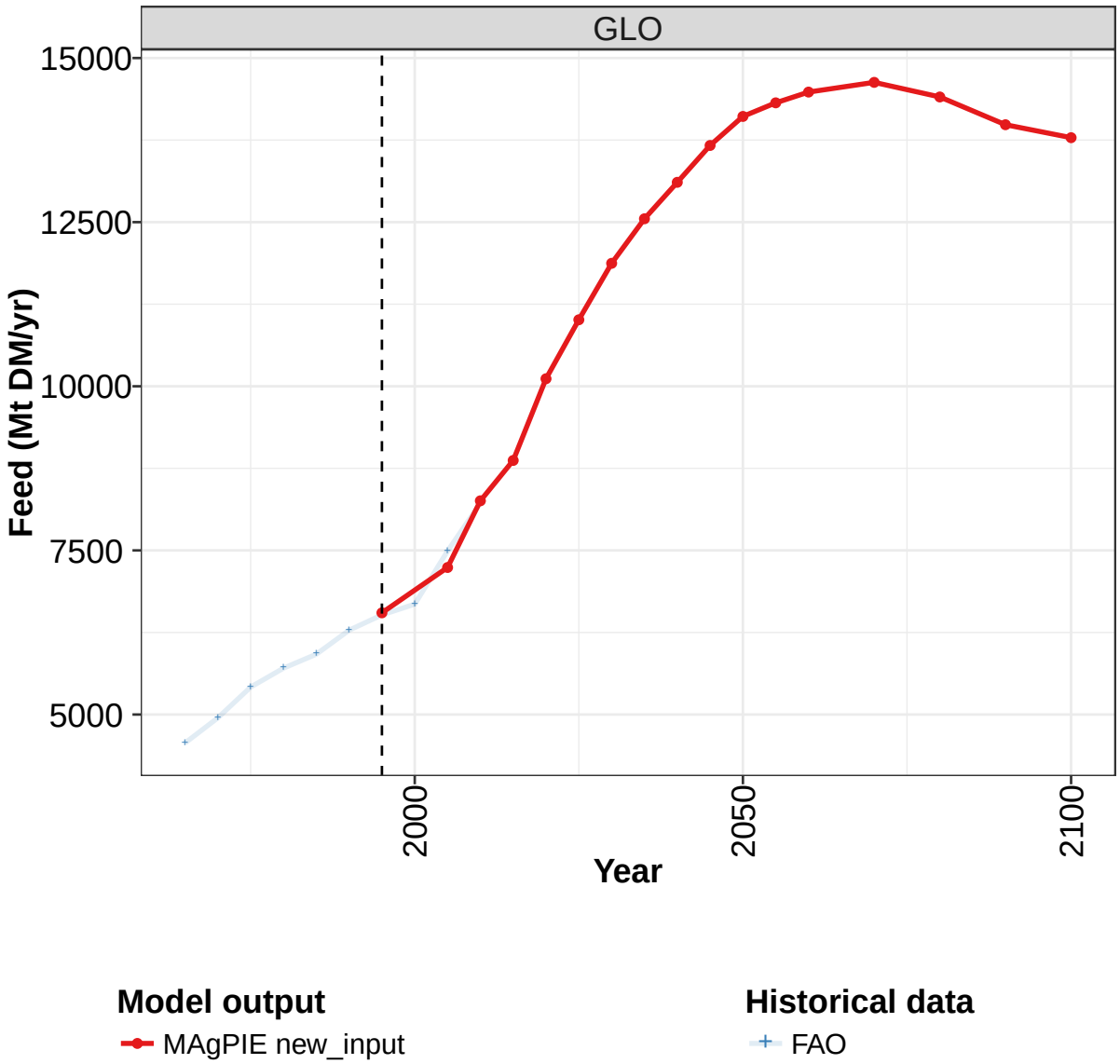
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.010	-0.038	-0.060	-0.054	-0.070	-0.039	-0.029	-0.123	-0.236	-1.036
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	-0.000	-0.000	-0.001	-0.009	-0.000
EUR	-0.038	0.003	-0.018	-0.051	-0.042	-0.249	-0.011	-0.024	-0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	-0.000
LAM	0.038	-0.045	-0.047	-0.032	-0.067	-0.010	-0.000	-0.045	-0.051	-0.632
MEA	0.000	-0.000	-0.001	-0.001	0.000	-0.002	0.004	-0.005	-0.013	-0.019
NEU	-0.006	-0.011	-0.013	-0.007	-0.007	-0.010	-0.002	0.000	-0.009	-0.016
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.001	-0.309
REF	0.017	0.016	0.018	0.038	0.046	0.239	-0.002	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	0.000
USA	0.000	0.000	0.000	-0.001	0.000	-0.007	-0.018	-0.048	-0.153	-0.061

Table 220: FAO — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr)

6 Feed


GLO
15000
10000
5000
0
Demand|Feed (Mt DM/yr)
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Feed (Mt DM/yr)
0
1000
2000
3000
4000
5000
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products


GLO
15000
12500
10000
7500
5000
Feed (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

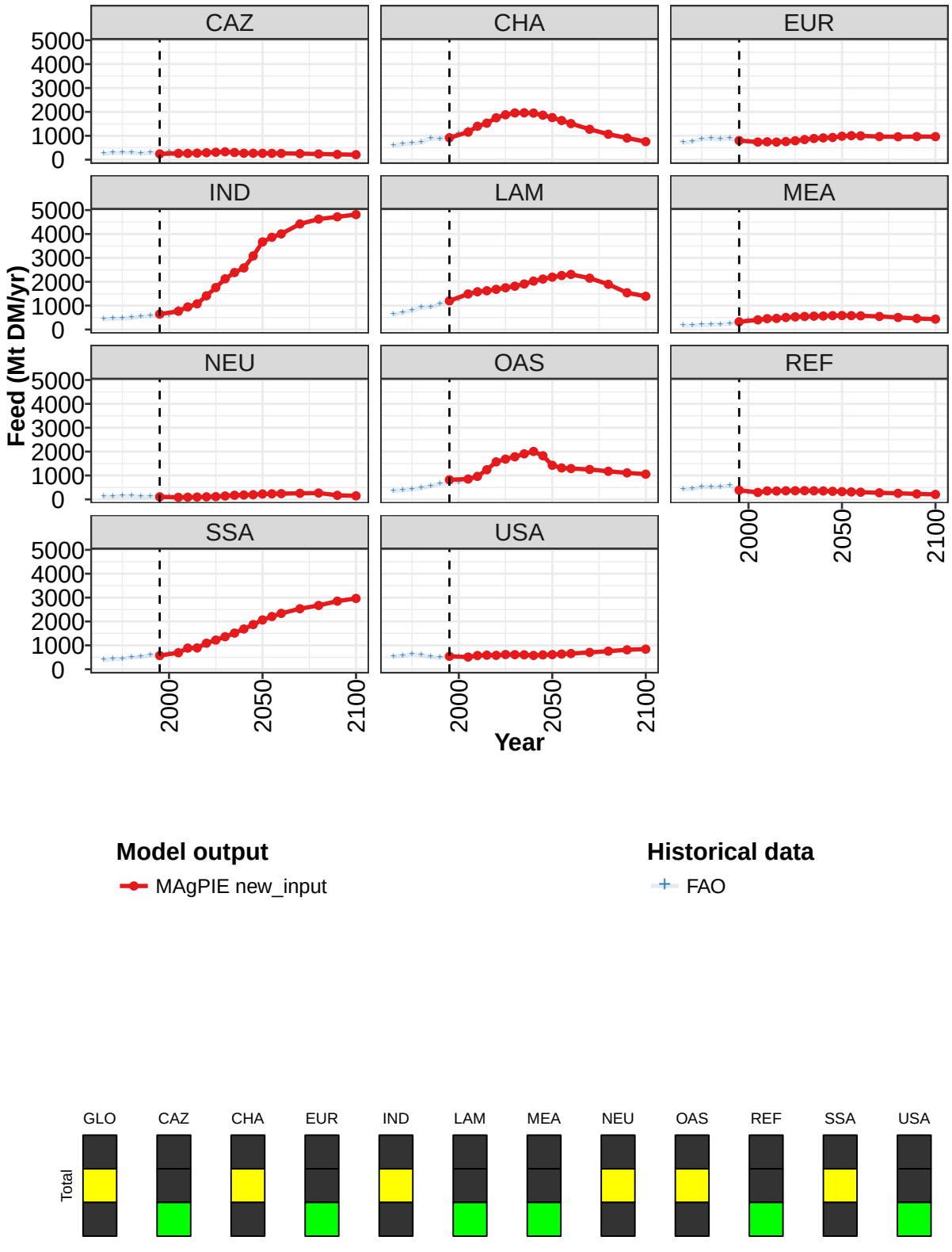


Figure 74: MAgPIE new_input — Demand—Feed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6550	7240	8256	8871	10115	11013	11874	12552	13107	13668	14111
CAZ	241	263	263	274	291	310	329	299	269	268	266
CHA	916	1152	1399	1529	1753	1879	1956	1962	1949	1862	1762
EUR	800	737	748	736	759	792	841	886	911	929	981
IND	644	765	944	1075	1413	1757	2122	2385	2578	3081	3667
LAM	1200	1489	1582	1623	1683	1747	1814	1905	2028	2114	2192
MEA	324	404	455	464	505	529	547	559	565	580	586
NEU	107	85	91	98	106	114	143	173	183	195	226
OAS	820	852	963	1241	1571	1686	1785	1906	2007	1828	1428
REF	384	290	354	349	360	362	364	359	353	338	325
SSA	573	691	885	892	1091	1220	1362	1514	1685	1871	2065
USA	540	511	574	589	582	616	611	604	578	601	613

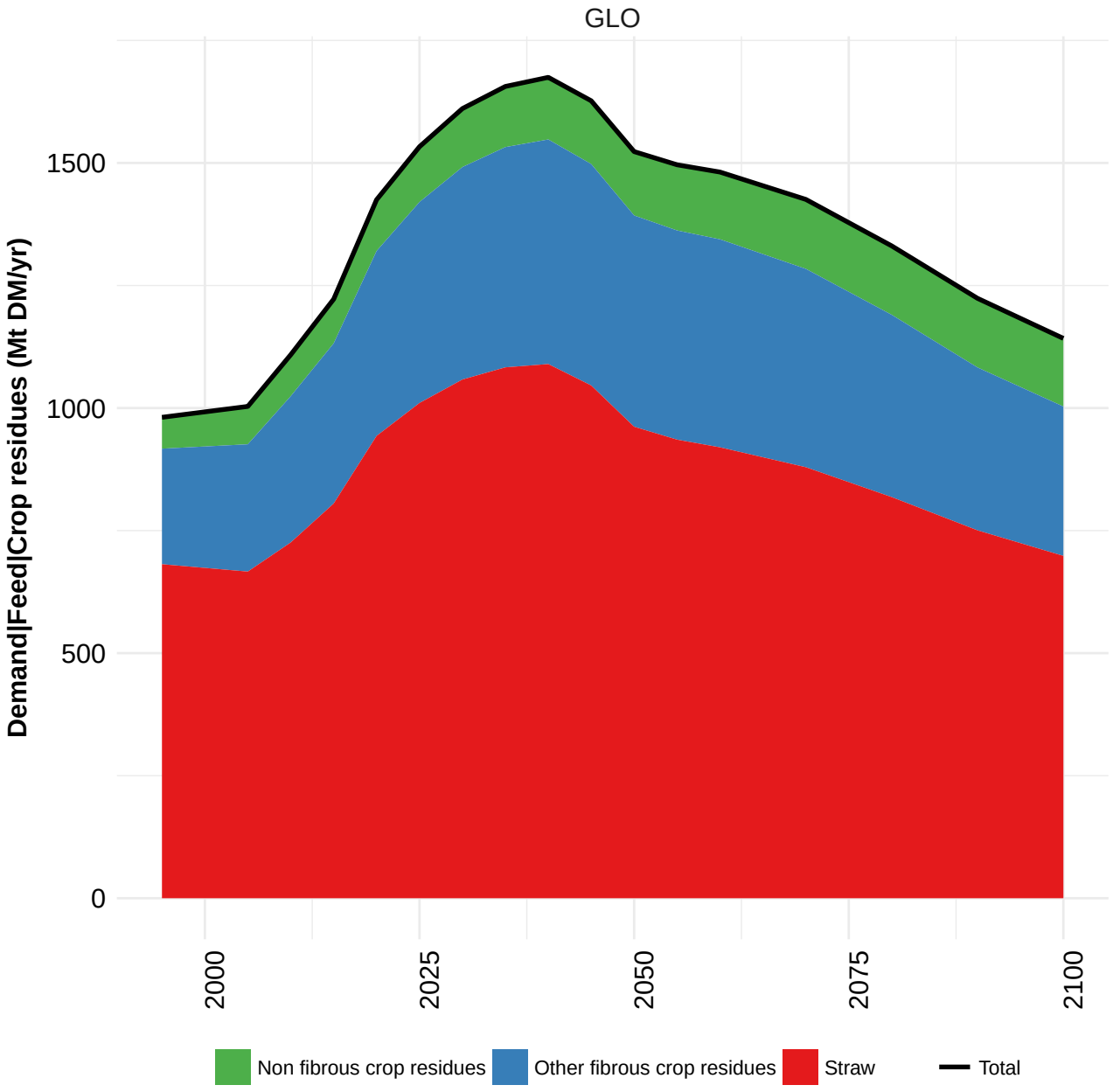
Table 221: MAgPIE new_input — Demand—Feed (Mt DM/yr) [PART 1/2]

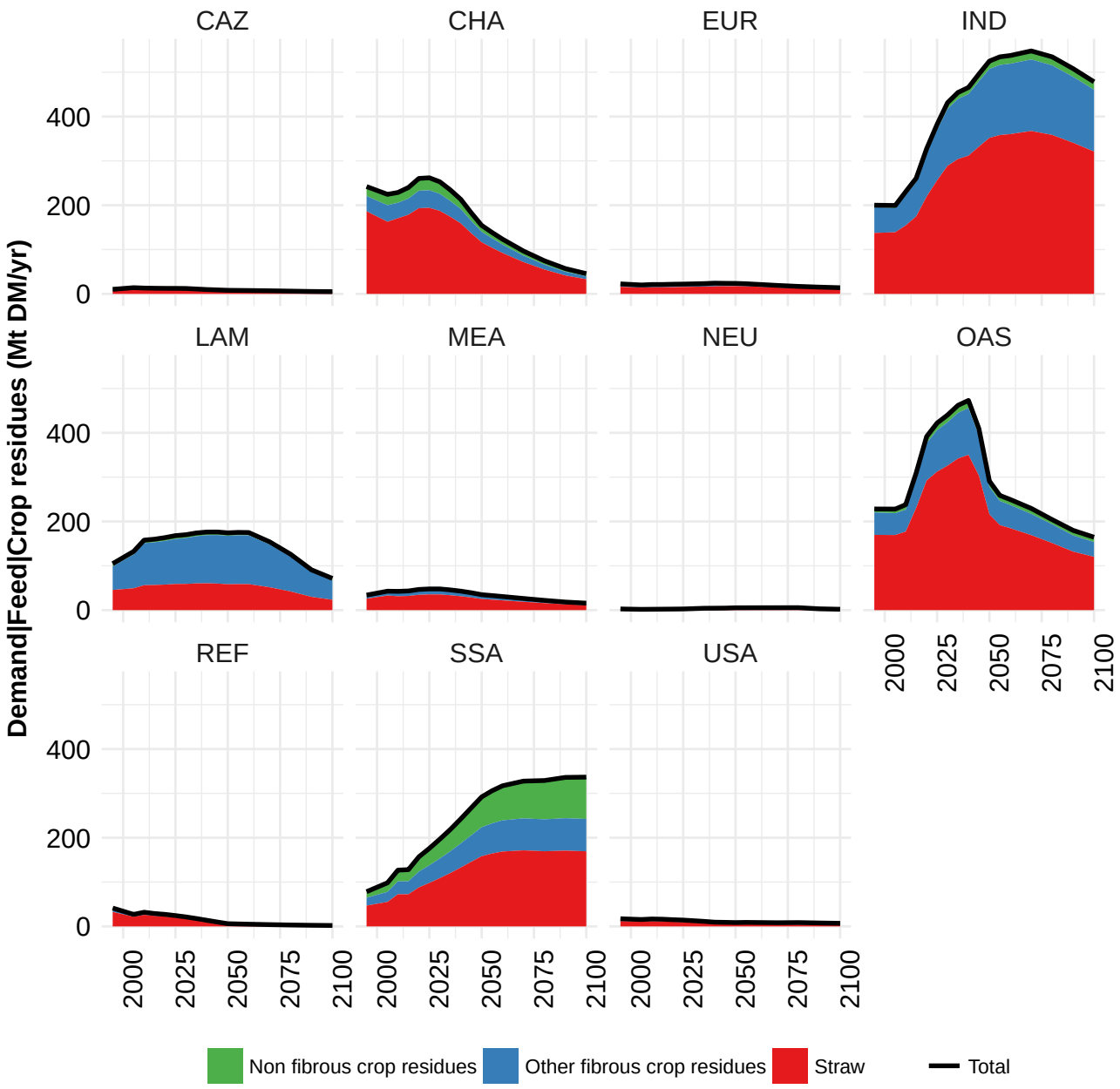
	2055	2060	2070	2080	2090	2100
GLO	14318	14481	14629	14407	13984	13787
CAZ	264	261	252	238	219	208
CHA	1639	1511	1272	1066	906	754
EUR	1005	996	966	958	967	964
IND	3863	4003	4421	4624	4719	4814
LAM	2261	2308	2151	1893	1538	1393
MEA	581	574	547	505	462	435
NEU	233	240	253	266	169	149
OAS	1315	1291	1253	1176	1110	1056
REF	312	301	276	254	228	208
SSA	2207	2339	2534	2670	2851	2965
USA	637	658	704	757	814	841

Table 222: MAgPIE new_input — Demand—Feed (Mt DM/yr) [PART 2/2]

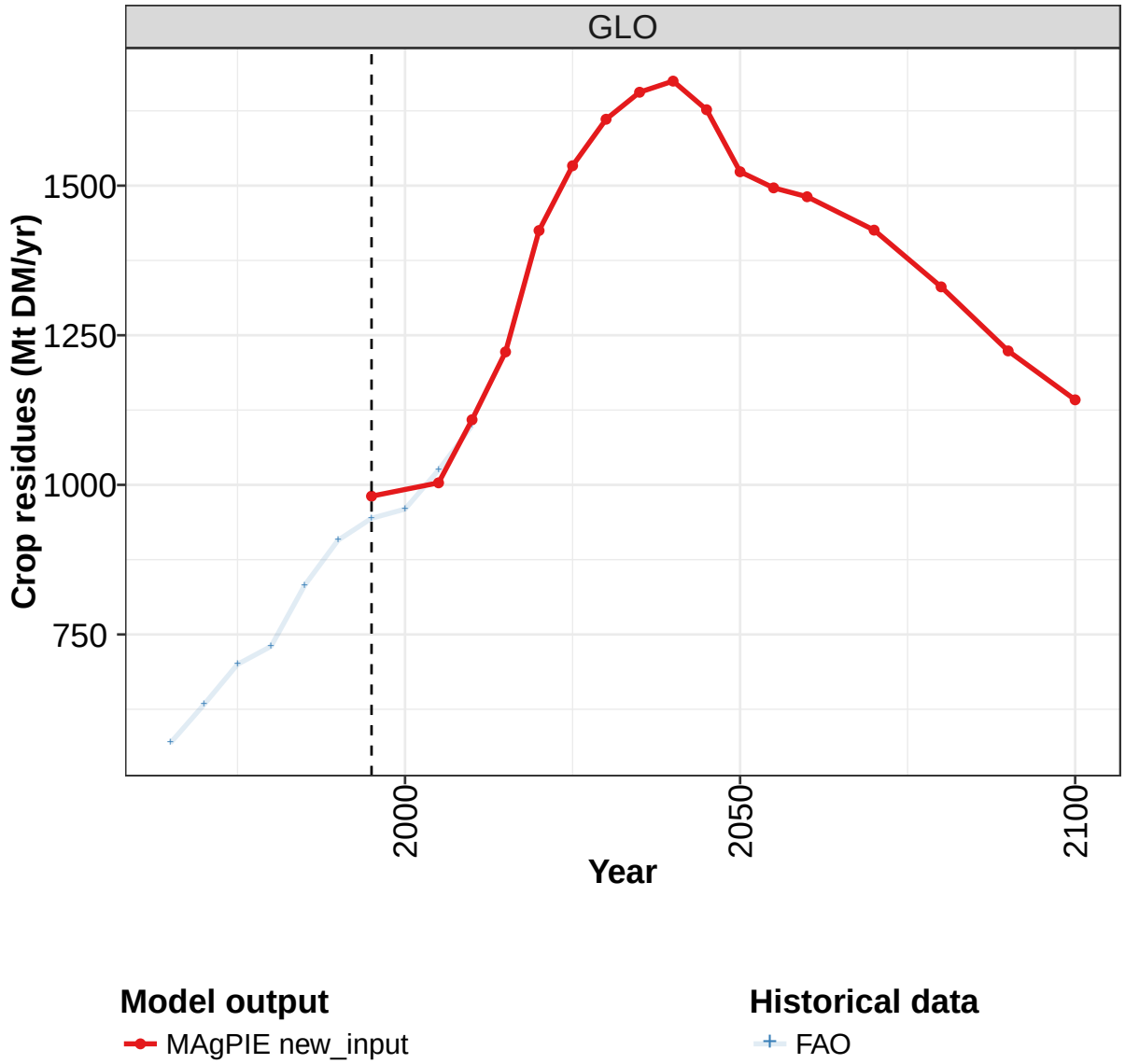
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4567	4950	5418	5706	5918	6285	6518	6681	7491	8221
CAZ	240	273	300	285	268	276	288	307	324	310
CHA	590	640	680	730	875	860	980	1074	1253	1424
EUR	709	760	857	870	855	885	776	755	713	727
IND	436	452	460	486	543	570	593	591	860	971
LAM	617	711	786	916	937	1067	1187	1264	1473	1515
MEA	153	173	186	206	216	247	314	385	411	435
NEU	124	125	141	141	116	114	103	99	84	88
OAS	354	390	426	466	554	636	734	722	815	934
REF	421	437	523	504	525	561	393	290	294	350
SSA	383	419	435	502	521	586	584	658	746	875
USA	539	569	624	602	510	481	565	536	518	593

Table 223: FAO — Demand—Feed (Mt DM/yr)


GLO
Demand|Feed|Crop residues (Mt DM/yr)
1500
1000
500
0
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Feed|Crop residues (Mt DM/yr)
0
200
400
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total

6.1 Crop residues



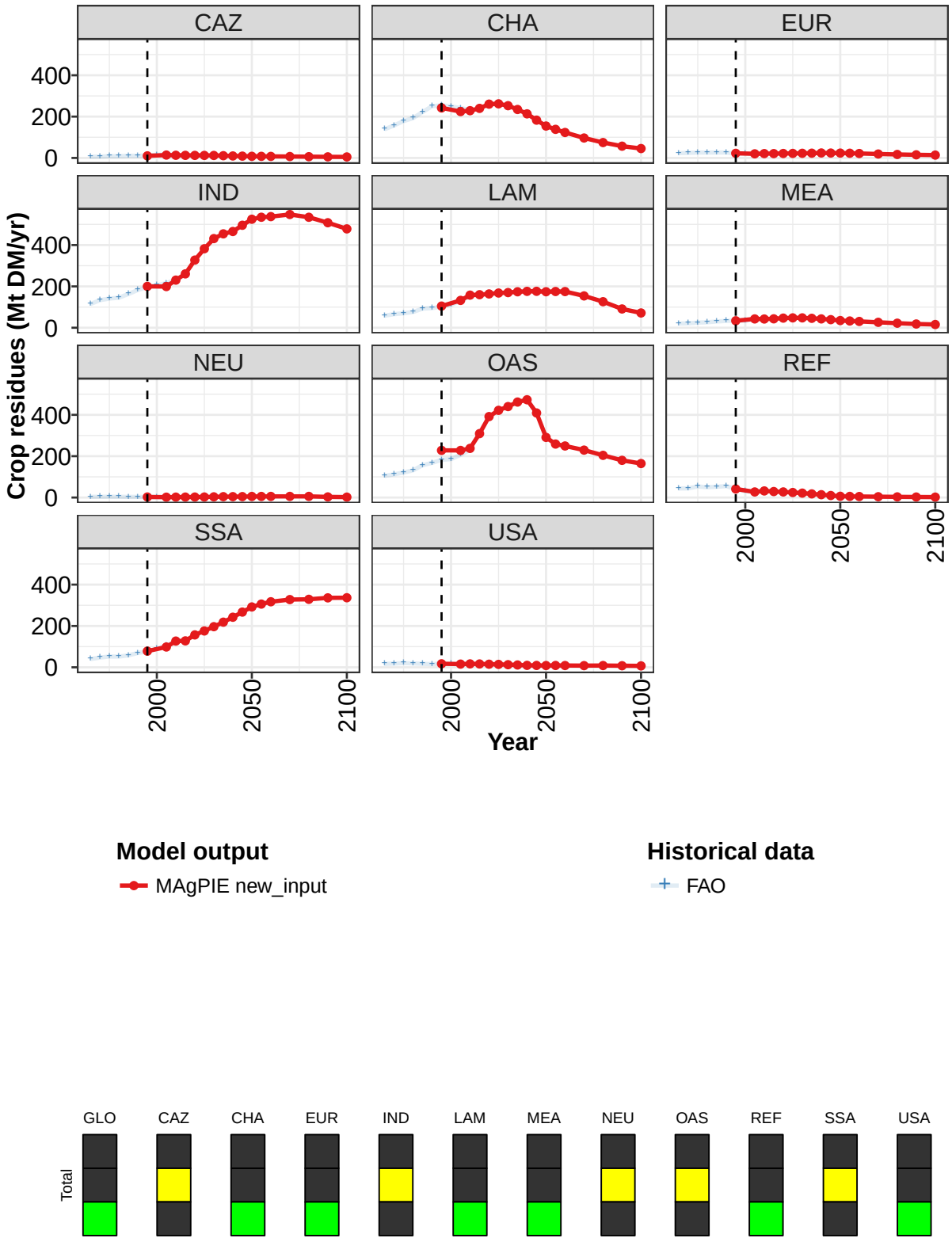


Figure 75: MAgPIE new_input — Demand—Feed—Crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	981	1003	1109	1222	1425	1533	1611	1656	1675	1627	1523
CAZ	10	14	13	13	12	12	12	11	10	9	8
CHA	242	224	229	240	260	262	253	235	213	183	154
EUR	23	20	21	21	22	22	23	23	24	24	24
IND	200	199	230	261	327	382	431	454	466	496	525
LAM	105	132	158	160	164	168	170	174	176	176	174
MEA	34	43	42	43	47	48	48	46	43	39	35
NEU	3	2	2	2	2	3	3	4	4	5	5
OAS	228	228	238	309	392	422	440	462	473	409	291
REF	41	27	32	29	27	24	21	18	14	10	6
SSA	78	98	127	128	157	176	197	218	242	267	292
USA	17	16	17	16	15	14	13	11	10	9	9

Table 224: MAgPIE new_input — Demand—Feed—Crop residues (Mt DM/yr) [PART 1/2]

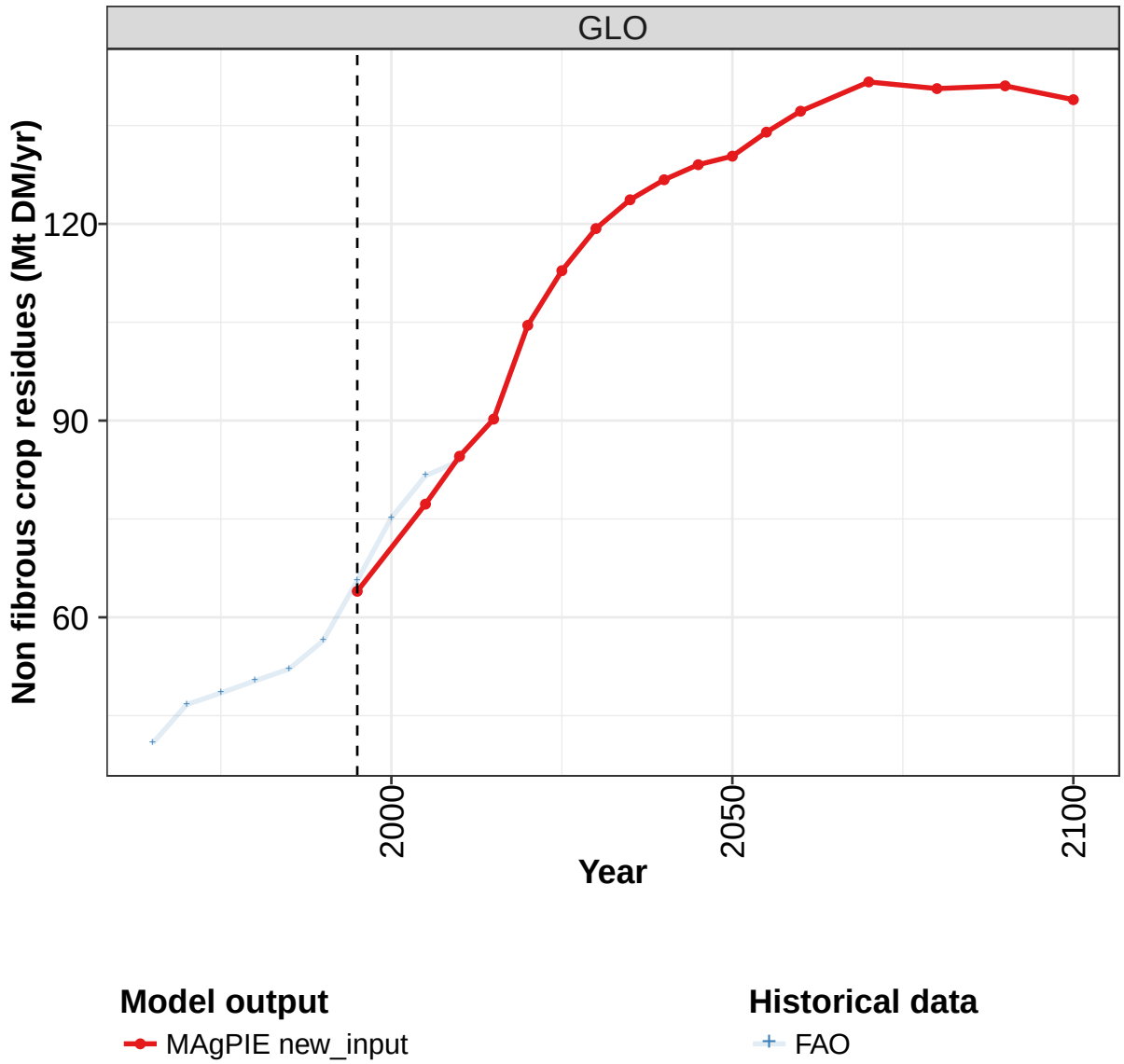
	2055	2060	2070	2080	2090	2100
GLO	1496	1481	1426	1331	1224	1142
CAZ	8	8	7	6	5	5
CHA	138	123	97	75	57	46
EUR	23	22	19	17	15	14
IND	535	538	548	535	508	478
LAM	175	175	154	126	91	72
MEA	33	31	26	22	18	16
NEU	5	5	6	6	3	2
OAS	259	249	229	204	180	164
REF	5	5	4	3	2	2
SSA	306	317	328	329	336	337
USA	9	9	8	9	8	7

Table 225: MAgPIE new_input — Demand—Feed—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	569	633	700	730	832	907	944	959	1025	1099
CAZ	6	7	9	9	11	10	12	16	17	15
CHA	139	157	178	193	222	250	255	249	241	232
EUR	23	24	26	26	26	26	22	21	19	20
IND	115	133	141	145	163	183	197	205	216	233
LAM	58	66	70	76	93	95	102	110	131	152
MEA	21	21	25	26	30	33	35	33	43	40
NEU	3	3	4	3	3	3	3	2	2	2
OAS	105	112	121	132	156	168	182	186	207	230
REF	44	44	53	50	52	55	42	31	27	32
SSA	40	47	52	52	58	69	77	89	106	125
USA	16	18	20	19	17	15	18	17	16	17

Table 226: FAO — Demand—Feed—Crop residues (Mt DM/yr)

6.1.1 Non fibrous crop residues



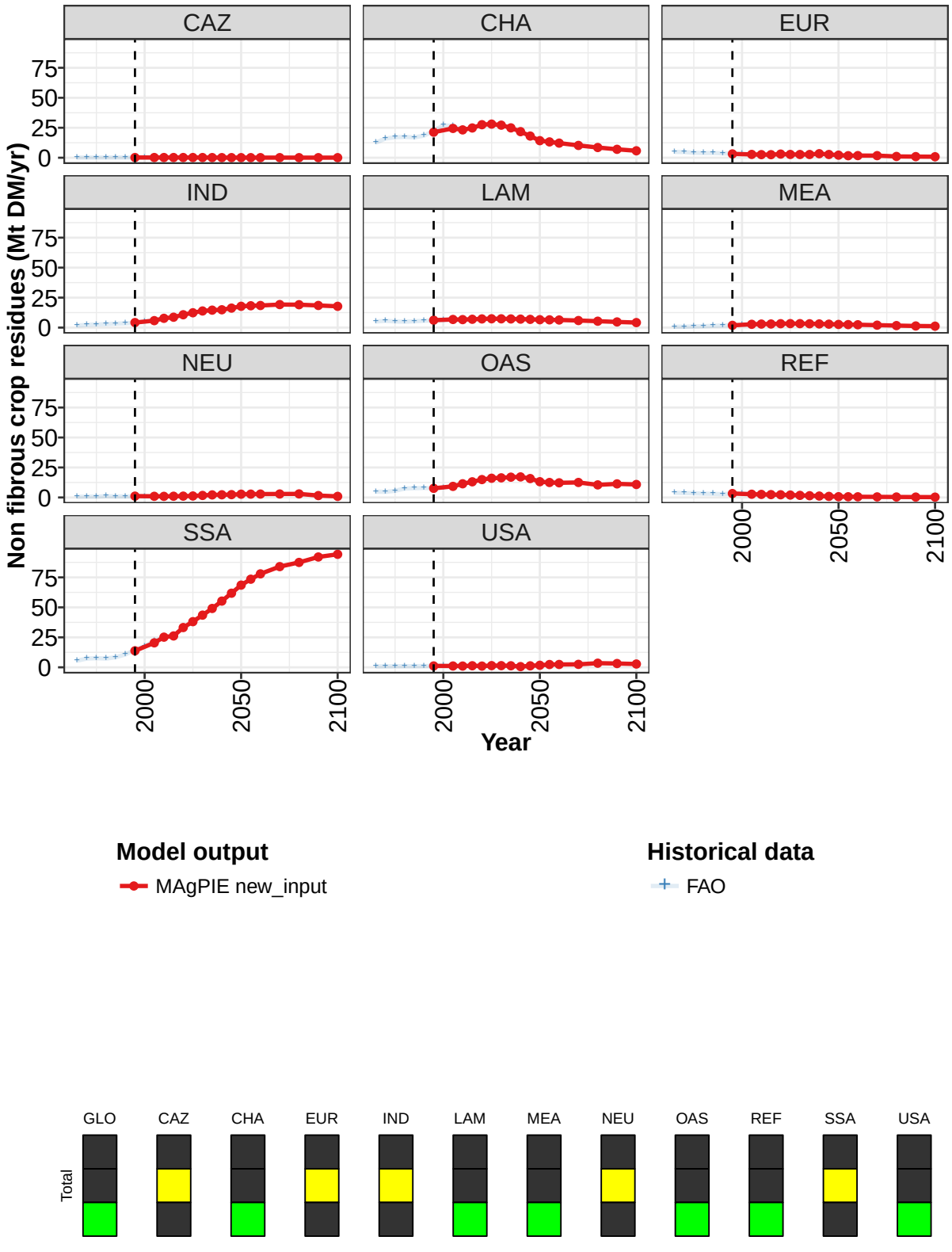


Figure 76: MAgPIE new_input — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	64	77	85	90	105	113	119	124	127	129	130
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	21	24	23	25	28	28	27	25	22	18	14
EUR	3	3	3	3	3	3	3	3	3	3	2
IND	4	6	8	9	11	12	14	15	15	16	18
LAM	6	7	7	7	7	7	7	7	7	7	7
MEA	2	3	3	3	3	3	3	3	3	3	3
NEU	1	1	1	1	1	1	2	2	2	2	3
OAS	8	9	11	13	15	16	16	17	17	16	13
REF	3	3	3	2	2	2	2	1	1	1	1
SSA	14	20	25	26	33	38	44	49	55	62	69
USA	1	1	1	1	1	1	1	1	1	1	2

Table 227: MAgPIE new_input — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 1/2]

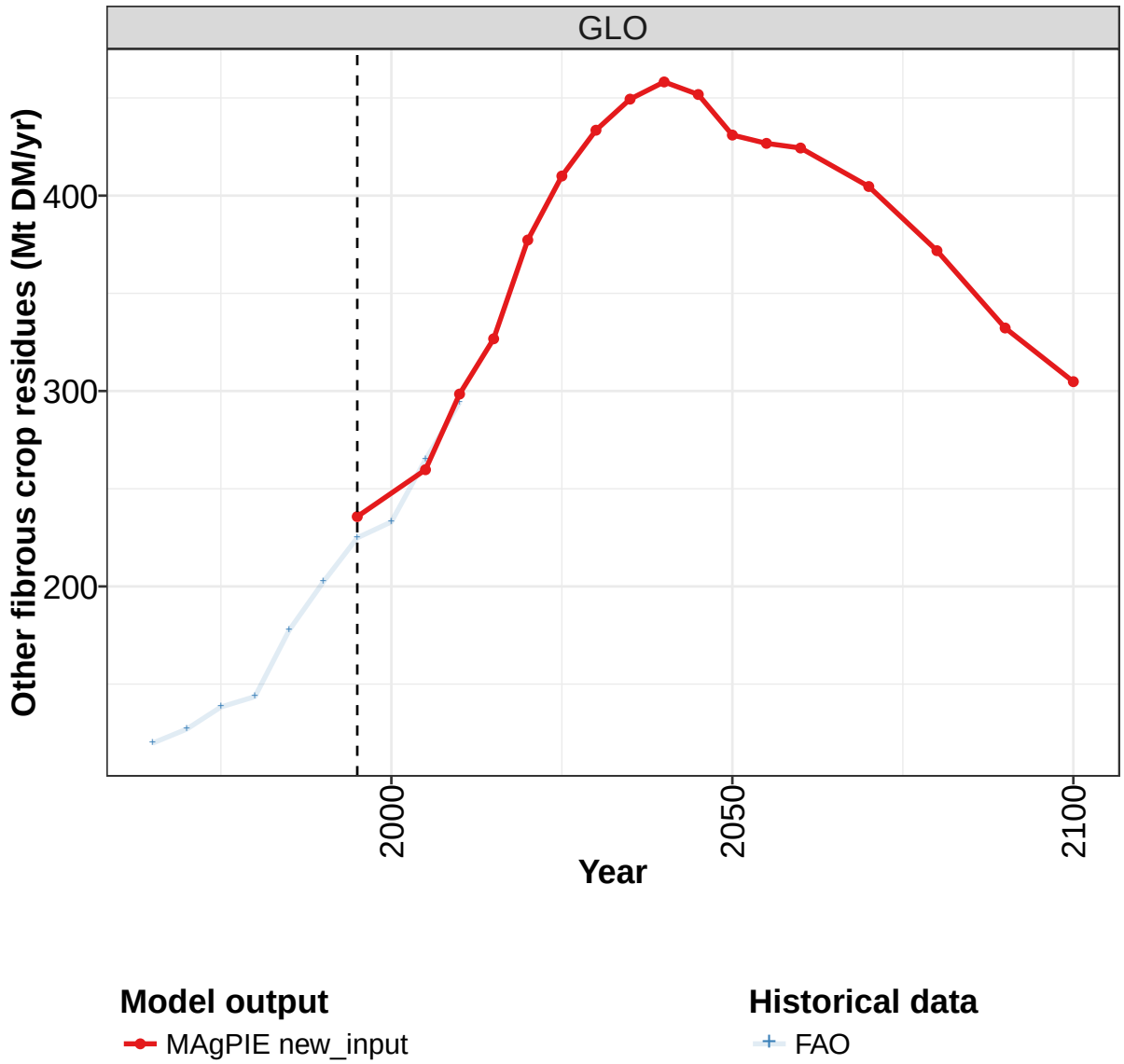
	2055	2060	2070	2080	2090	2100
GLO	134	137	142	141	141	139
CAZ	0	0	0	0	0	0
CHA	13	12	10	9	7	6
EUR	2	2	2	1	1	1
IND	18	18	19	19	18	18
LAM	6	6	6	5	5	4
MEA	3	2	2	2	1	1
NEU	3	3	3	3	2	1
OAS	12	12	13	11	11	11
REF	1	1	0	0	0	0
SSA	73	78	84	87	92	94
USA	2	2	2	3	3	3

Table 228: MAgPIE new_input — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.8	46.7	48.5	50.3	52.1	56.4	65.6	75.2	81.6	83.9
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
CHA	12.5	16.0	17.1	17.4	17.0	18.4	22.5	27.1	26.5	23.6
EUR	4.9	4.7	4.2	3.9	4.0	3.7	3.3	3.3	2.7	2.5
IND	1.8	2.3	2.6	2.9	3.3	3.5	4.1	4.9	6.3	7.9
LAM	5.1	5.7	5.2	4.9	5.3	5.7	6.0	6.1	6.6	6.2
MEA	0.7	0.7	0.9	1.2	1.5	1.7	1.9	2.3	2.7	2.8
NEU	0.6	0.7	0.7	1.0	0.9	0.9	0.9	0.9	0.9	0.9
OAS	4.9	4.7	5.6	7.5	7.7	7.9	7.6	8.2	9.4	11.2
REF	3.9	3.7	3.5	3.2	3.0	2.7	3.3	3.3	3.0	2.6
SSA	5.5	7.3	7.6	7.3	8.4	10.7	14.6	17.7	22.2	24.8
USA	0.8	0.8	0.9	1.0	1.0	1.0	1.2	1.3	1.1	1.1

Table 229: FAO — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr)

6.1.2 Other fibrous crop residues



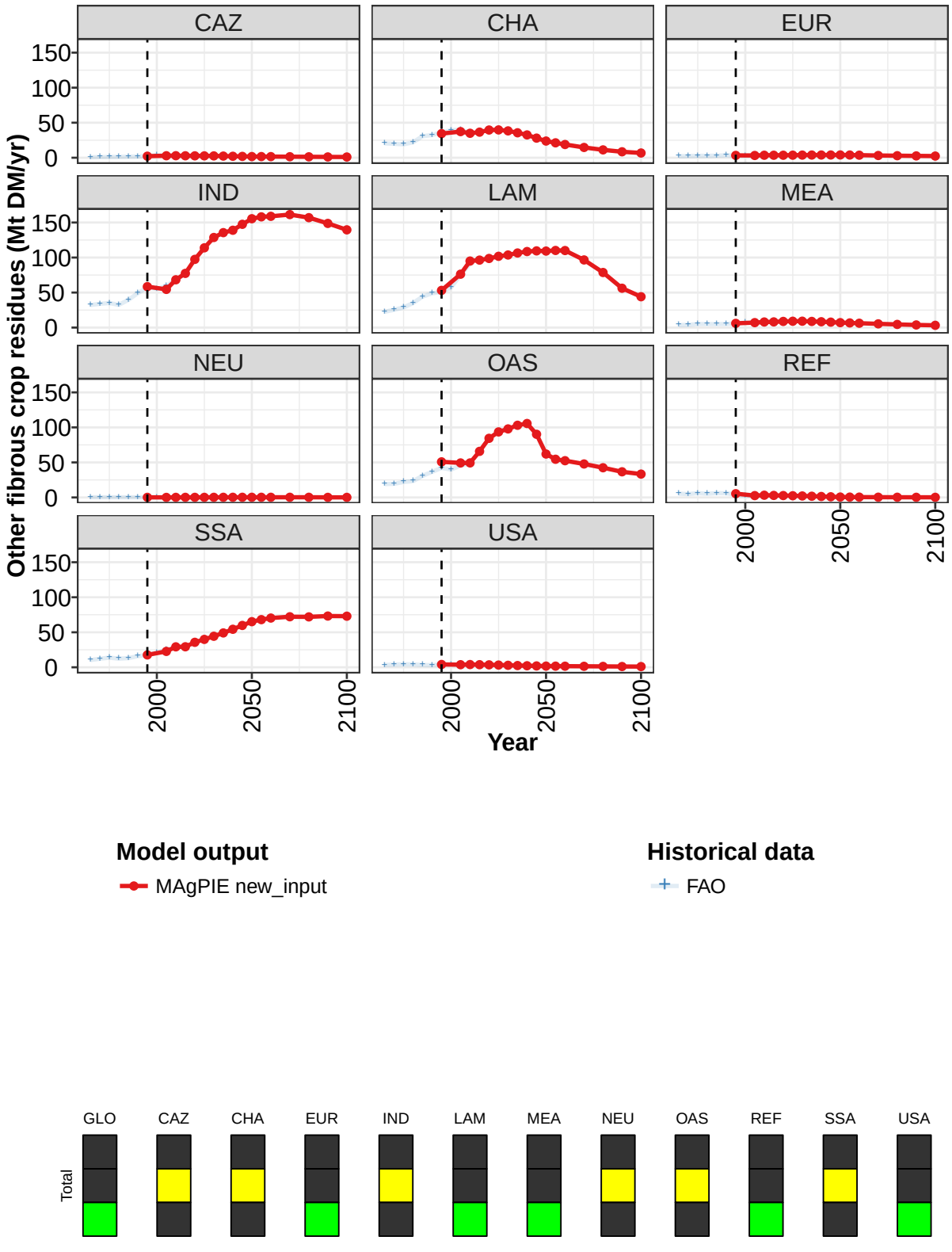


Figure 77: MAgPIE new_input — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	236	260	298	327	377	410	433	449	458	452	431
CAZ	2	3	3	3	3	3	3	2	2	2	2
CHA	34	37	35	37	40	40	38	36	33	28	24
EUR	3	3	4	4	4	4	4	4	4	4	4
IND	58	55	68	77	97	114	129	136	139	147	155
LAM	53	76	95	96	99	102	104	107	109	110	109
MEA	6	7	8	8	9	9	9	9	8	8	7
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	51	49	49	66	84	94	98	103	106	90	62
REF	5	3	3	3	3	2	2	2	1	1	1
SSA	18	23	29	29	36	40	44	49	54	60	65
USA	4	4	4	4	4	3	3	3	2	2	2

Table 230: MAgPIE new_input — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 1/2]

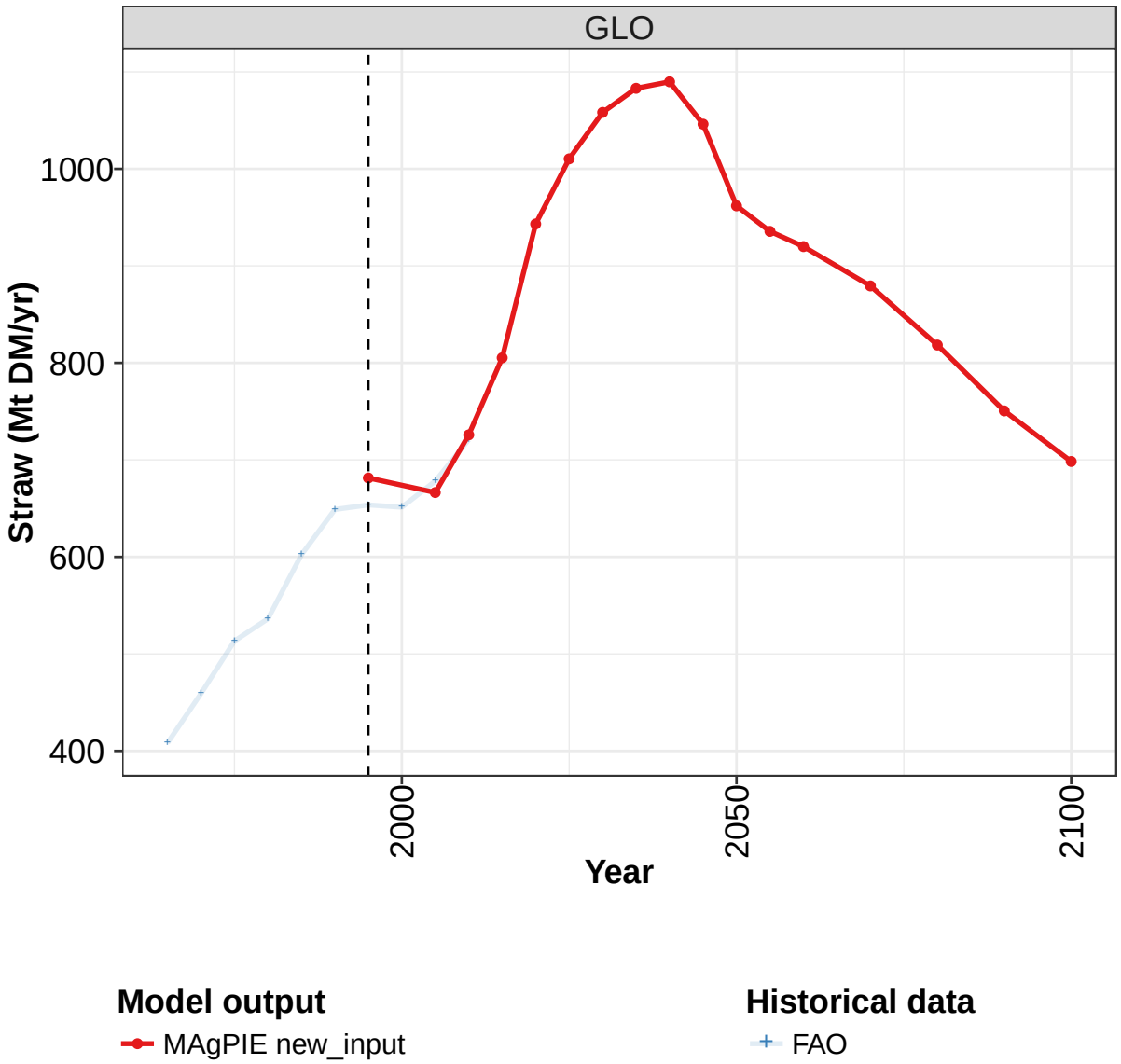
	2055	2060	2070	2080	2090	2100
GLO	427	424	405	372	332	305
CAZ	2	2	1	1	1	1
CHA	21	19	15	11	8	7
EUR	4	4	3	3	3	2
IND	158	159	161	157	149	140
LAM	110	110	97	79	56	44
MEA	7	6	5	5	4	3
NEU	0	0	0	0	0	0
OAS	55	52	48	42	37	33
REF	1	0	0	0	0	0
SSA	68	70	72	72	73	73
USA	2	2	1	1	1	1

Table 231: MAgPIE new_input — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	120	127	138	144	177	202	225	233	265	294
CAZ	1	1	1	1	2	2	3	4	4	3
CHA	20	20	19	22	31	32	36	39	40	35
EUR	2	2	3	3	3	3	3	3	3	3
IND	32	34	35	32	39	49	57	55	59	69
LAM	23	25	29	35	44	49	51	57	75	91
MEA	4	4	5	5	5	5	6	7	7	8
NEU	0	0	0	0	0	0	0	0	0	0
OAS	19	20	22	23	31	37	42	40	45	48
REF	5	5	6	5	6	6	4	3	2	3
SSA	10	12	14	12	13	16	18	21	25	29
USA	3	4	4	4	3	3	4	4	4	4

Table 232: FAO — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr)

6.1.3 Straw


GLO
Straw (Mt DM/yr)
1000
800
600
400
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

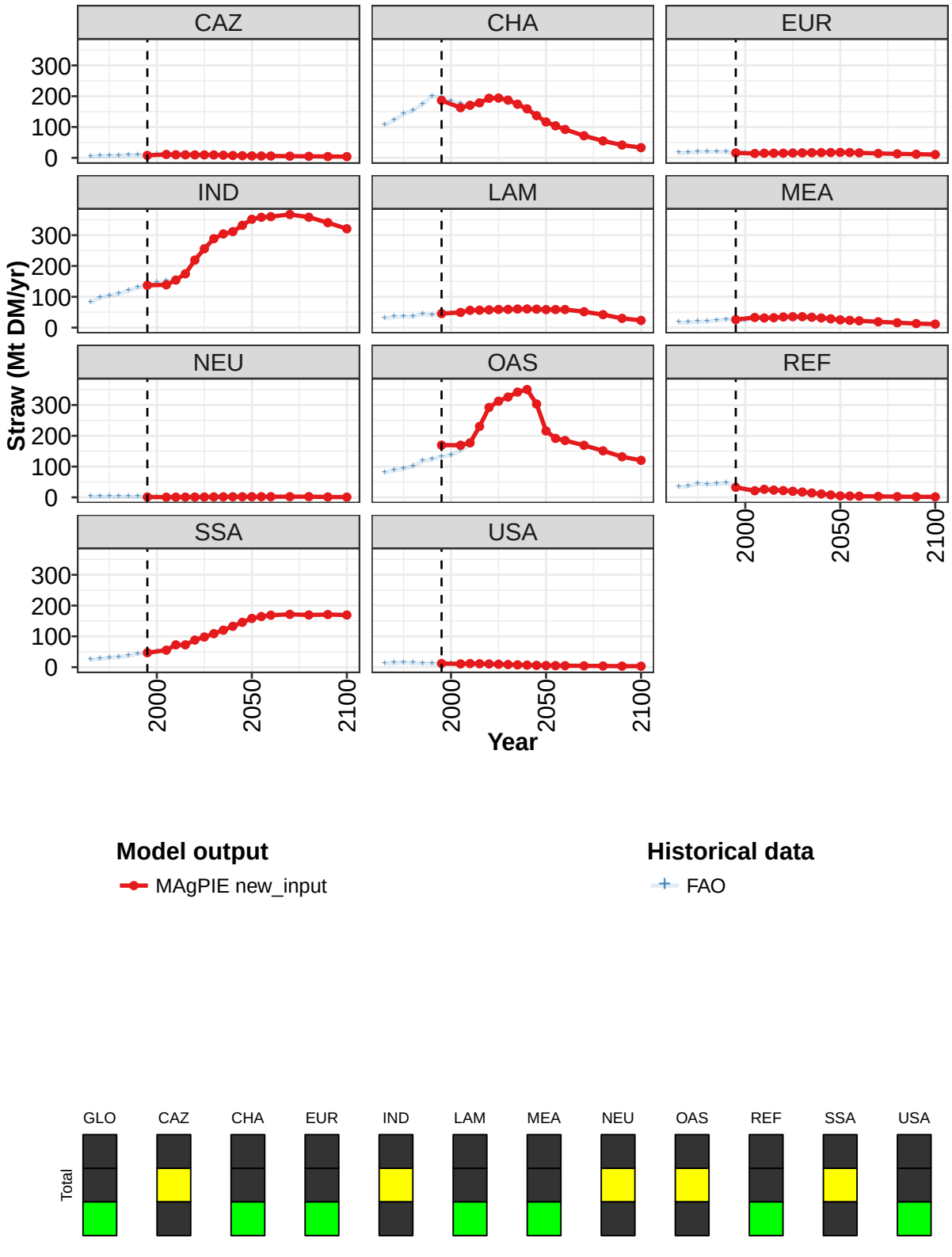


Figure 78: MAgPIE new_input — Demand—Feed—Crop residues—Straw (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	681	666	726	805	943	1010	1058	1083	1090	1046	962
CAZ	8	11	10	10	10	10	9	8	8	7	6
CHA	186	163	171	178	193	194	187	174	159	137	116
EUR	16	14	15	15	15	16	16	17	17	17	17
IND	137	139	154	175	219	256	289	304	312	332	352
LAM	45	49	56	57	58	59	59	60	60	60	58
MEA	26	33	31	32	35	35	35	34	31	29	25
NEU	1	1	1	1	1	1	2	2	2	2	2
OAS	170	169	177	230	292	312	326	342	350	303	216
REF	33	22	26	24	22	20	17	14	11	8	5
SSA	47	55	73	72	88	98	109	120	133	146	158
USA	12	11	12	11	10	10	9	8	7	6	5

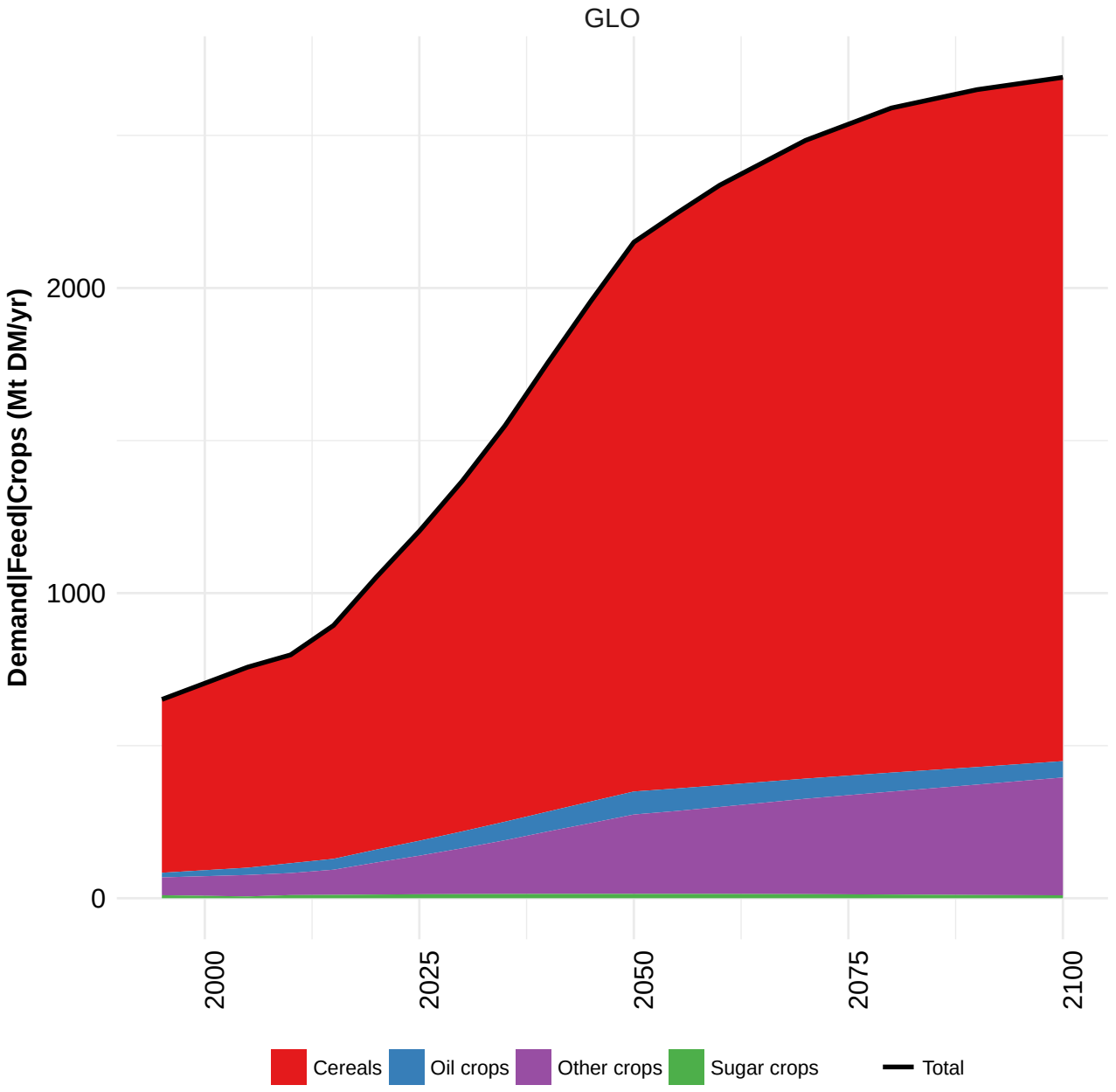
Table 233: MAgPIE new_input — Demand—Feed—Crop residues—Straw (Mt DM/yr) [PART 1/2]

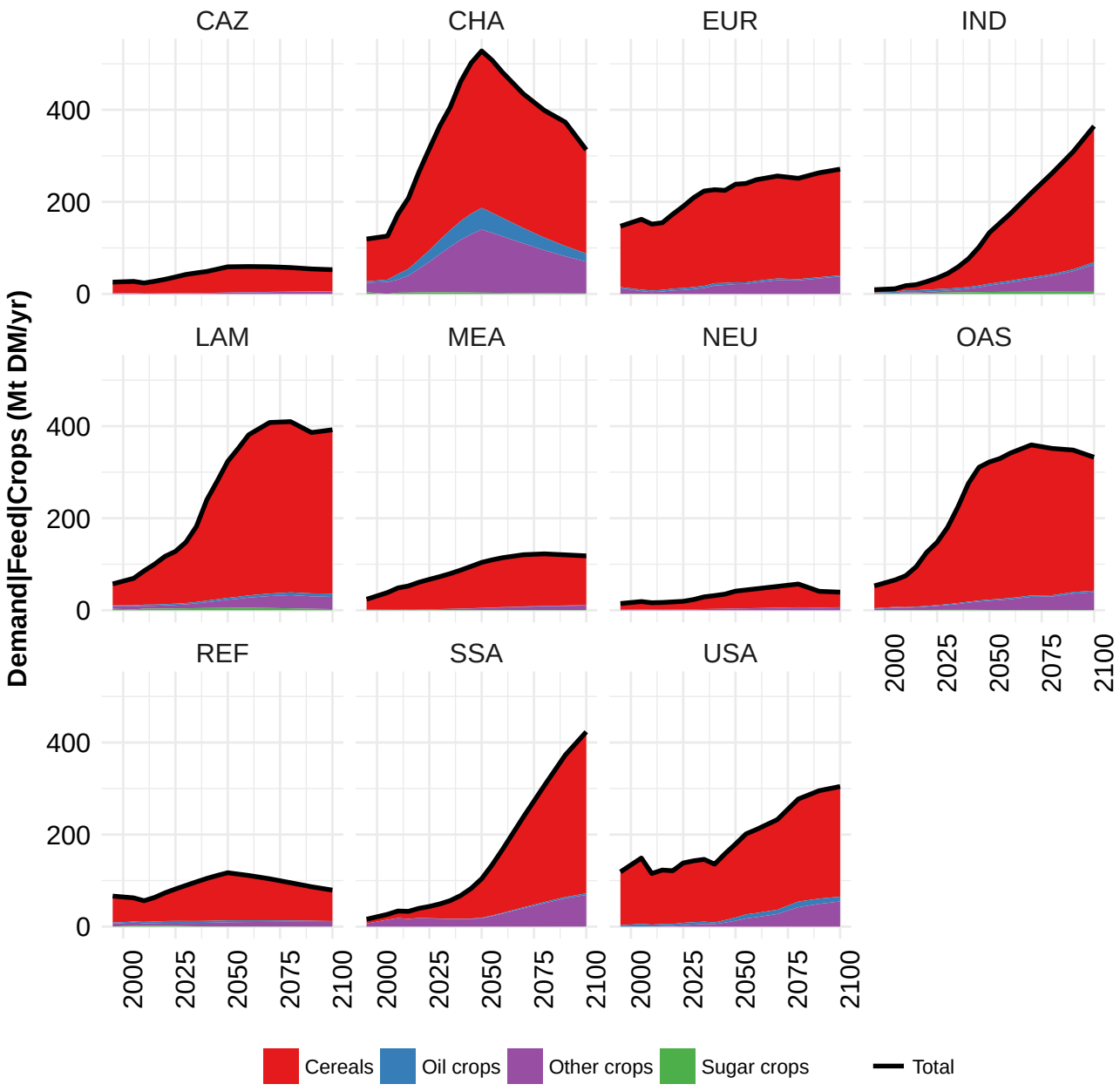
	2055	2060	2070	2080	2090	2100
GLO	936	920	879	818	751	698
CAZ	6	6	5	5	4	4
CHA	104	92	72	55	41	33
EUR	17	16	14	13	12	11
IND	358	360	367	358	341	321
LAM	59	59	52	42	30	23
MEA	24	22	19	16	13	11
NEU	2	2	2	2	1	1
OAS	192	185	169	151	132	120
REF	4	4	3	2	2	2
SSA	164	169	172	170	171	169
USA	5	5	4	4	3	3

Table 234: MAgPIE new_input — Demand—Feed—Crop residues—Straw (Mt DM/yr) [PART 2/2]

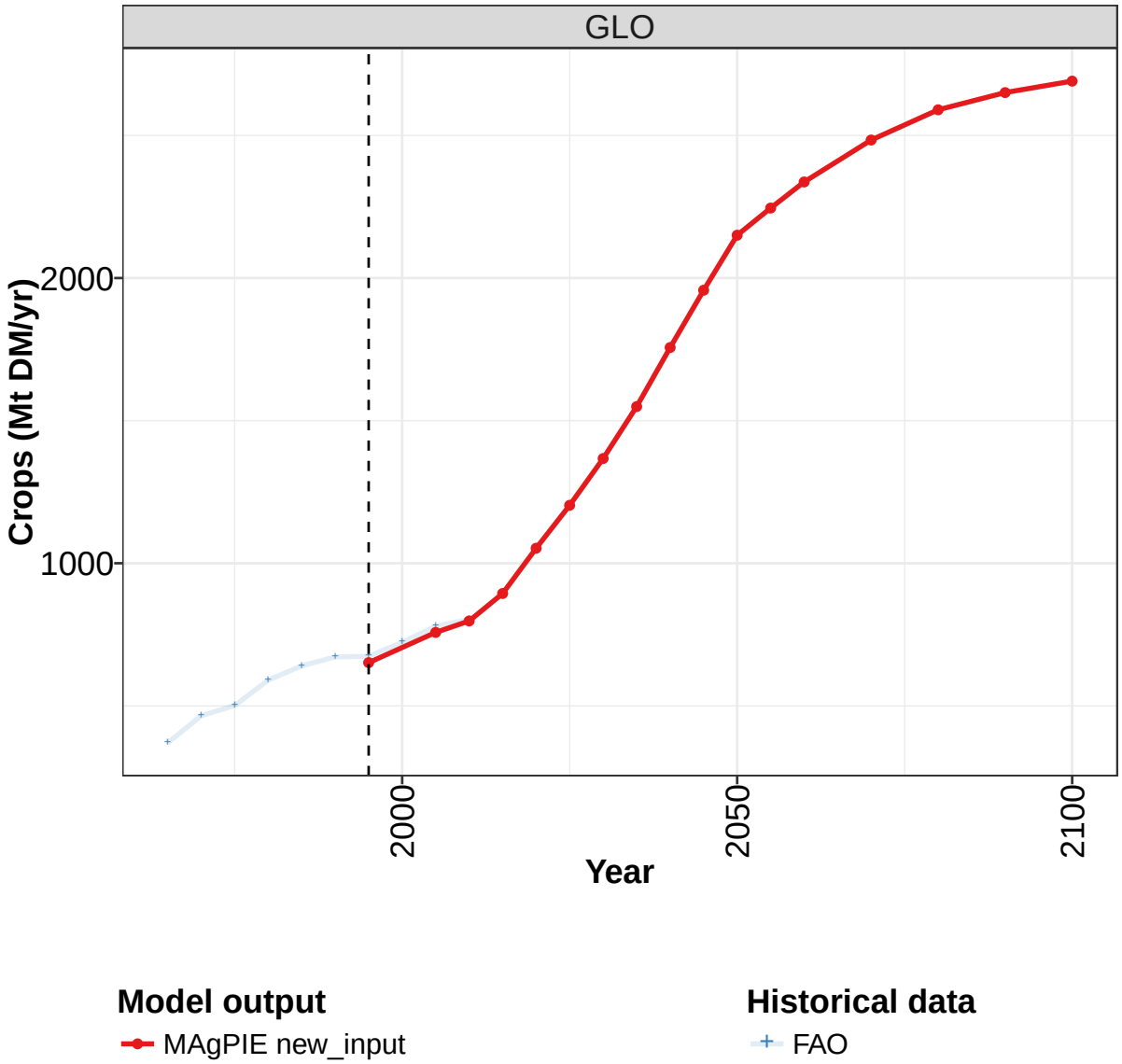
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	408	459	513	536	602	649	654	651	678	721
CAZ	5	6	7	7	9	8	9	12	14	12
CHA	106	121	142	153	174	199	196	183	175	173
EUR	16	17	19	19	19	19	15	15	14	15
IND	81	97	104	110	120	130	135	145	151	156
LAM	31	34	36	36	43	40	45	47	49	54
MEA	16	17	19	20	24	26	27	24	33	30
NEU	2	2	3	2	2	2	1	1	1	1
OAS	81	88	93	101	118	123	133	138	152	171
REF	34	36	44	41	43	46	34	25	22	26
SSA	24	27	31	32	36	43	45	51	59	72
USA	12	13	15	14	13	11	13	12	11	12

Table 235: FAO — Demand—Feed—Crop residues—Straw (Mt DM/yr)


GLO
Demand|Feed|Crops (Mt DM/yr)
2000
1000
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Feed|Crops (Mt DM/yr)
0
200
400
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

6.2 Crops


GLO
Crops (Mt DM/yr)
2000
1000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

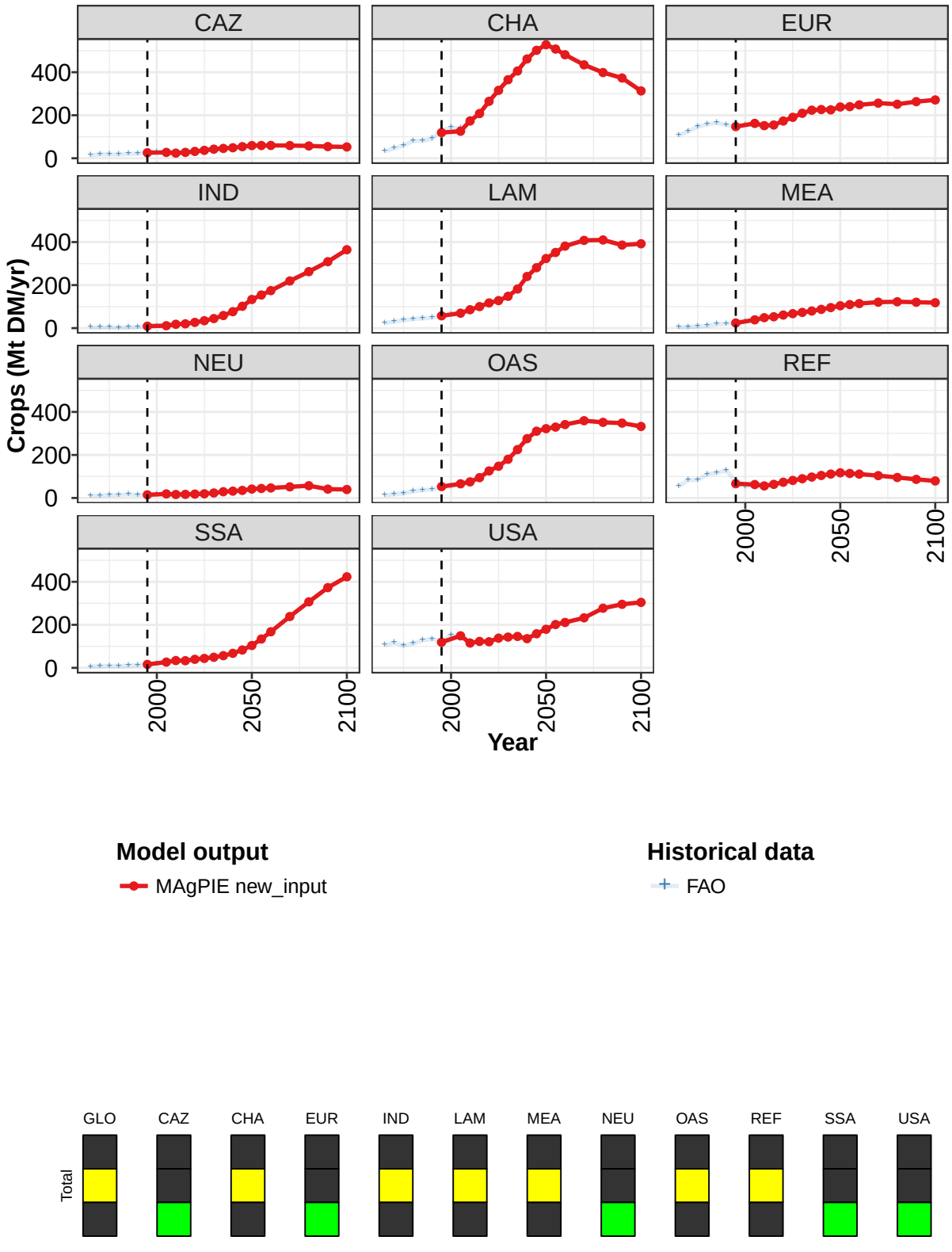


Figure 79: MAgPIE new_input — Demand—Feed—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	651	757	798	894	1053	1203	1367	1549	1756	1957	2150
CAZ	26	27	24	27	32	37	42	46	49	54	59
CHA	119	126	173	208	265	316	365	406	462	502	528
EUR	147	162	152	155	173	190	209	224	226	225	238
IND	9	11	18	20	27	34	44	59	76	102	133
LAM	57	69	86	100	117	128	148	182	240	281	324
MEA	24	39	49	53	61	67	73	80	87	95	104
NEU	15	19	16	17	18	19	23	29	32	35	42
OAS	53	66	75	95	126	148	180	225	276	311	322
REF	66	62	56	63	73	82	90	97	105	111	117
SSA	16	27	34	33	40	44	49	57	68	83	104
USA	119	149	115	123	121	138	143	146	136	158	179

Table 236: MAgPIE new_input — Demand—Feed—Crops (Mt DM/yr) [PART 1/2]

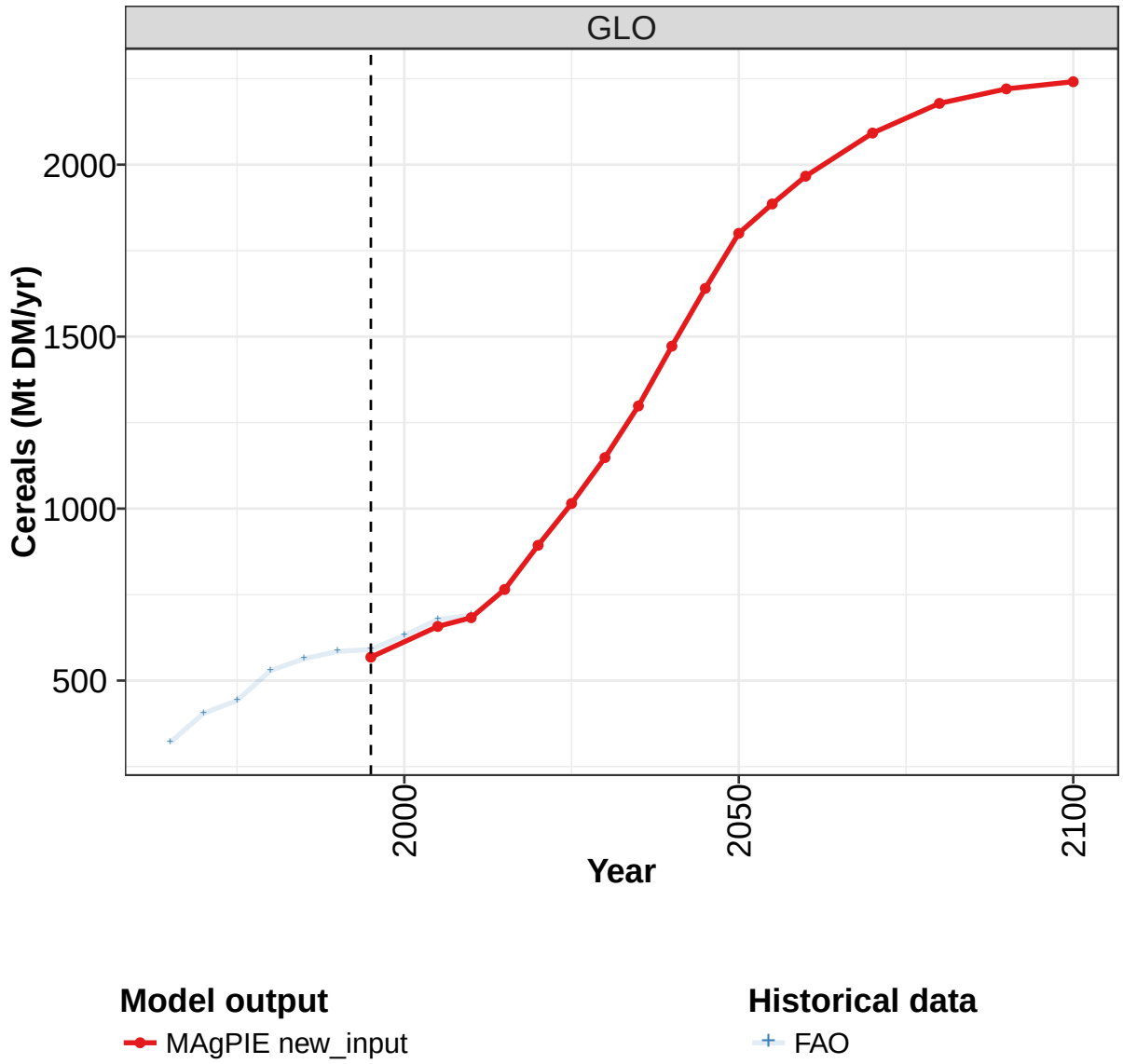
	2055	2060	2070	2080	2090	2100
GLO	2245	2337	2484	2590	2650	2690
CAZ	59	60	59	57	54	53
CHA	508	481	434	399	373	313
EUR	240	248	256	251	263	271
IND	154	174	219	262	309	364
LAM	352	381	408	410	386	392
MEA	109	114	121	123	120	118
NEU	44	47	52	57	41	39
OAS	330	341	359	352	348	333
REF	114	111	104	95	87	79
SSA	134	168	239	307	373	423
USA	201	211	233	277	295	304

Table 237: MAgPIE new_input — Demand—Feed—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	370	465	501	590	640	671	674	723	779	803
CAZ	13	18	18	18	20	22	28	30	33	27
CHA	32	46	60	80	82	90	129	143	139	179
EUR	108	125	146	158	164	155	146	154	159	148
IND	3	3	3	3	3	6	9	10	12	18
LAM	23	30	37	42	45	49	57	65	71	83
MEA	4	5	7	11	18	20	24	29	37	47
NEU	10	12	13	15	17	14	15	16	19	16
OAS	12	17	22	31	36	40	49	54	64	75
REF	54	84	84	111	116	128	76	53	64	56
SSA	5	8	9	8	10	13	17	19	29	33
USA	105	116	103	113	128	134	124	151	153	120

Table 238: FAO — Demand—Feed—Crops (Mt DM/yr)

6.2.1 Cereals


GLO
Cereals (Mt DM/yr)
2000
1500
1000
500
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

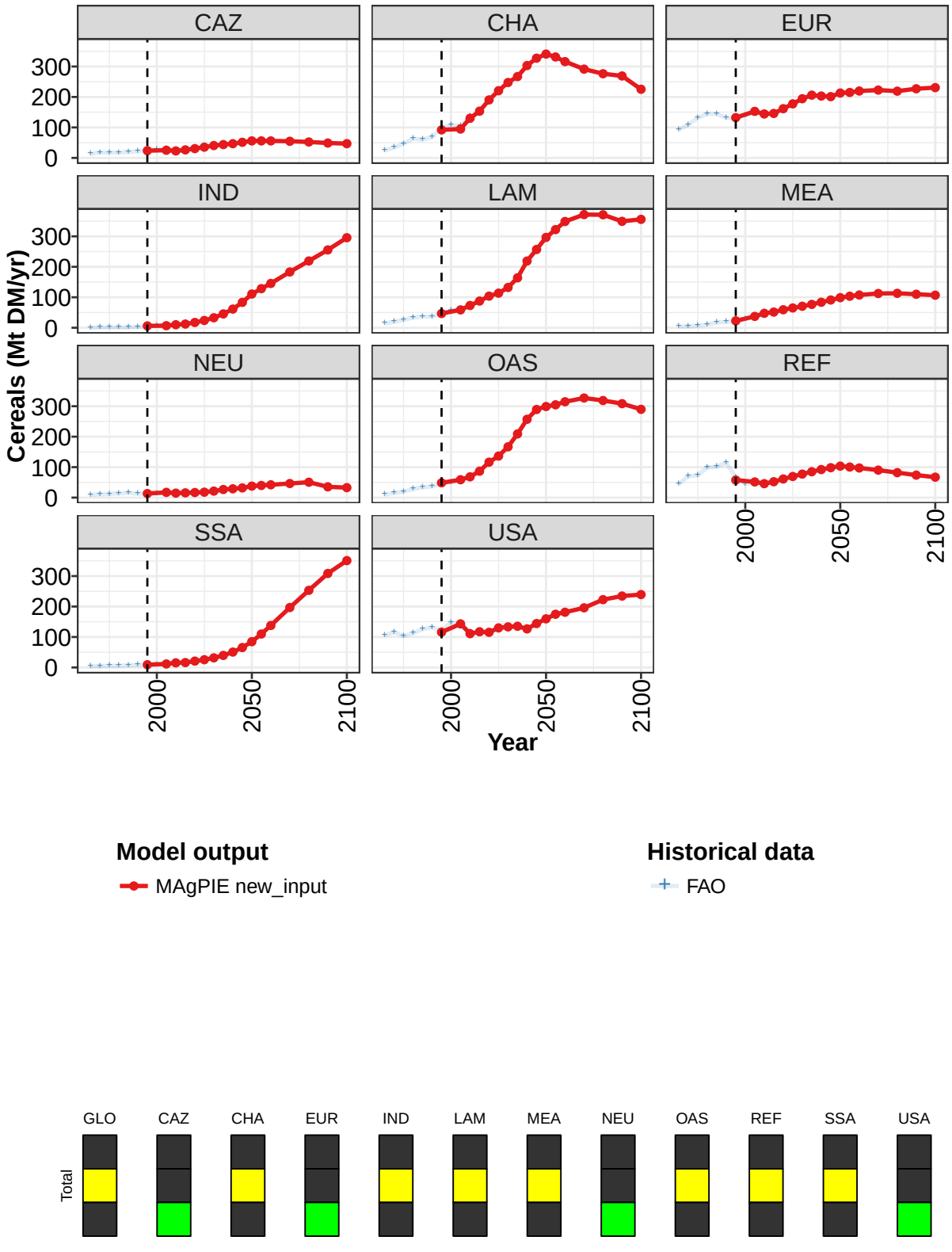


Figure 80: MAgPIE new_input — Demand—Feed—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	568	657	683	765	893	1015	1148	1299	1472	1640	1800
CAZ	24	25	23	26	30	35	41	44	47	51	56
CHA	92	95	130	153	190	221	248	267	303	327	341
EUR	132	153	144	146	162	177	194	206	203	201	213
IND	6	7	10	12	17	24	33	45	61	83	111
LAM	47	59	73	88	104	114	132	164	219	257	297
MEA	23	37	47	52	59	65	71	77	84	91	99
NEU	13	17	15	16	17	18	21	27	29	32	38
OAS	49	59	68	87	116	136	167	209	257	289	299
REF	58	51	46	52	61	69	77	85	92	98	103
SSA	9	12	15	16	21	25	32	40	51	65	85
USA	116	143	111	117	115	130	133	135	127	144	160

Table 239: MAgPIE new_input — Demand—Feed—Crops—Cereals (Mt DM/yr) [PART 1/2]

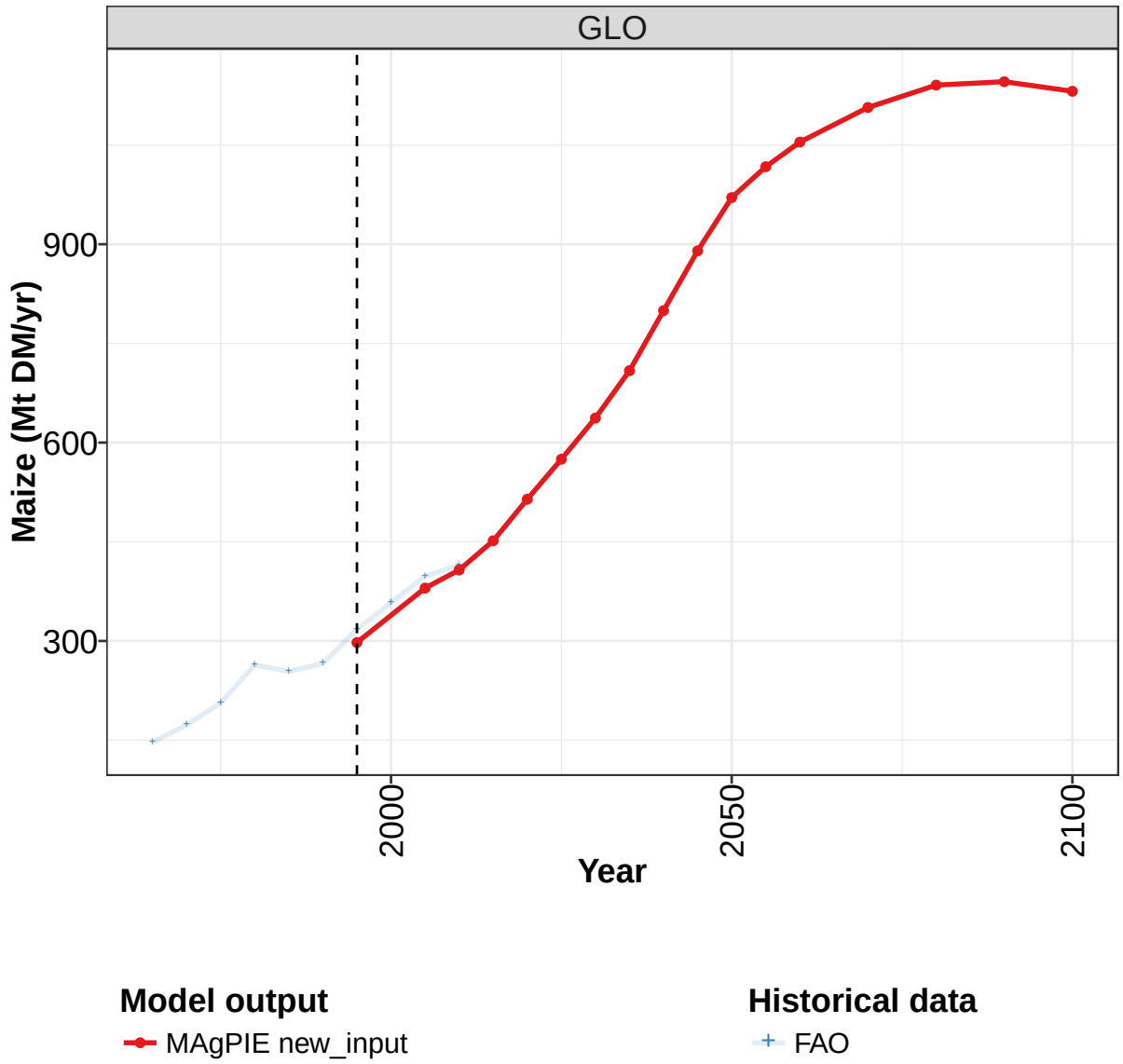
	2055	2060	2070	2080	2090	2100
GLO	1886	1967	2092	2178	2220	2241
CAZ	56	56	55	52	49	47
CHA	331	316	291	276	269	225
EUR	215	220	223	219	227	231
IND	128	145	183	219	256	296
LAM	322	349	372	371	349	356
MEA	104	108	112	113	110	107
NEU	40	42	46	51	35	33
OAS	305	315	327	319	308	290
REF	100	97	90	82	74	67
SSA	110	138	197	253	309	351
USA	175	181	196	223	234	239

Table 240: MAgPIE new_input — Demand—Feed—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	321	405	442	529	563	585	591	631	677	690
CAZ	13	18	17	18	20	21	25	27	30	26
CHA	24	34	47	63	60	68	100	108	105	136
EUR	93	109	131	144	144	132	131	139	150	141
IND	1	1	1	1	1	3	6	7	7	10
LAM	14	20	26	33	37	37	48	56	61	72
MEA	4	5	7	11	17	19	23	28	37	46
NEU	9	11	12	14	16	13	14	14	17	15
OAS	10	16	19	28	33	37	46	50	57	68
REF	45	71	73	99	102	114	67	45	53	46
SSA	3	5	5	5	7	8	9	10	13	15
USA	105	116	103	112	126	132	121	147	147	116

Table 241: FAO — Demand—Feed—Crops—Cereals (Mt DM/yr)

6.2.2 Cereals—Maize



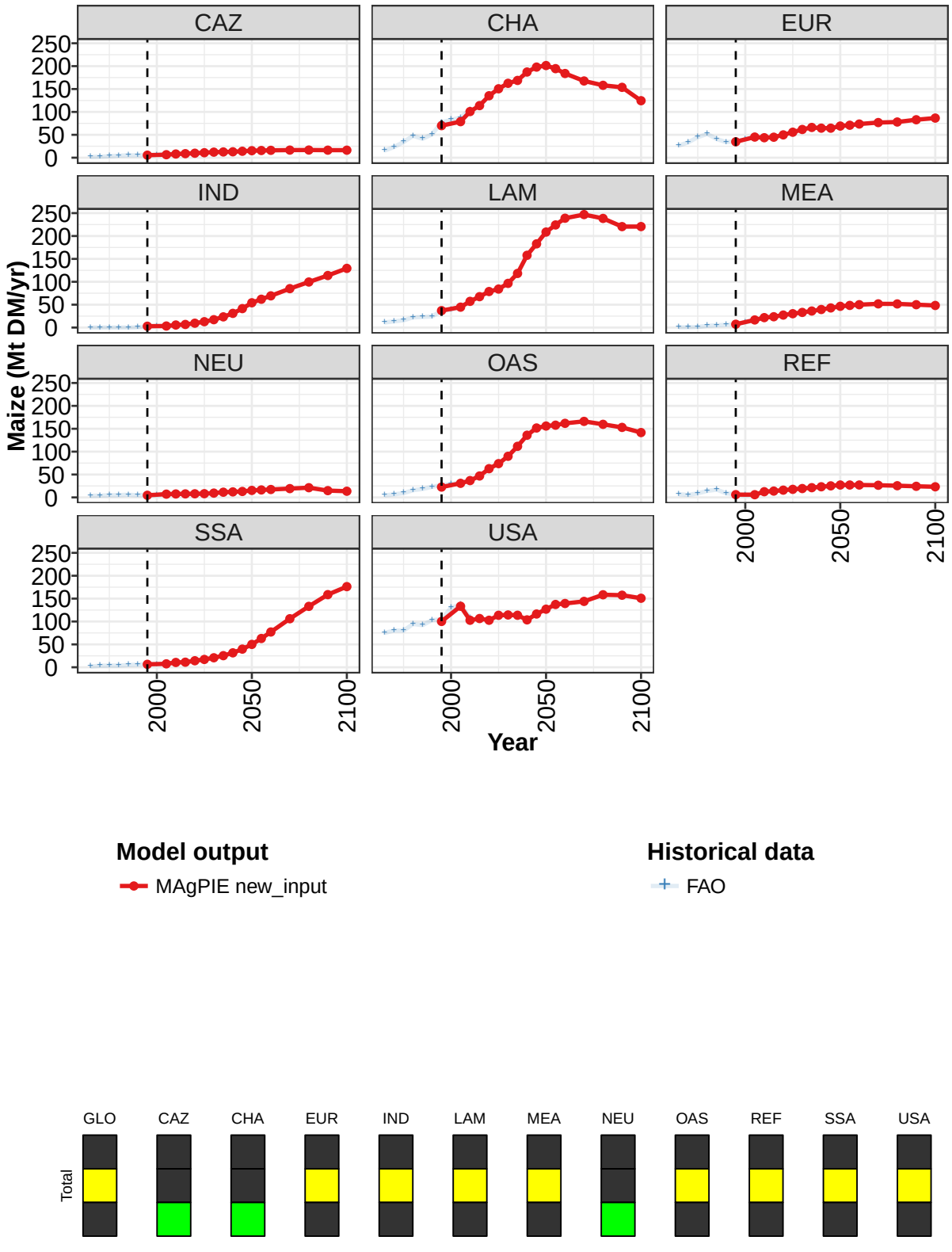


Figure 81: MAgPIE new_input — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	298	380	407	452	514	575	637	709	800	890	971
CAZ	6	7	8	9	10	11	12	13	13	14	15
CHA	70	79	101	114	135	151	163	169	187	198	201
EUR	35	45	44	45	50	56	62	66	65	65	69
IND	3	3	6	7	10	13	17	23	31	41	54
LAM	37	45	57	68	79	84	97	118	158	183	209
MEA	7	17	22	24	27	30	33	36	39	43	46
NEU	5	7	8	8	8	8	9	11	12	13	15
OAS	23	31	37	47	63	74	90	112	136	152	156
REF	6	6	13	14	16	18	19	21	23	25	27
SSA	6	8	11	11	14	17	21	25	32	40	50
USA	100	133	103	107	103	114	114	114	104	116	127

Table 242: MAgPIE new_input — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

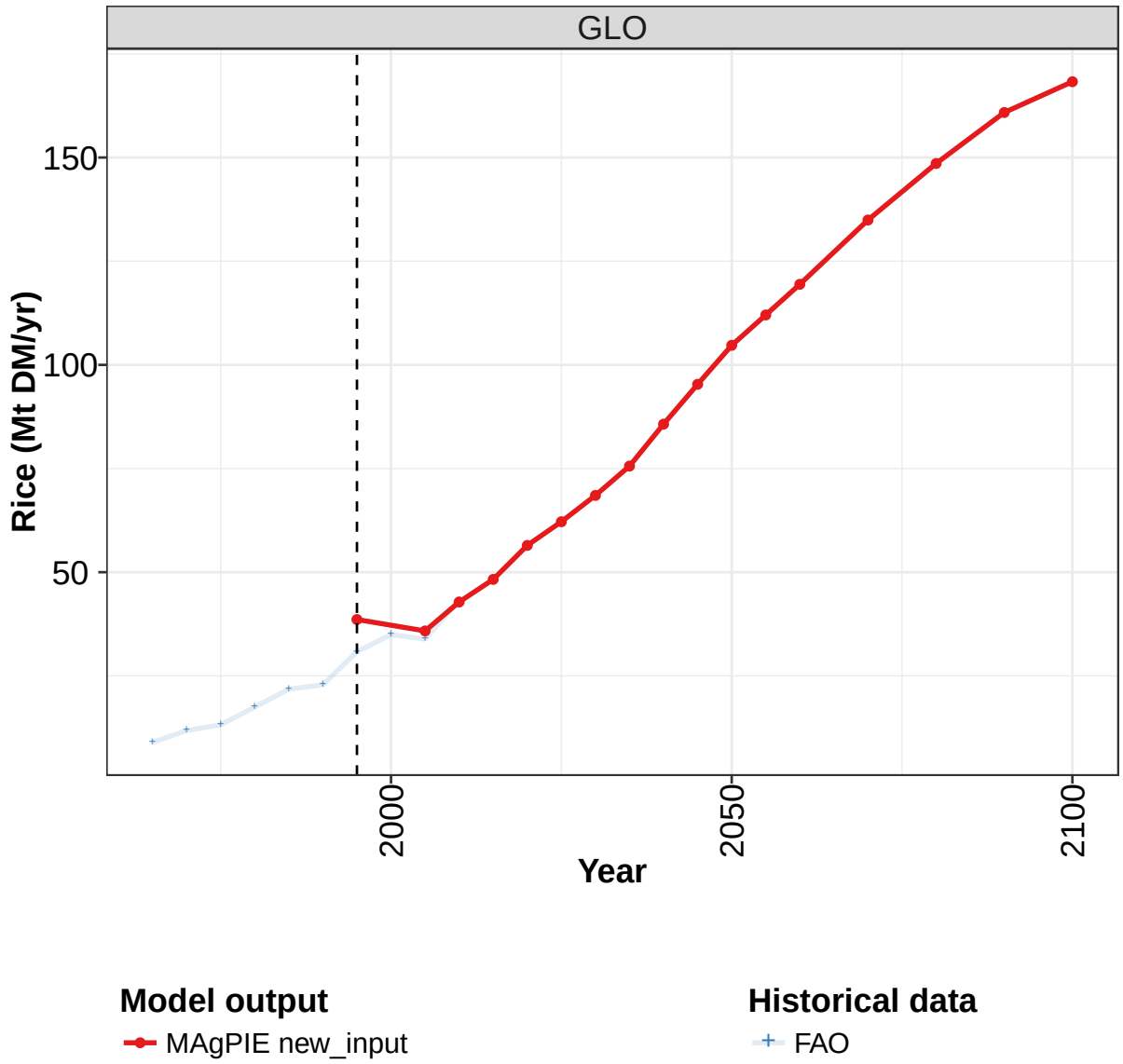
	2055	2060	2070	2080	2090	2100
GLO	1017	1054	1107	1141	1146	1131
CAZ	16	16	17	17	16	16
CHA	195	184	168	158	154	125
EUR	71	74	77	78	83	87
IND	62	69	85	100	114	129
LAM	224	239	247	238	221	221
MEA	48	50	52	52	50	48
NEU	16	17	19	21	15	14
OAS	158	162	166	160	153	142
REF	27	27	27	26	24	23
SSA	63	77	106	133	159	176
USA	137	139	144	158	157	151

Table 243: MAgPIE new_input — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	147	173	206	264	254	266	318	358	398	415
CAZ	1	2	3	5	5	5	6	6	8	9
CHA	16	23	34	48	41	51	77	83	88	105
EUR	26	34	45	52	41	34	36	40	45	43
IND	0	0	0	0	0	1	3	3	4	6
LAM	11	14	16	22	23	24	37	39	46	57
MEA	1	1	1	4	5	6	7	11	16	21
NEU	3	4	5	5	6	5	6	4	8	8
OAS	4	7	9	16	18	23	27	30	32	37
REF	7	5	9	14	17	9	7	4	6	13
SSA	2	3	4	4	5	6	7	6	8	11
USA	75	80	80	95	92	103	105	130	137	107

Table 244: FAO — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr)

6.2.3 Cereals—Rice



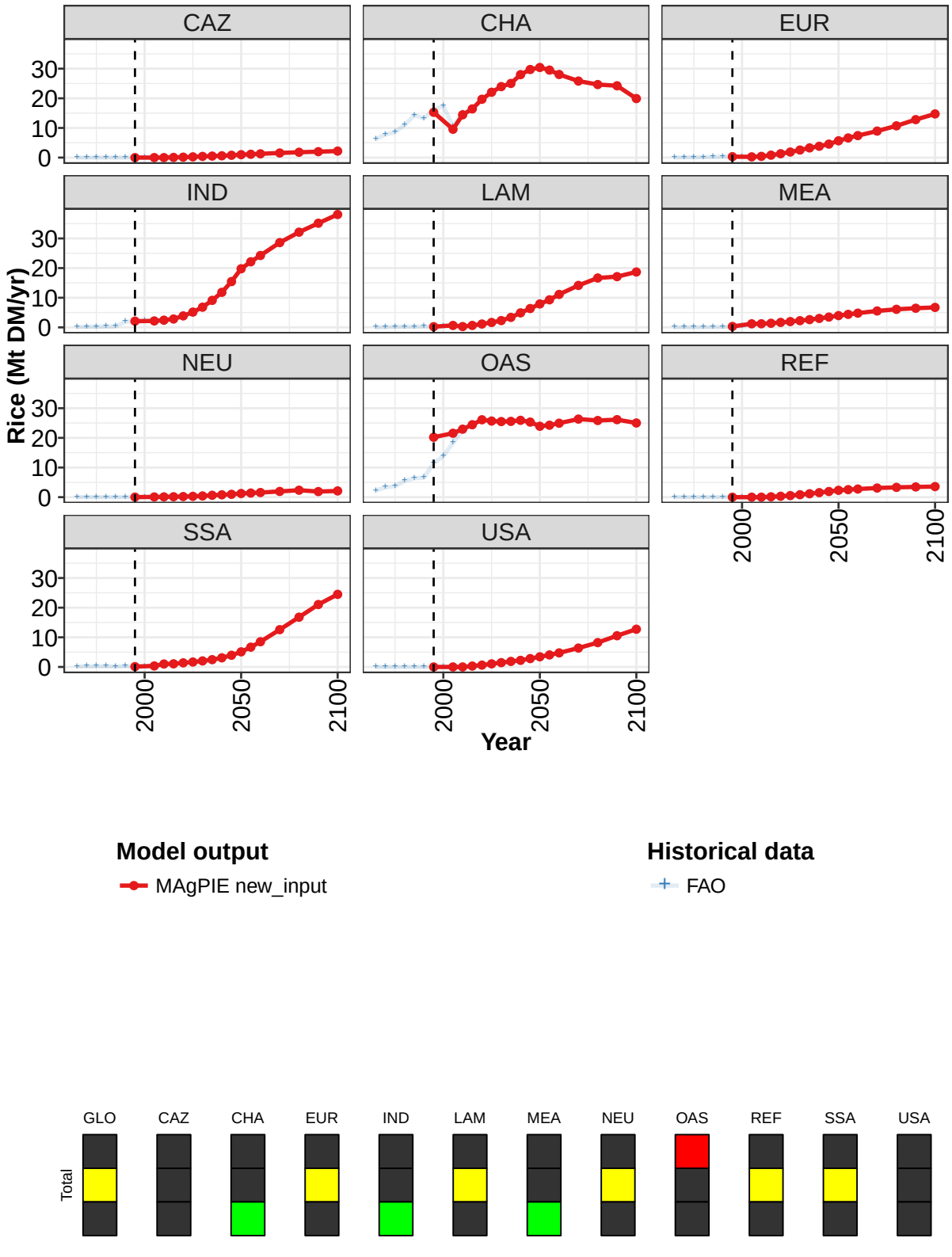


Figure 82: MAgPIE new_input — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	39	36	43	48	56	62	69	76	86	95	105
CAZ	0	0	0	0	0	0	0	1	1	1	1
CHA	15	10	14	16	20	22	24	25	28	30	30
EUR	0	0	0	1	1	2	3	3	4	5	6
IND	2	2	2	3	4	5	7	9	12	15	20
LAM	0	1	0	1	1	2	2	3	5	6	8
MEA	0	1	1	1	2	2	2	3	3	3	4
NEU	0	0	0	0	0	0	0	1	1	1	1
OAS	20	22	23	24	26	26	26	26	26	25	24
REF	0	0	0	0	0	1	1	1	2	2	2
SSA	0	0	1	1	1	2	2	2	3	4	5
USA	0	0	0	0	1	1	1	2	2	3	3

Table 245: MAgPIE new_input — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

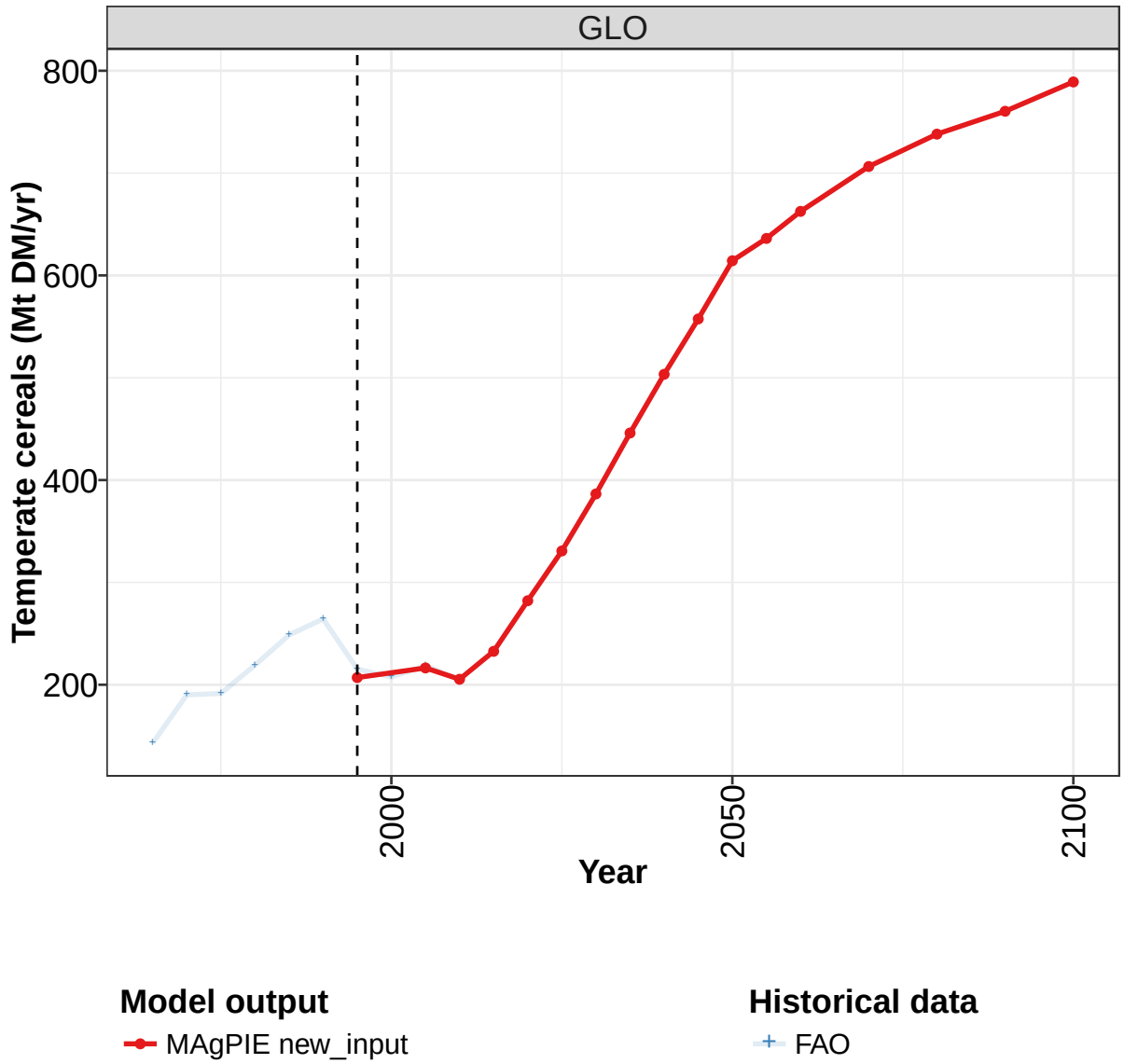
	2055	2060	2070	2080	2090	2100
GLO	112	119	135	149	161	168
CAZ	1	1	2	2	2	2
CHA	30	28	26	25	24	20
EUR	7	7	9	11	13	15
IND	22	24	29	32	35	38
LAM	9	11	14	17	17	19
MEA	4	5	6	6	6	7
NEU	1	2	2	2	2	2
OAS	24	25	26	26	26	25
REF	3	3	3	3	3	4
SSA	7	9	13	17	21	24
USA	4	5	6	8	11	13

Table 246: MAgPIE new_input — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.0	11.8	13.2	17.5	21.8	22.9	30.8	34.9	33.9	43.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.3	7.8	8.6	11.0	14.3	13.3	16.2	17.4	10.5	15.1
EUR	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4
IND	0.2	0.2	0.3	0.3	0.3	1.9	2.0	2.2	2.4	2.5
LAM	0.0	0.1	0.3	0.2	0.3	0.3	0.3	0.5	0.6	0.3
MEA	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5	1.2	1.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
OAS	2.2	3.3	3.7	5.5	6.4	6.6	11.5	13.8	18.3	22.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.4	1.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 247: FAO — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr)

6.2.4 Cereals—Temperate cereals



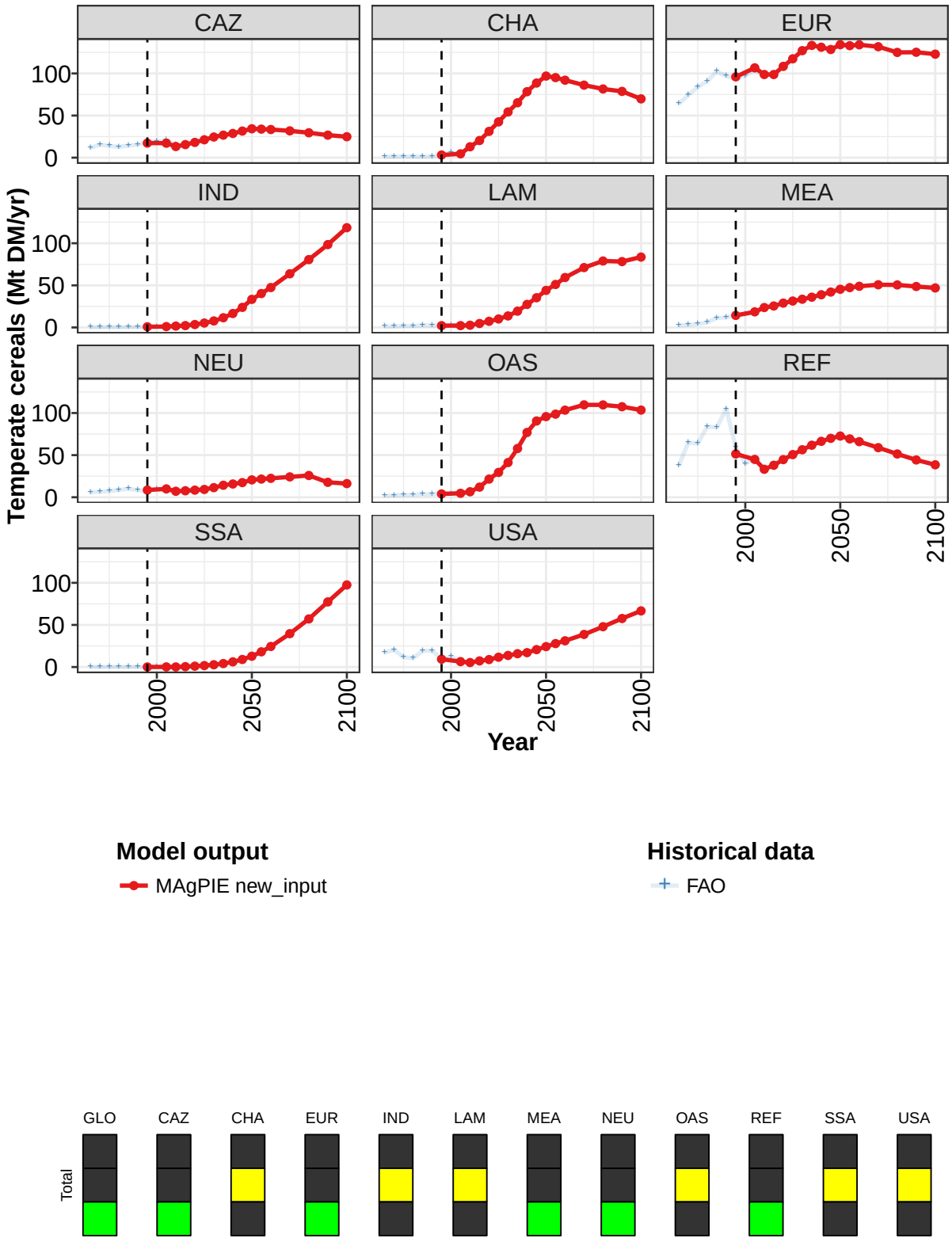


Figure 83: MAgPIE new_input — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	207	216	205	233	282	331	386	446	503	557	614
CAZ	17	17	13	16	18	21	25	27	29	32	34
CHA	3	5	13	20	31	43	54	65	78	89	97
EUR	96	107	99	99	108	117	127	133	131	128	134
IND	1	1	2	2	3	5	8	12	17	24	33
LAM	2	2	3	5	7	10	14	19	27	35	44
MEA	14	19	24	26	29	31	34	36	39	42	45
NEU	9	10	7	8	8	9	11	14	16	17	21
OAS	4	5	7	12	22	29	41	58	77	91	96
REF	51	45	33	38	45	51	56	62	66	70	73
SSA	0	0	0	0	1	2	3	4	6	9	13
USA	9	6	5	7	9	12	14	16	17	21	24

Table 248: MAgPIE new_input — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

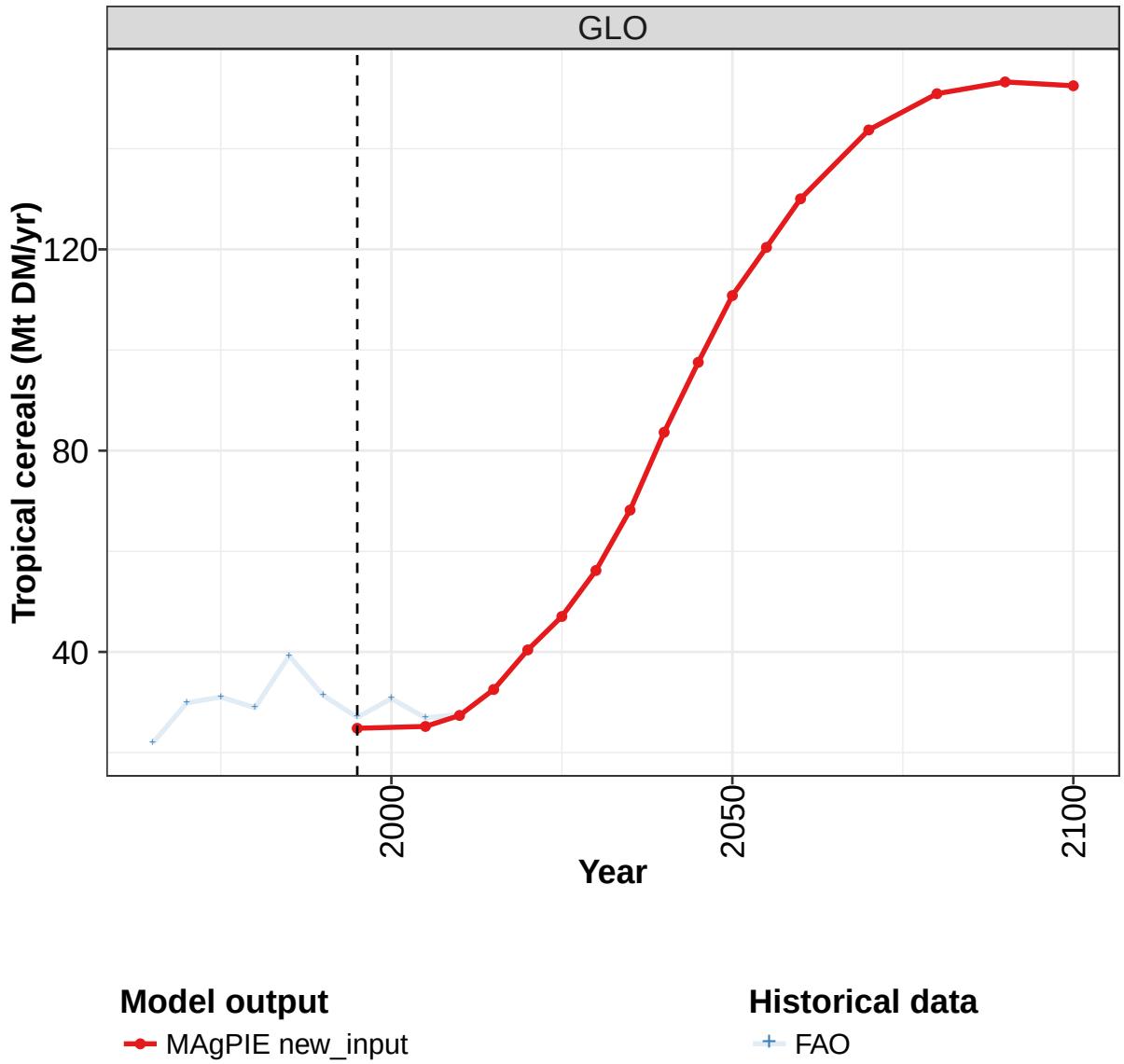
	2055	2060	2070	2080	2090	2100
GLO	636	663	706	738	760	789
CAZ	34	33	32	30	27	25
CHA	95	92	86	82	79	70
EUR	133	134	132	125	125	123
IND	40	47	64	81	98	118
LAM	51	59	71	79	78	84
MEA	47	49	51	51	49	47
NEU	22	22	24	26	18	16
OAS	99	103	110	110	108	104
REF	69	66	59	51	44	39
SSA	18	24	40	57	77	97
USA	28	31	39	48	58	67

Table 249: MAgPIE new_input — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	143	190	191	219	249	264	215	207	219	205
CAZ	11	16	14	13	14	15	19	19	21	15
CHA	1	1	1	1	1	2	3	6	5	14
EUR	64	74	84	91	102	97	93	97	104	96
IND	0	0	1	0	1	1	1	1	1	2
LAM	1	1	2	2	3	2	2	3	2	3
MEA	2	3	4	6	11	12	15	15	18	23
NEU	6	6	7	9	10	8	8	10	9	7
OAS	2	2	3	3	4	4	5	4	5	7
REF	37	65	64	84	83	105	59	40	46	33
SSA	0	0	0	0	0	0	0	0	0	0
USA	17	20	12	10	19	19	10	12	7	6

Table 250: FAO — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr)

6.2.5 Cereals—Tropical cereals



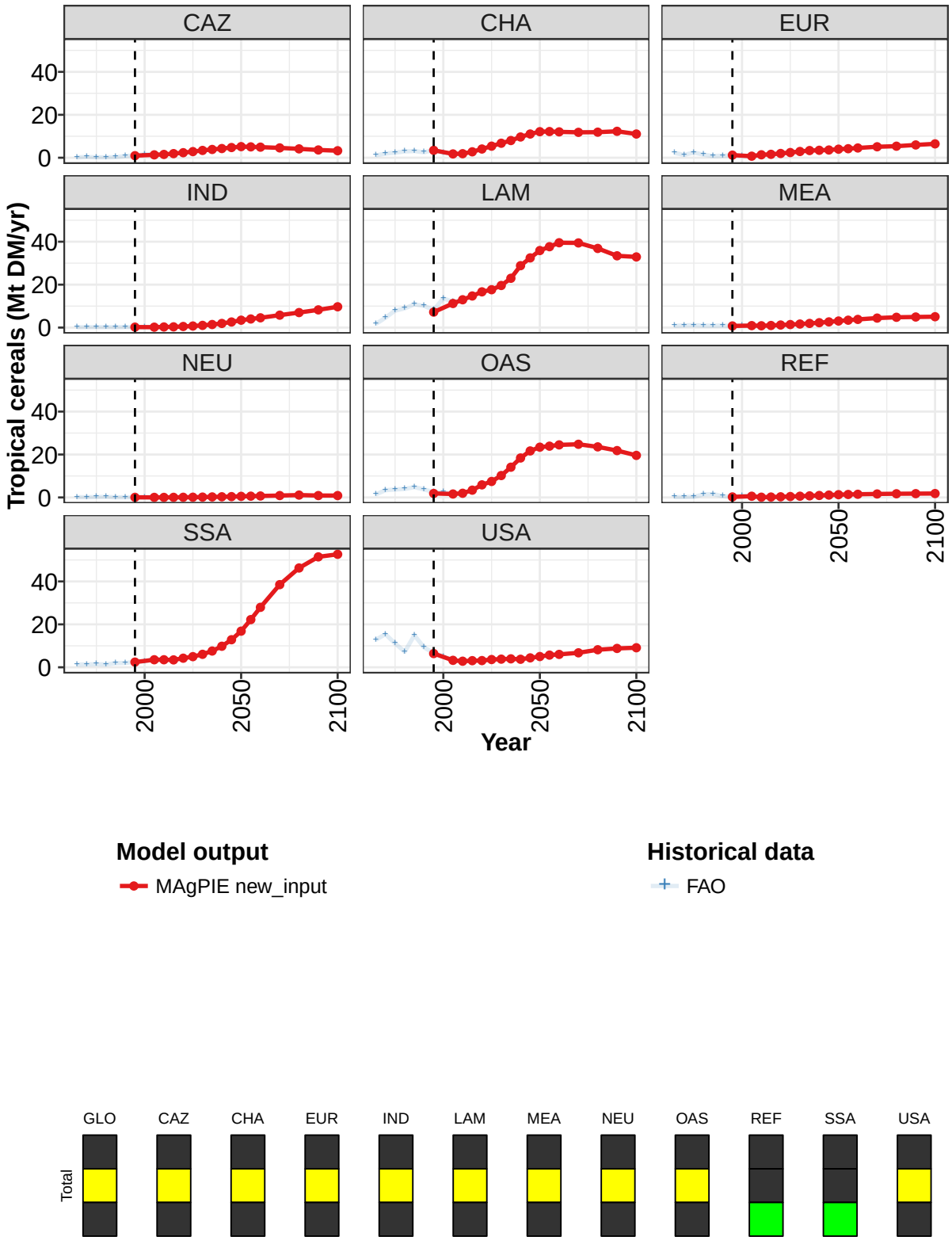


Figure 84: MAgPIE new_input — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	25	25	27	33	40	47	56	68	84	98	111
CAZ	1	1	2	2	2	3	3	4	4	5	5
CHA	3	2	2	3	4	5	7	8	10	11	12
EUR	1	1	1	2	2	2	3	3	3	4	4
IND	0	0	0	0	1	1	1	1	2	3	3
LAM	7	11	13	15	17	18	20	23	29	32	36
MEA	1	1	1	1	1	1	2	2	2	3	3
NEU	0	0	0	0	0	0	0	0	0	0	1
OAS	2	2	2	3	6	7	10	14	18	22	23
REF	0	1	0	0	0	0	1	1	1	1	1
SSA	2	4	4	3	4	5	6	8	10	13	17
USA	6	3	3	3	3	4	4	4	4	4	5

Table 251: MAgPIE new_input — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

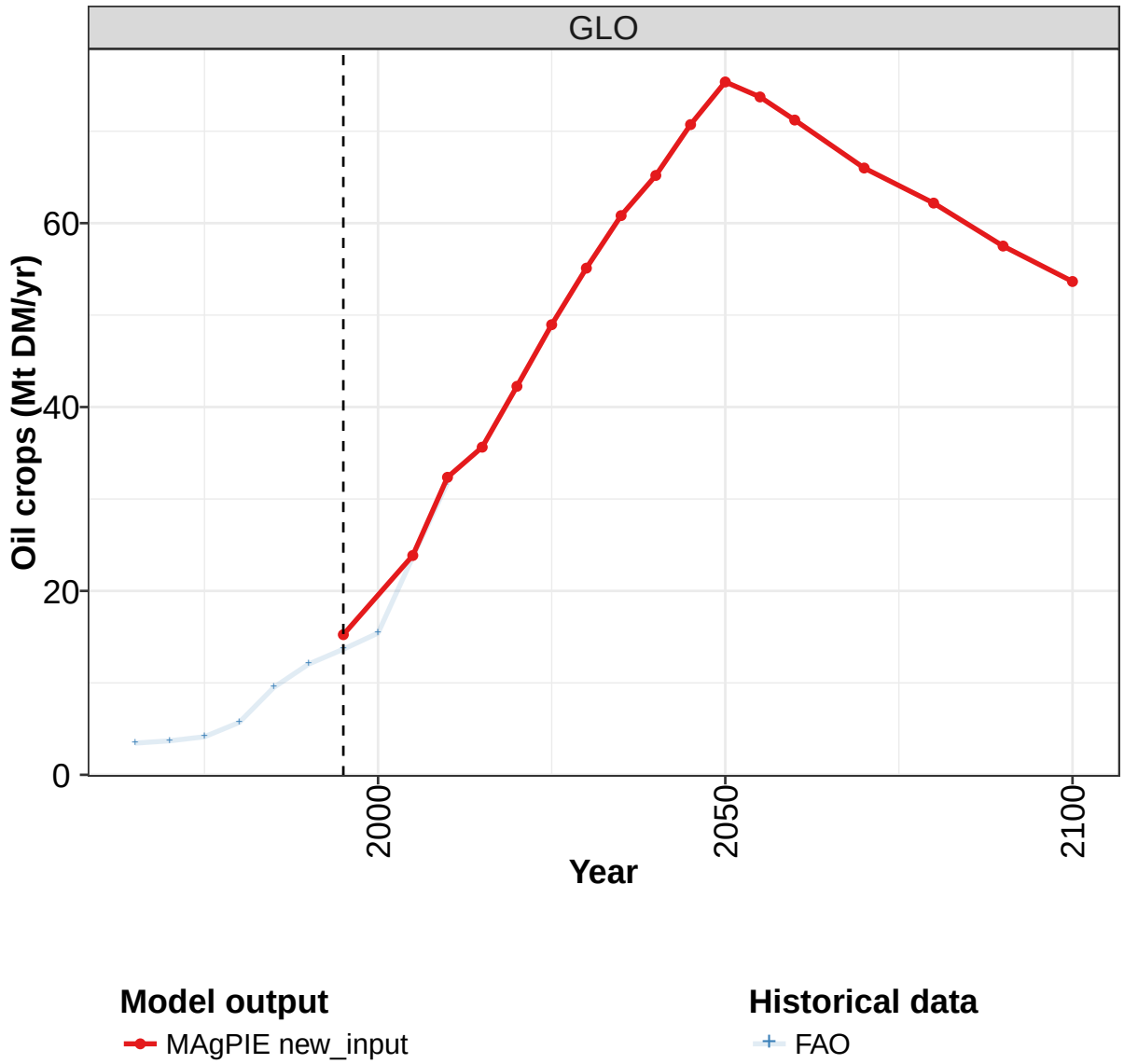
	2055	2060	2070	2080	2090	2100
GLO	120	130	144	151	153	153
CAZ	5	5	5	4	4	3
CHA	12	12	12	12	12	11
EUR	4	5	5	5	6	6
IND	4	5	6	7	8	10
LAM	38	40	39	37	33	33
MEA	3	4	4	5	5	5
NEU	1	1	1	1	1	1
OAS	24	24	25	24	22	20
REF	1	1	2	2	2	2
SSA	22	28	39	46	51	53
USA	6	6	7	8	9	9

Table 252: MAgPIE new_input — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	21.9	29.9	31.0	28.9	39.2	31.4	27.0	30.7	26.9	27.6
CAZ	0.1	0.4	0.2	0.2	0.3	0.8	1.1	1.6	1.6	1.7
CHA	1.1	1.9	2.4	2.9	3.1	2.5	3.7	2.3	2.0	2.0
EUR	2.3	1.3	2.4	1.4	0.8	1.0	1.1	0.8	0.7	1.3
IND	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
LAM	1.7	4.6	7.9	9.0	10.8	10.1	8.2	13.6	11.9	12.8
MEA	0.8	1.0	1.1	0.9	0.8	1.0	0.7	1.1	0.9	0.8
NEU	0.1	0.1	0.2	0.3	0.1	0.1	0.0	0.1	0.0	0.0
OAS	1.4	3.4	3.7	4.0	4.8	3.8	2.4	2.4	1.7	1.9
REF	0.2	0.2	0.3	1.4	1.5	0.6	0.3	0.8	0.6	0.1
SSA	1.2	1.4	1.4	1.3	1.9	2.0	2.5	2.8	4.0	3.5
USA	12.8	15.4	11.1	7.3	14.9	9.3	6.7	5.1	3.3	3.0

Table 253: FAO — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr)

6.2.6 Oil crops



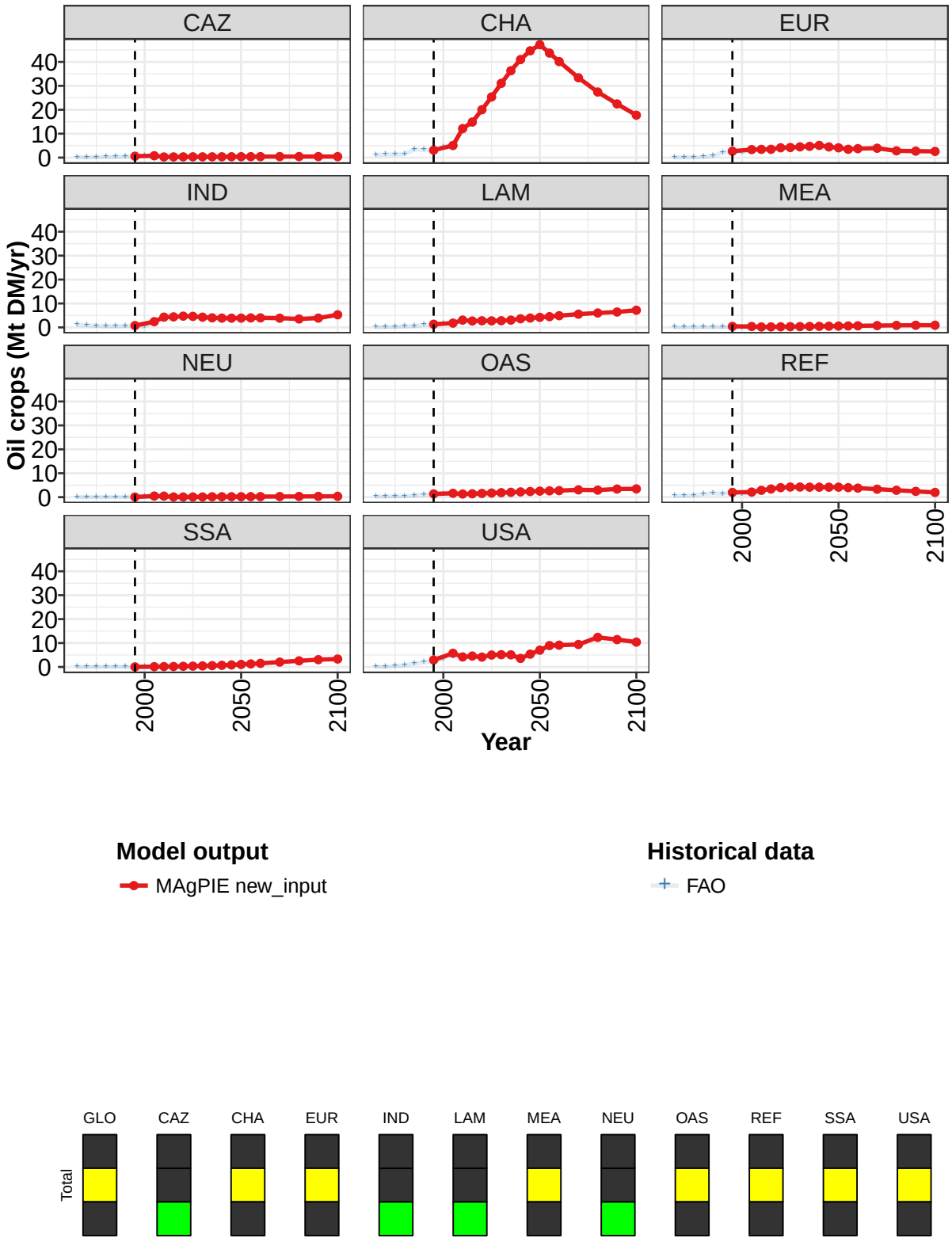


Figure 85: MAgPIE new_input — Demand—Feed—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	15.2	23.9	32.4	35.6	42.3	49.0	55.1	60.8	65.2	70.7	75.4
CAZ	0.6	0.8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
CHA	3.1	5.1	12.1	14.9	20.0	25.4	31.0	36.3	41.0	44.7	47.2
EUR	2.7	3.4	3.4	3.5	4.1	4.2	4.5	4.7	5.1	4.5	4.1
IND	0.8	2.4	4.3	4.4	4.7	4.6	4.3	4.0	3.9	3.9	3.9
LAM	1.3	1.8	3.0	2.7	2.8	2.7	2.8	3.0	3.6	3.9	4.2
MEA	0.4	0.4	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.6
NEU	0.1	0.5	0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
OAS	1.4	1.6	1.3	1.4	1.6	1.7	1.9	2.0	2.2	2.4	2.5
REF	2.0	2.1	2.9	3.4	4.0	4.2	4.2	4.2	4.2	4.2	4.2
SSA	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.6	0.7	0.9	1.1
USA	2.9	5.7	4.2	4.6	4.1	5.0	5.1	5.1	3.6	5.4	7.0

Table 254: MAgPIE new_input — Demand—Feed—Crops—Oil crops (Mt DM/yr) [PART 1/2]

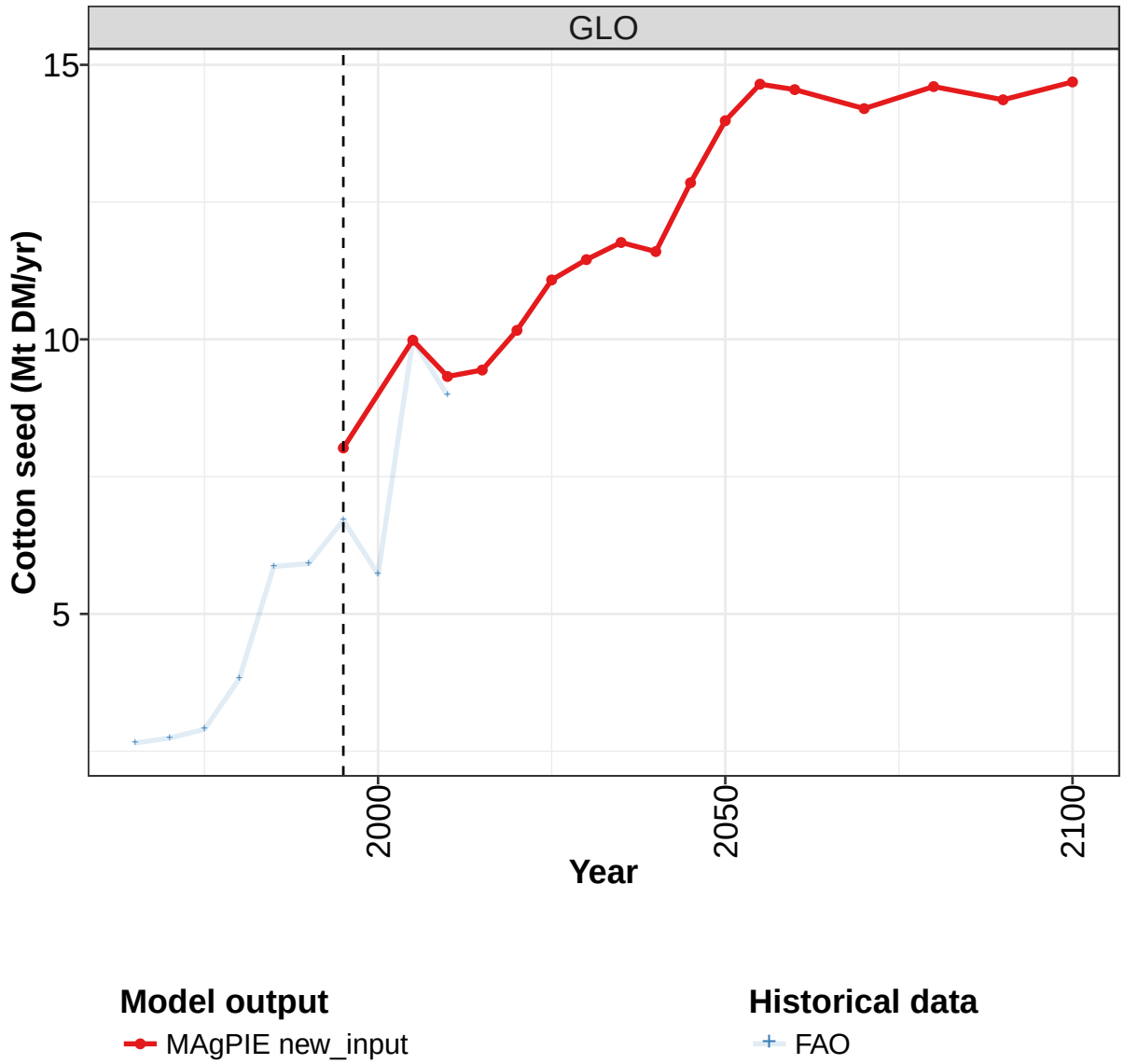
	2055	2060	2070	2080	2090	2100
GLO	73.7	71.2	66.0	62.2	57.5	53.7
CAZ	0.4	0.4	0.4	0.4	0.4	0.4
CHA	43.7	40.1	33.4	27.4	22.4	17.7
EUR	3.5	3.8	3.9	2.8	2.7	2.6
IND	4.0	4.0	3.9	3.5	3.9	5.3
LAM	4.5	4.9	5.5	6.0	6.4	7.2
MEA	0.6	0.7	0.8	0.8	0.9	0.9
NEU	0.2	0.2	0.3	0.3	0.3	0.4
OAS	2.6	2.7	3.1	3.0	3.4	3.5
REF	4.0	3.8	3.3	2.9	2.4	2.0
SSA	1.3	1.5	2.0	2.6	3.1	3.3
USA	8.9	9.1	9.4	12.4	11.5	10.4

Table 255: MAgPIE new_input — Demand—Feed—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.4	3.7	4.1	5.7	9.5	12.0	13.7	15.4	23.7	31.8
CAZ	0.1	0.1	0.2	0.3	0.3	0.5	0.6	0.6	0.9	0.3
CHA	1.1	1.3	1.3	1.5	3.4	3.2	2.7	4.4	5.5	12.2
EUR	0.1	0.2	0.2	0.3	0.7	2.1	2.7	2.2	3.3	3.4
IND	1.0	0.9	0.7	0.5	0.5	0.6	0.7	0.4	2.5	4.3
LAM	0.1	0.1	0.2	0.4	0.6	1.0	0.9	1.6	1.9	2.5
MEA	0.0	0.0	0.1	0.2	0.1	0.2	0.2	0.0	0.0	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1
OAS	0.3	0.3	0.3	0.4	0.7	1.0	1.1	1.3	1.5	1.3
REF	0.5	0.7	0.7	1.3	1.6	1.4	2.0	1.3	1.9	2.9
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
USA	0.1	0.0	0.4	0.7	1.5	1.9	2.6	3.4	5.9	4.4

Table 256: FAO — Demand—Feed—Crops—Oil crops (Mt DM/yr)

6.2.7 Oil crops—Cotton seed



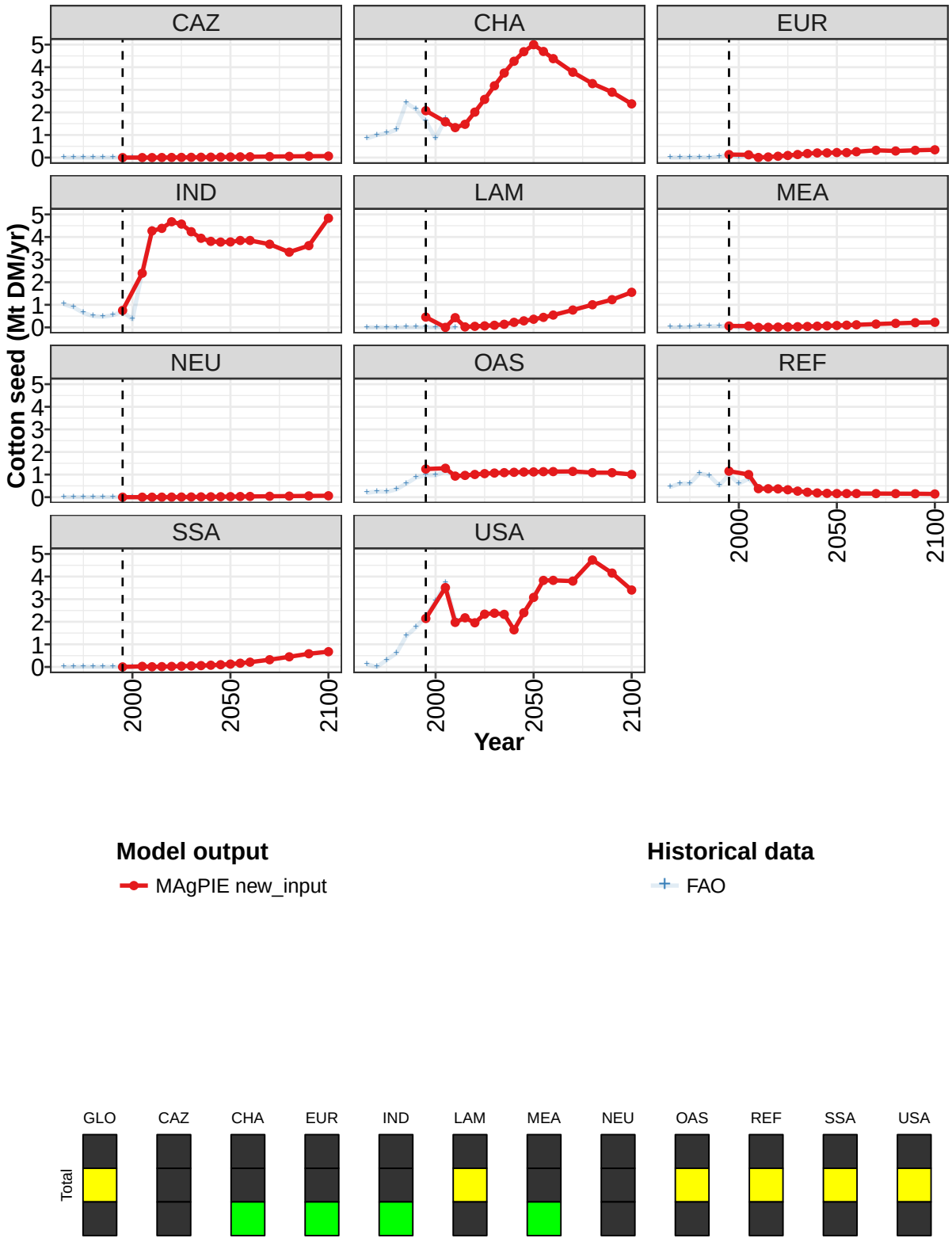


Figure 86: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8.0	10.0	9.3	9.4	10.2	11.1	11.5	11.8	11.6	12.9	14.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.1	1.6	1.3	1.5	2.0	2.6	3.2	3.7	4.3	4.7	5.0
EUR	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
IND	0.8	2.4	4.3	4.4	4.7	4.6	4.2	3.9	3.8	3.8	3.8
LAM	0.5	0.0	0.4	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.4
MEA	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.2	1.3	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1
REF	1.2	1.0	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
USA	2.1	3.5	2.0	2.2	2.0	2.3	2.4	2.3	1.6	2.4	3.1

Table 257: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

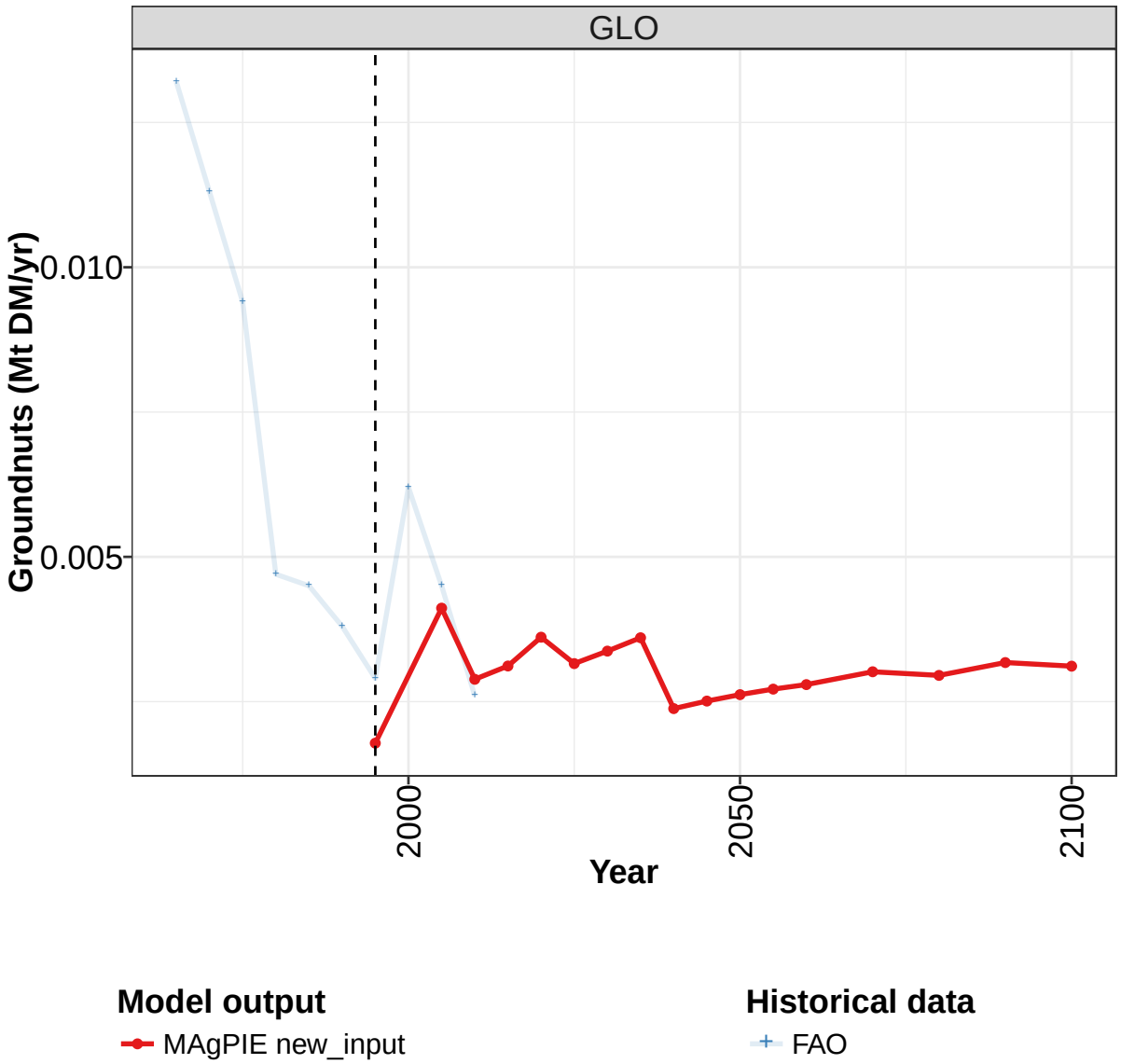
	2055	2060	2070	2080	2090	2100
GLO	14.6	14.5	14.2	14.6	14.4	14.7
CAZ	0.0	0.0	0.0	0.1	0.1	0.1
CHA	4.7	4.4	3.8	3.3	2.9	2.4
EUR	0.2	0.3	0.3	0.3	0.3	0.3
IND	3.8	3.8	3.7	3.3	3.6	4.8
LAM	0.4	0.5	0.8	1.0	1.2	1.6
MEA	0.1	0.1	0.1	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.1	0.1
OAS	1.1	1.1	1.1	1.1	1.1	1.0
REF	0.2	0.2	0.2	0.2	0.2	0.1
SSA	0.2	0.2	0.3	0.4	0.6	0.7
USA	3.8	3.8	3.8	4.7	4.2	3.4

Table 258: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.65	2.74	2.90	3.82	5.87	5.92	6.71	5.72	9.99	8.98
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.85	1.00	1.08	1.23	2.42	2.14	1.61	0.85	1.71	1.18
EUR	0.00	0.00	0.00	0.01	0.00	0.04	0.12	0.02	0.12	0.01
IND	1.03	0.89	0.64	0.50	0.47	0.53	0.71	0.35	2.47	4.33
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.02	0.05	0.04	0.05	0.06	0.01	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.19	0.25	0.24	0.35	0.60	0.87	0.97	0.97	1.14	0.95
REF	0.45	0.60	0.60	1.06	0.95	0.51	1.00	0.60	0.81	0.38
SSA	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.01
USA	0.12	0.00	0.31	0.61	1.37	1.76	2.23	2.91	3.71	2.11

Table 259: FAO — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr)

6.2.8 Oil crops—Groundnuts



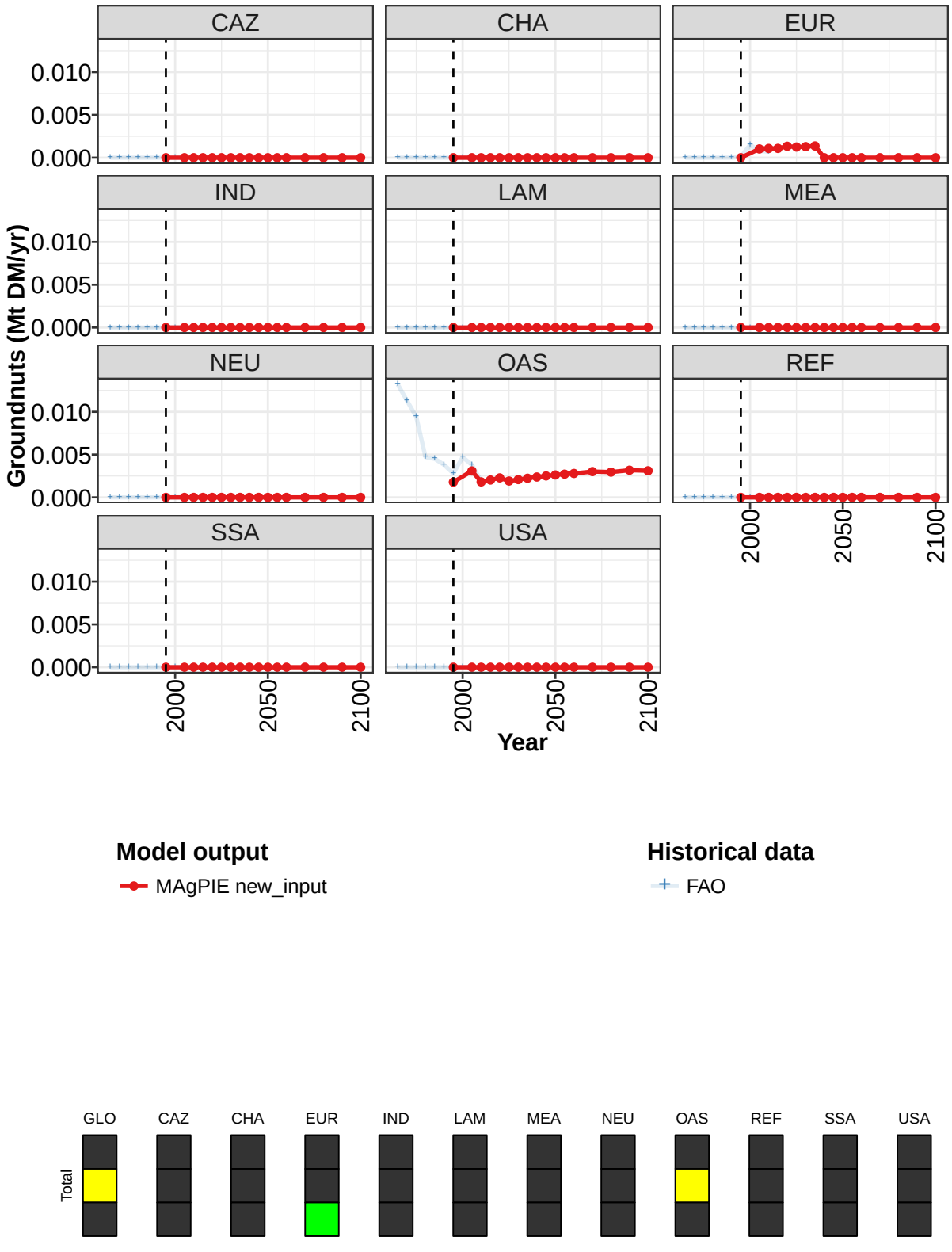


Figure 87: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.00178	0.00411	0.00289	0.00312	0.00361	0.00316	0.00337	0.00360	0.00238	0.00251	0.00262
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00102	0.00108	0.00109	0.00133	0.00125	0.00129	0.00137	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00178	0.00309	0.00181	0.00203	0.00228	0.00191	0.00208	0.00223	0.00238	0.00251	0.00262
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 260: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

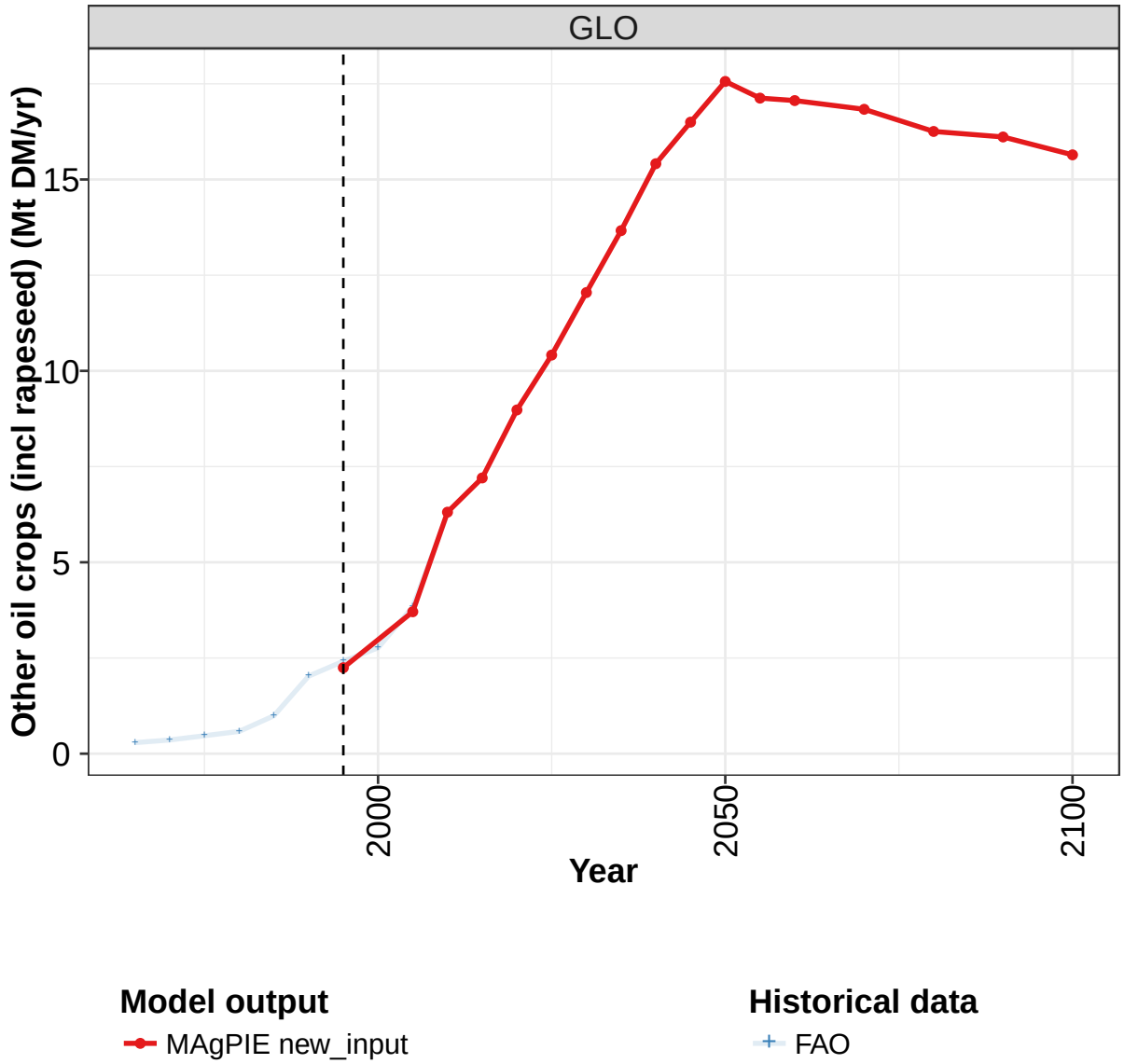
	2055	2060	2070	2080	2090	2100
GLO	0.00272	0.00279	0.00302	0.00295	0.00317	0.00311
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00272	0.00279	0.00302	0.00295	0.00317	0.00311
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 261: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0132	0.0113	0.0094	0.0047	0.0045	0.0038	0.0029	0.0062	0.0045	0.0026
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0015	0.0008	0.0007
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0132	0.0113	0.0094	0.0047	0.0045	0.0038	0.0028	0.0047	0.0038	0.0019
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 262: FAO — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr)

6.2.9 Oil crops—Other oil crops (incl rapeseed)



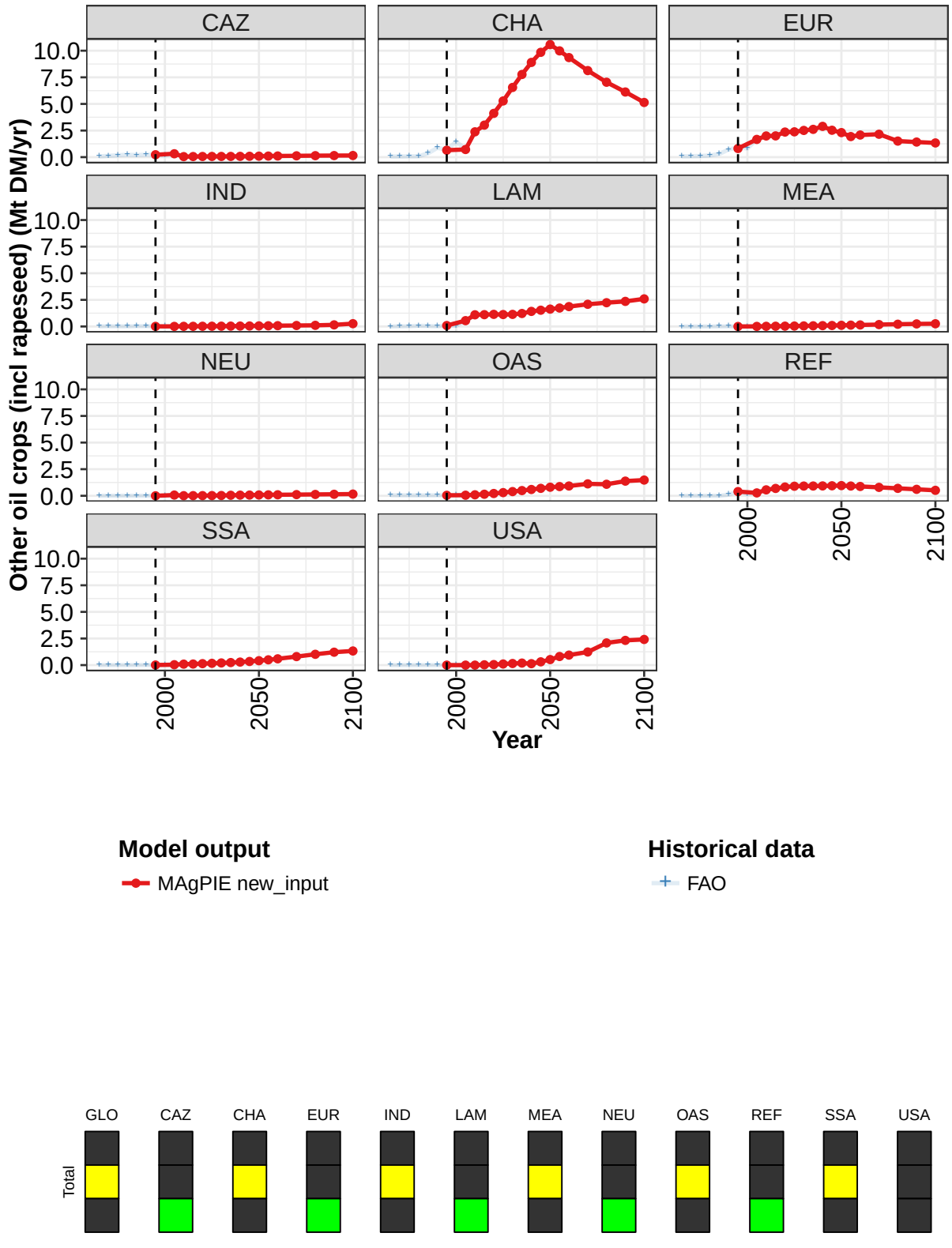


Figure 88: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.2	3.7	6.3	7.2	9.0	10.4	12.0	13.7	15.4	16.5	17.6
CAZ	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.7	0.7	2.4	3.0	4.1	5.3	6.5	7.8	8.9	9.8	10.6
EUR	0.8	1.7	2.0	2.0	2.4	2.4	2.5	2.6	2.9	2.5	2.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
LAM	0.1	0.5	1.1	1.1	1.1	1.1	1.1	1.2	1.4	1.5	1.6
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
NEU	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
OAS	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
REF	0.4	0.3	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.9	1.0
SSA	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4
USA	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.3	0.5

Table 263: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

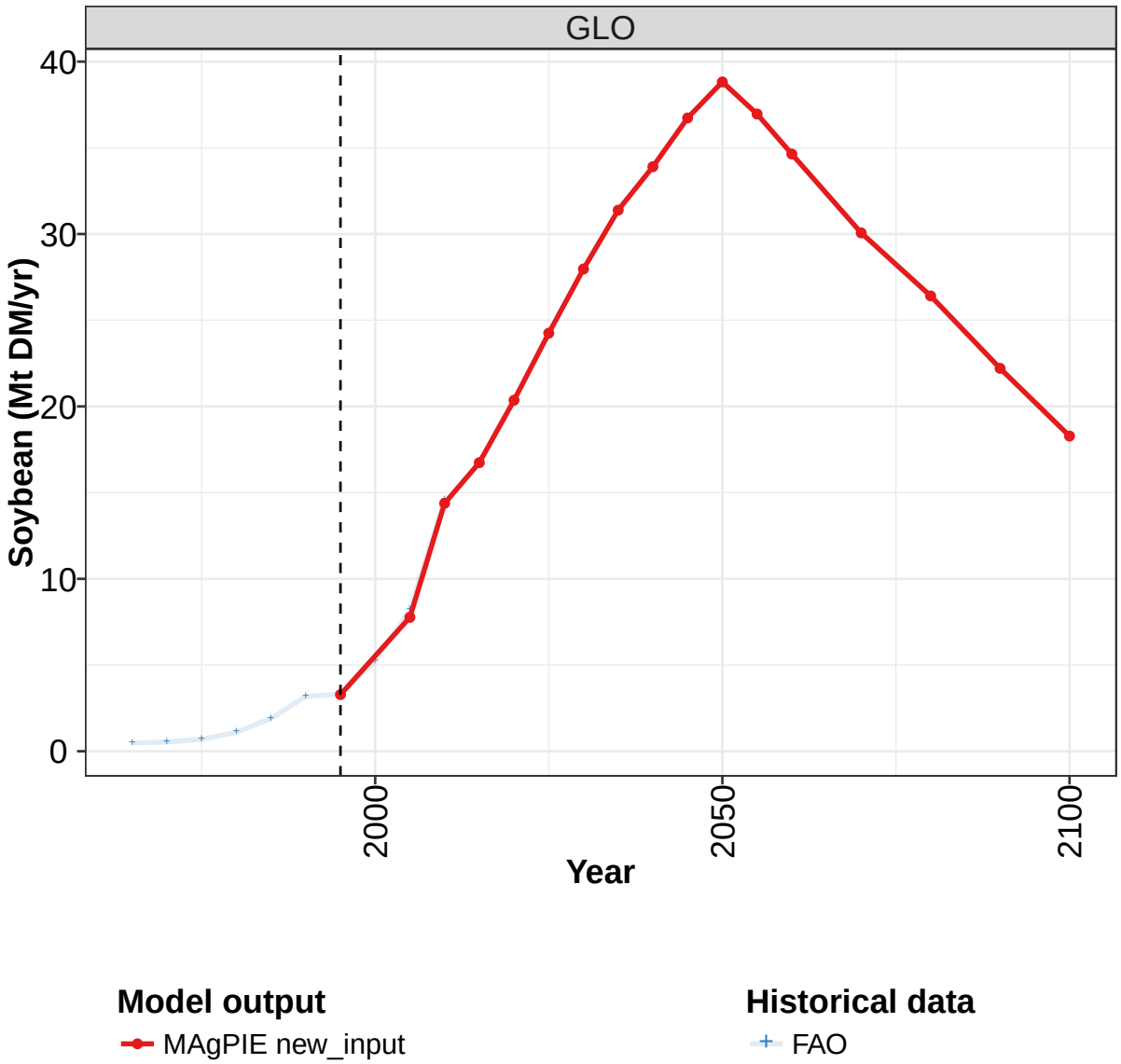
	2055	2060	2070	2080	2090	2100
GLO	17.1	17.1	16.8	16.3	16.1	15.6
CAZ	0.1	0.1	0.1	0.1	0.2	0.2
CHA	10.0	9.4	8.1	7.0	6.1	5.1
EUR	1.9	2.1	2.2	1.5	1.4	1.3
IND	0.1	0.1	0.1	0.1	0.2	0.3
LAM	1.7	1.9	2.1	2.2	2.4	2.6
MEA	0.1	0.1	0.2	0.2	0.2	0.3
NEU	0.1	0.1	0.1	0.1	0.1	0.2
OAS	0.9	0.9	1.1	1.1	1.4	1.5
REF	0.9	0.9	0.8	0.7	0.6	0.5
SSA	0.5	0.6	0.8	1.0	1.2	1.3
USA	0.8	0.9	1.2	2.1	2.3	2.4

Table 264: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.29	0.36	0.47	0.58	0.99	2.03	2.42	2.77	3.84	6.27
CAZ	0.08	0.12	0.18	0.22	0.20	0.22	0.24	0.16	0.38	0.06
CHA	0.06	0.06	0.08	0.08	0.36	0.87	0.70	1.44	0.78	2.42
EUR	0.08	0.09	0.11	0.15	0.30	0.71	0.93	0.81	1.69	1.95
IND	0.01	0.02	0.02	0.01	0.03	0.03	0.01	0.02	0.01	0.01
LAM	0.00	0.01	0.03	0.07	0.05	0.01	0.09	0.06	0.54	1.04
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
NEU	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.05	0.01
OAS	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.08	0.06	0.09
REF	0.00	0.00	0.00	0.00	0.00	0.11	0.39	0.16	0.28	0.57
SSA	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.02	0.05	0.09
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 265: FAO — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

6.2.10 Oil crops—Soybean



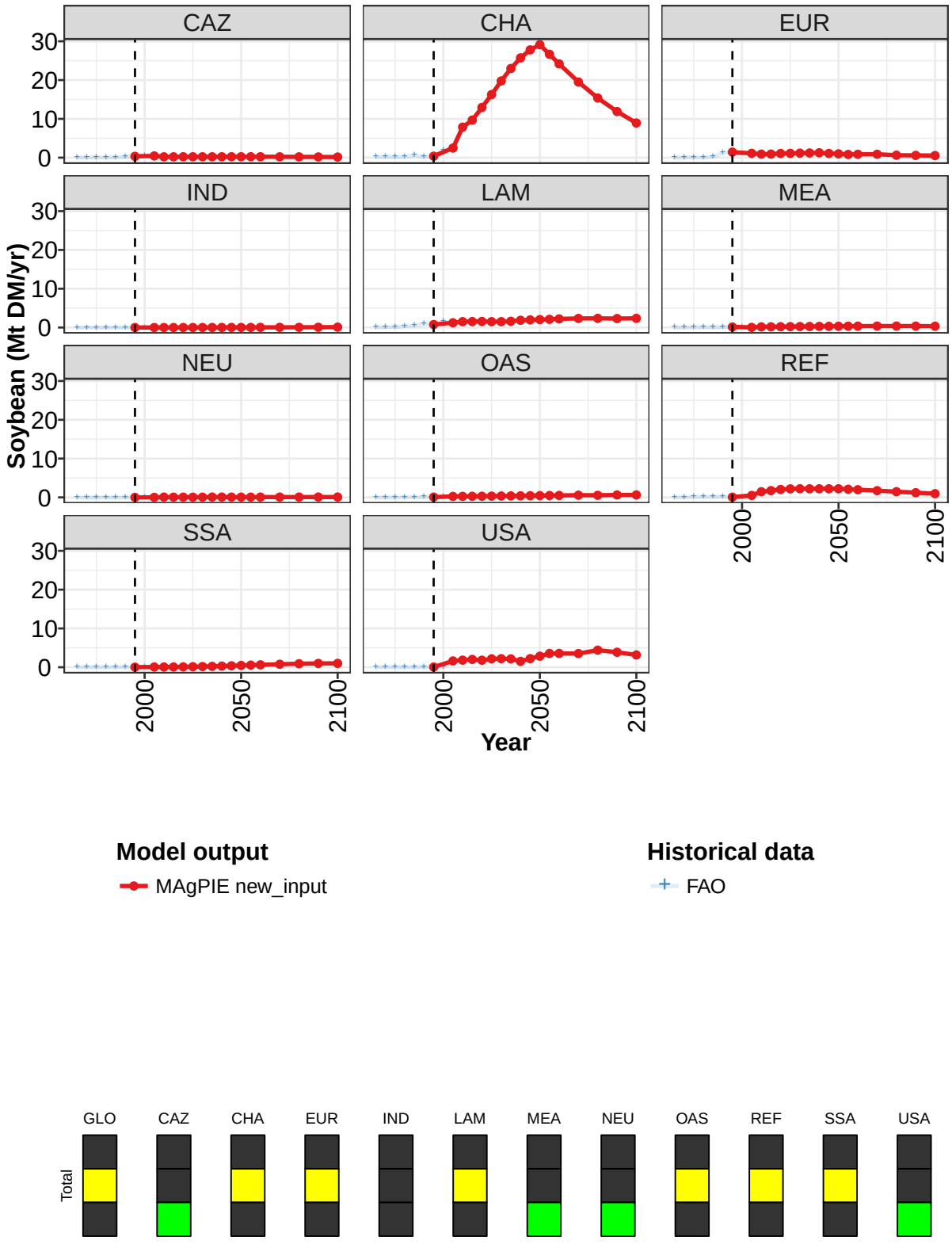


Figure 89: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.3	7.8	14.4	16.7	20.4	24.3	28.0	31.4	33.9	36.7	38.8
CAZ	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.4	2.5	7.9	9.7	12.9	16.3	19.8	23.0	25.7	27.8	29.1
EUR	1.4	1.1	0.9	0.9	1.1	1.1	1.2	1.2	1.3	1.1	1.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.8	1.2	1.5	1.5	1.6	1.5	1.5	1.6	1.9	2.0	2.0
MEA	0.2	0.0	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
NEU	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5
REF	0.1	0.5	1.5	1.7	2.0	2.2	2.2	2.2	2.2	2.2	2.2
SSA	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5
USA	0.1	1.6	1.8	2.0	1.8	2.2	2.2	2.2	1.5	2.2	2.9

Table 266: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

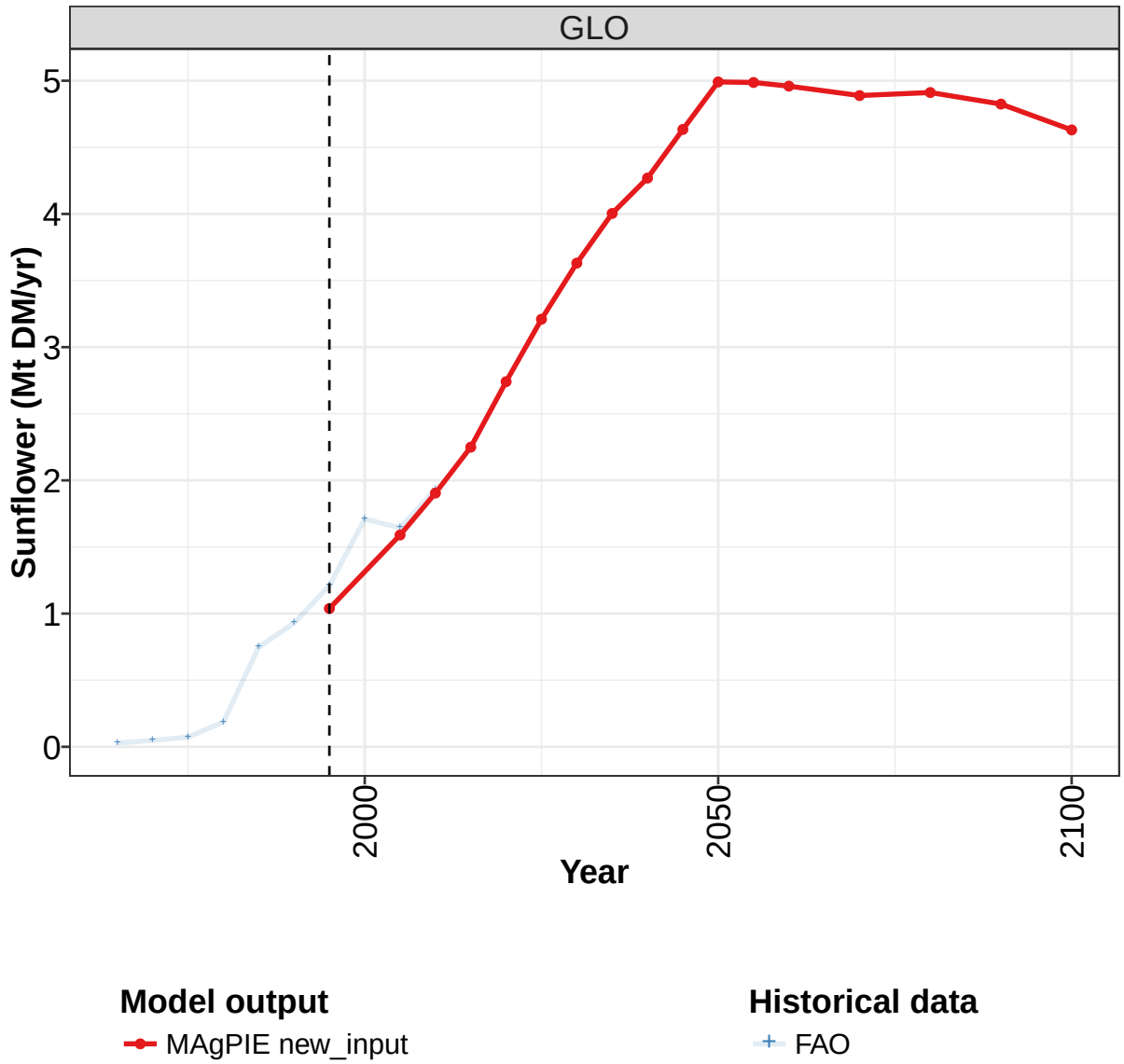
	2055	2060	2070	2080	2090	2100
GLO	37.0	34.6	30.1	26.4	22.2	18.3
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	26.6	24.2	19.5	15.4	11.9	8.9
EUR	0.8	0.9	0.9	0.6	0.6	0.5
IND	0.0	0.0	0.0	0.1	0.1	0.1
LAM	2.1	2.2	2.3	2.4	2.3	2.4
MEA	0.3	0.4	0.4	0.4	0.4	0.3
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.5	0.6	0.5	0.6	0.6
REF	2.1	2.0	1.7	1.5	1.2	1.0
SSA	0.5	0.6	0.8	0.9	1.0	1.0
USA	3.6	3.6	3.5	4.4	3.9	3.2

Table 267: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.5	0.5	0.7	1.1	1.9	3.2	3.3	5.2	8.2	14.6
CAZ	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.5	0.5	0.2
CHA	0.2	0.2	0.2	0.2	0.6	0.2	0.4	1.8	2.7	8.0
EUR	0.0	0.1	0.1	0.1	0.3	1.2	1.4	1.1	1.1	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.2	0.4	0.5	1.0	0.8	1.5	1.4	1.5
MEA	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
OAS	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3
REF	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.5	1.5
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.7	2.0

Table 268: FAO — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr)

6.2.11 Oil crops—Sunflower



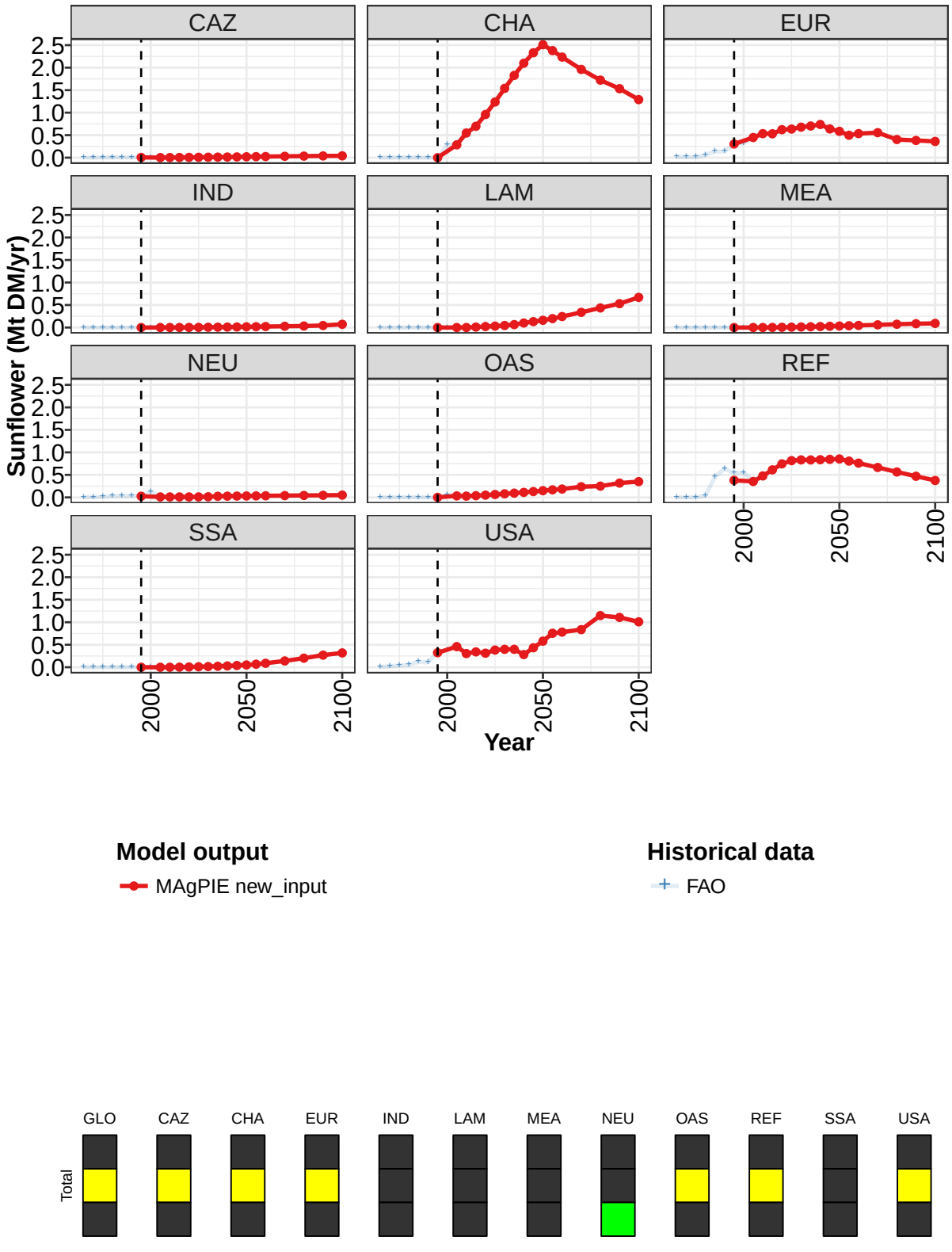


Figure 90: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.04	1.59	1.90	2.25	2.74	3.21	3.63	4.00	4.27	4.63	4.99
CAZ	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
CHA	0.00	0.29	0.55	0.70	0.96	1.24	1.54	1.83	2.10	2.33	2.51
EUR	0.30	0.45	0.53	0.53	0.62	0.64	0.68	0.70	0.74	0.64	0.58
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02
LAM	0.00	0.00	0.00	0.01	0.02	0.03	0.05	0.07	0.10	0.13	0.16
MEA	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03
NEU	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.03
OAS	0.00	0.03	0.03	0.04	0.05	0.06	0.08	0.09	0.11	0.13	0.15
REF	0.38	0.35	0.48	0.61	0.74	0.82	0.83	0.83	0.84	0.85	0.85
SSA	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.05
USA	0.32	0.46	0.30	0.34	0.31	0.38	0.40	0.40	0.28	0.43	0.58

Table 269: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

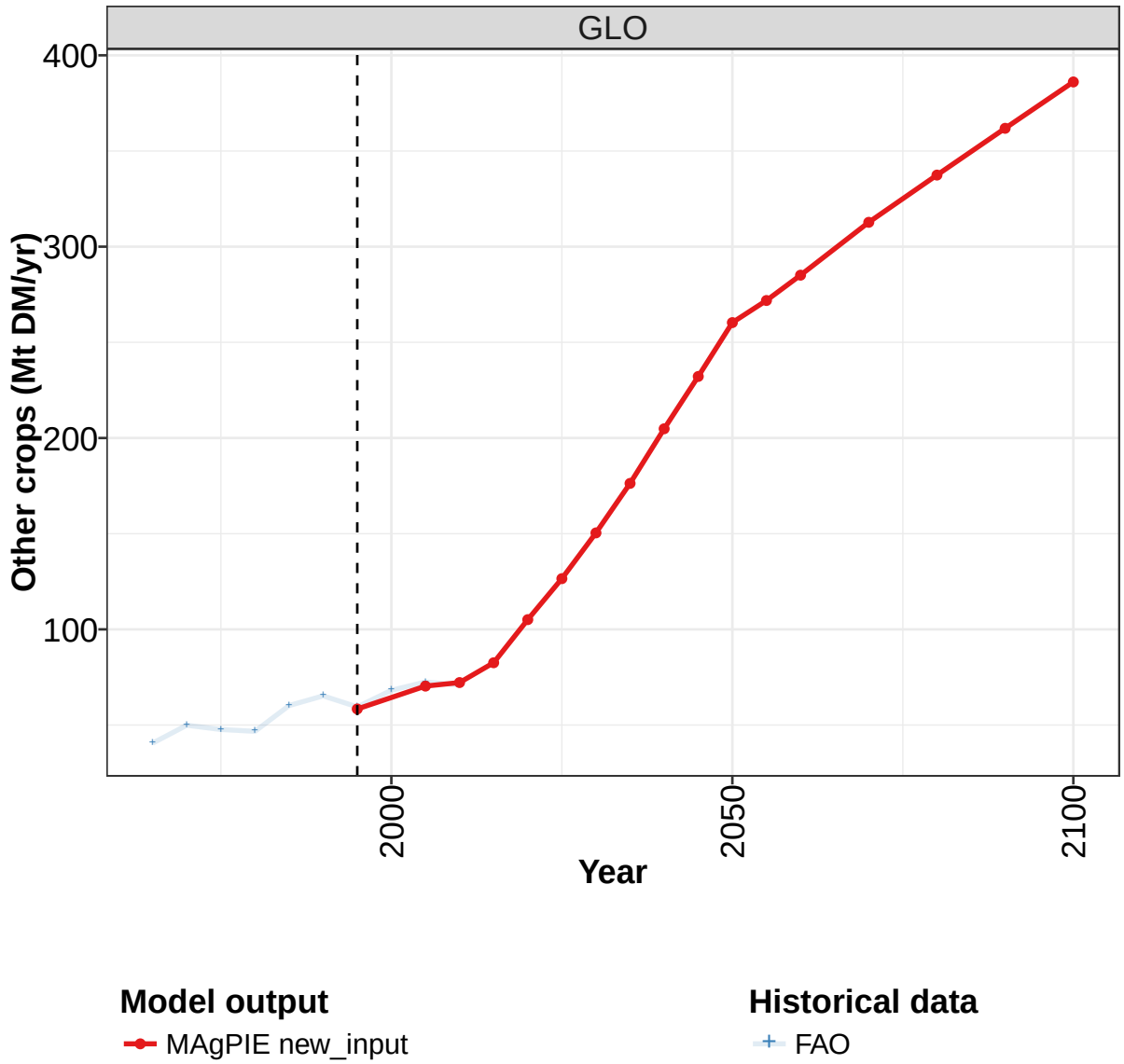
	2055	2060	2070	2080	2090	2100
GLO	4.99	4.96	4.89	4.91	4.82	4.63
CAZ	0.02	0.02	0.03	0.03	0.04	0.04
CHA	2.38	2.24	1.96	1.72	1.53	1.29
EUR	0.50	0.54	0.56	0.40	0.38	0.36
IND	0.02	0.02	0.03	0.03	0.04	0.07
LAM	0.20	0.24	0.34	0.44	0.53	0.67
MEA	0.04	0.05	0.06	0.07	0.08	0.09
NEU	0.03	0.04	0.04	0.04	0.05	0.05
OAS	0.17	0.19	0.24	0.25	0.32	0.35
REF	0.81	0.76	0.66	0.56	0.47	0.38
SSA	0.07	0.09	0.14	0.20	0.27	0.32
USA	0.76	0.78	0.84	1.15	1.11	1.01

Table 270: MAgPIE new_input — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.03	0.05	0.07	0.19	0.75	0.93	1.21	1.71	1.64	1.93
CAZ	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.31	0.56
EUR	0.02	0.01	0.01	0.06	0.14	0.14	0.29	0.32	0.43	0.52
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.01	0.01	0.03	0.03	0.03	0.03	0.12	0.02	0.01
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.03
REF	0.00	0.00	0.00	0.04	0.45	0.64	0.54	0.54	0.37	0.48
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.01	0.02	0.04	0.05	0.12	0.11	0.33	0.38	0.48	0.33

Table 271: FAO — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr)

6.2.12 Other crops



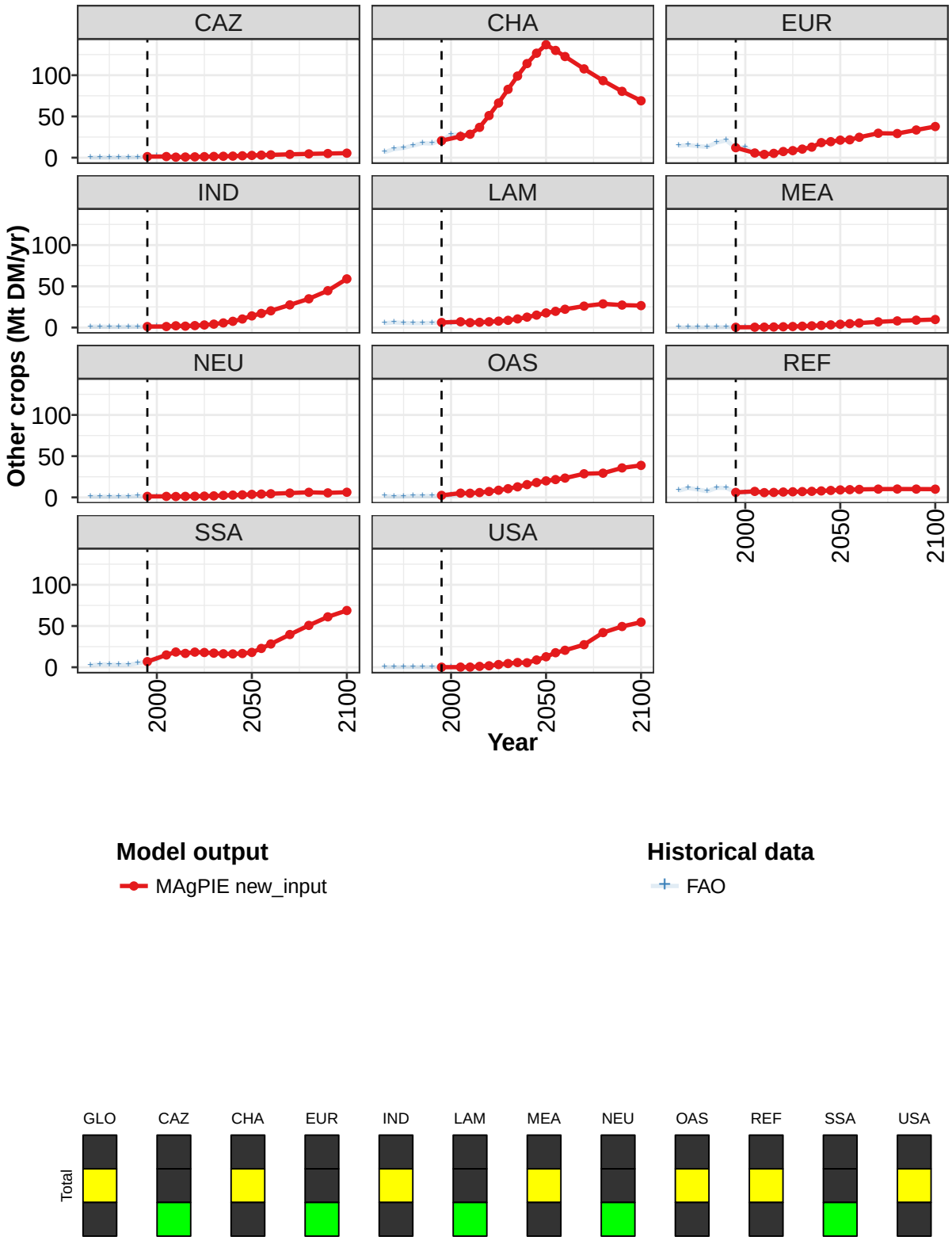


Figure 91: MAgPIE new_input — Demand—Feed—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	58	70	72	83	105	127	150	176	205	232	260
CAZ	1	1	1	1	1	1	2	2	2	2	3
CHA	21	26	28	37	51	66	83	99	114	127	137
EUR	12	6	4	5	7	9	10	13	18	19	21
IND	1	1	2	2	2	3	4	6	8	10	14
LAM	6	7	6	6	7	8	9	10	13	15	18
MEA	0	0	0	1	1	1	2	2	3	3	4
NEU	1	1	1	1	1	2	2	2	3	3	4
OAS	2	5	5	6	7	9	11	13	16	18	20
REF	6	7	6	6	7	7	7	7	8	8	9
SSA	7	15	18	17	18	18	17	16	16	17	18
USA	0	0	0	1	2	3	5	6	5	9	13

Table 272: MAgPIE new_input — Demand—Feed—Crops—Other crops (Mt DM/yr) [PART 1/2]

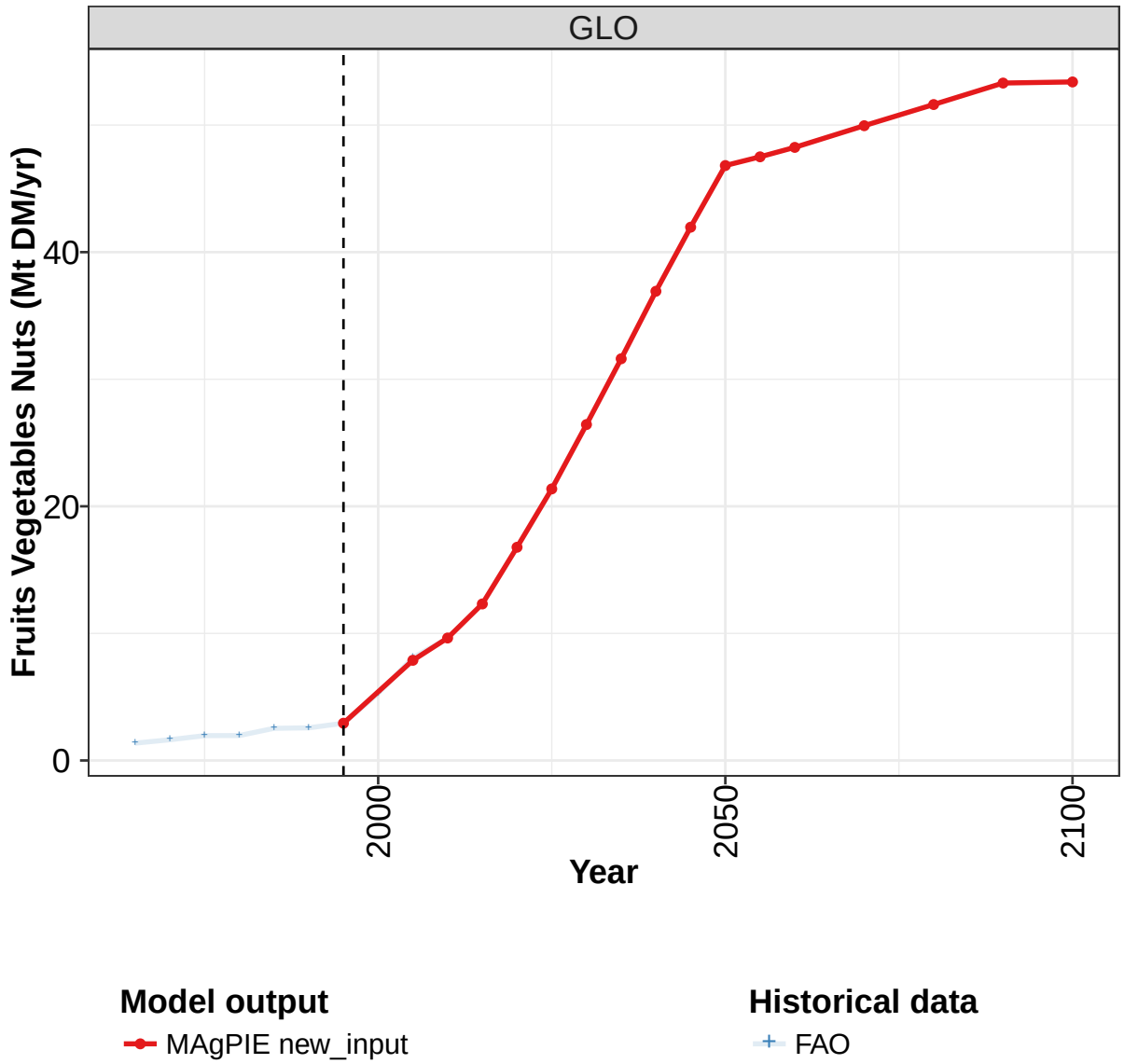
	2055	2060	2070	2080	2090	2100
GLO	272	285	313	337	362	386
CAZ	3	3	4	5	5	5
CHA	130	123	108	93	80	69
EUR	22	25	30	29	34	38
IND	17	20	27	35	45	59
LAM	20	22	26	29	27	27
MEA	5	5	7	8	9	10
NEU	4	4	5	6	6	6
OAS	22	23	29	29	36	39
REF	9	10	10	10	10	10
SSA	23	28	40	51	61	69
USA	18	21	27	42	49	55

Table 273: MAgPIE new_input — Demand—Feed—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.6	49.9	47.7	46.7	60.2	65.3	59.5	68.1	72.5	71.0
CAZ	0.0	0.0	0.0	0.1	0.2	0.3	1.8	1.7	1.8	0.7
CHA	6.8	10.4	11.9	14.7	17.6	17.1	21.6	27.9	27.9	28.9
EUR	14.4	15.2	14.1	13.1	18.5	20.9	12.1	12.6	5.6	3.9
IND	1.0	1.0	0.8	0.7	0.9	1.0	1.2	1.1	1.1	1.4
LAM	5.3	6.2	5.6	5.2	5.2	5.8	5.8	5.4	6.7	5.5
MEA	0.1	0.1	0.3	0.2	0.4	0.5	0.3	0.3	0.3	0.3
NEU	0.8	0.8	0.7	0.8	1.0	1.4	1.1	1.2	1.2	1.1
OAS	1.4	1.1	1.2	1.7	1.7	1.8	1.9	2.4	4.4	5.0
REF	8.2	11.4	9.6	7.4	11.6	11.5	6.3	5.7	7.6	5.8
SSA	2.2	3.5	3.3	2.7	3.0	4.8	7.2	9.5	15.8	18.1
USA	0.3	0.1	0.1	0.1	0.1	0.3	0.1	0.3	0.2	0.2

Table 274: FAO — Demand—Feed—Crops—Other crops (Mt DM/yr)

6.2.13 Other crops—Fruits Vegetables Nuts



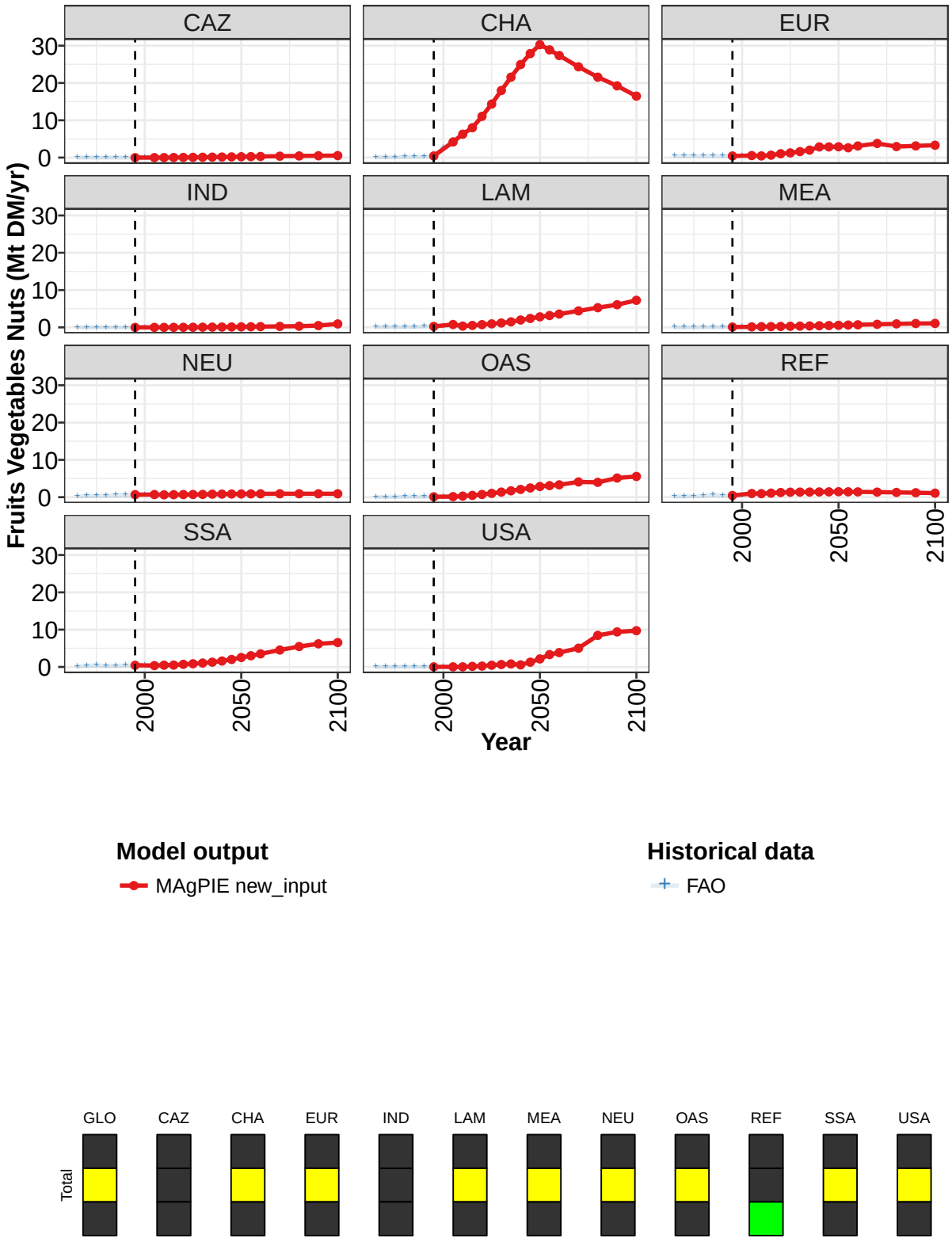


Figure 92: MAgPIE new_input — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.9	7.9	9.6	12.3	16.8	21.4	26.4	31.6	36.9	42.0	46.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
CHA	0.4	4.2	6.3	8.0	11.1	14.4	18.0	21.6	24.9	27.9	30.3
EUR	0.4	0.5	0.5	0.7	1.0	1.3	1.6	2.0	2.9	2.9	2.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
LAM	0.3	0.8	0.3	0.5	0.7	0.9	1.2	1.5	2.0	2.4	2.8
MEA	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.6
NEU	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9
OAS	0.1	0.1	0.3	0.5	0.7	1.0	1.4	1.7	2.1	2.5	2.9
REF	0.4	1.0	0.9	1.1	1.2	1.3	1.4	1.4	1.4	1.4	1.5
SSA	0.5	0.4	0.5	0.5	0.7	0.9	1.1	1.3	1.6	2.0	2.5
USA	0.0	0.0	0.0	0.2	0.2	0.5	0.7	0.8	0.6	1.3	2.1

Table 275: MAgPIE new_input — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

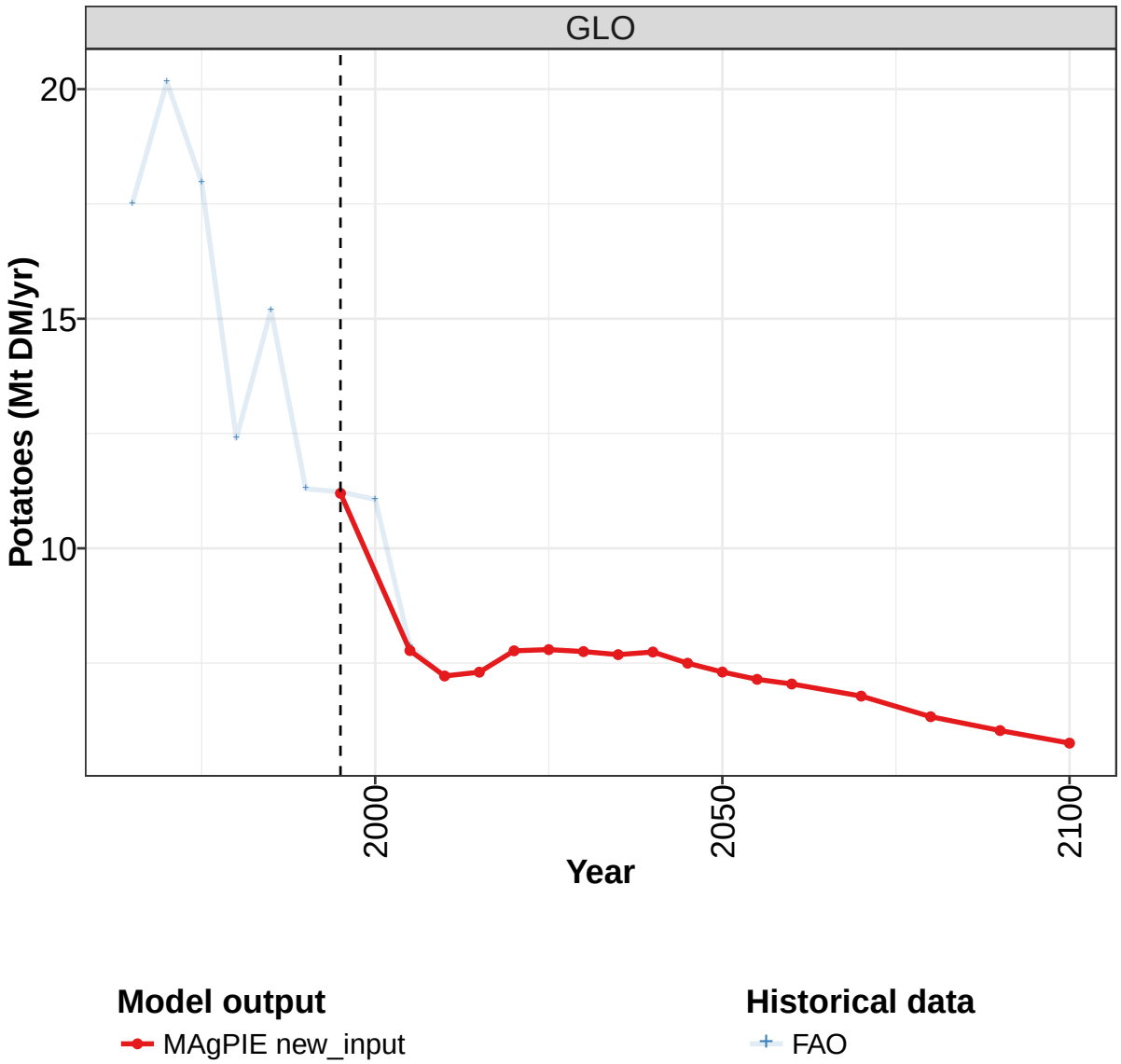
	2055	2060	2070	2080	2090	2100
GLO	47.5	48.2	50.0	51.6	53.3	53.4
CAZ	0.3	0.3	0.4	0.4	0.5	0.5
CHA	28.9	27.4	24.3	21.6	19.2	16.5
EUR	2.6	3.1	3.8	3.0	3.1	3.3
IND	0.2	0.2	0.3	0.3	0.5	0.9
LAM	3.2	3.6	4.4	5.3	6.1	7.3
MEA	0.6	0.7	0.8	0.9	1.0	1.1
NEU	0.9	0.9	0.9	0.9	0.9	0.9
OAS	3.1	3.3	4.1	4.0	5.1	5.6
REF	1.4	1.4	1.4	1.3	1.2	1.1
SSA	3.0	3.5	4.5	5.5	6.2	6.5
USA	3.3	3.9	5.0	8.5	9.4	9.7

Table 276: MAgPIE new_input — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.37	1.63	1.95	1.96	2.53	2.57	2.93	5.29	8.09	9.61
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.13	0.11	0.13	0.14	0.24	0.26	0.45	2.56	4.52	6.38
EUR	0.44	0.43	0.49	0.41	0.51	0.40	0.44	0.52	0.53	0.44
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.13	0.16	0.15	0.18	0.17	0.25	0.25	0.35	0.58	0.32
MEA	0.01	0.01	0.03	0.04	0.05	0.09	0.11	0.10	0.08	0.09
NEU	0.28	0.32	0.36	0.44	0.54	0.55	0.59	0.66	0.69	0.64
OAS	0.03	0.04	0.06	0.10	0.12	0.12	0.12	0.13	0.16	0.29
REF	0.18	0.20	0.29	0.35	0.58	0.50	0.50	0.47	1.08	0.97
SSA	0.15	0.36	0.43	0.27	0.31	0.37	0.43	0.45	0.43	0.45
USA	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04

Table 277: FAO — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

6.2.14 Other crops—Potatoes



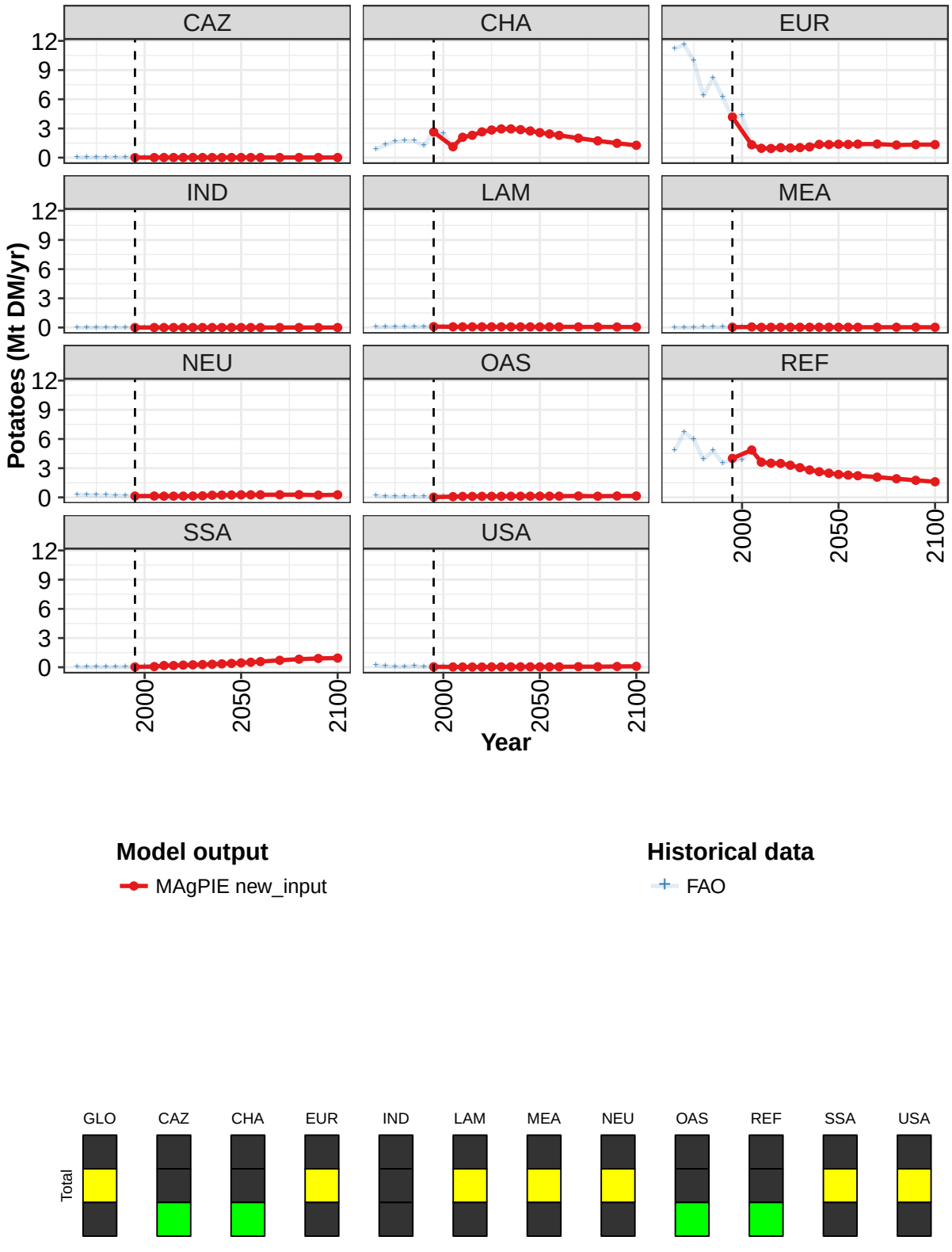


Figure 93: MAgPIE new_input — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	11.2	7.8	7.2	7.3	7.8	7.8	7.8	7.7	7.7	7.5	7.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.6	1.1	2.1	2.3	2.7	2.8	3.0	3.0	2.9	2.7	2.6
EUR	4.2	1.3	1.0	0.9	1.0	1.0	1.0	1.1	1.4	1.3	1.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
OAS	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
REF	4.0	4.9	3.6	3.5	3.5	3.3	3.1	2.8	2.6	2.5	2.4
SSA	0.0	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 278: MAgPIE new_input — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

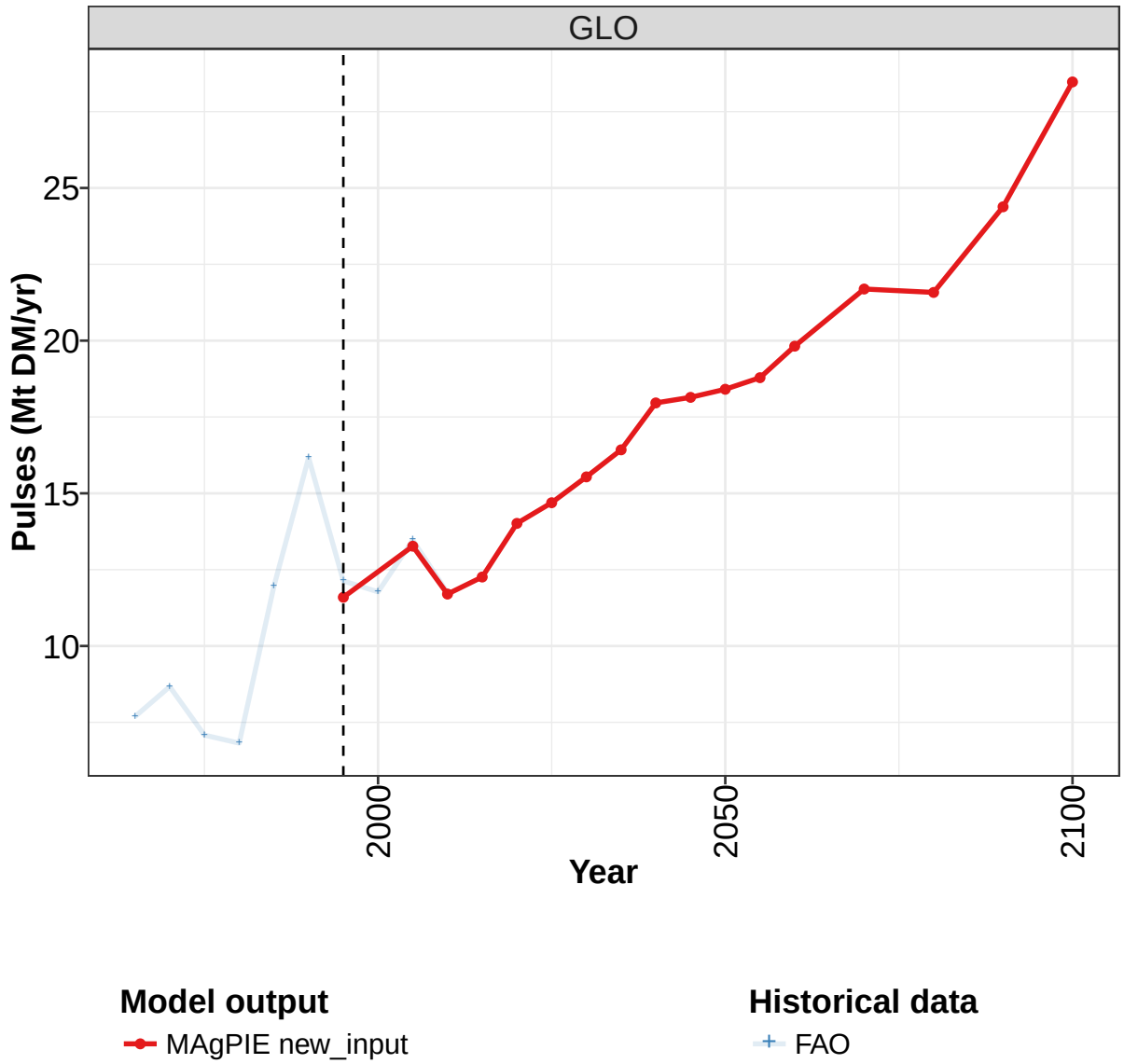
	2055	2060	2070	2080	2090	2100
GLO	7.1	7.0	6.8	6.3	6.0	5.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.4	2.3	2.0	1.7	1.5	1.3
EUR	1.4	1.4	1.4	1.3	1.3	1.3
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.3	0.3	0.3	0.3	0.2	0.3
OAS	0.1	0.1	0.1	0.1	0.1	0.1
REF	2.3	2.2	2.1	1.9	1.8	1.6
SSA	0.5	0.6	0.7	0.8	0.9	0.9
USA	0.0	0.0	0.1	0.1	0.1	0.1

Table 279: MAgPIE new_input — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.5	20.2	18.0	12.4	15.2	11.3	11.2	11.1	7.9	7.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.9	1.3	1.7	1.7	1.7	1.2	2.8	2.4	1.2	2.1
EUR	11.2	11.6	9.9	6.4	8.2	6.2	4.1	4.3	1.3	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
OAS	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
REF	4.8	6.7	5.9	3.9	4.8	3.5	4.0	3.8	4.9	3.6
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
USA	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0

Table 280: FAO — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr)

6.2.15 Other crops—Pulses



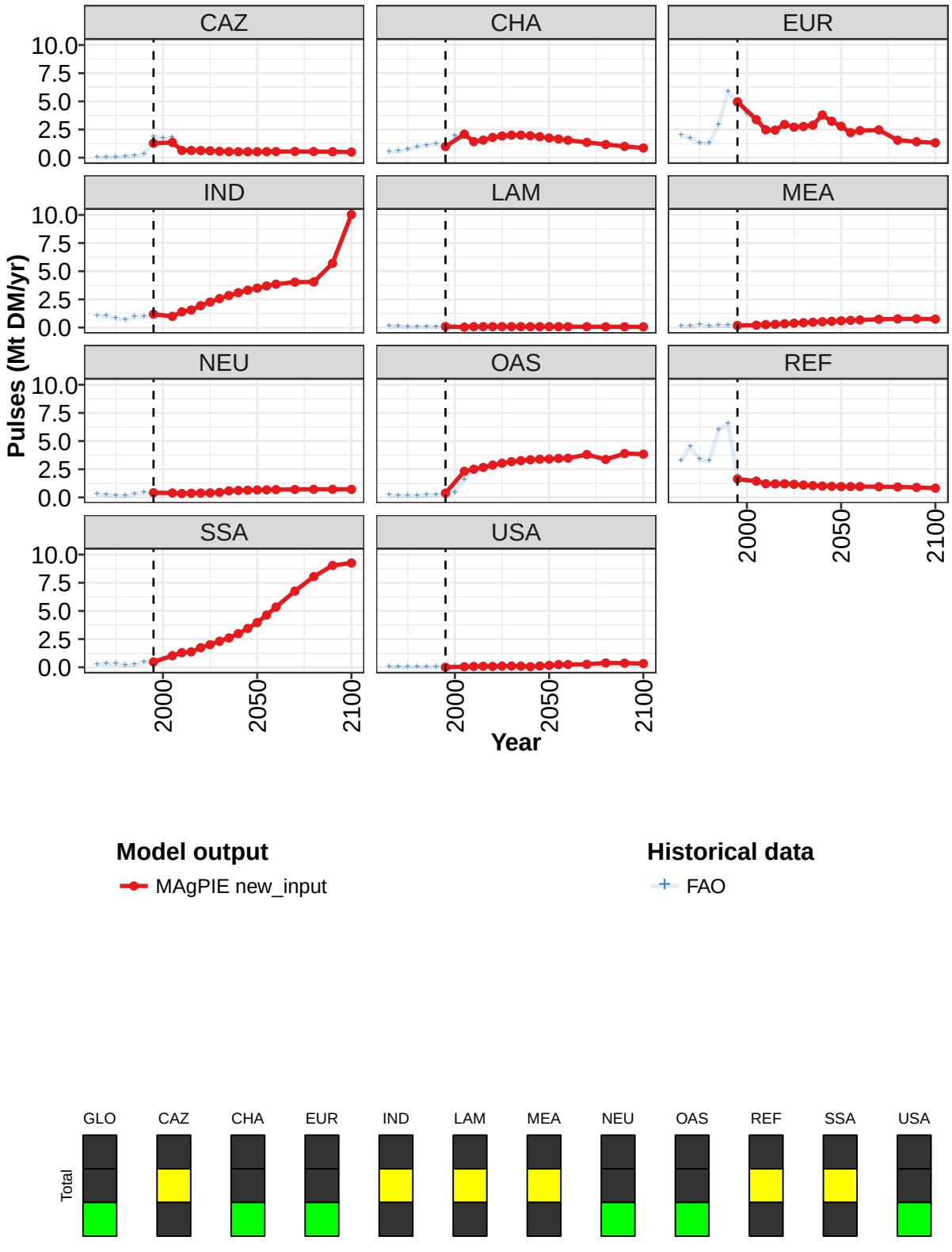


Figure 94: MAgPIE new_input — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	11.6	13.3	11.7	12.3	14.0	14.7	15.5	16.4	18.0	18.1	18.4
CAZ	1.3	1.4	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
CHA	1.0	2.1	1.4	1.6	1.8	1.9	2.0	2.0	1.9	1.9	1.7
EUR	5.0	3.4	2.5	2.5	2.9	2.7	2.8	2.9	3.8	3.2	2.8
IND	1.2	1.0	1.4	1.6	1.9	2.3	2.6	2.8	3.1	3.3	3.5
LAM	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6
NEU	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.7
OAS	0.4	2.3	2.5	2.7	2.9	3.0	3.2	3.3	3.3	3.4	3.4
REF	1.6	1.4	1.2	1.2	1.2	1.2	1.1	1.0	1.0	1.0	1.0
SSA	0.5	1.0	1.3	1.4	1.7	2.0	2.3	2.6	3.0	3.4	4.0
USA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Table 281: MAgPIE new_input — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

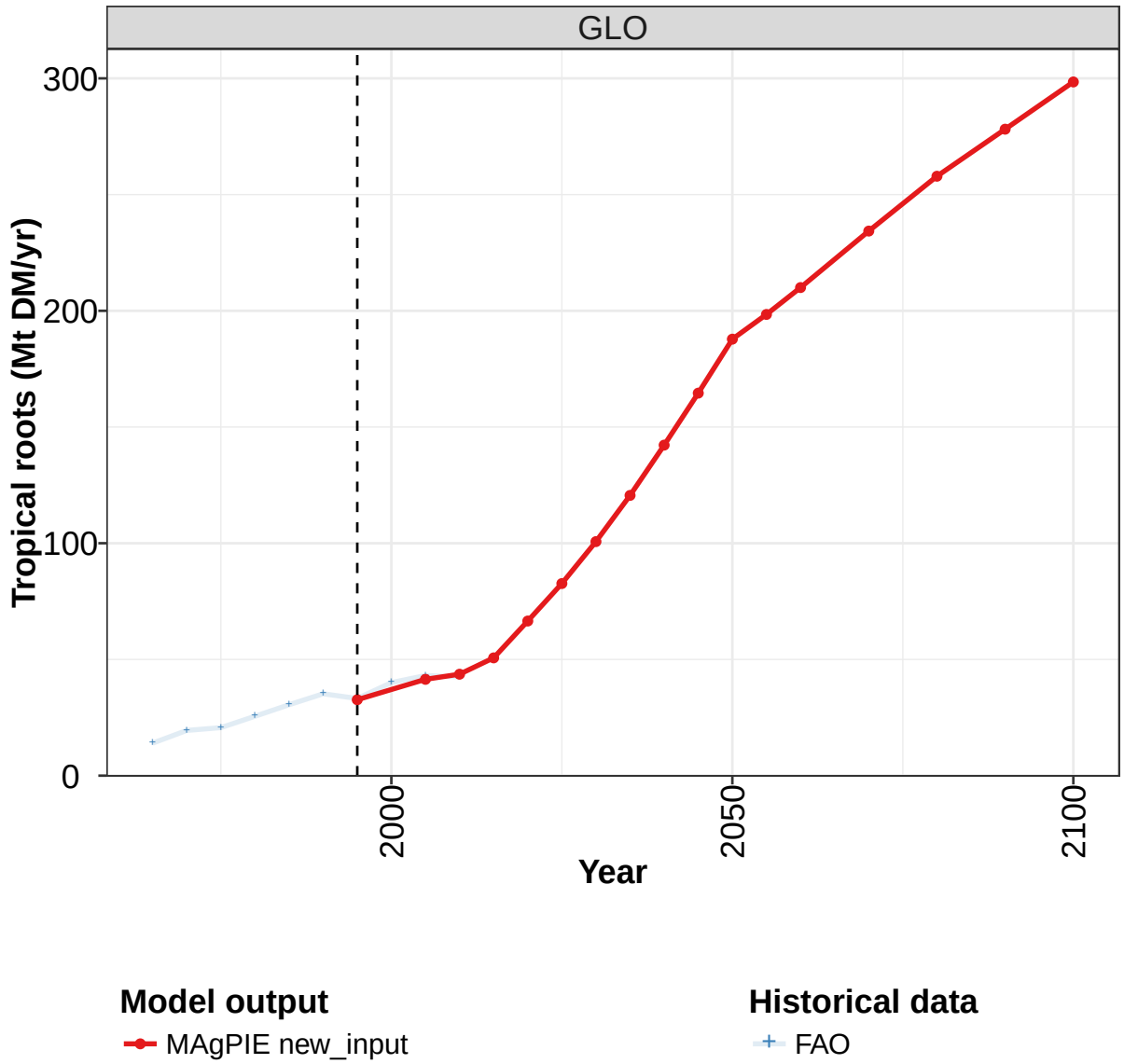
	2055	2060	2070	2080	2090	2100
GLO	18.8	19.8	21.7	21.6	24.4	28.5
CAZ	0.5	0.5	0.5	0.5	0.5	0.5
CHA	1.7	1.6	1.4	1.2	1.0	0.9
EUR	2.2	2.4	2.5	1.5	1.4	1.3
IND	3.7	3.8	4.0	4.0	5.7	10.0
LAM	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.6	0.7	0.7	0.8	0.8	0.7
NEU	0.7	0.7	0.7	0.7	0.7	0.7
OAS	3.5	3.5	3.8	3.4	3.9	3.8
REF	1.0	1.0	1.0	0.9	0.9	0.8
SSA	4.6	5.3	6.8	8.0	9.0	9.3
USA	0.2	0.2	0.3	0.4	0.4	0.3

Table 282: MAgPIE new_input — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.7	8.7	7.1	6.8	12.0	16.2	12.1	11.8	13.5	11.7
CAZ	0.0	0.0	0.0	0.1	0.1	0.3	1.8	1.7	1.8	0.7
CHA	0.5	0.6	0.7	1.0	1.1	1.2	1.0	1.9	2.3	1.4
EUR	2.0	1.7	1.3	1.3	2.9	5.9	4.8	3.9	3.3	2.4
IND	1.0	1.0	0.8	0.7	0.9	1.0	1.2	1.1	1.1	1.4
LAM	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
MEA	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.3	0.2	0.2	0.1	0.3	0.4	0.4	0.3	0.4	0.3
OAS	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.4	1.6	2.5
REF	3.3	4.5	3.4	3.2	6.0	6.6	1.8	1.4	1.6	1.2
SSA	0.2	0.3	0.3	0.2	0.2	0.4	0.6	0.7	1.2	1.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1

Table 283: FAO — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr)

6.2.16 Other crops—Tropical roots



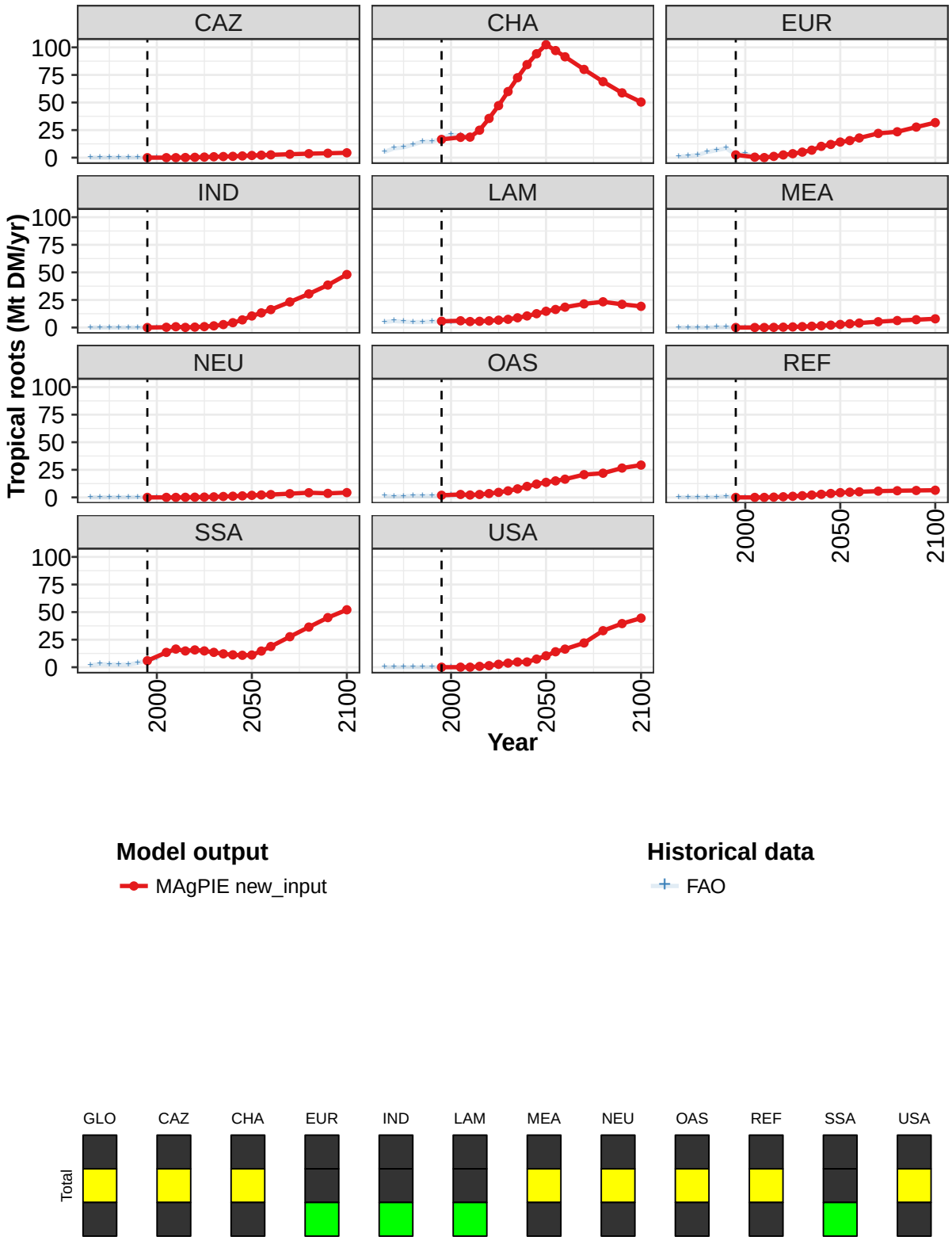


Figure 95: MAgPIE new_input — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	33	41	44	51	67	83	101	121	142	165	188
CAZ	0	0	0	0	0	1	1	1	1	2	2
CHA	17	18	19	25	36	47	60	72	84	94	102
EUR	3	0	0	1	2	4	5	7	10	12	14
IND	0	0	1	0	0	1	2	3	4	7	10
LAM	6	6	5	6	6	7	7	9	10	13	15
MEA	0	0	0	0	0	1	1	1	2	2	3
NEU	0	0	0	0	0	0	0	1	1	1	2
OAS	2	3	2	3	3	5	6	8	10	12	14
REF	0	0	0	0	1	1	2	2	3	4	4
SSA	6	13	16	15	16	15	14	12	11	11	11
USA	0	0	0	1	1	3	4	5	5	7	10

Table 284: MAgPIE new_input — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

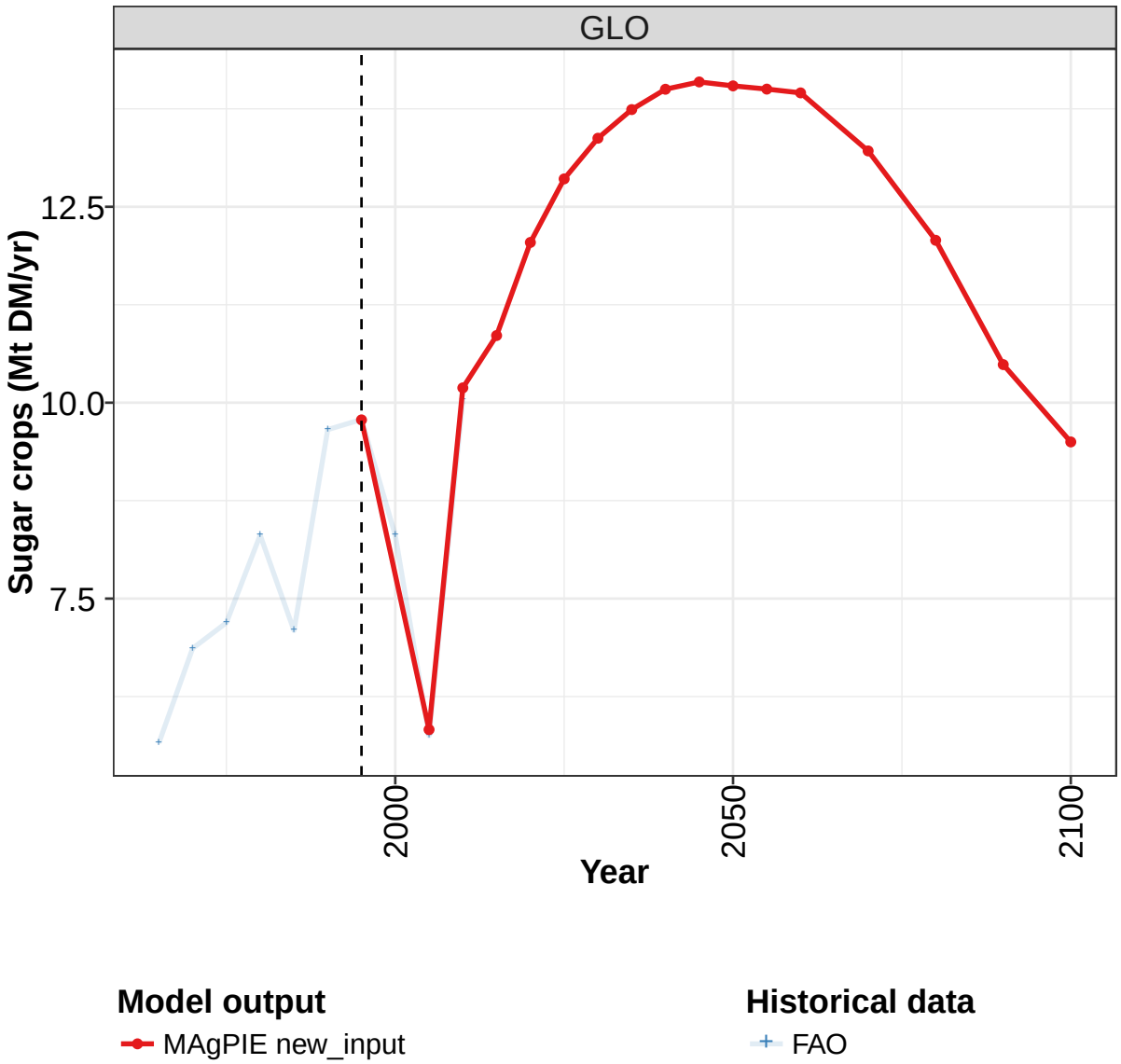
	2055	2060	2070	2080	2090	2100
GLO	198	210	234	258	278	298
CAZ	2	3	3	4	4	4
CHA	97	91	80	69	59	50
EUR	15	18	22	23	28	32
IND	13	16	23	30	38	48
LAM	16	18	21	23	21	19
MEA	3	4	5	6	7	8
NEU	2	3	3	4	4	4
OAS	15	16	21	22	27	29
REF	5	5	6	6	6	6
SSA	15	19	28	36	45	52
USA	14	16	22	33	40	45

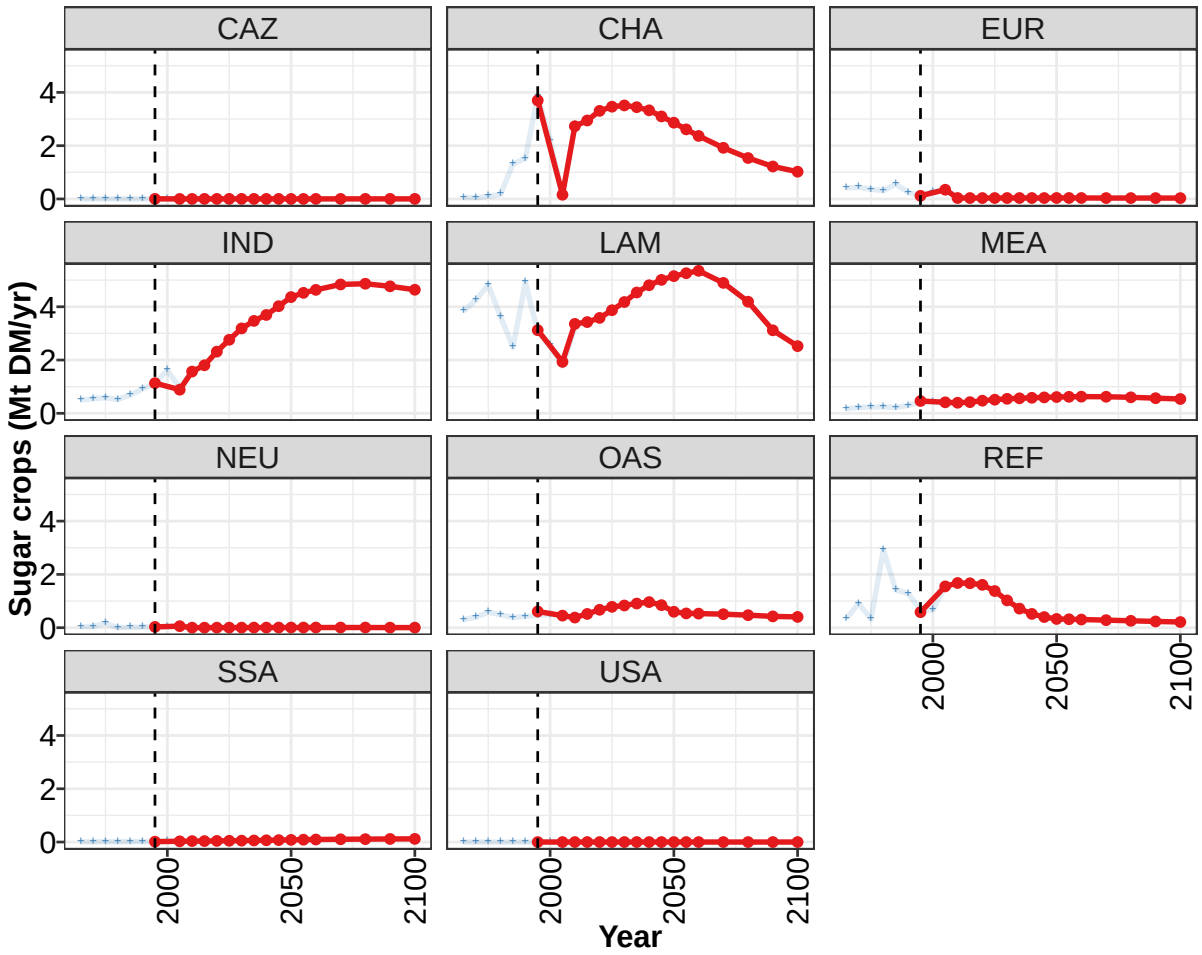
Table 285: MAgPIE new_input — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	14.0	19.5	20.7	25.5	30.5	35.2	33.2	40.0	43.1	42.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.3	8.4	9.4	11.8	14.6	14.4	17.4	21.0	19.9	19.0
EUR	0.8	1.5	2.4	5.1	6.9	8.5	2.7	3.9	0.4	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.0	5.9	5.4	4.9	4.9	5.4	5.4	4.9	6.0	5.1
MEA	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0
OAS	1.0	0.8	0.9	1.5	1.3	1.4	1.5	1.7	2.5	2.1
REF	0.0	0.0	0.0	0.0	0.2	1.0	0.0	0.0	0.0	0.0
SSA	1.8	2.8	2.6	2.3	2.4	3.9	6.2	8.3	14.1	16.1
USA	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.1

Table 286: FAO — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr)

6.2.17 Sugar crops





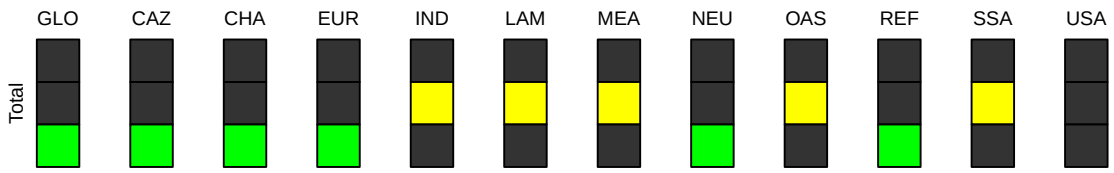


Figure 96: MAgPIE new_input — Demand—Feed—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.8	5.8	10.2	10.9	12.0	12.9	13.4	13.7	14.0	14.1	14.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.7	0.2	2.7	2.9	3.3	3.5	3.5	3.4	3.3	3.1	2.9
EUR	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	0.9	1.6	1.8	2.3	2.8	3.2	3.5	3.7	4.0	4.4
LAM	3.1	1.9	3.4	3.4	3.6	3.9	4.2	4.5	4.8	5.0	5.2
MEA	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6
NEU	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.6	0.5	0.4	0.5	0.7	0.8	0.8	0.9	1.0	0.8	0.6
REF	0.6	1.6	1.7	1.7	1.6	1.4	1.0	0.7	0.5	0.4	0.3
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 287: MAgPIE new_input — Demand—Feed—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

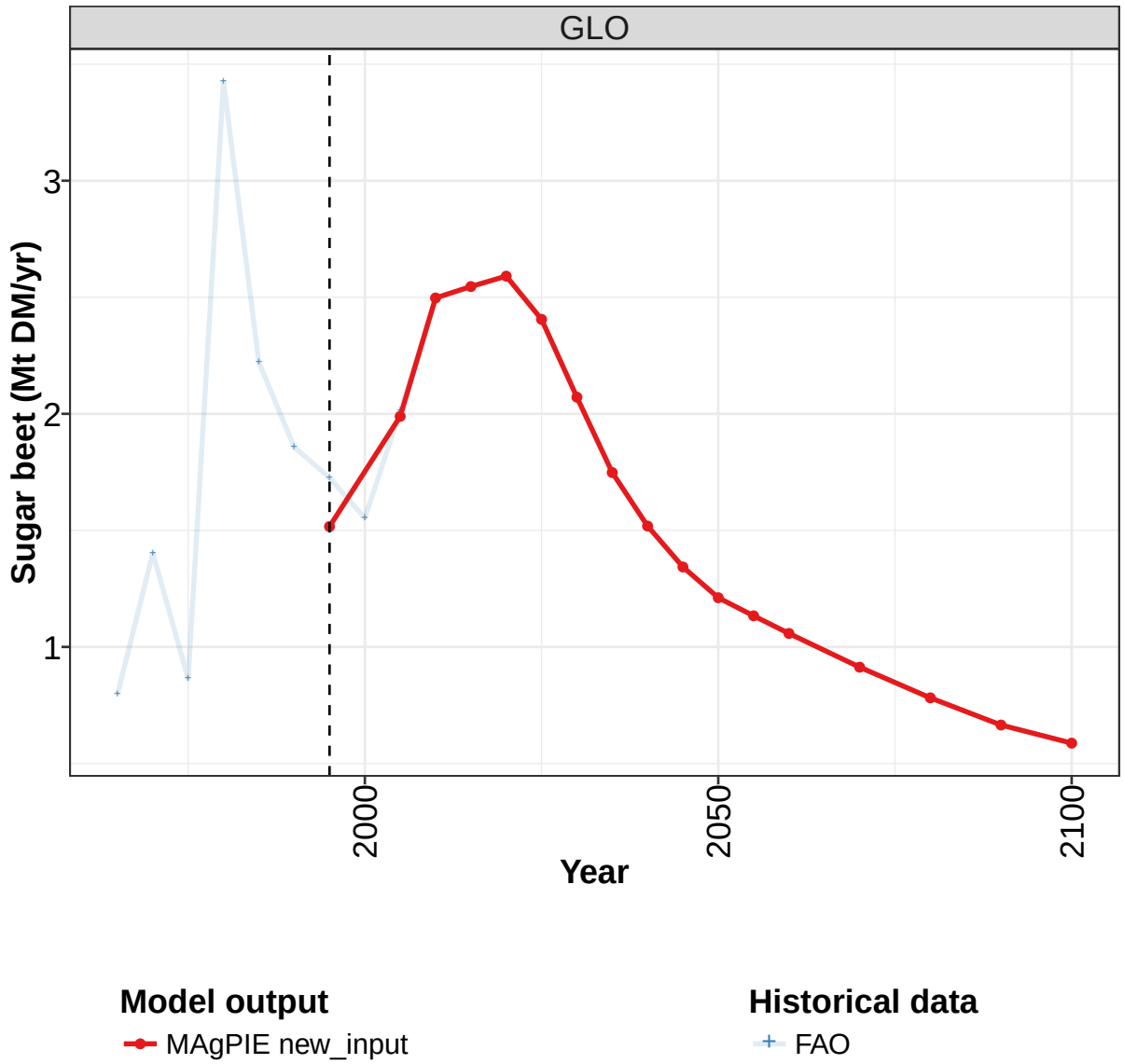
	2055	2060	2070	2080	2090	2100
GLO	14.0	14.0	13.2	12.1	10.5	9.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.6	2.4	1.9	1.5	1.2	1.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	4.5	4.6	4.8	4.9	4.8	4.6
LAM	5.3	5.4	4.9	4.2	3.1	2.5
MEA	0.6	0.6	0.6	0.6	0.6	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.5	0.5	0.5	0.4	0.4
REF	0.3	0.3	0.3	0.3	0.2	0.2
SSA	0.1	0.1	0.1	0.1	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 288: MAgPIE new_input — Demand—Feed—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.7	6.9	7.2	8.3	7.1	9.7	9.8	8.3	5.7	10.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.0	0.1	0.2	1.3	1.5	3.9	2.2	0.2	2.8
EUR	0.4	0.4	0.4	0.3	0.6	0.3	0.1	0.3	0.4	0.0
IND	0.5	0.5	0.6	0.5	0.7	0.9	1.1	1.6	1.0	1.6
LAM	3.8	4.2	4.8	3.6	2.5	4.9	3.1	2.6	1.8	3.2
MEA	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4
NEU	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
OAS	0.3	0.4	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.4
REF	0.3	0.9	0.3	2.9	1.4	1.3	0.7	0.7	1.6	1.7
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 289: FAO — Demand—Feed—Crops—Sugar crops (Mt DM/yr)

6.2.18 Sugar crops—Sugar beet



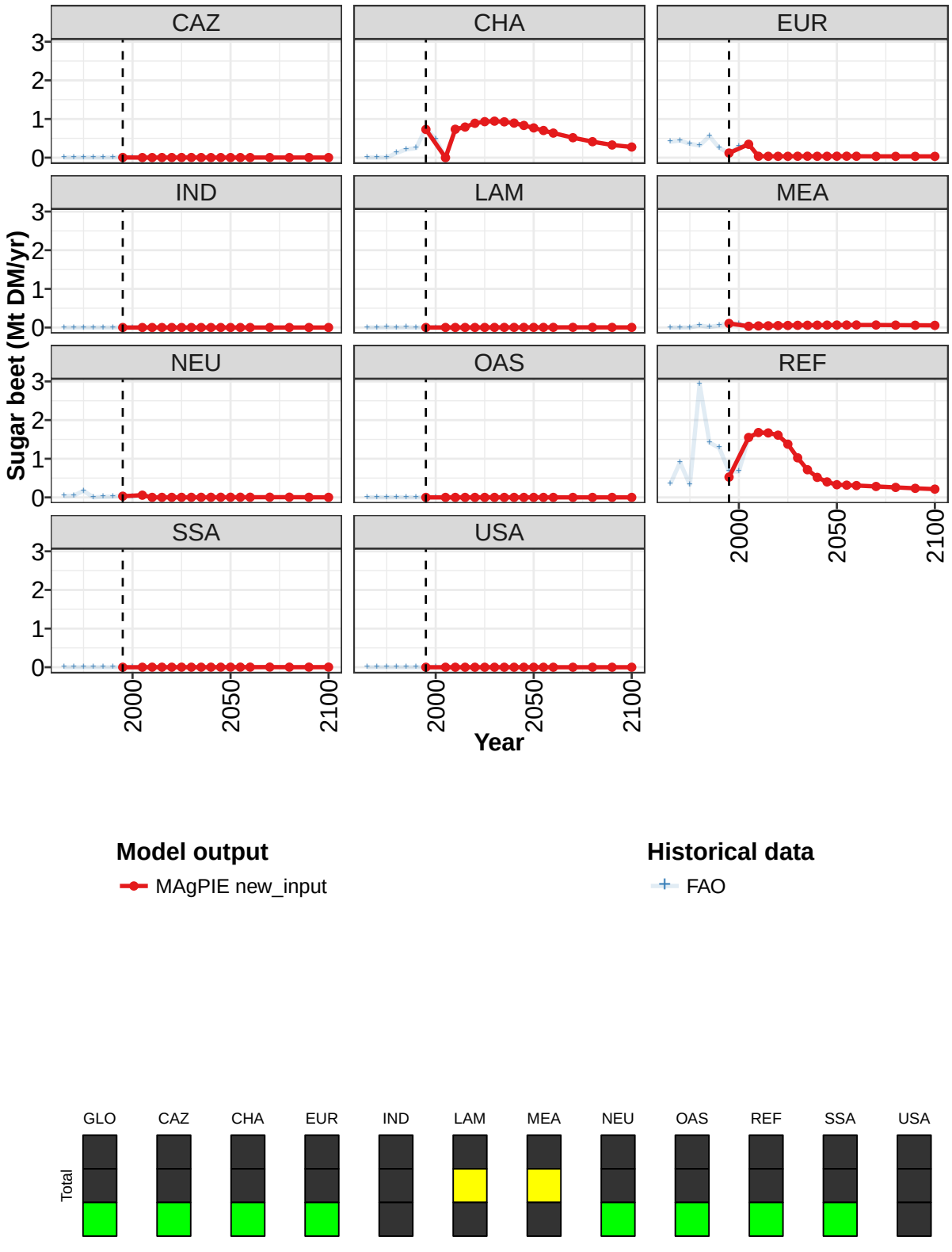


Figure 97: MAgPIE new_input — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.52	1.99	2.50	2.55	2.59	2.41	2.07	1.75	1.52	1.34	1.21
CAZ	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.73	0.00	0.73	0.79	0.89	0.93	0.94	0.93	0.89	0.83	0.77
EUR	0.12	0.35	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.10	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.06
NEU	0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.53	1.55	1.68	1.67	1.61	1.38	1.02	0.72	0.52	0.40	0.33
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 290: MAgPIE new_input — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

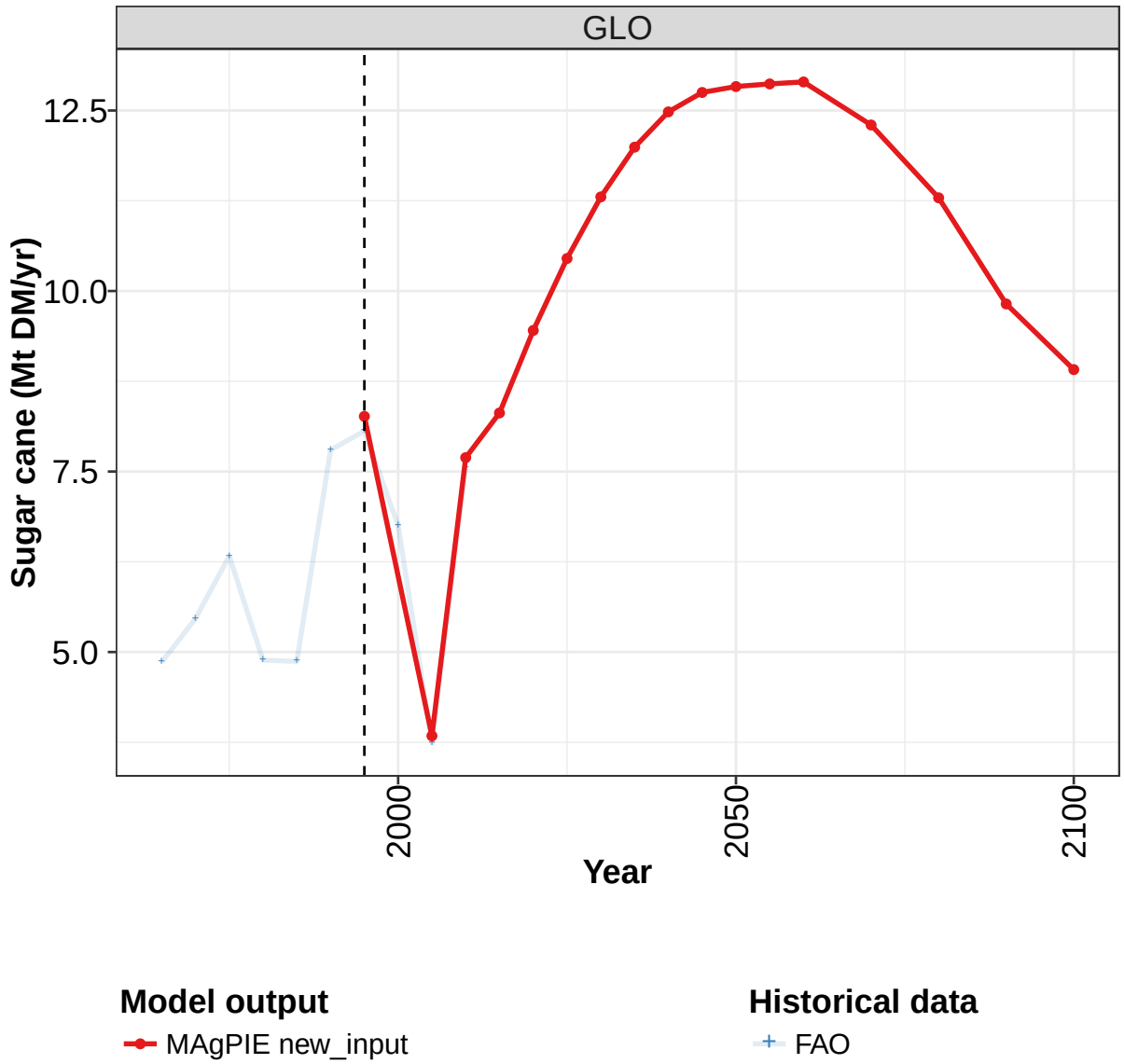
	2055	2060	2070	2080	2090	2100
GLO	1.13	1.06	0.91	0.78	0.67	0.59
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.70	0.64	0.52	0.41	0.33	0.28
EUR	0.04	0.04	0.03	0.03	0.03	0.03
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.06	0.07	0.06	0.06	0.06	0.06
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.32	0.31	0.28	0.26	0.23	0.21
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 291: MAgPIE new_input — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.80	1.40	0.86	3.42	2.22	1.86	1.73	1.55	2.01	2.50
CAZ	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.12	0.22	0.24	0.76	0.48	0.00	0.74
EUR	0.41	0.44	0.36	0.31	0.56	0.25	0.12	0.28	0.35	0.04
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.06	0.01	0.05	0.12	0.09	0.03	0.04
NEU	0.03	0.05	0.17	0.00	0.02	0.02	0.04	0.03	0.07	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.34	0.90	0.33	2.92	1.42	1.28	0.67	0.67	1.55	1.67
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 292: FAO — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr)

6.2.19 Sugar crops—Sugar cane



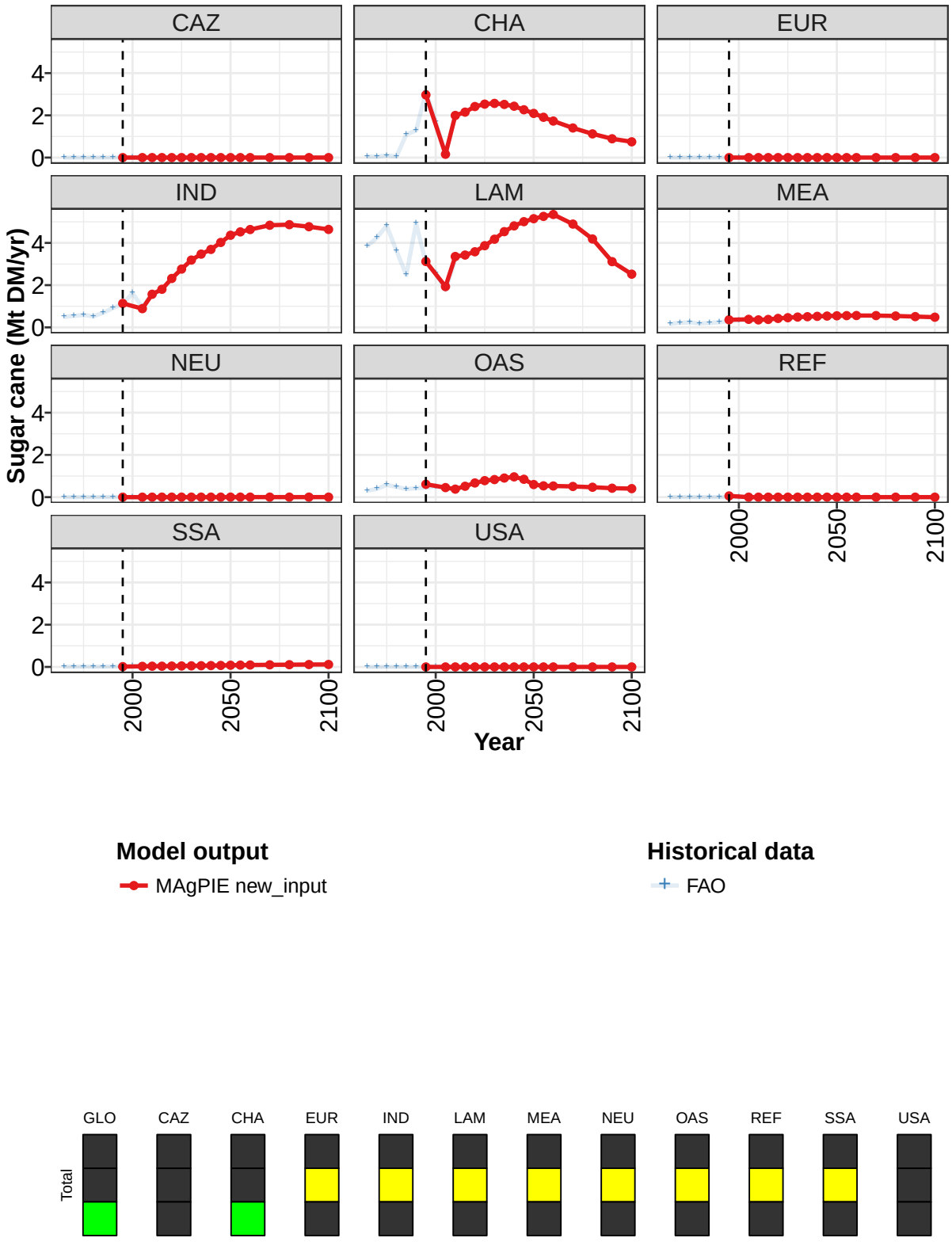


Figure 98: MAgPIE new_input — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8.3	3.8	7.7	8.3	9.5	10.5	11.3	12.0	12.5	12.8	12.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.0	0.2	2.0	2.2	2.4	2.5	2.6	2.5	2.4	2.3	2.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	0.9	1.6	1.8	2.3	2.8	3.2	3.5	3.7	4.0	4.4
LAM	3.1	1.9	3.4	3.4	3.6	3.9	4.2	4.5	4.8	5.0	5.1
MEA	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.6	0.5	0.4	0.5	0.7	0.8	0.8	0.9	1.0	0.8	0.6
REF	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 293: MAgPIE new_input — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

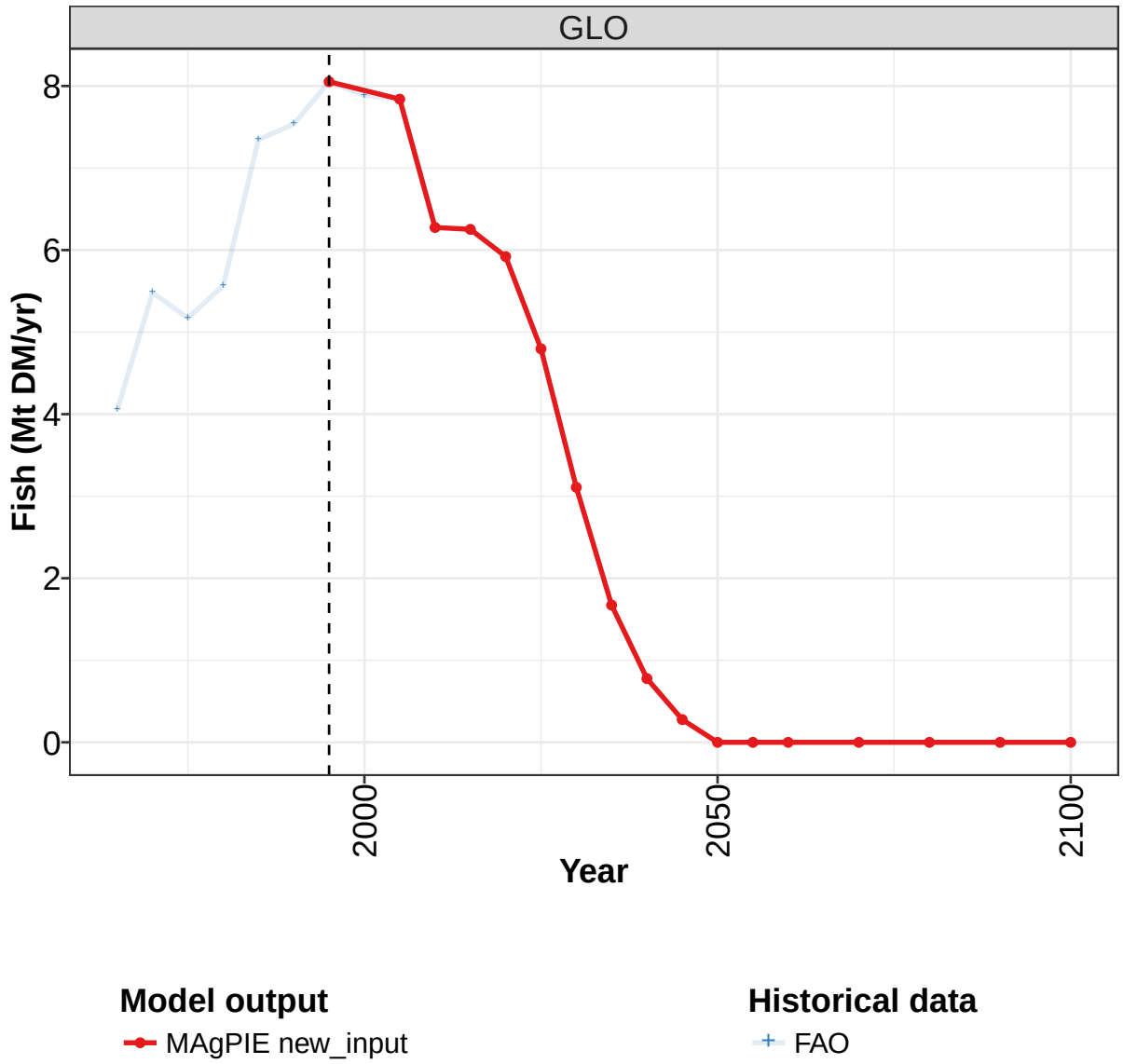
	2055	2060	2070	2080	2090	2100
GLO	12.9	12.9	12.3	11.3	9.8	8.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.9	1.7	1.4	1.1	0.9	0.7
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	4.5	4.6	4.8	4.9	4.8	4.6
LAM	5.3	5.3	4.9	4.2	3.1	2.5
MEA	0.6	0.6	0.6	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.5	0.5	0.5	0.4	0.4
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.1	0.1	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 294: MAgPIE new_input — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.86	5.46	6.33	4.89	4.87	7.80	8.06	6.75	3.74	7.55
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.05	0.04	0.10	0.06	1.09	1.28	3.11	1.71	0.17	2.02
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.49	0.55	0.58	0.52	0.69	0.91	1.12	1.62	0.96	1.58
LAM	3.83	4.25	4.82	3.62	2.48	4.92	3.06	2.56	1.77	3.20
MEA	0.17	0.22	0.23	0.19	0.21	0.24	0.30	0.34	0.35	0.34
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.30	0.39	0.58	0.49	0.38	0.43	0.46	0.49	0.45	0.37
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 295: FAO — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

6.3 Fish


GLO
Fish (Mt DM/yr)
0
2
4
6
8
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

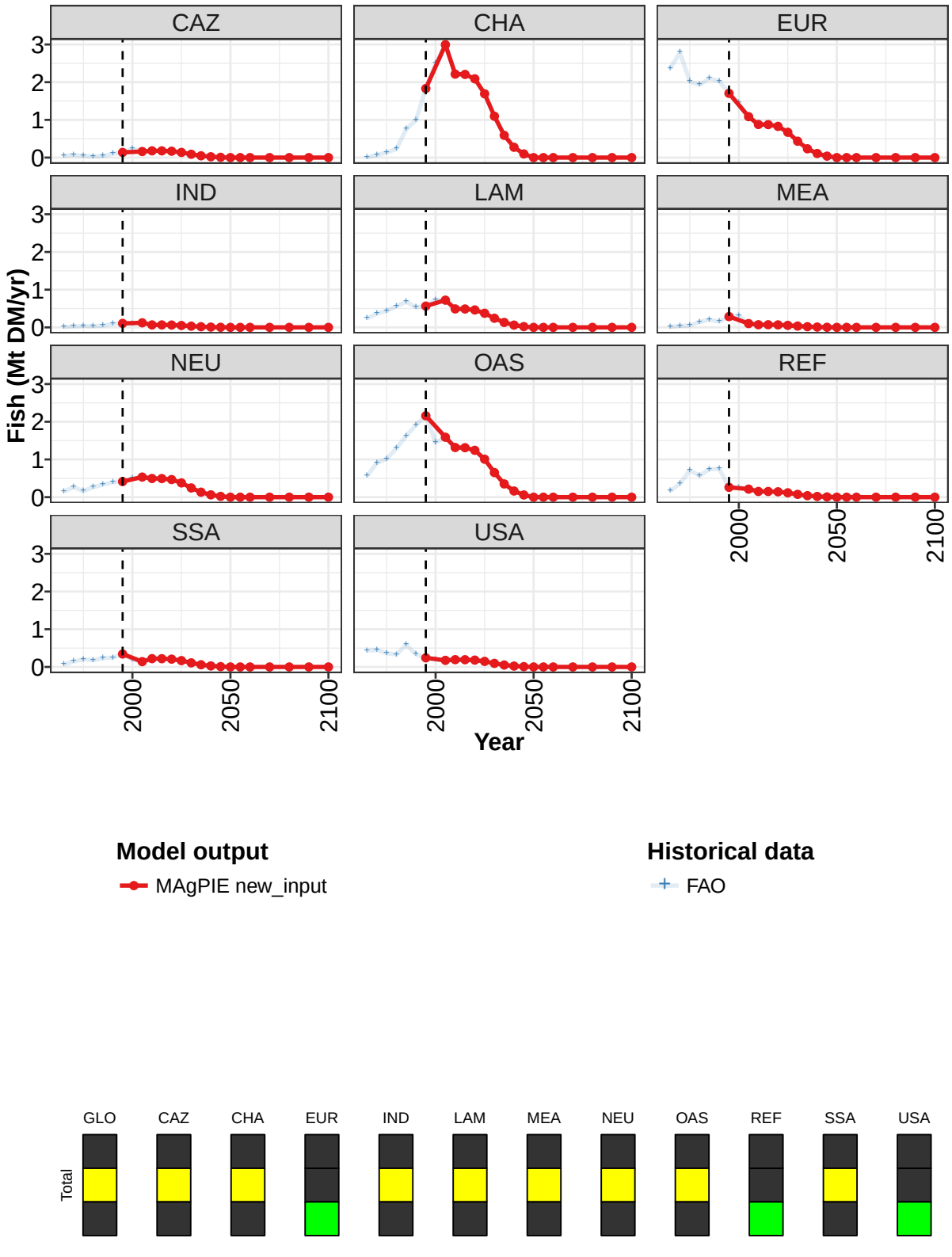


Figure 99: MAgPIE new_input — Demand—Feed—Fish (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8.05	7.84	6.28	6.25	5.92	4.80	3.11	1.67	0.78	0.28	0.00
CAZ	0.14	0.16	0.18	0.18	0.17	0.14	0.09	0.05	0.02	0.01	0.00
CHA	1.83	2.99	2.21	2.21	2.09	1.69	1.10	0.59	0.27	0.10	0.00
EUR	1.70	1.09	0.88	0.87	0.83	0.67	0.43	0.23	0.11	0.04	0.00
IND	0.11	0.12	0.07	0.07	0.06	0.05	0.03	0.02	0.01	0.00	0.00
LAM	0.56	0.72	0.49	0.49	0.46	0.37	0.24	0.13	0.06	0.02	0.00
MEA	0.29	0.10	0.07	0.07	0.07	0.05	0.03	0.02	0.01	0.00	0.00
NEU	0.41	0.53	0.50	0.49	0.47	0.38	0.25	0.13	0.06	0.02	0.00
OAS	2.16	1.59	1.32	1.31	1.24	1.01	0.65	0.35	0.16	0.06	0.00
REF	0.26	0.21	0.15	0.15	0.14	0.12	0.07	0.04	0.02	0.01	0.00
SSA	0.34	0.14	0.22	0.22	0.21	0.17	0.11	0.06	0.03	0.01	0.00
USA	0.24	0.18	0.19	0.19	0.18	0.15	0.10	0.05	0.02	0.01	0.00

Table 296: MAgPIE new_input — Demand—Feed—Fish (Mt DM/yr) [PART 1/2]

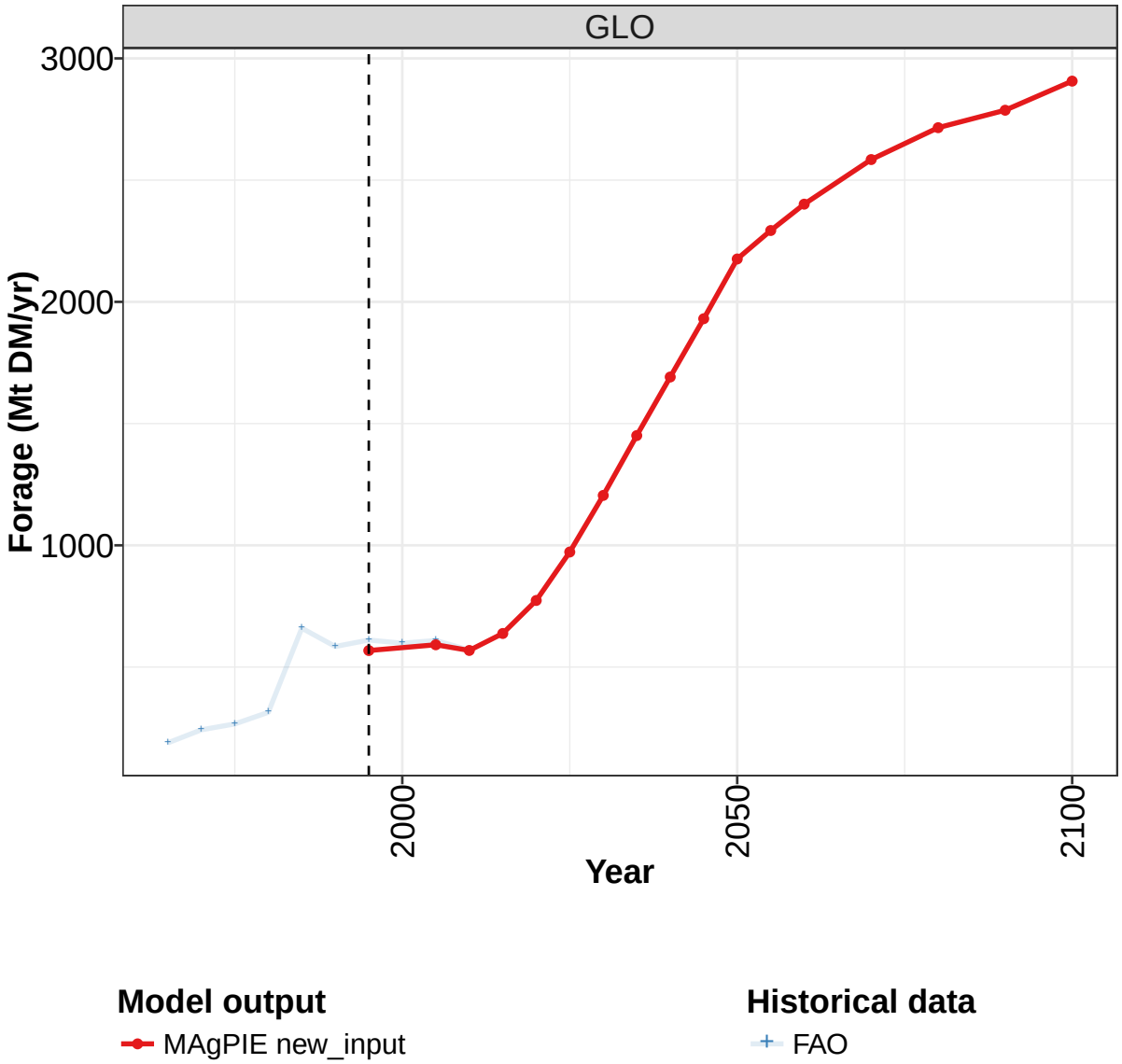
	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 297: MAgPIE new_input — Demand—Feed—Fish (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.05	5.48	5.17	5.56	7.35	7.54	8.05	7.89	7.84	6.28
CAZ	0.05	0.07	0.05	0.03	0.04	0.10	0.14	0.23	0.16	0.18
CHA	0.01	0.07	0.14	0.22	0.75	1.00	1.83	2.50	2.99	2.21
EUR	2.37	2.79	2.01	1.93	2.10	2.03	1.70	1.45	1.09	0.88
IND	0.01	0.03	0.04	0.03	0.05	0.09	0.11	0.09	0.12	0.07
LAM	0.24	0.36	0.44	0.56	0.68	0.53	0.56	0.73	0.72	0.49
MEA	0.02	0.04	0.05	0.14	0.20	0.15	0.29	0.31	0.10	0.07
NEU	0.15	0.27	0.16	0.26	0.33	0.39	0.41	0.50	0.53	0.50
OAS	0.56	0.91	1.01	1.30	1.63	1.91	2.16	1.44	1.59	1.32
REF	0.16	0.36	0.71	0.57	0.74	0.75	0.26	0.26	0.21	0.15
SSA	0.06	0.14	0.20	0.18	0.23	0.25	0.34	0.19	0.14	0.22
USA	0.43	0.45	0.36	0.33	0.59	0.33	0.24	0.19	0.18	0.19

Table 298: FAO — Demand—Feed—Fish (Mt DM/yr)

6.4 Forage


GLO
3000
2000
1000
Forage (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

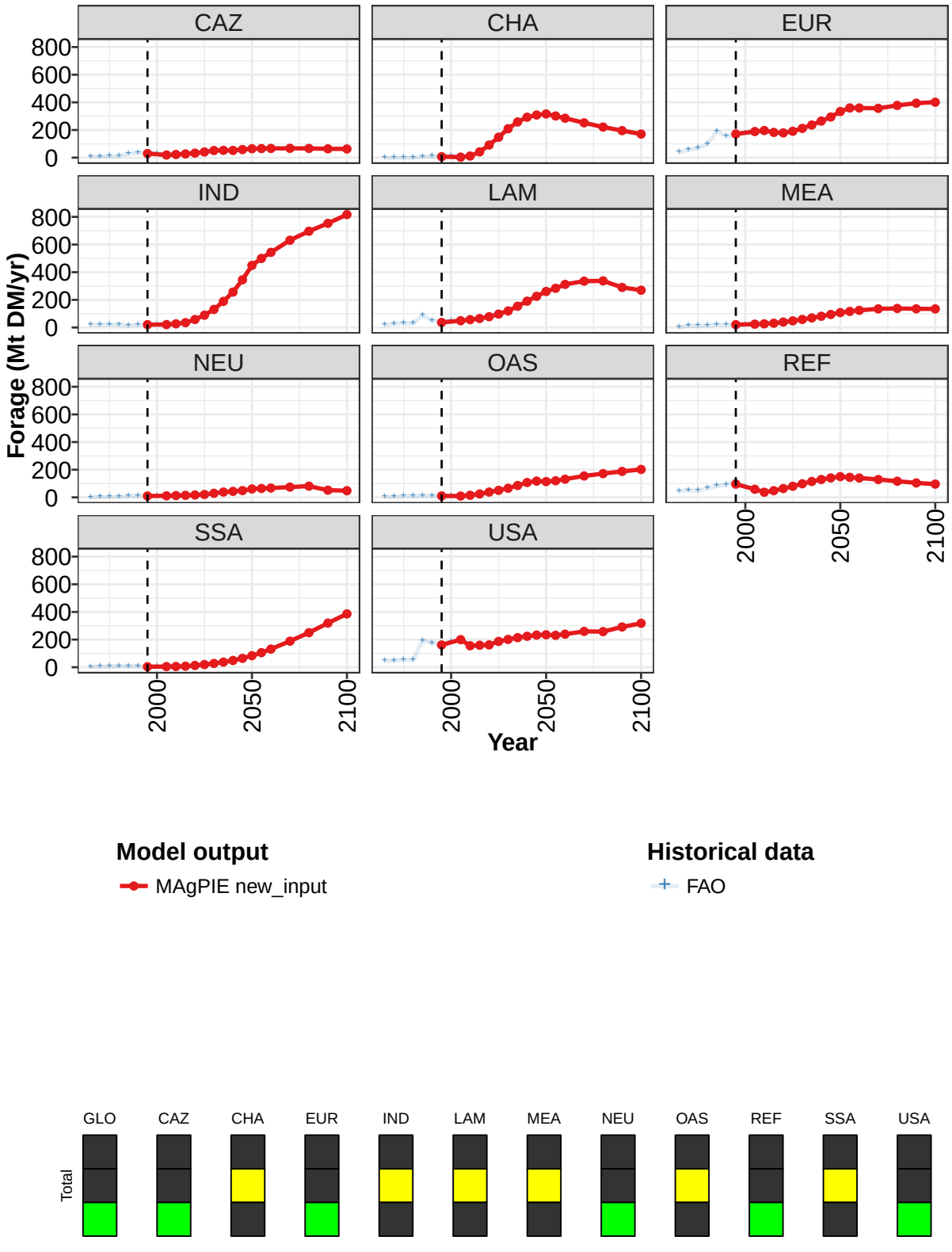


Figure 100: MAgPIE new_input — Demand—Feed—Forage (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	568	592	568	638	774	973	1205	1451	1691	1931	2176
CAZ	30	19	23	27	33	41	52	53	52	59	65
CHA	7	4	12	42	92	148	209	258	293	308	316
EUR	171	189	196	183	179	191	212	236	265	294	334
IND	21	21	27	35	58	89	131	189	256	345	449
LAM	37	49	57	65	78	97	120	154	191	226	261
MEA	21	24	27	31	39	48	58	69	81	94	108
NEU	10	11	13	15	17	21	30	39	44	49	61
OAS	11	10	15	25	38	51	66	86	108	118	114
REF	95	59	38	49	64	80	99	115	129	141	150
SSA	4	5	6	8	13	19	28	37	49	64	84
USA	161	200	155	159	162	187	201	214	224	232	235

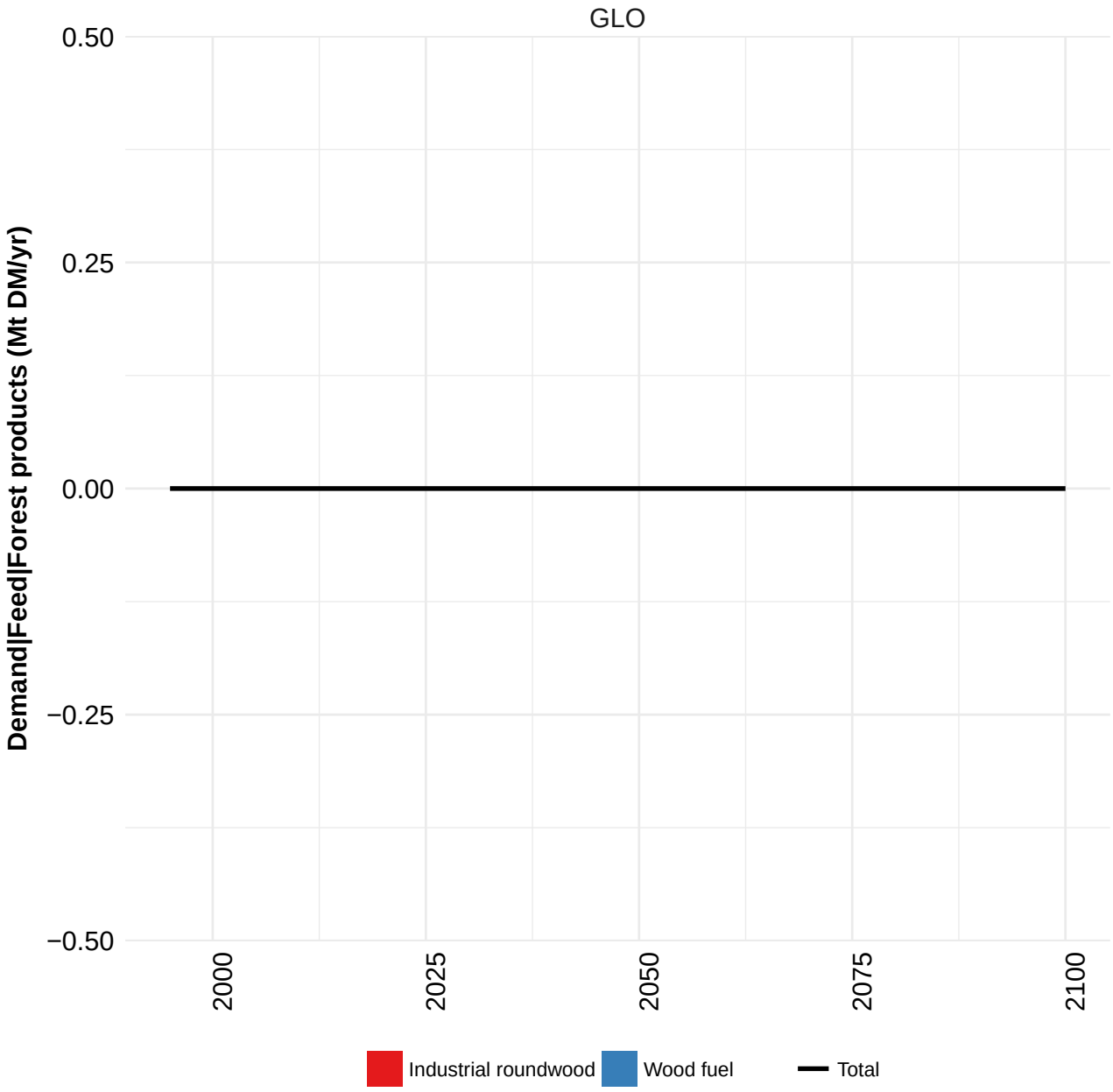
Table 299: MAgPIE new_input — Demand—Feed—Forage (Mt DM/yr) [PART 1/2]

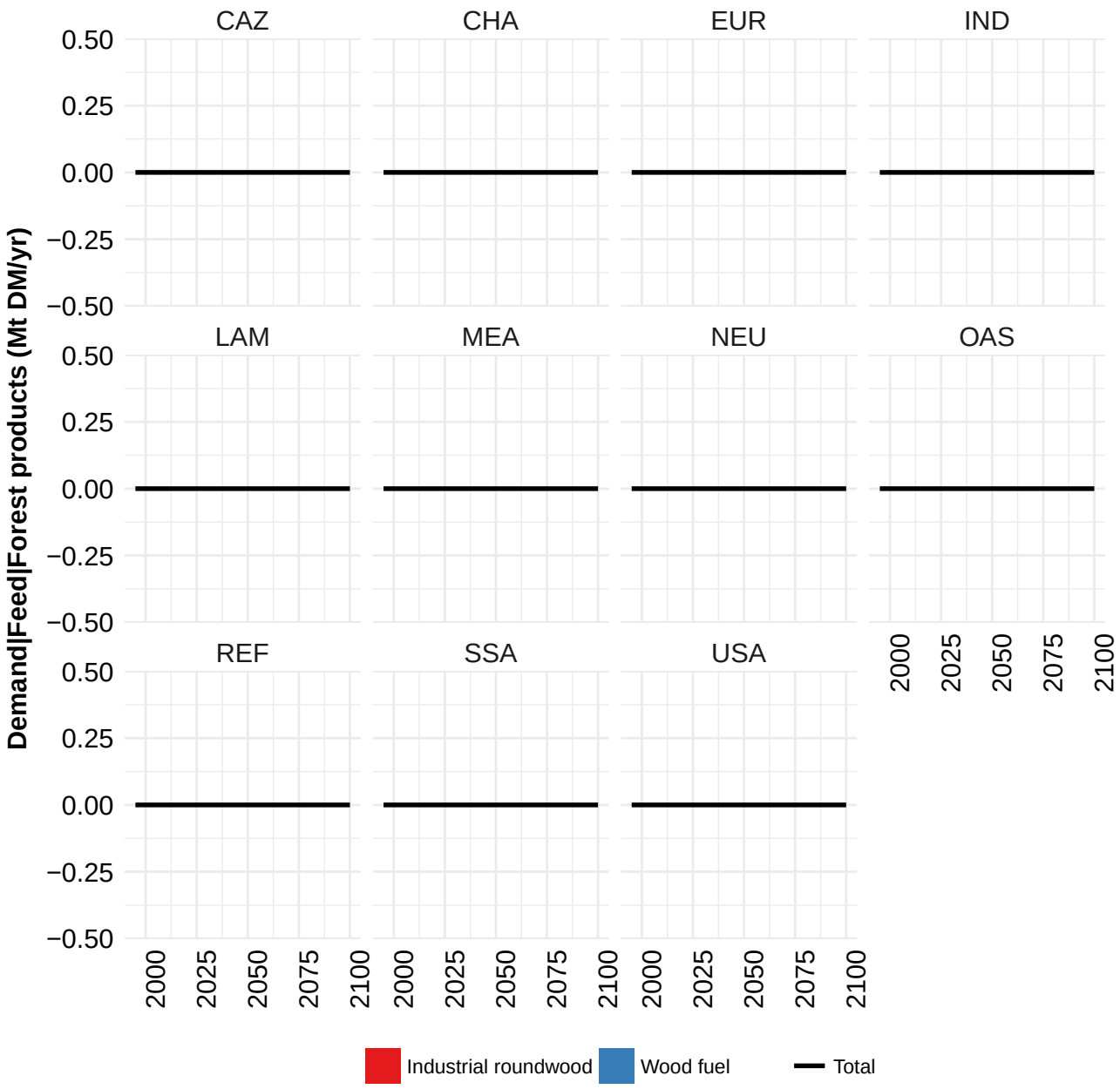
	2055	2060	2070	2080	2090	2100
GLO	2293	2401	2584	2715	2787	2907
CAZ	66	67	68	67	64	63
CHA	302	285	252	221	196	171
EUR	359	359	357	378	394	401
IND	500	544	631	696	753	817
LAM	284	312	335	337	290	270
MEA	117	124	135	138	135	135
NEU	64	68	74	81	52	48
OAS	120	132	155	172	188	202
REF	145	140	129	117	105	96
SSA	106	131	189	250	319	386
USA	231	239	259	258	291	318

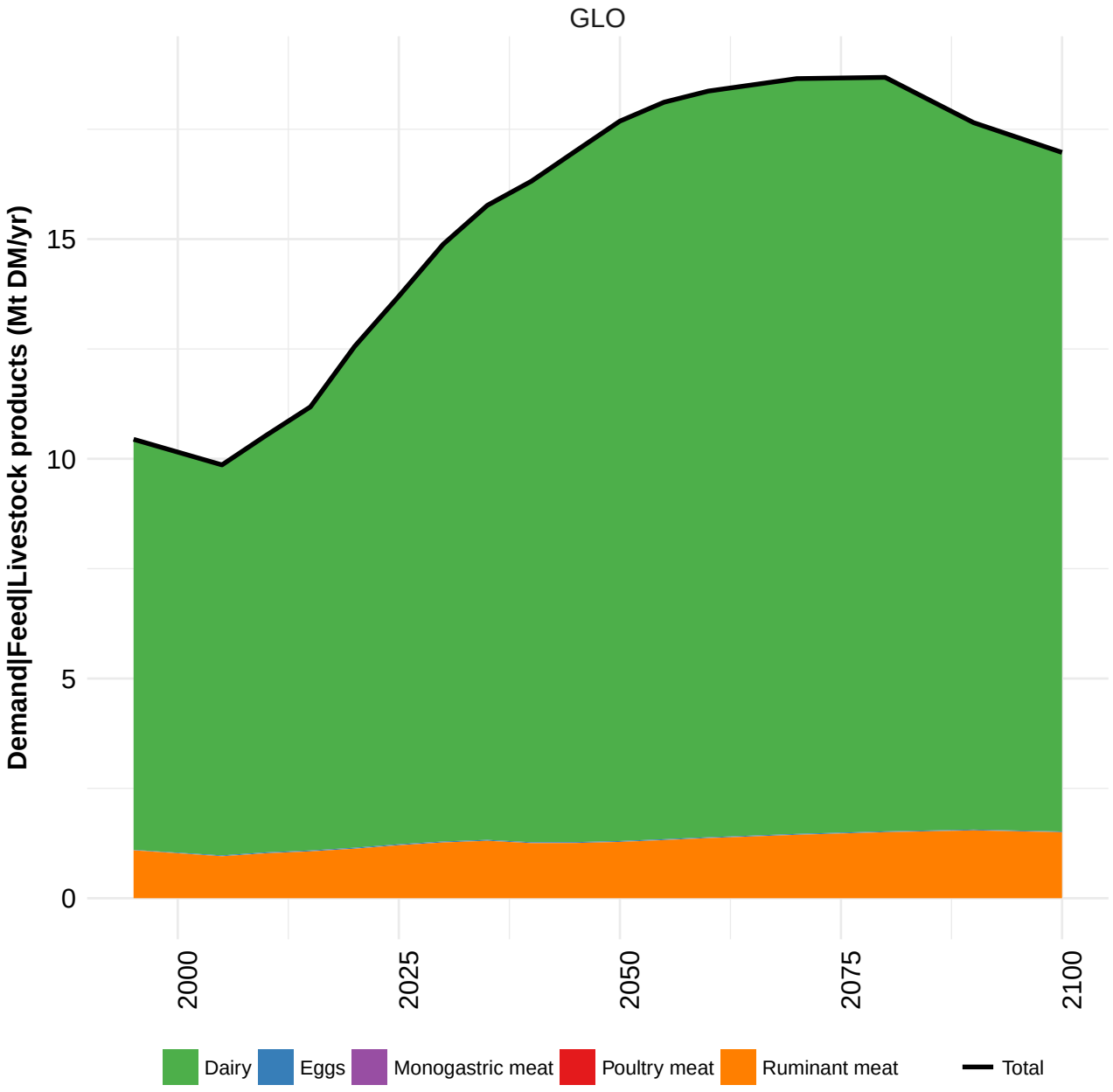
Table 300: MAgPIE new_input — Demand—Feed—Forage (Mt DM/yr) [PART 2/2]

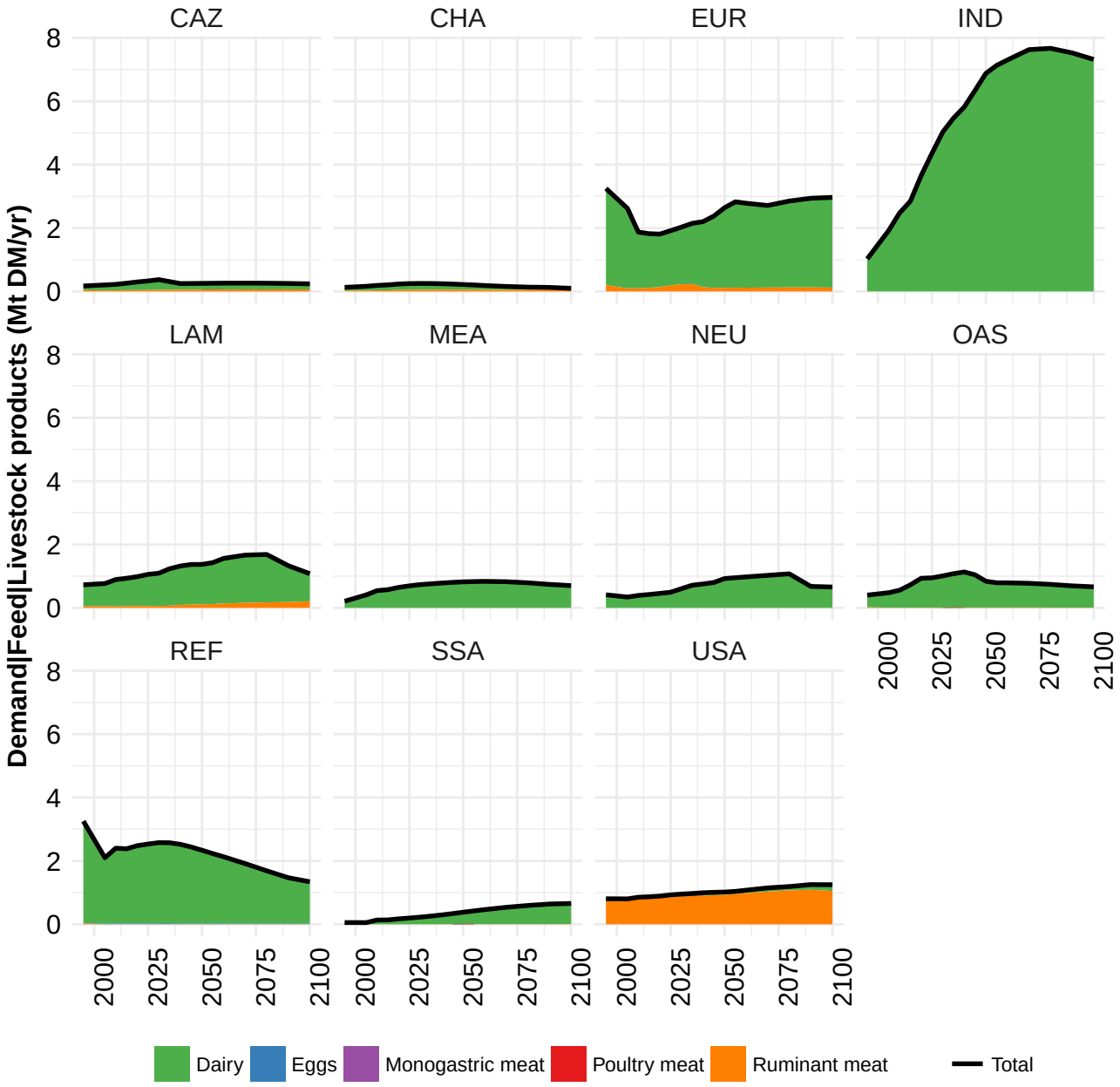
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	189	242	266	314	660	584	611	598	609	570
CAZ	7	9	10	10	28	36	32	30	26	29
CHA	0	0	0	0	8	10	11	12	13	14
EUR	39	56	70	96	192	155	167	178	179	189
IND	19	21	21	22	15	18	20	22	25	28
LAM	21	27	33	31	88	51	46	50	51	54
MEA	2	14	13	15	21	19	20	21	23	25
NEU	2	2	3	3	10	11	11	10	12	13
OAS	4	6	8	10	13	12	11	11	11	15
REF	44	53	49	66	83	90	119	75	63	37
SSA	4	5	6	9	9	7	5	5	5	5
USA	47	48	54	53	192	175	170	185	201	162

Table 301: FAO — Demand—Feed—Forage (Mt DM/yr)

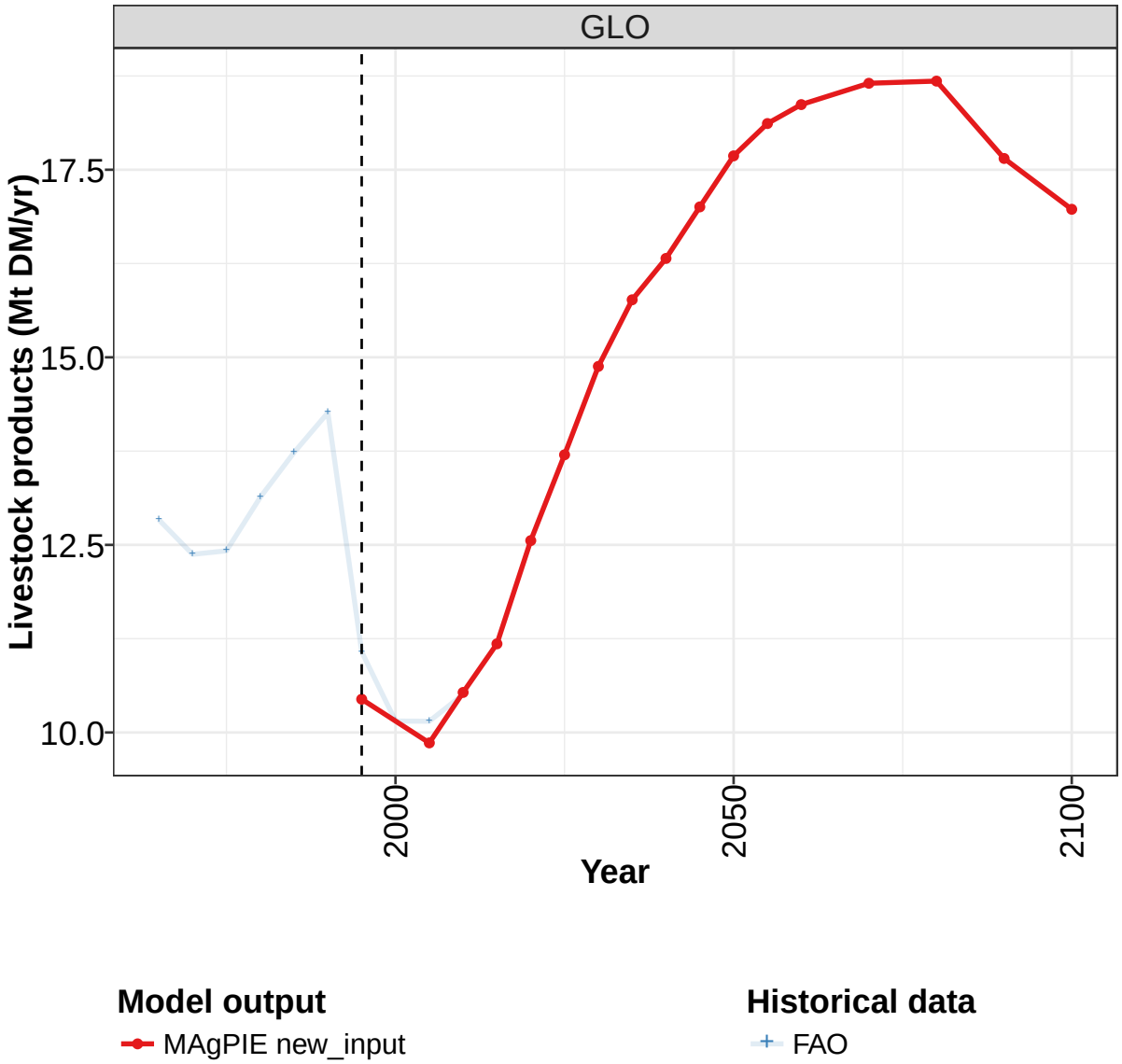

GLO
Demand|Feed|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Feed|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


GLO
Demand|Feed|Livestock products (Mt DM/yr)
0
5
10
15
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Feed|Livestock products (Mt DM/yr)
0
2
4
6
8
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total

6.5 Livestock products



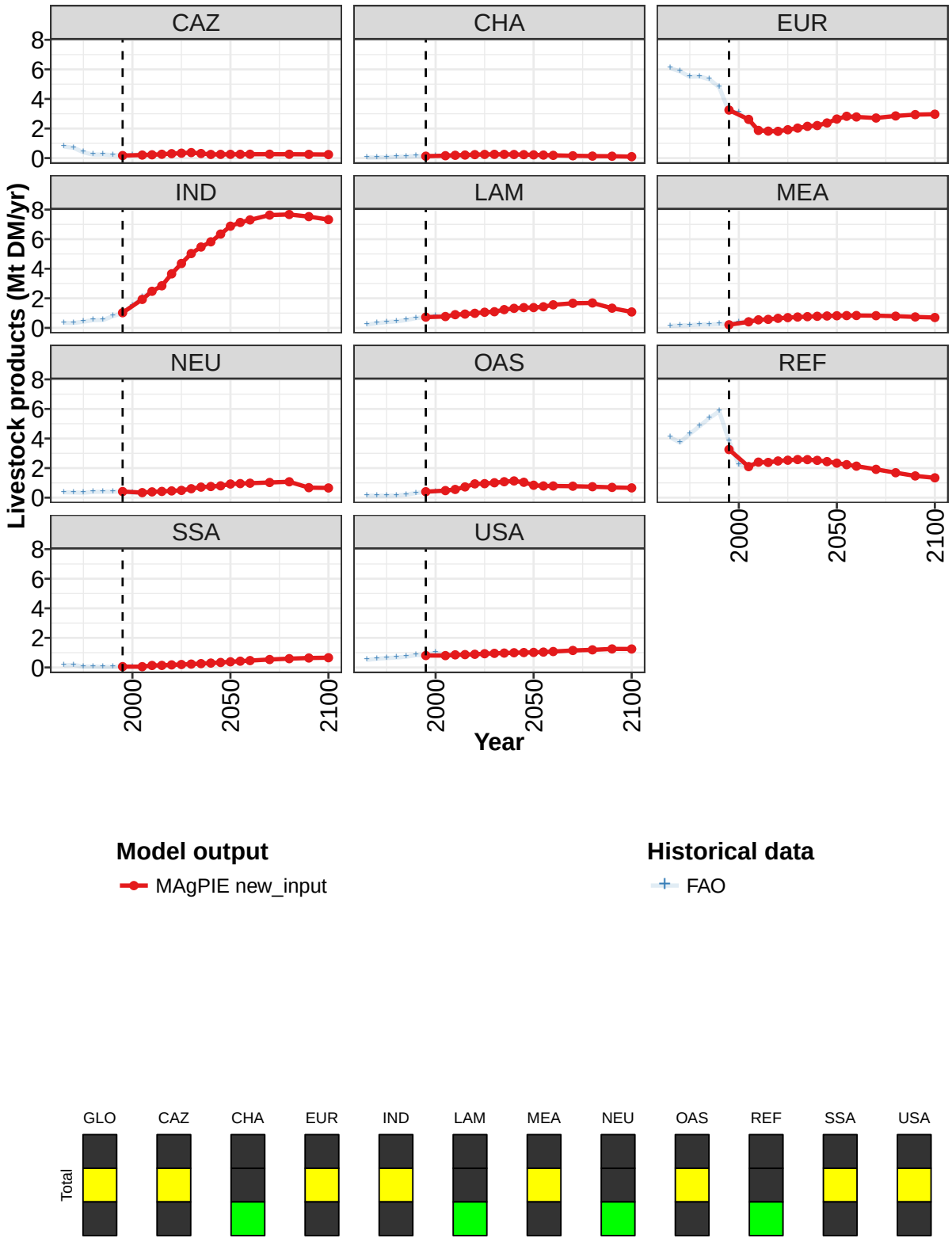


Figure 101: MAgPIE new_input — Demand—Feed—Livestock products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	10.4	9.9	10.5	11.2	12.6	13.7	14.9	15.8	16.3	17.0	17.7
CAZ	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3
CHA	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
EUR	3.3	2.6	1.9	1.8	1.8	1.9	2.0	2.1	2.2	2.4	2.6
IND	1.0	1.9	2.5	2.8	3.7	4.4	5.0	5.5	5.8	6.3	6.9
LAM	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.4
MEA	0.2	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8
NEU	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9
OAS	0.4	0.5	0.6	0.7	0.9	0.9	1.0	1.1	1.1	1.0	0.8
REF	3.3	2.1	2.4	2.4	2.5	2.5	2.6	2.6	2.5	2.4	2.3
SSA	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4
USA	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0

Table 302: MAgPIE new_input — Demand—Feed—Livestock products (Mt DM/yr) [PART 1/2]

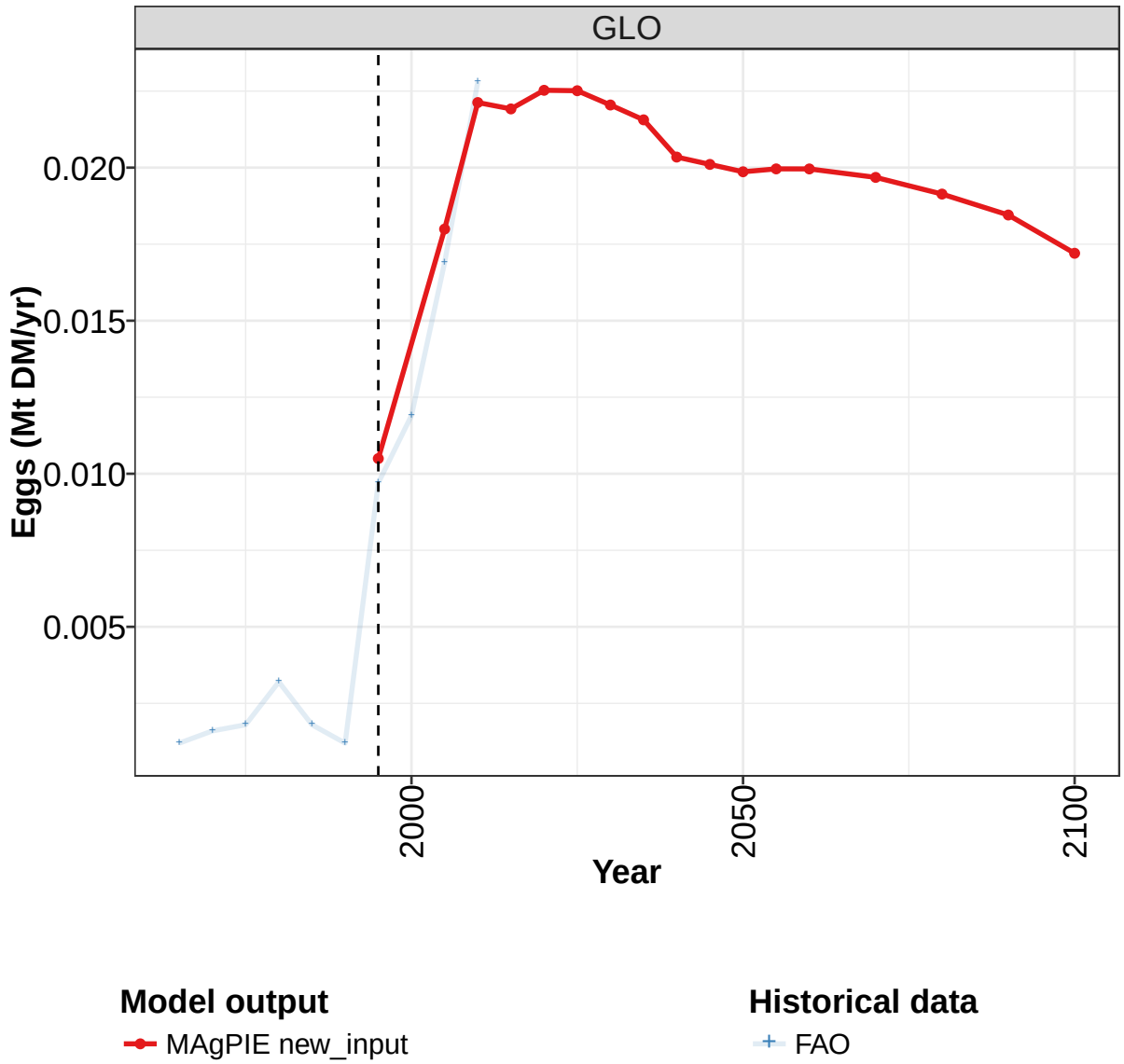
	2055	2060	2070	2080	2090	2100
GLO	18.1	18.4	18.7	18.7	17.7	17.0
CAZ	0.3	0.3	0.3	0.3	0.3	0.2
CHA	0.2	0.2	0.2	0.1	0.1	0.1
EUR	2.8	2.8	2.7	2.9	2.9	3.0
IND	7.1	7.3	7.6	7.7	7.5	7.3
LAM	1.4	1.6	1.7	1.7	1.3	1.1
MEA	0.8	0.8	0.8	0.8	0.7	0.7
NEU	1.0	1.0	1.0	1.1	0.7	0.7
OAS	0.8	0.8	0.8	0.7	0.7	0.7
REF	2.2	2.1	1.9	1.7	1.5	1.3
SSA	0.4	0.5	0.5	0.6	0.6	0.7
USA	1.0	1.1	1.1	1.2	1.3	1.2

Table 303: MAgPIE new_input — Demand—Feed—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.8	12.4	12.4	13.1	13.7	14.3	11.1	10.2	10.1	10.5
CAZ	0.8	0.7	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3
CHA	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
EUR	6.1	5.9	5.5	5.5	5.3	4.8	3.1	3.1	2.5	1.8
IND	0.3	0.3	0.4	0.5	0.5	0.8	1.0	1.5	2.1	2.5
LAM	0.2	0.3	0.4	0.4	0.5	0.7	0.7	0.8	0.8	0.9
MEA	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5
NEU	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4
OAS	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.5
REF	4.1	3.7	4.3	4.8	5.4	5.8	3.8	2.2	2.2	2.4
SSA	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1
USA	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	0.9	0.9

Table 304: FAO — Demand—Feed—Livestock products (Mt DM/yr)

6.5.1 Eggs


GLO
Eggs (Mt DM/yr)
0.020
0.015
0.010
0.005
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

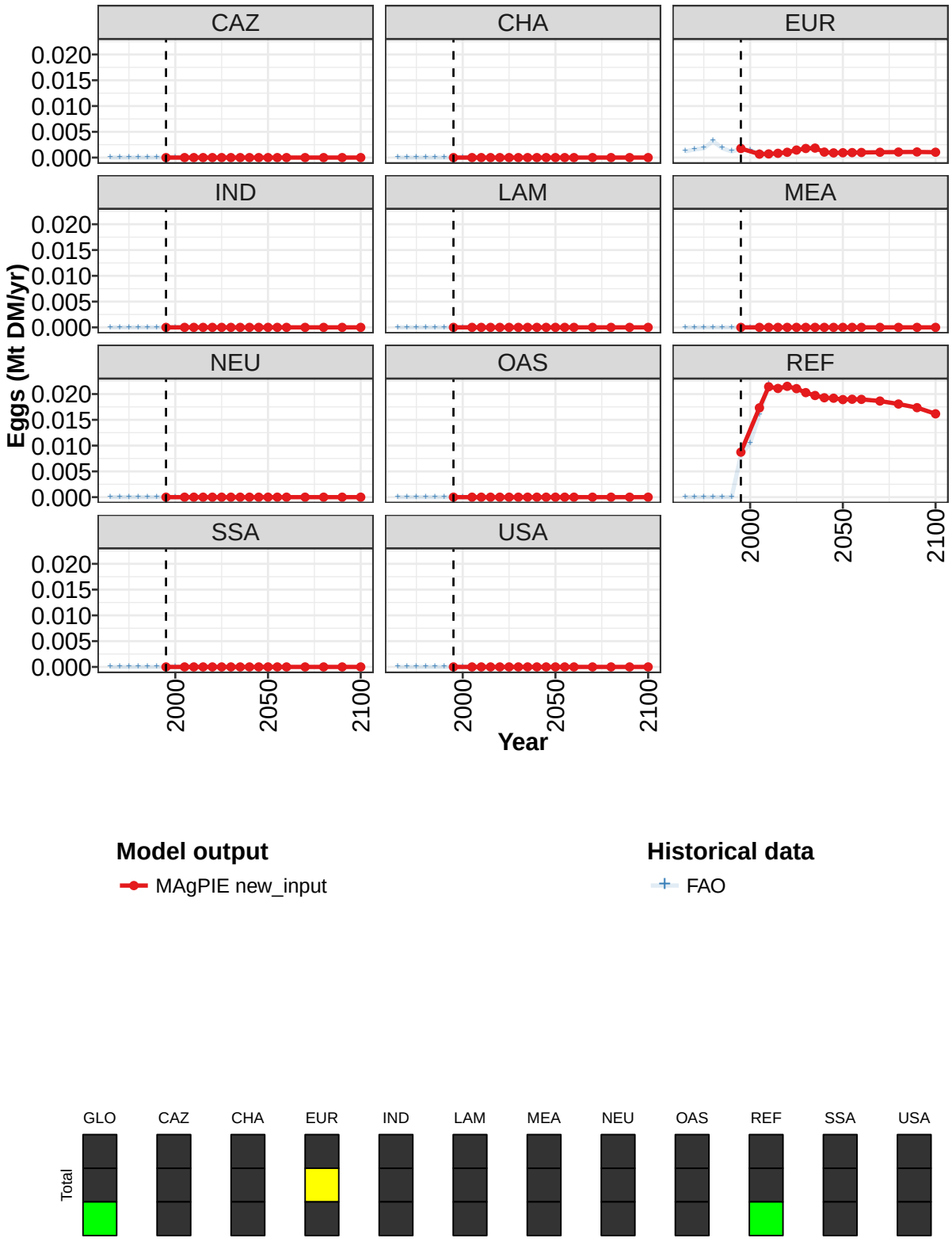


Figure 102: MAgPIE new_input — Demand—Feed—Livestock products—Eggs (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0105	0.0180	0.0221	0.0219	0.0225	0.0225	0.0220	0.0216	0.0203	0.0201	0.0199
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0018	0.0007	0.0007	0.0008	0.0010	0.0015	0.0018	0.0018	0.0011	0.0009	0.0009
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0087	0.0173	0.0214	0.0211	0.0215	0.0211	0.0203	0.0197	0.0193	0.0192	0.0189
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 305: MAgPIE new_input — Demand—Feed—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

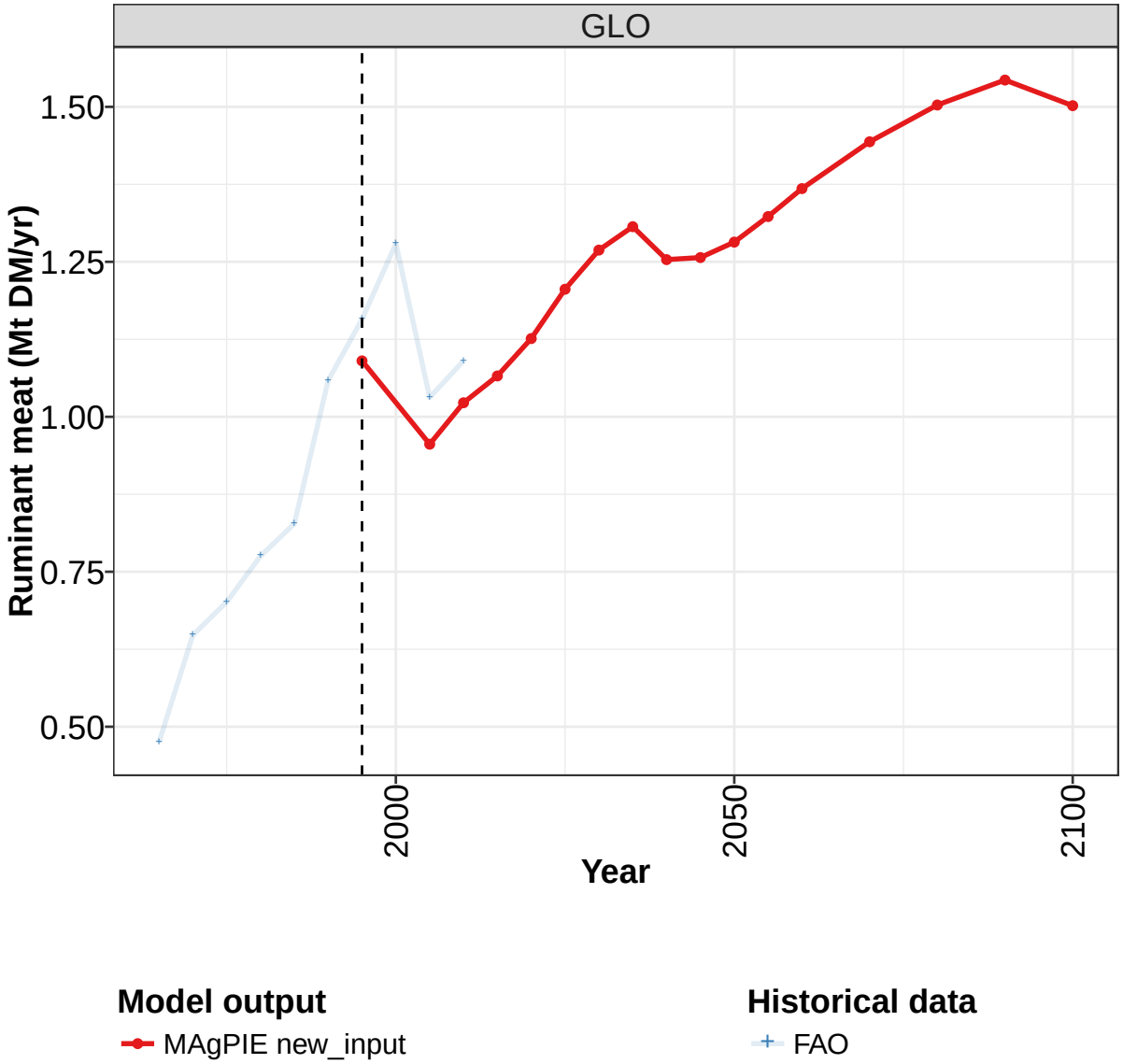
	2055	2060	2070	2080	2090	2100
GLO	0.0200	0.0200	0.0197	0.0191	0.0185	0.0172
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0010	0.0010	0.0010	0.0011	0.0011	0.0010
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0190	0.0190	0.0186	0.0181	0.0174	0.0162
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 306: MAgPIE new_input — Demand—Feed—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0012	0.0016	0.0018	0.0032	0.0018	0.0012	0.0097	0.0119	0.0169	0.0228
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0012	0.0016	0.0018	0.0032	0.0018	0.0012	0.0016	0.0014	0.0009	0.0008
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0081	0.0105	0.0160	0.0219
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 307: FAO — Demand—Feed—Livestock products—Eggs (Mt DM/yr)

6.5.2 Ruminant meat



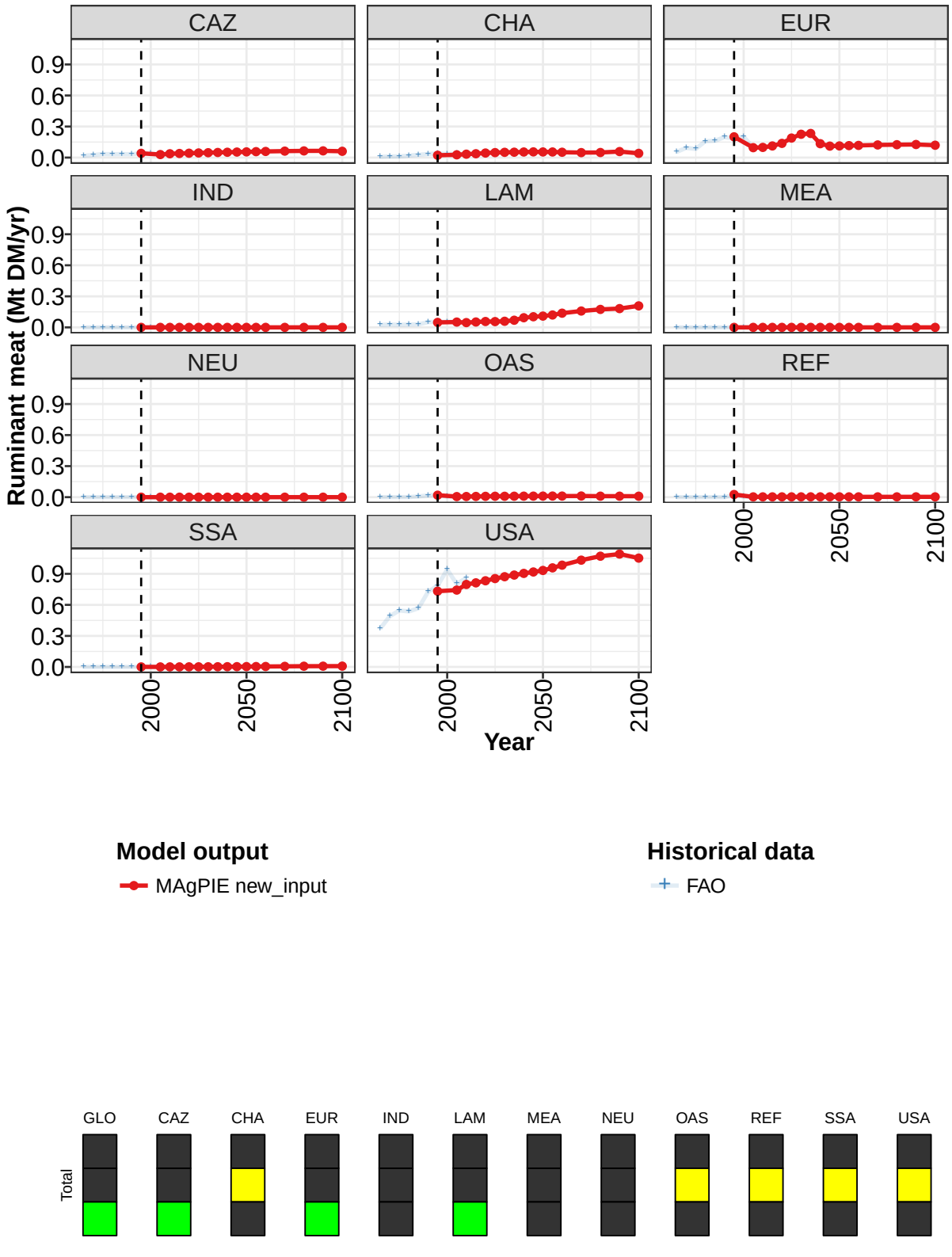


Figure 103: MAgPIE new_input — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.09	0.96	1.02	1.07	1.13	1.21	1.27	1.31	1.25	1.26	1.28
CAZ	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06
CHA	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.05
EUR	0.20	0.10	0.10	0.11	0.14	0.19	0.23	0.23	0.13	0.11	0.11
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.09	0.10	0.11
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
REF	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.73	0.74	0.80	0.81	0.83	0.85	0.87	0.89	0.90	0.92	0.93

Table 308: MAgPIE new_input — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

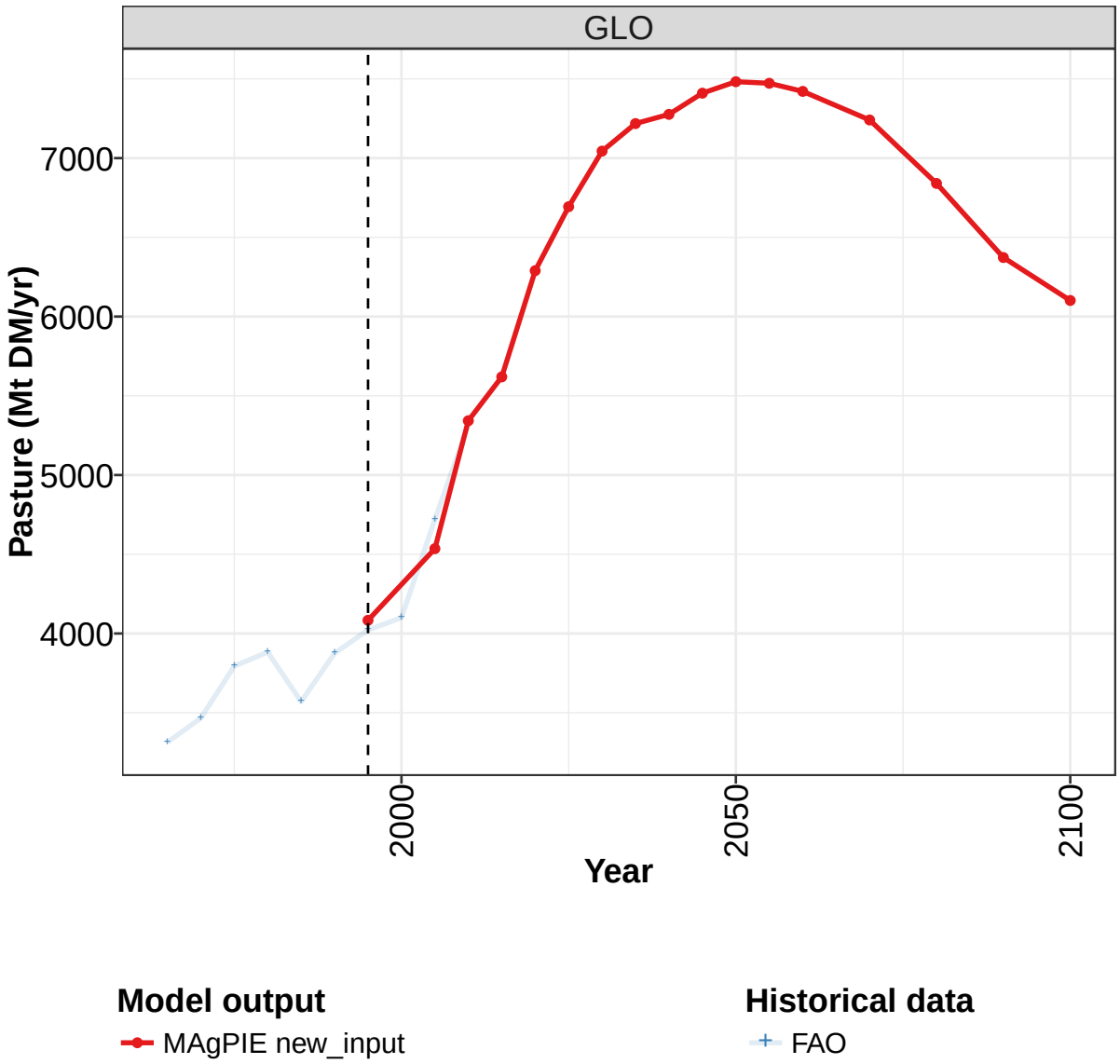
	2055	2060	2070	2080	2090	2100
GLO	1.32	1.37	1.44	1.50	1.54	1.50
CAZ	0.06	0.06	0.06	0.06	0.07	0.06
CHA	0.05	0.05	0.05	0.05	0.06	0.04
EUR	0.12	0.12	0.12	0.12	0.13	0.12
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.12	0.14	0.16	0.17	0.18	0.21
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.01	0.01	0.01	0.01	0.01	0.01
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.01	0.01	0.01	0.01
USA	0.96	0.98	1.03	1.07	1.09	1.05

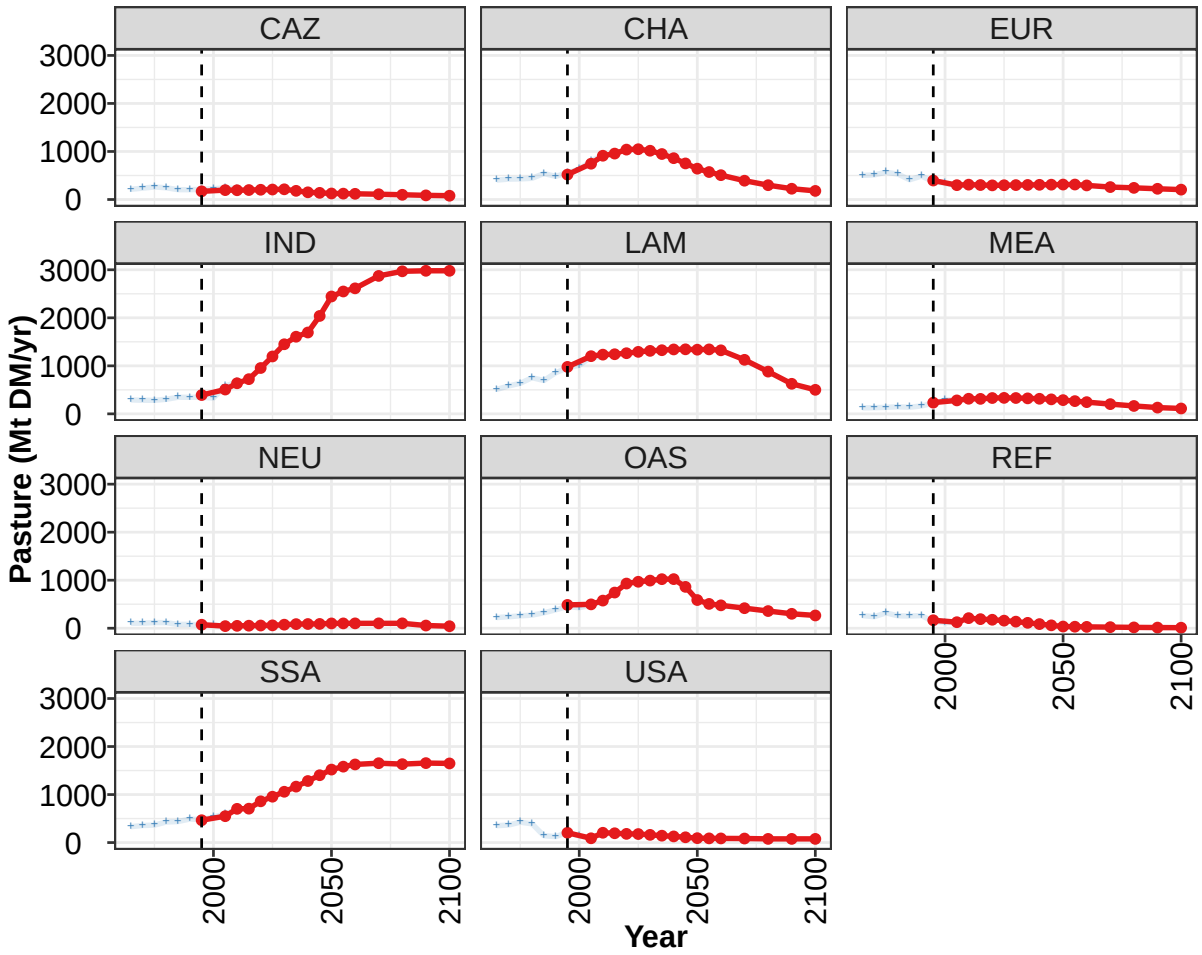
Table 309: MAgPIE new_input — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.47	0.65	0.70	0.78	0.83	1.06	1.16	1.28	1.03	1.09
CAZ	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
CHA	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.03	0.04	0.03
EUR	0.05	0.09	0.08	0.16	0.16	0.20	0.19	0.20	0.10	0.10
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.02	0.03	0.03	0.03	0.03	0.05	0.05	0.05	0.05	0.05
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.01	0.01	0.01
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.37	0.49	0.55	0.54	0.57	0.73	0.79	0.94	0.80	0.86

Table 310: FAO — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr)

6.6 Pasture


GLO
Pasture (Mt DM/yr)
7000
6000
5000
4000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



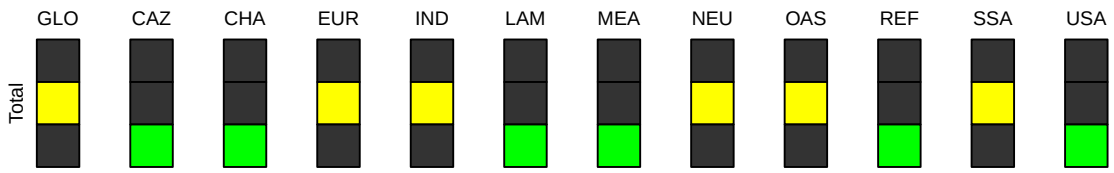


Figure 104: MAgPIE new_input — Demand—Feed—Pasture (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4083	4535	5343	5620	6290	6693	7044	7218	7276	7410	7482
CAZ	170	196	193	197	203	208	213	181	150	139	126
CHA	519	745	912	956	1039	1047	1016	948	861	751	643
EUR	396	299	309	301	294	298	300	304	306	309	311
IND	392	507	637	723	955	1196	1450	1607	1695	2039	2445
LAM	979	1201	1234	1242	1263	1291	1312	1326	1342	1344	1336
MEA	234	281	315	312	330	333	331	323	314	302	286
NEU	73	44	50	53	57	60	74	86	88	90	100
OAS	486	497	575	743	930	968	992	1022	1023	861	587
REF	166	126	210	190	177	158	138	113	86	60	35
SSA	466	550	703	707	860	956	1059	1166	1282	1403	1520
USA	204	90	205	195	182	178	161	144	129	111	92

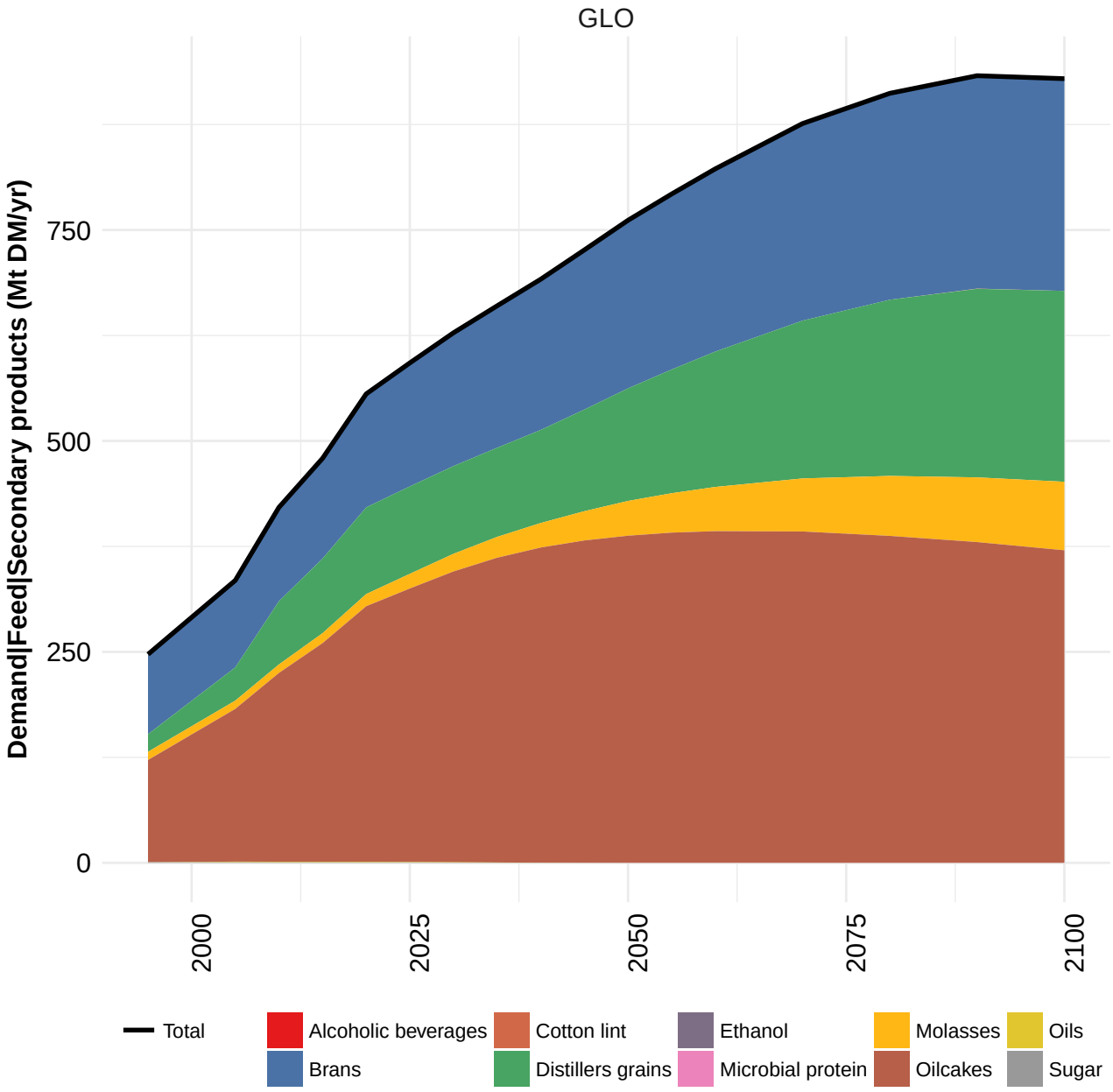
Table 311: MAgPIE new_input — Demand—Feed—Pasture (Mt DM/yr) [PART 1/2]

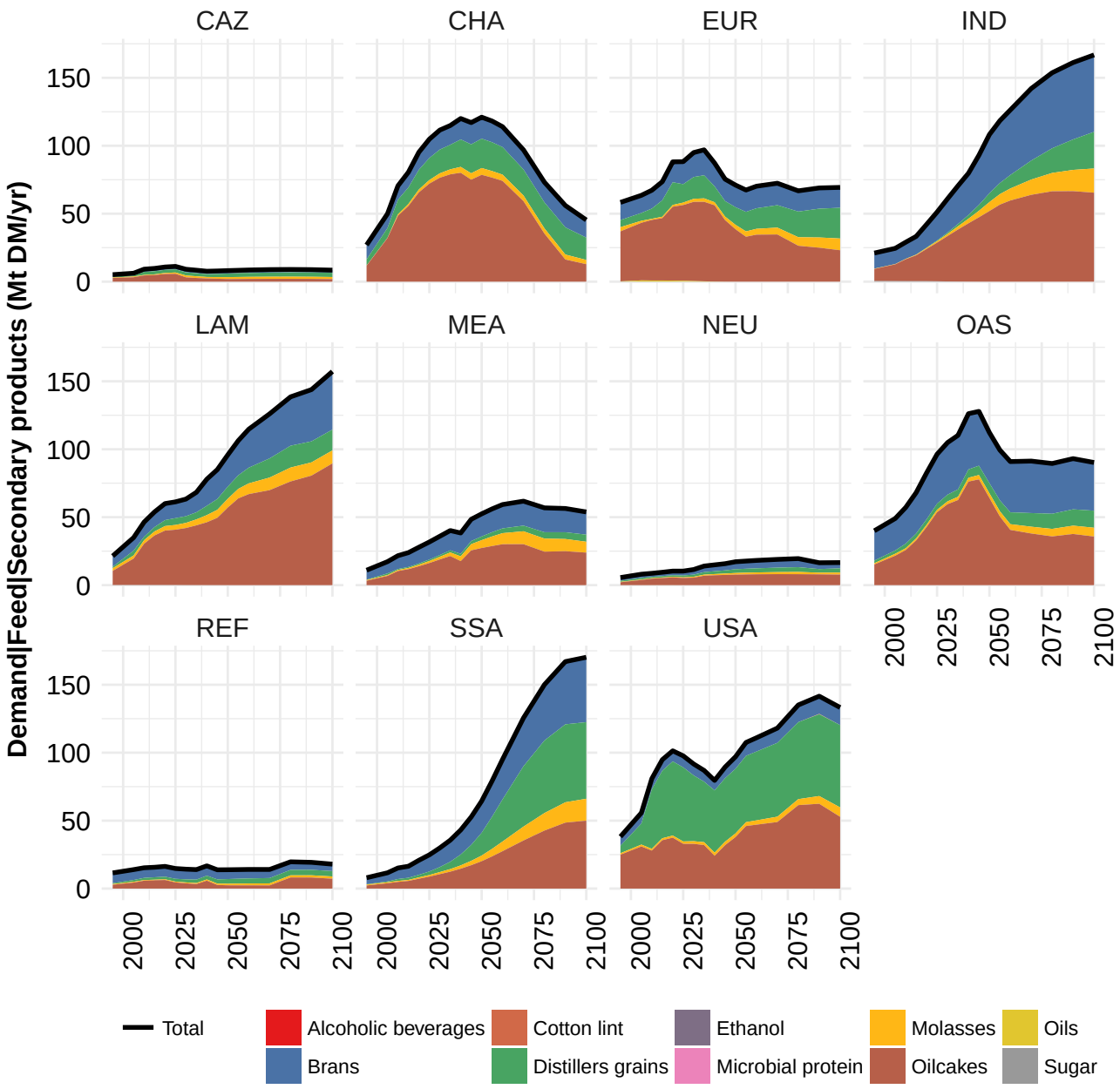
	2055	2060	2070	2080	2090	2100
GLO	7472	7421	7241	6840	6373	6102
CAZ	122	119	110	99	86	79
CHA	573	507	392	298	224	179
EUR	312	294	259	242	223	206
IND	2549	2614	2872	2969	2980	2980
LAM	1343	1324	1125	880	626	501
MEA	265	244	203	165	131	112
NEU	101	101	102	102	56	42
OAS	507	477	417	358	300	266
REF	32	28	22	18	14	11
SSA	1581	1627	1653	1633	1655	1648
USA	88	87	85	77	77	77

Table 312: MAgPIE new_input — Demand—Feed—Pasture (Mt DM/yr) [PART 2/2]

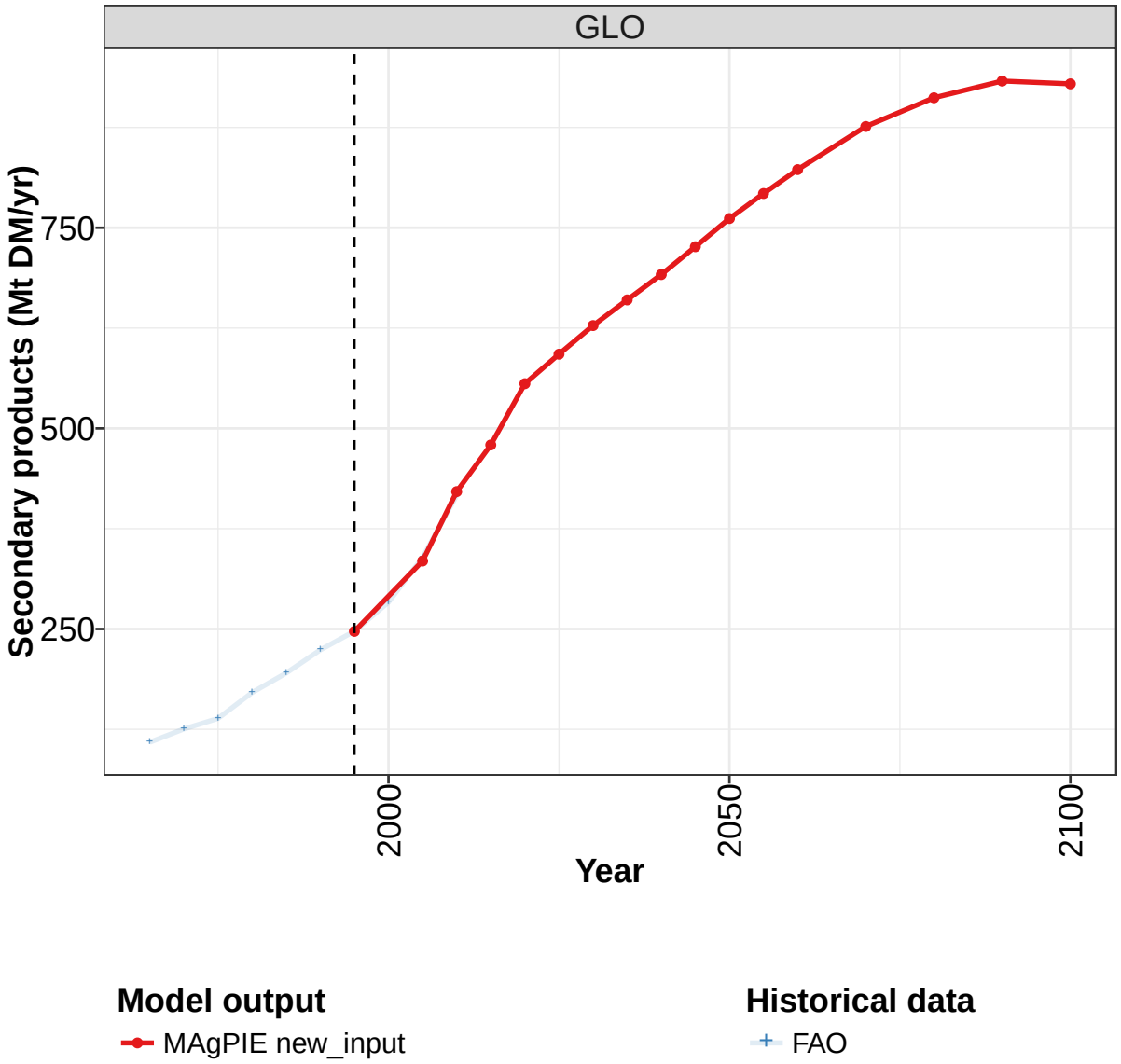
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3313	3466	3794	3883	3570	3875	4022	4100	4720	5316
CAZ	212	236	260	244	205	204	211	226	240	229
CHA	404	424	428	442	541	482	555	630	803	923
EUR	502	512	567	530	411	486	378	338	289	300
IND	290	283	282	304	346	345	345	329	580	662
LAM	509	580	637	753	694	855	959	1010	1184	1182
MEA	124	128	136	147	139	164	224	288	291	301
NEU	105	104	117	115	80	81	68	64	42	48
OAS	222	239	258	272	321	383	450	427	483	556
REF	263	239	320	258	253	262	141	117	124	208
SSA	331	356	364	428	438	490	477	534	594	696
USA	352	365	425	391	143	123	213	136	91	211

Table 313: FAO — Demand—Feed—Pasture (Mt DM/yr)


GLO
Demand|Feed|Secondary products (Mt DM/yr)
0
250
500
750
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Feed|Secondary products (Mt DM/yr)
0
50
100
150
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

6.7 Secondary products



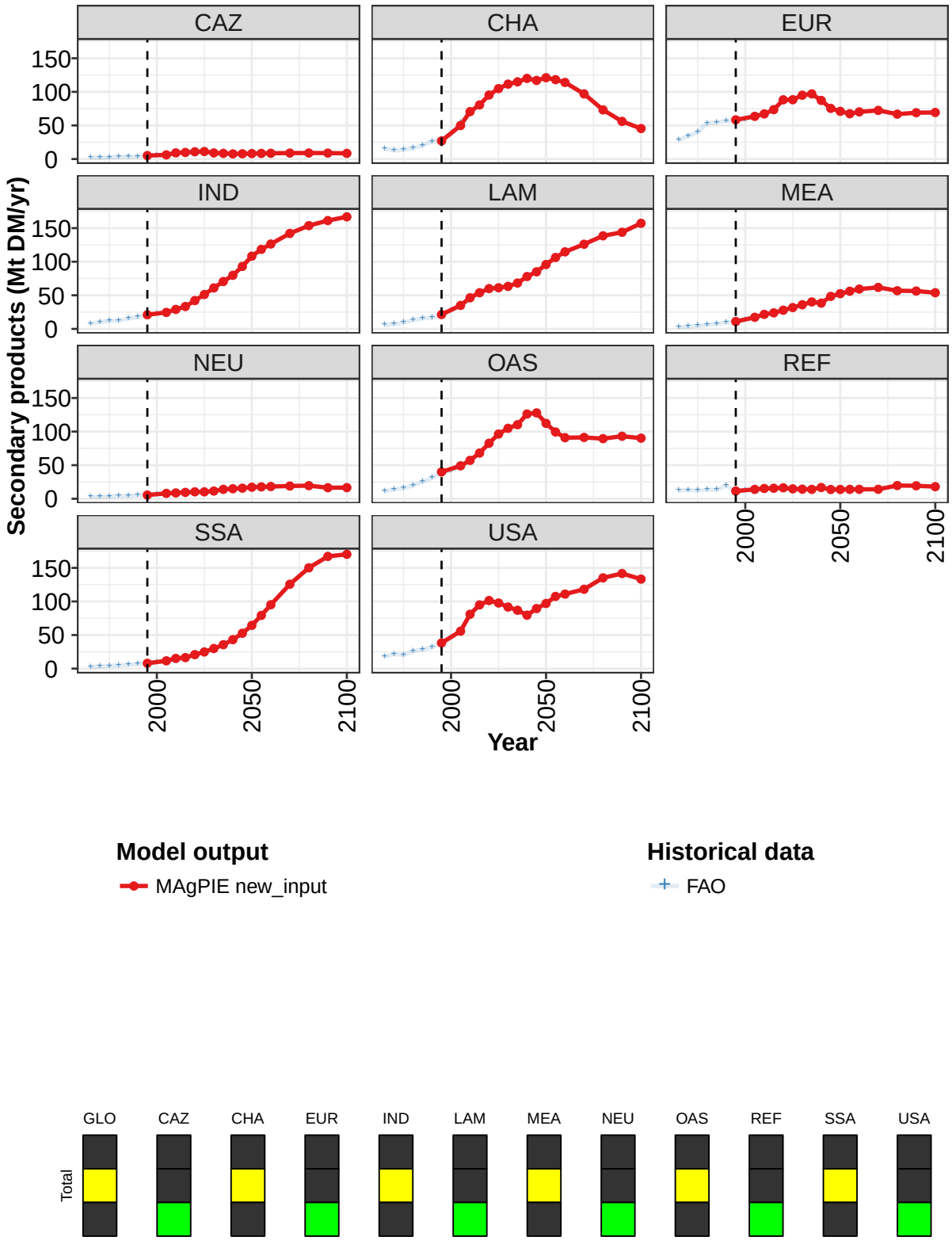


Figure 105: MAgPIE new_input — Demand—Feed—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	247	335	421	479	556	592	628	660	692	726	761
CAZ	5	6	9	10	11	11	9	8	8	8	8
CHA	27	50	71	81	95	105	112	115	120	117	121
EUR	58	64	67	74	88	88	95	97	87	75	71
IND	21	25	29	33	42	51	61	71	80	93	108
LAM	21	35	46	54	60	61	63	68	78	85	96
MEA	11	17	22	24	28	32	36	40	38	48	52
NEU	6	8	9	9	10	10	11	14	15	16	17
OAS	40	49	57	68	83	96	105	110	126	128	112
REF	12	14	15	16	16	15	14	14	17	14	14
SSA	8	12	15	16	21	25	30	36	43	53	64
USA	38	56	81	95	101	98	92	87	80	89	97

Table 314: MAgPIE new_input — Demand—Feed—Secondary products (Mt DM/yr) [PART 1/2]

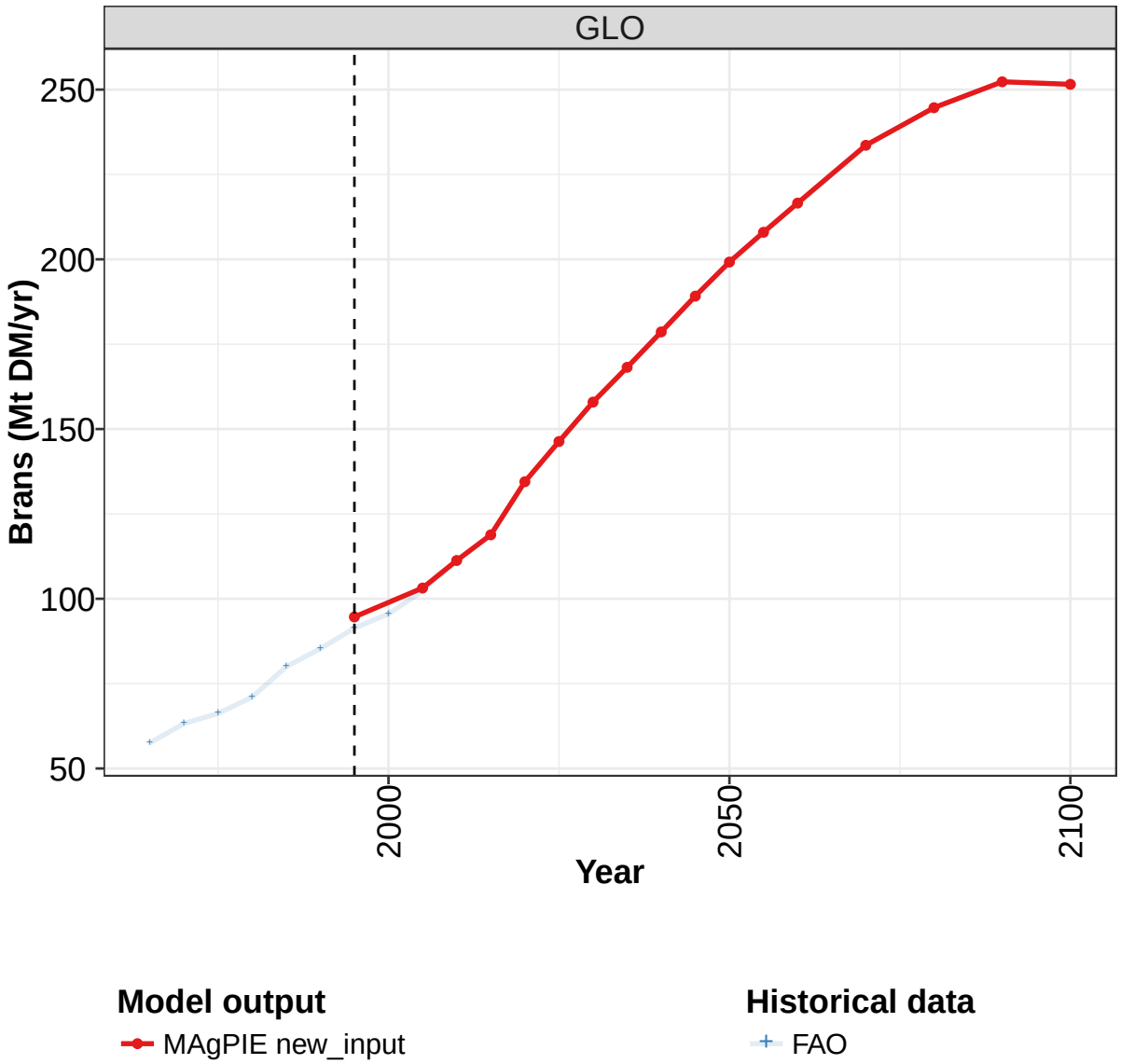
	2055	2060	2070	2080	2090	2100
GLO	793	822	876	912	933	929
CAZ	8	9	9	9	9	8
CHA	118	114	97	73	56	45
EUR	67	70	72	67	69	69
IND	118	126	142	154	161	167
LAM	106	115	126	139	144	157
MEA	56	59	62	57	56	54
NEU	18	18	19	20	16	17
OAS	99	91	91	89	93	90
REF	14	14	14	20	19	18
SSA	79	95	126	150	167	170
USA	108	111	118	135	142	133

Table 315: MAgPIE new_input — Demand—Feed—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	109	125	139	171	195	224	247	283	339	416
CAZ	2	2	3	3	4	4	5	6	7	9
CHA	15	13	14	16	20	26	29	38	54	72
EUR	28	34	40	53	55	57	58	59	62	66
IND	8	10	12	12	15	18	20	23	25	29
LAM	6	7	10	13	16	17	22	27	35	43
MEA	3	3	5	6	8	9	11	14	16	21
NEU	3	3	3	4	4	5	5	7	8	9
OAS	11	14	16	20	25	31	38	42	49	57
REF	12	13	12	13	14	19	11	12	14	15
SSA	3	3	4	5	6	7	8	10	13	15
USA	18	22	20	26	29	32	39	46	57	81

Table 316: FAO — Demand—Feed—Secondary products (Mt DM/yr)

6.7.1 Brans


GLO
250
200
150
100
50
Brans (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

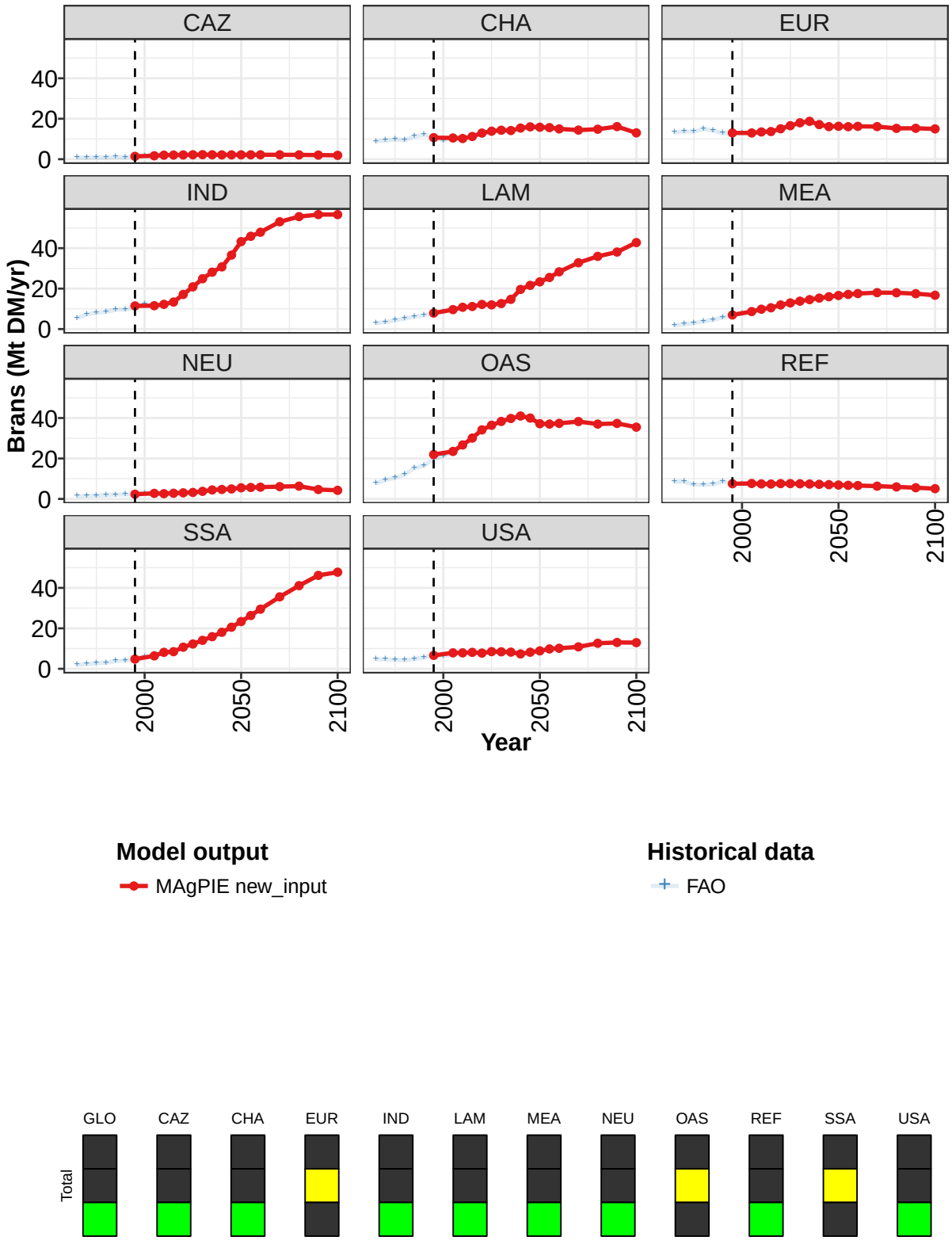


Figure 106: MAgPIE new_input — Demand—Feed—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	95	103	111	119	134	146	158	168	179	189	199
CAZ	1	2	2	2	2	2	2	2	2	2	2
CHA	11	11	10	11	13	14	14	14	15	16	16
EUR	13	13	13	14	15	17	18	19	17	16	16
IND	11	12	12	13	17	21	25	28	31	37	43
LAM	8	10	11	11	12	12	13	15	20	22	23
MEA	7	9	10	11	12	13	14	15	15	16	17
NEU	2	3	3	3	3	3	4	4	5	5	6
OAS	22	23	27	30	34	36	38	40	41	40	37
REF	8	8	7	7	8	8	7	7	7	7	7
SSA	5	6	8	8	11	12	14	16	18	21	23
USA	7	8	8	8	8	8	8	8	7	8	9

Table 317: MAgPIE new_input — Demand—Feed—Secondary products—Brans (Mt DM/yr) [PART 1/2]

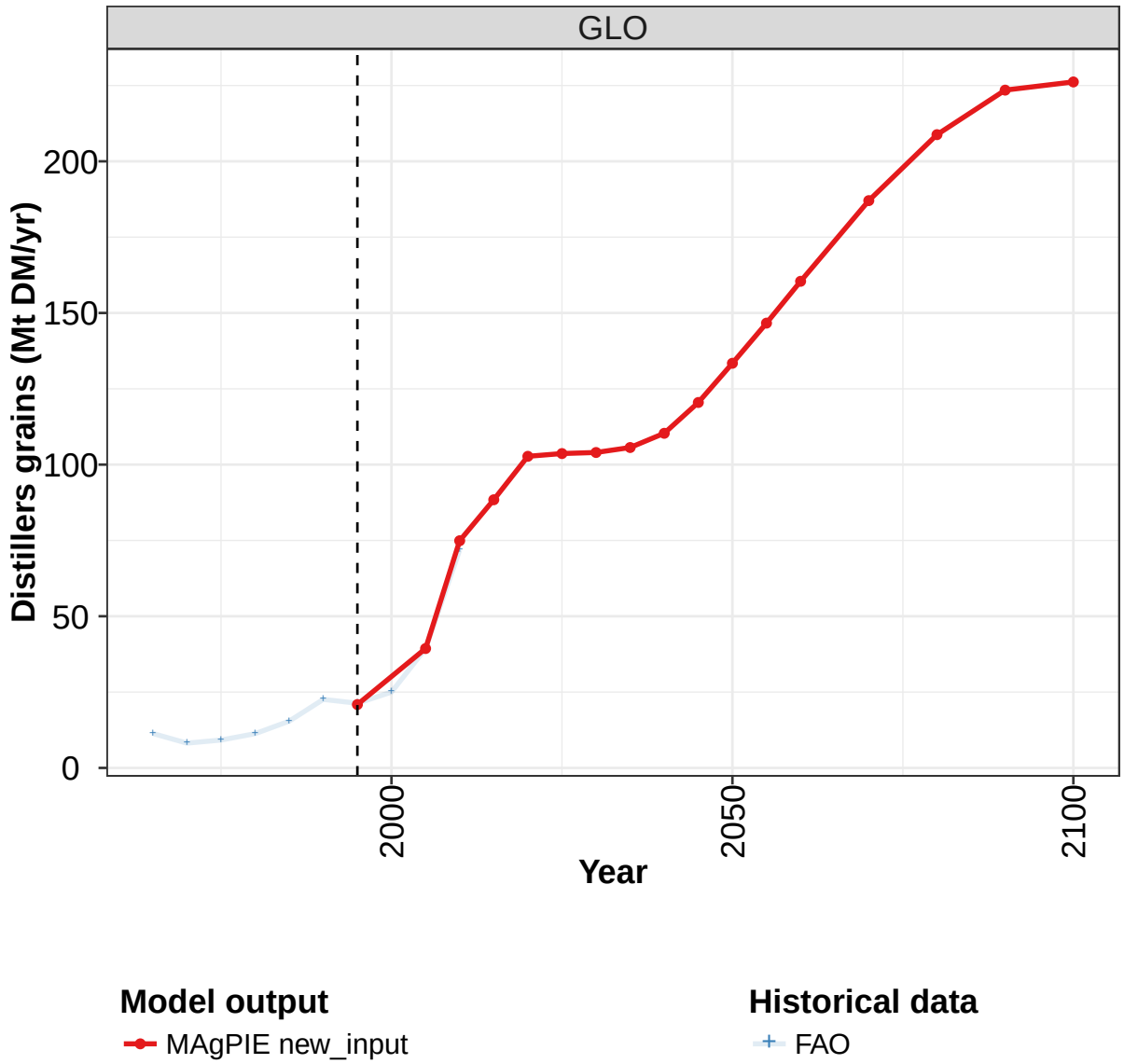
	2055	2060	2070	2080	2090	2100
GLO	208	217	234	245	252	252
CAZ	2	2	2	2	2	2
CHA	16	15	14	15	16	13
EUR	16	16	16	15	15	15
IND	46	48	53	56	57	57
LAM	26	28	33	36	38	43
MEA	17	18	18	18	17	17
NEU	6	6	6	6	5	4
OAS	37	37	38	37	37	35
REF	7	7	6	6	6	5
SSA	26	29	36	41	46	48
USA	10	10	11	13	13	13

Table 318: MAgPIE new_input — Demand—Feed—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	58	63	66	71	80	85	91	96	102	111
CAZ	1	1	1	1	1	1	1	2	2	2
CHA	9	9	10	9	11	12	11	9	11	11
EUR	13	14	14	15	14	13	13	13	13	13
IND	5	7	8	9	10	10	11	12	11	12
LAM	3	3	4	5	6	7	8	8	10	10
MEA	2	2	3	4	5	6	7	8	8	10
NEU	1	1	2	2	2	2	2	3	3	3
OAS	8	9	10	12	15	17	20	21	23	27
REF	9	9	7	7	7	9	7	7	7	7
SSA	2	2	3	3	4	4	5	6	7	8
USA	5	5	4	4	5	6	7	6	7	8

Table 319: FAO — Demand—Feed—Secondary products—Brans (Mt DM/yr)

6.7.2 Distillers grains



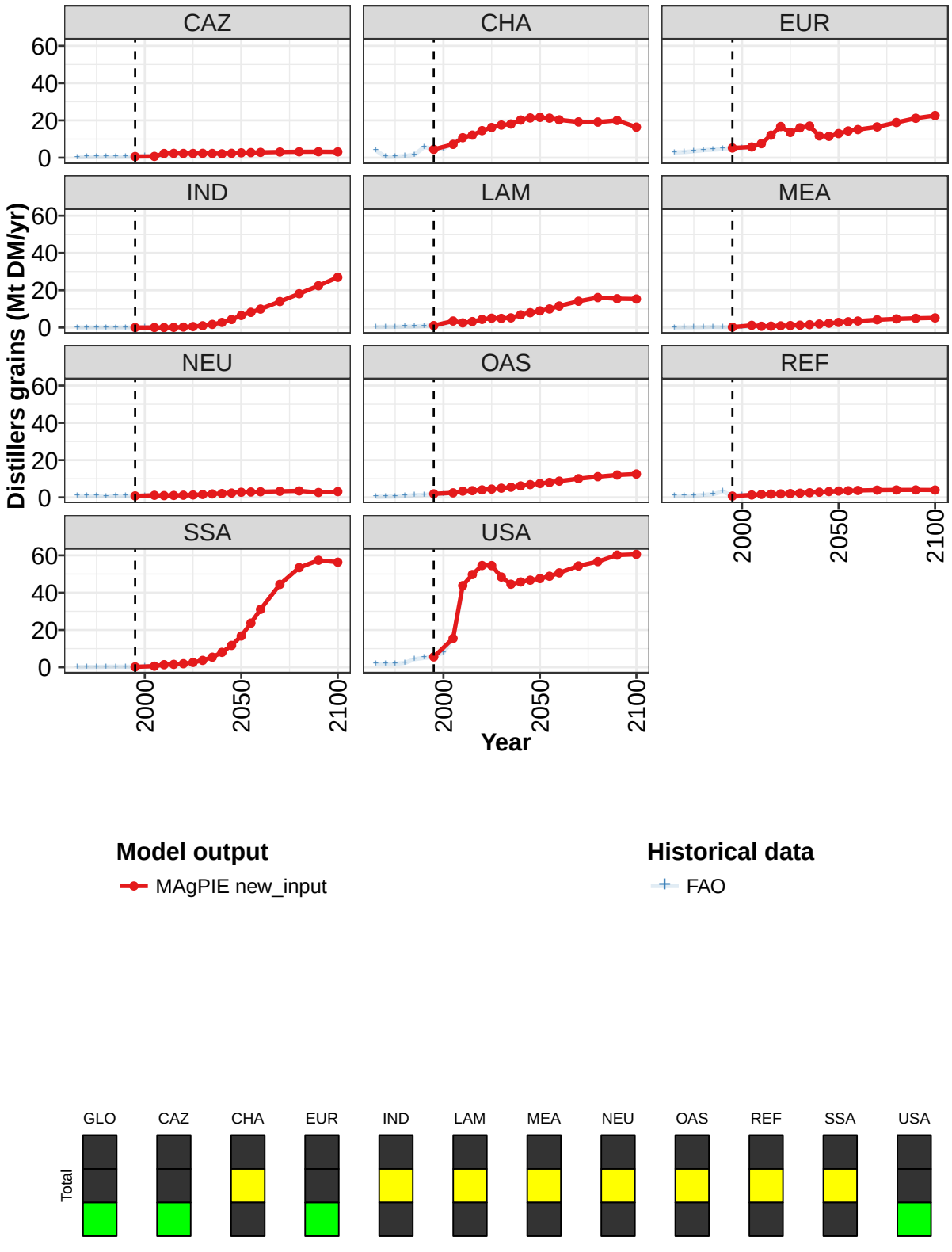


Figure 107: MAgPIE new_input — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	21	39	75	88	103	104	104	106	110	120	133
CAZ	1	1	2	2	2	2	2	2	2	2	3
CHA	4	7	11	12	15	16	18	18	20	21	22
EUR	5	6	8	12	17	14	16	17	12	11	13
IND	0	0	0	0	0	1	1	2	3	4	6
LAM	1	4	3	3	4	5	5	5	7	8	9
MEA	0	1	1	1	1	1	1	2	2	2	3
NEU	1	1	1	1	1	1	2	2	2	2	3
OAS	2	2	3	4	4	4	5	5	6	7	7
REF	1	1	2	2	2	2	2	3	3	3	3
SSA	0	1	1	2	2	3	4	5	8	12	17
USA	6	15	44	50	55	55	48	45	46	47	48

Table 320: MAgPIE new_input — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr) [PART 1/2]

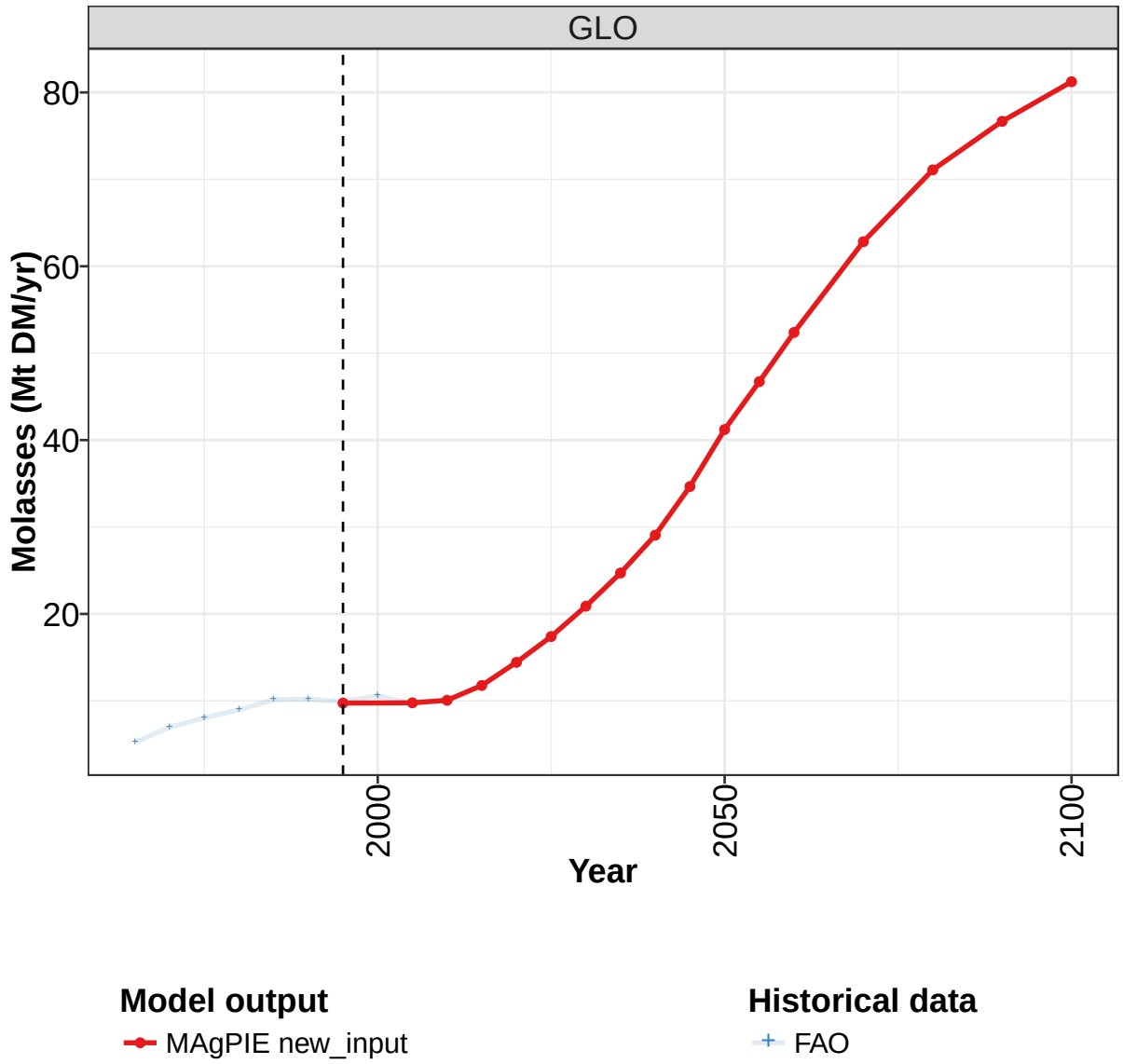
	2055	2060	2070	2080	2090	2100
GLO	147	160	187	209	223	226
CAZ	3	3	3	3	3	3
CHA	21	20	19	19	20	16
EUR	14	15	17	19	21	23
IND	8	10	14	18	22	27
LAM	10	12	14	16	15	15
MEA	3	4	4	5	5	5
NEU	3	3	3	3	3	3
OAS	8	9	10	11	12	13
REF	4	4	4	4	4	4
SSA	24	31	44	53	57	56
USA	49	51	54	57	60	61

Table 321: MAgPIE new_input — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.3	8.2	9.2	11.3	15.4	22.6	21.3	25.0	39.3	71.8
CAZ	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.8	0.7	1.1
CHA	4.0	0.4	0.6	0.8	1.6	5.7	4.8	4.7	7.9	11.1
EUR	2.8	3.0	3.5	4.0	4.3	4.7	5.3	5.2	5.7	7.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.3	0.4	0.5	0.6	0.9	1.1	1.7	3.6	2.5
MEA	0.0	0.1	0.1	0.2	0.3	0.2	0.3	0.4	0.5	0.7
NEU	0.9	0.8	0.9	0.6	0.6	0.7	0.8	0.9	1.1	1.0
OAS	0.3	0.4	0.5	0.8	1.2	1.3	1.9	1.8	2.4	3.4
REF	0.8	0.8	0.9	1.3	1.7	3.2	0.7	1.3	1.3	1.6
SSA	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.6	1.4
USA	1.8	1.8	1.9	2.3	4.3	5.0	5.6	7.9	15.5	41.7

Table 322: FAO — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr)

6.7.3 Molasses



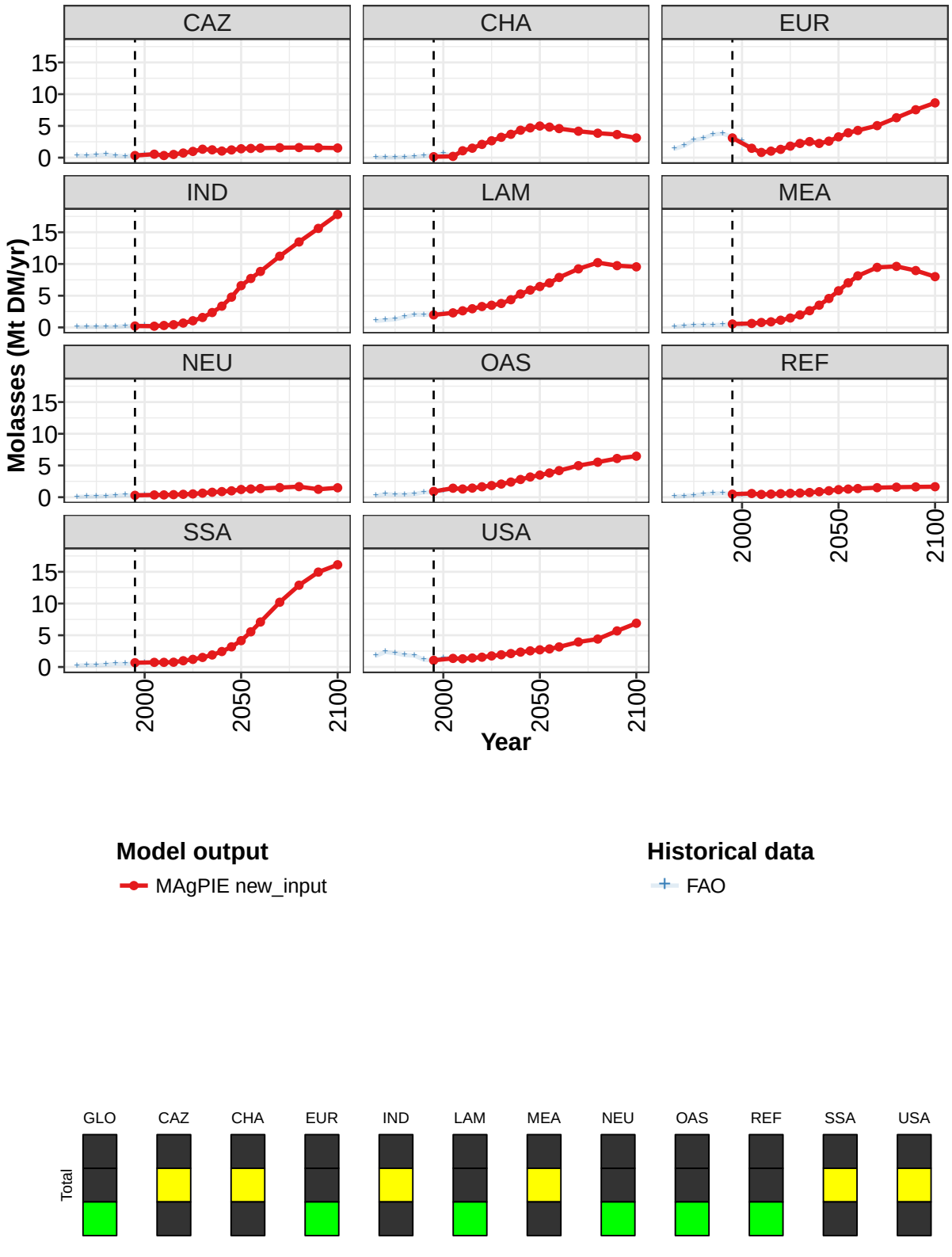


Figure 108: MAgPIE new_input — Demand—Feed—Secondary products—Molasses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.7	9.8	10.1	11.8	14.4	17.4	20.9	24.7	29.1	34.7	41.2
CAZ	0.3	0.5	0.3	0.5	0.7	1.0	1.3	1.2	1.0	1.2	1.4
CHA	0.1	0.2	1.1	1.5	2.1	2.7	3.2	3.7	4.3	4.7	5.0
EUR	3.1	1.5	0.8	1.0	1.3	1.8	2.2	2.5	2.2	2.6	3.3
IND	0.2	0.2	0.3	0.4	0.7	1.1	1.6	2.3	3.4	4.8	6.6
LAM	2.0	2.3	2.6	2.9	3.3	3.5	3.8	4.4	5.3	5.9	6.4
MEA	0.5	0.6	0.8	0.9	1.1	1.5	2.0	2.6	3.5	4.6	5.8
NEU	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.9	1.0	1.2
OAS	0.9	1.4	1.3	1.4	1.6	1.8	2.1	2.4	2.8	3.2	3.5
REF	0.5	0.6	0.4	0.5	0.6	0.6	0.7	0.7	0.9	1.0	1.2
SSA	0.7	0.7	0.7	0.8	1.0	1.2	1.5	1.9	2.4	3.2	4.2
USA	1.1	1.4	1.3	1.4	1.5	1.7	1.9	2.1	2.3	2.5	2.7

Table 323: MAgPIE new_input — Demand—Feed—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

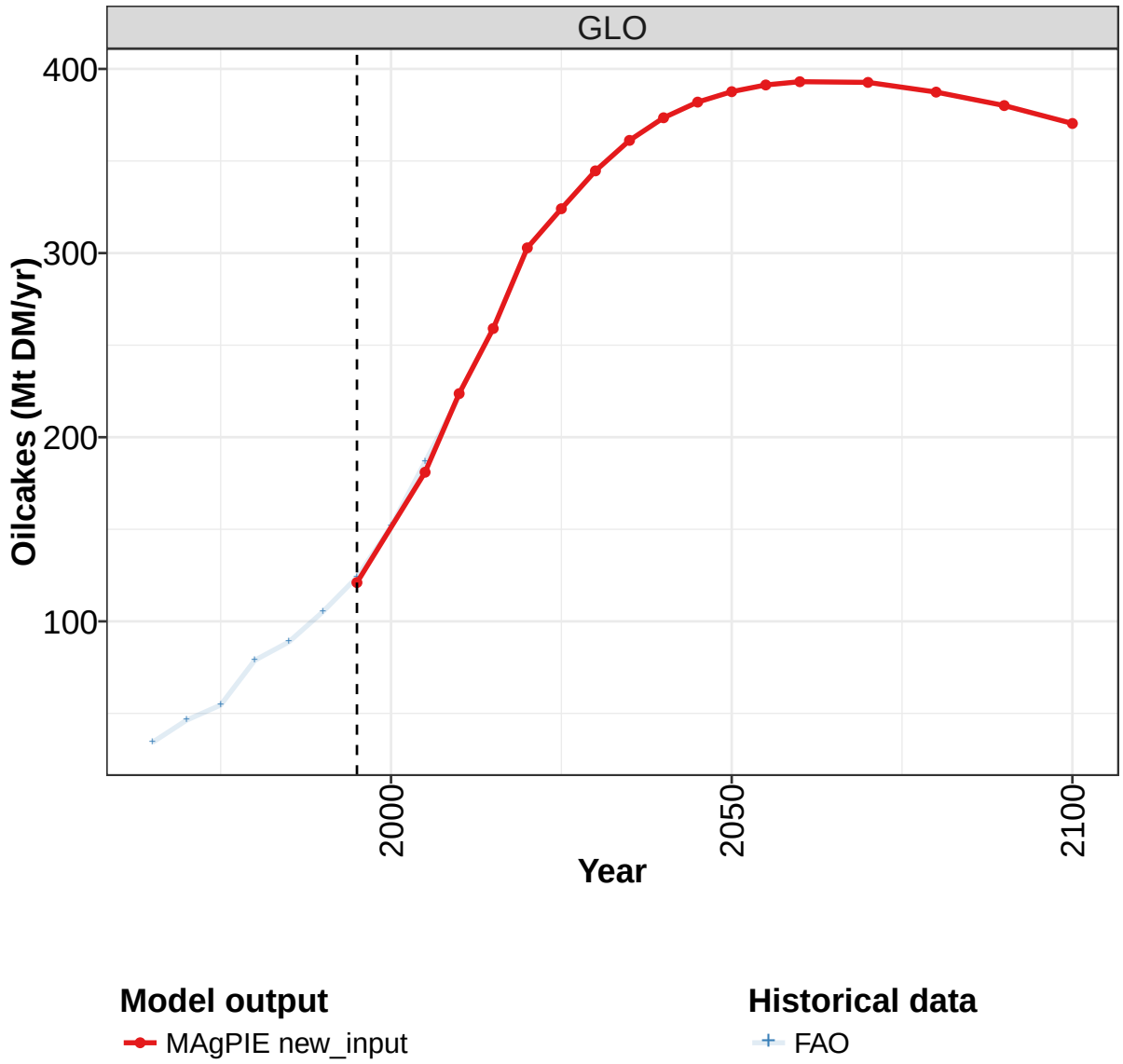
	2055	2060	2070	2080	2090	2100
GLO	46.7	52.4	62.8	71.1	76.7	81.2
CAZ	1.5	1.5	1.6	1.6	1.6	1.5
CHA	4.8	4.6	4.2	3.9	3.6	3.1
EUR	3.9	4.3	5.0	6.3	7.5	8.6
IND	7.7	8.8	11.2	13.5	15.6	17.8
LAM	7.0	7.9	9.2	10.2	9.7	9.6
MEA	7.0	8.1	9.5	9.6	9.0	8.0
NEU	1.3	1.4	1.5	1.7	1.2	1.5
OAS	3.8	4.2	5.0	5.5	6.1	6.5
REF	1.3	1.4	1.5	1.6	1.6	1.7
SSA	5.5	7.1	10.2	12.9	15.0	16.1
USA	2.8	3.2	3.9	4.4	5.7	6.9

Table 324: MAgPIE new_input — Demand—Feed—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.2	7.0	8.1	9.0	10.1	10.2	9.9	10.6	9.6	10.1
CAZ	0.3	0.3	0.4	0.5	0.3	0.2	0.4	0.5	0.5	0.4
CHA	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.7	0.3	1.1
EUR	1.4	1.9	2.8	3.1	3.7	3.8	3.2	2.6	1.4	0.8
IND	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3
LAM	1.0	1.2	1.3	1.6	2.0	2.0	2.1	2.2	2.4	2.5
MEA	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.4	0.5	0.7
NEU	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.3	0.4
OAS	0.2	0.5	0.4	0.4	0.5	0.8	0.8	1.0	1.4	1.3
REF	0.1	0.2	0.3	0.5	0.6	0.6	0.5	0.4	0.5	0.4
SSA	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.7	0.7	0.7
USA	1.8	2.4	2.2	1.9	1.8	1.1	1.1	1.4	1.4	1.4

Table 325: FAO — Demand—Feed—Secondary products—Molasses (Mt DM/yr)

6.7.4 Oilcakes



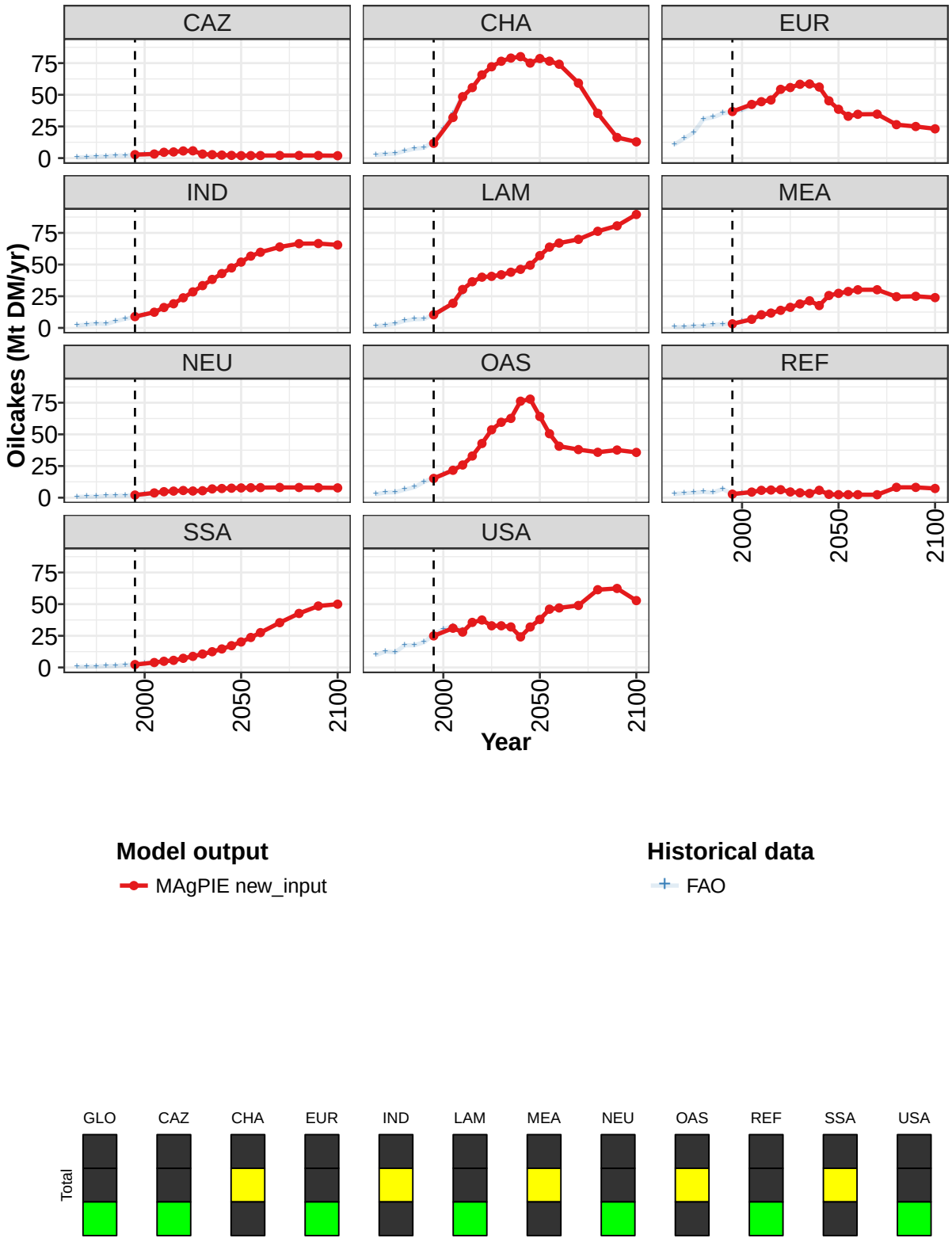


Figure 109: MAgPIE new_input — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	121	181	224	259	303	324	345	361	373	382	388
CAZ	3	3	5	5	6	6	3	3	2	2	2
CHA	12	32	49	56	66	72	76	79	80	75	79
EUR	37	42	45	46	54	56	58	59	56	45	39
IND	9	12	16	19	24	28	33	38	43	47	52
LAM	10	19	30	36	40	41	42	44	46	50	57
MEA	3	7	10	12	14	16	19	21	18	26	27
NEU	2	4	5	5	6	5	5	7	7	7	8
OAS	15	22	26	33	43	54	60	63	76	78	64
REF	3	4	6	6	6	5	4	3	6	3	2
SSA	2	4	5	6	7	9	11	12	15	17	20
USA	25	31	28	36	37	33	33	32	24	32	38

Table 326: MAgPIE new_input — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

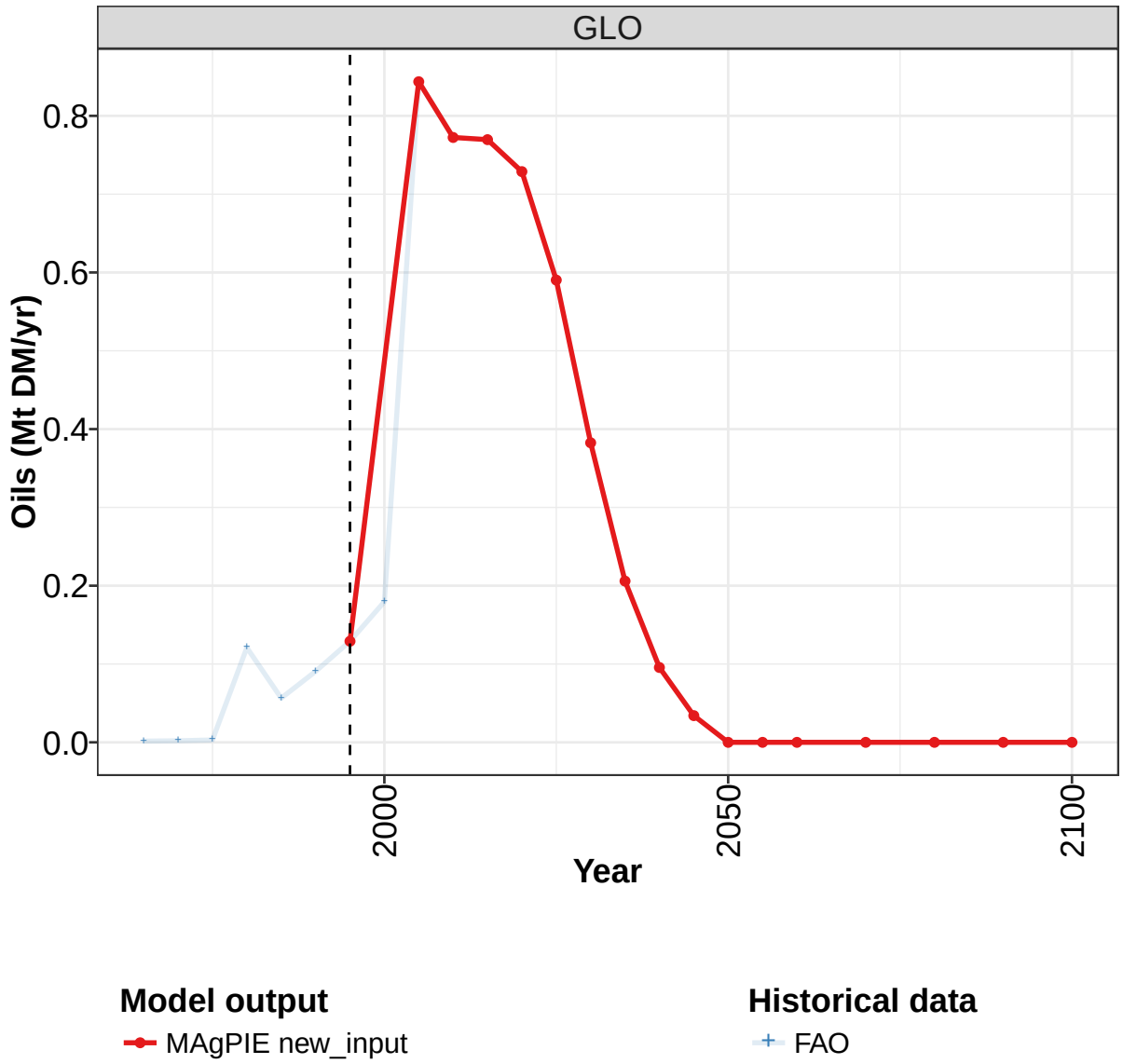
	2055	2060	2070	2080	2090	2100
GLO	391	393	393	387	380	370
CAZ	2	2	2	2	2	2
CHA	77	74	59	35	16	13
EUR	33	35	35	26	25	23
IND	57	60	64	67	67	65
LAM	64	67	70	76	81	90
MEA	29	30	30	25	25	24
NEU	8	8	8	8	8	8
OAS	51	41	38	36	38	36
REF	2	2	2	8	8	7
SSA	24	28	35	43	49	50
USA	46	47	49	61	62	53

Table 327: MAgPIE new_input — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	34	46	55	79	89	105	124	151	187	222
CAZ	0	1	1	1	2	2	3	3	4	5
CHA	2	3	3	6	7	8	13	23	35	49
EUR	11	15	20	31	32	35	37	38	42	44
IND	2	3	3	3	5	7	9	10	13	16
LAM	1	2	3	6	7	7	10	15	19	27
MEA	1	1	1	2	2	3	3	5	7	10
NEU	1	1	1	1	1	2	2	3	4	5
OAS	3	4	4	6	8	12	16	18	22	26
REF	3	3	4	4	4	7	3	3	4	6
SSA	0	1	1	1	1	2	2	3	4	5
USA	10	13	12	17	18	20	26	30	33	30

Table 328: FAO — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr)

6.7.5 Oils


GLO
Oils (Mt DM/yr)
0.0
0.2
0.4
0.6
0.8
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

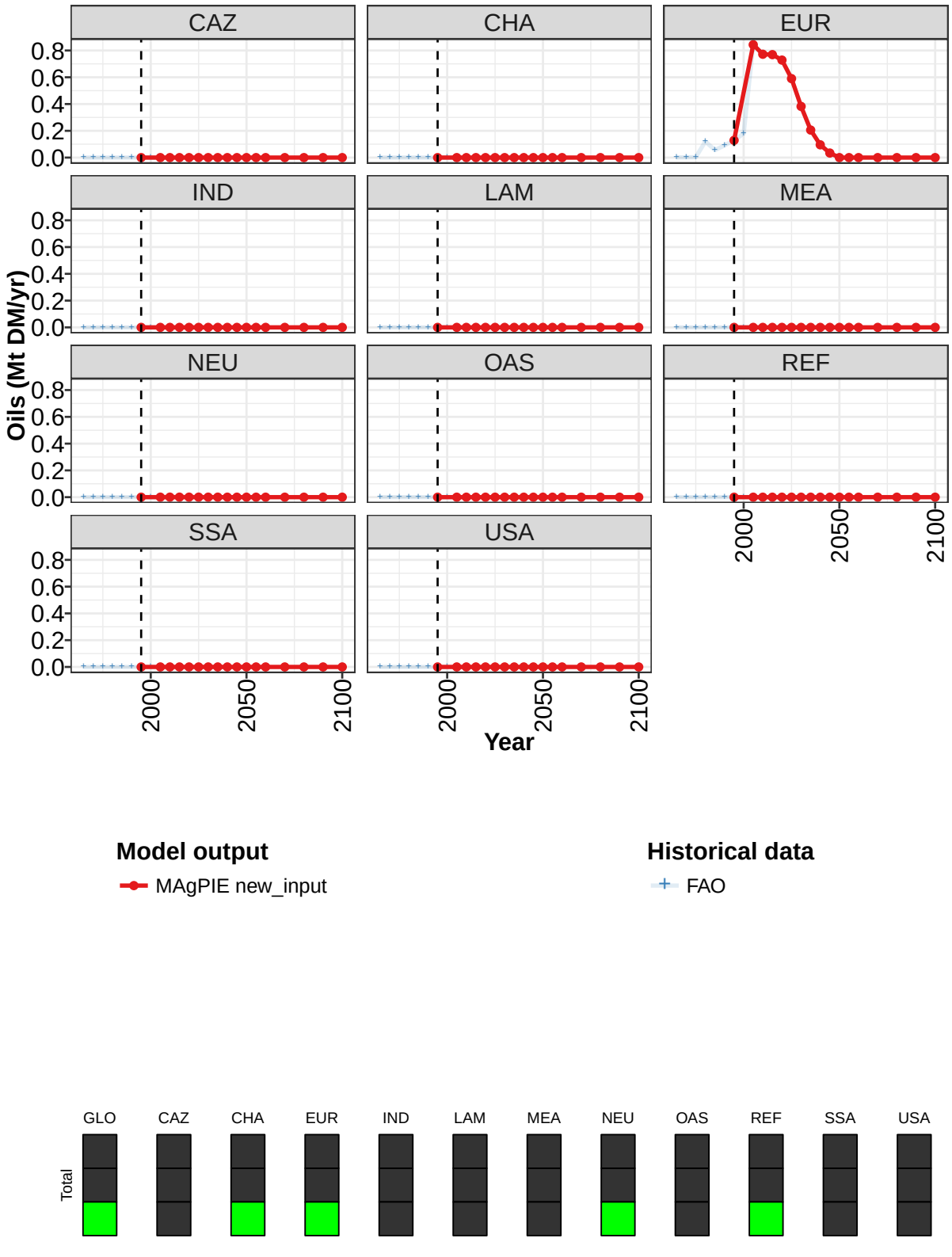


Figure 110: MAgPIE new_input — Demand—Feed—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.129	0.844	0.772	0.770	0.729	0.590	0.383	0.206	0.096	0.034	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.129	0.844	0.772	0.769	0.729	0.590	0.382	0.206	0.096	0.034	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 329: MAgPIE new_input — Demand—Feed—Secondary products—Oils (Mt DM/yr) [PART 1/2]

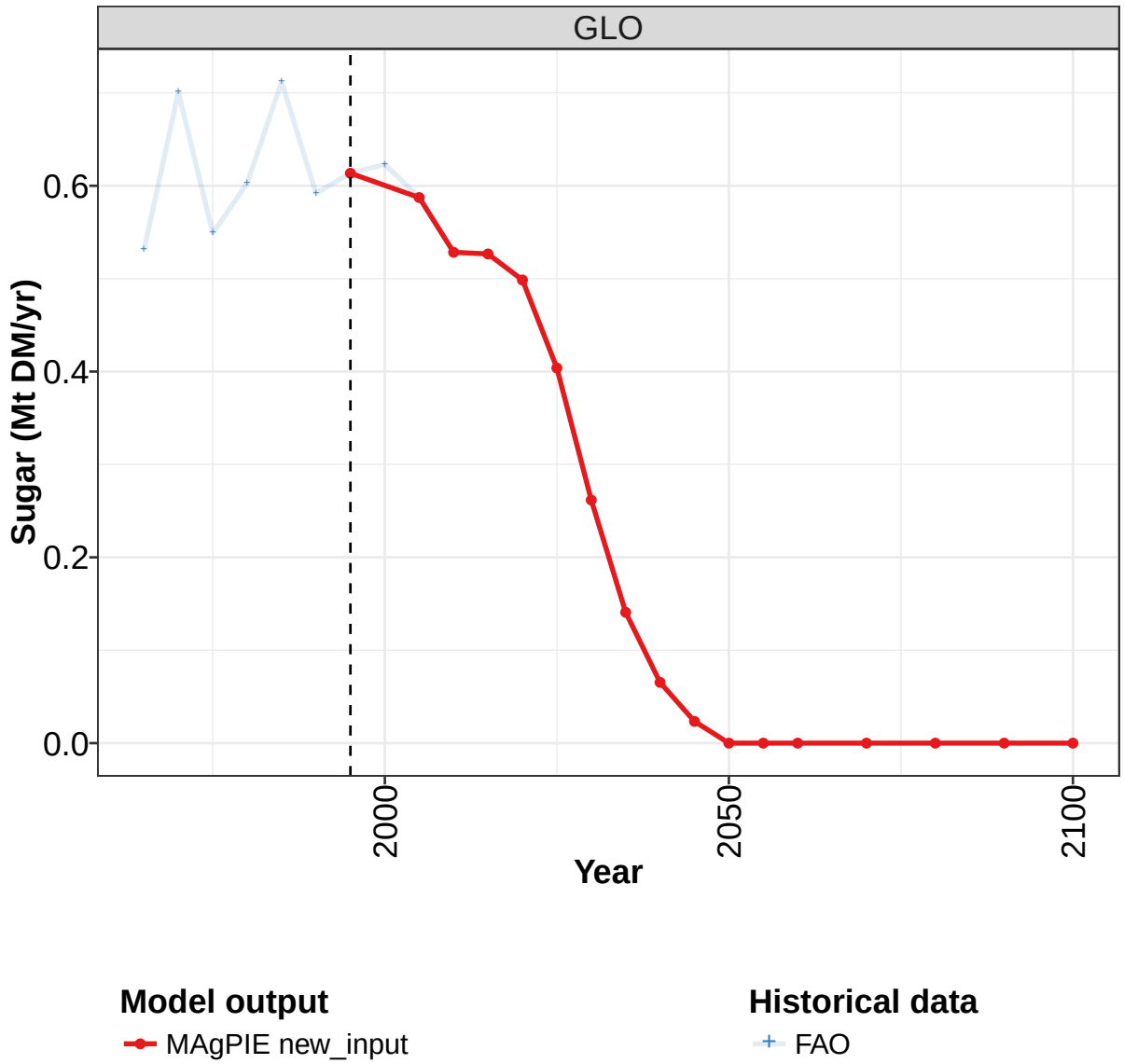
	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

Table 330: MAgPIE new_input — Demand—Feed—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.002	0.002	0.003	0.121	0.056	0.091	0.129	0.179	0.844	0.772
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.002	0.002	0.003	0.120	0.056	0.091	0.129	0.179	0.844	0.772
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 331: FAO — Demand—Feed—Secondary products—Oils (Mt DM/yr)

6.7.6 Sugar


GLO
Sugar (Mt DM/yr)
0.0
0.2
0.4
0.6
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

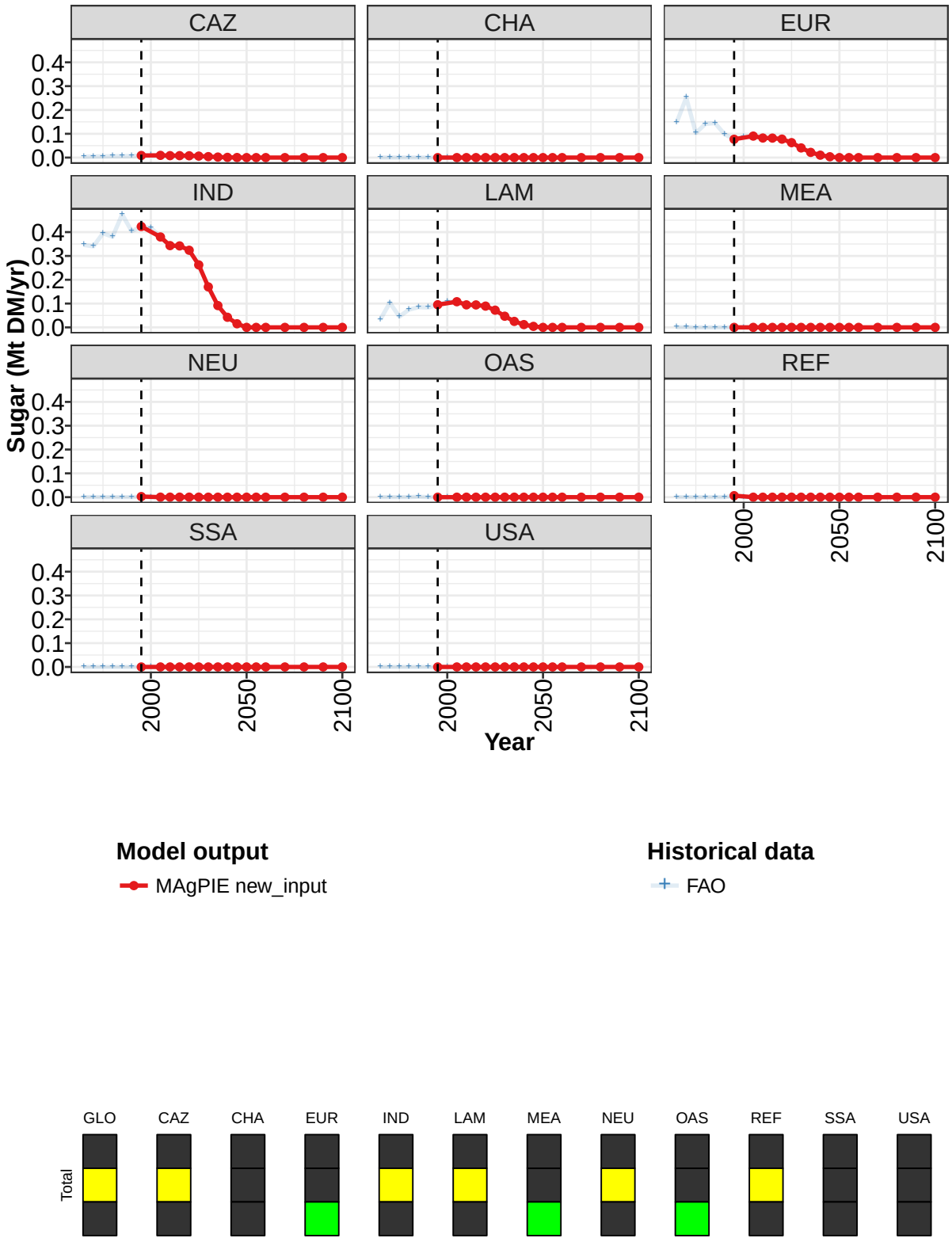


Figure 111: MAgPIE new_input — Demand—Feed—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.613	0.587	0.528	0.527	0.499	0.404	0.262	0.141	0.065	0.023	0.000
CAZ	0.009	0.009	0.008	0.008	0.008	0.006	0.004	0.002	0.001	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.077	0.090	0.082	0.082	0.078	0.063	0.041	0.022	0.010	0.004	0.000
IND	0.424	0.380	0.343	0.342	0.324	0.262	0.170	0.091	0.043	0.015	0.000
LAM	0.095	0.108	0.095	0.094	0.089	0.072	0.047	0.025	0.012	0.004	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 332: MAgPIE new_input — Demand—Feed—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

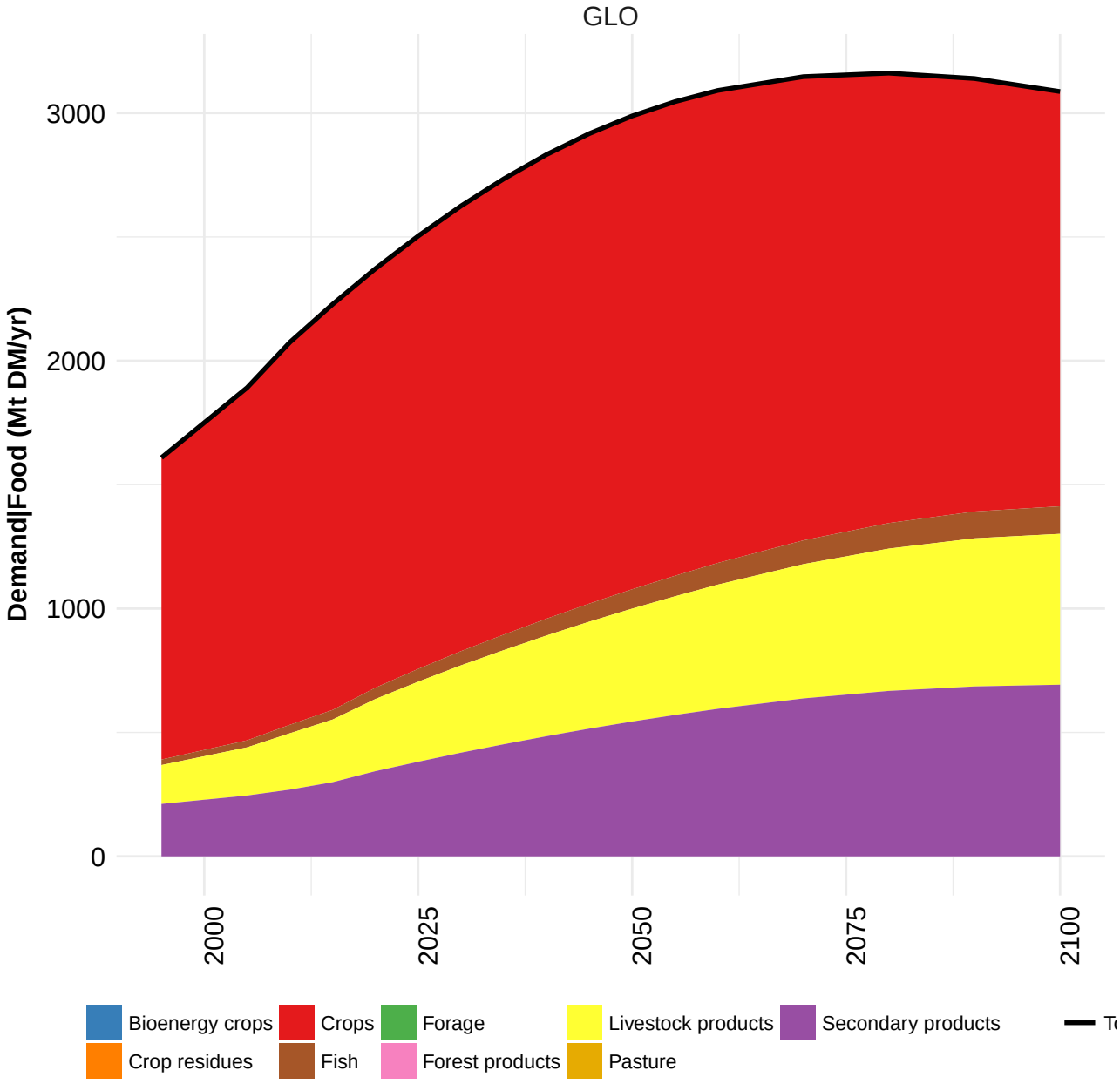
	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

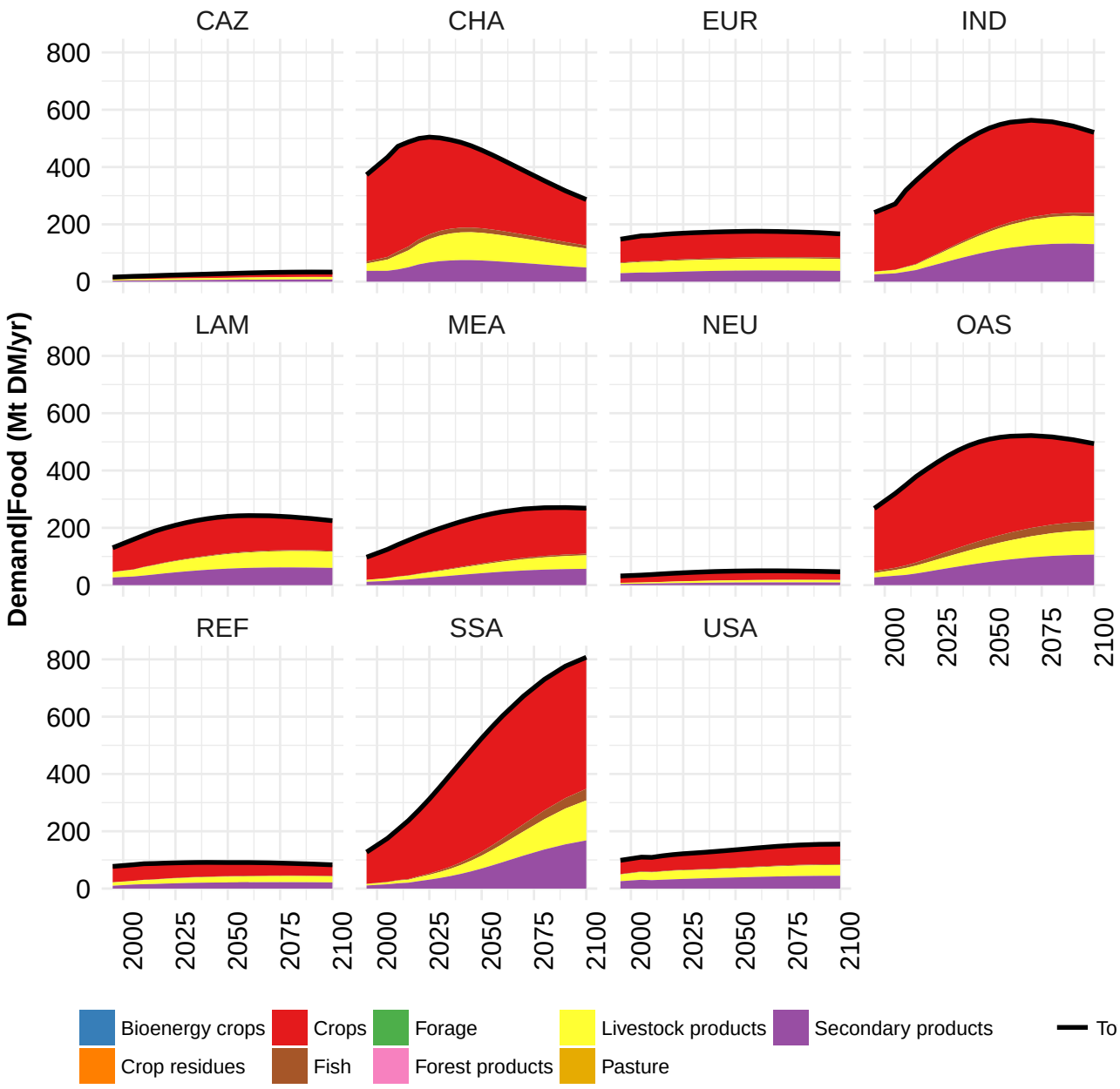
Table 333: MAgPIE new_input — Demand—Feed—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

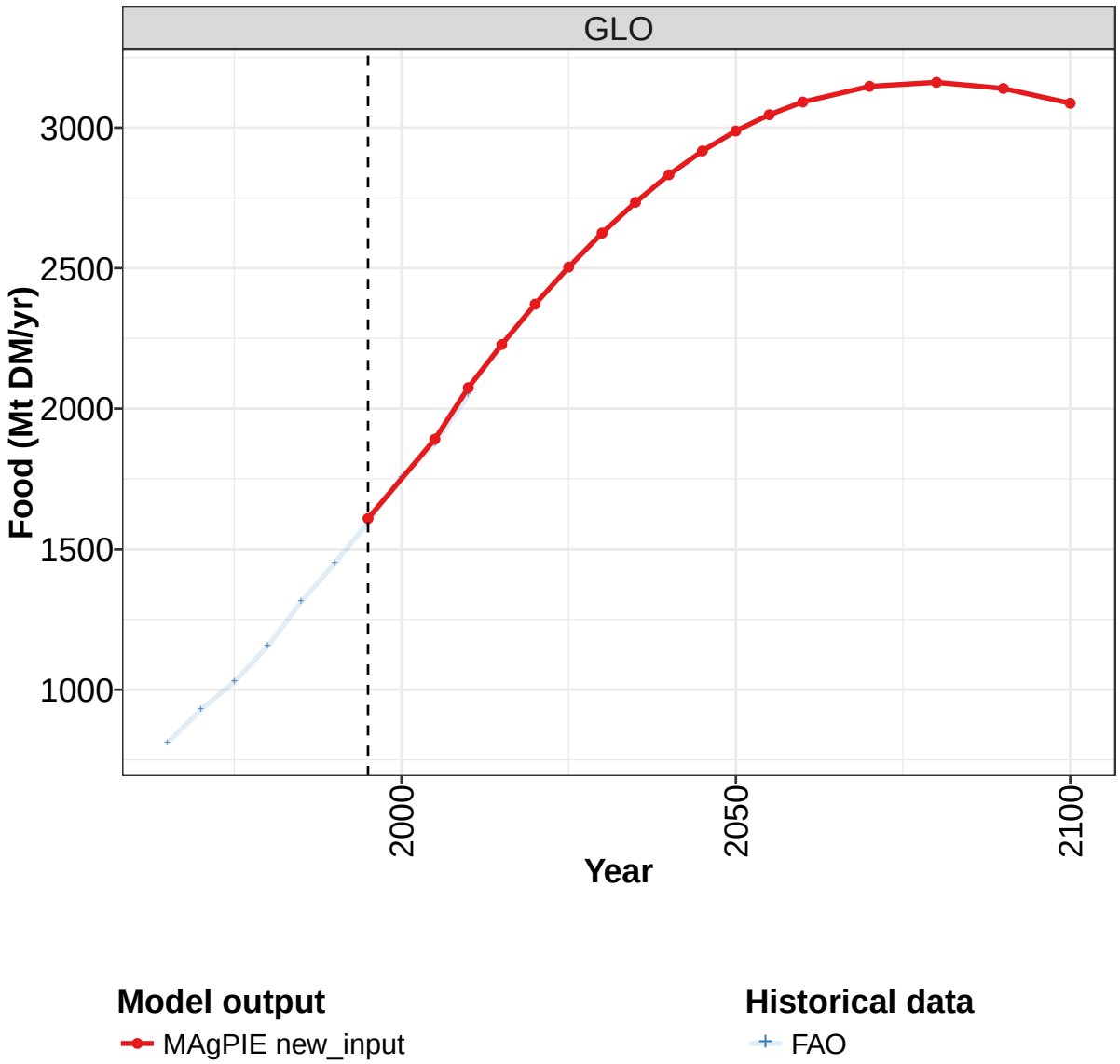
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.531	0.701	0.549	0.603	0.712	0.592	0.614	0.623	0.587	0.528
CAZ	0.004	0.005	0.005	0.006	0.006	0.007	0.009	0.010	0.009	0.008
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.147	0.252	0.103	0.141	0.145	0.098	0.077	0.087	0.090	0.082
IND	0.346	0.340	0.395	0.381	0.474	0.404	0.424	0.418	0.380	0.343
LAM	0.033	0.103	0.045	0.075	0.085	0.083	0.095	0.108	0.108	0.095
MEA	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 334: FAO — Demand—Feed—Secondary products—Sugar (Mt DM/yr)

7 Food


GLO
Demand|Food (Mt DM/yr)
3000
2000
1000
0
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Food (Mt DM/yr)
0
200
400
600
800
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


GLO
Food (Mt DM/yr)
3000
2500
2000
1500
1000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

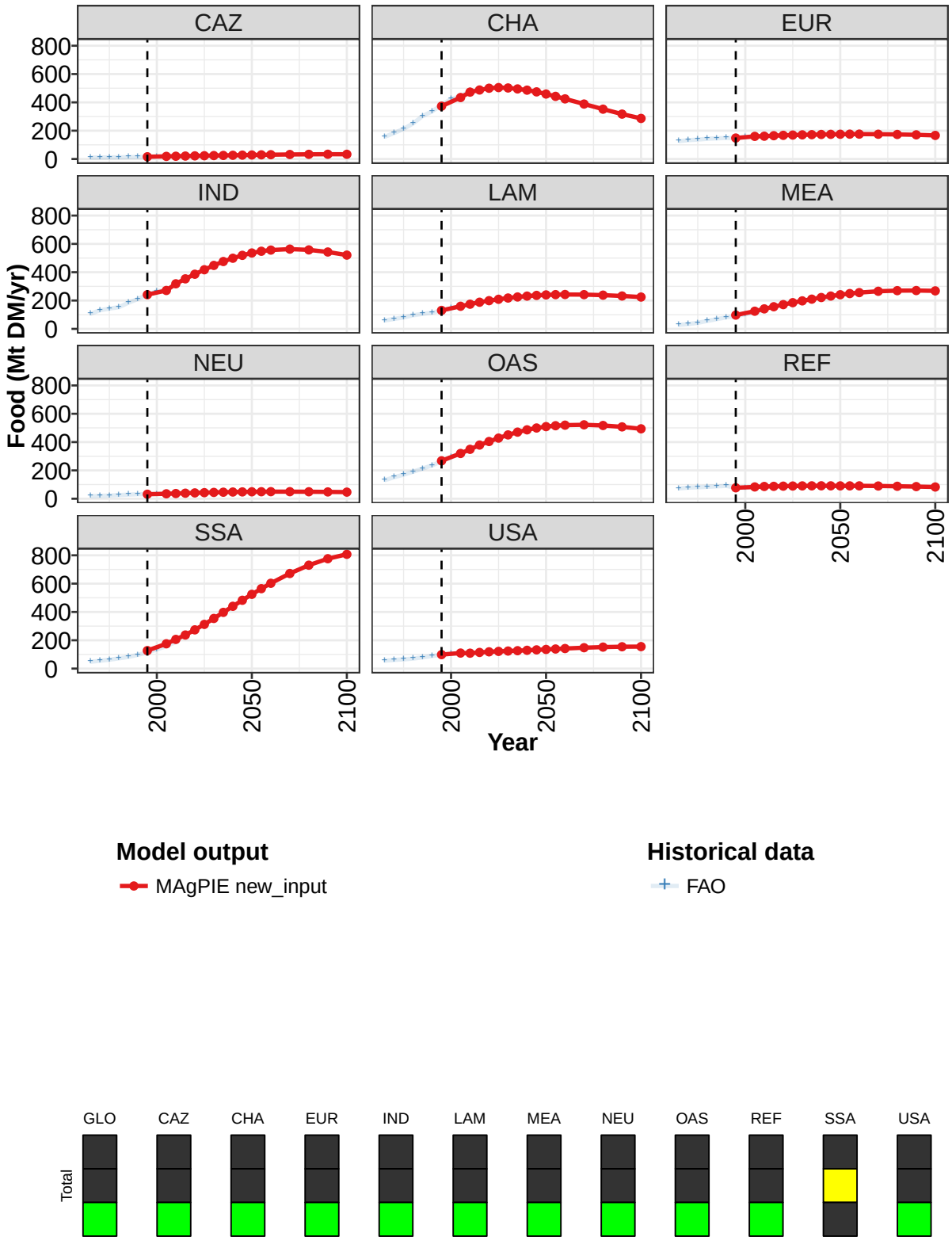


Figure 112: MAgPIE new_input — Demand—Food (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1609	1891	2075	2228	2372	2504	2625	2734	2832	2917	2988
CAZ	16	19	20	21	22	23	24	25	26	27	28
CHA	373	434	472	487	500	504	502	495	486	474	459
EUR	148	160	161	165	167	169	171	172	173	174	175
IND	241	271	318	353	386	418	448	476	499	519	536
LAM	130	160	174	188	199	209	218	225	232	236	240
MEA	97	125	141	156	171	185	198	210	221	232	241
NEU	32	35	37	39	41	43	45	46	47	48	49
OAS	268	320	349	379	404	428	451	470	487	500	509
REF	77	83	87	87	89	90	91	91	91	91	91
SSA	127	175	206	237	274	312	354	397	440	483	525
USA	99	110	109	114	118	122	124	126	129	132	135

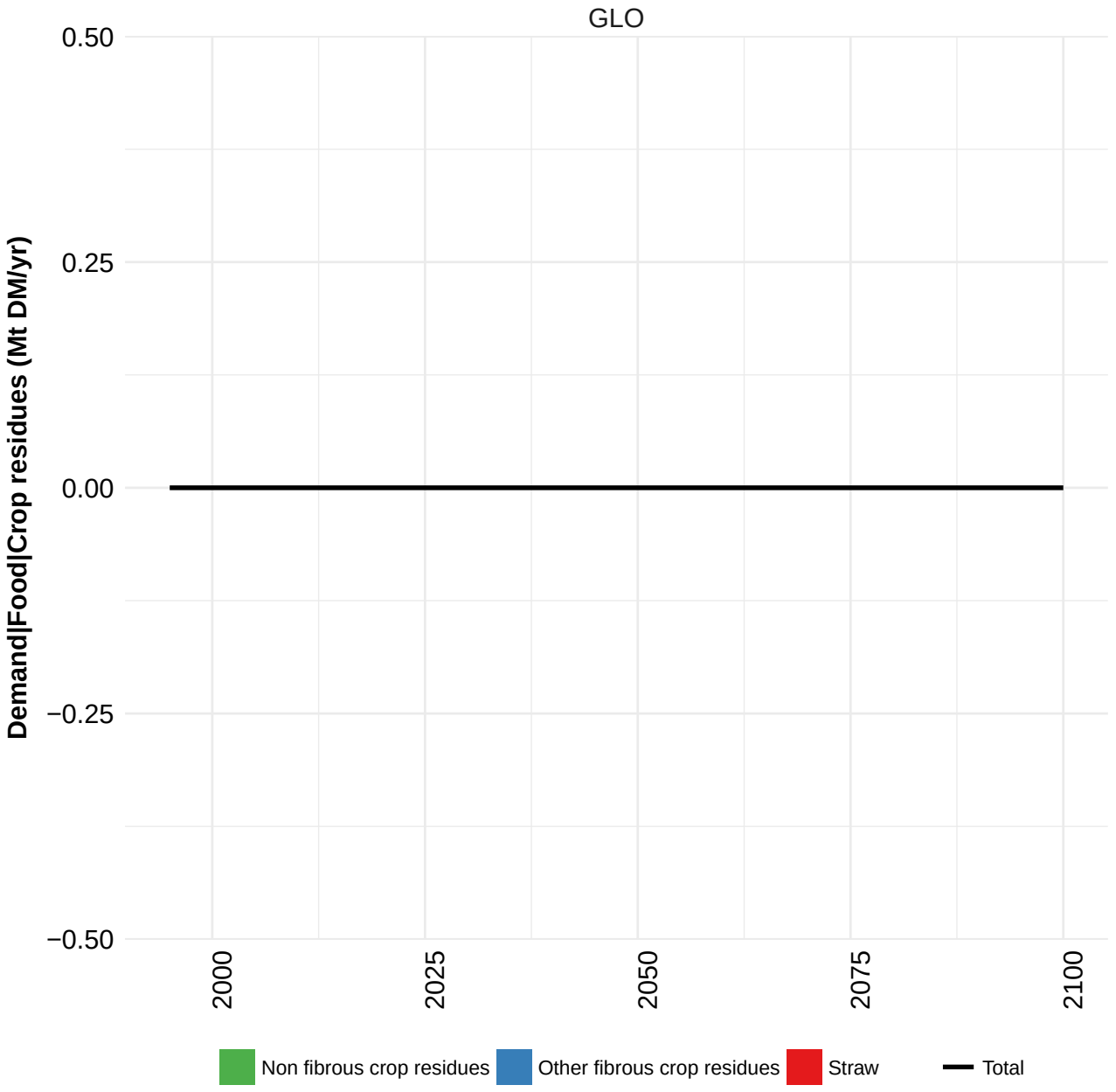
Table 335: MAgPIE new_input — Demand—Food (Mt DM/yr) [PART 1/2]

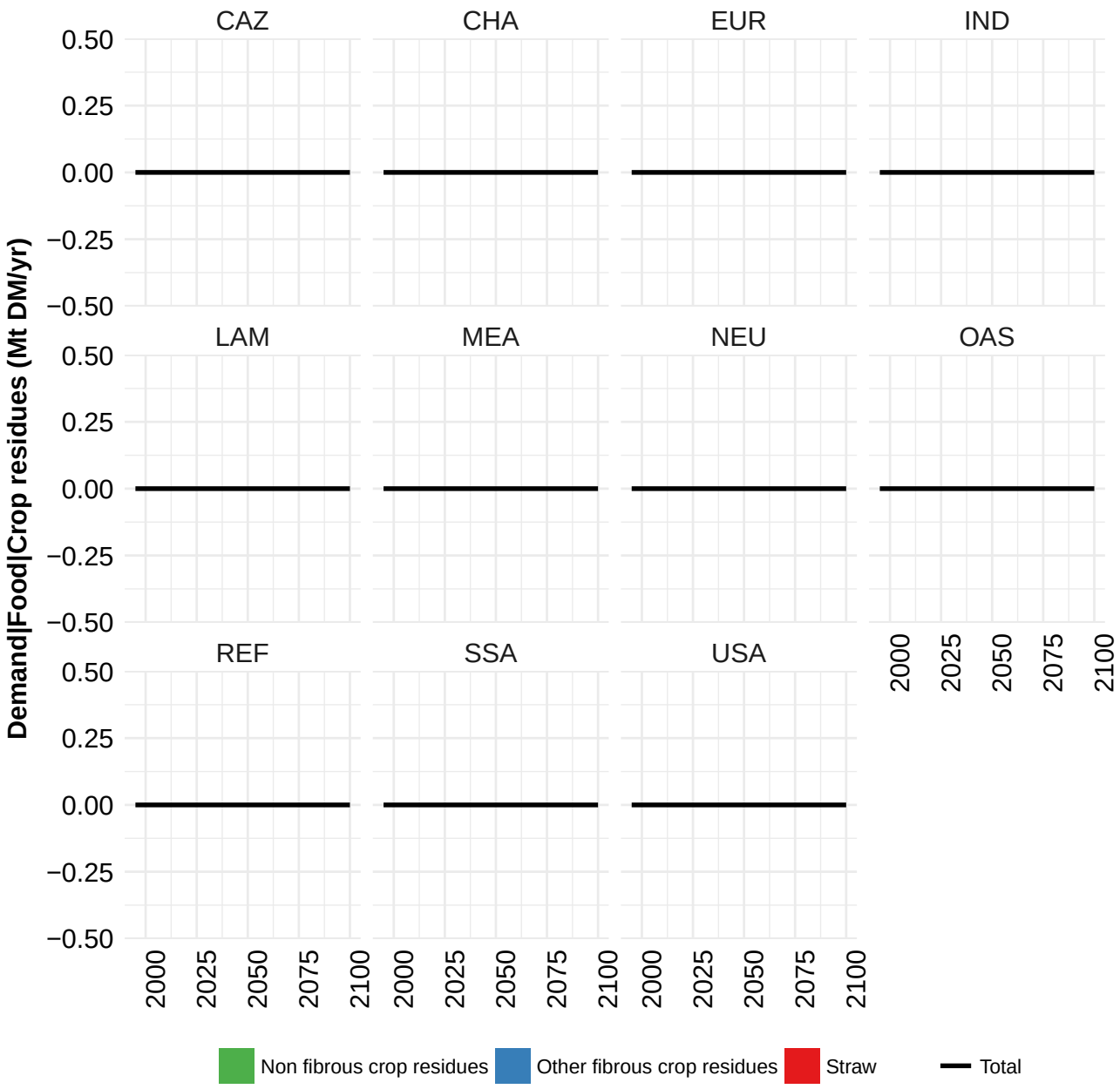
	2055	2060	2070	2080	2090	2100
GLO	3046	3091	3147	3161	3139	3087
CAZ	29	30	32	33	34	33
CHA	443	425	388	352	317	287
EUR	176	176	175	173	171	167
IND	548	557	563	558	543	521
LAM	242	243	242	238	232	225
MEA	249	256	266	270	271	268
NEU	50	50	50	49	48	47
OAS	516	520	522	517	507	494
REF	91	91	90	88	86	83
SSA	564	603	672	730	776	807
USA	138	142	147	152	154	155

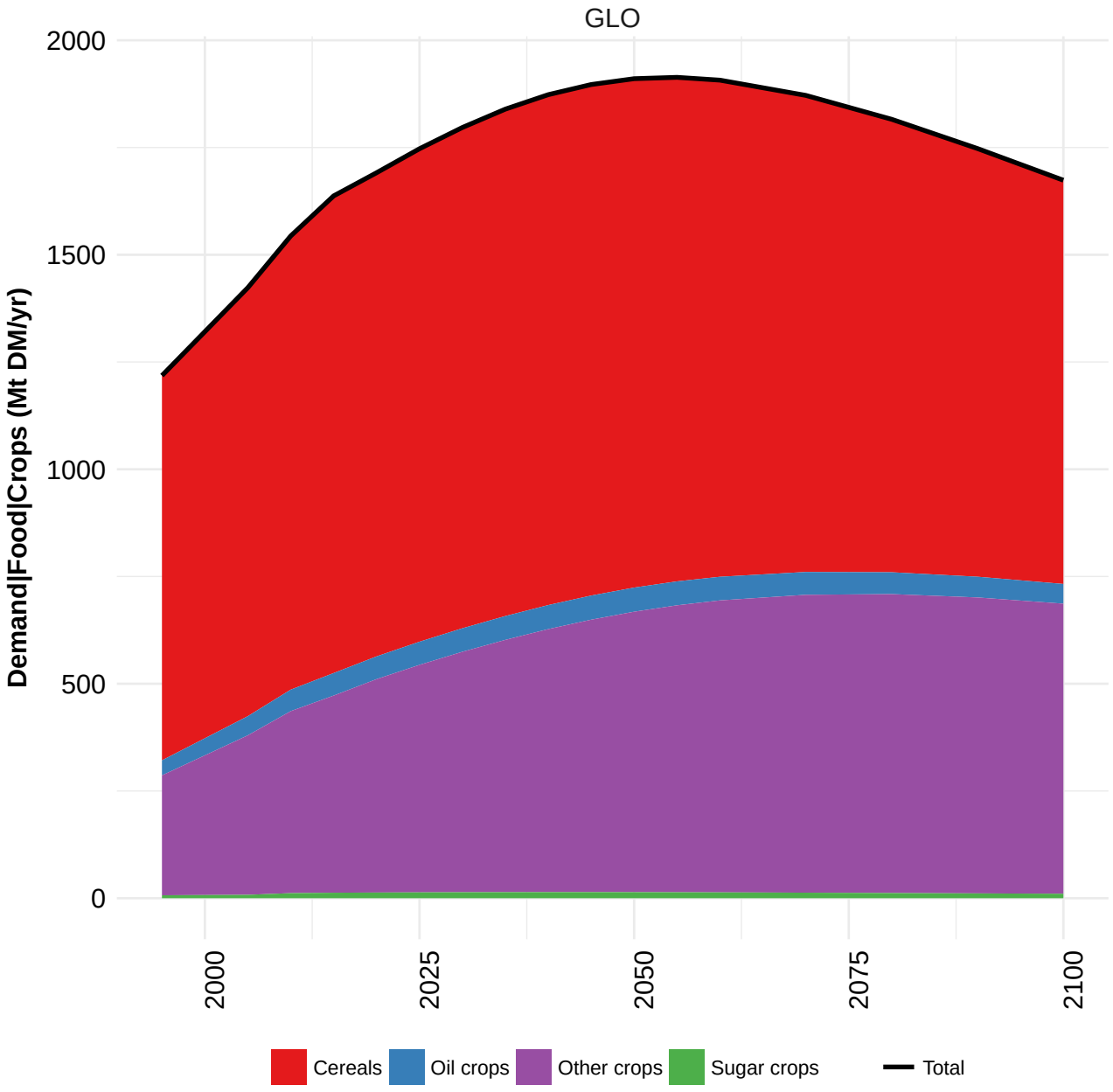
Table 336: MAgPIE new_input — Demand—Food (Mt DM/yr) [PART 2/2]

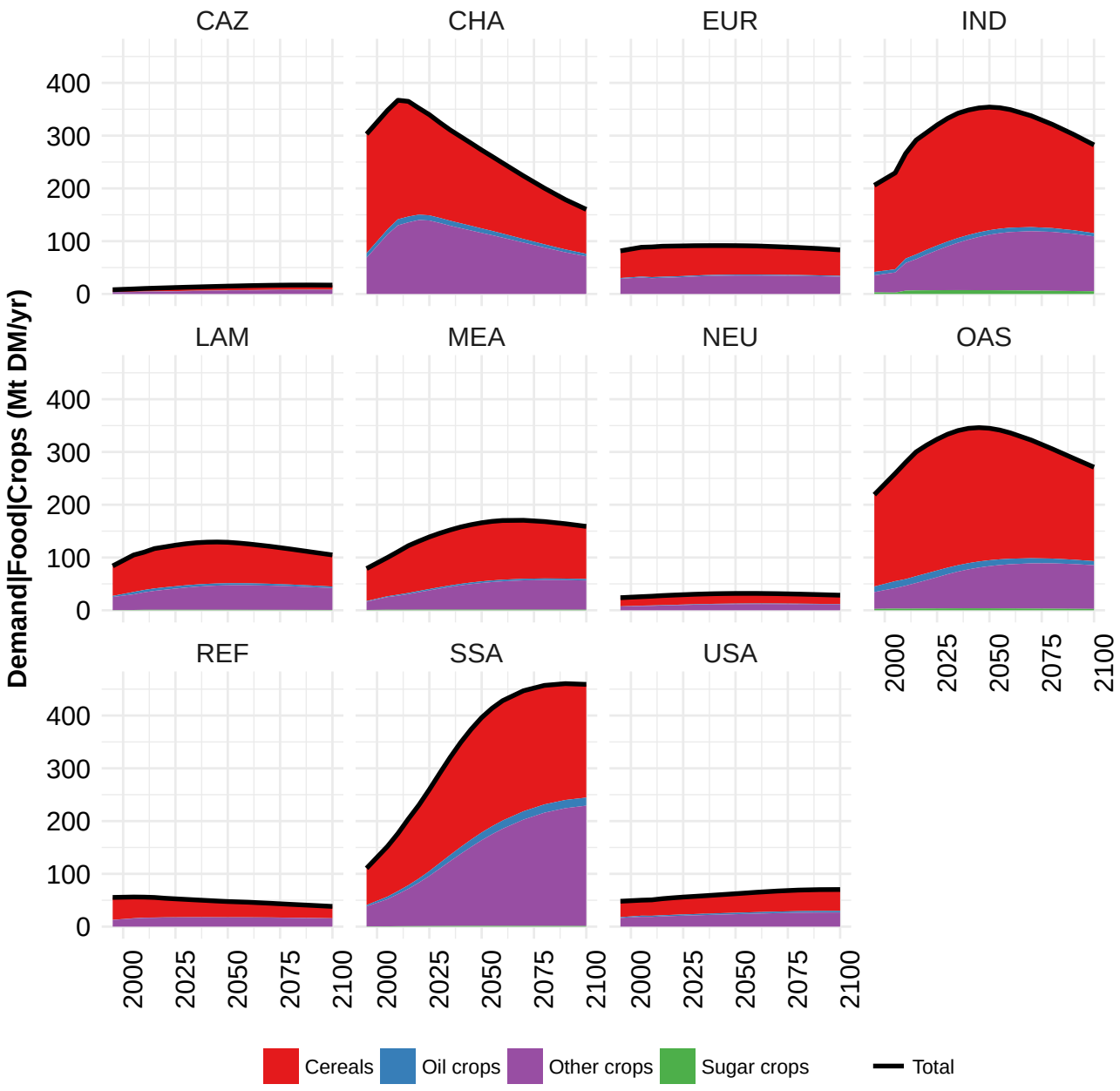
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	810	928	1028	1154	1312	1448	1595	1754	1874	2048
CAZ	9	11	11	12	13	14	16	17	19	20
CHA	156	183	212	251	303	336	381	423	443	479
EUR	126	133	137	143	146	149	148	155	160	161
IND	107	131	143	153	184	211	242	266	273	318
LAM	59	70	81	96	106	115	130	145	159	173
MEA	28	34	43	56	69	81	90	103	116	131
NEU	18	20	22	26	29	32	32	34	35	37
OAS	130	152	170	191	213	235	265	292	317	345
REF	73	78	81	84	87	91	78	77	84	87
SSA	48	56	63	72	82	97	115	135	159	188
USA	56	61	65	71	79	89	99	106	110	109

Table 337: FAO — Demand—Food (Mt DM/yr)

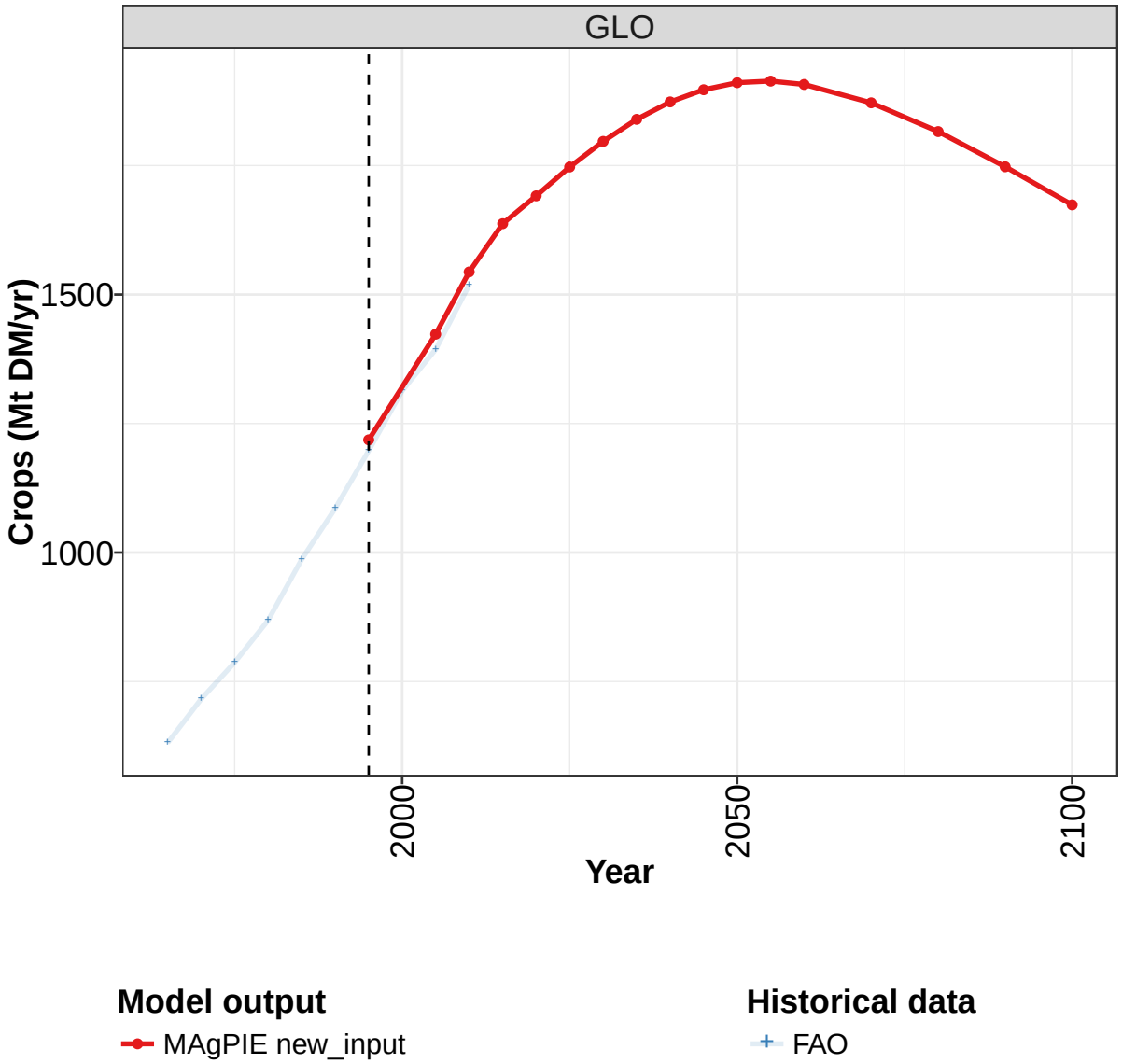

GLO
0.50
0.25
0.00
−0.25
−0.50
Demand|Food|Crop residues (Mt DM/yr)
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Food|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


GLO
Demand|Food|Crops (Mt DM/yr)
2000
1500
1000
500
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Food|Crops (Mt DM/yr)
0
100
200
300
400
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

7.1 Crops


GLO
Crops (Mt DM/yr)
1500
1000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

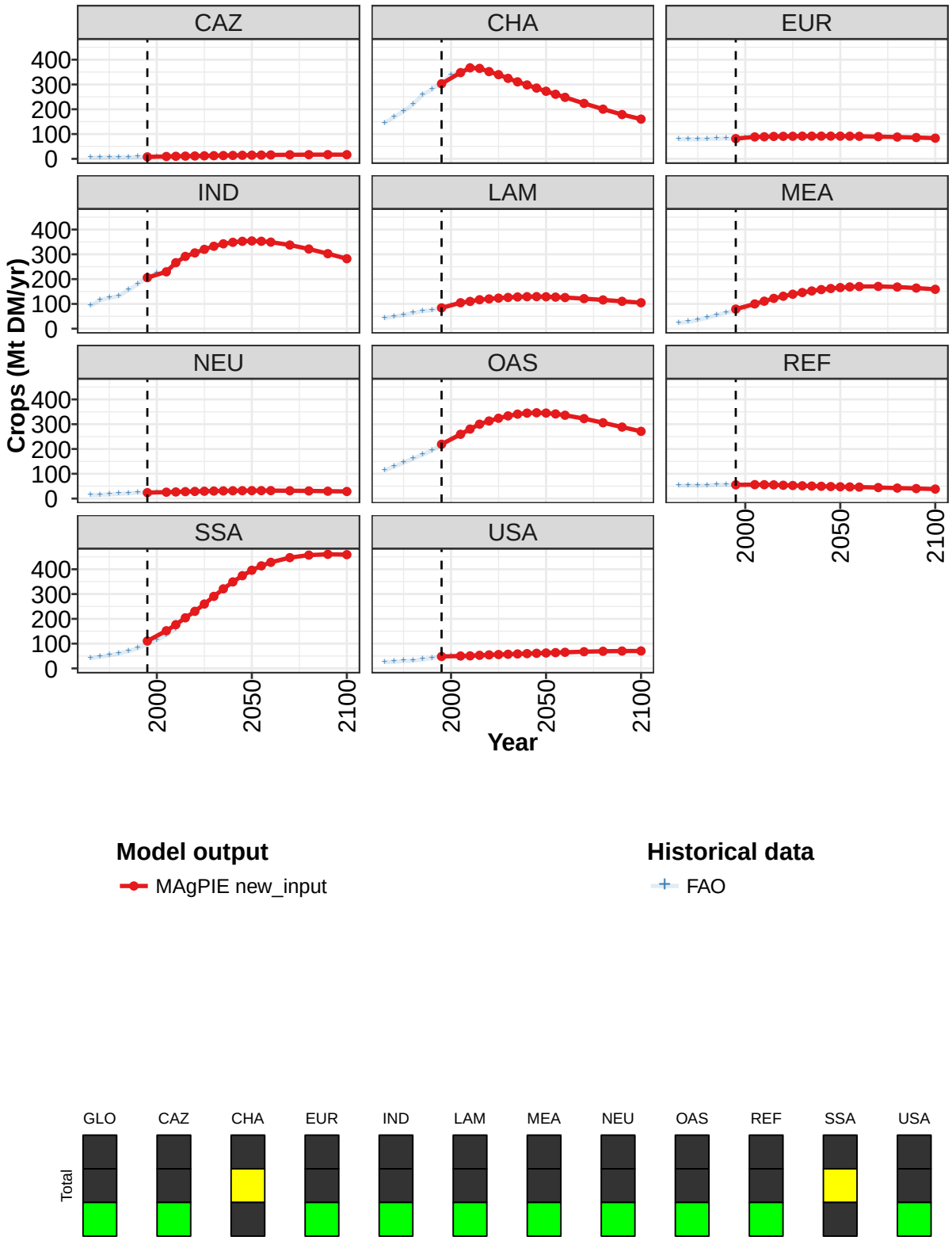


Figure 113: MAgPIE new_input — Demand—Food—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1218	1423	1544	1637	1691	1747	1797	1840	1873	1897	1911
CAZ	8	9	10	11	12	12	13	13	14	14	15
CHA	303	348	367	365	352	340	325	311	298	285	273
EUR	82	88	89	90	91	91	91	92	92	92	91
IND	206	229	266	292	306	320	333	342	349	353	354
LAM	84	105	110	117	120	123	126	128	129	129	129
MEA	79	100	111	122	131	139	146	152	158	162	166
NEU	24	26	27	28	29	30	30	31	31	32	32
OAS	219	259	280	300	313	324	334	341	345	346	345
REF	55	56	56	55	54	53	52	51	50	48	48
SSA	111	152	177	204	230	260	291	321	349	374	396
USA	48	50	51	53	55	56	57	58	60	61	62

Table 338: MAgPIE new_input — Demand—Food—Crops (Mt DM/yr) [PART 1/2]

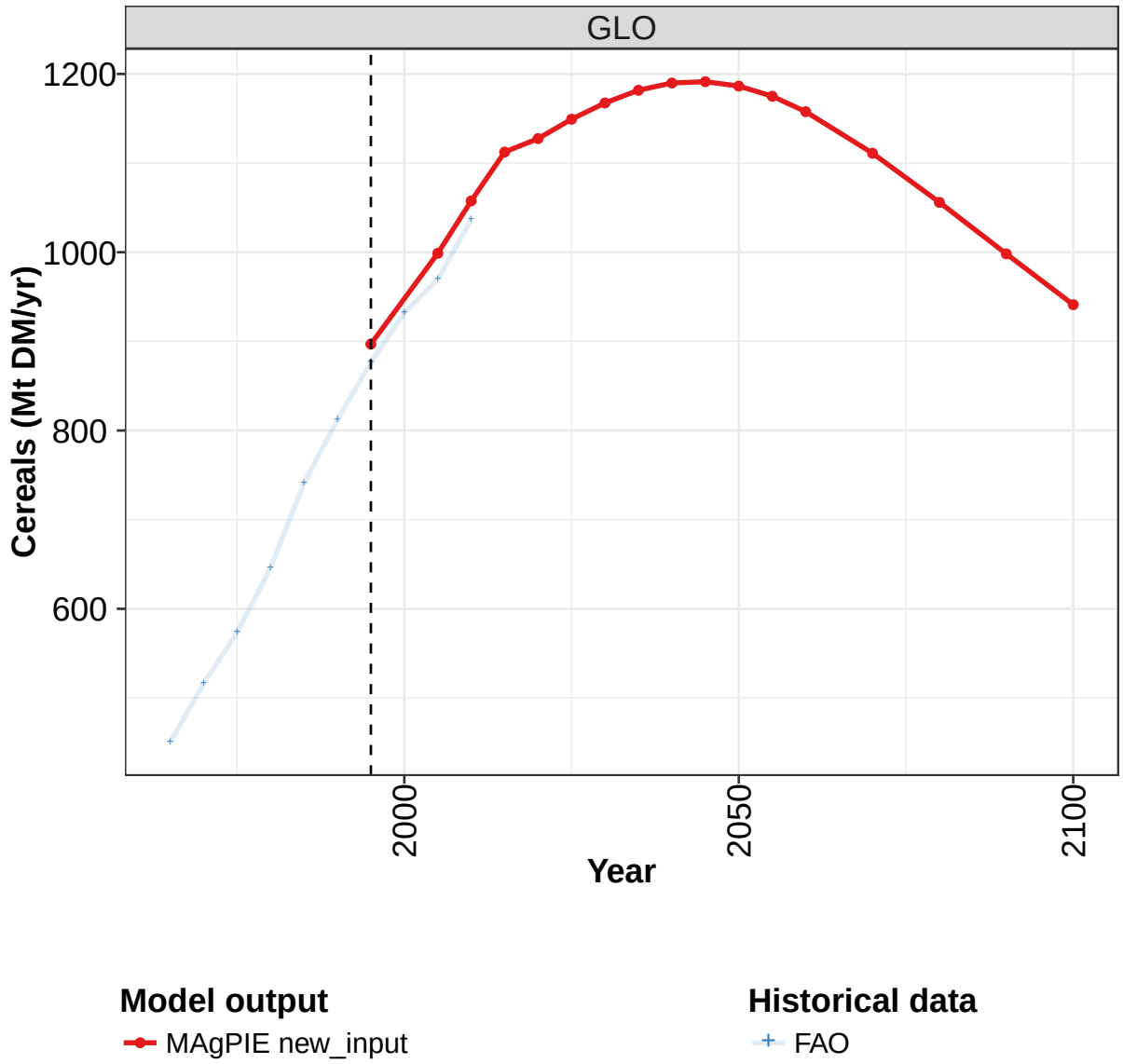
	2055	2060	2070	2080	2090	2100
GLO	1914	1907	1872	1816	1748	1674
CAZ	15	16	16	17	17	17
CHA	261	248	224	200	179	160
EUR	91	91	90	88	86	83
IND	353	349	338	321	303	282
LAM	127	126	121	116	110	105
MEA	168	170	171	168	164	159
NEU	32	32	31	31	30	29
OAS	341	336	323	306	288	271
REF	47	46	44	42	40	38
SSA	414	428	447	457	460	459
USA	64	65	67	69	70	70

Table 339: MAgPIE new_input — Demand—Food—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	631	716	787	869	987	1085	1197	1313	1394	1518
CAZ	5	5	5	6	7	7	8	9	9	10
CHA	144	168	192	219	259	280	306	338	350	372
EUR	79	79	79	80	81	82	81	86	88	89
IND	92	115	124	131	155	180	206	224	229	266
LAM	43	49	55	63	71	75	83	93	103	109
MEA	23	28	35	44	54	65	72	82	92	102
NEU	14	15	17	19	22	24	24	25	26	27
OAS	114	129	145	160	178	194	217	238	257	278
REF	52	53	52	54	55	55	55	53	56	56
SSA	41	47	53	60	69	82	98	115	135	159
USA	26	27	30	31	36	42	48	50	50	51

Table 340: FAO — Demand—Food—Crops (Mt DM/yr)

7.1.1 Cereals


GLO
1200
1000
800
600
Cereals (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

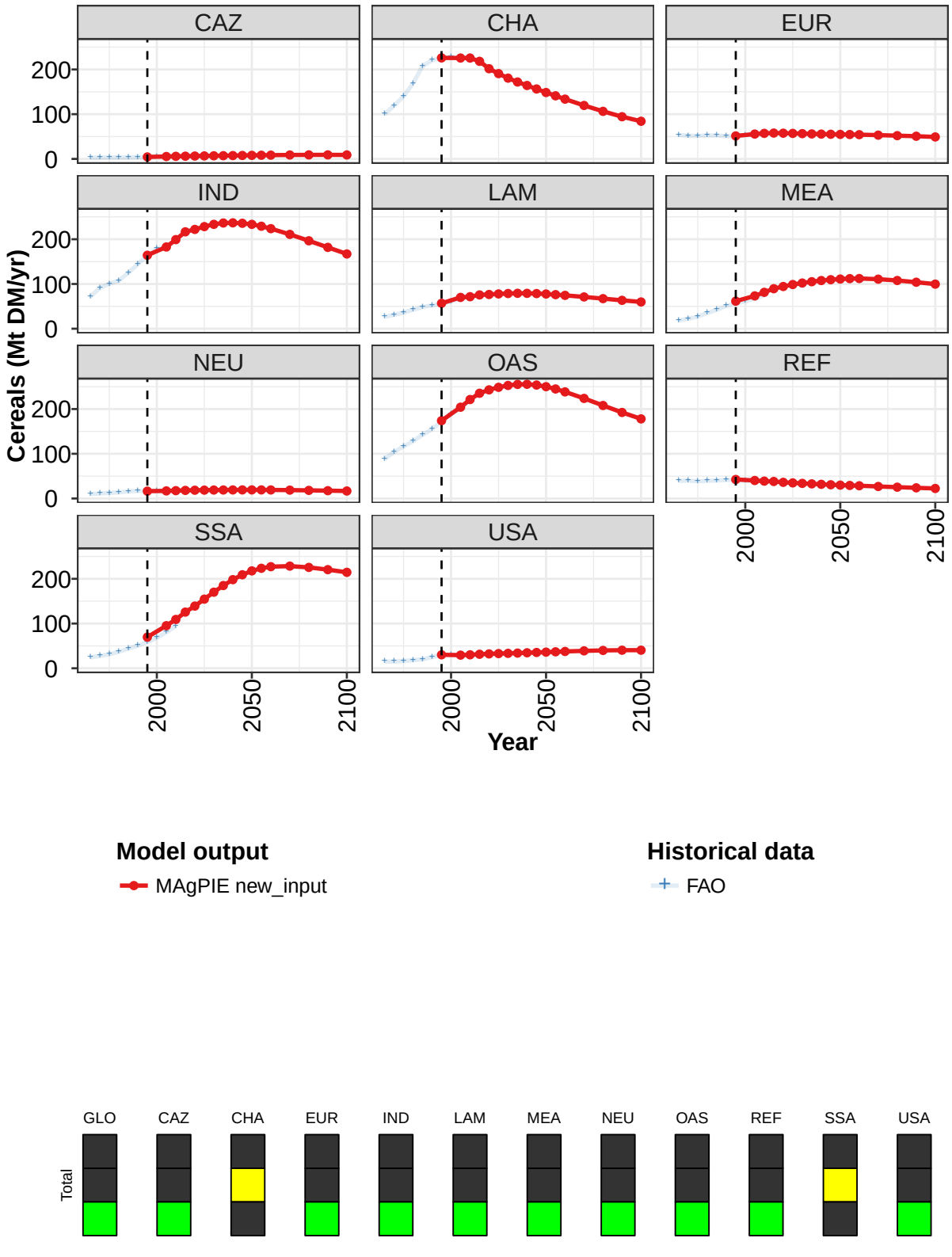


Figure 114: MAgPIE new_input — Demand—Food—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	897	999	1058	1112	1128	1149	1167	1182	1190	1191	1186
CAZ	4	5	6	6	6	7	7	7	7	8	8
CHA	226	226	226	218	202	191	181	172	164	156	149
EUR	51	56	57	58	58	57	57	56	56	55	55
IND	164	183	199	217	222	228	233	236	237	236	233
LAM	57	70	72	76	77	78	79	79	79	79	78
MEA	62	73	81	89	94	99	102	105	108	110	111
NEU	16	17	18	18	18	19	19	19	19	19	19
OAS	174	204	221	235	243	249	253	255	255	254	250
REF	43	40	39	38	36	35	34	33	32	31	30
SSA	70	95	109	126	139	155	170	185	198	209	218
USA	30	29	30	31	32	33	33	34	35	35	36

Table 341: MAgPIE new_input — Demand—Food—Crops—Cereals (Mt DM/yr) [PART 1/2]

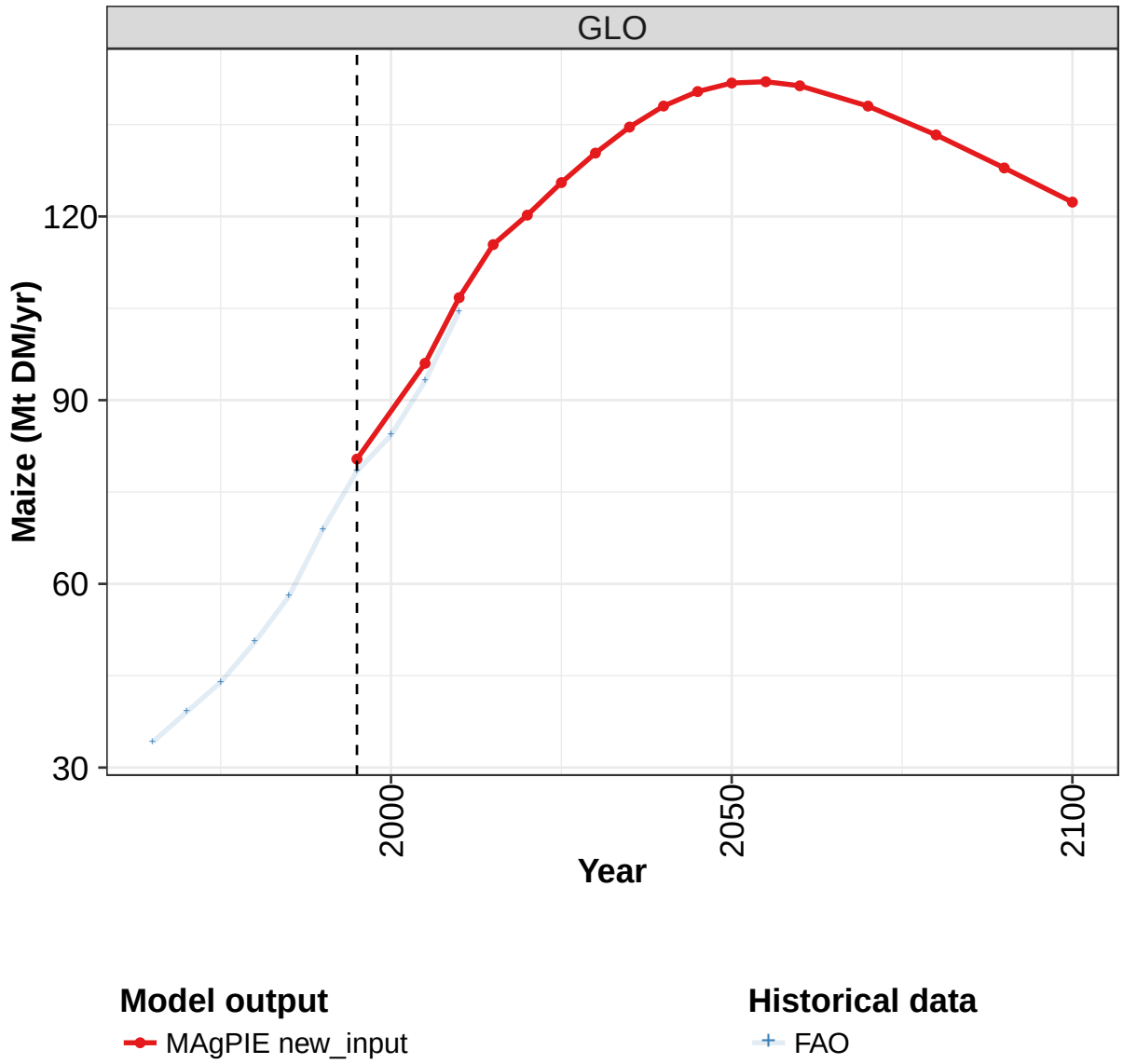
	2055	2060	2070	2080	2090	2100
GLO	1175	1158	1111	1056	998	941
CAZ	8	8	9	9	9	9
CHA	141	134	120	106	94	84
EUR	55	54	53	52	51	49
IND	229	224	211	197	182	167
LAM	76	75	71	67	63	60
MEA	112	112	111	108	104	100
NEU	19	19	19	18	17	17
OAS	245	238	224	208	192	178
REF	29	29	27	25	24	22
SSA	224	227	228	226	221	215
USA	37	38	39	40	40	40

Table 342: MAgPIE new_input — Demand—Food—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	450	516	573	646	741	812	877	932	970	1037
CAZ	3	3	3	3	4	4	4	5	5	6
CHA	100	119	140	169	208	220	227	228	224	228
EUR	54	52	52	52	52	51	51	53	55	57
IND	71	91	100	107	125	144	164	179	181	199
LAM	26	31	36	42	48	52	56	61	69	71
MEA	18	22	27	35	42	51	56	62	67	75
NEU	10	11	12	14	16	17	16	17	17	18
OAS	88	104	116	128	142	155	172	189	202	219
REF	40	40	38	40	40	41	41	40	39	39
SSA	24	28	31	37	44	51	59	68	80	95
USA	15	15	17	18	20	25	30	30	29	30

Table 343: FAO — Demand—Food—Crops—Cereals (Mt DM/yr)

7.1.2 Cereals—Maize



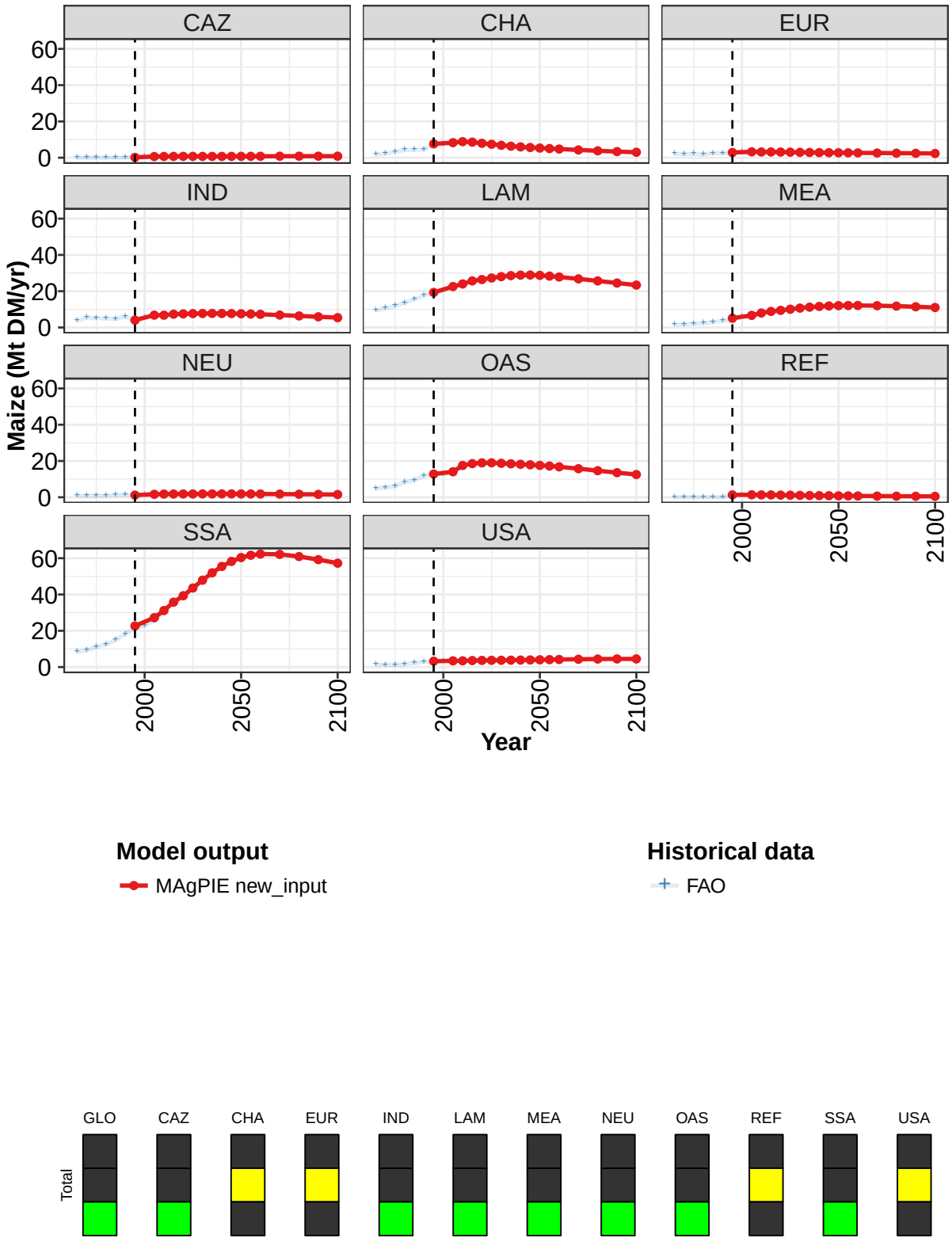


Figure 115: MAgPIE new_input — Demand—Food—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	80	96	107	115	120	126	130	135	138	140	142
CAZ	0	1	1	1	1	1	1	1	1	1	1
CHA	8	8	9	9	8	7	7	6	6	6	5
EUR	3	3	3	3	3	3	3	3	3	3	3
IND	4	7	7	7	8	8	8	8	8	8	8
LAM	19	23	24	26	26	27	28	29	29	29	29
MEA	5	7	8	9	9	10	11	11	12	12	12
NEU	1	2	2	2	2	2	2	2	2	2	2
OAS	13	14	18	19	19	19	19	18	18	18	18
REF	1	1	1	1	1	1	1	1	1	1	1
SSA	23	27	31	36	39	44	48	52	55	58	60
USA	3	3	3	4	4	4	4	4	4	4	4

Table 344: MAgPIE new_input — Demand—Food—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

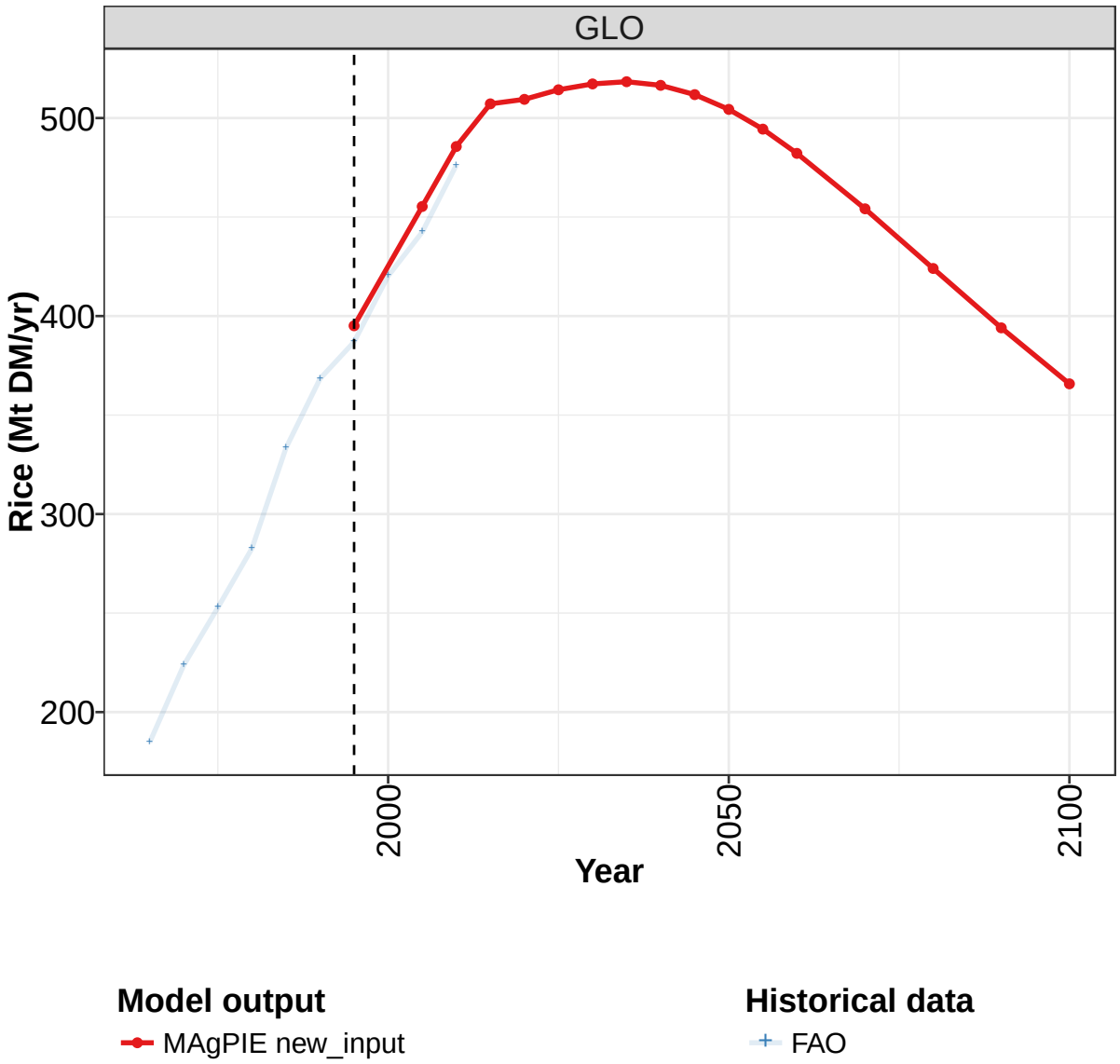
	2055	2060	2070	2080	2090	2100
GLO	142	141	138	133	128	122
CAZ	1	1	1	1	1	1
CHA	5	5	4	4	3	3
EUR	3	3	3	3	2	2
IND	7	7	7	6	6	5
LAM	28	28	27	26	25	23
MEA	12	12	12	12	11	11
NEU	2	2	2	2	2	2
OAS	17	17	16	15	14	13
REF	1	1	1	1	1	0
SSA	62	62	62	61	59	57
USA	4	4	4	4	4	4

Table 345: MAgPIE new_input — Demand—Food—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	34	39	44	50	58	69	78	84	93	104
CAZ	0	0	0	0	0	0	0	1	1	1
CHA	2	2	3	4	4	5	8	7	8	9
EUR	2	2	2	2	2	3	3	3	3	3
IND	4	5	5	5	5	6	4	6	7	7
LAM	9	11	12	14	16	18	19	20	22	24
MEA	2	2	2	2	3	4	5	6	6	7
NEU	1	1	1	1	1	1	1	1	2	2
OAS	5	5	6	8	9	12	13	13	14	17
REF	0	0	0	0	0	0	1	1	1	1
SSA	8	9	11	13	15	18	22	23	26	30
USA	1	1	1	2	2	3	3	3	3	3

Table 346: FAO — Demand—Food—Crops—Cereals—Maize (Mt DM/yr)

7.1.3 Cereals—Rice



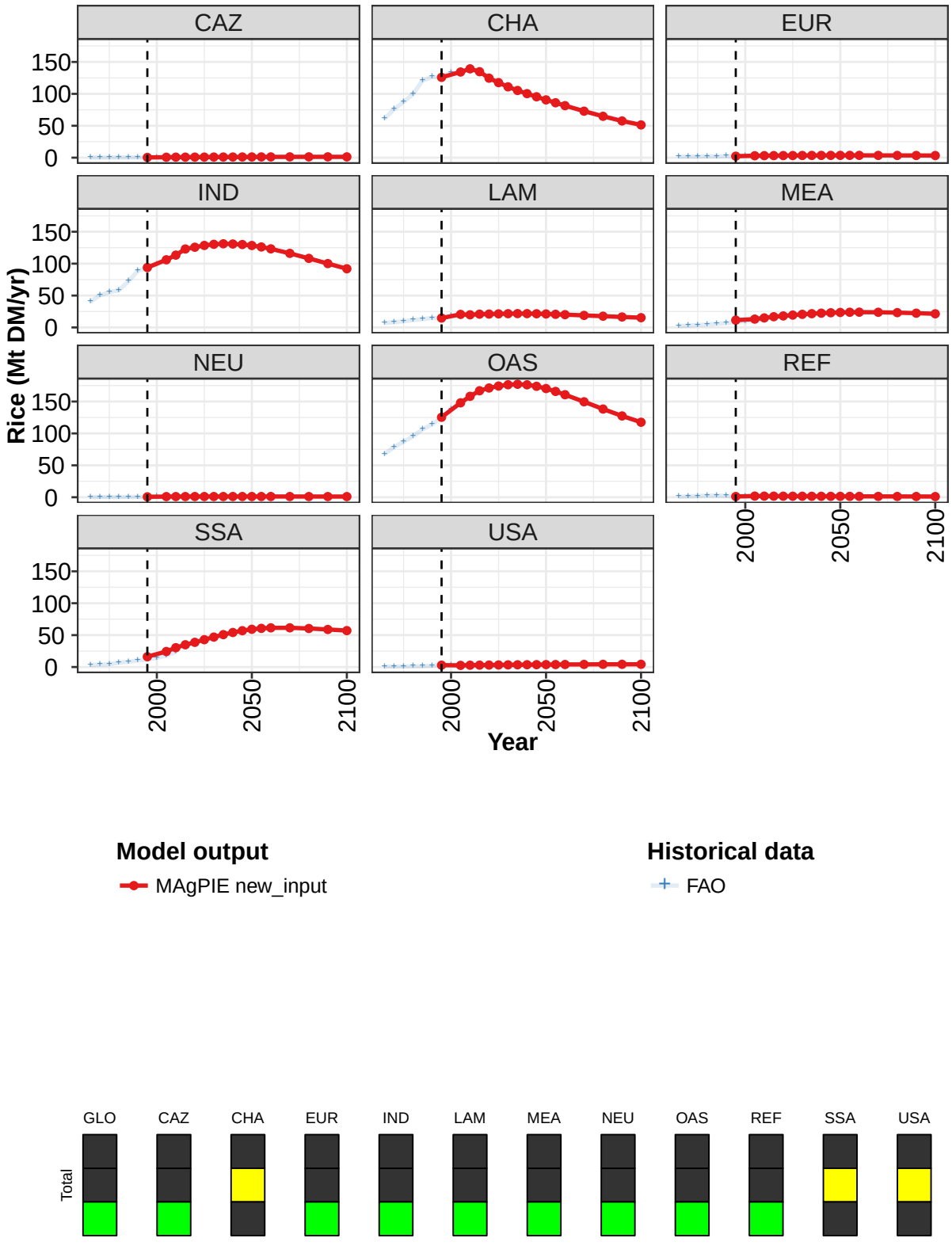


Figure 116: MAgPIE new_input — Demand—Food—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	395	455	486	507	509	514	517	518	517	512	504
CAZ	0	1	1	1	1	1	1	1	1	1	1
CHA	126	134	139	135	125	118	111	105	100	95	91
EUR	2	3	3	3	3	3	3	4	4	4	4
IND	94	106	113	123	126	129	130	131	131	130	128
LAM	15	20	20	21	21	21	22	22	22	21	21
MEA	11	13	15	17	18	19	21	22	22	23	24
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	125	148	158	167	171	174	176	177	176	174	170
REF	1	2	2	2	2	2	2	2	1	1	1
SSA	16	24	30	35	39	43	47	51	54	57	59
USA	3	3	3	3	3	3	3	4	4	4	4

Table 347: MAgPIE new_input — Demand—Food—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

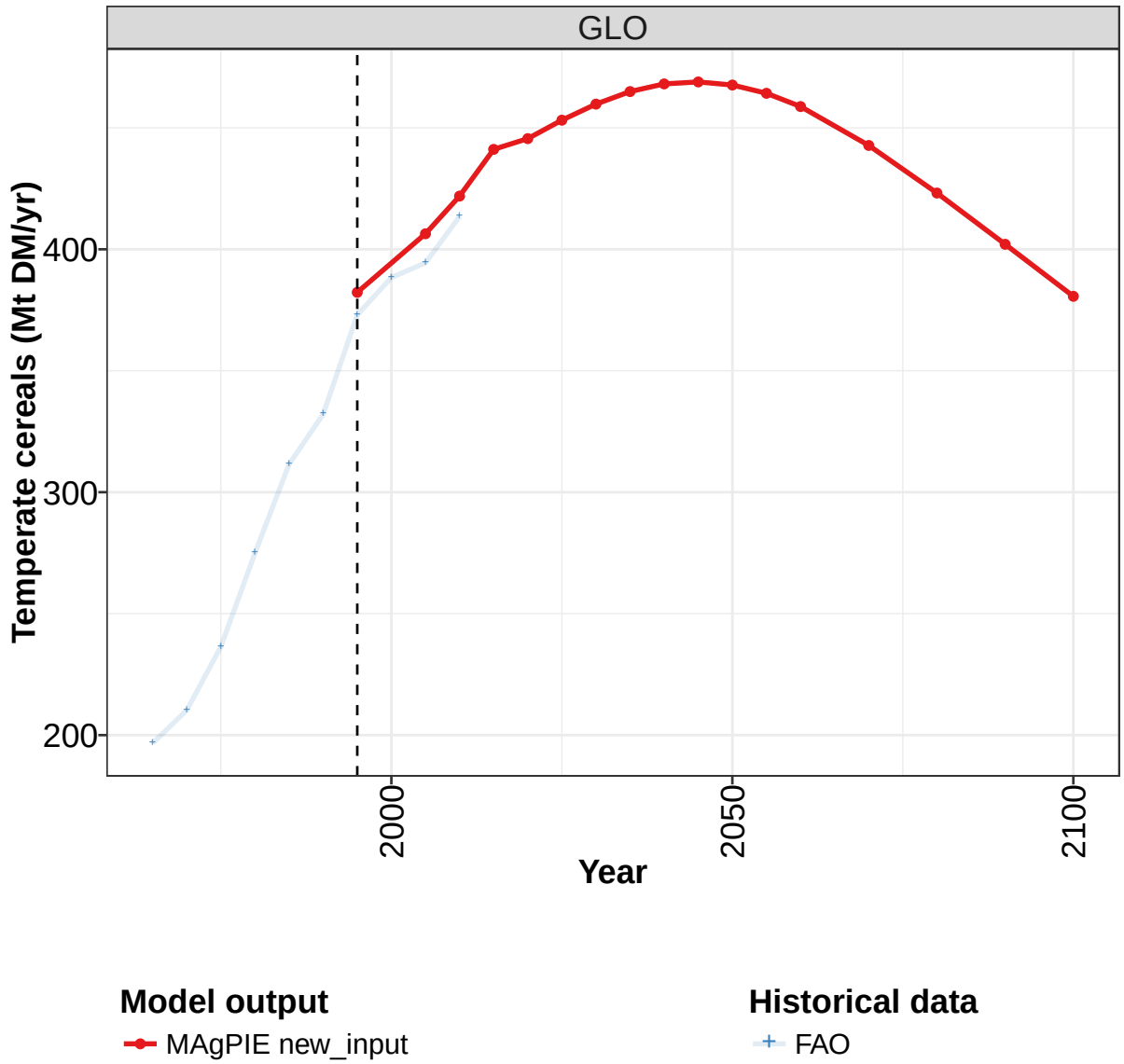
	2055	2060	2070	2080	2090	2100
GLO	494	482	454	424	394	366
CAZ	1	1	1	1	1	1
CHA	86	82	73	65	58	51
EUR	4	4	4	4	3	3
IND	126	123	116	108	100	92
LAM	21	20	19	18	16	15
MEA	24	24	24	23	22	21
NEU	1	1	1	1	1	1
OAS	166	161	150	138	127	118
REF	1	1	1	1	1	1
SSA	61	61	61	60	59	57
USA	4	4	4	4	4	4

Table 348: MAgPIE new_input — Demand—Food—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	185	224	253	283	333	368	387	420	442	476
CAZ	0	0	0	0	0	0	0	1	1	1
CHA	61	76	87	99	121	126	126	133	133	141
EUR	2	2	2	2	2	2	2	3	3	3
IND	40	50	55	58	72	89	94	99	105	113
LAM	7	8	10	11	13	15	14	18	20	20
MEA	2	3	4	5	6	7	9	10	10	12
NEU	0	0	0	0	0	1	1	1	1	1
OAS	67	79	87	95	107	114	125	138	147	157
REF	1	1	2	3	3	2	1	2	2	2
SSA	3	4	4	7	8	10	11	14	18	24
USA	1	1	1	1	1	2	3	3	3	3

Table 349: FAO — Demand—Food—Crops—Cereals—Rice (Mt DM/yr)

7.1.4 Cereals—Temperate cereals



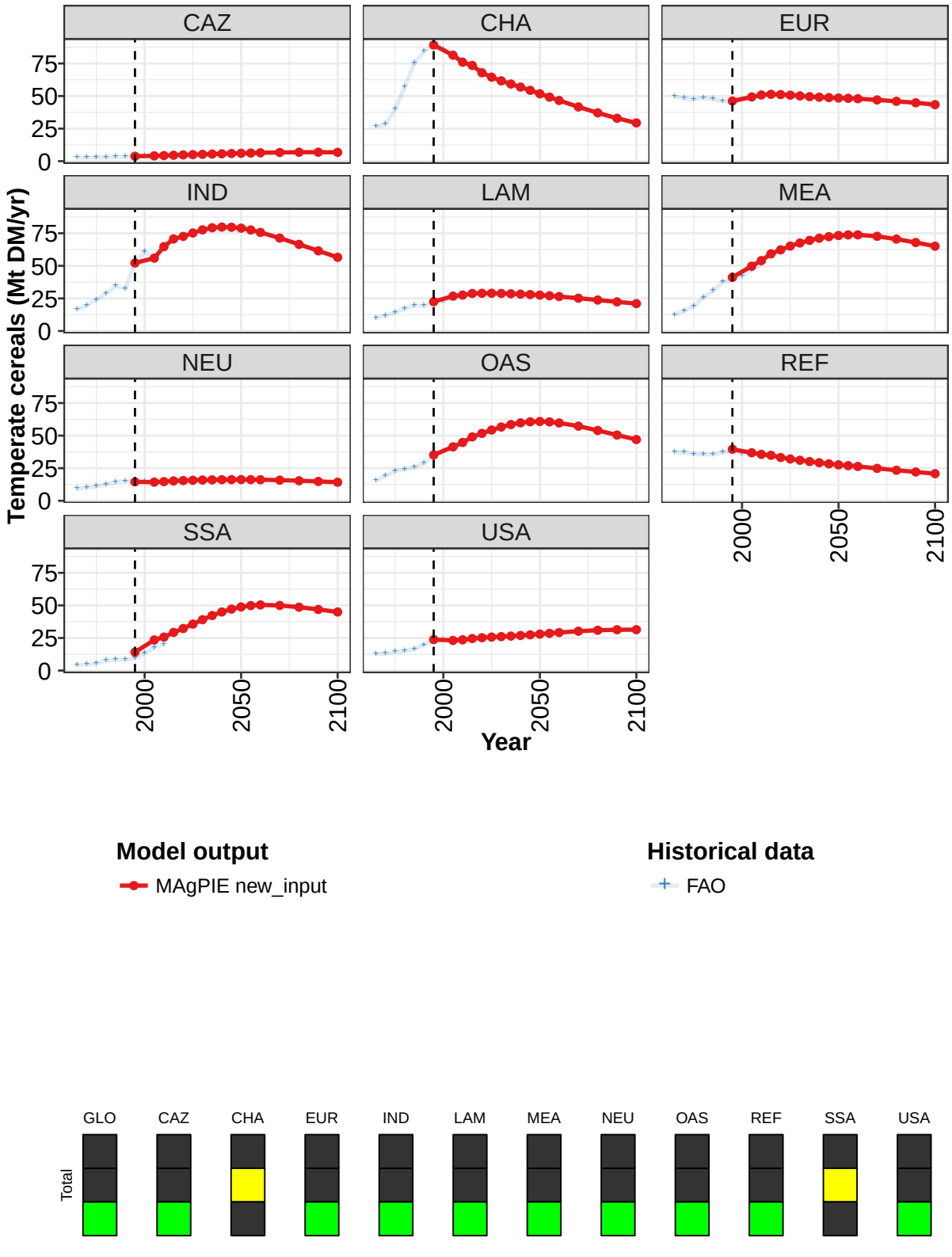


Figure 117: MAgPIE new_input — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	382	406	422	441	446	453	460	465	468	469	468
CAZ	4	4	4	5	5	5	5	5	6	6	6
CHA	89	81	76	73	68	65	62	59	57	54	52
EUR	46	49	51	51	51	51	50	50	49	49	49
IND	52	56	65	71	73	75	78	79	80	80	79
LAM	23	27	28	29	29	29	29	29	28	28	28
MEA	41	50	54	59	62	65	68	70	71	72	73
NEU	15	14	15	15	16	16	16	16	16	16	16
OAS	35	41	45	49	52	54	57	58	60	61	61
REF	40	37	36	35	33	32	31	30	29	28	28
SSA	14	23	26	29	32	36	39	42	45	47	49
USA	24	23	24	25	25	26	26	26	27	27	28

Table 350: MAgPIE new_input — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

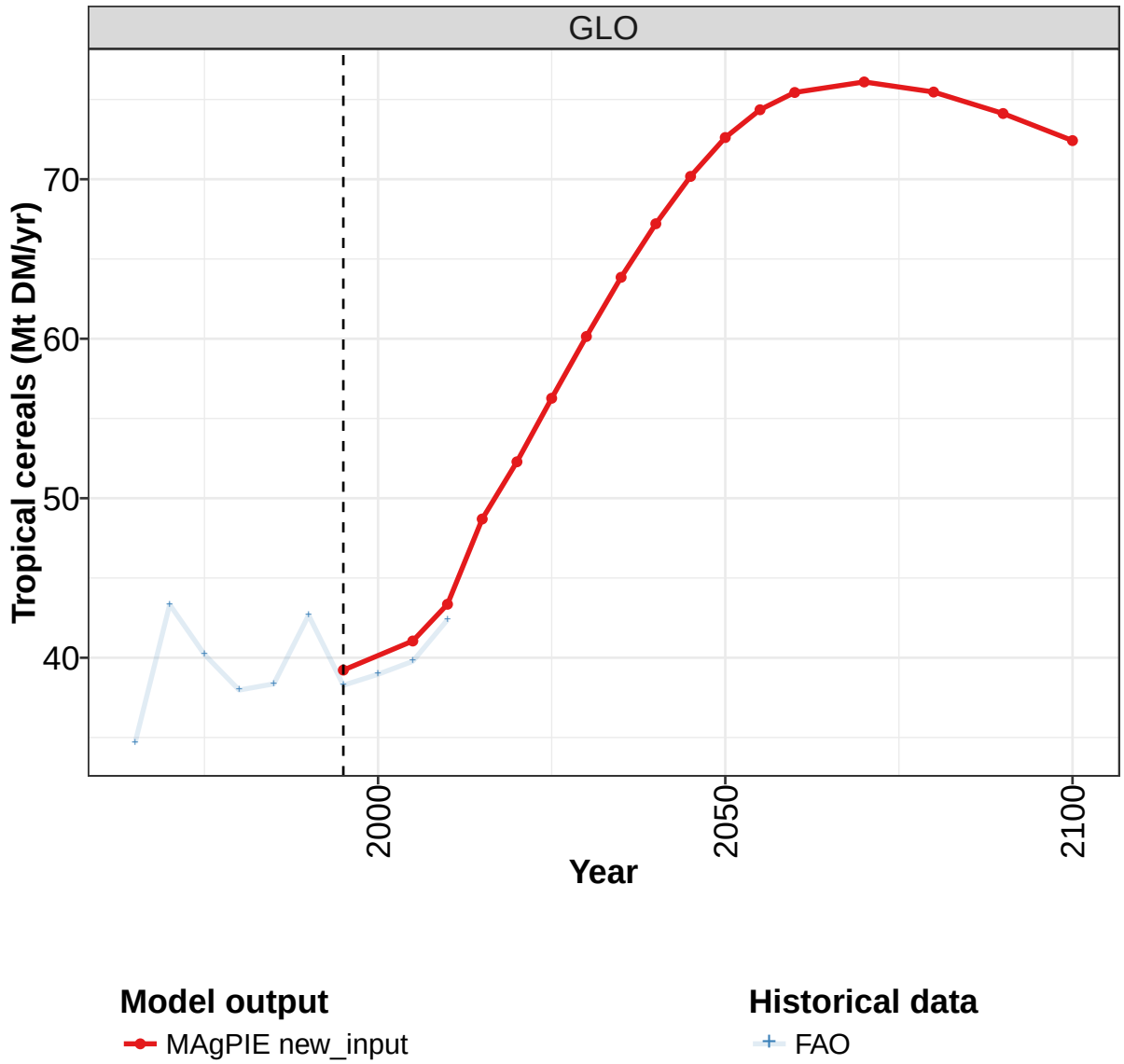
	2055	2060	2070	2080	2090	2100
GLO	464	459	443	423	402	381
CAZ	6	6	7	7	7	7
CHA	49	47	42	37	33	29
EUR	48	48	47	46	45	43
IND	78	76	71	66	62	57
LAM	27	26	25	24	22	21
MEA	74	74	73	71	68	65
NEU	16	16	16	15	15	14
OAS	61	60	57	54	50	47
REF	27	26	25	23	22	21
SSA	50	50	50	49	47	45
USA	29	29	30	31	31	31

Table 351: MAgPIE new_input — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	197	210	236	275	312	332	373	388	394	414
CAZ	3	3	3	3	3	3	4	4	4	4
CHA	27	28	40	57	75	84	89	86	81	77
EUR	50	48	48	49	48	46	46	47	49	51
IND	16	20	24	29	34	33	52	61	55	65
LAM	10	12	14	17	20	19	22	23	26	27
MEA	12	16	19	26	31	38	39	42	47	51
NEU	9	10	11	13	14	15	14	15	14	15
OAS	15	19	23	24	26	29	34	38	41	44
REF	37	37	36	36	36	37	39	36	36	36
SSA	4	5	5	8	8	8	10	13	18	20
USA	13	13	14	15	17	20	24	23	23	24

Table 352: FAO — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr)

7.1.5 Cereals—Tropical cereals



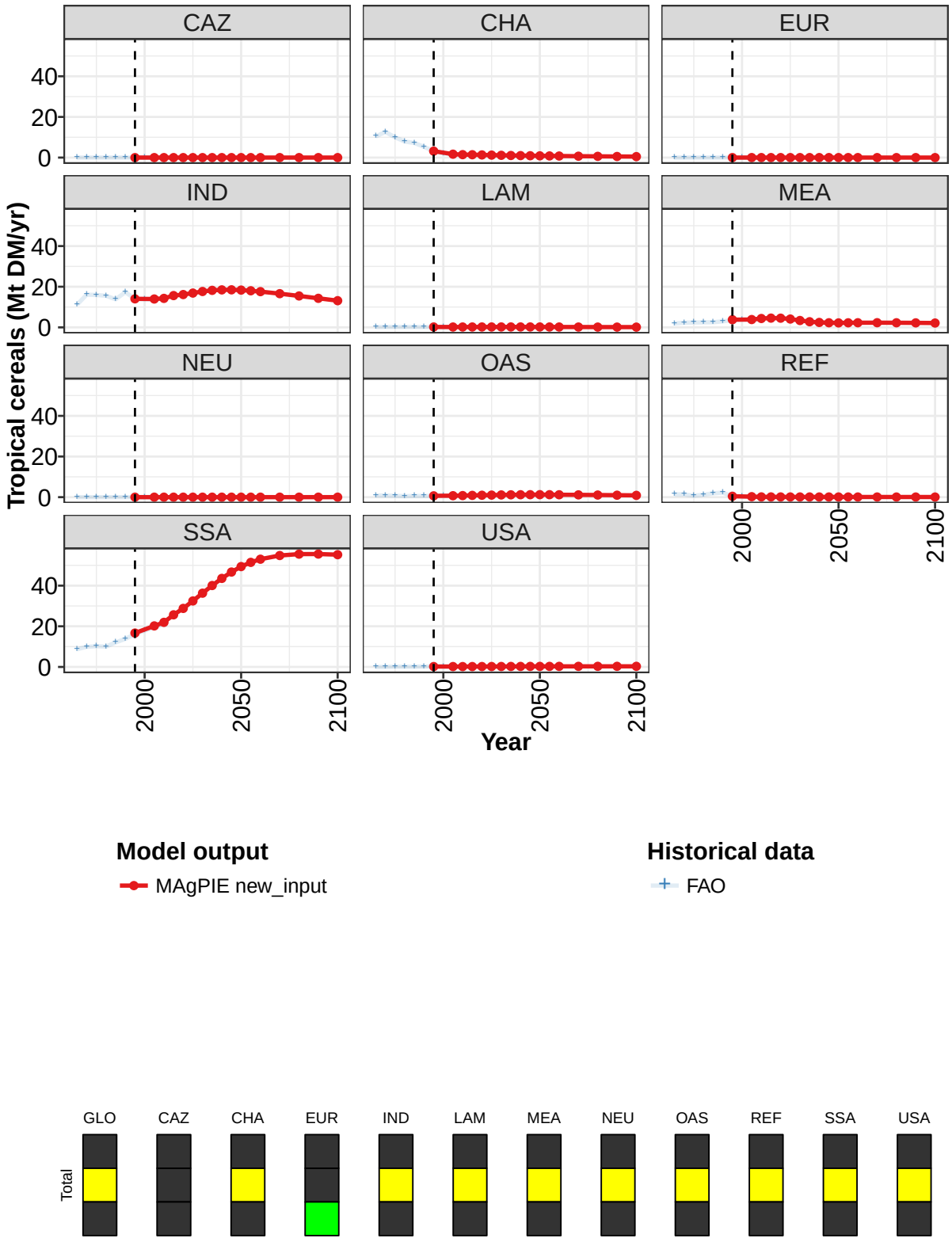


Figure 118: MAgPIE new_input — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	39.2	41.0	43.4	48.7	52.3	56.3	60.1	63.9	67.2	70.2	72.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.2	1.7	1.5	1.4	1.3	1.2	1.1	1.0	1.0	0.9	0.9
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	14.0	14.0	14.3	15.6	16.1	16.9	17.7	18.2	18.4	18.5	18.4
LAM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MEA	3.8	3.9	4.4	4.6	4.5	4.1	3.4	2.8	2.4	2.3	2.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.2
REF	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	16.7	20.2	22.0	25.7	28.8	32.5	36.3	40.1	43.6	46.7	49.4
USA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3

Table 353: MAgPIE new_input — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

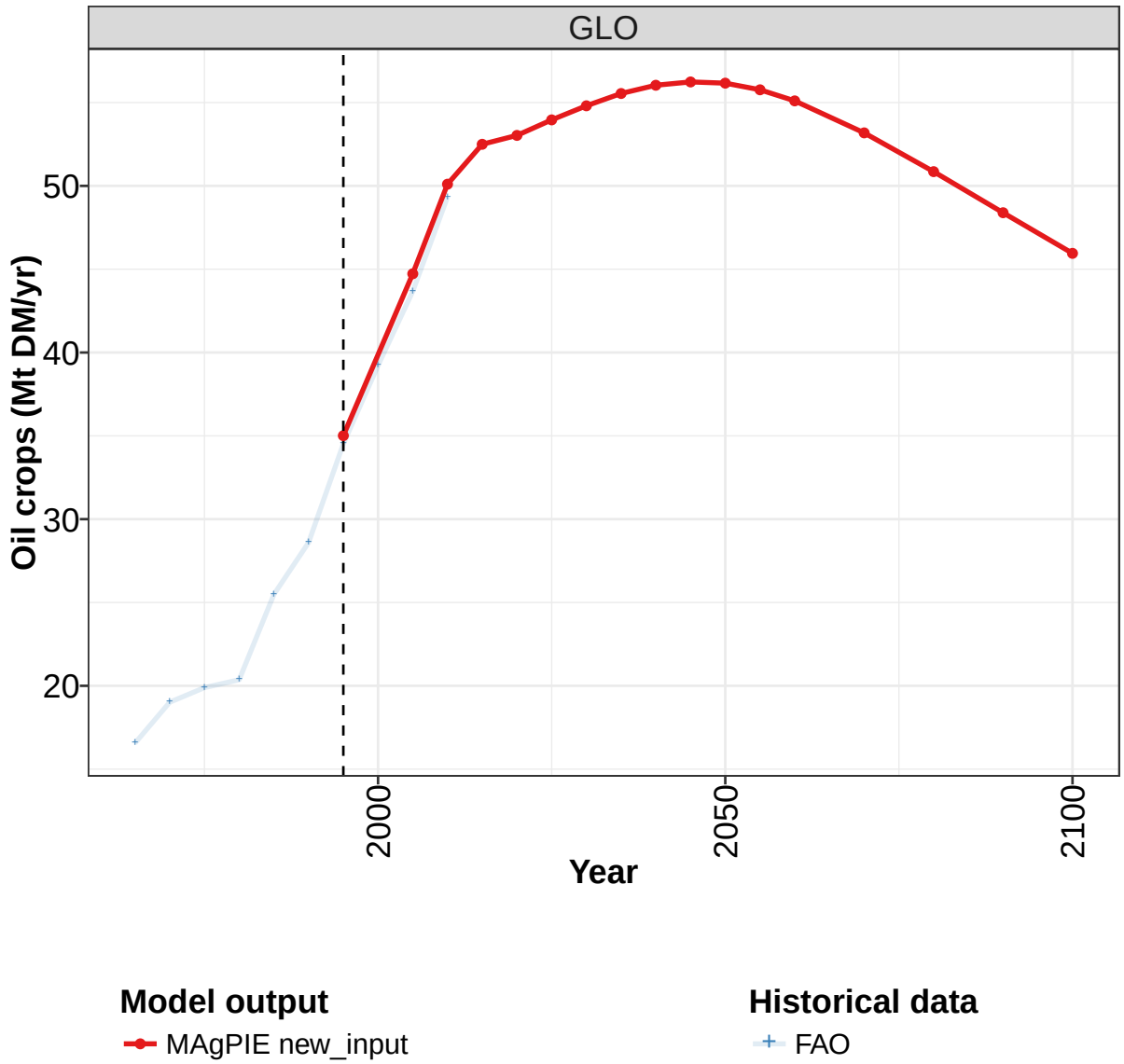
	2055	2060	2070	2080	2090	2100
GLO	74.4	75.4	76.1	75.5	74.1	72.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.8	0.8	0.7	0.6	0.5	0.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	18.0	17.6	16.6	15.5	14.3	13.1
LAM	0.2	0.2	0.2	0.2	0.1	0.1
MEA	2.3	2.3	2.3	2.3	2.2	2.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.2	1.2	1.1	1.1	1.0	0.9
REF	0.1	0.1	0.1	0.1	0.1	0.1
SSA	51.5	53.0	54.8	55.5	55.5	55.2
USA	0.3	0.3	0.3	0.3	0.3	0.3

Table 354: MAgPIE new_input — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	34.6	43.3	40.2	38.0	38.4	42.7	38.3	39.0	39.8	42.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	10.4	12.6	10.0	7.9	7.2	5.3	3.2	2.0	1.7	1.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	11.2	16.1	15.9	15.6	13.8	17.3	14.0	13.8	13.8	14.3
LAM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MEA	1.9	2.3	2.4	2.5	2.5	3.0	3.6	3.8	3.6	4.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.8	0.8	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7
REF	1.4	1.3	0.7	1.2	1.9	2.2	0.4	0.4	0.2	0.1
SSA	8.7	9.9	10.2	10.0	12.1	13.8	16.1	17.9	19.4	21.4
USA	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2

Table 355: FAO — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr)

7.1.6 Oil crops



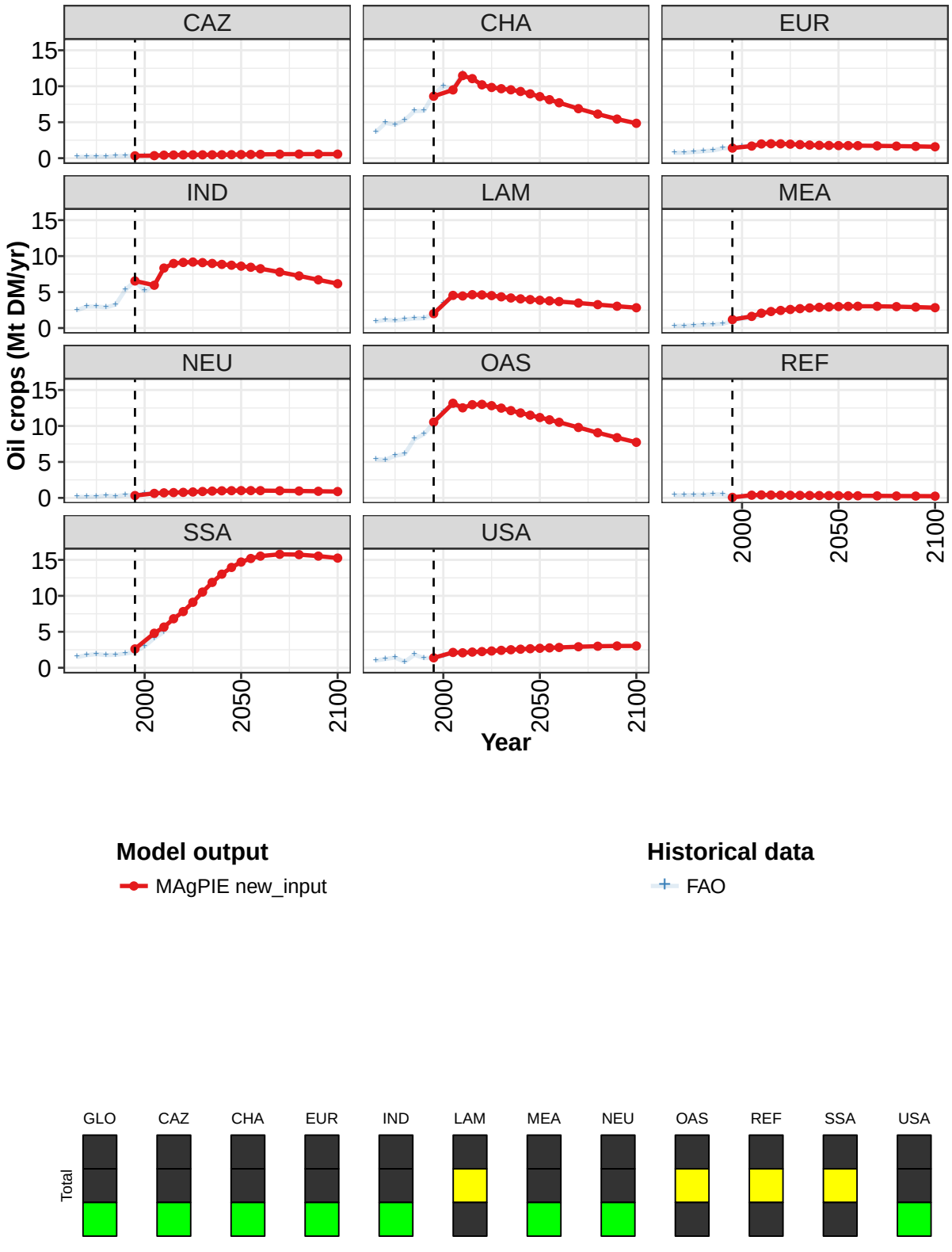


Figure 119: MAgPIE new_input — Demand—Food—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	35.0	44.7	50.1	52.5	53.0	54.0	54.8	55.5	56.0	56.2	56.2
CAZ	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CHA	8.6	9.5	11.5	11.1	10.2	9.8	9.7	9.5	9.3	8.9	8.6
EUR	1.4	1.7	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8
IND	6.5	5.9	8.3	9.0	9.1	9.2	9.1	9.0	8.8	8.7	8.6
LAM	2.0	4.5	4.5	4.6	4.6	4.5	4.3	4.2	4.1	4.0	3.9
MEA	1.2	1.6	2.1	2.3	2.4	2.6	2.7	2.8	2.9	2.9	3.0
NEU	0.3	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0
OAS	10.5	13.2	12.5	13.0	13.0	12.8	12.5	12.1	11.8	11.5	11.2
REF	0.1	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
SSA	2.6	4.8	5.7	6.8	7.8	9.1	10.5	11.9	13.0	13.9	14.7
USA	1.4	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.6	2.7

Table 356: MAgPIE new_input — Demand—Food—Crops—Oil crops (Mt DM/yr) [PART 1/2]

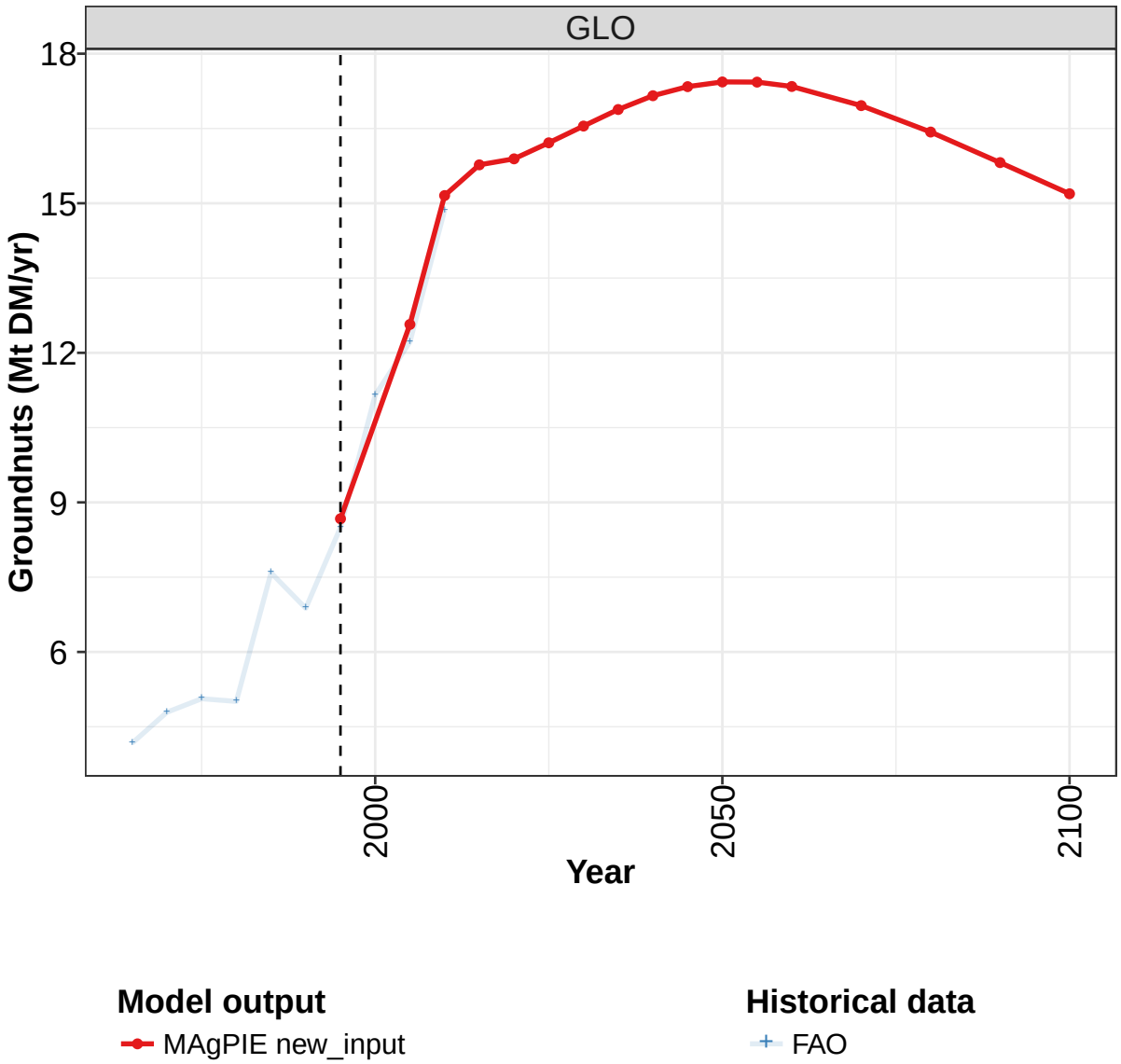
	2055	2060	2070	2080	2090	2100
GLO	55.8	55.1	53.2	50.9	48.4	46.0
CAZ	0.5	0.5	0.6	0.6	0.6	0.6
CHA	8.1	7.7	6.9	6.1	5.4	4.8
EUR	1.7	1.7	1.7	1.7	1.6	1.6
IND	8.4	8.2	7.8	7.2	6.7	6.2
LAM	3.8	3.7	3.5	3.3	3.0	2.8
MEA	3.0	3.0	3.0	3.0	2.9	2.8
NEU	1.0	1.0	1.0	1.0	0.9	0.9
OAS	10.9	10.5	9.8	9.1	8.4	7.7
REF	0.3	0.3	0.3	0.3	0.3	0.2
SSA	15.2	15.5	15.8	15.7	15.5	15.3
USA	2.8	2.8	2.9	3.0	3.0	3.0

Table 357: MAgPIE new_input — Demand—Food—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	16.6	19.0	19.9	20.4	25.5	28.6	34.5	39.2	43.7	49.3
CAZ	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4
CHA	3.6	4.9	4.7	5.3	6.5	6.6	8.9	10.0	9.7	11.8
EUR	0.8	0.8	0.9	1.0	1.1	1.4	1.4	1.7	1.7	2.0
IND	2.5	3.0	3.0	2.9	3.2	5.3	6.5	5.1	5.9	8.3
LAM	0.9	1.1	1.1	1.2	1.3	1.4	2.0	3.4	4.5	4.4
MEA	0.3	0.3	0.4	0.4	0.5	0.6	1.0	1.3	1.3	1.7
NEU	0.1	0.1	0.2	0.3	0.2	0.4	0.3	0.6	0.6	0.7
OAS	5.4	5.3	5.9	6.1	8.2	8.9	10.5	12.0	13.0	12.4
REF	0.4	0.4	0.4	0.4	0.5	0.5	0.1	0.2	0.4	0.4
SSA	1.5	1.8	1.9	1.8	1.8	2.0	2.2	3.0	4.1	5.0
USA	1.0	1.2	1.4	0.8	1.8	1.3	1.4	1.7	2.1	2.1

Table 358: FAO — Demand—Food—Crops—Oil crops (Mt DM/yr)

7.1.7 Oil crops—Groundnuts



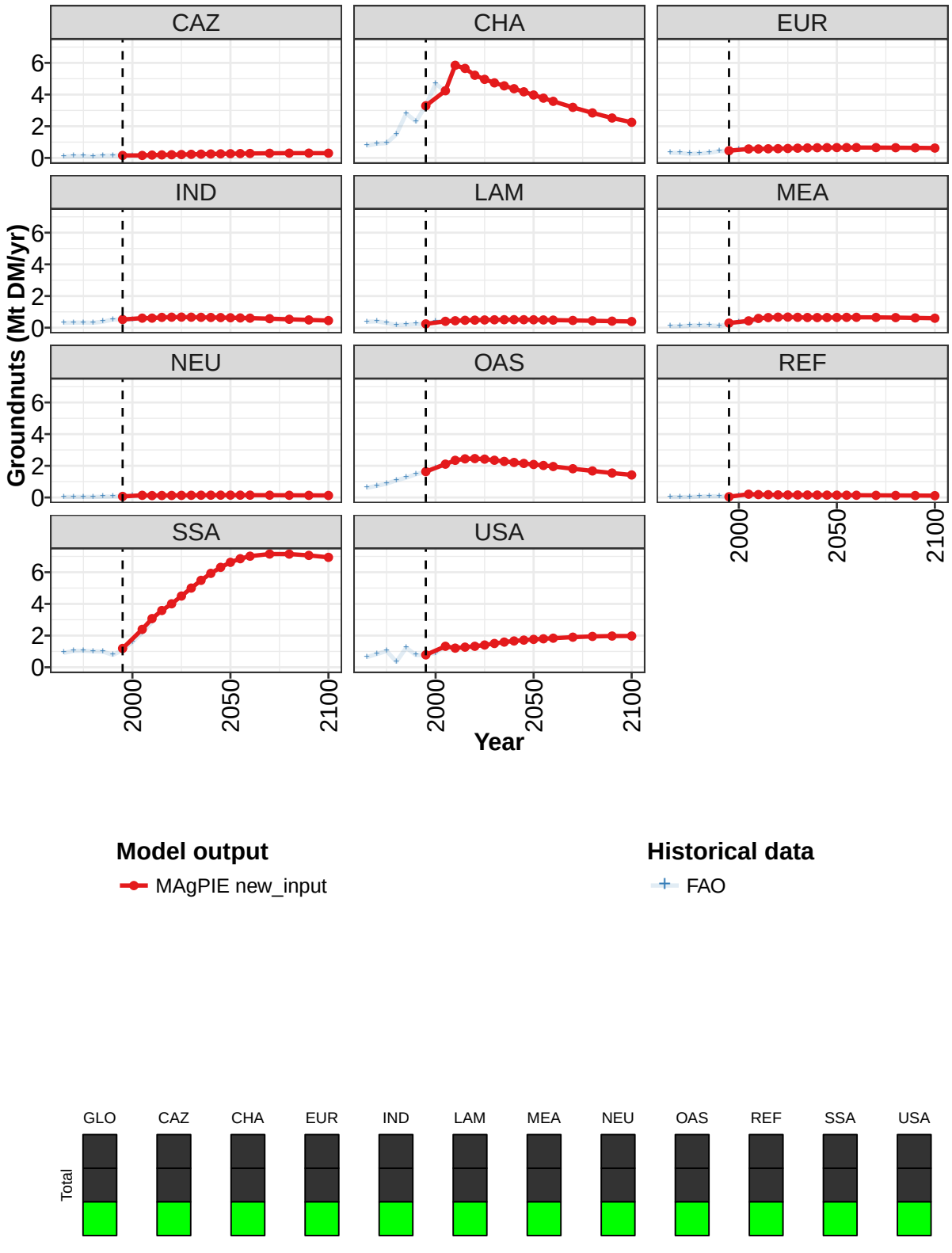


Figure 120: MAgPIE new_input — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8.7	12.6	15.2	15.8	15.9	16.2	16.5	16.9	17.2	17.3	17.4
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
CHA	3.3	4.2	5.8	5.7	5.2	5.0	4.7	4.6	4.4	4.2	4.0
EUR	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
IND	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
LAM	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.3	0.4	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.6	2.1	2.3	2.4	2.5	2.4	2.4	2.3	2.2	2.2	2.1
REF	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
SSA	1.2	2.4	3.1	3.6	4.0	4.5	5.0	5.5	5.9	6.3	6.6
USA	0.8	1.3	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.7	1.8

Table 359: MAgPIE new_input — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

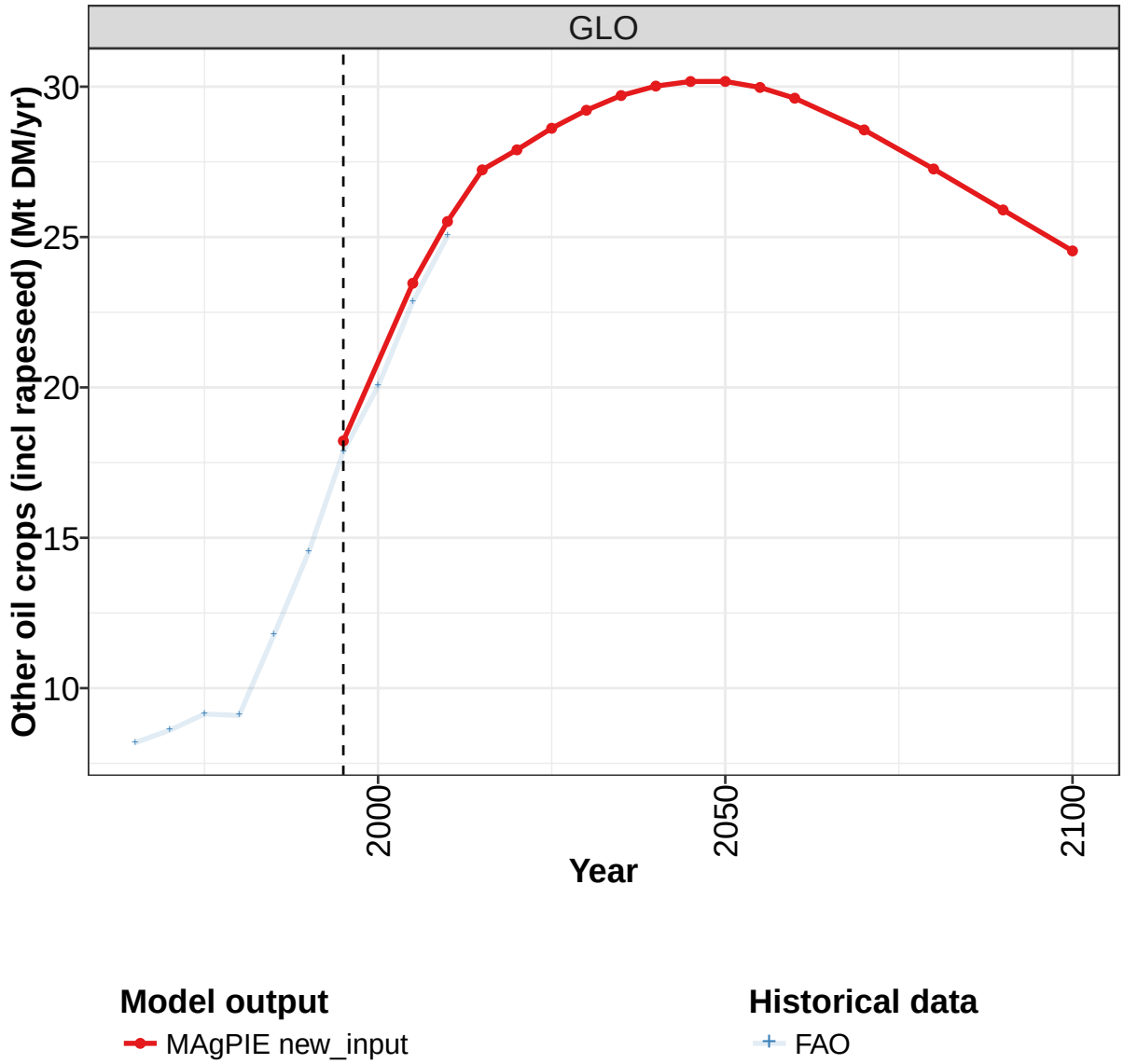
	2055	2060	2070	2080	2090	2100
GLO	17.4	17.3	17.0	16.4	15.8	15.2
CAZ	0.3	0.3	0.3	0.3	0.3	0.3
CHA	3.8	3.6	3.2	2.8	2.5	2.2
EUR	0.7	0.7	0.7	0.6	0.6	0.6
IND	0.6	0.6	0.6	0.5	0.5	0.5
LAM	0.5	0.5	0.5	0.4	0.4	0.4
MEA	0.7	0.7	0.7	0.6	0.6	0.6
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	2.0	2.0	1.8	1.7	1.5	1.4
REF	0.1	0.1	0.1	0.1	0.1	0.1
SSA	6.9	7.0	7.1	7.1	7.1	6.9
USA	1.8	1.8	1.9	1.9	2.0	2.0

Table 360: MAgPIE new_input — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.2	4.8	5.1	5.0	7.6	6.9	8.5	11.2	12.2	14.9
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2
CHA	0.8	0.9	0.9	1.5	2.8	2.3	3.3	4.7	4.2	5.9
EUR	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6
IND	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.6
LAM	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.4
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
OAS	0.6	0.7	0.9	1.1	1.3	1.5	1.6	1.8	2.1	2.3
REF	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.2
SSA	0.9	1.0	1.0	1.0	1.0	0.8	1.1	1.6	2.2	2.9
USA	0.6	0.8	1.0	0.4	1.2	0.8	0.8	0.9	1.3	1.2

Table 361: FAO — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr)

7.1.8 Oil crops—Other oil crops (incl rapeseed)



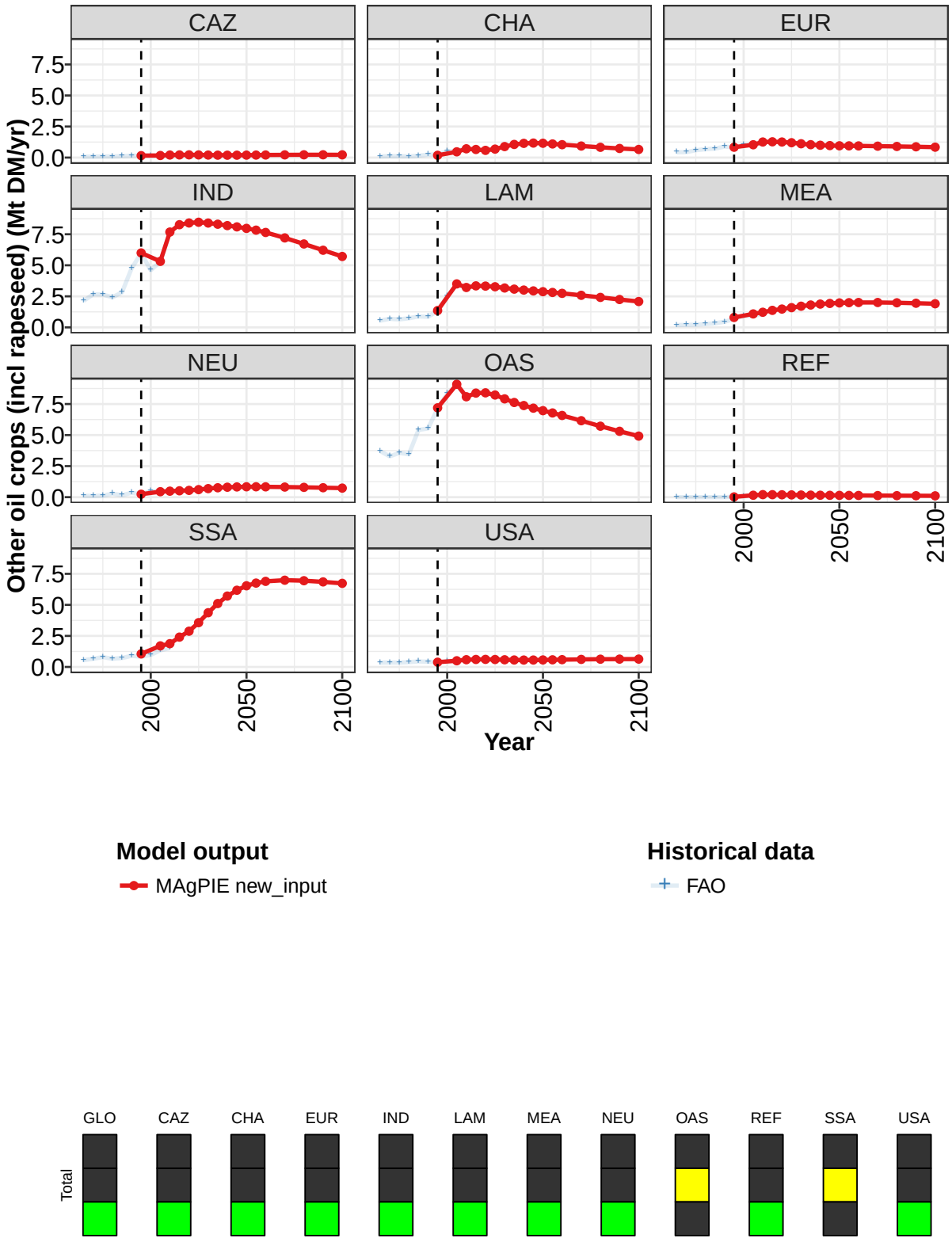


Figure 121: MAgPIE new_input — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	18.2	23.5	25.5	27.2	27.9	28.6	29.2	29.7	30.0	30.2	30.2
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.2	0.5	0.7	0.7	0.6	0.7	0.9	1.1	1.1	1.2	1.2
EUR	0.8	1.0	1.3	1.3	1.3	1.2	1.1	1.0	1.0	1.0	1.0
IND	6.0	5.3	7.7	8.3	8.4	8.5	8.4	8.3	8.2	8.1	8.0
LAM	1.4	3.5	3.2	3.3	3.3	3.3	3.2	3.1	3.0	2.9	2.9
MEA	0.8	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9	1.9	2.0
NEU	0.2	0.4	0.5	0.5	0.5	0.6	0.7	0.8	0.8	0.8	0.8
OAS	7.2	9.1	8.1	8.4	8.4	8.2	7.9	7.6	7.4	7.2	7.0
REF	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
SSA	1.1	1.7	1.9	2.4	2.9	3.6	4.4	5.1	5.7	6.2	6.5
USA	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

Table 362: MAgPIE new_input — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

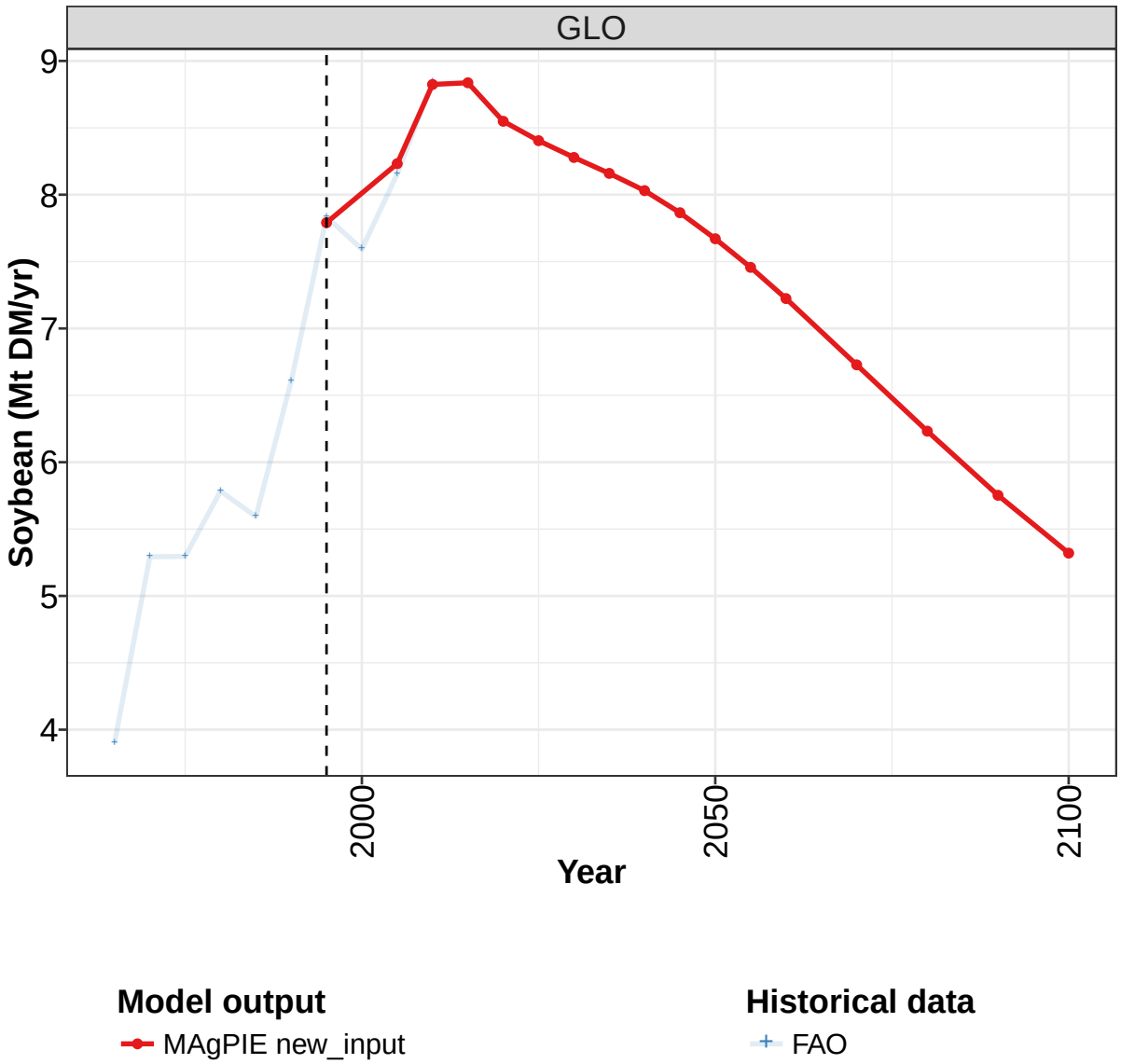
	2055	2060	2070	2080	2090	2100
GLO	30.0	29.6	28.6	27.3	25.9	24.5
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	1.1	1.0	0.9	0.8	0.7	0.7
EUR	0.9	0.9	0.9	0.9	0.9	0.8
IND	7.8	7.6	7.2	6.7	6.2	5.7
LAM	2.8	2.7	2.6	2.4	2.2	2.1
MEA	2.0	2.0	2.0	2.0	1.9	1.9
NEU	0.8	0.8	0.8	0.8	0.8	0.7
OAS	6.8	6.6	6.2	5.7	5.3	4.9
REF	0.1	0.1	0.1	0.1	0.1	0.1
SSA	6.8	6.9	7.0	6.9	6.9	6.7
USA	0.6	0.6	0.6	0.6	0.6	0.6

Table 363: MAgPIE new_input — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.2	8.6	9.1	9.1	11.8	14.5	17.9	20.0	22.9	25.0
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
CHA	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.5	0.8
EUR	0.4	0.4	0.6	0.7	0.7	0.9	0.8	1.0	1.0	1.3
IND	2.1	2.7	2.6	2.4	2.8	4.7	6.0	4.6	5.3	7.7
LAM	0.5	0.7	0.6	0.7	0.9	0.8	1.3	2.5	3.4	3.2
MEA	0.2	0.2	0.2	0.3	0.3	0.4	0.7	0.9	0.9	1.1
NEU	0.1	0.1	0.1	0.3	0.2	0.3	0.2	0.5	0.4	0.5
OAS	3.7	3.3	3.6	3.5	5.4	5.5	7.1	8.3	9.0	8.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
SSA	0.5	0.7	0.8	0.7	0.7	0.9	0.8	1.0	1.3	1.5
USA	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6

Table 364: FAO — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

7.1.9 Oil crops—Soybean



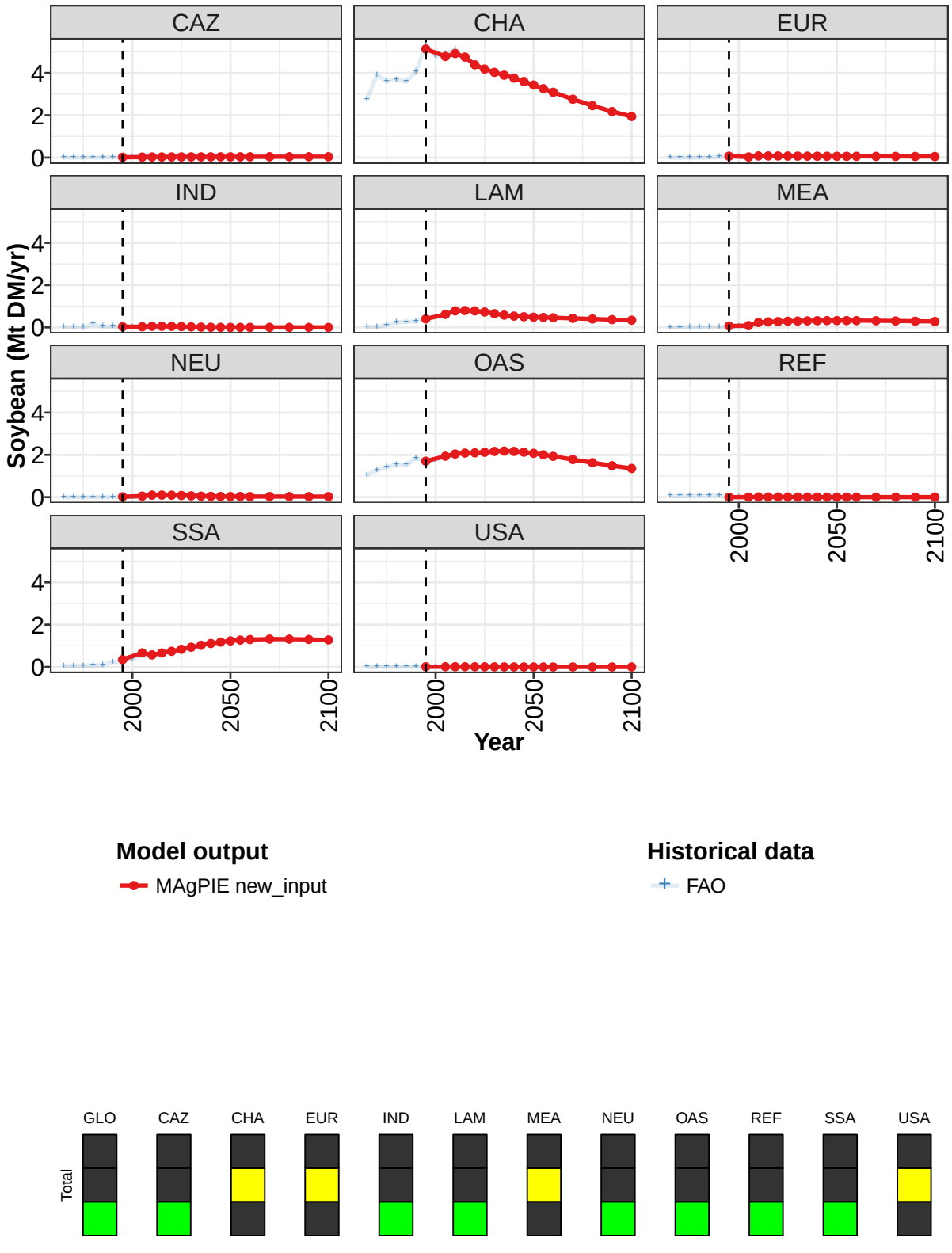


Figure 122: MAgPIE new_input — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	7.79	8.23	8.82	8.84	8.55	8.40	8.28	8.16	8.03	7.87	7.67
CAZ	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
CHA	5.13	4.78	4.92	4.75	4.39	4.19	4.03	3.90	3.76	3.60	3.43
EUR	0.07	0.03	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.06	0.06
IND	0.03	0.03	0.05	0.05	0.05	0.04	0.03	0.01	0.01	0.00	0.00
LAM	0.40	0.61	0.78	0.80	0.78	0.73	0.65	0.58	0.53	0.50	0.48
MEA	0.06	0.08	0.23	0.26	0.28	0.29	0.30	0.31	0.32	0.32	0.32
NEU	0.02	0.05	0.10	0.10	0.09	0.08	0.06	0.05	0.04	0.03	0.03
OAS	1.70	1.94	2.04	2.09	2.10	2.12	2.16	2.18	2.17	2.13	2.07
REF	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
SSA	0.35	0.67	0.57	0.66	0.74	0.83	0.93	1.02	1.11	1.18	1.23
USA	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Table 365: MAgPIE new_input — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

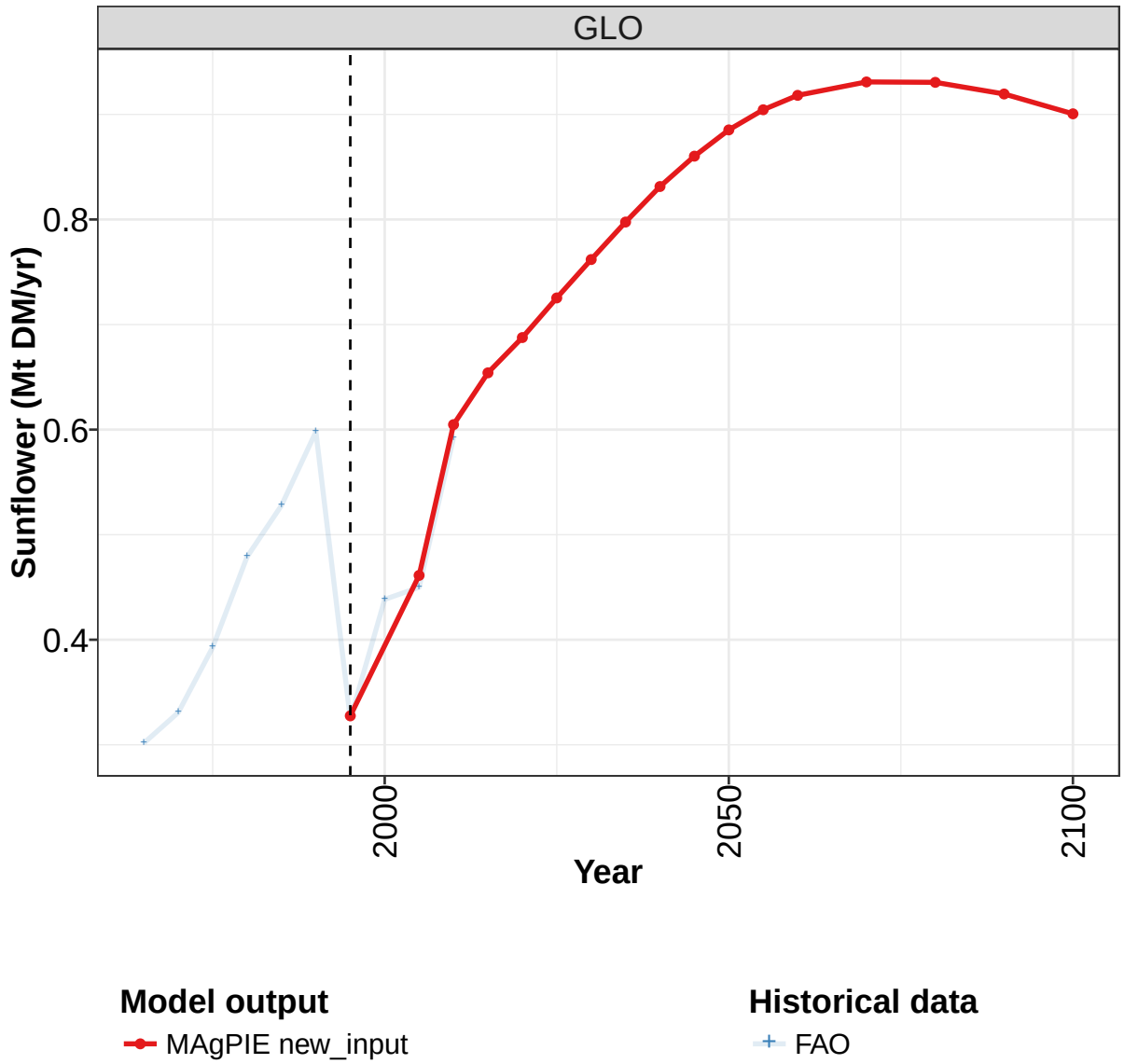
	2055	2060	2070	2080	2090	2100
GLO	7.46	7.22	6.73	6.23	5.75	5.32
CAZ	0.04	0.04	0.04	0.04	0.04	0.04
CHA	3.26	3.09	2.76	2.46	2.18	1.94
EUR	0.06	0.06	0.06	0.06	0.05	0.05
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.47	0.46	0.43	0.40	0.37	0.34
MEA	0.32	0.32	0.31	0.30	0.29	0.28
NEU	0.03	0.03	0.03	0.03	0.03	0.03
OAS	2.00	1.93	1.78	1.63	1.49	1.36
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.27	1.30	1.32	1.31	1.30	1.28
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 366: MAgPIE new_input — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.90	5.29	5.30	5.78	5.59	6.61	7.83	7.59	8.16	8.84
CAZ	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03
CHA	2.75	3.89	3.61	3.70	3.59	4.05	5.34	4.79	4.90	5.14
EUR	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.05	0.03	0.08
IND	0.01	0.00	0.01	0.15	0.04	0.04	0.03	0.02	0.03	0.05
LAM	0.01	0.03	0.11	0.23	0.26	0.29	0.39	0.47	0.61	0.78
MEA	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.04	0.03	0.18
NEU	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.05	0.10
OAS	1.04	1.26	1.42	1.54	1.52	1.84	1.69	1.78	1.92	2.03
REF	0.05	0.06	0.07	0.07	0.08	0.08	0.00	0.00	0.00	0.01
SSA	0.03	0.05	0.07	0.07	0.07	0.24	0.25	0.39	0.54	0.45
USA	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01

Table 367: FAO — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr)

7.1.10 Oil crops—Sunflower



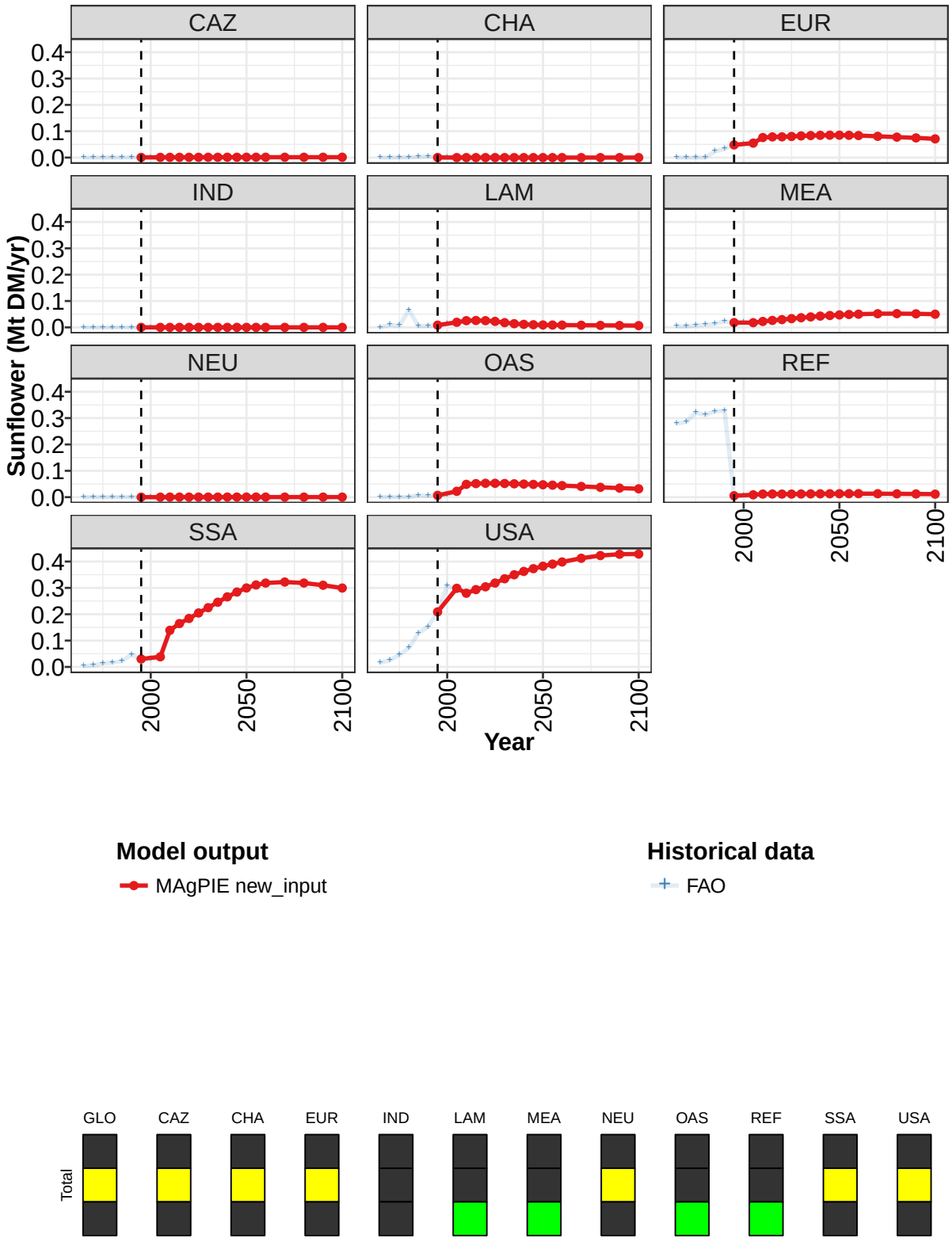


Figure 123: MAgPIE new_input — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.328	0.461	0.605	0.654	0.688	0.725	0.762	0.798	0.831	0.860	0.885
CAZ	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.048	0.055	0.076	0.079	0.079	0.080	0.082	0.084	0.084	0.085	0.085
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.008	0.019	0.025	0.026	0.025	0.023	0.018	0.014	0.011	0.010	0.009
MEA	0.018	0.018	0.023	0.026	0.029	0.033	0.037	0.040	0.043	0.045	0.047
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.007	0.022	0.049	0.052	0.053	0.053	0.052	0.051	0.050	0.048	0.047
REF	0.005	0.009	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013
SSA	0.030	0.038	0.139	0.165	0.184	0.205	0.225	0.246	0.266	0.284	0.300
USA	0.209	0.299	0.280	0.293	0.304	0.319	0.335	0.350	0.363	0.373	0.382

Table 368: MAgPIE new_input — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

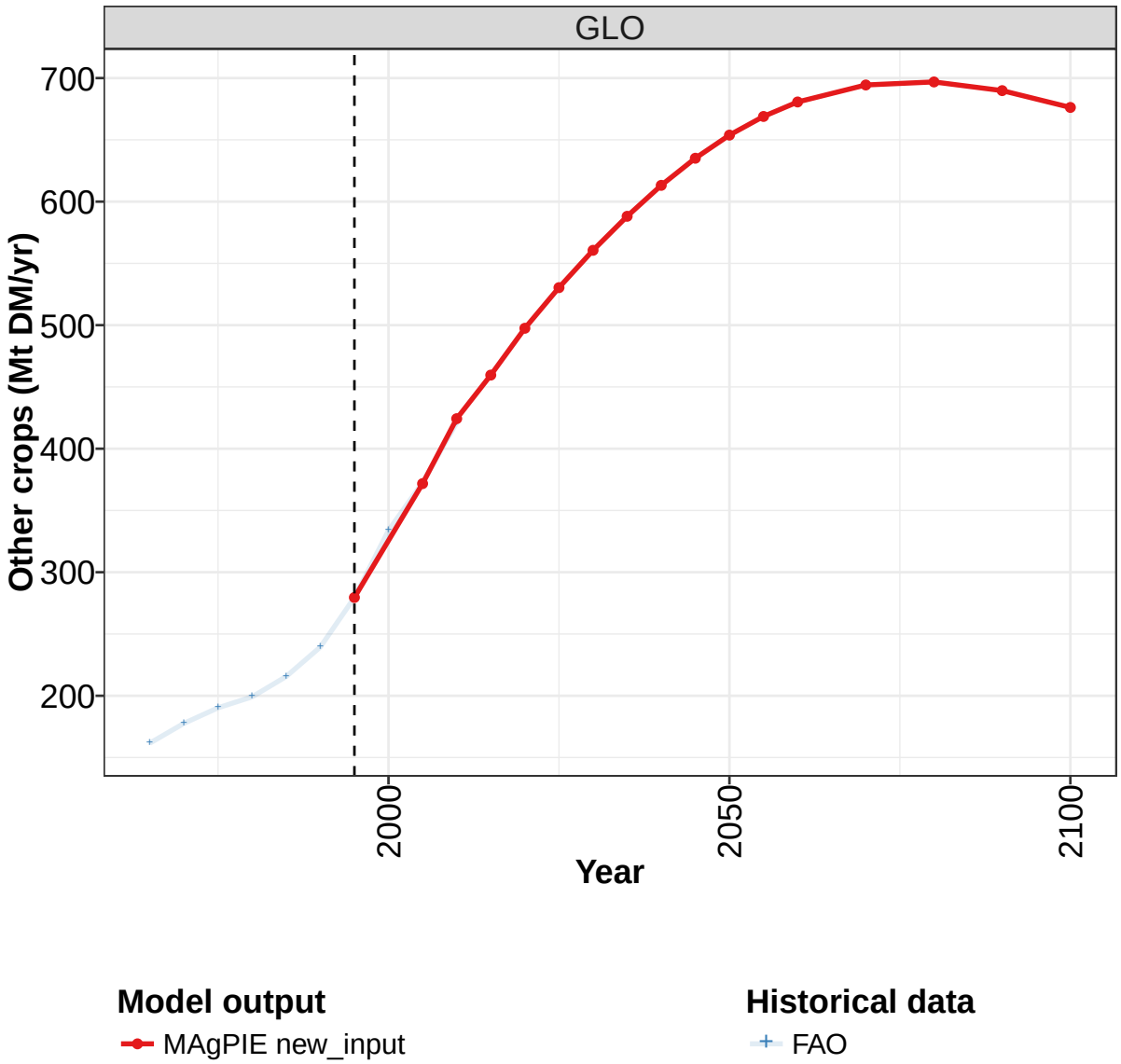
	2055	2060	2070	2080	2090	2100
GLO	0.904	0.918	0.931	0.931	0.919	0.901
CAZ	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.085	0.084	0.081	0.078	0.075	0.071
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.009	0.009	0.008	0.008	0.007	0.007
MEA	0.049	0.050	0.052	0.052	0.051	0.050
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.046	0.044	0.041	0.037	0.034	0.032
REF	0.013	0.013	0.013	0.013	0.012	0.011
SSA	0.311	0.318	0.322	0.318	0.310	0.299
USA	0.390	0.398	0.412	0.423	0.428	0.429

Table 369: MAgPIE new_input — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.302	0.331	0.393	0.479	0.528	0.598	0.325	0.438	0.450	0.592
CAZ	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
CHA	0.000	0.000	0.000	0.001	0.003	0.004	0.003	0.001	0.001	0.002
EUR	0.000	0.000	0.000	0.000	0.023	0.033	0.048	0.053	0.054	0.076
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.009	0.006	0.065	0.005	0.005	0.008	0.013	0.019	0.025
MEA	0.004	0.004	0.007	0.011	0.013	0.023	0.016	0.020	0.015	0.019
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.001	0.007	0.005	0.007	0.009	0.021	0.047
REF	0.279	0.285	0.321	0.312	0.326	0.328	0.005	0.004	0.009	0.012
SSA	0.003	0.006	0.013	0.017	0.022	0.047	0.026	0.032	0.032	0.131
USA	0.016	0.026	0.045	0.072	0.128	0.152	0.210	0.307	0.298	0.279

Table 370: FAO — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr)

7.1.11 Other crops



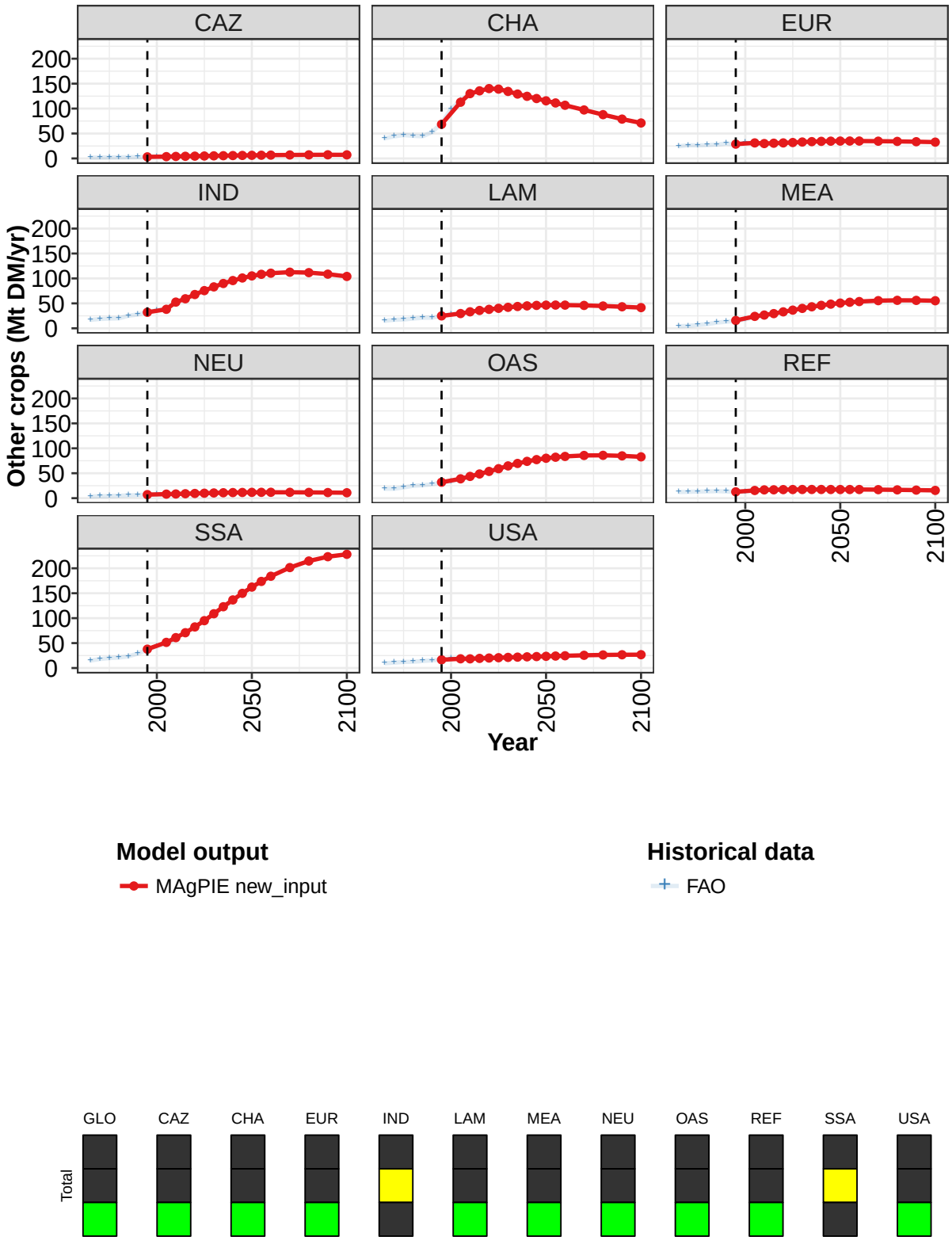


Figure 124: MAgPIE new_input — Demand—Food—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	280	372	424	460	497	530	561	588	613	635	654
CAZ	3	4	4	4	5	5	5	6	6	6	6
CHA	69	113	130	136	140	139	134	129	125	120	116
EUR	29	31	30	31	31	32	33	34	34	35	35
IND	32	38	53	59	68	76	83	90	96	101	105
LAM	25	30	33	36	38	40	42	44	45	46	46
MEA	16	24	27	30	33	36	40	43	46	48	51
NEU	7	8	8	9	9	10	10	11	11	11	12
OAS	32	39	44	49	54	59	65	70	74	77	80
REF	13	15	17	17	17	17	17	17	17	17	17
SSA	38	51	61	71	82	95	109	123	137	150	162
USA	17	19	18	19	20	21	21	22	22	23	24

Table 371: MAgPIE new_input — Demand—Food—Crops—Other crops (Mt DM/yr) [PART 1/2]

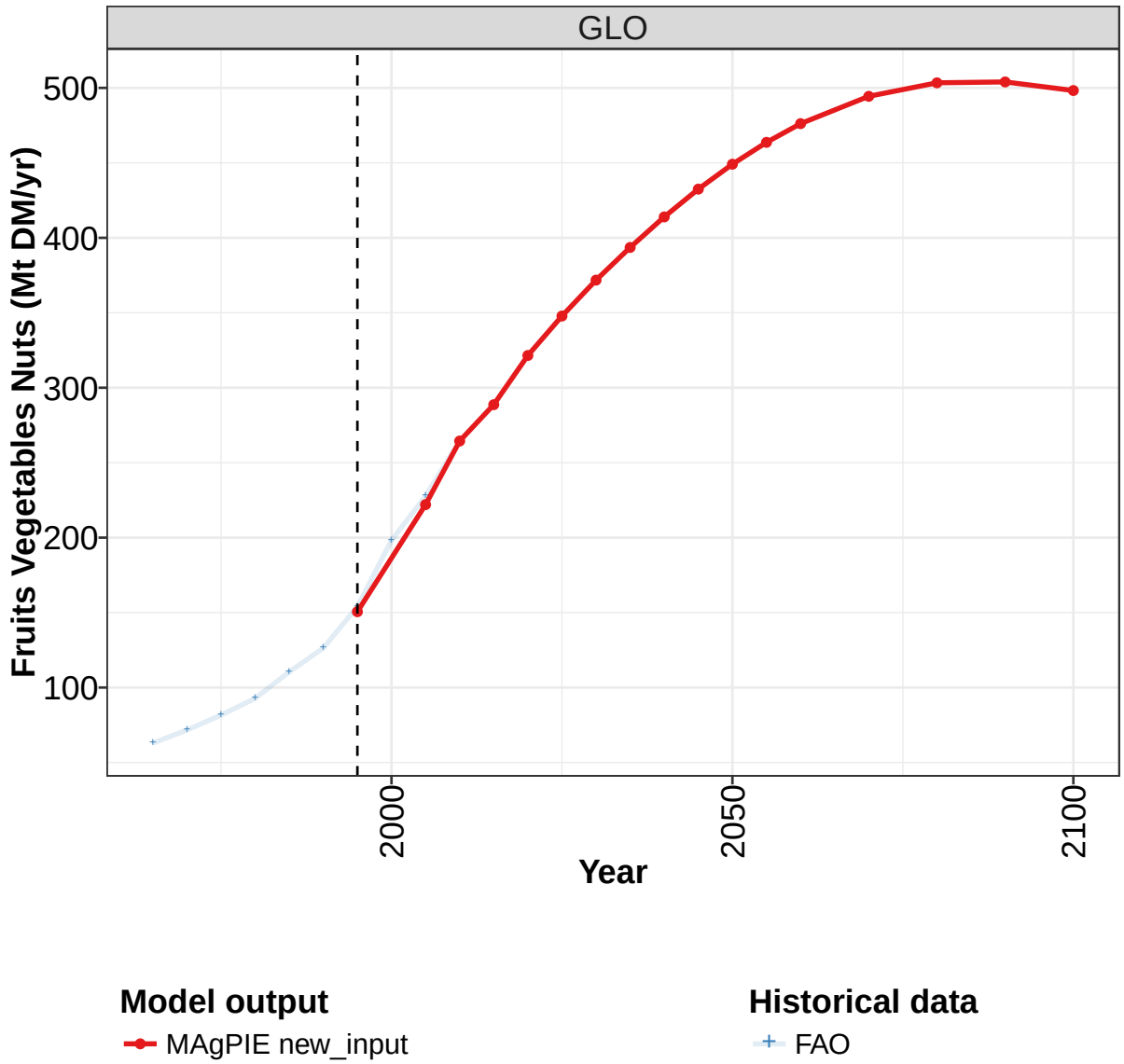
	2055	2060	2070	2080	2090	2100
GLO	669	681	694	697	690	676
CAZ	6	7	7	7	7	7
CHA	111	107	97	88	79	71
EUR	35	35	35	34	34	33
IND	108	111	113	112	109	104
LAM	47	47	46	45	43	42
MEA	52	54	55	56	56	55
NEU	12	12	12	12	11	11
OAS	82	84	86	86	85	83
REF	17	17	17	17	16	16
SSA	174	184	201	215	223	228
USA	24	25	26	26	27	27

Table 372: MAgPIE new_input — Demand—Food—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	162	178	190	199	216	239	280	334	373	421
CAZ	2	2	2	2	3	3	3	3	4	4
CHA	40	44	47	45	44	53	71	99	116	132
EUR	24	26	26	27	28	30	29	31	31	30
IND	17	19	20	20	25	28	32	37	39	53
LAM	15	17	18	20	21	21	25	28	30	33
MEA	4	5	7	8	11	13	15	18	23	25
NEU	3	4	4	5	6	6	7	8	8	8
OAS	19	19	22	25	26	28	32	34	39	43
REF	12	13	13	13	14	13	13	13	16	17
SSA	15	18	20	21	23	29	36	44	50	59
USA	10	11	12	13	14	15	17	19	19	18

Table 373: FAO — Demand—Food—Crops—Other crops (Mt DM/yr)

7.1.12 Other crops—Fruits Vegetables Nuts



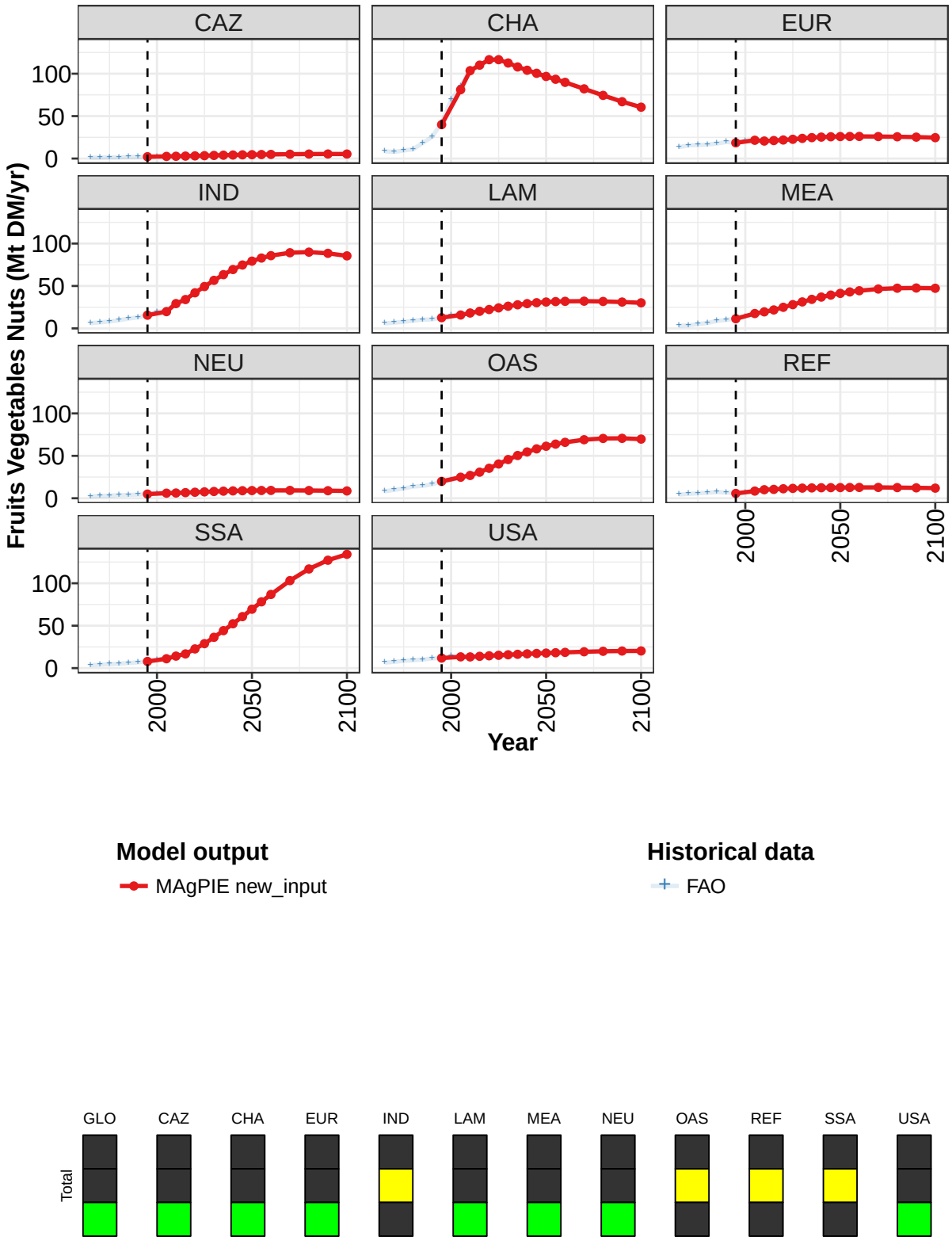


Figure 125: MAgPIE new_input — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	151	222	264	289	322	348	372	394	414	433	449
CAZ	2	3	3	3	3	3	4	4	4	4	5
CHA	40	81	104	110	117	117	113	108	104	100	97
EUR	19	22	21	21	22	23	24	25	25	26	26
IND	16	20	29	34	42	49	57	63	69	75	79
LAM	13	16	18	20	22	24	26	28	29	30	31
MEA	11	18	20	22	25	28	31	34	37	39	41
NEU	5	6	6	7	7	8	8	8	9	9	9
OAS	20	25	27	31	35	40	46	50	55	58	61
REF	6	8	10	10	11	12	12	12	12	13	13
SSA	8	11	14	17	23	29	36	44	52	61	69
USA	12	13	13	14	15	15	16	16	17	17	18

Table 374: MAgPIE new_input — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

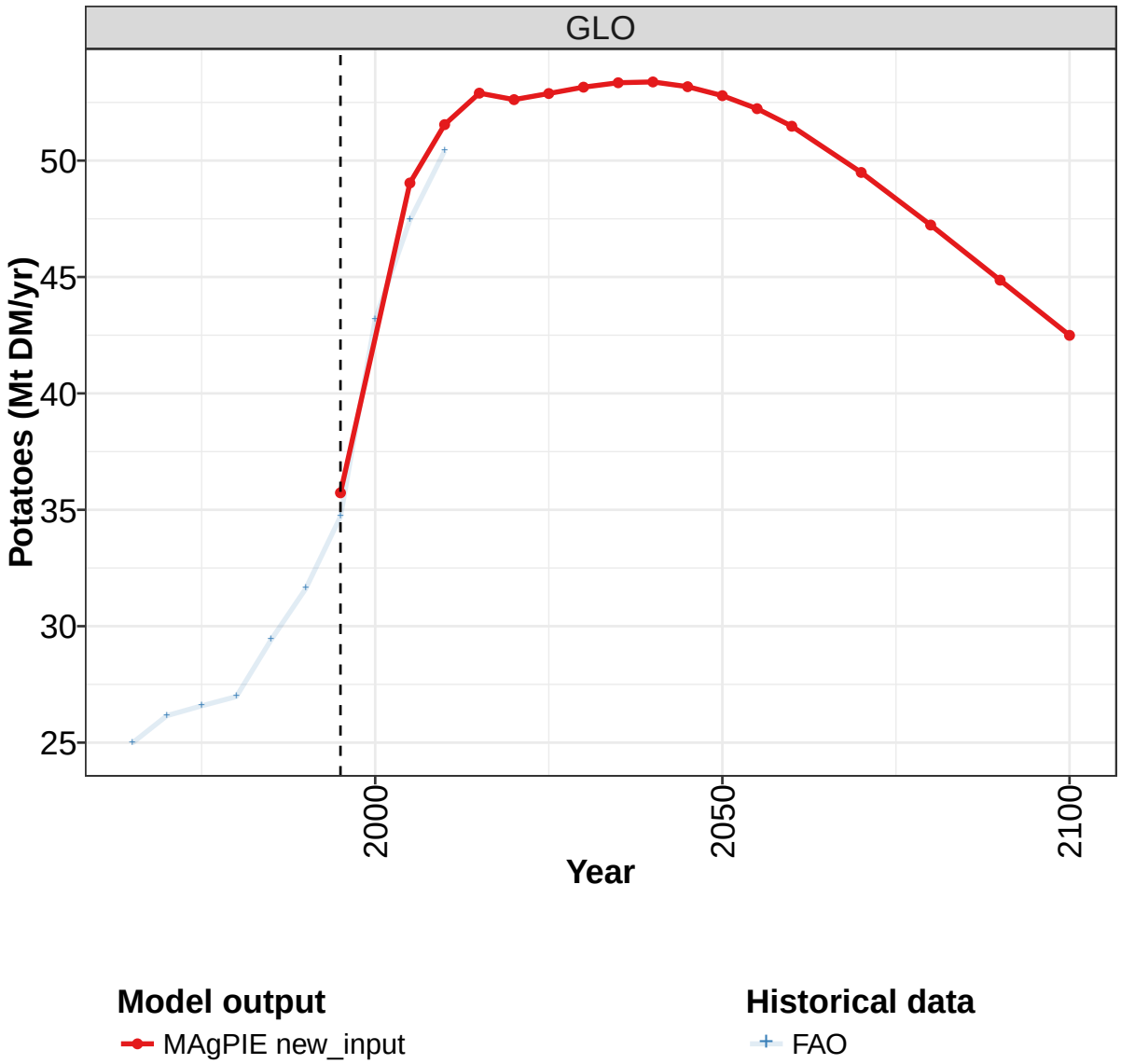
	2055	2060	2070	2080	2090	2100
GLO	464	476	494	503	504	498
CAZ	5	5	5	5	5	5
CHA	93	90	82	74	67	61
EUR	26	26	26	26	25	25
IND	83	86	89	90	88	86
LAM	32	32	32	32	31	30
MEA	43	44	46	47	48	47
NEU	9	9	9	9	9	9
OAS	64	66	69	71	71	70
REF	13	13	13	13	12	12
SSA	78	87	103	117	127	134
USA	18	19	19	20	20	20

Table 375: MAgPIE new_input — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	63	72	82	93	110	126	154	198	228	265
CAZ	1	1	1	2	2	2	2	2	3	3
CHA	8	8	9	11	18	25	42	69	85	105
EUR	13	16	16	17	18	19	19	21	22	21
IND	6	7	8	10	12	13	16	20	21	29
LAM	6	7	8	9	10	11	13	15	16	18
MEA	3	4	5	6	9	10	11	14	17	19
NEU	2	3	3	4	4	4	5	5	6	6
OAS	8	10	12	14	15	16	20	21	25	27
REF	4	5	6	7	7	7	6	7	9	10
SSA	3	4	5	5	6	7	8	10	12	14
USA	6	7	9	9	10	11	12	14	13	13

Table 376: FAO — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

7.1.13 Other crops—Potatoes



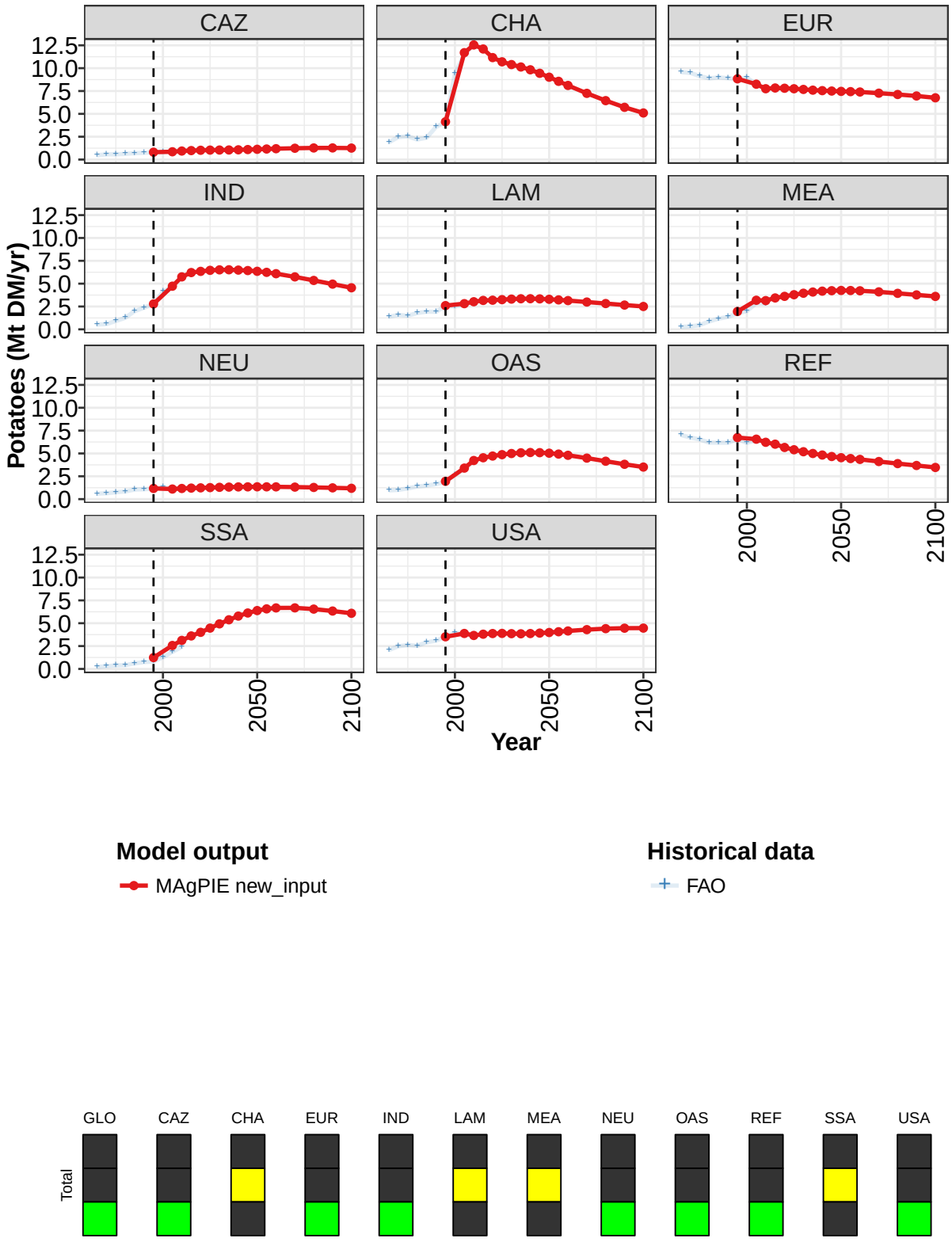


Figure 126: MAgPIE new_input — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	35.7	49.0	51.5	52.9	52.6	52.9	53.2	53.3	53.4	53.2	52.8
CAZ	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1
CHA	4.1	11.7	12.5	12.1	11.2	10.7	10.4	10.1	9.8	9.4	9.0
EUR	8.8	8.2	7.8	7.8	7.8	7.8	7.7	7.6	7.5	7.5	7.5
IND	2.8	4.7	5.7	6.2	6.3	6.5	6.5	6.5	6.5	6.4	6.4
LAM	2.6	2.8	3.0	3.2	3.2	3.3	3.3	3.3	3.4	3.3	3.3
MEA	2.0	3.2	3.1	3.4	3.6	3.8	4.0	4.1	4.2	4.2	4.3
NEU	1.2	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.4
OAS	2.0	3.4	4.2	4.5	4.7	4.9	5.0	5.1	5.1	5.1	5.0
REF	6.7	6.6	6.2	6.0	5.7	5.4	5.2	5.0	4.8	4.7	4.5
SSA	1.2	2.6	3.1	3.6	4.0	4.5	4.9	5.4	5.8	6.1	6.4
USA	3.5	3.9	3.7	3.8	3.9	3.9	3.9	3.8	3.9	3.9	4.0

Table 377: MAgPIE new_input — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

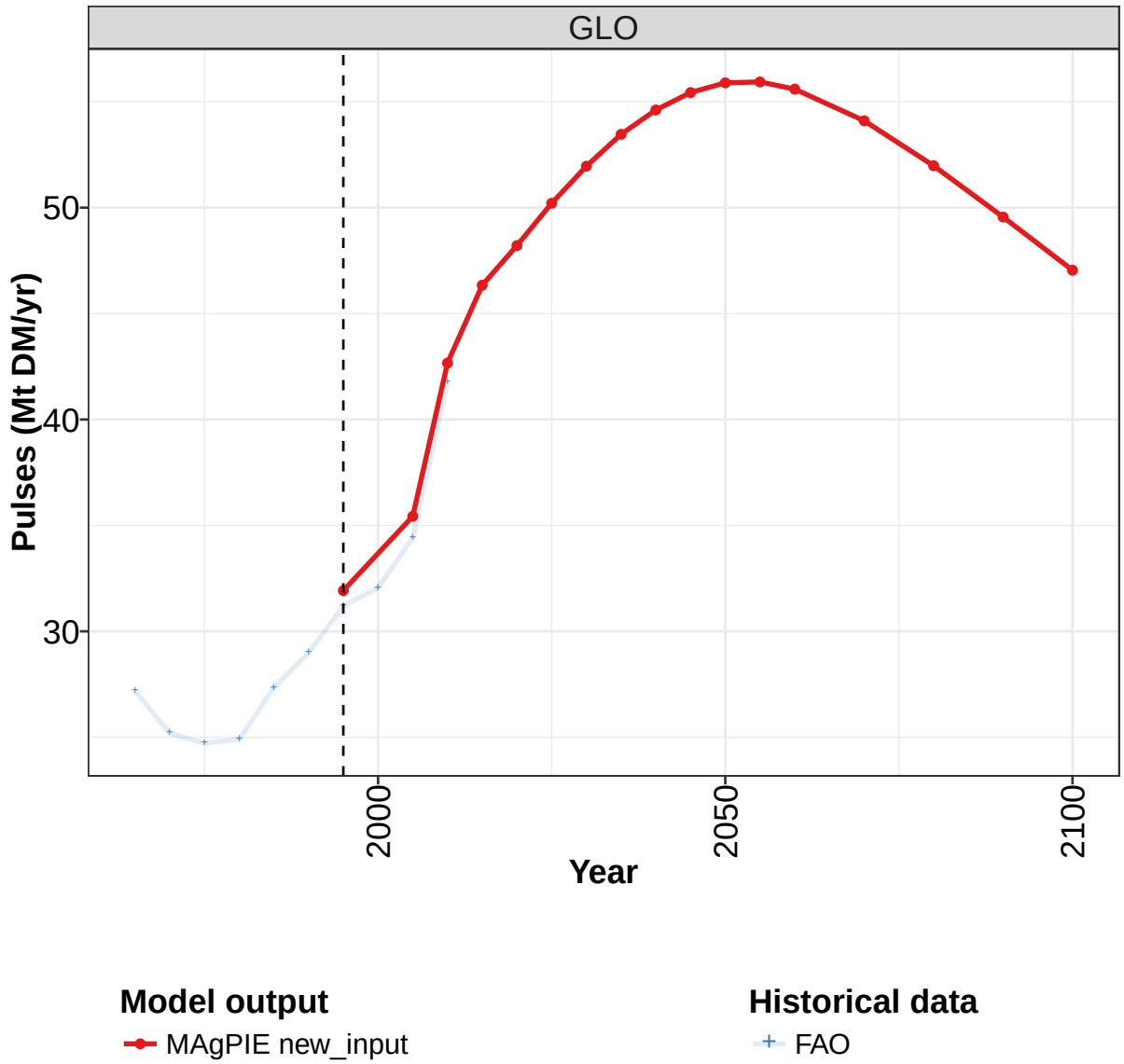
	2055	2060	2070	2080	2090	2100
GLO	52.2	51.5	49.5	47.2	44.9	42.5
CAZ	1.2	1.2	1.2	1.3	1.3	1.3
CHA	8.6	8.1	7.2	6.4	5.7	5.1
EUR	7.4	7.4	7.3	7.1	7.0	6.8
IND	6.2	6.1	5.7	5.4	5.0	4.6
LAM	3.2	3.1	3.0	2.8	2.7	2.5
MEA	4.3	4.2	4.1	3.9	3.8	3.6
NEU	1.3	1.3	1.3	1.3	1.2	1.2
OAS	4.9	4.8	4.5	4.1	3.8	3.5
REF	4.4	4.3	4.1	3.9	3.7	3.5
SSA	6.6	6.7	6.7	6.5	6.3	6.1
USA	4.1	4.2	4.3	4.4	4.5	4.5

Table 378: MAgPIE new_input — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	25.0	26.2	26.6	27.0	29.4	31.6	34.7	43.2	47.4	50.4
CAZ	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
CHA	1.9	2.5	2.5	2.2	2.4	3.6	4.1	9.4	11.5	12.6
EUR	9.6	9.5	9.1	8.9	9.0	8.9	8.8	9.0	8.2	7.8
IND	0.5	0.6	0.9	1.3	2.0	2.4	2.8	4.1	4.7	5.7
LAM	1.4	1.6	1.5	1.8	1.9	1.9	2.5	2.5	2.7	3.0
MEA	0.3	0.3	0.5	0.9	1.2	1.4	1.7	2.0	2.9	2.8
NEU	0.6	0.6	0.8	0.8	1.0	1.1	1.2	1.3	1.1	1.2
OAS	1.0	1.0	1.2	1.4	1.5	1.6	1.9	2.6	3.3	4.1
REF	7.0	6.7	6.5	6.2	6.2	6.2	6.5	6.2	6.4	6.2
SSA	0.2	0.3	0.4	0.4	0.6	0.7	0.8	1.3	1.9	2.4
USA	2.1	2.5	2.6	2.5	2.9	3.1	3.5	4.0	3.9	3.7

Table 379: FAO — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr)

7.1.14 Other crops—Pulses



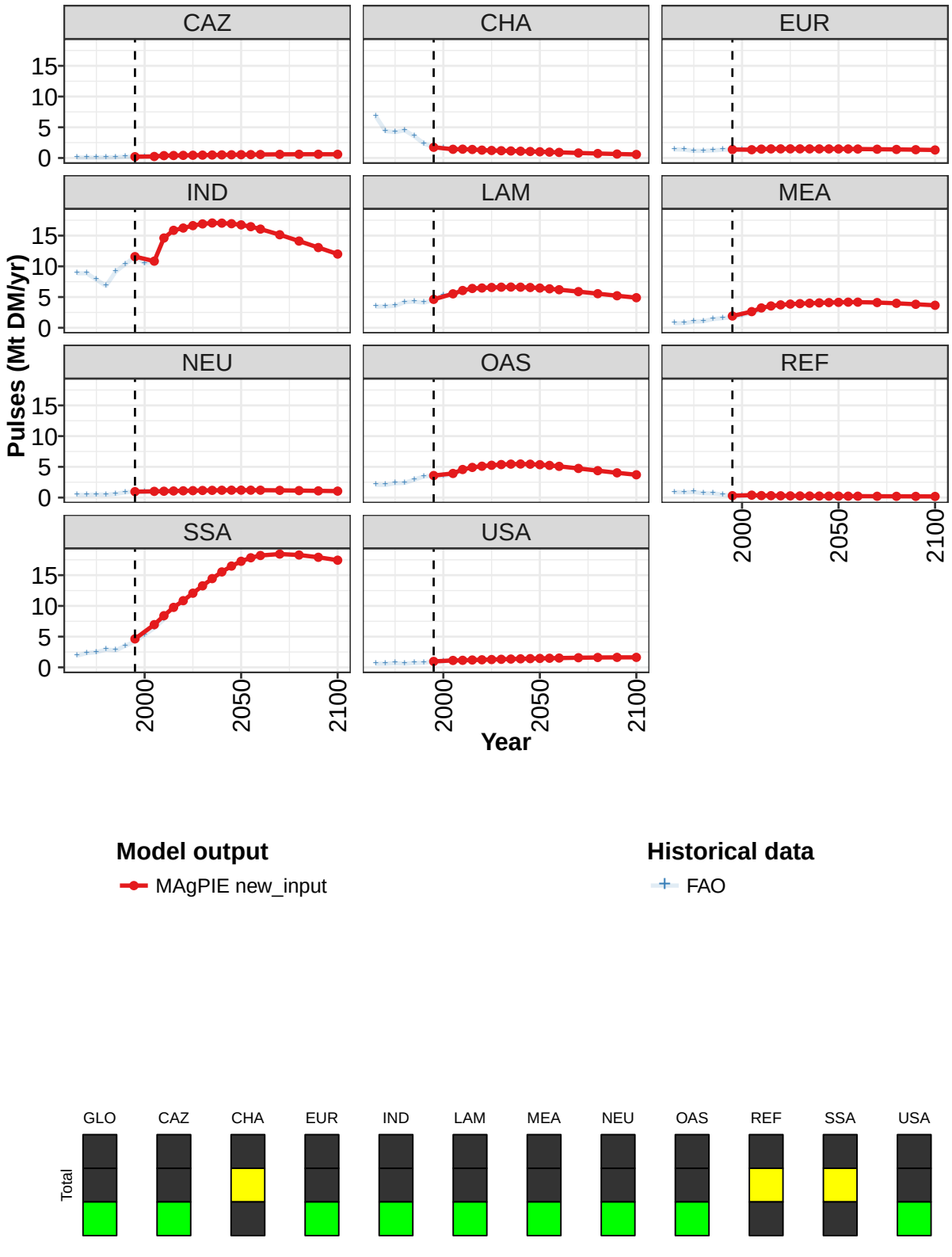


Figure 127: MAgPIE new_input — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	31.9	35.4	42.7	46.3	48.2	50.2	52.0	53.5	54.6	55.4	55.9
CAZ	0.2	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
CHA	1.7	1.4	1.4	1.4	1.3	1.2	1.2	1.1	1.1	1.1	1.0
EUR	1.4	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
IND	11.6	10.8	14.6	15.9	16.2	16.6	16.9	17.1	17.0	16.9	16.8
LAM	4.6	5.5	6.1	6.4	6.5	6.6	6.6	6.6	6.6	6.6	6.5
MEA	1.9	2.6	3.2	3.5	3.7	3.9	3.9	4.0	4.1	4.1	4.1
NEU	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
OAS	3.6	3.9	4.6	4.9	5.1	5.3	5.4	5.4	5.5	5.4	5.4
REF	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
SSA	4.6	7.0	8.4	9.8	10.9	12.1	13.3	14.4	15.5	16.5	17.3
USA	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5

Table 380: MAgPIE new_input — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

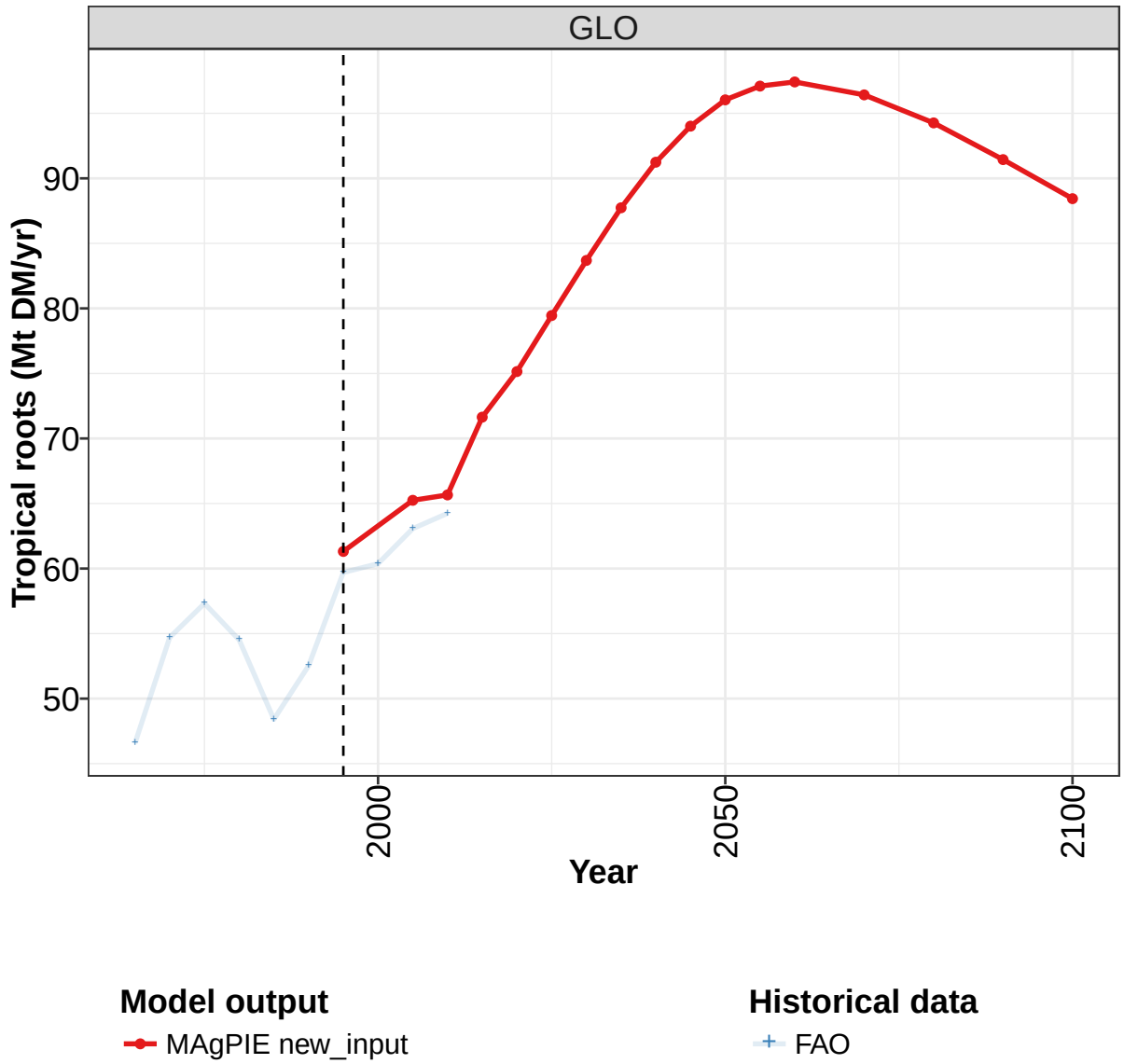
	2055	2060	2070	2080	2090	2100
GLO	55.9	55.6	54.1	52.0	49.6	47.0
CAZ	0.6	0.6	0.6	0.6	0.6	0.6
CHA	1.0	0.9	0.8	0.7	0.6	0.6
EUR	1.5	1.5	1.4	1.4	1.4	1.3
IND	16.5	16.1	15.1	14.1	13.1	12.0
LAM	6.3	6.2	5.9	5.6	5.2	4.9
MEA	4.2	4.2	4.1	4.0	3.8	3.7
NEU	1.2	1.2	1.2	1.1	1.1	1.0
OAS	5.2	5.1	4.7	4.4	4.0	3.7
REF	0.2	0.2	0.2	0.2	0.2	0.2
SSA	17.8	18.2	18.4	18.3	17.9	17.4
USA	1.5	1.5	1.6	1.6	1.6	1.6

Table 381: MAgPIE new_input — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	27.2	25.2	24.7	24.9	27.3	29.0	31.2	32.1	34.4	41.8
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.4
CHA	6.8	4.4	4.2	4.5	3.5	2.3	1.8	1.6	1.5	1.5
EUR	1.4	1.4	1.2	1.2	1.2	1.4	1.4	1.4	1.3	1.4
IND	8.9	8.9	7.8	6.8	9.1	10.3	11.6	10.5	10.8	14.6
LAM	3.4	3.5	3.6	4.2	4.3	4.1	4.6	5.3	5.4	6.1
MEA	0.7	0.8	1.0	1.1	1.4	1.6	1.7	2.0	2.4	3.0
NEU	0.4	0.4	0.5	0.5	0.6	0.9	1.0	0.9	1.0	1.0
OAS	2.1	2.1	2.3	2.4	2.9	3.4	3.5	3.5	3.8	4.5
REF	0.9	0.8	0.9	0.7	0.7	0.5	0.3	0.3	0.4	0.3
SSA	1.9	2.3	2.5	2.9	2.8	3.5	4.2	5.3	6.4	7.8
USA	0.6	0.6	0.7	0.6	0.7	0.8	1.0	1.0	1.1	1.1

Table 382: FAO — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr)

7.1.15 Other crops—Tropical roots



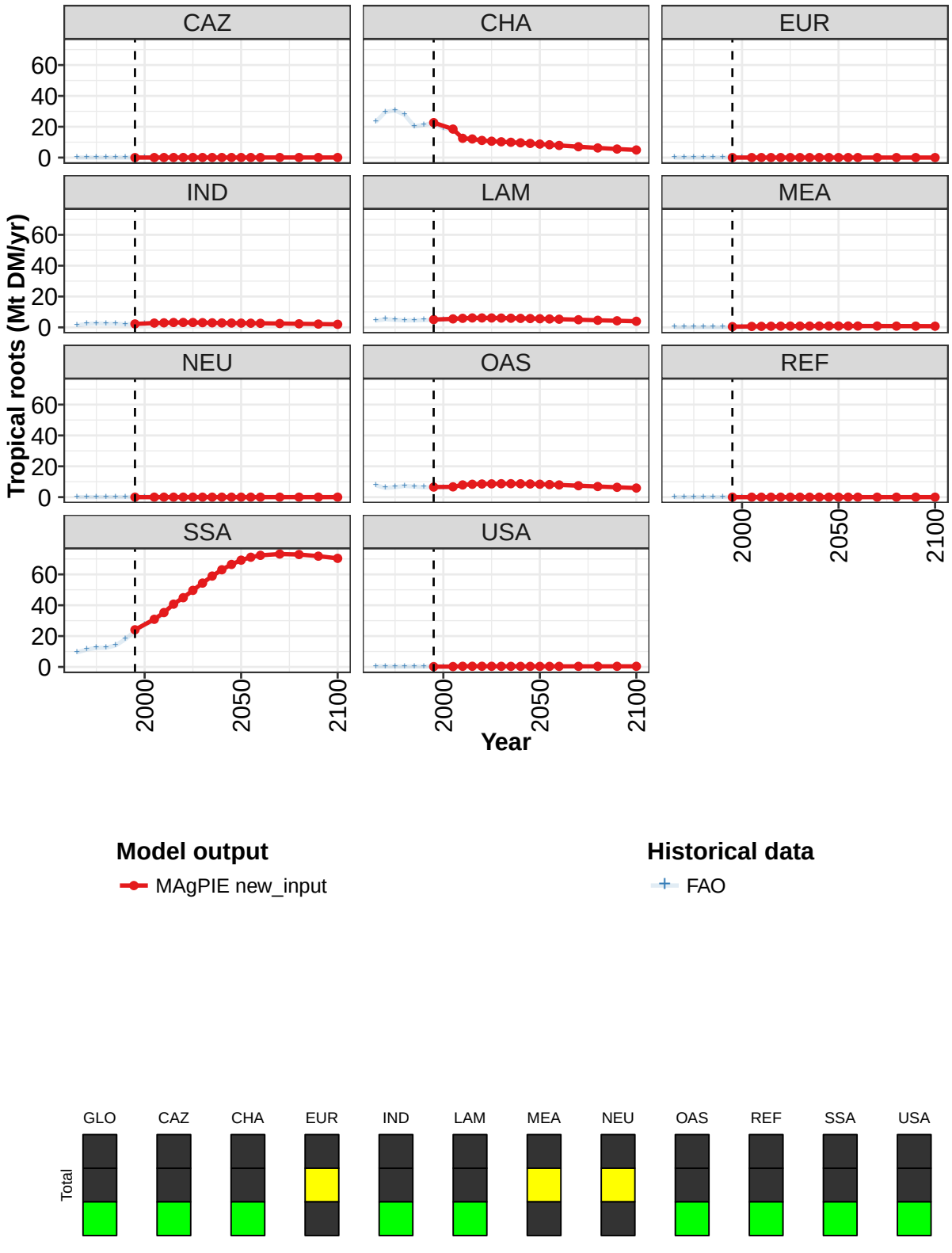


Figure 128: MAgPIE new_input — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	61.3	65.2	65.7	71.6	75.1	79.5	83.7	87.7	91.2	94.0	96.0
CAZ	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	22.7	18.5	12.5	12.1	11.1	10.6	10.3	9.9	9.6	9.2	8.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.2	2.8	2.9	3.2	3.2	3.2	3.0	2.9	2.9	2.8	2.8
LAM	5.1	5.5	5.9	6.1	6.1	6.1	6.0	5.9	5.8	5.7	5.6
MEA	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	6.6	6.7	7.9	8.4	8.5	8.6	8.7	8.7	8.7	8.5	8.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	24.1	30.9	35.3	40.7	44.9	49.6	54.4	58.9	63.0	66.4	69.2
USA	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Table 383: MAgPIE new_input — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

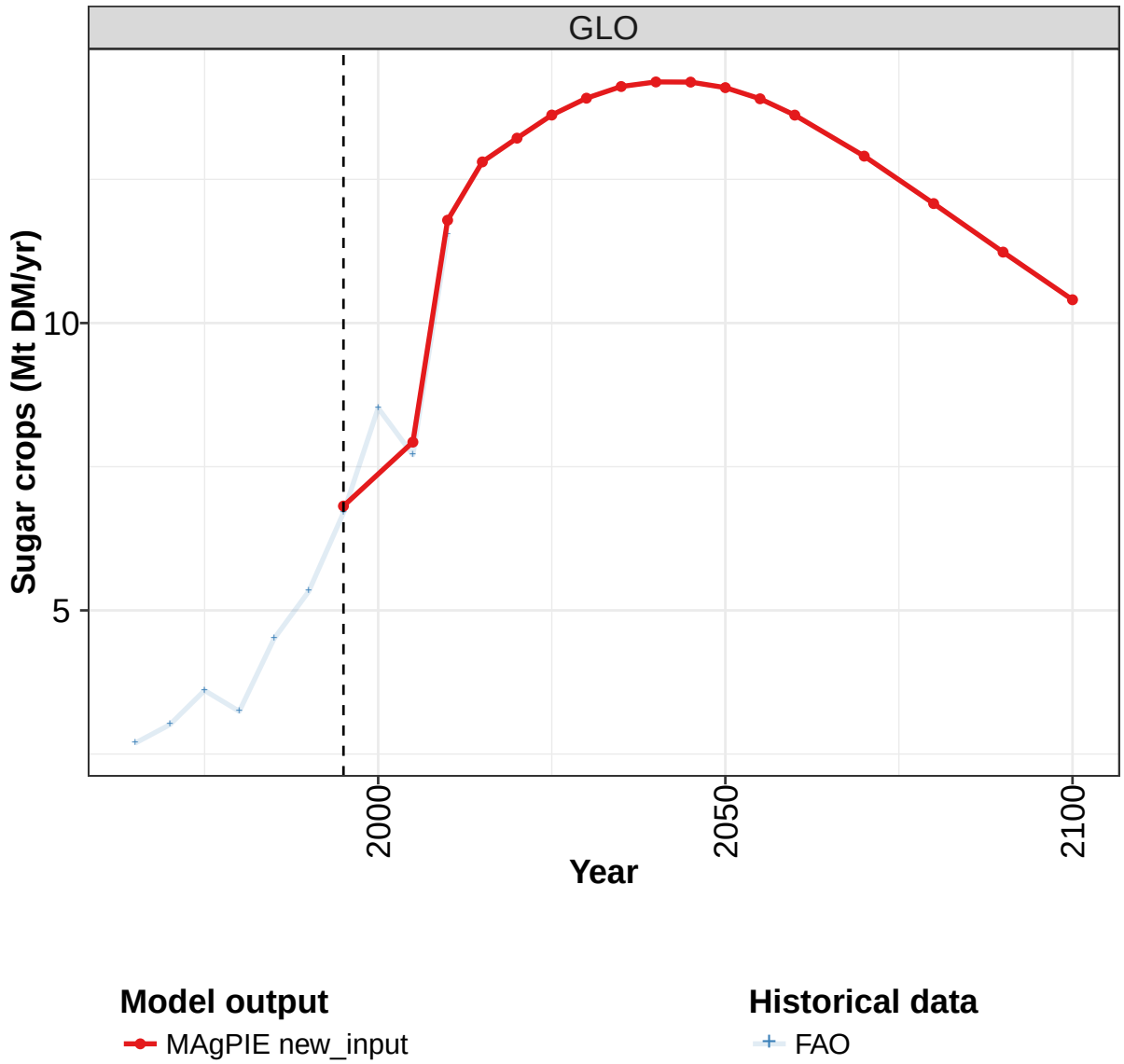
	2055	2060	2070	2080	2090	2100
GLO	97.1	97.4	96.4	94.3	91.4	88.4
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	8.3	7.9	7.0	6.3	5.5	4.9
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	2.6	2.5	2.3	2.1	2.0
LAM	5.4	5.3	5.0	4.6	4.3	4.0
MEA	0.9	0.9	0.9	0.8	0.8	0.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	8.2	7.9	7.4	6.9	6.4	5.9
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	71.1	72.4	73.2	72.9	71.8	70.4
USA	0.4	0.4	0.4	0.4	0.4	0.4

Table 384: MAgPIE new_input — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	46.6	54.7	57.3	54.5	48.4	52.5	59.7	60.4	63.1	64.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	23.2	29.6	30.6	27.7	20.2	21.2	22.5	19.0	18.2	12.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.3	2.2	2.6	2.3	2.3	2.0	2.2	2.3	2.8	2.9
LAM	4.4	5.2	4.9	4.5	4.6	4.7	5.0	5.0	5.4	5.8
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.7	6.0	6.5	7.3	6.9	6.4	6.4	6.3	6.6	7.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	9.4	11.3	12.4	12.4	14.0	18.0	23.2	27.4	29.7	34.3
USA	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4

Table 385: FAO — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr)

7.1.16 Sugar crops



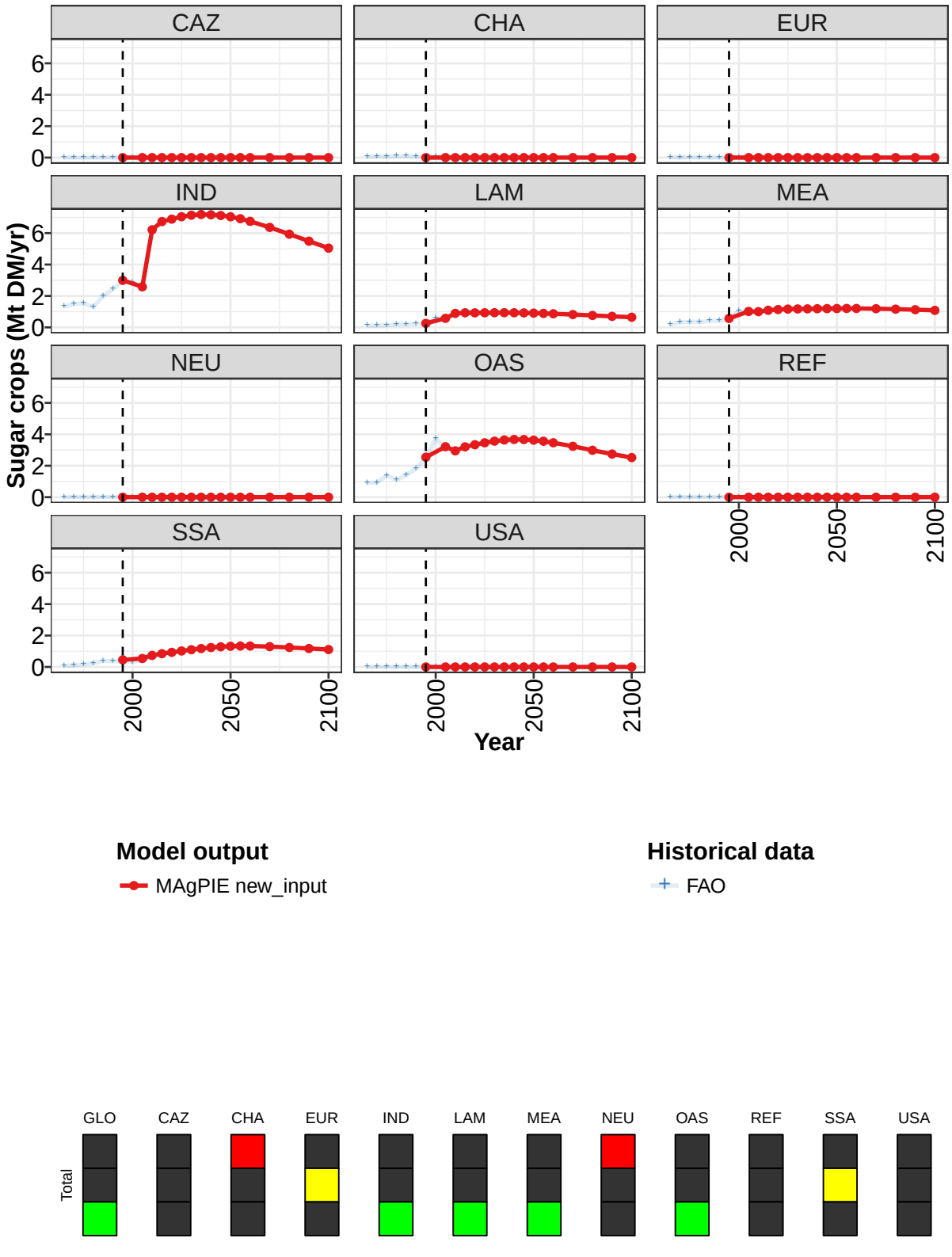


Figure 129: MAgPIE new_input — Demand—Food—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.8	7.9	11.8	12.8	13.2	13.6	13.9	14.1	14.2	14.2	14.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.0	2.6	6.2	6.7	6.9	7.0	7.1	7.2	7.2	7.1	7.0
LAM	0.3	0.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
MEA	0.6	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.5	3.2	2.9	3.2	3.3	3.5	3.6	3.6	3.7	3.7	3.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.5	0.5	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 386: MAgPIE new_input — Demand—Food—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

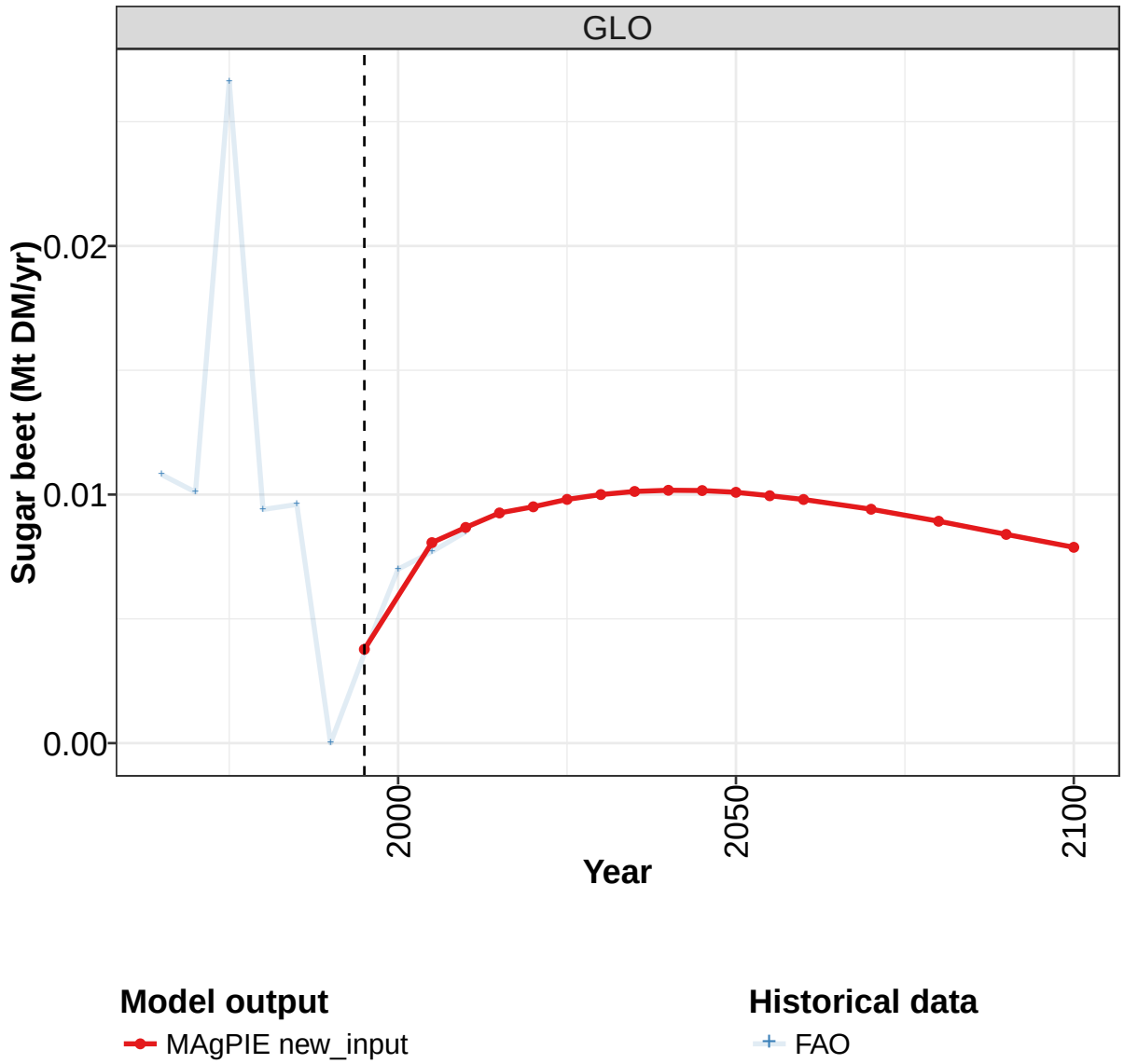
	2055	2060	2070	2080	2090	2100
GLO	13.9	13.6	12.9	12.1	11.2	10.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	6.9	6.8	6.4	5.9	5.5	5.0
LAM	0.9	0.9	0.8	0.8	0.7	0.6
MEA	1.2	1.2	1.2	1.2	1.1	1.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.6	3.5	3.2	3.0	2.7	2.5
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.3	1.3	1.3	1.2	1.2	1.1
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 387: MAgPIE new_input — Demand—Food—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.7	3.0	3.6	3.2	4.5	5.3	6.7	8.5	7.7	11.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.3	1.5	1.5	1.3	2.0	2.4	3.0	2.9	2.6	6.2
LAM	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.6	0.6	0.9
MEA	0.2	0.3	0.3	0.3	0.4	0.4	0.5	1.0	1.0	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.9	0.9	1.4	1.1	1.4	1.8	2.5	3.7	3.2	2.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.2	0.2	0.4	0.4	0.4	0.3	0.4	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 388: FAO — Demand—Food—Crops—Sugar crops (Mt DM/yr)

7.1.17 Sugar crops—Sugar beet



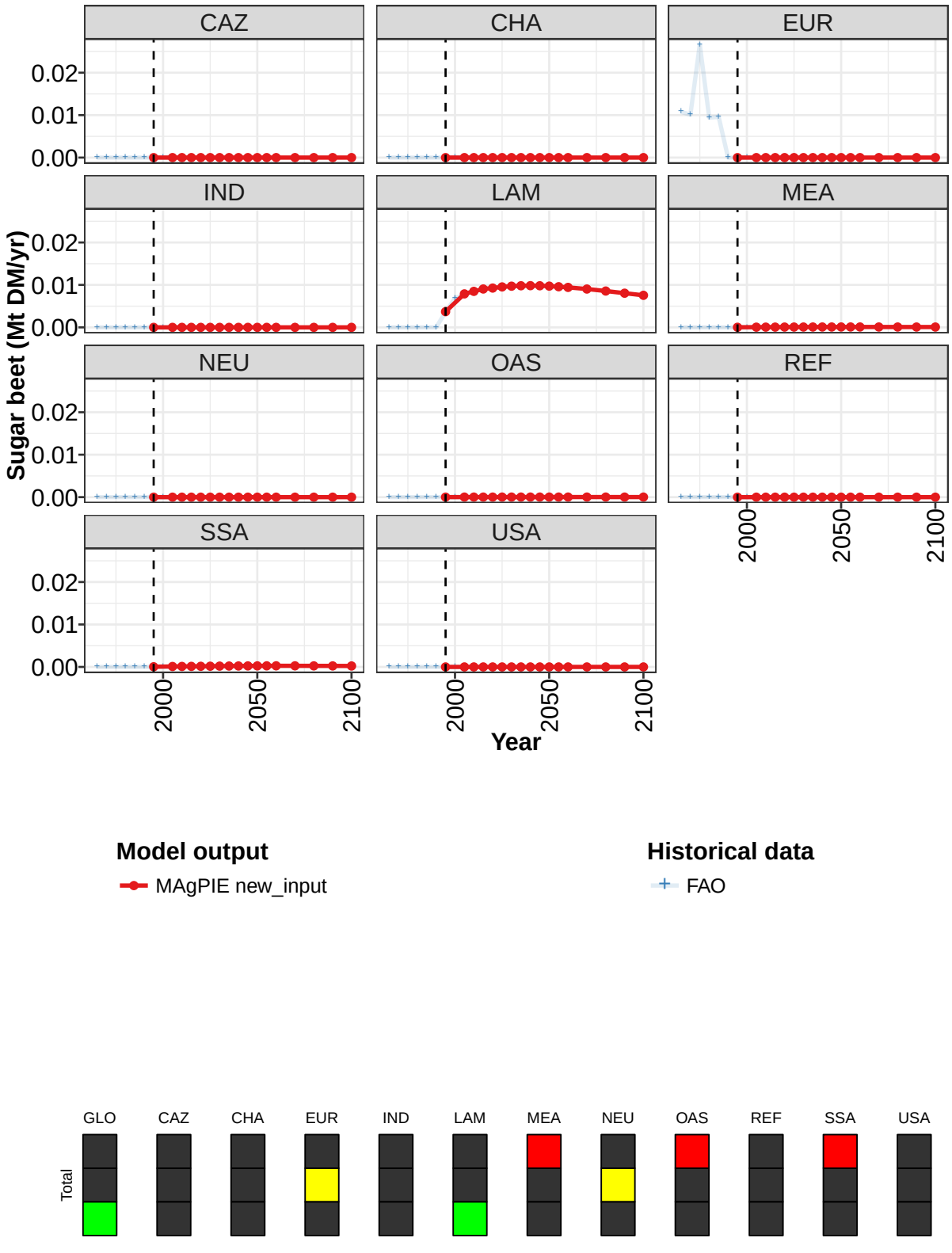


Figure 130: MAgPIE new_input — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0038	0.0081	0.0087	0.0093	0.0095	0.0098	0.0100	0.0101	0.0102	0.0102	0.0101
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0037	0.0079	0.0085	0.0090	0.0093	0.0095	0.0097	0.0098	0.0098	0.0098	0.0097
MEA	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 389: MAgPIE new_input — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

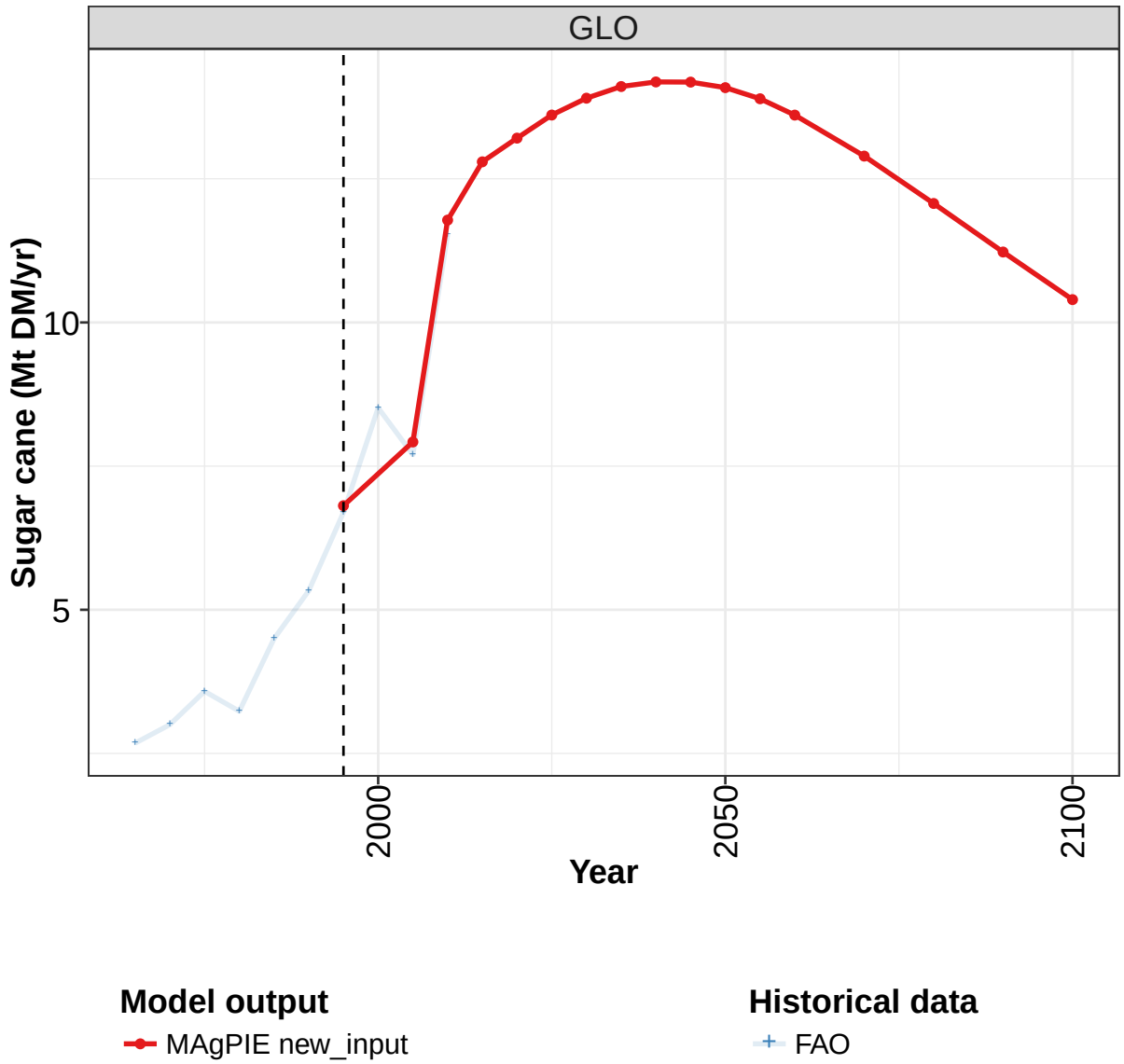
	2055	2060	2070	2080	2090	2100
GLO	0.0100	0.0098	0.0094	0.0089	0.0084	0.0079
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0096	0.0094	0.0090	0.0086	0.0081	0.0076
MEA	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 390: MAgPIE new_input — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0108	0.0101	0.0266	0.0094	0.0096	0.0000	0.0036	0.0070	0.0077	0.0085
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0108	0.0101	0.0266	0.0094	0.0096	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0036	0.0069	0.0077	0.0085
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 391: FAO — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr)

7.1.18 Sugar crops—Sugar cane



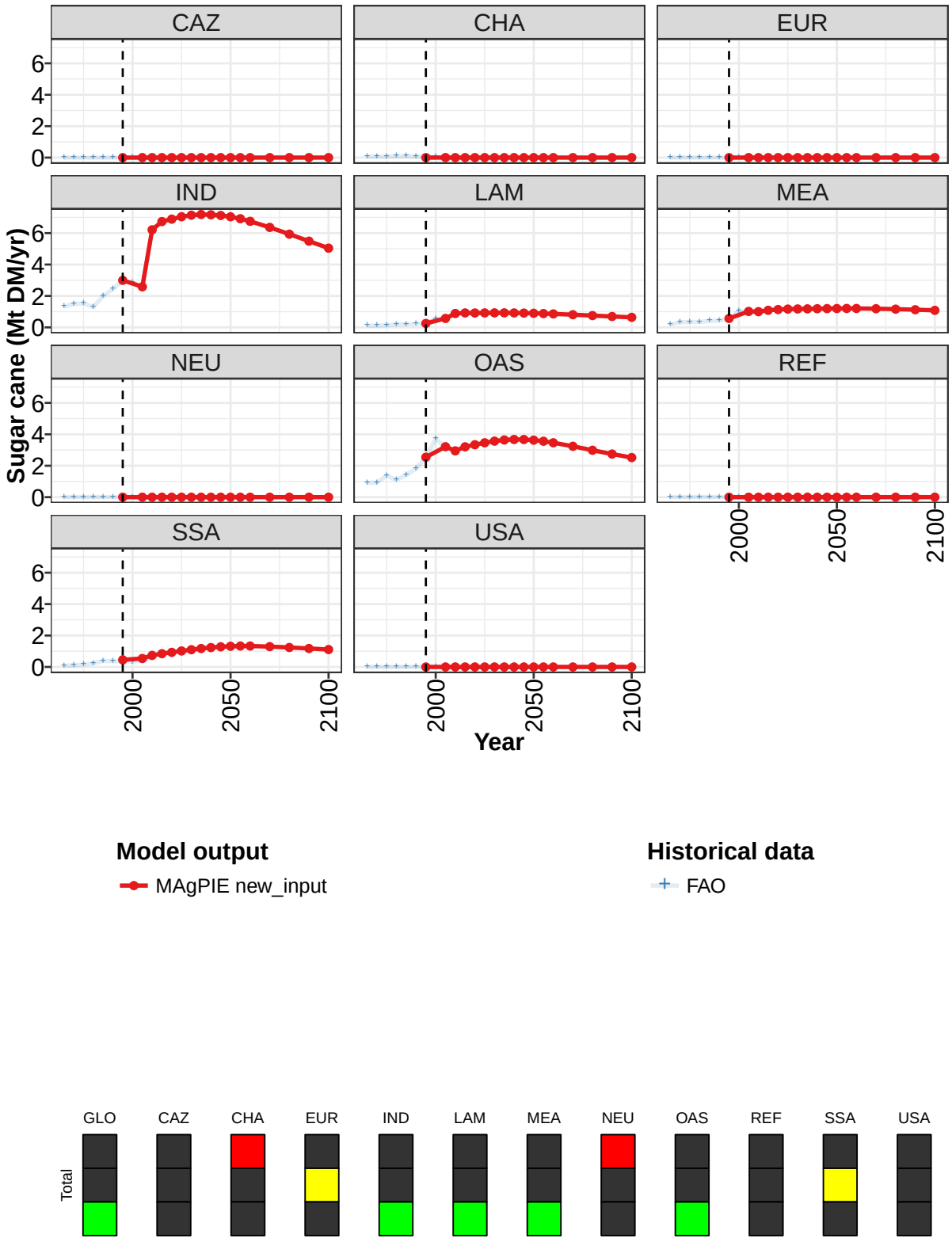


Figure 131: MAgPIE new_input — Demand—Food—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.8	7.9	11.8	12.8	13.2	13.6	13.9	14.1	14.2	14.2	14.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.0	2.6	6.2	6.7	6.9	7.0	7.1	7.2	7.2	7.1	7.0
LAM	0.3	0.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
MEA	0.6	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.5	3.2	2.9	3.2	3.3	3.5	3.6	3.6	3.7	3.7	3.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.5	0.5	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 392: MAgPIE new_input — Demand—Food—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

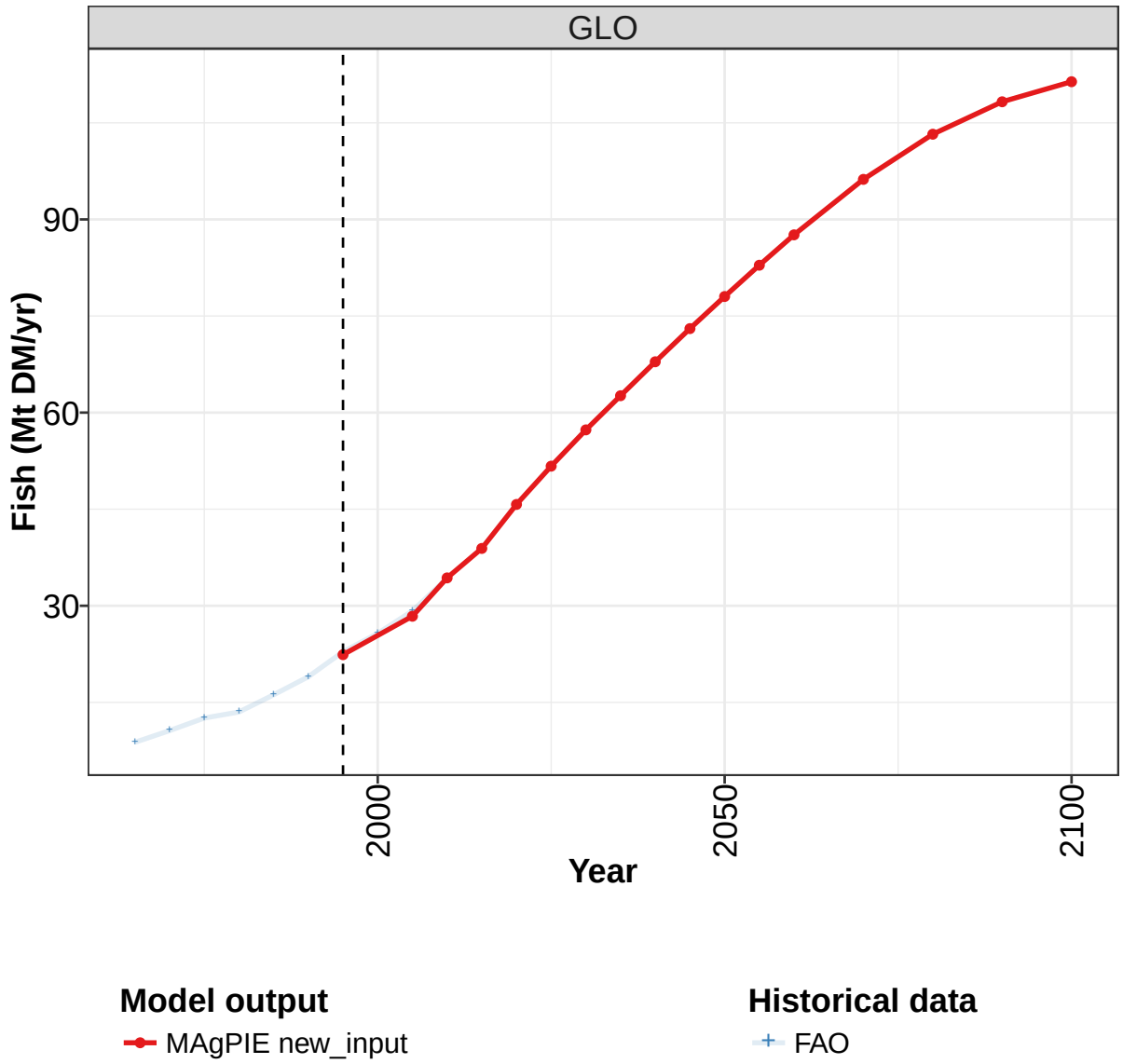
	2055	2060	2070	2080	2090	2100
GLO	13.9	13.6	12.9	12.1	11.2	10.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	6.9	6.8	6.4	5.9	5.5	5.0
LAM	0.9	0.9	0.8	0.8	0.7	0.6
MEA	1.2	1.2	1.2	1.2	1.1	1.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.6	3.5	3.2	3.0	2.7	2.5
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.3	1.3	1.3	1.2	1.2	1.1
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 393: MAgPIE new_input — Demand—Food—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.7	3.0	3.6	3.2	4.5	5.3	6.7	8.5	7.7	11.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.3	1.5	1.5	1.3	2.0	2.4	3.0	2.9	2.6	6.2
LAM	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.6	0.6	0.9
MEA	0.2	0.3	0.3	0.3	0.4	0.4	0.5	1.0	1.0	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.9	0.9	1.4	1.1	1.4	1.8	2.5	3.7	3.2	2.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.2	0.2	0.4	0.4	0.4	0.3	0.4	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 394: FAO — Demand—Food—Crops—Sugar crops—Sugar cane (Mt DM/yr)

7.2 Fish


GLO
Fish (Mt DM/yr)
90
60
30
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

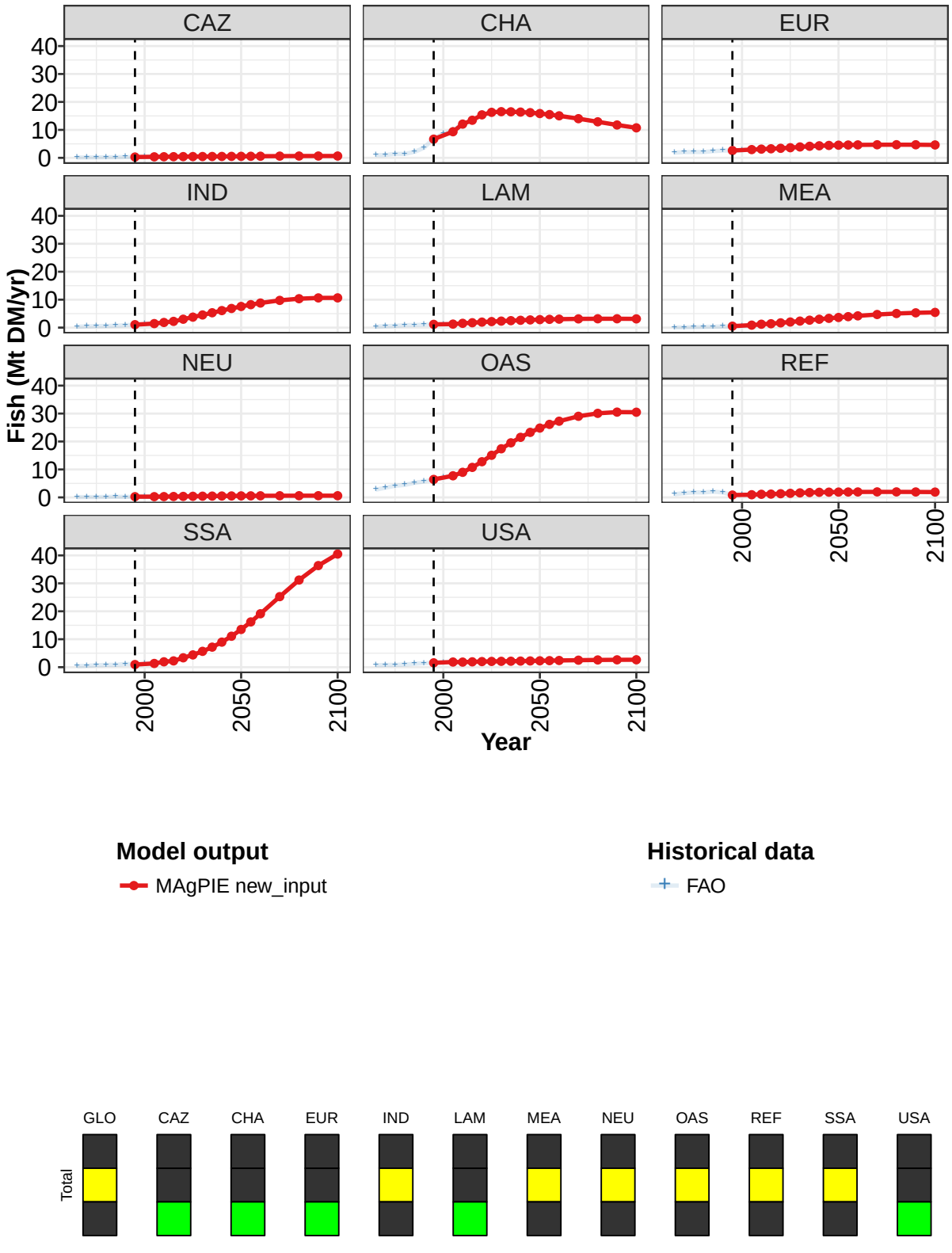


Figure 132: MAgPIE new_input — Demand—Food—Fish (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	22	28	34	39	46	52	57	63	68	73	78
CAZ	0	0	0	0	0	0	0	0	1	1	1
CHA	7	9	12	13	15	16	17	16	16	16	16
EUR	3	3	3	3	3	4	4	4	4	4	5
IND	1	1	2	2	3	4	5	5	6	7	8
LAM	1	1	2	2	2	2	2	2	3	3	3
MEA	1	1	1	1	2	2	2	3	3	3	4
NEU	0	0	0	0	0	0	0	0	0	1	1
OAS	6	8	9	11	13	15	17	20	22	23	25
REF	1	1	1	1	1	1	2	2	2	2	2
SSA	1	1	2	2	3	4	6	7	9	11	13
USA	2	2	2	2	2	2	2	2	2	2	2

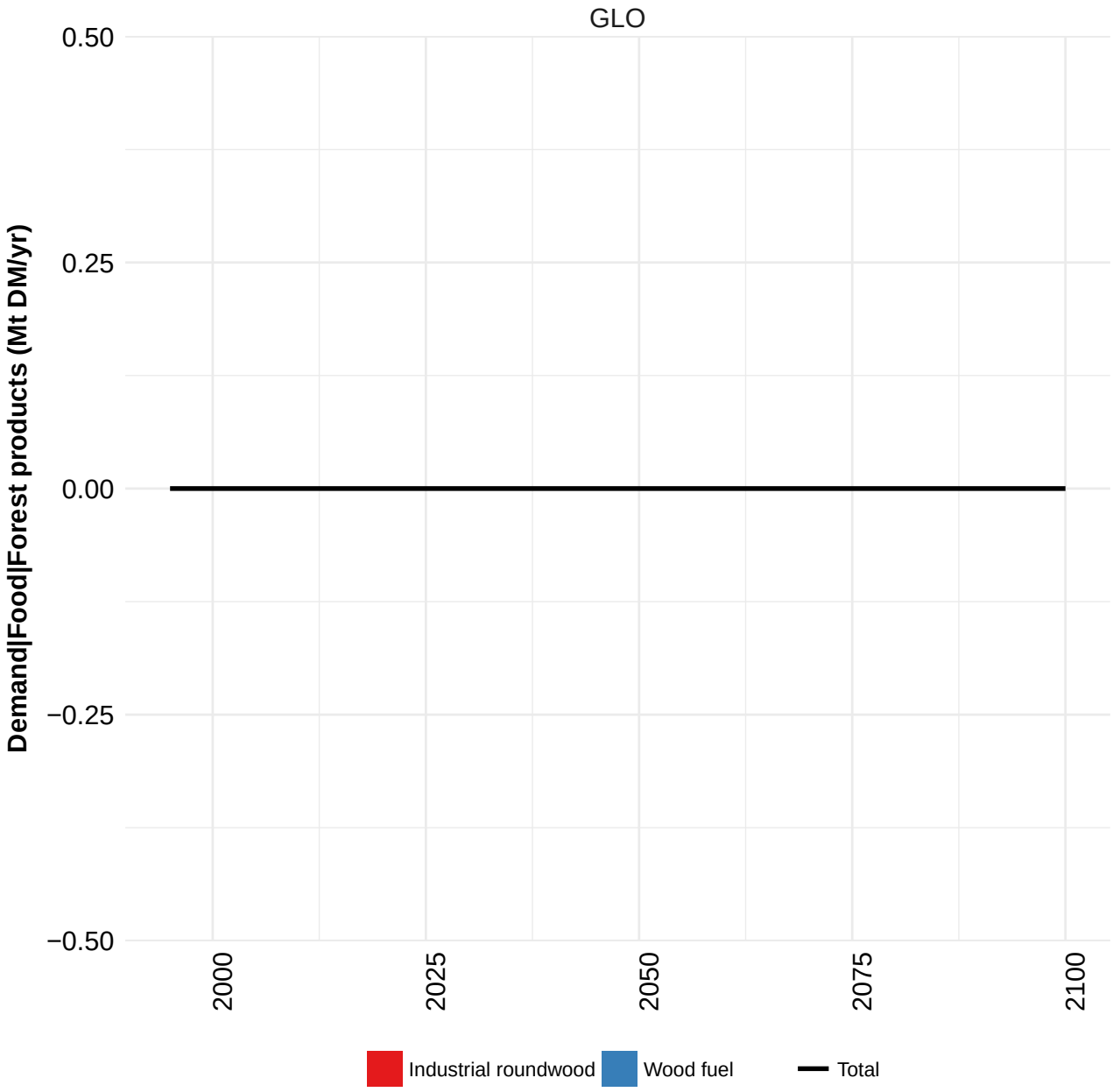
Table 395: MAgPIE new_input — Demand—Food—Fish (Mt DM/yr) [PART 1/2]

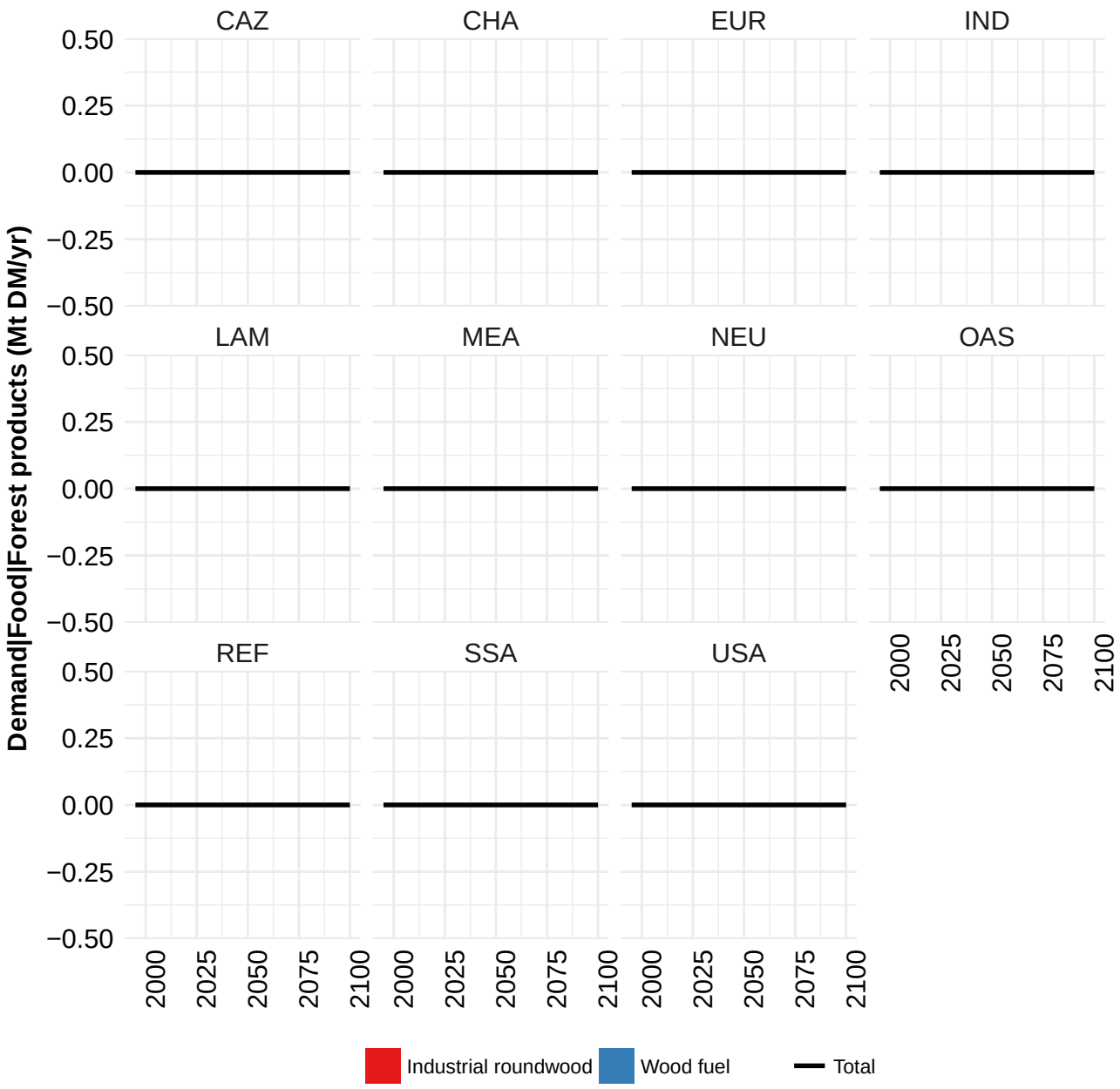
	2055	2060	2070	2080	2090	2100
GLO	83	88	96	103	108	111
CAZ	1	1	1	1	1	1
CHA	15	15	14	13	12	11
EUR	5	5	5	5	5	5
IND	8	9	10	10	11	11
LAM	3	3	3	3	3	3
MEA	4	4	5	5	5	5
NEU	1	1	1	1	1	1
OAS	26	27	29	30	31	30
REF	2	2	2	2	2	2
SSA	16	19	25	31	36	40
USA	2	2	3	3	3	3

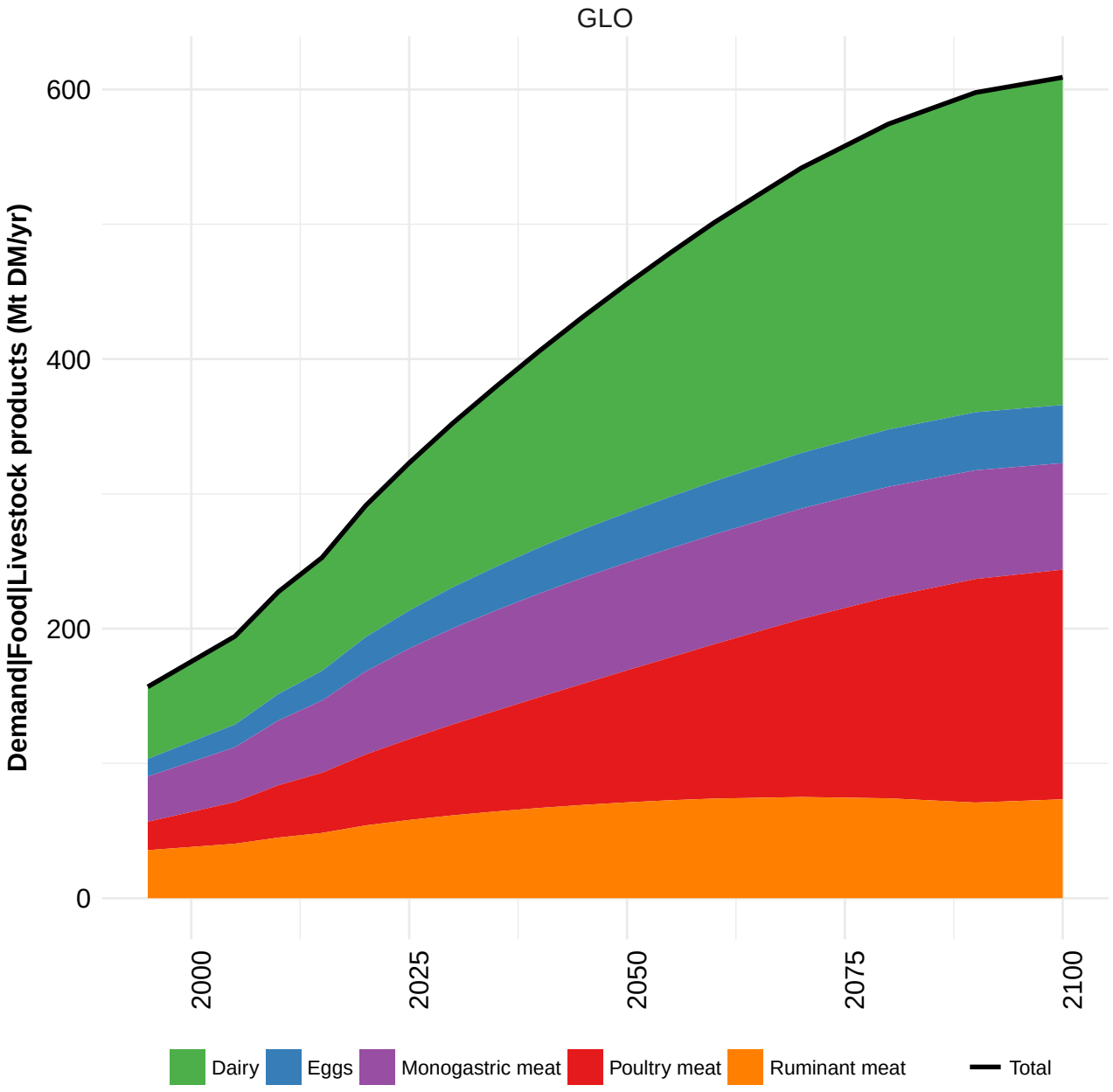
Table 396: MAgPIE new_input — Demand—Food—Fish (Mt DM/yr) [PART 2/2]

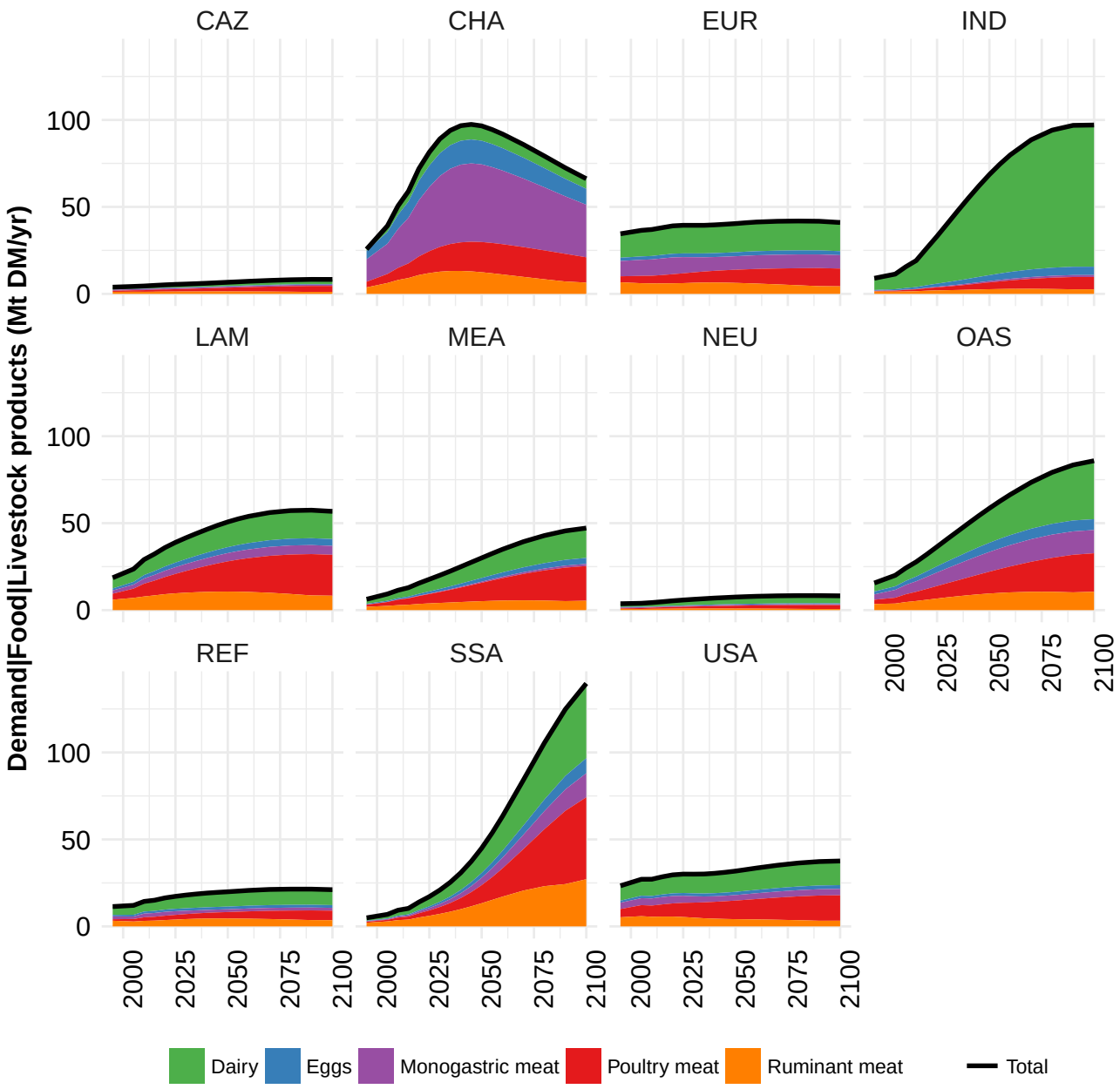
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.8	10.6	12.6	13.5	16.2	19.0	22.9	25.7	29.2	34.3
CAZ	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
CHA	1.0	1.0	1.4	1.4	2.1	3.6	7.0	8.6	9.9	12.2
EUR	1.9	2.0	2.1	2.1	2.4	2.6	2.6	2.7	3.0	3.1
IND	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.2	1.5	1.8
LAM	0.4	0.5	0.6	0.9	0.9	1.1	1.2	1.2	1.3	1.5
MEA	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.9	1.1
NEU	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3
OAS	2.8	3.5	4.2	4.5	5.2	5.7	6.4	7.0	7.8	8.9
REF	1.1	1.5	1.8	1.8	2.1	1.8	0.9	0.9	1.0	1.1
SSA	0.4	0.5	0.7	0.8	0.8	1.1	1.0	1.2	1.5	1.9
USA	0.7	0.8	0.8	0.9	1.2	1.4	1.6	1.7	1.9	1.8

Table 397: FAO — Demand—Food—Fish (Mt DM/yr)

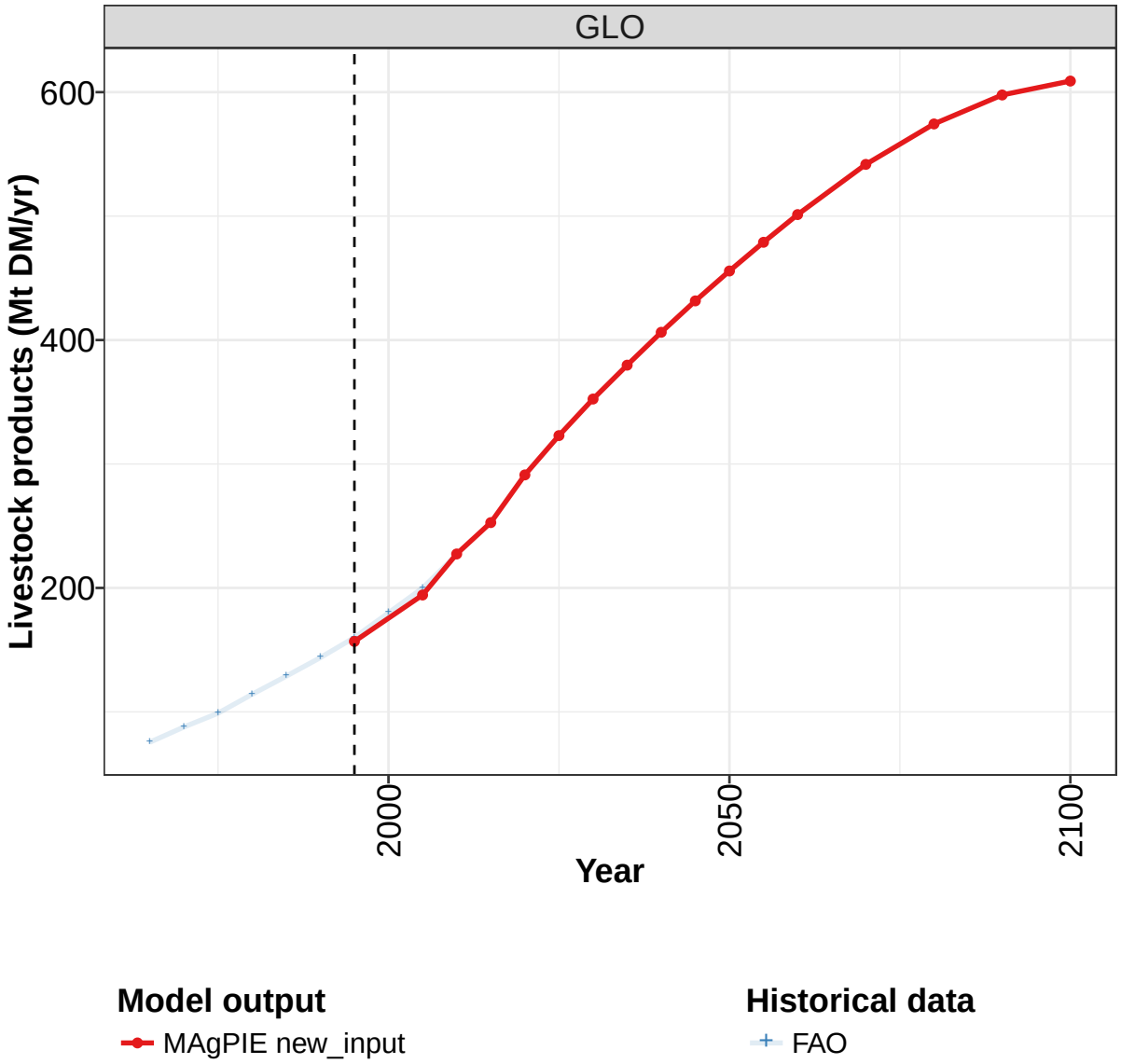

GLO
Demand|Food|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Food|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


GLO
Demand|Food|Livestock products (Mt DM/yr)
600
400
200
0
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Food|Livestock products (Mt DM/yr)
0
50
100
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total

7.3 Livestock products



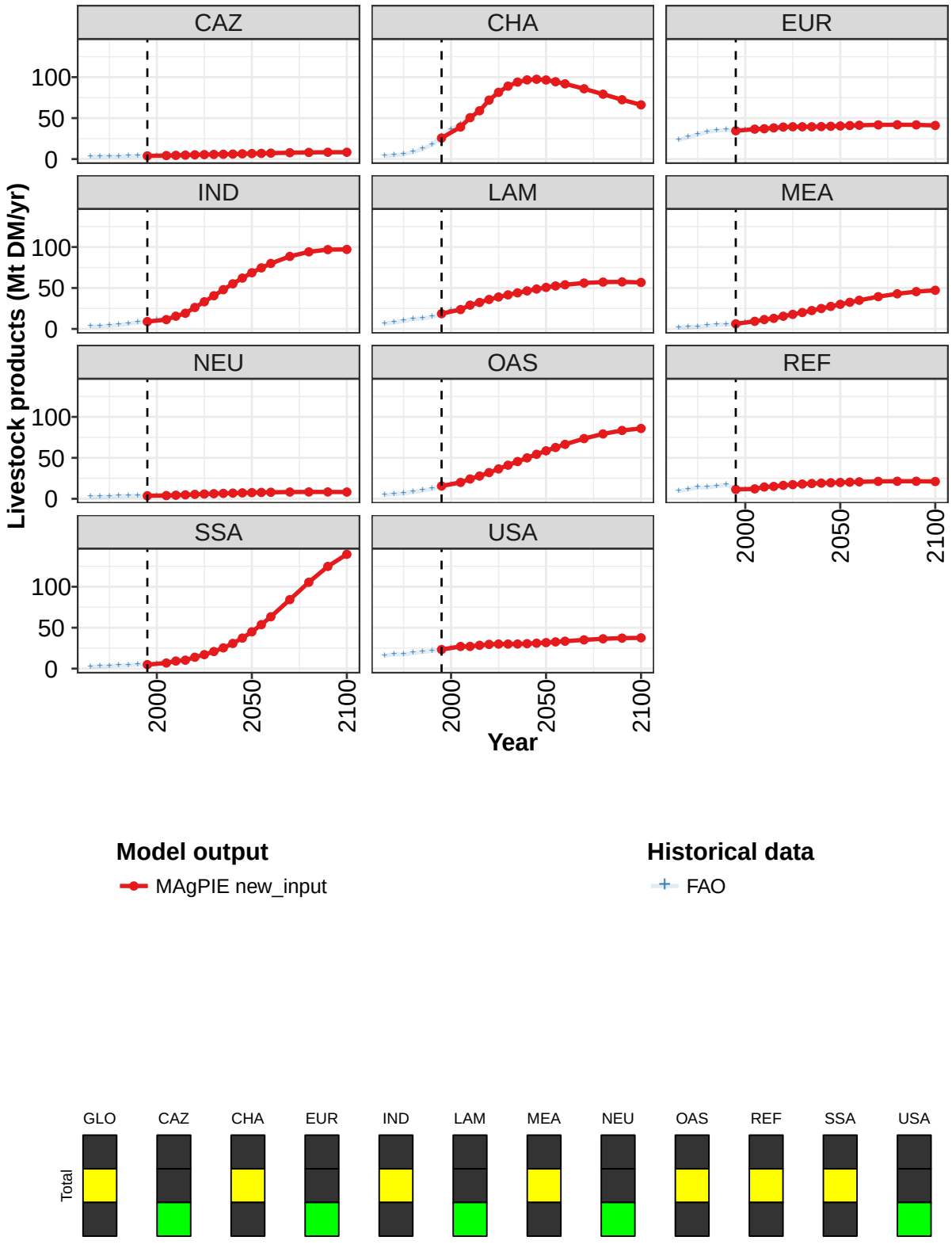


Figure 133: MAgPIE new_input — Demand—Food—Livestock products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	157	194	227	253	291	323	352	380	406	432	456
CAZ	4	4	5	5	5	5	6	6	6	6	7
CHA	26	39	51	59	72	81	89	94	97	97	97
EUR	35	37	37	38	39	39	39	39	40	40	40
IND	9	11	16	19	26	33	41	48	55	62	69
LAM	19	24	29	32	36	39	42	44	46	49	51
MEA	6	9	11	13	15	18	20	22	25	27	30
NEU	4	4	4	5	5	6	6	7	7	7	8
OAS	16	20	24	28	32	36	41	45	50	54	59
REF	11	12	14	15	16	17	18	19	19	20	20
SSA	5	7	9	10	14	17	21	25	31	37	45
USA	23	27	27	29	30	30	30	30	31	31	32

Table 398: MAgPIE new_input — Demand—Food—Livestock products (Mt DM/yr) [PART 1/2]

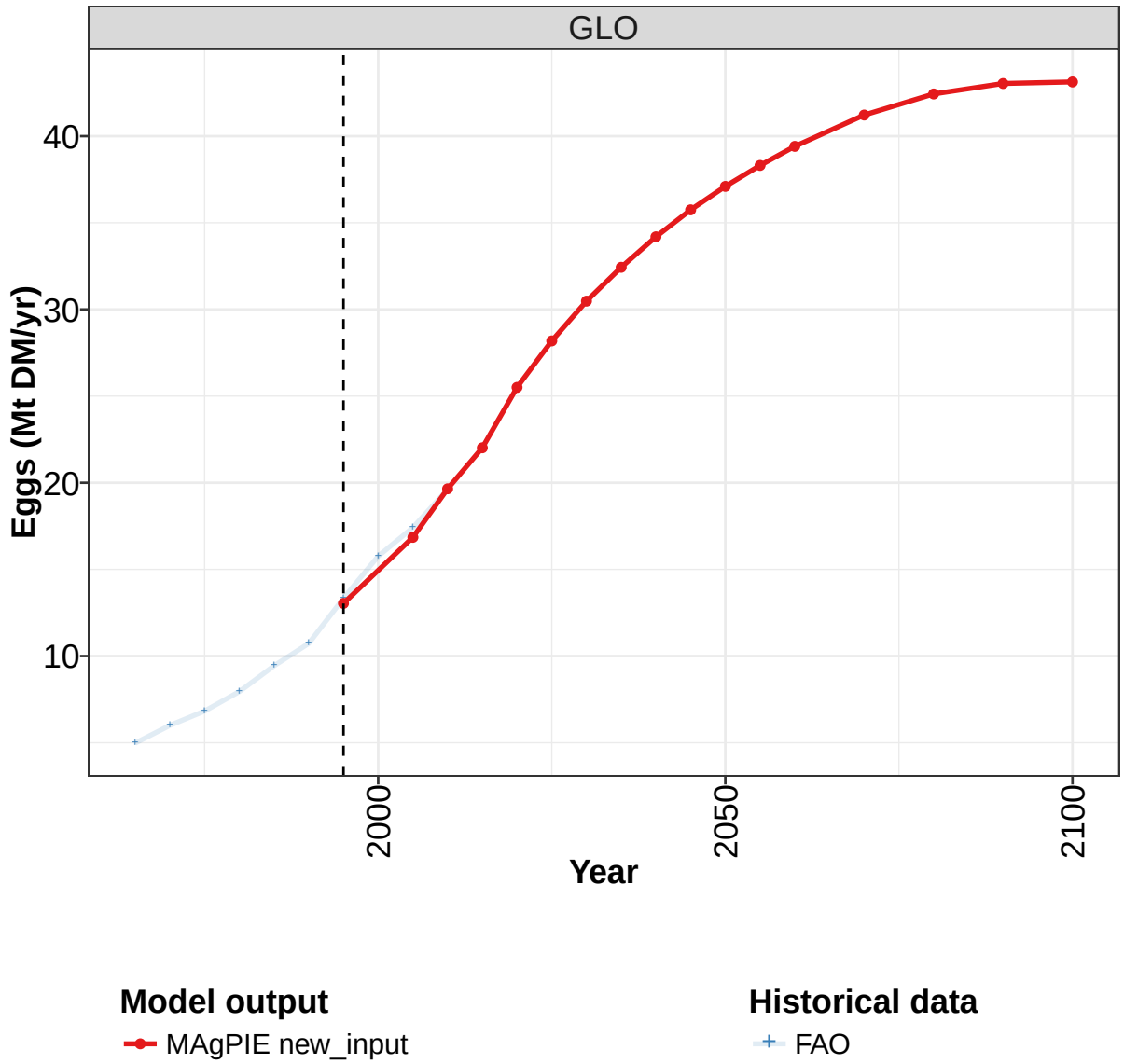
	2055	2060	2070	2080	2090	2100
GLO	479	501	542	574	598	609
CAZ	7	7	8	8	8	8
CHA	94	92	86	79	72	66
EUR	41	41	42	42	42	41
IND	75	80	89	94	97	97
LAM	52	54	56	57	57	57
MEA	33	35	39	43	46	47
NEU	8	8	8	8	8	8
OAS	63	66	73	79	83	86
REF	20	21	21	21	21	21
SSA	54	63	84	106	125	140
USA	33	34	35	36	37	38

Table 399: MAgPIE new_input — Demand—Food—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	76	88	99	114	129	144	160	180	200	227
CAZ	3	3	3	3	3	4	4	4	4	5
CHA	4	4	6	8	12	18	28	36	43	52
EUR	23	27	30	33	35	35	35	36	37	37
IND	3	3	4	5	7	8	9	11	12	16
LAM	6	8	10	12	13	15	19	22	24	29
MEA	2	2	3	4	5	5	6	8	9	11
NEU	2	2	3	3	3	4	4	4	4	4
OAS	5	6	7	8	10	12	15	17	20	24
REF	9	12	14	14	15	17	12	11	13	14
SSA	2	3	3	4	4	5	5	6	7	9
USA	16	17	17	19	21	22	23	25	27	27

Table 400: FAO — Demand—Food—Livestock products (Mt DM/yr)

7.3.1 Eggs


GLO
Eggs (Mt DM/yr)
40
30
20
10
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

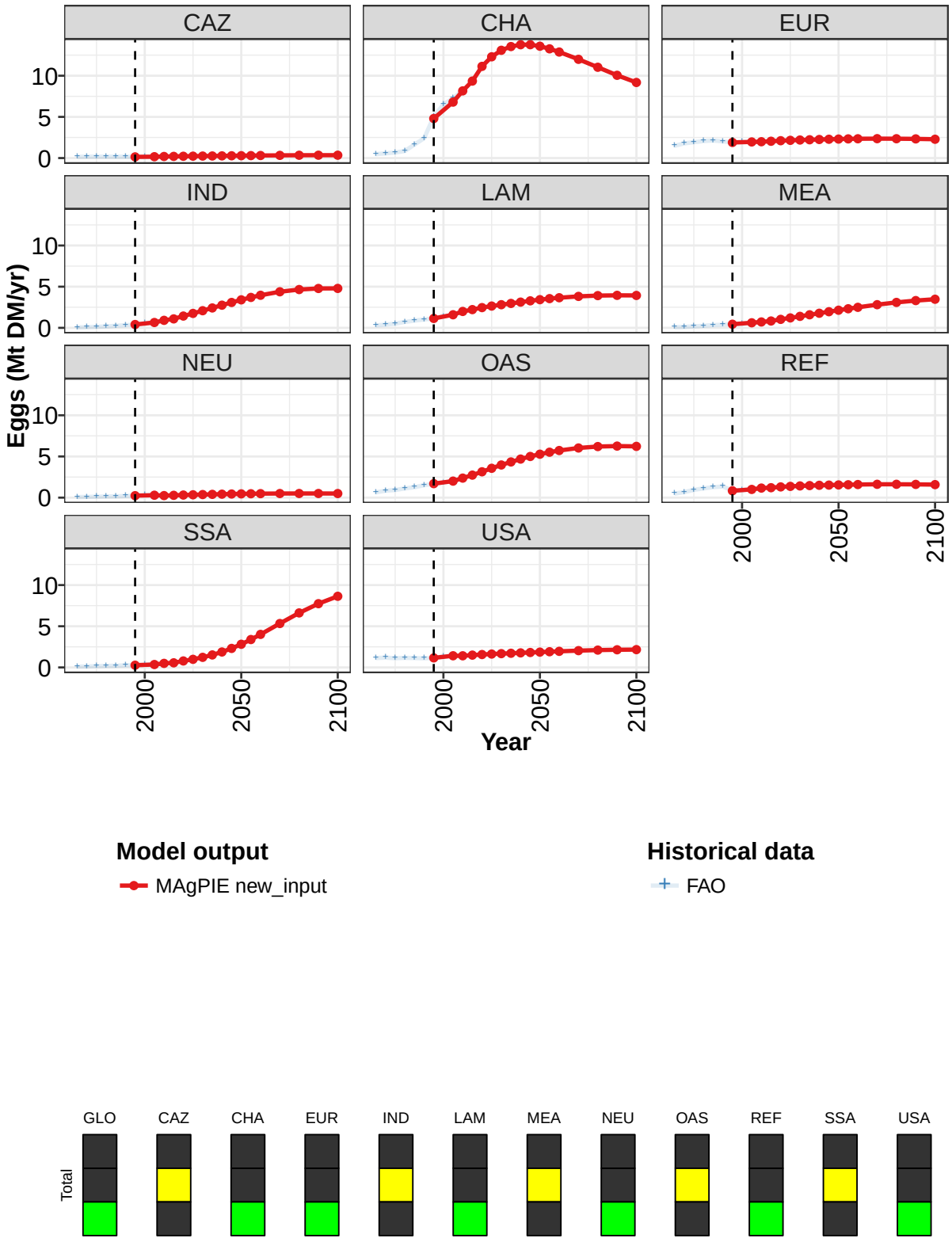


Figure 134: MAgPIE new_input — Demand—Food—Livestock products—Eggs (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	13.0	16.9	19.7	22.0	25.5	28.2	30.5	32.4	34.2	35.7	37.1
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
CHA	4.8	6.8	8.2	9.3	11.1	12.3	13.1	13.5	13.8	13.8	13.6
EUR	1.9	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.3	2.3	2.3
IND	0.4	0.7	0.9	1.1	1.4	1.8	2.1	2.4	2.8	3.1	3.4
LAM	1.1	1.6	2.0	2.2	2.5	2.6	2.8	3.0	3.1	3.3	3.4
MEA	0.4	0.6	0.7	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.1
NEU	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5
OAS	1.7	2.0	2.4	2.7	3.1	3.6	4.0	4.3	4.7	5.0	5.3
REF	0.8	1.0	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.5
SSA	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.5	1.9	2.3	2.8
USA	1.2	1.4	1.4	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9

Table 401: MAgPIE new_input — Demand—Food—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

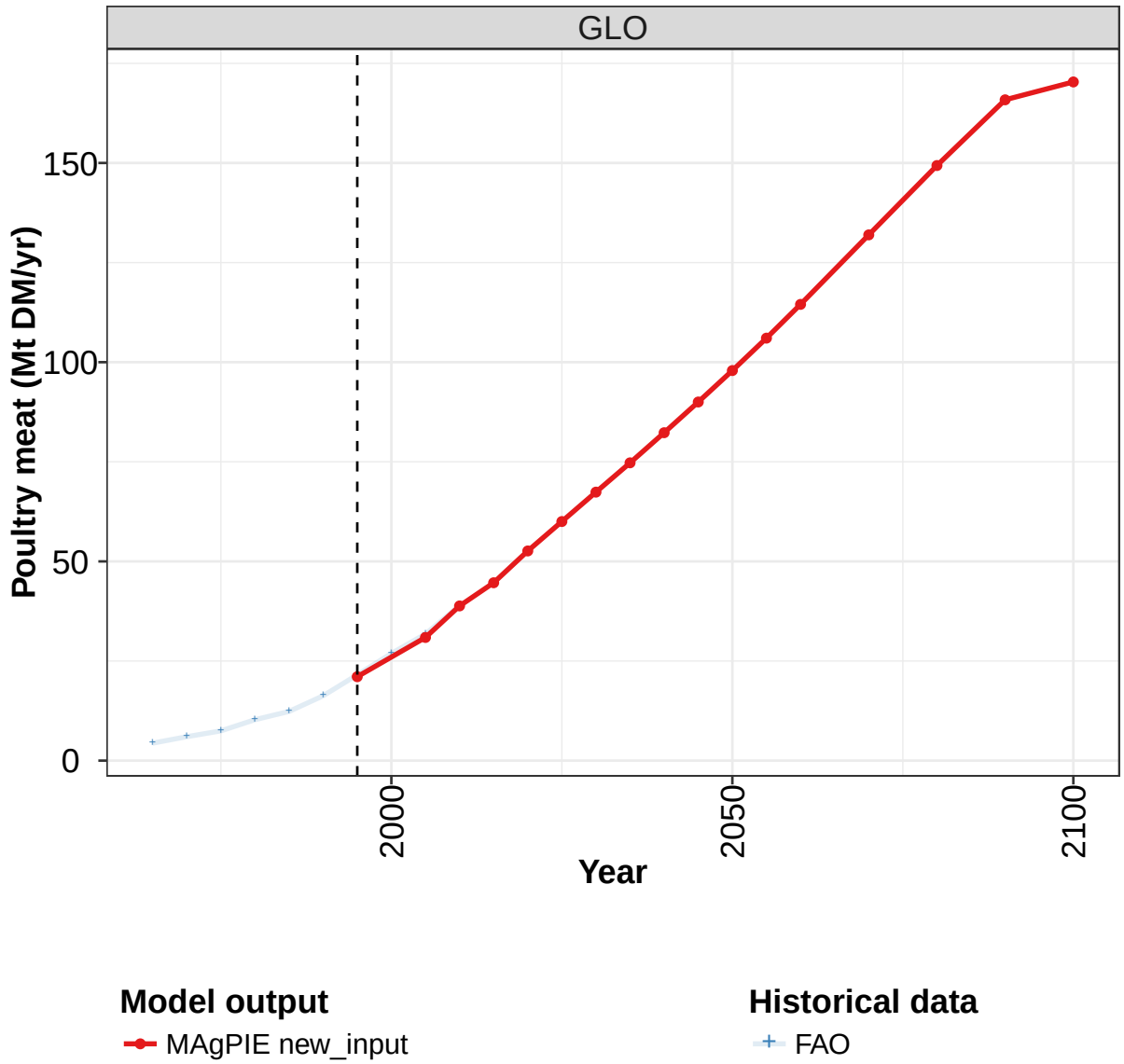
	2055	2060	2070	2080	2090	2100
GLO	38.3	39.4	41.2	42.4	43.0	43.1
CAZ	0.3	0.3	0.3	0.3	0.3	0.3
CHA	13.3	12.9	12.0	11.0	10.1	9.2
EUR	2.3	2.3	2.4	2.3	2.3	2.3
IND	3.7	4.0	4.4	4.7	4.8	4.8
LAM	3.6	3.7	3.8	3.9	3.9	3.9
MEA	2.3	2.5	2.8	3.1	3.3	3.5
NEU	0.5	0.5	0.5	0.5	0.5	0.5
OAS	5.5	5.7	6.0	6.2	6.3	6.2
REF	1.6	1.6	1.6	1.6	1.6	1.6
SSA	3.4	4.0	5.3	6.6	7.7	8.6
USA	1.9	2.0	2.0	2.1	2.1	2.2

Table 402: MAgPIE new_input — Demand—Food—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.0	6.0	6.8	8.0	9.4	10.7	13.3	15.8	17.4	19.6
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
CHA	0.5	0.6	0.7	0.9	1.6	2.4	5.0	6.5	7.3	8.3
EUR	1.5	1.8	1.9	2.1	2.1	2.0	1.9	2.0	2.0	2.0
IND	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.7	0.9
LAM	0.3	0.4	0.5	0.7	0.9	1.0	1.2	1.4	1.6	2.0
MEA	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.7
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2
OAS	0.6	0.8	0.9	1.1	1.3	1.5	1.7	1.8	2.0	2.3
REF	0.5	0.7	0.9	1.1	1.3	1.3	0.9	0.9	1.0	1.2
SSA	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5
USA	1.1	1.2	1.1	1.2	1.1	1.1	1.2	1.3	1.4	1.4

Table 403: FAO — Demand—Food—Livestock products—Eggs (Mt DM/yr)

7.3.2 Poultry meat



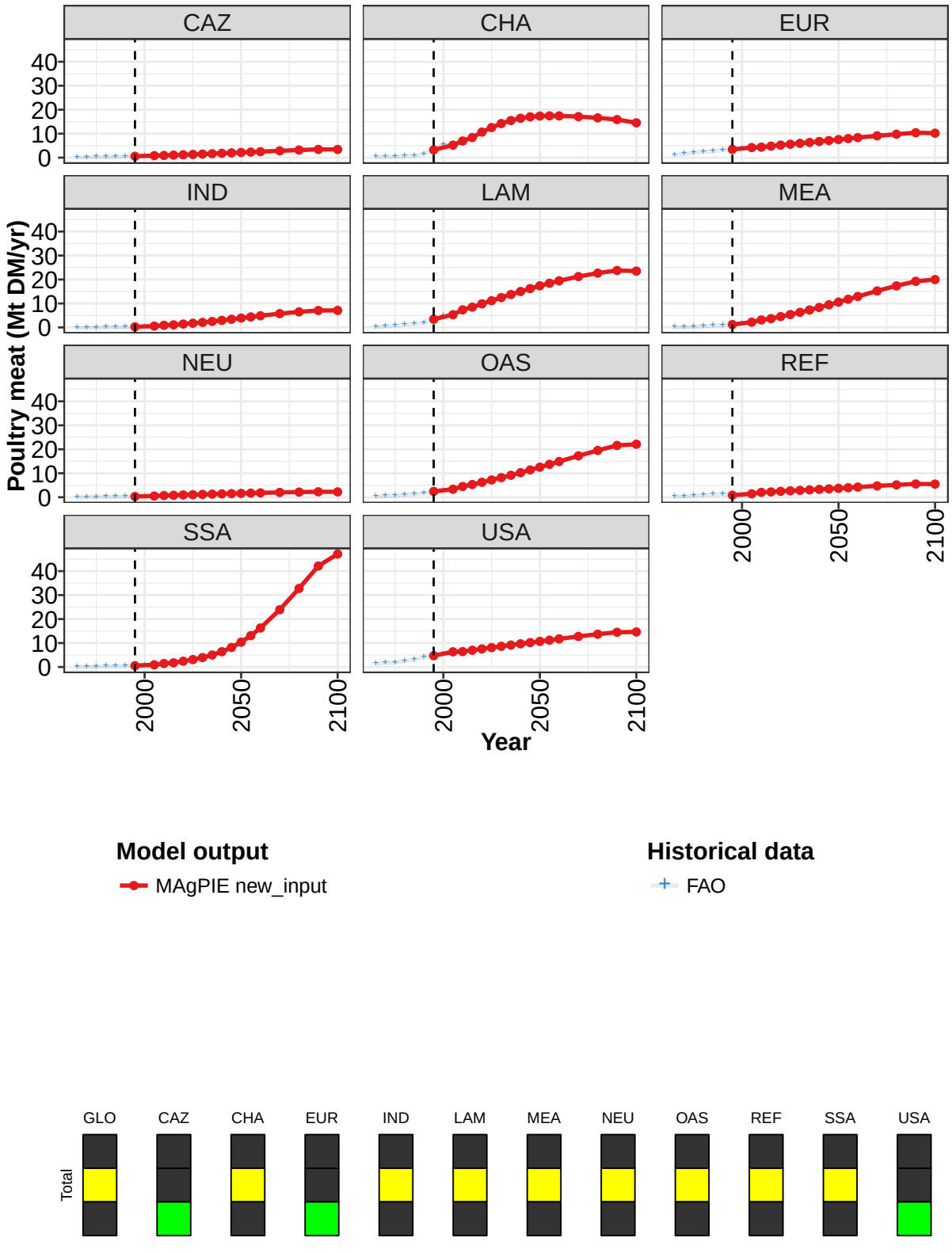


Figure 135: MAgPIE new_input — Demand—Food—Livestock products—Poultry meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	21	31	39	45	53	60	67	75	82	90	98
CAZ	1	1	1	1	1	1	2	2	2	2	2
CHA	3	5	7	8	11	13	14	16	16	17	17
EUR	3	4	4	5	5	6	6	6	7	7	8
IND	0	1	1	1	1	2	2	3	3	3	4
LAM	3	5	7	8	10	11	12	14	15	16	17
MEA	1	2	3	4	5	5	6	7	8	9	11
NEU	0	1	1	1	1	1	1	1	1	2	2
OAS	2	3	4	5	6	7	8	9	10	11	13
REF	1	1	2	2	2	3	3	3	3	4	4
SSA	1	1	1	2	2	3	4	5	6	8	10
USA	5	6	6	7	8	8	9	9	10	10	11

Table 404: MAgPIE new_input — Demand—Food—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

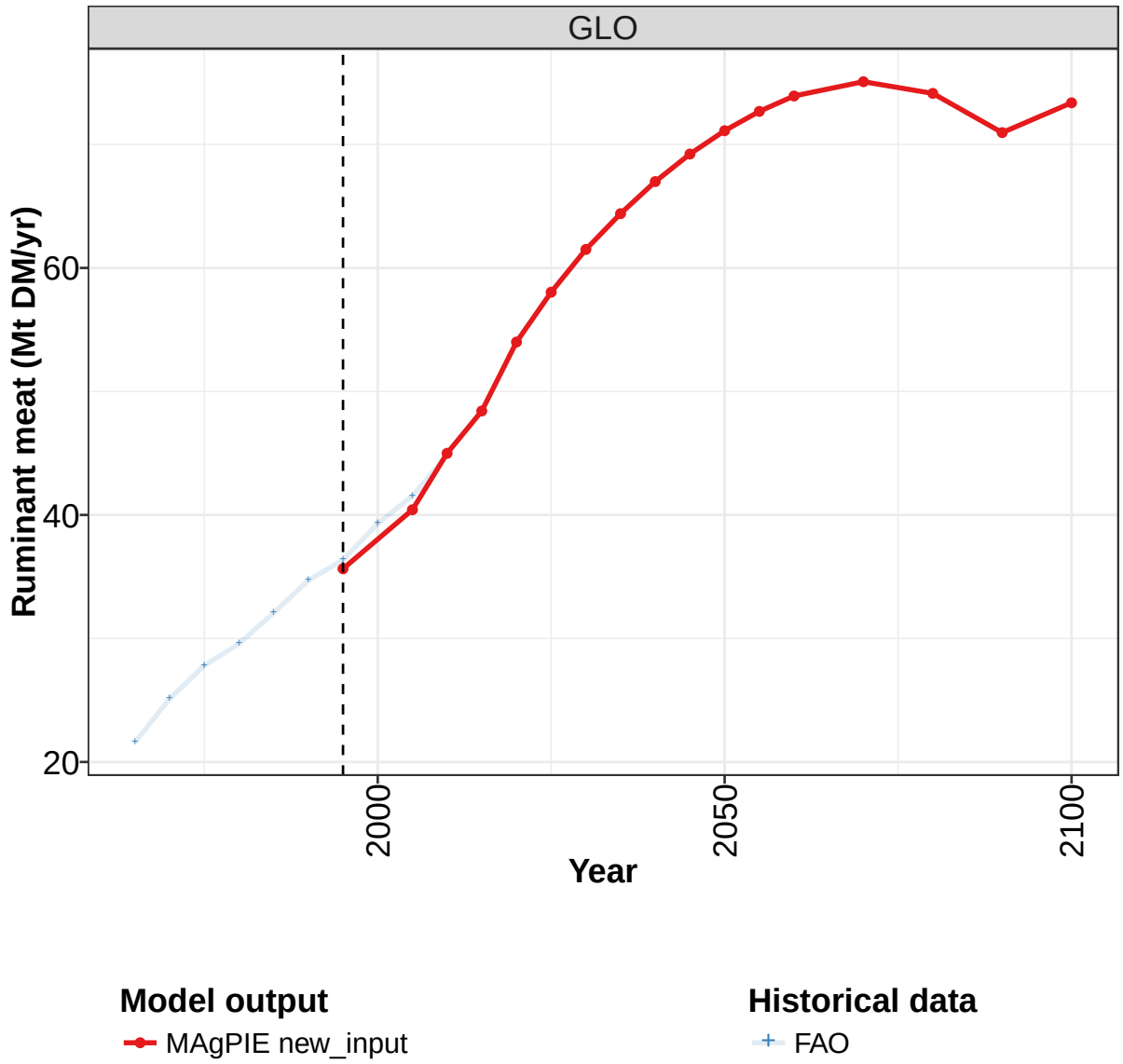
	2055	2060	2070	2080	2090	2100
GLO	106	115	132	149	166	170
CAZ	2	3	3	3	3	3
CHA	17	17	17	17	16	15
EUR	8	8	9	10	10	10
IND	4	5	6	7	7	7
LAM	18	19	21	23	24	24
MEA	12	13	15	17	19	20
NEU	2	2	2	2	2	2
OAS	14	15	17	20	22	22
REF	4	4	5	5	6	5
SSA	13	16	24	33	42	47
USA	11	12	13	14	14	15

Table 405: MAgPIE new_input — Demand—Food—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.4	6.0	7.5	10.3	12.3	16.3	21.5	26.9	31.8	38.9
CAZ	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9
CHA	0.3	0.4	0.5	0.7	0.8	1.6	3.6	5.4	5.8	7.3
EUR	1.2	1.6	2.1	2.5	2.7	3.1	3.5	3.9	4.2	4.4
IND	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.9
LAM	0.3	0.5	0.8	1.2	1.4	2.0	3.5	4.8	5.4	7.3
MEA	0.1	0.2	0.3	0.5	0.8	0.9	1.2	1.7	2.2	3.0
NEU	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.7
OAS	0.3	0.5	0.7	1.0	1.3	1.7	2.4	2.7	3.3	4.4
REF	0.3	0.4	0.6	0.9	1.2	1.4	0.9	0.8	1.5	2.0
SSA	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.7	1.0	1.4
USA	1.5	1.8	1.9	2.5	3.0	4.1	4.7	5.5	6.4	6.4

Table 406: FAO — Demand—Food—Livestock products—Poultry meat (Mt DM/yr)

7.3.3 Ruminant meat



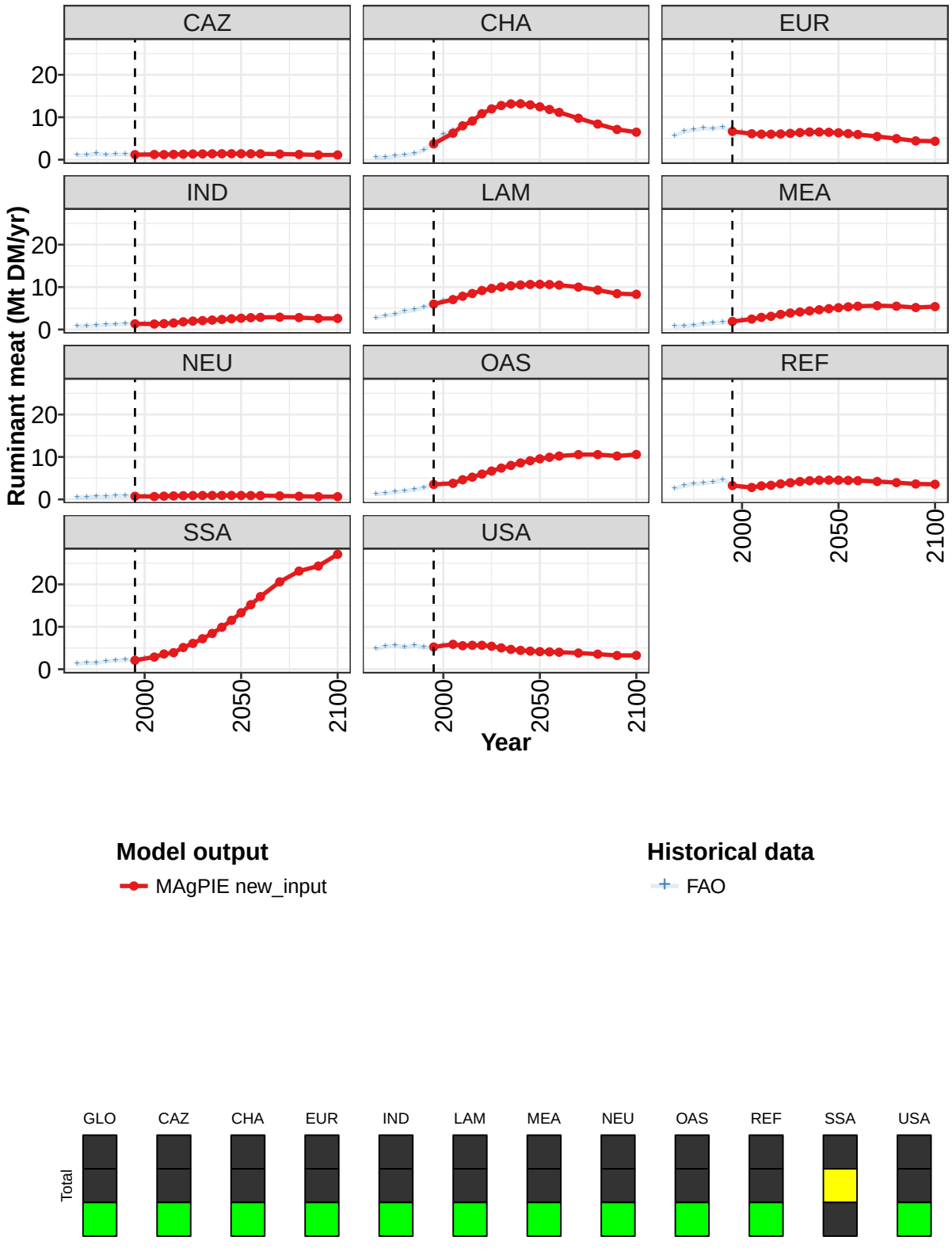


Figure 136: MAgPIE new_input — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	35.6	40.4	45.0	48.4	54.0	58.0	61.5	64.4	67.0	69.2	71.1
CAZ	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4
CHA	3.7	6.2	8.0	9.1	10.8	12.0	12.8	13.1	13.2	12.9	12.5
EUR	6.6	6.1	6.0	6.0	6.1	6.2	6.4	6.5	6.5	6.5	6.3
IND	1.3	1.3	1.4	1.5	1.8	2.0	2.1	2.2	2.4	2.5	2.7
LAM	6.0	7.1	7.8	8.5	9.2	9.7	10.0	10.3	10.5	10.6	10.7
MEA	1.9	2.5	2.9	3.1	3.6	3.9	4.1	4.4	4.7	4.9	5.1
NEU	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
OAS	3.5	3.8	4.6	5.2	6.0	6.7	7.4	8.0	8.6	9.1	9.6
REF	3.3	2.8	3.2	3.3	3.6	3.9	4.2	4.4	4.5	4.5	4.5
SSA	2.1	2.9	3.6	3.9	5.1	6.1	7.2	8.4	9.9	11.5	13.3
USA	5.2	5.9	5.5	5.6	5.6	5.4	5.0	4.7	4.4	4.3	4.2

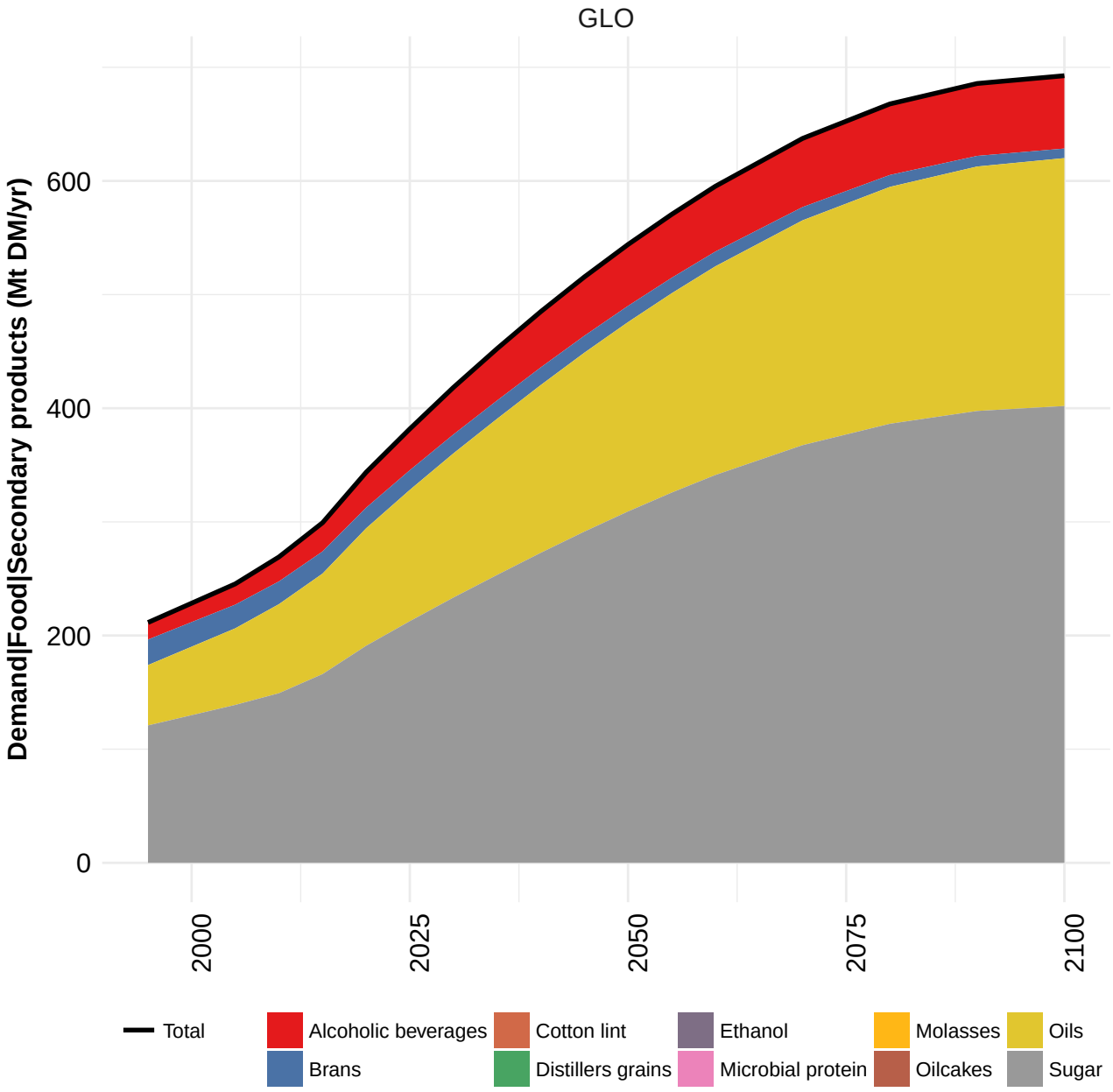
Table 407: MAgPIE new_input — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

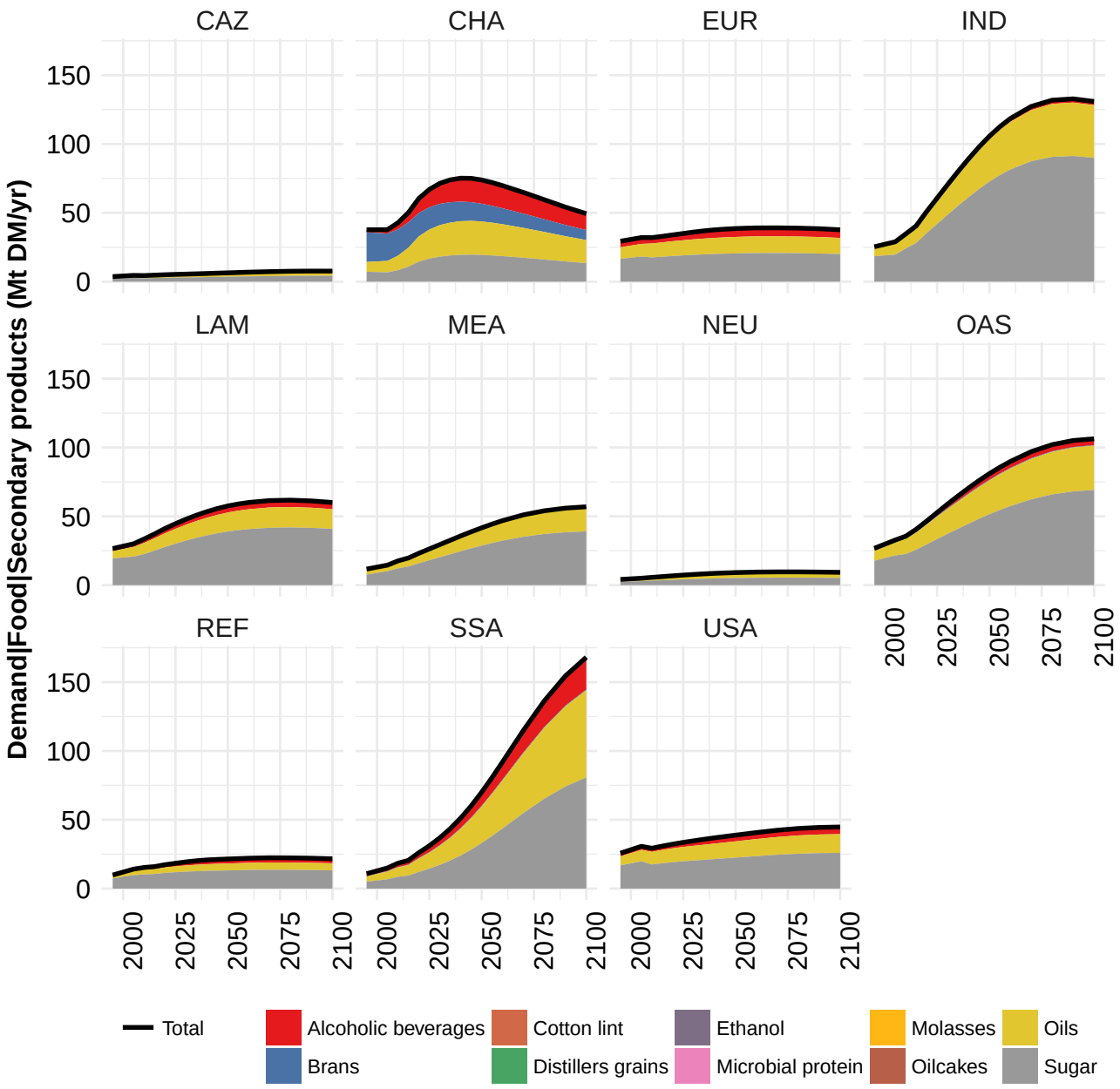
	2055	2060	2070	2080	2090	2100
GLO	72.7	73.9	75.1	74.1	71.0	73.4
CAZ	1.4	1.4	1.3	1.2	1.1	1.1
CHA	11.8	11.1	9.8	8.4	7.1	6.5
EUR	6.1	5.9	5.5	5.0	4.4	4.3
IND	2.8	2.9	2.9	2.8	2.6	2.6
LAM	10.6	10.5	10.0	9.3	8.4	8.3
MEA	5.3	5.5	5.6	5.5	5.2	5.4
NEU	0.9	0.9	0.8	0.7	0.6	0.6
OAS	9.9	10.2	10.6	10.6	10.2	10.6
REF	4.5	4.4	4.2	3.9	3.6	3.6
SSA	15.2	17.1	20.6	23.1	24.3	27.1
USA	4.1	4.0	3.8	3.6	3.2	3.3

Table 408: MAgPIE new_input — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

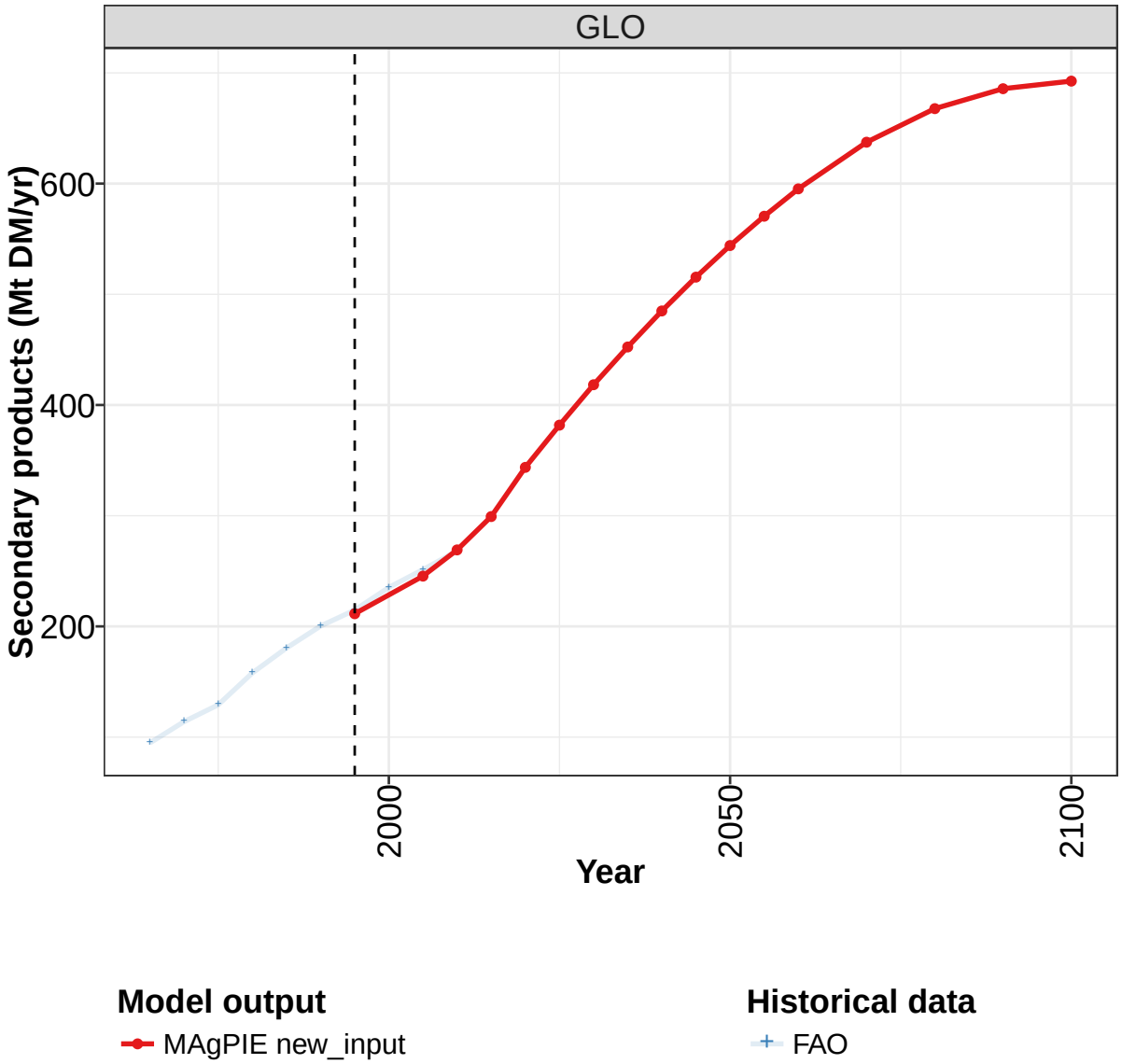
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	21.6	25.1	27.8	29.6	32.1	34.7	36.4	39.3	41.5	44.8
CAZ	1.0	1.1	1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2
CHA	0.5	0.6	0.8	1.0	1.4	2.2	4.0	5.9	6.8	8.1
EUR	5.6	6.6	7.0	7.4	7.3	7.6	6.7	6.5	6.1	6.0
IND	0.8	0.8	0.9	1.0	1.2	1.3	1.4	1.3	1.4	1.4
LAM	2.7	3.2	3.6	4.2	4.6	5.3	6.1	6.8	7.2	7.8
MEA	0.7	0.8	1.0	1.3	1.5	1.6	1.9	2.2	2.4	2.7
NEU	0.5	0.5	0.6	0.6	0.8	0.8	0.7	0.7	0.7	0.8
OAS	1.3	1.4	1.7	1.9	2.3	2.7	3.5	3.6	3.8	4.5
REF	2.6	3.2	3.7	3.8	4.1	4.5	3.5	2.7	2.9	3.2
SSA	1.3	1.5	1.5	1.9	2.1	2.2	2.2	2.6	3.1	3.6
USA	4.7	5.3	5.6	5.2	5.6	5.1	5.3	5.7	5.9	5.5

Table 409: FAO — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr)


GLO
Demand|Food|Secondary products (Mt DM/yr)
600
400
200
0
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Food|Secondary products (Mt DM/yr)
150
100
50
0
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

7.4 Secondary products



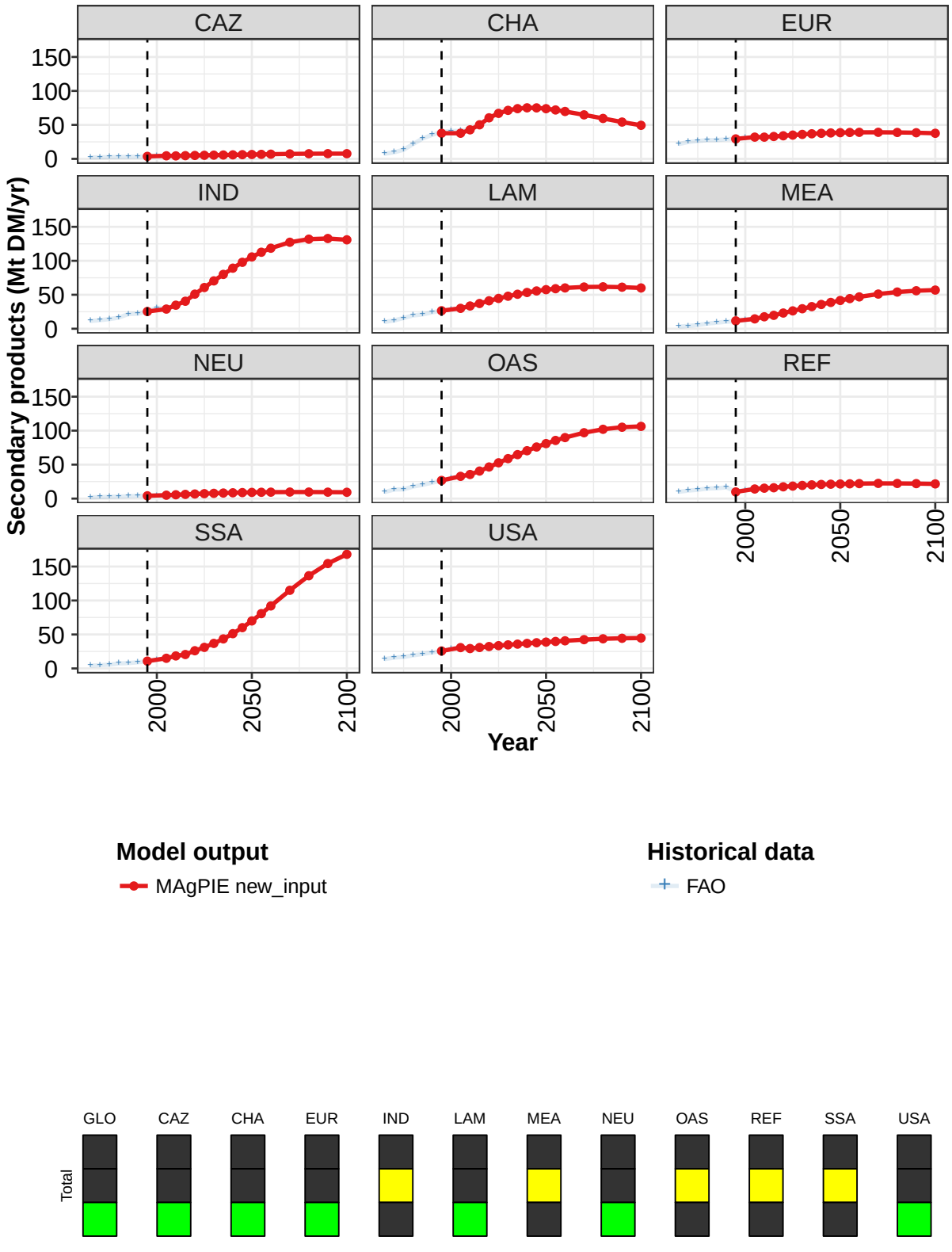


Figure 137: MAgPIE new_input — Demand—Food—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	211	245	269	299	344	382	418	452	485	516	544
CAZ	4	5	4	5	5	5	5	6	6	6	6
CHA	38	38	43	50	60	67	71	74	75	75	74
EUR	29	32	32	33	34	35	36	37	38	38	39
IND	25	29	35	40	51	61	70	80	89	98	106
LAM	27	30	33	37	41	45	48	51	53	56	58
MEA	12	15	18	20	23	26	29	33	36	39	42
NEU	4	5	6	6	7	7	8	8	9	9	9
OAS	27	33	35	41	47	53	59	65	70	76	81
REF	10	14	15	16	17	18	19	20	21	21	21
SSA	11	15	18	21	26	31	37	44	51	60	70
USA	26	31	29	31	32	34	35	36	37	38	39

Table 410: MAgPIE new_input — Demand—Food—Secondary products (Mt DM/yr) [PART 1/2]

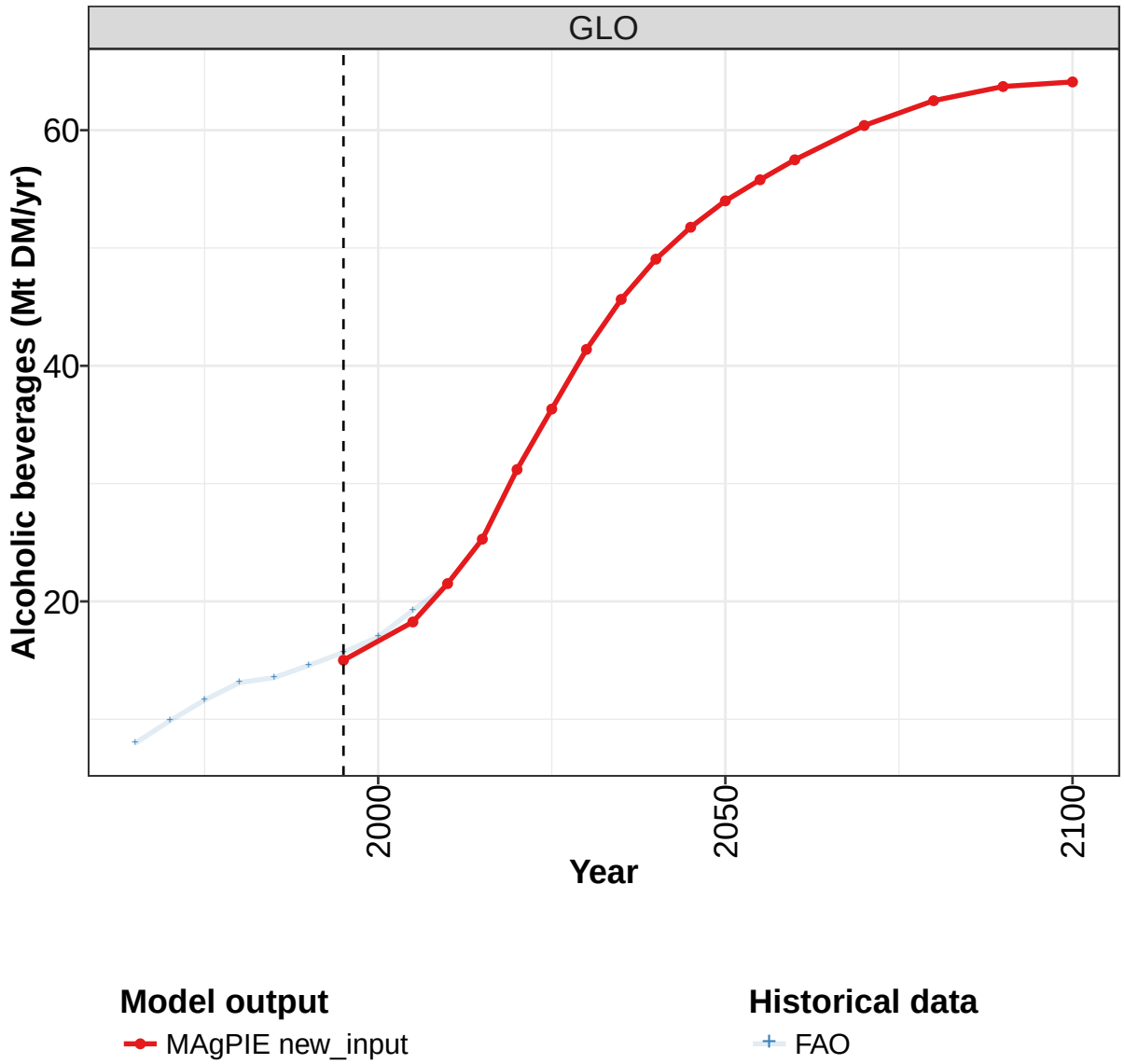
	2055	2060	2070	2080	2090	2100
GLO	571	595	637	668	686	693
CAZ	7	7	7	8	8	8
CHA	72	70	65	60	54	49
EUR	39	39	39	39	38	38
IND	113	119	127	132	133	131
LAM	59	60	61	62	61	60
MEA	44	47	51	54	56	57
NEU	9	9	10	10	9	9
OAS	86	90	97	102	105	106
REF	22	22	22	22	22	22
SSA	81	92	115	137	154	168
USA	40	41	42	44	44	45

Table 411: MAgPIE new_input — Demand—Food—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	95	114	129	158	180	200	215	235	251	268
CAZ	2	2	3	3	3	3	4	4	5	4
CHA	7	10	13	22	30	35	40	41	41	44
EUR	22	25	26	28	28	29	30	31	32	32
IND	11	13	14	16	22	22	26	31	30	35
LAM	10	12	16	20	21	24	27	28	30	33
MEA	3	4	5	8	9	10	11	13	14	17
NEU	2	2	3	3	3	4	4	5	5	6
OAS	10	13	14	18	20	23	27	30	33	35
REF	10	12	13	15	15	16	11	12	15	15
SSA	4	5	6	7	8	9	11	13	15	18
USA	14	16	17	19	21	24	26	29	31	29

Table 412: FAO — Demand—Food—Secondary products (Mt DM/yr)

7.4.1 Alcoholic beverages



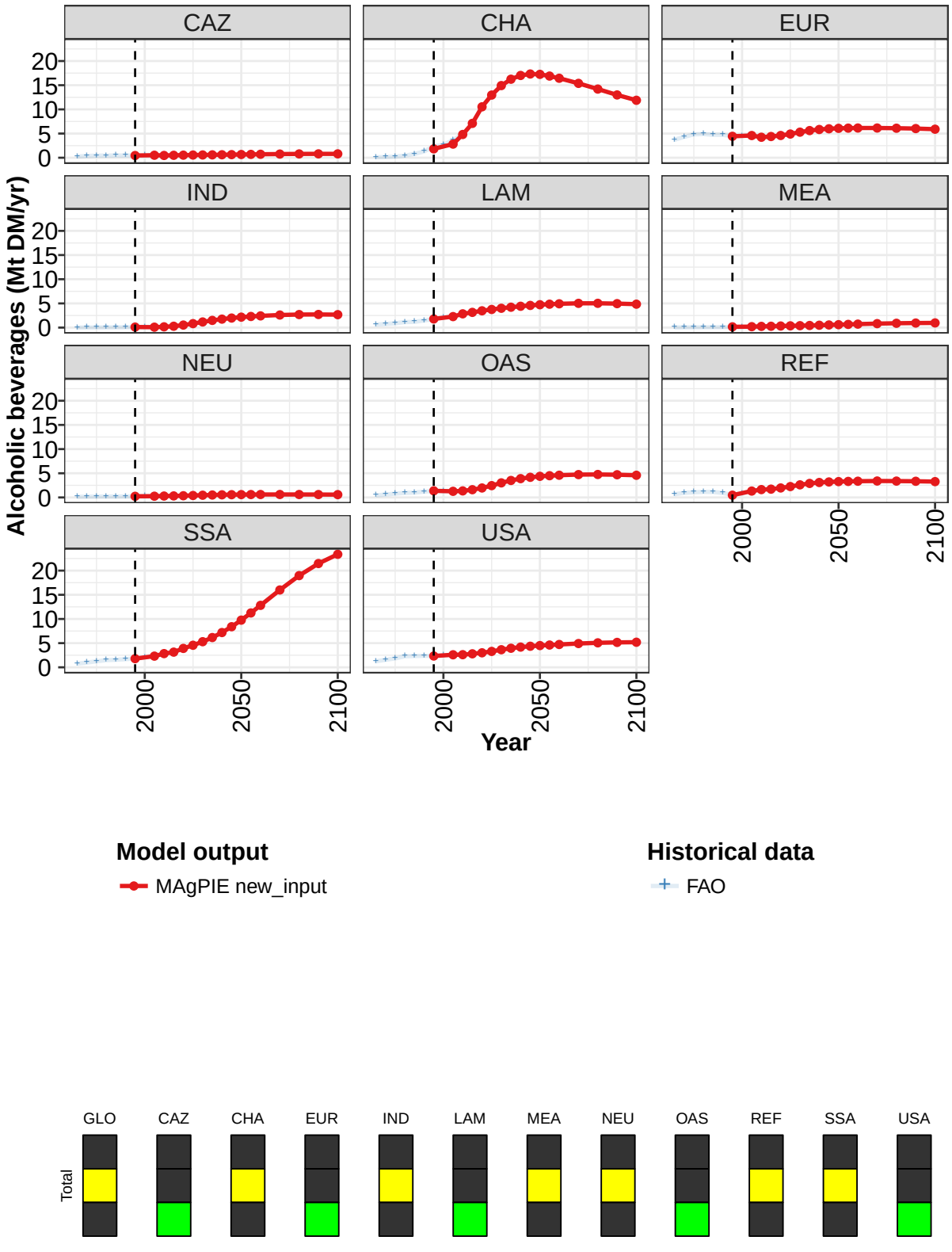


Figure 138: MAgPIE new_input — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	15.0	18.3	21.5	25.3	31.2	36.3	41.4	45.6	49.1	51.8	54.0
CAZ	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7
CHA	1.8	2.8	4.8	7.1	10.5	13.0	14.9	16.2	17.0	17.3	17.2
EUR	4.4	4.6	4.2	4.4	4.6	4.9	5.3	5.6	5.8	6.0	6.1
IND	0.1	0.1	0.2	0.3	0.5	0.8	1.2	1.5	1.8	2.0	2.2
LAM	1.8	2.3	2.8	3.1	3.5	3.8	4.0	4.2	4.4	4.6	4.7
MEA	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6
NEU	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6
OAS	1.4	1.3	1.4	1.6	2.0	2.4	3.0	3.5	3.9	4.2	4.4
REF	0.5	1.3	1.6	1.7	2.0	2.3	2.6	2.9	3.1	3.2	3.3
SSA	1.8	2.3	2.8	3.1	3.9	4.6	5.3	6.2	7.2	8.4	9.8
USA	2.3	2.6	2.6	2.8	3.0	3.3	3.6	3.9	4.2	4.4	4.5

Table 413: MAgPIE new_input — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

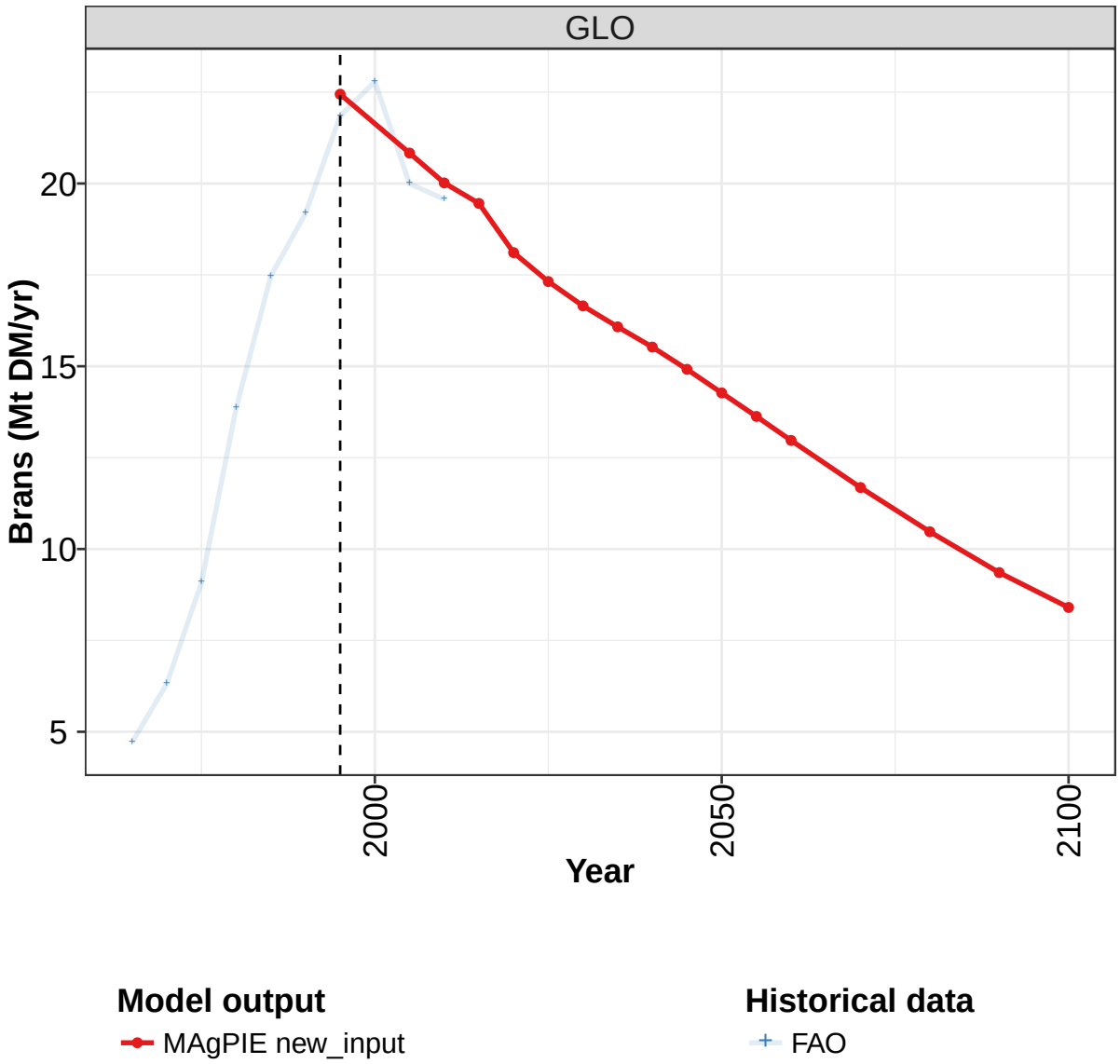
	2055	2060	2070	2080	2090	2100
GLO	55.8	57.5	60.4	62.5	63.7	64.1
CAZ	0.7	0.7	0.8	0.8	0.8	0.8
CHA	16.9	16.4	15.4	14.2	13.0	11.9
EUR	6.1	6.2	6.1	6.1	6.0	5.9
IND	2.3	2.4	2.6	2.7	2.7	2.7
LAM	4.8	4.9	5.0	5.0	5.0	4.8
MEA	0.7	0.7	0.8	0.9	0.9	1.0
NEU	0.6	0.6	0.6	0.6	0.6	0.6
OAS	4.5	4.6	4.7	4.8	4.7	4.6
REF	3.3	3.4	3.4	3.4	3.4	3.3
SSA	11.2	12.8	16.0	19.0	21.5	23.4
USA	4.6	4.7	4.9	5.1	5.2	5.2

Table 414: MAgPIE new_input — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.0	9.9	11.6	13.1	13.5	14.6	15.7	17.0	19.2	21.4
CAZ	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
CHA	0.1	0.1	0.2	0.4	0.8	1.3	2.4	2.7	3.6	4.9
EUR	3.7	4.3	4.8	4.9	4.7	4.7	4.5	4.5	4.6	4.2
IND	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
LAM	0.6	0.7	0.9	1.1	1.2	1.5	1.8	2.1	2.3	2.8
MEA	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
OAS	0.4	0.6	0.8	0.9	1.0	1.2	1.3	1.3	1.2	1.3
REF	0.7	0.9	1.1	1.2	1.1	0.9	0.6	0.8	1.4	1.6
SSA	0.8	1.0	1.2	1.5	1.6	1.7	1.8	2.1	2.4	2.8
USA	1.2	1.6	1.8	2.3	2.3	2.4	2.3	2.5	2.6	2.6

Table 415: FAO — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr)

7.4.2 Brans


GLO
Brans (Mt DM/yr)
20
15
10
5
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

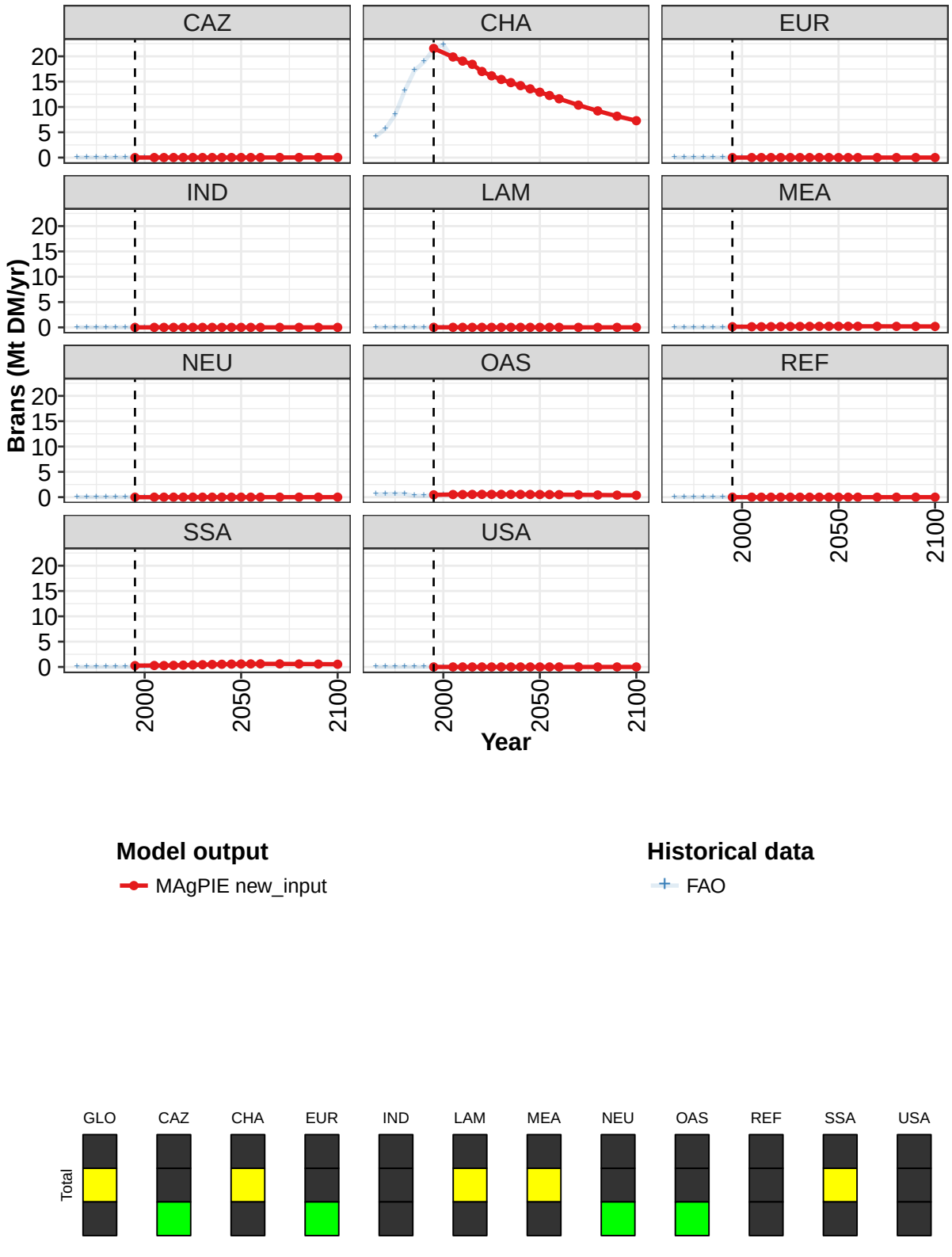


Figure 139: MAgPIE new_input — Demand—Food—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	22.4	20.8	20.0	19.5	18.1	17.3	16.7	16.1	15.5	14.9	14.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	21.6	19.9	19.1	18.4	17.0	16.2	15.4	14.8	14.2	13.6	12.9
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 416: MAgPIE new_input — Demand—Food—Secondary products—Brans (Mt DM/yr) [PART 1/2]

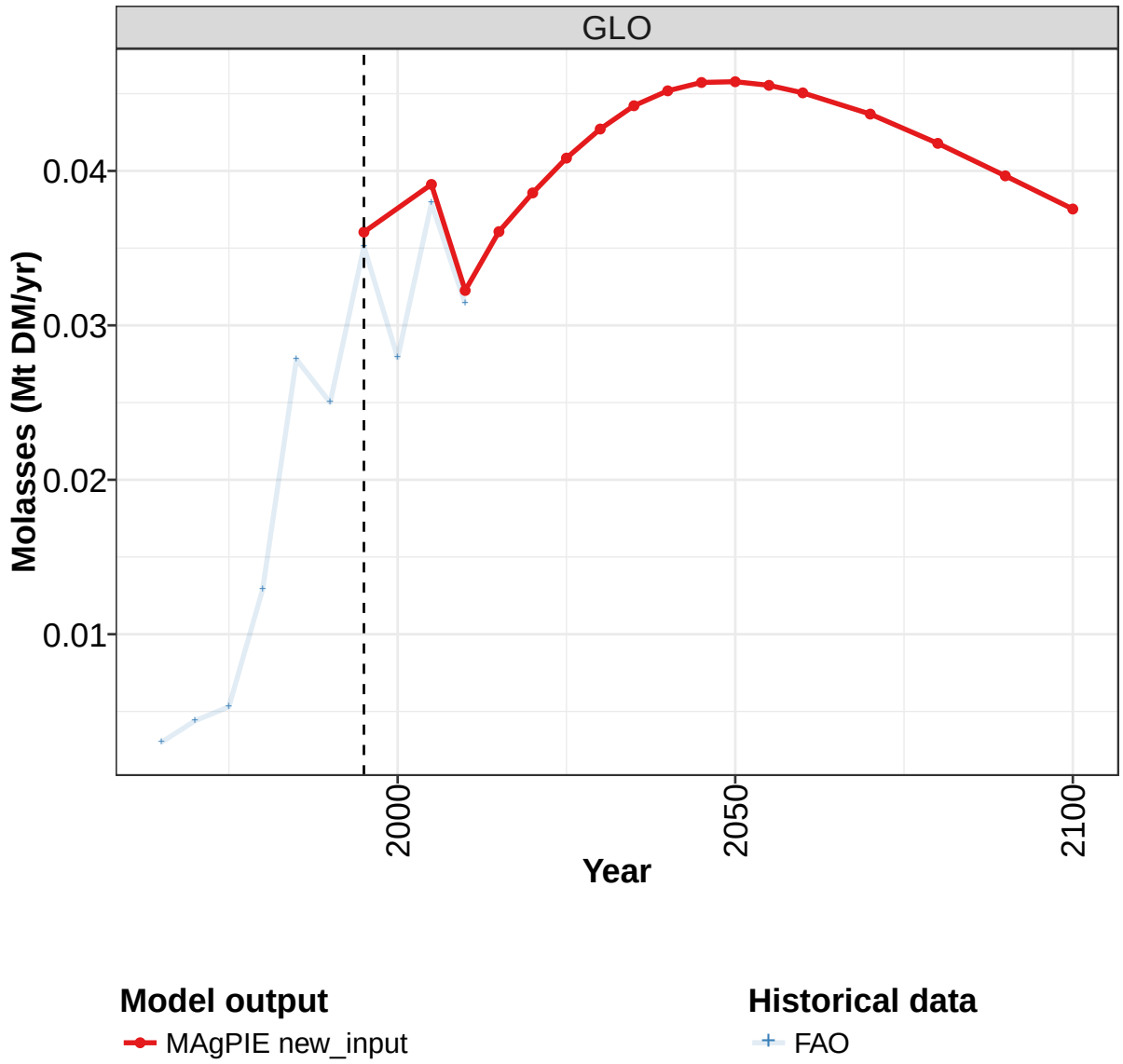
	2055	2060	2070	2080	2090	2100
GLO	13.6	13.0	11.7	10.5	9.4	8.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	12.3	11.6	10.4	9.2	8.2	7.3
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.5	0.5	0.4	0.4	0.4
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.6	0.6	0.6	0.6	0.6	0.5
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 417: MAgPIE new_input — Demand—Food—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.7	6.3	9.1	13.9	17.5	19.2	21.8	22.8	20.0	19.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.2	5.7	8.4	13.2	17.2	18.9	21.4	22.3	19.5	19.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.6	0.7	0.6	0.3	0.3	0.4	0.5	0.5	0.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 418: FAO — Demand—Food—Secondary products—Brans (Mt DM/yr)

7.4.3 Molasses



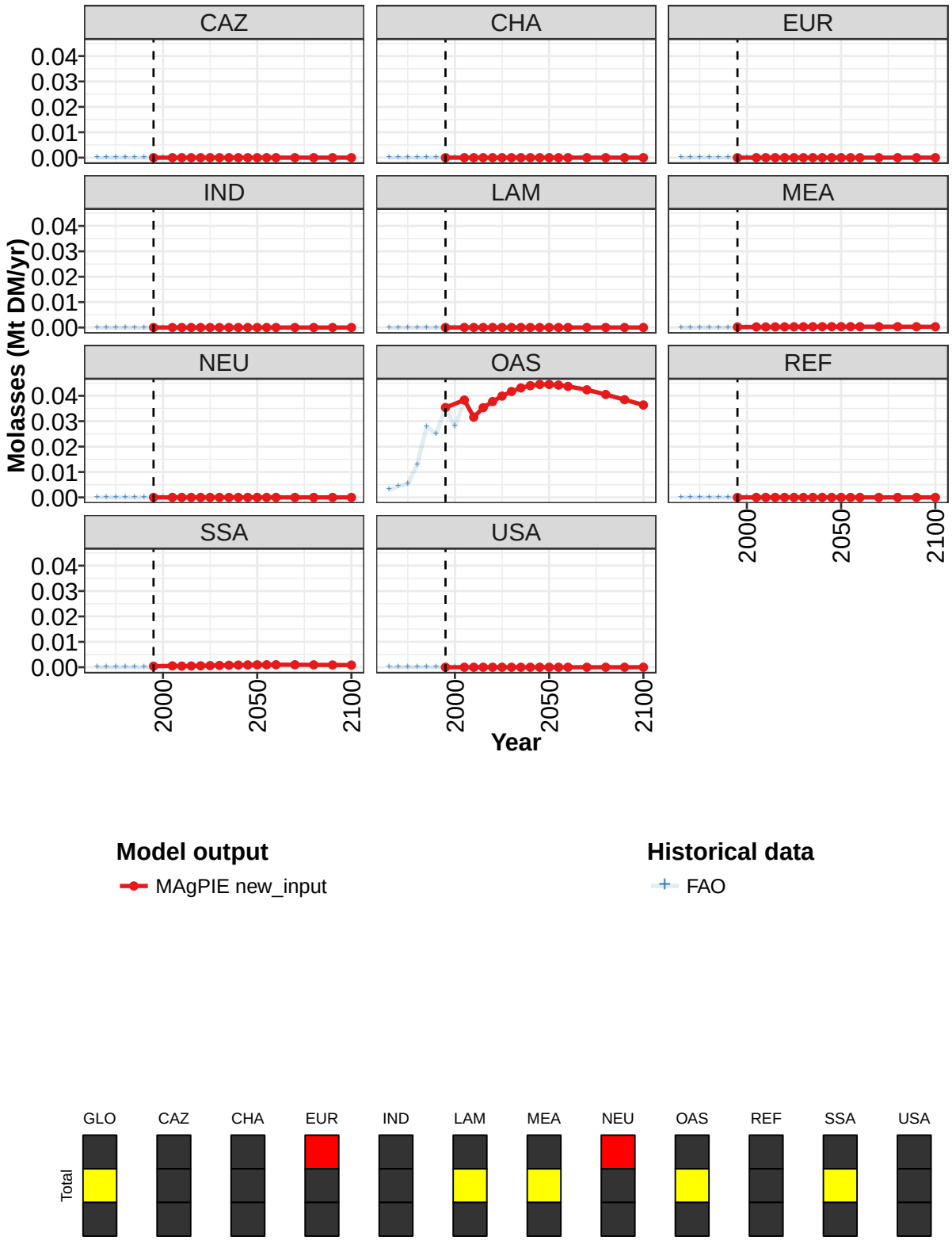


Figure 140: MAgPIE new_input — Demand—Food—Secondary products—Molasses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0360	0.0391	0.0323	0.0361	0.0386	0.0408	0.0427	0.0442	0.0452	0.0457	0.0458
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0354	0.0383	0.0316	0.0353	0.0377	0.0399	0.0417	0.0431	0.0440	0.0445	0.0445
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0004	0.0005	0.0004	0.0005	0.0006	0.0006	0.0007	0.0008	0.0009	0.0009	0.0009
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 419: MAgPIE new_input — Demand—Food—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

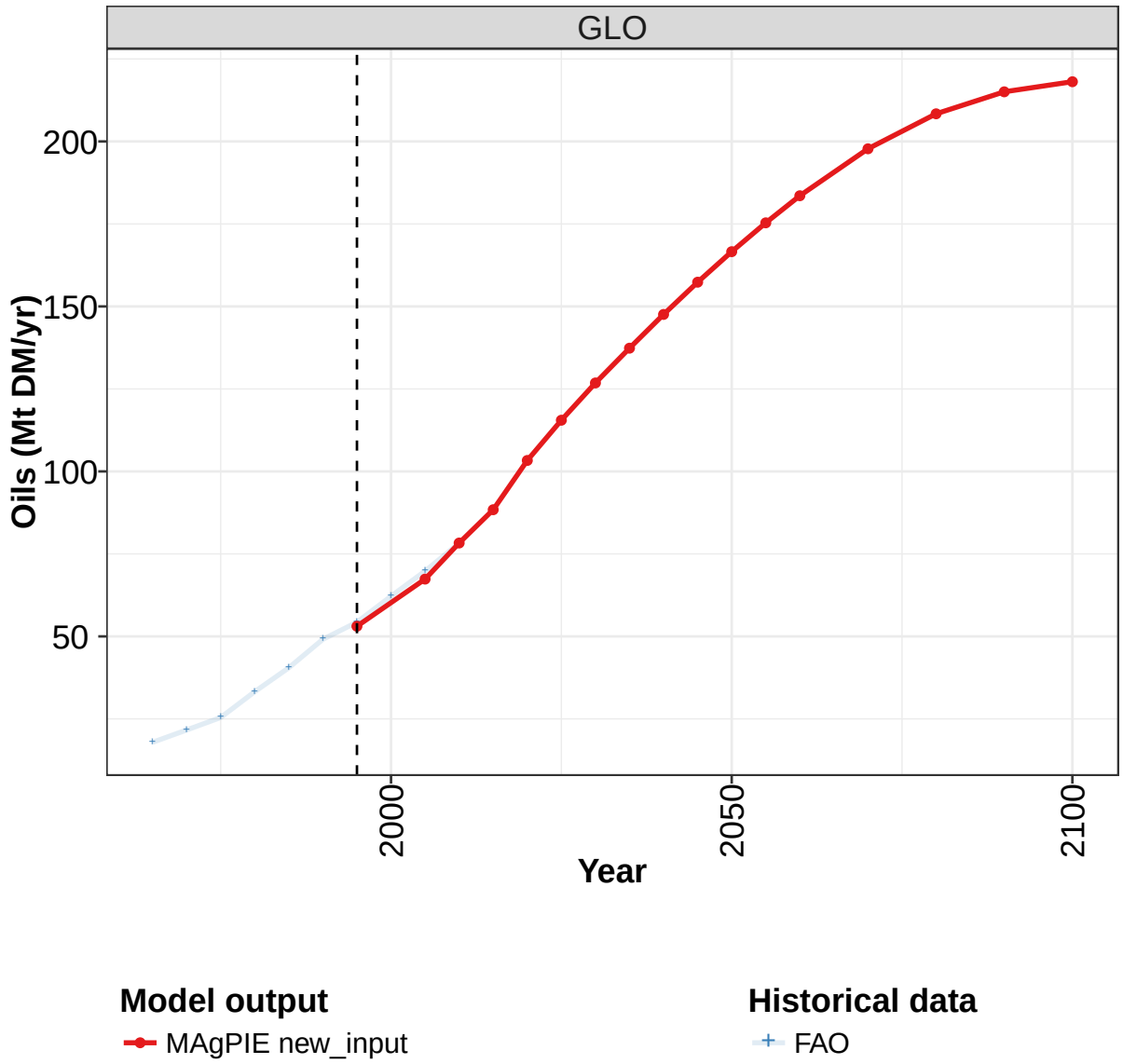
	2055	2060	2070	2080	2090	2100
GLO	0.0455	0.0451	0.0437	0.0418	0.0397	0.0375
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0442	0.0437	0.0424	0.0405	0.0385	0.0364
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0010	0.0010	0.0010	0.0009	0.0009	0.0009
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 420: MAgPIE new_input — Demand—Food—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0030	0.0044	0.0053	0.0129	0.0278	0.0250	0.0351	0.0279	0.0379	0.0314
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0030	0.0044	0.0053	0.0129	0.0278	0.0250	0.0351	0.0279	0.0379	0.0314
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 421: FAO — Demand—Food—Secondary products—Molasses (Mt DM/yr)

7.4.4 Oils


GLO
Oils (Mt DM/yr)
200
150
100
50
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

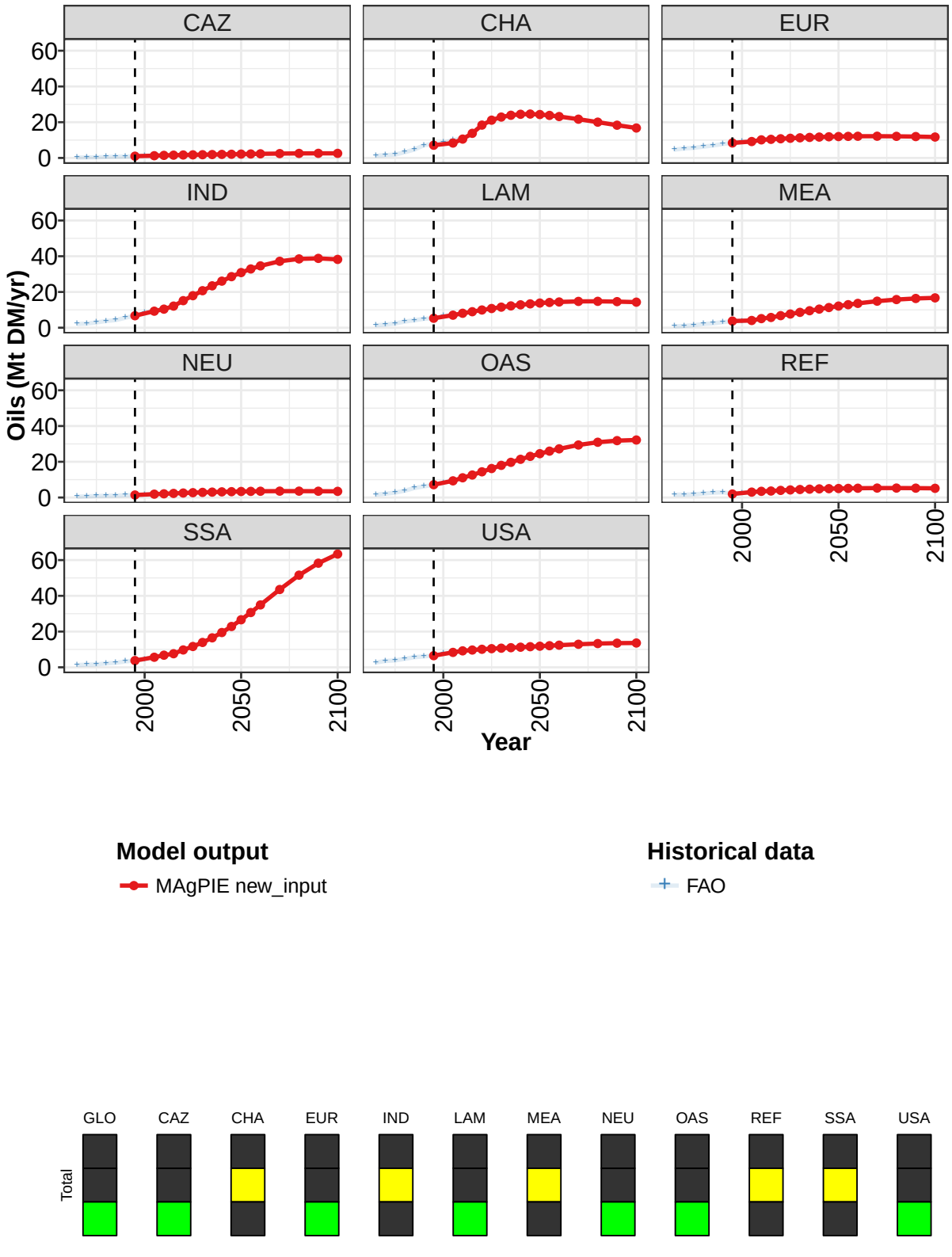


Figure 141: MAgPIE new_input — Demand—Food—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	53	67	78	88	103	116	127	137	148	157	167
CAZ	1	1	1	2	2	2	2	2	2	2	2
CHA	7	8	11	14	18	21	23	24	24	25	24
EUR	8	9	10	10	11	11	11	11	12	12	12
IND	7	9	10	12	15	18	21	23	26	29	31
LAM	5	7	8	9	10	11	12	12	13	13	14
MEA	4	4	5	6	7	8	9	10	10	11	12
NEU	1	2	2	2	3	3	3	3	3	3	3
OAS	7	9	11	13	14	16	18	20	21	23	25
REF	2	3	3	4	4	4	4	5	5	5	5
SSA	4	6	7	8	10	12	14	16	19	23	27
USA	7	8	9	10	10	10	11	11	11	12	12

Table 422: MAgPIE new_input — Demand—Food—Secondary products—Oils (Mt DM/yr) [PART 1/2]

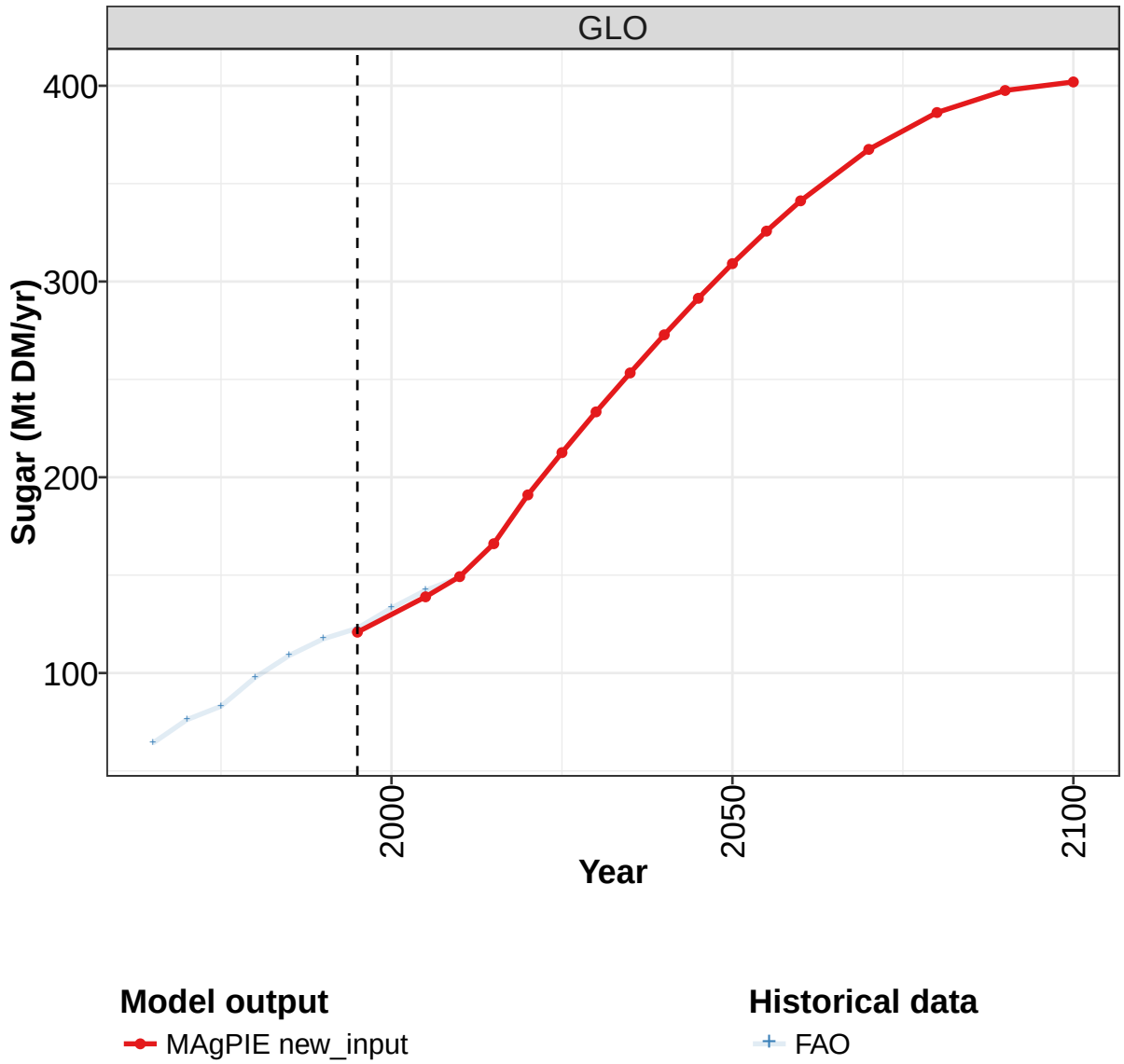
	2055	2060	2070	2080	2090	2100
GLO	175	184	198	208	215	218
CAZ	2	2	2	3	3	3
CHA	24	23	22	20	18	17
EUR	12	12	12	12	12	12
IND	33	35	37	39	39	38
LAM	14	14	15	15	15	14
MEA	13	14	15	16	16	17
NEU	3	4	4	4	4	3
OAS	26	27	29	31	32	32
REF	5	5	5	5	5	5
SSA	31	35	44	52	58	63
USA	12	12	13	13	14	14

Table 423: MAgPIE new_input — Demand—Food—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.9	21.6	25.4	33.2	40.5	49.1	54.3	62.2	69.8	78.3
CAZ	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.3	1.4
CHA	1.3	1.6	1.9	3.2	4.7	7.1	8.0	8.6	10.0	11.1
EUR	4.6	5.3	5.6	6.3	7.0	7.8	8.4	9.1	9.2	10.1
IND	2.1	2.3	3.0	3.8	4.3	5.6	6.8	8.4	9.6	10.4
LAM	1.3	1.7	2.4	3.4	4.2	5.0	5.3	6.4	7.1	8.0
MEA	0.8	1.0	1.4	2.1	2.4	3.1	3.7	3.7	4.0	4.8
NEU	0.5	0.7	0.8	1.0	1.1	1.3	1.4	1.6	1.9	2.1
OAS	1.6	2.1	2.7	3.8	5.3	6.2	7.1	8.3	9.3	10.9
REF	1.6	1.6	1.7	2.2	2.7	2.9	2.1	2.5	3.1	3.5
SSA	1.3	1.4	1.6	2.2	2.5	3.2	3.9	4.5	5.9	6.7
USA	2.7	3.5	3.9	4.7	5.7	6.1	6.5	7.9	8.4	9.2

Table 424: FAO — Demand—Food—Secondary products—Oils (Mt DM/yr)

7.4.5 Sugar


GLO
400
300
200
100
Sugar (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

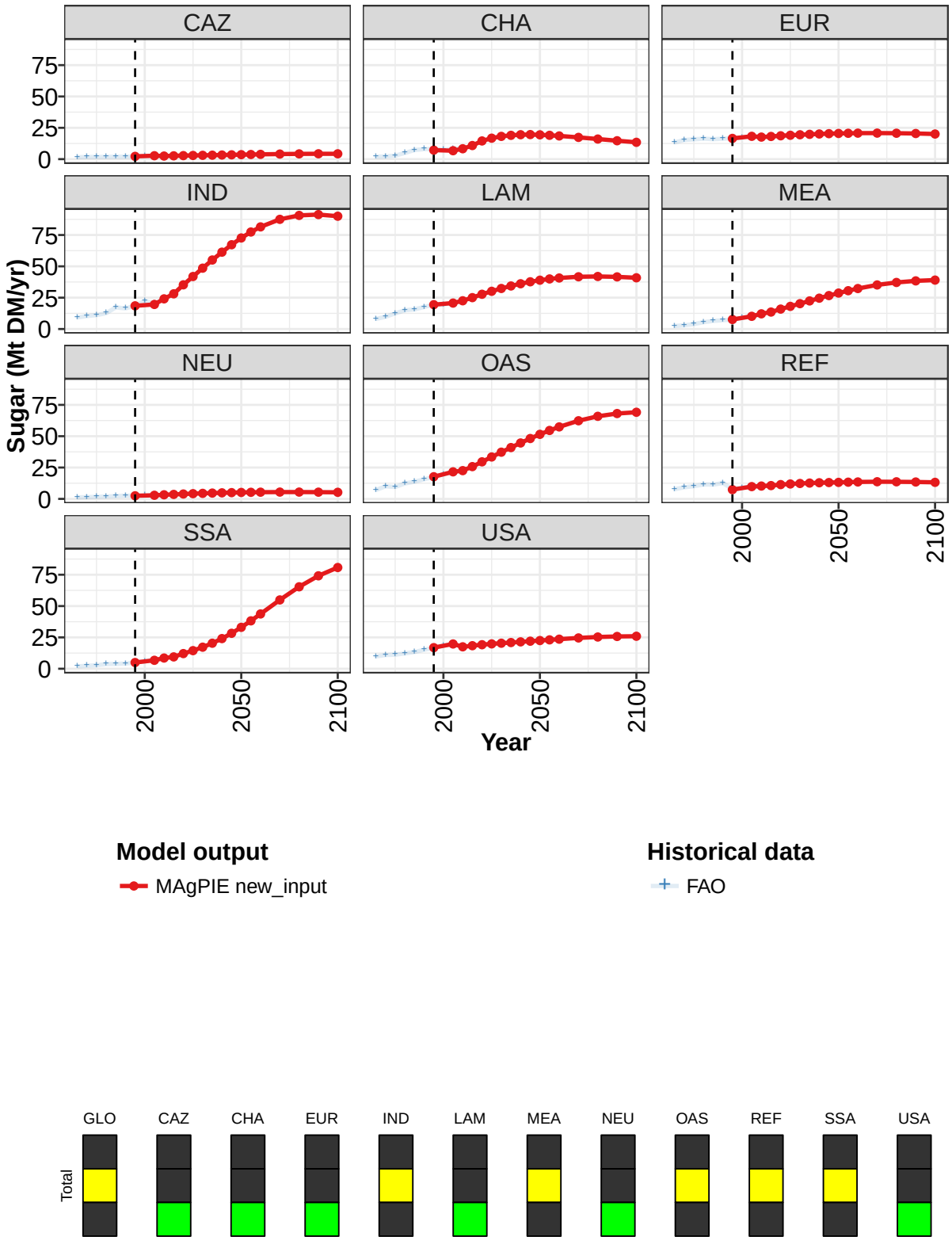


Figure 142: MAgPIE new_input — Demand—Food—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	121	139	149	166	191	213	233	253	273	291	309
CAZ	2	3	2	3	3	3	3	3	3	3	4
CHA	7	7	8	11	15	17	18	19	19	20	19
EUR	17	18	18	18	19	19	19	20	20	20	21
IND	19	20	24	28	35	42	49	55	61	67	73
LAM	19	21	23	25	28	30	32	34	36	38	39
MEA	8	10	12	14	16	18	20	22	25	27	29
NEU	2	3	3	4	4	4	4	5	5	5	5
OAS	18	22	23	26	30	33	37	41	45	48	51
REF	7	10	10	11	11	12	12	13	13	13	13
SSA	5	7	9	9	12	14	17	20	24	28	33
USA	17	20	17	18	19	20	20	21	21	22	23

Table 425: MAgPIE new_input — Demand—Food—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

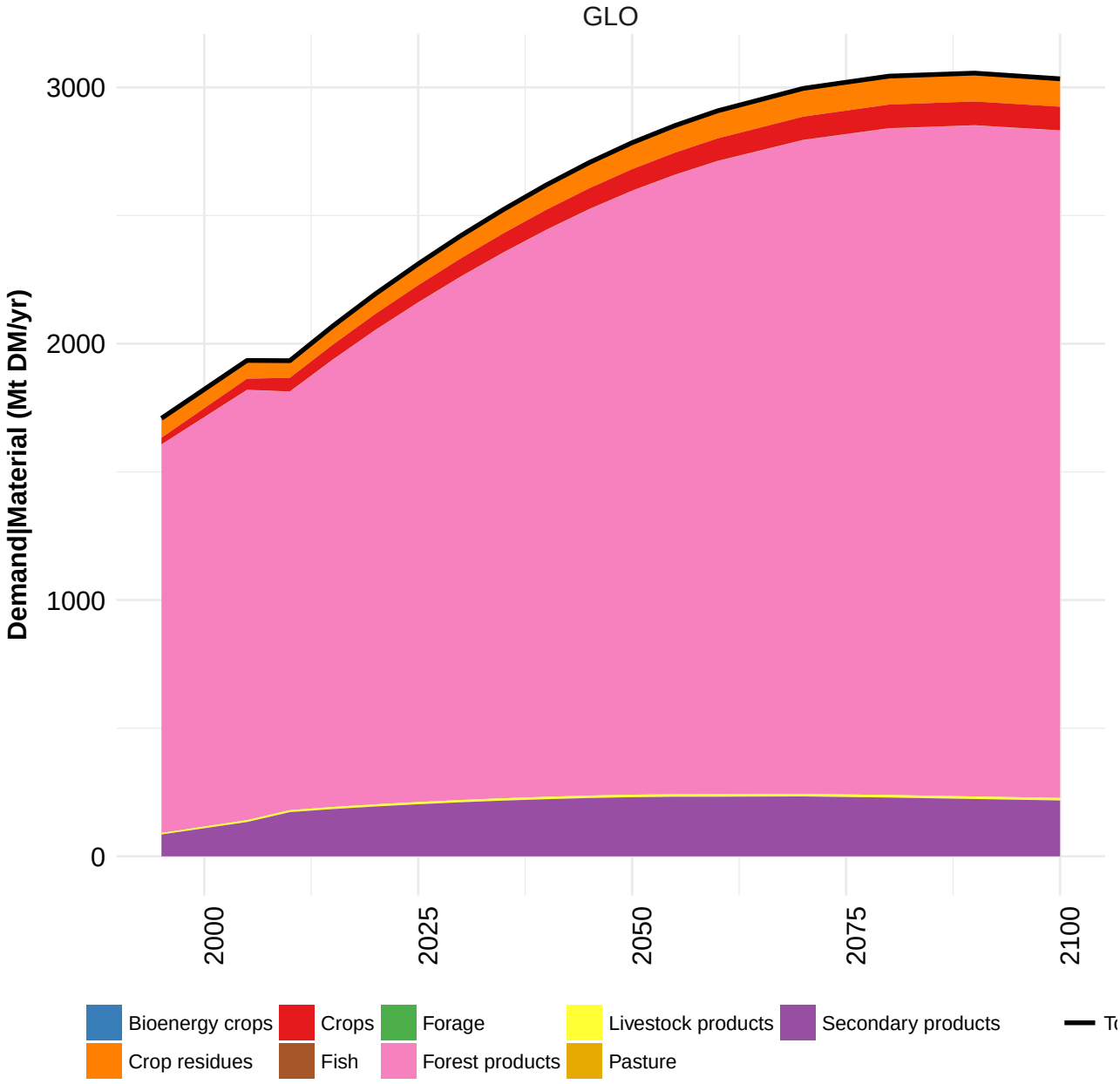
	2055	2060	2070	2080	2090	2100
GLO	326	341	367	386	398	402
CAZ	4	4	4	4	4	4
CHA	19	19	17	16	15	13
EUR	21	21	21	21	20	20
IND	77	81	88	91	91	90
LAM	40	41	42	42	42	41
MEA	31	32	35	37	38	39
NEU	5	5	5	5	5	5
OAS	55	57	62	66	68	69
REF	13	14	14	14	13	13
SSA	38	44	55	65	74	81
USA	23	24	25	25	26	26

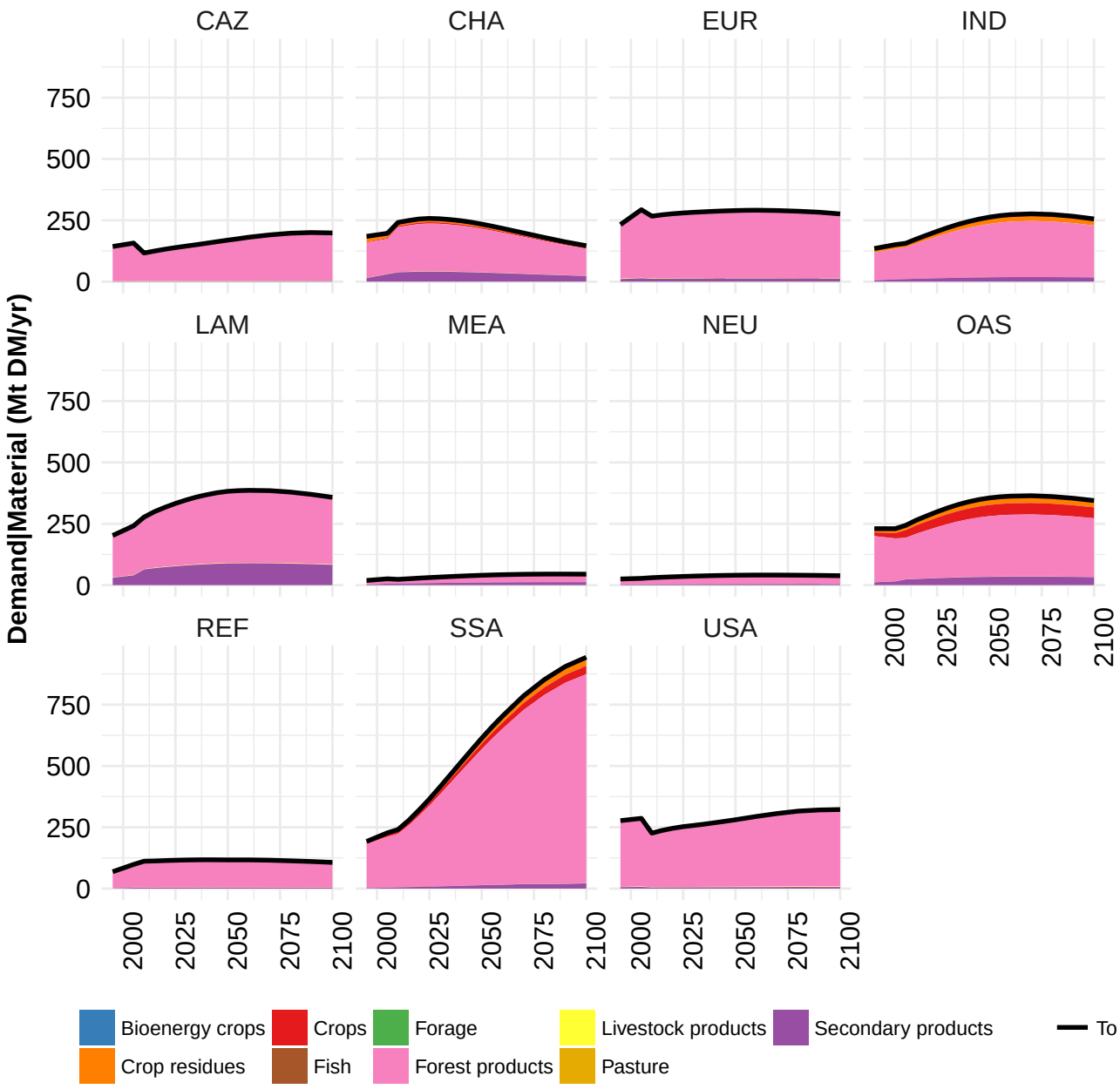
Table 426: MAgPIE new_input — Demand—Food—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

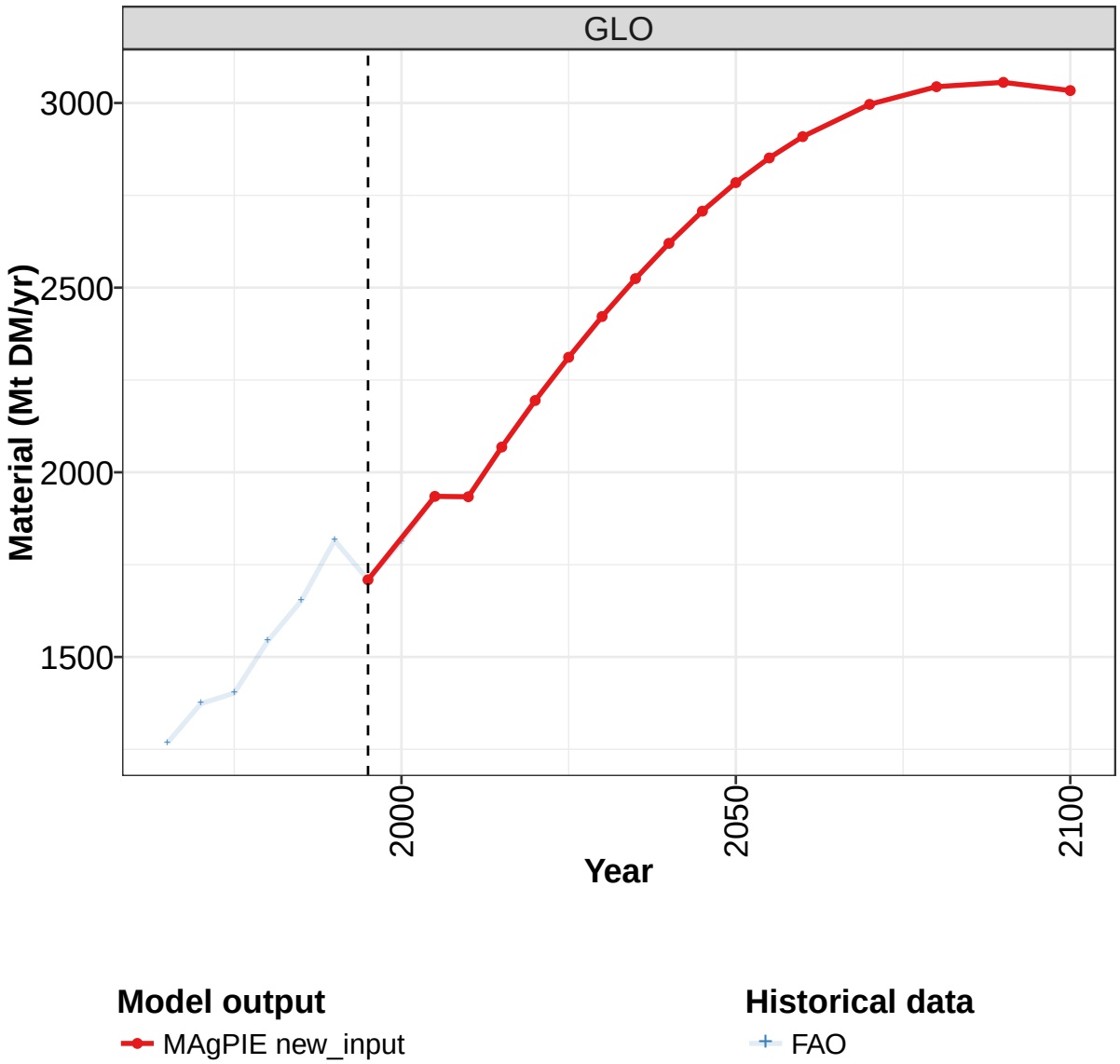
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	64	76	83	98	109	117	123	133	142	149
CAZ	2	2	2	2	2	2	2	2	3	2
CHA	2	2	3	5	7	8	8	7	8	9
EUR	13	15	16	16	16	16	17	17	18	18
IND	9	10	11	13	17	16	19	22	20	24
LAM	8	10	12	15	16	18	20	19	21	22
MEA	2	3	4	5	6	7	7	9	10	12
NEU	1	1	2	2	2	3	2	3	3	3
OAS	7	10	9	12	14	16	18	19	22	22
REF	8	9	10	11	11	13	8	9	10	10
SSA	2	2	3	4	4	4	5	6	7	8
USA	10	11	11	12	13	15	17	19	20	17

Table 427: FAO — Demand—Food—Secondary products—Sugar (Mt DM/yr)

8 Material


GLO
Demand|Material (Mt DM/yr)
3000
2000
1000
0
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Material (Mt DM/yr)
0
250
500
750
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


GLO
3000
2500
2000
1500
Material (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

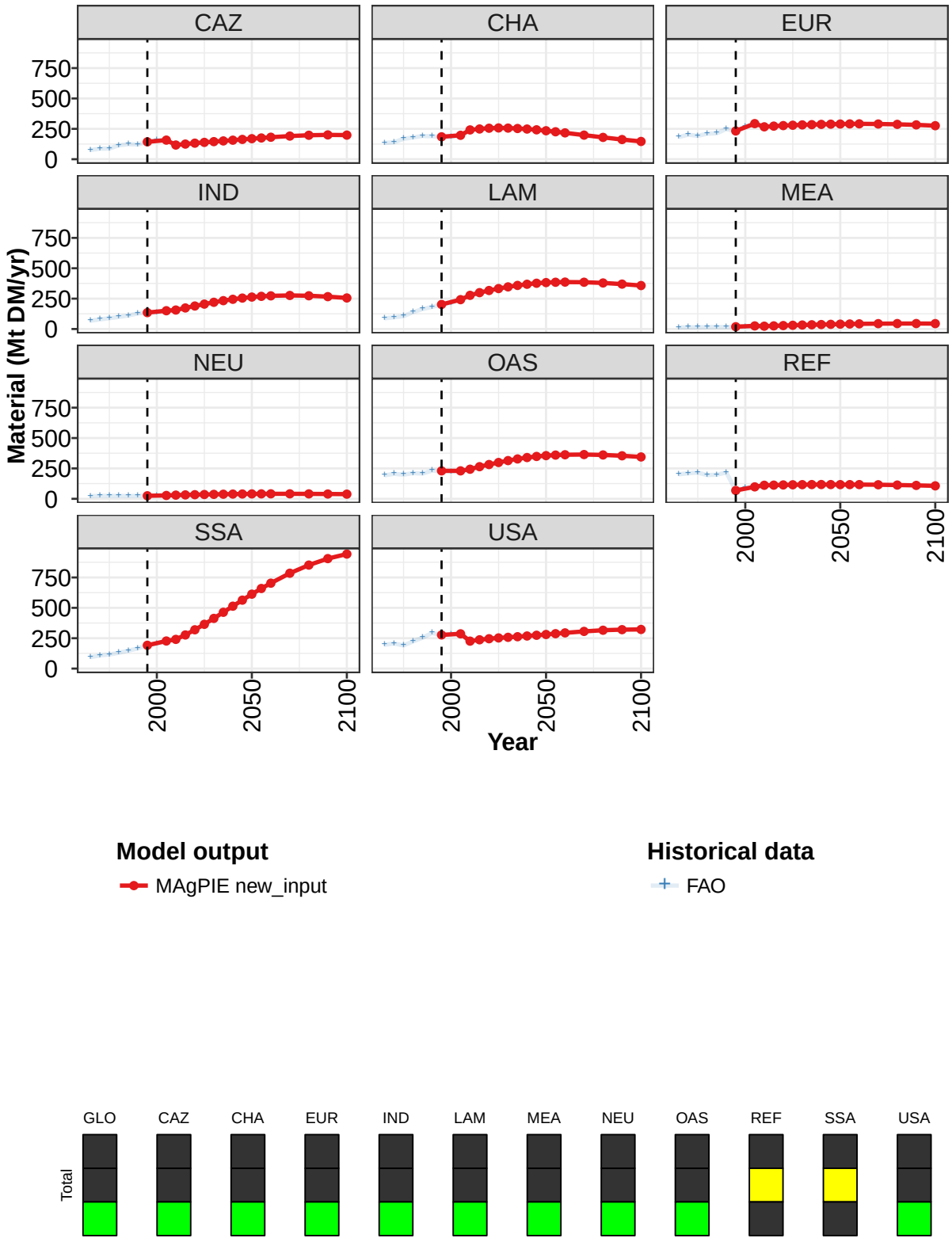


Figure 143: MAgPIE new_input — Demand—Material (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1709	1935	1934	2068	2194	2311	2422	2525	2620	2707	2784
CAZ	143	157	117	125	132	139	145	151	157	163	169
CHA	185	197	241	249	255	258	256	253	248	242	234
EUR	233	293	267	273	277	280	283	285	287	289	290
IND	135	151	156	173	189	205	220	233	245	255	263
LAM	202	242	277	300	317	333	347	359	369	377	382
MEA	19	26	23	26	28	31	33	35	37	39	40
NEU	25	28	30	32	34	35	37	38	39	40	40
OAS	230	230	244	265	282	299	315	328	340	349	355
REF	69	98	111	112	114	115	117	117	117	117	117
SSA	192	227	240	277	319	365	413	463	514	563	613
USA	277	286	226	237	246	252	257	262	268	274	281

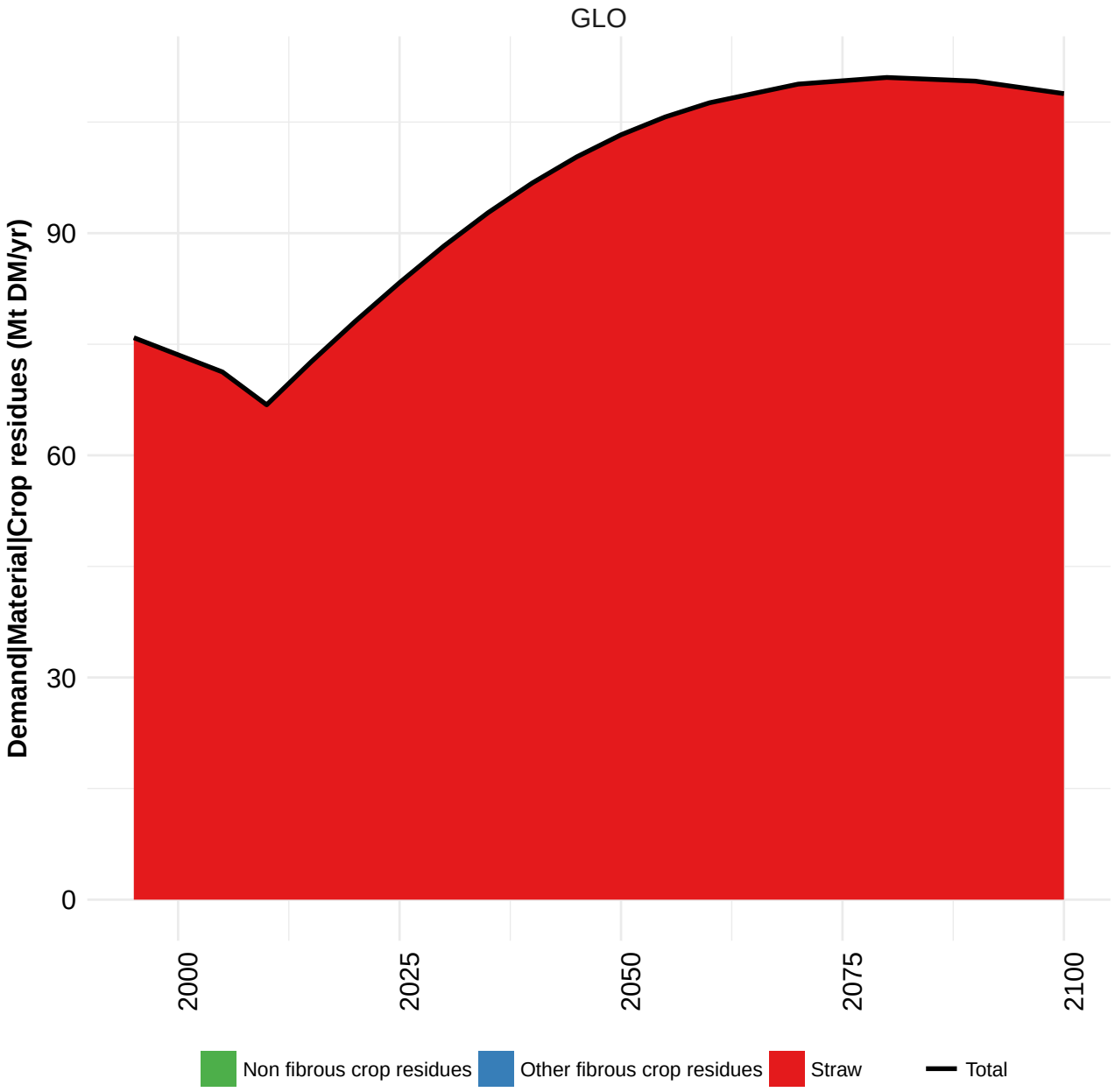
Table 428: MAgPIE new_input — Demand—Material (Mt DM/yr) [PART 1/2]

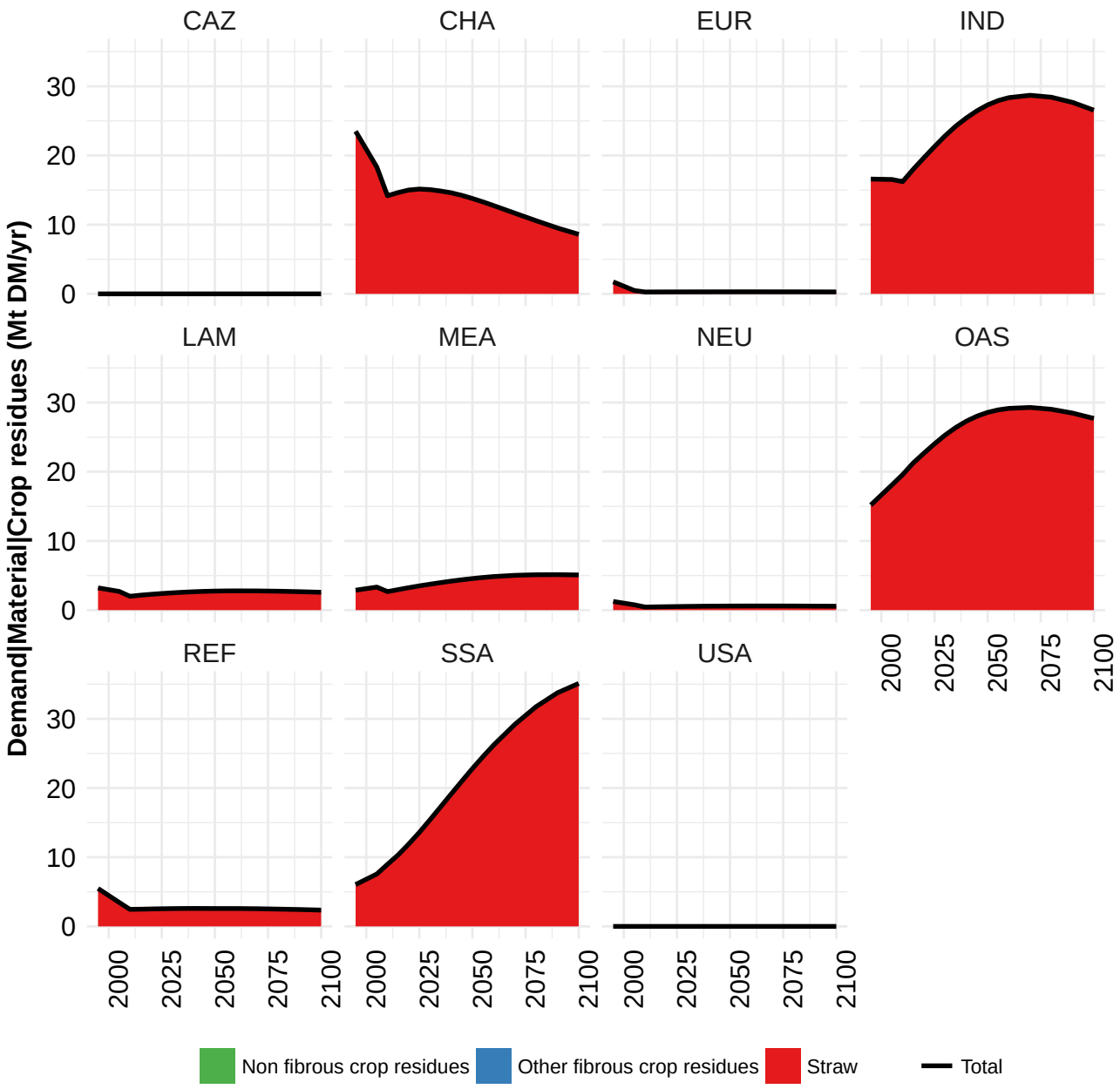
	2055	2060	2070	2080	2090	2100
GLO	2851	2909	2996	3044	3056	3034
CAZ	175	181	191	197	200	199
CHA	226	217	198	180	162	146
EUR	291	291	290	287	283	276
IND	269	273	276	274	266	256
LAM	385	386	385	379	370	358
MEA	41	43	44	45	45	45
NEU	41	41	41	40	39	38
OAS	360	363	364	361	354	345
REF	117	117	116	113	110	107
SSA	659	703	785	852	905	943
USA	287	294	306	316	320	322

Table 429: MAgPIE new_input — Demand—Material (Mt DM/yr) [PART 2/2]

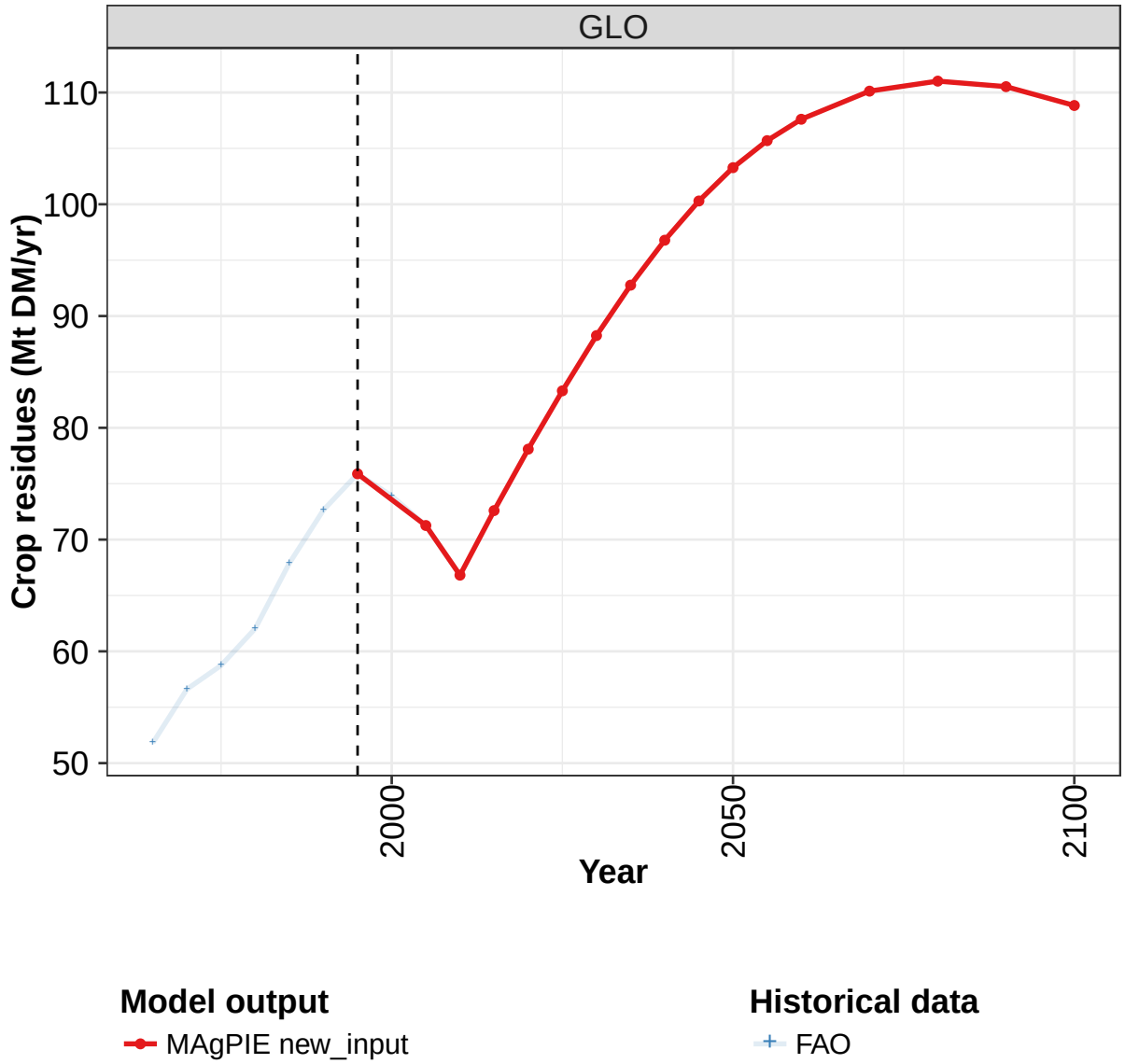
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1267	1374	1402	1543	1652	1816	1709	1811	1935	1931
CAZ	75	87	88	115	124	121	143	156	157	116
CHA	134	140	168	179	191	189	185	182	197	241
EUR	182	202	192	210	213	248	233	270	293	267
IND	68	79	89	99	111	128	135	137	151	156
LAM	88	97	106	139	164	182	202	215	242	277
MEA	13	14	14	16	17	16	19	20	26	23
NEU	22	24	24	24	23	24	25	27	28	30
OAS	193	205	199	211	208	232	230	224	230	244
REF	202	210	216	195	198	216	69	91	98	111
SSA	94	108	116	130	147	166	192	204	227	240
USA	196	207	190	224	254	292	277	284	286	224

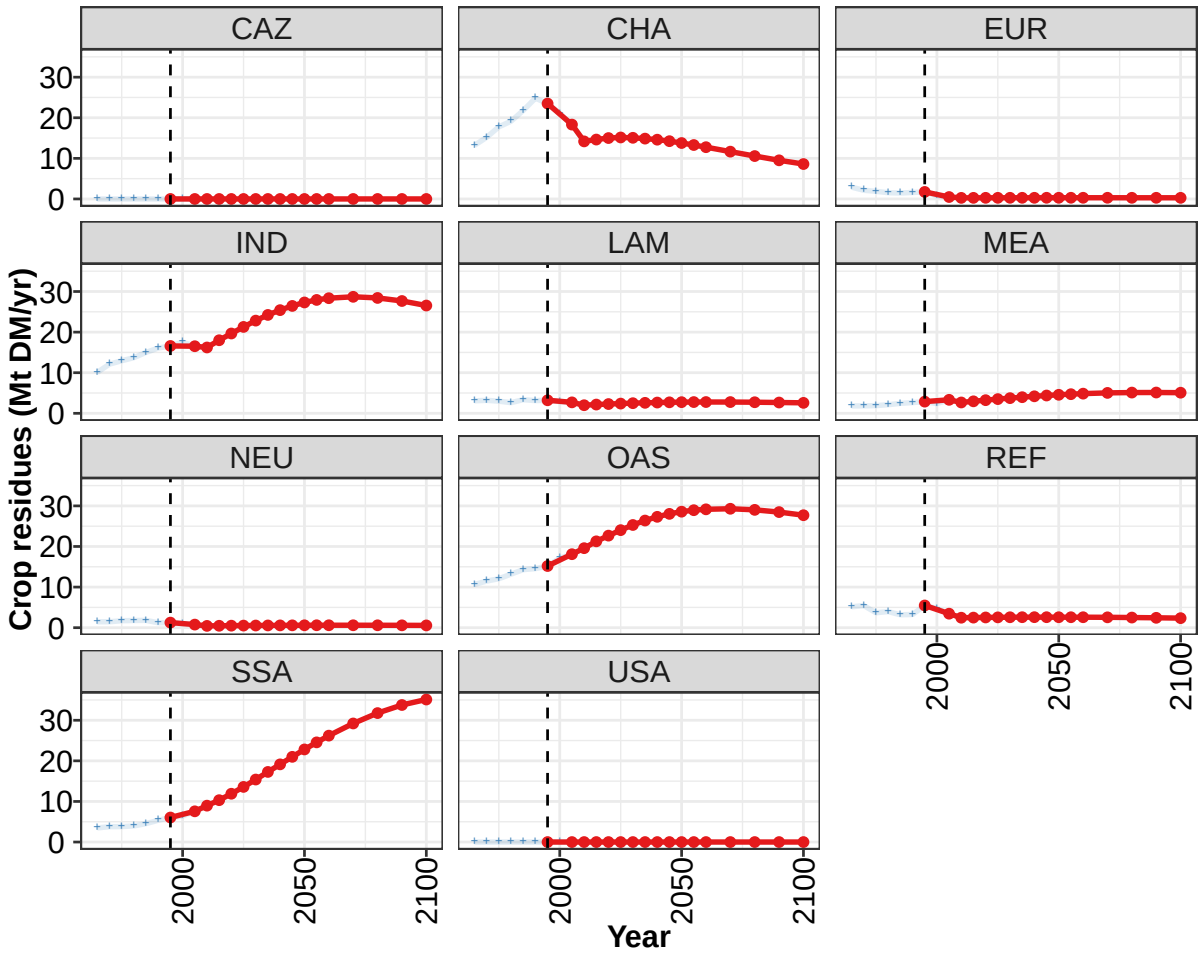
Table 430: FAO — Demand—Material (Mt DM/yr)


GLO
Demand|Material|Crop residues (Mt DM/yr)
90
60
30
0
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Material|Crop residues (Mt DM/yr)
0
10
20
30
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total

8.1 Crop residues





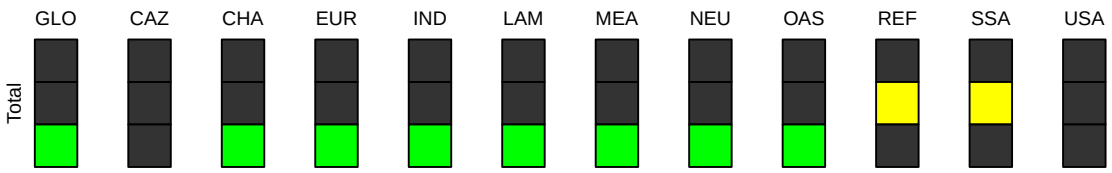


Figure 144: MAgPIE new_input — Demand—Material—Crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	76	71	67	73	78	83	88	93	97	100	103
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	23	18	14	15	15	15	15	15	15	14	14
EUR	2	0	0	0	0	0	0	0	0	0	0
IND	17	17	16	18	20	21	23	24	25	26	27
LAM	3	3	2	2	2	2	3	3	3	3	3
MEA	3	3	3	3	3	4	4	4	4	4	5
NEU	1	1	0	0	0	1	1	1	1	1	1
OAS	15	18	20	21	23	24	25	26	27	28	29
REF	5	3	2	2	3	3	3	3	3	3	3
SSA	6	8	9	10	12	14	15	17	19	21	23
USA	0	0	0	0	0	0	0	0	0	0	0

Table 431: MAgPIE new_input — Demand—Material—Crop residues (Mt DM/yr) [PART 1/2]

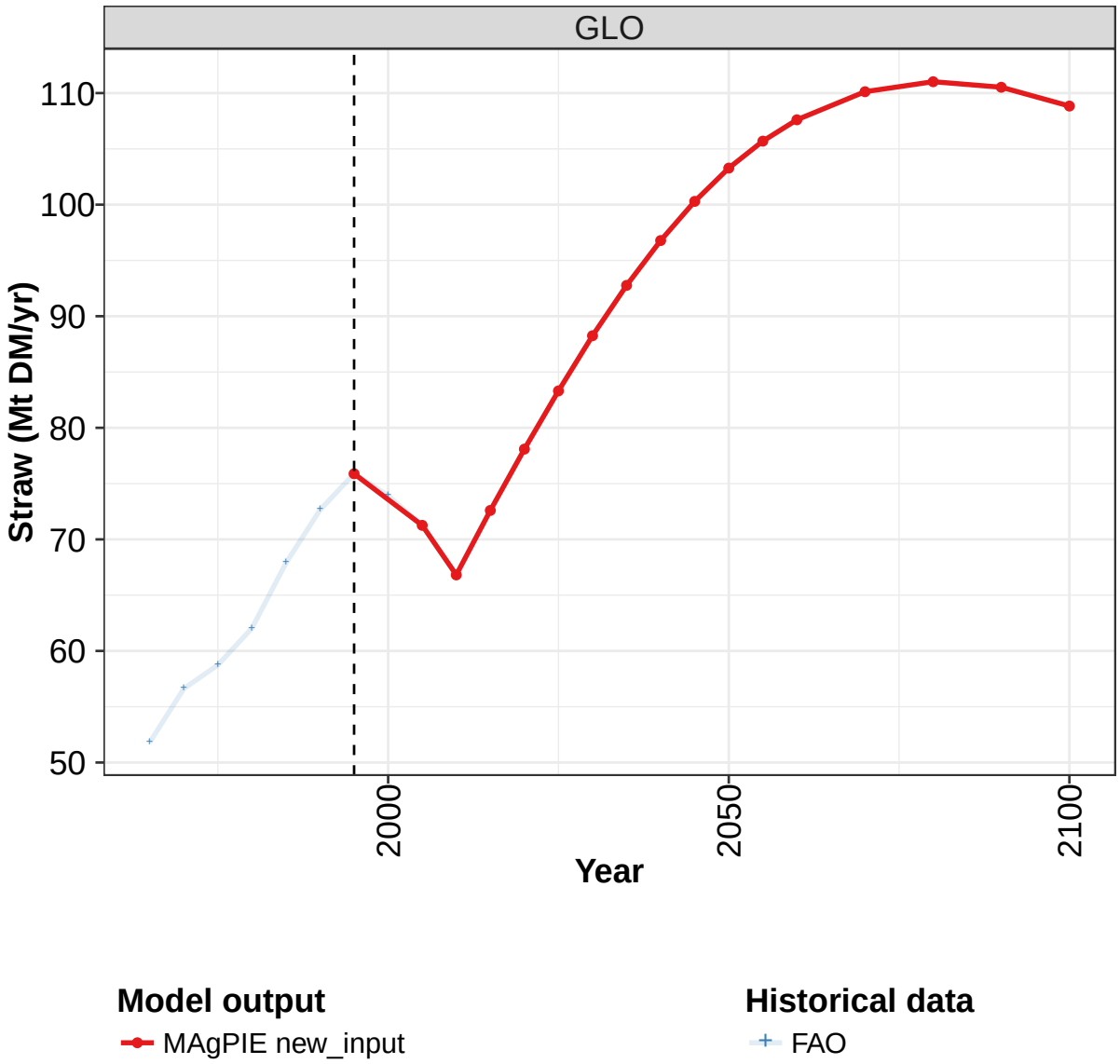
	2055	2060	2070	2080	2090	2100
GLO	106	108	110	111	111	109
CAZ	0	0	0	0	0	0
CHA	13	13	12	11	10	9
EUR	0	0	0	0	0	0
IND	28	28	29	28	28	27
LAM	3	3	3	3	3	3
MEA	5	5	5	5	5	5
NEU	1	1	1	1	1	1
OAS	29	29	29	29	28	28
REF	3	3	3	2	2	2
SSA	25	26	29	32	34	35
USA	0	0	0	0	0	0

Table 432: MAgPIE new_input — Demand—Material—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	51.8	56.6	58.7	62.0	67.9	72.6	75.9	73.9	71.3	66.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	13.2	15.2	17.8	19.1	21.8	24.8	23.5	21.1	18.3	14.2
EUR	2.9	2.1	1.9	1.5	1.5	1.6	1.7	0.8	0.5	0.3
IND	10.1	12.1	12.9	13.7	15.0	16.1	16.6	17.5	16.5	16.2
LAM	3.1	3.2	3.0	2.6	3.4	3.1	3.2	2.9	2.7	2.0
MEA	1.8	1.8	1.9	2.1	2.5	2.6	2.9	2.4	3.3	2.7
NEU	1.5	1.5	1.7	1.8	1.8	1.2	1.3	1.0	0.8	0.4
OAS	10.6	11.5	12.1	13.2	14.3	14.6	15.2	17.1	18.1	19.6
REF	5.2	5.4	3.7	4.0	3.2	3.2	5.5	4.7	3.5	2.5
SSA	3.5	3.8	3.8	4.0	4.5	5.4	6.0	6.4	7.6	9.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 433: FAO — Demand—Material—Crop residues (Mt DM/yr)

8.1.1 Straw


GLO
Straw (Mt DM/yr)
110
100
90
80
70
60
50
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

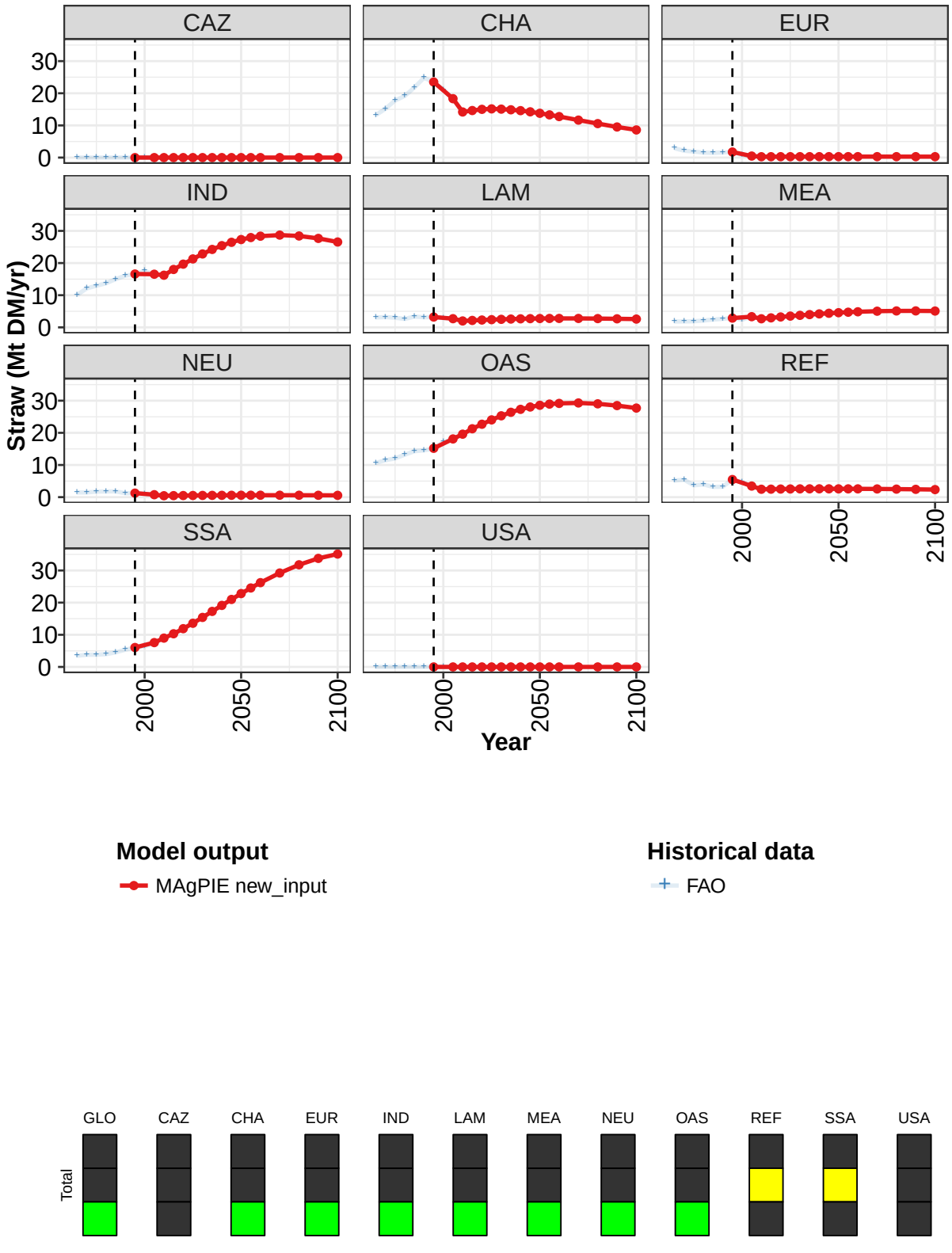


Figure 145: MAgPIE new_input — Demand—Material—Crop residues—Straw (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	76	71	67	73	78	83	88	93	97	100	103
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	23	18	14	15	15	15	15	15	15	14	14
EUR	2	0	0	0	0	0	0	0	0	0	0
IND	17	17	16	18	20	21	23	24	25	26	27
LAM	3	3	2	2	2	2	3	3	3	3	3
MEA	3	3	3	3	3	4	4	4	4	4	5
NEU	1	1	0	0	0	1	1	1	1	1	1
OAS	15	18	20	21	23	24	25	26	27	28	29
REF	5	3	2	2	3	3	3	3	3	3	3
SSA	6	8	9	10	12	14	15	17	19	21	23
USA	0	0	0	0	0	0	0	0	0	0	0

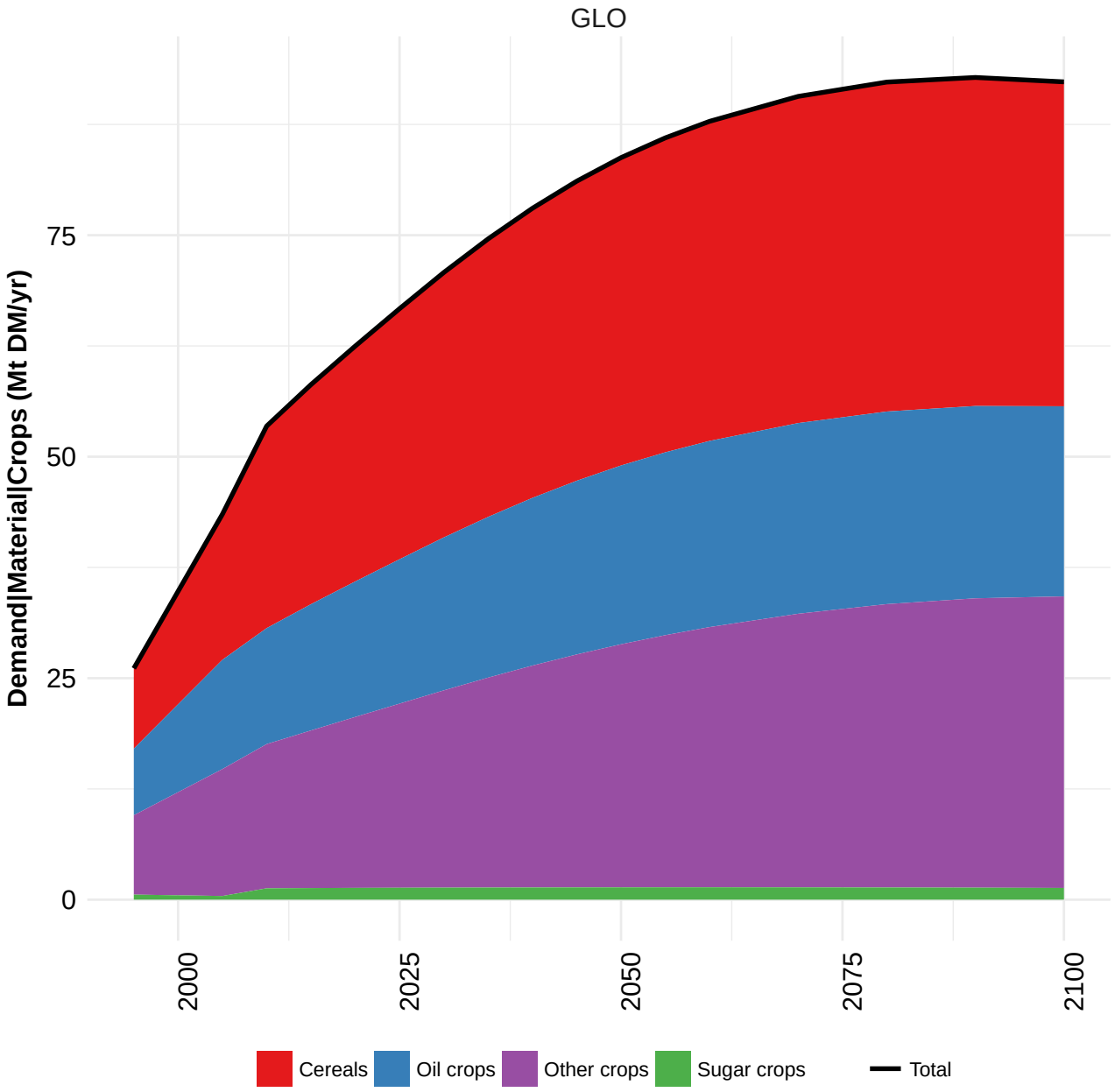
Table 434: MAgPIE new_input — Demand—Material—Crop residues—Straw (Mt DM/yr) [PART 1/2]

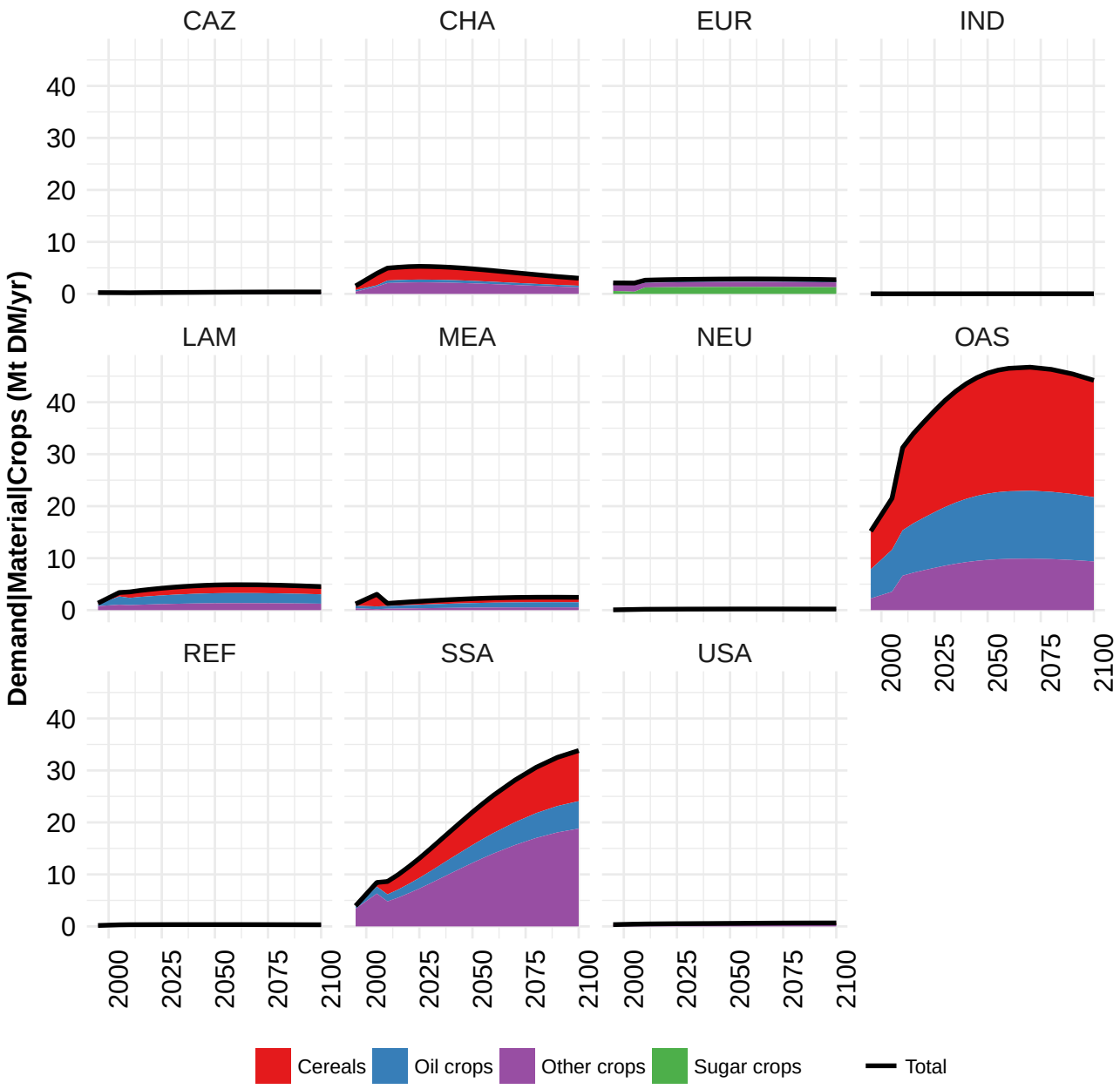
	2055	2060	2070	2080	2090	2100
GLO	106	108	110	111	111	109
CAZ	0	0	0	0	0	0
CHA	13	13	12	11	10	9
EUR	0	0	0	0	0	0
IND	28	28	29	28	28	27
LAM	3	3	3	3	3	3
MEA	5	5	5	5	5	5
NEU	1	1	1	1	1	1
OAS	29	29	29	29	28	28
REF	3	3	3	2	2	2
SSA	25	26	29	32	34	35
USA	0	0	0	0	0	0

Table 435: MAgPIE new_input — Demand—Material—Crop residues—Straw (Mt DM/yr) [PART 2/2]

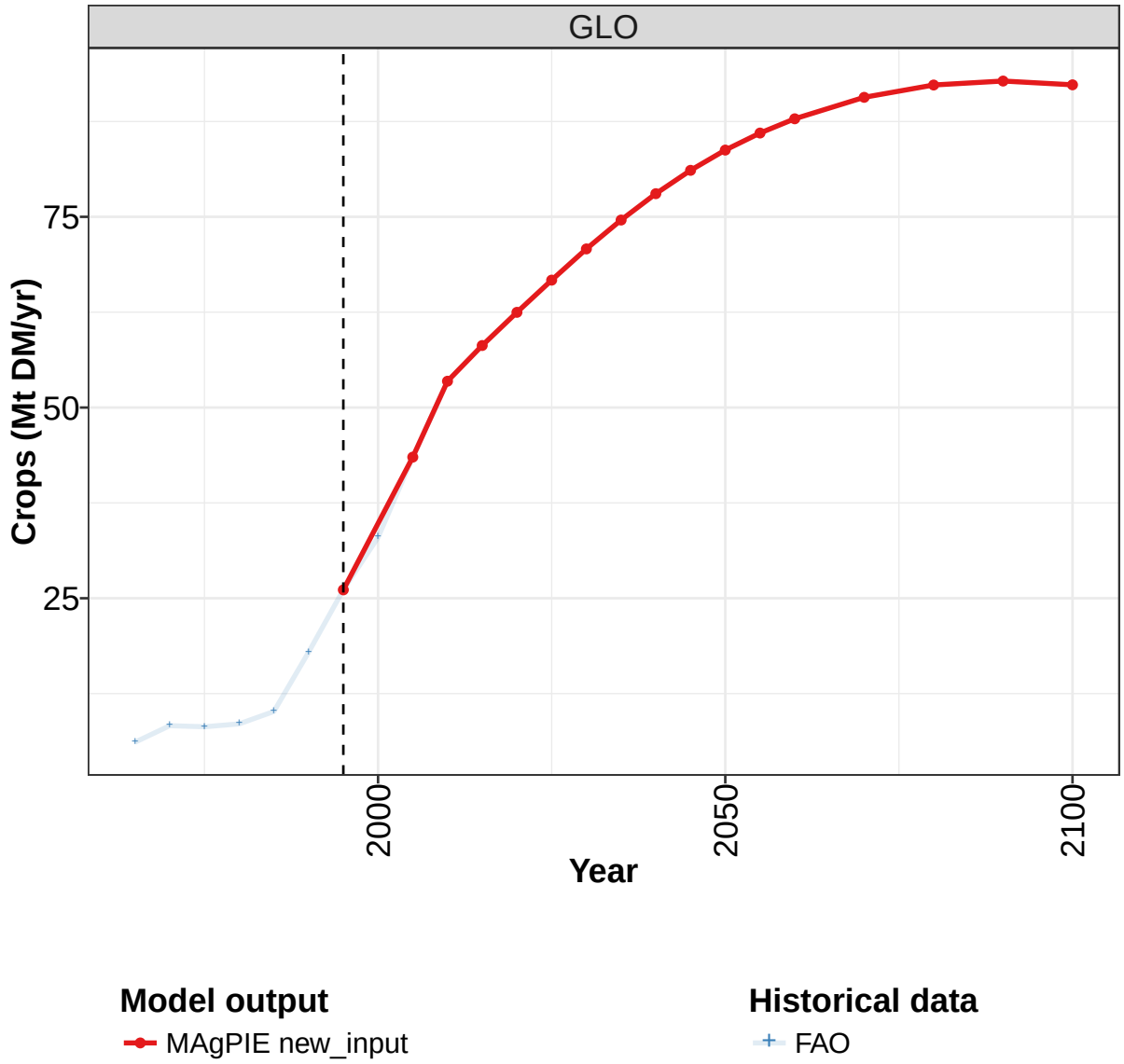
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	51.8	56.6	58.7	62.0	67.9	72.6	75.9	73.9	71.3	66.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	13.2	15.2	17.8	19.1	21.8	24.8	23.5	21.1	18.3	14.2
EUR	2.9	2.1	1.9	1.5	1.5	1.6	1.7	0.8	0.5	0.3
IND	10.1	12.1	12.9	13.7	15.0	16.1	16.6	17.5	16.5	16.2
LAM	3.1	3.2	3.0	2.6	3.4	3.1	3.2	2.9	2.7	2.0
MEA	1.8	1.8	1.9	2.1	2.5	2.6	2.9	2.4	3.3	2.7
NEU	1.5	1.5	1.7	1.8	1.8	1.2	1.3	1.0	0.8	0.4
OAS	10.6	11.5	12.1	13.2	14.3	14.6	15.2	17.1	18.1	19.6
REF	5.2	5.4	3.7	4.0	3.2	3.2	5.5	4.7	3.5	2.5
SSA	3.5	3.8	3.8	4.0	4.5	5.4	6.0	6.4	7.6	9.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 436: FAO — Demand—Material—Crop residues—Straw (Mt DM/yr)


GLO
Demand|Material|Crops (Mt DM/yr)
75
50
25
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Material|Crops (Mt DM/yr)
0
10
20
30
40
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

8.2 Crops


GLO
Crops (Mt DM/yr)
75
50
25
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

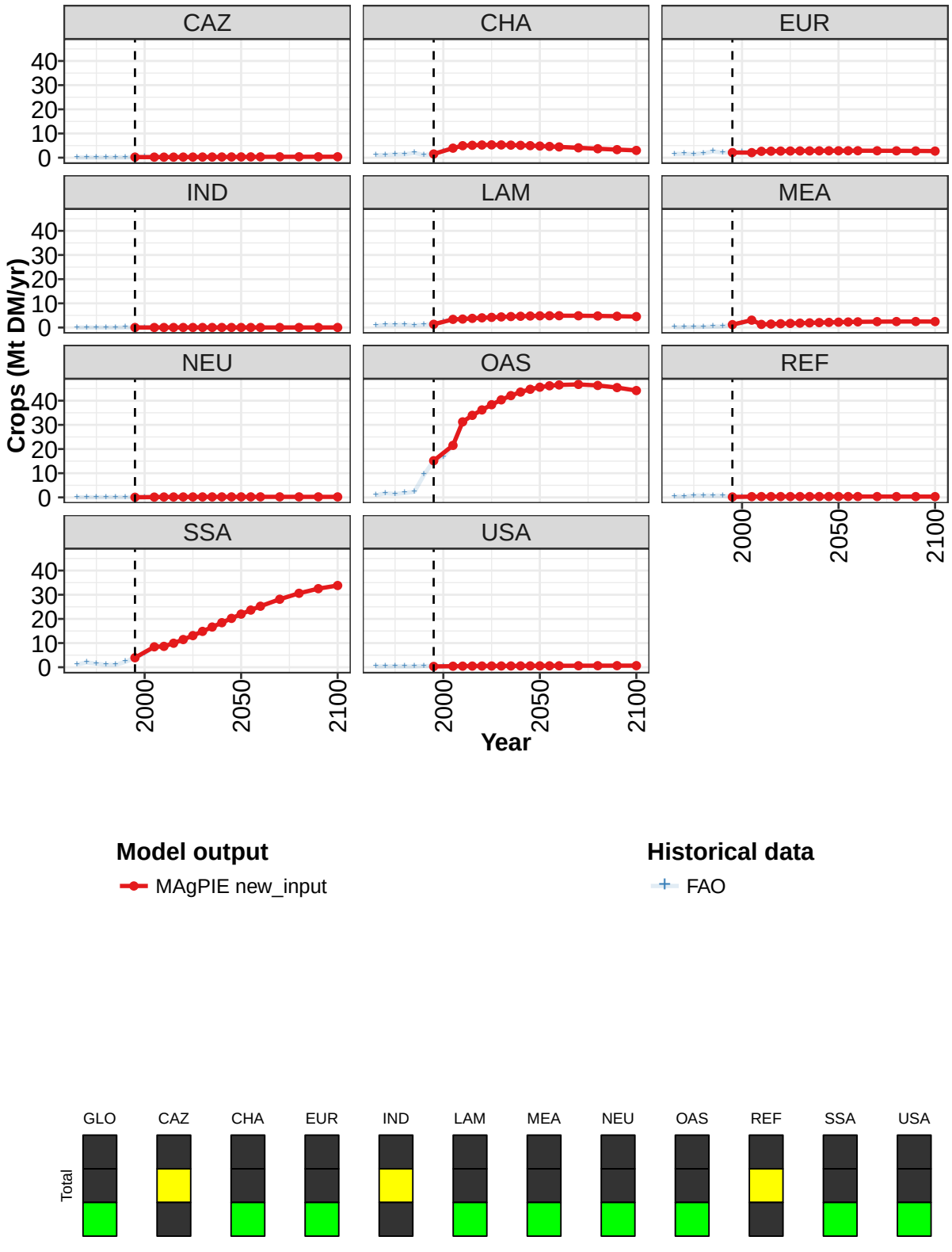


Figure 146: MAgPIE new_input — Demand—Material—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	26.1	43.5	53.5	58.1	62.5	66.7	70.8	74.6	78.0	81.1	83.8
CAZ	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
CHA	1.5	3.9	5.0	5.1	5.2	5.3	5.3	5.2	5.1	5.0	4.8
EUR	2.1	2.1	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.3	3.4	3.5	3.8	4.0	4.2	4.4	4.5	4.7	4.8	4.8
MEA	1.2	3.1	1.3	1.4	1.6	1.7	1.8	1.9	2.0	2.1	2.2
NEU	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	15.2	21.5	31.2	33.9	36.2	38.3	40.4	42.1	43.6	44.7	45.6
REF	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	3.9	8.5	8.6	9.9	11.5	13.1	14.8	16.6	18.4	20.2	22.0
USA	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6

Table 437: MAgPIE new_input — Demand—Material—Crops (Mt DM/yr) [PART 1/2]

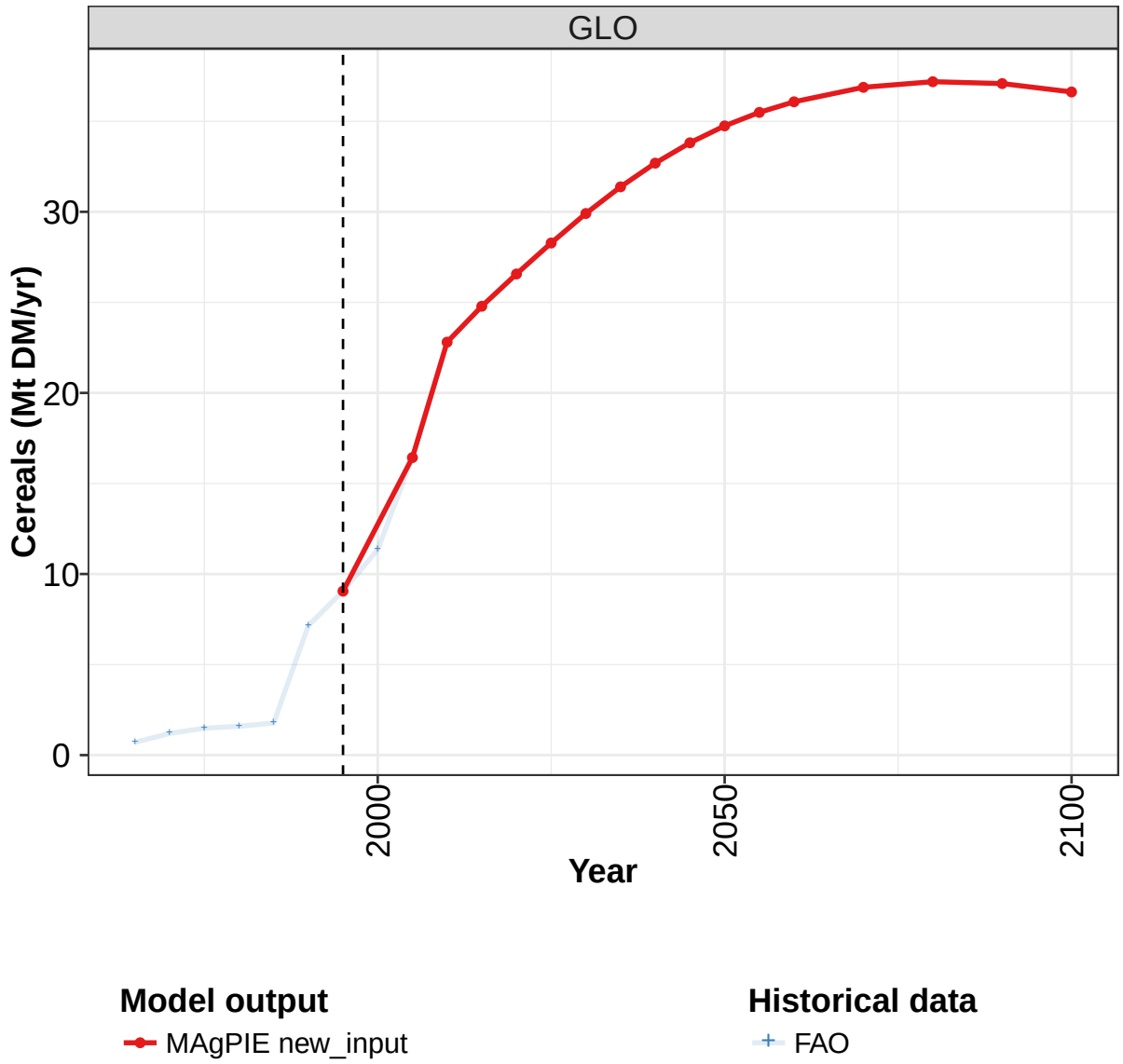
	2055	2060	2070	2080	2090	2100
GLO	86.0	87.9	90.7	92.3	92.8	92.3
CAZ	0.3	0.3	0.4	0.4	0.4	0.4
CHA	4.6	4.5	4.1	3.7	3.3	3.0
EUR	2.9	2.9	2.9	2.8	2.8	2.7
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	4.9	4.9	4.9	4.8	4.7	4.5
MEA	2.3	2.3	2.4	2.5	2.5	2.5
NEU	0.2	0.2	0.2	0.2	0.2	0.2
OAS	46.2	46.5	46.7	46.3	45.4	44.2
REF	0.3	0.3	0.3	0.3	0.3	0.3
SSA	23.6	25.2	28.1	30.6	32.5	33.8
USA	0.6	0.6	0.6	0.6	0.7	0.7

Table 438: MAgPIE new_input — Demand—Material—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.1	8.3	8.2	8.5	10.2	17.9	26.1	33.0	43.5	53.5
CAZ	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.2	0.2
CHA	1.0	1.1	1.3	1.4	1.9	1.1	1.5	2.8	3.9	5.0
EUR	1.5	1.6	1.5	1.8	2.5	2.1	2.1	2.5	2.1	2.6
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	1.1	1.0	1.2	0.8	1.2	1.3	2.4	3.4	3.5
MEA	0.1	0.1	0.3	0.2	0.4	0.5	1.2	1.8	3.1	1.3
NEU	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.2
OAS	0.9	1.7	1.4	1.8	2.3	9.4	15.2	16.8	21.5	31.2
REF	0.3	0.3	0.7	0.7	0.7	0.7	0.2	0.2	0.3	0.3
SSA	1.2	2.0	1.5	1.0	1.0	2.2	3.9	5.6	8.5	8.6
USA	0.3	0.3	0.4	0.3	0.3	0.6	0.3	0.5	0.4	0.5

Table 439: FAO — Demand—Material—Crops (Mt DM/yr)

8.2.1 Cereals


GLO
Cereals (Mt DM/yr)
0
10
20
30
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

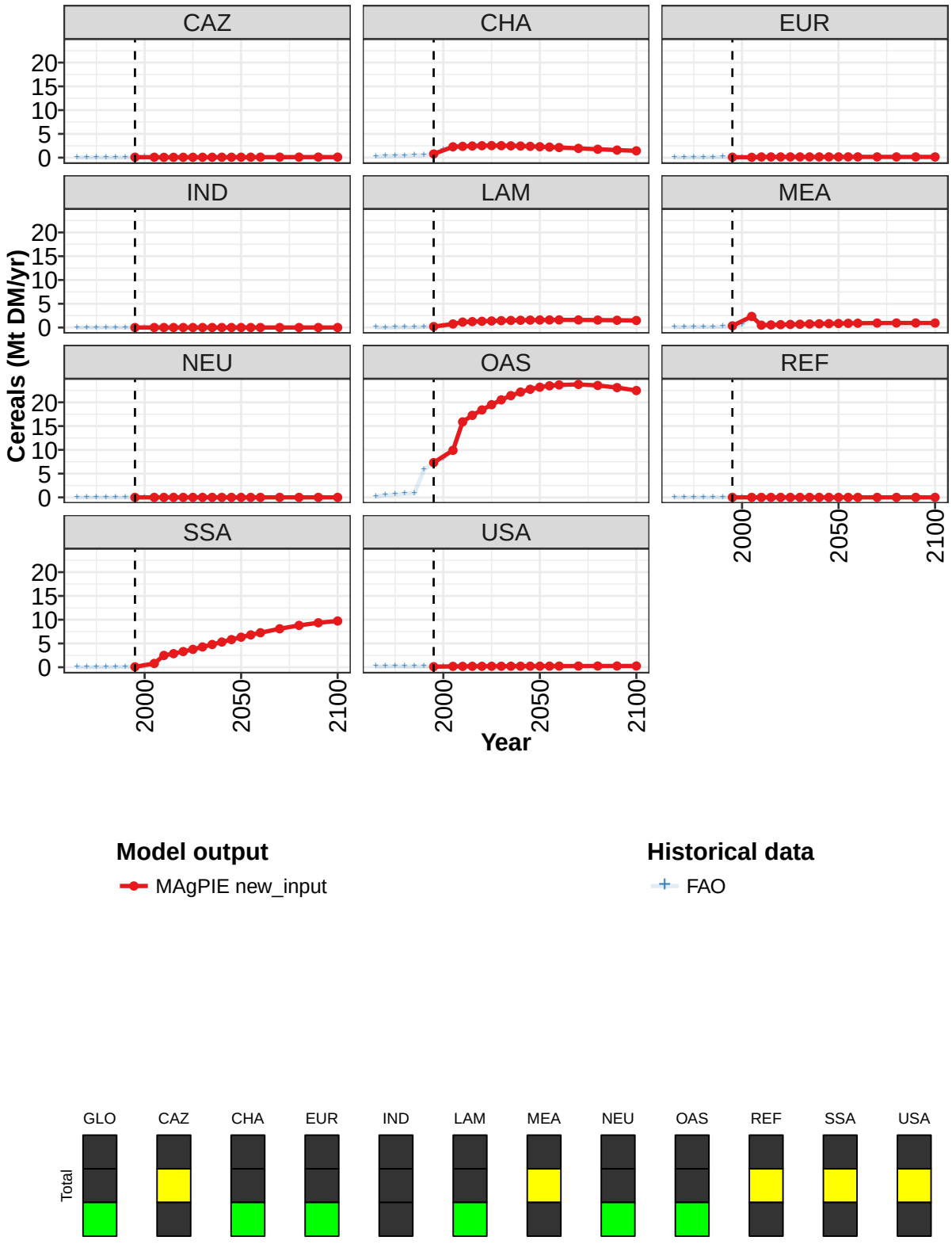


Figure 147: MAgPIE new_input — Demand—Material—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.1	16.4	22.8	24.8	26.6	28.3	29.9	31.4	32.7	33.8	34.7
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.8	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.3
EUR	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.7	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.6
MEA	0.3	2.3	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.3	9.9	15.9	17.3	18.4	19.5	20.5	21.4	22.2	22.7	23.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.8	2.5	2.9	3.3	3.8	4.3	4.8	5.3	5.8	6.3
USA	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 440: MAgPIE new_input — Demand—Material—Crops—Cereals (Mt DM/yr) [PART 1/2]

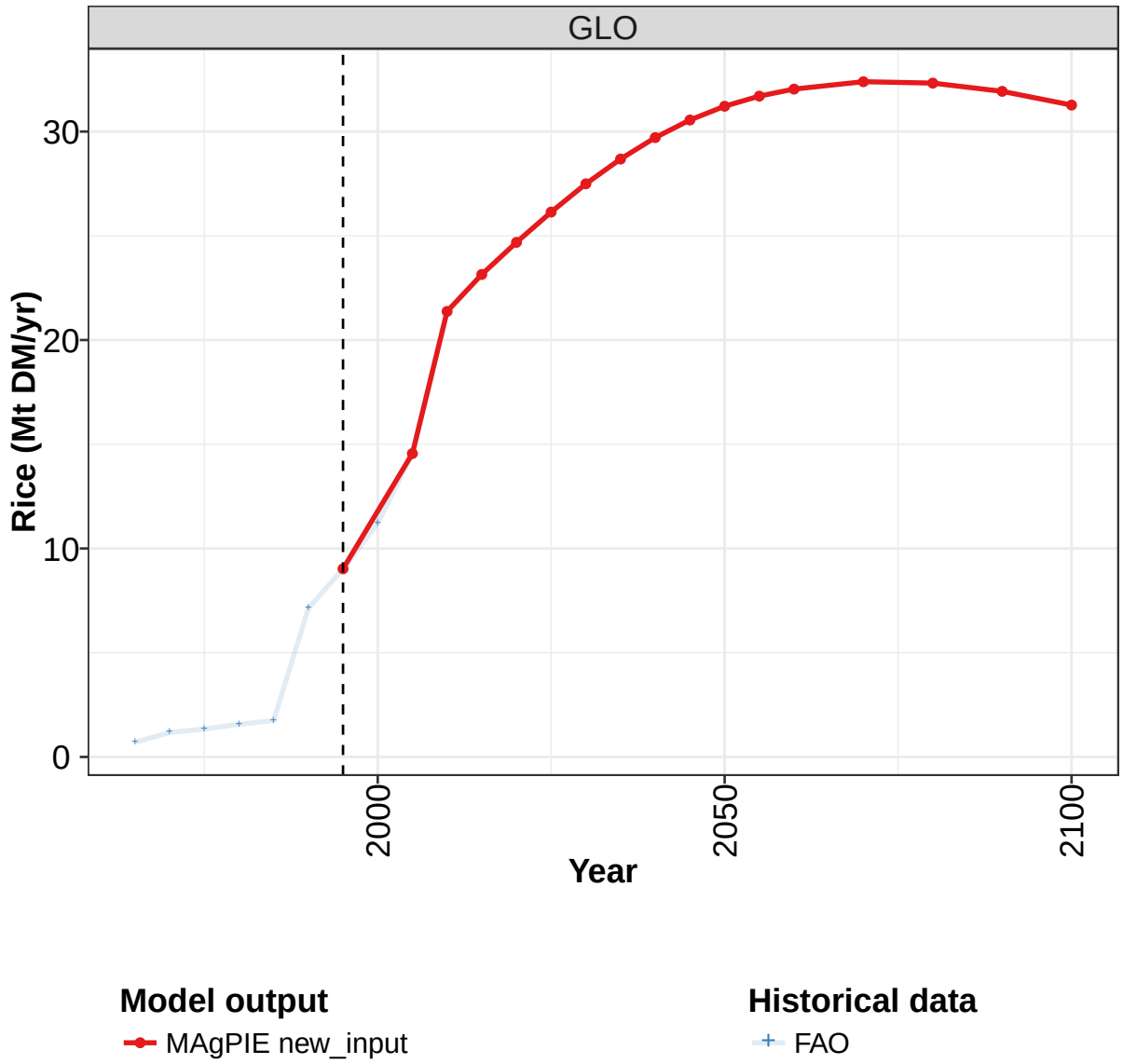
	2055	2060	2070	2080	2090	2100
GLO	35.5	36.1	36.9	37.2	37.1	36.6
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	2.2	2.1	2.0	1.8	1.6	1.4
EUR	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.6	1.6	1.6	1.6	1.5	1.5
MEA	0.9	0.9	0.9	1.0	1.0	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	23.5	23.7	23.8	23.5	23.1	22.5
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	6.8	7.3	8.1	8.8	9.4	9.7
USA	0.2	0.2	0.3	0.3	0.3	0.3

Table 441: MAgPIE new_input — Demand—Material—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.7	1.2	1.5	1.6	1.8	7.2	9.1	11.4	16.4	22.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1
CHA	0.3	0.3	0.4	0.4	0.5	0.5	0.8	1.7	2.3	2.4
EUR	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.7	1.1
MEA	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.6	2.3	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.5	0.6	0.8	0.8	5.9	7.3	8.2	9.9	15.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.8	2.5
USA	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2

Table 442: FAO — Demand—Material—Crops—Cereals (Mt DM/yr)

8.2.2 Cereals—Rice



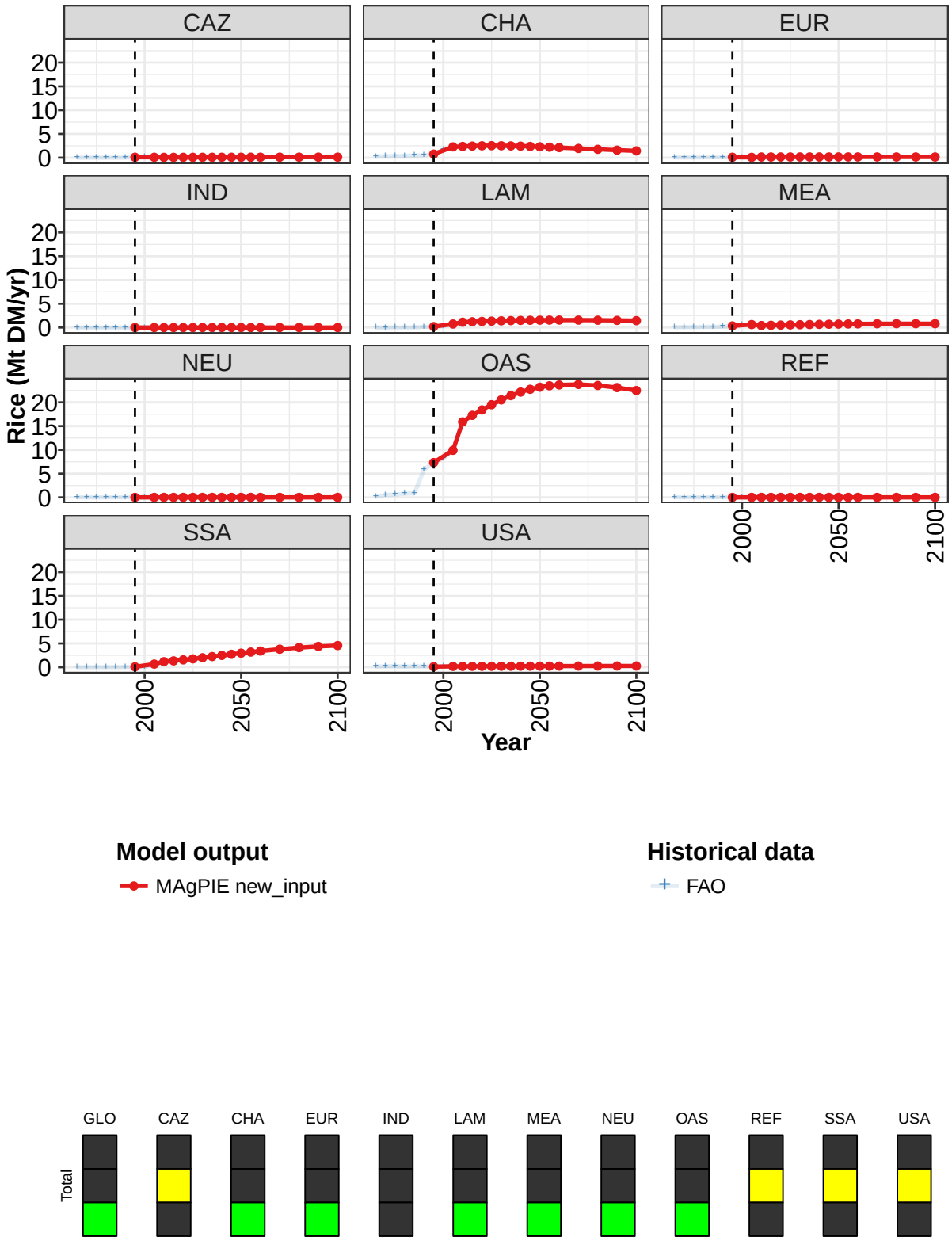


Figure 148: MAgPIE new_input — Demand—Material—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.0	14.6	21.4	23.1	24.7	26.1	27.5	28.7	29.7	30.6	31.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.8	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.4	2.4	2.3
EUR	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.7	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.6
MEA	0.3	0.6	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.3	9.9	15.9	17.3	18.4	19.5	20.5	21.4	22.2	22.7	23.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.7	1.2	1.3	1.5	1.8	2.0	2.2	2.5	2.7	3.0
USA	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 443: MAgPIE new_input — Demand—Material—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

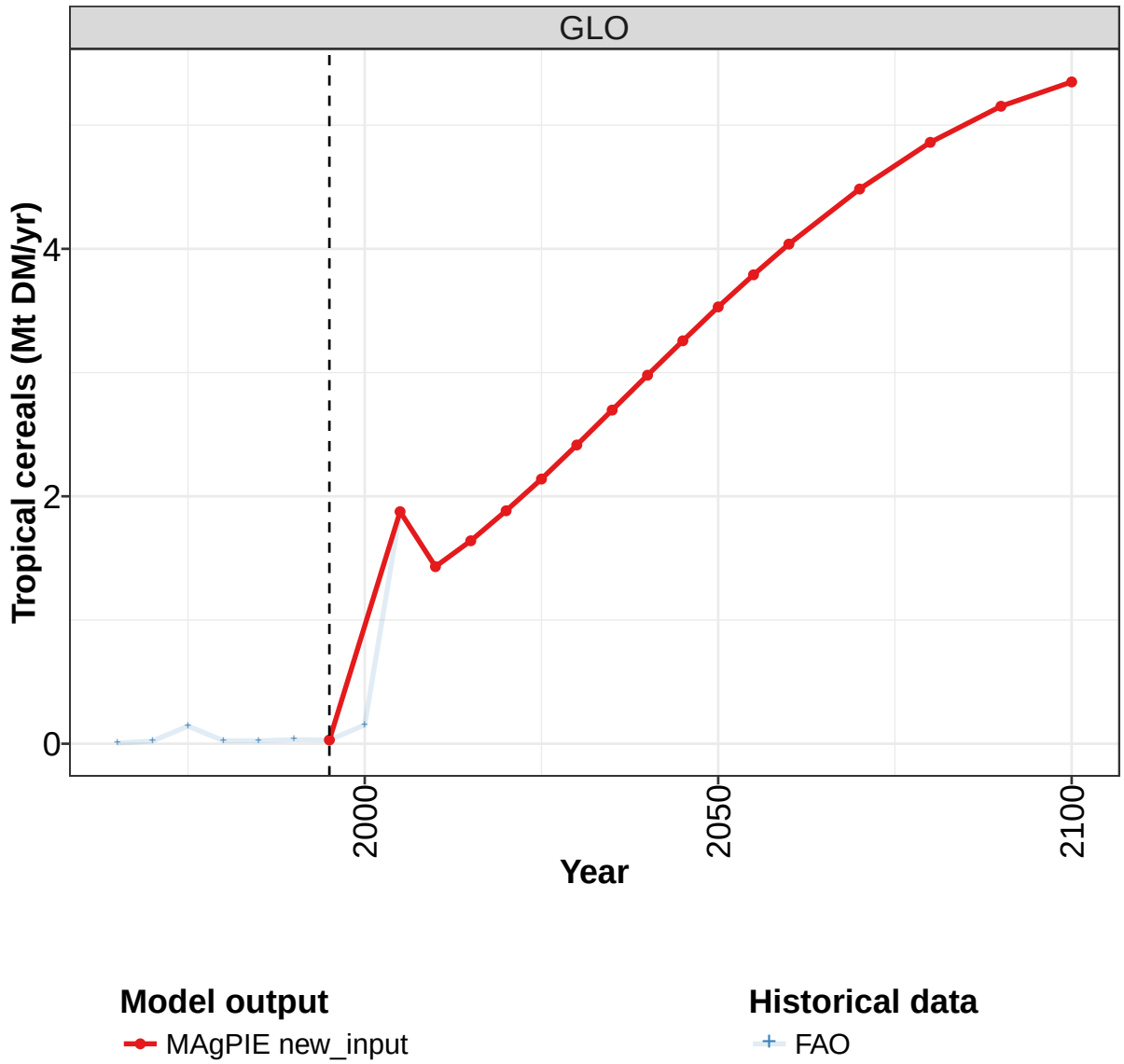
	2055	2060	2070	2080	2090	2100
GLO	31.7	32.0	32.4	32.3	31.9	31.3
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	2.2	2.1	1.9	1.8	1.6	1.4
EUR	0.2	0.2	0.2	0.2	0.2	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.6	1.6	1.6	1.5	1.5	1.5
MEA	0.7	0.8	0.8	0.8	0.8	0.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	23.5	23.7	23.8	23.5	23.1	22.5
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.2	3.4	3.8	4.1	4.4	4.6
USA	0.2	0.2	0.3	0.3	0.3	0.3

Table 444: MAgPIE new_input — Demand—Material—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.7	1.2	1.3	1.6	1.7	7.1	9.0	11.2	14.6	21.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1
CHA	0.3	0.3	0.3	0.4	0.5	0.5	0.8	1.7	2.3	2.4
EUR	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.7	1.1
MEA	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	0.6	0.4
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.5	0.6	0.8	0.8	5.9	7.3	8.2	9.9	15.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.7	1.2
USA	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2

Table 445: FAO — Demand—Material—Crops—Cereals—Rice (Mt DM/yr)

8.2.3 Cereals—Tropical cereals



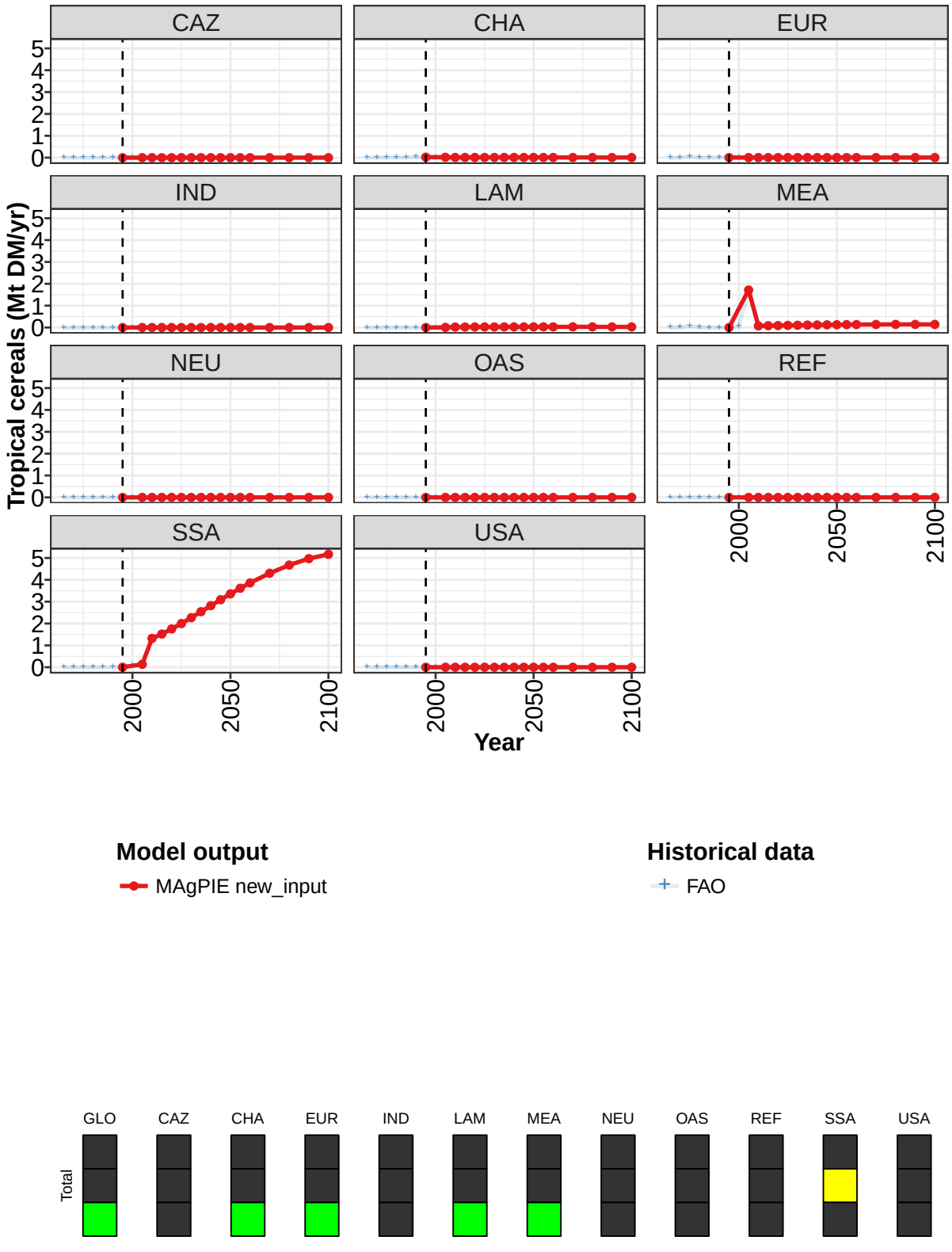


Figure 149: MAgPIE new_input — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.03	1.88	1.43	1.64	1.88	2.14	2.41	2.70	2.98	3.26	3.53
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
MEA	0.00	1.72	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.12	0.13
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.13	1.32	1.52	1.75	2.00	2.27	2.54	2.82	3.09	3.36
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 446: MAgPIE new_input — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

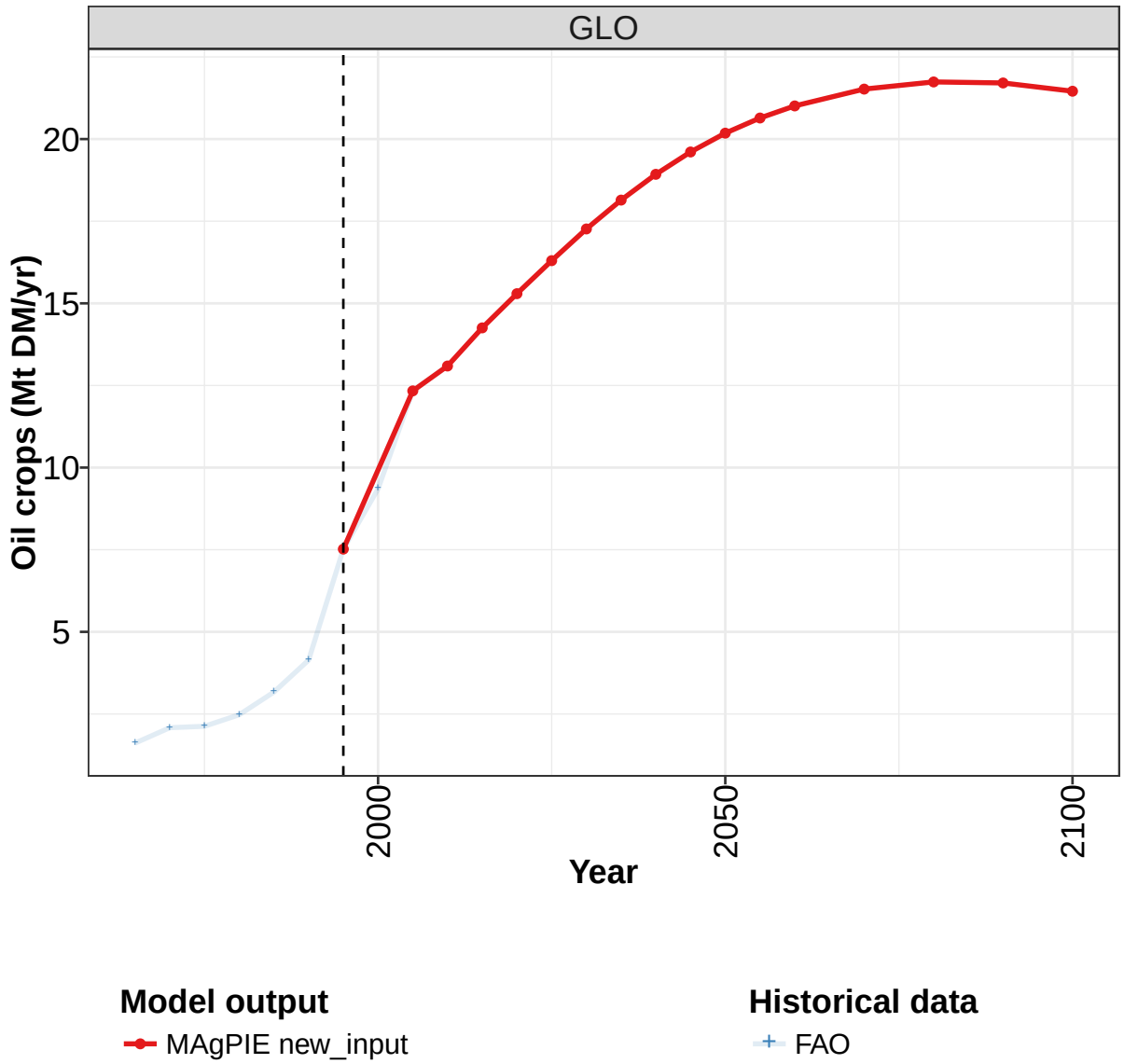
	2055	2060	2070	2080	2090	2100
GLO	3.79	4.04	4.48	4.86	5.15	5.35
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.01	0.01	0.01	0.01	0.01	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.03	0.03	0.03	0.03	0.03	0.03
MEA	0.13	0.14	0.14	0.14	0.14	0.14
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	3.61	3.86	4.30	4.68	4.97	5.17
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 447: MAgPIE new_input — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.02	0.14	0.02	0.02	0.03	0.03	0.15	1.88	1.43
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.02	0.01	0.02	0.03	0.02	0.01	0.02	0.01
EUR	0.00	0.00	0.06	0.00	0.00	0.01	0.01	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
MEA	0.00	0.02	0.07	0.01	0.00	0.00	0.00	0.05	1.72	0.07
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.13	1.32
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 448: FAO — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr)

8.2.4 Oil crops



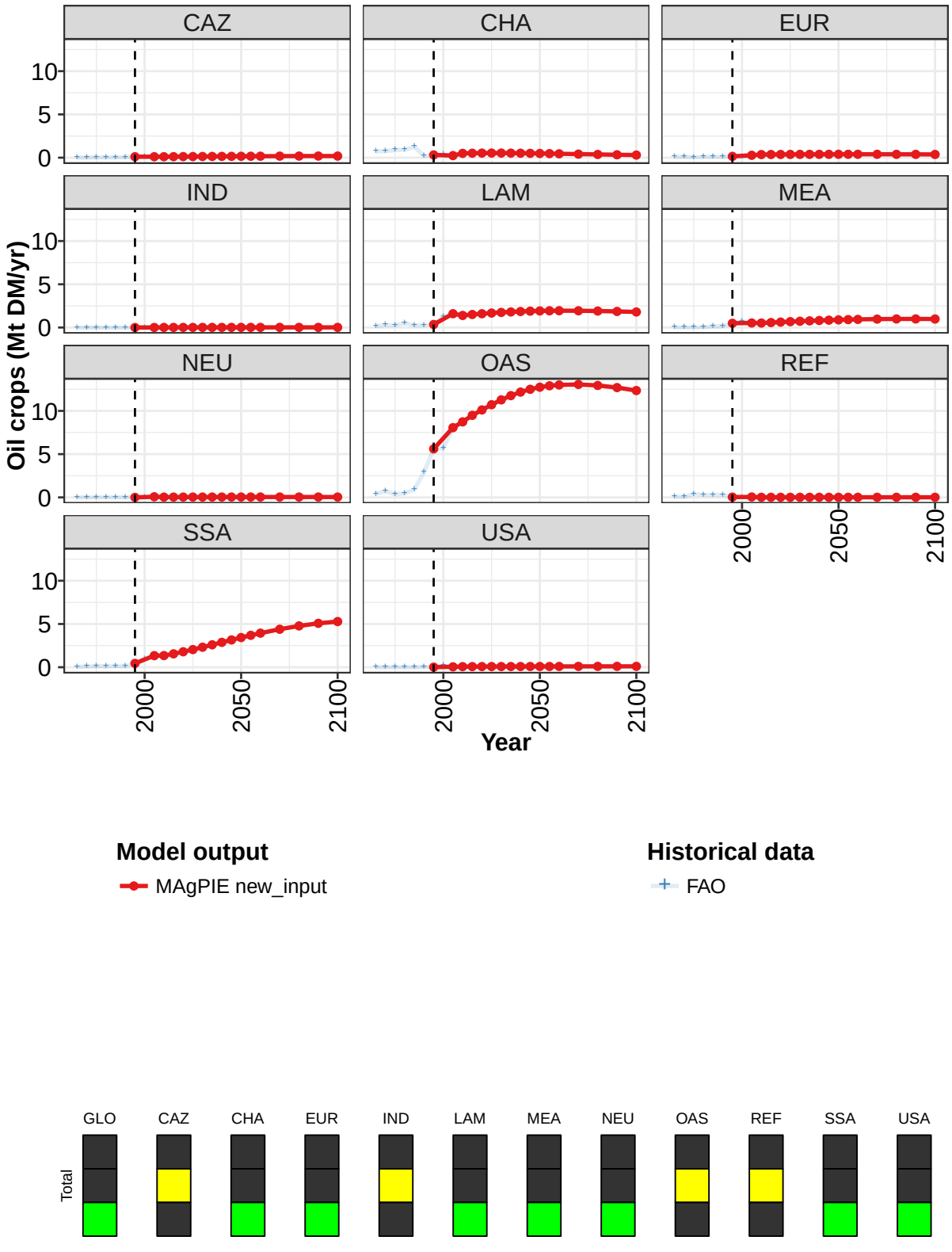


Figure 150: MAgPIE new_input — Demand—Material—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	7.5	12.3	13.1	14.3	15.3	16.3	17.3	18.1	18.9	19.6	20.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
CHA	0.3	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EUR	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.4	1.6	1.4	1.5	1.6	1.7	1.7	1.8	1.9	1.9	1.9
MEA	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
NEU	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	5.6	8.1	8.7	9.5	10.1	10.7	11.3	11.8	12.2	12.5	12.7
REF	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.4	1.3	1.3	1.6	1.8	2.0	2.3	2.6	2.9	3.2	3.4
USA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 449: MAgPIE new_input — Demand—Material—Crops—Oil crops (Mt DM/yr) [PART 1/2]

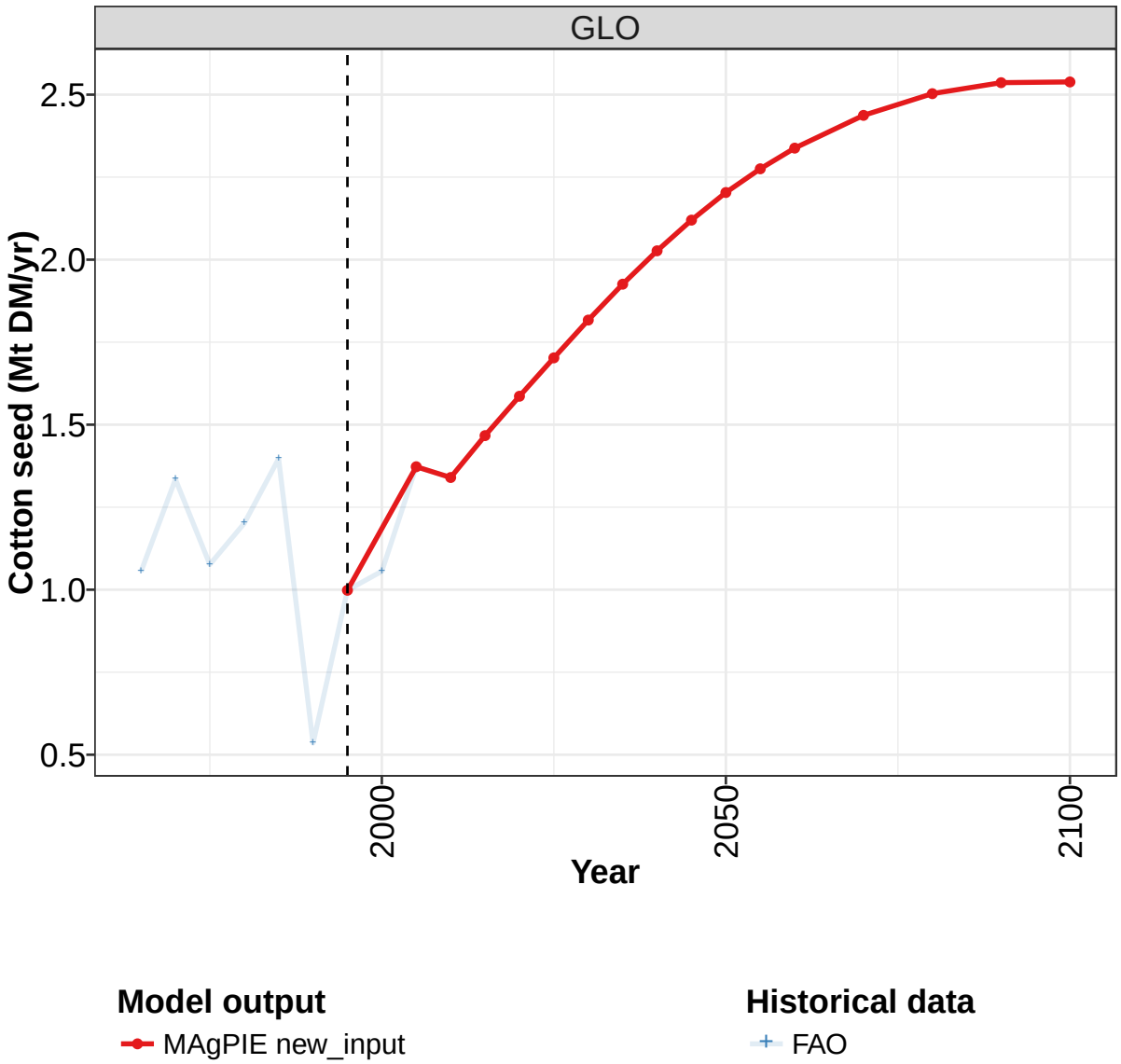
	2055	2060	2070	2080	2090	2100
GLO	20.6	21.0	21.5	21.7	21.7	21.5
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.5	0.4	0.4	0.4	0.3	0.3
EUR	0.4	0.4	0.4	0.4	0.4	0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.9	1.9	1.9	1.9	1.9	1.8
MEA	0.9	0.9	1.0	1.0	1.0	1.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	12.9	13.0	13.1	12.9	12.7	12.4
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.7	3.9	4.4	4.8	5.1	5.3
USA	0.1	0.1	0.1	0.1	0.1	0.1

Table 450: MAgPIE new_input — Demand—Material—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.6	2.1	2.1	2.5	3.2	4.1	7.5	9.4	12.3	13.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
CHA	0.7	0.8	0.9	0.9	1.3	0.2	0.3	0.3	0.2	0.5
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.3	0.5	0.3	0.3	0.4	1.3	1.6	1.4
MEA	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.7	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
OAS	0.4	0.7	0.4	0.5	0.9	2.9	5.6	5.7	8.1	8.7
REF	0.1	0.1	0.4	0.3	0.3	0.3	0.0	0.0	0.1	0.0
SSA	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.9	1.3	1.3
USA	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1

Table 451: FAO — Demand—Material—Crops—Oil crops (Mt DM/yr)

8.2.5 Oil crops—Cotton seed



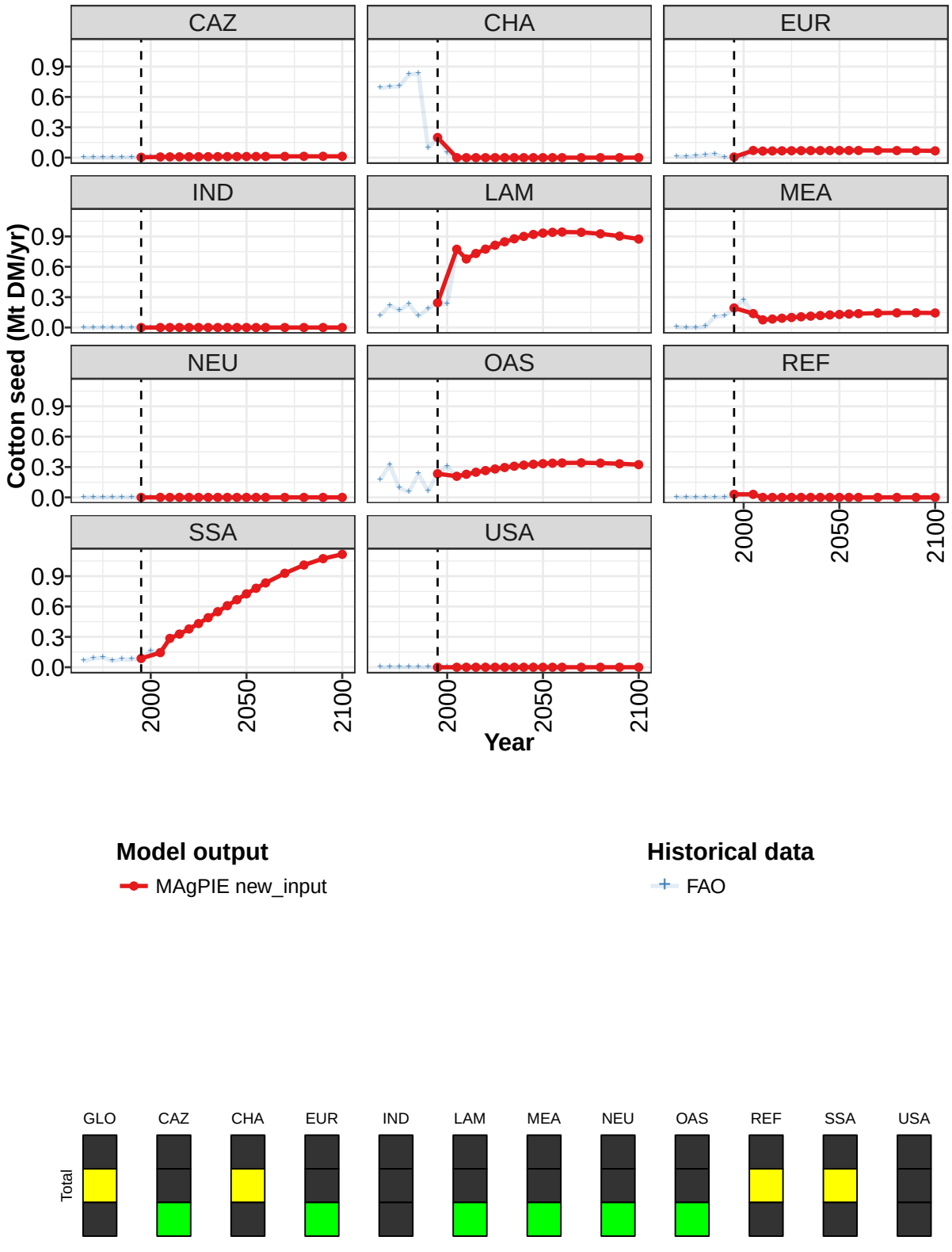


Figure 151: MAgPIE new_input — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.00	1.37	1.34	1.47	1.59	1.70	1.82	1.93	2.03	2.12	2.20
CAZ	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.01	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.24	0.77	0.68	0.73	0.77	0.81	0.85	0.88	0.90	0.92	0.93
MEA	0.19	0.14	0.08	0.08	0.09	0.10	0.11	0.11	0.12	0.12	0.13
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.23	0.21	0.23	0.25	0.26	0.28	0.30	0.31	0.32	0.33	0.33
REF	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.09	0.14	0.29	0.33	0.38	0.43	0.49	0.55	0.61	0.67	0.73
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 452: MAgPIE new_input — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

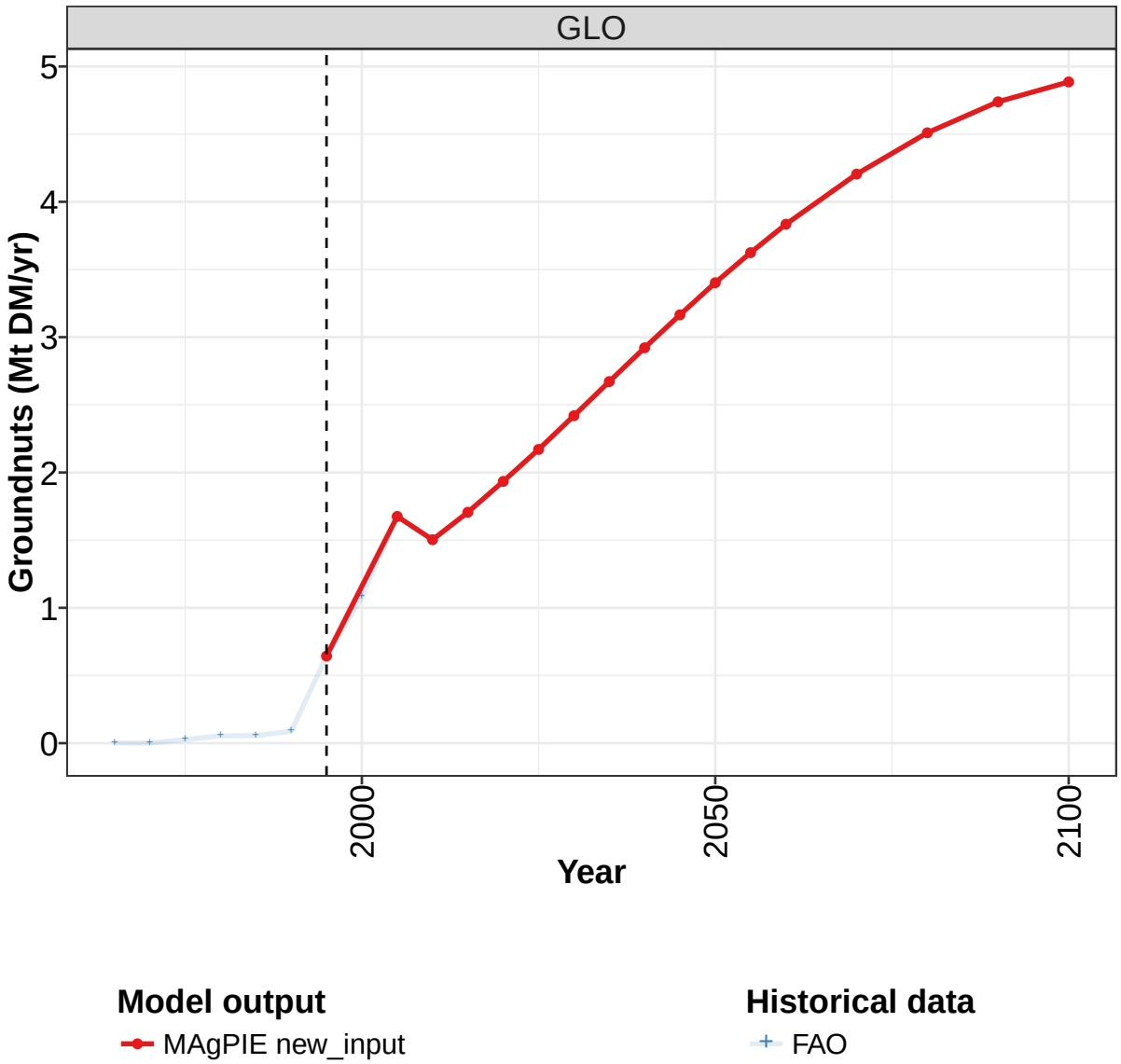
	2055	2060	2070	2080	2090	2100
GLO	2.28	2.34	2.44	2.50	2.54	2.54
CAZ	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.07	0.07	0.07	0.07	0.07	0.07
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.94	0.94	0.94	0.93	0.90	0.87
MEA	0.13	0.14	0.14	0.14	0.15	0.14
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.34	0.34	0.34	0.34	0.33	0.32
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.78	0.83	0.93	1.01	1.07	1.12
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 453: MAgPIE new_input — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.05	1.33	1.08	1.20	1.40	0.54	1.00	1.06	1.37	1.34
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
CHA	0.69	0.70	0.70	0.82	0.83	0.09	0.20	0.05	0.00	0.00
EUR	0.01	0.01	0.01	0.03	0.04	0.00	0.01	0.01	0.07	0.07
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.12	0.22	0.17	0.23	0.11	0.18	0.24	0.23	0.77	0.68
MEA	0.00	0.00	0.00	0.01	0.11	0.12	0.19	0.27	0.14	0.08
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.17	0.32	0.09	0.05	0.23	0.06	0.23	0.30	0.21	0.23
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00
SSA	0.06	0.09	0.10	0.06	0.08	0.08	0.09	0.16	0.14	0.29
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 454: FAO — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr)

8.2.6 Oil crops—Groundnuts



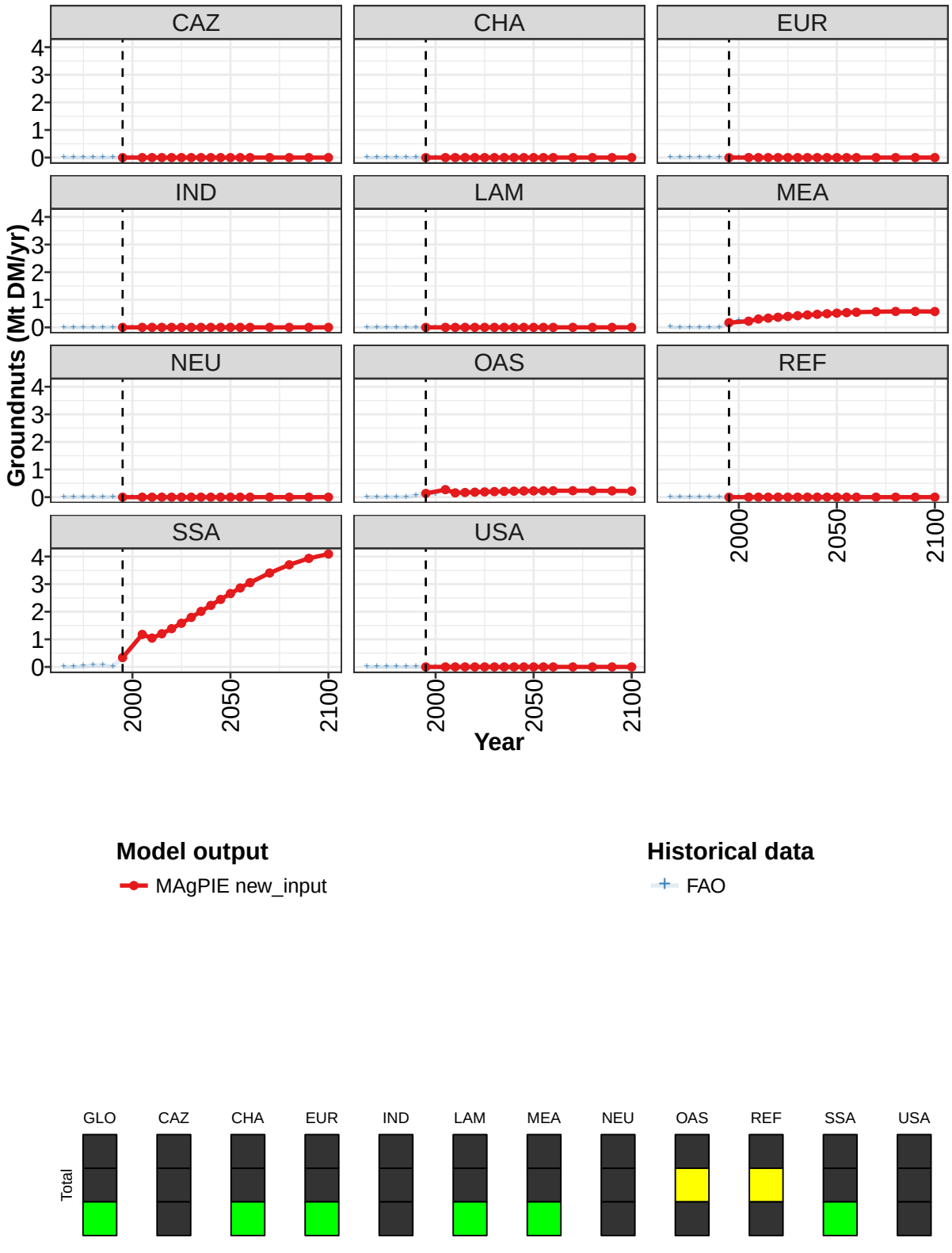


Figure 152: MAgPIE new_input — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.64	1.68	1.50	1.71	1.93	2.17	2.42	2.67	2.92	3.16	3.40
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.17	0.22	0.30	0.33	0.37	0.40	0.42	0.45	0.47	0.50	0.52
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.13	0.27	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.23
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.34	1.18	1.04	1.20	1.39	1.58	1.79	2.01	2.23	2.45	2.66
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 455: MAgPIE new_input — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

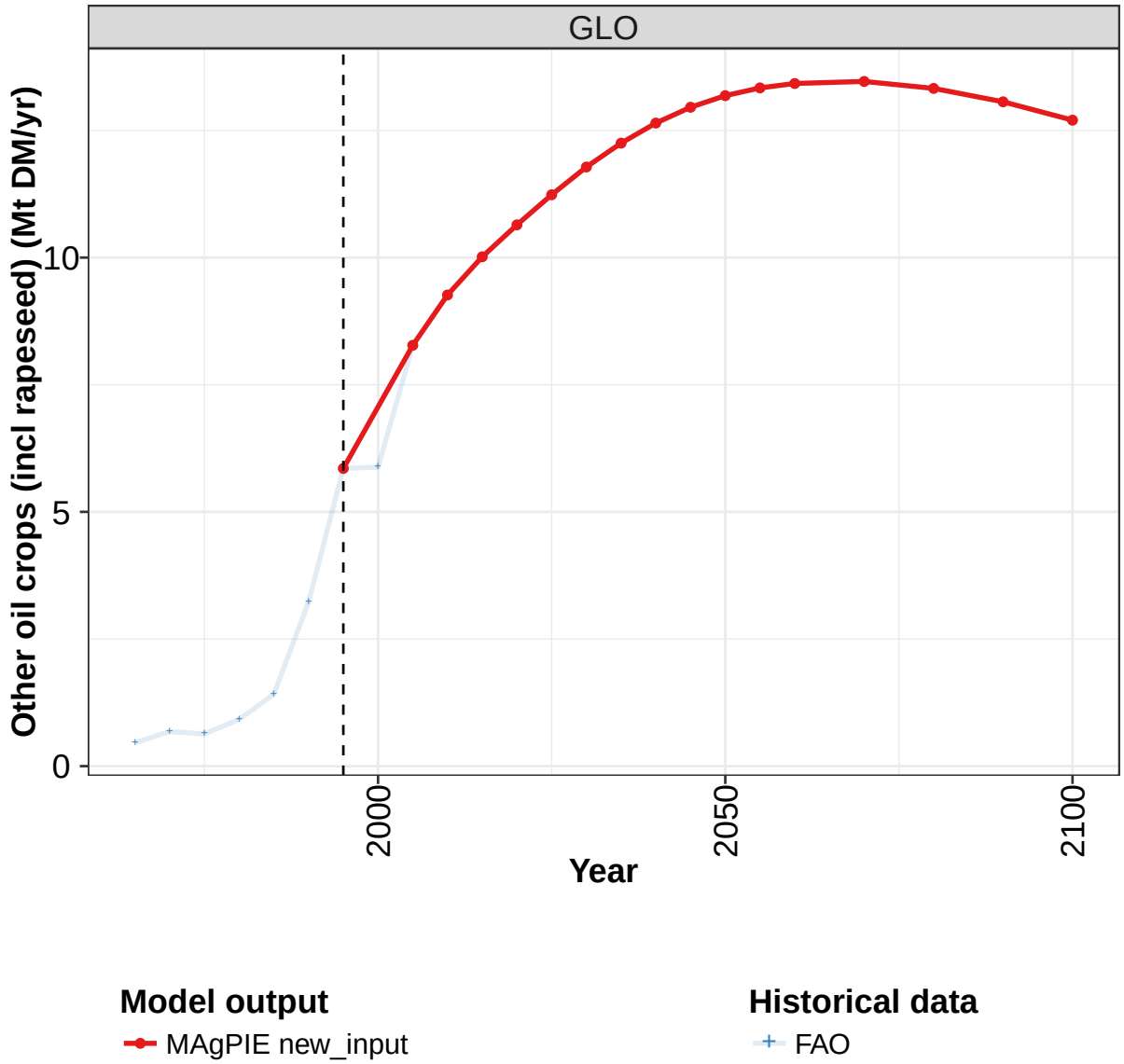
	2055	2060	2070	2080	2090	2100
GLO	3.62	3.83	4.20	4.51	4.74	4.89
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.53	0.55	0.57	0.58	0.58	0.57
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.23	0.23	0.23	0.23	0.23	0.22
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	2.86	3.05	3.40	3.70	3.93	4.09
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 456: MAgPIE new_input — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.03	0.05	0.06	0.09	0.64	1.08	1.68	1.50
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.24	0.22	0.30
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.07	0.13	0.12	0.27	0.16
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.03	0.05	0.05	0.02	0.34	0.73	1.18	1.04
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 457: FAO — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr)

8.2.7 Oil crops—Other oil crops (incl rapeseed)



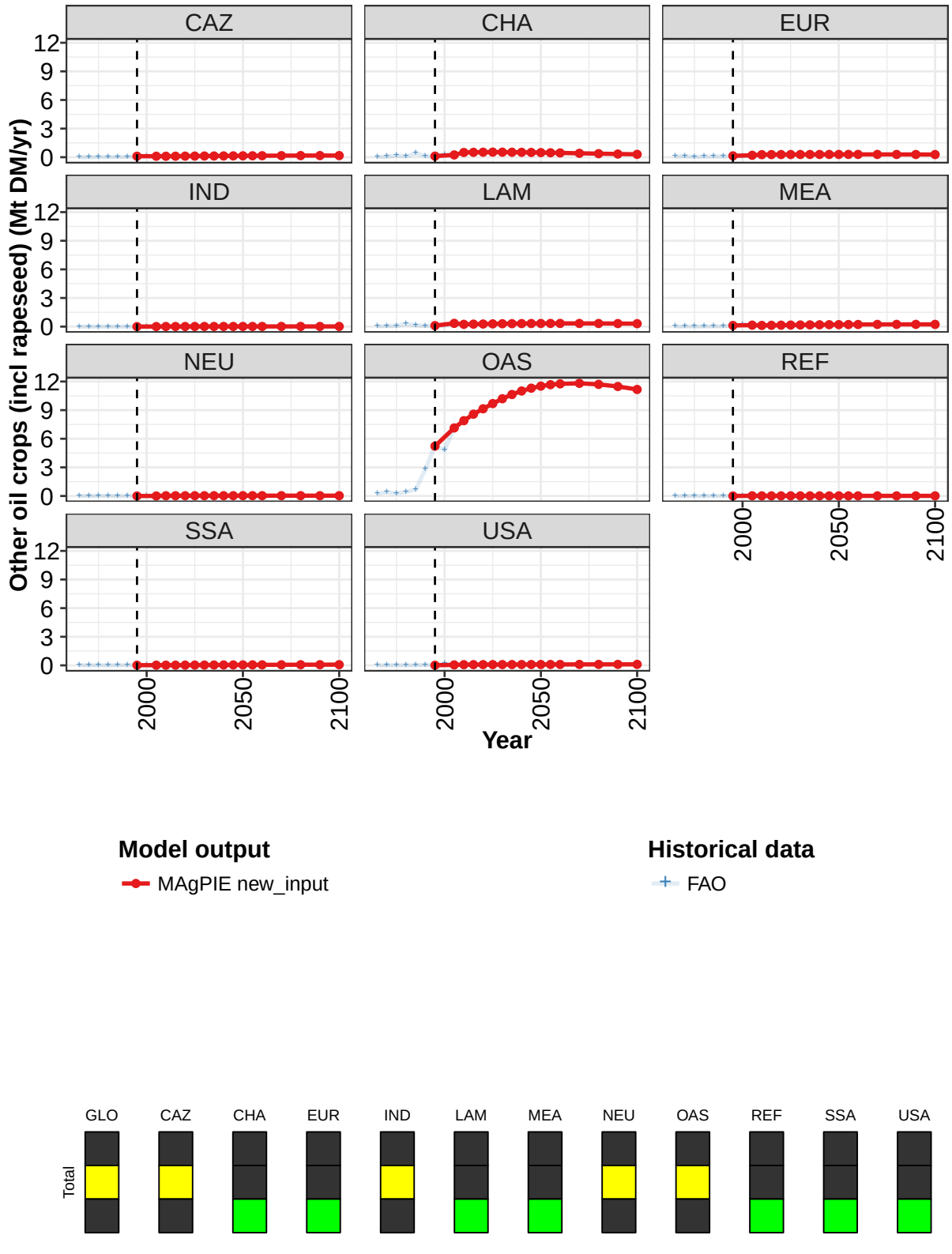


Figure 153: MAgPIE new_input — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	5.9	8.3	9.3	10.0	10.6	11.2	11.8	12.3	12.6	13.0	13.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.1	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EUR	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	5.2	7.1	7.9	8.6	9.1	9.7	10.2	10.6	11.0	11.3	11.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 458: MAgPIE new_input — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

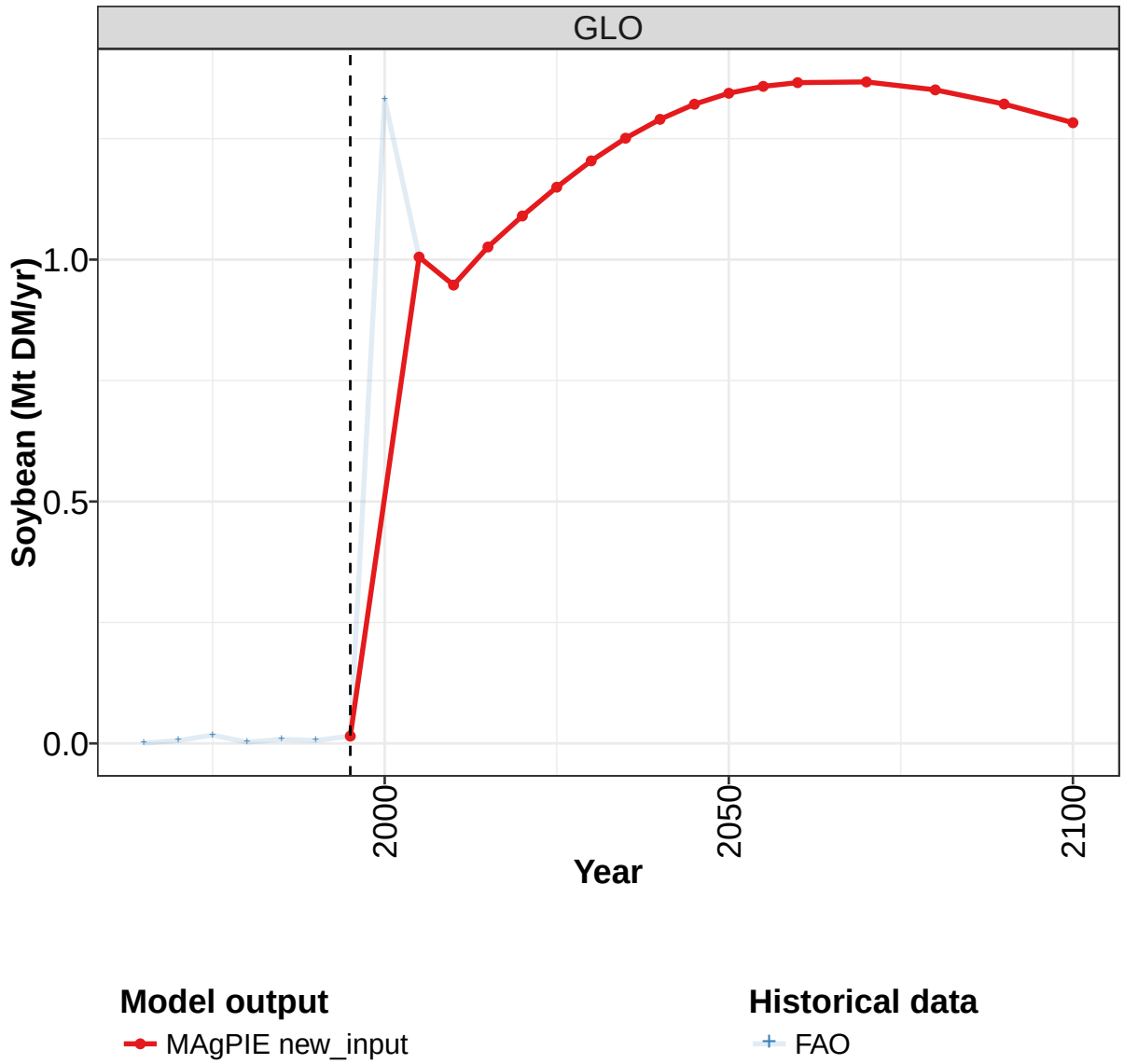
	2055	2060	2070	2080	2090	2100
GLO	13.3	13.4	13.5	13.3	13.1	12.7
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.5	0.4	0.4	0.4	0.3	0.3
EUR	0.3	0.3	0.3	0.3	0.3	0.3
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	11.7	11.8	11.8	11.7	11.5	11.2
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.1	0.1	0.1	0.1
USA	0.1	0.1	0.1	0.1	0.1	0.1

Table 459: MAgPIE new_input — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.46	0.68	0.63	0.92	1.42	3.23	5.85	5.88	8.28	9.26
CAZ	0.01	0.01	0.02	0.03	0.03	0.05	0.11	0.10	0.10	0.10
CHA	0.05	0.06	0.18	0.08	0.42	0.10	0.11	0.29	0.24	0.50
EUR	0.09	0.12	0.04	0.06	0.09	0.10	0.14	0.11	0.20	0.27
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
LAM	0.04	0.06	0.09	0.28	0.15	0.08	0.11	0.13	0.34	0.24
MEA	0.02	0.01	0.01	0.02	0.02	0.03	0.12	0.22	0.15	0.12
NEU	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.02
OAS	0.22	0.41	0.27	0.43	0.68	2.79	5.22	4.83	7.14	7.90
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01
SSA	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
USA	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.18	0.05	0.07

Table 460: FAO — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

8.2.8 Oil crops—Soybean



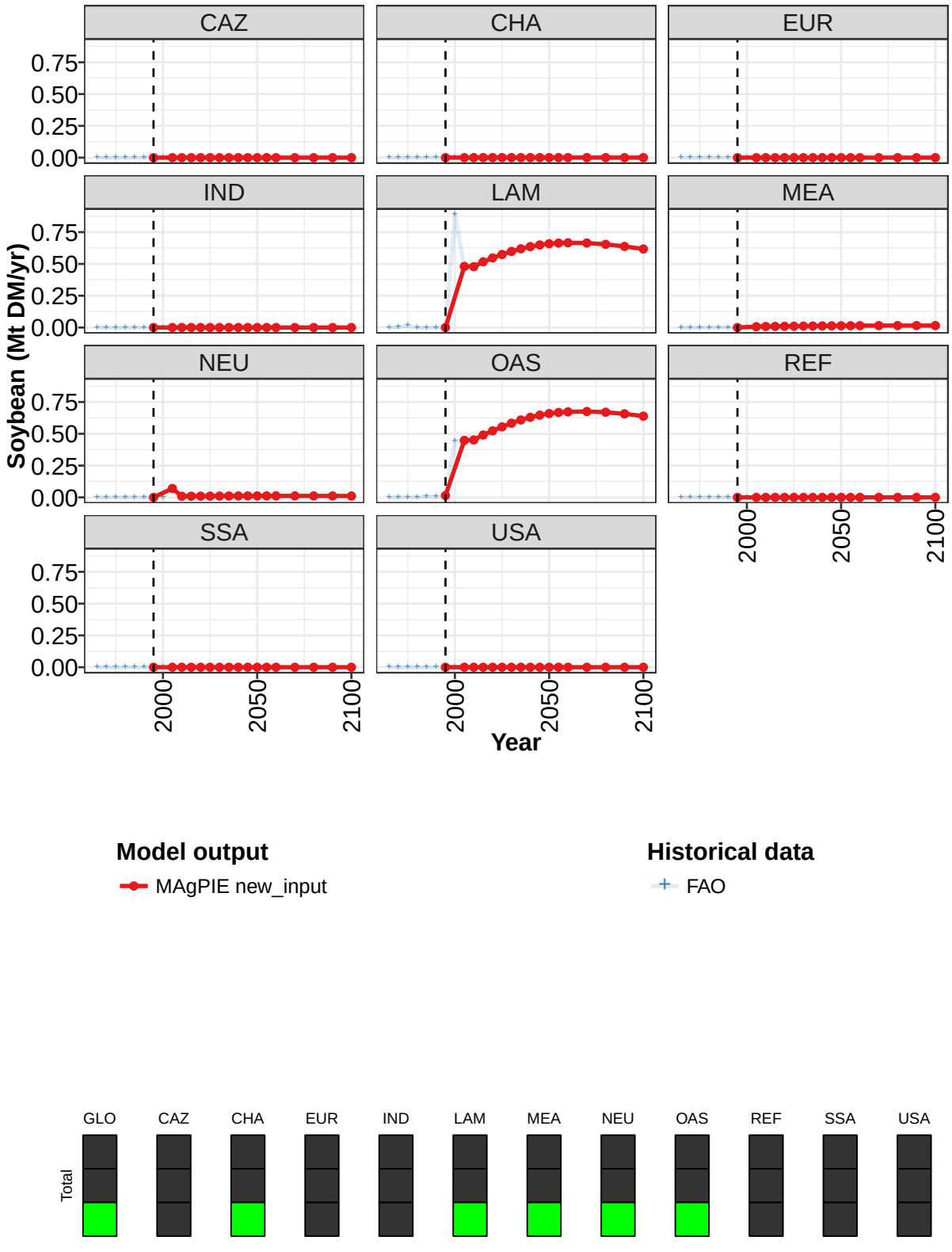


Figure 154: MAgPIE new_input — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.02	1.01	0.95	1.03	1.09	1.15	1.20	1.25	1.29	1.32	1.34
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.48	0.48	0.52	0.55	0.57	0.60	0.62	0.64	0.65	0.66
MEA	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.00	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.01	0.45	0.45	0.49	0.52	0.55	0.58	0.61	0.63	0.65	0.66
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 461: MAgPIE new_input — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

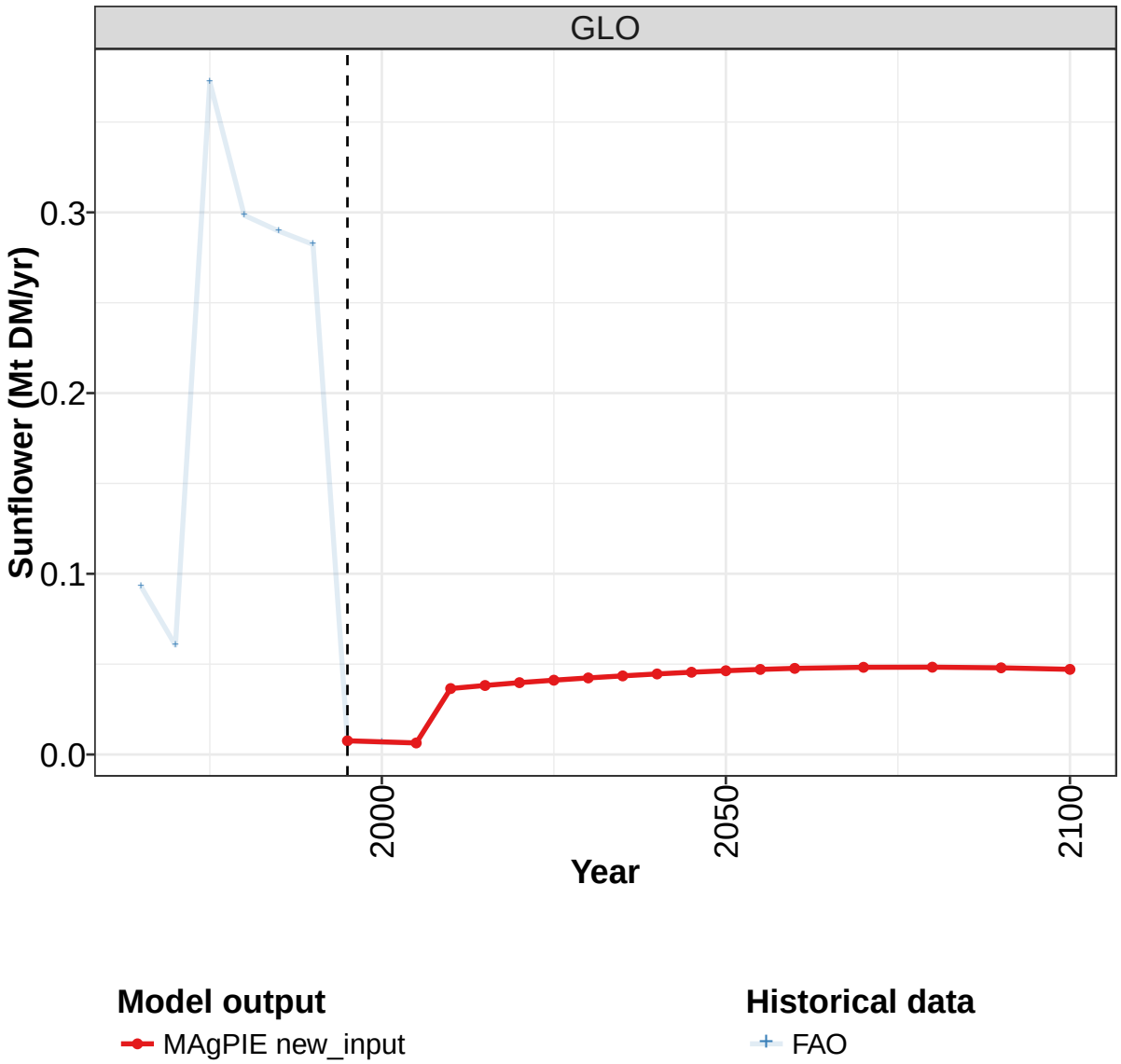
	2055	2060	2070	2080	2090	2100
GLO	1.36	1.37	1.37	1.35	1.32	1.28
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.66	0.67	0.66	0.65	0.64	0.62
MEA	0.01	0.01	0.02	0.02	0.02	0.02
NEU	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.67	0.67	0.68	0.67	0.66	0.64
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 462: MAgPIE new_input — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.01	0.02	0.00	0.01	0.01	0.02	1.33	1.01	0.95
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.89	0.48	0.48
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01
OAS	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.44	0.45	0.45
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 463: FAO — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr)

8.2.9 Oil crops—Sunflower



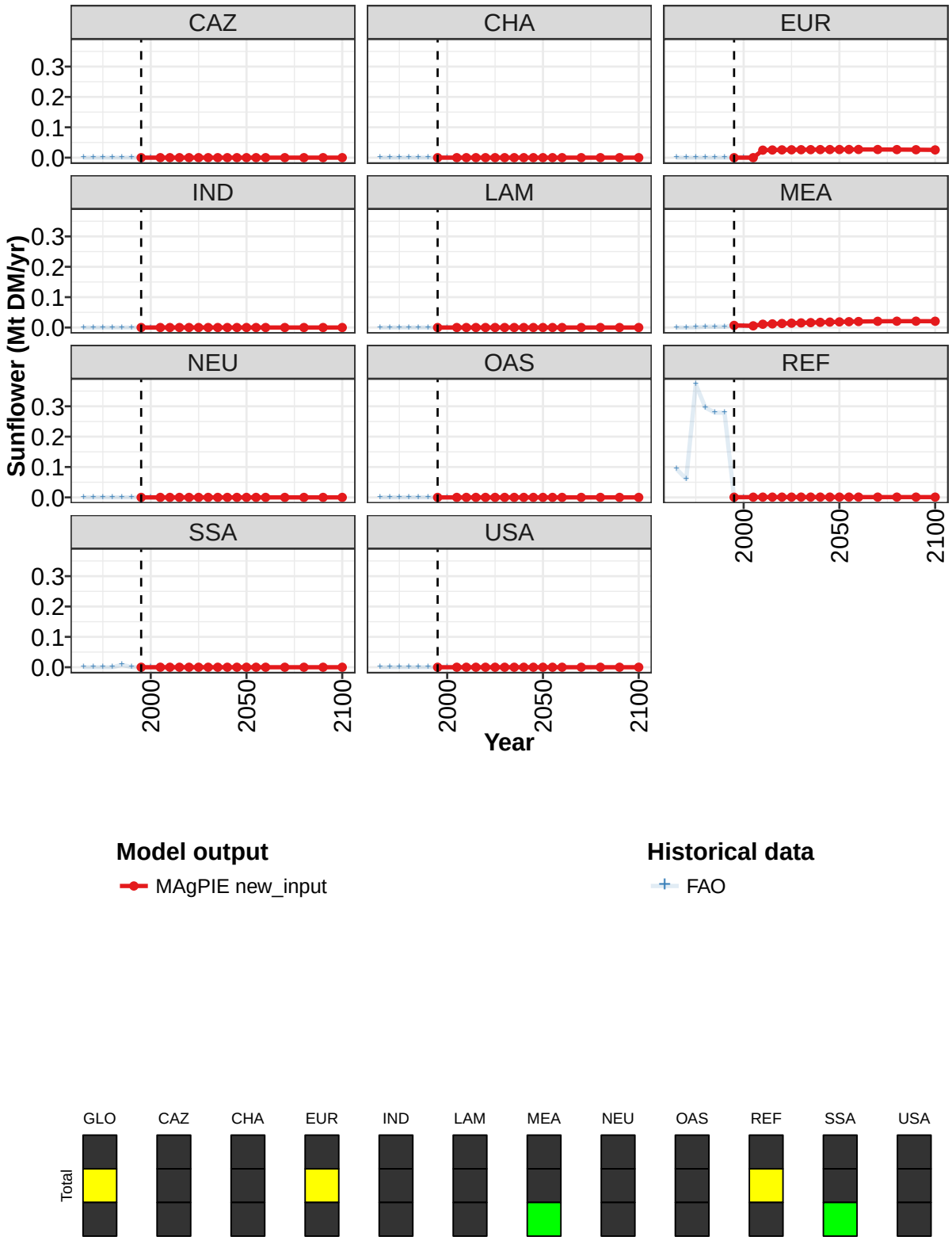


Figure 155: MAgPIE new_input — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0076	0.0064	0.0365	0.0382	0.0398	0.0411	0.0424	0.0435	0.0446	0.0455	0.0464
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0247	0.0252	0.0256	0.0259	0.0262	0.0264	0.0266	0.0267	0.0268
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0070	0.0056	0.0109	0.0121	0.0132	0.0143	0.0153	0.0162	0.0171	0.0179	0.0186
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0006	0.0007	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
SSA	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 464: MAgPIE new_input — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

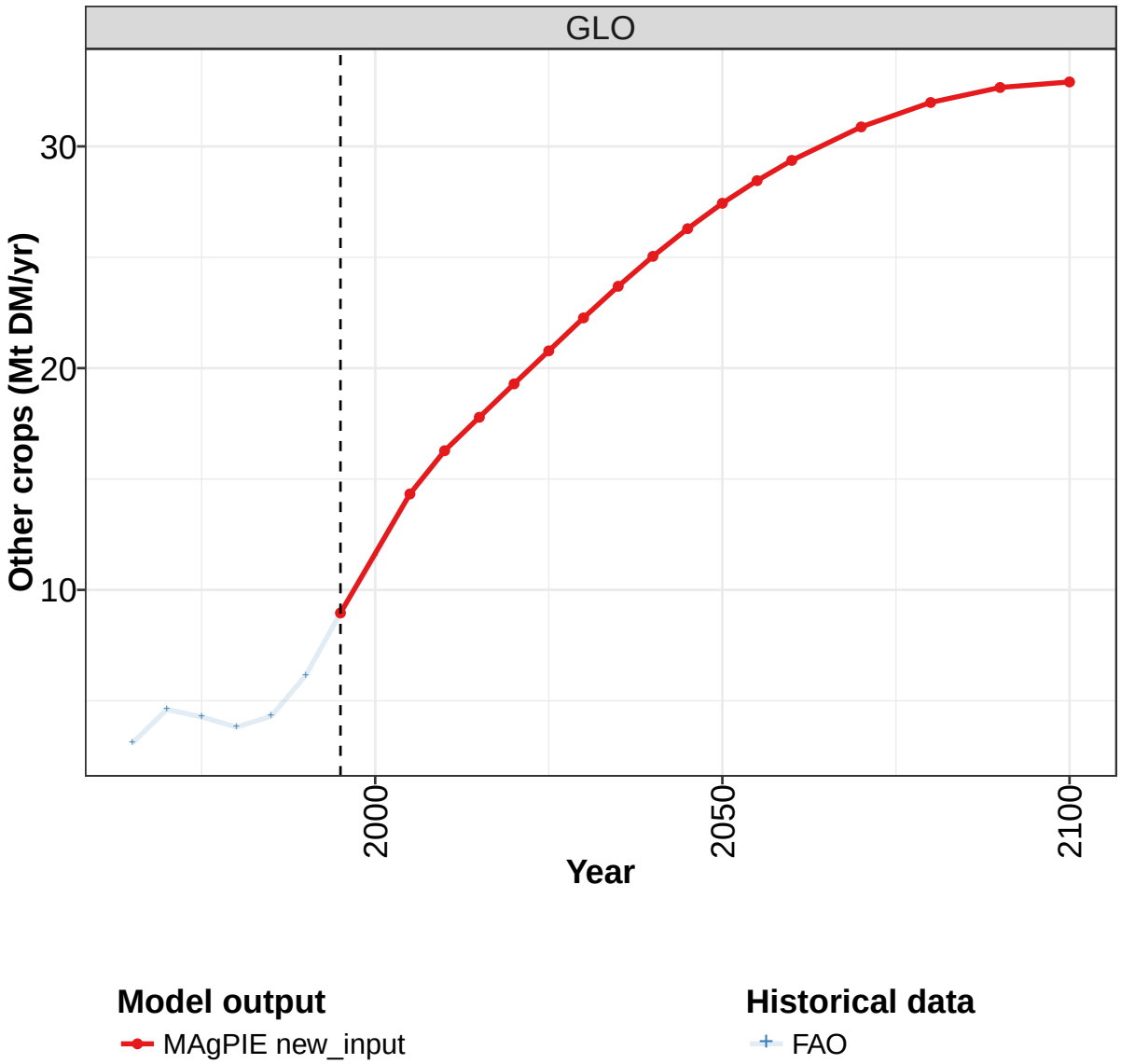
	2055	2060	2070	2080	2090	2100
GLO	0.0471	0.0477	0.0483	0.0483	0.0480	0.0471
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0269	0.0270	0.0268	0.0266	0.0262	0.0256
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0192	0.0198	0.0205	0.0208	0.0209	0.0207
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 465: MAgPIE new_input — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.093	0.060	0.372	0.298	0.290	0.282	0.008	0.007	0.006	0.037
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.025
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.003	0.003	0.003	0.007	0.005	0.006	0.011
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.093	0.060	0.372	0.296	0.279	0.279	0.001	0.000	0.001	0.001
SSA	0.000	0.000	0.000	0.000	0.008	0.001	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 466: FAO — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr)

8.2.10 Other crops



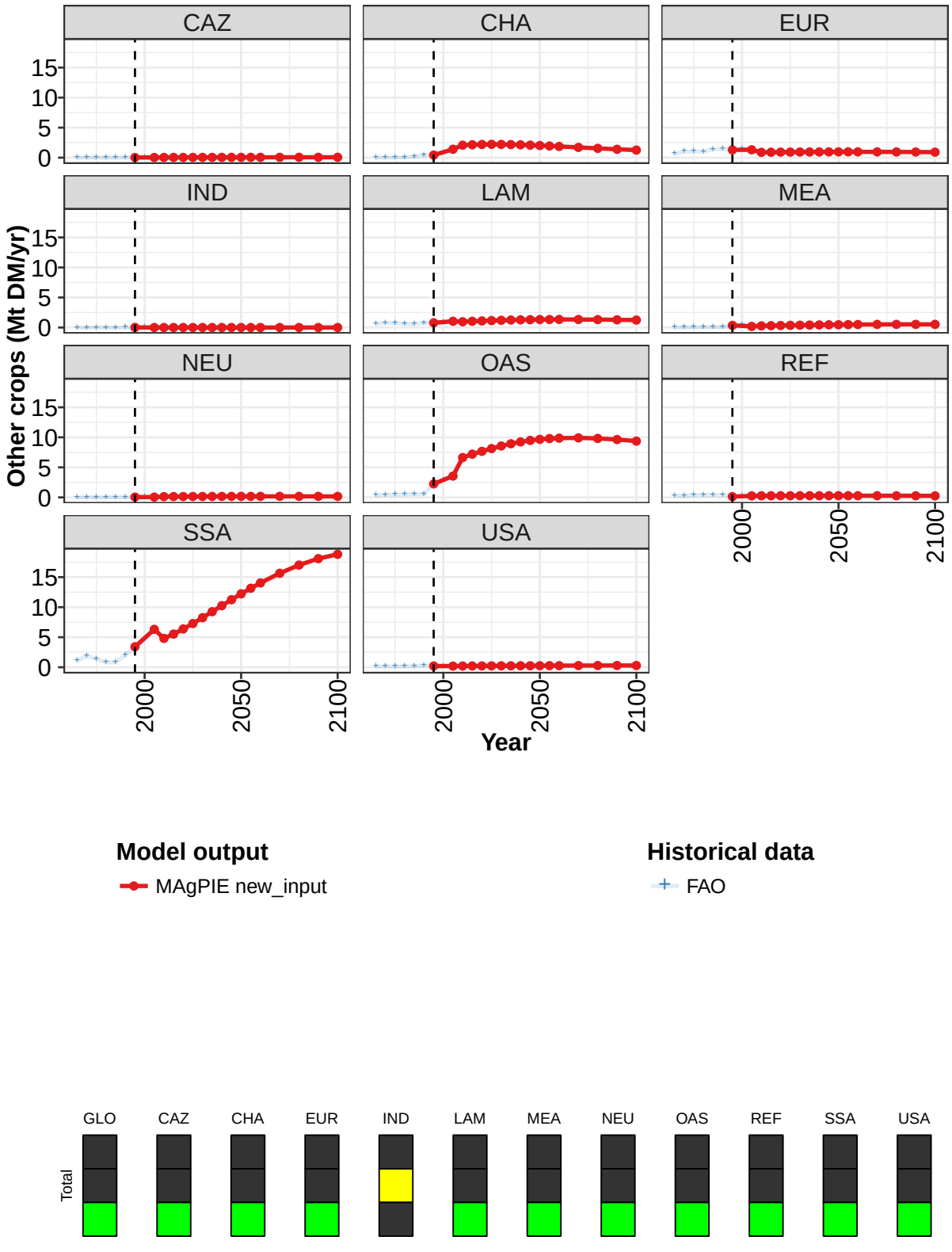


Figure 156: MAgPIE new_input — Demand—Material—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.0	14.3	16.3	17.8	19.3	20.8	22.3	23.7	25.0	26.3	27.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
CHA	0.4	1.4	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.0
EUR	1.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.8	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.3	1.3	1.3
MEA	0.4	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
OAS	2.2	3.5	6.6	7.2	7.7	8.1	8.6	8.9	9.2	9.5	9.7
REF	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	3.4	6.3	4.8	5.5	6.4	7.3	8.3	9.3	10.3	11.2	12.2
USA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3

Table 467: MAgPIE new_input — Demand—Material—Crops—Other crops (Mt DM/yr) [PART 1/2]

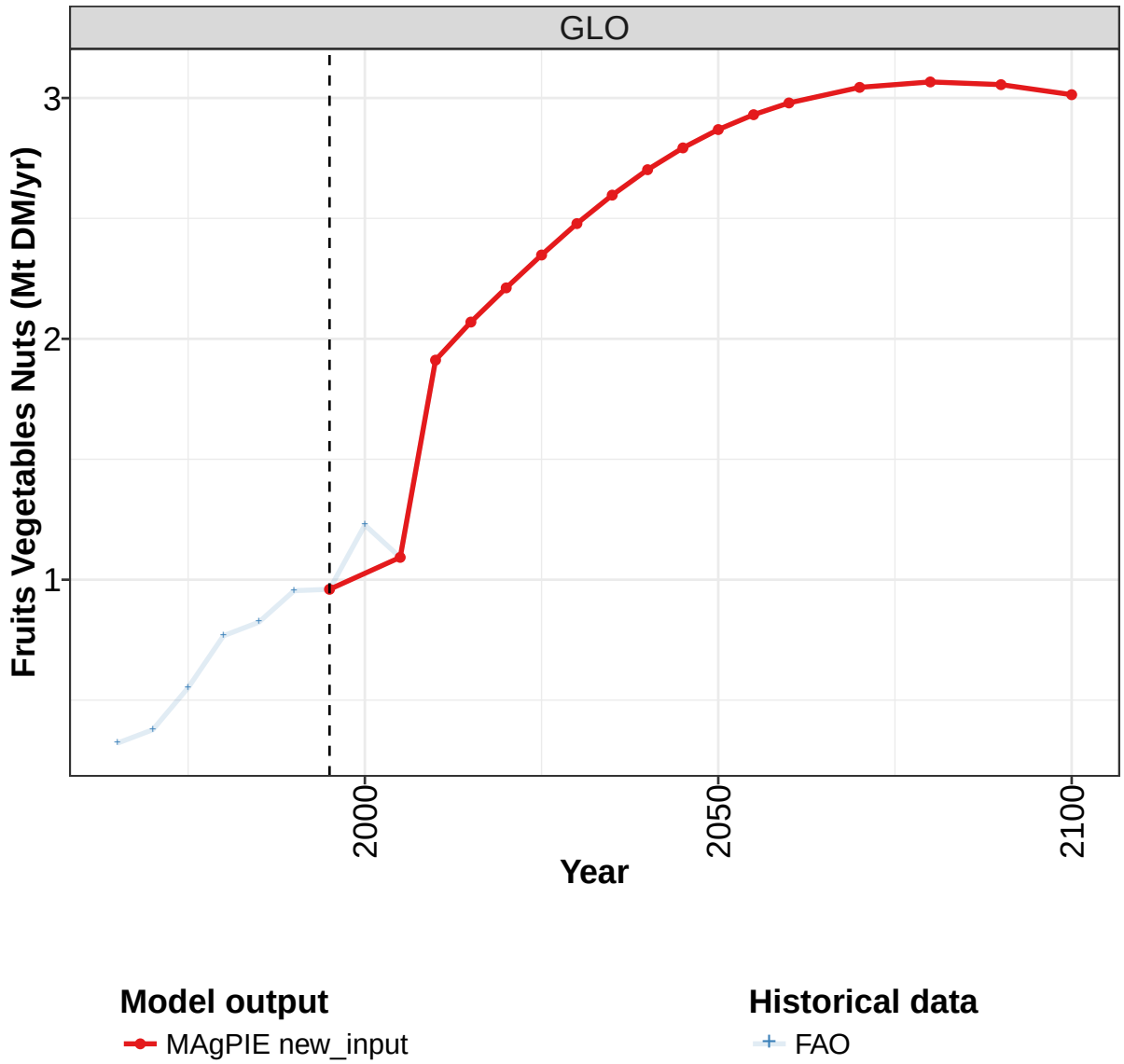
	2055	2060	2070	2080	2090	2100
GLO	28.5	29.4	30.9	32.0	32.7	32.9
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.9	1.9	1.7	1.5	1.4	1.3
EUR	1.0	1.0	1.0	1.0	0.9	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.3	1.3	1.3	1.3	1.3	1.2
MEA	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.2	0.2	0.2	0.2	0.2	0.2
OAS	9.8	9.9	9.9	9.8	9.6	9.4
REF	0.3	0.3	0.3	0.3	0.3	0.3
SSA	13.2	14.0	15.6	17.0	18.1	18.8
USA	0.3	0.3	0.3	0.3	0.3	0.3

Table 468: MAgPIE new_input — Demand—Material—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.1	4.6	4.3	3.8	4.3	6.1	9.0	11.5	14.3	16.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.8	1.4	2.1
EUR	0.7	1.0	1.0	1.0	1.4	1.4	1.3	1.5	1.3	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.8	0.8	0.6	0.6	0.8	0.8	0.8	1.0	1.0
MEA	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.4	0.2	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
OAS	0.3	0.4	0.5	0.5	0.6	0.6	2.2	3.0	3.5	6.6
REF	0.2	0.2	0.4	0.4	0.4	0.4	0.1	0.2	0.2	0.3
SSA	1.1	1.9	1.4	0.8	0.8	2.0	3.4	4.6	6.3	4.8
USA	0.1	0.1	0.1	0.2	0.1	0.3	0.2	0.1	0.2	0.2

Table 469: FAO — Demand—Material—Crops—Other crops (Mt DM/yr)

8.2.11 Other crops—Fruits Vegetables Nuts



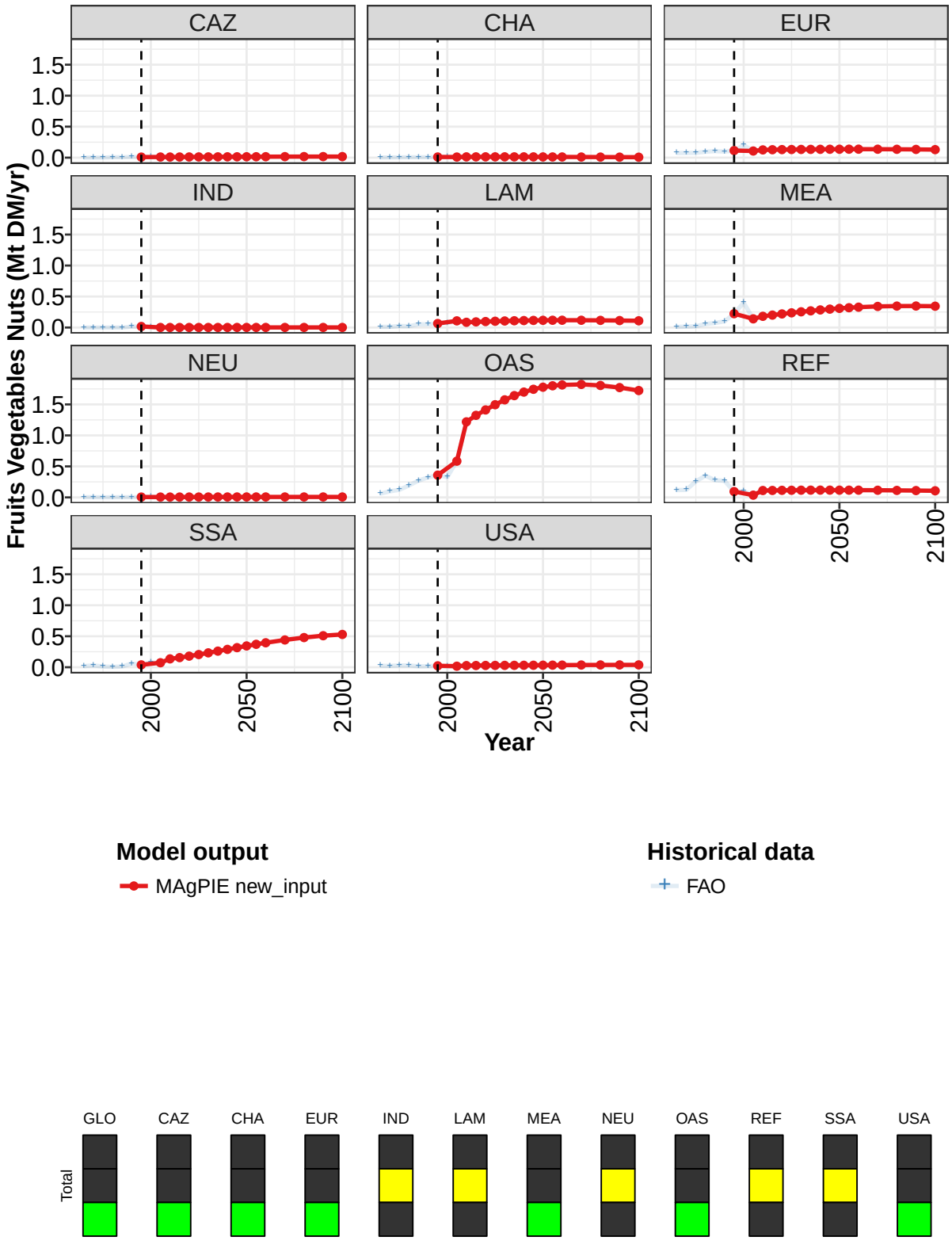


Figure 157: MAgPIE new_input — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.96	1.09	1.91	2.07	2.21	2.35	2.48	2.60	2.70	2.79	2.87
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.12	0.11	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14
IND	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.07	0.11	0.08	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.12
MEA	0.22	0.14	0.18	0.20	0.22	0.24	0.25	0.27	0.28	0.30	0.31
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.36	0.58	1.22	1.32	1.41	1.50	1.57	1.64	1.70	1.74	1.78
REF	0.09	0.04	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
SSA	0.04	0.07	0.14	0.16	0.18	0.20	0.23	0.26	0.29	0.32	0.34
USA	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

Table 470: MAgPIE new_input — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

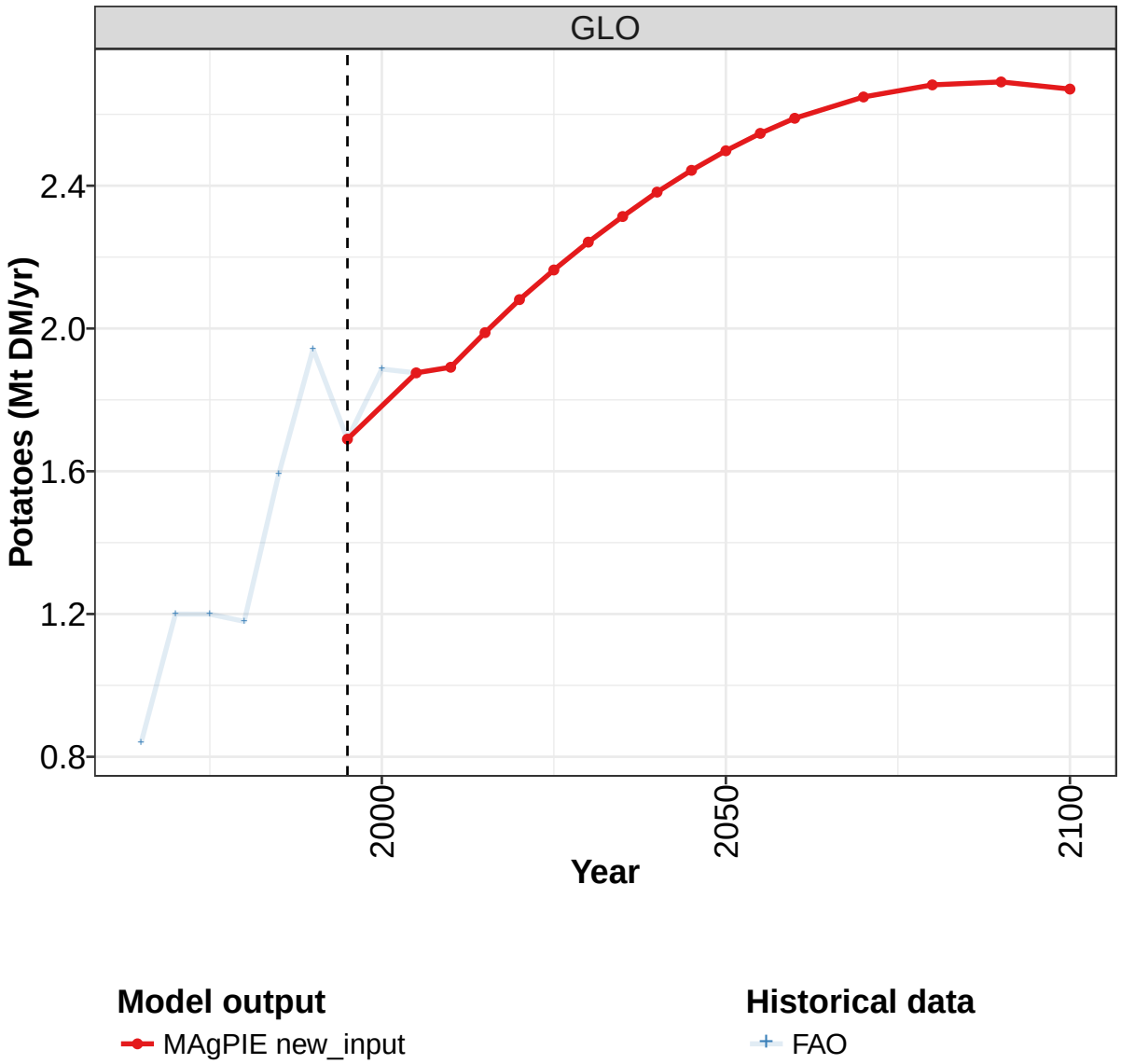
	2055	2060	2070	2080	2090	2100
GLO	2.93	2.98	3.04	3.07	3.06	3.01
CAZ	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.14	0.14	0.14	0.14	0.13	0.13
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.12	0.12	0.12	0.12	0.11	0.11
MEA	0.32	0.33	0.34	0.35	0.35	0.34
NEU	0.01	0.01	0.01	0.01	0.01	0.01
OAS	1.80	1.81	1.82	1.81	1.77	1.72
REF	0.12	0.12	0.12	0.11	0.11	0.11
SSA	0.37	0.40	0.44	0.48	0.51	0.53
USA	0.03	0.03	0.04	0.04	0.04	0.04

Table 471: MAgPIE new_input — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.32	0.38	0.55	0.77	0.82	0.95	0.96	1.23	1.09	1.91
CAZ	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.07	0.08	0.08	0.10	0.11	0.10	0.12	0.20	0.11	0.13
IND	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.00
LAM	0.01	0.01	0.02	0.02	0.05	0.05	0.07	0.07	0.11	0.08
MEA	0.01	0.01	0.02	0.06	0.07	0.10	0.22	0.40	0.14	0.18
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
OAS	0.06	0.10	0.12	0.19	0.27	0.32	0.36	0.33	0.58	1.22
REF	0.12	0.12	0.26	0.35	0.28	0.27	0.09	0.10	0.04	0.11
SSA	0.02	0.03	0.01	0.01	0.01	0.06	0.04	0.07	0.07	0.14
USA	0.02	0.02	0.03	0.03	0.01	0.02	0.02	0.01	0.02	0.03

Table 472: FAO — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

8.2.12 Other crops—Potatoes



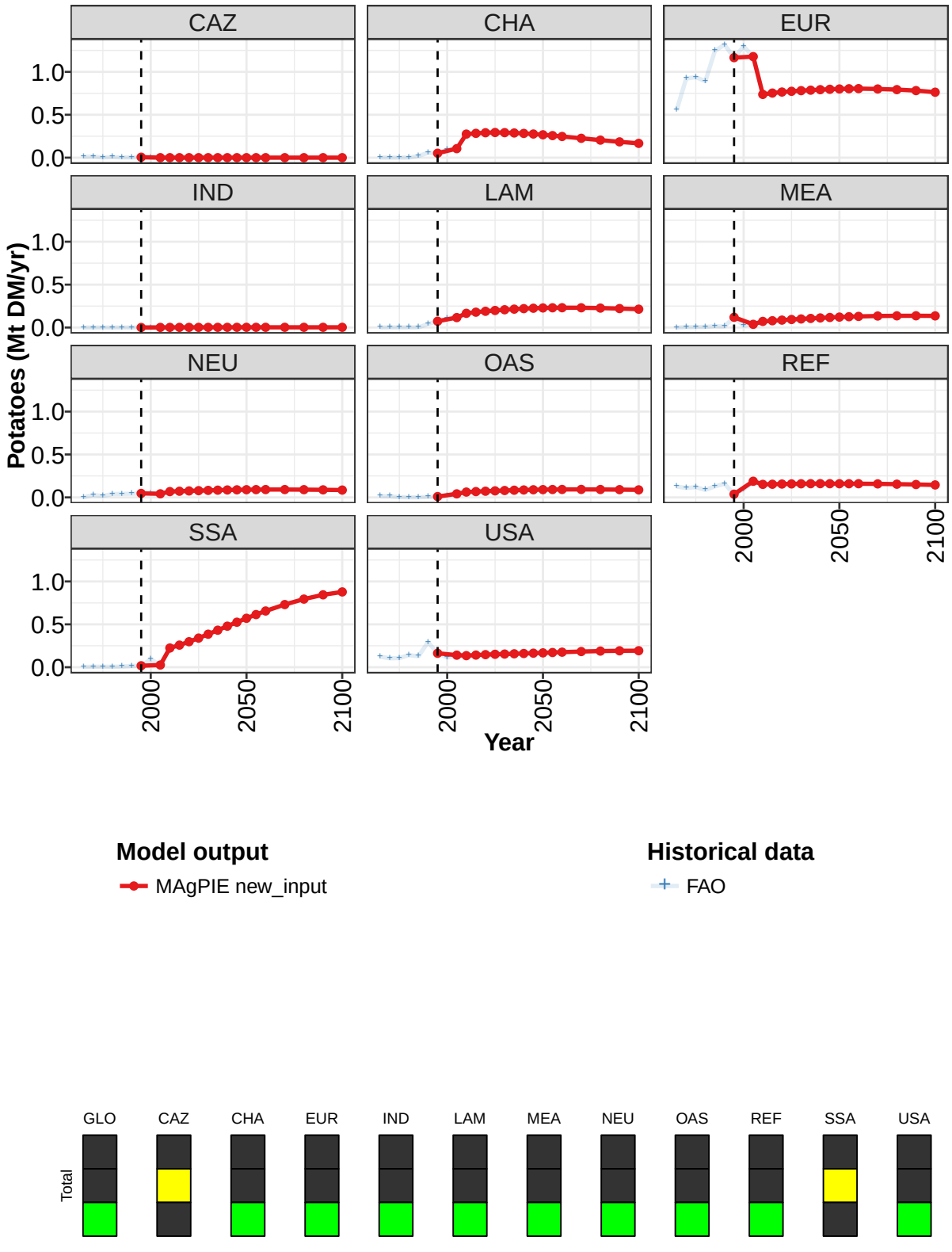


Figure 158: MAgPIE new_input — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.69	1.88	1.89	1.99	2.08	2.16	2.24	2.31	2.38	2.44	2.50
CAZ	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.05	0.11	0.27	0.28	0.29	0.29	0.29	0.29	0.28	0.28	0.27
EUR	1.17	1.18	0.74	0.75	0.76	0.77	0.78	0.79	0.79	0.80	0.80
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.07	0.12	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23
MEA	0.12	0.04	0.07	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.12
NEU	0.05	0.04	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09
OAS	0.01	0.04	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09
REF	0.04	0.19	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16
SSA	0.02	0.03	0.22	0.26	0.30	0.34	0.39	0.43	0.48	0.52	0.57
USA	0.16	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17

Table 473: MAgPIE new_input — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

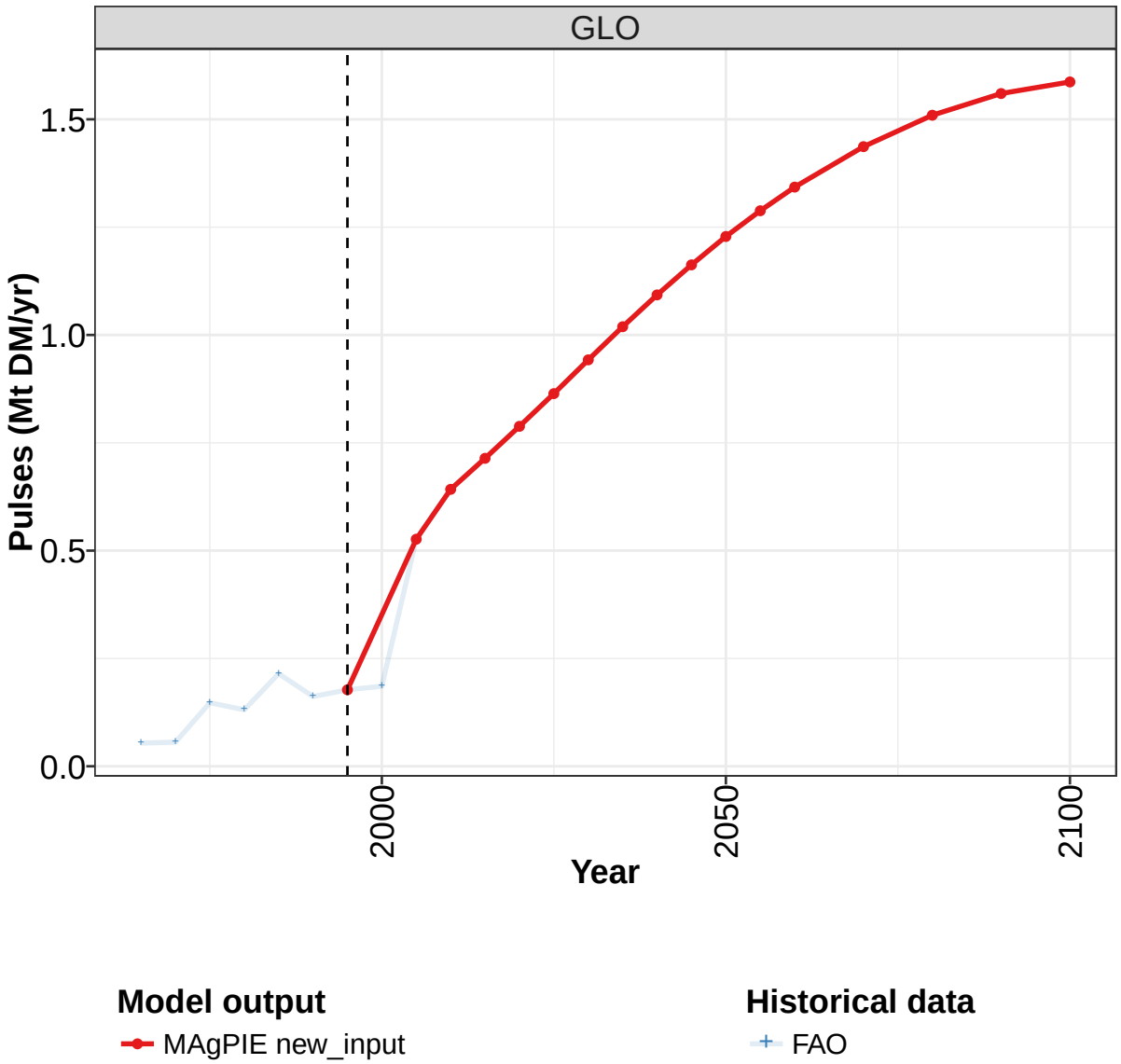
	2055	2060	2070	2080	2090	2100
GLO	2.55	2.59	2.65	2.68	2.69	2.67
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.26	0.25	0.23	0.20	0.18	0.17
EUR	0.80	0.80	0.80	0.79	0.78	0.76
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.23	0.23	0.23	0.23	0.22	0.21
MEA	0.13	0.13	0.13	0.14	0.14	0.14
NEU	0.09	0.09	0.09	0.09	0.09	0.09
OAS	0.09	0.09	0.09	0.09	0.09	0.09
REF	0.16	0.16	0.16	0.15	0.15	0.15
SSA	0.61	0.66	0.73	0.79	0.84	0.88
USA	0.17	0.18	0.18	0.19	0.19	0.19

Table 474: MAgPIE new_input — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.84	1.20	1.20	1.18	1.59	1.94	1.69	1.89	1.88	1.89
CAZ	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.02	0.06	0.05	0.10	0.11	0.27
EUR	0.55	0.92	0.94	0.89	1.25	1.32	1.17	1.30	1.18	0.74
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.10	0.12	0.17
MEA	0.00	0.00	0.01	0.01	0.02	0.01	0.12	0.02	0.04	0.07
NEU	0.00	0.03	0.02	0.04	0.04	0.04	0.05	0.05	0.04	0.07
OAS	0.02	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.04	0.06
REF	0.13	0.11	0.12	0.09	0.13	0.16	0.04	0.09	0.19	0.15
SSA	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.09	0.03	0.22
USA	0.12	0.10	0.11	0.14	0.13	0.29	0.16	0.11	0.14	0.14

Table 475: FAO — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr)

8.2.13 Other crops—Pulses



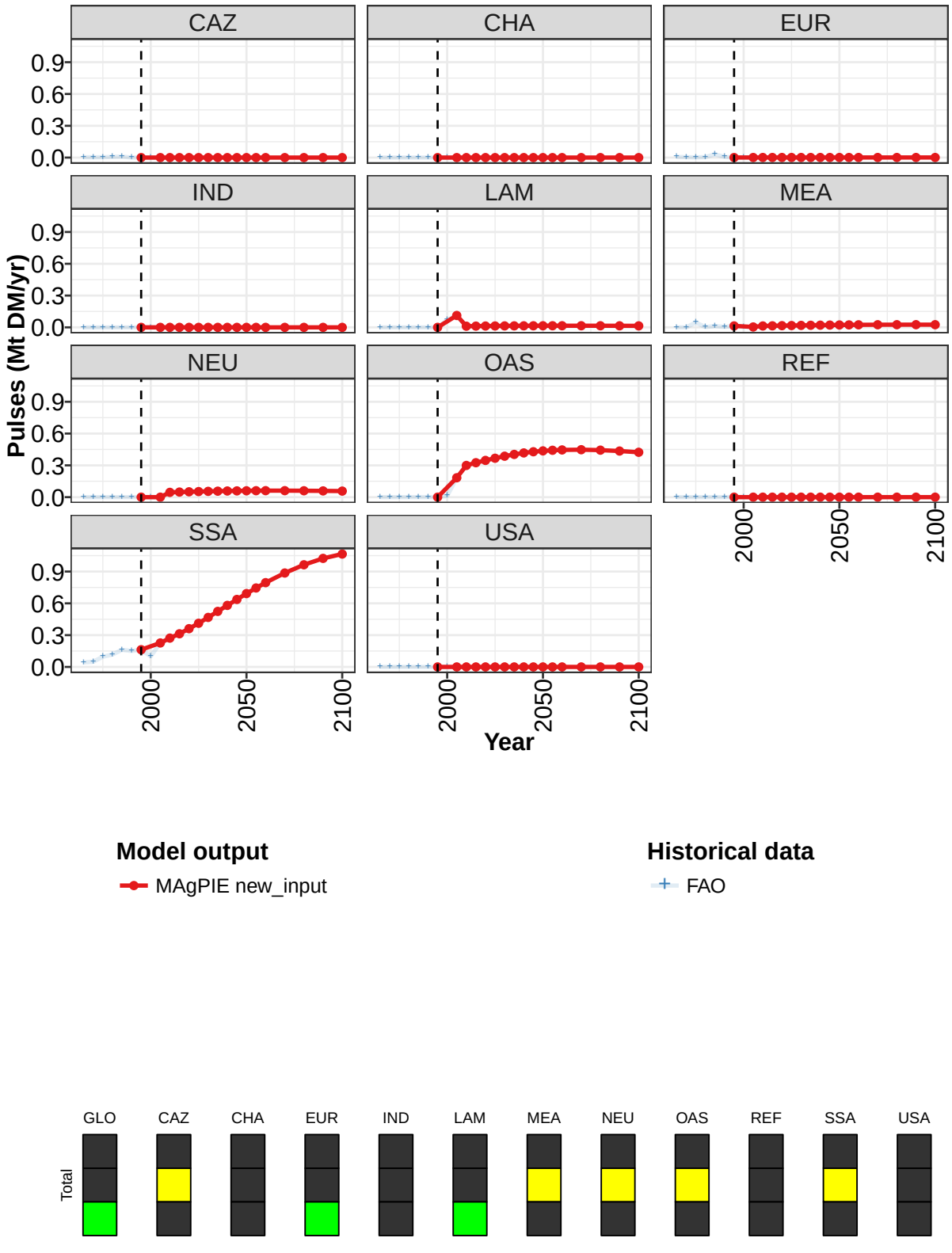


Figure 159: MAgPIE new_input — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.18	0.53	0.64	0.71	0.79	0.86	0.94	1.02	1.09	1.16	1.23
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
MEA	0.01	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
NEU	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
OAS	0.00	0.18	0.30	0.33	0.35	0.37	0.39	0.40	0.42	0.43	0.44
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.16	0.23	0.27	0.31	0.36	0.41	0.47	0.52	0.58	0.64	0.69
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 476: MAgPIE new_input — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

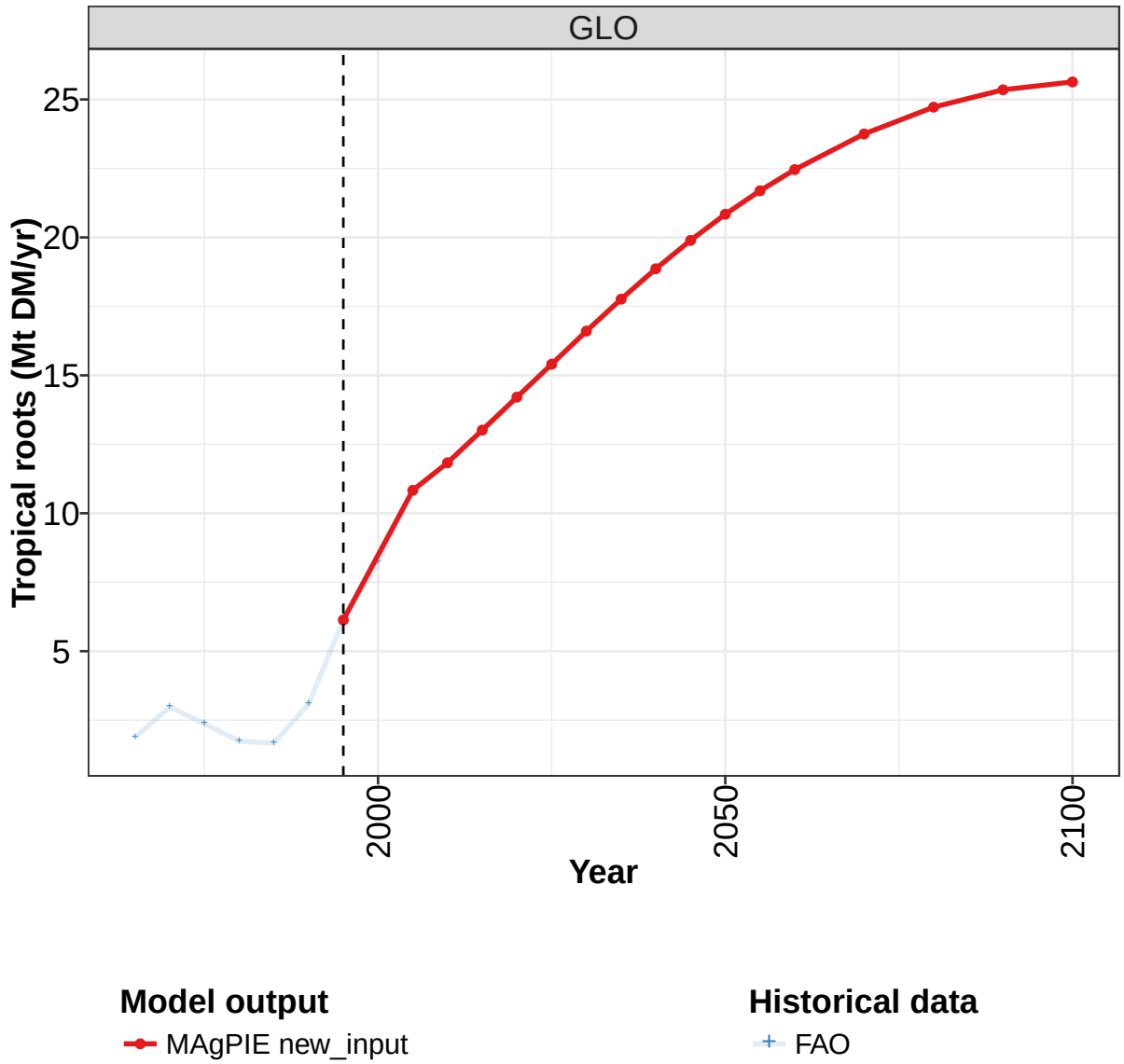
	2055	2060	2070	2080	2090	2100
GLO	1.29	1.34	1.44	1.51	1.56	1.59
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.02	0.02	0.02	0.02	0.01	0.01
MEA	0.02	0.02	0.03	0.03	0.03	0.03
NEU	0.06	0.06	0.06	0.06	0.06	0.06
OAS	0.44	0.45	0.45	0.44	0.44	0.42
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.74	0.80	0.89	0.96	1.02	1.07
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 477: MAgPIE new_input — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.054	0.056	0.147	0.131	0.215	0.162	0.177	0.186	0.526	0.642
CAZ	0.004	0.003	0.004	0.006	0.009	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.007	0.004	0.002	0.005	0.031	0.006	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069	0.112	0.011
MEA	0.000	0.000	0.046	0.003	0.012	0.004	0.014	0.004	0.004	0.013
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.183	0.299
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.043	0.049	0.096	0.117	0.162	0.150	0.163	0.100	0.226	0.272
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 478: FAO — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr)

8.2.14 Other crops—Tropical roots



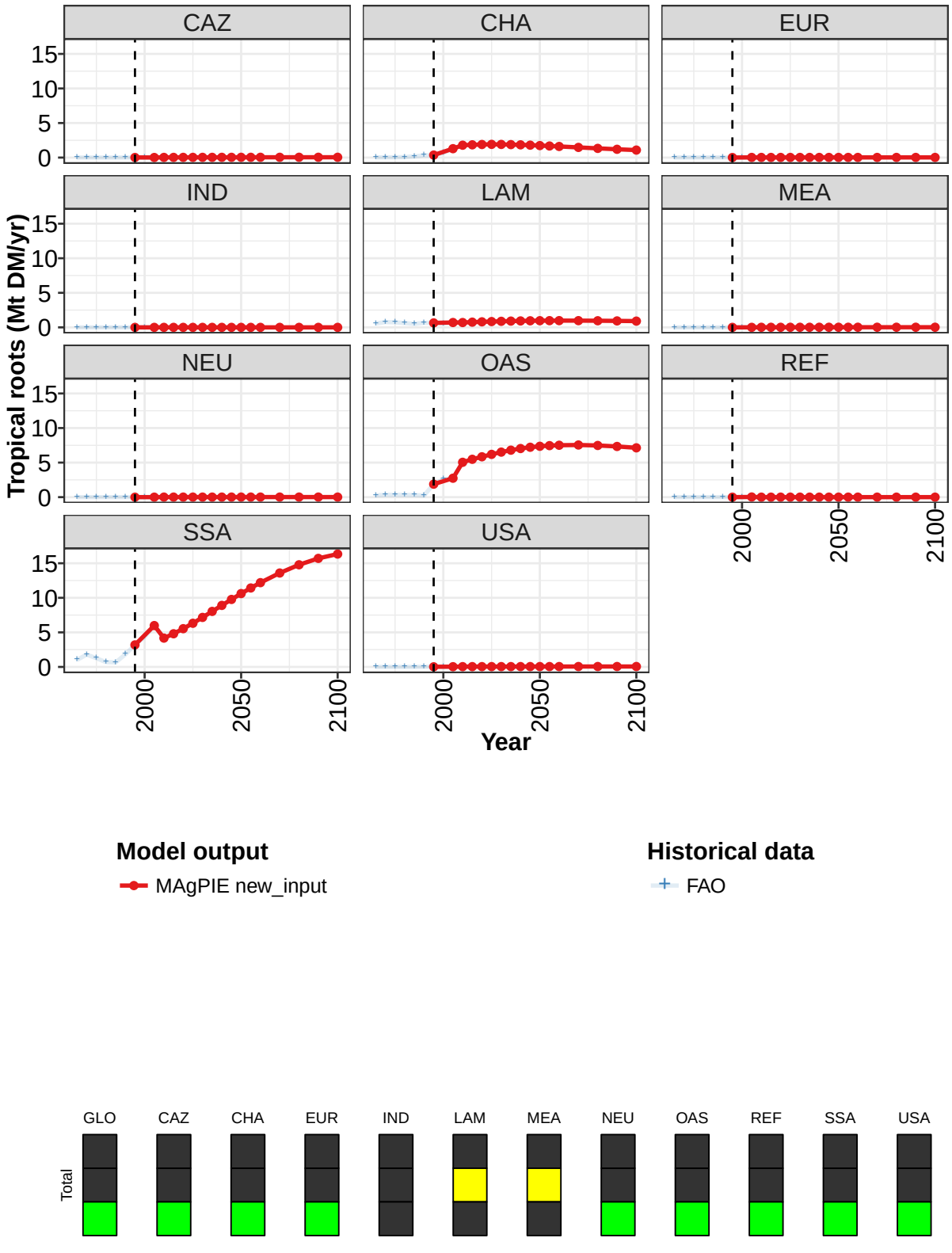


Figure 160: MAgPIE new_input — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.1	10.8	11.8	13.0	14.2	15.4	16.6	17.8	18.9	19.9	20.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.4	1.3	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.7
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.9	2.7	5.0	5.5	5.8	6.2	6.5	6.8	7.0	7.2	7.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.2	6.0	4.2	4.8	5.5	6.3	7.2	8.0	8.9	9.8	10.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1

Table 479: MAgPIE new_input — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

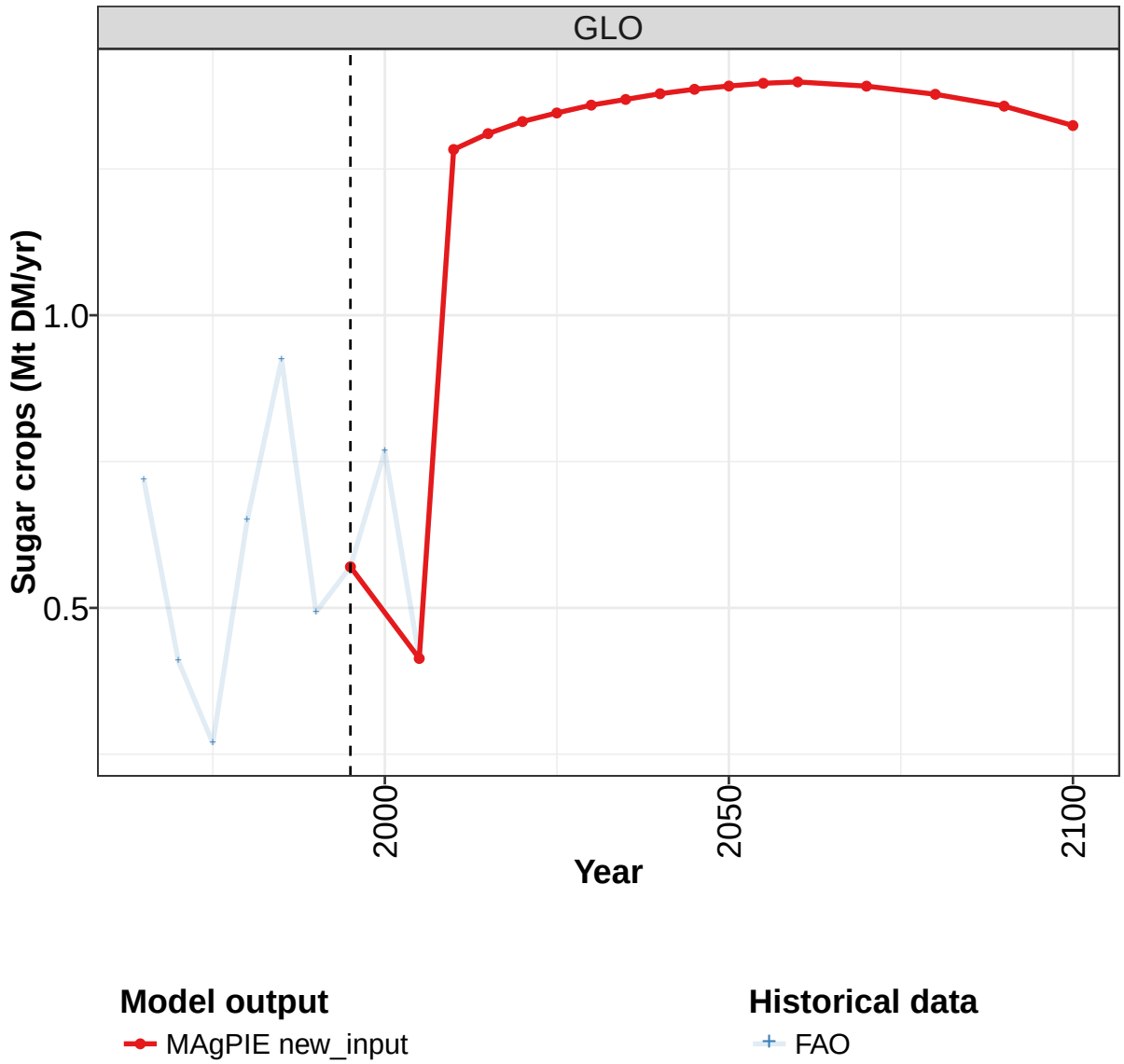
	2055	2060	2070	2080	2090	2100
GLO	21.7	22.5	23.8	24.7	25.4	25.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.7	1.6	1.5	1.3	1.2	1.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.0	1.0	1.0	1.0	0.9	0.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.5	7.5	7.5	7.5	7.3	7.1
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	11.4	12.2	13.6	14.8	15.7	16.3
USA	0.1	0.1	0.1	0.1	0.1	0.1

Table 480: MAgPIE new_input — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.9	3.0	2.4	1.7	1.7	3.1	6.1	8.2	10.8	11.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.7	1.3	1.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.8	0.7	0.6	0.5	0.7	0.6	0.6	0.7	0.7
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.3	0.3	0.3	0.3	0.2	1.9	2.6	2.7	5.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.0	1.8	1.3	0.7	0.7	1.8	3.2	4.3	6.0	4.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 481: FAO — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr)

8.2.15 Sugar crops



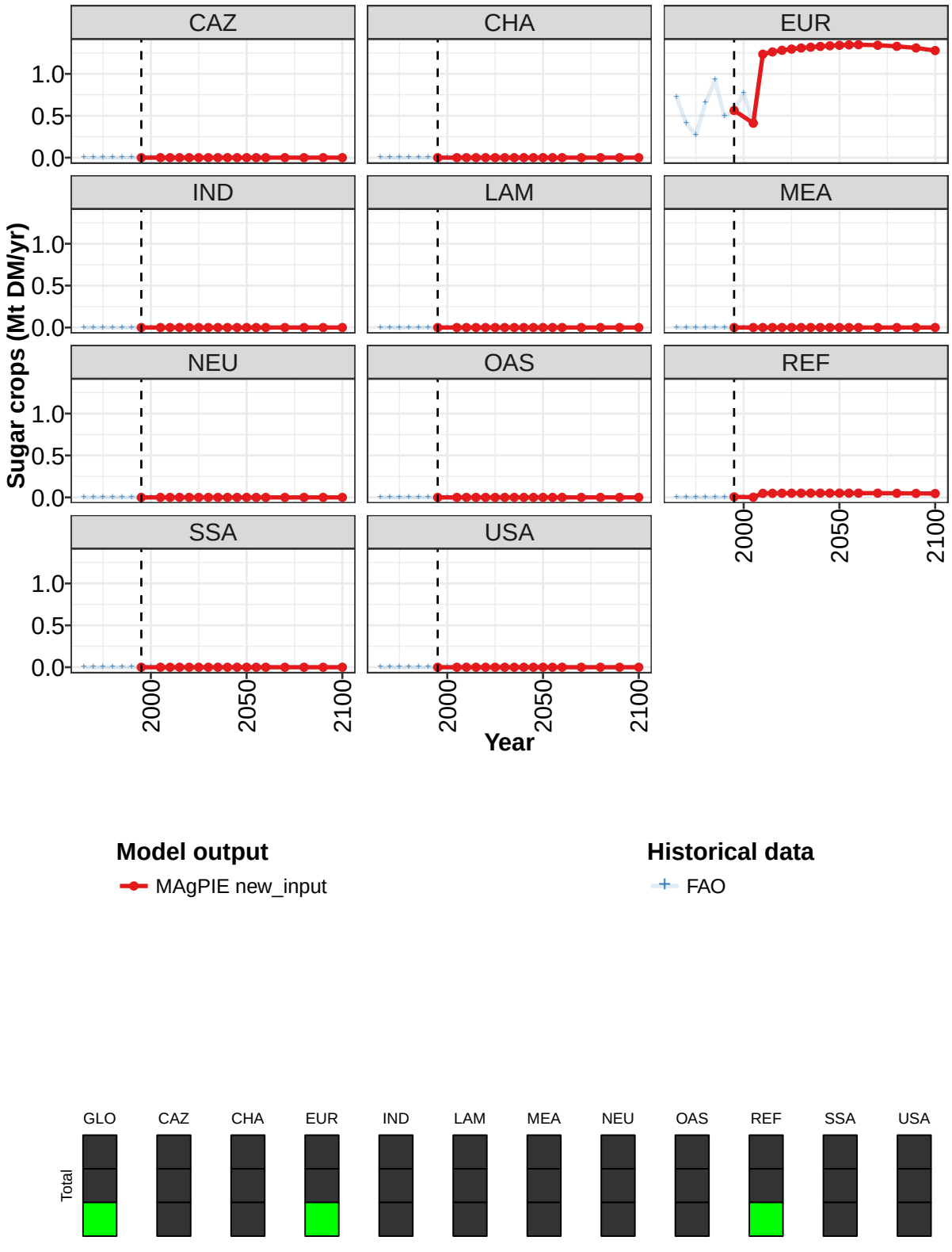


Figure 161: MAgPIE new_input — Demand—Material—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.57	0.41	1.28	1.31	1.33	1.35	1.36	1.37	1.38	1.39	1.39
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.56	0.41	1.24	1.26	1.28	1.30	1.31	1.32	1.33	1.34	1.34
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.01	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 482: MAgPIE new_input — Demand—Material—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

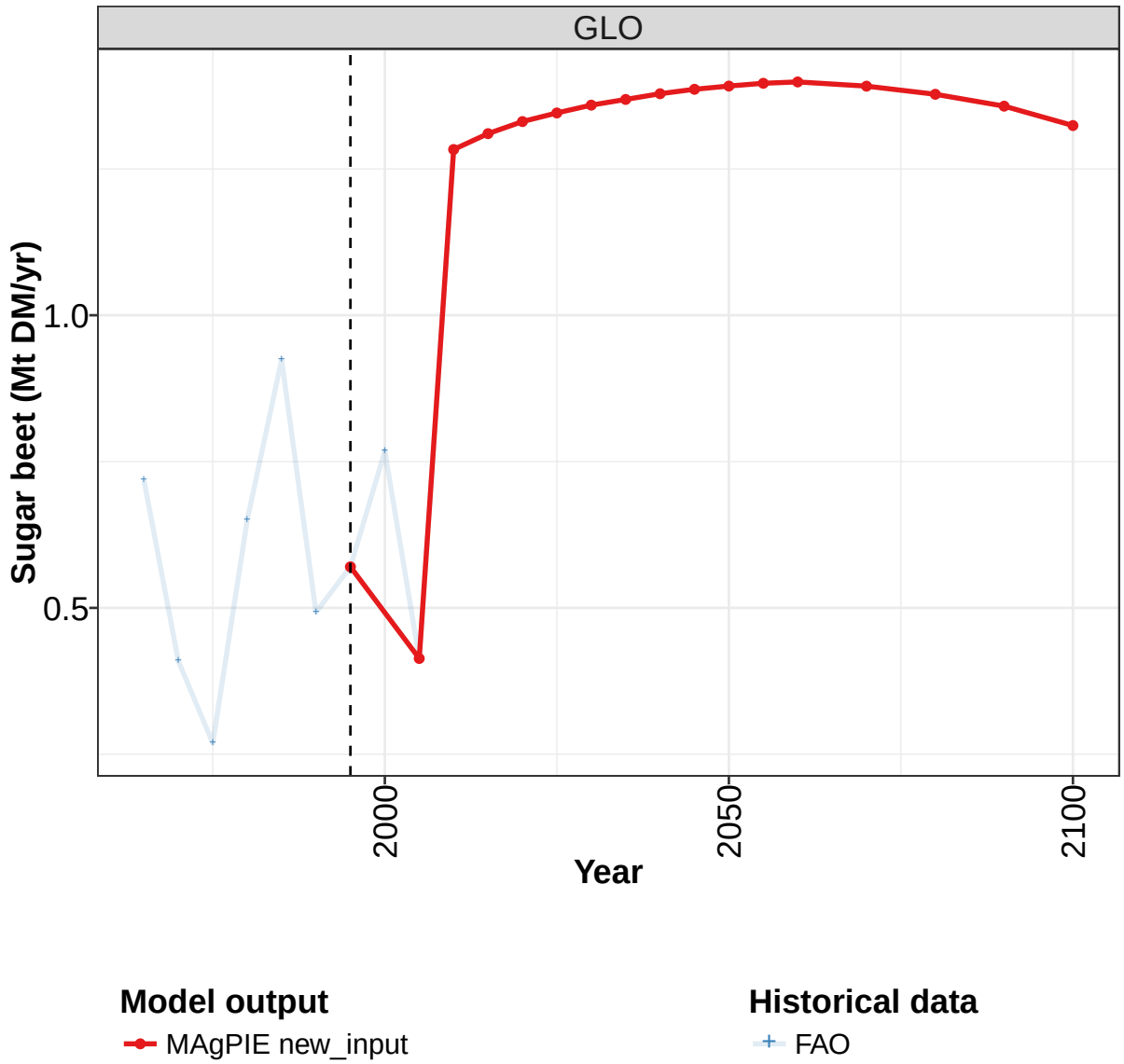
	2055	2060	2070	2080	2090	2100
GLO	1.40	1.40	1.39	1.38	1.36	1.32
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	1.35	1.35	1.34	1.33	1.31	1.28
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 483: MAgPIE new_input — Demand—Material—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.72	0.41	0.27	0.65	0.92	0.49	0.57	0.77	0.41	1.28
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.72	0.41	0.27	0.65	0.92	0.49	0.56	0.77	0.41	1.24
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 484: FAO — Demand—Material—Crops—Sugar crops (Mt DM/yr)

8.2.16 Sugar crops—Sugar beet



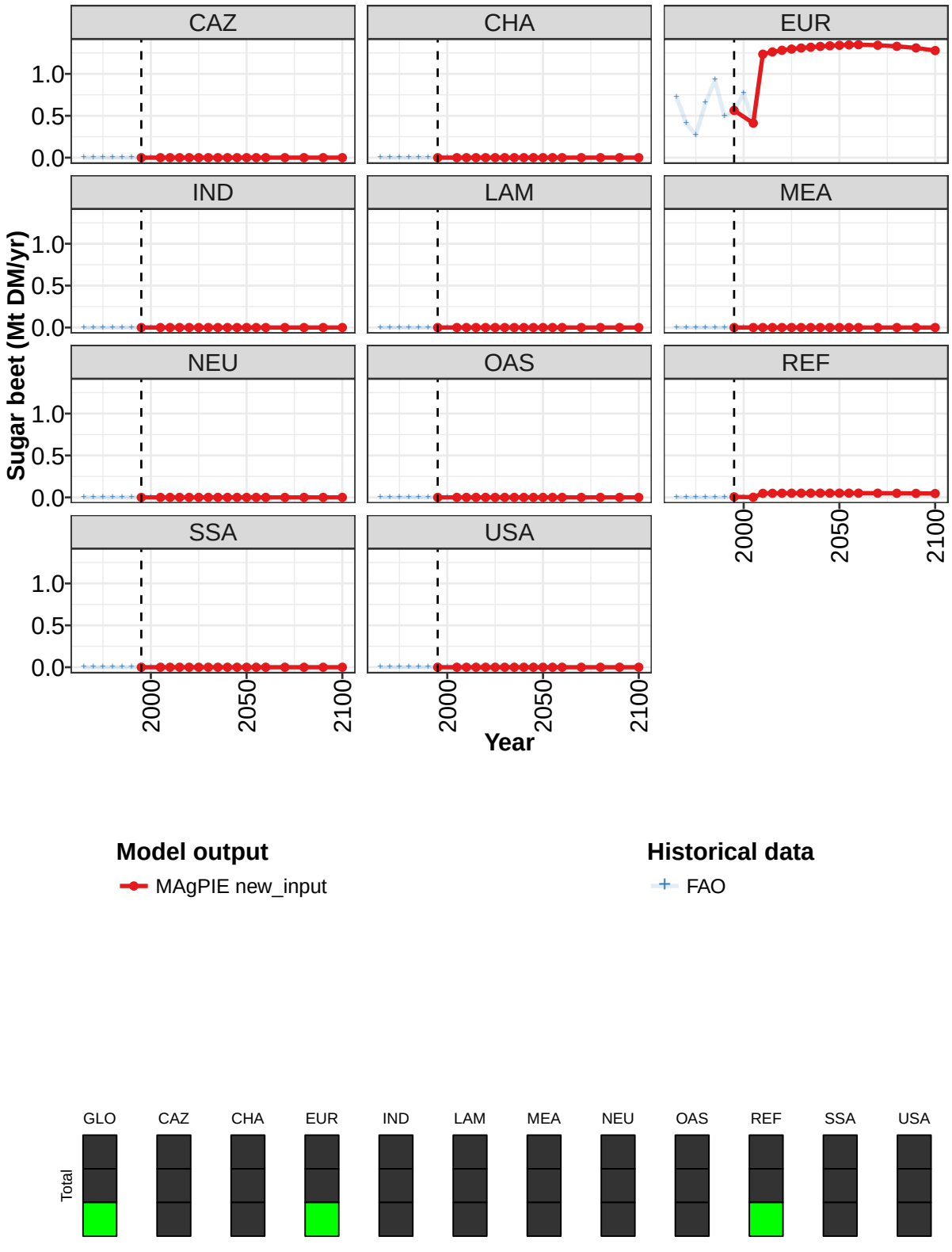


Figure 162: MAgPIE new_input — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.57	0.41	1.28	1.31	1.33	1.35	1.36	1.37	1.38	1.39	1.39
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.56	0.41	1.24	1.26	1.28	1.30	1.31	1.32	1.33	1.34	1.34
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.01	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 485: MAgPIE new_input — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

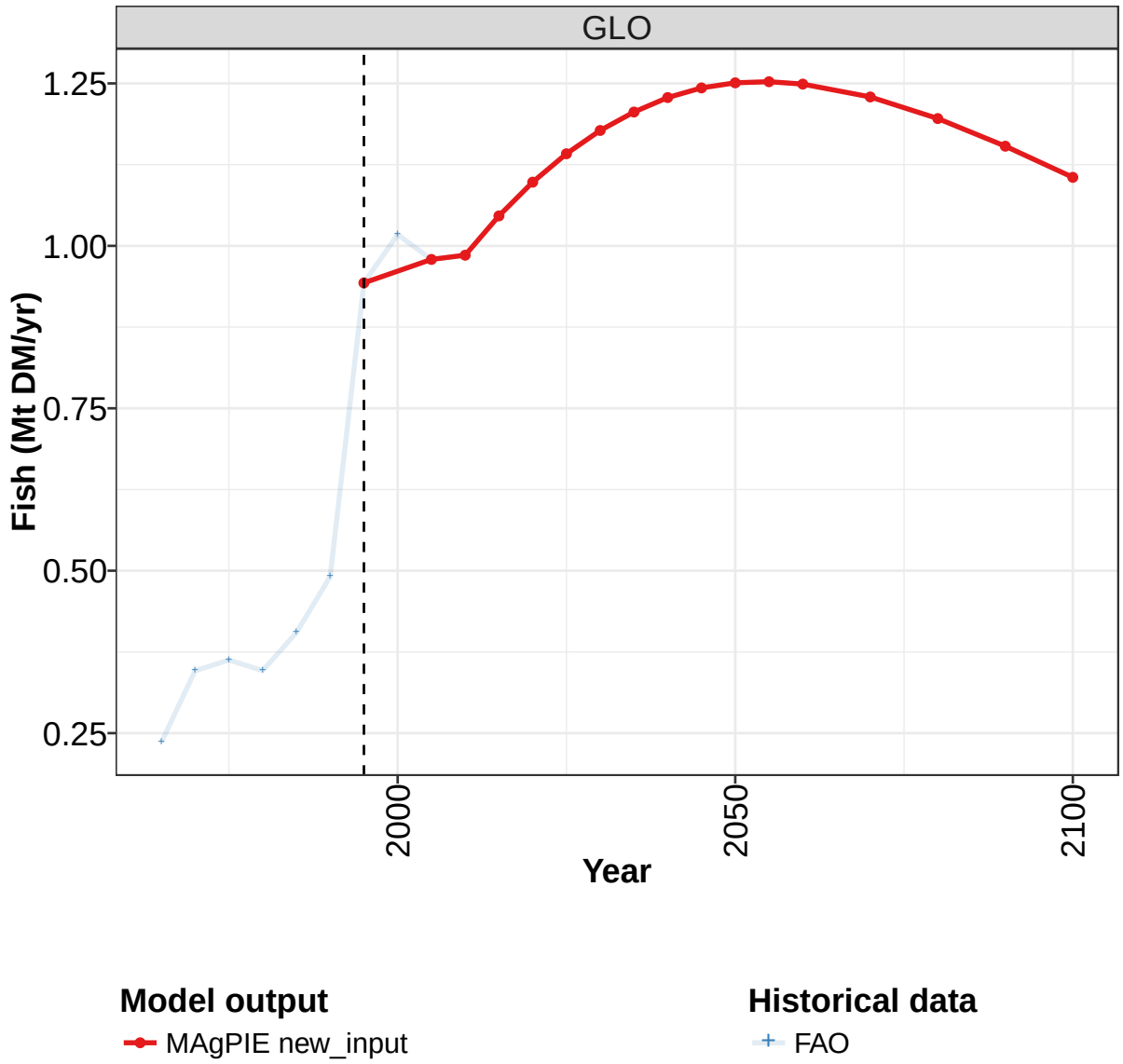
	2055	2060	2070	2080	2090	2100
GLO	1.40	1.40	1.39	1.38	1.36	1.32
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	1.35	1.35	1.34	1.33	1.31	1.28
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 486: MAgPIE new_input — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.72	0.41	0.27	0.65	0.92	0.49	0.57	0.77	0.41	1.28
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.72	0.41	0.27	0.65	0.92	0.49	0.56	0.77	0.41	1.24
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 487: FAO — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr)

8.3 Fish


GLO
1.25
1.00
0.75
0.50
0.25
Fish (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

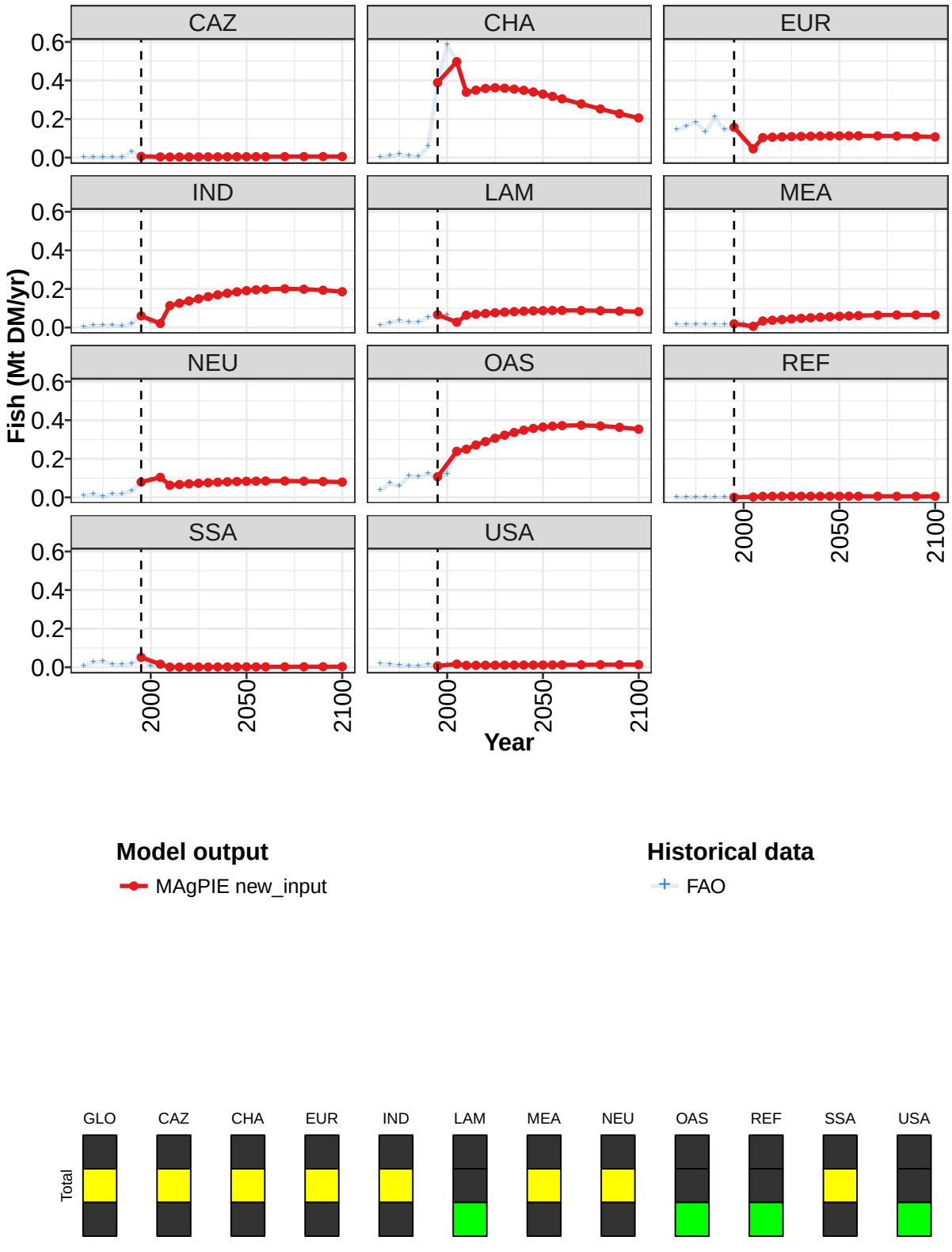


Figure 163: MAgPIE new_input — Demand—Material—Fish (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.94	0.98	0.99	1.05	1.10	1.14	1.18	1.21	1.23	1.24	1.25
CAZ	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.39	0.50	0.34	0.35	0.36	0.36	0.36	0.36	0.35	0.34	0.33
EUR	0.16	0.05	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
IND	0.06	0.02	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19
LAM	0.07	0.03	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09
MEA	0.02	0.01	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06
NEU	0.08	0.10	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
OAS	0.11	0.24	0.25	0.27	0.29	0.31	0.32	0.34	0.35	0.36	0.36
REF	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

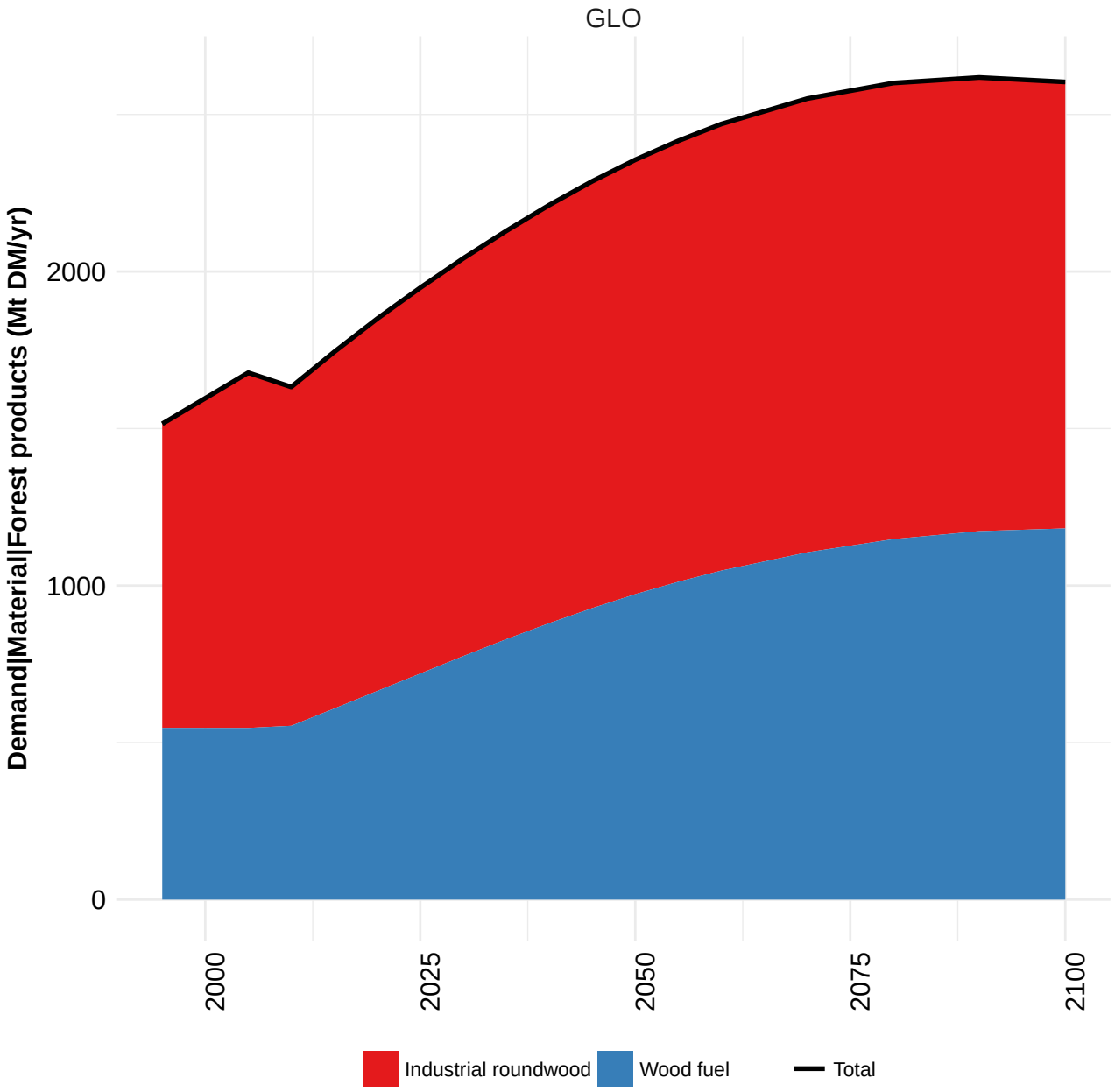
Table 488: MAgPIE new_input — Demand—Material—Fish (Mt DM/yr) [PART 1/2]

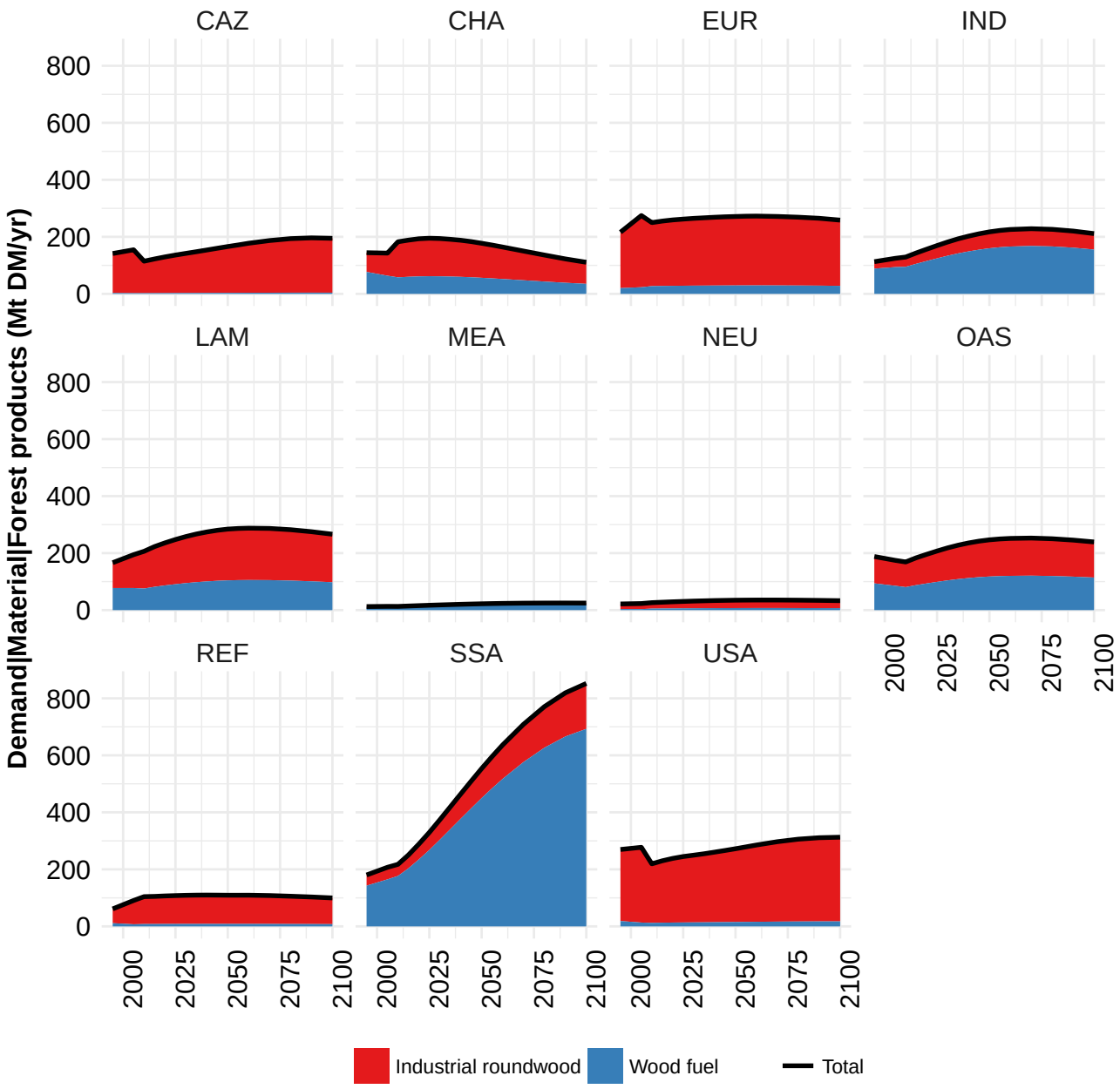
	2055	2060	2070	2080	2090	2100
GLO	1.25	1.25	1.23	1.20	1.15	1.11
CAZ	0.00	0.01	0.01	0.01	0.01	0.01
CHA	0.32	0.30	0.28	0.25	0.23	0.21
EUR	0.11	0.11	0.11	0.11	0.11	0.11
IND	0.20	0.20	0.20	0.20	0.19	0.19
LAM	0.09	0.09	0.09	0.09	0.08	0.08
MEA	0.06	0.06	0.06	0.06	0.07	0.06
NEU	0.08	0.08	0.08	0.08	0.08	0.08
OAS	0.37	0.37	0.37	0.37	0.36	0.35
REF	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.01	0.01	0.01	0.01	0.01	0.01

Table 489: MAgPIE new_input — Demand—Material—Fish (Mt DM/yr) [PART 2/2]

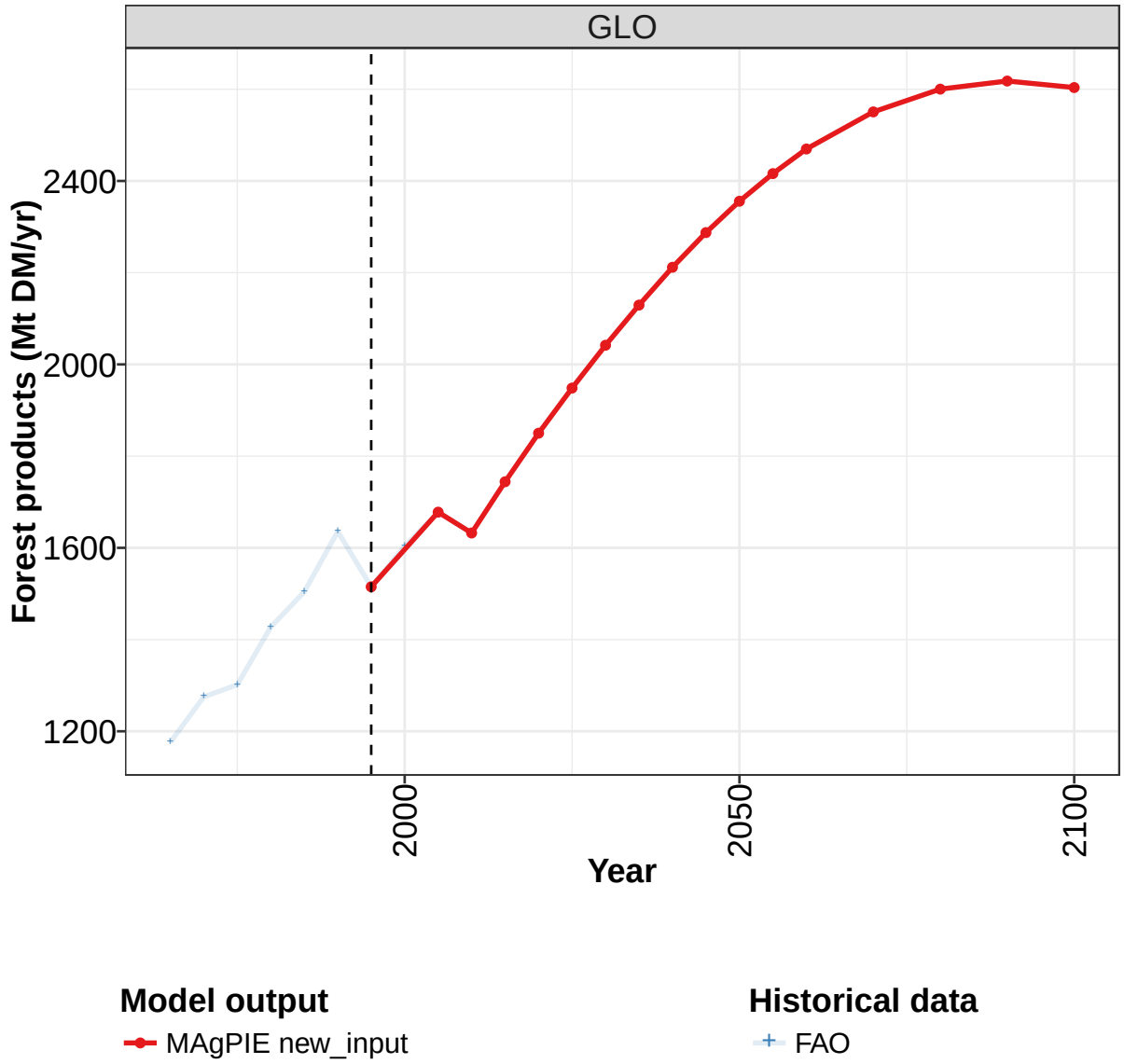
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.24	0.35	0.36	0.35	0.40	0.49	0.94	1.02	0.98	0.99
CAZ	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.00	0.00
CHA	0.00	0.01	0.02	0.01	0.00	0.06	0.39	0.59	0.50	0.34
EUR	0.14	0.16	0.18	0.13	0.21	0.14	0.16	0.09	0.05	0.10
IND	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.03	0.02	0.11
LAM	0.01	0.02	0.03	0.03	0.03	0.05	0.07	0.06	0.03	0.06
MEA	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.03
NEU	0.01	0.02	0.00	0.02	0.02	0.03	0.08	0.09	0.10	0.06
OAS	0.03	0.07	0.06	0.11	0.11	0.12	0.11	0.12	0.24	0.25
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
SSA	0.01	0.02	0.03	0.01	0.01	0.02	0.05	0.00	0.02	0.00
USA	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01

Table 490: FAO — Demand—Material—Fish (Mt DM/yr)


GLO
Demand|Material|Forest products (Mt DM/yr)
2000
1000
0
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Material|Forest products (Mt DM/yr)
0
200
400
600
800
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total

8.4 Forest products



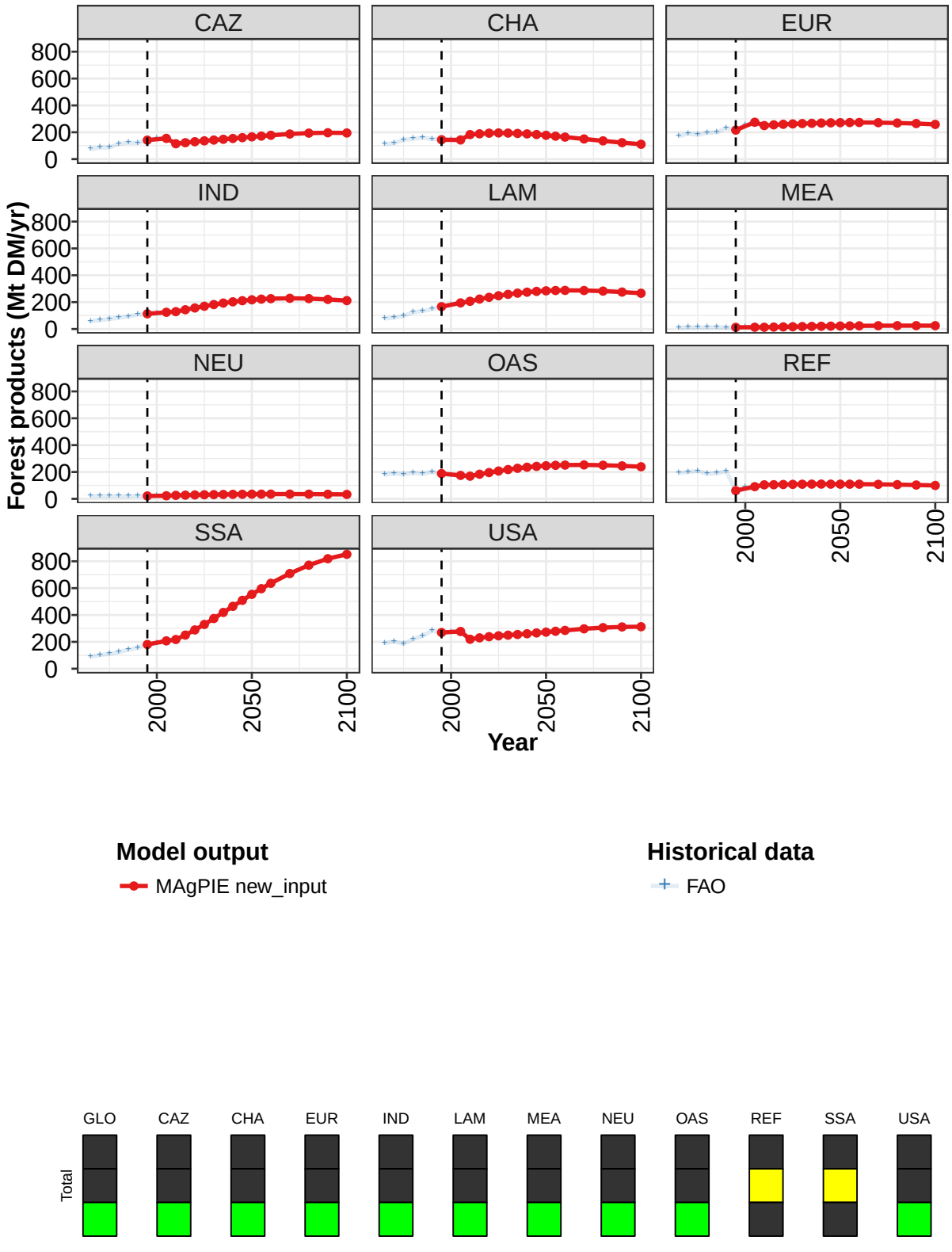


Figure 164: MAgPIE new_input — Demand—Material—Forest products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1515	1678	1632	1744	1850	1948	2042	2129	2212	2287	2356
CAZ	142	155	115	122	130	136	142	148	154	160	166
CHA	144	143	183	189	193	195	194	191	188	183	177
EUR	216	275	250	255	259	262	265	267	269	270	271
IND	113	125	129	143	157	169	182	193	202	211	217
LAM	166	194	206	223	236	248	258	267	274	280	284
MEA	13	13	13	14	16	17	18	19	20	21	22
NEU	22	23	26	28	29	31	32	33	34	34	35
OAS	188	175	169	184	196	207	218	228	236	242	247
REF	61	91	104	105	107	108	109	110	110	110	109
SSA	180	207	218	250	289	330	374	419	464	509	554
USA	270	277	219	230	239	245	250	255	260	266	272

Table 491: MAgPIE new_input — Demand—Material—Forest products (Mt DM/yr) [PART 1/2]

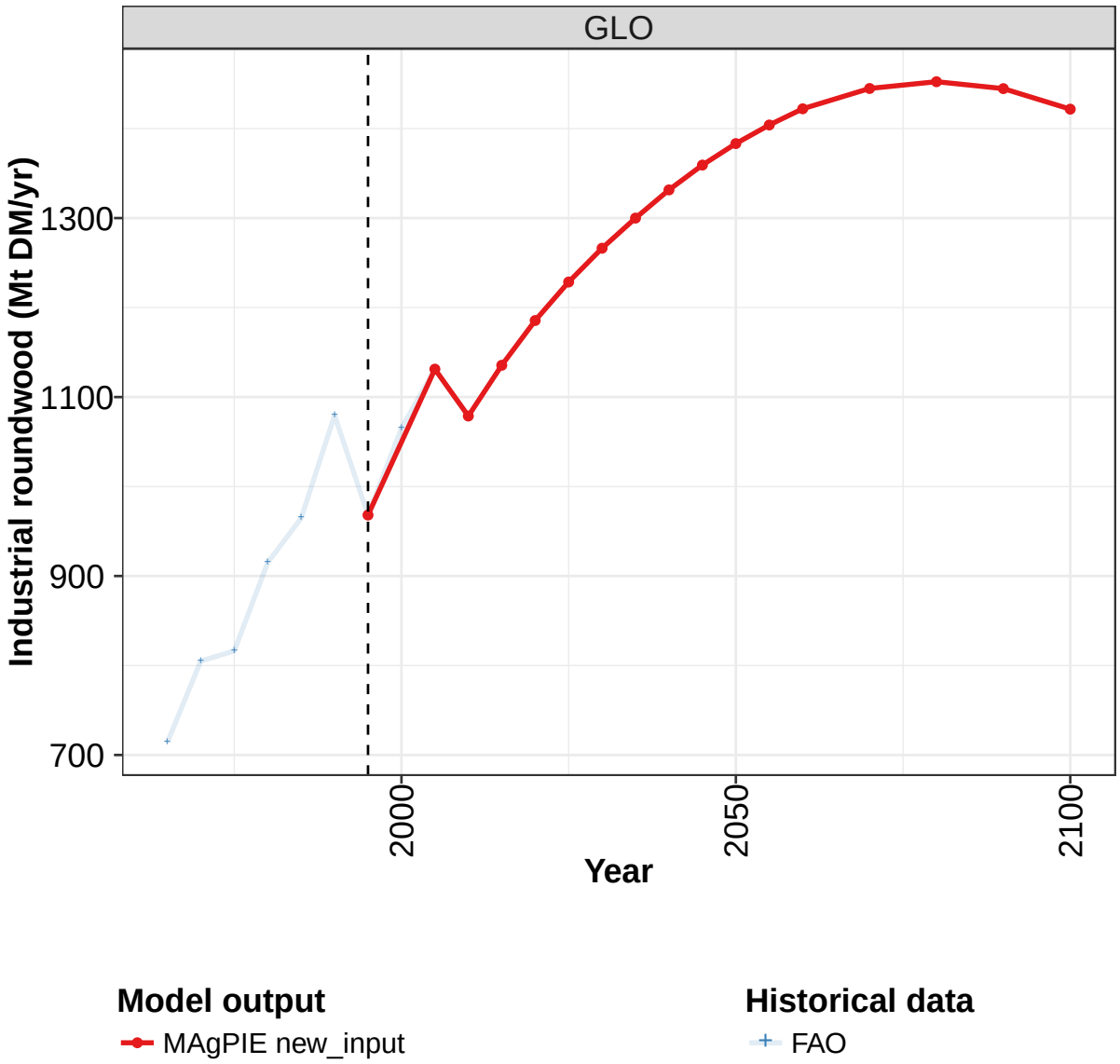
	2055	2060	2070	2080	2090	2100
GLO	2416	2470	2551	2600	2618	2604
CAZ	172	178	187	194	196	195
CHA	171	164	150	136	123	111
EUR	272	273	272	269	265	259
IND	222	226	229	226	220	211
LAM	287	287	287	282	275	266
MEA	23	24	24	25	25	25
NEU	35	35	35	35	34	33
OAS	250	252	253	250	246	239
REF	109	109	108	106	103	100
SSA	596	636	709	771	819	852
USA	279	285	297	306	311	313

Table 492: MAgPIE new_input — Demand—Material—Forest products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1176	1275	1301	1427	1504	1636	1515	1603	1678	1632
CAZ	74	86	87	114	123	120	142	154	155	115
CHA	113	119	144	152	160	150	144	141	143	183
EUR	171	191	180	197	199	233	216	252	275	250
IND	57	66	75	84	94	108	113	113	125	129
LAM	78	86	97	124	134	148	166	181	194	206
MEA	11	11	11	12	13	11	13	13	13	13
NEU	19	22	21	21	20	21	22	24	23	26
OAS	179	190	183	193	186	200	188	178	175	169
REF	193	201	208	187	190	206	61	84	91	104
SSA	89	102	110	124	141	157	180	190	207	218
USA	191	202	186	220	245	282	270	274	277	219

Table 493: FAO — Demand—Material—Forest products (Mt DM/yr)

8.4.1 Industrial roundwood



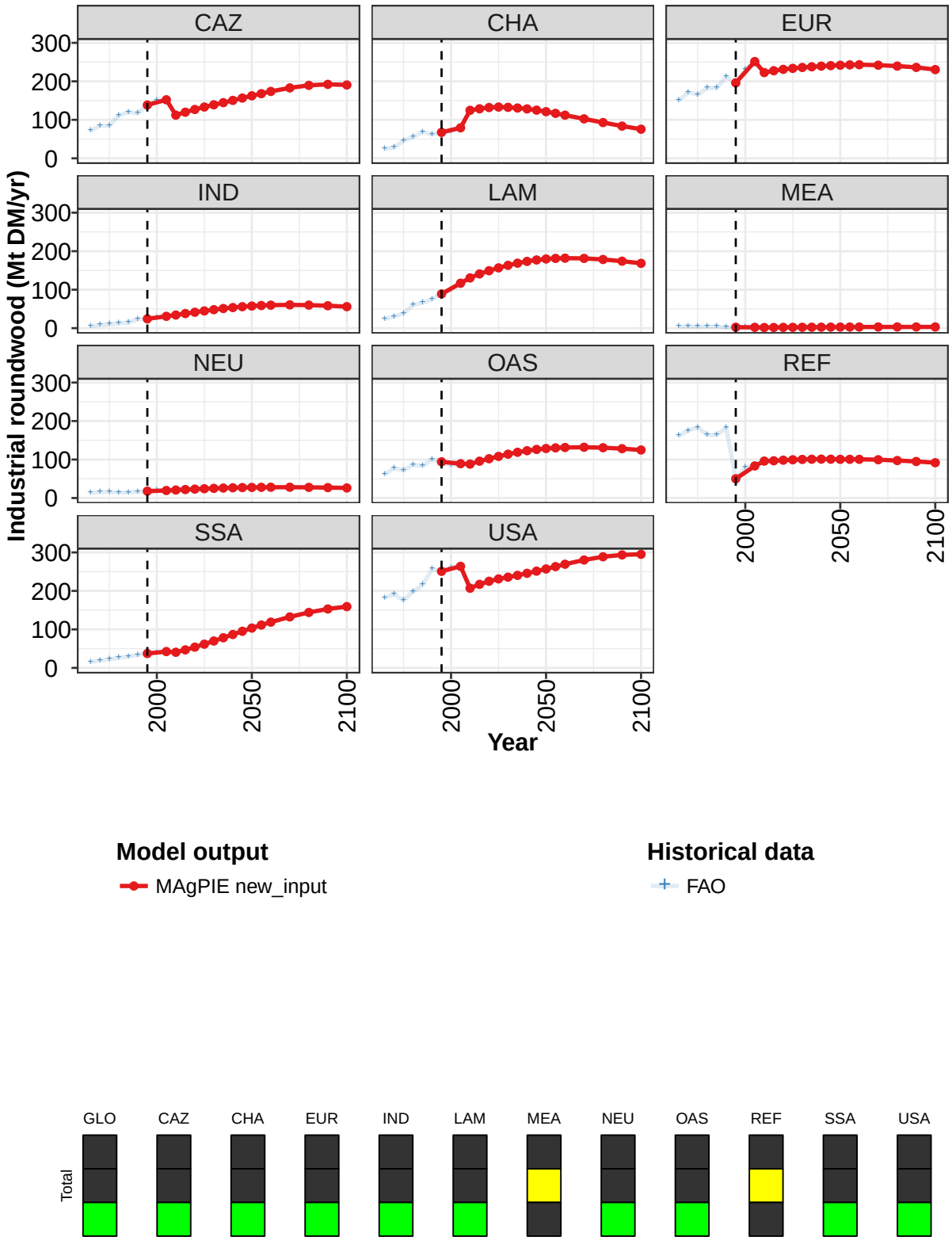


Figure 165: MAgPIE new_input — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	968	1131	1079	1136	1186	1229	1266	1300	1331	1359	1383
CAZ	138	152	112	120	127	133	139	145	150	157	162
CHA	67	79	125	129	132	133	132	131	128	125	121
EUR	196	251	223	228	231	234	236	238	239	241	242
IND	24	31	34	38	41	45	48	51	54	56	58
LAM	89	117	131	141	149	157	163	169	174	177	180
MEA	3	2	2	2	2	2	2	3	3	3	3
NEU	18	20	21	22	23	24	25	26	27	27	28
OAS	94	89	88	96	102	108	114	119	123	126	129
REF	50	83	96	97	98	99	100	101	101	101	101
SSA	37	42	41	47	54	62	70	78	87	95	103
USA	251	264	207	217	225	231	236	240	246	251	257

Table 494: MAgPIE new_input — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr) [PART 1/2]

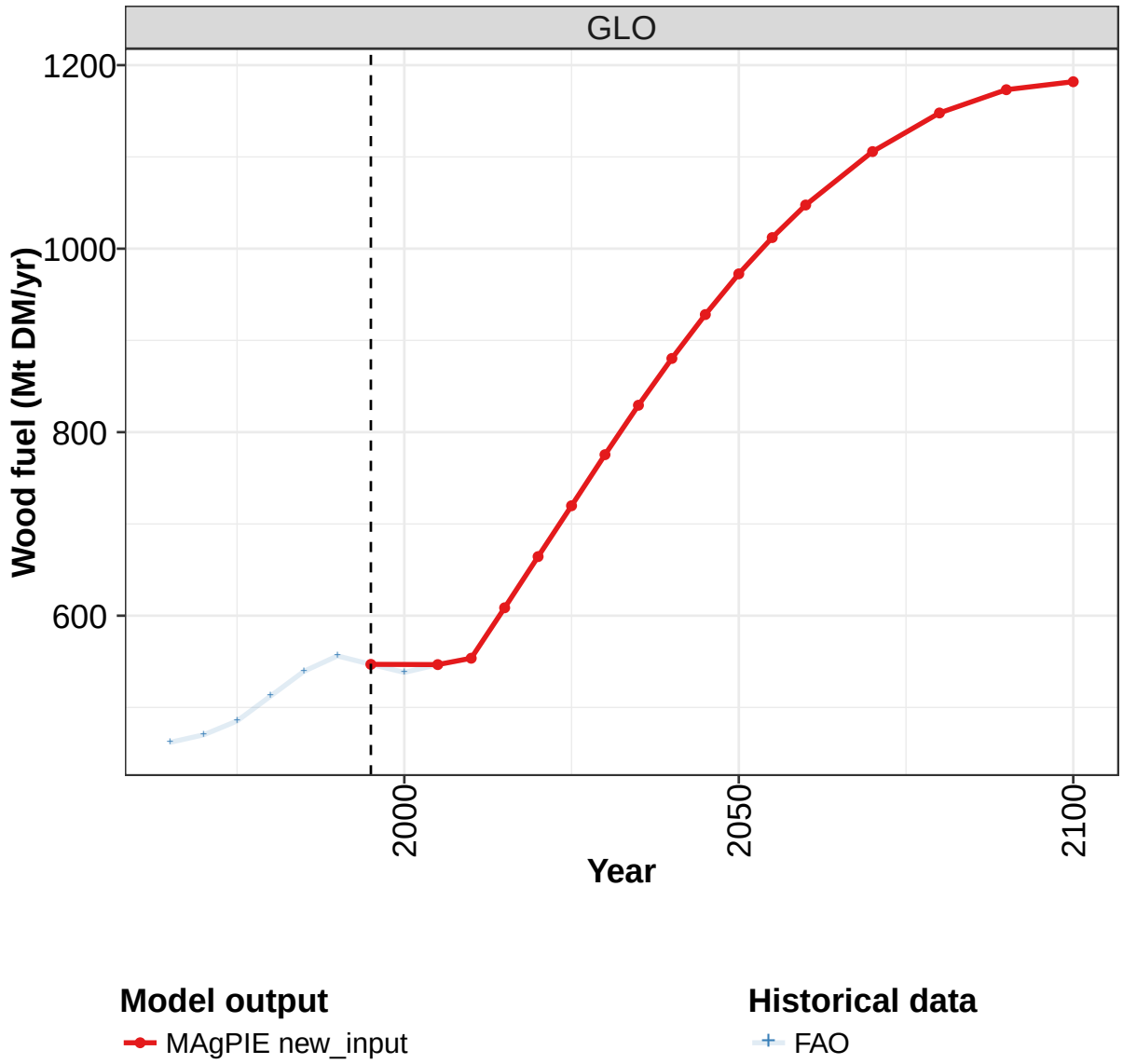
	2055	2060	2070	2080	2090	2100
GLO	1404	1422	1445	1452	1445	1422
CAZ	168	174	183	190	192	191
CHA	117	112	103	93	84	76
EUR	243	243	242	240	236	231
IND	59	60	60	60	58	56
LAM	181	182	181	178	174	168
MEA	3	3	3	3	3	3
NEU	28	28	28	28	27	26
OAS	130	131	132	131	128	125
REF	101	101	100	97	95	92
SSA	111	119	132	144	153	159
USA	263	269	280	289	294	295

Table 495: MAgPIE new_input — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	714	805	816	915	965	1079	968	1065	1131	1079
CAZ	72	84	85	111	120	117	138	151	152	112
CHA	25	28	46	55	69	62	67	71	79	125
EUR	150	171	166	183	183	212	196	230	251	223
IND	5	8	10	12	15	23	24	27	31	34
LAM	24	31	38	60	66	75	89	99	117	131
MEA	4	4	4	4	5	2	3	2	2	2
NEU	13	15	16	14	15	17	18	20	20	21
OAS	62	77	72	86	84	99	94	86	89	88
REF	162	175	184	163	165	182	50	79	83	96
SSA	15	19	22	26	30	34	37	39	42	41
USA	182	191	175	198	215	257	251	260	264	207

Table 496: FAO — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr)

8.4.2 Wood fuel



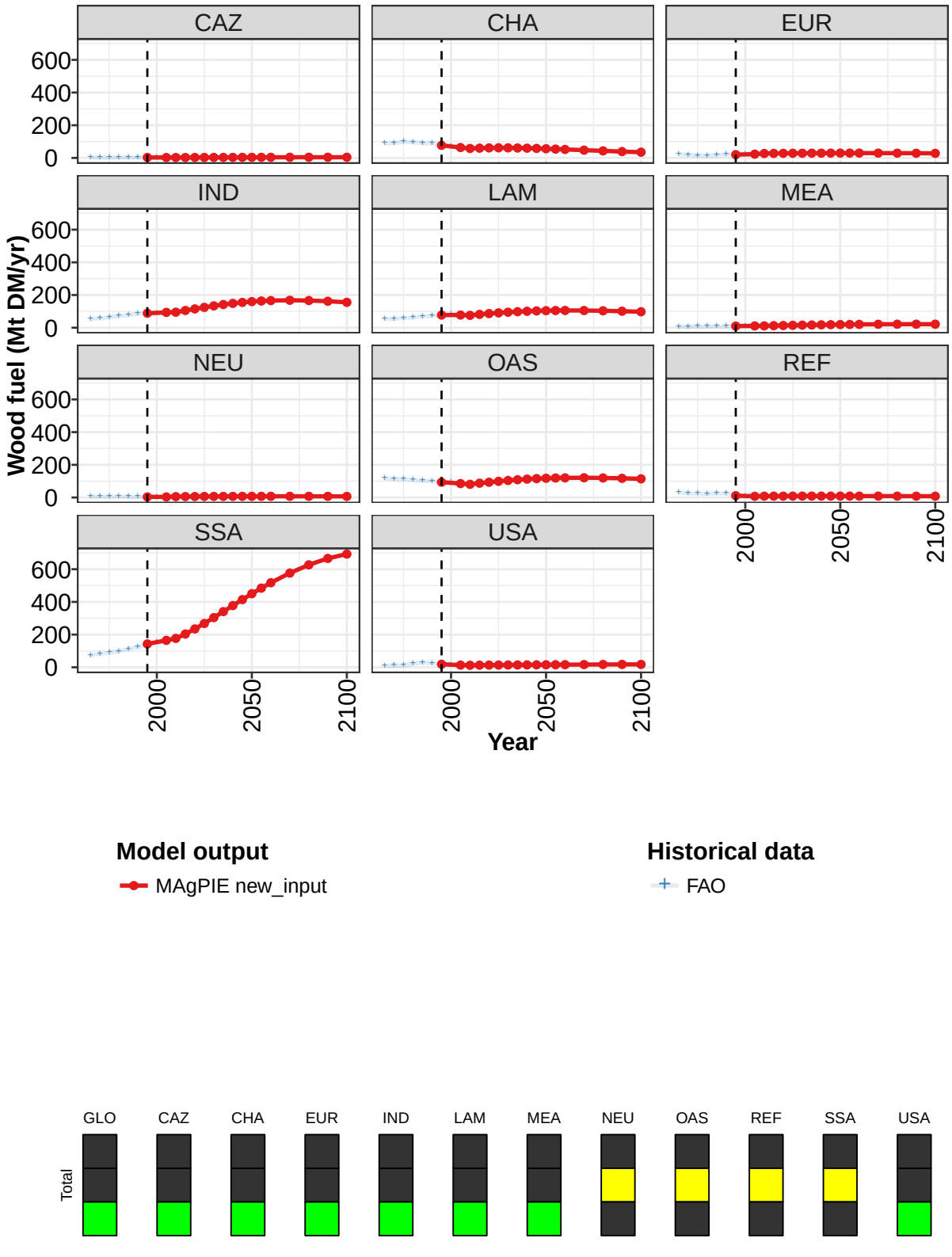


Figure 166: MAgPIE new_input — Demand—Material—Forest products—Wood fuel (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	547	547	554	609	664	720	776	829	880	928	973
CAZ	3	3	2	3	3	3	3	3	3	3	4
CHA	77	64	58	60	61	62	62	61	60	58	56
EUR	20	23	27	28	28	29	29	29	29	29	30
IND	89	94	95	105	115	125	134	142	149	155	160
LAM	77	78	76	82	87	91	95	98	101	103	104
MEA	10	11	11	13	14	15	16	17	18	19	19
NEU	4	4	5	6	6	6	7	7	7	7	7
OAS	94	85	81	88	94	99	104	109	113	116	118
REF	11	7	8	8	9	9	9	9	9	9	9
SSA	143	165	177	204	235	268	304	341	378	414	450
USA	19	13	12	13	13	14	14	14	15	15	15

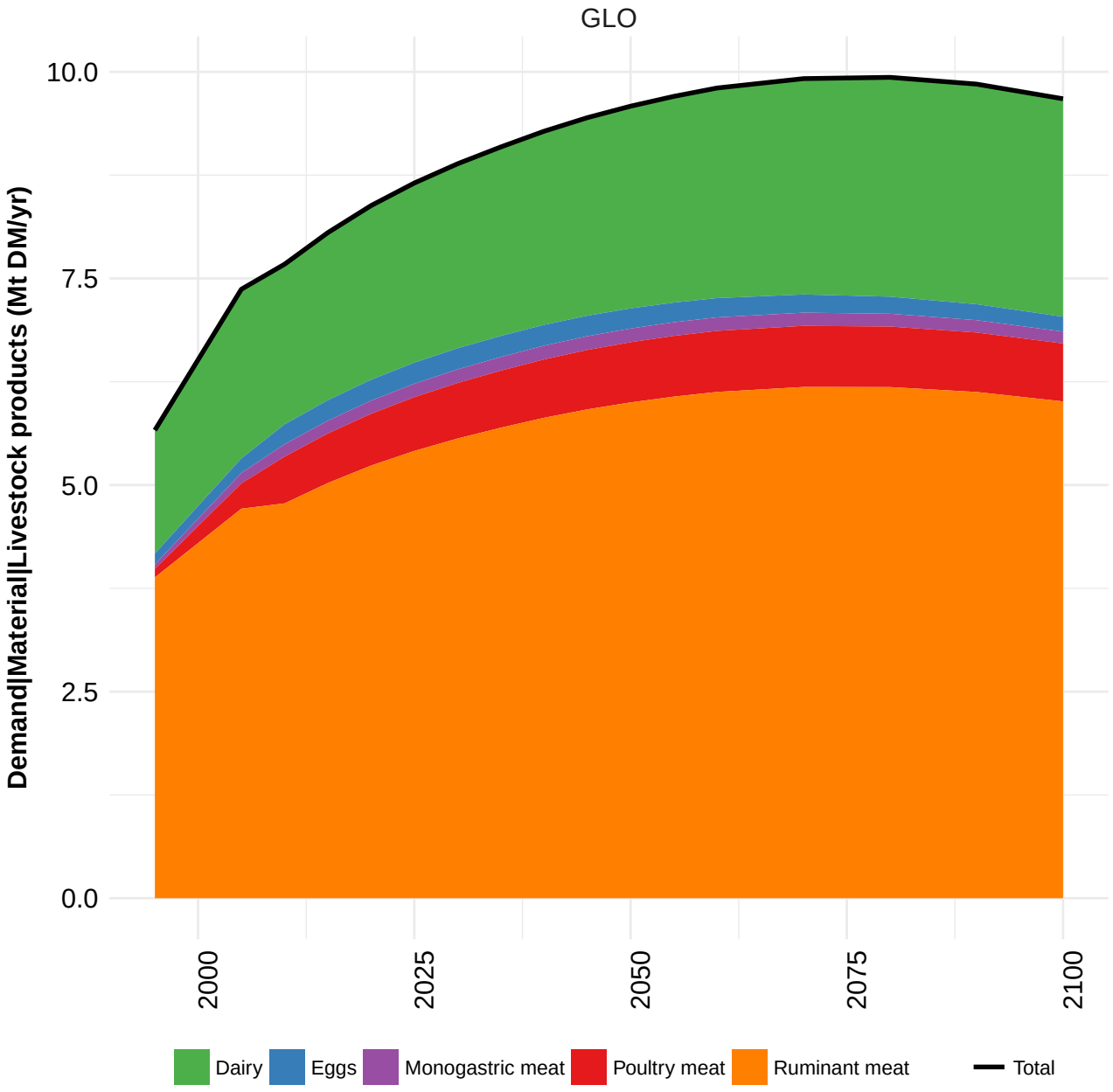
Table 497: MAgPIE new_input — Demand—Material—Forest products—Wood fuel (Mt DM/yr) [PART 1/2]

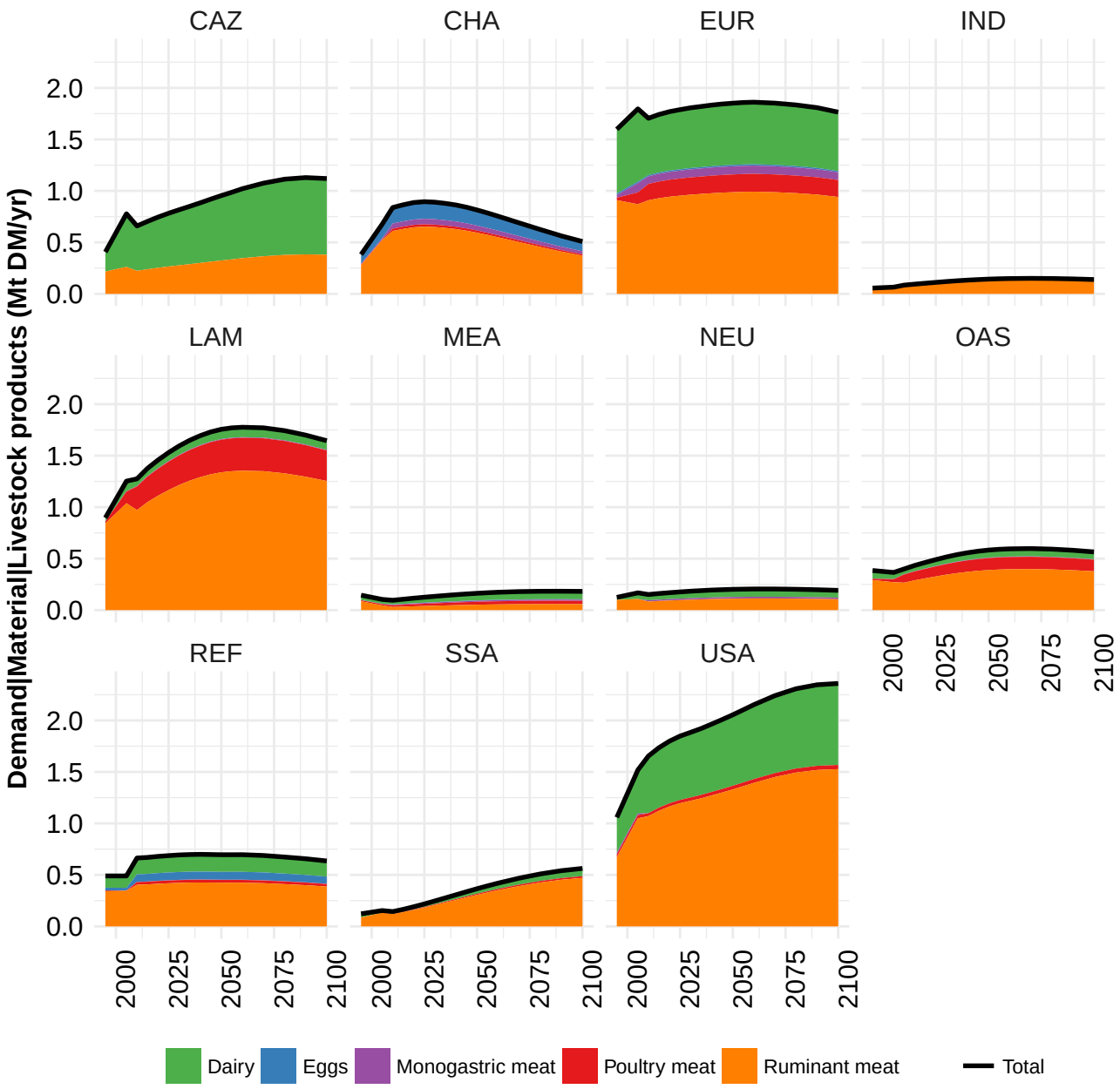
	2055	2060	2070	2080	2090	2100
GLO	1012	1048	1106	1148	1173	1182
CAZ	4	4	4	4	4	4
CHA	54	52	48	43	39	35
EUR	30	30	30	29	29	28
IND	164	166	168	166	162	155
LAM	105	106	105	104	101	98
MEA	20	21	21	22	22	22
NEU	7	7	7	7	7	7
OAS	119	120	121	120	117	114
REF	9	9	9	8	8	8
SSA	485	517	576	627	666	693
USA	16	16	17	17	18	18

Table 498: MAgPIE new_input — Demand—Material—Forest products—Wood fuel (Mt DM/yr) [PART 2/2]

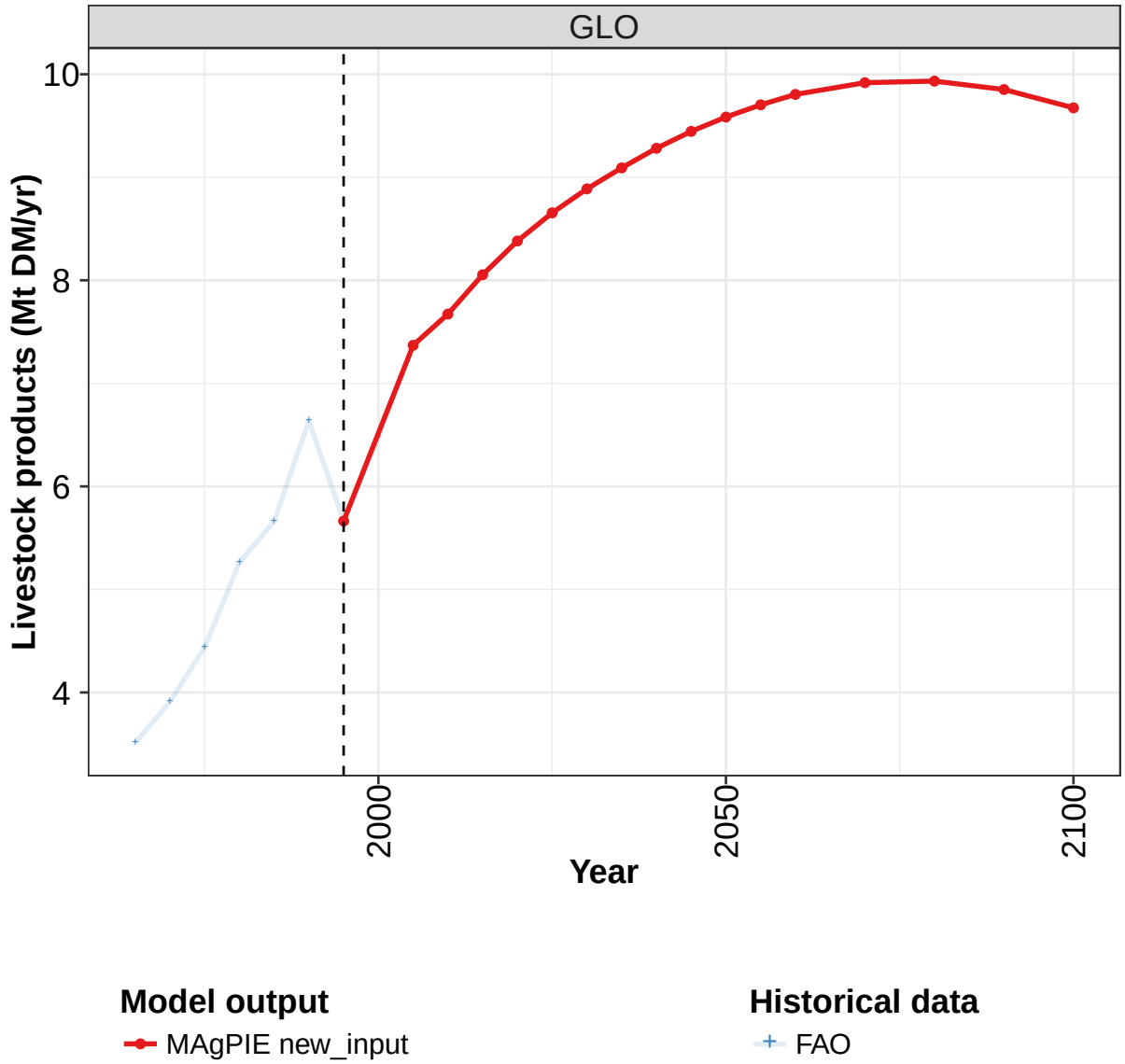
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	462	470	485	512	539	556	547	538	547	554
CAZ	3	2	2	2	3	3	3	3	3	2
CHA	88	91	98	97	91	88	77	70	64	58
EUR	22	19	15	15	17	21	20	21	23	27
IND	52	58	64	71	79	85	89	85	94	95
LAM	54	55	59	64	68	72	77	82	78	76
MEA	7	7	7	8	8	9	10	10	11	11
NEU	6	6	5	7	5	5	4	4	4	5
OAS	117	112	111	106	102	101	94	93	85	81
REF	31	25	24	23	26	24	11	5	7	8
SSA	73	82	88	98	111	123	143	151	165	177
USA	9	11	11	22	30	25	19	14	13	12

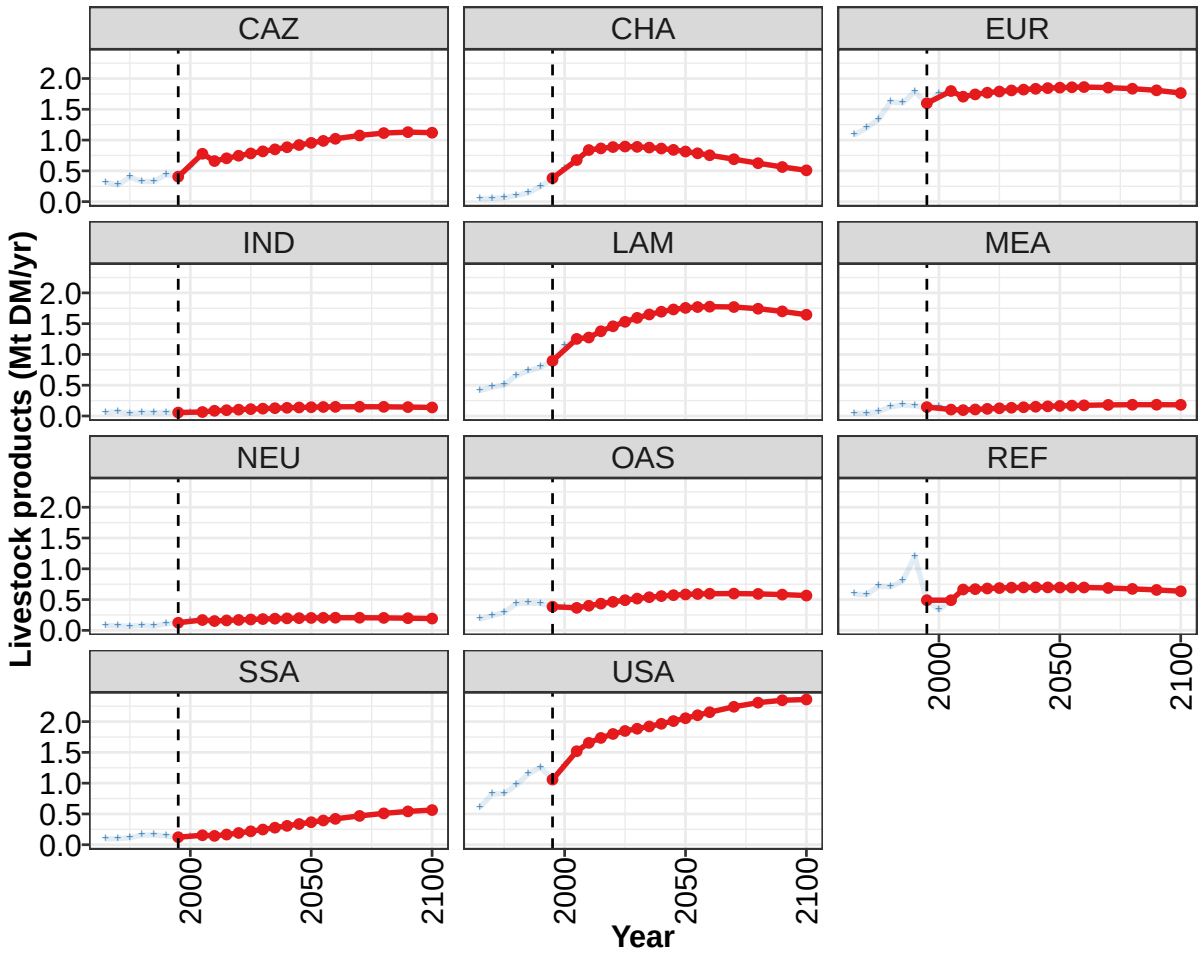
Table 499: FAO — Demand—Material—Forest products—Wood fuel (Mt DM/yr)


GLO
Demand|Material|Livestock products (Mt DM/yr)
10.0
7.5
5.0
2.5
0.0
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Material|Livestock products (Mt DM/yr)
0.0
0.5
1.0
1.5
2.0
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total

8.5 Livestock products





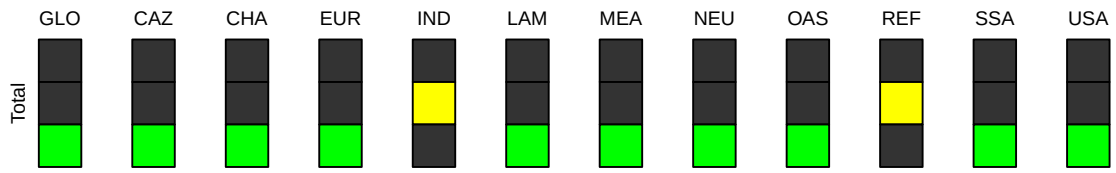


Figure 167: MAgPIE new_input — Demand—Material—Livestock products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	5.66	7.37	7.67	8.05	8.38	8.65	8.89	9.09	9.28	9.45	9.58
CAZ	0.41	0.78	0.66	0.70	0.75	0.78	0.82	0.85	0.88	0.92	0.95
CHA	0.38	0.68	0.84	0.87	0.89	0.90	0.89	0.88	0.86	0.84	0.81
EUR	1.60	1.80	1.71	1.74	1.77	1.79	1.81	1.82	1.83	1.84	1.85
IND	0.06	0.07	0.09	0.09	0.10	0.11	0.12	0.13	0.13	0.14	0.14
LAM	0.90	1.25	1.27	1.38	1.46	1.53	1.59	1.65	1.69	1.73	1.76
MEA	0.15	0.10	0.10	0.11	0.12	0.13	0.13	0.14	0.15	0.16	0.16
NEU	0.12	0.17	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20
OAS	0.38	0.37	0.40	0.43	0.46	0.49	0.52	0.54	0.56	0.57	0.58
REF	0.49	0.49	0.66	0.67	0.68	0.69	0.69	0.70	0.70	0.70	0.70
SSA	0.12	0.15	0.14	0.17	0.19	0.22	0.25	0.28	0.31	0.34	0.37
USA	1.06	1.52	1.65	1.74	1.80	1.85	1.88	1.92	1.96	2.01	2.05

Table 500: MAgPIE new_input — Demand—Material—Livestock products (Mt DM/yr) [PART 1/2]

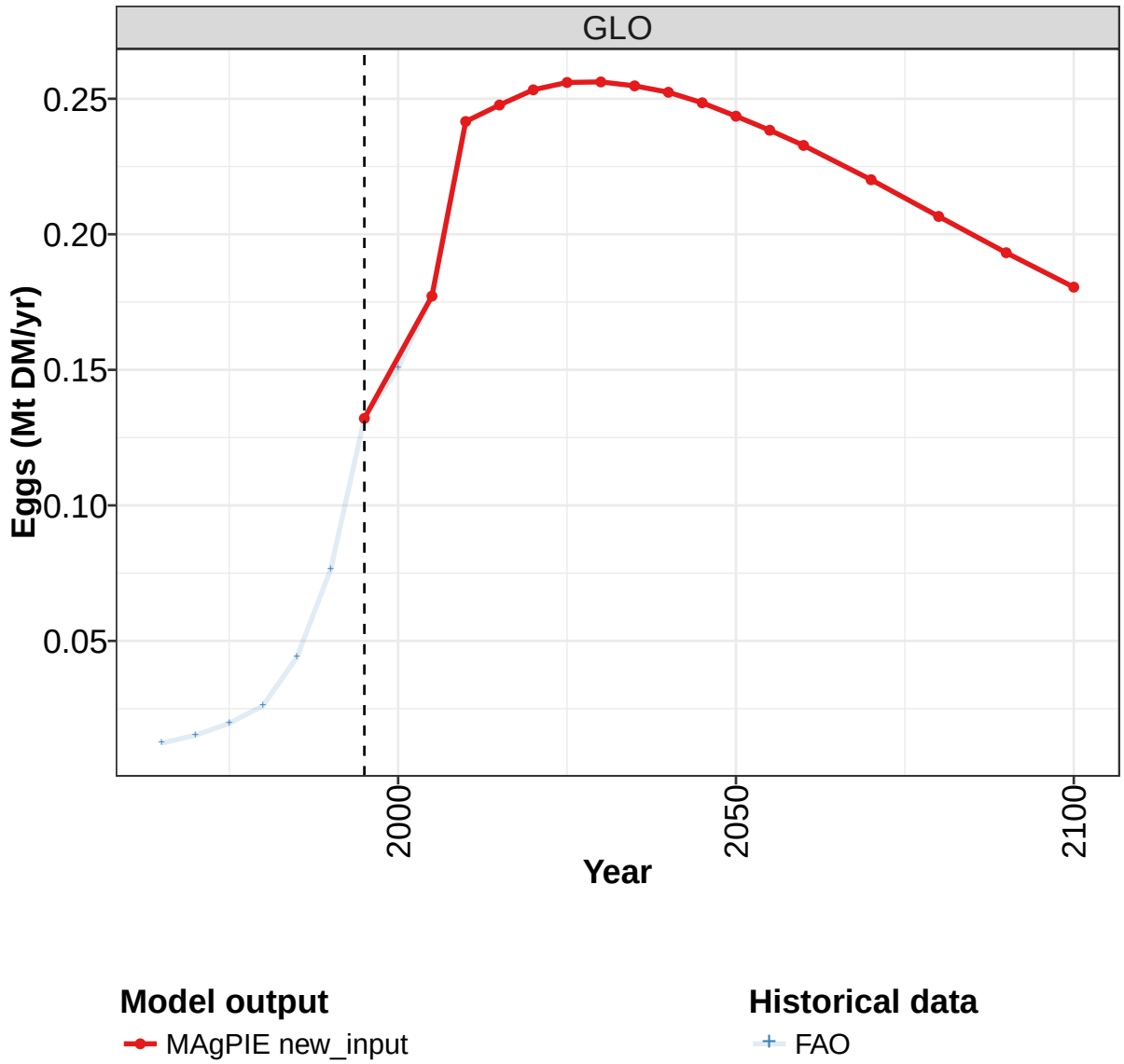
	2055	2060	2070	2080	2090	2100
GLO	9.70	9.80	9.92	9.93	9.85	9.67
CAZ	0.99	1.02	1.08	1.11	1.13	1.12
CHA	0.79	0.75	0.69	0.62	0.56	0.51
EUR	1.86	1.86	1.85	1.83	1.81	1.76
IND	0.15	0.15	0.15	0.15	0.15	0.14
LAM	1.77	1.78	1.77	1.74	1.70	1.65
MEA	0.17	0.17	0.18	0.18	0.18	0.18
NEU	0.20	0.21	0.21	0.20	0.20	0.19
OAS	0.59	0.60	0.60	0.59	0.58	0.57
REF	0.70	0.70	0.69	0.67	0.66	0.64
SSA	0.39	0.42	0.47	0.51	0.54	0.56
USA	2.10	2.15	2.24	2.31	2.35	2.36

Table 501: MAgPIE new_input — Demand—Material—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.51	3.91	4.44	5.26	5.66	6.63	5.66	6.47	7.37	7.67
CAZ	0.31	0.27	0.40	0.33	0.33	0.44	0.41	0.56	0.78	0.66
CHA	0.05	0.05	0.06	0.10	0.14	0.25	0.38	0.53	0.68	0.84
EUR	1.08	1.19	1.34	1.62	1.60	1.79	1.60	1.75	1.80	1.71
IND	0.06	0.07	0.04	0.06	0.05	0.06	0.06	0.06	0.07	0.09
LAM	0.42	0.47	0.50	0.66	0.73	0.79	0.90	1.14	1.25	1.27
MEA	0.04	0.04	0.07	0.15	0.18	0.16	0.15	0.16	0.10	0.10
NEU	0.08	0.07	0.07	0.08	0.07	0.11	0.12	0.16	0.17	0.15
OAS	0.18	0.24	0.29	0.43	0.44	0.44	0.38	0.38	0.37	0.40
REF	0.59	0.58	0.72	0.71	0.80	1.20	0.49	0.33	0.49	0.66
SSA	0.09	0.10	0.11	0.16	0.16	0.14	0.12	0.13	0.15	0.14
USA	0.61	0.82	0.83	0.97	1.15	1.26	1.06	1.28	1.52	1.65

Table 502: FAO — Demand—Material—Livestock products (Mt DM/yr)

8.5.1 Eggs


GLO
Eggs (Mt DM/yr)
0.25
0.20
0.15
0.10
0.05
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

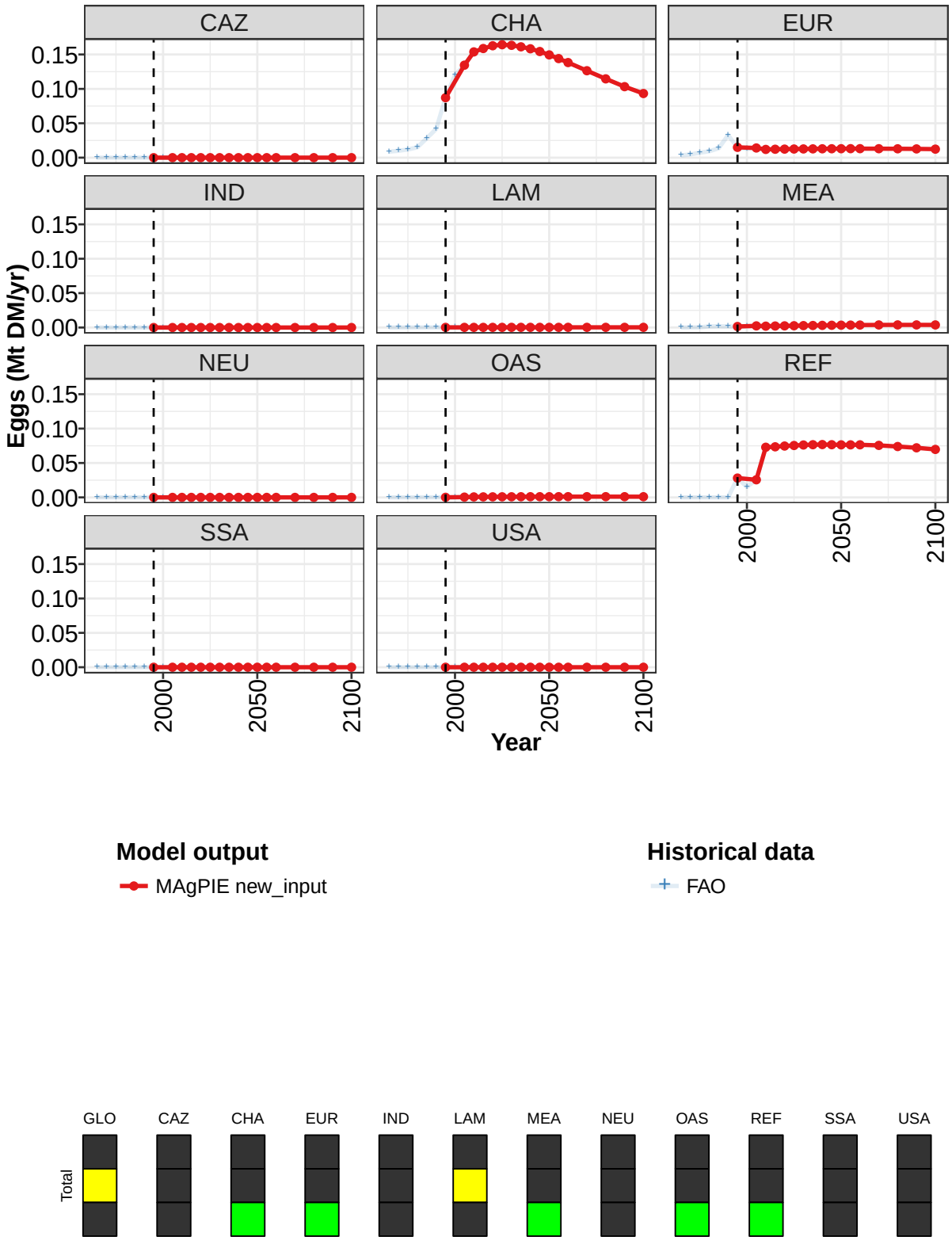


Figure 168: MAgPIE new_input — Demand—Material—Livestock products—Eggs (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.132	0.177	0.242	0.248	0.253	0.256	0.256	0.255	0.252	0.249	0.244
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.087	0.135	0.154	0.159	0.163	0.164	0.163	0.161	0.158	0.154	0.149
EUR	0.015	0.014	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
REF	0.028	0.026	0.073	0.074	0.075	0.075	0.076	0.077	0.077	0.077	0.076
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 503: MAgPIE new_input — Demand—Material—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

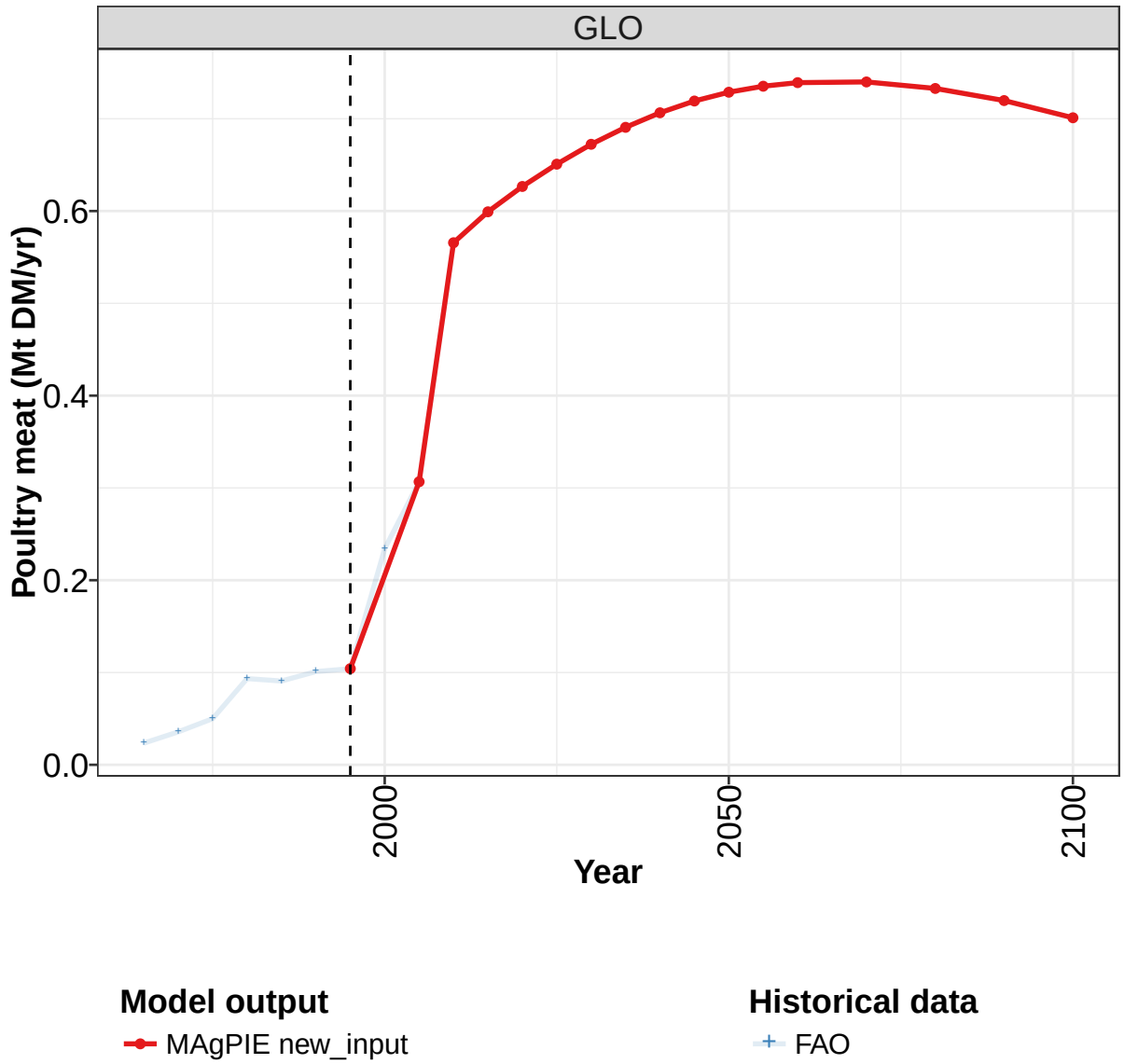
	2055	2060	2070	2080	2090	2100
GLO	0.238	0.233	0.220	0.207	0.193	0.181
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.144	0.138	0.126	0.115	0.103	0.093
EUR	0.013	0.013	0.013	0.013	0.013	0.012
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.004	0.004	0.004	0.004	0.004	0.004
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.001	0.001	0.001	0.001	0.001	0.001
REF	0.076	0.076	0.076	0.074	0.072	0.070
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

Table 504: MAgPIE new_input — Demand—Material—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.012	0.015	0.020	0.026	0.044	0.076	0.132	0.151	0.177	0.242
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.009	0.010	0.012	0.015	0.028	0.042	0.087	0.120	0.135	0.154
EUR	0.003	0.005	0.007	0.009	0.014	0.033	0.015	0.013	0.014	0.012
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.015	0.026	0.073
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 505: FAO — Demand—Material—Livestock products—Eggs (Mt DM/yr)

8.5.2 Poultry meat



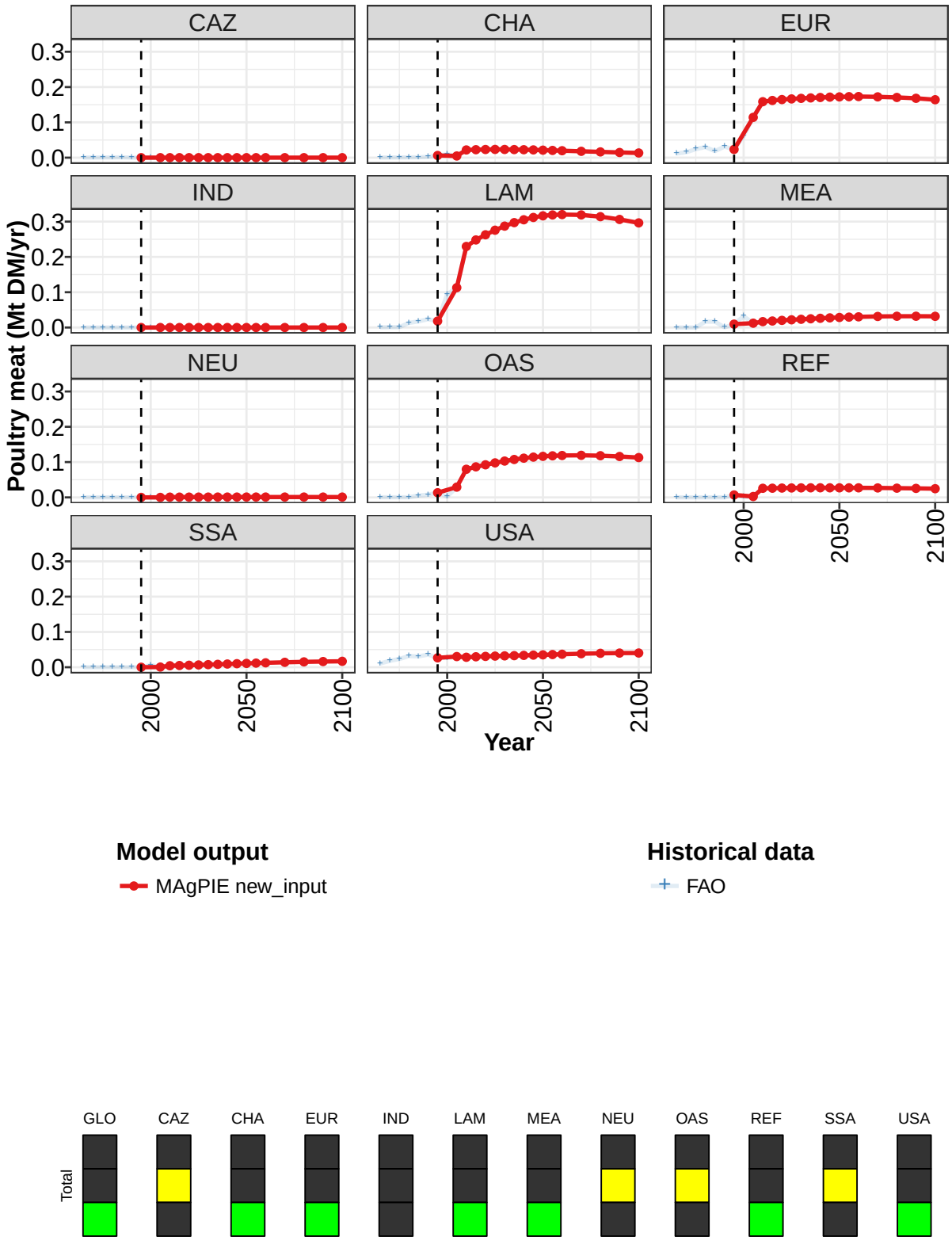


Figure 169: MAgPIE new_input — Demand—Material—Livestock products—Poultry meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.104	0.307	0.566	0.599	0.627	0.651	0.672	0.691	0.706	0.719	0.729
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.006	0.005	0.022	0.023	0.023	0.023	0.023	0.023	0.023	0.022	0.021
EUR	0.023	0.114	0.159	0.162	0.165	0.166	0.168	0.169	0.171	0.171	0.172
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.018	0.113	0.230	0.248	0.263	0.276	0.287	0.297	0.305	0.312	0.316
MEA	0.010	0.012	0.017	0.018	0.020	0.022	0.023	0.025	0.026	0.027	0.029
NEU	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.013	0.029	0.080	0.087	0.092	0.098	0.103	0.107	0.111	0.114	0.116
REF	0.007	0.003	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.027	0.027
SSA	0.000	0.001	0.004	0.005	0.006	0.007	0.007	0.008	0.009	0.010	0.011
USA	0.027	0.030	0.028	0.030	0.031	0.032	0.032	0.033	0.034	0.034	0.035

Table 506: MAgPIE new_input — Demand—Material—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

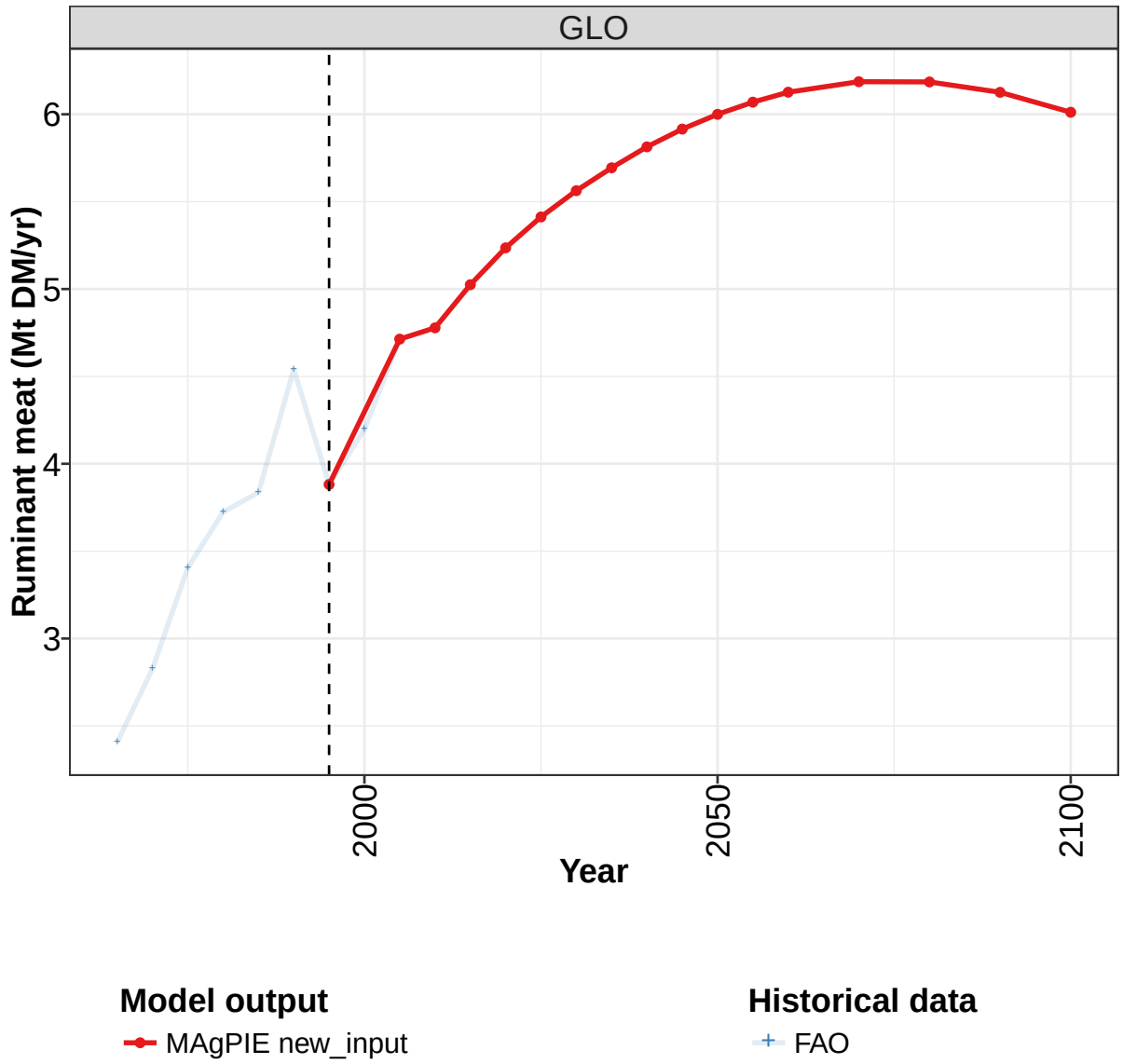
	2055	2060	2070	2080	2090	2100
GLO	0.735	0.739	0.740	0.733	0.720	0.701
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.021	0.020	0.018	0.016	0.015	0.013
EUR	0.173	0.173	0.172	0.171	0.168	0.164
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.319	0.320	0.319	0.314	0.306	0.296
MEA	0.029	0.030	0.031	0.032	0.032	0.032
NEU	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.118	0.119	0.119	0.118	0.116	0.113
REF	0.027	0.027	0.027	0.026	0.026	0.025
SSA	0.012	0.013	0.014	0.015	0.016	0.017
USA	0.036	0.037	0.038	0.039	0.040	0.040

Table 507: MAgPIE new_input — Demand—Material—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.024	0.036	0.050	0.093	0.091	0.101	0.104	0.234	0.307	0.566
CAZ	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.001	0.001	0.001	0.001	0.002	0.006	0.010	0.005	0.022
EUR	0.012	0.015	0.024	0.030	0.019	0.031	0.023	0.062	0.114	0.159
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.001	0.001	0.001	0.013	0.017	0.024	0.018	0.094	0.113	0.230
MEA	0.000	0.000	0.000	0.017	0.017	0.001	0.010	0.032	0.012	0.017
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
OAS	0.000	0.000	0.000	0.000	0.005	0.007	0.013	0.003	0.029	0.080
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.002	0.003	0.026
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.001	0.004
USA	0.011	0.018	0.023	0.032	0.031	0.036	0.027	0.026	0.030	0.028

Table 508: FAO — Demand—Material—Livestock products—Poultry meat (Mt DM/yr)

8.5.3 Ruminant meat



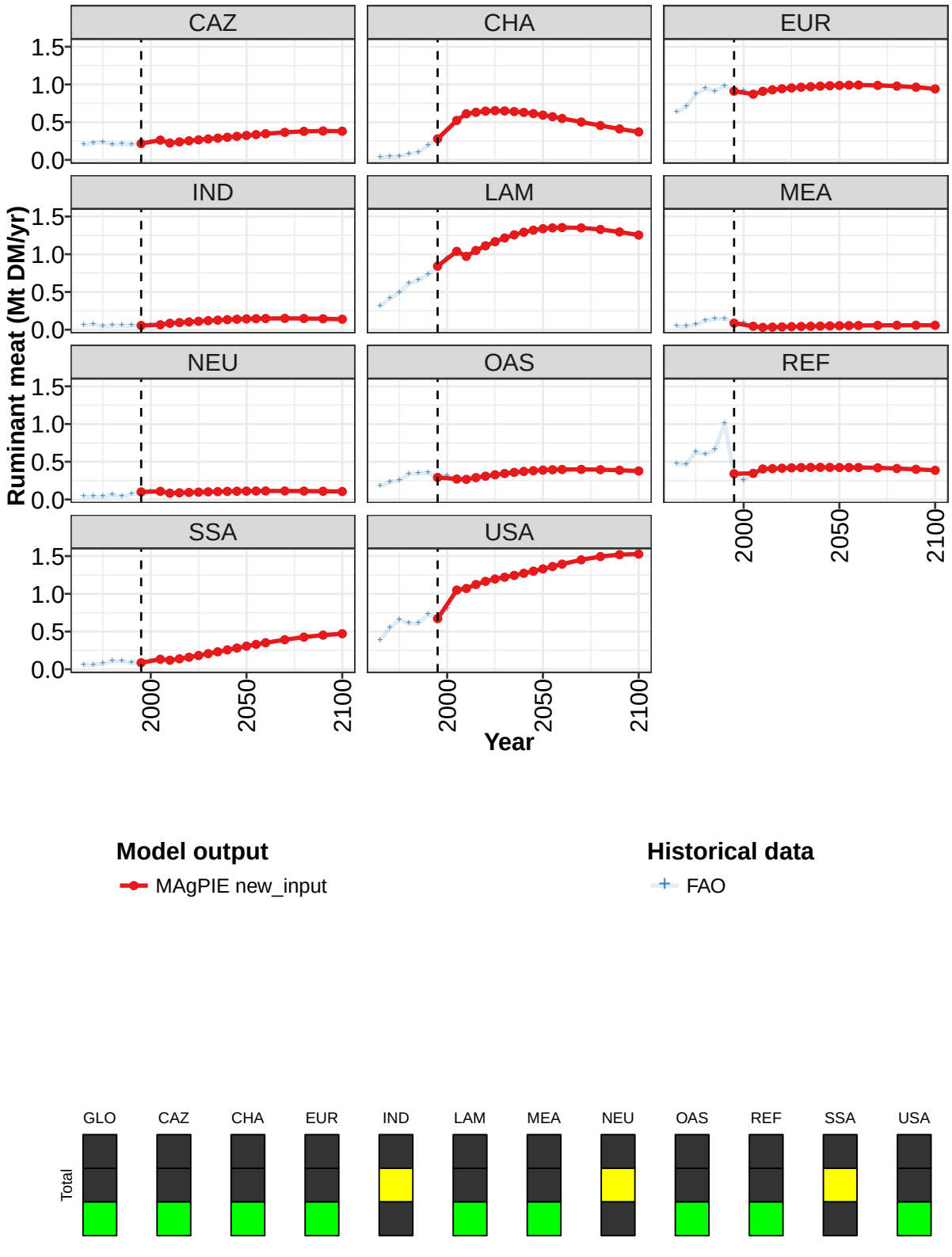


Figure 170: MAgPIE new_input — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.88	4.71	4.78	5.02	5.24	5.41	5.56	5.69	5.81	5.92	6.00
CAZ	0.22	0.26	0.22	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32
CHA	0.28	0.52	0.61	0.63	0.65	0.65	0.65	0.64	0.63	0.61	0.59
EUR	0.91	0.87	0.91	0.93	0.94	0.95	0.96	0.97	0.98	0.98	0.99
IND	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.13	0.14	0.14
LAM	0.84	1.04	0.97	1.05	1.11	1.17	1.22	1.26	1.29	1.32	1.34
MEA	0.09	0.05	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.05
NEU	0.10	0.11	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11
OAS	0.29	0.27	0.27	0.29	0.31	0.33	0.34	0.36	0.37	0.38	0.39
REF	0.34	0.35	0.40	0.41	0.41	0.42	0.42	0.43	0.43	0.43	0.42
SSA	0.09	0.13	0.12	0.14	0.16	0.18	0.21	0.23	0.26	0.28	0.31
USA	0.67	1.05	1.07	1.12	1.16	1.20	1.22	1.24	1.27	1.30	1.33

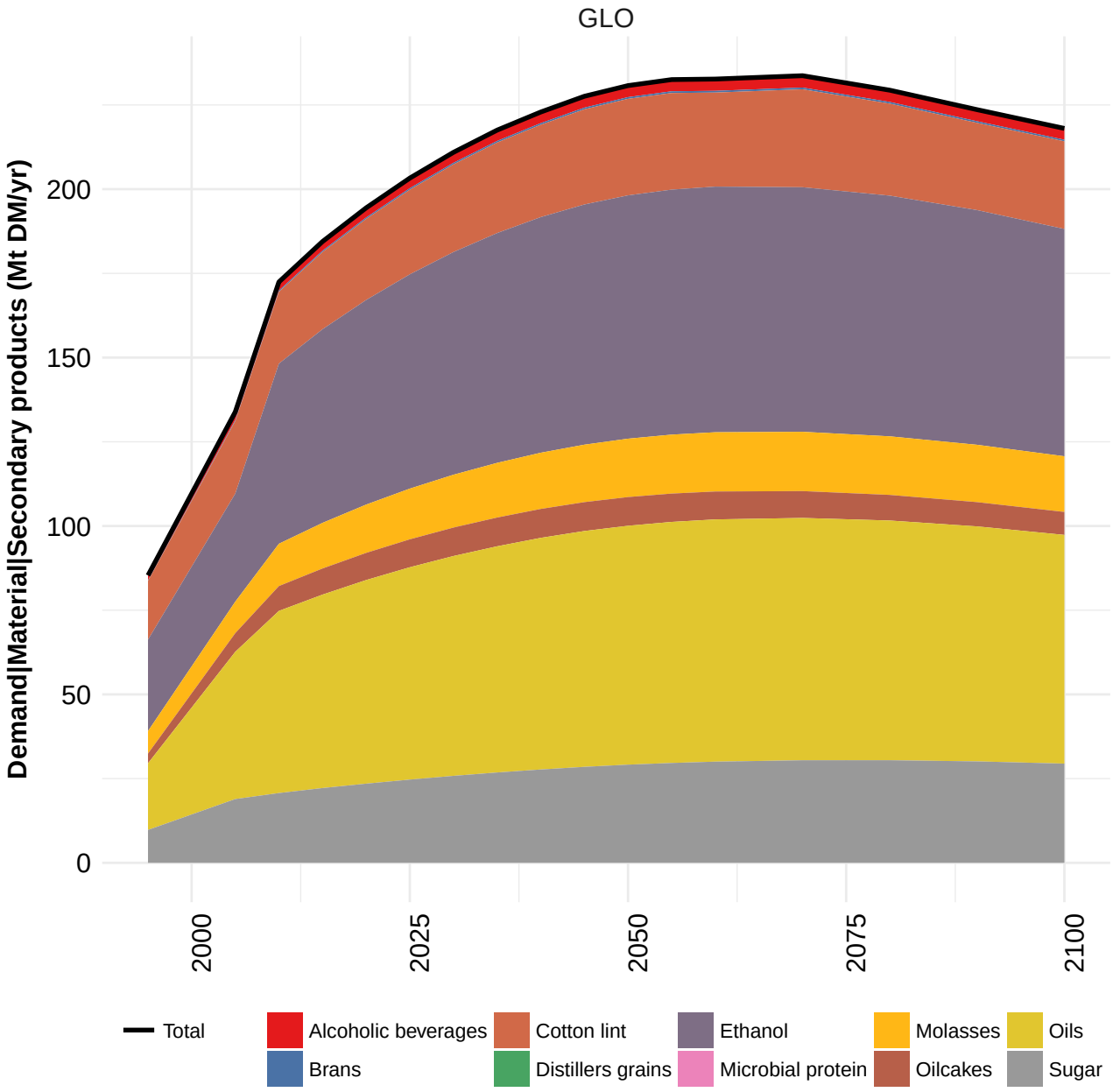
Table 509: MAgPIE new_input — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

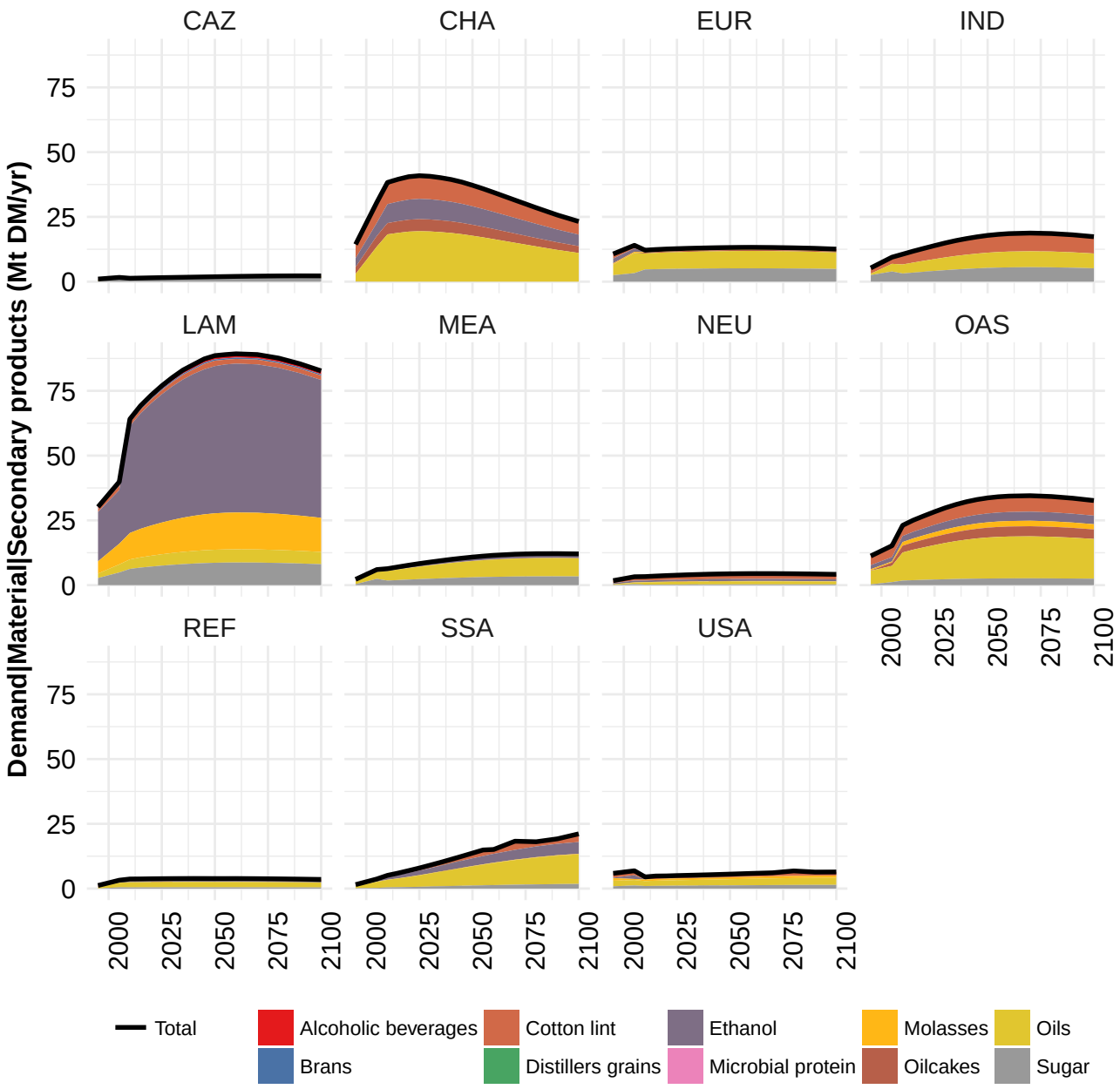
	2055	2060	2070	2080	2090	2100
GLO	6.07	6.13	6.19	6.19	6.13	6.01
CAZ	0.34	0.35	0.37	0.38	0.38	0.38
CHA	0.57	0.55	0.50	0.46	0.41	0.37
EUR	0.99	0.99	0.99	0.98	0.96	0.94
IND	0.15	0.15	0.15	0.15	0.14	0.14
LAM	1.35	1.35	1.35	1.33	1.30	1.25
MEA	0.05	0.06	0.06	0.06	0.06	0.06
NEU	0.11	0.11	0.11	0.11	0.11	0.11
OAS	0.39	0.40	0.40	0.40	0.39	0.38
REF	0.42	0.42	0.42	0.41	0.40	0.39
SSA	0.33	0.35	0.39	0.43	0.45	0.47
USA	1.36	1.39	1.45	1.49	1.52	1.53

Table 510: MAgPIE new_input — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

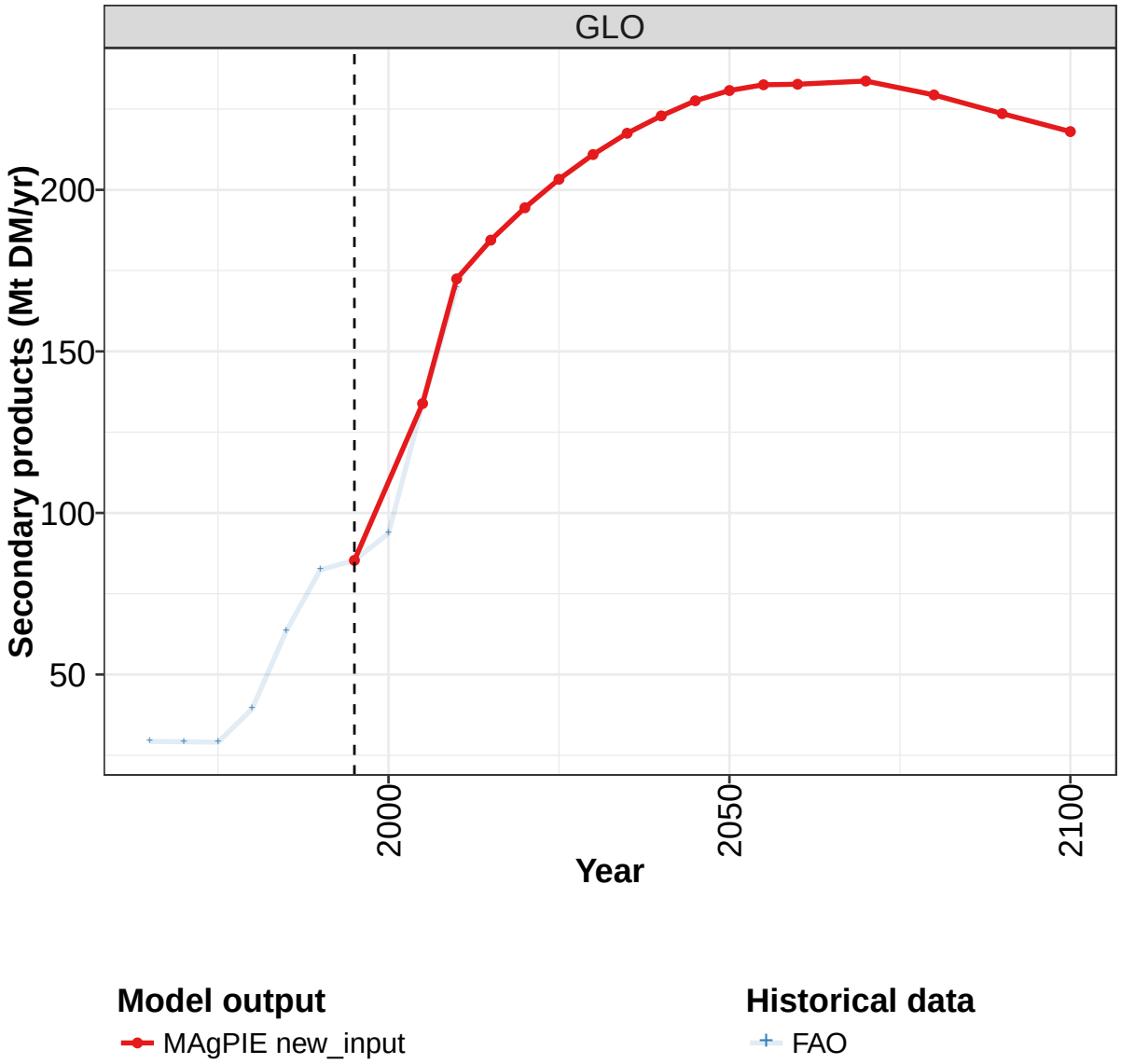
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.41	2.83	3.41	3.72	3.84	4.54	3.88	4.20	4.71	4.78
CAZ	0.20	0.23	0.24	0.20	0.21	0.20	0.22	0.23	0.26	0.22
CHA	0.04	0.04	0.05	0.08	0.10	0.19	0.28	0.39	0.52	0.61
EUR	0.63	0.70	0.87	0.95	0.91	0.98	0.91	0.91	0.87	0.91
IND	0.06	0.07	0.04	0.06	0.05	0.06	0.06	0.06	0.07	0.08
LAM	0.31	0.41	0.49	0.61	0.66	0.73	0.84	0.95	1.04	0.97
MEA	0.04	0.04	0.07	0.12	0.15	0.14	0.09	0.09	0.05	0.03
NEU	0.04	0.04	0.04	0.06	0.04	0.07	0.10	0.10	0.11	0.08
OAS	0.18	0.23	0.25	0.34	0.35	0.35	0.29	0.31	0.27	0.27
REF	0.47	0.46	0.63	0.60	0.66	1.01	0.34	0.25	0.35	0.40
SSA	0.06	0.06	0.07	0.11	0.11	0.09	0.09	0.10	0.13	0.12
USA	0.38	0.54	0.66	0.61	0.61	0.73	0.67	0.80	1.05	1.07

Table 511: FAO — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr)


GLO
Demand|Material|Secondary products (Mt DM/yr)
200
150
100
50
0
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Material|Secondary products (Mt DM/yr)
0
25
50
75
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

8.6 Secondary products



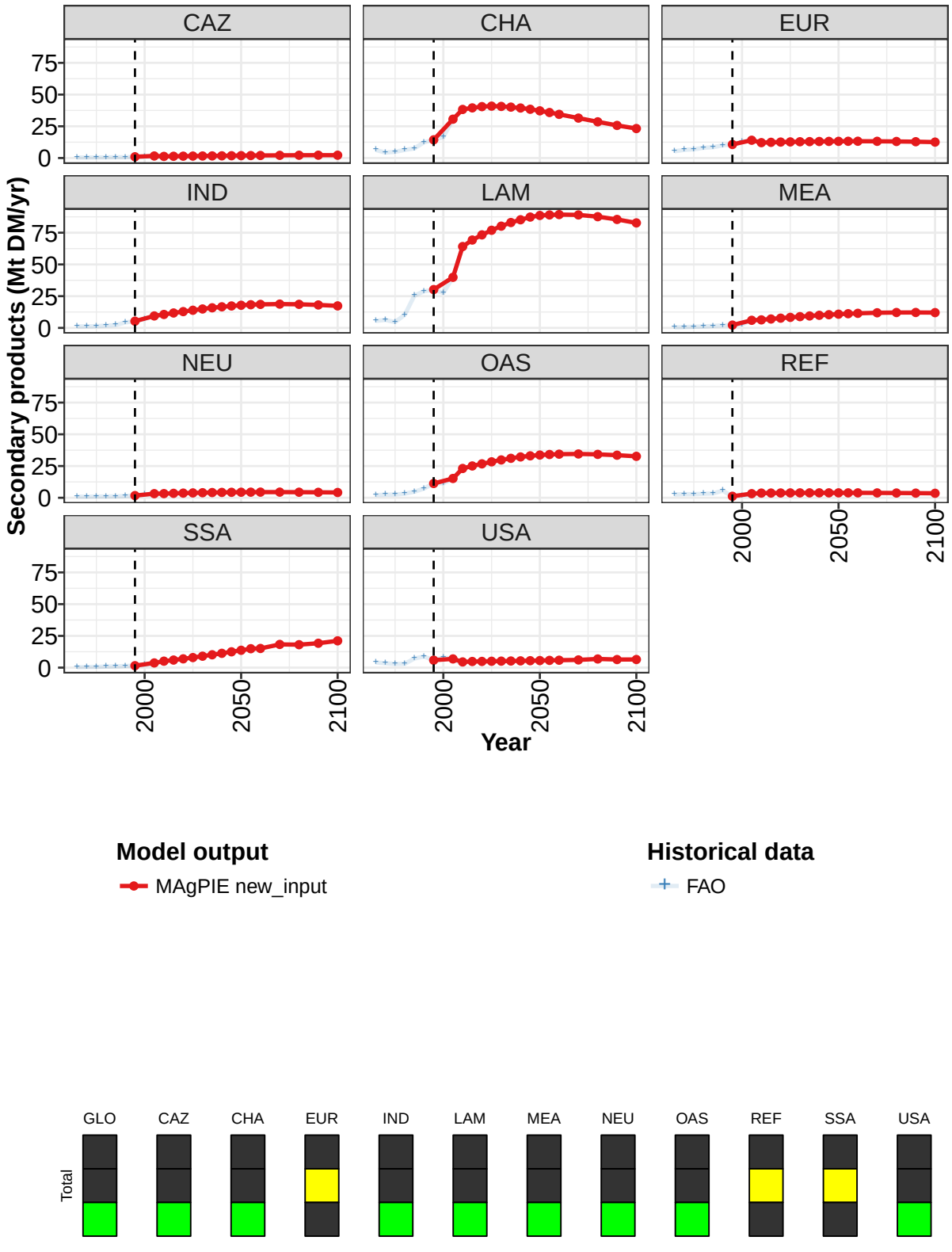


Figure 171: MAgPIE new_input — Demand—Material—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	85	134	172	184	194	203	211	218	223	228	231
CAZ	1	2	1	1	1	2	2	2	2	2	2
CHA	14	31	38	40	41	41	41	40	39	38	37
EUR	11	14	12	12	13	13	13	13	13	13	13
IND	5	9	11	12	13	14	15	16	17	17	18
LAM	30	40	64	69	73	77	80	83	85	87	89
MEA	2	6	6	7	8	8	9	9	10	10	11
NEU	2	3	3	3	4	4	4	4	4	4	4
OAS	11	15	23	25	27	28	30	31	32	33	34
REF	1	3	4	4	4	4	4	4	4	4	4
SSA	2	4	5	6	7	8	9	10	11	12	14
USA	6	7	4	5	5	5	5	5	5	5	6

Table 512: MAgPIE new_input — Demand—Material—Secondary products (Mt DM/yr) [PART 1/2]

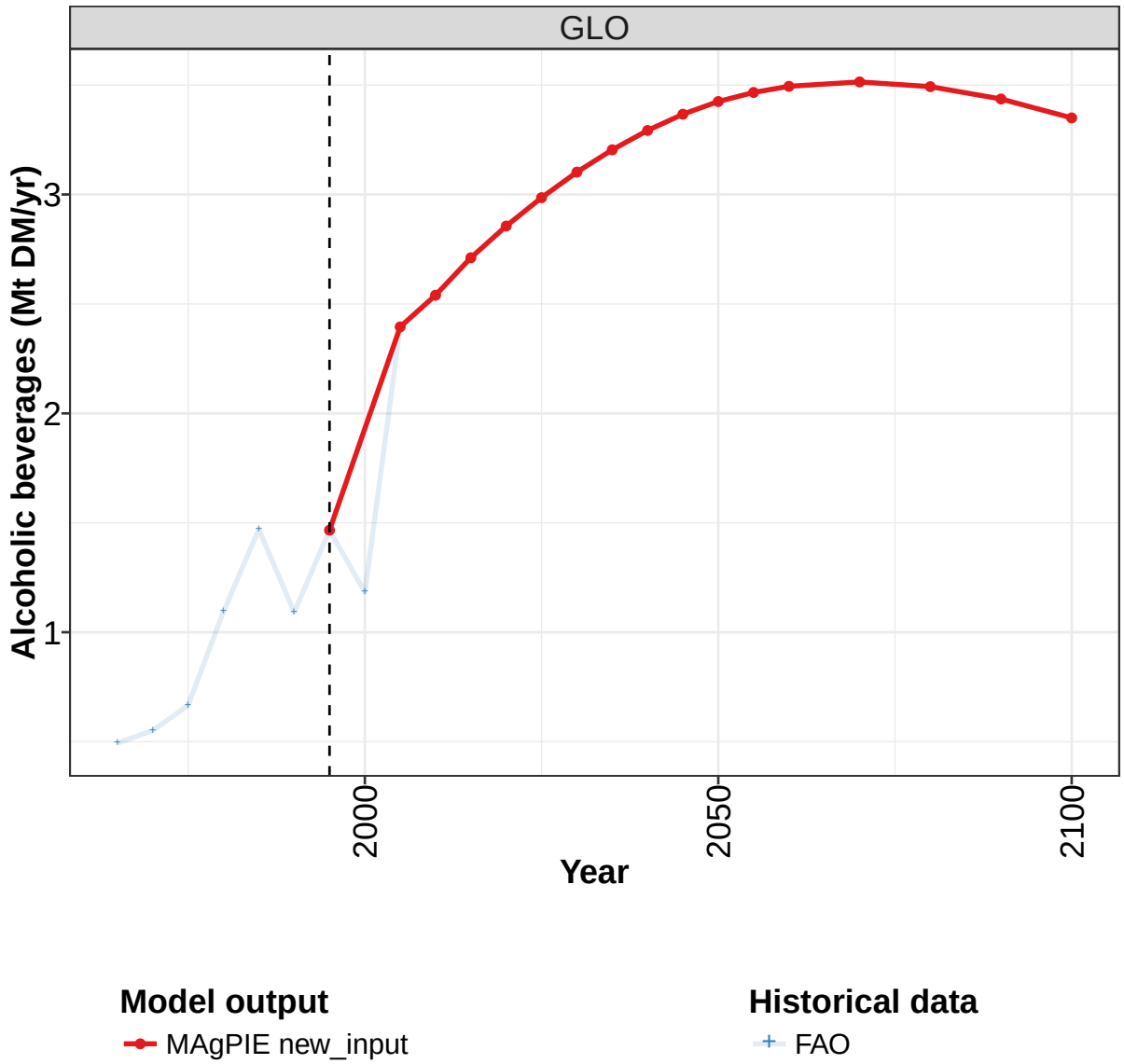
	2055	2060	2070	2080	2090	2100
GLO	233	233	234	229	224	218
CAZ	2	2	2	2	2	2
CHA	36	34	31	29	26	23
EUR	13	13	13	13	13	13
IND	18	19	19	19	18	17
LAM	89	89	89	88	85	83
MEA	11	12	12	12	12	12
NEU	4	4	4	4	4	4
OAS	34	34	35	34	34	33
REF	4	4	4	4	4	4
SSA	15	15	18	18	19	21
USA	6	6	6	7	6	6

Table 513: MAgPIE new_input — Demand—Material—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	29	29	29	39	63	82	85	94	134	170
CAZ	0	0	0	1	1	1	1	1	2	0
CHA	6	4	5	6	8	12	14	16	31	38
EUR	5	6	7	8	9	10	11	13	14	12
IND	1	1	1	2	2	4	5	7	9	11
LAM	6	6	5	10	25	29	30	28	40	64
MEA	1	1	1	1	2	2	2	3	6	6
NEU	1	1	1	1	1	1	2	2	3	3
OAS	2	2	3	3	5	7	11	11	15	23
REF	3	3	3	3	3	6	1	2	3	4
SSA	0	1	1	1	1	1	2	2	4	5
USA	4	3	3	3	7	9	6	8	7	3

Table 514: FAO — Demand—Material—Secondary products (Mt DM/yr)

8.6.1 Alcoholic beverages



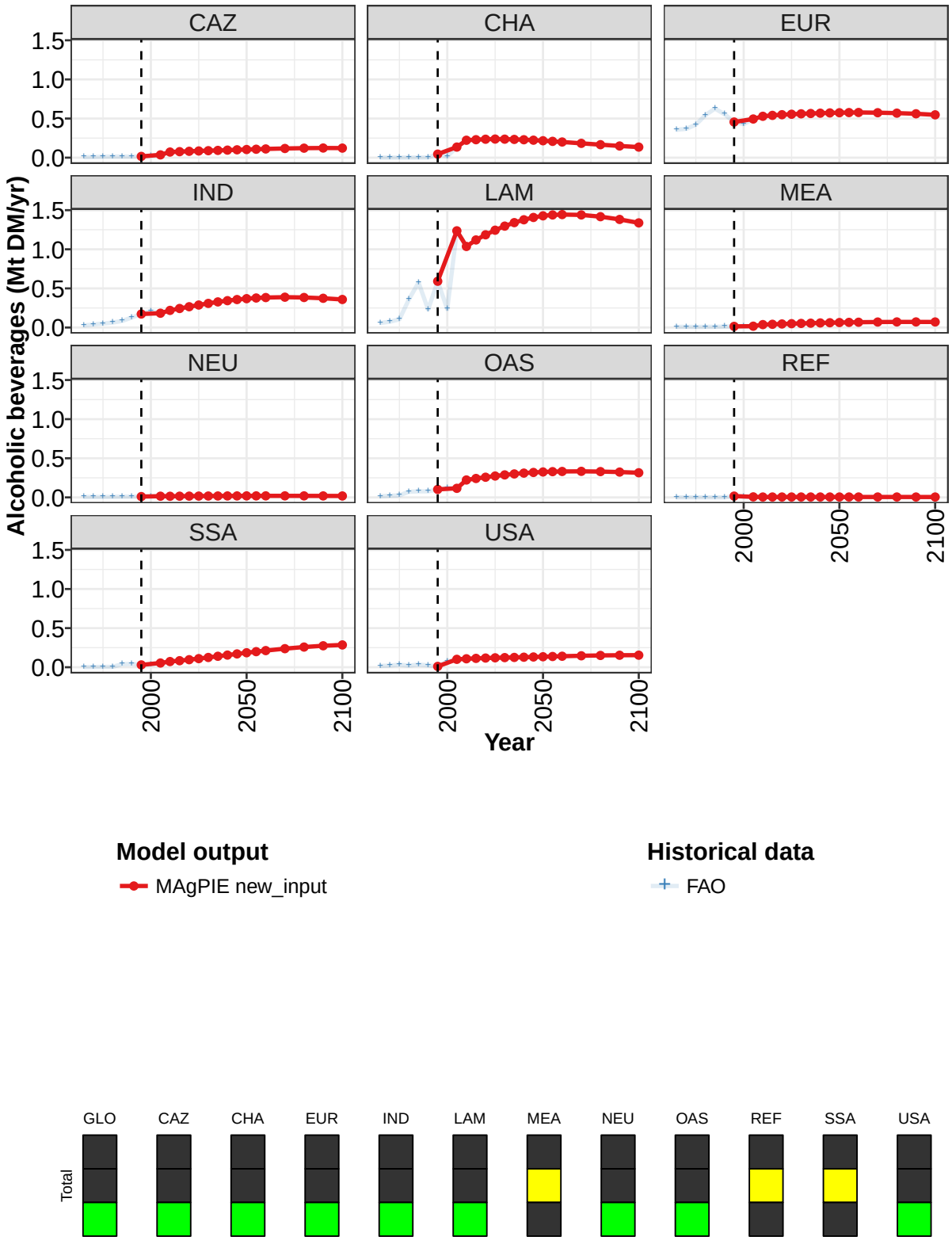


Figure 172: MAgPIE new_input — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.47	2.40	2.54	2.71	2.86	2.99	3.10	3.20	3.29	3.37	3.42
CAZ	0.02	0.04	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10
CHA	0.05	0.14	0.22	0.23	0.24	0.24	0.24	0.23	0.23	0.22	0.22
EUR	0.46	0.49	0.53	0.54	0.55	0.56	0.56	0.56	0.57	0.57	0.57
IND	0.17	0.18	0.22	0.24	0.27	0.29	0.31	0.33	0.34	0.36	0.37
LAM	0.59	1.24	1.04	1.12	1.19	1.24	1.30	1.34	1.38	1.41	1.43
MEA	0.01	0.02	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06
NEU	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.10	0.12	0.22	0.24	0.26	0.27	0.29	0.30	0.31	0.32	0.32
REF	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.03	0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.19
USA	0.01	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.13

Table 515: MAgPIE new_input — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

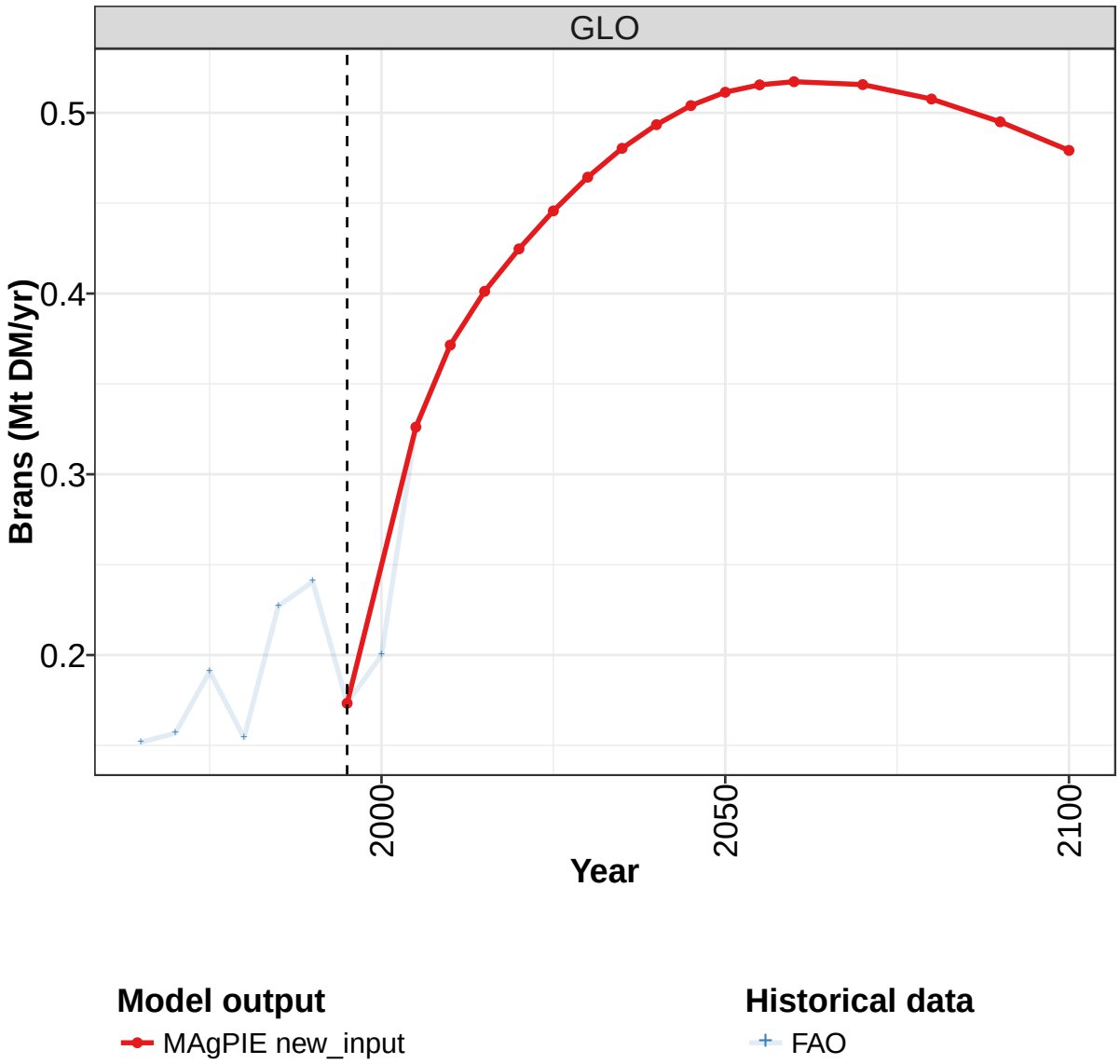
	2055	2060	2070	2080	2090	2100
GLO	3.47	3.49	3.51	3.49	3.44	3.35
CAZ	0.11	0.11	0.12	0.12	0.12	0.12
CHA	0.21	0.20	0.18	0.17	0.15	0.14
EUR	0.58	0.58	0.57	0.57	0.56	0.55
IND	0.38	0.38	0.39	0.38	0.37	0.36
LAM	1.44	1.44	1.44	1.42	1.38	1.34
MEA	0.07	0.07	0.07	0.07	0.07	0.07
NEU	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.33	0.33	0.33	0.33	0.32	0.31
REF	0.01	0.01	0.01	0.00	0.00	0.00
SSA	0.20	0.21	0.24	0.26	0.27	0.29
USA	0.14	0.14	0.15	0.15	0.15	0.15

Table 516: MAgPIE new_input — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.49	0.55	0.67	1.09	1.47	1.09	1.47	1.18	2.40	2.54
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.04	0.07
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.14	0.22
EUR	0.36	0.37	0.42	0.54	0.63	0.56	0.46	0.43	0.49	0.53
IND	0.03	0.04	0.05	0.06	0.08	0.13	0.17	0.21	0.18	0.22
LAM	0.06	0.07	0.10	0.36	0.57	0.23	0.59	0.23	1.24	1.04
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.04
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
OAS	0.01	0.02	0.03	0.07	0.08	0.08	0.10	0.12	0.12	0.22
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00
SSA	0.00	0.00	0.00	0.01	0.04	0.04	0.03	0.04	0.05	0.07
USA	0.02	0.02	0.03	0.02	0.03	0.02	0.01	0.08	0.10	0.11

Table 517: FAO — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr)

8.6.2 Brans


GLO
Brans (Mt DM/yr)
0.5
0.4
0.3
0.2
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

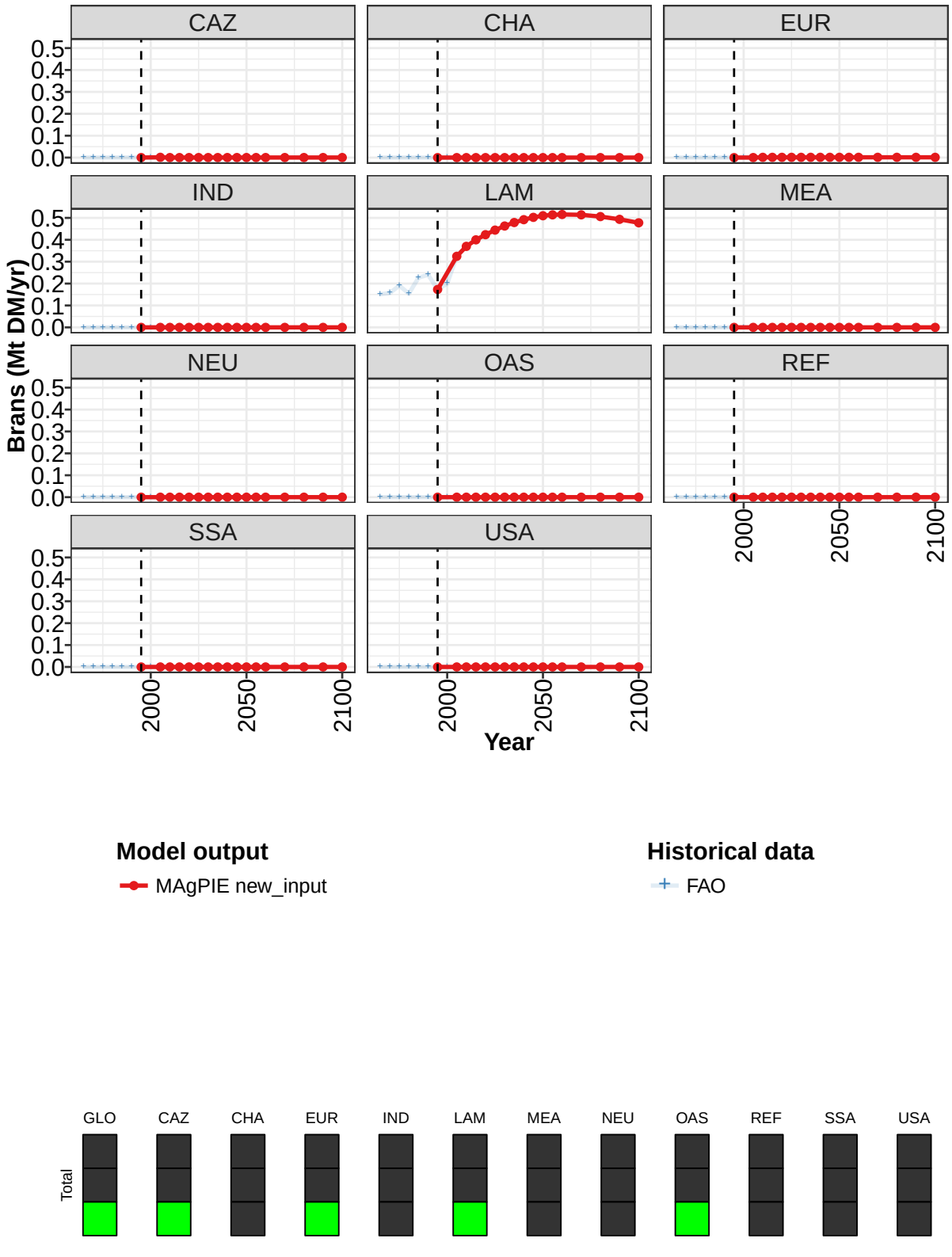


Figure 173: MAgPIE new_input — Demand—Material—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.173	0.326	0.371	0.401	0.425	0.446	0.464	0.480	0.493	0.504	0.511
CAZ	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.173	0.325	0.370	0.400	0.423	0.444	0.463	0.479	0.492	0.502	0.510
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 518: MAgPIE new_input — Demand—Material—Secondary products—Brans (Mt DM/yr) [PART 1/2]

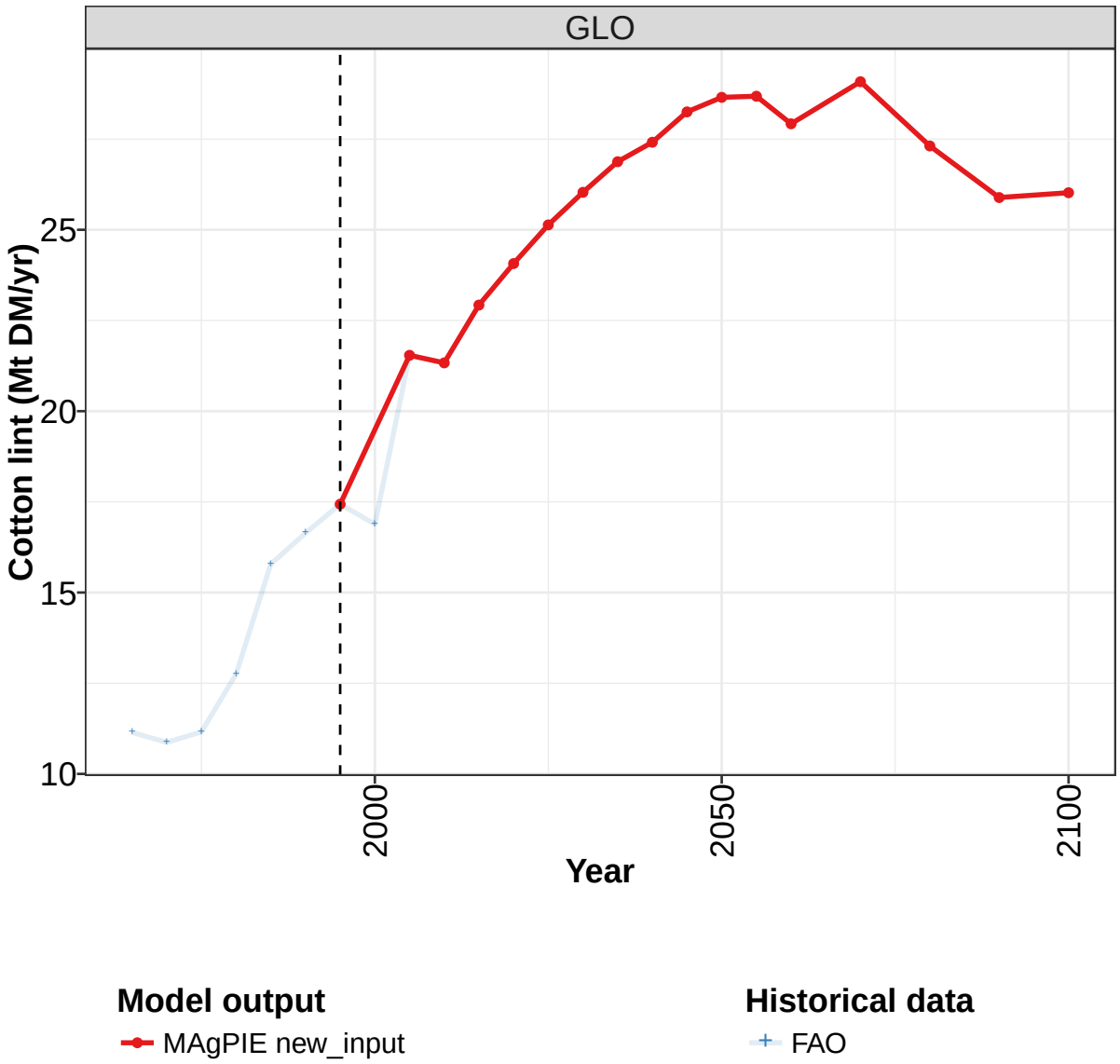
	2055	2060	2070	2080	2090	2100
GLO	0.515	0.517	0.516	0.508	0.495	0.479
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.001	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.514	0.516	0.514	0.506	0.493	0.478
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

Table 519: MAgPIE new_input — Demand—Material—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.152	0.157	0.191	0.154	0.227	0.241	0.173	0.200	0.326	0.371
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.152	0.157	0.191	0.154	0.227	0.240	0.173	0.200	0.325	0.370
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 520: FAO — Demand—Material—Secondary products—Brans (Mt DM/yr)

8.6.3 Cotton lint



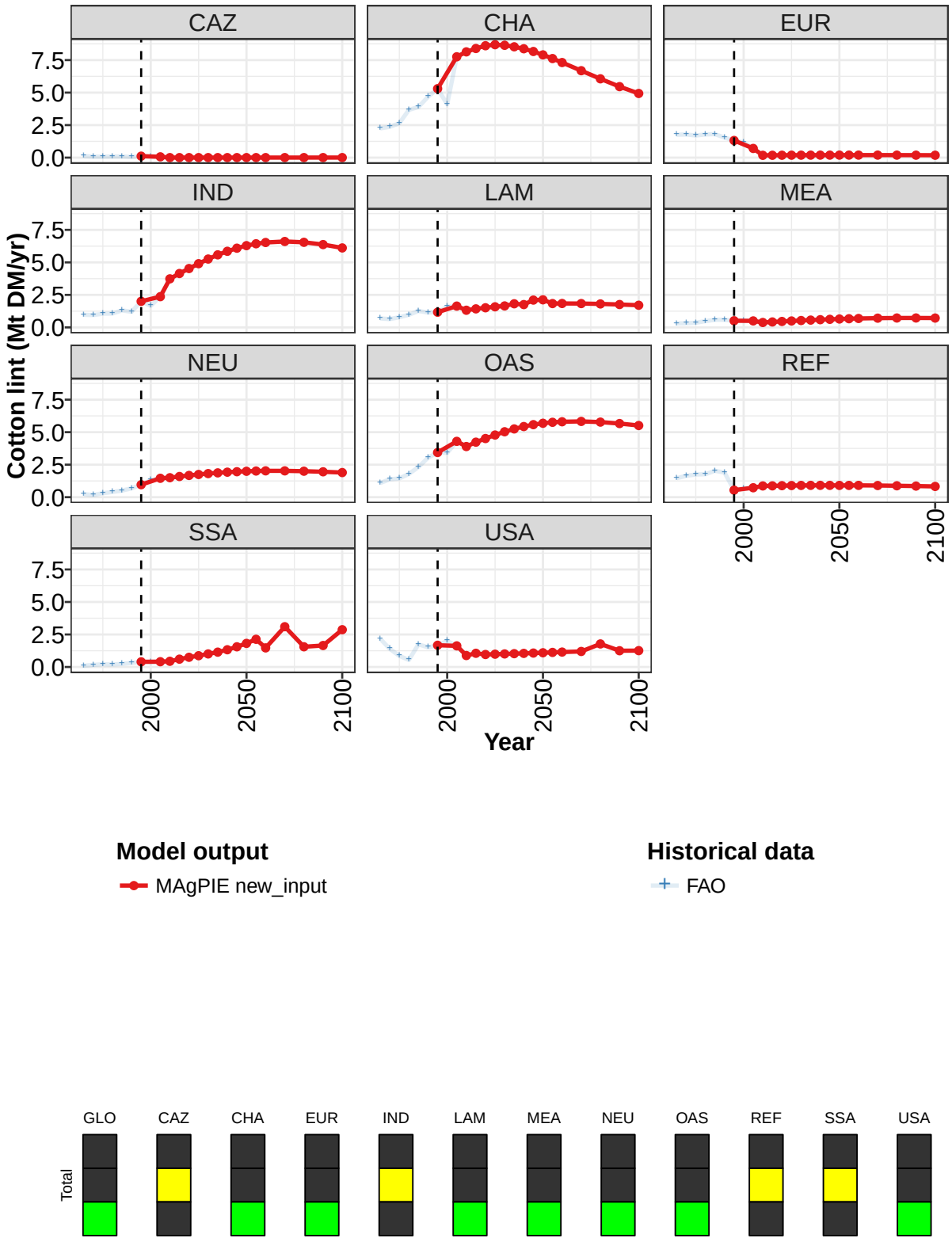


Figure 174: MAgPIE new_input — Demand—Material—Secondary products—Cotton lint (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	17.4	21.5	21.3	22.9	24.1	25.1	26.0	26.9	27.4	28.2	28.7
CAZ	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.3	7.8	8.1	8.4	8.6	8.7	8.6	8.5	8.4	8.2	7.9
EUR	1.3	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	2.0	2.4	3.7	4.1	4.5	4.9	5.3	5.6	5.9	6.1	6.3
LAM	1.2	1.6	1.3	1.4	1.5	1.6	1.7	1.8	1.8	2.1	2.1
MEA	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6
NEU	1.0	1.5	1.5	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.0
OAS	3.4	4.3	3.9	4.2	4.5	4.8	5.0	5.3	5.4	5.6	5.7
REF	0.5	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
SSA	0.4	0.4	0.4	0.6	0.7	0.9	1.0	1.1	1.3	1.6	1.8
USA	1.7	1.6	0.9	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1

Table 521: MAgPIE new_input — Demand—Material—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

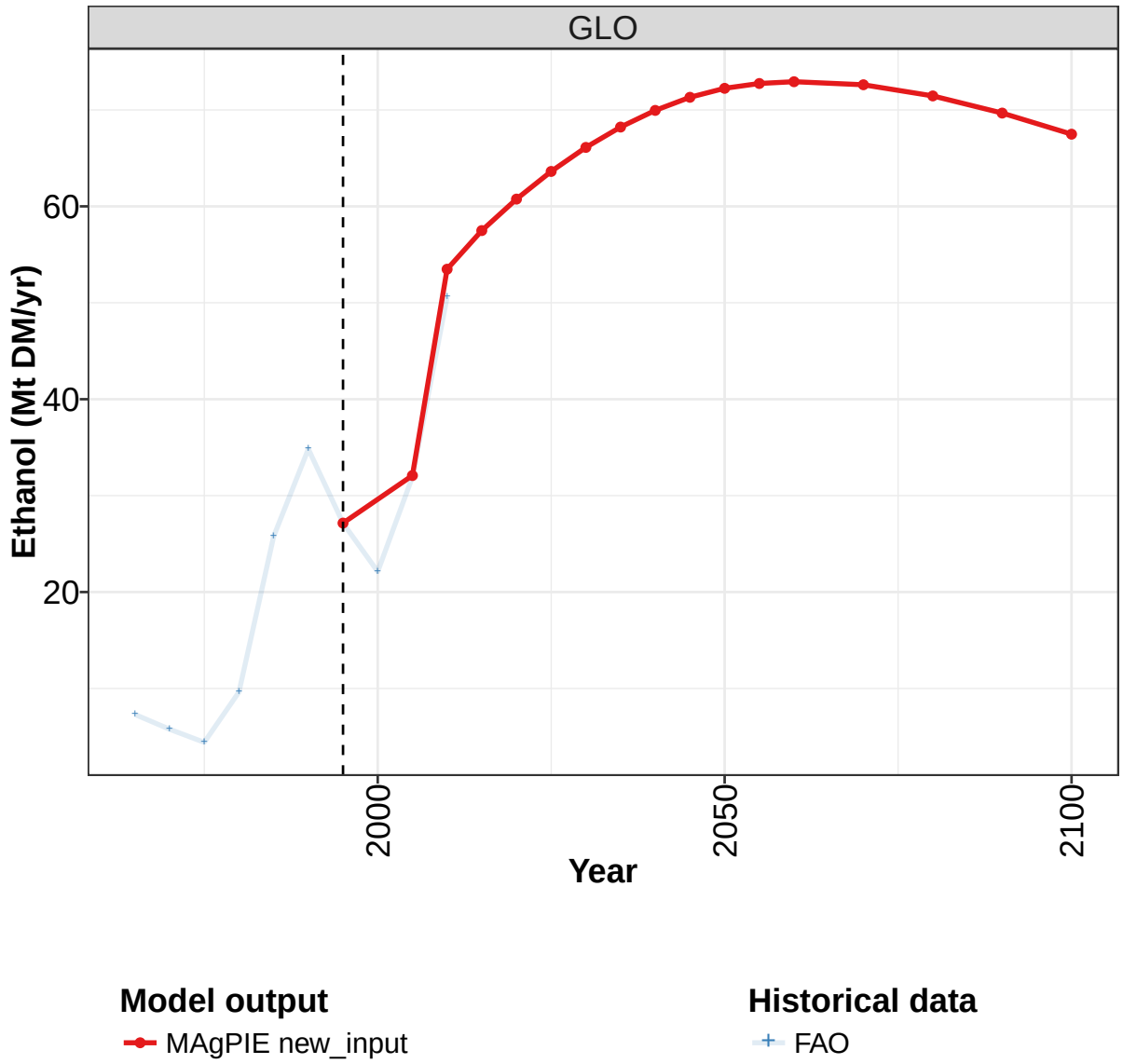
	2055	2060	2070	2080	2090	2100
GLO	28.7	27.9	29.1	27.3	25.9	26.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	7.6	7.3	6.7	6.1	5.5	4.9
EUR	0.2	0.2	0.2	0.2	0.2	0.2
IND	6.4	6.5	6.6	6.5	6.4	6.1
LAM	1.8	1.8	1.8	1.8	1.8	1.7
MEA	0.7	0.7	0.7	0.7	0.7	0.7
NEU	2.0	2.0	2.0	2.0	2.0	1.9
OAS	5.8	5.8	5.8	5.8	5.7	5.5
REF	0.9	0.9	0.9	0.9	0.9	0.8
SSA	2.1	1.5	3.1	1.6	1.7	2.9
USA	1.1	1.1	1.2	1.8	1.3	1.3

Table 522: MAgPIE new_input — Demand—Material—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.1	10.9	11.2	12.8	15.8	16.6	17.4	16.9	21.5	21.3
CAZ	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
CHA	2.2	2.4	2.6	3.7	3.9	4.7	5.3	4.1	7.8	8.1
EUR	1.8	1.8	1.7	1.8	1.8	1.5	1.3	1.2	0.7	0.2
IND	1.0	0.9	1.1	1.1	1.3	1.2	2.0	1.7	2.4	3.7
LAM	0.7	0.6	0.8	1.0	1.3	1.1	1.2	1.6	1.6	1.3
MEA	0.3	0.3	0.4	0.5	0.6	0.6	0.5	0.5	0.5	0.4
NEU	0.2	0.2	0.3	0.4	0.5	0.7	1.0	1.3	1.5	1.5
OAS	1.1	1.4	1.4	1.8	2.3	3.0	3.4	3.4	4.3	3.9
REF	1.5	1.6	1.7	1.8	2.0	1.9	0.5	0.7	0.7	0.9
SSA	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4
USA	2.2	1.4	0.9	0.5	1.7	1.5	1.7	2.0	1.6	0.9

Table 523: FAO — Demand—Material—Secondary products—Cotton lint (Mt DM/yr)

8.6.4 Ethanol


GLO
Ethanol (Mt DM/yr)
60
40
20
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

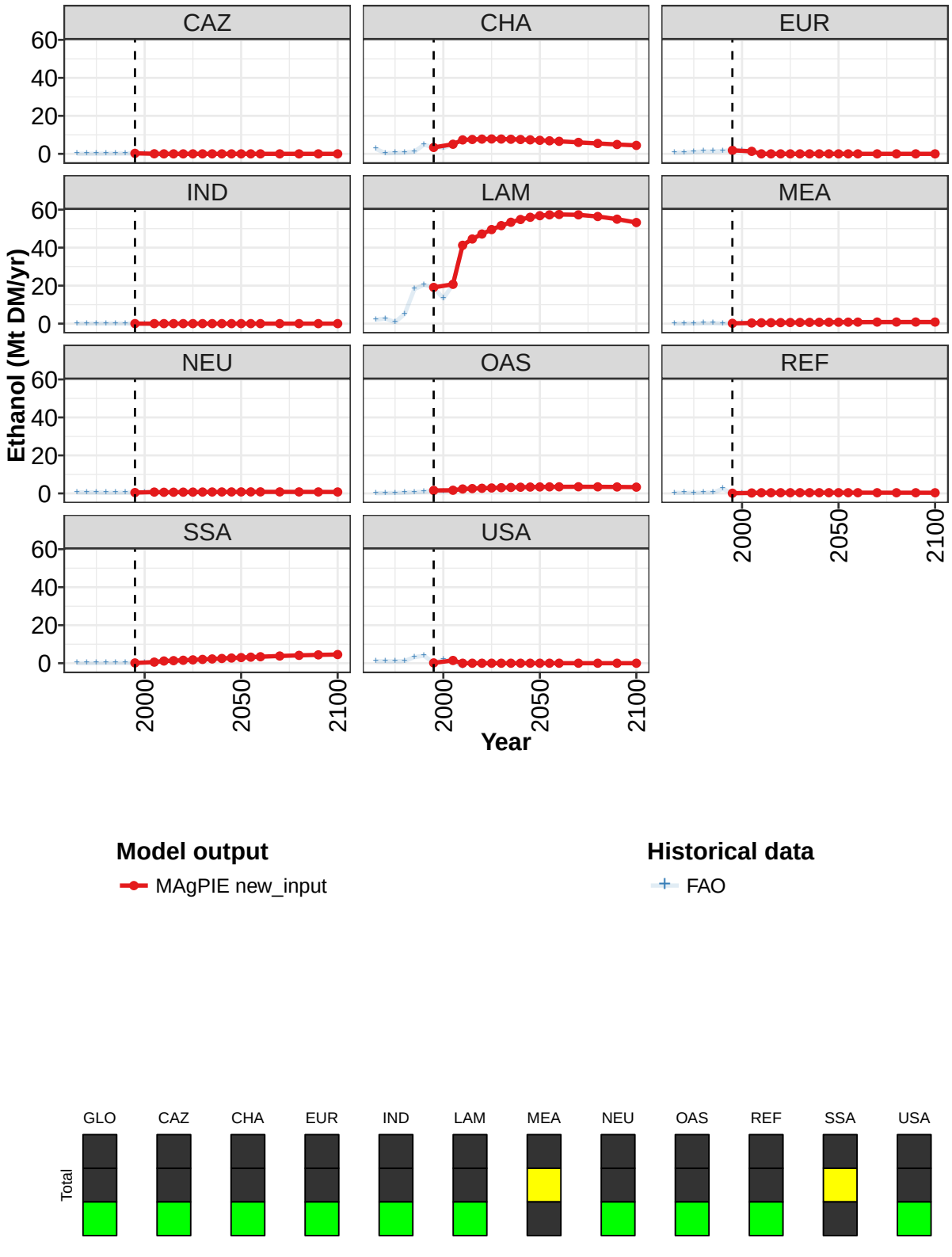


Figure 175: MAgPIE new_input — Demand—Material—Secondary products—Ethanol (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	27.2	32.1	53.5	57.5	60.8	63.6	66.1	68.2	70.0	71.3	72.2
CAZ	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.4	5.1	7.3	7.6	7.8	7.8	7.8	7.7	7.6	7.4	7.1
EUR	1.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	19.1	20.7	41.2	44.6	47.2	49.5	51.6	53.4	54.8	56.0	56.8
MEA	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7
NEU	0.5	0.7	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8
OAS	1.6	1.7	2.3	2.5	2.7	2.9	3.0	3.2	3.3	3.3	3.4
REF	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SSA	0.1	0.6	1.2	1.3	1.5	1.8	2.0	2.2	2.5	2.7	3.0
USA	0.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 524: MAgPIE new_input — Demand—Material—Secondary products—Ethanol (Mt DM/yr) [PART 1/2]

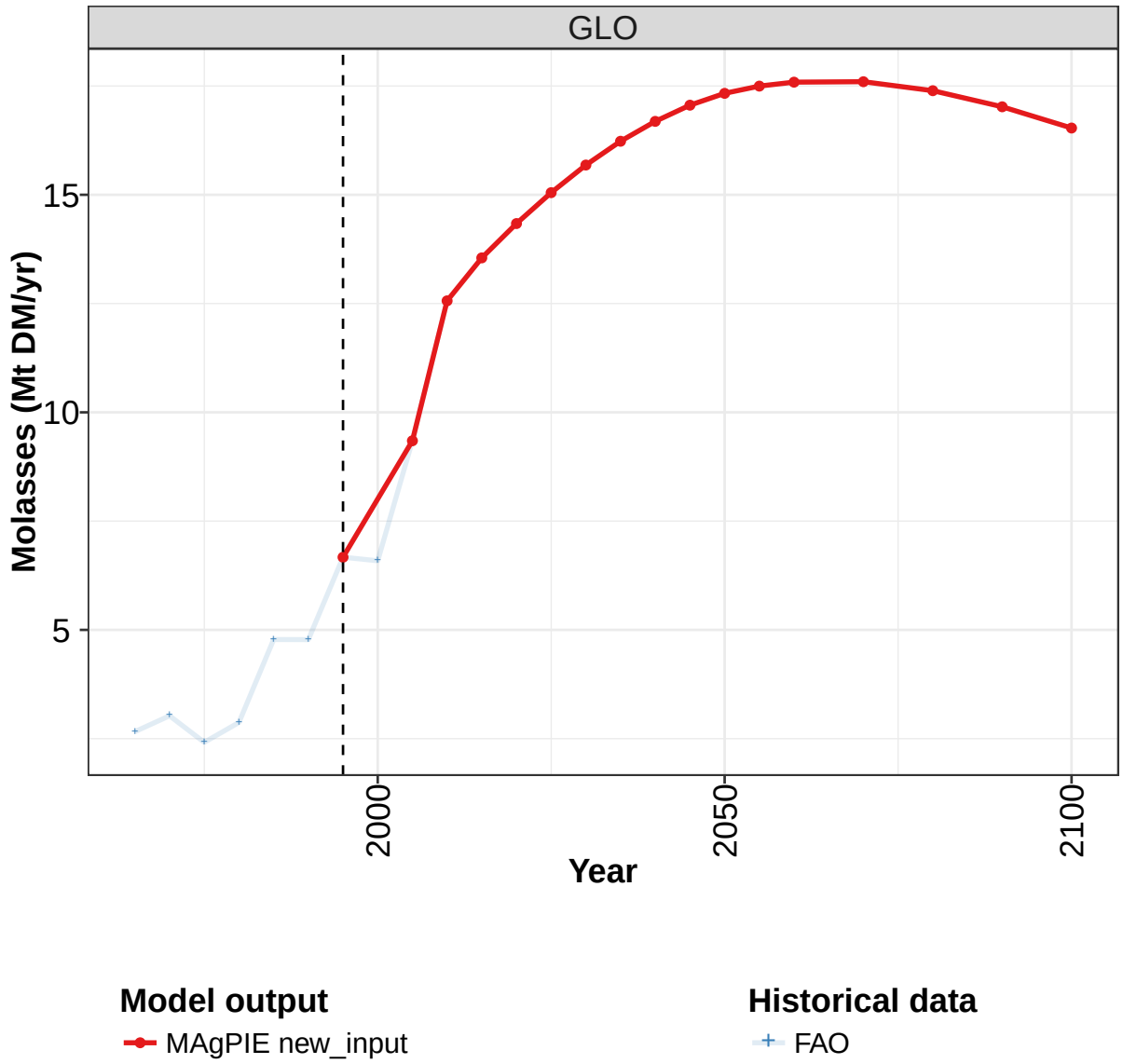
	2055	2060	2070	2080	2090	2100
GLO	72.7	72.9	72.6	71.5	69.7	67.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.9	6.6	6.0	5.5	4.9	4.4
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	57.3	57.5	57.3	56.4	55.0	53.2
MEA	0.8	0.8	0.8	0.8	0.8	0.8
NEU	0.8	0.8	0.8	0.8	0.8	0.8
OAS	3.5	3.5	3.5	3.5	3.4	3.3
REF	0.4	0.4	0.4	0.4	0.4	0.3
SSA	3.2	3.4	3.8	4.1	4.4	4.6
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 525: MAgPIE new_input — Demand—Material—Secondary products—Ethanol (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.3	5.8	4.4	9.6	25.8	34.8	27.2	22.1	31.9	50.6
CAZ	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.1	0.0	-0.9
CHA	2.6	0.3	0.5	0.7	1.2	4.8	3.4	3.1	5.1	7.3
EUR	0.5	0.7	1.0	1.2	1.2	1.5	1.8	1.7	1.3	-0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.0
LAM	2.1	2.6	0.8	5.1	18.2	20.4	19.1	13.2	20.7	41.2
MEA	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.4
NEU	0.6	0.5	0.5	0.3	0.4	0.4	0.5	0.5	0.7	0.6
OAS	0.1	0.2	0.2	0.4	0.7	0.9	1.6	1.1	1.7	2.3
REF	0.3	0.3	0.3	0.4	0.5	2.4	0.1	0.2	0.2	0.4
SSA	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.6	1.2
USA	1.0	1.0	1.0	1.2	3.2	4.0	0.2	1.8	1.4	-2.0

Table 526: FAO — Demand—Material—Secondary products—Ethanol (Mt DM/yr)

8.6.5 Molasses



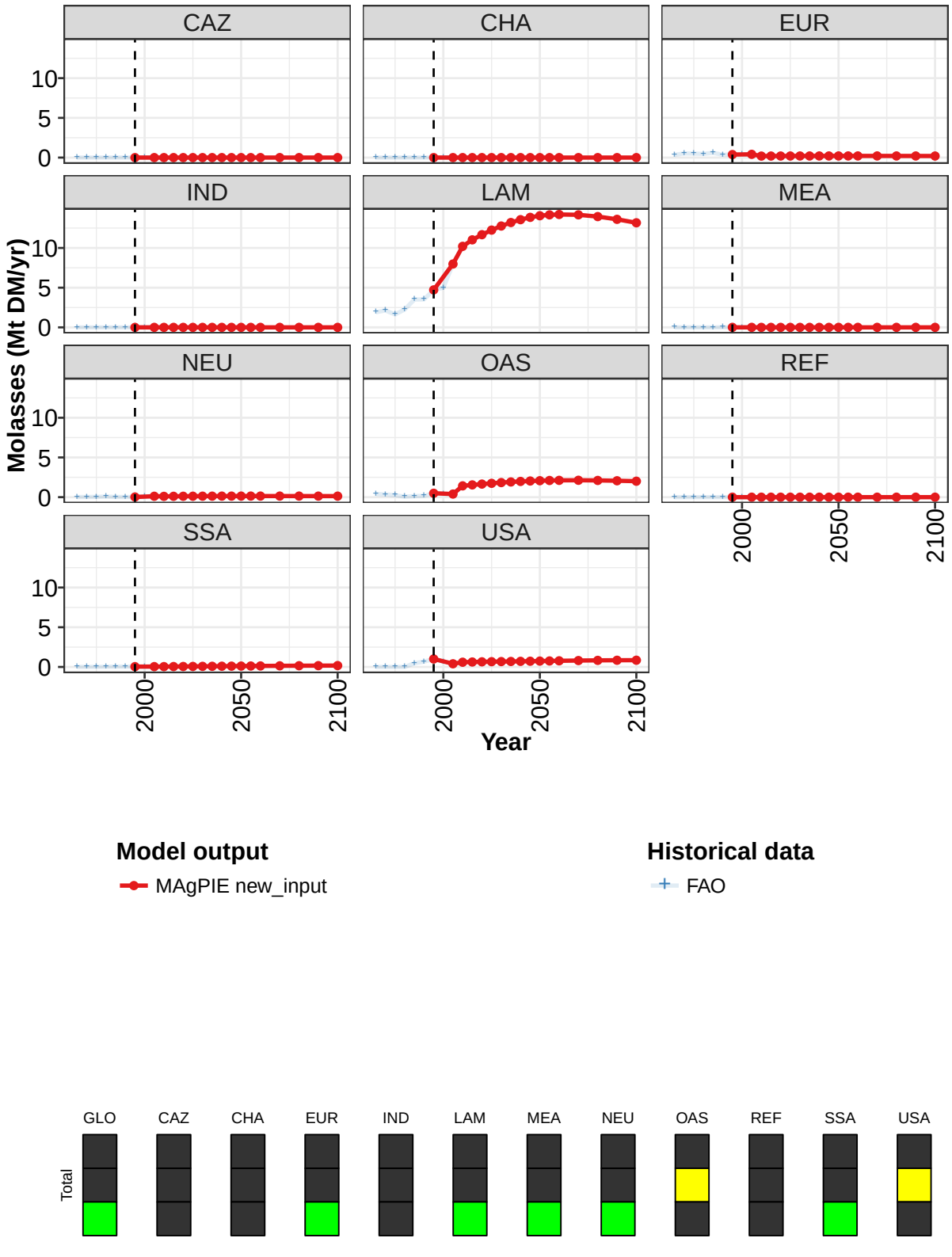


Figure 176: MAgPIE new_input — Demand—Material—Secondary products—Molasses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.7	9.3	12.6	13.5	14.3	15.0	15.7	16.2	16.7	17.1	17.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	4.7	8.0	10.2	11.0	11.7	12.2	12.8	13.2	13.6	13.9	14.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.4	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
USA	1.0	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7

Table 527: MAgPIE new_input — Demand—Material—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

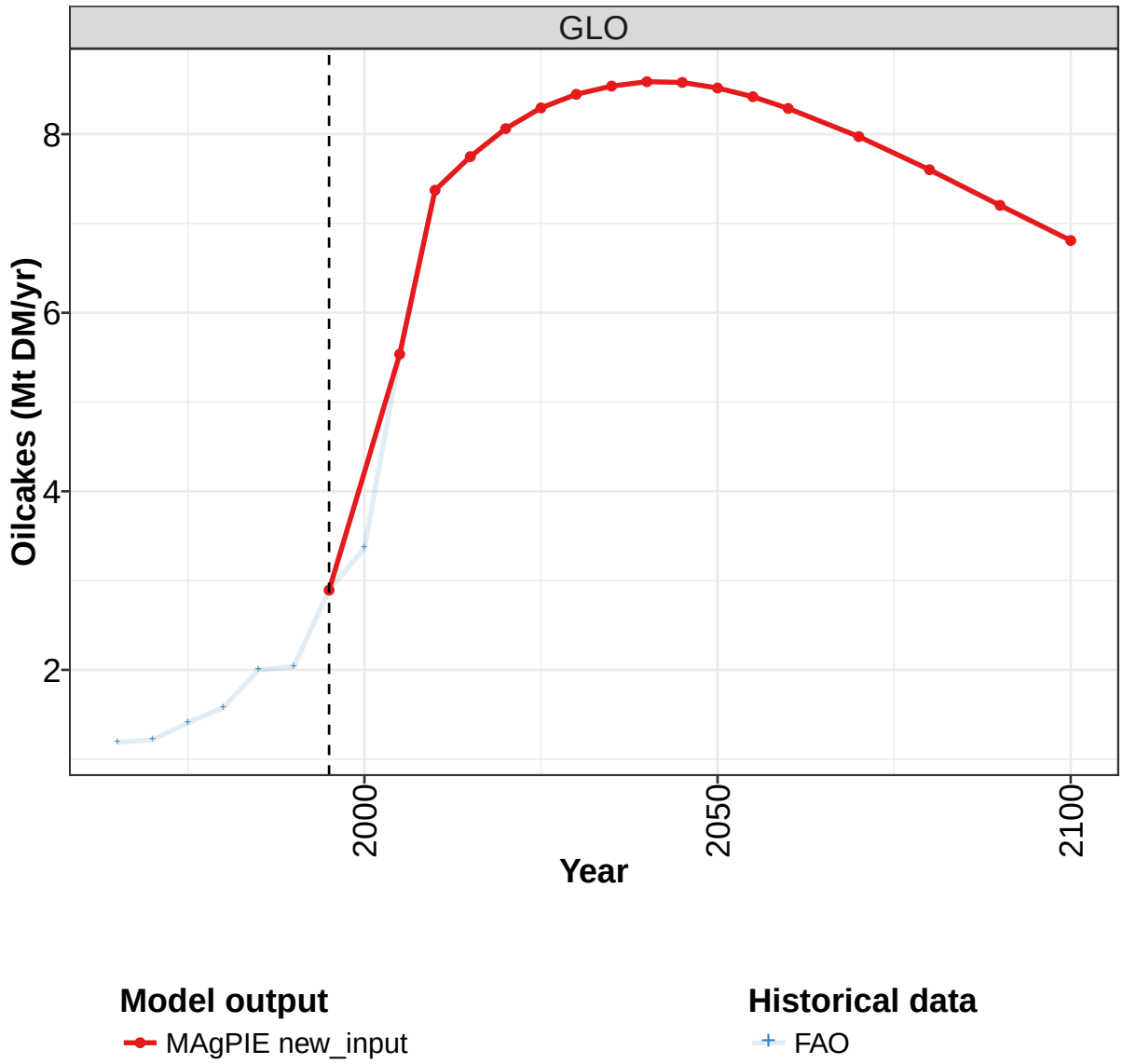
	2055	2060	2070	2080	2090	2100
GLO	17.5	17.6	17.6	17.4	17.0	16.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	14.2	14.2	14.2	14.0	13.6	13.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	2.1	2.1	2.1	2.1	2.1	2.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.1	0.2	0.2	0.2
USA	0.8	0.8	0.8	0.8	0.8	0.8

Table 528: MAgPIE new_input — Demand—Material—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.7	3.0	2.4	2.9	4.8	4.8	6.7	6.6	9.3	12.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.3	0.5	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.9	2.1	1.6	2.3	3.5	3.5	4.7	5.0	8.0	10.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1
OAS	0.4	0.3	0.2	0.1	0.1	0.2	0.5	0.4	0.4	1.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.5	0.7	1.0	0.7	0.4	0.6

Table 529: FAO — Demand—Material—Secondary products—Molasses (Mt DM/yr)

8.6.6 Oilcakes



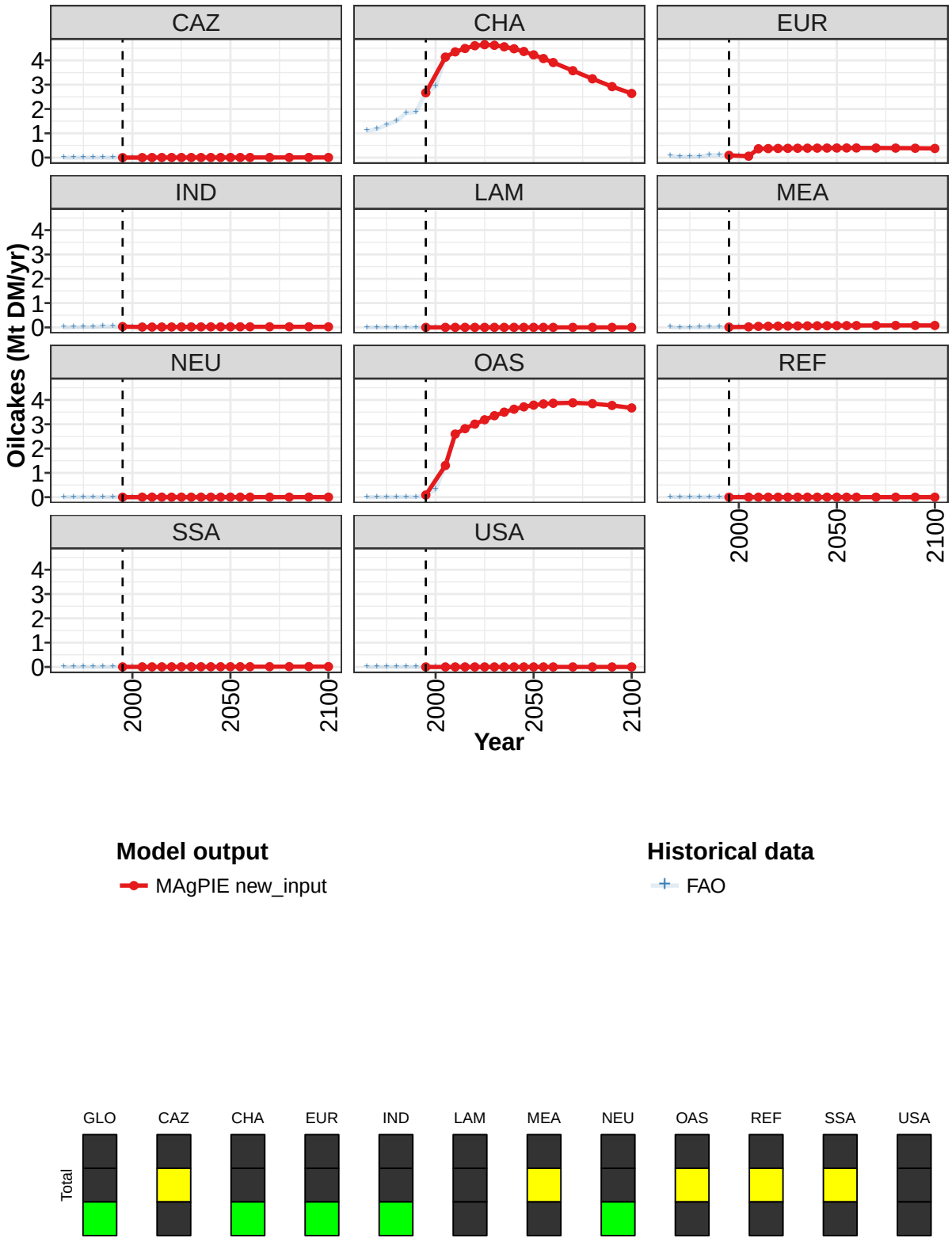


Figure 177: MAgPIE new_input — Demand—Material—Secondary products—Oilcakes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.89	5.54	7.37	7.75	8.06	8.29	8.45	8.54	8.59	8.58	8.52
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	2.67	4.14	4.35	4.49	4.60	4.65	4.62	4.56	4.48	4.37	4.23
EUR	0.09	0.06	0.36	0.37	0.38	0.38	0.38	0.39	0.39	0.39	0.39
IND	0.03	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.01	0.02	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.07
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.09	1.30	2.60	2.82	3.01	3.18	3.35	3.50	3.62	3.72	3.79
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 530: MAgPIE new_input — Demand—Material—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

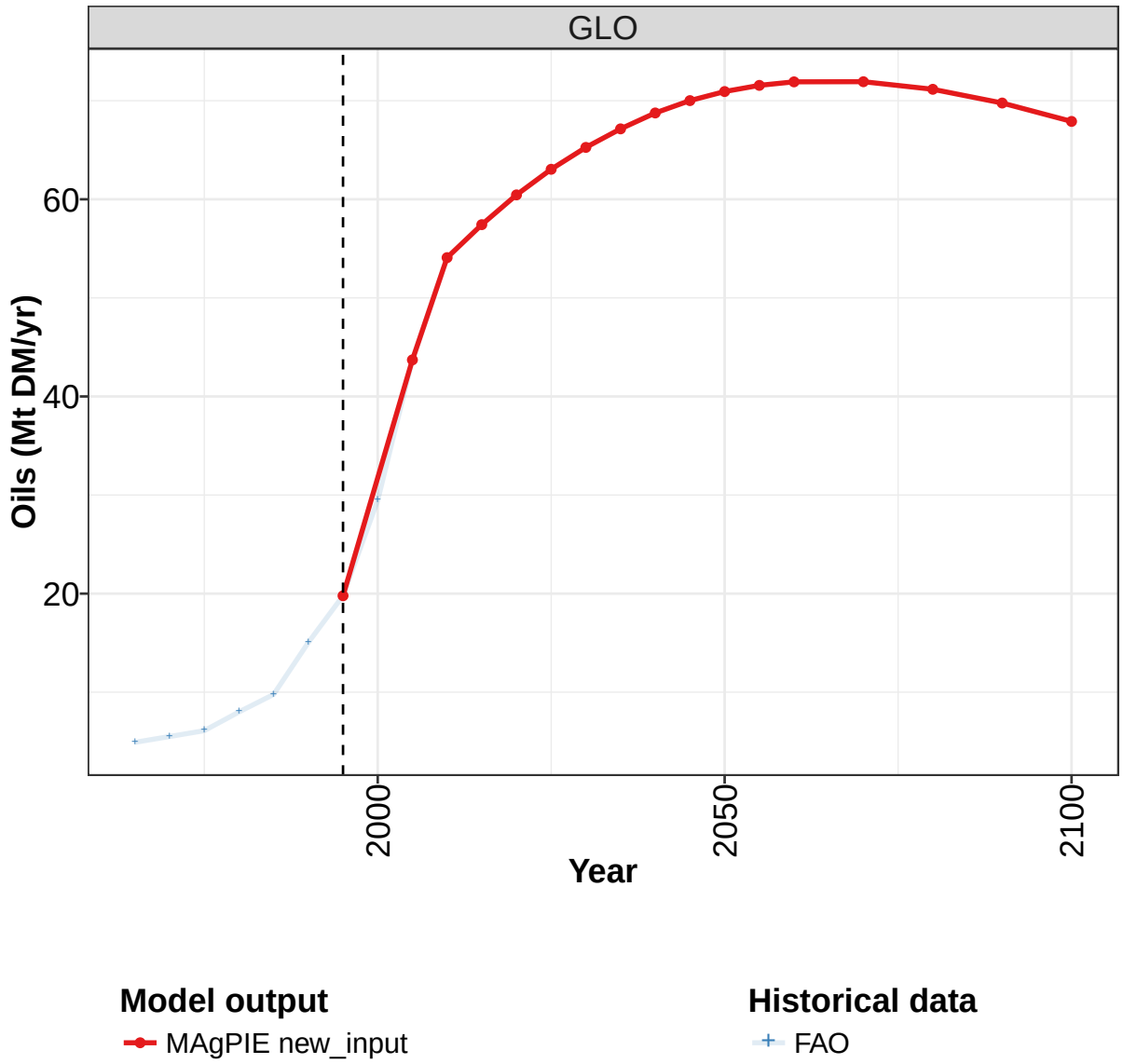
	2055	2060	2070	2080	2090	2100
GLO	8.42	8.29	7.97	7.60	7.20	6.81
CAZ	0.00	0.00	0.00	0.01	0.01	0.01
CHA	4.08	3.91	3.58	3.24	2.92	2.64
EUR	0.40	0.40	0.39	0.39	0.39	0.38
IND	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.07	0.08	0.08	0.08	0.08	0.08
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	3.84	3.86	3.88	3.85	3.77	3.67
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.01	0.01	0.01	0.01	0.01	0.01
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 531: MAgPIE new_input — Demand—Material—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.19	1.22	1.41	1.58	2.00	2.04	2.89	3.36	5.54	7.37
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	1.11	1.17	1.35	1.50	1.83	1.88	2.67	2.93	4.14	4.35
EUR	0.07	0.03	0.04	0.05	0.10	0.10	0.09	0.07	0.06	0.36
IND	0.00	0.01	0.02	0.02	0.04	0.04	0.03	0.02	0.01	0.01
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.02	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.01	0.01	0.09	0.31	1.30	2.60
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 532: FAO — Demand—Material—Secondary products—Oilcakes (Mt DM/yr)

8.6.7 Oils


GLO
Oils (Mt DM/yr)
60
40
20
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

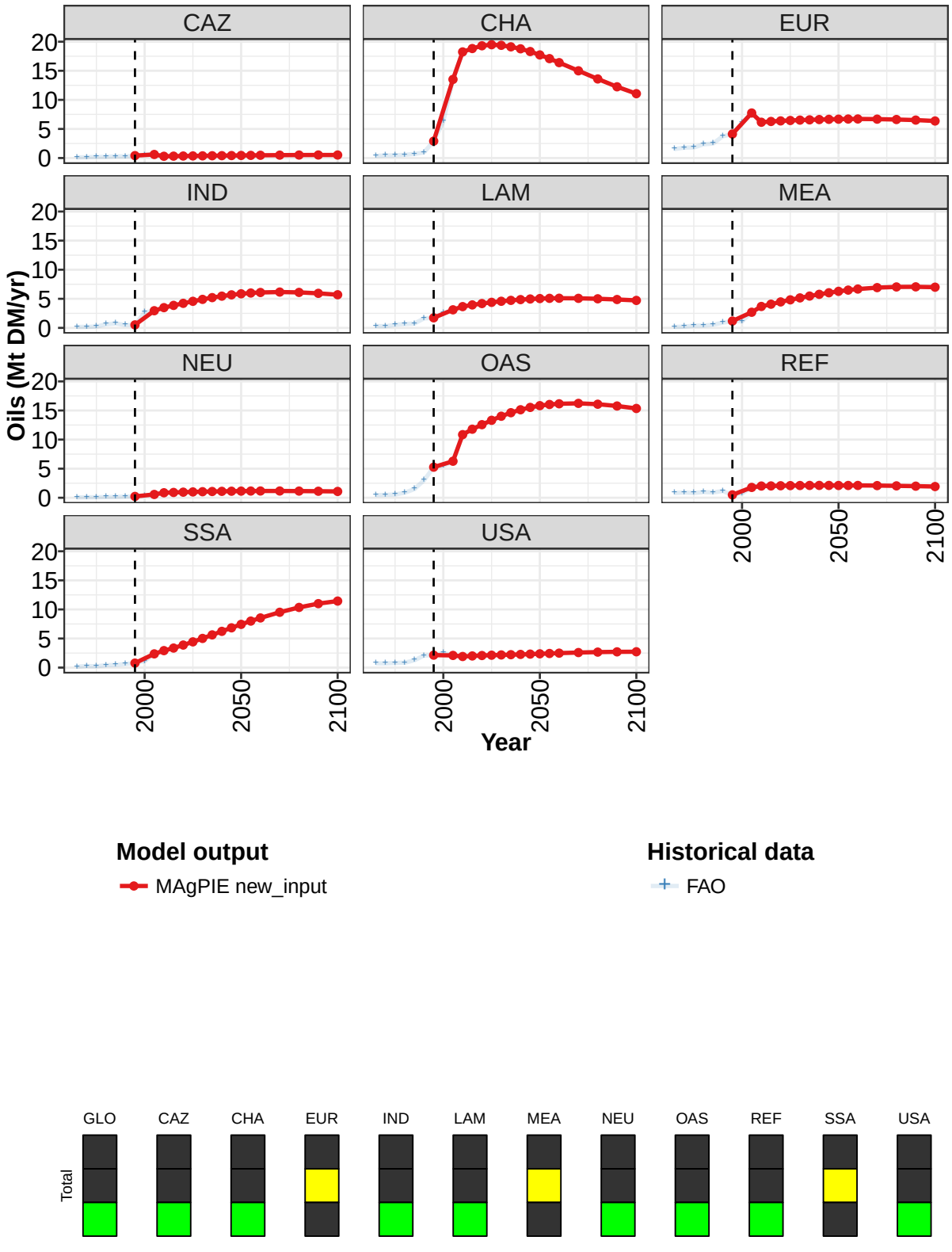


Figure 178: MAgPIE new_input — Demand—Material—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	19.8	43.7	54.1	57.4	60.4	63.0	65.3	67.1	68.8	70.0	70.9
CAZ	0.4	0.6	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
CHA	2.9	13.5	18.2	18.8	19.3	19.5	19.4	19.1	18.8	18.3	17.7
EUR	4.1	7.7	6.2	6.3	6.4	6.5	6.5	6.6	6.6	6.7	6.7
IND	0.5	3.0	3.5	3.9	4.2	4.6	4.9	5.2	5.5	5.7	5.9
LAM	1.7	3.1	3.7	4.0	4.2	4.4	4.6	4.7	4.9	5.0	5.0
MEA	1.2	2.7	3.7	4.1	4.5	4.8	5.2	5.5	5.8	6.0	6.3
NEU	0.2	0.6	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1
OAS	5.3	6.3	10.8	11.8	12.6	13.3	14.0	14.6	15.1	15.5	15.8
REF	0.5	1.8	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
SSA	0.8	2.4	2.9	3.4	3.9	4.4	5.0	5.6	6.2	6.8	7.4
USA	2.1	2.1	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4

Table 533: MAgPIE new_input — Demand—Material—Secondary products—Oils (Mt DM/yr) [PART 1/2]

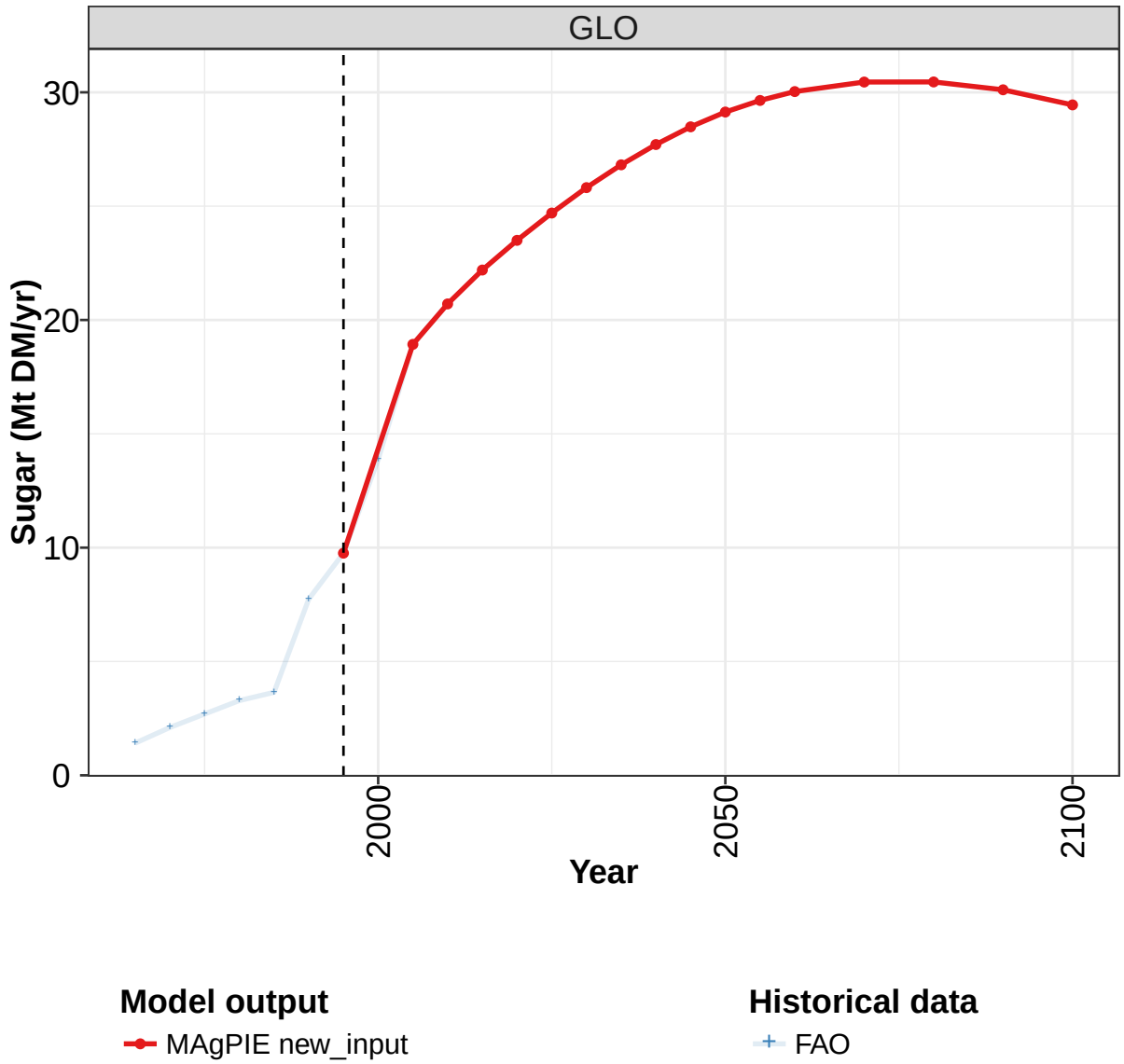
	2055	2060	2070	2080	2090	2100
GLO	71.6	71.9	71.9	71.2	69.8	67.9
CAZ	0.5	0.5	0.5	0.5	0.5	0.5
CHA	17.1	16.4	15.0	13.6	12.2	11.1
EUR	6.7	6.7	6.7	6.6	6.5	6.4
IND	6.0	6.1	6.2	6.1	5.9	5.7
LAM	5.1	5.1	5.1	5.0	4.9	4.7
MEA	6.5	6.7	6.9	7.0	7.1	7.0
NEU	1.2	1.2	1.2	1.1	1.1	1.1
OAS	16.0	16.2	16.2	16.1	15.8	15.3
REF	2.1	2.1	2.1	2.0	2.0	1.9
SSA	8.0	8.5	9.5	10.3	11.0	11.4
USA	2.4	2.5	2.6	2.7	2.7	2.7

Table 534: MAgPIE new_input — Demand—Material—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.9	5.5	6.1	8.0	9.8	15.0	19.8	29.5	43.7	54.1
CAZ	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.3
CHA	0.4	0.4	0.5	0.6	0.7	1.0	2.9	6.3	13.5	18.2
EUR	1.5	1.8	1.8	2.3	2.5	3.7	4.1	6.1	7.7	6.2
IND	0.2	0.2	0.2	0.6	0.8	0.5	0.5	2.7	3.0	3.5
LAM	0.3	0.3	0.5	0.7	0.7	1.6	1.7	2.5	3.1	3.7
MEA	0.2	0.2	0.4	0.4	0.6	0.9	1.2	1.1	2.7	3.7
NEU	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.9
OAS	0.4	0.5	0.5	0.9	1.5	3.0	5.3	5.5	6.3	10.8
REF	0.8	0.9	0.8	1.0	0.9	1.2	0.5	0.7	1.8	2.0
SSA	0.2	0.3	0.2	0.4	0.4	0.6	0.8	1.1	2.4	2.9
USA	0.7	0.7	0.8	0.8	1.3	2.1	2.1	2.5	2.1	1.9

Table 535: FAO — Demand—Material—Secondary products—Oils (Mt DM/yr)

8.6.8 Sugar


GLO
Sugar (Mt DM/yr)
0
10
20
30
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

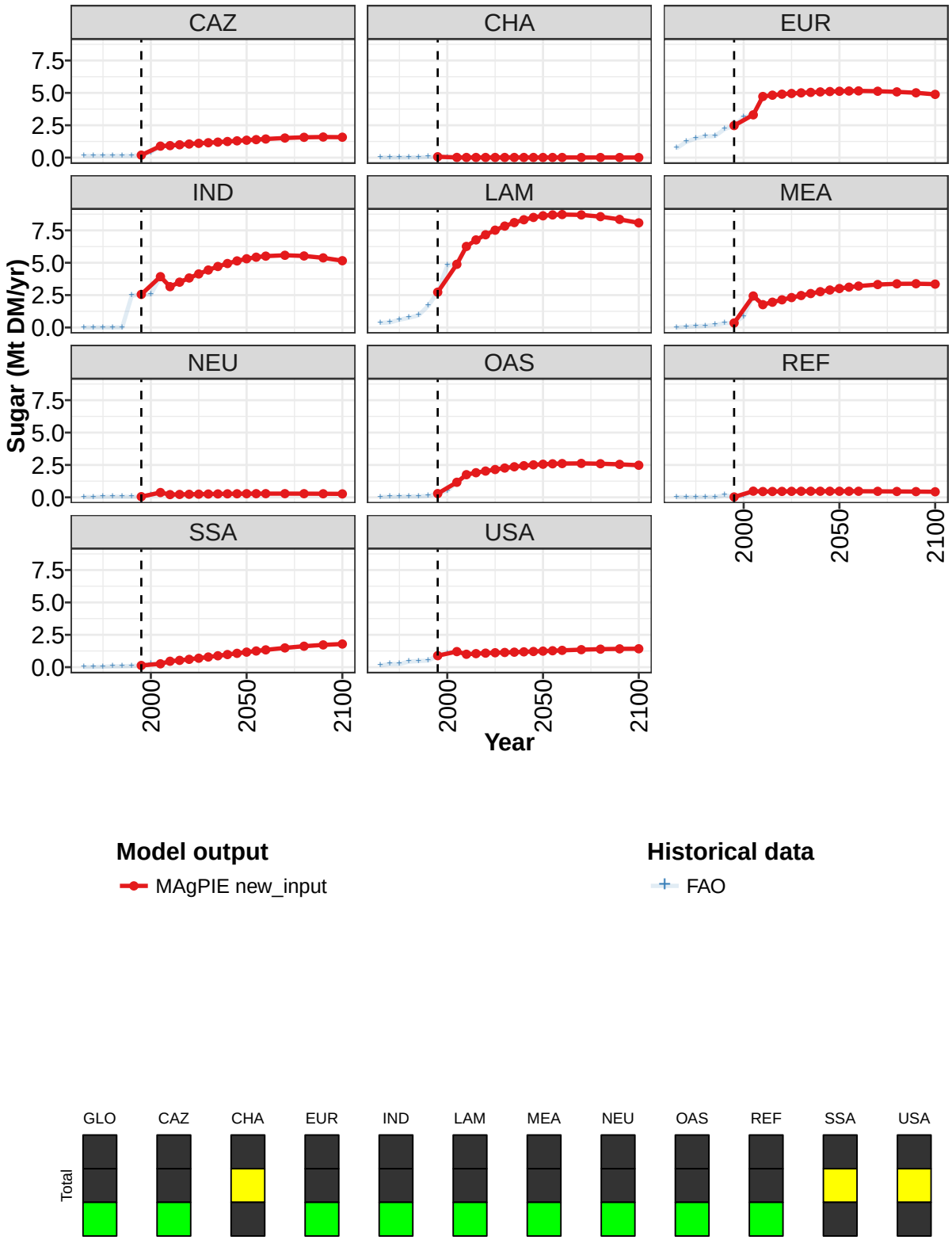


Figure 179: MAgPIE new_input — Demand—Material—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9.8	18.9	20.7	22.2	23.5	24.7	25.8	26.8	27.7	28.5	29.1
CAZ	0.2	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3
CHA	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	2.5	3.3	4.7	4.8	4.9	5.0	5.0	5.0	5.1	5.1	5.1
IND	2.6	3.9	3.2	3.5	3.8	4.1	4.4	4.7	4.9	5.1	5.3
LAM	2.7	4.9	6.3	6.8	7.2	7.5	7.8	8.1	8.3	8.5	8.6
MEA	0.3	2.4	1.8	2.0	2.1	2.3	2.5	2.6	2.8	2.9	3.0
NEU	0.1	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
OAS	0.3	1.2	1.8	1.9	2.0	2.1	2.3	2.4	2.4	2.5	2.6
REF	0.0	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SSA	0.1	0.3	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2
USA	0.9	1.2	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2

Table 536: MAgPIE new_input — Demand—Material—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

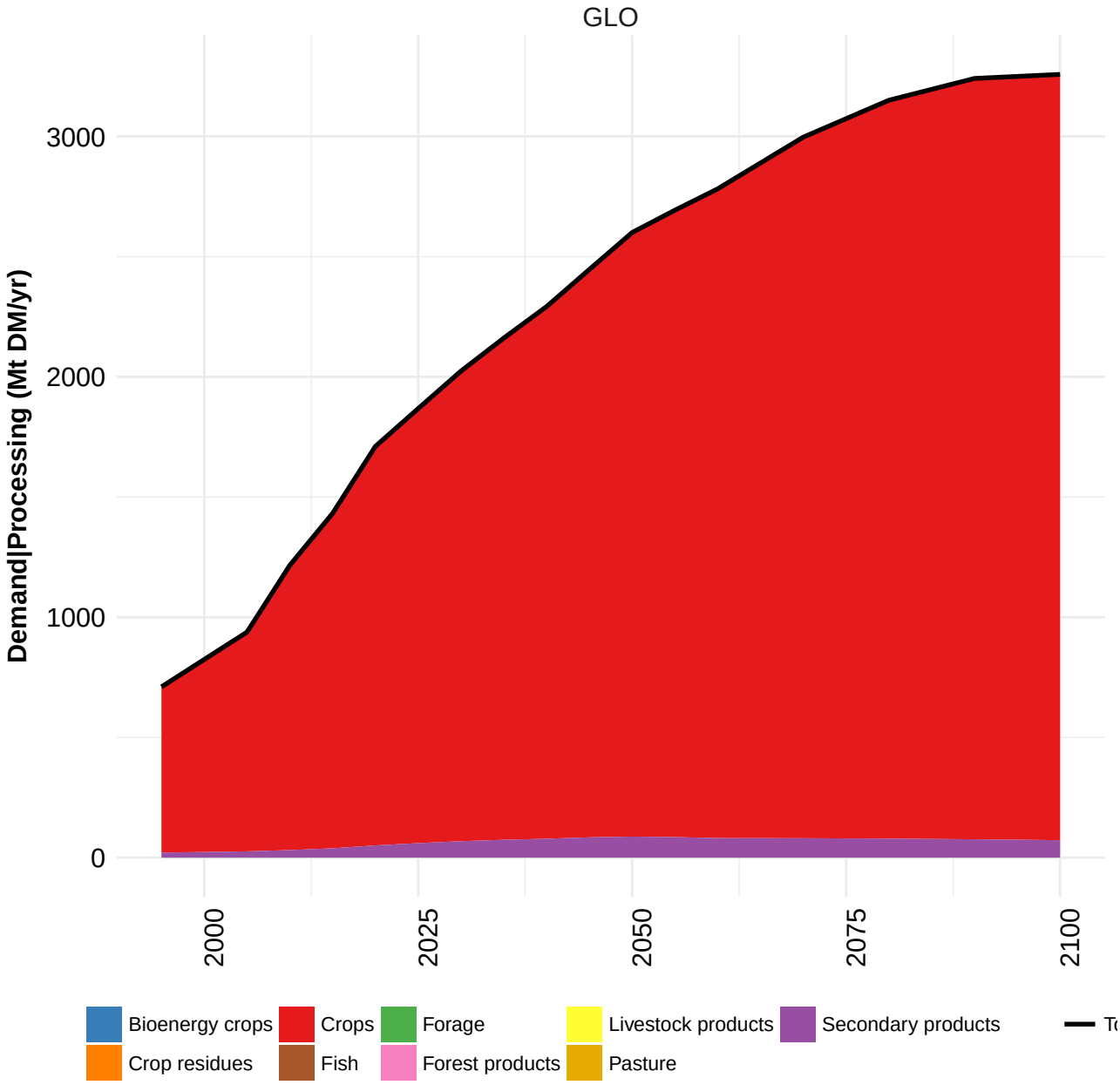
	2055	2060	2070	2080	2090	2100
GLO	29.6	30.0	30.5	30.5	30.1	29.4
CAZ	1.4	1.4	1.5	1.6	1.6	1.6
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	5.1	5.2	5.1	5.1	5.0	4.9
IND	5.4	5.5	5.6	5.5	5.4	5.2
LAM	8.7	8.7	8.7	8.6	8.3	8.1
MEA	3.1	3.2	3.3	3.4	3.4	3.4
NEU	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.6	2.6	2.6	2.6	2.5	2.5
REF	0.5	0.5	0.5	0.5	0.4	0.4
SSA	1.3	1.3	1.5	1.6	1.7	1.8
USA	1.3	1.3	1.4	1.4	1.4	1.4

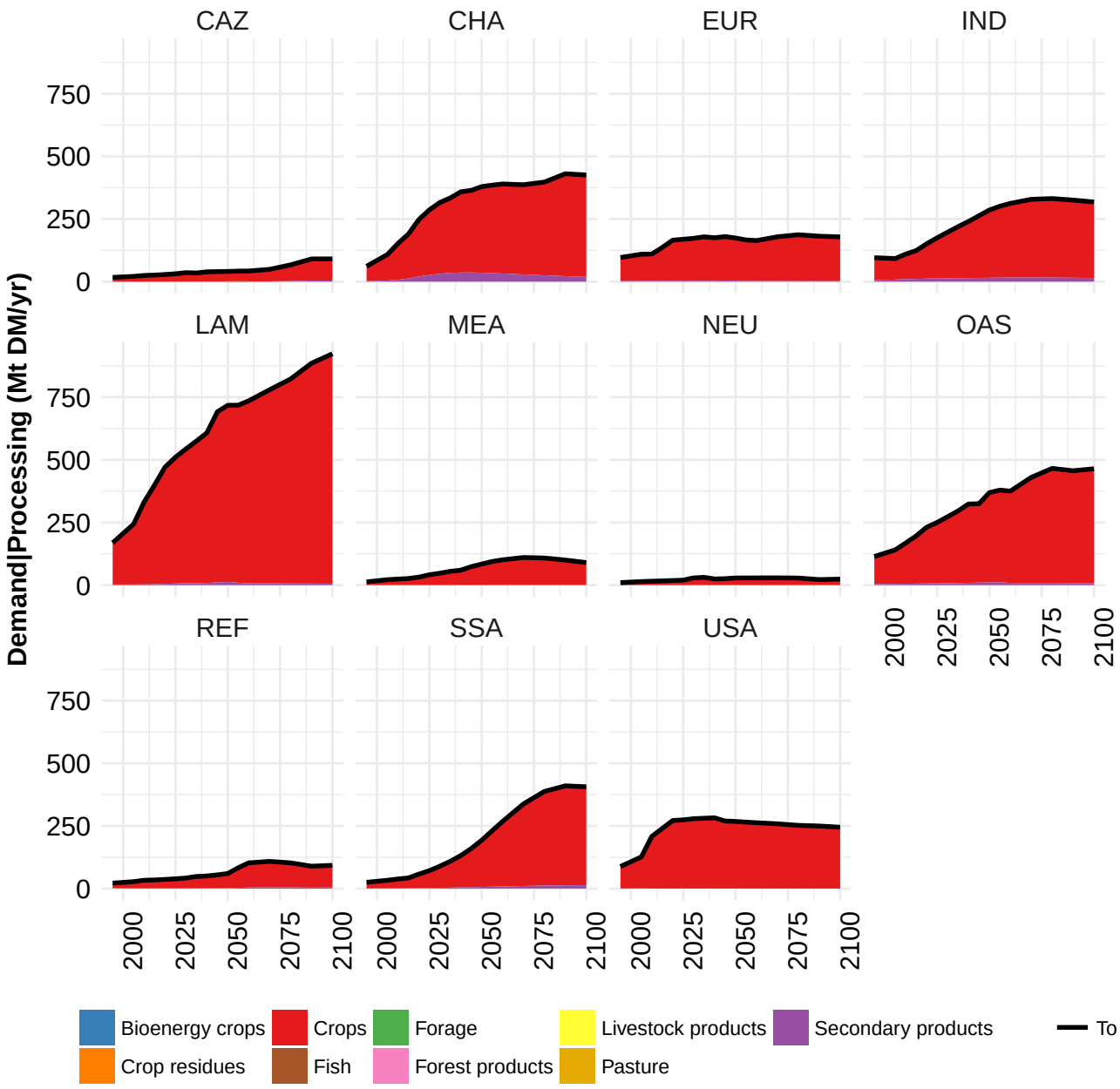
Table 537: MAgPIE new_input — Demand—Material—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

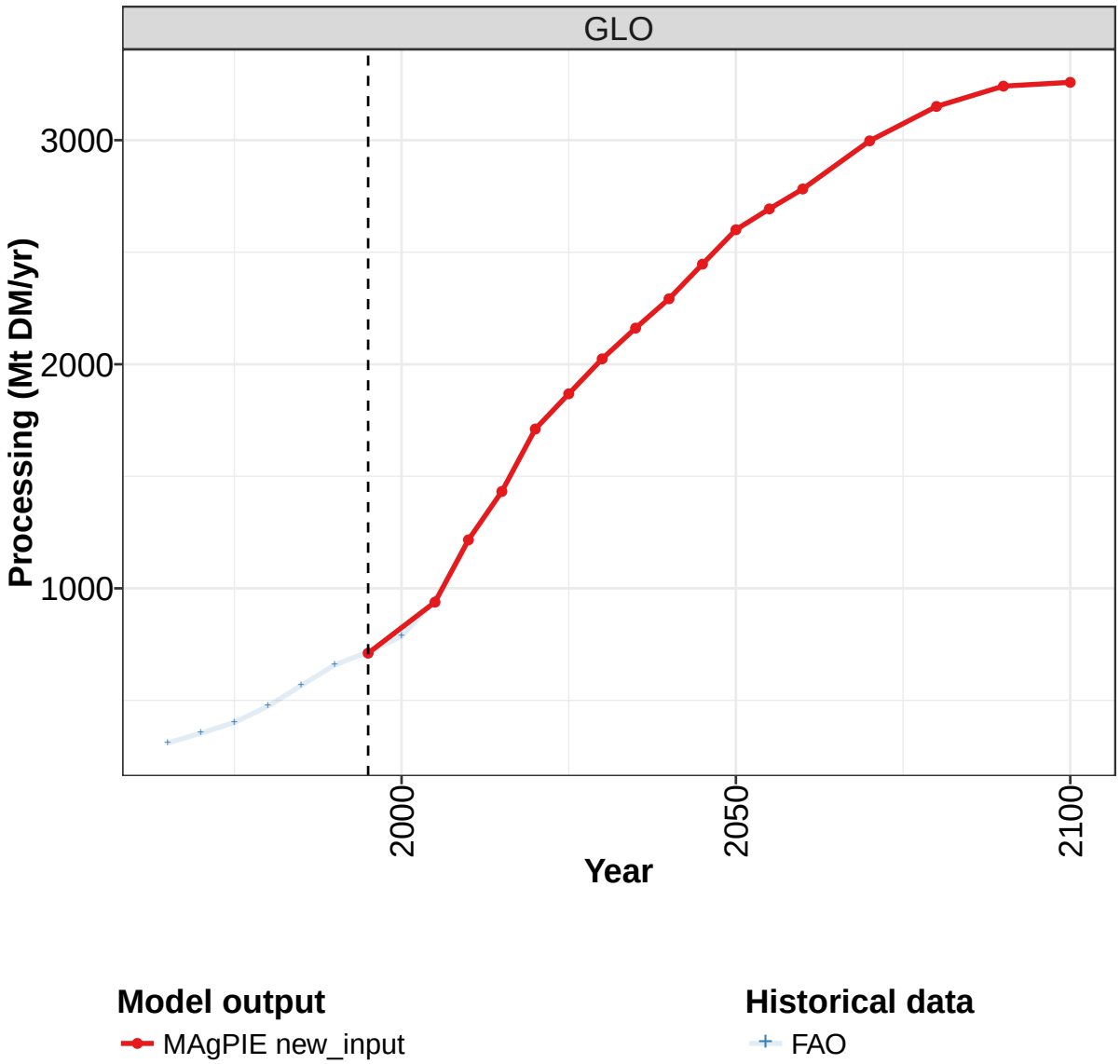
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.4	2.1	2.7	3.3	3.6	7.7	9.8	13.9	18.9	20.7
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.9	0.9
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
EUR	0.7	1.2	1.5	1.6	1.7	2.2	2.5	3.1	3.3	4.7
IND	0.0	0.0	0.0	0.0	0.0	2.5	2.6	2.6	3.9	3.2
LAM	0.4	0.4	0.6	0.8	0.9	1.7	2.7	4.8	4.9	6.3
MEA	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.9	2.4	1.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.2
OAS	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.5	1.2	1.8
REF	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.5	0.4
SSA	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5
USA	0.1	0.2	0.2	0.4	0.5	0.5	0.9	1.1	1.2	1.0

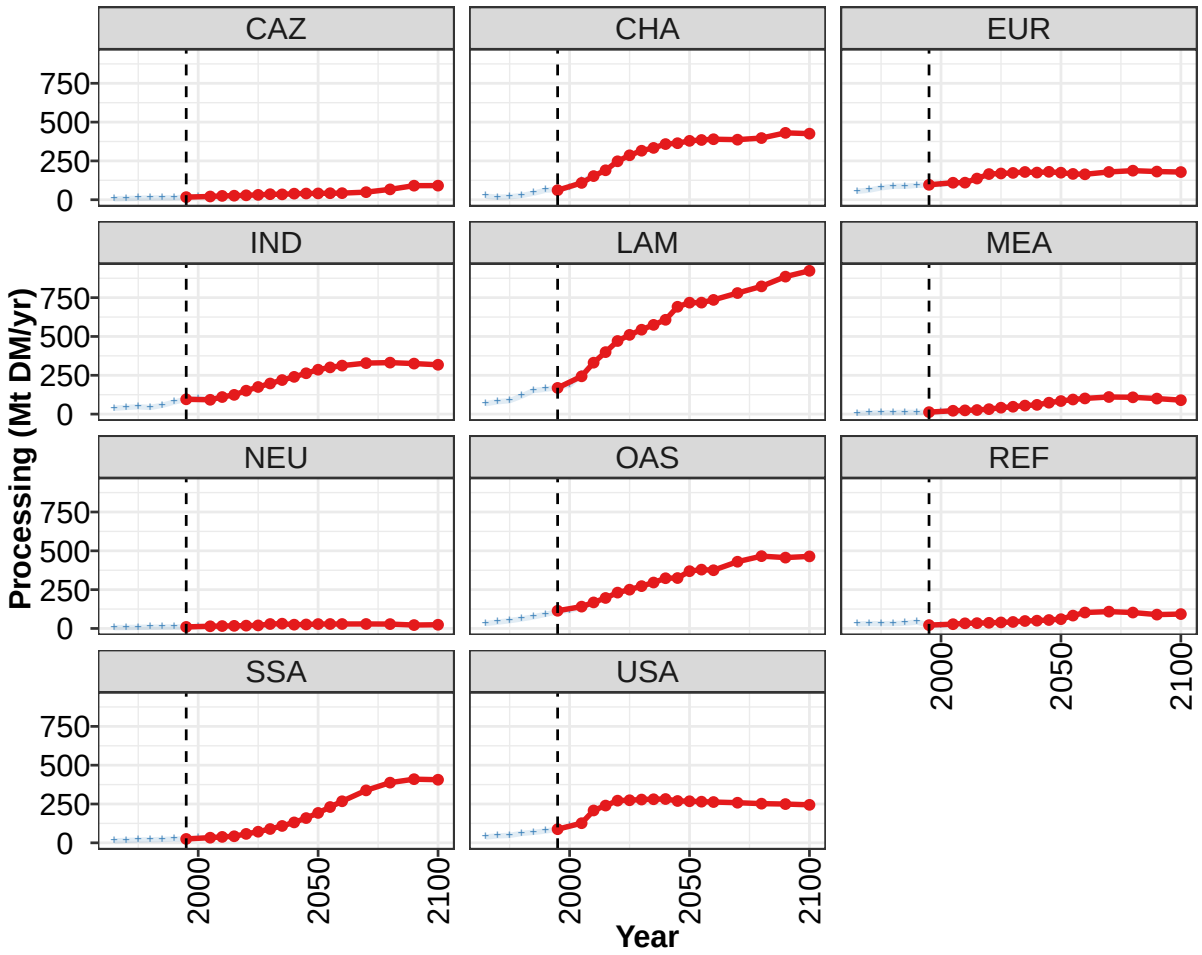
Table 538: FAO — Demand—Material—Secondary products—Sugar (Mt DM/yr)

9 Processing




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Processing (Mt DM/yr)
0
250
500
750
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


GLO
Processing (Mt DM/yr)
3000
2000
1000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



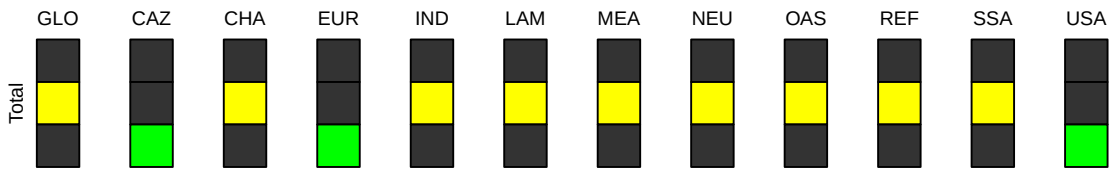


Figure 180: MAgPIE new_input — Demand—Processing (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	711	938	1216	1432	1711	1868	2024	2161	2292	2447	2600
CAZ	17	21	25	26	29	31	36	35	39	40	41
CHA	61	108	153	190	248	286	316	334	359	364	379
EUR	96	110	110	136	165	169	173	179	175	180	174
IND	95	92	110	124	151	175	197	219	240	263	286
LAM	169	243	331	399	471	510	544	575	607	691	718
MEA	13	22	24	26	32	41	47	55	60	74	84
NEU	10	14	16	17	18	20	29	31	25	26	28
OAS	114	141	168	197	231	250	273	296	324	325	369
REF	22	28	33	34	37	39	42	48	50	55	60
SSA	25	33	38	42	58	72	89	109	132	160	193
USA	88	126	208	240	272	274	279	281	282	270	268

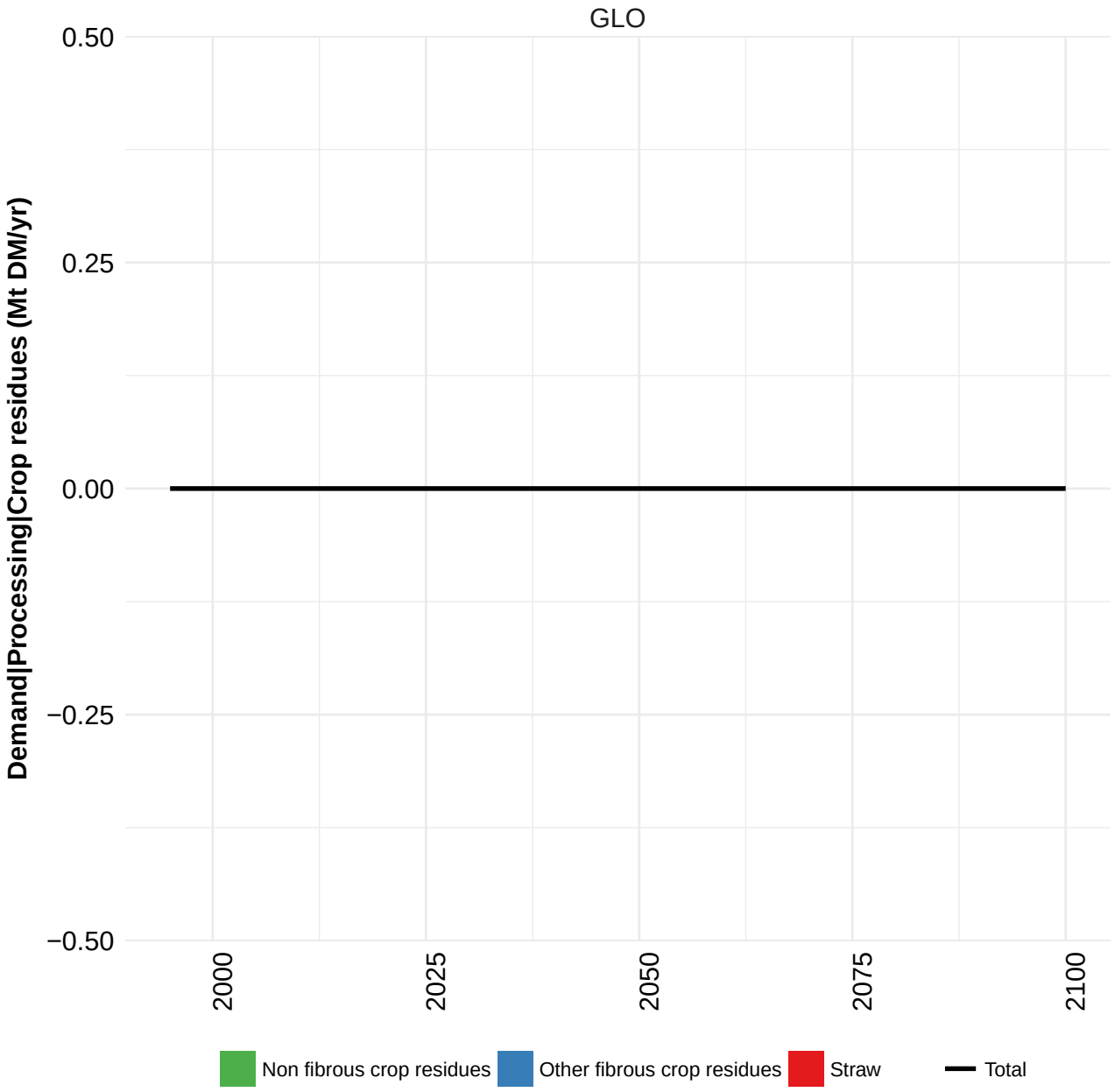
Table 539: MAgPIE new_input — Demand—Processing (Mt DM/yr) [PART 1/2]

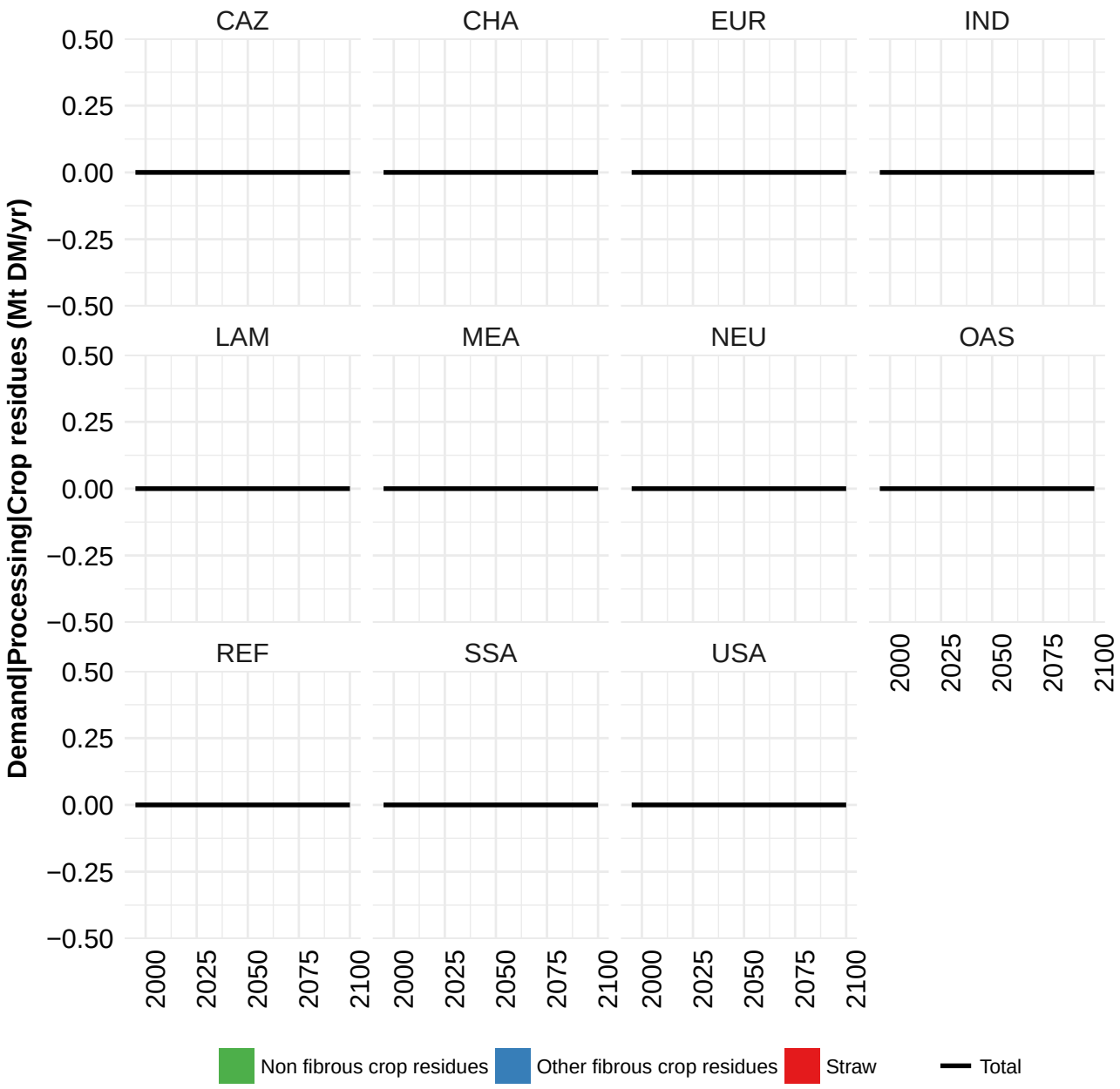
	2055	2060	2070	2080	2090	2100
GLO	2693	2782	2997	3151	3241	3258
CAZ	42	43	49	67	91	91
CHA	385	390	387	397	431	426
EUR	167	164	179	187	181	178
IND	301	312	329	332	325	318
LAM	718	736	780	823	885	923
MEA	94	101	110	108	100	90
NEU	29	29	29	28	22	24
OAS	379	375	430	466	456	464
REF	83	103	109	103	89	93
SSA	231	268	338	388	410	406
USA	265	263	258	252	250	245

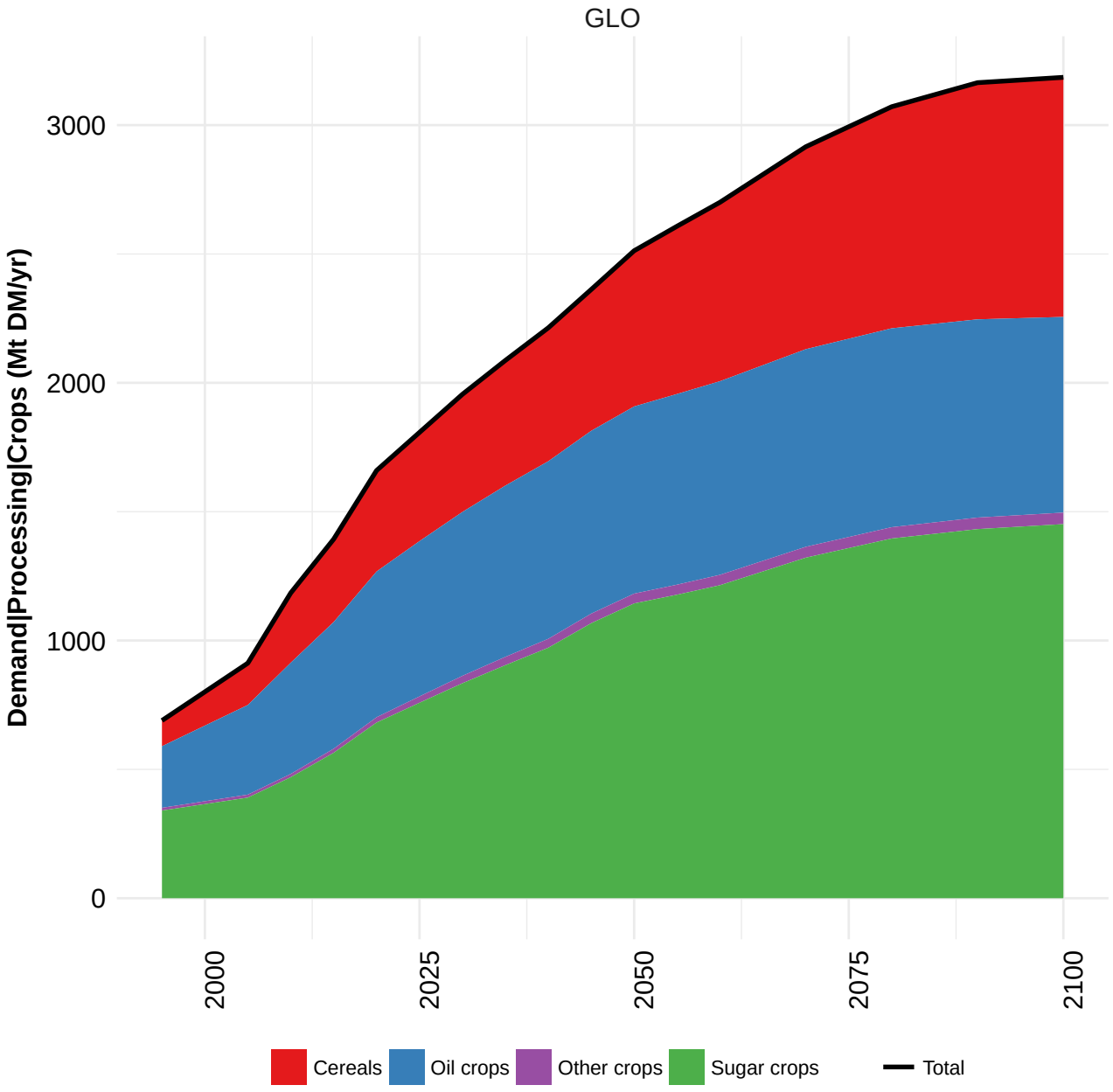
Table 540: MAgPIE new_input — Demand—Processing (Mt DM/yr) [PART 2/2]

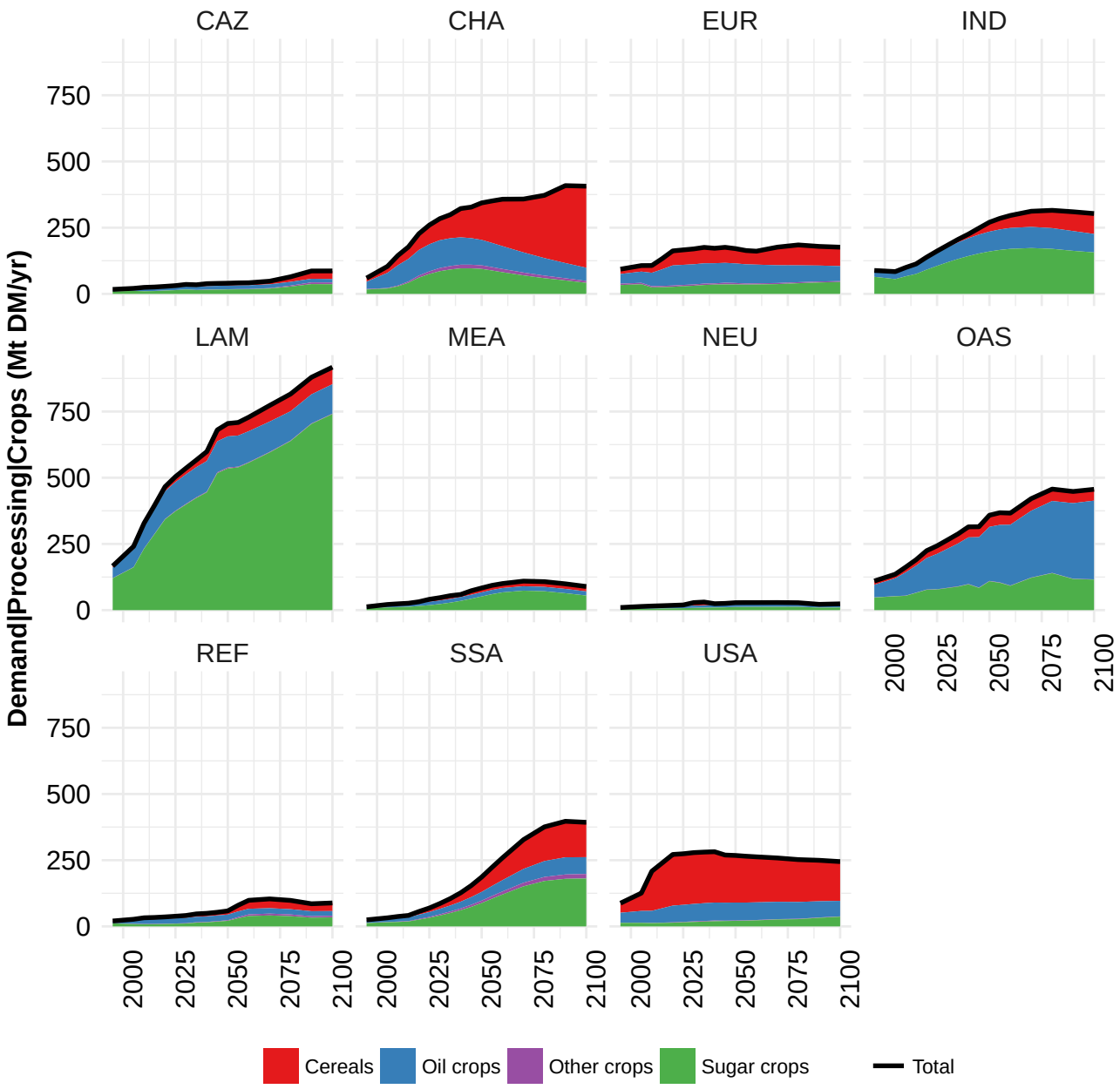
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	310	353	401	474	566	658	716	786	947	1200
CAZ	6	8	10	11	12	12	17	20	20	21
CHA	23	16	19	27	42	62	67	79	119	156
EUR	54	62	77	86	87	93	95	99	103	108
IND	38	43	47	43	57	78	96	102	93	109
LAM	67	80	86	116	152	160	173	186	253	331
MEA	5	7	9	9	11	11	12	15	19	22
NEU	5	6	7	8	9	11	9	13	13	16
OAS	32	41	50	62	75	91	109	116	136	165
REF	29	31	30	31	34	41	22	19	28	33
SSA	12	16	18	19	21	25	25	29	34	37
USA	38	45	48	60	68	76	89	107	129	204

Table 541: FAO — Demand—Processing (Mt DM/yr)

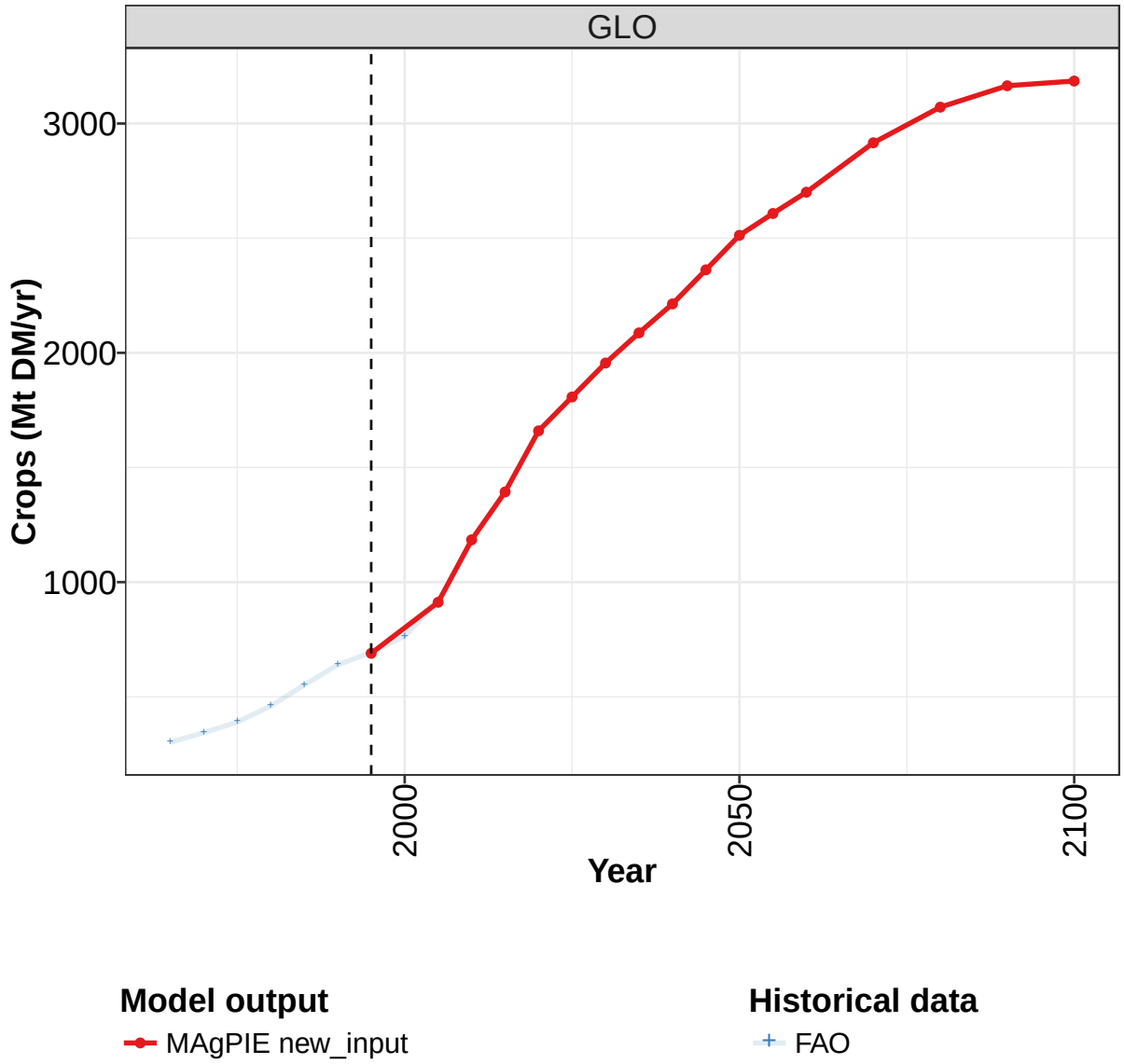

GLO
Demand|Processing|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total

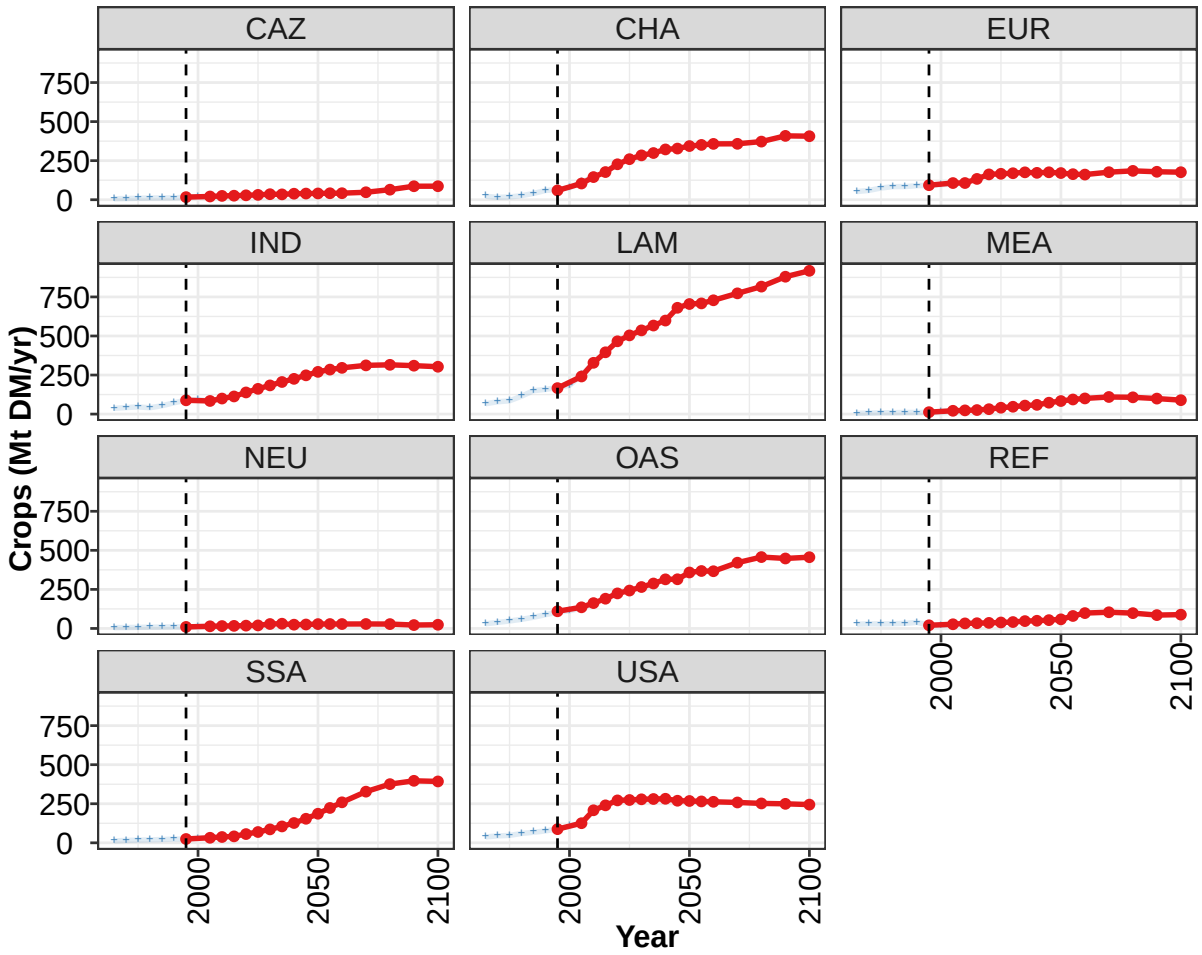

CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Processing|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


GLO
Demand|Processing|Crops (Mt DM/yr)
3000
2000
1000
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Processing|Crops (Mt DM/yr)
0
250
500
750
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

9.1 Crops


GLO
3000
2000
1000
Crops (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



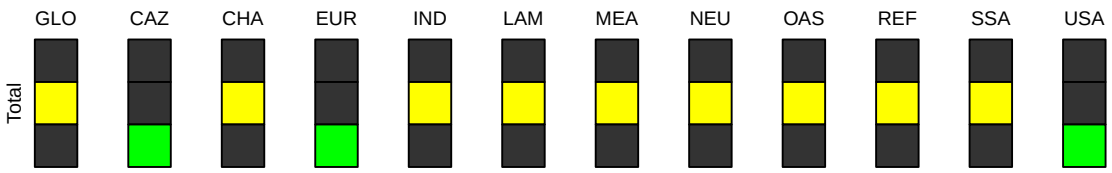


Figure 181: MAgPIE new_input — Demand—Processing—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	690	912	1185	1393	1660	1808	1956	2087	2213	2362	2513
CAZ	17	21	25	26	28	31	36	34	39	40	40
CHA	60	104	145	177	227	260	284	299	322	328	344
EUR	93	107	107	133	162	166	170	176	172	176	171
IND	88	84	100	113	139	162	184	206	226	248	270
LAM	166	241	328	396	466	504	536	567	599	681	705
MEA	13	21	24	26	32	41	47	54	59	73	84
NEU	10	14	15	17	18	20	29	31	24	25	28
OAS	110	136	162	191	224	243	265	288	315	315	358
REF	20	27	33	34	36	38	41	47	49	53	58
SSA	25	32	37	41	56	69	86	105	127	154	186
USA	88	126	208	240	272	274	279	281	282	269	268

Table 542: MAgPIE new_input — Demand—Processing—Crops (Mt DM/yr) [PART 1/2]

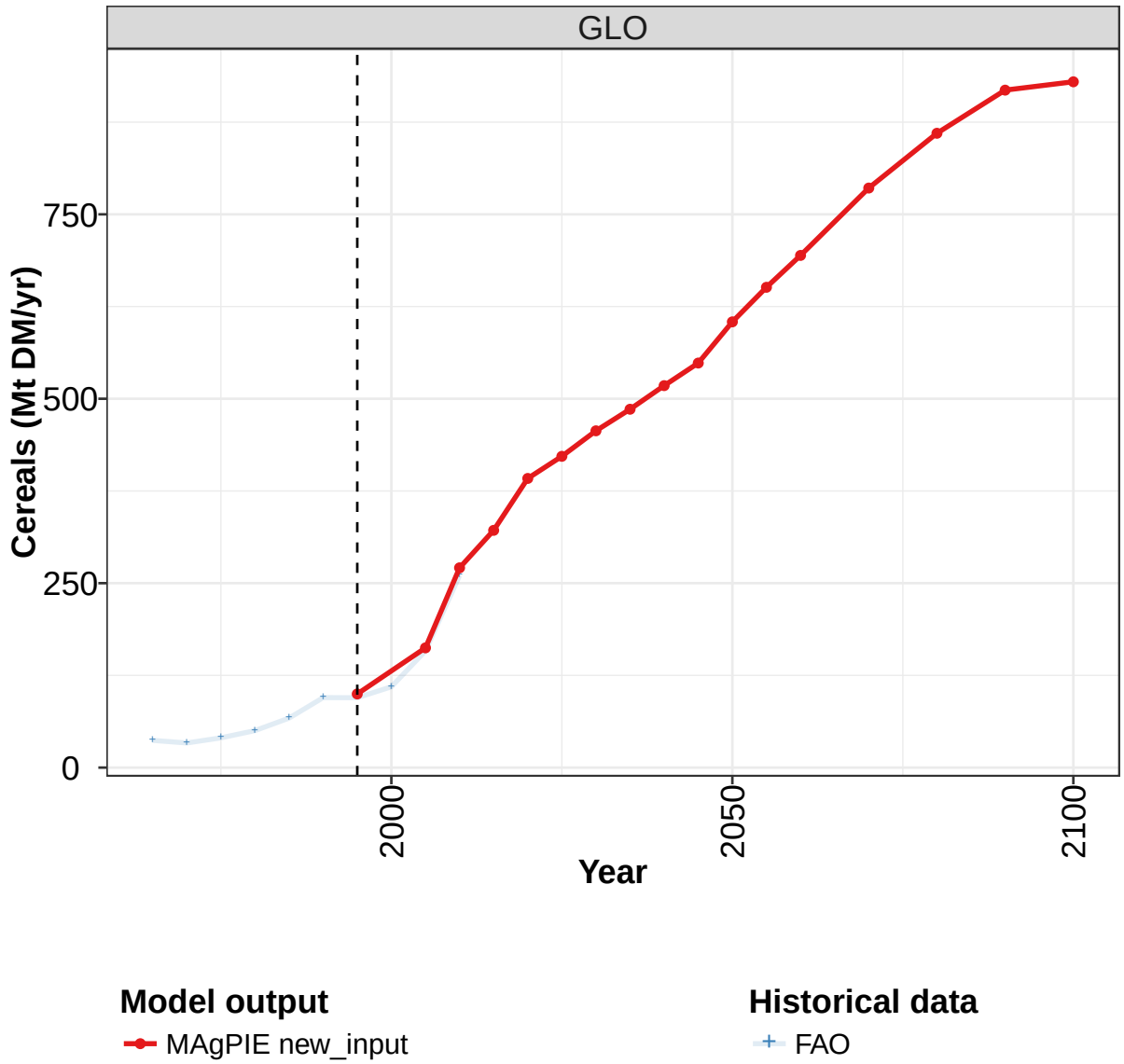
	2055	2060	2070	2080	2090	2100
GLO	2608	2701	2916	3071	3165	3185
CAZ	41	42	48	64	86	87
CHA	351	357	358	372	409	407
EUR	164	161	176	185	179	176
IND	285	296	312	315	310	303
LAM	709	728	773	816	879	917
MEA	94	100	110	107	99	89
NEU	28	28	29	28	22	24
OAS	368	366	421	457	448	456
REF	80	98	104	98	86	89
SSA	223	259	328	376	397	393
USA	265	263	258	252	250	245

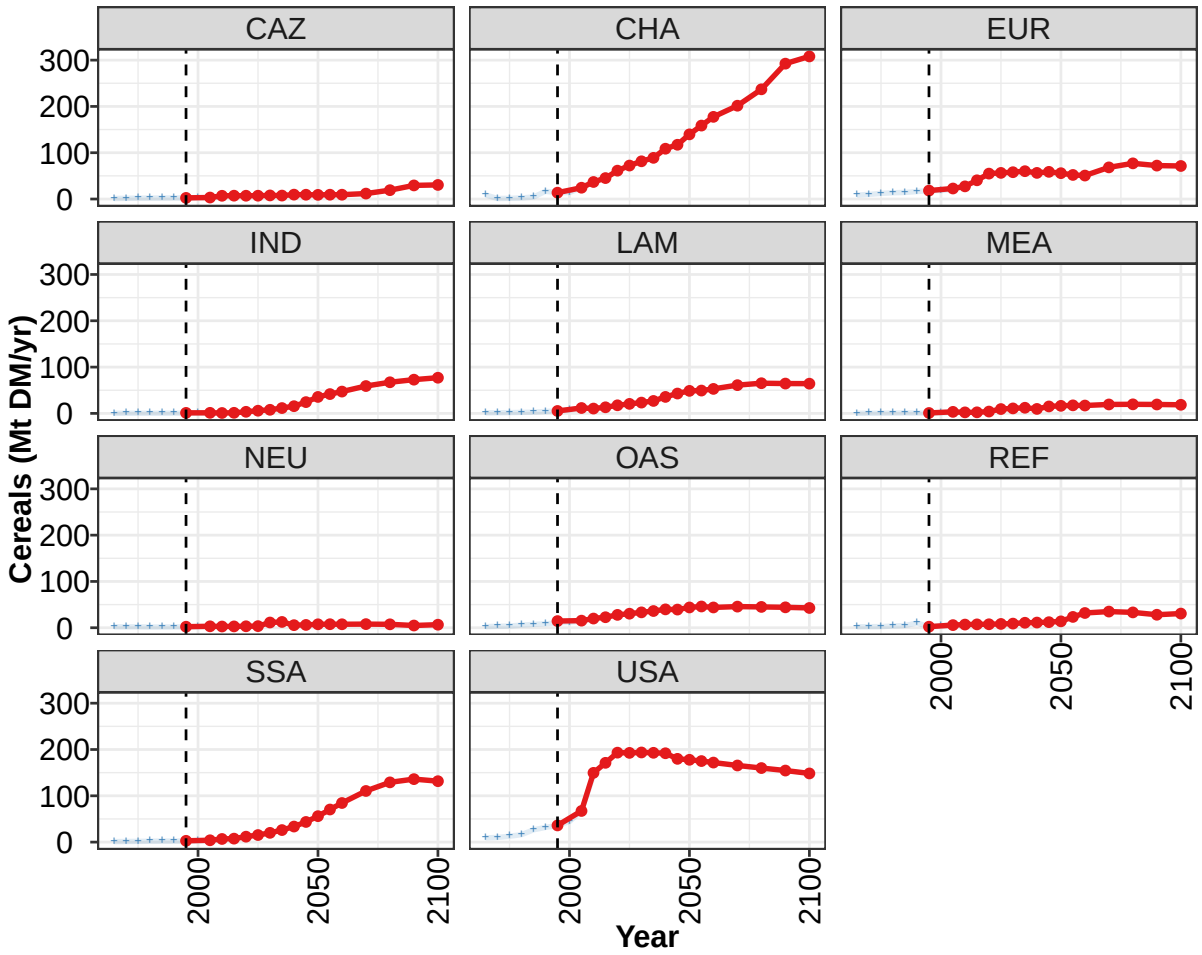
Table 543: MAgPIE new_input — Demand—Processing—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	302	343	390	460	551	639	694	764	919	1169
CAZ	6	8	9	11	12	12	17	19	20	21
CHA	23	15	18	26	40	59	65	77	113	148
EUR	52	60	75	84	84	90	92	97	100	105
IND	37	42	46	41	53	72	89	93	85	99
LAM	66	79	85	114	150	158	170	184	250	328
MEA	5	7	9	9	10	11	12	14	19	22
NEU	5	6	7	8	9	11	9	13	13	15
OAS	30	38	48	58	72	88	105	113	131	160
REF	28	30	29	30	32	39	21	19	27	32
SSA	12	15	17	19	21	24	24	29	34	36
USA	38	44	47	60	68	76	89	106	128	204

Table 544: FAO — Demand—Processing—Crops (Mt DM/yr)

9.1.1 Cereals


GLO
Cereals (Mt DM/yr)
750
500
250
0
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



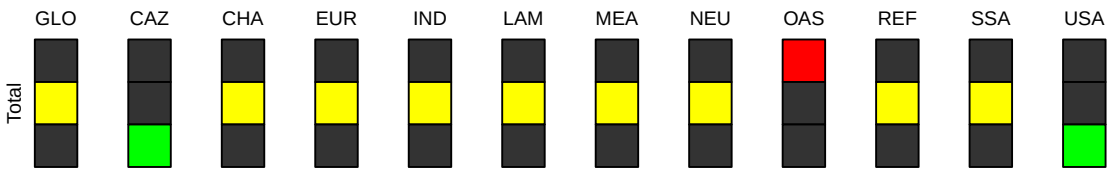


Figure 182: MAgPIE new_input — Demand—Processing—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	100	162	271	322	392	422	457	486	518	548	604
CAZ	2	3	7	7	7	7	8	7	10	9	9
CHA	14	24	37	45	61	72	82	89	109	117	140
EUR	18	23	27	41	55	56	58	60	56	59	56
IND	1	1	1	1	3	6	8	12	16	24	36
LAM	5	12	10	13	17	21	23	27	36	43	49
MEA	1	3	2	2	4	9	11	12	10	15	16
NEU	2	3	3	3	3	4	11	13	6	6	7
OAS	14	15	20	23	28	30	33	36	40	39	44
REF	2	6	7	7	8	8	9	11	11	12	14
SSA	3	4	7	8	12	15	20	26	34	44	56
USA	36	67	150	171	193	193	194	193	192	180	178

Table 545: MAgPIE new_input — Demand—Processing—Crops—Cereals (Mt DM/yr) [PART 1/2]

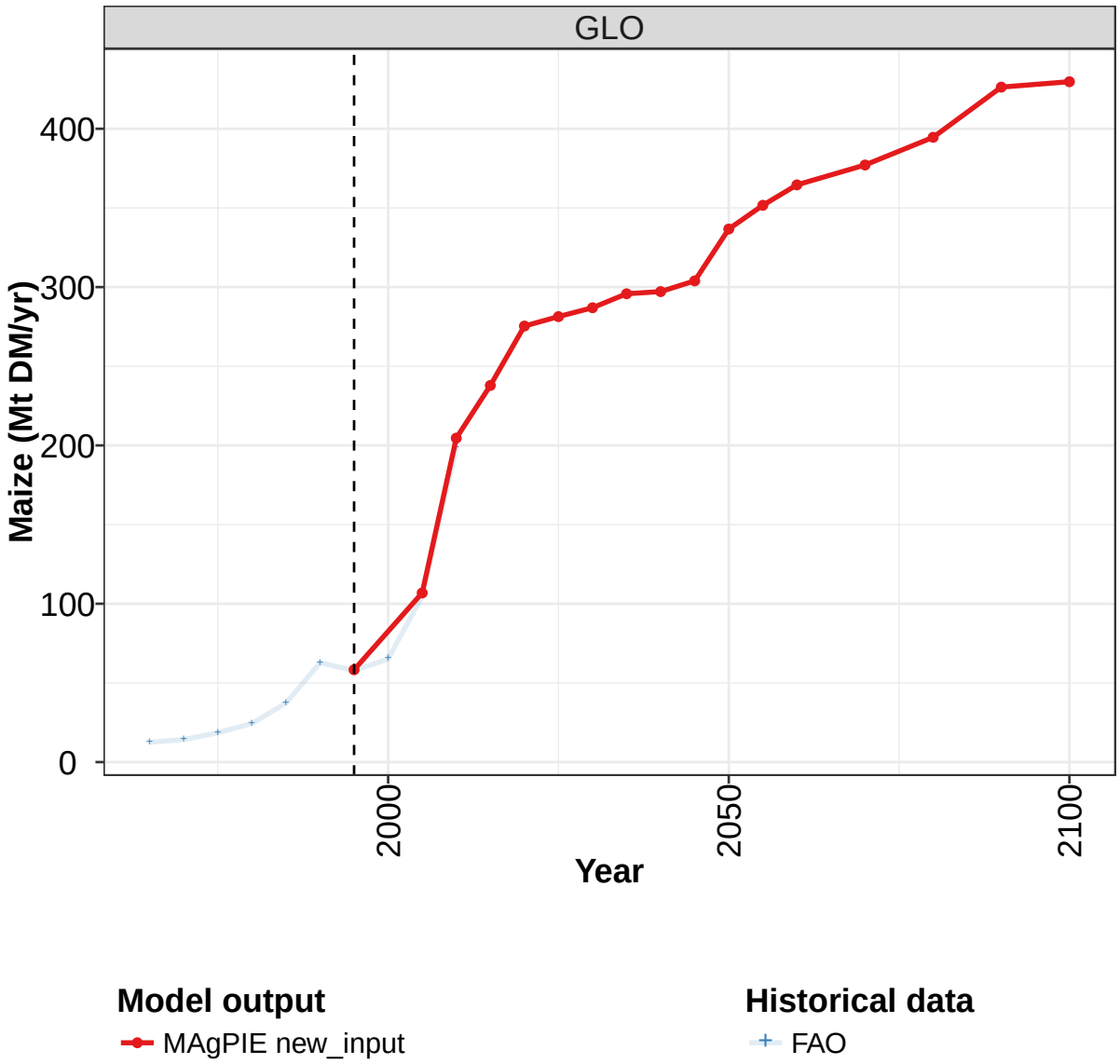
	2055	2060	2070	2080	2090	2100
GLO	651	694	786	860	918	930
CAZ	9	9	12	19	29	30
CHA	159	178	202	237	292	308
EUR	52	51	68	77	72	71
IND	42	47	59	67	73	77
LAM	49	53	61	65	64	64
MEA	17	17	19	20	19	19
NEU	8	8	8	7	5	7
OAS	46	44	46	45	44	43
REF	23	32	35	33	28	31
SSA	70	85	111	129	136	132
USA	175	172	166	160	155	148

Table 546: MAgPIE new_input — Demand—Processing—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	37	33	40	50	67	95	95	109	158	260
CAZ	1	2	2	2	2	2	3	3	3	4
CHA	9	1	2	2	4	17	14	14	25	37
EUR	8	10	12	13	14	16	18	18	21	26
IND	0	0	0	0	0	0	0	1	1	1
LAM	1	1	2	2	3	4	5	7	12	11
MEA	0	0	0	1	1	1	1	1	2	2
NEU	2	2	2	1	2	2	2	2	3	3
OAS	2	3	4	6	7	9	11	12	15	20
REF	2	2	2	4	5	10	2	4	6	7
SSA	1	1	2	2	2	2	3	3	4	6
USA	9	10	13	16	27	32	36	44	67	144

Table 547: FAO — Demand—Processing—Crops—Cereals (Mt DM/yr)

9.1.2 Cereals—Maize



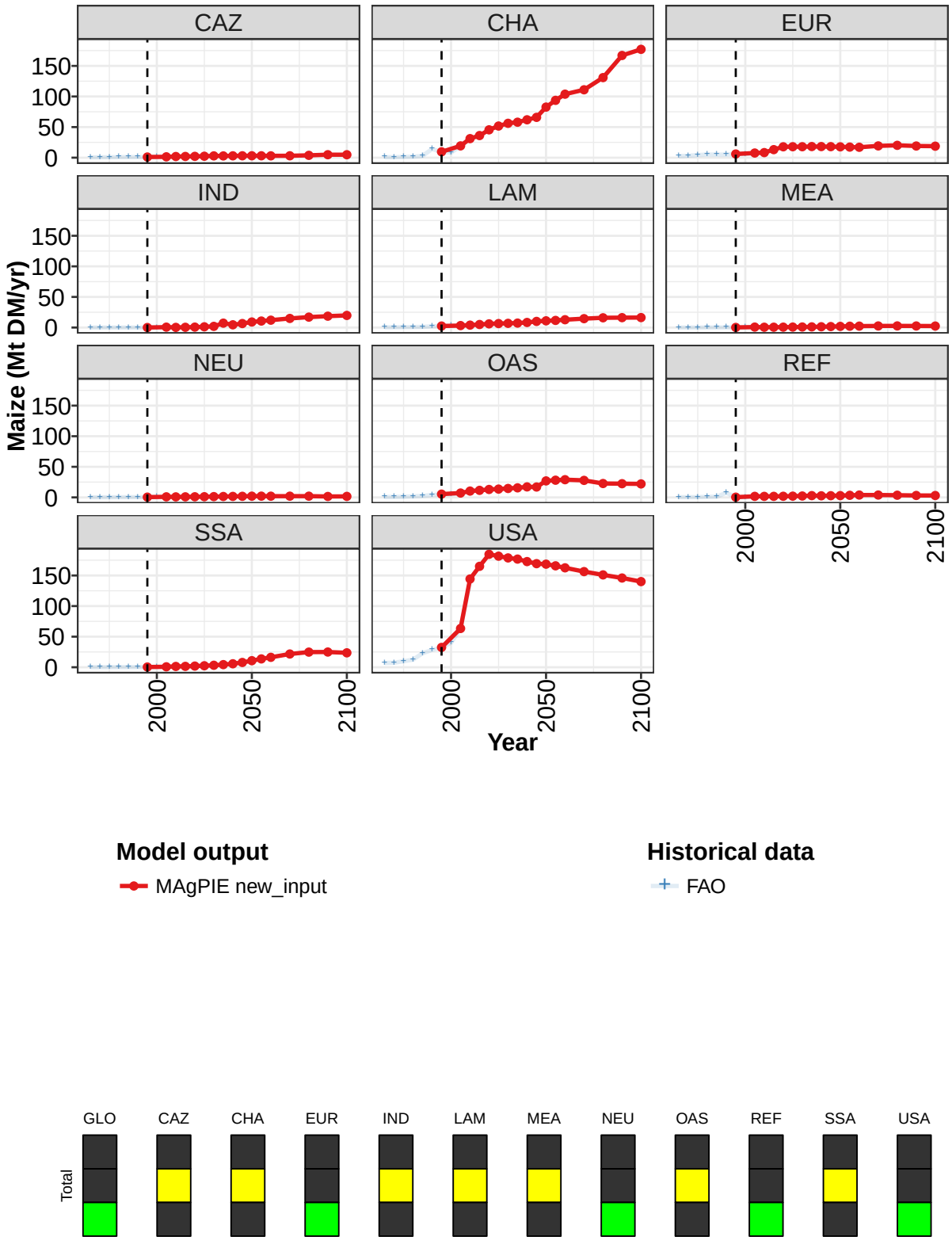


Figure 183: MAgPIE new_input — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	58	107	205	238	275	281	287	296	297	304	337
CAZ	1	1	2	2	2	2	3	3	3	3	3
CHA	10	19	31	36	46	52	56	58	62	66	83
EUR	6	8	8	13	18	18	18	18	18	18	18
IND	0	1	0	0	1	1	2	7	4	7	9
LAM	2	3	4	5	6	6	7	7	8	10	11
MEA	0	1	1	1	1	1	1	1	1	2	2
NEU	0	1	1	1	1	1	1	1	2	2	2
OAS	5	7	10	12	13	14	15	16	17	17	27
REF	0	2	2	2	2	2	2	3	3	3	3
SSA	0	1	1	1	2	2	3	4	6	8	11
USA	32	63	144	165	185	182	179	177	173	169	169

Table 548: MAgPIE new_input — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

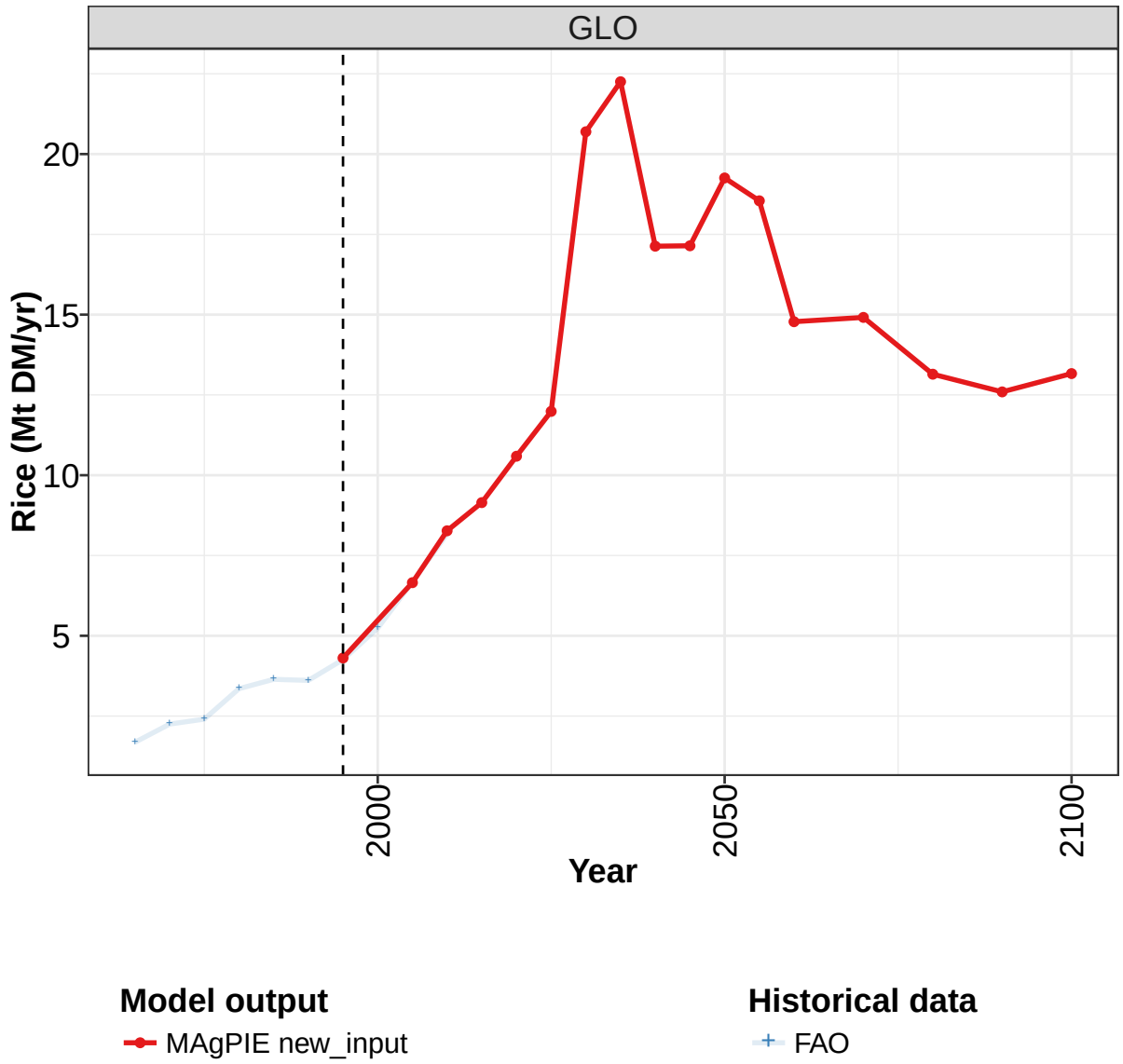
	2055	2060	2070	2080	2090	2100
GLO	352	365	377	395	426	430
CAZ	3	3	3	4	5	5
CHA	94	104	111	131	167	177
EUR	17	17	19	20	19	19
IND	11	12	15	17	19	20
LAM	12	13	15	16	16	16
MEA	2	2	3	3	3	2
NEU	2	2	2	2	2	2
OAS	28	29	28	23	22	22
REF	3	4	4	4	3	3
SSA	14	16	22	25	25	24
USA	166	163	156	151	146	140

Table 549: MAgPIE new_input — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12	14	19	24	37	63	58	65	105	198
CAZ	0	1	1	1	1	1	1	1	1	1
CHA	1	1	1	2	3	14	9	8	19	31
EUR	2	3	4	5	5	5	6	6	7	8
IND	0	0	0	0	0	0	0	0	0	0
LAM	0	0	1	1	1	2	3	3	3	4
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	1	1	1
OAS	1	1	1	2	3	4	5	5	7	10
REF	0	0	0	1	1	8	0	0	2	2
SSA	0	0	0	0	0	0	0	1	1	1
USA	7	7	10	12	23	28	32	40	63	139

Table 550: FAO — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr)

9.1.3 Cereals—Rice



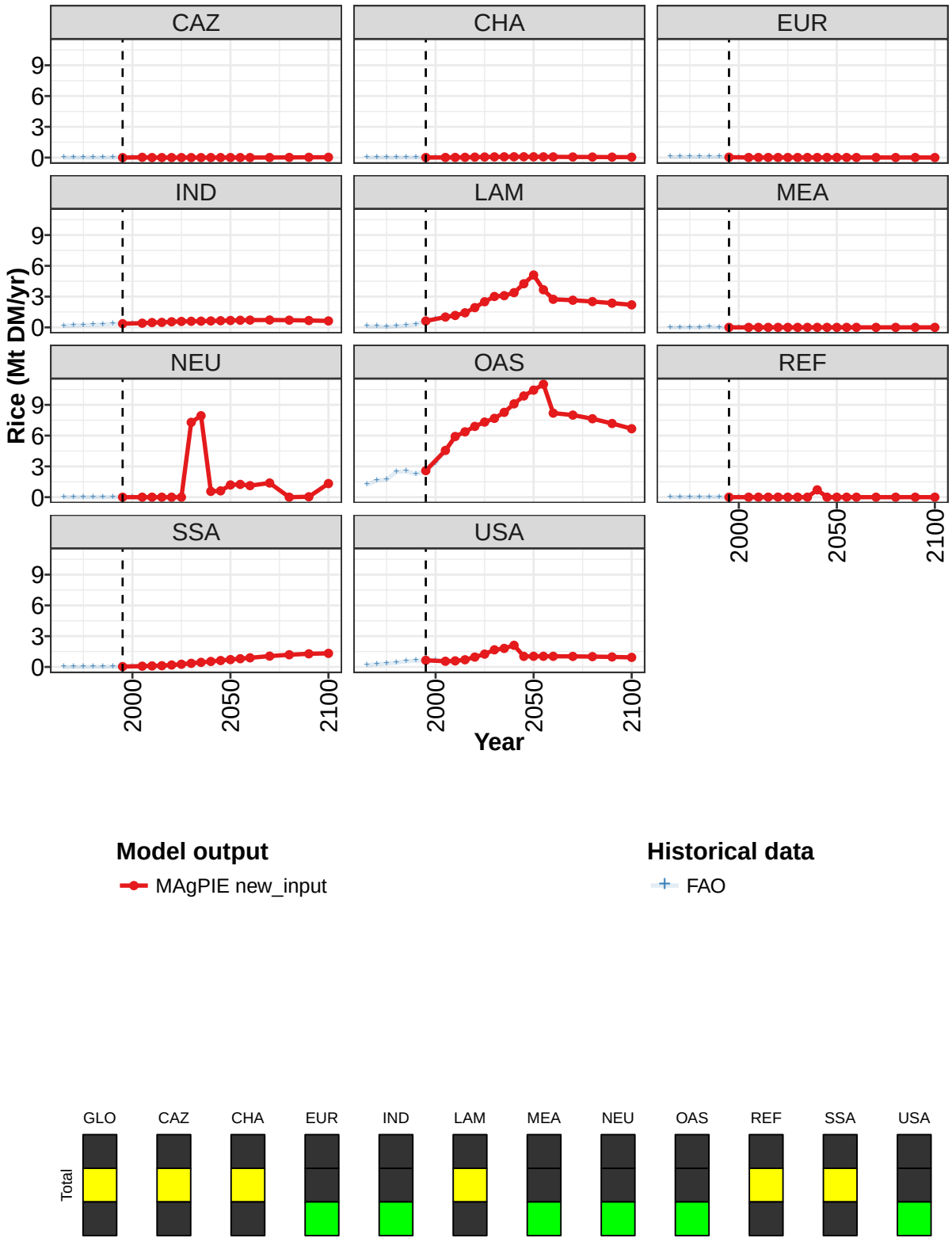


Figure 184: MAgPIE new_input — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.3	6.7	8.3	9.1	10.6	12.0	20.7	22.3	17.1	17.1	19.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7
LAM	0.6	1.0	1.2	1.4	1.9	2.5	3.0	3.1	3.4	4.3	5.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	7.3	7.9	0.6	0.6	1.2
OAS	2.6	4.6	5.9	6.4	6.9	7.3	7.7	8.3	9.1	9.9	10.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
SSA	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7
USA	0.6	0.6	0.6	0.7	1.0	1.3	1.7	1.8	2.1	1.0	1.0

Table 551: MAgPIE new_input — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

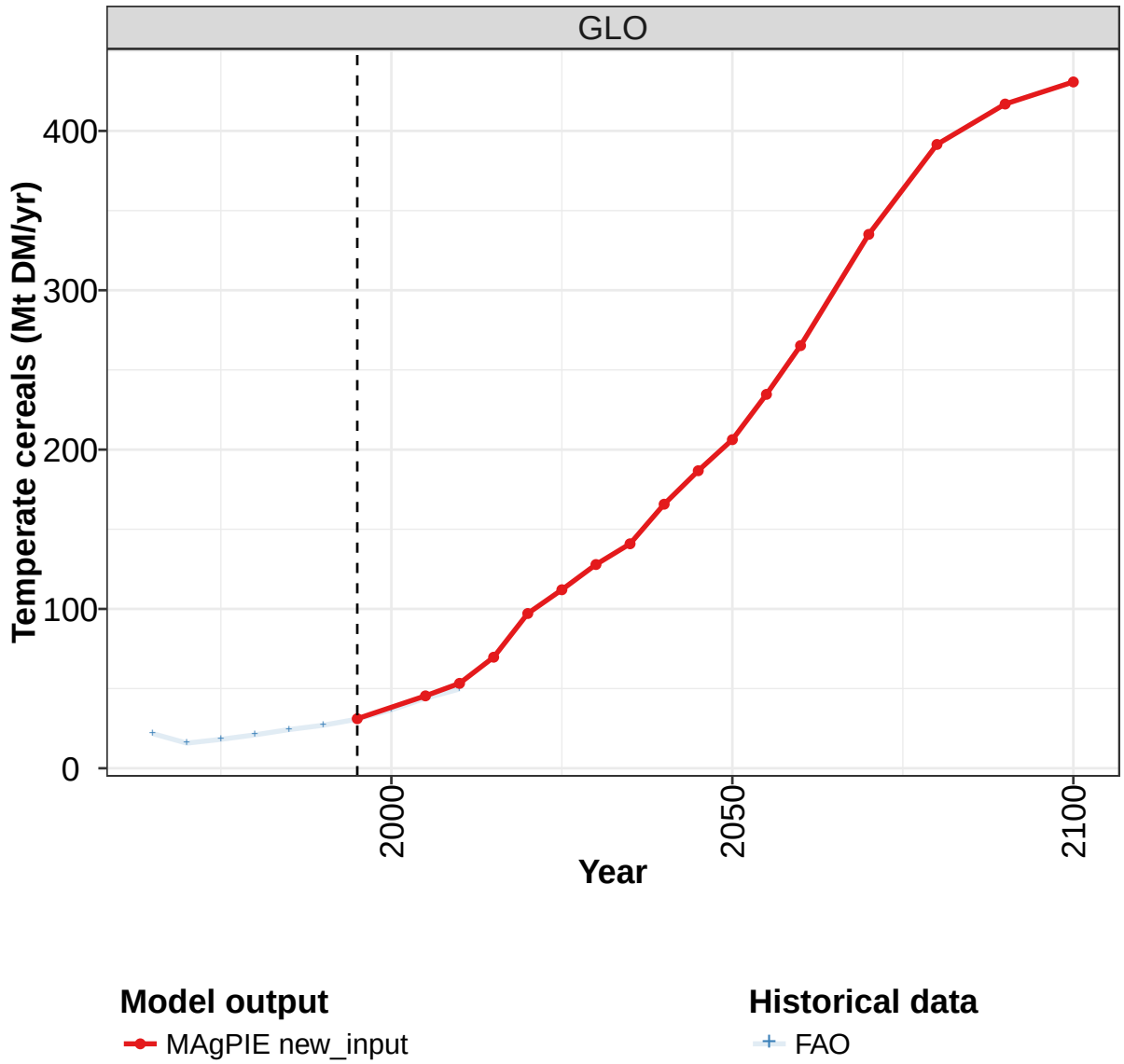
	2055	2060	2070	2080	2090	2100
GLO	18.5	14.8	14.9	13.1	12.6	13.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.7	0.7	0.7	0.7	0.7	0.6
LAM	3.7	2.7	2.6	2.5	2.4	2.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	1.2	1.1	1.4	0.0	0.0	1.3
OAS	11.0	8.2	8.0	7.6	7.2	6.7
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.8	0.9	1.1	1.2	1.3	1.3
USA	1.0	1.0	1.0	1.0	1.0	0.9

Table 552: MAgPIE new_input — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.68	2.25	2.40	3.35	3.64	3.61	4.26	5.24	6.68	8.17
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
CHA	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
EUR	0.05	0.06	0.06	0.06	0.07	0.05	0.04	0.02	0.01	0.01
IND	0.15	0.19	0.23	0.24	0.29	0.34	0.36	0.38	0.41	0.45
LAM	0.08	0.09	0.06	0.10	0.16	0.31	0.63	0.78	1.09	1.22
MEA	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	1.23	1.63	1.72	2.49	2.52	2.26	2.56	3.34	4.48	5.80
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.02	0.01	0.03	0.04	0.05	0.08	0.10
USA	0.17	0.28	0.33	0.44	0.56	0.62	0.62	0.65	0.55	0.57

Table 553: FAO — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr)

9.1.4 Cereals—Temperate cereals



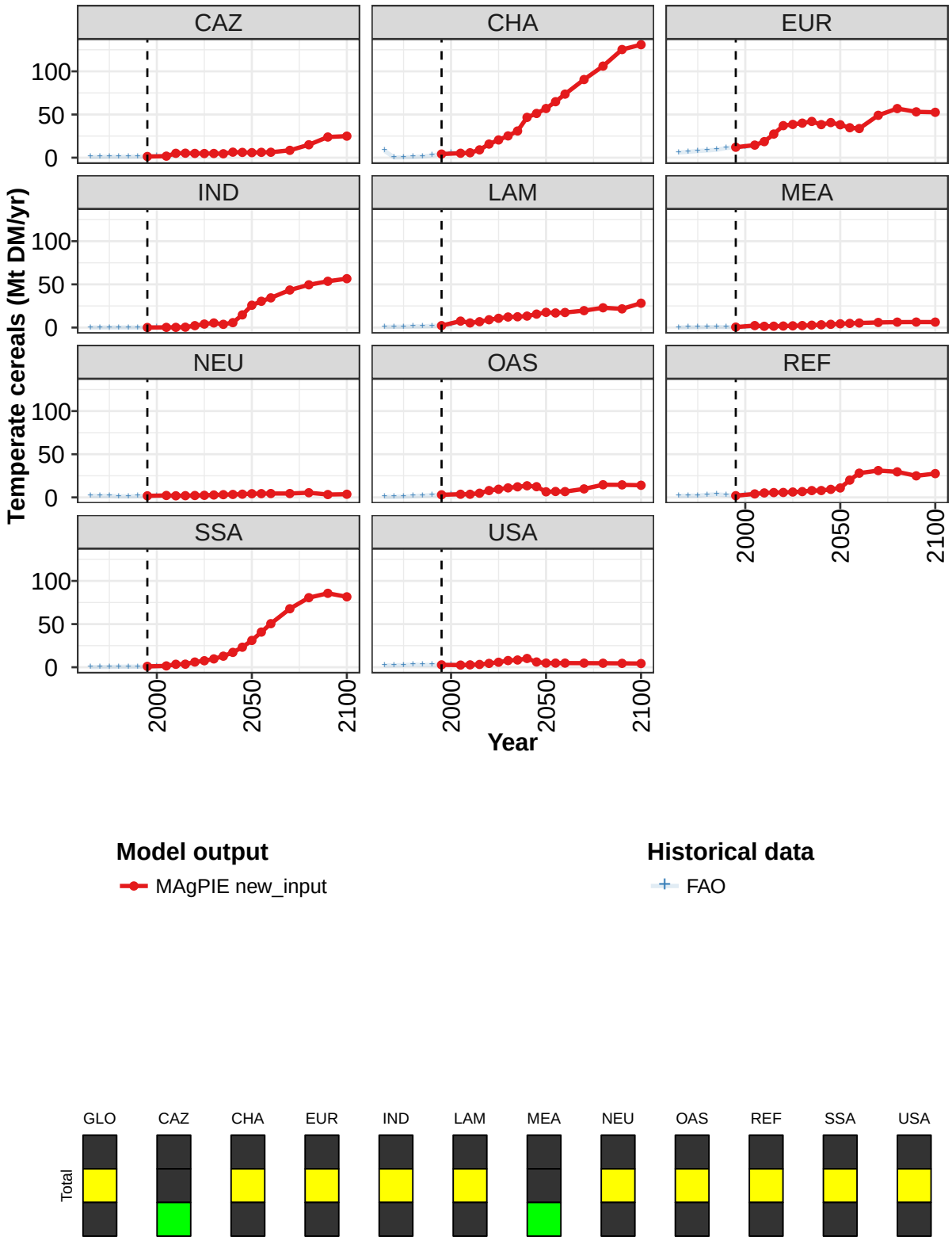


Figure 185: MAgPIE new_input — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	31	45	53	70	97	112	128	141	166	187	206
CAZ	1	2	5	5	5	5	5	5	6	6	6
CHA	4	5	6	9	16	21	25	31	47	51	57
EUR	12	15	19	27	37	39	40	42	38	41	38
IND	0	0	0	0	2	4	5	4	6	15	26
LAM	2	7	5	7	9	11	12	12	13	16	18
MEA	1	2	1	2	2	2	2	3	3	4	4
NEU	2	2	2	2	2	2	3	3	3	4	4
OAS	3	4	4	5	8	9	11	12	13	12	6
REF	2	4	5	6	6	6	7	8	8	9	11
SSA	1	2	3	4	6	8	10	13	17	23	31
USA	3	3	3	3	4	6	8	8	10	6	5

Table 554: MAgPIE new_input — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

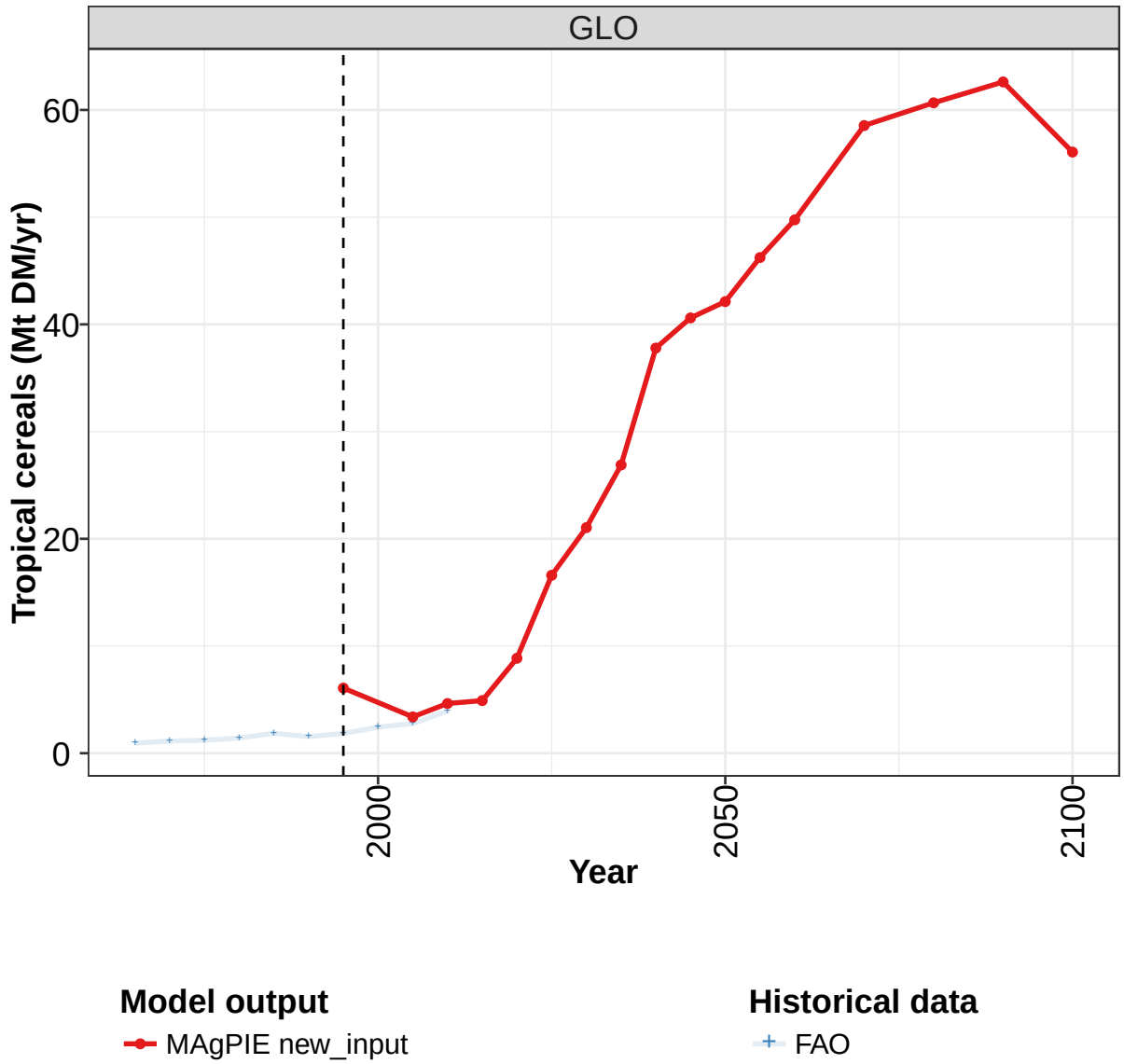
	2055	2060	2070	2080	2090	2100
GLO	235	265	335	392	417	431
CAZ	6	6	9	15	24	25
CHA	65	74	91	106	125	131
EUR	35	34	49	57	53	53
IND	30	34	43	50	54	57
LAM	17	17	20	23	22	28
MEA	5	5	6	6	6	6
NEU	4	4	4	5	3	4
OAS	7	7	10	15	15	14
REF	20	28	31	30	25	28
SSA	41	51	68	81	86	82
USA	5	5	5	5	5	4

Table 555: MAgPIE new_input — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	21.8	15.8	18.1	21.0	24.3	27.0	30.8	36.6	44.0	49.8
CAZ	0.7	0.9	1.1	1.0	1.0	1.2	1.4	1.8	1.8	2.7
CHA	8.0	0.3	0.4	0.7	1.5	2.5	4.5	5.7	5.7	5.8
EUR	6.0	6.7	7.8	8.3	9.2	11.2	12.3	12.3	14.2	18.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
LAM	0.7	0.9	0.9	1.3	1.4	1.9	2.2	3.5	7.7	5.3
MEA	0.1	0.2	0.3	0.5	0.7	0.4	0.5	0.6	1.0	1.3
NEU	2.0	1.8	1.8	1.2	1.2	1.4	1.6	1.7	2.0	1.9
OAS	0.5	0.7	0.9	1.4	2.2	2.4	2.9	3.3	3.5	3.6
REF	1.7	1.9	2.0	2.9	3.6	2.6	2.1	3.8	4.1	5.2
SSA	0.2	0.3	0.4	0.6	0.7	0.6	0.6	0.8	1.4	3.0
USA	1.9	2.2	2.5	3.1	2.7	2.7	2.7	3.1	2.5	2.7

Table 556: FAO — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr)

9.1.5 Cereals—Tropical cereals



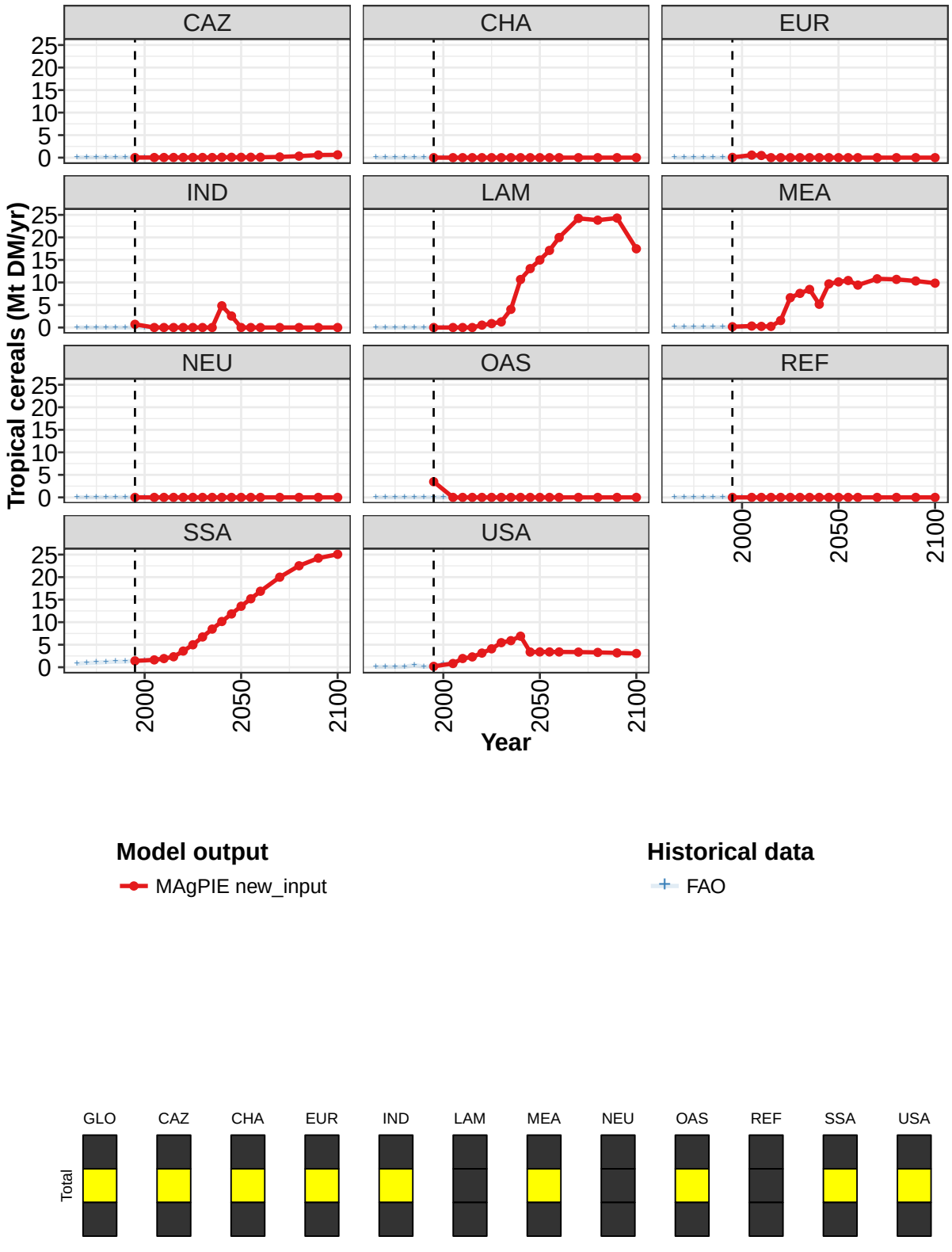


Figure 186: MAgPIE new_input — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.1	3.4	4.6	4.9	8.9	16.6	21.0	26.9	37.8	40.6	42.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.1	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	2.6	0.0
LAM	0.0	0.0	0.0	0.0	0.5	0.9	1.2	4.0	10.7	13.1	15.0
MEA	0.2	0.3	0.3	0.2	1.6	6.6	7.6	8.5	5.2	9.7	10.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.4	1.6	1.9	2.3	3.6	5.0	6.7	8.5	10.2	11.8	13.5
USA	0.2	0.8	1.9	2.3	3.1	4.1	5.5	5.9	6.9	3.4	3.4

Table 557: MAgPIE new_input — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

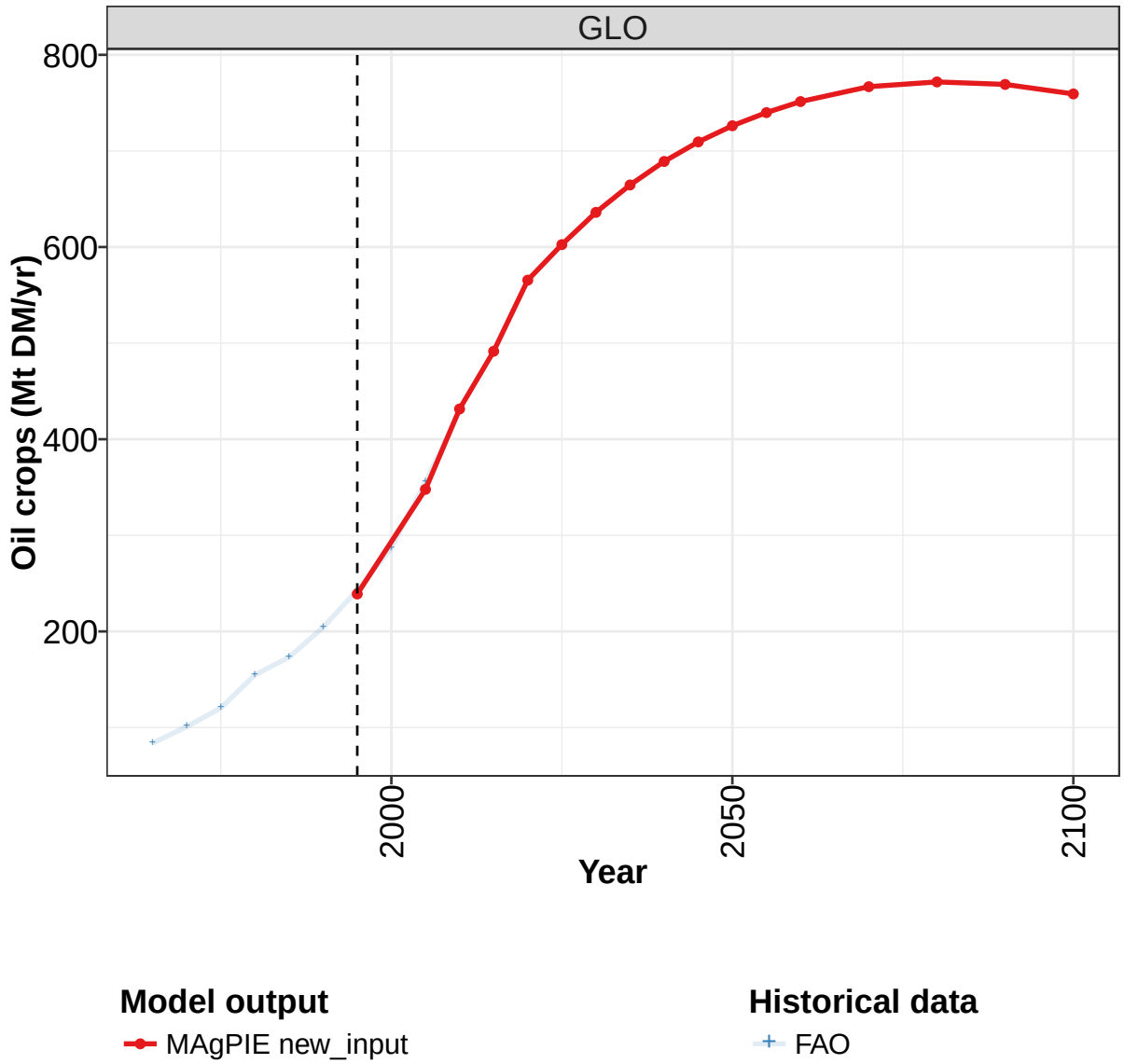
	2055	2060	2070	2080	2090	2100
GLO	46.2	49.8	58.5	60.7	62.6	56.1
CAZ	0.1	0.1	0.2	0.3	0.6	0.6
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	17.1	20.0	24.2	23.8	24.3	17.5
MEA	10.4	9.4	10.8	10.7	10.3	9.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	15.2	16.9	20.0	22.5	24.2	25.1
USA	3.4	3.4	3.4	3.3	3.2	3.0

Table 558: MAgPIE new_input — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	1.13	1.21	1.42	1.86	1.55	1.84	2.44	2.76	3.94
CAZ	0.03	0.05	0.06	0.11	0.05	0.07	0.03	0.04	0.04	0.04
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.03	0.05	0.06	0.07	0.09	0.10	0.13	0.13	0.12	0.15
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.81	0.94	1.02	1.14	1.23	1.25	1.49	1.44	1.77	1.88
USA	0.07	0.08	0.06	0.09	0.48	0.12	0.19	0.83	0.83	1.88

Table 559: FAO — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr)

9.1.6 Oil crops



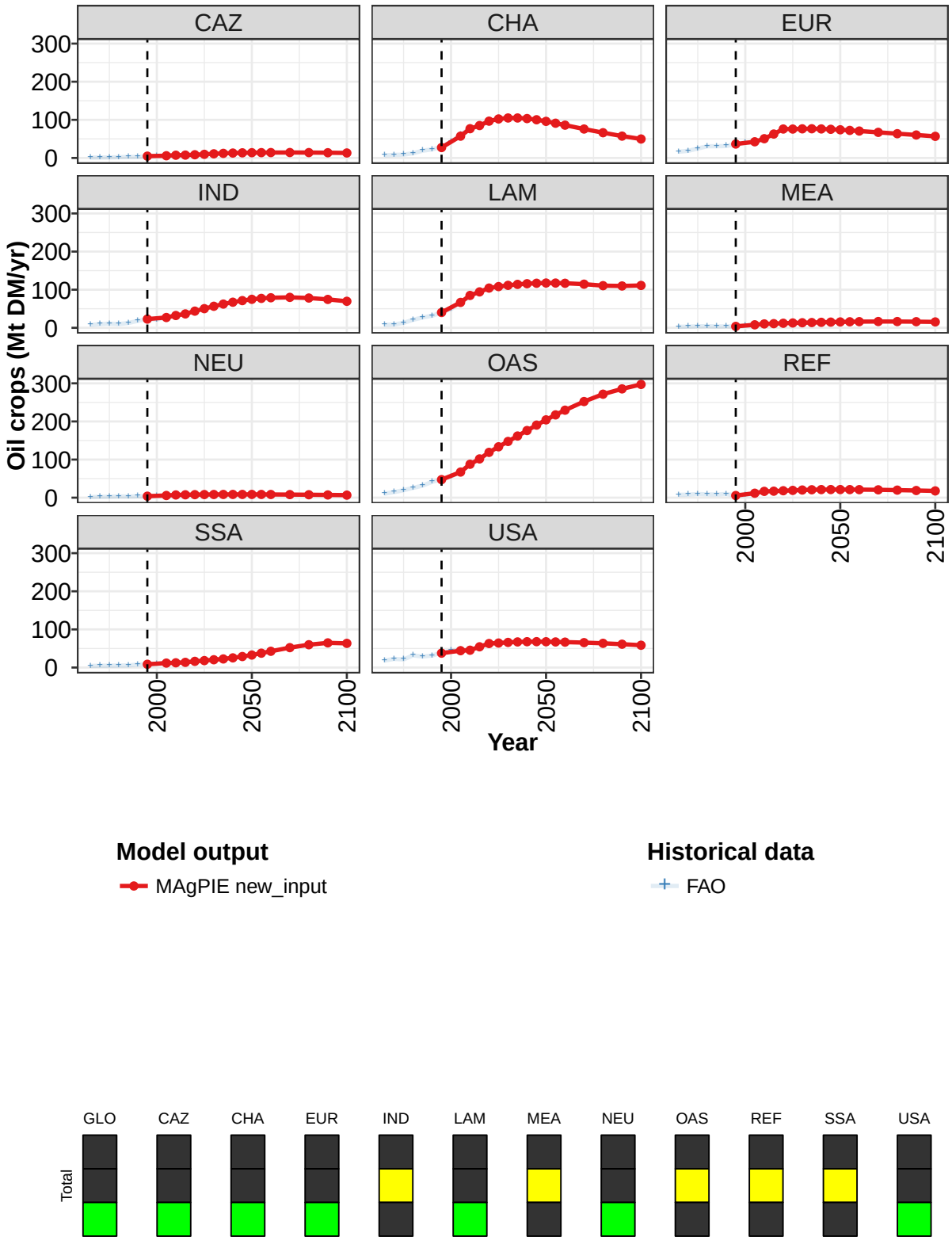


Figure 187: MAgPIE new_input — Demand—Processing—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	239	348	432	492	566	603	636	665	689	709	726
CAZ	5	6	7	8	8	10	11	12	13	13	14
CHA	27	57	77	85	97	102	105	105	103	100	96
EUR	37	43	51	63	76	76	76	77	76	75	74
IND	23	27	32	37	44	50	57	62	67	71	75
LAM	40	67	85	94	104	108	111	114	116	117	118
MEA	4	8	10	11	12	13	13	14	14	15	15
NEU	4	6	7	8	8	8	8	8	9	9	9
OAS	47	67	88	102	119	134	148	162	176	190	204
REF	6	12	17	17	18	19	20	21	21	21	21
SSA	9	12	12	14	16	18	20	23	25	29	33
USA	38	44	45	54	63	64	66	67	68	68	68

Table 560: MAgPIE new_input — Demand—Processing—Crops—Oil crops (Mt DM/yr) [PART 1/2]

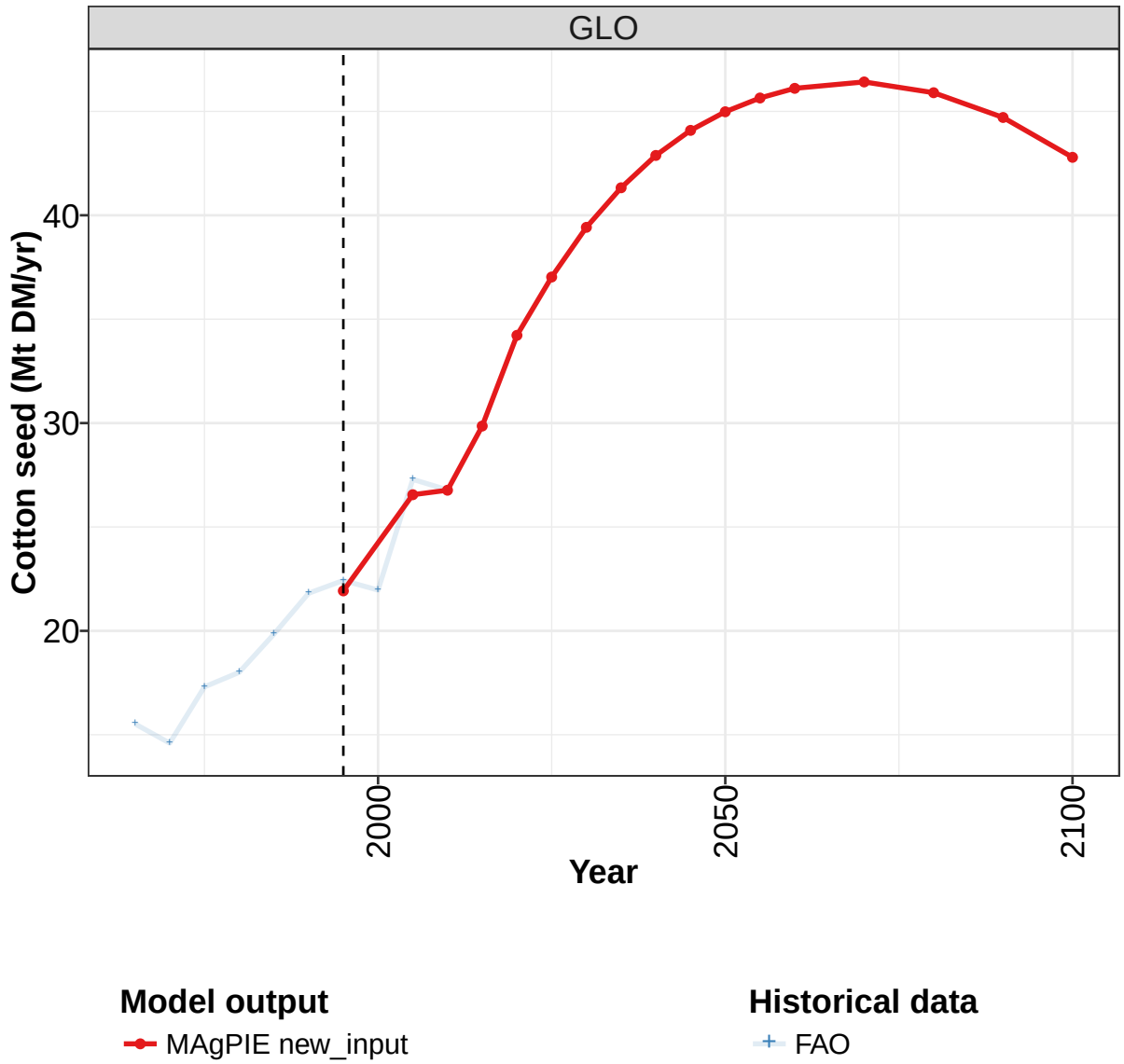
	2055	2060	2070	2080	2090	2100
GLO	740	751	767	772	769	759
CAZ	14	14	14	14	14	13
CHA	91	86	76	66	57	50
EUR	72	71	67	64	60	57
IND	77	79	80	78	75	70
LAM	117	117	115	111	110	111
MEA	16	16	17	16	16	15
NEU	9	8	8	8	7	7
OAS	217	230	252	272	285	297
REF	21	21	21	20	19	18
SSA	38	43	52	60	65	63
USA	67	67	65	64	61	59

Table 561: MAgPIE new_input — Demand—Processing—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	84	101	120	155	173	204	243	287	356	428
CAZ	1	1	1	2	3	3	4	5	6	8
CHA	7	8	9	12	19	22	29	43	61	78
EUR	16	19	25	31	31	31	36	41	42	50
IND	8	9	11	10	13	18	23	22	28	32
LAM	8	9	13	21	27	32	41	49	68	81
MEA	3	3	4	4	3	4	4	5	8	10
NEU	2	2	2	3	3	4	4	5	6	7
OAS	11	15	20	26	32	42	48	56	68	88
REF	7	8	9	9	8	10	6	7	11	16
SSA	4	5	5	5	6	8	8	10	12	12
USA	18	23	21	32	29	31	40	44	47	46

Table 562: FAO — Demand—Processing—Crops—Oil crops (Mt DM/yr)

9.1.7 Oil crops—Cotton seed



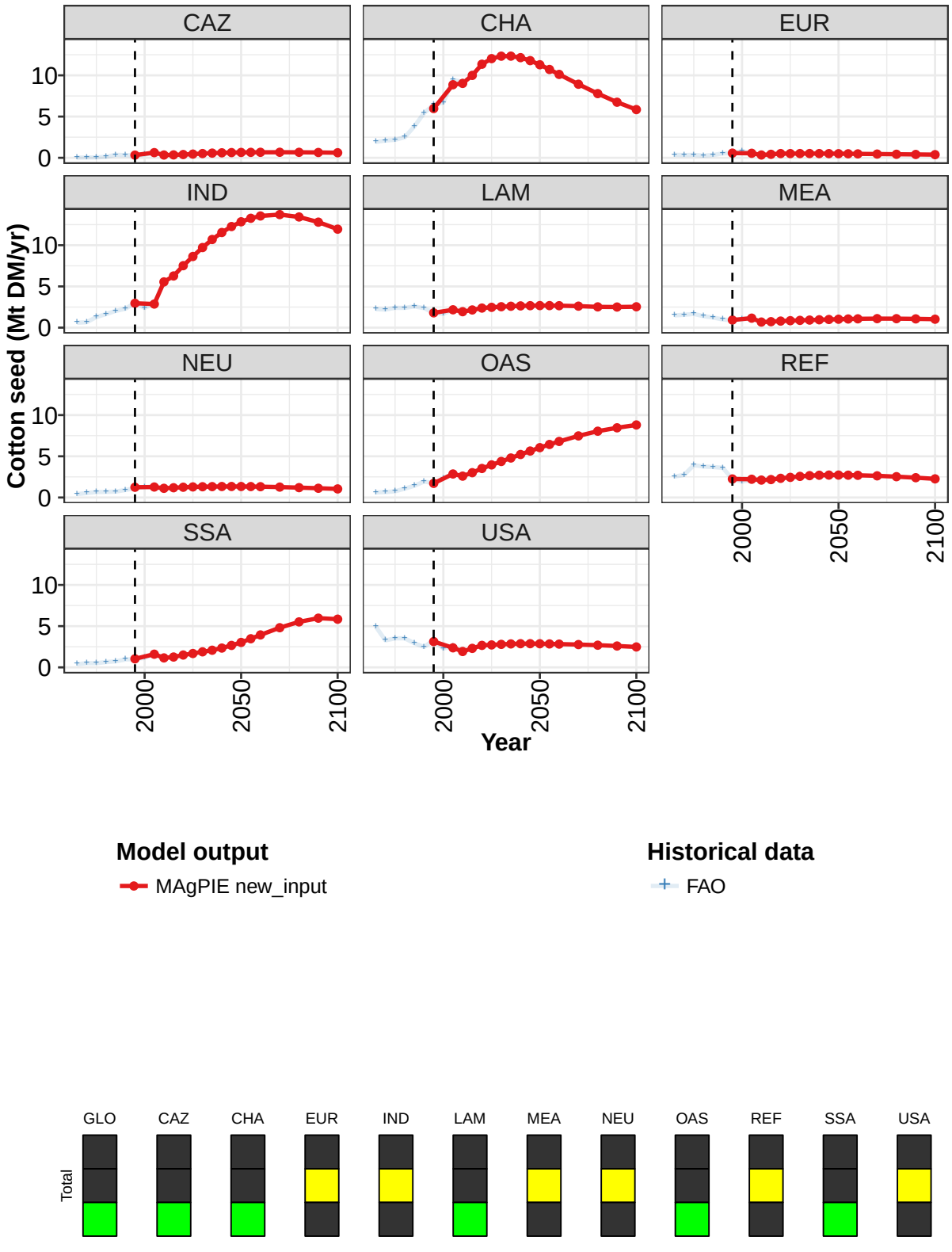


Figure 188: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	21.9	26.6	26.8	29.9	34.2	37.0	39.4	41.3	42.9	44.1	45.0
CAZ	0.3	0.6	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6
CHA	6.0	8.9	9.0	10.0	11.4	12.0	12.3	12.3	12.1	11.8	11.3
EUR	0.6	0.5	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IND	3.0	2.9	5.5	6.3	7.5	8.6	9.7	10.7	11.5	12.3	12.8
LAM	1.8	2.2	1.9	2.1	2.4	2.5	2.5	2.6	2.6	2.7	2.7
MEA	0.9	1.2	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0
NEU	1.2	1.3	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3
OAS	1.7	2.9	2.6	3.0	3.5	4.0	4.4	4.8	5.2	5.6	6.0
REF	2.3	2.2	2.1	2.2	2.3	2.4	2.6	2.7	2.7	2.7	2.7
SSA	1.0	1.6	1.1	1.3	1.5	1.7	1.9	2.1	2.3	2.7	3.0
USA	3.1	2.4	1.9	2.3	2.7	2.7	2.8	2.8	2.9	2.9	2.9

Table 563: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

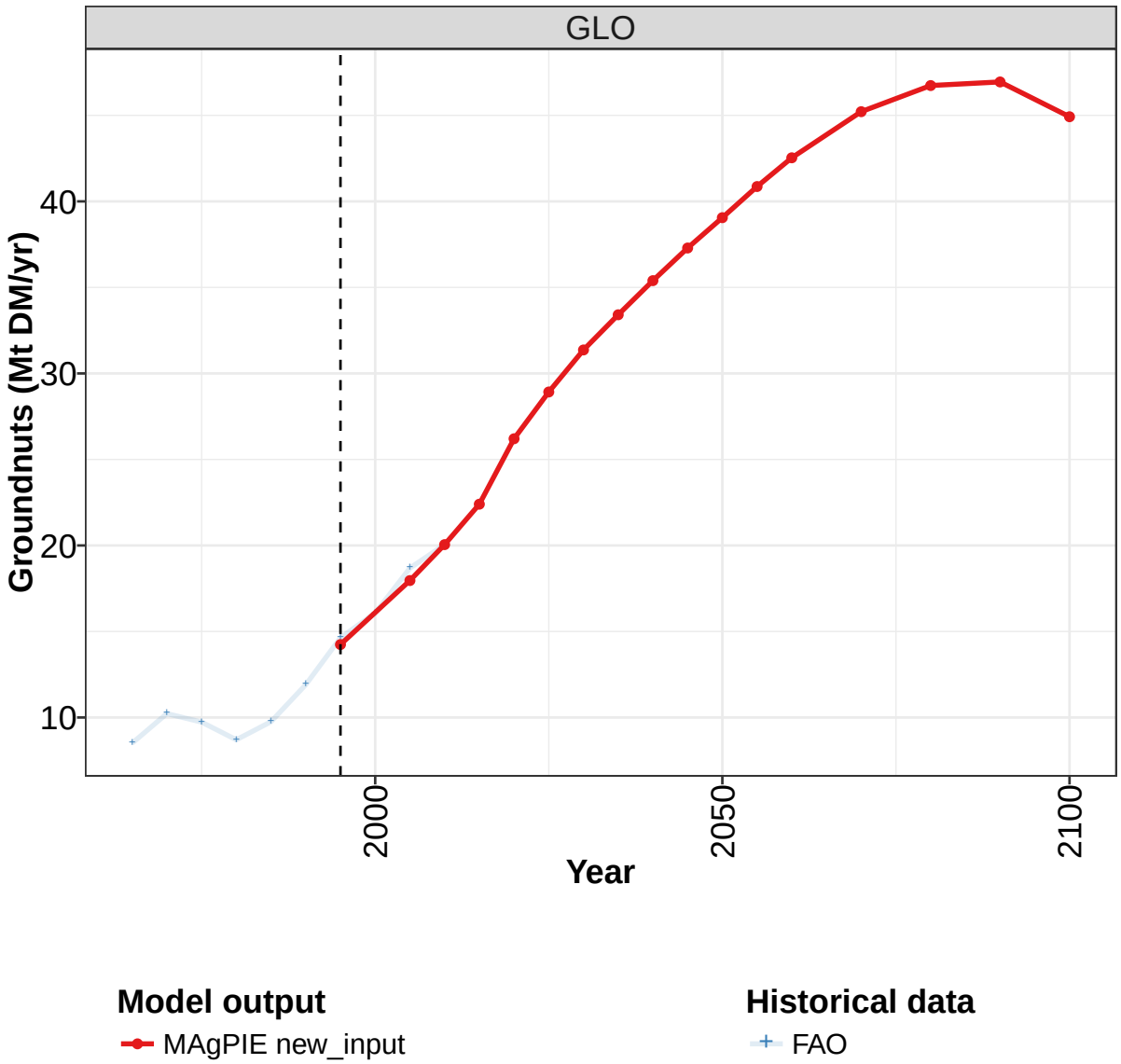
	2055	2060	2070	2080	2090	2100
GLO	45.6	46.1	46.4	45.9	44.7	42.8
CAZ	0.7	0.7	0.7	0.7	0.6	0.6
CHA	10.7	10.1	8.9	7.8	6.7	5.8
EUR	0.5	0.5	0.5	0.4	0.4	0.4
IND	13.3	13.5	13.7	13.4	12.8	12.0
LAM	2.7	2.7	2.6	2.5	2.5	2.5
MEA	1.1	1.1	1.1	1.1	1.1	1.0
NEU	1.3	1.3	1.3	1.2	1.1	1.0
OAS	6.4	6.8	7.5	8.0	8.5	8.8
REF	2.7	2.7	2.6	2.5	2.4	2.3
SSA	3.5	3.9	4.8	5.5	6.0	5.8
USA	2.8	2.8	2.8	2.7	2.6	2.5

Table 564: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	15.5	14.6	17.3	18.0	19.8	21.8	22.4	22.0	27.3	26.8
CAZ	0.0	0.0	0.0	0.1	0.4	0.3	0.3	0.4	0.6	0.4
CHA	1.9	2.1	2.2	2.5	3.8	5.4	6.4	6.7	9.5	9.2
EUR	0.4	0.3	0.4	0.3	0.3	0.5	0.6	0.8	0.5	0.3
IND	0.6	0.7	1.3	1.6	2.0	2.3	3.0	2.4	2.9	5.5
LAM	2.2	2.2	2.4	2.4	2.6	2.4	1.8	1.7	2.2	1.8
MEA	1.5	1.6	1.7	1.4	1.2	1.0	0.9	1.0	1.1	0.7
NEU	0.4	0.5	0.7	0.7	0.7	0.9	1.1	1.3	1.2	1.1
OAS	0.6	0.7	0.8	1.1	1.4	1.9	1.7	2.3	2.9	2.6
REF	2.5	2.7	3.9	3.8	3.7	3.6	2.2	1.9	2.1	2.1
SSA	0.4	0.5	0.5	0.6	0.7	1.0	1.0	1.1	1.6	1.1
USA	4.9	3.3	3.5	3.5	2.9	2.5	3.3	2.3	2.5	1.9

Table 565: FAO — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr)

9.1.8 Oil crops—Groundnuts



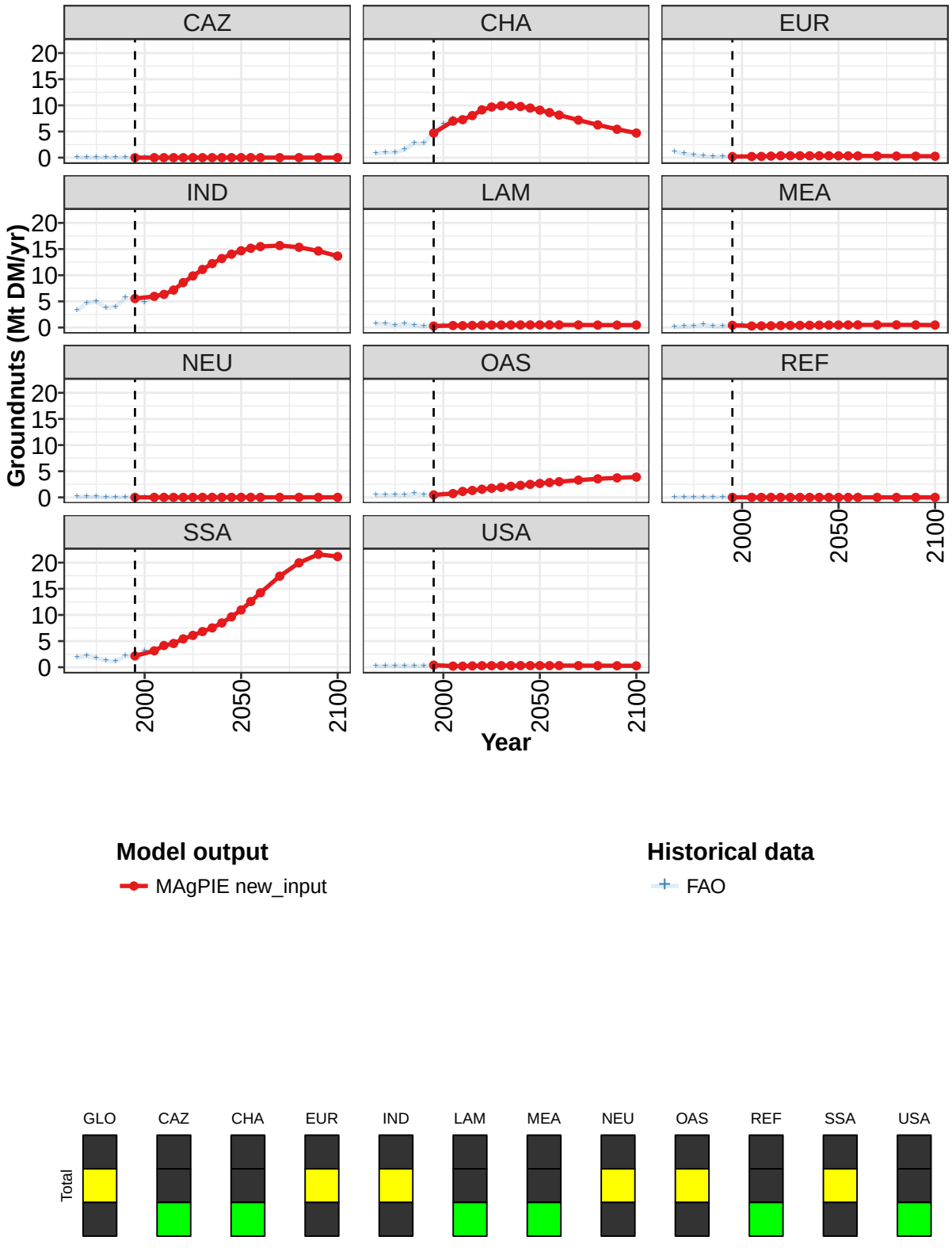


Figure 189: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	14.2	18.0	20.1	22.4	26.2	28.9	31.4	33.4	35.4	37.3	39.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.7	7.0	7.3	8.0	9.1	9.7	9.9	9.9	9.8	9.5	9.1
EUR	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
IND	5.5	6.0	6.3	7.2	8.6	9.9	11.1	12.2	13.2	14.0	14.7
LAM	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.7	1.1	1.3	1.6	1.7	1.9	2.1	2.3	2.5	2.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.2	3.1	4.2	4.5	5.4	6.1	6.8	7.5	8.5	9.6	10.9
USA	0.4	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Table 566: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

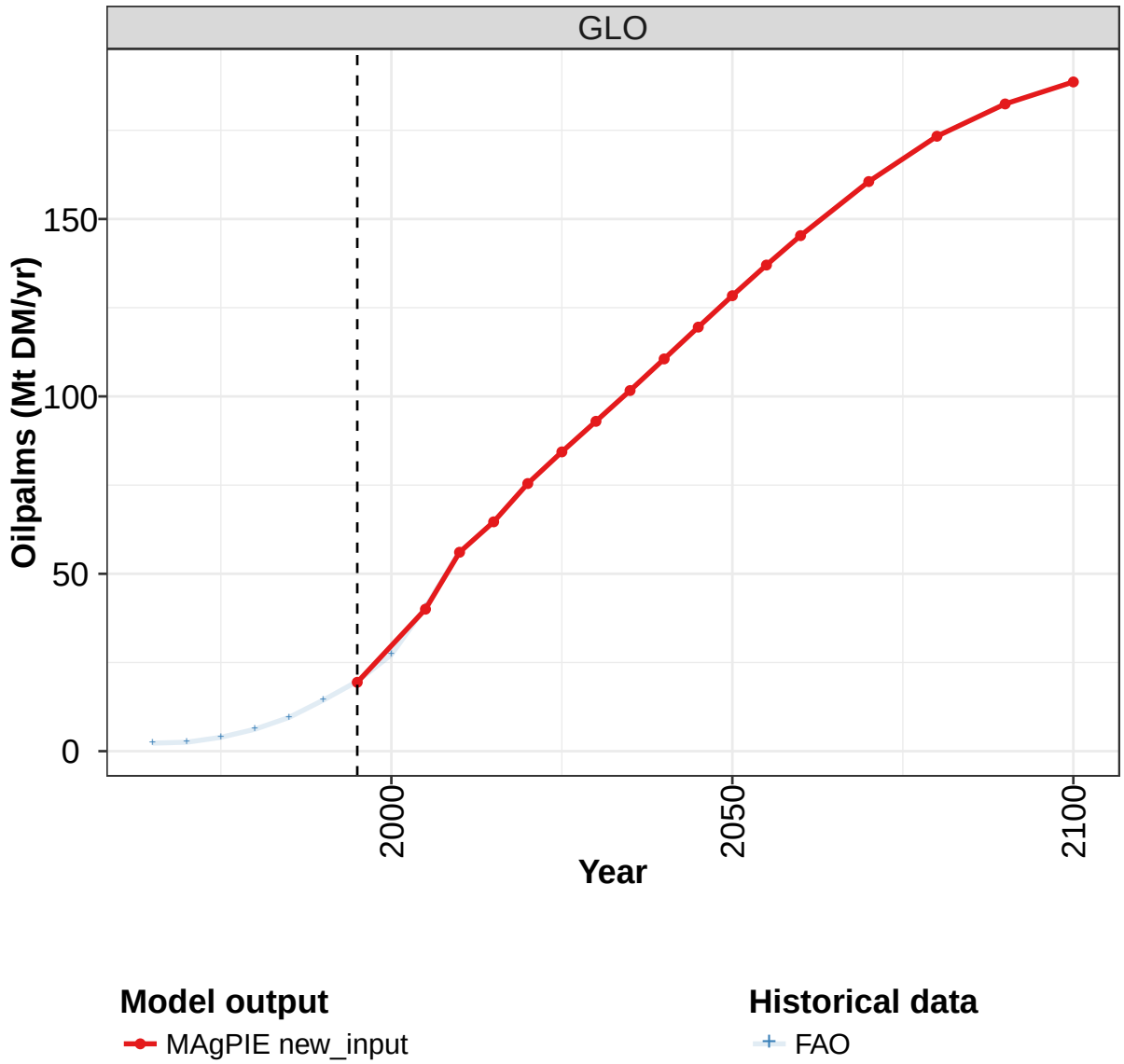
	2055	2060	2070	2080	2090	2100
GLO	40.9	42.5	45.2	46.7	46.9	44.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	8.6	8.1	7.2	6.3	5.4	4.7
EUR	0.3	0.3	0.3	0.3	0.3	0.3
IND	15.2	15.5	15.7	15.3	14.6	13.7
LAM	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.8	3.0	3.3	3.5	3.7	3.9
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	12.6	14.2	17.4	20.0	21.6	21.2
USA	0.3	0.3	0.3	0.3	0.3	0.3

Table 567: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.5	10.2	9.7	8.7	9.8	11.9	14.6	16.1	18.7	20.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.8	1.0	1.0	1.5	2.8	2.7	5.1	6.3	7.5	7.4
EUR	1.1	0.7	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2
IND	3.2	4.7	4.9	3.8	3.9	5.7	5.6	4.8	6.1	6.3
LAM	0.7	0.8	0.4	0.7	0.5	0.2	0.3	0.3	0.4	0.3
MEA	0.1	0.2	0.2	0.5	0.2	0.2	0.4	0.5	0.3	0.3
NEU	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.4	0.4	0.5	0.4	0.7	0.5	0.5	0.6	0.7	1.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.8	2.1	1.8	1.3	1.1	2.1	2.1	3.0	3.2	4.1
USA	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.2	0.2

Table 568: FAO — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr)

9.1.9 Oil crops—Oilpalms



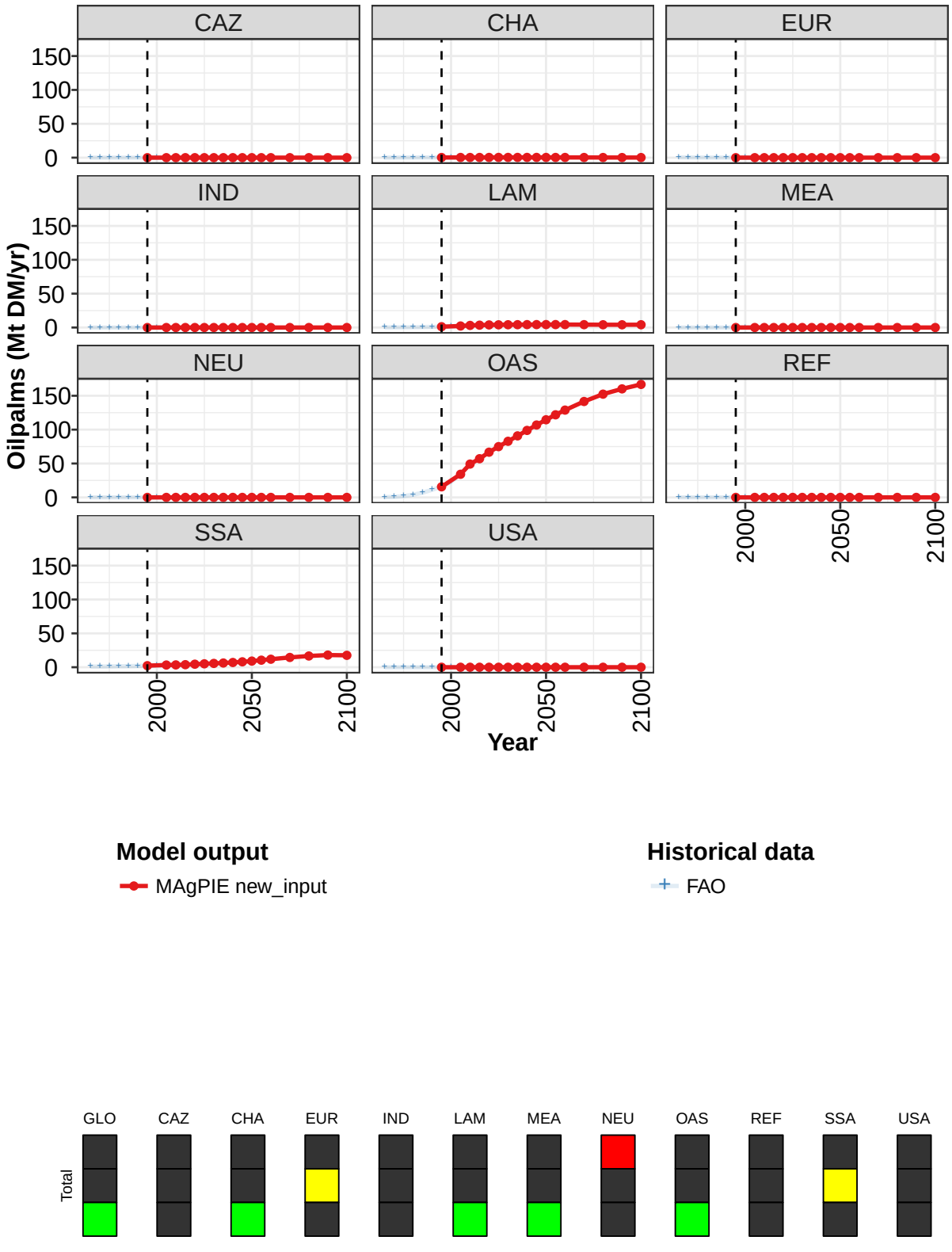


Figure 190: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	19	40	56	65	75	84	93	102	111	120	128
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	1	2	3	3	4	4	4	4	4	4	4
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	16	34	49	57	67	75	83	91	99	107	115
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2	3	3	4	5	5	6	6	7	8	9
USA	0	0	0	0	0	0	0	0	0	0	0

Table 569: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 1/2]

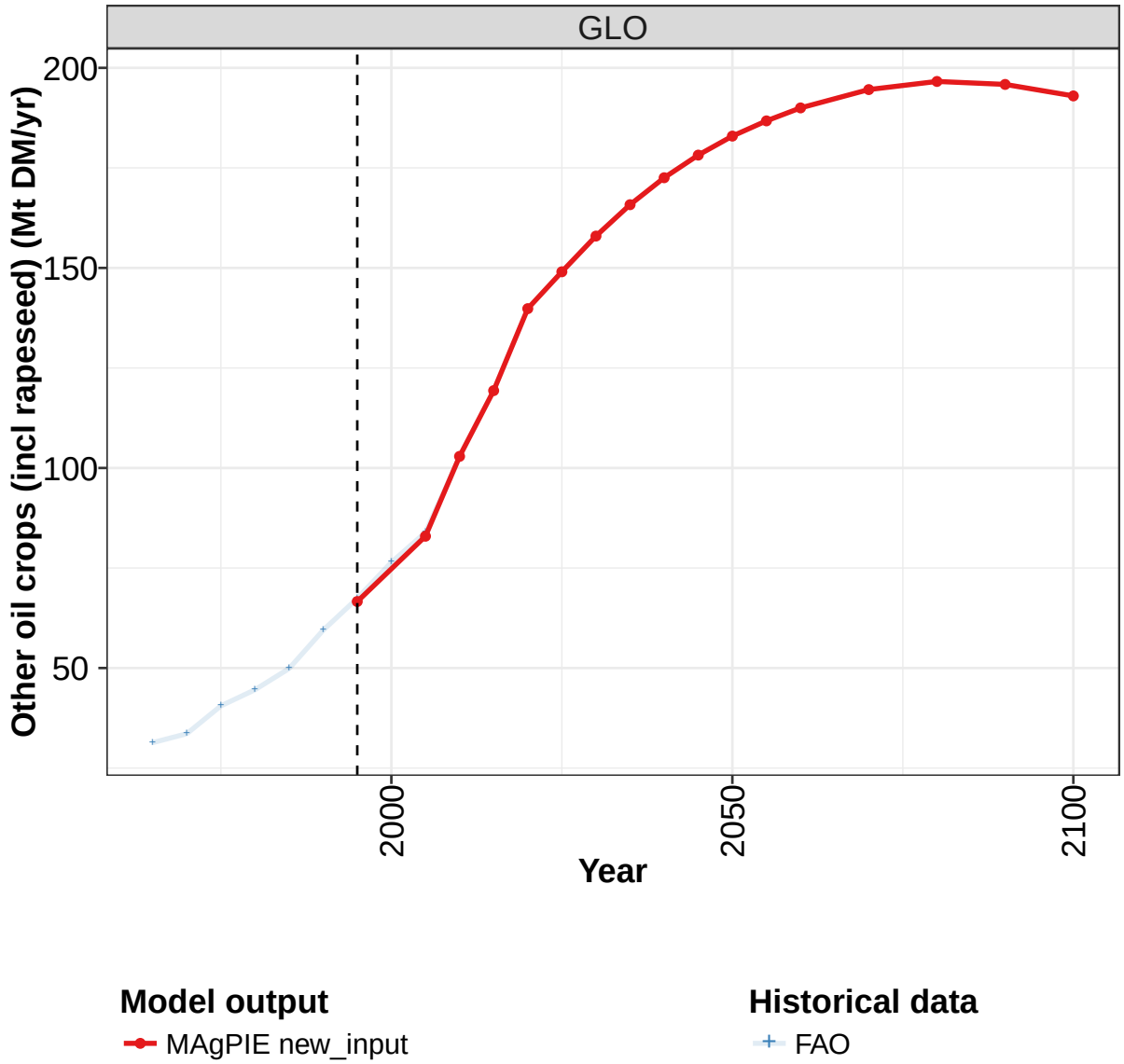
	2055	2060	2070	2080	2090	2100
GLO	137	145	161	173	182	189
CAZ	0	0	0	0	0	0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	0	0	0	0	0	0
LAM	4	4	4	4	4	4
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	122	129	142	152	160	167
REF	0	0	0	0	0	0
SSA	10	12	14	17	18	18
USA	0	0	0	0	0	0

Table 570: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.3	2.5	3.9	6.2	9.5	14.4	19.7	27.2	40.6	56.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
EUR	0.6	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.3	0.4	0.7	1.0	1.2	1.7	2.3	3.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.7	1.9	3.9	6.9	11.2	15.9	23.0	34.6	49.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.1	1.0	1.2	1.5	1.6	1.9	2.3	2.3	3.4	3.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 571: FAO — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr)

9.1.10 Oil crops—Other oil crops (incl rapeseed)



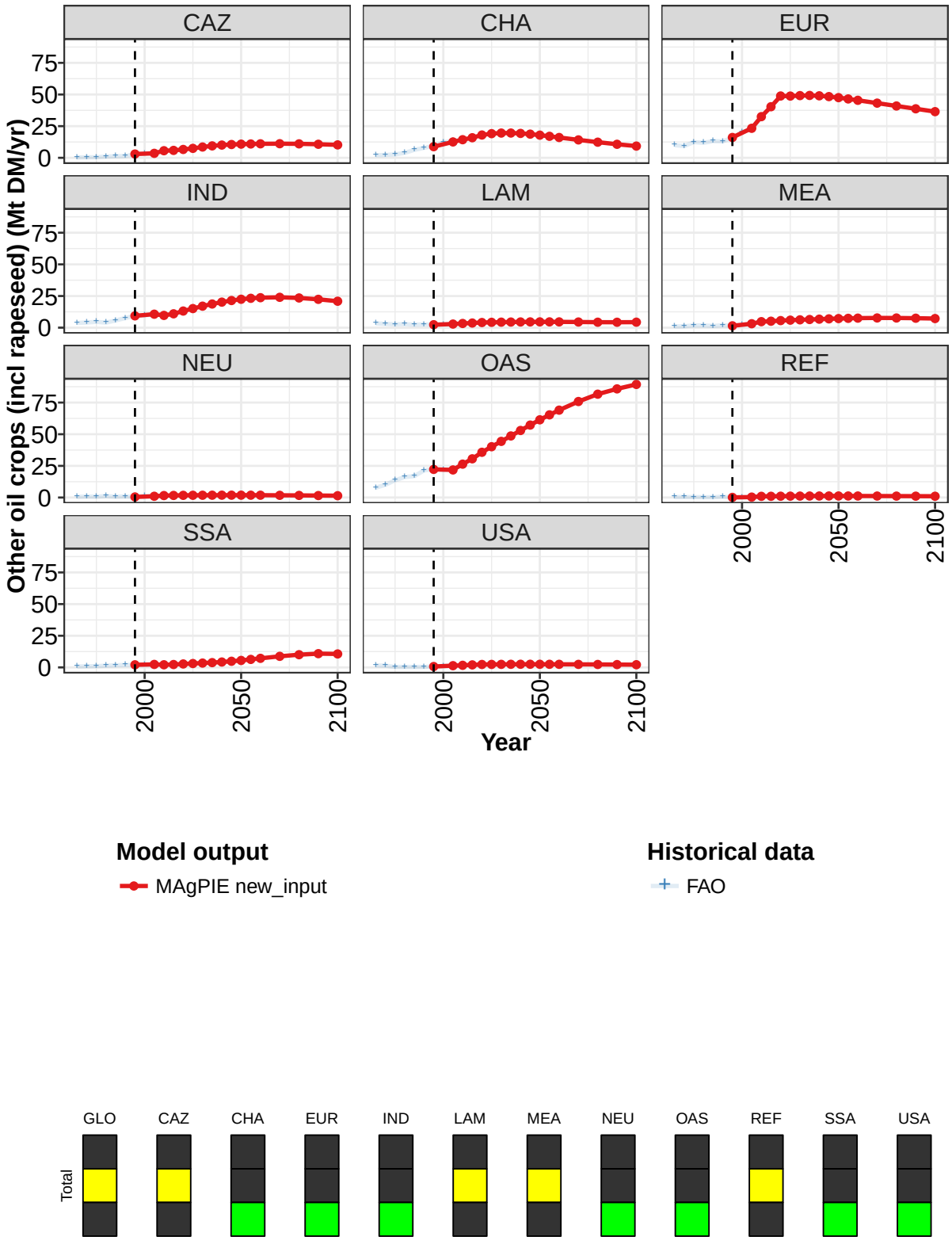


Figure 191: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	67	83	103	119	140	149	158	166	173	178	183
CAZ	3	4	6	6	7	7	9	9	10	11	11
CHA	9	13	14	16	18	19	20	20	19	19	18
EUR	16	23	33	40	49	49	49	49	49	48	48
IND	9	11	10	11	13	15	17	19	20	21	22
LAM	2	3	3	4	4	4	4	4	5	5	5
MEA	1	3	5	5	6	6	6	6	7	7	7
NEU	0	1	2	2	2	2	2	2	2	2	2
OAS	22	22	26	31	36	40	44	49	53	57	61
REF	0	0	1	1	1	1	1	1	1	1	1
SSA	2	2	2	2	3	3	3	4	4	5	6
USA	1	1	2	2	2	2	2	2	2	2	2

Table 572: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

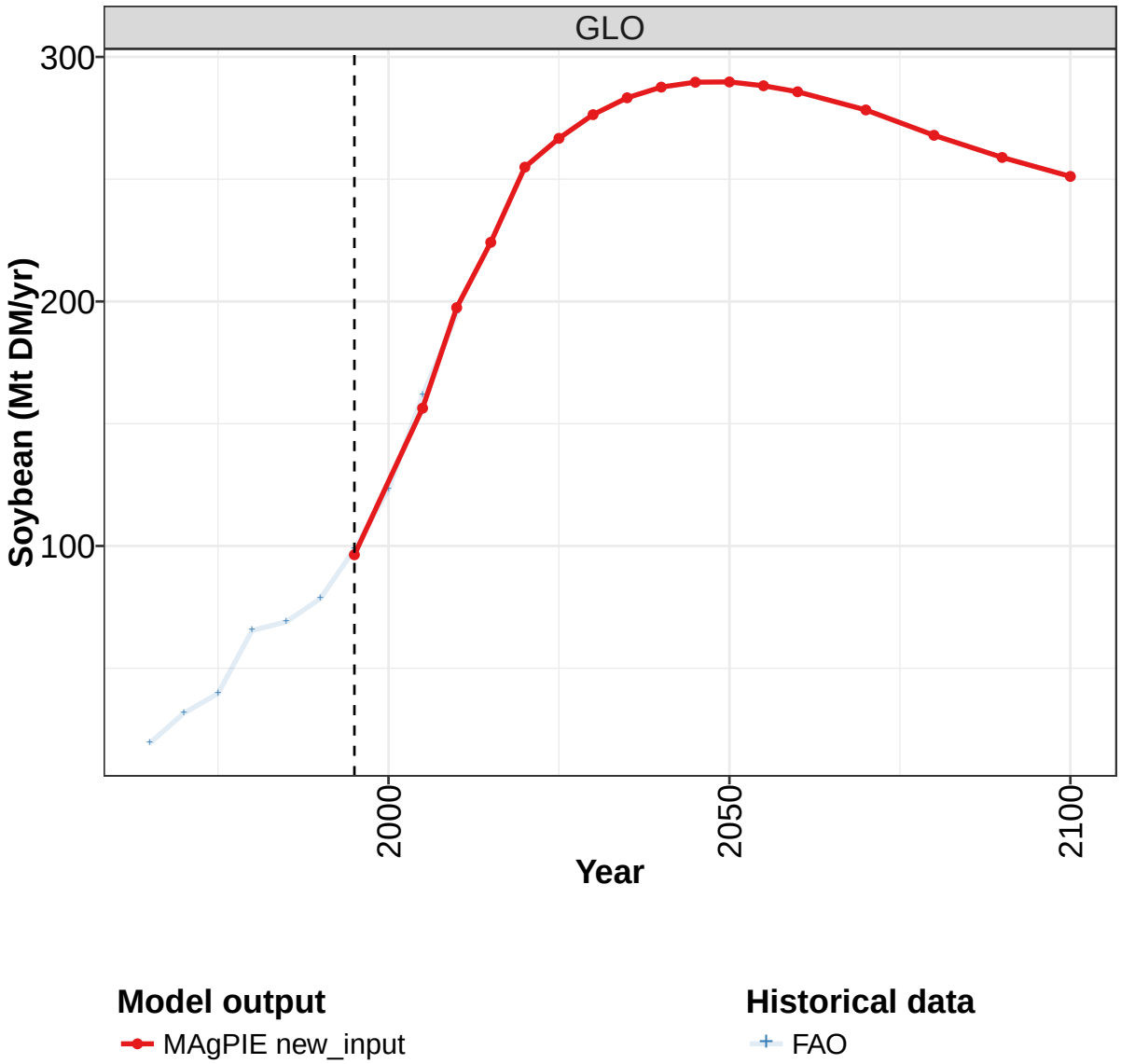
	2055	2060	2070	2080	2090	2100
GLO	187	190	195	197	196	193
CAZ	11	11	11	11	11	10
CHA	17	16	14	12	11	9
EUR	46	45	43	41	39	36
IND	23	24	24	23	22	21
LAM	5	5	4	4	4	4
MEA	7	8	8	8	7	7
NEU	2	2	2	2	2	1
OAS	65	69	76	82	86	89
REF	1	1	1	1	1	1
SSA	6	7	9	10	11	11
USA	2	2	2	2	2	2

Table 573: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	31	34	41	45	50	59	67	76	84	103
CAZ	0	0	0	1	1	1	3	3	3	6
CHA	2	2	3	4	6	8	9	12	13	15
EUR	10	9	12	12	13	13	16	20	23	32
IND	4	4	5	4	6	8	9	10	11	10
LAM	3	3	3	3	2	3	2	3	3	3
MEA	1	1	2	2	1	2	1	2	3	5
NEU	1	1	1	1	1	1	0	1	1	2
OAS	8	10	14	16	17	21	23	22	22	27
REF	0	0	0	0	0	1	0	0	0	1
SSA	1	1	1	1	2	2	2	2	2	2
USA	2	1	0	0	0	0	1	1	1	2

Table 574: FAO — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

9.1.11 Oil crops—Soybean



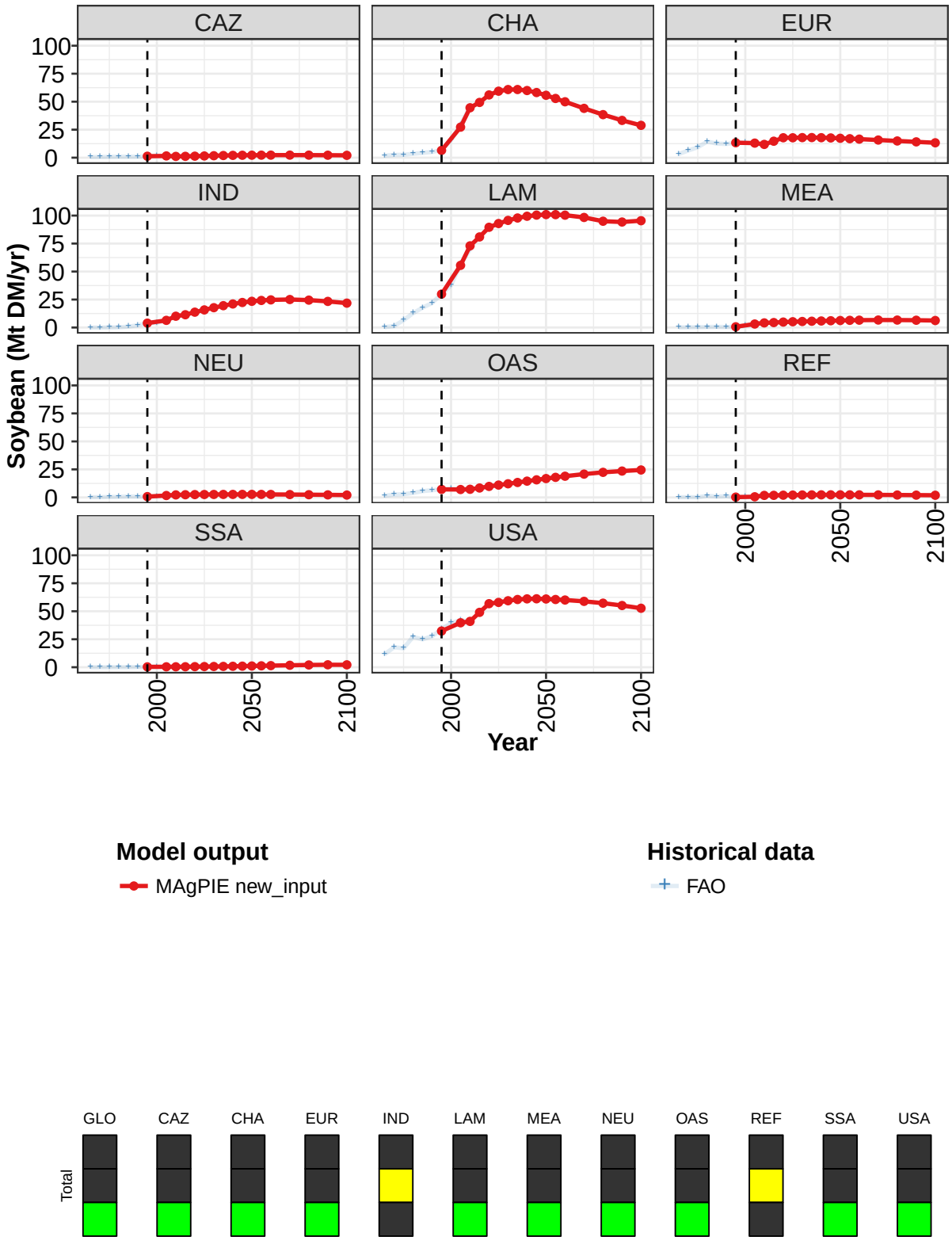


Figure 192: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	96	156	197	224	255	267	276	283	288	290	290
CAZ	1	2	1	1	1	2	2	2	2	2	2
CHA	7	27	45	49	56	59	61	61	60	58	56
EUR	13	13	12	15	18	18	18	18	18	18	17
IND	4	6	10	11	14	16	18	20	21	22	23
LAM	30	56	73	81	90	93	96	98	99	100	101
MEA	1	3	4	4	5	5	5	6	6	6	6
NEU	1	2	2	2	2	3	3	3	3	3	3
OAS	7	7	7	8	10	11	12	13	15	16	17
REF	0	1	2	2	2	2	2	2	2	2	2
SSA	0	0	0	0	1	1	1	1	1	1	1
USA	32	40	41	49	57	58	59	61	61	61	61

Table 575: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

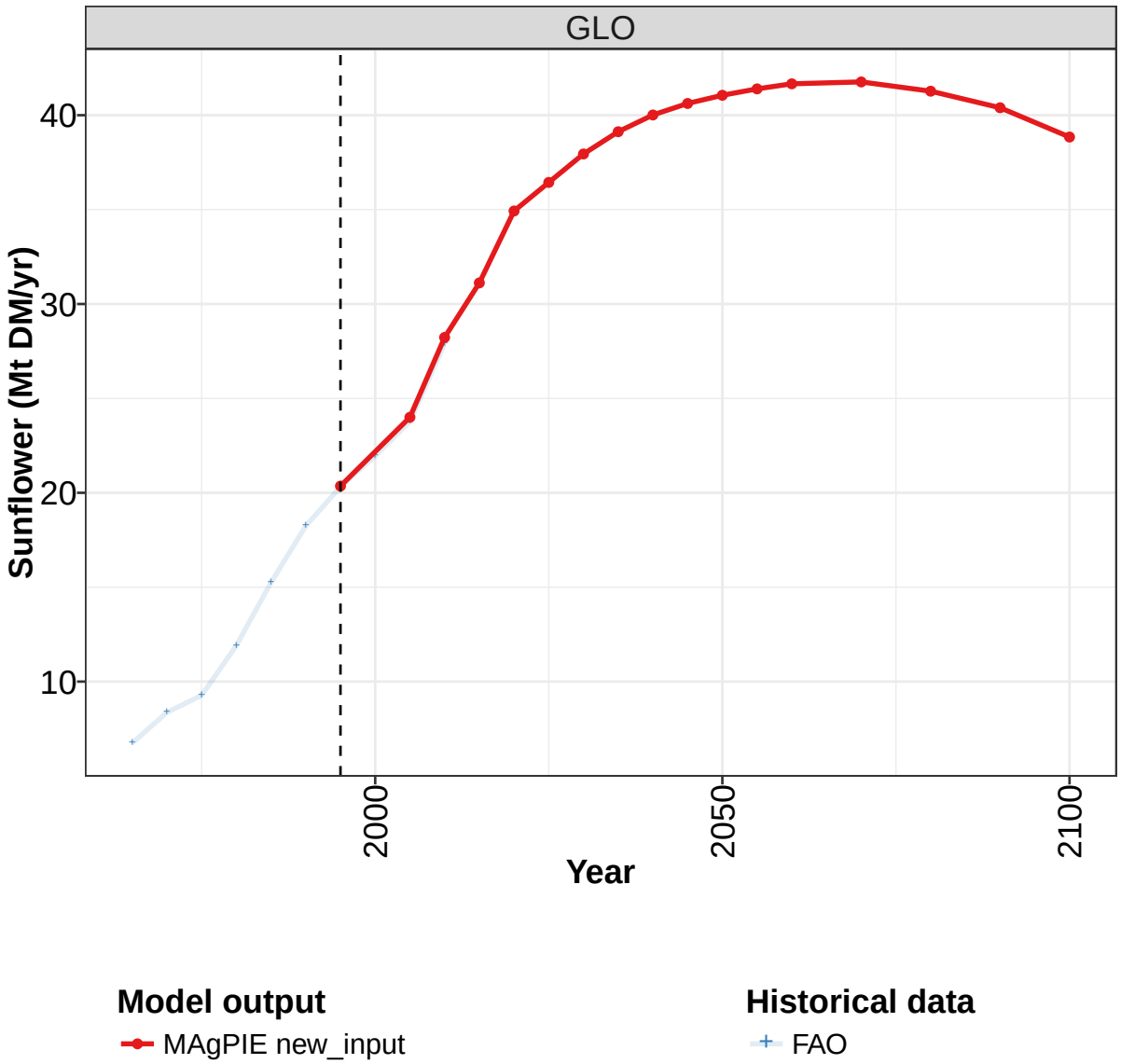
	2055	2060	2070	2080	2090	2100
GLO	288	286	278	268	259	251
CAZ	2	2	2	2	2	2
CHA	53	50	44	38	33	29
EUR	17	17	16	15	14	13
IND	24	25	25	24	23	22
LAM	101	100	98	95	94	95
MEA	6	7	7	7	7	6
NEU	3	3	3	2	2	2
OAS	18	19	21	22	24	24
REF	2	2	2	2	2	2
SSA	1	1	2	2	2	2
USA	61	60	59	57	55	53

Table 576: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	19	32	40	65	69	78	99	123	162	195
CAZ	0	1	1	1	1	1	1	2	2	1
CHA	2	2	3	3	4	5	7	16	29	45
EUR	3	6	9	14	13	12	13	13	13	12
IND	0	0	0	0	1	2	4	4	7	10
LAM	0	1	7	13	18	22	30	38	57	70
MEA	0	0	0	0	1	0	1	1	3	4
NEU	0	0	0	1	1	1	1	1	2	2
OAS	1	3	3	4	6	6	7	8	7	7
REF	0	0	0	1	1	1	0	0	1	2
SSA	0	0	0	0	0	0	0	0	0	0
USA	12	18	17	27	25	28	34	40	42	41

Table 577: FAO — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr)

9.1.12 Oil crops—Sunflower



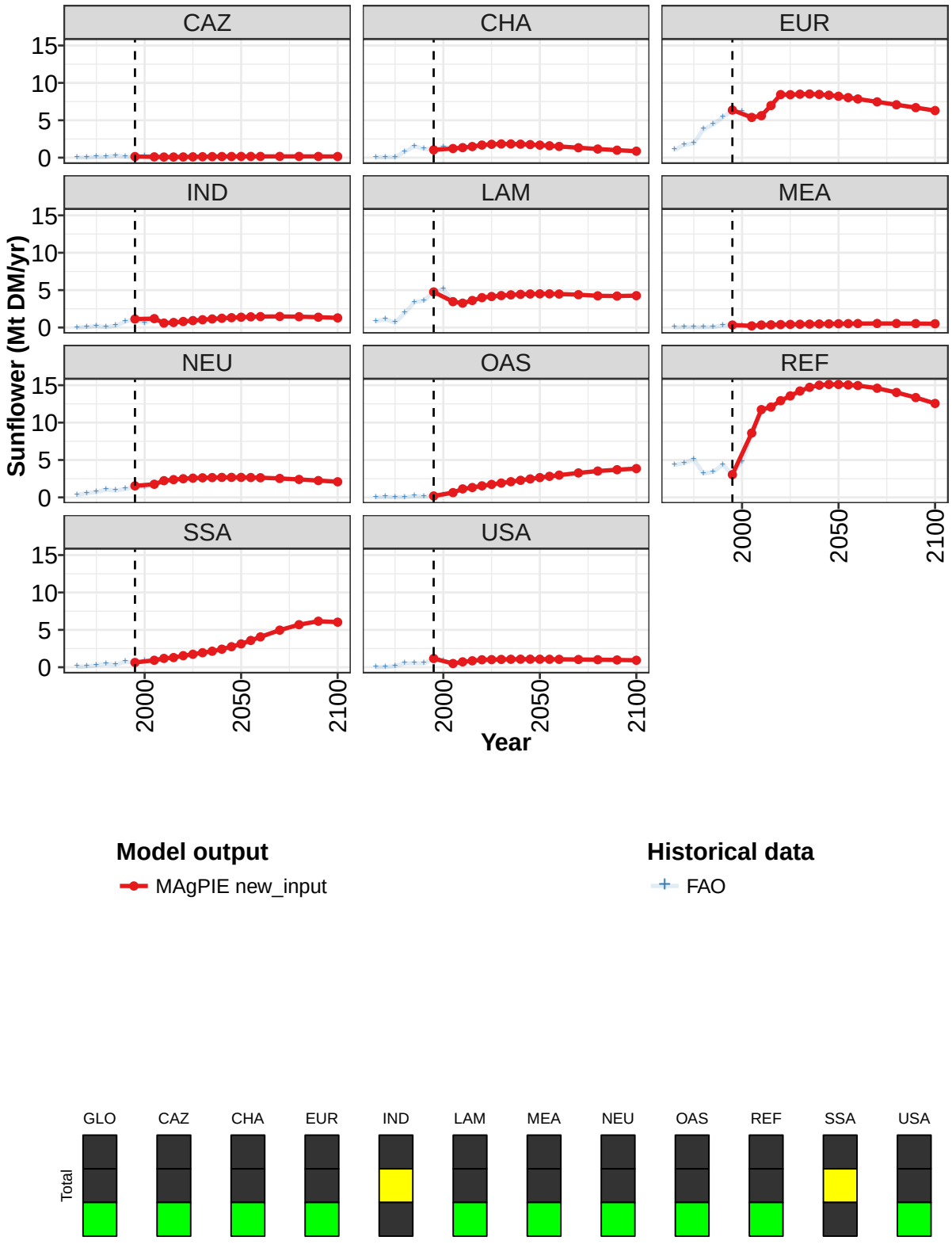


Figure 193: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	20.4	24.0	28.2	31.1	34.9	36.4	37.9	39.1	40.0	40.6	41.1
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
CHA	1.0	1.2	1.3	1.5	1.7	1.8	1.8	1.8	1.8	1.7	1.7
EUR	6.4	5.4	5.6	7.0	8.4	8.4	8.5	8.5	8.5	8.4	8.2
IND	1.1	1.2	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
LAM	4.8	3.5	3.3	3.6	4.0	4.1	4.3	4.4	4.4	4.5	4.5
MEA	0.3	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
NEU	1.5	1.8	2.2	2.4	2.5	2.6	2.6	2.6	2.7	2.7	2.7
OAS	0.2	0.6	1.1	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.6
REF	3.0	8.6	11.7	12.1	12.9	13.6	14.2	14.7	15.0	15.1	15.1
SSA	0.6	0.9	1.2	1.3	1.5	1.7	1.9	2.1	2.4	2.7	3.1
USA	1.2	0.5	0.7	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1

Table 578: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

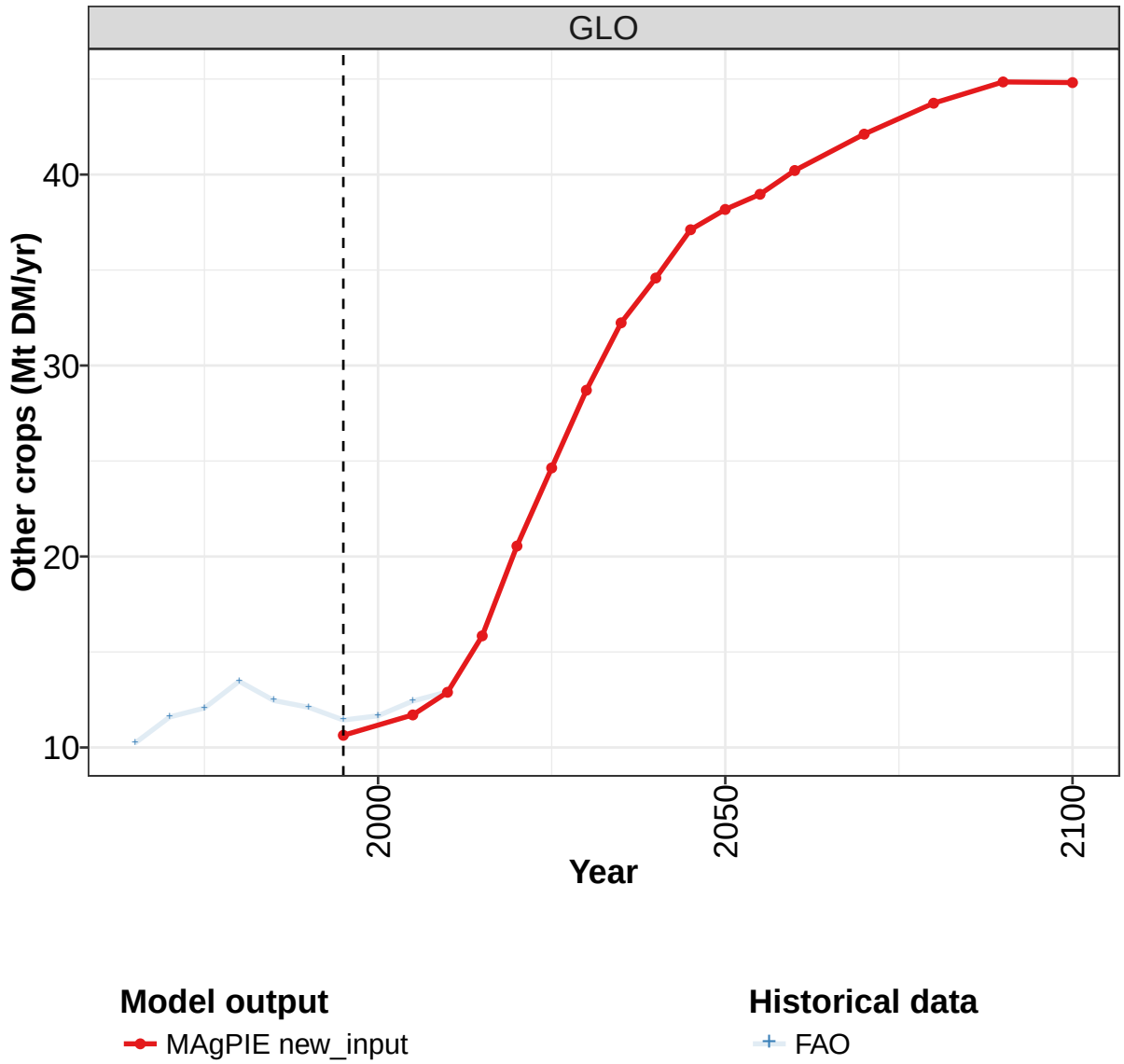
	2055	2060	2070	2080	2090	2100
GLO	41.4	41.7	41.8	41.3	40.4	38.8
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	1.6	1.5	1.3	1.2	1.0	0.9
EUR	8.0	7.8	7.5	7.1	6.7	6.3
IND	1.4	1.5	1.5	1.4	1.4	1.3
LAM	4.5	4.5	4.4	4.2	4.2	4.3
MEA	0.5	0.5	0.5	0.5	0.5	0.5
NEU	2.7	2.6	2.5	2.4	2.2	2.1
OAS	2.8	3.0	3.3	3.5	3.7	3.9
REF	15.0	15.0	14.6	14.0	13.3	12.6
SSA	3.6	4.1	5.0	5.7	6.2	6.0
USA	1.1	1.1	1.0	1.0	1.0	0.9

Table 579: MAgPIE new_input — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.7	8.4	9.3	11.9	15.3	18.2	20.3	22.0	23.8	27.9
CAZ	0.0	0.0	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.1
CHA	0.1	0.1	0.1	0.8	1.5	1.2	1.1	1.4	1.3	1.4
EUR	1.0	1.7	1.9	3.8	4.4	5.4	6.3	6.1	5.3	5.5
IND	0.0	0.1	0.2	0.1	0.2	0.8	1.1	0.6	1.2	0.6
LAM	0.8	1.1	0.7	1.9	3.4	3.6	4.8	5.1	3.5	3.1
MEA	0.0	0.1	0.1	0.0	0.1	0.3	0.3	0.3	0.2	0.3
NEU	0.3	0.6	0.7	1.1	0.9	1.1	1.4	1.4	1.7	2.2
OAS	0.0	0.1	0.0	0.0	0.2	0.1	0.2	0.3	0.6	1.1
REF	4.4	4.6	5.1	3.2	3.4	4.4	3.0	4.8	8.3	11.7
SSA	0.1	0.1	0.3	0.4	0.3	0.7	0.6	0.9	1.0	1.2
USA	0.0	0.0	0.2	0.5	0.5	0.5	1.2	0.9	0.5	0.7

Table 580: FAO — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr)

9.1.13 Other crops



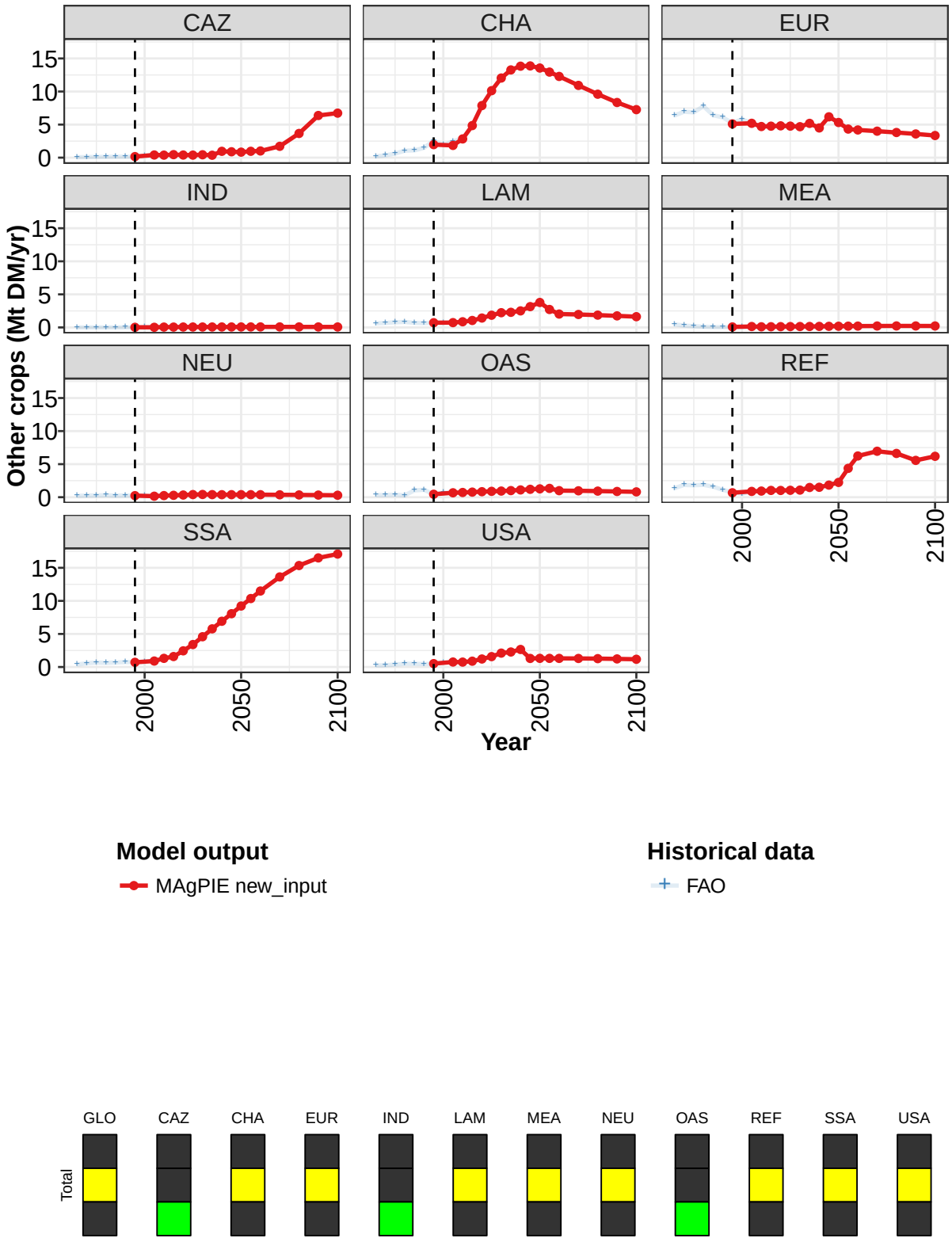


Figure 194: MAgPIE new_input — Demand—Processing—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	10.6	11.7	12.9	15.8	20.5	24.6	28.7	32.2	34.6	37.1	38.2
CAZ	0.2	0.4	0.4	0.5	0.4	0.4	0.4	0.4	1.0	0.9	0.8
CHA	2.0	1.9	2.8	4.9	7.9	10.1	12.0	13.3	13.8	13.9	13.6
EUR	5.1	5.2	4.7	4.8	4.8	4.8	4.7	5.2	4.5	6.2	5.3
IND	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.7	0.7	0.9	1.1	1.4	1.8	2.2	2.3	2.5	3.1	3.8
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
NEU	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
OAS	0.4	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.3
REF	0.7	0.9	0.9	1.0	1.0	1.0	1.1	1.5	1.5	1.8	2.2
SSA	0.7	0.9	1.3	1.6	2.4	3.4	4.6	5.8	6.9	8.1	9.2
USA	0.5	0.8	0.7	0.9	1.2	1.6	2.1	2.3	2.7	1.3	1.3

Table 581: MAgPIE new_input — Demand—Processing—Crops—Other crops (Mt DM/yr) [PART 1/2]

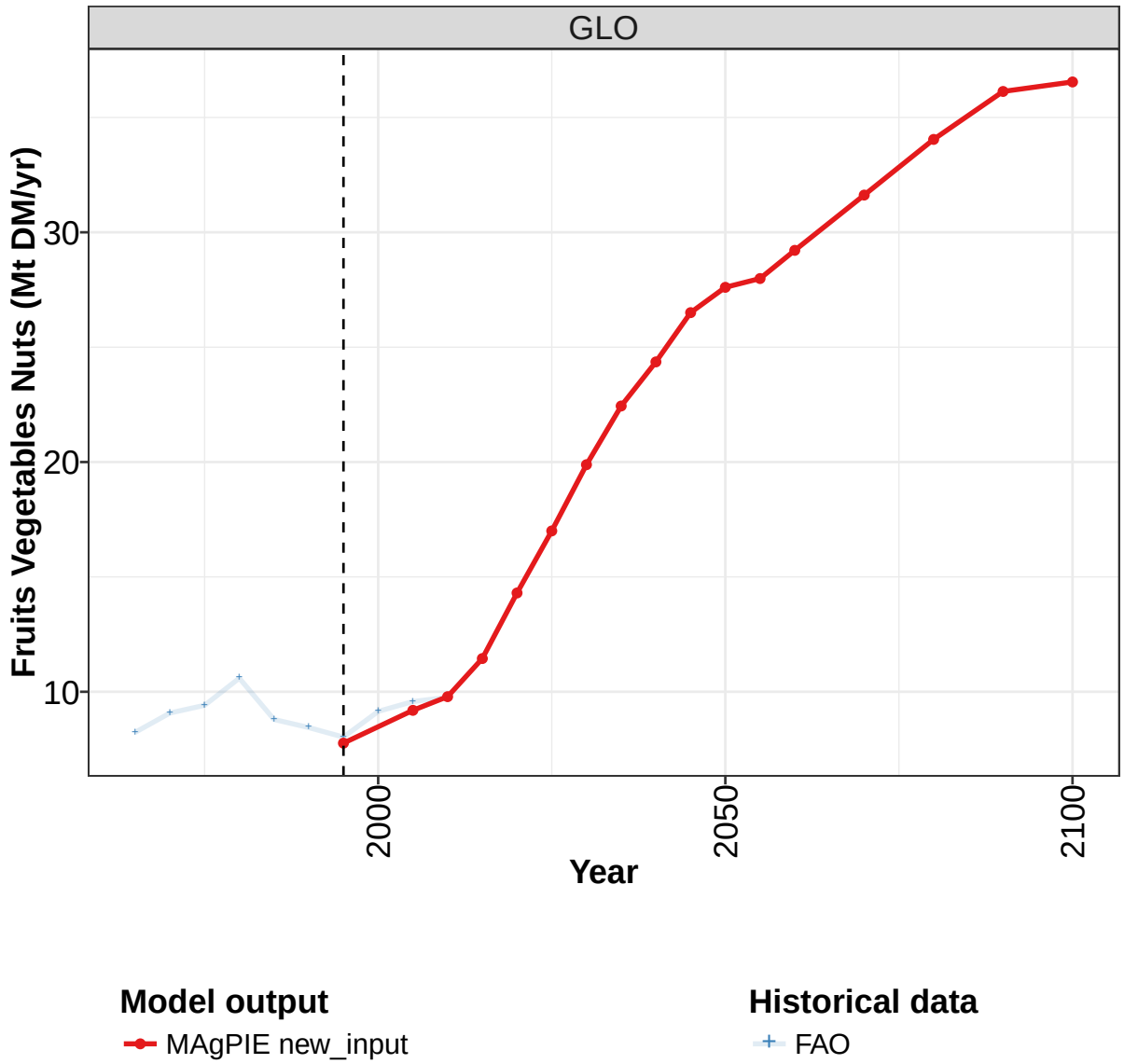
	2055	2060	2070	2080	2090	2100
GLO	39.0	40.2	42.1	43.7	44.8	44.8
CAZ	1.0	1.0	1.7	3.7	6.4	6.7
CHA	12.9	12.3	10.9	9.6	8.3	7.3
EUR	4.3	4.2	4.0	3.8	3.6	3.3
IND	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.7	2.0	2.0	1.9	1.7	1.6
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.4	0.4	0.4	0.3	0.3	0.3
OAS	1.3	1.0	1.0	0.9	0.9	0.8
REF	4.4	6.2	7.0	6.6	5.6	6.2
SSA	10.4	11.5	13.6	15.3	16.5	17.1
USA	1.3	1.3	1.3	1.3	1.2	1.2

Table 582: MAgPIE new_input — Demand—Processing—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	10.2	11.6	12.1	13.5	12.5	12.1	11.4	11.7	12.4	12.9
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4
CHA	0.2	0.3	0.6	1.0	1.1	1.5	2.6	1.9	2.5	3.0
EUR	6.4	6.9	6.8	7.8	6.4	6.1	5.2	5.8	5.2	4.7
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
LAM	0.6	0.7	0.8	0.8	0.7	0.6	0.7	0.7	0.8	0.9
MEA	0.5	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1
NEU	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3
OAS	0.3	0.3	0.4	0.3	1.0	1.1	0.4	0.7	0.7	0.7
REF	1.4	1.9	1.8	1.9	1.6	1.1	0.7	0.5	0.9	0.9
SSA	0.4	0.6	0.7	0.6	0.7	0.7	0.8	0.8	1.0	1.3
USA	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.7	0.8	0.7

Table 583: FAO — Demand—Processing—Crops—Other crops (Mt DM/yr)

9.1.14 Other crops—Fruits Vegetables Nuts



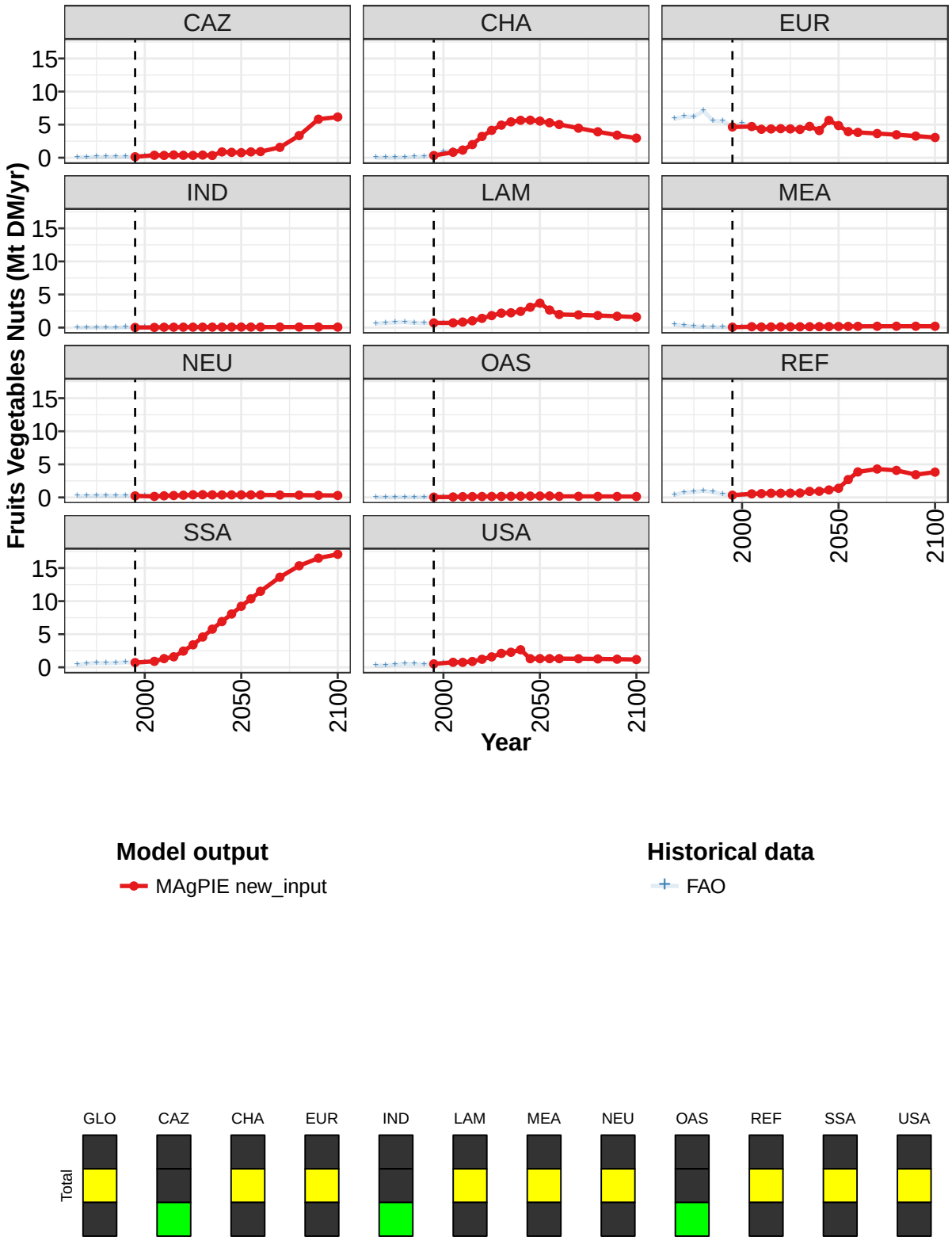


Figure 195: MAgPIE new_input — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	7.8	9.2	9.8	11.4	14.3	17.0	19.9	22.4	24.4	26.5	27.6
CAZ	0.1	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.9	0.8	0.8
CHA	0.3	0.8	1.2	2.0	3.2	4.1	4.9	5.4	5.7	5.7	5.5
EUR	4.6	4.7	4.3	4.3	4.4	4.4	4.3	4.7	4.1	5.6	4.9
IND	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.7	0.7	0.8	1.0	1.4	1.8	2.2	2.2	2.4	3.1	3.7
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
NEU	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
OAS	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
REF	0.3	0.5	0.6	0.6	0.6	0.6	0.7	0.9	0.9	1.1	1.4
SSA	0.7	0.9	1.3	1.6	2.4	3.4	4.6	5.8	6.9	8.1	9.2
USA	0.5	0.8	0.7	0.9	1.2	1.6	2.1	2.3	2.7	1.3	1.3

Table 584: MAgPIE new_input — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

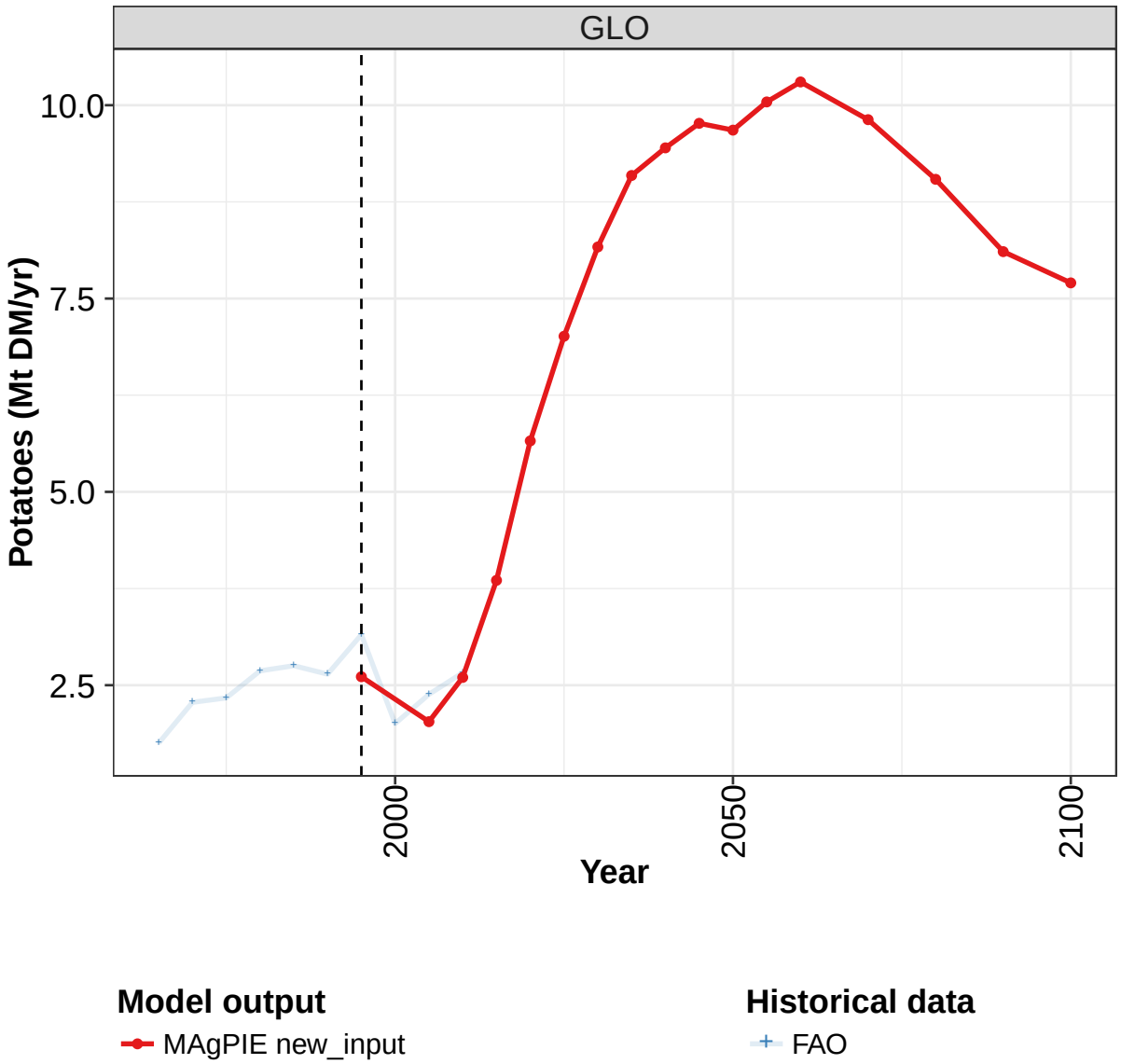
	2055	2060	2070	2080	2090	2100
GLO	28.0	29.2	31.6	34.0	36.1	36.5
CAZ	0.9	0.9	1.6	3.3	5.8	6.2
CHA	5.3	5.0	4.5	3.9	3.4	3.0
EUR	3.9	3.8	3.7	3.5	3.3	3.1
IND	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.7	2.0	1.9	1.8	1.7	1.6
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.4	0.4	0.4	0.3	0.3	0.3
OAS	0.2	0.2	0.2	0.2	0.1	0.1
REF	2.7	3.9	4.3	4.1	3.4	3.8
SSA	10.4	11.5	13.6	15.3	16.5	17.1
USA	1.3	1.3	1.3	1.3	1.2	1.2

Table 585: MAgPIE new_input — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.2	9.1	9.4	10.6	8.8	8.4	8.0	9.1	9.6	9.8
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.3
CHA	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.9	1.1	1.2
EUR	5.9	6.2	6.2	7.1	5.6	5.5	4.8	5.2	4.7	4.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
LAM	0.6	0.7	0.8	0.8	0.7	0.6	0.7	0.7	0.8	0.9
MEA	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1
NEU	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
REF	0.4	0.7	0.8	1.0	0.8	0.5	0.4	0.3	0.6	0.6
SSA	0.4	0.6	0.7	0.6	0.7	0.7	0.8	0.8	1.0	1.3
USA	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.7	0.8	0.7

Table 586: FAO — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

9.1.15 Other crops—Potatoes



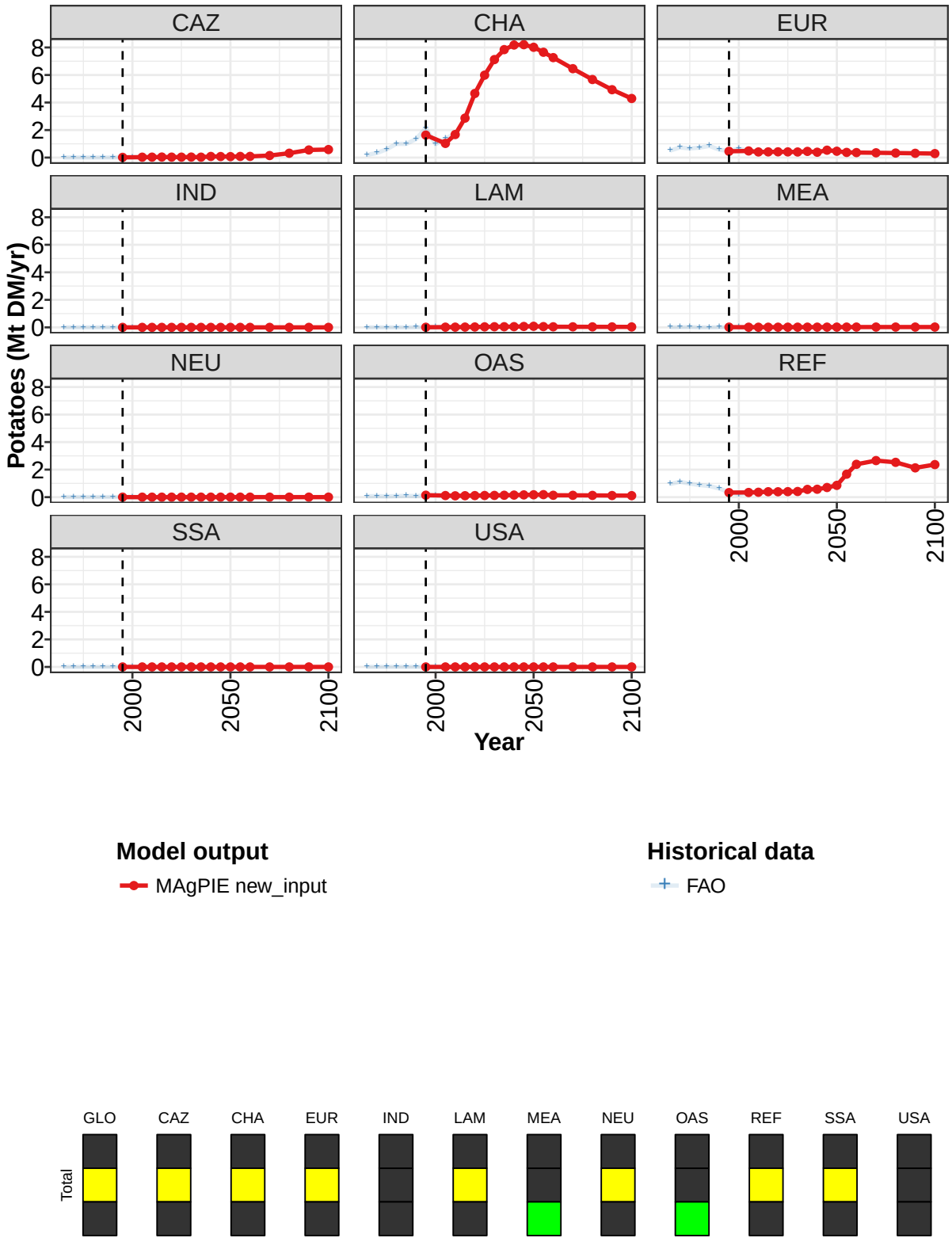


Figure 196: MAgPIE new_input — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.6	2.0	2.6	3.9	5.7	7.0	8.2	9.1	9.4	9.8	9.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
CHA	1.6	1.0	1.7	2.9	4.7	6.0	7.1	7.8	8.2	8.2	8.0
EUR	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
REF	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.9
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 587: MAgPIE new_input — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

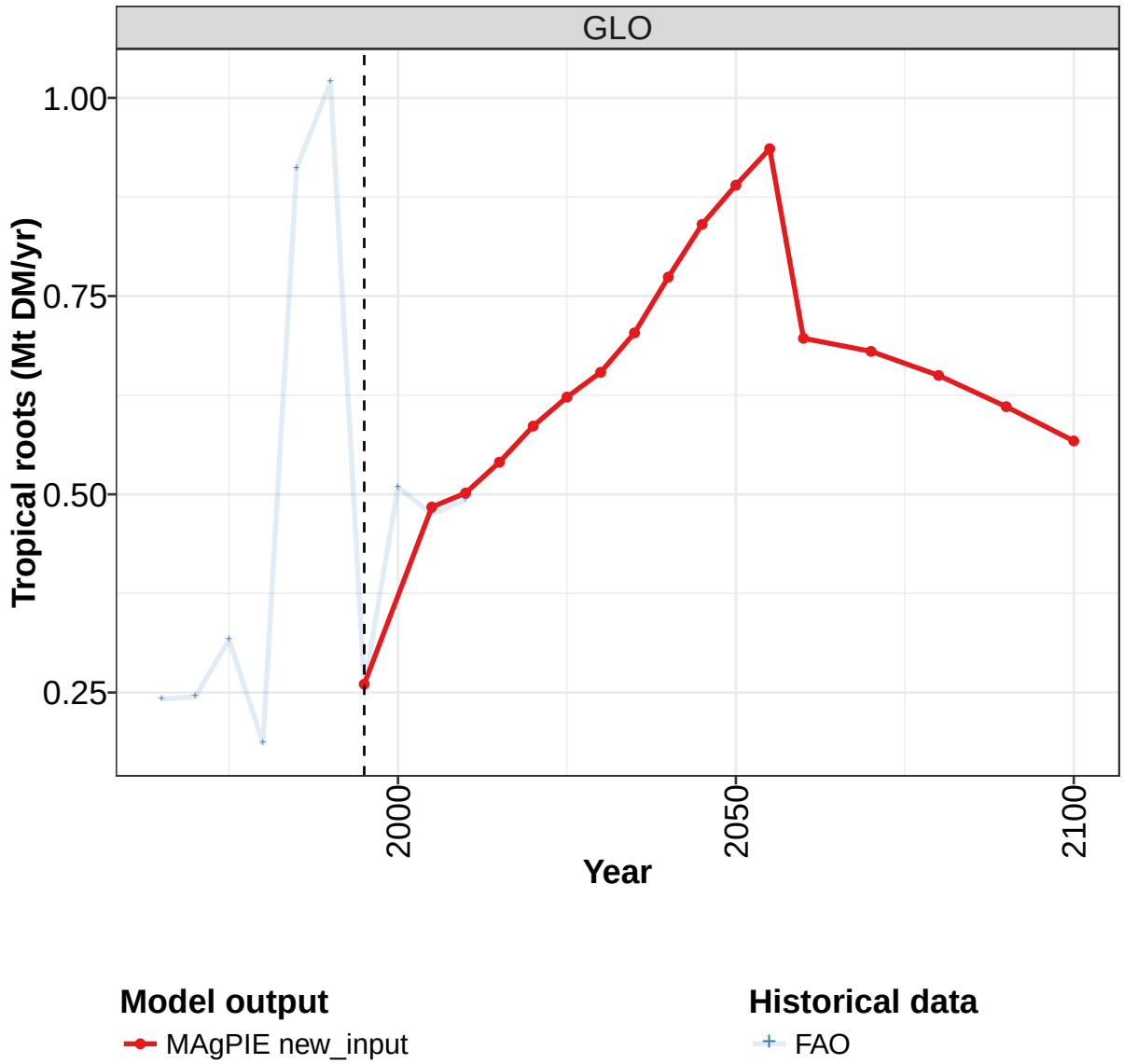
	2055	2060	2070	2080	2090	2100
GLO	10.0	10.3	9.8	9.0	8.1	7.7
CAZ	0.1	0.1	0.1	0.3	0.6	0.6
CHA	7.7	7.3	6.5	5.7	4.9	4.3
EUR	0.4	0.4	0.3	0.3	0.3	0.3
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.1	0.1	0.1	0.1	0.1
REF	1.7	2.4	2.7	2.5	2.1	2.4
SSA	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 588: MAgPIE new_input — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.75	2.28	2.34	2.69	2.75	2.64	3.15	2.00	2.38	2.66
CAZ	0.01	0.01	0.00	0.00	0.01	0.00	0.02	0.02	0.03	0.03
CHA	0.20	0.33	0.60	0.99	0.99	1.34	2.14	0.97	1.37	1.74
EUR	0.51	0.73	0.66	0.72	0.85	0.58	0.47	0.67	0.48	0.41
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02
MEA	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
OAS	0.07	0.07	0.05	0.08	0.09	0.07	0.14	0.13	0.11	0.10
REF	0.95	1.12	0.99	0.88	0.81	0.63	0.36	0.19	0.36	0.36
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 589: FAO — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr)

9.1.16 Other crops—Tropical roots



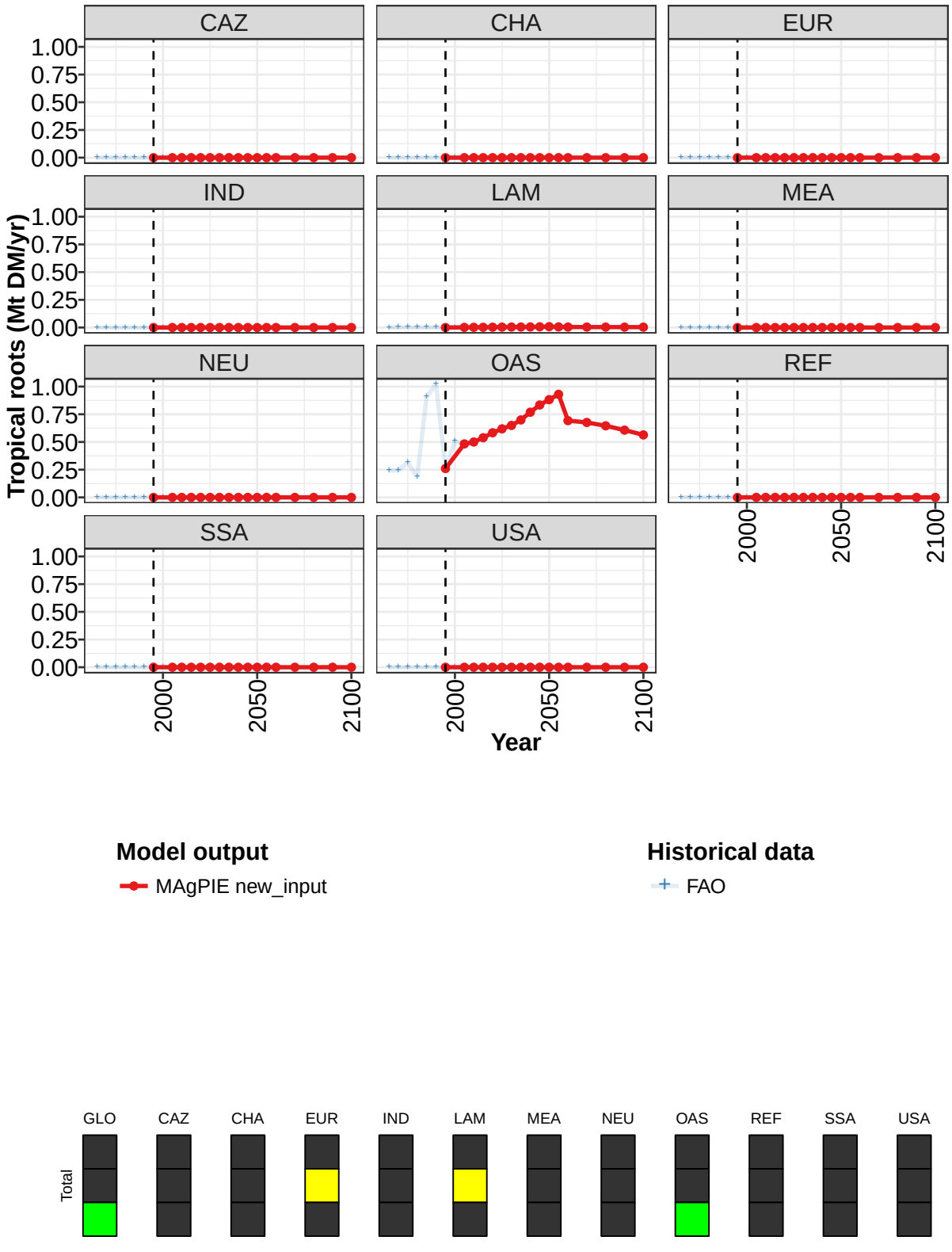


Figure 197: MAgPIE new_input — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.261	0.484	0.502	0.540	0.586	0.623	0.654	0.704	0.774	0.840	0.890
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.001	0.002	0.002	0.003	0.004	0.005	0.005	0.005	0.007	0.008
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.261	0.483	0.500	0.538	0.583	0.619	0.649	0.699	0.769	0.834	0.882
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 590: MAgPIE new_input — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

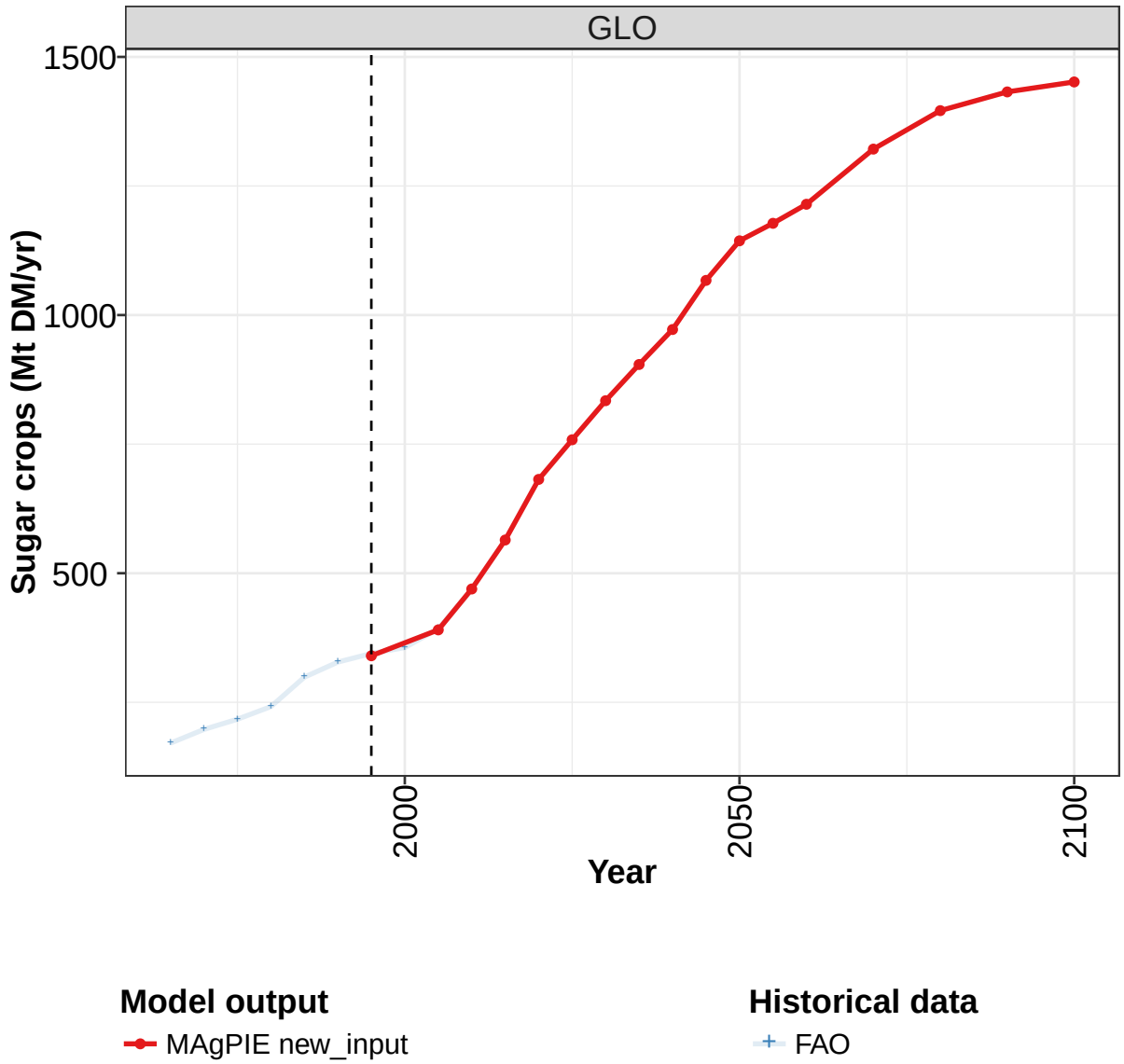
	2055	2060	2070	2080	2090	2100
GLO	0.936	0.697	0.680	0.650	0.611	0.567
CAZ	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.006	0.004	0.004	0.004	0.004	0.003
MEA	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.930	0.693	0.676	0.646	0.607	0.564
REF	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000

Table 591: MAgPIE new_input — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.24	0.24	0.32	0.19	0.91	1.02	0.26	0.51	0.48	0.49
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.24	0.24	0.32	0.19	0.91	1.02	0.26	0.51	0.47	0.49
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 592: FAO — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr)

9.1.17 Sugar crops



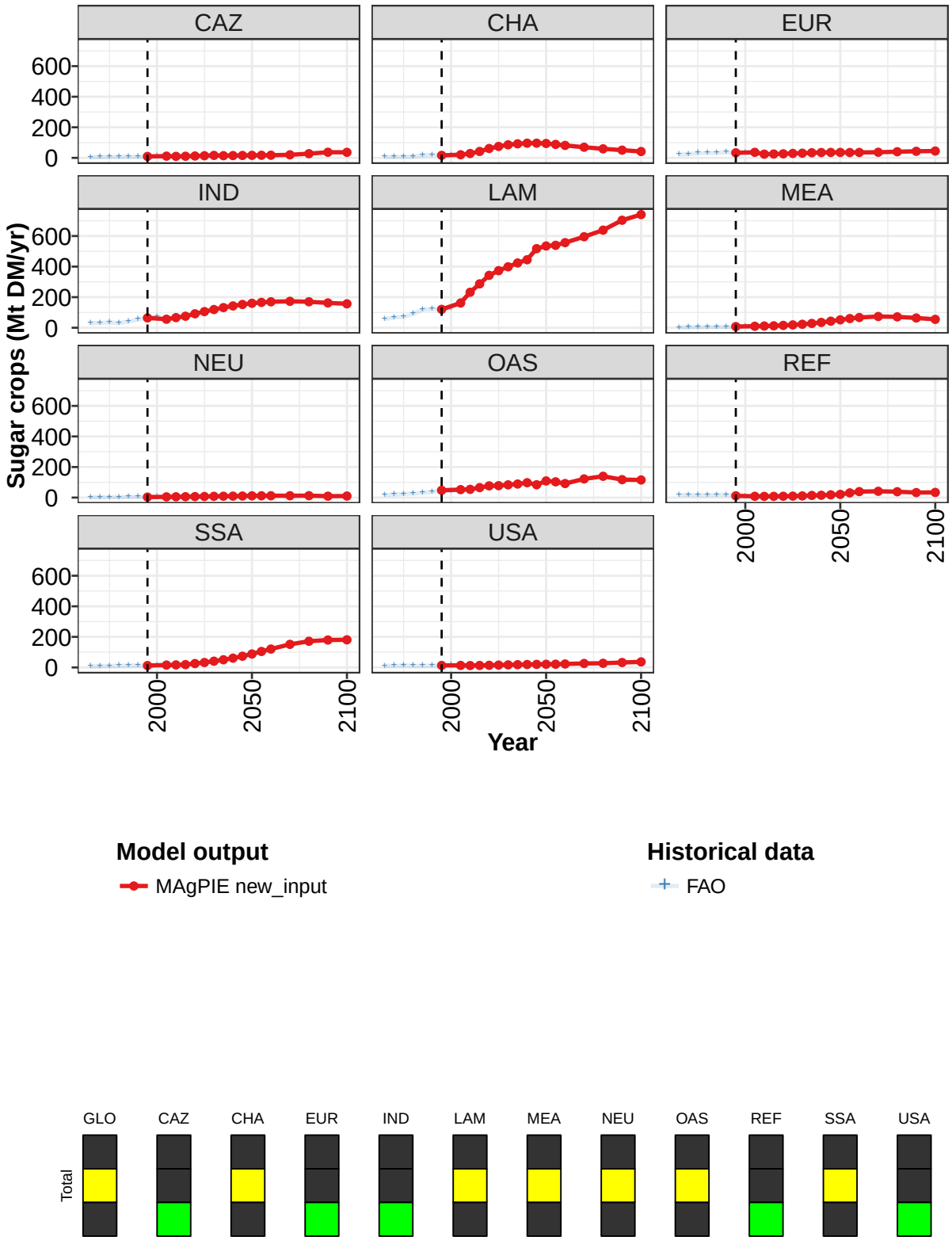


Figure 198: MAgPIE new_input — Demand—Processing—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	340	390	470	564	682	758	834	904	972	1067	1144
CAZ	9	11	10	11	12	14	16	14	15	16	17
CHA	17	20	29	42	61	75	86	92	96	96	94
EUR	33	36	24	25	27	29	31	34	35	36	36
IND	64	56	66	75	91	106	119	132	143	152	160
LAM	120	162	232	287	343	373	399	424	445	518	535
MEA	8	10	11	13	15	19	23	28	35	43	52
NEU	3	5	5	6	6	7	8	9	10	10	12
OAS	48	52	54	65	77	78	83	89	97	84	109
REF	12	9	8	8	9	10	11	14	15	18	21
SSA	12	16	17	19	26	32	41	51	61	74	88
USA	13	13	13	13	14	16	17	18	20	20	21

Table 593: MAgPIE new_input — Demand—Processing—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

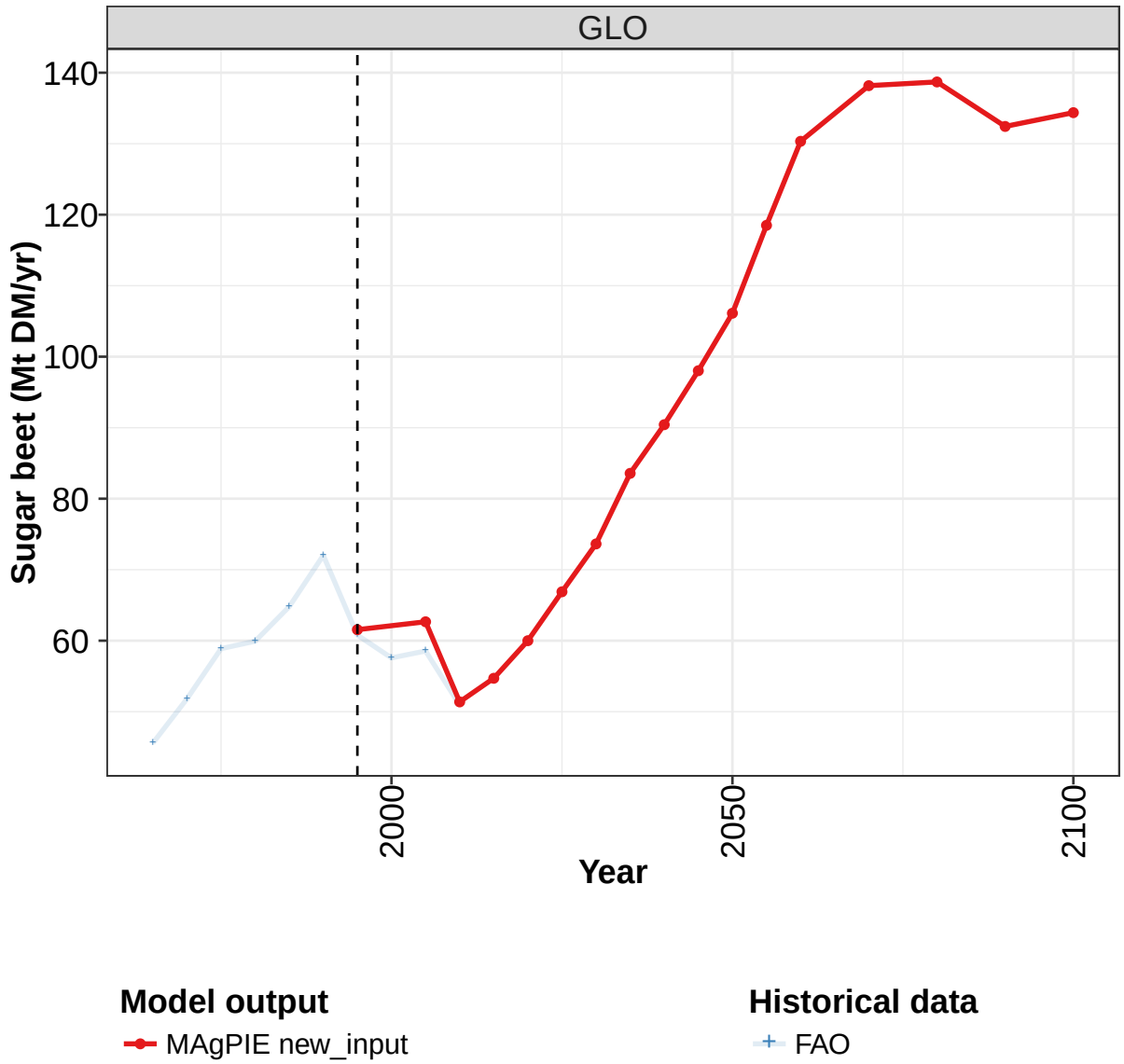
	2055	2060	2070	2080	2090	2100
GLO	1178	1215	1321	1396	1432	1452
CAZ	17	17	20	28	37	36
CHA	88	82	70	59	51	42
EUR	35	36	37	40	43	45
IND	166	170	173	170	162	157
LAM	539	557	595	638	703	740
MEA	60	67	73	71	64	55
NEU	12	12	12	13	9	10
OAS	103	92	122	140	118	115
REF	31	39	41	39	33	34
SSA	105	121	151	171	180	181
USA	21	23	26	27	32	37

Table 594: MAgPIE new_input — Demand—Processing—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	171	197	217	242	299	328	345	356	393	467
CAZ	4	5	6	7	7	7	10	10	10	9
CHA	7	6	7	10	16	19	19	18	25	30
EUR	21	24	31	32	33	36	32	32	32	24
IND	29	32	34	31	40	54	65	71	56	66
LAM	57	68	70	90	119	121	124	127	169	235
MEA	2	3	4	4	6	6	8	8	10	10
NEU	1	2	2	3	4	5	3	5	5	5
OAS	17	21	24	27	32	37	46	45	47	51
REF	17	18	15	16	18	18	12	7	9	8
SSA	6	9	10	11	13	13	13	16	17	16
USA	10	11	13	11	11	12	13	17	13	13

Table 595: FAO — Demand—Processing—Crops—Sugar crops (Mt DM/yr)

9.1.18 Sugar crops—Sugar beet



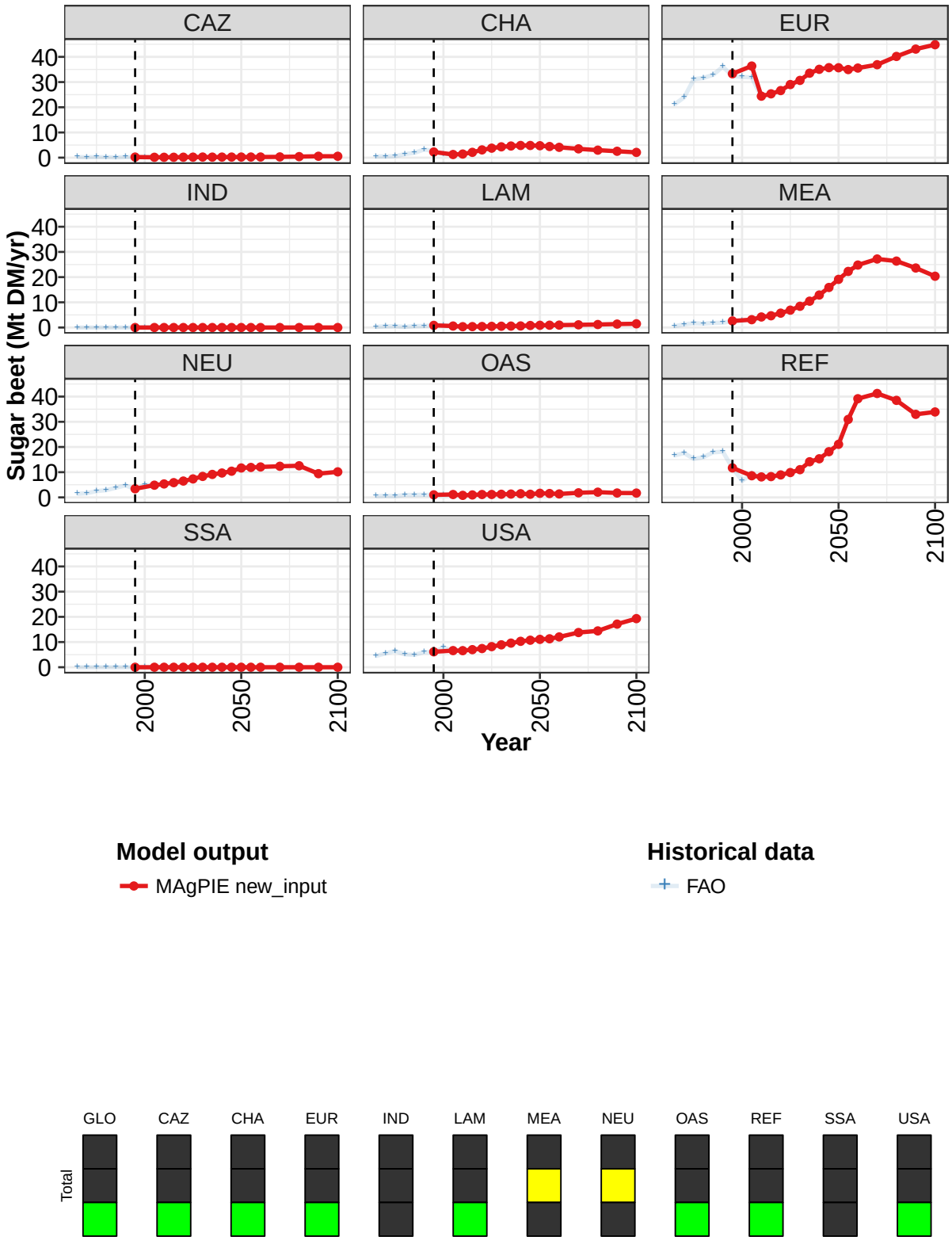


Figure 199: MAgPIE new_input — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	62	63	51	55	60	67	74	84	90	98	106
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	2	1	1	2	3	4	4	5	5	5	5
EUR	33	36	24	25	27	29	31	34	35	36	36
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	1	1	0	0	0	0	1	1	1	1	1
MEA	3	3	4	5	6	7	8	10	13	16	19
NEU	3	5	5	6	6	7	8	9	10	10	12
OAS	1	1	1	1	1	1	1	1	1	1	2
REF	12	9	8	8	9	10	11	14	15	18	21
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	6	7	7	7	7	8	9	10	10	11	11

Table 596: MAgPIE new_input — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

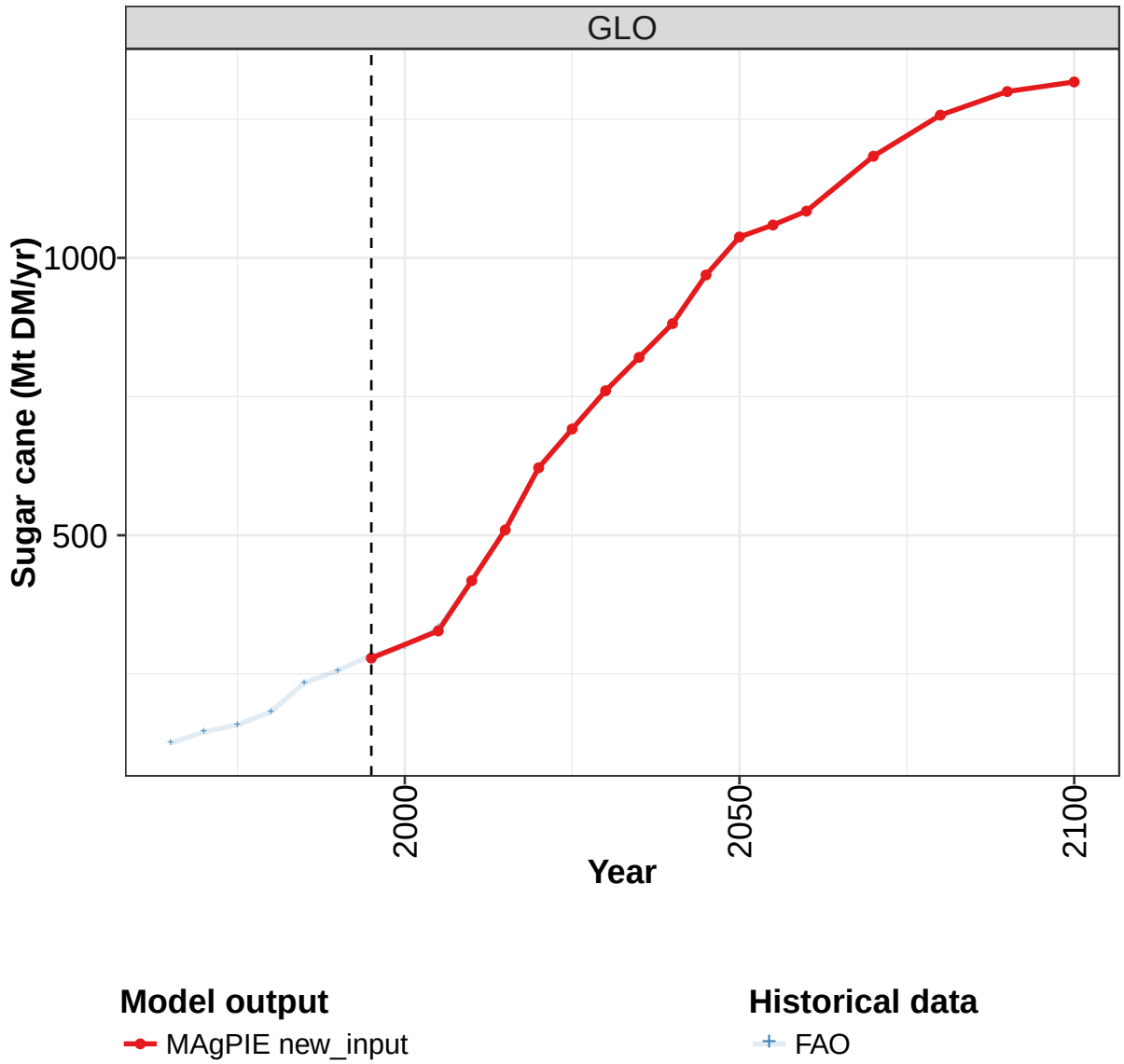
	2055	2060	2070	2080	2090	2100
GLO	119	130	138	139	132	134
CAZ	0	0	0	0	1	1
CHA	4	4	4	3	3	2
EUR	35	36	37	40	43	45
IND	0	0	0	0	0	0
LAM	1	1	1	1	1	1
MEA	22	25	27	26	24	20
NEU	12	12	12	13	9	10
OAS	2	1	2	2	2	2
REF	31	39	41	39	33	34
SSA	0	0	0	0	0	0
USA	11	12	14	14	17	19

Table 597: MAgPIE new_input — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	45.6	51.8	58.9	59.9	64.8	72.0	60.8	57.6	58.5	50.9
CAZ	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1
CHA	0.5	0.5	0.6	1.4	1.9	3.2	2.6	1.5	1.5	1.5
EUR	21.1	24.0	31.1	31.7	32.8	36.1	32.4	32.0	31.9	24.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.5	0.5	0.2	0.6	0.6	0.9	0.7	0.6	0.3
MEA	0.5	1.3	1.7	1.5	1.8	1.9	2.5	2.7	3.0	3.8
NEU	1.4	1.7	2.5	2.9	3.8	4.8	3.3	5.1	4.7	5.4
OAS	0.5	0.6	0.5	0.9	1.0	1.0	1.0	0.9	1.0	0.8
REF	16.6	17.6	15.2	16.0	17.9	18.2	11.7	6.6	9.1	8.1
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	4.5	5.5	6.5	5.1	4.9	6.0	6.1	7.8	6.6	7.0

Table 598: FAO — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr)

9.1.19 Sugar crops—Sugar cane



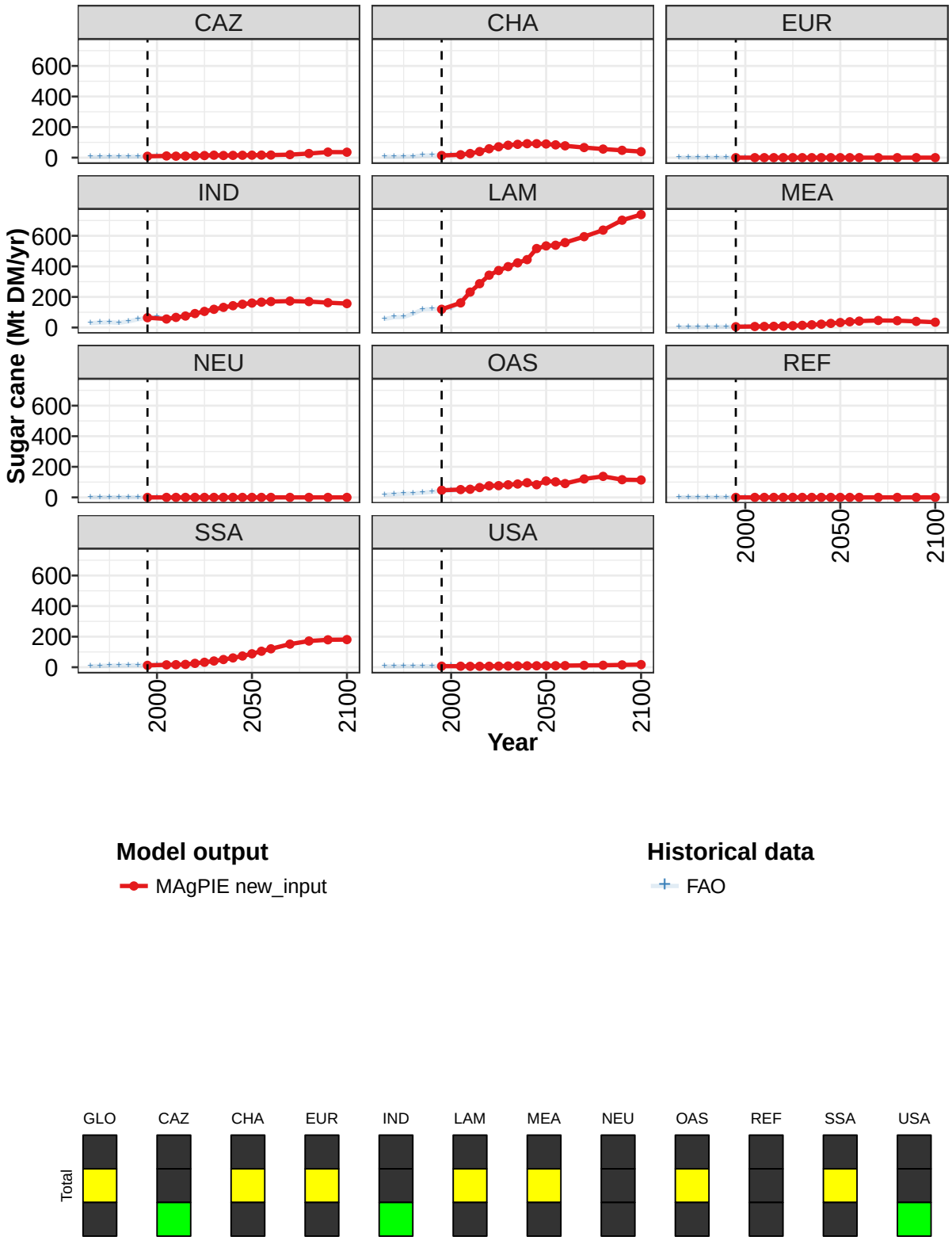


Figure 200: MAgPIE new_input — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	279	328	418	510	622	692	761	821	882	969	1038
CAZ	9	11	10	10	12	14	16	14	15	16	16
CHA	14	19	27	40	58	71	81	87	91	91	89
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	64	56	66	75	91	106	119	132	143	152	160
LAM	119	161	232	287	342	373	398	423	444	517	534
MEA	5	7	7	8	10	12	14	18	22	27	33
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	47	51	53	64	76	77	82	87	96	83	107
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	12	16	17	19	26	32	41	51	61	74	88
USA	7	7	6	6	7	7	8	9	9	10	10

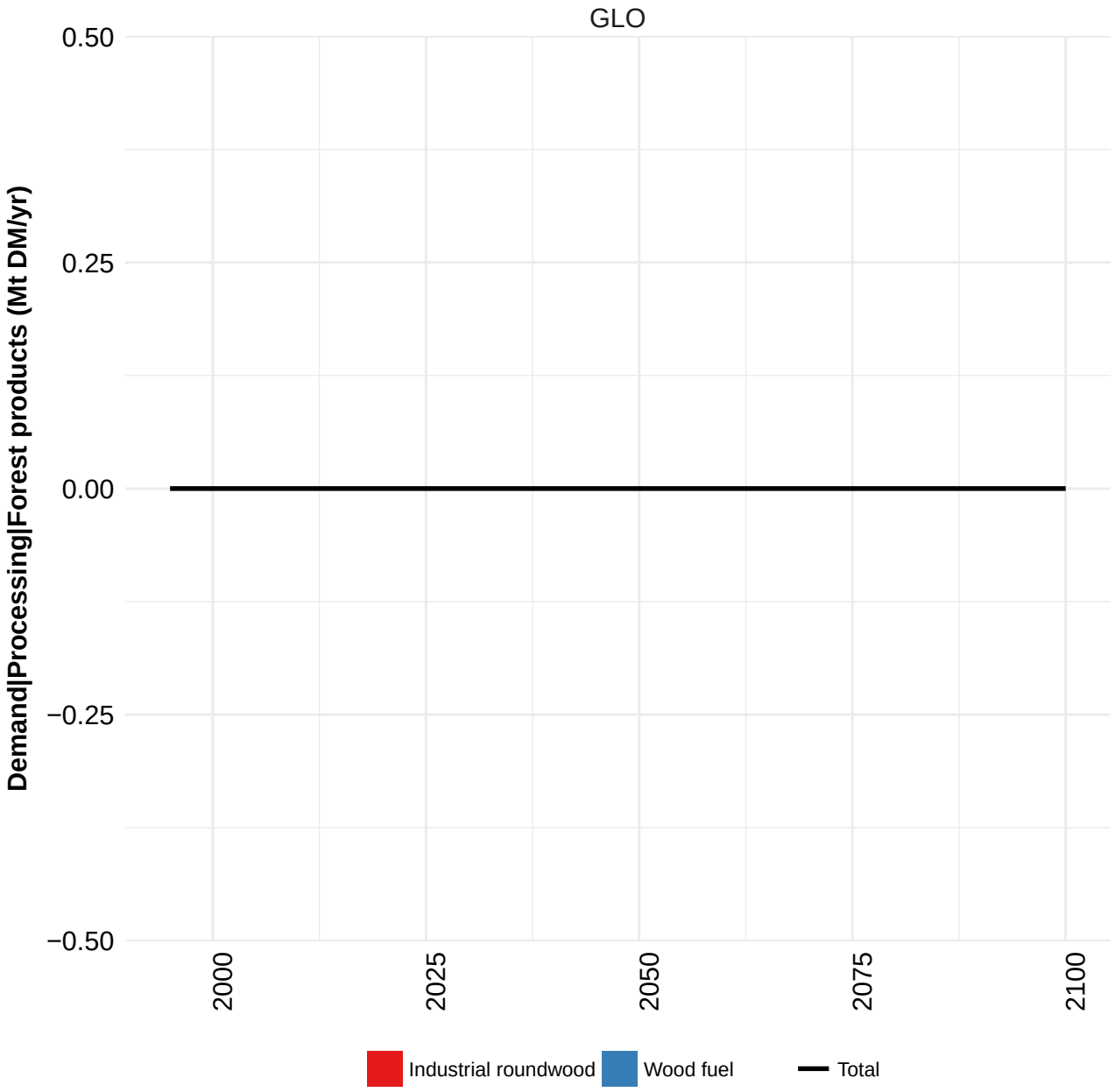
Table 599: MAgPIE new_input — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

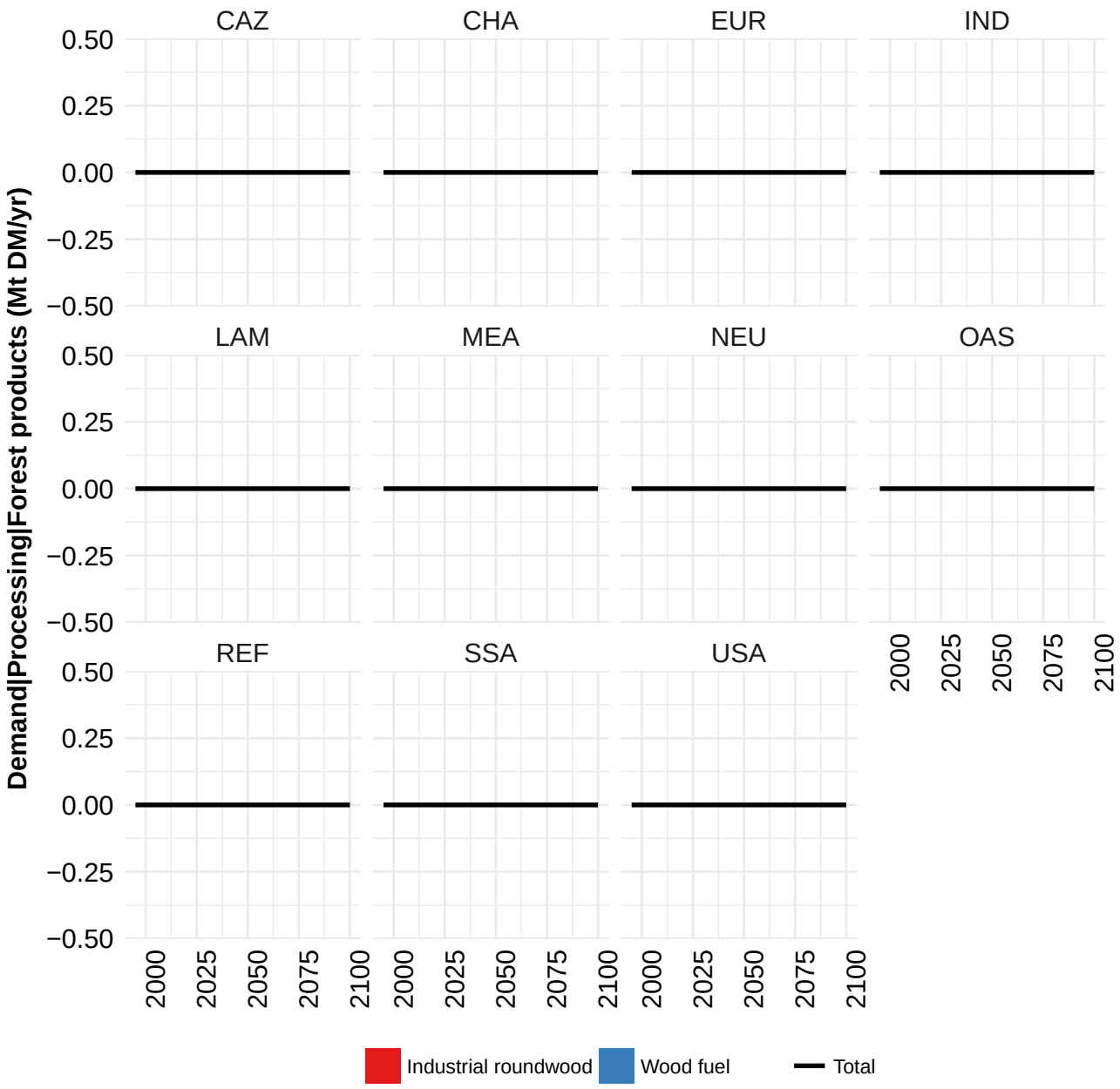
	2055	2060	2070	2080	2090	2100
GLO	1059	1084	1183	1257	1300	1317
CAZ	17	17	20	27	36	36
CHA	84	78	66	56	48	39
EUR	0	0	0	0	0	0
IND	166	170	173	170	162	157
LAM	538	556	594	637	702	739
MEA	38	42	46	45	40	35
NEU	0	0	0	0	0	0
OAS	102	91	120	137	116	114
REF	0	0	0	0	0	0
SSA	105	121	151	171	180	181
USA	10	11	12	13	15	17

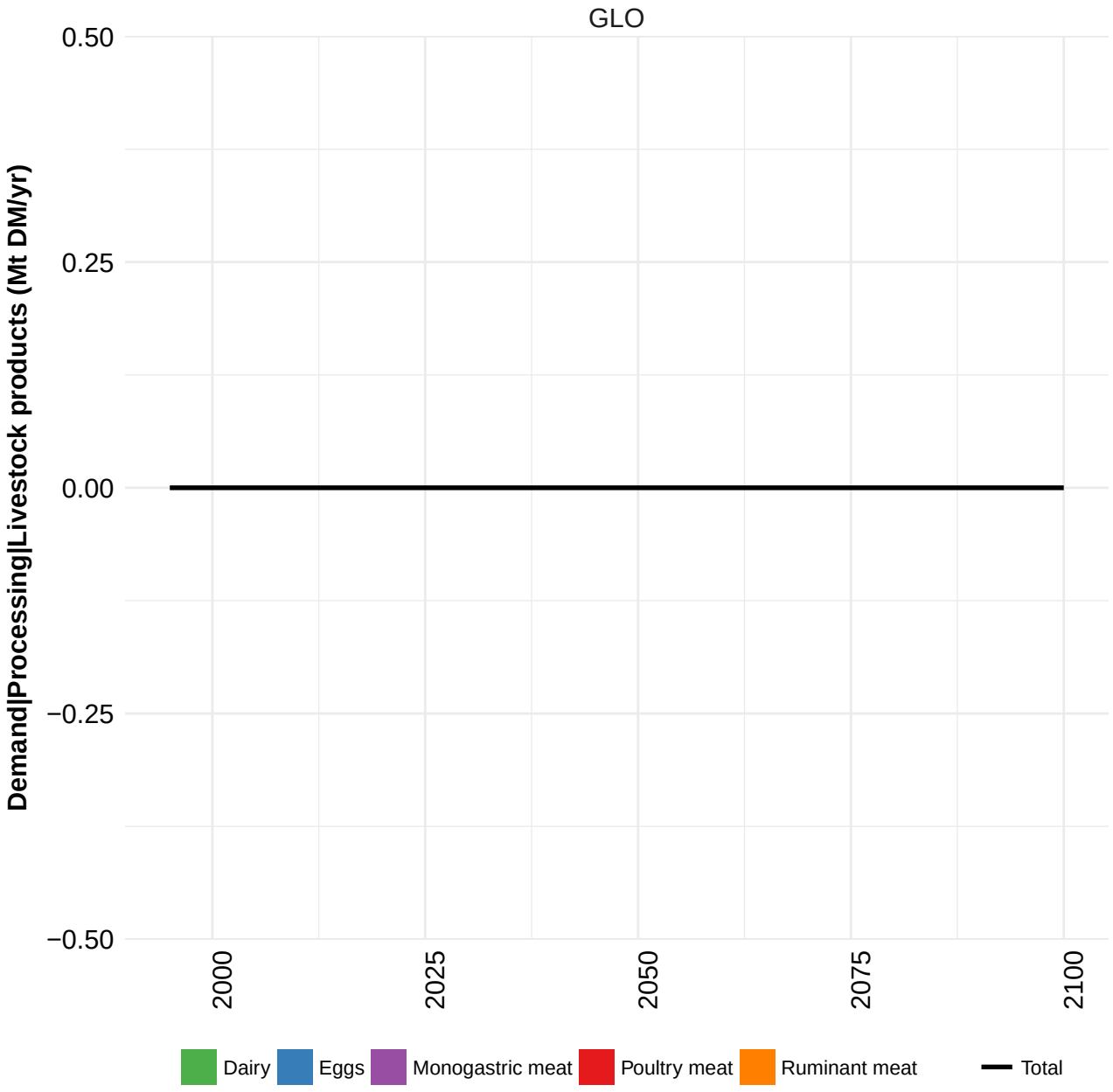
Table 600: MAgPIE new_input — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

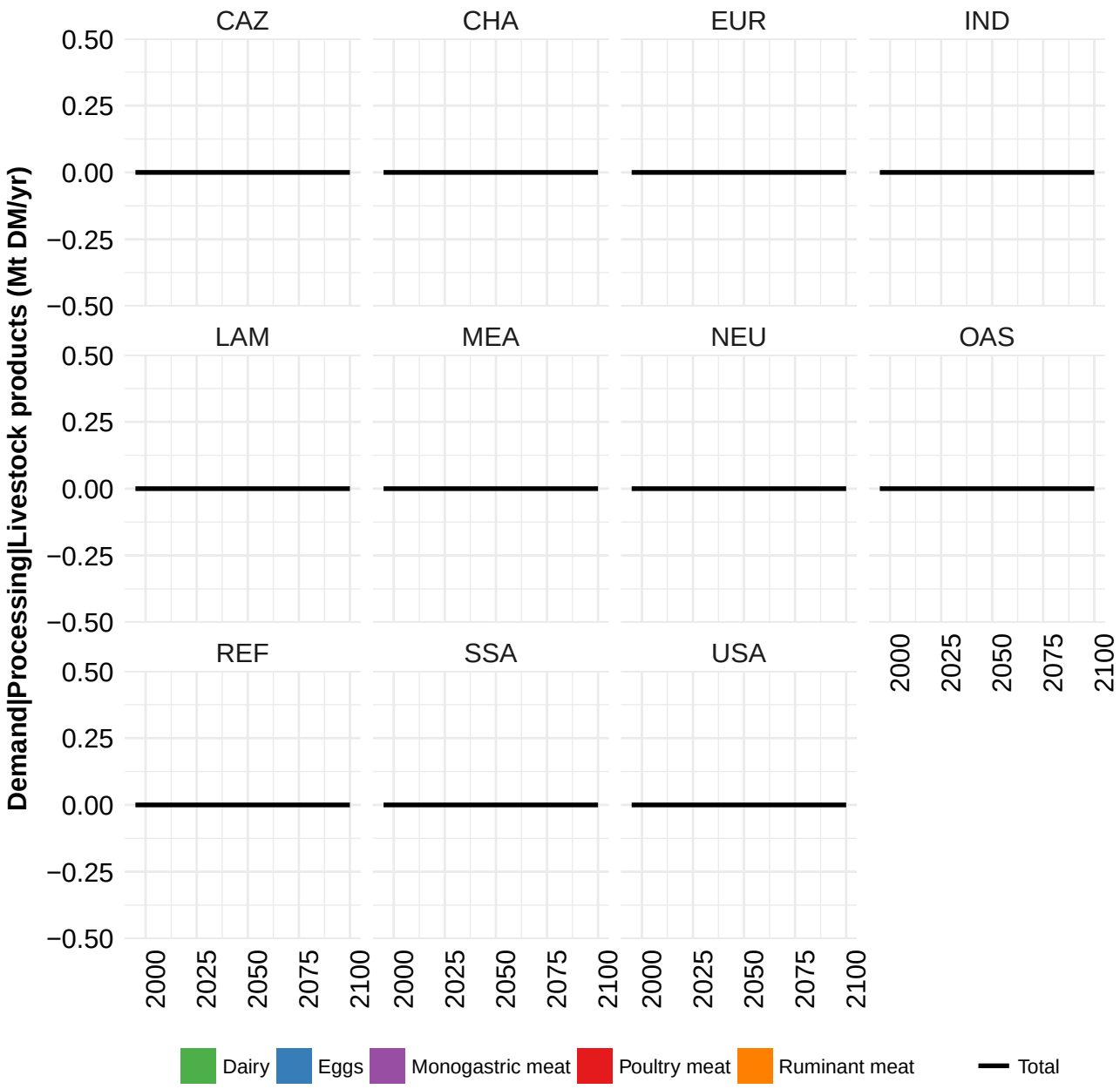
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	125	146	158	182	234	256	284	298	334	417
CAZ	4	5	6	6	7	7	9	10	10	8
CHA	6	5	6	8	14	15	16	17	23	28
EUR	0	0	0	0	0	0	0	0	0	0
IND	29	32	34	31	40	54	65	71	56	66
LAM	56	68	69	90	119	121	123	126	168	235
MEA	1	2	2	3	4	4	5	5	7	6
NEU	0	0	0	0	0	0	0	0	0	0
OAS	17	20	24	26	31	36	45	44	46	50
REF	0	0	0	0	0	0	0	0	0	0
SSA	6	9	10	11	13	13	13	16	17	16
USA	6	6	7	6	7	6	7	9	7	6

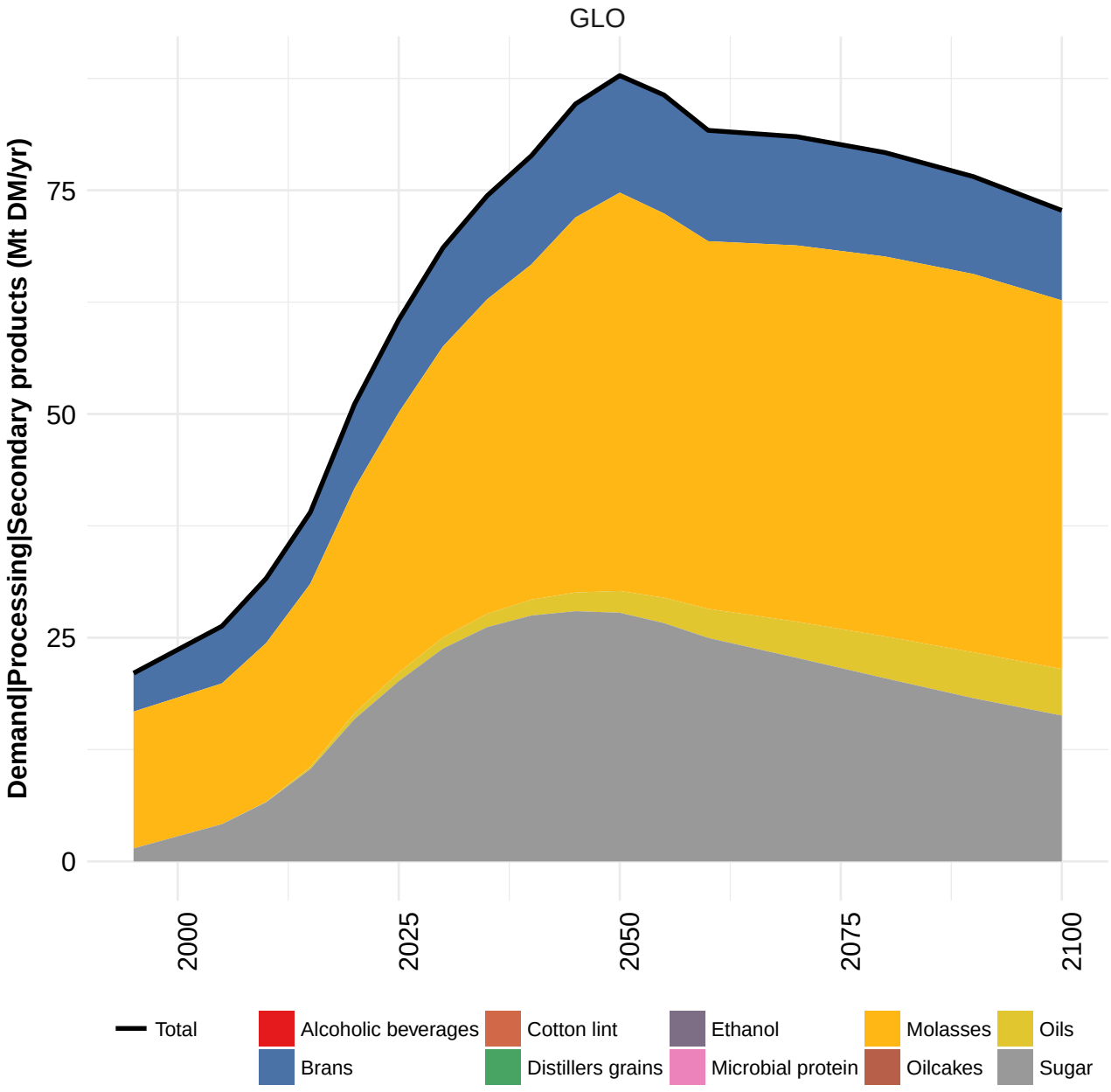
Table 601: FAO — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr)

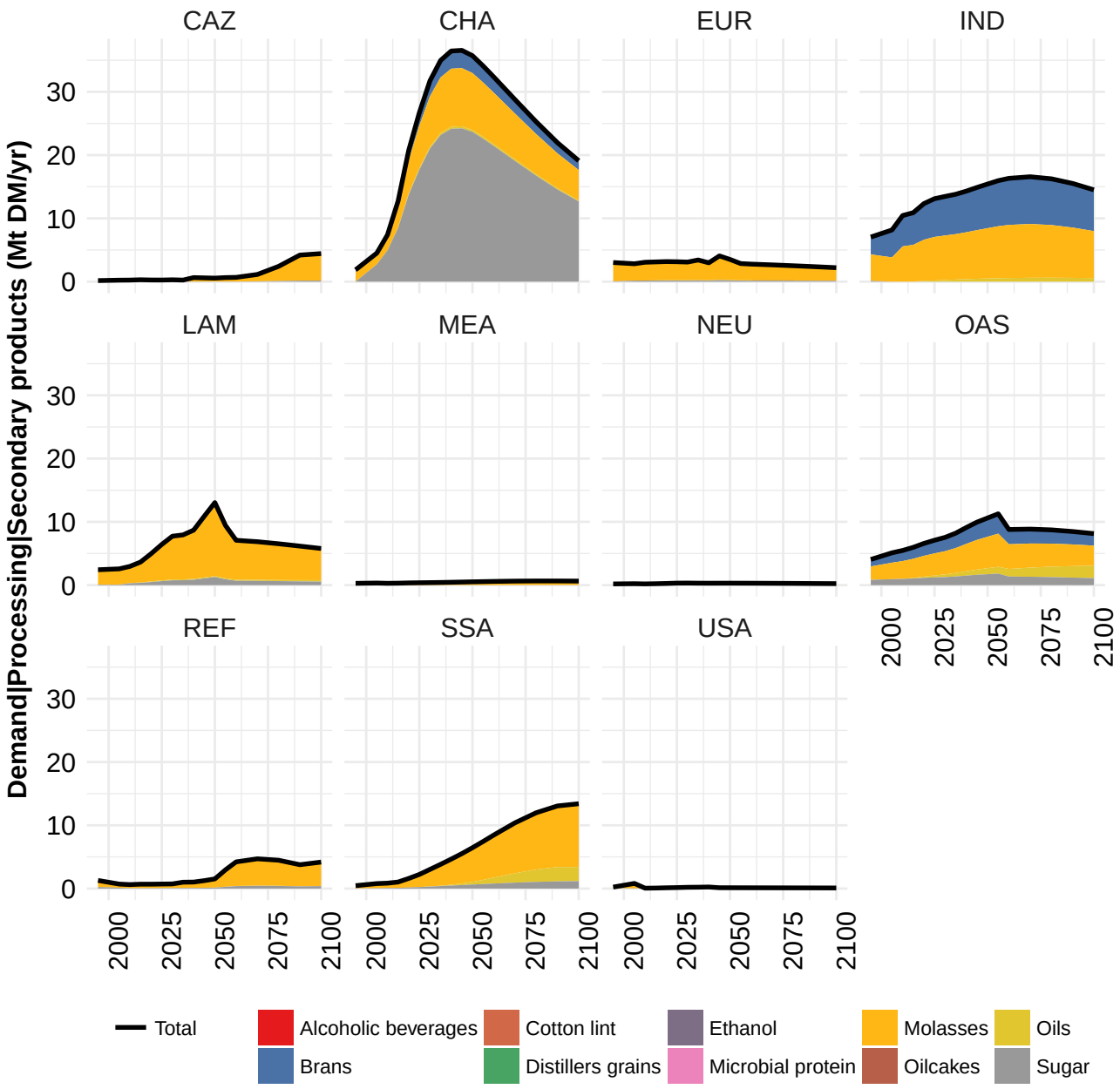

GLO
0.50
0.25
0.00
−0.25
−0.50
Demand|Processing|Forest products (Mt DM/yr)
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Processing|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total

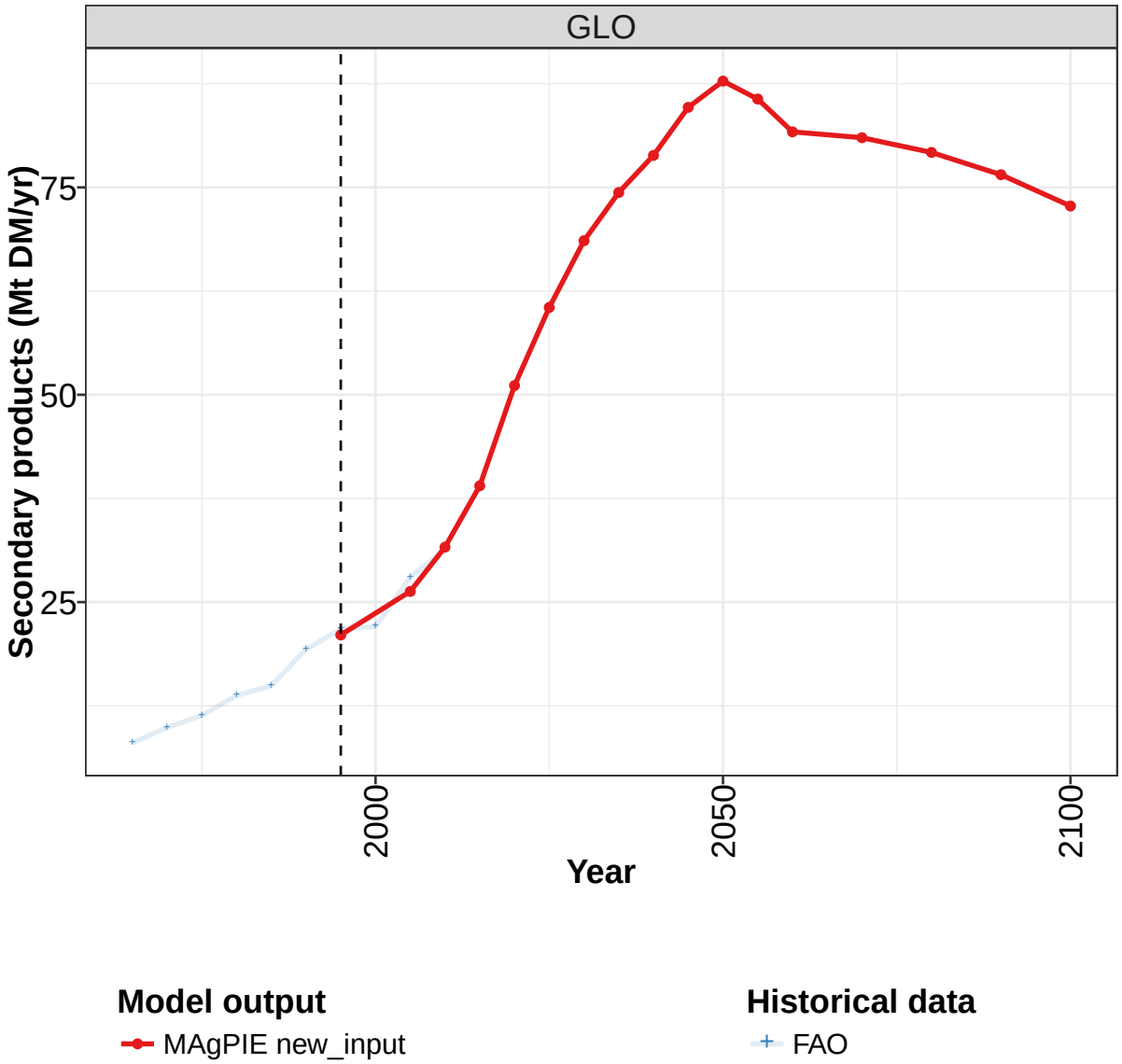

GLO
Demand|Processing|Livestock products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Processing|Livestock products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


GLO
Demand|Processing|Secondary products (Mt DM/yr)
0
25
50
75
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Processing|Secondary products (Mt DM/yr)
0
10
20
30
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

9.2 Secondary products



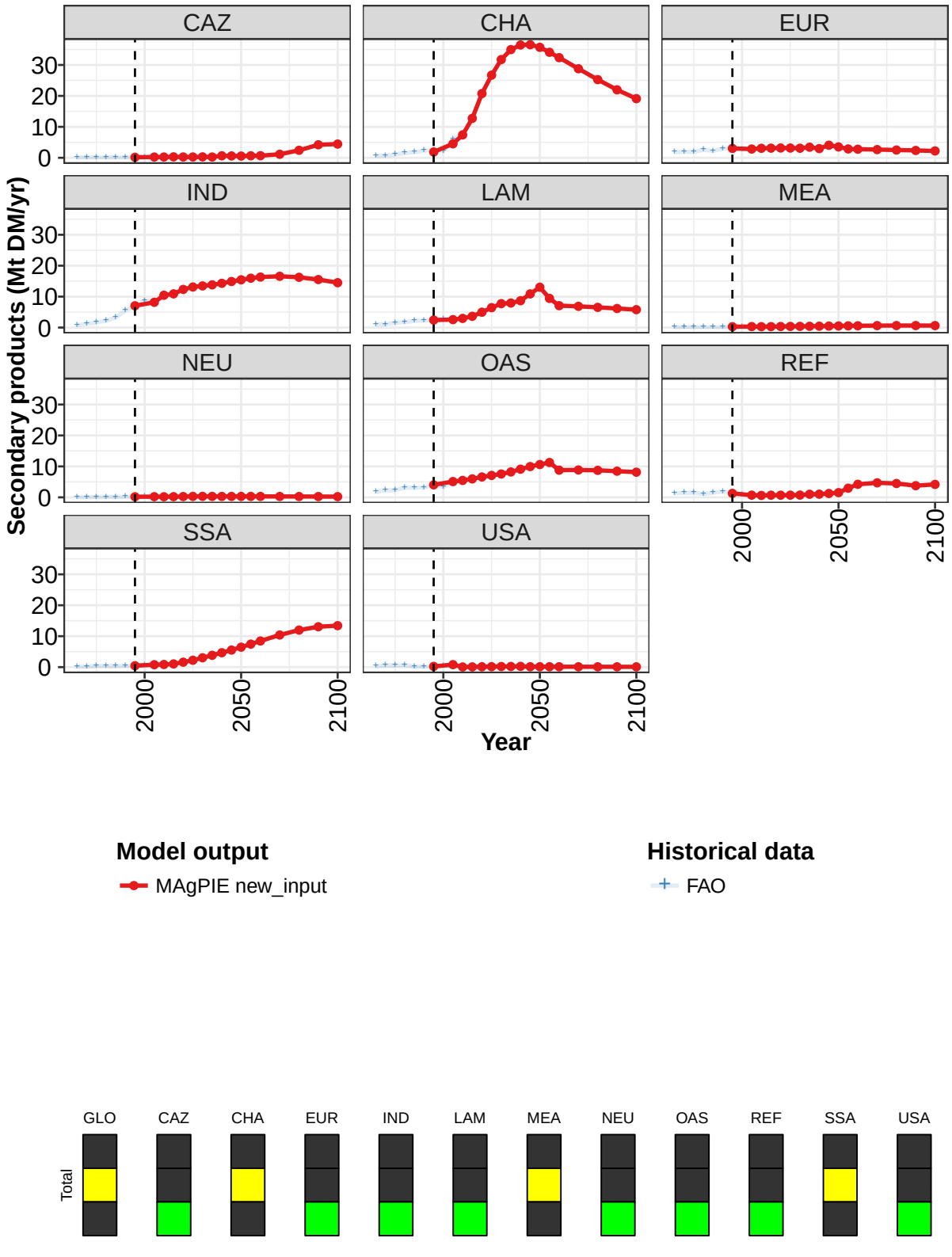


Figure 201: MAgPIE new_input — Demand—Processing—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	21.0	26.3	31.6	39.0	51.1	60.5	68.6	74.4	78.9	84.7	87.8
CAZ	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.6	0.6	0.6
CHA	1.9	4.5	7.4	12.7	20.8	26.7	31.7	35.0	36.5	36.6	35.7
EUR	3.0	2.8	3.1	3.1	3.2	3.1	3.1	3.4	3.0	4.1	3.5
IND	7.0	8.2	10.5	10.9	12.3	13.1	13.5	13.8	14.3	14.9	15.4
LAM	2.4	2.6	3.0	3.6	5.0	6.4	7.7	7.9	8.7	10.9	13.0
MEA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5
NEU	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	4.1	5.1	5.5	6.0	6.6	7.1	7.5	8.2	9.1	10.0	10.6
REF	1.3	0.7	0.6	0.7	0.7	0.7	0.7	1.0	1.0	1.3	1.5
SSA	0.5	0.8	0.9	1.0	1.6	2.2	3.0	3.8	4.7	5.5	6.5
USA	0.2	0.8	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1

Table 602: MAgPIE new_input — Demand—Processing—Secondary products (Mt DM/yr) [PART 1/2]

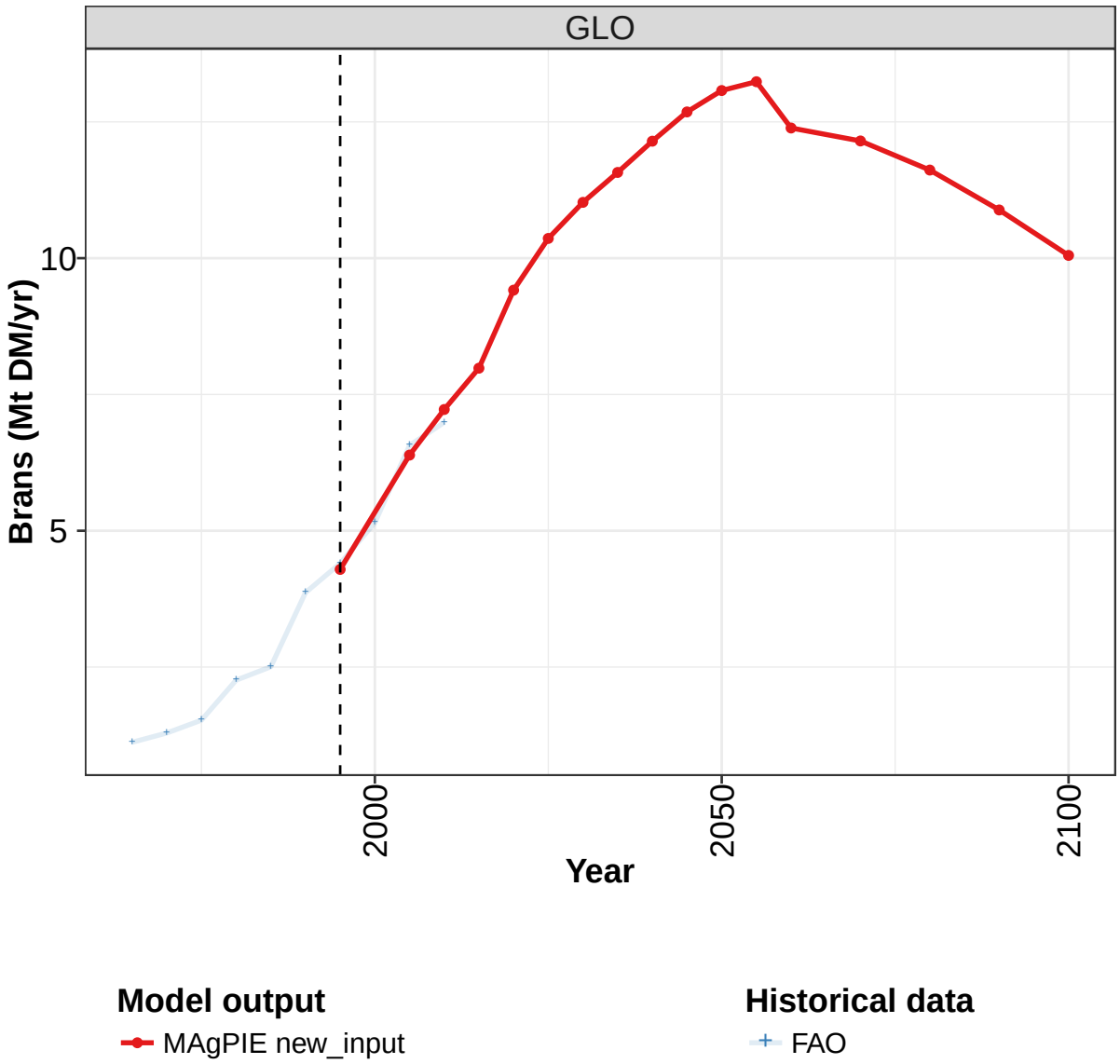
	2055	2060	2070	2080	2090	2100
GLO	85.7	81.7	81.0	79.2	76.5	72.8
CAZ	0.6	0.7	1.1	2.4	4.2	4.4
CHA	34.1	32.4	28.8	25.3	22.0	19.1
EUR	2.9	2.8	2.6	2.5	2.4	2.2
IND	16.0	16.3	16.6	16.3	15.5	14.5
LAM	9.4	7.1	6.9	6.5	6.2	5.8
MEA	0.6	0.6	0.6	0.7	0.7	0.6
NEU	0.3	0.3	0.3	0.3	0.3	0.2
OAS	11.3	8.8	8.8	8.7	8.5	8.1
REF	3.0	4.2	4.7	4.5	3.8	4.2
SSA	7.4	8.5	10.4	12.0	13.1	13.4
USA	0.1	0.1	0.1	0.1	0.1	0.1

Table 603: MAgPIE new_input — Demand—Processing—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.0	9.9	11.3	13.7	14.9	19.3	21.7	22.1	28.0	31.3
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
CHA	0.6	0.7	1.0	1.5	1.8	2.3	2.4	2.2	6.0	7.7
EUR	1.8	1.9	1.9	2.6	2.2	3.0	3.1	2.7	2.8	3.0
IND	0.8	1.2	1.7	2.2	3.2	5.5	7.1	8.7	8.3	9.9
LAM	1.0	1.1	1.5	1.7	2.2	2.3	2.4	2.7	2.8	3.1
MEA	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
OAS	1.8	2.3	2.3	3.1	3.1	3.2	4.0	3.4	5.0	5.4
REF	1.3	1.5	1.5	1.1	1.5	1.9	1.4	0.8	0.7	0.6
SSA	0.2	0.2	0.4	0.4	0.3	0.5	0.5	0.6	0.9	0.8
USA	0.3	0.6	0.6	0.7	0.2	0.2	0.2	0.3	0.8	0.1

Table 604: FAO — Demand—Processing—Secondary products (Mt DM/yr)

9.2.1 Brans


GLO
Brans (Mt DM/yr)
10
5
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

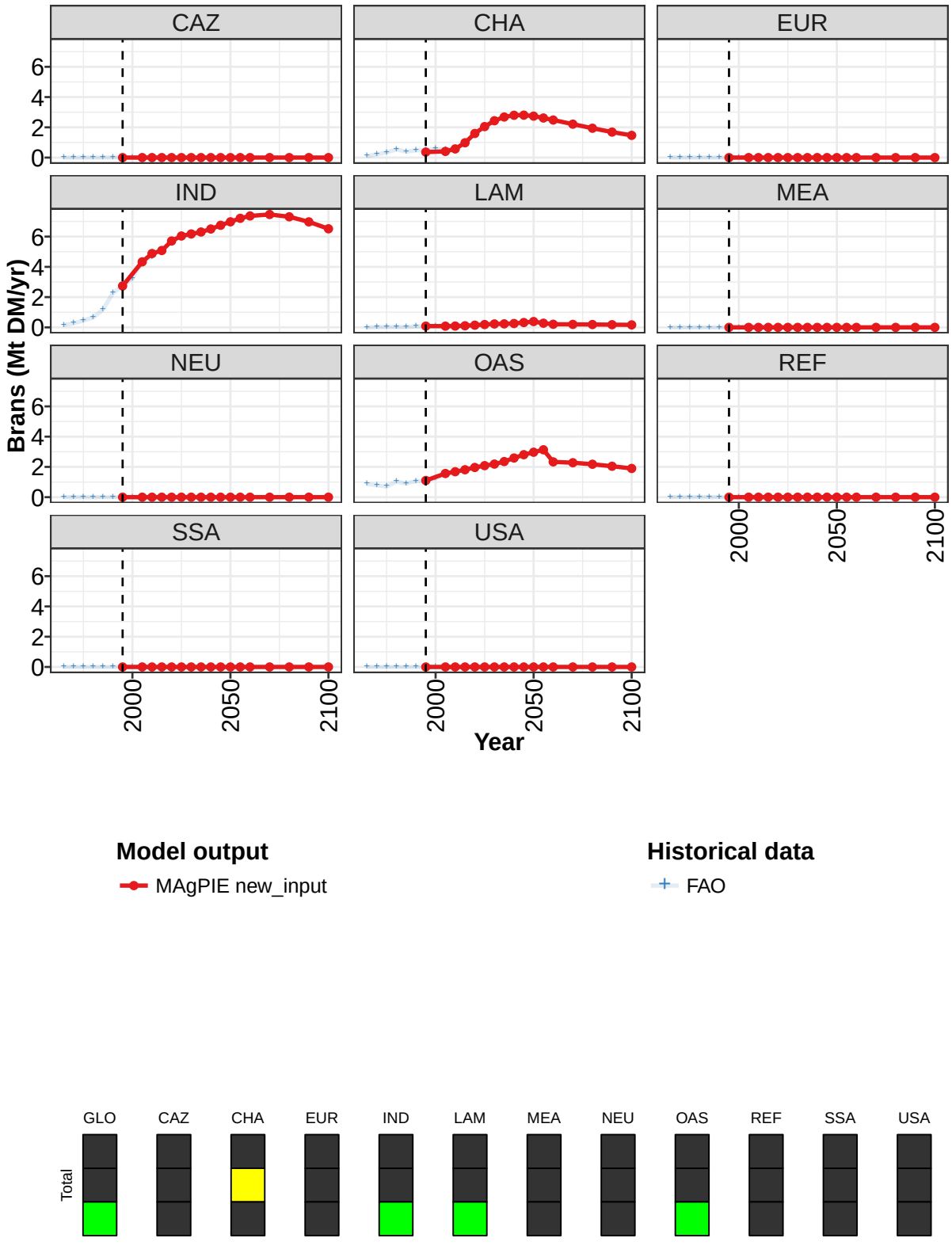


Figure 202: MAgPIE new_input — Demand—Processing—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.3	6.4	7.2	8.0	9.4	10.4	11.0	11.6	12.1	12.7	13.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.4	0.4	0.6	1.0	1.6	2.0	2.4	2.7	2.8	2.8	2.7
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	4.3	4.9	5.1	5.7	6.0	6.2	6.3	6.5	6.7	7.0
LAM	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.1	1.6	1.7	1.8	2.0	2.1	2.2	2.4	2.6	2.8	3.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 605: MAgPIE new_input — Demand—Processing—Secondary products—Brans (Mt DM/yr) [PART 1/2]

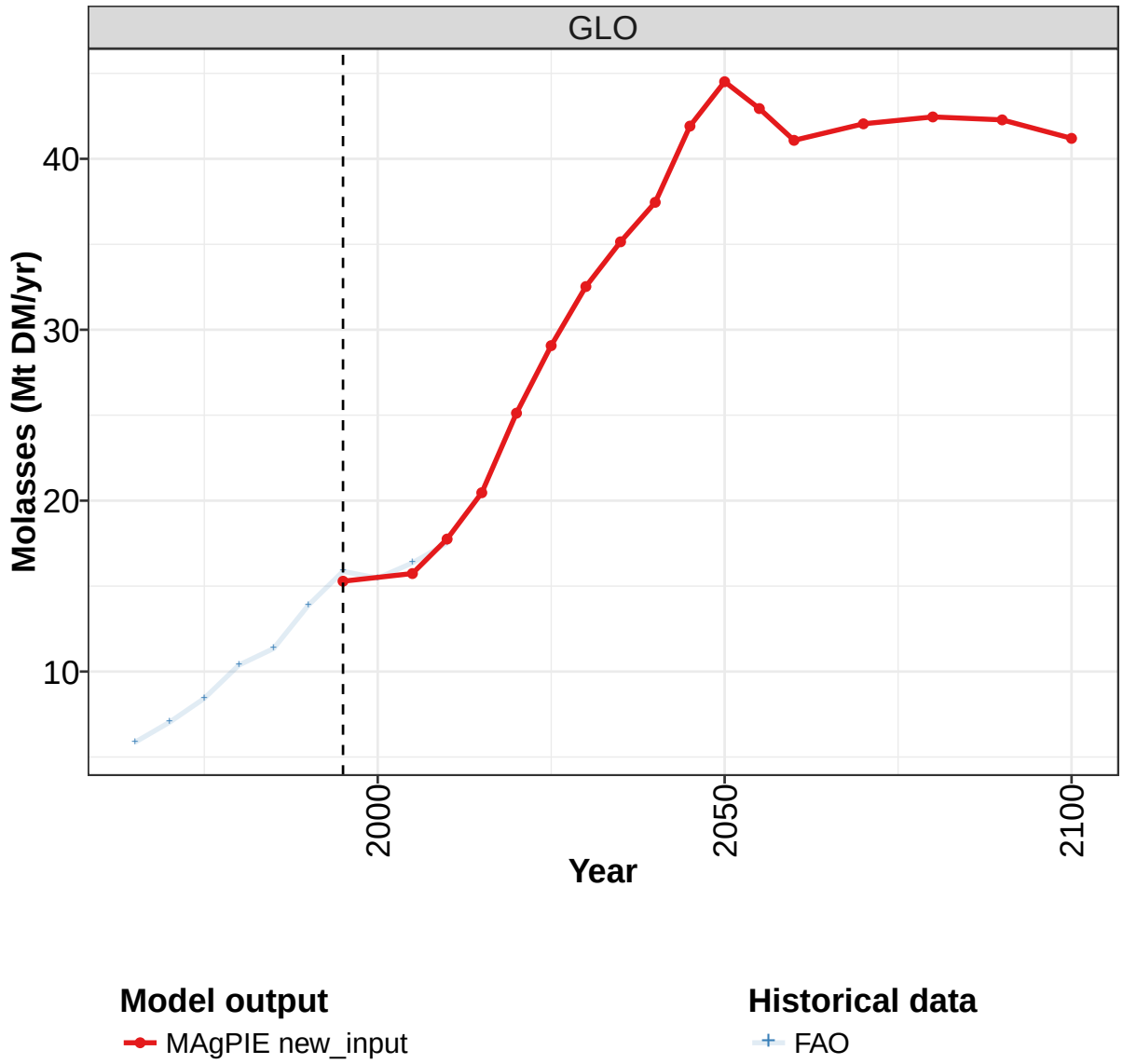
	2055	2060	2070	2080	2090	2100
GLO	13.2	12.4	12.1	11.6	10.9	10.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.6	2.5	2.2	1.9	1.7	1.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	7.2	7.4	7.5	7.3	7.0	6.5
LAM	0.3	0.2	0.2	0.2	0.2	0.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.1	2.3	2.3	2.2	2.0	1.9
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 606: MAgPIE new_input — Demand—Processing—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.12	1.29	1.53	2.26	2.50	3.87	4.40	5.15	6.57	6.99
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.09	0.21	0.34	0.54	0.40	0.48	0.48	0.59	0.54	0.60
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.16	0.27	0.46	0.66	1.17	2.26	2.75	3.23	4.39	4.65
LAM	0.00	0.02	0.02	0.02	0.03	0.06	0.08	0.09	0.09	0.09
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.87	0.79	0.70	1.03	0.91	1.06	1.09	1.24	1.54	1.65
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 607: FAO — Demand—Processing—Secondary products—Brans (Mt DM/yr)

9.2.2 Molasses



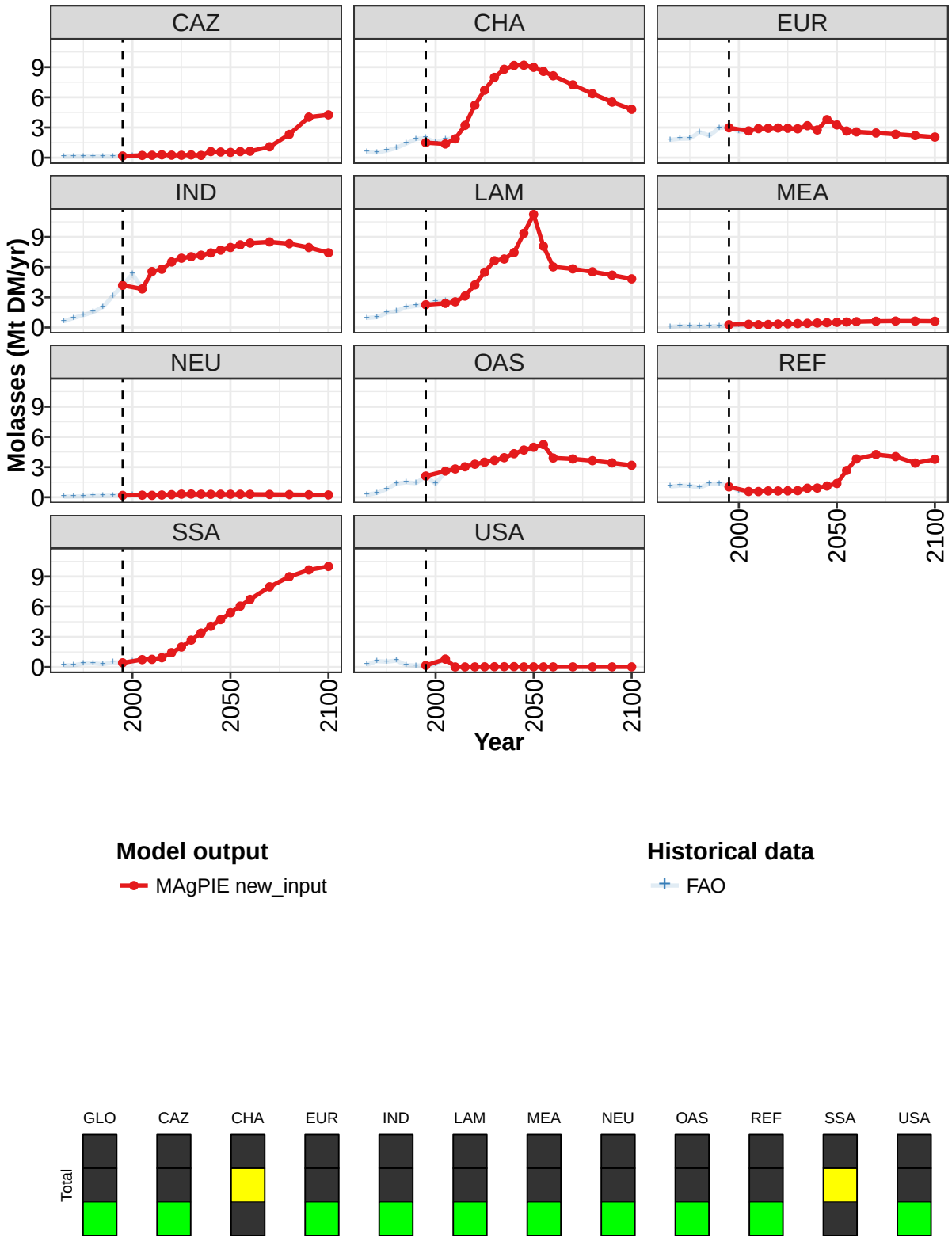


Figure 203: MAgPIE new_input — Demand—Processing—Secondary products—Molasses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	15.3	15.7	17.8	20.5	25.1	29.1	32.5	35.1	37.5	41.9	44.5
CAZ	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.6	0.6	0.5
CHA	1.5	1.4	1.9	3.2	5.2	6.7	8.0	8.8	9.2	9.2	9.0
EUR	3.0	2.7	2.9	2.9	2.9	2.9	2.9	3.2	2.8	3.8	3.3
IND	4.2	3.8	5.6	5.8	6.5	6.9	7.0	7.2	7.4	7.7	7.9
LAM	2.3	2.4	2.6	3.1	4.2	5.5	6.6	6.8	7.4	9.4	11.2
MEA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
NEU	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.1	2.6	2.8	3.0	3.3	3.5	3.7	3.9	4.3	4.7	5.0
REF	1.0	0.6	0.6	0.6	0.6	0.6	0.7	0.9	0.9	1.1	1.4
SSA	0.4	0.7	0.8	0.9	1.4	2.0	2.7	3.4	4.0	4.7	5.4
USA	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 608: MAgPIE new_input — Demand—Processing—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

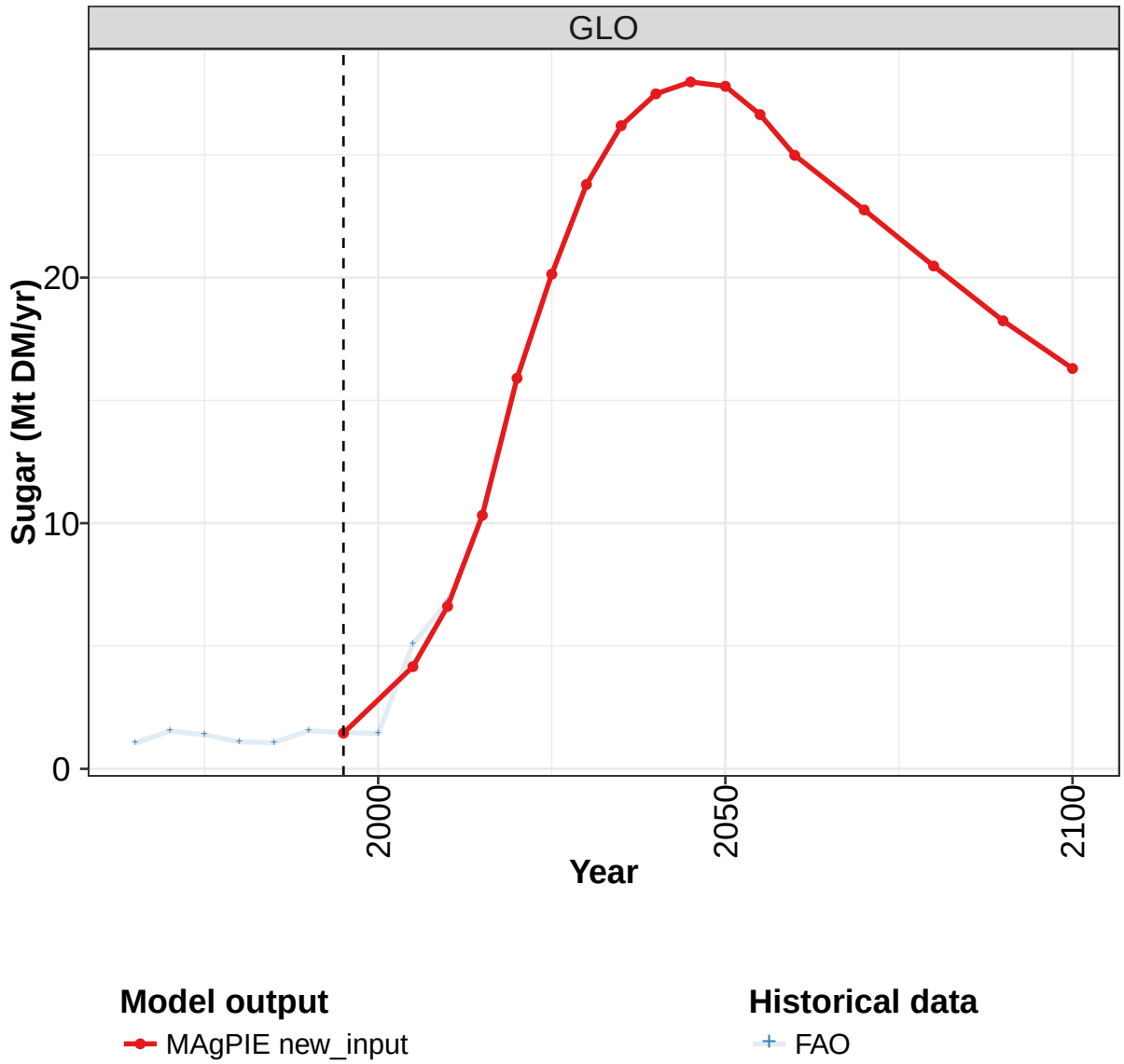
	2055	2060	2070	2080	2090	2100
GLO	42.9	41.1	42.0	42.5	42.3	41.2
CAZ	0.6	0.6	1.1	2.3	4.0	4.3
CHA	8.6	8.1	7.2	6.4	5.5	4.8
EUR	2.7	2.6	2.5	2.3	2.2	2.1
IND	8.2	8.4	8.5	8.3	7.9	7.4
LAM	8.1	6.0	5.8	5.5	5.2	4.8
MEA	0.5	0.6	0.6	0.6	0.6	0.6
NEU	0.3	0.3	0.3	0.3	0.2	0.2
OAS	5.2	3.9	3.8	3.6	3.4	3.2
REF	2.7	3.8	4.2	4.0	3.4	3.8
SSA	6.1	6.7	8.0	9.0	9.7	10.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 609: MAgPIE new_input — Demand—Processing—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.9	7.0	8.4	10.4	11.3	13.9	15.9	15.5	16.4	17.5
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
CHA	0.6	0.5	0.7	1.0	1.4	1.9	2.0	1.5	1.8	2.0
EUR	1.8	1.9	1.9	2.5	2.2	2.9	3.0	2.6	2.7	2.9
IND	0.6	1.0	1.2	1.5	2.0	3.1	4.2	5.3	3.9	5.3
LAM	0.9	1.0	1.4	1.6	2.0	2.1	2.3	2.6	2.6	2.7
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
OAS	0.3	0.4	0.8	1.4	1.5	1.4	2.1	1.3	2.6	2.8
REF	1.1	1.2	1.1	1.0	1.3	1.4	1.1	0.6	0.6	0.6
SSA	0.2	0.2	0.3	0.4	0.3	0.5	0.4	0.6	0.8	0.7
USA	0.2	0.6	0.5	0.6	0.2	0.1	0.2	0.3	0.8	0.0

Table 610: FAO — Demand—Processing—Secondary products—Molasses (Mt DM/yr)

9.2.3 Sugar


GLO
Sugar (Mt DM/yr)
20
10
0
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

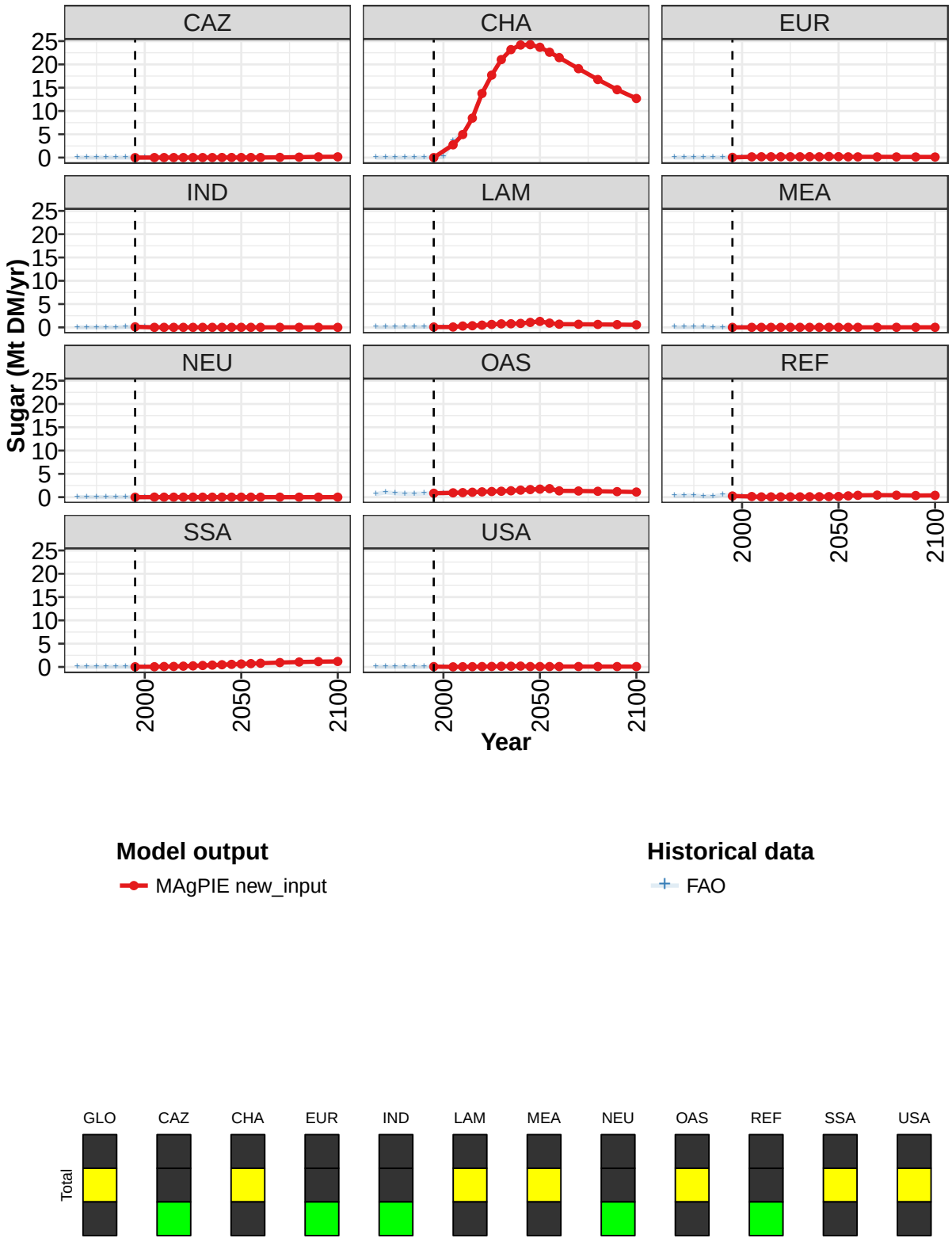


Figure 204: MAgPIE new_input — Demand—Processing—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.5	4.2	6.6	10.3	15.9	20.1	23.8	26.2	27.5	28.0	27.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	2.7	4.9	8.5	13.8	17.7	21.0	23.2	24.2	24.2	23.7
EUR	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.3	0.4	0.5	0.6	0.8	0.8	0.8	1.1	1.3
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.8	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.7
REF	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.6
USA	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1

Table 611: MAgPIE new_input — Demand—Processing—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

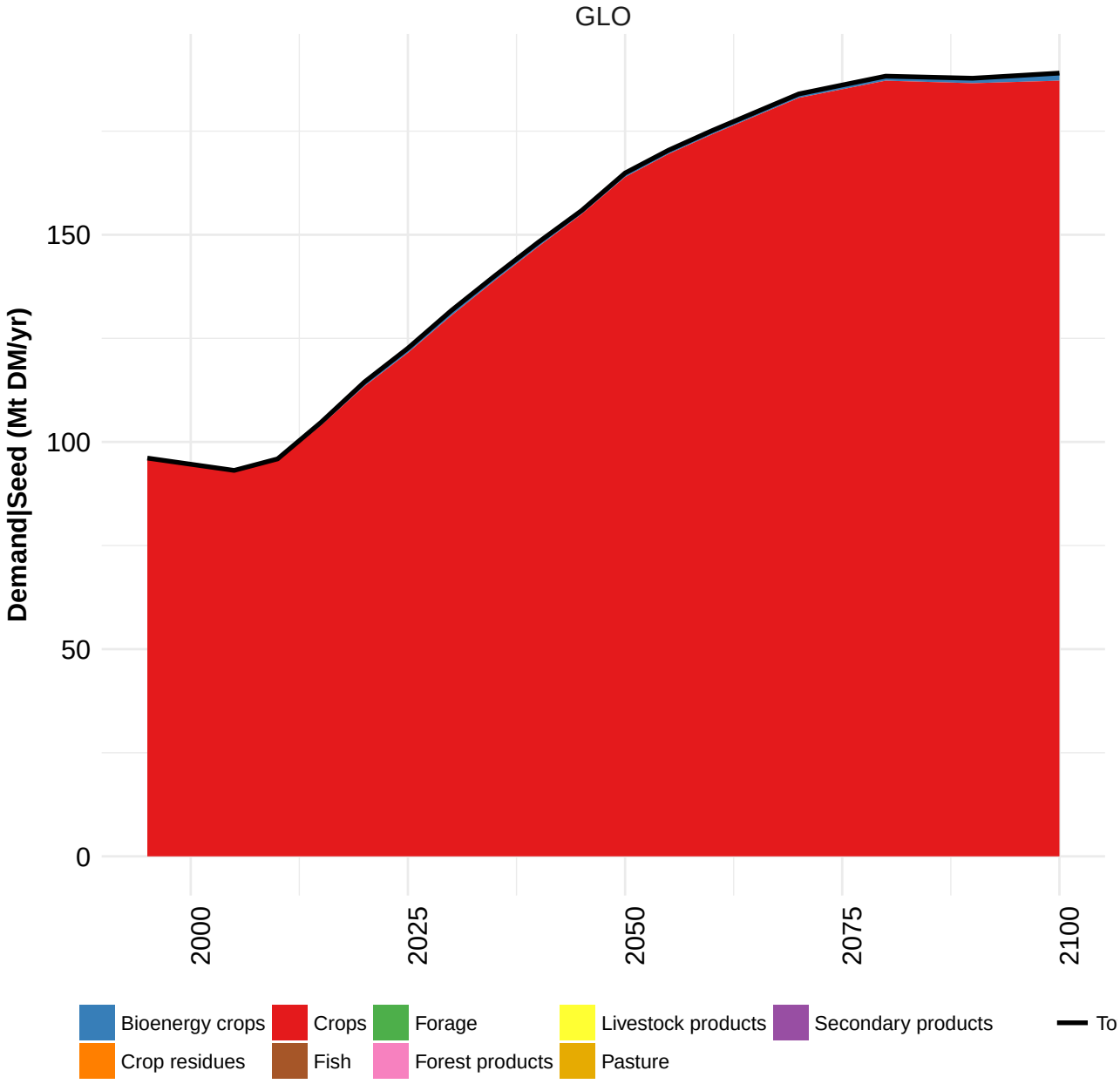
	2055	2060	2070	2080	2090	2100
GLO	26.6	25.0	22.8	20.5	18.2	16.3
CAZ	0.0	0.0	0.0	0.1	0.2	0.2
CHA	22.6	21.5	19.1	16.8	14.6	12.7
EUR	0.2	0.2	0.2	0.1	0.1	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.9	0.7	0.7	0.6	0.6	0.6
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.8	1.4	1.3	1.3	1.2	1.1
REF	0.3	0.4	0.4	0.4	0.3	0.4
SSA	0.7	0.8	0.9	1.1	1.1	1.2
USA	0.1	0.1	0.1	0.1	0.1	0.1

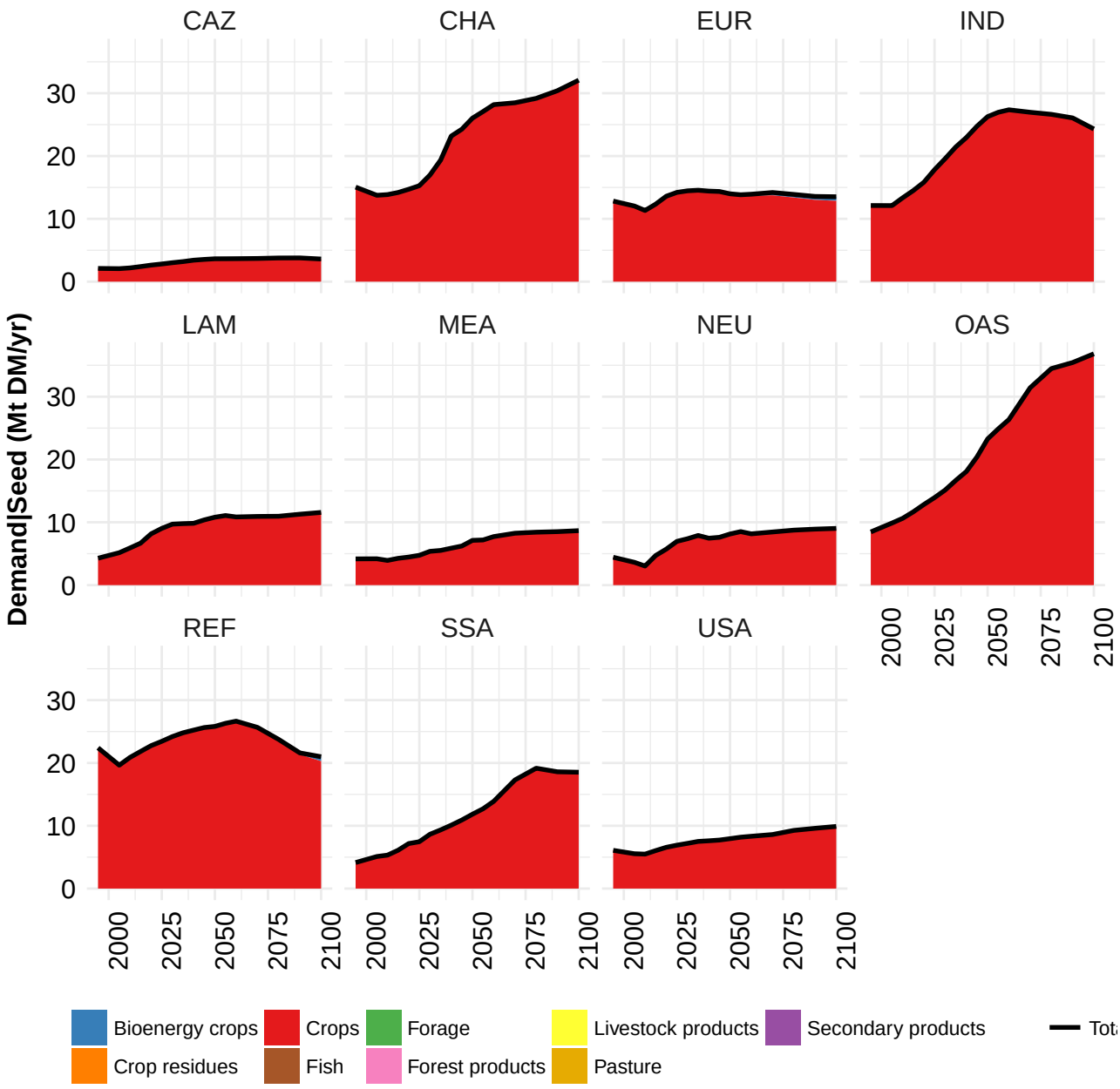
Table 612: MAgPIE new_input — Demand—Processing—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

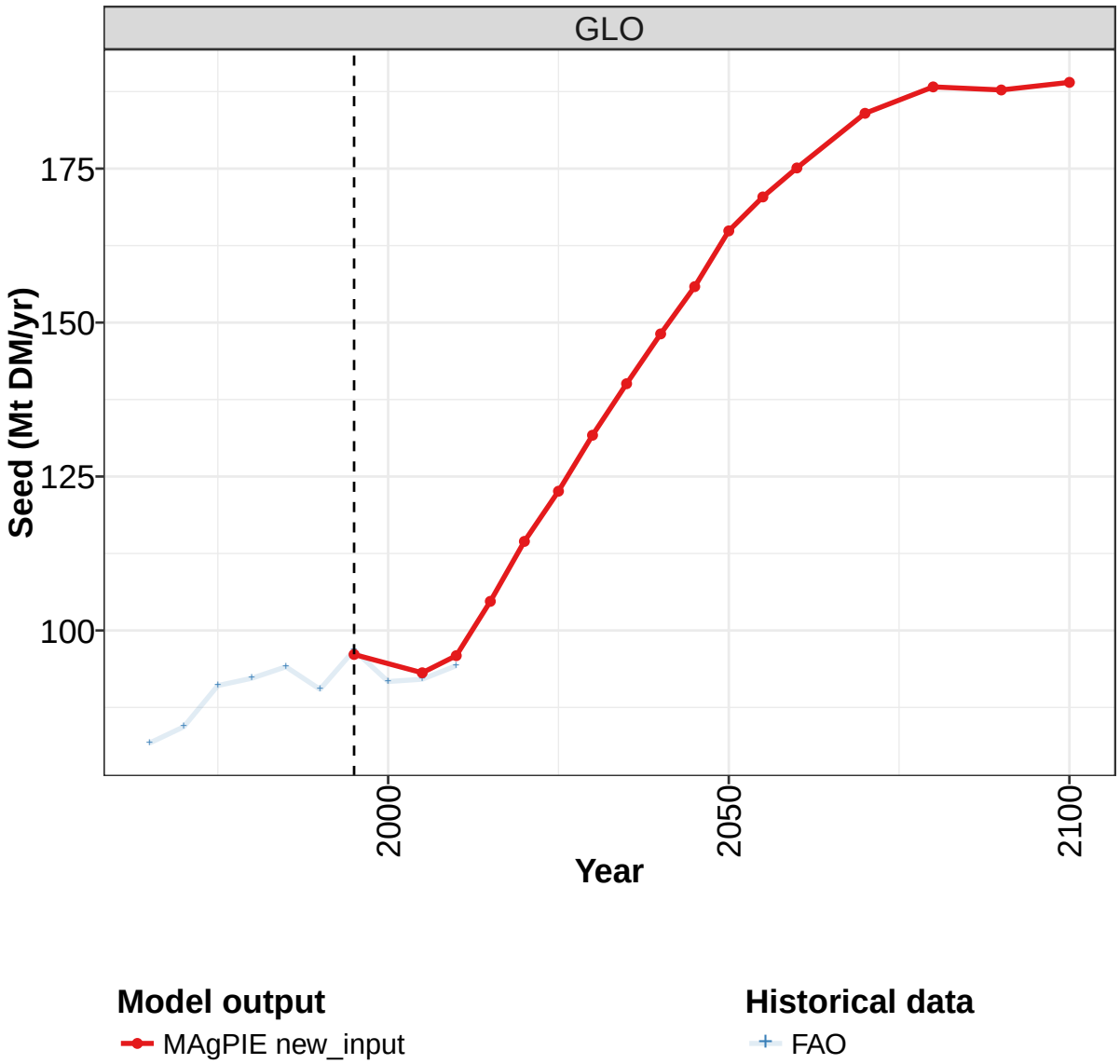
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.05	1.54	1.39	1.09	1.07	1.55	1.47	1.44	5.07	6.81
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
CHA	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.12	3.65	5.16
EUR	0.01	0.04	0.03	0.02	0.03	0.02	0.05	0.11	0.16	0.17
IND	0.00	0.00	0.00	0.00	0.00	0.08	0.12	0.14	0.00	0.00
LAM	0.04	0.04	0.06	0.08	0.11	0.11	0.08	0.08	0.09	0.31
MEA	0.03	0.05	0.06	0.07	0.01	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
OAS	0.63	1.05	0.81	0.72	0.72	0.77	0.83	0.82	0.92	0.96
REF	0.27	0.32	0.37	0.14	0.16	0.51	0.27	0.12	0.14	0.06
SSA	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.06	0.09
USA	0.05	0.02	0.02	0.02	0.01	0.01	0.07	0.00	0.02	0.05

Table 613: FAO — Demand—Processing—Secondary products—Sugar (Mt DM/yr)

10 Seed


GLO
Demand|Seed (Mt DM/yr)
150
100
50
0
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Seed (Mt DM/yr)
0
10
20
30
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
Tot


GLO
Seed (Mt DM/yr)
175
150
125
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

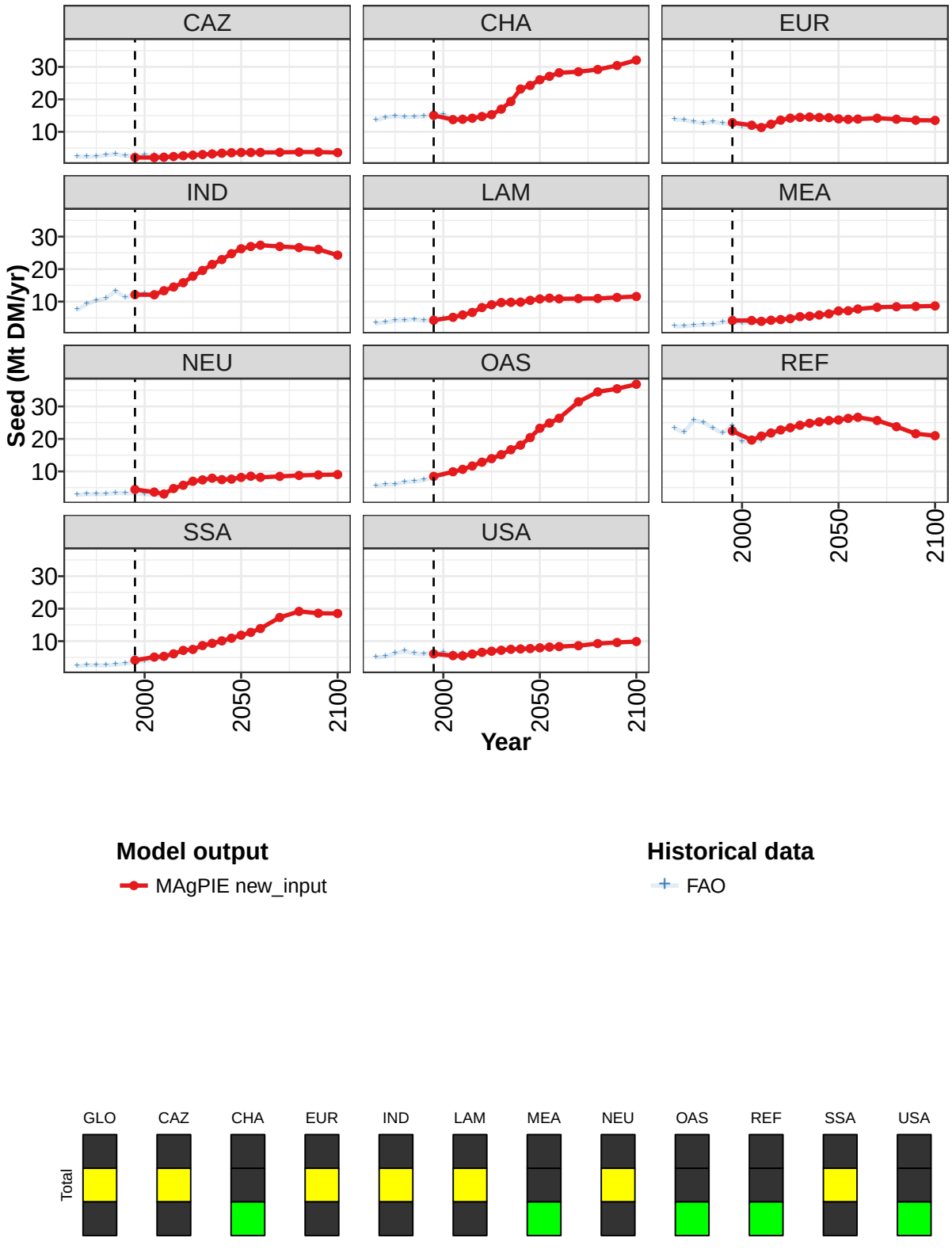


Figure 205: MAgPIE new_input — Demand—Seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	96	93	96	105	114	123	132	140	148	156	165
CAZ	2	2	2	2	3	3	3	3	3	4	4
CHA	15	14	14	14	15	15	17	19	23	24	26
EUR	13	12	11	12	14	14	14	15	14	14	14
IND	12	12	13	14	16	18	20	21	23	25	26
LAM	4	5	6	7	8	9	10	10	10	10	11
MEA	4	4	4	4	4	5	5	6	6	6	7
NEU	4	4	3	5	6	7	7	8	7	8	8
OAS	8	10	11	12	13	14	15	17	18	20	23
REF	22	20	21	22	23	23	24	25	25	26	26
SSA	4	5	5	6	7	7	9	9	10	11	12
USA	6	6	5	6	7	7	7	8	8	8	8

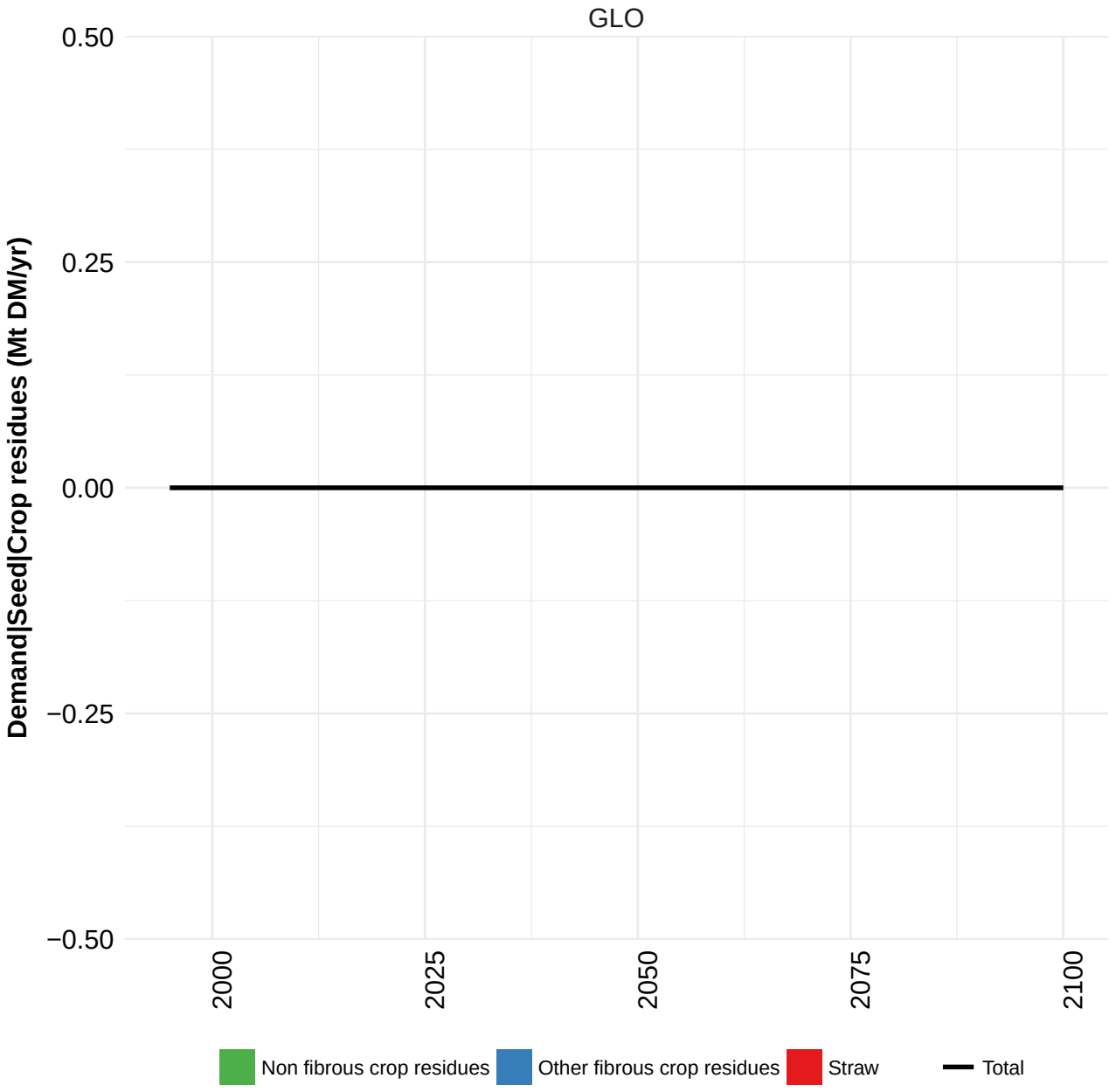
Table 614: MAgPIE new_input — Demand—Seed (Mt DM/yr) [PART 1/2]

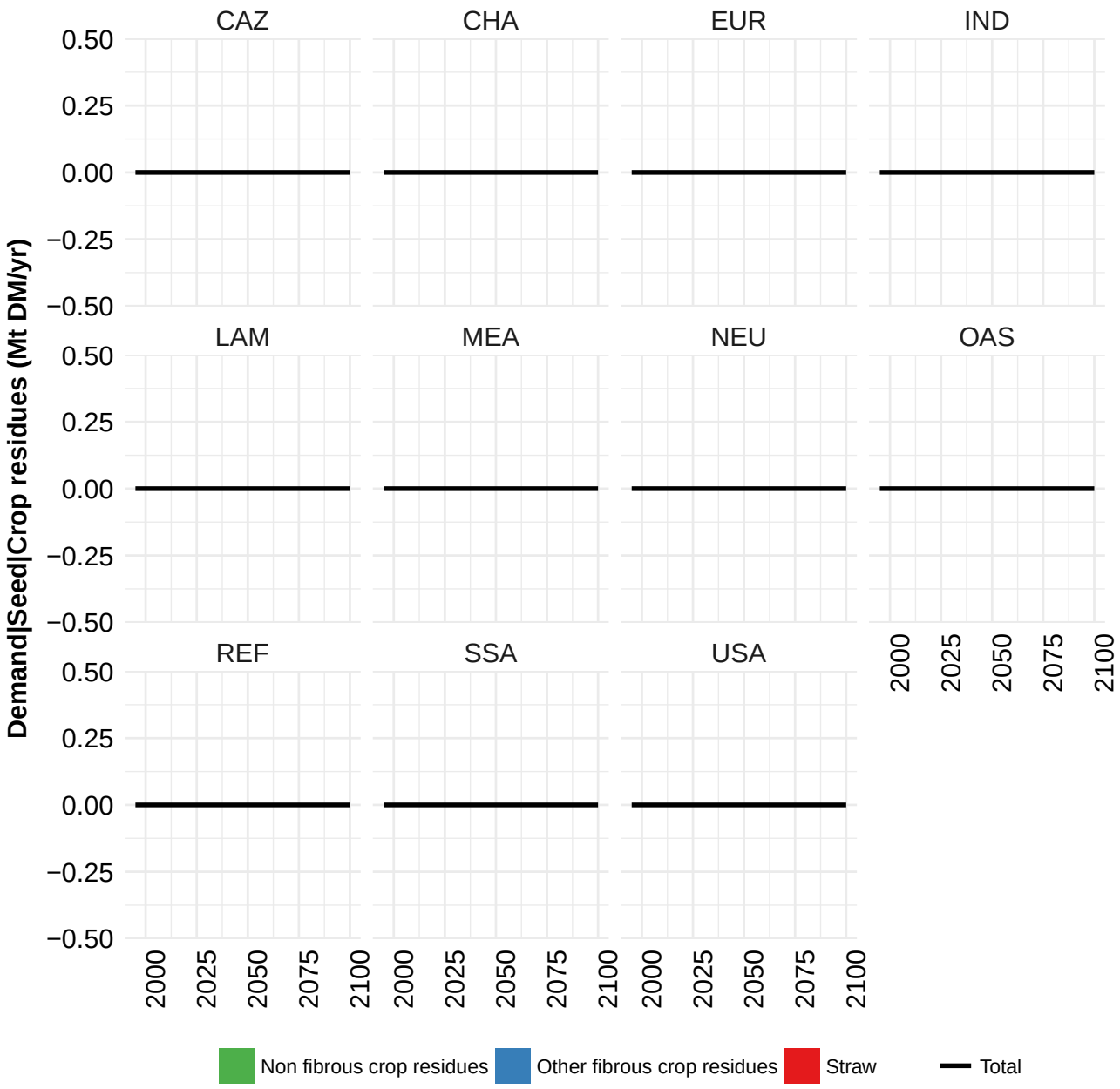
	2055	2060	2070	2080	2090	2100
GLO	170	175	184	188	188	189
CAZ	4	4	4	4	4	4
CHA	27	28	28	29	30	32
EUR	14	14	14	14	14	14
IND	27	27	27	27	26	24
LAM	11	11	11	11	11	12
MEA	7	8	8	8	9	9
NEU	9	8	8	9	9	9
OAS	25	26	31	34	35	37
REF	26	27	26	24	22	21
SSA	13	14	17	19	19	19
USA	8	8	9	9	10	10

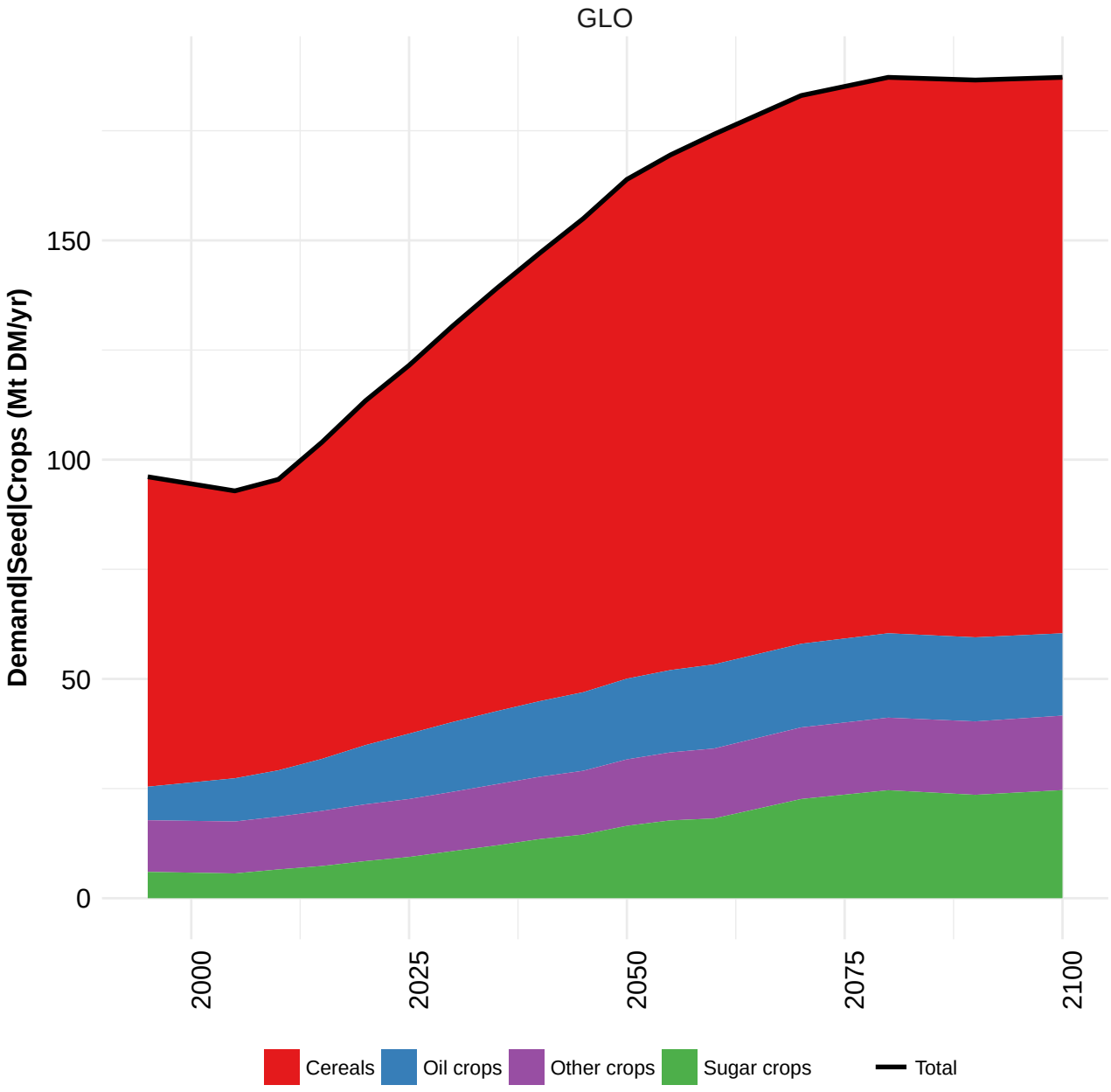
Table 615: MAgPIE new_input — Demand—Seed (Mt DM/yr) [PART 2/2]

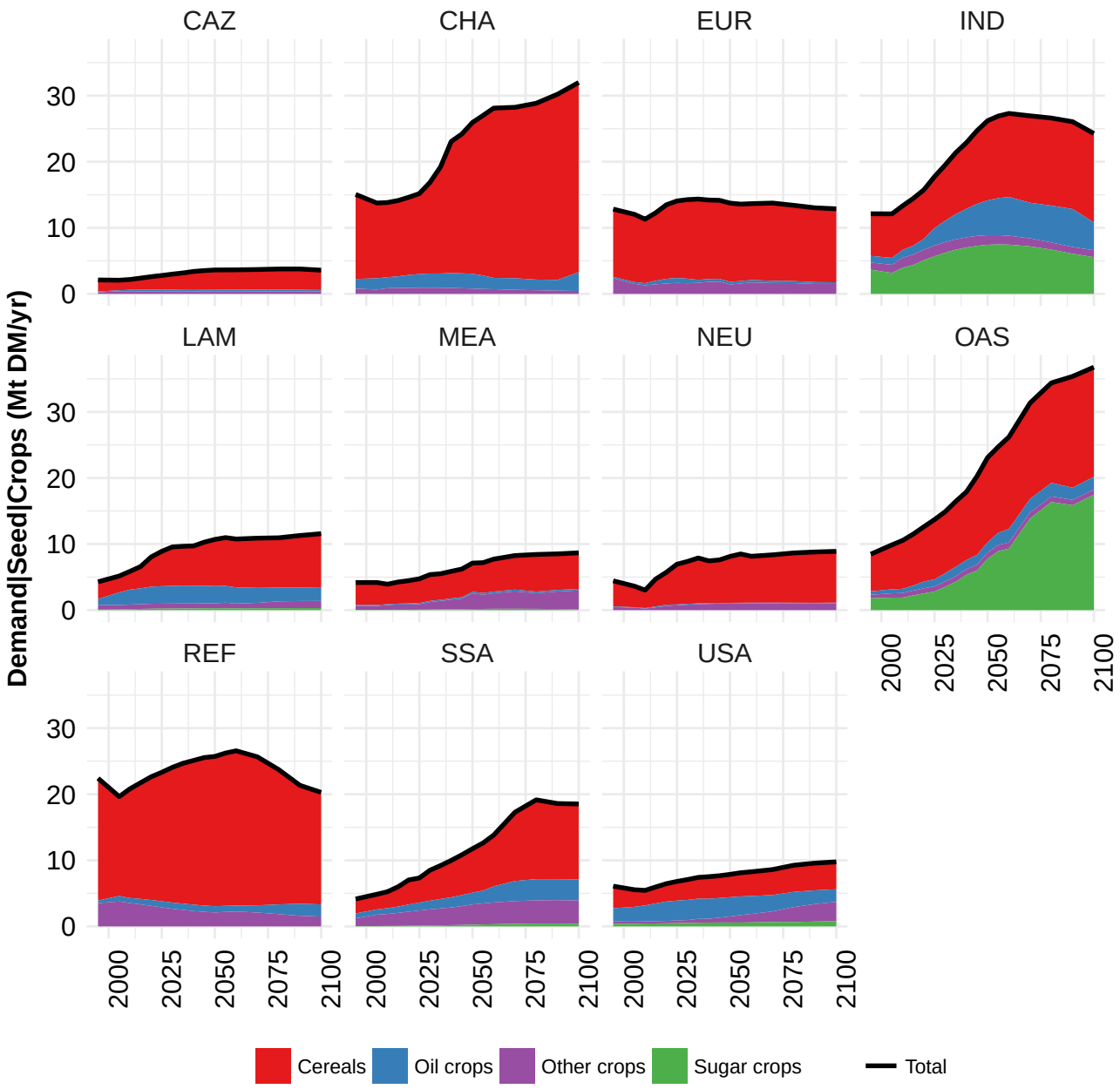
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	81.7	84.4	91.1	92.2	94.1	90.4	96.8	91.7	92.1	94.3
CAZ	2.5	2.3	2.4	2.8	3.1	2.6	2.8	2.9	2.8	2.6
CHA	13.6	14.4	14.8	14.5	14.7	14.7	15.6	15.3	14.1	14.4
EUR	13.8	13.7	13.0	12.7	13.1	12.6	12.2	11.6	11.2	10.6
IND	7.4	9.2	10.3	11.0	13.2	11.3	12.2	12.5	12.1	13.5
LAM	3.3	3.6	4.2	4.2	4.5	4.1	4.3	4.8	5.3	5.9
MEA	2.4	2.4	2.7	2.8	3.0	3.6	3.9	3.4	3.8	3.6
NEU	2.8	3.0	3.0	3.1	3.3	3.3	3.2	3.0	2.8	2.5
OAS	5.5	5.9	6.1	6.7	6.9	7.4	8.3	9.0	9.7	10.7
REF	23.2	22.0	25.7	25.1	23.3	21.8	24.1	19.1	19.5	19.3
SSA	2.3	2.6	2.6	2.5	2.8	3.2	3.6	3.9	4.5	5.0
USA	5.0	5.3	6.3	6.9	6.2	6.0	6.6	6.4	6.3	6.2

Table 616: FAO — Demand—Seed (Mt DM/yr)

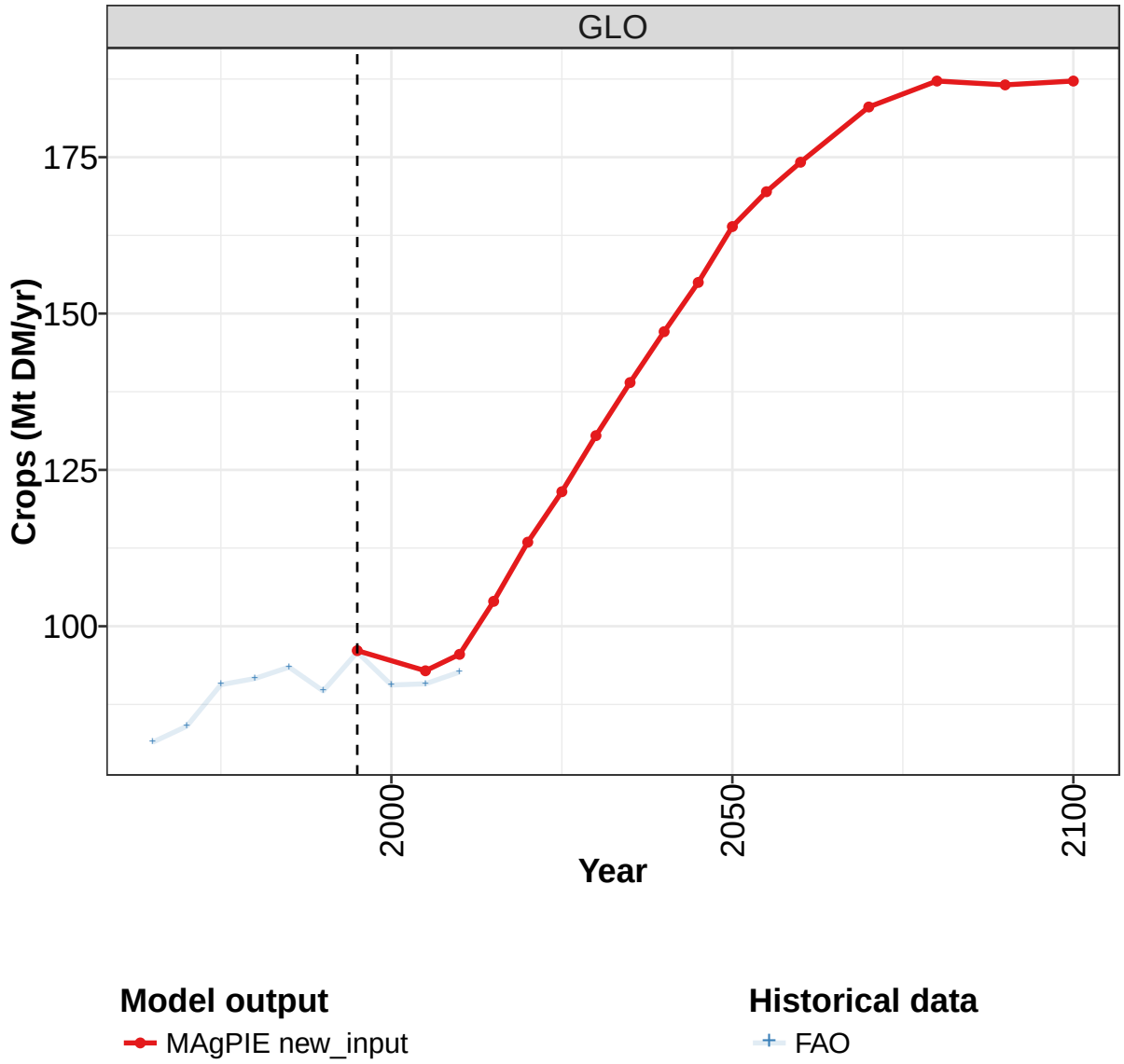

GLO
0.50
0.25
0.00
−0.25
−0.50
Demand|Seed|Crop residues (Mt DM/yr)
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Seed|Crop residues (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


GLO
Demand|Seed|Crops (Mt DM/yr)
150
100
50
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Seed|Crops (Mt DM/yr)
0
10
20
30
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

10.1 Crops


GLO
Crops (Mt DM/yr)
175
150
125
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

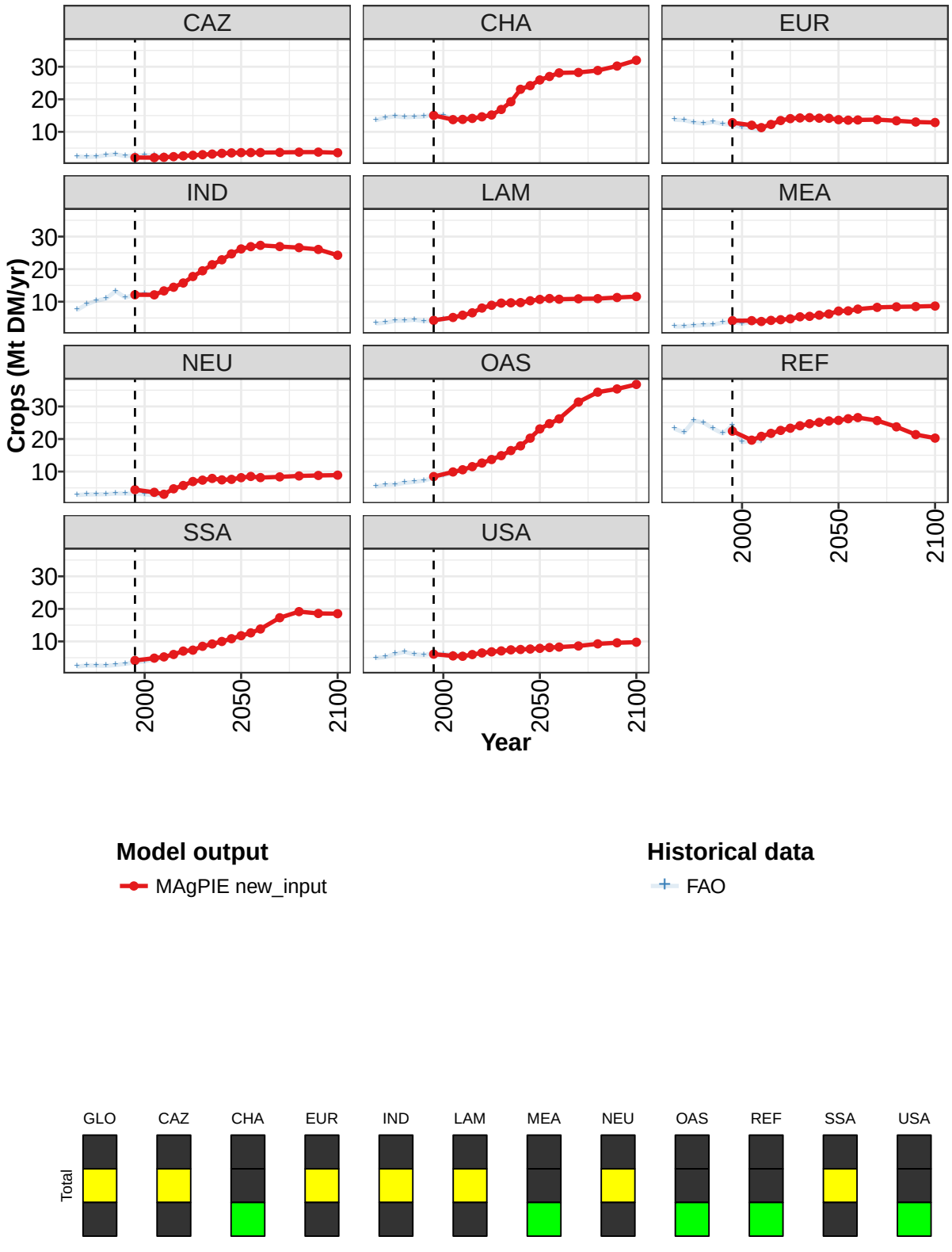


Figure 206: MAgPIE new_input — Demand—Seed—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	96	93	96	104	113	122	130	139	147	155	164
CAZ	2	2	2	2	3	3	3	3	3	4	4
CHA	15	14	14	14	15	15	17	19	23	24	26
EUR	13	12	11	12	13	14	14	14	14	14	14
IND	12	12	13	14	16	18	19	21	23	25	26
LAM	4	5	6	7	8	9	10	10	10	10	11
MEA	4	4	4	4	4	5	5	6	6	6	7
NEU	4	4	3	5	6	7	7	8	7	8	8
OAS	8	10	11	12	13	14	15	16	18	20	23
REF	22	20	21	22	23	23	24	25	25	26	26
SSA	4	5	5	6	7	7	9	9	10	11	12
USA	6	6	5	6	6	7	7	7	8	8	8

Table 617: MAgPIE new_input — Demand—Seed—Crops (Mt DM/yr) [PART 1/2]

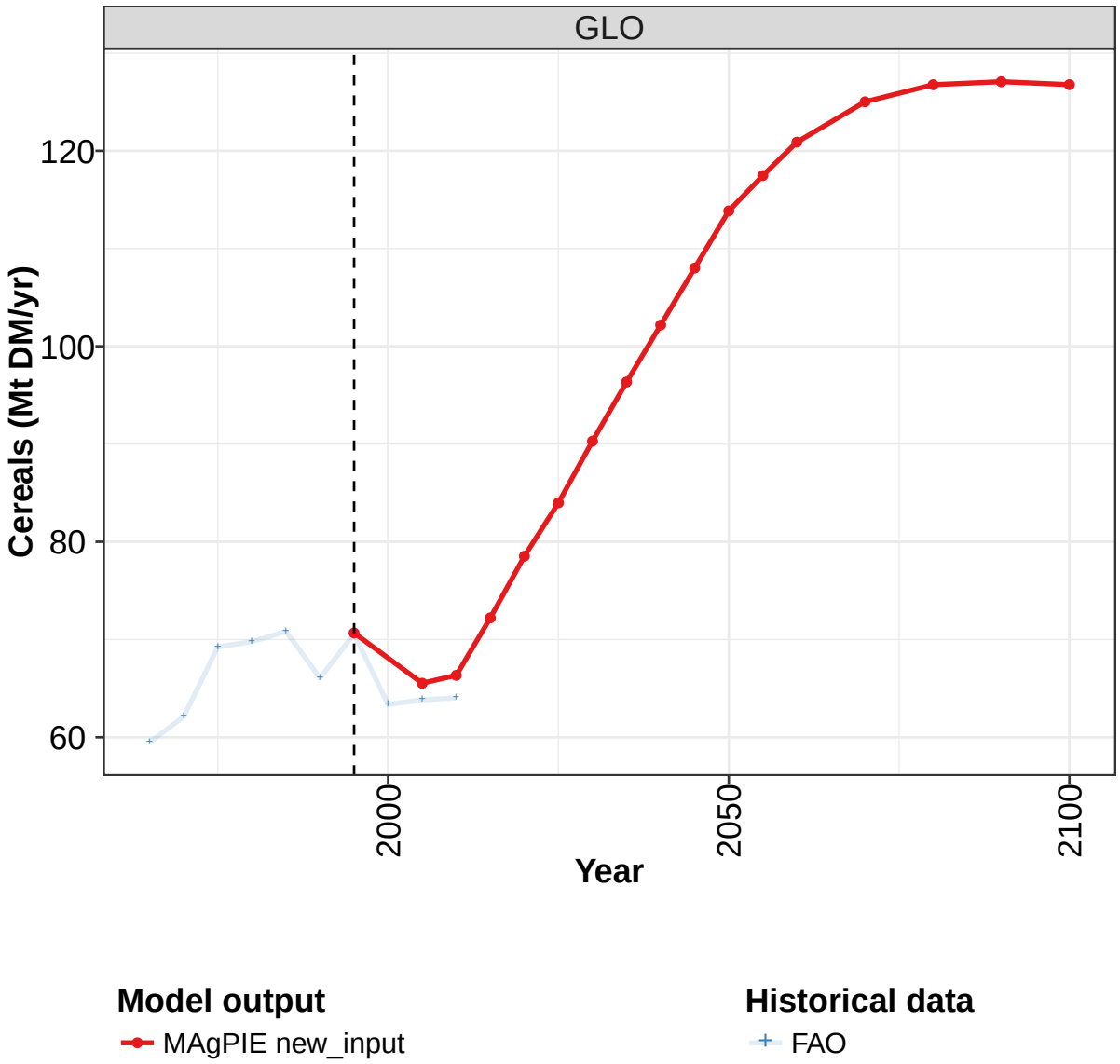
	2055	2060	2070	2080	2090	2100
GLO	169	174	183	187	187	187
CAZ	4	4	4	4	4	4
CHA	27	28	28	29	30	32
EUR	14	14	14	13	13	13
IND	27	27	27	27	26	24
LAM	11	11	11	11	11	12
MEA	7	8	8	8	9	9
NEU	9	8	8	9	9	9
OAS	25	26	31	34	35	37
REF	26	27	26	24	21	20
SSA	13	14	17	19	19	19
USA	8	8	9	9	10	10

Table 618: MAgPIE new_input — Demand—Seed—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	81.5	84.0	90.6	91.6	93.5	89.6	95.8	90.6	90.8	92.7
CAZ	2.4	2.3	2.4	2.8	3.1	2.5	2.8	2.8	2.8	2.5
CHA	13.6	14.4	14.8	14.4	14.6	14.7	15.5	15.1	13.9	14.1
EUR	13.7	13.6	12.9	12.6	13.0	12.4	12.1	11.4	11.1	10.4
IND	7.4	9.2	10.3	11.0	13.2	11.3	12.2	12.5	12.1	13.5
LAM	3.3	3.5	4.1	4.2	4.4	4.0	4.2	4.6	5.0	5.7
MEA	2.4	2.4	2.7	2.8	3.0	3.5	3.8	3.3	3.7	3.5
NEU	2.8	3.0	3.0	3.0	3.3	3.2	3.2	3.0	2.7	2.5
OAS	5.4	5.9	6.0	6.6	6.8	7.3	8.1	8.8	9.5	10.4
REF	23.2	22.0	25.7	25.0	23.2	21.7	24.1	19.0	19.5	19.2
SSA	2.3	2.6	2.6	2.5	2.7	3.1	3.5	3.9	4.5	5.0
USA	4.9	5.2	6.2	6.8	6.0	5.9	6.3	6.1	6.0	5.9

Table 619: FAO — Demand—Seed—Crops (Mt DM/yr)

10.1.1 Cereals



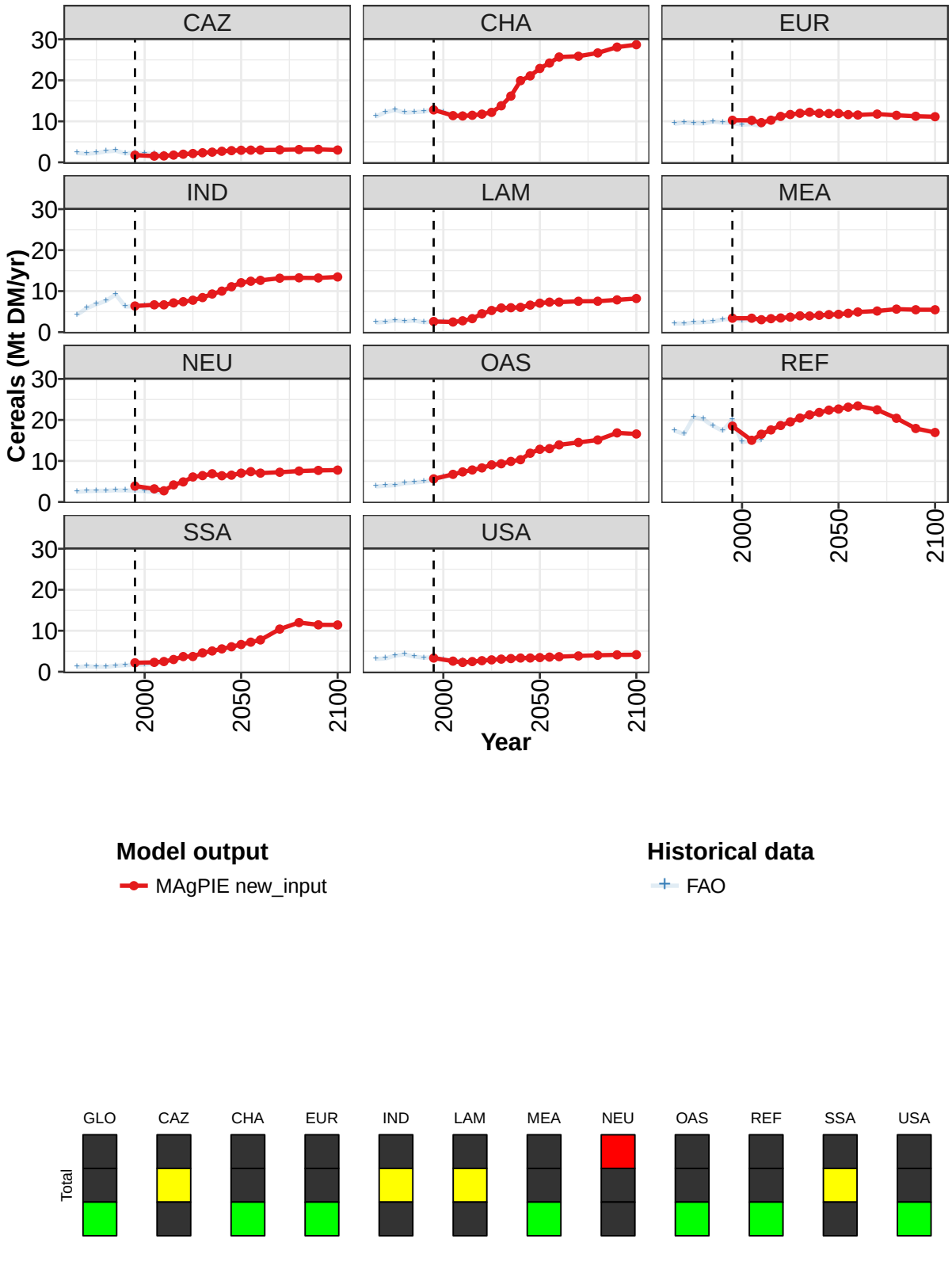


Figure 207: MAgPIE new_input — Demand—Seed—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	71	66	66	72	79	84	90	96	102	108	114
CAZ	2	2	2	2	2	2	2	2	3	3	3
CHA	13	11	11	11	12	12	14	16	20	21	23
EUR	10	10	10	10	11	12	12	12	12	12	12
IND	6	7	7	7	7	8	8	9	10	11	12
LAM	3	2	3	3	4	5	6	6	6	7	7
MEA	3	3	3	3	3	4	4	4	4	4	4
NEU	4	3	3	4	5	6	6	7	6	7	7
OAS	6	7	7	8	8	9	9	10	10	12	13
REF	18	15	17	18	19	20	20	21	22	22	23
SSA	2	2	2	3	4	4	5	5	6	6	7
USA	3	3	2	2	3	3	3	3	3	3	3

Table 620: MAgPIE new_input — Demand—Seed—Crops—Cereals (Mt DM/yr) [PART 1/2]

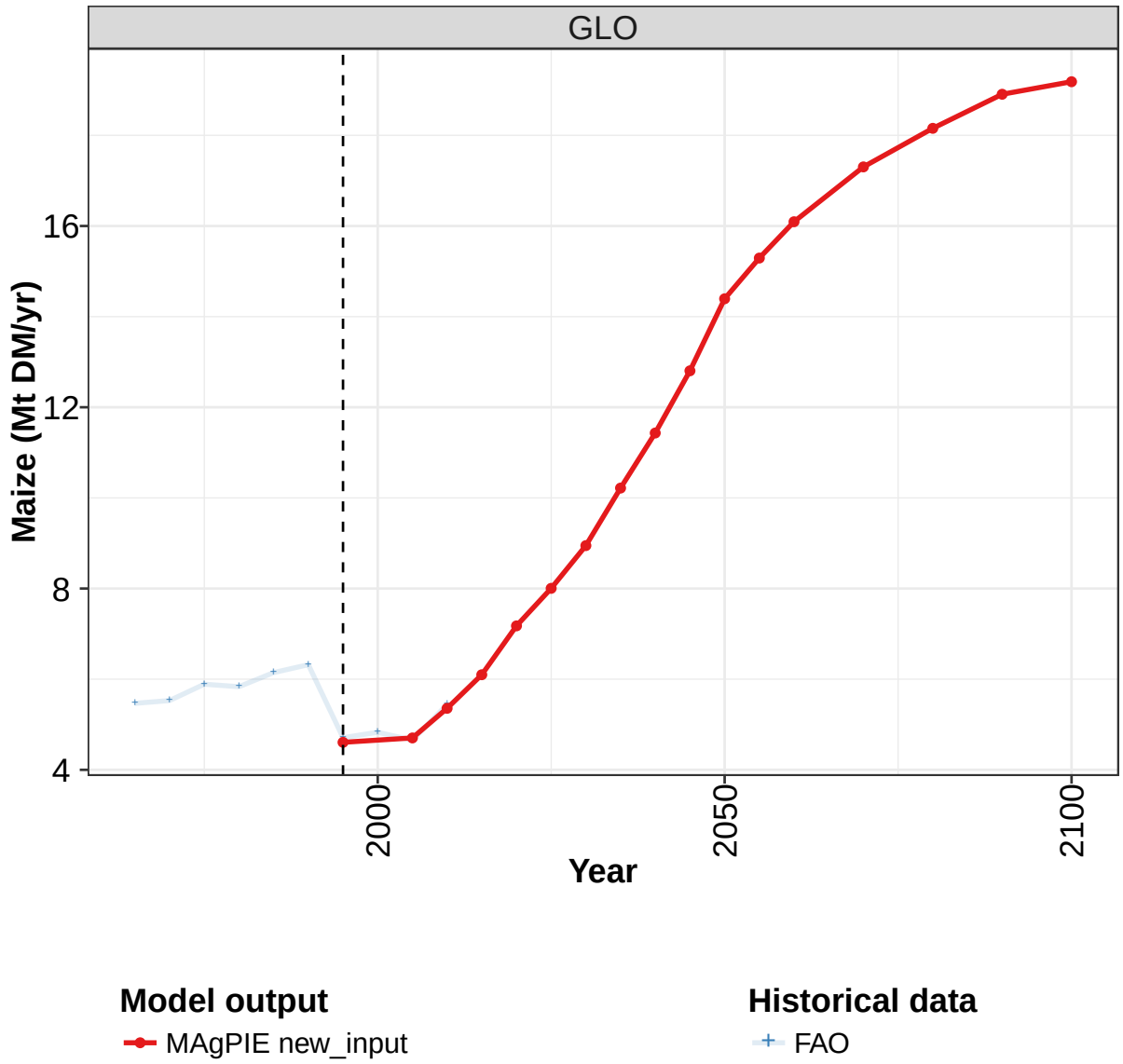
	2055	2060	2070	2080	2090	2100
GLO	117	121	125	127	127	127
CAZ	3	3	3	3	3	3
CHA	24	26	26	27	28	29
EUR	12	12	12	11	11	11
IND	12	13	13	13	13	13
LAM	7	7	8	8	8	8
MEA	5	5	5	6	5	5
NEU	7	7	7	8	8	8
OAS	13	14	15	15	17	17
REF	23	23	22	20	18	17
SSA	7	8	10	12	11	11
USA	4	4	4	4	4	4

Table 621: MAgPIE new_input — Demand—Seed—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	59.5	62.1	69.2	69.8	70.8	66.1	70.6	63.4	63.8	64.0
CAZ	2.3	2.1	2.3	2.6	2.8	2.2	2.3	2.2	2.1	1.9
CHA	11.2	12.2	12.7	12.1	12.2	12.4	13.0	12.3	11.5	11.6
EUR	9.4	9.7	9.5	9.5	9.9	9.7	9.6	9.2	9.3	8.8
IND	4.2	5.8	6.8	7.6	9.2	6.2	6.4	6.5	6.6	6.8
LAM	2.3	2.5	2.9	2.6	2.8	2.4	2.6	2.6	2.4	2.6
MEA	2.1	2.1	2.3	2.4	2.6	3.1	3.2	2.8	3.2	2.9
NEU	2.5	2.6	2.7	2.7	2.8	2.8	2.8	2.6	2.4	2.2
OAS	3.8	4.0	4.1	4.6	4.7	5.0	5.4	6.1	6.6	7.3
REF	17.4	16.6	20.7	20.2	18.5	17.4	20.0	14.6	15.0	15.0
SSA	1.1	1.3	1.2	1.2	1.4	1.6	1.7	1.7	2.0	2.3
USA	3.1	3.2	3.9	4.2	3.7	3.4	3.5	2.9	2.8	2.7

Table 622: FAO — Demand—Seed—Crops—Cereals (Mt DM/yr)

10.1.2 Cereals—Maize



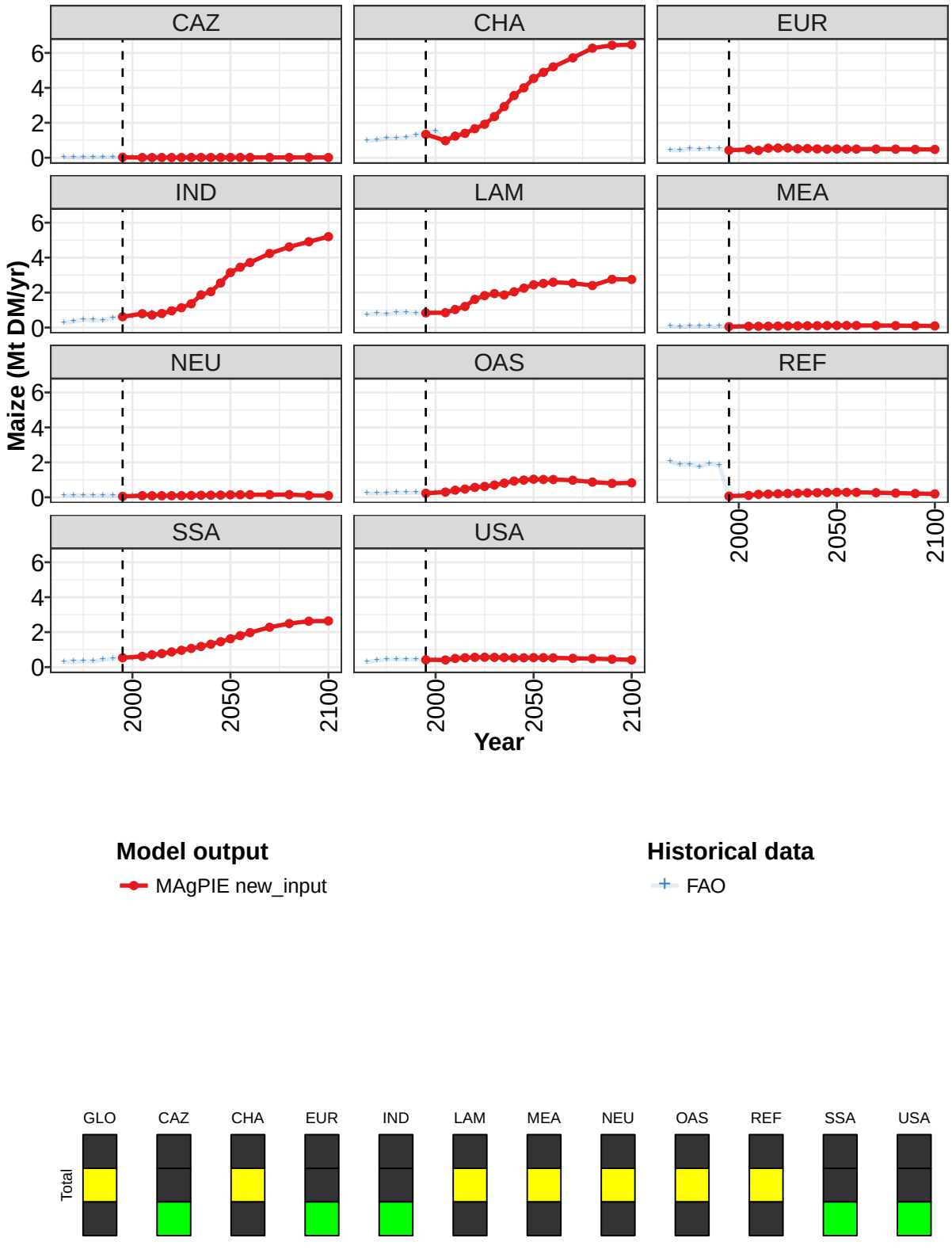


Figure 208: MAgPIE new_input — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.6	4.7	5.4	6.1	7.2	8.0	8.9	10.2	11.4	12.8	14.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.3	1.0	1.2	1.4	1.7	1.9	2.4	2.9	3.6	4.0	4.5
EUR	0.4	0.5	0.4	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5
IND	0.6	0.8	0.7	0.8	1.0	1.1	1.4	1.9	2.1	2.6	3.1
LAM	0.8	0.8	1.0	1.2	1.6	1.8	1.9	1.9	2.0	2.3	2.4
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.0
REF	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
SSA	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.5	1.6
USA	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5

Table 623: MAgPIE new_input — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

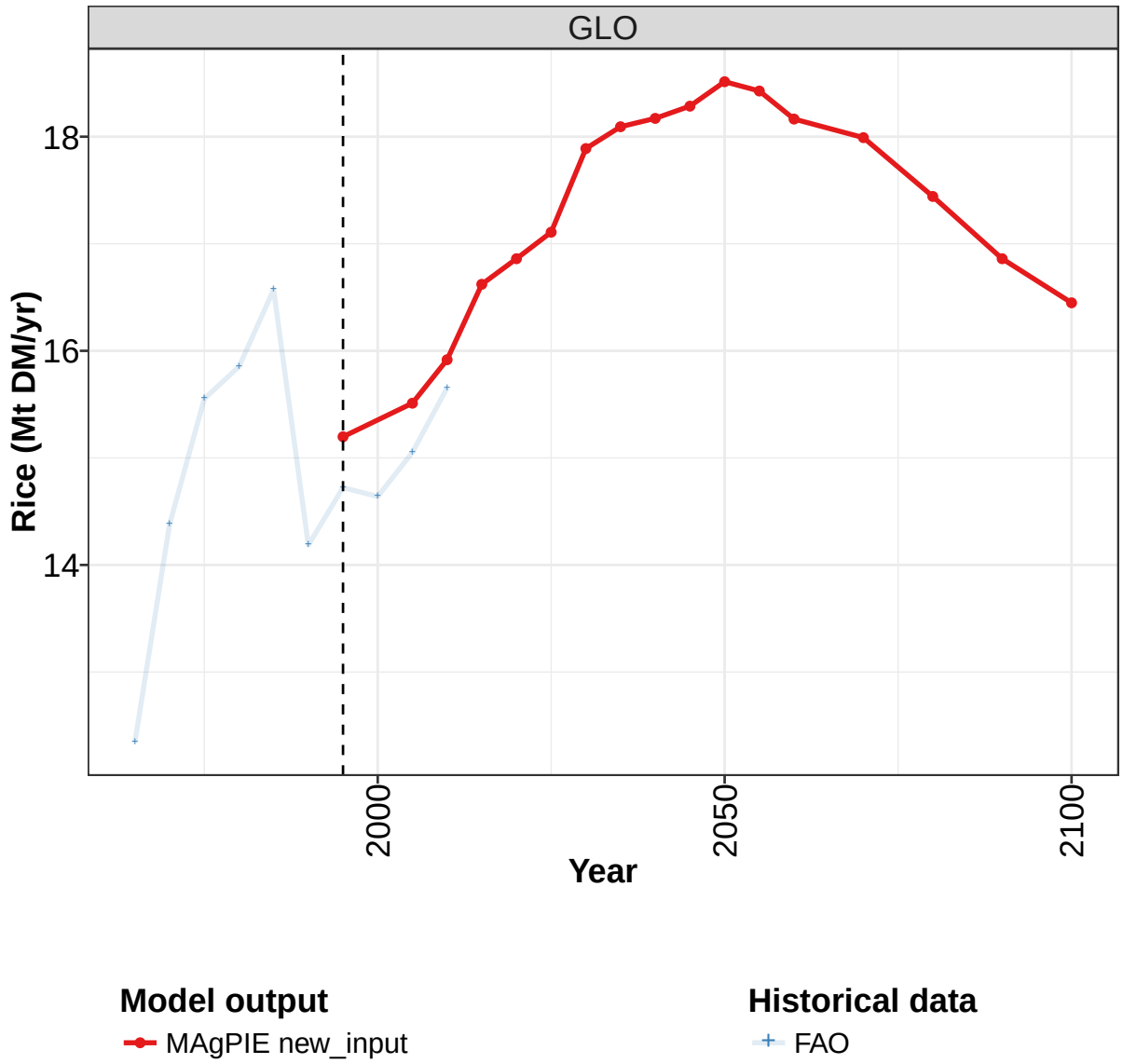
	2055	2060	2070	2080	2090	2100
GLO	15.3	16.1	17.3	18.2	18.9	19.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.9	5.2	5.7	6.3	6.4	6.5
EUR	0.5	0.5	0.5	0.5	0.5	0.5
IND	3.5	3.7	4.2	4.6	4.9	5.2
LAM	2.5	2.6	2.5	2.4	2.8	2.8
MEA	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.2	0.2	0.1	0.1
OAS	1.0	1.0	1.0	0.9	0.8	0.8
REF	0.3	0.3	0.3	0.2	0.2	0.2
SSA	1.8	2.0	2.3	2.5	2.6	2.6
USA	0.5	0.5	0.5	0.5	0.5	0.4

Table 624: MAgPIE new_input — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.47	5.53	5.89	5.83	6.15	6.32	4.71	4.83	4.65	5.44
CAZ	0.01	0.01	0.02	0.03	0.02	0.02	0.03	0.03	0.01	0.01
CHA	0.97	1.00	1.11	1.11	1.17	1.28	1.41	1.53	1.01	1.29
EUR	0.44	0.43	0.50	0.48	0.51	0.49	0.44	0.38	0.39	0.37
IND	0.28	0.34	0.44	0.42	0.40	0.54	0.61	0.64	0.76	0.84
LAM	0.74	0.80	0.75	0.84	0.84	0.81	0.82	0.84	0.87	0.97
MEA	0.07	0.05	0.06	0.06	0.06	0.06	0.05	0.05	0.07	0.07
NEU	0.11	0.11	0.11	0.10	0.11	0.10	0.06	0.08	0.08	0.09
OAS	0.23	0.21	0.24	0.27	0.26	0.27	0.25	0.26	0.31	0.40
REF	2.03	1.86	1.88	1.74	1.91	1.83	0.07	0.09	0.12	0.16
SSA	0.29	0.32	0.33	0.33	0.42	0.48	0.51	0.49	0.60	0.73
USA	0.29	0.38	0.45	0.45	0.44	0.43	0.45	0.43	0.44	0.51

Table 625: FAO — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr)

10.1.3 Cereals—Rice



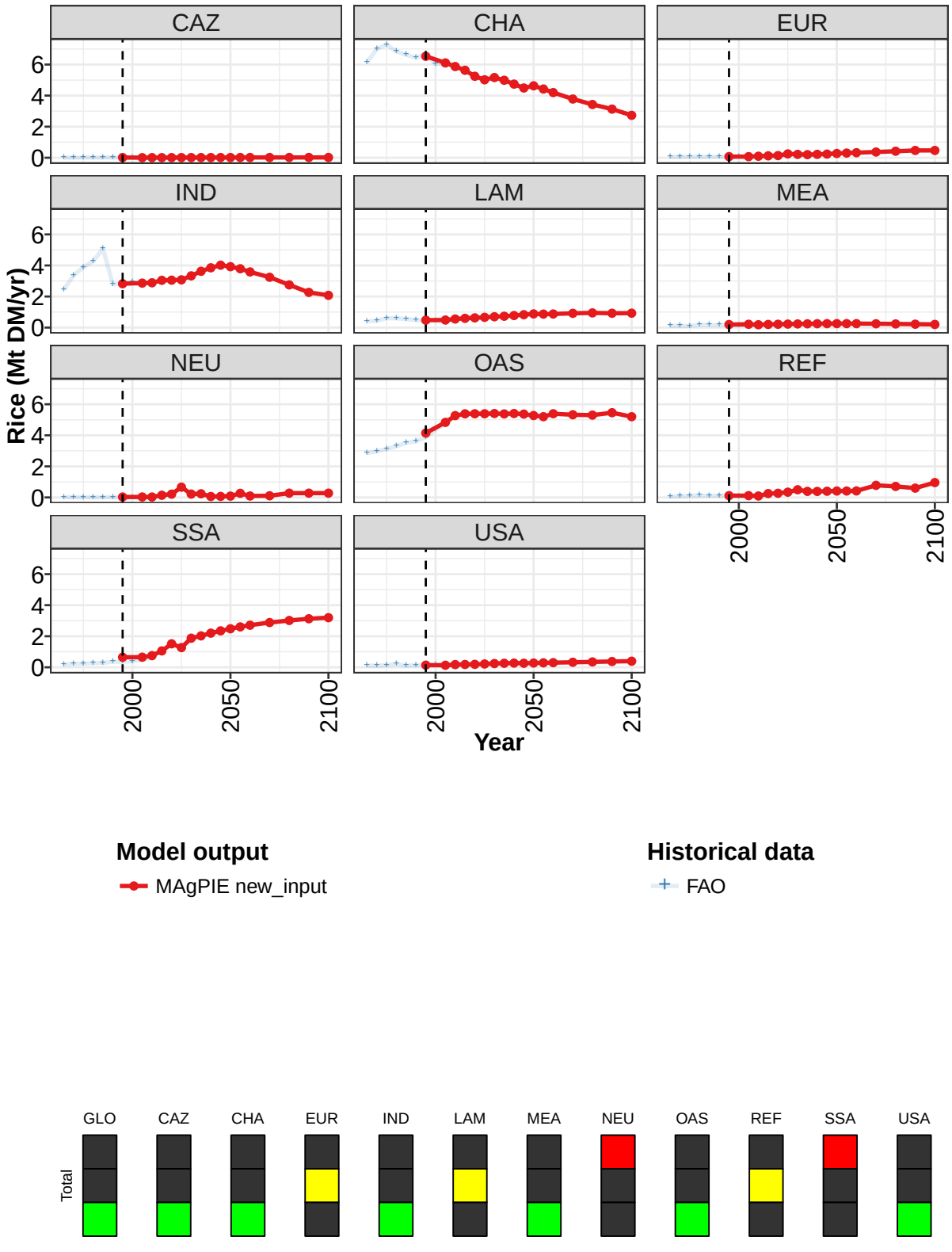


Figure 209: MAgPIE new_input — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	15.2	15.5	15.9	16.6	16.9	17.1	17.9	18.1	18.2	18.3	18.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.5	6.1	5.9	5.6	5.2	5.0	5.2	5.0	4.7	4.5	4.6
EUR	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
IND	2.8	2.9	2.9	3.0	3.1	3.1	3.3	3.6	3.8	4.0	3.9
LAM	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
NEU	0.0	0.0	0.0	0.1	0.2	0.7	0.2	0.2	0.1	0.1	0.1
OAS	4.1	4.8	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.3
REF	0.1	0.1	0.1	0.2	0.3	0.3	0.5	0.4	0.4	0.4	0.4
SSA	0.6	0.7	0.8	1.1	1.5	1.3	1.9	2.0	2.2	2.3	2.5
USA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Table 626: MAgPIE new_input — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

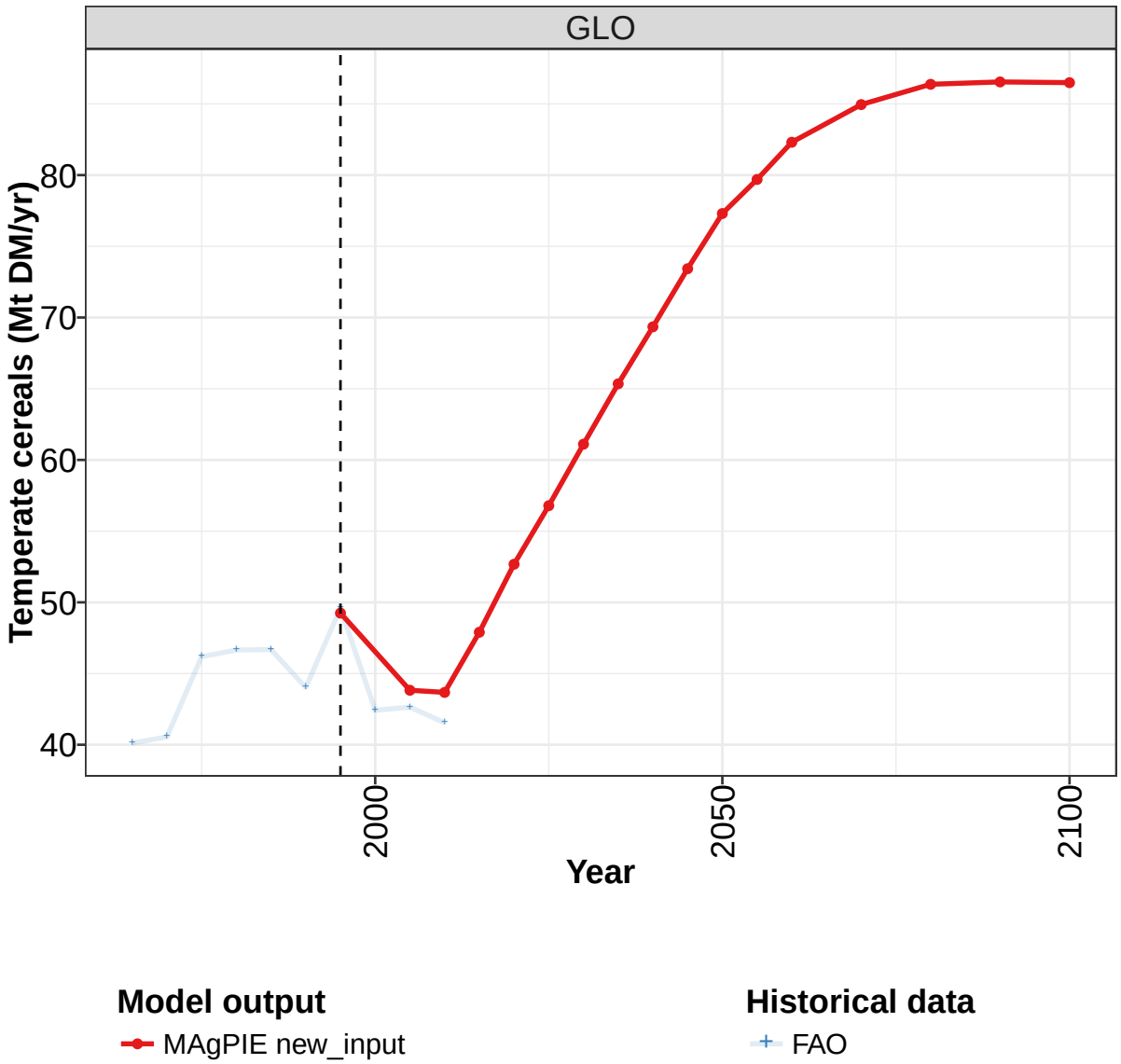
	2055	2060	2070	2080	2090	2100
GLO	18.4	18.2	18.0	17.4	16.9	16.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.4	4.2	3.8	3.4	3.1	2.7
EUR	0.3	0.3	0.4	0.4	0.5	0.5
IND	3.8	3.6	3.2	2.7	2.3	2.1
LAM	0.9	0.9	0.9	0.9	0.9	0.9
MEA	0.3	0.3	0.2	0.2	0.2	0.2
NEU	0.3	0.1	0.1	0.3	0.3	0.3
OAS	5.2	5.4	5.3	5.3	5.5	5.2
REF	0.4	0.4	0.8	0.7	0.6	1.0
SSA	2.6	2.7	2.9	3.0	3.1	3.2
USA	0.3	0.3	0.3	0.3	0.4	0.4

Table 627: MAgPIE new_input — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.3	14.4	15.6	15.9	16.6	14.2	14.7	14.6	15.1	15.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.1	7.0	7.3	6.8	6.6	6.4	6.7	6.0	6.1	5.9
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	2.4	3.4	3.9	4.3	5.1	2.8	2.8	2.9	2.9	2.9
LAM	0.4	0.4	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.5
MEA	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.8	3.0	3.1	3.3	3.5	3.6	3.9	4.4	4.7	5.3
REF	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6
USA	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2

Table 628: FAO — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr)

10.1.4 Cereals—Temperate cereals



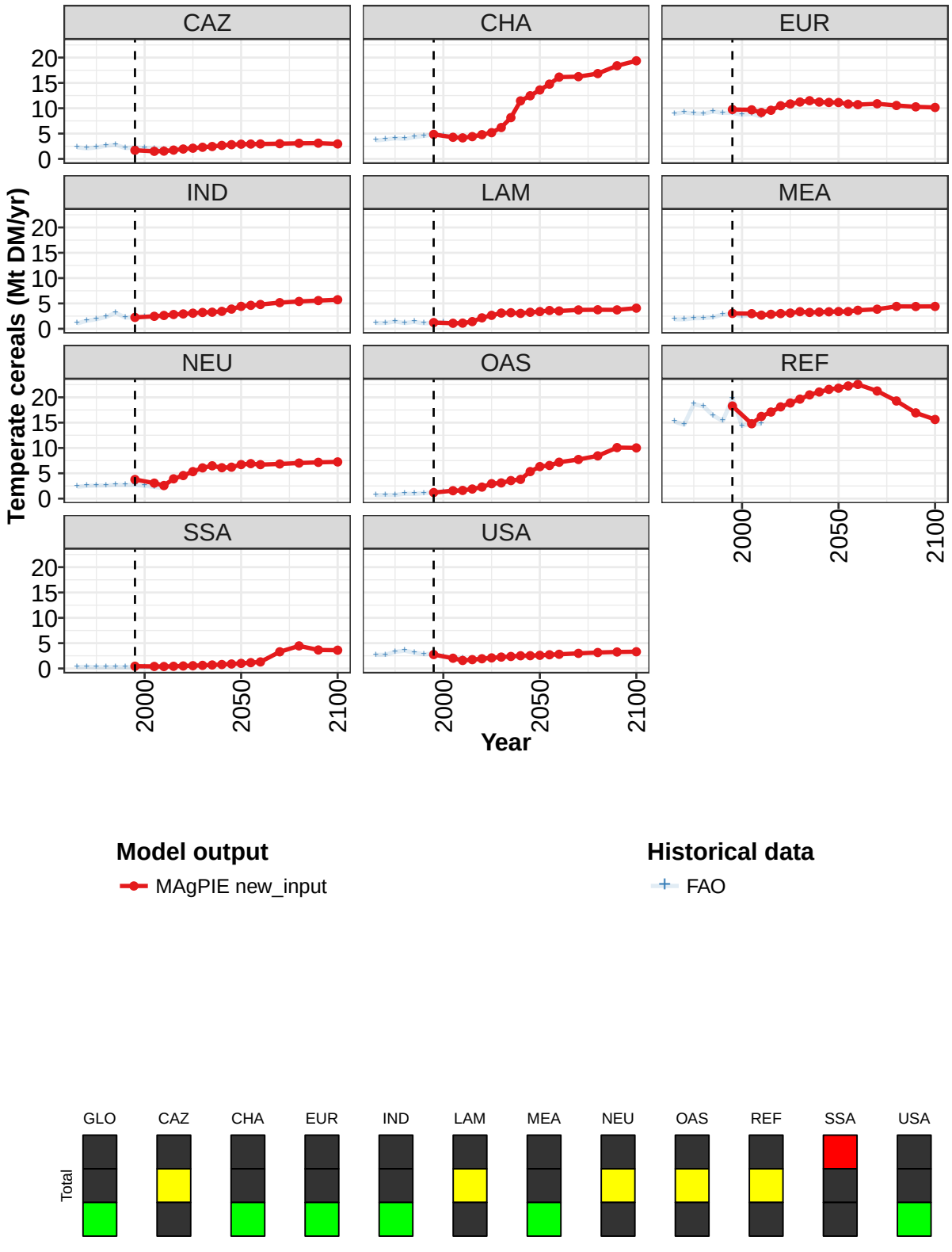


Figure 210: MAgPIE new_input — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	49.2	43.8	43.7	47.9	52.7	56.8	61.1	65.3	69.3	73.4	77.3
CAZ	1.7	1.5	1.5	1.7	2.0	2.1	2.3	2.4	2.7	2.8	2.9
CHA	4.8	4.3	4.2	4.4	4.8	5.2	6.2	8.2	11.5	12.5	13.6
EUR	9.7	9.7	9.2	9.6	10.5	10.8	11.2	11.5	11.2	11.1	11.1
IND	2.2	2.5	2.6	2.8	2.9	3.1	3.2	3.3	3.4	3.9	4.4
LAM	1.2	1.1	1.1	1.4	2.2	2.7	3.1	3.2	3.0	3.3	3.4
MEA	3.0	3.0	2.7	2.9	3.0	3.1	3.4	3.2	3.3	3.4	3.4
NEU	3.8	3.1	2.6	3.9	4.6	5.3	6.1	6.5	6.1	6.2	6.7
OAS	1.2	1.6	1.6	1.9	2.3	2.9	3.1	3.6	3.8	5.3	6.3
REF	18.3	14.8	16.2	17.1	18.1	18.9	19.6	20.5	21.0	21.6	21.8
SSA	0.5	0.4	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.9	1.0
USA	2.7	2.0	1.6	1.8	1.9	2.1	2.3	2.4	2.5	2.5	2.6

Table 629: MAgPIE new_input — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

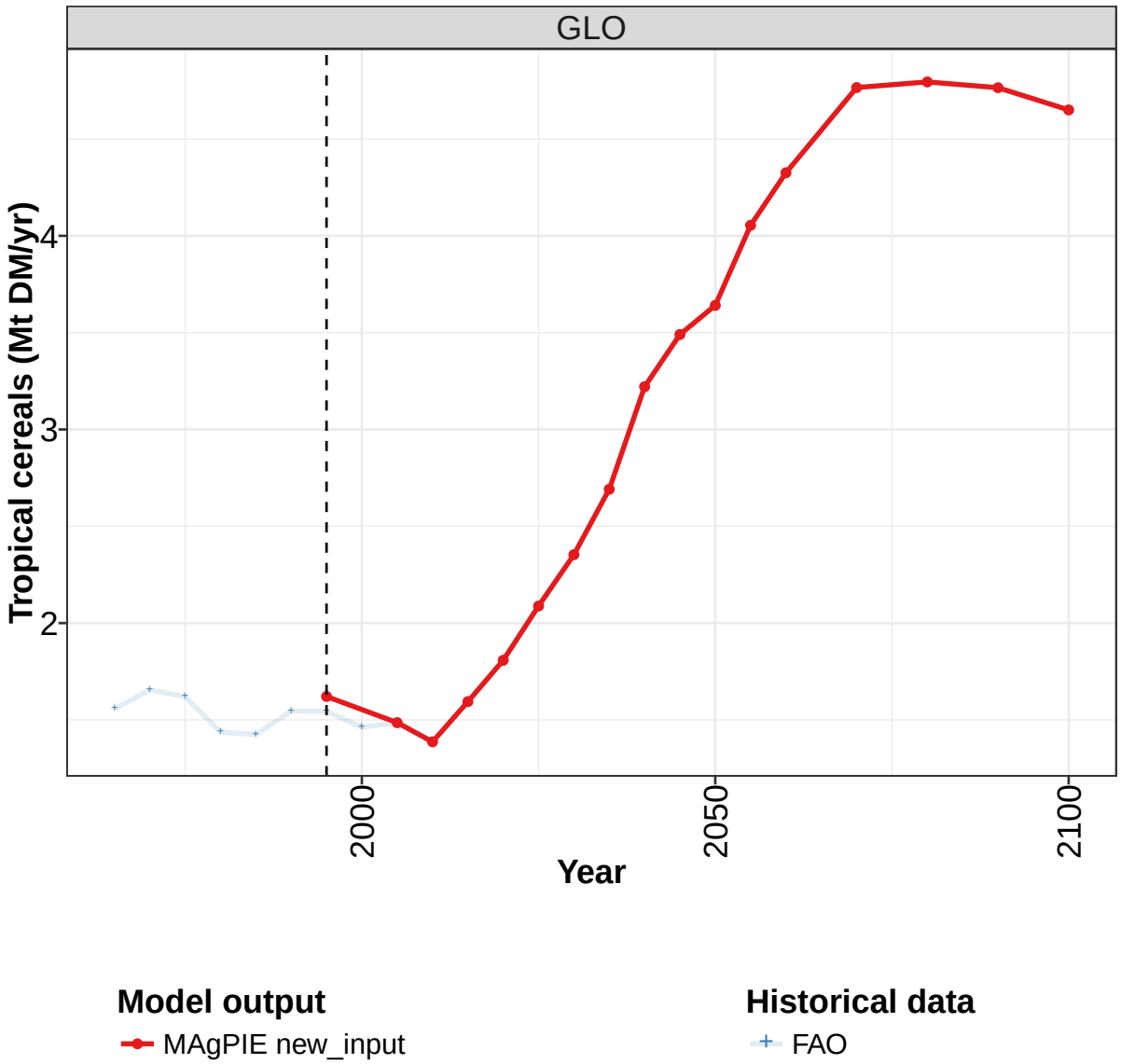
	2055	2060	2070	2080	2090	2100
GLO	79.7	82.3	85.0	86.4	86.5	86.5
CAZ	2.9	3.0	3.0	3.1	3.1	3.0
CHA	14.8	16.1	16.2	16.8	18.4	19.4
EUR	10.8	10.7	10.9	10.5	10.3	10.2
IND	4.6	4.8	5.2	5.4	5.6	5.7
LAM	3.6	3.5	3.7	3.8	3.7	4.1
MEA	3.4	3.6	3.9	4.4	4.4	4.4
NEU	6.9	6.7	6.8	7.0	7.2	7.2
OAS	6.5	7.2	7.7	8.4	10.1	10.0
REF	22.2	22.5	21.2	19.3	16.9	15.6
SSA	1.2	1.3	3.3	4.5	3.7	3.6
USA	2.7	2.8	3.0	3.2	3.3	3.3

Table 630: MAgPIE new_input — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.1	40.6	46.2	46.7	46.7	44.0	49.6	42.4	42.6	41.5
CAZ	2.3	2.1	2.2	2.6	2.8	2.1	2.3	2.1	2.1	1.8
CHA	3.6	3.8	4.1	4.0	4.3	4.5	4.9	4.7	4.3	4.3
EUR	8.9	9.2	9.0	8.9	9.3	9.1	9.1	8.7	8.9	8.4
IND	1.0	1.6	1.9	2.3	3.1	2.2	2.3	2.3	2.4	2.6
LAM	1.2	1.1	1.4	1.1	1.4	1.1	1.2	1.2	1.1	1.1
MEA	1.9	1.9	2.1	2.1	2.3	2.8	2.9	2.4	2.8	2.6
NEU	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.5	2.3	2.1
OAS	0.7	0.7	0.7	1.0	0.9	1.1	1.2	1.4	1.5	1.6
REF	15.2	14.6	18.6	18.2	16.4	15.3	19.8	14.4	14.8	14.7
SSA	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3
USA	2.7	2.7	3.3	3.5	3.1	2.8	2.9	2.3	2.2	2.0

Table 631: FAO — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr)

10.1.5 Cereals—Tropical cereals



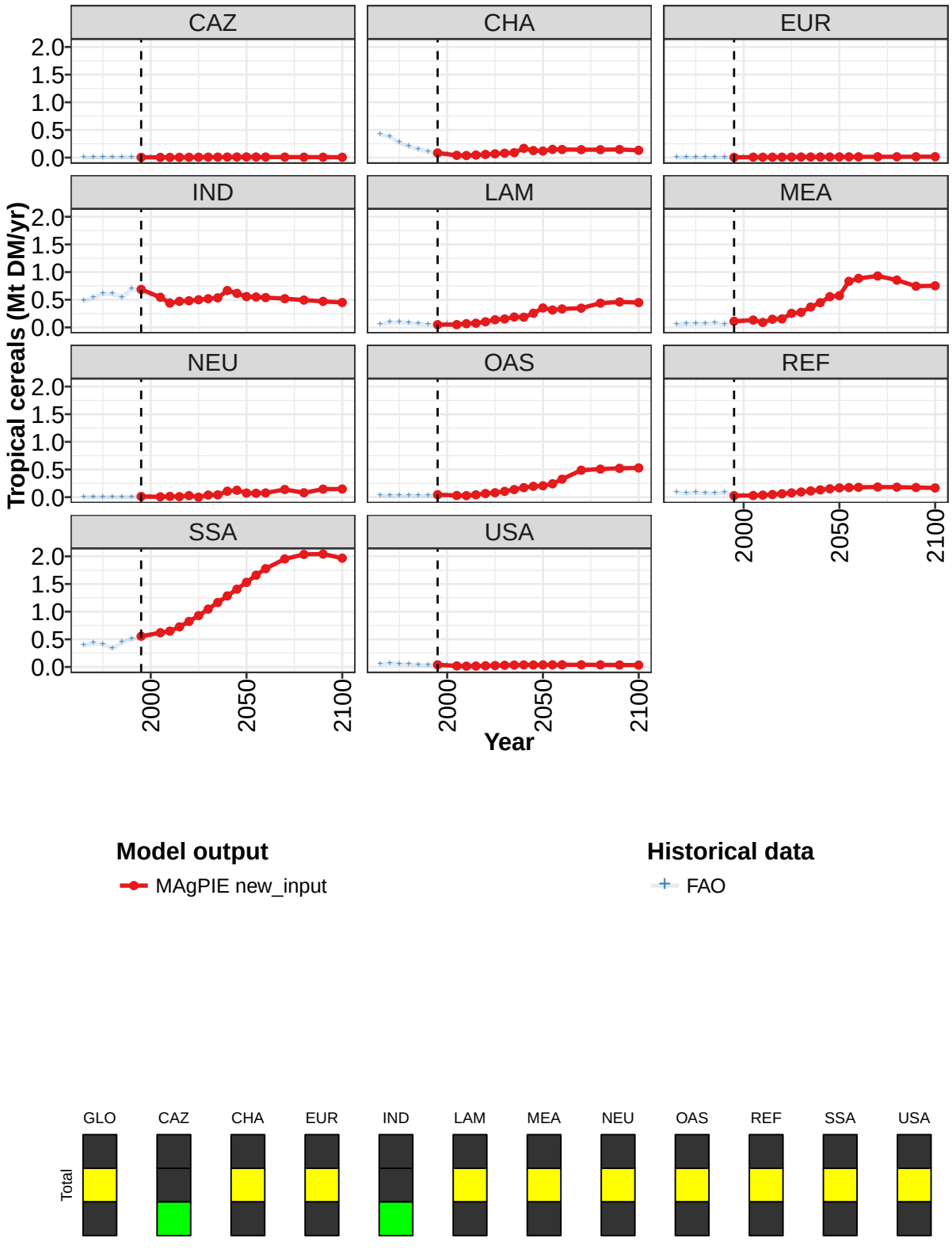


Figure 211: MAgPIE new_input — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.62	1.49	1.39	1.59	1.81	2.09	2.35	2.69	3.22	3.49	3.64
CAZ	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.08	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.17	0.13	0.12
EUR	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.69	0.54	0.44	0.47	0.48	0.50	0.52	0.53	0.67	0.62	0.56
LAM	0.05	0.05	0.07	0.08	0.10	0.14	0.15	0.19	0.18	0.26	0.35
MEA	0.11	0.13	0.09	0.15	0.15	0.25	0.27	0.37	0.45	0.56	0.57
NEU	0.01	0.01	0.01	0.01	0.03	0.00	0.04	0.04	0.11	0.13	0.08
OAS	0.04	0.03	0.03	0.04	0.07	0.08	0.10	0.14	0.17	0.20	0.21
REF	0.03	0.03	0.04	0.05	0.06	0.08	0.09	0.11	0.13	0.15	0.17
SSA	0.56	0.62	0.65	0.72	0.82	0.93	1.05	1.17	1.28	1.41	1.53
USA	0.04	0.02	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04

Table 632: MAgPIE new_input — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

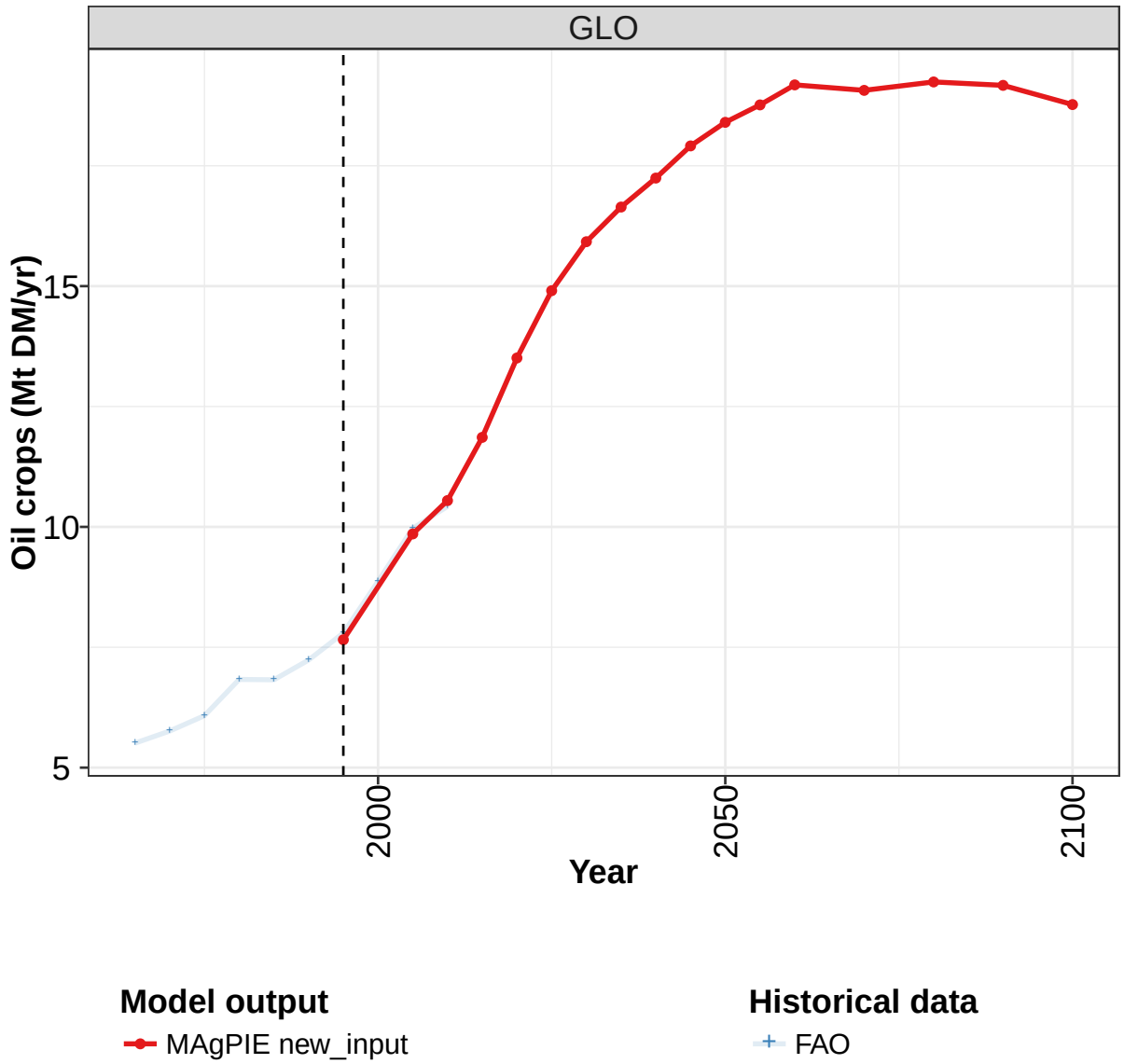
	2055	2060	2070	2080	2090	2100
GLO	4.05	4.33	4.77	4.79	4.77	4.65
CAZ	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.15	0.15	0.14	0.14	0.15	0.13
EUR	0.01	0.01	0.01	0.01	0.02	0.02
IND	0.55	0.54	0.52	0.49	0.47	0.45
LAM	0.31	0.33	0.35	0.44	0.46	0.45
MEA	0.83	0.89	0.93	0.86	0.75	0.75
NEU	0.07	0.08	0.14	0.08	0.15	0.15
OAS	0.24	0.32	0.49	0.51	0.52	0.53
REF	0.17	0.18	0.18	0.18	0.17	0.17
SSA	1.66	1.78	1.95	2.03	2.04	1.97
USA	0.04	0.04	0.04	0.04	0.04	0.03

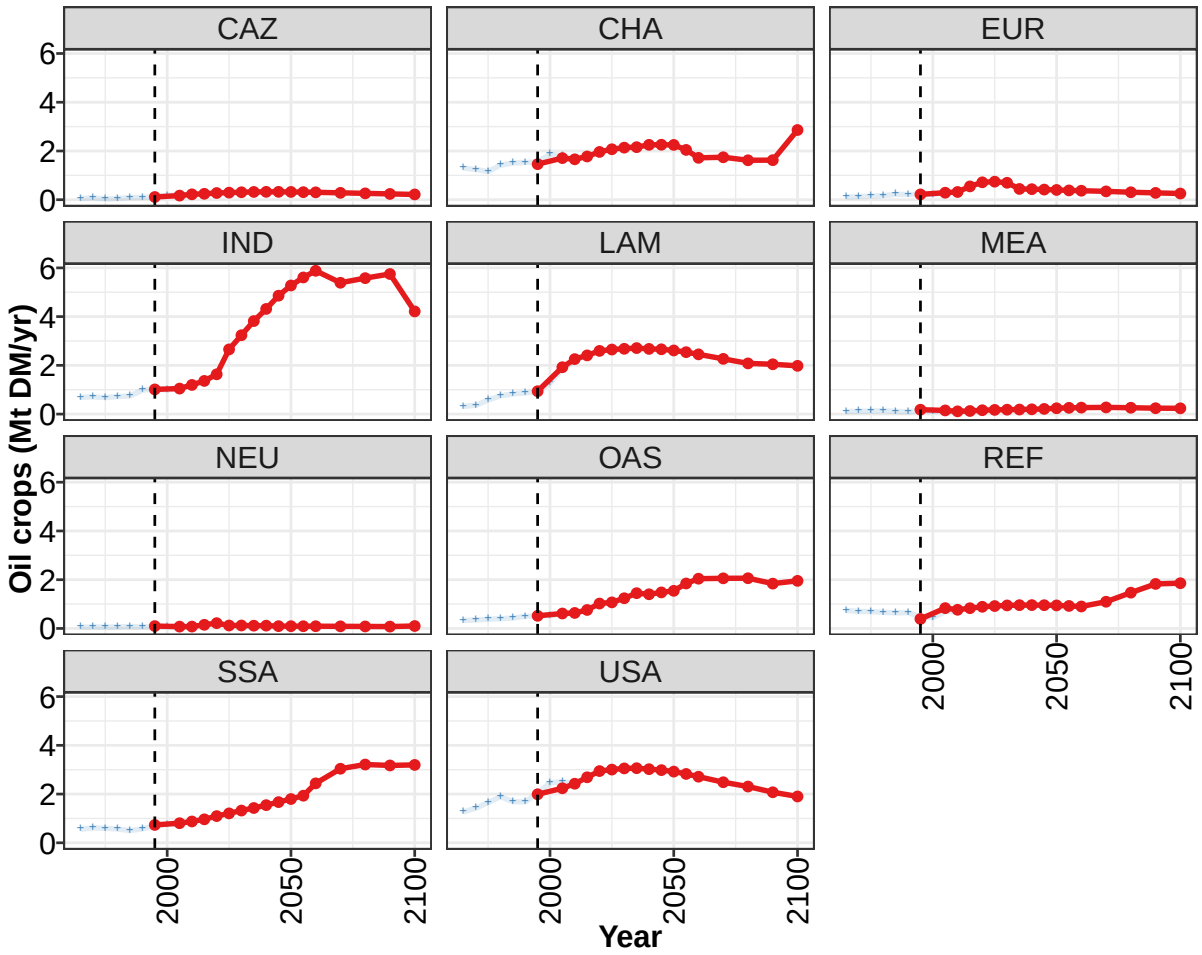
Table 633: MAgPIE new_input — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.56	1.66	1.62	1.44	1.42	1.54	1.54	1.46	1.49	1.38
CAZ	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00
CHA	0.42	0.38	0.27	0.20	0.15	0.11	0.09	0.06	0.04	0.04
EUR	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
IND	0.48	0.53	0.60	0.60	0.54	0.69	0.65	0.59	0.54	0.48
LAM	0.05	0.09	0.09	0.08	0.07	0.05	0.06	0.06	0.05	0.07
MEA	0.05	0.06	0.07	0.07	0.08	0.05	0.10	0.10	0.12	0.08
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.03
REF	0.09	0.06	0.08	0.07	0.07	0.08	0.03	0.03	0.03	0.04
SSA	0.39	0.43	0.41	0.34	0.44	0.50	0.55	0.56	0.64	0.63
USA	0.04	0.07	0.05	0.04	0.04	0.03	0.04	0.03	0.02	0.01

Table 634: FAO — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr)

10.1.6 Oil crops





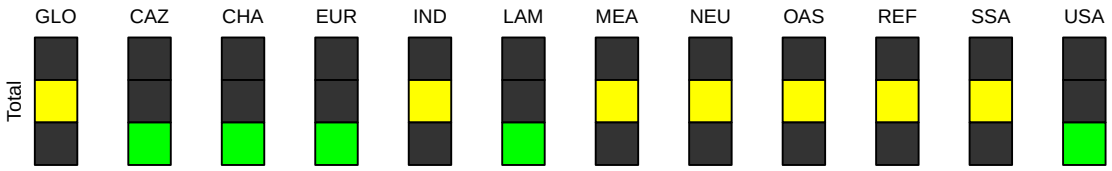


Figure 212: MAgPIE new_input — Demand—Seed—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	7.7	9.9	10.5	11.9	13.5	14.9	15.9	16.6	17.2	17.9	18.4
CAZ	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	1.5	1.7	1.7	1.8	2.0	2.1	2.1	2.2	2.3	2.3	2.2
EUR	0.2	0.3	0.3	0.5	0.7	0.7	0.7	0.4	0.4	0.4	0.4
IND	1.0	1.0	1.2	1.4	1.6	2.7	3.2	3.8	4.3	4.9	5.3
LAM	0.9	1.9	2.3	2.4	2.6	2.6	2.7	2.7	2.7	2.7	2.6
MEA	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.6	0.6	0.8	1.0	1.1	1.2	1.4	1.4	1.5	1.5
REF	0.4	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	0.9
SSA	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.7	1.8
USA	2.0	2.2	2.4	2.7	2.9	3.0	3.1	3.1	3.0	3.0	2.9

Table 635: MAgPIE new_input — Demand—Seed—Crops—Oil crops (Mt DM/yr) [PART 1/2]

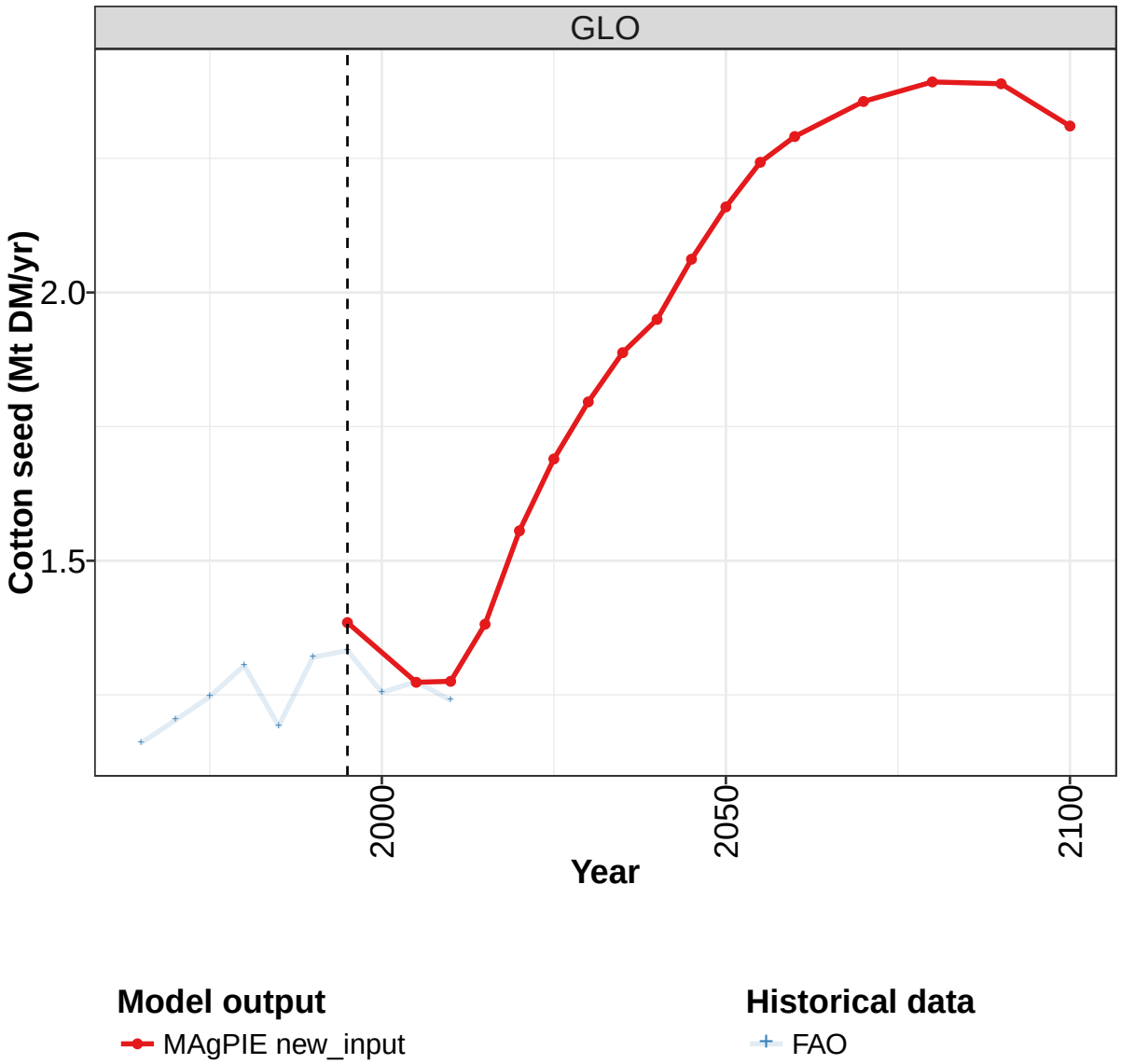
	2055	2060	2070	2080	2090	2100
GLO	18.8	19.2	19.1	19.2	19.2	18.8
CAZ	0.3	0.3	0.3	0.3	0.2	0.2
CHA	2.0	1.7	1.7	1.6	1.6	2.9
EUR	0.4	0.4	0.3	0.3	0.3	0.3
IND	5.6	5.9	5.4	5.6	5.7	4.2
LAM	2.5	2.5	2.3	2.1	2.0	2.0
MEA	0.3	0.3	0.3	0.3	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.8	2.0	2.1	2.1	1.8	2.0
REF	0.9	0.9	1.1	1.5	1.8	1.9
SSA	1.9	2.4	3.0	3.2	3.2	3.2
USA	2.8	2.7	2.5	2.3	2.1	1.9

Table 636: MAgPIE new_input — Demand—Seed—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.5	5.8	6.1	6.8	6.8	7.2	7.8	8.9	10.0	10.4
CAZ	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2
CHA	1.3	1.2	1.2	1.4	1.5	1.5	1.6	1.9	1.8	1.7
EUR	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3
IND	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.0	1.1	1.2
LAM	0.3	0.4	0.6	0.7	0.8	0.9	0.9	1.3	1.9	2.2
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
REF	0.7	0.7	0.7	0.7	0.6	0.7	0.5	0.4	0.7	0.7
SSA	0.6	0.6	0.6	0.6	0.5	0.6	0.7	0.8	0.8	0.9
USA	1.3	1.4	1.7	1.9	1.7	1.7	2.0	2.5	2.5	2.4

Table 637: FAO — Demand—Seed—Crops—Oil crops (Mt DM/yr)

10.1.7 Oil crops—Cotton seed



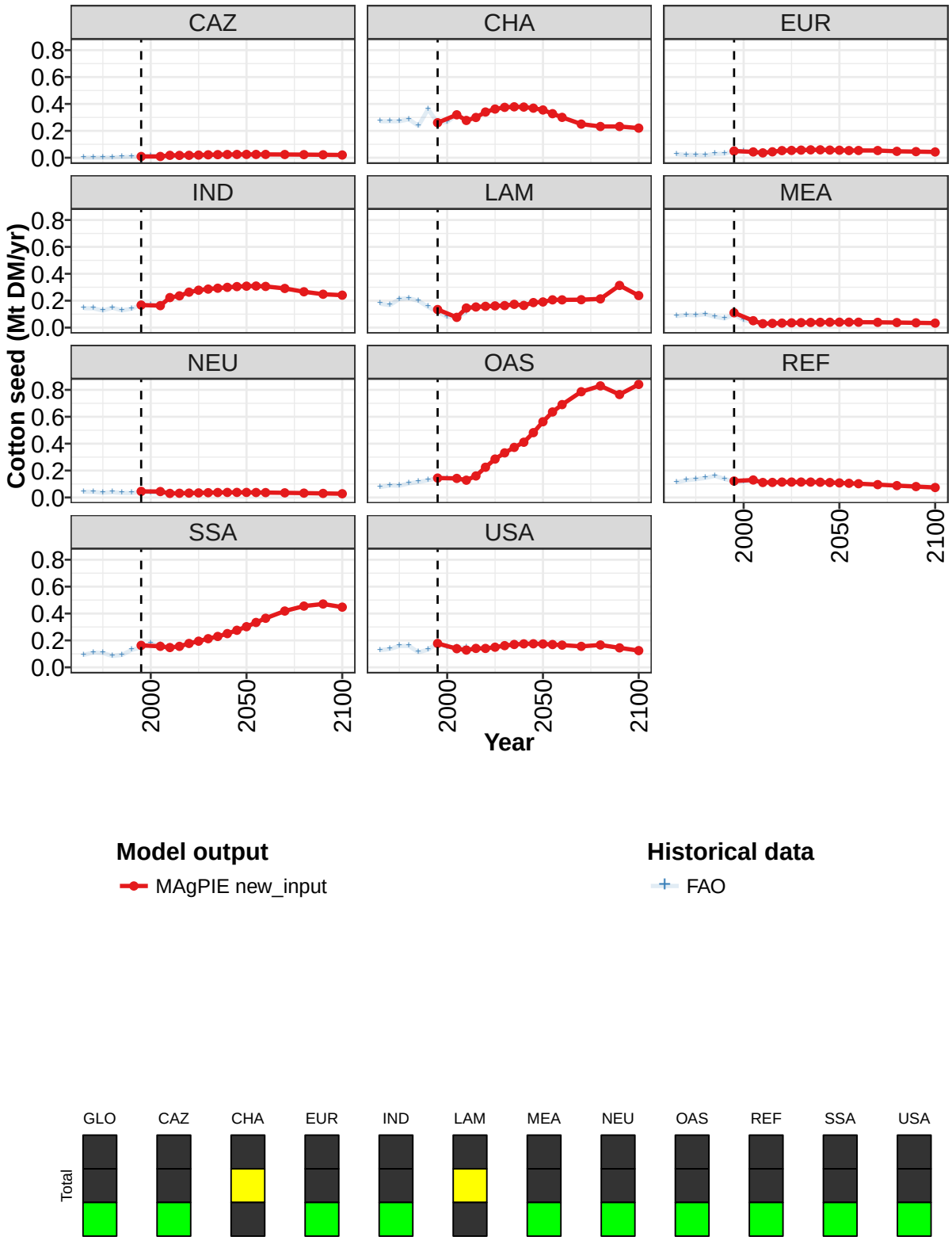


Figure 213: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.38	1.27	1.28	1.38	1.56	1.69	1.80	1.89	1.95	2.06	2.16
CAZ	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.26	0.32	0.28	0.30	0.34	0.36	0.37	0.38	0.38	0.37	0.36
EUR	0.05	0.04	0.04	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.06
IND	0.17	0.16	0.22	0.24	0.26	0.28	0.29	0.29	0.30	0.30	0.31
LAM	0.13	0.08	0.15	0.15	0.16	0.16	0.16	0.17	0.16	0.19	0.19
MEA	0.11	0.05	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
NEU	0.05	0.04	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
OAS	0.14	0.14	0.13	0.16	0.22	0.29	0.33	0.37	0.41	0.48	0.56
REF	0.12	0.13	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
SSA	0.16	0.16	0.15	0.16	0.18	0.19	0.21	0.23	0.25	0.28	0.30
USA	0.18	0.14	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.18	0.17

Table 638: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

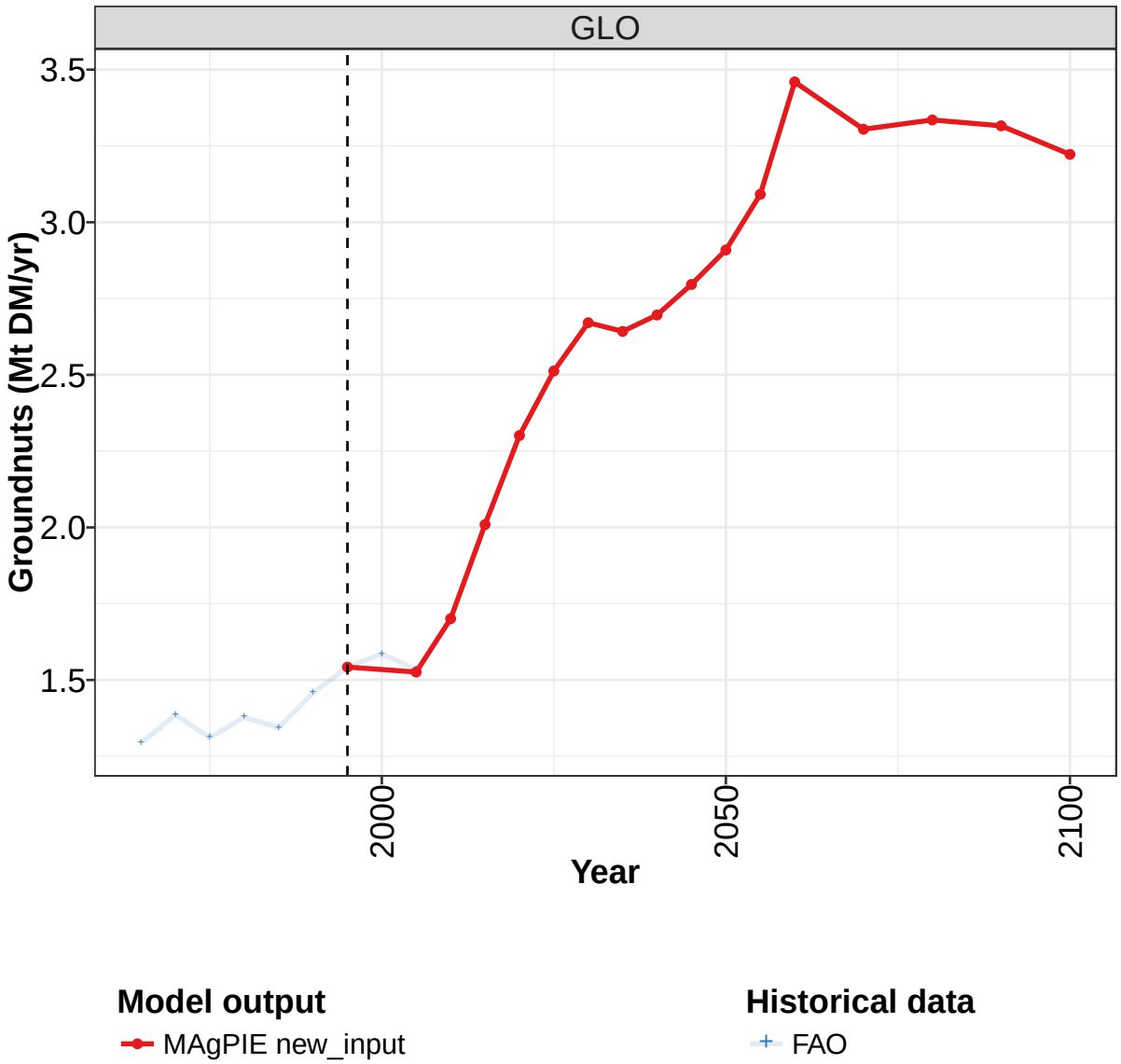
	2055	2060	2070	2080	2090	2100
GLO	2.24	2.29	2.36	2.39	2.39	2.31
CAZ	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.33	0.30	0.25	0.23	0.23	0.22
EUR	0.05	0.05	0.05	0.05	0.05	0.04
IND	0.31	0.31	0.29	0.27	0.25	0.24
LAM	0.21	0.21	0.21	0.21	0.31	0.24
MEA	0.04	0.04	0.04	0.04	0.04	0.03
NEU	0.04	0.04	0.03	0.03	0.03	0.03
OAS	0.64	0.69	0.79	0.83	0.77	0.84
REF	0.11	0.10	0.10	0.09	0.08	0.07
SSA	0.33	0.36	0.42	0.46	0.47	0.45
USA	0.17	0.17	0.16	0.17	0.14	0.12

Table 639: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.16	1.20	1.25	1.30	1.19	1.32	1.33	1.25	1.27	1.24
CAZ	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02
CHA	0.27	0.27	0.27	0.29	0.24	0.36	0.26	0.27	0.32	0.28
EUR	0.03	0.02	0.02	0.02	0.03	0.03	0.05	0.05	0.04	0.04
IND	0.14	0.14	0.13	0.15	0.13	0.14	0.17	0.17	0.17	0.22
LAM	0.18	0.17	0.21	0.22	0.20	0.15	0.12	0.08	0.08	0.11
MEA	0.09	0.09	0.09	0.10	0.08	0.07	0.10	0.06	0.05	0.02
NEU	0.04	0.04	0.04	0.04	0.03	0.03	0.04	0.04	0.03	0.03
OAS	0.08	0.09	0.09	0.10	0.12	0.13	0.15	0.14	0.14	0.13
REF	0.11	0.13	0.14	0.15	0.16	0.14	0.12	0.12	0.13	0.11
SSA	0.09	0.11	0.11	0.08	0.09	0.13	0.15	0.18	0.16	0.13
USA	0.13	0.14	0.16	0.16	0.11	0.13	0.18	0.15	0.15	0.15

Table 640: FAO — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr)

10.1.8 Oil crops—Groundnuts



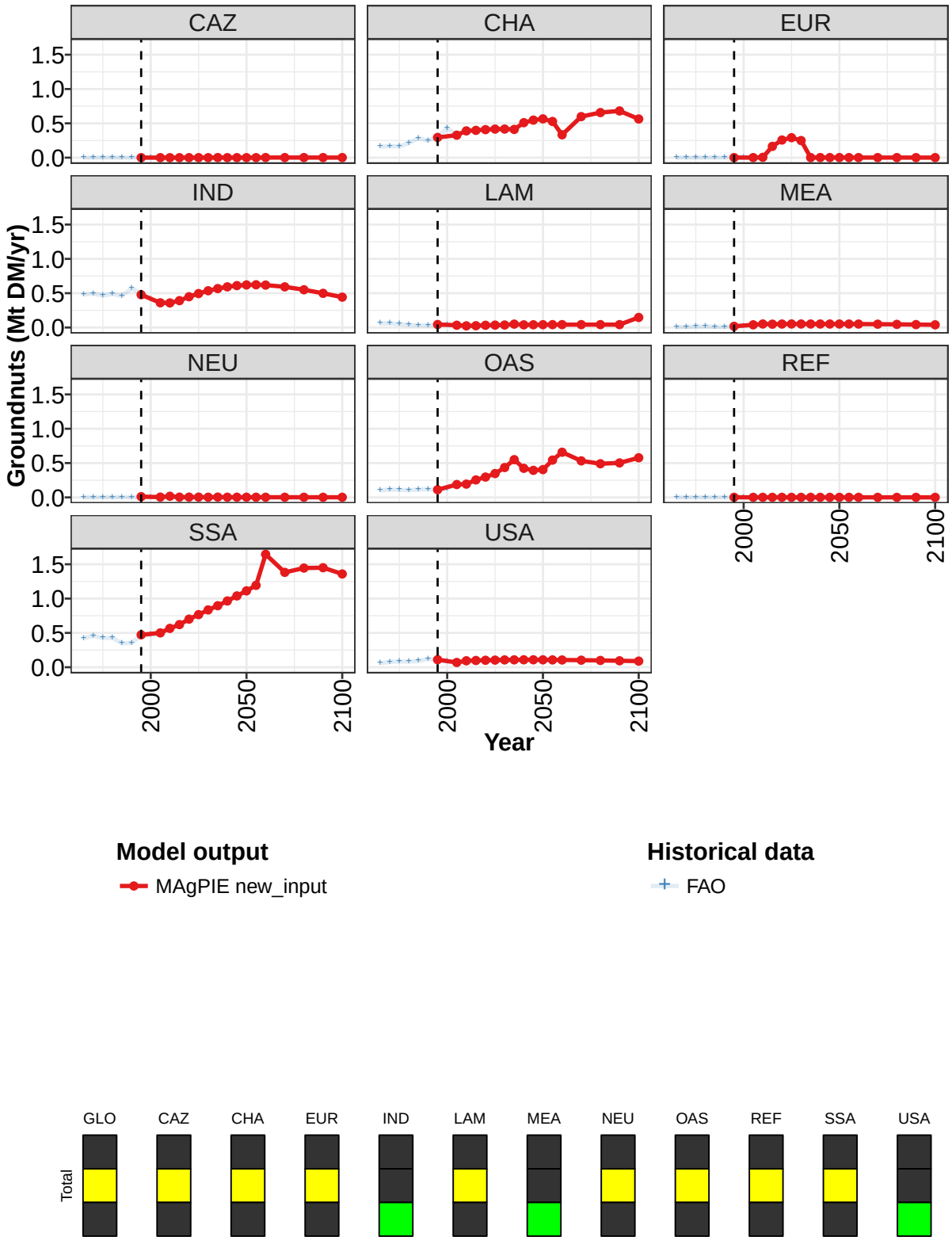


Figure 214: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.54	1.53	1.70	2.01	2.30	2.51	2.67	2.64	2.70	2.80	2.91
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.29	0.33	0.39	0.40	0.41	0.42	0.42	0.41	0.51	0.55	0.57
EUR	0.00	0.00	0.01	0.16	0.26	0.29	0.25	0.00	0.00	0.00	0.00
IND	0.48	0.36	0.36	0.39	0.45	0.49	0.54	0.57	0.59	0.61	0.62
LAM	0.04	0.03	0.02	0.03	0.03	0.04	0.04	0.05	0.04	0.04	0.04
MEA	0.02	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NEU	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.11	0.19	0.19	0.25	0.30	0.35	0.43	0.55	0.42	0.39	0.40
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.47	0.50	0.57	0.62	0.70	0.77	0.84	0.90	0.97	1.04	1.11
USA	0.11	0.07	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11

Table 641: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

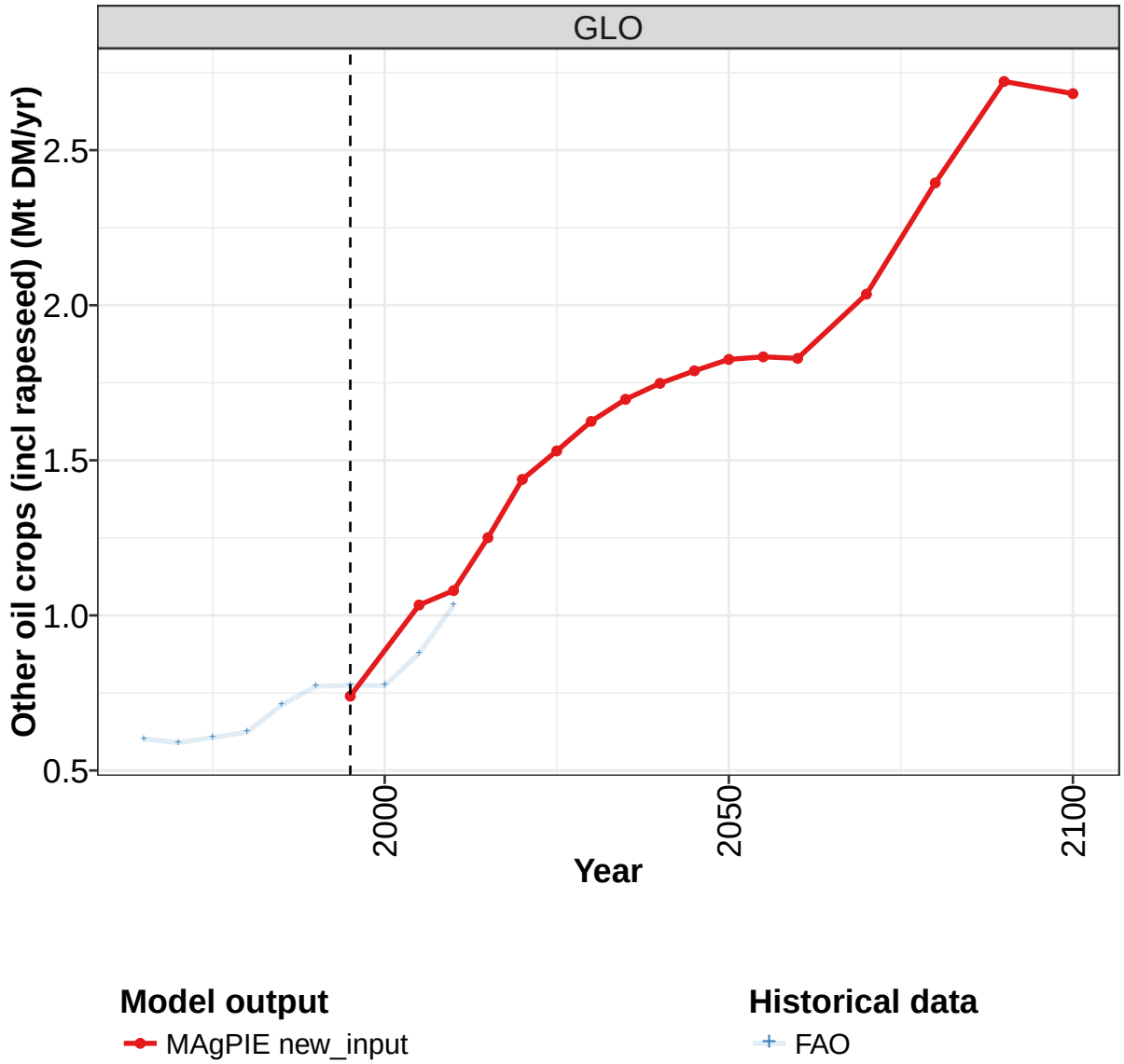
	2055	2060	2070	2080	2090	2100
GLO	3.09	3.46	3.30	3.34	3.32	3.22
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.53	0.33	0.60	0.66	0.68	0.56
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.62	0.62	0.59	0.55	0.50	0.44
LAM	0.04	0.04	0.04	0.04	0.04	0.15
MEA	0.05	0.05	0.05	0.05	0.04	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.54	0.66	0.53	0.49	0.50	0.58
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.19	1.65	1.38	1.45	1.45	1.36
USA	0.11	0.11	0.10	0.10	0.09	0.09

Table 642: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.29	1.39	1.31	1.38	1.34	1.46	1.54	1.59	1.53	1.69
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.16	0.17	0.16	0.22	0.28	0.25	0.31	0.43	0.34	0.39
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.48	0.49	0.46	0.49	0.46	0.57	0.50	0.41	0.37	0.35
LAM	0.06	0.06	0.05	0.04	0.03	0.03	0.03	0.04	0.03	0.04
MEA	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.04	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.10	0.11	0.11	0.10	0.11	0.12	0.11	0.13	0.19	0.19
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.42	0.46	0.42	0.43	0.35	0.35	0.46	0.47	0.49	0.58
USA	0.06	0.08	0.08	0.08	0.09	0.12	0.10	0.08	0.08	0.09

Table 643: FAO — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr)

10.1.9 Oil crops—Other oil crops (incl rapeseed)



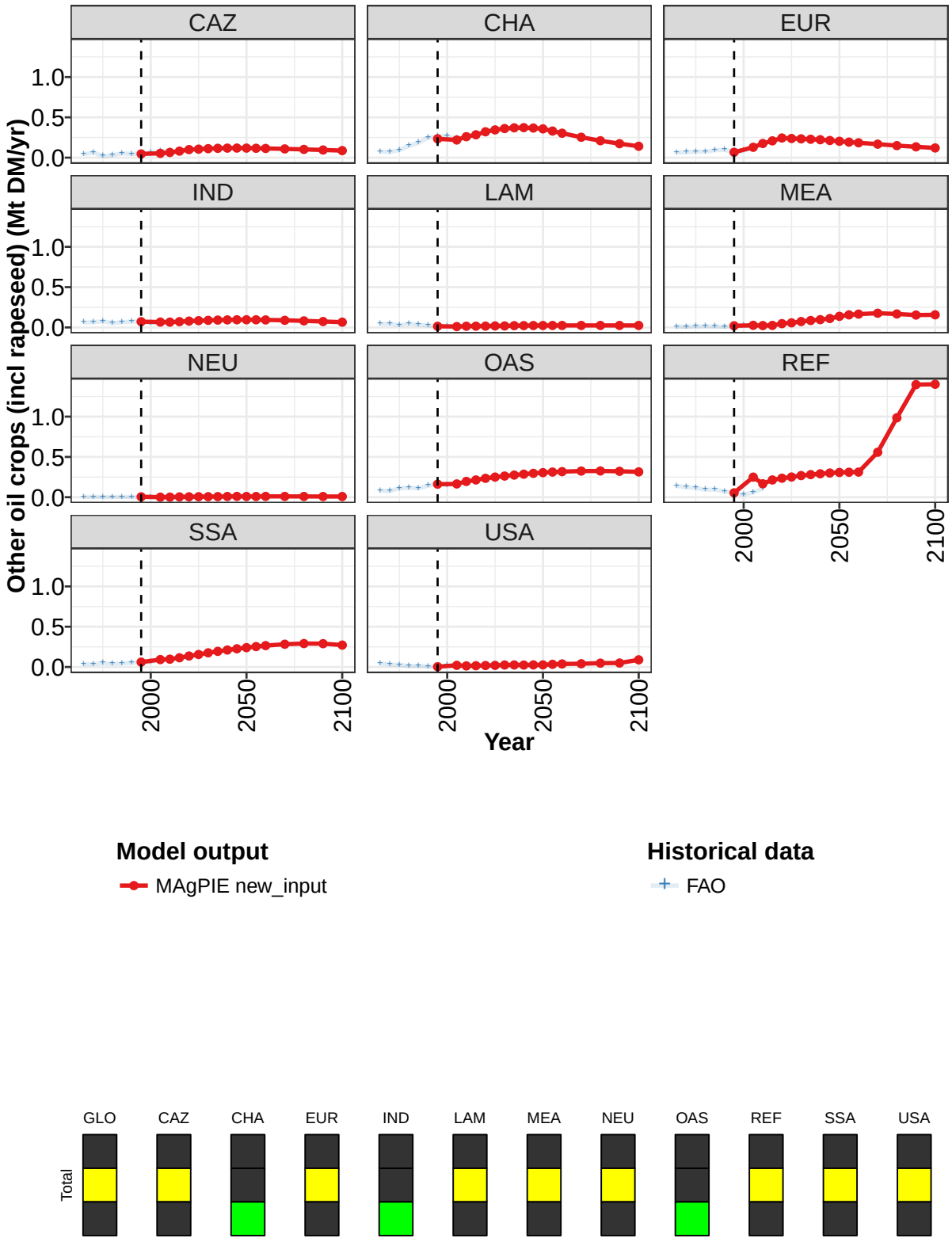


Figure 215: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.74	1.03	1.08	1.25	1.44	1.53	1.63	1.70	1.75	1.79	1.83
CAZ	0.05	0.05	0.06	0.08	0.10	0.11	0.11	0.12	0.12	0.12	0.12
CHA	0.23	0.22	0.26	0.28	0.32	0.34	0.36	0.37	0.37	0.37	0.36
EUR	0.07	0.13	0.18	0.21	0.24	0.24	0.23	0.23	0.22	0.21	0.20
IND	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.10
LAM	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
MEA	0.02	0.03	0.02	0.03	0.05	0.06	0.07	0.09	0.10	0.11	0.14
NEU	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.16	0.17	0.20	0.21	0.23	0.25	0.26	0.27	0.29	0.30	0.31
REF	0.05	0.25	0.17	0.21	0.24	0.25	0.27	0.28	0.29	0.30	0.31
SSA	0.06	0.09	0.10	0.11	0.14	0.16	0.18	0.19	0.21	0.23	0.24
USA	0.00	0.02	0.01	0.02	0.02	0.02	0.03	0.03	0.02	0.03	0.03

Table 644: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

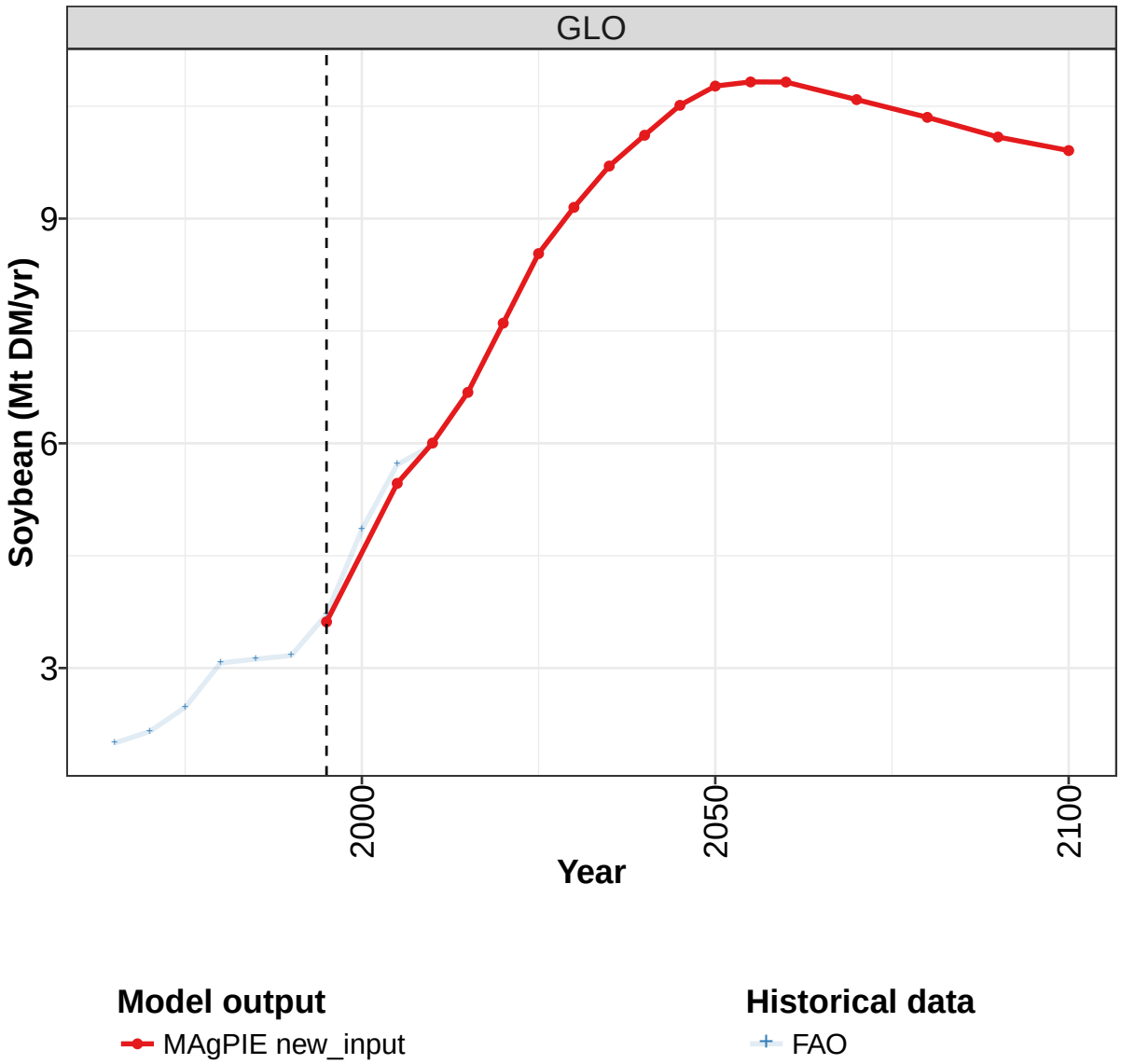
	2055	2060	2070	2080	2090	2100
GLO	1.83	1.83	2.04	2.39	2.72	2.68
CAZ	0.12	0.11	0.11	0.10	0.10	0.09
CHA	0.33	0.30	0.25	0.21	0.17	0.14
EUR	0.19	0.18	0.17	0.15	0.13	0.12
IND	0.09	0.09	0.09	0.08	0.07	0.07
LAM	0.02	0.02	0.02	0.02	0.02	0.02
MEA	0.16	0.17	0.18	0.17	0.15	0.16
NEU	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.31	0.32	0.32	0.33	0.32	0.31
REF	0.31	0.31	0.56	0.99	1.40	1.40
SSA	0.25	0.27	0.28	0.29	0.29	0.27
USA	0.03	0.04	0.04	0.05	0.05	0.09

Table 645: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.60	0.59	0.61	0.62	0.71	0.77	0.77	0.77	0.88	1.03
CAZ	0.04	0.06	0.02	0.03	0.05	0.05	0.05	0.06	0.08	0.08
CHA	0.08	0.07	0.09	0.14	0.19	0.25	0.27	0.27	0.23	0.27
EUR	0.06	0.07	0.08	0.07	0.09	0.10	0.07	0.09	0.13	0.17
IND	0.06	0.07	0.08	0.05	0.07	0.07	0.07	0.05	0.07	0.07
LAM	0.04	0.04	0.03	0.04	0.04	0.02	0.01	0.01	0.01	0.02
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.08	0.08	0.11	0.12	0.11	0.14	0.17	0.15	0.17	0.20
REF	0.14	0.12	0.11	0.09	0.10	0.07	0.05	0.03	0.06	0.11
SSA	0.03	0.04	0.05	0.04	0.04	0.05	0.06	0.07	0.09	0.09
USA	0.05	0.03	0.03	0.01	0.01	0.01	0.00	0.02	0.02	0.01

Table 646: FAO — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

10.1.10 Oil crops—Soybean



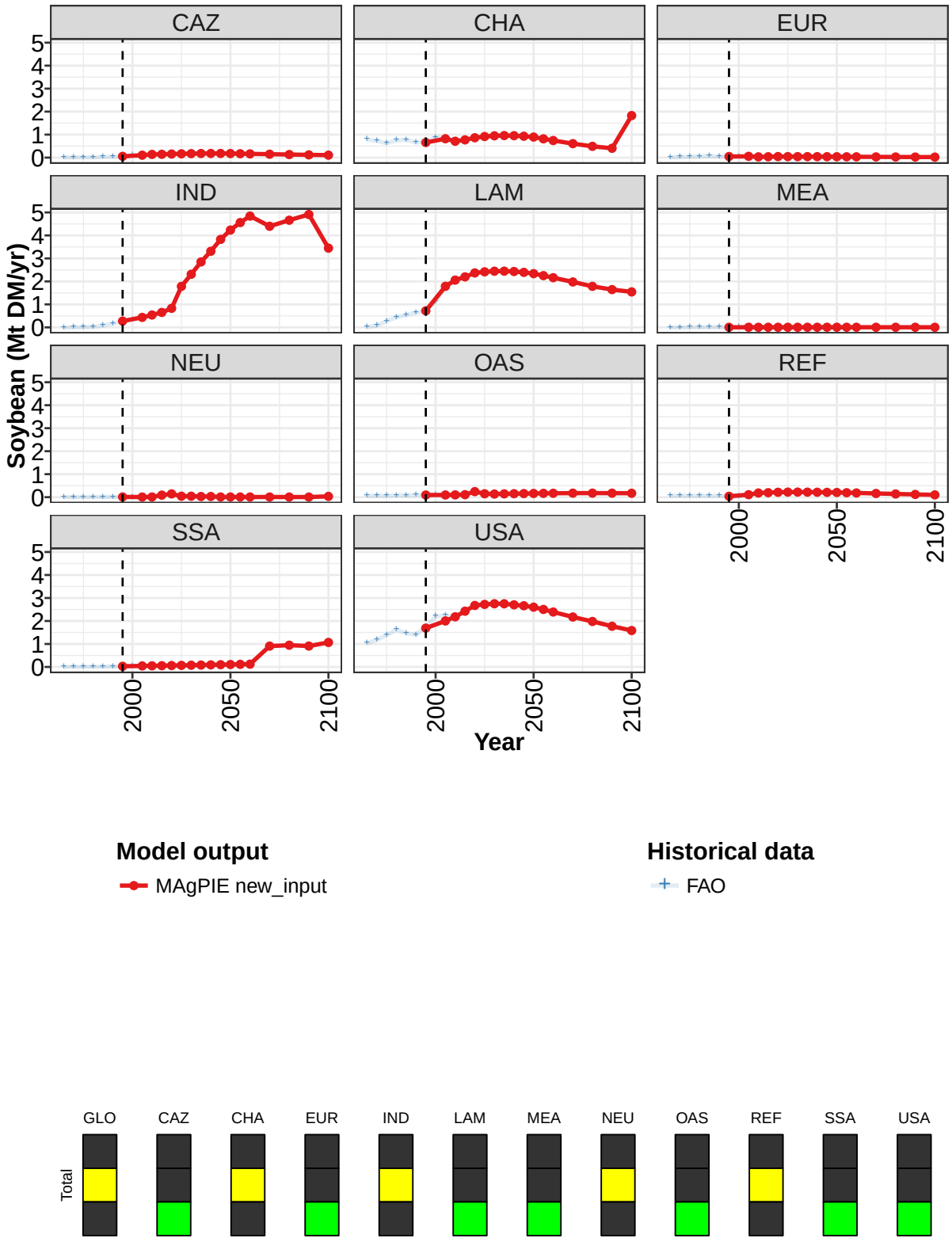


Figure 216: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.6	5.5	6.0	6.7	7.6	8.5	9.1	9.7	10.1	10.5	10.8
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.7	0.8	0.7	0.8	0.9	0.9	0.9	1.0	1.0	0.9	0.9
EUR	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.3	0.4	0.5	0.7	0.8	1.8	2.3	2.8	3.3	3.8	4.2
LAM	0.7	1.8	2.1	2.2	2.4	2.4	2.4	2.4	2.4	2.4	2.3
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2
REF	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SSA	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
USA	1.7	2.0	2.2	2.4	2.7	2.7	2.7	2.7	2.7	2.7	2.6

Table 647: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

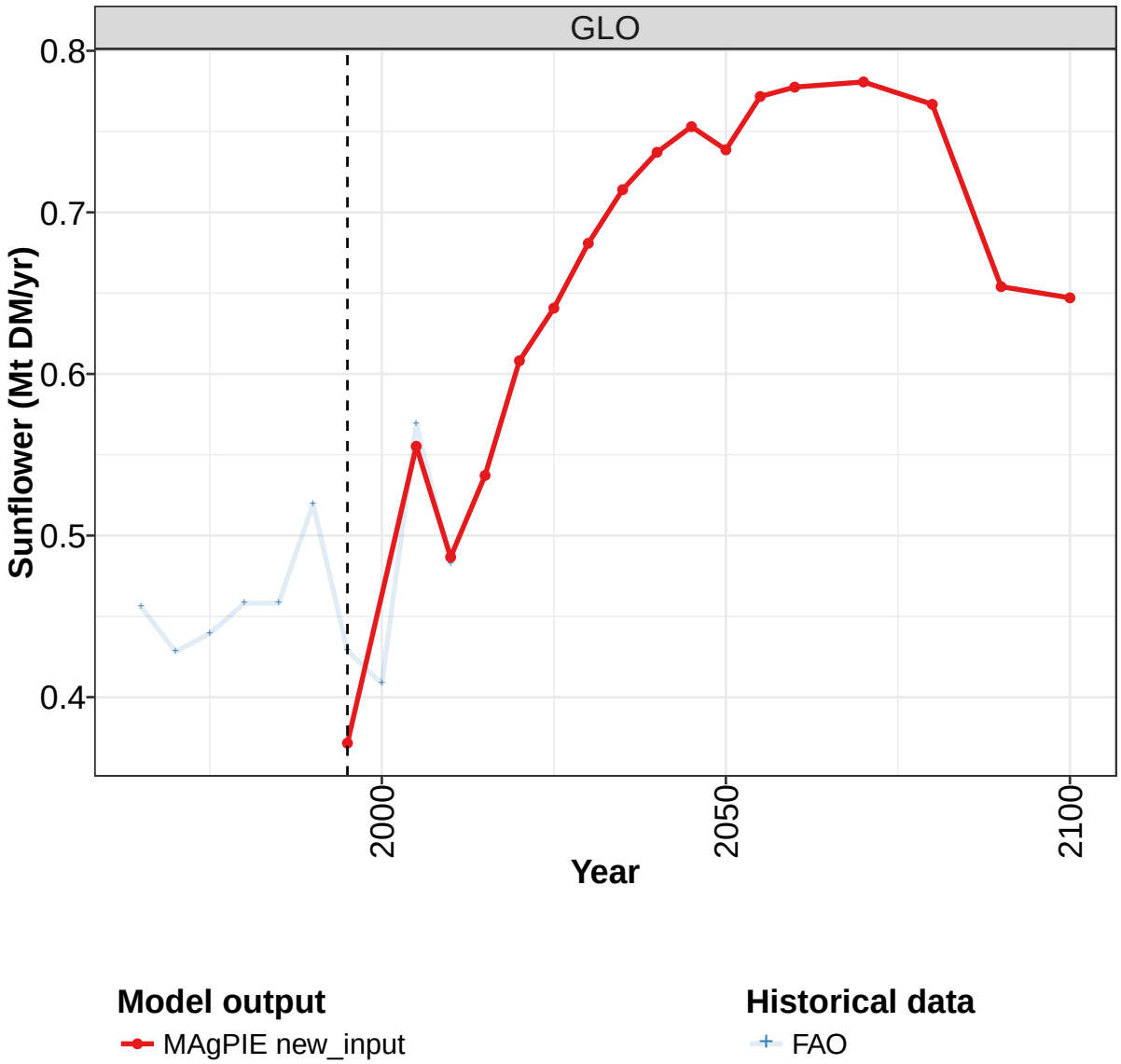
	2055	2060	2070	2080	2090	2100
GLO	10.8	10.8	10.6	10.4	10.1	9.9
CAZ	0.2	0.2	0.1	0.1	0.1	0.1
CHA	0.8	0.7	0.6	0.5	0.4	1.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	4.6	4.8	4.4	4.7	4.9	3.4
LAM	2.3	2.2	2.0	1.8	1.6	1.5
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.2	0.2	0.2	0.2	0.2
REF	0.2	0.2	0.2	0.1	0.1	0.1
SSA	0.1	0.1	0.9	0.9	0.9	1.1
USA	2.5	2.4	2.2	2.0	1.8	1.6

Table 648: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.00	2.15	2.48	3.07	3.12	3.17	3.72	4.85	5.72	5.98
CAZ	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.10	0.11	0.14
CHA	0.79	0.73	0.63	0.75	0.77	0.66	0.70	0.88	0.87	0.74
EUR	0.00	0.02	0.03	0.06	0.07	0.05	0.05	0.04	0.06	0.03
IND	0.00	0.00	0.01	0.03	0.08	0.17	0.28	0.34	0.44	0.54
LAM	0.02	0.08	0.27	0.44	0.54	0.65	0.73	1.12	1.72	2.00
MEA	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00
NEU	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01
OAS	0.07	0.07	0.07	0.07	0.08	0.10	0.10	0.09	0.10	0.10
REF	0.07	0.07	0.06	0.07	0.06	0.06	0.04	0.04	0.12	0.18
SSA	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.04	0.05
USA	1.04	1.17	1.38	1.62	1.46	1.40	1.74	2.20	2.25	2.18

Table 649: FAO — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr)

10.1.11 Oil crops—Sunflower



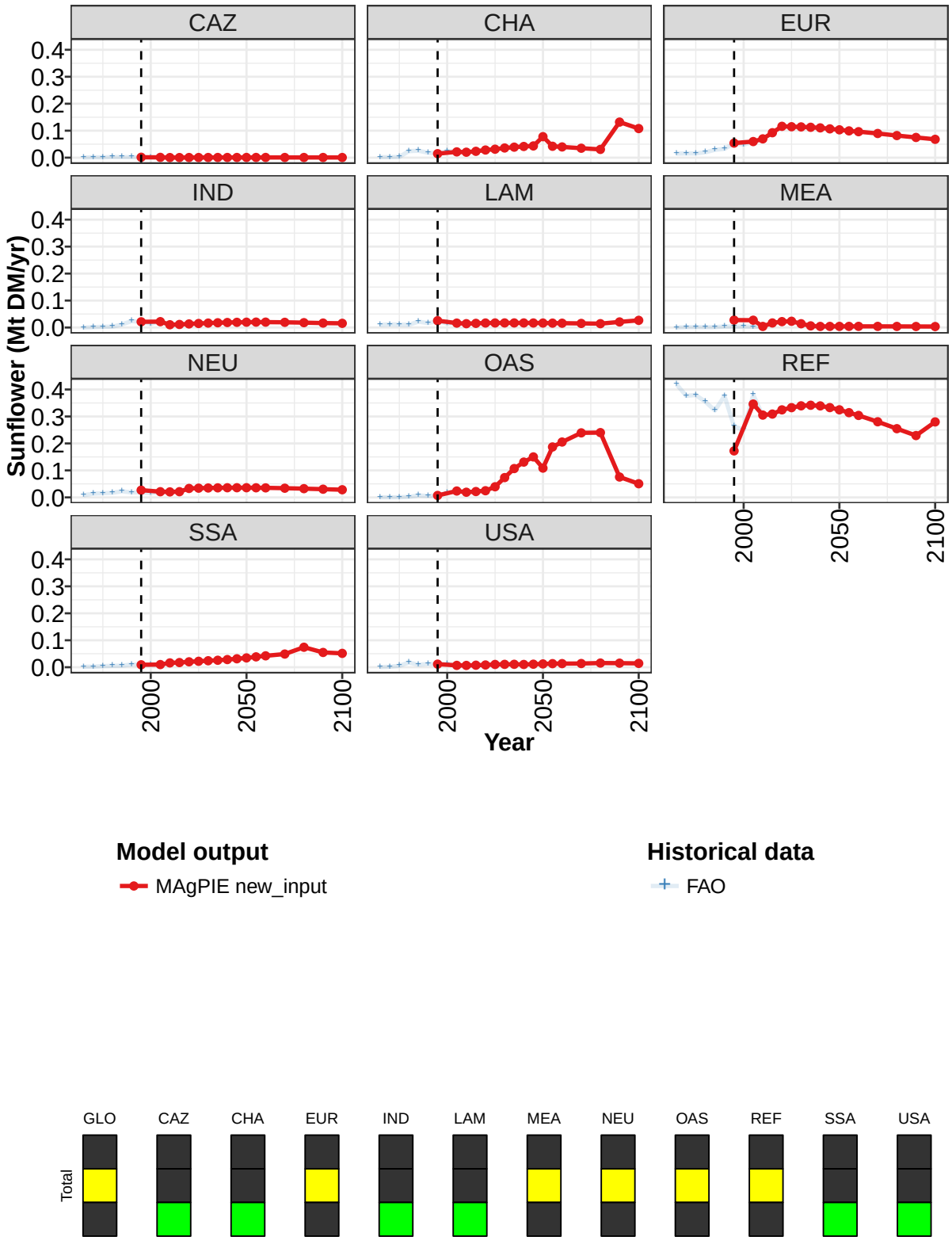


Figure 217: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.372	0.555	0.487	0.537	0.608	0.641	0.681	0.714	0.737	0.753	0.739
CAZ	0.002	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.015	0.021	0.020	0.024	0.028	0.031	0.036	0.039	0.042	0.043	0.078
EUR	0.054	0.060	0.070	0.092	0.116	0.115	0.114	0.113	0.110	0.107	0.103
IND	0.021	0.022	0.010	0.011	0.013	0.015	0.016	0.018	0.019	0.019	0.020
LAM	0.025	0.016	0.014	0.015	0.017	0.017	0.017	0.017	0.017	0.017	0.017
MEA	0.028	0.027	0.004	0.017	0.022	0.023	0.014	0.006	0.004	0.004	0.004
NEU	0.027	0.021	0.020	0.021	0.033	0.034	0.035	0.035	0.036	0.036	0.036
OAS	0.007	0.024	0.019	0.022	0.025	0.039	0.073	0.107	0.131	0.150	0.109
REF	0.172	0.346	0.305	0.309	0.325	0.333	0.339	0.342	0.339	0.333	0.325
SSA	0.009	0.010	0.016	0.017	0.020	0.022	0.024	0.026	0.028	0.031	0.035
USA	0.011	0.007	0.007	0.008	0.008	0.010	0.011	0.011	0.010	0.011	0.012

Table 650: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

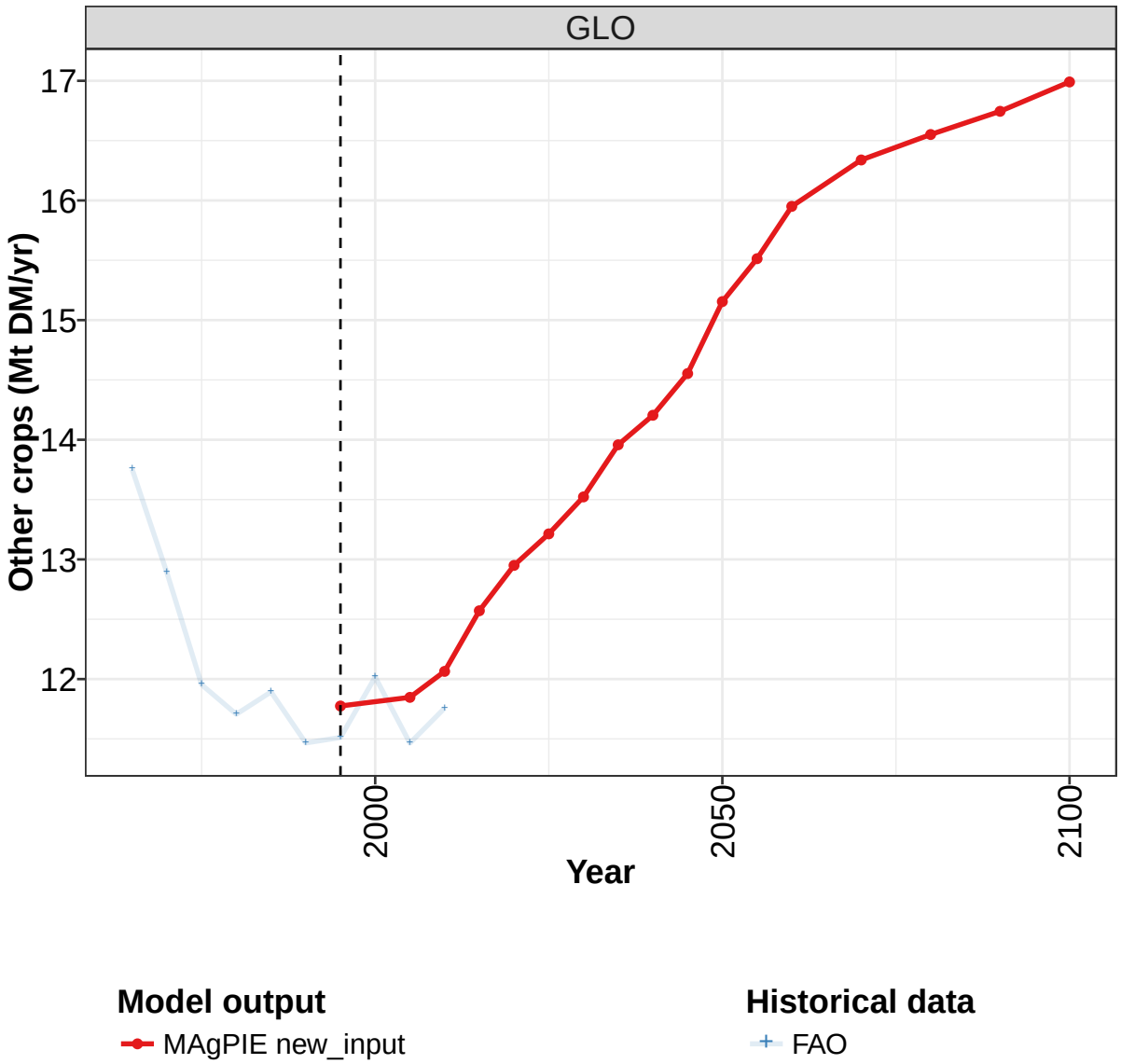
	2055	2060	2070	2080	2090	2100
GLO	0.772	0.777	0.781	0.767	0.654	0.647
CAZ	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.042	0.040	0.035	0.031	0.132	0.108
EUR	0.099	0.096	0.090	0.082	0.075	0.068
IND	0.020	0.020	0.019	0.018	0.017	0.016
LAM	0.016	0.016	0.015	0.014	0.021	0.027
MEA	0.004	0.004	0.004	0.004	0.004	0.004
NEU	0.036	0.035	0.034	0.032	0.030	0.028
OAS	0.187	0.205	0.239	0.240	0.076	0.051
REF	0.314	0.304	0.280	0.255	0.229	0.280
SSA	0.039	0.042	0.049	0.074	0.055	0.052
USA	0.013	0.013	0.014	0.016	0.015	0.014

Table 651: MAgPIE new_input — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.456	0.428	0.439	0.458	0.458	0.519	0.429	0.408	0.569	0.482
CAZ	0.000	0.002	0.001	0.003	0.002	0.002	0.001	0.001	0.001	0.000
CHA	0.002	0.002	0.003	0.024	0.026	0.018	0.016	0.024	0.023	0.022
EUR	0.015	0.016	0.016	0.020	0.029	0.033	0.053	0.048	0.059	0.068
IND	0.000	0.001	0.003	0.003	0.011	0.024	0.021	0.013	0.024	0.010
LAM	0.010	0.012	0.011	0.010	0.022	0.017	0.024	0.015	0.017	0.014
MEA	0.000	0.001	0.002	0.001	0.002	0.004	0.004	0.004	0.003	0.003
NEU	0.008	0.014	0.015	0.017	0.022	0.018	0.018	0.016	0.019	0.020
OAS	0.000	0.000	0.000	0.002	0.007	0.005	0.007	0.016	0.024	0.019
REF	0.419	0.377	0.380	0.354	0.322	0.376	0.263	0.251	0.381	0.302
SSA	0.002	0.002	0.004	0.005	0.006	0.010	0.009	0.008	0.010	0.016
USA	0.000	0.002	0.005	0.018	0.009	0.012	0.011	0.012	0.009	0.007

Table 652: FAO — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr)

10.1.12 Other crops



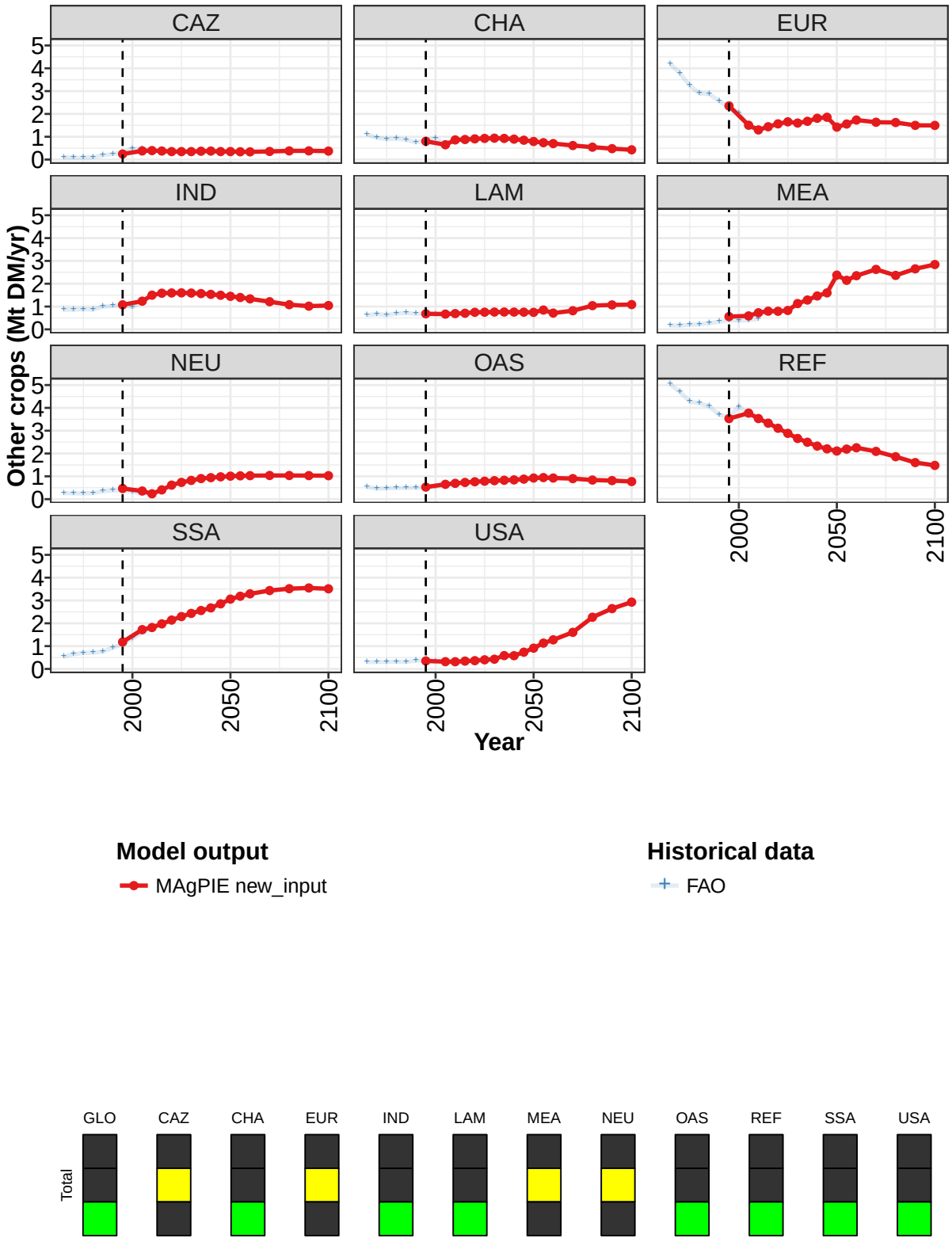


Figure 218: MAgPIE new_input — Demand—Seed—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	11.8	11.8	12.1	12.6	13.0	13.2	13.5	14.0	14.2	14.6	15.2
CAZ	0.2	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4
CHA	0.8	0.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
EUR	2.4	1.5	1.3	1.4	1.6	1.7	1.6	1.7	1.8	1.9	1.4
IND	1.1	1.2	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.4
LAM	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7
MEA	0.6	0.6	0.7	0.8	0.8	0.8	1.1	1.3	1.5	1.6	2.4
NEU	0.5	0.4	0.2	0.4	0.6	0.7	0.8	0.9	0.9	1.0	1.0
OAS	0.5	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9
REF	3.5	3.8	3.5	3.3	3.1	2.9	2.7	2.5	2.3	2.2	2.1
SSA	1.2	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	3.1
USA	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.6	0.7	0.9

Table 653: MAgPIE new_input — Demand—Seed—Crops—Other crops (Mt DM/yr) [PART 1/2]

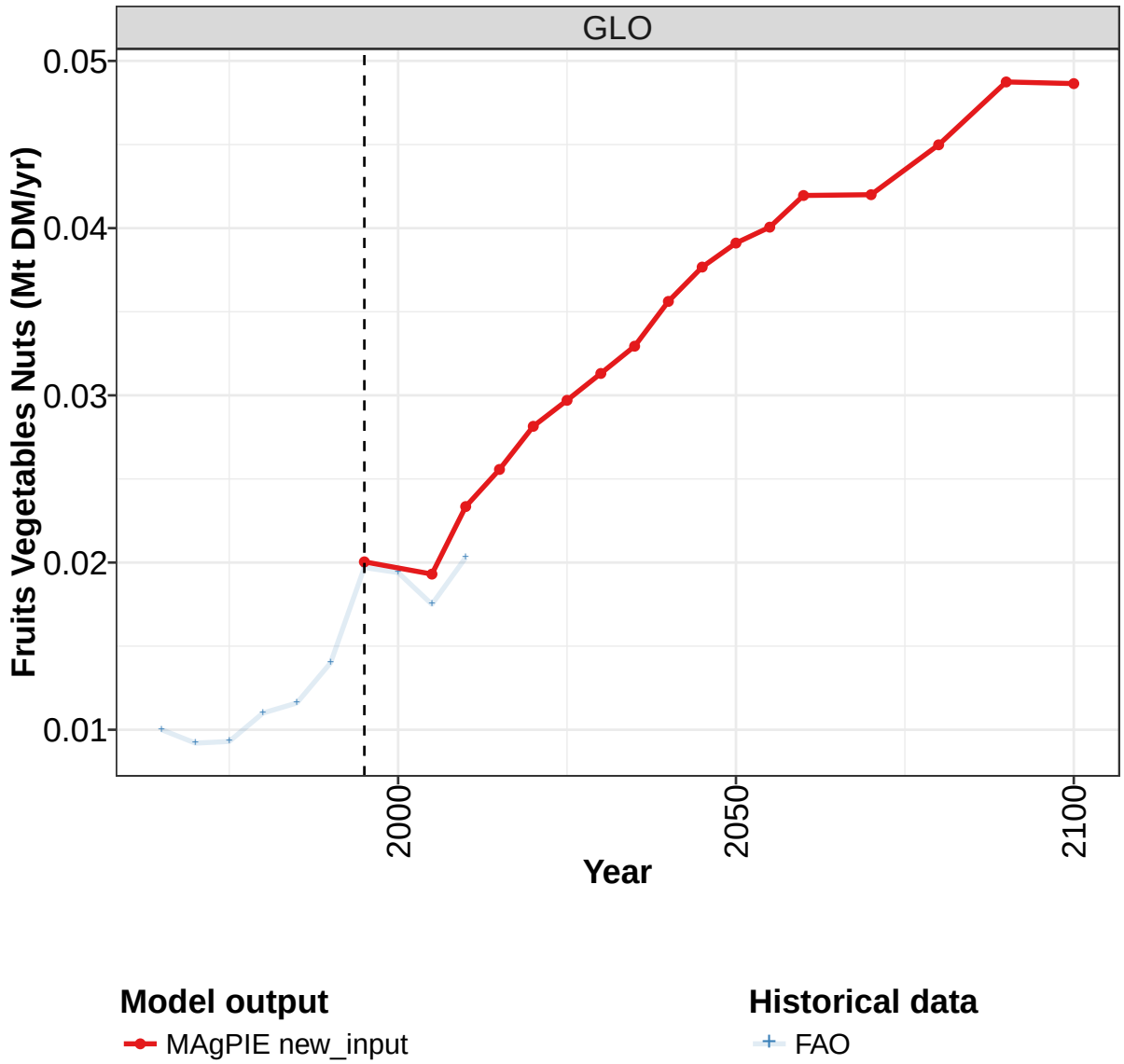
	2055	2060	2070	2080	2090	2100
GLO	15.5	16.0	16.3	16.6	16.7	17.0
CAZ	0.3	0.3	0.4	0.4	0.4	0.4
CHA	0.7	0.7	0.6	0.5	0.5	0.4
EUR	1.6	1.7	1.6	1.6	1.5	1.5
IND	1.4	1.3	1.2	1.1	1.0	1.0
LAM	0.8	0.7	0.8	1.0	1.1	1.1
MEA	2.1	2.4	2.6	2.4	2.7	2.8
NEU	1.0	1.0	1.0	1.0	1.0	1.0
OAS	0.9	0.9	0.9	0.8	0.8	0.8
REF	2.2	2.3	2.1	1.9	1.6	1.5
SSA	3.2	3.3	3.4	3.5	3.5	3.5
USA	1.1	1.3	1.6	2.3	2.6	2.9

Table 654: MAgPIE new_input — Demand—Seed—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	13.8	12.9	12.0	11.7	11.9	11.5	11.5	12.0	11.5	11.8
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.5	0.4
CHA	1.1	1.0	0.9	0.9	0.9	0.8	0.9	0.9	0.7	0.9
EUR	4.2	3.8	3.2	2.9	2.9	2.6	2.3	2.0	1.5	1.3
IND	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.0	1.2	1.5
LAM	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5
NEU	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2
OAS	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7
REF	5.0	4.7	4.3	4.2	4.1	3.7	3.6	4.0	3.8	3.5
SSA	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.3	1.6	1.8
USA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3

Table 655: FAO — Demand—Seed—Crops—Other crops (Mt DM/yr)

10.1.13 Other crops—Fruits Vegetables Nuts



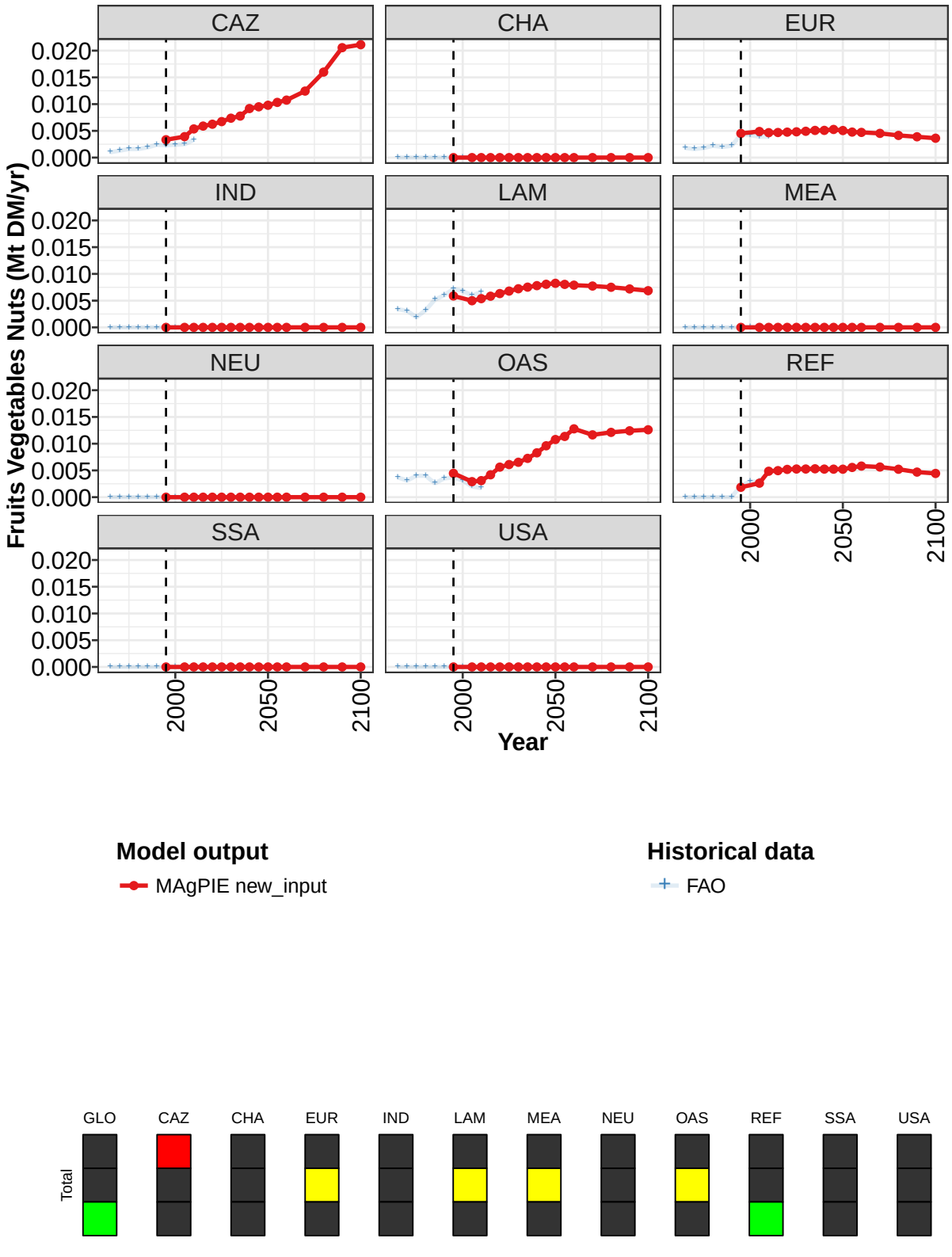


Figure 219: MAgPIE new_input — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0200	0.0193	0.0233	0.0256	0.0281	0.0297	0.0313	0.0329	0.0356	0.0377	0.0391
CAZ	0.0033	0.0039	0.0054	0.0059	0.0062	0.0067	0.0074	0.0078	0.0092	0.0095	0.0098
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0045	0.0049	0.0047	0.0047	0.0048	0.0048	0.0049	0.0051	0.0051	0.0053	0.0051
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0059	0.0050	0.0054	0.0058	0.0063	0.0068	0.0072	0.0075	0.0078	0.0081	0.0082
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0045	0.0029	0.0031	0.0042	0.0056	0.0061	0.0065	0.0073	0.0083	0.0096	0.0108
REF	0.0018	0.0026	0.0049	0.0050	0.0052	0.0053	0.0053	0.0053	0.0053	0.0052	0.0052
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 656: MAgPIE new_input — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

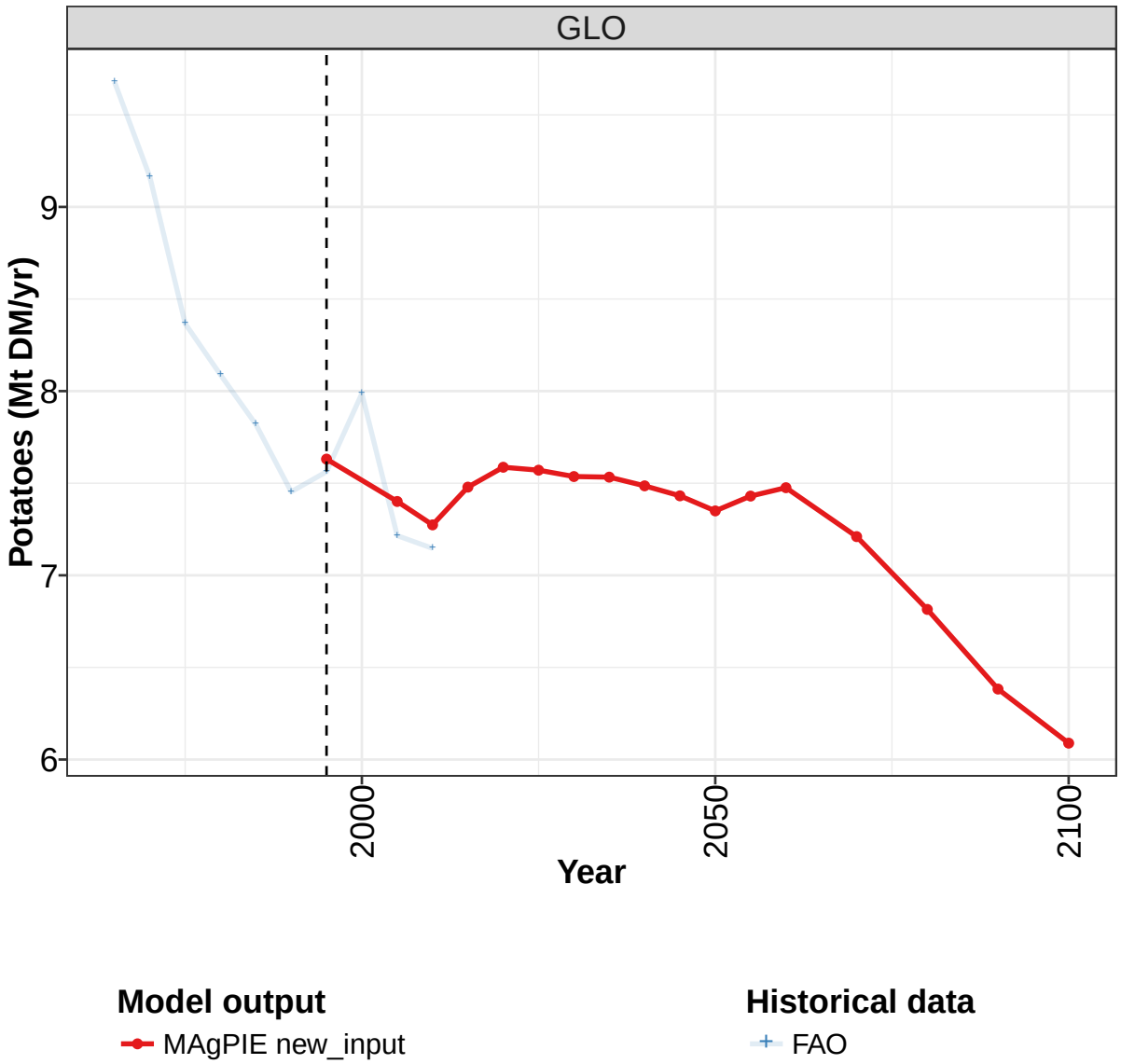
	2055	2060	2070	2080	2090	2100
GLO	0.0401	0.0420	0.0420	0.0450	0.0487	0.0486
CAZ	0.0103	0.0108	0.0124	0.0160	0.0206	0.0211
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0048	0.0047	0.0045	0.0041	0.0039	0.0036
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0080	0.0079	0.0077	0.0075	0.0072	0.0069
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0114	0.0128	0.0117	0.0121	0.0124	0.0126
REF	0.0056	0.0058	0.0056	0.0052	0.0047	0.0044
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 657: MAgPIE new_input — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0100	0.0092	0.0093	0.0110	0.0116	0.0140	0.0197	0.0194	0.0175	0.0203
CAZ	0.0010	0.0013	0.0016	0.0016	0.0019	0.0024	0.0023	0.0024	0.0025	0.0033
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0018	0.0016	0.0018	0.0022	0.0020	0.0022	0.0043	0.0042	0.0039	0.0039
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0034	0.0031	0.0019	0.0032	0.0052	0.0060	0.0072	0.0068	0.0060	0.0066
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0037	0.0031	0.0040	0.0040	0.0026	0.0035	0.0037	0.0031	0.0020	0.0017
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0029	0.0029	0.0047
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 658: FAO — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

10.1.14 Other crops—Potatoes



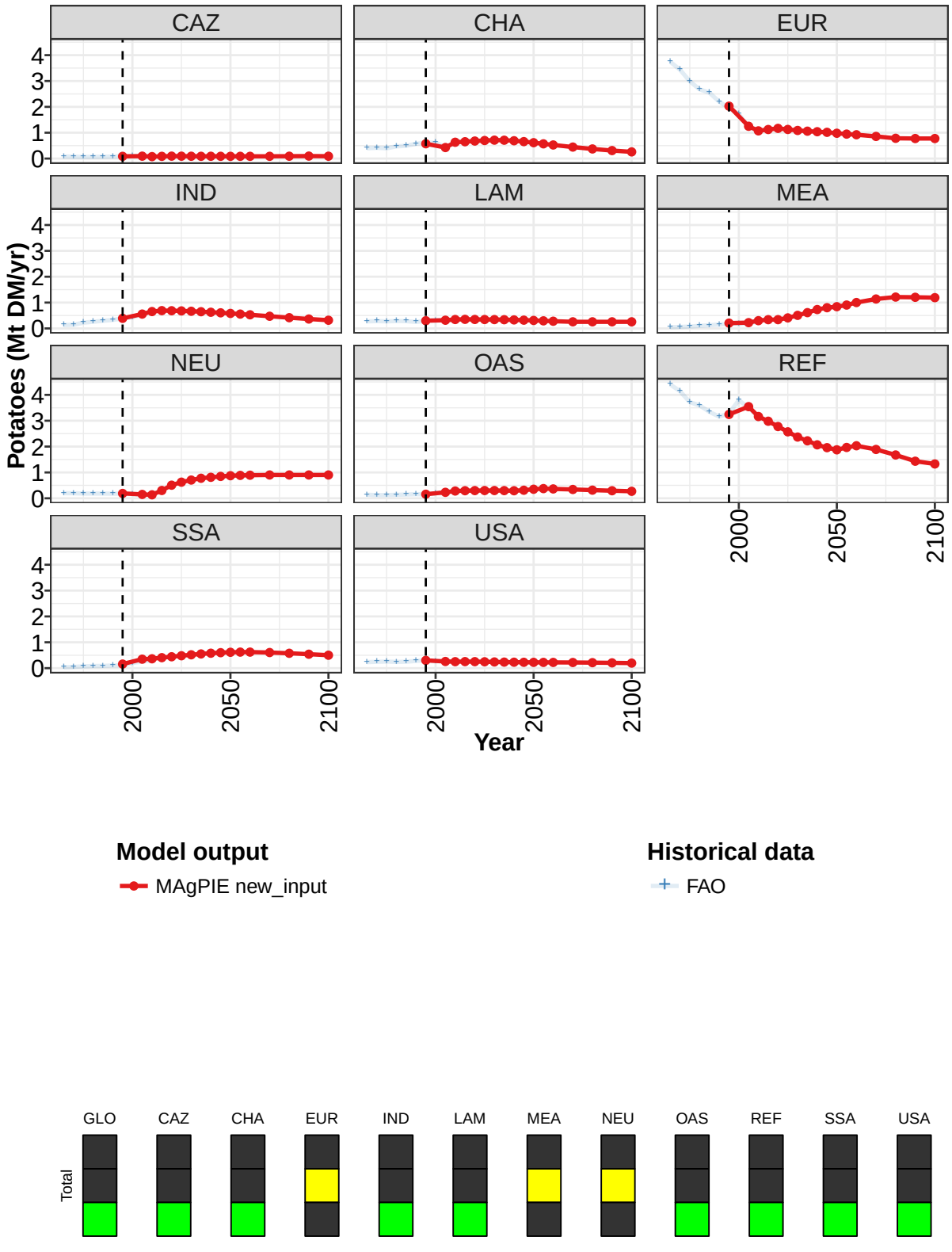


Figure 220: MAgPIE new_input — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	7.63	7.40	7.27	7.48	7.59	7.57	7.54	7.53	7.49	7.43	7.35
CAZ	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
CHA	0.57	0.43	0.63	0.65	0.68	0.70	0.71	0.71	0.69	0.66	0.62
EUR	2.03	1.25	1.07	1.12	1.17	1.13	1.09	1.06	1.04	1.02	0.98
IND	0.39	0.56	0.65	0.69	0.68	0.68	0.66	0.65	0.63	0.60	0.58
LAM	0.30	0.32	0.35	0.35	0.35	0.34	0.34	0.34	0.33	0.32	0.31
MEA	0.21	0.22	0.30	0.34	0.34	0.41	0.51	0.61	0.73	0.80	0.84
NEU	0.19	0.15	0.14	0.30	0.51	0.62	0.71	0.78	0.81	0.85	0.87
OAS	0.16	0.23	0.28	0.29	0.30	0.30	0.30	0.30	0.29	0.31	0.35
REF	3.24	3.54	3.16	2.98	2.78	2.57	2.37	2.22	2.07	1.96	1.87
SSA	0.16	0.35	0.36	0.41	0.44	0.48	0.52	0.55	0.58	0.60	0.61
USA	0.30	0.26	0.25	0.25	0.25	0.25	0.24	0.23	0.23	0.23	0.22

Table 659: MAgPIE new_input — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

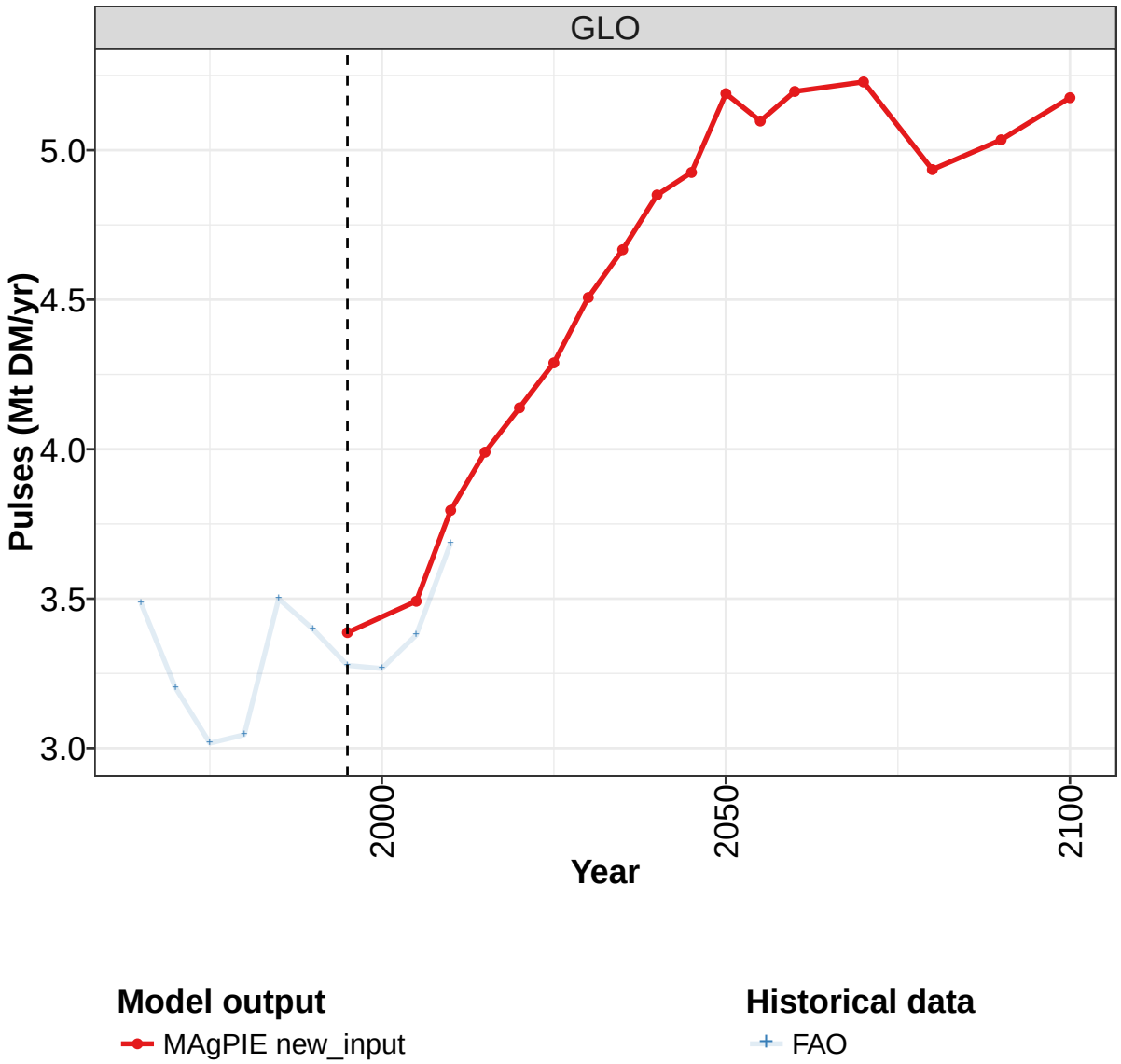
	2055	2060	2070	2080	2090	2100
GLO	7.43	7.48	7.21	6.81	6.38	6.09
CAZ	0.09	0.09	0.09	0.09	0.10	0.09
CHA	0.57	0.53	0.44	0.37	0.31	0.26
EUR	0.95	0.92	0.86	0.78	0.78	0.78
IND	0.56	0.53	0.47	0.42	0.36	0.32
LAM	0.29	0.28	0.26	0.26	0.26	0.26
MEA	0.90	1.00	1.14	1.21	1.20	1.19
NEU	0.89	0.89	0.90	0.90	0.90	0.90
OAS	0.37	0.36	0.34	0.32	0.29	0.27
REF	1.97	2.03	1.89	1.68	1.43	1.33
SSA	0.62	0.62	0.60	0.58	0.54	0.50
USA	0.22	0.22	0.22	0.21	0.21	0.20

Table 660: MAgPIE new_input — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.68	9.16	8.37	8.09	7.82	7.45	7.56	7.99	7.22	7.15
CAZ	0.08	0.07	0.06	0.07	0.07	0.08	0.10	0.11	0.10	0.08
CHA	0.40	0.42	0.40	0.47	0.50	0.57	0.62	0.62	0.44	0.64
EUR	3.74	3.44	2.99	2.68	2.55	2.20	1.96	1.72	1.22	1.07
IND	0.13	0.14	0.22	0.26	0.30	0.33	0.39	0.43	0.55	0.66
LAM	0.27	0.28	0.27	0.29	0.28	0.25	0.29	0.31	0.31	0.34
MEA	0.04	0.06	0.07	0.10	0.12	0.15	0.18	0.17	0.20	0.26
NEU	0.20	0.20	0.18	0.18	0.18	0.18	0.18	0.17	0.15	0.13
OAS	0.14	0.12	0.12	0.13	0.14	0.16	0.15	0.19	0.23	0.28
REF	4.40	4.14	3.72	3.59	3.34	3.16	3.28	3.80	3.50	3.15
SSA	0.04	0.05	0.07	0.08	0.08	0.10	0.11	0.20	0.26	0.29
USA	0.23	0.24	0.26	0.24	0.25	0.28	0.31	0.27	0.26	0.25

Table 661: FAO — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr)

10.1.15 Other crops—Pulses



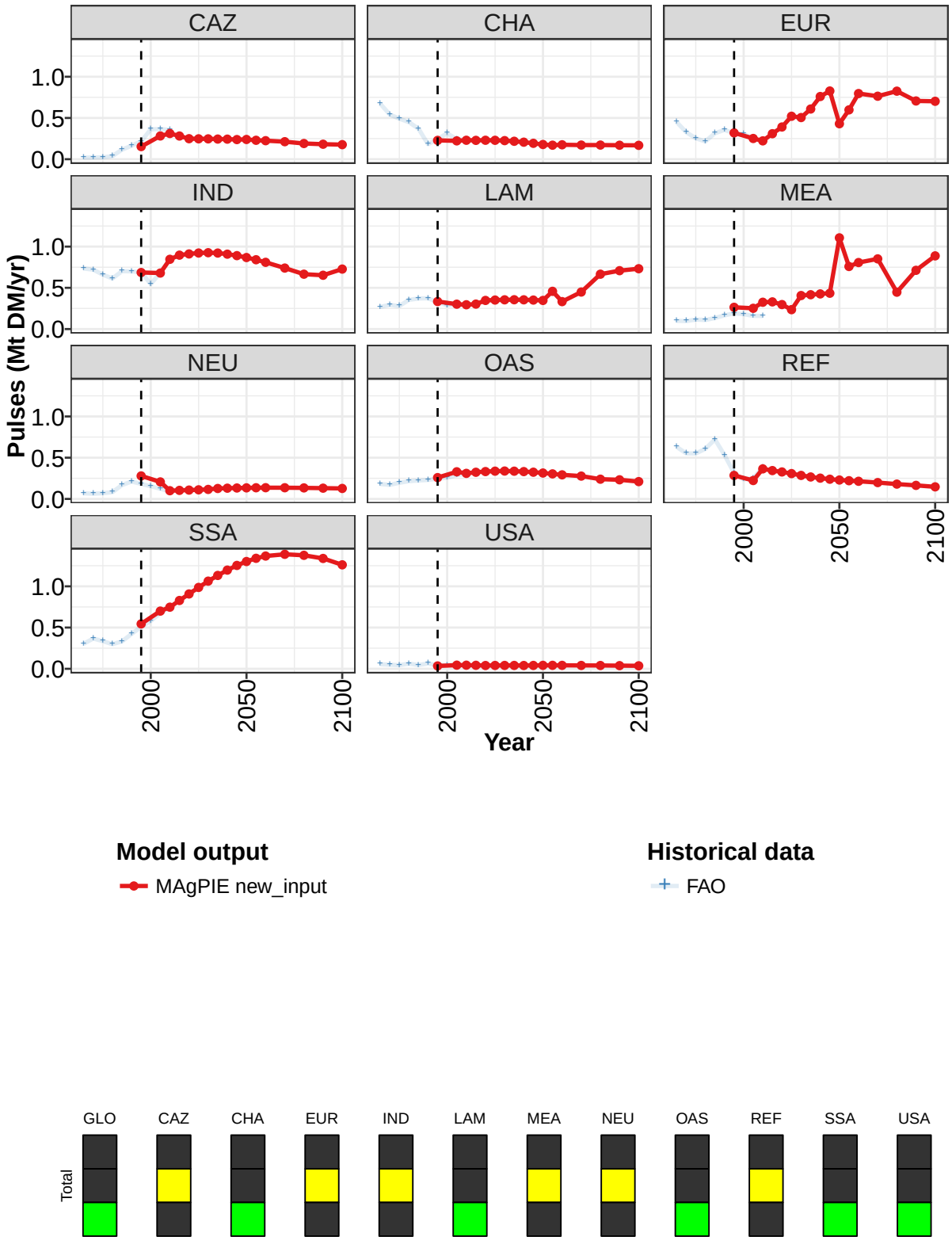


Figure 221: MAgPIE new_input — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.39	3.49	3.80	3.99	4.14	4.29	4.51	4.67	4.85	4.93	5.19
CAZ	0.15	0.28	0.31	0.28	0.25	0.25	0.25	0.24	0.24	0.24	0.24
CHA	0.23	0.22	0.23	0.23	0.23	0.23	0.23	0.22	0.21	0.19	0.18
EUR	0.32	0.25	0.22	0.31	0.39	0.52	0.51	0.61	0.76	0.83	0.43
IND	0.69	0.68	0.85	0.90	0.91	0.92	0.93	0.92	0.91	0.89	0.87
LAM	0.33	0.30	0.29	0.30	0.35	0.35	0.35	0.36	0.35	0.35	0.35
MEA	0.26	0.25	0.33	0.33	0.30	0.24	0.41	0.42	0.43	0.43	1.11
NEU	0.28	0.21	0.10	0.10	0.11	0.11	0.12	0.13	0.13	0.13	0.13
OAS	0.26	0.33	0.31	0.32	0.33	0.34	0.34	0.34	0.33	0.32	0.31
REF	0.29	0.22	0.36	0.34	0.33	0.31	0.29	0.27	0.25	0.24	0.23
SSA	0.54	0.70	0.75	0.83	0.91	0.99	1.06	1.13	1.20	1.25	1.30
USA	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Table 662: MAgPIE new_input — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

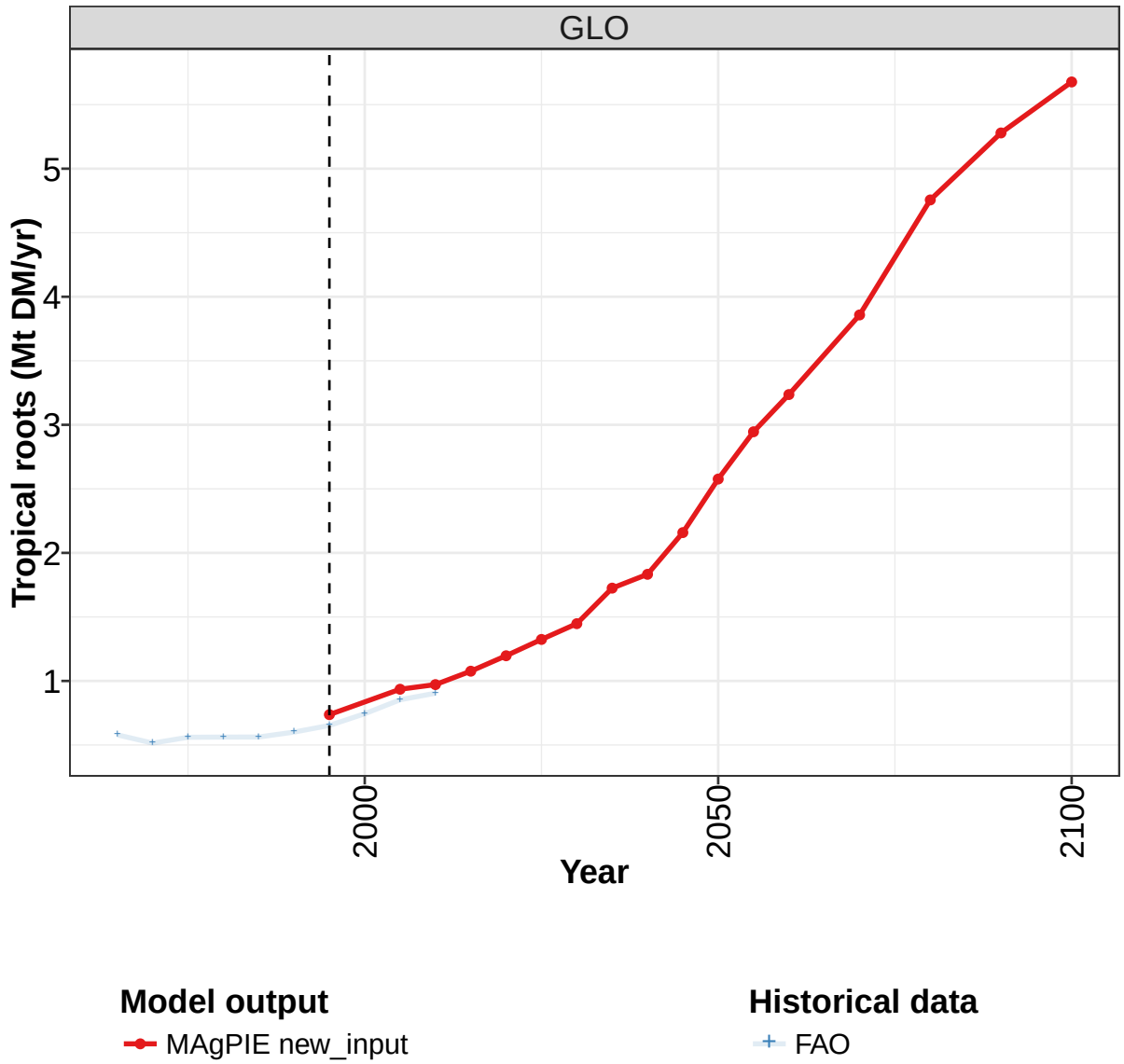
	2055	2060	2070	2080	2090	2100
GLO	5.10	5.20	5.23	4.94	5.03	5.18
CAZ	0.23	0.22	0.21	0.19	0.18	0.18
CHA	0.17	0.17	0.17	0.17	0.17	0.17
EUR	0.60	0.80	0.76	0.83	0.71	0.70
IND	0.84	0.81	0.74	0.67	0.65	0.73
LAM	0.46	0.33	0.45	0.67	0.71	0.73
MEA	0.76	0.81	0.85	0.45	0.71	0.89
NEU	0.14	0.14	0.14	0.13	0.13	0.13
OAS	0.30	0.29	0.28	0.24	0.23	0.21
REF	0.22	0.21	0.20	0.18	0.16	0.15
SSA	1.34	1.37	1.39	1.38	1.34	1.26
USA	0.04	0.04	0.04	0.04	0.04	0.04

Table 663: MAgPIE new_input — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.49	3.20	3.02	3.04	3.50	3.40	3.28	3.27	3.38	3.69
CAZ	0.02	0.02	0.02	0.04	0.12	0.16	0.22	0.36	0.37	0.35
CHA	0.67	0.54	0.49	0.45	0.37	0.18	0.25	0.31	0.24	0.24
EUR	0.45	0.33	0.25	0.22	0.32	0.36	0.31	0.30	0.25	0.22
IND	0.73	0.72	0.66	0.61	0.70	0.70	0.69	0.55	0.68	0.85
LAM	0.27	0.29	0.28	0.35	0.37	0.37	0.33	0.29	0.30	0.29
MEA	0.10	0.10	0.12	0.11	0.13	0.17	0.19	0.18	0.16	0.16
NEU	0.07	0.06	0.07	0.08	0.17	0.21	0.18	0.15	0.12	0.09
OAS	0.18	0.17	0.20	0.22	0.22	0.23	0.24	0.26	0.29	0.30
REF	0.63	0.55	0.55	0.61	0.72	0.53	0.32	0.24	0.25	0.38
SSA	0.30	0.37	0.33	0.30	0.33	0.42	0.51	0.58	0.67	0.75
USA	0.06	0.05	0.04	0.06	0.04	0.06	0.04	0.04	0.05	0.05

Table 664: FAO — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr)

10.1.16 Other crops—Tropical roots



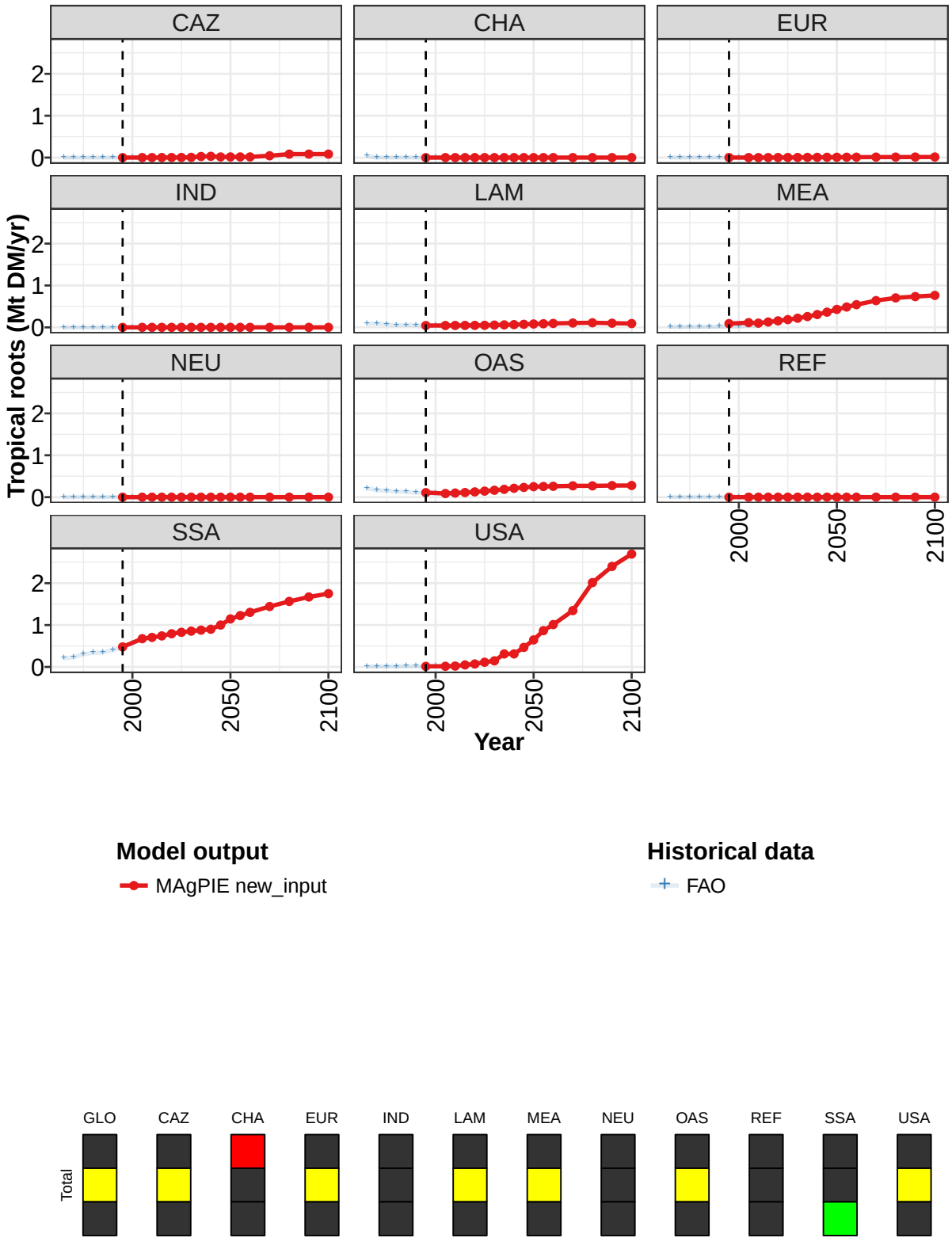


Figure 222: MAgPIE new_input — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.74	0.94	0.97	1.08	1.20	1.32	1.45	1.72	1.83	2.16	2.58
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.02	0.02
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.08
MEA	0.09	0.11	0.10	0.13	0.16	0.19	0.22	0.26	0.31	0.36	0.43
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.11	0.09	0.10	0.11	0.13	0.14	0.16	0.19	0.21	0.23	0.25
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.48	0.67	0.70	0.74	0.79	0.83	0.85	0.88	0.90	1.00	1.15
USA	0.01	0.02	0.02	0.05	0.07	0.11	0.15	0.31	0.31	0.47	0.65

Table 665: MAgPIE new_input — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

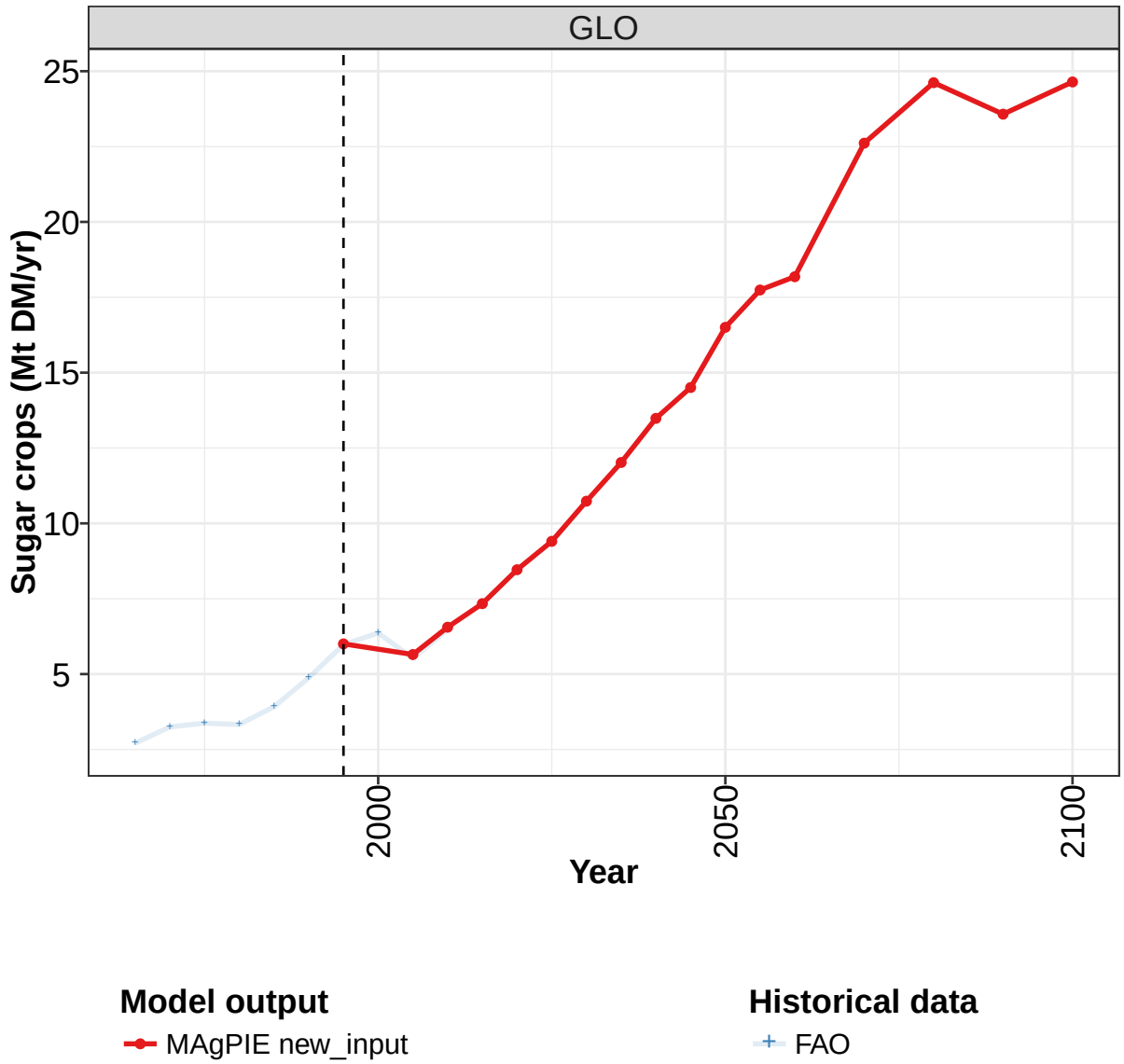
	2055	2060	2070	2080	2090	2100
GLO	2.95	3.24	3.86	4.76	5.28	5.68
CAZ	0.02	0.02	0.04	0.08	0.08	0.08
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.09	0.09	0.10	0.11	0.10	0.09
MEA	0.49	0.54	0.64	0.70	0.74	0.76
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.25	0.26	0.27	0.27	0.28	0.28
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.23	1.30	1.44	1.56	1.67	1.75
USA	0.87	1.01	1.35	2.01	2.40	2.70

Table 666: MAgPIE new_input — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.579	0.514	0.560	0.562	0.562	0.601	0.652	0.744	0.853	0.904
CAZ	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.001	0.001
CHA	0.040	0.000	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.085	0.090	0.073	0.056	0.057	0.054	0.042	0.049	0.044	0.045
MEA	0.019	0.016	0.017	0.018	0.018	0.020	0.023	0.026	0.039	0.037
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.215	0.166	0.156	0.134	0.127	0.107	0.104	0.091	0.087	0.090
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.207	0.230	0.300	0.339	0.343	0.403	0.468	0.561	0.666	0.711
USA	0.012	0.012	0.012	0.014	0.016	0.016	0.014	0.016	0.016	0.021

Table 667: FAO — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr)

10.1.17 Sugar crops



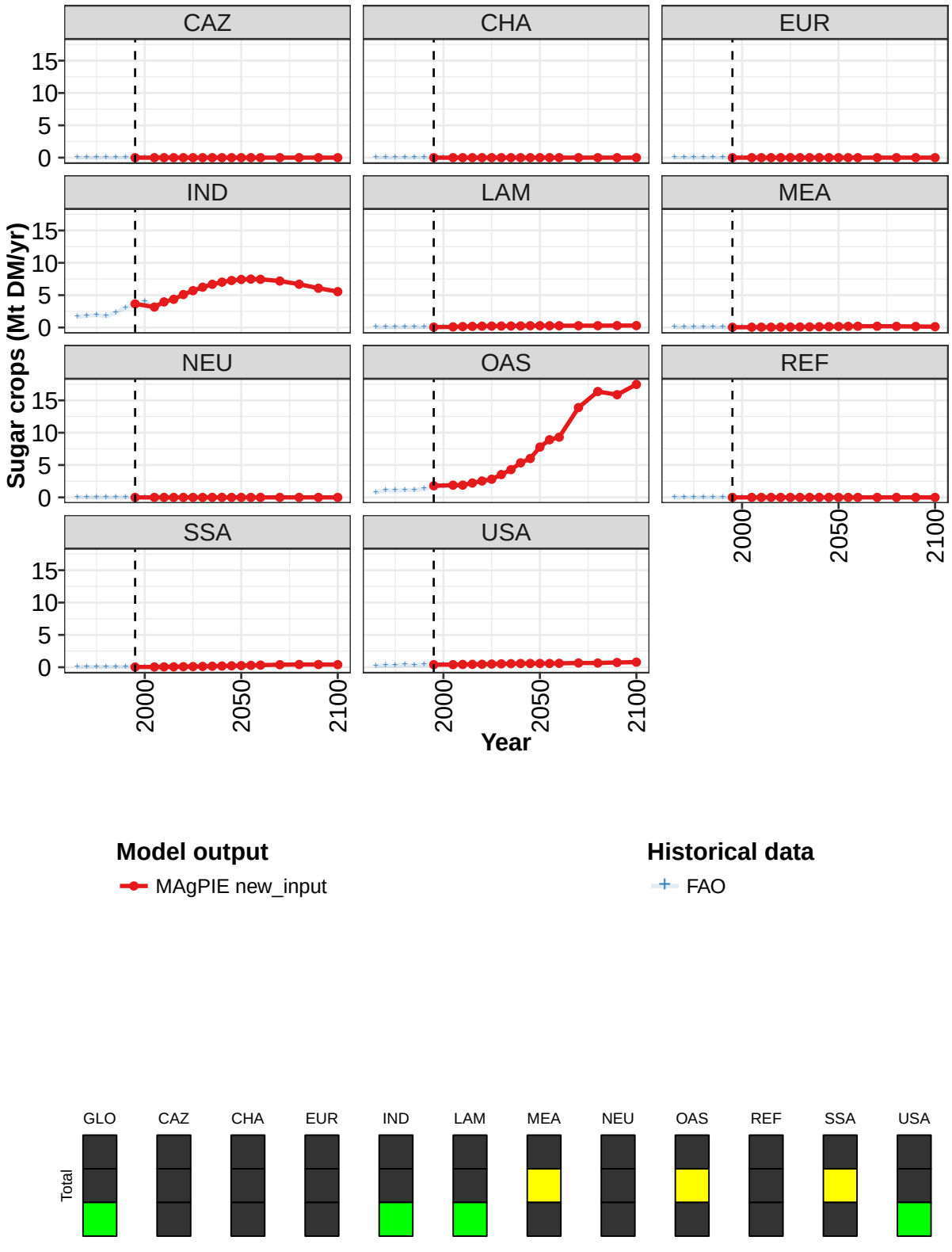


Figure 223: MAgPIE new_input — Demand—Seed—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.0	5.6	6.6	7.3	8.5	9.4	10.7	12.0	13.5	14.5	16.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.7	3.2	4.0	4.4	5.1	5.7	6.2	6.7	7.0	7.3	7.4
LAM	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
MEA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.8	1.9	1.9	2.2	2.5	2.8	3.5	4.3	5.3	6.0	7.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
USA	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6

Table 668: MAgPIE new_input — Demand—Seed—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

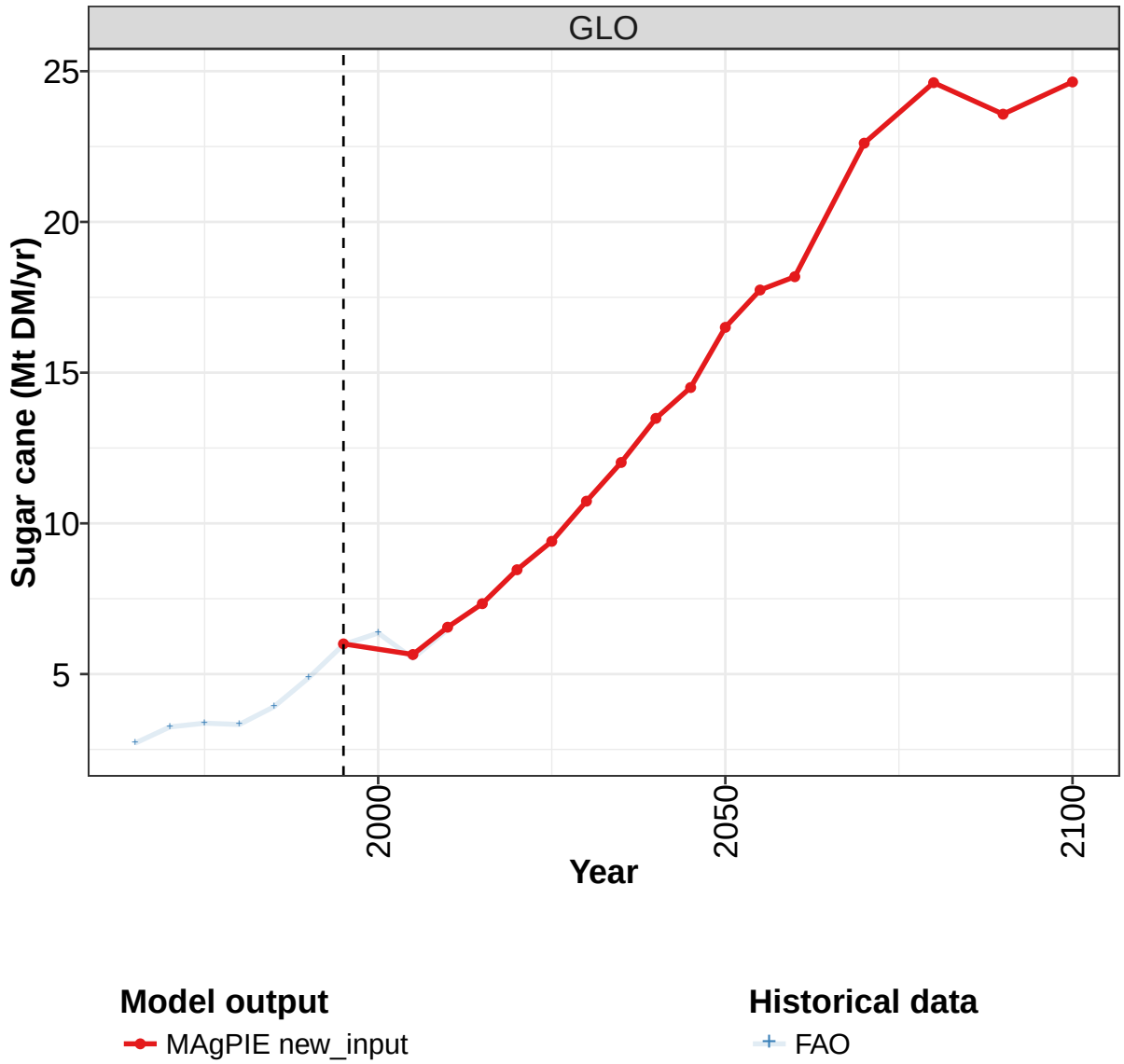
	2055	2060	2070	2080	2090	2100
GLO	17.7	18.2	22.6	24.6	23.6	24.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	7.5	7.5	7.2	6.7	6.1	5.6
LAM	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.2	0.2	0.2	0.2	0.2	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	8.9	9.3	13.9	16.4	15.9	17.5
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.3	0.3	0.4	0.4	0.4	0.4
USA	0.6	0.6	0.7	0.7	0.7	0.8

Table 669: MAgPIE new_input — Demand—Seed—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.71	3.25	3.37	3.33	3.92	4.88	5.98	6.36	5.52	6.48
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	1.65	1.82	1.95	1.74	2.30	3.05	3.72	4.04	3.20	3.95
LAM	0.03	0.04	0.05	0.08	0.07	0.06	0.06	0.09	0.10	0.15
MEA	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.77	1.09	1.05	1.11	1.15	1.29	1.71	1.70	1.72	1.83
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.06
USA	0.22	0.23	0.25	0.34	0.33	0.41	0.40	0.45	0.40	0.46

Table 670: FAO — Demand—Seed—Crops—Sugar crops (Mt DM/yr)

10.1.18 Sugar crops—Sugar cane



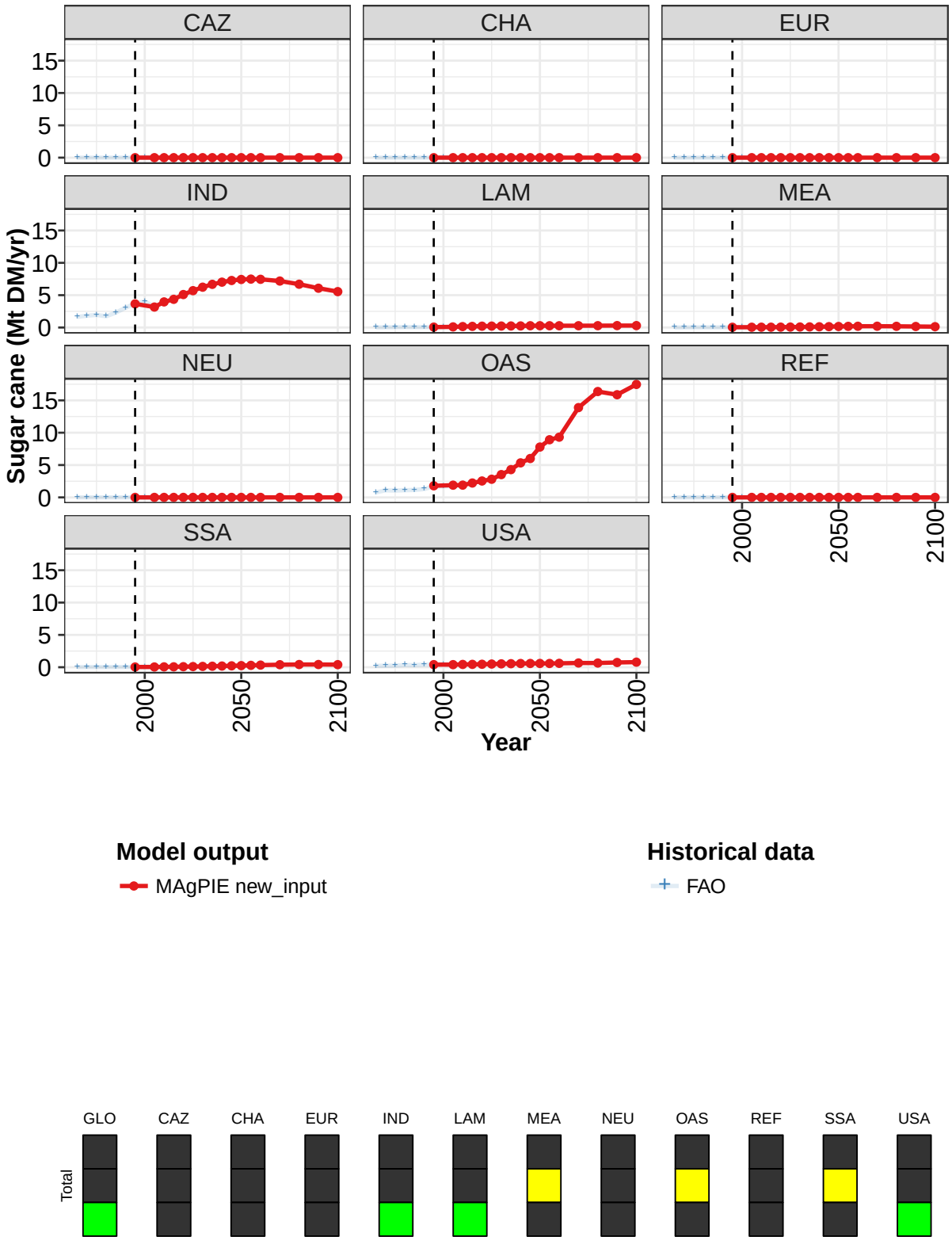


Figure 224: MAgPIE new_input — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.0	5.6	6.6	7.3	8.5	9.4	10.7	12.0	13.5	14.5	16.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.7	3.2	4.0	4.4	5.1	5.7	6.2	6.7	7.0	7.3	7.4
LAM	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
MEA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.8	1.9	1.9	2.2	2.5	2.8	3.5	4.3	5.3	6.0	7.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
USA	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6

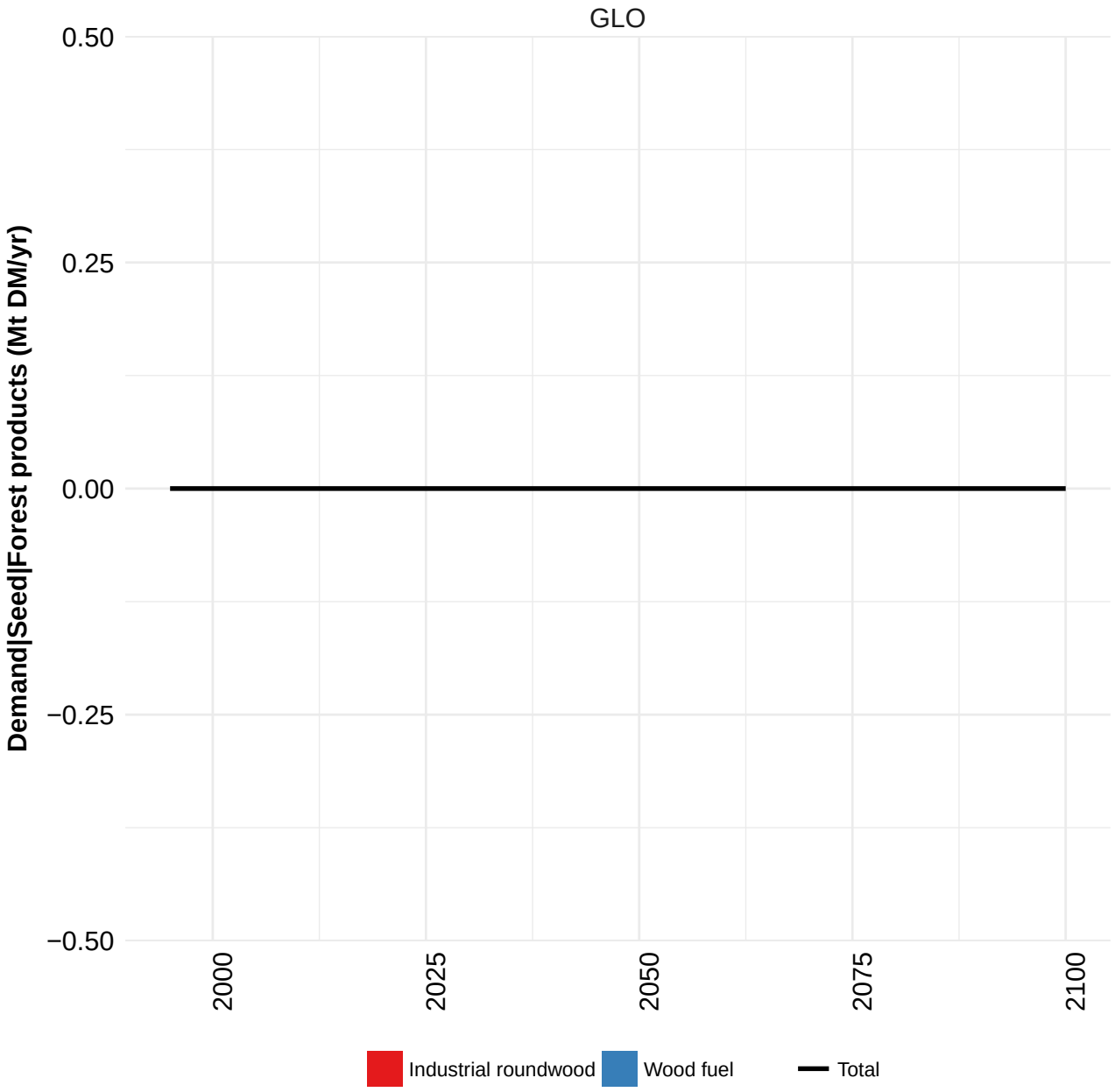
Table 671: MAgPIE new_input — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

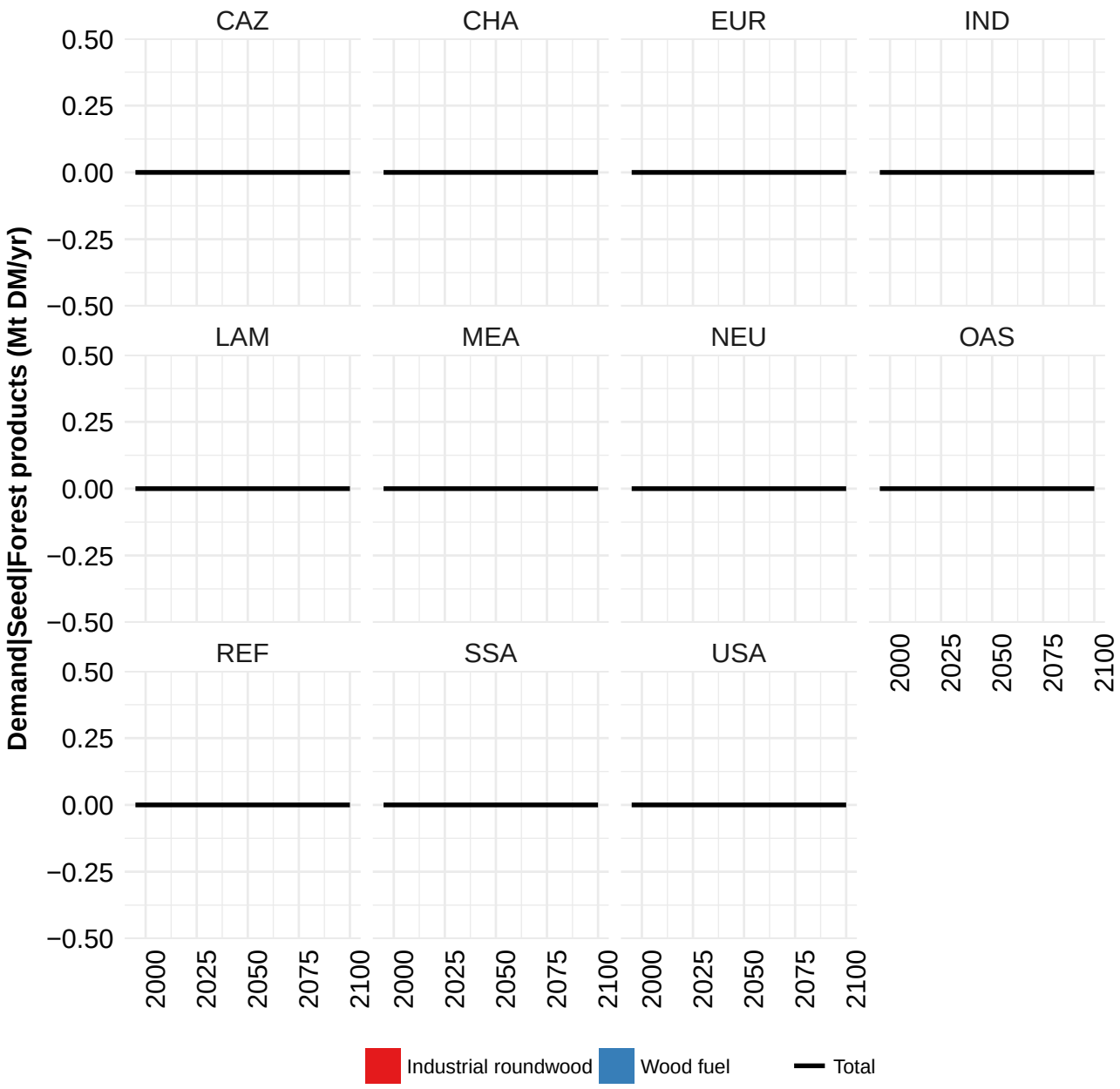
	2055	2060	2070	2080	2090	2100
GLO	17.7	18.2	22.6	24.6	23.6	24.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	7.5	7.5	7.2	6.7	6.1	5.6
LAM	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.2	0.2	0.2	0.2	0.2	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	8.9	9.3	13.9	16.4	15.9	17.5
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.3	0.3	0.4	0.4	0.4	0.4
USA	0.6	0.6	0.7	0.7	0.7	0.8

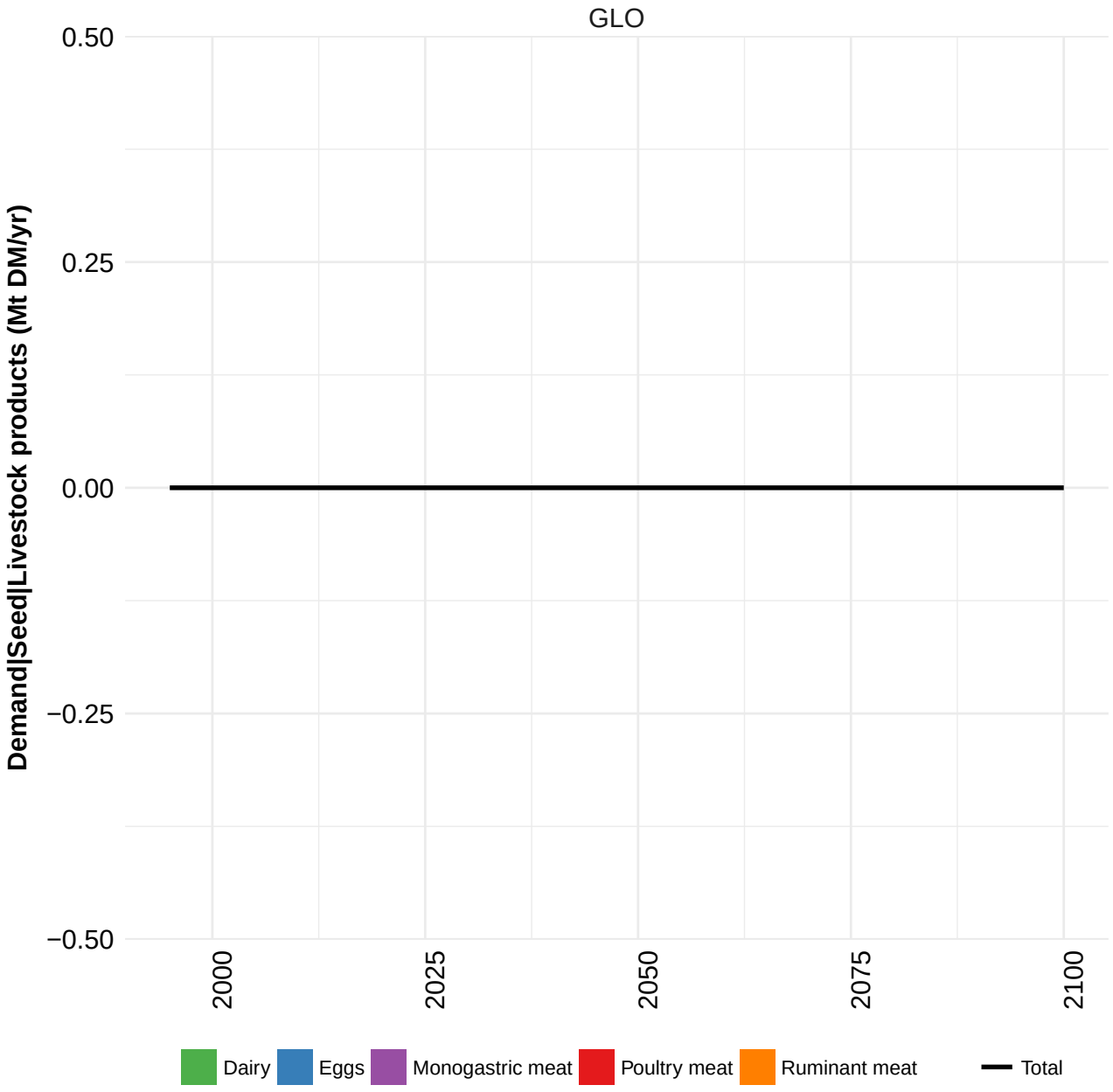
Table 672: MAgPIE new_input — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

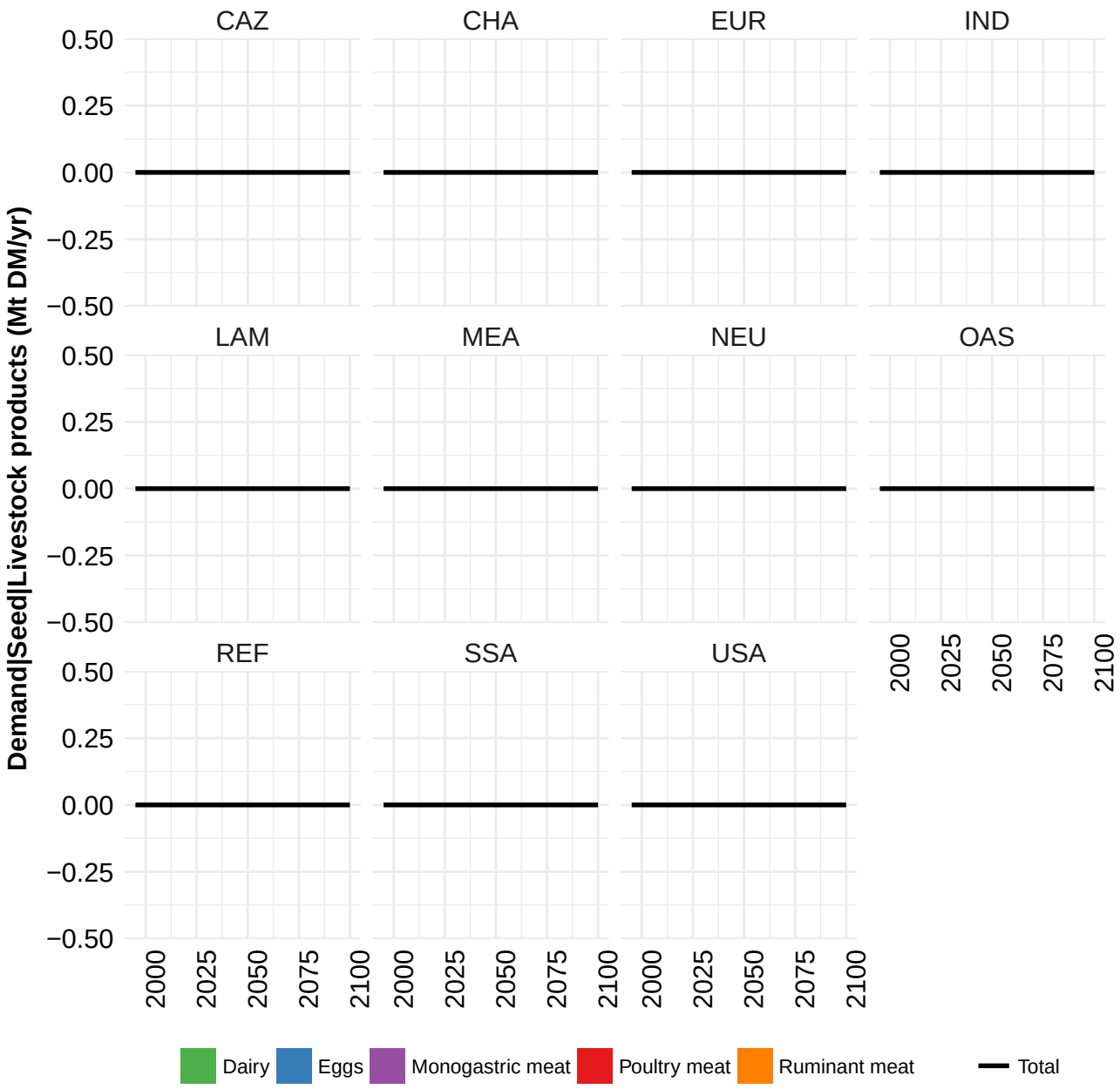
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.71	3.25	3.37	3.33	3.92	4.88	5.98	6.36	5.52	6.48
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	1.65	1.82	1.95	1.74	2.30	3.05	3.72	4.04	3.20	3.95
LAM	0.03	0.04	0.05	0.08	0.07	0.06	0.06	0.09	0.10	0.15
MEA	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.77	1.09	1.05	1.11	1.15	1.29	1.71	1.70	1.72	1.83
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.06
USA	0.22	0.23	0.25	0.34	0.33	0.41	0.40	0.45	0.40	0.46

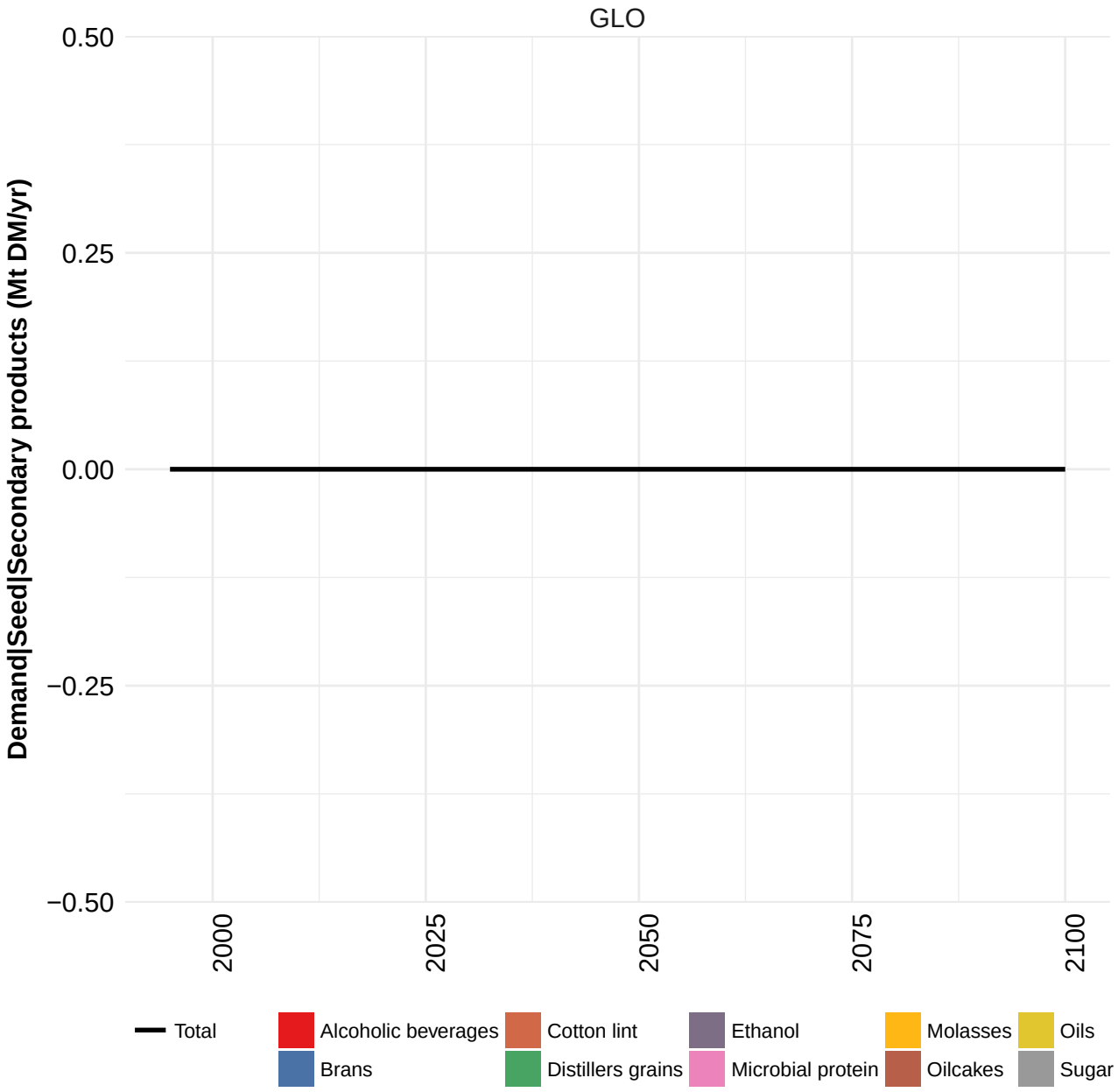
Table 673: FAO — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

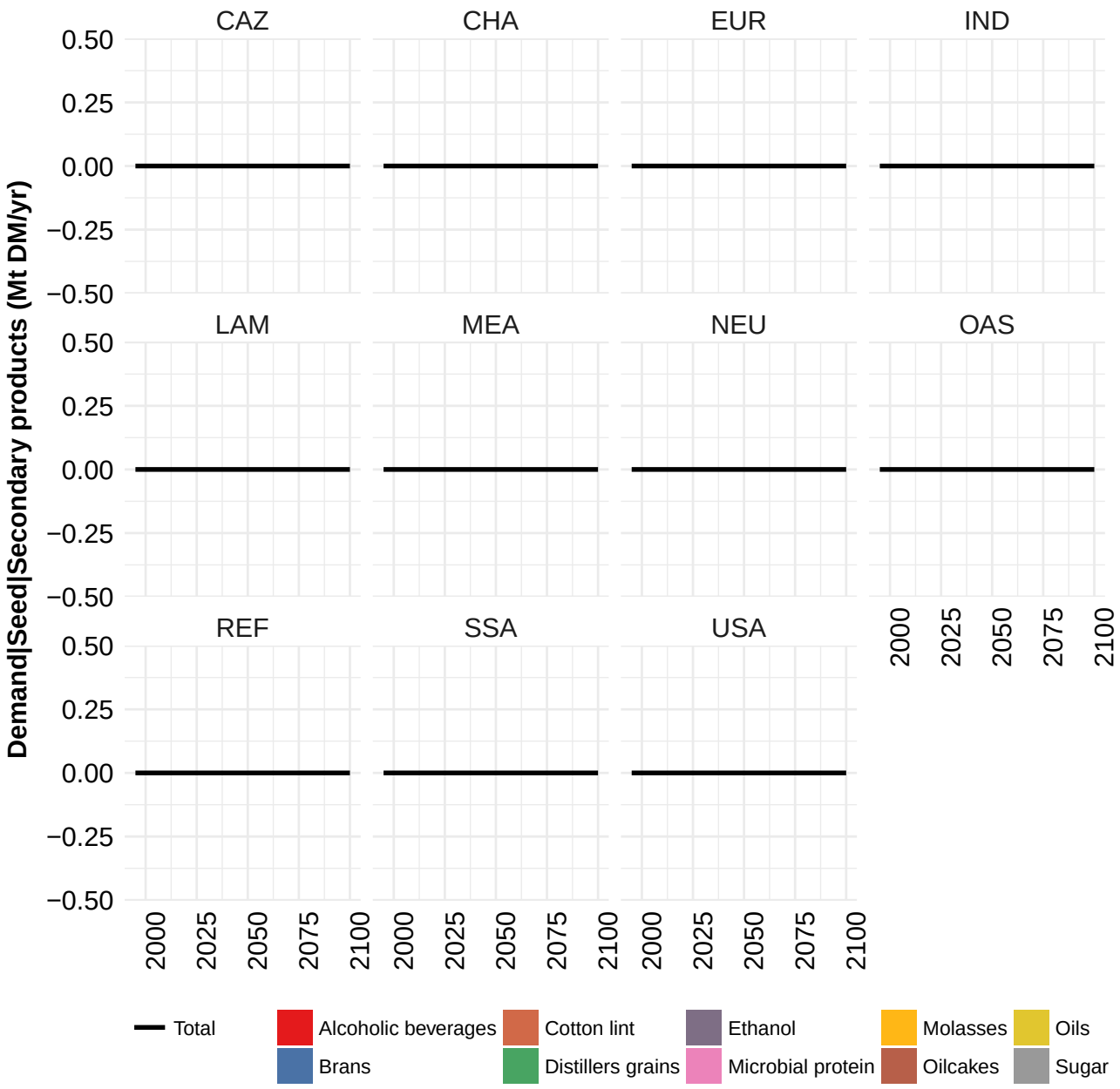

GLO
Demand|Seed|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Seed|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total


GLO
0.50
0.25
0.00
−0.25
−0.50
Demand|Seed|Livestock products (Mt DM/yr)
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total

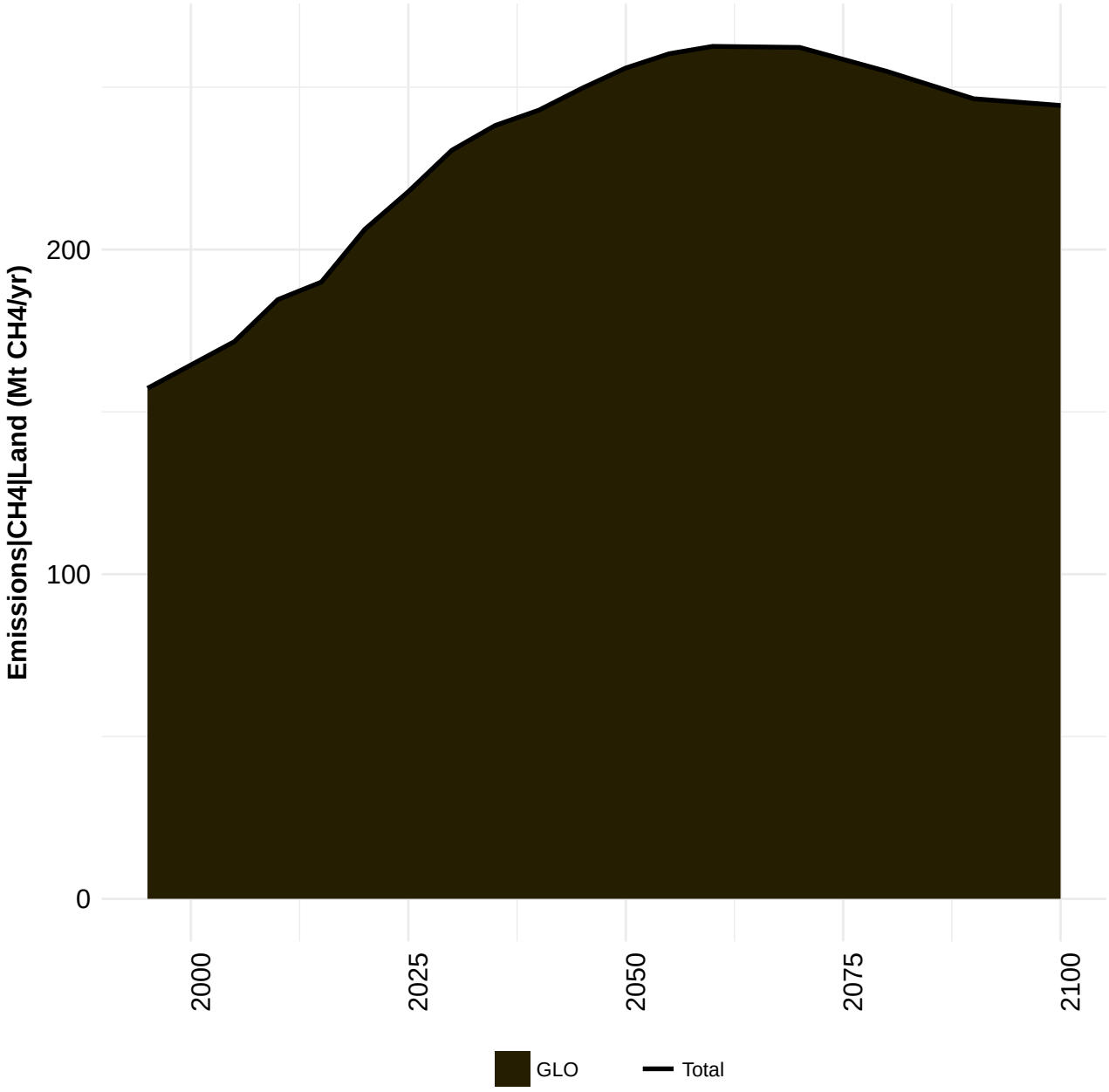

CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Seed|Livestock products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total

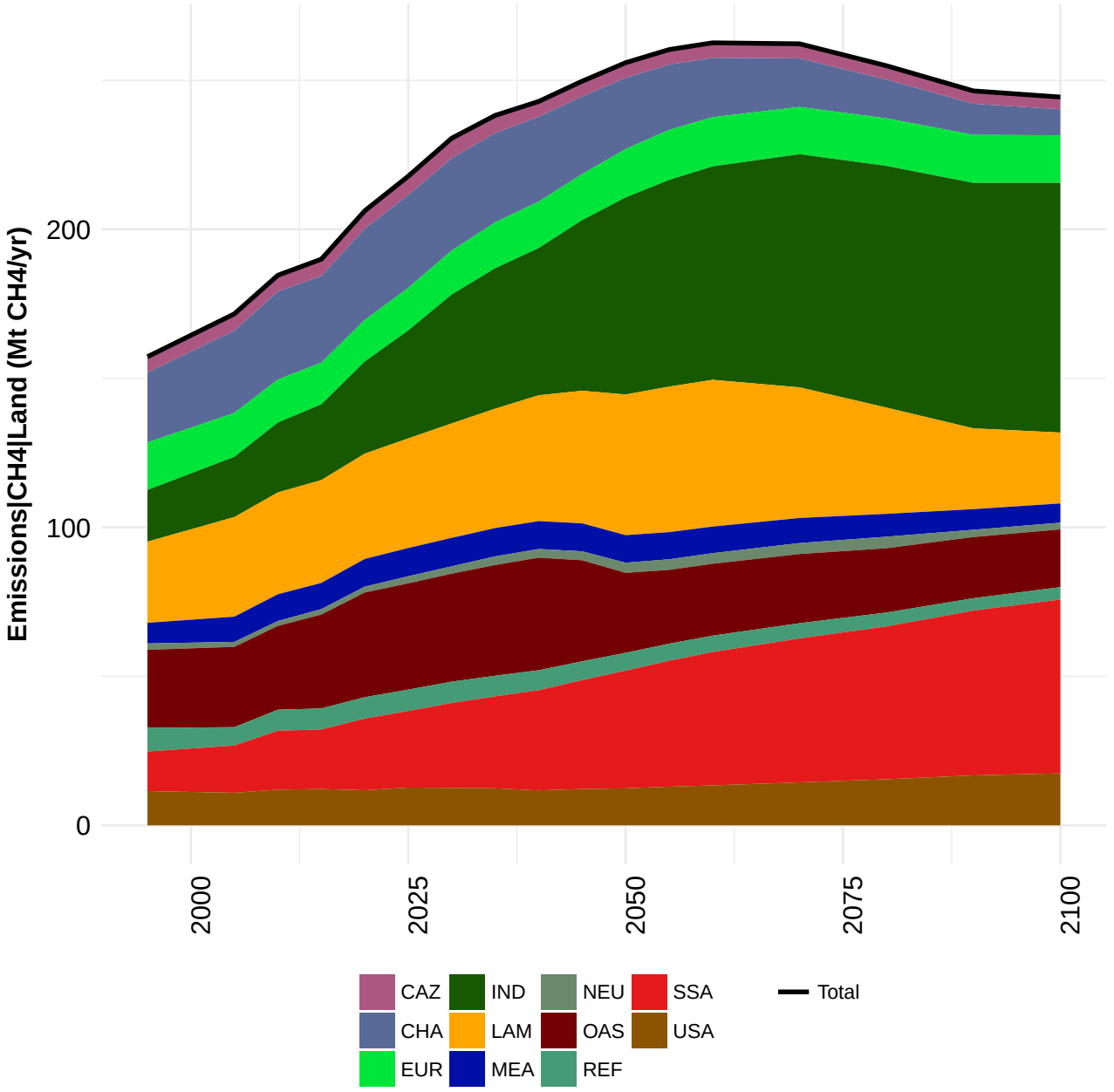

GLO
0.50
0.25
0.00
−0.25
−0.50
Demand|Seed|Secondary products (Mt DM/yr)
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Demand|Seed|Secondary products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar

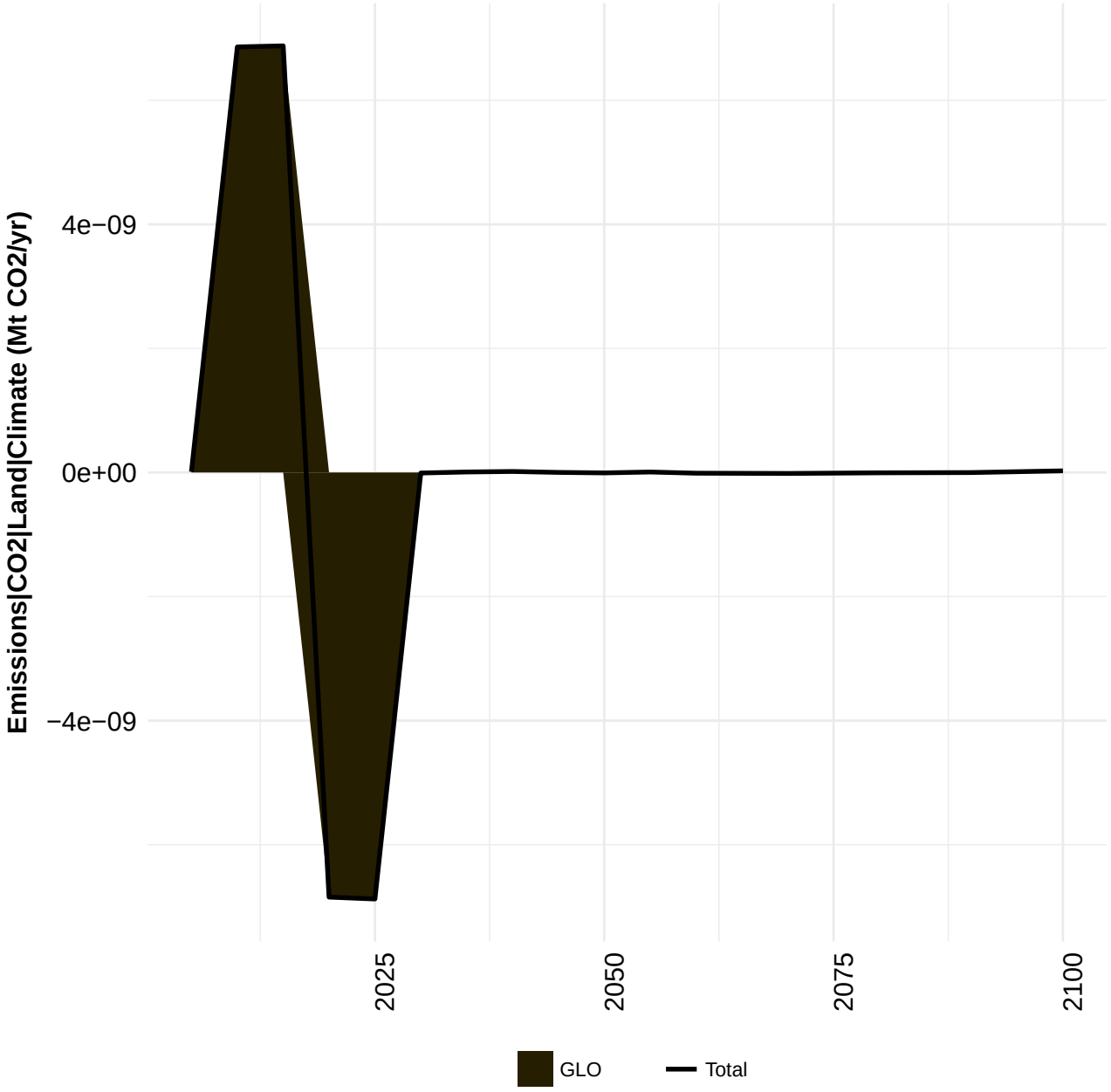
Part V
Emissions

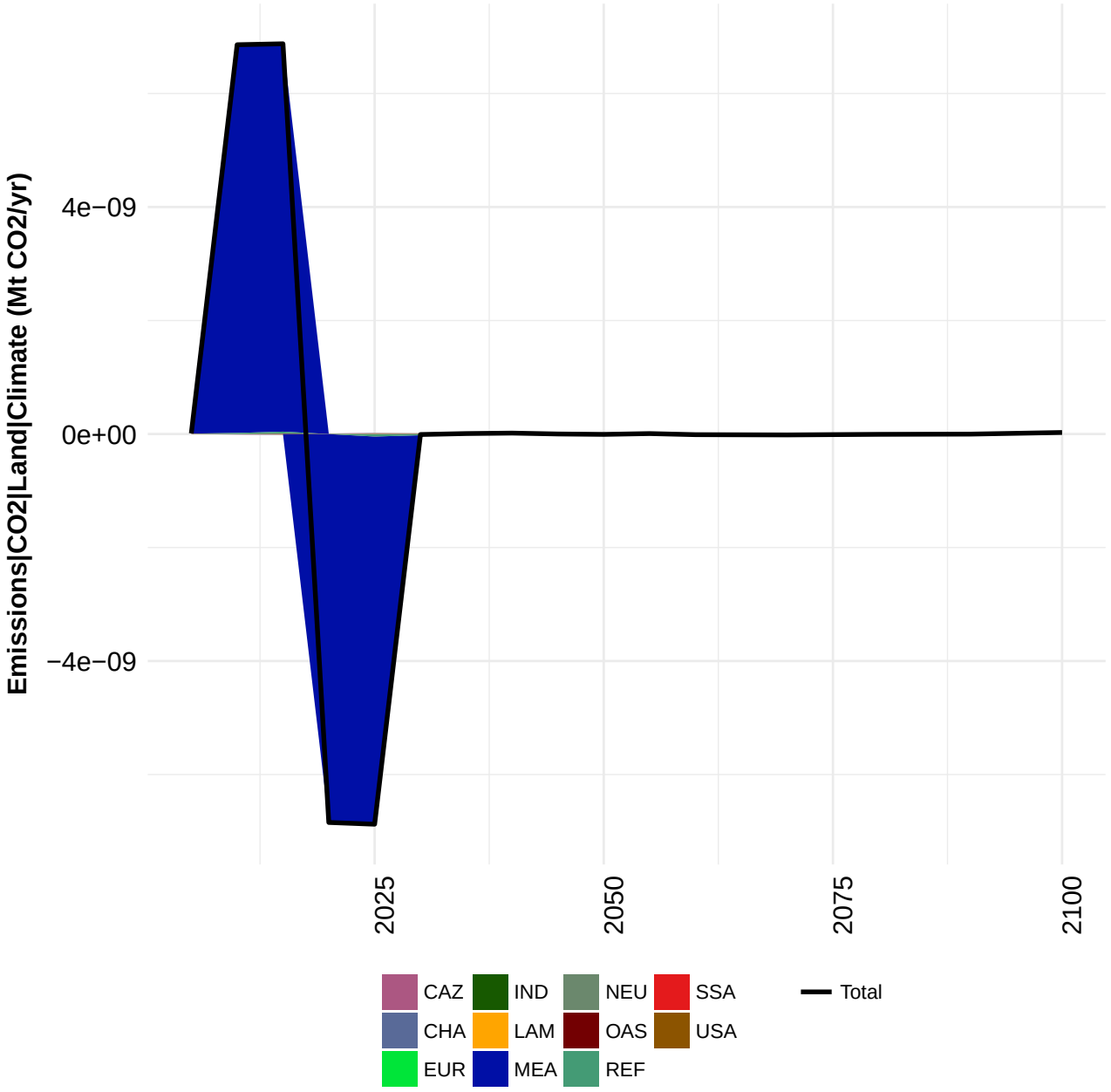
11 CH4




Emissions|CH4|Land (Mt CH4/yr)
200
100
0
2000
2025
2050
2075
2100
CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Total

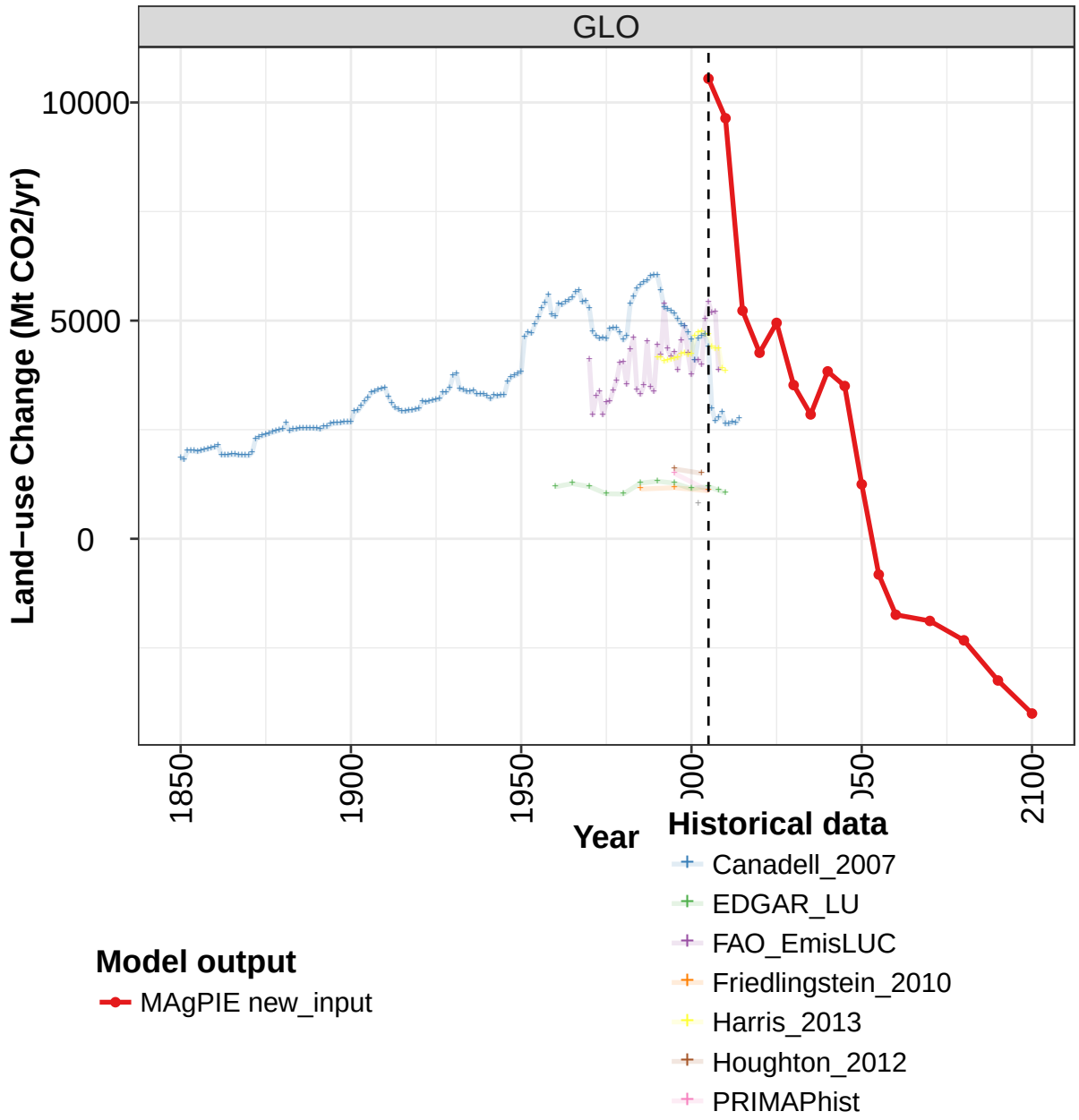
12 CO2


Emissions|CO2|Land|Climate (Mt CO2/yr)
4e−09
0e+00
−4e−09
2025
2050
2075
2100
GLO
Total


Emissions|CO2|Land|Climate (Mt CO2/yr)
4e−09
0e+00
−4e−09
2025
2050
2075
2100
CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Total

12.1 Land

12.1.1 Land-use Change



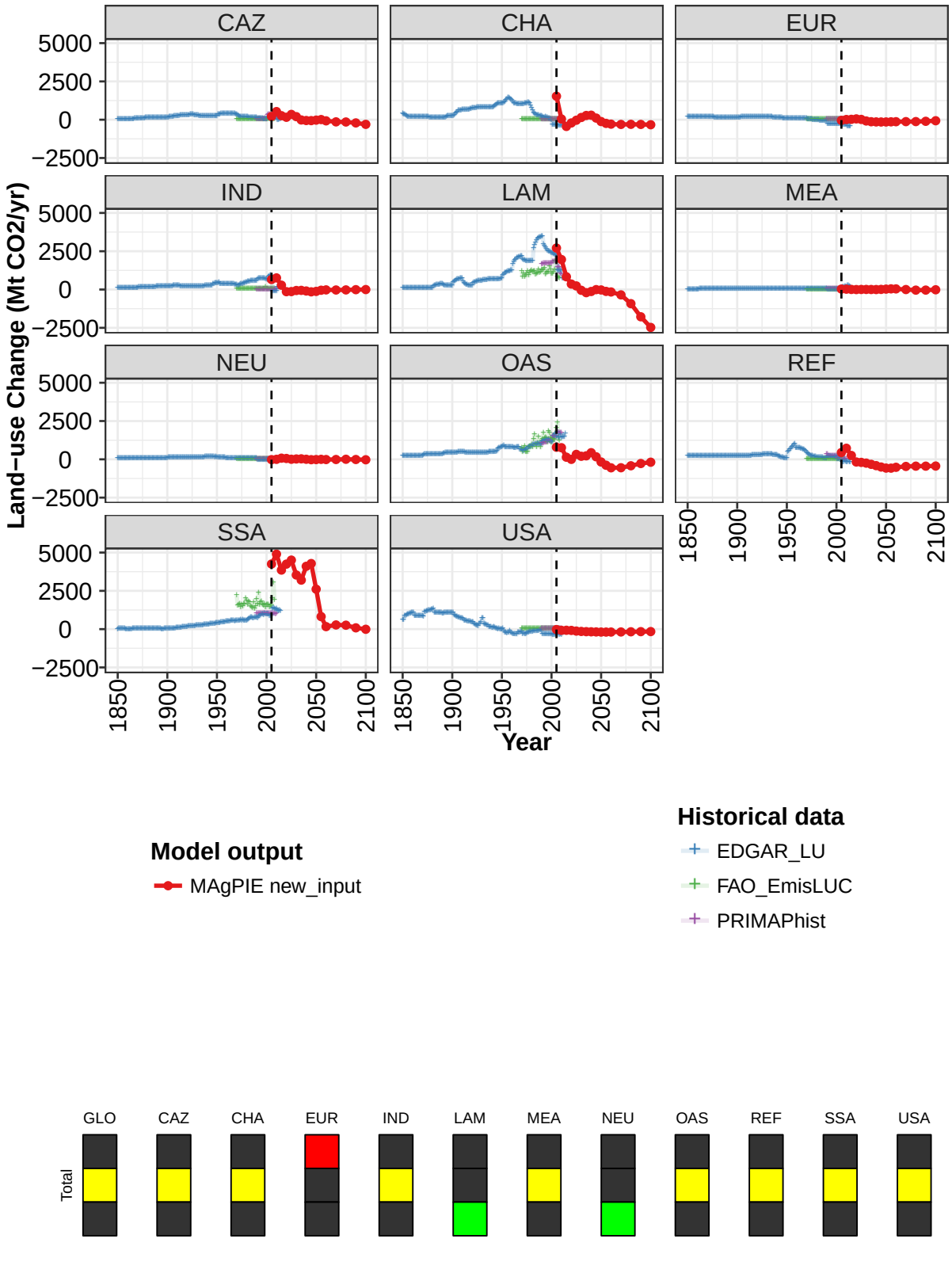


Figure 225: MAgPIE new_input — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055
GLO	10545	9638	5228	4264	4949	3523	2850	3837	3502	1249	-819
CAZ	215	531	263	159	346	200	-16	-51	-58	-27	11
CHA	1536	47	-438	-212	-34	146	276	296	107	-120	-239
EUR	-44	14	25	53	19	-82	-131	-142	-148	-145	-138
IND	655	759	284	-139	-134	-62	-54	-95	-150	-122	-46
LAM	2709	1959	833	357	235	-50	-203	-127	-6	-27	-122
MEA	29	23	6	-2	4	6	3	-0	9	27	45
NEU	-20	1	77	56	6	24	33	5	-22	-14	1
OAS	792	760	140	-1	323	201	229	434	167	-172	-384
REF	446	724	253	-172	-198	-247	-326	-411	-501	-571	-575
SSA	4253	4898	3857	4246	4507	3535	3202	4102	4283	2611	819
USA	-27	-78	-73	-83	-126	-149	-163	-173	-181	-190	-191

Table 674: MAgPIE new_input — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/2]

	2060	2070	2080	2090	2100
GLO	-1741	-1883	-2327	-3247	-4005
CAZ	-72	-140	-147	-209	-302
CHA	-289	-307	-301	-307	-327
EUR	-129	-124	-122	-103	-66
IND	-24	-30	-24	-8	-1
LAM	-159	-350	-922	-1779	-2474
MEA	41	-0	-39	-36	-15
NEU	-13	-11	6	-10	-28
OAS	-552	-549	-419	-272	-187
REF	-520	-463	-444	-445	-437
SSA	165	275	258	85	-9
USA	-188	-184	-172	-163	-159

Table 675: MAgPIE new_input — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/2]

	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860
GLO	1841	1812	2018	2010	2003	1992	2014	2034	2051	2079	2095
CAZ	29	28	28	28	28	28	28	28	28	28	27
CHA	368	336	303	268	233	196	191	186	182	179	177
EUR	176	176	176	176	176	176	176	176	176	176	176
IND	106	106	106	106	106	106	106	106	106	107	107
LAM	87	85	85	84	83	82	81	81	80	80	78
MEA	4	4	4	4	4	4	4	4	4	4	4
NEU	48	48	48	48	48	48	48	48	48	48	48
OAS	219	217	217	216	216	215	215	215	216	216	216
REF	208	208	209	210	211	212	214	215	216	218	219
SSA	-5	-4	-4	-4	-4	-4	-4	-4	-5	-6	-7
USA	601	607	845	874	902	929	955	979	1000	1030	1050

Table 676: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/16]

	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871
GLO	2136	1916	1916	1918	1920	1921	1915	1910	1904	1900	1973
CAZ	28	34	36	38	41	43	45	47	49	52	71
CHA	175	173	169	167	166	165	164	163	162	162	161
EUR	176	176	176	176	177	177	178	178	179	179	161
IND	107	107	107	107	107	107	107	108	108	108	137
LAM	81	82	82	82	83	81	79	78	77	77	76
MEA	10	11	12	12	12	13	13	14	14	14	14
NEU	61	63	65	66	67	68	69	70	71	71	69
OAS	216	217	217	217	218	218	218	218	219	219	276
REF	221	191	191	191	191	191	190	189	189	189	189
SSA	-8	-7	-6	-5	-2	-2	-1	-1	-2	-2	-3
USA	1070	871	868	865	862	860	852	845	838	831	821

Table 677: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/16]

	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882
GLO	2286	2326	2353	2382	2410	2434	2459	2485	2507	2646	2469
CAZ	79	85	88	92	95	94	95	96	96	97	97
CHA	160	160	152	150	148	147	146	147	147	147	146
EUR	158	156	153	150	148	146	145	143	142	140	139
IND	144	148	152	155	157	158	160	161	162	163	163
LAM	76	75	75	75	75	77	79	80	82	198	232
MEA	15	15	15	15	16	16	16	16	16	16	17
NEU	70	70	70	70	70	70	70	71	71	71	71
OAS	290	300	307	313	316	319	322	325	327	328	329
REF	189	191	192	192	195	196	196	196	196	196	197
SSA	-4	-3	-2	-1	-0	-0	-0	0	-1	-1	-2
USA	1110	1130	1150	1170	1190	1210	1230	1250	1270	1290	1080

Table 678: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 3/16]

	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
GLO	2495	2506	2529	2533	2532	2531	2529	2517	2504	2557	2560
CAZ	98	98	99	99	100	100	100	100	101	101	101
CHA	145	144	144	143	143	142	142	142	142	142	142
EUR	137	136	135	136	136	137	138	138	139	140	140
IND	164	164	164	165	165	165	166	166	188	193	197
LAM	258	280	298	309	316	323	329	333	269	257	247
MEA	17	17	17	17	17	17	18	18	18	18	18
NEU	71	71	71	72	72	73	73	73	74	74	75
OAS	330	331	333	333	334	334	335	335	375	384	391
REF	197	197	199	199	199	200	200	201	201	201	203
SSA	-3	-2	-1	0	0	-0	-1	-1	-2	-2	-4
USA	1080	1070	1070	1060	1050	1040	1030	1010	999	1050	1050

Table 679: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 4/16]

	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
GLO	2618	2638	2647	2655	2664	2664	2671	2914	2926	3033	3130
CAZ	102	102	102	102	103	103	103	104	151	163	173
CHA	198	204	210	216	222	228	233	238	299	363	430
EUR	141	142	142	143	143	144	145	145	146	147	148
IND	200	202	204	205	206	207	208	208	209	209	209
LAM	239	234	230	226	224	223	221	447	512	564	608
MEA	18	18	18	19	19	19	19	22	22	23	23
NEU	75	75	76	76	77	77	77	84	85	86	87
OAS	398	402	405	407	409	411	412	414	416	418	420
REF	203	203	204	204	204	204	205	206	206	207	207
SSA	-5	-5	-5	-4	-2	-2	-2	-3	-1	4	10
USA	1050	1060	1060	1060	1060	1050	1050	1050	881	850	815

Table 680: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 5/16]

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
GLO	3229	3342	3374	3409	3434	3456	3243	3109	2996	2956	2913
CAZ	184	194	204	214	222	232	241	250	258	267	276
CHA	498	567	583	597	607	616	624	626	627	641	643
EUR	149	151	152	153	154	155	156	158	159	161	162
IND	210	221	223	225	227	228	229	230	202	196	192
LAM	646	664	677	689	698	706	479	413	359	314	273
MEA	23	24	24	24	24	24	24	24	25	25	25
NEU	88	89	89	90	90	91	91	92	92	93	93
OAS	423	443	449	453	456	459	461	463	415	405	398
REF	208	208	208	208	208	208	208	208	226	231	237
SSA	18	27	37	47	57	66	74	83	92	100	108
USA	781	755	728	709	690	671	655	562	541	524	507

Table 681: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 6/16]

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
GLO	2921	2932	2944	2965	2972	3148	3119	3147	3170	3182	3198
CAZ	284	287	290	292	295	298	300	303	305	308	310
CHA	644	662	681	699	717	736	745	754	763	771	779
EUR	163	165	167	168	170	171	173	174	176	177	176
IND	198	197	197	197	197	196	196	196	196	196	190
LAM	259	247	237	228	221	384	430	467	498	526	533
MEA	25	25	25	25	25	25	25	25	25	25	34
NEU	94	94	94	94	95	95	95	95	95	96	117
OAS	409	408	408	408	408	409	408	408	409	410	400
REF	241	246	250	255	260	264	269	274	279	284	289
SSA	116	125	134	142	151	158	165	171	177	182	187
USA	489	476	462	456	434	412	313	280	246	207	182

Table 682: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 7/16]

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
GLO	3342	3354	3453	3738	3777	3418	3406	3362	3356	3386	3303
CAZ	274	269	263	258	253	249	245	241	236	232	227
CHA	782	785	791	799	806	809	812	793	792	792	792
EUR	175	173	171	169	166	163	159	155	151	146	141
IND	189	188	188	187	187	187	187	188	188	211	216
LAM	539	544	546	550	593	606	614	621	627	634	640
MEA	37	39	39	39	40	41	41	42	42	43	43
NEU	122	126	127	127	128	129	130	130	131	131	132
OAS	397	397	397	396	396	396	397	397	398	438	449
REF	294	295	298	299	302	305	306	301	294	287	280
SSA	192	198	205	211	217	223	231	237	248	254	261
USA	341	341	429	703	688	311	284	257	249	218	120

Table 683: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 8/16]

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
GLO	3313	3307	3260	3196	3274	3254	3277	3282	3589	3700	3729
CAZ	223	220	215	211	212	212	213	213	214	214	214
CHA	792	792	792	792	836	881	929	977	1030	1030	1040
EUR	137	132	127	121	115	110	104	99	94	89	84
IND	221	224	226	230	233	236	240	243	341	366	385
LAM	647	652	657	652	650	649	647	647	658	669	681
MEA	44	44	44	45	45	46	46	46	46	46	47
NEU	132	132	132	133	133	132	133	132	132	133	132
OAS	456	462	467	473	480	487	494	501	673	717	749
REF	272	265	253	193	169	145	121	99	85	72	60
SSA	268	277	285	292	300	308	317	325	335	343	357
USA	122	108	60	55	101	48	33	0	-18	22	-19

Table 684: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 9/16]

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
GLO	3768	3815	4613	4714	4703	4901	5064	5277	5390	5576	5123
CAZ	213	214	303	330	352	355	359	360	360	359	359
CHA	1050	1050	1040	1110	1180	1250	1320	1390	1400	1370	1300
EUR	79	74	81	80	79	79	79	80	81	82	75
IND	398	409	417	428	370	365	365	364	365	358	360
LAM	694	707	922	991	1048	1095	1136	1159	1180	1197	1211
MEA	47	47	37	36	34	31	29	28	27	27	26
NEU	132	131	109	104	99	93	87	85	84	82	80
OAS	772	792	839	868	774	770	773	773	774	764	764
REF	50	45	452	533	611	686	762	842	920	998	742
SSA	371	386	401	389	400	411	423	435	448	458	469
USA	-39	-42	12	-154	-243	-236	-269	-240	-249	-120	-263

Table 685: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 10/16]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	5089	5367	5360	5412	5460	5517	5648	5675	5415	5435	5278
CAZ	358	356	357	356	356	356	355	355	354	352	350
CHA	1240	1160	1070	1030	1030	1020	1020	1020	1010	1010	1010
EUR	75	66	64	63	62	61	60	58	57	56	47
IND	362	367	353	356	350	357	364	371	290	280	273
LAM	1224	1647	1774	1877	1958	2029	2066	2097	2125	2148	2169
MEA	25	25	24	23	23	22	23	24	24	24	23
NEU	79	76	74	73	72	70	73	73	74	73	72
OAS	768	775	748	752	742	753	765	778	637	616	605
REF	752	732	720	708	699	687	646	604	563	526	408
SSA	479	487	491	510	517	526	523	527	512	538	513
USA	-274	-324	-315	-337	-348	-365	-247	-232	-229	-188	-193

Table 686: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 11/16]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	4738	4639	4585	4596	4567	4810	4820	4815	4709	4548	4635
CAZ	253	219	194	185	177	171	166	161	157	153	159
CHA	1010	1020	1030	1030	1050	1090	1100	1030	894	755	609
EUR	38	28	18	8	-2	-12	-22	-33	-44	-51	-56
IND	265	265	299	324	329	370	399	419	438	450	506
LAM	1967	1924	1889	1861	1842	1844	1847	1851	1856	1860	1869
MEA	23	23	23	24	24	24	24	24	24	24	18
NEU	70	69	68	67	66	64	63	61	60	59	46
OAS	556	544	596	636	642	713	762	793	821	838	936
REF	356	303	253	230	208	199	178	159	140	125	118
SSA	525	539	553	568	530	584	523	547	552	531	612
USA	-326	-295	-339	-336	-298	-236	-219	-198	-188	-196	-183

Table 687: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 12/16]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	5369	5543	5720	5807	5871	5914	6006	6038	6029	5690	5297
CAZ	145	140	134	127	120	114	108	103	97	57	55
CHA	443	366	339	299	278	257	235	241	221	185	145
EUR	-59	-62	-64	-66	-67	-67	-67	-67	-65	-276	-276
IND	515	522	529	532	529	529	539	549	557	669	696
LAM	2676	2880	3052	3199	3304	3363	3391	3414	3433	3435	2942
MEA	18	18	19	21	22	23	24	24	25	-13	-13
NEU	44	44	47	52	53	55	56	58	60	-52	-52
OAS	948	956	967	971	962	962	975	994	1005	1157	1205
REF	109	102	96	91	82	79	77	74	71	146	146
SSA	667	717	754	724	710	710	744	724	739	718	786
USA	-137	-140	-153	-142	-123	-111	-76	-77	-114	-336	-336

Table 688: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 13/16]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	5259	5212	5142	5025	4904	4869	4710	4555	4082	4586	4645
CAZ	52	49	47	44	43	42	41	40	95	94	97
CHA	144	156	113	100	77	45	19	-45	-339	-340	-339
EUR	-276	-276	-276	-276	-277	-276	-276	-276	-278	-278	-278
IND	717	711	709	705	696	689	670	655	629	834	885
LAM	2811	2702	2616	2533	2488	2445	2404	2380	2358	2293	2256
MEA	-13	-13	-13	-13	-13	-13	-13	-13	-16	-16	-16
NEU	-52	-52	-52	-52	-52	-52	-52	-52	-57	-57	-56
OAS	1241	1231	1225	1212	1273	1184	1150	1123	1132	1502	1580
REF	146	146	146	158	115	166	129	134	-15	-8	63
SSA	825	895	964	958	909	989	969	958	961	949	828
USA	-336	-336	-336	-343	-354	-349	-331	-349	-389	-388	-375

Table 689: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 14/16]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	4670	4397	2979	2698	2766	2899	2622	2623	2666	2649	2742
CAZ	93	94	147	135	141	110	159	-36	-17	27	5
CHA	-340	-340	-396	-396	-395	-395	-396	-312	-312	-312	-312
EUR	-278	-278	-340	-339	-340	-340	-340	-427	-427	-428	-428
IND	923	818	-127	-127	-127	-127	-127	121	121	121	121
LAM	2232	2226	1222	1217	1219	1221	1213	723	731	732	730
MEA	-16	-16	138	120	146	210	146	266	263	200	164
NEU	-57	-57	-163	-163	-163	-163	-163	-90	-90	-90	-90
OAS	1669	1460	1738	1400	1393	1614	1385	1440	1441	1446	1647
REF	-48	-30	-196	-200	-63	-163	-189	-180	-127	-181	-179
SSA	829	878	1327	1348	1337	1286	1308	1186	1163	1218	1156
USA	-338	-359	-372	-298	-383	-354	-373	-70	-80	-83	-72

Table 690: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 15/16]

	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2008
GLO	1192	1264	1197	1032	1025	1275	1319	1275	1149	1196	1112
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 691: RCP — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/2]

	2010
GLO	1057
CAZ	
CHA	
EUR	
IND	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 692: RCP — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/2]

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
GLO	4096	2840	3262	3364	2837	3110	3148	3392	3618	4023	4040
CAZ	14	10	21	10	13	17	26	26	16	26	30
CHA	4	2	3	5	2	2	2	4	5	5	6
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	32	32	32	32	32	32	32	32	32	32	32
LAM	1164	826	997	835	897	1010	1162	904	1087	1159	1225
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	707	460	655	846	472	461	474	788	846	790	922
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2175	1510	1554	1636	1421	1588	1452	1638	1631	2011	1825
USA	0	0	0	0	0	0	0	0	0	0	0

Table 693: EDGAR_LU — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/4]

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
GLO	3537	4325	4601	3409	3300	3506	4517	3472	3371	4441	4198
CAZ	13	25	16	16	30	21	13	13	14	18	24
CHA	5	5	10	6	5	6	8	6	4	7	6
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	32	32	32	40	33	33	33	33	33	33	33
LAM	1107	1187	1194	951	1003	1066	1299	1097	1099	1260	1204
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	794	1302	1604	933	803	1029	1456	1003	769	1181	1309
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1585	1773	1746	1463	1426	1351	1707	1320	1452	1942	1622
USA	0	0	0	0	0	0	0	0	0	0	0

Table 694: EDGAR_LU — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/4]

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GLO	5375	4345	4164	4268	3862	4527	4860	4239	3755	4074	4092
CAZ	18	14	29	14	14	18	10	7	34	38	60
CHA	10	8	7	8	6	6	5	6	4	4	4
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	33	33	33	33	33	33	24	145	38	56	31
LAM	1263	1390	990	1086	1128	1126	1474	1284	1007	1038	1097
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1692	1339	1380	1347	1097	1804	1729	1378	1076	1343	1316
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2359	1561	1726	1780	1585	1540	1619	1419	1596	1595	1584
USA	0	0	0	0	0	0	0	0	0	0	0

Table 695: EDGAR_LU — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 3/4]

	2003	2004	2005	2006	2007	2008
GLO	3986	5017	5419	5176	5197	3848
CAZ	36	19	14	9	30	7
CHA	4	4	4	3	3	3
EUR	0	0	0	0	0	0
IND	28	30	29	24	24	24
LAM	1262	1786	1873	787	752	706
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	1231	1661	1997	2360	1378	1205
REF	0	0	0	0	0	0
SSA	1426	1517	1502	1993	3011	1903
USA	0	0	0	0	0	0

Table 696: EDGAR_LU — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 4/4]

	1985	1995	2005
GLO	1140	1170	1100
CAZ			
CHA			
EUR			
IND			
LAM			
MEA			
NEU			
OAS			
REF			
SSA			
USA			

Table 697: Houghton_2012 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	4151	4151	4054	4080	4106	4132	4149	4229	4258	4215	4227
CAZ	36	36	36	36	36	36	29	22	65	36	22
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	26	26	22	22	22	22	22	22	22	22	23
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	1663	1663	1667	1670	1674	1678	1682	1685	1690	1693	1696
MEA	53	53	53	53	53	54	53	54	55	54	55
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1025	1024	1046	1067	1089	1110	1119	1232	1175	1188	1205
REF	329	329	211	211	211	211	216	190	222	198	202
SSA	1019	1019	1020	1021	1022	1022	1027	1024	1028	1023	1025
USA	0	0	0	0	0	0	0	0	0	0	0

Table 698: FAO_EmisLUC — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/2]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLO	4644	4724	4733	4670	4675	4399	4347	4348	3903	3843
CAZ	284	317	317	299	302	149	144	149	131	163
CHA	0	0	0	0	0	0	0	0	0	0
EUR	15	16	16	16	16	30	30	30	30	30
IND	0	0	0	0	0	0	0	0	0	0
LAM	1816	1818	1823	1824	1827	1437	1438	1441	996	944
MEA	13	18	11	15	13	21	19	23	30	23
NEU	2	2	2	2	2	0	0	0	0	0
OAS	1492	1521	1491	1506	1487	1768	1719	1709	1724	1689
REF	37	41	85	17	28	14	14	14	14	14
SSA	983	991	990	992	1001	979	982	982	978	981
USA	0	0	0	0	0	0	0	0	0	0

Table 699: FAO_EmisLUC — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/2]

	1995	2003
GLO	1600	1500
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 700: Canadell_2007 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

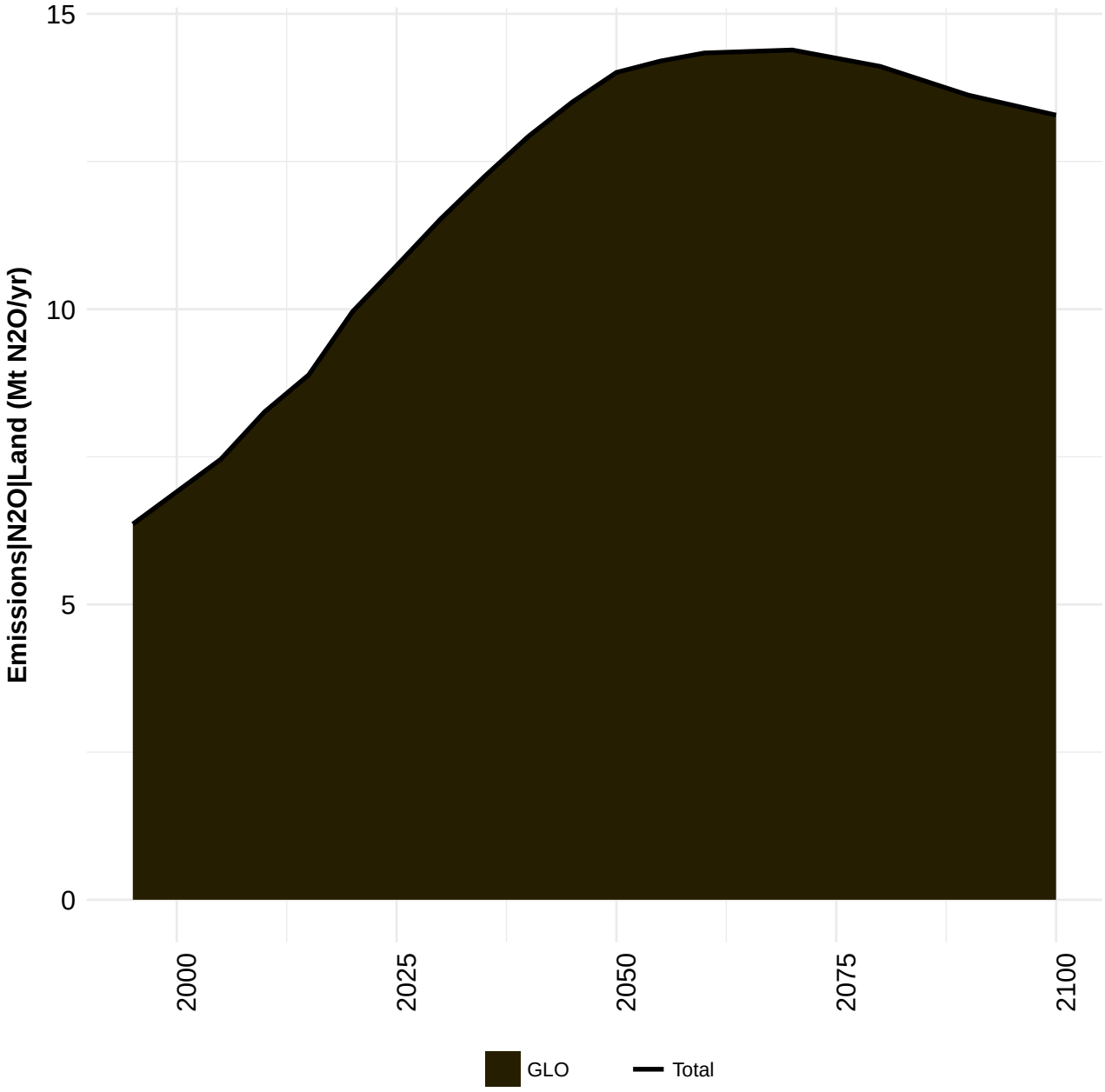
	1995	2005
GLO	1500	1100
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

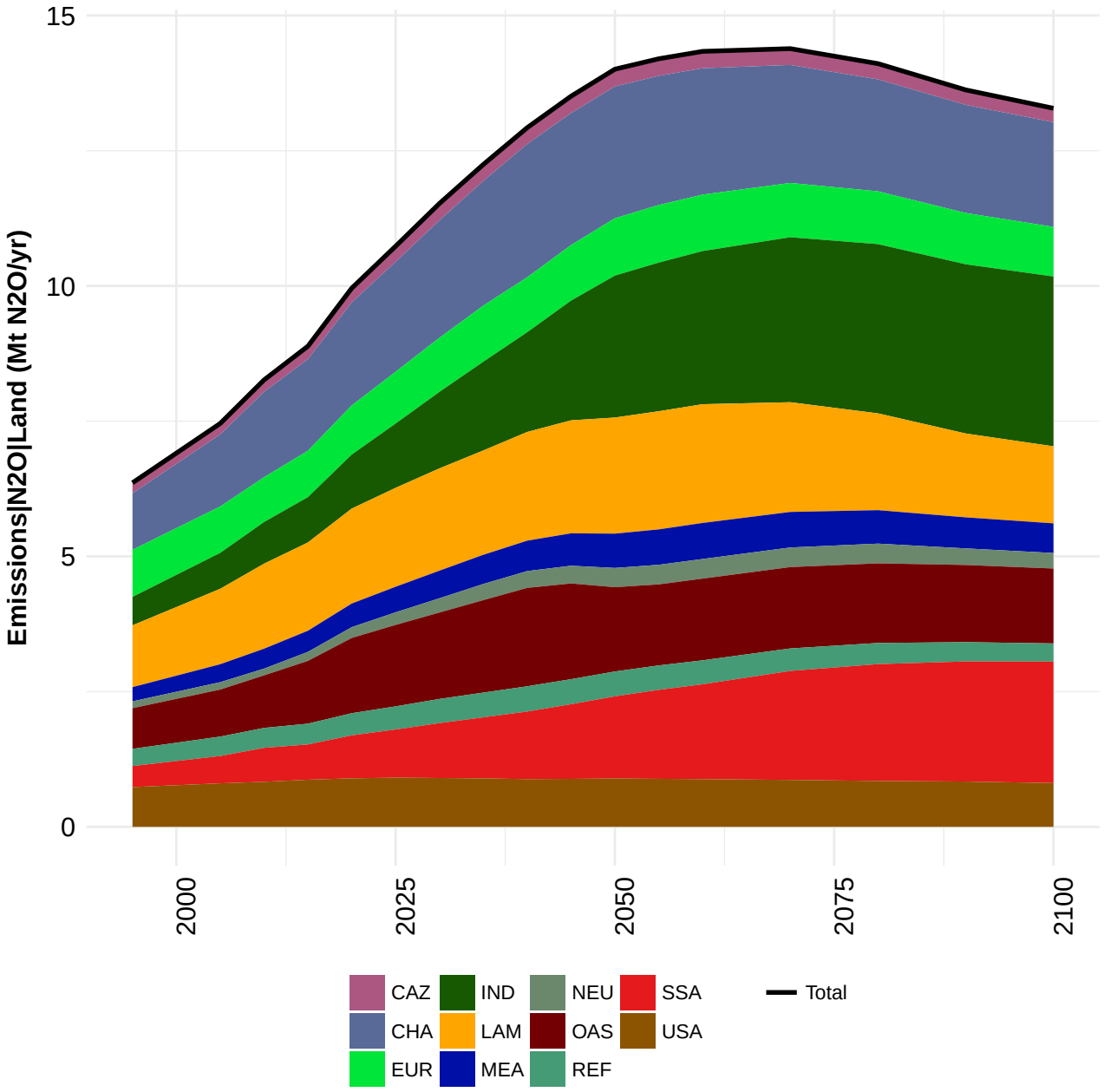
Table 701: Friedlingstein_2010 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

	2002
GLO	810
CAZ	
CHA	
EUR	
IND	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

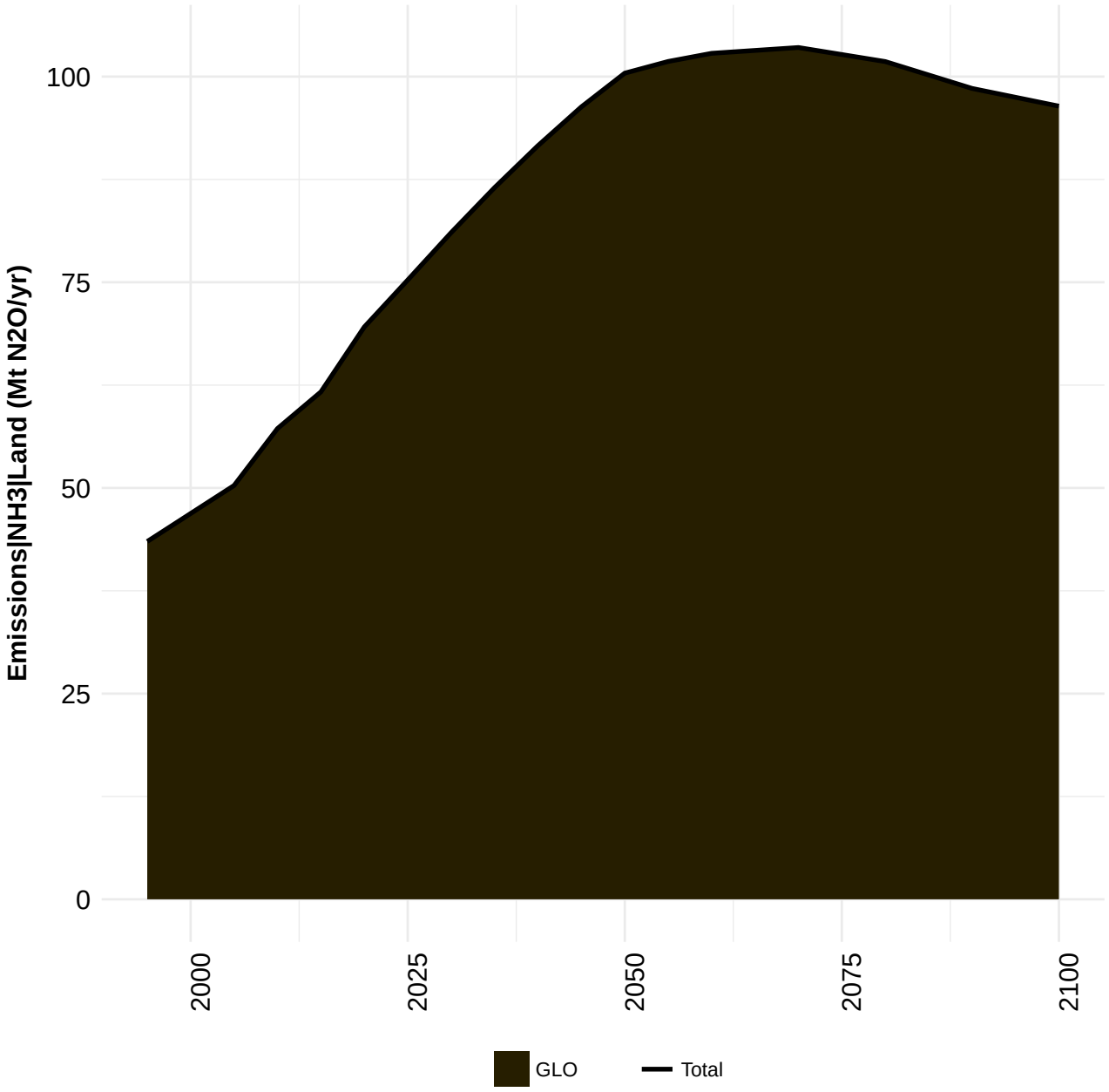
Table 702: Harris_2013 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

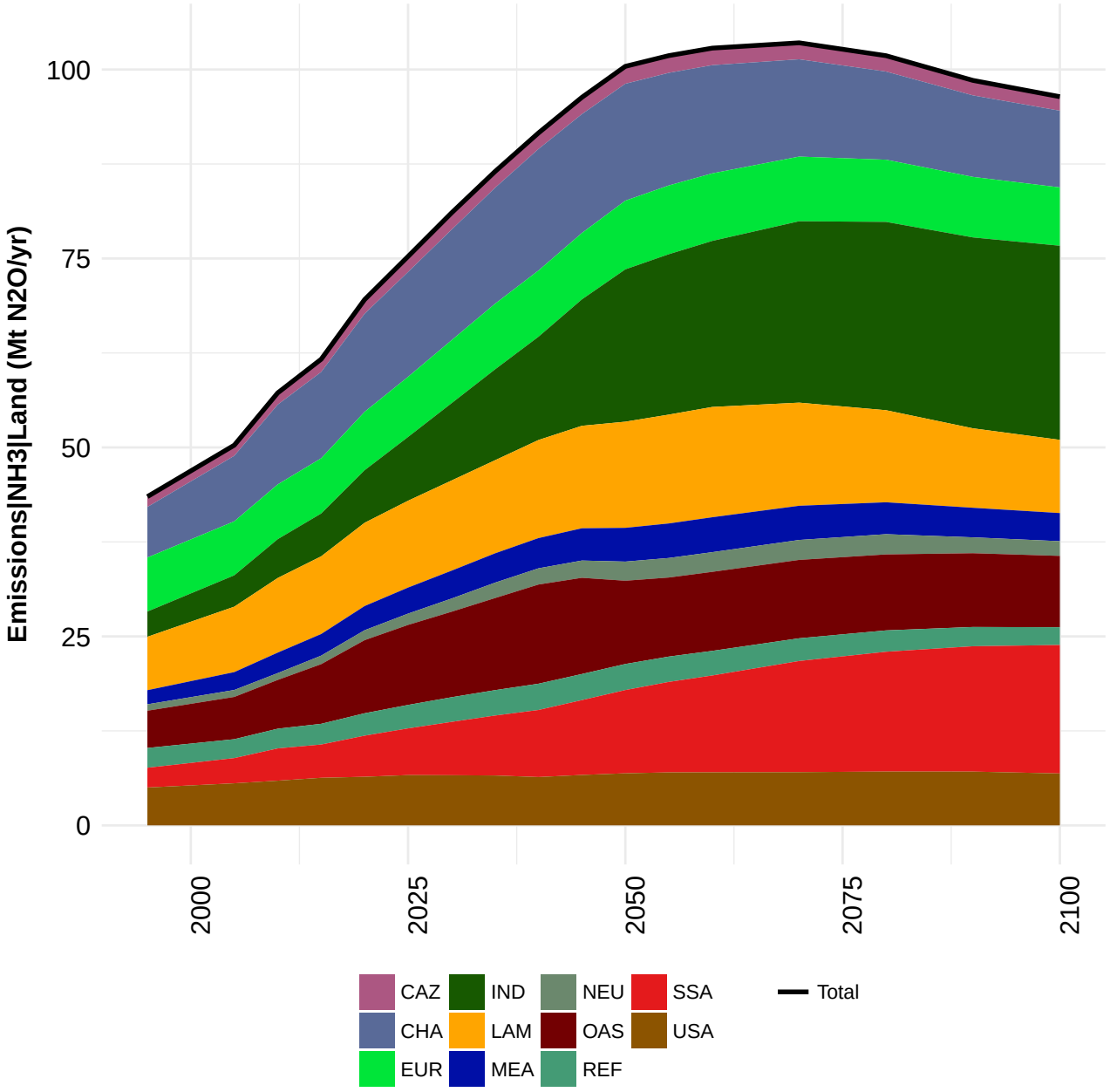
13 N2O


15
10
5
0
Emissions|N2O|Land (Mt N2O/yr)
2000
2025
2050
2075
2100
GLO
Total

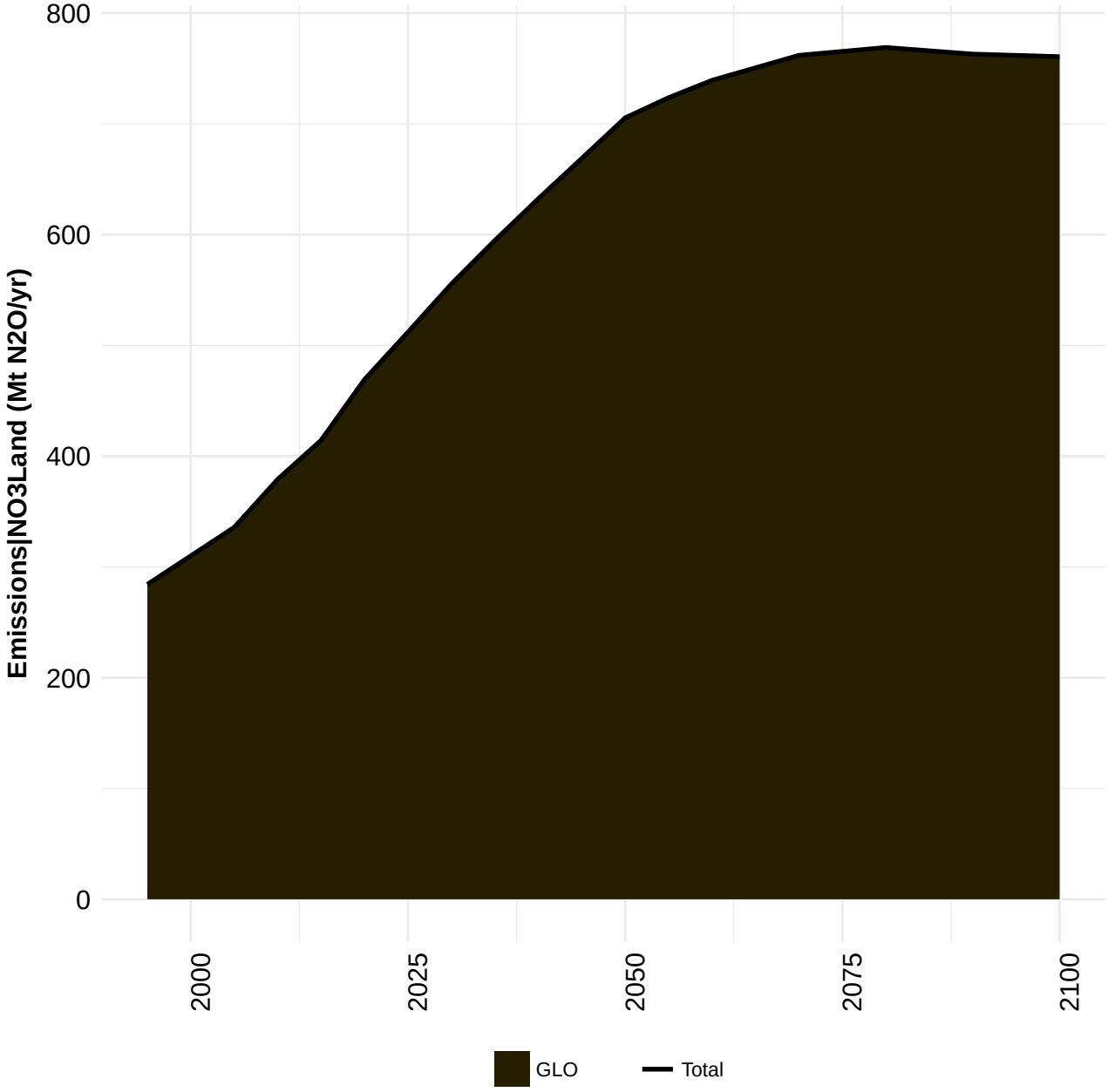

15
10
5
0
Emissions|N2O|Land (Mt N2O/yr)
2000
2025
2050
2075
2100
CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Total

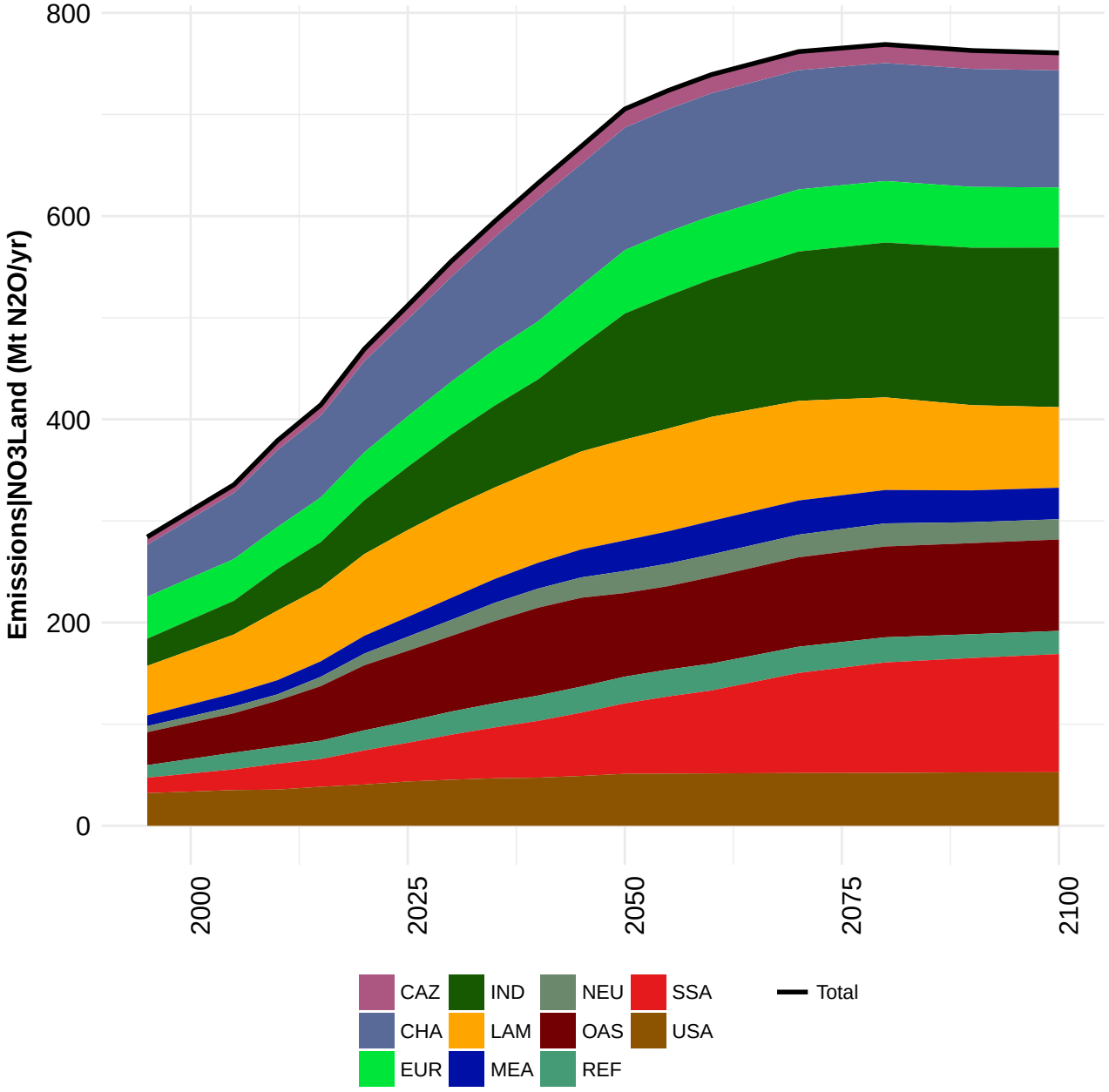
14 NH3

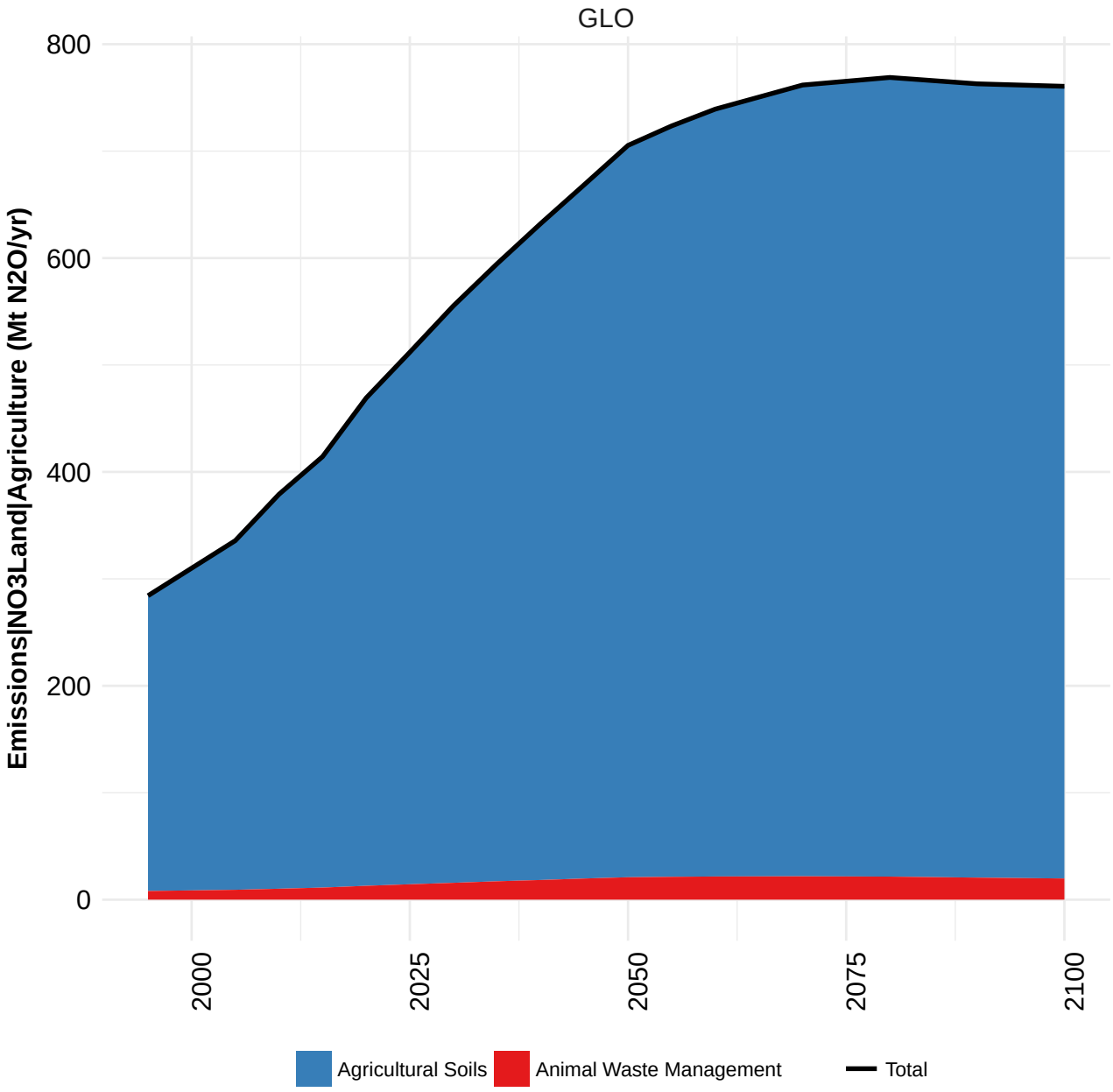

Emissions|NH3|Land (Mt N2O/yr)
100
75
50
25
0
2000
2025
2050
2075
2100
GLO
Total

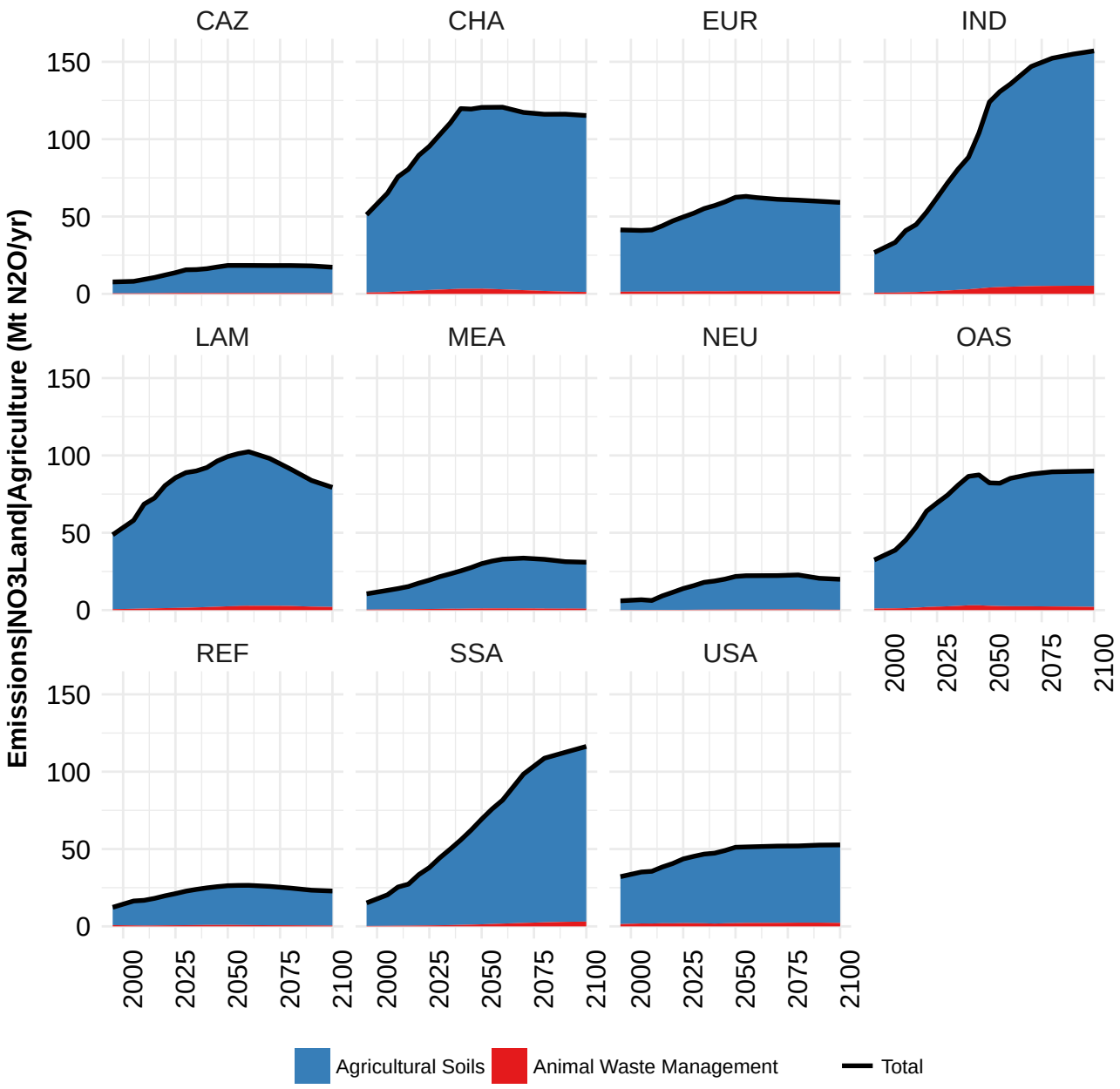

Emissions|NH3|Land (Mt N2O/yr)
100
75
50
25
0
2000
2025
2050
2075
2100
CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Total

15 NO3Land

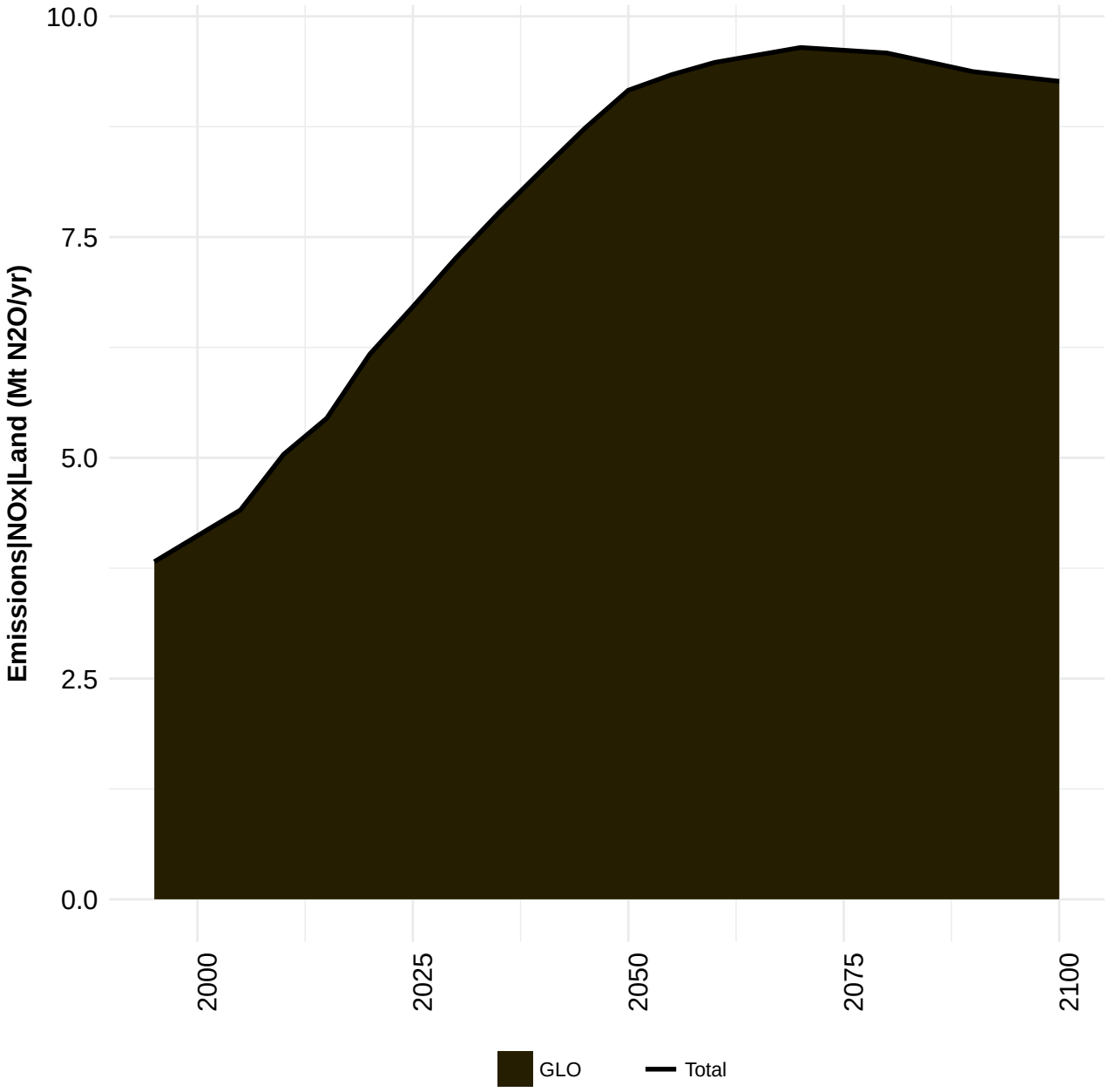

800
600
400
200
0
Emissions|NO3Land (Mt N2O/yr)
2000
2025
2050
2075
2100
GLO
Total

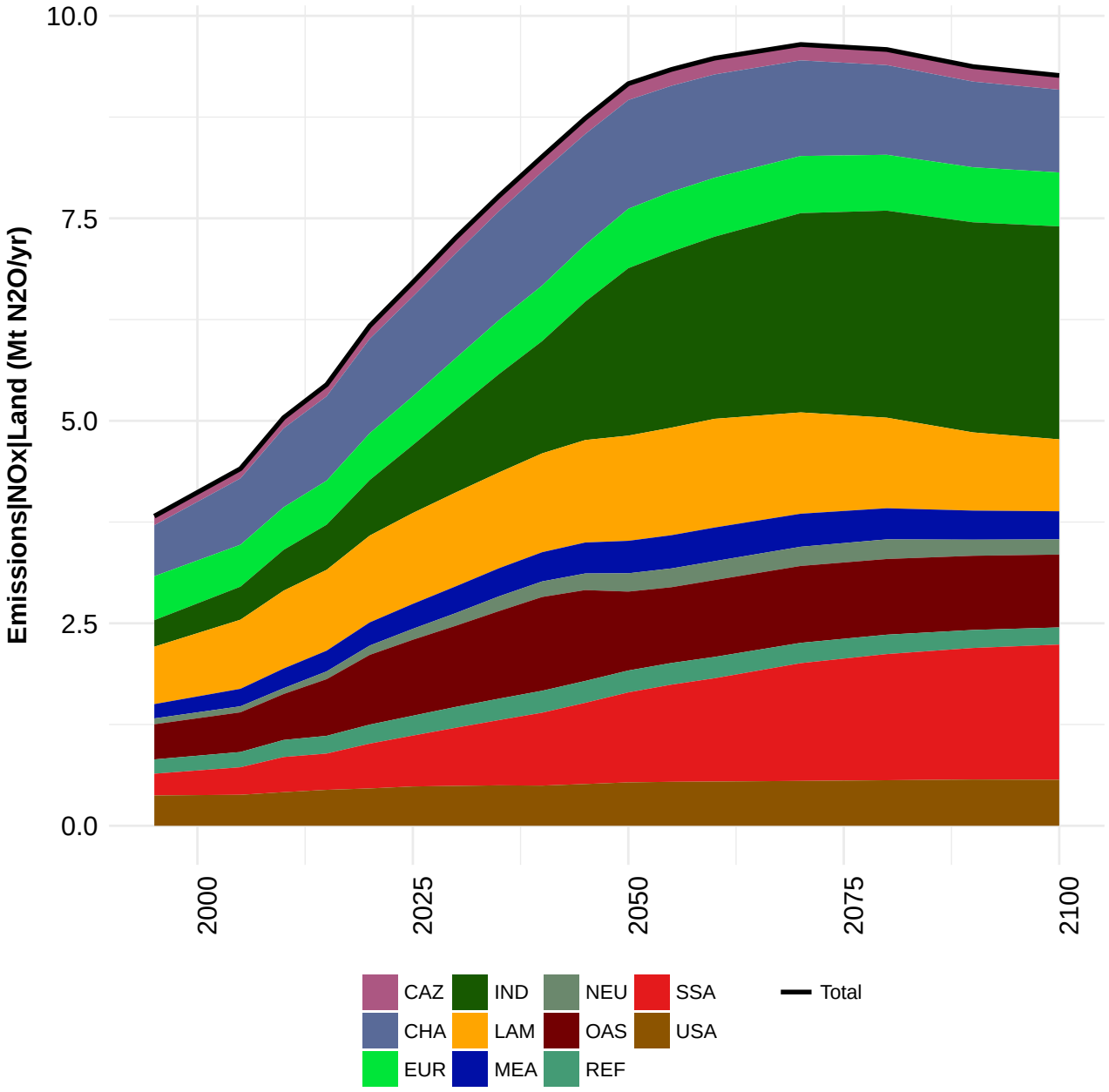

800
600
400
200
0
Emissions|NO3Land (Mt N2O/yr)
2000
2025
2050
2075
2100
CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Total


GLO
Emissions|NO3Land|Agriculture (Mt N2O/yr)
800
600
400
200
0
2000
2025
2050
2075
2100
Agricultural Soils
Animal Waste Management
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Emissions|NO3Land|Agriculture (Mt N2O/yr)
150
100
50
0
2000
2025
2050
2075
2100
Agricultural Soils
Animal Waste Management
Total

16 NOx


10.0
7.5
5.0
2.5
0.0
Emissions|NOx|Land (Mt N2O/yr)
2000
2025
2050
2075
2100
GLO
Total


10.0
7.5
5.0
2.5
0.0
Emissions|NOx|Land (Mt N2O/yr)
2000
2025
2050
2075
2100
CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Total

Part VI
Food Consumption Value

Part VII
Food Expenditure Share

Part VIII
Food Supply

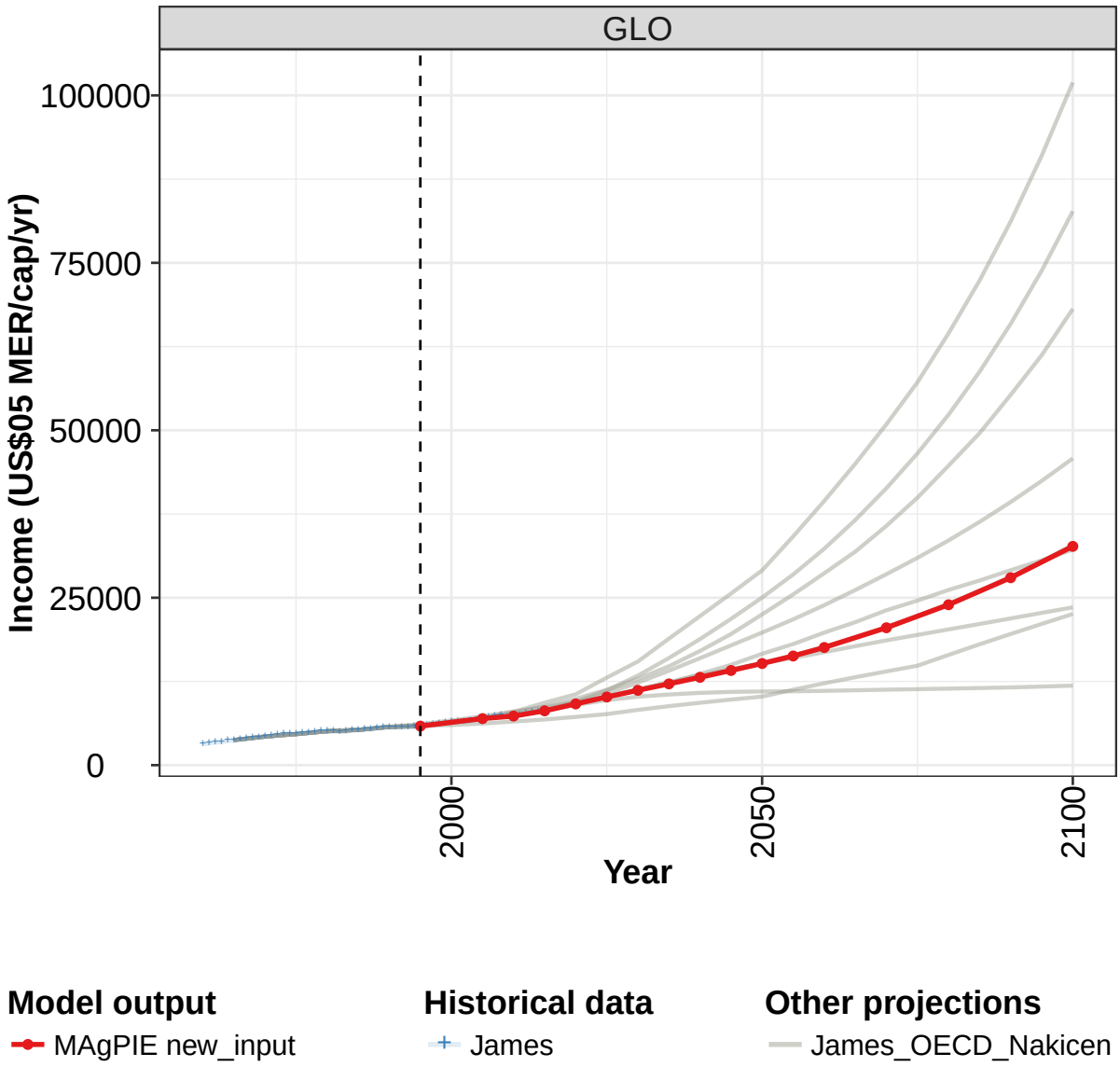
33 Calorie Supply

Part IX
Household Expenditure

34 Food

Part X

Income



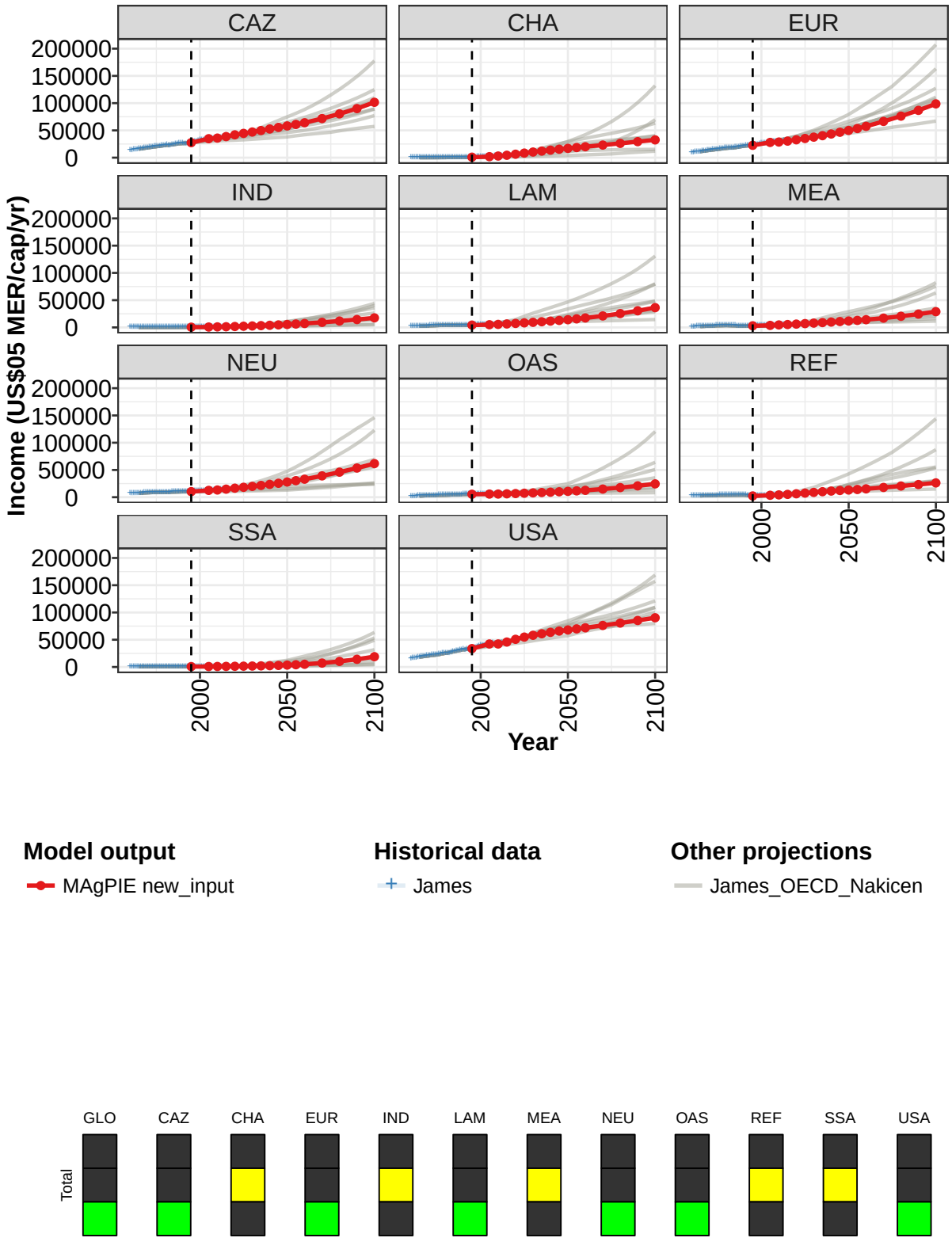


Figure 226: MAgPIE new_input — Income (US$05 MER/cap/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	5833	6954	7330	8110	9144	10178	11178	12134	13117	14134	15176
CAZ	27507	34772	35884	38692	41915	44539	47060	49755	52613	55522	58255
CHA	875	1850	2975	4399	6328	8377	10326	12079	13787	15482	17071
EUR	22612	27969	28687	30375	32798	35153	37629	40344	43379	46591	49918
IND	472	740	1025	1318	1726	2210	2744	3326	3977	4686	5457
LAM	4304	5005	5614	6416	7375	8366	9385	10446	11592	12839	14207
MEA	3016	3784	4598	5331	6150	7030	7980	8907	9865	10839	11841
NEU	10289	12557	13262	14813	16583	18236	19906	21640	23561	25638	27892
OAS	5483	5756	5857	6257	6752	7346	7966	8577	9229	9956	10750
REF	2358	3584	4271	5218	6313	7549	8852	10129	11311	12336	13226
SSA	741	862	966	1109	1299	1527	1790	2089	2459	2916	3479
USA	33796	42279	42251	45798	50834	54851	58192	61026	63591	65936	67953

Table 703: MAgPIE new_input — Income (US$05 MER/cap/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	16299	17570	20516	23952	27985	32672
CAZ	60984	64083	71737	80389	90010	101590
CHA	18538	20044	23113	26206	29383	32585
EUR	53475	57455	66484	76177	86735	98675
IND	6302	7236	9355	11770	14510	17573
LAM	15720	17375	21106	25483	30544	36319
MEA	12941	14193	17108	20501	24450	28966
NEU	30377	33077	39157	45999	53533	61695
OAS	11648	12647	14949	17663	20838	24502
REF	14161	15322	17946	20522	23270	26269
SSA	4178	5031	7255	10261	14141	18941
USA	69903	71921	76226	80614	85338	90345

Table 704: MAgPIE new_input — Income (US$05 MER/cap/yr) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3207	3307	3412	3493	3638	3749	3859	3930	4064	4189	4269
CAZ	13552	13645	14191	14676	15296	15836	16330	16607	17135	17823	18185
CHA	143	118	116	125	137	152	160	152	146	160	177
EUR	9372	9745	10080	10426	10892	11259	11607	11922	12413	12969	13449
IND	200	204	206	213	223	240	237	248	252	263	269
LAM	2281	2348	2390	2416	2521	2579	2630	2684	2792	2877	2986
MEA	1519	1553	1614	1714	1813	1916	2001	2073	2246	2357	2497
NEU	6584	6809	6957	7177	7376	7467	7669	7824	7975	8188	8374
OAS	1730	1876	1969	2063	2209	2280	2429	2588	2799	3031	3152
REF	2268	2354	2378	2294	2547	2657	2750	2839	2971	2985	3180
SSA	655	659	676	700	723	745	752	753	761	791	829
USA	15739	15894	16507	16949	17578	18336	19136	19427	20087	20511	20449

Table 705: James — Income (US$05 MER/cap/yr) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	4348	4486	4673	4679	4636	4774	4868	4982	5077	5062	5064
CAZ	18605	19155	19944	20287	20368	20941	21219	21677	22180	22437	22934
CHA	184	188	200	201	210	210	223	243	260	276	289
EUR	13829	14350	15110	15410	15313	15912	16296	16736	17251	17414	17350
IND	268	261	264	262	278	277	290	299	280	291	302
LAM	3092	3228	3403	3520	3573	3693	3777	3869	4026	4178	4162
MEA	2630	2874	3028	3240	3260	3497	3572	3520	3660	3612	3487
NEU	8600	8812	8940	9063	8887	9059	9192	9189	9228	9318	9349
OAS	3229	3397	3583	3516	3556	3633	3733	3858	3984	3936	4029
REF	3232	3222	3454	3522	3504	3635	3691	3755	3713	3694	3702
SSA	855	860	875	907	891	902	892	879	883	892	900
USA	20926	21886	22874	22626	22372	23343	24139	25229	25723	25484	25859

Table 706: James — Income (US$05 MER/cap/yr) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	4997	5039	5171	5266	5339	5421	5560	5661	5711	5684	5692
CAZ	22339	22503	23540	24355	24690	25318	26085	26439	26184	25448	25502
CHA	307	333	375	411	442	487	530	542	555	594	663
EUR	17469	17744	18154	18563	19026	19513	20256	20870	21312	21470	21611
IND	307	321	327	336	345	353	377	393	407	403	415
LAM	4065	3879	3950	3998	4052	4096	4063	4066	4025	4096	4150
MEA	3299	3203	3157	3081	2972	2905	2838	2837	2913	2955	2912
NEU	9176	9224	9428	9660	9845	10115	10180	10267	10062	9953	9983
OAS	4094	4164	4275	4433	4505	4627	4878	5059	5266	5380	5383
REF	3765	3854	3873	3879	4003	4024	4082	4127	3992	3754	3236
SSA	880	847	847	838	818	803	816	818	811	790	759
USA	25130	26027	27639	28500	29219	29864	30780	31553	31766	31284	31934

Table 707: James — Income (US$05 MER/cap/yr) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	5684	5773	5857	5961	6095	6159	6282	6469	6498	6551	6641
CAZ	26005	26934	27511	27923	28755	29678	30892	31919	32266	32921	33401
CHA	739	820	890	964	1038	1092	1160	1247	1333	1433	1560
EUR	21472	22042	22620	23034	23643	24317	25020	25959	26428	26710	26962
IND	427	448	472	499	520	541	563	576	594	608	645
LAM	4230	4352	4313	4396	4557	4599	4569	4703	4666	4630	4653
MEA	2864	2884	3019	3107	3130	3191	3193	3295	3296	3313	3446
NEU	10106	9999	10290	10628	11083	11274	11129	11476	11248	11429	11560
OAS	5364	5394	5483	5593	5633	5379	5379	5510	5483	5502	5546
REF	2893	2488	2358	2274	2310	2225	2353	2578	2725	2875	3100
SSA	742	737	742	759	764	759	756	761	769	784	797
USA	32429	33357	33796	34648	35770	36893	38234	39382	39351	39731	40347

Table 708: James — Income (US$05 MER/cap/yr) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	6823	6982	7179	7383	7422	7190	7364	7503	7682	7860	8044
CAZ	34141	34776	35361	35959	35910	35221	35888	36540	37218	37819	38402
CHA	1707	1882	2100	2376	2579	2779	3026	3271	3535	3818	4124
EUR	27540	27979	28792	29530	29589	28256	28698	29127	29677	30267	30875
IND	688	740	799	865	899	953	1025	1090	1157	1229	1306
LAM	4853	5015	5226	5447	5596	5419	5645	5803	5978	6154	6332
MEA	3628	3788	3982	4185	4397	4446	4604	4787	4947	5087	5228
NEU	12076	12557	13036	13444	13519	13011	13416	13660	13933	14220	14517
OAS	5666	5756	5867	6004	5956	5706	5870	5955	6061	6166	6274
REF	3353	3584	3894	4236	4462	4149	4271	4403	4553	4706	4867
SSA	836	863	895	931	956	949	969	994	1026	1055	1084
USA	41374	42279	42933	43445	43091	41534	42251	42853	43743	44595	45408

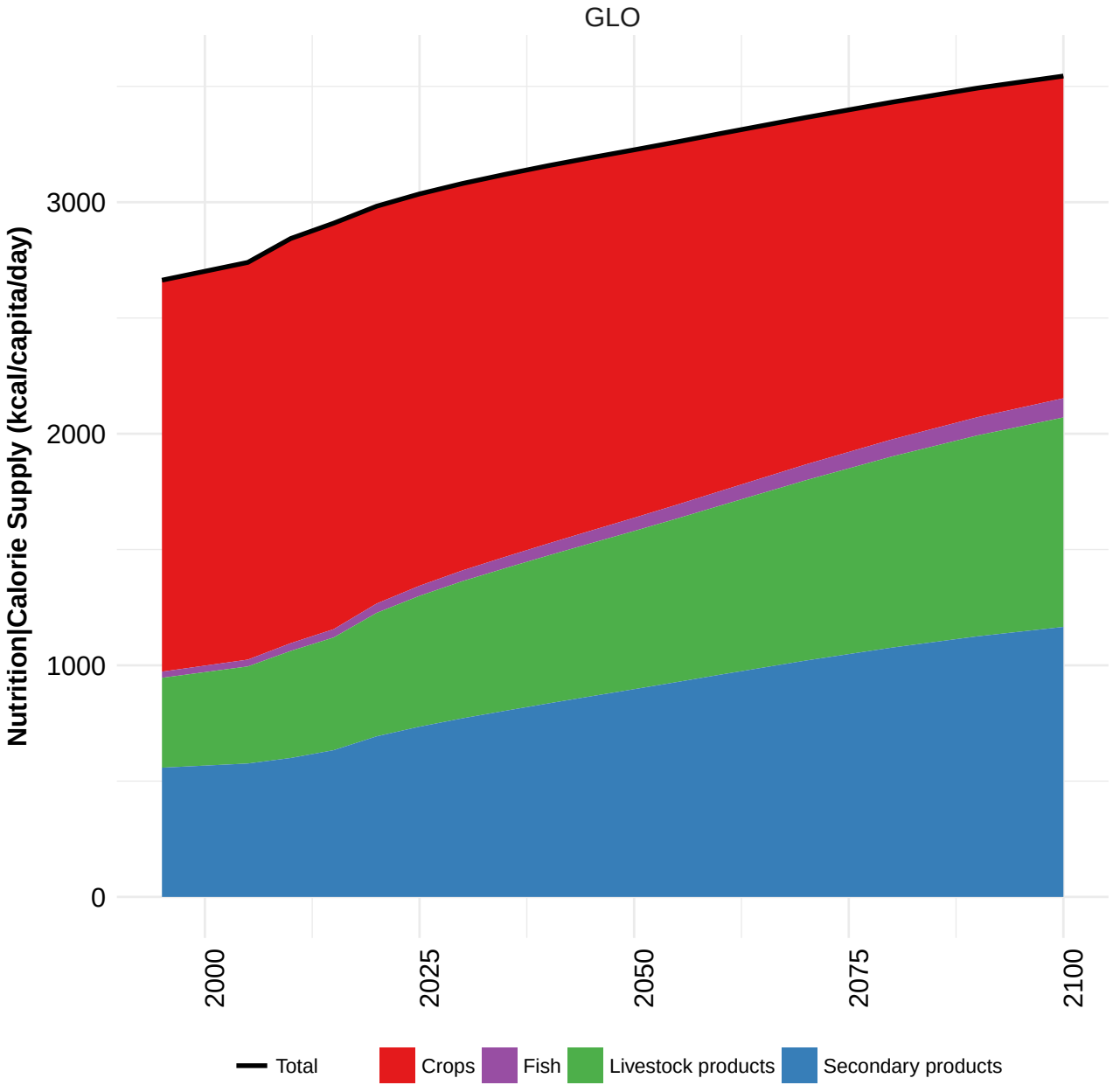
Table 709: James — Income (US$05 MER/cap/yr) [PART 5/6]

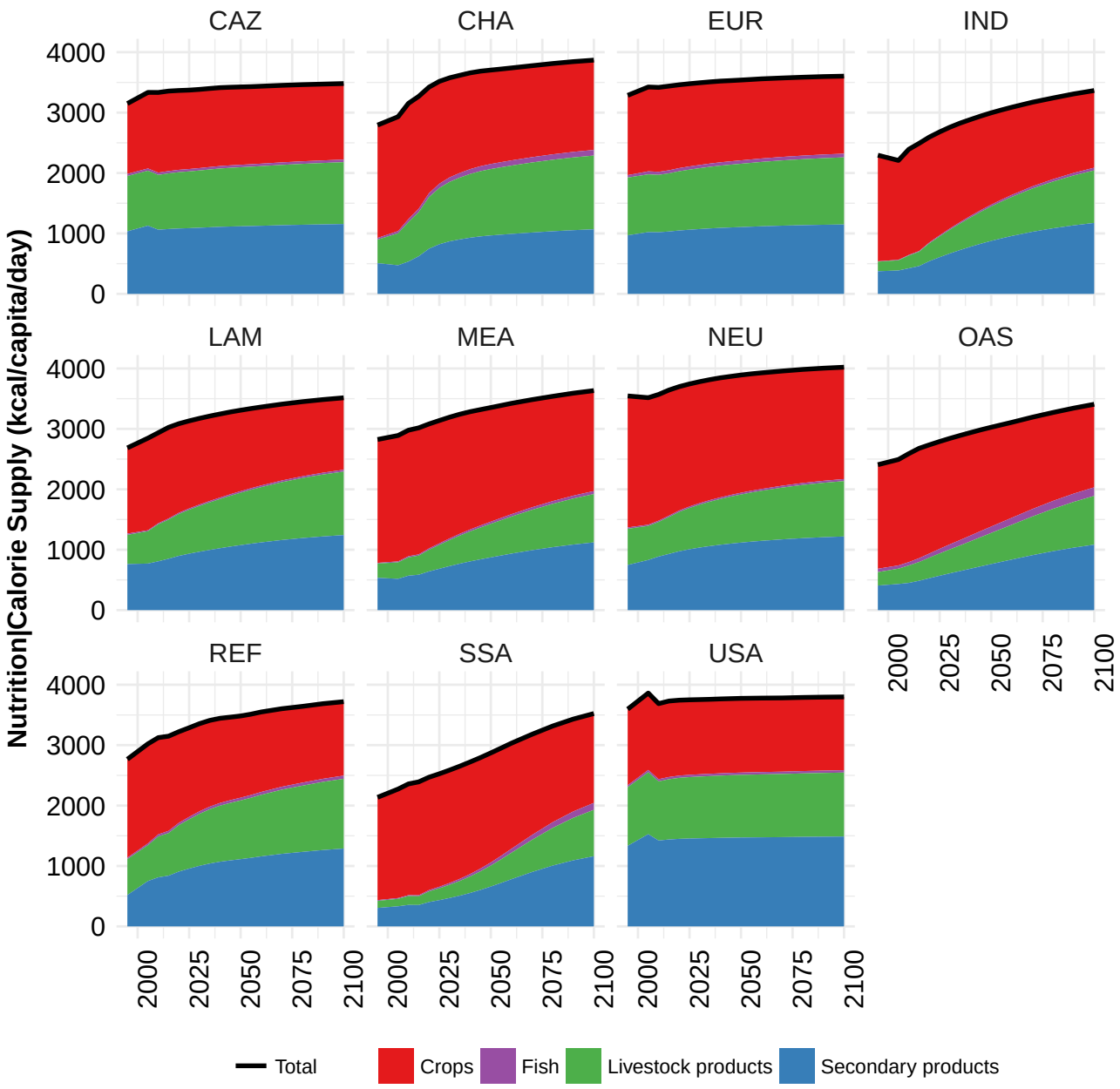
	2015
GLO	8232
CAZ	38967
CHA	4454
EUR	31490
IND	1388
LAM	6524
MEA	5391
NEU	14816
OAS	6386
REF	5027
SSA	1112
USA	46168

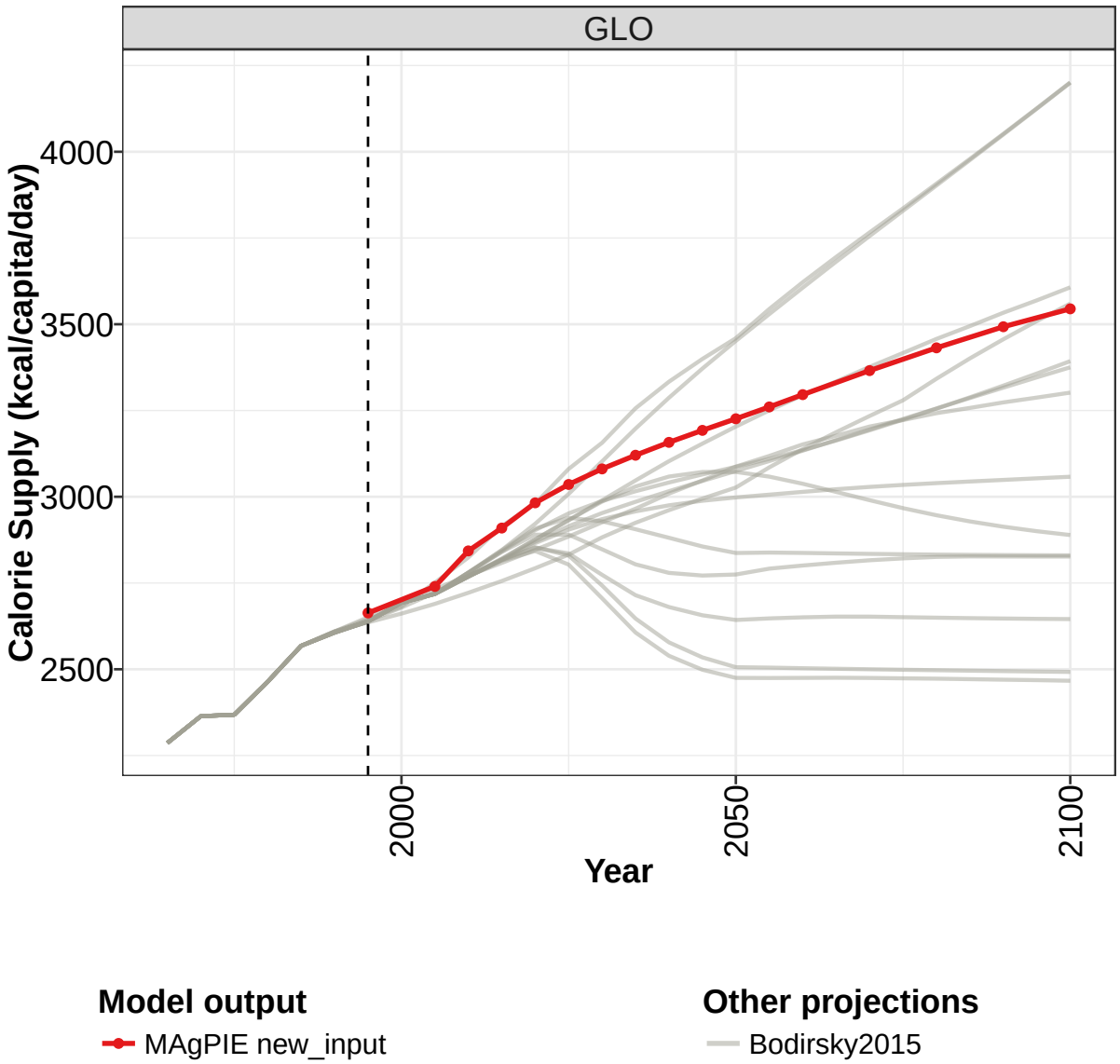
Table 710: James — Income (US$05 MER/cap/yr) [PART 6/6]

Part XI
Nutrition

35 Calorie Supply




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Nutrition|Calorie Supply (kcal/capita/day)
0
1000
2000
3000
4000
2000
2025
2050
2075
2100
Total
Crops
Fish
Livestock products
Secondary products


GLO
Calorie Supply (kcal/capita/day)
4000
3500
3000
2500
2000
2050
2100
Year
Model output
MAgPIE new_input
Other projections
Bodirsky2015

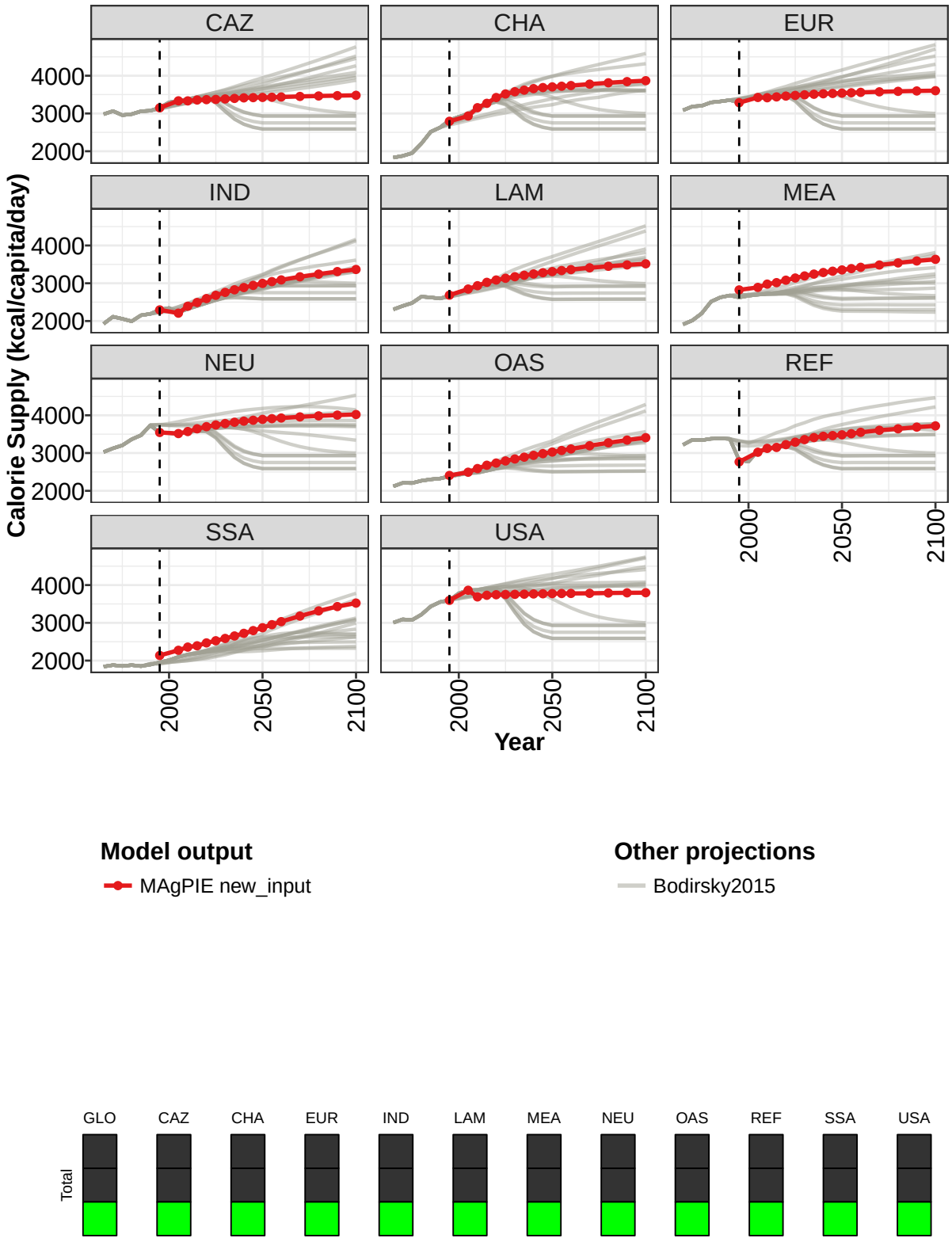


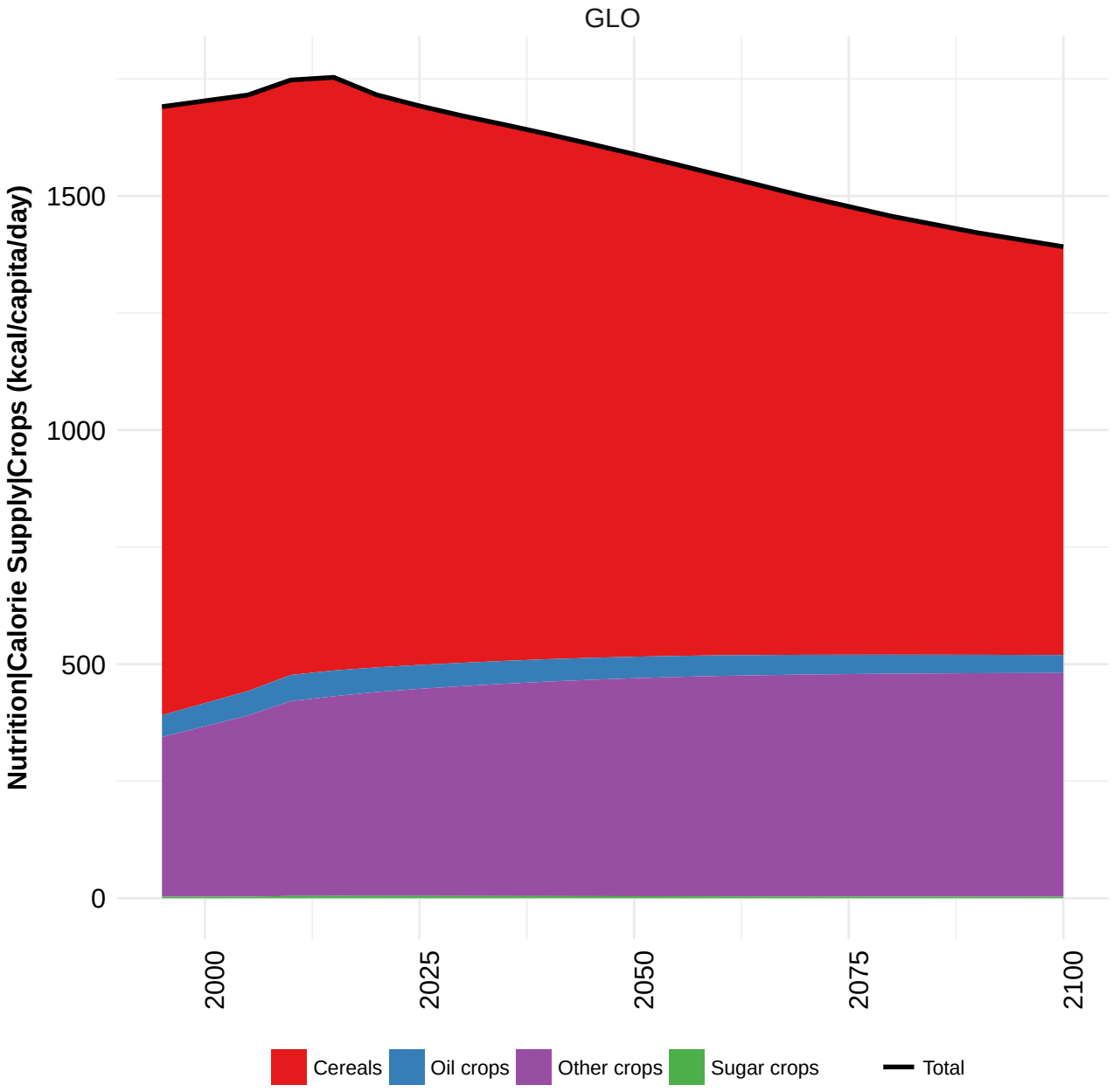
Figure 227: MAgPIE new_input — Nutrition—Calorie Supply (kcal/capita/day)

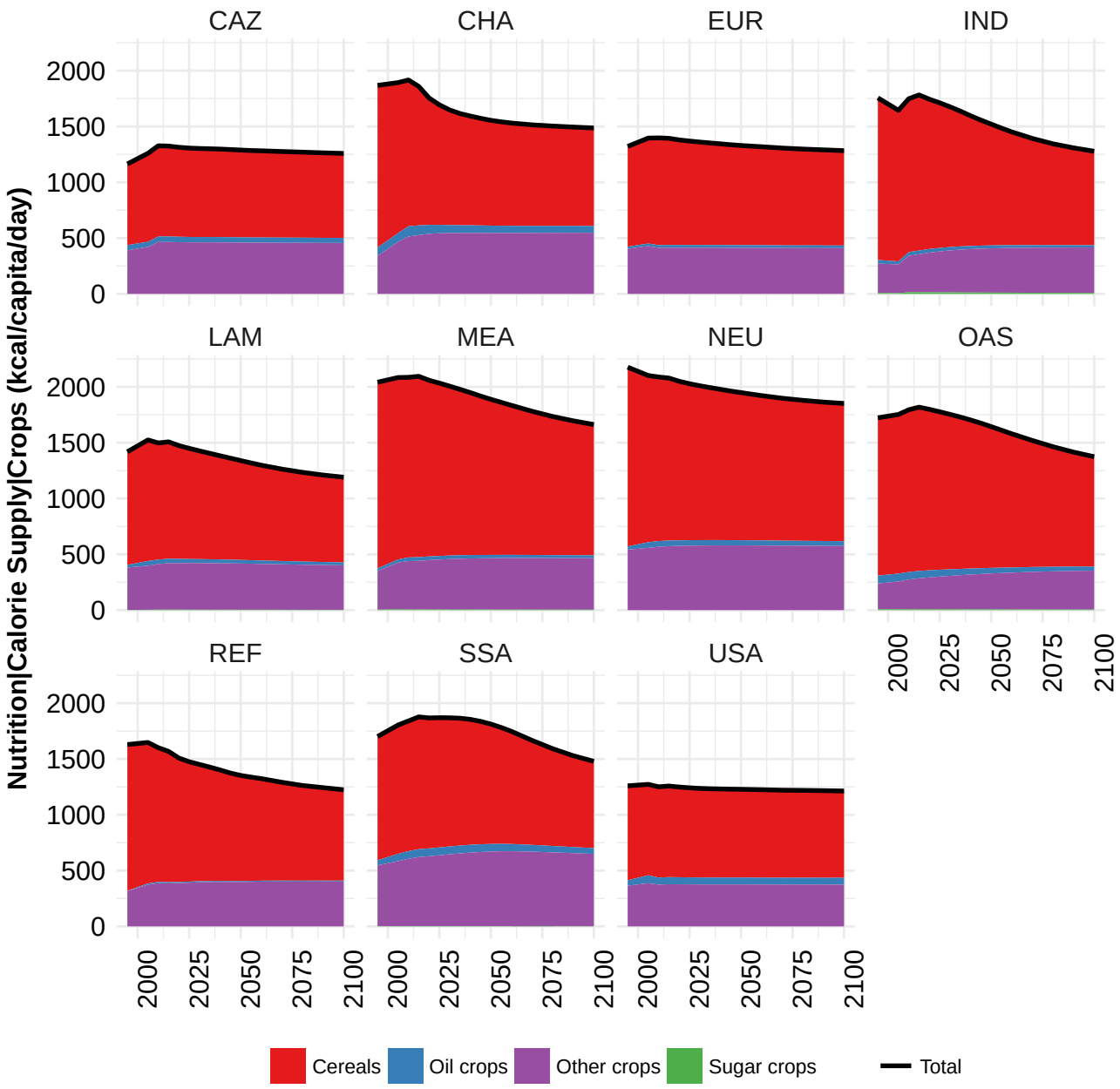
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2663	2740	2843	2909	2982	3036	3081	3120	3158	3193	3226
CAZ	3150	3335	3334	3357	3366	3373	3384	3399	3413	3420	3425
CHA	2794	2932	3153	3269	3422	3517	3576	3618	3658	3686	3704
EUR	3286	3424	3417	3439	3461	3479	3494	3509	3522	3530	3539
IND	2295	2209	2393	2491	2596	2681	2759	2827	2887	2944	2997
LAM	2685	2847	2936	3025	3086	3133	3174	3212	3247	3280	3309
MEA	2824	2891	2978	3017	3082	3139	3194	3243	3285	3319	3353
NEU	3545	3516	3570	3642	3699	3744	3782	3816	3845	3869	3892
OAS	2407	2493	2590	2678	2736	2791	2844	2892	2939	2985	3027
REF	2766	3022	3124	3149	3223	3288	3356	3410	3445	3463	3483
SSA	2136	2273	2358	2392	2469	2526	2587	2653	2722	2795	2872
USA	3596	3862	3687	3730	3745	3750	3754	3759	3765	3770	3775

Table 711: MAgPIE new_input — Nutrition—Calorie Supply (kcal/capita/day) [PART 1/2]

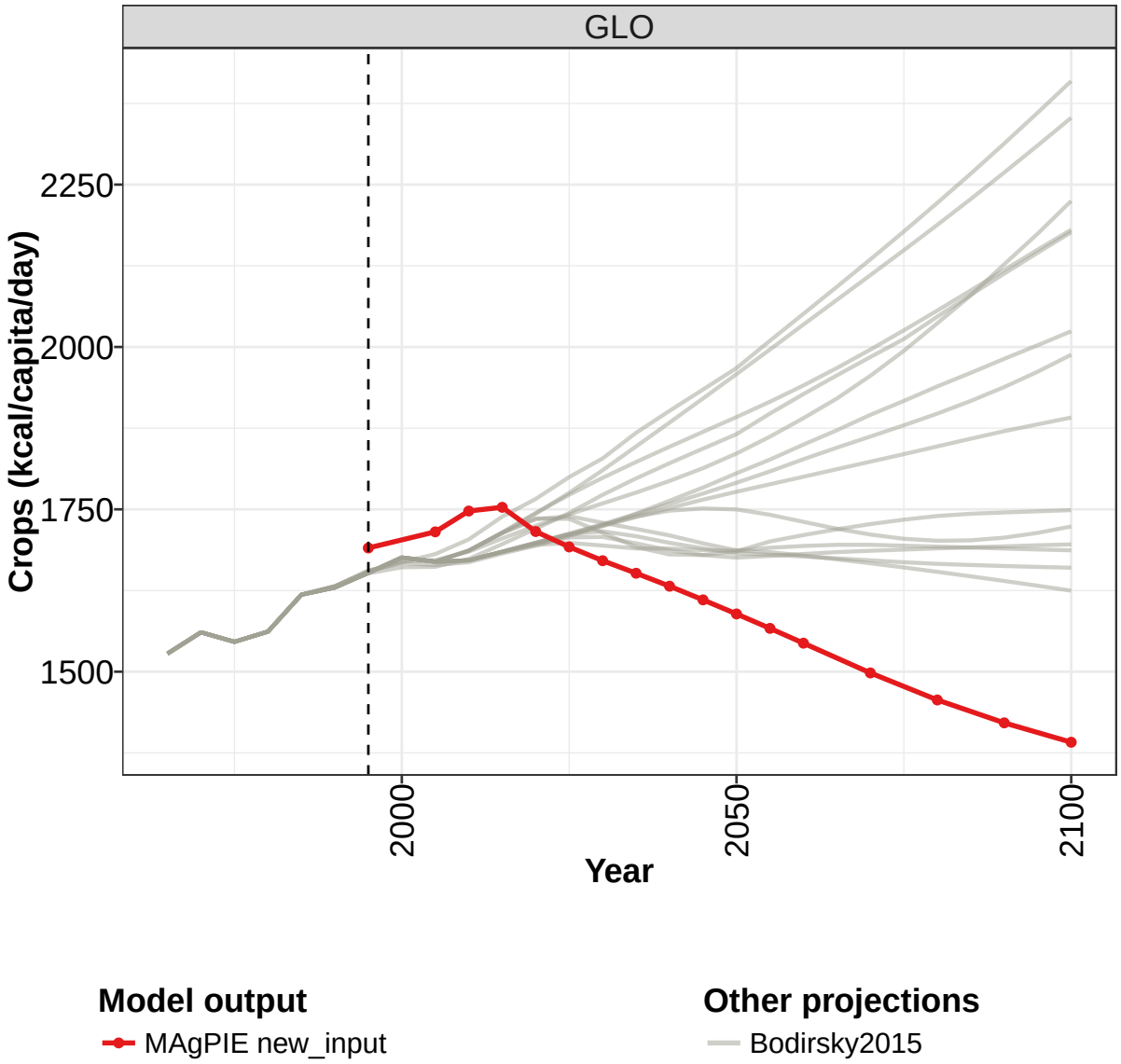
	2055	2060	2070	2080	2090	2100
GLO	3260	3296	3366	3432	3493	3545
CAZ	3430	3437	3452	3464	3472	3481
CHA	3722	3740	3777	3813	3844	3869
EUR	3549	3559	3574	3586	3597	3604
IND	3044	3089	3172	3242	3309	3365
LAM	3337	3362	3410	3450	3485	3515
MEA	3388	3423	3484	3539	3591	3633
NEU	3911	3928	3958	3984	4005	4021
OAS	3068	3108	3194	3271	3343	3407
REF	3513	3549	3603	3642	3687	3720
SSA	2951	3032	3180	3316	3431	3523
USA	3777	3779	3781	3790	3795	3798

Table 712: MAgPIE new_input — Nutrition—Calorie Supply (kcal/capita/day) [PART 2/2]


GLO
Nutrition|Calorie Supply|Crops (kcal/capita/day)
1500
1000
500
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Nutrition|Calorie Supply|Crops (kcal/capita/day)
0
500
1000
1500
2000
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

35.1 Crops


GLO
Crops (kcal/capita/day)
2250
2000
1750
1500
2000
2050
2100
Year
Model output
MAgPIE new_input
Other projections
Bodirsky2015

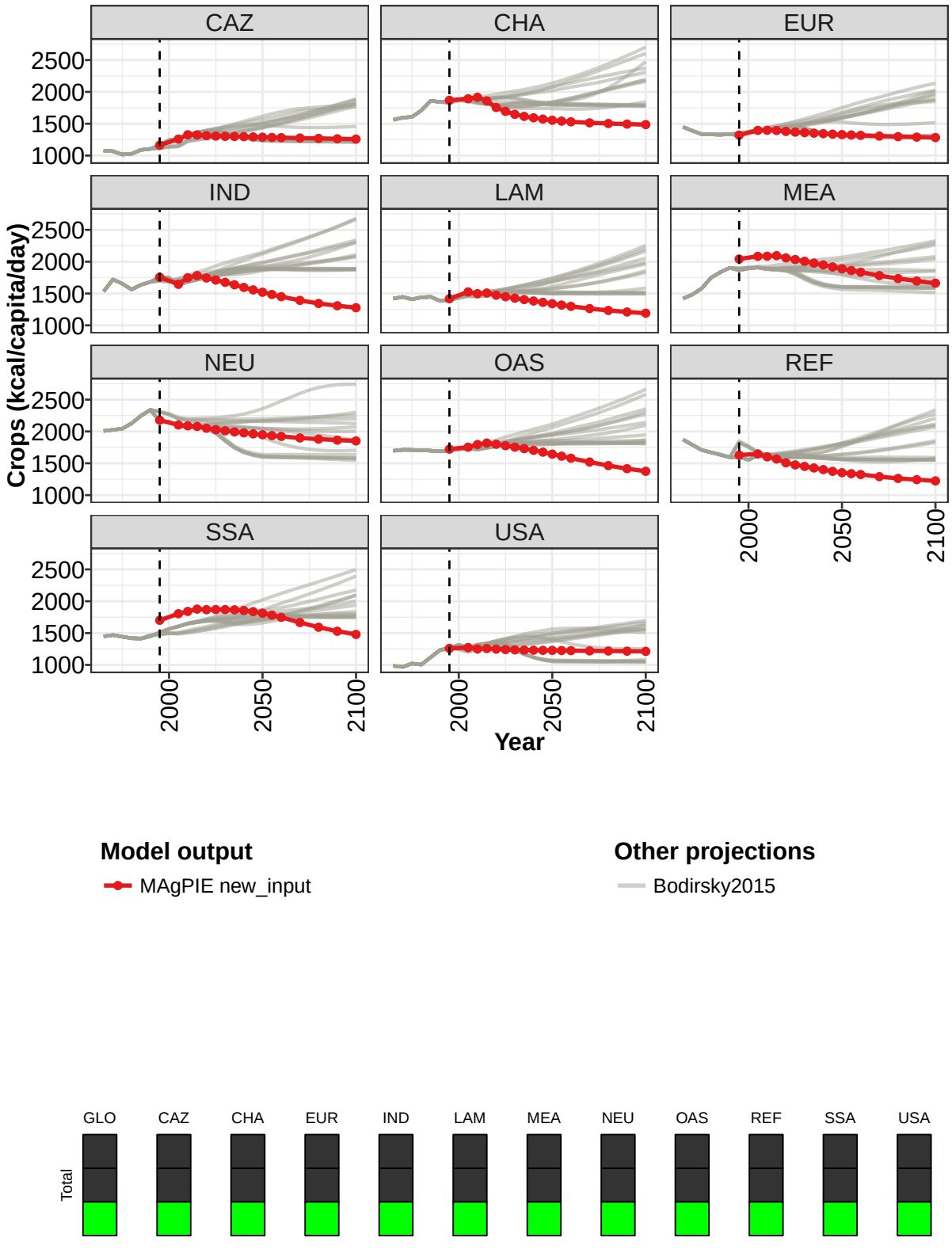


Figure 228: MAgPIE new_input — Nutrition—Calorie Supply—Crops (kcal/capita/day)

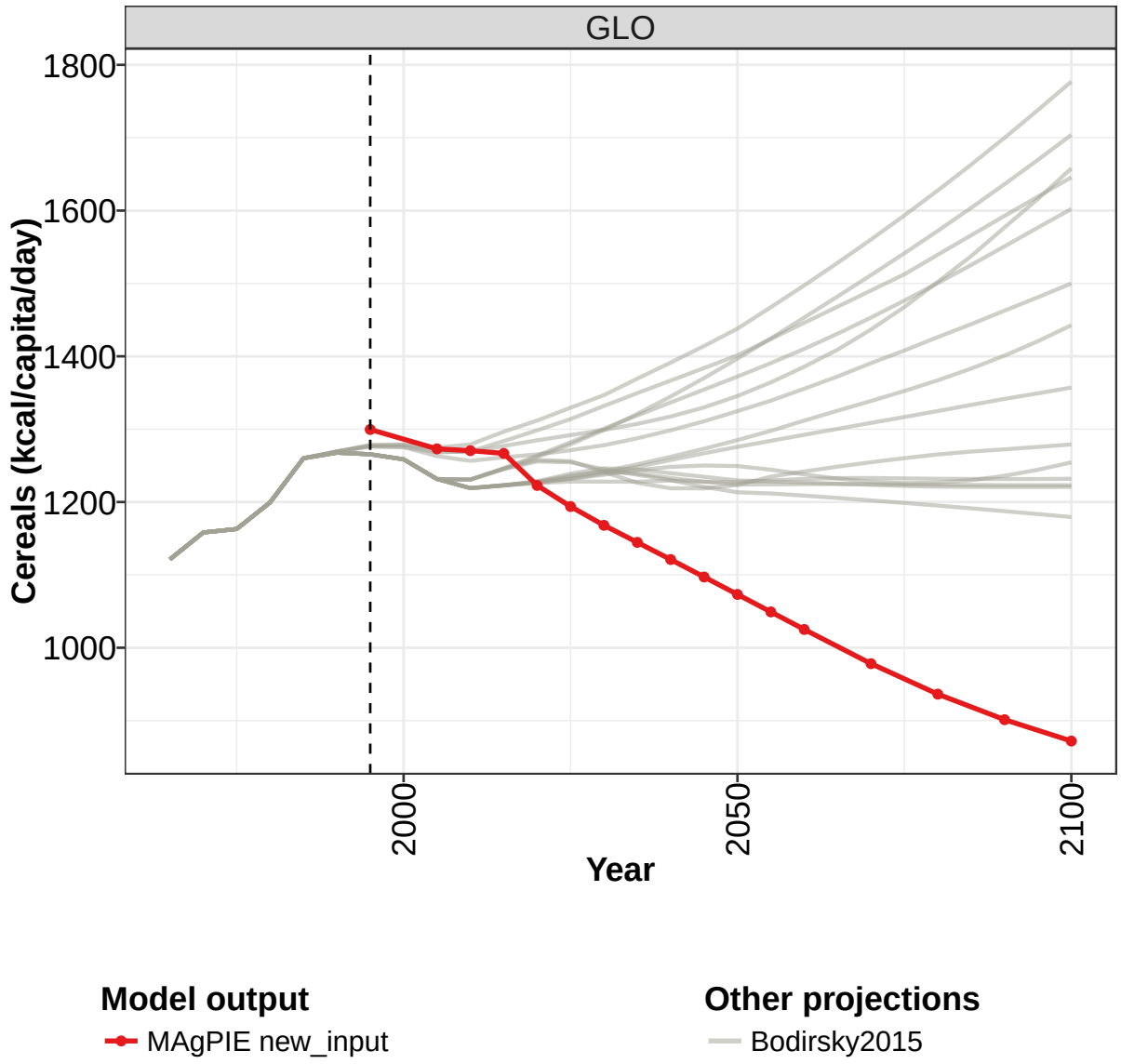
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1691	1715	1747	1753	1716	1692	1671	1652	1632	1611	1589
CAZ	1164	1259	1327	1324	1313	1306	1302	1300	1297	1293	1289
CHA	1868	1893	1916	1859	1755	1694	1648	1616	1593	1573	1555
EUR	1321	1396	1397	1394	1379	1369	1360	1352	1344	1336	1329
IND	1756	1644	1748	1782	1744	1712	1676	1638	1596	1557	1520
LAM	1419	1524	1498	1508	1474	1450	1427	1405	1383	1362	1340
MEA	2042	2084	2086	2095	2060	2034	2007	1978	1949	1918	1889
NEU	2176	2102	2089	2079	2050	2028	2010	1994	1978	1962	1949
OAS	1723	1753	1795	1818	1799	1777	1754	1730	1704	1675	1644
REF	1629	1648	1601	1568	1508	1475	1451	1427	1401	1374	1353
SSA	1701	1804	1840	1877	1868	1870	1869	1865	1855	1837	1813
USA	1259	1272	1251	1257	1248	1242	1236	1233	1231	1229	1228

Table 713: MAgPIE new_input — Nutrition—Calorie Supply—Crops (kcal/capita/day) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1567	1544	1498	1456	1421	1391
CAZ	1284	1282	1275	1270	1264	1258
CHA	1541	1530	1514	1503	1494	1486
EUR	1324	1318	1306	1297	1290	1283
IND	1485	1451	1392	1344	1308	1277
LAM	1319	1298	1264	1234	1210	1191
MEA	1861	1835	1782	1735	1696	1663
NEU	1935	1922	1898	1879	1864	1852
OAS	1612	1580	1520	1464	1415	1374
REF	1337	1324	1291	1262	1243	1224
SSA	1782	1747	1666	1592	1529	1479
USA	1226	1225	1220	1219	1216	1213

Table 714: MAgPIE new_input — Nutrition—Calorie Supply—Crops (kcal/capita/day) [PART 2/2]

35.1.1 Cereals



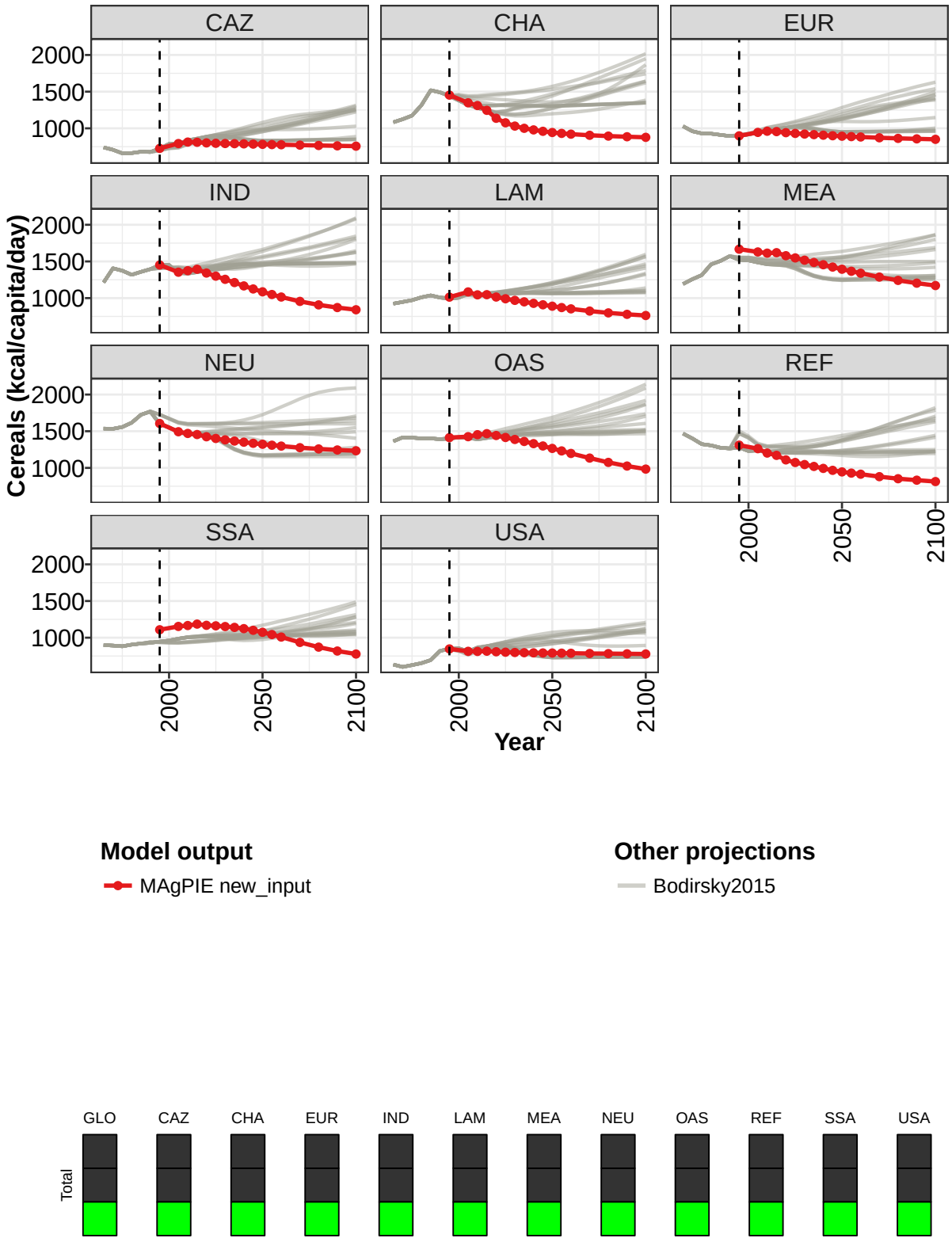


Figure 229: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Cereals (kcal/capita/day)

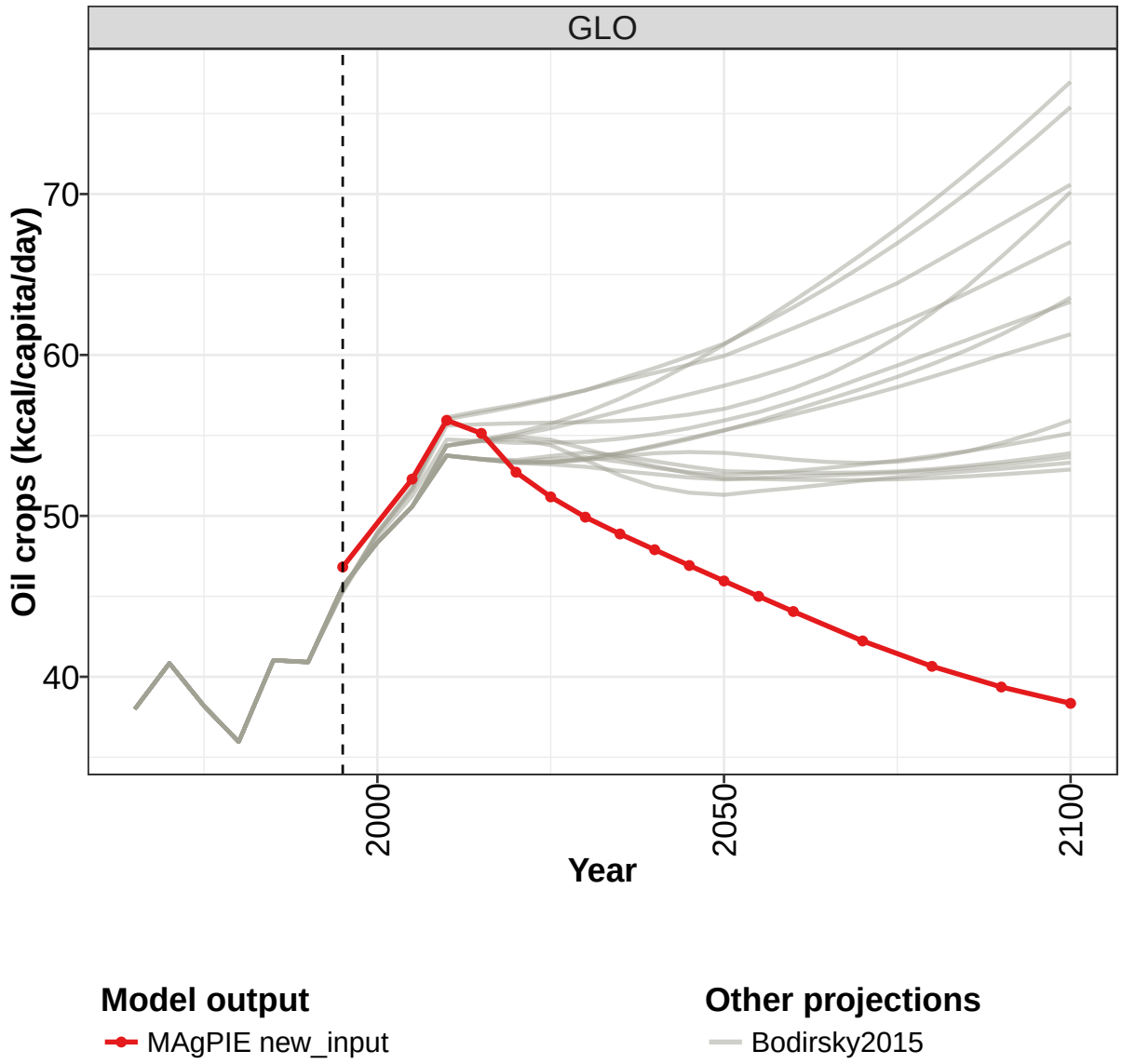
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1300	1273	1270	1267	1223	1194	1168	1145	1121	1097	1073
CAZ	727	792	812	810	801	796	793	791	788	785	782
CHA	1453	1348	1311	1245	1137	1075	1031	1000	979	960	943
EUR	898	945	960	955	941	931	922	914	907	899	893
IND	1452	1353	1374	1394	1342	1300	1256	1212	1166	1125	1086
LAM	1014	1084	1045	1047	1015	991	969	949	929	909	890
MEA	1667	1630	1613	1620	1578	1548	1517	1486	1455	1423	1394
NEU	1606	1493	1470	1455	1425	1402	1383	1366	1351	1335	1322
OAS	1413	1426	1453	1467	1442	1415	1388	1361	1331	1299	1266
REF	1311	1262	1202	1171	1109	1074	1046	1020	993	967	946
SSA	1108	1154	1166	1185	1169	1162	1152	1141	1124	1101	1074
USA	847	814	813	816	808	802	798	795	794	792	791

Table 715: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Cereals (kcal/capita/day) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1049	1025	978	936	901	872
CAZ	778	776	771	766	761	757
CHA	931	921	905	894	885	877
EUR	887	882	871	863	856	850
IND	1049	1015	956	908	871	841
LAM	871	853	823	799	779	763
MEA	1366	1339	1287	1242	1204	1171
NEU	1309	1297	1276	1259	1244	1233
OAS	1232	1197	1134	1075	1025	984
REF	929	914	881	853	833	814
SSA	1043	1009	936	871	818	777
USA	789	788	784	783	780	778

Table 716: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Cereals (kcal/capita/day) [PART 2/2]

35.1.2 Oil crops



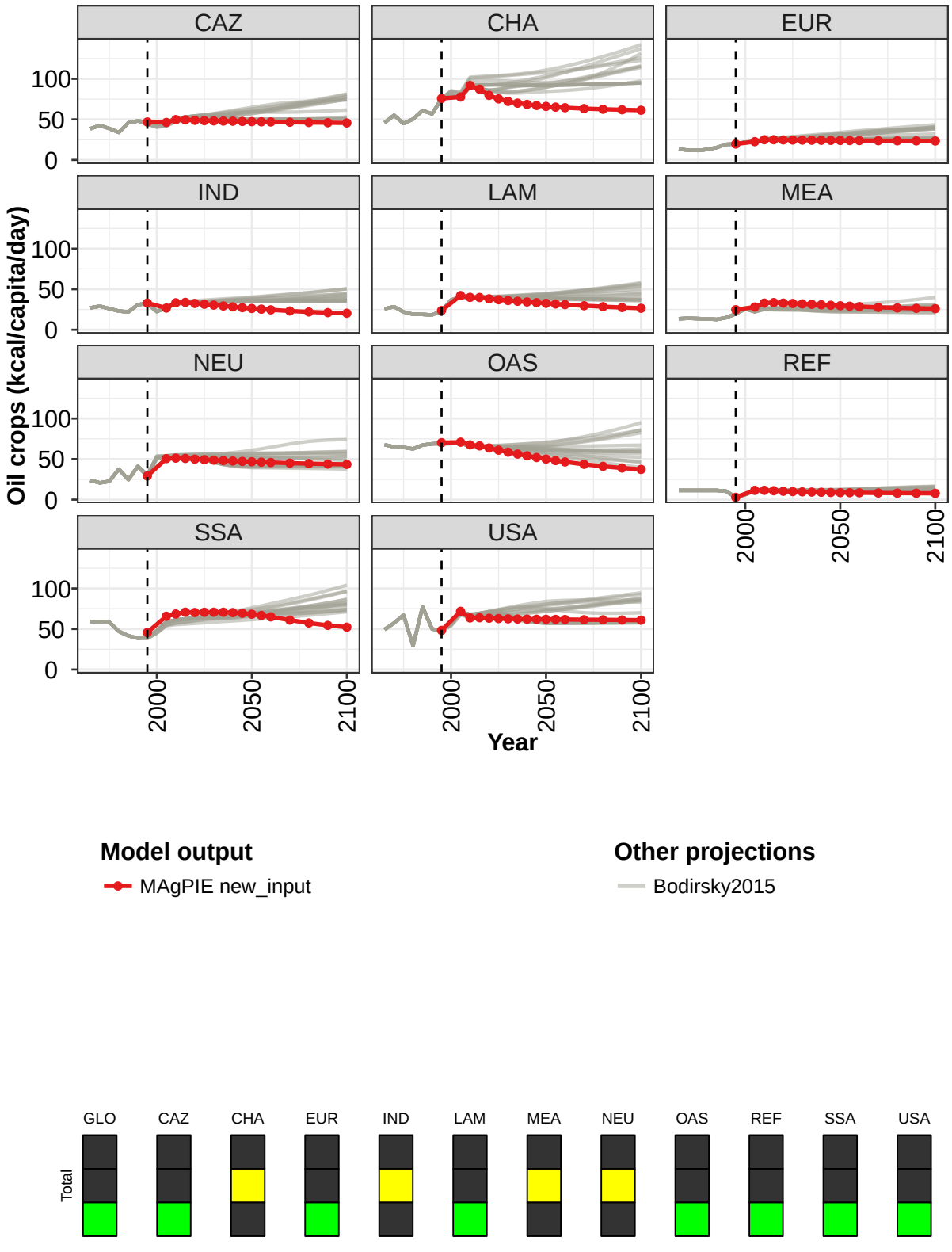


Figure 230: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Oil crops (kcal/capita/day)

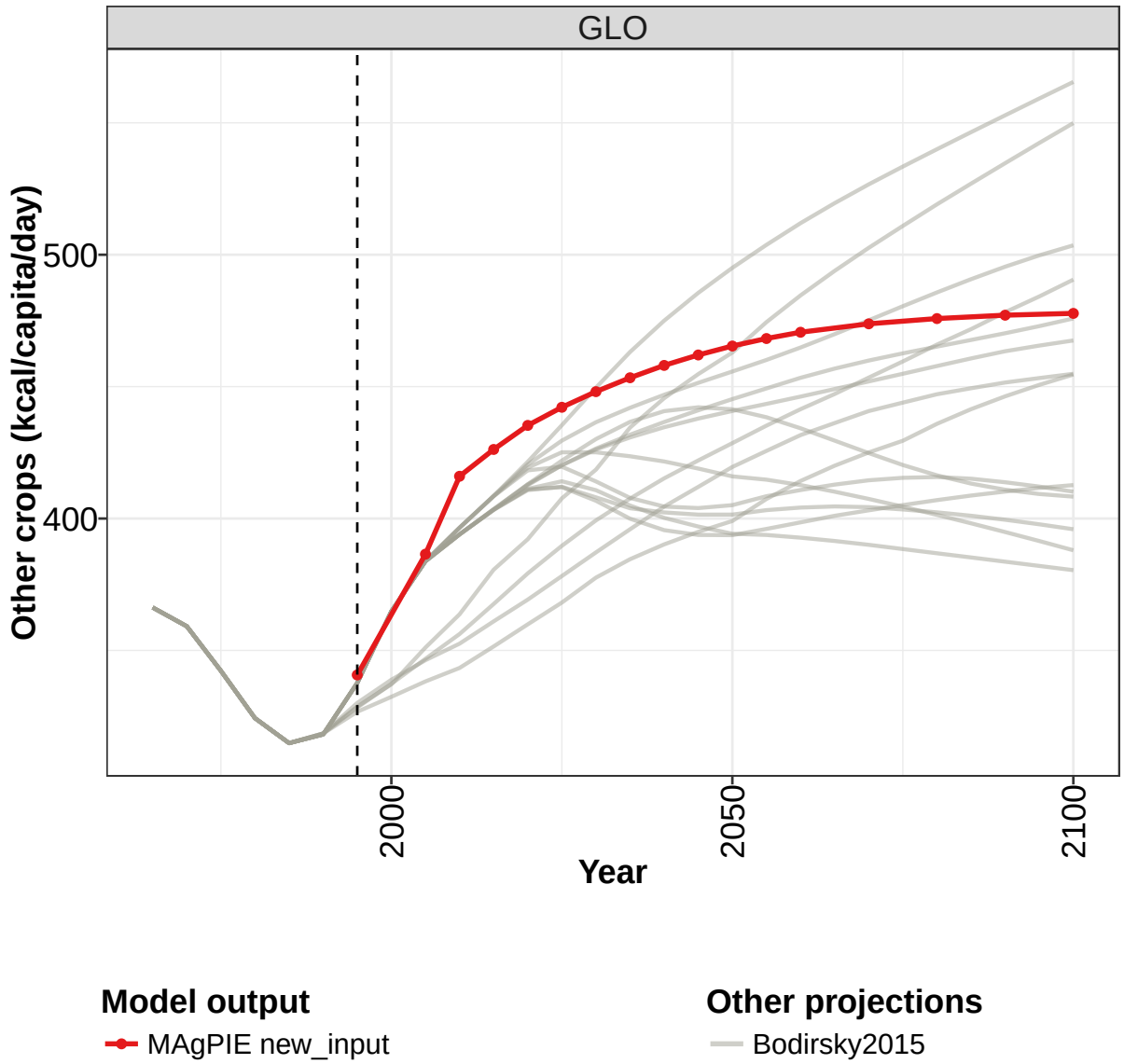
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	46.8	52.3	55.9	55.1	52.7	51.2	49.9	48.9	47.9	46.9	46.0
CAZ	46.8	46.2	49.7	49.5	48.9	48.5	48.2	48.0	47.8	47.5	47.3
CHA	75.8	77.6	91.8	87.2	79.6	75.3	72.2	70.0	68.5	67.2	66.0
EUR	19.7	22.6	25.0	25.0	24.7	24.6	24.5	24.4	24.2	24.1	24.1
IND	33.0	26.8	33.3	33.8	32.5	31.5	30.4	29.4	28.3	27.3	26.3
LAM	23.7	42.2	40.0	39.8	38.2	37.1	36.1	35.2	34.3	33.4	32.6
MEA	24.8	28.0	32.9	33.5	32.9	32.5	32.0	31.4	30.8	30.2	29.6
NEU	29.2	50.6	51.2	50.8	49.9	49.3	48.7	48.2	47.7	47.2	46.7
OAS	70.2	70.9	67.6	66.4	63.7	61.0	58.5	56.2	54.0	52.0	50.0
REF	2.9	11.5	11.5	11.0	10.3	9.9	9.6	9.4	9.1	8.9	8.7
SSA	45.7	65.7	68.5	70.7	70.3	70.6	70.7	70.6	70.2	69.4	68.2
USA	48.3	71.8	63.6	63.9	63.2	62.8	62.5	62.2	62.1	62.0	61.9

Table 717: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Oil crops (kcal/capita/day) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	45.0	44.1	42.2	40.6	39.4	38.3
CAZ	47.0	46.9	46.5	46.2	45.9	45.6
CHA	65.2	64.4	63.3	62.5	61.9	61.3
EUR	24.0	23.9	23.8	23.6	23.5	23.4
IND	25.4	24.6	23.2	22.0	21.1	20.4
LAM	31.8	31.1	29.7	28.5	27.4	26.6
MEA	29.1	28.6	27.7	27.0	26.4	26.0
NEU	46.3	45.8	45.1	44.4	43.9	43.5
OAS	48.2	46.5	43.6	41.1	39.0	37.3
REF	8.6	8.5	8.2	8.0	7.9	7.8
SSA	66.7	64.9	60.9	57.3	54.4	52.2
USA	61.8	61.7	61.4	61.3	61.1	60.9

Table 718: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Oil crops (kcal/capita/day) [PART 2/2]

35.1.3 Other crops



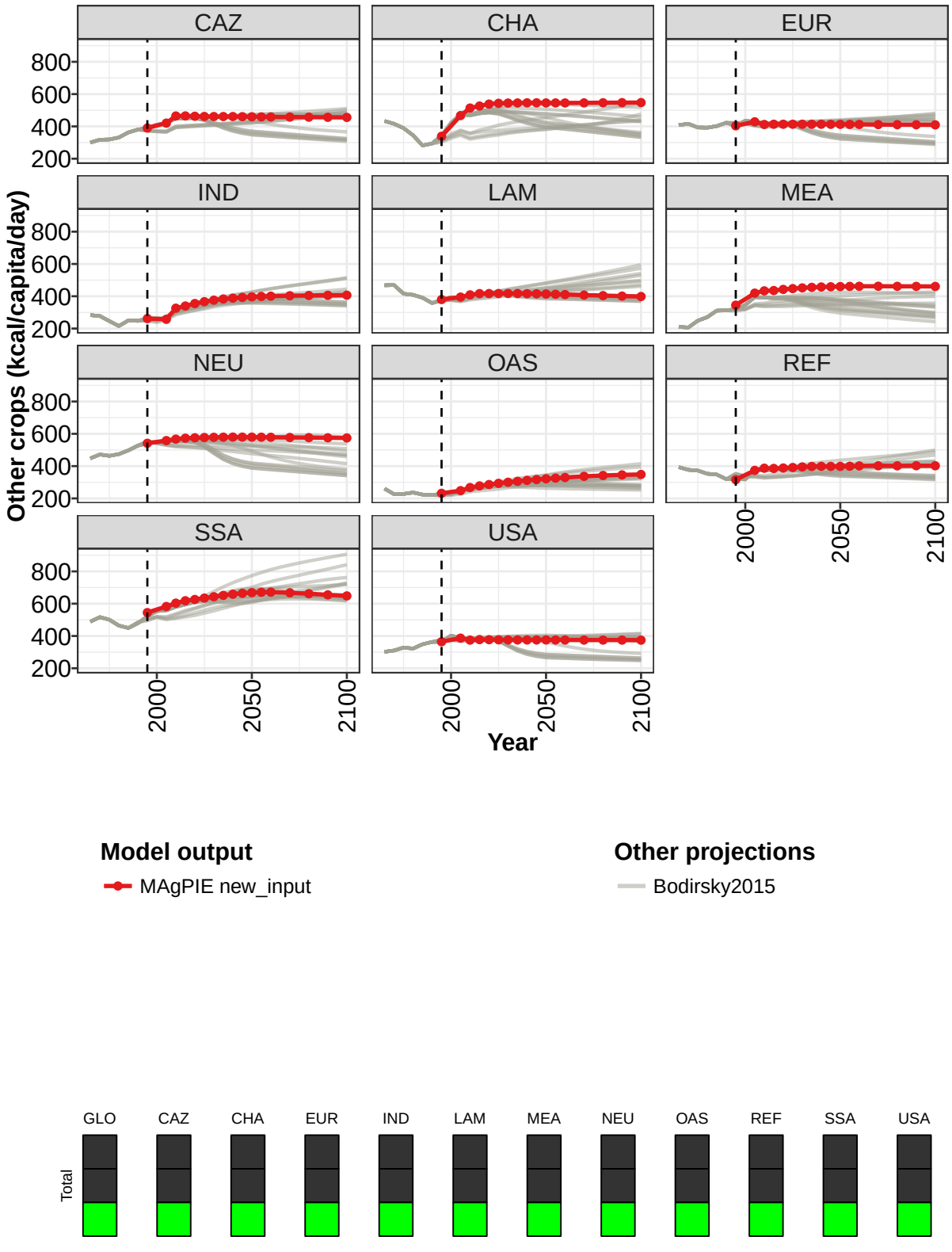


Figure 231: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Other crops (kcal/capita/day)

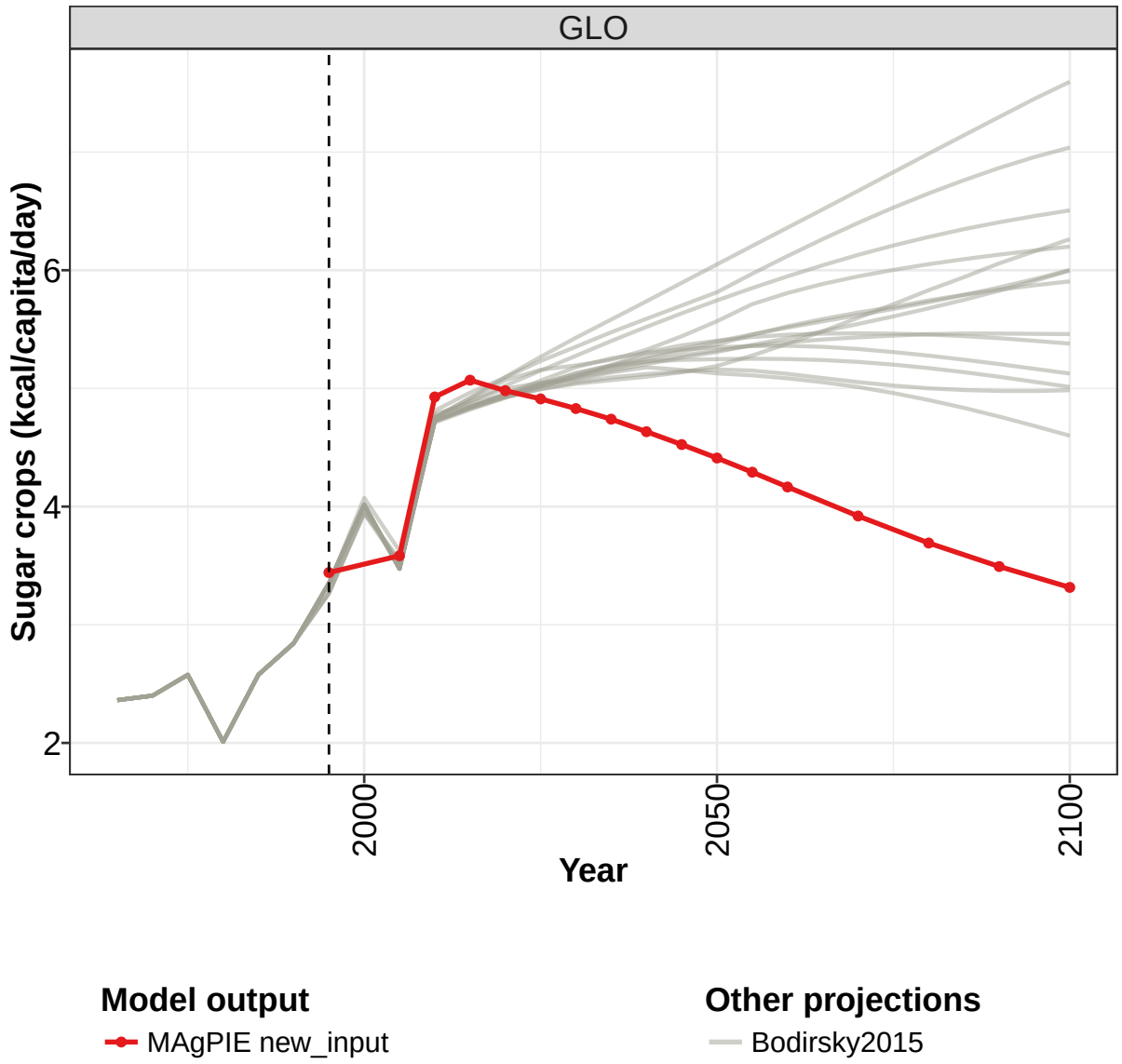
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	341	386	416	426	435	442	448	453	458	462	465
CAZ	390	420	465	465	463	462	461	461	461	460	460
CHA	339	467	514	526	538	543	545	545	546	546	545
EUR	403	428	412	413	413	414	414	414	413	413	413
IND	262	257	326	340	355	367	376	383	388	393	396
LAM	380	395	409	416	417	417	417	417	416	415	414
MEA	345	419	433	435	442	447	452	455	458	459	460
NEU	542	558	567	573	576	577	579	579	580	580	580
OAS	232	248	267	278	286	293	300	306	312	317	322
REF	316	374	387	386	388	391	395	398	399	398	398
SSA	545	583	604	618	626	635	643	651	659	664	668
USA	365	387	374	378	377	376	376	376	376	375	376

Table 719: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Other crops (kcal/capita/day) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	468	471	474	476	477	478
CAZ	459	459	458	457	456	456
CHA	545	545	546	547	547	547
EUR	412	412	411	411	410	410
IND	399	401	403	405	406	407
LAM	412	411	407	404	401	398
MEA	461	462	462	462	461	461
NEU	579	579	577	576	575	575
OAS	326	330	337	342	346	348
REF	400	401	402	402	402	402
SSA	671	672	668	662	655	648
USA	375	375	375	375	375	374

Table 720: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Other crops (kcal/capita/day) [PART 2/2]

35.1.4 Sugar crops



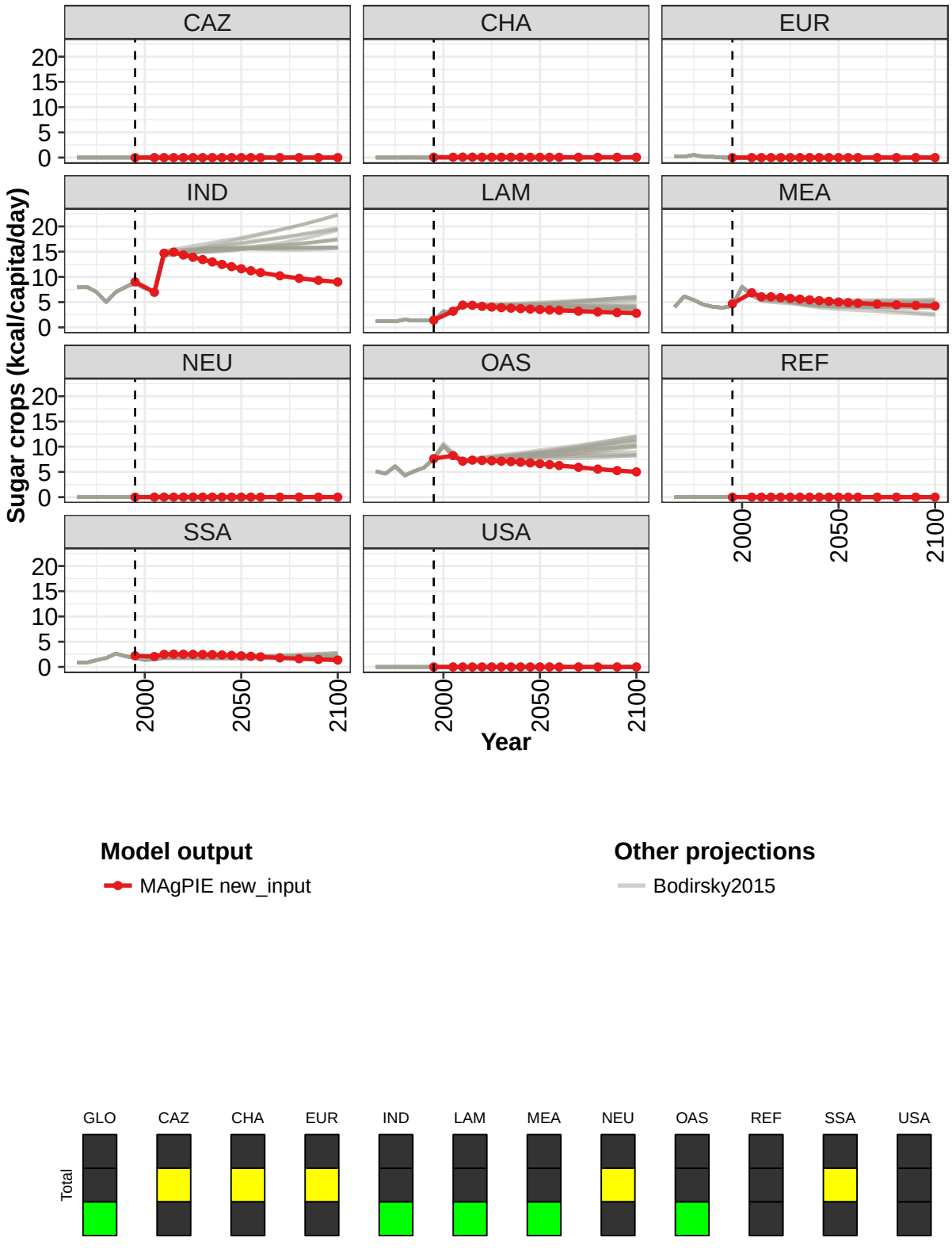


Figure 232: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Sugar crops (kcal/capita/day)

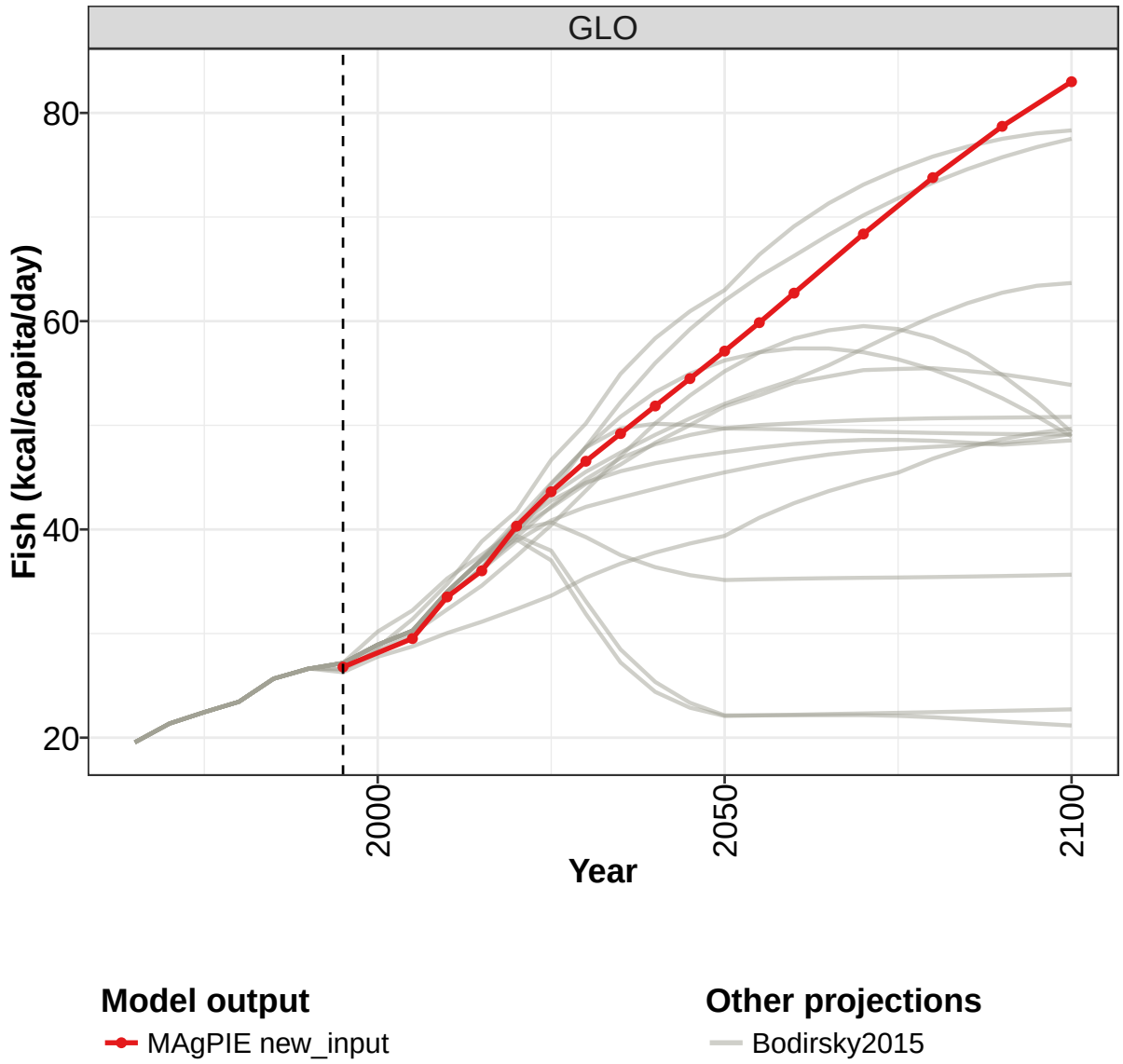
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.4	3.6	4.9	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	9.0	7.0	14.7	14.9	14.4	13.9	13.4	13.0	12.5	12.0	11.6
LAM	1.4	3.2	4.4	4.4	4.2	4.0	3.9	3.8	3.7	3.6	3.5
MEA	4.7	6.9	6.1	6.1	5.9	5.8	5.6	5.5	5.3	5.2	5.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.6	8.2	7.1	7.3	7.3	7.2	7.1	7.0	6.9	6.8	6.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.2	2.1	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.3	2.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 721: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Sugar crops (kcal/capita/day) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	4.3	4.2	3.9	3.7	3.5	3.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	11.2	10.9	10.2	9.7	9.3	9.0
LAM	3.5	3.4	3.2	3.1	2.9	2.8
MEA	4.9	4.8	4.6	4.5	4.3	4.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	6.5	6.3	5.9	5.6	5.3	5.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.1	2.0	1.8	1.6	1.5	1.4
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 722: MAgPIE new_input — Nutrition—Calorie Supply—Crops—Sugar crops (kcal/capita/day) [PART 2/2]

35.2 Fish


GLO
Fish (kcal/capita/day)
80
60
40
20
2000
2050
2100
Year
Model output
MAgPIE new_input
Other projections
Bodirsky2015

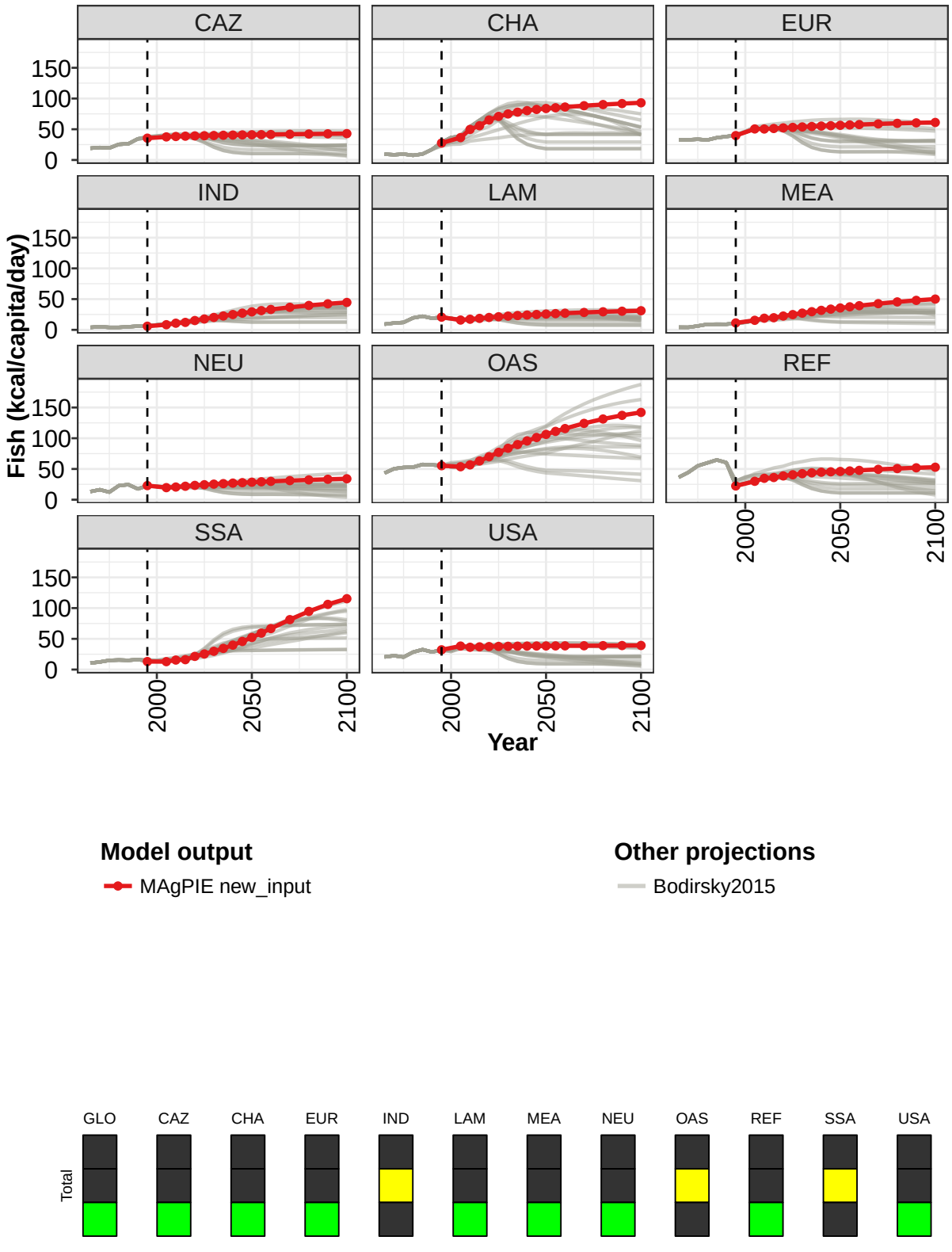


Figure 233: MAgPIE new_input — Nutrition—Calorie Supply—Fish (kcal/capita/day)

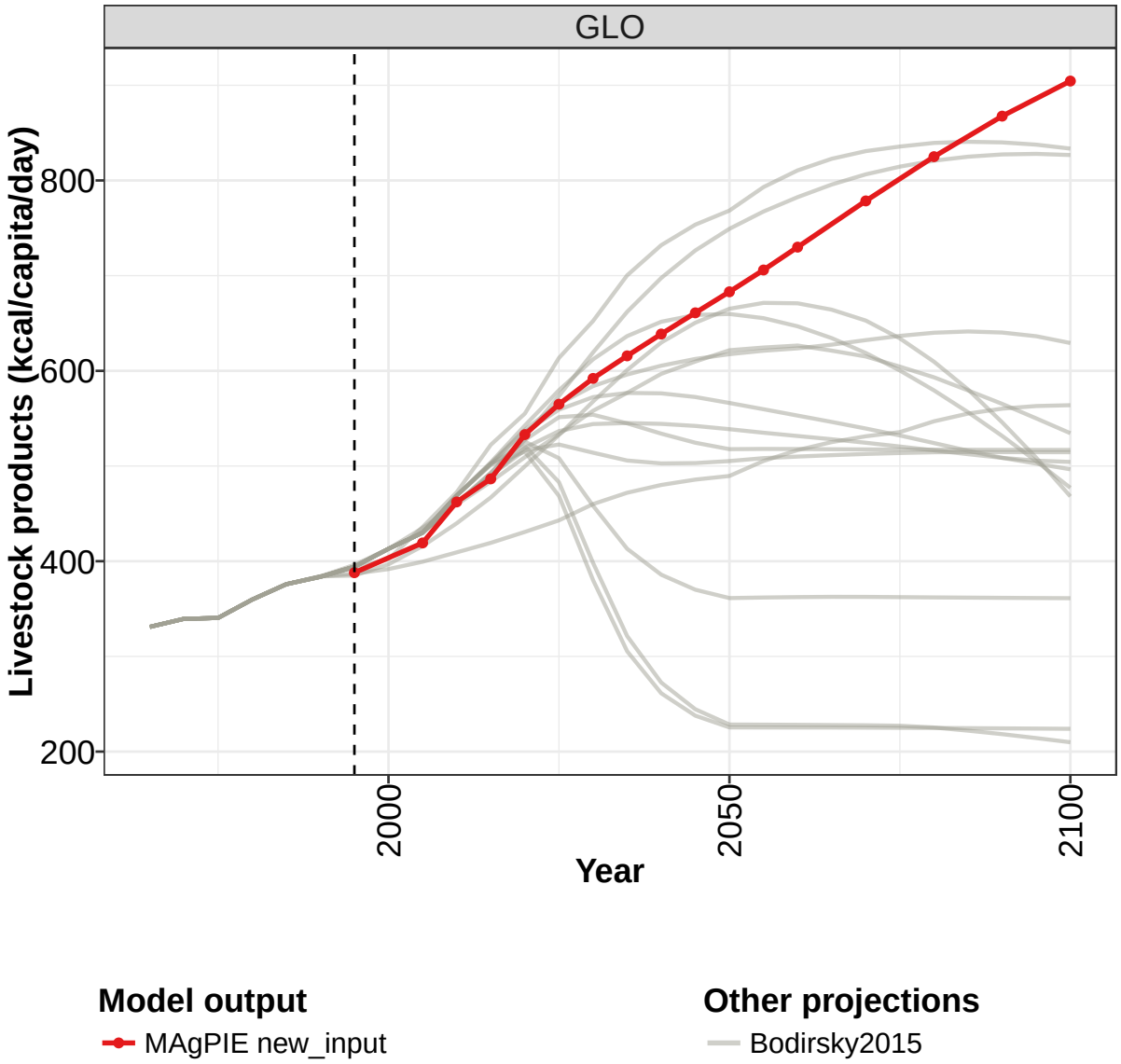
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	27	30	34	36	40	44	47	49	52	54	57
CAZ	36	38	38	39	39	40	40	40	41	41	41
CHA	28	36	50	56	65	71	75	78	80	82	84
EUR	40	51	50	51	52	53	54	55	55	56	56
IND	6	8	11	12	15	18	20	23	25	27	29
LAM	21	16	17	19	20	21	22	23	24	25	26
MEA	11	16	19	20	22	25	27	30	32	34	36
NEU	23	20	21	22	23	24	25	26	27	28	28
OAS	55	54	57	63	70	77	84	90	96	101	106
REF	22	30	35	36	39	41	42	44	45	45	46
SSA	13	13	15	16	21	25	30	34	40	46	52
USA	32	38	36	37	37	38	38	38	38	38	38

Table 723: MAgPIE new_input — Nutrition—Calorie Supply—Fish (kcal/capita/day) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	60	63	68	74	79	83
CAZ	41	41	42	42	43	43
CHA	85	86	88	90	92	93
EUR	57	58	59	60	60	61
IND	31	33	37	40	42	45
LAM	26	27	28	29	30	31
MEA	37	39	43	45	48	50
NEU	29	30	31	32	33	34
OAS	111	116	124	131	137	142
REF	47	48	49	51	52	53
SSA	59	67	81	95	106	115
USA	39	39	39	39	39	39

Table 724: MAgPIE new_input — Nutrition—Calorie Supply—Fish (kcal/capita/day) [PART 2/2]

35.3 Livestock products



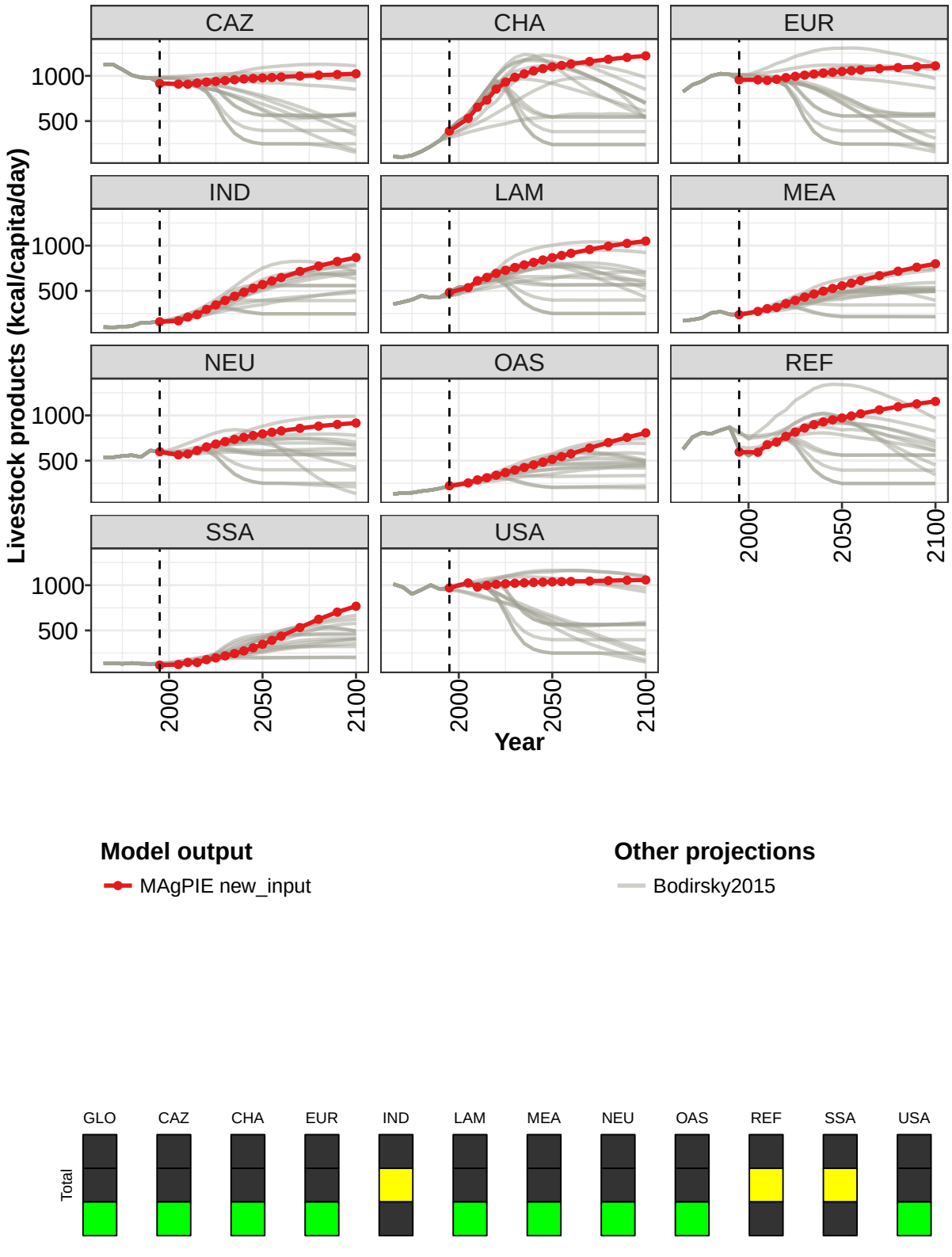


Figure 234: MAgPIE new_input — Nutrition—Calorie Supply—Livestock products (kcal/capita/day)

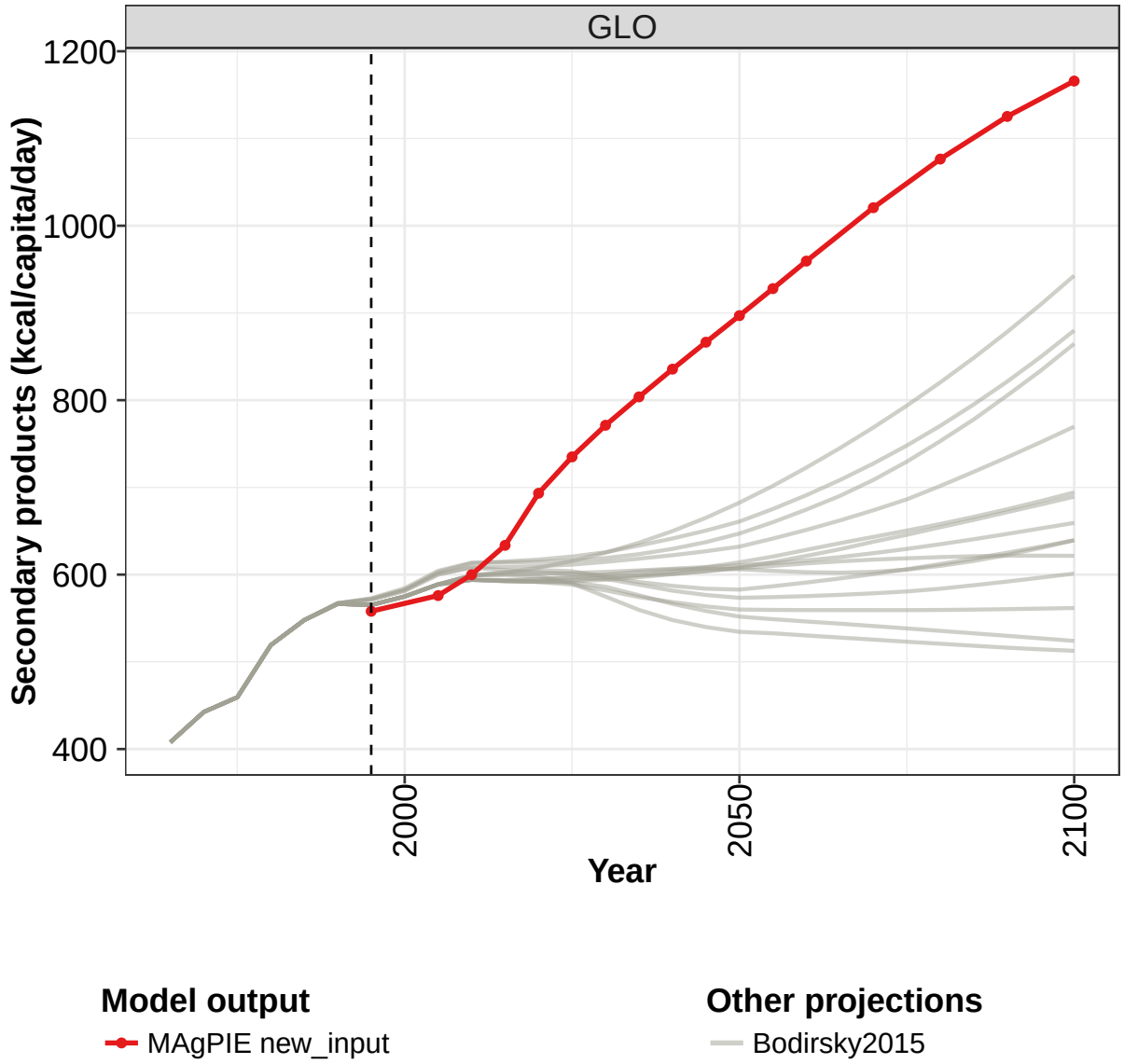
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	388	419	462	487	533	565	592	616	639	661	683
CAZ	915	909	907	921	932	939	948	957	965	972	977
CHA	390	530	653	732	854	931	984	1022	1054	1080	1099
EUR	956	956	950	962	980	995	1008	1020	1030	1039	1048
IND	159	169	210	236	295	345	394	440	486	529	570
LAM	483	535	613	649	694	728	759	787	815	842	867
MEA	237	273	303	317	359	395	431	465	497	527	556
NEU	598	564	574	611	652	684	711	736	758	778	796
OAS	222	254	288	311	339	368	397	425	454	484	514
REF	595	593	677	705	769	816	860	898	928	951	972
SSA	116	123	146	145	177	197	219	244	274	308	347
USA	970	1025	979	997	1010	1017	1022	1026	1030	1034	1037

Table 725: MAgPIE new_input — Nutrition—Calorie Supply—Livestock products (kcal/capita/day) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	706	730	779	825	868	904
CAZ	982	987	998	1008	1016	1023
CHA	1115	1131	1159	1183	1204	1221
EUR	1056	1065	1079	1092	1102	1111
IND	609	647	715	774	825	869
LAM	892	915	957	994	1025	1051
MEA	584	613	668	717	762	800
NEU	814	829	858	882	901	916
OAS	545	576	639	700	757	807
REF	994	1018	1062	1096	1128	1155
SSA	390	437	532	623	703	768
USA	1039	1042	1045	1051	1055	1058

Table 726: MAgPIE new_input — Nutrition—Calorie Supply—Livestock products (kcal/capita/day) [PART 2/2]

35.4 Secondary products



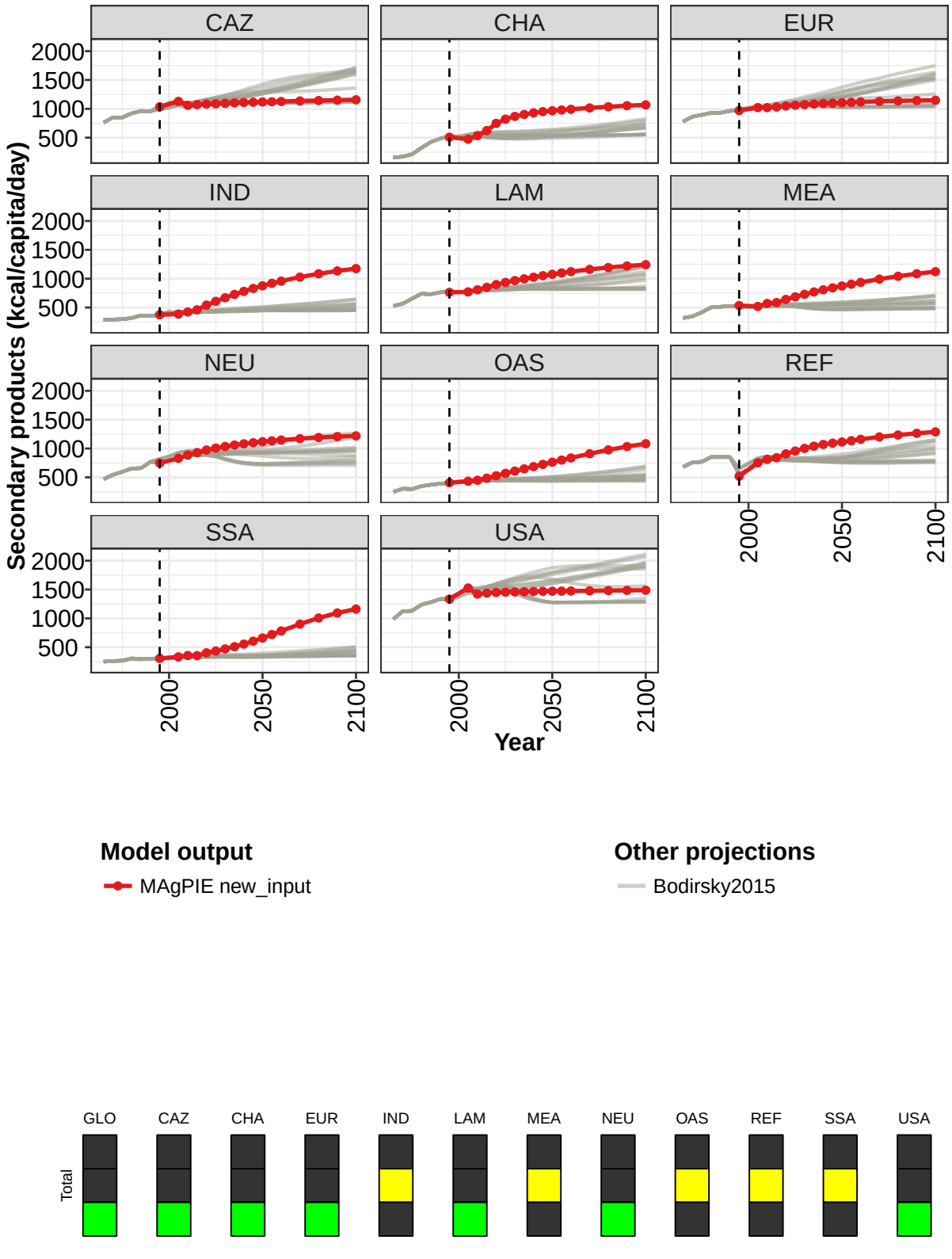


Figure 235: MAgPIE new_input — Nutrition—Calorie Supply—Secondary products (kcal/capita/day)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	558	576	600	634	693	735	771	804	836	866	897
CAZ	1035	1129	1062	1073	1082	1088	1095	1102	1110	1115	1119
CHA	508	474	534	623	748	821	869	902	930	952	967
EUR	969	1022	1020	1032	1049	1062	1073	1083	1092	1099	1106
IND	374	387	423	460	541	607	669	727	781	830	877
LAM	763	771	808	850	898	934	967	997	1025	1052	1076
MEA	535	519	570	586	640	685	729	770	807	841	873
NEU	747	830	887	930	974	1008	1036	1060	1082	1101	1118
OAS	407	433	450	486	528	569	609	647	686	725	763
REF	519	752	812	840	907	956	1002	1041	1071	1093	1113
SSA	306	333	356	354	403	434	470	509	554	604	660
USA	1334	1527	1421	1439	1449	1454	1458	1462	1465	1468	1471

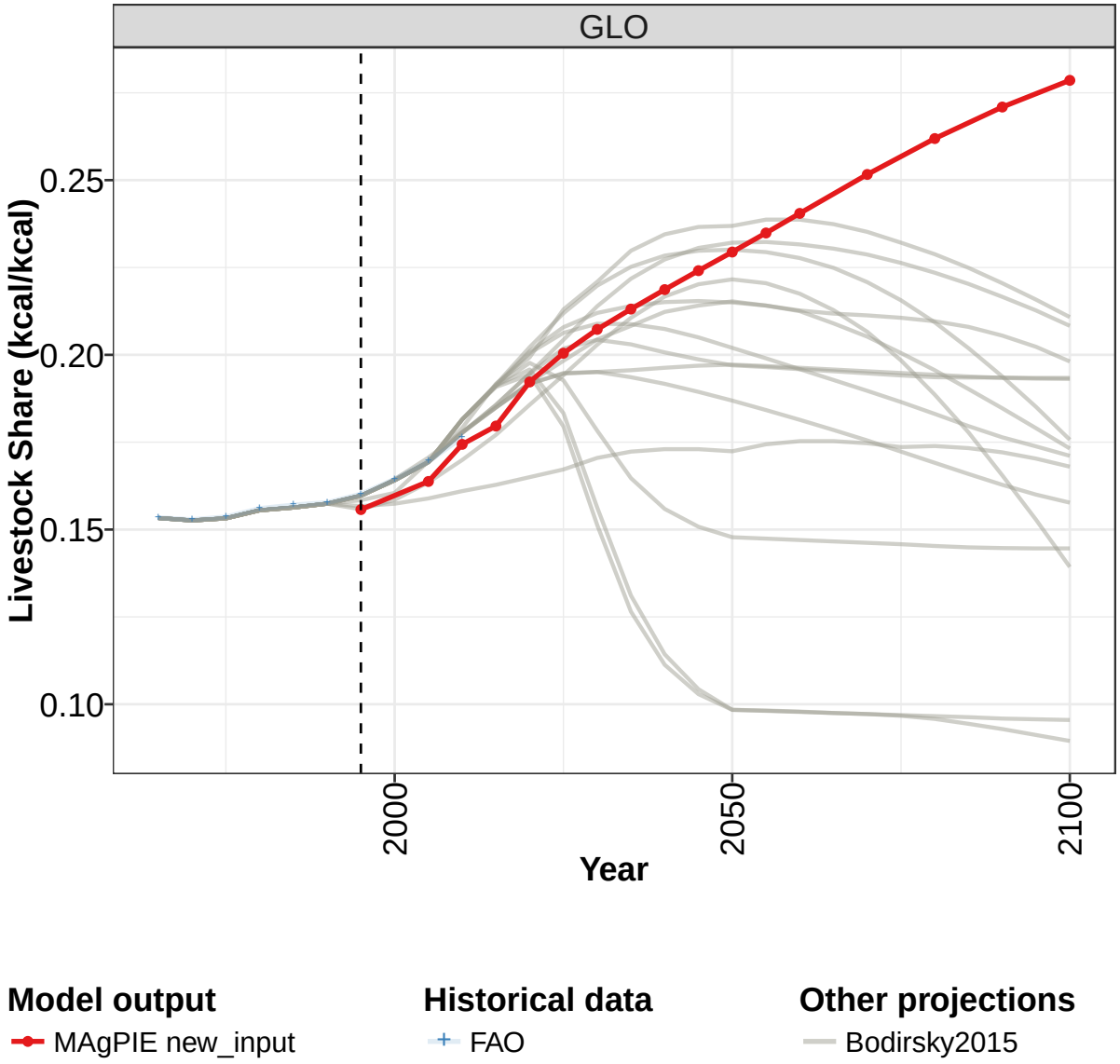
Table 727: MAgPIE new_input — Nutrition—Calorie Supply—Secondary products (kcal/capita/day) [PART 1/2]

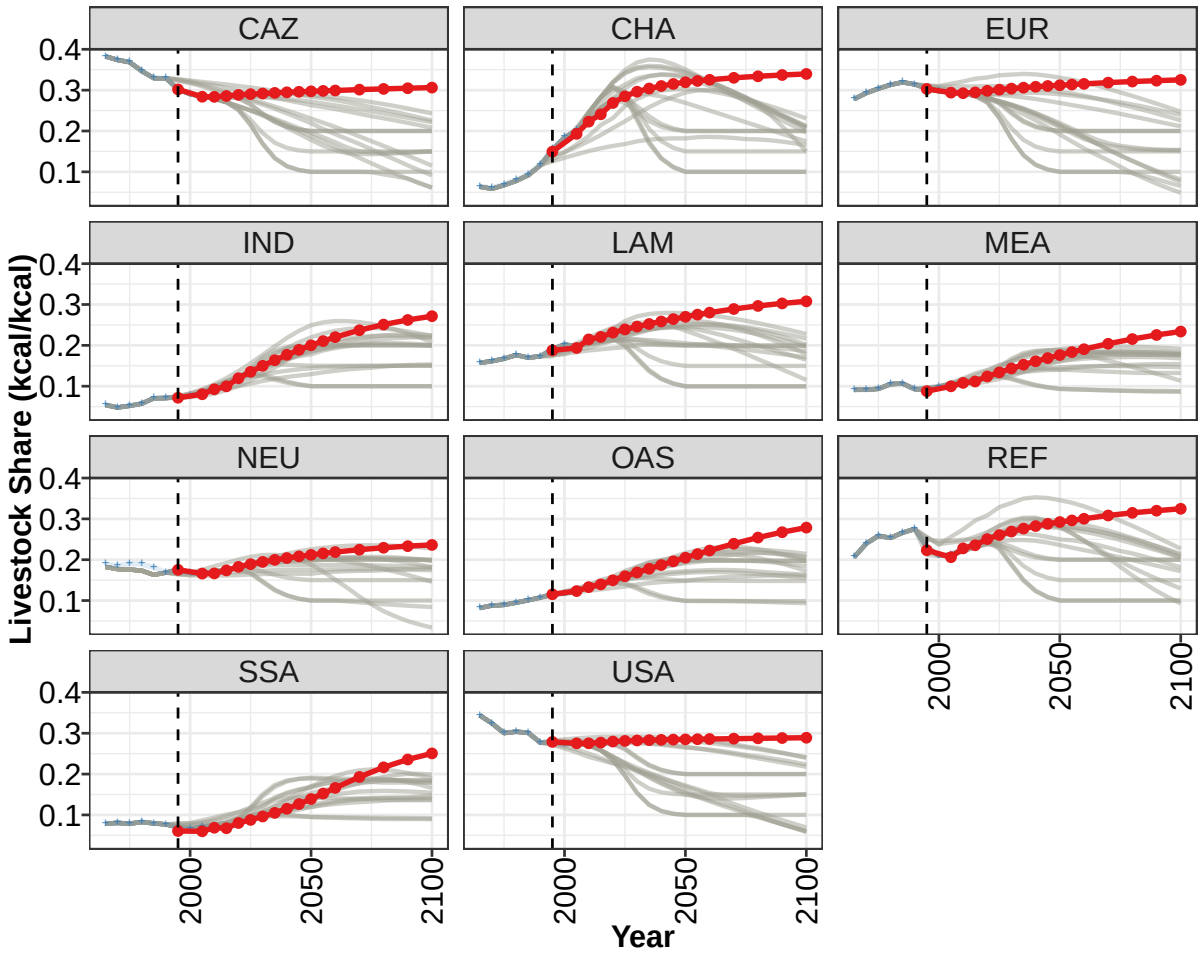
	2055	2060	2070	2080	2090	2100
GLO	928	959	1021	1076	1125	1166
CAZ	1123	1127	1136	1144	1150	1156
CHA	980	992	1016	1036	1054	1068
EUR	1112	1119	1129	1137	1144	1149
IND	919	958	1028	1085	1134	1175
LAM	1100	1122	1161	1193	1220	1242
MEA	905	935	992	1042	1085	1121
NEU	1133	1147	1171	1191	1207	1219
OAS	800	837	910	976	1034	1084
REF	1135	1159	1201	1233	1264	1288
SSA	720	781	900	1006	1093	1161
USA	1473	1474	1477	1482	1485	1488

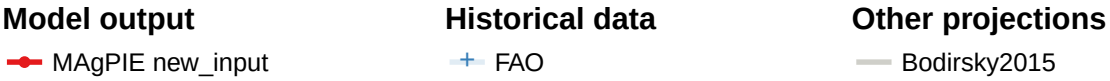
Table 728: MAgPIE new_input — Nutrition—Calorie Supply—Secondary products (kcal/capita/day) [PART 2/2]

36 Dietary Composition

36.1 Livestock Share







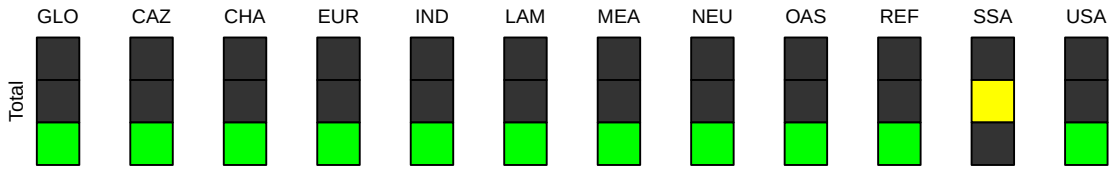


Figure 236: MAgPIE new_input — Nutrition—Dietary Composition—Livestock Share (kcal/kcal)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.156	0.164	0.174	0.180	0.192	0.200	0.207	0.213	0.219	0.224	0.229
CAZ	0.302	0.284	0.284	0.286	0.288	0.290	0.292	0.293	0.295	0.296	0.297
CHA	0.149	0.193	0.223	0.241	0.269	0.285	0.296	0.304	0.310	0.315	0.319
EUR	0.303	0.294	0.293	0.295	0.298	0.301	0.304	0.306	0.308	0.310	0.312
IND	0.072	0.080	0.092	0.100	0.120	0.135	0.150	0.164	0.177	0.189	0.200
LAM	0.188	0.194	0.215	0.221	0.231	0.239	0.246	0.252	0.258	0.264	0.270
MEA	0.088	0.100	0.108	0.112	0.124	0.134	0.144	0.153	0.161	0.169	0.176
NEU	0.175	0.166	0.166	0.174	0.183	0.189	0.195	0.200	0.204	0.208	0.212
OAS	0.115	0.123	0.133	0.140	0.150	0.160	0.169	0.178	0.187	0.196	0.205
REF	0.223	0.206	0.228	0.235	0.250	0.260	0.269	0.276	0.282	0.288	0.292
SSA	0.061	0.060	0.069	0.067	0.080	0.088	0.096	0.105	0.115	0.127	0.139
USA	0.279	0.275	0.275	0.277	0.280	0.281	0.282	0.283	0.284	0.284	0.285

Table 729: MAgPIE new_input — Nutrition—Dietary Composition—Livestock Share (kcal/kcal) [PART 1/2]

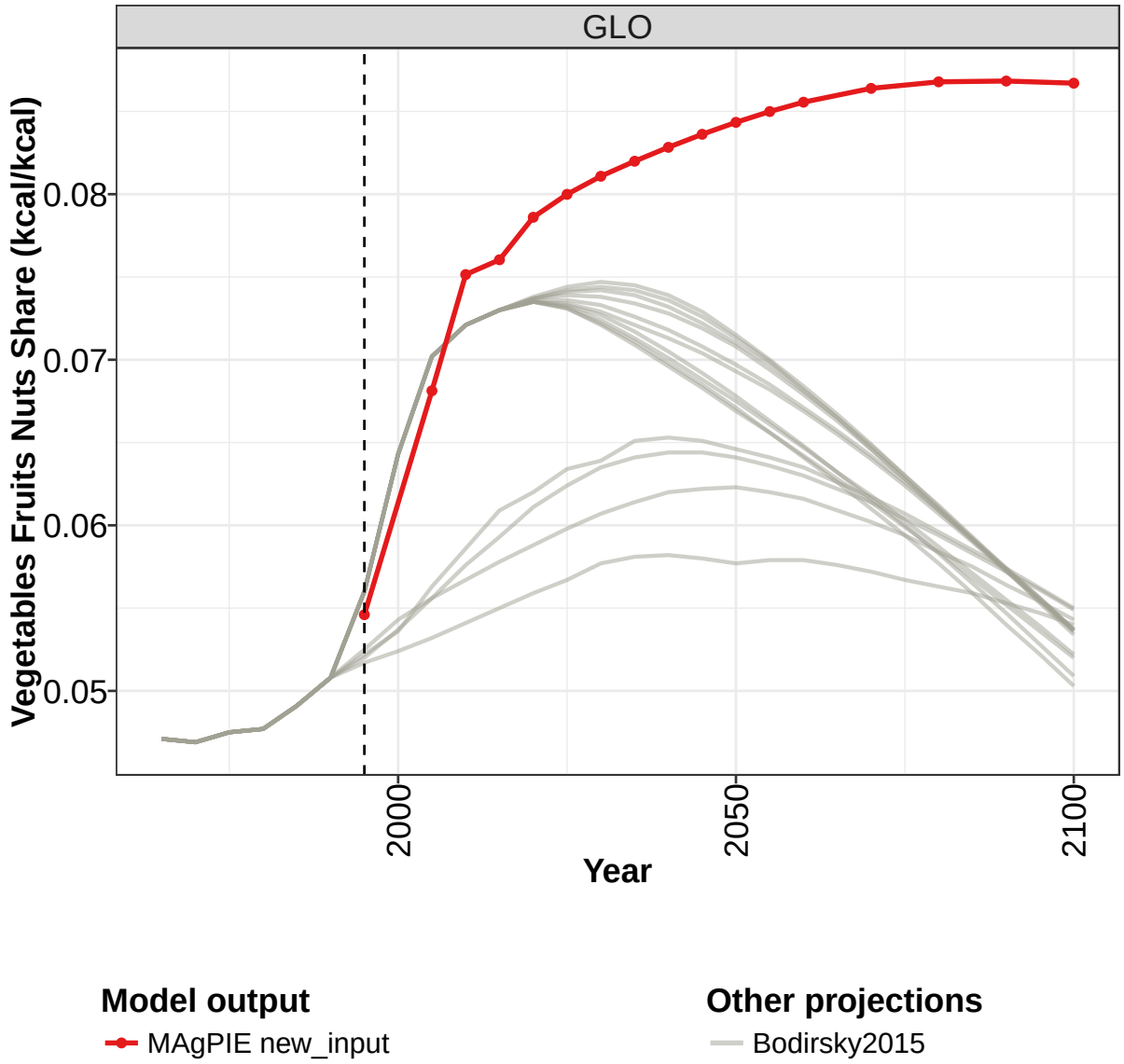
	2055	2060	2070	2080	2090	2100
GLO	0.235	0.240	0.252	0.262	0.271	0.279
CAZ	0.298	0.299	0.301	0.303	0.305	0.306
CHA	0.323	0.325	0.330	0.334	0.337	0.340
EUR	0.314	0.315	0.318	0.321	0.323	0.325
IND	0.210	0.220	0.237	0.251	0.262	0.271
LAM	0.275	0.280	0.289	0.297	0.303	0.308
MEA	0.184	0.191	0.204	0.215	0.225	0.234
NEU	0.215	0.219	0.225	0.229	0.233	0.236
OAS	0.214	0.222	0.239	0.254	0.267	0.279
REF	0.296	0.300	0.308	0.315	0.320	0.325
SSA	0.152	0.166	0.193	0.217	0.236	0.251
USA	0.285	0.286	0.287	0.288	0.288	0.289

Table 730: MAgPIE new_input — Nutrition—Dietary Composition—Livestock Share (kcal/kcal) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.153	0.153	0.154	0.156	0.157	0.158	0.160	0.164	0.170	0.176
CAZ	0.383	0.374	0.368	0.347	0.329	0.329	0.302	0.290	0.284	0.284
CHA	0.065	0.060	0.069	0.080	0.094	0.118	0.156	0.185	0.202	0.224
EUR	0.278	0.293	0.304	0.313	0.319	0.314	0.304	0.297	0.294	0.293
IND	0.054	0.048	0.052	0.057	0.071	0.071	0.073	0.076	0.085	0.092
LAM	0.157	0.161	0.167	0.176	0.170	0.173	0.191	0.202	0.197	0.214
MEA	0.091	0.091	0.094	0.105	0.106	0.093	0.091	0.099	0.105	0.108
NEU	0.189	0.186	0.190	0.189	0.181	0.169	0.176	0.168	0.167	0.166
OAS	0.082	0.088	0.089	0.095	0.101	0.107	0.116	0.117	0.124	0.132
REF	0.206	0.240	0.258	0.254	0.266	0.275	0.231	0.210	0.212	0.228
SSA	0.079	0.081	0.079	0.083	0.079	0.077	0.070	0.066	0.071	0.073
USA	0.344	0.324	0.300	0.304	0.301	0.277	0.279	0.273	0.276	0.275

Table 731: FAO — Nutrition—Dietary Composition—Livestock Share (kcal/kcal)

36.2 Vegetables Fruits Nuts Share



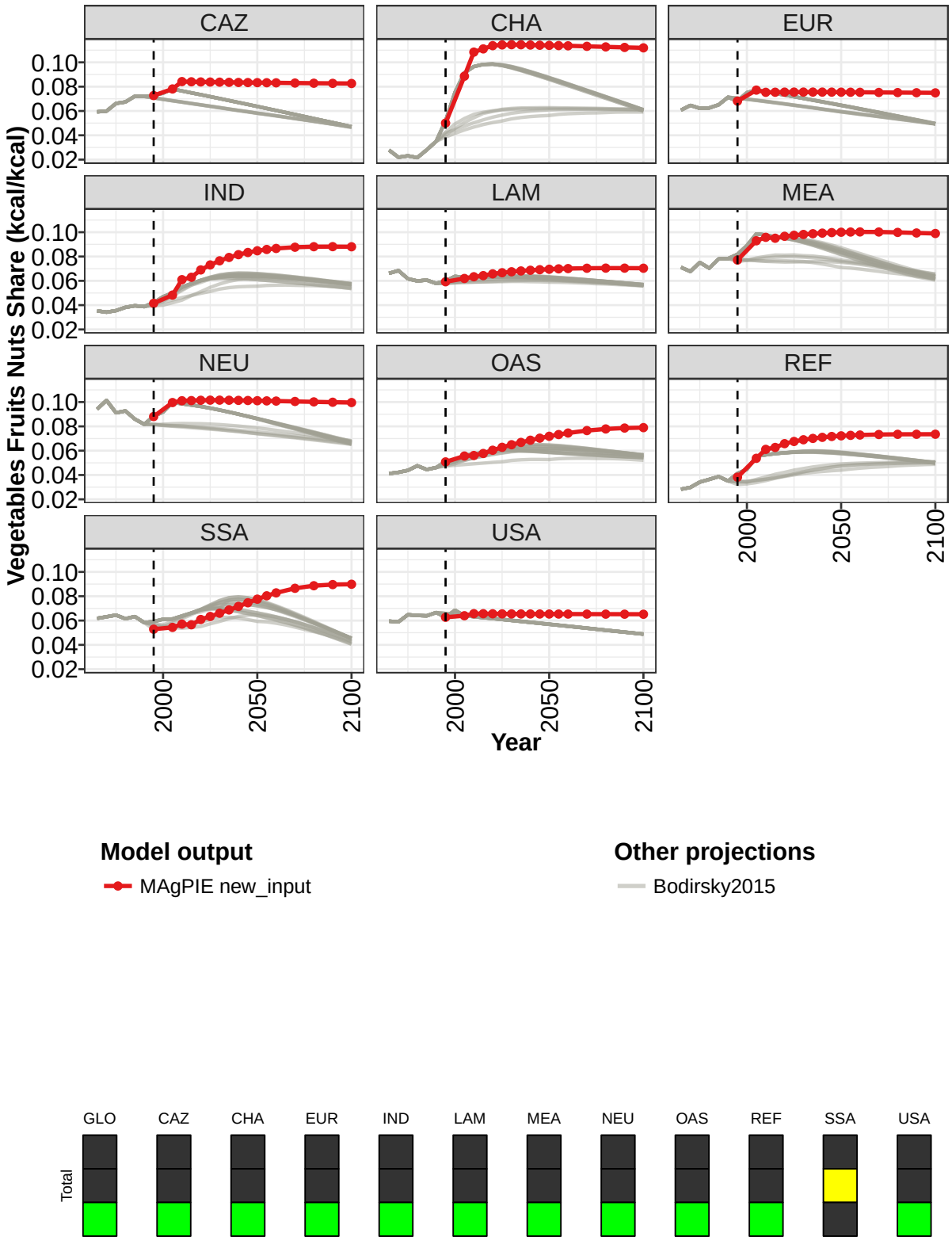


Figure 237: MAgPIE new_input — Nutrition—Dietary Composition—Vegetables Fruits Nuts Share (kcal/kcal)

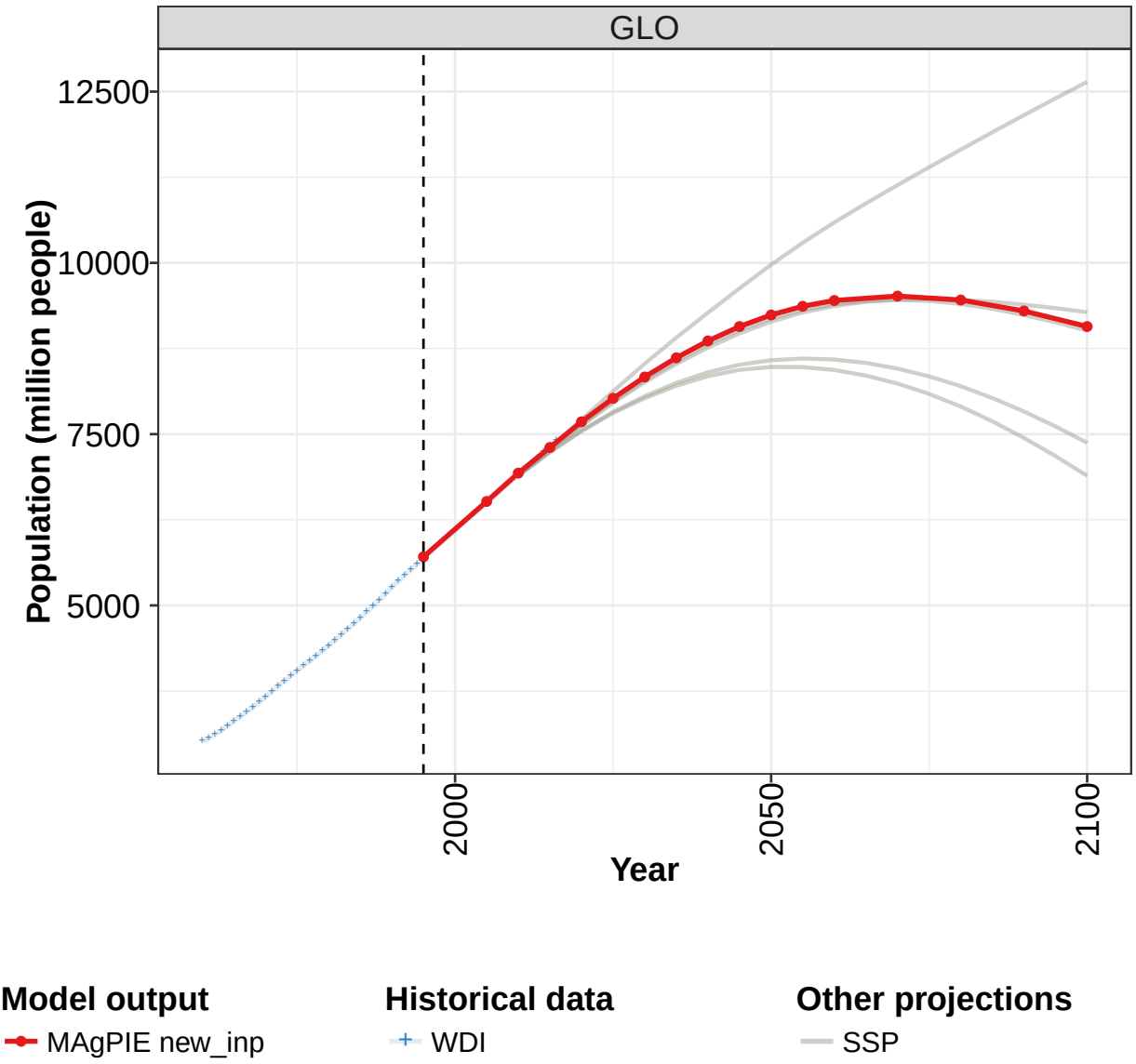
	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.055	0.068	0.075	0.076	0.079	0.080	0.081	0.082	0.083	0.084	0.084
CAZ	0.073	0.078	0.084	0.084	0.084	0.084	0.084	0.084	0.083	0.083	0.083
CHA	0.050	0.089	0.108	0.111	0.114	0.114	0.115	0.114	0.114	0.114	0.114
EUR	0.068	0.077	0.075	0.075	0.076	0.076	0.076	0.076	0.076	0.076	0.075
IND	0.042	0.048	0.061	0.063	0.069	0.073	0.076	0.079	0.082	0.083	0.085
LAM	0.059	0.062	0.063	0.064	0.066	0.067	0.067	0.068	0.069	0.069	0.070
MEA	0.077	0.093	0.096	0.095	0.097	0.097	0.098	0.099	0.099	0.100	0.100
NEU	0.088	0.100	0.101	0.101	0.101	0.102	0.102	0.102	0.101	0.101	0.101
OAS	0.051	0.056	0.056	0.058	0.060	0.063	0.065	0.067	0.069	0.070	0.072
REF	0.038	0.054	0.061	0.063	0.066	0.068	0.069	0.070	0.071	0.072	0.072
SSA	0.053	0.054	0.057	0.057	0.061	0.063	0.066	0.069	0.072	0.075	0.078
USA	0.063	0.064	0.066	0.066	0.066	0.066	0.065	0.065	0.065	0.065	0.065

Table 732: MAgPIE new_input — Nutrition—Dietary Composition—Vegetables Fruits Nuts Share (kcal/kcal) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	0.085	0.086	0.086	0.087	0.087	0.087
CAZ	0.083	0.083	0.083	0.083	0.083	0.083
CHA	0.114	0.114	0.113	0.113	0.112	0.112
EUR	0.075	0.075	0.075	0.075	0.075	0.075
IND	0.086	0.087	0.088	0.088	0.088	0.088
LAM	0.070	0.070	0.070	0.070	0.070	0.070
MEA	0.100	0.100	0.100	0.100	0.099	0.099
NEU	0.101	0.101	0.101	0.100	0.100	0.100
OAS	0.073	0.075	0.077	0.078	0.079	0.079
REF	0.073	0.073	0.073	0.073	0.074	0.074
SSA	0.080	0.083	0.087	0.089	0.090	0.090
USA	0.065	0.065	0.065	0.065	0.065	0.065

Table 733: MAgPIE new_input — Nutrition—Dietary Composition—Vegetables Fruits Nuts Share (kcal/kcal) [PART 2/2]

Part XII
Population



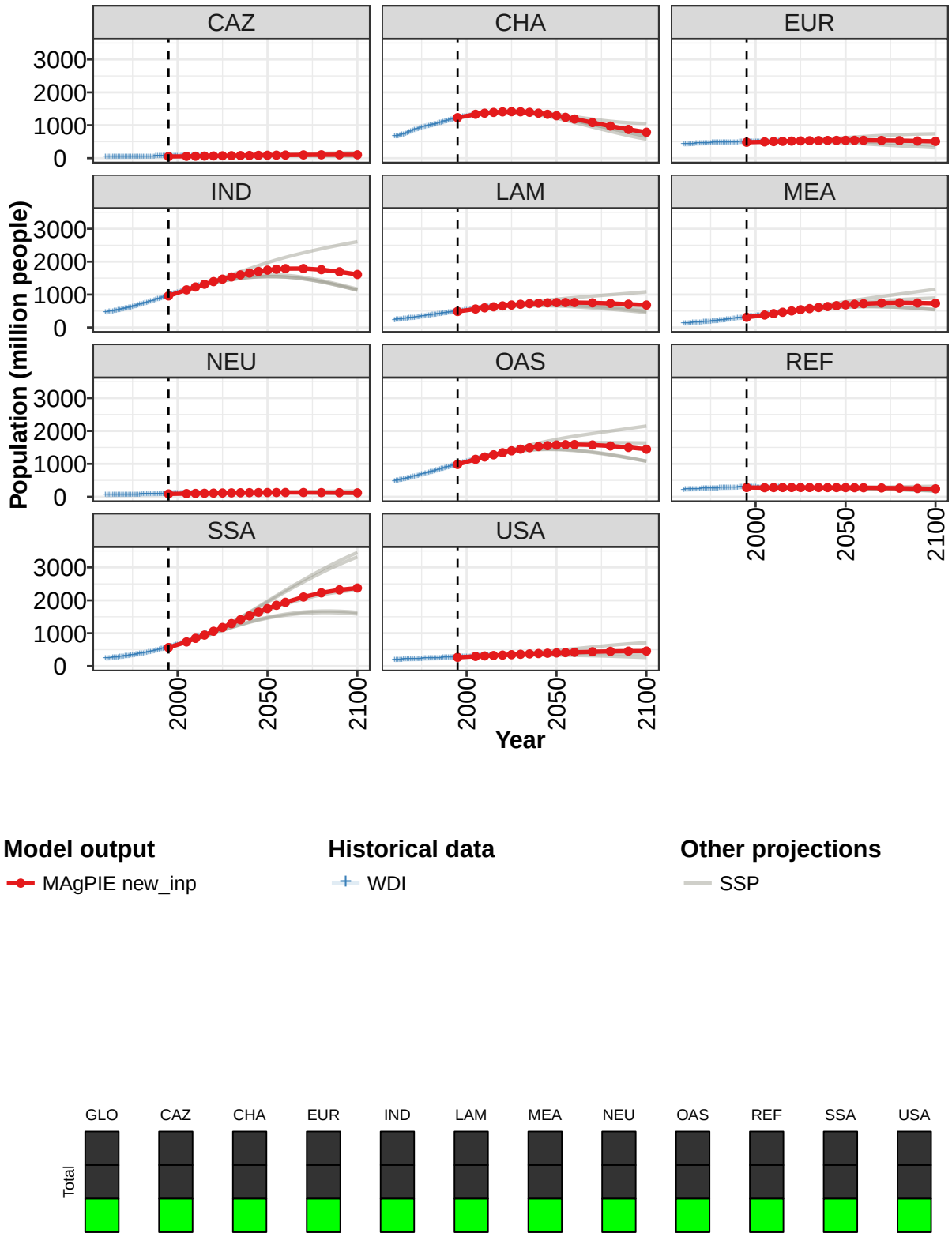


Figure 238: MAgPIE new_input — Population (million people)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	5710	6518	6932	7306	7680	8023	8335	8614	8861	9071	9240
CAZ	51	57	60	64	68	72	76	79	83	86	89
CHA	1233	1334	1368	1391	1407	1414	1409	1394	1368	1333	1291
EUR	485	496	505	513	520	525	530	534	538	540	542
IND	960	1144	1231	1315	1395	1469	1537	1599	1654	1703	1743
LAM	487	562	598	628	657	683	705	724	739	749	756
MEA	310	379	422	463	503	540	574	607	637	664	688
NEU	88	97	102	107	111	116	119	122	125	127	129
OAS	983	1140	1211	1276	1341	1399	1449	1492	1527	1555	1574
REF	283	278	281	282	283	284	283	282	282	281	280
SSA	564	736	845	944	1060	1175	1292	1410	1526	1639	1748
USA	266	296	309	322	335	348	360	371	382	392	401

Table 734: MAgPIE new_input — Population (million people) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	9367	9451	9515	9458	9298	9071
CAZ	92	95	100	103	104	103
CHA	1242	1190	1082	975	874	788
EUR	543	543	539	532	523	510
IND	1772	1789	1791	1757	1693	1611
LAM	759	758	749	732	709	683
MEA	707	723	743	749	745	734
NEU	130	130	130	128	124	120
OAS	1585	1589	1576	1545	1500	1447
REF	278	276	270	262	253	244
SSA	1848	1940	2101	2228	2318	2374
USA	410	420	436	448	455	457

Table 735: MAgPIE new_input — Population (million people) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3016	3056	3109	3173	3238	3304	3374	3443	3513	3587	3662
CAZ	31	31	32	32	33	34	34	35	36	36	37
CHA	670	664	669	686	702	719	739	758	779	800	823
EUR	410	413	417	421	424	428	431	434	437	440	442
IND	449	458	468	478	487	498	508	519	530	542	554
LAM	220	227	233	239	246	253	260	266	273	280	287
MEA	113	116	119	122	126	129	133	137	141	145	149
NEU	43	44	45	46	47	48	49	50	51	52	53
OAS	471	483	494	505	517	530	542	555	567	582	595
REF	207	210	213	216	220	223	225	228	230	232	234
SSA	221	226	232	237	243	249	255	262	268	275	282
USA	181	184	187	189	192	194	197	199	201	203	205

Table 736: WDI — Population (million people) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	3739	3815	3891	3967	4042	4114	4186	4260	4335	4411	4489
CAZ	37	38	39	40	40	41	41	42	42	42	43
CHA	845	866	886	905	921	935	948	961	974	987	999
EUR	445	447	450	453	455	457	459	461	463	465	466
IND	566	579	593	607	621	636	650	666	681	697	713
LAM	295	302	310	317	325	332	340	348	356	364	372
MEA	153	157	162	166	171	176	182	187	193	200	206
NEU	54	56	57	58	59	60	61	62	63	64	65
OAS	609	623	636	651	665	679	694	708	723	739	754
REF	237	239	241	243	245	248	250	252	254	257	259
SSA	290	298	306	314	323	332	341	351	361	371	382
USA	208	210	212	214	216	218	220	223	225	227	229

Table 737: WDI — Population (million people) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	4569	4651	4732	4815	4900	4988	5076	5165	5263	5350	5433
CAZ	44	44	44	45	45	46	47	47	48	49	50
CHA	1014	1029	1042	1057	1073	1090	1108	1125	1141	1157	1171
EUR	468	469	470	471	472	473	475	477	478	479	481
IND	730	747	764	782	799	817	834	852	870	888	906
LAM	380	388	396	404	412	421	429	437	445	453	462
MEA	213	221	228	236	243	251	258	266	275	283	288
NEU	67	68	69	70	71	72	74	75	83	84	85
OAS	769	785	801	817	833	850	867	883	900	917	933
REF	261	263	266	268	271	273	276	278	280	281	282
SSA	393	404	416	428	440	452	465	478	492	506	520
USA	232	234	236	238	240	242	244	247	250	253	257

Table 738: WDI — Population (million people) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	5518	5602	5686	5769	5852	5933	6014	6094	6173	6253	6332
CAZ	50	51	51	52	52	53	53	54	54	55	56
CHA	1185	1198	1211	1224	1237	1249	1260	1270	1279	1288	1296
EUR	482	483	484	485	486	487	488	488	489	491	492
IND	924	942	960	979	997	1016	1035	1053	1071	1090	1108
LAM	470	478	486	494	502	510	517	525	532	539	547
MEA	295	302	310	317	323	330	337	343	350	357	364
NEU	86	87	88	89	89	90	91	92	93	94	95
OAS	950	967	983	999	1016	1032	1047	1063	1079	1095	1110
REF	283	283	283	282	282	281	281	280	279	279	278
SSA	534	548	563	579	594	610	626	643	660	678	696
USA	260	263	266	269	273	276	279	282	285	288	290

Table 739: WDI — Population (million people) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	6412	6492	6574	6656	6739	6822	6906	6988	7068	7153	7239
CAZ	56	57	57	58	59	60	60	61	62	63	64
CHA	1303	1311	1318	1325	1332	1339	1345	1352	1358	1365	1372
EUR	494	496	498	500	502	503	505	504	505	507	508
IND	1126	1144	1162	1180	1197	1214	1231	1247	1263	1279	1294
LAM	554	561	568	575	582	589	597	604	611	618	624
MEA	371	379	387	395	404	413	421	430	439	448	457
NEU	96	97	98	99	100	101	102	103	105	106	107
OAS	1125	1140	1154	1168	1182	1196	1211	1225	1240	1255	1270
REF	278	278	277	278	278	279	281	282	283	285	286
SSA	715	735	755	776	798	820	843	867	887	912	937
USA	293	296	298	301	304	307	309	312	314	316	319

Table 740: WDI — Population (million people) [PART 5/6]

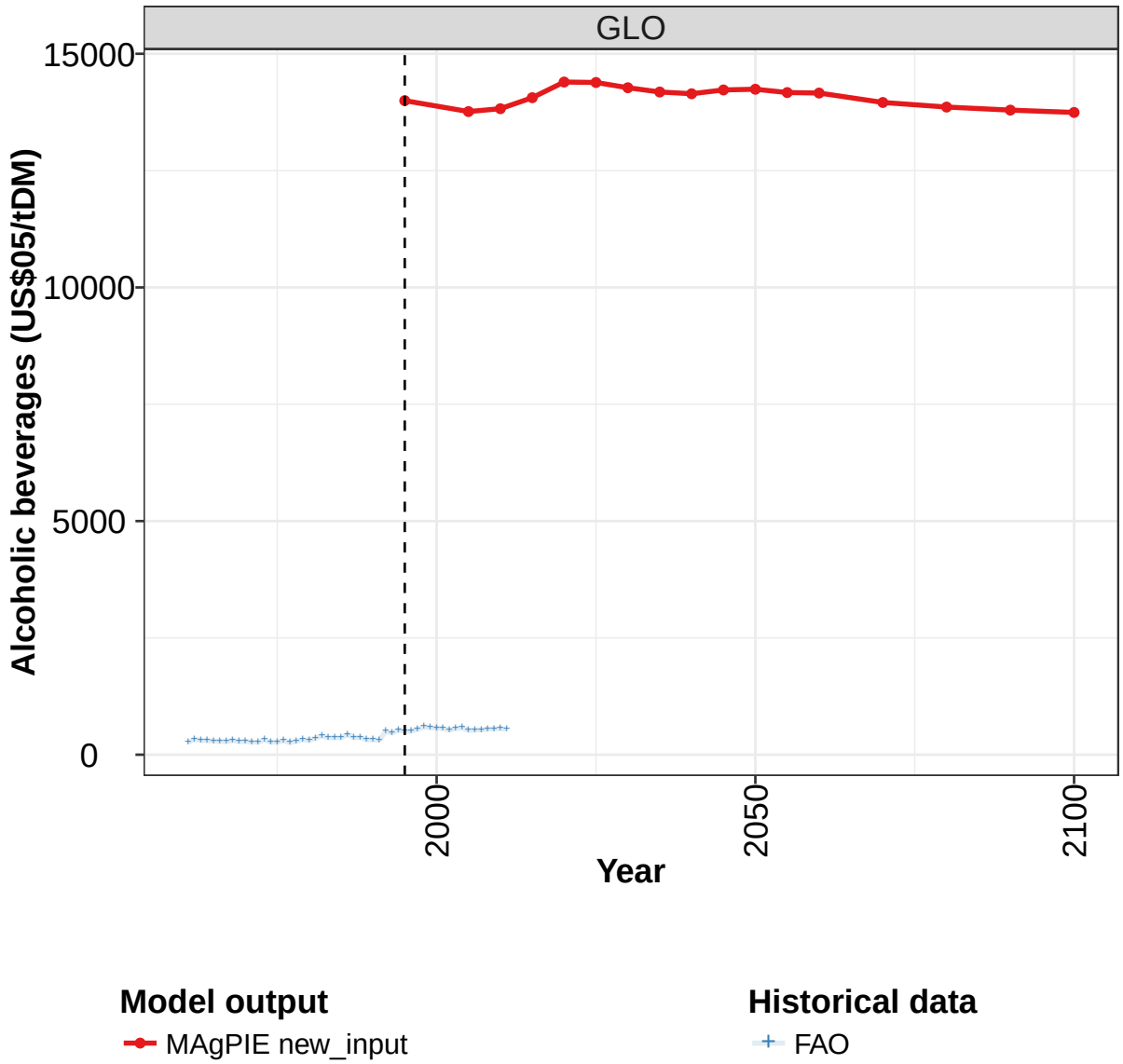
	2015	2016
GLO	7325	7412
CAZ	64	65
CHA	1379	1387
EUR	510	512
IND	1309	1324
LAM	631	638
MEA	466	475
NEU	109	110
OAS	1285	1300
REF	287	289
SSA	963	990
USA	321	323

Table 741: WDI — Population (million people) [PART 6/6]

Part XIII
Prices

37 Agriculture

37.1 Alcoholic beverages



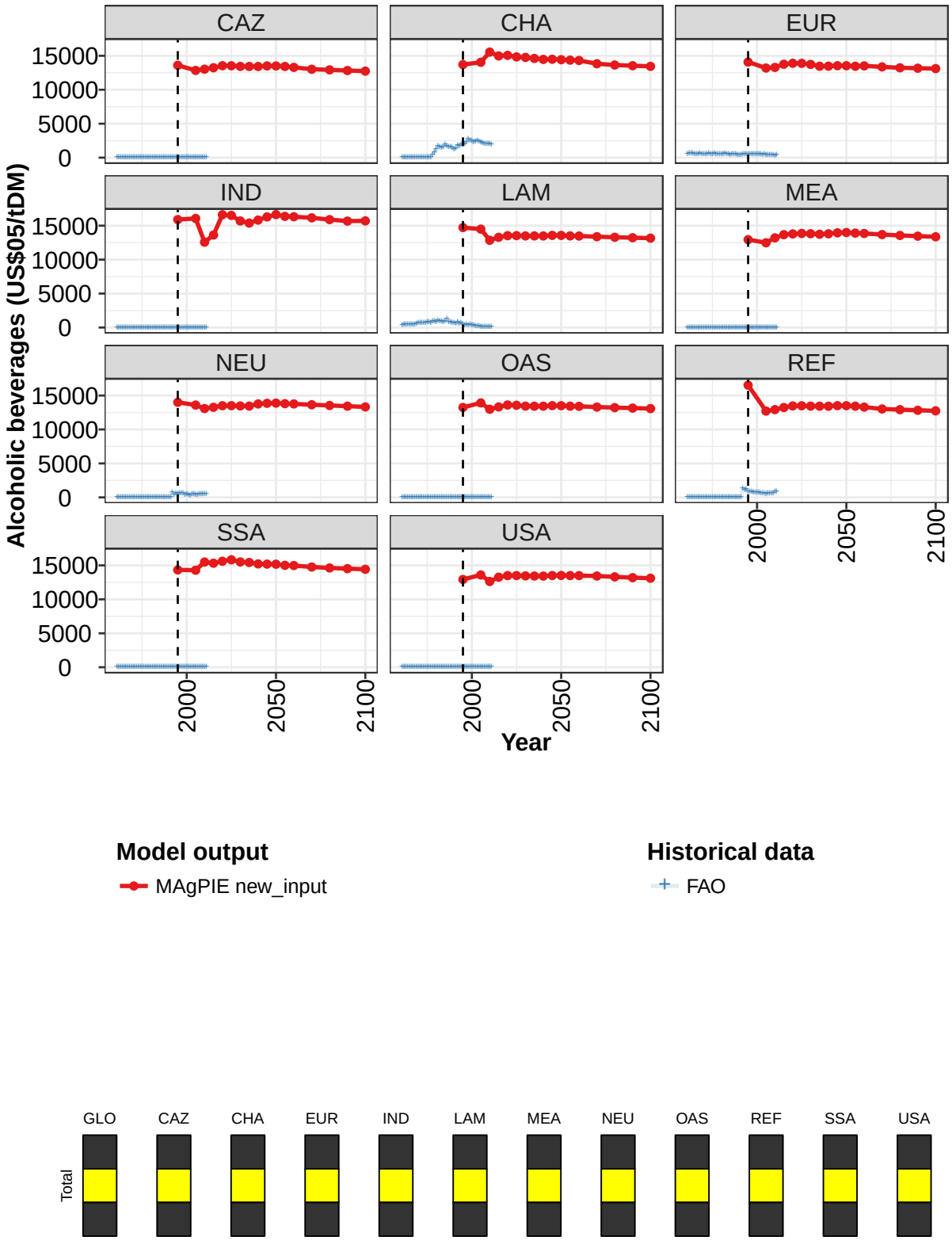


Figure 239: MAgPIE new_input — Prices—Agriculture—Alcoholic beverages (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	13998	13764	13825	14060	14396	14386	14274	14182	14145	14227	14242
CAZ	13602	12849	13034	13240	13542	13534	13441	13433	13427	13510	13508
CHA	13708	14049	15547	14980	15070	14842	14763	14615	14473	14494	14429
EUR	14082	13200	13289	13759	13901	13893	13737	13466	13477	13544	13542
IND	15896	16065	12570	13622	16609	16511	15695	15384	15824	16296	16636
LAM	14719	14493	12850	13287	13526	13535	13494	13494	13487	13571	13569
MEA	12947	12481	13206	13675	13788	13854	13815	13738	13807	13949	13993
NEU	14003	13600	13083	13271	13503	13510	13462	13445	13760	13857	13887
OAS	13246	13919	12980	13321	13609	13567	13441	13431	13426	13509	13507
REF	16525	12712	12926	13237	13472	13491	13438	13431	13425	13509	13507
SSA	14335	14289	15496	15326	15613	15827	15509	15434	15220	15190	15175
USA	12930	13593	12633	13265	13495	13503	13453	13431	13426	13509	13520

Table 742: MAgPIE new_input — Prices—Agriculture—Alcoholic beverages (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	14170	14160	13959	13860	13795	13744
CAZ	13432	13298	13026	12929	12833	12749
CHA	14364	14316	13832	13645	13541	13450
EUR	13465	13522	13367	13238	13174	13118
IND	16371	16317	16155	15893	15675	15706
LAM	13492	13475	13379	13294	13227	13162
MEA	13907	13855	13691	13561	13456	13365
NEU	13802	13767	13647	13538	13434	13321
OAS	13430	13410	13302	13221	13150	13078
REF	13430	13295	13022	12925	12829	12745
SSA	15013	14978	14762	14624	14517	14425
USA	13499	13497	13435	13314	13197	13113

Table 743: MAgPIE new_input — Prices—Agriculture—Alcoholic beverages (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	264	330	304	302	294	286	278	309	276	290	270
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	509	614	579	553	537	530	525	590	524	523	498
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	348	355	384	408	430	425	377	451	473	663	629
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 744: FAO — Prices—Agriculture—Alcoholic beverages (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	268	317	271	266	301	258	290	316	310	353	401
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	328	702	1159	1601	1498
EUR	494	580	484	483	561	481	478	516	472	484	621
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	625	658	677	708	709	669	915	937	802	1039	922
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 745: FAO — Prices—Agriculture—Alcoholic beverages (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	362	363	363	434	366	370	321	317	309	495	470
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	1392	1532	1898	1698	1559	1532	1412	1230	1311	1731	1678
EUR	514	518	426	526	445	435	376	405	348	483	483
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	909	817	903	1231	816	805	652	677	557	760	553
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	655	386
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	1308	1094
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 746: FAO — Prices—Agriculture—Alcoholic beverages (US$05/tDM) [PART 3/5]

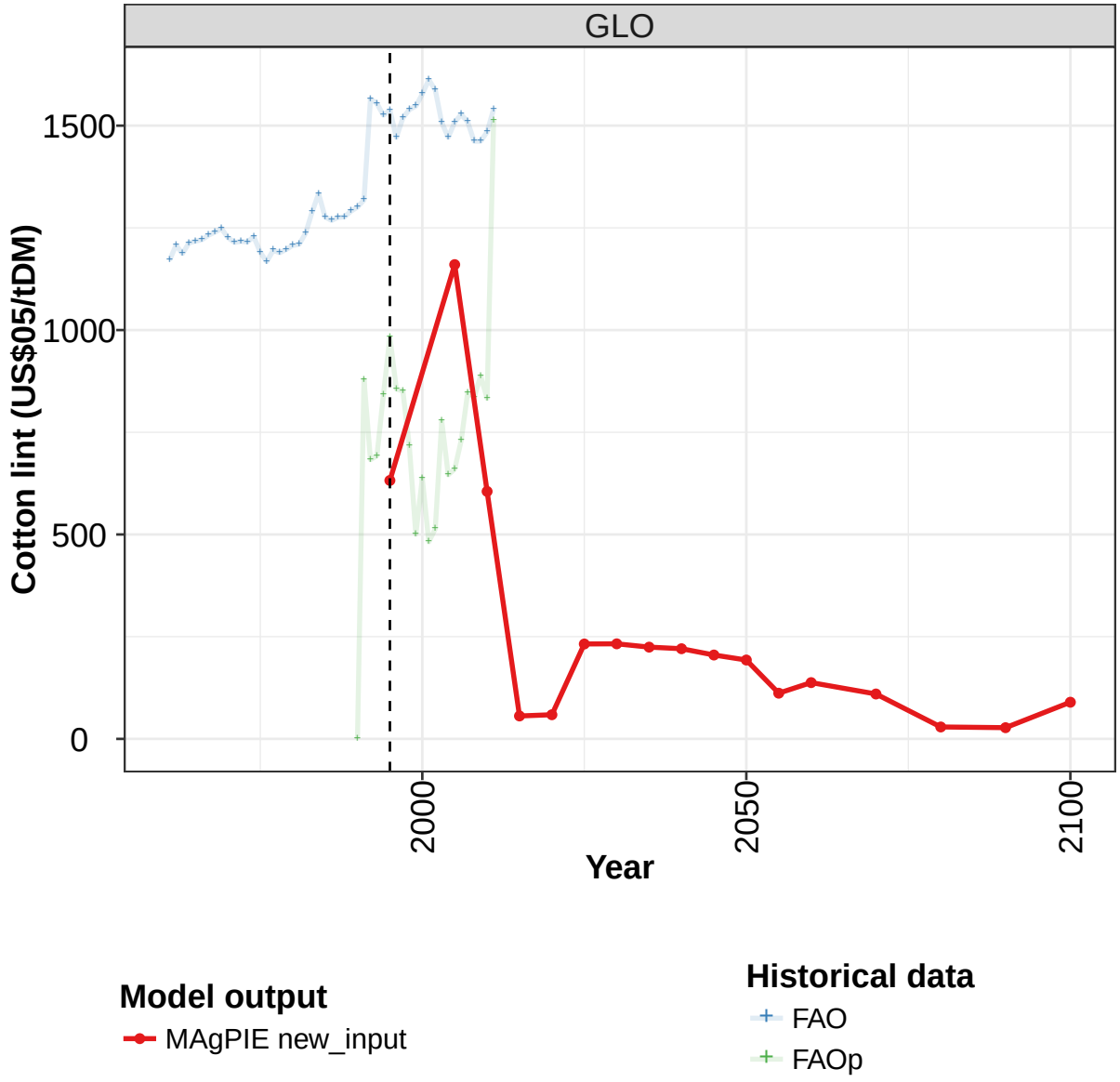
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	525	505	505	546	594	576	573	560	527	558	577
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	1875	1841	2023	2245	2672	2530	2474	2260	2328	2437	2310
EUR	483	502	517	500	482	481	461	465	437	420	494
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	696	452	352	373	350	378	307	314	190	226	154
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	532	512	555	616	549	386	448	378	275	405	431
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	1133	836	826	804	695	658	687	660	582	572	554
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 747: FAO — Prices—Agriculture—Alcoholic beverages (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	519	532	529	549	553	558	545
CAZ	0	0	0	0	0	0	0
CHA	2271	2101	2007	1996	2046	1982	1872
EUR	352	375	363	370	367	312	340
IND	0	0	0	0	0	0	0
LAM	77	100	110	111	79	59	66
MEA	0	0	0	0	0	0	0
NEU	331	328	458	412	489	478	435
OAS	0	0	0	0	0	0	0
REF	433	561	541	529	556	845	791
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

Table 748: FAO — Prices—Agriculture—Alcoholic beverages (US$05/tDM) [PART 5/5]

37.2 Cotton lint



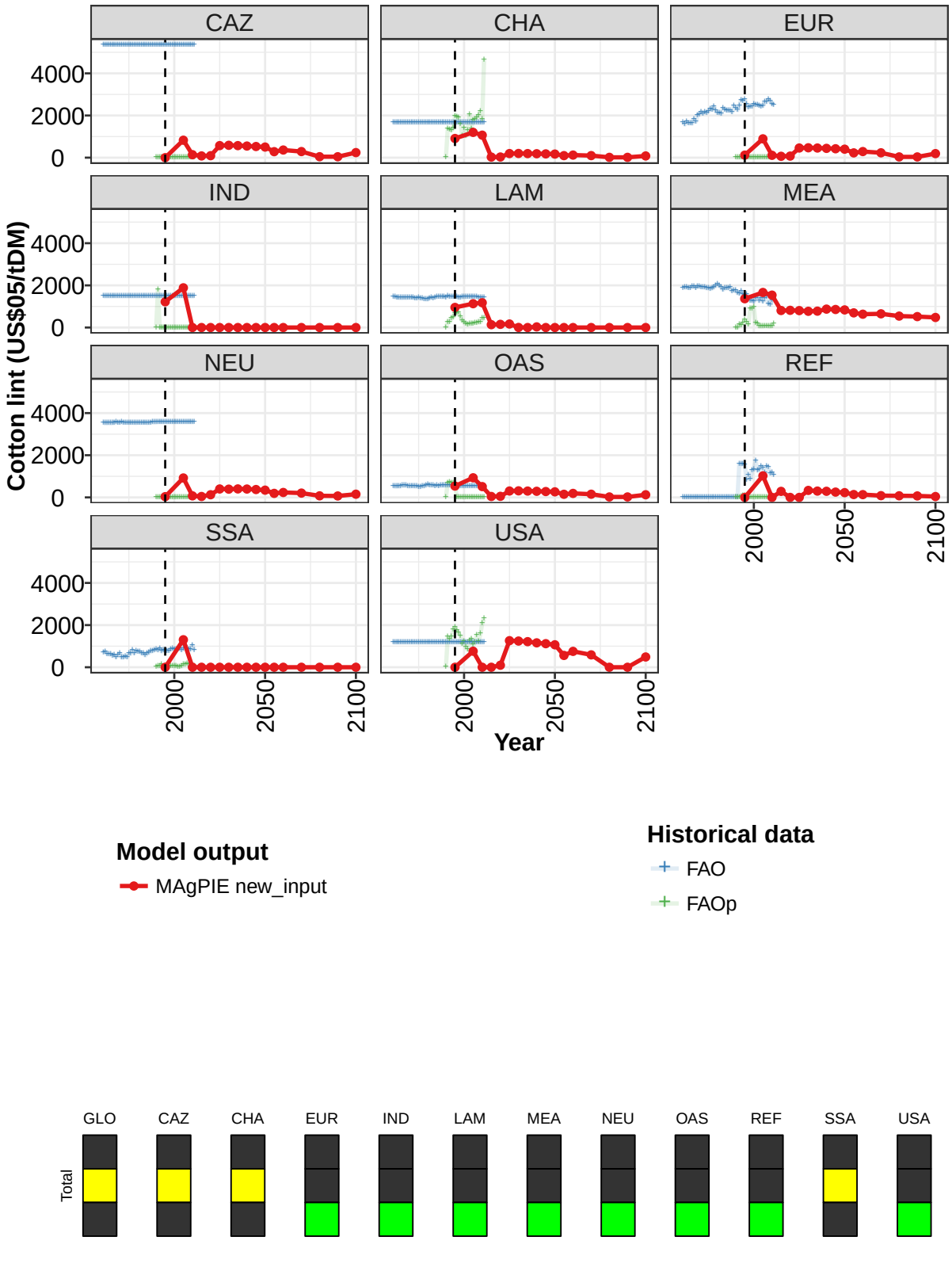


Figure 240: MAgPIE new_input — Prices—Agriculture—Cotton lint (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	632	1160	605	56	59	232	233	224	221	205	193
CAZ	0	829	141	82	94	573	587	572	552	529	504
CHA	911	1200	1068	28	32	195	200	194	188	180	171
EUR	120	895	113	66	75	458	470	457	441	423	403
IND	1221	1886	0	0	0	0	0	0	0	0	0
LAM	954	1131	1177	136	152	168	3	0	31	0	0
MEA	1367	1664	1537	808	817	804	771	778	873	856	836
NEU	35	923	73	43	126	399	391	402	397	374	344
OAS	538	931	513	44	50	304	311	300	290	278	265
REF	0	1023	0	286	0	0	332	300	290	252	226
SSA	0	1305	0	0	0	0	0	0	0	0	0
USA	0	762	0	0	96	1261	1244	1215	1159	1120	1067

Table 749: MAgPIE new_input — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	112	138	110	29	27	90
CAZ	285	362	290	46	45	241
CHA	97	123	99	16	15	82
EUR	228	290	232	37	36	193
IND	0	0	0	0	0	0
LAM	0	0	0	0	0	0
MEA	697	633	651	543	519	478
NEU	192	233	205	74	68	152
OAS	148	189	151	22	21	125
REF	136	132	83	76	70	41
SSA	0	0	0	0	0	0
USA	561	754	588	0	0	489

Table 750: MAgPIE new_input — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	1171	1207	1187	1213	1217	1221	1232	1239	1248	1226	1214
CAZ	5358	5358	5357	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1651	1650	1651	1651	1651	1651	1651	1651	1651	1651	1651
EUR	1675	1570	1706	1632	1635	1613	1825	1701	2010	2046	2166
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
LAM	1436	1438	1410	1404	1397	1395	1410	1398	1410	1416	1415
MEA	1863	1909	1887	1878	1876	1922	1934	1880	1952	1925	1914
NEU	3513	3521	3512	3524	3512	3521	3528	3550	3543	3543	3552
OAS	536	511	506	517	521	547	544	557	526	519	530
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	697	741	621	617	600	531	560	479	565	656	461
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 751: FAO — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	1217	1215	1228	1190	1168	1195	1189	1197	1207	1210	1237
CAZ	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652
EUR	2093	2156	2115	2202	2317	2261	2418	2217	2122	2098	2079
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
LAM	1400	1388	1376	1406	1386	1363	1348	1335	1332	1388	1408
MEA	1907	1885	1865	1854	1823	1853	1905	1968	2037	1977	1894
NEU	3548	3542	3546	3538	3537	3542	3535	3532	3547	3538	3538
OAS	533	512	514	491	486	533	520	554	584	577	559
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	459	501	469	638	638	798	667	744	735	724	666
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 752: FAO — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	1289	1334	1277	1268	1276	1277	1291	1301	1318	1566	1554
CAZ	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652
EUR	2330	2267	2230	2230	2228	2154	2455	2326	2253	2460	2730
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
LAM	1389	1416	1446	1460	1454	1435	1461	1425	1481	1440	1467
MEA	1789	1854	1876	1856	1893	1721	1751	1748	1629	1593	1709
NEU	3549	3546	3532	3533	3538	3555	3550	3558	3572	3572	3573
OAS	564	540	542	538	547	553	553	554	552	558	549
REF	0	0	0	0	0	0	0	0	0	1562	1562
SSA	640	557	637	687	754	760	807	844	793	892	747
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 753: FAO — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	1526	1537	1471	1519	1539	1548	1577	1612	1588	1507	1471
CAZ	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652
EUR	2692	2738	2524	2382	2427	2412	2513	2501	2496	2456	2419
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
LAM	1453	1442	1440	1420	1396	1433	1456	1446	1461	1466	1455
MEA	1548	1534	1578	1380	1261	1266	1221	1381	1438	1252	1363
NEU	3573	3573	3573	3573	3573	3573	3573	3573	3573	3573	3573
OAS	546	544	534	529	527	530	528	532	527	526	531
REF	1564	1552	840	1065	859	1284	1328	1735	1264	1322	1467
SSA	801	800	763	774	848	857	849	829	847	892	809
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 754: FAO — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	1508	1528	1509	1462	1462	1485	1540
CAZ	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652
EUR	2445	2650	2635	2756	2675	2538	2484
IND	1483	1483	1483	1483	1483	1483	1483
LAM	1446	1454	1439	1425	1426	1421	1407
MEA	1229	1382	1460	1108	1079	1260	1379
NEU	3573	3573	3573	3573	3573	3573	3573
OAS	530	527	524	524	521	507	505
REF	1395	1143	1446	1426	1129	1146	1039
SSA	875	980	893	836	840	1042	793
USA	1180	1180	1180	1180	1180	1180	1180

Table 755: FAO — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 5/5]

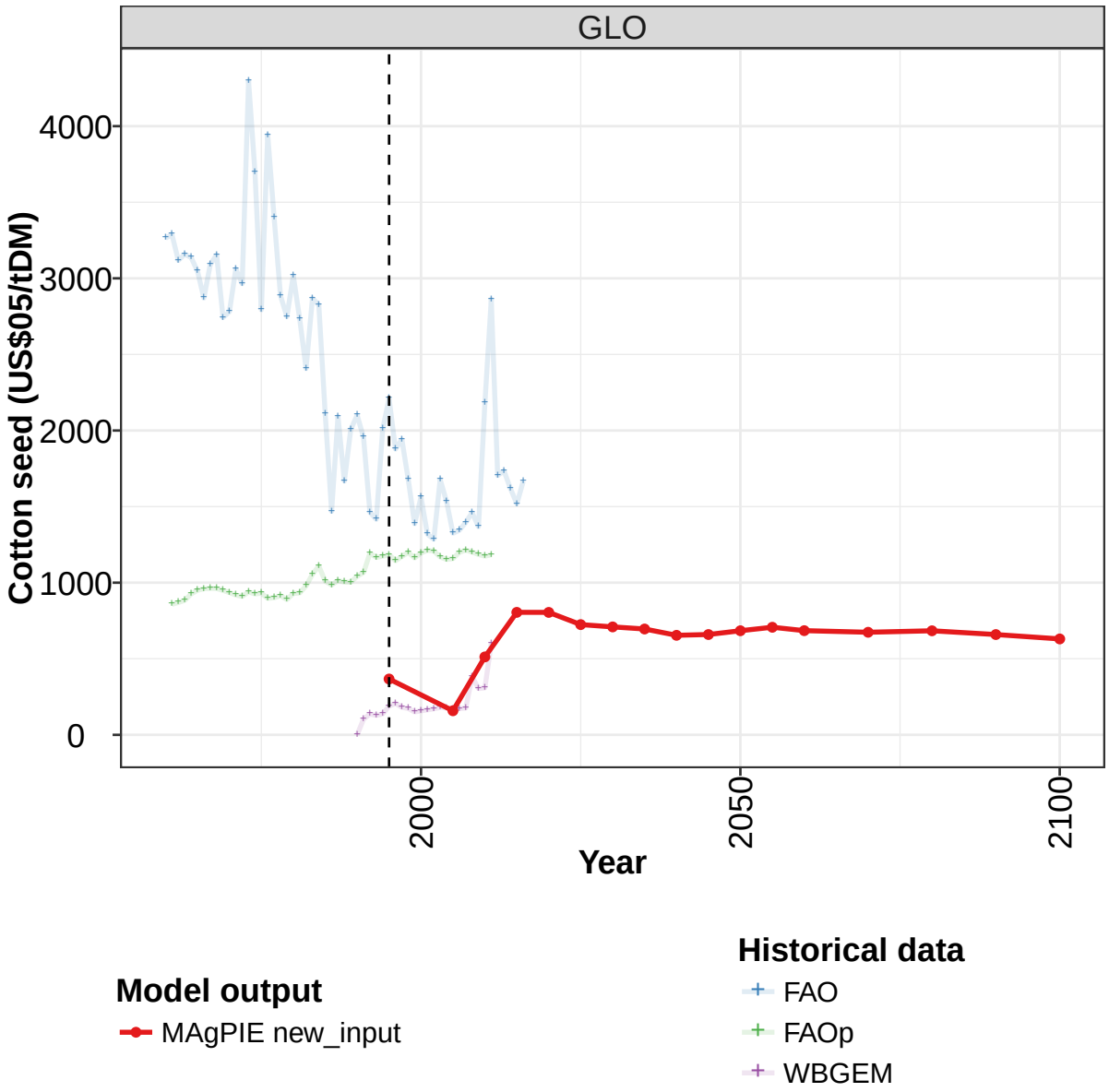
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	878	683	692	842	982	856	851	716	501	637
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	1351	1327	1292	1385	1959	1923	1890	1594	1024	1389
EUR	0	0	3	2	2	5	4	3	2	2	1
IND	0	1774	0	0	0	0	0	0	0	0	0
LAM	0	263	259	428	484	669	688	703	508	320	228
MEA	0	0	130	100	203	343	239	148	879	895	943
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	687	712	660	676	654	4	4	6	5	6
REF	0	0	0	33	70	64	76	0	0	0	0
SSA	0	32	34	115	21	19	20	19	61	62	42
USA	0	1423	1344	1430	1763	1874	1726	1621	1474	1102	1220

Table 756: FAOp — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	482	514	777	646	660	730	847	835	888	833	1512
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	1016	1284	2021	1377	1781	1798	1879	1981	2188	1805	4630
EUR	2	1	1	1	0	0	0	0	0	1	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	187	128	176	165	188	215	210	232	244	420	425
MEA	192	177	48	49	48	71	75	53	46	65	154
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	11	8	8	1	2	2	1	1	1	1	2
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	38	19	25	40	111	114	148	105	17	18	41
USA	953	823	1267	1330	1045	1163	1501	1202	1588	2072	2290

Table 757: FAOp — Prices—Agriculture—Cotton lint (US$05/tDM) [PART 2/3]

37.3 Cotton seed



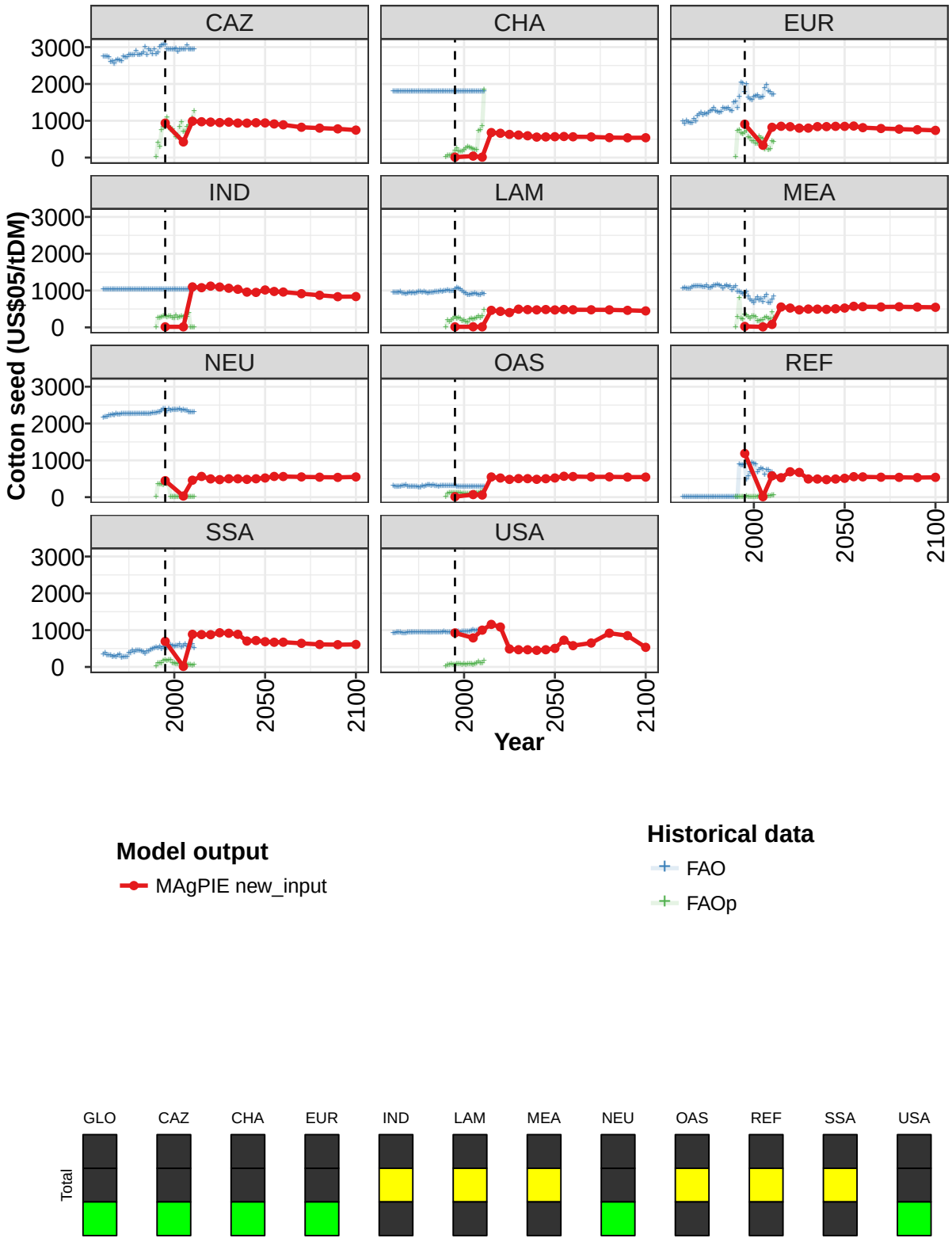


Figure 241: MAgPIE new_input — Prices—Agriculture—Cotton seed (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	367	158	512	805	805	725	709	696	654	659	684
CAZ	936	425	988	974	964	951	963	938	937	947	942
CHA	13	41	13	680	661	630	612	593	557	561	567
EUR	908	335	824	851	840	800	801	841	842	849	849
IND	15	15	1100	1078	1121	1097	1064	1035	958	951	1017
LAM	16	16	16	463	435	402	494	483	476	485	474
MEA	27	14	80	554	525	476	498	496	489	505	525
NEU	449	30	461	564	497	476	500	499	483	500	521
OAS	13	70	58	549	520	482	505	503	485	502	522
REF	1186	12	579	528	690	673	494	493	476	492	513
SSA	695	15	887	879	877	929	916	886	703	718	687
USA	925	789	1000	1156	1085	488	468	467	452	468	505

Table 758: MAgPIE new_input — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	707	685	674	684	659	630
CAZ	915	890	824	801	781	747
CHA	573	565	562	543	538	540
EUR	857	814	791	773	758	739
IND	976	960	915	872	833	837
LAM	486	478	478	476	463	448
MEA	573	562	554	560	551	546
NEU	563	561	550	543	538	550
OAS	568	560	551	552	545	546
REF	556	551	542	539	532	539
SSA	671	673	642	612	605	611
USA	727	579	651	917	850	533

Table 759: MAgPIE new_input — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3264	3288	3118	3158	3137	3048	2870	3090	3154	2742	2781
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 760: WBGEM — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	3062	2964	4298	3699	2792	3942	3399	2885	2748	3018	2735
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 761: WBGEM — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	2407	2869	2825	2108	1469	2092	1667	2007	2100	1955	1462
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 762: WBGEM — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	1416	2010	2210	1877	1942	1678	1387	1562	1319	1286	1677
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 763: WBGEM — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	1533	1325	1344	1396	1461	1368	2180	2863	1704	1734	1619
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 764: WBGEM — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 5/6]

	2015	2016
GLO	1518	1666
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 765: WBGEM — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	858	870	884	925	950	960	963	962	949	935	919
CAZ	2736	2735	2739	2719	2595	2604	2533	2622	2644	2631	2611
CHA	1782	1781	1782	1782	1782	1783	1783	1782	1783	1782	1783
EUR	967	908	986	946	937	931	1034	980	1127	1155	1203
IND	1016	1016	1016	1017	1017	1017	1017	1017	1017	1016	1017
LAM	946	934	939	937	952	924	924	904	922	942	924
MEA	1047	1066	1052	1038	1052	1090	1110	1100	1119	1111	1099
NEU	2154	2177	2178	2204	2205	2225	2223	2253	2242	2235	2255
OAS	291	277	274	281	285	302	298	310	283	277	283
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	337	371	315	313	306	274	285	264	298	332	252
USA	916	919	925	920	924	919	907	911	924	930	925

Table 766: FAO — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	910	939	926	931	897	901	914	889	929	932	979
CAZ	2731	2707	2722	2787	2789	2770	2789	2888	2788	2788	2791
CHA	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783
EUR	1150	1188	1159	1214	1254	1265	1341	1261	1237	1215	1223
IND	1017	1017	1017	1017	1016	1016	1017	1017	1017	1016	1016
LAM	927	915	928	962	966	945	962	939	922	931	935
MEA	1094	1095	1125	1058	1058	1088	1121	1121	1154	1137	1119
NEU	2256	2248	2255	2247	2247	2257	2251	2252	2267	2258	2257
OAS	286	273	277	262	260	292	285	306	328	322	305
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	253	261	262	368	361	441	395	442	437	433	410
USA	934	939	936	939	937	942	934	933	927	922	932

Table 767: FAO — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	1055	1109	1010	985	1014	1004	1003	1042	1066	1193	1166
CAZ	2851	2991	2778	2924	2880	2797	2922	2799	2849	2987	3042
CHA	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783
EUR	1333	1317	1326	1328	1275	1261	1479	1502	1336	1642	2034
IND	1017	1017	1016	1017	1016	1017	1016	1017	1017	1016	1016
LAM	934	954	948	949	970	962	989	987	1011	977	986
MEA	1046	1103	1136	1097	1103	1006	1074	1103	959	967	930
NEU	2268	2264	2252	2253	2259	2277	2272	2281	2294	2305	2353
OAS	314	290	291	285	291	296	295	295	294	297	292
REF	0	0	0	0	0	0	0	0	0	888	864
SSA	390	357	404	424	452	474	503	526	511	553	485
USA	932	931	934	936	936	934	942	941	934	941	934

Table 768: FAO — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	1174	1184	1144	1172	1199	1162	1195	1213	1208	1169	1153
CAZ	3063	3067	2937	2939	2935	2922	2936	2953	2874	2938	2935
CHA	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783
EUR	2005	1760	1978	1611	1580	1558	1645	1659	1684	1625	1619
IND	1017	1016	1016	1017	1017	1017	1017	1017	1017	1016	1017
LAM	990	1018	1065	1053	1016	981	932	913	883	882	889
MEA	902	913	949	824	750	706	653	738	804	724	760
NEU	2386	2386	2320	2389	2343	2372	2367	2362	2365	2377	2341
OAS	291	289	284	280	278	279	278	281	275	275	277
REF	857	874	472	562	655	931	897	884	672	722	779
SSA	526	534	508	528	588	571	545	558	559	597	523
USA	939	943	947	954	940	949	950	956	963	958	972

Table 769: FAO — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	1158	1199	1214	1201	1185	1174	1183
CAZ	2935	2935	3044	2935	2936	2935	2920
CHA	1786	1783	1783	1783	1783	1783	1783
EUR	1633	1881	1966	1795	1767	1696	1696
IND	1017	1016	1016	1016	1017	1016	1016
LAM	899	908	896	875	871	911	894
MEA	686	809	879	663	649	743	827
NEU	2358	2348	2338	2297	2297	2297	2297
OAS	277	282	280	280	278	271	269
REF	753	609	734	724	672	664	590
SSA	555	619	537	524	514	608	502
USA	998	971	980	987	982	985	977

Table 770: FAO — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 5/5]

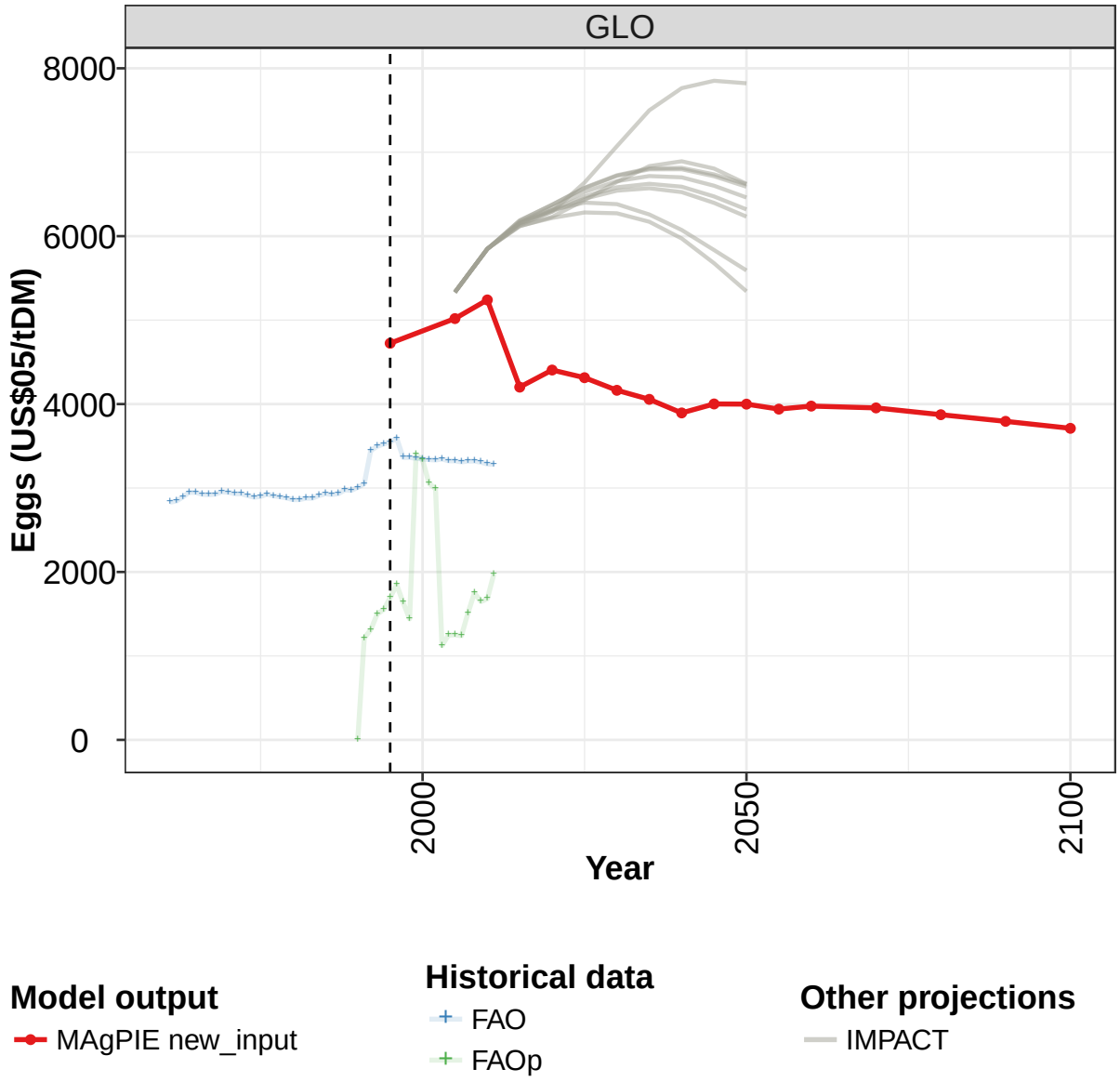
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	103	137	128	137	189	206	181	173	151	158
CAZ	0	400	275	737	827	931	1073	833	745	748	640
CHA	0	45	52	57	64	180	233	159	159	161	198
EUR	0	706	745	655	629	671	703	550	519	438	429
IND	0	252	238	261	301	299	265	282	288	251	239
LAM	0	180	142	178	233	268	236	256	227	167	181
MEA	0	259	795	236	210	344	323	267	229	291	282
NEU	0	351	345	340	320	402	344	349	0	0	0
OAS	0	81	102	111	110	107	108	103	104	92	92
REF	0	0	0	3	6	8	10	4	4	2	2
SSA	3	101	95	82	165	183	163	170	184	102	88
USA	0	39	53	61	55	58	76	72	77	53	63

Table 771: FAOp — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	164	171	180	177	170	172	176	382	304	308	602
CAZ	552	582	826	950	698	685	821	872	911	1068	1262
CHA	244	290	267	244	224	206	191	711	739	852	1839
EUR	367	380	554	515	496	211	301	202	224	429	407
IND	306	242	265	293	279	292	270	375	0	0	0
LAM	137	129	196	220	212	218	252	299	253	296	469
MEA	263	154	162	175	188	238	270	233	210	394	249
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	75	89	92	93	93	96	105	100	121	146	0
REF	3	2	21	20	18	17	27	23	28	37	47
SSA	64	70	83	78	78	75	48	39	51	36	56
USA	54	60	70	64	58	66	97	134	95	96	156

Table 772: FAOp — Prices—Agriculture—Cotton seed (US$05/tDM) [PART 2/3]

37.4 Eggs


GLO
8000
6000
4000
2000
0
Eggs (US$05/tDM)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO
FAOp
Other projections
IMPACT

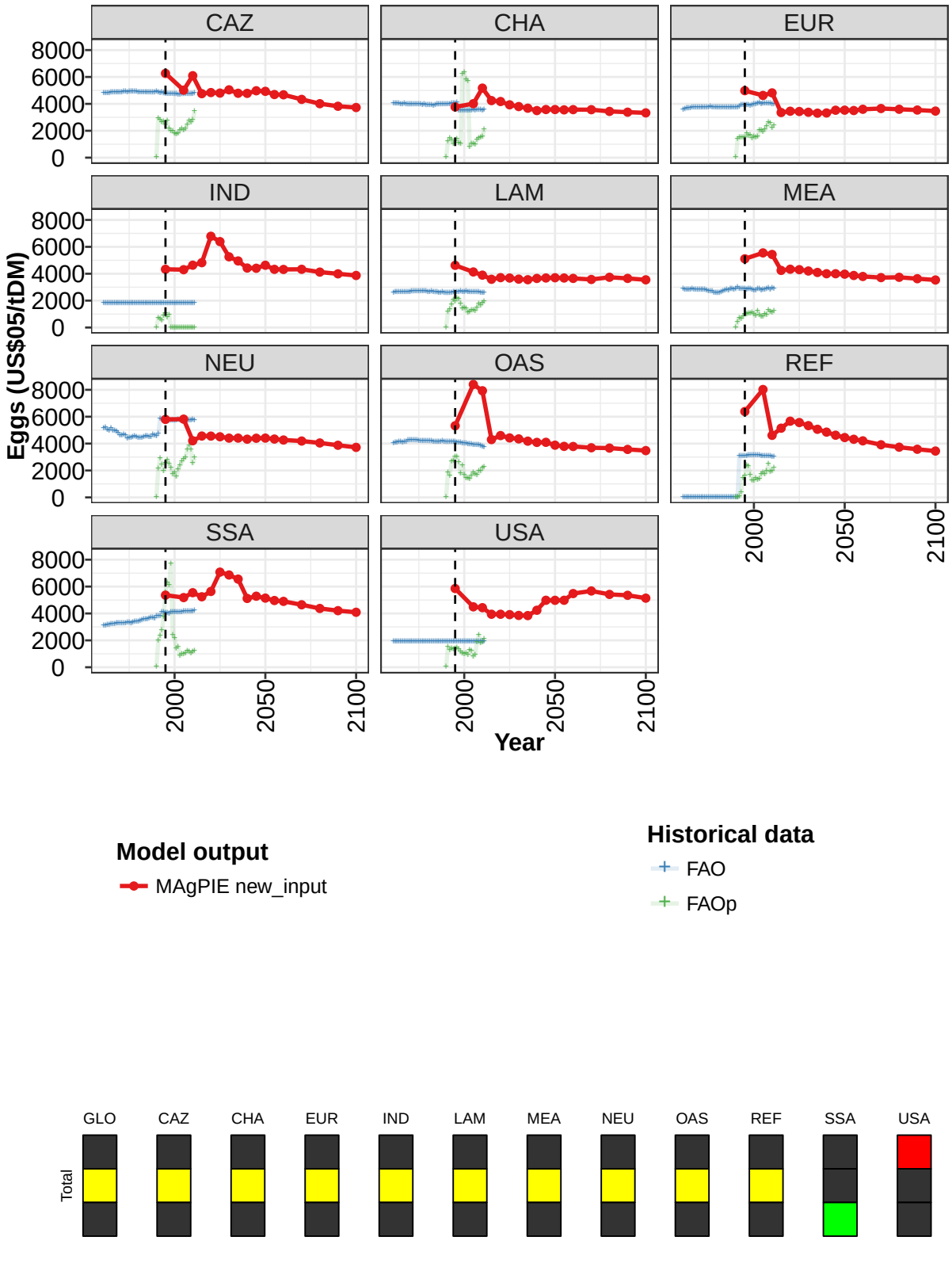


Figure 242: MAgPIE new_input — Prices—Agriculture—Eggs (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4725	5019	5241	4202	4406	4314	4165	4056	3895	4002	3999
CAZ	6266	5019	6096	4759	4842	4802	5044	4789	4781	4975	4934
CHA	3769	4015	5173	4245	4176	3929	3799	3679	3501	3579	3579
EUR	4981	4626	4818	3356	3454	3433	3378	3311	3325	3528	3532
IND	4332	4301	4635	4824	6788	6390	5259	4951	4425	4409	4632
LAM	4625	4134	3896	3587	3710	3681	3598	3555	3651	3684	3702
MEA	5110	5551	5434	4249	4335	4303	4204	4095	4001	4001	3970
NEU	5797	5819	4212	4562	4558	4509	4408	4409	4329	4398	4409
OAS	5328	8399	7931	4301	4597	4423	4350	4183	4091	4096	3883
REF	6386	8023	4613	5147	5667	5566	5336	5064	4854	4625	4450
SSA	5362	5181	5545	5241	5636	7075	6862	6556	5119	5284	5142
USA	5855	4492	4431	3942	3942	3914	3855	3842	4240	4981	4978

Table 773: MAgPIE new_input — Prices—Agriculture—Eggs (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	3940	3976	3955	3873	3794	3711
CAZ	4694	4677	4334	4013	3822	3729
CHA	3555	3572	3566	3441	3383	3331
EUR	3505	3598	3655	3598	3541	3464
IND	4327	4320	4331	4123	3994	3872
LAM	3682	3653	3575	3737	3653	3548
MEA	3871	3796	3713	3735	3631	3535
NEU	4339	4268	4192	4049	3877	3720
OAS	3794	3785	3691	3666	3568	3480
REF	4322	4204	3914	3732	3579	3447
SSA	4963	4900	4646	4372	4209	4089
USA	4981	5480	5673	5417	5352	5139

Table 774: MAgPIE new_input — Prices—Agriculture—Eggs (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2832	2846	2893	2949	2947	2926	2920	2928	2954	2951	2933
CAZ	4798	4799	4806	4794	4819	4840	4837	4853	4842	4836	4855
CHA	4018	4013	4008	4000	3968	3965	3991	3957	3934	3930	3965
EUR	3566	3587	3646	3659	3684	3711	3708	3703	3698	3704	3711
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
LAM	2580	2628	2625	2631	2628	2631	2629	2626	2641	2631	2659
MEA	2832	2805	2807	2817	2793	2852	2829	2805	2774	2799	2786
NEU	5138	5157	5030	4972	5129	4962	4941	4875	4740	4619	4600
OAS	4024	4052	4057	4116	4138	4075	4104	4139	4210	4232	4233
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3087	3097	3131	3134	3204	3215	3216	3233	3278	3247	3256
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 775: FAO — Prices—Agriculture—Eggs (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	2931	2910	2891	2900	2928	2908	2897	2882	2863	2862	2880
CAZ	4882	4879	4868	4887	4885	4882	4894	4880	4852	4871	4871
CHA	3942	3969	3952	3954	3948	3906	3951	3888	3893	3900	3907
EUR	3729	3712	3721	3746	3768	3751	3735	3740	3700	3711	3709
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
LAM	2668	2704	2682	2682	2692	2700	2711	2690	2621	2647	2658
MEA	2779	2777	2758	2710	2693	2684	2589	2558	2544	2562	2633
NEU	4657	4589	4383	4442	4442	4467	4516	4482	4409	4442	4441
OAS	4232	4219	4216	4206	4193	4196	4183	4184	4182	4164	4160
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3250	3284	3306	3322	3234	3317	3361	3388	3396	3417	3480
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 776: FAO — Prices—Agriculture—Eggs (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	2880	2909	2932	2923	2932	2978	2972	3007	3051	3446	3496
CAZ	4866	4864	4845	4845	4829	4824	4842	4891	4849	4813	4815
CHA	3866	3904	3935	3941	3941	3967	3961	3966	3986	3979	3988
EUR	3720	3713	3695	3707	3693	3736	3719	3718	3714	3799	3928
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
LAM	2647	2604	2597	2577	2580	2600	2563	2542	2538	2562	2590
MEA	2703	2745	2774	2742	2835	2867	2792	2851	2960	2869	2844
NEU	4501	4510	4520	4495	4490	4626	4573	4559	4697	5804	5739
OAS	4141	4137	4122	4131	4145	4159	4133	4096	4094	4116	4137
REF	0	0	0	0	0	0	0	0	0	3058	3056
SSA	3527	3558	3572	3637	3678	3645	3608	3765	3773	3800	4065
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 777: FAO — Prices—Agriculture—Eggs (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	3524	3549	3594	3364	3365	3354	3346	3340	3334	3346	3325
CAZ	4757	4747	4739	4737	4752	4739	4712	4698	4694	4678	4699
CHA	4003	4005	4058	3496	3499	3502	3504	3504	3487	3510	3511
EUR	3900	3904	3908	3894	3864	3887	3957	3966	4000	4054	3986
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
LAM	2598	2605	2639	2637	2662	2646	2641	2670	2635	2631	2616
MEA	2843	2889	2803	2845	2854	2773	2766	2765	2844	2839	2759
NEU	5743	5696	5710	5683	5688	5691	5690	5731	5739	5725	5732
OAS	4107	4115	4080	4067	4032	4014	3979	3983	3949	3918	3939
REF	3073	3077	3084	3092	3092	3092	3109	3112	3097	3099	3083
SSA	4092	4052	4019	3979	4103	4106	4094	4096	4087	4098	4103
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 778: FAO — Prices—Agriculture—Eggs (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	3324	3312	3321	3321	3308	3286	3283
CAZ	4697	4750	4728	4720	4714	4728	4767
CHA	3517	3515	3516	3521	3522	3513	3522
EUR	4019	4019	4019	3998	4012	3944	3983
IND	1790	1790	1790	1790	1790	1790	1790
LAM	2627	2626	2615	2607	2581	2570	2561
MEA	2796	2780	2855	2900	2819	2911	2875
NEU	5721	5709	5698	5721	5734	5755	5739
OAS	3894	3903	3898	3856	3813	3760	3710
REF	3083	3043	3070	3052	3042	3023	2998
SSA	4120	4132	4149	4133	4148	4155	4173
USA	1902	1902	1902	1902	1902	1902	1902

Table 779: FAO — Prices—Agriculture—Eggs (US$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	1213	1311	1499	1551	1694	1849	1637	1441	3399	3333
CAZ	0	2912	2763	2620	2639	2429	2748	2114	1962	1929	1800
CHA	0	1179	1423	1303	1019	1179	1359	1055	993	6215	6286
EUR	0	1363	1491	1487	1490	1501	1783	1581	1644	1427	1544
IND	0	696	611	519	854	1022	718	933	0	0	0
LAM	0	1160	1309	1662	2062	1924	2169	2111	1737	1390	1423
MEA	0	393	698	649	785	969	987	1027	1030	1070	962
NEU	0	2095	2861	2433	1947	2540	2762	2472	2194	1674	1810
OAS	0	1811	1595	2630	2702	3026	2983	2595	1746	2355	1646
REF	0	0	78	355	1423	1605	2322	2294	1652	1258	1207
SSA	0	1962	2296	2716	3728	5580	6284	6073	7691	2346	2137
USA	0	1472	1255	1381	1339	1362	1404	1283	1148	988	975

Table 780: FAOp — Prices—Agriculture—Eggs (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	3054	2992	1123	1249	1251	1240	1508	1751	1647	1680	1973
CAZ	1732	1797	2026	2108	2042	2125	2431	2742	2603	2769	3422
CHA	5765	5662	784	987	1030	976	1290	1447	1477	1535	2056
EUR	1482	1538	2040	2013	1910	2064	2315	2574	2540	2210	2381
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	1359	1063	1170	1245	1291	1228	1422	1757	1612	1792	1922
MEA	868	1194	912	803	803	979	921	1262	1134	1087	1189
NEU	1518	2063	2359	2630	2815	2956	3534	3810	3519	2523	2940
OAS	1435	1390	1362	1602	1825	1706	1627	1923	1914	2170	2220
REF	1395	1306	1365	1683	1816	1714	1912	2454	1869	1942	2148
SSA	1393	1473	831	950	967	1038	1207	1131	1029	1137	1207
USA	993	898	1255	1218	758	878	1862	2385	1782	1867	2082

Table 781: FAOp — Prices—Agriculture—Eggs (US$05/tDM) [PART 2/3]

37.5 Fish

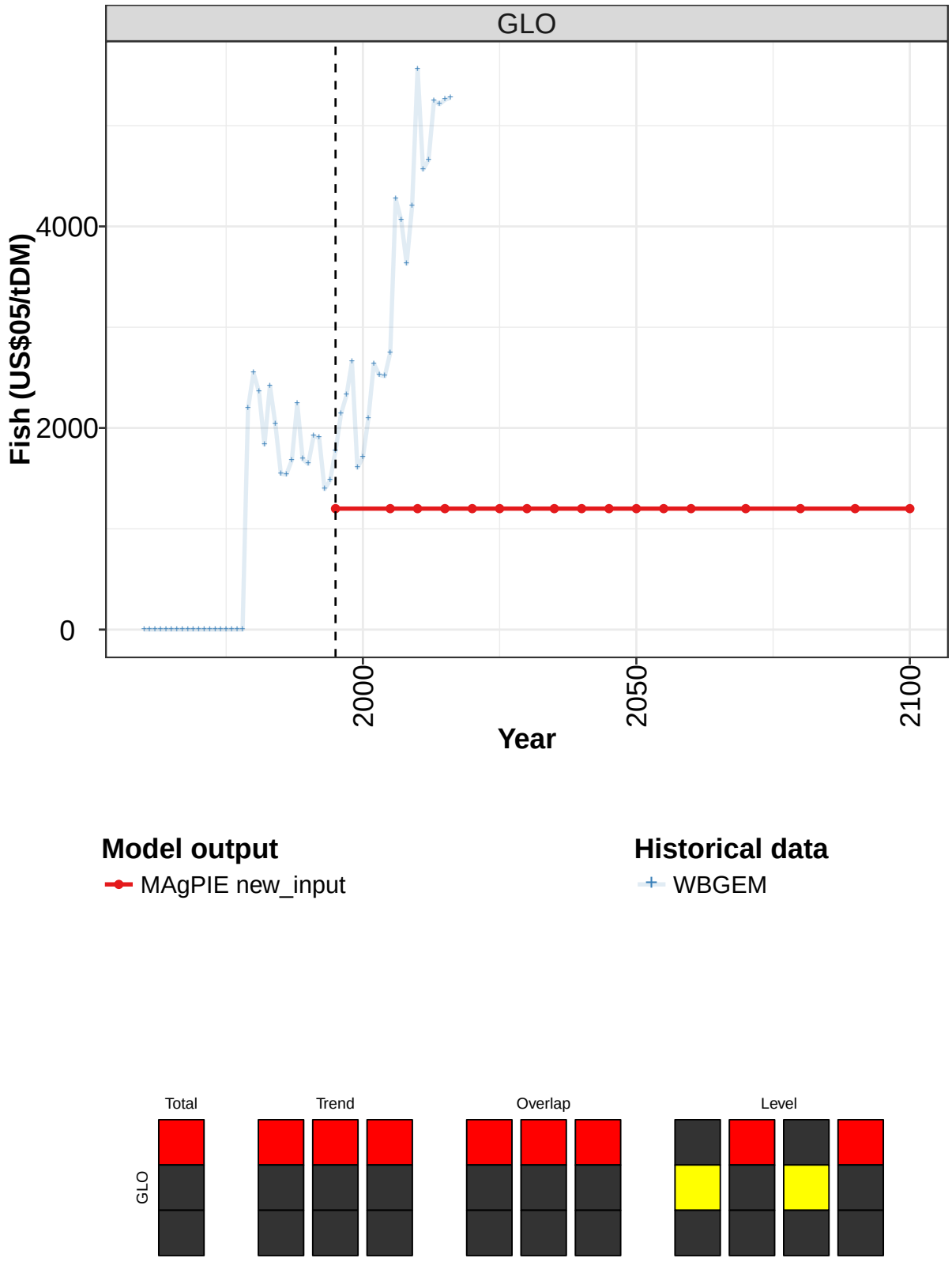


Figure 243: MAgPIE new_input — Prices—Agriculture—Fish (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200

Table 782: MAgPIE new_input — Prices—Agriculture—Fish (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1200	1200	1200	1200	1200	1200

Table 783: MAgPIE new_input — Prices—Agriculture—Fish (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	0	0	0	0	0	0	0	0	0	0	0

Table 784: WBGEM — Prices—Agriculture—Fish (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	0	0	0	0	0	0	0	0	2194	2548	2358

Table 785: WBGEM — Prices—Agriculture—Fish (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	1835	2417	2038	1546	1538	1679	2239	1689	1642	1922	1901

Table 786: WBGEM — Prices—Agriculture—Fish (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	1392	1481	1774	2141	2324	2654	1604	1710	2094	2637	2527

Table 787: WBGEM — Prices—Agriculture—Fish (US$05/tDM) [PART 4/6]

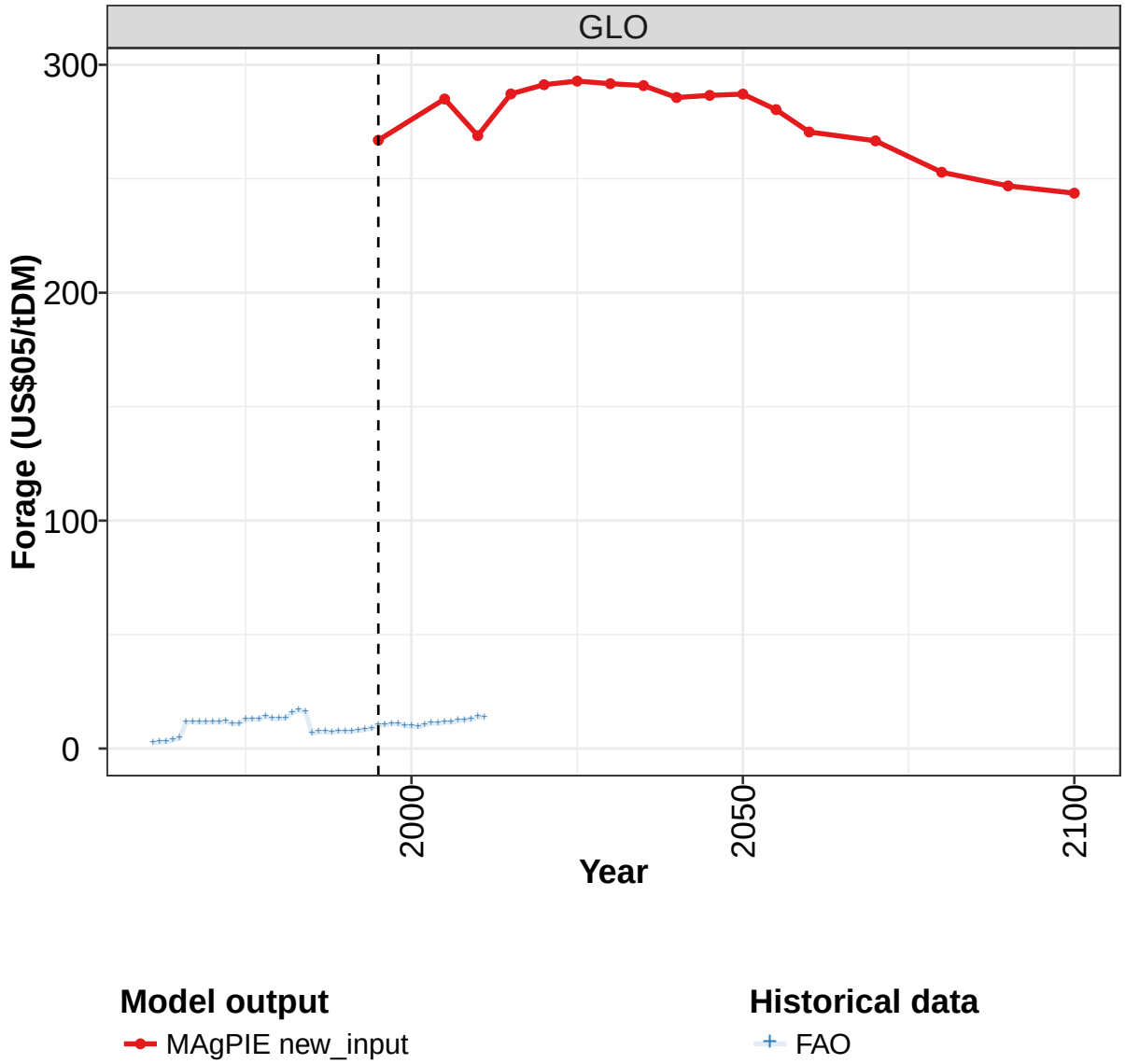
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	2513	2745	4273	4064	3630	4201	5559	4564	4659	5245	5211

Table 788: WBGEM — Prices—Agriculture—Fish (US$05/tDM) [PART 5/6]

	2015	2016
GLO	5256	5275

Table 789: WBGEM — Prices—Agriculture—Fish (US$05/tDM) [PART 6/6]

37.6 Forage


GLO
300
200
100
0
Forage (US$05/tDM)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

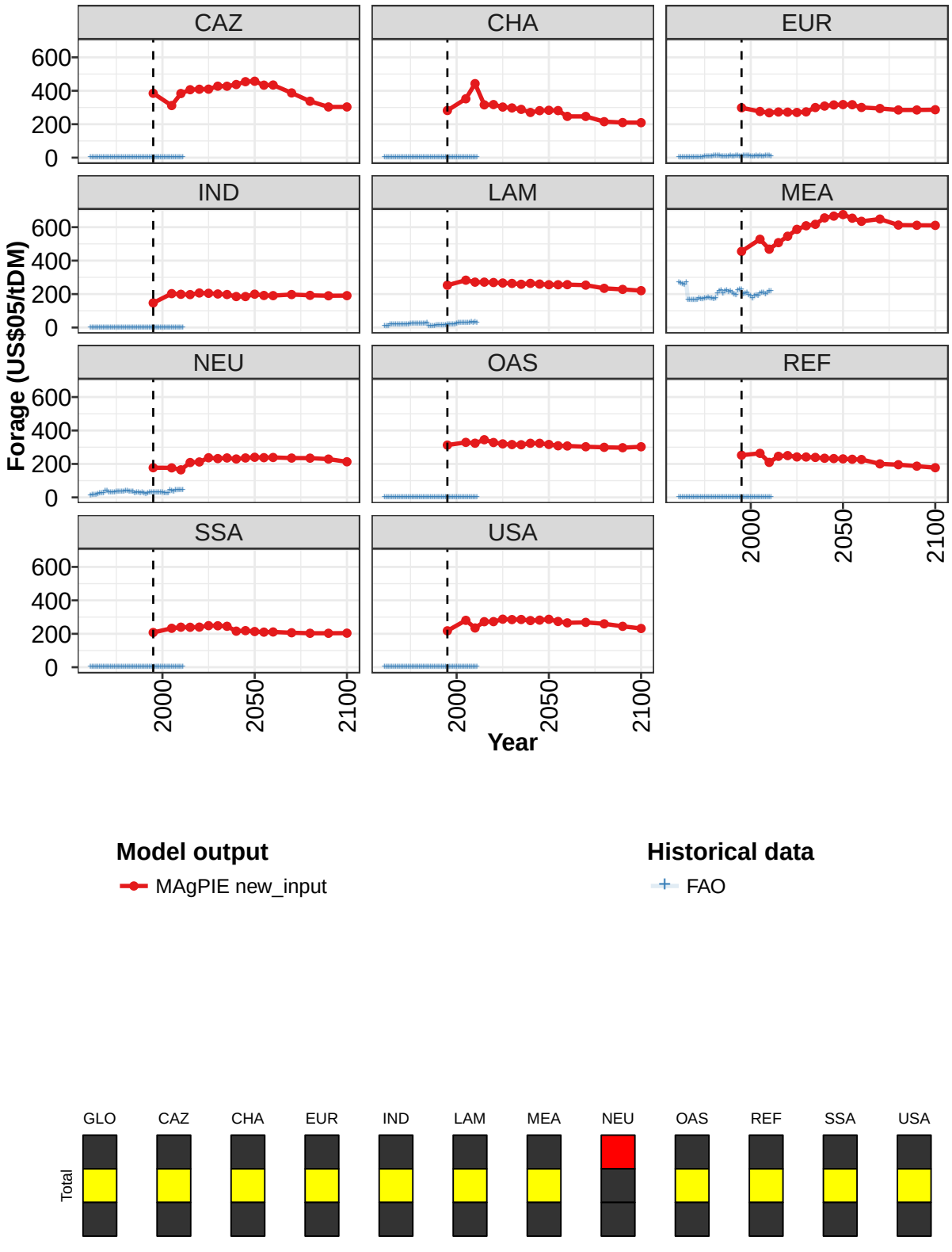


Figure 244: MAgPIE new_input — Prices—Agriculture—Forage (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	267	285	269	287	291	293	292	291	286	287	287
CAZ	385	312	384	406	409	410	427	427	437	454	457
CHA	282	352	443	316	317	303	297	289	270	281	283
EUR	298	276	268	273	272	270	274	300	309	315	318
IND	147	203	199	197	206	205	201	197	185	185	199
LAM	253	283	271	271	269	266	264	259	264	260	256
MEA	455	528	469	508	546	587	609	617	656	666	676
NEU	177	177	165	208	212	237	232	236	230	236	240
OAS	313	329	324	345	328	320	316	315	324	323	316
REF	252	264	209	246	250	242	241	239	234	232	230
SSA	208	233	240	239	240	249	248	245	216	219	214
USA	218	281	235	273	273	287	285	286	279	282	287

Table 790: MAgPIE new_input — Prices—Agriculture—Forage (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	280	271	267	253	247	244
CAZ	434	434	387	337	303	303
CHA	282	247	247	215	210	209
EUR	317	300	294	285	285	287
IND	192	191	197	192	190	191
LAM	256	256	253	234	228	220
MEA	654	635	649	613	611	611
NEU	238	239	235	235	229	213
OAS	309	307	303	299	297	303
REF	228	227	200	195	187	178
SSA	210	211	206	203	203	204
USA	274	266	268	260	245	232

Table 791: MAgPIE new_input — Prices—Agriculture—Forage (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2	3	3	4	4	12	12	11	11	12	11
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	6	6	7	15	19	16	18	16	15	18	17
MEA	269	264	257	254	266	164	165	163	163	163	165
NEU	8	12	14	15	19	23	24	24	36	37	29
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 792: FAO — Prices—Agriculture—Forage (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	12	11	11	13	13	13	14	13	13	13	16
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	7	6	7	7	7	8	9	9
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	18	18	19	20	20	22	22	20	24	21	23
MEA	174	170	168	174	175	179	174	172	171	173	204
NEU	29	29	29	31	33	33	33	33	37	37	35
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 793: FAO — Prices—Agriculture—Forage (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	17	16	7	7	7	7	8	7	7	8	8
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	9	8	5	7	6	7	8	7	7	9	9
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	24	25	7	8	9	9	12	14	13	11	12
MEA	217	223	202	215	220	209	216	209	195	192	220
NEU	34	35	25	26	26	23	28	22	19	25	26
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 794: FAO — Prices—Agriculture—Forage (US$05/tDM) [PART 3/5]

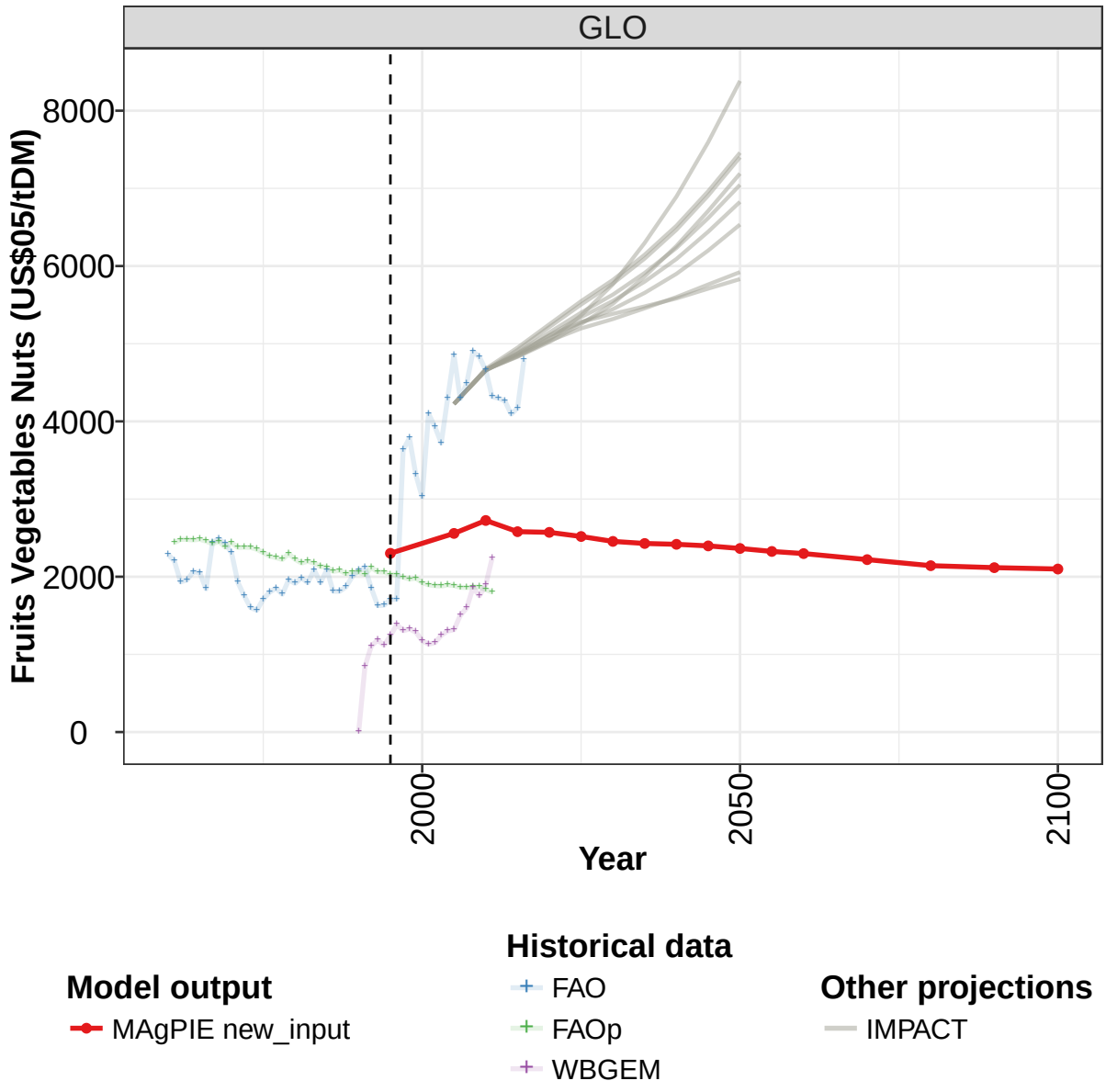
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	9	10	10	11	11	10	10	10	10	11	11
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	8	7	8	10	8	9	7	7	8	8	8
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	14	18	18	17	18	18	22	24	26	27	27
MEA	224	224	198	201	207	191	187	172	186	194	189
NEU	28	28	26	27	26	26	27	25	24	24	40
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 795: FAO — Prices—Agriculture—Forage (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	12	12	12	13	13	14	14
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	8	7	8	9	8	8	7
IND	0	0	0	0	0	0	0
LAM	26	28	28	30	28	29	28
MEA	201	207	208	198	207	214	215
NEU	36	33	41	42	43	44	43
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

Table 796: FAO — Prices—Agriculture—Forage (US$05/tDM) [PART 5/5]

37.7 Fruits Vegetables Nuts



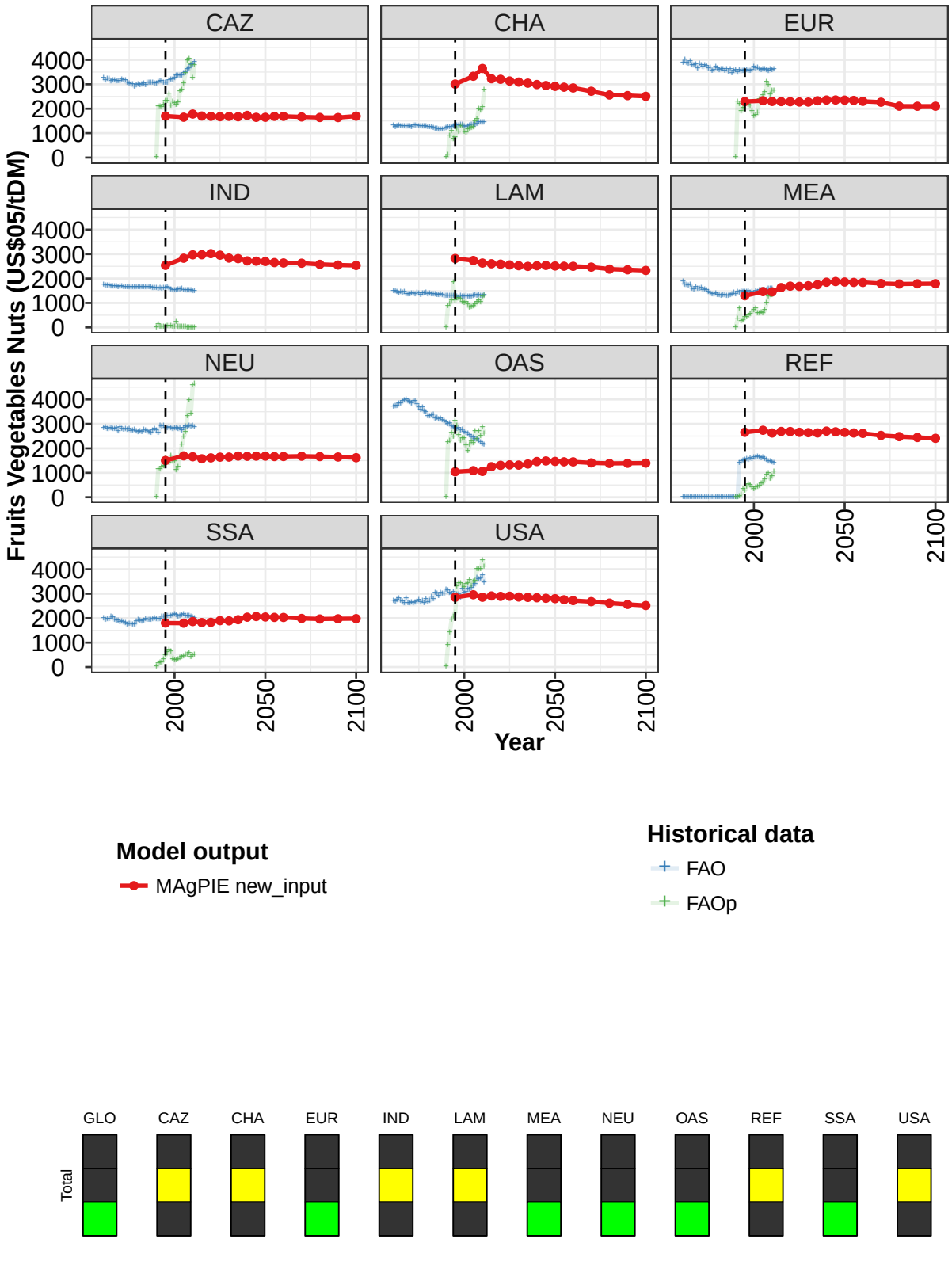


Figure 245: MAgPIE new_input — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2301	2558	2724	2580	2571	2518	2455	2428	2417	2397	2364
CAZ	1701	1653	1783	1702	1690	1675	1688	1673	1727	1648	1650
CHA	3008	3329	3647	3227	3204	3135	3091	3046	2990	2949	2914
EUR	2294	2326	2297	2292	2287	2274	2272	2325	2354	2357	2350
IND	2540	2830	2970	2974	3019	2956	2836	2814	2722	2710	2698
LAM	2819	2738	2634	2605	2589	2557	2526	2498	2524	2537	2515
MEA	1295	1466	1456	1630	1689	1679	1707	1748	1850	1877	1858
NEU	1502	1692	1656	1572	1611	1640	1643	1684	1675	1682	1681
OAS	1043	1087	1056	1248	1305	1324	1316	1361	1459	1483	1464
REF	2655	2740	2627	2690	2688	2654	2641	2630	2704	2677	2652
SSA	1801	1794	1860	1819	1829	1898	1890	1937	2040	2067	2048
USA	2853	2957	2854	2908	2891	2897	2864	2849	2835	2812	2798

Table 797: MAgPIE new_input — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	2325	2298	2220	2142	2117	2099
CAZ	1690	1689	1665	1643	1639	1696
CHA	2881	2850	2715	2562	2537	2508
EUR	2339	2302	2267	2105	2103	2104
IND	2653	2637	2627	2580	2552	2535
LAM	2505	2501	2468	2386	2359	2332
MEA	1842	1840	1798	1778	1785	1791
NEU	1664	1666	1679	1664	1646	1618
OAS	1448	1446	1405	1383	1390	1396
REF	2629	2611	2528	2480	2444	2410
SSA	2032	2030	1988	1967	1975	1981
USA	2751	2718	2675	2614	2562	2516

Table 798: MAgPIE new_input — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	2288	2204	1933	1959	2064	2052	1843	2440	2488	2424	2311
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 799: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	1928	1755	1601	1569	1712	1800	1852	1774	1960	1914	1984
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 800: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	1923	2088	1921	2088	1813	1812	1867	2000	2081	2117	1851
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 801: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	1628	1632	1706	1711	3632	3784	3312	3026	4101	3930	3722
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 802: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	4294	4851	4291	4491	4901	4828	4662	4316	4300	4263	4093
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 803: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 5/6]

	2015	2016
GLO	4170	4788
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 804: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2439	2481	2480	2473	2483	2458	2422	2457	2382	2436	2377
CAZ	3256	3143	3215	3220	3105	3163	3136	3115	3130	3132	3168
CHA	1306	1252	1278	1288	1283	1278	1272	1260	1266	1266	1249
EUR	3872	3996	3860	3832	3915	3769	3753	3812	3650	3827	3759
IND	1732	1717	1710	1699	1666	1662	1670	1659	1652	1663	1656
LAM	1477	1472	1447	1390	1435	1400	1428	1360	1351	1355	1393
MEA	1850	1721	1734	1697	1740	1561	1531	1634	1559	1589	1611
NEU	2811	2853	2782	2802	2817	2784	2790	2825	2683	2863	2789
OAS	3694	3710	3728	3813	3825	3921	3936	3981	3908	3879	3837
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1984	1926	1958	1958	2045	2015	1922	1898	1890	1834	1851
USA	2690	2660	2746	2786	2709	2665	2590	2797	2616	2596	2627

Table 805: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	2380	2378	2352	2311	2266	2245	2222	2296	2225	2175	2199
CAZ	3151	3139	3048	3025	2983	2975	2904	2965	2992	2967	2972
CHA	1288	1293	1289	1282	1279	1267	1260	1254	1252	1248	1233
EUR	3691	3752	3746	3633	3672	3551	3584	3698	3628	3563	3606
IND	1645	1653	1645	1642	1631	1626	1626	1636	1640	1633	1643
LAM	1379	1348	1409	1383	1325	1368	1394	1413	1346	1373	1352
MEA	1513	1540	1503	1434	1372	1349	1348	1366	1315	1319	1284
NEU	2767	2774	2747	2781	2693	2724	2737	2688	2651	2685	2664
OAS	3919	3908	3780	3662	3564	3651	3505	3480	3308	3303	3324
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1811	1787	1725	1763	1772	1742	1716	1869	1906	1883	1850
USA	2599	2618	2681	2718	2625	2689	2613	2767	2638	2710	2849

Table 806: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	2175	2132	2124	2069	2082	2039	2062	2057	2028	2117	2063
CAZ	3006	2964	3045	3056	3054	3064	3033	3014	3094	3105	3123
CHA	1218	1177	1170	1133	1154	1148	1159	1199	1234	1223	1233
EUR	3590	3551	3590	3520	3589	3453	3527	3564	3468	3567	3527
IND	1640	1631	1646	1641	1635	1596	1618	1606	1585	1600	1568
LAM	1359	1340	1330	1316	1333	1310	1277	1284	1285	1275	1273
MEA	1311	1311	1284	1291	1317	1351	1404	1348	1452	1422	1470
NEU	2739	2711	2675	2640	2628	2730	2782	2711	2629	2921	2888
OAS	3366	3206	3248	3170	3207	3141	3105	3043	2976	2996	2875
REF	0	0	0	0	0	0	0	0	0	1406	1443
SSA	1895	1938	1934	1933	1923	1953	1977	1944	1939	1955	2046
USA	2764	3020	2975	2909	3022	2995	2988	3156	3122	3007	2948

Table 807: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	2060	2031	2022	1994	1969	1981	1925	1895	1885	1880	1895
CAZ	3067	3063	3060	3141	3174	3182	3246	3332	3339	3357	3353
CHA	1265	1293	1297	1296	1322	1324	1256	1252	1264	1299	1333
EUR	3537	3556	3582	3549	3544	3584	3692	3631	3680	3589	3578
IND	1603	1597	1625	1602	1530	1510	1524	1508	1532	1535	1560
LAM	1287	1269	1247	1231	1284	1253	1241	1276	1265	1264	1260
MEA	1456	1456	1455	1471	1408	1435	1391	1469	1454	1505	1494
NEU	2900	2819	2817	2836	2813	2777	2819	2821	2775	2801	2729
OAS	2844	2822	2788	2815	2721	2753	2662	2620	2591	2539	2446
REF	1481	1531	1545	1519	1586	1562	1613	1604	1638	1603	1597
SSA	2053	2043	2070	2073	2090	2126	2152	2124	2041	2079	2130
USA	3055	2926	2958	2959	2842	3195	3021	3041	3179	3159	3208

Table 808: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	1886	1864	1861	1866	1869	1833	1805
CAZ	3456	3460	3600	3623	3772	3808	3879
CHA	1346	1349	1374	1420	1434	1416	1431
EUR	3614	3595	3576	3526	3592	3577	3603
IND	1522	1510	1498	1504	1501	1481	1488
LAM	1274	1299	1289	1302	1282	1295	1308
MEA	1492	1523	1510	1578	1577	1568	1370
NEU	2826	2870	2856	2916	2874	2913	2857
OAS	2444	2356	2358	2306	2243	2169	2126
REF	1615	1556	1530	1452	1458	1423	1385
SSA	2135	2074	2071	2076	2034	2006	1970
USA	3305	3369	3637	3562	3611	3737	3453

Table 809: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 5/5]

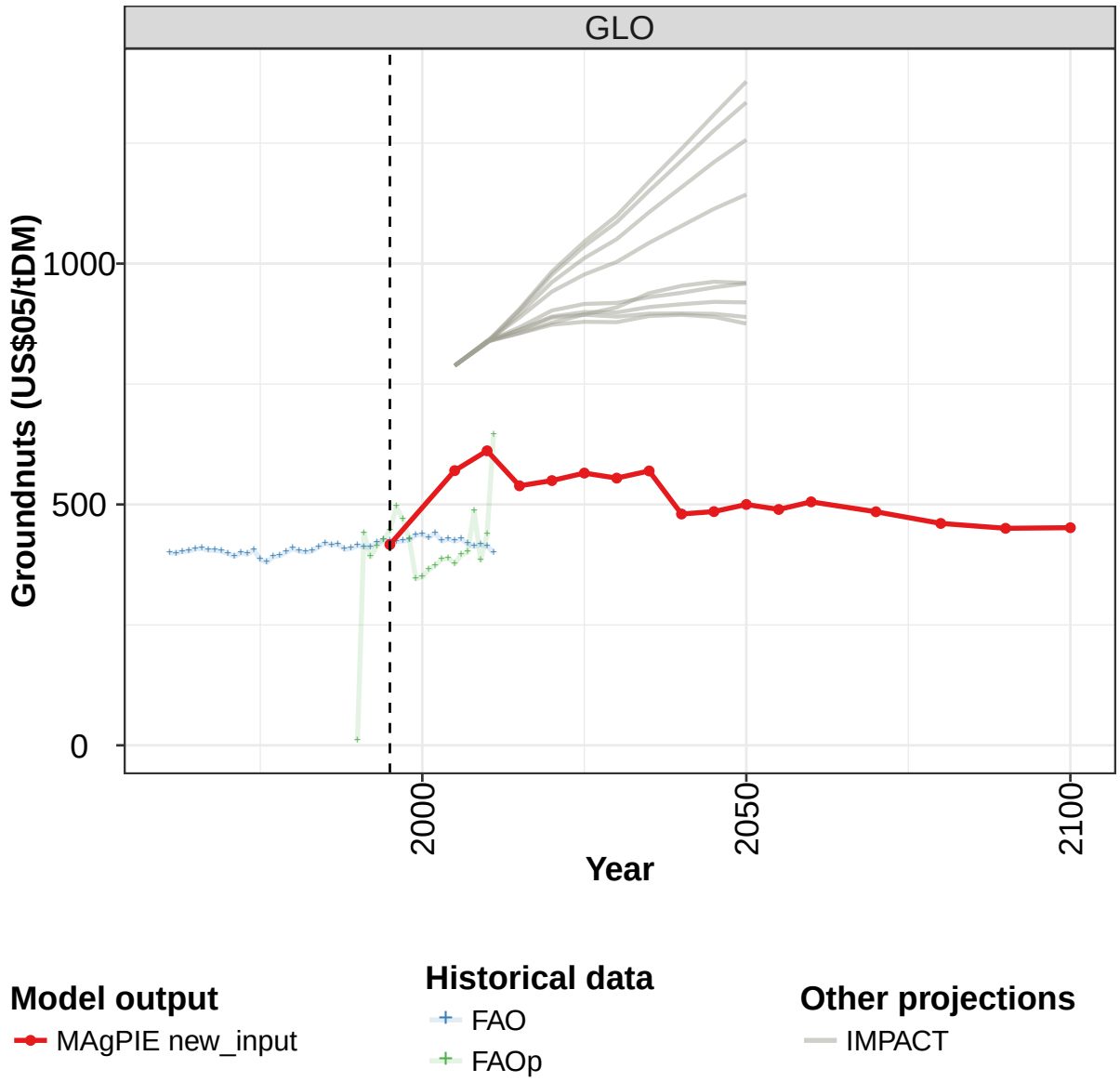
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	846	1109	1183	1119	1239	1384	1305	1328	1287	1175
CAZ	0	2090	2082	2037	2138	2317	2314	2598	2114	2268	2205
CHA	0	101	870	1085	735	808	1164	1058	1259	1260	1056
EUR	0	2264	2191	1881	2015	2286	2198	2143	2125	1871	1688
IND	0	130	28	30	32	31	36	38	34	30	29
LAM	0	847	952	1083	1820	1083	1178	1176	1138	1022	999
MEA	0	342	758	248	285	402	419	460	534	643	702
NEU	0	1128	1116	1212	1270	1586	1495	1403	1677	1441	1455
OAS	0	2235	2292	2631	2474	3104	2904	2537	2293	2398	2382
REF	0	0	19	99	311	271	406	523	479	380	334
SSA	1	129	155	184	296	453	601	688	610	316	271
USA	0	874	1386	1929	2062	2213	3280	3395	3413	3312	3261

Table 810: FAOp — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	1132	1149	1245	1301	1317	1502	1597	1862	1753	1896	2239
CAZ	2150	2251	2702	2761	3032	3451	3964	4030	3802	3253	3778
CHA	1011	1129	1186	1207	1224	1470	1572	1994	1910	2051	2746
EUR	1724	1809	2379	2364	2541	2664	3088	2965	2575	2734	2714
IND	213	4	6	8	7	8	0	0	0	0	0
LAM	1025	927	811	833	850	910	1025	1090	1010	1264	1287
MEA	778	560	559	591	566	698	991	1260	1307	1320	1374
NEU	1084	1236	1642	2130	2471	2665	3300	3938	3409	4556	4619
OAS	2088	1884	2131	2263	2190	2684	2349	2674	2480	2835	2601
REF	371	411	462	539	581	705	891	960	741	842	1026
SSA	282	303	374	409	434	479	500	575	402	460	497
USA	3393	3400	3541	3310	3486	3494	3983	3988	4007	4343	4106

Table 811: FAOp — Prices—Agriculture—Fruits Vegetables Nuts (US$05/tDM) [PART 2/3]

37.8 Groundnuts



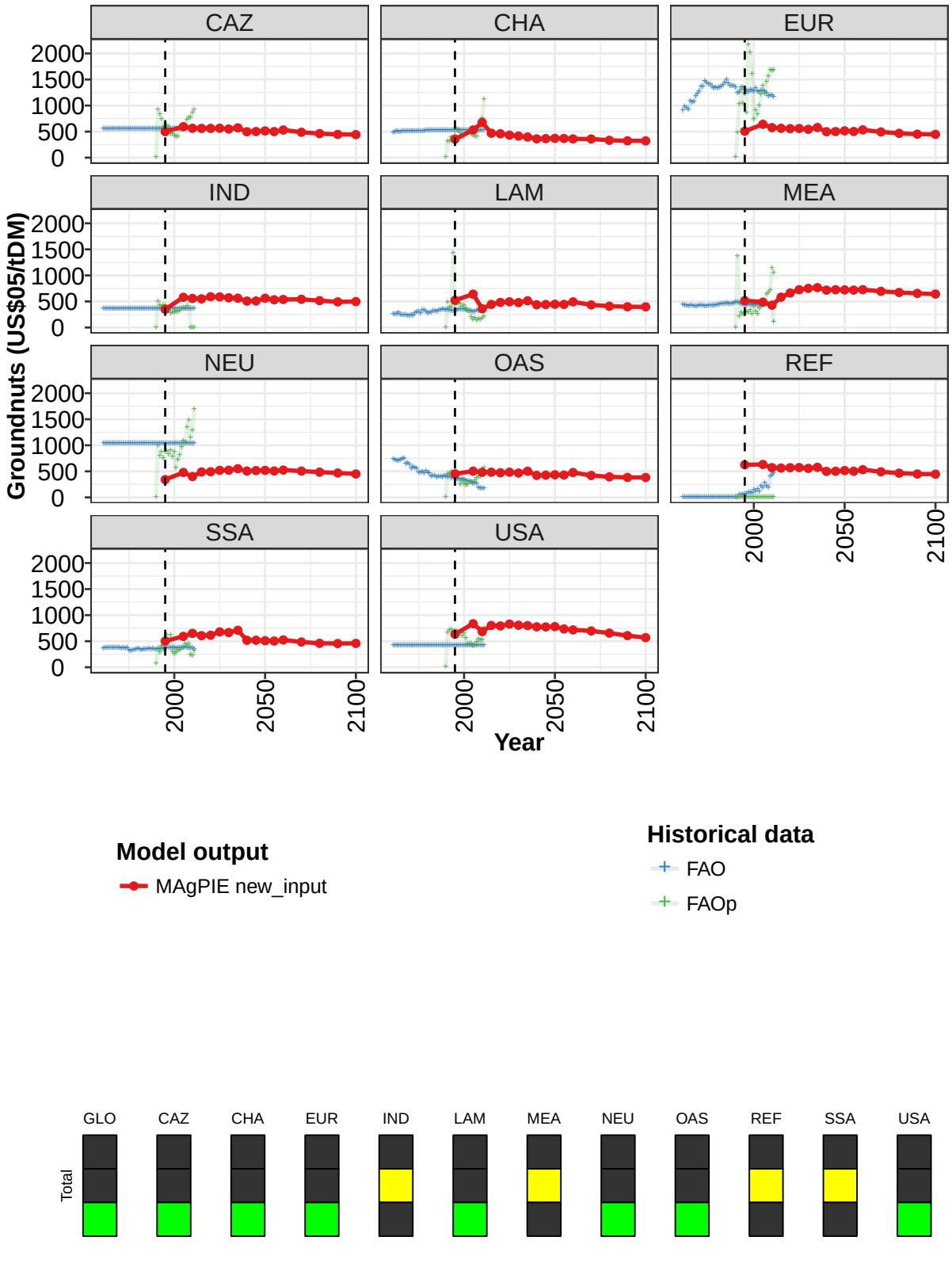


Figure 246: MAgPIE new_input — Prices—Agriculture—Groundnuts (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	417	570	611	539	550	565	555	570	480	485	500
CAZ	499	595	564	562	562	565	549	573	497	501	514
CHA	354	532	676	469	459	432	415	397	361	365	370
EUR	507	640	576	563	556	560	544	579	498	501	515
IND	350	581	558	550	591	588	571	563	508	509	562
LAM	522	640	361	443	482	494	479	514	436	441	447
MEA	517	488	429	583	662	726	751	766	718	726	722
NEU	342	478	400	488	493	519	522	551	505	515	519
OAS	451	504	481	483	473	483	468	502	423	427	434
REF	626	632	571	563	570	573	558	577	499	501	515
SSA	502	593	651	606	615	679	667	710	518	518	510
USA	634	836	685	803	793	828	807	800	776	774	779

Table 812: MAgPIE new_input — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	490	505	485	461	450	452
CAZ	500	531	488	461	446	443
CHA	368	359	359	333	324	322
EUR	502	534	494	467	451	447
IND	532	538	543	516	492	498
LAM	443	493	434	409	399	397
MEA	719	726	695	672	655	642
NEU	507	525	505	484	469	449
OAS	429	478	420	395	383	382
REF	502	532	491	465	449	445
SSA	503	524	485	460	456	458
USA	735	717	697	655	607	569

Table 813: MAgPIE new_input — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	399	398	402	404	407	408	405	405	403	398	392
CAZ	543	544	544	544	543	543	543	544	543	543	543
CHA	481	487	497	496	497	504	498	501	502	501	507
EUR	899	974	953	915	1084	1058	1073	1170	1219	1271	1354
IND	359	359	359	359	359	359	359	359	359	359	359
LAM	246	254	248	278	243	231	233	229	227	219	236
MEA	427	421	419	409	418	412	410	408	409	425	424
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	733	712	702	702	718	726	749	644	648	624	553
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	361	366	371	369	374	367	366	373	374	367	359
USA	421	421	421	421	421	421	421	421	421	421	421

Table 814: FAO — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	399	397	406	385	380	392	393	400	408	403	401
CAZ	543	543	543	543	543	543	544	543	543	543	543
CHA	506	506	509	509	505	509	509	513	517	518	518
EUR	1360	1456	1431	1401	1395	1358	1327	1344	1323	1341	1349
IND	359	359	359	359	359	359	359	359	359	359	359
LAM	222	271	290	291	265	322	327	297	268	284	288
MEA	412	407	411	417	418	412	425	421	428	438	457
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	575	569	541	476	471	484	460	494	471	453	393
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	365	346	376	316	305	325	330	332	348	337	325
USA	421	421	421	421	421	421	421	421	421	421	421

Table 815: FAO — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	403	412	420	416	417	407	408	415	412	411	421
CAZ	543	543	543	543	543	543	543	543	543	544	543
CHA	521	520	522	522	520	521	523	524	522	522	524
EUR	1391	1435	1490	1422	1367	1377	1377	1342	1239	1253	1340
IND	359	359	359	359	359	359	359	359	359	359	359
LAM	310	316	296	326	333	347	345	335	339	323	317
MEA	448	452	461	448	445	450	461	485	474	458	452
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	405	402	373	395	397	382	409	401	378	404	368
REF	0	0	0	0	0	0	0	0	0	39	50
SSA	337	343	340	347	339	353	339	339	338	343	349
USA	421	421	421	421	421	421	421	421	421	421	421

Table 816: FAO — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	426	424	423	424	426	436	437	431	440	424	428
CAZ	543	544	544	543	543	543	543	544	543	543	544
CHA	525	524	525	525	526	526	526	527	526	526	527
EUR	1342	1222	1278	1246	1302	1283	1260	1331	1264	1253	1273
IND	359	359	359	359	359	359	359	359	359	359	359
LAM	309	307	335	339	336	339	336	332	311	313	310
MEA	433	425	423	429	439	425	430	435	424	431	442
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	381	351	344	346	337	342	330	311	306	296	285
REF	45	60	53	85	87	77	134	111	143	109	218
SSA	355	349	375	368	369	374	375	360	373	363	368
USA	421	421	421	421	421	421	421	421	421	421	421

Table 817: FAO — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	424	428	418	413	416	413	400
CAZ	544	543	543	543	543	544	543
CHA	527	526	527	527	527	527	527
EUR	1278	1259	1235	1167	1185	1187	1165
IND	359	359	359	359	359	359	359
LAM	299	304	320	314	326	324	320
MEA	448	448	450	433	430	435	105
NEU	1030	1030	1030	1030	1030	1030	1030
OAS	274	277	264	174	168	168	169
REF	176	269	204	188	402	424	457
SSA	373	385	369	365	366	368	343
USA	421	421	421	421	421	421	421

Table 818: FAO — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 5/5]

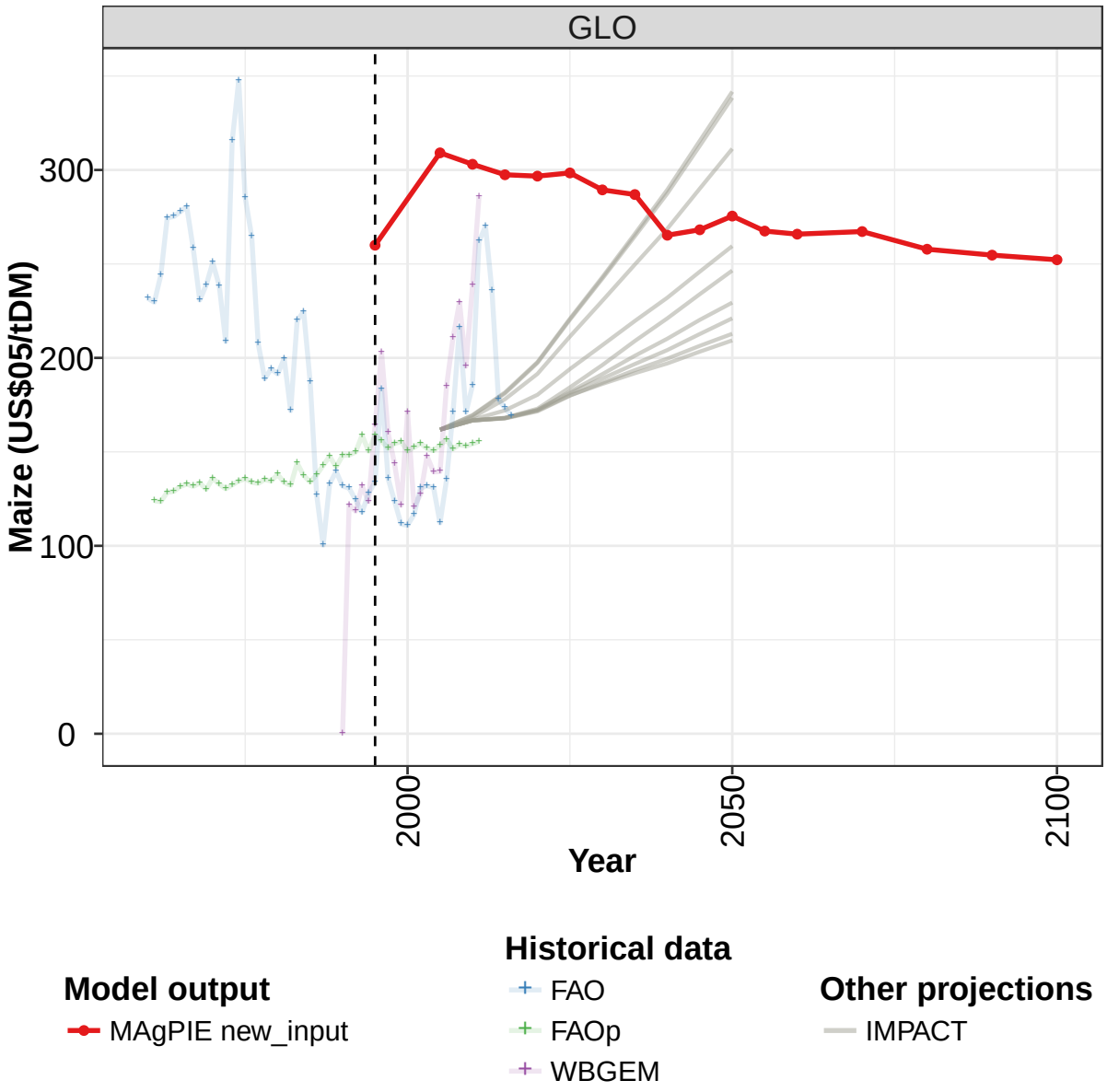
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	10	440	391	413	426	446	495	469	427	346	350
CAZ	0	908	828	735	586	587	608	584	448	453	413
CHA	0	309	307	384	359	418	539	541	463	379	401
EUR	0	481	1024	1294	1031	1297	859	2168	2006	1594	729
IND	0	488	419	376	420	424	354	330	268	285	289
LAM	0	480	370	390	1416	436	450	462	449	395	418
MEA	0	1363	201	289	257	278	301	290	329	258	398
NEU	0	982	792	870	741	863	881	826	900	774	860
OAS	0	446	456	484	475	481	491	440	244	307	258
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	59	348	277	407	342	475	618	519	610	286	247
USA	0	664	703	713	678	687	687	658	666	596	643

Table 819: FAOp — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	364	373	386	388	377	395	401	486	385	438	644
CAZ	391	405	545	533	536	561	714	763	768	849	910
CHA	440	455	473	446	422	404	394	519	590	751	1115
EUR	906	826	986	1203	1379	1218	1451	1557	1681	1662	1682
IND	302	297	320	352	367	357	399	513	0	0	0
LAM	363	320	317	189	151	179	133	158	147	172	206
MEA	300	250	364	387	425	479	638	659	704	1132	1045
NEU	556	710	800	959	1085	1046	1336	1471	1147	1277	1690
OAS	225	244	295	283	252	319	362	394	389	524	562
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	283	314	325	357	367	438	415	447	231	219	304
USA	549	427	452	444	405	415	481	539	508	528	746

Table 820: FAOp — Prices—Agriculture—Groundnuts (US$05/tDM) [PART 2/3]

37.9 Maize


GLO
Maize (US$05/tDM)
300
200
100
0
2000
2050
2100
Year
Historical data
FAO
FAOp
WBGEM
Model output
MAgPIE new_input
Other projections
IMPACT

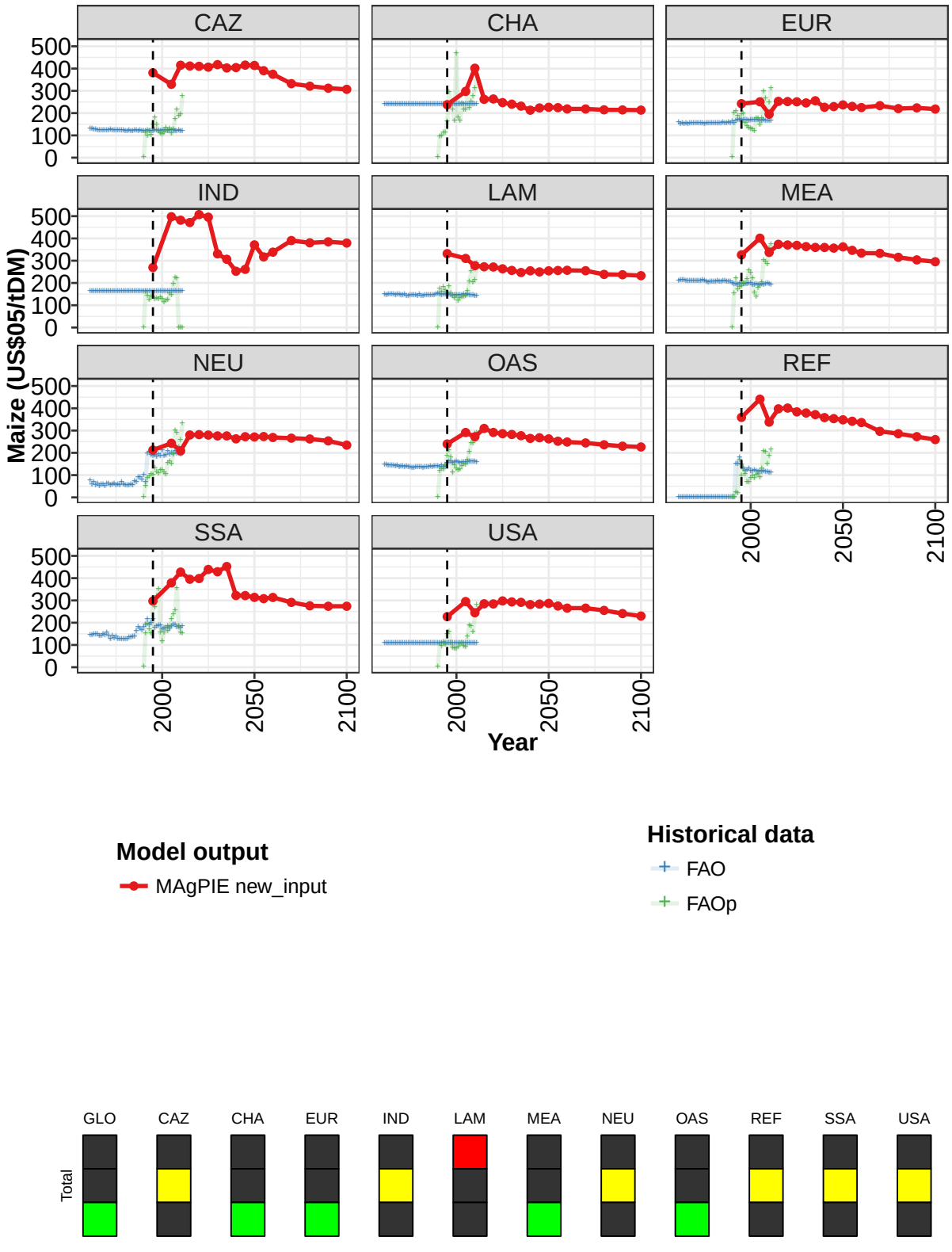


Figure 247: MAgPIE new_input — Prices—Agriculture—Maize (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	260	309	303	297	297	298	289	287	265	268	275
CAZ	381	329	415	411	410	406	418	403	404	416	414
CHA	238	298	402	262	264	247	240	231	213	223	226
EUR	242	251	195	253	252	251	246	255	226	229	237
IND	270	498	482	471	507	496	331	306	253	261	371
LAM	332	310	278	273	272	264	256	247	255	250	255
MEA	326	401	337	374	371	369	363	360	359	357	362
NEU	212	243	209	280	282	280	276	276	263	273	271
OAS	240	291	272	310	292	286	282	277	265	268	263
REF	359	441	338	398	401	384	379	372	358	354	348
SSA	297	379	427	395	398	439	429	452	322	322	314
USA	227	295	245	285	284	298	293	291	281	284	287

Table 821: MAgPIE new_input — Prices—Agriculture—Maize (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	267	266	267	258	255	252
CAZ	390	375	332	321	312	307
CHA	225	219	219	215	214	213
EUR	230	225	234	220	224	218
IND	317	338	391	380	385	379
LAM	256	257	255	239	237	233
MEA	346	334	333	315	304	295
NEU	273	269	266	262	254	235
OAS	252	249	245	236	230	226
REF	342	336	297	286	273	260
SSA	308	313	291	276	274	274
USA	275	265	265	255	241	230

Table 822: MAgPIE new_input — Prices—Agriculture—Maize (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	232	230	244	275	275	278	280	258	231	239	251
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 823: WBGEM — Prices—Agriculture—Maize (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	238	209	316	347	285	265	208	189	194	191	200
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 824: WBGEM — Prices—Agriculture—Maize (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	172	220	225	187	127	100	133	140	132	131	125
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 825: WBGEM — Prices—Agriculture—Maize (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	118	128	134	183	136	124	112	111	117	131	132
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 826: WBGEM — Prices—Agriculture—Maize (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	131	112	135	171	216	171	185	262	270	236	178
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 827: WBGEM — Prices—Agriculture—Maize (US$05/tDM) [PART 5/6]

	2015	2016
GLO	173	169
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 828: WBGEM — Prices—Agriculture—Maize (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	124	123	129	129	132	133	132	133	130	136	133
CAZ	127	127	127	123	123	121	122	122	122	122	122
CHA	239	238	239	239	239	239	239	239	239	239	239
EUR	156	151	153	152	152	151	152	154	152	154	154
IND	162	162	162	162	162	162	162	162	162	162	162
LAM	146	146	148	149	149	147	144	147	146	143	143
MEA	208	212	213	212	210	207	209	209	210	208	210
NEU	74	55	66	53	58	49	57	56	51	59	60
OAS	145	145	140	143	141	142	139	143	136	139	137
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	142	143	147	146	145	141	139	148	142	154	140
USA	106	106	106	106	106	106	106	106	106	106	106

Table 829: FAO — Prices—Agriculture—Maize (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	130	132	134	136	134	133	135	134	138	134	132
CAZ	124	122	121	121	122	122	121	120	120	119	120
CHA	238	238	238	238	238	239	239	239	239	239	239
EUR	154	152	153	150	154	153	155	152	155	154	152
IND	162	162	162	162	162	162	162	162	162	162	162
LAM	146	141	140	144	145	144	144	142	147	141	141
MEA	208	208	210	209	206	201	204	205	204	203	207
NEU	53	55	60	54	58	54	68	57	54	53	53
OAS	135	138	135	135	132	133	136	136	135	136	131
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	126	139	129	135	127	126	125	124	125	126	132
USA	106	106	106	106	106	106	106	106	106	106	106

Table 830: FAO — Prices—Agriculture—Maize (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	144	137	134	138	143	148	142	148	148	150	159
CAZ	119	120	120	121	120	120	119	120	119	122	119
CHA	238	238	238	238	238	238	238	238	238	238	238
EUR	153	153	156	153	155	157	154	160	154	164	166
IND	162	162	162	162	162	162	162	162	162	162	162
LAM	145	145	144	144	145	145	149	153	149	145	147
MEA	206	205	207	207	206	205	204	199	194	193	191
NEU	58	54	69	67	87	88	78	98	66	194	201
OAS	134	135	135	137	136	139	138	138	135	141	137
REF	0	0	0	0	0	0	0	0	0	150	150
SSA	133	135	138	160	177	171	164	178	189	214	191
USA	106	106	106	106	106	106	106	106	106	106	106

Table 831: FAO — Prices—Agriculture—Maize (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	150	159	156	152	154	155	150	152	155	152	151
CAZ	119	120	121	121	119	120	121	120	120	119	120
CHA	238	238	238	238	239	239	239	239	239	239	239
EUR	167	167	168	167	167	166	168	167	167	169	167
IND	162	162	162	162	162	162	162	162	162	162	162
LAM	147	146	147	143	140	144	144	144	145	145	147
MEA	196	195	195	195	195	196	198	192	192	192	189
NEU	189	183	187	180	191	186	210	186	186	205	190
OAS	139	154	159	159	154	158	159	155	154	155	156
REF	178	144	131	116	122	128	116	116	119	116	113
SSA	196	213	176	182	184	186	169	177	175	181	171
USA	106	106	106	106	106	106	106	106	106	106	106

Table 832: FAO — Prices—Agriculture—Maize (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	153	157	152	154	153	154	155
CAZ	120	120	118	120	120	119	119
CHA	239	239	239	239	239	239	239
EUR	165	165	168	164	164	164	165
IND	162	162	162	162	162	162	162
LAM	144	147	143	142	145	141	139
MEA	190	192	192	193	196	196	190
NEU	198	193	207	196	195	192	195
OAS	157	156	158	159	158	158	158
REF	116	114	117	114	112	109	109
SSA	182	190	189	178	182	174	181
USA	106	106	106	106	106	106	106

Table 833: FAO — Prices—Agriculture—Maize (US$05/tDM) [PART 5/5]

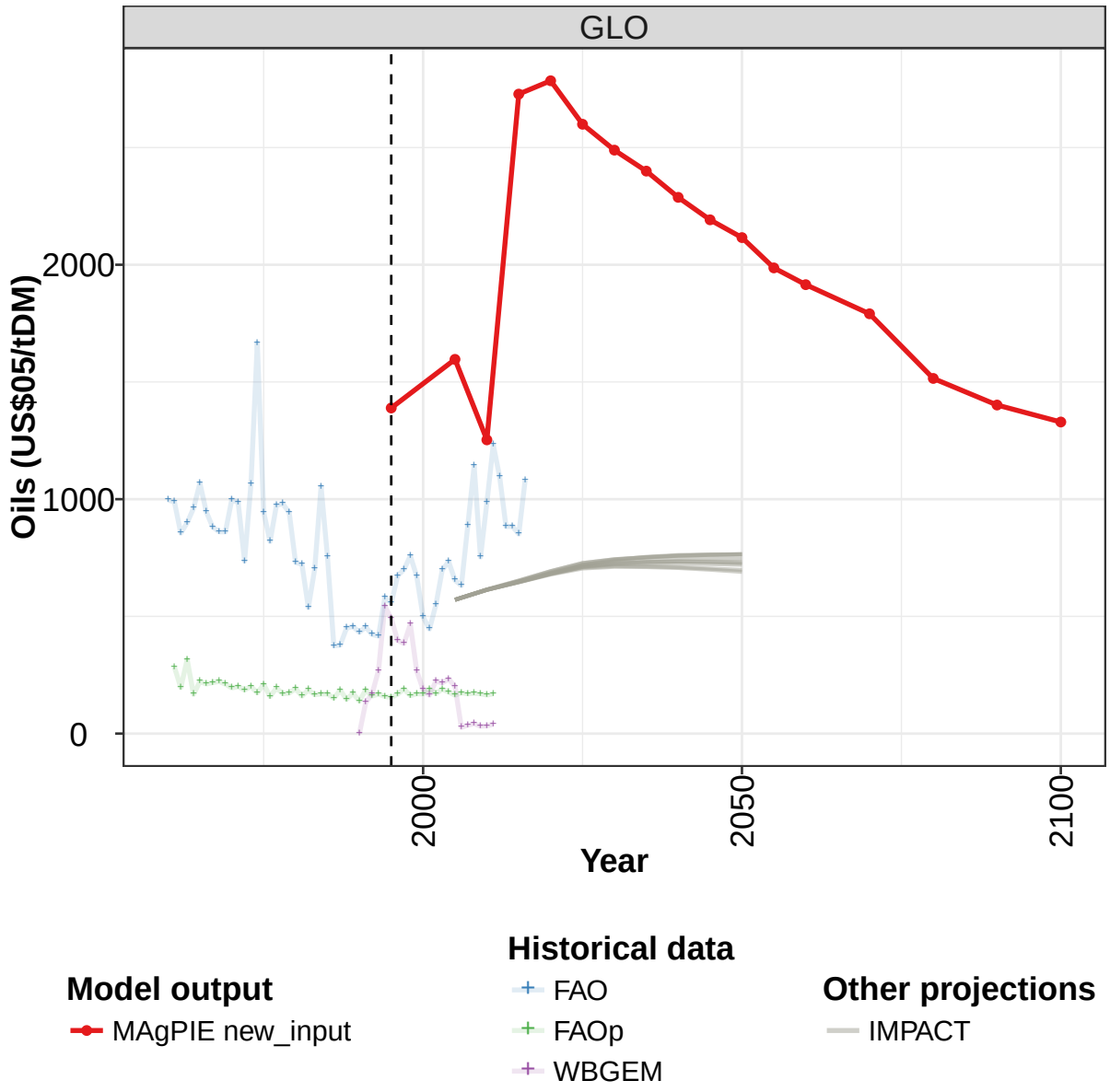
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	122	118	132	123	164	203	160	144	122	171
CAZ	0	109	97	118	100	147	177	145	119	109	103
CHA	0	91	96	110	111	162	293	240	212	166	466
EUR	0	200	206	186	173	192	197	153	138	133	127
IND	0	158	140	123	137	137	125	129	127	135	126
LAM	0	171	160	180	164	156	183	151	146	130	142
MEA	0	150	220	168	179	183	197	198	217	256	244
NEU	0	48	84	93	103	100	130	113	107	122	120
OAS	0	116	129	124	141	186	208	179	111	142	129
REF	0	0	20	18	167	95	125	102	66	66	84
SSA	1	152	194	167	151	298	268	318	350	154	114
USA	0	106	92	111	101	145	159	109	86	82	83

Table 834: FAOp — Prices—Agriculture—Maize (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	121	127	148	139	139	185	211	230	196	239	286
CAZ	111	132	119	128	107	125	171	215	187	193	275
CHA	177	166	243	215	215	286	220	248	276	310	365
EUR	124	118	174	174	147	174	296	263	195	247	311
IND	113	120	123	150	145	192	221	219	0	0	0
LAM	118	129	135	136	140	161	205	250	203	213	286
MEA	220	156	139	175	187	200	300	292	283	353	373
NEU	109	102	154	160	151	193	298	286	222	258	331
OAS	122	125	137	151	147	167	202	242	240	285	289
REF	96	85	99	104	87	129	207	201	148	186	214
SSA	152	176	161	180	213	236	252	351	179	155	152
USA	89	103	108	92	90	136	188	182	159	232	278

Table 835: FAOp — Prices—Agriculture—Maize (US$05/tDM) [PART 2/3]

37.10 Oils


GLO
Oils (US$05/tDM)
2000
1000
0
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO
FAOp
WBGEM
Other projections
IMPACT

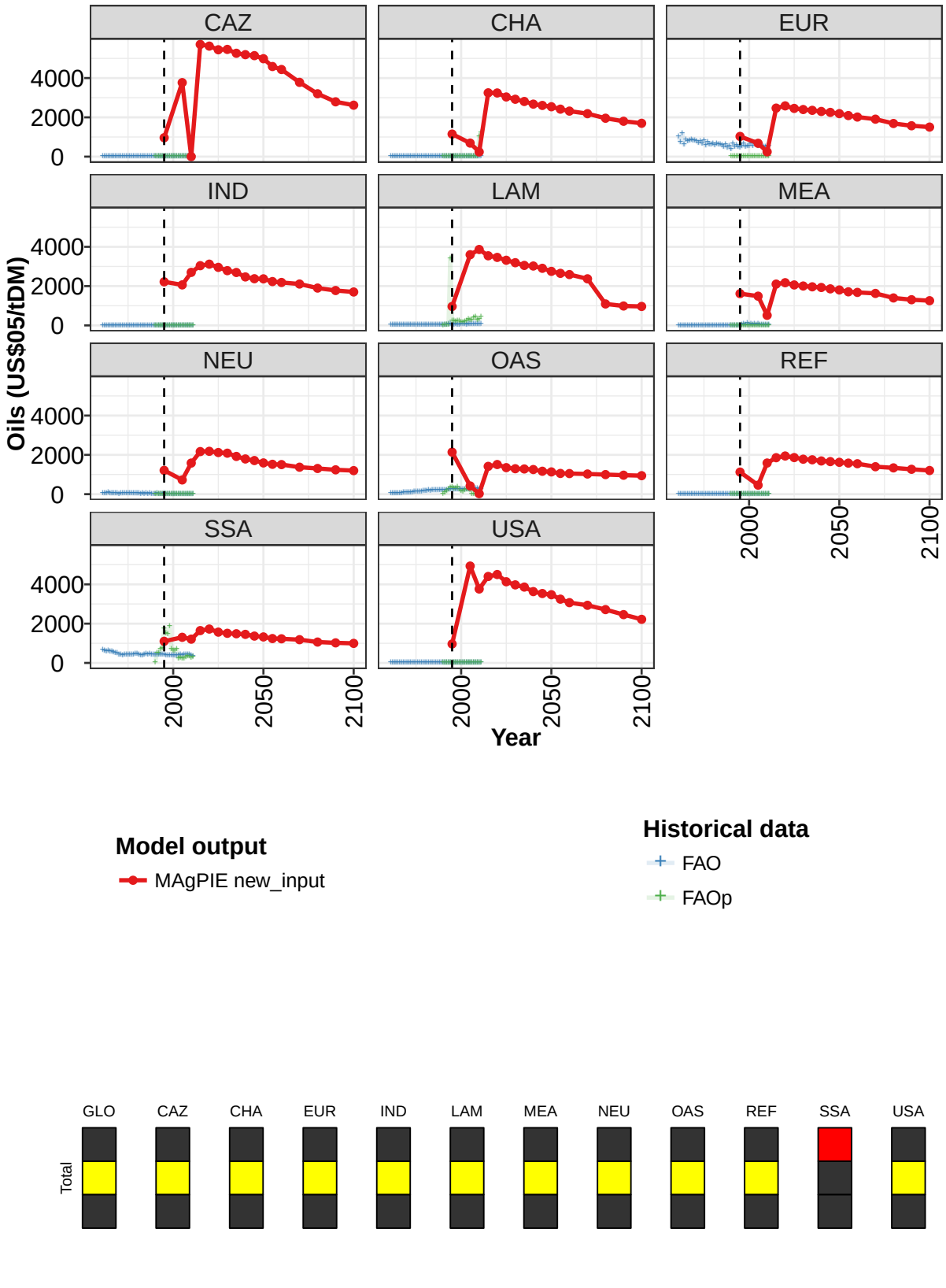


Figure 248: MAgPIE new_input — Prices—Agriculture—Oils (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1389	1597	1253	2728	2785	2600	2489	2400	2288	2192	2116
CAZ	964	3768	2	5712	5627	5440	5459	5262	5191	5142	4986
CHA	1149	690	240	3249	3241	3039	2922	2808	2674	2607	2540
EUR	1030	680	246	2470	2584	2455	2398	2358	2300	2253	2190
IND	2219	2063	2700	3041	3118	2955	2788	2695	2469	2377	2370
LAM	963	3598	3864	3544	3462	3316	3192	3054	3024	2907	2751
MEA	1617	1489	514	2103	2174	2059	2006	1964	1931	1860	1805
NEU	1211	725	1583	2168	2182	2121	2087	1922	1792	1711	1591
OAS	2140	419	26	1415	1509	1351	1296	1283	1254	1167	1134
REF	1124	460	1586	1857	1943	1863	1781	1751	1691	1659	1622
SSA	1102	1305	1210	1647	1725	1568	1509	1485	1455	1367	1324
USA	967	4931	3764	4402	4501	4133	3974	3862	3632	3534	3473

Table 836: MAgPIE new_input — Prices—Agriculture—Oils (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1987	1915	1791	1515	1402	1329
CAZ	4588	4436	3781	3200	2791	2620
CHA	2417	2318	2188	1955	1802	1699
EUR	2092	2017	1908	1688	1573	1505
IND	2233	2186	2107	1901	1776	1702
LAM	2650	2589	2373	1093	989	965
MEA	1710	1680	1628	1399	1307	1258
NEU	1520	1506	1374	1308	1239	1200
OAS	1056	1050	1027	997	966	942
REF	1580	1550	1398	1339	1266	1205
SSA	1241	1229	1184	1064	1022	996
USA	3247	3068	2934	2715	2460	2219

Table 837: MAgPIE new_input — Prices—Agriculture—Oils (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	997	988	855	900	961	1068	946	881	861	861	999
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 838: WBGEM — Prices—Agriculture—Oils (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	985	736	1064	1666	943	819	974	980	943	730	723
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 839: WBGEM — Prices—Agriculture—Oils (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	538	702	1054	755	374	377	450	457	432	454	423
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 840: WBGEM — Prices—Agriculture—Oils (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	416	581	556	673	700	758	671	497	446	549	698
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 841: WBGEM — Prices—Agriculture—Oils (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	734	654	631	886	1141	753	985	1231	1096	883	884
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 842: WBGEM — Prices—Agriculture—Oils (US$05/tDM) [PART 5/6]

	2015	2016
GLO	851	1081
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 843: WBGEM — Prices—Agriculture—Oils (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	284	196	316	167	223	211	218	222	211	195	201
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	8	7	6	6	5	7	8	10	11	12	13
EUR	1016	715	1177	597	842	782	805	829	802	793	787
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	15	15	17	18	16	16	20	23	19	18	22
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	22	44	34	64	36	28	33	26	27	10	29
OAS	44	37	39	41	43	47	51	58	65	68	77
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	637	596	584	596	552	584	524	502	489	401	427
USA	0	0	0	0	0	0	0	0	0	0	0

Table 844: FAO — Prices—Agriculture—Oils (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	186	201	174	210	158	195	170	173	192	160	187
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	15	15	15	14	16	15	13	12	10	9	8
EUR	679	751	651	792	549	714	624	599	667	569	664
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	23	22	18	15	14	15	14	15	15	18	21
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	24	42	32	38	32	45	25	27	21	20	12
OAS	85	96	112	120	116	130	129	147	158	158	176
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	384	417	400	415	412	396	423	452	465	404	390
USA	0	0	0	0	0	0	0	0	0	0	0

Table 845: FAO — Prices—Agriculture—Oils (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	166	169	169	151	185	146	172	139	186	160	168
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	8	7	9	10	8	8	8	6	6	6	6
EUR	608	604	575	478	610	430	544	381	644	493	549
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	22	25	24	29	30	33	36	37	40	39	42
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	37	15	20	9	18	13	15	5	18	8	16
OAS	162	185	183	177	182	192	209	201	207	211	218
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	382	404	439	427	438	396	414	398	402	424	425
USA	0	0	0	0	0	0	0	0	0	0	0

Table 846: FAO — Prices—Agriculture—Oils (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	159	154	168	190	162	170	169	188	170	189	177
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	6	6	5	5	4	4	4	4	3	3	3
EUR	473	451	534	630	505	516	542	632	545	682	611
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	43	39	39	44	41	38	43	46	42	39	44
MEA	0	0	29	66	19	88	13	74	24	45	13
NEU	14	17	9	11	3	2	4	6	5	4	3
OAS	220	218	227	230	226	242	237	240	243	248	246
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	419	420	386	380	389	388	389	360	363	376	393
USA	0	0	0	0	0	0	0	0	0	0	0

Table 847: FAO — Prices—Agriculture—Oils (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	164	174	170	172	170	165	170
CAZ	0	0	0	0	0	0	0
CHA	3	3	3	3	3	2	2
EUR	518	553	532	479	470	516	539
IND	0	0	0	0	0	0	0
LAM	46	47	46	48	52	47	48
MEA	60	14	15	27	7	31	27
NEU	2	2	2	2	2	2	2
OAS	250	256	253	259	258	242	253
REF	0	0	0	0	0	0	0
SSA	390	417	426	418	394	357	341
USA	0	0	0	0	0	0	0

Table 848: FAO — Prices—Agriculture—Oils (US$05/tDM) [PART 5/5]

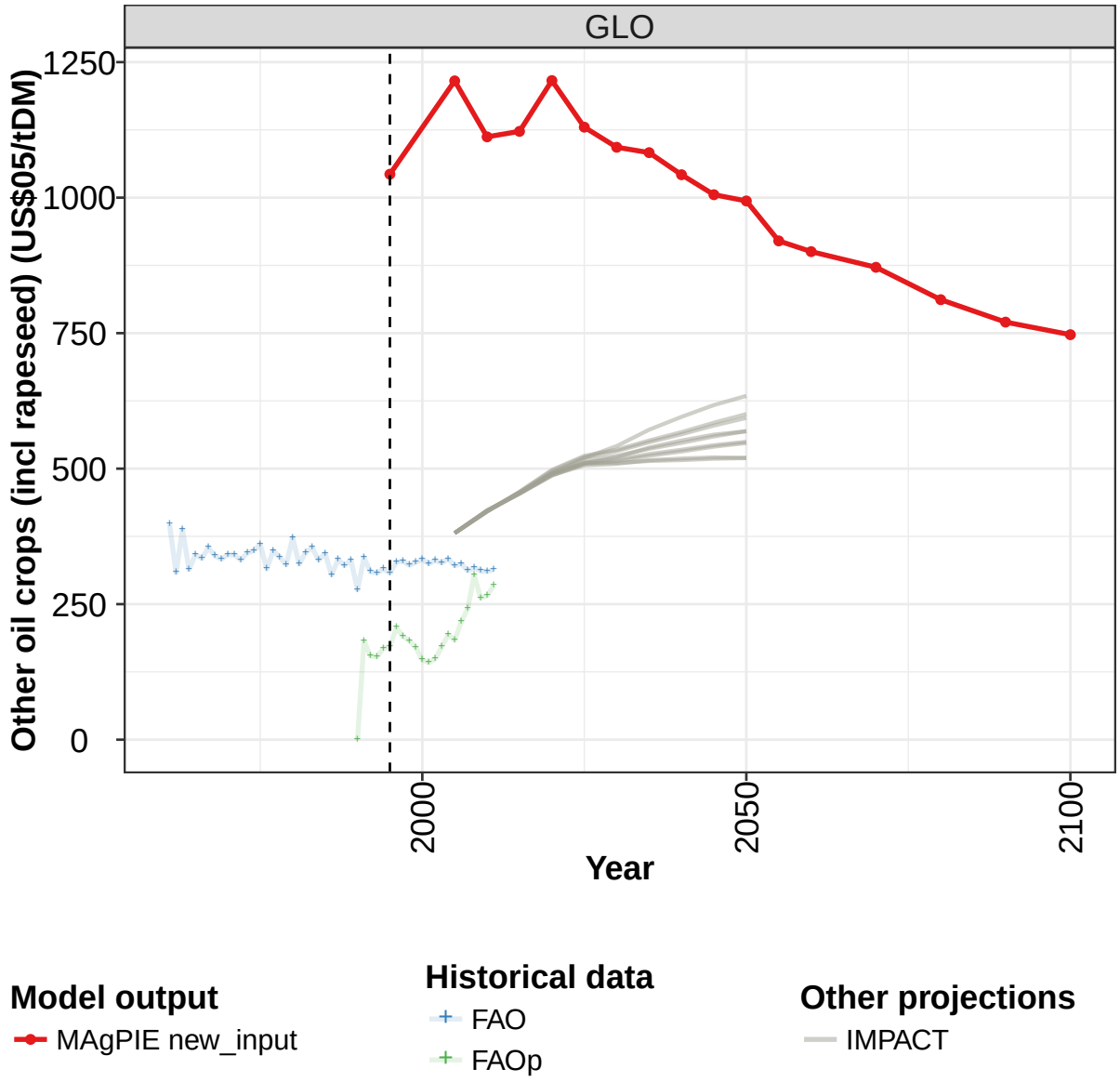
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	132	170	268	544	491	397	384	466	267	187
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	0	6	15	35	3375	235	224	198	221	207	153
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	85	137	229	304	360	289	292	341	234	154
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	502	481	705	747	1752	1512	1461	1846	681	610
USA	0	0	0	0	0	0	0	0	0	0	0

Table 849: FAOp — Prices—Agriculture—Oils (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	164	224	216	232	202	26	36	42	32	33	40
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	1012	1228
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	150	174	202	287	270	277	373	432	270	300	422
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	132	192	219	230	199	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	605	697	211	241	211	216	286	339	333	268	284
USA	0	0	0	0	0	0	0	0	0	0	0

Table 850: FAOp — Prices—Agriculture—Oils (US$05/tDM) [PART 2/3]

37.11 Other oil crops (incl rapeseed)



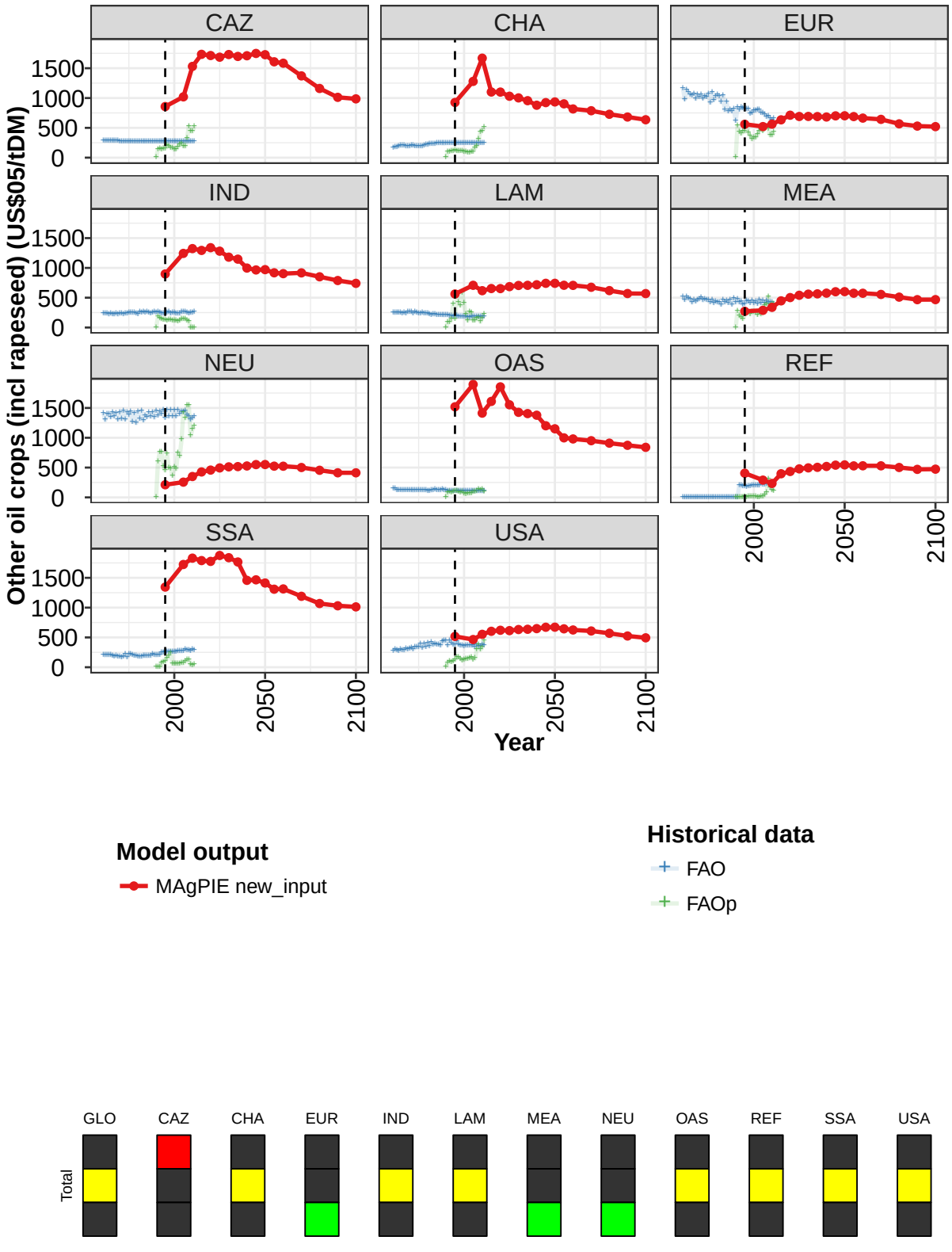


Figure 249: MAgPIE new_input — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1043	1215	1112	1122	1216	1130	1093	1083	1042	1005	994
CAZ	857	1020	1531	1733	1713	1686	1730	1698	1710	1748	1727
CHA	926	1280	1669	1102	1100	1030	1003	956	880	924	935
EUR	561	521	562	634	712	691	692	689	682	701	703
IND	898	1244	1324	1293	1339	1281	1180	1147	998	966	971
LAM	563	708	618	654	653	686	705	708	717	742	742
MEA	272	289	338	447	502	541	560	565	577	601	602
NEU	212	256	350	427	458	494	512	516	527	550	551
OAS	1520	1895	1413	1610	1854	1553	1427	1406	1378	1201	1151
REF	405	290	234	397	435	478	495	504	519	541	545
SSA	1345	1724	1830	1789	1776	1875	1838	1766	1458	1466	1413
USA	517	465	552	603	621	614	633	637	648	671	672

Table 851: MAgPIE new_input — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	920	900	871	812	770	747
CAZ	1608	1584	1372	1161	1012	986
CHA	903	817	787	728	682	636
EUR	689	664	643	567	530	521
IND	918	904	917	851	789	741
LAM	709	707	675	619	570	569
MEA	575	575	556	510	468	468
NEU	524	523	501	455	412	412
OAS	999	980	951	910	874	840
REF	528	530	530	501	470	474
SSA	1309	1314	1190	1069	1031	1013
USA	645	625	608	570	525	494

Table 852: MAgPIE new_input — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	397	308	388	314	341	334	354	339	333	341	341
CAZ	280	283	284	280	281	280	275	285	278	274	269
CHA	161	175	174	190	196	195	196	187	185	189	196
EUR	1161	977	1130	1091	1052	1041	1067	984	1056	1012	1050
IND	236	235	234	216	235	221	216	228	215	230	235
LAM	240	242	249	248	248	237	242	236	255	259	255
MEA	511	459	509	490	469	418	453	436	460	475	505
NEU	1411	1295	1388	1391	1341	1422	1353	1410	1304	1425	1308
OAS	147	139	120	124	124	118	121	123	122	121	118
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	197	201	201	201	204	189	182	194	173	178	166
USA	271	297	286	272	291	288	279	307	302	303	319

Table 853: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	331	345	349	360	315	349	336	322	373	324	345
CAZ	271	273	273	268	272	270	267	267	266	269	269
CHA	196	195	192	192	189	187	204	215	209	229	230
EUR	992	1029	1017	1067	920	1094	966	1025	1051	1030	929
IND	221	236	230	251	244	240	240	239	224	261	251
LAM	237	259	241	237	232	241	237	239	232	223	212
MEA	453	466	459	454	423	465	407	434	419	413	382
NEU	1441	1306	1415	1377	1431	1266	1410	1244	1437	1308	1447
OAS	115	116	120	119	119	117	118	116	106	108	113
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	178	210	168	215	210	204	191	188	183	172	170
USA	301	331	332	333	387	321	395	338	402	348	410

Table 854: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	354	331	344	304	332	321	330	277	335	310	307
CAZ	266	267	268	269	266	264	266	269	266	265	266
CHA	227	229	239	239	245	236	236	243	243	244	243
EUR	1041	794	930	773	804	776	809	616	834	802	837
IND	255	250	256	248	239	248	254	252	256	253	233
LAM	221	214	210	212	211	207	205	206	206	192	189
MEA	454	416	442	411	465	386	485	418	467	419	434
NEU	1290	1372	1348	1416	1349	1428	1335	1442	1371	1429	1392
OAS	122	128	122	121	118	126	122	114	110	110	104
REF	0	0	0	0	0	0	0	0	0	203	193
SSA	185	185	183	188	185	217	202	198	202	207	246
USA	369	387	382	375	362	425	447	440	367	442	397

Table 855: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	315	308	328	329	322	327	332	325	330	326	333
CAZ	265	267	268	267	268	269	268	270	268	269	268
CHA	241	245	244	242	243	245	247	247	247	244	247
EUR	828	808	810	814	739	749	791	783	804	795	752
IND	234	239	243	254	231	243	249	227	228	227	255
LAM	183	187	190	179	178	178	180	178	171	171	177
MEA	385	393	446	438	408	449	403	429	395	458	403
NEU	1464	1332	1464	1357	1455	1358	1463	1358	1461	1389	1438
OAS	109	109	108	108	107	108	110	109	104	101	105
REF	182	185	177	187	190	204	195	200	196	197	221
SSA	247	254	262	260	260	261	261	262	264	270	266
USA	378	375	429	378	357	368	350	363	356	362	363

Table 856: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	321	325	312	317	311	310	314
CAZ	268	268	270	269	269	270	270
CHA	245	243	241	244	244	243	243
EUR	744	720	681	691	648	633	653
IND	263	254	246	236	241	243	264
LAM	179	179	179	179	181	182	182
MEA	440	403	442	420	413	417	364
NEU	1436	1442	1379	1350	1296	1326	1354
OAS	105	101	102	103	100	99	99
REF	206	211	219	242	236	227	208
SSA	275	295	284	289	274	295	279
USA	356	332	379	354	345	380	365

Table 857: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 5/5]

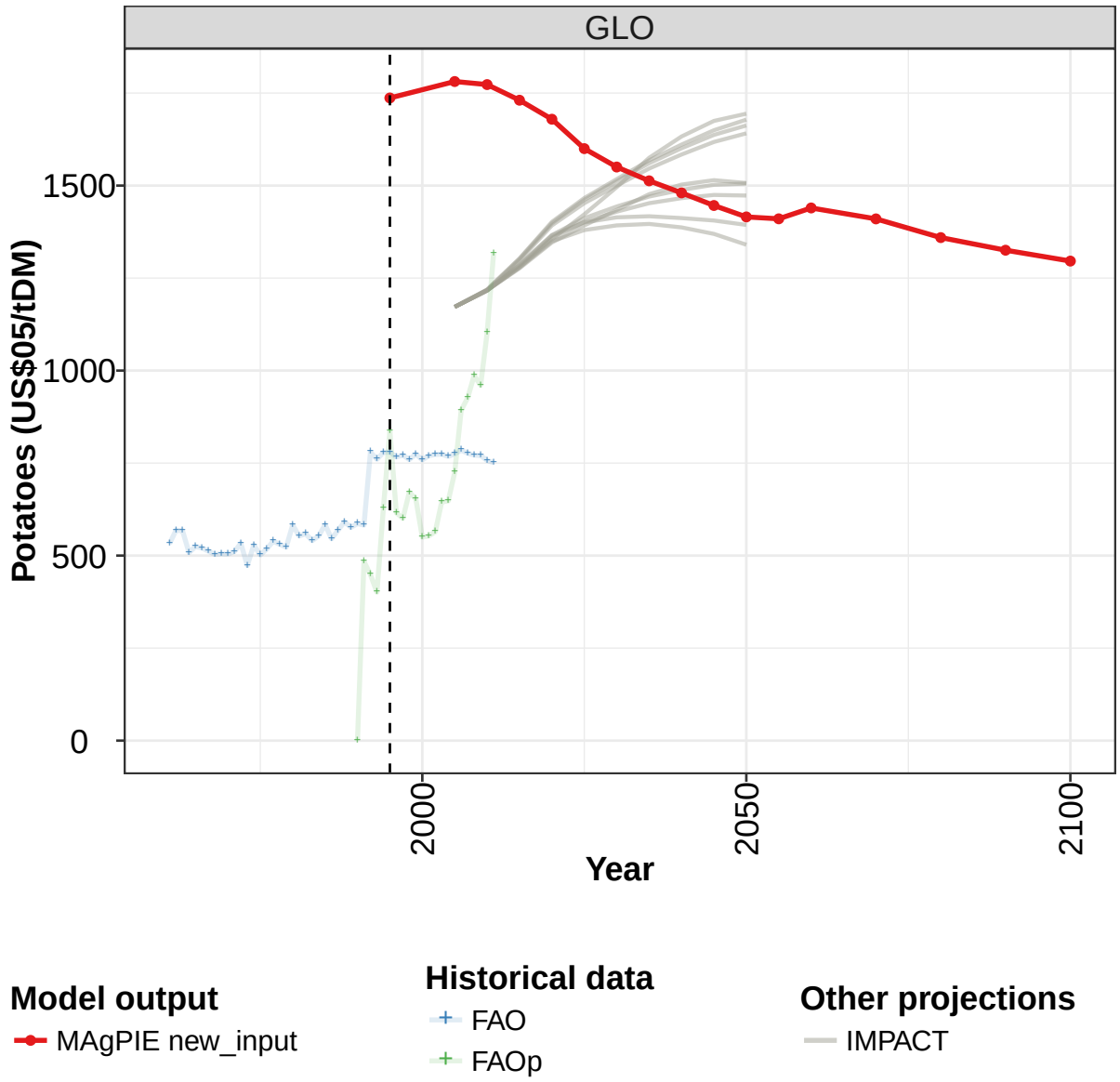
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	181	155	153	168	172	207	191	182	170	147
CAZ	0	137	147	133	147	151	200	195	165	157	131
CHA	0	99	101	104	108	122	110	104	114	113	95
EUR	0	532	423	400	437	435	535	416	367	306	328
IND	0	178	150	135	129	132	117	131	123	118	111
LAM	0	83	91	134	389	146	526	425	366	574	402
MEA	0	273	190	165	140	213	238	248	221	261	253
NEU	0	592	755	761	520	448	724	493	478	362	507
OAS	0	75	85	83	90	101	111	94	79	94	60
REF	0	0	0	0	1	6	5	6	11	11	9
SSA	0	4	4	69	77	92	145	190	242	60	63
USA	0	73	98	89	100	121	163	162	140	113	118

Table 858: FAOp — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	143	149	171	193	183	217	241	303	261	265	284
CAZ	139	180	219	239	191	187	315	525	441	439	527
CHA	94	84	80	97	100	164	193	311	427	447	506
EUR	336	385	447	469	448	503	519	483	371	371	431
IND	114	102	118	134	143	143	112	101	0	0	0
LAM	226	114	256	248	113	119	157	161	95	160	213
MEA	246	212	242	218	270	368	389	508	383	393	388
NEU	471	742	684	969	1426	1325	1536	1539	1032	1143	1190
OAS	57	61	65	71	93	94	104	132	113	134	87
REF	7	5	4	9	8	45	78	310	163	119	108
SSA	59	53	56	64	65	92	116	122	38	35	39
USA	140	138	147	162	129	145	291	374	291	330	446

Table 859: FAOp — Prices—Agriculture—Other oil crops (incl rapeseed) (US$05/tDM) [PART 2/3]

37.12 Potatoes



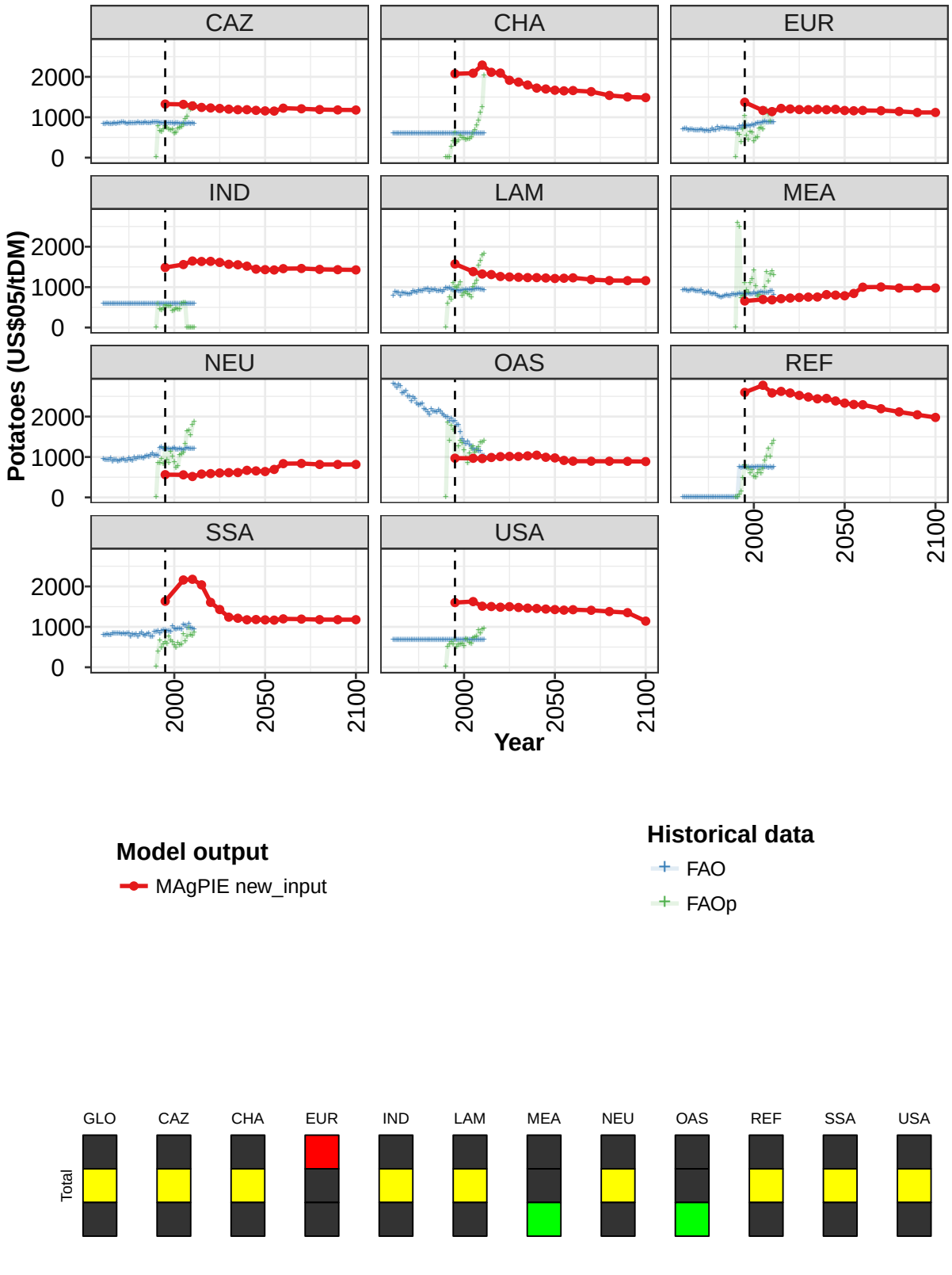


Figure 250: MAgPIE new_input — Prices—Agriculture—Potatoes (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1737	1781	1773	1731	1679	1600	1550	1513	1480	1446	1415
CAZ	1326	1318	1282	1243	1230	1218	1200	1187	1187	1170	1158
CHA	2075	2090	2292	2113	2094	1916	1869	1798	1722	1699	1669
EUR	1372	1168	1140	1219	1205	1191	1187	1196	1185	1197	1167
IND	1486	1559	1646	1635	1638	1612	1565	1553	1519	1445	1432
LAM	1573	1383	1325	1311	1263	1252	1244	1236	1235	1225	1214
MEA	656	695	685	714	729	742	753	755	815	802	786
NEU	562	558	517	578	589	603	613	615	670	656	640
OAS	970	968	961	988	1009	1015	1011	1027	1045	993	977
REF	2599	2774	2584	2624	2583	2524	2484	2439	2450	2387	2333
SSA	1634	2160	2177	2040	1607	1429	1240	1213	1175	1181	1172
USA	1601	1625	1511	1503	1486	1499	1480	1463	1454	1440	1427

Table 860: MAgPIE new_input — Prices—Agriculture—Potatoes (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1410	1440	1410	1359	1325	1296
CAZ	1153	1225	1210	1190	1182	1179
CHA	1654	1661	1634	1540	1502	1486
EUR	1160	1169	1162	1145	1118	1119
IND	1425	1457	1461	1439	1432	1426
LAM	1220	1230	1187	1162	1161	1161
MEA	843	999	1003	978	978	978
NEU	692	835	839	815	815	815
OAS	915	896	895	894	892	888
REF	2299	2293	2194	2116	2045	1979
SSA	1166	1198	1191	1179	1178	1177
USA	1414	1424	1410	1379	1351	1142

Table 861: MAgPIE new_input — Prices—Agriculture—Potatoes (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	532	568	567	508	524	521	512	503	505	504	511
CAZ	822	829	849	833	826	832	845	836	853	843	861
CHA	590	590	590	590	590	590	590	590	590	590	590
EUR	691	708	705	665	692	682	676	669	668	665	691
IND	586	586	586	586	586	586	586	586	586	586	586
LAM	782	873	856	853	784	848	832	833	811	816	834
MEA	907	938	905	895	907	938	912	892	891	884	917
NEU	948	926	923	922	954	886	922	922	884	899	918
OAS	2796	2776	2705	2789	2735	2560	2586	2625	2483	2483	2373
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	793	785	801	798	794	820	826	819	826	828	818
USA	668	668	668	668	668	668	668	668	668	668	668

Table 862: FAO — Prices—Agriculture—Potatoes (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	533	473	529	501	518	539	531	523	583	553	559
CAZ	875	854	833	853	842	840	846	842	857	852	853
CHA	590	590	590	590	589	590	590	590	590	590	590
EUR	666	643	673	654	660	700	680	675	753	687	722
IND	586	586	586	586	586	586	586	586	586	586	586
LAM	890	882	857	909	898	886	923	937	943	878	925
MEA	855	832	852	871	832	824	840	811	772	757	743
NEU	945	895	901	963	926	904	975	946	986	970	974
OAS	2474	2429	2312	2273	2294	2305	2180	2157	2091	2034	2171
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	830	812	819	834	759	801	785	814	751	819	846
USA	668	668	668	668	668	668	668	668	668	668	668

Table 863: FAO — Prices—Agriculture—Potatoes (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	540	553	583	545	569	591	576	587	582	780	760
CAZ	853	860	852	856	853	868	861	868	870	849	852
CHA	590	590	590	590	590	590	590	590	590	590	590
EUR	722	719	728	700	706	700	712	690	693	766	737
IND	586	586	586	586	586	586	586	586	586	586	586
LAM	918	928	897	898	913	875	918	981	957	976	933
MEA	763	771	804	771	767	809	808	791	809	829	814
NEU	954	997	1024	991	1036	1081	1024	1045	1022	1212	1228
OAS	2117	2123	2098	2151	2120	2063	2010	1979	1975	1875	1943
REF	0	0	0	0	0	0	0	0	0	737	723
SSA	791	772	818	837	743	747	859	869	890	829	881
USA	668	668	668	668	668	668	668	668	668	668	668

Table 864: FAO — Prices—Agriculture—Potatoes (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	779	780	767	771	760	774	759	770	773	774	768
CAZ	848	840	848	845	847	845	832	844	838	826	830
CHA	590	590	590	590	590	590	590	590	590	590	590
EUR	780	777	771	787	773	800	789	820	844	851	849
IND	586	586	586	586	586	586	586	586	586	586	586
LAM	920	917	916	894	886	908	912	927	915	930	921
MEA	817	823	822	843	809	820	853	814	830	850	869
NEU	1197	1183	1204	1185	1184	1196	1217	1177	1178	1198	1167
OAS	1869	1876	1784	1791	1610	1433	1363	1313	1374	1295	1259
REF	735	741	728	743	733	739	732	744	745	744	736
SSA	901	904	895	897	869	999	938	935	944	946	934
USA	668	668	668	668	668	668	668	668	668	668	668

Table 865: FAO — Prices—Agriculture—Potatoes (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	775	785	777	772	770	757	751
CAZ	840	828	827	842	830	839	834
CHA	590	590	590	590	590	590	590
EUR	869	890	858	860	875	866	872
IND	586	586	586	586	586	586	586
LAM	940	931	957	942	926	926	914
MEA	855	857	851	852	886	902	797
NEU	1151	1195	1212	1200	1199	1198	1197
OAS	1190	1157	1186	1142	1127	1023	1025
REF	747	745	745	730	740	718	738
SSA	1043	1025	970	1072	961	945	924
USA	668	668	668	668	668	668	668

Table 866: FAO — Prices—Agriculture—Potatoes (US$05/tDM) [PART 5/5]

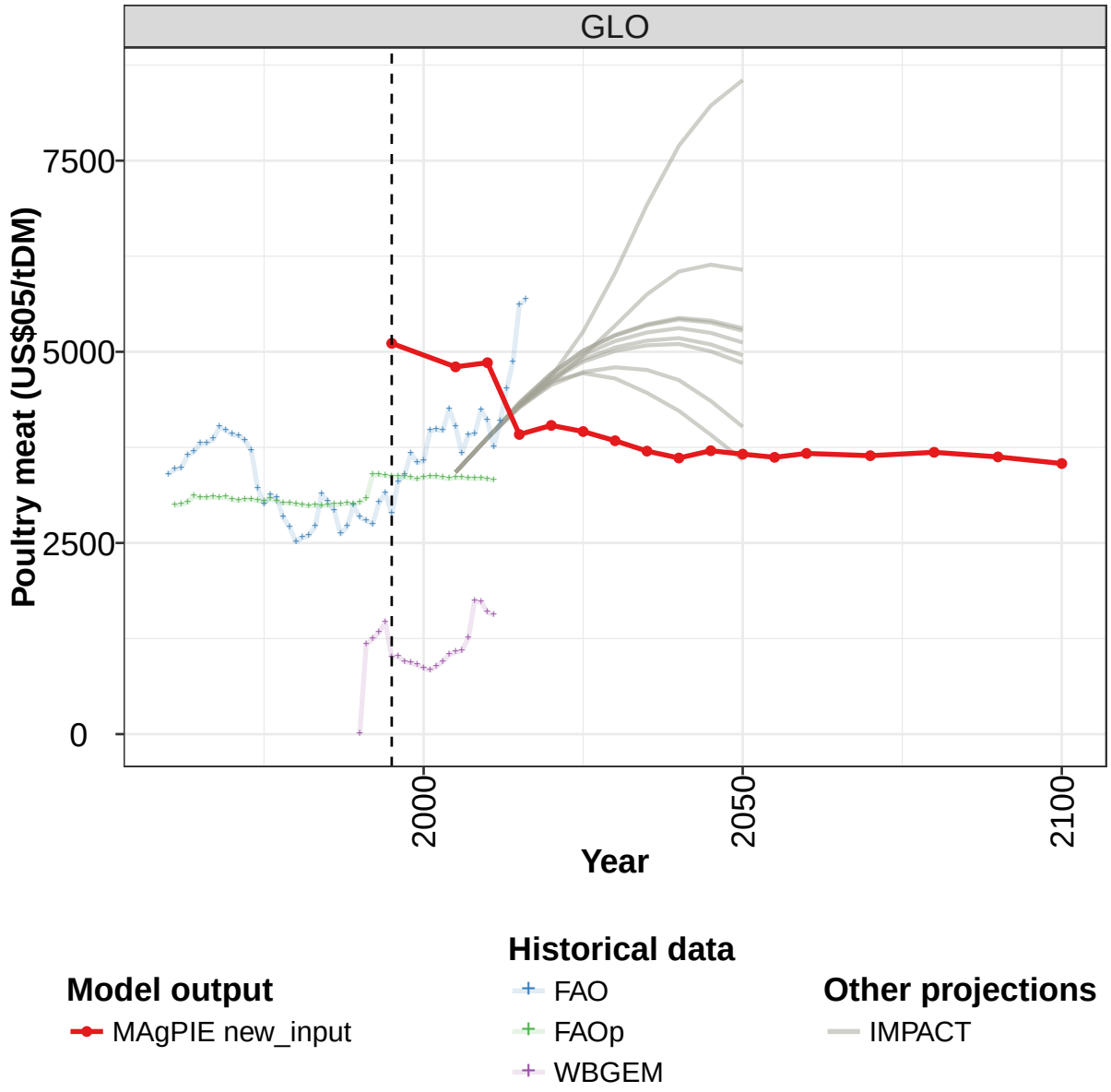
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	484	448	401	629	836	615	601	671	653	550
CAZ	0	771	658	631	697	764	730	683	668	689	596
CHA	0	0	0	262	405	612	385	419	532	483	477
EUR	0	586	558	371	699	1026	538	439	623	620	404
IND	0	584	436	421	458	533	518	522	530	396	427
LAM	0	586	728	678	1095	984	977	1036	1100	780	831
MEA	0	2583	2483	717	770	1090	905	856	1097	1188	1404
NEU	0	833	833	944	825	1215	922	848	1124	993	860
OAS	0	1850	1399	1763	1669	940	959	1250	1394	1330	1163
REF	0	0	51	140	465	777	745	704	587	661	504
SSA	0	372	645	470	562	614	566	753	658	607	537
USA	0	495	555	618	559	677	491	564	559	577	509

Table 867: FAOp — Prices—Agriculture—Potatoes (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	553	564	645	648	725	893	926	987	960	1102	1317
CAZ	615	713	733	746	809	943	1008	1214	1186	1206	1311
CHA	434	450	461	494	599	678	782	915	1104	1248	2014
EUR	483	494	713	728	698	1158	1184	1068	890	1062	1163
IND	464	434	434	571	595	591	0	0	0	0	0
LAM	877	816	797	744	984	1065	1150	1521	1643	1779	1817
MEA	1020	766	795	733	676	987	1369	1135	1298	1381	1277
NEU	728	769	1033	1051	1090	1303	1625	1650	1534	1787	1868
OAS	962	838	1084	1196	1246	1104	1159	1226	1349	1360	1382
REF	484	582	659	580	709	901	1005	1202	1000	1317	1382
SSA	484	584	530	549	806	632	753	974	789	777	857
USA	700	668	591	568	705	732	755	909	827	923	941

Table 868: FAOp — Prices—Agriculture—Potatoes (US$05/tDM) [PART 2/3]

37.13 Poultry meat



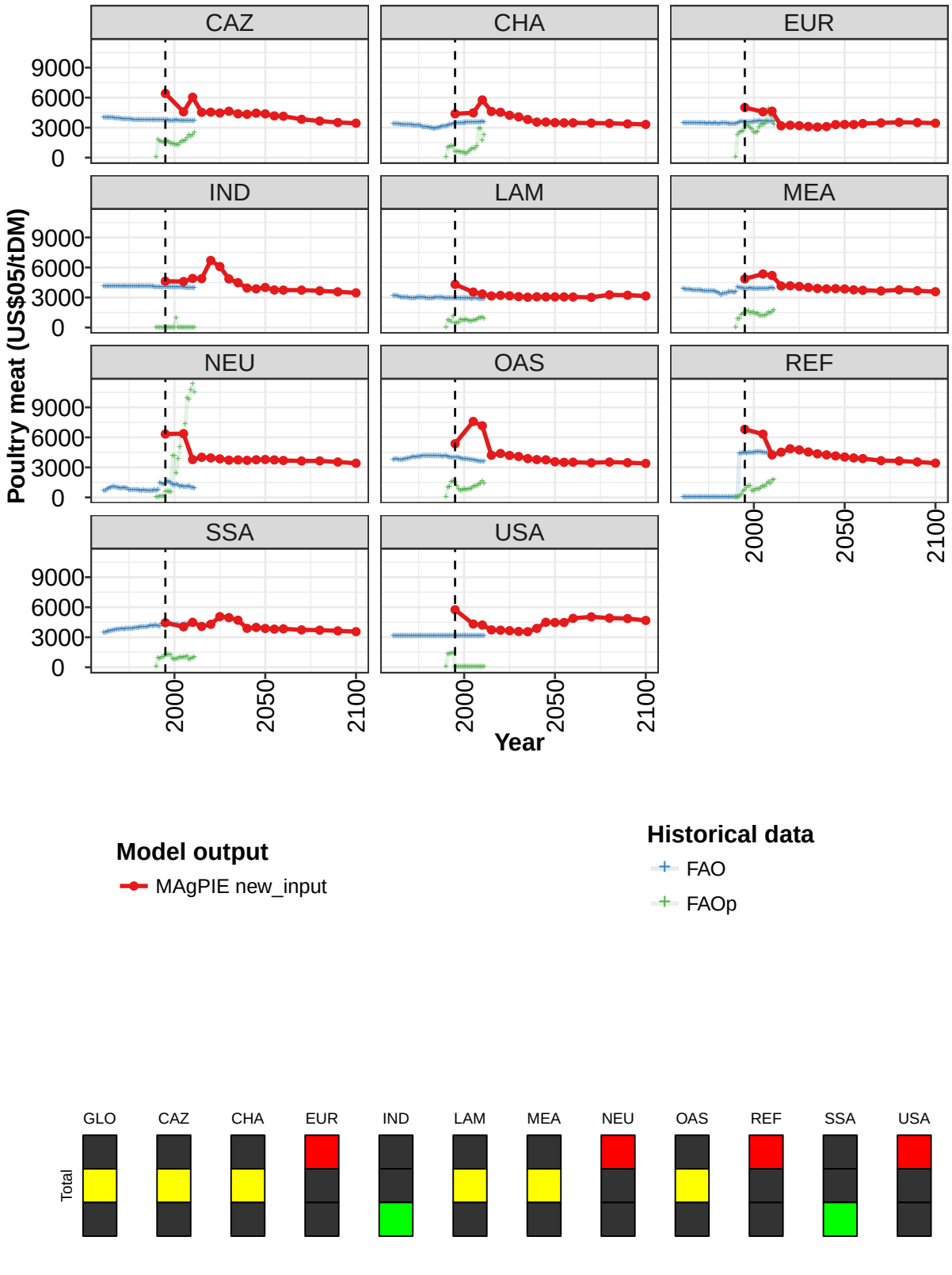


Figure 251: MAgPIE new_input — Prices—Agriculture—Poultry meat (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	5111	4803	4858	3919	4037	3958	3837	3701	3611	3706	3662
CAZ	6417	4581	6041	4537	4551	4462	4643	4383	4340	4448	4379
CHA	4385	4479	5768	4617	4535	4238	4078	3817	3552	3558	3501
EUR	5012	4579	4646	3185	3246	3198	3120	3062	3107	3308	3321
IND	4627	4595	4907	4886	6706	6091	4864	4483	3945	3865	4007
LAM	4311	3545	3358	3153	3214	3168	3088	3029	3072	3061	3059
MEA	4866	5351	5203	4154	4171	4113	4007	3903	3860	3887	3854
NEU	6332	6368	3781	4010	3942	3851	3727	3746	3704	3761	3788
OAS	5366	7589	7154	4212	4393	4192	4087	3877	3777	3755	3563
REF	6807	6321	4246	4519	4862	4746	4538	4355	4251	4149	4035
SSA	4452	4041	4490	4077	4293	5064	4961	4702	3889	3981	3877
USA	5750	4322	4220	3734	3706	3656	3579	3551	3886	4495	4472

Table 869: MAgPIE new_input — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	3620	3671	3642	3686	3626	3539
CAZ	4174	4144	3834	3664	3515	3443
CHA	3477	3481	3459	3431	3375	3321
EUR	3311	3414	3473	3535	3509	3446
IND	3753	3741	3740	3668	3572	3467
LAM	3060	3050	3017	3269	3231	3153
MEA	3770	3729	3658	3764	3682	3579
NEU	3746	3688	3641	3648	3536	3415
OAS	3505	3517	3453	3531	3470	3395
REF	3943	3880	3672	3645	3541	3425
SSA	3814	3841	3736	3709	3639	3558
USA	4474	4890	5037	4916	4866	4679

Table 870: MAgPIE new_input — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3395	3465	3481	3640	3695	3796	3801	3857	4013	3976	3918
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 871: WBGEM — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	3903	3843	3709	3216	3008	3123	3086	2832	2704	2514	2567
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 872: WBGEM — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	2597	2711	3137	3040	2919	2615	2711	2990	2834	2792	2744
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 873: WBGEM — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	3024	3152	2882	3299	3389	3669	3552	3567	3967	3979	3970
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 874: WBGEM — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	4251	4023	3675	3911	3928	4238	4098	3759	4086	4518	4867
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 875: WBGEM — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 5/6]

	2015	2016
GLO	5608	5678
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 876: WBGEM — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2989	3002	3034	3108	3093	3088	3097	3091	3098	3066	3057
CAZ	3954	3953	3954	3948	3935	3953	3917	3893	3885	3877	3841
CHA	3302	3312	3318	3314	3290	3282	3269	3252	3250	3255	3231
EUR	3407	3412	3425	3429	3442	3433	3427	3417	3417	3391	3391
IND	4065	4075	4085	4093	4101	4108	4103	4097	4091	4086	4081
LAM	3158	3145	3098	3075	3010	2989	2985	2967	2949	2926	2932
MEA	3806	3778	3773	3767	3742	3723	3715	3715	3713	3708	3678
NEU	589	635	777	876	965	998	1004	968	919	867	890
OAS	3739	3759	3768	3733	3742	3732	3760	3796	3839	3874	3938
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3410	3438	3507	3564	3596	3632	3680	3715	3765	3776	3804
USA	3105	3103	3103	3103	3103	3103	3104	3102	3101	3101	3102

Table 877: FAO — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	3067	3072	3052	3038	3075	3042	3022	3023	3005	2996	2985
CAZ	3829	3839	3805	3777	3789	3770	3747	3753	3722	3731	3743
CHA	3177	3202	3211	3195	3171	3060	3026	3028	3005	2948	2940
EUR	3401	3400	3379	3387	3380	3375	3384	3390	3369	3376	3386
IND	4077	4078	4079	4079	4079	4082	4097	4102	4102	4107	4111
LAM	2928	2921	2942	2982	3000	2987	2949	2897	2859	2870	2903
MEA	3634	3606	3605	3572	3596	3641	3579	3503	3476	3380	3210
NEU	906	896	844	726	715	743	705	717	671	640	620
OAS	4009	3988	4043	4014	4064	4091	4077	4107	4133	4085	4081
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3765	3819	3789	3845	3848	3833	3886	3907	3926	4002	3954
USA	3102	3102	3102	3101	3102	3101	3101	3101	3101	3101	3101

Table 878: FAO — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	2990	2987	2993	3002	3007	3014	3005	3026	3081	3389	3392
CAZ	3727	3745	3726	3725	3722	3722	3712	3717	3713	3701	3703
CHA	2875	2895	2908	2982	3007	3105	3082	3113	3210	3242	3298
EUR	3398	3389	3394	3380	3374	3375	3380	3374	3387	3469	3543
IND	4111	4107	4105	4096	4050	4046	4035	4021	3998	3995	3993
LAM	2893	2939	2943	2967	2950	2942	2874	2880	2917	2906	2890
MEA	3373	3357	3372	3489	3517	3554	3461	3565	3977	3925	3911
NEU	682	623	662	625	599	624	678	634	685	1444	1343
OAS	4083	4096	4076	4075	4074	4053	4076	4077	4018	3979	3947
REF	0	0	0	0	0	0	0	0	0	4350	4357
SSA	4004	3994	4018	4063	4102	4094	4114	4130	4066	4051	4294
USA	3101	3101	3101	3102	3103	3103	3103	3103	3103	3102	3102

Table 879: FAO — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	3381	3372	3371	3363	3350	3337	3357	3366	3363	3351	3340
CAZ	3715	3716	3714	3687	3682	3696	3695	3713	3693	3684	3684
CHA	3336	3402	3383	3396	3427	3441	3451	3461	3460	3472	3480
EUR	3527	3525	3511	3499	3484	3486	3591	3583	3582	3619	3593
IND	3996	3999	4002	4003	3996	3991	3984	3981	3974	3969	3966
LAM	2884	2882	2883	2886	2870	2864	2878	2904	2902	2861	2836
MEA	3871	3819	3860	3878	3906	3851	3848	3834	3812	3865	3858
NEU	1295	1367	1556	1509	1406	1223	1193	1223	1205	1026	1112
OAS	3966	3953	3952	3923	3835	3827	3824	3794	3787	3726	3753
REF	4395	4422	4385	4407	4421	4435	4458	4474	4502	4491	4483
SSA	4314	4289	4296	4278	4277	4246	4208	4209	4223	4177	4210
USA	3101	3101	3101	3101	3100	3100	3100	3100	3100	3100	3099

Table 880: FAO — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	3352	3352	3346	3341	3350	3337	3324
CAZ	3676	3668	3656	3671	3660	3648	3623
CHA	3501	3502	3515	3533	3537	3541	3537
EUR	3580	3568	3567	3576	3559	3550	3547
IND	3963	3960	3956	3955	3953	3952	3953
LAM	2880	2880	2861	2830	2826	2795	2778
MEA	3881	3872	3838	3883	3927	3934	3872
NEU	1059	1017	996	1088	961	910	882
OAS	3687	3660	3609	3563	3558	3542	3534
REF	4454	4434	4453	4433	4433	4424	4430
SSA	4212	4285	4279	4279	4275	4262	4248
USA	3099	3099	3099	3099	3099	3098	3098

Table 881: FAO — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 5/5]

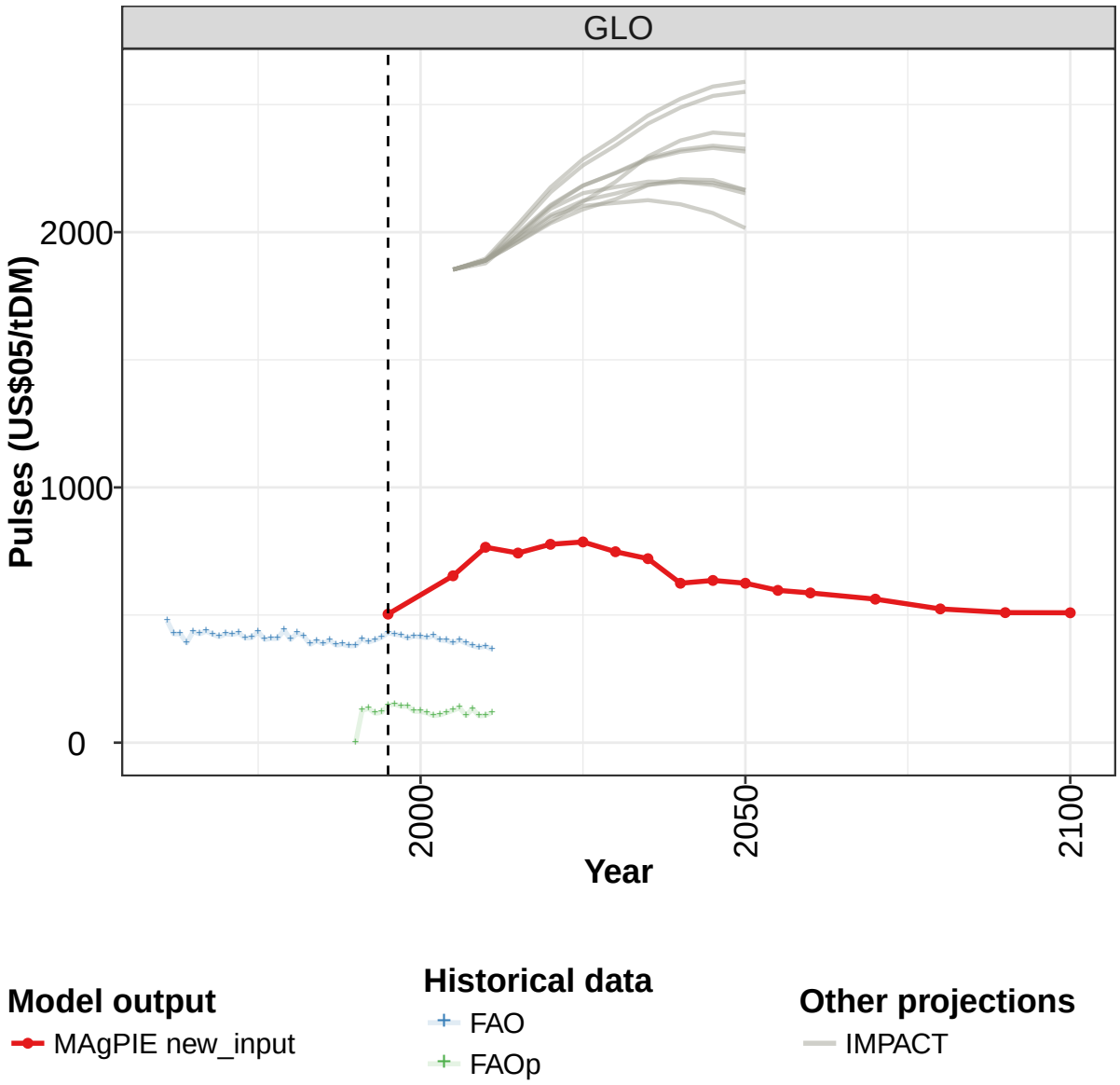
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	1174	1243	1332	1460	1005	1018	948	936	901	864
CAZ	0	1790	1602	1535	1485	1475	1623	1538	1379	1332	1284
CHA	0	1000	1049	1137	1026	556	587	541	526	492	457
EUR	0	2212	2448	2511	2626	3131	3241	3078	2939	2746	2499
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	0	689	714	504	1101	375	405	459	730	669	711
MEA	0	807	801	1215	1359	1290	1514	1614	1386	1454	1442
NEU	0	0	98	67	71	513	537	529	477	4127	4136
OAS	0	973	1021	1536	1552	1534	1112	771	594	678	769
REF	0	0	33	254	515	710	962	1088	1082	612	631
SSA	16	931	852	999	999	1198	1221	1226	1177	797	744
USA	0	1267	1272	1338	1381	0	0	0	0	0	0

Table 882: FAOp — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	835	885	948	1037	1070	1089	1256	1742	1728	1594	1559
CAZ	1263	1223	1418	1609	1633	1637	1899	2206	2102	2217	2454
CHA	352	481	643	806	849	908	1115	2842	2902	1691	2266
EUR	2450	2579	3007	3292	3260	3310	3637	4876	4133	4067	3250
IND	890	0	0	0	0	0	0	0	0	0	0
LAM	768	711	594	584	682	712	782	875	878	990	869
MEA	1318	1419	1113	1128	1143	1116	1267	1457	1351	1544	1697
NEU	2403	3774	4976	6117	6261	7279	9892	9759	10714	11289	10466
OAS	716	747	746	846	997	1082	1114	1220	1360	1576	1312
REF	785	749	778	950	1094	1047	1233	1498	1308	1644	1710
SSA	794	852	957	931	939	939	1083	771	840	895	949
USA	0	0	0	0	0	0	0	0	0	0	0

Table 883: FAOp — Prices—Agriculture—Poultry meat (US$05/tDM) [PART 2/3]

37.14 Pulses


GLO
Pulses (US$05/tDM)
2000
1000
0
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO
FAOp
Other projections
IMPACT

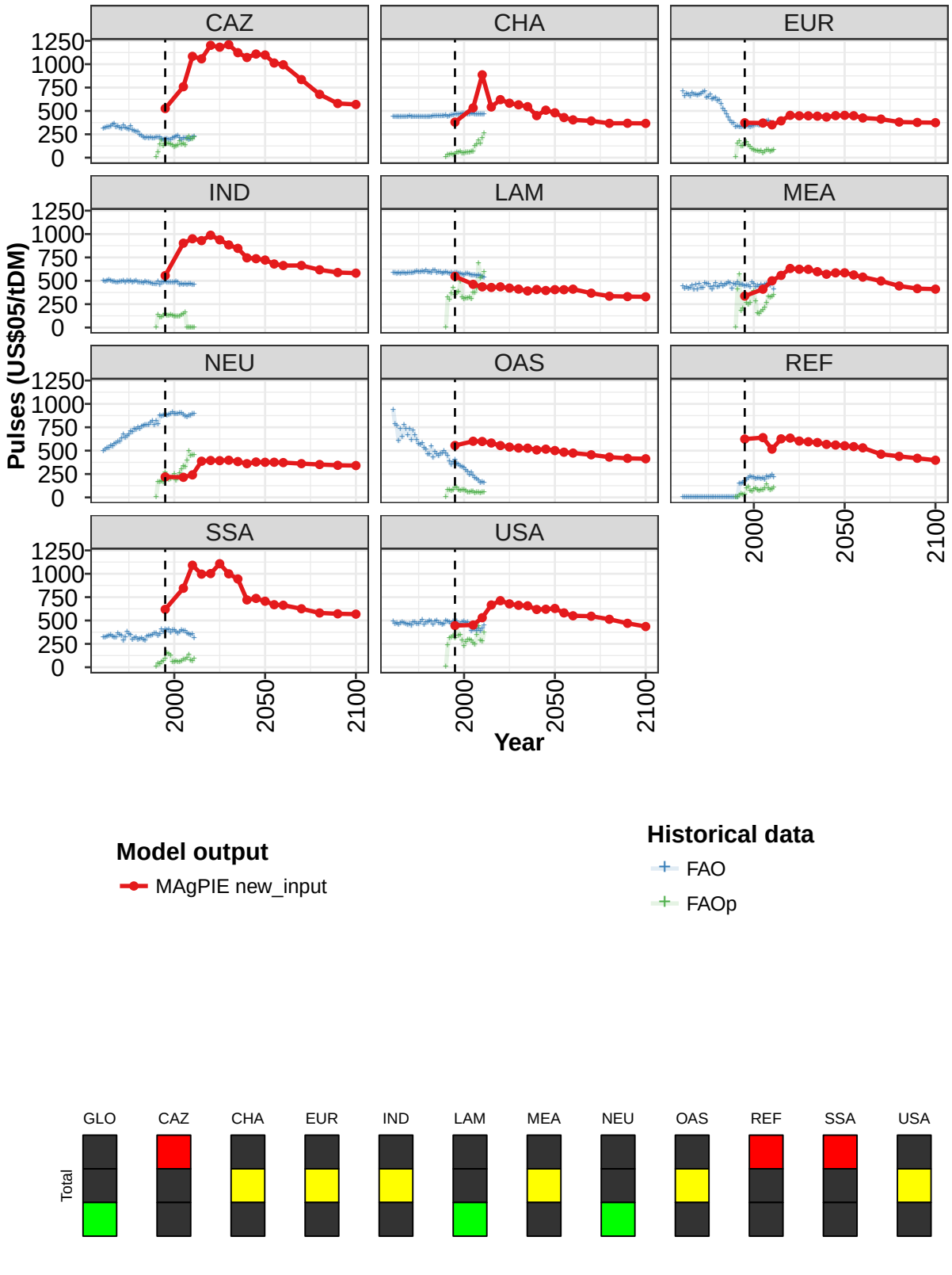


Figure 252: MAgPIE new_input — Prices—Agriculture—Pulses (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	504	654	766	743	777	786	748	721	625	636	625
CAZ	526	759	1084	1057	1202	1182	1208	1123	1072	1108	1098
CHA	380	533	886	542	621	583	565	545	450	508	480
EUR	373	371	351	394	453	448	448	444	434	450	453
IND	556	902	950	930	988	938	884	847	745	736	722
LAM	547	462	435	429	435	422	411	391	407	396	405
MEA	337	410	500	558	632	624	623	597	570	585	585
NEU	219	215	241	387	395	393	397	383	361	379	376
OAS	555	601	598	582	555	538	528	527	508	516	501
REF	624	639	516	626	634	603	595	586	567	560	552
SSA	620	845	1091	996	1002	1108	1000	944	721	737	707
USA	446	452	530	666	712	678	663	657	618	621	629

Table 884: MAgPIE new_input — Prices—Agriculture—Pulses (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	597	587	562	524	510	509
CAZ	1013	994	835	678	580	569
CHA	429	404	393	367	368	367
EUR	449	425	413	381	377	374
IND	680	663	664	617	588	582
LAM	404	411	368	335	331	329
MEA	562	540	498	445	416	411
NEU	376	372	361	352	343	341
OAS	483	474	456	431	417	413
REF	543	530	462	439	418	398
SSA	669	663	626	581	572	568
USA	582	551	546	513	470	436

Table 885: MAgPIE new_input — Prices—Agriculture—Pulses (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	477	425	427	391	435	426	437	425	415	426	424
CAZ	304	317	326	320	330	351	358	321	331	312	303
CHA	433	435	433	431	432	434	434	435	437	438	434
EUR	703	653	681	674	651	689	675	670	662	674	678
IND	496	491	496	508	497	486	488	480	483	485	491
LAM	579	577	571	578	573	582	578	576	579	582	580
MEA	437	416	432	414	421	448	402	452	404	460	420
NEU	495	508	525	526	550	538	563	577	589	590	626
OAS	934	780	763	598	728	643	769	731	664	731	609
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	314	320	328	331	338	329	314	318	355	342	335
USA	489	459	469	455	466	480	467	462	447	458	439

Table 886: FAO — Prices—Agriculture—Pulses (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	429	410	411	435	404	408	408	441	404	429	418
CAZ	339	318	303	296	332	289	284	275	273	239	231
CHA	436	437	437	437	434	436	432	431	432	434	437
EUR	698	706	641	643	669	621	628	639	600	616	567
IND	498	479	496	487	493	479	491	495	481	479	477
LAM	584	590	597	593	590	596	593	607	587	588	584
MEA	422	471	460	460	426	406	433	471	428	436	464
NEU	669	631	655	669	702	695	724	720	742	732	752
OAS	707	659	612	566	560	575	524	506	461	459	541
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	280	313	373	348	337	293	307	312	290	299	309
USA	478	476	460	458	476	500	452	476	474	494	484

Table 887: FAO — Prices—Agriculture—Pulses (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	385	399	388	401	382	385	379	380	406	394	403
CAZ	214	206	210	202	213	202	205	218	213	209	197
CHA	439	439	443	441	439	444	443	447	437	441	454
EUR	523	493	462	427	394	366	364	327	330	327	326
IND	474	489	475	475	474	466	466	458	491	451	476
LAM	606	603	582	591	586	575	581	587	578	574	581
MEA	440	458	463	476	467	411	463	451	479	455	458
NEU	759	770	771	774	800	811	769	811	783	876	866
OAS	421	483	453	439	463	467	490	469	443	381	343
REF	0	0	0	0	0	0	0	0	0	146	146
SSA	287	285	324	335	329	341	355	361	333	352	397
USA	455	484	491	467	472	452	459	496	482	480	462

Table 888: FAO — Prices—Agriculture—Pulses (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	413	431	425	421	410	418	415	411	419	402	400
CAZ	192	196	198	189	188	204	210	224	230	206	188
CHA	451	457	456	456	456	465	465	465	460	463	466
EUR	330	342	336	328	324	330	338	350	347	343	347
IND	483	486	475	482	476	476	477	488	476	452	465
LAM	575	585	583	574	572	566	558	570	570	562	555
MEA	457	436	447	443	429	478	463	432	443	430	456
NEU	870	879	875	881	888	902	892	892	892	895	895
OAS	371	398	355	350	329	321	312	286	267	239	261
REF	151	166	188	206	220	208	213	196	204	199	195
SSA	374	396	394	399	369	391	389	375	356	374	390
USA	489	464	488	455	460	473	481	466	477	455	381

Table 889: FAO — Prices—Agriculture—Pulses (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	391	402	390	380	373	378	367
CAZ	202	208	202	192	200	214	220
CHA	464	462	460	463	463	461	458
EUR	350	368	384	388	368	352	369
IND	458	462	453	460	463	452	457
LAM	553	560	549	557	546	542	526
MEA	440	451	465	462	446	478	401
NEU	878	863	858	869	869	886	889
OAS	232	200	194	176	156	160	153
REF	200	189	217	209	216	234	214
SSA	383	382	361	352	341	346	307
USA	398	401	386	413	384	410	445

Table 890: FAO — Prices—Agriculture—Pulses (US$05/tDM) [PART 5/5]

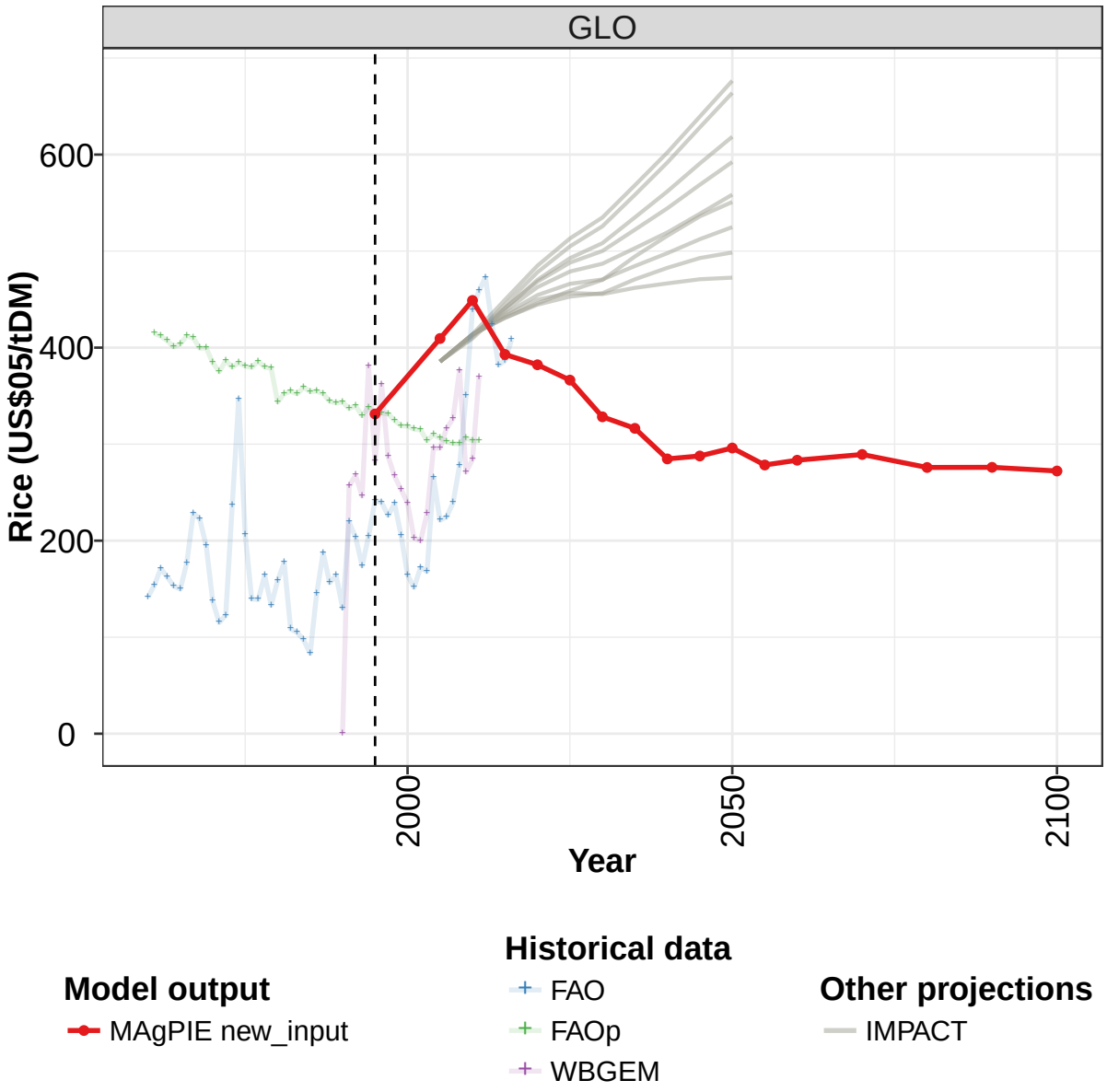
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	127	134	115	119	146	151	143	143	123	123
CAZ	0	53	137	181	123	148	149	147	138	128	109
CHA	0	27	28	32	24	37	51	51	63	40	45
EUR	0	148	175	116	119	150	162	126	110	85	80
IND	0	130	107	109	122	138	123	127	132	126	118
LAM	0	319	296	360	421	340	370	374	485	320	301
MEA	0	403	562	174	204	308	262	244	262	362	385
NEU	0	163	162	172	157	264	219	185	195	207	241
OAS	0	75	73	64	77	99	97	74	70	73	76
REF	0	0	20	31	25	27	93	111	66	62	88
SSA	0	39	30	51	60	90	144	139	121	54	57
USA	0	234	305	320	332	310	445	332	341	281	226

Table 891: FAOp — Prices—Agriculture—Pulses (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	116	106	109	118	126	137	106	133	105	107	118
CAZ	123	129	168	137	147	131	200	223	192	197	216
CHA	48	52	53	59	61	117	141	182	145	204	254
EUR	71	69	63	66	48	57	74	74	60	68	78
IND	119	117	119	132	138	153	0	0	0	0	0
LAM	306	309	317	304	368	370	412	683	524	541	593
MEA	279	150	141	167	182	207	258	330	314	329	345
NEU	177	210	253	296	331	318	385	492	442	449	447
OAS	64	52	53	58	59	46	49	50	43	51	52
REF	89	72	65	80	74	90	133	90	73	83	101
SSA	59	53	55	63	78	80	93	131	68	61	84
USA	267	291	290	284	255	238	337	436	285	270	367

Table 892: FAOp — Prices—Agriculture—Pulses (US$05/tDM) [PART 2/3]

37.15 Rice


GLO
Rice (US$05/tDM)
600
400
200
0
2000
2050
2100
Year
Historical data
FAO
FAOp
WBGEM
Model output
MAgPIE new_input
Other projections
IMPACT

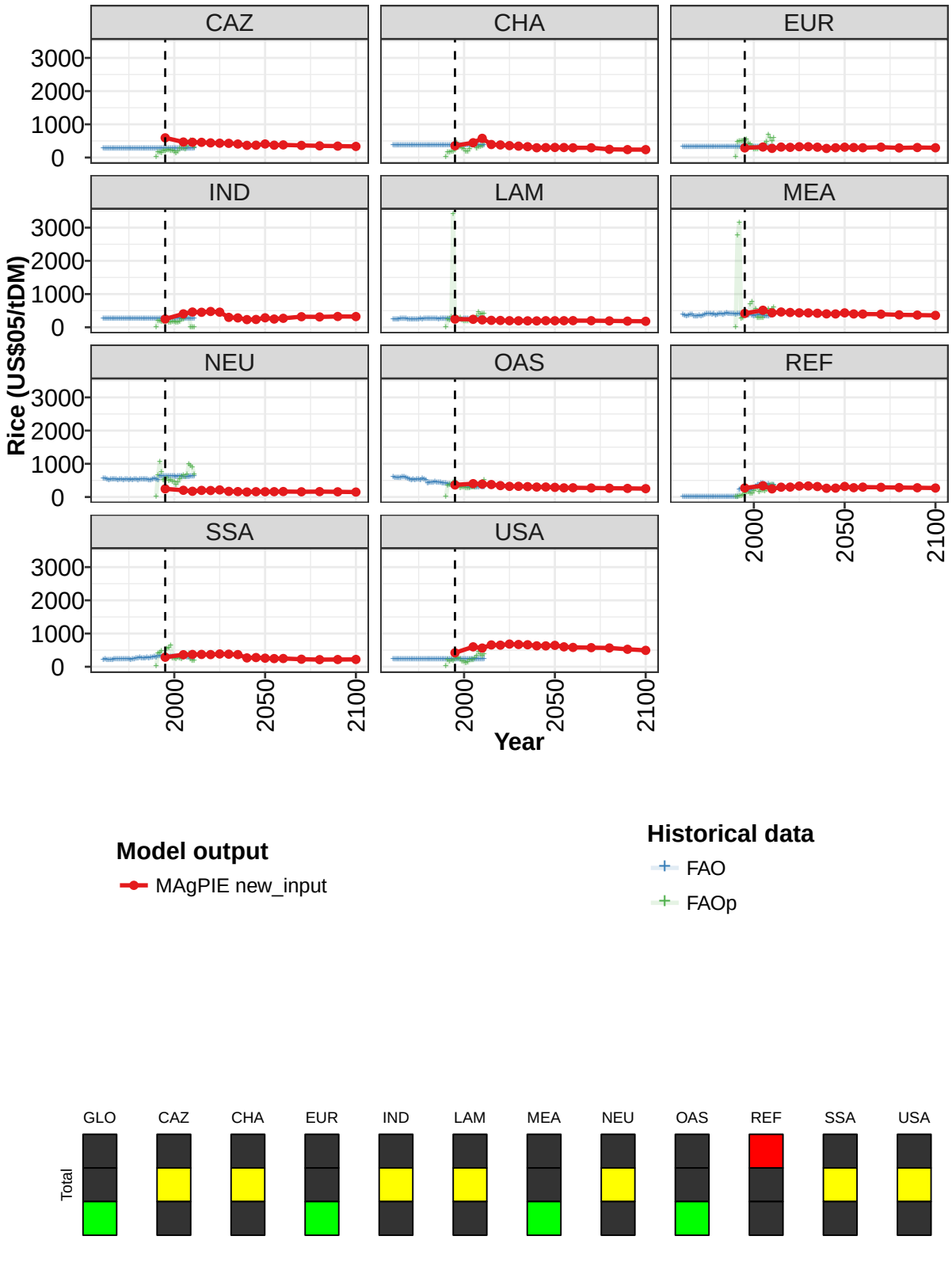


Figure 253: MAgPIE new_input — Prices—Agriculture—Rice (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	331	409	449	393	382	366	328	316	285	288	296
CAZ	593	467	460	458	442	432	428	407	367	371	409
CHA	356	446	578	393	380	359	344	327	295	300	304
EUR	291	317	277	316	307	326	327	311	275	294	312
IND	250	404	459	452	476	456	299	283	231	236	286
LAM	247	240	222	209	206	198	196	194	192	198	197
MEA	417	513	435	460	446	435	433	422	405	402	434
NEU	246	203	173	200	196	213	170	164	151	160	159
OAS	363	402	388	375	344	322	323	313	300	302	291
REF	273	339	246	296	299	329	332	316	263	268	319
SSA	287	363	370	371	367	385	379	367	267	278	258
USA	420	599	563	657	650	683	670	662	630	629	644

Table 893: MAgPIE new_input — Prices—Agriculture—Rice (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	278	283	289	276	276	272
CAZ	372	381	365	353	344	335
CHA	302	294	294	247	239	238
EUR	302	295	313	290	302	294
IND	248	271	319	312	325	323
LAM	198	200	199	192	186	181
MEA	402	398	394	375	367	359
NEU	161	165	158	163	157	149
OAS	276	279	272	265	260	252
REF	280	298	292	284	279	271
SSA	246	248	227	215	218	220
USA	600	582	575	566	526	494

Table 894: MAgPIE new_input — Prices—Agriculture—Rice (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	141	154	171	162	153	150	177	228	223	194	137
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 895: WBGEM — Prices—Agriculture—Rice (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	115	122	236	346	206	140	139	164	133	159	177
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 896: WBGEM — Prices—Agriculture—Rice (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	108	105	97	83	145	187	156	164	130	219	204
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 897: WBGEM — Prices—Agriculture—Rice (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	174	205	242	240	226	238	206	164	151	172	168
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 898: WBGEM — Prices—Agriculture—Rice (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	265	221	225	239	278	350	439	459	473	424	382
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 899: WBGEM — Prices—Agriculture—Rice (US$05/tDM) [PART 5/6]

	2015	2016
GLO	386	408
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 900: WBGEM — Prices—Agriculture—Rice (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	415	412	407	401	404	412	410	399	400	384	375
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	353	355	357	358	358	359	359	358	359	360	361
EUR	308	306	308	308	308	310	312	312	314	313	316
IND	257	257	257	257	257	257	257	257	257	257	257
LAM	234	234	235	237	240	241	240	242	238	235	236
MEA	365	341	332	342	365	380	324	313	322	335	325
NEU	546	546	524	502	519	532	531	525	503	513	520
OAS	591	582	578	569	565	588	599	565	558	521	499
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	203	214	200	204	206	200	219	220	213	214	215
USA	211	211	211	211	211	211	211	211	211	211	211

Table 901: FAO — Prices—Agriculture—Rice (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	386	380	384	381	379	386	380	378	344	352	355
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	360	362	361	361	360	361	362	362	363	363	363
EUR	314	316	318	318	318	315	318	319	316	317	317
IND	257	257	257	257	257	257	257	257	257	257	257
LAM	238	239	237	235	240	238	241	243	242	242	241
MEA	344	376	384	386	393	378	387	359	368	401	390
NEU	498	512	514	501	529	509	522	532	490	516	522
OAS	531	508	519	521	506	538	514	496	405	425	425
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	220	220	224	221	199	214	220	237	248	258	248
USA	211	211	211	211	211	211	211	211	211	211	211

Table 902: FAO — Prices—Agriculture—Rice (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	352	359	354	355	352	344	343	344	337	340	329
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	363	364	364	365	365	365	365	366	366	366	366
EUR	323	322	323	323	320	321	320	317	315	317	319
IND	257	257	257	257	257	257	257	257	257	257	257
LAM	245	241	241	239	243	241	241	244	244	244	242
MEA	362	395	409	404	403	391	391	382	397	384	372
NEU	516	513	512	497	495	516	544	524	503	618	606
OAS	422	440	430	428	418	407	397	398	376	379	356
REF	0	0	0	0	0	0	0	0	0	219	247
SSA	251	251	258	249	259	269	296	278	306	311	302
USA	211	211	211	211	211	211	211	211	211	211	211

Table 903: FAO — Prices—Agriculture—Rice (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	338	332	332	331	325	319	319	315	315	304	310
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	366	366	367	366	367	367	366	367	366	366	367
EUR	316	315	313	312	312	312	311	311	312	312	312
IND	257	257	257	257	257	257	257	257	257	257	257
LAM	238	237	233	232	236	234	240	242	243	239	239
MEA	353	353	371	346	382	344	328	339	358	365	341
NEU	607	606	611	612	610	608	608	605	605	606	606
OAS	385	361	361	359	340	329	326	324	313	294	306
REF	269	294	209	210	187	212	260	297	350	353	394
SSA	286	301	297	303	295	301	302	288	286	283	285
USA	211	211	211	211	211	211	211	211	211	211	211

Table 904: FAO — Prices—Agriculture—Rice (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	306	303	301	300	307	303	304
CAZ	257	257	257	257	257	257	257
CHA	367	367	368	367	367	367	367
EUR	313	314	315	314	315	313	312
IND	257	257	257	257	257	257	257
LAM	242	241	243	244	241	247	247
MEA	350	334	334	315	345	404	359
NEU	605	605	605	605	606	606	606
OAS	298	289	285	284	299	290	293
REF	393	379	350	370	327	346	362
SSA	279	281	267	279	267	259	264
USA	211	211	211	211	211	211	211

Table 905: FAO — Prices—Agriculture—Rice (US$05/tDM) [PART 5/5]

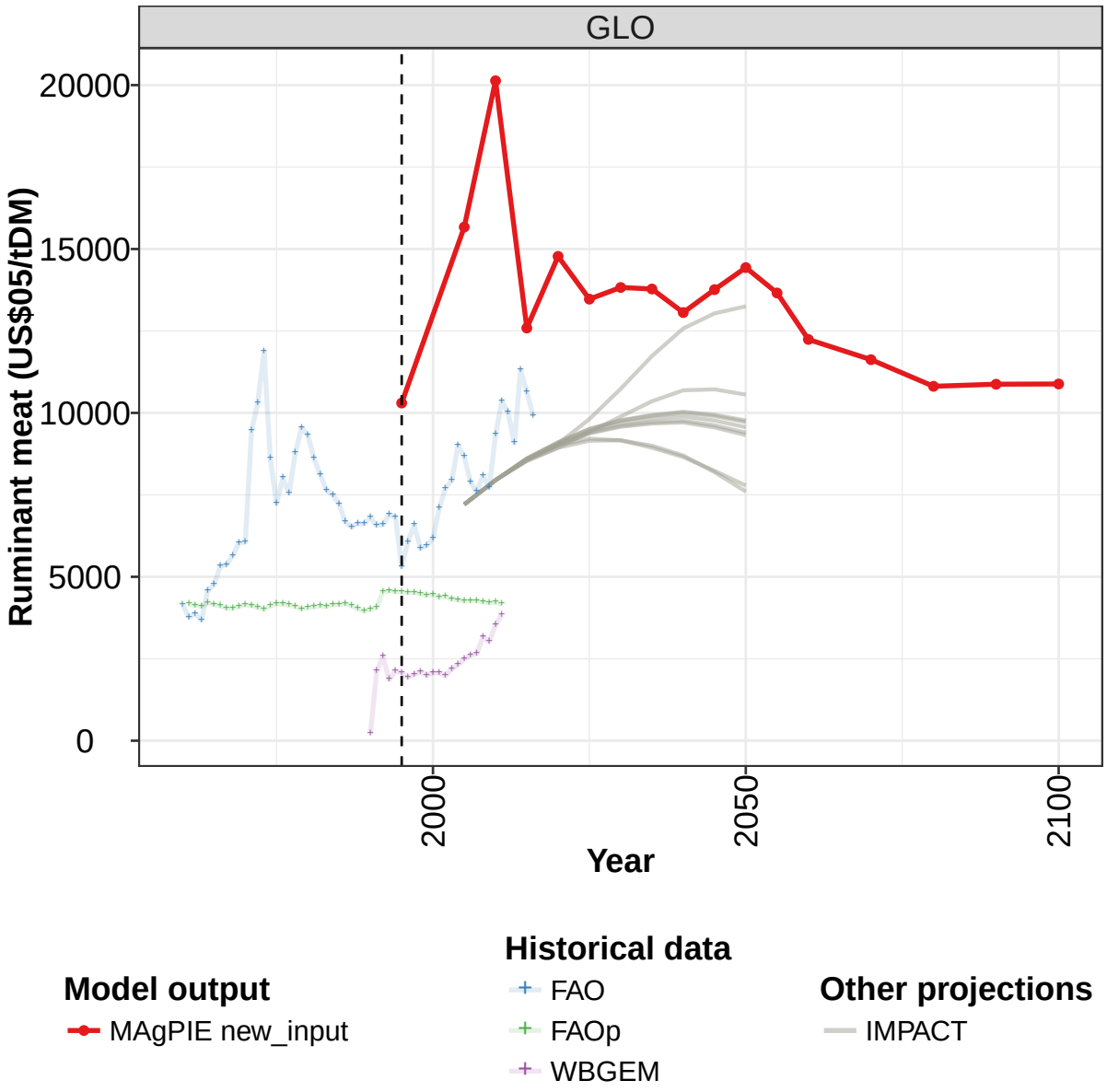
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	257	268	246	381	282	362	287	267	253	239
CAZ	0	158	138	134	203	181	210	211	186	197	178
CHA	0	140	136	170	168	209	438	302	316	268	234
EUR	0	466	477	486	487	541	529	412	375	341	243
IND	0	184	176	162	162	173	178	137	138	166	152
LAM	0	230	215	294	3399	220	235	242	268	192	179
MEA	0	2744	3129	251	268	465	388	374	670	743	453
NEU	0	631	1038	741	494	512	565	479	498	460	449
OAS	0	340	361	362	423	417	407	355	266	285	295
REF	0	0	12	28	38	95	139	137	95	105	175
SSA	7	386	403	448	296	352	537	543	637	246	244
USA	0	192	149	202	171	232	244	254	225	151	143

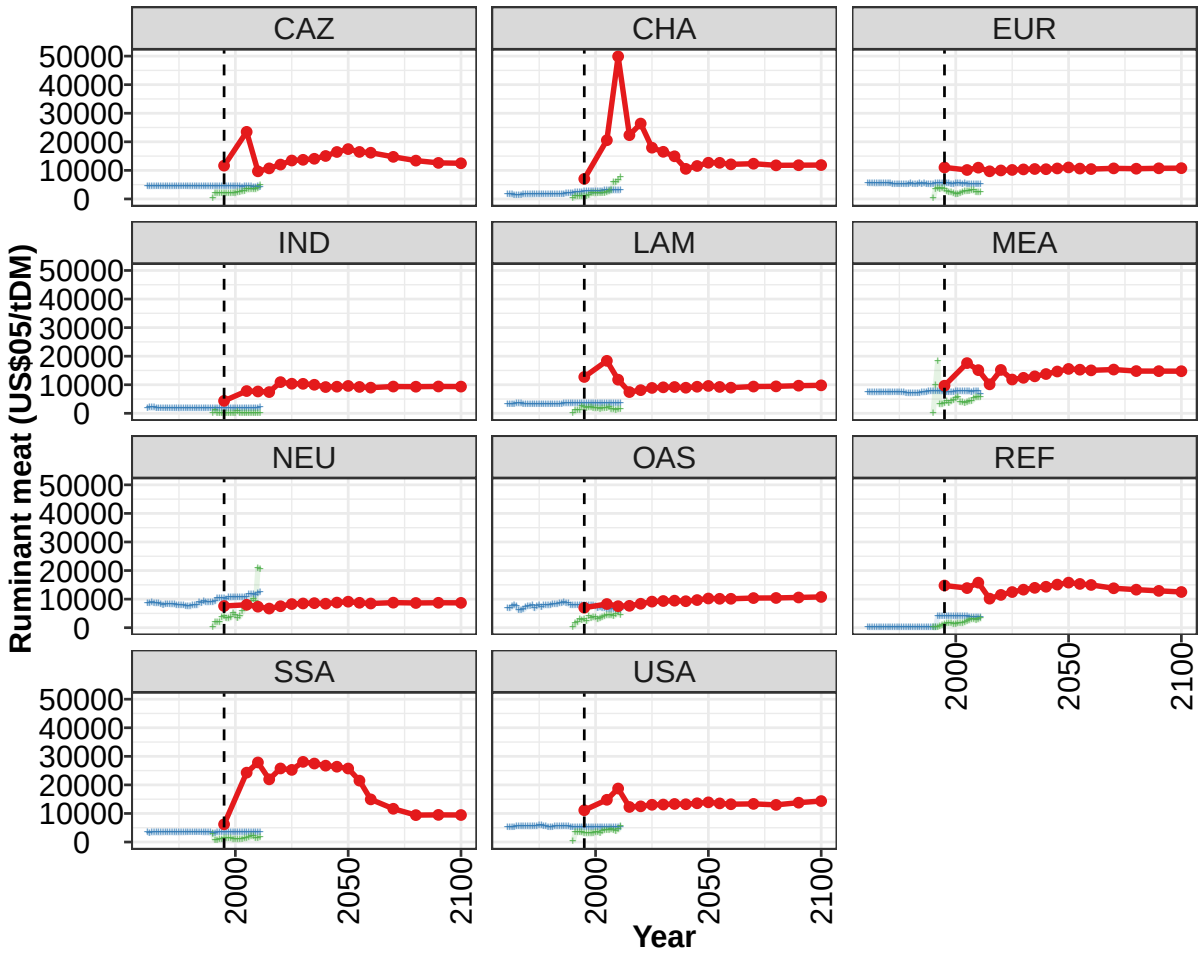
Table 906: FAOp — Prices—Agriculture—Rice (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	203	200	228	296	296	316	326	376	271	284	369
CAZ	127	171	259	275	261	236	326	400	516	482	284
CHA	173	160	236	358	366	377	259	317	324	338	460
EUR	242	244	285	272	245	417	467	676	571	483	569
IND	143	143	154	239	234	298	397	443	0	0	0
LAM	177	170	202	245	238	239	317	433	378	402	402
MEA	542	270	271	284	274	453	402	537	445	544	580
NEU	350	427	512	592	632	593	659	987	921	883	662
OAS	258	257	265	294	289	286	331	364	343	375	508
REF	228	266	142	177	183	175	219	299	356	345	336
SSA	232	257	241	232	308	317	335	399	214	168	179
USA	108	114	205	186	194	253	324	425	364	322	368

Table 907: FAOp — Prices—Agriculture—Rice (US$05/tDM) [PART 2/3]

37.16 Ruminant meat





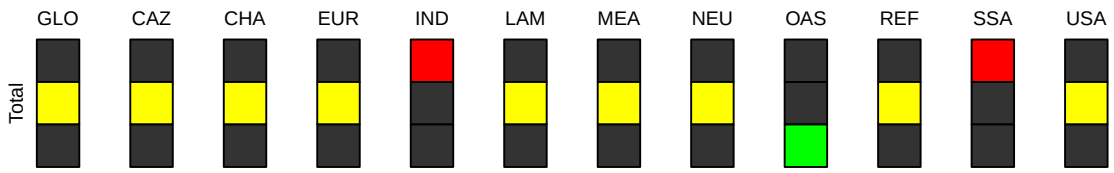


Figure 254: MAgPIE new_input — Prices—Agriculture—Ruminant meat (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	10302	15670	20133	12590	14776	13472	13826	13780	13062	13762	14434
CAZ	11663	23499	9684	10712	12038	13455	13713	14078	15050	16448	17460
CHA	7033	20563	49897	22334	26392	17952	16511	14940	10535	11547	12689
EUR	11036	10149	10961	9693	9988	10164	10347	10495	10421	10681	11036
IND	4370	7803	7656	7443	10930	10361	10327	9999	9205	9317	9593
LAM	12731	18378	11778	7447	8115	8889	9109	9218	8960	9314	9593
MEA	9671	17589	15123	10148	15192	11832	12430	12949	13763	14641	15546
NEU	7584	8025	7353	6702	7518	8275	8482	8598	8402	8791	9103
OAS	6989	8289	7529	7653	8377	9135	9341	9458	9273	9671	10221
REF	14761	13860	15766	10162	11482	12481	13310	13950	14326	15086	15775
SSA	6208	24293	27867	21953	25764	25258	28075	27482	26747	26378	25739
USA	11147	14793	18739	12282	12499	13047	13127	13332	13237	13570	13903

Table 908: MAgPIE new_input — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	13658	12241	11625	10812	10875	10882
CAZ	16464	16193	14742	13425	12628	12498
CHA	12651	12119	12339	11773	11818	11872
EUR	10641	10465	10711	10595	10733	10785
IND	9245	8992	9375	9322	9405	9356
LAM	9240	8984	9373	9436	9674	9801
MEA	15276	15042	15323	14790	14768	14754
NEU	8724	8472	8765	8648	8716	8689
OAS	10118	10119	10370	10406	10574	10767
REF	15317	14959	13802	13308	12891	12500
SSA	21499	14943	11650	9429	9507	9466
USA	13527	13241	13361	13013	13780	14352

Table 909: MAgPIE new_input — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	4146	3765	3871	3679	4579	4755	5317	5368	5644	6037	6054
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 910: WBGEM — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	9456	10310	11867	8604	7229	8013	7554	8781	9548	9316	8602
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 911: WBGEM — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	8106	7636	7492	7218	6663	6514	6628	6616	6803	6570	6593
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 912: WBGEM — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	6896	6830	5307	6070	6582	5869	5954	6163	7093	7699	7935
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 913: WBGEM — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	9012	8668	7888	7590	8092	7722	9337	10362	10006	9080	11309
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 914: WBGEM — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 5/6]

	2015	2016
GLO	10644	9909
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 915: WBGEM — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	4174	4129	4100	4194	4158	4106	4048	4040	4096	4142	4116
CAZ	4242	4248	4268	4291	4349	4328	4287	4287	4274	4219	4214
CHA	1581	1498	1319	1226	1219	1259	1281	1302	1341	1338	1326
EUR	5307	5305	5311	5171	5143	5238	5240	5214	5252	5307	5246
IND	1744	1782	1782	1768	1754	1743	1721	1698	1679	1657	1630
LAM	3166	3168	3161	3165	3174	3180	3177	3151	3152	3138	3156
MEA	7250	7163	7103	7115	7128	7158	7157	7236	7234	7151	7198
NEU	8522	8429	8605	8469	8282	8399	8157	7811	8113	8165	7976
OAS	6621	6621	7210	7836	7379	6053	6042	6207	6914	7340	7373
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3097	3053	3086	3127	3133	3088	3101	3154	3243	3163	3224
USA	5102	5083	5088	5143	5309	5340	5268	5252	5269	5271	5175

Table 916: FAO — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	4072	4010	4107	4172	4164	4135	4094	4021	4054	4093	4109
CAZ	4236	4252	4270	4328	4344	4348	4329	4279	4224	4226	4244
CHA	1304	1366	1429	1481	1404	1423	1473	1456	1536	1537	1548
EUR	5056	5044	5121	5098	5114	5085	5045	5084	5143	5114	5088
IND	1613	1602	1589	1593	1585	1580	1588	1589	1595	1601	1603
LAM	3122	3125	3145	3158	3155	3144	3140	3137	3142	3153	3154
MEA	7237	7283	7237	7217	7164	7056	6956	6866	6791	6871	6957
NEU	7889	7917	7672	7743	7657	7732	7455	7191	7271	7521	7557
OAS	7567	6590	7263	7769	7064	7565	7700	7522	7677	8048	8025
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3235	3127	3154	3168	3183	3192	3253	3291	3408	3344	3350
USA	5284	5292	5316	5538	5537	5446	5391	5124	5053	5139	5252

Table 917: FAO — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	4094	4154	4153	4178	4110	4023	3963	3996	4063	4543	4567
CAZ	4231	4205	4194	4208	4170	4176	4152	4187	4183	4150	4144
CHA	1575	1583	1548	1603	1757	1844	1945	1970	2067	2097	2226
EUR	5105	5136	5130	5192	5114	4997	4946	5053	5168	5244	5273
IND	1603	1602	1592	1595	1629	1630	1630	1634	1633	1632	1640
LAM	3164	3158	3153	3211	3203	3201	3193	3290	3281	3282	3270
MEA	6964	6904	7056	7140	7293	7365	7535	7551	7609	7580	7557
NEU	7595	8543	8491	9103	8583	8599	8811	8668	9111	10074	9945
OAS	7998	8281	8476	8606	8444	8206	7681	7637	7696	7780	7787
REF	0	0	0	0	0	0	0	0	0	3816	3882
SSA	3379	3390	3366	3124	3182	3138	3092	3029	3046	3076	3368
USA	5220	5250	5253	5344	5290	5197	5149	5164	5126	5050	5050

Table 918: FAO — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	4553	4528	4517	4527	4477	4441	4458	4378	4398	4320	4299
CAZ	4140	4106	4127	4149	4169	4172	4157	4136	4104	4068	4126
CHA	2231	2343	2429	2570	2620	2616	2663	2650	2653	2679	2708
EUR	5245	5264	5217	5188	5050	5019	5180	5170	5185	5110	5136
IND	1649	1658	1665	1675	1677	1679	1680	1682	1684	1686	1700
LAM	3275	3274	3253	3269	3252	3220	3210	3204	3206	3205	3198
MEA	7393	7311	7344	7286	7236	7325	7396	7388	7511	7408	7401
NEU	10160	9974	9917	10396	10296	10507	10457	10574	10512	10344	10636
OAS	7754	7729	7606	7615	7669	7537	7370	6711	6935	6548	6535
REF	3940	3815	3878	3823	3783	3709	3718	3731	3737	3677	3673
SSA	3389	3295	3326	3336	3296	3283	3275	3238	3254	3255	3284
USA	5074	5115	5165	5158	5062	5086	5159	5129	5152	5096	4988

Table 919: FAO — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	4259	4267	4270	4237	4208	4219	4164
CAZ	4139	4121	4110	4089	4083	4096	4071
CHA	2705	2700	2749	2730	2727	2706	2703
EUR	5096	5079	5052	5012	5000	4937	4886
IND	1712	1726	1739	1749	1756	1759	1770
LAM	3220	3261	3301	3210	3201	3235	3246
MEA	7382	7368	7359	7382	7441	7512	6365
NEU	10528	11350	11576	11448	11242	11982	12159
OAS	6399	6267	6180	6215	6151	5959	5965
REF	3647	3590	3611	3631	3599	3550	3417
SSA	3270	3196	3243	3286	3264	3275	3273
USA	4972	5069	5049	4966	4959	4972	4965

Table 920: FAO — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 5/5]

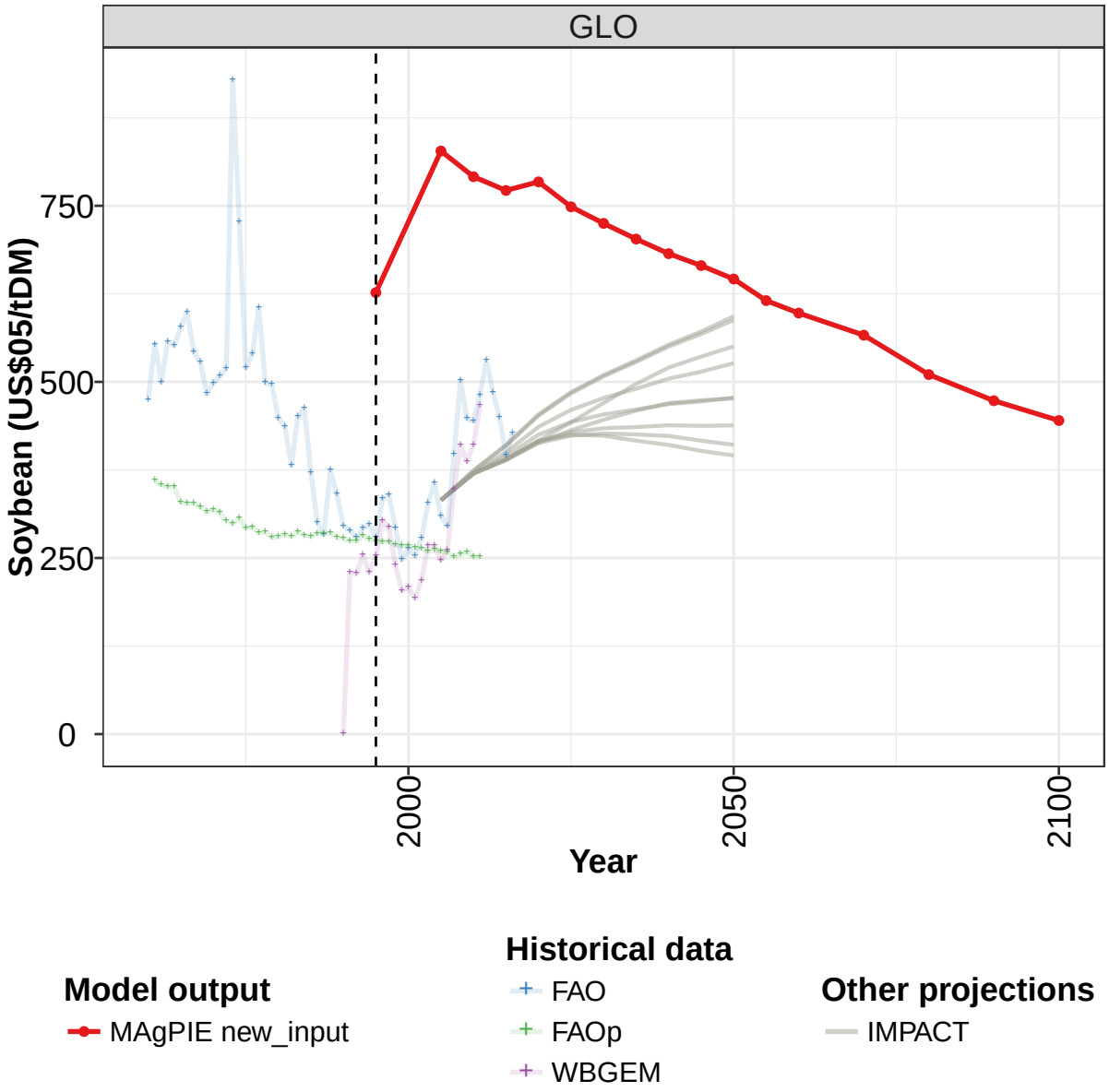
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	217	2114	2565	1864	2123	2071	1926	2026	2108	1986	2066
CAZ	0	1891	1794	1746	1889	1802	1723	1865	1765	1883	1937
CHA	0	629	640	703	639	851	891	1116	1971	1748	1863
EUR	0	3323	3515	3259	3393	3169	2430	2147	2108	1708	1582
IND	0	959	0	0	0	0	0	0	0	0	0
LAM	0	893	1014	960	2183	1792	1688	1778	1819	1534	1661
MEA	0	9618	17971	2917	3029	3474	3901	3512	4018	4525	5144
NEU	0	1630	1762	1548	3364	3797	3057	2975	3510	4949	4283
OAS	0	1271	1639	2614	2507	2651	2189	3676	3126	3392	3296
REF	0	0	80	391	705	1005	1434	1443	1508	1038	1058
SSA	2412	608	581	730	827	1022	1074	1183	1229	657	628
USA	0	3306	3252	3339	3095	2837	2732	2911	2746	2918	3161

Table 921: FAOp — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	2071	1974	2184	2314	2490	2605	2650	3169	3017	3536	3838
CAZ	2024	2319	2353	2663	3045	3050	3283	3149	3130	3661	4777
CHA	1834	1866	1952	1979	2122	2353	2835	5672	5837	6521	7271
EUR	1601	1831	2244	2433	2537	2677	2752	2780	2173	2088	2222
IND	480	0	0	0	0	0	0	0	0	0	0
LAM	1558	1341	1428	1499	1724	1800	1096	1075	987	1272	1394
MEA	5451	3685	3616	3465	3687	3934	4143	4926	5480	5351	5409
NEU	3244	3828	5389	6508	6670	7605	9189	9693	8961	20711	20180
OAS	2742	3152	3534	3847	4132	4013	4120	3921	4440	5404	4065
REF	1399	1388	1295	1687	2115	2281	2640	2822	2455	2615	3098
SSA	679	769	926	984	1102	1381	1698	1858	1199	1231	1409
USA	3281	3060	3657	3944	4114	4004	4124	4085	3674	4228	5180

Table 922: FAOp — Prices—Agriculture—Ruminant meat (US$05/tDM) [PART 2/3]

37.17 Soybean



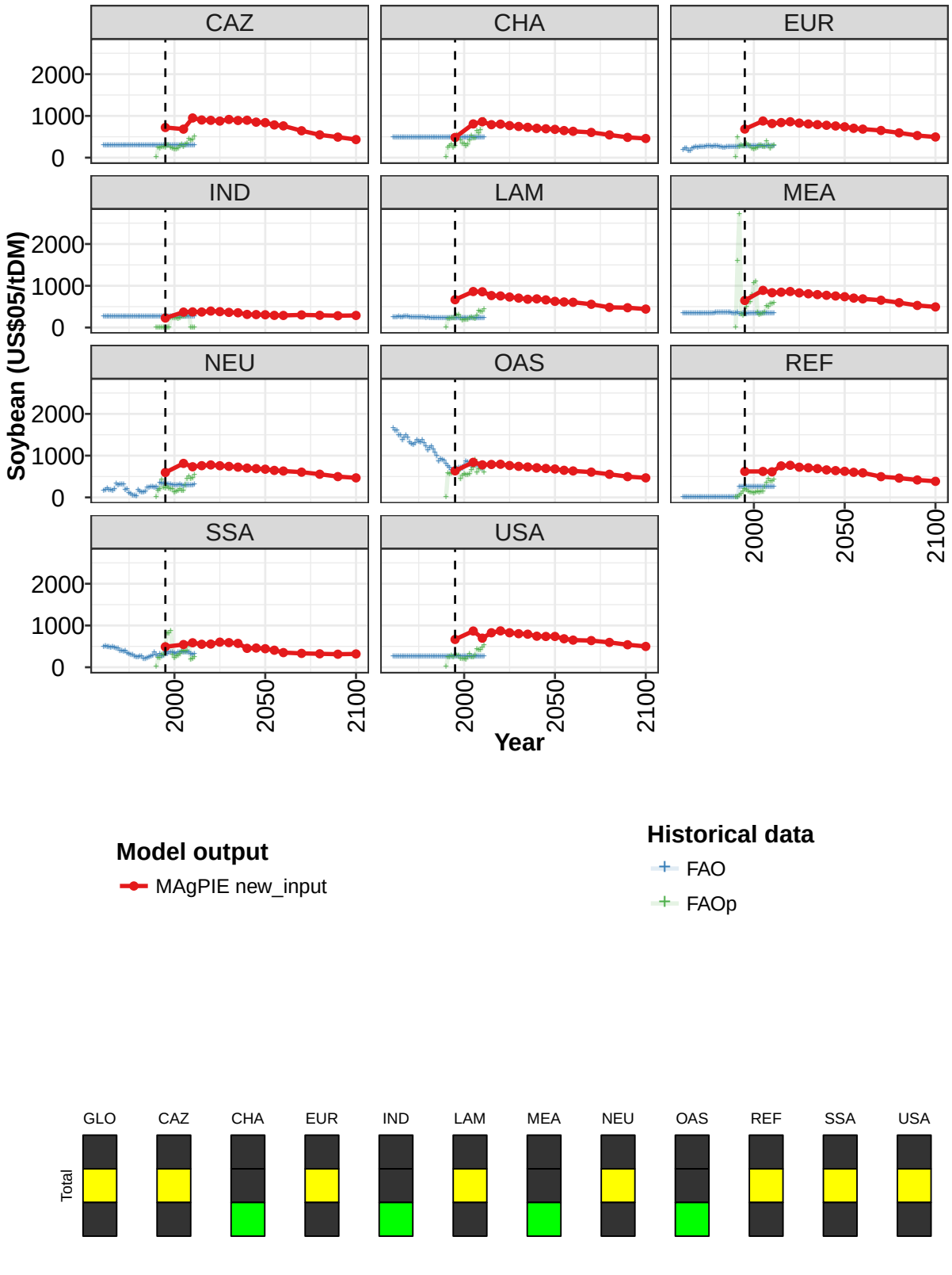


Figure 255: MAgPIE new_input — Prices—Agriculture—Soybean (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	627	828	791	772	784	749	725	703	682	665	646
CAZ	723	683	950	902	895	877	915	891	897	851	839
CHA	484	808	860	790	803	768	748	727	704	692	678
EUR	685	878	816	841	860	828	807	791	776	760	739
IND	228	370	374	371	395	380	363	353	314	310	306
LAM	667	862	857	766	757	730	706	677	686	662	627
MEA	648	890	833	846	863	829	809	788	772	756	738
NEU	596	814	734	760	778	758	743	725	702	689	675
OAS	636	840	779	788	794	763	744	728	710	693	680
REF	621	622	613	755	769	724	709	689	658	641	624
SSA	491	544	586	551	556	602	590	572	453	461	444
USA	666	868	697	826	872	826	804	792	744	738	738

Table 923: MAgPIE new_input — Prices—Agriculture—Soybean (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	615	598	566	510	473	445
CAZ	784	761	645	547	493	434
CHA	649	632	605	545	486	459
EUR	705	684	651	594	530	496
IND	292	290	302	293	283	290
LAM	612	605	557	483	474	442
MEA	705	687	654	595	529	494
NEU	647	632	604	555	498	468
OAS	649	633	605	553	497	468
REF	602	588	496	462	418	385
SSA	408	351	332	323	312	319
USA	682	650	639	595	539	499

Table 924: MAgPIE new_input — Prices—Agriculture—Soybean (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	474	553	499	557	552	578	599	542	528	483	497
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 925: WBGEM — Prices—Agriculture—Soybean (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	508	519	928	727	520	540	605	499	496	449	436
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 926: WBGEM — Prices—Agriculture—Soybean (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	381	451	462	371	300	283	374	341	295	289	279
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 927: WBGEM — Prices—Agriculture—Soybean (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	292	297	279	334	340	292	247	263	253	278	327
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 928: WBGEM — Prices—Agriculture—Soybean (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	356	309	295	397	502	447	444	481	530	485	450
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 929: WBGEM — Prices—Agriculture—Soybean (US$05/tDM) [PART 5/6]

	2015	2016
GLO	395	427
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 930: WBGEM — Prices—Agriculture—Soybean (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	360	353	351	351	329	327	327	322	316	318	314
CAZ	286	286	286	286	286	286	286	286	286	287	288
CHA	472	472	472	472	471	472	471	471	472	472	472
EUR	179	214	204	156	156	214	232	243	240	251	253
IND	254	254	253	253	253	253	253	253	253	253	253
LAM	245	244	246	251	246	246	249	254	249	246	240
MEA	338	338	338	338	338	332	332	332	332	334	332
NEU	156	165	208	168	167	151	185	314	289	304	307
OAS	1656	1586	1601	1475	1477	1357	1414	1480	1415	1311	1275
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	481	491	482	471	470	475	459	439	437	379	394
USA	246	246	246	246	246	246	246	246	246	246	246

Table 931: FAO — Prices—Agriculture—Soybean (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	302	298	307	292	294	285	287	279	280	284	280
CAZ	290	290	294	294	294	290	293	293	291	291	290
CHA	471	472	471	472	472	472	473	474	474	475	475
EUR	251	256	260	265	263	258	262	262	261	255	242
IND	253	254	253	253	253	253	253	253	253	253	253
LAM	239	236	234	235	232	231	229	228	229	228	227
MEA	335	337	334	333	333	335	340	343	345	347	346
NEU	297	178	184	96	79	42	28	26	177	129	111
OAS	1253	1285	1368	1332	1313	1359	1285	1218	1121	1176	1216
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	373	382	335	312	287	281	244	241	239	255	244
USA	246	246	246	246	246	246	246	246	246	246	246

Table 932: FAO — Prices—Agriculture—Soybean (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	287	282	280	285	285	286	279	277	274	274	281
CAZ	289	290	291	291	289	289	291	289	288	288	287
CHA	475	475	475	475	475	475	475	475	475	475	475
EUR	237	239	245	250	255	258	258	259	254	263	269
IND	253	253	253	253	253	253	253	253	253	253	253
LAM	228	225	226	224	226	223	227	223	222	222	223
MEA	345	345	345	346	351	340	323	335	352	322	322
NEU	119	131	217	234	243	239	231	252	193	333	324
OAS	1144	1059	976	858	901	882	864	803	742	703	646
REF	0	0	0	0	0	0	0	0	0	251	251
SSA	191	188	216	237	254	272	341	293	245	300	261
USA	246	246	246	246	246	246	246	246	246	246	246

Table 933: FAO — Prices—Agriculture—Soybean (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	276	274	273	273	268	267	268	264	264	259	261
CAZ	288	287	287	287	287	288	288	287	287	286	287
CHA	475	475	475	476	476	476	476	476	476	476	476
EUR	270	270	268	267	268	271	268	271	272	270	268
IND	253	253	253	253	253	253	253	253	253	253	253
LAM	223	222	221	223	221	220	220	220	220	220	220
MEA	325	321	315	324	324	330	328	328	328	331	333
NEU	324	317	293	292	301	285	286	279	289	295	277
OAS	629	650	690	708	707	687	758	852	841	783	744
REF	252	252	253	253	251	249	250	251	249	248	247
SSA	262	338	317	344	346	339	322	315	342	353	364
USA	246	246	246	246	246	246	246	246	246	246	246

Table 934: FAO — Prices—Agriculture—Soybean (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	260	258	252	255	258	251	252
CAZ	287	287	287	286	287	287	286
CHA	476	476	476	476	476	476	476
EUR	269	269	270	273	272	273	273
IND	253	253	253	253	253	253	253
LAM	219	219	219	219	221	219	221
MEA	333	331	333	335	333	334	334
NEU	266	283	283	282	283	286	293
OAS	818	802	750	783	736	673	725
REF	247	246	248	247	249	247	250
SSA	352	355	353	352	308	285	317
USA	246	246	246	246	246	246	246

Table 935: FAO — Prices—Agriculture—Soybean (US$05/tDM) [PART 5/5]

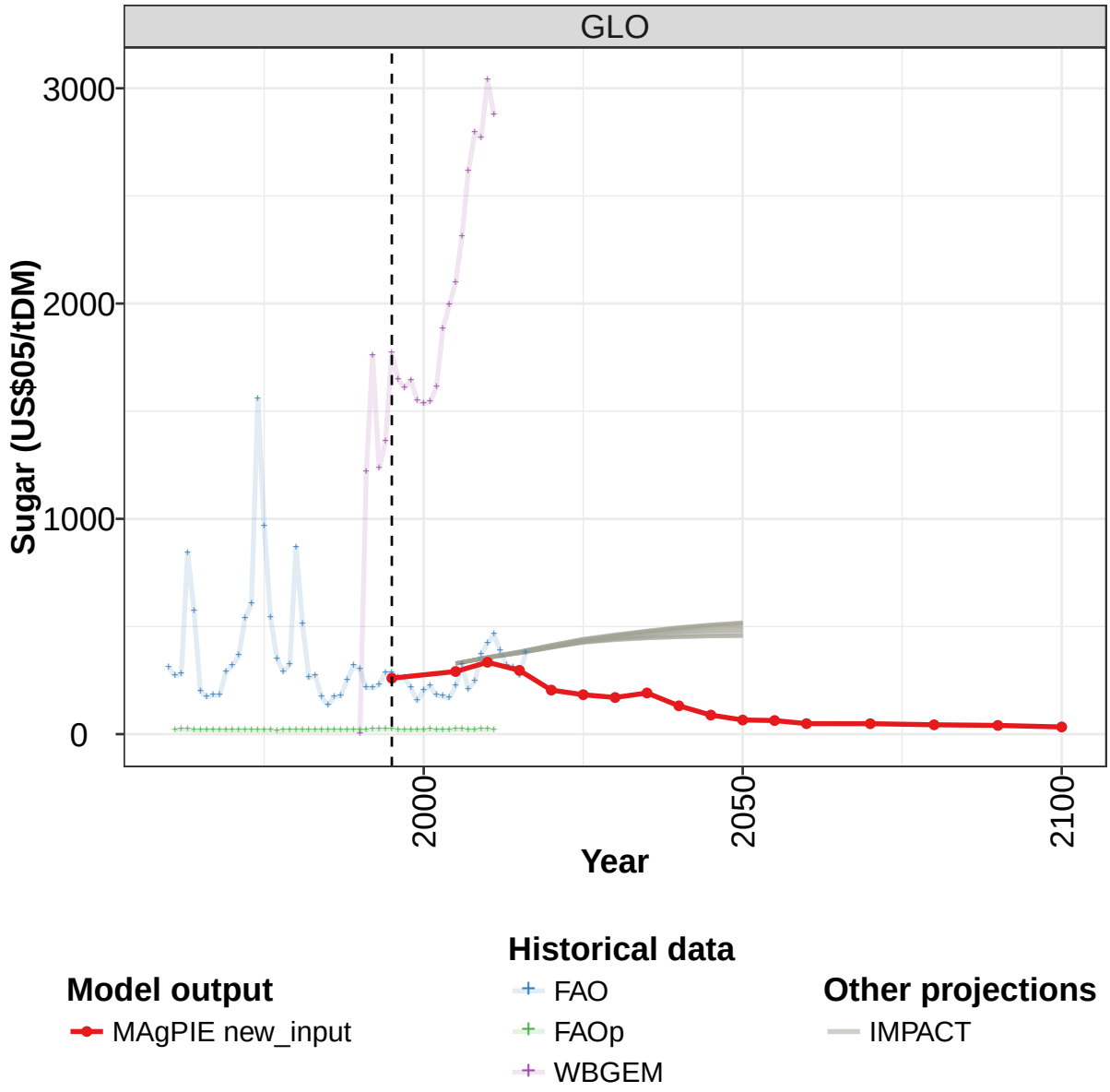
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	229	227	254	230	253	303	293	239	204	208
CAZ	0	222	220	242	241	238	288	297	239	203	200
CHA	0	226	268	315	238	278	539	475	408	320	324
EUR	0	480	252	282	272	265	319	287	262	208	199
IND	0	0	0	0	0	0	0	0	217	221	217
LAM	0	194	192	222	226	210	271	290	224	170	187
MEA	0	1581	2706	305	285	328	488	605	601	776	1056
NEU	0	152	181	408	230	208	238	205	180	183	114
OAS	0	566	557	561	582	631	663	603	426	520	548
REF	0	0	38	71	122	186	162	140	121	116	93
SSA	0	208	206	296	286	538	810	797	860	283	217
USA	0	231	230	265	226	278	278	268	204	191	188

Table 936: FAOp — Prices—Agriculture—Soybean (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	193	218	268	268	247	261	347	410	387	411	466
CAZ	190	211	263	302	257	302	321	440	409	421	503
CHA	268	301	411	510	452	465	622	564	656	832	905
EUR	213	231	288	285	257	251	374	281	213	263	285
IND	211	205	225	249	258	254	293	360	0	0	0
LAM	175	182	216	241	210	209	272	384	372	362	433
MEA	1086	350	300	314	323	353	505	480	560	557	583
NEU	133	152	182	155	154	277	444	496	432	447	527
OAS	530	529	557	634	700	881	581	666	688	672	590
REF	118	124	103	137	122	236	340	429	381	376	418
SSA	249	263	302	358	377	368	391	526	172	200	227
USA	181	229	304	238	234	266	418	412	396	467	517

Table 937: FAOp — Prices—Agriculture—Soybean (US$05/tDM) [PART 2/3]

37.18 Sugar


GLO
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2000
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0
Sugar (US$05/tDM)
2000
2050
2100
Year
Historical data
FAO
FAOp
WBGEM
Model output
MAgPIE new_input
Other projections
IMPACT

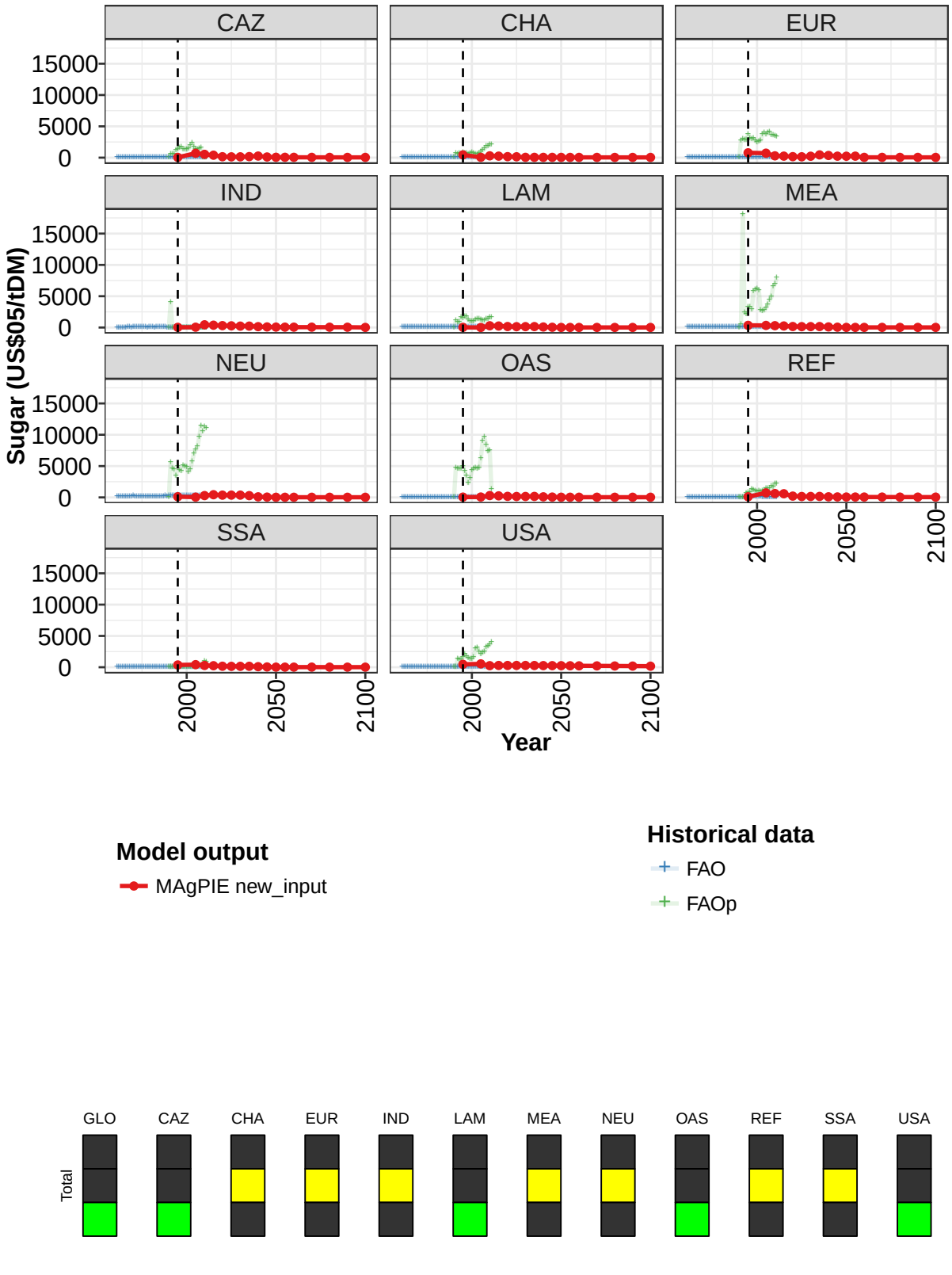


Figure 256: MAgPIE new_input — Prices—Agriculture—Sugar (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	260	291	334	296	205	183	170	191	131	89	66
CAZ	45	707	529	396	154	134	137	173	259	111	62
CHA	448	60	290	246	165	145	53	52	49	50	45
EUR	780	716	291	247	165	145	230	443	354	240	231
IND	34	52	435	373	306	274	225	230	141	95	69
LAM	29	7	284	241	161	140	144	152	87	43	14
MEA	347	339	298	252	165	145	148	158	99	50	21
NEU	108	42	289	428	360	363	365	284	92	48	22
OAS	46	60	291	247	165	145	148	157	94	54	28
REF	101	724	622	587	207	145	148	158	96	75	61
SSA	370	415	292	248	165	145	148	157	94	49	19
USA	466	540	255	289	285	293	286	283	265	258	252

Table 938: MAgPIE new_input — Prices—Agriculture—Sugar (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	63	49	49	43	40	33
CAZ	58	55	49	46	43	44
CHA	44	43	43	40	39	38
EUR	243	50	51	47	46	44
IND	63	58	59	52	48	17
LAM	14	14	16	13	12	12
MEA	21	20	23	19	18	18
NEU	23	22	22	21	21	19
OAS	27	26	27	25	24	23
REF	59	58	53	48	45	42
SSA	19	19	22	18	17	17
USA	239	227	220	204	187	173

Table 939: MAgPIE new_input — Prices—Agriculture—Sugar (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	309	273	278	840	571	198	172	180	181	289	317
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 940: WBGEM — Prices—Agriculture—Sugar (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	363	538	604	1556	965	539	350	290	321	866	512
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 941: WBGEM — Prices—Agriculture—Sugar (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	262	271	170	134	174	177	251	317	299	216	214
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 942: WBGEM — Prices—Agriculture—Sugar (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	229	285	285	261	261	214	153	203	222	179	176
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 943: WBGEM — Prices—Agriculture—Sugar (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	166	222	324	208	245	371	420	462	386	318	311
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 944: WBGEM — Prices—Agriculture—Sugar (US$05/tDM) [PART 5/6]

	2015	2016
GLO	271	380
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 945: WBGEM — Prices—Agriculture—Sugar (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	18	21	21	19	17	18	19	19	18	18	17
CAZ	58	38	52	42	46	39	36	29	45	42	36
CHA	19	24	21	15	12	12	14	15	18	18	18
EUR	26	31	33	31	32	32	35	35	31	37	31
IND	4	5	5	4	5	6	7	7	6	6	6
LAM	7	9	9	9	8	9	8	8	8	7	7
MEA	67	68	63	62	56	48	48	39	36	38	39
NEU	124	130	135	133	110	107	107	156	115	206	143
OAS	20	30	20	21	17	19	18	19	16	15	16
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	10	9	8	8	9	7	6	7	6	7	6
USA	58	55	52	47	41	40	35	28	43	35	29

Table 946: FAO — Prices—Agriculture—Sugar (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	17	17	17	16	19	15	16	17	17	18	18
CAZ	36	40	34	36	33	32	43	43	40	39	38
CHA	19	15	13	15	14	12	12	16	17	14	14
EUR	27	28	30	26	37	25	24	25	25	24	31
IND	7	7	7	6	6	6	5	6	8	6	6
LAM	8	8	8	8	8	8	9	9	9	10	7
MEA	52	42	42	39	38	38	47	45	48	43	39
NEU	135	129	153	154	175	112	113	132	138	136	139
OAS	14	16	15	14	12	12	16	15	13	20	14
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	6	6	6	7	6	6	6	6	6	5	5
USA	29	33	26	23	23	22	28	28	22	19	23

Table 947: FAO — Prices—Agriculture—Sugar (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	18	17	16	19	19	19	19	18	18	20	22
CAZ	43	43	45	42	44	38	29	36	35	39	29
CHA	16	14	13	14	20	17	15	14	12	11	13
EUR	37	31	26	32	33	34	39	30	31	32	35
IND	6	6	6	7	6	6	6	5	5	5	5
LAM	9	7	8	10	10	10	10	10	10	10	11
MEA	38	39	40	38	45	44	50	47	46	46	51
NEU	116	123	135	170	142	184	164	180	188	225	244
OAS	14	14	16	17	16	15	13	13	14	12	12
REF	0	0	0	0	0	0	0	0	0	42	40
SSA	7	5	6	6	7	7	8	8	8	11	22
USA	20	15	12	16	17	16	13	14	15	14	15

Table 948: FAO — Prices—Agriculture—Sugar (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	21	22	19	18	19	19	20	20	19	19	20
CAZ	35	25	26	26	29	28	24	32	25	26	25
CHA	14	13	13	12	11	16	18	14	12	14	16
EUR	34	38	27	26	29	30	31	38	30	39	36
IND	5	5	4	4	4	4	4	4	4	4	5
LAM	10	9	8	8	8	9	9	8	8	7	7
MEA	56	54	66	56	57	52	50	47	45	34	48
NEU	219	363	209	188	190	233	181	213	238	270	250
OAS	12	12	10	10	10	12	18	21	19	16	15
REF	50	45	58	75	78	76	65	63	56	48	42
SSA	19	19	18	15	16	16	16	18	18	17	17
USA	13	13	12	11	12	11	12	10	9	10	10

Table 949: FAO — Prices—Agriculture—Sugar (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	21	21	19	20	21	21	20
CAZ	26	33	25	27	29	30	33
CHA	16	14	12	15	18	18	17
EUR	35	44	39	43	40	45	40
IND	5	4	3	4	5	5	4
LAM	8	8	7	7	6	6	7
MEA	56	58	66	69	75	63	64
NEU	249	280	251	232	206	221	259
OAS	23	23	23	20	23	22	17
REF	41	37	37	41	44	48	26
SSA	17	19	16	16	14	17	15
USA	9	8	8	9	8	9	8

Table 950: FAO — Prices—Agriculture—Sugar (US$05/tDM) [PART 5/5]

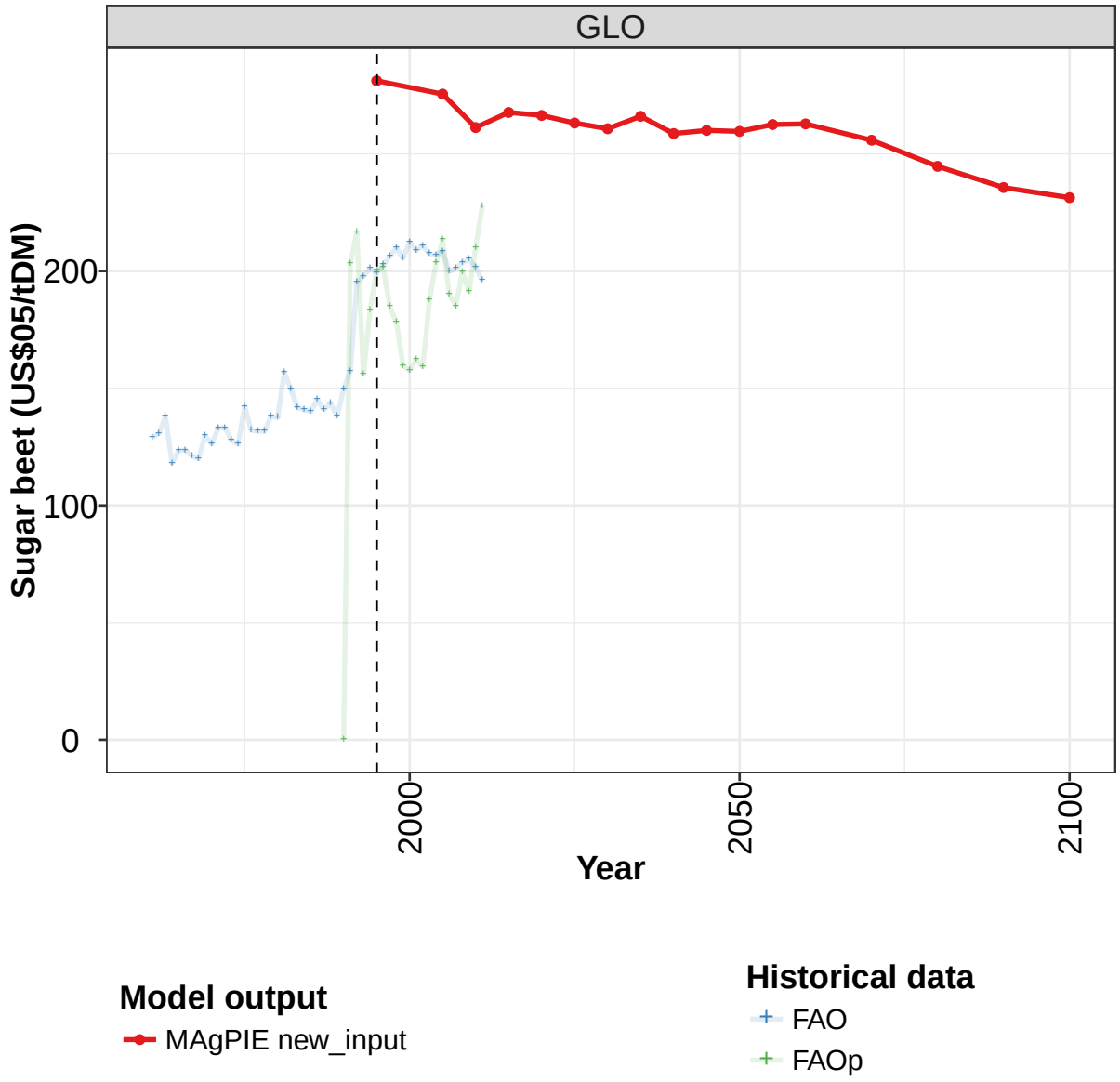
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	1218	1758	1235	1359	1769	1648	1608	1643	1549	1535
CAZ	0	488	496	491	1125	1328	1566	1611	1289	1272	1271
CHA	0	599	532	596	544	763	608	675	567	715	729
EUR	0	2743	2955	2758	2786	3685	3110	2913	3018	2705	2401
IND	0	3989	0	0	0	0	0	0	0	0	0
LAM	0	1081	829	862	1523	1477	1716	1738	1164	966	999
MEA	0	507	18037	2325	2153	3252	3175	2819	5746	6031	6165
NEU	0	5510	4515	4404	3399	4972	4332	4178	4998	4891	4826
OAS	0	4629	4579	4500	4551	4890	4116	3364	2246	3002	4308
REF	0	0	0	10	630	691	789	1298	1174	994	843
SSA	2	2	59	57	19	28	27	26	31	30	30
USA	0	0	1237	1212	1187	1540	1997	1691	1484	1349	1342

Table 951: FAOp — Prices—Agriculture—Sugar (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	1544	1611	1884	1991	2097	2312	2615	2793	2770	3038	2875
CAZ	1403	1879	2323	1648	1279	1311	1371	1535	0	0	0
CHA	608	543	520	711	905	1132	1401	1745	1813	2097	1998
EUR	2599	2731	3741	3982	3641	3893	4088	3625	3534	3486	3354
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	1002	1205	1387	1296	1209	1032	1090	1338	1367	1584	1606
MEA	5941	2707	2607	2681	3119	3665	4393	4828	6560	6930	7879
NEU	4019	4435	5714	6947	7587	8031	9603	11423	10523	11284	10996
OAS	4526	4692	4544	4721	6148	9011	9544	8358	7323	7448	1267
REF	960	932	1005	1121	1329	1324	1409	1705	1590	2187	2105
SSA	29	24	31	17	22	288	295	262	173	882	796
USA	1583	2985	3119	2447	2074	2260	2421	3196	3312	3640	3969

Table 952: FAOp — Prices—Agriculture—Sugar (US$05/tDM) [PART 2/3]

37.19 Sugar beet



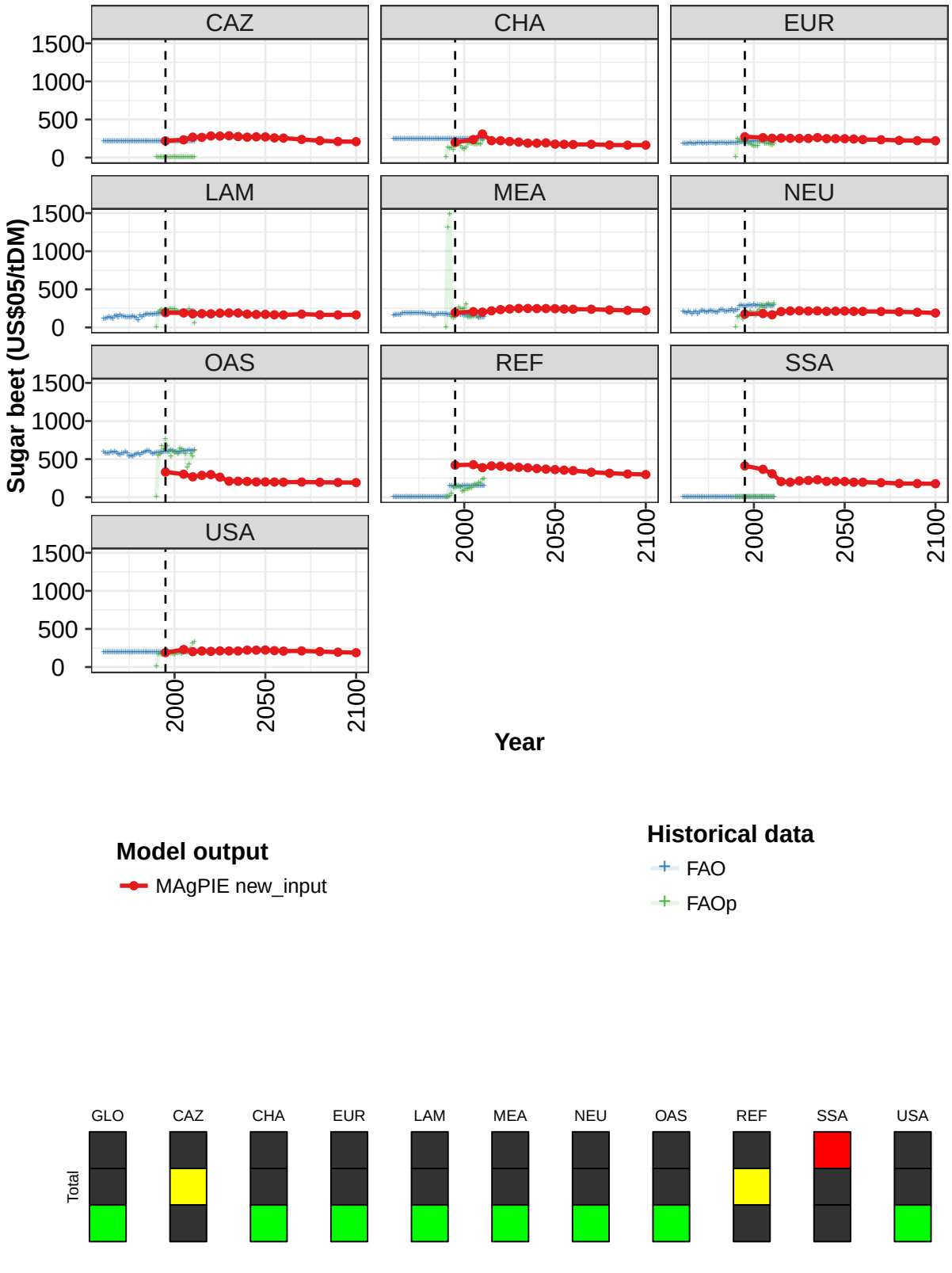


Figure 257: MAgPIE new_input — Prices—Agriculture—Sugar beet (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	281	276	261	268	266	263	261	266	259	260	260
CAZ	220	234	269	266	284	283	287	277	269	272	271
CHA	200	237	310	222	222	212	204	190	189	194	177
EUR	274	262	254	256	253	251	252	263	249	249	248
LAM	193	190	179	180	179	187	190	190	175	170	172
MEA	193	207	201	218	234	243	249	249	247	247	246
NEU	174	182	166	208	216	219	215	218	211	213	215
OAS	331	302	268	287	297	263	211	210	207	201	201
REF	421	427	388	411	409	398	393	386	376	369	363
SSA	411	367	308	205	197	215	220	229	208	209	207
USA	189	230	202	211	206	212	211	211	222	222	223

Table 953: MAgPIE new_input — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	263	263	256	245	236	231
CAZ	259	256	238	222	211	209
CHA	174	171	175	166	164	165
EUR	244	237	234	226	223	221
LAM	166	163	175	166	164	165
MEA	241	239	238	230	223	221
NEU	211	210	209	204	199	189
OAS	199	198	199	196	194	192
REF	355	350	328	315	304	298
SSA	197	197	191	181	179	178
USA	215	209	212	203	195	188

Table 954: MAgPIE new_input — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	129	131	138	118	123	124	121	120	130	126	133
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	180	183	181	180	186	181	183	182	185	184	184
LAM	109	107	118	131	117	106	136	155	126	157	138
MEA	155	165	165	159	162	179	180	183	180	178	178
NEU	205	194	185	205	189	177	195	205	167	196	217
OAS	588	573	574	574	588	579	587	580	556	555	568
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 955: FAO — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	133	128	126	142	132	132	132	138	138	157	150
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	183	184	179	186	192	186	186	183	186	189	185
LAM	143	128	129	135	134	144	127	119	87	148	132
MEA	182	185	183	180	181	177	179	176	172	169	168
NEU	209	202	191	203	215	205	206	198	190	210	222
OAS	570	589	574	529	541	526	553	561	568	554	574
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 956: FAO — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	142	141	140	145	141	144	138	150	157	195	198
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	189	186	184	188	189	191	189	190	189	196	203
LAM	148	163	169	165	167	166	174	168	171	179	185
MEA	156	148	168	171	170	171	167	168	165	166	165
NEU	222	204	201	213	216	230	203	224	226	272	285
OAS	586	593	604	600	578	563	574	577	581	576	585
REF	0	0	0	0	0	0	0	0	0	140	139
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 957: FAO — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	201	199	203	206	210	205	212	209	211	207	207
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	204	203	203	203	205	204	213	212	212	211	211
LAM	187	188	189	188	188	188	188	188	188	190	190
MEA	163	164	164	167	161	160	155	146	148	152	150
NEU	276	279	278	284	286	280	292	281	283	283	276
OAS	588	593	587	596	608	602	597	589	581	593	592
REF	138	139	139	138	138	142	145	144	145	146	145
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 958: FAO — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	208	200	201	203	205	202	196
CAZ	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239
EUR	213	208	207	206	206	206	205
LAM	191	193	196	197	201	197	193
MEA	149	149	139	123	127	126	125
NEU	274	276	275	285	283	279	282
OAS	604	606	607	609	603	607	613
REF	145	144	146	146	148	146	146
SSA	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192

Table 959: FAO — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 5/5]

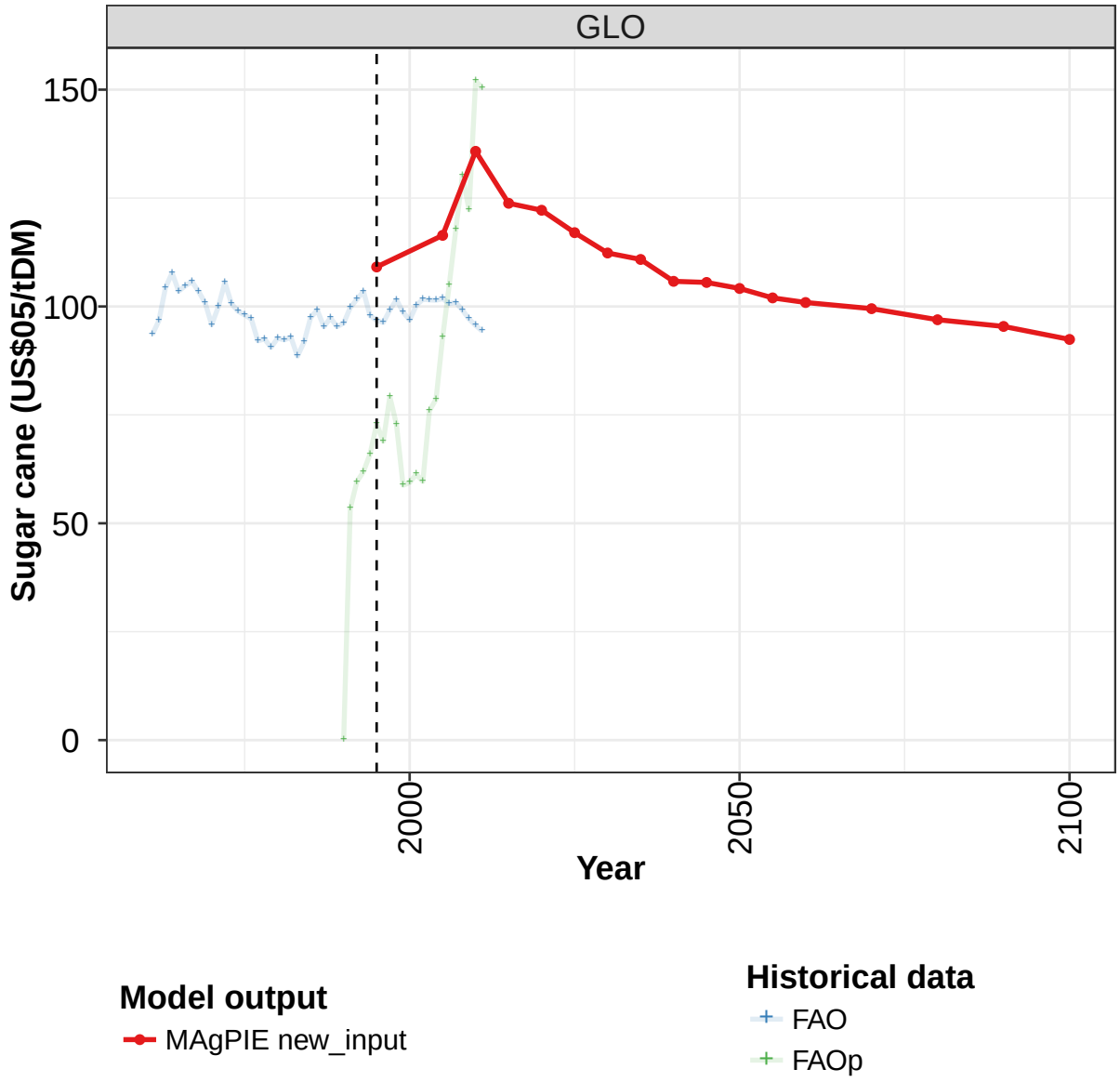
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	203	216	156	183	200	201	185	178	160	157
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	129	119	124	98	144	171	167	150	121	107
EUR	0	237	220	199	219	239	211	182	175	156	152
LAM	0	194	213	219	215	215	227	232	234	233	233
MEA	0	1310	1482	131	119	130	191	254	238	230	248
NEU	0	127	143	146	104	157	193	171	201	183	184
OAS	0	535	560	666	618	762	662	604	534	600	586
REF	0	0	11	40	125	120	148	148	125	77	86
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	163	171	163	163	158	208	179	167	171	158

Table 960: FAOp — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	162	159	188	203	213	190	185	200	191	210	228
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	125	176	192	183	177	173	172	178	171	215	271
EUR	152	151	196	222	227	181	180	182	164	156	181
LAM	213	198	191	190	189	197	216	230	204	212	50
MEA	295	127	125	135	143	169	136	126	169	180	205
NEU	153	205	228	283	274	249	298	308	276	290	310
OAS	584	561	633	624	603	563	385	425	558	526	601
REF	100	98	113	116	141	165	155	184	173	224	239
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	183	183	192	171	200	204	192	221	233	308	321

Table 961: FAOp — Prices—Agriculture—Sugar beet (US$05/tDM) [PART 2/3]

37.20 Sugar cane



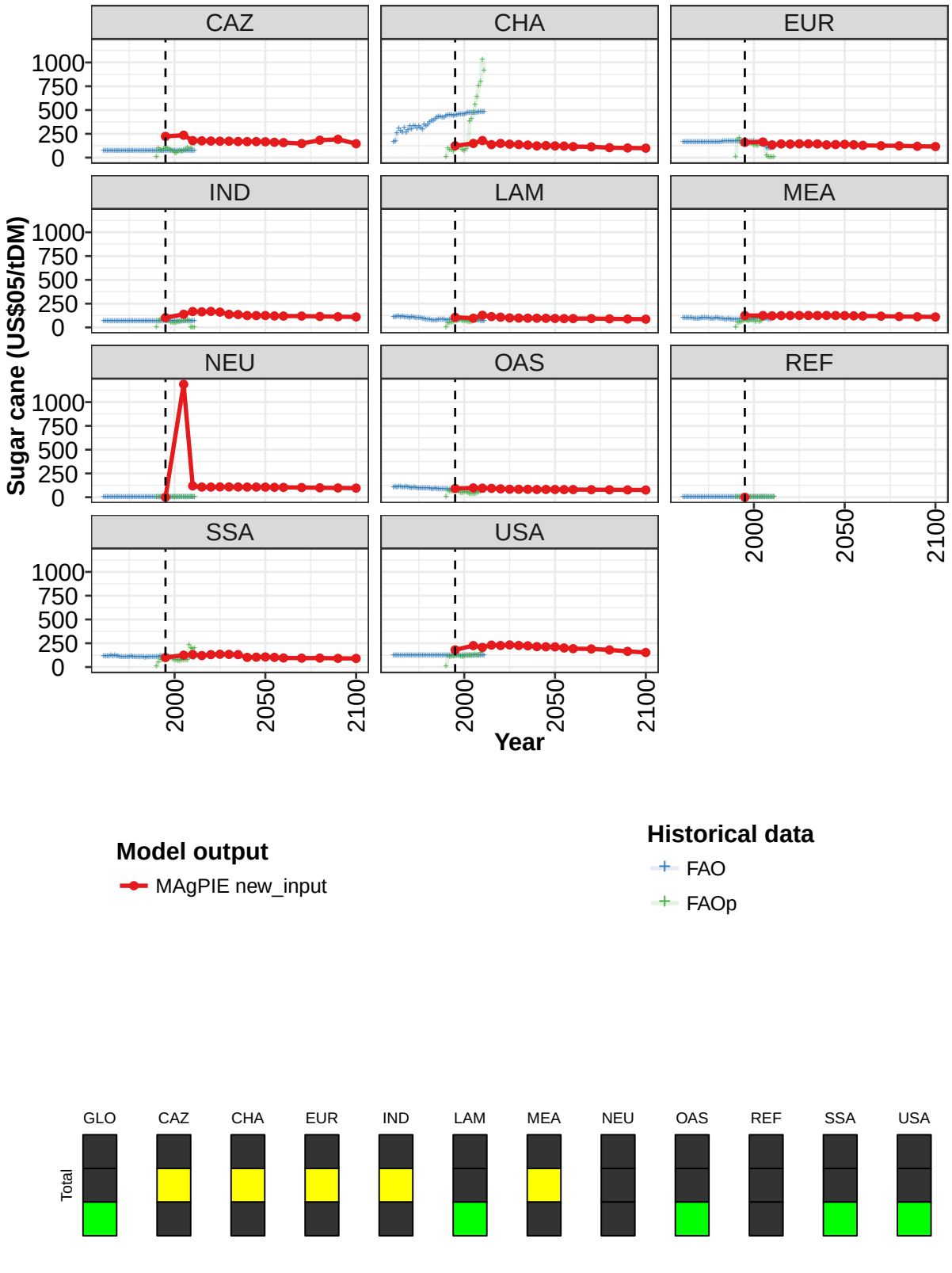


Figure 258: MAgPIE new_input — Prices—Agriculture—Sugar cane (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	109	116	136	124	122	117	112	111	106	106	104
CAZ	223	235	179	176	174	172	173	169	168	168	167
CHA	124	149	179	137	149	141	137	132	123	126	123
EUR	160	164	134	144	142	145	145	144	134	137	140
IND	103	138	167	164	168	161	137	135	125	124	125
LAM	106	97	128	114	108	100	98	97	97	96	94
MEA	125	125	121	124	124	125	125	125	125	125	124
NEU	0	1187	119	107	107	108	108	107	107	107	106
OAS	91	98	96	93	88	84	83	83	81	82	81
REF	0										
SSA	100	125	132	120	130	135	133	130	101	104	106
USA	180	225	207	230	226	232	227	223	215	213	212

Table 962: MAgPIE new_input — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	102	101	99	97	95	92
CAZ	161	158	148	183	192	146
CHA	121	116	114	104	101	99
EUR	135	129	125	124	119	116
IND	121	119	119	115	112	110
LAM	93	93	93	90	88	87
MEA	122	120	118	114	112	110
NEU	104	103	102	99	97	96
OAS	80	81	79	78	77	76
REF						
SSA	102	95	93	94	91	90
USA	201	193	190	180	165	153

Table 963: MAgPIE new_input — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	94	97	104	108	104	105	106	103	101	96	100
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	163	166	255	302	275	263	306	260	281	325	293
EUR	162	157	158	158	160	159	159	159	160	159	160
IND	63	63	63	63	63	63	63	63	63	63	63
LAM	100	107	114	113	106	115	107	107	106	93	104
MEA	96	96	96	96	99	97	91	89	91	91	92
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	101	104	97	111	104	101	103	106	101	98	94
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	113	108	114	107	117	107	115	112	111	105	104
USA	119	119	119	119	119	119	119	119	119	119	119

Table 964: FAO — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	106	101	99	98	97	92	93	91	93	92	93
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	328	326	305	322	309	290	341	328	339	367	385
EUR	158	161	158	160	160	159	160	162	163	161	163
IND	63	63	63	63	63	63	63	63	63	63	63
LAM	108	99	100	97	96	87	85	79	80	76	75
MEA	94	95	94	93	89	89	88	97	95	90	89
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	97	95	92	94	90	88	90	90	91	87	84
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	104	105	105	101	108	104	104	104	100	99	104
USA	119	119	119	119	119	119	119	119	119	119	119

Table 965: FAO — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	89	92	97	99	95	97	95	96	100	102	103
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	383	404	417	423	426	416	417	432	444	440	442
EUR	164	165	165	165	165	165	165	166	165	165	165
IND	63	63	63	63	63	63	63	63	63	63	63
LAM	72	71	73	77	76	79	76	73	74	76	82
MEA	85	82	83	85	76	83	83	82	79	82	84
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	86	87	85	84	79	82	82	81	79	78	79
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	99	98	101	99	100	100	99	100	100	108	112
USA	119	119	119	119	119	119	119	119	119	119	119

Table 966: FAO — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	98	97	96	99	102	99	97	100	102	102	101
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	436	442	446	452	455	455	455	461	464	466	469
EUR	165	164	162	163	164	165	164	164	164	164	163
IND	63	63	63	63	63	63	63	63	63	63	63
LAM	76	76	76	74	77	79	78	79	76	77	75
MEA	84	83	81	80	80	83	85	87	88	92	94
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	77	74	74	74	74	73	73	74	73	71	71
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	99	100	101	99	100	95	100	101	97	96	97
USA	119	119	119	119	119	119	119	119	119	119	119

Table 967: FAO — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	102	101	101	99	97	96	94
CAZ	71	71	71	71	71	71	71
CHA	470	472	472	472	473	472	472
EUR	161	150	99	94	93	97	98
IND	63	63	63	63	63	63	63
LAM	76	75	73	69	67	67	67
MEA	92	90	90	81	79	93	96
NEU	0	0	0	0	0	0	0
OAS	73	74	71	69	71	71	67
REF	0	0	0	0	0	0	0
SSA	98	97	102	103	100	98	97
USA	119	119	119	119	119	119	119

Table 968: FAO — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 5/5]

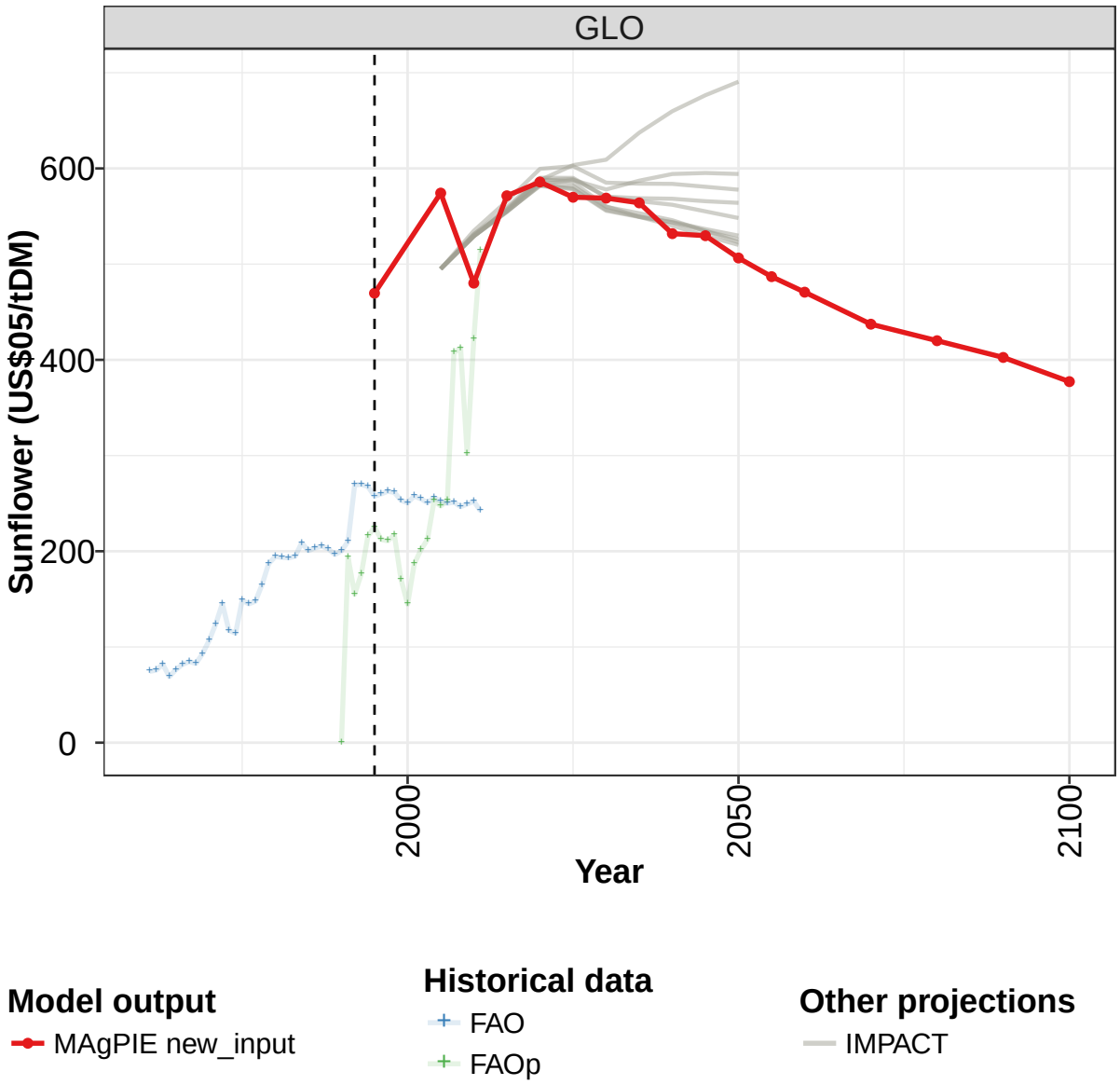
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	53	60	62	66	73	69	79	73	59	59
CAZ	0	92	76	71	81	99	93	88	74	65	49
CHA	0	92	80	74	61	91	109	108	98	78	69
EUR	0	186	198	147	148	169	163	146	146	144	124
IND	0	61	76	79	80	85	66	69	47	48	49
LAM	0	38	44	49	57	60	61	83	87	62	63
MEA	0	47	49	55	62	68	70	67	68	70	69
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	62	57	57	62	69	65	58	42	44	49
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1	43	82	72	80	88	87	96	96	78	72
USA	0	107	104	107	107	111	115	115	111	104	107

Table 969: FAOp — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	61	60	76	79	93	105	118	130	122	152	150
CAZ	44	62	67	63	74	78	102	81	94	150	145
CHA	83	117	373	397	465	549	634	752	793	1027	912
EUR	130	119	160	156	152	130	17	0	0	0	0
IND	49	53	58	61	64	66	73	69	0	0	0
LAM	66	54	56	57	75	86	90	83	86	111	127
MEA	57	90	56	65	84	94	102	118	128	131	116
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	49	44	32	30	31	33	40	50	58	76	83
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	71	59	64	65	66	65	71	225	195	183	194
USA	119	115	122	115	115	126	119	122	141	170	193

Table 970: FAOp — Prices—Agriculture—Sugar cane (US$05/tDM) [PART 2/3]

37.21 Sunflower



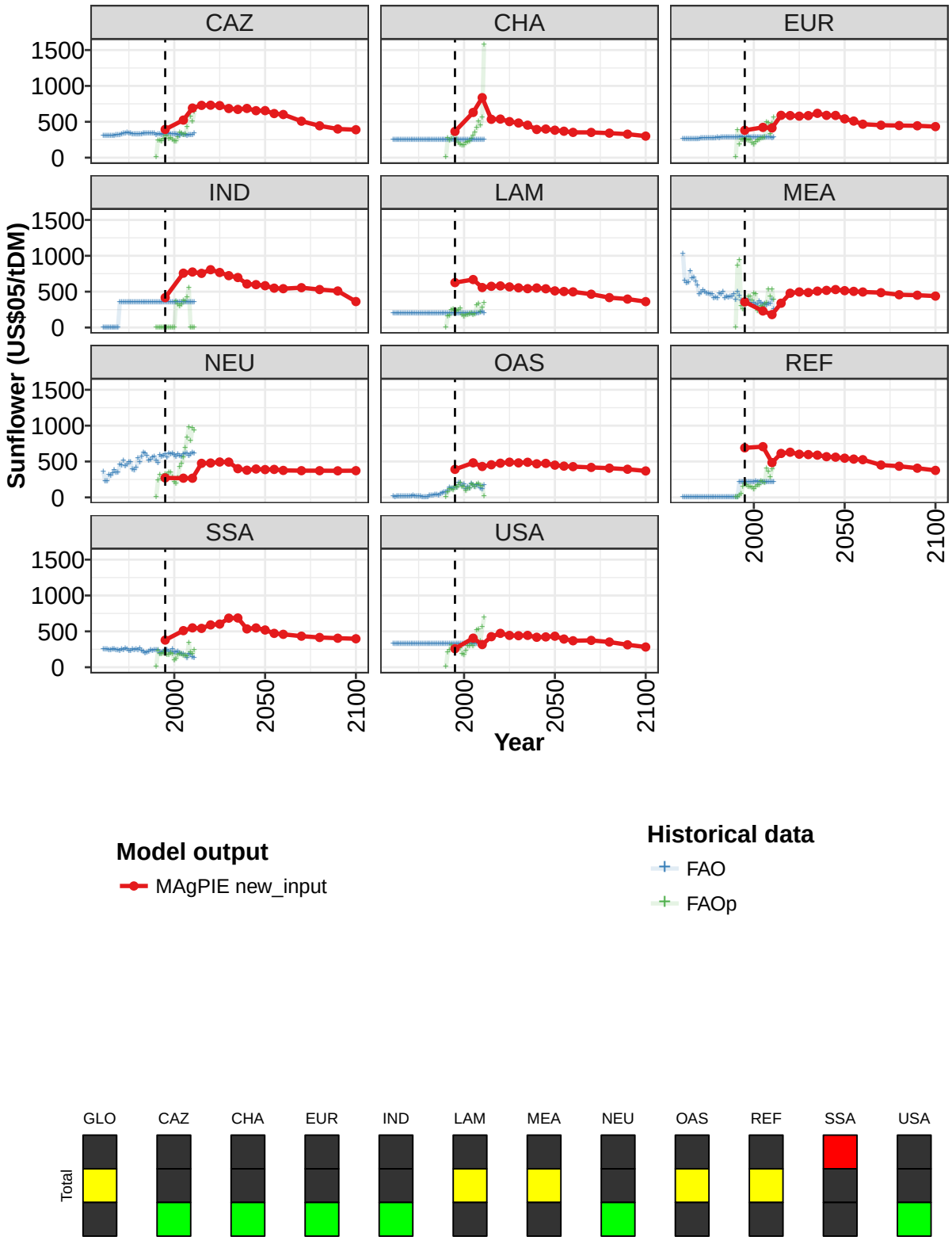


Figure 259: MAgPIE new_input — Prices—Agriculture—Sunflower (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	470	574	480	571	586	570	569	564	532	530	506
CAZ	394	524	691	729	731	726	685	673	686	655	656
CHA	366	630	837	535	538	503	483	453	393	399	383
EUR	382	422	414	590	587	579	586	618	590	589	541
IND	417	758	774	755	806	767	723	697	607	598	583
LAM	626	669	557	575	580	566	553	542	551	540	511
MEA	357	231	180	339	478	496	487	507	518	529	514
NEU	271	268	267	475	479	493	492	400	379	395	388
OAS	391	482	431	455	476	491	481	490	468	474	450
REF	690	707	485	613	630	602	597	589	567	561	546
SSA	379	510	549	542	590	602	684	687	535	548	519
USA	259	405	317	426	473	444	440	444	418	423	433

Table 971: MAgPIE new_input — Prices—Agriculture—Sunflower (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	487	471	437	420	403	377
CAZ	615	602	508	444	400	390
CHA	369	353	352	342	328	300
EUR	510	466	452	448	445	433
IND	549	541	555	529	510	362
LAM	502	497	465	417	396	361
MEA	504	495	486	457	450	438
NEU	390	376	372	372	370	372
OAS	436	429	418	407	392	369
REF	534	526	451	434	407	376
SSA	472	459	433	415	405	397
USA	393	369	375	352	313	282

Table 972: MAgPIE new_input — Prices—Agriculture—Sunflower (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	75	76	82	69	76	82	85	83	93	107	124
CAZ	304	303	303	302	302	305	301	307	310	313	317
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	256	255	254	254	253	255	254	254	254	261	262
IND	0	0	0	0	0	0	0	0	0	347	347
LAM	193	192	195	195	192	194	191	191	191	191	195
MEA	1022	649	616	625	783	685	690	632	576	457	486
NEU	352	221	221	305	296	325	373	336	347	449	438
OAS	4	4	5	5	6	5	6	7	8	10	14
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	244	244	244	236	235	245	243	237	231	227	247
USA	319	318	319	319	319	319	319	319	319	319	319

Table 973: FAO — Prices—Agriculture—Sunflower (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	145	117	114	149	145	148	165	187	194	194	193
CAZ	328	331	341	335	334	320	324	319	319	323	323
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	263	263	266	269	266	265	266	267	273	269	276
IND	347	347	347	347	347	347	347	347	347	347	347
LAM	193	192	190	192	192	191	191	191	191	191	190
MEA	511	489	468	468	454	459	407	411	403	468	464
NEU	505	432	449	489	483	381	371	410	536	485	560
OAS	21	11	5	6	5	4	0	3	4	23	22
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	239	253	250	229	226	241	236	243	232	252	224
USA	319	319	319	319	319	319	319	319	319	319	319

Table 974: FAO — Prices—Agriculture—Sunflower (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	195	209	201	203	205	203	196	200	210	269	270
CAZ	329	329	336	338	332	336	331	316	322	324	315
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	277	280	281	278	280	281	279	282	278	280	285
IND	347	347	347	347	347	347	347	347	347	347	347
LAM	189	190	190	190	192	194	197	197	192	191	192
MEA	490	408	431	411	421	424	458	381	490	432	372
NEU	618	609	578	511	522	552	559	508	479	579	559
OAS	23	36	36	25	42	53	67	66	83	131	125
REF	0	0	0	0	0	0	0	0	0	212	212
SSA	211	194	205	215	236	229	236	233	232	186	204
USA	319	319	319	319	319	319	319	319	319	319	319

Table 975: FAO — Prices—Agriculture—Sunflower (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	268	258	260	263	262	253	250	258	255	251	256
CAZ	319	327	323	330	319	327	325	317	311	304	322
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	282	279	283	285	282	279	283	282	279	277	276
IND	347	347	347	347	347	347	347	347	347	347	347
LAM	190	190	191	190	191	190	191	191	191	191	192
MEA	331	351	353	378	333	306	337	311	315	359	332
NEU	578	596	553	610	599	611	582	560	600	571	561
OAS	119	140	136	192	194	149	181	113	145	123	181
REF	212	212	211	213	213	214	212	214	213	213	213
SSA	213	238	237	213	217	244	201	204	217	188	181
USA	319	319	319	319	319	319	319	319	319	319	319

Table 976: FAO — Prices—Agriculture—Sunflower (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	252	250	251	247	249	252	242
CAZ	317	315	303	315	313	315	330
CHA	245	245	245	245	245	245	245
EUR	275	275	281	276	277	272	273
IND	347	347	347	347	347	347	347
LAM	192	192	198	198	203	211	198
MEA	310	324	308	325	327	378	247
NEU	592	603	604	576	600	619	609
OAS	165	138	160	165	126	107	161
REF	213	213	213	212	212	212	212
SSA	175	156	121	181	169	131	129
USA	319	319	319	319	319	319	319

Table 977: FAO — Prices—Agriculture—Sunflower (US$05/tDM) [PART 5/5]

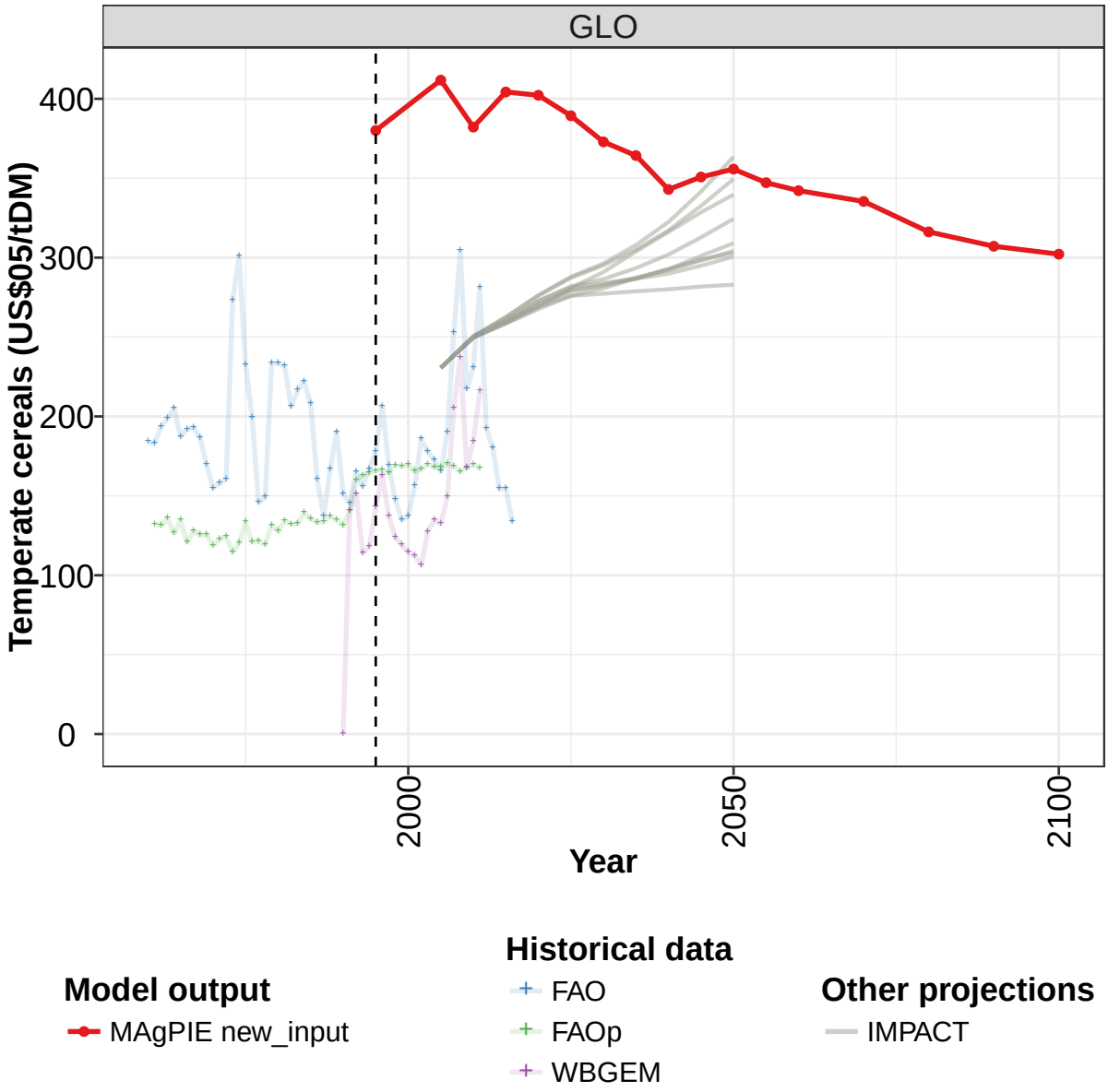
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	193	155	176	216	225	212	211	217	171	145
CAZ	0	234	237	220	261	296	297	257	264	243	224
CHA	0	262	234	255	306	334	250	200	177	162	170
EUR	0	377	181	242	245	260	241	229	249	198	177
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	0	150	158	235	250	230	230	242	258	173	146
MEA	0	852	934	293	254	310	353	421	423	376	470
NEU	0	231	303	250	256	322	307	342	344	279	211
OAS	0	67	112	107	94	138	129	160	195	139	147
REF	0	0	26	42	146	183	161	144	138	132	107
SSA	0	222	178	182	189	229	172	168	195	184	97
USA	0	206	231	305	254	273	273	275	252	178	163

Table 978: FAOp — Prices—Agriculture—Sunflower (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	187	201	212	253	247	253	408	412	302	422	514
CAZ	218	274	340	331	314	319	424	610	564	499	627
CHA	200	207	217	257	300	349	409	495	441	556	1575
EUR	212	237	240	271	271	273	489	472	317	461	558
IND	357	311	289	318	366	356	414	547	0	0	0
LAM	175	172	182	196	170	181	302	324	219	274	337
MEA	461	222	262	293	286	318	340	528	423	523	381
NEU	186	259	424	468	552	680	823	970	784	959	924
OAS	83	124	118	178	167	139	171	182	158	150	14
REF	145	165	169	223	209	198	392	350	272	390	426
SSA	111	168	178	185	157	154	151	335	204	183	237
USA	228	287	287	325	287	344	514	517	358	553	690

Table 979: FAOp — Prices—Agriculture—Sunflower (US$05/tDM) [PART 2/3]

37.22 Temperate cereals



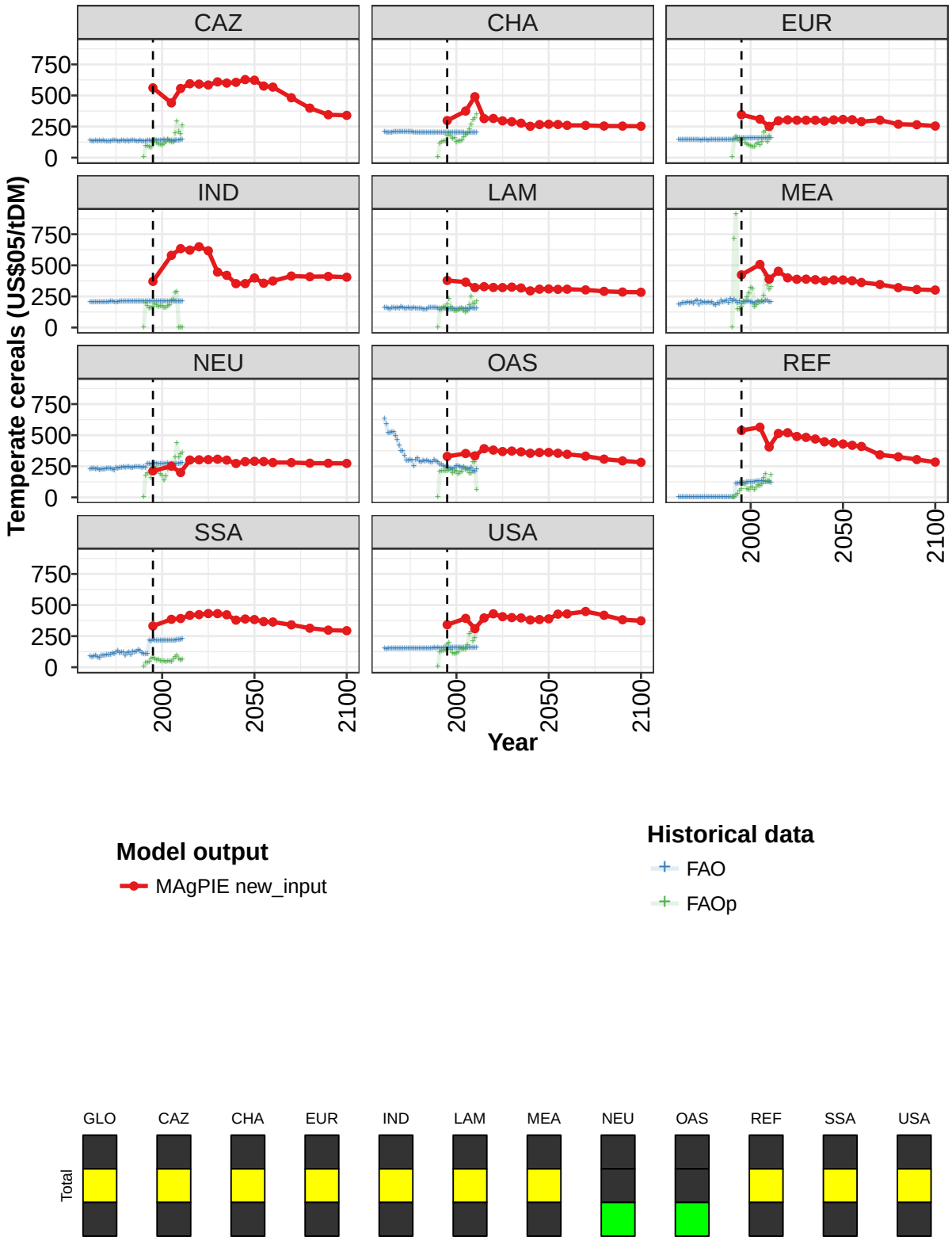


Figure 260: MAgPIE new_input — Prices—Agriculture—Temperate cereals (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	380	412	382	404	402	389	373	364	343	351	356
CAZ	561	440	556	594	591	584	609	600	605	627	623
CHA	298	375	490	314	315	296	289	277	252	266	269
EUR	345	309	251	296	304	301	301	301	294	304	307
IND	371	580	634	622	649	617	446	420	353	353	398
LAM	378	365	322	329	322	321	325	318	295	308	310
MEA	423	507	389	452	399	388	389	384	375	383	382
NEU	213	251	200	300	302	303	307	300	273	288	290
OAS	329	353	334	392	380	369	373	366	355	360	361
REF	538	564	405	514	520	490	483	469	447	439	429
SSA	332	385	392	417	423	432	431	422	379	388	383
USA	342	393	310	396	430	407	399	397	380	383	389

Table 980: MAgPIE new_input — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	347	342	335	316	307	302
CAZ	576	567	482	398	345	340
CHA	267	260	259	255	254	253
EUR	305	289	301	269	265	254
IND	356	374	414	408	411	405
LAM	307	308	303	291	286	283
MEA	376	362	346	320	306	301
NEU	288	280	280	275	274	273
OAS	355	347	332	307	294	282
REF	419	409	342	326	304	284
SSA	367	364	341	314	298	294
USA	427	429	448	418	382	373

Table 981: MAgPIE new_input — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	184	183	193	199	205	187	192	193	186	169	155
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 982: WBGEM — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	158	160	273	301	232	199	146	149	233	234	232
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 983: WBGEM — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	206	217	222	208	161	137	167	190	151	145	165
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 984: WBGEM — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	156	167	178	206	169	148	135	137	156	186	178
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 985: WBGEM — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	172	165	190	253	304	217	231	281	192	180	154
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 986: WBGEM — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 5/6]

	2015	2016
GLO	155	134
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 987: WBGEM — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	132	131	136	126	135	121	128	125	126	119	123
CAZ	136	132	131	134	129	133	131	136	131	129	127
CHA	204	201	201	201	201	203	202	202	204	204	203
EUR	138	141	140	140	142	141	141	140	140	140	140
IND	202	202	203	203	203	203	203	203	204	204	204
LAM	153	155	148	146	154	154	151	155	153	161	156
MEA	182	181	193	192	193	198	193	201	190	205	213
NEU	222	229	226	225	226	219	221	225	223	231	228
OAS	632	587	514	517	521	523	492	457	416	369	371
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	84	75	83	89	76	69	89	93	94	95	96
USA	145	145	145	146	146	146	147	147	146	146	147

Table 988: FAO — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	124	114	120	133	121	121	119	132	128	134	132
CAZ	126	132	133	132	130	128	136	137	130	132	126
CHA	203	203	203	203	202	201	202	201	201	201	200
EUR	140	138	139	141	139	138	139	141	142	141	141
IND	204	204	204	204	204	204	204	205	205	205	205
LAM	149	151	155	150	147	156	150	150	151	149	143
MEA	179	210	193	202	193	203	195	203	185	177	197
NEU	230	221	214	236	232	234	237	243	237	243	239
OAS	331	291	289	299	292	251	296	314	284	282	293
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	97	107	104	117	128	112	114	113	91	111	116
USA	148	148	149	149	150	149	149	150	151	150	151

Table 989: FAO — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	133	139	136	133	134	137	135	131	141	160	163
CAZ	137	137	133	131	129	134	131	131	129	132	132
CHA	200	200	199	198	199	198	198	198	198	199	198
EUR	140	142	141	142	142	142	141	140	142	146	153
IND	205	205	205	205	205	205	205	205	205	205	205
LAM	145	146	154	155	156	155	154	151	152	150	150
MEA	190	214	199	206	212	194	227	205	218	204	194
NEU	236	238	242	244	242	240	237	239	238	269	267
OAS	285	294	288	277	281	297	285	282	263	262	250
REF	0	0	0	0	0	0	0	0	0	110	111
SSA	97	121	118	124	133	126	107	103	103	104	210
USA	150	150	150	150	150	152	151	152	151	151	152

Table 990: FAO — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	165	166	166	164	169	168	169	165	167	170	168
CAZ	128	133	135	134	136	137	136	139	133	139	136
CHA	197	197	197	197	197	197	198	196	196	197	196
EUR	153	152	153	152	152	152	155	153	154	155	154
IND	205	205	205	205	205	205	205	205	205	205	205
LAM	148	149	144	145	147	143	143	145	148	148	146
MEA	205	187	204	199	205	208	202	193	189	202	209
NEU	263	264	271	264	265	267	270	266	267	271	265
OAS	240	234	235	230	225	235	246	250	243	235	244
REF	111	113	111	112	119	120	122	118	121	127	124
SSA	208	219	211	210	210	211	215	212	215	212	212
USA	152	152	152	152	152	153	152	153	152	153	153

Table 991: FAO — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	168	170	168	165	167	170	167
CAZ	138	130	132	136	138	140	142
CHA	195	195	196	196	196	195	196
EUR	153	155	155	155	153	154	154
IND	205	205	205	205	205	205	205
LAM	149	145	144	154	153	147	147
MEA	199	205	201	214	212	204	201
NEU	269	269	269	270	270	271	270
OAS	227	229	222	237	207	205	221
REF	125	128	125	119	123	121	115
SSA	211	212	209	219	216	221	223
USA	153	153	153	153	153	153	153

Table 992: FAO — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 5/5]

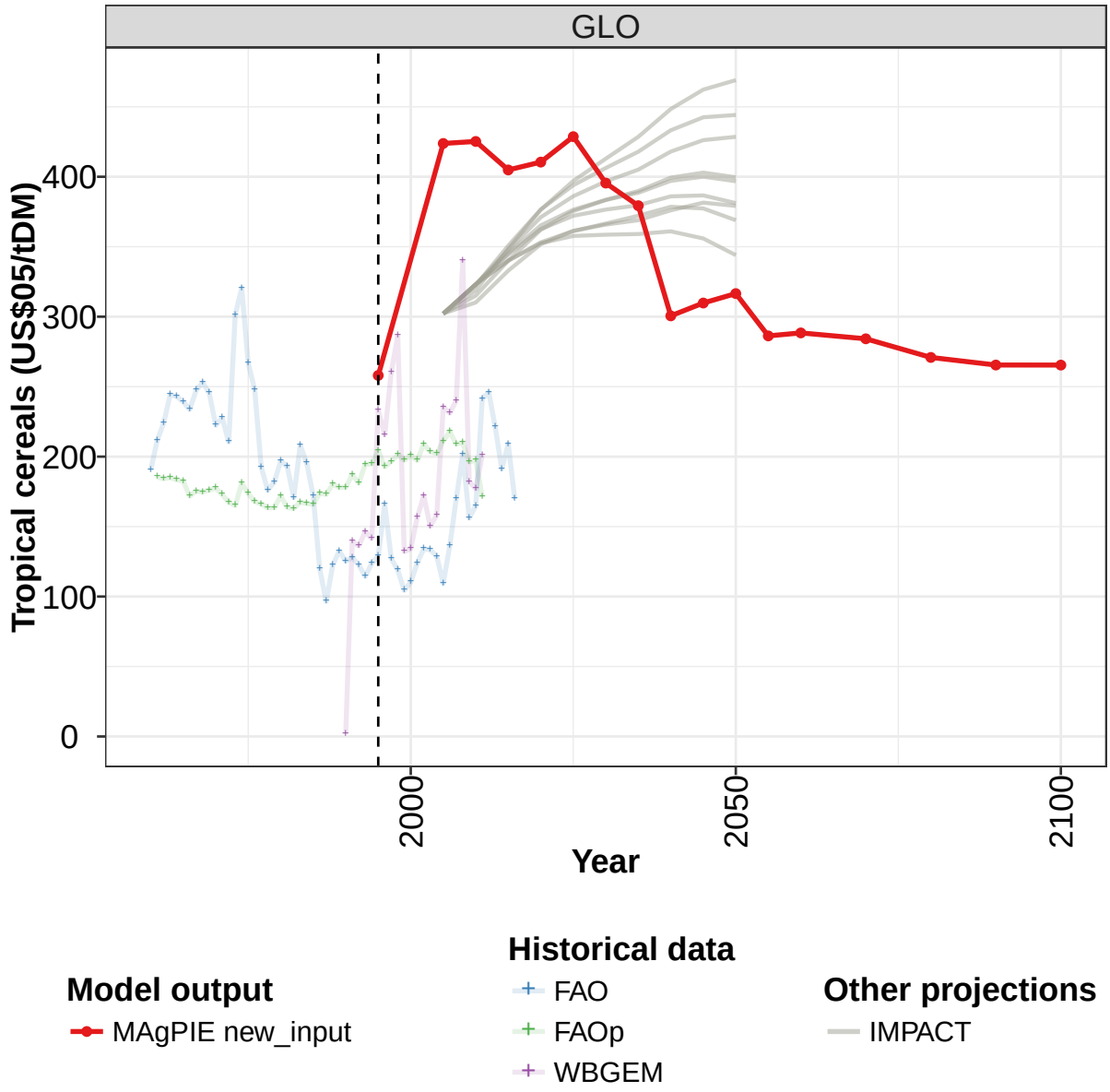
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	140	151	114	118	143	163	137	124	119	114
CAZ	0	88	91	81	75	120	144	116	106	100	96
CHA	0	111	124	128	127	175	190	169	150	152	119
EUR	0	149	167	139	131	139	146	118	104	97	91
IND	0	192	171	153	155	166	185	173	163	168	168
LAM	0	136	144	160	154	181	224	163	141	132	134
MEA	0	708	908	147	145	161	207	210	241	273	318
NEU	0	170	190	192	152	204	244	211	200	183	169
OAS	0	205	211	209	212	209	218	217	191	202	212
REF	0	0	13	28	50	64	112	103	63	57	75
SSA	0	33	35	37	65	71	63	50	60	47	48
USA	0	117	129	131	137	182	192	138	108	103	108

Table 993: FAOp — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	112	106	128	135	132	149	205	237	168	184	216
CAZ	106	124	144	129	119	121	189	288	203	185	257
CHA	129	127	137	159	179	193	225	260	298	310	346
EUR	86	82	106	114	99	122	198	211	125	168	227
IND	158	158	170	178	214	223	275	282	0	0	0
LAM	138	142	149	130	119	130	176	247	191	187	209
MEA	308	163	175	198	200	209	250	414	335	302	322
NEU	136	167	225	251	269	248	321	432	318	341	355
OAS	185	195	203	233	220	215	190	193	282	279	56
REF	75	58	74	96	87	101	154	185	127	128	177
SSA	45	42	45	45	41	59	79	91	66	55	59
USA	115	147	141	139	141	174	263	280	204	233	298

Table 994: FAOp — Prices—Agriculture—Temperate cereals (US$05/tDM) [PART 2/3]

37.23 Tropical cereals



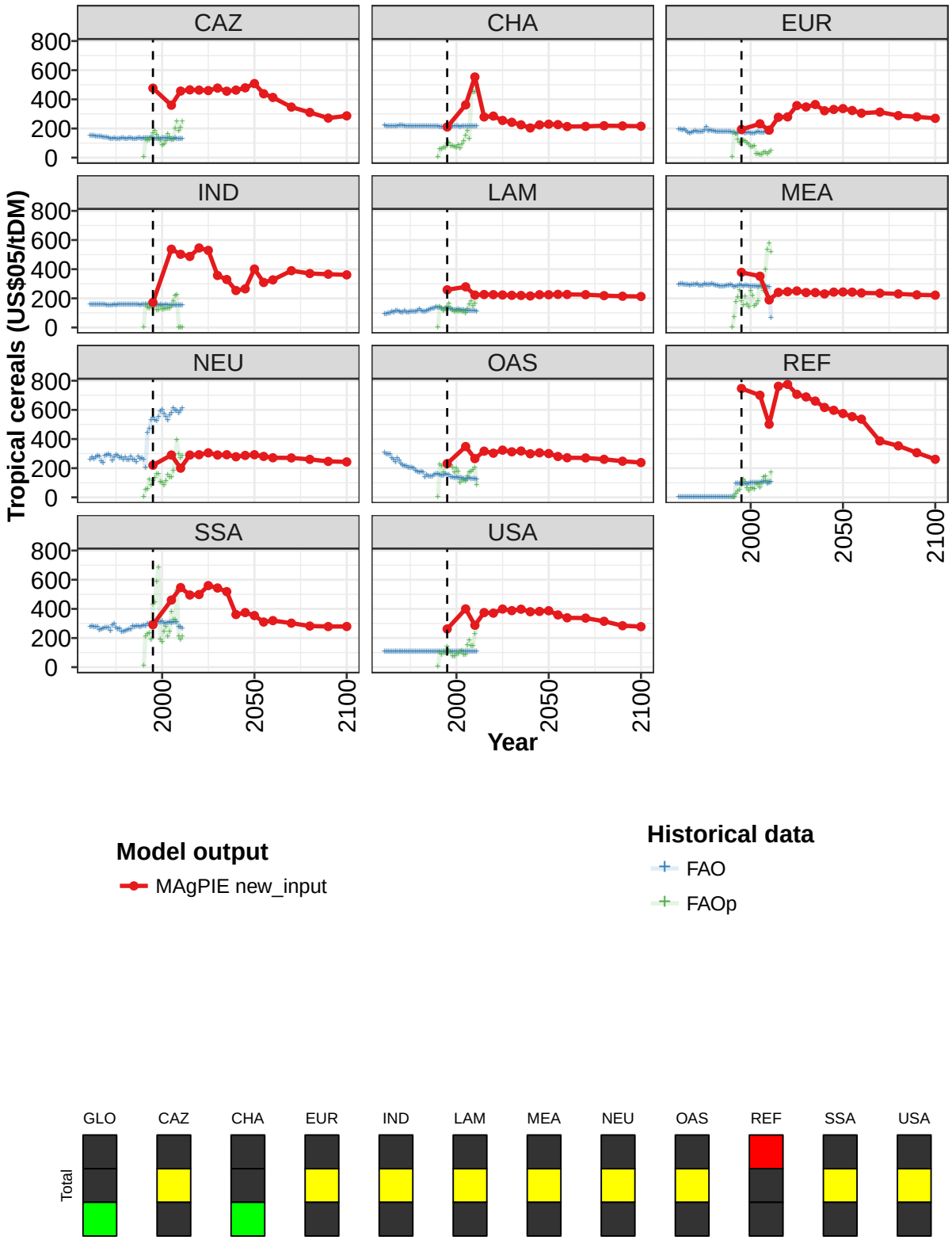


Figure 261: MAgPIE new_input — Prices—Agriculture—Tropical cereals (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	258	424	425	405	410	429	396	379	301	310	317
CAZ	477	360	457	465	463	460	477	456	463	479	508
CHA	210	362	554	280	285	255	243	225	204	225	230
EUR	194	232	189	277	280	357	348	364	322	331	337
IND	172	537	502	488	545	529	357	329	254	265	401
LAM	259	279	223	226	225	223	221	220	216	225	225
MEA	378	352	189	241	246	251	240	240	230	243	244
NEU	220	290	200	290	292	305	290	292	279	288	292
OAS	232	349	266	317	303	324	312	318	299	306	300
REF	747	701	502	762	775	707	689	660	617	597	575
SSA	292	461	546	495	498	560	543	518	361	375	354
USA	262	400	288	375	371	399	388	398	380	383	387

Table 995: MAgPIE new_input — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	286	288	284	271	265	265
CAZ	438	413	347	310	271	287
CHA	227	214	215	219	218	216
EUR	323	305	313	289	280	270
IND	309	327	390	370	366	361
LAM	227	227	225	218	214	213
MEA	242	237	235	230	224	222
NEU	281	272	270	260	247	243
OAS	280	271	270	261	248	238
REF	554	537	387	353	306	261
SSA	310	320	302	282	279	279
USA	359	339	337	315	284	278

Table 996: MAgPIE new_input — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	190	212	224	244	243	239	234	248	253	246	222
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 997: WBGEM — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	228	210	301	320	267	248	193	176	182	197	193
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 998: WBGEM — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	171	208	195	172	120	96	122	133	125	128	123
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 999: WBGEM — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	114	124	129	166	127	119	104	110	124	134	133
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1000: WBGEM — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	129	109	136	170	201	156	165	241	246	221	191
CAZ											
CHA											
EUR											
IND											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1001: WBGEM — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 5/6]

	2015	2016
GLO	209	170
CAZ		
CHA		
EUR		
IND		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1002: WBGEM — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	185	184	185	183	182	172	175	175	176	178	173
CAZ	146	148	147	145	145	143	141	137	136	135	132
CHA	217	214	215	215	214	216	216	216	216	217	216
EUR	194	194	187	193	181	170	166	171	175	180	174
IND	153	154	153	153	153	153	153	154	153	151	152
LAM	89	89	94	96	105	101	110	111	108	103	101
MEA	291	294	295	293	290	293	287	291	293	293	294
NEU	257	272	259	270	285	279	245	234	281	285	292
OAS	307	293	295	290	267	254	239	267	251	229	216
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	275	278	271	274	275	252	258	264	267	269	266
USA	104	104	104	104	104	104	104	104	104	104	104

Table 1003: FAO — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	167	165	181	174	168	166	163	164	172	164	163
CAZ	128	129	130	128	128	128	132	130	127	128	129
CHA	214	213	214	212	210	213	213	213	213	214	215
EUR	174	174	174	184	208	178	184	181	180	177	177
IND	152	152	154	152	153	154	153	154	153	153	154
LAM	112	103	100	108	108	105	106	109	122	110	106
MEA	285	285	288	295	291	291	291	294	289	288	287
NEU	281	249	272	287	282	267	274	256	270	254	253
OAS	210	213	201	203	199	197	181	172	167	172	167
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	246	284	295	269	257	260	239	242	244	249	257
USA	104	104	104	104	104	104	104	104	104	104	104

Table 1004: FAO — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	168	167	166	174	173	180	178	178	187	181	195
CAZ	130	128	127	128	129	130	127	132	129	129	129
CHA	214	214	215	212	211	210	212	211	209	209	210
EUR	176	178	174	177	176	174	174	169	169	164	165
IND	153	153	154	153	155	152	153	153	153	153	154
LAM	107	110	115	123	129	130	138	134	133	130	122
MEA	278	278	279	282	287	285	290	286	277	282	282
NEU	275	255	253	239	274	261	265	256	202	439	467
OAS	136	151	141	139	143	154	155	155	152	148	145
REF	0	0	0	0	0	0	0	0	0	95	93
SSA	255	279	272	278	279	271	280	282	281	293	296
USA	104	104	104	104	104	104	104	104	104	104	104

Table 1005: FAO — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	195	204	193	197	201	197	201	197	209	204	202
CAZ	130	130	127	128	129	128	129	129	129	128	128
CHA	207	208	209	208	211	211	212	211	210	210	212
EUR	172	169	167	166	169	168	166	166	165	169	177
IND	152	153	153	151	152	153	151	151	153	150	151
LAM	129	134	131	125	118	118	118	121	119	116	116
MEA	289	286	282	285	283	282	281	281	280	278	275
NEU	529	542	529	523	548	587	599	570	551	526	558
OAS	156	152	151	135	137	129	136	132	129	129	126
REF	93	91	92	91	88	94	98	95	99	95	95
SSA	291	302	299	307	304	304	311	295	301	303	307
USA	104	104	104	104	104	105	104	105	104	105	105

Table 1006: FAO — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	211	218	209	210	196	197	171
CAZ	126	127	129	126	127	128	128
CHA	211	211	213	211	212	210	212
EUR	169	167	168	176	172	176	181
IND	151	151	150	151	152	150	150
LAM	112	114	112	109	112	112	106
MEA	280	283	283	280	275	276	60
NEU	577	610	592	592	575	593	607
OAS	120	124	128	123	125	126	122
REF	100	100	105	109	93	95	102
SSA	303	304	303	308	273	274	260
USA	105	105	105	105	104	105	105

Table 1007: FAO — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 5/5]

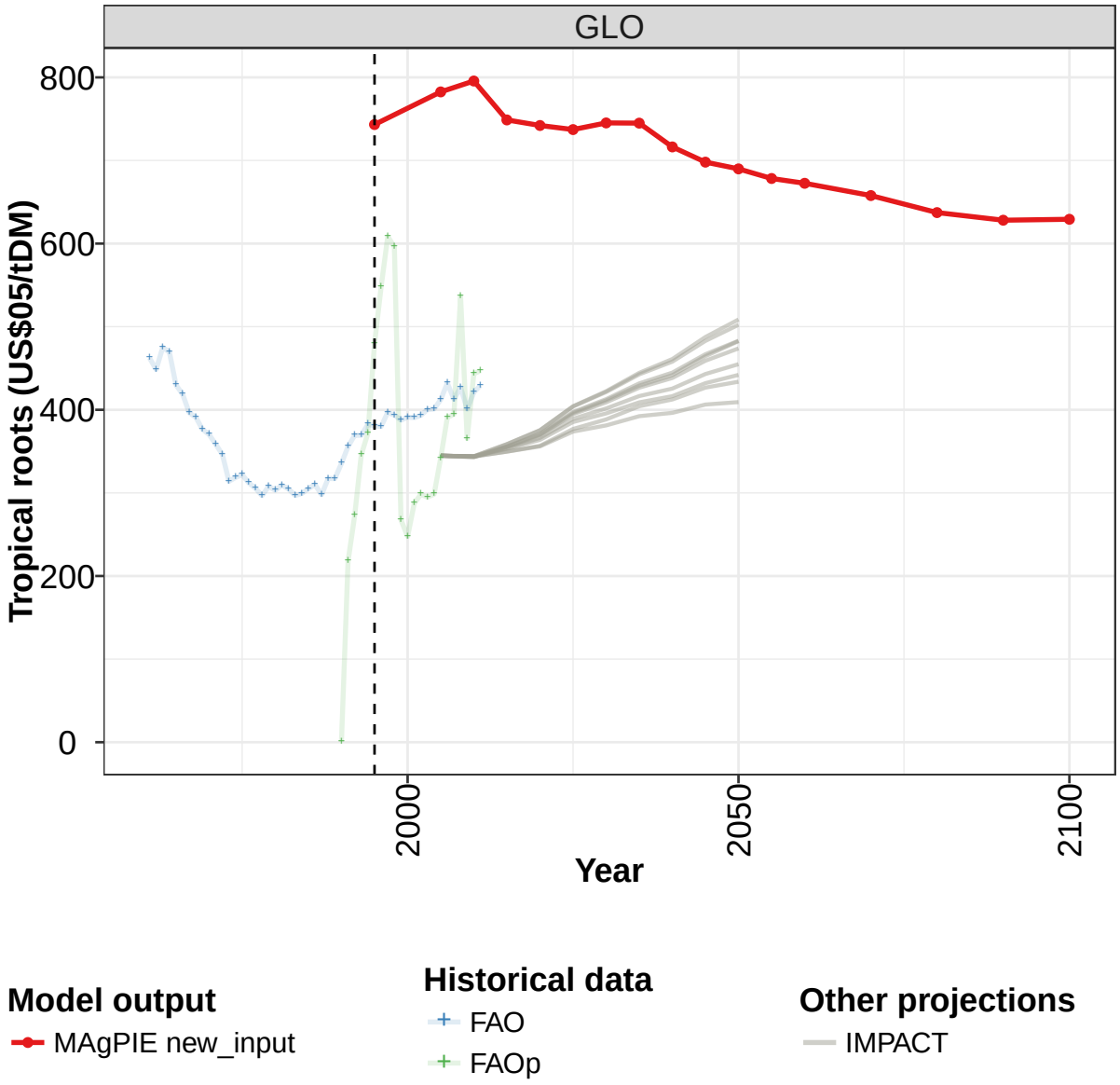
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	2	139	136	146	141	233	216	260	286	132	134
CAZ	0	119	118	121	139	165	181	155	125	113	83
CHA	0	56	57	66	64	92	98	77	78	70	67
EUR	0	167	159	119	101	104	117	110	97	88	70
IND	0	155	134	129	141	147	143	115	117	146	122
LAM	0	137	128	112	123	136	162	126	115	104	112
MEA	0	66	172	204	251	178	147	210	153	137	249
NEU	0	49	53	121	79	106	130	156	155	100	96
OAS	0	221	213	165	205	229	222	218	203	171	193
REF	0	0	21	37	47	80	120	101	60	43	60
SSA	7	210	223	230	186	426	441	586	682	184	173
USA	0	100	83	102	94	140	103	97	73	71	86

Table 1008: FAOp — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	157	172	150	158	235	231	240	340	182	177	201
CAZ	89	110	157	138	119	120	197	244	182	200	244
CHA	84	63	90	112	147	180	126	458	447	446	498
EUR	73	76	22	24	20	17	32	33	22	34	44
IND	123	129	128	128	147	178	213	222	0	0	0
LAM	107	110	107	106	95	123	154	175	142	159	223
MEA	217	146	157	176	357	273	248	395	530	574	514
NEU	81	108	152	134	134	178	249	389	293	266	284
OAS	172	99	114	113	108	139	168	175	184	202	82
REF	59	52	100	86	64	91	134	138	103	105	168
SSA	241	273	211	240	376	320	323	522	210	189	209
USA	87	105	108	81	85	149	183	143	144	225	269

Table 1009: FAOp — Prices—Agriculture—Tropical cereals (US$05/tDM) [PART 2/3]

37.24 Tropical roots



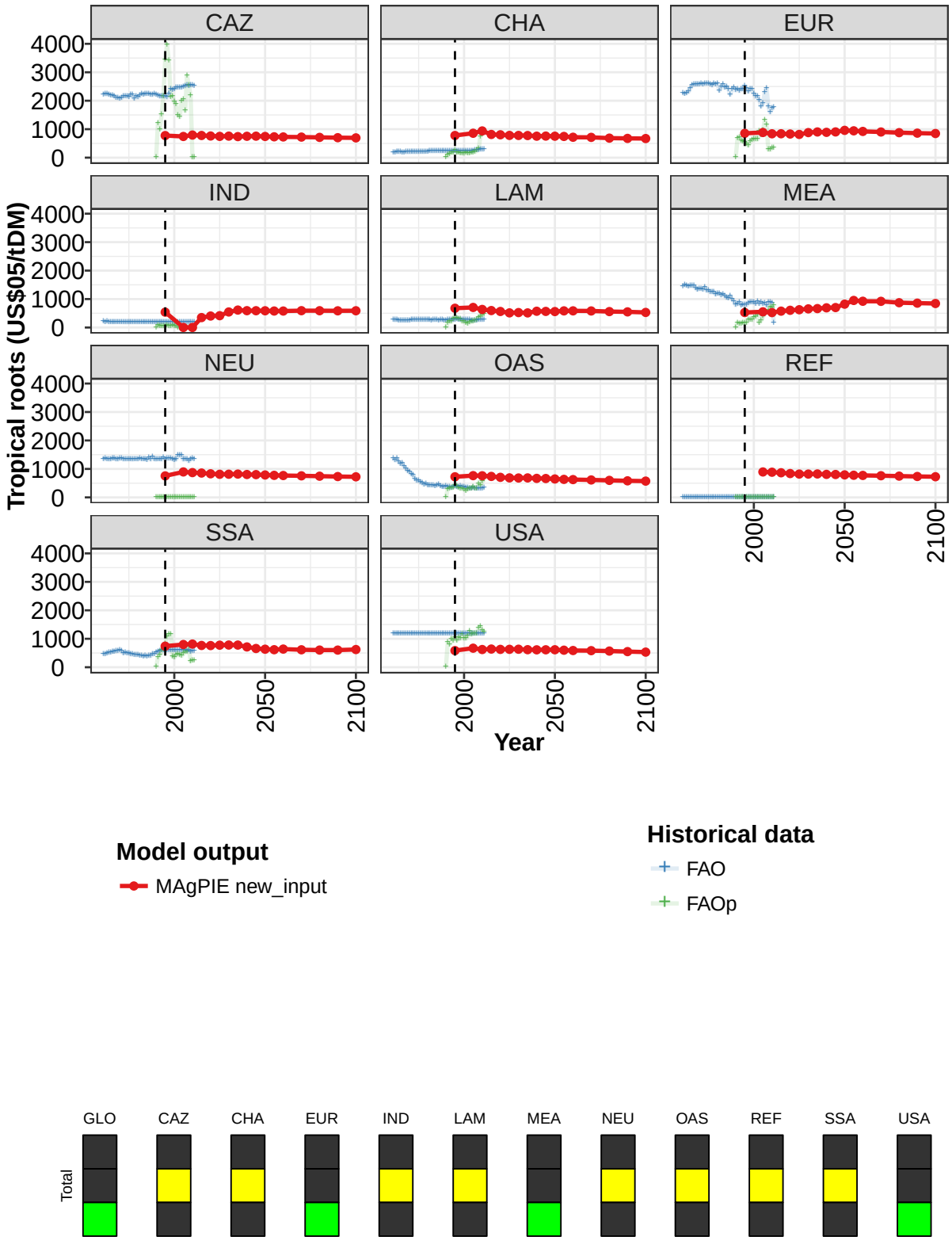


Figure 262: MAgPIE new_input — Prices—Agriculture—Tropical roots (US$05/tDM)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	743	783	796	749	742	737	745	745	716	698	690
CAZ	777	744	794	780	762	748	757	741	752	756	745
CHA	779	859	939	816	804	782	781	777	755	759	754
EUR	855	884	839	840	831	817	881	903	890	905	960
IND	540	2	2	350	404	416	547	614	592	591	589
LAM	678	706	636	596	565	516	525	514	573	567	561
MEA	528	553	525	576	606	626	656	666	693	701	822
NEU	755	894	871	855	829	812	814	819	805	800	787
OAS	724	764	759	737	705	685	682	684	668	663	648
REF		894	884	865	837	820	819	824	809	804	791
SSA	741	799	815	766	762	776	781	779	714	659	634
USA	585	670	623	639	628	630	634	617	612	614	615

Table 1010: MAgPIE new_input — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	678	673	658	637	628	629
CAZ	733	728	723	713	702	696
CHA	746	718	713	687	677	672
EUR	944	922	902	879	861	849
IND	580	580	592	591	588	589
LAM	585	586	583	560	551	530
MEA	952	923	920	872	857	844
NEU	774	768	758	745	732	723
OAS	633	625	613	597	582	572
REF	778	772	761	748	735	726
SSA	617	639	614	604	603	623
USA	599	588	583	569	550	532

Table 1011: MAgPIE new_input — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	462	449	475	469	430	419	396	391	376	370	358
CAZ	2217	2222	2222	2201	2188	2173	2145	2105	2085	2070	2095
CHA	184	185	188	189	186	183	184	188	188	187	192
EUR	2259	2241	2267	2310	2438	2544	2557	2569	2573	2575	2586
IND	203	196	197	188	191	187	190	191	195	189	190
LAM	258	256	253	248	247	251	250	246	247	251	259
MEA	1439	1488	1458	1442	1453	1455	1450	1372	1322	1356	1356
NEU	1327	1349	1341	1334	1334	1352	1352	1330	1331	1352	1352
OAS	1373	1296	1349	1242	1176	1205	1093	1009	914	877	809
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	457	458	480	497	511	537	546	552	577	589	554
USA	1183	1181	1183	1184	1181	1182	1181	1183	1181	1182	1185

Table 1012: FAO — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	347	314	319	322	312	306	297	308	303	309	305
CAZ	2163	2163	2140	2133	2208	2202	2070	2151	2109	2167	2238
CHA	196	189	193	194	199	199	199	207	213	223	222
EUR	2569	2602	2597	2605	2560	2532	2593	2574	2598	2350	2495
IND	186	184	185	186	187	185	187	186	184	186	189
LAM	260	261	261	259	257	258	258	257	258	256	248
MEA	1323	1409	1289	1298	1237	1239	1244	1154	1193	1195	1120
NEU	1332	1336	1339	1341	1341	1327	1344	1342	1337	1349	1342
OAS	784	640	577	580	513	498	442	481	425	427	418
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	492	495	485	488	448	439	433	425	424	408	404
USA	1184	1183	1182	1181	1180	1183	1181	1179	1181	1178	1177

Table 1013: FAO — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	297	299	305	310	298	317	317	335	356	369	369
CAZ	2206	2229	2237	2238	2201	2196	2230	2207	2180	2137	2157
CHA	221	225	226	227	217	221	220	219	221	223	219
EUR	2564	2450	2488	2411	2213	2388	2455	2360	2409	2339	2404
IND	188	186	187	187	189	184	186	185	184	182	184
LAM	253	257	256	251	252	253	248	251	258	264	266
MEA	1170	1100	1033	1030	1102	997	916	785	823	884	779
NEU	1342	1339	1311	1377	1327	1411	1338	1327	1344	1344	1329
OAS	419	400	414	443	398	371	363	380	367	361	331
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	379	383	379	386	392	453	459	500	543	570	590
USA	1178	1178	1177	1178	1179	1181	1180	1177	1180	1180	1179

Table 1014: FAO — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	383	381	380	397	394	387	391	391	393	400	401
CAZ	2144	2135	2108	2226	2391	2381	2412	2446	2462	2466	2456
CHA	224	223	218	230	224	220	225	227	229	234	232
EUR	2388	2497	2436	2316	2403	2397	2236	2136	2155	2023	1799
IND	182	182	183	182	179	182	181	179	180	183	182
LAM	267	266	285	269	270	269	261	263	254	253	244
MEA	798	792	785	848	885	880	891	831	906	828	868
NEU	1377	1327	1349	1361	1358	1347	1311	1327	1475	1475	1475
OAS	364	378	359	362	383	362	352	341	343	315	313
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	598	598	600	600	596	596	592	581	579	589	585
USA	1177	1179	1177	1176	1178	1179	1178	1177	1178	1174	1174

Table 1015: FAO — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	412	432	413	427	401	421	429
CAZ	2486	2502	2528	2514	2536	2536	2513
CHA	236	260	269	266	271	276	273
EUR	1892	2279	2429	1782	1588	1724	1749
IND	179	178	177	177	176	178	177
LAM	243	248	245	253	263	261	266
MEA	826	842	778	886	866	857	163
NEU	1321	1346	1341	1264	1347	1352	1336
OAS	335	313	297	311	295	309	330
REF	0	0	0	0	0	0	0
SSA	594	603	570	588	541	556	560
USA	1172	1173	1171	1172	1171	1170	1170

Table 1016: FAO — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 5/5]

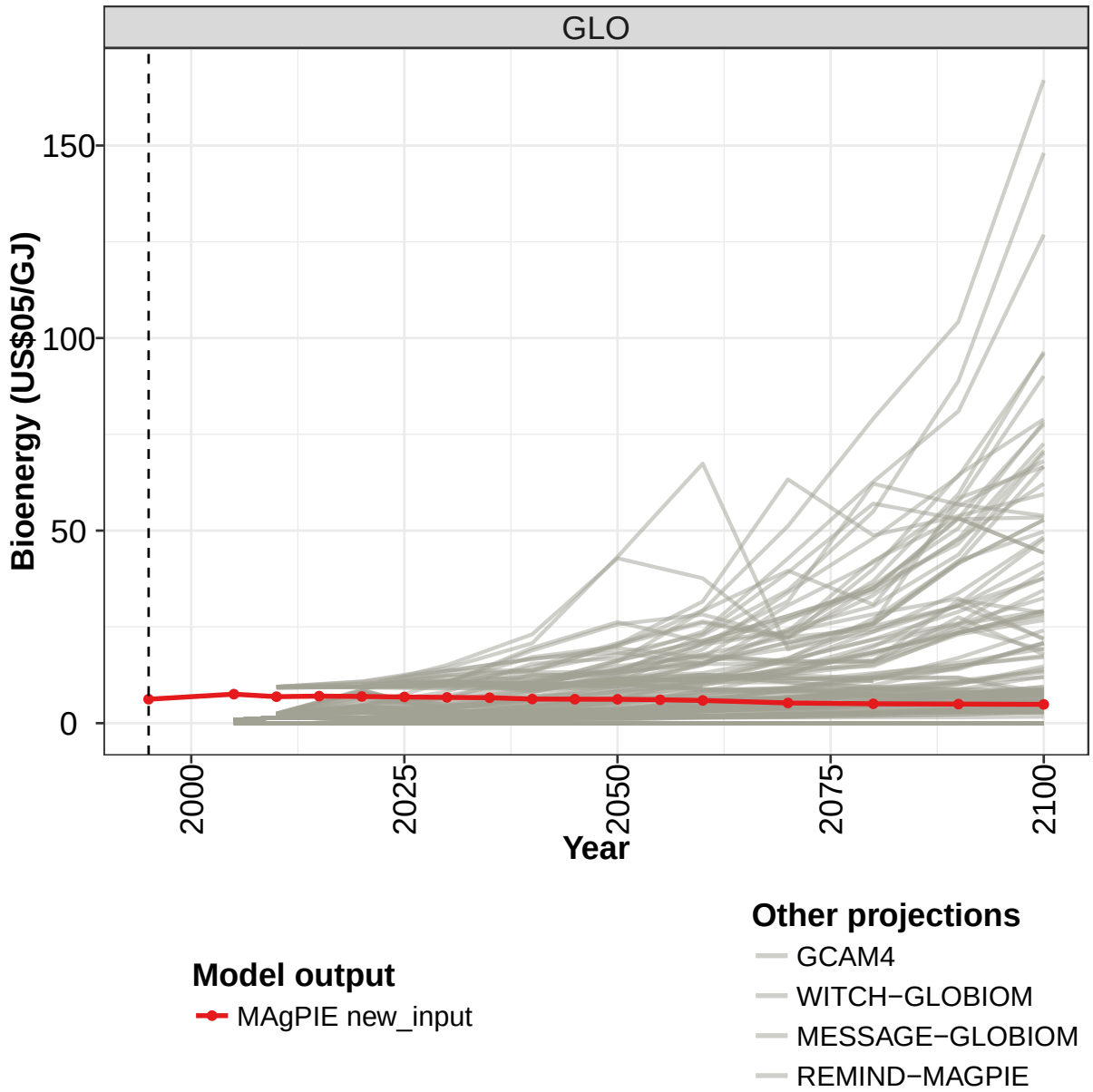
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	218	273	346	372	479	548	608	596	267	248
CAZ	0	1212	985	1510	2152	3426	3969	3403	2132	2154	1940
CHA	0	94	129	176	162	249	166	182	158	154	135
EUR	0	669	705	584	560	525	484	421	550	626	635
IND	0	64	54	46	47	51	63	47	52	57	42
LAM	0	146	217	201	301	315	335	285	284	203	218
MEA	0	164	123	132	147	165	165	272	272	253	352
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	279	313	319	343	404	385	332	292	301	276
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1	346	423	585	620	812	1075	1161	1158	375	339
USA	0	865	796	983	913	1035	937	1028	996	1145	996

Table 1017: FAOp — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	287	298	295	298	342	391	395	536	365	443	447
CAZ	1858	1474	1421	1994	2026	1638	2883	2545	2176	0	0
CHA	176	153	157	179	181	195	242	316	743	934	914
EUR	634	636	930	780	942	1311	1150	272	271	329	350
IND	40	0	0	0	0	0	0	0	0	0	0
LAM	168	132	176	198	207	231	263	340	371	437	471
MEA	364	424	161	243	364	552	524	601	699	697	767
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	232	285	304	304	351	313	318	466	406	544	625
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	422	451	413	397	469	543	527	710	200	237	230
USA	996	1093	1247	1139	1177	1183	1189	1377	1418	1290	1222

Table 1018: FAOp — Prices—Agriculture—Tropical roots (US$05/tDM) [PART 2/3]

38 Bioenergy



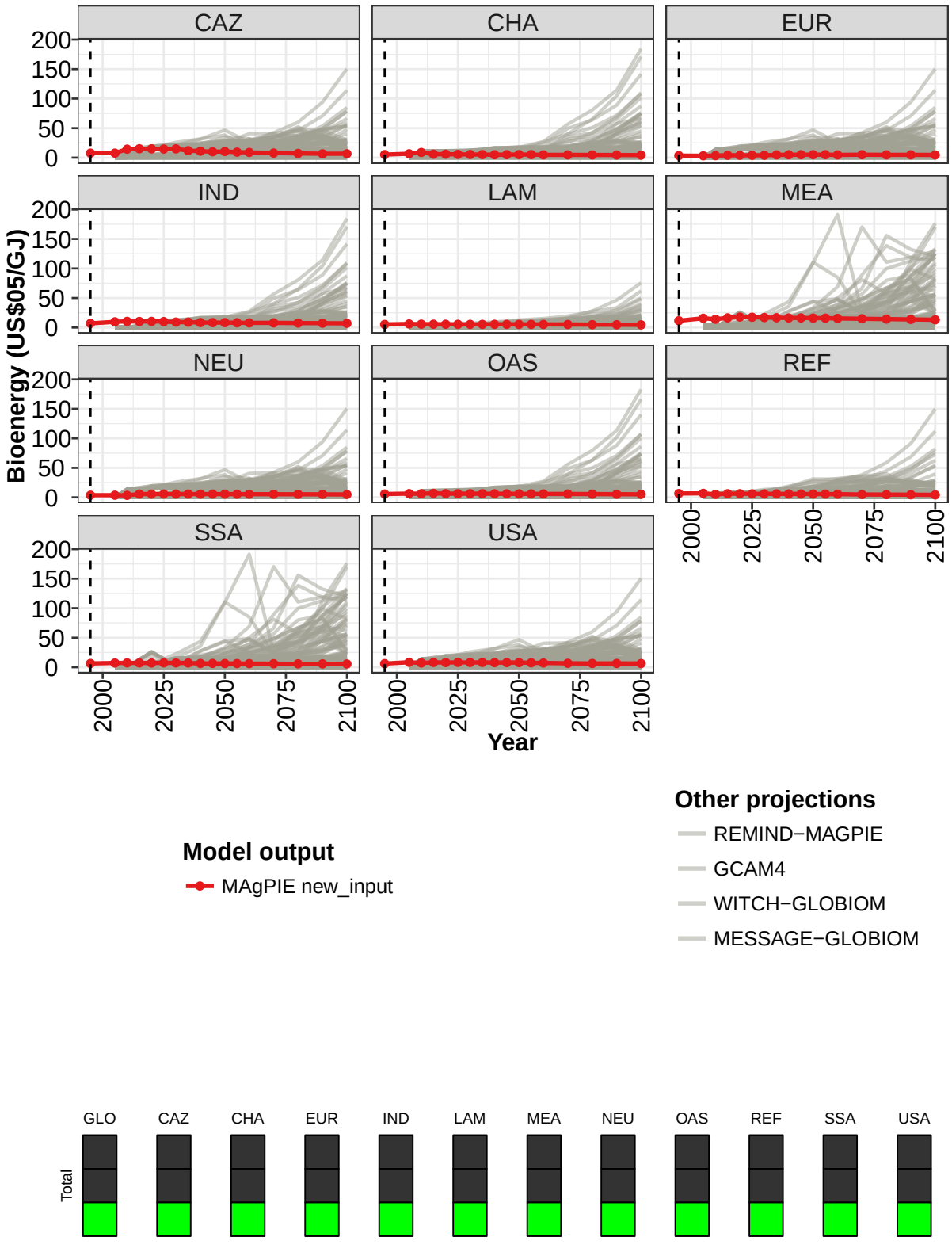


Figure 263: MAgPIE new_input — Prices—Bioenergy (US$05/GJ)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.2	7.5	6.9	7.0	6.9	6.8	6.7	6.6	6.3	6.2	6.2
CAZ	7.7	7.7	14.5	15.1	15.0	14.7	14.9	11.9	11.0	10.1	10.5
CHA	5.2	6.7	8.9	5.9	5.9	5.5	5.4	5.2	4.9	5.1	5.2
EUR	3.5	3.2	3.4	4.1	4.0	4.0	4.1	4.7	4.9	5.0	5.1
IND	7.0	9.6	10.4	10.2	10.4	10.0	9.2	9.1	8.4	8.4	8.4
LAM	5.2	6.1	5.7	5.6	5.6	5.5	5.4	5.4	5.5	5.4	5.4
MEA	11.5	15.7	14.1	16.4	17.8	17.5	16.9	16.6	16.2	16.3	16.0
NEU	3.7	3.7	3.4	5.6	5.5	5.6	5.6	5.6	5.4	5.5	5.5
OAS	5.6	6.3	6.2	6.7	6.3	6.1	6.2	6.2	6.0	6.0	5.9
REF	6.5	6.8	5.1	6.2	6.2	5.9	5.9	5.8	5.7	5.7	5.6
SSA	6.4	7.2	7.4	7.3	7.2	7.4	7.3	7.2	6.4	6.5	6.3
USA	6.1	8.4	7.3	8.1	8.0	8.3	8.1	8.1	7.9	7.9	7.9

Table 1019: MAgPIE new_input — Prices—Bioenergy (US$05/GJ) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	6.1	5.9	5.2	5.0	5.0	4.9
CAZ	9.4	8.9	7.8	7.2	6.6	6.7
CHA	5.2	4.7	4.7	4.6	4.5	4.2
EUR	5.0	4.7	5.0	4.7	4.8	4.6
IND	8.1	7.9	7.9	7.6	7.3	7.1
LAM	5.4	5.3	5.2	4.9	4.8	4.6
MEA	15.8	15.4	14.8	14.3	13.7	13.1
NEU	5.4	5.3	5.2	5.2	5.0	4.9
OAS	5.8	5.8	5.7	5.5	5.3	5.1
REF	5.5	5.4	4.8	4.7	4.5	4.2
SSA	6.2	6.1	5.9	5.8	5.7	5.5
USA	7.6	7.2	6.7	6.4	6.5	6.2

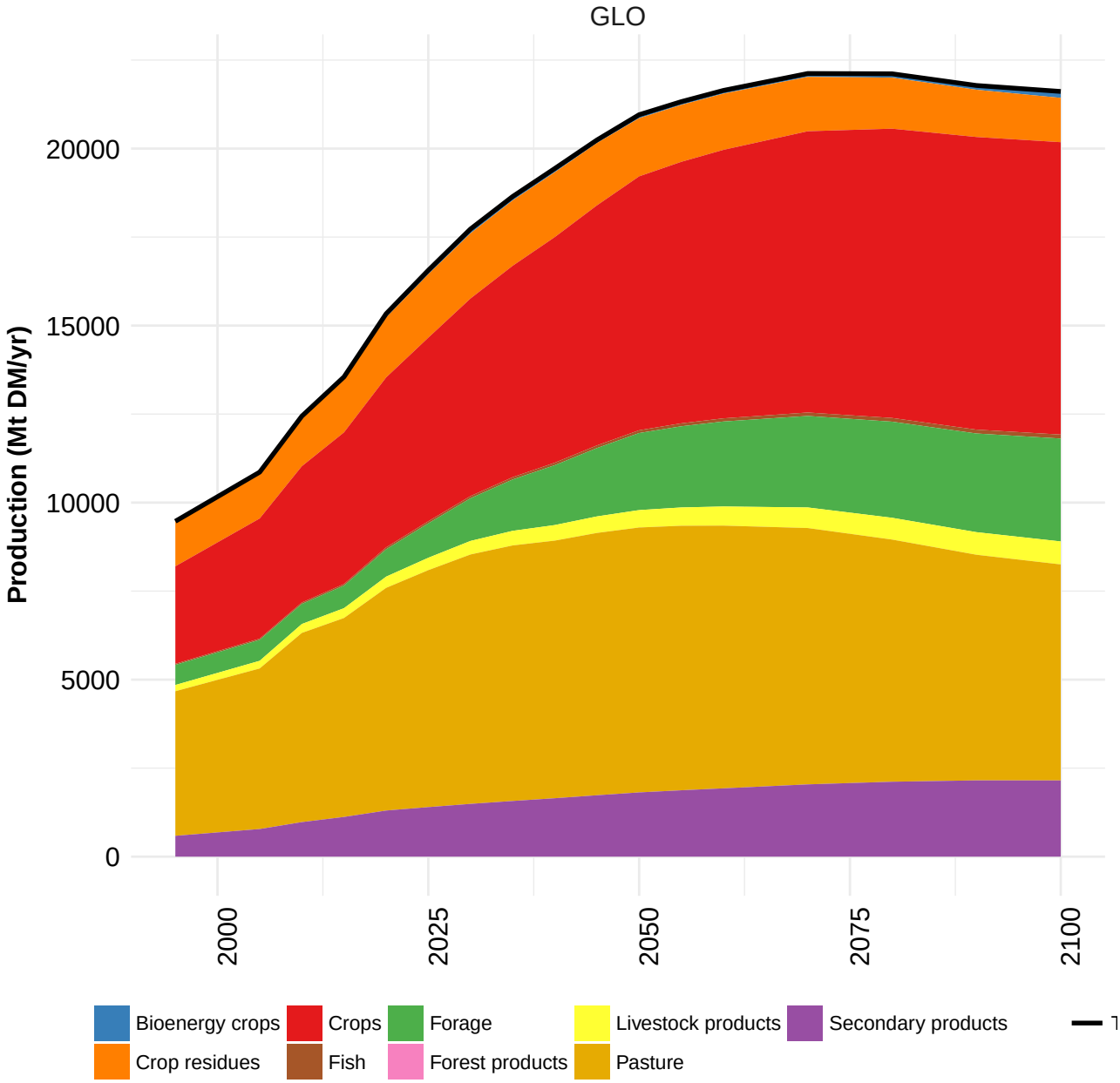
Table 1020: MAgPIE new_input — Prices—Bioenergy (US$05/GJ) [PART 2/2]

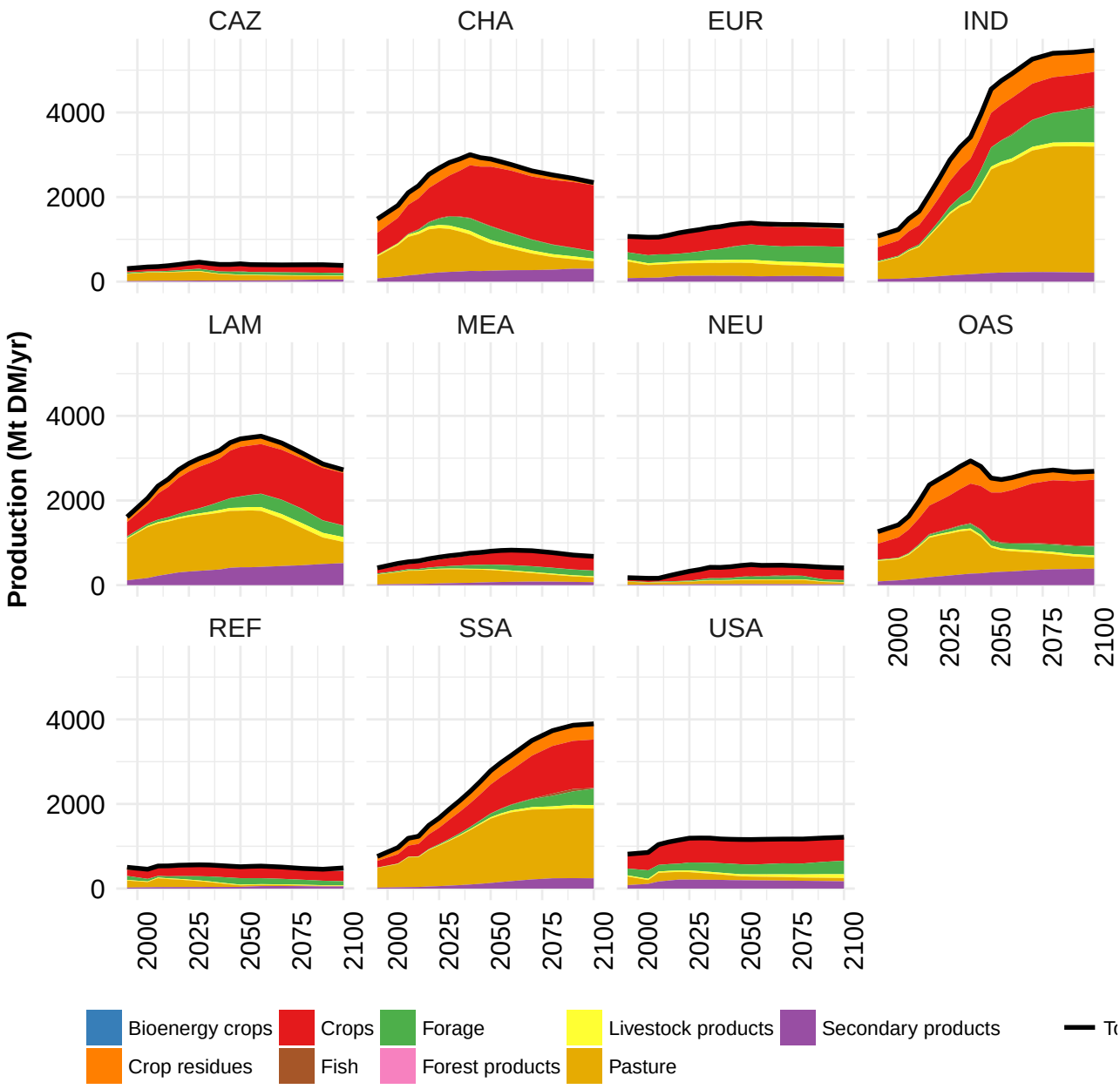
39 GHG Emission

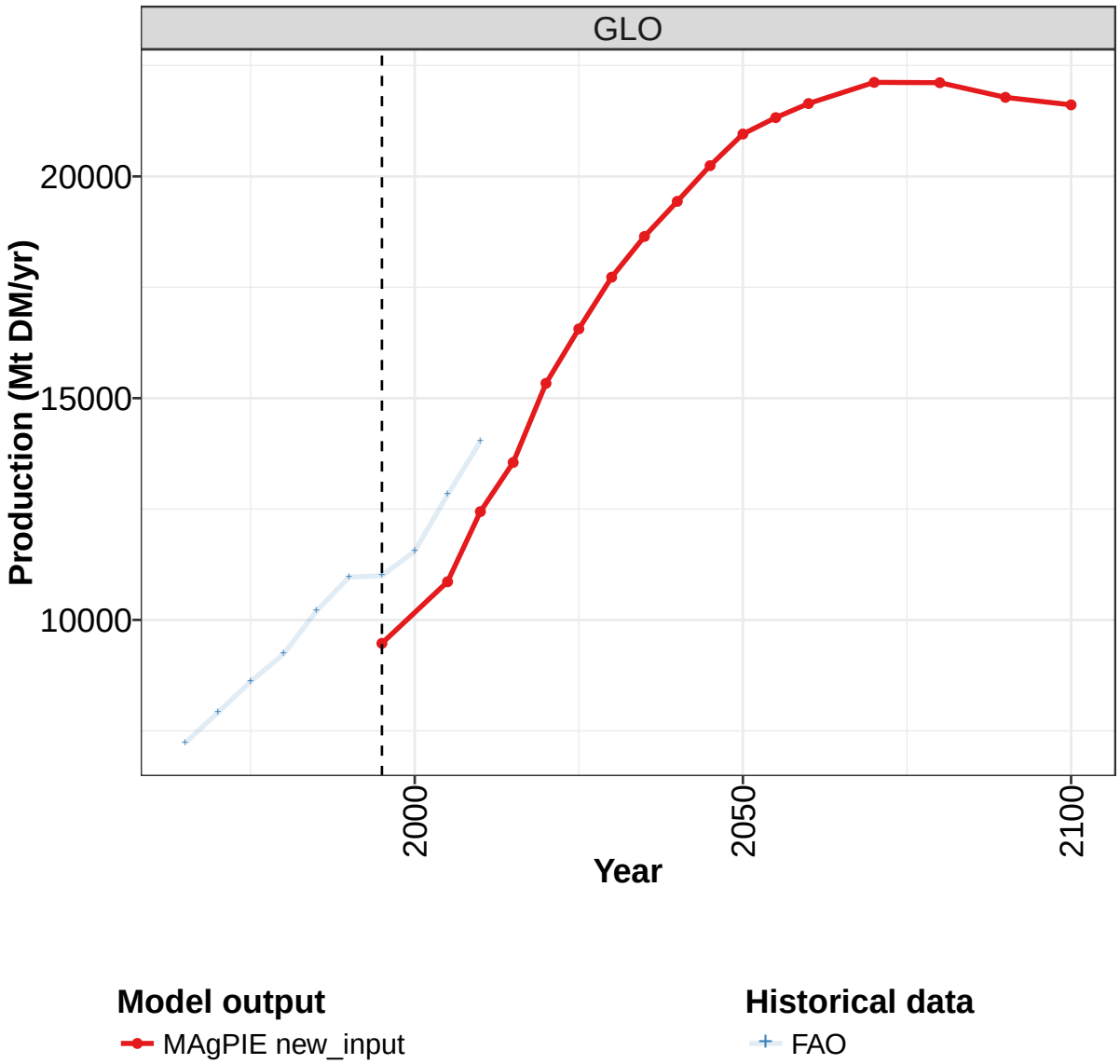
40 Land

41 Water

Part XIV
Production




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production (Mt DM/yr)
0
2000
4000
2000
2025
2050
2075
2100
Bioenergy crops
Crop residues
Crops
Fish
Forage
Forest products
Livestock products
Pasture
Secondary products
To


GLO
Production (Mt DM/yr)
20000
15000
10000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

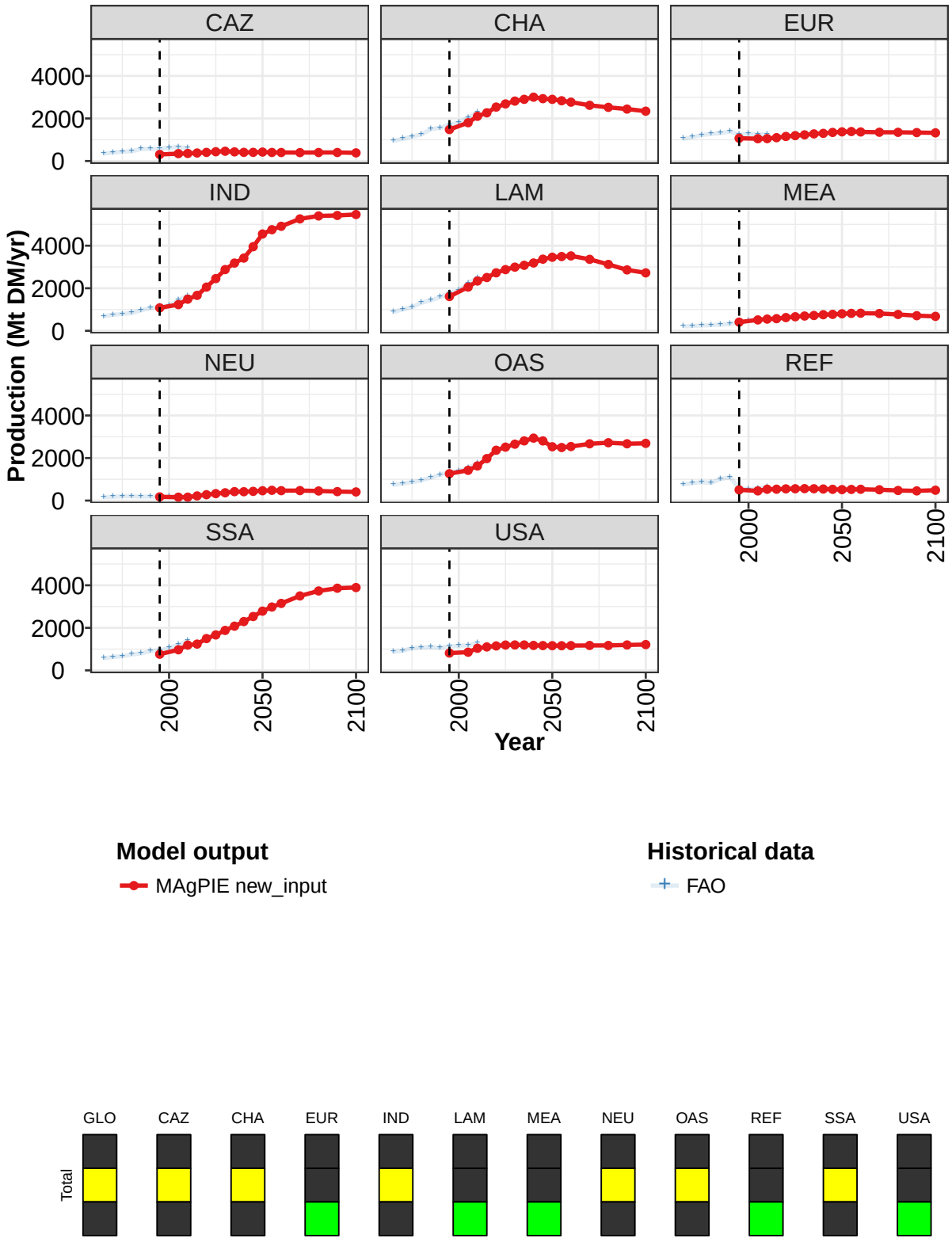


Figure 264: MAgPIE new_input — Production (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	9472	10861	12442	13551	15335	16562	17728	18646	19437	20243	20956
CAZ	309	347	356	377	405	437	461	431	407	407	421
CHA	1480	1802	2102	2266	2535	2684	2817	2900	3002	2932	2899
EUR	1070	1049	1052	1098	1154	1194	1230	1275	1300	1344	1371
IND	1079	1232	1486	1665	2054	2455	2877	3183	3418	3953	4551
LAM	1611	2055	2342	2504	2726	2876	2992	3079	3187	3368	3458
MEA	407	512	551	571	623	661	696	720	756	773	801
NEU	176	161	162	221	276	328	368	421	418	434	464
OAS	1263	1424	1628	1974	2368	2512	2651	2807	2936	2805	2530
REF	503	457	533	536	551	557	562	557	544	530	516
SSA	760	968	1189	1236	1495	1666	1879	2078	2295	2532	2785
USA	814	854	1040	1102	1148	1191	1196	1194	1174	1165	1161

Table 1021: MAgPIE new_input — Production (Mt DM/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	21325	21643	22120	22113	21782	21613
CAZ	403	400	396	399	400	383
CHA	2834	2767	2619	2523	2442	2342
EUR	1386	1366	1353	1350	1337	1325
IND	4752	4912	5260	5399	5422	5468
LAM	3490	3521	3360	3120	2863	2724
MEA	819	827	813	768	711	679
NEU	484	467	470	452	423	407
OAS	2495	2540	2669	2720	2671	2690
REF	525	532	510	476	457	488
SSA	2978	3148	3499	3733	3861	3894
USA	1159	1164	1171	1172	1196	1213

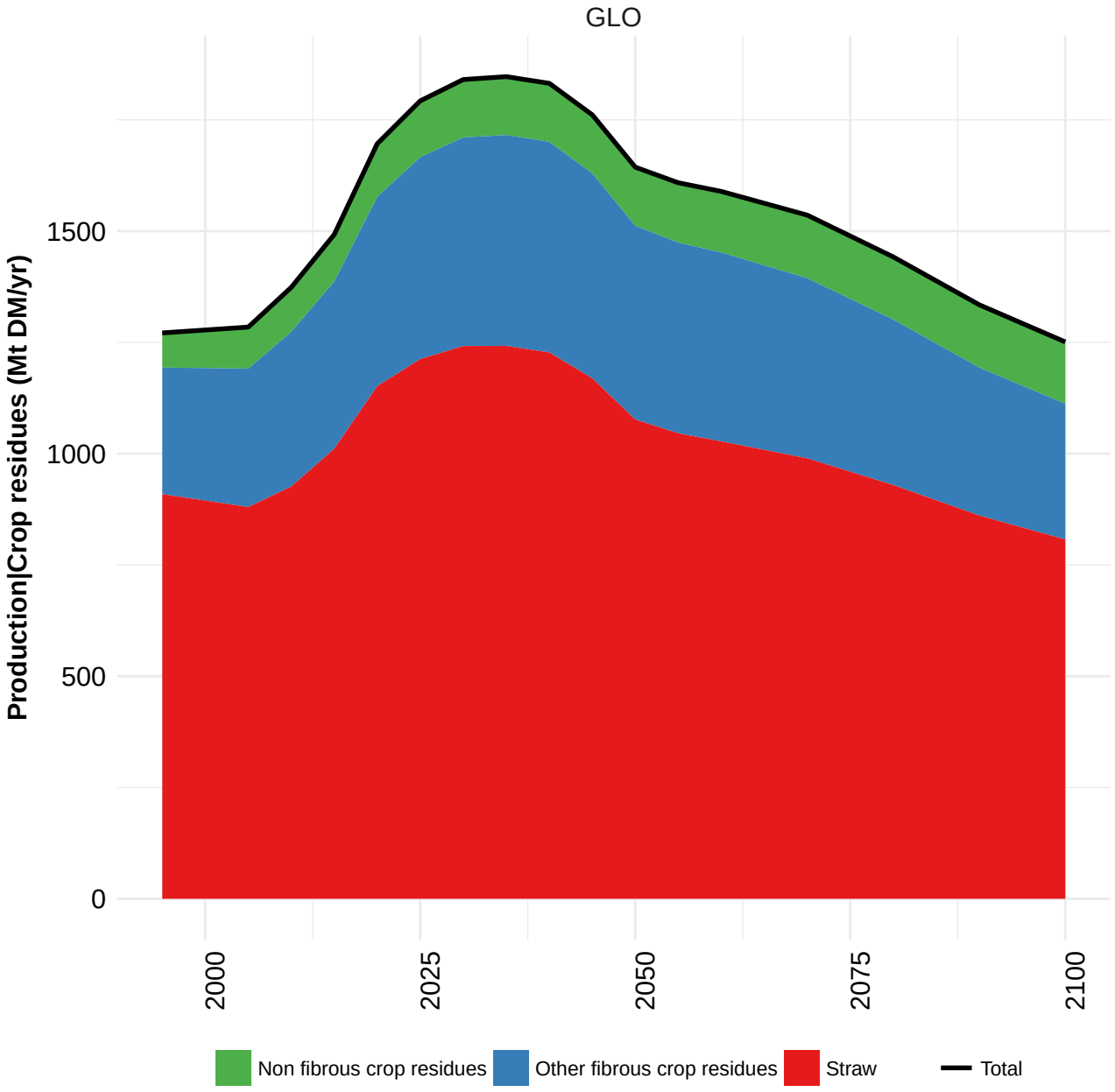
Table 1022: MAgPIE new_input — Production (Mt DM/yr) [PART 2/2]

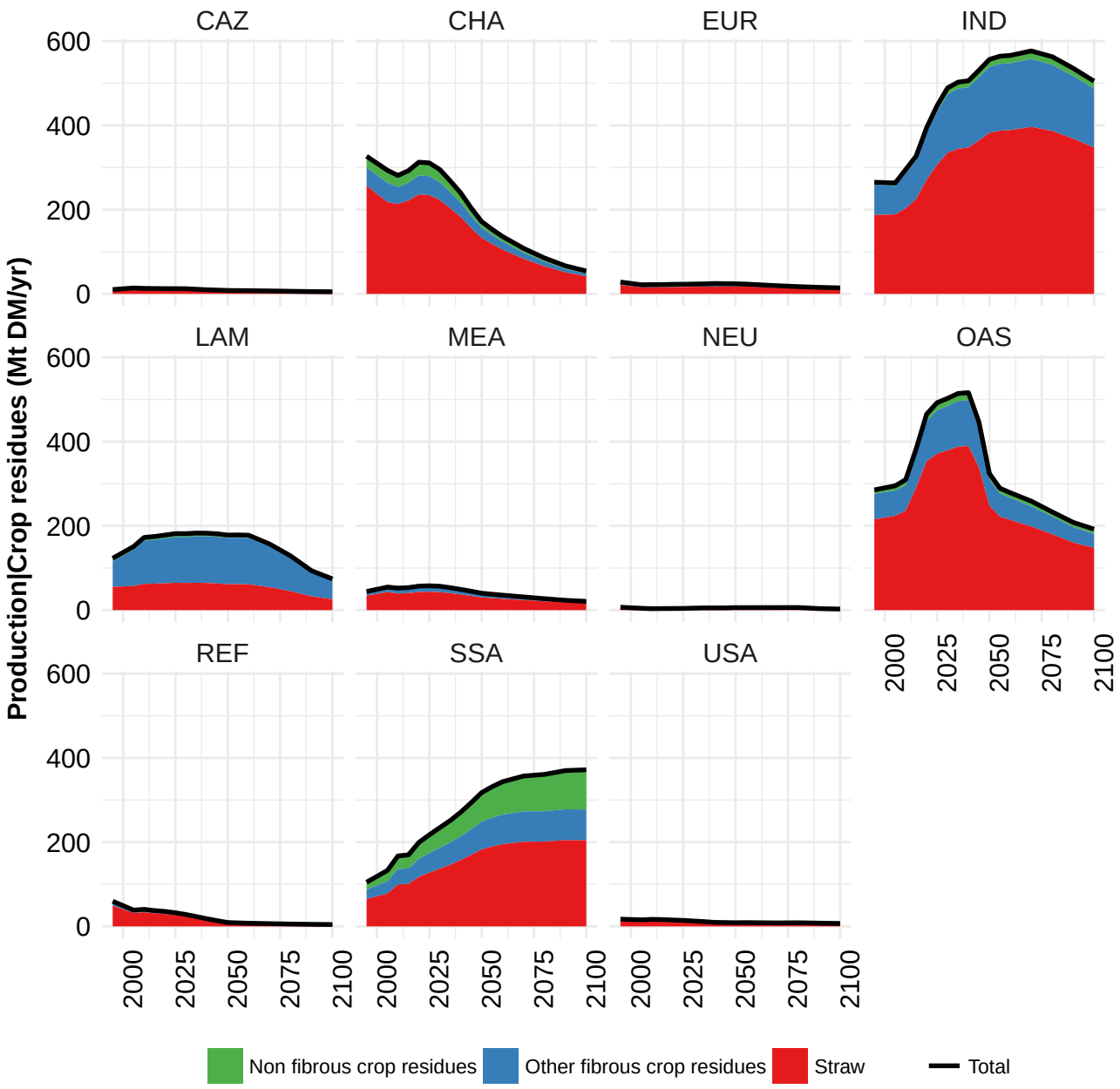
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7226	7911	8611	9227	10195	10965	10996	11551	12823	14021
CAZ	355	399	438	456	563	575	566	624	654	601
CHA	951	1045	1151	1244	1491	1561	1700	1809	2040	2297
EUR	1044	1118	1224	1275	1308	1391	1241	1270	1250	1251
IND	681	753	794	835	959	1063	1144	1175	1450	1640
LAM	878	1011	1109	1317	1431	1587	1774	1906	2246	2473
MEA	205	229	249	270	287	325	399	466	519	530
NEU	171	177	203	209	185	192	174	177	164	174
OAS	740	806	866	950	1081	1213	1341	1381	1543	1753
REF	762	822	869	840	1009	1093	590	527	583	631
SSA	566	631	664	749	797	902	940	1056	1198	1382
USA	872	920	1044	1083	1085	1064	1128	1160	1176	1289

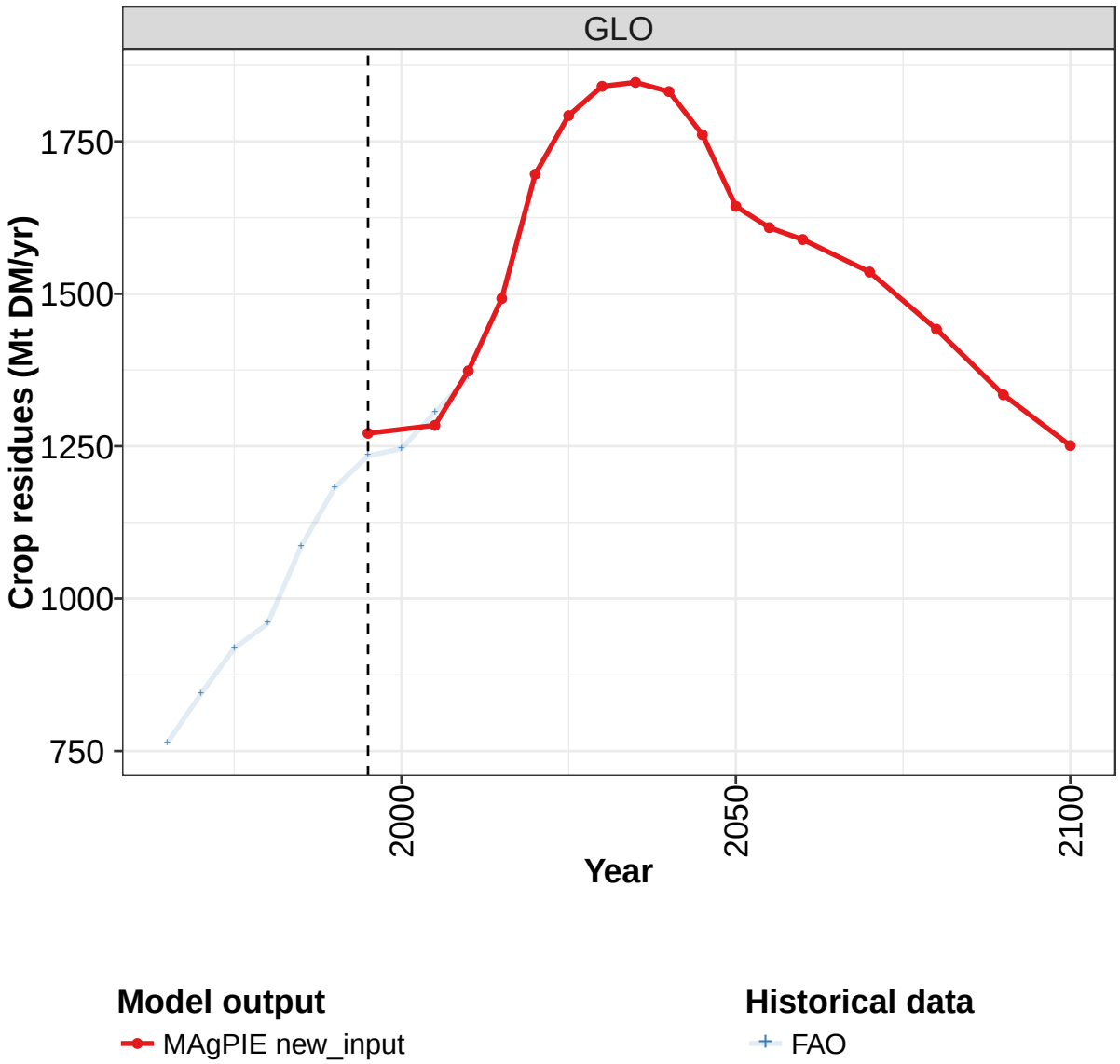
Table 1023: FAO — Production (Mt DM/yr)

42 Bioenergy crops

43 Crop residues




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Crop residues (Mt DM/yr)
600
400
200
0
2000
2025
2050
2075
2100
Non fibrous crop residues
Other fibrous crop residues
Straw
Total


GLO
Crop residues (Mt DM/yr)
1750
1500
1250
1000
750
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

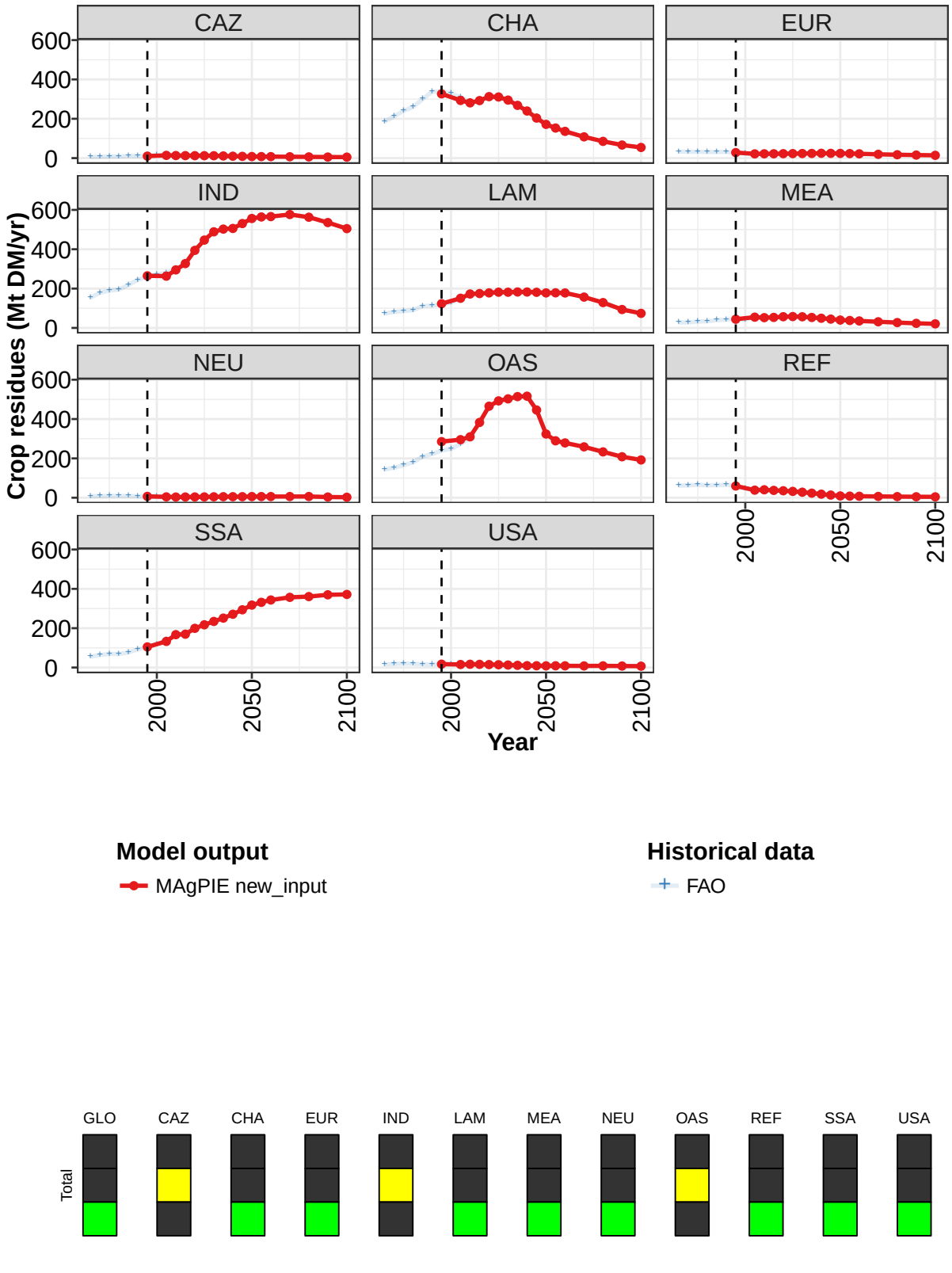


Figure 265: MAgPIE new_input — Production—Crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1271	1284	1374	1492	1696	1792	1840	1847	1832	1761	1644
CAZ	10	14	13	13	12	12	12	11	10	9	8
CHA	327	293	281	292	313	311	295	268	240	204	172
EUR	28	22	22	22	23	23	23	24	25	24	24
IND	265	263	295	327	394	447	489	503	506	531	556
LAM	123	151	173	175	178	182	182	183	183	181	178
MEA	44	55	52	53	57	58	57	53	49	45	40
NEU	7	4	4	4	4	4	5	5	5	5	6
OAS	285	295	310	383	465	492	503	514	516	446	324
REF	60	39	40	37	36	32	28	23	18	13	9
SSA	105	133	167	170	199	217	234	251	271	294	318
USA	17	16	17	16	15	14	13	11	10	9	9

Table 1024: MAgPIE new_input — Production—Crop residues (Mt DM/yr) [PART 1/2]

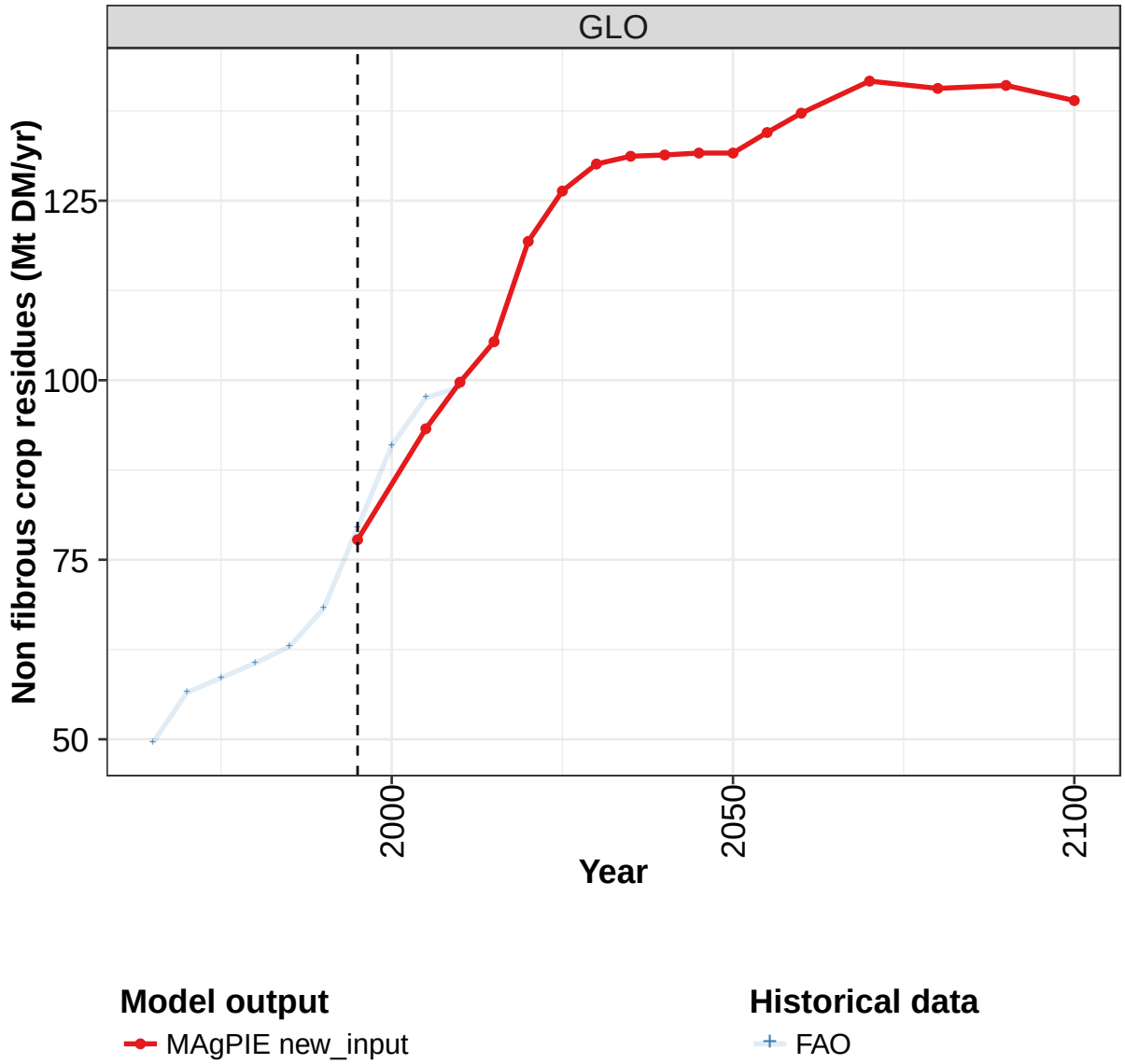
	2055	2060	2070	2080	2090	2100
GLO	1609	1589	1536	1442	1334	1251
CAZ	8	8	7	6	5	5
CHA	153	136	108	85	67	54
EUR	23	22	19	17	16	14
IND	564	566	577	563	536	505
LAM	179	178	157	129	94	74
MEA	38	35	31	27	23	21
NEU	6	6	6	6	4	3
OAS	289	279	259	233	208	192
REF	8	8	7	6	5	4
SSA	332	343	357	361	370	372
USA	9	9	8	9	8	7

Table 1025: MAgPIE new_input — Production—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	763	844	919	959	1086	1182	1234	1246	1306	1364
CAZ	6	7	9	9	11	10	12	16	17	15
CHA	186	212	241	260	299	337	339	328	310	284
EUR	33	32	32	31	31	32	27	24	21	21
IND	153	178	189	195	219	244	262	272	280	297
LAM	73	81	85	90	111	113	120	128	149	166
MEA	27	28	32	34	39	42	45	42	55	50
NEU	8	8	9	9	9	7	7	6	4	3
OAS	143	153	165	180	209	222	240	249	274	302
REF	61	63	66	63	63	66	60	46	39	40
SSA	55	64	69	69	77	92	104	118	140	166
USA	16	18	20	19	17	15	18	17	16	17

Table 1026: FAO — Production—Crop residues (Mt DM/yr)

43.1 Non fibrous crop residues



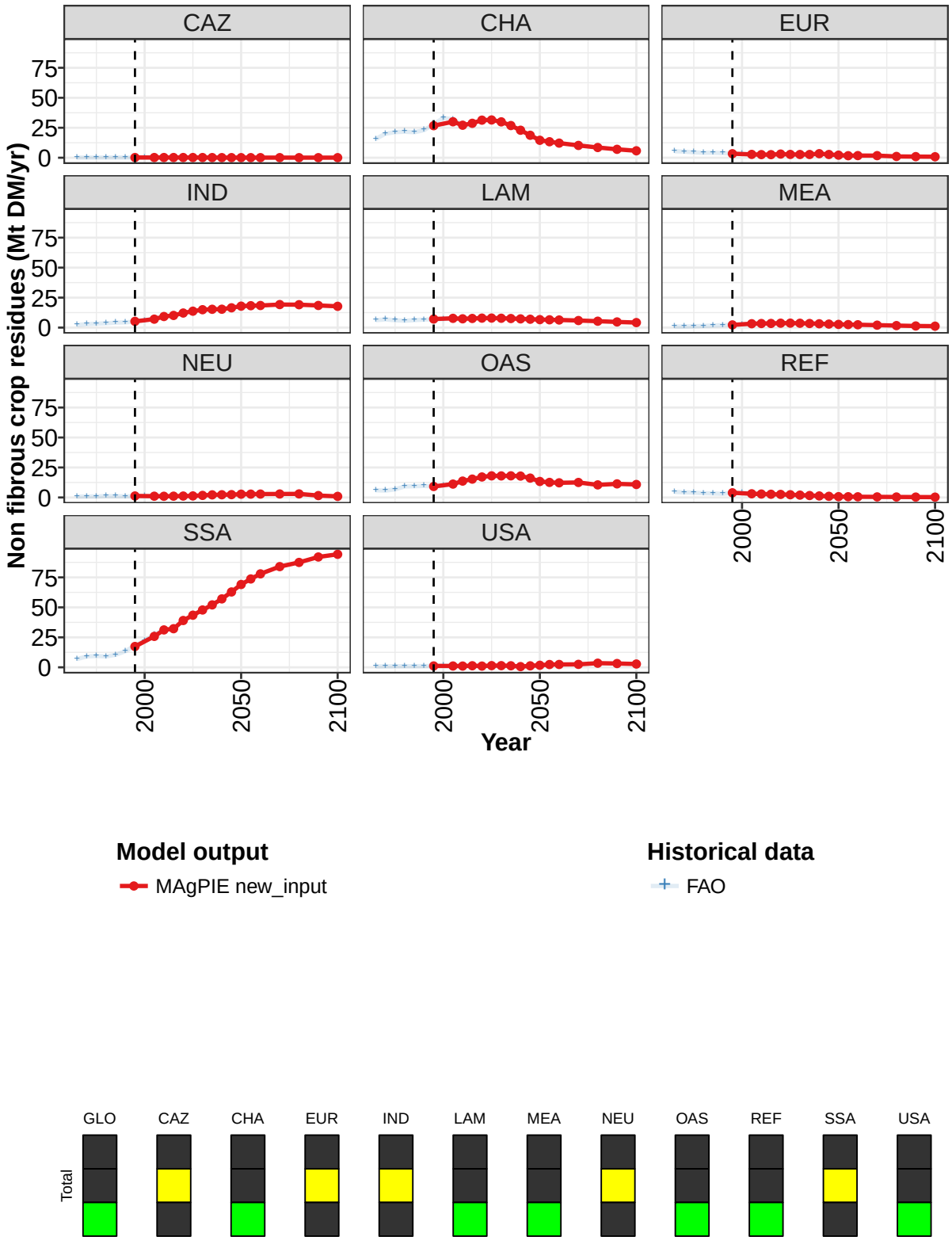


Figure 266: MAgPIE new_input — Production—Crop residues—Non fibrous crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	78	93	100	105	119	126	130	131	131	132	132
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	27	30	27	29	31	32	30	27	23	19	15
EUR	3	3	3	3	3	3	3	3	3	3	2
IND	5	7	9	10	12	14	15	15	15	17	18
LAM	7	8	7	8	8	8	8	8	7	7	7
MEA	2	3	3	3	4	4	4	3	3	3	3
NEU	1	1	1	1	1	1	2	2	2	2	3
OAS	9	11	14	15	17	18	18	18	18	16	13
REF	4	3	3	3	3	2	2	2	1	1	1
SSA	17	26	31	32	39	43	48	52	57	63	69
USA	1	1	1	1	1	1	1	1	1	1	2

Table 1027: MAgPIE new_input — Production—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 1/2]

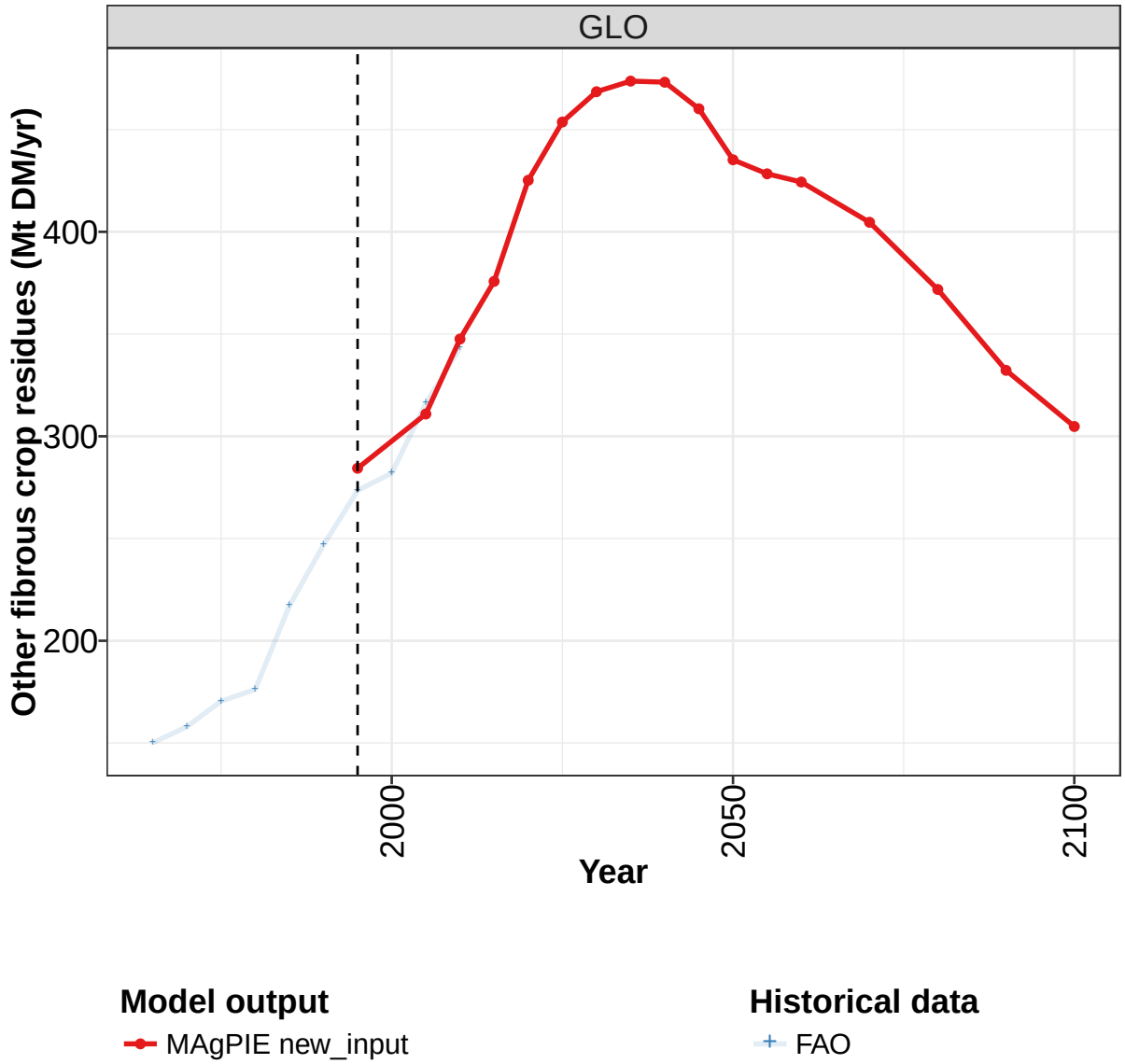
	2055	2060	2070	2080	2090	2100
GLO	134	137	142	141	141	139
CAZ	0	0	0	0	0	0
CHA	13	12	10	9	7	6
EUR	2	2	2	1	1	1
IND	18	18	19	19	18	18
LAM	7	6	6	5	5	4
MEA	3	2	2	2	1	1
NEU	3	3	3	3	2	1
OAS	13	12	13	11	11	11
REF	1	1	0	0	0	0
SSA	74	78	84	87	92	94
USA	2	2	2	3	3	3

Table 1028: MAgPIE new_input — Production—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	49.5	56.5	58.5	60.6	62.9	68.2	79.4	90.9	97.6	99.0
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
CHA	15.7	20.0	21.3	21.7	21.3	23.0	27.9	33.3	32.0	27.5
EUR	5.4	5.1	4.5	4.1	4.2	3.9	3.5	3.4	2.7	2.5
IND	2.2	2.8	3.3	3.6	4.1	4.3	5.1	6.0	7.6	9.3
LAM	6.2	6.8	6.1	5.7	6.2	6.7	7.0	7.1	7.6	6.9
MEA	0.9	0.9	1.1	1.4	1.7	2.1	2.3	2.7	3.2	3.3
NEU	0.7	0.8	0.8	1.2	1.0	1.0	1.1	1.0	1.0	1.0
OAS	6.0	5.7	6.8	9.2	9.4	9.6	9.1	9.9	11.3	13.4
REF	4.7	4.3	4.0	3.6	3.4	3.0	4.0	3.9	3.3	2.9
SSA	6.9	9.1	9.4	9.1	10.4	13.4	18.2	22.1	27.5	30.8
USA	0.8	0.8	0.9	1.0	1.0	1.0	1.2	1.3	1.1	1.1

Table 1029: FAO — Production—Crop residues—Non fibrous crop residues (Mt DM/yr)

43.2 Other fibrous crop residues



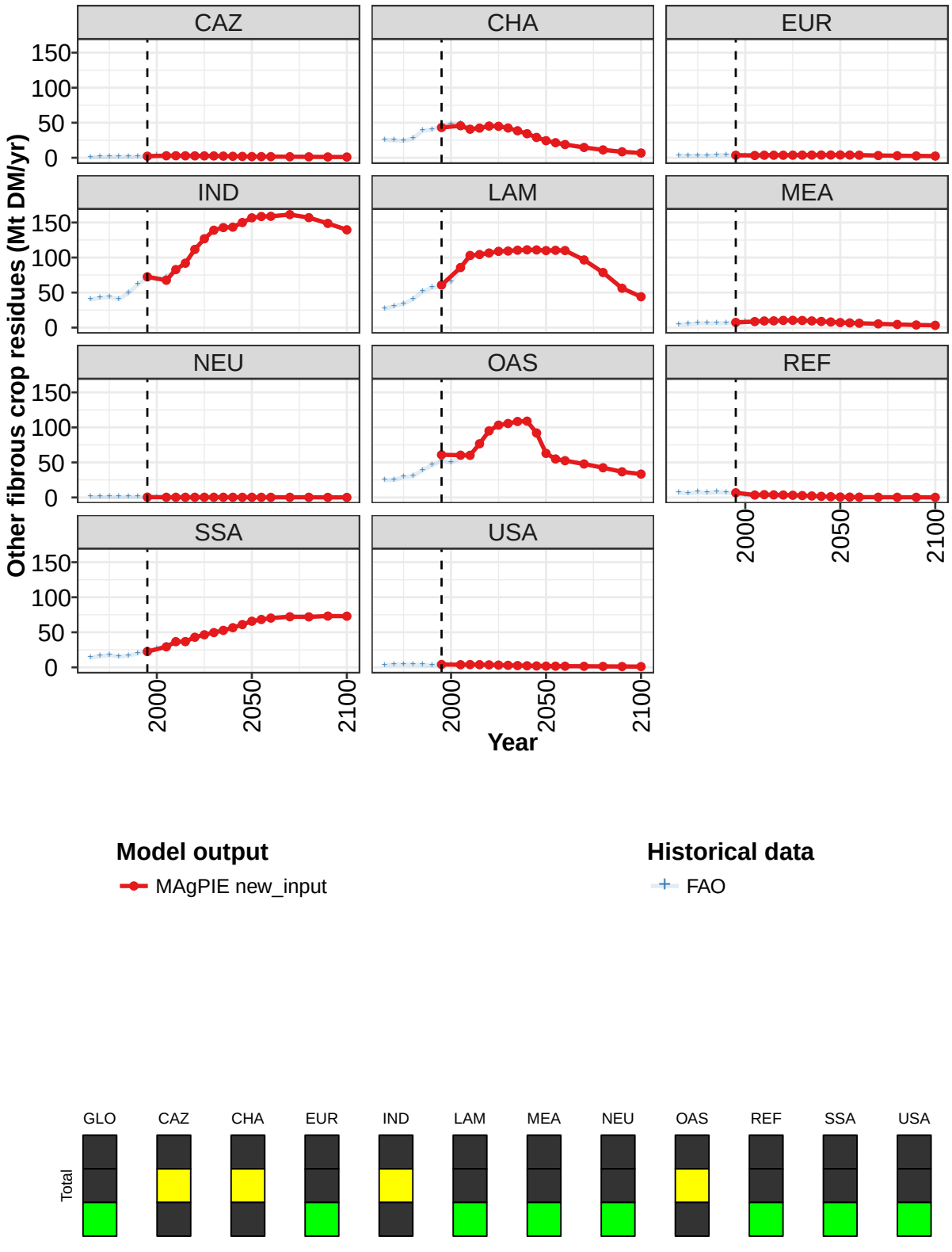


Figure 267: MAgPIE new_input — Production—Crop residues—Other fibrous crop residues (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	284	311	348	376	425	454	469	474	473	460	435
CAZ	2	3	3	3	3	3	3	2	2	2	2
CHA	43	46	41	42	45	45	42	38	34	29	24
EUR	4	3	4	4	4	4	4	4	4	4	4
IND	73	68	83	92	112	127	139	143	143	150	157
LAM	61	86	103	104	106	109	109	110	111	111	110
MEA	7	9	9	10	10	10	10	10	9	8	7
NEU	1	0	0	0	0	0	0	0	0	0	0
OAS	61	60	60	77	95	103	106	108	109	92	63
REF	7	3	4	4	4	3	3	2	2	1	1
SSA	23	29	37	37	43	46	50	53	57	61	66
USA	4	4	4	4	4	3	3	3	2	2	2

Table 1030: MAgPIE new_input — Production—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 1/2]

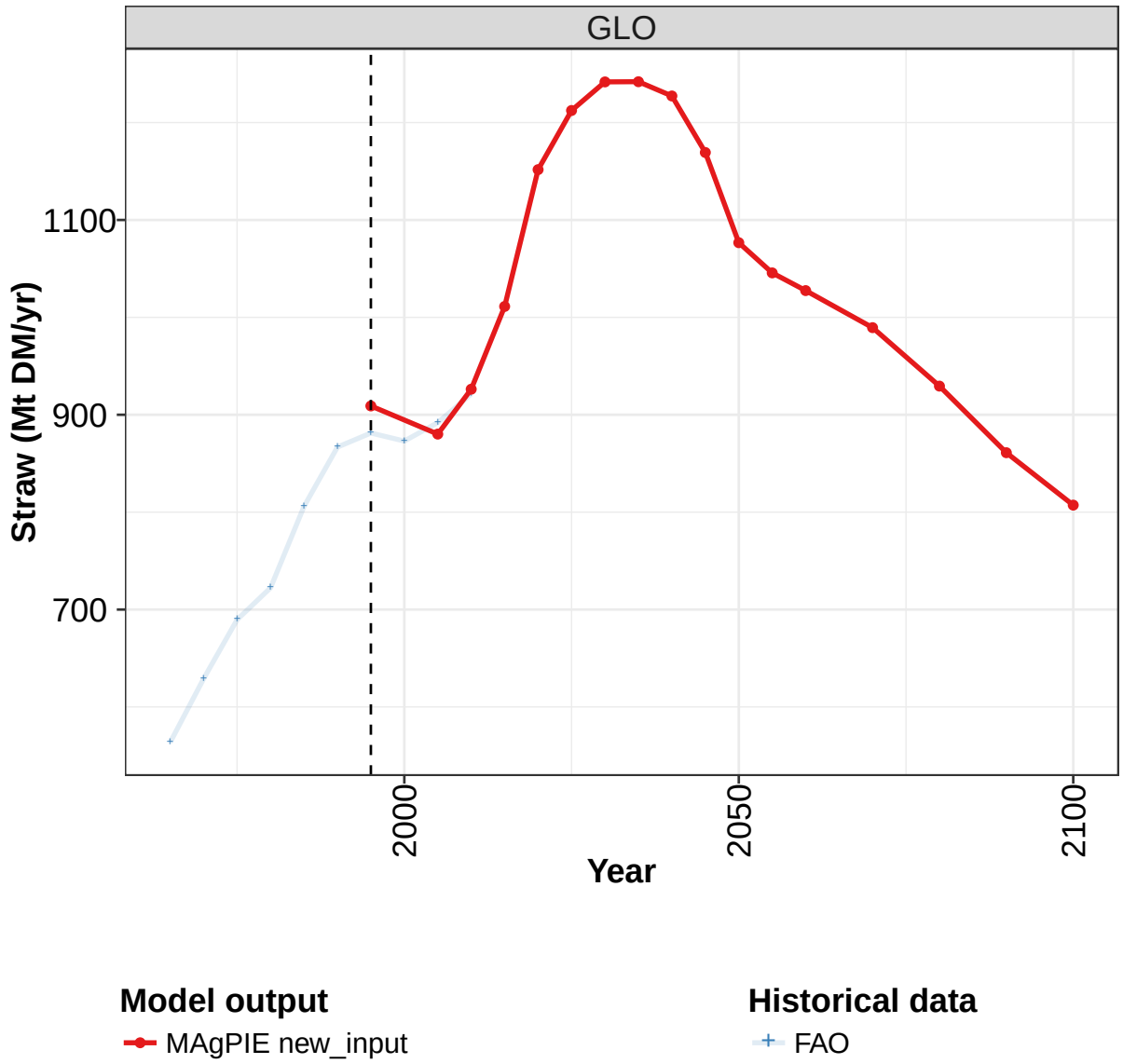
	2055	2060	2070	2080	2090	2100
GLO	428	424	405	372	332	305
CAZ	2	2	1	1	1	1
CHA	21	19	15	11	8	7
EUR	4	4	3	3	3	2
IND	159	159	161	157	149	140
LAM	110	110	97	79	56	44
MEA	7	6	5	5	4	3
NEU	0	0	0	0	0	0
OAS	55	52	48	42	37	33
REF	1	0	0	0	0	0
SSA	68	70	72	72	73	73
USA	2	2	1	1	1	1

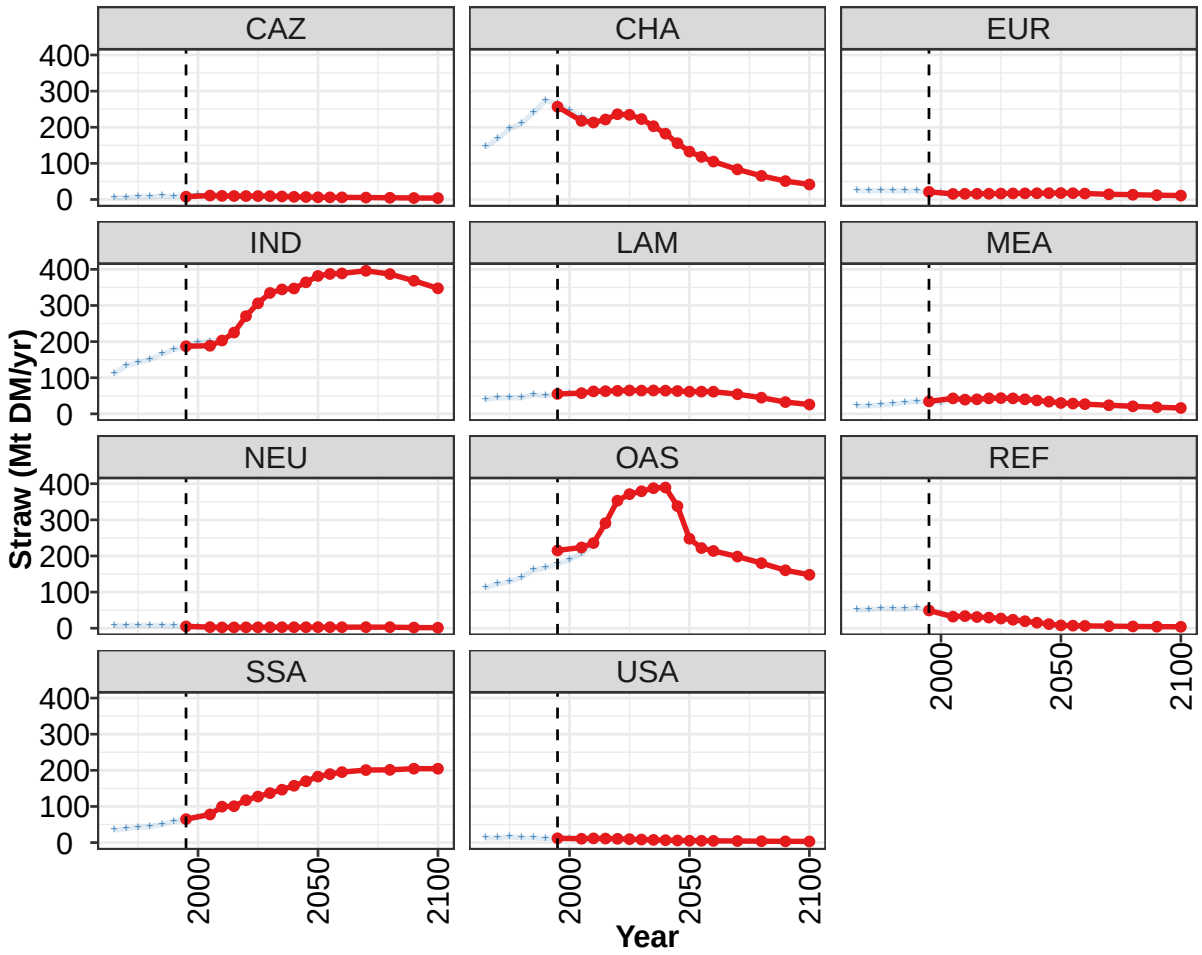
Table 1031: MAgPIE new_input — Production—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	150	158	170	176	217	247	274	282	316	343
CAZ	1	1	1	1	2	2	3	4	4	3
CHA	26	25	24	28	38	40	45	48	49	41
EUR	3	3	3	3	3	4	3	3	3	4
IND	40	42	44	41	49	61	72	69	72	83
LAM	27	31	34	41	52	57	58	65	85	99
MEA	4	5	6	6	6	6	7	9	9	9
NEU	1	1	1	1	1	1	1	1	0	0
OAS	25	25	29	30	39	46	52	50	56	59
REF	7	6	7	6	7	7	5	3	3	4
SSA	14	16	17	16	17	20	23	26	31	36
USA	3	4	4	4	3	3	4	4	4	4

Table 1032: FAO — Production—Crop residues—Other fibrous crop residues (Mt DM/yr)

43.3 Straw


GLO
Straw (Mt DM/yr)
1100
900
700
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



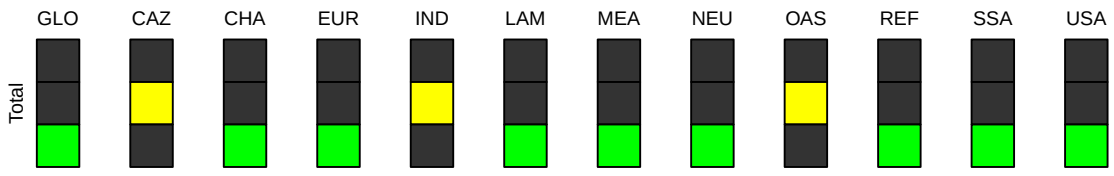


Figure 268: MAgPIE new_input — Production—Crop residues—Straw (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	909	880	926	1011	1152	1212	1242	1242	1227	1169	1077
CAZ	8	11	10	10	10	10	9	8	8	7	6
CHA	257	218	213	221	236	234	223	203	182	156	133
EUR	21	15	16	16	16	16	17	17	17	18	18
IND	187	189	203	225	271	306	335	344	347	364	382
LAM	55	57	62	63	64	65	64	65	64	63	62
MEA	35	43	39	40	43	44	43	40	37	34	30
NEU	5	3	2	2	2	3	3	3	3	3	3
OAS	215	224	236	291	353	371	379	388	390	338	248
REF	49	32	34	31	29	27	24	19	15	11	8
SSA	65	78	99	101	117	128	137	146	157	170	183
USA	12	11	12	11	10	10	9	8	7	6	5

Table 1033: MAgPIE new_input — Production—Crop residues—Straw (Mt DM/yr) [PART 1/2]

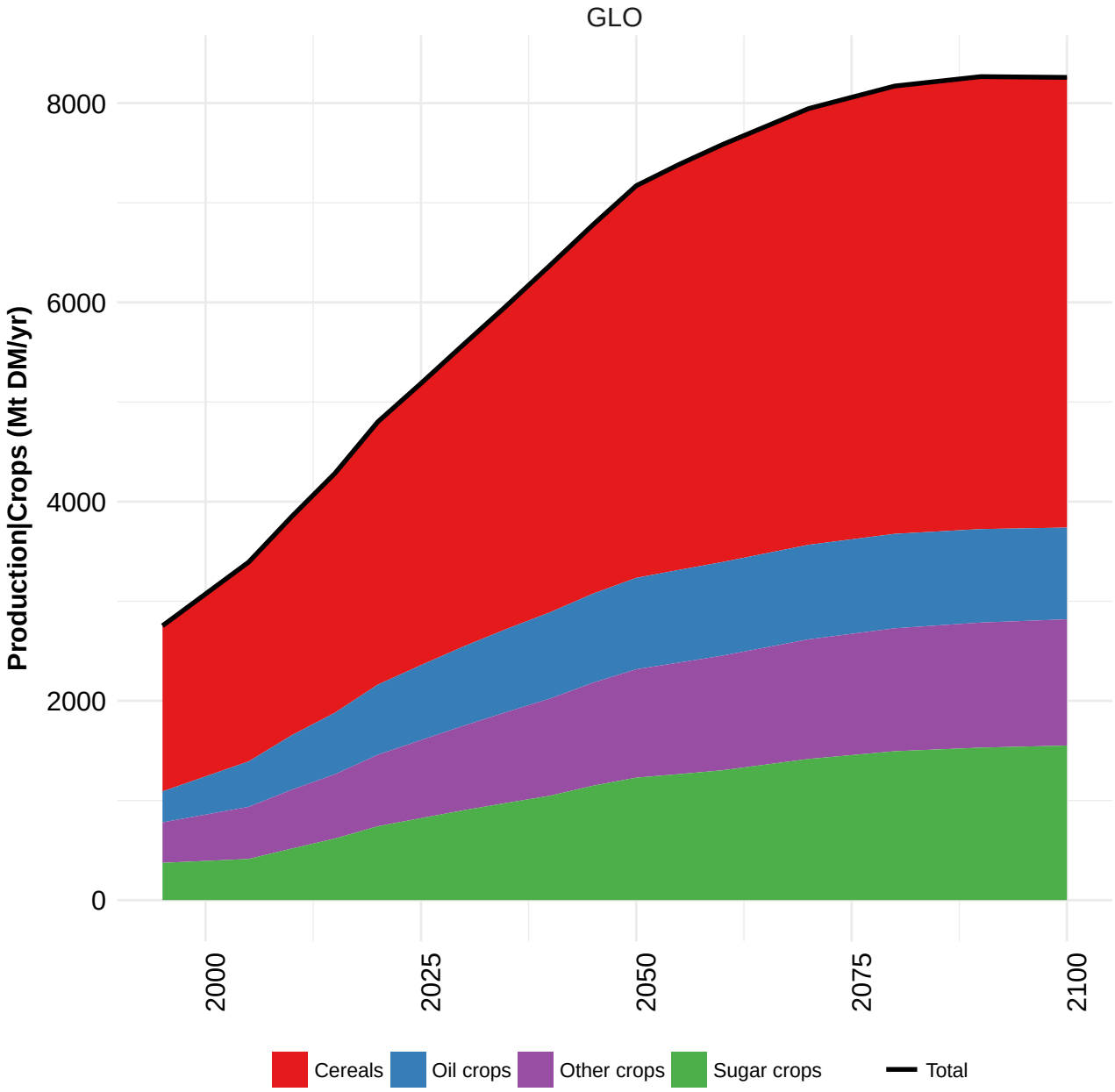
	2055	2060	2070	2080	2090	2100
GLO	1046	1028	989	929	861	807
CAZ	6	6	5	5	4	4
CHA	118	105	83	65	51	42
EUR	18	16	14	13	12	11
IND	387	389	396	387	368	348
LAM	62	61	54	45	33	26
MEA	28	27	24	21	18	16
NEU	3	3	3	3	2	1
OAS	222	214	198	180	160	148
REF	7	7	6	5	4	4
SSA	190	195	201	201	205	205
USA	5	5	4	4	3	3

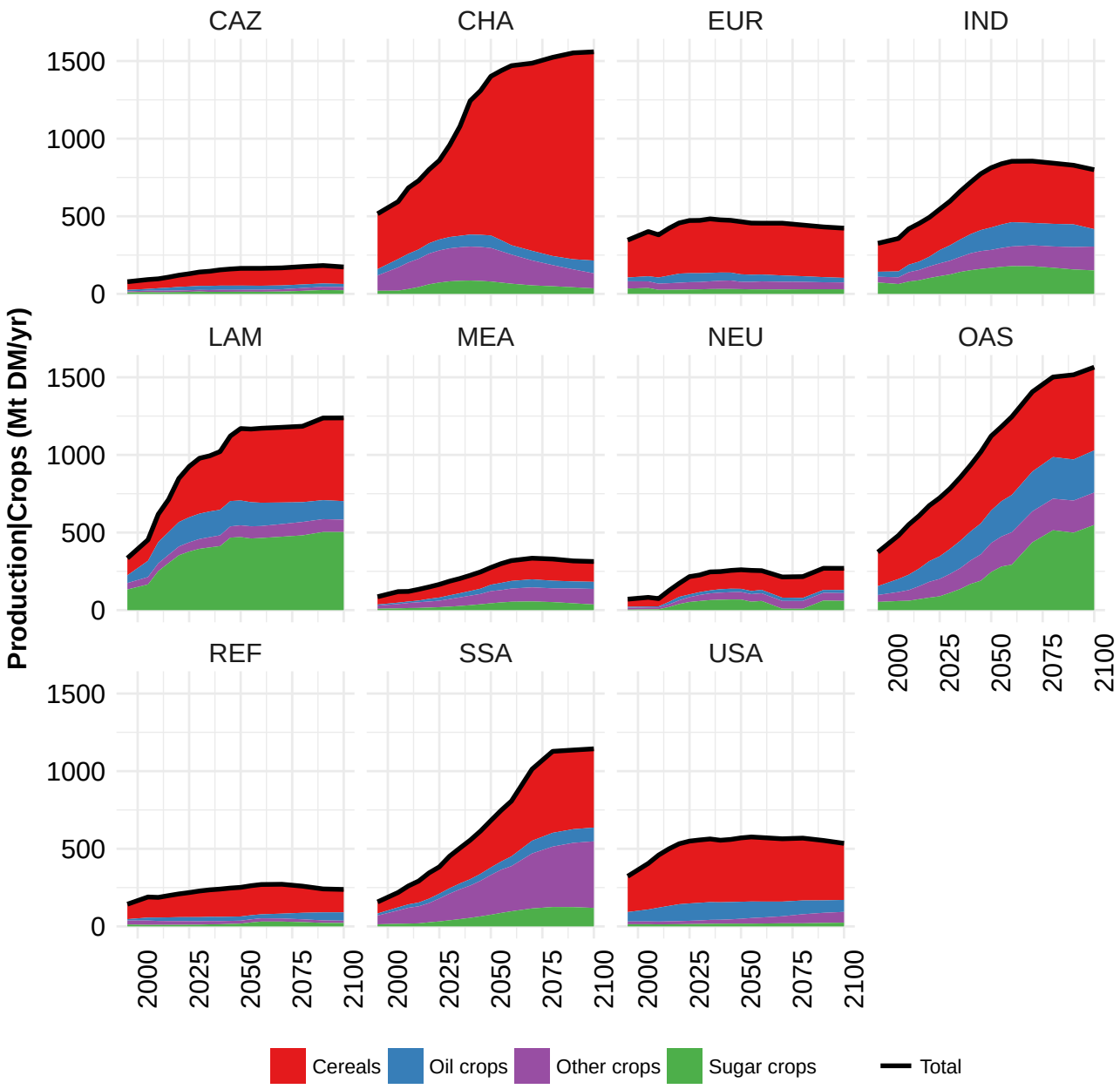
Table 1034: MAgPIE new_input — Production—Crop residues—Straw (Mt DM/yr) [PART 2/2]

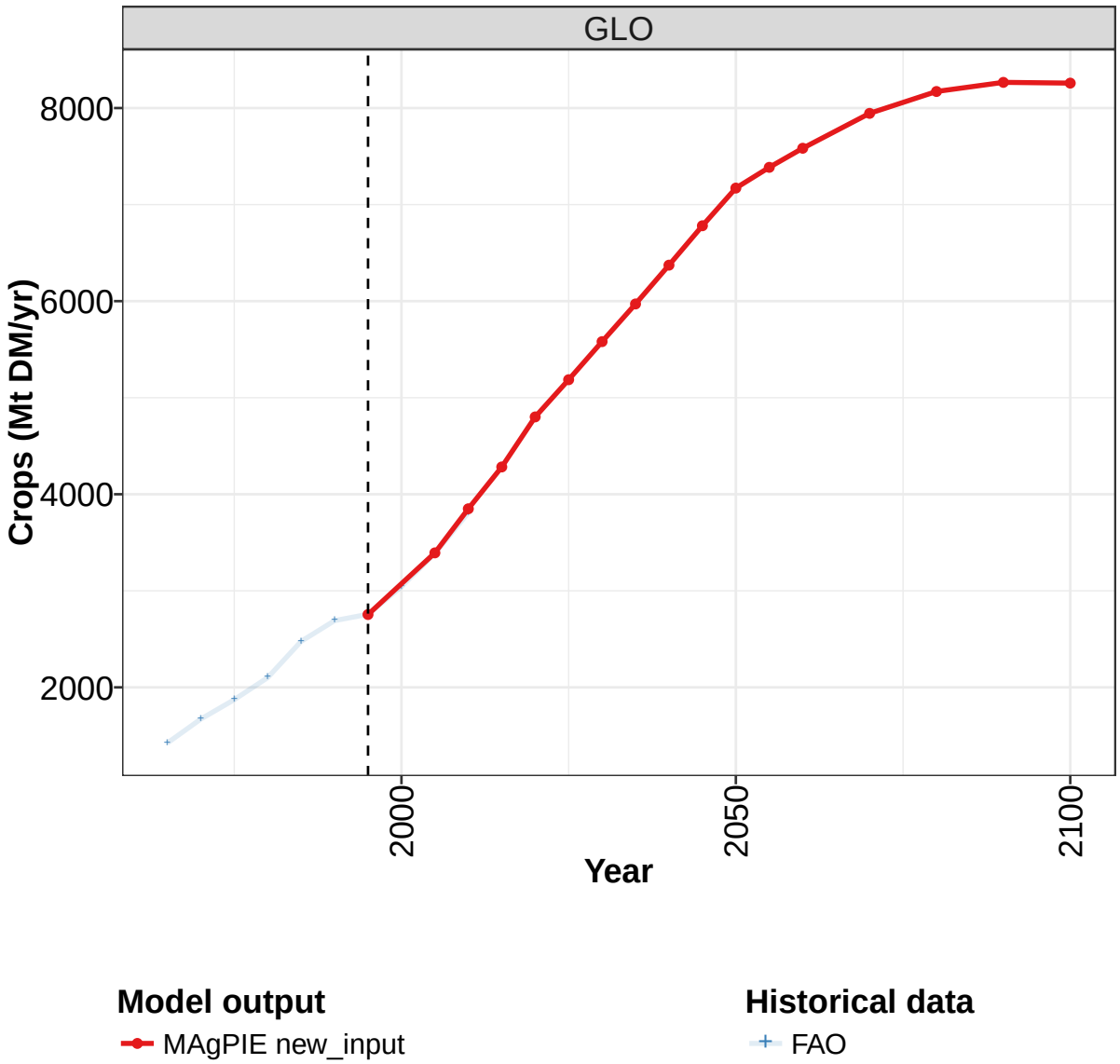
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	564	629	690	722	806	867	881	873	892	921
CAZ	5	6	7	7	9	8	9	12	14	12
CHA	145	167	195	211	240	274	266	246	230	215
EUR	25	24	25	24	24	24	21	18	15	15
IND	111	133	142	151	165	178	185	198	200	205
LAM	40	44	45	44	53	50	55	56	57	60
MEA	22	22	25	27	31	34	35	31	43	38
NEU	7	7	8	8	7	6	5	4	3	2
OAS	113	122	130	140	161	167	178	189	206	230
REF	50	52	55	53	53	56	51	39	32	33
SSA	35	39	42	44	50	59	63	70	81	99
USA	12	13	15	14	13	11	13	12	11	12

Table 1035: FAO — Production—Crop residues—Straw (Mt DM/yr)

44 Crops


GLO
Production|Crops (Mt DM/yr)
8000
6000
4000
2000
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Crops (Mt DM/yr)
0
500
1000
1500
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


GLO
8000
6000
4000
2000
Crops (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

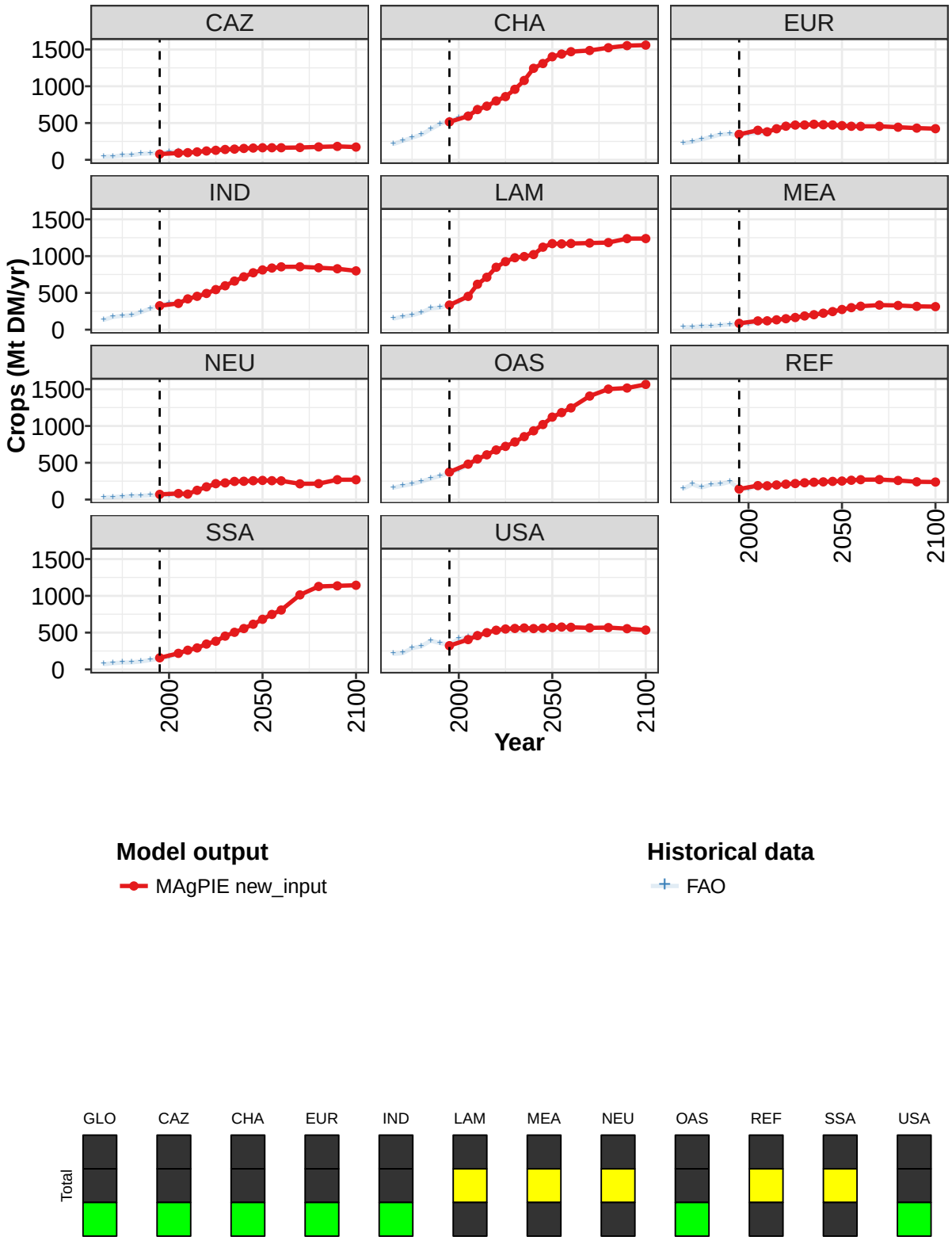


Figure 269: MAgPIE new_input — Production—Crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2754	3393	3850	4283	4801	5186	5581	5971	6373	6781	7171
CAZ	78	92	97	108	120	130	141	146	155	160	164
CHA	516	594	683	730	801	859	959	1079	1244	1309	1401
EUR	346	402	381	422	457	472	473	483	477	474	465
IND	326	357	419	453	493	545	597	661	718	774	812
LAM	335	453	617	713	849	925	978	994	1021	1122	1170
MEA	86	119	121	134	149	166	187	204	224	246	274
NEU	71	82	74	126	173	216	227	246	248	256	260
OAS	374	481	551	608	674	723	783	855	934	1020	1121
REF	143	189	187	198	209	218	228	235	240	247	251
SSA	157	218	261	292	345	383	453	505	555	614	682
USA	323	406	459	499	532	549	557	563	555	560	570

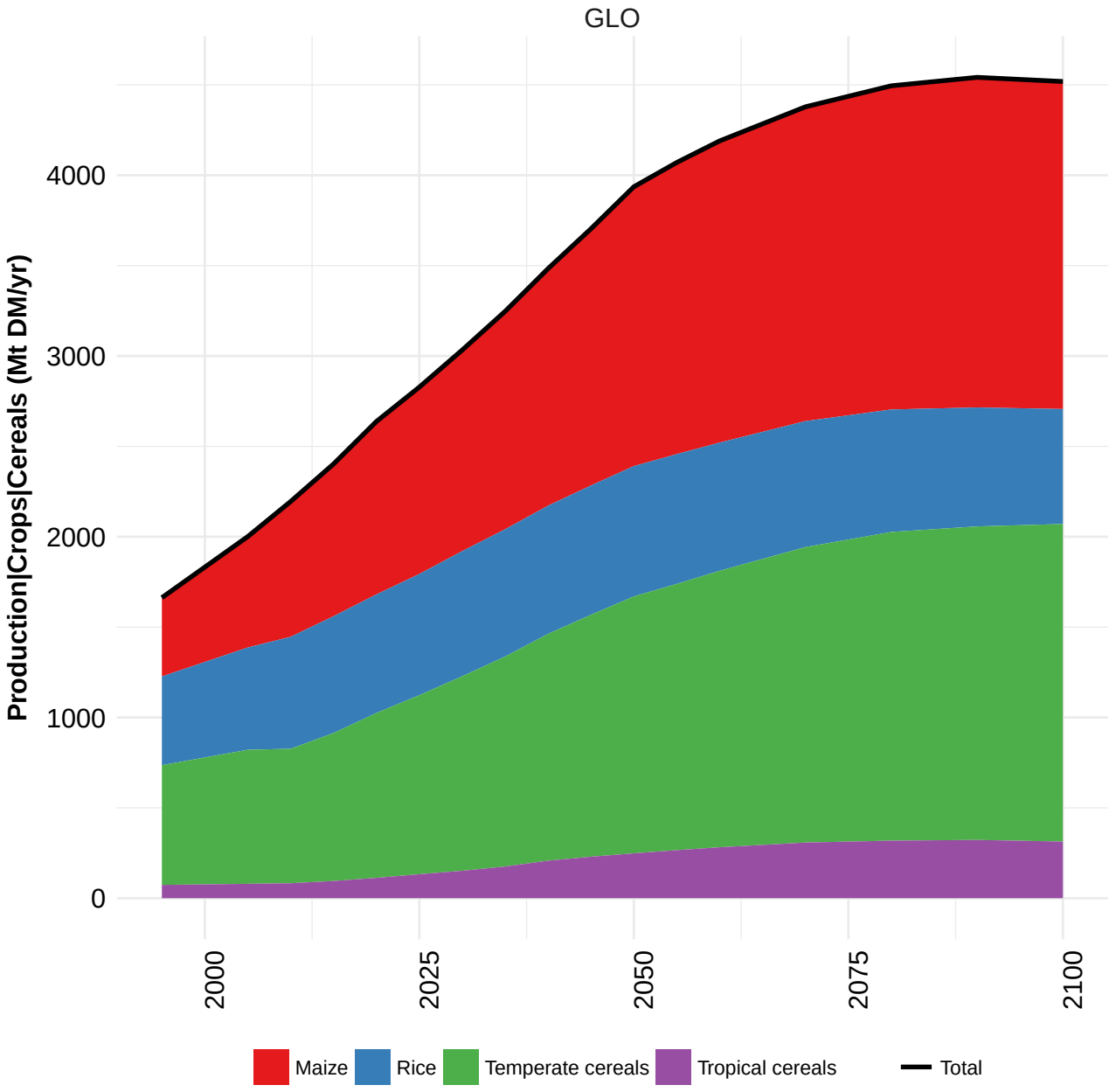
Table 1036: MAgPIE new_input — Production—Crops (Mt DM/yr) [PART 1/2]

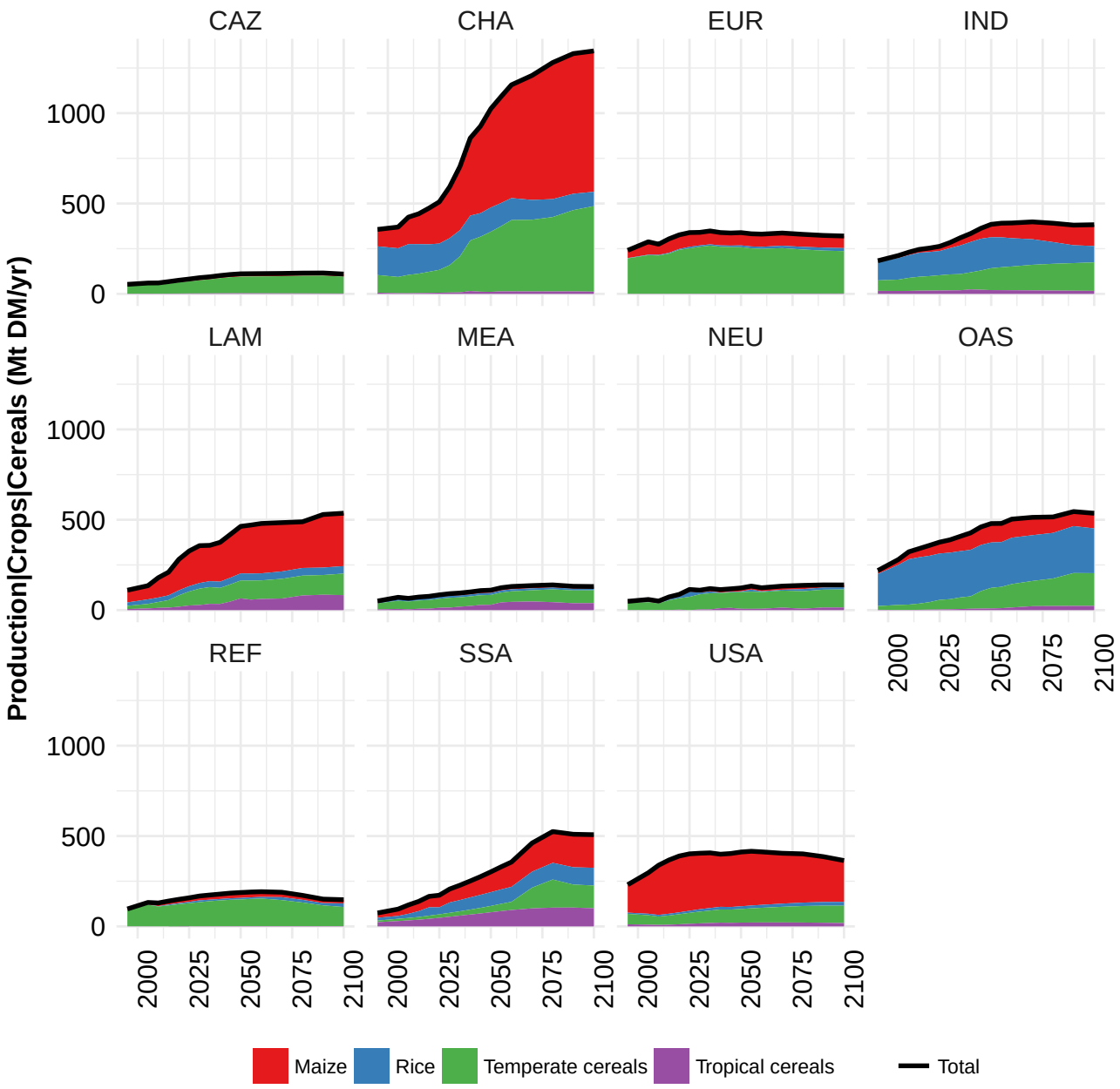
	2055	2060	2070	2080	2090	2100
GLO	7386	7584	7945	8171	8266	8258
CAZ	164	164	167	176	182	173
CHA	1438	1470	1486	1524	1553	1559
EUR	456	455	455	443	431	423
IND	838	854	855	842	828	800
LAM	1166	1171	1178	1184	1238	1239
MEA	300	319	334	329	317	313
NEU	256	254	214	216	270	269
OAS	1182	1245	1406	1502	1516	1565
REF	262	270	271	259	241	238
SSA	748	807	1013	1128	1136	1144
USA	576	572	564	569	554	535

Table 1037: MAgPIE new_input — Production—Crops (Mt DM/yr) [PART 2/2]

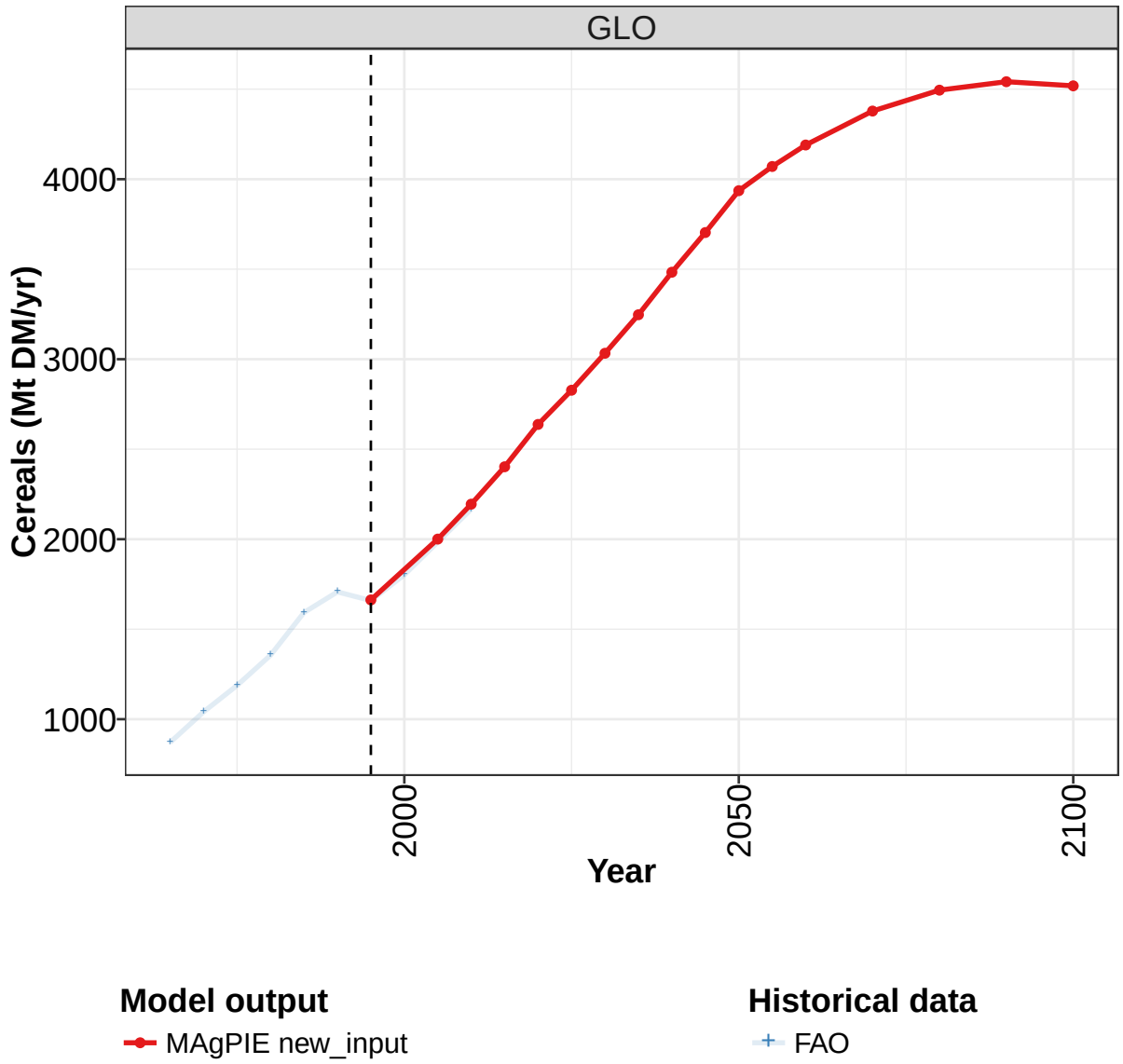
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1424	1671	1872	2101	2476	2691	2757	3043	3387	3808
CAZ	44	47	60	64	81	88	95	109	116	108
CHA	214	258	301	342	417	488	536	568	614	700
EUR	226	245	278	311	345	353	333	356	363	353
IND	134	173	190	195	238	288	328	358	357	422
LAM	150	179	196	233	290	300	339	379	457	610
MEA	34	38	46	50	61	70	78	78	108	107
NEU	29	33	43	48	52	58	54	57	65	63
OAS	163	187	212	244	286	319	359	406	467	545
REF	148	206	164	204	208	241	153	144	188	173
SSA	70	85	94	96	108	128	145	172	211	252
USA	210	221	289	314	390	358	338	415	440	475

Table 1038: FAO — Production—Crops (Mt DM/yr)


GLO
Production|Crops|Cereals (Mt DM/yr)
4000
3000
2000
1000
0
2000
2025
2050
2075
2100
Maize
Rice
Temperate cereals
Tropical cereals
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Crops|Cereals (Mt DM/yr)
0
500
1000
2000
2025
2050
2075
2100
Maize
Rice
Temperate cereals
Tropical cereals
Total

44.1 Cereals


GLO
Cereals (Mt DM/yr)
4000
3000
2000
1000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

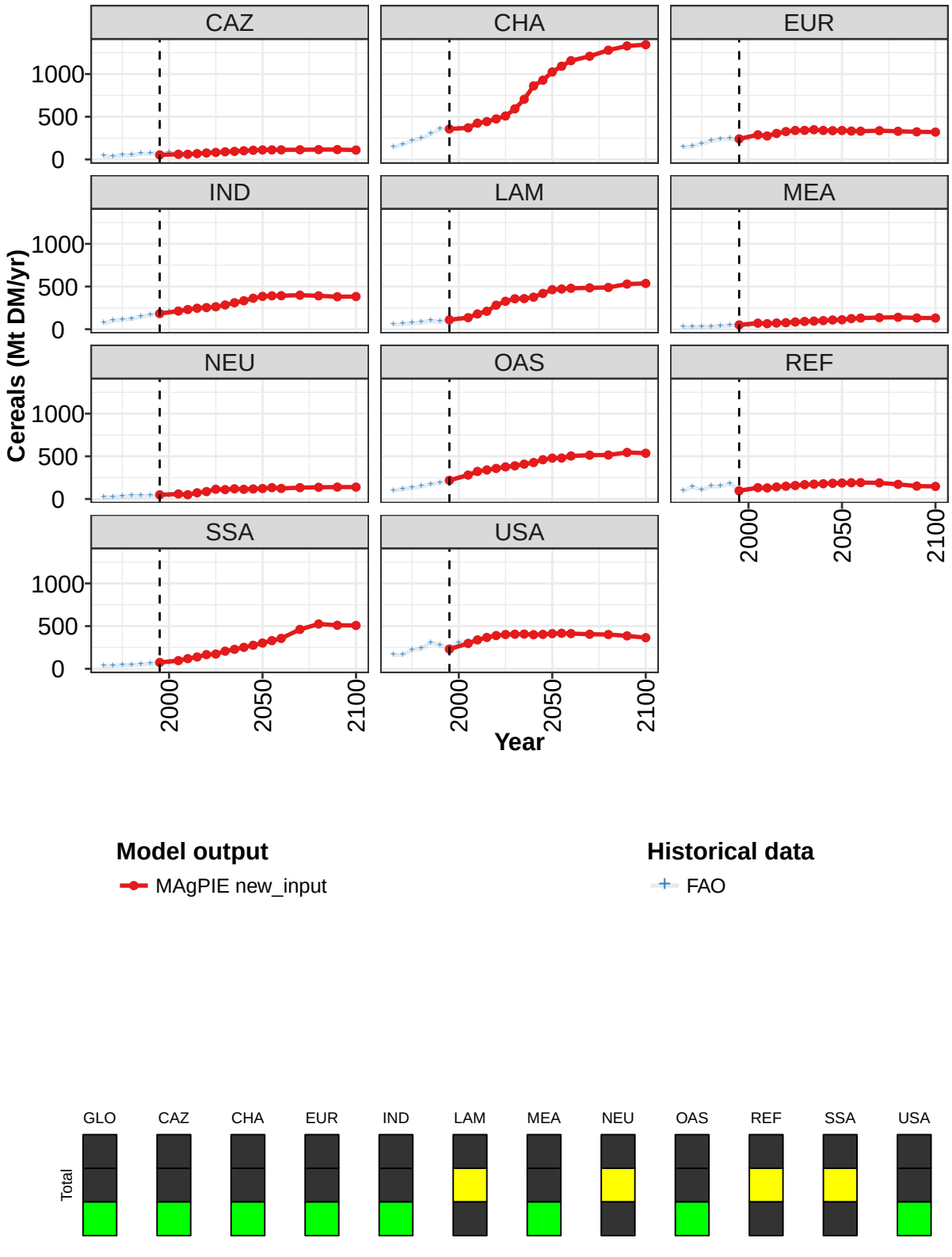


Figure 270: MAgPIE new_input — Production—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1663	2001	2195	2402	2638	2828	3033	3247	3483	3704	3936
CAZ	53	60	61	68	76	82	89	94	101	107	111
CHA	357	370	425	443	475	509	592	705	862	928	1025
EUR	241	288	275	304	326	339	340	348	339	337	339
IND	183	212	231	246	253	263	284	310	334	363	385
LAM	110	135	179	210	281	327	357	358	375	419	463
MEA	50	71	65	72	76	85	91	95	101	108	111
NEU	49	59	50	73	87	114	110	119	114	118	123
OAS	219	280	323	340	358	376	389	408	427	460	479
REF	96	133	130	140	150	158	168	174	179	184	187
SSA	74	96	119	138	166	172	207	228	251	276	302
USA	230	297	338	367	389	401	405	407	400	403	412

Table 1039: MAgPIE new_input — Production—Crops—Cereals (Mt DM/yr) [PART 1/2]

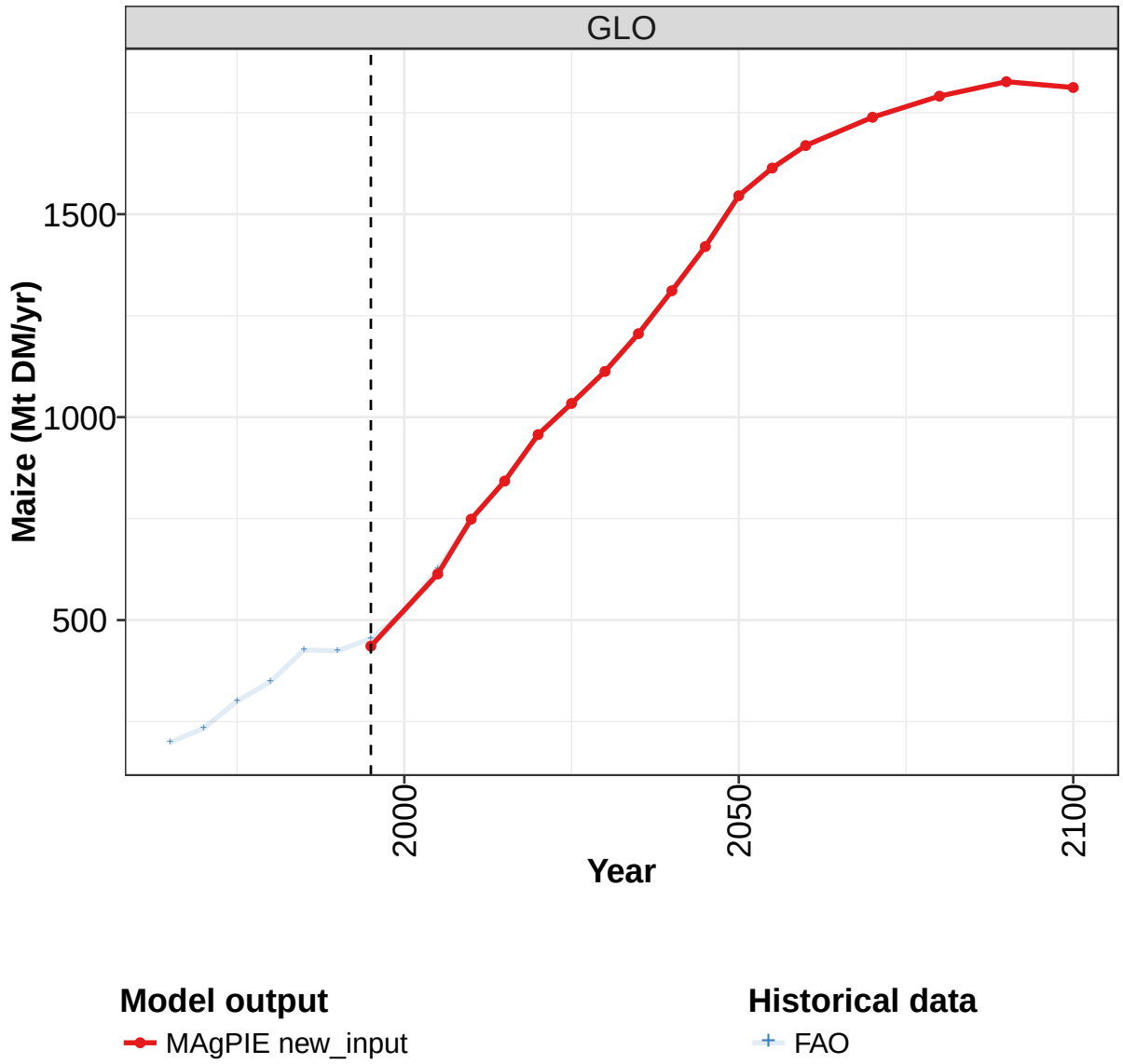
	2055	2060	2070	2080	2090	2100
GLO	4071	4190	4379	4495	4542	4519
CAZ	112	112	113	115	116	110
CHA	1092	1157	1209	1280	1330	1344
EUR	332	331	337	329	323	320
IND	391	392	398	391	381	383
LAM	471	480	484	489	529	536
MEA	124	131	136	140	132	131
NEU	133	124	133	137	140	139
OAS	480	504	513	516	545	536
REF	190	192	189	172	151	147
SSA	330	356	461	525	510	508
USA	416	412	405	401	386	364

Table 1040: MAgPIE new_input — Production—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	872	1041	1188	1356	1593	1707	1659	1802	1984	2167
CAZ	37	37	49	51	65	71	68	76	81	70
CHA	142	176	214	245	297	354	366	356	376	436
EUR	143	155	184	217	238	241	229	247	256	249
IND	70	100	112	123	145	169	184	205	210	234
LAM	51	63	71	78	97	87	109	121	135	170
MEA	23	24	29	31	37	44	47	42	65	61
NEU	21	24	31	34	37	39	37	37	45	41
OAS	99	118	128	147	173	188	208	242	274	321
REF	92	144	108	147	146	180	104	102	133	118
SSA	33	38	43	46	52	59	63	72	88	112
USA	162	164	219	238	305	275	244	301	322	353

Table 1041: FAO — Production—Crops—Cereals (Mt DM/yr)

44.1.1 Maize


GLO
Maize (Mt DM/yr)
1500
1000
500
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

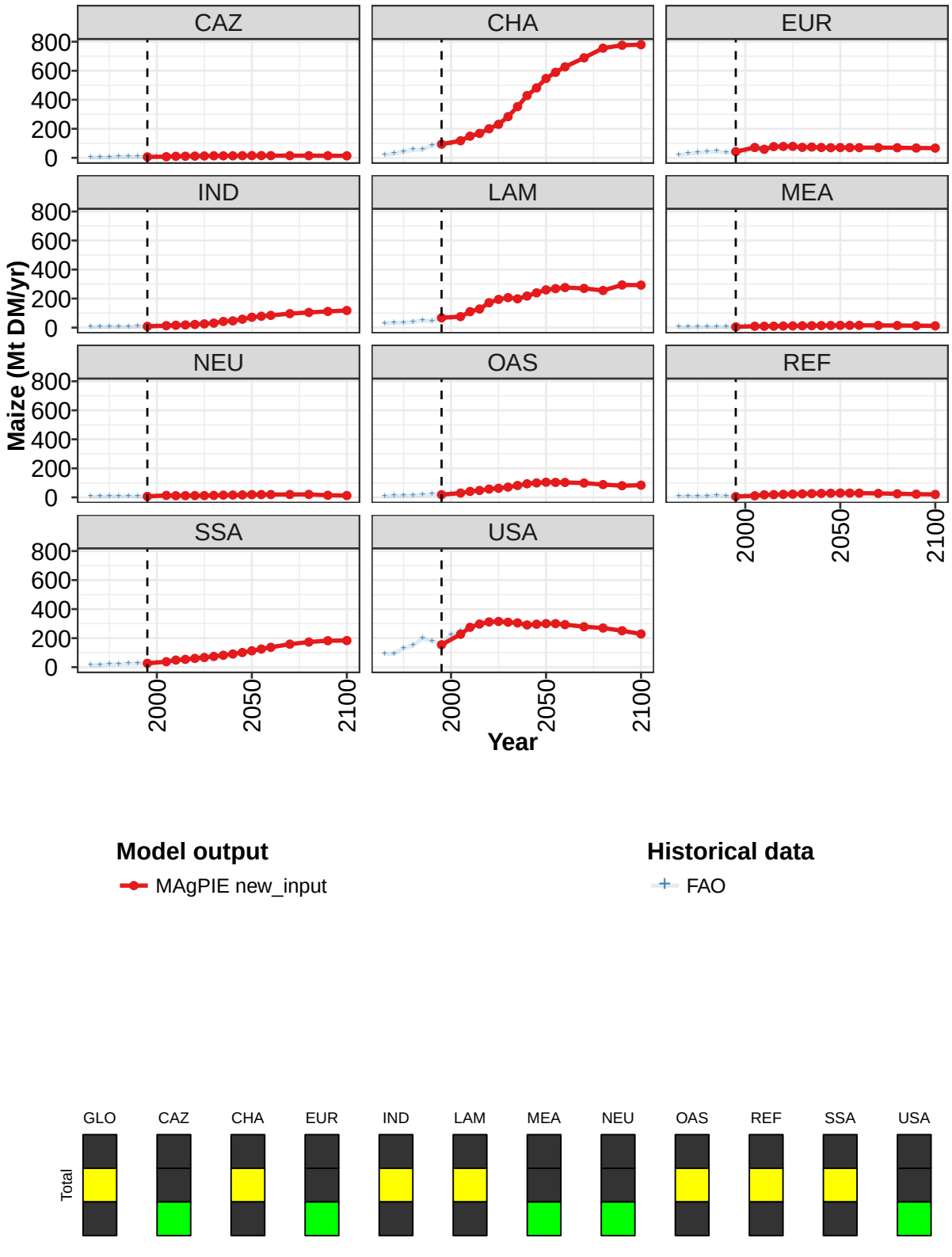


Figure 271: MAgPIE new_input — Production—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	436	614	749	842	957	1034	1113	1206	1311	1420	1546
CAZ	6	8	10	11	12	13	14	14	14	15	15
CHA	94	117	149	168	200	231	284	353	429	482	547
EUR	43	71	59	77	78	79	72	74	71	70	71
IND	9	13	16	18	22	26	31	42	47	58	71
LAM	68	76	110	128	171	194	207	198	218	240	260
MEA	5	9	9	10	11	12	13	13	14	15	15
NEU	7	14	12	12	12	12	14	16	16	17	19
OAS	19	30	41	48	57	63	71	82	94	100	104
REF	6	11	18	19	21	23	24	26	27	29	30
SSA	27	38	49	54	60	67	74	82	91	101	113
USA	154	227	275	297	312	315	310	305	291	296	300

Table 1042: MAgPIE new_input — Production—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

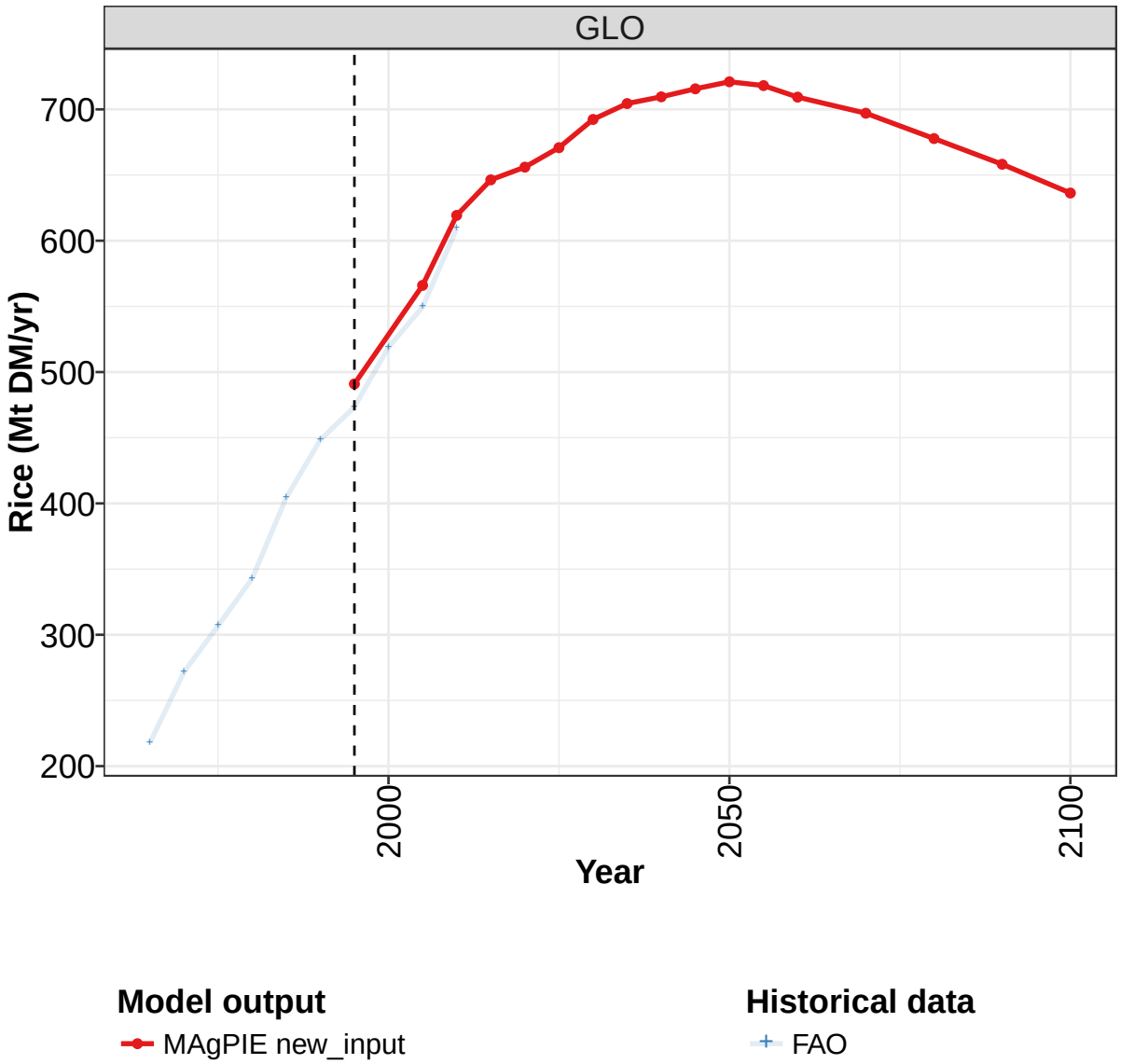
	2055	2060	2070	2080	2090	2100
GLO	1614	1669	1739	1791	1826	1812
CAZ	15	15	15	15	14	14
CHA	589	627	689	756	776	780
EUR	70	70	70	69	67	67
IND	78	84	96	105	111	118
LAM	268	276	270	256	294	293
MEA	15	16	15	14	13	12
NEU	19	20	20	21	15	13
OAS	103	103	99	88	80	84
REF	30	29	27	25	22	20
SSA	125	137	158	173	182	183
USA	300	293	279	270	251	229

Table 1043: MAgPIE new_input — Production—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	199	233	300	348	426	424	454	520	627	748
CAZ	2	3	3	5	7	7	7	7	9	11
CHA	21	29	42	55	56	86	99	93	123	156
EUR	19	28	35	39	45	34	44	47	58	52
IND	4	7	6	6	6	8	8	11	13	19
LAM	27	34	34	40	49	44	66	67	77	103
MEA	2	2	3	3	4	5	5	7	9	9
NEU	5	6	8	8	9	7	8	6	11	11
OAS	8	10	12	14	18	21	20	23	30	41
REF	7	8	6	8	13	9	6	7	12	16
SSA	12	15	20	21	23	27	26	32	37	51
USA	92	93	131	148	198	177	165	222	248	278

Table 1044: FAO — Production—Crops—Cereals—Maize (Mt DM/yr)

44.1.2 Rice


GLO
700
600
500
400
300
200
Rice (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

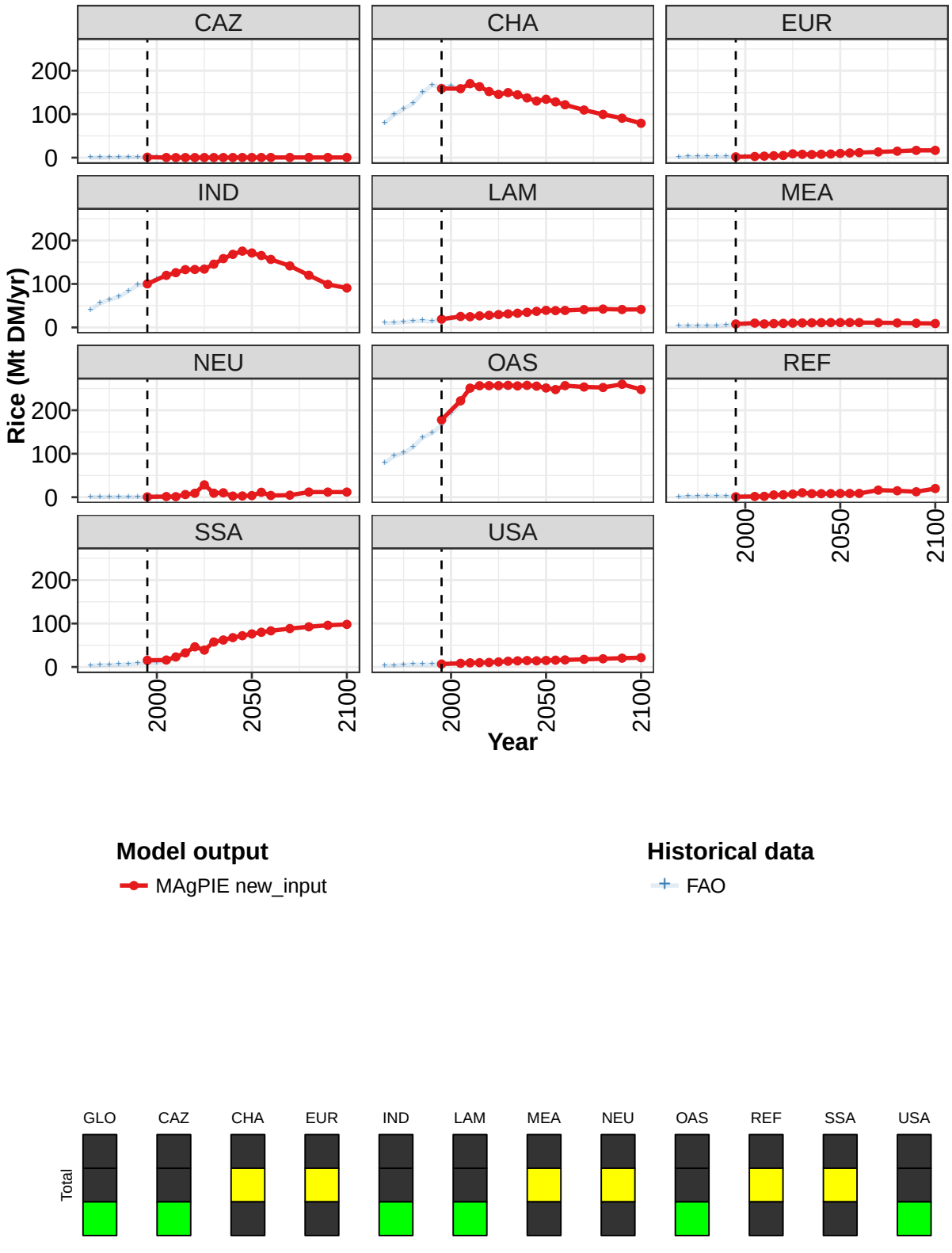


Figure 272: MAgPIE new_input — Production—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	491	566	619	646	656	671	692	704	710	716	721
CAZ	1	0	0	0	0	0	0	0	0	0	0
CHA	159	159	170	163	152	145	150	145	137	130	134
EUR	2	3	3	4	5	9	8	7	8	8	10
IND	100	120	126	133	133	134	145	158	168	176	171
LAM	19	25	25	27	28	30	31	33	35	37	39
MEA	8	10	8	9	9	10	10	11	11	11	11
NEU	1	2	1	6	9	28	9	10	3	3	4
OAS	178	222	251	256	257	257	257	256	257	256	251
REF	1	2	2	5	6	7	10	8	8	8	9
SSA	15	16	23	32	46	39	57	62	68	72	76
USA	7	8	10	10	10	12	13	14	15	14	15

Table 1045: MAgPIE new_input — Production—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

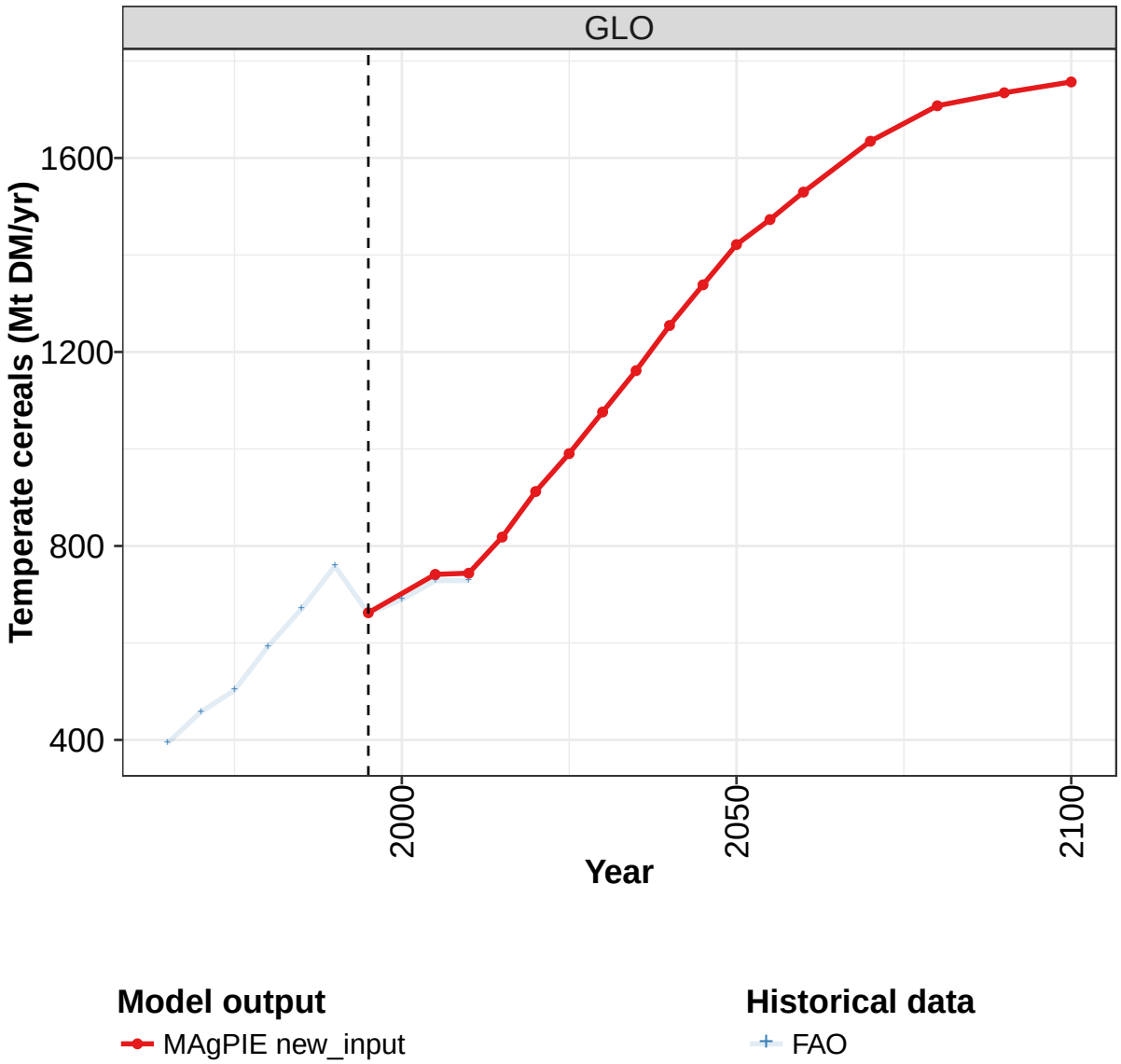
	2055	2060	2070	2080	2090	2100
GLO	718	709	697	678	658	636
CAZ	0	0	0	0	0	0
CHA	128	122	110	99	91	79
EUR	11	12	13	15	17	17
IND	166	157	142	120	99	91
LAM	39	39	41	42	41	41
MEA	11	11	11	10	10	9
NEU	11	4	5	12	12	12
OAS	248	257	254	252	260	248
REF	9	9	16	15	13	20
SSA	80	83	88	92	96	98
USA	16	16	18	19	20	21

Table 1046: MAgPIE new_input — Production—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	218	272	307	343	404	448	473	519	550	609
CAZ	0	0	0	1	1	1	1	1	0	0
CHA	79	98	112	124	149	167	163	165	158	172
EUR	1	2	2	2	2	2	2	2	2	3
IND	40	55	64	70	83	97	100	111	120	125
LAM	9	10	12	14	15	14	19	20	23	22
MEA	3	3	3	3	4	5	6	7	8	7
NEU	0	0	0	0	0	0	0	0	1	1
OAS	79	94	102	115	137	147	166	194	216	250
REF	0	1	2	2	2	2	1	1	1	2
SSA	3	4	5	5	6	8	8	10	12	18
USA	3	3	5	6	5	6	7	8	9	10

Table 1047: FAO — Production—Crops—Cereals—Rice (Mt DM/yr)

44.1.3 Temperate cereals



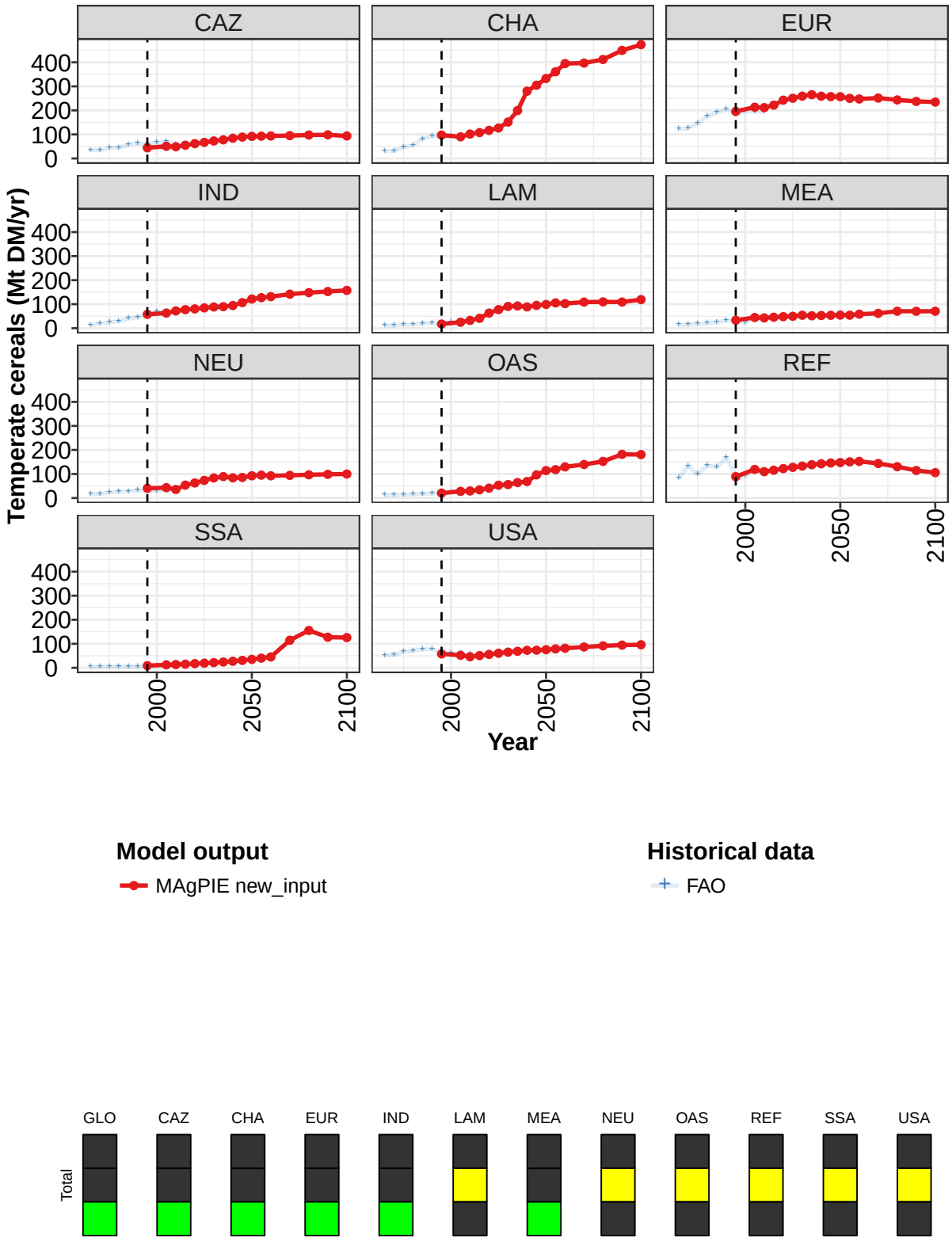


Figure 273: MAgPIE new_input — Production—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	662	741	744	818	912	990	1076	1162	1255	1339	1421
CAZ	44	51	49	55	62	67	73	77	84	89	92
CHA	97	90	102	108	117	127	152	199	280	305	333
EUR	196	213	212	222	242	251	259	265	259	257	257
IND	58	63	72	77	81	85	88	90	94	107	122
LAM	17	25	33	41	63	78	91	93	89	95	99
MEA	33	45	43	46	48	50	54	52	53	54	55
NEU	40	43	36	54	63	73	84	89	84	85	93
OAS	20	28	29	34	41	53	56	64	69	96	114
REF	89	119	110	116	123	128	133	139	142	146	147
SSA	9	12	14	15	17	19	22	24	27	31	35
USA	58	52	46	51	56	61	65	69	73	73	75

Table 1048: MAgPIE new_input — Production—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

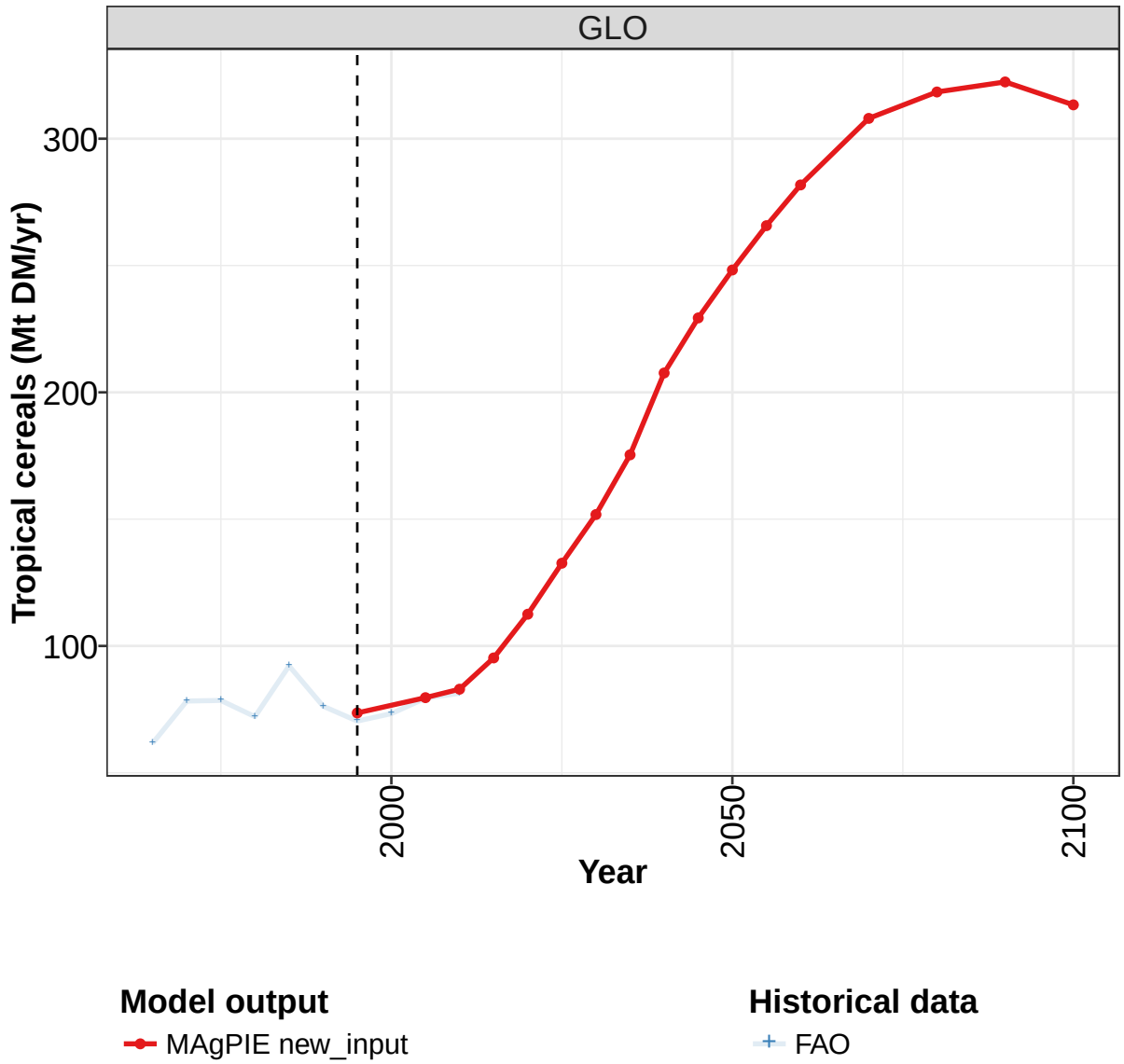
	2055	2060	2070	2080	2090	2100
GLO	1473	1530	1635	1708	1735	1757
CAZ	93	93	95	97	98	94
CHA	361	395	397	412	450	473
EUR	250	247	251	244	237	235
IND	127	132	142	148	153	158
LAM	105	103	109	110	109	119
MEA	54	59	62	71	71	71
NEU	95	92	94	97	99	100
OAS	118	130	139	152	182	181
REF	150	153	144	130	115	106
SSA	40	45	115	155	127	126
USA	78	81	87	91	94	96

Table 1049: MAgPIE new_input — Production—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	393	458	502	592	670	758	661	690	728	729
CAZ	35	34	44	45	57	63	59	66	70	58
CHA	30	32	47	55	81	93	98	94	91	105
EUR	123	125	146	175	191	204	183	197	195	194
IND	13	20	24	29	40	45	59	68	61	72
LAM	12	12	16	15	20	21	17	24	25	33
MEA	15	15	18	21	25	32	32	24	42	42
NEU	16	17	23	27	28	32	29	31	33	29
OAS	12	13	14	16	17	19	21	24	27	29
REF	83	133	99	135	129	166	96	93	119	100
SSA	4	5	4	5	5	5	6	7	9	11
USA	52	53	67	70	76	78	61	61	56	57

Table 1050: FAO — Production—Crops—Cereals—Temperate cereals (Mt DM/yr)

44.1.4 Tropical cereals



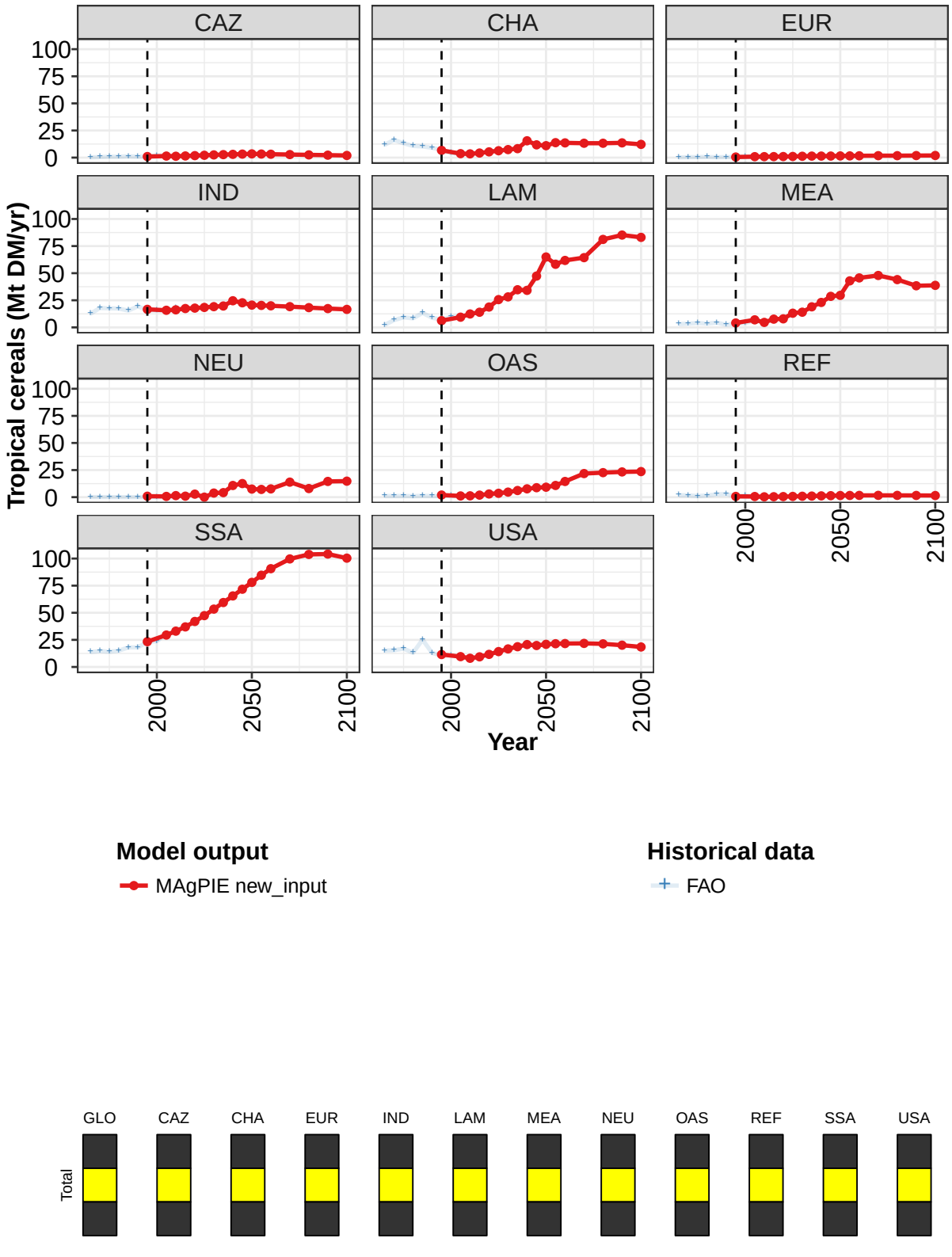


Figure 274: MAgPIE new_input — Production—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	74	80	83	95	113	133	152	175	208	229	248
CAZ	1	1	1	2	2	2	2	3	3	3	3
CHA	7	4	3	4	5	6	7	8	16	12	11
EUR	1	1	1	1	1	1	1	1	1	1	2
IND	17	16	16	17	18	18	19	20	25	23	21
LAM	6	9	12	14	19	26	28	35	34	47	65
MEA	4	7	5	8	8	13	14	19	23	29	30
NEU	1	1	1	1	3	0	4	4	11	13	8
OAS	2	1	1	2	3	4	5	6	8	9	9
REF	1	1	0	0	1	1	1	1	1	1	2
SSA	23	29	33	37	42	47	53	59	66	72	78
USA	11	10	8	9	12	14	17	19	21	20	21

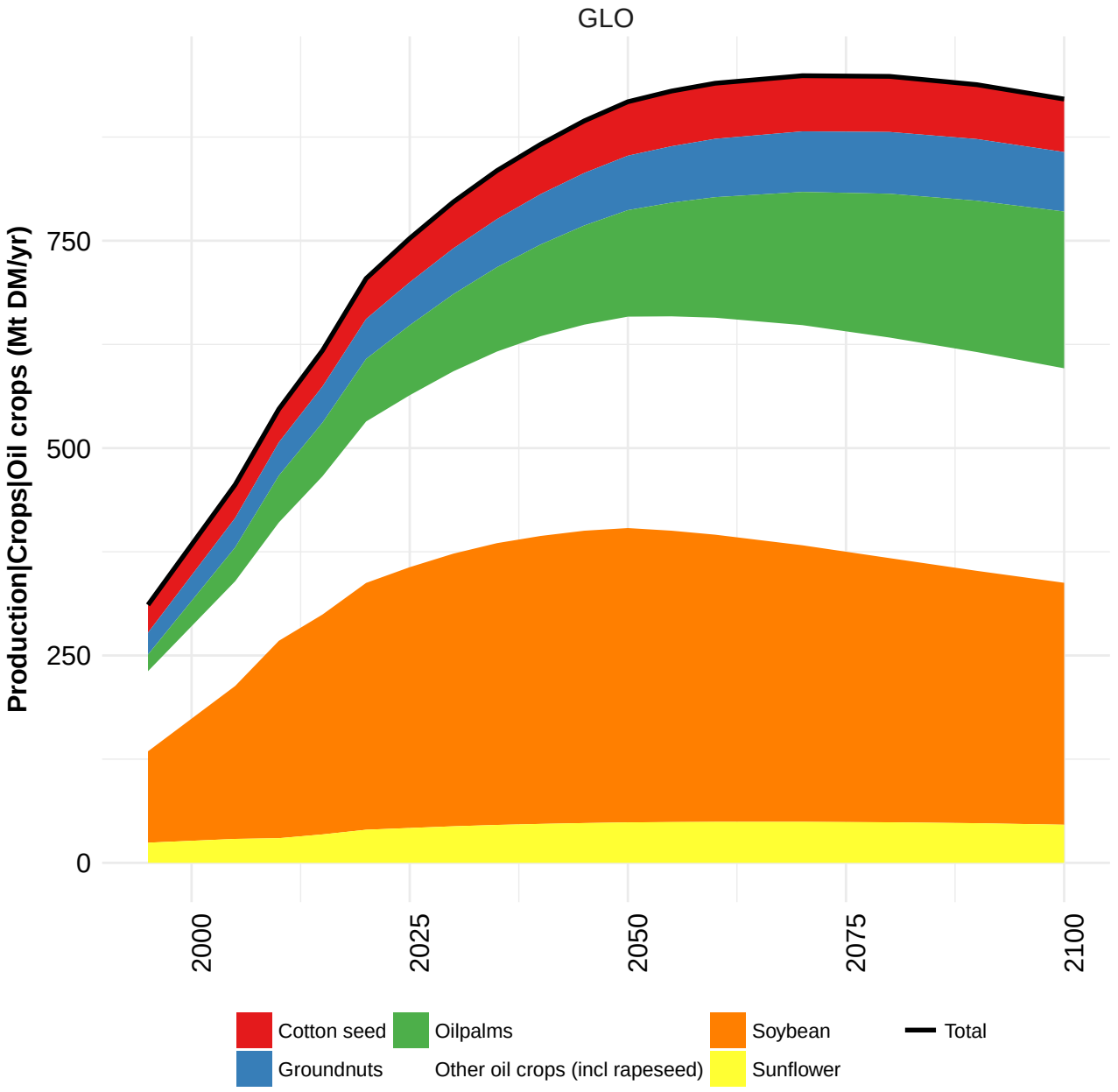
Table 1051: MAgPIE new_input — Production—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

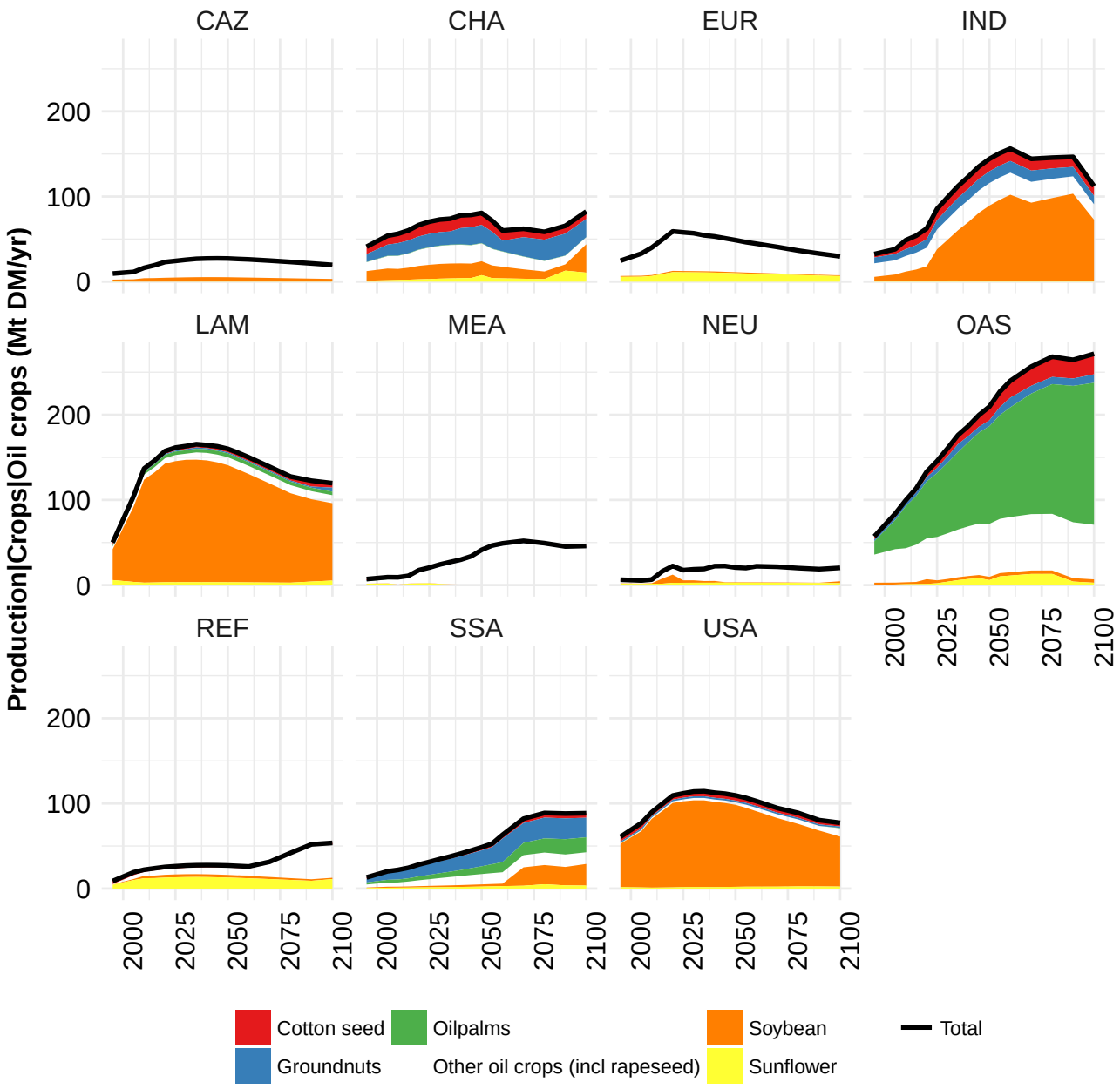
	2055	2060	2070	2080	2090	2100
GLO	266	282	308	318	322	313
CAZ	3	3	3	3	2	2
CHA	14	14	13	13	14	12
EUR	2	2	2	2	2	2
IND	20	20	19	18	17	17
LAM	58	62	64	81	85	83
MEA	43	46	48	44	38	39
NEU	7	8	14	8	15	15
OAS	11	15	22	23	23	24
REF	2	2	2	2	2	2
SSA	85	91	100	104	104	100
USA	21	22	22	21	20	18

Table 1052: MAgPIE new_input — Production—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

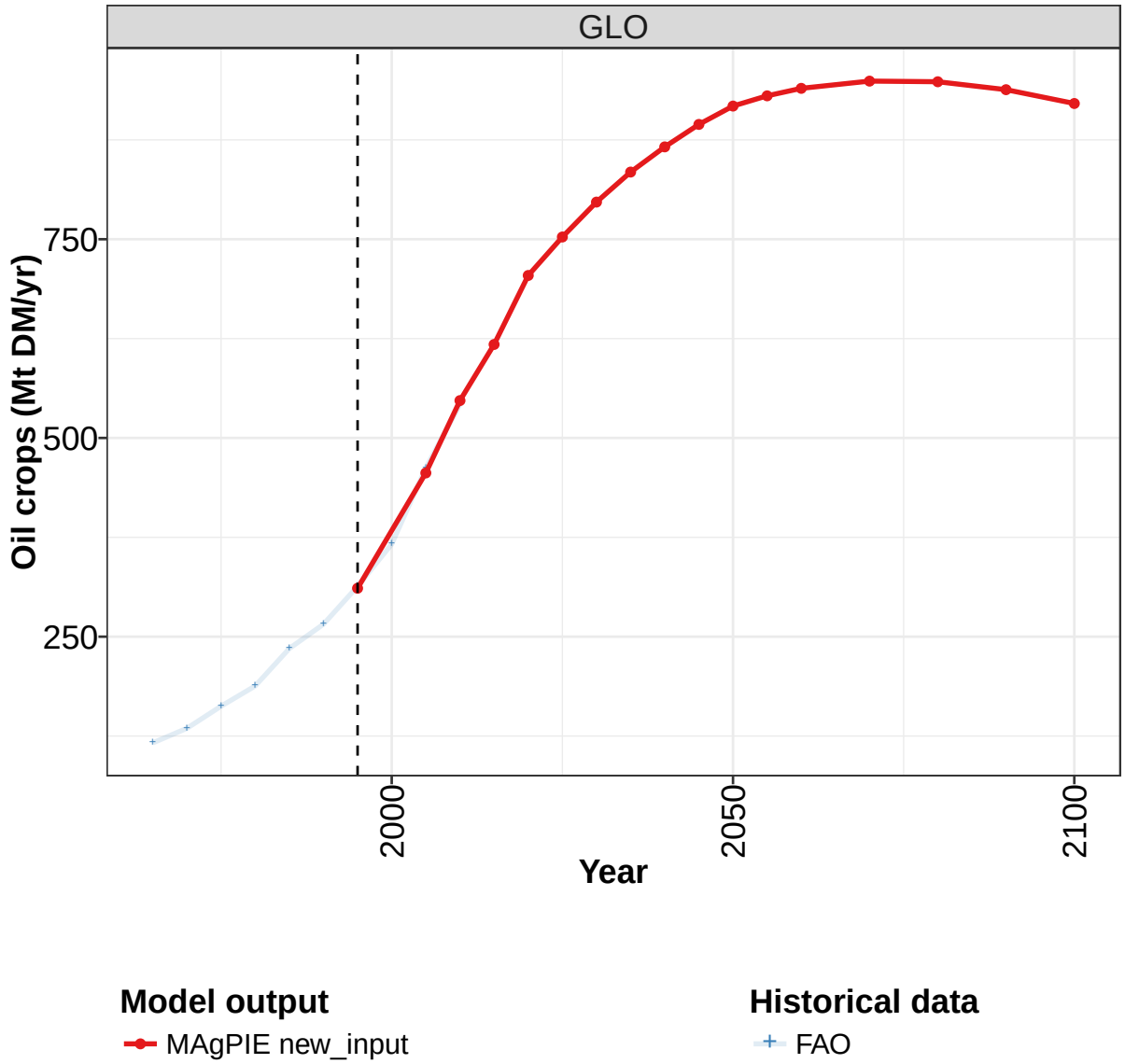
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	61.7	78.3	78.5	72.1	92.1	76.2	70.4	73.3	79.4	81.4
CAZ	0.2	0.5	0.8	0.8	1.2	0.9	1.2	1.9	1.8	1.4
CHA	11.7	16.3	13.2	10.8	10.3	9.1	6.9	4.2	3.8	3.5
EUR	0.2	0.4	0.5	0.6	0.3	0.5	0.5	0.6	0.5	0.6
IND	12.5	17.8	17.6	17.4	15.5	19.5	15.8	15.5	15.6	17.6
LAM	2.2	6.7	9.2	8.4	13.3	8.9	7.0	10.0	10.0	12.2
MEA	3.0	3.4	4.0	3.5	4.4	2.3	3.8	4.1	6.4	4.2
NEU	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
OAS	1.1	1.1	1.1	1.0	1.3	1.1	1.0	1.1	1.1	1.2
REF	1.8	1.7	1.0	1.6	2.6	2.9	0.7	1.5	0.6	0.3
SSA	13.7	14.7	14.0	15.0	18.0	18.1	23.0	23.8	30.4	32.2
USA	15.1	15.4	16.9	13.1	25.2	13.0	10.4	10.7	9.1	8.0

Table 1053: FAO — Production—Crops—Cereals—Tropical cereals (Mt DM/yr)


GLO
Production|Crops|Oil crops (Mt DM/yr)
750
500
250
0
2000
2025
2050
2075
2100
Cotton seed
Oilpalms
Soybean
Total
Groundnuts
Other oil crops (incl rapeseed)
Sunflower


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Crops|Oil crops (Mt DM/yr)
0
100
200
2000
2025
2050
2075
2100
Cotton seed
Oilpalms
Soybean
Total
Groundnuts
Other oil crops (incl rapeseed)
Sunflower

44.2 Oil crops



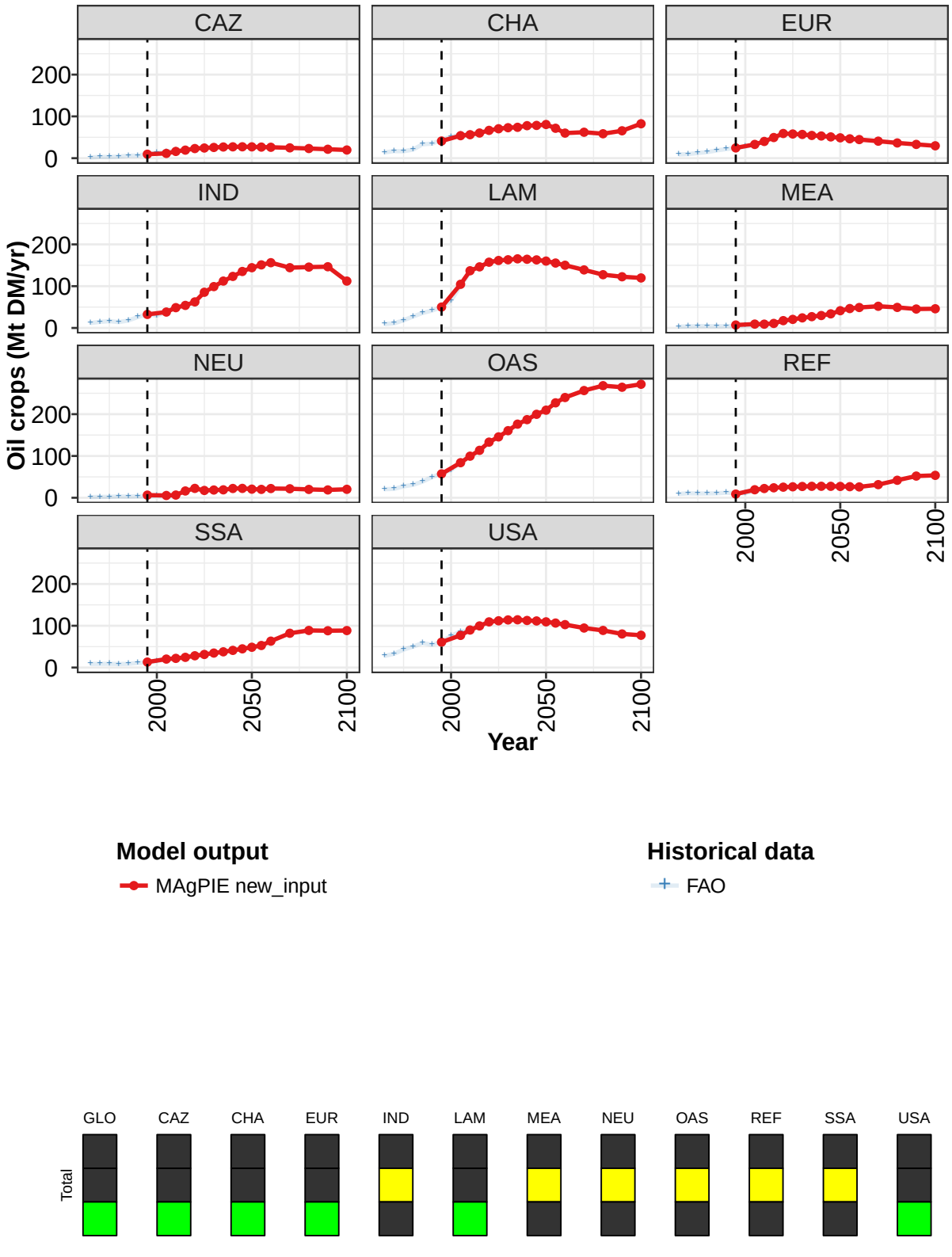


Figure 275: MAgPIE new_input — Production—Crops—Oil crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	311	456	547	618	704	753	797	835	866	894	918
CAZ	9	11	16	19	23	24	26	27	27	27	27
CHA	41	54	56	60	67	70	73	74	78	78	81
EUR	25	33	40	49	59	58	57	54	53	51	49
IND	32	38	49	54	62	85	99	112	123	135	144
LAM	50	104	137	146	157	161	163	165	164	163	160
MEA	7	9	9	11	18	21	24	27	30	34	41
NEU	6	5	6	16	22	18	19	19	22	22	21
OAS	57	84	100	114	133	146	161	176	187	200	210
REF	9	19	22	24	25	26	27	27	28	27	27
SSA	13	20	22	24	28	31	35	38	41	45	49
USA	61	77	90	100	109	112	114	114	113	112	109

Table 1054: MAgPIE new_input — Production—Crops—Oil crops (Mt DM/yr) [PART 1/2]

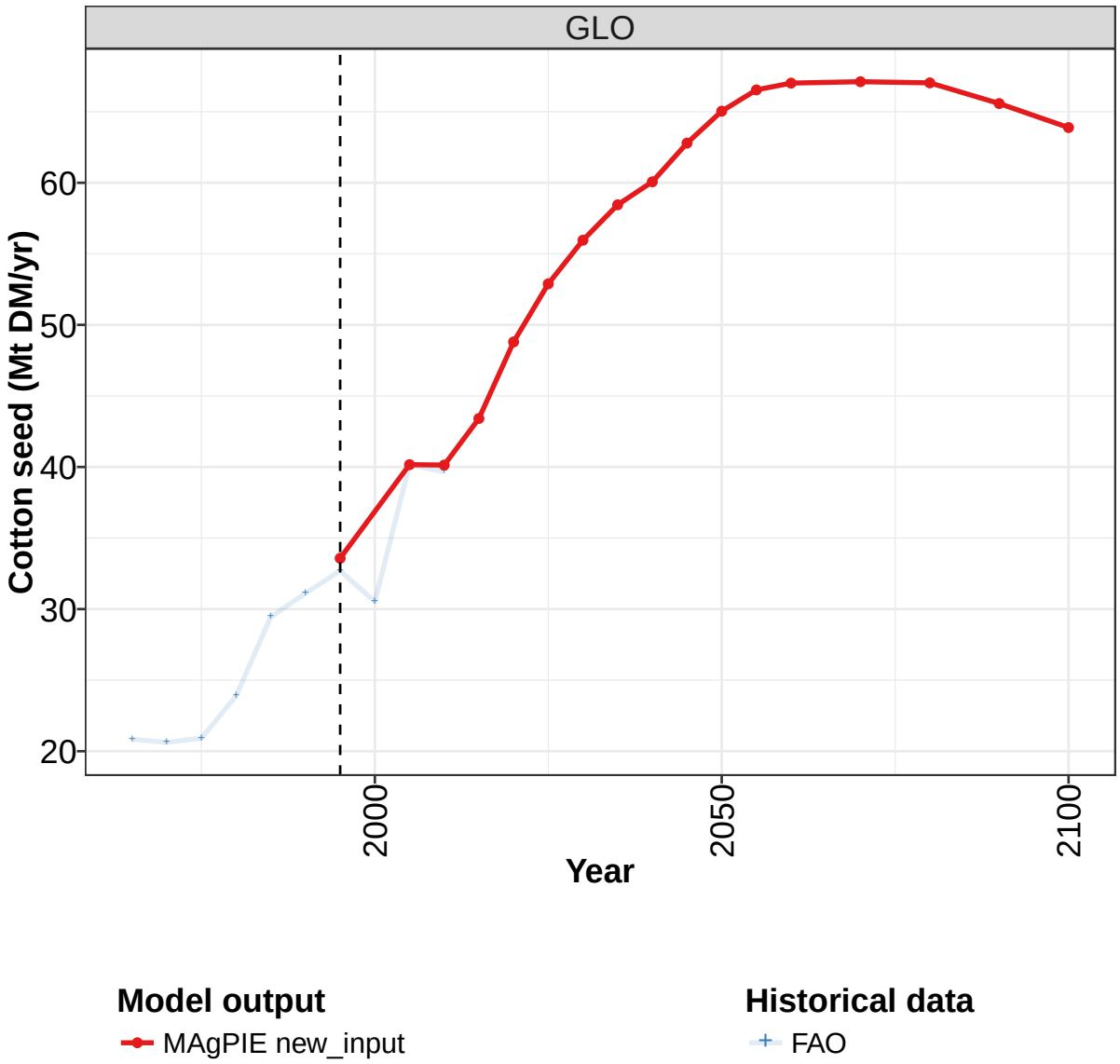
	2055	2060	2070	2080	2090	2100
GLO	930	940	949	948	938	921
CAZ	27	26	25	23	21	20
CHA	72	60	62	58	66	82
EUR	46	45	41	36	33	30
IND	151	156	144	146	147	112
LAM	155	150	139	128	123	120
MEA	46	49	52	49	45	46
NEU	20	22	22	20	19	20
OAS	227	240	257	268	265	272
REF	27	26	31	42	52	54
SSA	53	63	82	89	88	89
USA	106	103	95	89	80	77

Table 1055: MAgPIE new_input — Production—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	116	135	163	188	235	266	313	366	462	542
CAZ	1	3	3	4	6	6	10	13	15	19
CHA	14	17	17	21	33	35	44	52	56	57
EUR	9	10	12	15	19	22	25	28	33	39
IND	12	15	16	14	18	26	33	29	39	49
LAM	9	11	18	27	36	42	50	66	101	133
MEA	3	4	5	4	4	4	5	6	7	7
NEU	1	2	2	3	3	4	3	4	4	5
OAS	21	21	27	31	39	50	58	66	84	100
REF	9	11	10	10	11	12	11	11	17	20
SSA	9	9	9	8	9	11	12	15	20	22
USA	28	33	43	50	59	54	62	76	86	90

Table 1056: FAO — Production—Crops—Oil crops (Mt DM/yr)

44.2.1 Cotton seed



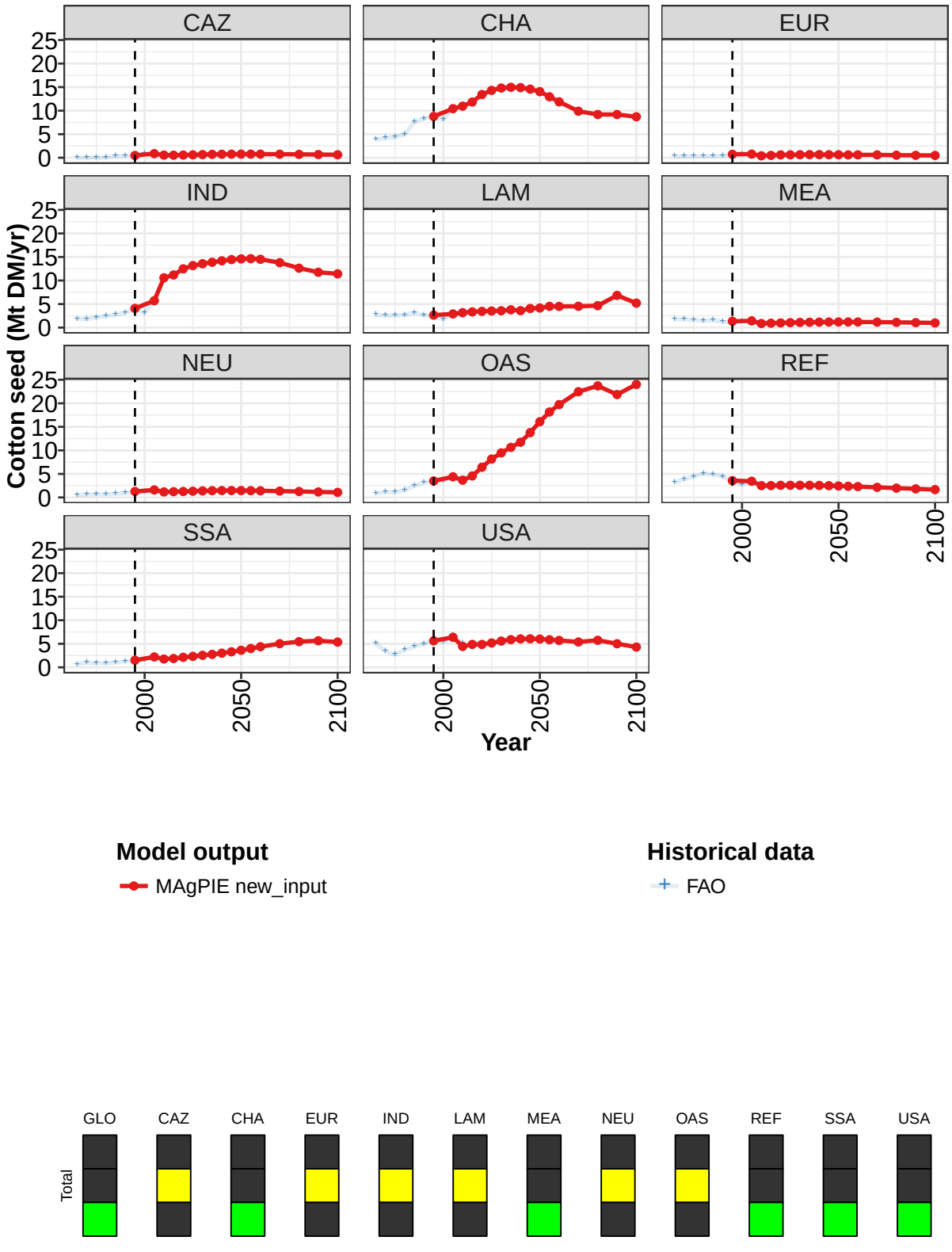


Figure 276: MAgPIE new_input — Production—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	33.6	40.2	40.1	43.4	48.8	52.9	56.0	58.4	60.1	62.8	65.0
CAZ	0.5	0.9	0.6	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8
CHA	8.8	10.4	11.0	11.8	13.4	14.3	14.8	15.0	14.9	14.6	14.0
EUR	0.7	0.8	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.6	0.6
IND	4.1	5.7	10.6	11.2	12.5	13.2	13.6	13.9	14.2	14.4	14.6
LAM	2.6	2.9	3.2	3.3	3.5	3.5	3.6	3.8	3.6	4.1	4.2
MEA	1.4	1.4	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.2	1.2
NEU	1.3	1.6	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.5
OAS	3.5	4.4	3.7	4.6	6.4	8.2	9.5	10.6	11.7	13.8	16.1
REF	3.6	3.4	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.5	2.4
SSA	1.5	2.2	1.8	1.9	2.1	2.3	2.6	2.8	3.0	3.3	3.6
USA	5.6	6.4	4.4	4.9	4.9	5.2	5.6	5.9	6.0	6.1	6.0

Table 1057: MAgPIE new_input — Production—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

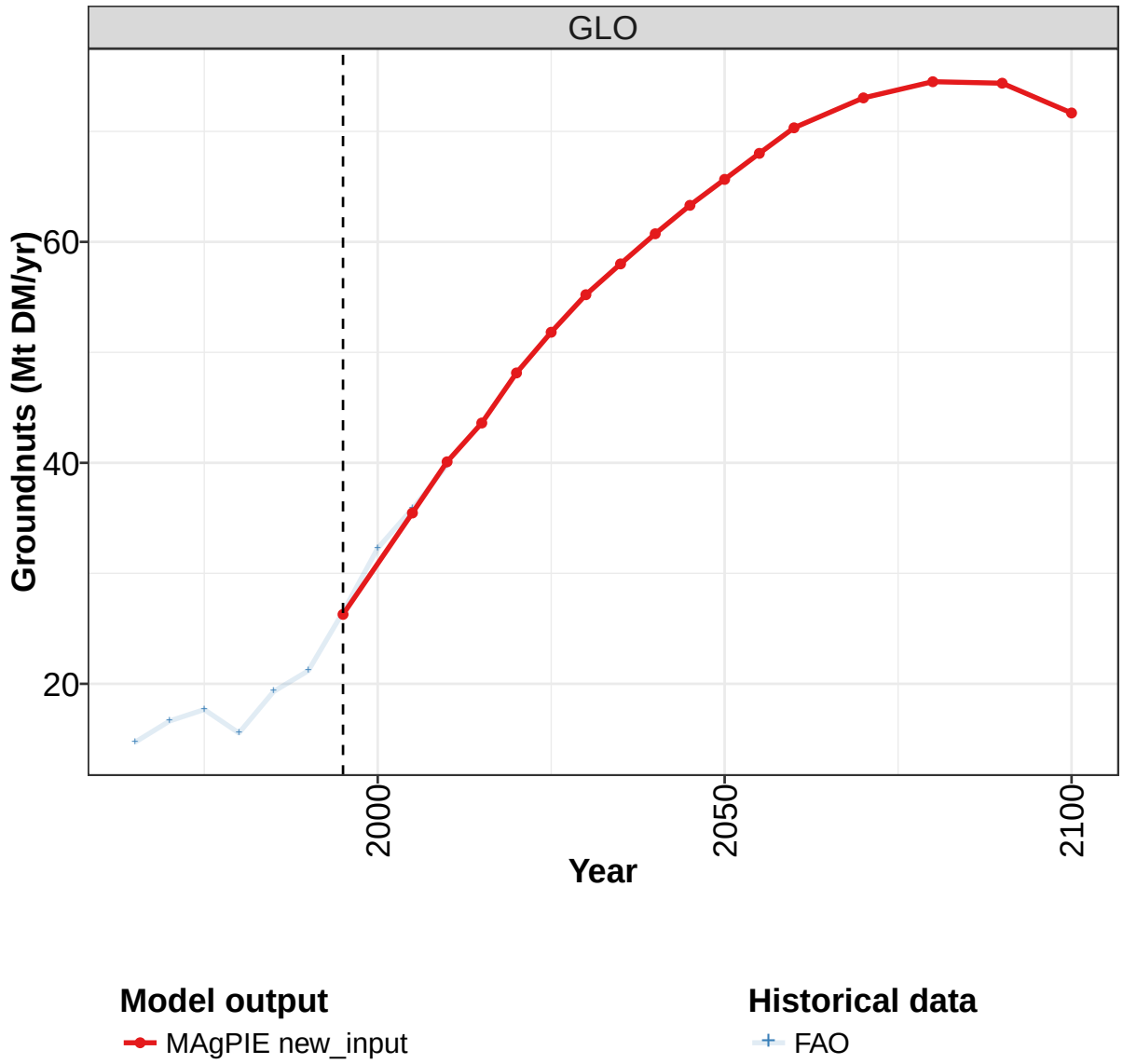
	2055	2060	2070	2080	2090	2100
GLO	66.5	67.0	67.1	67.0	65.6	63.9
CAZ	0.8	0.8	0.8	0.7	0.7	0.6
CHA	12.9	11.9	9.9	9.2	9.2	8.7
EUR	0.6	0.6	0.6	0.5	0.5	0.5
IND	14.6	14.5	13.8	12.6	11.8	11.4
LAM	4.5	4.5	4.5	4.7	6.8	5.2
MEA	1.2	1.2	1.2	1.1	1.1	1.0
NEU	1.4	1.4	1.3	1.3	1.2	1.1
OAS	18.2	19.7	22.5	23.7	21.9	24.0
REF	2.4	2.3	2.2	2.0	1.8	1.7
SSA	4.0	4.4	5.0	5.5	5.6	5.4
USA	5.9	5.7	5.4	5.7	5.0	4.3

Table 1058: MAgPIE new_input — Production—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	20.8	20.6	20.9	23.9	29.4	31.1	32.7	30.5	40.2	39.7
CAZ	0.0	0.0	0.0	0.1	0.4	0.5	0.4	1.0	0.8	0.5
CHA	3.9	4.2	4.4	5.0	7.6	8.3	8.8	8.1	10.5	11.0
EUR	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.8	0.8	0.4
IND	1.9	1.8	2.2	2.4	2.8	3.1	4.1	3.1	5.9	10.6
LAM	2.7	2.6	2.6	2.7	3.1	2.7	2.3	1.8	2.9	2.5
MEA	1.8	1.8	1.6	1.4	1.6	1.2	1.2	1.4	1.4	0.7
NEU	0.5	0.6	0.7	0.7	0.8	1.0	1.2	1.2	1.2	1.2
OAS	0.9	1.1	1.1	1.5	2.5	3.2	3.5	3.6	4.3	3.7
REF	3.2	3.9	4.4	5.1	4.9	4.4	3.4	2.7	3.3	2.5
SSA	0.6	1.0	0.9	0.8	1.0	1.3	1.4	1.6	2.3	1.6
USA	5.1	3.4	2.7	3.7	4.4	5.0	5.7	5.4	6.8	5.1

Table 1059: FAO — Production—Crops—Oil crops—Cotton seed (Mt DM/yr)

44.2.2 Groundnuts



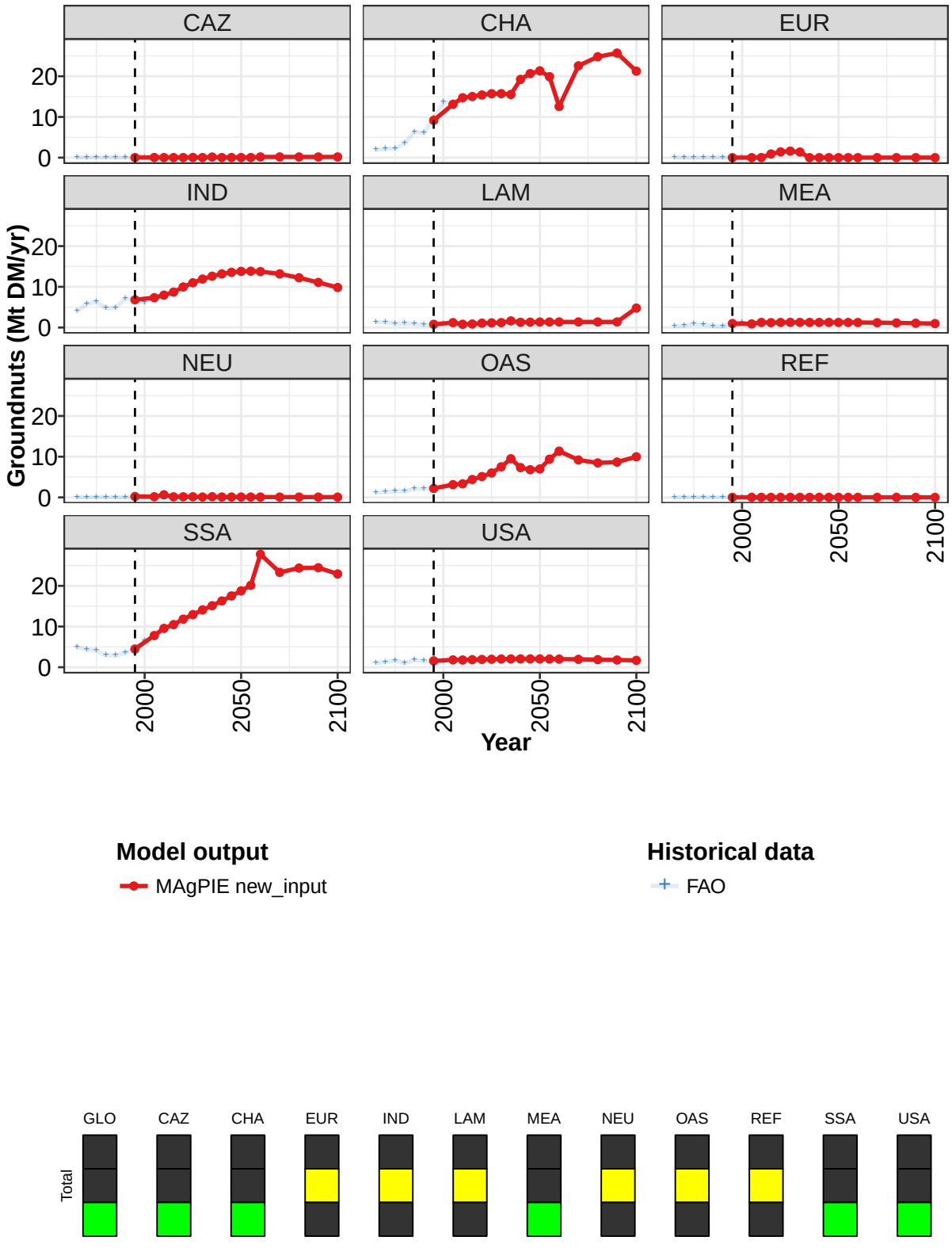


Figure 277: MAgPIE new_input — Production—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	26.3	35.5	40.1	43.6	48.1	51.8	55.2	58.0	60.7	63.3	65.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
CHA	9.2	13.1	14.7	15.0	15.4	15.7	15.7	15.5	19.2	20.7	21.3
EUR	0.0	0.0	0.0	0.9	1.4	1.6	1.4	0.0	0.0	0.0	0.0
IND	6.8	7.3	8.0	8.7	10.0	11.0	11.9	12.6	13.2	13.6	13.8
LAM	0.8	1.2	0.8	0.9	1.1	1.1	1.2	1.6	1.3	1.3	1.4
MEA	1.0	0.9	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3
NEU	0.2	0.2	0.6	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1
OAS	2.2	3.1	3.3	4.4	5.1	6.0	7.5	9.5	7.3	6.8	7.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	4.5	7.8	9.5	10.5	11.8	12.9	14.1	15.1	16.3	17.5	18.8
USA	1.6	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.0

Table 1060: MAgPIE new_input — Production—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

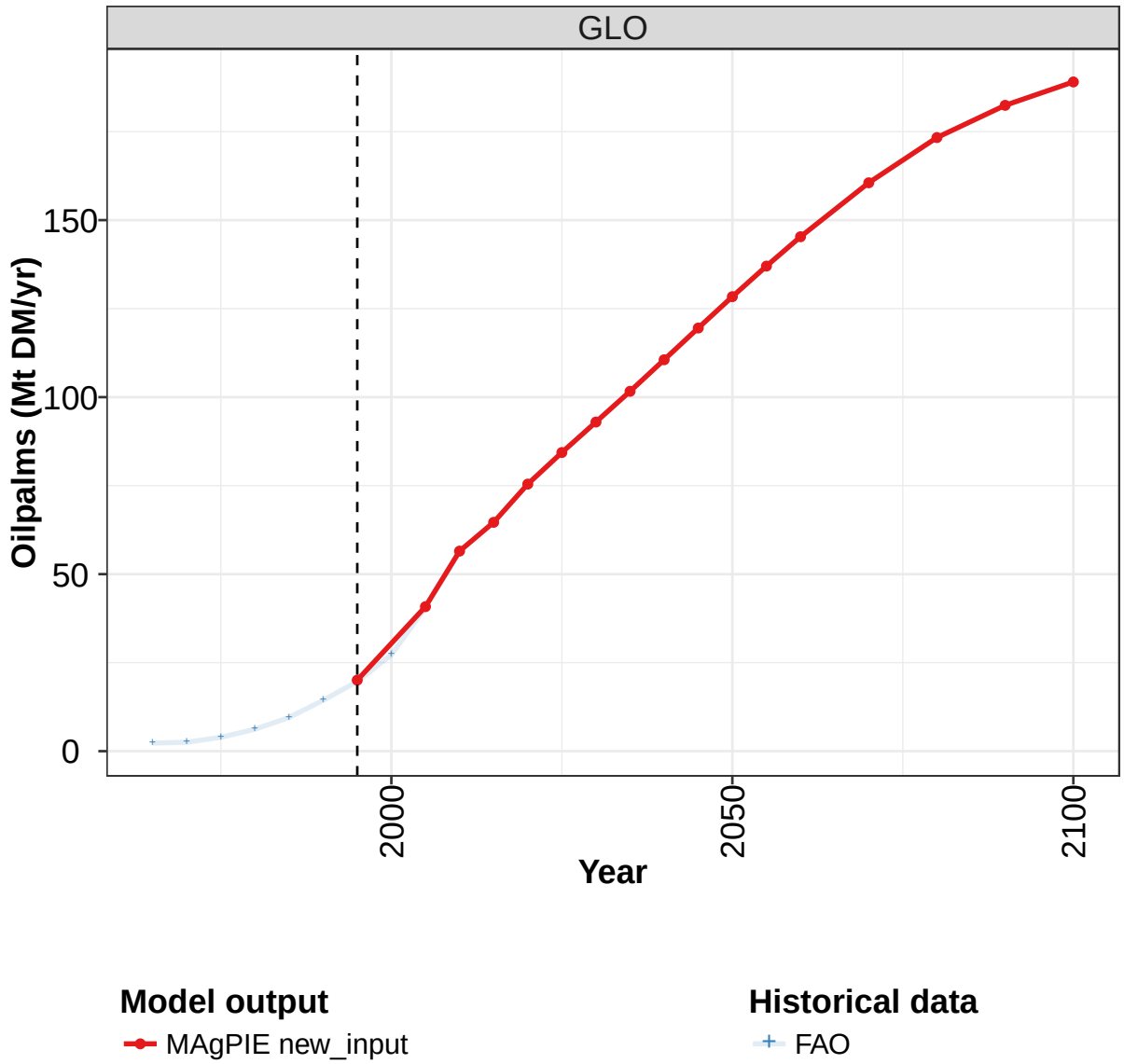
	2055	2060	2070	2080	2090	2100
GLO	68.0	70.3	73.0	74.5	74.4	71.7
CAZ	0.0	0.2	0.2	0.2	0.2	0.2
CHA	19.9	12.6	22.6	24.8	25.7	21.3
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	13.8	13.7	13.2	12.2	11.1	9.8
LAM	1.4	1.4	1.4	1.4	1.4	4.8
MEA	1.2	1.2	1.2	1.1	1.1	1.0
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	9.4	11.4	9.2	8.5	8.7	10.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	20.1	27.8	23.3	24.4	24.5	22.9
USA	2.0	2.0	1.9	1.9	1.8	1.7

Table 1061: MAgPIE new_input — Production—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	14.7	16.6	17.7	15.5	19.3	21.2	26.5	32.3	35.9	39.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.9	2.1	2.2	3.5	6.3	6.0	9.7	13.6	13.5	14.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	4.0	5.7	6.3	4.7	4.8	7.1	7.1	6.1	7.5	7.8
LAM	1.3	1.3	1.0	1.0	0.9	0.6	0.6	0.9	1.1	1.2
MEA	0.4	0.4	0.8	0.8	0.4	0.2	0.9	1.2	0.8	1.0
NEU	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.1	1.3	1.5	1.5	2.1	2.1	2.2	2.5	3.1	3.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	4.9	4.4	4.1	3.0	2.9	3.5	4.4	6.5	7.6	9.8
USA	1.0	1.3	1.6	1.0	1.8	1.5	1.5	1.4	2.1	1.8

Table 1062: FAO — Production—Crops—Oil crops—Groundnuts (Mt DM/yr)

44.2.3 Oilpalms



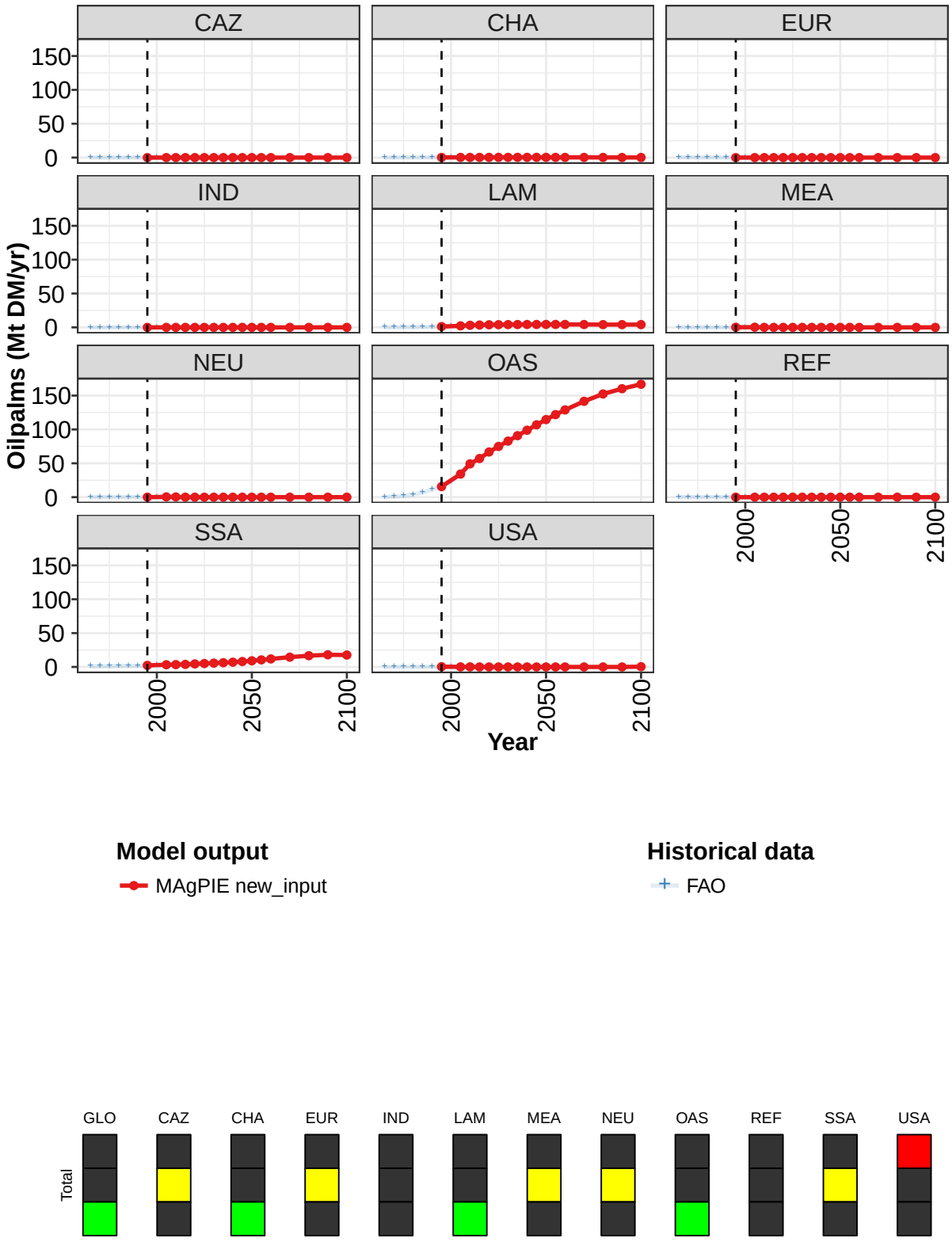


Figure 278: MAgPIE new_input — Production—Crops—Oil crops—Oilpalms (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	20	41	57	65	75	84	93	102	111	120	128
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
LAM	1	2	3	3	4	4	4	4	4	4	4
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	16	34	49	57	67	75	83	91	99	107	115
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2	3	3	4	5	5	6	6	7	8	9
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1063: MAgPIE new_input — Production—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 1/2]

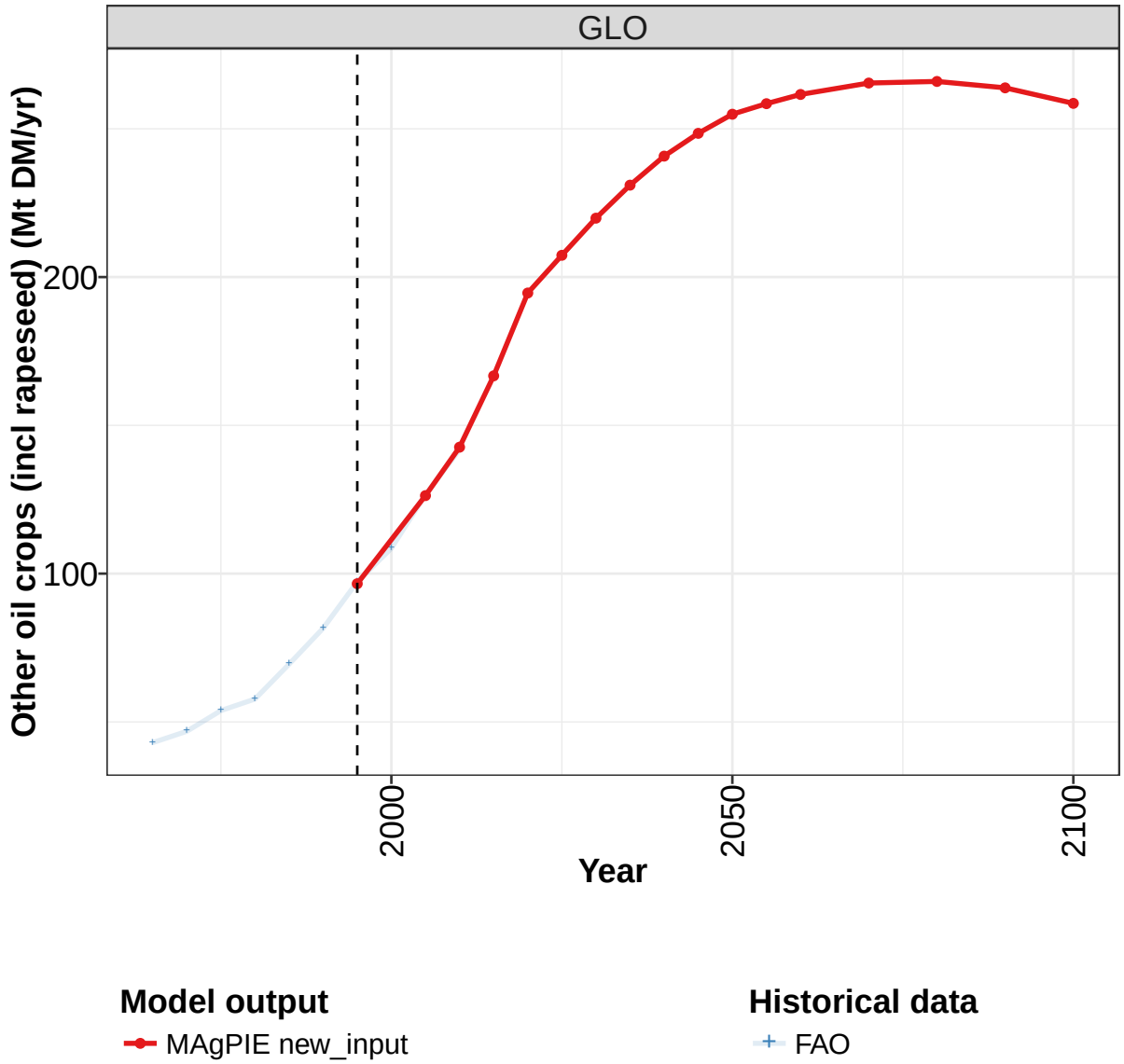
	2055	2060	2070	2080	2090	2100
GLO	137	145	161	173	182	189
CAZ	0	0	0	0	0	0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	0	0	0	0	0	0
LAM	4	4	4	4	4	4
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	122	129	142	152	160	167
REF	0	0	0	0	0	0
SSA	10	12	14	17	18	18
USA	0	0	0	0	0	0

Table 1064: MAgPIE new_input — Production—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.3	2.5	3.9	6.2	9.5	14.4	19.7	27.2	40.6	56.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
EUR	0.6	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.3	0.4	0.7	1.0	1.2	1.7	2.3	3.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.7	1.9	3.9	6.9	11.2	15.9	23.0	34.6	49.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.1	1.0	1.2	1.5	1.6	1.9	2.3	2.3	3.4	3.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1065: FAO — Production—Crops—Oil crops—Oilpalms (Mt DM/yr)

44.2.4 Other oil crops (incl rapeseed)



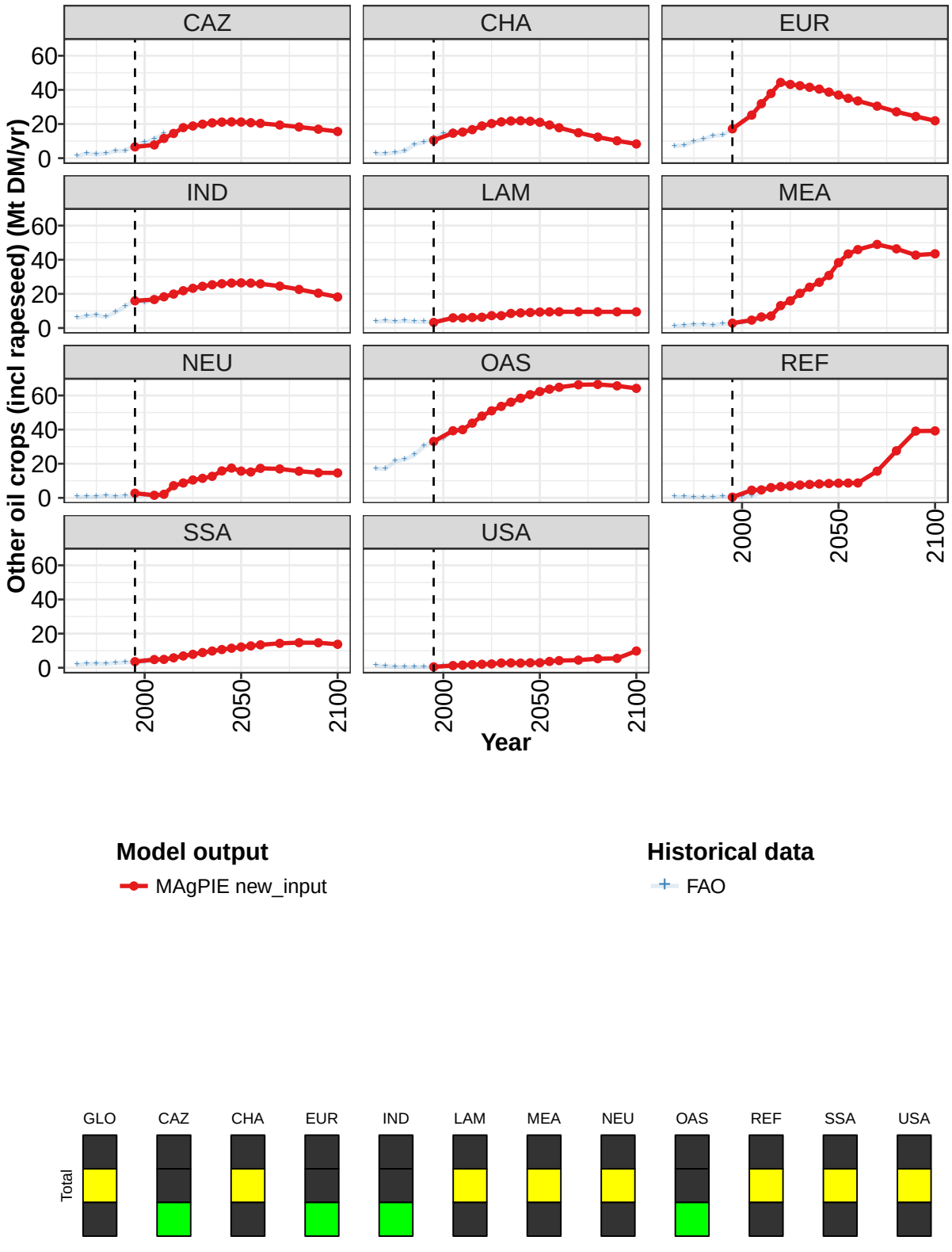


Figure 279: MAgPIE new_input — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	97	126	143	167	195	207	220	231	241	248	255
CAZ	7	8	12	14	18	19	20	21	21	21	21
CHA	10	15	15	17	19	20	21	22	22	22	21
EUR	17	25	32	38	44	43	42	42	40	39	37
IND	16	17	18	20	22	23	24	25	26	26	26
LAM	3	6	6	6	6	7	7	9	9	9	9
MEA	3	5	6	7	13	16	20	24	27	31	38
NEU	3	2	2	7	9	10	11	13	16	17	16
OAS	33	39	40	44	48	51	54	56	58	60	62
REF	0	5	5	6	7	7	8	8	8	8	9
SSA	4	5	5	6	7	8	9	10	11	11	12
USA	1	1	2	2	2	2	3	3	3	3	3

Table 1066: MAgPIE new_input — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

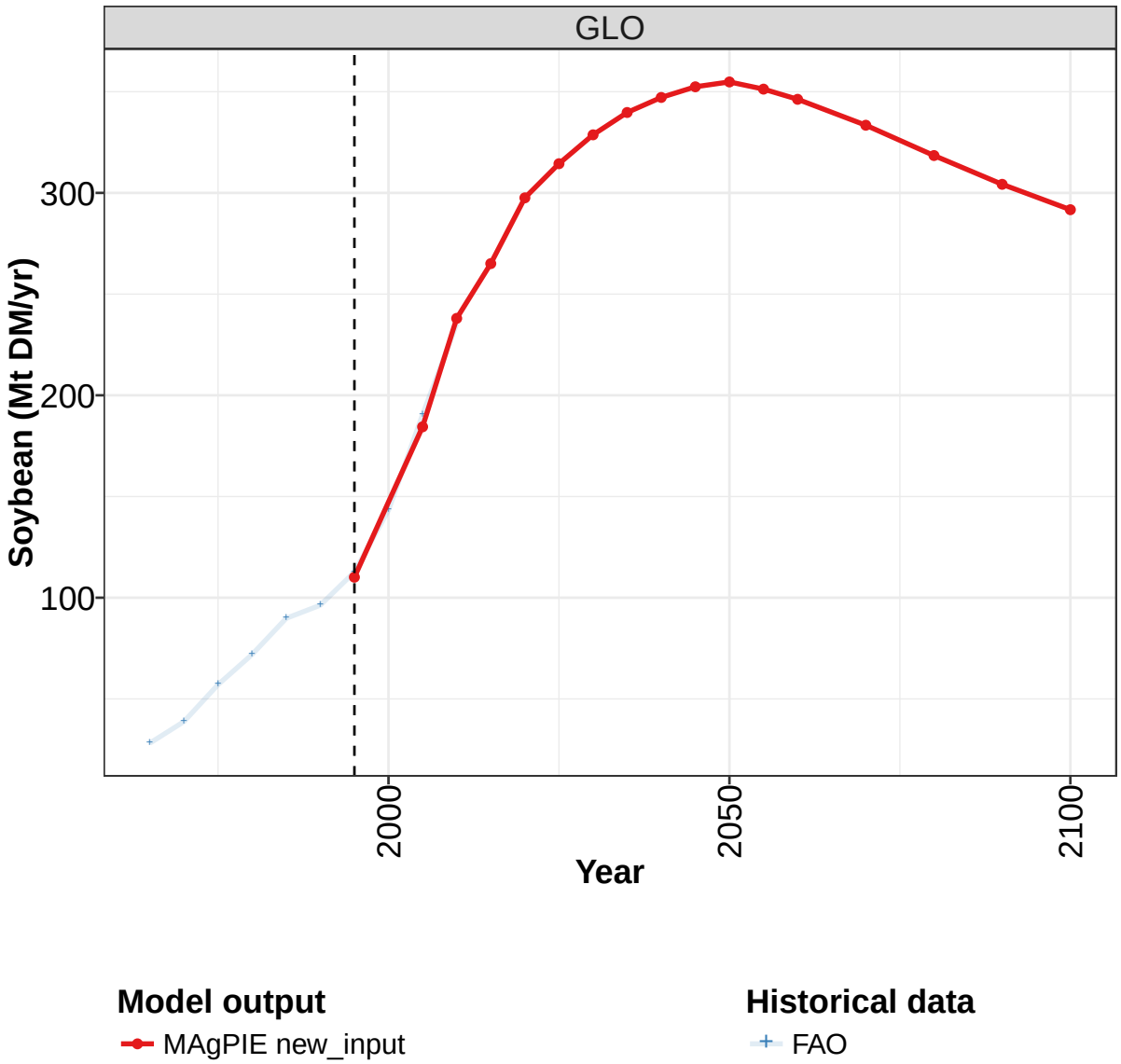
	2055	2060	2070	2080	2090	2100
GLO	258	262	265	266	264	259
CAZ	21	20	19	18	17	16
CHA	19	18	15	12	10	8
EUR	35	34	30	27	24	22
IND	26	26	25	23	20	18
LAM	9	10	10	9	9	9
MEA	43	46	49	46	43	43
NEU	15	17	17	16	15	15
OAS	64	65	66	66	66	64
REF	9	9	16	28	39	39
SSA	13	13	14	15	15	14
USA	4	4	4	5	5	10

Table 1067: MAgPIE new_input — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	43	47	54	58	69	82	97	109	127	142
CAZ	1	3	2	3	4	4	8	9	11	14
CHA	2	3	3	4	8	9	12	14	16	16
EUR	7	8	10	11	13	14	17	21	25	31
IND	6	7	8	6	9	13	16	15	17	19
LAM	4	4	4	4	4	4	3	4	6	6
MEA	1	1	2	2	2	2	2	3	4	5
NEU	0	1	1	1	1	1	1	2	1	2
OAS	17	17	21	23	25	30	34	35	39	40
REF	1	1	0	0	0	1	0	1	1	3
SSA	2	2	2	2	3	3	3	3	5	5
USA	1	1	1	0	0	0	1	1	1	2

Table 1068: FAO — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

44.2.5 Soybean



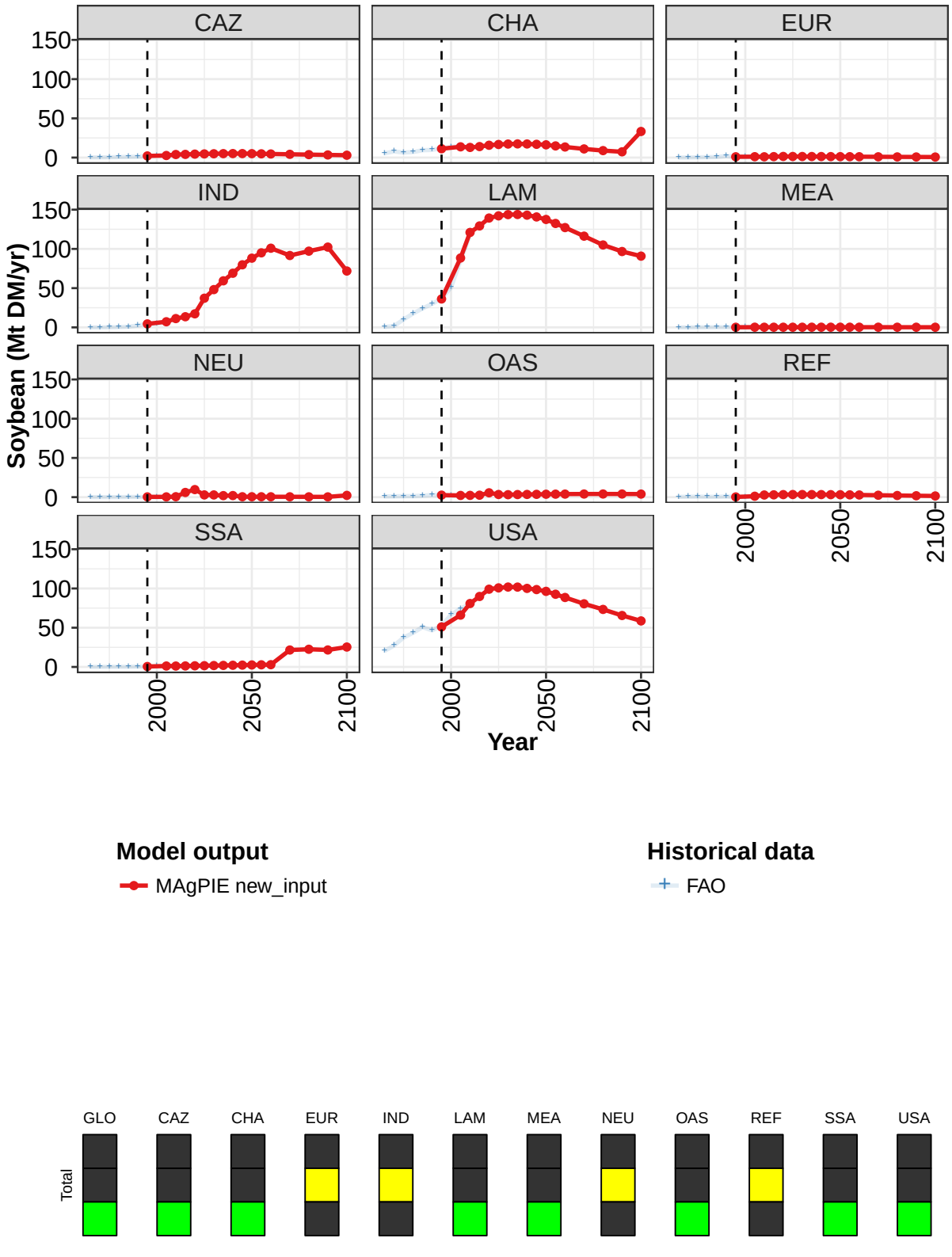


Figure 280: MAgPIE new_input — Production—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	110	184	238	265	298	314	329	340	347	352	355
CAZ	2	3	4	4	4	5	5	5	5	5	5
CHA	11	14	13	14	16	17	17	17	17	17	16
EUR	1	1	1	1	1	1	1	1	1	1	1
IND	4	7	11	14	17	37	48	59	69	80	88
LAM	36	88	121	129	139	142	144	144	143	141	138
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	1	6	10	3	3	2	2	1	1
OAS	3	2	2	3	6	3	3	3	3	4	4
REF	0	1	3	3	3	3	3	3	3	3	3
SSA	1	1	1	1	1	2	2	2	2	2	3
USA	51	66	81	90	99	101	102	102	100	99	96

Table 1069: MAgPIE new_input — Production—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

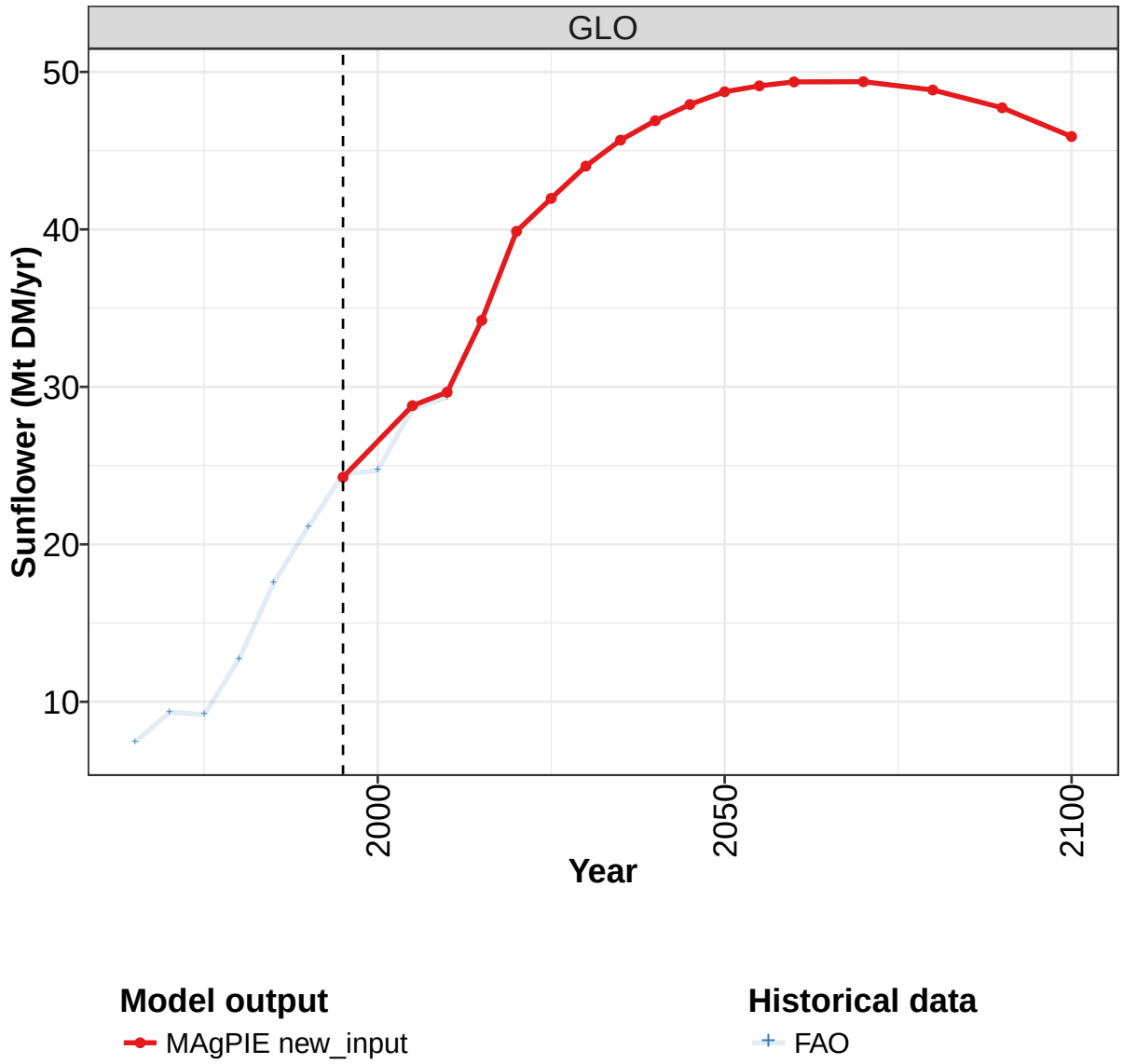
	2055	2060	2070	2080	2090	2100
GLO	351	346	333	318	304	292
CAZ	5	5	4	4	3	3
CHA	15	14	11	9	7	33
EUR	1	1	1	1	1	1
IND	95	101	92	97	102	72
LAM	132	127	116	105	97	91
MEA	0	0	0	0	0	0
NEU	1	1	0	0	0	2
OAS	4	4	4	4	4	4
REF	3	3	2	2	2	2
SSA	3	3	22	23	22	25
USA	93	89	80	73	66	59

Table 1070: MAgPIE new_input — Production—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	28	39	57	72	90	96	113	143	191	235
CAZ	0	0	0	1	1	1	2	2	3	4
CHA	6	8	6	7	9	10	12	14	15	13
EUR	0	0	0	1	1	2	1	1	1	1
IND	0	0	0	0	1	2	5	5	7	11
LAM	1	2	10	18	24	30	37	51	85	118
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	1
OAS	1	1	1	1	2	3	3	2	2	2
REF	0	1	1	0	0	1	0	0	1	3
SSA	0	0	0	0	0	1	0	1	1	1
USA	20	27	37	43	51	47	53	67	74	80

Table 1071: FAO — Production—Crops—Oil crops—Soybean (Mt DM/yr)

44.2.6 Sunflower



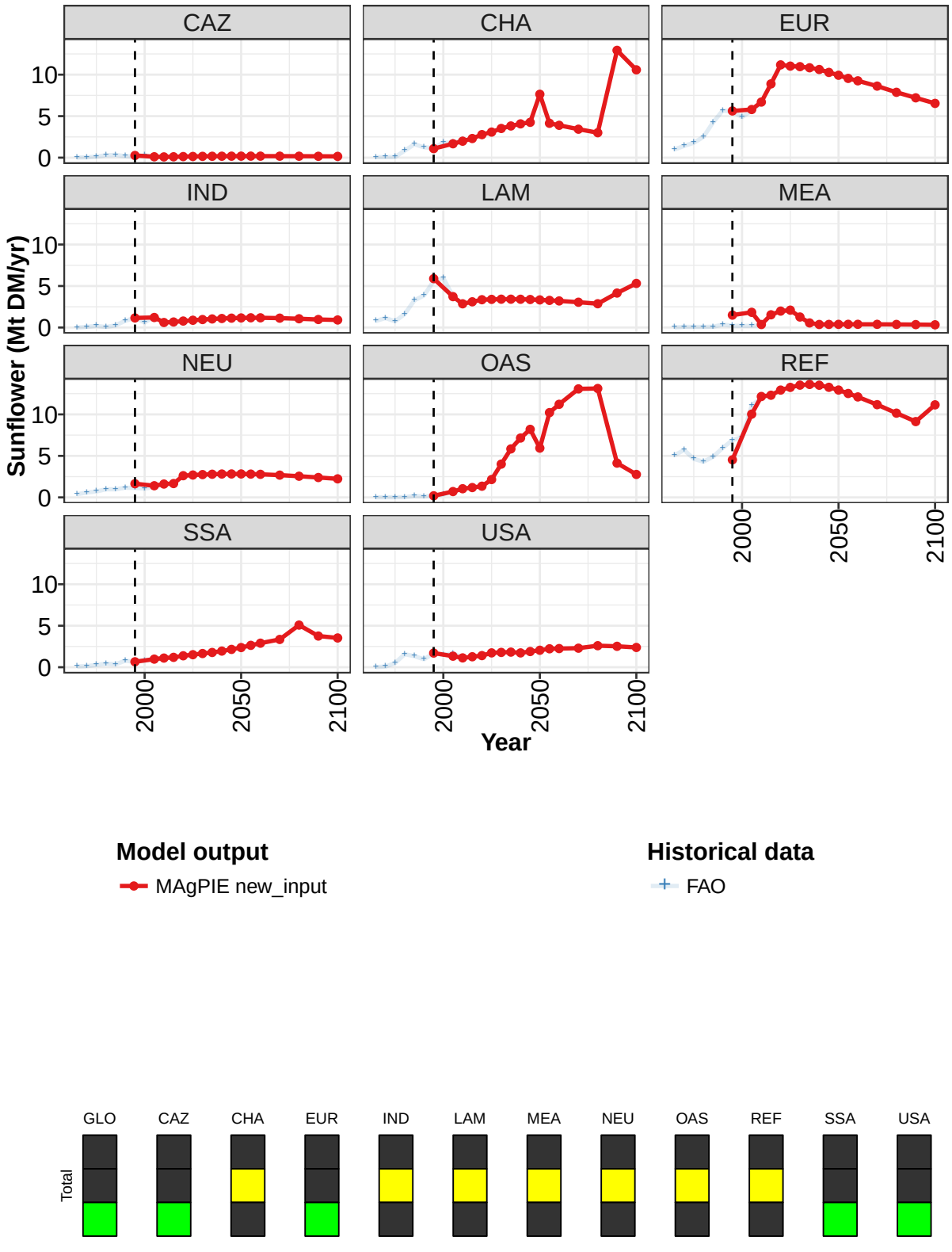


Figure 281: MAgPIE new_input — Production—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	24.3	28.8	29.7	34.2	39.9	42.0	44.0	45.7	46.9	47.9	48.7
CAZ	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
CHA	1.1	1.7	2.0	2.3	2.8	3.1	3.5	3.8	4.1	4.3	7.6
EUR	5.6	5.8	6.7	8.9	11.2	11.0	11.0	10.8	10.6	10.3	9.9
IND	1.2	1.2	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2
LAM	5.9	3.7	2.9	3.1	3.4	3.4	3.4	3.4	3.4	3.4	3.3
MEA	1.5	1.8	0.4	1.5	2.0	2.1	1.3	0.6	0.4	0.4	0.4
NEU	1.6	1.4	1.6	1.7	2.6	2.7	2.7	2.8	2.8	2.8	2.8
OAS	0.2	0.7	1.0	1.2	1.3	2.2	4.0	5.8	7.2	8.2	5.9
REF	4.5	10.0	12.2	12.3	12.9	13.3	13.5	13.6	13.5	13.3	12.9
SSA	0.7	1.0	1.1	1.2	1.4	1.5	1.7	1.8	1.9	2.2	2.4
USA	1.7	1.3	1.1	1.3	1.4	1.7	1.8	1.8	1.7	1.9	2.0

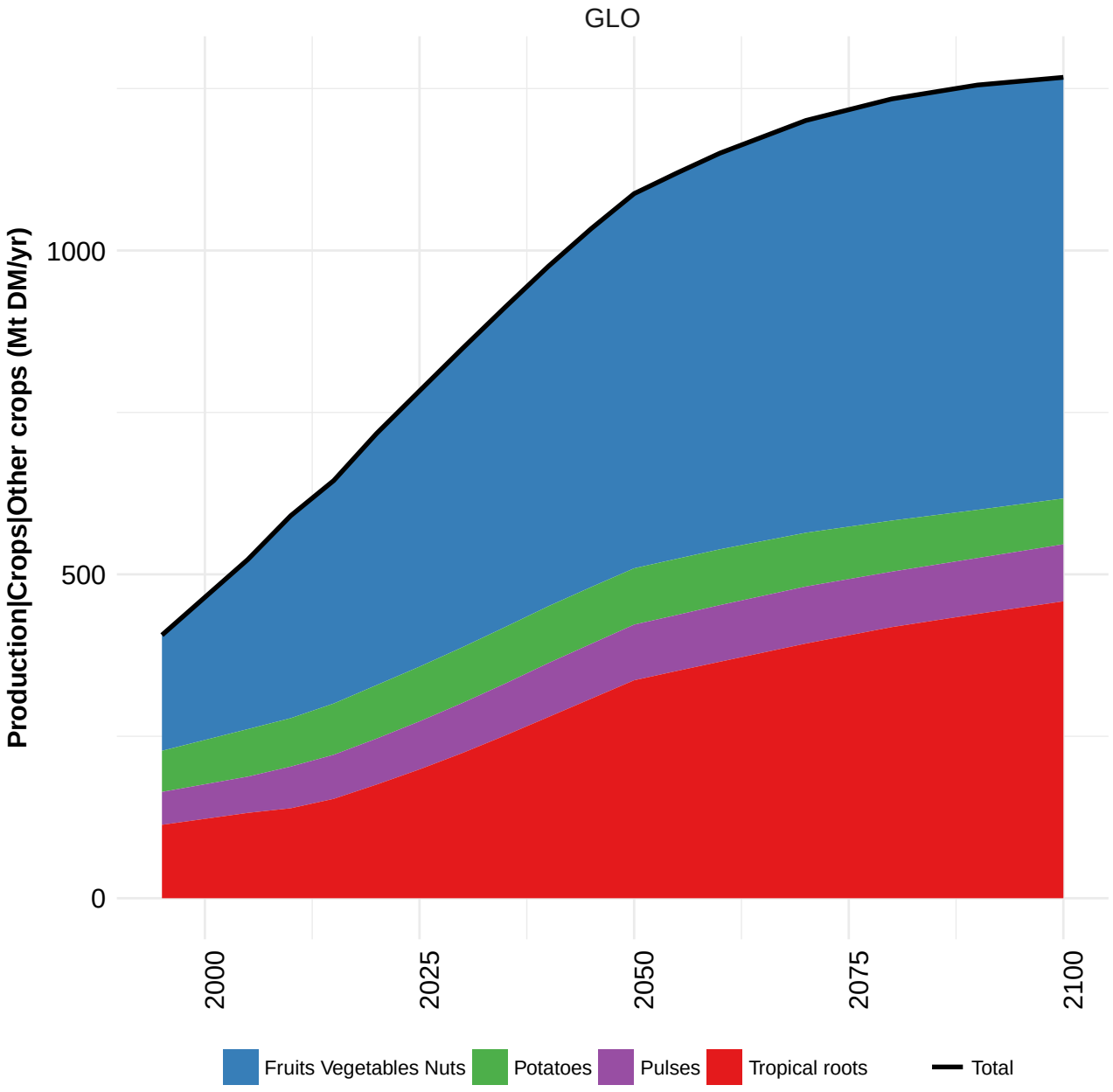
Table 1072: MAgPIE new_input — Production—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

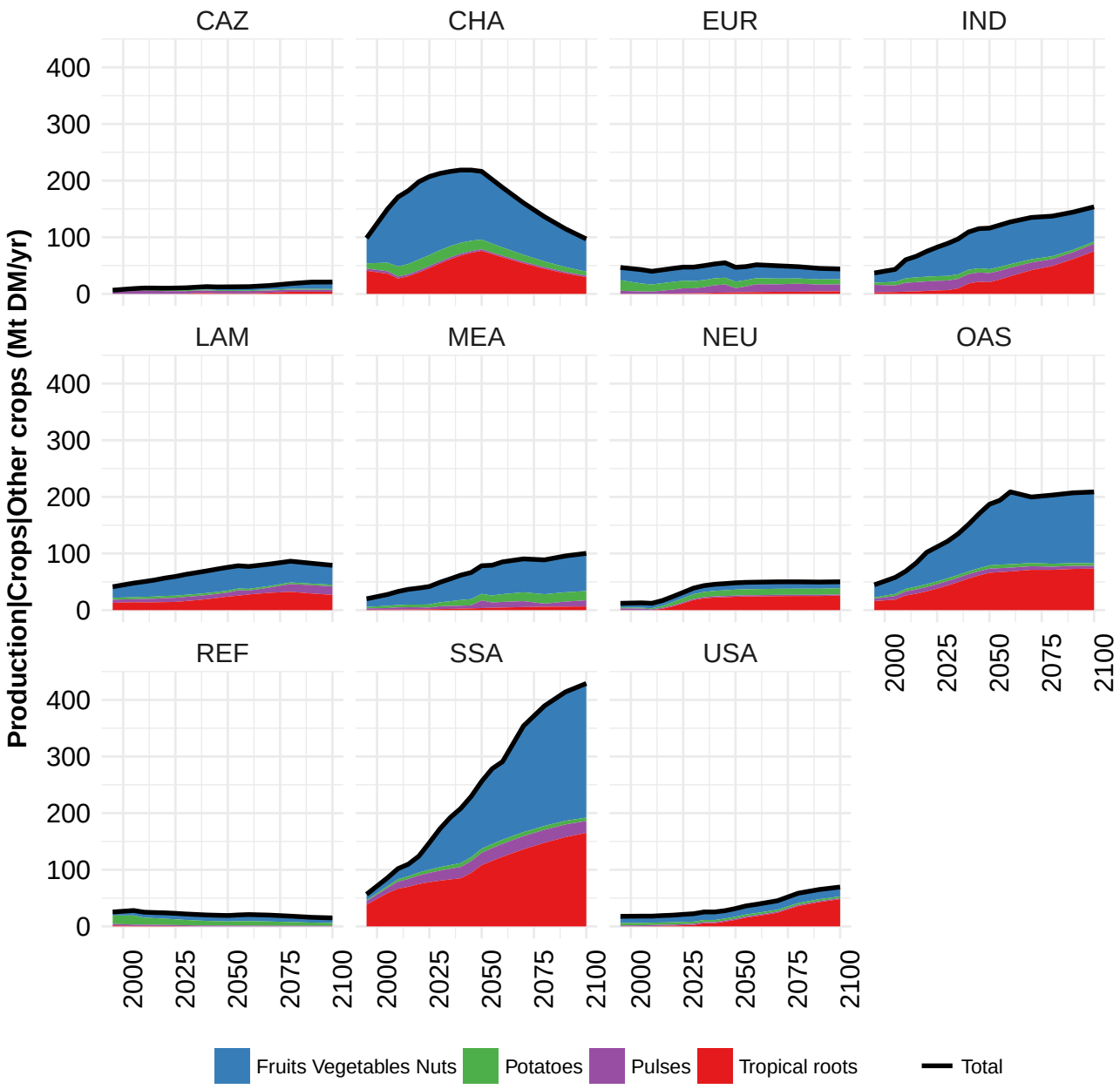
	2055	2060	2070	2080	2090	2100
GLO	49.1	49.4	49.4	48.9	47.7	45.9
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	4.1	3.9	3.4	3.0	12.9	10.6
EUR	9.6	9.3	8.6	7.9	7.2	6.5
IND	1.2	1.2	1.1	1.1	1.0	0.9
LAM	3.3	3.2	3.0	2.9	4.2	5.3
MEA	0.4	0.4	0.4	0.4	0.4	0.3
NEU	2.8	2.8	2.7	2.6	2.4	2.2
OAS	10.2	11.2	13.1	13.1	4.1	2.8
REF	12.5	12.1	11.2	10.1	9.1	11.2
SSA	2.6	2.9	3.4	5.1	3.8	3.5
USA	2.2	2.2	2.3	2.6	2.5	2.4

Table 1073: MAgPIE new_input — Production—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

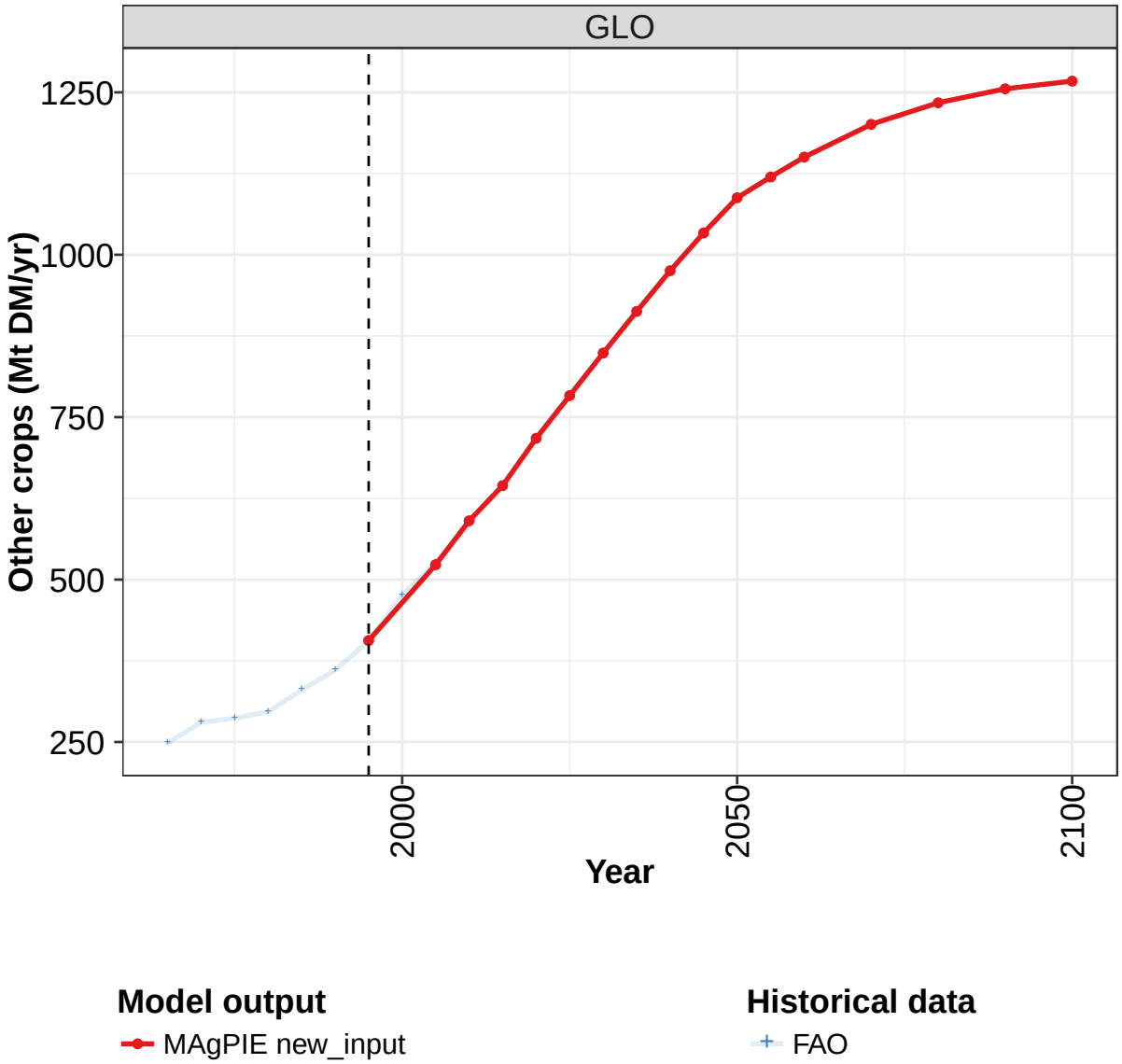
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.4	9.3	9.2	12.7	17.5	21.1	24.5	24.7	28.6	29.3
CAZ	0.0	0.0	0.1	0.3	0.3	0.2	0.2	0.3	0.1	0.1
CHA	0.1	0.1	0.1	0.8	1.6	1.2	1.2	1.8	1.8	2.1
EUR	1.0	1.4	1.8	2.5	4.3	5.7	5.6	4.9	5.7	6.6
IND	0.0	0.1	0.2	0.1	0.3	0.8	1.2	0.6	1.3	0.6
LAM	0.8	1.1	0.8	1.6	3.3	3.9	5.6	6.0	3.8	2.7
MEA	0.0	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.3
NEU	0.4	0.6	0.7	1.0	1.0	1.2	1.1	1.1	1.3	1.6
OAS	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.7	1.1
REF	5.1	5.7	4.6	4.3	4.9	6.0	6.9	7.3	11.0	12.0
SSA	0.1	0.1	0.3	0.4	0.4	0.8	0.6	0.8	1.0	1.1
USA	0.0	0.1	0.5	1.6	1.3	1.0	1.7	1.5	1.7	1.2

Table 1074: FAO — Production—Crops—Oil crops—Sunflower (Mt DM/yr)


GLO
Production|Crops|Other crops (Mt DM/yr)
1000
500
0
2000
2025
2050
2075
2100
Fruits Vegetables Nuts
Potatoes
Pulses
Tropical roots
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Crops|Other crops (Mt DM/yr)
0
100
200
300
400
2000
2025
2050
2075
2100
Fruits Vegetables Nuts
Potatoes
Pulses
Tropical roots
Total

44.3 Other crops



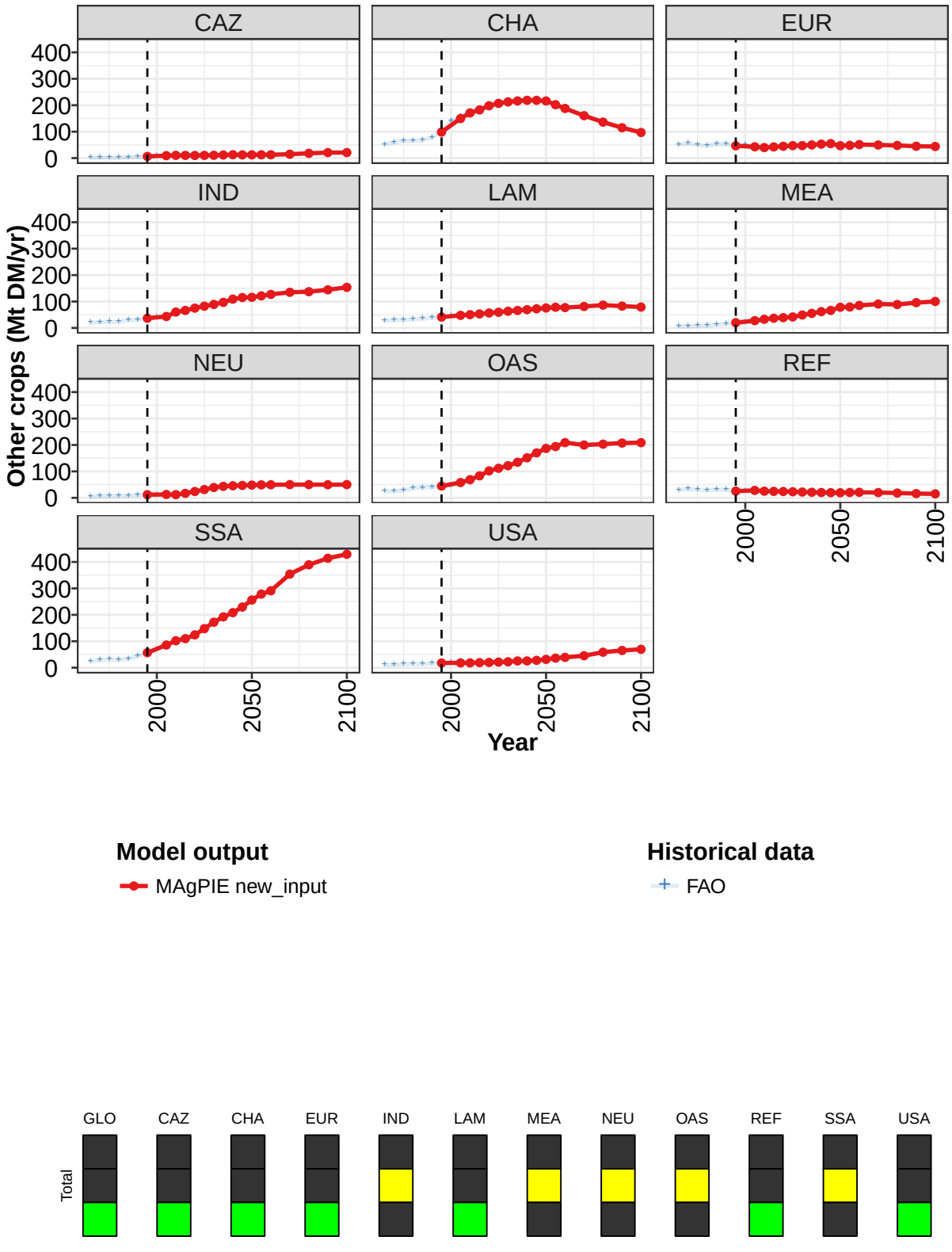


Figure 282: MAgPIE new_input — Production—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	406	523	591	645	717	783	849	913	975	1034	1088
CAZ	7	9	10	10	10	10	11	12	13	12	12
CHA	98	150	171	182	198	207	213	216	219	219	216
EUR	47	43	40	42	45	47	47	50	53	55	47
IND	37	43	60	66	75	82	89	97	109	115	116
LAM	41	48	50	53	57	59	63	66	69	73	76
MEA	20	28	33	37	39	42	49	55	62	66	78
NEU	12	13	12	17	24	31	39	43	46	47	48
OAS	45	58	69	83	102	112	122	135	151	170	187
REF	25	28	25	24	24	23	22	21	20	20	19
SSA	57	86	102	110	124	148	172	192	208	229	256
USA	18	18	18	19	20	21	22	25	26	28	32

Table 1075: MAgPIE new_input — Production—Crops—Other crops (Mt DM/yr) [PART 1/2]

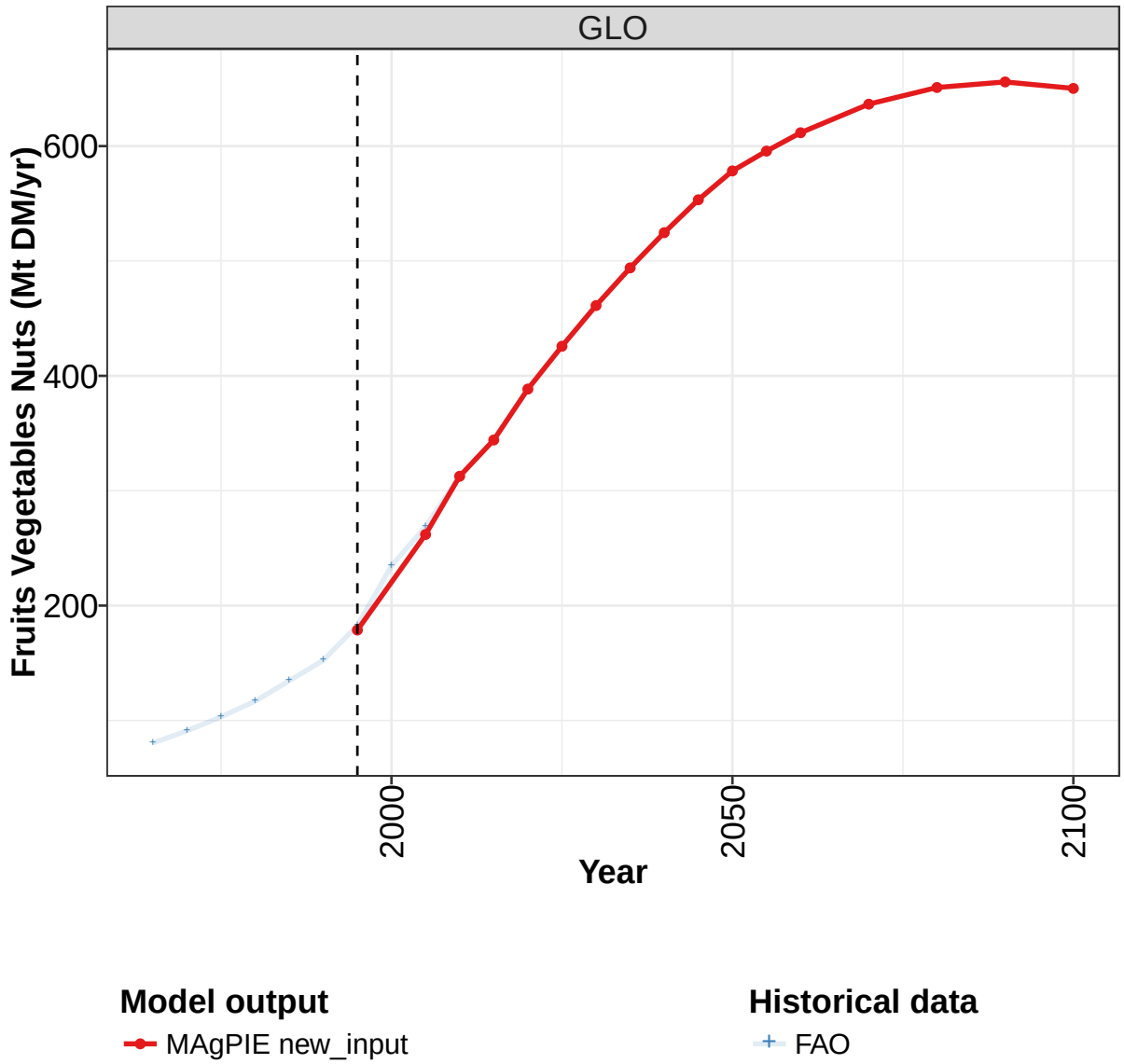
	2055	2060	2070	2080	2090	2100
GLO	1120	1150	1201	1234	1255	1267
CAZ	13	13	15	18	21	21
CHA	202	188	161	136	115	97
EUR	48	51	50	48	45	44
IND	122	127	135	137	144	154
LAM	78	77	81	86	83	79
MEA	79	85	91	89	96	100
NEU	49	49	50	50	50	50
OAS	194	209	200	203	207	209
REF	20	21	20	18	16	15
SSA	278	291	354	389	414	429
USA	36	39	45	59	65	70

Table 1076: MAgPIE new_input — Production—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	249	280	287	296	330	361	406	476	526	584
CAZ	2	2	2	2	3	4	7	9	10	10
CHA	52	60	64	66	68	78	103	140	157	174
EUR	51	56	50	47	54	53	46	49	42	40
IND	20	22	23	23	29	32	37	42	44	60
LAM	26	30	30	32	35	38	43	46	50	53
MEA	6	7	8	10	13	15	17	20	25	27
NEU	5	6	6	7	9	10	10	11	12	12
OAS	24	25	29	37	39	41	43	47	55	65
REF	29	33	30	28	32	30	25	24	28	24
SSA	22	29	31	30	34	44	56	68	85	101
USA	11	12	13	14	15	16	18	20	18	18

Table 1077: FAO — Production—Crops—Other crops (Mt DM/yr)

44.3.1 Fruits Vegetables Nuts



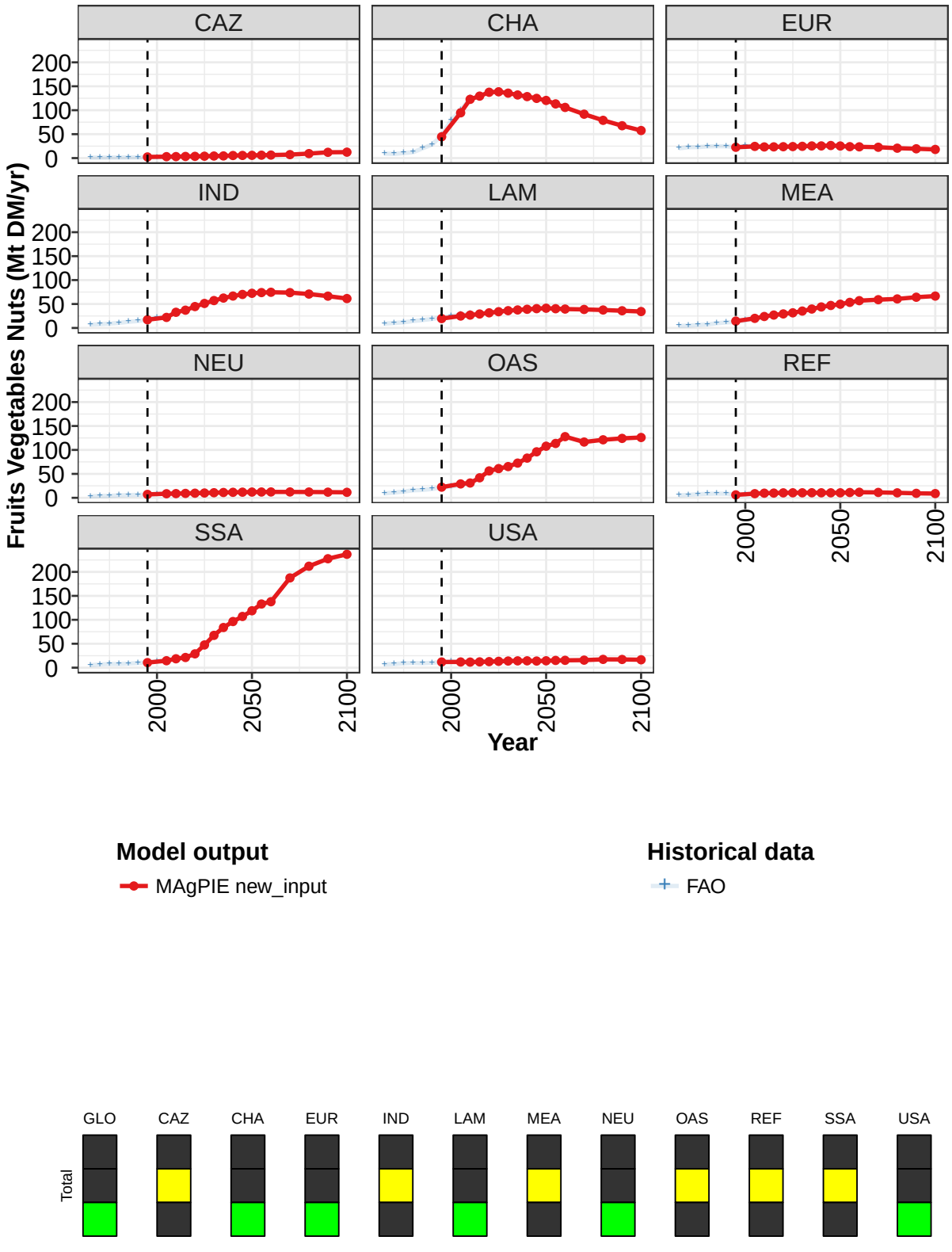


Figure 283: MAgPIE new_input — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	179	262	313	344	388	426	461	494	525	553	578
CAZ	2	3	3	3	4	4	4	5	5	6	6
CHA	45	95	123	129	138	139	136	132	128	125	120
EUR	23	24	23	23	24	24	25	25	25	26	25
IND	17	22	33	37	45	51	57	62	67	70	72
LAM	20	25	27	29	32	34	36	38	39	40	41
MEA	14	20	24	27	29	32	35	40	44	47	50
NEU	7	9	9	9	10	10	11	11	12	12	12
OAS	22	29	31	42	56	61	65	73	83	96	108
REF	6	9	10	10	10	11	11	11	11	10	10
SSA	11	15	19	21	29	47	68	84	96	107	119
USA	12	12	12	12	13	13	14	14	14	14	14

Table 1078: MAgPIE new_input — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

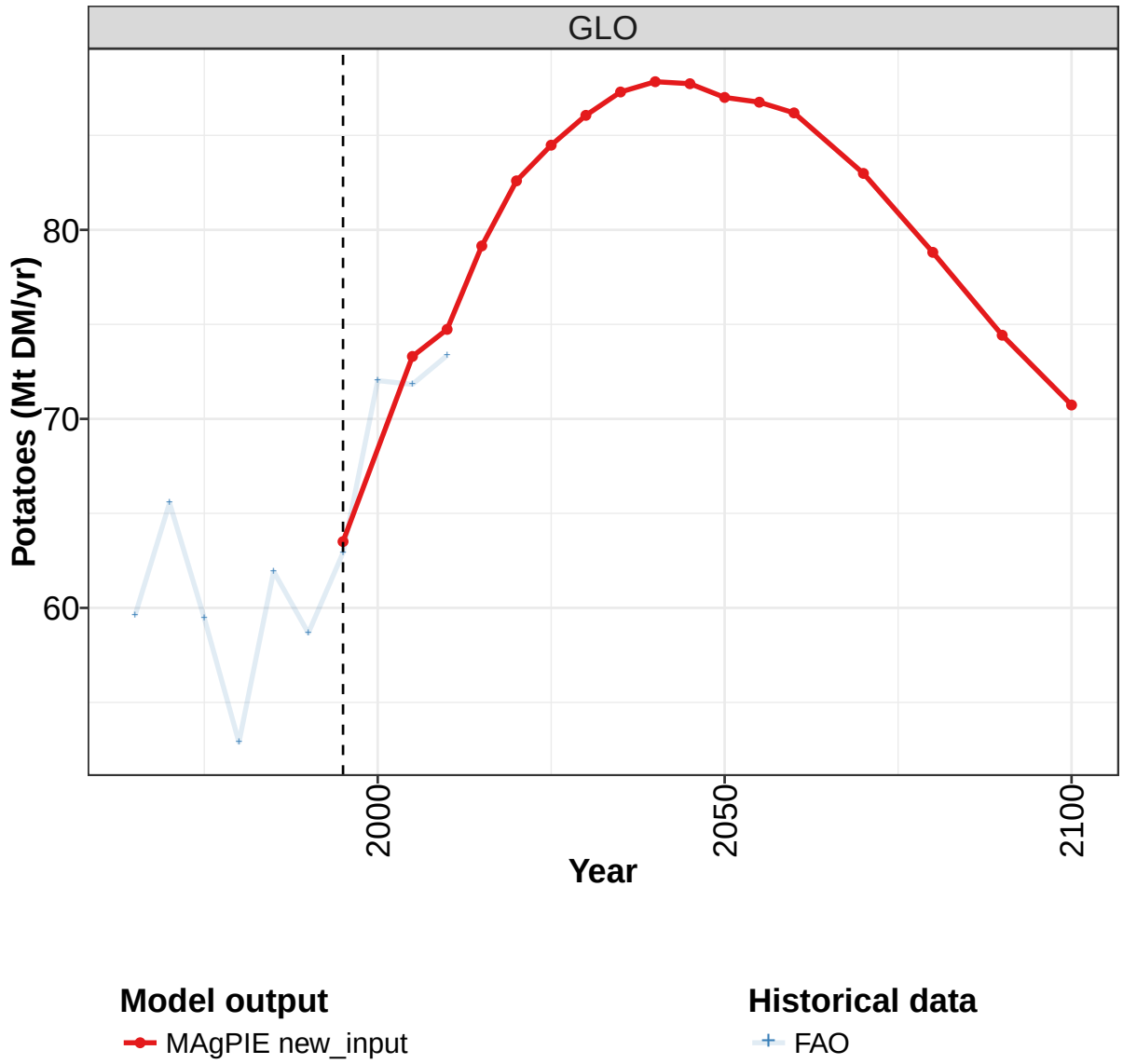
	2055	2060	2070	2080	2090	2100
GLO	596	612	637	651	656	650
CAZ	6	6	7	9	12	12
CHA	113	106	92	79	68	58
EUR	24	24	23	21	19	18
IND	74	75	74	71	66	61
LAM	40	39	39	38	36	34
MEA	53	57	59	61	64	67
NEU	12	12	12	12	12	11
OAS	114	128	117	121	124	126
REF	11	12	11	10	9	9
SSA	133	138	187	212	228	237
USA	15	15	16	17	17	17

Table 1079: MAgPIE new_input — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	80	91	103	117	135	152	183	235	269	313
CAZ	1	1	1	1	1	2	2	2	2	2
CHA	9	9	11	12	20	28	47	79	100	125
EUR	20	23	23	24	25	25	23	26	24	23
IND	7	8	9	11	13	15	18	22	23	33
LAM	9	10	12	14	16	19	22	25	28	30
MEA	4	5	6	7	10	12	13	16	19	21
NEU	3	4	4	5	6	6	7	8	9	9
OAS	9	11	13	16	17	18	22	23	27	30
REF	5	6	7	8	9	8	7	7	9	10
SSA	5	7	8	8	9	10	11	13	16	19
USA	7	8	9	10	9	10	12	13	12	12

Table 1080: FAO — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

44.3.2 Potatoes



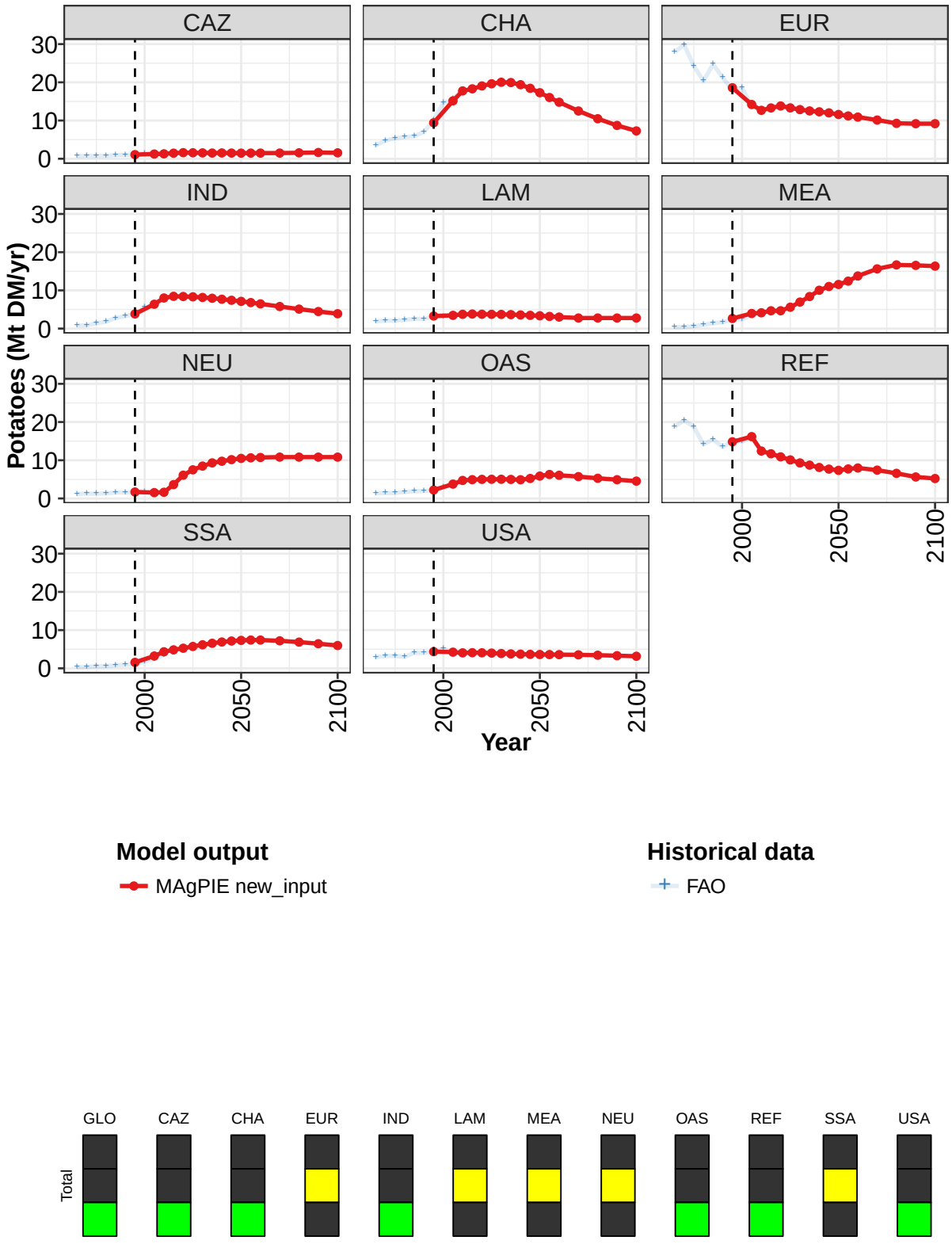


Figure 284: MAgPIE new_input — Production—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	63.5	73.3	74.7	79.2	82.6	84.5	86.1	87.3	87.8	87.7	87.0
CAZ	1.1	1.2	1.3	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.5
CHA	9.4	15.2	17.8	18.3	19.1	19.6	20.0	19.9	19.4	18.4	17.3
EUR	18.6	14.2	12.7	13.3	13.8	13.3	12.9	12.5	12.3	12.0	11.6
IND	3.8	6.4	8.0	8.4	8.4	8.3	8.2	7.9	7.7	7.4	7.1
LAM	3.3	3.5	3.7	3.8	3.8	3.7	3.7	3.7	3.6	3.5	3.4
MEA	2.7	4.0	4.1	4.7	4.7	5.6	6.9	8.4	10.0	11.0	11.6
NEU	1.7	1.5	1.6	3.6	6.1	7.5	8.5	9.3	9.7	10.2	10.5
OAS	2.2	3.8	4.7	4.9	5.0	5.0	5.0	5.0	4.9	5.2	5.9
REF	14.8	16.2	12.4	11.7	10.9	10.1	9.3	8.7	8.1	7.7	7.4
SSA	1.6	3.2	4.3	4.8	5.3	5.7	6.2	6.6	6.9	7.1	7.3
USA	4.4	4.2	4.0	4.1	4.1	4.0	3.9	3.8	3.7	3.7	3.6

Table 1081: MAgPIE new_input — Production—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

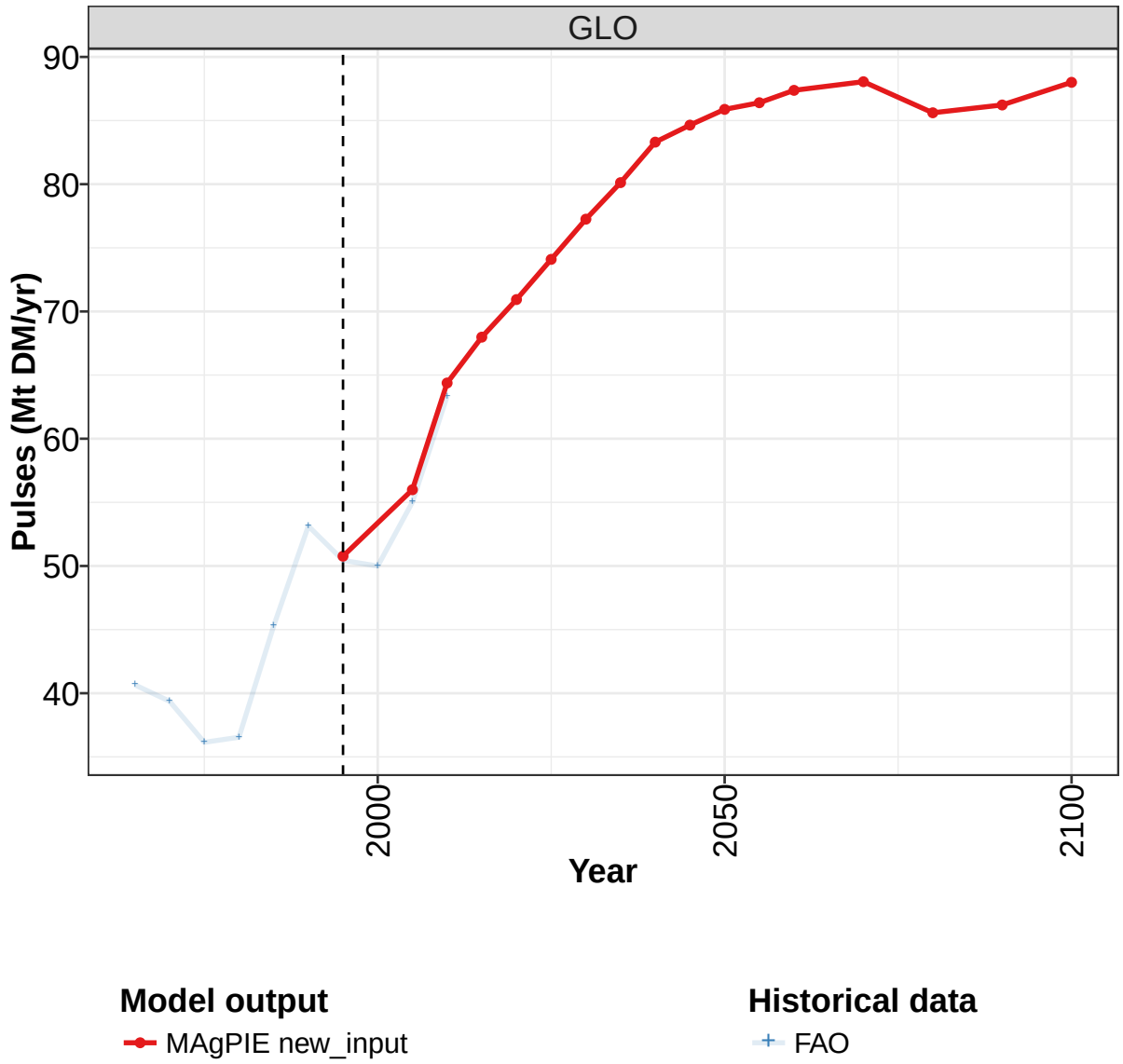
	2055	2060	2070	2080	2090	2100
GLO	86.8	86.2	83.0	78.8	74.4	70.7
CAZ	1.5	1.5	1.5	1.6	1.6	1.5
CHA	16.0	14.8	12.5	10.5	8.7	7.3
EUR	11.2	10.9	10.1	9.3	9.2	9.2
IND	6.8	6.5	5.8	5.1	4.5	3.9
LAM	3.2	3.0	2.8	2.8	2.8	2.8
MEA	12.4	13.8	15.6	16.7	16.5	16.4
NEU	10.6	10.7	10.8	10.8	10.8	10.8
OAS	6.3	6.1	5.7	5.3	4.9	4.5
REF	7.7	8.0	7.4	6.6	5.6	5.2
SSA	7.4	7.4	7.2	6.9	6.4	6.0
USA	3.6	3.6	3.5	3.4	3.3	3.2

Table 1082: MAgPIE new_input — Production—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	59.6	65.6	59.5	52.9	61.9	58.7	62.9	72.0	71.8	73.4
CAZ	0.6	0.8	0.7	0.8	0.9	1.0	1.2	1.4	1.4	1.4
CHA	3.5	4.7	5.4	5.7	5.9	7.0	10.1	14.6	15.6	18.0
EUR	27.9	29.8	24.3	20.4	24.7	21.2	17.9	18.5	13.8	12.6
IND	0.8	0.9	1.4	1.8	2.8	3.2	3.8	5.5	6.3	8.0
LAM	1.9	2.1	2.0	2.3	2.6	2.5	3.2	3.1	3.4	3.7
MEA	0.4	0.4	0.6	1.1	1.4	1.7	2.3	2.4	3.5	3.6
NEU	1.2	1.3	1.2	1.4	1.6	1.5	1.6	1.7	1.5	1.6
OAS	1.4	1.4	1.4	1.7	1.9	2.0	2.2	3.0	3.7	4.6
REF	18.8	20.5	18.8	14.2	15.4	13.4	15.0	14.9	16.0	12.4
SSA	0.3	0.4	0.5	0.6	0.8	1.0	1.0	1.8	2.4	3.5
USA	2.9	3.3	3.2	3.0	4.1	4.0	4.4	5.1	4.2	4.0

Table 1083: FAO — Production—Crops—Other crops—Potatoes (Mt DM/yr)

44.3.3 Pulses


GLO
Pulses (Mt DM/yr)
90
80
70
60
50
40
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

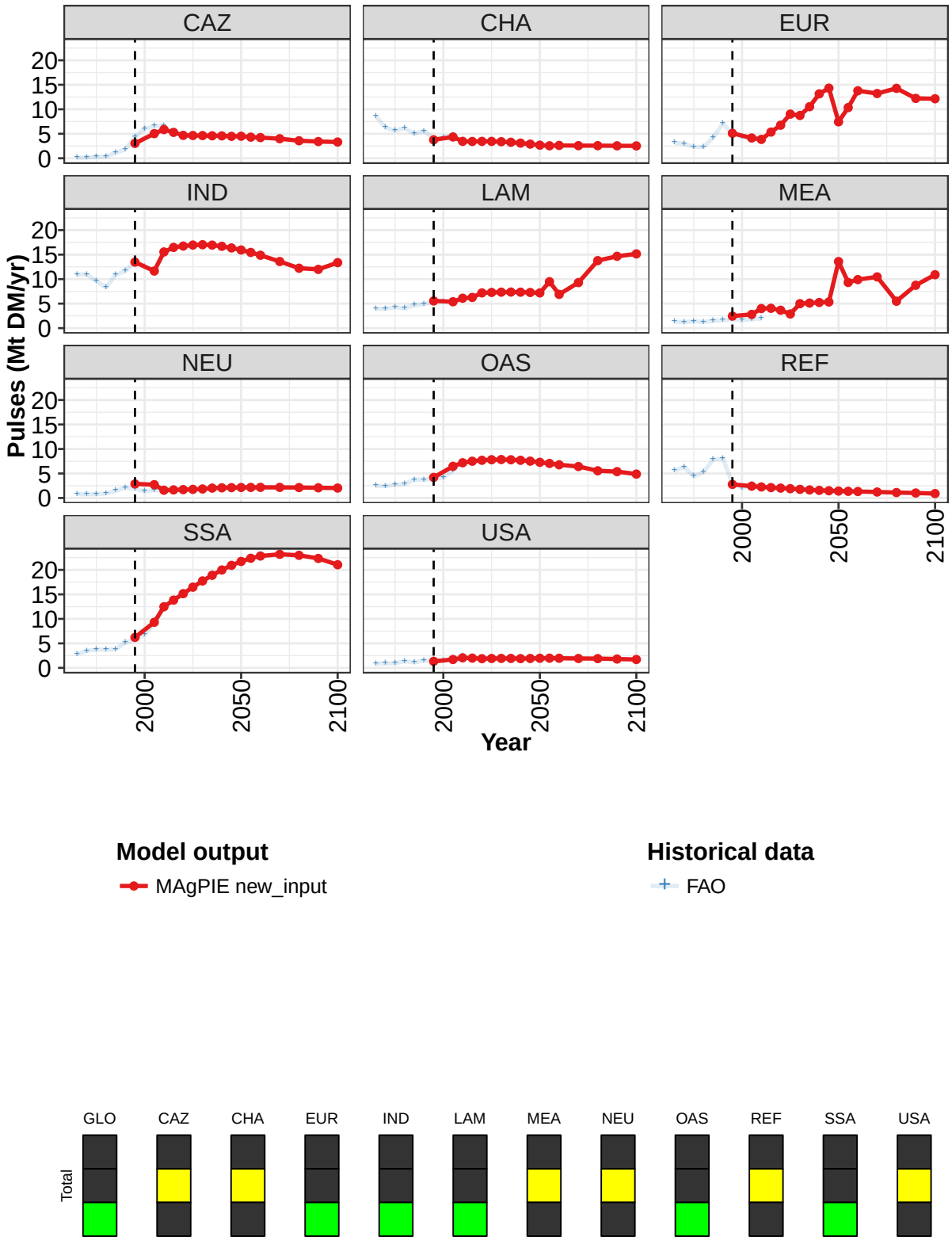


Figure 285: MAgPIE new_input — Production—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	50.8	56.0	64.4	68.0	70.9	74.1	77.3	80.1	83.3	84.6	85.9
CAZ	3.0	5.0	5.9	5.3	4.7	4.6	4.6	4.6	4.6	4.5	4.5
CHA	3.8	4.4	3.5	3.4	3.5	3.4	3.4	3.3	3.1	2.9	2.7
EUR	5.1	4.1	3.9	5.4	6.8	9.0	8.7	10.5	13.2	14.3	7.4
IND	13.5	11.7	15.5	16.5	16.7	17.0	17.0	16.9	16.7	16.4	15.9
LAM	5.6	5.4	6.1	6.3	7.2	7.3	7.3	7.4	7.3	7.3	7.2
MEA	2.5	2.8	4.0	4.1	3.7	2.9	5.0	5.1	5.2	5.3	13.6
NEU	2.9	2.7	1.6	1.7	1.7	1.8	1.8	2.0	2.1	2.1	2.1
OAS	4.2	6.5	7.2	7.5	7.7	7.8	7.8	7.8	7.7	7.5	7.3
REF	2.8	2.4	2.3	2.1	2.0	1.9	1.8	1.6	1.6	1.5	1.4
SSA	6.2	9.3	12.5	13.8	15.1	16.5	17.7	18.9	20.0	20.9	21.7
USA	1.3	1.7	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0

Table 1084: MAgPIE new_input — Production—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

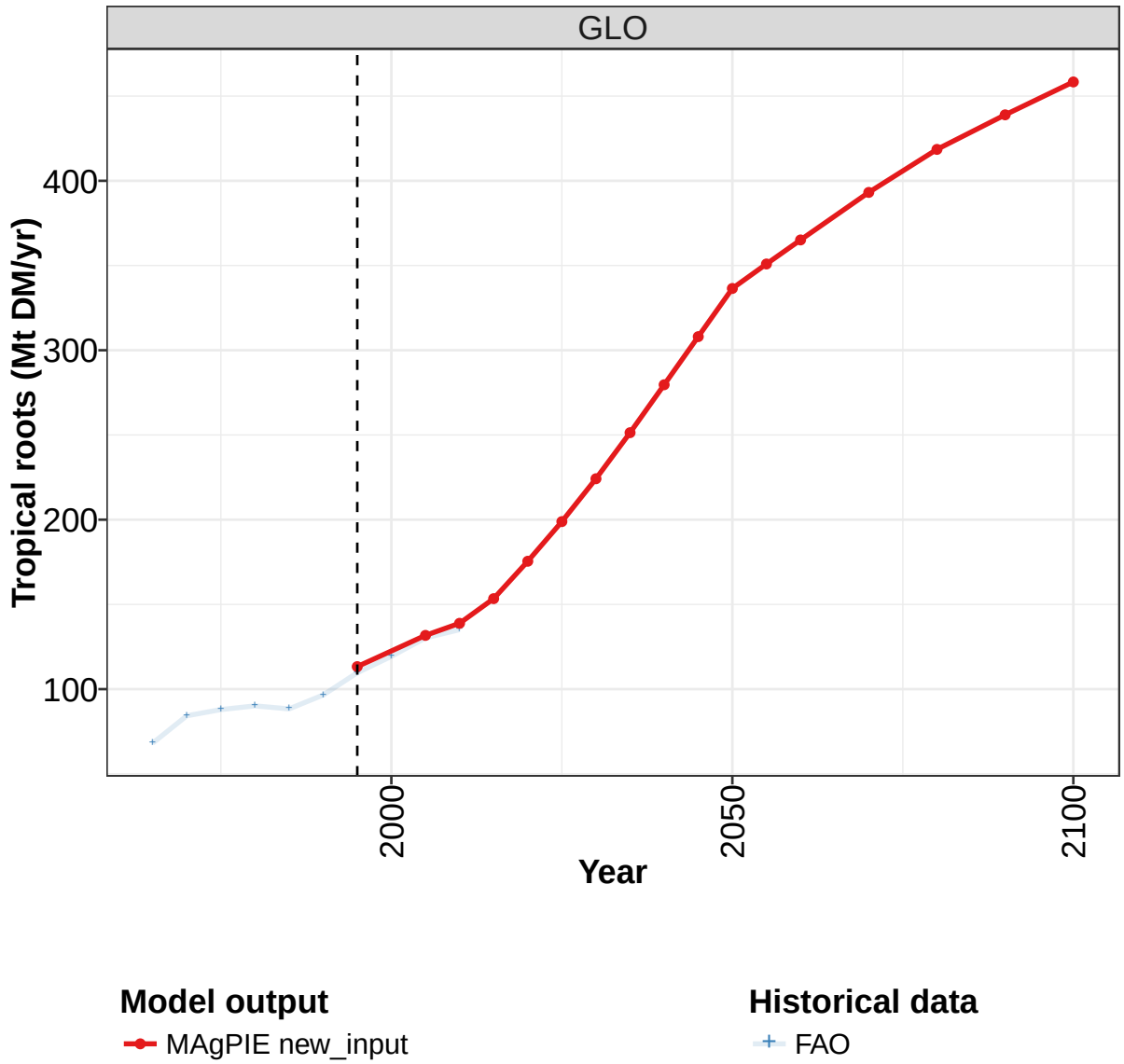
	2055	2060	2070	2080	2090	2100
GLO	86.4	87.4	88.1	85.6	86.2	88.0
CAZ	4.3	4.2	4.0	3.6	3.4	3.3
CHA	2.6	2.6	2.6	2.6	2.5	2.5
EUR	10.3	13.8	13.2	14.3	12.2	12.2
IND	15.5	14.9	13.6	12.2	12.0	13.4
LAM	9.5	6.9	9.3	13.8	14.7	15.2
MEA	9.3	9.9	10.5	5.5	8.8	10.9
NEU	2.2	2.2	2.2	2.1	2.1	2.0
OAS	7.1	6.8	6.4	5.6	5.4	4.9
REF	1.4	1.3	1.2	1.1	1.0	0.9
SSA	22.4	22.8	23.2	23.0	22.3	21.0
USA	2.0	2.0	1.9	1.9	1.8	1.7

Table 1085: MAgPIE new_input — Production—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.7	39.4	36.1	36.5	45.3	53.1	50.4	50.0	55.0	63.3
CAZ	0.1	0.2	0.3	0.4	1.1	1.8	4.3	6.1	6.5	6.7
CHA	8.6	6.3	5.6	6.1	5.0	5.6	4.1	4.3	4.7	3.5
EUR	3.2	3.0	2.3	2.3	4.2	7.0	5.0	4.4	4.1	3.8
IND	10.9	11.0	9.6	8.3	10.9	11.7	13.5	12.4	11.7	15.6
LAM	3.9	4.0	4.3	4.1	4.7	4.9	5.4	5.4	5.3	6.1
MEA	1.3	1.2	1.4	1.3	1.5	1.6	1.8	1.6	1.8	1.9
NEU	0.8	0.8	0.8	0.9	1.5	2.1	1.9	1.3	1.6	1.4
OAS	2.5	2.4	2.7	2.9	3.7	3.7	4.0	4.2	5.7	7.1
REF	5.6	6.3	4.4	5.3	7.8	8.1	3.1	2.0	2.7	2.4
SSA	2.8	3.4	3.7	3.7	3.8	5.1	5.8	6.8	8.9	12.5
USA	0.9	0.9	0.9	1.4	1.1	1.5	1.6	1.4	1.9	2.4

Table 1086: FAO — Production—Crops—Other crops—Pulses (Mt DM/yr)

44.3.4 Tropical roots



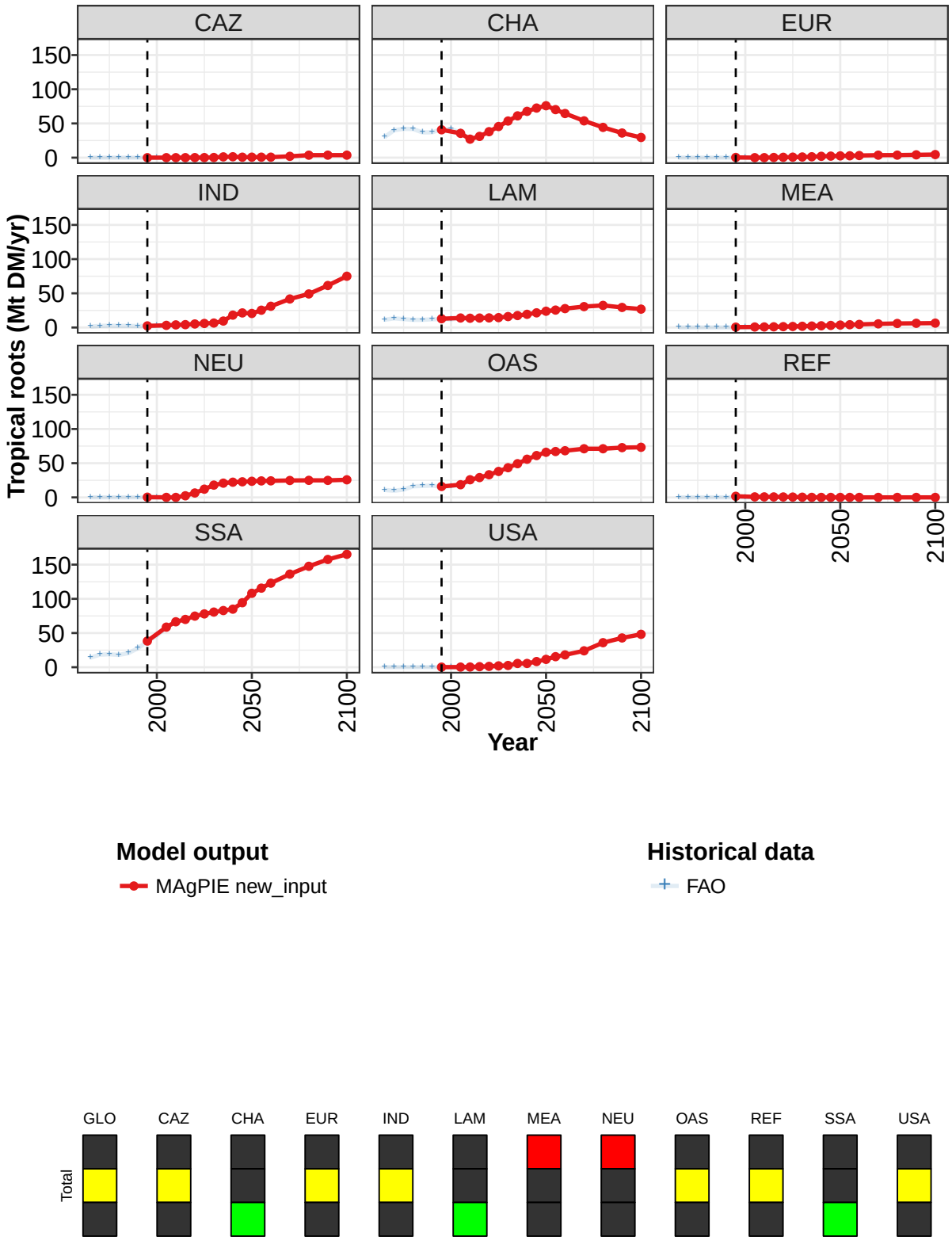


Figure 286: MAgPIE new_input — Production—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	113	132	139	153	175	199	224	251	280	308	336
CAZ	0	0	0	0	0	0	0	1	1	1	1
CHA	41	36	27	31	38	46	54	61	68	73	76
EUR	0	0	0	0	1	1	1	1	2	2	3
IND	2	3	4	4	5	6	7	9	18	21	21
LAM	13	14	14	14	14	14	16	18	19	21	24
MEA	1	1	1	1	1	2	2	2	3	3	4
NEU	0	0	0	2	6	12	18	21	22	23	24
OAS	16	19	26	29	33	38	43	49	56	61	66
REF	2	1	1	1	1	0	0	0	0	0	0
SSA	38	59	67	70	75	78	81	83	85	94	108
USA	0	0	0	1	1	2	3	6	6	8	12

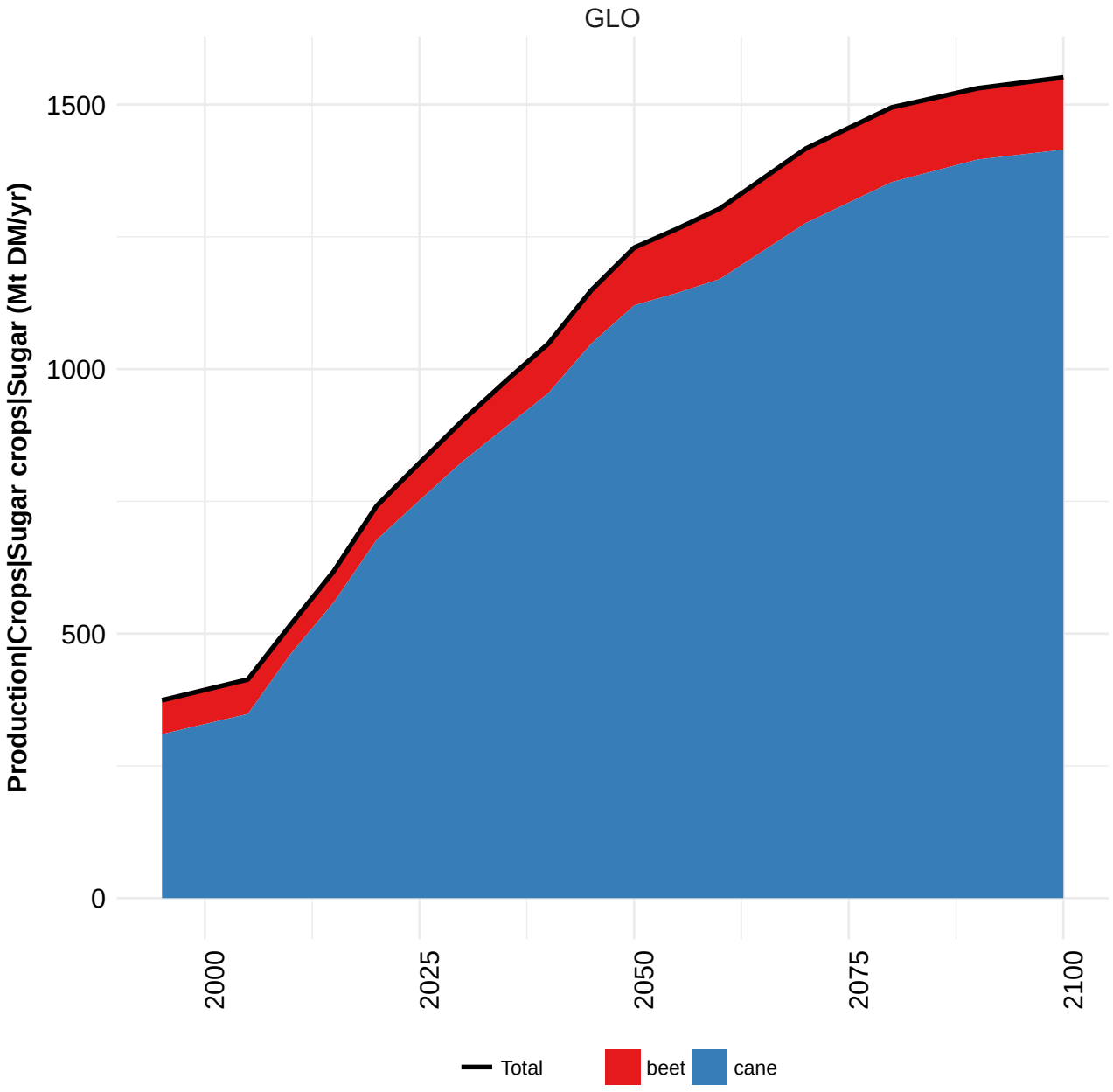
Table 1087: MAgPIE new_input — Production—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

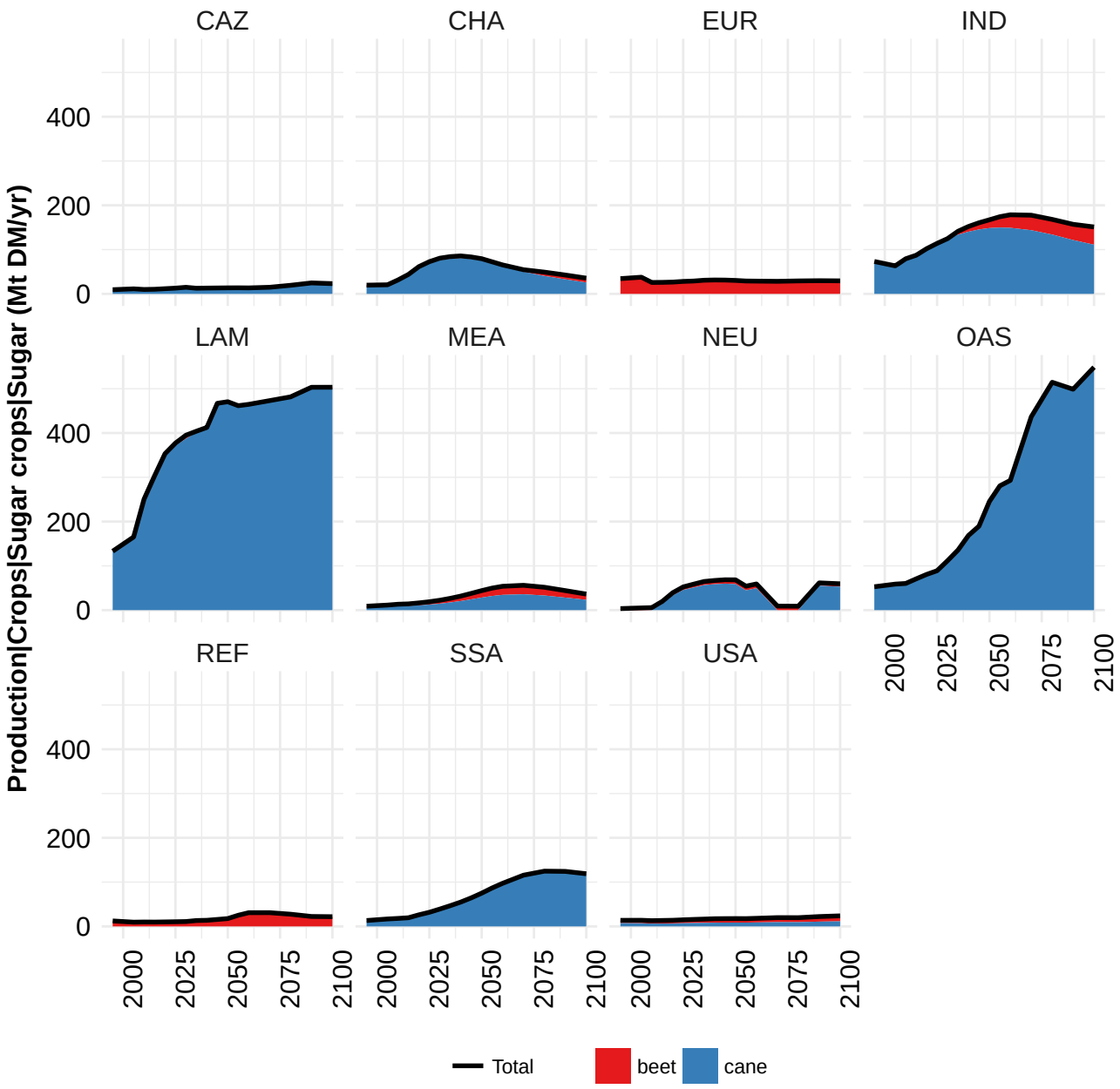
	2055	2060	2070	2080	2090	2100
GLO	351	365	393	419	439	458
CAZ	1	1	2	4	4	4
CHA	70	65	54	44	36	30
EUR	3	3	4	4	4	5
IND	25	31	42	49	61	75
LAM	25	28	31	32	29	27
MEA	4	5	5	6	6	6
NEU	24	24	25	25	25	26
OAS	67	68	71	71	73	73
REF	0	0	0	0	0	0
SSA	116	123	136	148	158	165
USA	15	18	24	36	43	48

Table 1088: MAgPIE new_input — Production—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

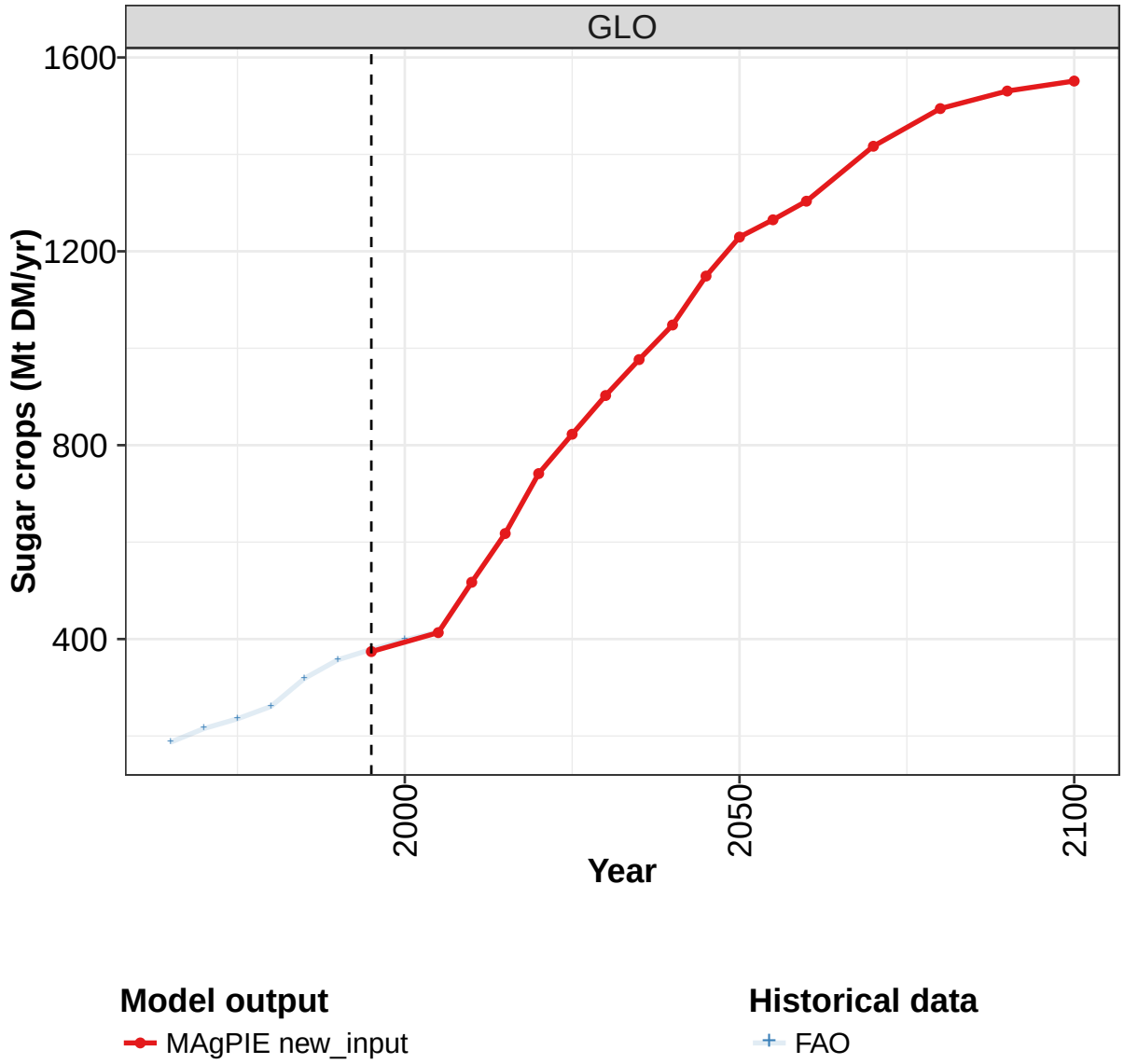
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	68	84	88	90	88	97	110	119	130	135
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	30	40	42	42	37	37	42	42	37	27
EUR	0	0	0	0	0	0	0	0	0	0
IND	1	2	3	2	2	2	2	2	3	3
LAM	11	13	12	11	11	12	12	12	14	13
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	11	10	11	16	17	17	15	16	18	24
REF	0	0	0	0	0	0	0	0	0	0
SSA	14	18	19	18	21	28	38	46	58	67
USA	0	0	0	0	0	0	0	0	0	0

Table 1089: FAO — Production—Crops—Other crops—Tropical roots (Mt DM/yr)


GLO
Production|Crops|Sugar crops|Sugar (Mt DM/yr)
1500
1000
500
0
2000
2025
2050
2075
2100
Total
beet
cane


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Crops|Sugar crops|Sugar (Mt DM/yr)
0
200
400
2000
2025
2050
2075
2100
Total
beet
cane

44.4 Sugar crops



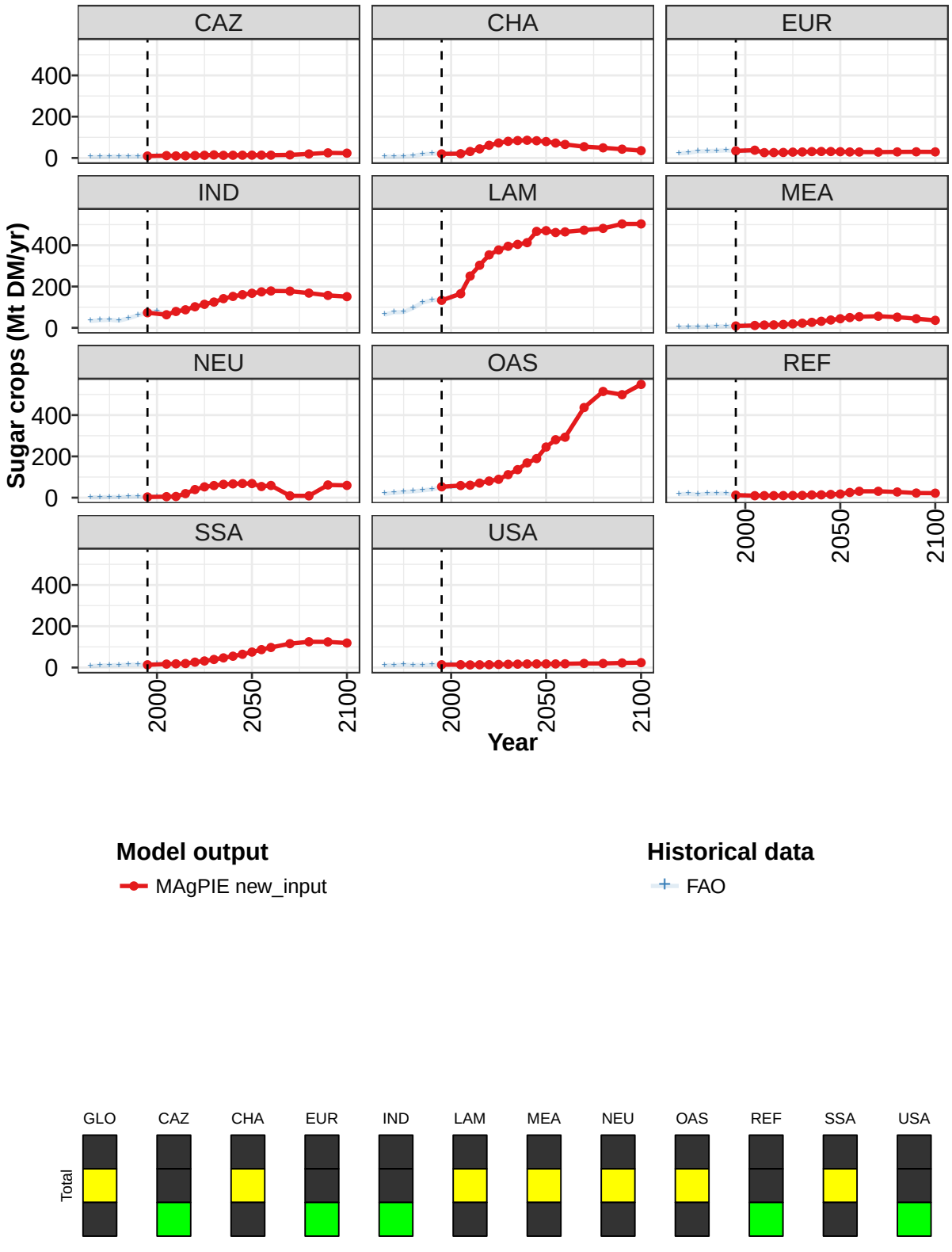


Figure 287: MAgPIE new_input — Production—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	374	413	517	618	741	823	903	977	1048	1149	1229
CAZ	9	11	10	10	12	13	15	13	13	13	14
CHA	20	21	31	44	61	73	81	84	86	83	79
EUR	34	38	26	26	27	28	29	31	31	31	30
IND	73	63	79	87	102	114	125	141	152	161	167
LAM	133	165	251	303	353	377	395	404	413	467	471
MEA	9	11	13	14	16	19	22	27	32	38	44
NEU	3	5	6	20	39	52	59	65	67	69	68
OAS	53	59	60	71	81	89	112	136	169	189	245
REF	12	10	10	10	10	11	11	13	14	16	18
SSA	13	17	18	19	26	32	39	47	55	64	75
USA	14	14	13	13	14	15	16	17	17	18	18

Table 1090: MAgPIE new_input — Production—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

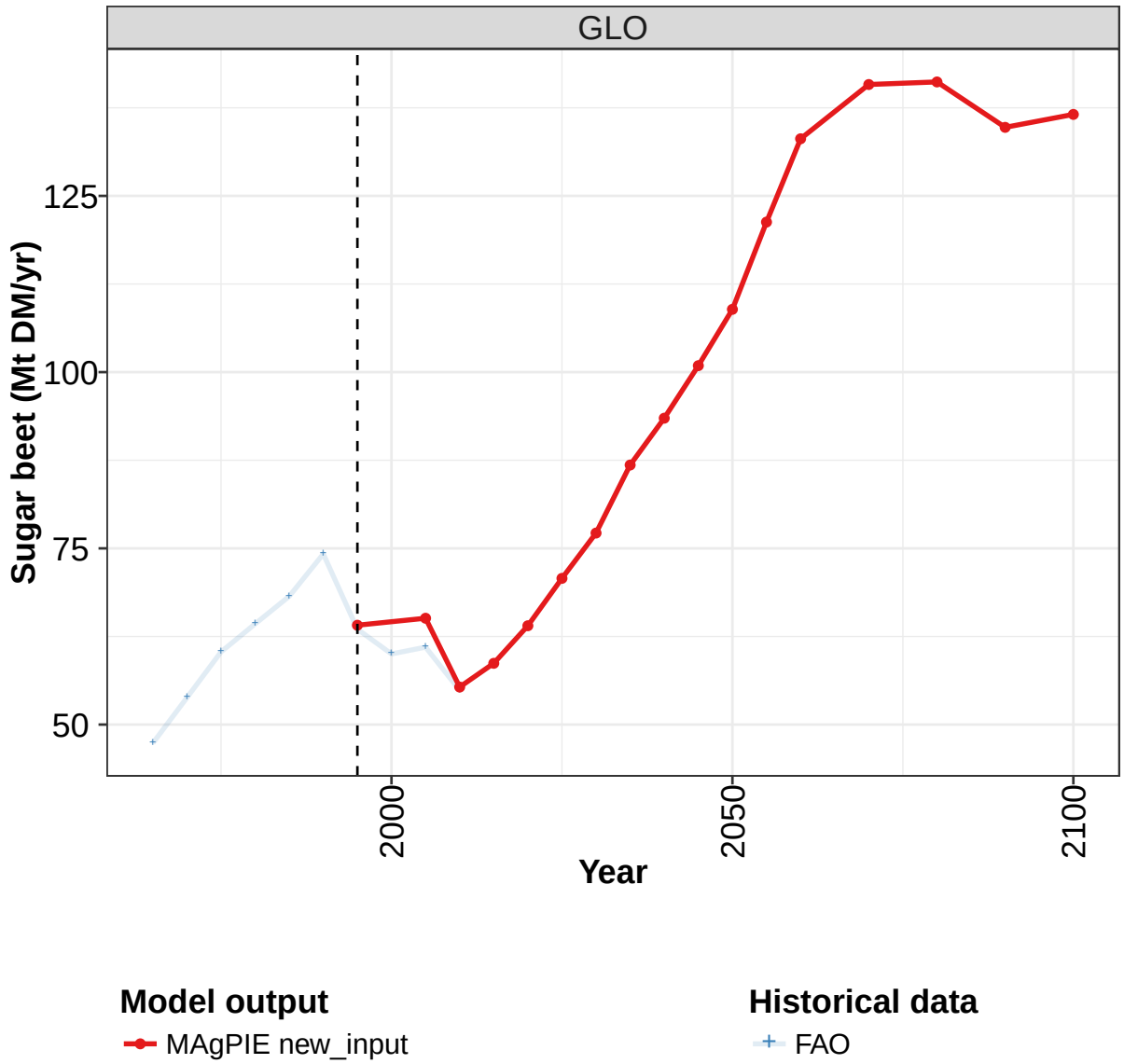
	2055	2060	2070	2080	2090	2100
GLO	1265	1303	1417	1495	1531	1551
CAZ	14	14	15	19	25	23
CHA	72	65	55	49	43	35
EUR	29	29	28	29	30	29
IND	174	179	178	168	157	151
LAM	462	465	473	482	503	503
MEA	50	54	56	52	44	36
NEU	54	59	9	9	62	59
OAS	281	293	437	515	499	549
REF	25	31	31	28	22	22
SSA	87	97	116	125	124	119
USA	18	18	20	20	22	24

Table 1091: MAgPIE new_input — Production—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	187	215	235	261	319	357	379	398	415	515
CAZ	4	5	6	7	7	7	10	11	10	9
CHA	7	6	7	10	18	21	22	21	26	32
EUR	23	25	32	33	34	37	33	33	33	25
IND	33	36	39	35	46	61	74	81	64	79
LAM	64	75	77	96	123	134	137	146	172	254
MEA	2	4	5	5	7	7	9	9	11	12
NEU	1	2	3	3	4	5	3	5	5	5
OAS	19	23	28	30	35	41	50	51	54	58
REF	17	19	16	19	19	20	13	7	10	10
SSA	7	9	11	12	14	14	13	16	18	17
USA	10	11	13	12	12	13	14	18	14	14

Table 1092: FAO — Production—Crops—Sugar crops (Mt DM/yr)

44.4.1 Sugar beet



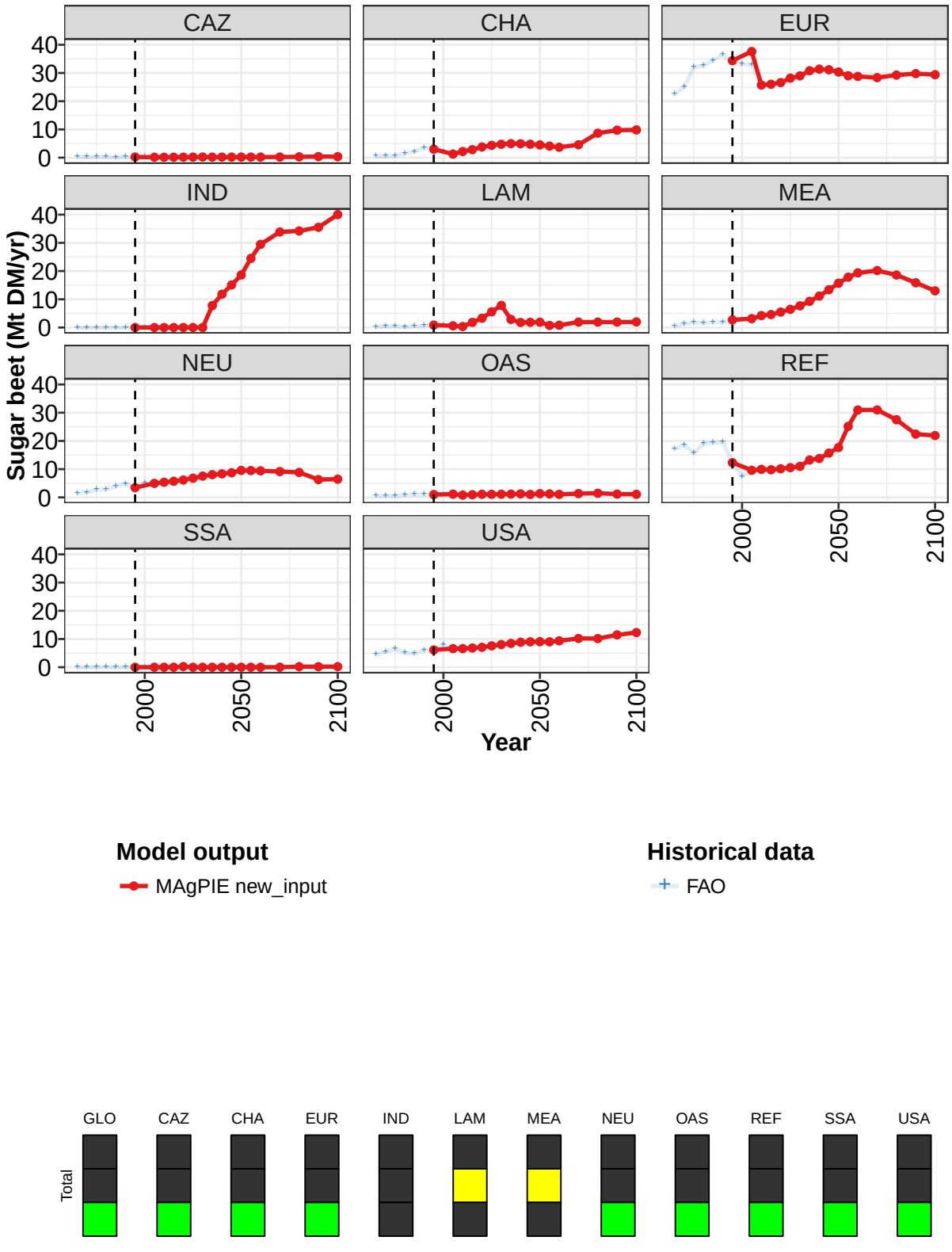


Figure 288: MAgPIE new_input — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	64	65	55	59	64	71	77	87	93	101	109
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	3	1	2	3	4	4	5	5	5	5	5
EUR	34	38	26	26	27	28	29	31	31	31	30
IND	0	0	0	0	0	0	0	8	12	15	19
LAM	1	1	0	2	3	6	8	3	2	2	2
MEA	3	3	4	5	5	6	8	9	11	13	16
NEU	3	5	5	6	6	7	8	8	8	9	10
OAS	1	1	1	1	1	1	1	1	1	1	1
REF	12	10	10	10	10	11	11	13	14	16	18
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	6	7	7	7	7	8	8	8	9	9	9

Table 1093: MAgPIE new_input — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

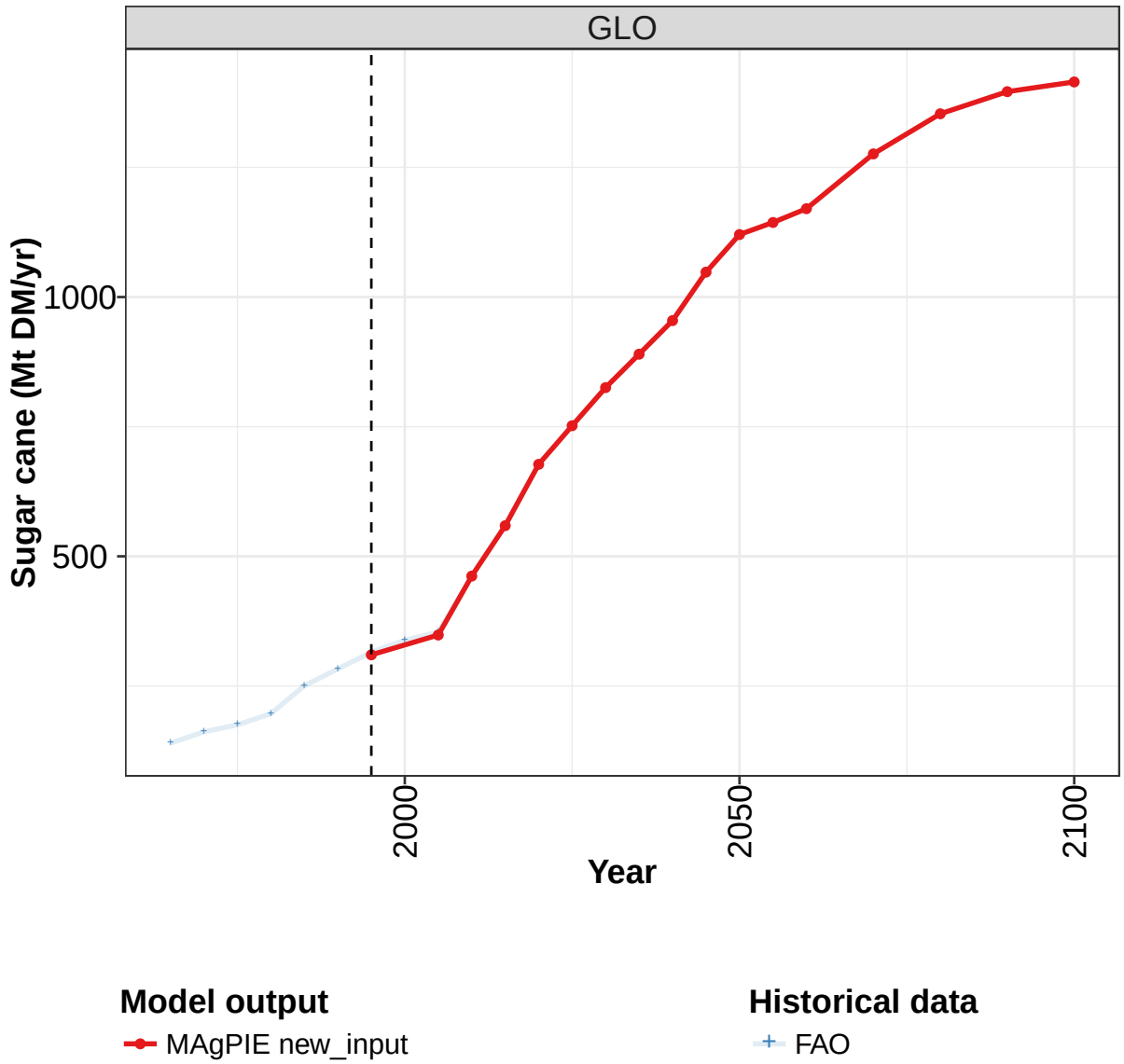
	2055	2060	2070	2080	2090	2100
GLO	121	133	141	141	135	137
CAZ	0	0	0	0	0	0
CHA	4	4	5	9	10	10
EUR	29	29	28	29	30	29
IND	24	29	34	34	35	40
LAM	1	1	2	2	2	2
MEA	18	19	20	19	16	13
NEU	9	9	9	9	6	6
OAS	1	1	1	1	1	1
REF	25	31	31	28	22	22
SSA	0	0	0	0	0	0
USA	9	9	10	10	11	12

Table 1094: MAgPIE new_input — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	47.4	53.8	60.3	64.3	68.2	74.2	63.5	60.0	61.0	54.9
CAZ	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1
CHA	0.5	0.5	0.6	1.5	2.1	3.5	3.4	1.9	1.9	2.2
EUR	22.5	24.9	32.0	32.7	34.4	36.5	33.4	33.1	32.8	25.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.5	0.5	0.2	0.6	0.6	0.9	0.7	0.6	0.4
MEA	0.5	1.3	1.7	1.6	1.8	2.0	2.7	2.8	3.1	3.8
NEU	1.4	1.7	2.7	2.9	3.9	4.8	3.3	5.1	4.7	5.4
OAS	0.5	0.6	0.5	0.9	1.0	1.0	1.0	0.9	1.0	0.8
REF	17.0	18.6	15.6	19.1	19.4	19.6	12.6	7.4	10.0	9.9
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	4.5	5.5	6.5	5.1	4.9	6.0	6.1	7.8	6.6	7.0

Table 1095: FAO — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr)

44.4.2 Sugar cane



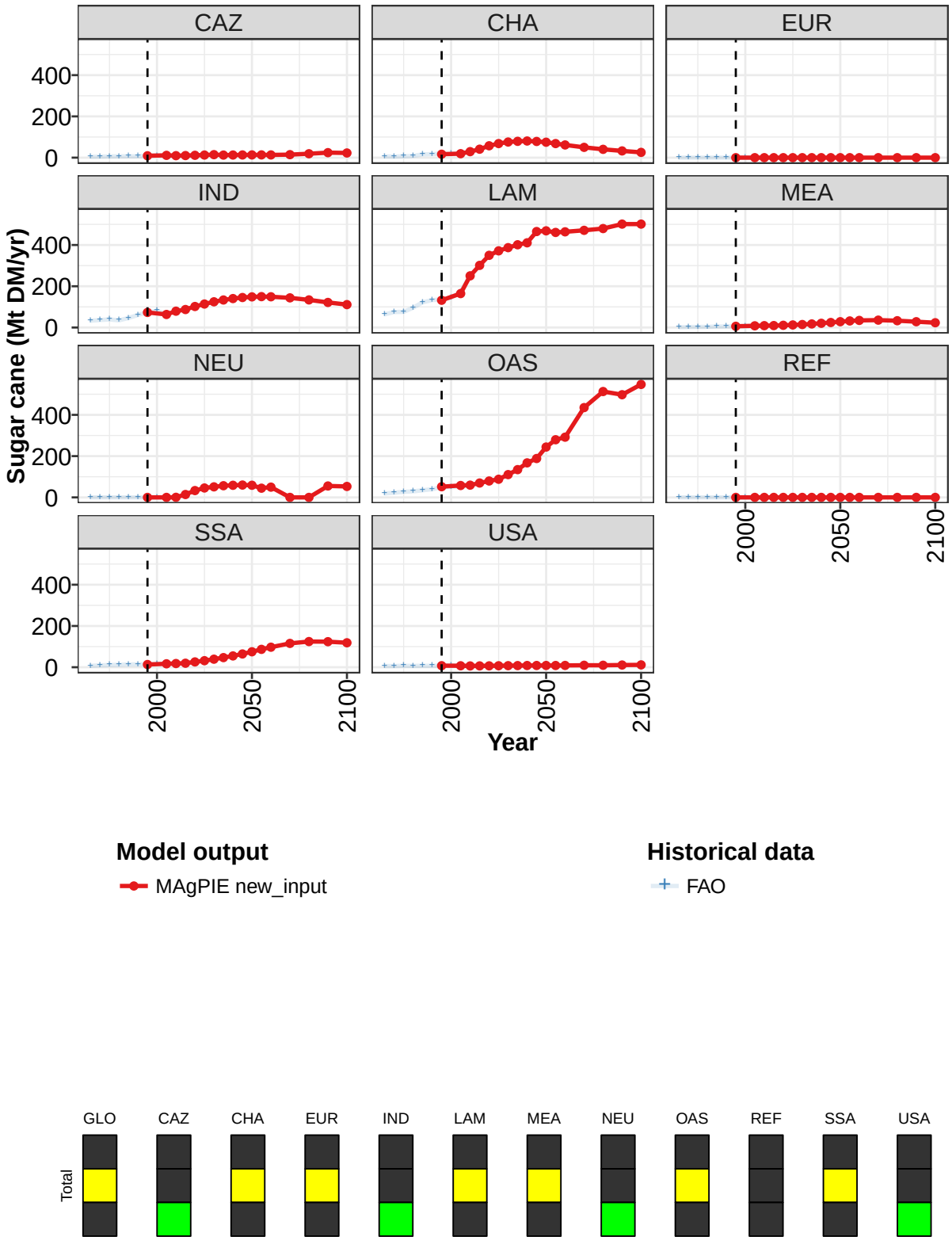


Figure 289: MAgPIE new_input — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	310	348	462	559	677	752	825	890	955	1048	1120
CAZ	9	11	10	10	12	13	15	13	13	13	13
CHA	17	19	29	41	58	68	76	79	81	79	75
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	73	63	79	87	102	114	125	134	140	145	149
LAM	132	165	250	301	350	372	387	401	411	465	469
MEA	6	8	9	10	11	13	15	17	21	24	28
NEU	0	0	0	14	33	46	51	57	59	60	59
OAS	52	58	59	70	80	88	110	135	167	188	244
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	13	17	18	19	26	32	39	47	55	64	75
USA	8	7	6	7	7	7	8	8	8	9	9

Table 1096: MAgPIE new_input — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

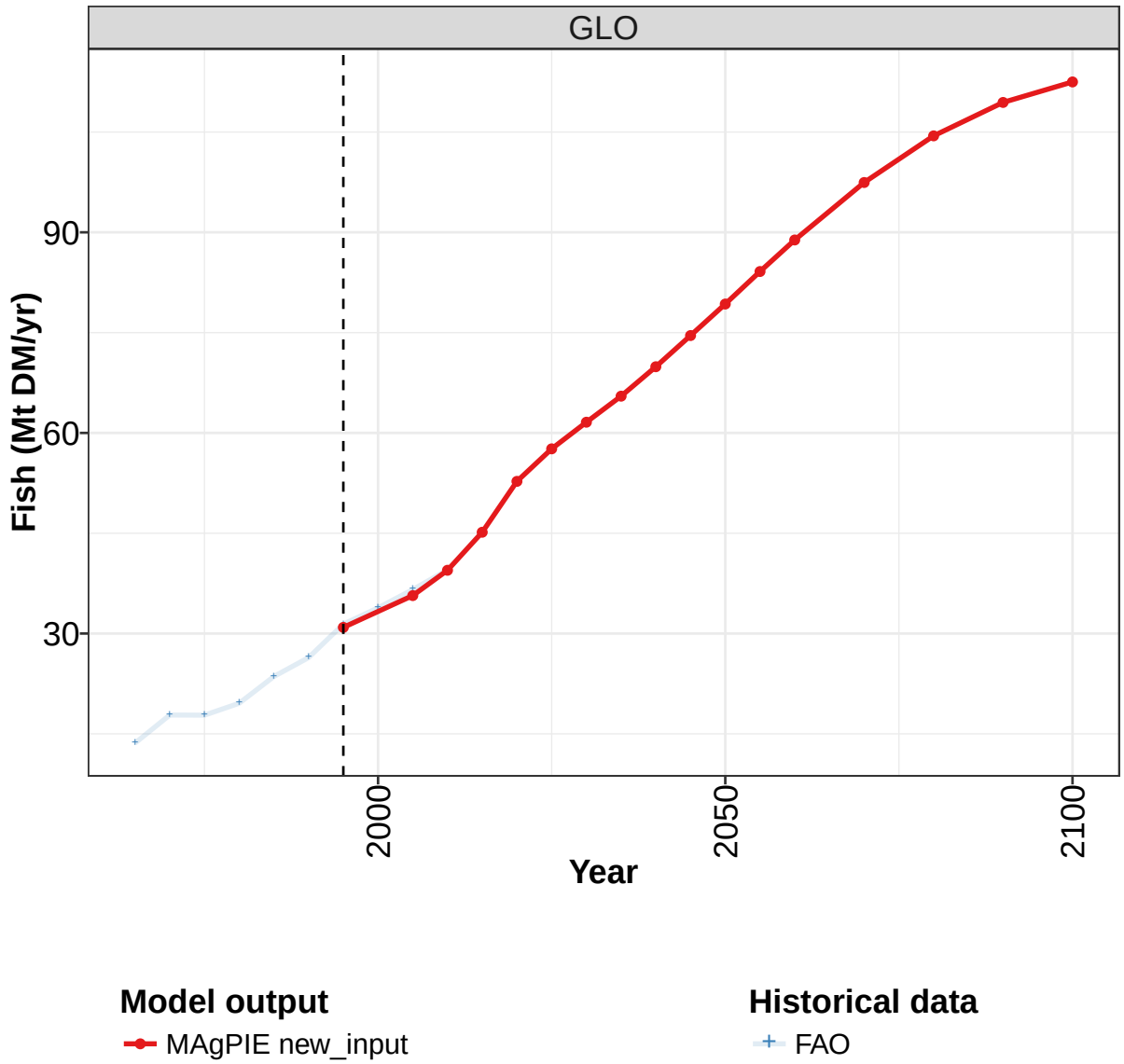
	2055	2060	2070	2080	2090	2100
GLO	1144	1170	1276	1353	1396	1415
CAZ	13	13	15	19	24	23
CHA	68	62	50	40	33	26
EUR	0	0	0	0	0	0
IND	150	149	144	134	122	111
LAM	461	464	471	480	501	501
MEA	32	35	36	33	28	23
NEU	45	50	0	0	55	53
OAS	279	292	435	513	498	548
REF	0	0	0	0	0	0
SSA	87	97	116	125	124	119
USA	9	9	10	10	11	12

Table 1097: MAgPIE new_input — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	140	162	175	197	251	283	315	338	354	460
CAZ	4	5	6	6	7	7	9	10	10	8
CHA	6	5	7	9	16	17	19	19	24	30
EUR	0	0	0	0	0	0	0	0	0	0
IND	33	36	39	35	46	61	74	81	64	79
LAM	64	75	76	96	122	133	136	145	171	254
MEA	1	2	3	3	5	5	6	7	8	8
NEU	0	0	0	0	0	0	0	0	0	0
OAS	19	23	27	29	34	40	49	50	53	57
REF	0	0	0	0	0	0	0	0	0	0
SSA	7	9	11	12	14	14	13	16	18	17
USA	6	6	7	7	7	7	8	10	7	7

Table 1098: FAO — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr)

45 Fish


GLO
Fish (Mt DM/yr)
90
60
30
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

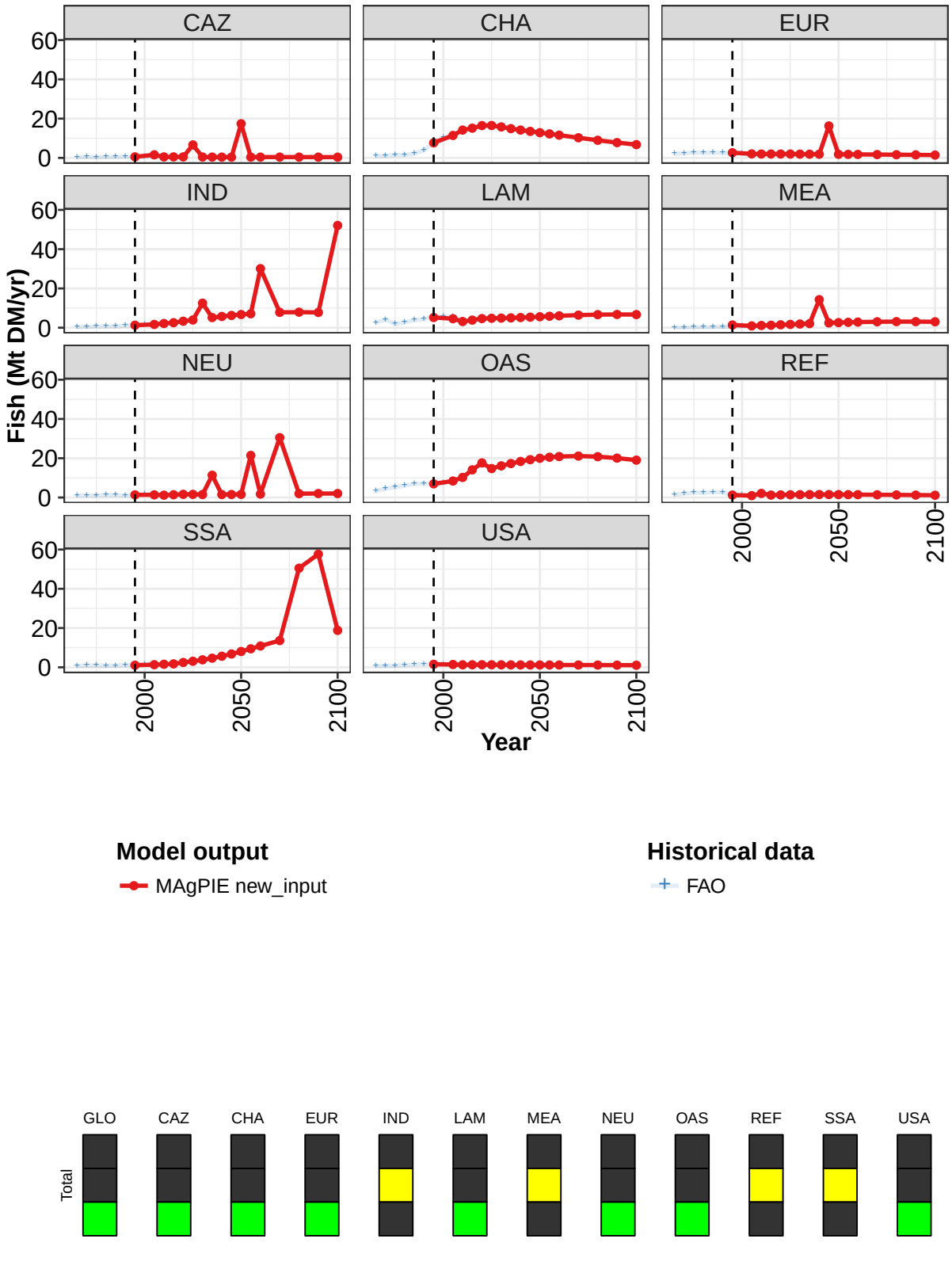


Figure 290: MAgPIE new_input — Production—Fish (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	31	36	39	45	53	58	62	66	70	75	79
CAZ	1	2	1	1	1	7	0	0	0	0	17
CHA	8	11	14	15	16	17	16	15	14	14	13
EUR	3	2	2	2	2	2	2	2	2	16	2
IND	1	2	2	3	3	4	12	5	6	6	7
LAM	5	5	3	4	5	5	5	5	5	5	6
MEA	1	1	1	1	1	2	2	2	14	2	3
NEU	1	1	1	1	2	2	2	11	2	2	2
OAS	7	8	10	14	18	15	16	17	18	19	20
REF	1	1	2	1	1	1	1	2	2	2	1
SSA	1	1	2	2	2	3	4	5	6	7	8
USA	2	1	1	1	1	1	1	1	1	1	1

Table 1099: MAgPIE new_input — Production—Fish (Mt DM/yr) [PART 1/2]

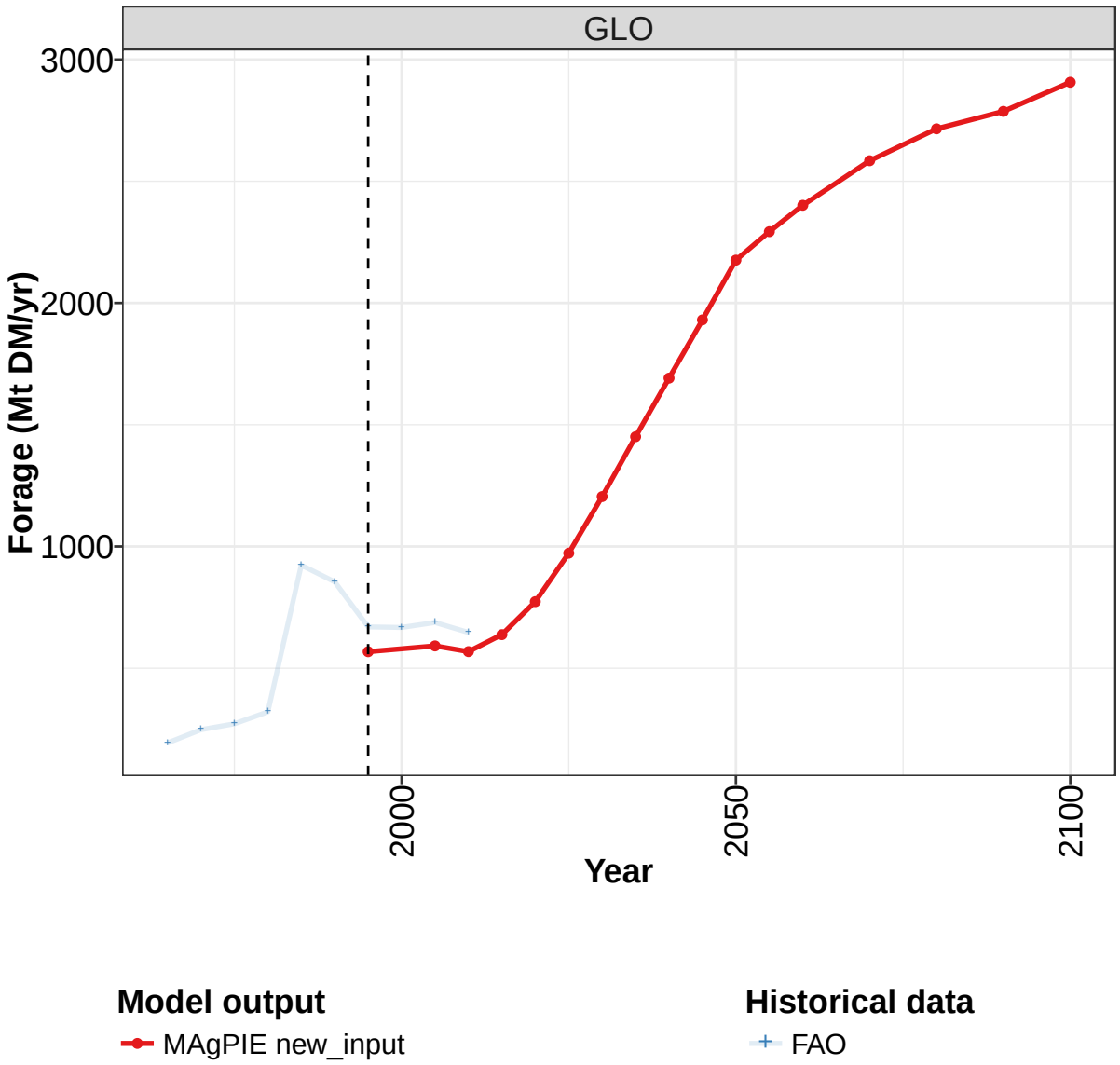
	2055	2060	2070	2080	2090	2100
GLO	84	89	97	104	109	112
CAZ	0	0	0	0	0	0
CHA	12	12	10	9	8	7
EUR	2	2	2	2	2	1
IND	7	30	8	8	8	52
LAM	6	6	6	7	7	7
MEA	3	3	3	3	3	3
NEU	21	2	30	2	2	2
OAS	21	21	21	21	20	19
REF	1	1	1	1	1	1
SSA	9	11	14	51	58	19
USA	1	1	1	1	1	1

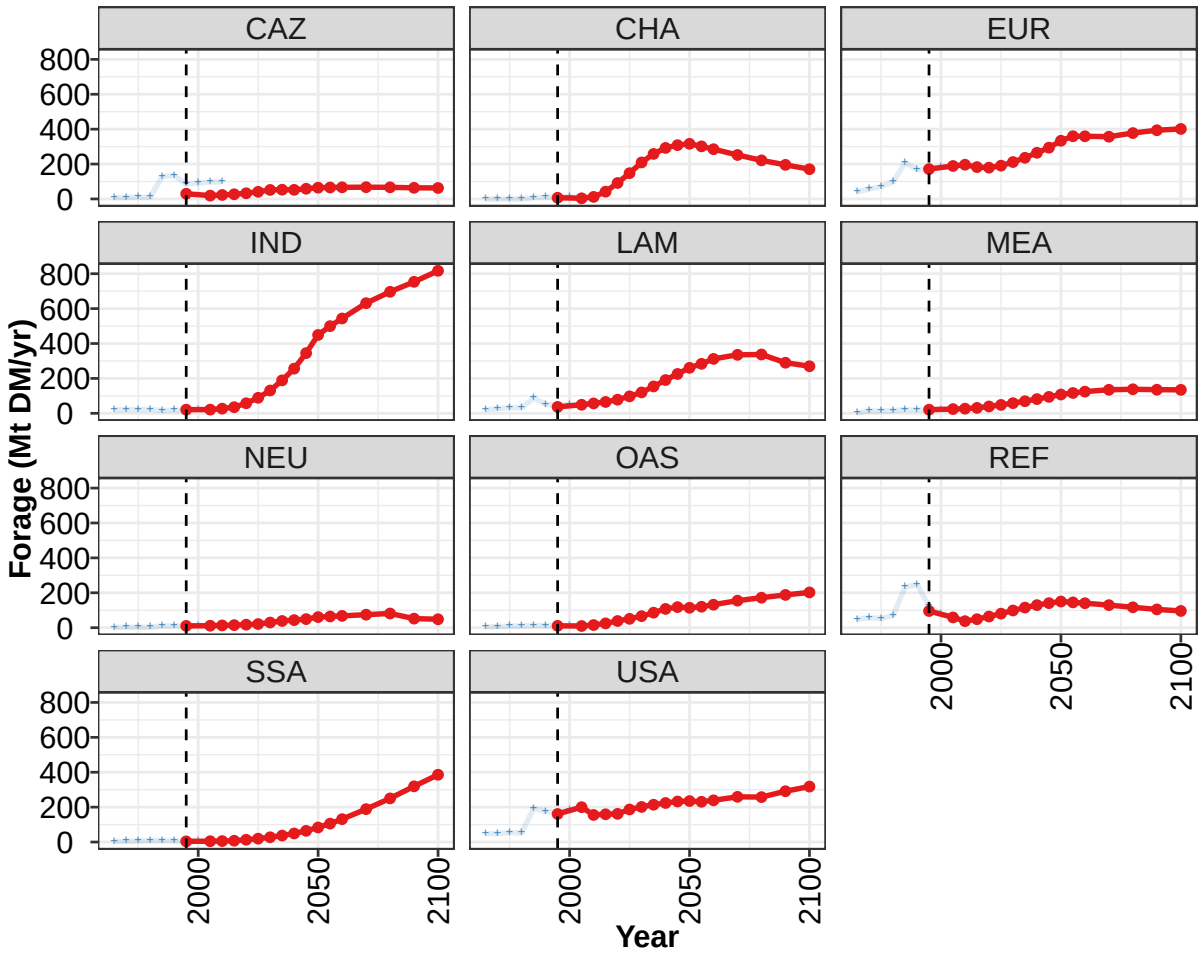
Table 1100: MAgPIE new_input — Production—Fish (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	13.6	17.8	17.8	19.6	23.6	26.4	31.4	33.8	36.6	39.5
CAZ	0.4	0.4	0.3	0.5	0.5	0.6	0.5	0.5	0.6	0.5
CHA	1.0	1.1	1.5	1.5	2.3	3.9	8.0	10.1	11.9	14.3
EUR	2.1	2.4	2.7	2.6	2.7	2.5	2.6	2.3	2.0	2.0
IND	0.4	0.5	0.6	0.7	0.8	1.0	1.3	1.5	1.8	2.3
LAM	2.5	4.2	1.8	2.7	3.8	4.4	6.0	5.7	5.5	3.8
MEA	0.1	0.2	0.2	0.2	0.3	0.4	0.6	0.7	0.9	1.1
NEU	1.1	1.1	1.0	1.3	1.3	1.0	1.4	1.6	1.5	1.5
OAS	3.3	4.5	5.3	6.0	7.0	7.2	6.9	7.3	8.4	10.1
REF	1.3	1.9	2.6	2.4	2.7	2.6	1.3	1.2	1.0	1.2
SSA	0.7	0.9	1.0	0.8	0.8	1.0	1.1	1.3	1.5	1.5
USA	0.7	0.8	0.8	1.1	1.4	1.6	1.6	1.4	1.5	1.3

Table 1101: FAO — Production—Fish (Mt DM/yr)

46 Forage


GLO
3000
2000
1000
Forage (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



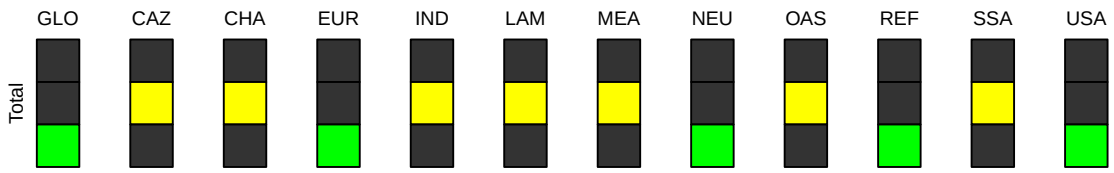


Figure 291: MAgPIE new_input — Production—Forage (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	568	592	568	638	774	973	1205	1451	1691	1931	2176
CAZ	30	19	23	27	33	41	52	53	52	59	65
CHA	7	4	12	42	92	148	209	258	293	308	316
EUR	171	189	196	183	179	191	212	236	265	294	334
IND	21	21	27	35	58	89	131	189	256	345	449
LAM	37	49	57	65	78	97	120	154	191	226	261
MEA	21	24	27	31	39	48	58	69	81	94	108
NEU	10	11	13	15	17	21	30	39	44	49	61
OAS	11	10	15	25	38	51	66	86	108	118	114
REF	95	59	38	49	64	80	99	115	129	141	150
SSA	4	5	6	8	13	19	28	37	49	64	84
USA	161	200	155	159	162	187	201	214	224	232	235

Table 1102: MAgPIE new_input — Production—Forage (Mt DM/yr) [PART 1/2]

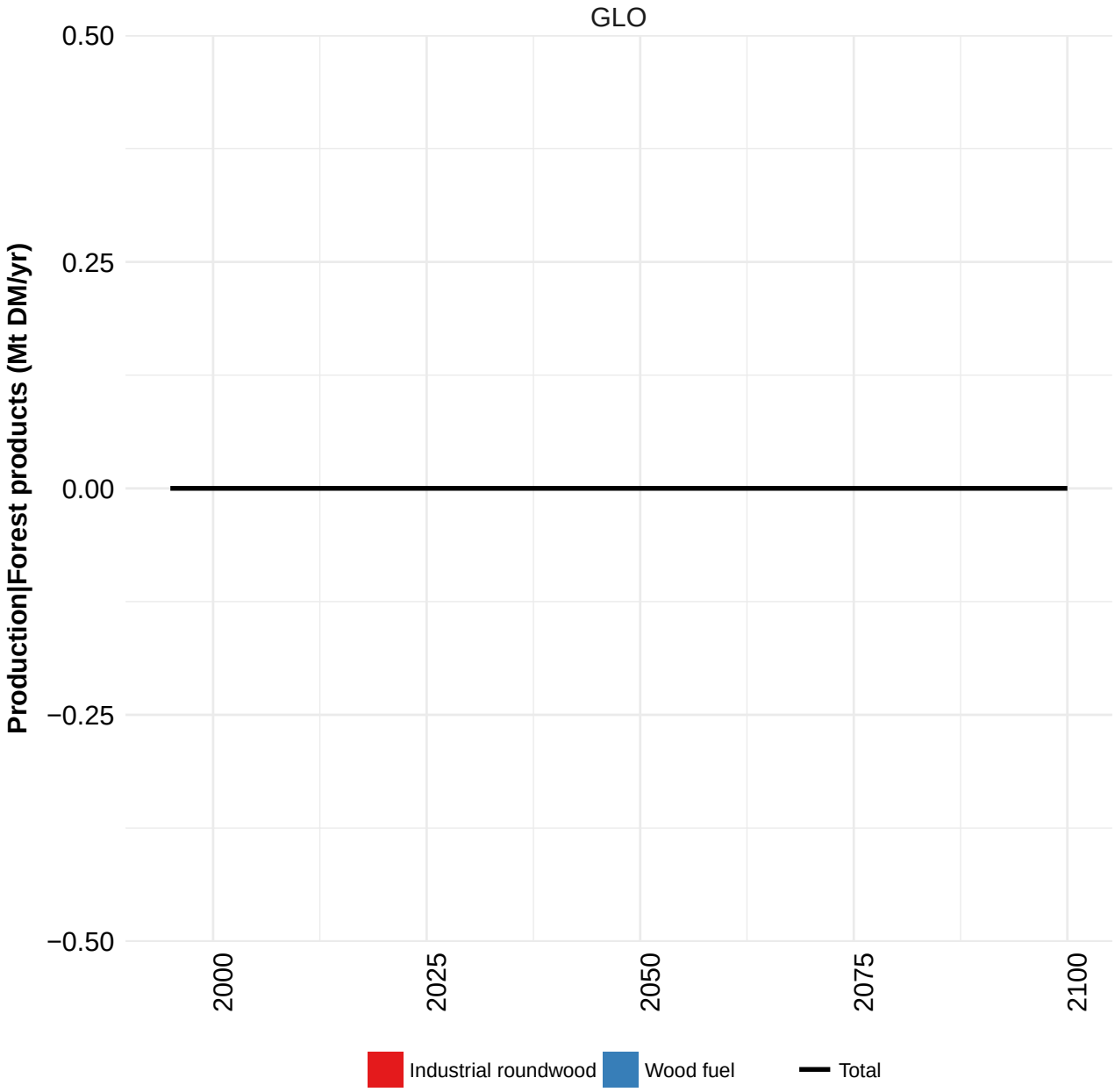
	2055	2060	2070	2080	2090	2100
GLO	2293	2401	2584	2715	2787	2907
CAZ	66	67	68	67	64	63
CHA	302	285	252	221	196	171
EUR	359	359	357	378	394	401
IND	500	544	631	696	753	817
LAM	284	312	335	337	290	270
MEA	117	124	135	138	135	135
NEU	64	68	74	81	52	48
OAS	120	132	155	172	188	202
REF	145	140	129	117	105	96
SSA	106	131	189	250	319	386
USA	231	239	259	258	291	318

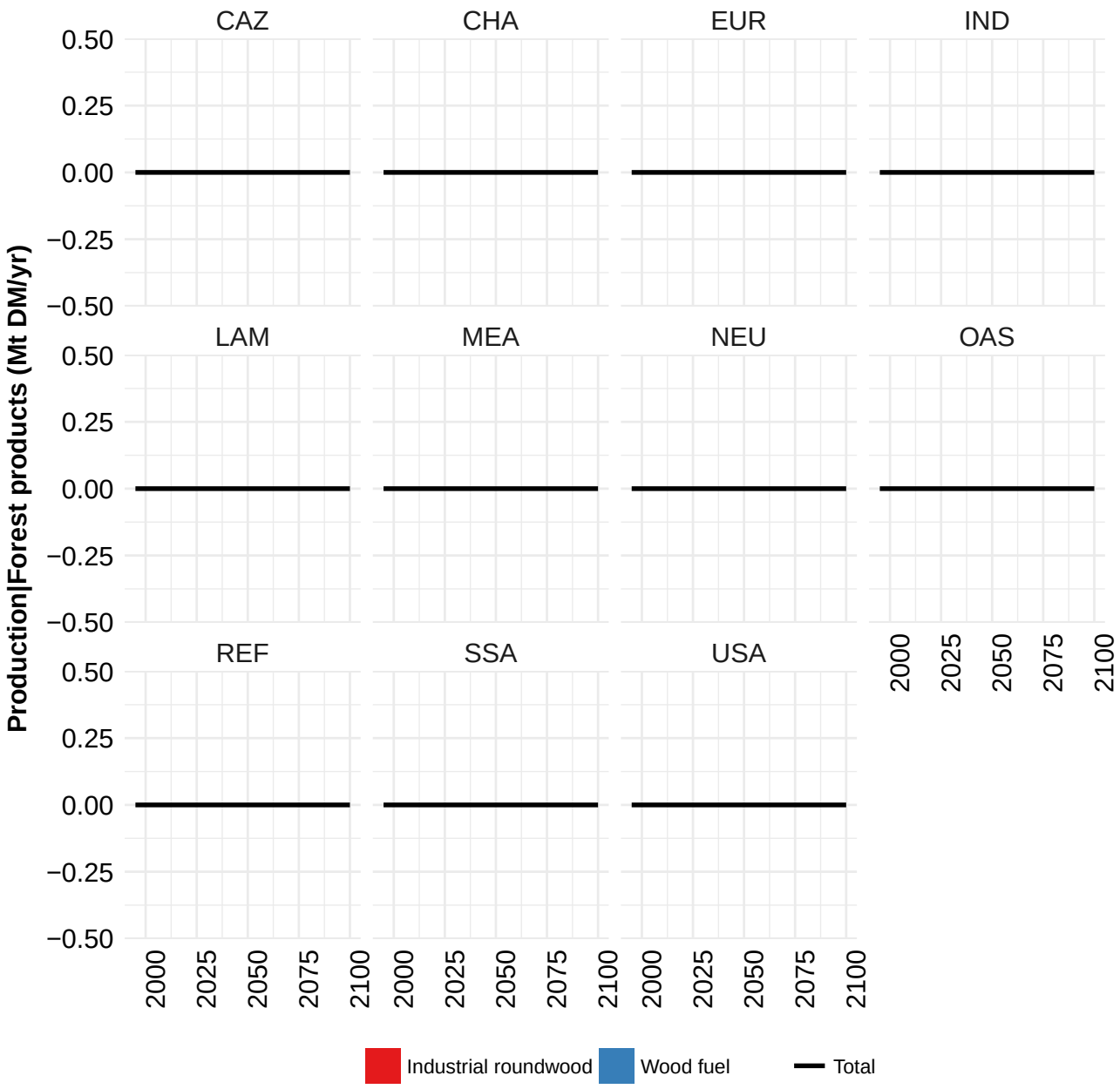
Table 1103: MAgPIE new_input — Production—Forage (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	193	247	272	321	923	855	670	667	688	647
CAZ	7	9	10	10	128	135	85	93	96	99
CHA	0	0	0	0	8	10	11	12	13	14
EUR	40	57	71	97	206	168	169	182	186	196
IND	19	21	21	22	15	18	20	22	25	28
LAM	21	27	33	31	88	51	46	50	51	54
MEA	2	14	13	15	21	20	20	21	23	25
NEU	2	2	3	3	11	11	11	10	12	13
OAS	4	6	9	10	13	12	11	11	10	14
REF	47	57	52	71	232	248	123	77	65	38
SSA	4	5	6	9	9	7	5	5	5	5
USA	47	48	54	53	193	175	170	185	201	162

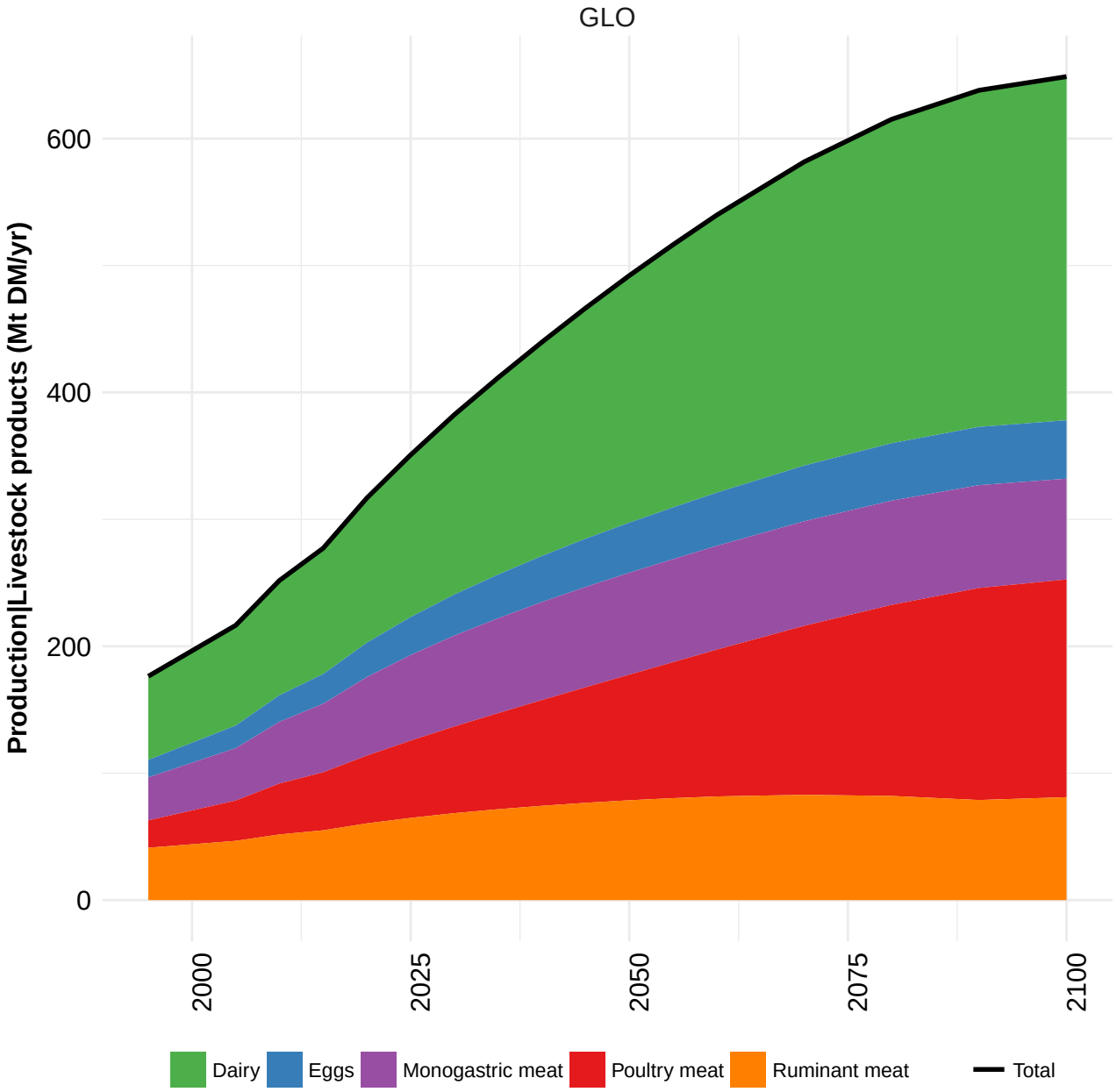
Table 1104: FAO — Production—Forage (Mt DM/yr)

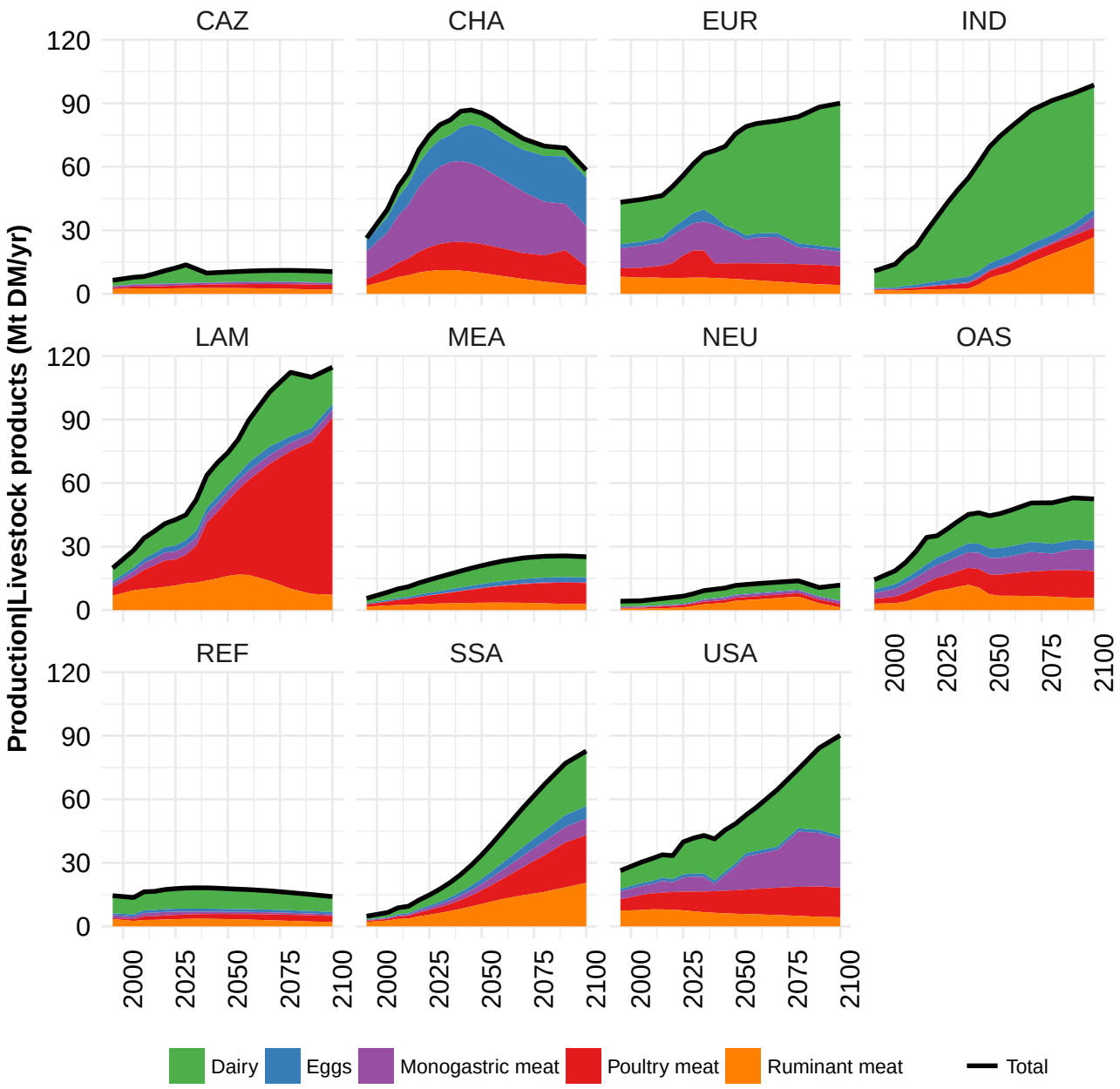
47 Forest products

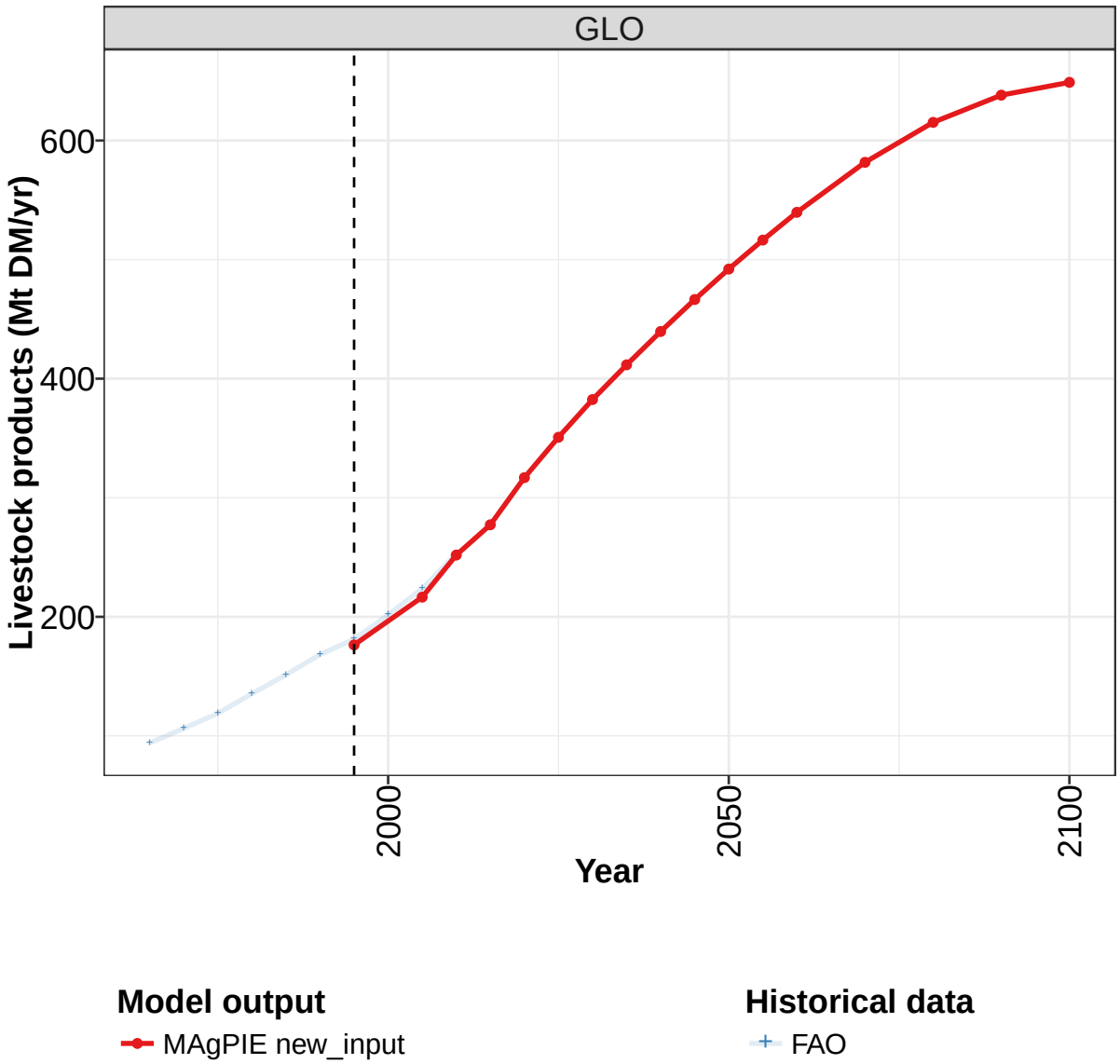


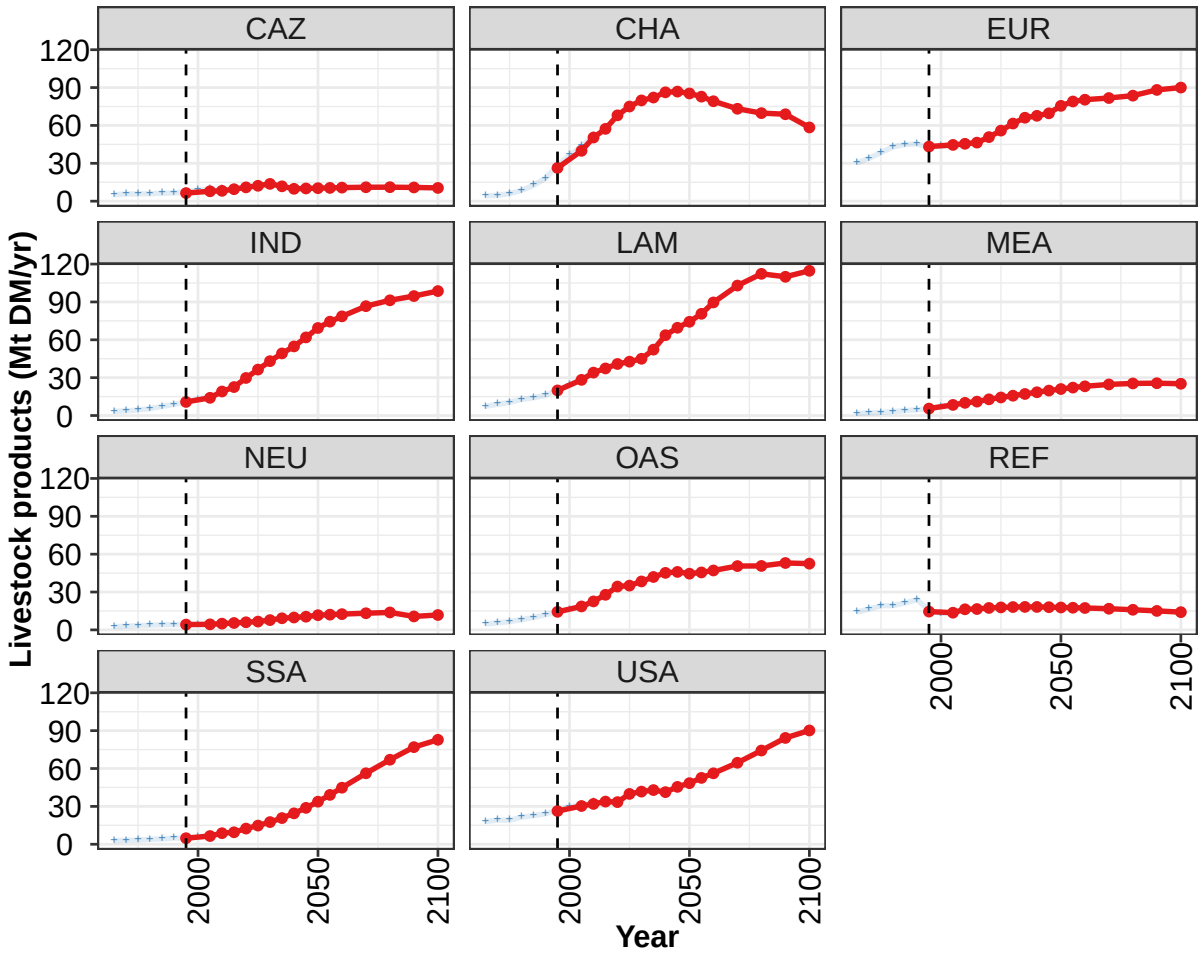

CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Forest products (Mt DM/yr)
0.50
0.25
0.00
−0.25
−0.50
2000
2025
2050
2075
2100
Industrial roundwood
Wood fuel
Total

48 Livestock products




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Livestock products (Mt DM/yr)
0
30
60
90
120
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


GLO
Livestock products (Mt DM/yr)
600
400
200
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



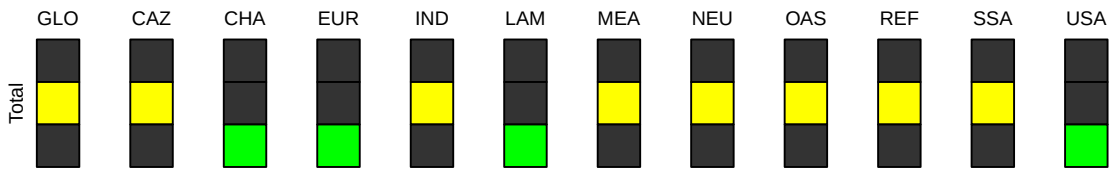


Figure 292: MAgPIE new_input — Production—Livestock products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	176	217	252	277	317	351	382	412	440	466	492
CAZ	6	8	8	10	11	12	14	12	10	10	10
CHA	26	40	50	57	68	75	80	82	86	87	85
EUR	43	45	45	46	51	56	62	66	68	70	76
IND	11	14	19	23	30	36	43	49	55	62	69
LAM	20	28	34	37	41	43	45	52	64	70	74
MEA	6	8	10	11	13	14	16	17	18	20	21
NEU	4	4	5	5	6	7	8	9	10	10	12
OAS	14	19	23	28	34	35	38	42	45	46	45
REF	14	14	16	17	17	18	18	18	18	18	18
SSA	5	7	9	9	12	15	18	21	24	29	34
USA	26	30	32	34	33	40	42	43	41	45	48

Table 1105: MAgPIE new_input — Production—Livestock products (Mt DM/yr) [PART 1/2]

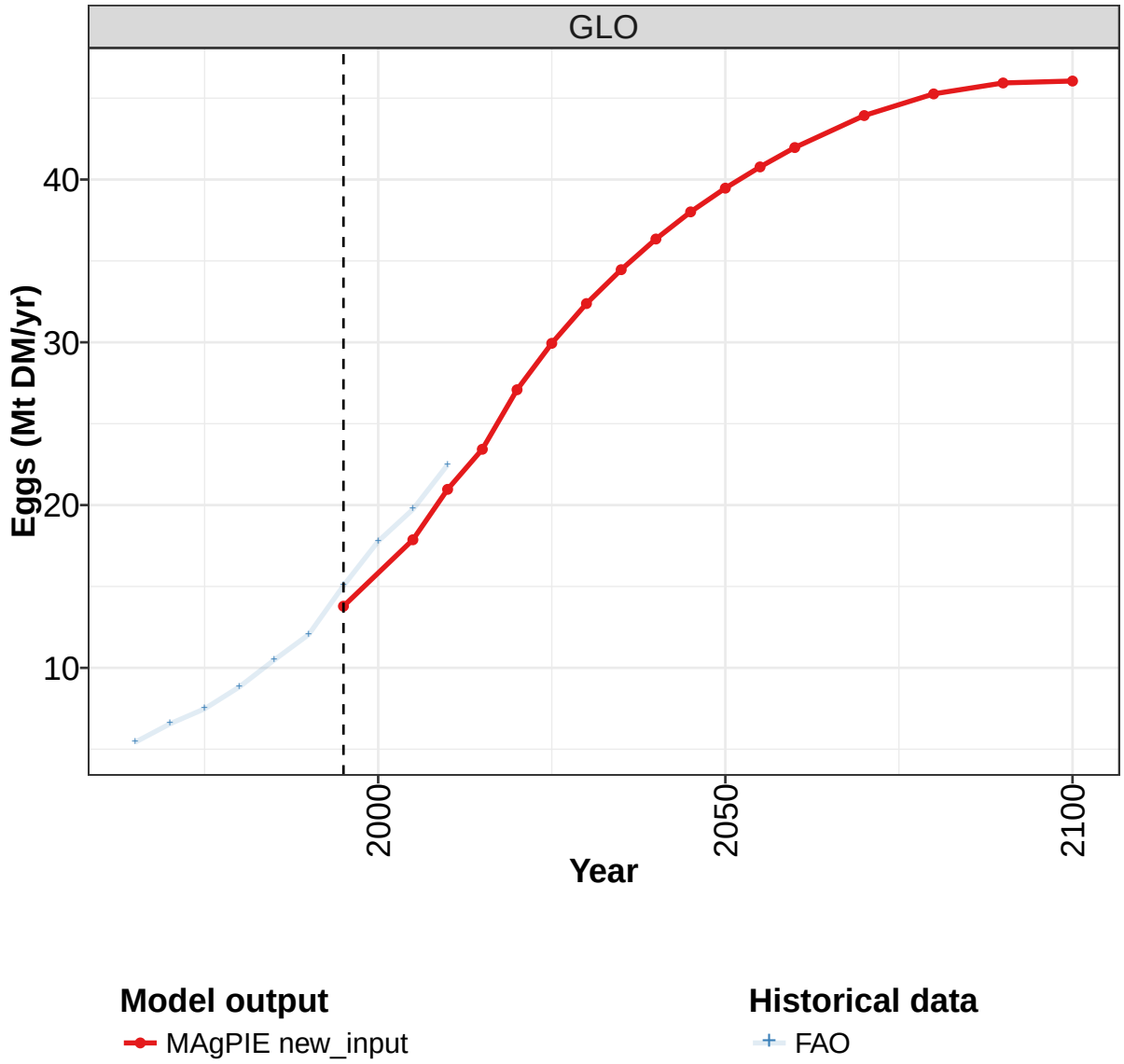
	2055	2060	2070	2080	2090	2100
GLO	516	540	582	615	638	649
CAZ	11	11	11	11	11	11
CHA	83	79	73	70	69	58
EUR	79	80	82	84	88	90
IND	74	79	87	91	95	99
LAM	81	90	103	112	110	115
MEA	22	23	25	25	26	25
NEU	12	12	13	14	11	12
OAS	46	47	51	51	53	52
REF	18	17	17	16	15	14
SSA	39	45	56	67	77	83
USA	53	56	65	74	84	90

Table 1106: MAgPIE new_input — Production—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	94	106	119	135	151	168	181	202	224	253
CAZ	5	6	6	6	6	7	7	9	9	10
CHA	4	5	6	9	13	18	28	36	44	52
EUR	30	34	38	43	45	45	43	44	43	44
IND	3	4	4	5	7	9	11	13	15	19
LAM	7	9	10	13	14	16	20	24	29	33
MEA	2	2	2	3	4	5	6	7	8	10
NEU	3	3	3	4	4	4	4	4	4	5
OAS	5	6	7	8	10	12	14	16	18	22
REF	14	17	19	19	21	24	16	13	14	16
SSA	3	3	3	4	4	5	5	6	7	9
USA	18	19	19	21	23	24	27	30	31	33

Table 1107: FAO — Production—Livestock products (Mt DM/yr)

48.1 Eggs


GLO
Eggs (Mt DM/yr)
10
20
30
40
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

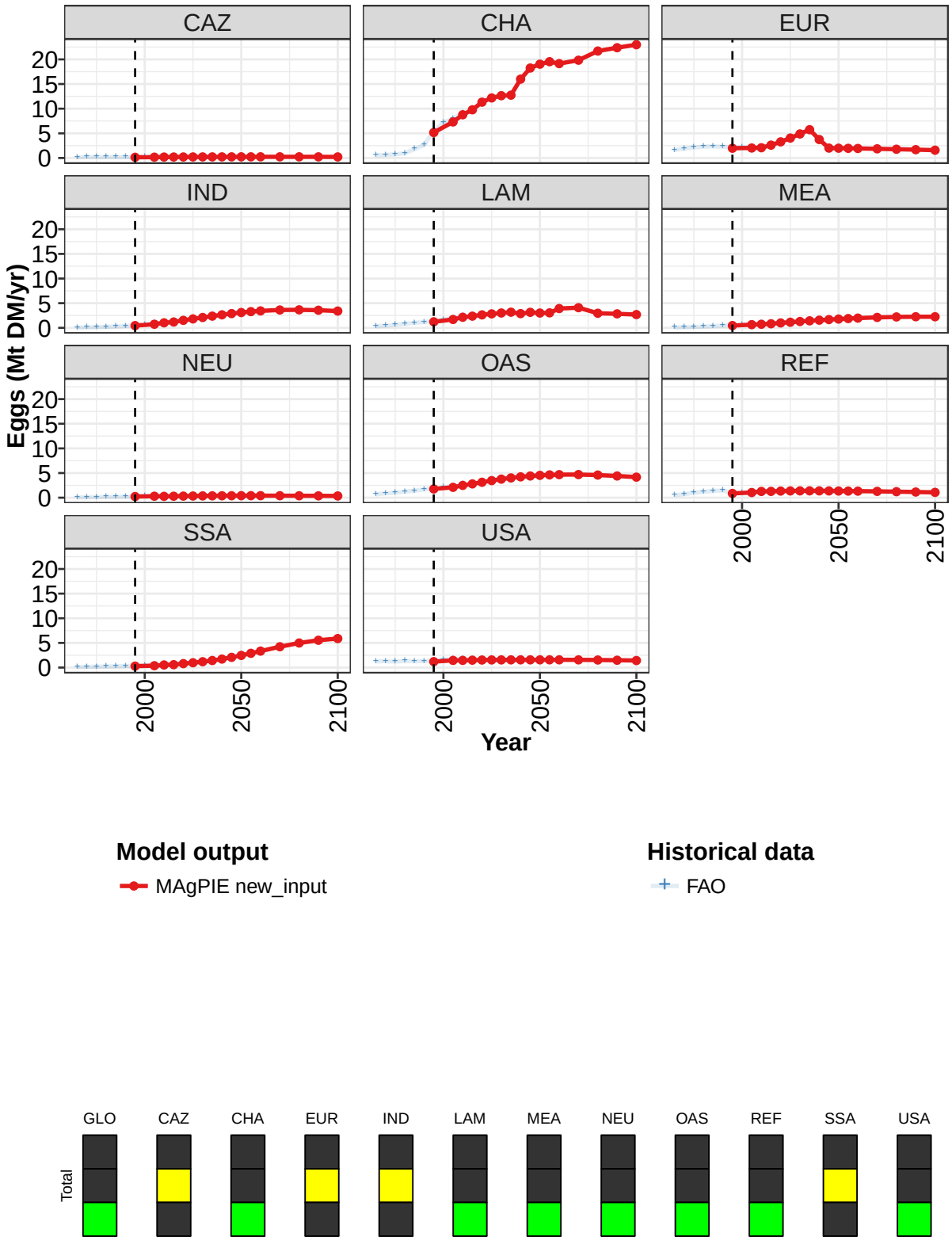


Figure 293: MAgPIE new_input — Production—Livestock products—Eggs (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	13.8	17.9	21.0	23.4	27.1	29.9	32.4	34.5	36.3	38.0	39.5
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	5.2	7.3	8.8	9.8	11.3	12.2	12.6	12.7	16.0	18.3	19.0
EUR	2.0	2.0	2.1	2.6	3.3	4.0	4.9	5.7	3.7	2.0	2.0
IND	0.5	0.7	1.0	1.2	1.5	1.8	2.1	2.4	2.6	2.9	3.1
LAM	1.2	1.7	2.2	2.4	2.6	2.8	3.0	3.2	2.9	3.1	3.0
MEA	0.5	0.6	0.7	0.8	1.0	1.1	1.3	1.4	1.6	1.7	1.8
NEU	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
OAS	1.8	2.1	2.5	2.8	3.1	3.5	3.8	4.0	4.2	4.4	4.5
REF	0.9	1.0	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
SSA	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.4	1.7	2.1	2.5
USA	1.2	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6

Table 1108: MAgPIE new_input — Production—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

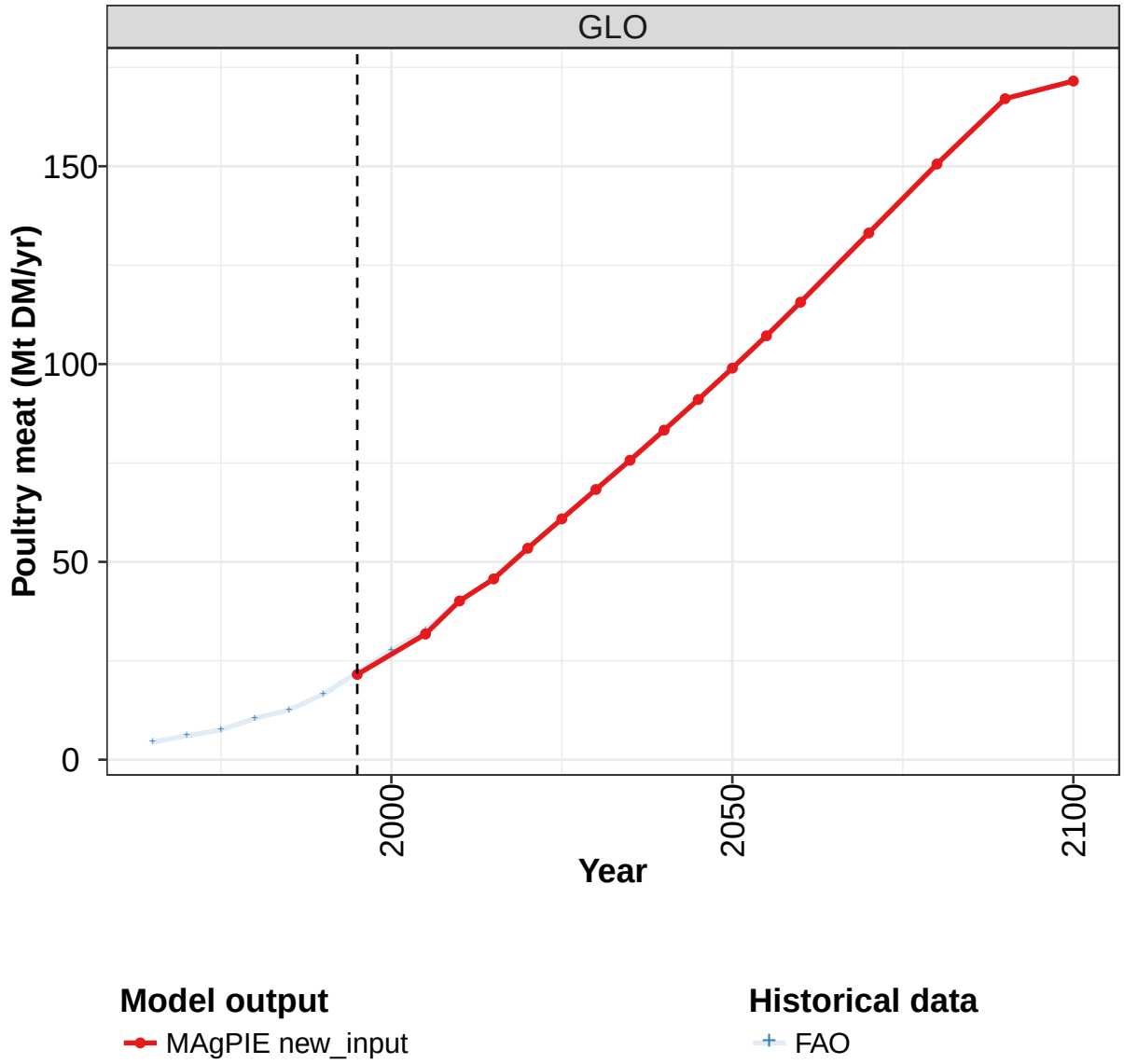
	2055	2060	2070	2080	2090	2100
GLO	40.8	42.0	43.9	45.3	45.9	46.1
CAZ	0.2	0.2	0.2	0.2	0.2	0.2
CHA	19.5	19.1	19.8	21.7	22.4	23.0
EUR	2.0	1.9	1.9	1.8	1.7	1.6
IND	3.3	3.4	3.6	3.7	3.6	3.4
LAM	3.0	3.9	4.1	3.0	2.8	2.7
MEA	1.9	2.0	2.1	2.2	2.3	2.3
NEU	0.4	0.4	0.4	0.4	0.4	0.4
OAS	4.6	4.7	4.7	4.6	4.4	4.2
REF	1.3	1.3	1.3	1.2	1.2	1.1
SSA	2.9	3.3	4.2	5.0	5.5	5.9
USA	1.6	1.6	1.6	1.5	1.5	1.4

Table 1109: MAgPIE new_input — Production—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.4	6.6	7.5	8.8	10.5	12.0	15.0	17.8	19.7	22.5
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.5	0.6	0.7	0.9	1.8	2.6	5.5	7.2	8.0	9.1
EUR	1.6	1.9	2.1	2.3	2.4	2.3	2.1	2.2	2.2	2.2
IND	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.8	1.1
LAM	0.3	0.4	0.6	0.8	1.0	1.2	1.4	1.7	1.9	2.4
MEA	0.1	0.1	0.2	0.2	0.4	0.4	0.5	0.6	0.7	0.8
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
OAS	0.7	0.9	1.0	1.2	1.4	1.7	1.9	2.1	2.3	2.7
REF	0.5	0.7	1.0	1.2	1.4	1.5	0.9	0.9	1.1	1.3
SSA	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.6
USA	1.3	1.3	1.2	1.3	1.3	1.3	1.4	1.6	1.7	1.7

Table 1110: FAO — Production—Livestock products—Eggs (Mt DM/yr)

48.2 Poultry meat



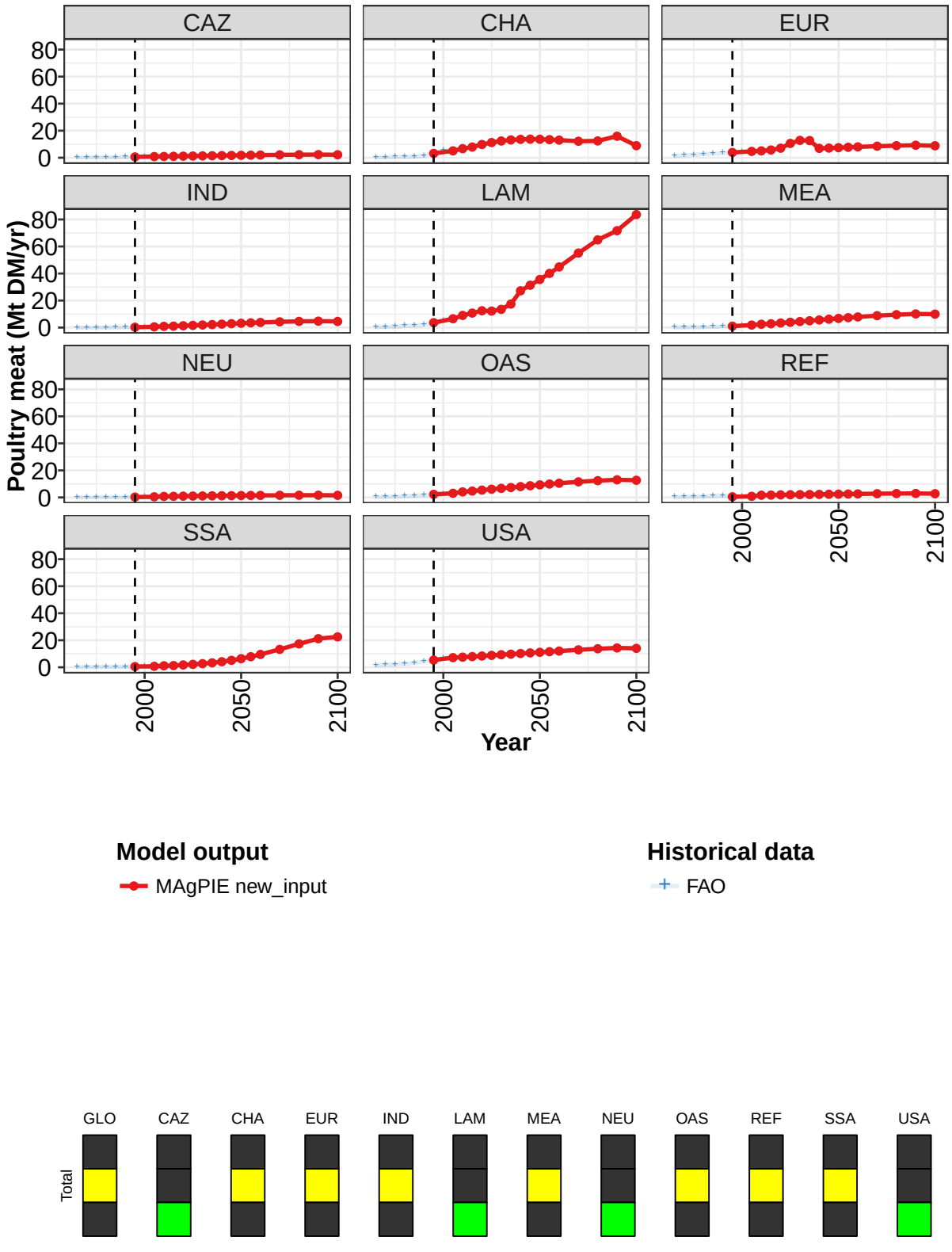


Figure 294: MAgPIE new_input — Production—Livestock products—Poultry meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	22	32	40	46	53	61	68	76	83	91	99
CAZ	1	1	1	1	1	1	1	1	2	2	2
CHA	3	5	7	8	10	11	12	13	14	14	14
EUR	4	5	5	6	7	11	13	13	7	7	7
IND	0	1	1	1	1	2	2	2	3	3	3
LAM	4	7	9	11	12	12	13	17	27	31	36
MEA	1	2	2	3	3	4	4	5	6	6	7
NEU	0	0	1	1	1	1	1	1	1	1	1
OAS	2	3	4	5	5	6	7	7	8	9	9
REF	0	1	2	2	2	2	2	2	2	2	2
SSA	1	1	1	1	2	2	3	3	4	5	6
USA	5	7	8	8	8	9	9	10	10	11	11

Table 1111: MAgPIE new_input — Production—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

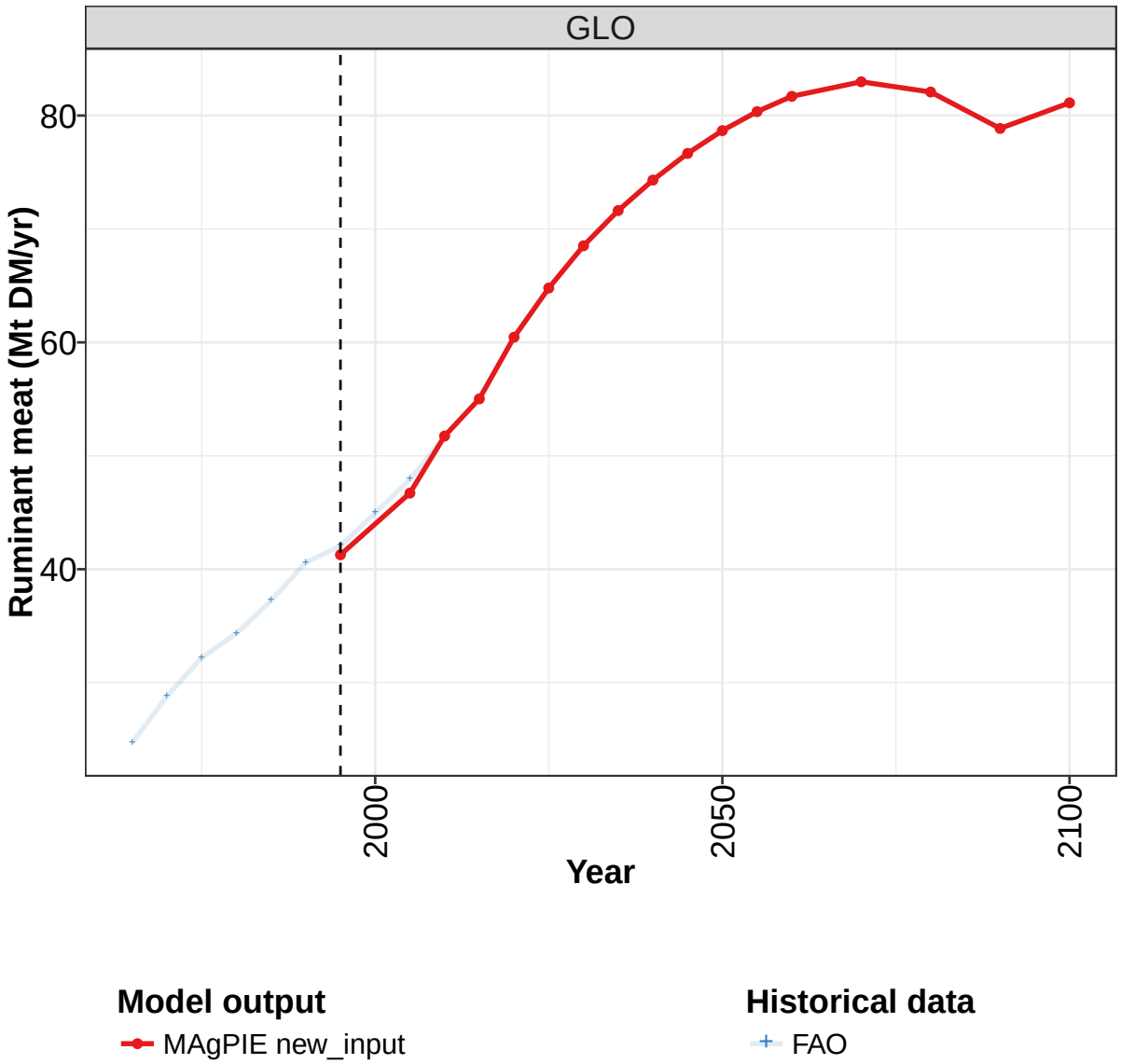
	2055	2060	2070	2080	2090	2100
GLO	107	116	133	151	167	172
CAZ	2	2	2	2	2	2
CHA	13	13	12	12	16	9
EUR	8	8	9	9	9	9
IND	4	4	4	5	5	5
LAM	40	45	55	65	72	84
MEA	7	8	9	10	10	10
NEU	1	2	2	2	2	2
OAS	10	10	12	12	13	13
REF	3	3	3	3	3	3
SSA	8	10	13	17	21	23
USA	12	12	13	14	14	14

Table 1112: MAgPIE new_input — Production—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.4	6.1	7.5	10.4	12.6	16.5	22.0	27.7	32.6	40.2
CAZ	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.9	0.9
CHA	0.3	0.4	0.5	0.7	0.8	1.5	3.5	5.1	5.7	7.0
EUR	1.2	1.7	2.2	2.8	2.9	3.4	3.8	4.3	4.4	4.9
IND	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.9
LAM	0.3	0.5	0.7	1.3	1.5	2.1	3.6	5.1	6.5	8.7
MEA	0.1	0.2	0.2	0.4	0.7	0.8	1.0	1.5	1.9	2.4
NEU	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.5	0.7
OAS	0.3	0.5	0.7	1.0	1.3	1.7	2.2	2.5	3.0	4.0
REF	0.3	0.4	0.6	0.8	1.1	1.3	0.5	0.5	0.9	1.6
SSA	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.8	1.1
USA	1.5	1.9	1.9	2.6	3.1	4.4	5.6	6.6	7.5	7.9

Table 1113: FAO — Production—Livestock products—Poultry meat (Mt DM/yr)

48.3 Ruminant meat



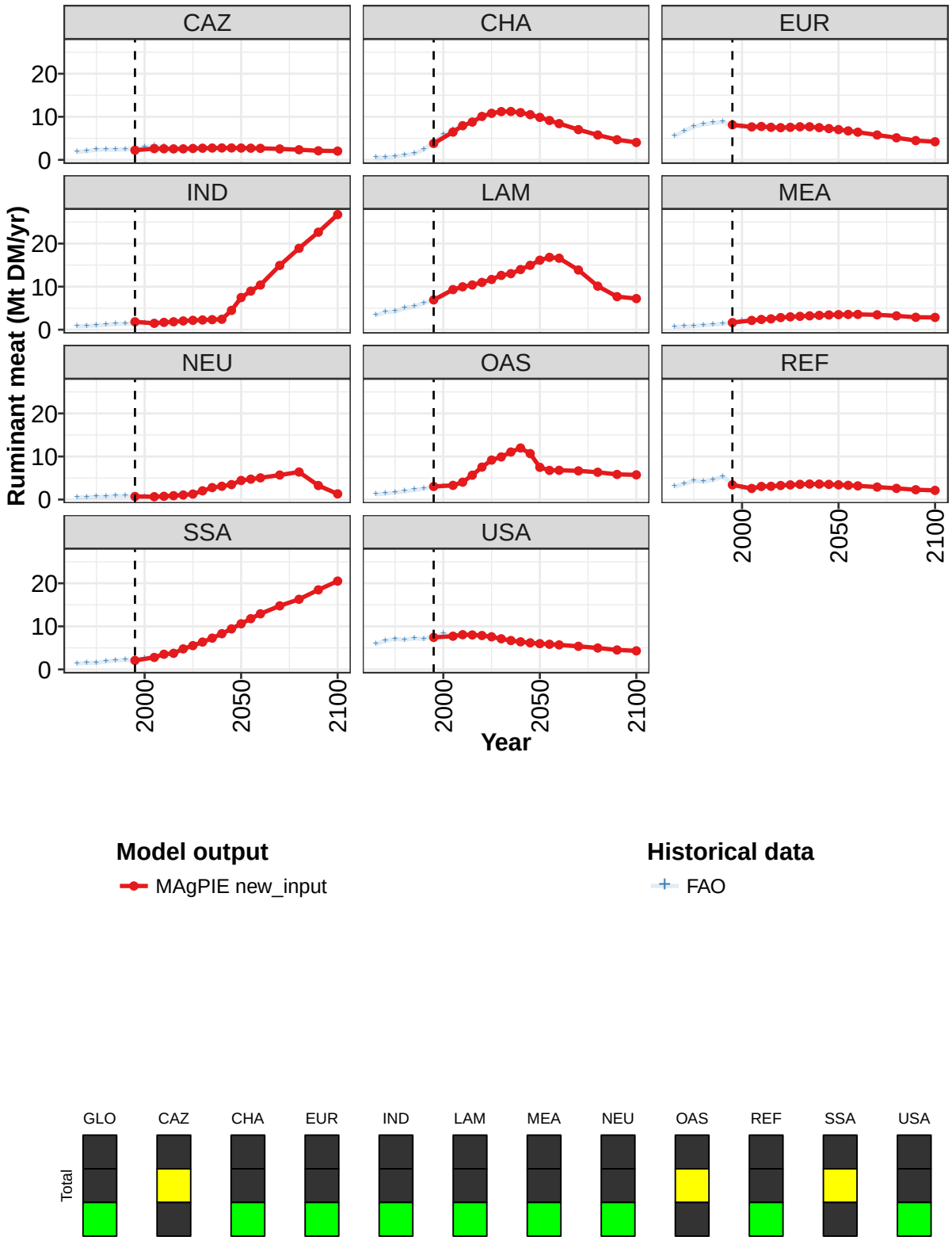


Figure 295: MAgPIE new_input — Production—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	41.3	46.7	51.7	55.0	60.5	64.8	68.5	71.6	74.3	76.7	78.7
CAZ	2.2	2.6	2.6	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.7
CHA	3.8	6.5	7.9	8.8	10.1	10.8	11.2	11.2	11.0	10.5	9.9
EUR	8.1	7.6	7.8	7.6	7.5	7.6	7.7	7.7	7.5	7.3	7.0
IND	1.8	1.5	1.7	1.8	2.0	2.2	2.3	2.3	2.4	4.5	7.5
LAM	6.9	9.3	10.0	10.4	11.0	11.7	12.6	13.0	14.0	15.0	16.1
MEA	1.7	2.2	2.4	2.5	2.8	3.0	3.1	3.2	3.3	3.4	3.5
NEU	0.7	0.7	0.8	0.9	1.1	1.3	2.0	2.8	3.1	3.5	4.4
OAS	3.0	3.3	4.0	5.7	7.5	9.2	9.9	11.0	12.0	10.7	7.5
REF	3.4	2.6	3.0	3.1	3.3	3.4	3.5	3.6	3.6	3.5	3.4
SSA	2.1	2.8	3.5	3.7	4.8	5.5	6.4	7.3	8.3	9.4	10.6
USA	7.4	7.7	8.1	8.0	7.9	7.6	7.1	6.7	6.4	6.2	6.0

Table 1114: MAgPIE new_input — Production—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

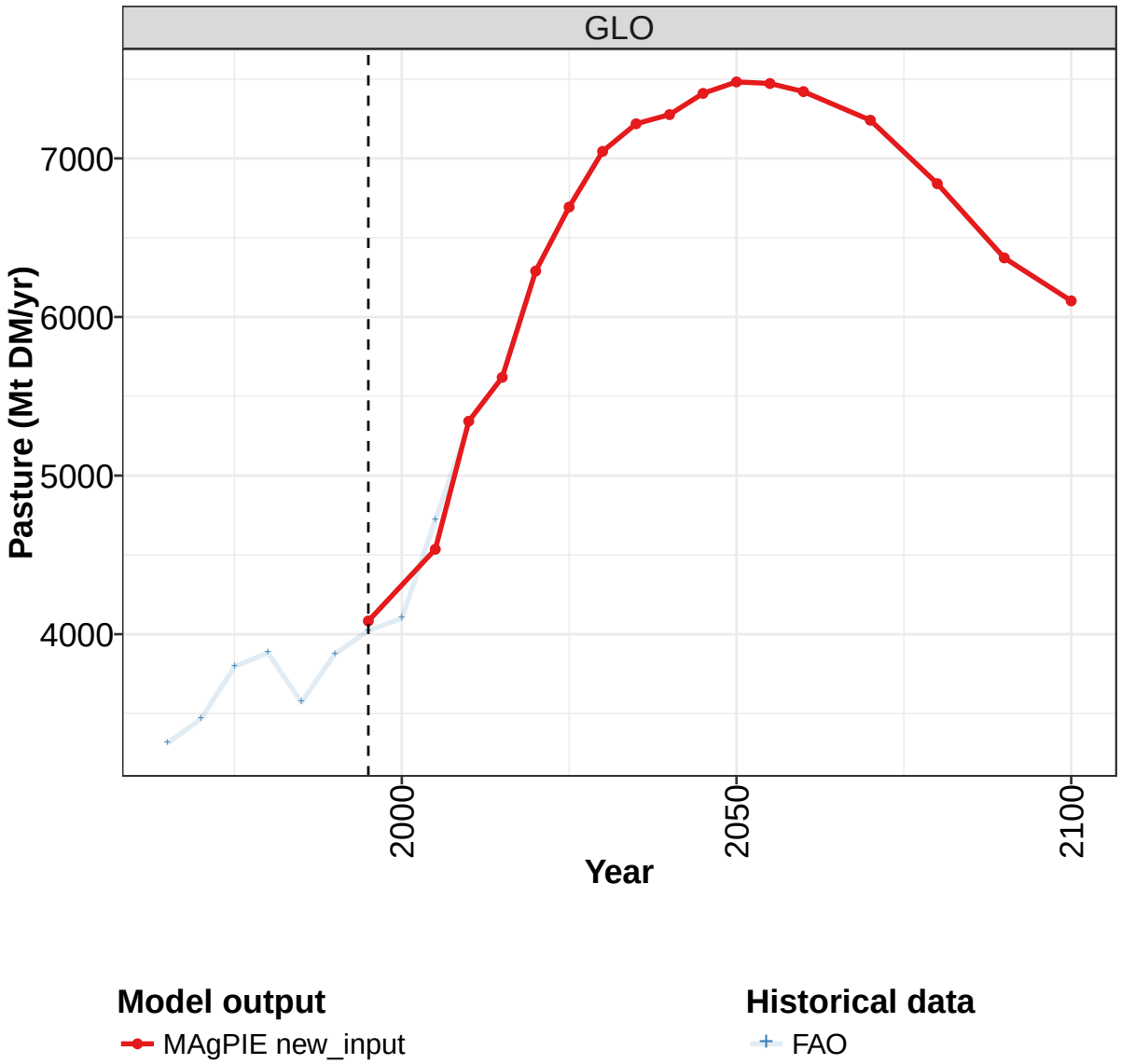
	2055	2060	2070	2080	2090	2100
GLO	80.3	81.7	83.0	82.1	78.9	81.1
CAZ	2.7	2.7	2.5	2.3	2.1	2.0
CHA	9.1	8.4	7.0	5.8	4.7	4.0
EUR	6.7	6.4	5.8	5.1	4.5	4.2
IND	9.0	10.4	14.9	18.9	22.6	26.7
LAM	16.8	16.6	13.9	10.1	7.7	7.2
MEA	3.5	3.6	3.5	3.2	2.9	2.9
NEU	4.7	5.0	5.7	6.4	3.3	1.3
OAS	6.8	6.8	6.7	6.3	5.8	5.7
REF	3.3	3.2	2.9	2.6	2.3	2.1
SSA	11.8	12.9	14.8	16.3	18.5	20.5
USA	5.8	5.7	5.4	5.0	4.5	4.3

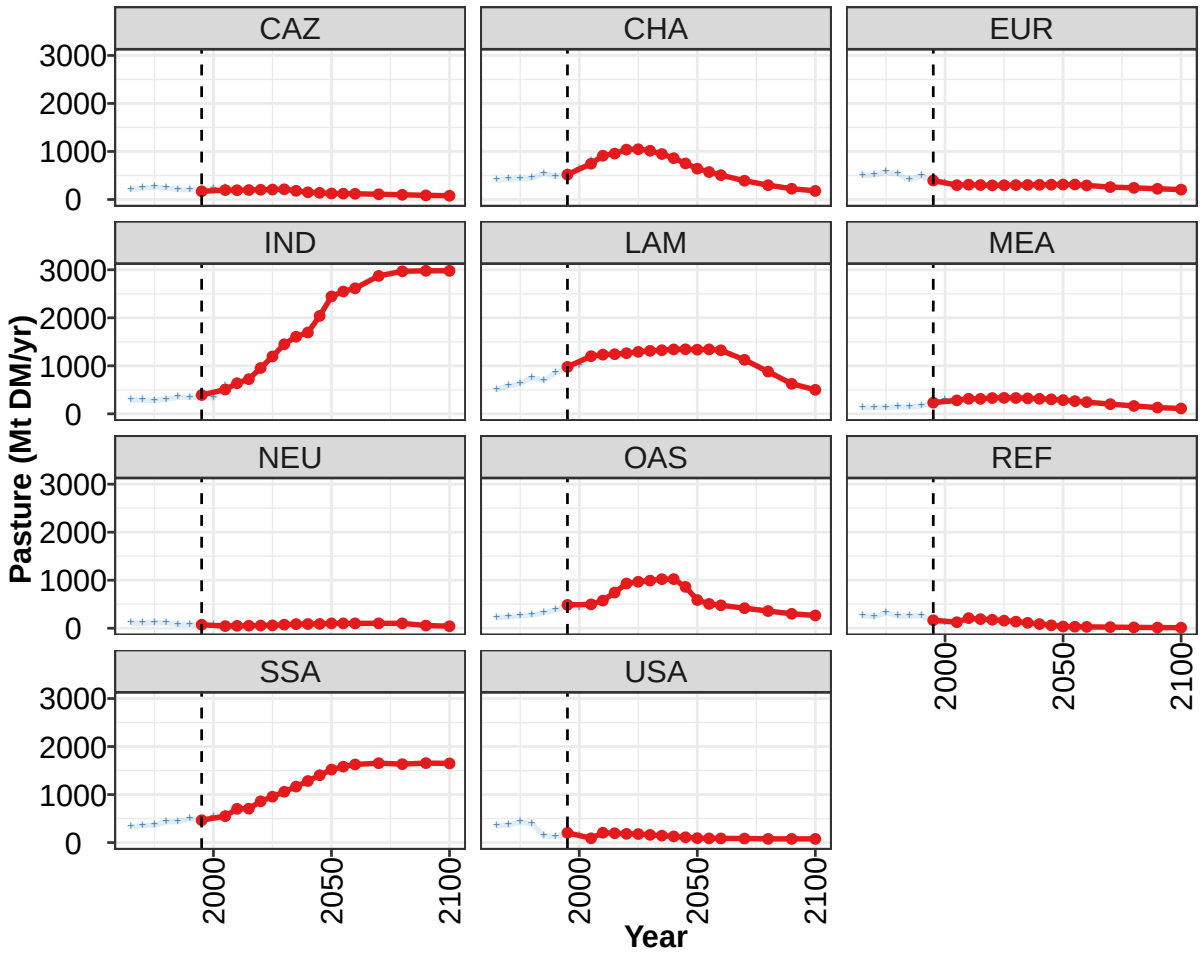
Table 1115: MAgPIE new_input — Production—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	24.7	28.8	32.2	34.3	37.2	40.6	42.1	44.9	47.9	51.7
CAZ	1.8	2.0	2.3	2.4	2.3	2.4	2.7	3.0	3.2	3.0
CHA	0.5	0.6	0.8	1.0	1.4	2.4	4.1	5.8	6.9	8.0
EUR	5.5	6.6	7.7	8.2	8.6	8.8	7.8	7.6	7.4	7.5
IND	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.5	1.6	1.8
LAM	3.3	4.1	4.2	5.0	5.4	6.2	7.0	7.8	9.2	9.5
MEA	0.7	0.8	0.9	1.0	1.2	1.4	1.6	2.0	2.2	2.3
NEU	0.5	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.6	0.7
OAS	1.2	1.4	1.7	1.9	2.3	2.5	3.0	3.1	3.3	3.9
REF	3.0	3.6	4.3	4.2	4.6	5.3	3.6	2.6	2.7	3.0
SSA	1.4	1.5	1.6	1.9	2.1	2.2	2.2	2.6	3.0	3.5
USA	5.9	6.7	7.1	6.9	7.2	7.1	7.8	8.2	7.8	8.4

Table 1116: FAO — Production—Livestock products—Ruminant meat (Mt DM/yr)

49 Pasture


GLO
7000
6000
5000
4000
Pasture (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO



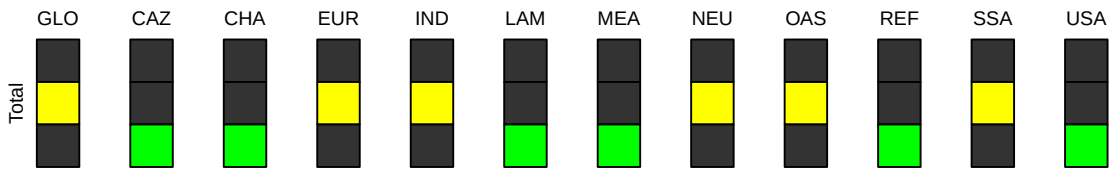


Figure 296: MAgPIE new_input — Production—Pasture (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4083	4535	5343	5620	6290	6693	7044	7218	7276	7410	7482
CAZ	170	196	193	197	203	208	213	181	150	139	126
CHA	519	745	912	956	1039	1047	1016	948	861	751	643
EUR	396	299	309	301	294	298	300	304	306	309	311
IND	392	507	637	723	955	1196	1450	1607	1695	2039	2445
LAM	979	1201	1234	1242	1263	1291	1312	1326	1342	1344	1336
MEA	234	281	315	312	330	333	331	323	314	302	286
NEU	73	44	50	53	57	60	74	86	88	90	100
OAS	486	497	575	743	930	968	992	1022	1023	861	587
REF	166	126	210	190	177	158	138	113	86	60	35
SSA	466	550	703	707	860	956	1059	1166	1282	1403	1520
USA	204	90	205	195	182	178	161	144	129	111	92

Table 1117: MAgPIE new_input — Production—Pasture (Mt DM/yr) [PART 1/2]

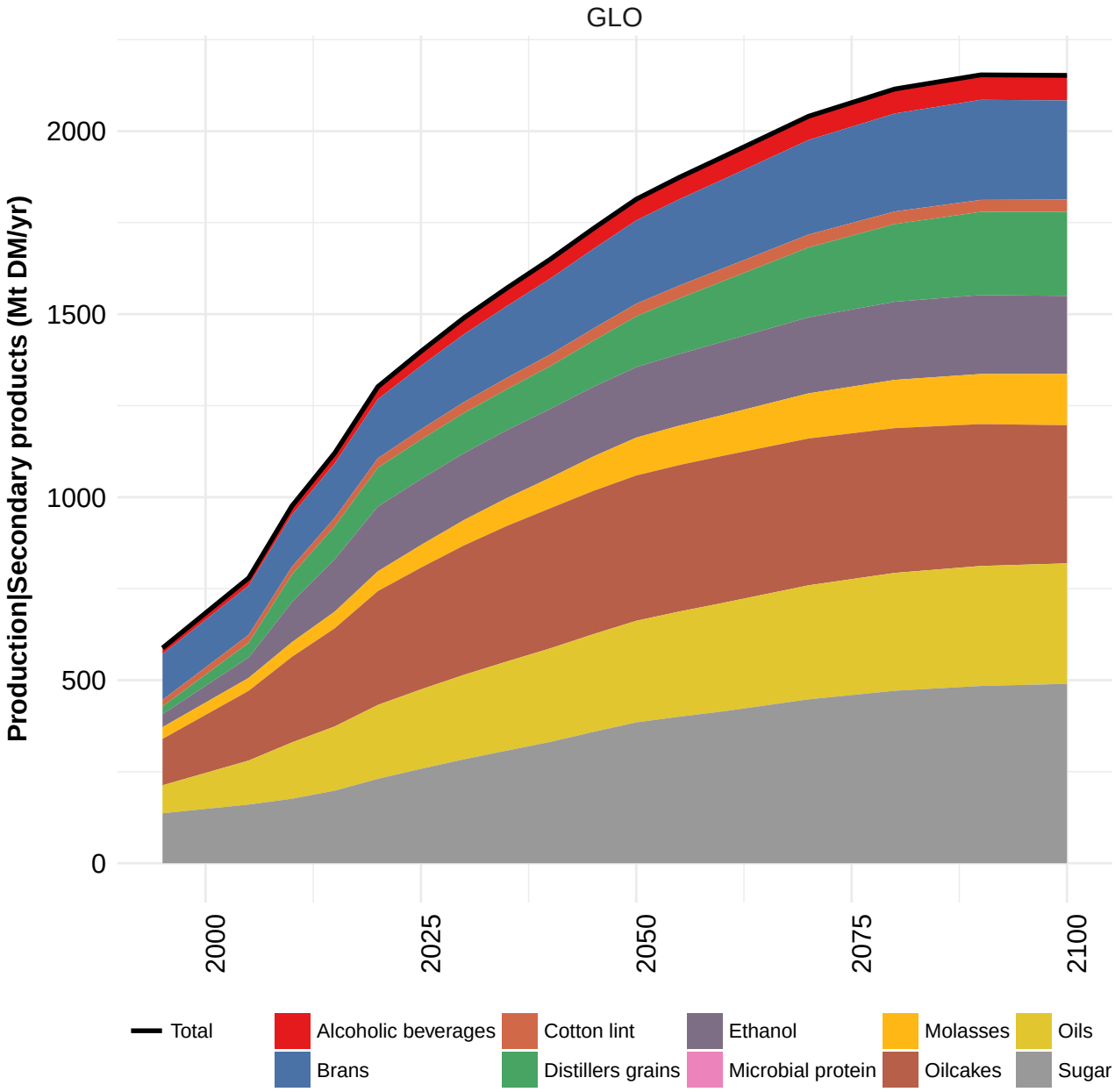
	2055	2060	2070	2080	2090	2100
GLO	7472	7421	7241	6840	6373	6102
CAZ	122	119	110	99	86	79
CHA	573	507	392	298	224	179
EUR	312	294	259	242	223	206
IND	2549	2614	2872	2969	2980	2980
LAM	1343	1324	1125	880	626	501
MEA	265	244	203	165	131	112
NEU	101	101	102	102	56	42
OAS	507	477	417	358	300	266
REF	32	28	22	18	14	11
SSA	1581	1627	1653	1633	1655	1648
USA	88	87	85	77	77	77

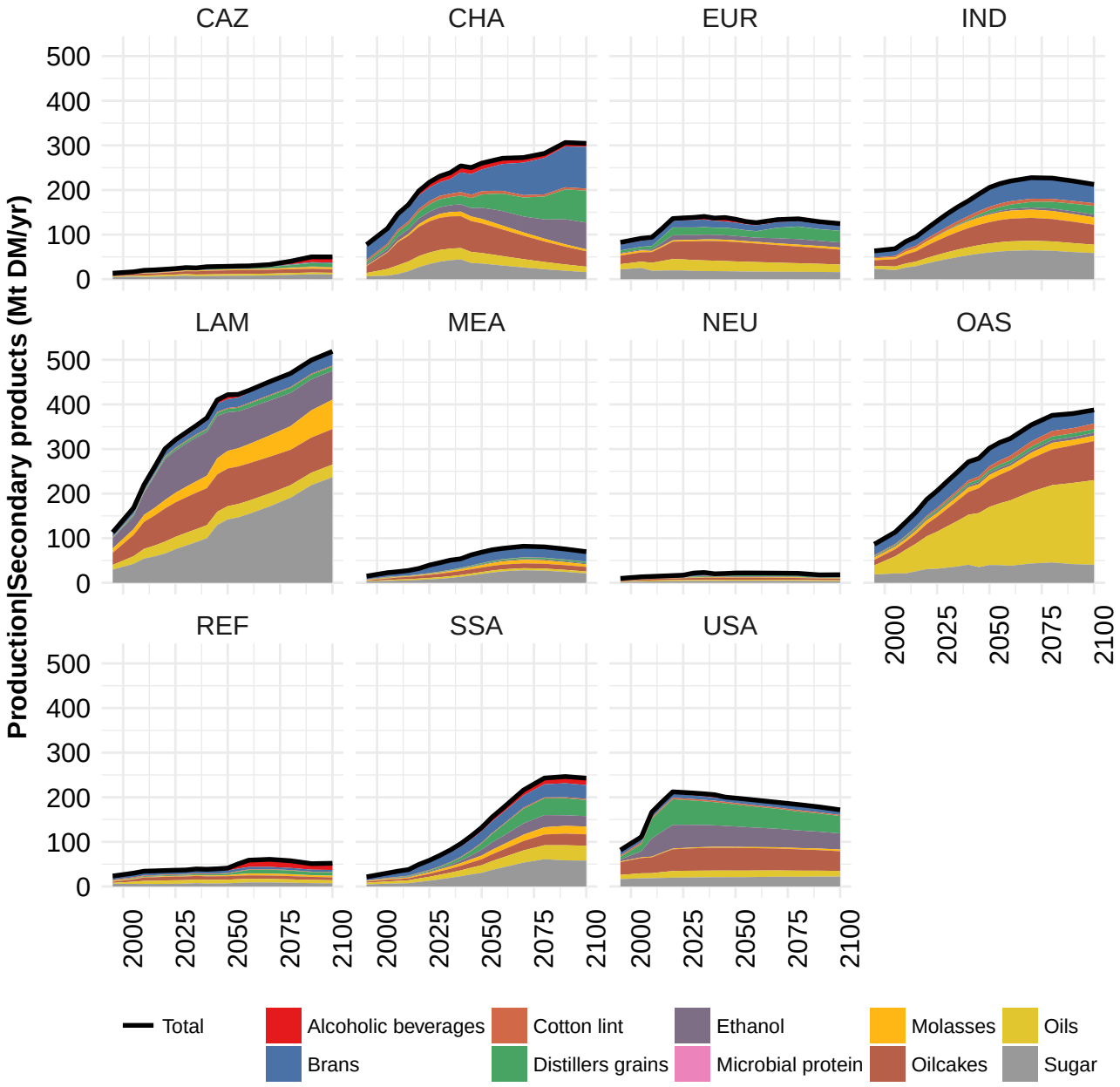
Table 1118: MAgPIE new_input — Production—Pasture (Mt DM/yr) [PART 2/2]

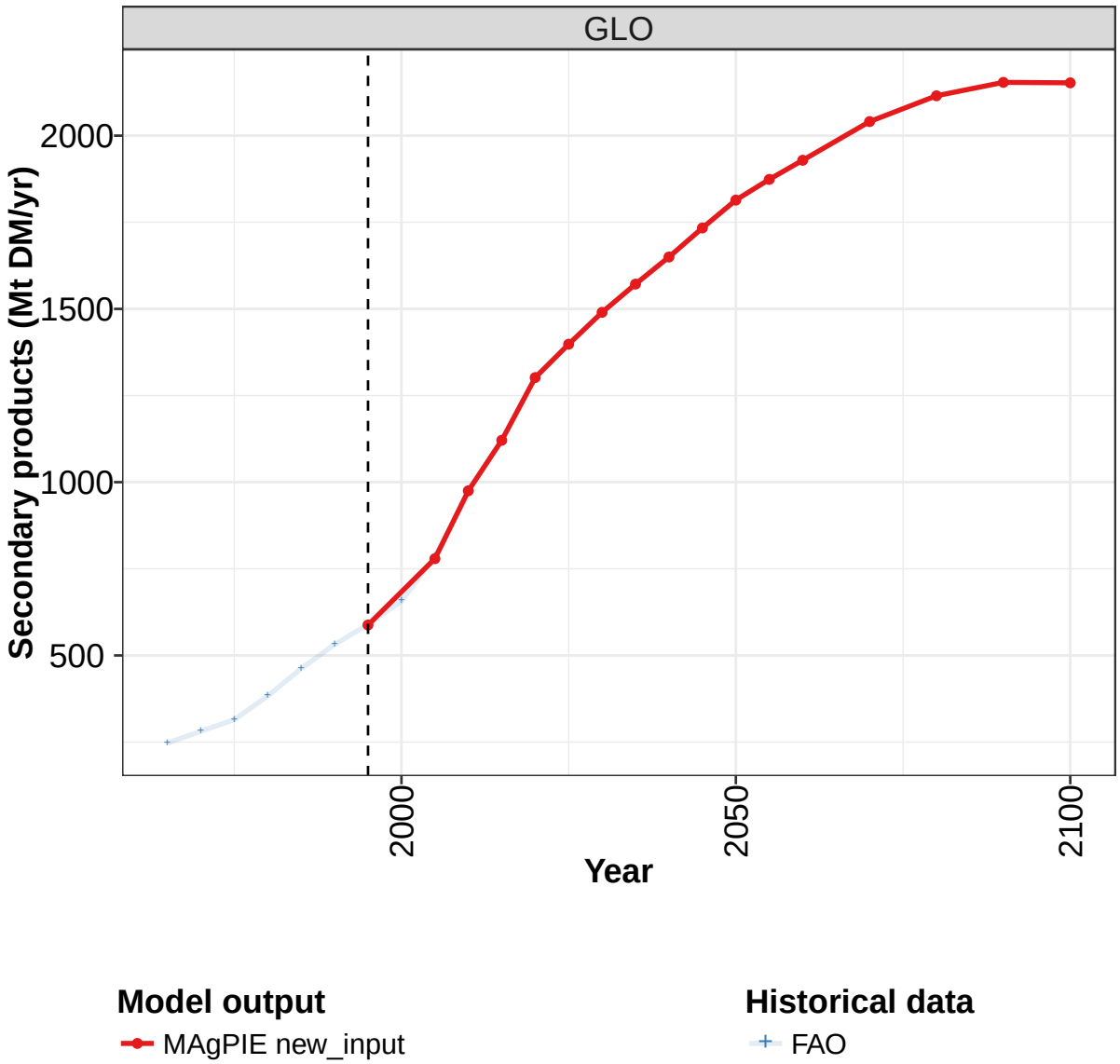
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3313	3466	3794	3883	3570	3875	4022	4100	4720	5316
CAZ	212	236	260	244	205	204	211	226	240	229
CHA	404	424	428	442	541	482	555	630	803	923
EUR	502	512	567	530	411	486	378	338	289	300
IND	290	283	282	304	346	345	345	329	580	662
LAM	509	580	637	753	694	855	959	1010	1184	1182
MEA	124	128	136	147	139	164	224	288	291	301
NEU	105	104	117	115	80	81	68	64	42	48
OAS	222	239	258	272	321	383	450	427	483	556
REF	263	239	320	258	253	262	141	117	124	208
SSA	331	356	364	428	438	490	477	534	594	696
USA	352	365	425	391	143	123	213	136	91	211

Table 1119: FAO — Production—Pasture (Mt DM/yr)

50 Secondary products




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Production|Secondary products (Mt DM/yr)
0
100
200
300
400
500
2000
2025
2050
2075
2100
Total
Alcoholic beverages
Brans
Cotton lint
Distillers grains
Ethanol
Microbial protein
Molasses
Oilcakes
Oils
Sugar


GLO
Secondary products (Mt DM/yr)
2000
1500
1000
500
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

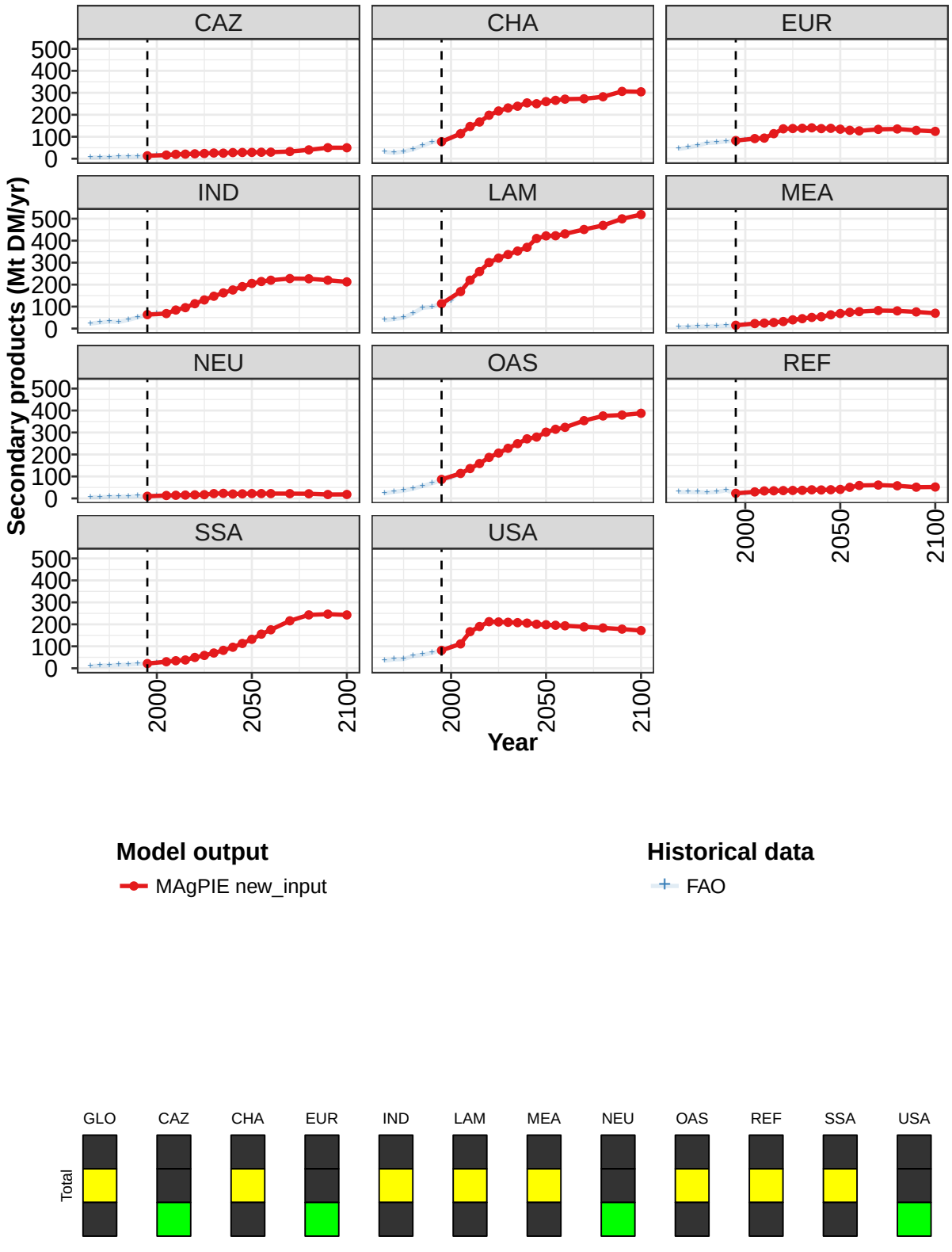


Figure 297: MAgPIE new_input — Production—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	588	779	975	1121	1302	1398	1490	1572	1650	1734	1814
CAZ	13	17	20	21	22	24	26	25	28	28	29
CHA	78	114	147	167	198	217	231	239	254	250	260
EUR	83	92	94	114	136	137	138	141	137	138	134
IND	63	68	84	95	113	130	147	162	176	191	206
LAM	113	168	220	260	300	321	337	353	370	410	422
MEA	15	23	25	28	32	40	45	51	54	63	69
NEU	10	13	14	15	16	17	22	23	20	21	22
OAS	86	114	136	159	187	206	228	249	271	279	302
REF	23	30	34	35	36	36	37	39	39	40	41
SSA	22	30	34	38	49	59	70	82	96	113	132
USA	82	111	167	190	212	211	209	208	206	200	198

Table 1120: MAgPIE new_input — Production—Secondary products (Mt DM/yr) [PART 1/2]

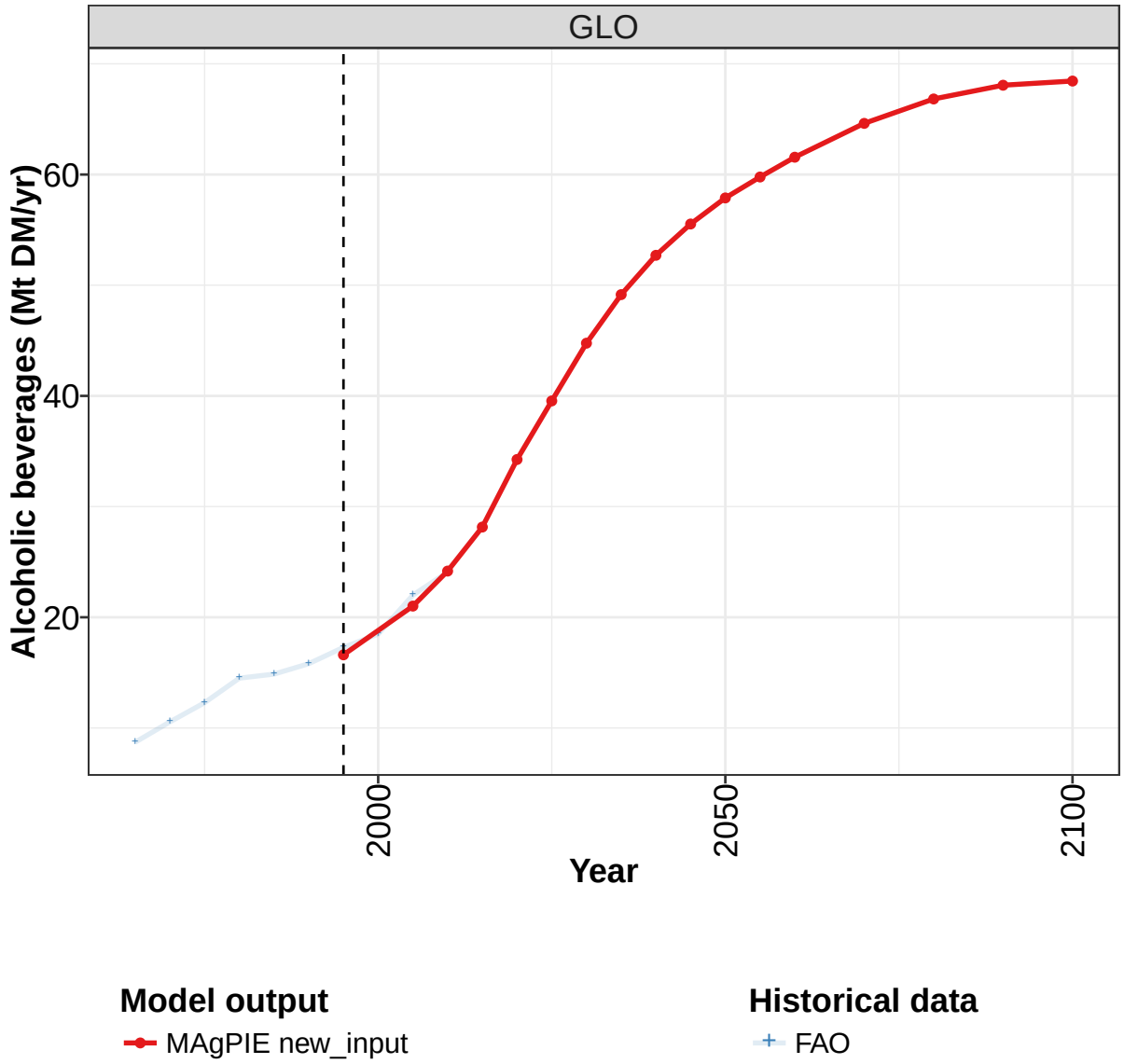
	2055	2060	2070	2080	2090	2100
GLO	1874	1929	2041	2115	2154	2152
CAZ	29	30	33	40	50	50
CHA	266	271	273	282	306	304
EUR	129	127	134	135	129	125
IND	214	220	228	227	220	213
LAM	422	431	451	469	499	519
MEA	74	77	82	81	76	70
NEU	22	22	22	21	18	18
OAS	315	323	354	375	379	388
REF	51	59	61	58	51	52
SSA	155	175	216	243	246	243
USA	196	193	189	184	178	172

Table 1121: MAgPIE new_input — Production—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	247	281	315	383	462	532	590	657	786	964
CAZ	5	6	7	8	9	10	13	16	16	18
CHA	30	27	32	43	60	75	81	93	120	149
EUR	45	51	60	72	74	79	82	86	88	92
IND	23	28	32	30	40	51	64	69	69	84
LAM	37	44	49	70	94	98	115	127	175	218
MEA	6	8	9	10	12	12	14	17	20	23
NEU	5	6	7	8	9	10	9	11	13	14
OAS	24	30	35	45	57	69	84	94	111	135
REF	28	30	28	28	30	37	23	22	30	34
SSA	9	12	13	15	17	20	21	25	30	32
USA	35	40	42	56	62	70	83	96	114	164

Table 1122: FAO — Production—Secondary products (Mt DM/yr)

50.1 Alcoholic beverages



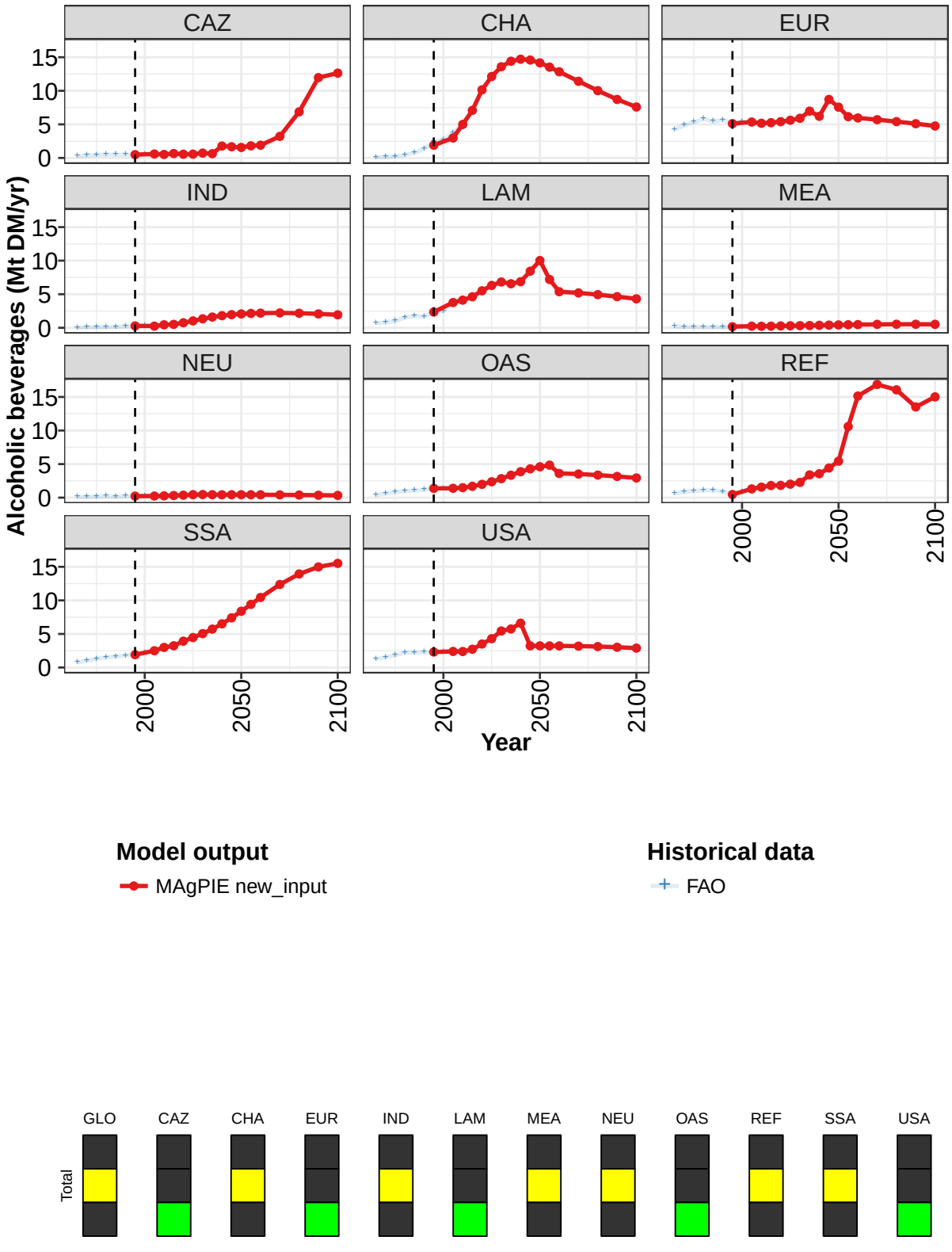


Figure 298: MAgPIE new_input — Production—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	16.6	21.0	24.2	28.2	34.3	39.5	44.8	49.2	52.7	55.5	57.9
CAZ	0.5	0.6	0.5	0.7	0.6	0.6	0.7	0.6	1.8	1.7	1.6
CHA	1.9	3.0	5.0	7.1	10.1	12.1	13.6	14.4	14.7	14.6	14.2
EUR	5.1	5.3	5.2	5.2	5.4	5.6	5.9	7.0	6.2	8.7	7.6
IND	0.3	0.3	0.4	0.5	0.8	1.0	1.3	1.6	1.8	2.0	2.1
LAM	2.4	3.8	4.1	4.6	5.5	6.3	6.8	6.6	6.9	8.4	10.0
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
NEU	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4
OAS	1.4	1.4	1.5	1.7	2.0	2.4	2.8	3.3	3.9	4.3	4.6
REF	0.5	1.3	1.6	1.8	1.8	2.0	2.3	3.4	3.6	4.4	5.4
SSA	1.9	2.5	3.0	3.2	3.9	4.5	5.1	5.7	6.5	7.4	8.4
USA	2.3	2.4	2.4	2.7	3.5	4.3	5.4	5.7	6.6	3.2	3.2

Table 1123: MAgPIE new_input — Production—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

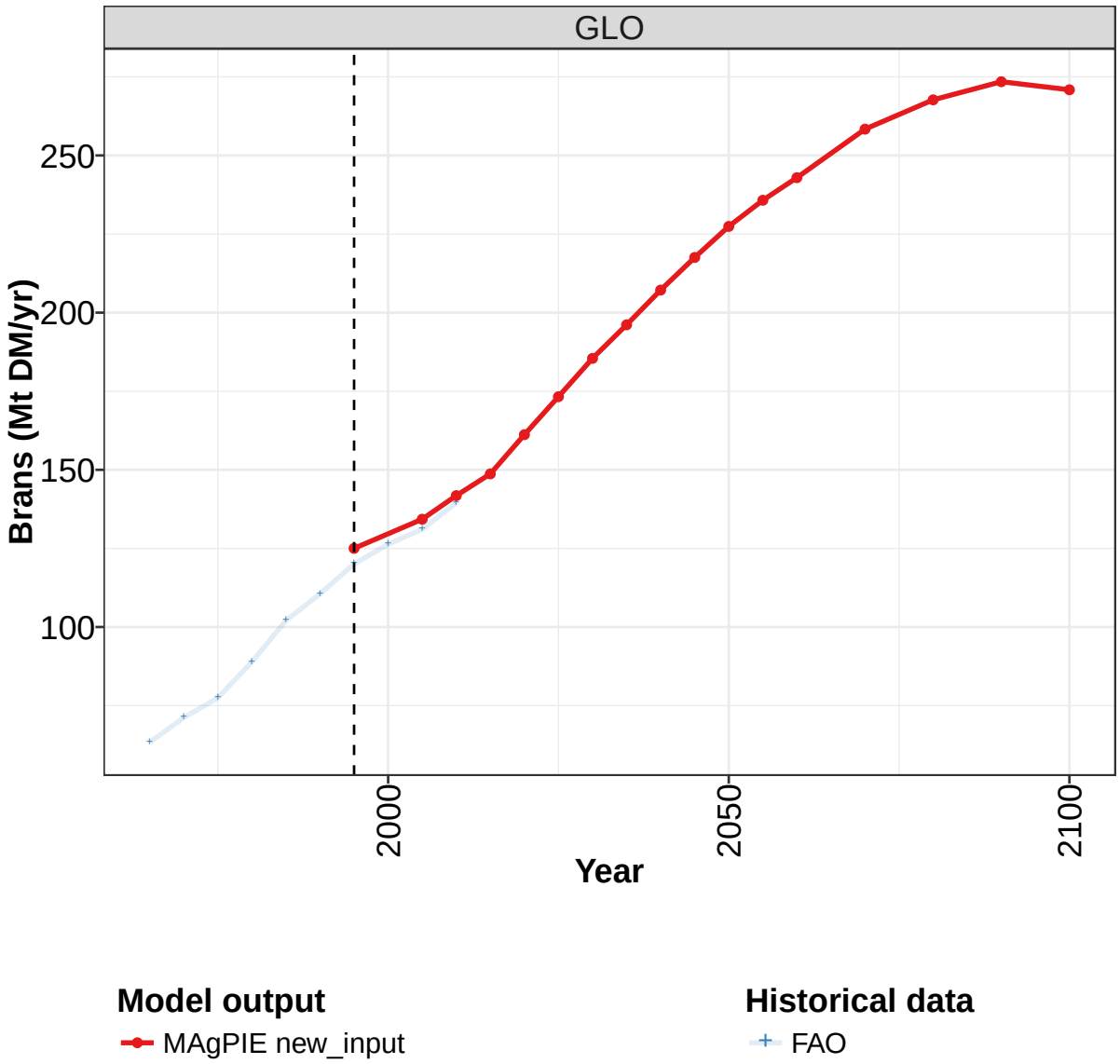
	2055	2060	2070	2080	2090	2100
GLO	59.8	61.6	64.6	66.8	68.1	68.4
CAZ	1.8	1.9	3.2	6.9	12.0	12.6
CHA	13.5	12.8	11.4	10.0	8.7	7.6
EUR	6.1	6.0	5.7	5.4	5.1	4.8
IND	2.1	2.2	2.2	2.2	2.1	1.9
LAM	7.2	5.4	5.2	4.9	4.6	4.3
MEA	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.4	0.4	0.4	0.4	0.4	0.3
OAS	4.8	3.6	3.5	3.4	3.2	2.9
REF	10.6	15.1	16.9	16.1	13.5	15.0
SSA	9.4	10.4	12.4	13.9	15.0	15.5
USA	3.2	3.2	3.2	3.1	3.0	2.9

Table 1124: MAgPIE new_input — Production—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.7	10.5	12.3	14.5	14.9	15.8	17.3	18.5	22.0	24.1
CAZ	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5
CHA	0.1	0.1	0.2	0.4	0.8	1.3	2.4	2.7	3.8	5.1
EUR	4.2	4.9	5.3	5.8	5.4	5.6	5.2	5.4	5.3	5.1
IND	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.4
LAM	0.7	0.8	1.0	1.6	1.8	1.7	2.4	2.5	3.9	4.2
MEA	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
OAS	0.4	0.6	0.8	1.0	1.0	1.2	1.4	1.3	1.4	1.4
REF	0.6	0.9	1.0	1.1	1.1	0.9	0.6	0.8	1.4	1.6
SSA	0.8	1.0	1.3	1.5	1.6	1.8	1.9	2.2	2.6	3.0
USA	1.2	1.5	1.8	2.2	2.2	2.3	2.2	2.3	2.4	2.3

Table 1125: FAO — Production—Secondary products—Alcoholic beverages (Mt DM/yr)

50.2 Brans


GLO
Brans (Mt DM/yr)
250
200
150
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

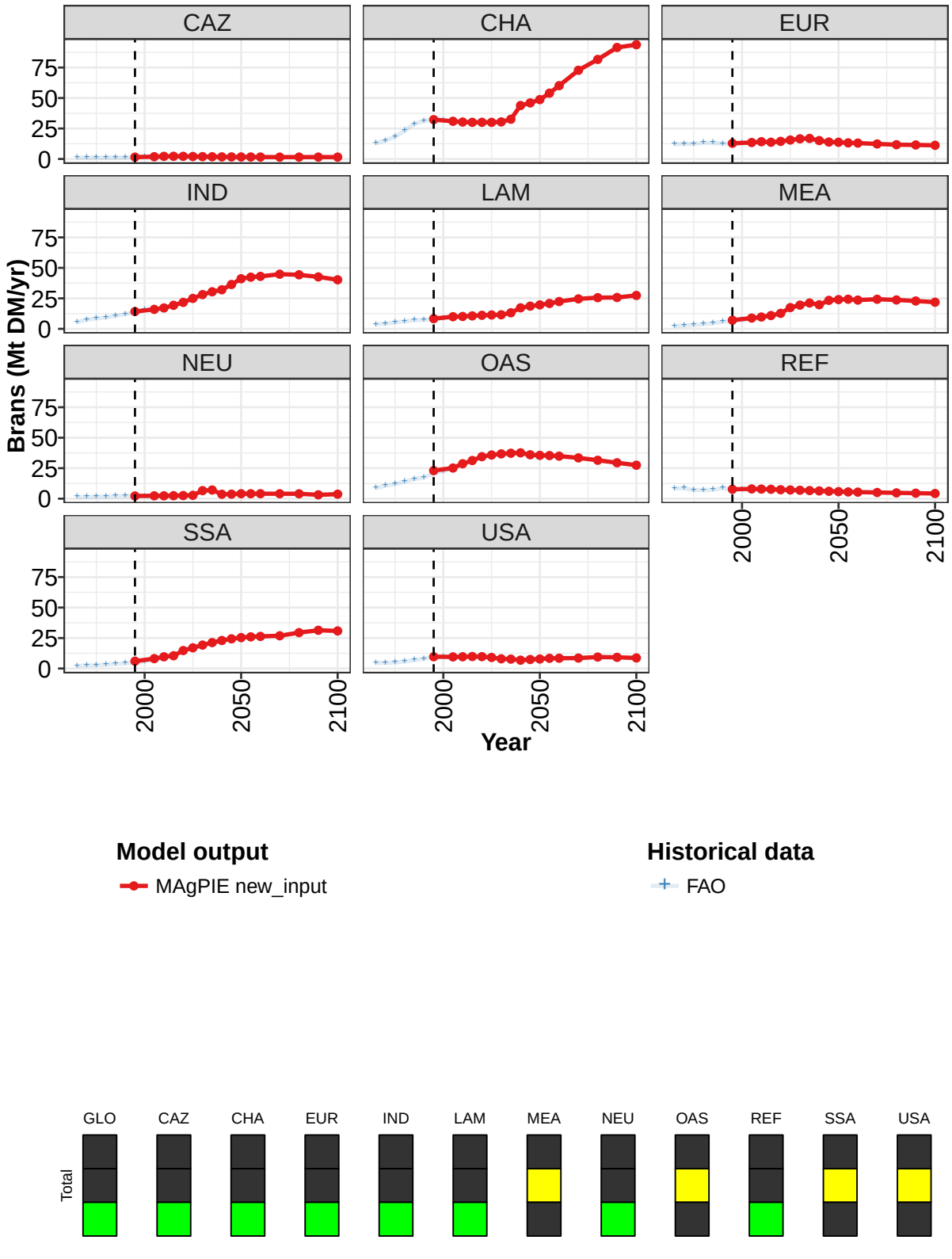


Figure 299: MAgPIE new_input — Production—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	125	134	142	149	161	173	185	196	207	218	227
CAZ	2	2	2	2	2	2	2	2	2	2	2
CHA	32	31	30	30	30	30	30	33	44	46	49
EUR	13	14	14	14	14	16	17	17	15	14	14
IND	14	16	17	19	22	25	28	30	32	36	41
LAM	8	10	10	11	11	11	12	13	17	19	20
MEA	7	9	10	11	13	17	19	21	20	23	24
NEU	2	2	2	2	3	3	7	7	4	4	4
OAS	23	25	29	31	34	36	37	37	38	36	36
REF	8	8	8	8	7	7	7	7	6	6	6
SSA	6	8	10	10	15	17	19	21	23	24	25
USA	10	10	10	10	10	9	8	8	7	7	8

Table 1126: MAgPIE new_input — Production—Secondary products—Brans (Mt DM/yr) [PART 1/2]

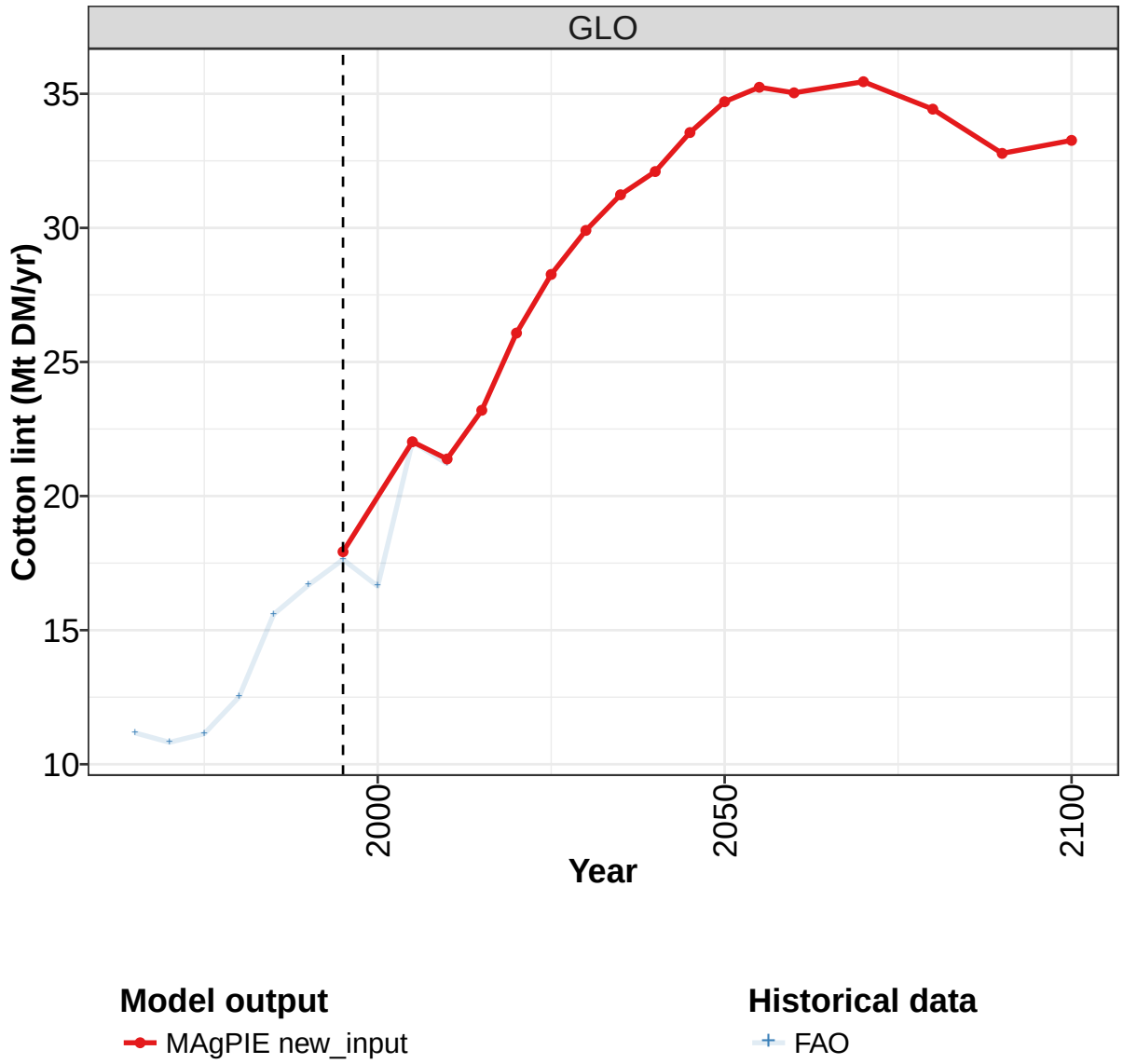
	2055	2060	2070	2080	2090	2100
GLO	236	243	258	268	273	271
CAZ	2	2	2	2	2	2
CHA	54	60	73	82	91	94
EUR	13	13	12	12	12	11
IND	42	43	45	44	43	40
LAM	21	22	25	26	26	27
MEA	24	24	24	24	23	22
NEU	4	4	4	4	3	4
OAS	35	35	33	32	29	27
REF	6	5	5	5	5	4
SSA	26	26	27	29	31	31
USA	8	8	9	9	9	9

Table 1127: MAgPIE new_input — Production—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	63	71	77	89	102	111	120	126	131	140
CAZ	1	1	1	1	1	1	2	2	2	2
CHA	13	15	18	23	29	31	32	32	31	31
EUR	12	12	12	13	13	13	13	13	13	14
IND	6	8	9	9	11	12	14	16	16	17
LAM	4	4	5	6	7	7	8	9	10	10
MEA	2	3	3	4	5	6	7	7	8	9
NEU	1	2	2	2	2	2	2	2	2	2
OAS	9	11	12	14	16	17	21	23	25	28
REF	9	9	7	7	7	9	8	8	8	8
SSA	2	3	3	3	4	4	5	6	7	8
USA	5	5	5	6	7	8	10	10	10	10

Table 1128: FAO — Production—Secondary products—Brans (Mt DM/yr)

50.3 Cotton lint



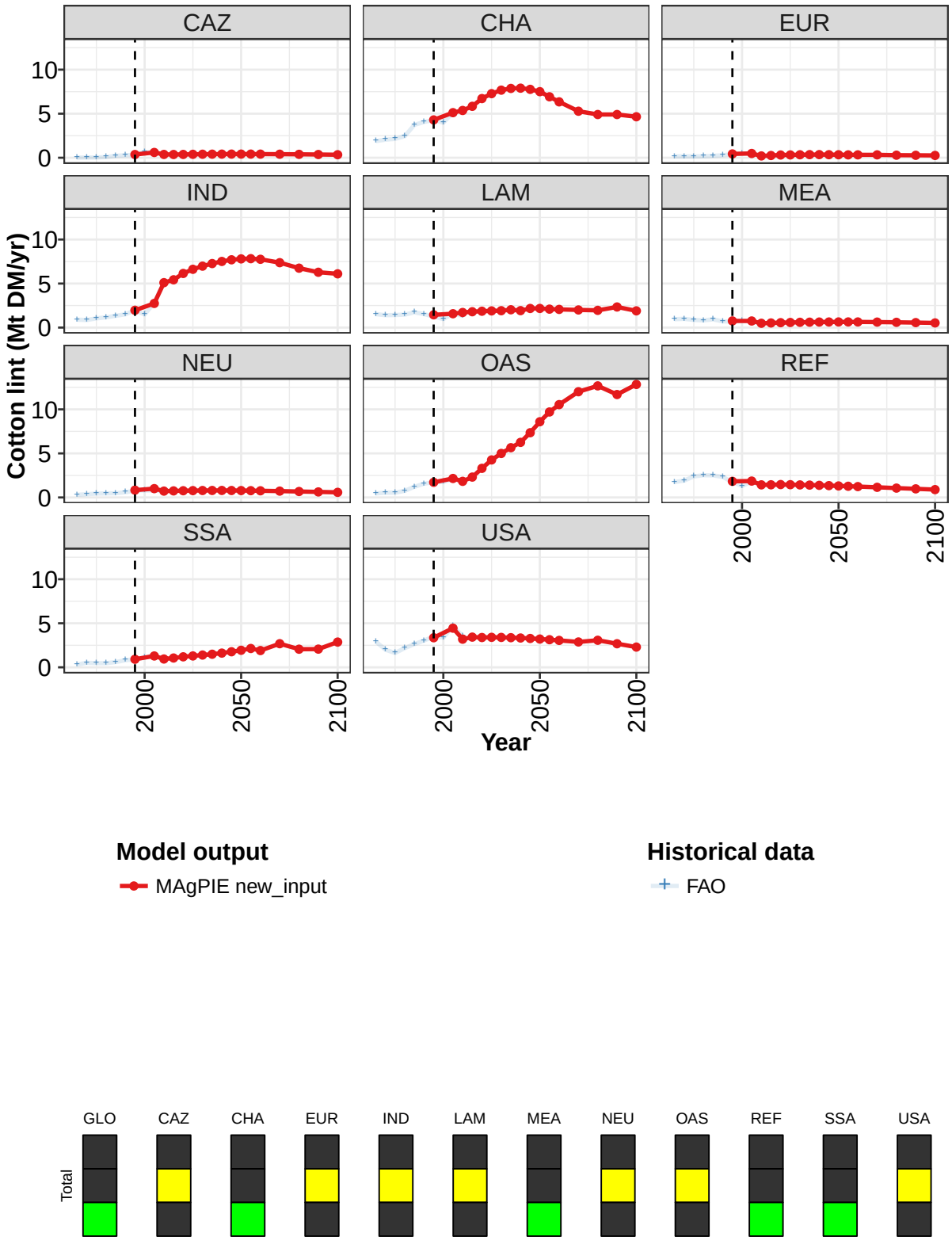


Figure 300: MAgPIE new_input — Production—Secondary products—Cotton lint (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	17.9	22.0	21.4	23.2	26.1	28.3	29.9	31.2	32.1	33.6	34.7
CAZ	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	4.3	5.1	5.4	5.8	6.7	7.3	7.7	7.9	7.9	7.8	7.5
EUR	0.4	0.5	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3
IND	2.0	2.7	5.1	5.4	6.1	6.6	7.0	7.3	7.5	7.7	7.8
LAM	1.5	1.6	1.7	1.8	1.9	1.9	1.9	2.0	1.9	2.2	2.2
MEA	0.8	0.8	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
NEU	0.8	1.0	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
OAS	1.7	2.2	1.8	2.3	3.3	4.3	5.0	5.6	6.3	7.4	8.6
REF	1.8	1.9	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.3	1.3
SSA	0.9	1.3	0.9	1.1	1.2	1.3	1.4	1.5	1.6	1.8	1.9
USA	3.4	4.4	3.2	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.2

Table 1129: MAgPIE new_input — Production—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

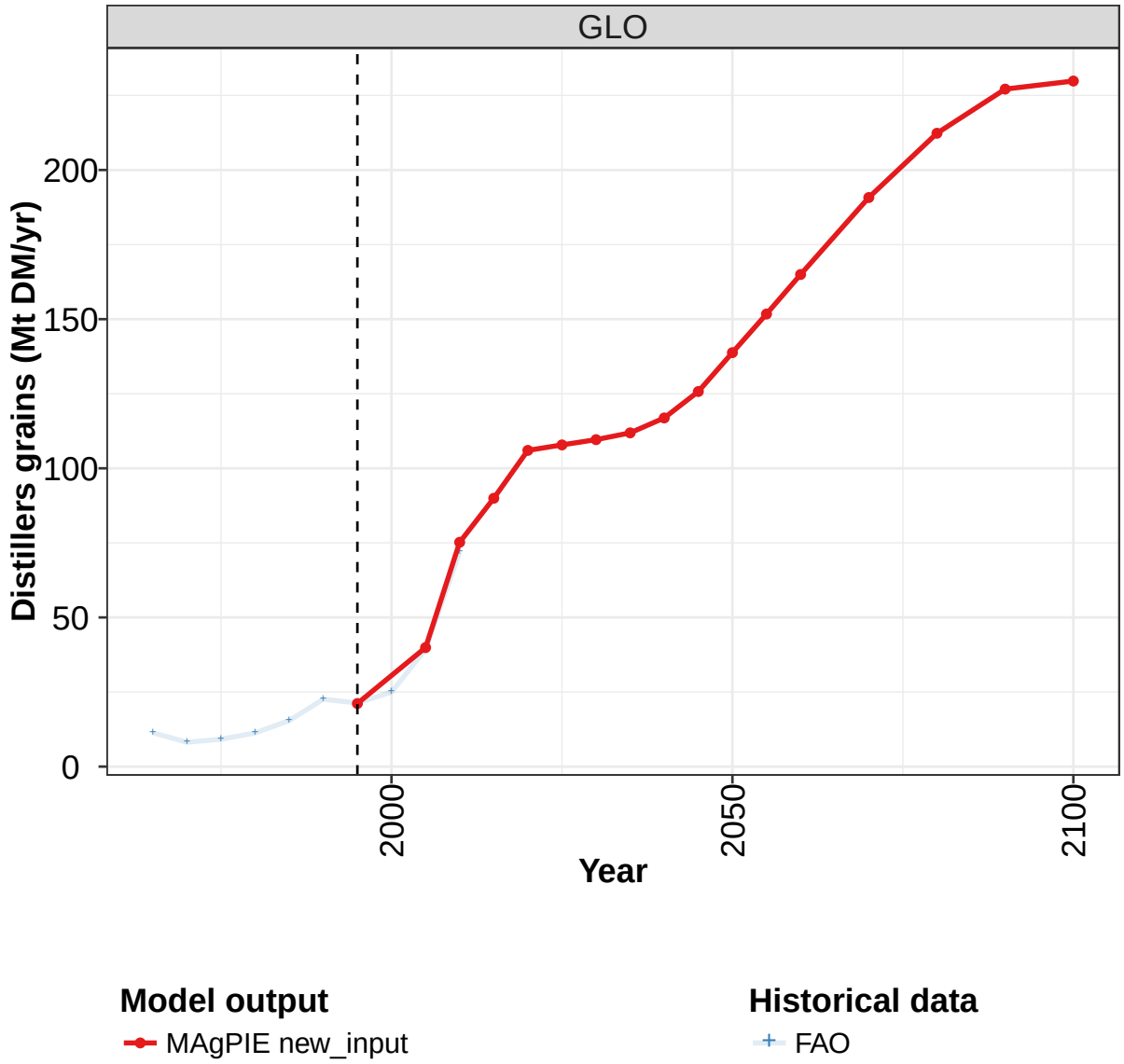
	2055	2060	2070	2080	2090	2100
GLO	35.2	35.0	35.5	34.4	32.8	33.3
CAZ	0.4	0.4	0.4	0.4	0.4	0.3
CHA	6.9	6.3	5.3	4.9	4.9	4.7
EUR	0.3	0.3	0.3	0.3	0.3	0.3
IND	7.8	7.8	7.4	6.7	6.3	6.1
LAM	2.1	2.1	2.0	2.0	2.3	1.9
MEA	0.6	0.6	0.6	0.6	0.6	0.5
NEU	0.8	0.8	0.7	0.7	0.6	0.6
OAS	9.7	10.5	12.0	12.7	11.7	12.8
REF	1.3	1.2	1.2	1.1	1.0	0.9
SSA	2.1	1.9	2.7	2.1	2.1	2.9
USA	3.1	3.1	2.9	3.1	2.7	2.3

Table 1130: MAgPIE new_input — Production—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.2	10.8	11.1	12.5	15.6	16.7	17.6	16.6	22.0	21.2
CAZ	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.7	0.6	0.3
CHA	1.9	2.1	2.1	2.4	3.7	4.1	4.3	4.0	5.1	5.4
EUR	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.2
IND	0.9	0.9	1.0	1.2	1.3	1.5	2.0	1.5	2.8	5.1
LAM	1.5	1.4	1.4	1.5	1.7	1.5	1.3	1.0	1.6	1.3
MEA	1.0	1.0	0.9	0.8	0.9	0.7	0.7	0.7	0.7	0.4
NEU	0.3	0.4	0.4	0.5	0.5	0.6	0.8	0.8	0.8	0.7
OAS	0.4	0.5	0.5	0.8	1.2	1.6	1.7	1.8	2.1	1.8
REF	1.7	1.9	2.4	2.5	2.5	2.3	1.7	1.3	1.8	1.4
SSA	0.3	0.5	0.5	0.5	0.6	0.8	0.9	1.1	1.4	0.9
USA	2.9	2.0	1.6	2.2	2.6	3.0	3.5	3.4	4.7	3.5

Table 1131: FAO — Production—Secondary products—Cotton lint (Mt DM/yr)

50.4 Distillers grains



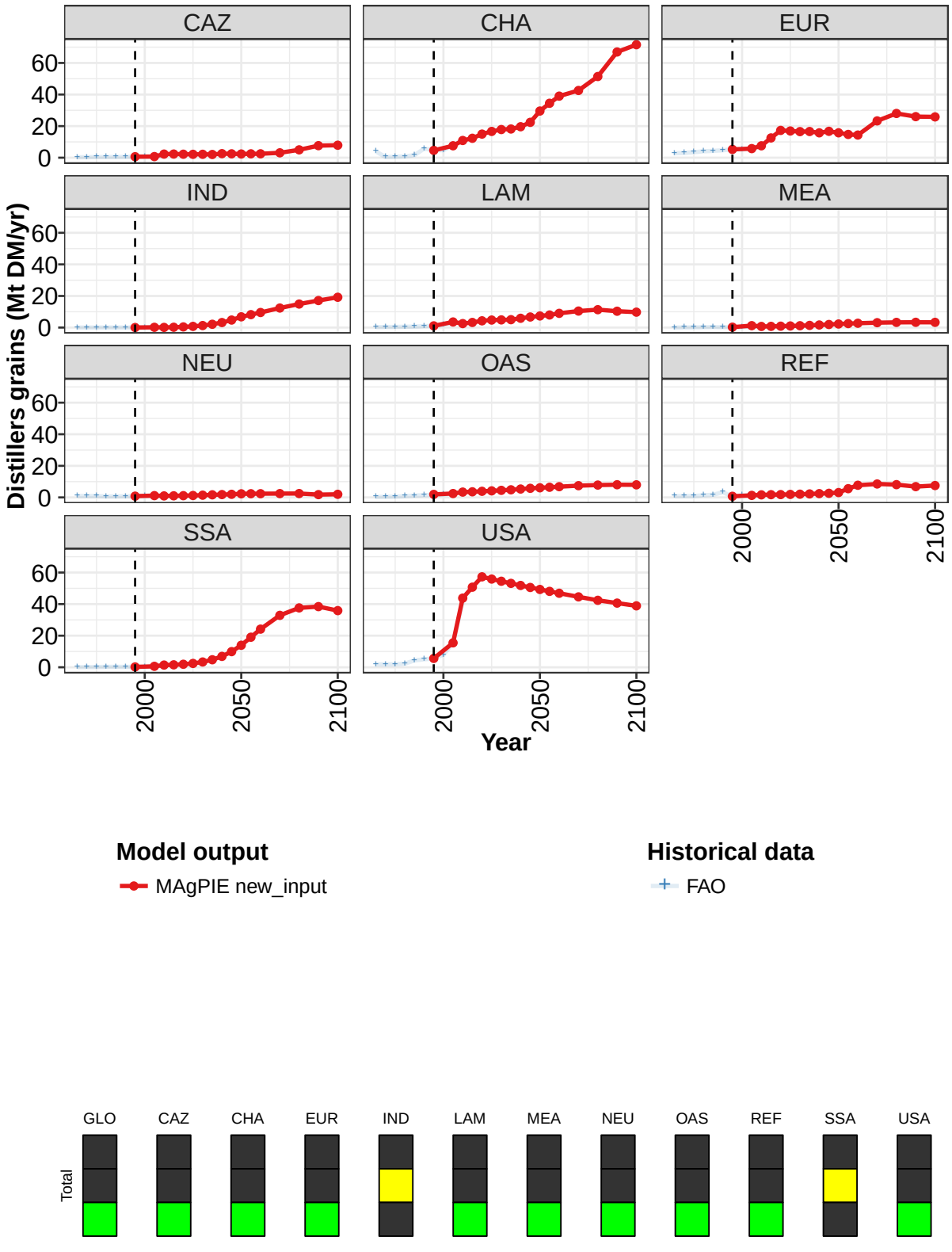


Figure 301: MAgPIE new_input — Production—Secondary products—Distillers grains (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	21	40	75	90	106	108	110	112	117	126	139
CAZ	1	1	2	2	2	2	2	2	3	2	2
CHA	5	8	11	12	15	17	18	18	20	22	30
EUR	5	6	8	13	17	17	17	17	16	17	16
IND	0	0	0	0	0	1	1	2	3	5	7
LAM	1	4	3	3	4	5	5	5	6	7	7
MEA	0	1	1	1	1	1	1	1	2	2	2
NEU	1	1	1	1	1	1	1	2	2	2	2
OAS	2	2	3	4	4	4	4	5	5	6	6
REF	1	1	2	2	2	2	2	2	2	3	3
SSA	0	1	1	2	2	2	3	5	7	10	14
USA	6	15	44	51	57	56	54	53	52	51	49

Table 1132: MAgPIE new_input — Production—Secondary products—Distillers grains (Mt DM/yr) [PART 1/2]

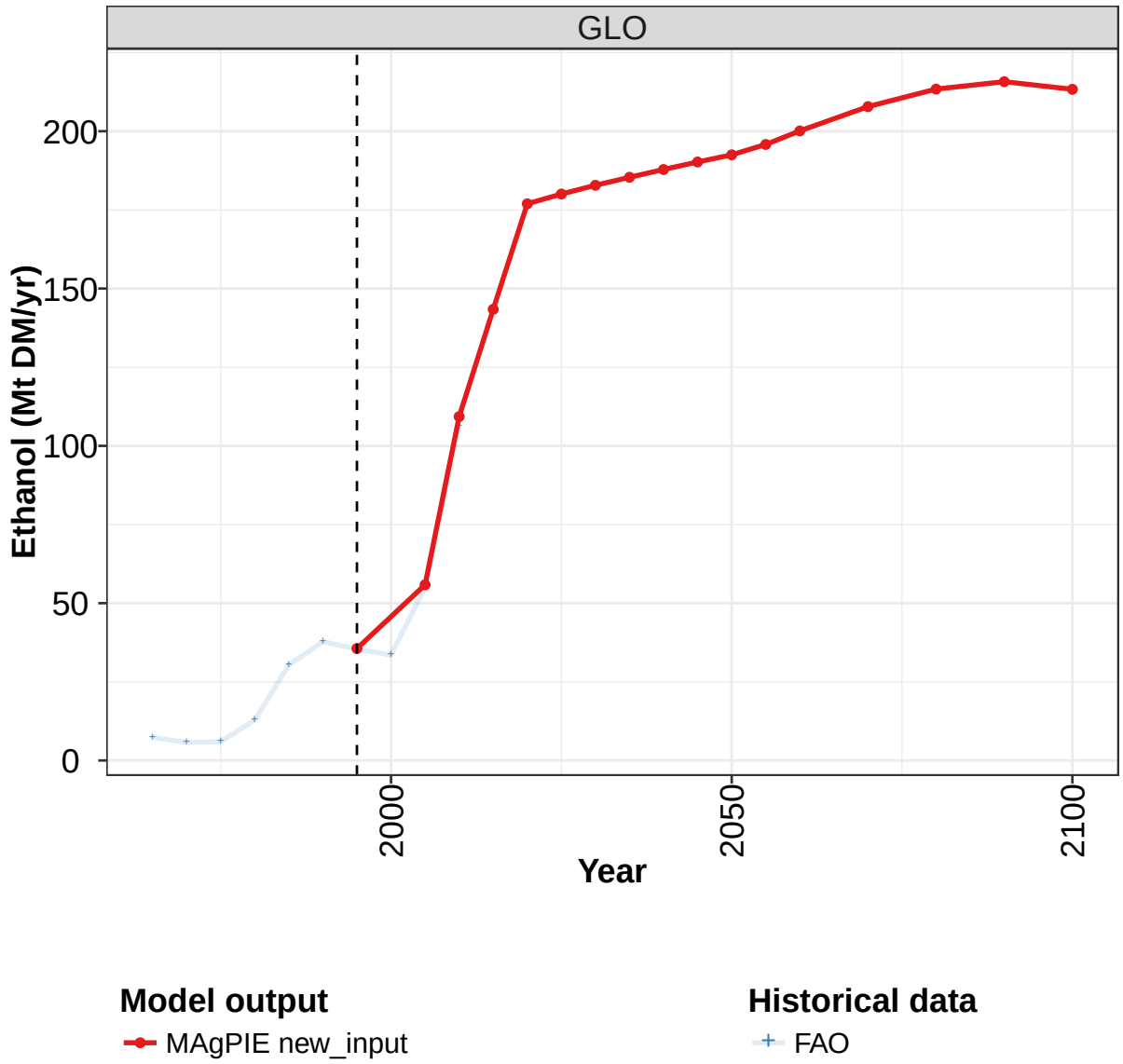
	2055	2060	2070	2080	2090	2100
GLO	152	165	191	212	227	230
CAZ	2	2	3	5	8	8
CHA	34	39	43	51	67	72
EUR	15	14	23	28	26	26
IND	8	10	12	15	17	19
LAM	8	9	10	11	10	10
MEA	3	3	3	3	3	3
NEU	2	2	2	2	2	2
OAS	6	7	7	8	8	8
REF	6	8	9	8	7	8
SSA	19	24	33	38	38	36
USA	48	47	45	42	41	39

Table 1133: MAgPIE new_input — Production—Secondary products—Distillers grains (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.3	8.2	9.2	11.3	15.4	22.6	21.3	25.0	39.3	71.8
CAZ	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.8	0.7	1.1
CHA	4.0	0.4	0.6	0.8	1.6	5.7	4.8	4.7	7.9	11.1
EUR	2.8	3.0	3.5	4.0	4.3	4.7	5.3	5.2	5.7	7.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.3	0.4	0.5	0.6	0.9	1.1	1.7	3.6	2.5
MEA	0.0	0.1	0.1	0.2	0.3	0.2	0.3	0.4	0.5	0.7
NEU	0.9	0.8	0.9	0.6	0.6	0.7	0.8	0.9	1.1	1.0
OAS	0.3	0.4	0.5	0.8	1.2	1.3	1.9	1.8	2.4	3.4
REF	0.8	0.8	0.9	1.3	1.7	3.2	0.7	1.3	1.3	1.6
SSA	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.6	1.4
USA	1.8	1.8	1.9	2.3	4.3	5.0	5.6	7.9	15.5	41.7

Table 1134: FAO — Production—Secondary products—Distillers grains (Mt DM/yr)

50.5 Ethanol


GLO
Ethanol (Mt DM/yr)
200
150
100
50
0
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

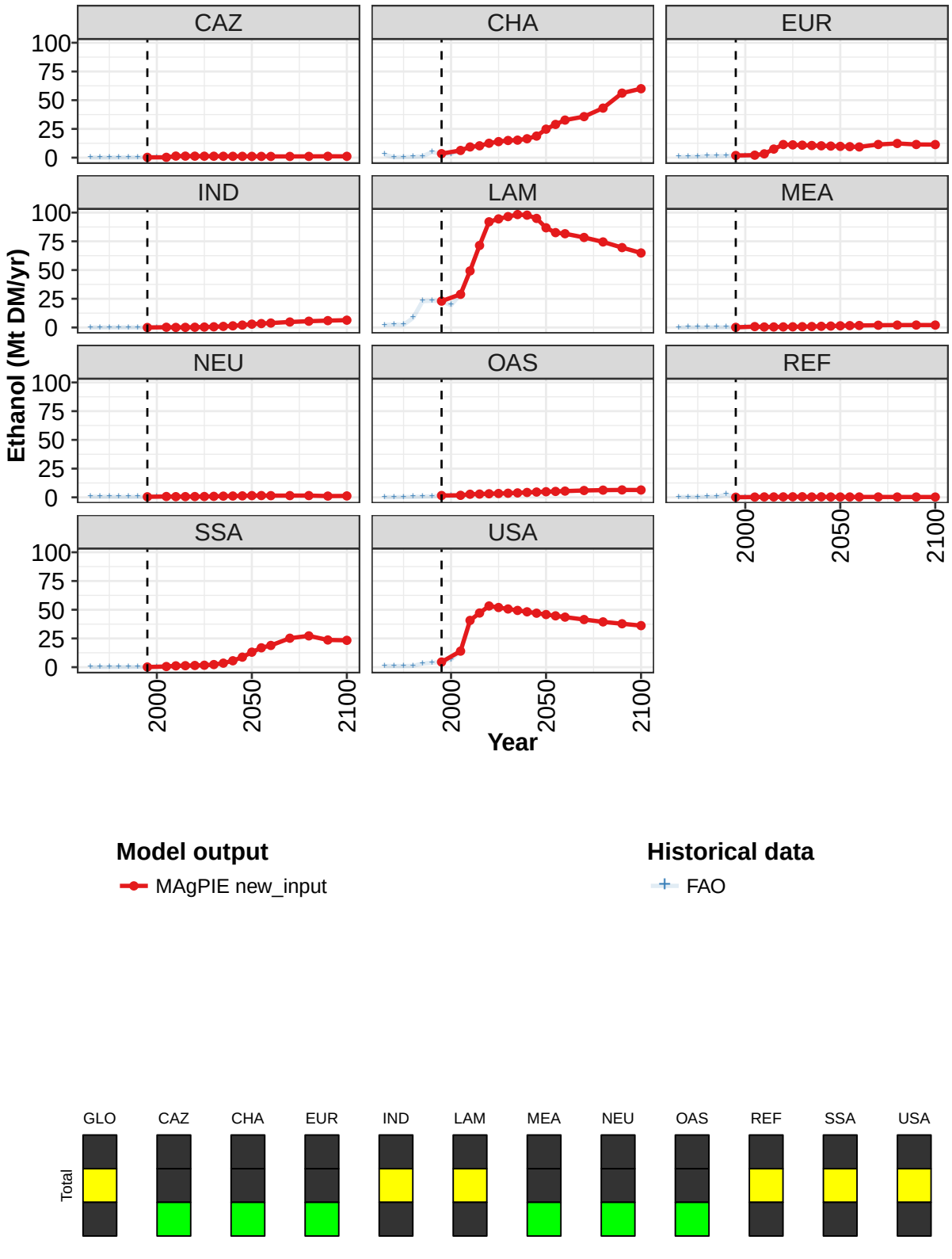


Figure 302: MAgPIE new_input — Production—Secondary products—Ethanol (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	36	56	109	143	177	180	183	185	188	190	192
CAZ	0	0	1	1	1	1	1	1	1	1	1
CHA	3	6	9	10	13	14	15	15	16	19	25
EUR	2	2	3	7	11	11	11	11	10	10	10
IND	0	0	0	0	0	0	1	1	1	2	3
LAM	23	29	49	71	92	95	97	98	98	95	87
MEA	0	1	0	0	1	1	1	1	1	1	1
NEU	0	1	1	1	1	1	1	1	1	1	2
OAS	2	2	3	3	3	3	4	4	4	5	5
REF	0	0	0	0	0	0	1	0	0	0	0
SSA	0	1	1	1	1	2	2	4	6	9	13
USA	4	14	41	47	53	52	51	49	48	47	46

Table 1135: MAgPIE new_input — Production—Secondary products—Ethanol (Mt DM/yr) [PART 1/2]

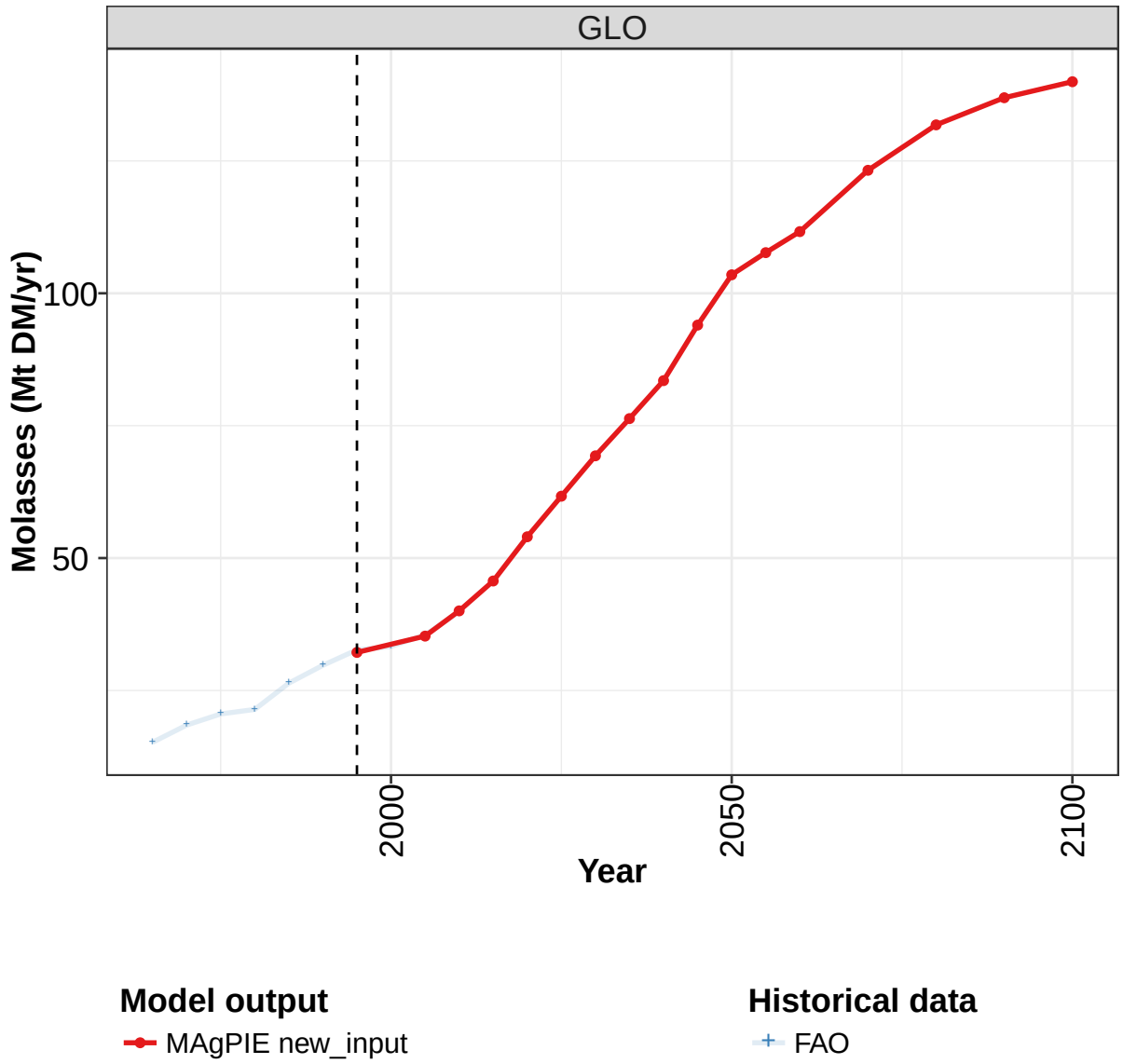
	2055	2060	2070	2080	2090	2100
GLO	196	200	208	213	216	213
CAZ	1	1	1	1	1	1
CHA	29	33	36	43	56	60
EUR	10	9	11	12	11	11
IND	3	4	5	5	6	6
LAM	83	82	78	74	70	65
MEA	2	2	2	2	2	2
NEU	2	1	2	2	1	1
OAS	5	5	6	6	6	6
REF	0	0	0	0	0	0
SSA	17	19	25	27	24	23
USA	45	44	41	39	38	36

Table 1136: MAgPIE new_input — Production—Secondary products—Ethanol (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7	6	6	13	30	38	35	34	55	106
CAZ	0	0	0	0	0	0	0	0	0	1
CHA	3	0	0	1	1	5	3	3	6	9
EUR	1	1	1	1	1	2	2	2	2	3
IND	0	0	0	0	0	0	0	0	0	0
LAM	2	3	2	8	23	23	23	19	29	49
MEA	0	0	0	0	0	0	0	0	0	0
NEU	1	0	1	0	0	0	0	1	1	1
OAS	0	0	0	0	1	1	2	1	2	3
REF	0	0	0	0	0	2	0	0	0	0
SSA	0	0	0	0	0	0	0	0	1	1
USA	1	1	1	1	3	4	4	7	14	39

Table 1137: FAO — Production—Secondary products—Ethanol (Mt DM/yr)

50.6 Molasses



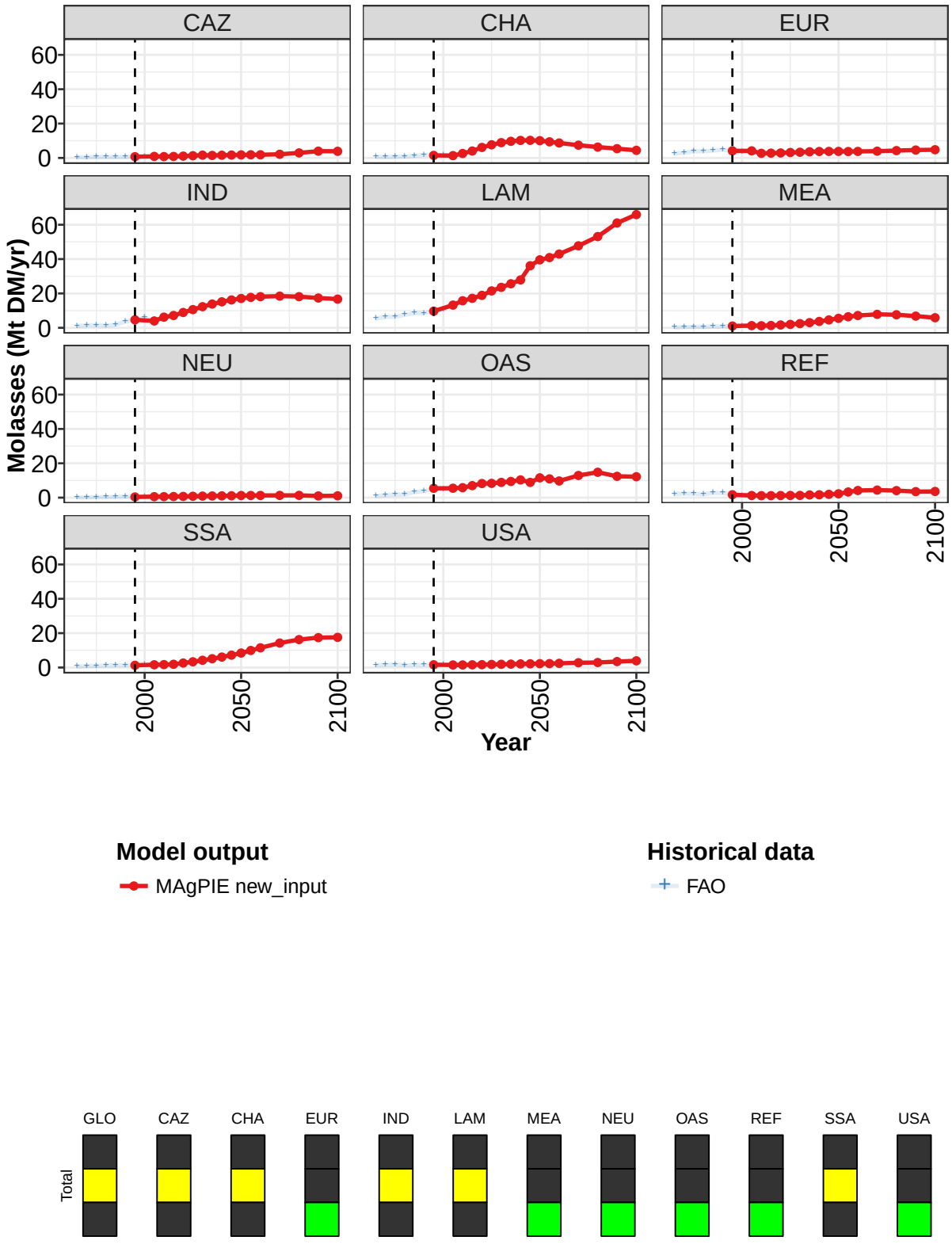


Figure 303: MAgPIE new_input — Production—Secondary products—Molasses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	32	35	40	46	54	62	69	76	84	94	103
CAZ	1	1	1	1	1	1	2	1	2	2	2
CHA	1	1	3	4	6	8	9	10	10	10	10
EUR	4	4	3	3	3	3	3	4	4	4	4
IND	5	4	6	7	9	11	12	14	15	16	17
LAM	10	13	16	17	19	21	24	26	28	36	40
MEA	1	1	1	1	2	2	2	3	4	5	6
NEU	0	1	1	1	1	1	1	1	1	1	1
OAS	5	5	6	7	8	8	9	9	10	9	12
REF	2	1	1	1	1	1	1	2	2	2	2
SSA	1	2	2	2	3	3	4	5	6	7	8
USA	2	1	2	2	2	2	2	2	2	2	2

Table 1138: MAgPIE new_input — Production—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

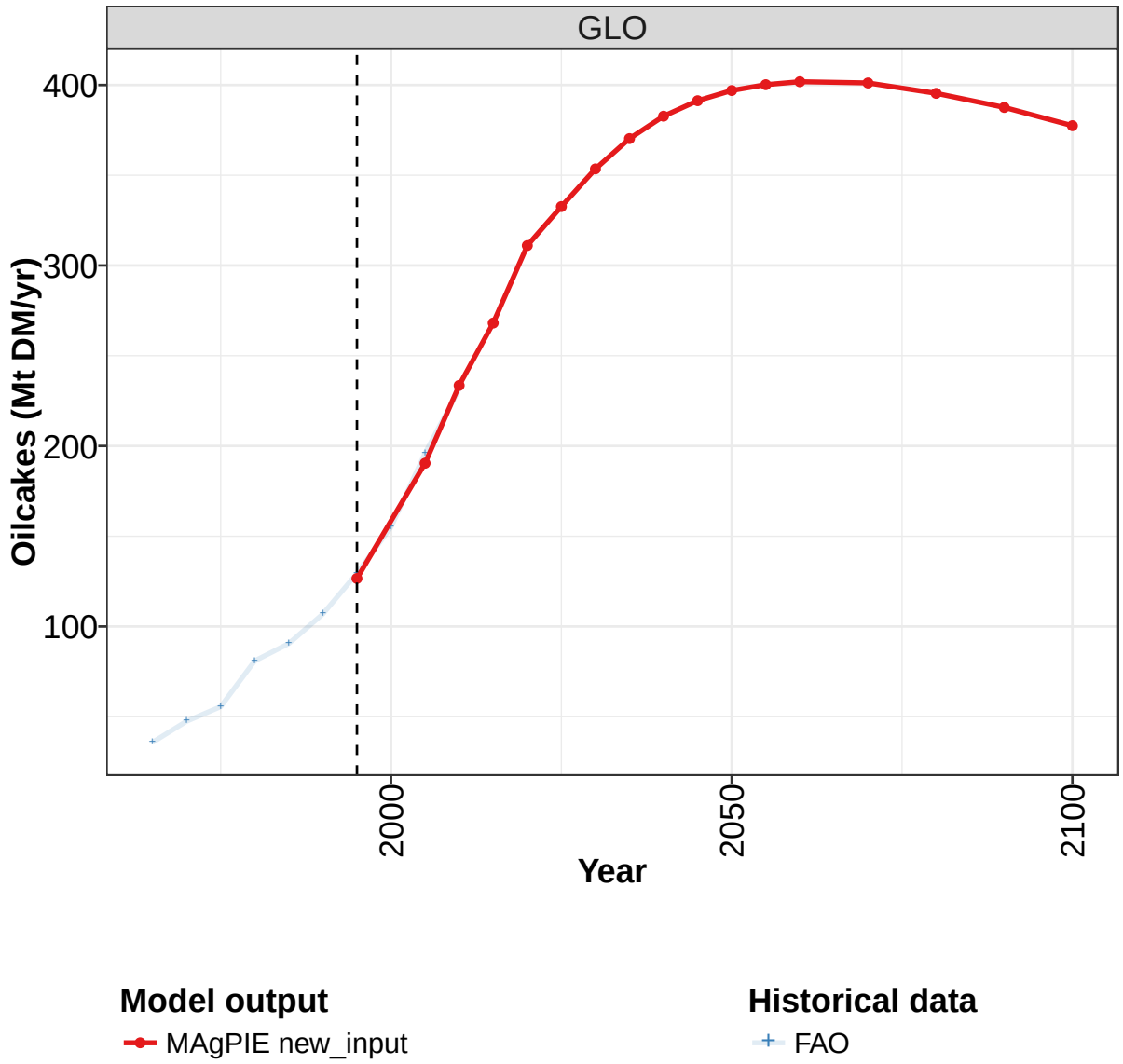
	2055	2060	2070	2080	2090	2100
GLO	108	112	123	132	137	140
CAZ	2	2	2	3	4	4
CHA	9	9	7	6	5	4
EUR	4	4	4	4	5	5
IND	18	18	18	18	17	17
LAM	41	43	48	53	61	66
MEA	6	7	8	8	7	6
NEU	1	1	1	1	1	1
OAS	11	10	13	15	12	12
REF	3	4	4	4	4	4
SSA	10	11	14	16	17	18
USA	2	2	3	3	3	4

Table 1139: MAgPIE new_input — Production—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	15.2	18.5	20.6	21.4	26.4	29.8	32.7	33.3	35.5	39.8
CAZ	0.3	0.4	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.7
CHA	0.6	0.6	0.7	0.9	1.3	1.7	1.7	1.5	1.8	2.7
EUR	2.6	3.1	3.9	3.9	4.3	4.8	4.0	3.5	3.7	2.7
IND	1.0	1.5	1.5	1.2	1.8	3.6	4.8	5.9	4.1	6.2
LAM	5.3	6.3	6.4	7.6	8.5	8.4	10.1	10.6	13.9	16.1
MEA	0.2	0.4	0.5	0.6	0.8	0.8	1.0	1.1	1.3	1.1
NEU	0.2	0.2	0.3	0.4	0.5	0.6	0.4	0.6	0.6	0.6
OAS	0.9	1.4	1.8	1.9	3.2	3.7	5.2	4.8	5.0	5.5
REF	2.2	2.3	2.3	1.9	2.7	2.8	1.7	1.0	1.3	1.2
SSA	0.6	0.9	1.0	1.2	1.3	1.3	1.3	1.6	1.7	1.6
USA	1.3	1.5	1.7	1.4	1.4	1.5	1.6	1.8	1.5	1.6

Table 1140: FAO — Production—Secondary products—Molasses (Mt DM/yr)

50.7 Oilcakes



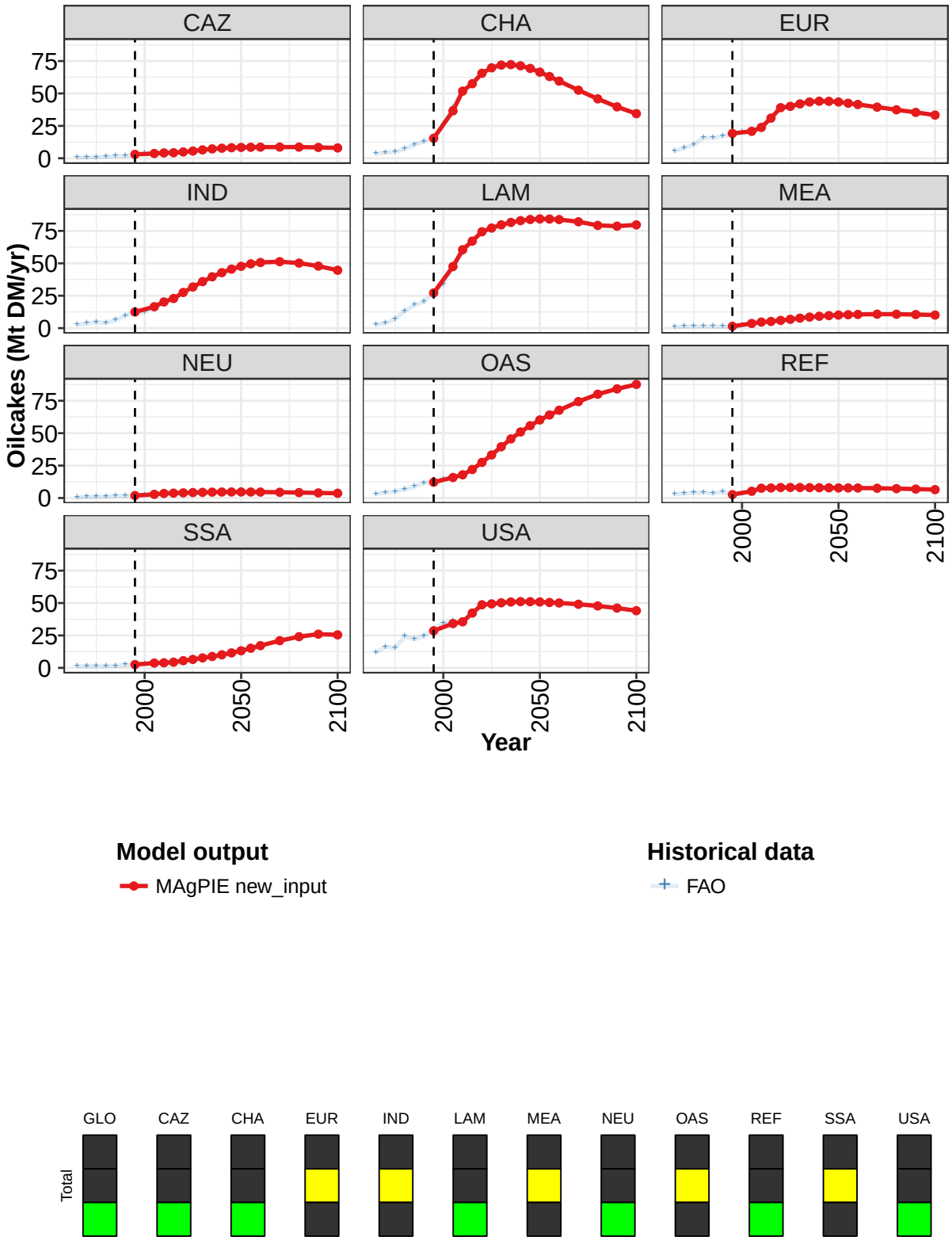


Figure 304: MAgPIE new_input — Production—Secondary products—Oilcakes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	127	190	234	268	311	333	354	370	383	391	397
CAZ	3	4	4	4	5	6	6	7	8	8	8
CHA	15	37	52	58	66	70	72	72	71	69	66
EUR	19	21	24	31	39	40	42	43	44	44	43
IND	12	17	20	23	28	32	36	40	43	46	48
LAM	27	48	60	67	74	77	80	82	83	84	84
MEA	1	4	5	5	6	7	8	9	9	10	10
NEU	2	3	4	4	4	4	4	5	5	5	5
OAS	12	16	18	22	27	33	40	46	51	56	60
REF	3	5	8	8	8	8	8	8	8	8	8
SSA	3	4	4	4	6	7	8	9	10	12	13
USA	29	34	36	42	49	49	50	51	51	51	51

Table 1141: MAgPIE new_input — Production—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

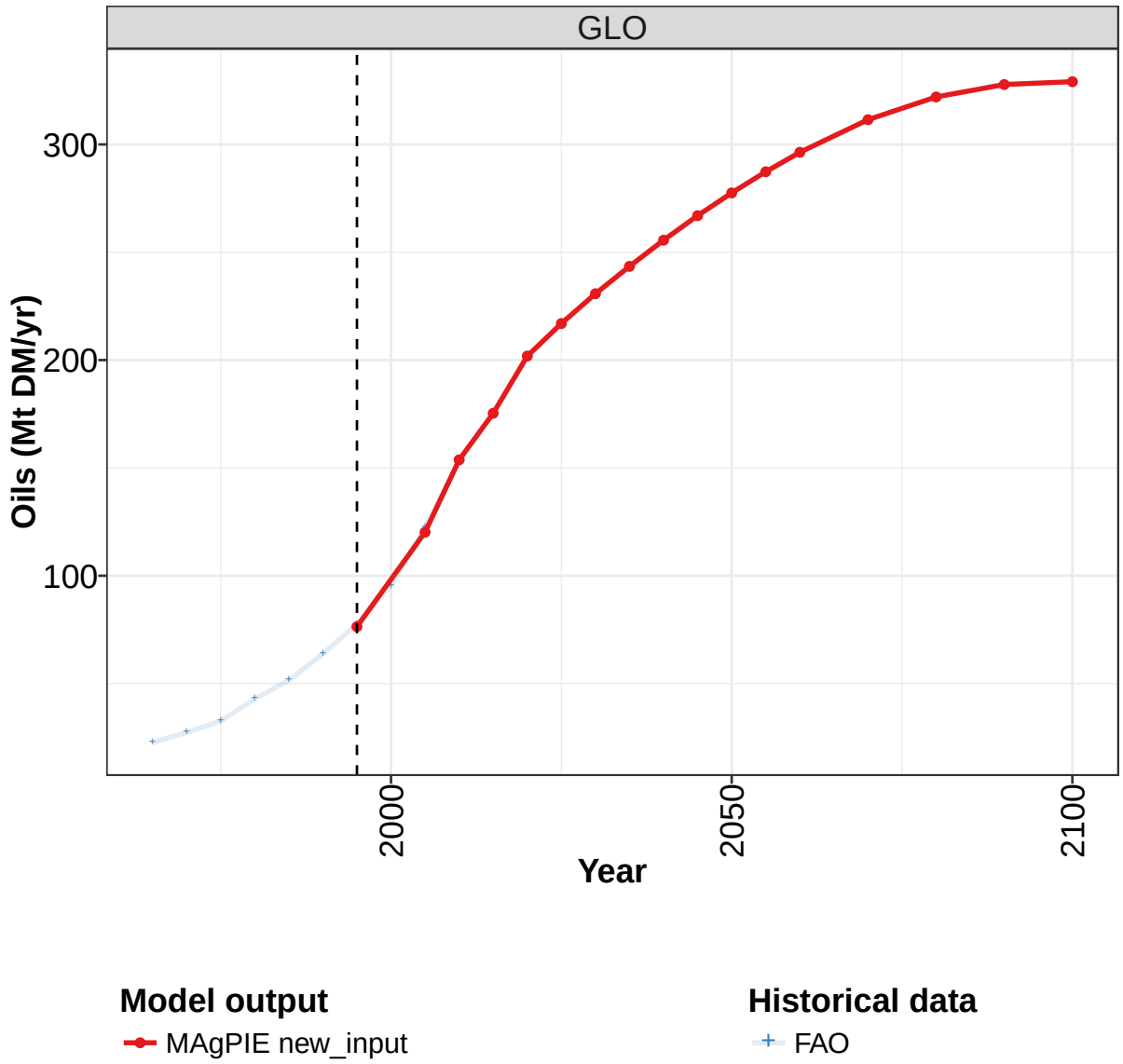
	2055	2060	2070	2080	2090	2100
GLO	400	402	401	395	388	377
CAZ	8	9	9	9	8	8
CHA	63	60	53	46	40	34
EUR	42	42	39	37	35	33
IND	50	51	51	50	48	45
LAM	84	84	82	79	79	80
MEA	10	11	11	11	10	10
NEU	5	5	4	4	4	4
OAS	64	68	74	80	84	88
REF	8	8	8	7	7	6
SSA	15	17	21	24	26	25
USA	50	50	49	48	46	44

Table 1142: MAgPIE new_input — Production—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	36	48	56	81	91	107	129	155	196	232
CAZ	0	1	1	1	2	2	3	3	4	4
CHA	4	4	5	7	10	13	17	26	39	53
EUR	5	8	10	16	16	17	19	20	20	23
IND	3	4	5	4	6	10	13	12	17	20
LAM	3	4	7	13	18	20	27	34	49	58
MEA	1	1	1	1	1	1	1	2	3	4
NEU	1	1	1	1	1	2	2	2	3	3
OAS	3	4	5	7	9	11	13	14	16	18
REF	3	3	4	4	4	5	3	3	5	8
SSA	1	1	1	1	2	2	2	3	4	4
USA	12	16	15	24	22	24	30	35	36	36

Table 1143: FAO — Production—Secondary products—Oilcakes (Mt DM/yr)

50.8 Oils


GLO
Oils (Mt DM/yr)
300
200
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

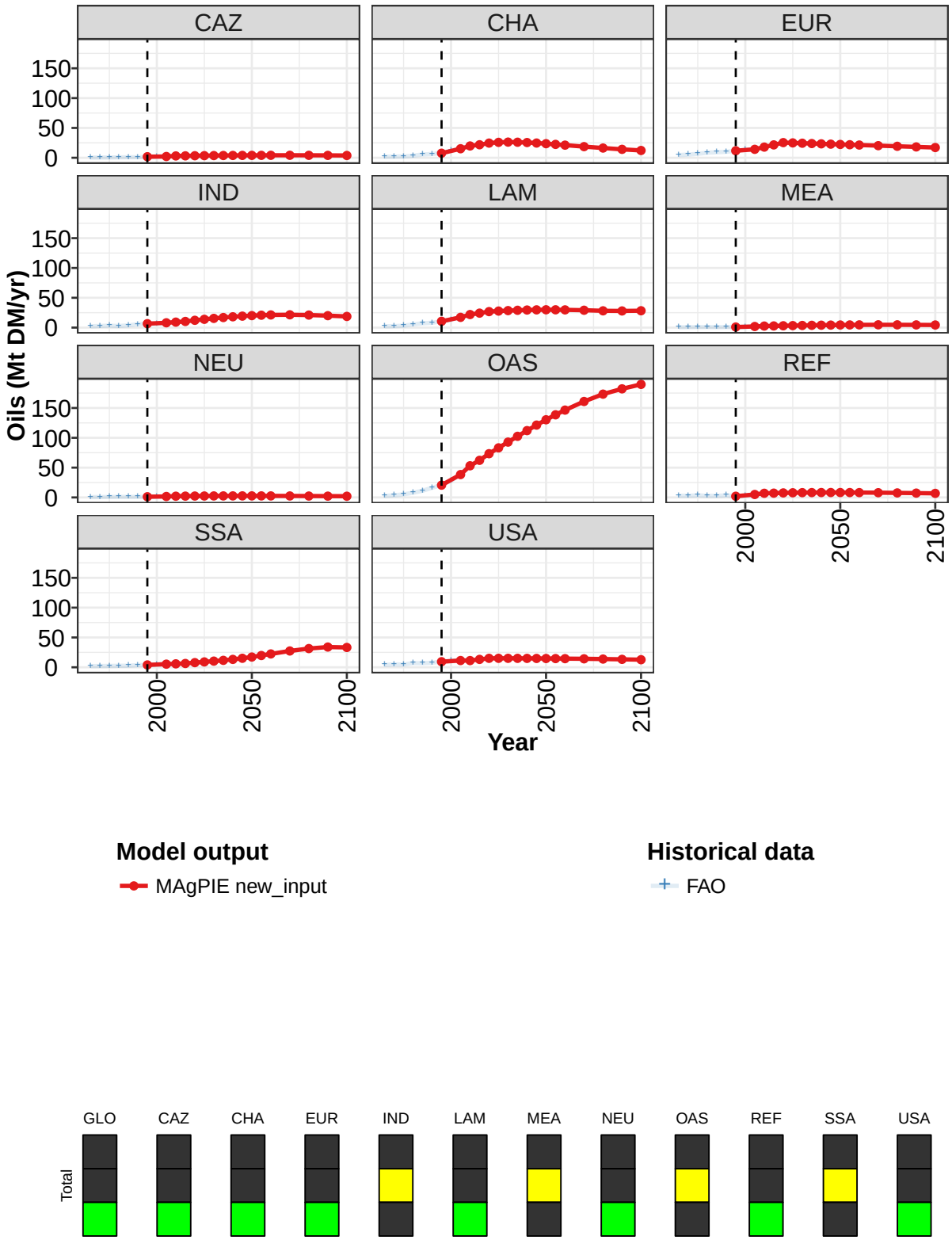


Figure 305: MAgPIE new_input — Production—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	76	120	154	175	202	217	231	243	256	267	278
CAZ	2	2	3	3	3	4	4	4	4	4	4
CHA	8	15	20	22	25	26	26	26	26	25	24
EUR	12	14	18	22	25	25	24	24	23	23	22
IND	7	8	9	10	12	14	15	17	18	19	20
LAM	11	17	22	24	27	28	29	29	29	30	30
MEA	1	2	3	3	3	3	4	4	4	4	4
NEU	1	2	2	2	2	2	3	3	3	3	3
OAS	21	38	53	62	73	83	93	103	112	121	130
REF	2	5	7	7	8	8	8	8	8	8	8
SSA	4	5	6	6	8	9	10	12	13	15	17
USA	9	11	11	13	15	15	15	15	15	15	15

Table 1144: MAgPIE new_input — Production—Secondary products—Oils (Mt DM/yr) [PART 1/2]

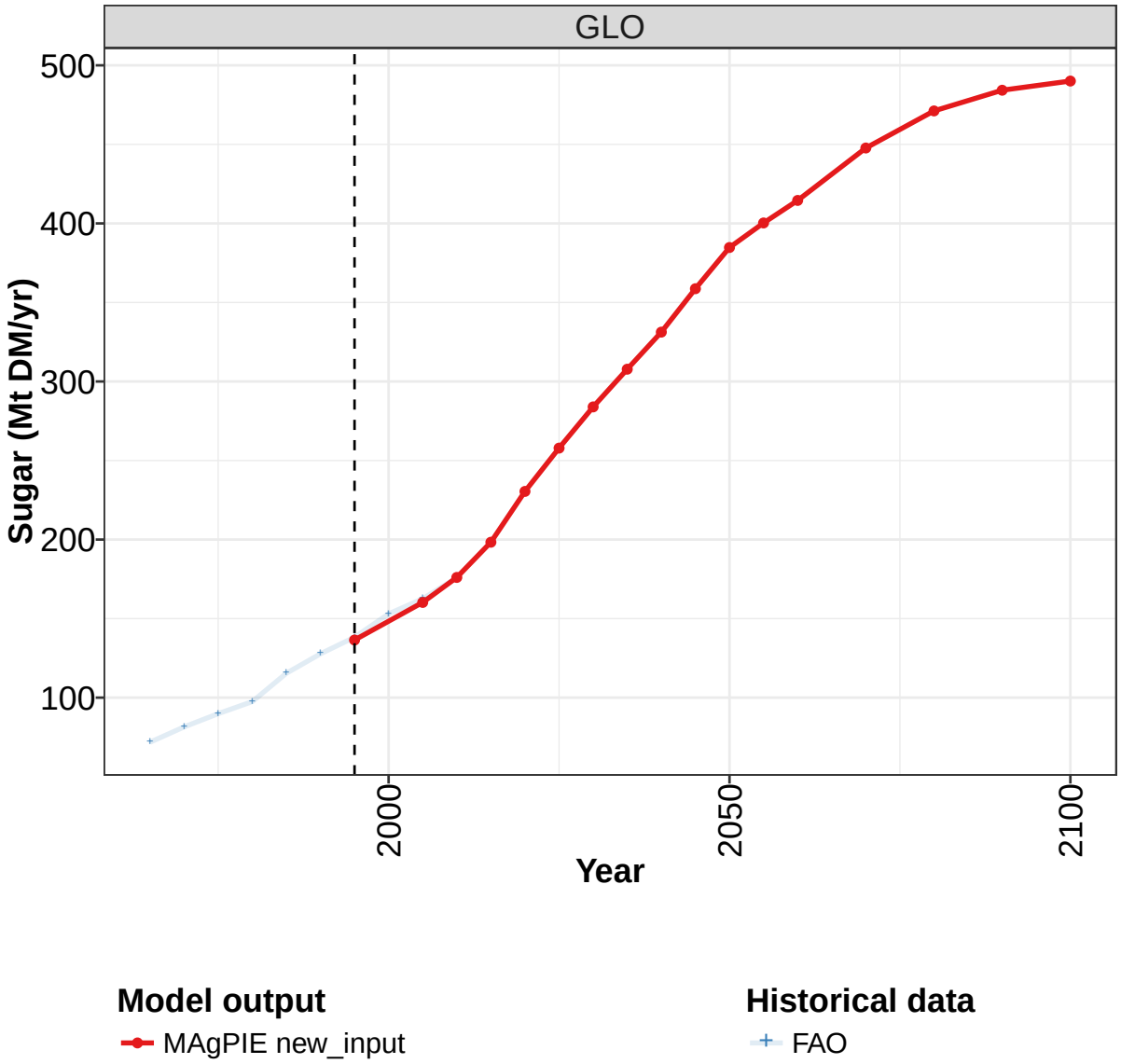
	2055	2060	2070	2080	2090	2100
GLO	287	296	311	322	328	329
CAZ	4	4	4	4	4	4
CHA	22	21	19	16	14	12
EUR	22	21	20	19	18	17
IND	21	21	21	21	20	19
LAM	30	30	29	28	28	28
MEA	4	5	5	5	5	4
NEU	3	3	2	2	2	2
OAS	139	146	161	173	182	190
REF	8	8	8	8	7	7
SSA	20	22	27	31	34	33
USA	15	15	14	14	13	13

Table 1145: MAgPIE new_input — Production—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	23	27	33	43	51	64	78	95	122	153
CAZ	0	0	0	1	1	1	2	2	2	3
CHA	2	2	2	3	5	6	8	12	16	20
EUR	5	5	7	9	9	10	12	13	14	18
IND	2	3	3	3	4	6	7	6	8	9
LAM	2	2	3	5	7	8	11	13	18	21
MEA	1	1	1	1	1	1	1	1	2	2
NEU	0	1	1	1	1	1	1	1	2	2
OAS	2	3	5	8	11	16	21	28	39	54
REF	3	3	3	3	3	3	2	3	5	7
SSA	2	2	2	2	3	4	4	4	5	6
USA	4	5	5	7	7	8	10	11	12	11

Table 1146: FAO — Production—Secondary products—Oils (Mt DM/yr)

50.9 Sugar


GLO
500
400
300
200
100
Sugar (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

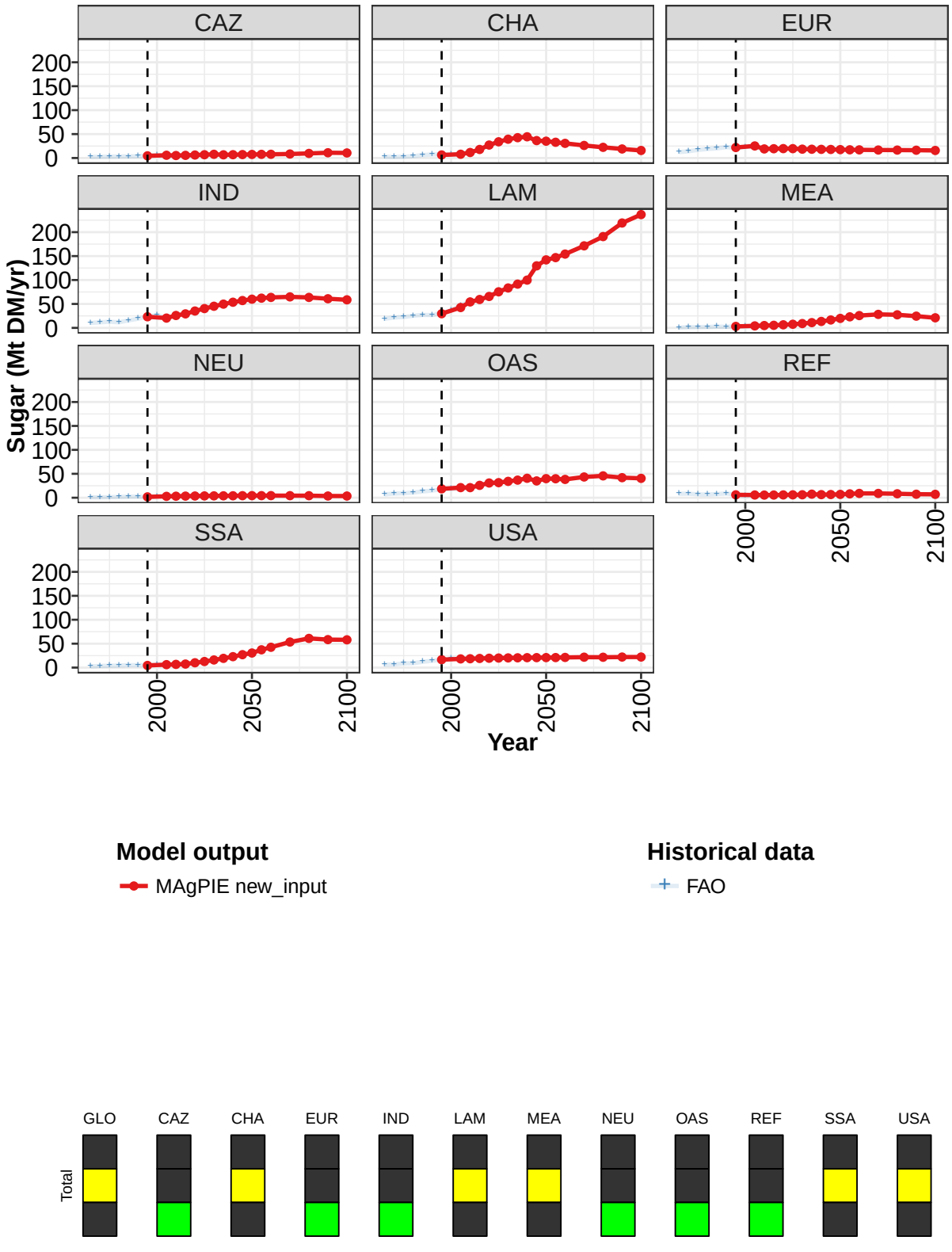


Figure 306: MAgPIE new_input — Production—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	136	160	176	198	230	258	284	308	331	359	385
CAZ	5	6	5	6	6	7	8	7	7	7	7
CHA	6	8	12	18	27	34	39	43	44	36	35
EUR	22	25	19	19	20	20	19	18	18	18	18
IND	23	20	26	29	35	40	45	50	54	57	60
LAM	30	43	54	59	66	75	83	91	100	130	142
MEA	3	4	5	5	6	8	9	11	13	17	20
NEU	2	3	3	3	4	4	4	4	4	4	4
OAS	19	21	21	26	31	32	34	37	41	35	40
REF	6	6	6	6	6	6	6	7	7	7	7
SSA	5	6	7	7	10	13	16	19	23	27	31
USA	17	18	19	19	20	20	20	20	21	21	21

Table 1147: MAgPIE new_input — Production—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	400	415	448	471	484	490
CAZ	8	8	8	10	11	11
CHA	33	31	26	22	19	16
EUR	17	17	17	17	16	16
IND	62	64	65	64	61	59
LAM	147	154	171	191	219	237
MEA	23	26	28	27	24	21
NEU	4	4	4	4	4	4
OAS	40	38	43	46	42	41
REF	8	9	9	8	7	7
SSA	37	42	53	61	58	58
USA	21	21	22	22	22	22

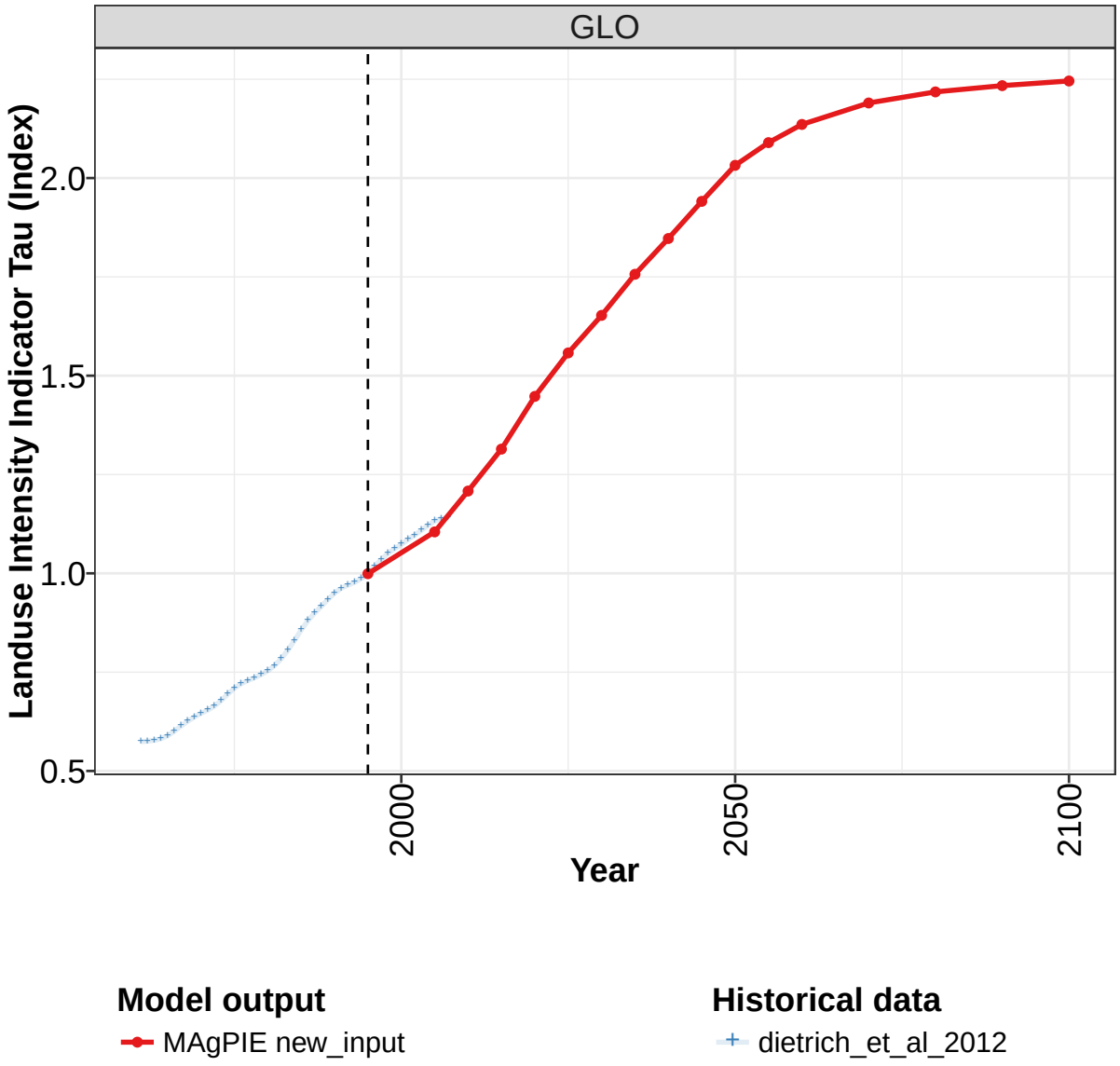
Table 1148: MAgPIE new_input — Production—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	72	81	90	97	115	128	138	153	163	176
CAZ	2	2	3	3	3	4	5	6	5	5
CHA	3	2	3	4	6	7	7	7	10	12
EUR	12	14	17	19	20	23	22	23	23	19
IND	10	12	13	12	16	19	24	27	21	26
LAM	19	22	23	25	27	27	31	37	47	55
MEA	1	1	2	2	3	2	3	3	4	4
NEU	1	1	1	2	2	2	2	3	3	3
OAS	7	9	9	11	13	15	18	18	19	20
REF	8	8	7	7	8	9	6	4	6	6
SSA	2	3	4	4	5	5	5	6	7	6
USA	6	7	9	9	12	14	17	19	18	20

Table 1149: FAO — Production—Secondary products—Sugar (Mt DM/yr)

Part XV
Productivity

51 Landuse Intensity Indicator Tau



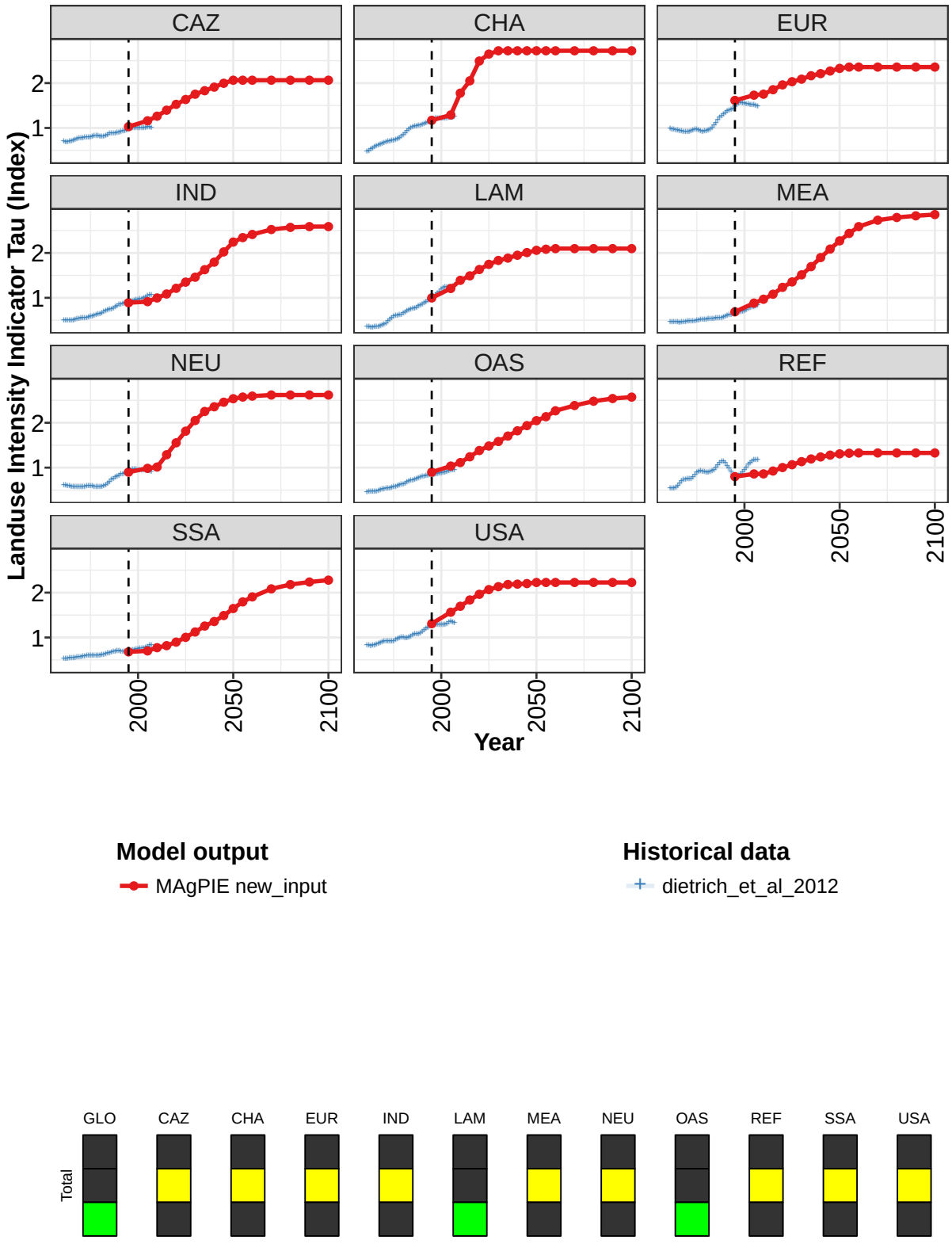


Figure 307: MAgPIE new_input — Productivity—Landuse Intensity Indicator Tau (Index)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.00	1.10	1.21	1.31	1.45	1.56	1.65	1.76	1.85	1.94	2.03
CAZ	1.03	1.16	1.26	1.40	1.53	1.63	1.75	1.83	1.91	2.00	2.06
CHA	1.17	1.29	1.78	2.05	2.49	2.65	2.72	2.72	2.72	2.72	2.72
EUR	1.61	1.73	1.75	1.85	1.96	2.03	2.09	2.16	2.21	2.27	2.33
IND	0.89	0.91	1.00	1.09	1.21	1.35	1.46	1.63	1.79	2.02	2.24
LAM	1.00	1.21	1.39	1.49	1.63	1.75	1.83	1.89	1.95	2.01	2.06
MEA	0.69	0.88	0.97	1.08	1.23	1.35	1.51	1.70	1.90	2.09	2.27
NEU	0.90	0.98	1.01	1.29	1.55	1.81	2.05	2.25	2.36	2.46	2.54
OAS	0.90	1.04	1.11	1.24	1.38	1.48	1.58	1.70	1.82	1.94	2.05
REF	0.80	0.86	0.86	0.93	1.00	1.07	1.13	1.19	1.24	1.28	1.31
SSA	0.68	0.70	0.77	0.82	0.90	1.00	1.12	1.26	1.36	1.49	1.65
USA	1.31	1.56	1.70	1.84	1.96	2.07	2.13	2.18	2.19	2.20	2.23

Table 1150: MAgPIE new_input — Productivity—Landuse Intensity Indicator Tau (Index) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	2.09	2.14	2.19	2.22	2.23	2.25
CAZ	2.06	2.06	2.06	2.06	2.06	2.06
CHA	2.72	2.72	2.72	2.72	2.72	2.72
EUR	2.36	2.36	2.36	2.36	2.36	2.36
IND	2.34	2.41	2.52	2.57	2.59	2.59
LAM	2.08	2.10	2.10	2.10	2.10	2.10
MEA	2.44	2.59	2.73	2.79	2.83	2.86
NEU	2.57	2.59	2.62	2.62	2.62	2.62
OAS	2.14	2.27	2.38	2.48	2.54	2.57
REF	1.32	1.33	1.33	1.33	1.33	1.33
SSA	1.79	1.91	2.08	2.18	2.24	2.28
USA	2.23	2.23	2.23	2.23	2.23	2.23

Table 1151: MAgPIE new_input — Productivity—Landuse Intensity Indicator Tau (Index) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	0.57	0.58	0.58	0.58	0.59	0.60	0.61	0.63	0.64	0.65	0.65
CAZ	0.69	0.69	0.69	0.69	0.70	0.71	0.73	0.75	0.76	0.77	0.77
CHA	0.47	0.48	0.51	0.54	0.57	0.60	0.61	0.63	0.65	0.66	0.68
EUR	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.91	0.91
IND	0.50	0.50	0.50	0.49	0.49	0.49	0.50	0.52	0.53	0.54	0.54
LAM	0.35	0.34	0.34	0.34	0.34	0.35	0.35	0.36	0.38	0.40	0.43
MEA	0.45	0.45	0.46	0.45	0.45	0.44	0.45	0.45	0.46	0.47	0.47
NEU	0.60	0.59	0.59	0.58	0.57	0.57	0.57	0.56	0.56	0.56	0.56
OAS	0.45	0.45	0.46	0.46	0.46	0.46	0.47	0.49	0.51	0.52	0.53
REF	0.54	0.53	0.53	0.55	0.59	0.65	0.69	0.72	0.73	0.74	0.74
SSA	0.52	0.52	0.53	0.53	0.53	0.54	0.55	0.55	0.56	0.56	0.57
USA	0.82	0.81	0.81	0.81	0.82	0.84	0.86	0.88	0.89	0.91	0.91

Table 1152: dietrich_et_al_2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	0.66	0.68	0.69	0.71	0.72	0.73	0.74	0.74	0.75	0.77	0.78
CAZ	0.78	0.78	0.78	0.79	0.80	0.81	0.82	0.81	0.81	0.80	0.81
CHA	0.69	0.70	0.71	0.72	0.73	0.75	0.77	0.80	0.83	0.87	0.92
EUR	0.93	0.94	0.96	0.96	0.94	0.92	0.91	0.92	0.92	0.94	0.96
IND	0.54	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.64	0.66	0.68
LAM	0.47	0.51	0.55	0.58	0.59	0.60	0.61	0.62	0.64	0.67	0.70
MEA	0.47	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.52	0.52
NEU	0.57	0.58	0.59	0.59	0.58	0.57	0.56	0.56	0.57	0.58	0.59
OAS	0.53	0.54	0.55	0.56	0.57	0.58	0.60	0.61	0.63	0.64	0.66
REF	0.74	0.77	0.82	0.88	0.91	0.92	0.91	0.90	0.89	0.89	0.89
SSA	0.57	0.58	0.59	0.59	0.59	0.59	0.59	0.59	0.60	0.60	0.61
USA	0.91	0.90	0.90	0.91	0.94	0.96	0.98	0.99	0.99	0.98	0.98

Table 1153: dietrich_et_al_2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	0.81	0.83	0.86	0.88	0.90	0.92	0.93	0.95	0.96	0.97	0.98
CAZ	0.82	0.84	0.87	0.88	0.88	0.87	0.88	0.89	0.91	0.92	0.93
CHA	0.96	1.00	1.02	1.03	1.04	1.04	1.06	1.07	1.09	1.11	1.13
EUR	0.99	1.04	1.10	1.17	1.22	1.25	1.29	1.34	1.37	1.39	1.40
IND	0.70	0.71	0.73	0.74	0.76	0.79	0.81	0.83	0.85	0.86	0.87
LAM	0.72	0.74	0.75	0.76	0.78	0.80	0.82	0.85	0.87	0.90	0.94
MEA	0.52	0.53	0.53	0.54	0.54	0.54	0.56	0.58	0.59	0.61	0.62
NEU	0.61	0.64	0.68	0.72	0.75	0.77	0.79	0.82	0.84	0.85	0.86
OAS	0.68	0.70	0.71	0.72	0.74	0.75	0.77	0.79	0.80	0.81	0.82
REF	0.91	0.94	0.99	1.04	1.10	1.13	1.13	1.09	1.03	0.96	0.90
SSA	0.62	0.64	0.65	0.66	0.67	0.68	0.69	0.69	0.69	0.68	0.67
USA	0.99	1.02	1.05	1.07	1.08	1.07	1.09	1.12	1.16	1.19	1.22

Table 1154: dietrich_et_al_2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 3/5]

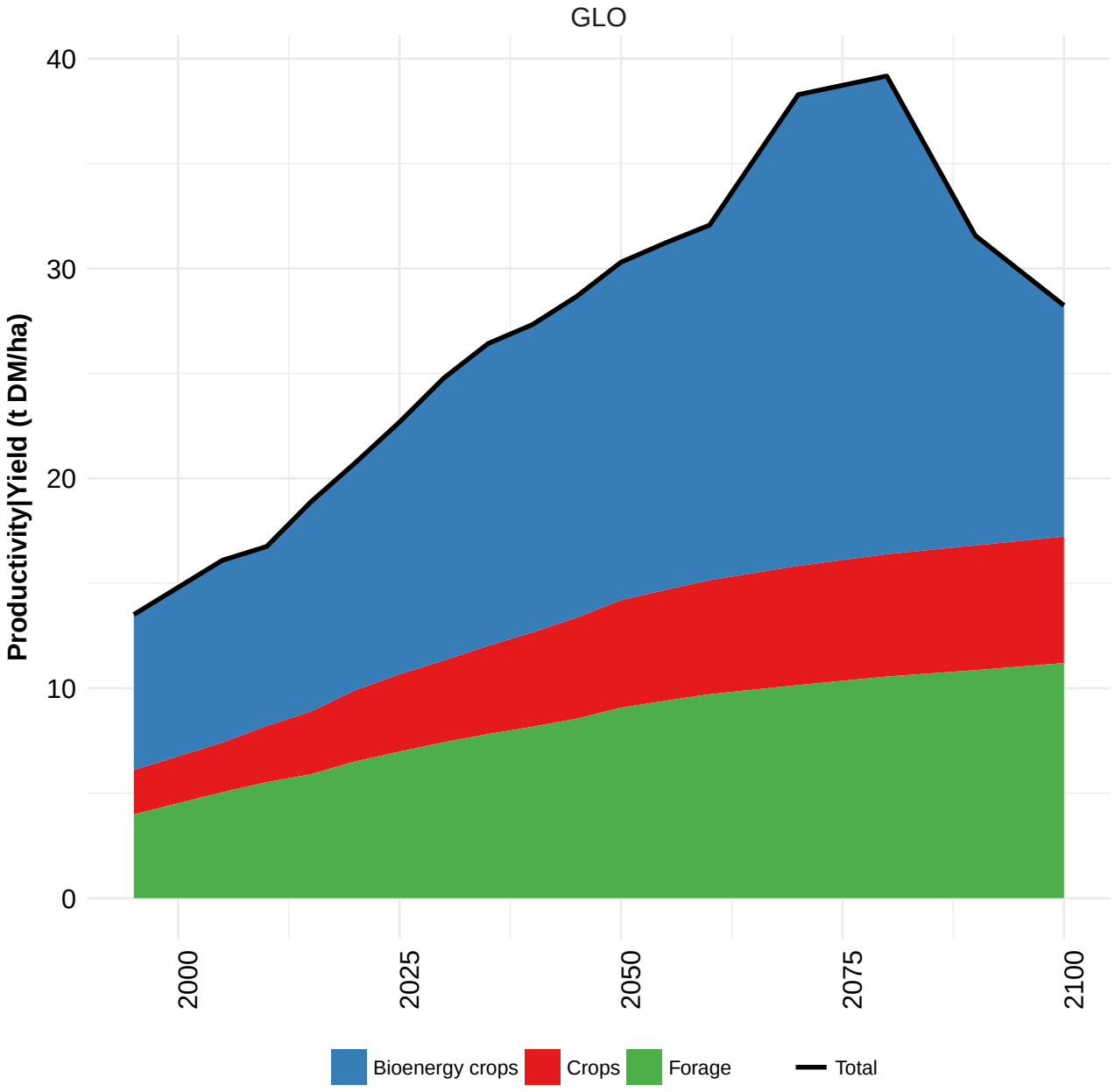
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	0.99	1.00	1.02	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12
CAZ	0.95	0.97	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.00
CHA	1.15	1.17	1.19	1.21	1.22	1.21	1.21	1.21	1.21	1.21	1.22
EUR	1.43	1.47	1.51	1.54	1.55	1.55	1.54	1.53	1.52	1.52	1.51
IND	0.88	0.89	0.90	0.92	0.94	0.95	0.96	0.96	0.97	0.99	1.01
LAM	0.96	0.99	1.02	1.05	1.09	1.13	1.17	1.21	1.24	1.23	1.22
MEA	0.63	0.64	0.66	0.67	0.68	0.69	0.70	0.72	0.75	0.77	0.78
NEU	0.88	0.90	0.93	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93
OAS	0.83	0.83	0.84	0.85	0.85	0.86	0.87	0.88	0.89	0.90	0.92
REF	0.84	0.80	0.79	0.81	0.85	0.89	0.94	1.00	1.06	1.10	1.14
SSA	0.67	0.68	0.70	0.71	0.72	0.73	0.74	0.74	0.75	0.75	0.77
USA	1.24	1.25	1.27	1.27	1.28	1.27	1.27	1.27	1.28	1.30	1.33

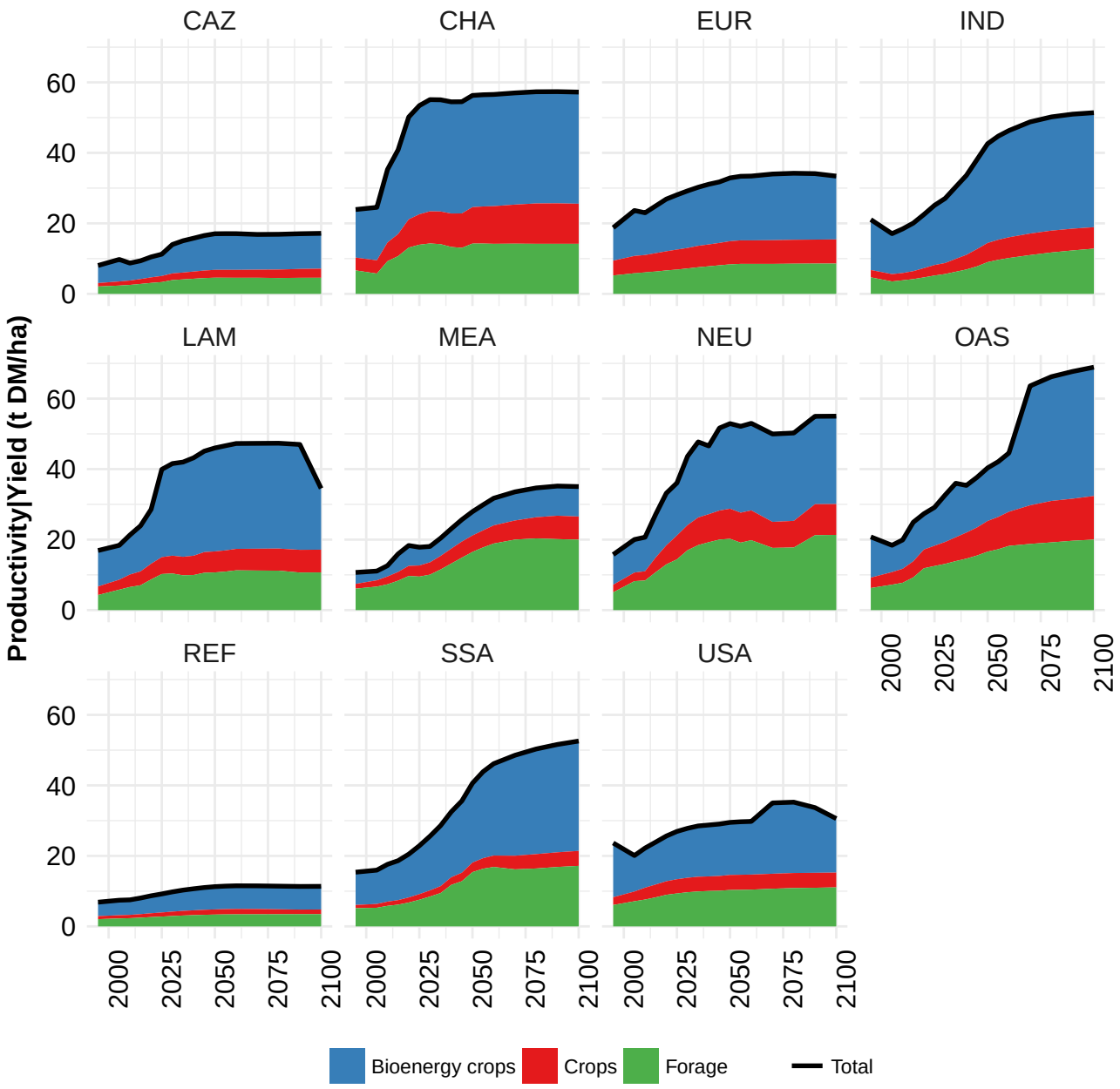
Table 1155: dietrich_et_al_2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 4/5]

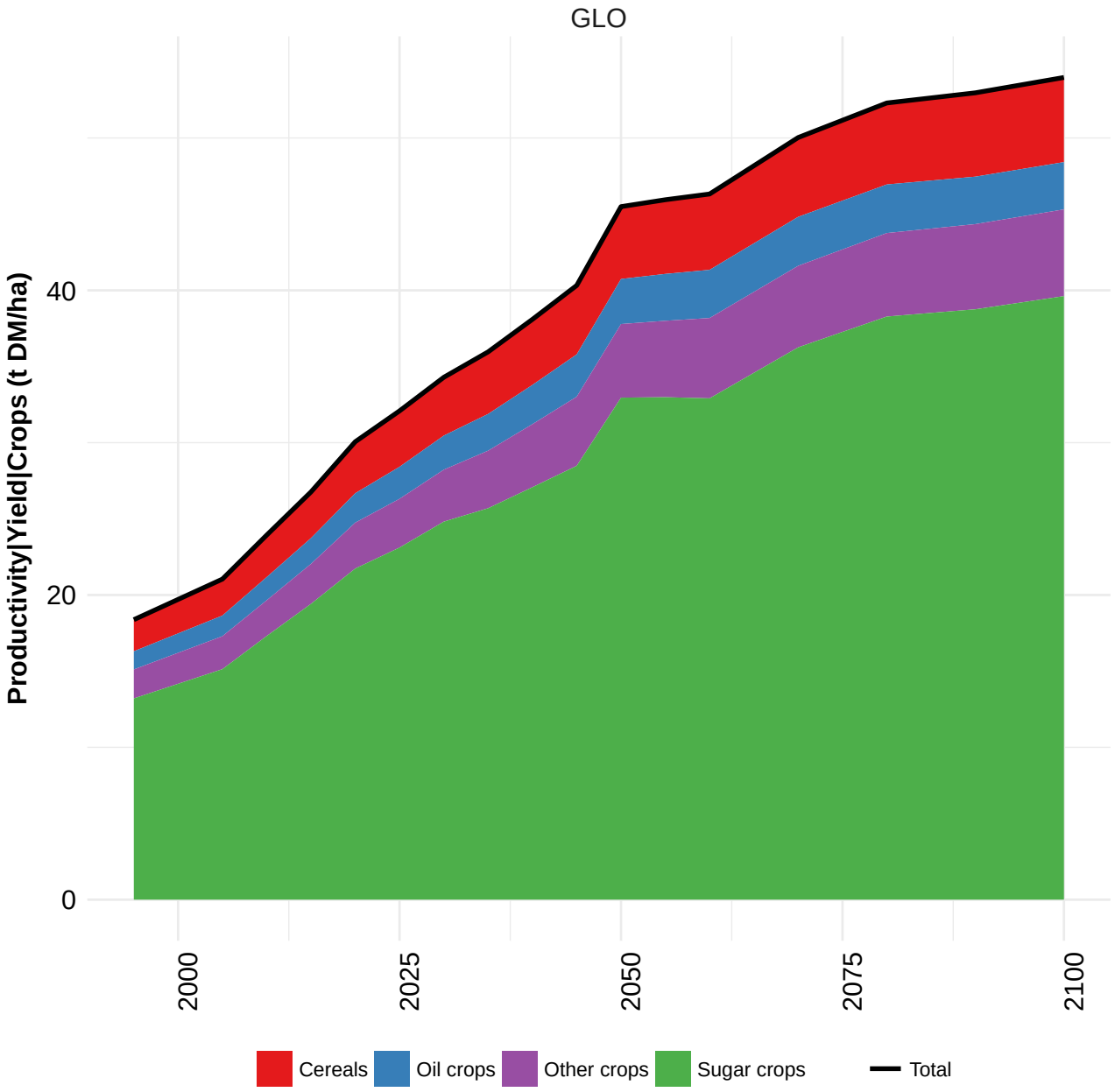
	2005	2006	2007
GLO	1.13	1.14	1.14
CAZ	1.01	1.01	1.00
CHA	1.23	1.23	1.24
EUR	1.51	1.49	1.47
IND	1.03	1.05	1.06
LAM	1.23	1.25	1.27
MEA	0.80	0.81	0.82
NEU	0.93	0.92	0.91
OAS	0.93	0.94	0.95
REF	1.16	1.17	1.17
SSA	0.79	0.81	0.83
USA	1.34	1.33	1.31

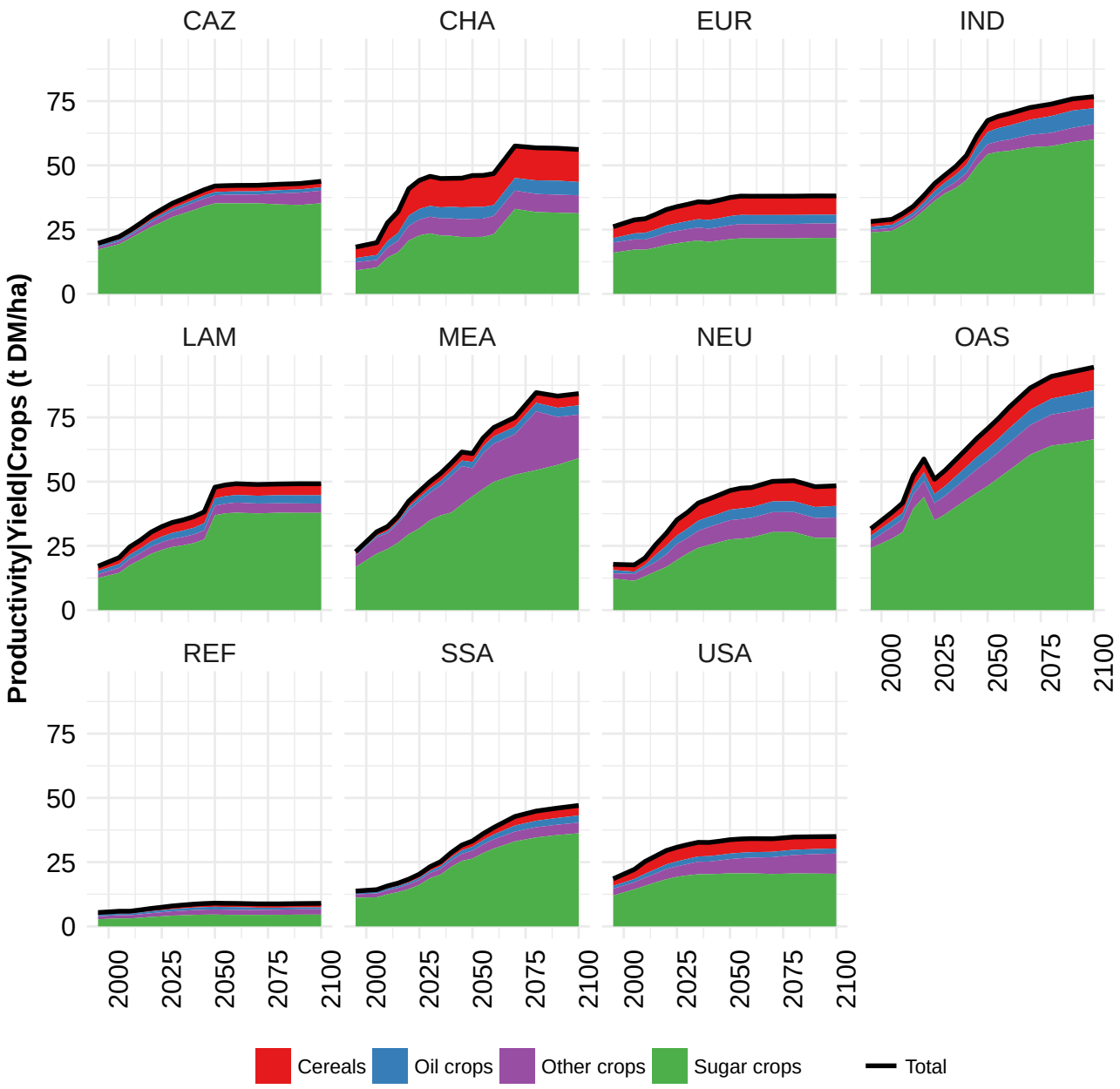
Table 1156: dietrich_et_al_2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 5/5]

52 Yield

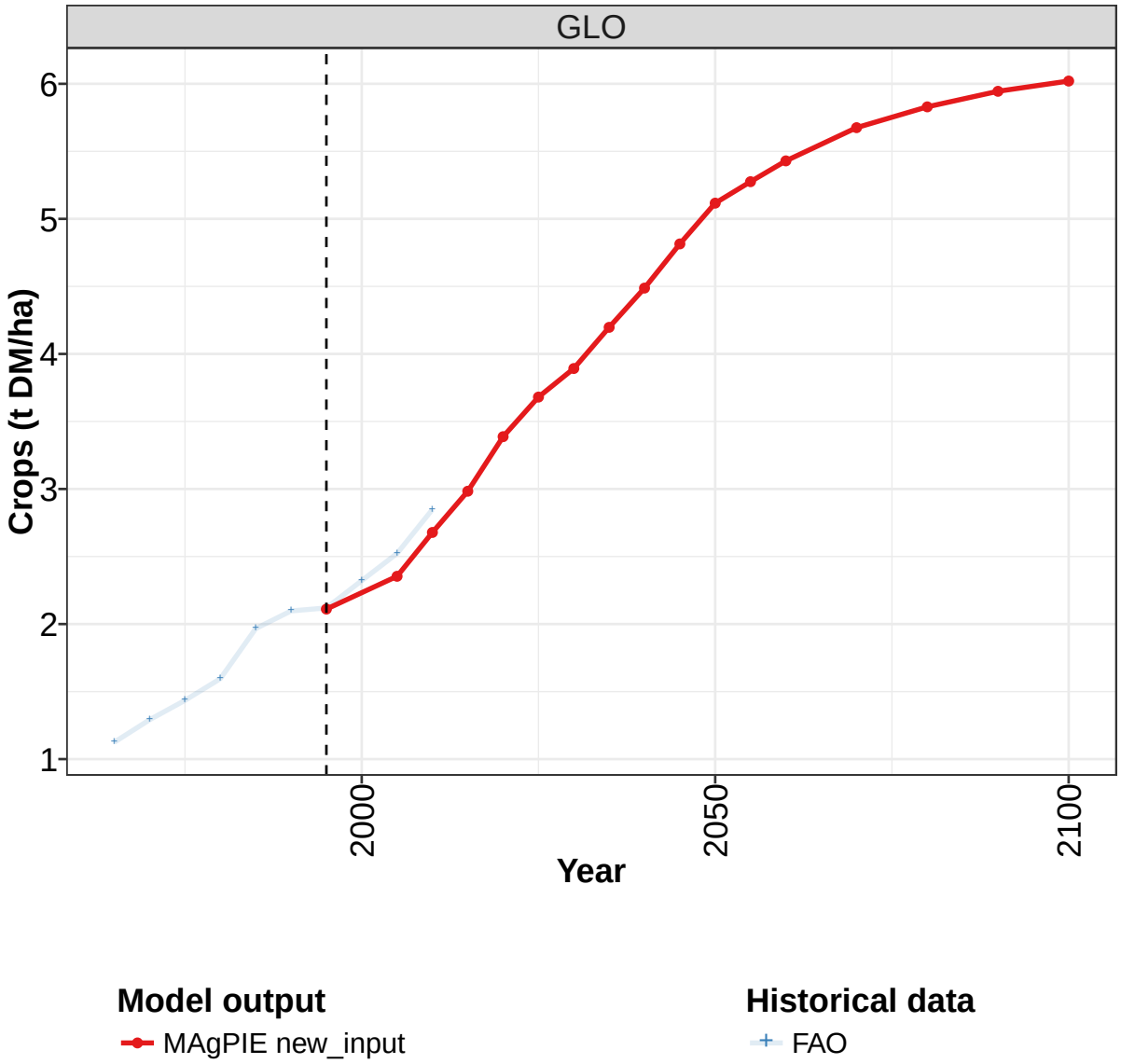



CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Productivity|Yield (t DM/ha)
0
20
40
60
2000
2025
2050
2075
2100
Bioenergy crops
Crops
Forage
Total


GLO
Productivity|Yield|Crops (t DM/ha)
40
20
0
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Productivity|Yield|Crops (t DM/ha)
0
25
50
75
2000
2025
2050
2075
2100
Cereals
Oil crops
Other crops
Sugar crops
Total

52.1 Crops


GLO
Crops (t DM/ha)
1
2
3
4
5
6
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

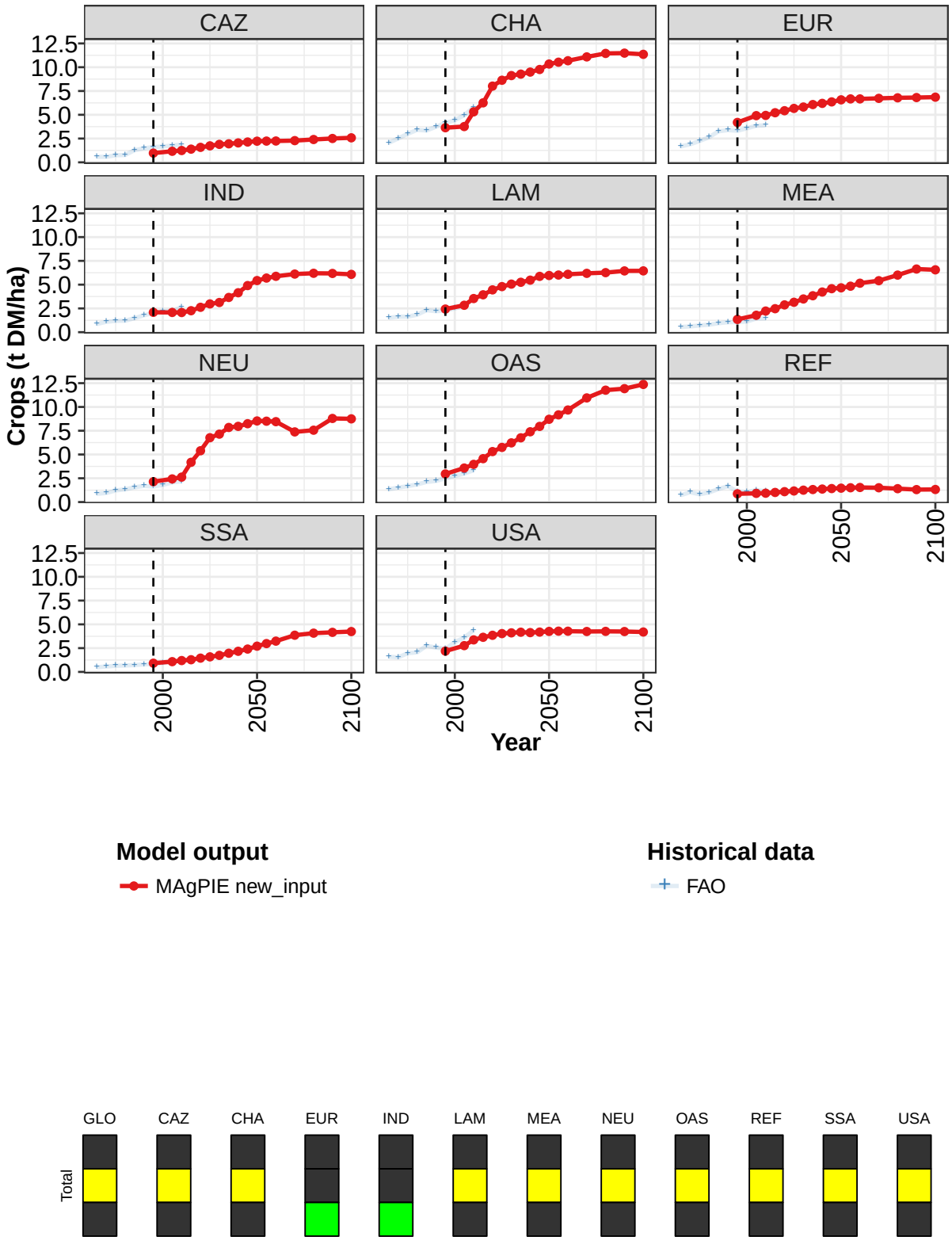


Figure 308: MAgPIE new_input — Productivity—Yield—Crops (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.1	2.4	2.7	3.0	3.4	3.7	3.9	4.2	4.5	4.8	5.1
CAZ	1.0	1.2	1.2	1.4	1.6	1.7	1.9	1.9	2.0	2.1	2.2
CHA	3.6	3.8	5.3	6.3	8.0	8.6	9.1	9.3	9.5	9.8	10.3
EUR	4.2	4.9	4.9	5.2	5.4	5.7	5.8	6.1	6.2	6.4	6.6
IND	2.1	2.1	2.1	2.3	2.6	3.0	3.1	3.7	4.1	4.9	5.4
LAM	2.4	2.8	3.5	3.9	4.4	4.8	5.1	5.2	5.5	5.9	6.0
MEA	1.3	1.8	2.2	2.5	2.9	3.1	3.5	3.8	4.2	4.6	4.7
NEU	2.1	2.4	2.6	4.2	5.4	6.8	7.1	7.8	8.0	8.2	8.5
OAS	3.0	3.6	4.0	4.6	5.3	5.7	6.2	6.8	7.4	8.0	8.7
REF	0.9	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.5
SSA	0.9	1.1	1.2	1.3	1.5	1.6	1.7	2.0	2.2	2.4	2.7
USA	2.2	2.8	3.4	3.6	3.9	4.0	4.1	4.2	4.1	4.2	4.3

Table 1157: MAgPIE new_input — Productivity—Yield—Crops (t DM/ha) [PART 1/2]

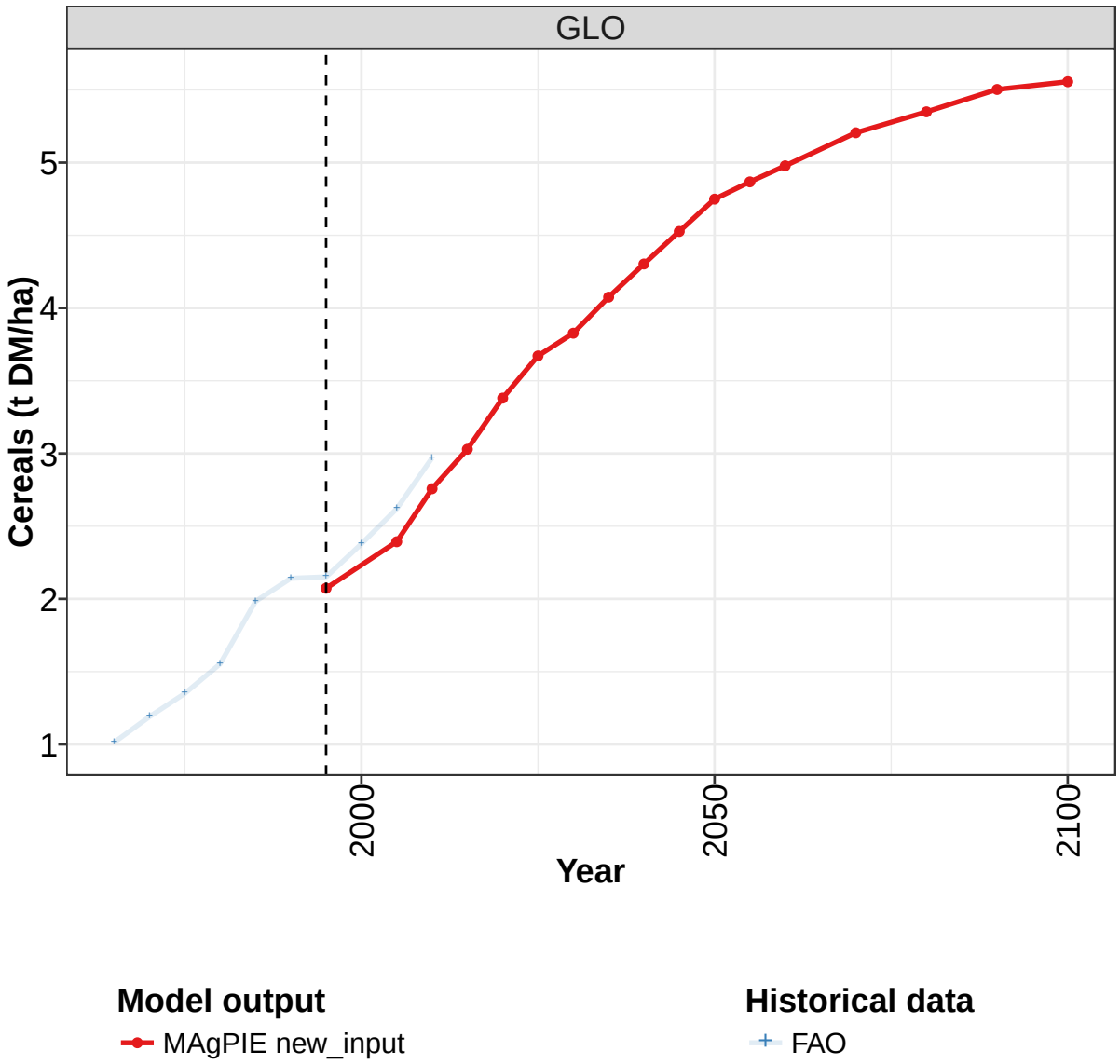
	2055	2060	2070	2080	2090	2100
GLO	5.3	5.4	5.7	5.8	5.9	6.0
CAZ	2.2	2.2	2.3	2.4	2.5	2.6
CHA	10.5	10.7	11.1	11.5	11.5	11.4
EUR	6.7	6.7	6.7	6.8	6.8	6.9
IND	5.7	5.9	6.1	6.2	6.2	6.1
LAM	6.0	6.1	6.2	6.3	6.4	6.4
MEA	4.8	5.2	5.4	6.0	6.6	6.6
NEU	8.5	8.5	7.4	7.6	8.8	8.8
OAS	9.2	9.7	11.0	11.8	11.9	12.4
REF	1.5	1.5	1.5	1.4	1.3	1.3
SSA	3.0	3.2	3.9	4.1	4.2	4.2
USA	4.3	4.3	4.3	4.3	4.2	4.2

Table 1158: MAgPIE new_input — Productivity—Yield—Crops (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.12	1.29	1.43	1.60	1.97	2.10	2.12	2.32	2.52	2.85
CAZ	0.58	0.58	0.74	0.77	1.27	1.47	1.61	1.66	1.78	1.85
CHA	2.05	2.52	2.99	3.41	3.35	3.73	4.14	4.43	4.96	5.79
EUR	1.68	1.90	2.25	2.64	3.26	3.39	3.32	3.58	3.85	3.89
IND	0.86	1.09	1.19	1.21	1.47	1.77	2.02	2.21	2.22	2.64
LAM	1.52	1.63	1.64	1.83	2.32	2.20	2.28	2.50	2.73	3.51
MEA	0.55	0.61	0.71	0.79	0.94	1.05	1.06	1.12	1.44	1.45
NEU	0.87	0.95	1.22	1.34	1.55	1.70	1.63	1.80	2.07	2.18
OAS	1.35	1.52	1.67	1.86	2.11	2.21	2.51	2.73	3.01	3.34
REF	0.73	1.03	0.82	1.01	1.37	1.67	1.10	1.04	1.25	1.15
SSA	0.49	0.57	0.64	0.67	0.71	0.79	0.83	0.94	1.07	1.21
USA	1.60	1.53	1.97	2.06	2.75	2.56	2.44	3.13	3.61	4.37

Table 1159: FAO — Productivity—Yield—Crops (t DM/ha)

52.1.1 Cereals



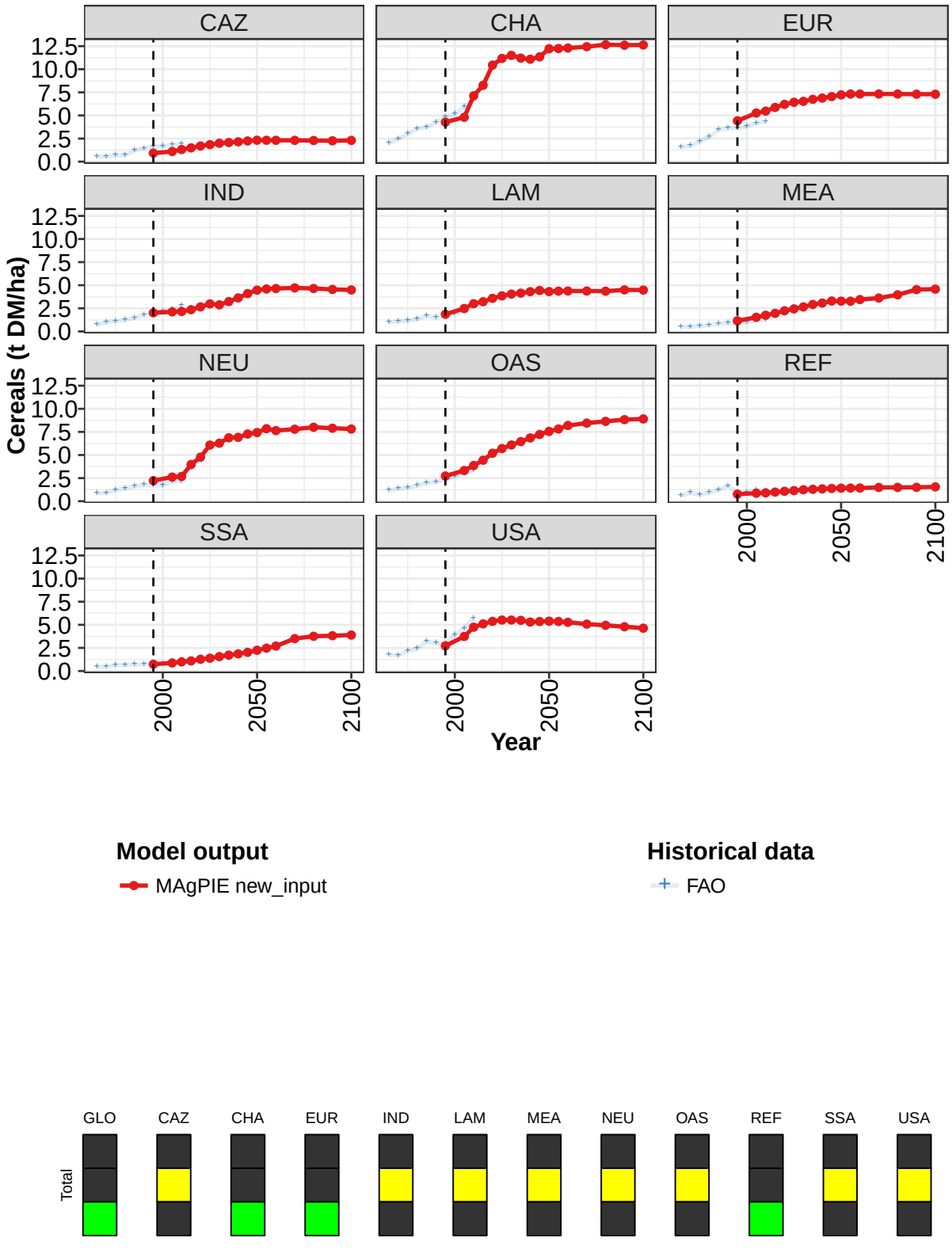


Figure 309: MAgPIE new_input — Productivity—Yield—Crops—Cereals (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.1	2.4	2.8	3.0	3.4	3.7	3.8	4.1	4.3	4.5	4.7
CAZ	0.9	1.1	1.3	1.5	1.7	1.8	2.0	2.1	2.1	2.2	2.3
CHA	4.3	4.8	7.1	8.3	10.4	11.2	11.5	11.2	11.1	11.3	12.2
EUR	4.4	5.3	5.5	5.9	6.2	6.4	6.5	6.7	6.9	7.0	7.2
IND	2.0	2.1	2.2	2.4	2.7	3.0	2.9	3.2	3.6	4.1	4.5
LAM	1.9	2.5	3.0	3.2	3.6	3.9	4.0	4.1	4.3	4.4	4.3
MEA	1.2	1.5	1.8	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.3
NEU	2.2	2.6	2.7	4.0	4.8	6.1	6.3	6.9	6.9	7.3	7.4
OAS	2.7	3.3	3.9	4.4	5.2	5.7	6.1	6.5	6.9	7.2	7.6
REF	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4
SSA	0.7	0.9	1.0	1.1	1.3	1.4	1.6	1.7	1.9	2.0	2.2
USA	2.7	3.7	4.7	5.1	5.4	5.5	5.5	5.5	5.3	5.4	5.4

Table 1160: MAgPIE new_input — Productivity—Yield—Crops—Cereals (t DM/ha) [PART 1/2]

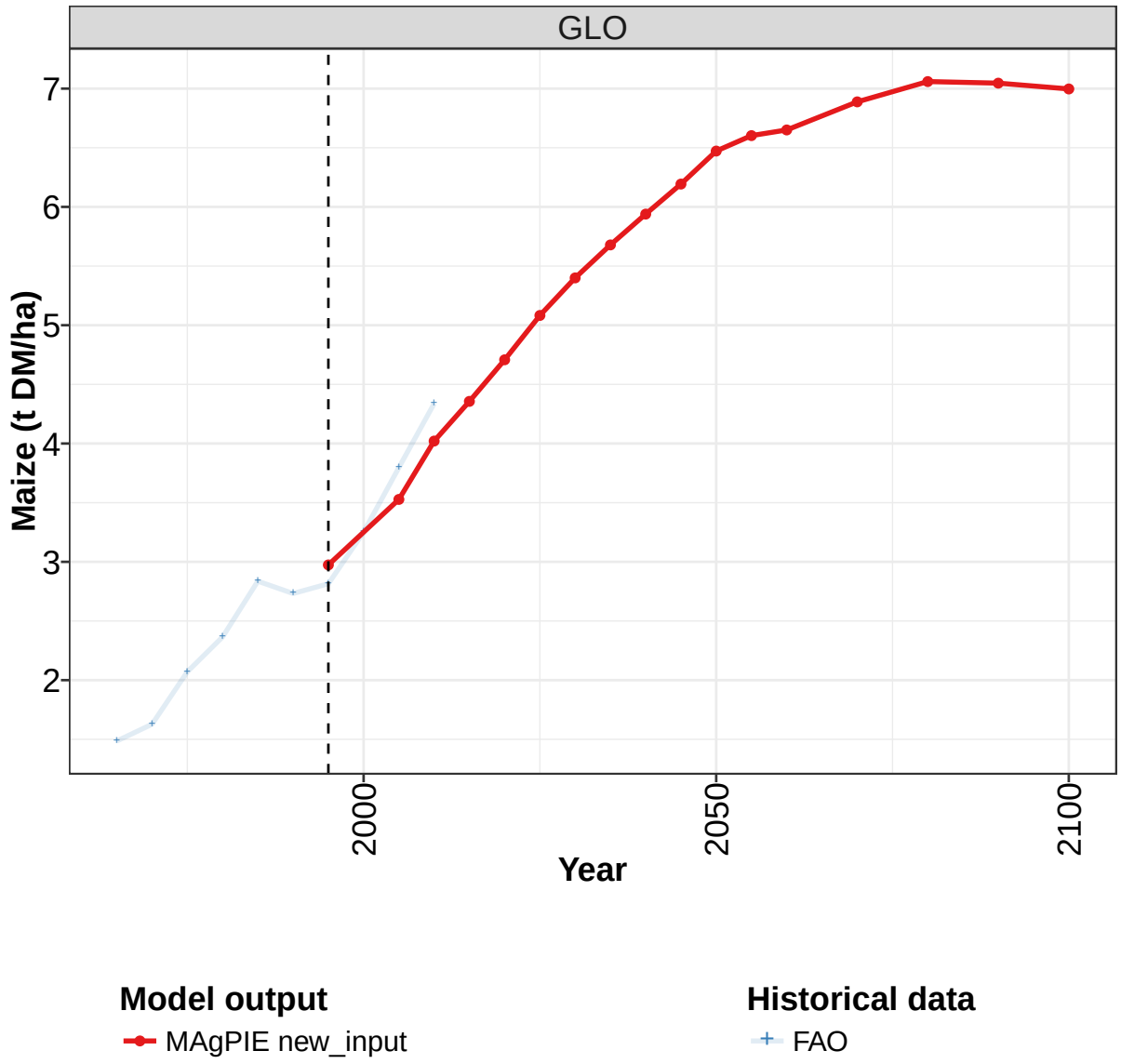
	2055	2060	2070	2080	2090	2100
GLO	4.9	5.0	5.2	5.3	5.5	5.6
CAZ	2.3	2.3	2.3	2.3	2.3	2.3
CHA	12.2	12.3	12.4	12.7	12.6	12.6
EUR	7.3	7.3	7.3	7.3	7.3	7.3
IND	4.6	4.6	4.7	4.6	4.5	4.5
LAM	4.4	4.4	4.4	4.4	4.5	4.5
MEA	3.3	3.4	3.6	4.0	4.5	4.6
NEU	7.8	7.6	7.8	8.0	7.9	7.8
OAS	7.8	8.2	8.5	8.6	8.8	8.9
REF	1.4	1.4	1.5	1.5	1.5	1.6
SSA	2.5	2.7	3.5	3.8	3.8	3.9
USA	5.4	5.3	5.1	4.9	4.8	4.6

Table 1161: MAgPIE new_input — Productivity—Yield—Crops—Cereals (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.19	1.35	1.55	1.98	2.14	2.15	2.38	2.62	2.97
CAZ	0.53	0.53	0.68	0.69	1.22	1.44	1.63	1.66	1.79	1.94
CHA	2.01	2.47	3.02	3.56	3.71	4.26	4.82	5.15	5.92	6.79
EUR	1.55	1.73	2.15	2.64	3.46	3.64	3.61	3.83	4.17	4.34
IND	0.73	1.00	1.12	1.22	1.46	1.77	2.01	2.18	2.37	2.79
LAM	0.98	1.08	1.15	1.30	1.70	1.49	1.70	1.94	2.18	2.78
MEA	0.49	0.52	0.61	0.68	0.80	0.92	0.97	0.99	1.28	1.29
NEU	0.86	0.90	1.22	1.35	1.59	1.77	1.69	1.73	2.11	2.19
OAS	1.18	1.36	1.47	1.68	1.98	2.06	2.34	2.68	3.00	3.39
REF	0.58	0.92	0.68	0.92	1.24	1.62	0.99	0.98	1.20	1.12
SSA	0.44	0.51	0.61	0.65	0.69	0.73	0.74	0.83	0.95	1.14
USA	1.76	1.69	2.16	2.43	3.22	3.00	2.92	3.93	4.61	5.67

Table 1162: FAO — Productivity—Yield—Crops—Cereals (t DM/ha)

52.1.2 Cereals—Maize



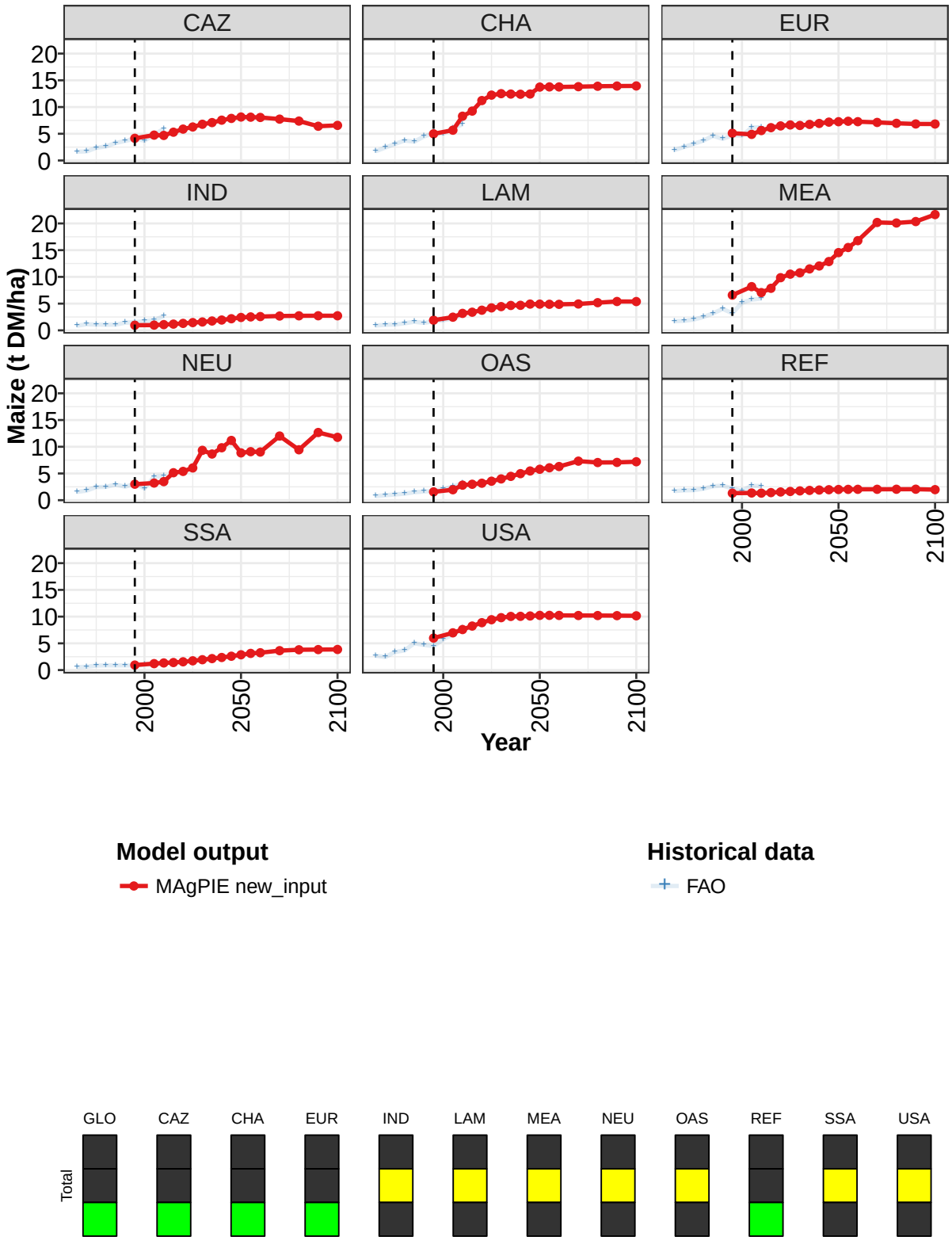


Figure 310: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Maize (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.0	3.5	4.0	4.4	4.7	5.1	5.4	5.7	5.9	6.2	6.5
CAZ	4.2	4.7	4.7	5.3	5.9	6.3	6.8	7.1	7.5	7.9	8.1
CHA	5.0	5.7	8.3	9.2	11.2	12.2	12.5	12.4	12.4	12.4	13.7
EUR	5.1	4.9	5.6	6.1	6.5	6.6	6.6	6.8	6.9	7.2	7.3
IND	1.0	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.9	2.2	2.4
LAM	1.9	2.5	3.2	3.4	3.8	4.2	4.4	4.7	4.7	4.9	4.9
MEA	6.6	8.2	7.1	7.9	9.9	10.5	10.8	11.5	12.0	12.9	14.5
NEU	3.0	3.2	3.5	5.1	5.4	6.0	9.3	8.6	9.8	11.2	8.9
OAS	1.6	2.0	2.8	3.0	3.2	3.6	4.0	4.5	5.0	5.5	5.8
REF	1.3	1.4	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.0
SSA	0.9	1.2	1.3	1.4	1.5	1.7	1.9	2.1	2.4	2.6	2.9
USA	6.0	7.0	7.6	8.2	8.9	9.4	9.8	10.0	10.1	10.1	10.2

Table 1163: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Maize (t DM/ha) [PART 1/2]

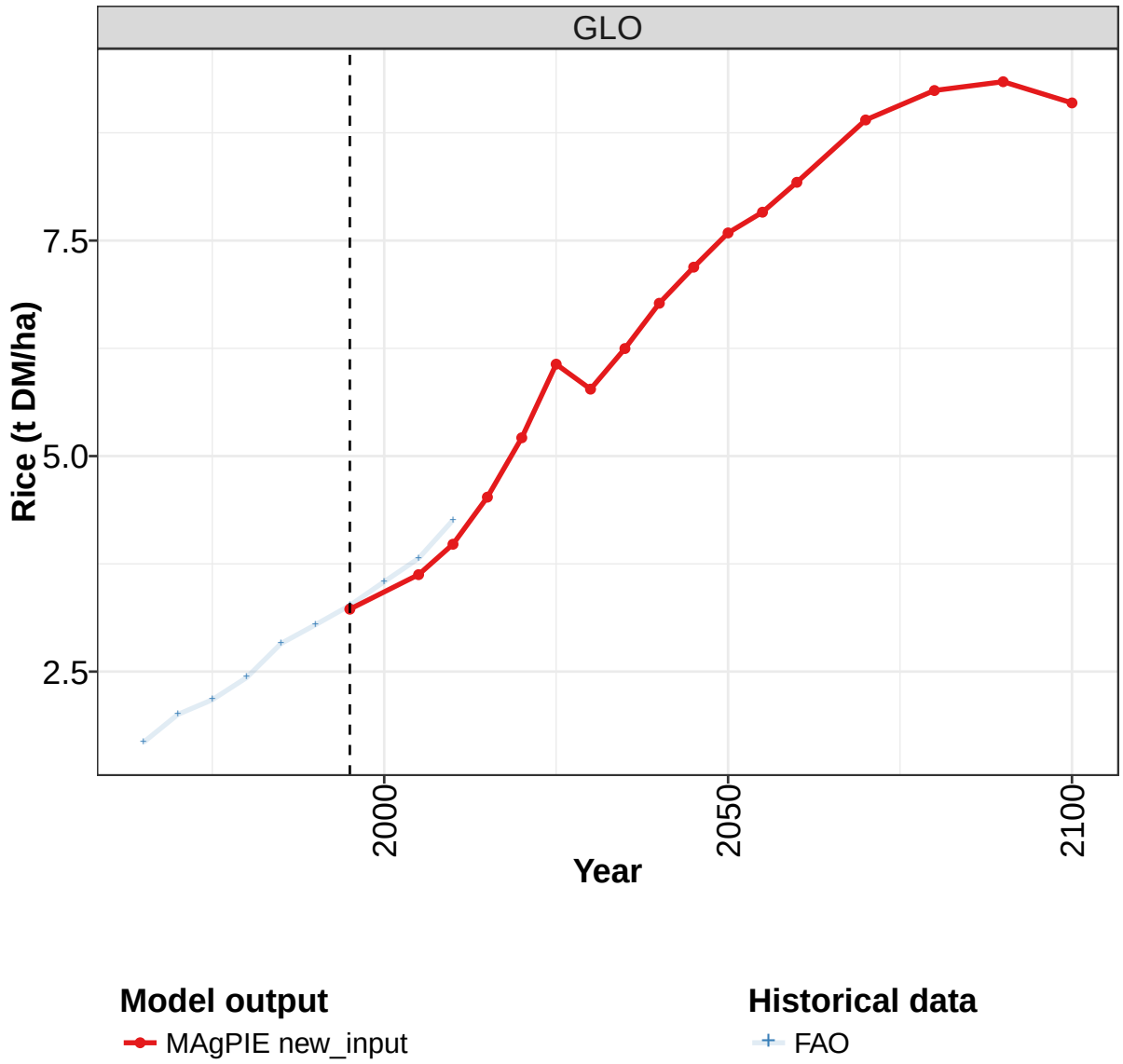
	2055	2060	2070	2080	2090	2100
GLO	6.6	6.7	6.9	7.1	7.0	7.0
CAZ	8.1	8.1	7.7	7.4	6.4	6.6
CHA	13.8	13.8	13.8	13.9	13.9	13.9
EUR	7.3	7.3	7.1	7.0	6.8	6.8
IND	2.5	2.6	2.7	2.7	2.7	2.7
LAM	4.9	4.9	4.9	5.2	5.4	5.4
MEA	15.5	16.8	20.2	20.1	20.4	21.7
NEU	9.1	9.0	12.0	9.4	12.7	11.8
OAS	6.1	6.3	7.3	7.0	7.1	7.2
REF	2.0	2.0	2.0	2.1	2.1	2.0
SSA	3.1	3.2	3.6	3.8	3.8	3.9
USA	10.2	10.2	10.2	10.2	10.2	10.2

Table 1164: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Maize (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.49	1.63	2.07	2.37	2.84	2.73	2.81	3.25	3.80	4.34
CAZ	1.65	1.69	2.36	2.62	3.27	3.65	4.11	3.70	4.85	5.92
CHA	1.73	2.42	3.10	3.74	3.52	4.49	5.11	5.02	6.03	6.75
EUR	1.96	2.53	3.12	3.71	4.62	4.04	4.70	4.64	6.16	6.21
IND	0.86	1.13	1.08	1.05	1.06	1.43	1.53	1.74	1.92	2.67
LAM	0.90	1.04	1.10	1.32	1.60	1.40	1.70	1.88	2.22	2.85
MEA	1.71	1.79	2.02	2.50	3.18	4.01	3.19	5.19	5.74	5.96
NEU	1.55	1.79	2.45	2.49	2.94	2.52	3.09	2.20	4.42	4.49
OAS	0.78	0.92	1.07	1.22	1.49	1.63	1.74	2.07	2.55	3.25
REF	1.71	1.85	1.88	2.15	2.61	2.73	2.20	1.75	2.71	2.64
SSA	0.53	0.64	0.82	0.88	0.86	0.87	0.83	1.05	1.07	1.36
USA	2.69	2.44	3.38	3.68	5.01	4.70	4.47	5.77	6.64	7.79

Table 1165: FAO — Productivity—Yield—Crops—Cereals—Maize (t DM/ha)

52.1.3 Cereals—Rice



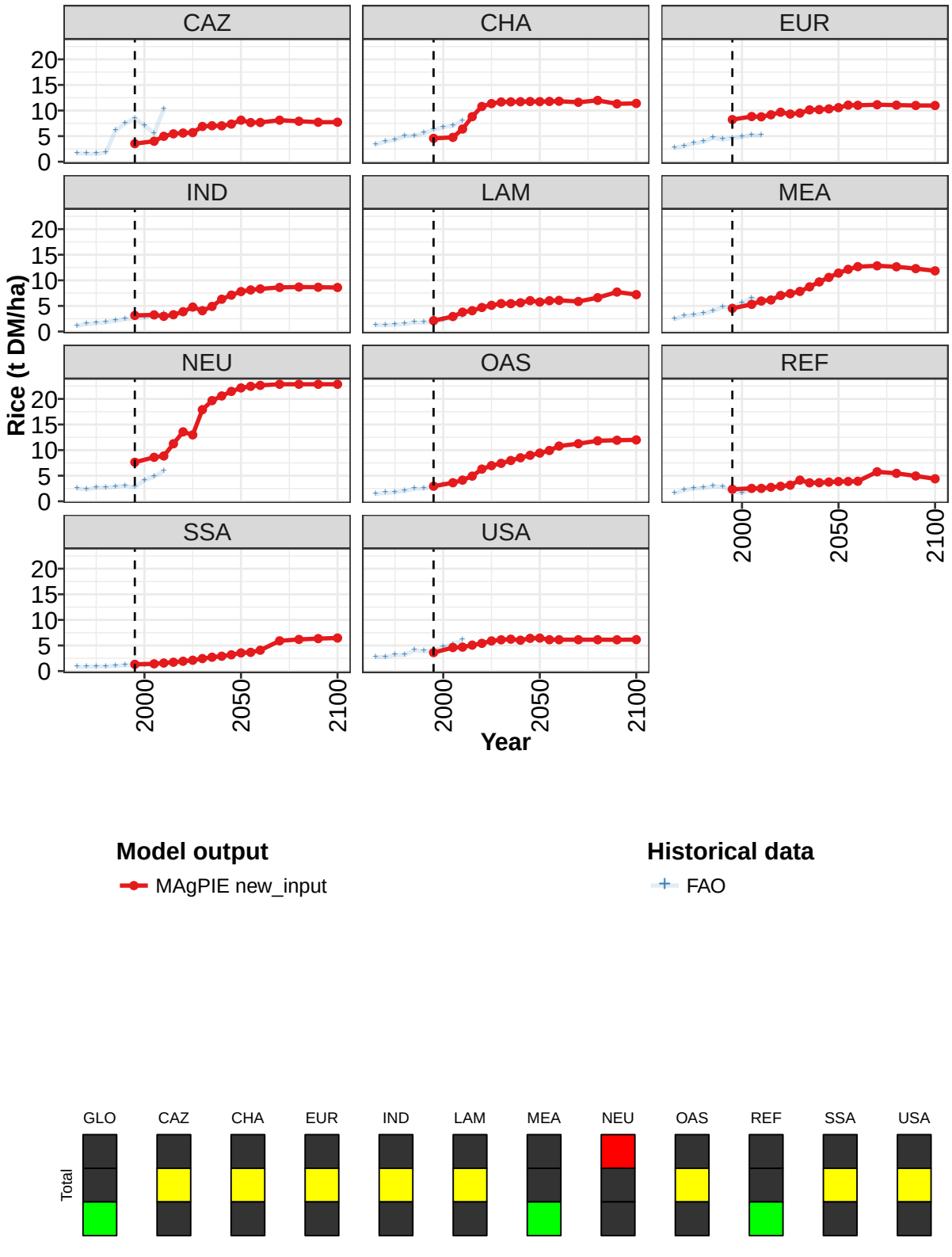


Figure 311: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Rice (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.2	3.6	4.0	4.5	5.2	6.1	5.8	6.2	6.8	7.2	7.6
CAZ	3.5	4.0	5.0	5.5	5.6	5.7	6.9	7.0	7.0	7.4	8.1
CHA	4.6	4.8	6.4	8.8	10.8	11.4	11.7	11.7	11.7	11.8	11.7
EUR	8.2	8.8	8.8	9.2	9.7	9.3	9.5	10.1	10.2	10.3	10.6
IND	3.1	3.2	3.0	3.3	3.9	4.8	4.1	4.9	6.3	7.1	7.8
LAM	2.1	2.9	3.8	4.1	4.7	5.1	5.5	5.4	5.6	6.0	5.8
MEA	4.5	5.3	6.0	6.2	7.0	7.4	7.8	8.7	9.7	10.6	11.4
NEU	7.6	8.6	8.9	11.2	13.6	13.0	17.9	19.7	20.6	21.5	22.1
OAS	3.0	3.6	4.1	4.9	6.3	7.0	7.4	8.0	8.5	9.0	9.4
REF	2.3	2.5	2.5	2.7	2.9	3.2	4.1	3.6	3.6	3.7	3.9
SSA	1.3	1.4	1.6	1.7	1.9	2.1	2.4	2.7	2.9	3.2	3.6
USA	3.6	4.6	4.7	5.1	5.4	5.9	6.1	6.2	6.0	6.4	6.4

Table 1166: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Rice (t DM/ha) [PART 1/2]

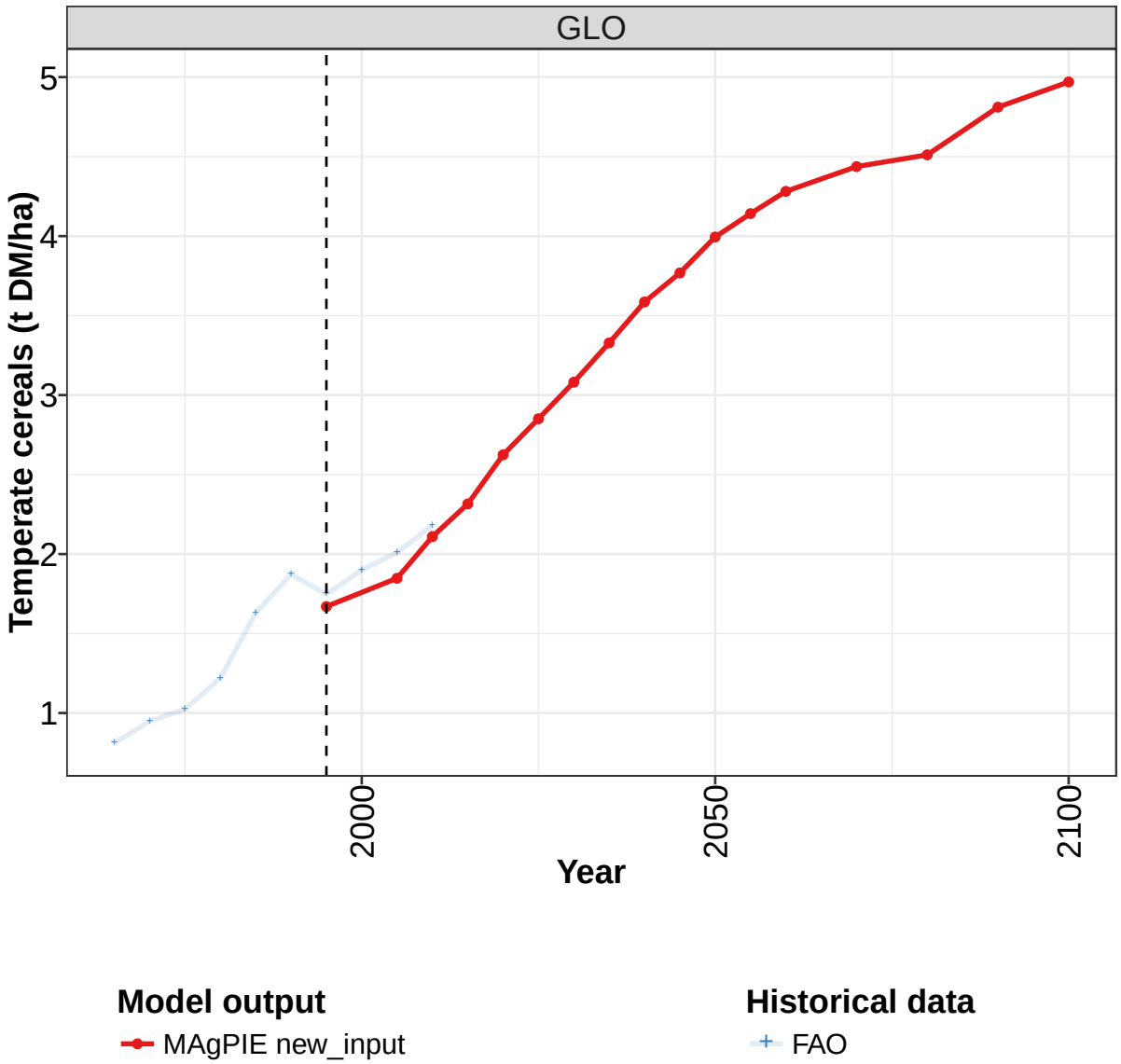
	2055	2060	2070	2080	2090	2100
GLO	7.8	8.2	8.9	9.2	9.3	9.1
CAZ	7.7	7.7	8.1	7.9	7.7	7.7
CHA	11.8	11.8	11.6	12.0	11.3	11.4
EUR	11.1	11.0	11.1	11.1	11.0	11.0
IND	8.1	8.3	8.6	8.7	8.6	8.6
LAM	6.0	6.1	5.9	6.6	7.7	7.2
MEA	12.2	12.7	12.8	12.6	12.3	11.9
NEU	22.5	22.6	22.9	22.9	22.9	22.9
OAS	9.9	10.8	11.3	11.8	11.9	12.0
REF	3.9	3.9	5.8	5.5	4.9	4.4
SSA	3.7	4.1	5.9	6.2	6.3	6.5
USA	6.1	6.1	6.1	6.1	6.1	6.1

Table 1167: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Rice (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.7	2.0	2.2	2.4	2.8	3.0	3.3	3.5	3.8	4.3
CAZ	1.7	1.6	1.5	1.8	6.1	7.5	8.5	7.0	5.5	10.3
CHA	3.4	3.9	4.3	5.0	5.1	5.6	6.2	6.7	7.0	8.0
EUR	2.7	3.0	3.6	3.9	4.6	4.4	4.6	4.8	5.2	5.1
IND	1.1	1.5	1.6	1.8	2.1	2.4	2.6	2.7	3.1	3.5
LAM	1.3	1.3	1.3	1.4	1.8	1.7	2.0	2.3	2.6	3.0
MEA	2.4	3.0	3.2	3.5	4.0	4.7	4.8	5.6	6.5	6.0
NEU	2.5	2.3	2.7	2.7	2.9	3.0	2.7	4.1	4.8	5.9
OAS	1.4	1.7	1.8	2.0	2.4	2.5	2.9	3.3	3.5	3.9
REF	1.6	2.2	2.5	2.6	2.9	2.9	1.9	1.6	2.4	2.7
SSA	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.7
USA	2.7	2.7	3.2	3.2	4.1	3.9	3.9	4.7	5.3	6.1

Table 1168: FAO — Productivity—Yield—Crops—Cereals—Rice (t DM/ha)

52.1.4 Cereals—Temperate cereals



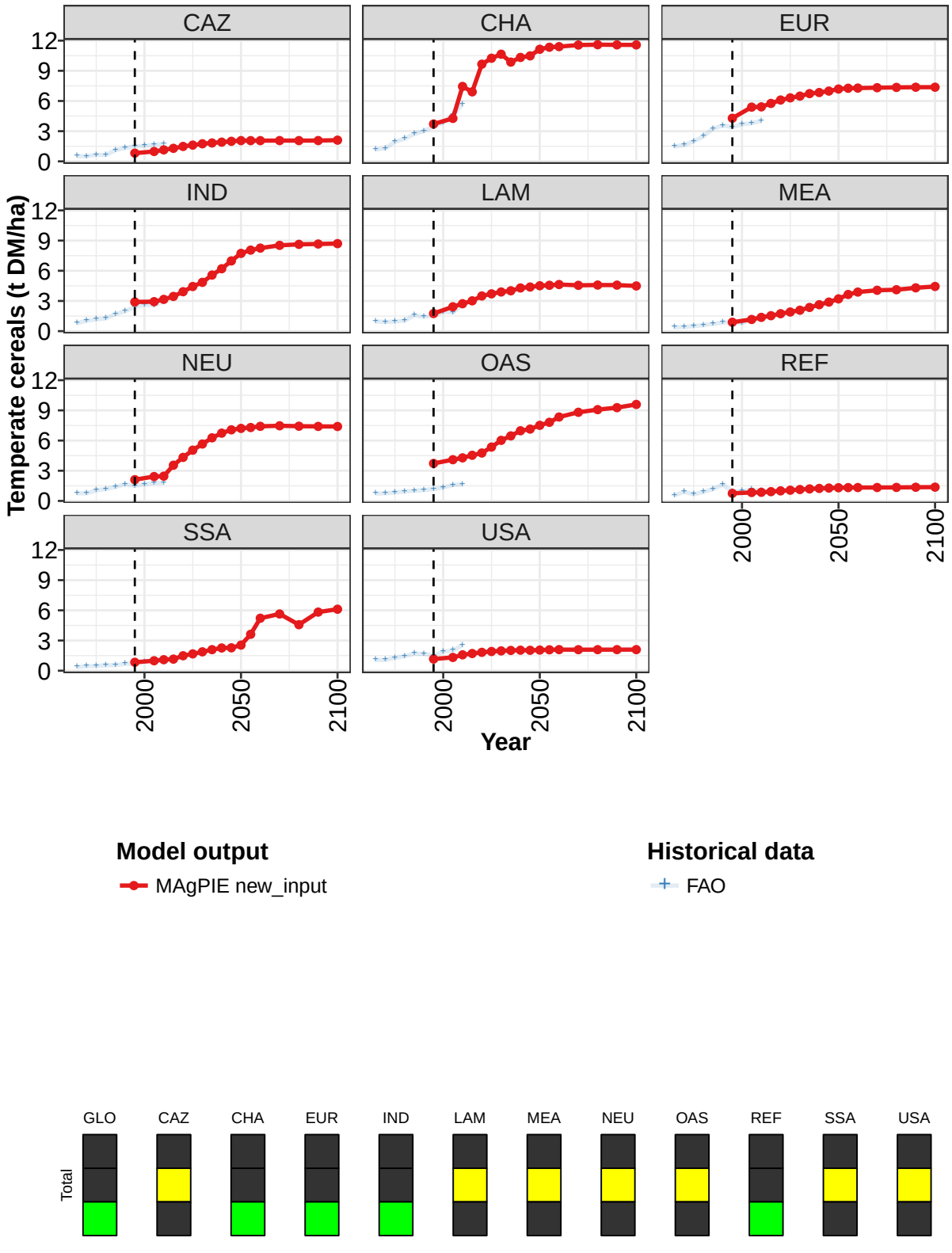


Figure 312: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.7	1.8	2.1	2.3	2.6	2.9	3.1	3.3	3.6	3.8	4.0
CAZ	0.8	1.0	1.1	1.3	1.5	1.6	1.7	1.8	1.9	2.0	2.1
CHA	3.7	4.3	7.4	6.9	9.7	10.3	10.7	9.9	10.3	10.5	11.1
EUR	4.3	5.4	5.4	5.8	6.1	6.3	6.5	6.7	6.8	7.0	7.2
IND	2.9	2.9	3.2	3.5	3.9	4.4	4.9	5.6	6.2	7.0	7.7
LAM	1.8	2.4	2.7	3.0	3.5	3.7	3.9	4.0	4.3	4.4	4.5
MEA	0.9	1.2	1.4	1.5	1.7	1.9	2.1	2.4	2.6	2.9	3.2
NEU	2.1	2.4	2.5	3.6	4.3	5.0	5.7	6.3	6.7	7.1	7.2
OAS	3.7	4.1	4.3	4.5	4.8	5.4	6.0	6.5	7.0	7.1	7.5
REF	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.3	1.3
SSA	0.8	1.0	1.1	1.2	1.5	1.7	1.9	2.1	2.3	2.3	2.5
USA	1.2	1.3	1.6	1.7	1.8	1.9	2.0	2.0	2.0	2.0	2.1

Table 1169: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha) [PART 1/2]

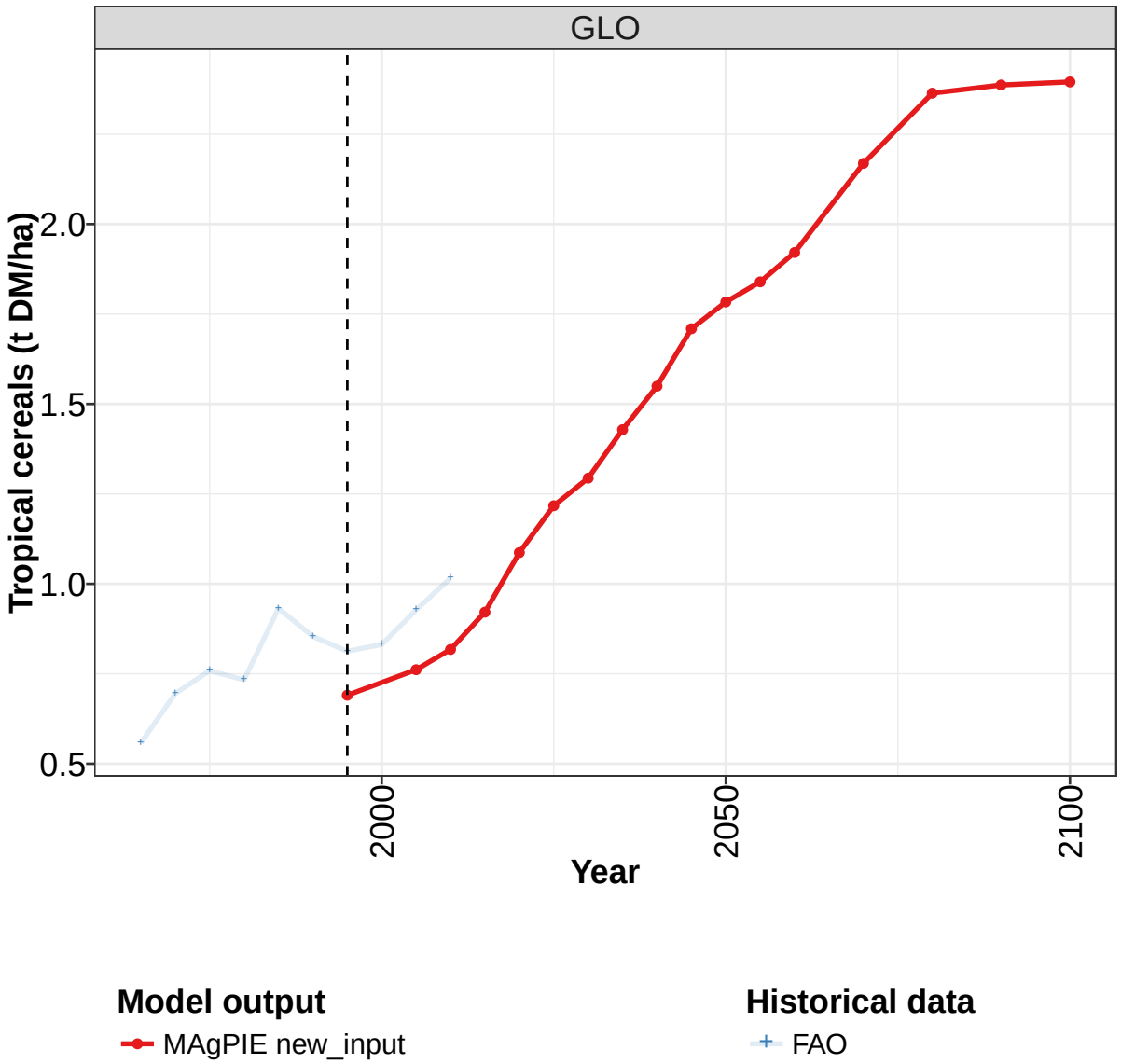
	2055	2060	2070	2080	2090	2100
GLO	4.1	4.3	4.4	4.5	4.8	5.0
CAZ	2.1	2.1	2.1	2.1	2.1	2.1
CHA	11.3	11.4	11.6	11.6	11.6	11.6
EUR	7.3	7.3	7.3	7.4	7.4	7.4
IND	8.1	8.3	8.5	8.6	8.7	8.7
LAM	4.6	4.6	4.6	4.6	4.6	4.5
MEA	3.6	3.9	4.1	4.1	4.3	4.4
NEU	7.3	7.4	7.5	7.4	7.4	7.4
OAS	7.8	8.3	8.8	9.1	9.3	9.6
REF	1.3	1.3	1.3	1.3	1.4	1.4
SSA	3.6	5.2	5.6	4.6	5.8	6.1
USA	2.1	2.1	2.1	2.1	2.1	2.1

Table 1170: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.81	0.95	1.03	1.22	1.63	1.87	1.75	1.90	2.01	2.18
CAZ	0.51	0.51	0.65	0.63	1.12	1.34	1.50	1.54	1.65	1.71
CHA	1.19	1.28	1.96	2.25	2.73	3.01	3.49	3.86	4.66	5.64
EUR	1.50	1.61	2.00	2.48	3.26	3.57	3.41	3.67	3.80	4.01
IND	0.79	1.04	1.17	1.27	1.69	1.97	2.41	2.63	2.55	2.96
LAM	0.96	0.91	0.95	1.05	1.57	1.43	1.49	1.93	1.86	2.62
MEA	0.40	0.42	0.51	0.60	0.72	0.86	0.92	0.78	1.21	1.26
NEU	0.75	0.77	1.04	1.19	1.39	1.66	1.50	1.66	1.78	1.79
OAS	0.73	0.77	0.85	0.94	1.02	1.07	1.19	1.33	1.58	1.66
REF	0.55	0.90	0.65	0.89	1.18	1.60	0.95	0.96	1.14	1.01
SSA	0.37	0.45	0.47	0.55	0.55	0.68	0.73	0.90	1.02	1.16
USA	1.06	1.08	1.27	1.45	1.70	1.67	1.53	1.90	2.02	2.53

Table 1171: FAO — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha)

52.1.5 Cereals—Tropical cereals



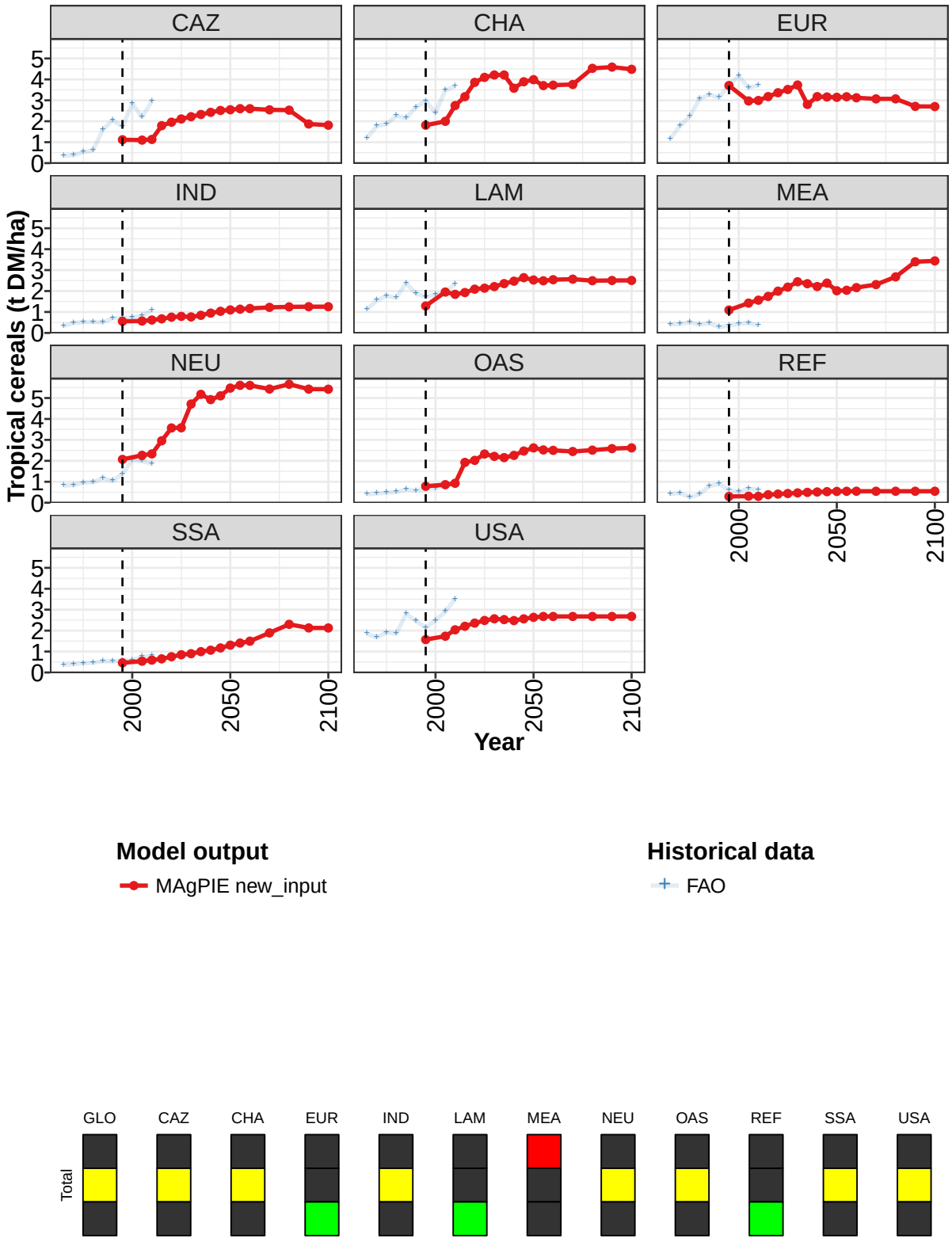


Figure 313: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.69	0.76	0.82	0.92	1.09	1.22	1.29	1.43	1.55	1.71	1.78
CAZ	1.12	1.10	1.13	1.79	1.96	2.11	2.22	2.32	2.43	2.52	2.55
CHA	1.81	2.00	2.75	3.17	3.86	4.10	4.21	4.21	3.58	3.89	3.99
EUR	3.71	2.97	2.99	3.18	3.36	3.52	3.73	2.81	3.18	3.16	3.14
IND	0.55	0.57	0.62	0.67	0.75	0.79	0.76	0.84	0.95	1.03	1.10
LAM	1.29	1.95	1.84	1.93	2.09	2.14	2.21	2.36	2.47	2.64	2.53
MEA	1.09	1.42	1.56	1.74	1.99	2.19	2.44	2.35	2.21	2.38	2.01
NEU	2.07	2.26	2.33	2.96	3.57	3.58	4.71	5.18	4.92	5.11	5.47
OAS	0.79	0.86	0.93	1.92	2.02	2.33	2.21	2.15	2.26	2.47	2.62
REF	0.30	0.31	0.30	0.38	0.41	0.44	0.47	0.49	0.51	0.53	0.54
SSA	0.46	0.54	0.59	0.65	0.75	0.85	0.90	1.00	1.07	1.17	1.30
USA	1.57	1.73	2.04	2.21	2.36	2.49	2.56	2.53	2.48	2.56	2.63

Table 1172: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha) [PART 1/2]

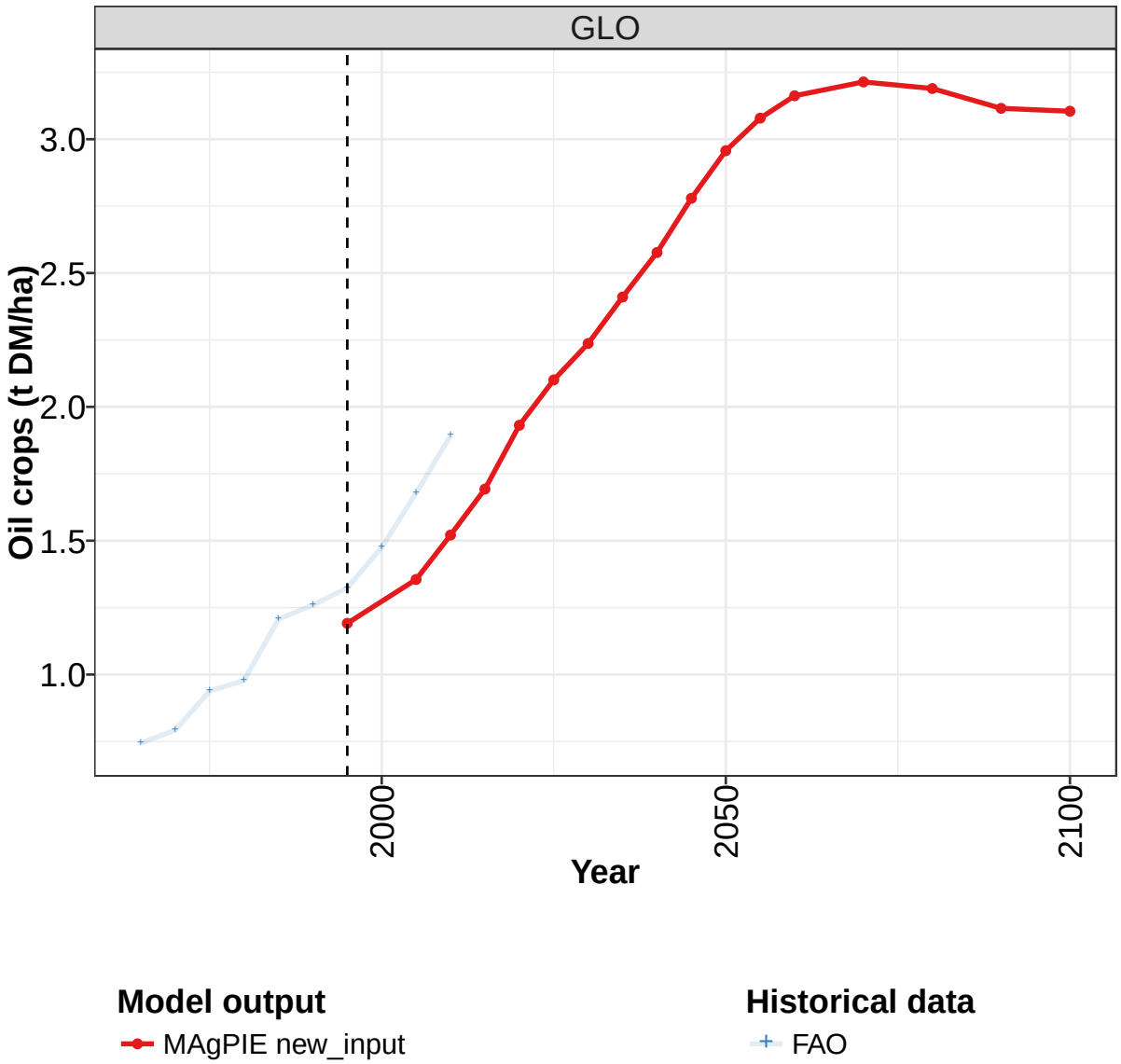
	2055	2060	2070	2080	2090	2100
GLO	1.84	1.92	2.17	2.36	2.39	2.40
CAZ	2.60	2.60	2.55	2.53	1.87	1.81
CHA	3.70	3.72	3.76	4.53	4.59	4.48
EUR	3.17	3.12	3.07	3.07	2.71	2.70
IND	1.13	1.17	1.22	1.24	1.25	1.25
LAM	2.49	2.54	2.57	2.49	2.51	2.51
MEA	2.04	2.16	2.31	2.68	3.40	3.44
NEU	5.61	5.60	5.43	5.66	5.43	5.42
OAS	2.52	2.50	2.45	2.51	2.58	2.62
REF	0.54	0.55	0.55	0.55	0.55	0.55
SSA	1.41	1.50	1.89	2.30	2.13	2.13
USA	2.68	2.68	2.68	2.68	2.68	2.68

Table 1173: MAgPIE new_input — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.56	0.69	0.76	0.73	0.93	0.85	0.81	0.83	0.93	1.02
CAZ	0.36	0.38	0.53	0.61	1.60	2.04	1.75	2.84	2.21	2.95
CHA	1.20	1.77	1.86	2.26	2.16	2.67	2.97	2.41	3.48	3.67
EUR	1.16	1.77	2.23	3.07	3.27	3.13	3.74	4.15	3.60	3.72
IND	0.33	0.48	0.51	0.53	0.50	0.71	0.72	0.74	0.82	1.07
LAM	1.11	1.55	1.77	1.68	2.38	1.89	1.73	1.82	1.96	2.35
MEA	0.40	0.44	0.50	0.40	0.47	0.27	0.35	0.43	0.47	0.35
NEU	0.81	0.84	0.96	0.98	1.17	1.04	1.38	2.04	1.99	1.86
OAS	0.40	0.44	0.47	0.51	0.63	0.58	0.62	0.70	0.79	0.88
REF	0.42	0.46	0.26	0.40	0.79	0.89	0.59	0.52	0.67	0.62
SSA	0.37	0.40	0.44	0.46	0.54	0.53	0.59	0.58	0.75	0.79
USA	1.85	1.68	1.90	1.86	2.81	2.45	2.15	2.48	2.91	3.51

Table 1174: FAO — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha)

52.1.6 Oil crops



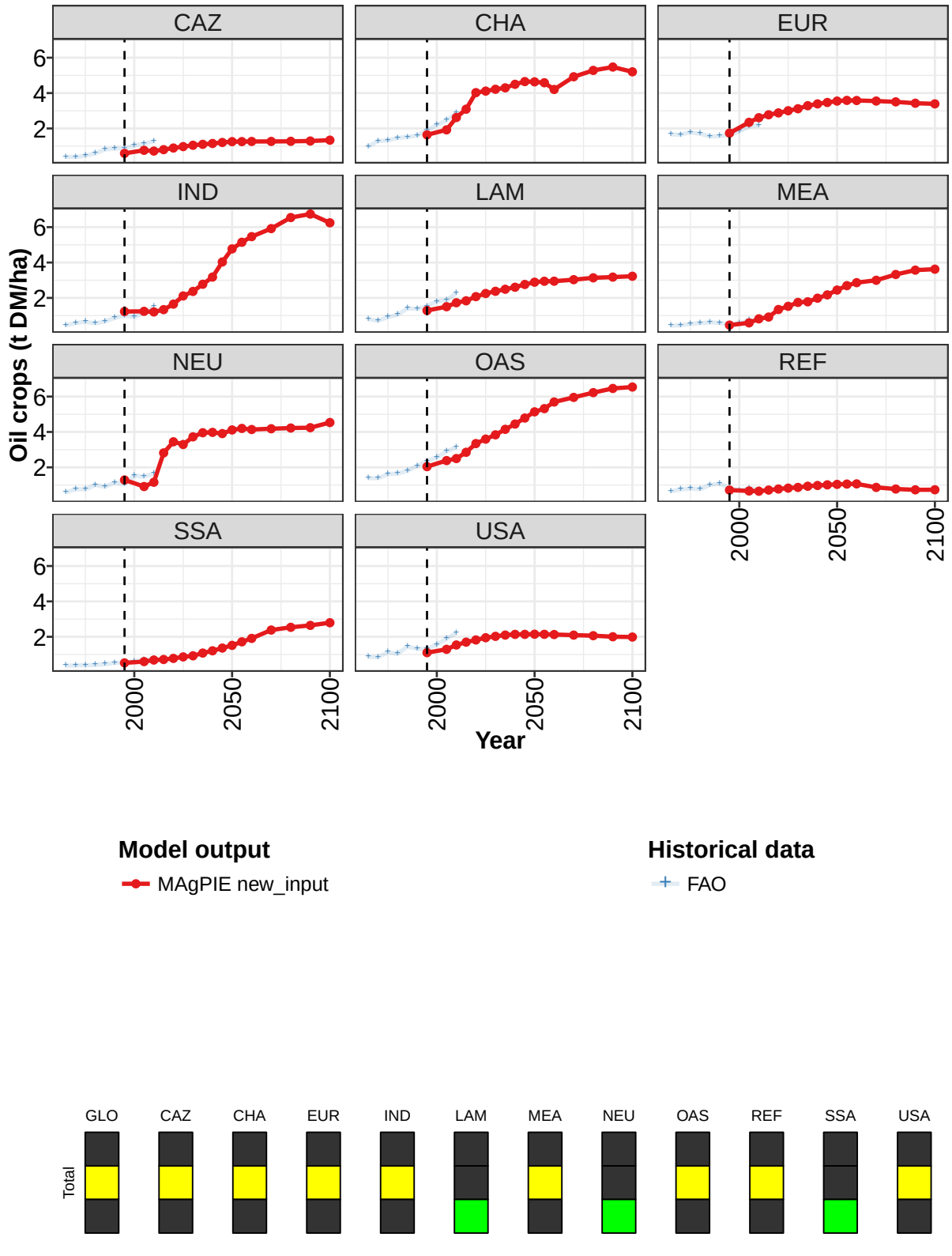


Figure 314: MAgPIE new_input — Productivity—Yield—Crops—Oil crops (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.19	1.36	1.52	1.69	1.93	2.10	2.24	2.41	2.58	2.78	2.96
CAZ	0.59	0.77	0.72	0.80	0.90	0.98	1.05	1.10	1.15	1.21	1.26
CHA	1.64	1.92	2.62	3.09	4.03	4.11	4.22	4.30	4.50	4.65	4.64
EUR	1.74	2.35	2.61	2.77	2.88	3.00	3.12	3.29	3.39	3.47	3.55
IND	1.23	1.24	1.21	1.34	1.65	2.11	2.37	2.77	3.18	4.03	4.77
LAM	1.29	1.50	1.73	1.84	2.07	2.25	2.37	2.49	2.60	2.76	2.89
MEA	0.46	0.59	0.82	0.92	1.34	1.53	1.75	1.78	1.98	2.17	2.44
NEU	1.29	0.92	1.16	2.82	3.45	3.29	3.72	3.96	3.98	3.91	4.11
OAS	2.04	2.38	2.50	2.85	3.34	3.60	3.84	4.15	4.45	4.79	5.14
REF	0.71	0.67	0.65	0.72	0.78	0.83	0.87	0.93	0.97	1.01	1.04
SSA	0.53	0.60	0.69	0.72	0.78	0.86	0.92	1.08	1.21	1.36	1.52
USA	1.10	1.29	1.54	1.70	1.82	1.95	2.03	2.10	2.14	2.14	2.15

Table 1175: MAgPIE new_input — Productivity—Yield—Crops—Oil crops (t DM/ha) [PART 1/2]

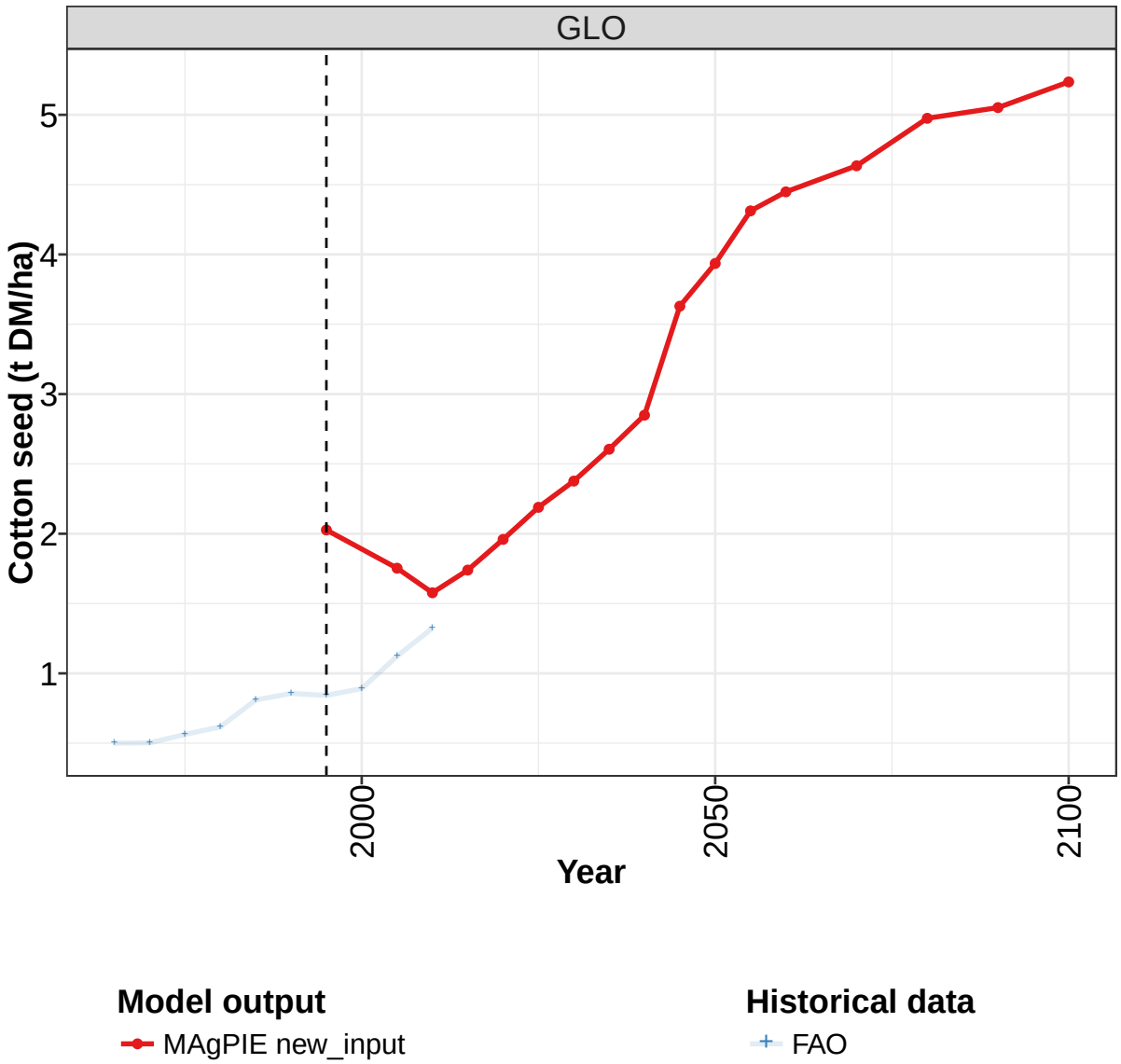
	2055	2060	2070	2080	2090	2100
GLO	3.08	3.16	3.21	3.19	3.12	3.10
CAZ	1.26	1.27	1.27	1.27	1.29	1.34
CHA	4.58	4.20	4.92	5.28	5.47	5.20
EUR	3.59	3.58	3.55	3.50	3.43	3.39
IND	5.15	5.46	5.92	6.54	6.74	6.24
LAM	2.94	2.94	3.03	3.14	3.18	3.22
MEA	2.69	2.86	3.00	3.32	3.57	3.62
NEU	4.20	4.14	4.18	4.22	4.24	4.53
OAS	5.32	5.69	5.95	6.22	6.46	6.54
REF	1.06	1.07	0.87	0.78	0.73	0.73
SSA	1.72	1.91	2.38	2.54	2.64	2.80
USA	2.14	2.13	2.09	2.06	2.00	1.99

Table 1176: MAgPIE new_input — Productivity—Yield—Crops—Oil crops (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.74	0.79	0.94	0.98	1.21	1.26	1.32	1.48	1.68	1.89
CAZ	0.40	0.38	0.46	0.59	0.81	0.87	0.87	1.04	1.15	1.27
CHA	0.98	1.29	1.33	1.47	1.52	1.61	1.91	2.19	2.46	2.88
EUR	1.66	1.65	1.79	1.70	1.55	1.57	1.64	1.83	2.10	2.18
IND	0.45	0.58	0.65	0.56	0.68	0.87	0.99	0.92	1.14	1.50
LAM	0.79	0.71	0.92	1.05	1.41	1.38	1.53	1.80	1.86	2.29
MEA	0.44	0.46	0.53	0.57	0.61	0.59	0.49	0.56	0.75	0.68
NEU	0.59	0.77	0.76	1.00	0.90	1.14	1.05	1.53	1.47	1.64
OAS	1.39	1.39	1.62	1.65	1.81	2.07	2.35	2.57	2.91	3.14
REF	0.65	0.75	0.80	0.76	1.01	1.07	0.84	0.70	0.82	0.75
SSA	0.37	0.38	0.39	0.41	0.45	0.52	0.54	0.61	0.70	0.74
USA	0.85	0.85	1.12	1.04	1.45	1.33	1.31	1.57	1.89	2.22

Table 1177: FAO — Productivity—Yield—Crops—Oil crops (t DM/ha)

52.1.7 Oil crops—Cotton seed



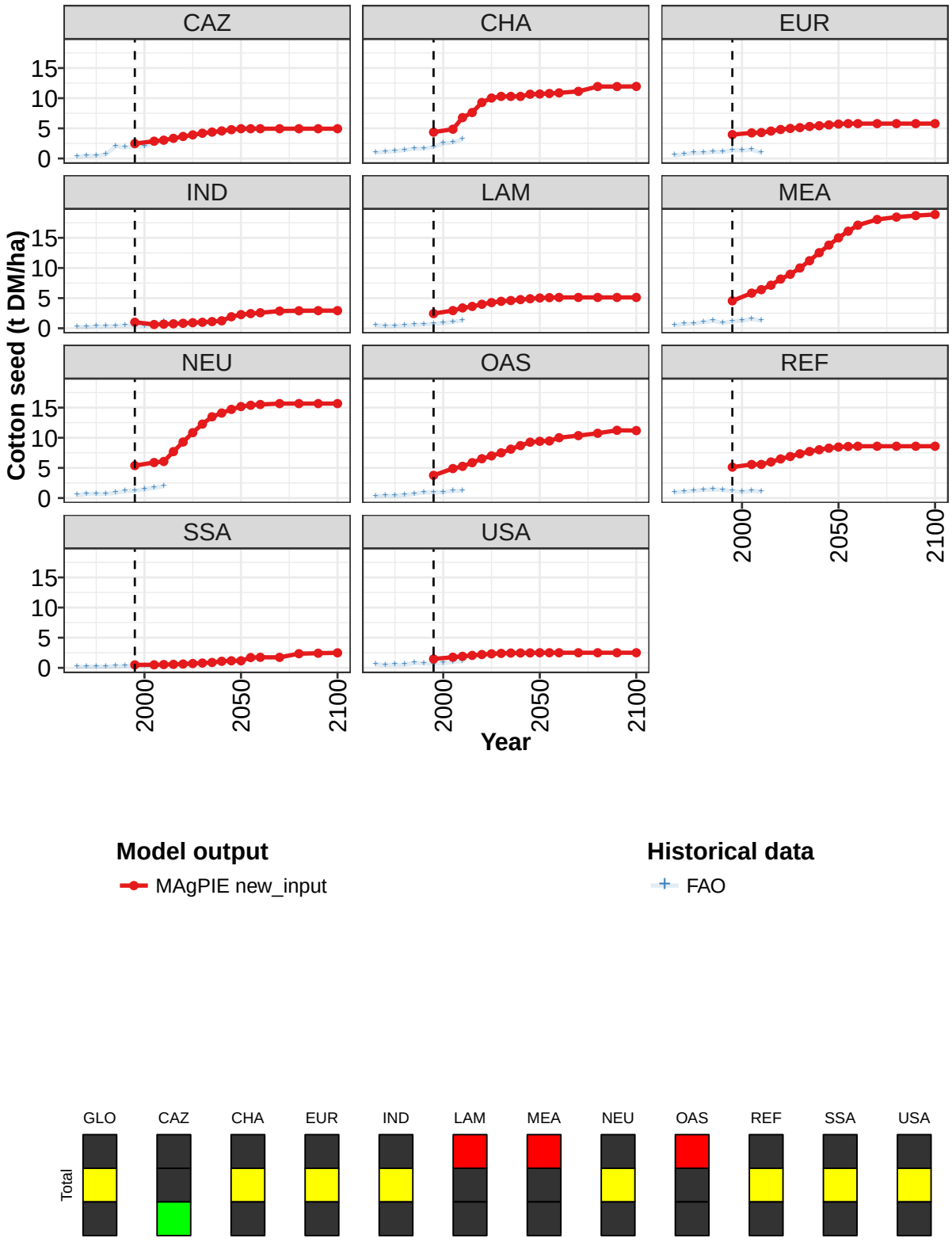


Figure 315: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.0	1.8	1.6	1.7	2.0	2.2	2.4	2.6	2.8	3.6	3.9
CAZ	2.5	2.9	3.0	3.3	3.7	3.9	4.2	4.4	4.6	4.8	4.9
CHA	4.4	4.9	6.8	7.6	9.3	10.0	10.3	10.3	10.3	10.7	10.7
EUR	4.0	4.2	4.3	4.5	4.8	5.0	5.1	5.3	5.4	5.6	5.7
IND	1.0	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.9	2.3
LAM	2.4	2.9	3.4	3.6	4.0	4.3	4.5	4.6	4.8	4.9	5.0
MEA	4.5	5.8	6.4	7.1	8.2	9.0	10.0	11.2	12.5	13.8	15.0
NEU	5.4	5.9	6.1	7.7	9.3	10.8	12.3	13.5	14.1	14.7	15.2
OAS	3.8	4.9	5.3	5.9	6.5	7.0	7.5	8.1	8.7	9.3	9.4
REF	5.1	5.6	5.6	6.0	6.5	6.9	7.3	7.7	8.0	8.3	8.5
SSA	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.1	1.2	1.2
USA	1.5	1.8	1.9	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.5

Table 1178: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha) [PART 1/2]

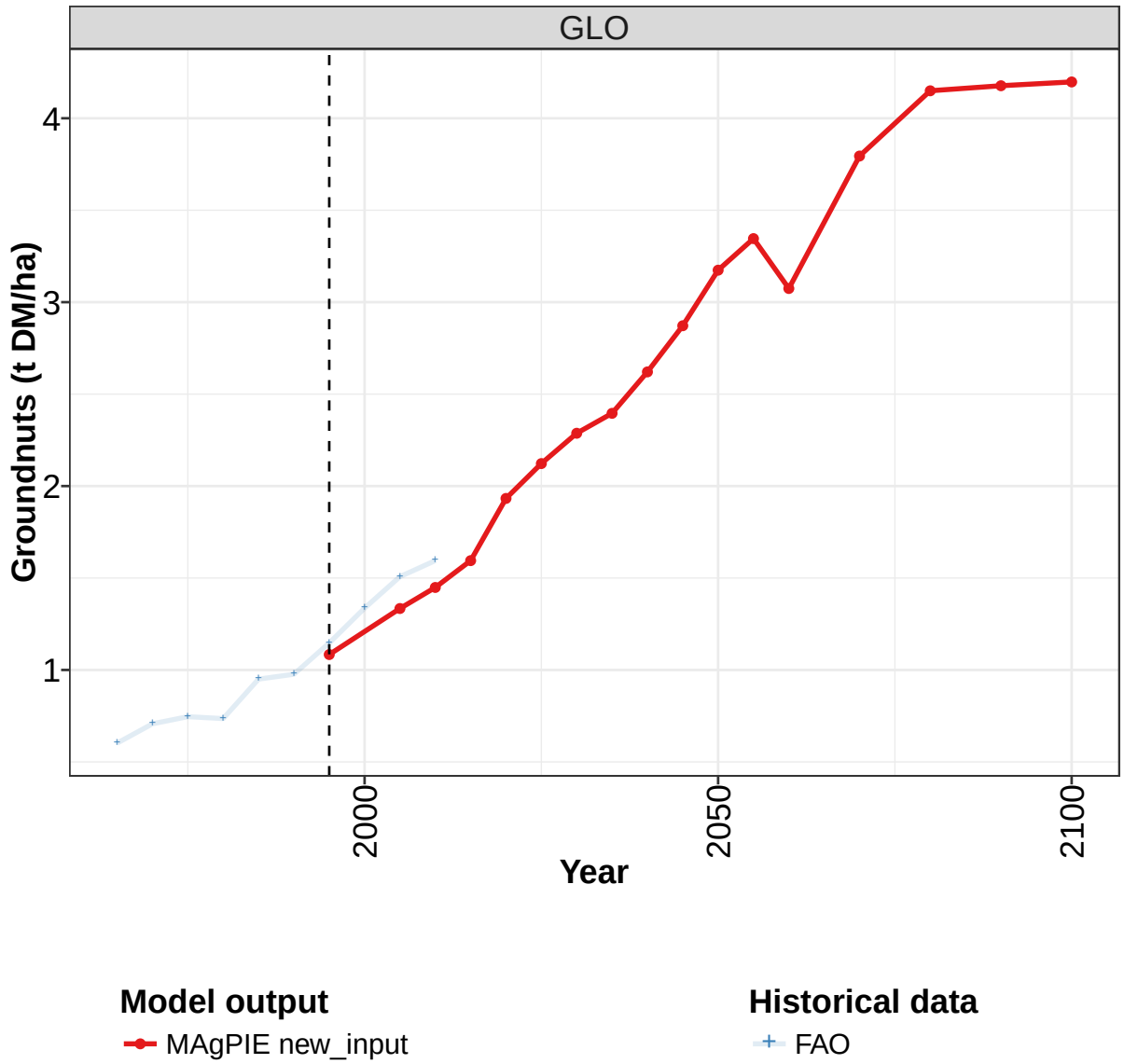
	2055	2060	2070	2080	2090	2100
GLO	4.3	4.4	4.6	5.0	5.1	5.2
CAZ	4.9	4.9	4.9	4.9	4.9	4.9
CHA	10.8	10.9	11.1	11.9	11.9	12.0
EUR	5.8	5.8	5.8	5.8	5.8	5.8
IND	2.4	2.6	2.9	2.9	2.9	2.9
LAM	5.1	5.1	5.1	5.1	5.1	5.1
MEA	16.1	17.1	18.0	18.4	18.7	18.9
NEU	15.4	15.5	15.7	15.7	15.7	15.7
OAS	9.5	10.0	10.4	10.7	11.2	11.2
REF	8.6	8.6	8.6	8.6	8.6	8.6
SSA	1.7	1.7	1.7	2.3	2.4	2.5
USA	2.5	2.5	2.5	2.5	2.5	2.5

Table 1179: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.50	0.50	0.56	0.62	0.81	0.86	0.84	0.89	1.12	1.32
CAZ	0.32	0.41	0.44	0.66	2.02	1.84	1.95	2.03	2.51	2.76
CHA	1.00	1.10	1.22	1.40	1.64	1.67	1.91	2.49	2.68	3.18
EUR	0.52	0.73	0.90	0.93	1.09	1.12	1.35	1.34	1.44	0.99
IND	0.23	0.24	0.30	0.32	0.39	0.45	0.49	0.39	0.76	1.14
LAM	0.49	0.36	0.38	0.42	0.56	0.66	0.68	0.90	1.07	1.30
MEA	0.52	0.68	0.81	1.01	1.23	0.89	1.14	1.26	1.53	1.27
NEU	0.47	0.70	0.70	0.71	0.86	1.15	1.23	1.46	1.72	1.93
OAS	0.33	0.41	0.36	0.49	0.71	0.93	0.94	0.97	1.17	1.18
REF	0.92	1.06	1.20	1.32	1.43	1.32	1.17	0.99	1.21	1.08
SSA	0.15	0.20	0.20	0.22	0.26	0.32	0.34	0.33	0.41	0.47
USA	0.61	0.46	0.53	0.51	0.82	0.75	0.63	0.77	0.99	1.08

Table 1180: FAO — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha)

52.1.8 Oil crops—Groundnuts



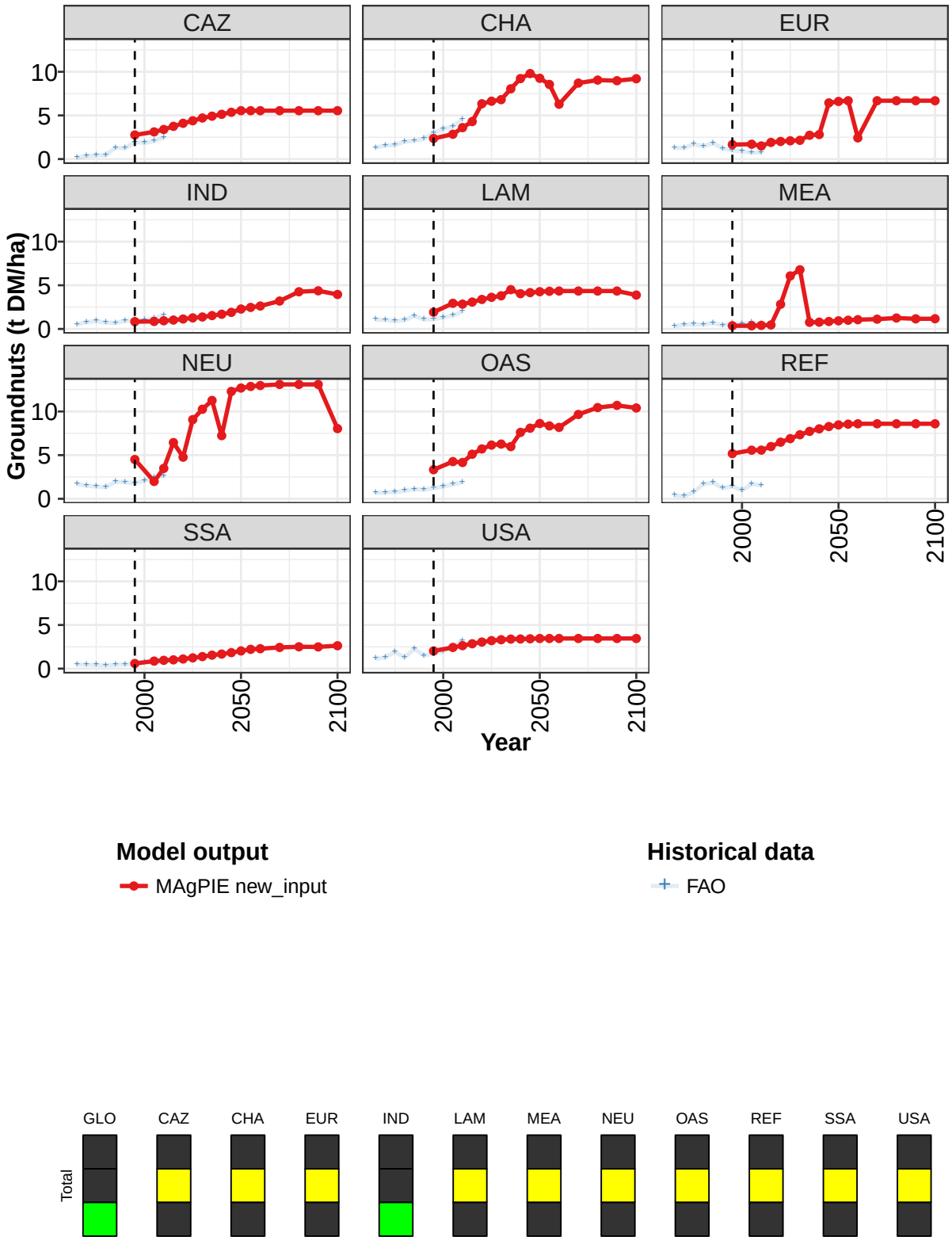


Figure 316: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.1	1.3	1.4	1.6	1.9	2.1	2.3	2.4	2.6	2.9	3.2
CAZ	2.8	3.1	3.4	3.7	4.1	4.4	4.7	4.9	5.1	5.4	5.5
CHA	2.4	2.8	3.6	4.3	6.3	6.6	6.8	8.0	9.2	9.8	9.3
EUR	1.7	1.7	1.5	1.9	2.0	2.1	2.1	2.7	2.8	6.4	6.6
IND	0.8	0.9	0.9	1.0	1.1	1.3	1.4	1.5	1.7	1.9	2.3
LAM	1.9	2.9	2.8	3.1	3.4	3.6	3.8	4.5	4.0	4.2	4.3
MEA	0.4	0.4	0.4	0.5	2.8	6.1	6.8	0.8	0.8	0.9	0.9
NEU	4.5	2.0	3.5	6.4	4.8	9.1	10.3	11.3	7.2	12.3	12.7
OAS	3.3	4.3	4.2	5.1	5.7	6.2	6.3	6.0	7.6	8.1	8.6
REF	5.2	5.6	5.6	6.0	6.5	6.9	7.3	7.7	8.0	8.3	8.5
SSA	0.6	0.9	1.0	1.0	1.1	1.2	1.4	1.5	1.7	1.8	2.0
USA	2.0	2.4	2.6	2.9	3.0	3.2	3.3	3.4	3.4	3.4	3.5

Table 1181: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha) [PART 1/2]

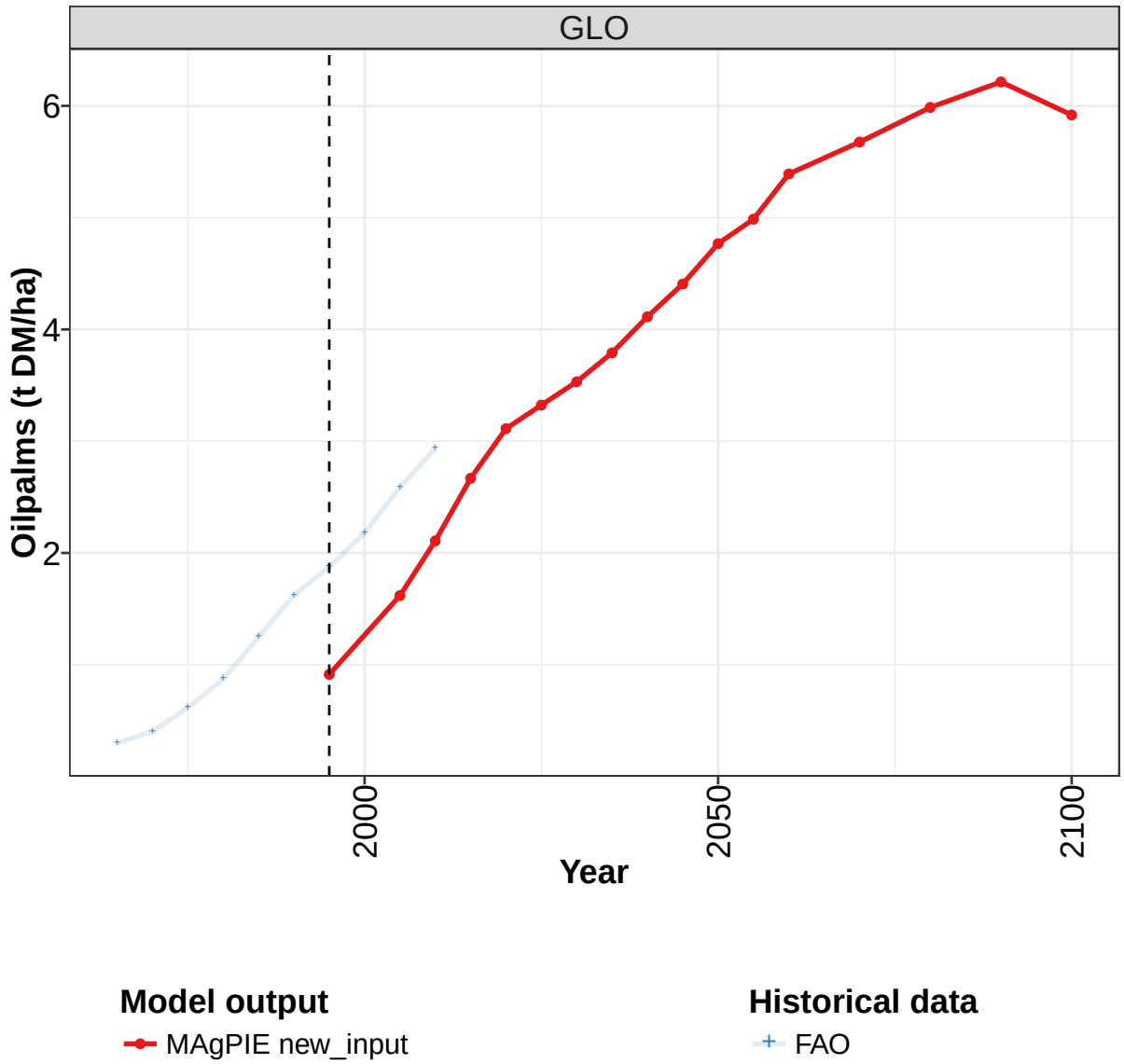
	2055	2060	2070	2080	2090	2100
GLO	3.3	3.1	3.8	4.1	4.2	4.2
CAZ	5.5	5.5	5.5	5.5	5.5	5.5
CHA	8.5	6.3	8.7	9.0	9.0	9.2
EUR	6.7	2.4	6.7	6.7	6.7	6.7
IND	2.5	2.6	3.2	4.3	4.4	3.9
LAM	4.3	4.3	4.3	4.3	4.3	3.9
MEA	1.0	1.1	1.1	1.3	1.2	1.2
NEU	12.9	13.0	13.1	13.1	13.1	8.0
OAS	8.4	8.2	9.7	10.4	10.7	10.4
REF	8.6	8.6	8.6	8.6	8.6	8.6
SSA	2.2	2.3	2.4	2.5	2.5	2.6
USA	3.5	3.5	3.5	3.5	3.5	3.5

Table 1182: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.60	0.71	0.75	0.74	0.95	0.98	1.15	1.34	1.51	1.59
CAZ	0.16	0.35	0.43	0.46	1.31	1.23	1.94	1.86	2.06	2.48
CHA	1.31	1.58	1.59	2.00	2.09	2.32	2.98	3.46	3.73	4.55
EUR	1.30	1.27	1.69	1.48	1.84	1.22	1.00	0.86	0.76	0.77
IND	0.51	0.79	0.90	0.71	0.71	0.91	1.03	1.01	1.25	1.58
LAM	1.08	1.03	0.90	1.01	1.49	1.08	1.10	1.34	1.54	1.99
MEA	0.33	0.47	0.53	0.52	0.67	0.42	0.63	0.59	0.75	0.58
NEU	1.70	1.50	1.41	1.34	1.95	1.92	1.78	2.08	2.45	2.64
OAS	0.68	0.74	0.77	0.92	1.10	1.05	1.21	1.41	1.65	1.89
REF	0.41	0.29	0.77	1.67	1.85	1.22	1.43	0.96	1.68	1.55
SSA	0.48	0.44	0.42	0.38	0.44	0.49	0.53	0.72	0.79	0.81
USA	1.15	1.30	1.92	1.27	2.27	1.50	1.72	1.96	2.56	3.22

Table 1183: FAO — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha)

52.1.9 Oil crops—Oilpalms



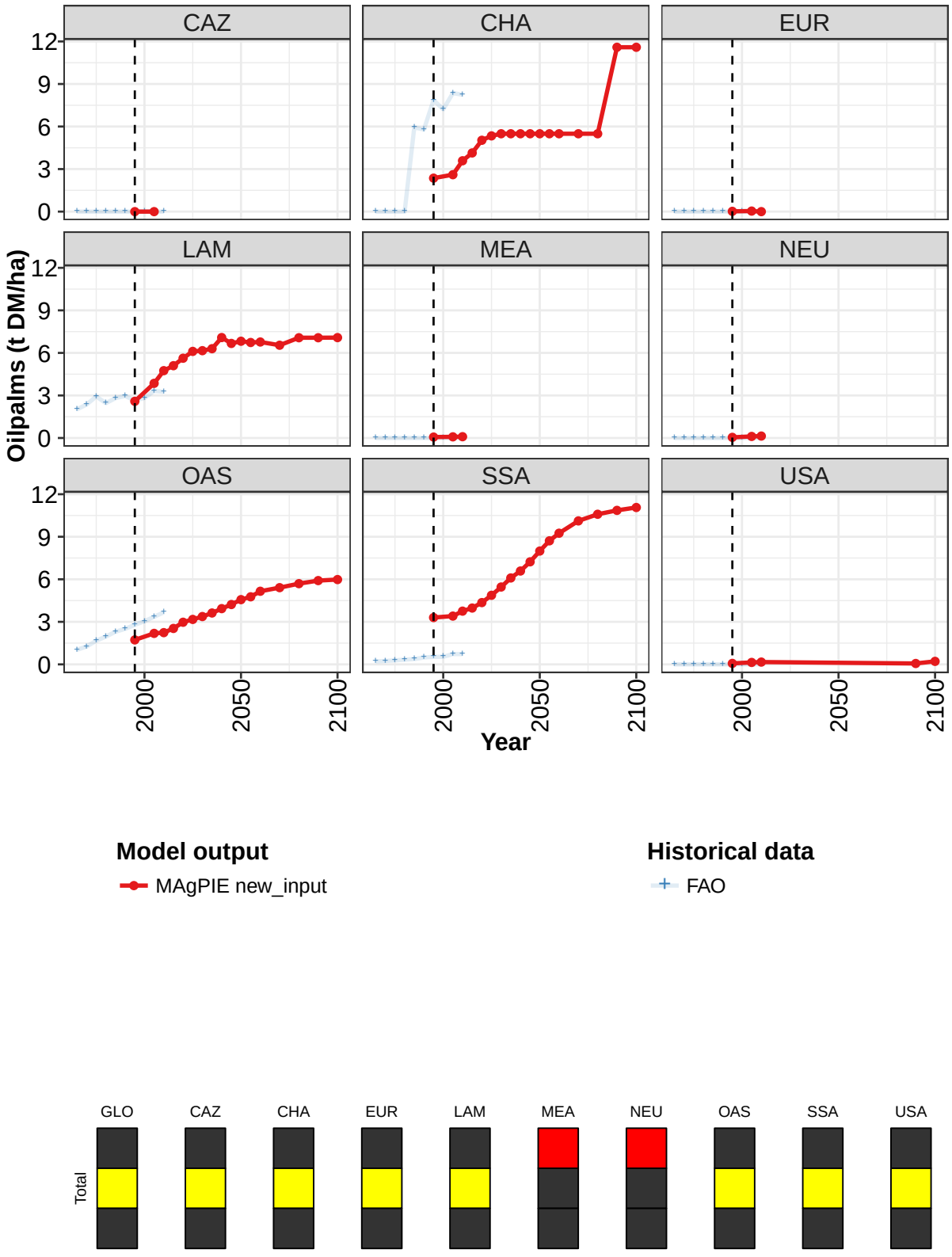


Figure 317: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1	2	2	3	3	3	4	4	4	4	5
CAZ	0	0									
CHA	2	3	4	4	5	5	5	5	5	5	5
EUR	0	0	0								
LAM	3	4	5	5	6	6	6	6	7	7	7
MEA	0	0	0								
NEU	0	0	0								
OAS	2	2	2	3	3	3	3	4	4	4	5
SSA	3	3	4	4	4	5	5	6	7	7	8
USA	0	0	0								

Table 1184: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha) [PART 1/2]

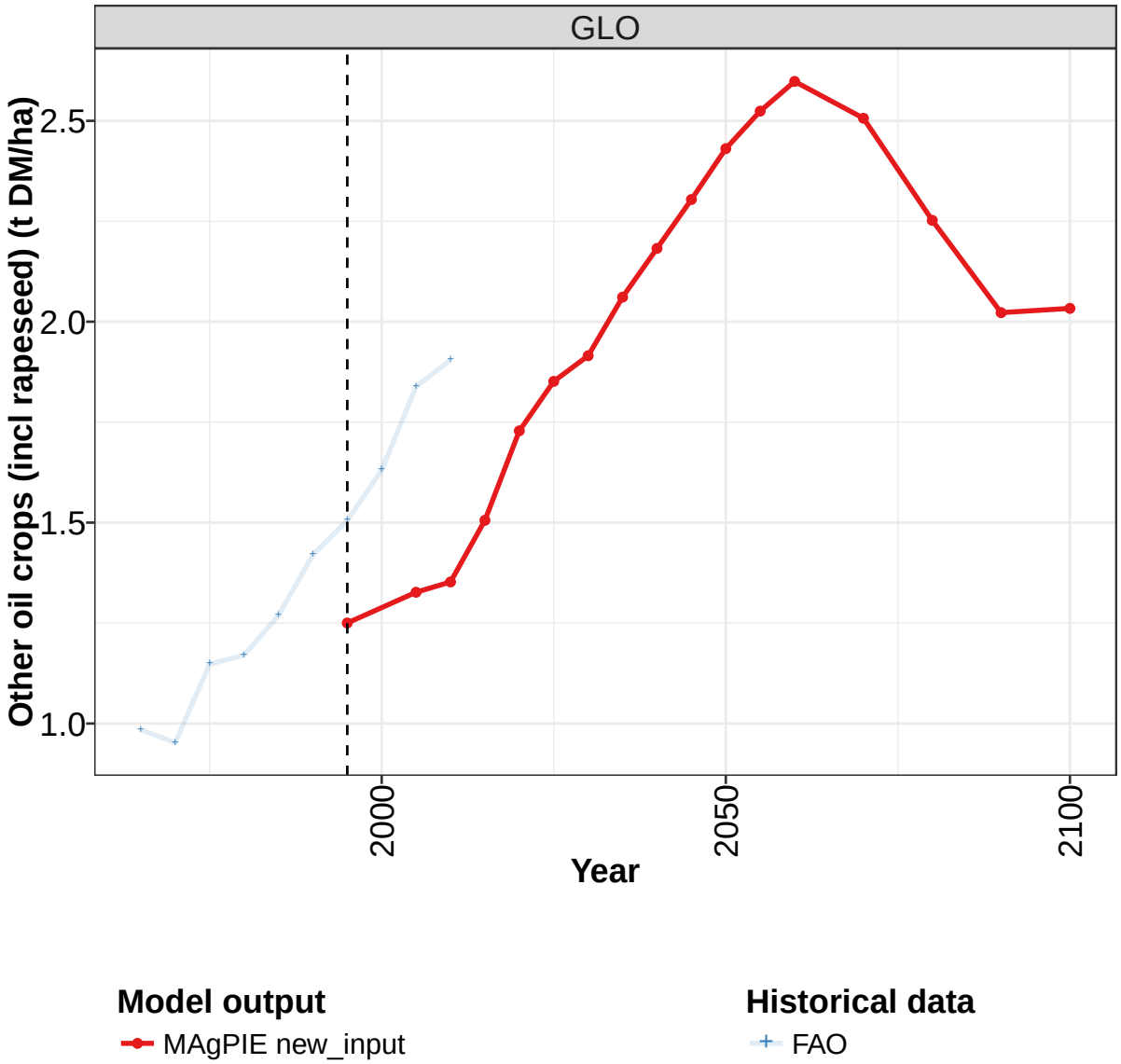
	2055	2060	2070	2080	2090	2100
GLO	5	5	6	6	6	6
CAZ						
CHA	5	5	5	5	12	12
EUR						
LAM	7	7	7	7	7	7
MEA						
NEU						
OAS	5	5	5	6	6	6
SSA	9	9	10	11	11	11
USA					0	0

Table 1185: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.30	0.40	0.61	0.87	1.25	1.62	1.88	2.18	2.59	2.93
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	5.93	5.80	7.86	7.21	8.36	8.24
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	2.02	2.36	2.93	2.46	2.81	2.96	2.65	2.82	3.32	3.26
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	1.03	1.26	1.67	1.96	2.30	2.51	2.79	3.04	3.36	3.67
SSA	0.21	0.24	0.28	0.34	0.38	0.49	0.53	0.53	0.73	0.72
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1186: FAO — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha)

52.1.10 Oil crops—Other oil crops (incl rapeseed)



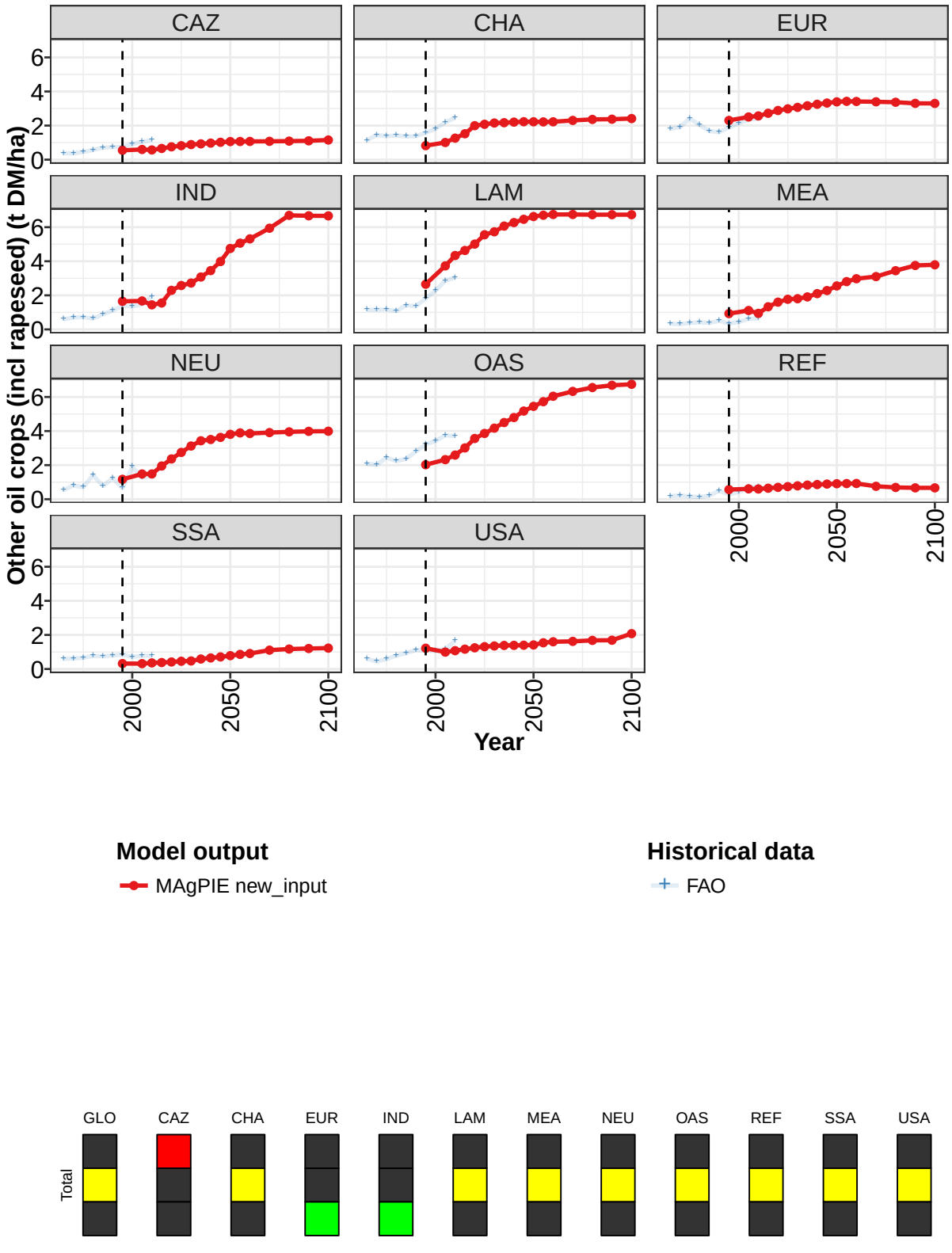


Figure 318: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.25	1.33	1.35	1.51	1.73	1.85	1.92	2.06	2.18	2.30	2.43
CAZ	0.55	0.60	0.57	0.66	0.75	0.82	0.88	0.93	0.97	1.02	1.06
CHA	0.82	1.01	1.26	1.52	1.99	2.08	2.15	2.17	2.20	2.23	2.22
EUR	2.30	2.50	2.57	2.72	2.89	2.98	3.07	3.16	3.25	3.32	3.39
IND	1.65	1.67	1.44	1.55	2.29	2.58	2.72	3.08	3.45	3.99	4.75
LAM	2.65	3.73	4.34	4.63	5.01	5.56	5.73	6.07	6.27	6.46	6.62
MEA	0.93	1.11	0.94	1.33	1.60	1.77	1.80	1.91	2.10	2.28	2.55
NEU	1.17	1.48	1.48	1.95	2.36	2.75	3.12	3.43	3.50	3.63	3.81
OAS	2.02	2.32	2.59	3.01	3.56	3.86	4.17	4.50	4.79	5.17	5.45
REF	0.57	0.61	0.60	0.65	0.70	0.74	0.79	0.83	0.86	0.89	0.91
SSA	0.32	0.32	0.36	0.38	0.41	0.46	0.47	0.59	0.65	0.71	0.78
USA	1.22	0.99	1.08	1.16	1.24	1.31	1.35	1.38	1.39	1.40	1.41

Table 1187: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha) [PART 1/2]

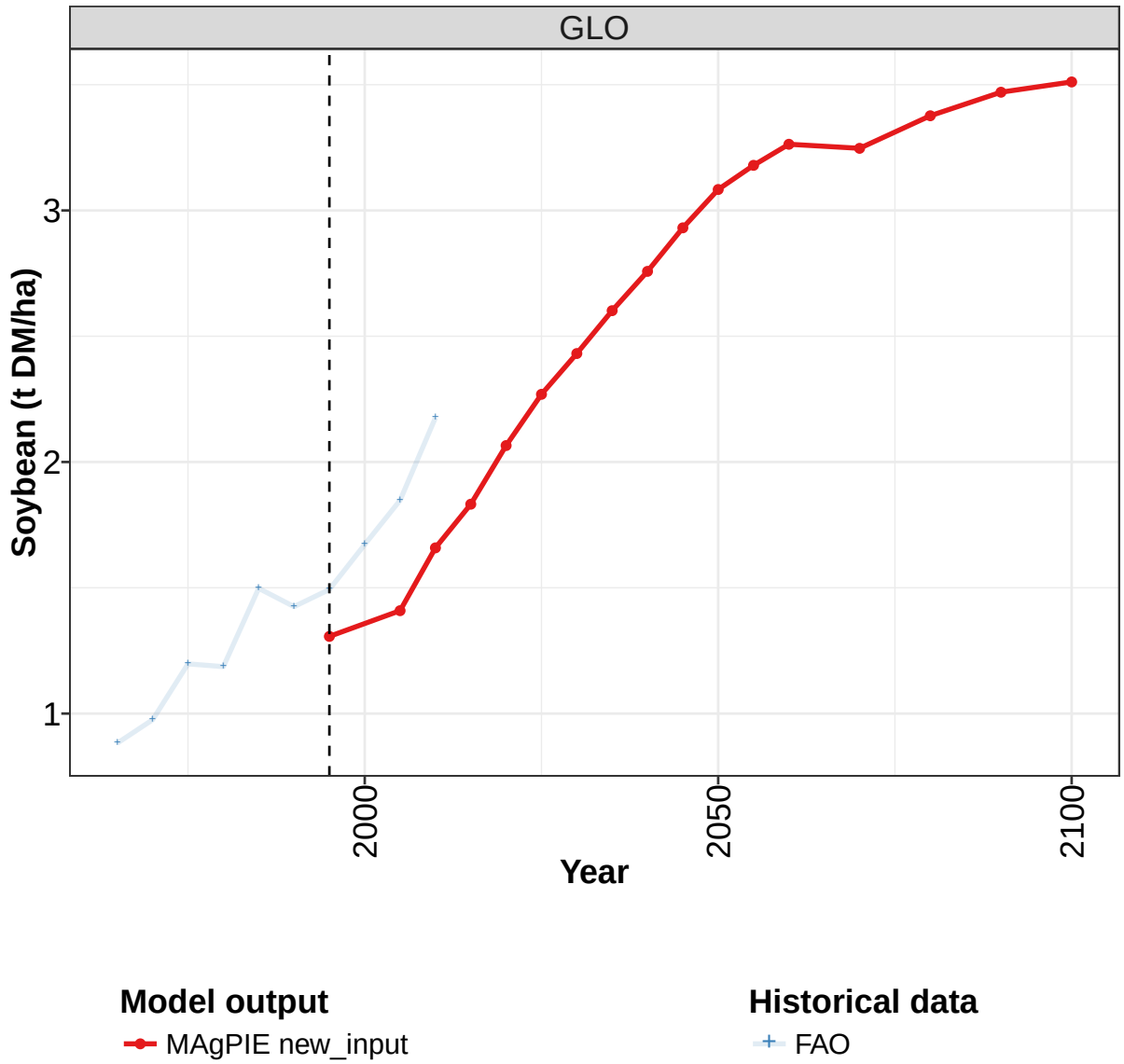
	2055	2060	2070	2080	2090	2100
GLO	2.52	2.60	2.51	2.25	2.02	2.03
CAZ	1.07	1.07	1.08	1.09	1.11	1.15
CHA	2.22	2.22	2.30	2.36	2.37	2.41
EUR	3.42	3.41	3.39	3.37	3.30	3.30
IND	5.06	5.32	5.94	6.69	6.67	6.66
LAM	6.70	6.75	6.75	6.73	6.73	6.73
MEA	2.81	2.98	3.10	3.45	3.75	3.79
NEU	3.89	3.86	3.91	3.95	3.98	3.99
OAS	5.72	6.04	6.33	6.55	6.69	6.74
REF	0.92	0.92	0.76	0.69	0.67	0.67
SSA	0.86	0.91	1.11	1.17	1.20	1.23
USA	1.54	1.60	1.62	1.68	1.69	2.07

Table 1188: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.98	0.95	1.15	1.17	1.27	1.42	1.51	1.63	1.84	1.90
CAZ	0.38	0.37	0.46	0.57	0.71	0.74	0.76	0.91	1.05	1.16
CHA	1.13	1.45	1.37	1.42	1.36	1.38	1.58	1.81	2.19	2.46
EUR	1.82	1.90	2.41	2.03	1.68	1.61	1.88	2.12	2.36	2.40
IND	0.59	0.70	0.72	0.64	0.88	1.11	1.38	1.35	1.47	1.93
LAM	1.15	1.16	1.17	1.08	1.41	1.36	1.82	2.27	2.86	3.04
MEA	0.34	0.31	0.39	0.41	0.39	0.50	0.34	0.43	0.62	0.64
NEU	0.55	0.80	0.70	1.42	0.77	1.23	0.65	1.91	1.27	1.36
OAS	2.08	2.03	2.44	2.24	2.37	2.80	3.21	3.42	3.74	3.72
REF	0.18	0.22	0.16	0.12	0.21	0.49	0.28	0.43	0.69	0.73
SSA	0.60	0.61	0.66	0.76	0.75	0.80	0.85	0.71	0.78	0.77
USA	0.60	0.44	0.58	0.79	0.93	1.11	1.07	1.06	1.17	1.65

Table 1189: FAO — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha)

52.1.11 Oil crops—Soybean



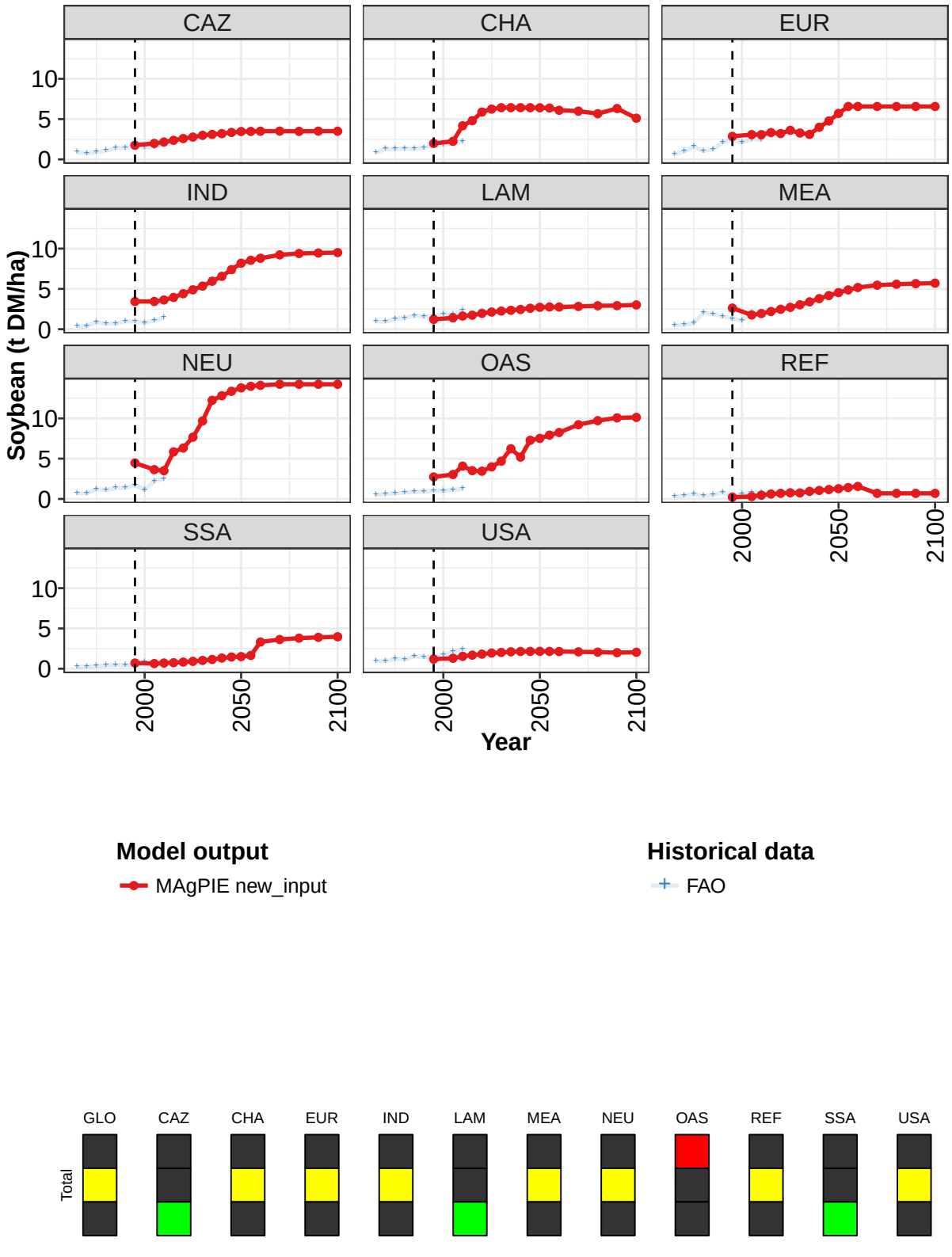


Figure 319: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.3	1.4	1.7	1.8	2.1	2.3	2.4	2.6	2.8	2.9	3.1
CAZ	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.1	3.2	3.3	3.5
CHA	2.0	2.2	4.2	4.8	5.9	6.2	6.4	6.4	6.4	6.4	6.4
EUR	2.9	3.1	3.1	3.3	3.2	3.6	3.3	3.1	4.0	4.8	5.7
IND	3.4	3.4	3.6	3.9	4.4	4.9	5.3	6.0	6.6	7.4	8.2
LAM	1.2	1.4	1.6	1.7	2.0	2.1	2.2	2.3	2.4	2.6	2.7
MEA	2.6	1.8	1.9	2.2	2.5	2.7	3.0	3.4	3.8	4.2	4.5
NEU	4.5	3.6	3.5	5.8	6.3	7.7	9.7	12.2	12.8	13.4	13.8
OAS	2.7	3.0	4.1	3.5	3.4	4.0	4.7	6.2	5.2	7.3	7.5
REF	0.2	0.3	0.5	0.6	0.7	0.8	0.7	0.9	1.1	1.2	1.3
SSA	0.7	0.6	0.7	0.8	0.8	0.9	1.0	1.2	1.3	1.5	1.5
USA	1.2	1.3	1.5	1.7	1.8	1.9	2.0	2.1	2.1	2.1	2.2

Table 1190: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha) [PART 1/2]

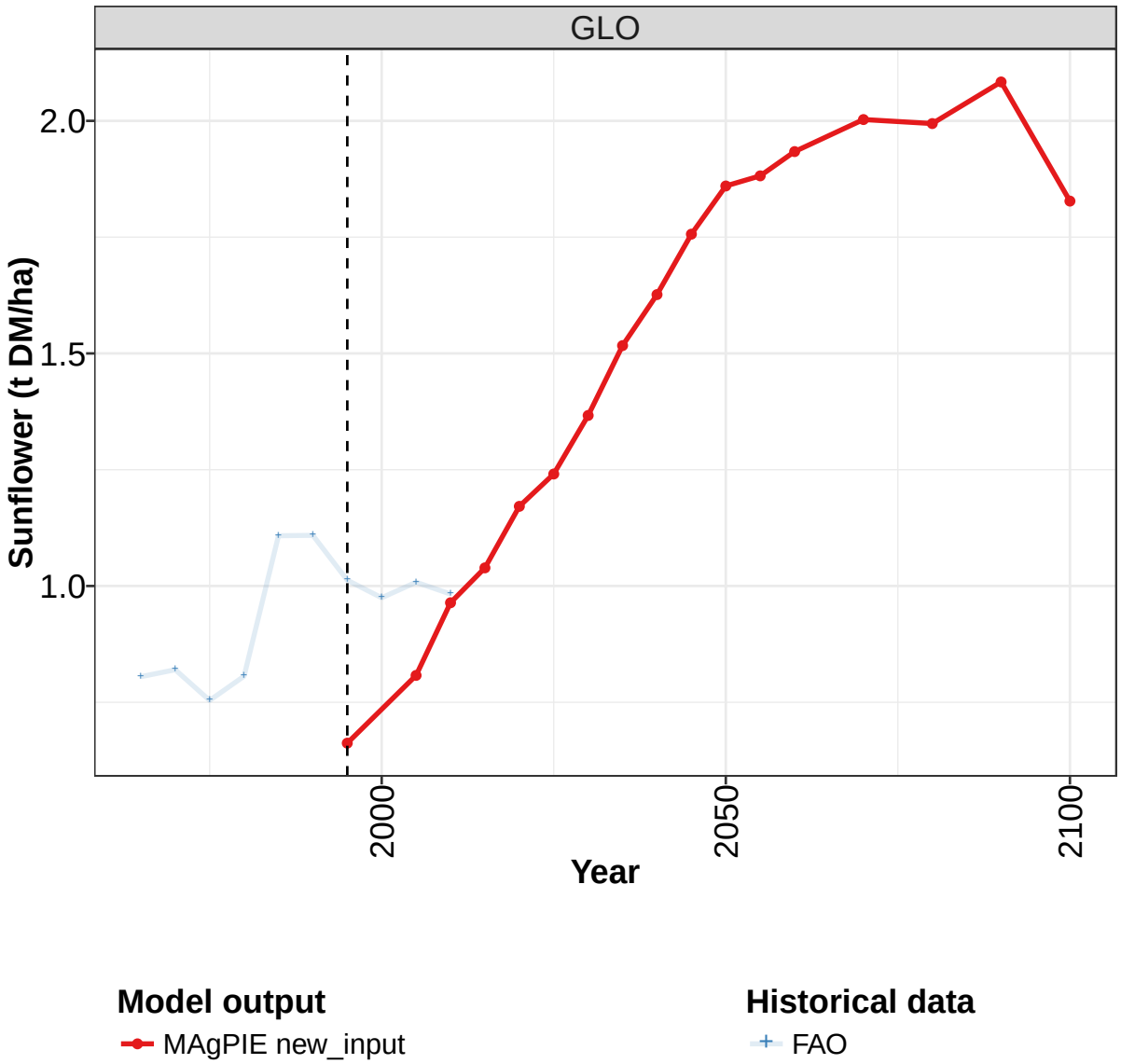
	2055	2060	2070	2080	2090	2100
GLO	3.2	3.3	3.2	3.4	3.5	3.5
CAZ	3.5	3.5	3.5	3.5	3.5	3.5
CHA	6.4	6.1	6.0	5.7	6.3	5.1
EUR	6.6	6.6	6.6	6.6	6.6	6.6
IND	8.5	8.8	9.2	9.4	9.5	9.5
LAM	2.8	2.8	2.8	2.9	2.9	3.0
MEA	4.9	5.2	5.5	5.6	5.7	5.7
NEU	14.0	14.1	14.2	14.2	14.2	14.2
OAS	7.9	8.2	9.2	9.7	10.1	10.1
REF	1.4	1.6	0.7	0.7	0.7	0.7
SSA	1.6	3.3	3.6	3.8	3.9	4.0
USA	2.1	2.1	2.1	2.1	2.0	2.0

Table 1191: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.88	0.98	1.20	1.19	1.50	1.43	1.49	1.67	1.85	2.18
CAZ	0.90	0.77	0.92	1.09	1.38	1.44	1.60	1.52	1.53	1.80
CHA	0.83	1.28	1.28	1.35	1.34	1.46	1.74	1.82	1.96	2.21
EUR	0.66	0.98	1.58	1.06	1.24	2.13	2.40	2.10	2.48	2.44
IND	0.38	0.39	0.88	0.67	0.71	0.96	0.98	0.79	1.07	1.41
LAM	1.00	0.93	1.30	1.39	1.69	1.55	1.61	1.84	1.87	2.32
MEA	0.47	0.53	0.77	2.05	1.89	1.56	1.30	1.07	2.04	1.63
NEU	0.70	0.68	1.20	1.10	1.36	1.38	1.71	1.10	2.21	2.50
OAS	0.55	0.61	0.70	0.78	0.91	0.90	1.00	1.01	1.13	1.25
REF	0.32	0.42	0.61	0.39	0.50	0.83	0.43	0.61	0.77	0.82
SSA	0.22	0.29	0.35	0.41	0.48	0.43	0.48	0.80	0.78	0.83
USA	0.96	0.97	1.22	1.16	1.56	1.46	1.51	1.74	2.09	2.40

Table 1192: FAO — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha)

52.1.12 Oil crops—Sunflower



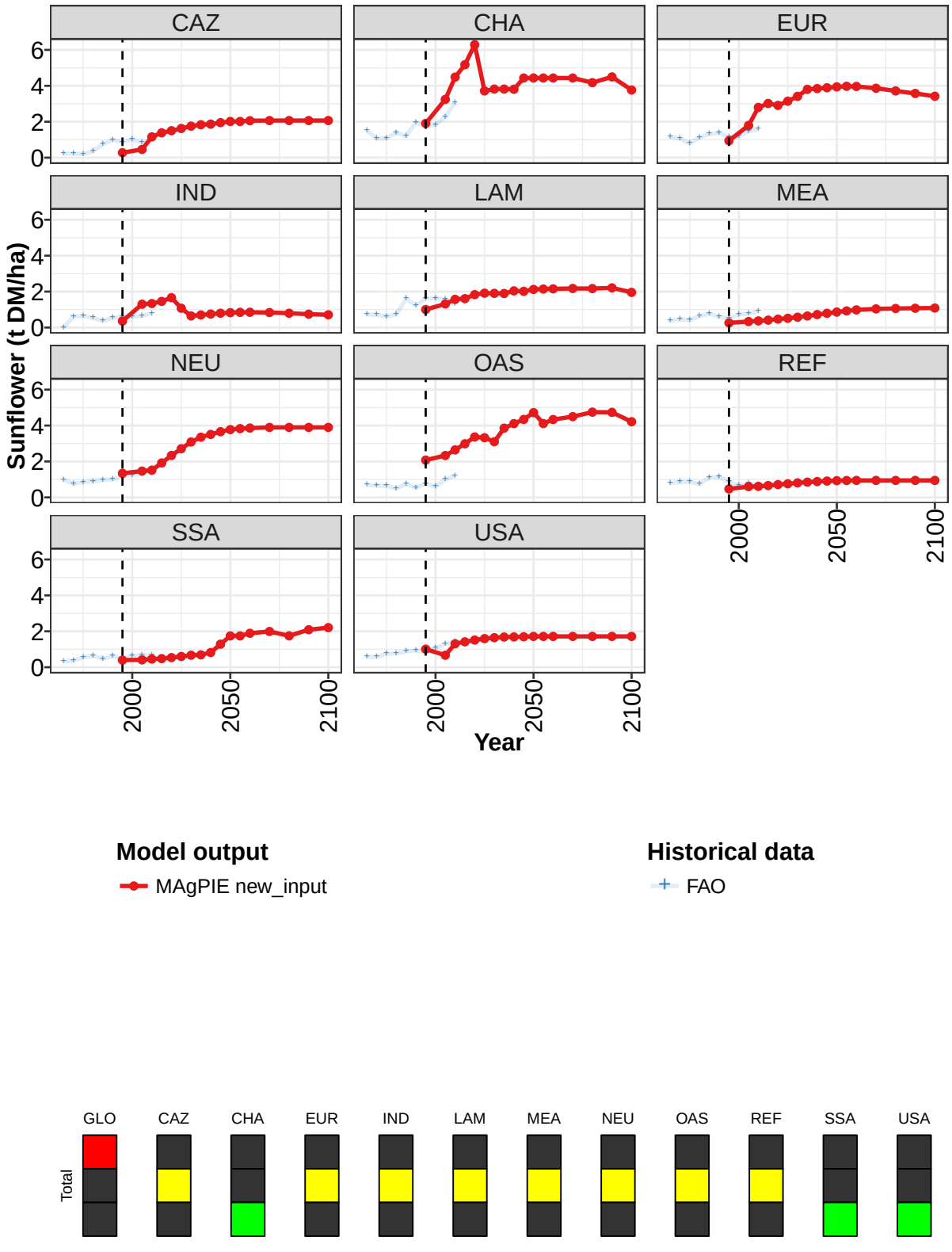


Figure 320: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.66	0.81	0.96	1.04	1.17	1.24	1.37	1.52	1.63	1.76	1.86
CAZ	0.28	0.46	1.16	1.38	1.50	1.62	1.75	1.83	1.87	1.95	2.01
CHA	1.91	3.25	4.48	5.18	6.29	3.72	3.82	3.82	3.81	4.44	4.44
EUR	0.94	1.79	2.80	3.02	2.91	3.15	3.41	3.80	3.85	3.89	3.94
IND	0.36	1.30	1.34	1.45	1.66	1.08	0.65	0.70	0.75	0.80	0.83
LAM	1.00	1.31	1.57	1.61	1.83	1.91	1.90	1.90	2.04	2.01	2.12
MEA	0.26	0.33	0.37	0.41	0.47	0.51	0.57	0.64	0.72	0.79	0.86
NEU	1.34	1.47	1.51	1.92	2.33	2.71	3.09	3.35	3.51	3.66	3.77
OAS	2.08	2.33	2.64	2.98	3.36	3.32	3.10	3.85	4.11	4.34	4.72
REF	0.47	0.60	0.61	0.66	0.71	0.76	0.81	0.85	0.88	0.91	0.93
SSA	0.40	0.41	0.45	0.48	0.54	0.60	0.67	0.69	0.82	1.28	1.74
USA	1.01	0.67	1.31	1.42	1.51	1.59	1.65	1.68	1.69	1.70	1.72

Table 1193: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha) [PART 1/2]

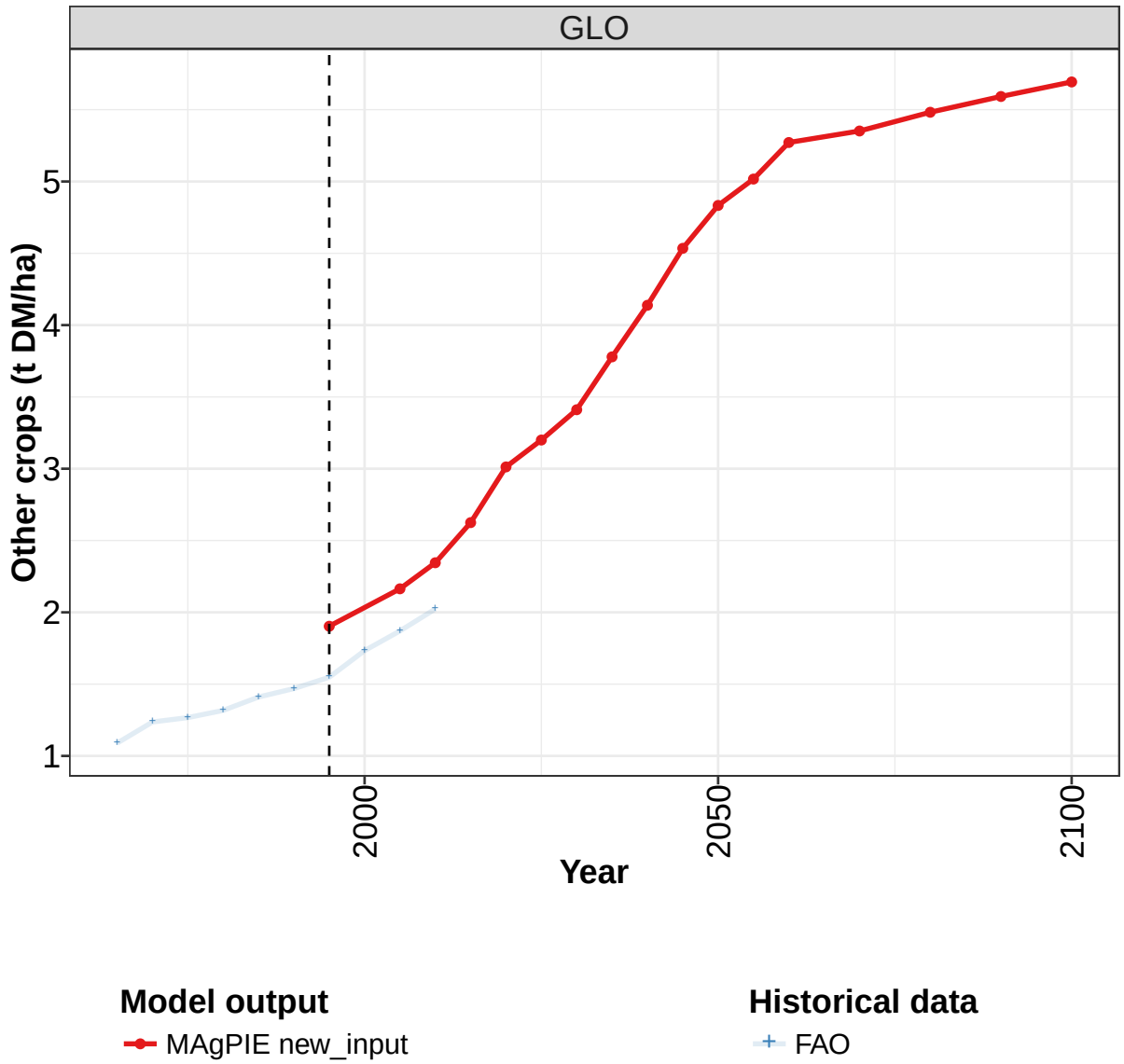
	2055	2060	2070	2080	2090	2100
GLO	1.88	1.93	2.00	1.99	2.08	1.83
CAZ	2.01	2.06	2.07	2.07	2.07	2.07
CHA	4.44	4.44	4.44	4.18	4.50	3.77
EUR	3.97	3.97	3.87	3.72	3.58	3.42
IND	0.84	0.85	0.84	0.80	0.74	0.71
LAM	2.14	2.15	2.17	2.17	2.21	1.96
MEA	0.93	0.98	1.04	1.06	1.07	1.08
NEU	3.83	3.86	3.90	3.90	3.90	3.90
OAS	4.11	4.34	4.50	4.75	4.73	4.21
REF	0.94	0.95	0.95	0.95	0.95	0.95
SSA	1.75	1.89	1.99	1.75	2.09	2.21
USA	1.72	1.72	1.72	1.72	1.72	1.72

Table 1194: MAgPIE new_input — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.81	0.82	0.75	0.81	1.11	1.11	1.01	0.97	1.01	0.98
CAZ	0.22	0.23	0.20	0.36	0.74	0.99	0.86	1.00	0.84	1.03
CHA	1.50	1.07	1.08	1.39	1.21	1.97	1.72	1.83	2.28	3.05
EUR	1.17	1.05	0.78	1.13	1.32	1.38	1.14	1.19	1.46	1.60
IND	0.00	0.61	0.65	0.53	0.36	0.53	0.60	0.61	0.64	0.78
LAM	0.72	0.71	0.61	0.74	1.60	1.23	1.61	1.63	1.56	1.30
MEA	0.38	0.46	0.42	0.63	0.77	0.59	0.52	0.71	0.77	0.89
NEU	0.97	0.76	0.84	0.90	0.96	1.01	1.20	1.25	1.33	1.59
OAS	0.70	0.67	0.64	0.50	0.73	0.54	0.76	0.59	1.00	1.20
REF	0.79	0.86	0.86	0.73	1.10	1.15	0.86	0.66	0.77	0.69
SSA	0.32	0.37	0.55	0.65	0.46	0.63	0.45	0.64	0.67	0.65
USA	0.58	0.57	0.75	0.78	0.89	0.92	0.89	1.06	1.30	1.40

Table 1195: FAO — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha)

52.1.13 Other crops



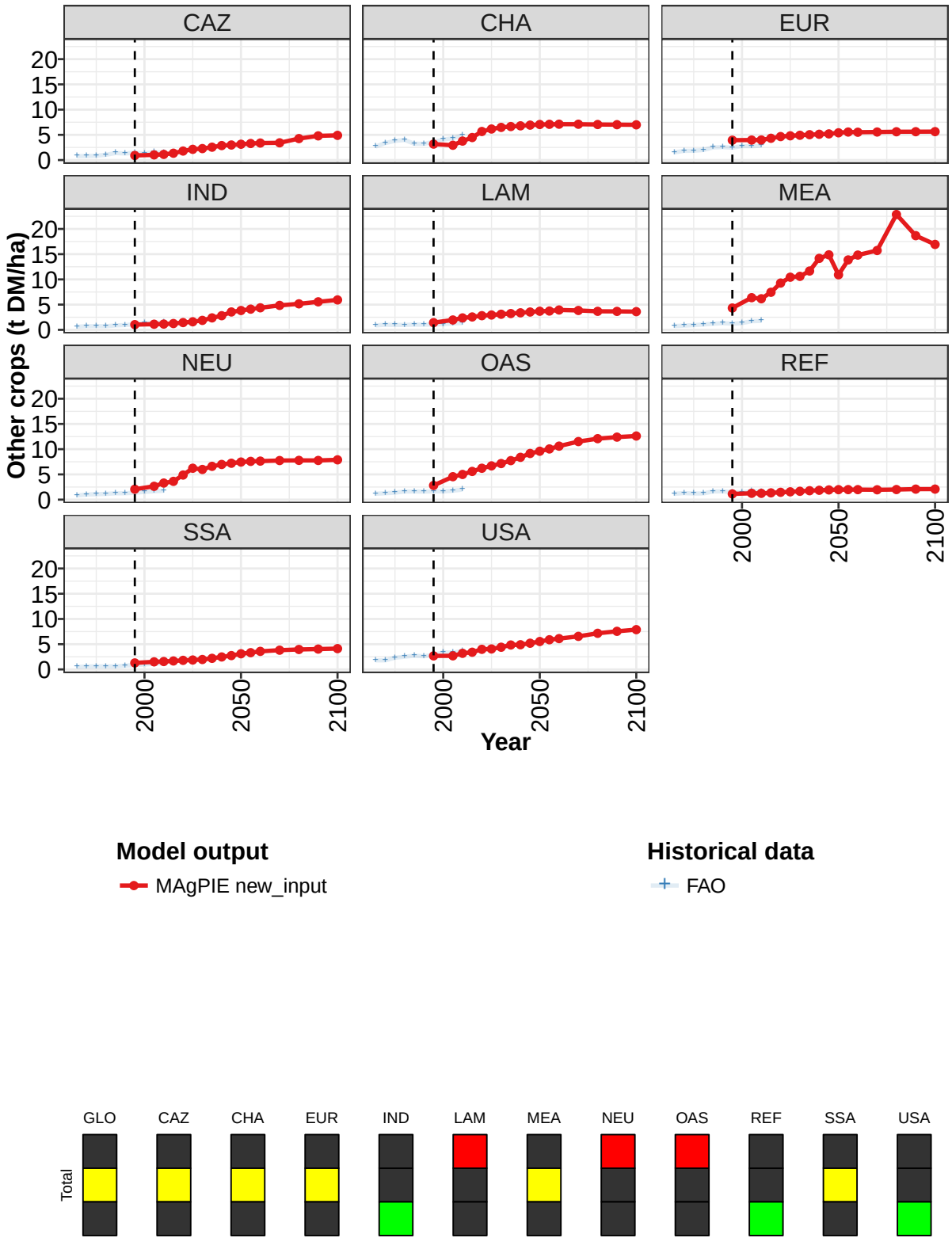


Figure 321: MAgPIE new_input — Productivity—Yield—Crops—Other crops (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.9	2.2	2.3	2.6	3.0	3.2	3.4	3.8	4.1	4.5	4.8
CAZ	0.9	1.0	1.1	1.4	1.8	2.1	2.3	2.6	2.9	3.0	3.1
CHA	3.2	2.9	3.8	4.5	5.7	6.2	6.5	6.6	6.8	6.9	7.1
EUR	3.9	4.0	4.0	4.3	4.7	4.8	4.9	5.0	5.1	5.2	5.4
IND	1.0	1.1	1.1	1.3	1.4	1.6	1.9	2.4	2.8	3.5	3.8
LAM	1.4	2.0	2.4	2.6	2.8	2.9	3.1	3.2	3.4	3.5	3.7
MEA	4.3	6.4	6.2	7.4	9.3	10.4	10.6	11.7	14.2	14.9	10.9
NEU	2.1	2.6	3.3	3.6	4.9	6.2	6.0	6.6	7.0	7.2	7.5
OAS	2.8	4.5	5.0	5.6	6.2	6.7	7.2	7.7	8.4	9.2	9.6
REF	1.1	1.3	1.2	1.3	1.5	1.6	1.7	1.8	1.9	1.9	2.0
SSA	1.3	1.5	1.6	1.7	1.8	1.9	2.0	2.2	2.5	2.7	3.1
USA	2.7	2.7	3.2	3.4	4.0	4.1	4.4	4.8	4.9	5.2	5.5

Table 1196: MAgPIE new_input — Productivity—Yield—Crops—Other crops (t DM/ha) [PART 1/2]

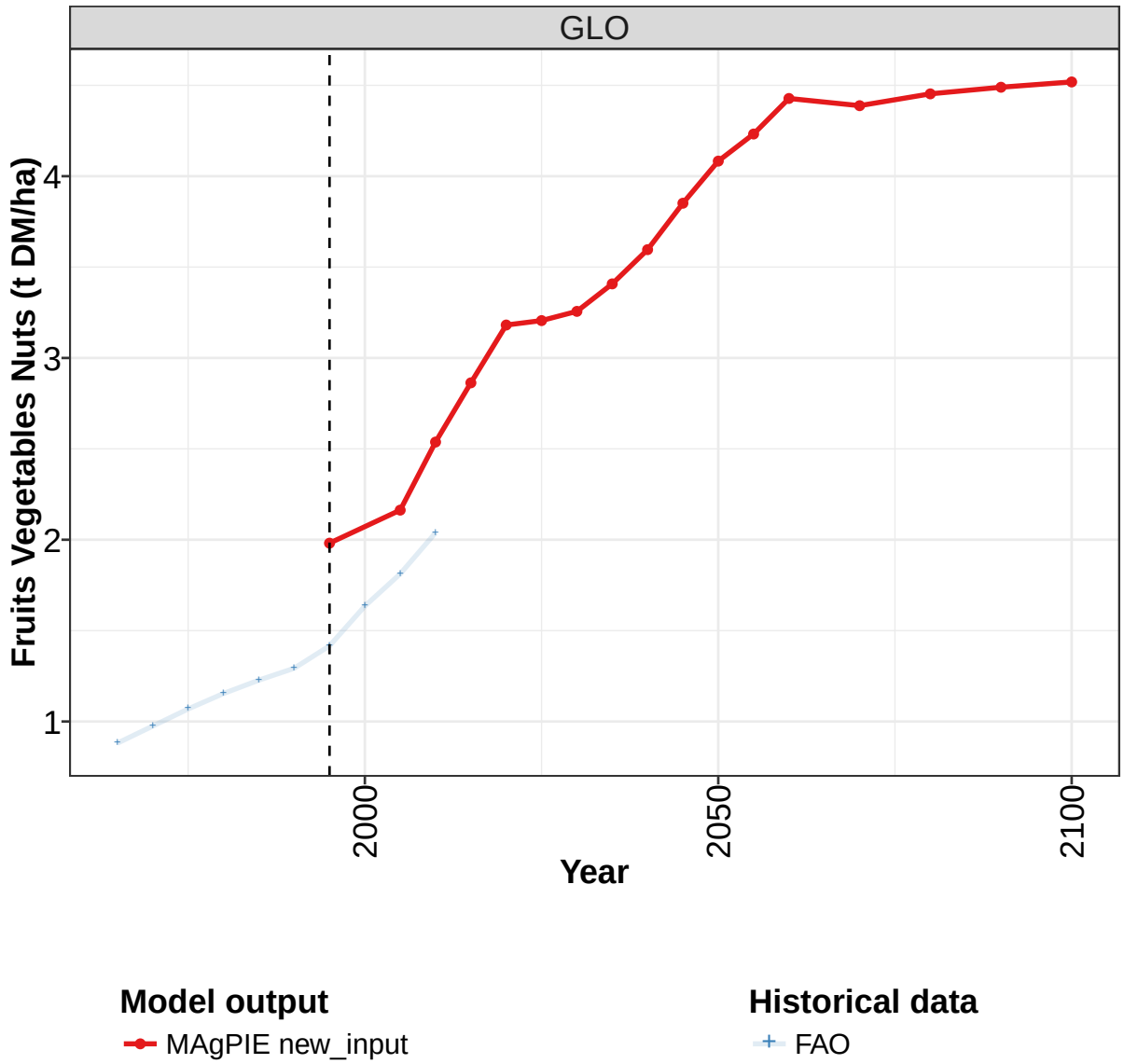
	2055	2060	2070	2080	2090	2100
GLO	5.0	5.3	5.4	5.5	5.6	5.7
CAZ	3.3	3.4	3.4	4.3	4.8	4.9
CHA	7.1	7.1	7.1	7.0	7.0	7.0
EUR	5.6	5.5	5.6	5.6	5.6	5.6
IND	4.1	4.4	4.8	5.2	5.6	5.9
LAM	3.7	3.9	3.8	3.7	3.7	3.6
MEA	13.9	14.8	15.7	22.9	18.7	16.9
NEU	7.6	7.6	7.8	7.8	7.8	7.9
OAS	10.0	10.6	11.5	12.1	12.4	12.6
REF	2.0	2.0	2.0	2.0	2.1	2.1
SSA	3.3	3.6	3.8	4.0	4.0	4.1
USA	5.9	6.1	6.6	7.2	7.6	7.9

Table 1197: MAgPIE new_input — Productivity—Yield—Crops—Other crops (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.09	1.24	1.27	1.32	1.41	1.47	1.55	1.73	1.87	2.02
CAZ	0.79	0.80	0.85	1.05	1.39	1.31	1.44	1.31	1.56	1.47
CHA	2.68	3.37	3.81	3.98	3.24	3.22	3.59	4.05	4.33	4.92
EUR	1.53	1.83	1.85	2.00	2.50	2.57	2.45	2.77	2.74	2.84
IND	0.62	0.71	0.73	0.71	0.87	0.96	1.10	1.33	1.28	1.51
LAM	0.88	1.01	0.98	0.97	1.04	1.02	1.06	1.12	1.27	1.35
MEA	0.75	0.83	0.93	1.06	1.21	1.32	1.23	1.34	1.72	1.77
NEU	0.82	1.02	1.07	1.14	1.25	1.26	1.37	1.53	1.66	1.76
OAS	1.17	1.26	1.39	1.61	1.62	1.59	1.65	1.62	1.76	2.01
REF	1.15	1.30	1.22	1.23	1.62	1.65	1.47	1.44	1.68	1.60
SSA	0.49	0.58	0.60	0.59	0.61	0.76	0.86	0.98	1.14	1.28
USA	1.80	1.80	2.32	2.52	2.71	2.61	2.87	3.40	3.31	3.69

Table 1198: FAO — Productivity—Yield—Crops—Other crops (t DM/ha)

52.1.14 Other crops—Fruits Vegetables Nuts



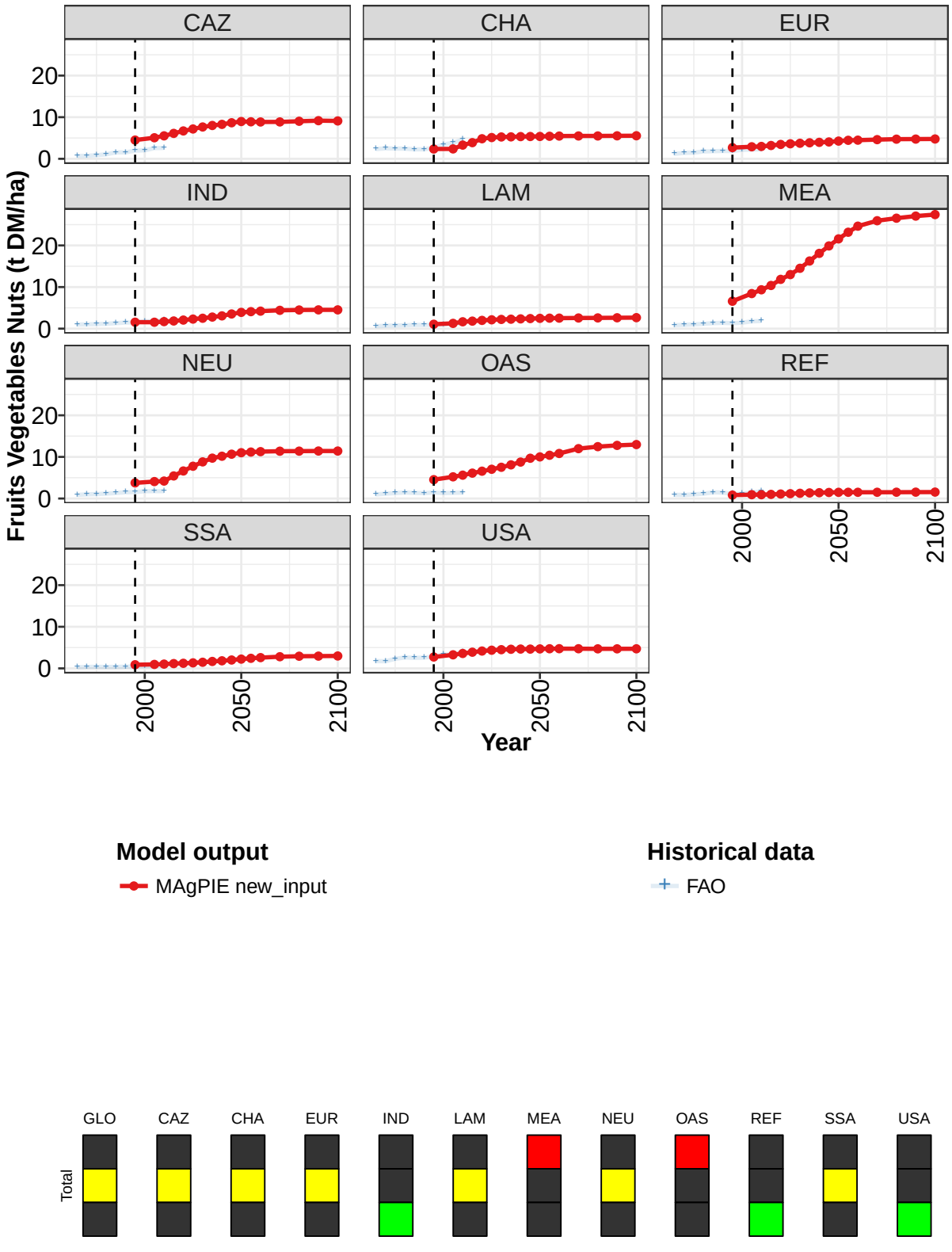


Figure 322: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.0	2.2	2.5	2.9	3.2	3.2	3.3	3.4	3.6	3.9	4.1
CAZ	4.5	5.1	5.5	6.1	6.7	7.2	7.6	8.0	8.3	8.7	9.0
CHA	2.4	2.4	3.3	3.9	4.8	5.1	5.2	5.3	5.3	5.4	5.4
EUR	2.7	2.9	3.0	3.2	3.5	3.6	3.7	3.8	4.0	4.0	4.3
IND	1.6	1.5	1.7	1.8	2.1	2.3	2.5	2.8	3.1	3.5	3.9
LAM	1.1	1.3	1.7	1.8	2.0	2.1	2.2	2.3	2.4	2.4	2.5
MEA	6.6	8.4	9.3	10.4	11.8	13.0	14.5	16.3	18.1	19.9	21.6
NEU	3.8	4.1	4.2	5.4	6.6	7.8	8.8	9.7	10.2	10.7	11.0
OAS	4.5	5.2	5.6	6.1	6.6	7.0	7.5	8.1	8.8	9.7	10.0
REF	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5
SSA	0.9	1.0	1.0	1.2	1.2	1.3	1.5	1.7	1.8	2.0	2.2
USA	2.7	3.3	3.6	3.9	4.2	4.4	4.5	4.6	4.6	4.6	4.7

Table 1199: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha) [PART 1/2]

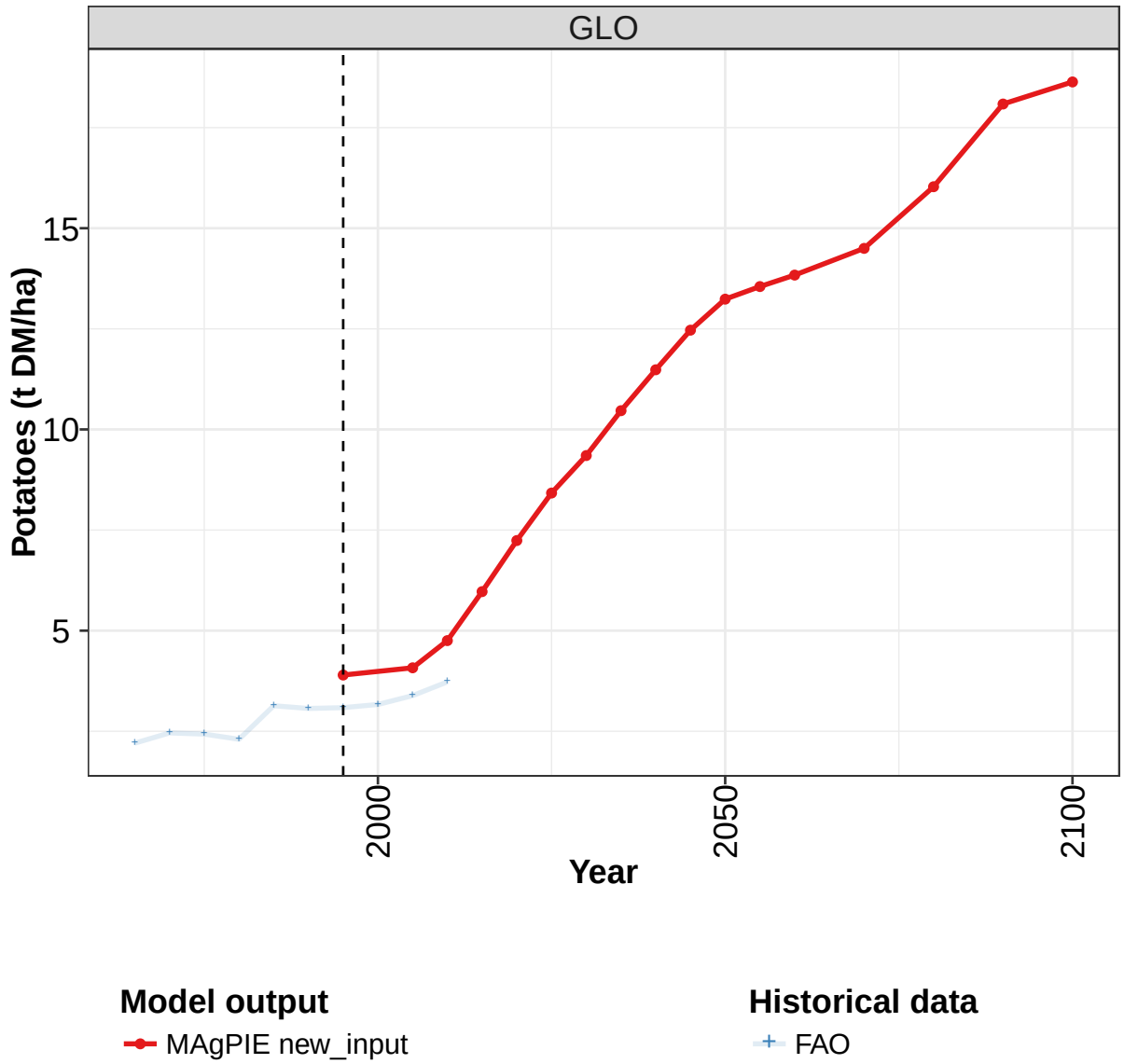
	2055	2060	2070	2080	2090	2100
GLO	4.2	4.4	4.4	4.5	4.5	4.5
CAZ	8.9	8.9	8.9	9.0	9.2	9.1
CHA	5.4	5.5	5.5	5.5	5.5	5.5
EUR	4.4	4.5	4.6	4.7	4.7	4.8
IND	4.1	4.2	4.4	4.5	4.5	4.5
LAM	2.5	2.5	2.6	2.6	2.6	2.6
MEA	23.2	24.6	25.9	26.5	27.1	27.4
NEU	11.2	11.3	11.4	11.4	11.4	11.4
OAS	10.4	10.8	12.0	12.5	12.8	13.0
REF	1.5	1.5	1.5	1.5	1.5	1.5
SSA	2.4	2.6	2.8	2.9	3.0	3.0
USA	4.7	4.7	4.7	4.7	4.7	4.7

Table 1200: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.88	0.98	1.07	1.15	1.23	1.29	1.42	1.64	1.81	2.04
CAZ	0.68	0.71	0.87	1.07	1.55	1.54	1.95	2.03	2.57	2.61
CHA	2.34	2.51	2.46	2.44	2.27	2.28	2.67	3.44	3.84	4.66
EUR	1.19	1.42	1.50	1.76	1.83	1.89	1.87	2.14	2.21	2.27
IND	0.98	1.03	1.10	1.17	1.32	1.47	1.50	1.80	1.77	2.13
LAM	0.59	0.70	0.76	0.82	0.89	0.89	0.97	1.04	1.14	1.24
MEA	0.83	0.92	1.03	1.16	1.32	1.40	1.31	1.44	1.76	1.83
NEU	0.87	1.00	1.07	1.17	1.32	1.50	1.54	1.76	1.77	1.76
OAS	0.99	1.16	1.30	1.45	1.34	1.29	1.45	1.31	1.36	1.42
REF	0.90	0.84	1.00	1.16	1.49	1.42	1.12	1.13	1.49	1.69
SSA	0.27	0.35	0.38	0.35	0.35	0.41	0.46	0.49	0.57	0.62
USA	1.75	1.72	2.30	2.62	2.52	2.58	2.84	3.31	3.36	3.85

Table 1201: FAO — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha)

52.1.15 Other crops—Potatoes



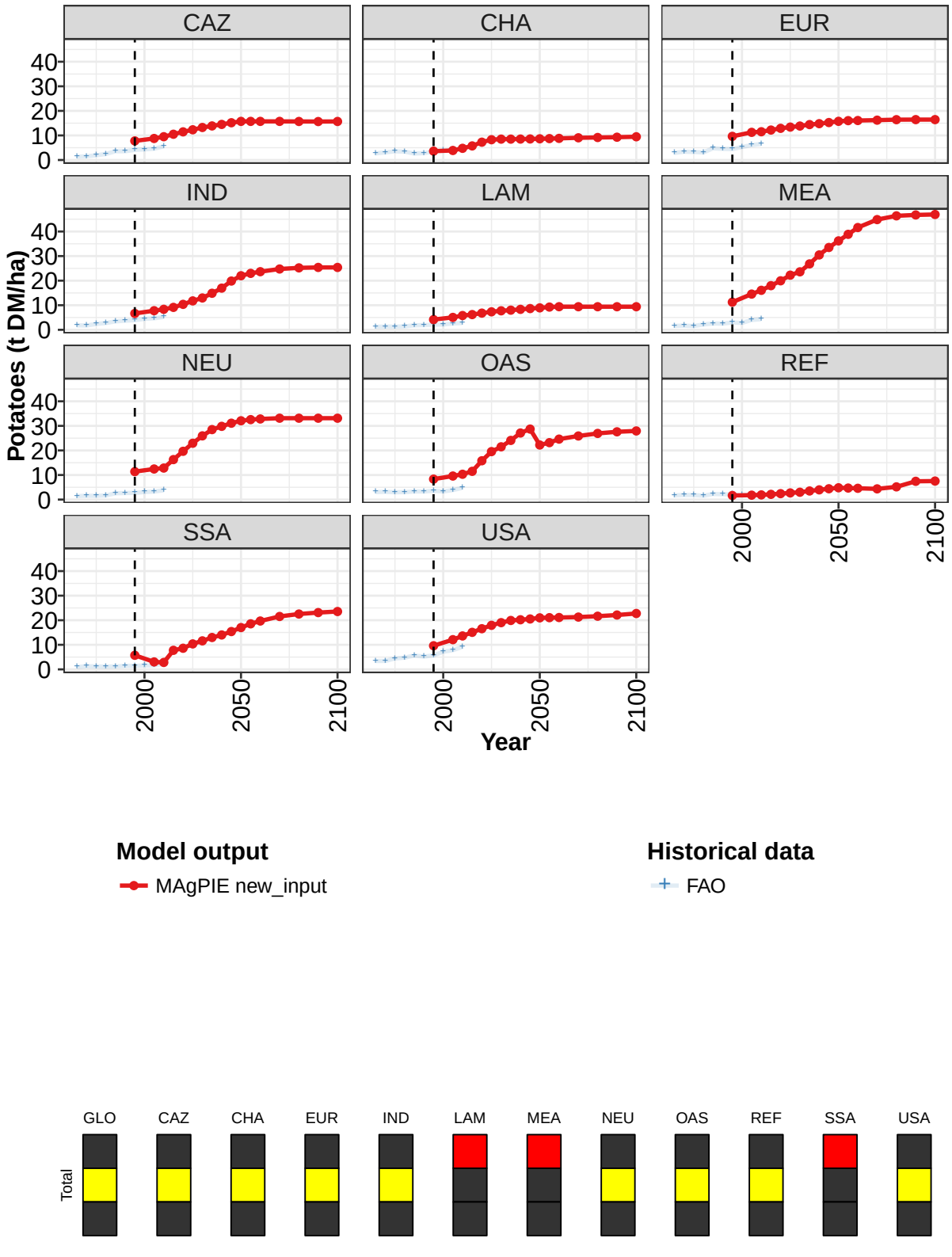


Figure 323: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.9	4.1	4.8	6.0	7.2	8.4	9.4	10.5	11.5	12.5	13.2
CAZ	7.8	8.8	9.5	10.5	11.5	12.3	13.2	13.9	14.5	15.2	15.7
CHA	3.6	3.9	4.8	5.7	7.3	8.3	8.5	8.5	8.5	8.6	8.6
EUR	9.6	11.3	11.5	12.2	12.9	13.4	13.8	14.4	14.8	15.3	15.7
IND	6.7	7.8	8.3	9.1	10.4	11.8	13.0	14.9	17.0	19.8	22.0
LAM	4.2	5.1	5.8	6.2	6.8	7.3	7.7	8.0	8.3	8.6	8.9
MEA	11.3	14.5	16.1	18.0	20.0	22.2	23.6	26.8	30.5	33.5	36.2
NEU	11.4	12.5	12.8	16.3	19.7	22.9	25.9	28.5	29.8	31.1	32.1
OAS	8.3	9.6	10.3	11.5	15.8	19.5	21.5	24.1	27.1	28.7	22.2
REF	1.7	1.8	1.9	2.1	2.4	2.7	3.0	3.5	4.0	4.4	4.8
SSA	5.7	3.0	2.8	7.8	8.6	10.4	11.6	13.0	14.0	15.4	17.0
USA	9.6	12.1	13.6	15.1	16.5	17.9	19.0	19.9	20.2	20.5	21.0

Table 1202: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha) [PART 1/2]

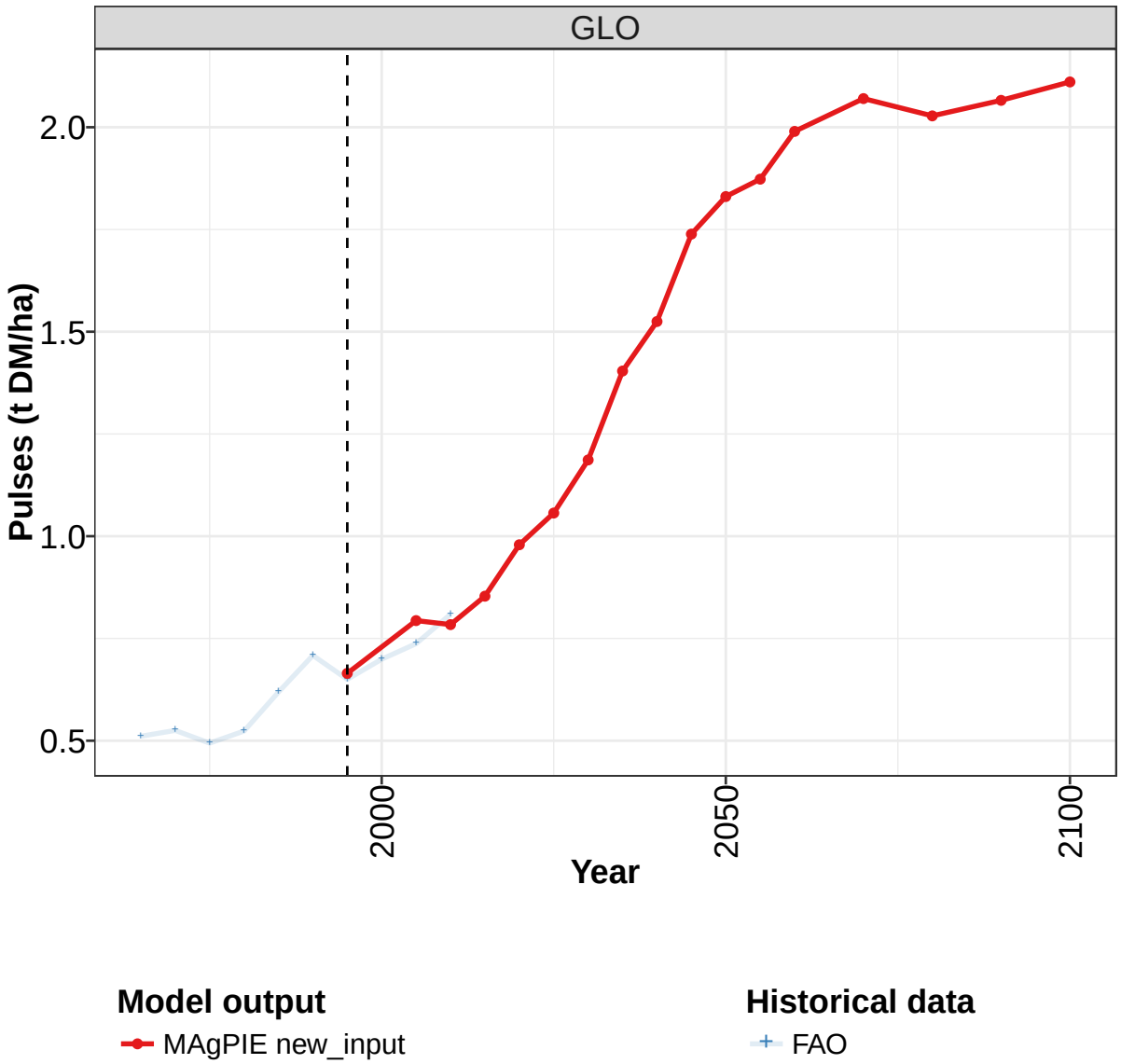
	2055	2060	2070	2080	2090	2100
GLO	13.6	13.8	14.5	16.0	18.1	18.6
CAZ	15.7	15.7	15.7	15.7	15.7	15.7
CHA	8.7	8.8	9.0	9.2	9.3	9.5
EUR	16.0	16.1	16.2	16.4	16.4	16.4
IND	23.0	23.7	24.7	25.2	25.4	25.4
LAM	9.3	9.4	9.4	9.4	9.4	9.4
MEA	38.9	41.6	44.9	46.4	46.7	46.9
NEU	32.5	32.8	33.1	33.1	33.1	33.1
OAS	23.2	24.6	25.9	26.9	27.6	27.9
REF	4.7	4.6	4.4	5.2	7.4	7.5
SSA	18.5	19.7	21.5	22.5	23.1	23.5
USA	21.0	21.1	21.3	21.6	22.1	22.7

Table 1203: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.20	2.46	2.43	2.30	3.13	3.07	3.09	3.16	3.38	3.73
CAZ	1.31	1.50	1.91	2.46	3.57	3.56	4.12	4.33	4.61	5.54
CHA	2.69	3.11	3.52	3.41	2.63	2.80	3.48	3.83	4.14	4.84
EUR	2.89	3.38	3.26	3.09	4.75	4.54	4.43	5.30	6.05	6.56
IND	1.80	1.75	2.37	2.76	3.42	3.70	3.90	4.45	4.67	5.23
LAM	1.23	1.32	1.30	1.36	1.81	1.92	2.07	2.16	2.59	2.77
MEA	1.60	1.67	1.54	2.17	2.55	2.52	2.97	2.82	3.99	4.33
NEU	1.42	1.53	1.52	1.69	2.56	2.68	2.75	3.07	3.28	3.78
OAS	3.06	3.17	2.99	3.04	3.31	3.30	3.62	3.31	3.88	4.78
REF	1.71	1.88	1.84	1.57	2.28	2.17	2.11	1.80	2.02	1.84
SSA	0.99	1.27	1.21	1.11	1.22	1.44	1.42	1.58	1.65	2.24
USA	3.41	3.43	4.45	4.76	5.64	5.20	5.69	7.17	7.82	9.20

Table 1204: FAO — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha)

52.1.16 Other crops—Pulses



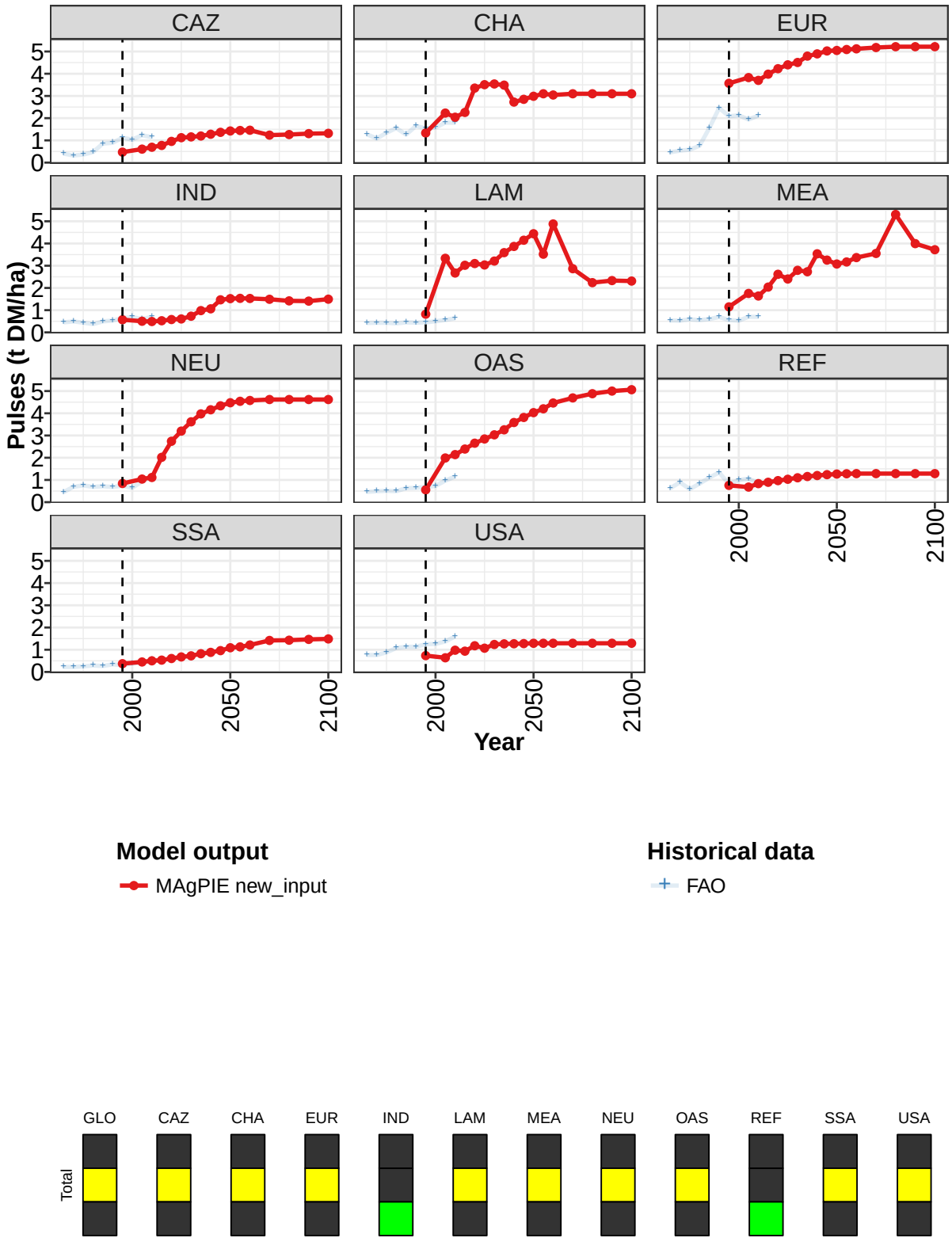


Figure 324: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.66	0.79	0.78	0.85	0.98	1.06	1.19	1.40	1.52	1.74	1.83
CAZ	0.47	0.61	0.69	0.77	0.96	1.12	1.16	1.20	1.28	1.36	1.42
CHA	1.33	2.23	2.04	2.26	3.35	3.51	3.54	3.49	2.72	2.85	2.99
EUR	3.57	3.83	3.70	3.98	4.23	4.40	4.51	4.79	4.89	5.03	5.05
IND	0.57	0.50	0.49	0.52	0.58	0.60	0.73	0.98	1.06	1.47	1.52
LAM	0.82	3.33	2.67	3.02	3.10	3.03	3.21	3.59	3.87	4.15	4.44
MEA	1.15	1.75	1.64	2.04	2.61	2.40	2.79	2.73	3.54	3.25	3.08
NEU	0.84	1.04	1.11	2.02	2.74	3.20	3.62	3.97	4.16	4.34	4.48
OAS	0.56	1.99	2.14	2.39	2.65	2.84	3.03	3.26	3.59	3.81	4.03
REF	0.76	0.68	0.83	0.90	0.97	1.03	1.10	1.16	1.20	1.24	1.27
SSA	0.37	0.45	0.50	0.53	0.60	0.68	0.73	0.82	0.88	0.96	1.09
USA	0.74	0.64	0.98	0.94	1.18	1.07	1.24	1.26	1.27	1.28	1.29

Table 1205: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha) [PART 1/2]

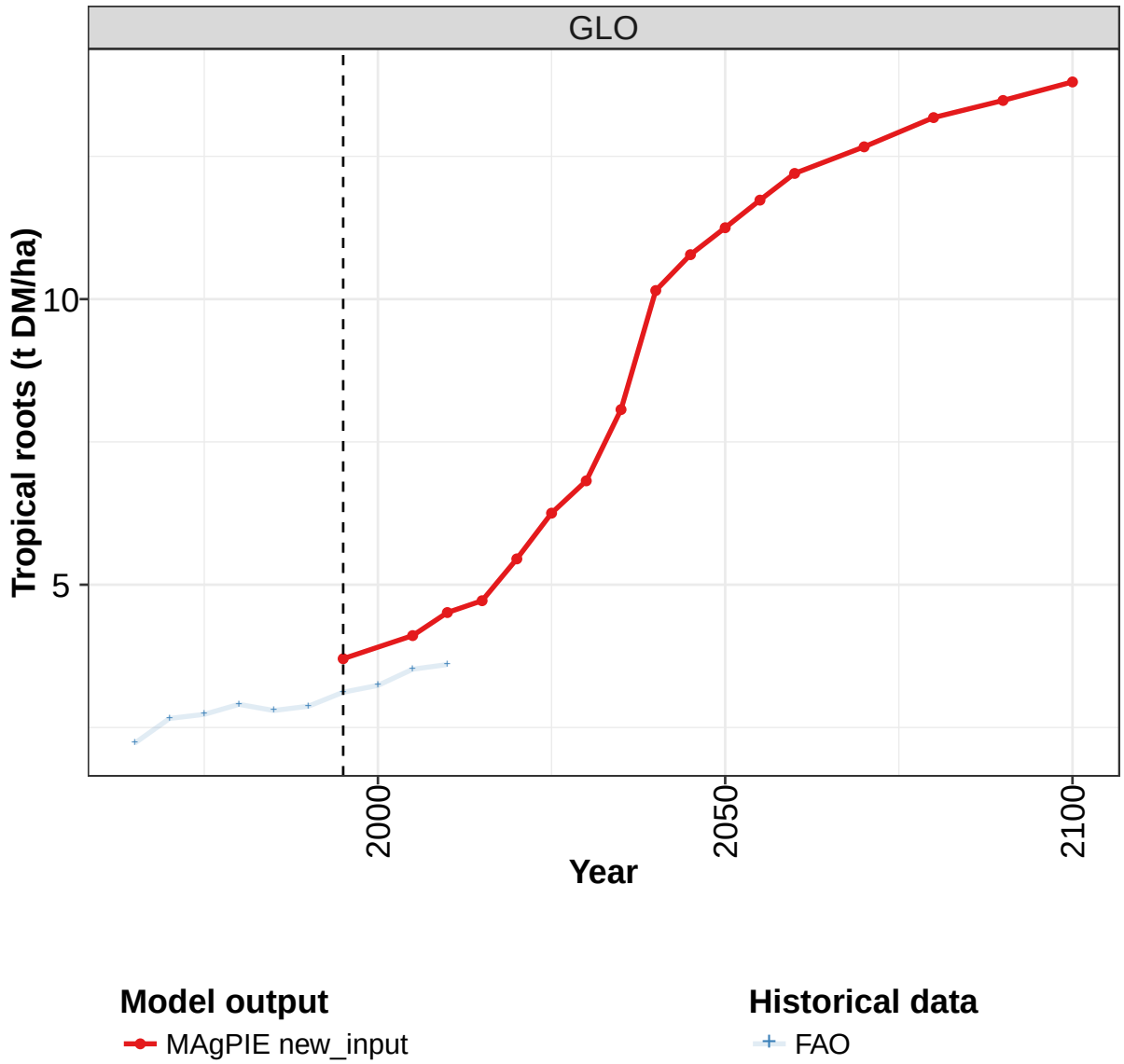
	2055	2060	2070	2080	2090	2100
GLO	1.87	1.99	2.07	2.03	2.07	2.11
CAZ	1.45	1.46	1.24	1.26	1.30	1.32
CHA	3.10	3.04	3.10	3.10	3.10	3.10
EUR	5.09	5.12	5.18	5.22	5.22	5.22
IND	1.53	1.53	1.49	1.42	1.41	1.50
LAM	3.52	4.88	2.87	2.24	2.33	2.31
MEA	3.17	3.37	3.55	5.31	4.00	3.72
NEU	4.54	4.58	4.62	4.62	4.62	4.62
OAS	4.20	4.46	4.69	4.88	5.00	5.06
REF	1.28	1.29	1.29	1.29	1.29	1.29
SSA	1.13	1.21	1.42	1.43	1.47	1.49
USA	1.29	1.29	1.29	1.29	1.29	1.29

Table 1206: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.51	0.53	0.49	0.52	0.62	0.71	0.65	0.70	0.74	0.81
CAZ	0.40	0.32	0.36	0.47	0.85	0.89	1.12	1.03	1.23	1.15
CHA	1.28	1.08	1.34	1.56	1.26	1.65	1.54	1.57	1.80	1.79
EUR	0.46	0.54	0.58	0.76	1.56	2.46	2.08	2.13	1.94	2.12
IND	0.45	0.49	0.44	0.37	0.49	0.53	0.65	0.69	0.60	0.70
LAM	0.42	0.43	0.43	0.41	0.45	0.44	0.45	0.50	0.56	0.63
MEA	0.54	0.53	0.59	0.55	0.60	0.69	0.55	0.53	0.70	0.70
NEU	0.45	0.69	0.75	0.69	0.72	0.69	0.74	0.65	0.93	1.14
OAS	0.46	0.49	0.51	0.49	0.63	0.64	0.68	0.73	0.97	1.16
REF	0.62	0.89	0.58	0.83	1.10	1.34	0.82	1.00	1.06	0.85
SSA	0.23	0.23	0.25	0.29	0.27	0.34	0.30	0.38	0.42	0.56
USA	0.77	0.76	0.88	1.08	1.13	1.13	1.25	1.26	1.37	1.60

Table 1207: FAO — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha)

52.1.17 Other crops—Tropical roots



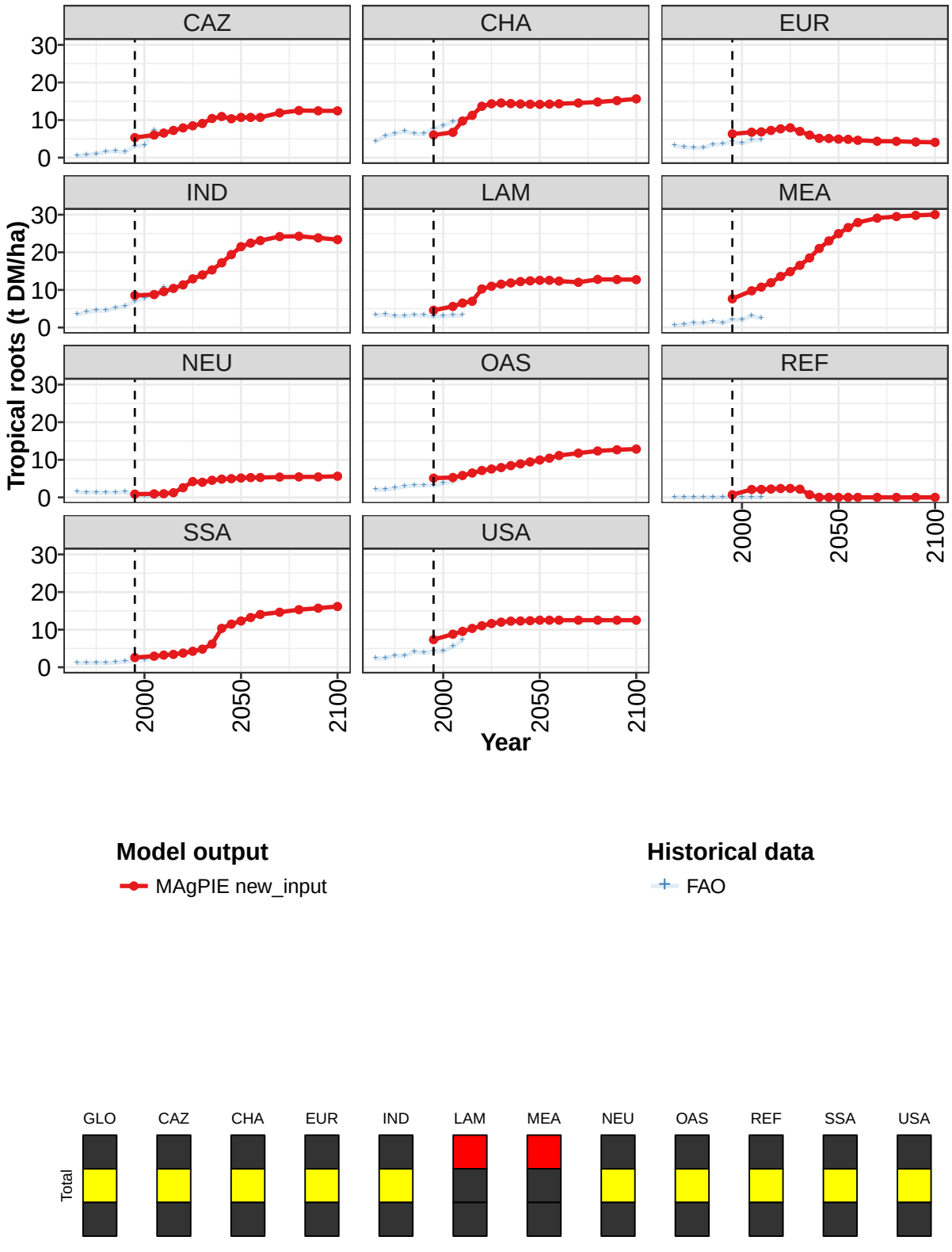


Figure 325: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.7	4.1	4.5	4.7	5.5	6.3	6.8	8.1	10.2	10.8	11.3
CAZ	5.3	6.0	6.5	7.2	7.9	8.5	9.1	10.4	10.9	10.4	10.7
CHA	6.0	6.7	9.7	11.3	13.7	14.3	14.5	14.4	14.3	14.2	14.2
EUR	6.3	6.8	6.9	7.2	7.7	7.9	7.0	6.0	5.1	5.1	4.9
IND	8.5	8.8	9.6	10.4	11.4	12.9	14.0	15.3	17.2	19.4	21.5
LAM	4.6	5.6	6.5	7.0	10.3	11.0	11.5	11.9	12.2	12.4	12.6
MEA	7.6	9.8	10.7	11.9	13.6	14.9	16.5	18.5	21.0	23.0	25.0
NEU	0.9	0.9	1.0	1.2	2.6	4.2	4.0	4.5	4.9	5.0	5.2
OAS	5.1	5.3	5.8	6.5	7.2	7.5	7.9	8.4	8.9	9.4	9.9
REF	0.7	2.1	2.1	2.2	2.4	2.4	2.2	0.7	0.0	0.0	0.0
SSA	2.6	2.9	3.2	3.4	3.8	4.2	4.8	6.2	10.3	11.5	12.3
USA	7.4	8.8	9.5	10.3	11.0	11.6	12.0	12.3	12.3	12.4	12.5

Table 1208: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha) [PART 1/2]

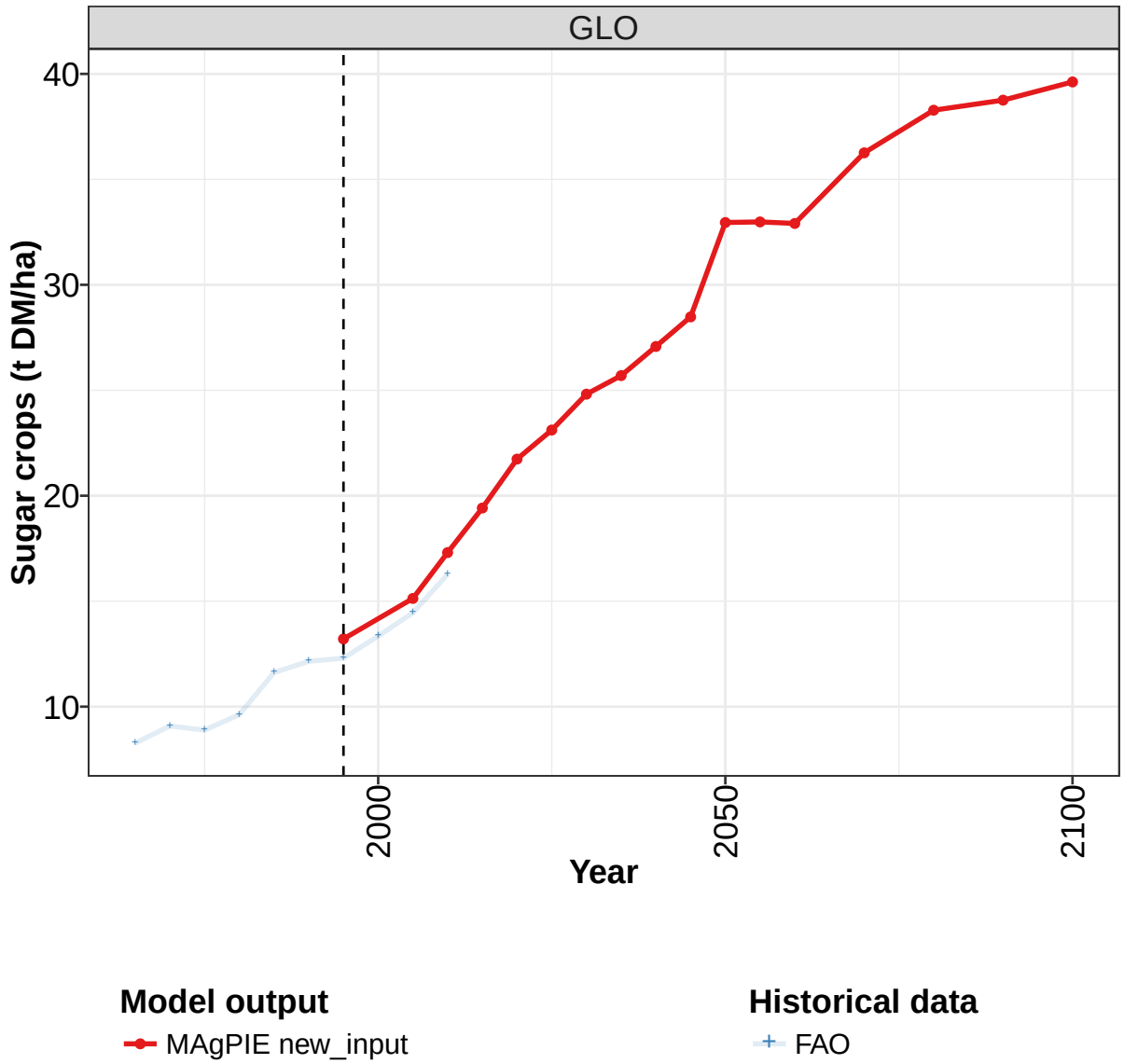
	2055	2060	2070	2080	2090	2100
GLO	11.7	12.2	12.7	13.2	13.5	13.8
CAZ	10.7	10.7	11.9	12.5	12.5	12.5
CHA	14.3	14.3	14.5	14.8	15.2	15.6
EUR	4.9	4.6	4.4	4.4	4.2	4.1
IND	22.5	23.1	24.2	24.3	23.8	23.4
LAM	12.6	12.4	12.0	12.8	12.8	12.7
MEA	26.6	27.9	29.1	29.5	29.8	30.0
NEU	5.3	5.3	5.4	5.4	5.4	5.6
OAS	10.4	11.1	11.8	12.4	12.7	12.8
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	13.2	14.0	14.6	15.3	15.7	16.2
USA	12.5	12.5	12.5	12.5	12.5	12.5

Table 1209: MAgPIE new_input — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.2	2.7	2.7	2.9	2.8	2.9	3.1	3.2	3.5	3.6
CAZ	0.5	0.8	0.9	1.6	1.7	1.4	3.1	3.3	7.3	6.8
CHA	4.2	5.8	6.3	7.0	6.3	6.3	7.6	8.4	9.5	9.8
EUR	3.2	2.8	2.7	2.7	3.5	3.7	4.2	3.8	4.6	4.8
IND	3.5	4.1	4.5	4.5	5.2	5.7	6.9	7.8	8.7	10.5
LAM	3.3	3.4	3.0	3.0	3.3	3.2	2.9	3.0	3.2	3.2
MEA	0.5	0.8	1.1	1.1	1.7	1.2	2.1	2.1	3.1	2.5
NEU	1.4	1.3	1.3	1.3	1.3	1.5	0.3	0.4	0.1	0.4
OAS	2.0	2.1	2.4	2.9	3.2	3.2	3.2	3.7	4.2	5.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.0	1.2	1.2	1.2	1.3	1.5	1.9	2.0	2.4	2.6
USA	2.3	2.4	3.0	3.0	4.1	3.8	4.2	4.2	5.5	7.1

Table 1210: FAO — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha)

52.1.18 Sugar crops



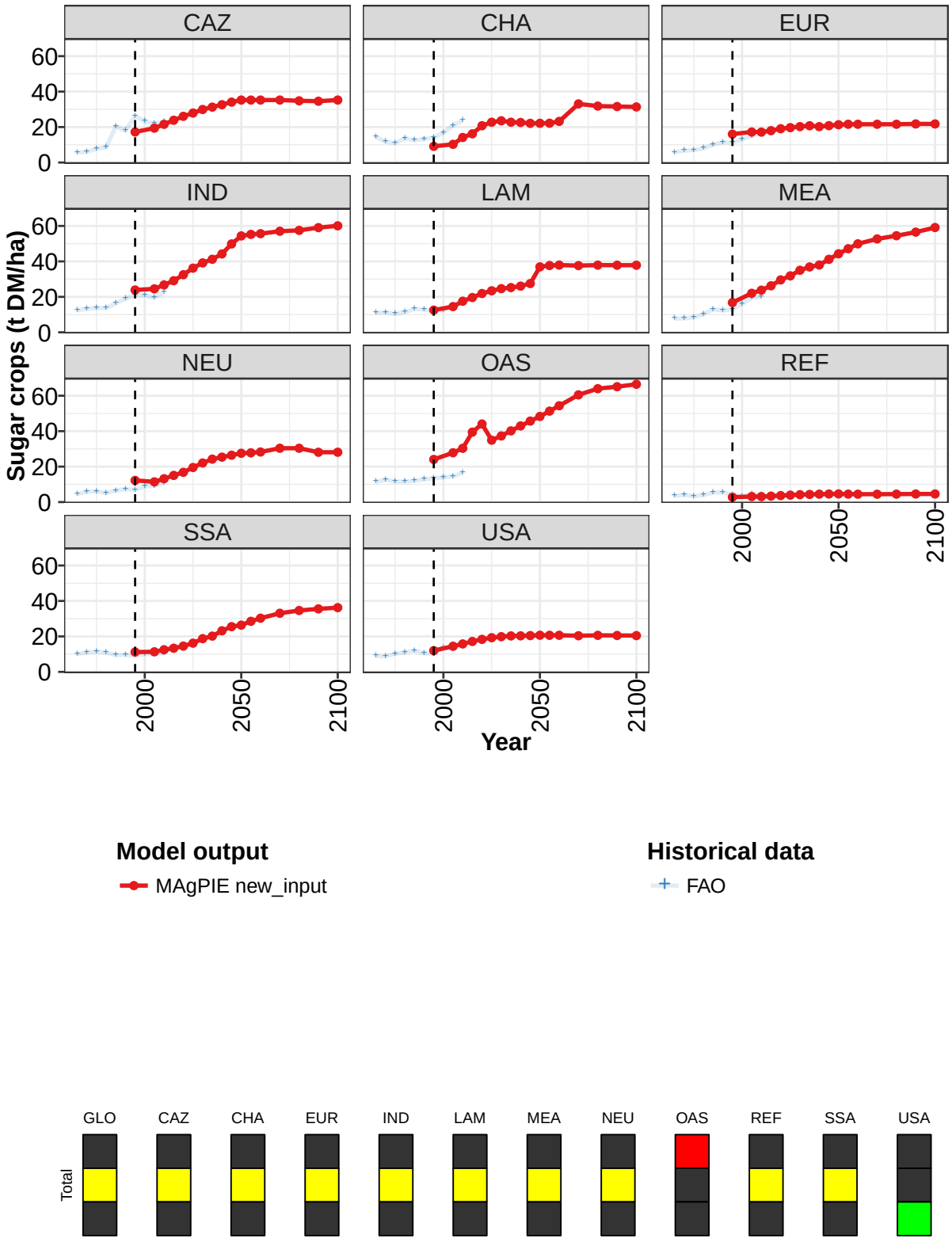


Figure 326: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	13.2	15.1	17.3	19.4	21.7	23.1	24.8	25.7	27.1	28.5	33.0
CAZ	17.2	19.4	21.6	23.8	26.1	27.9	29.9	31.3	32.6	34.1	35.2
CHA	9.1	10.3	14.1	16.2	20.8	22.7	23.5	22.7	22.6	22.1	22.1
EUR	16.0	17.2	17.2	18.0	19.1	19.7	20.3	20.7	20.2	20.8	21.3
IND	23.9	24.5	26.7	29.1	32.5	36.2	39.1	41.2	44.2	49.9	54.4
LAM	12.5	14.5	17.5	19.6	21.9	23.4	24.6	25.2	26.1	27.5	36.9
MEA	16.8	22.0	23.8	26.2	29.6	31.8	35.0	36.9	38.0	41.2	44.3
NEU	12.2	11.4	13.2	15.1	16.8	19.5	22.1	24.2	25.4	26.5	27.5
OAS	24.1	27.8	30.3	39.5	44.0	34.9	37.3	40.2	43.0	45.7	48.3
REF	2.8	3.1	3.1	3.4	3.7	3.9	4.2	4.3	4.5	4.6	4.6
SSA	11.2	11.3	12.5	13.4	14.5	16.2	18.7	20.2	23.2	25.5	26.4
USA	12.0	14.5	15.8	17.2	18.3	19.3	19.9	20.3	20.3	20.5	20.7

Table 1211: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops (t DM/ha) [PART 1/2]

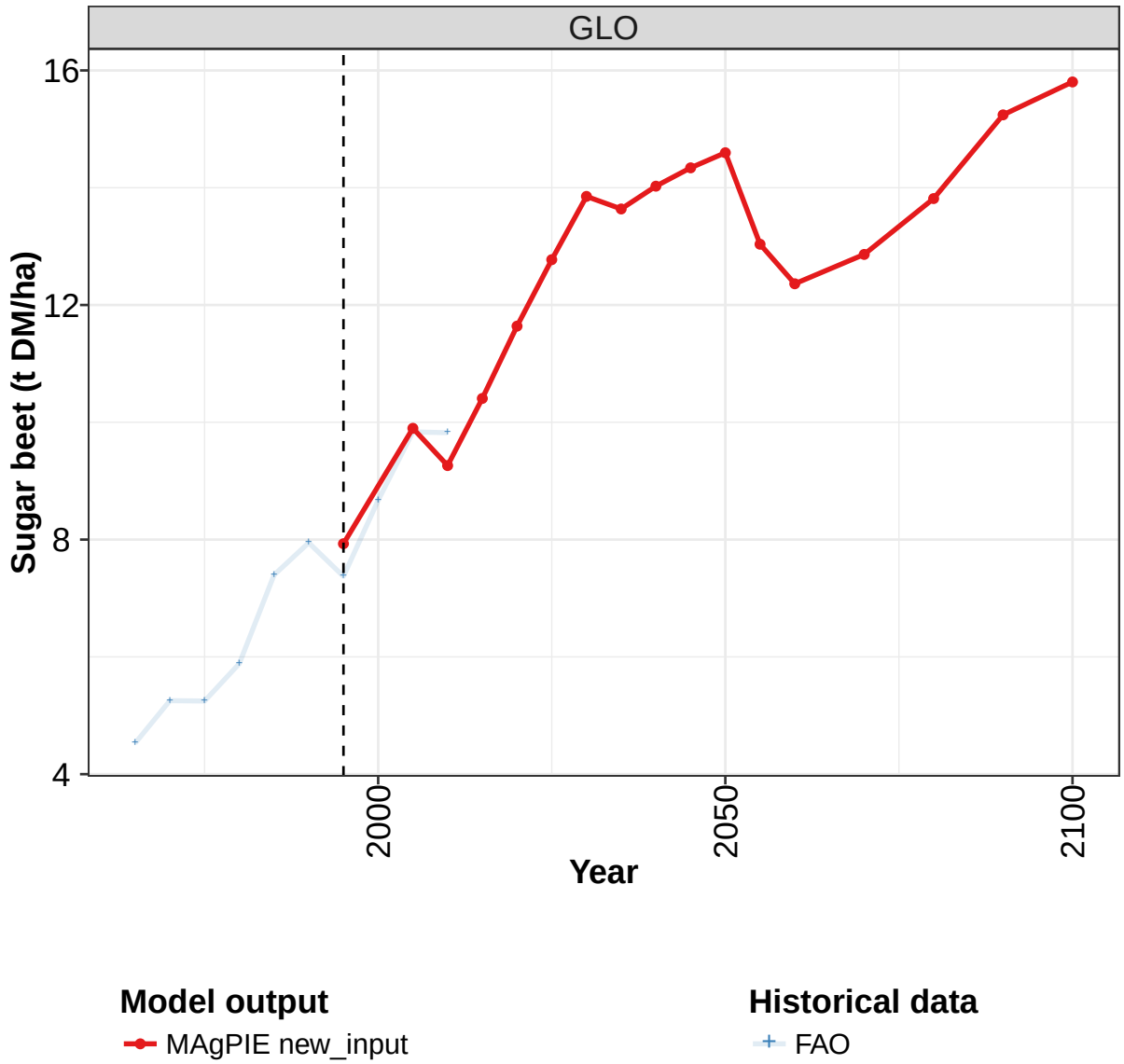
	2055	2060	2070	2080	2090	2100
GLO	33.0	32.9	36.3	38.3	38.8	39.6
CAZ	35.2	35.2	35.2	34.8	34.6	35.2
CHA	22.2	23.2	33.1	31.8	31.6	31.4
EUR	21.6	21.6	21.6	21.6	21.8	21.8
IND	55.3	55.6	57.0	57.5	59.1	60.1
LAM	37.7	37.9	37.6	37.9	37.9	37.9
MEA	47.2	49.9	52.7	54.5	56.5	59.1
NEU	27.8	28.3	30.4	30.4	28.1	28.1
OAS	51.3	54.3	60.5	64.0	65.1	66.5
REF	4.5	4.5	4.5	4.5	4.6	4.6
SSA	28.5	30.3	33.1	34.6	35.5	36.2
USA	20.6	20.6	20.4	20.6	20.5	20.5

Table 1212: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.3	9.1	8.9	9.6	11.6	12.1	12.3	13.3	14.5	16.3
CAZ	5.6	6.1	7.7	8.6	20.4	17.9	26.3	23.2	21.9	23.2
CHA	14.4	11.7	11.0	13.7	12.5	13.3	14.0	16.8	20.9	23.7
EUR	5.7	6.7	7.0	8.0	10.2	11.3	11.2	13.2	14.8	17.2
IND	12.4	13.3	13.7	13.7	16.3	18.9	21.0	20.8	19.6	22.5
LAM	11.0	11.3	10.4	11.4	13.1	12.9	11.9	12.5	14.6	16.7
MEA	7.7	7.8	8.3	10.2	13.0	12.2	13.0	15.9	19.4	20.1
NEU	4.4	5.9	6.0	5.2	6.5	7.3	6.9	8.8	9.2	10.7
OAS	11.4	12.6	11.6	11.6	12.0	12.8	13.4	14.0	14.6	16.5
REF	3.5	4.1	3.3	4.0	5.3	5.5	4.0	3.2	4.6	3.9
SSA	10.1	11.1	11.5	10.8	9.6	9.6	9.1	10.0	10.3	10.3
USA	9.0	8.8	10.3	11.0	12.0	10.5	10.2	13.8	12.8	15.3

Table 1213: FAO — Productivity—Yield—Crops—Sugar crops (t DM/ha)

52.1.19 Sugar crops—Sugar beet



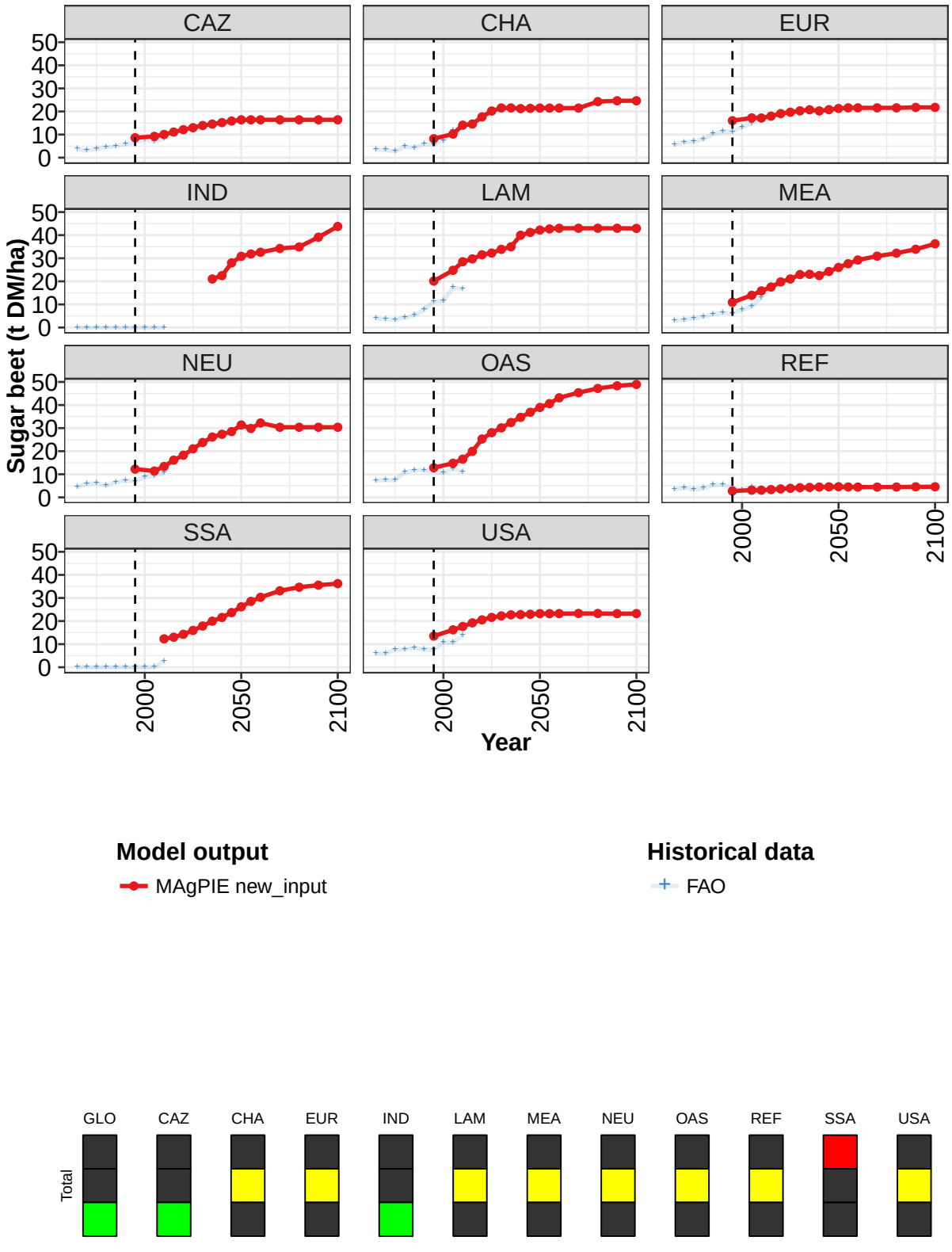


Figure 327: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8	10	9	10	12	13	14	14	14	14	15
CAZ	9	9	10	11	12	13	14	15	15	16	16
CHA	8	10	14	15	18	20	22	22	21	21	21
EUR	16	17	17	18	19	20	20	21	20	21	21
IND								21	22	28	31
LAM	20	25	28	30	32	32	34	35	40	41	42
MEA	11	14	16	18	20	21	23	23	22	24	26
NEU	12	11	13	16	18	21	24	26	27	29	31
OAS	13	15	17	20	25	28	30	32	35	37	39
REF	3	3	3	3	4	4	4	4	4	5	5
SSA			12	13	14	16	18	20	22	24	26
USA	13	16	18	19	21	22	22	23	23	23	23

Table 1214: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha) [PART 1/2]

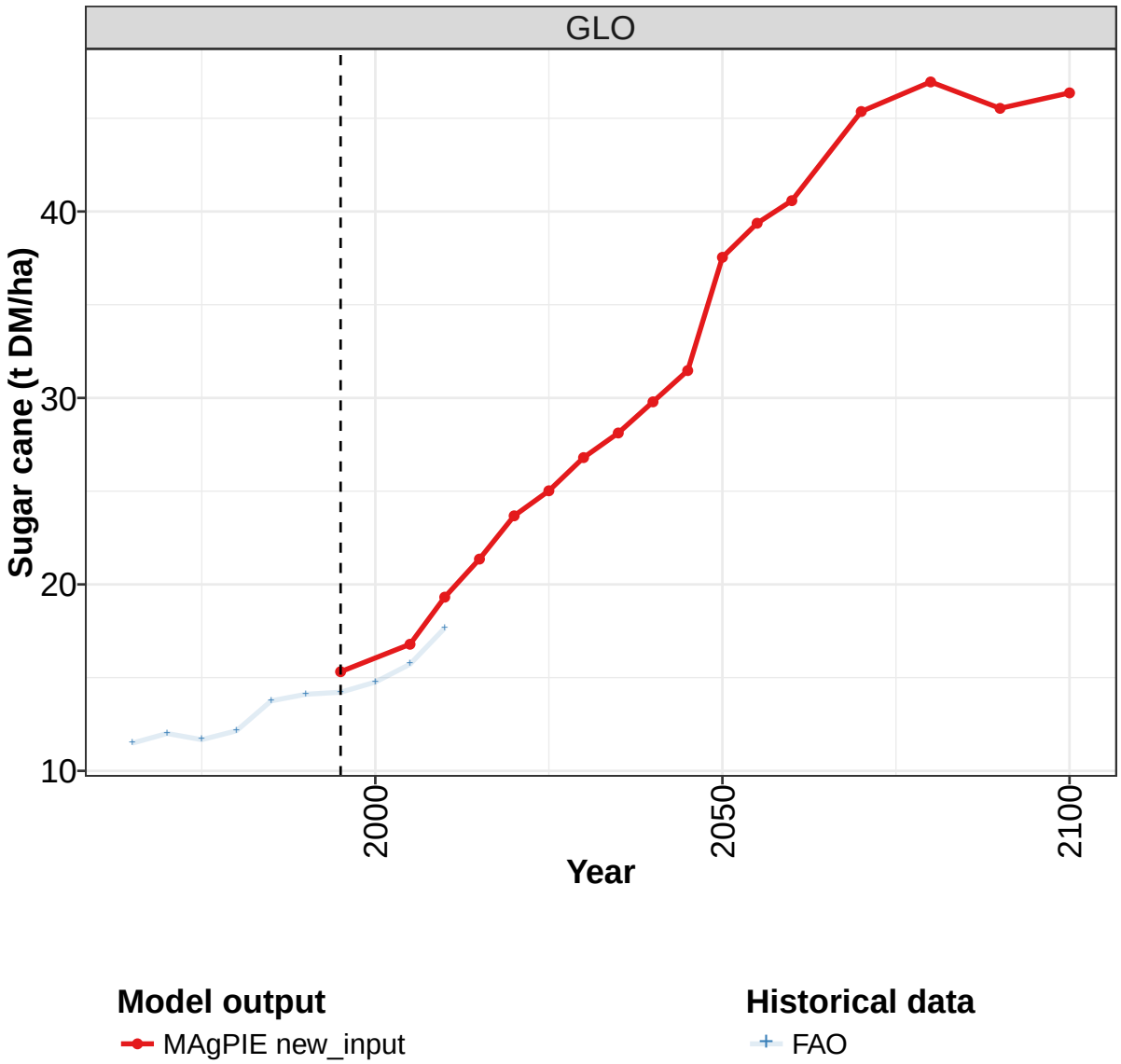
	2055	2060	2070	2080	2090	2100
GLO	13	12	13	14	15	16
CAZ	16	16	16	16	16	16
CHA	21	21	21	24	25	25
EUR	22	22	22	22	22	22
IND	32	33	34	35	39	44
LAM	43	43	43	43	43	43
MEA	28	29	31	32	34	36
NEU	30	32	30	30	30	30
OAS	41	43	45	47	48	49
REF	5	4	4	4	5	5
SSA	29	30	33	35	36	36
USA	23	23	23	23	23	23

Table 1215: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.5	5.3	5.2	5.9	7.4	7.9	7.4	8.7	9.8	9.8
CAZ	3.7	3.1	3.8	4.5	4.9	5.8	6.5	7.9	6.9	8.2
CHA	3.6	3.3	2.7	4.7	4.2	5.9	5.7	7.3	11.7	14.3
EUR	5.7	6.6	7.0	8.0	10.2	11.3	11.2	13.2	14.8	17.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	4.0	3.6	3.4	4.3	5.2	7.8	11.2	11.5	17.3	16.7
MEA	2.9	3.4	3.9	4.8	5.8	6.3	6.1	7.6	9.2	12.8
NEU	4.4	5.9	6.0	5.2	6.5	7.3	6.9	8.8	9.2	10.7
OAS	7.3	7.5	7.4	10.8	11.8	11.7	11.2	10.6	12.5	11.0
REF	3.5	4.1	3.3	4.0	5.3	5.5	4.0	3.2	4.6	3.9
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
USA	5.8	6.1	7.5	7.8	8.4	7.7	7.6	10.7	10.6	13.8

Table 1216: FAO — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha)

52.1.20 Sugar crops—Sugar cane



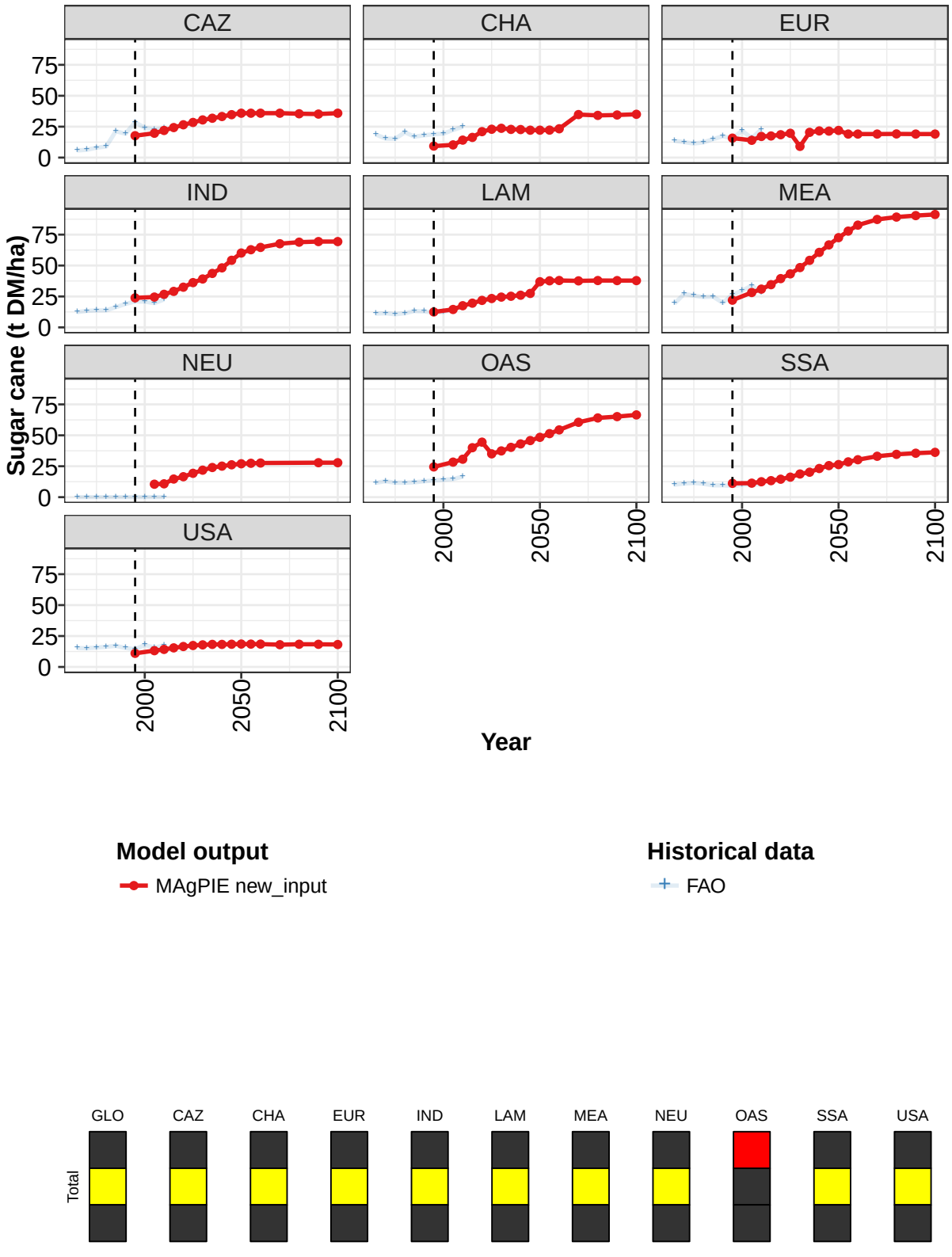


Figure 328: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	15	17	19	21	24	25	27	28	30	31	38
CAZ	18	20	22	24	27	28	30	32	33	35	36
CHA	9	10	14	16	21	23	24	23	23	22	22
EUR	16	14	17	17	19	20	9	20	22	21	22
IND	24	25	27	29	33	36	39	44	48	54	60
LAM	12	14	18	20	22	23	24	25	26	27	37
MEA	22	28	31	35	39	43	48	54	61	67	73
NEU		10	11	15	17	19	22	24	25	26	27
OAS	24	28	31	40	44	35	37	40	43	46	48
SSA	11	11	12	13	15	16	19	20	23	26	26
USA	11	13	14	15	17	17	18	18	18	18	19

Table 1217: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha) [PART 1/2]

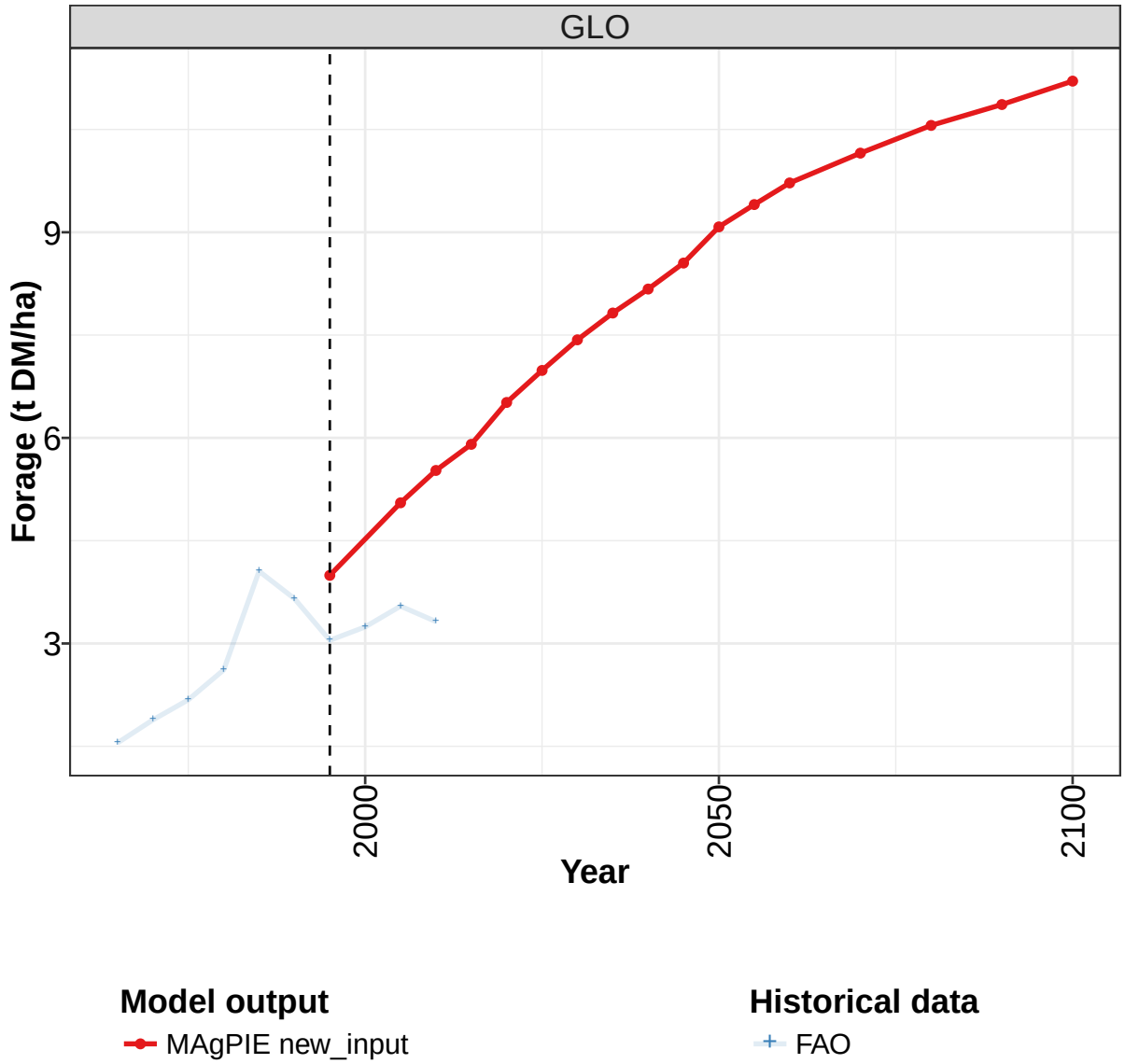
	2055	2060	2070	2080	2090	2100
GLO	39	41	45	47	46	46
CAZ	36	36	36	35	35	36
CHA	22	23	35	34	34	35
EUR	19	19	19	19	19	19
IND	63	65	68	69	69	69
LAM	38	38	38	38	38	38
MEA	78	83	87	89	90	91
NEU	27	28			28	28
OAS	51	54	61	64	65	67
SSA	29	30	33	35	36	36
USA	18	18	18	18	18	18

Table 1218: MAgPIE new_input — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.5	12.0	11.7	12.1	13.8	14.1	14.2	14.8	15.7	17.7
CAZ	5.8	6.3	8.0	8.9	21.3	19.3	28.6	24.1	22.6	23.9
CHA	18.7	15.4	15.1	20.4	17.0	18.0	18.9	19.4	22.3	24.9
EUR	13.5	12.5	11.4	12.3	14.9	17.3	15.5	21.7	15.8	22.7
IND	12.4	13.3	13.7	13.7	16.3	18.9	21.0	20.8	19.6	22.5
LAM	11.1	11.4	10.6	11.5	13.2	12.9	11.9	12.5	14.5	16.7
MEA	19.3	27.0	25.7	24.5	24.9	19.8	26.5	29.7	33.7	28.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	11.6	12.9	11.7	11.6	12.0	12.8	13.5	14.1	14.6	16.6
SSA	10.1	11.1	11.5	10.8	9.6	9.6	9.1	10.0	10.3	10.3
USA	15.3	15.2	15.7	16.3	17.0	15.4	14.3	17.8	15.7	17.4

Table 1219: FAO — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha)

52.2 Forage


GLO
Forage (t DM/ha)
9
6
3
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

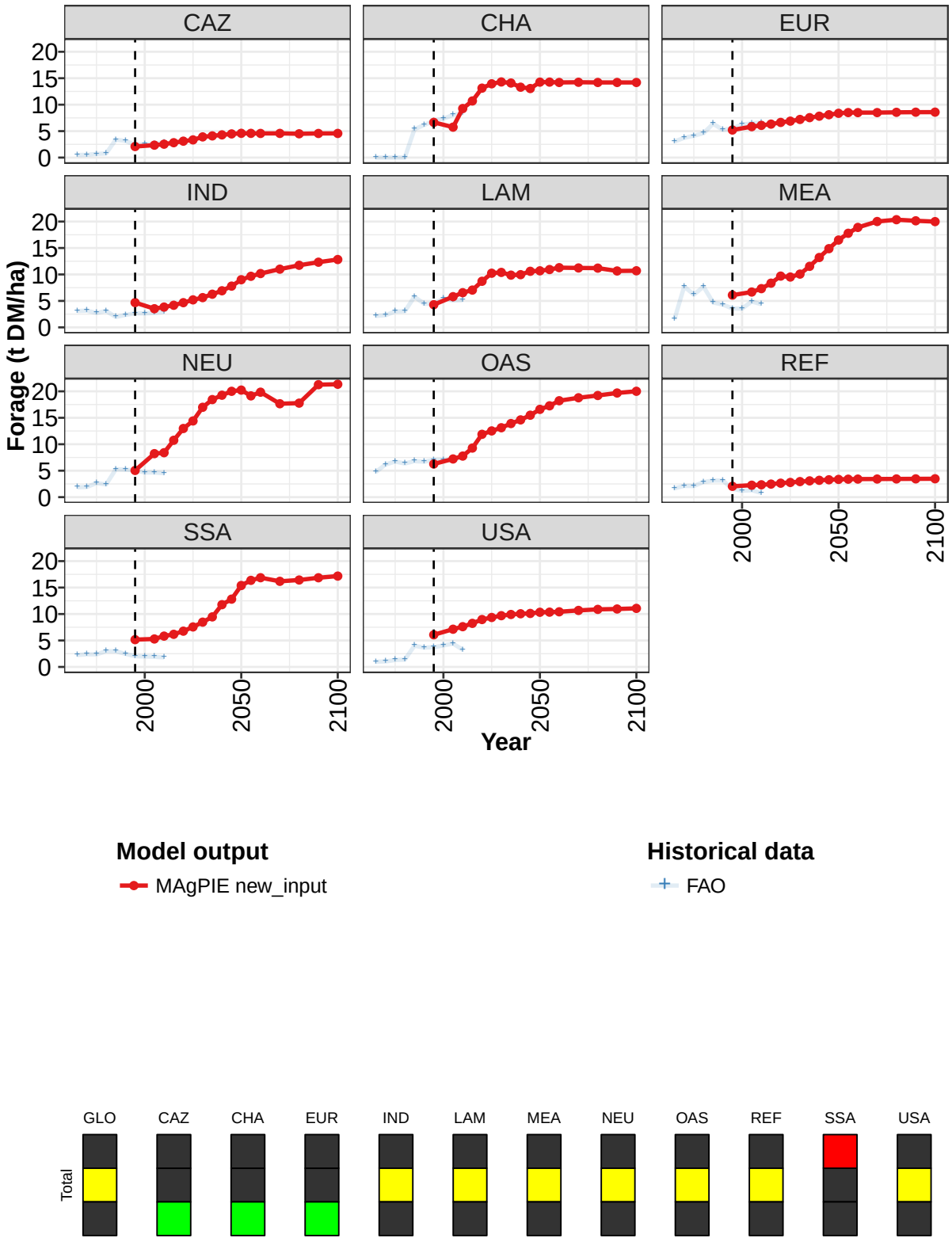


Figure 329: MAgPIE new_input — Productivity—Yield—Forage (t DM/ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.0	5.1	5.5	5.9	6.5	7.0	7.4	7.8	8.2	8.6	9.1
CAZ	2.1	2.4	2.5	2.8	3.1	3.3	3.9	4.1	4.3	4.5	4.6
CHA	6.7	5.8	9.3	10.7	13.1	13.9	14.3	14.1	13.3	13.1	14.3
EUR	5.2	5.8	6.1	6.3	6.7	6.9	7.2	7.6	7.8	8.1	8.4
IND	4.7	3.5	3.8	4.2	4.7	5.2	5.6	6.3	6.9	7.8	9.0
LAM	4.3	5.8	6.6	7.0	8.7	10.2	10.4	9.9	10.0	10.6	10.7
MEA	6.1	6.7	7.3	8.4	9.7	9.5	10.1	11.5	13.2	14.9	16.5
NEU	5.0	8.2	8.4	10.8	13.0	14.4	17.0	18.4	19.3	20.0	20.2
OAS	6.3	7.2	7.8	9.3	11.9	12.5	13.1	13.9	14.6	15.5	16.6
REF	2.1	2.3	2.3	2.5	2.6	2.8	2.9	3.1	3.2	3.3	3.4
SSA	5.2	5.3	5.8	6.2	6.8	7.6	8.5	9.5	11.8	12.8	15.4
USA	6.1	7.1	7.6	8.2	9.0	9.3	9.7	9.9	10.0	10.1	10.3

Table 1220: MAgPIE new_input — Productivity—Yield—Forage (t DM/ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	9.4	9.7	10.2	10.6	10.9	11.2
CAZ	4.6	4.6	4.6	4.5	4.6	4.6
CHA	14.3	14.2	14.2	14.2	14.2	14.2
EUR	8.5	8.5	8.5	8.6	8.6	8.6
IND	9.7	10.2	11.0	11.7	12.3	12.8
LAM	10.9	11.3	11.2	11.2	10.7	10.7
MEA	17.8	18.9	20.0	20.4	20.1	20.0
NEU	19.1	19.8	17.7	17.8	21.3	21.3
OAS	17.3	18.2	18.8	19.2	19.7	20.0
REF	3.4	3.4	3.4	3.4	3.5	3.5
SSA	16.4	16.9	16.2	16.4	16.9	17.2
USA	10.4	10.4	10.7	10.9	11.0	11.1

Table 1221: MAgPIE new_input — Productivity—Yield—Forage (t DM/ha) [PART 2/2]

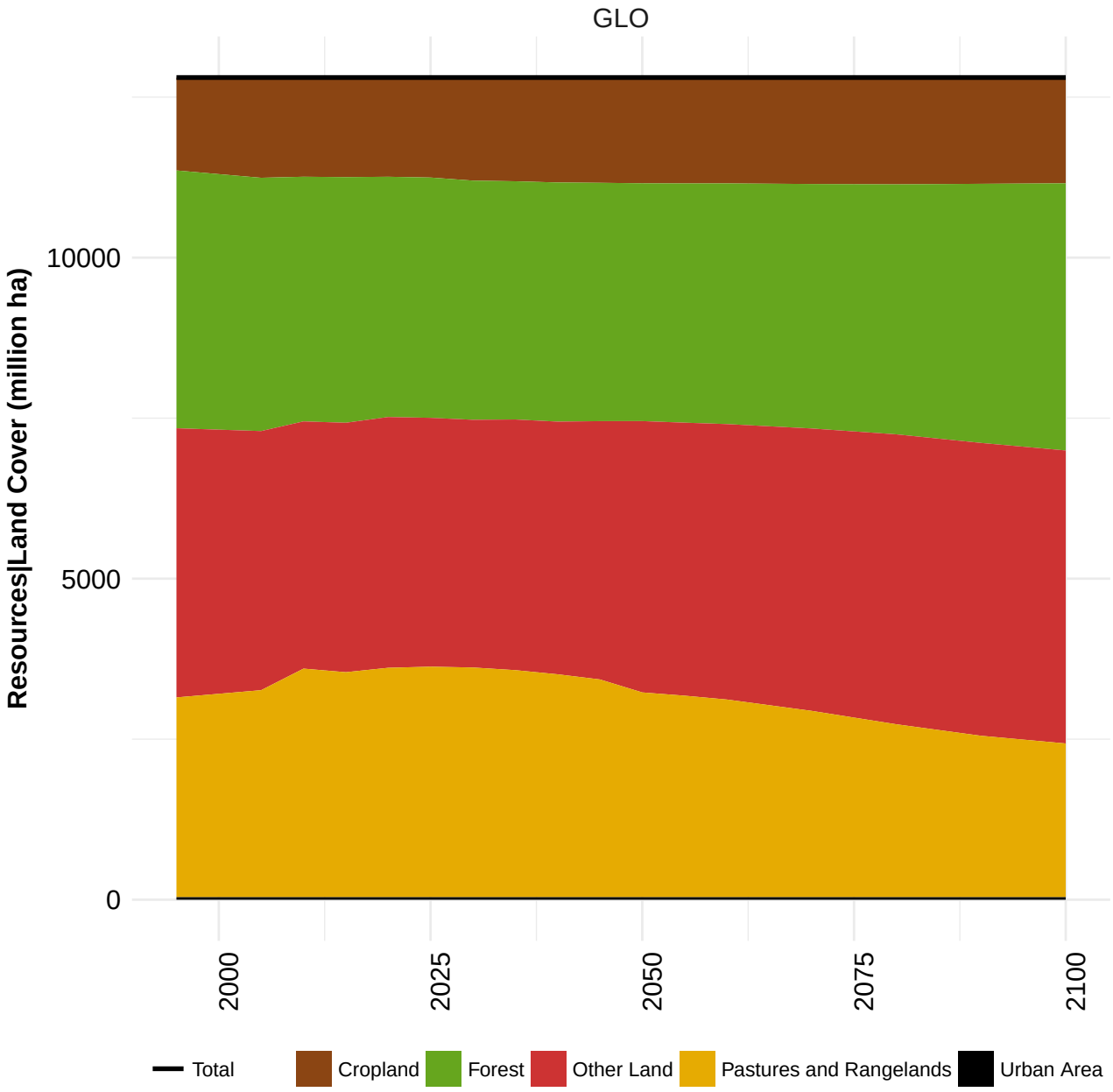
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.55	1.89	2.18	2.61	4.05	3.65	3.05	3.24	3.54	3.32
CAZ	0.50	0.53	0.69	0.78	3.39	3.16	2.42	2.59	2.58	2.93
CHA	0.00	0.00	0.00	0.00	5.36	6.15	6.99	7.36	8.05	8.36
EUR	3.05	3.72	4.13	4.60	6.40	5.25	5.54	6.25	6.46	6.64
IND	3.09	3.15	2.73	3.10	1.97	2.35	2.66	2.64	2.72	2.90
LAM	2.17	2.30	3.00	3.04	5.79	4.46	4.45	5.45	5.10	5.17
MEA	1.57	7.72	6.17	7.70	4.70	4.32	3.56	3.54	4.89	4.37
NEU	1.86	1.92	2.66	2.40	5.27	5.20	5.08	4.65	4.66	4.52
OAS	4.76	6.16	6.73	6.36	6.81	6.70	7.04	7.05	7.02	7.63
REF	1.67	2.12	2.10	2.86	3.14	3.14	1.58	1.21	1.30	0.81
SSA	2.25	2.39	2.37	2.98	2.96	2.47	2.03	1.97	1.92	1.80
USA	0.99	1.03	1.31	1.39	4.01	3.65	3.72	4.06	4.41	3.25

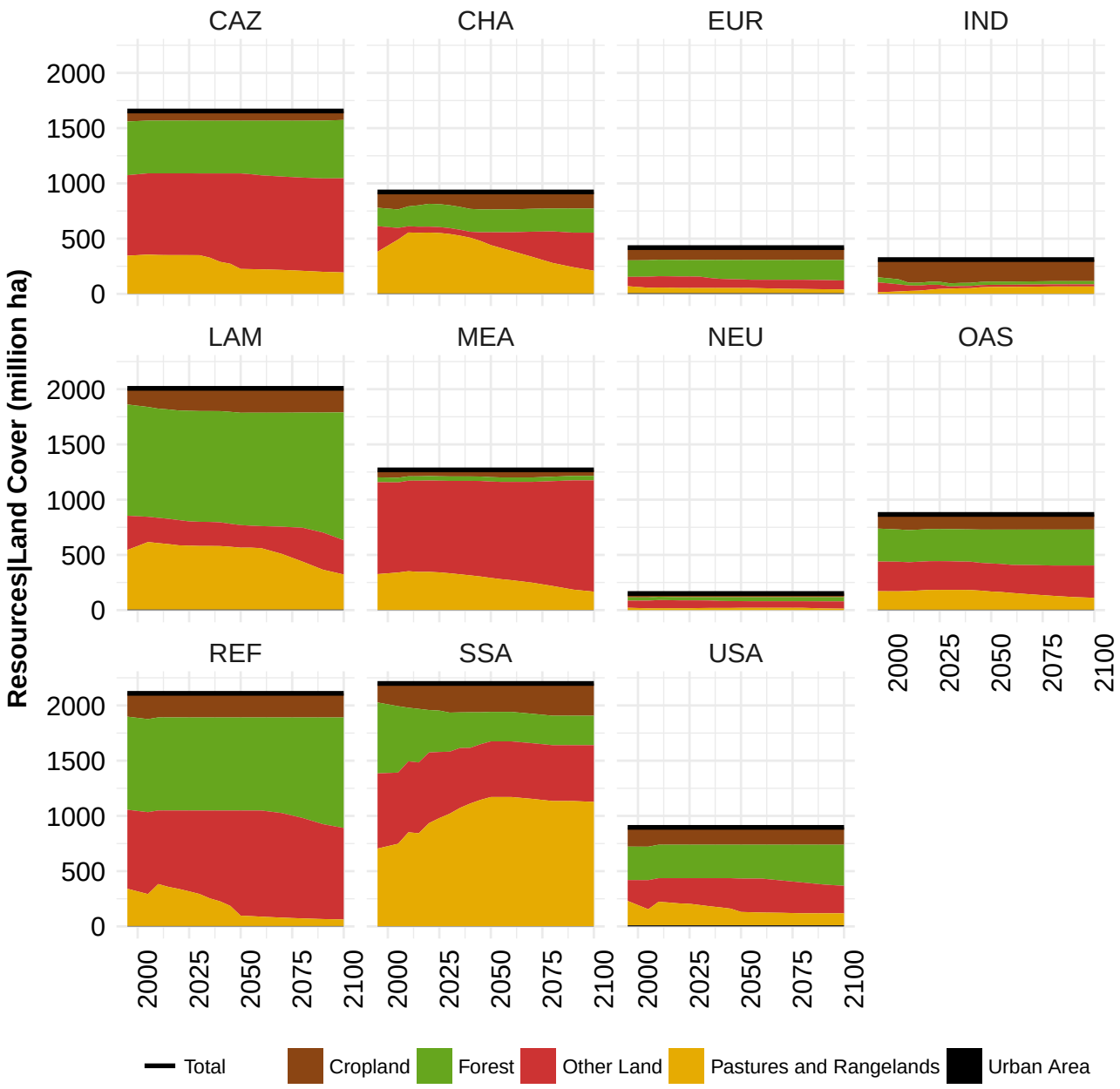
Table 1222: FAO — Productivity—Yield—Forage (t DM/ha)

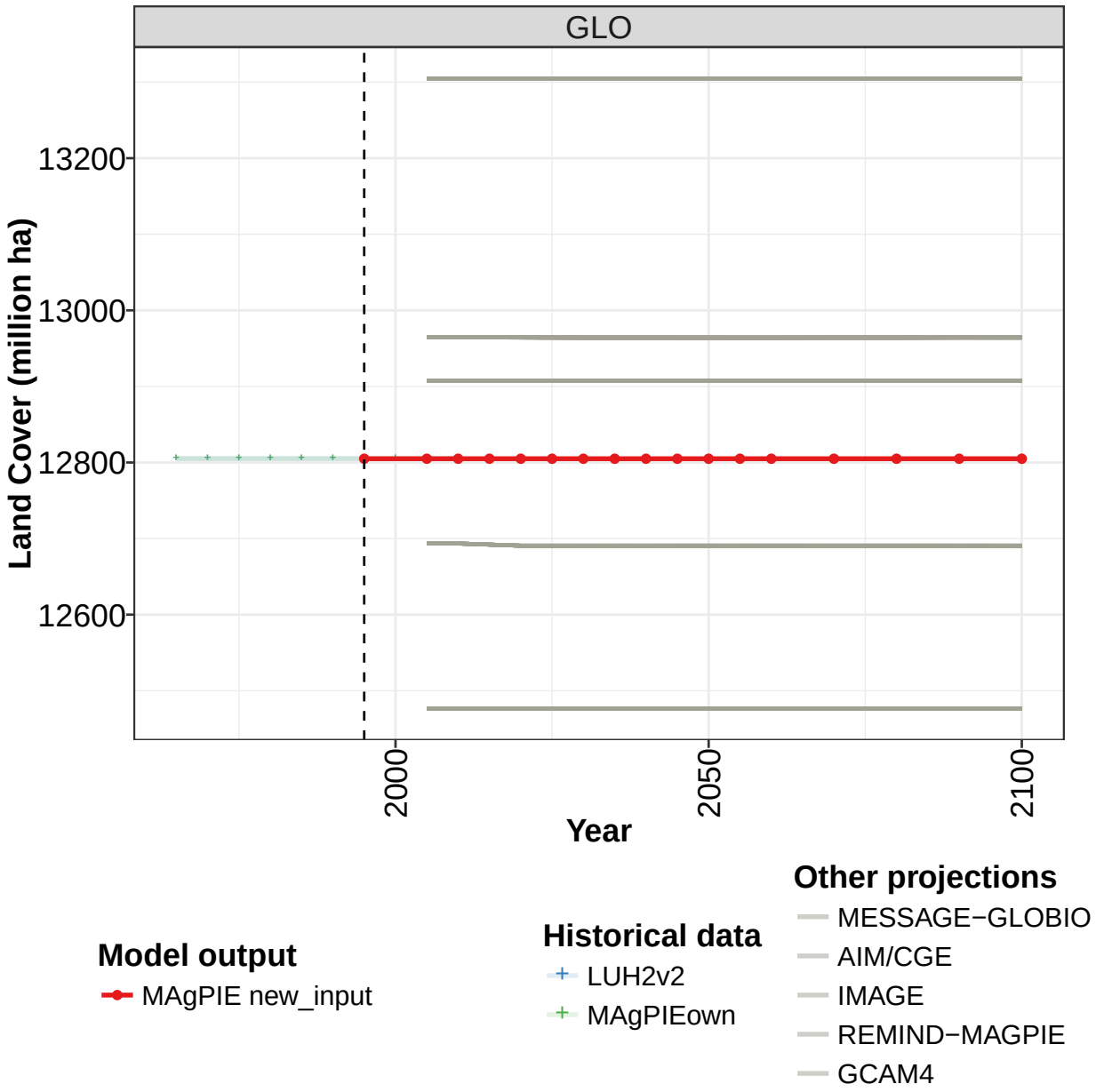
53 Yield-increasing technological change

Part XVI
Resources

54 Land Cover




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Resources|Land Cover (million ha)
0
500
1000
1500
2000
2000
2025
2050
2075
2100
Total
Cropland
Forest
Other Land
Pastures and Rangelands
Urban Area


GLO
Land Cover (million ha)
13200
13000
12800
12600
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
LUH2v2
MAgPIEown
Other projections
MESSAGE−GLOBIO
AIM/CGE
IMAGE
REMIND−MAGPIE
GCAM4

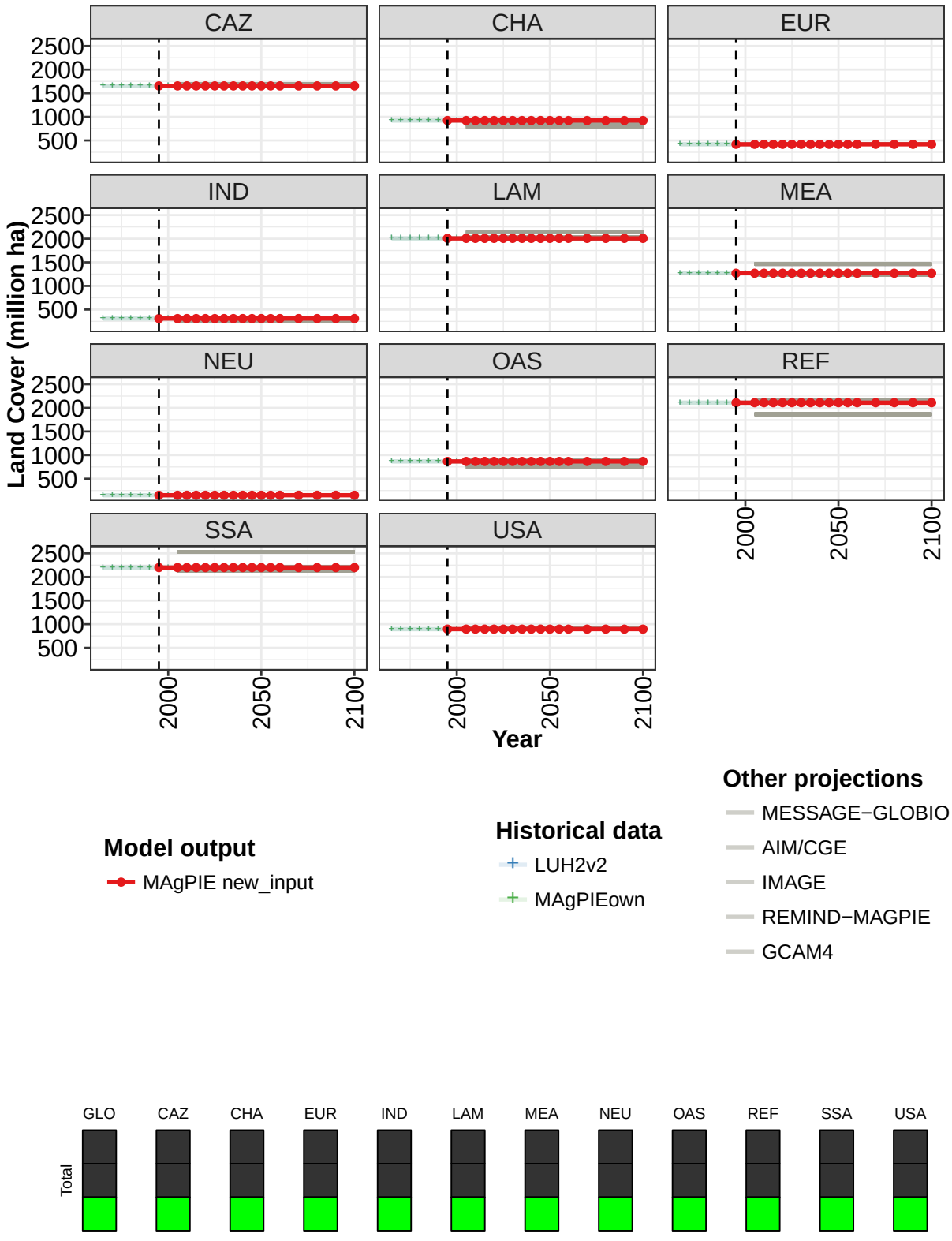


Figure 330: MAgPIE new_input — Resources—Land Cover (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922	922	922	922	922	922
EUR	419	419	419	419	419	419	419	419	419	419	419
IND	310	310	310	310	310	310	310	310	310	310	310
LAM	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151	151	151	151	151	151
OAS	866	866	866	866	866	866	866	866	866	866	866
REF	2109	2109	2109	2109	2109	2109	2109	2109	2109	2109	2109
SSA	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896	896	896	896	896	896

Table 1223: MAgPIE new_input — Resources—Land Cover (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922
EUR	419	419	419	419	419	419
IND	310	310	310	310	310	310
LAM	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151
OAS	866	866	866	866	866	866
REF	2109	2109	2109	2109	2109	2109
SSA	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896

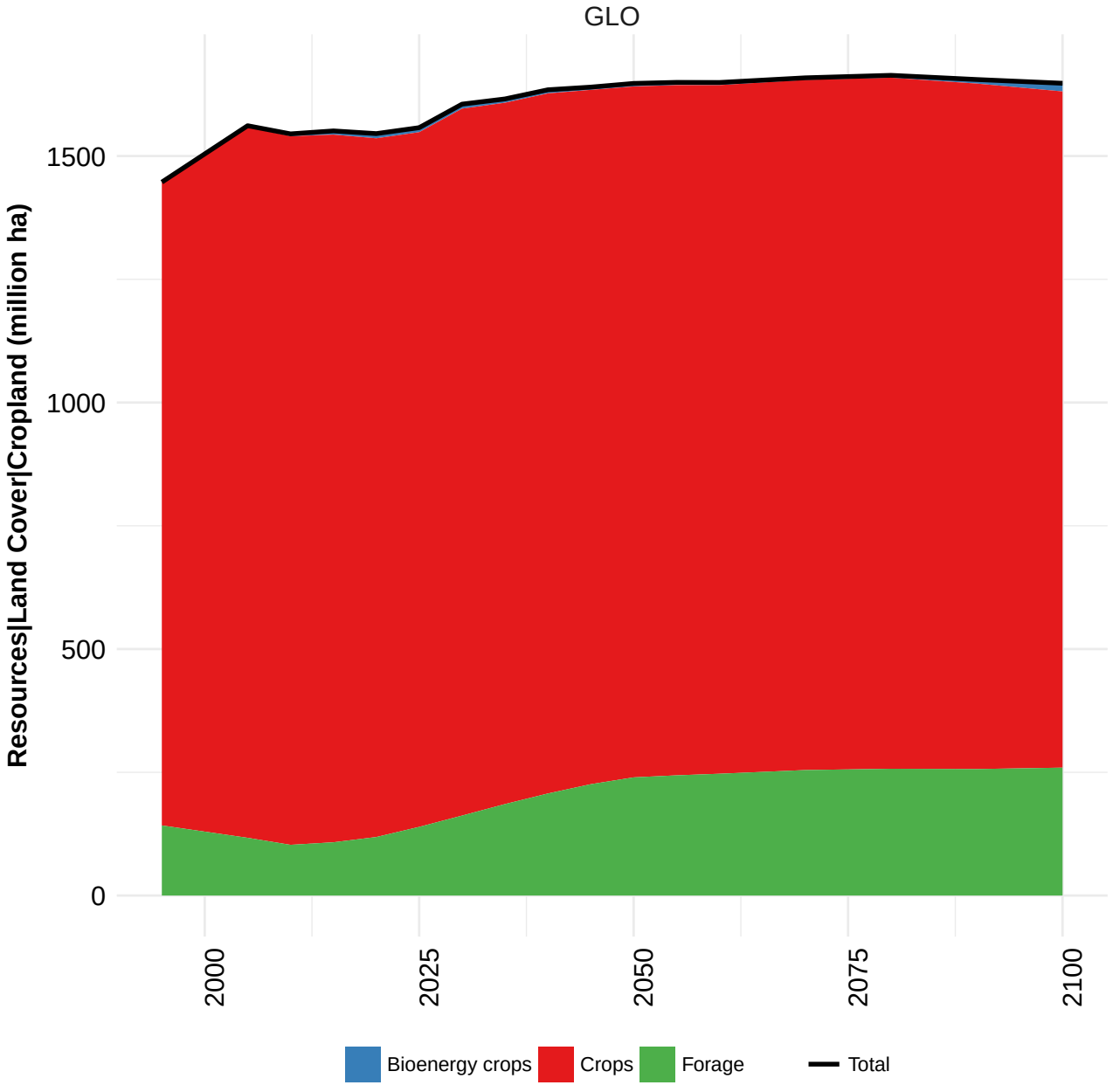
Table 1224: MAgPIE new_input — Resources—Land Cover (million ha) [PART 2/2]

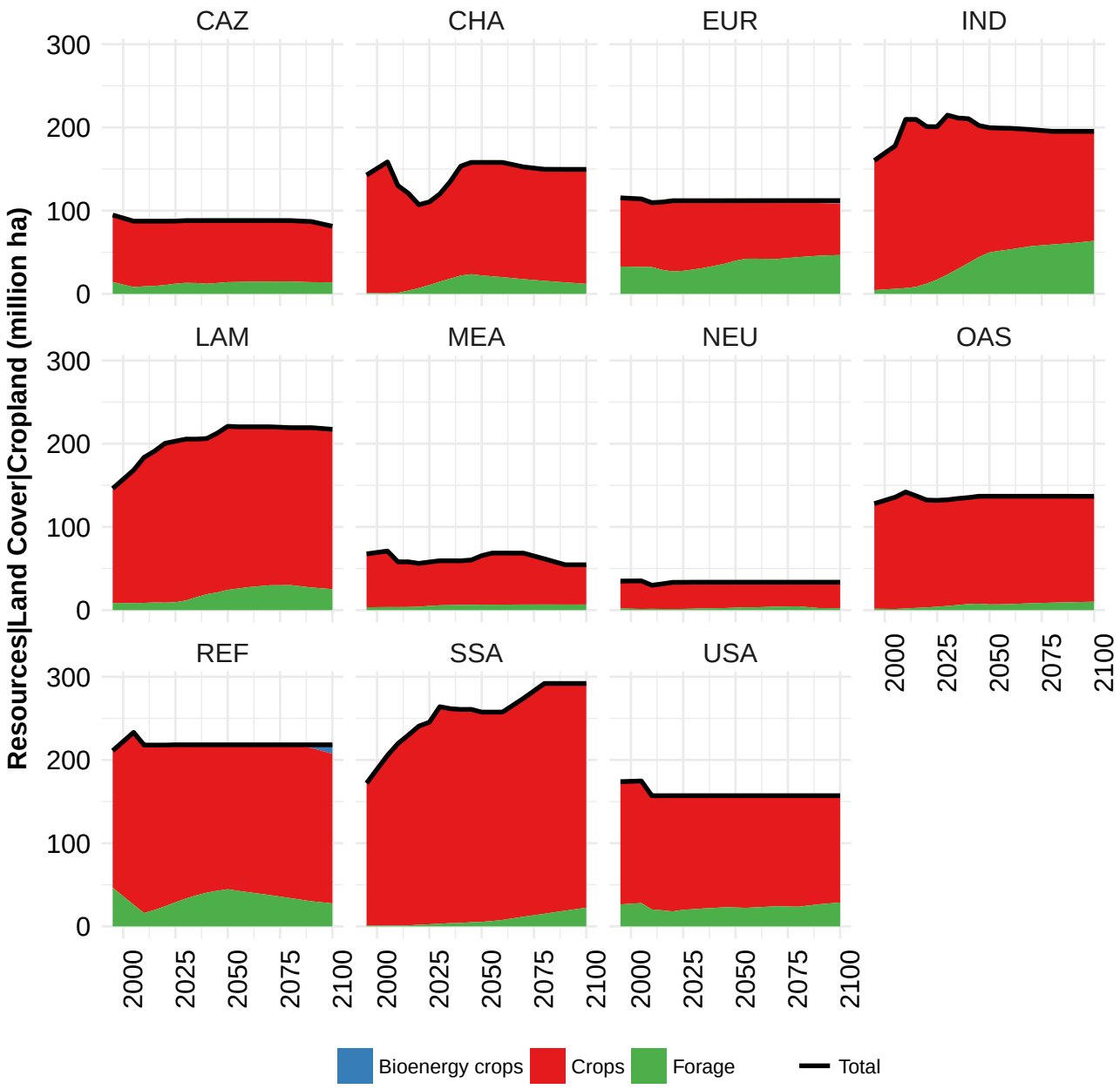
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922	922	922	922	922
EUR	419	419	419	419	419	419	419	419	419	419
IND	310	310	310	310	310	310	310	310	310	310
LAM	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151	151	151	151	151
OAS	866	866	866	866	866	866	866	866	866	866
REF	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110
SSA	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896	896	896	896	896

Table 1225: LUH2v2 — Resources—Land Cover (million ha)

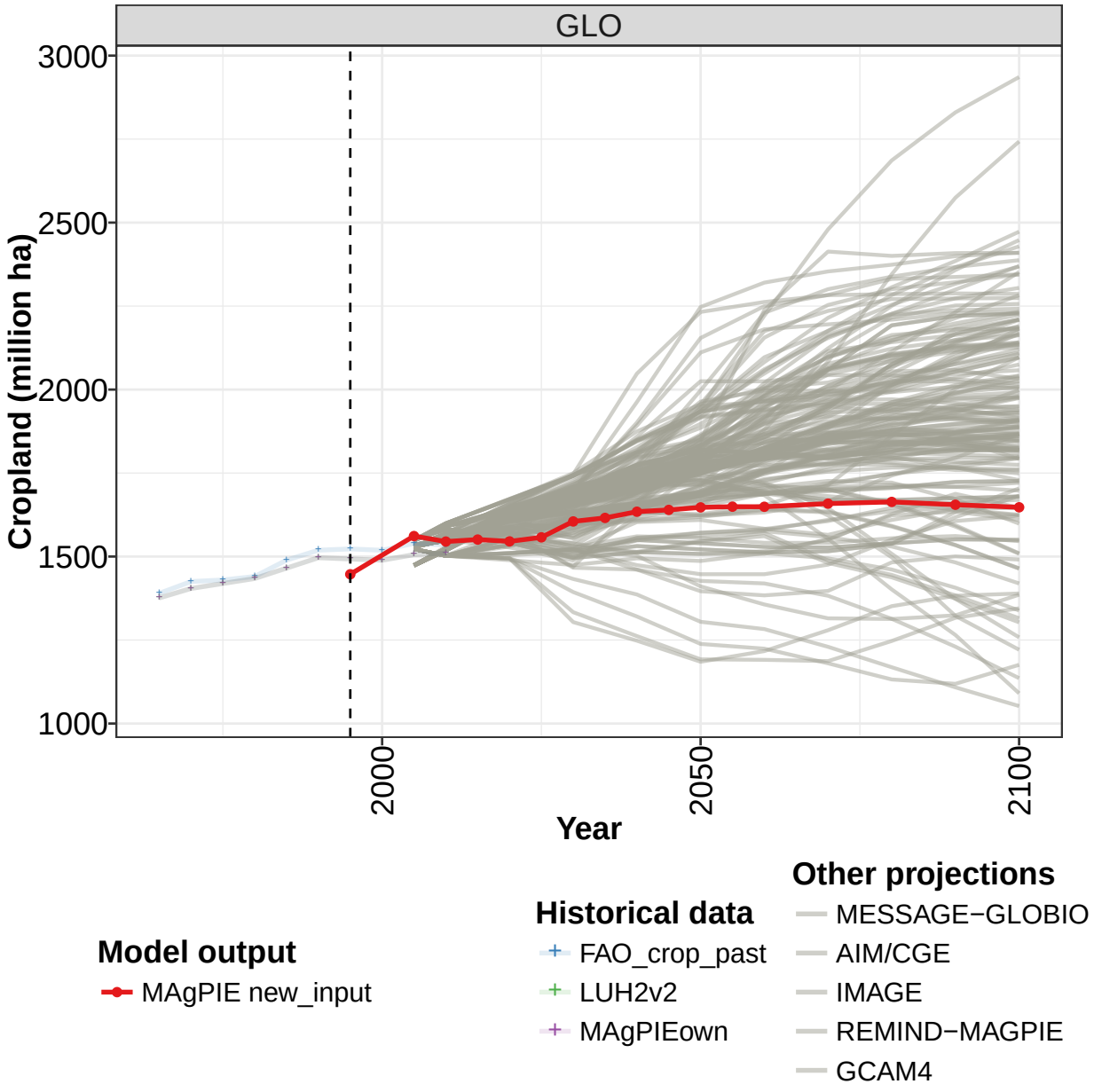
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922	922	922	922	922
EUR	419	419	419	419	419	419	419	419	419	419
IND	310	310	310	310	310	310	310	310	310	310
LAM	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151	151	151	151	151
OAS	866	866	866	866	866	866	866	866	866	866
REF	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110
SSA	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896	896	896	896	896

Table 1226: MAgPIEown — Resources—Land Cover (million ha)




CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Resources|Land Cover|Cropland (million ha)
300
200
100
0
2000
2025
2050
2075
2100
Bioenergy crops
Crops
Forage
Total

54.1 Cropland



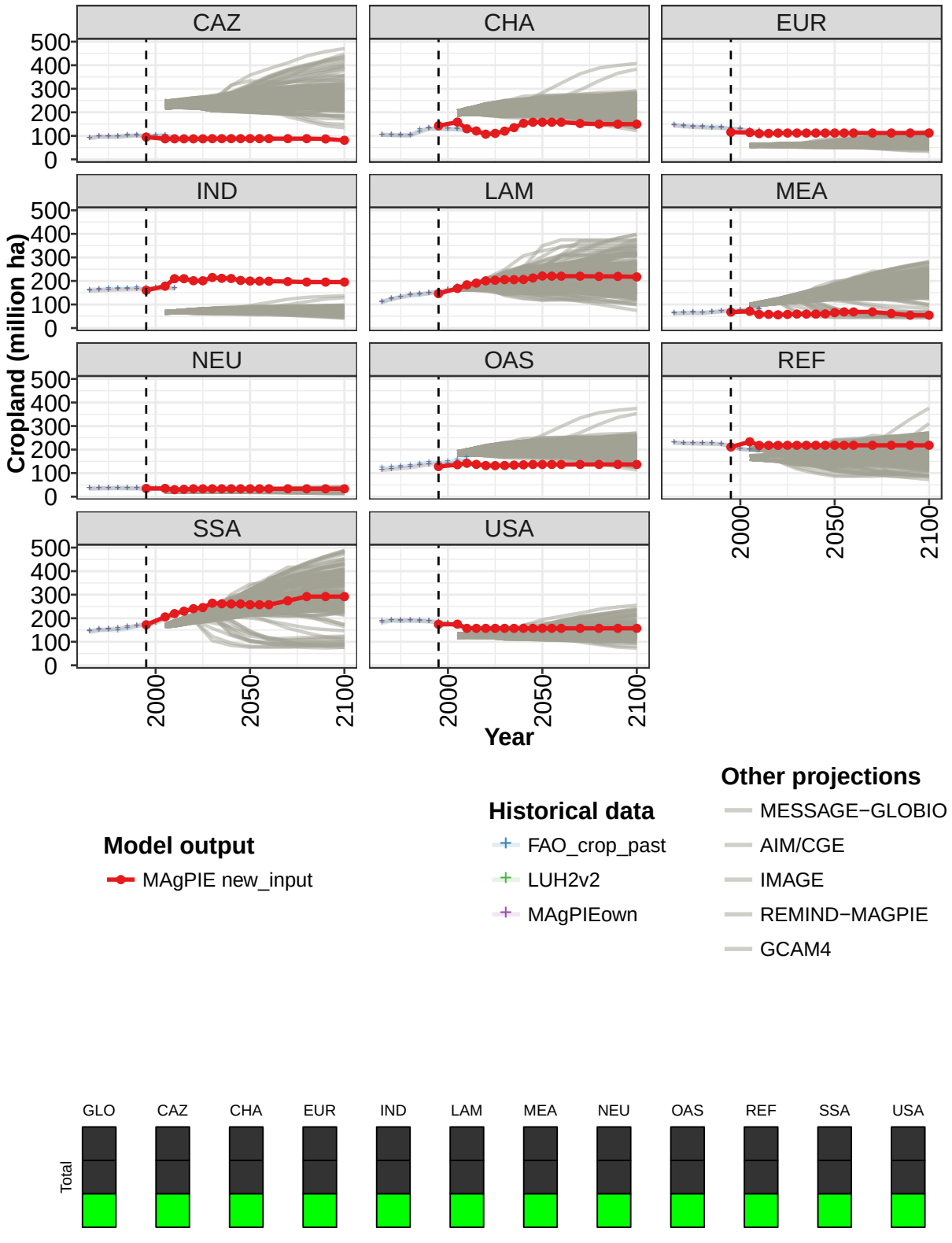


Figure 331: MAgPIE new_input — Resources—Land Cover—Cropland (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1447	1561	1545	1551	1545	1558	1605	1616	1634	1640	1647
CAZ	95	87	87	87	87	87	88	88	88	88	88
CHA	143	159	130	121	107	110	120	135	153	158	158
EUR	115	114	110	110	112	112	112	112	112	112	112
IND	160	178	210	210	201	201	215	211	210	202	200
LAM	146	168	184	191	200	203	206	205	206	213	221
MEA	68	71	58	58	56	58	59	59	59	60	65
NEU	35	35	30	32	33	33	34	34	34	34	34
OAS	128	136	142	137	132	132	133	134	135	137	137
REF	211	233	218	218	218	218	218	218	218	218	218
SSA	172	206	220	230	241	245	264	262	261	261	258
USA	174	175	157	157	157	157	157	157	157	157	157

Table 1227: MAgPIE new_input — Resources—Land Cover—Cropland (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1649	1649	1659	1664	1655	1648
CAZ	88	88	88	88	87	81
CHA	158	158	153	150	150	150
EUR	112	112	112	112	112	112
IND	199	199	197	195	195	195
LAM	220	220	220	219	219	217
MEA	69	69	68	62	54	54
NEU	34	34	34	34	34	34
OAS	137	137	137	137	137	137
REF	218	218	218	218	218	218
SSA	258	258	274	292	292	292
USA	157	157	157	157	157	157

Table 1228: MAgPIE new_input — Resources—Land Cover—Cropland (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1390	1425	1430	1440	1489	1519	1523	1519	1539	1534
CAZ	91	98	96	97	102	103	94	101	102	92
CHA	105	103	101	100	126	132	131	130	125	123
EUR	147	144	140	139	138	136	131	129	123	120
IND	162	165	167	168	169	170	170	170	170	169
LAM	109	121	131	137	141	148	159	161	177	184
MEA	64	65	67	65	69	72	78	75	80	80
NEU	35	36	36	37	36	36	35	34	34	32
OAS	122	124	128	133	138	146	145	150	157	165
REF	231	227	227	226	226	223	217	203	200	198
SSA	146	153	150	148	156	166	179	188	203	214
USA	179	190	188	191	190	188	184	178	168	159

Table 1229: FAO_crop_past — Resources—Land Cover—Cropland (million ha)

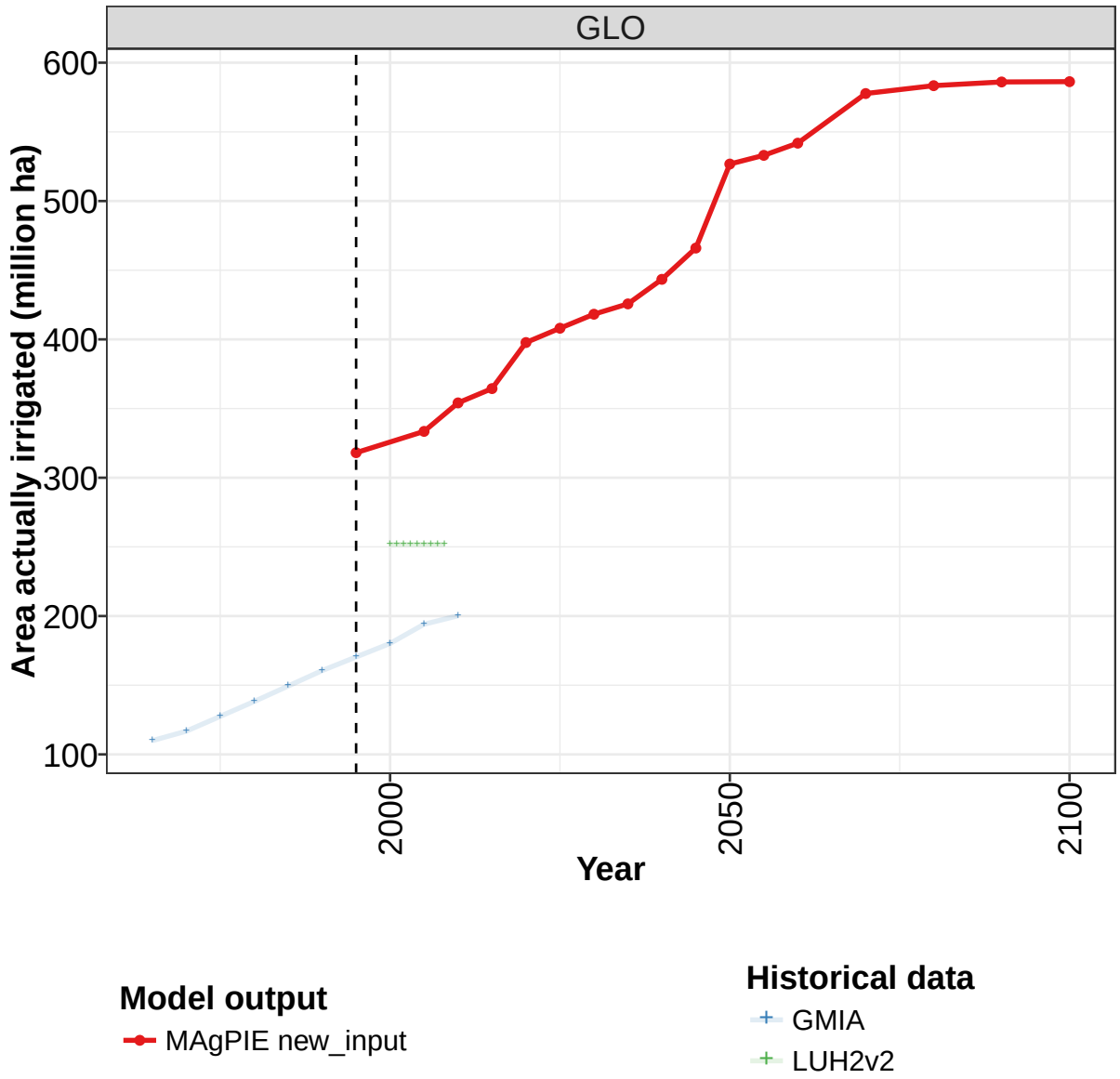
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1376	1404	1419	1434	1465	1497	1493	1489	1506	1510
CAZ	91	96	96	96	99	101	101	100	101	91
CHA	104	104	104	103	117	130	129	128	130	122
EUR	143	140	138	135	134	133	130	127	119	118
IND	158	160	162	163	164	165	166	167	169	168
LAM	112	124	132	140	144	148	154	160	165	182
MEA	62	63	63	64	67	70	72	75	79	78
NEU	34	35	36	36	36	35	34	33	33	31
OAS	113	117	121	124	131	137	138	140	145	154
REF	230	227	226	225	224	223	213	203	199	196
SSA	142	149	153	157	162	168	173	179	197	212
USA	187	190	190	190	188	186	182	178	167	158

Table 1230: LUH2v2 — Resources—Land Cover—Cropland (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1376	1404	1419	1434	1465	1497	1493	1489	1506	1510
CAZ	91	96	96	96	99	101	101	100	101	91
CHA	104	104	104	103	117	130	129	128	130	122
EUR	143	140	138	135	134	133	130	127	119	118
IND	158	160	162	163	164	165	166	167	169	168
LAM	112	124	132	140	144	148	154	160	165	182
MEA	62	63	63	64	67	70	72	75	79	78
NEU	34	35	36	36	36	35	34	33	33	31
OAS	113	117	121	124	131	137	138	140	145	154
REF	230	227	226	225	224	223	213	203	199	196
SSA	142	149	153	157	162	168	173	179	197	212
USA	187	190	190	190	188	186	182	178	167	158

Table 1231: MAgPIEown — Resources—Land Cover—Cropland (million ha)

54.1.1 Area actually irrigated



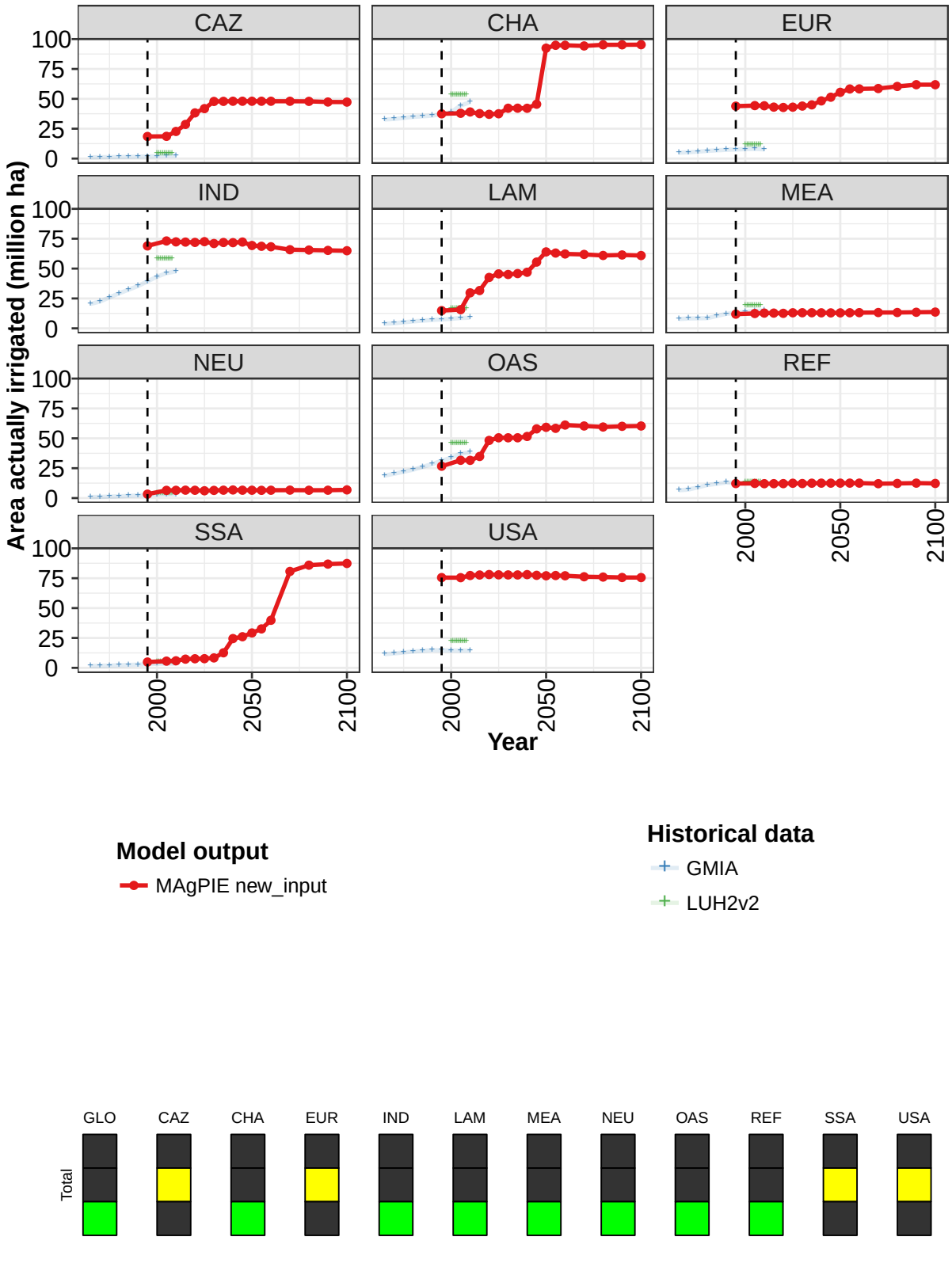


Figure 332: MAgPIE new_input — Resources—Land Cover—Cropland—Area actually irrigated (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	318	333	354	364	398	408	418	426	443	466	527
CAZ	19	19	23	29	38	42	48	48	48	48	48
CHA	37	38	39	38	37	38	42	42	42	46	92
EUR	44	44	44	43	43	43	44	45	48	51	55
IND	69	73	72	72	72	73	71	72	72	72	69
LAM	15	16	30	32	43	46	45	46	47	55	64
MEA	12	12	13	13	13	13	13	13	13	13	13
NEU	3	6	7	7	7	6	6	7	7	7	7
OAS	27	32	32	35	48	50	50	50	52	58	59
REF	12	12	12	12	12	12	12	12	13	13	13
SSA	5	6	6	7	8	8	8	13	25	26	29
USA	76	75	77	78	78	78	78	78	78	77	77

Table 1232: MAgPIE new_input — Resources—Land Cover—Cropland—Area actually irrigated (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	533	542	578	583	586	586
CAZ	48	48	48	48	47	47
CHA	95	95	94	95	95	95
EUR	58	58	59	60	62	62
IND	69	68	66	66	65	65
LAM	63	62	62	61	61	61
MEA	13	13	13	13	13	14
NEU	6	7	7	7	7	7
OAS	58	61	60	59	60	60
REF	13	13	12	12	13	12
SSA	33	40	81	86	87	87
USA	77	77	76	76	76	76

Table 1233: MAgPIE new_input — Resources—Land Cover—Cropland—Area actually irrigated (million ha) [PART 2/2]

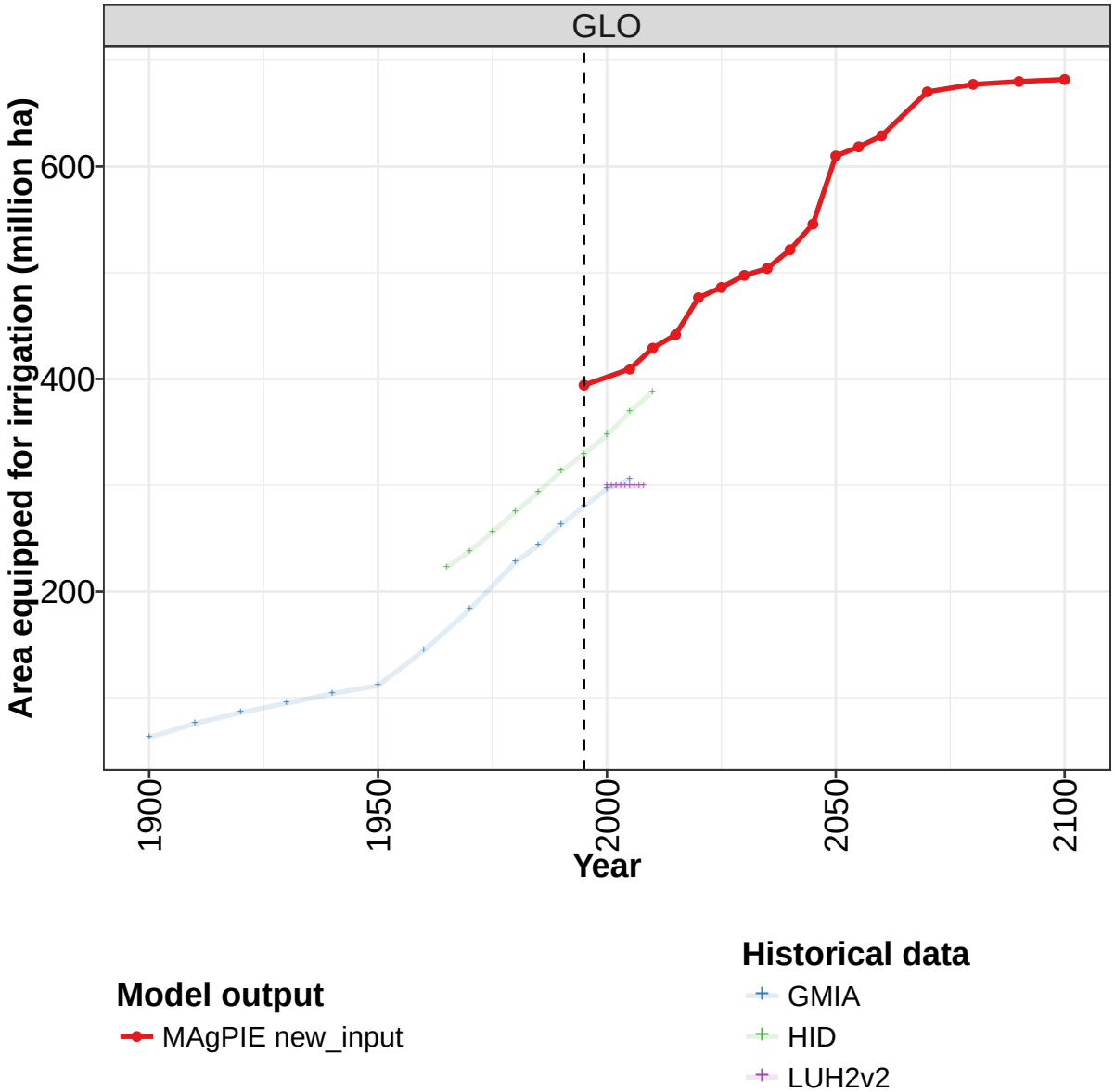
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	110	117	128	138	149	161	170	180	194	200
CAZ	1	1	1	1	1	2	2	2	2	2
CHA	33	33	34	35	35	36	37	39	44	47
EUR	5	5	6	6	7	7	8	8	8	8
IND	20	22	26	29	32	35	39	43	46	48
LAM	4	4	5	6	6	7	8	8	9	9
MEA	8	8	8	9	10	12	13	14	15	15
NEU	1	1	1	1	2	2	2	3	3	3
OAS	19	20	22	24	26	28	31	34	37	38
REF	7	7	9	11	12	13	13	12	12	12
SSA	2	2	2	2	2	3	3	3	3	4
USA	11	12	13	14	14	15	15	15	14	14

Table 1234: LUH2v2 — Resources—Land Cover—Cropland—Area actually irrigated (million ha)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
GLO	252	252	252	252	252	252	252	252	252
CAZ	4	4	4	4	4	4	4	4	4
CHA	53	53	53	53	53	53	53	53	53
EUR	11	11	11	11	11	11	11	11	11
IND	58	58	58	58	58	58	58	58	58
LAM	16	16	16	16	16	16	16	16	16
MEA	19	19	19	19	19	19	19	19	19
NEU	4	4	4	4	4	4	4	4	4
OAS	46	46	46	46	46	46	46	46	46
REF	13	13	13	13	13	13	13	13	13
SSA	5	5	5	5	5	5	5	5	5
USA	22	22	22	22	22	22	22	22	22

Table 1235: GMIA — Resources—Land Cover—Cropland—Area actually irrigated (million ha)

54.1.2 Area equipped for irrigation



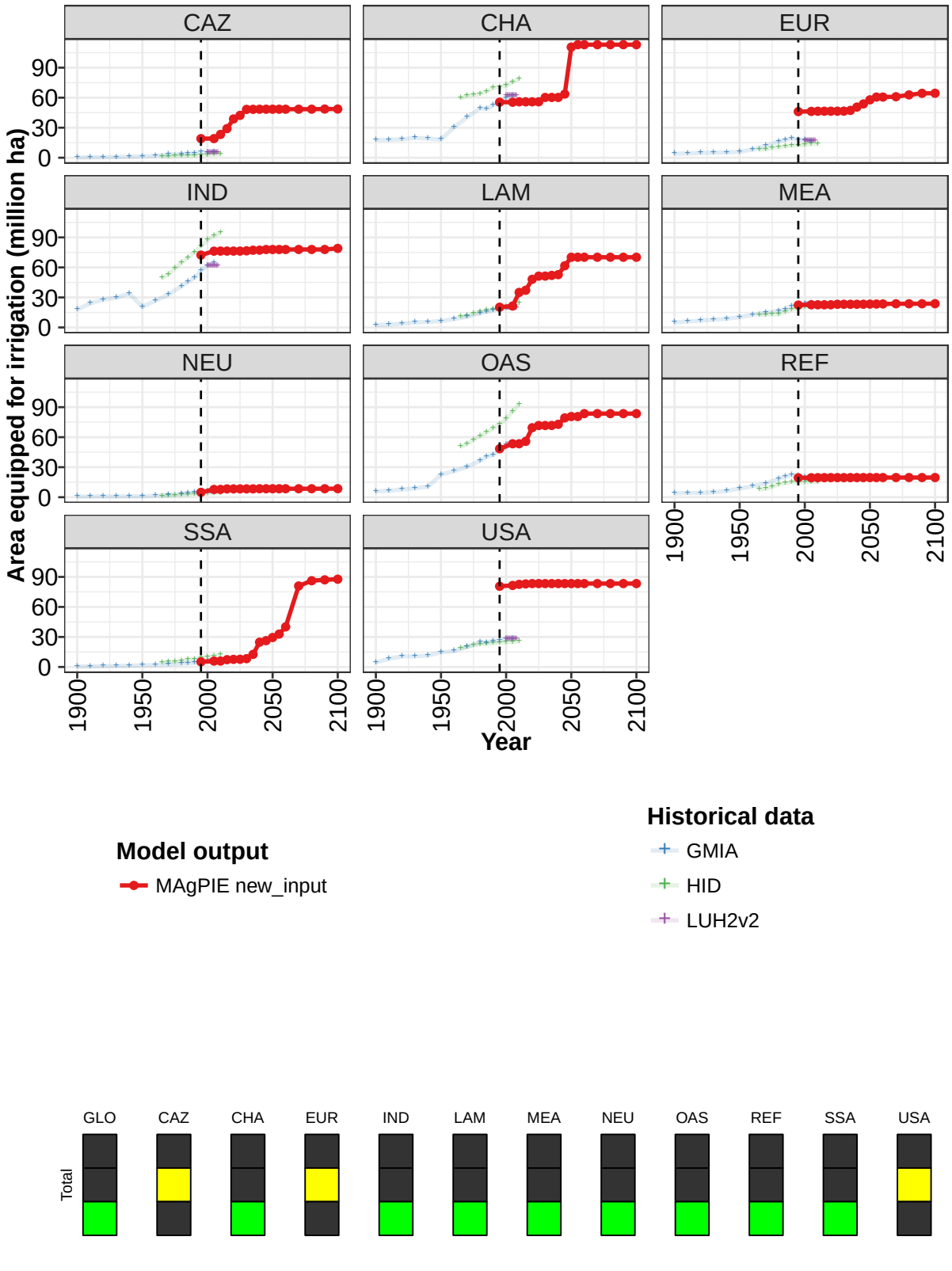


Figure 333: MAgPIE new_input — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	394	409	429	442	477	486	497	504	522	546	610
CAZ	19	19	23	29	39	42	48	48	48	48	48
CHA	55	55	56	56	56	56	60	60	60	64	111
EUR	46	46	46	46	46	47	47	47	51	54	58
IND	72	76	76	76	76	76	77	77	77	78	78
LAM	20	21	35	37	48	51	51	52	53	62	70
MEA	22	23	23	23	23	23	23	23	23	23	23
NEU	5	8	8	8	8	8	8	8	8	8	8
OAS	48	53	53	56	69	72	72	72	73	79	81
REF	19	19	20	20	20	20	20	20	20	20	20
SSA	5	6	6	7	8	8	8	13	25	26	29
USA	81	81	83	83	83	83	83	83	83	83	83

Table 1236: MAgPIE new_input — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	619	629	670	677	680	682
CAZ	48	48	48	48	49	49
CHA	113	113	113	113	113	113
EUR	61	61	61	63	64	64
IND	78	78	78	78	78	79
LAM	70	70	70	70	70	70
MEA	23	24	24	24	24	24
NEU	8	8	8	8	8	9
OAS	81	84	84	84	84	84
REF	20	20	20	20	20	20
SSA	33	40	81	86	87	88
USA	83	83	83	83	83	83

Table 1237: MAgPIE new_input — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 2/2]

	1900	1910	1920	1930	1940	1950	1960	1970	1980	1985	1990
GLO	63	76	86	95	104	111	144	183	227	243	263
CAZ	0	0	0	1	1	1	2	3	4	4	5
CHA	18	18	18	20	19	18	30	40	49	49	52
EUR	4	4	5	5	5	6	8	12	16	18	19
IND	18	24	28	30	34	21	27	33	41	46	49
LAM	2	3	4	5	6	6	8	11	14	16	17
MEA	5	6	7	8	9	10	13	15	17	18	21
NEU	1	1	1	1	1	1	1	2	3	4	5
OAS	6	7	8	9	11	23	26	30	36	40	42
REF	4	4	4	5	6	9	11	14	18	20	22
SSA	1	1	1	1	1	2	2	2	3	4	4
USA	4	8	11	11	11	15	16	20	25	24	26

Table 1238: HID — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 1/2]

	1995	2000	2005
GLO	280	297	306
CAZ	6	5	6
CHA	54	59	62
EUR	18	18	16
IND	57	62	65
LAM	19	20	21
MEA	23	24	24
NEU	5	6	6
OAS	47	50	54
REF	21	20	17
SSA	5	5	5
USA	26	28	28

Table 1239: HID — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 2/2]

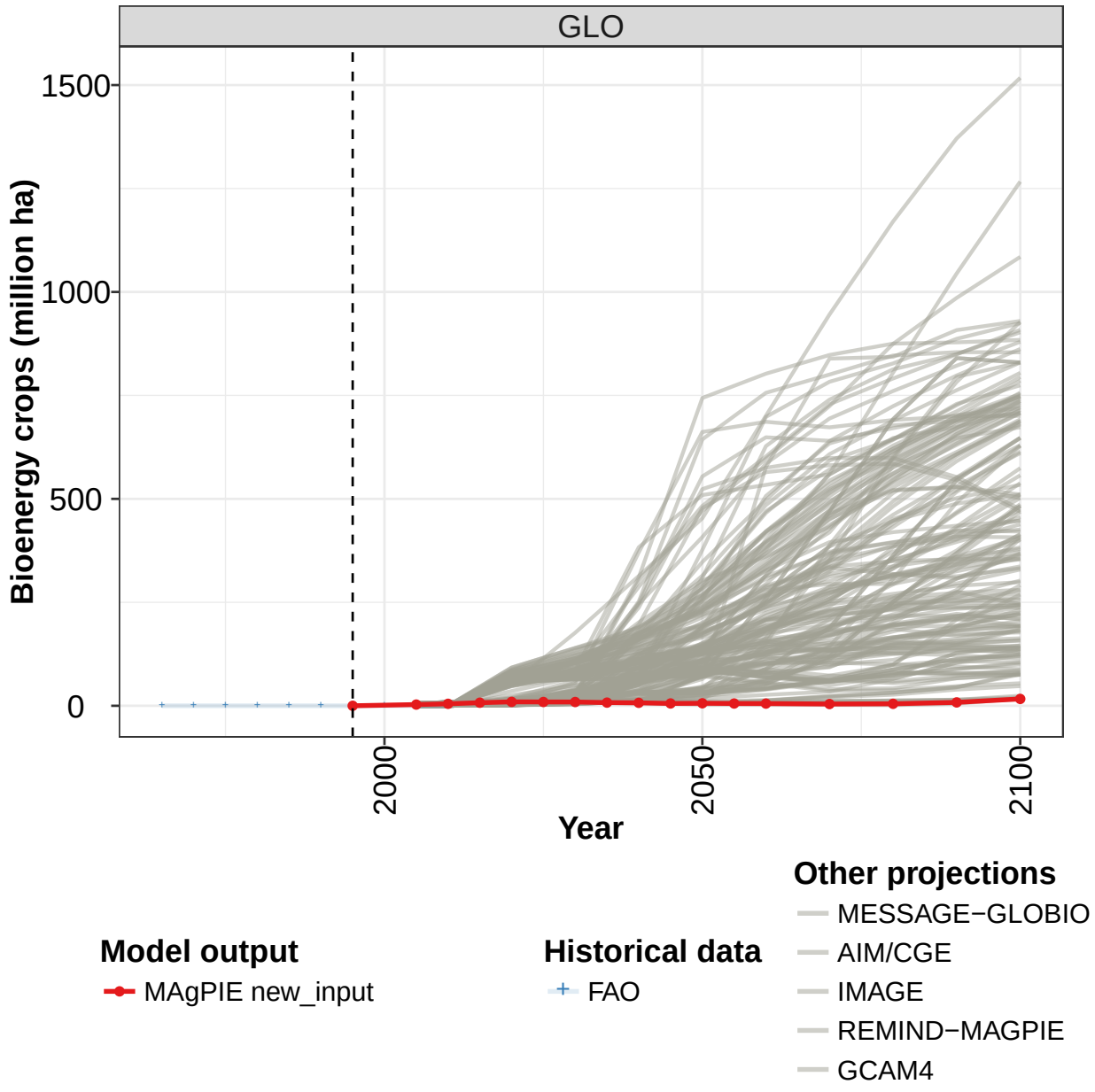
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	223	238	256	275	293	313	329	347	369	388
CAZ	1	1	2	2	2	2	3	3	3	3
CHA	59	62	63	64	66	70	70	72	76	79
EUR	8	9	10	11	11	12	12	13	14	14
IND	49	53	59	65	70	75	81	87	92	95
LAM	11	12	14	16	17	18	19	20	22	24
MEA	12	13	13	13	15	18	19	20	22	23
NEU	1	1	2	2	3	3	4	4	4	4
OAS	50	53	57	61	65	69	73	78	86	93
REF	8	8	11	13	14	15	15	15	15	15
SSA	4	5	5	6	7	8	9	10	11	12
USA	19	20	22	23	23	24	24	25	25	25

Table 1240: LUH2v2 — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
GLO	299	299	299	299	299	299	299	299	299
CAZ	5	5	5	5	5	5	5	5	5
CHA	62	62	62	62	62	62	62	62	62
EUR	17	17	17	17	17	17	17	17	17
IND	62	62	62	62	62	62	62	62	62
LAM	20	20	20	20	20	20	20	20	20
MEA	23	23	23	23	23	23	23	23	23
NEU	6	6	6	6	6	6	6	6	6
OAS	52	52	52	52	52	52	52	52	52
REF	19	19	19	19	19	19	19	19	19
SSA	5	5	5	5	5	5	5	5	5
USA	28	28	28	28	28	28	28	28	28

Table 1241: GMIA — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha)

54.1.3 Bioenergy crops



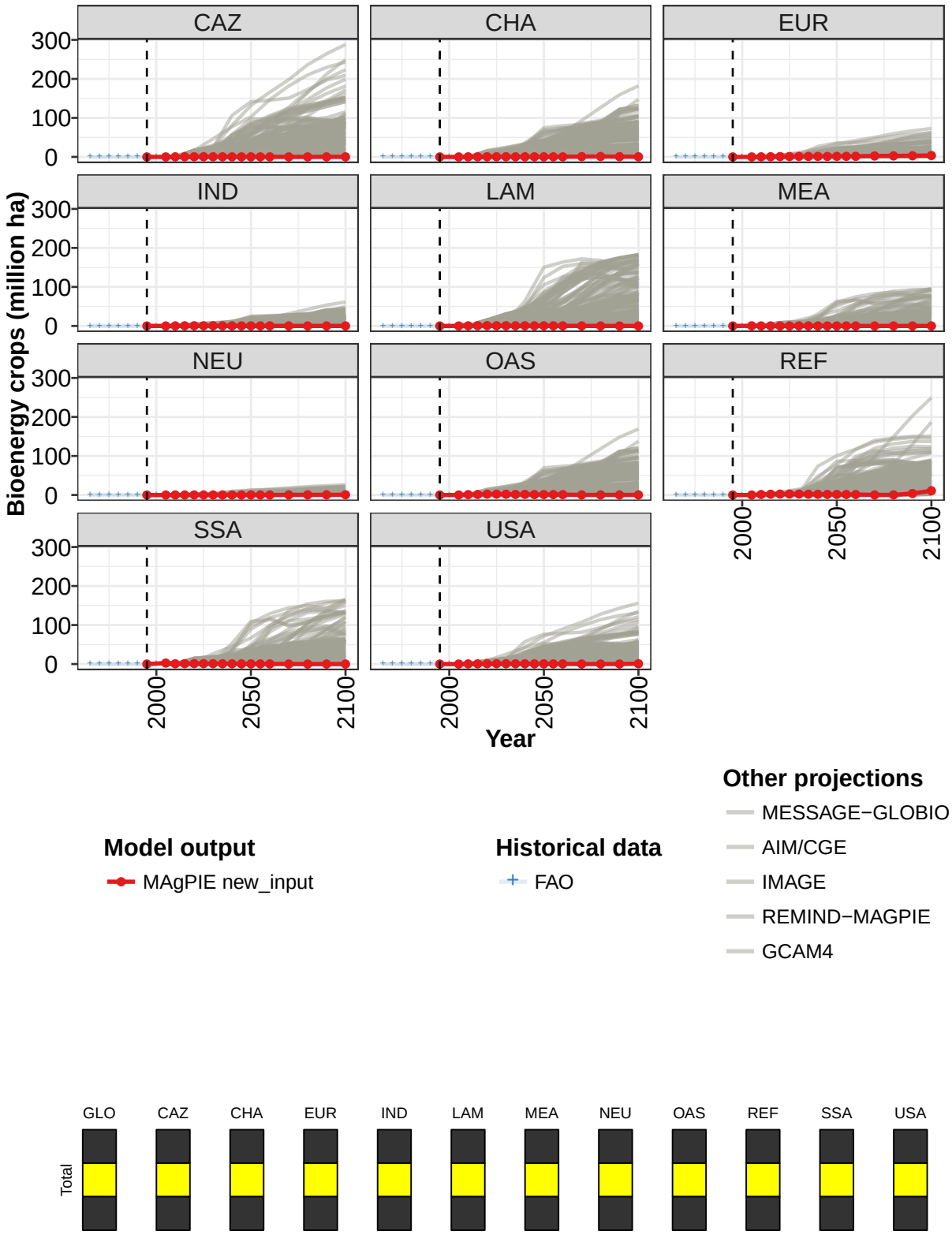


Figure 334: MAgPIE new_input — Resources—Land Cover—Cropland—Bioenergy crops (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0	2.9	4.8	7.5	9.5	9.2	9.1	7.7	7.2	5.6	6.1
CAZ	0.0	0.0	0.2	0.4	0.5	0.5	0.4	0.3	0.3	0.2	0.2
CHA	0.0	0.0	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
EUR	0.0	0.0	0.2	0.5	0.8	1.0	1.2	1.2	1.3	1.1	1.4
IND	0.0	0.0	0.2	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0.2
LAM	0.0	0.0	0.4	0.7	0.8	0.5	0.5	0.5	0.4	0.3	0.4
MEA	0.0	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
NEU	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.0	0.0	1.0	1.4	2.1	2.1	1.9	1.4	1.5	1.1	1.2
REF	0.0	0.0	1.3	2.0	2.4	2.3	2.3	2.0	1.8	1.4	1.5
SSA	0.0	2.5	0.7	1.0	1.1	1.0	0.9	0.7	0.6	0.4	0.4
USA	0.0	0.0	0.4	0.7	0.8	0.8	0.8	0.6	0.6	0.4	0.5

Table 1242: MAgPIE new_input — Resources—Land Cover—Cropland—Bioenergy crops (million ha) [PART 1/2]

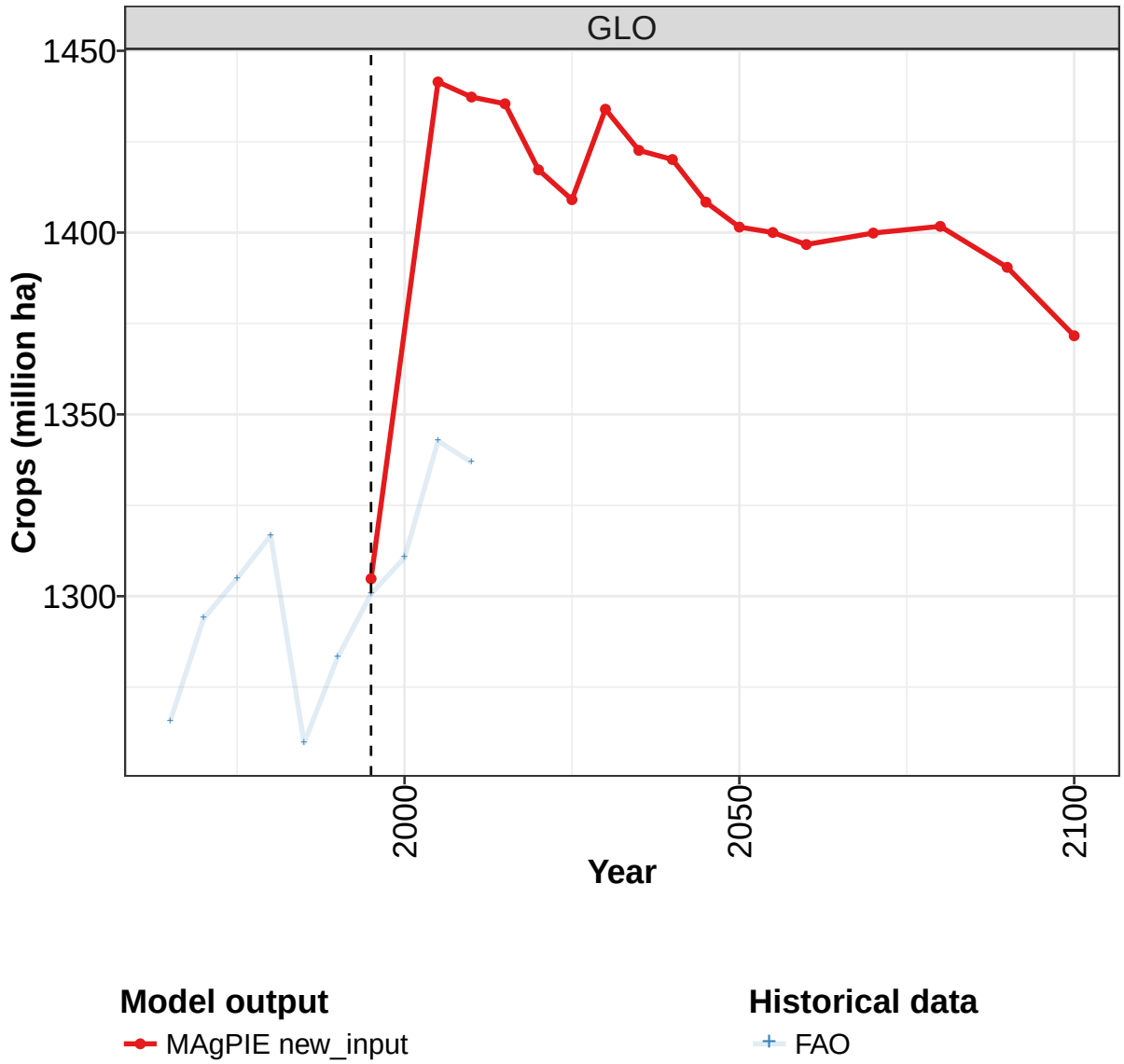
	2055	2060	2070	2080	2090	2100
GLO	5.5	5.3	4.2	4.8	8.2	16.5
CAZ	0.2	0.2	0.0	0.1	0.1	0.2
CHA	0.3	0.2	0.8	1.1	0.6	0.3
EUR	1.4	1.5	2.4	2.6	2.9	3.6
IND	0.2	0.2	0.1	0.1	0.1	0.1
LAM	0.3	0.3	0.1	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.1	0.1	0.4	0.4	0.4	0.5
OAS	1.0	1.0	0.2	0.3	0.2	0.2
REF	1.3	1.2	0.2	0.2	3.8	10.8
SSA	0.3	0.3	0.1	0.0	0.0	0.0
USA	0.4	0.4	0.0	0.0	0.1	0.8

Table 1243: MAgPIE new_input — Resources—Land Cover—Cropland—Bioenergy crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0

Table 1244: FAO — Resources—Land Cover—Cropland—Bioenergy crops (million ha)

54.1.4 Crops


GLO
1450
1400
1350
1300
Crops (million ha)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

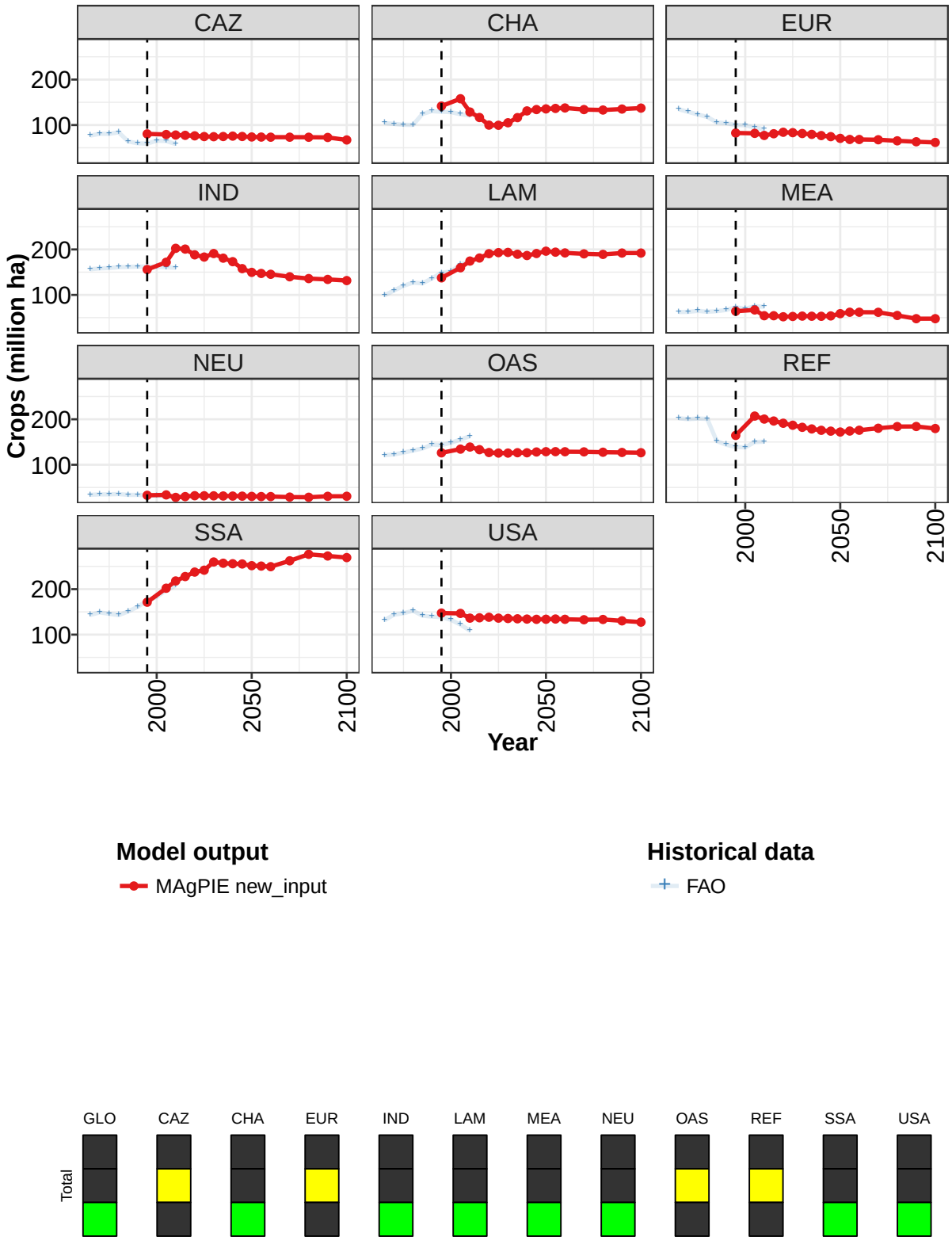


Figure 335: MAgPIE new_input — Resources—Land Cover—Cropland—Crops (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1305	1441	1437	1435	1417	1409	1434	1423	1420	1408	1402
CAZ	81	79	78	77	76	75	74	75	76	75	74
CHA	142	158	129	117	100	100	105	116	131	134	136
EUR	83	82	77	81	84	83	81	80	77	75	71
IND	156	172	202	201	188	183	191	181	173	158	150
LAM	138	160	174	181	191	193	193	189	187	191	196
MEA	64	67	54	54	52	53	53	53	53	54	59
NEU	33	34	28	30	32	32	32	31	31	31	30
OAS	126	134	139	133	127	126	126	127	126	128	129
REF	165	207	201	196	191	187	182	179	176	174	172
SSA	171	202	218	228	238	242	260	257	256	255	252
USA	147	147	136	137	138	136	136	135	134	134	134

Table 1245: MAgPIE new_input — Resources—Land Cover—Cropland—Crops (million ha) [PART 1/2]

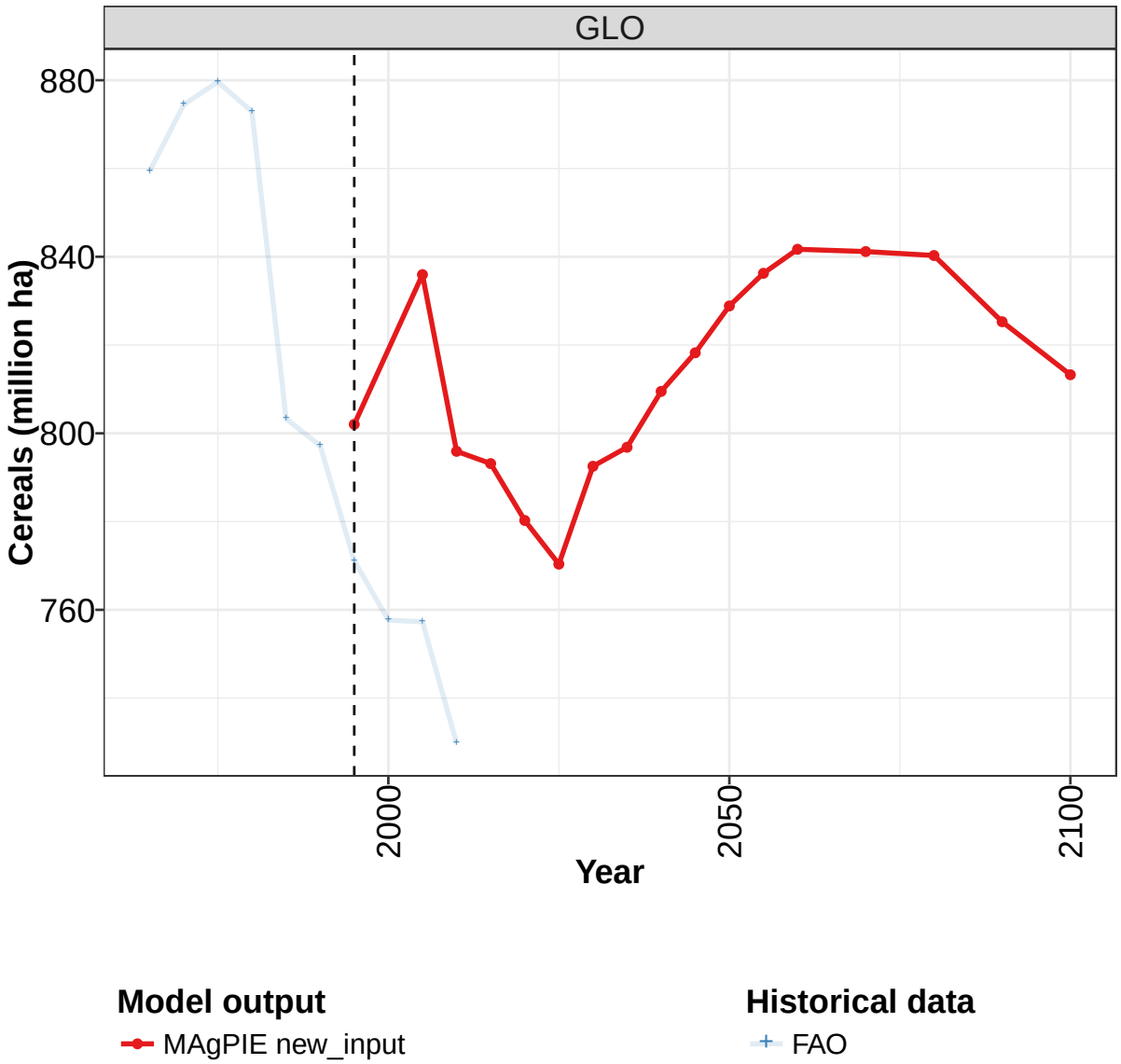
	2055	2060	2070	2080	2090	2100
GLO	1400	1397	1400	1402	1390	1372
CAZ	74	73	73	73	73	67
CHA	137	138	134	133	135	137
EUR	68	68	68	65	63	62
IND	147	145	140	136	134	132
LAM	194	192	190	189	192	192
MEA	62	62	62	55	48	48
NEU	30	30	29	29	31	31
OAS	129	129	128	128	127	127
REF	174	176	180	184	184	180
SSA	251	249	262	277	273	269
USA	134	134	133	133	130	128

Table 1246: MAgPIE new_input — Resources—Land Cover—Cropland—Crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1266	1294	1305	1317	1260	1283	1301	1311	1343	1337
CAZ	77	81	81	84	64	60	59	66	65	58
CHA	105	103	101	100	124	131	129	128	124	121
EUR	135	129	123	118	106	104	100	99	94	91
IND	156	158	159	161	162	162	162	162	161	160
LAM	99	110	120	127	125	136	148	152	167	174
MEA	62	63	65	63	64	67	73	69	75	74
NEU	34	35	35	36	34	34	33	32	32	29
OAS	121	123	127	131	136	144	143	149	155	163
REF	202	200	202	201	152	144	139	138	150	151
SSA	143	149	146	143	151	161	175	183	198	208
USA	132	144	147	153	142	140	139	133	122	109

Table 1247: FAO — Resources—Land Cover—Cropland—Crops (million ha)

54.1.5 Crops—Cereals



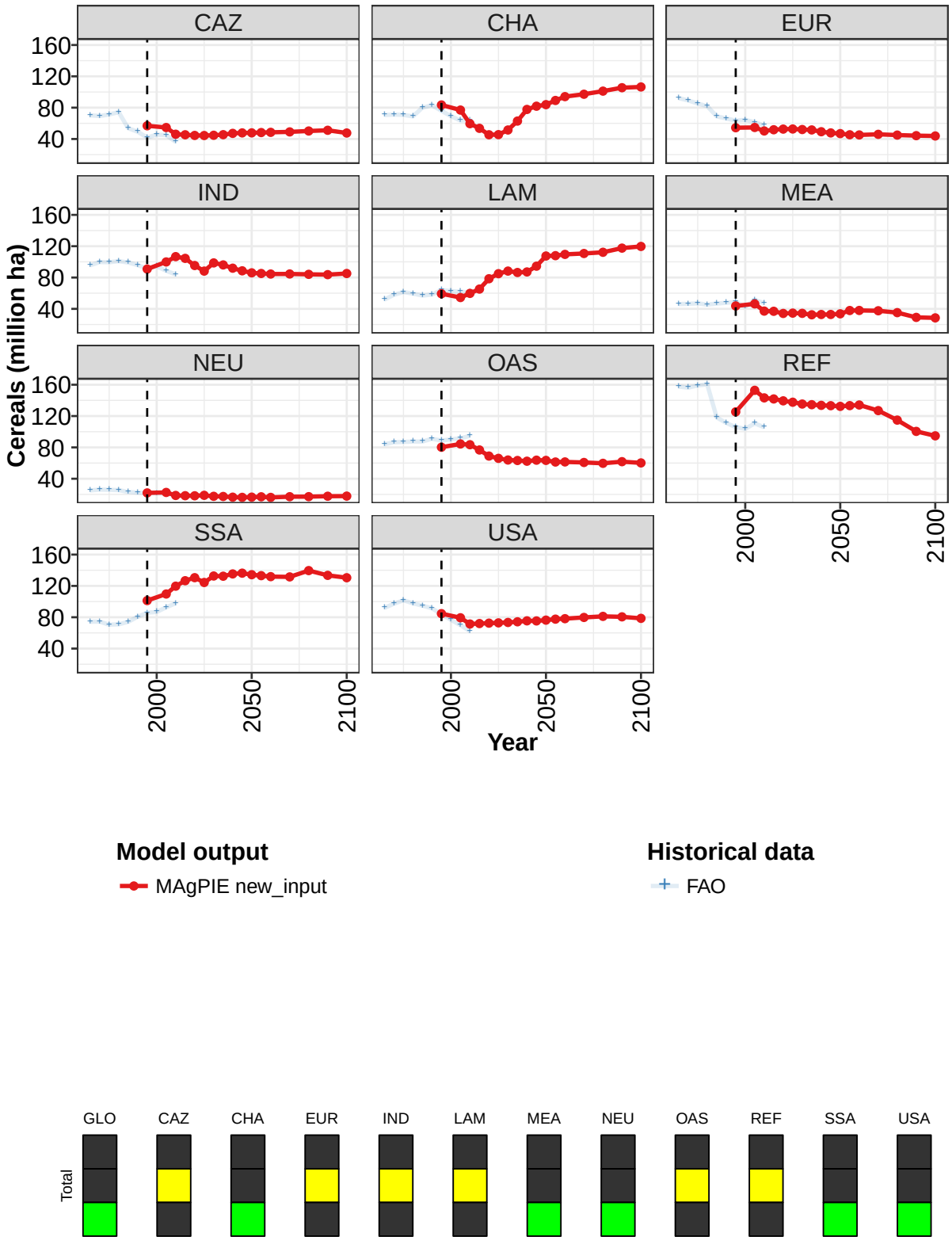


Figure 336: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	802	836	796	793	780	770	793	797	809	818	829
CAZ	57	55	46	45	45	44	45	46	47	48	48
CHA	83	77	60	54	45	46	52	63	78	82	84
EUR	54	55	50	52	53	53	52	52	49	48	47
IND	91	100	107	104	95	88	99	96	92	89	86
LAM	59	54	60	65	78	85	88	86	87	95	108
MEA	44	46	37	37	34	35	34	32	33	33	34
NEU	22	23	19	18	18	19	18	17	16	16	17
OAS	80	84	83	77	69	66	64	63	62	64	63
REF	125	153	143	142	139	138	135	135	134	133	132
SSA	101	110	120	127	131	124	133	132	135	136	134
USA	85	79	71	72	72	73	73	74	75	75	76

Table 1248: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals (million ha) [PART 1/2]

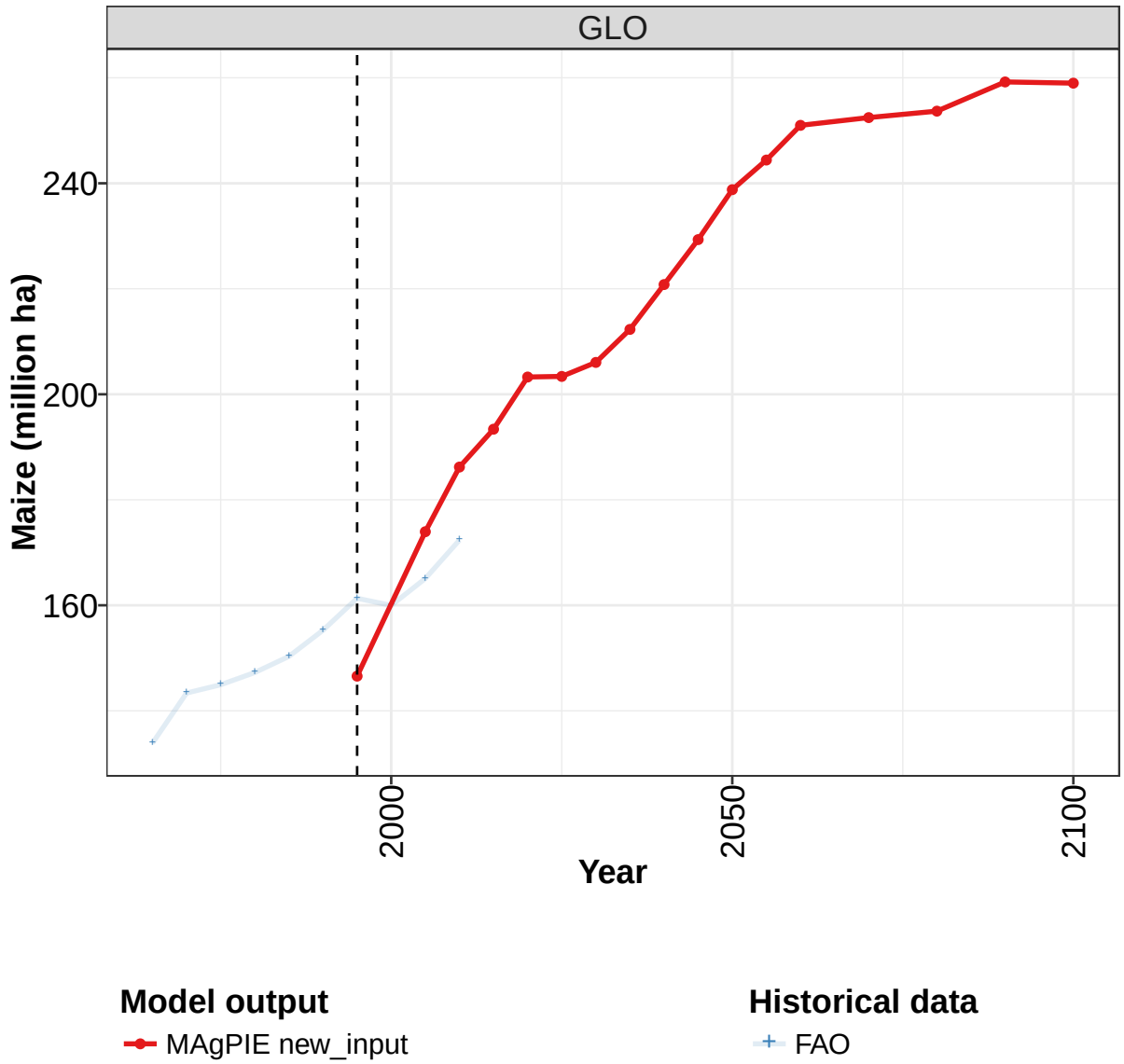
	2055	2060	2070	2080	2090	2100
GLO	836	842	841	840	825	813
CAZ	48	49	49	50	51	48
CHA	89	94	97	101	105	106
EUR	45	45	46	45	44	44
IND	85	84	85	84	84	85
LAM	108	110	111	112	118	120
MEA	38	38	38	35	29	29
NEU	17	16	17	17	18	18
OAS	61	61	61	60	62	60
REF	133	134	127	115	100	95
SSA	133	132	132	140	133	130
USA	78	78	80	81	81	79

Table 1249: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	859	874	880	873	803	797	771	758	757	730
CAZ	70	69	71	74	54	49	42	46	45	36
CHA	71	71	71	69	80	83	76	69	64	64
EUR	92	89	85	82	69	66	63	64	61	57
IND	96	100	100	101	99	96	91	94	89	84
LAM	52	58	61	60	57	58	64	63	62	61
MEA	46	46	47	45	47	48	49	43	51	47
NEU	25	26	26	25	23	22	22	21	21	19
OAS	84	87	87	87	87	91	89	90	92	95
REF	158	156	159	160	118	111	106	104	111	106
SSA	74	74	71	71	74	81	86	87	93	98
USA	92	97	102	98	95	91	84	77	70	62

Table 1250: FAO — Resources—Land Cover—Cropland—Crops—Cereals (million ha)

54.1.6 Crops—Cereals—Maize



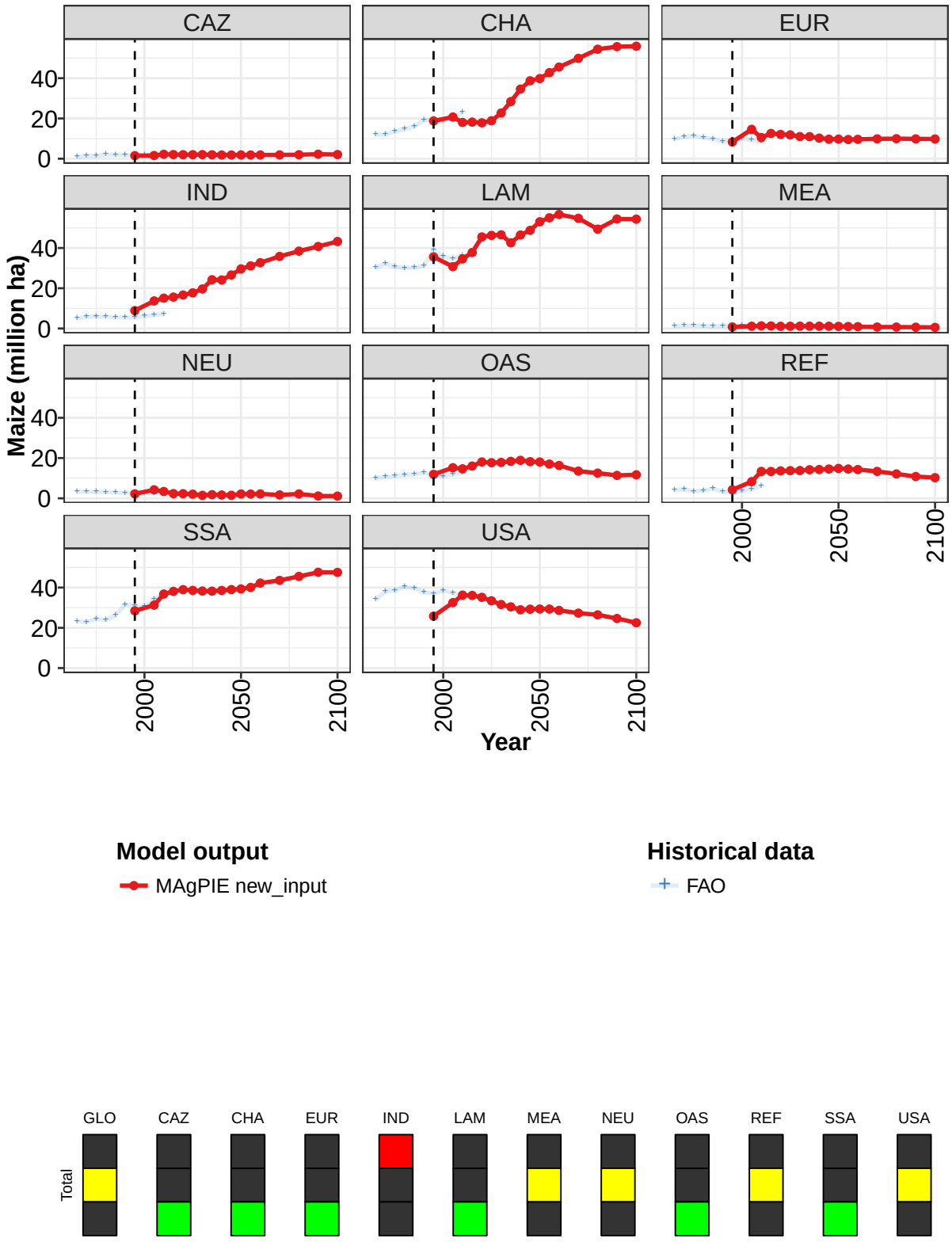


Figure 337: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	147	174	186	193	203	203	206	212	221	229	239
CAZ	2	2	2	2	2	2	2	2	2	2	2
CHA	19	21	18	18	18	19	23	28	35	39	40
EUR	8	15	11	13	12	12	11	11	10	10	10
IND	9	14	15	16	17	18	20	24	24	27	30
LAM	36	31	35	38	46	46	47	43	46	49	53
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	2	4	3	2	2	2	1	2	2	2	2
OAS	12	15	15	16	18	18	18	18	19	18	18
REF	4	8	13	13	14	14	14	14	14	15	15
SSA	28	31	37	38	39	39	38	38	39	39	39
USA	26	33	36	36	35	33	32	30	29	29	29

Table 1251: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha) [PART 1/2]

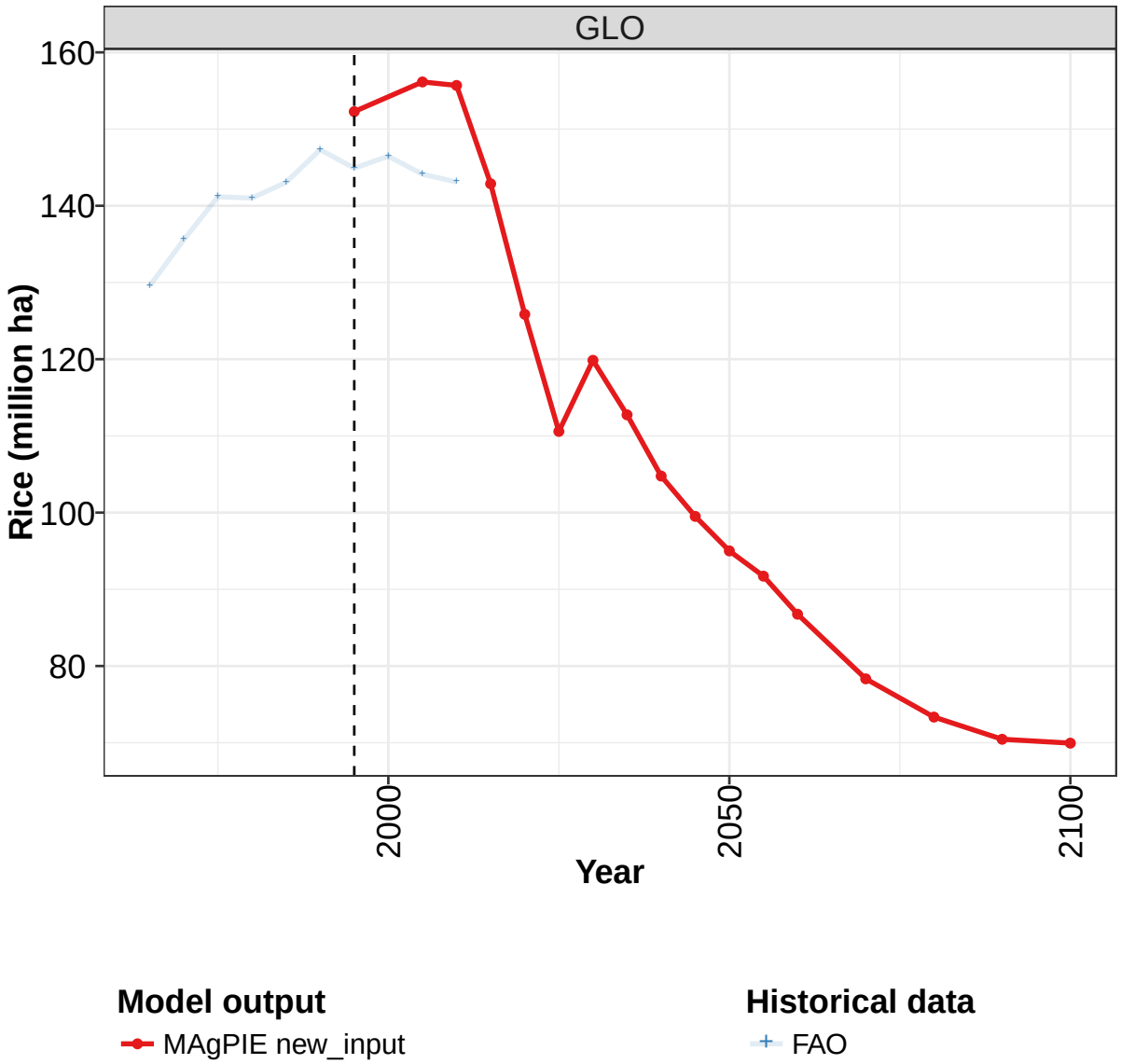
	2055	2060	2070	2080	2090	2100
GLO	244	251	252	254	259	259
CAZ	2	2	2	2	2	2
CHA	43	46	50	54	56	56
EUR	10	10	10	10	10	10
IND	31	33	36	38	41	43
LAM	55	57	55	49	54	54
MEA	1	1	1	1	1	1
NEU	2	2	2	2	1	1
OAS	17	16	14	13	11	12
REF	15	14	13	12	11	10
SSA	40	42	44	46	48	48
USA	29	29	27	26	25	23

Table 1252: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	134	143	145	147	150	155	161	160	165	172
CAZ	1	1	1	2	2	2	2	2	2	2
CHA	12	12	13	15	16	19	19	19	20	23
EUR	10	11	11	11	10	9	9	10	9	8
IND	5	6	6	6	6	6	5	6	7	7
LAM	30	32	31	30	30	31	39	36	35	36
MEA	1	1	1	1	1	1	2	1	2	2
NEU	3	3	3	3	3	3	2	3	3	3
OAS	10	11	11	12	12	13	12	11	12	13
REF	4	4	3	4	5	3	3	4	4	6
SSA	23	23	24	24	26	32	31	31	34	37
USA	34	38	39	40	40	38	37	38	37	36

Table 1253: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha)

54.1.7 Crops—Cereals—Rice



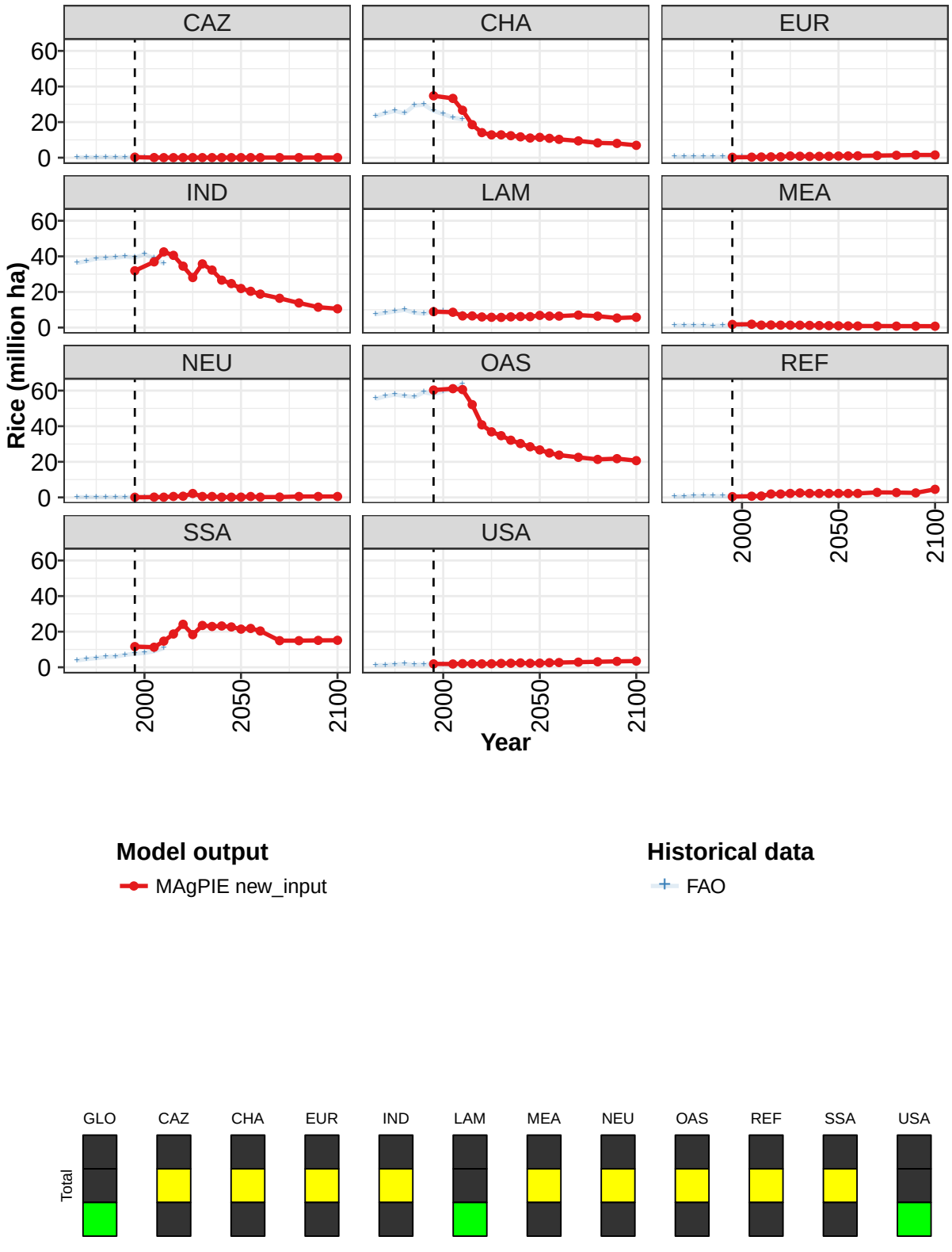


Figure 338: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	152	156	156	143	126	111	120	113	105	100	95
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	35	33	27	19	14	13	13	12	12	11	11
EUR	0	0	0	0	1	1	1	1	1	1	1
IND	32	37	43	41	34	28	36	32	27	25	22
LAM	9	9	7	7	6	6	6	6	6	6	7
MEA	2	2	1	1	1	1	1	1	1	1	1
NEU	0	0	0	1	1	2	1	1	0	0	0
OAS	60	61	61	52	41	37	35	32	30	28	27
REF	0	1	1	2	2	2	3	2	2	2	2
SSA	12	11	15	19	24	18	24	23	23	23	21
USA	2	2	2	2	2	2	2	2	2	2	2

Table 1254: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha) [PART 1/2]

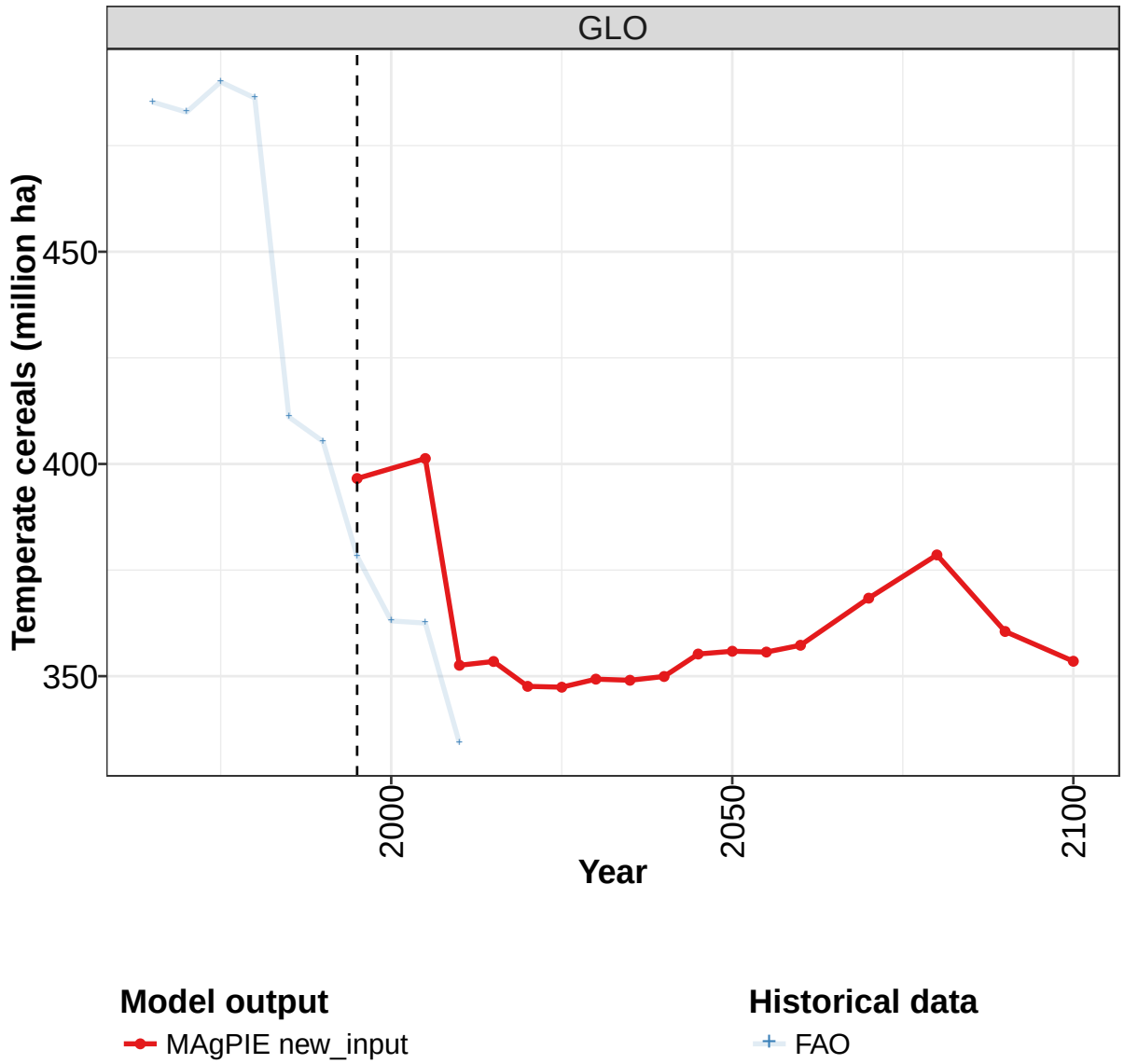
	2055	2060	2070	2080	2090	2100
GLO	92	87	78	73	70	70
CAZ	0	0	0	0	0	0
CHA	11	10	9	8	8	7
EUR	1	1	1	1	2	2
IND	20	19	16	14	11	11
LAM	6	6	7	6	5	6
MEA	1	1	1	1	1	1
NEU	1	0	0	1	1	1
OAS	25	24	23	21	22	21
REF	2	2	3	3	3	5
SSA	22	20	15	15	15	15
USA	3	3	3	3	3	3

Table 1255: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	130	136	141	141	143	147	145	146	144	143
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	23	25	26	25	29	30	26	24	23	22
EUR	0	0	0	0	0	0	0	0	0	1
IND	36	37	39	39	39	40	39	41	39	36
LAM	7	8	9	10	8	8	9	9	9	7
MEA	1	1	1	1	1	1	1	1	1	1
NEU	0	0	0	0	0	0	0	0	0	0
OAS	55	57	58	57	56	59	58	60	61	63
REF	0	0	1	1	1	1	1	1	0	1
SSA	4	5	5	6	6	7	8	8	9	11
USA	1	1	2	2	1	2	2	2	2	2

Table 1256: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha)

54.1.8 Crops—Cereals—Temperate cereals



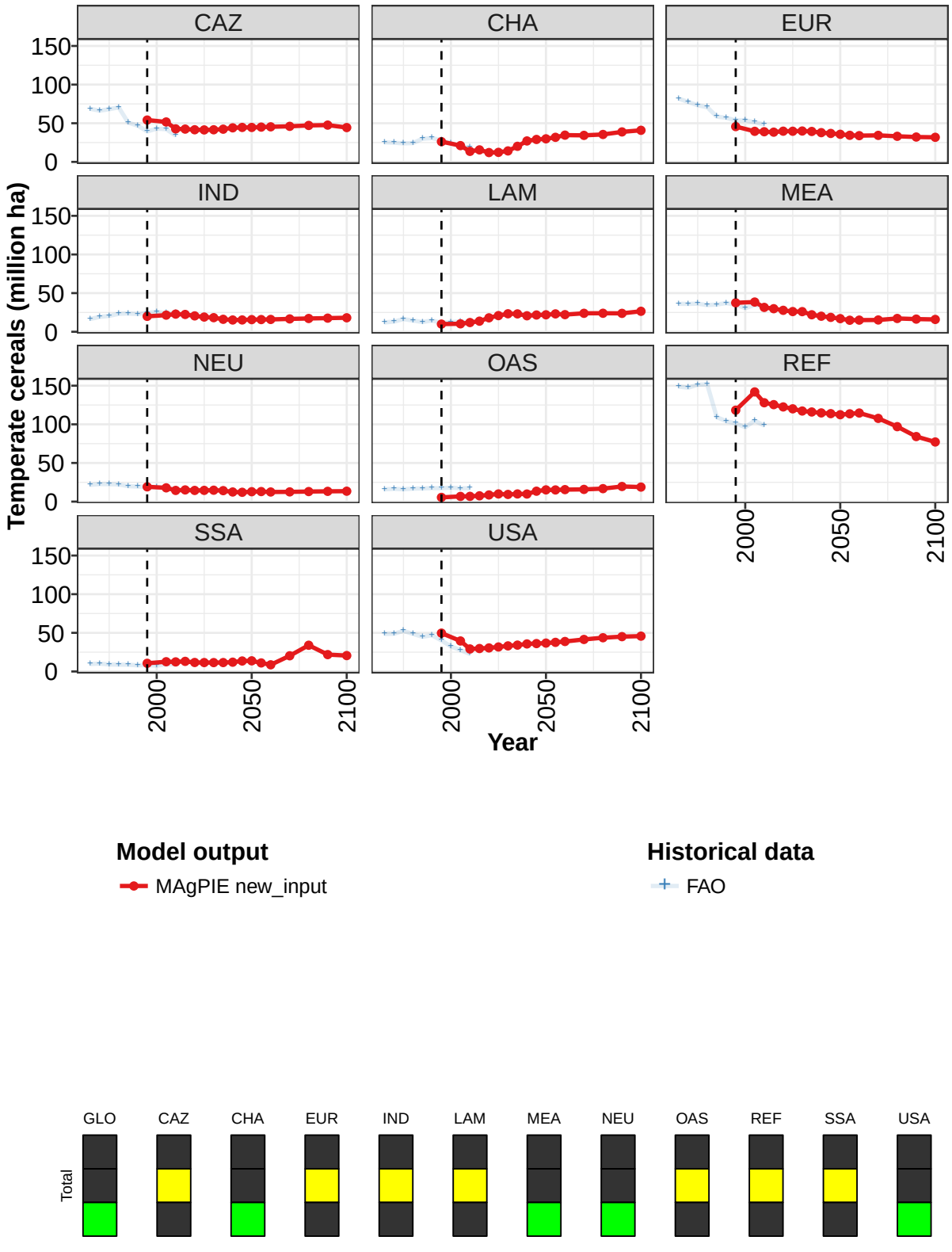


Figure 339: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	397	401	353	353	348	347	349	349	350	355	356
CAZ	54	52	43	42	42	41	42	42	44	45	45
CHA	26	21	14	16	12	12	14	20	27	29	30
EUR	46	40	39	38	40	40	40	39	38	37	36
IND	20	22	23	22	21	19	18	16	15	15	16
LAM	10	10	12	14	18	21	23	23	21	22	22
MEA	37	38	32	30	28	26	26	22	20	19	17
NEU	19	18	14	15	14	15	15	14	12	12	13
OAS	5	7	7	8	9	10	9	10	10	13	15
REF	118	142	128	125	123	120	117	116	115	114	112
SSA	11	13	12	13	12	12	11	12	12	14	14
USA	50	39	29	30	30	32	33	34	36	36	37

Table 1257: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha) [PART 1/2]

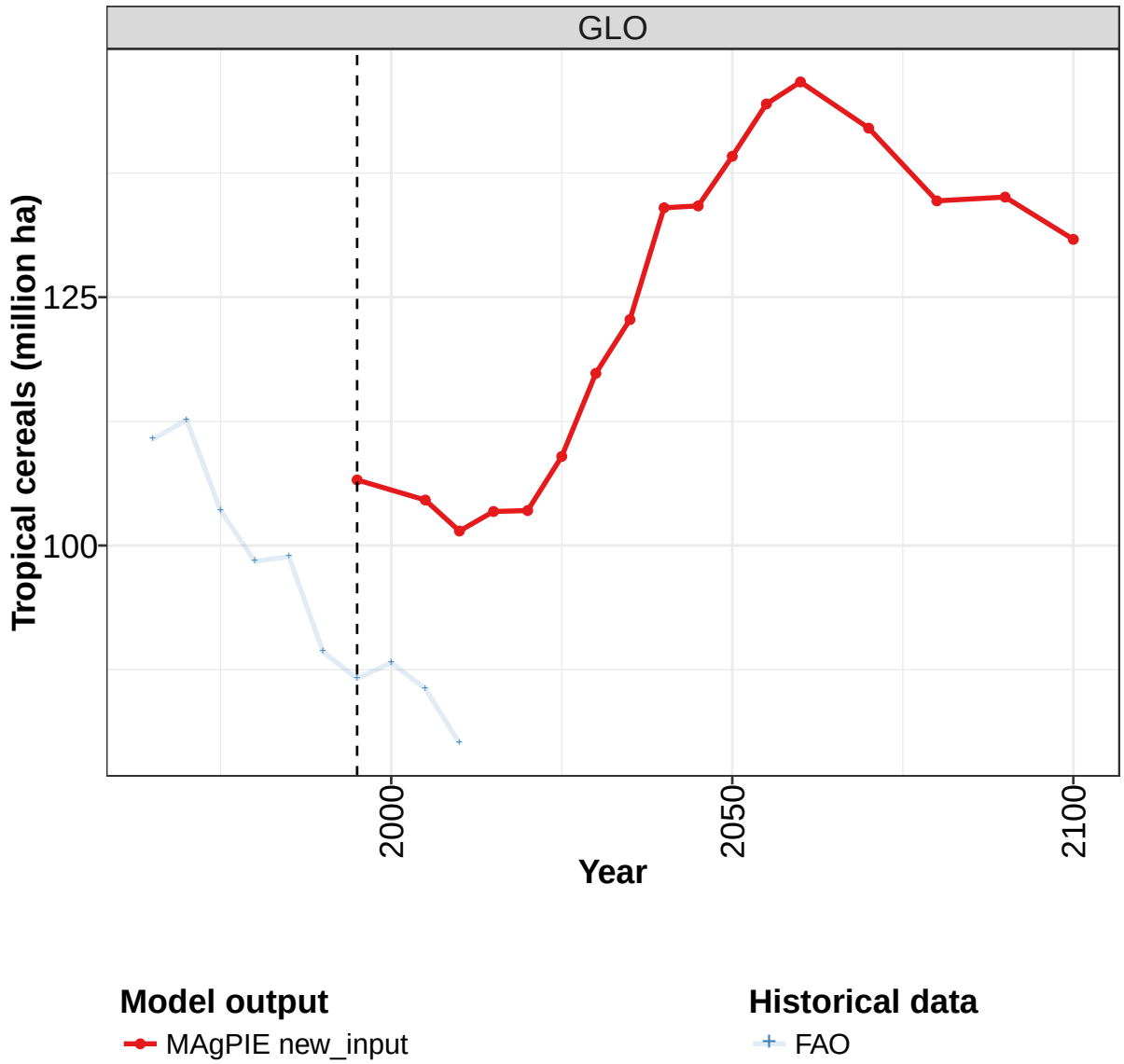
	2055	2060	2070	2080	2090	2100
GLO	356	357	368	379	361	354
CAZ	45	45	46	47	48	44
CHA	32	35	34	36	39	41
EUR	34	34	34	33	32	32
IND	16	16	17	17	18	18
LAM	23	22	24	24	24	27
MEA	15	15	15	17	16	16
NEU	13	12	13	13	13	13
OAS	15	16	16	17	20	19
REF	114	115	108	97	84	77
SSA	11	9	20	34	22	21
USA	38	39	41	44	45	46

Table 1258: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	485	483	490	486	411	405	378	363	363	334
CAZ	69	66	68	71	51	47	39	43	42	34
CHA	25	25	24	24	30	31	28	24	19	19
EUR	82	78	73	71	59	57	54	54	51	48
IND	17	19	21	23	24	23	24	26	24	24
LAM	12	13	16	15	13	15	12	12	13	12
MEA	36	36	36	34	35	37	35	31	35	33
NEU	22	23	23	22	20	19	19	19	18	16
OAS	16	17	16	17	17	17	17	18	17	17
REF	149	147	151	152	109	104	101	96	105	98
SSA	10	10	9	9	9	8	8	7	9	9
USA	49	49	53	49	45	47	40	32	28	23

Table 1259: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha)

54.1.9 Crops—Cereals—Tropical cereals



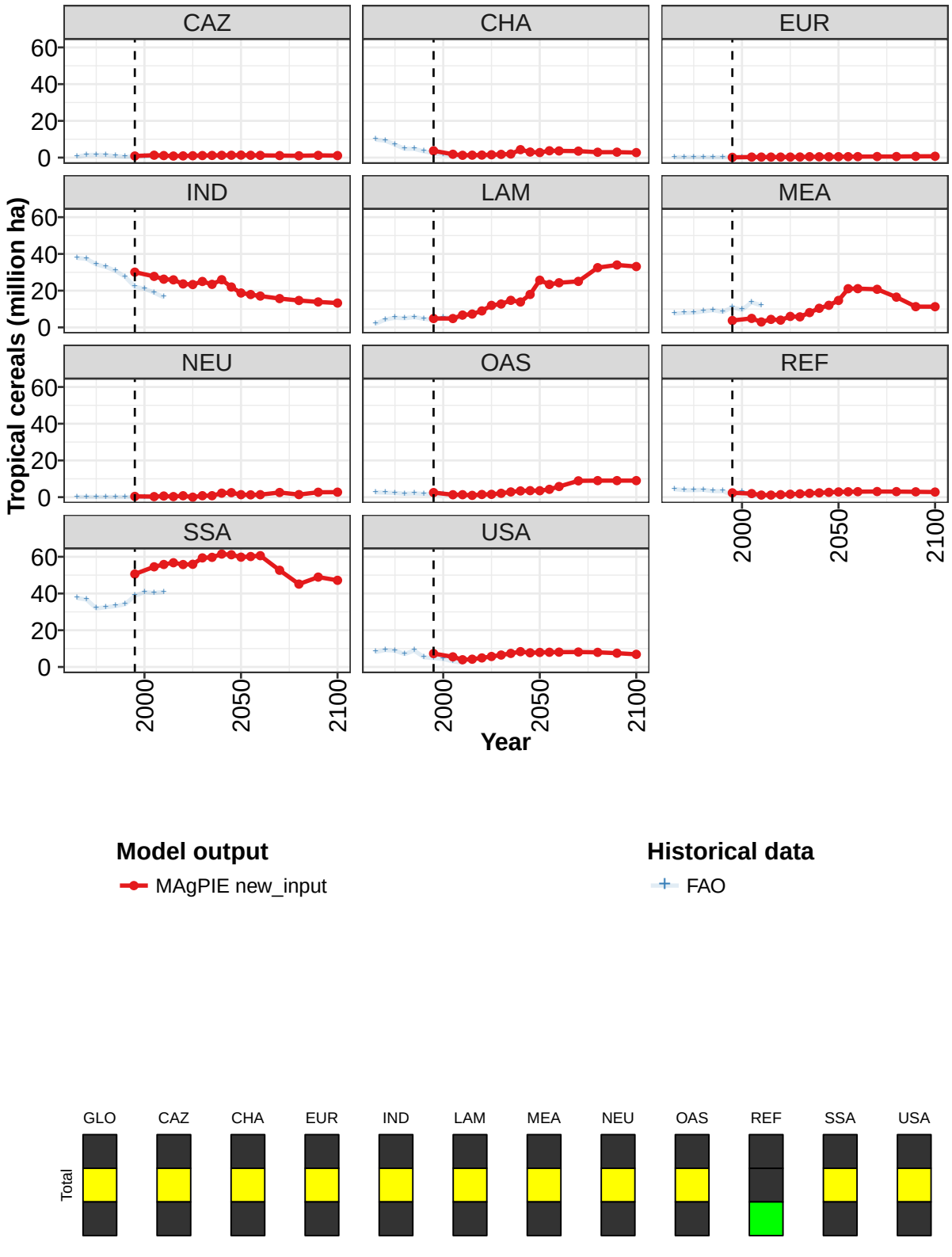


Figure 340: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	107	105	101	103	104	109	117	123	134	134	139
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	4	2	1	1	1	2	2	2	4	3	3
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	30	28	26	26	24	23	25	23	26	22	19
LAM	5	5	7	7	9	12	13	15	14	18	26
MEA	4	5	3	4	4	6	6	8	10	12	15
NEU	0	0	1	0	1	0	1	1	2	2	1
OAS	3	1	1	1	1	2	2	3	3	4	4
REF	2	2	1	1	1	2	2	2	2	3	3
SSA	51	55	56	57	56	56	59	60	61	61	60
USA	7	6	4	4	5	6	6	7	8	8	8

Table 1260: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha) [PART 1/2]

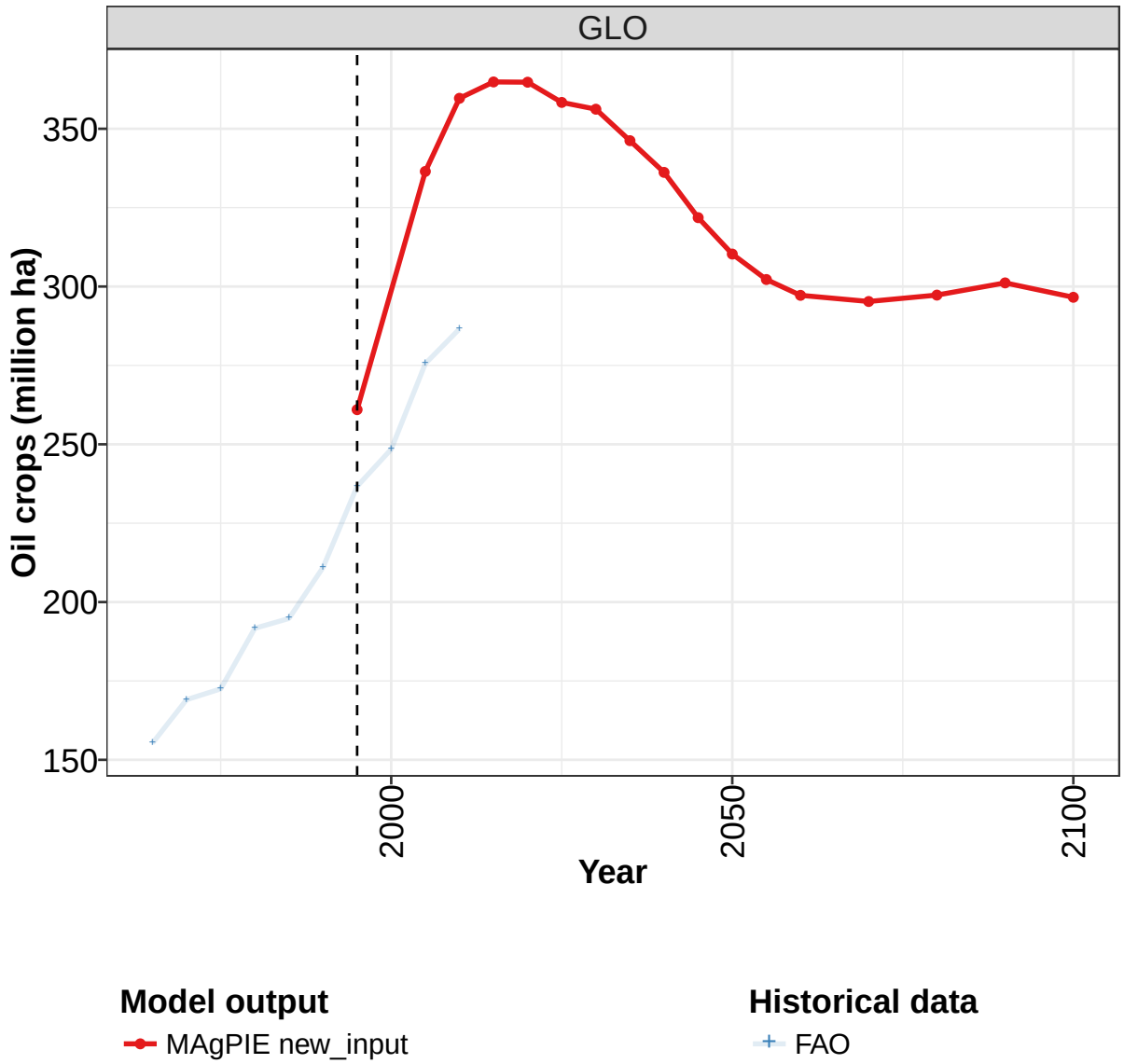
	2055	2060	2070	2080	2090	2100
GLO	144	147	142	135	135	131
CAZ	1	1	1	1	1	1
CHA	4	4	4	3	3	3
EUR	1	1	1	1	1	1
IND	18	17	16	15	14	13
LAM	23	24	25	33	34	33
MEA	21	21	21	16	11	11
NEU	1	1	3	1	3	3
OAS	4	6	9	9	9	9
REF	3	3	3	3	3	3
SSA	60	61	53	45	49	47
USA	8	8	8	8	8	7

Table 1261: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	111	113	103	98	99	89	87	88	86	80
CAZ	1	1	2	1	1	0	1	1	1	0
CHA	10	9	7	5	5	3	2	2	1	1
EUR	0	0	0	0	0	0	0	0	0	0
IND	38	37	34	33	31	28	22	21	19	16
LAM	2	4	5	5	6	5	4	5	5	5
MEA	8	8	8	9	9	8	11	10	14	12
NEU	0	0	0	0	0	0	0	0	0	0
OAS	3	2	2	2	2	2	2	2	1	1
REF	4	4	4	4	3	3	1	3	1	1
SSA	38	37	32	33	33	34	39	41	40	41
USA	8	9	9	7	9	5	5	4	3	2

Table 1262: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha)

54.1.10 Crops—Oil crops



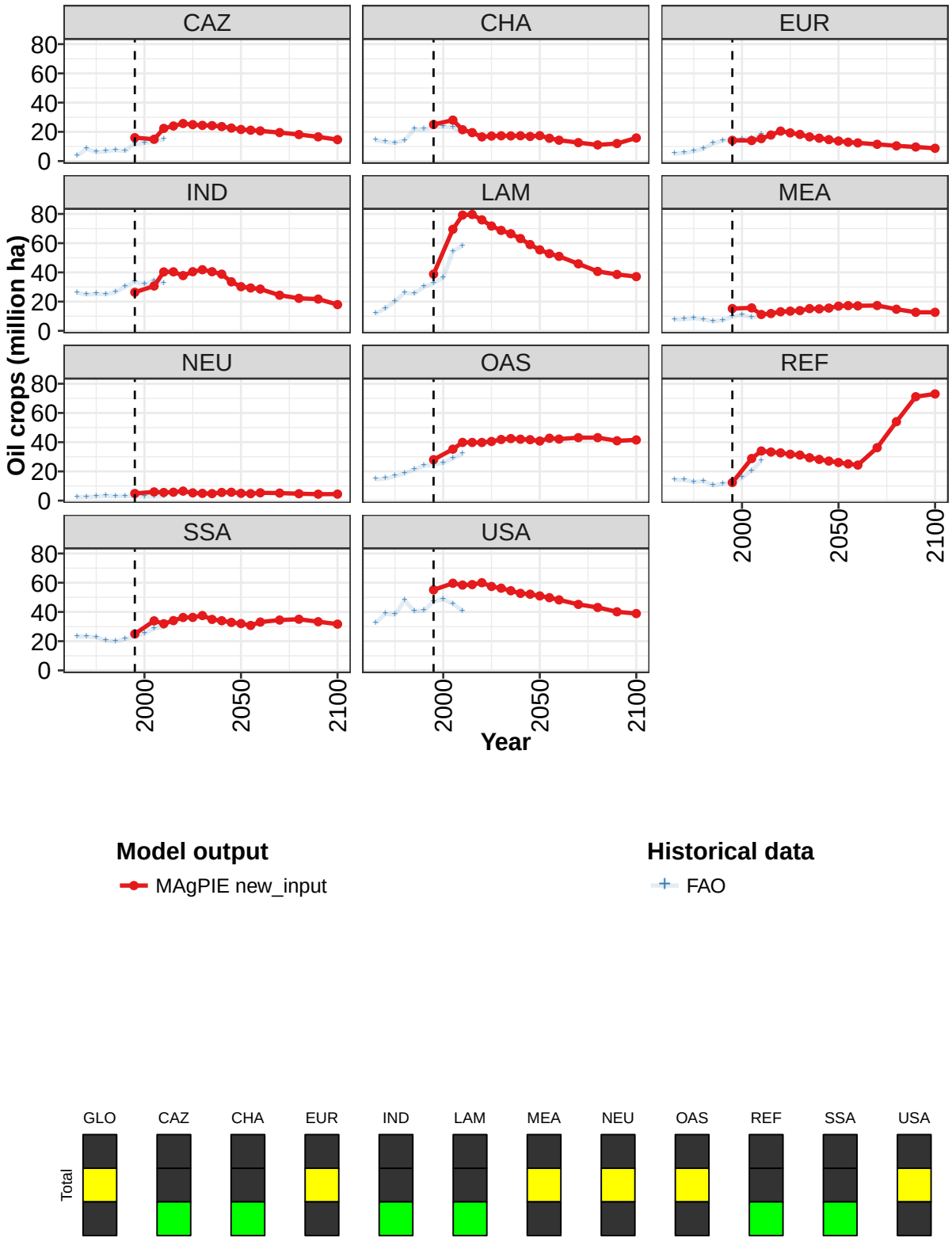


Figure 341: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	261	336	360	365	365	358	356	346	336	322	310
CAZ	16	15	22	24	26	25	24	24	24	23	22
CHA	25	28	21	19	17	17	17	17	17	17	17
EUR	14	14	15	18	21	19	18	17	16	15	14
IND	26	31	40	40	38	40	42	40	39	34	30
LAM	39	70	79	80	76	72	69	66	63	59	55
MEA	15	16	11	12	13	13	14	15	15	16	17
NEU	5	6	6	6	7	5	5	5	6	6	5
OAS	28	35	40	40	40	40	42	42	42	42	41
REF	12	29	34	33	33	32	31	29	28	27	26
SSA	25	34	32	34	36	36	38	35	34	33	32
USA	55	60	58	59	60	57	56	55	53	52	51

Table 1263: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops (million ha) [PART 1/2]

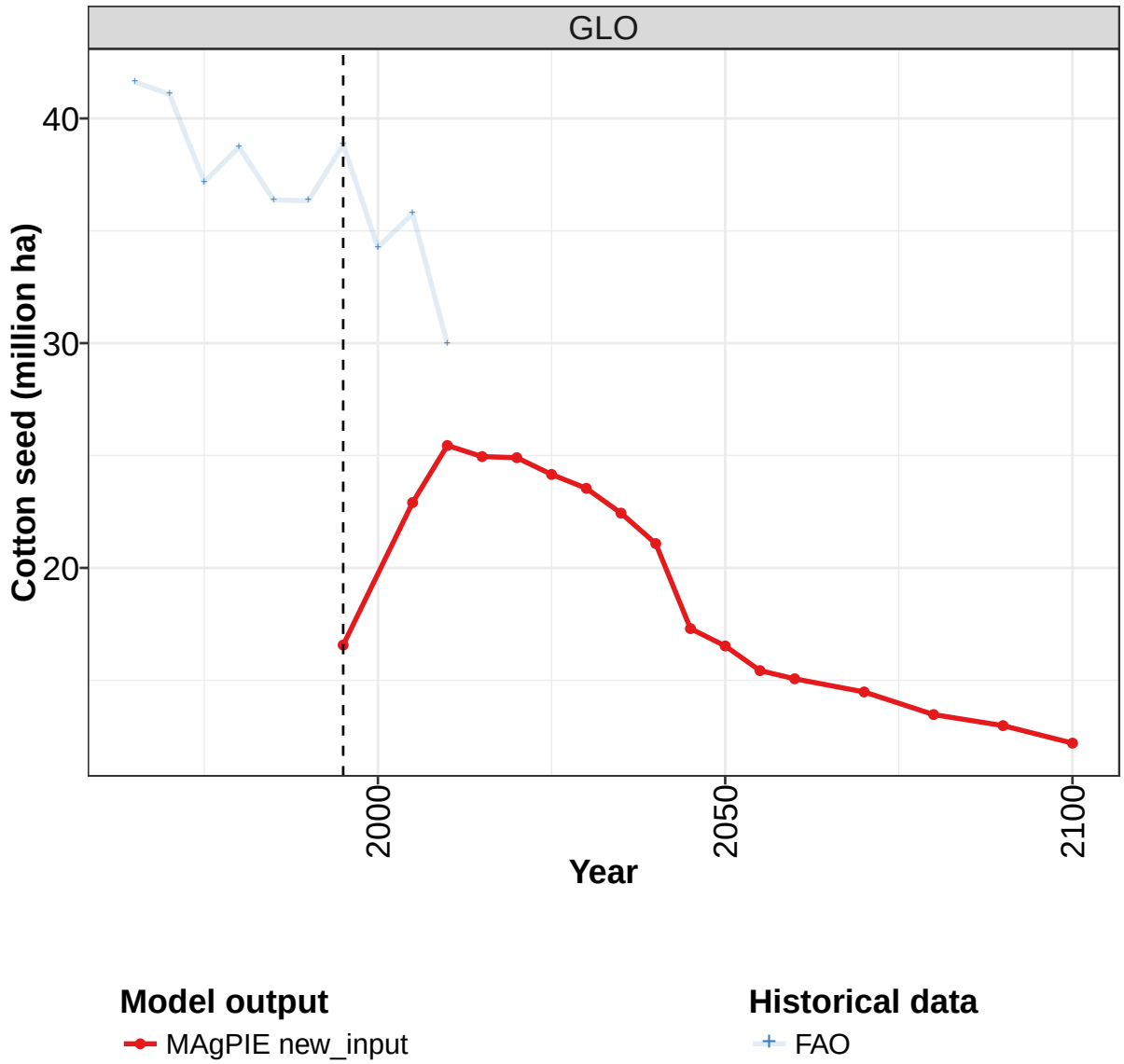
	2055	2060	2070	2080	2090	2100
GLO	302	297	295	297	301	297
CAZ	21	21	19	18	17	15
CHA	16	14	13	11	12	16
EUR	13	12	11	10	10	9
IND	29	29	24	22	22	18
LAM	53	51	46	41	39	37
MEA	17	17	17	15	13	13
NEU	5	5	5	5	4	4
OAS	43	42	43	43	41	42
REF	25	24	36	54	71	73
SSA	31	33	34	35	33	32
USA	50	48	45	43	40	39

Table 1264: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	155	169	172	192	195	211	237	248	276	287
CAZ	4	8	6	7	7	7	12	12	13	15
CHA	14	13	12	14	22	22	23	24	23	20
EUR	5	6	7	8	12	14	15	15	15	18
IND	26	25	25	25	26	30	34	32	34	33
LAM	12	15	20	26	25	30	32	36	54	58
MEA	8	8	9	8	6	7	10	11	9	11
NEU	2	3	3	3	3	3	3	3	3	3
OAS	15	15	17	19	21	24	25	26	29	32
REF	14	14	13	13	10	11	13	16	20	27
SSA	23	23	23	20	20	22	23	25	29	29
USA	32	39	38	48	41	41	47	49	46	41

Table 1265: FAO — Resources—Land Cover—Cropland—Crops—Oil crops (million ha)

54.1.11 Crops—Oil crops—Cotton seed



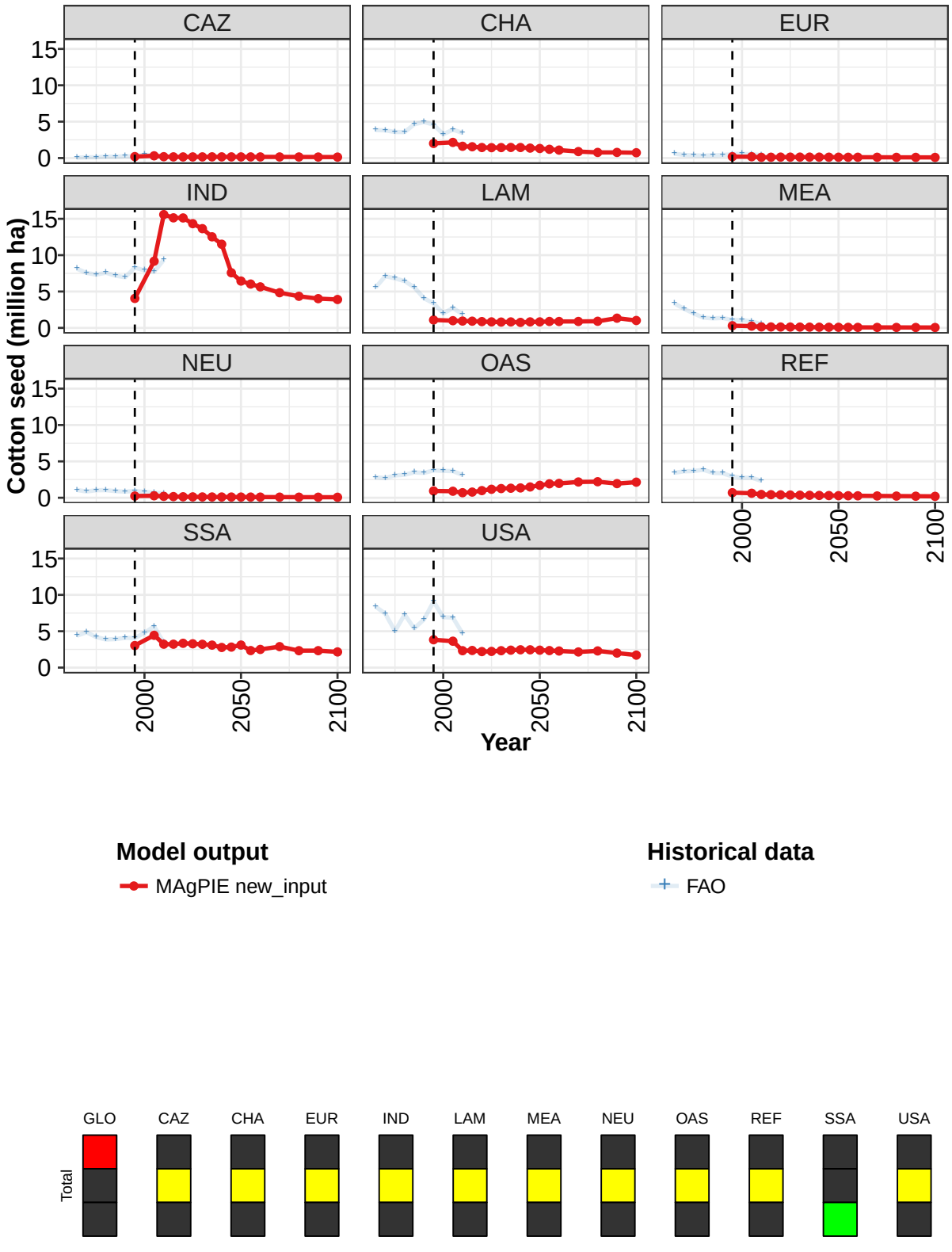


Figure 342: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	16.6	22.9	25.4	25.0	24.9	24.2	23.5	22.4	21.1	17.3	16.5
CAZ	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	2.0	2.1	1.6	1.6	1.4	1.4	1.4	1.5	1.4	1.4	1.3
EUR	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	4.1	9.2	15.6	15.1	15.1	14.3	13.6	12.5	11.5	7.6	6.4
LAM	1.1	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
MEA	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.9	0.9	0.7	0.8	1.0	1.2	1.3	1.3	1.3	1.5	1.7
REF	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
SSA	3.0	4.4	3.2	3.2	3.3	3.3	3.2	3.1	2.8	2.8	3.1
USA	3.8	3.6	2.3	2.4	2.2	2.2	2.3	2.4	2.5	2.4	2.4

Table 1266: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha) [PART 1/2]

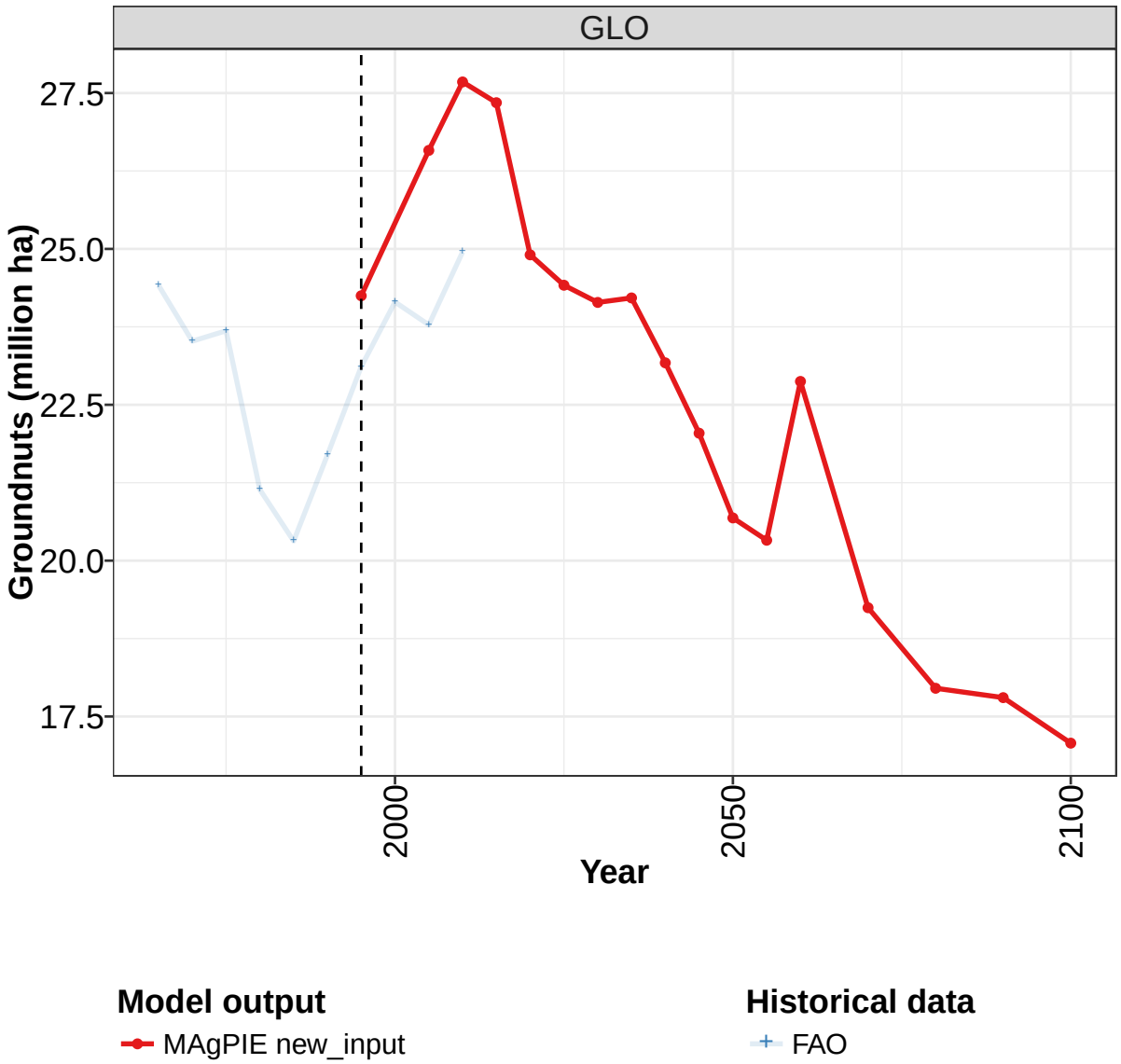
	2055	2060	2070	2080	2090	2100
GLO	15.4	15.1	14.5	13.5	13.0	12.2
CAZ	0.2	0.2	0.2	0.1	0.1	0.1
CHA	1.2	1.1	0.9	0.8	0.8	0.7
EUR	0.1	0.1	0.1	0.1	0.1	0.1
IND	6.0	5.6	4.8	4.3	4.0	3.9
LAM	0.9	0.9	0.9	0.9	1.3	1.0
MEA	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.9	2.0	2.2	2.2	1.9	2.1
REF	0.3	0.3	0.3	0.2	0.2	0.2
SSA	2.3	2.5	2.9	2.3	2.3	2.2
USA	2.3	2.3	2.2	2.3	2.0	1.7

Table 1267: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	41.6	41.1	37.2	38.7	36.4	36.3	38.8	34.3	35.8	30.0
CAZ	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.5	0.3	0.2
CHA	3.8	3.8	3.6	3.6	4.6	5.0	4.6	3.3	3.9	3.4
EUR	0.6	0.4	0.4	0.3	0.4	0.4	0.5	0.6	0.5	0.4
IND	8.1	7.6	7.3	7.6	7.2	7.0	8.3	7.9	7.7	9.3
LAM	5.6	7.1	6.8	6.4	5.6	4.1	3.4	2.0	2.7	1.9
MEA	3.4	2.6	2.0	1.4	1.3	1.4	1.1	1.1	0.9	0.5
NEU	1.1	0.9	1.0	1.0	0.9	0.8	0.9	0.8	0.7	0.6
OAS	2.8	2.7	3.1	3.2	3.5	3.4	3.8	3.7	3.7	3.1
REF	3.4	3.6	3.7	3.8	3.4	3.4	2.9	2.7	2.8	2.3
SSA	4.4	4.9	4.2	3.9	3.9	4.1	4.1	4.8	5.7	3.4
USA	8.4	7.4	5.0	7.3	5.4	6.6	9.1	6.9	6.9	4.7

Table 1268: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha)

54.1.12 Crops—Oil crops—Groundnuts



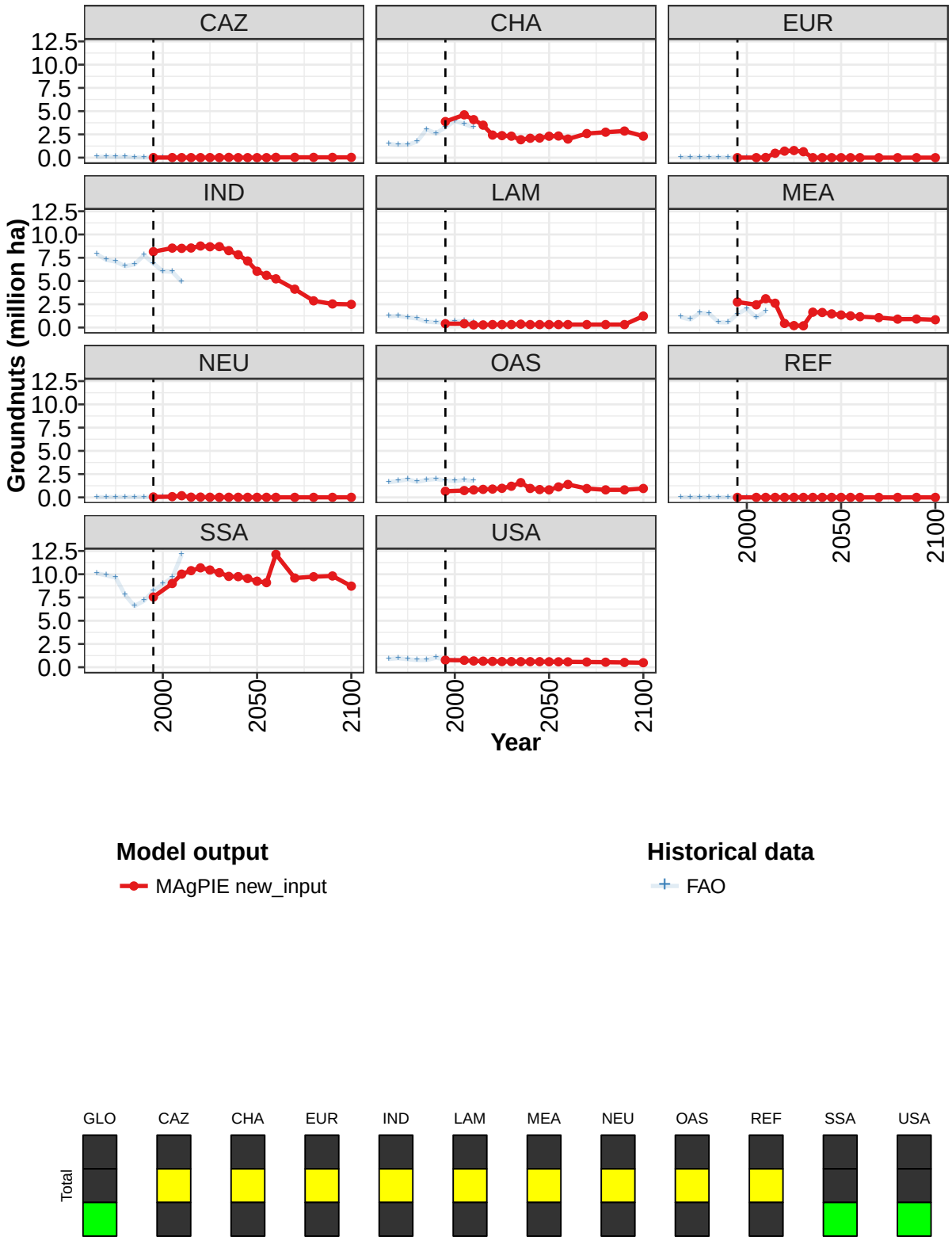


Figure 343: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	24.2	26.6	27.7	27.3	24.9	24.4	24.1	24.2	23.2	22.0	20.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.9	4.6	4.1	3.5	2.4	2.4	2.3	1.9	2.1	2.1	2.3
EUR	0.0	0.0	0.0	0.5	0.7	0.8	0.6	0.0	0.0	0.0	0.0
IND	8.2	8.5	8.5	8.5	8.8	8.7	8.7	8.3	7.8	7.1	6.0
LAM	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
MEA	2.7	2.4	3.1	2.6	0.4	0.2	0.2	1.7	1.6	1.5	1.3
NEU	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.7	0.8	0.9	0.9	1.0	1.2	1.6	1.0	0.8	0.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	7.6	9.0	10.0	10.4	10.7	10.5	10.2	9.8	9.7	9.5	9.3
USA	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6

Table 1269: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha) [PART 1/2]

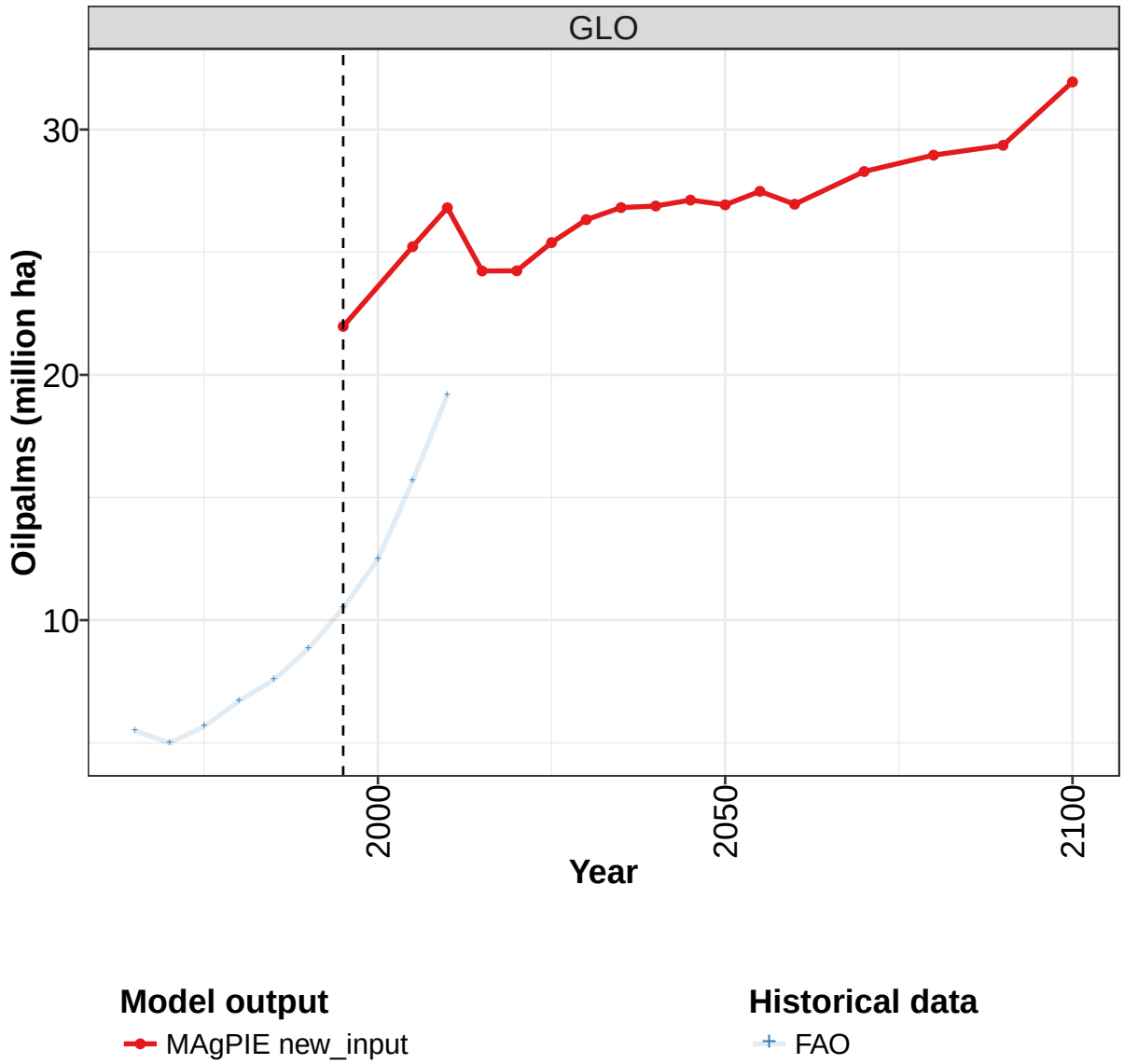
	2055	2060	2070	2080	2090	2100
GLO	20.3	22.9	19.2	18.0	17.8	17.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.3	2.0	2.6	2.7	2.9	2.3
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	5.6	5.2	4.1	2.9	2.5	2.5
LAM	0.3	0.3	0.3	0.3	0.3	1.2
MEA	1.3	1.2	1.1	0.9	0.9	0.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.1	1.4	1.0	0.8	0.8	1.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	9.1	12.1	9.6	9.7	9.8	8.7
USA	0.6	0.6	0.6	0.5	0.5	0.5

Table 1270: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	24.4	23.5	23.7	21.1	20.3	21.7	23.1	24.1	23.8	25.0
CAZ	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.5	1.3	1.4	1.7	3.0	2.6	3.3	3.9	3.6	3.2
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	7.9	7.3	7.1	6.6	6.8	7.8	6.9	6.0	6.0	4.9
LAM	1.2	1.3	1.1	1.0	0.6	0.6	0.5	0.7	0.7	0.6
MEA	1.1	0.9	1.6	1.5	0.6	0.5	1.4	2.0	1.1	1.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.6	1.8	1.9	1.7	1.9	2.0	1.8	1.8	1.9	1.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	10.1	9.9	9.6	7.8	6.6	7.1	8.2	8.9	9.6	12.1
USA	0.9	1.0	0.9	0.8	0.8	1.0	0.9	0.7	0.8	0.6

Table 1271: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha)

54.1.13 Crops—Oil crops—Oilpalms



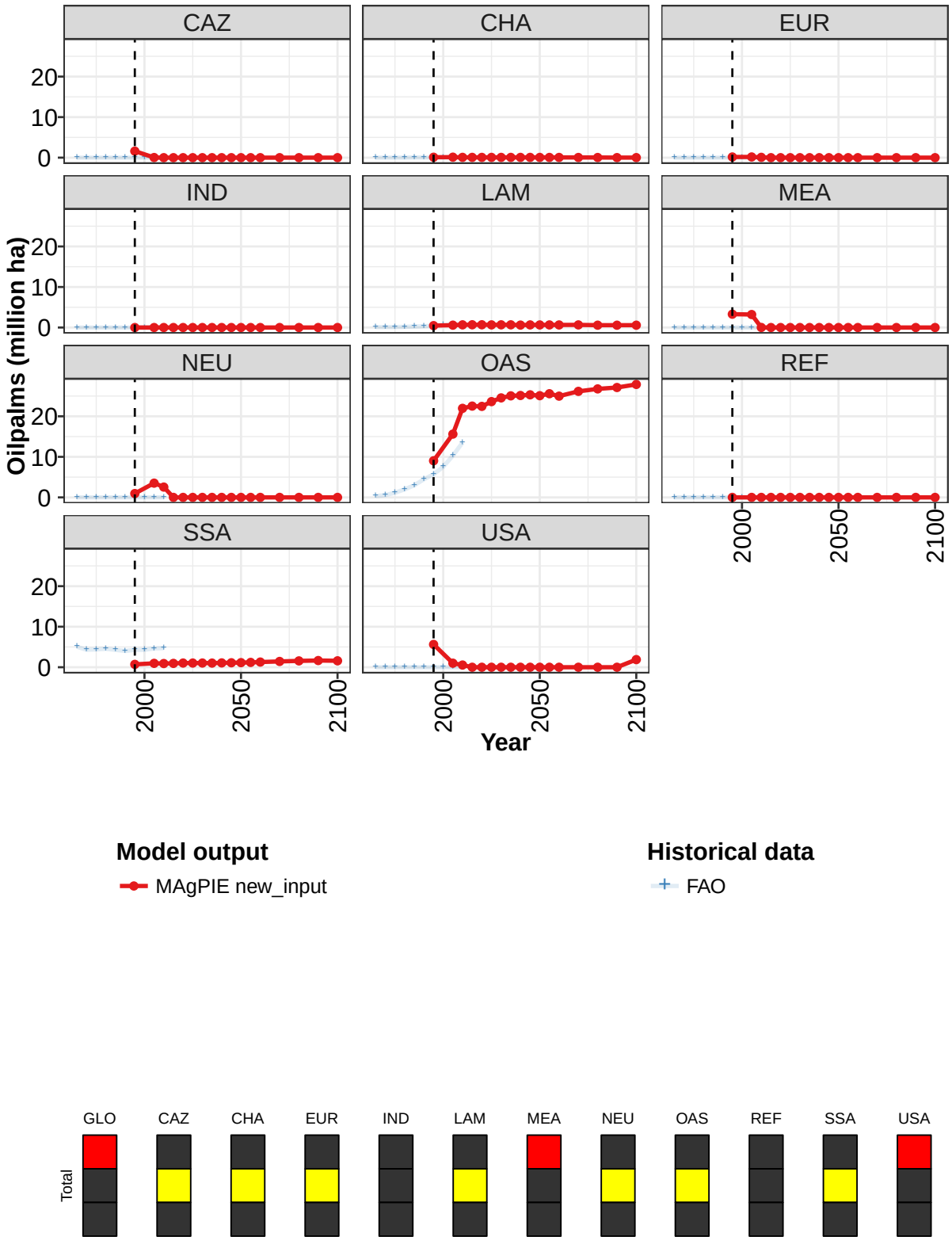


Figure 344: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	22.0	25.2	26.8	24.2	24.2	25.4	26.3	26.8	26.9	27.1	26.9
CAZ	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
EUR	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
MEA	3.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.9	3.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	9.0	15.6	22.0	22.5	22.5	23.6	24.5	25.1	25.1	25.3	25.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.7	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1
USA	5.6	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1272: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha) [PART 1/2]

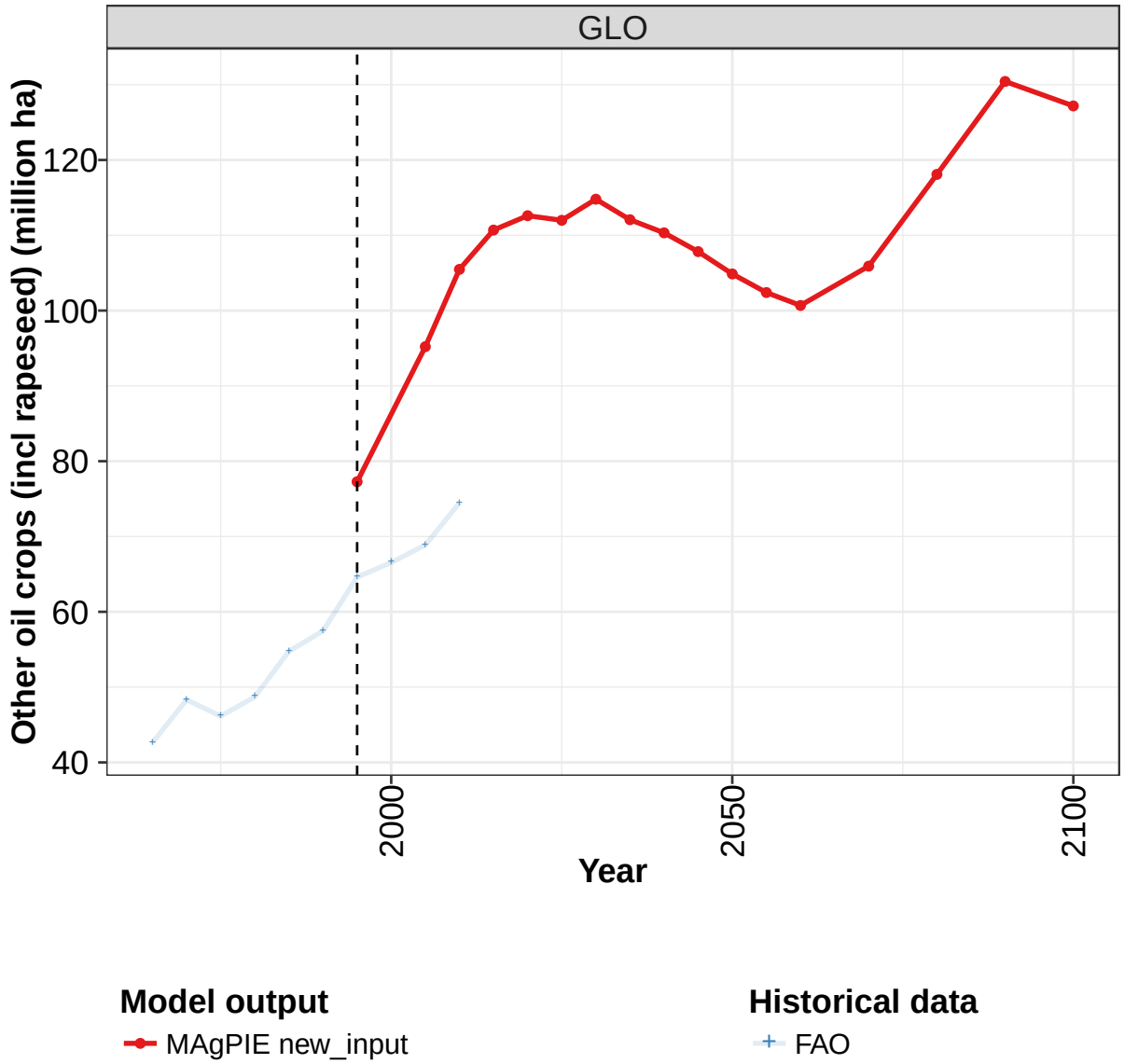
	2055	2060	2070	2080	2090	2100
GLO	27.5	27.0	28.3	29.0	29.4	31.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.6	0.6	0.6	0.6	0.6
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	25.6	25.0	26.2	26.8	27.1	27.9
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.2	1.3	1.4	1.6	1.7	1.6
USA	0.0	0.0	0.0	0.0	0.0	1.9

Table 1273: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.5	5.0	5.7	6.7	7.6	8.8	10.5	12.5	15.7	19.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.6	0.7	0.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.6	1.1	2.0	3.0	4.5	5.7	7.5	10.3	13.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	5.1	4.3	4.4	4.5	4.3	4.0	4.3	4.3	4.6	4.7
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1274: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha)

54.1.14 Crops—Oil crops—Other oil crops (incl rapeseed)



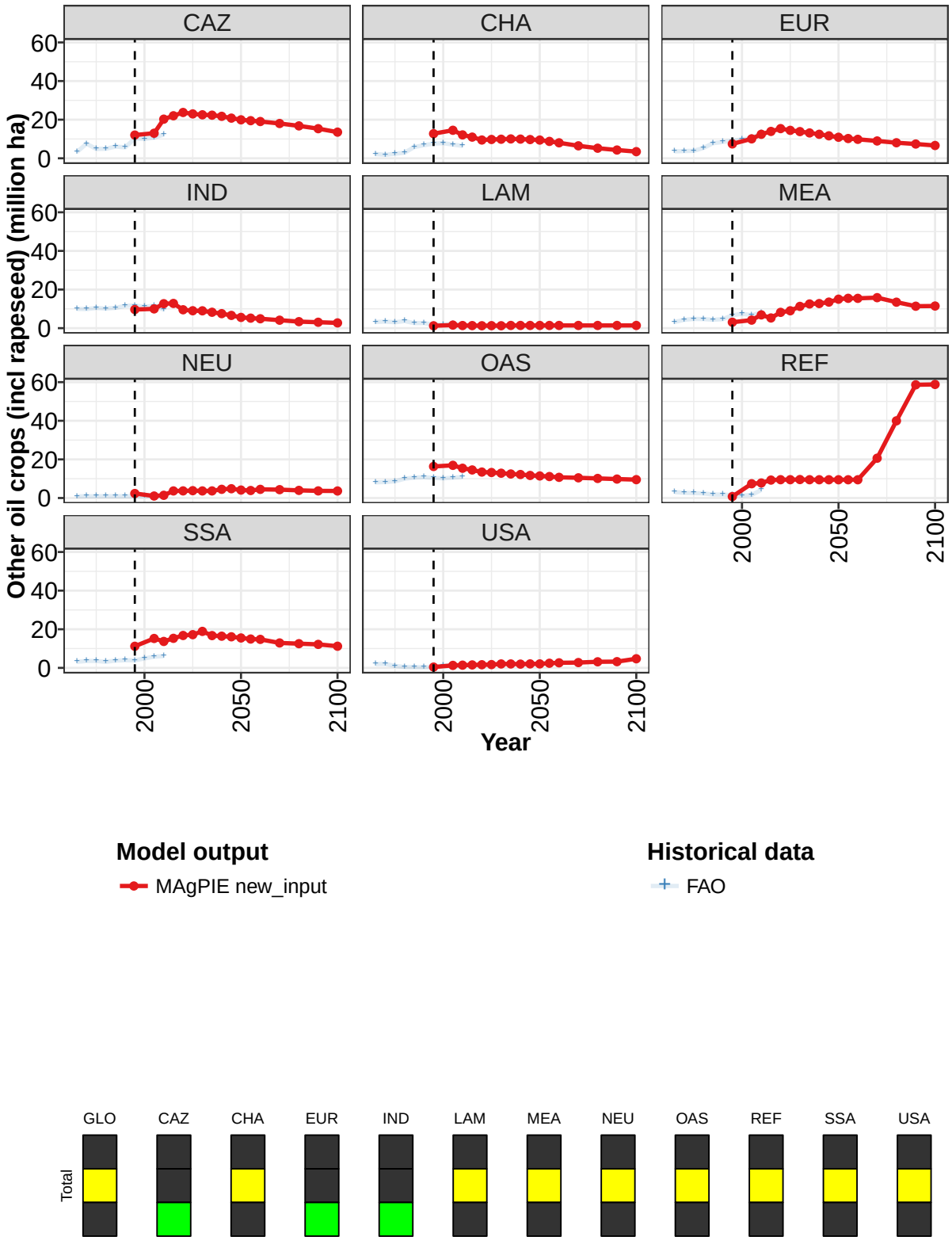


Figure 345: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	77	95	105	111	113	112	115	112	110	108	105
CAZ	12	13	20	22	24	23	23	22	22	21	20
CHA	13	15	12	11	9	10	10	10	10	10	9
EUR	7	10	12	14	15	14	14	13	12	12	11
IND	10	10	13	13	10	9	9	8	8	7	6
LAM	1	2	1	1	1	1	1	1	1	1	1
MEA	3	4	7	5	8	9	11	13	13	13	15
NEU	2	1	1	4	4	4	4	4	5	5	4
OAS	16	17	15	15	13	13	13	12	12	12	11
REF	1	7	8	9	9	9	10	9	9	9	9
SSA	11	15	14	15	17	17	19	17	16	16	16
USA	0	1	1	2	2	2	2	2	2	2	2

Table 1275: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha) [PART 1/2]

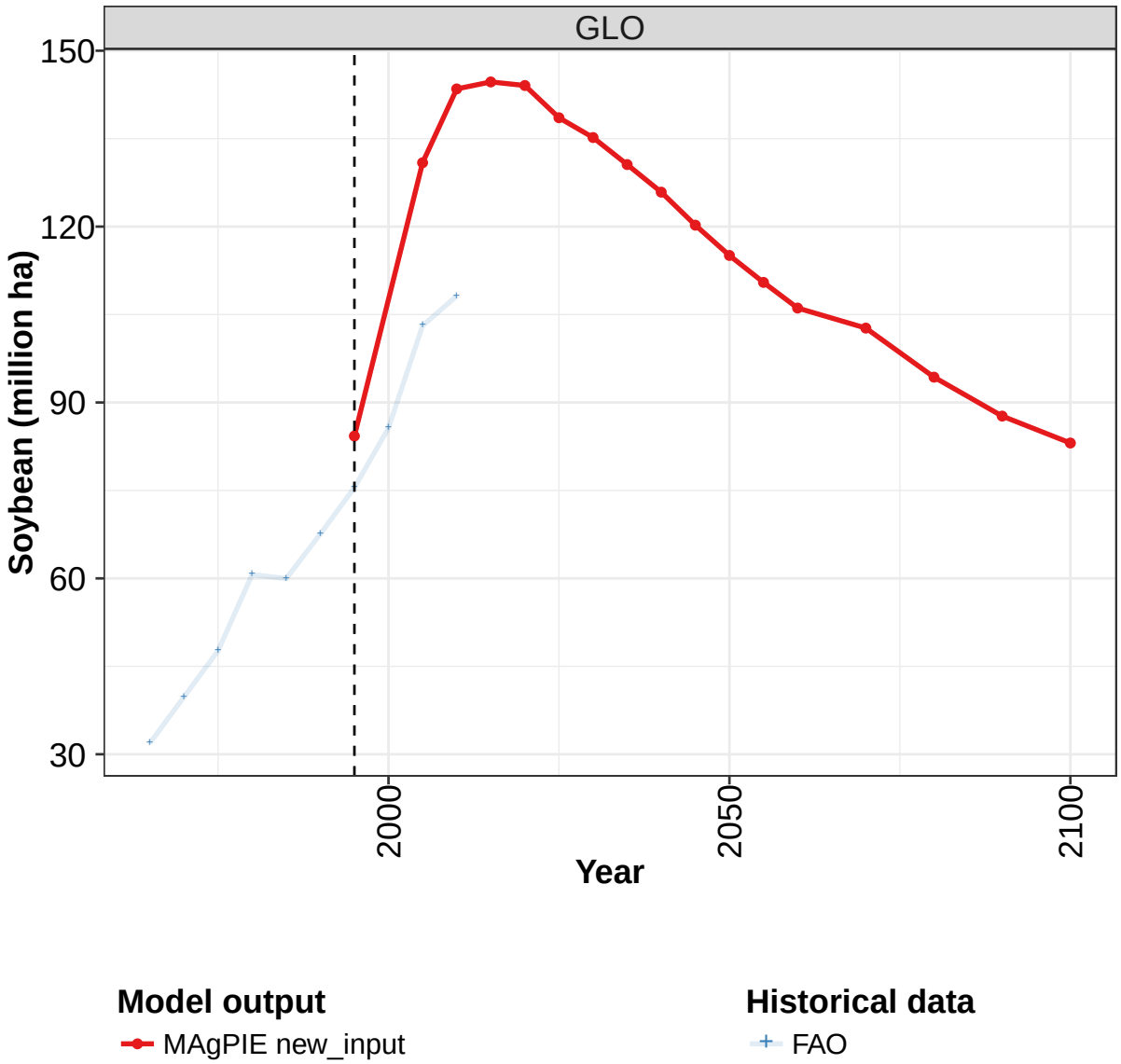
	2055	2060	2070	2080	2090	2100
GLO	102	101	106	118	130	127
CAZ	19	19	18	17	15	14
CHA	9	8	6	5	4	3
EUR	10	10	9	8	7	7
IND	5	5	4	3	3	3
LAM	1	1	1	1	1	1
MEA	15	15	16	13	11	11
NEU	4	4	4	4	4	4
OAS	11	11	10	10	10	10
REF	9	9	21	40	59	59
SSA	15	15	13	13	12	11
USA	2	3	3	3	3	5

Table 1276: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	42.6	48.3	46.2	48.7	54.8	57.5	64.6	66.5	68.9	74.5
CAZ	3.3	7.6	4.8	5.0	6.1	5.7	10.3	10.0	10.7	12.3
CHA	2.2	1.8	2.3	2.9	5.8	6.8	7.6	7.8	7.1	6.4
EUR	3.6	3.7	3.9	5.3	7.8	8.4	9.1	9.7	10.6	13.0
IND	10.0	9.9	10.4	10.2	10.5	11.5	11.8	11.1	11.6	9.6
LAM	3.2	3.4	3.1	3.7	2.6	2.7	1.8	2.0	2.1	1.9
MEA	3.2	4.3	4.8	4.7	4.4	4.6	6.6	7.5	6.7	8.0
NEU	0.9	0.9	0.9	1.0	0.9	0.9	1.0	0.9	1.0	1.2
OAS	8.1	8.3	8.7	10.0	10.6	10.8	10.4	10.2	10.5	10.8
REF	3.1	2.7	2.6	2.4	1.8	1.8	1.5	1.3	1.6	4.2
SSA	3.1	3.6	3.6	3.1	3.8	3.9	3.9	4.9	5.8	6.1
USA	2.0	2.1	1.0	0.5	0.4	0.3	0.5	1.2	1.2	0.9

Table 1277: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha)

54.1.15 Crops—Oil crops—Soybean



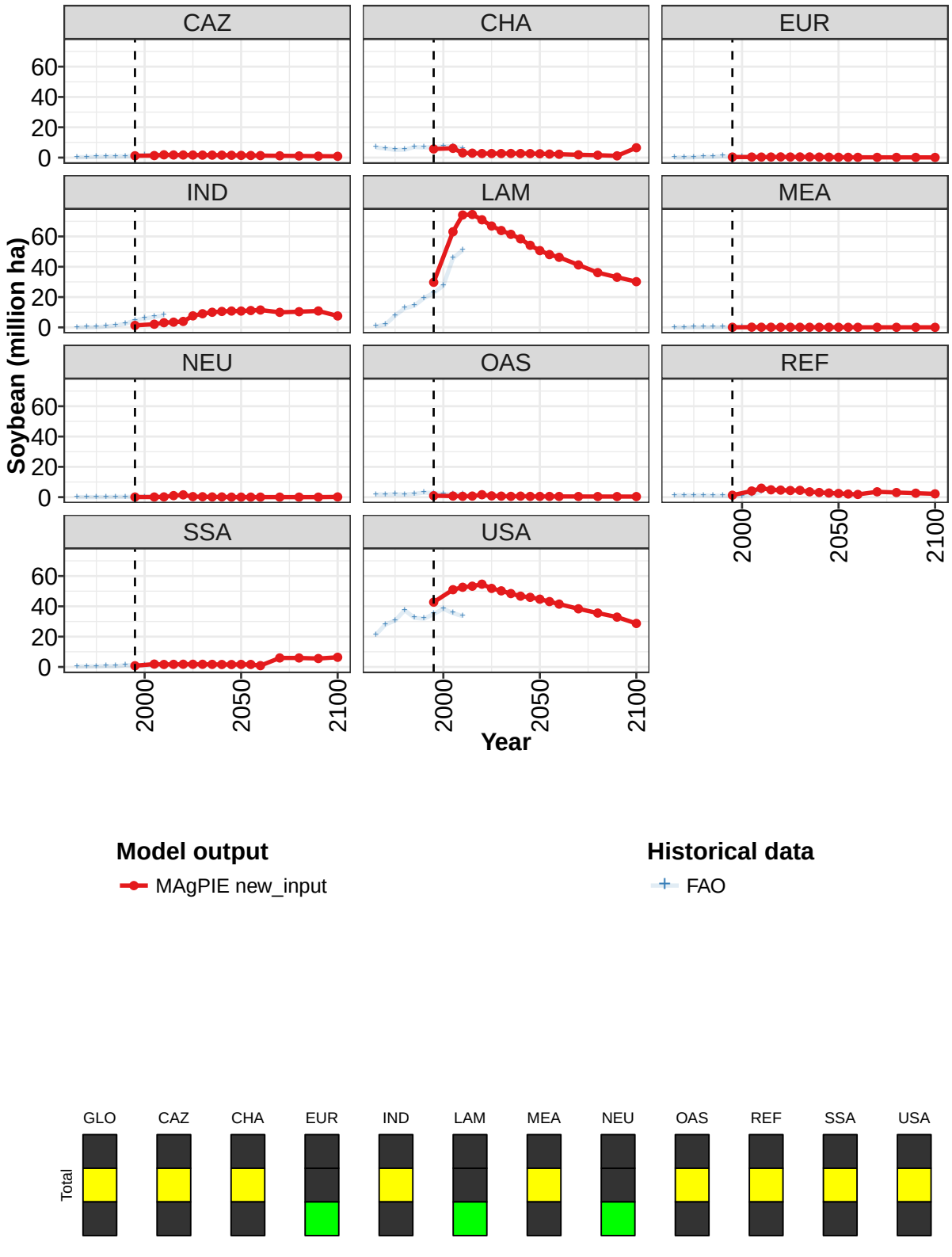


Figure 346: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	84	131	143	145	144	139	135	131	126	120	115
CAZ	1	1	2	2	2	2	2	2	2	2	1
CHA	6	6	3	3	3	3	3	3	3	3	3
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	1	2	3	3	4	8	9	10	11	11	11
LAM	30	63	74	74	71	67	64	61	58	54	51
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	1	2	0	0	0	0	0	0
OAS	1	1	1	1	2	1	1	1	1	0	0
REF	1	4	6	5	5	4	5	4	3	3	2
SSA	1	2	2	2	2	2	2	2	2	2	2
USA	43	51	53	53	55	52	50	48	47	46	45

Table 1278: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha) [PART 1/2]

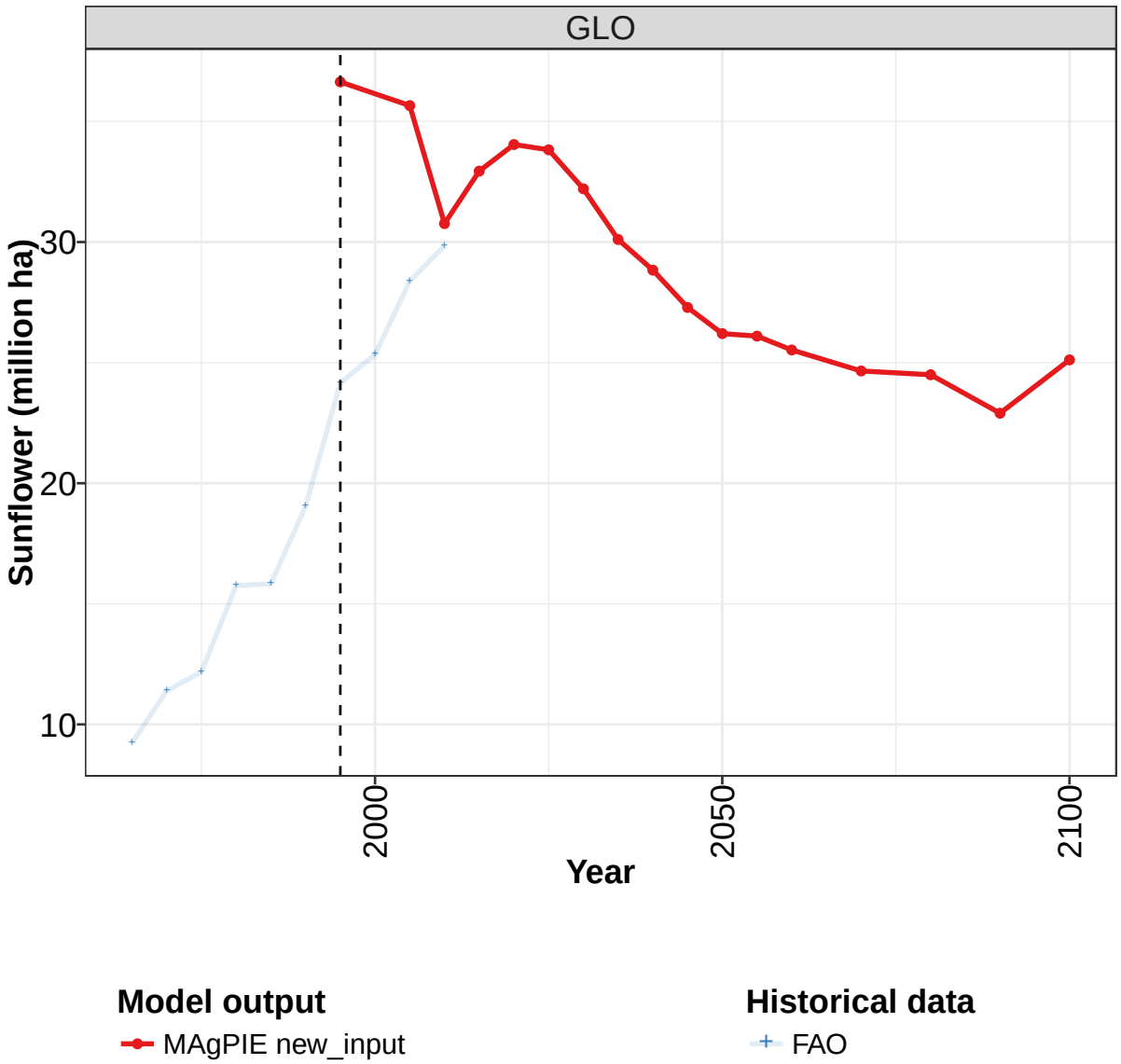
	2055	2060	2070	2080	2090	2100
GLO	110	106	103	94	88	83
CAZ	1	1	1	1	1	1
CHA	2	2	2	2	1	7
EUR	0	0	0	0	0	0
IND	11	11	10	10	11	8
LAM	48	46	41	36	33	30
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	0	0	0	0	0	0
REF	2	2	4	3	3	2
SSA	2	1	6	6	6	6
USA	43	41	38	36	33	29

Table 1279: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	32	40	48	61	60	68	75	86	103	108
CAZ	0	0	0	1	1	1	1	2	2	2
CHA	7	6	5	5	7	7	7	8	7	6
EUR	0	0	0	1	1	1	0	1	0	0
IND	0	0	0	1	1	2	5	6	7	8
LAM	1	2	8	13	14	19	23	28	46	51
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	2	2	2	2	2	3	3	2	2	2
REF	1	1	1	1	1	1	1	1	2	3
SSA	0	0	0	1	0	1	1	1	1	2
USA	21	28	31	37	32	32	35	38	35	34

Table 1280: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha)

54.1.16 Crops—Oil crops—Sunflower



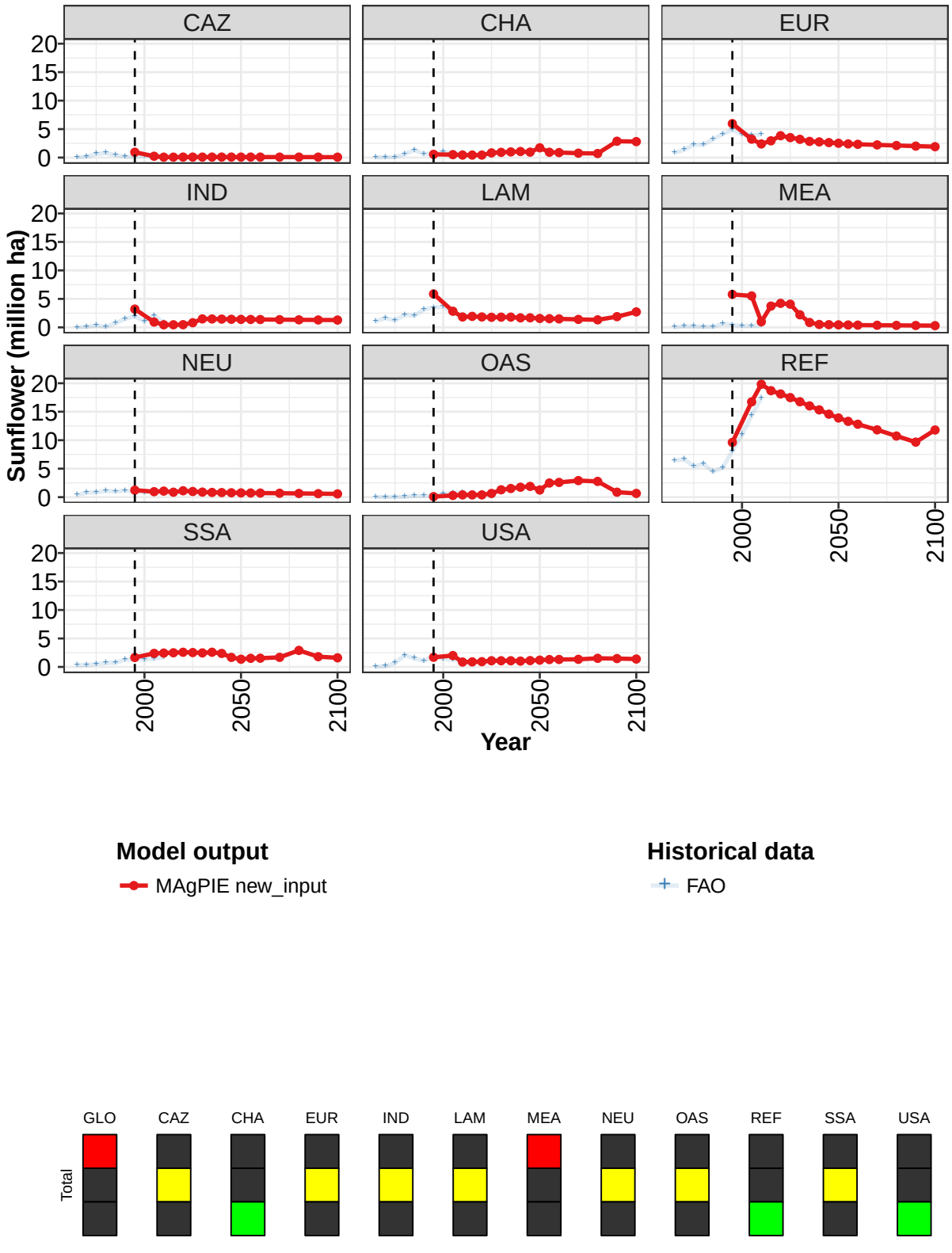


Figure 347: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	36.6	35.7	30.8	32.9	34.0	33.8	32.2	30.1	28.8	27.3	26.2
CAZ	0.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.6	0.5	0.4	0.4	0.4	0.8	0.9	1.0	1.1	1.0	1.7
EUR	6.0	3.2	2.4	2.9	3.8	3.5	3.2	2.8	2.8	2.6	2.5
IND	3.2	0.9	0.5	0.5	0.5	0.8	1.5	1.5	1.5	1.4	1.4
LAM	5.9	2.8	1.8	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.6
MEA	5.8	5.5	1.0	3.7	4.2	4.1	2.2	0.9	0.5	0.5	0.4
NEU	1.2	1.0	1.1	0.9	1.1	1.0	0.9	0.8	0.8	0.8	0.7
OAS	0.1	0.3	0.4	0.4	0.4	0.6	1.3	1.5	1.7	1.9	1.3
REF	9.6	16.7	19.8	18.7	18.1	17.5	16.8	16.0	15.3	14.6	13.9
SSA	1.7	2.4	2.4	2.5	2.6	2.5	2.5	2.6	2.4	1.7	1.4
USA	1.7	2.0	0.9	0.9	0.9	1.1	1.1	1.1	1.0	1.1	1.2

Table 1281: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha) [PART 1/2]

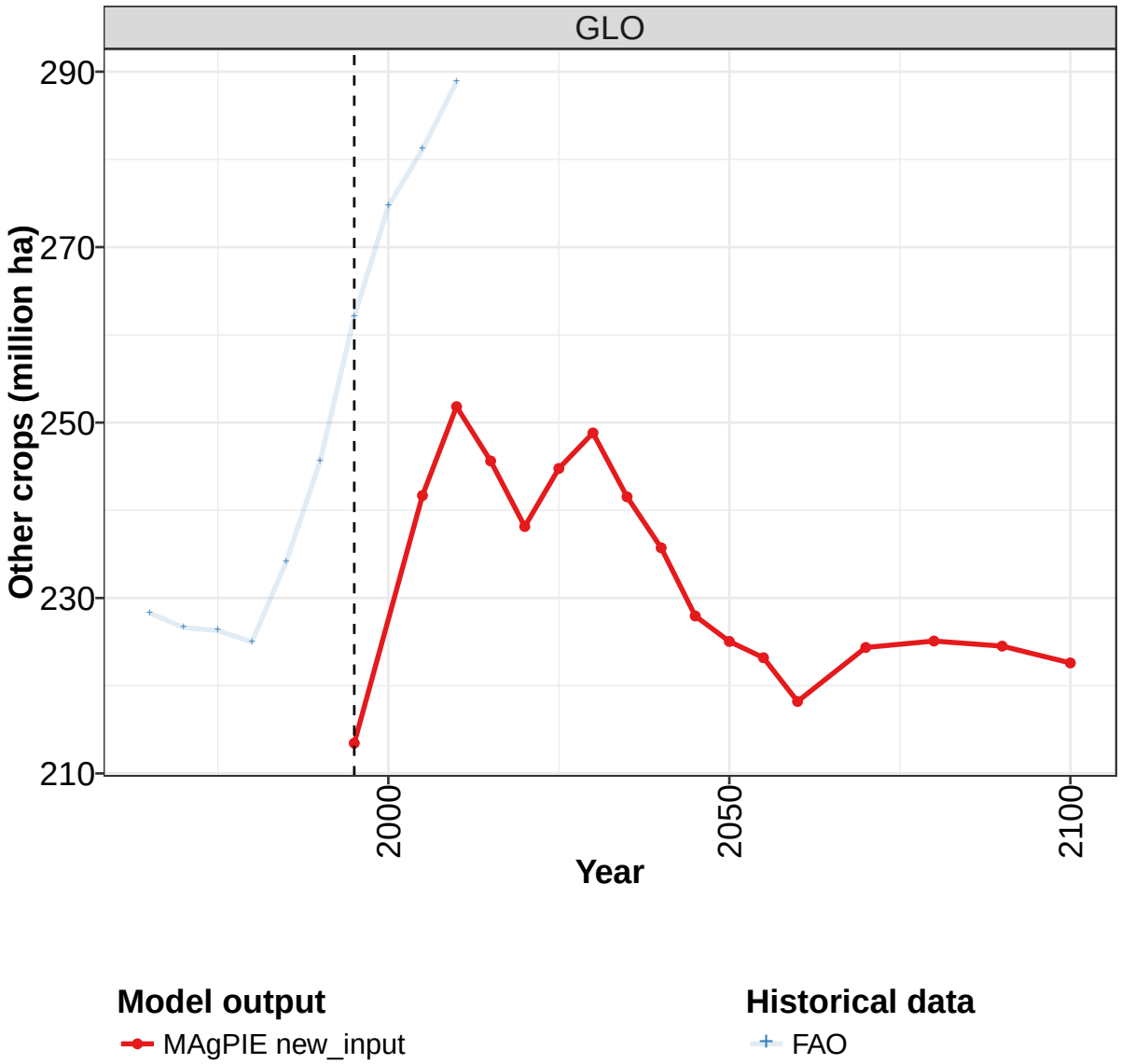
	2055	2060	2070	2080	2090	2100
GLO	26.1	25.5	24.7	24.5	22.9	25.1
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.9	0.9	0.8	0.7	2.9	2.8
EUR	2.4	2.3	2.2	2.1	2.0	1.9
IND	1.4	1.4	1.4	1.3	1.3	1.3
LAM	1.5	1.5	1.4	1.3	1.9	2.7
MEA	0.4	0.4	0.4	0.4	0.3	0.3
NEU	0.7	0.7	0.7	0.7	0.6	0.6
OAS	2.5	2.6	2.9	2.8	0.9	0.7
REF	13.3	12.8	11.8	10.7	9.7	11.8
SSA	1.5	1.5	1.7	2.9	1.8	1.6
USA	1.3	1.3	1.3	1.5	1.5	1.4

Table 1282: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.2	11.4	12.2	15.8	15.8	19.0	24.2	25.3	28.4	29.8
CAZ	0.1	0.2	0.7	0.8	0.4	0.2	0.2	0.3	0.2	0.1
CHA	0.0	0.1	0.1	0.6	1.3	0.6	0.7	1.0	0.8	0.7
EUR	0.8	1.3	2.3	2.2	3.2	4.1	4.9	4.1	3.9	4.1
IND	0.0	0.1	0.3	0.1	0.7	1.5	1.9	1.0	2.1	0.8
LAM	1.1	1.6	1.2	2.2	2.0	3.1	3.5	3.6	2.4	2.1
MEA	0.0	0.2	0.2	0.1	0.1	0.6	0.4	0.3	0.3	0.3
NEU	0.4	0.8	0.8	1.1	1.0	1.2	0.9	0.8	0.9	1.0
OAS	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.6	0.7	0.9
REF	6.4	6.6	5.4	5.9	4.4	5.2	8.0	11.0	14.4	17.4
SSA	0.3	0.3	0.5	0.7	0.8	1.3	1.4	1.2	1.5	1.7
USA	0.0	0.1	0.7	2.0	1.5	1.0	1.9	1.4	1.3	0.8

Table 1283: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha)

54.1.17 Crops—Other crops



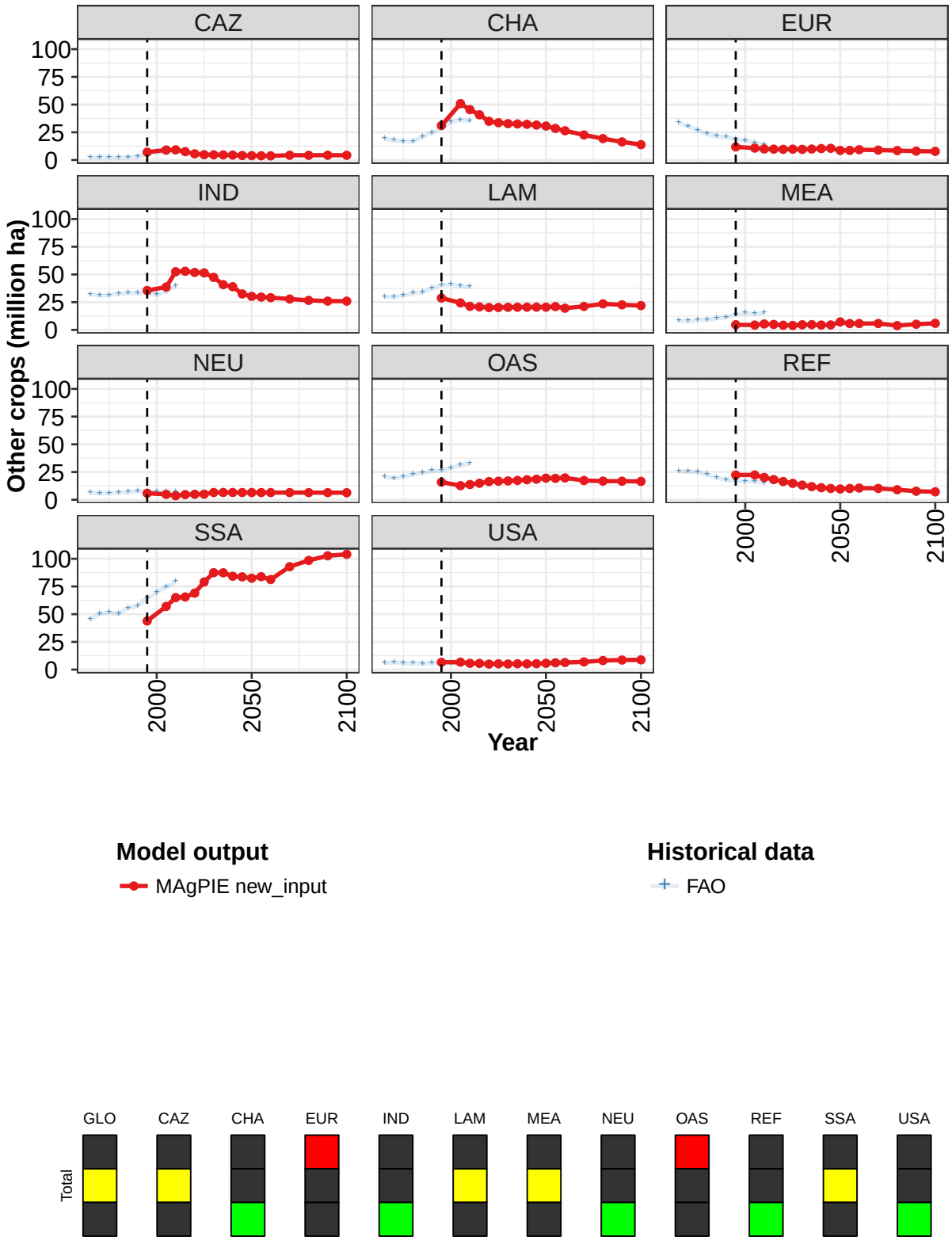


Figure 348: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	213	242	252	246	238	245	249	242	236	228	225
CAZ	7	9	9	8	6	5	5	5	4	4	4
CHA	31	51	45	41	35	34	33	33	32	32	31
EUR	12	11	10	10	10	10	10	10	10	11	9
IND	36	39	52	53	52	51	47	41	39	32	30
LAM	29	24	21	21	20	20	20	20	20	21	20
MEA	5	4	5	5	4	4	5	5	4	4	7
NEU	6	5	4	5	5	5	7	7	7	6	6
OAS	16	13	14	15	16	17	17	17	18	19	19
REF	22	22	20	18	16	15	13	12	11	10	10
SSA	44	57	65	66	69	79	87	87	84	84	82
USA	7	7	6	6	5	5	5	5	5	5	6

Table 1284: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops (million ha) [PART 1/2]

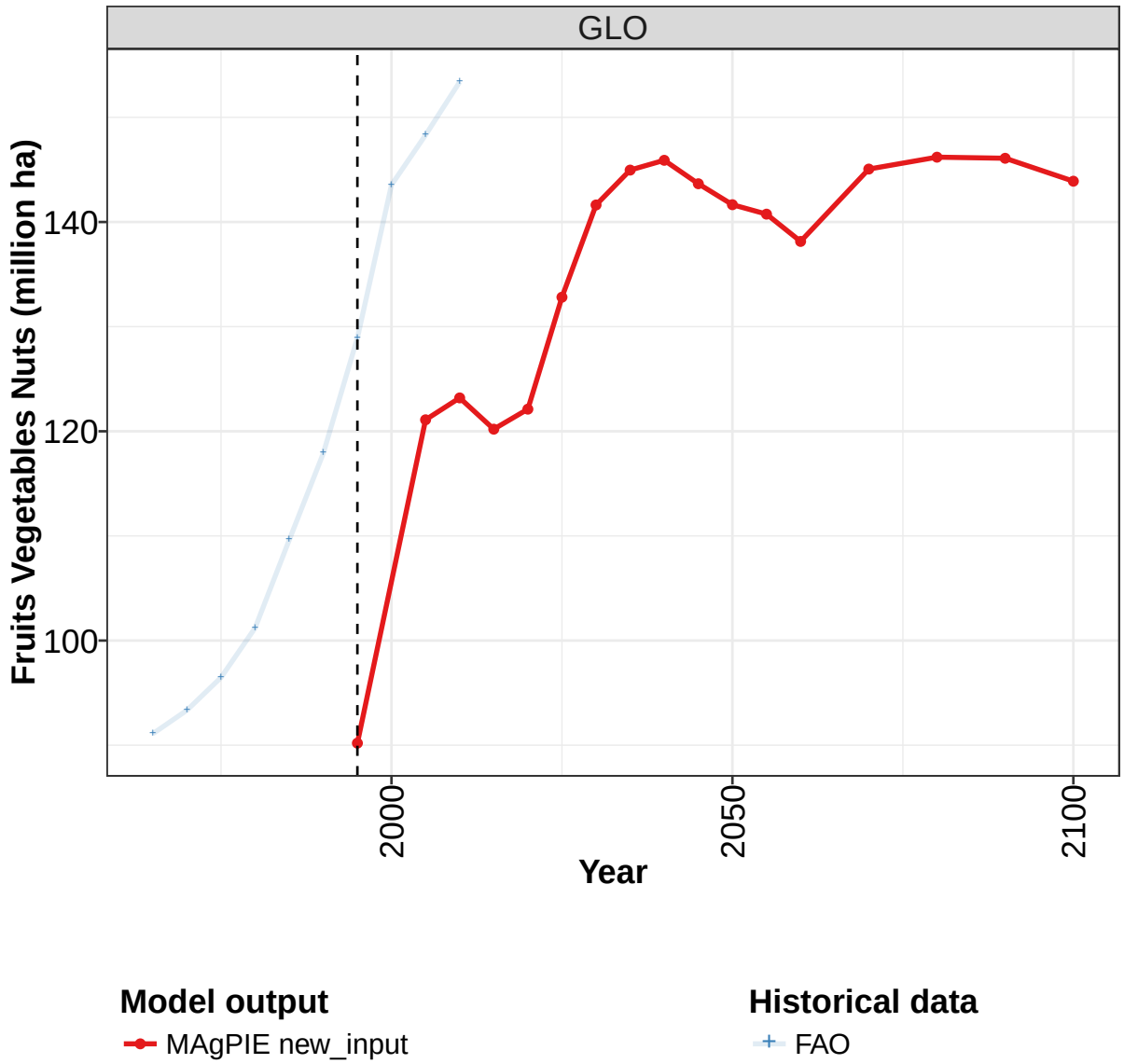
	2055	2060	2070	2080	2090	2100
GLO	223	218	224	225	225	223
CAZ	4	4	4	4	4	4
CHA	28	26	23	19	16	14
EUR	9	9	9	9	8	8
IND	30	29	28	27	26	26
LAM	21	20	21	23	23	22
MEA	6	6	6	4	5	6
NEU	6	6	6	6	6	6
OAS	19	20	17	17	17	17
REF	10	11	10	9	8	7
SSA	84	81	93	98	103	104
USA	6	6	7	8	9	9

Table 1285: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	228	227	226	225	234	246	262	275	281	289
CAZ	2	2	2	2	2	3	5	7	6	7
CHA	19	18	17	17	21	24	29	34	36	35
EUR	34	30	27	23	22	21	19	18	15	14
IND	32	31	31	33	33	33	34	32	34	40
LAM	30	30	31	33	34	37	40	41	39	39
MEA	8	8	9	9	11	11	14	15	15	15
NEU	6	6	6	6	7	8	8	7	7	7
OAS	21	19	21	23	24	26	26	29	31	33
REF	26	25	25	23	20	18	17	17	17	15
SSA	45	50	52	50	56	58	64	70	75	79
USA	6	7	6	6	5	6	6	6	6	5

Table 1286: FAO — Resources—Land Cover—Cropland—Crops—Other crops (million ha)

54.1.18 Crops—Other crops—Fruits Vegetables Nuts



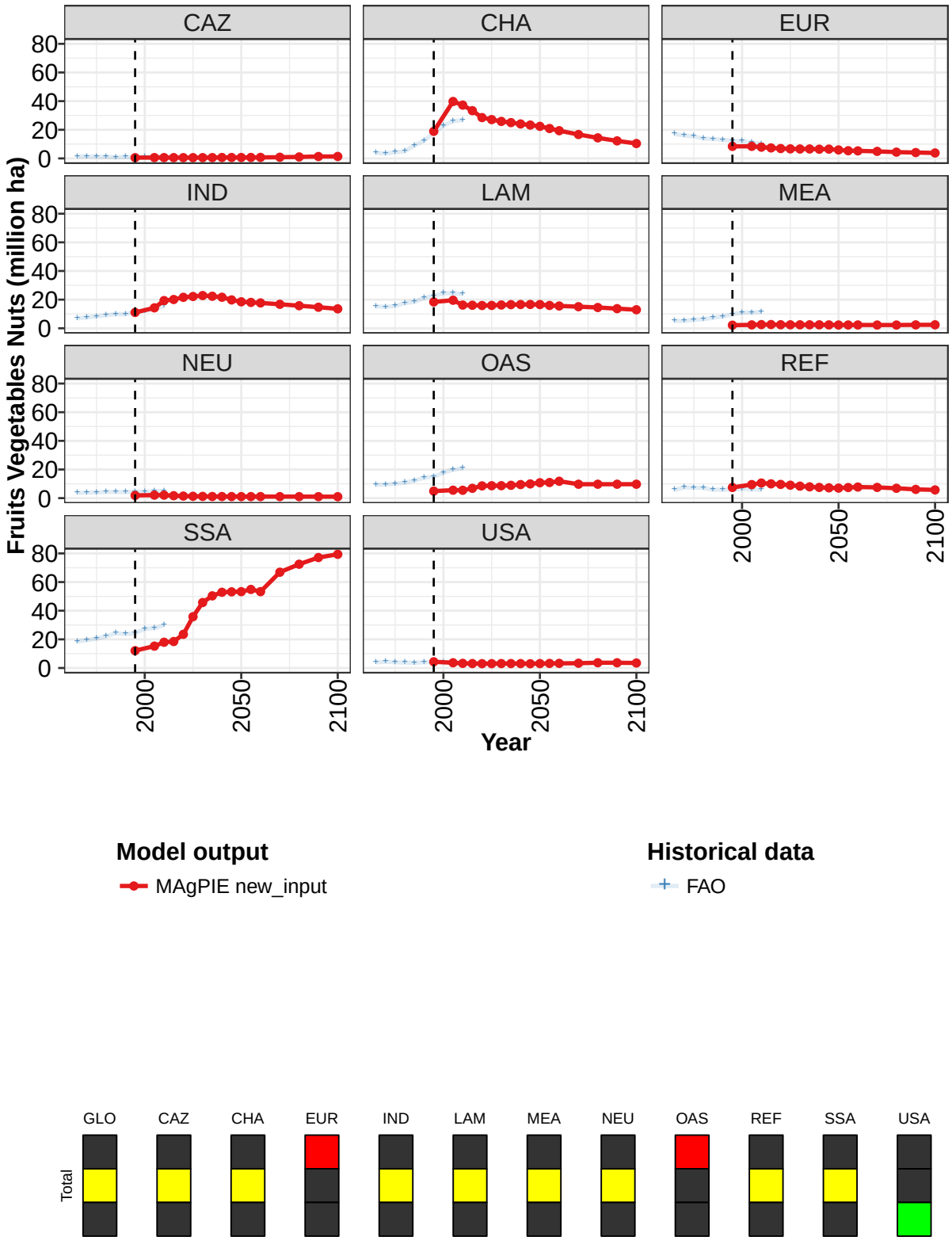


Figure 349: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	90	121	123	120	122	133	142	145	146	144	142
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	19	40	37	33	29	27	26	25	24	23	22
EUR	8	8	8	7	7	7	7	7	6	6	6
IND	11	14	19	20	22	22	23	22	22	20	18
LAM	18	20	16	16	16	16	16	17	17	17	17
MEA	2	2	3	3	2	2	2	2	2	2	2
NEU	2	2	2	2	1	1	1	1	1	1	1
OAS	5	6	6	7	9	9	9	9	9	10	11
REF	7	9	11	10	10	9	8	8	7	7	7
SSA	12	15	18	18	24	36	46	50	53	53	53
USA	4	4	3	3	3	3	3	3	3	3	3

Table 1287: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha) [PART 1/2]

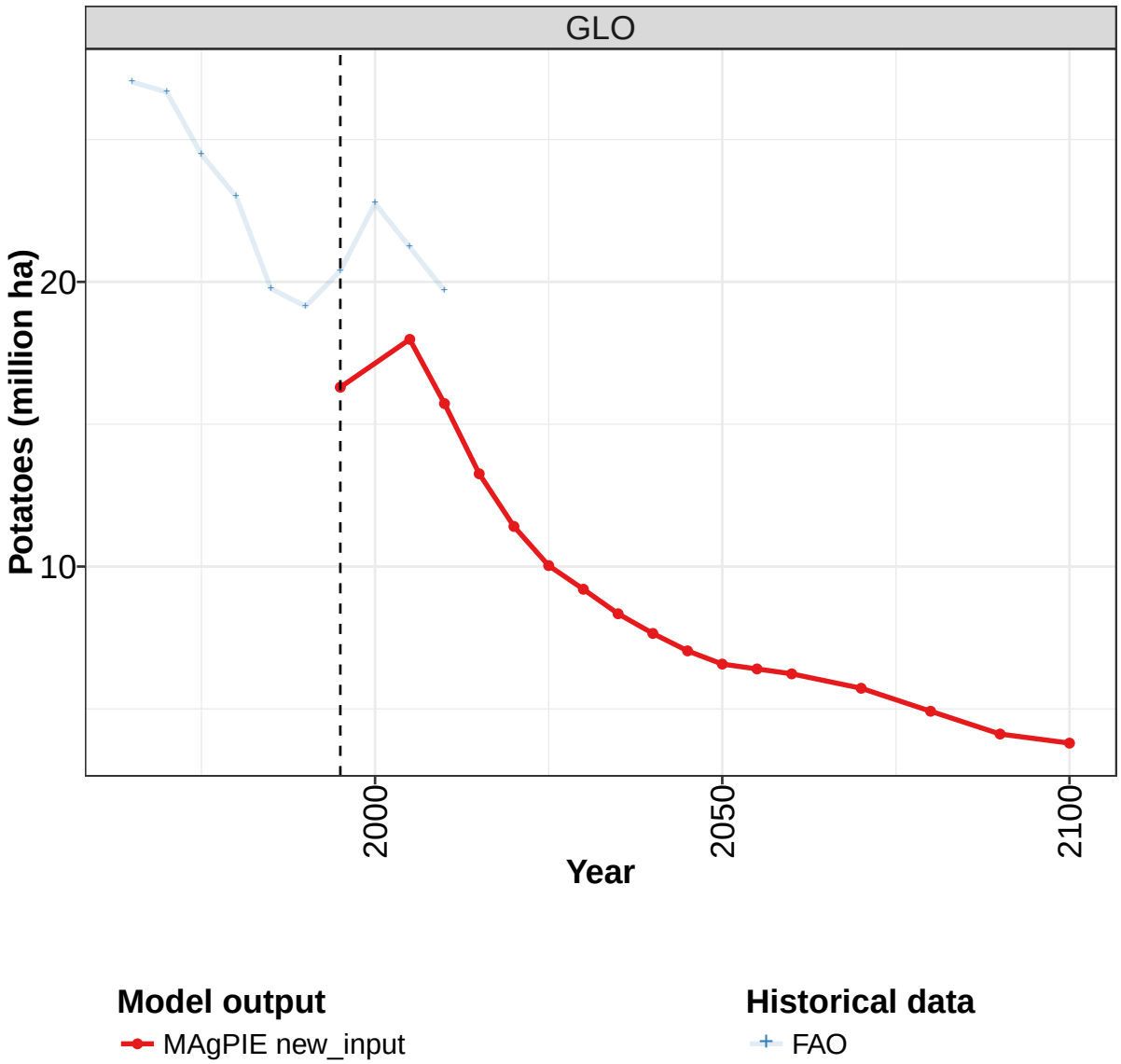
	2055	2060	2070	2080	2090	2100
GLO	141	138	145	146	146	144
CAZ	1	1	1	1	1	1
CHA	21	19	17	14	12	10
EUR	5	5	5	4	4	4
IND	18	18	17	16	15	14
LAM	16	16	15	15	14	13
MEA	2	2	2	2	2	2
NEU	1	1	1	1	1	1
OAS	11	12	10	10	10	10
REF	7	8	7	7	6	6
SSA	55	53	67	72	77	79
USA	3	3	3	4	4	4

Table 1288: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	91	93	96	101	110	118	129	144	148	153
CAZ	1	1	1	1	1	1	1	1	1	1
CHA	4	3	4	5	9	12	18	23	26	27
EUR	17	16	15	14	14	13	12	12	11	10
IND	7	8	8	9	10	10	12	12	13	15
LAM	15	15	16	18	18	21	23	25	24	24
MEA	5	5	6	6	7	8	10	11	11	12
NEU	4	4	4	4	4	4	5	4	5	5
OAS	9	9	10	11	12	14	15	18	20	21
REF	6	7	7	7	6	6	6	6	6	6
SSA	19	19	20	22	24	24	24	27	28	30
USA	4	4	4	4	4	4	4	4	4	3

Table 1289: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha)

54.1.19 Crops—Other crops—Potatoes



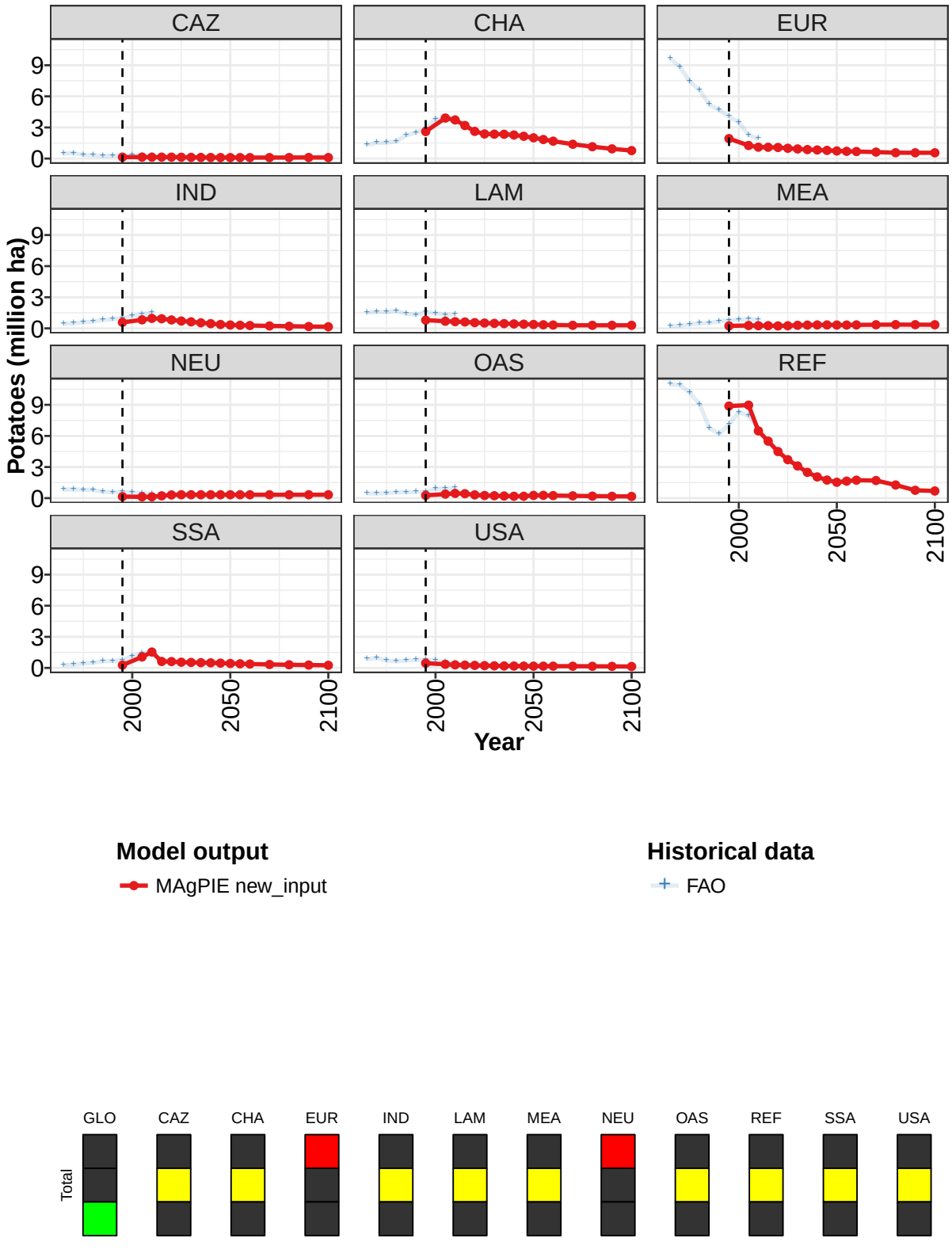


Figure 350: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	16.3	18.0	15.7	13.3	11.4	10.0	9.2	8.3	7.6	7.0	6.6
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	2.6	3.9	3.7	3.2	2.6	2.4	2.4	2.3	2.3	2.2	2.0
EUR	1.9	1.3	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.7
IND	0.6	0.8	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.3
LAM	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4
MEA	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
NEU	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	0.3	0.4	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3
REF	8.9	9.0	6.5	5.5	4.5	3.7	3.1	2.5	2.0	1.7	1.5
SSA	0.3	1.1	1.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4
USA	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 1290: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha) [PART 1/2]

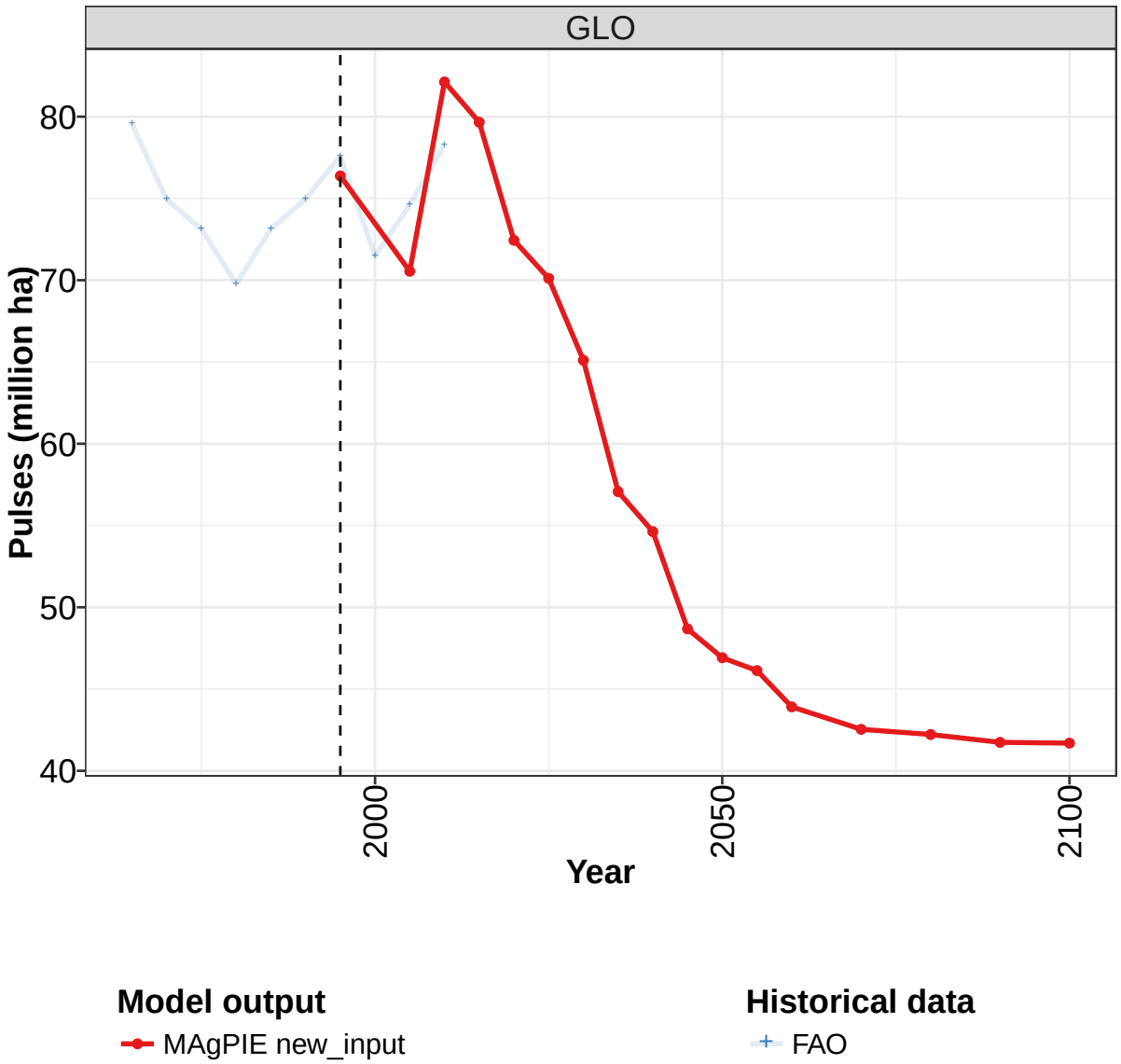
	2055	2060	2070	2080	2090	2100
GLO	6.4	6.2	5.7	4.9	4.1	3.8
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.8	1.7	1.4	1.1	0.9	0.8
EUR	0.7	0.7	0.6	0.6	0.6	0.6
IND	0.3	0.3	0.2	0.2	0.2	0.2
LAM	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.3	0.3	0.3	0.4	0.4	0.3
NEU	0.3	0.3	0.3	0.3	0.3	0.3
OAS	0.3	0.2	0.2	0.2	0.2	0.2
REF	1.6	1.7	1.7	1.3	0.8	0.7
SSA	0.4	0.4	0.3	0.3	0.3	0.3
USA	0.2	0.2	0.2	0.2	0.1	0.1

Table 1291: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	27.0	26.7	24.5	23.0	19.8	19.1	20.4	22.8	21.2	19.7
CAZ	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2
CHA	1.3	1.5	1.5	1.7	2.2	2.5	2.9	3.8	3.8	3.7
EUR	9.6	8.8	7.4	6.6	5.2	4.7	4.0	3.5	2.3	1.9
IND	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5
LAM	1.5	1.6	1.6	1.7	1.4	1.3	1.6	1.5	1.3	1.3
MEA	0.2	0.3	0.4	0.5	0.5	0.7	0.8	0.9	0.9	0.8
NEU	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.5	0.5	0.4
OAS	0.5	0.4	0.5	0.6	0.6	0.6	0.6	0.9	1.0	1.0
REF	11.0	10.9	10.2	9.1	6.8	6.2	7.1	8.3	7.9	6.7
SSA	0.3	0.3	0.4	0.5	0.6	0.7	0.7	1.1	1.4	1.6
USA	0.9	0.9	0.7	0.6	0.7	0.8	0.8	0.7	0.5	0.4

Table 1292: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha)

54.1.20 Crops—Other crops—Pulses



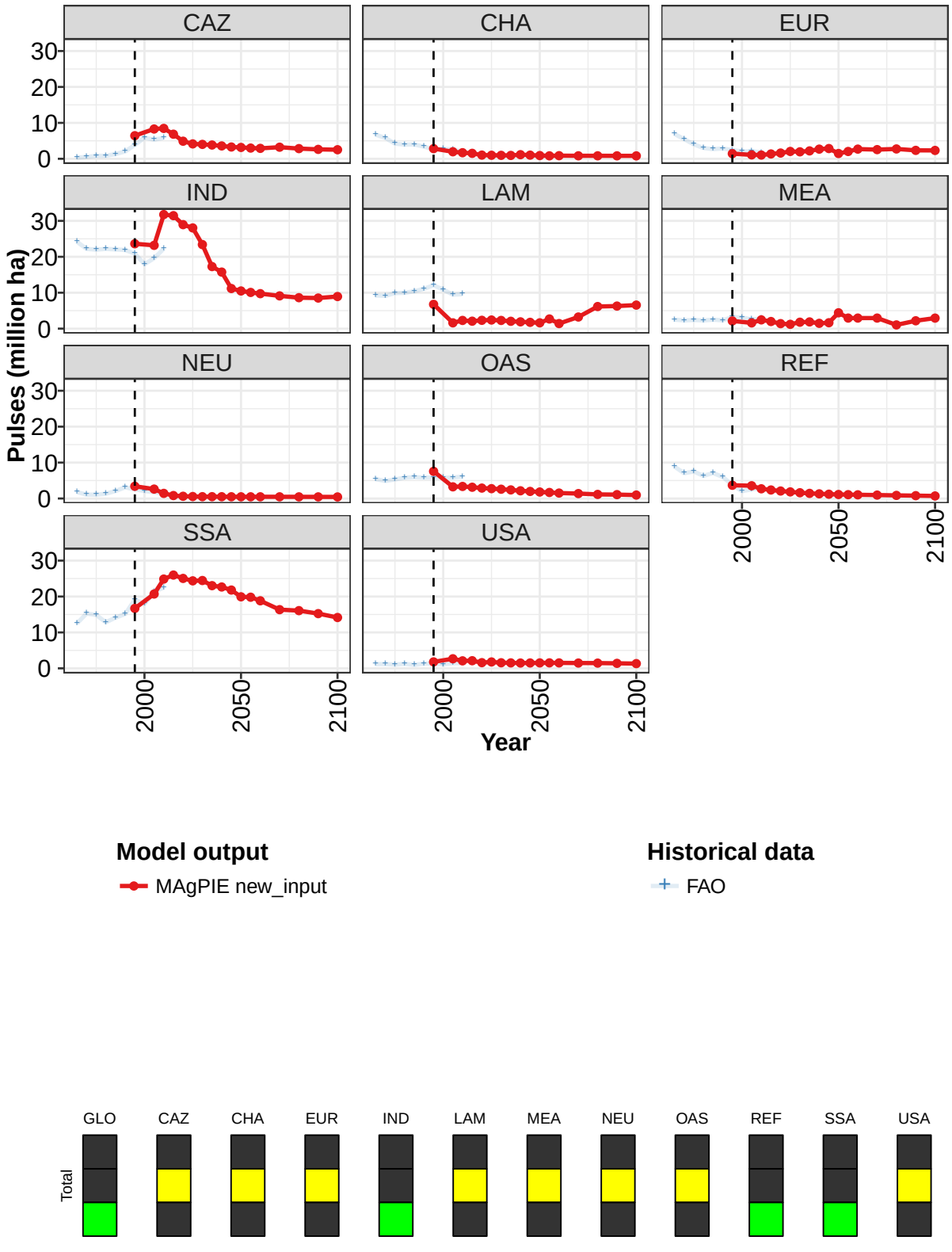


Figure 351: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	76.4	70.5	82.1	79.7	72.4	70.1	65.1	57.1	54.6	48.7	46.9
CAZ	6.4	8.3	8.5	6.8	4.9	4.1	4.0	3.8	3.6	3.3	3.2
CHA	2.8	2.0	1.7	1.5	1.0	1.0	1.0	0.9	1.1	1.0	0.9
EUR	1.4	1.1	1.0	1.3	1.6	2.0	1.9	2.2	2.7	2.8	1.5
IND	23.6	23.2	31.8	31.5	29.0	28.0	23.4	17.3	15.7	11.2	10.5
LAM	6.8	1.6	2.3	2.1	2.3	2.4	2.3	2.1	1.9	1.8	1.6
MEA	2.1	1.6	2.4	2.0	1.4	1.2	1.8	1.9	1.5	1.6	4.4
NEU	3.4	2.6	1.4	0.8	0.6	0.6	0.5	0.5	0.5	0.5	0.5
OAS	7.6	3.3	3.4	3.1	2.9	2.7	2.6	2.4	2.1	2.0	1.8
REF	3.7	3.6	2.7	2.4	2.1	1.8	1.6	1.4	1.3	1.2	1.1
SSA	16.7	20.7	24.9	26.0	25.0	24.4	24.5	23.0	22.7	21.8	19.9
USA	1.8	2.7	2.1	2.1	1.6	1.8	1.6	1.5	1.5	1.5	1.5

Table 1293: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha) [PART 1/2]

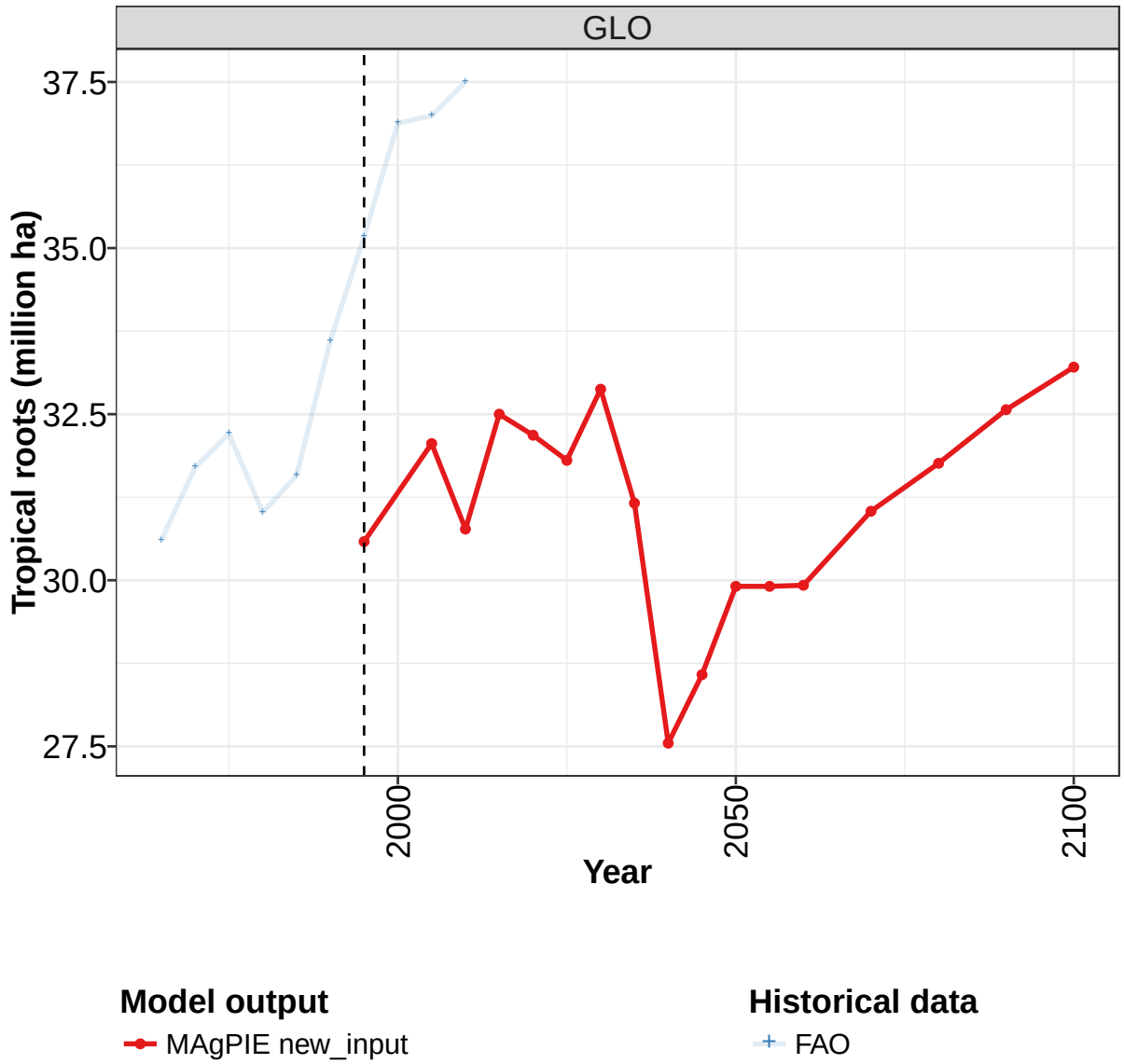
	2055	2060	2070	2080	2090	2100
GLO	46.1	43.9	42.5	42.2	41.7	41.7
CAZ	3.0	2.9	3.2	2.8	2.6	2.5
CHA	0.8	0.9	0.8	0.8	0.8	0.8
EUR	2.0	2.7	2.6	2.7	2.3	2.3
IND	10.1	9.7	9.1	8.6	8.5	8.9
LAM	2.7	1.4	3.2	6.2	6.3	6.6
MEA	2.9	2.9	2.9	1.0	2.2	2.9
NEU	0.5	0.5	0.5	0.5	0.5	0.4
OAS	1.7	1.5	1.4	1.1	1.1	1.0
REF	1.1	1.0	1.0	0.9	0.8	0.7
SSA	19.8	18.8	16.3	16.1	15.2	14.2
USA	1.5	1.5	1.5	1.5	1.4	1.3

Table 1294: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	79.5	74.9	73.1	69.8	73.1	75.0	77.6	71.5	74.6	78.3
CAZ	0.3	0.5	0.8	0.8	1.3	2.0	3.8	5.9	5.3	5.8
CHA	6.7	5.8	4.2	3.9	4.0	3.4	2.6	2.7	2.6	2.0
EUR	6.9	5.5	4.0	3.0	2.7	2.9	2.4	2.1	2.1	1.8
IND	24.2	22.2	22.0	22.2	22.1	21.9	20.9	17.9	19.6	22.3
LAM	9.2	9.1	9.9	10.0	10.4	11.1	12.1	10.9	9.5	9.6
MEA	2.5	2.3	2.4	2.3	2.5	2.3	3.2	3.1	2.5	2.8
NEU	1.8	1.1	1.1	1.3	2.1	3.1	2.5	2.1	1.7	1.3
OAS	5.4	4.9	5.3	5.8	5.9	5.8	5.8	5.8	5.9	6.1
REF	8.9	7.0	7.5	6.3	7.1	6.0	3.8	2.0	2.6	2.8
SSA	12.5	15.3	14.9	12.8	14.1	15.1	19.1	18.0	21.4	22.5
USA	1.2	1.2	1.0	1.3	1.0	1.3	1.3	1.1	1.4	1.5

Table 1295: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha)

54.1.21 Crops—Other crops—Tropical roots



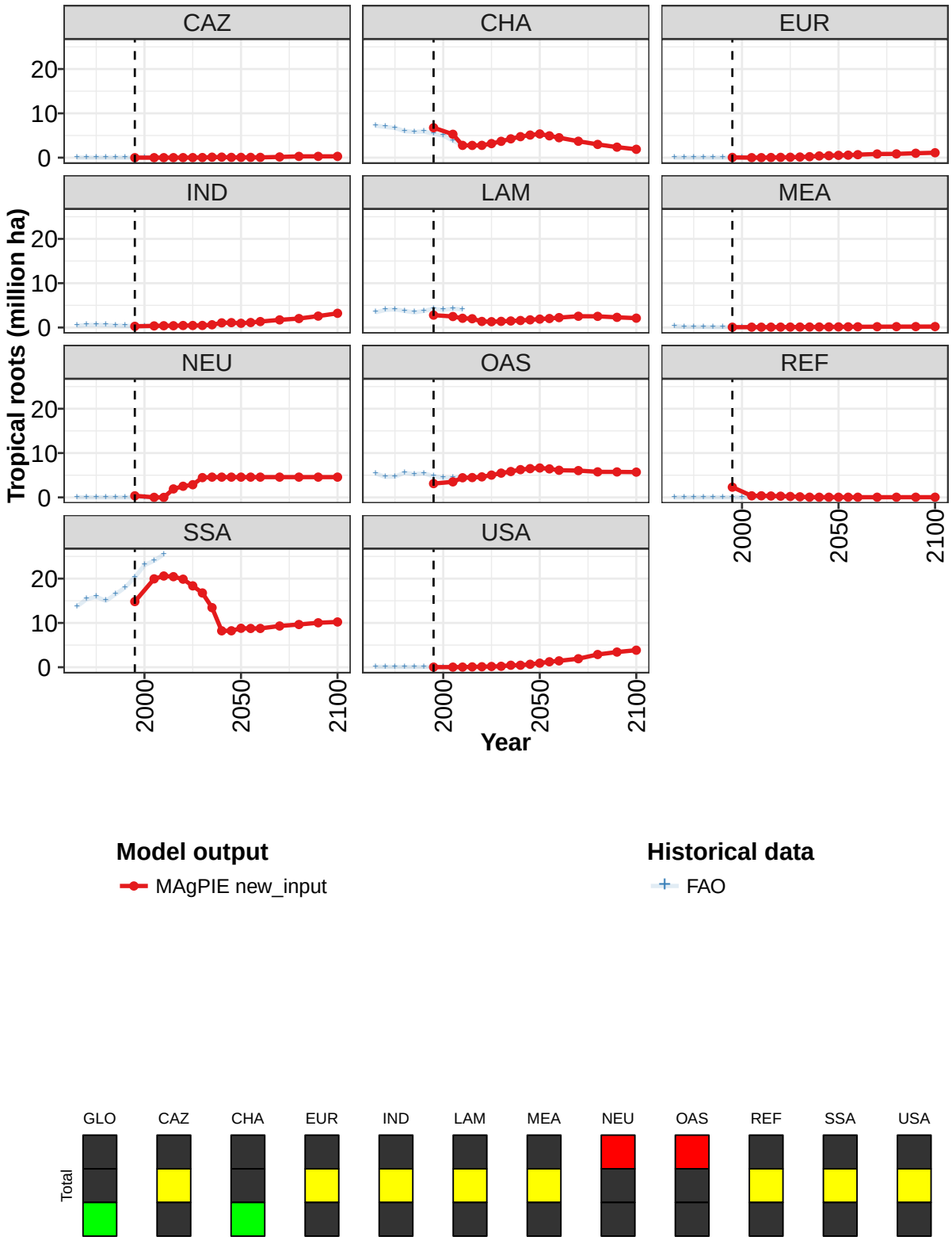


Figure 352: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	30.6	32.1	30.8	32.5	32.2	31.8	32.9	31.2	27.5	28.6	29.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
CHA	6.8	5.3	2.8	2.8	2.8	3.2	3.7	4.2	4.7	5.1	5.4
EUR	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.4	0.4	0.5
IND	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	1.1	1.1	1.0
LAM	2.8	2.5	2.1	2.0	1.4	1.3	1.4	1.5	1.6	1.7	1.9
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.4	0.0	0.0	1.9	2.5	2.9	4.5	4.6	4.6	4.6	4.6
OAS	3.1	3.5	4.4	4.5	4.6	5.0	5.5	5.8	6.3	6.5	6.6
REF	2.3	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0
SSA	14.8	19.9	20.6	20.4	19.9	18.4	16.8	13.5	8.2	8.2	8.8
USA	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.5	0.5	0.7	0.9

Table 1296: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha) [PART 1/2]

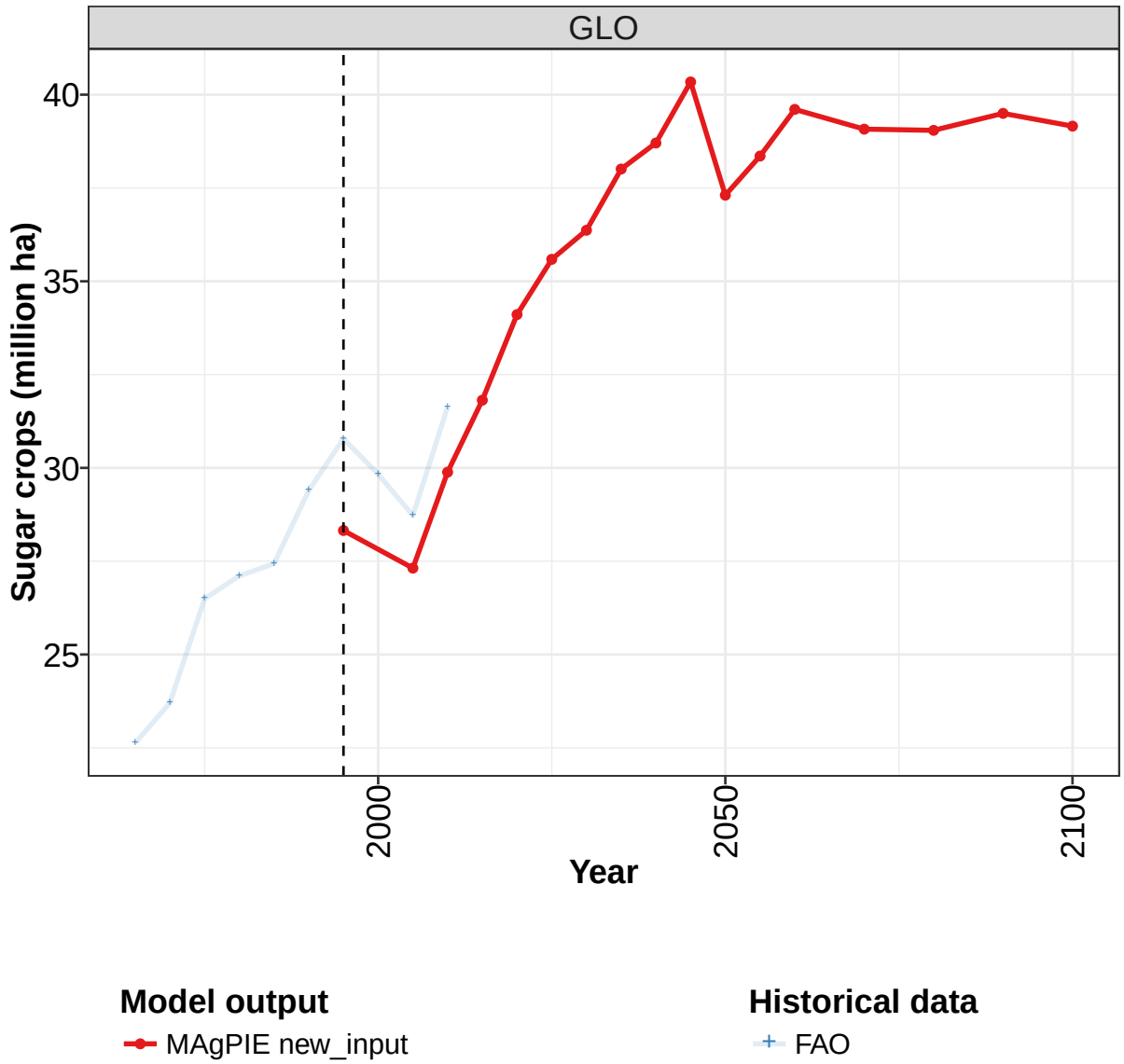
	2055	2060	2070	2080	2090	2100
GLO	29.9	29.9	31.0	31.8	32.6	33.2
CAZ	0.1	0.1	0.2	0.3	0.3	0.3
CHA	4.9	4.5	3.7	3.0	2.4	1.9
EUR	0.6	0.7	0.8	0.9	1.0	1.1
IND	1.1	1.3	1.7	2.0	2.6	3.2
LAM	2.0	2.2	2.5	2.5	2.3	2.1
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	4.6	4.6	4.6	4.6	4.6	4.6
OAS	6.4	6.1	6.0	5.8	5.7	5.7
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	8.8	8.8	9.3	9.6	10.0	10.2
USA	1.2	1.4	1.9	2.9	3.4	3.8

Table 1297: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	30.6	31.7	32.2	31.0	31.6	33.6	35.2	36.9	37.0	37.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	7.2	6.9	6.7	6.0	5.8	5.9	5.4	5.0	3.8	2.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.4	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3
LAM	3.4	4.0	4.1	3.8	3.4	3.8	4.2	4.0	4.3	4.1
MEA	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	5.4	4.6	4.7	5.6	5.2	5.4	4.8	4.4	4.4	4.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	13.7	15.3	15.9	15.0	16.5	18.0	20.3	23.0	24.0	25.5
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1

Table 1298: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha)

54.1.22 Crops—Sugar crops



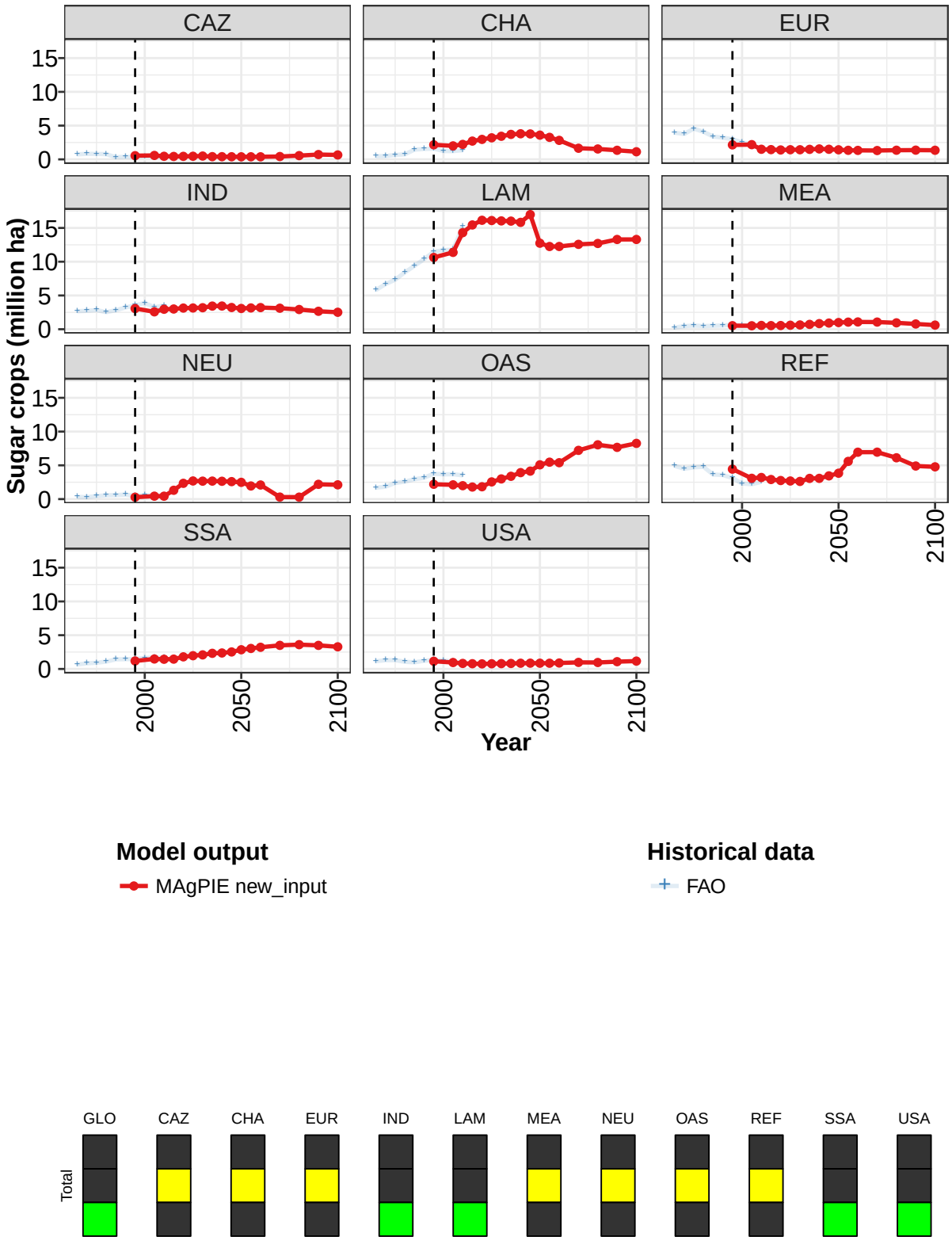


Figure 353: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	28.3	27.3	29.9	31.8	34.1	35.6	36.4	38.0	38.7	40.3	37.3
CAZ	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4
CHA	2.2	2.0	2.2	2.7	3.0	3.2	3.4	3.7	3.8	3.8	3.6
EUR	2.1	2.2	1.5	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.4
IND	3.1	2.6	3.0	3.0	3.1	3.1	3.2	3.4	3.4	3.2	3.1
LAM	10.6	11.4	14.3	15.4	16.1	16.1	16.0	16.0	15.8	17.0	12.7
MEA	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.7	0.8	0.9	1.0
NEU	0.3	0.4	0.4	1.3	2.3	2.7	2.7	2.7	2.6	2.6	2.5
OAS	2.2	2.1	2.0	1.8	1.8	2.5	3.0	3.4	3.9	4.1	5.1
REF	4.4	3.1	3.2	2.9	2.8	2.7	2.6	3.1	3.1	3.4	3.8
SSA	1.2	1.5	1.4	1.5	1.8	2.0	2.1	2.3	2.4	2.5	2.8
USA	1.1	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9

Table 1299: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha) [PART 1/2]

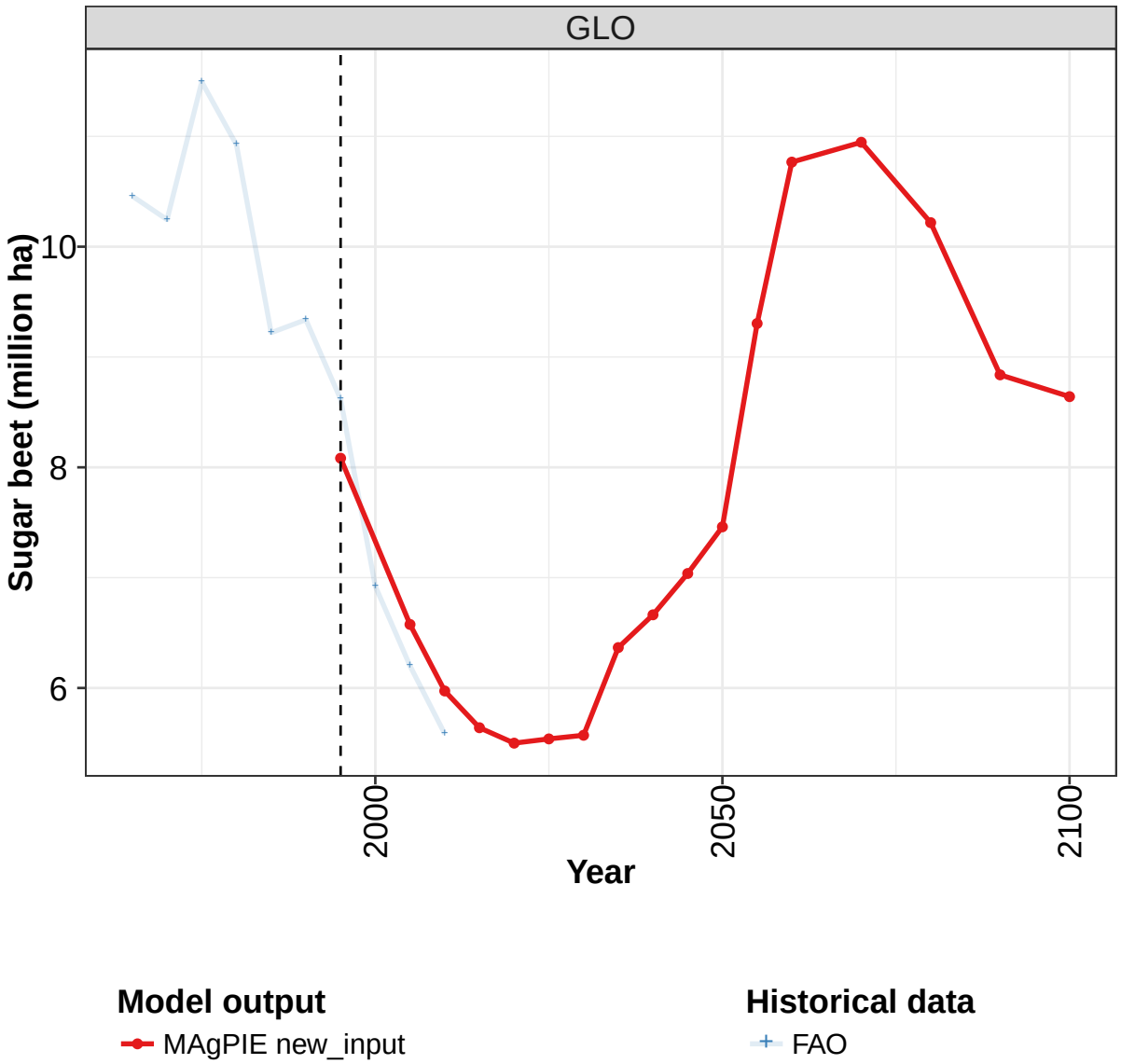
	2055	2060	2070	2080	2090	2100
GLO	38.4	39.6	39.1	39.0	39.5	39.2
CAZ	0.4	0.4	0.4	0.6	0.7	0.7
CHA	3.3	2.8	1.6	1.5	1.3	1.1
EUR	1.3	1.3	1.3	1.4	1.4	1.4
IND	3.2	3.2	3.1	2.9	2.7	2.5
LAM	12.3	12.3	12.6	12.7	13.3	13.3
MEA	1.1	1.1	1.1	0.9	0.8	0.6
NEU	1.9	2.1	0.3	0.3	2.2	2.1
OAS	5.5	5.4	7.2	8.0	7.7	8.3
REF	5.6	6.9	7.0	6.1	4.9	4.8
SSA	3.0	3.2	3.5	3.6	3.5	3.3
USA	0.9	0.9	1.0	1.0	1.1	1.2

Table 1300: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	22.6	23.7	26.5	27.1	27.4	29.4	30.8	29.8	28.7	31.6
CAZ	0.7	0.8	0.8	0.8	0.3	0.4	0.4	0.5	0.5	0.4
CHA	0.5	0.5	0.7	0.7	1.4	1.5	1.6	1.2	1.2	1.4
EUR	4.0	3.8	4.6	4.1	3.4	3.2	3.0	2.5	2.2	1.5
IND	2.7	2.7	2.8	2.5	2.8	3.2	3.5	3.9	3.3	3.5
LAM	5.8	6.7	7.3	8.4	9.4	10.4	11.5	11.7	11.8	15.2
MEA	0.3	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6
NEU	0.3	0.3	0.4	0.6	0.6	0.7	0.5	0.6	0.5	0.5
OAS	1.7	1.8	2.4	2.6	2.9	3.2	3.8	3.7	3.7	3.5
REF	4.9	4.5	4.7	4.8	3.6	3.6	3.1	2.3	2.2	2.5
SSA	0.7	0.8	0.9	1.1	1.4	1.4	1.5	1.6	1.7	1.7
USA	1.1	1.3	1.3	1.1	1.0	1.2	1.3	1.3	1.1	0.9

Table 1301: FAO — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha)

54.1.23 Crops—Sugar crops—Sugar beet



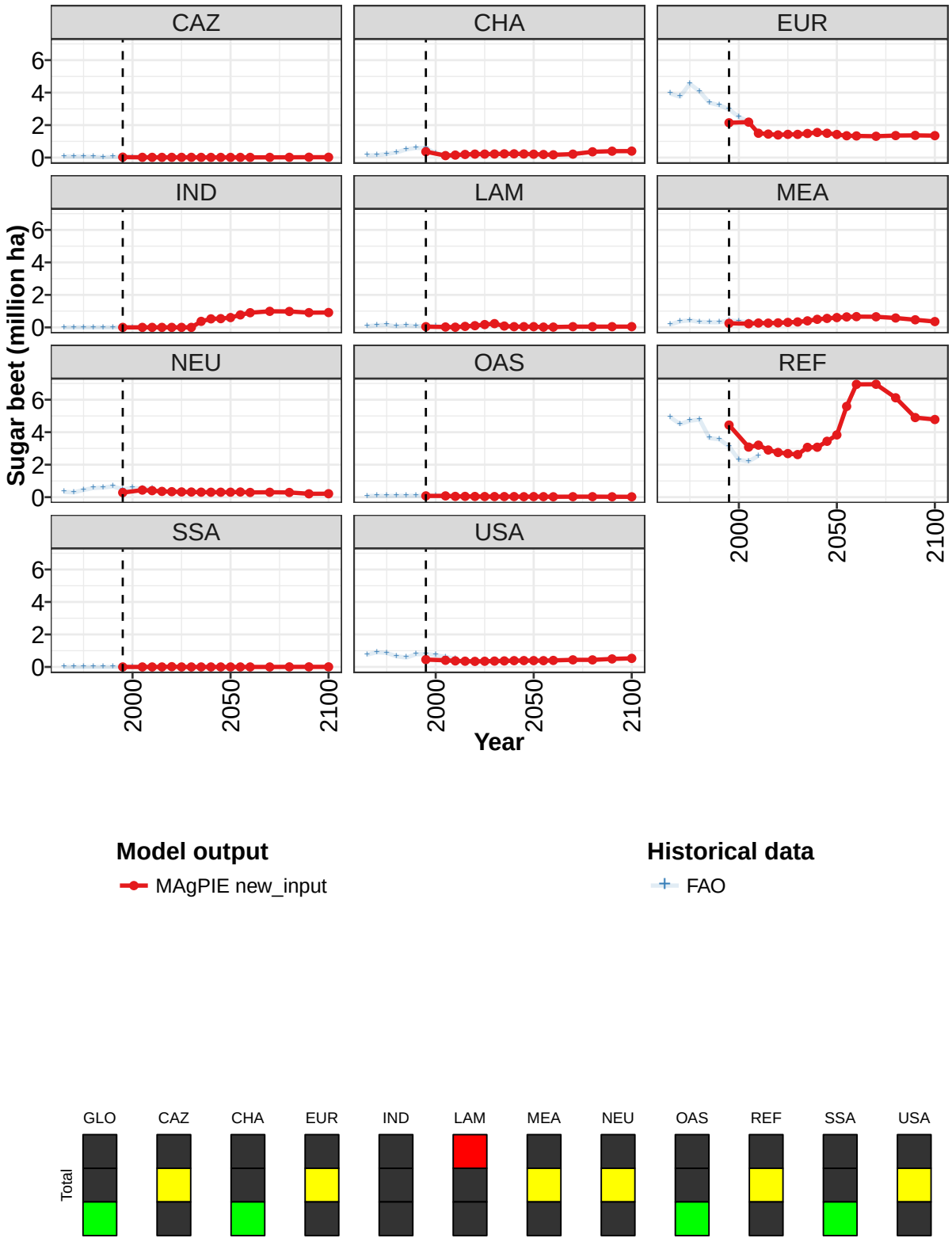


Figure 354: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	8.1	6.6	6.0	5.6	5.5	5.5	5.6	6.4	6.7	7.0	7.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.4	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
EUR	2.1	2.2	1.5	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.5	0.6
LAM	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.0
MEA	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6
NEU	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REF	4.4	3.1	3.2	2.9	2.8	2.7	2.6	3.1	3.1	3.4	3.8
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4

Table 1302: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha) [PART 1/2]

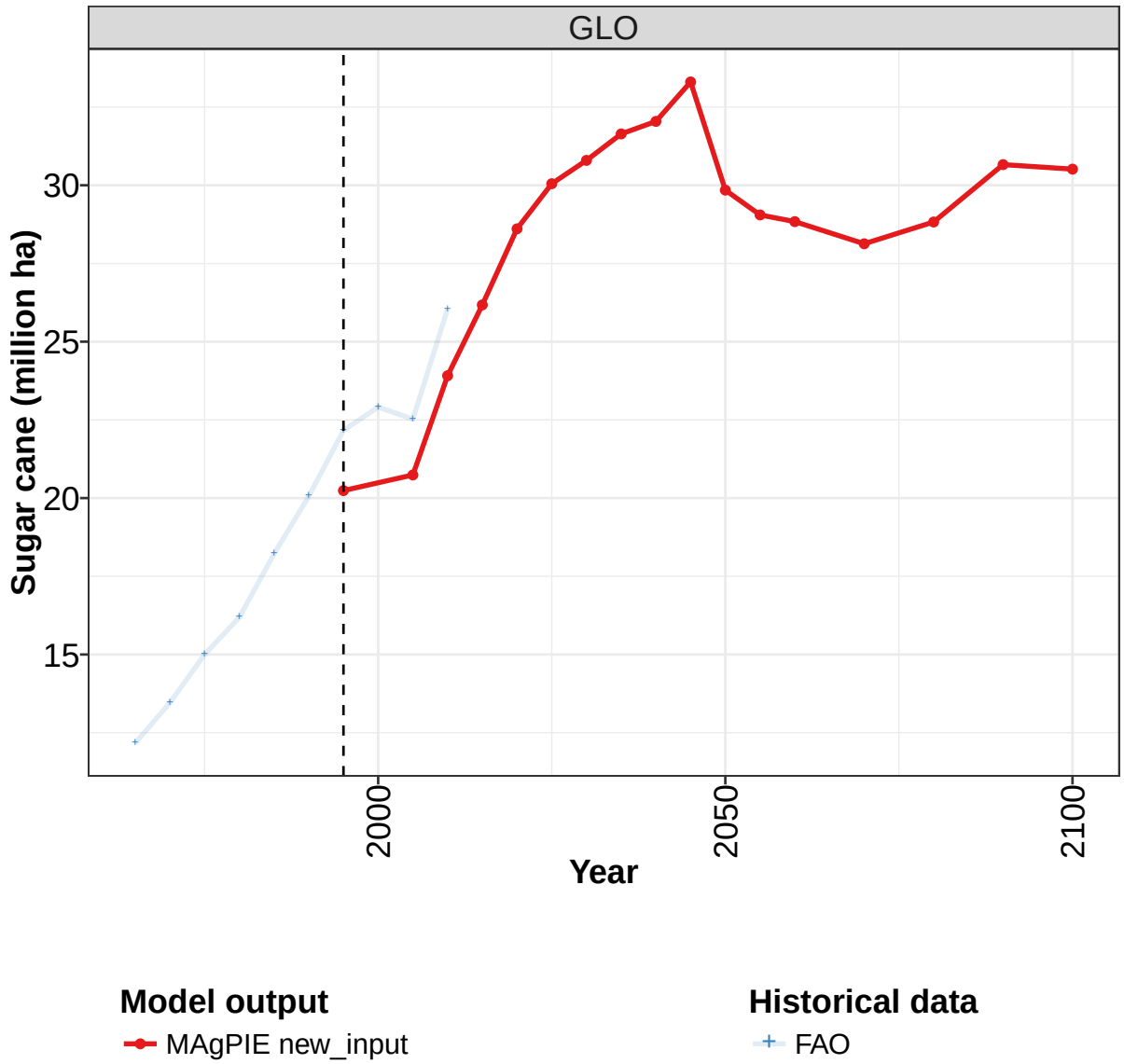
	2055	2060	2070	2080	2090	2100
GLO	9.3	10.8	10.9	10.2	8.8	8.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.2	0.2	0.2	0.4	0.4	0.4
EUR	1.3	1.3	1.3	1.4	1.4	1.4
IND	0.8	0.9	1.0	1.0	0.9	0.9
LAM	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.6	0.7	0.7	0.6	0.5	0.4
NEU	0.3	0.3	0.3	0.3	0.2	0.2
OAS	0.0	0.0	0.0	0.0	0.0	0.0
REF	5.6	6.9	7.0	6.1	4.9	4.8
SSA	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.4	0.4	0.4	0.4	0.5	0.5

Table 1303: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	10.5	10.2	11.5	10.9	9.2	9.3	8.6	6.9	6.2	5.6
CAZ	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.2	0.2	0.3	0.5	0.6	0.6	0.3	0.2	0.2
EUR	3.9	3.7	4.5	4.1	3.4	3.2	3.0	2.5	2.2	1.5
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0
MEA	0.2	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3
NEU	0.3	0.3	0.4	0.6	0.6	0.7	0.5	0.6	0.5	0.5
OAS	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
REF	4.9	4.5	4.7	4.8	3.6	3.6	3.1	2.3	2.2	2.5
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.8	0.9	0.9	0.7	0.6	0.8	0.8	0.7	0.6	0.5

Table 1304: FAO — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha)

54.1.24 Crops—Sugar crops—Sugar cane



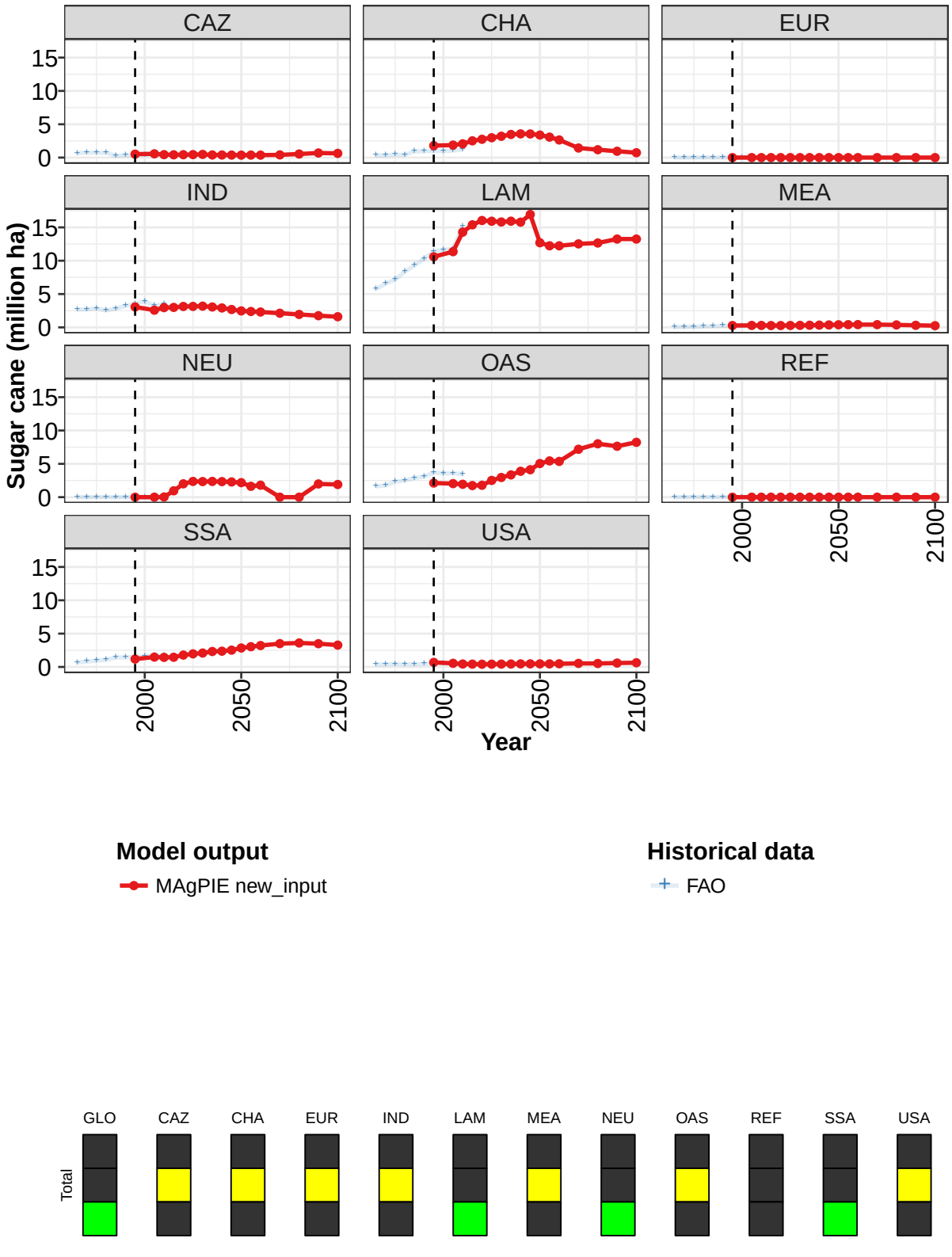


Figure 355: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	20.2	20.7	23.9	26.2	28.6	30.1	30.8	31.6	32.0	33.3	29.8
CAZ	0.5	0.6	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4
CHA	1.8	1.9	2.1	2.5	2.7	3.0	3.2	3.5	3.6	3.5	3.4
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.1	2.6	3.0	3.0	3.1	3.1	3.2	3.1	2.9	2.7	2.5
LAM	10.6	11.4	14.3	15.4	16.0	15.9	15.8	15.9	15.8	16.9	12.7
MEA	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
NEU	0.0	0.0	0.0	1.0	2.0	2.4	2.3	2.4	2.3	2.3	2.2
OAS	2.1	2.0	1.9	1.7	1.8	2.5	3.0	3.3	3.9	4.1	5.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.2	1.5	1.4	1.5	1.8	2.0	2.1	2.3	2.4	2.5	2.8
USA	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5

Table 1305: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha) [PART 1/2]

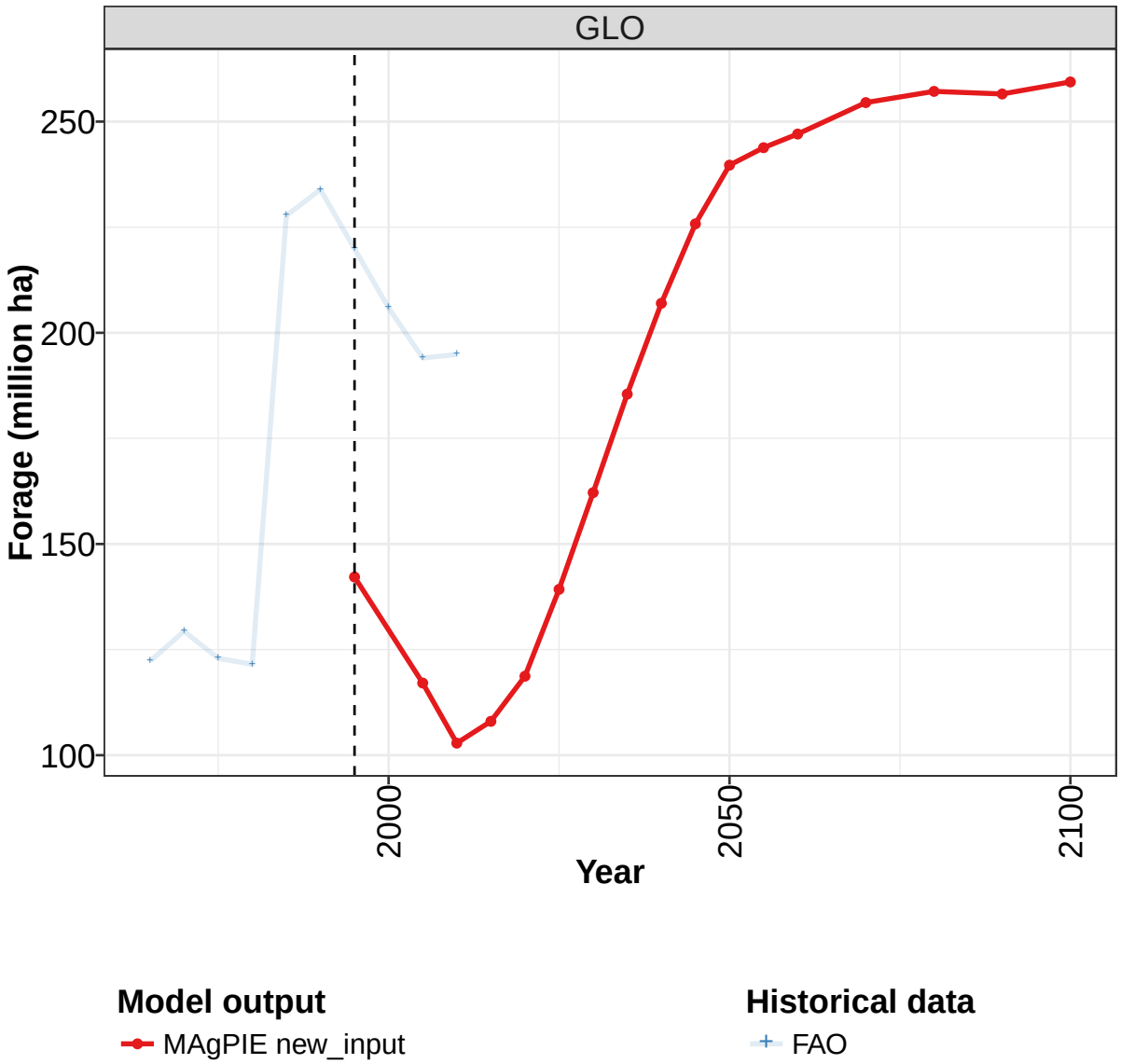
	2055	2060	2070	2080	2090	2100
GLO	29.1	28.8	28.1	28.8	30.7	30.5
CAZ	0.4	0.4	0.4	0.5	0.7	0.6
CHA	3.1	2.6	1.4	1.2	1.0	0.7
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.4	2.3	2.1	1.9	1.8	1.6
LAM	12.2	12.2	12.5	12.7	13.3	13.3
MEA	0.4	0.4	0.4	0.4	0.3	0.3
NEU	1.6	1.8	0.0	0.0	2.0	1.9
OAS	5.4	5.4	7.2	8.0	7.6	8.2
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.0	3.2	3.5	3.6	3.5	3.3
USA	0.5	0.5	0.5	0.5	0.6	0.6

Table 1306: MAgPIE new_input — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.2	13.5	15.0	16.2	18.2	20.1	22.2	22.9	22.5	26.0
CAZ	0.7	0.8	0.7	0.7	0.3	0.3	0.3	0.4	0.5	0.4
CHA	0.3	0.3	0.4	0.4	0.9	1.0	1.0	1.0	1.1	1.2
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	2.7	2.8	2.5	2.8	3.2	3.5	3.9	3.3	3.5
LAM	5.7	6.6	7.2	8.4	9.3	10.3	11.4	11.6	11.7	15.2
MEA	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.6	1.8	2.3	2.5	2.9	3.1	3.7	3.6	3.6	3.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.7	0.8	0.9	1.1	1.4	1.4	1.5	1.6	1.7	1.7
USA	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4

Table 1307: FAO — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha)

54.1.25 Forage



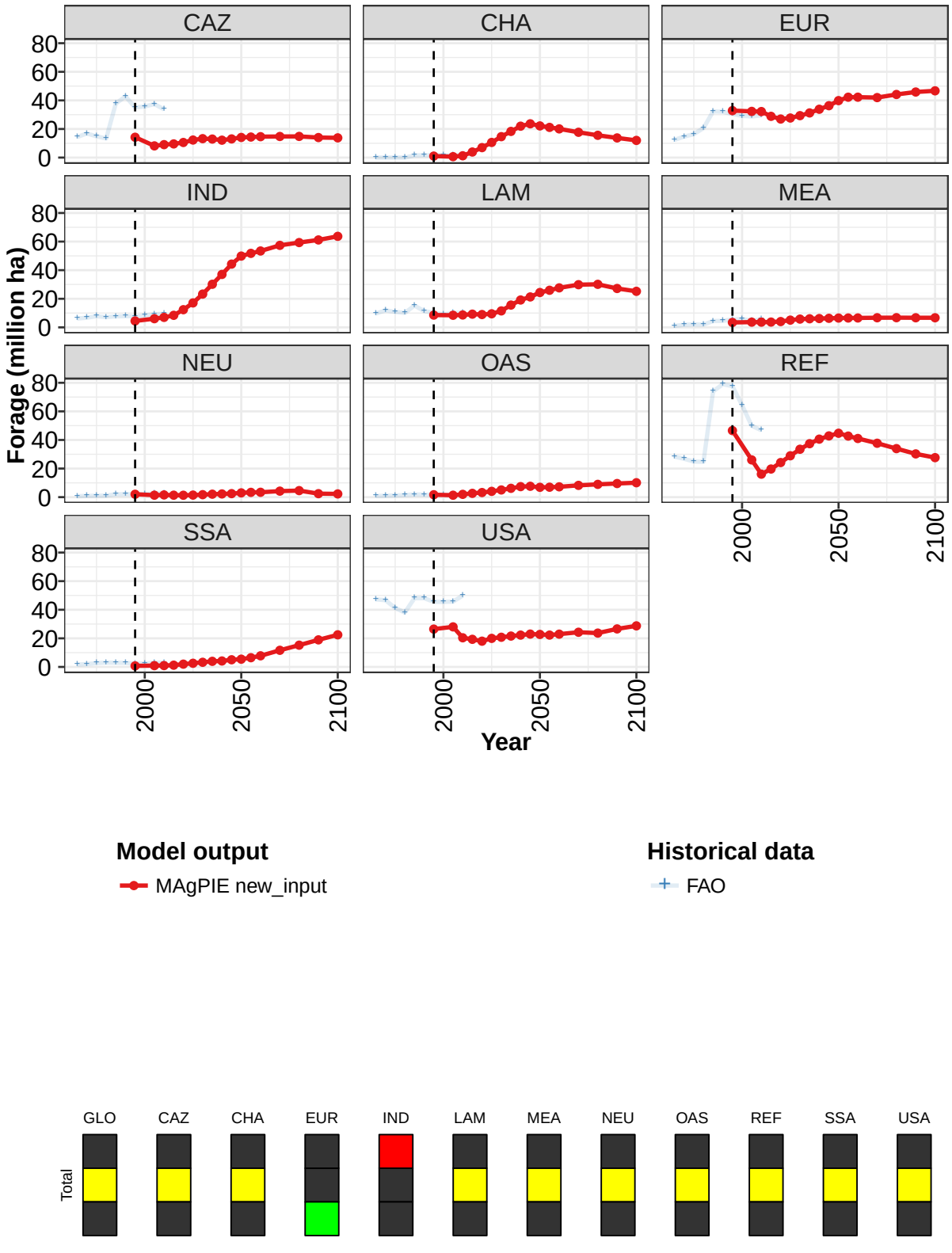


Figure 356: MAgPIE new_input — Resources—Land Cover—Cropland—Forage (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	142	117	103	108	119	139	162	185	207	226	240
CAZ	14	8	9	10	11	12	13	13	12	13	14
CHA	1	1	1	4	7	11	15	18	22	24	22
EUR	33	32	32	29	27	28	29	31	34	36	40
IND	4	6	7	8	12	17	23	30	37	44	50
LAM	9	8	9	9	9	9	12	16	19	21	24
MEA	3	4	4	4	4	5	6	6	6	6	7
NEU	2	1	2	1	1	1	2	2	2	2	3
OAS	2	1	2	3	3	4	5	6	7	8	7
REF	47	26	16	20	24	29	34	37	41	43	45
SSA	1	1	1	1	2	3	3	4	4	5	5
USA	26	28	20	19	18	20	21	22	22	23	23

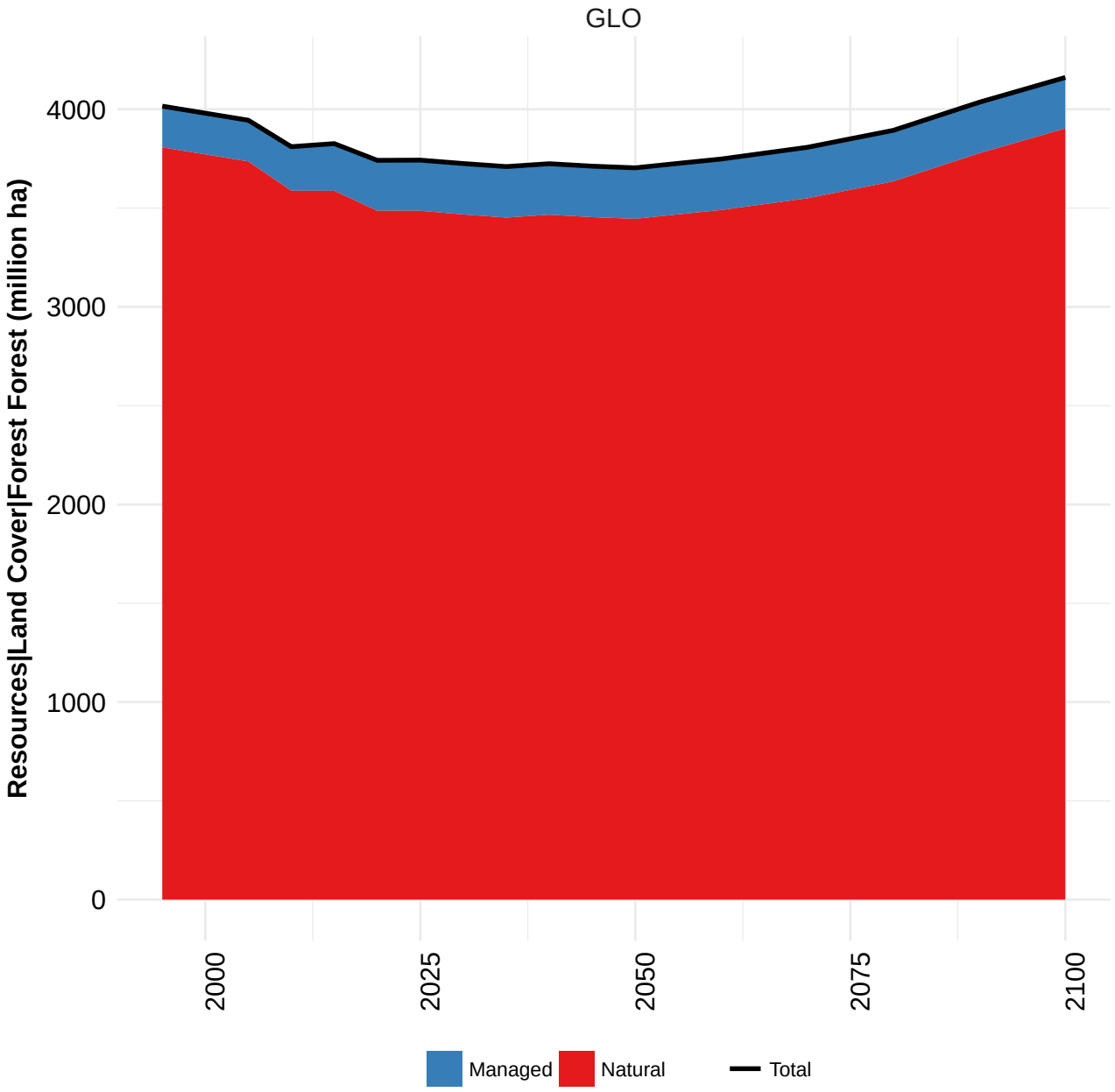
Table 1308: MAgPIE new_input — Resources—Land Cover—Cropland—Forage (million ha) [PART 1/2]

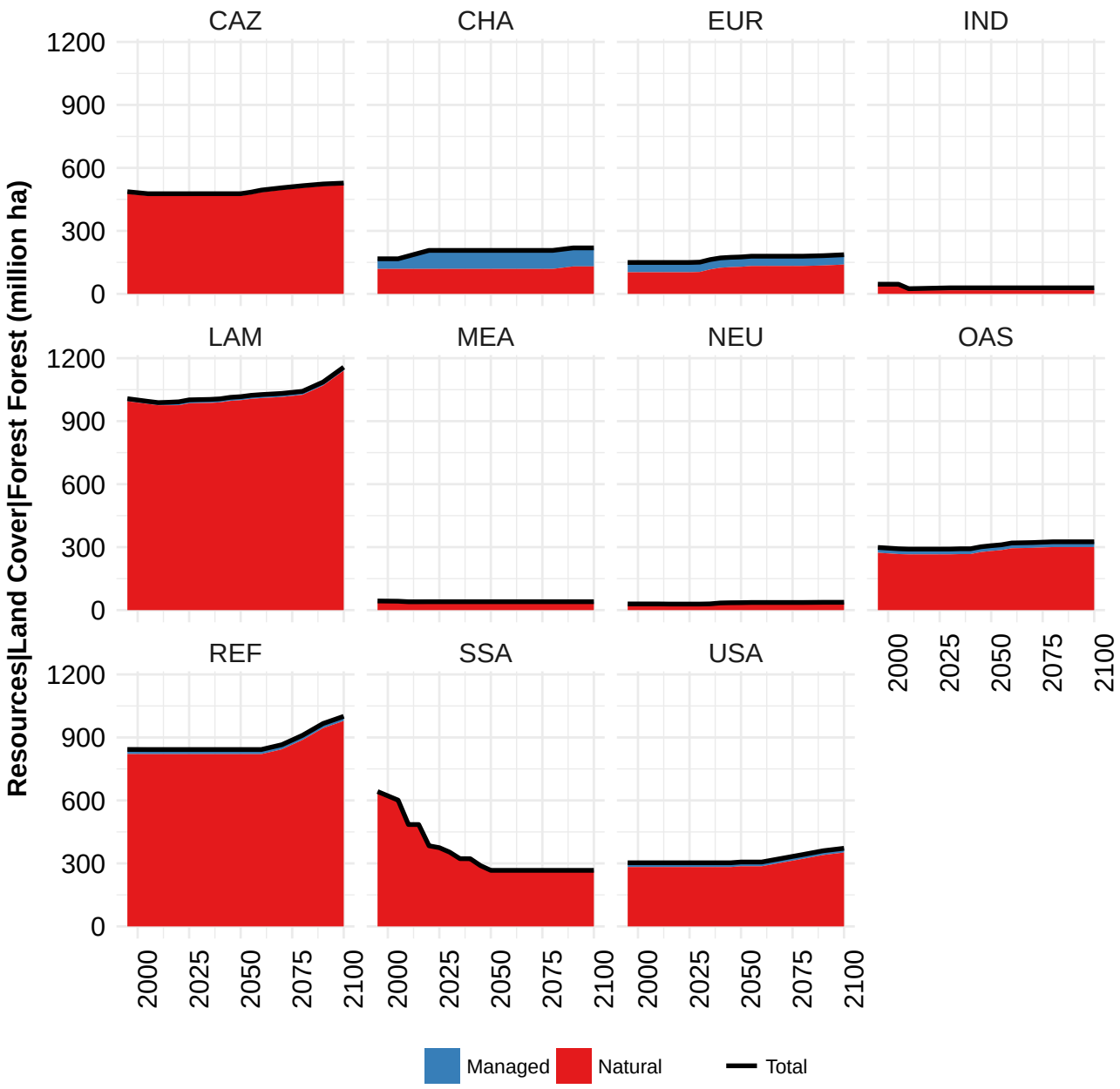
	2055	2060	2070	2080	2090	2100
GLO	244	247	255	257	257	259
CAZ	14	15	15	15	14	14
CHA	21	20	18	16	14	12
EUR	42	42	42	44	46	47
IND	52	53	57	59	61	64
LAM	26	28	30	30	27	25
MEA	7	7	7	7	7	7
NEU	3	3	4	5	2	2
OAS	7	7	8	9	10	10
REF	43	41	38	34	30	28
SSA	6	8	12	15	19	22
USA	22	23	24	24	27	29

Table 1309: MAgPIE new_input — Resources—Land Cover—Cropland—Forage (million ha) [PART 2/2]

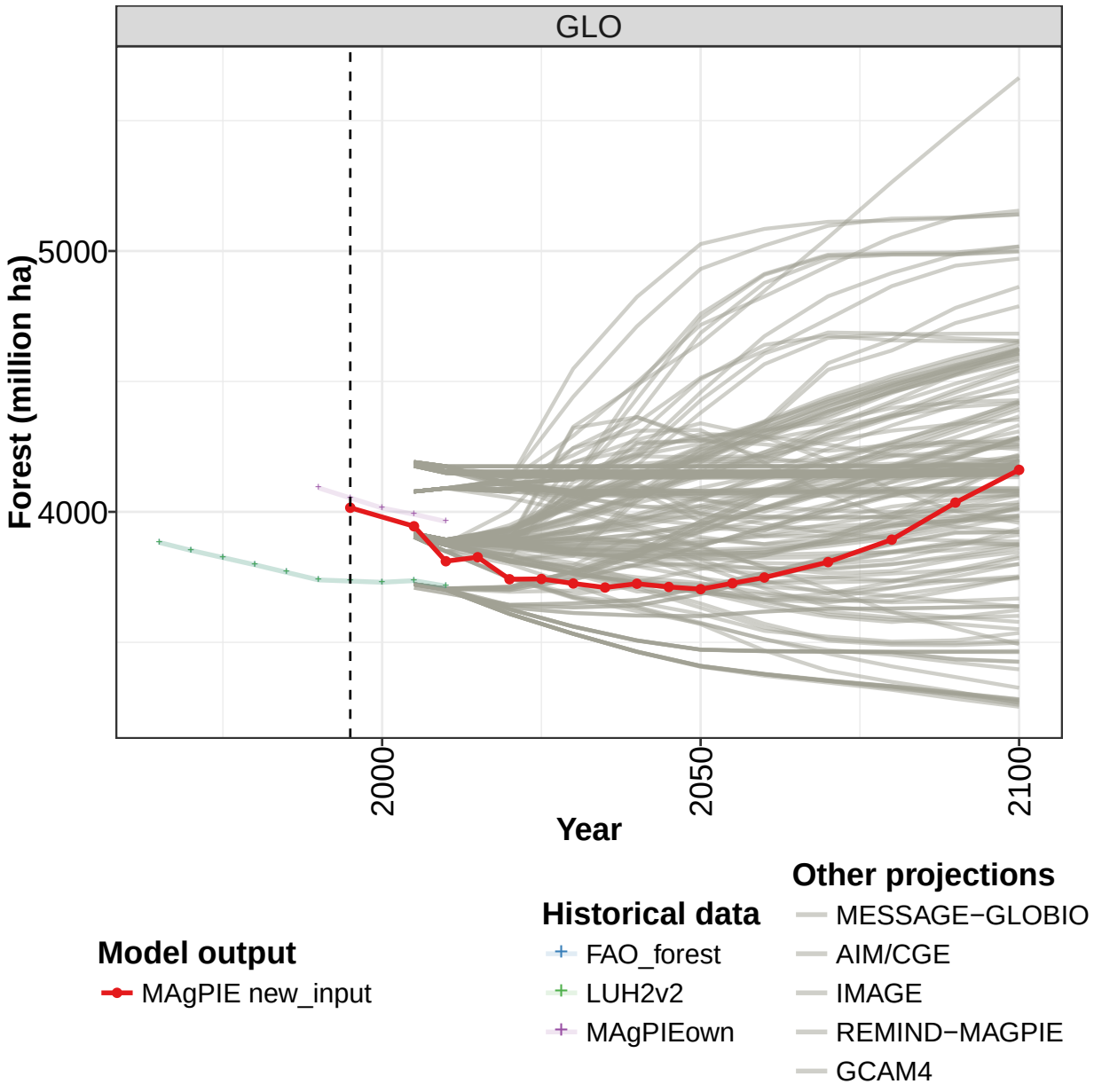
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	122	129	123	122	228	234	220	206	194	195
CAZ	14	17	15	13	38	43	35	36	37	34
CHA	0	0	0	0	2	2	2	2	2	2
EUR	12	15	16	21	32	32	30	29	29	30
IND	6	7	8	7	8	8	8	8	9	10
LAM	10	12	11	10	15	11	10	9	10	10
MEA	1	2	2	2	4	5	6	6	5	6
NEU	1	1	1	1	2	2	2	2	3	3
OAS	1	1	1	1	2	2	2	2	1	2
REF	28	27	25	25	74	79	78	64	50	47
SSA	2	2	3	3	3	3	2	2	3	3
USA	47	47	41	38	48	48	46	45	46	50

Table 1310: FAO — Resources—Land Cover—Cropland—Forage (million ha)


GLO
Resources|Land Cover|Forest Forest (million ha)
4000
3000
2000
1000
0
2000
2025
2050
2075
2100
Managed
Natural
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Resources|Land Cover|Forest Forest (million ha)
0
300
600
900
1200
2000
2025
2050
2075
2100
Managed
Natural
Total

54.2 Forest


GLO
Forest (million ha)
5000
4000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO_forest
LUH2v2
MAgPIEown
Other projections
MESSAGE−GLOBIO
AIM/CGE
IMAGE
REMIND−MAGPIE
GCAM4

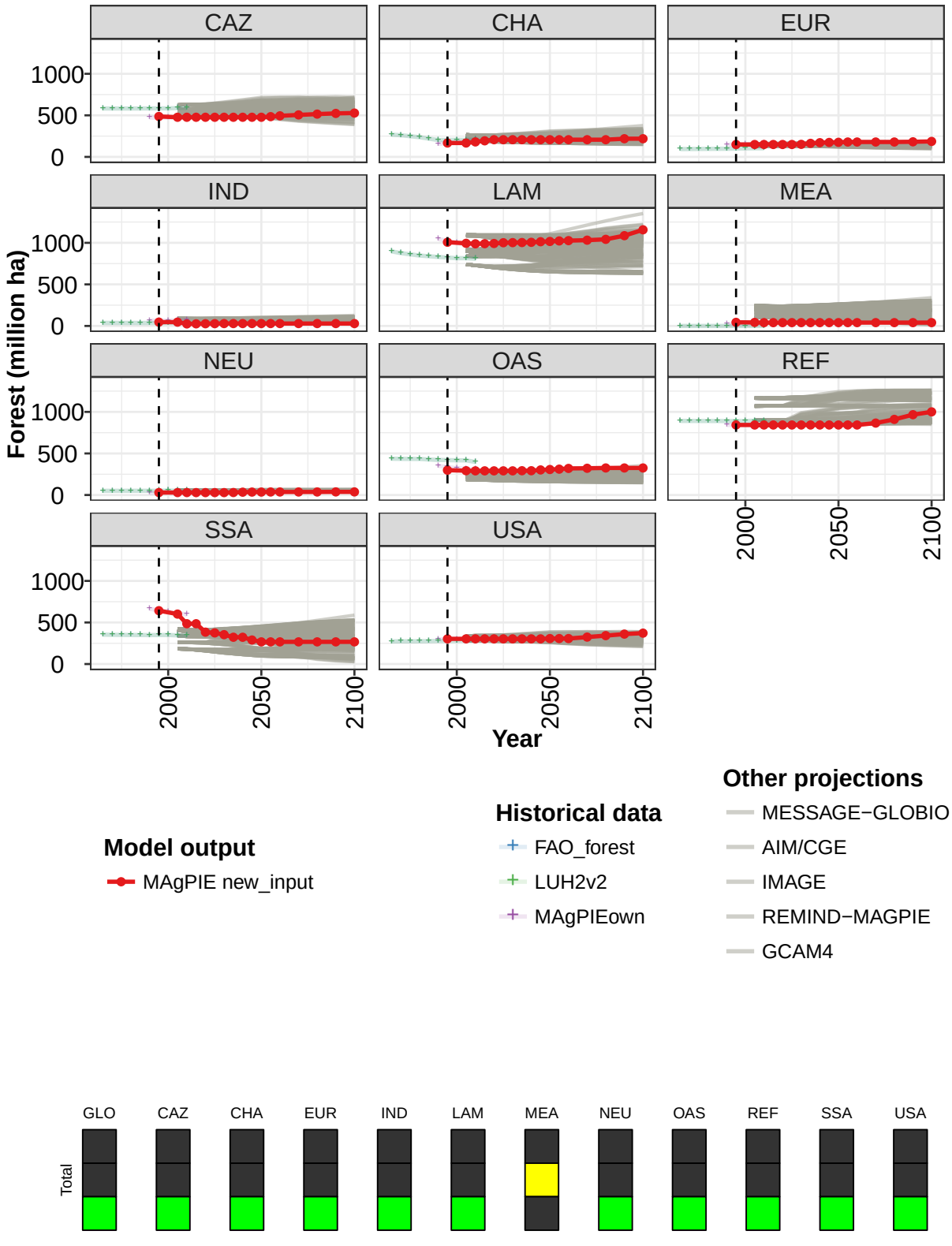


Figure 357: MAgPIE new_input — Resources—Land Cover—Forest (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4016	3945	3811	3826	3742	3743	3725	3710	3725	3712	3704
CAZ	487	477	477	477	477	477	477	477	477	477	477
CHA	167	167	180	194	207	207	207	207	207	207	207
EUR	150	150	150	150	150	150	151	163	171	174	176
IND	46	46	25	26	27	28	29	29	29	29	29
LAM	1007	994	988	990	992	1001	1003	1004	1006	1013	1017
MEA	44	42	40	40	40	40	40	40	40	40	40
NEU	30	30	30	29	29	29	29	30	34	35	36
OAS	298	292	291	291	291	291	291	292	292	302	307
REF	843	842	842	842	842	842	842	842	842	842	842
SSA	642	601	485	485	384	375	354	323	322	289	267
USA	303	303	303	303	303	303	303	303	303	303	307

Table 1311: MAgPIE new_input — Resources—Land Cover—Forest (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	3726	3748	3808	3893	4036	4161
CAZ	484	494	505	515	523	528
CHA	207	207	207	207	219	219
EUR	179	179	179	180	182	186
IND	29	29	29	29	29	29
LAM	1023	1027	1032	1042	1086	1157
MEA	40	40	40	40	40	40
NEU	36	36	36	36	37	37
OAS	311	320	322	325	325	325
REF	842	842	865	910	966	1000
SSA	267	267	267	267	267	267
USA	307	307	324	342	360	372

Table 1312: MAgPIE new_input — Resources—Land Cover—Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3883	3852	3825	3797	3768	3739	3735	3730	3736	3715
CAZ	583	582	582	582	583	583	583	584	587	590
CHA	267	261	249	237	220	203	204	206	204	207
EUR	94	95	96	97	98	98	100	102	103	103
IND	37	37	36	36	36	36	36	36	36	36
LAM	897	876	862	847	839	830	823	815	815	808
MEA	0	0	0	0	0	0	0	0	0	0
NEU	50	50	50	51	50	50	51	52	52	52
OAS	437	435	434	433	428	422	420	418	417	398
REF	892	891	891	890	890	890	890	889	895	895
SSA	354	352	350	349	349	348	349	349	345	342
USA	273	273	274	274	276	278	279	279	282	285

Table 1313: LUH2v2 — Resources—Land Cover—Forest (million ha)

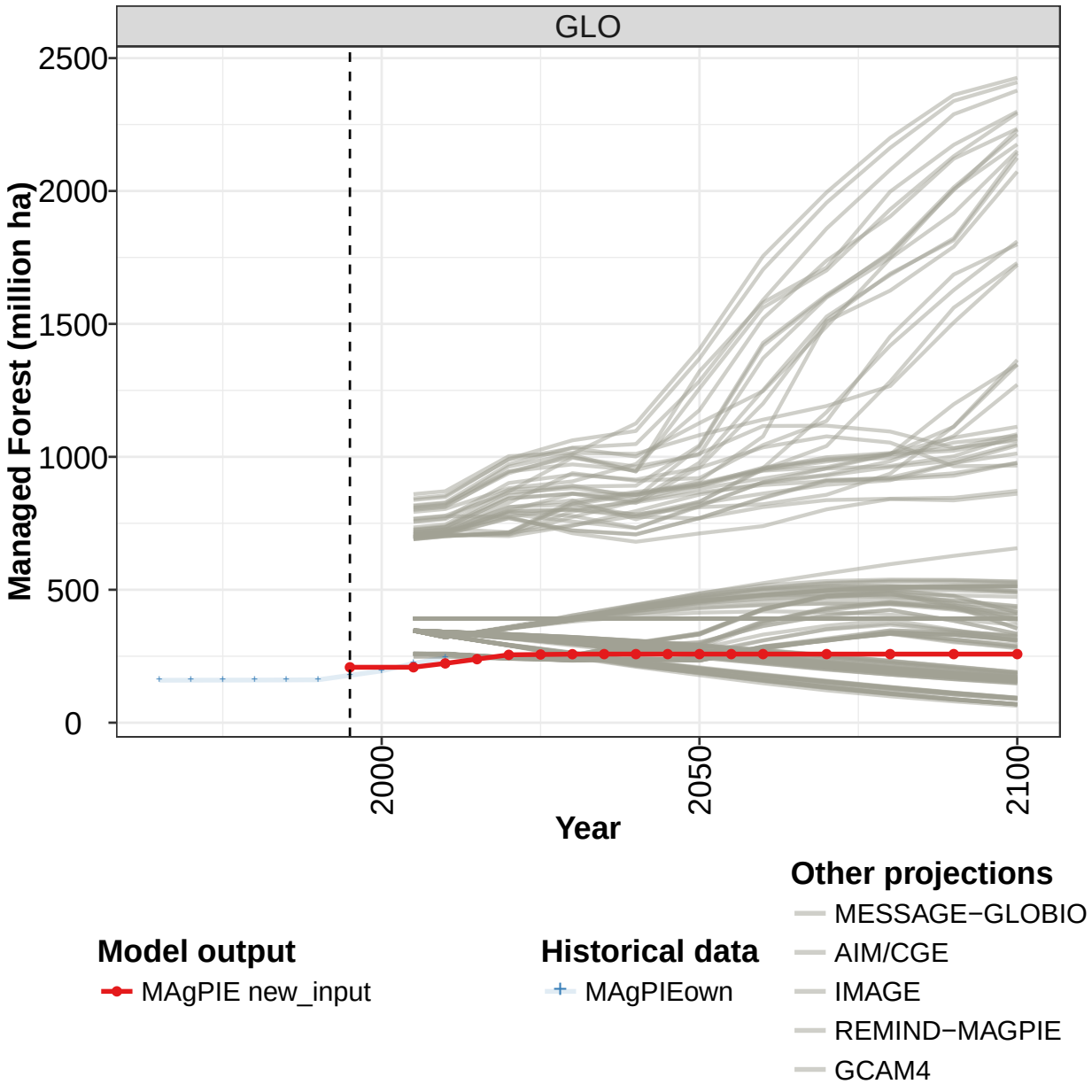
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3883	3852	3825	3797	3768	3739	3735	3730	3736	3715
CAZ	583	582	582	582	583	583	583	584	587	590
CHA	267	261	249	237	220	203	204	206	204	207
EUR	94	95	96	97	98	98	100	102	103	103
IND	37	37	36	36	36	36	36	36	36	36
LAM	897	876	862	847	839	830	823	815	815	808
MEA	0	0	0	0	0	0	0	0	0	0
NEU	50	50	50	51	50	50	51	52	52	52
OAS	437	435	434	433	428	422	420	418	417	398
REF	892	891	891	890	890	890	890	889	895	895
SSA	354	352	350	349	349	348	349	349	345	342
USA	273	273	274	274	276	278	279	279	282	285

Table 1314: MAgPIEown — Resources—Land Cover—Forest (million ha)

	1990	1995	2000	2005	2010
GLO	4092	4053	4015	3991	3963
CAZ	472	473	473	472	468
CHA	157	167	177	193	207
EUR	146	150	154	156	159
IND	64	65	65	68	68
LAM	1048	1024	999	975	956
MEA	23	23	23	23	23
NEU	27	27	28	29	30
OAS	351	337	322	316	309
REF	842	843	843	843	844
SSA	665	647	630	613	596
USA	296	298	300	302	304

Table 1315: FAO_forest — Resources—Land Cover—Forest (million ha)

54.2.1 Managed Forest



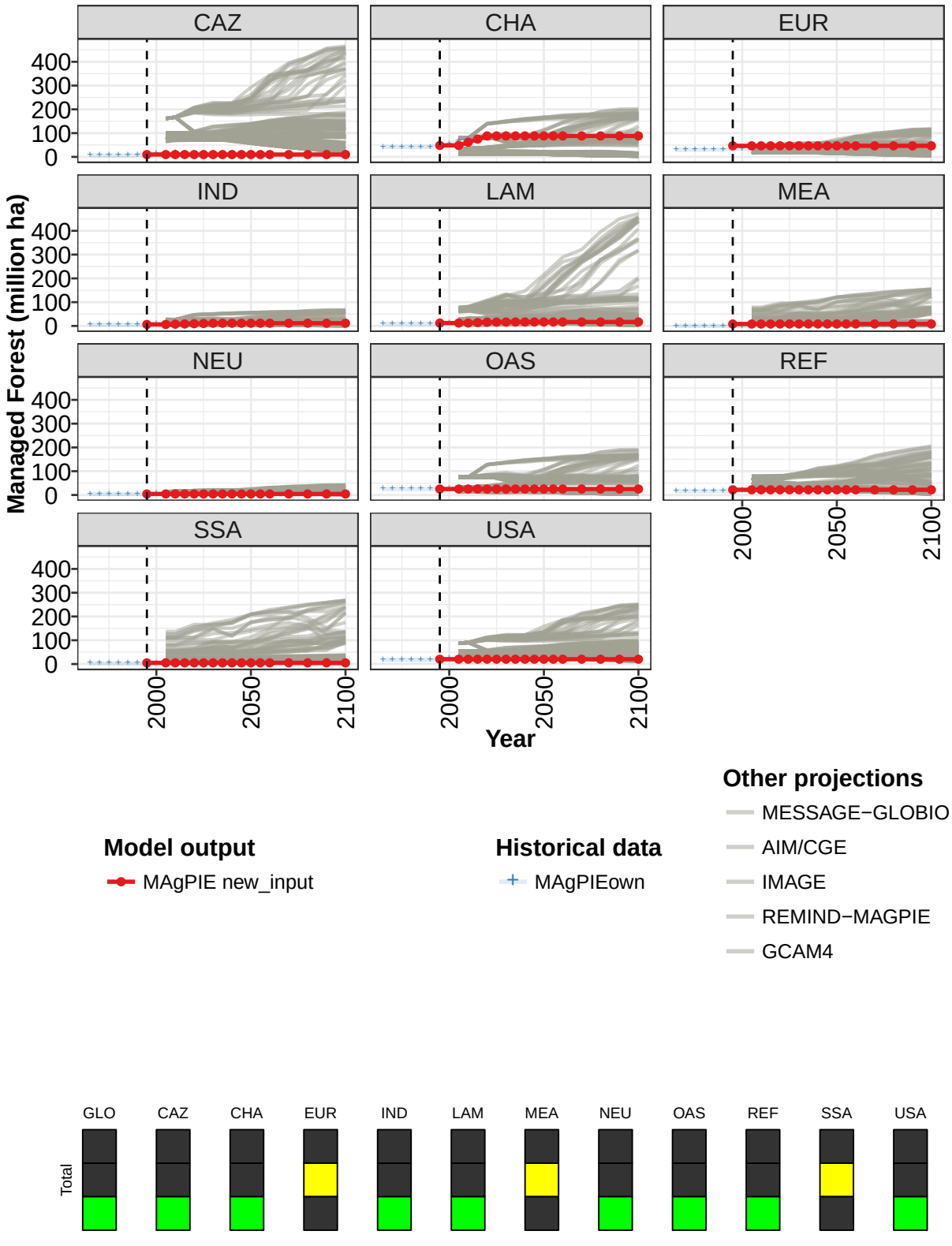


Figure 358: MAgPIE new_input — Resources—Land Cover—Forest—Managed Forest (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	208	208	223	239	255	257	258	258	258	258	258
CAZ	10	10	10	10	10	10	10	10	10	10	10
CHA	48	48	62	75	88	88	88	88	88	88	88
EUR	47	47	47	47	47	47	47	47	47	47	47
IND	6	6	7	8	9	10	11	11	11	11	11
LAM	12	12	13	14	16	16	16	17	17	17	17
MEA	8	8	8	8	8	8	8	8	8	8	8
NEU	4	4	4	4	4	4	4	4	4	4	4
OAS	25	25	25	25	25	25	25	25	25	25	25
REF	22	22	22	22	22	22	22	22	22	22	22
SSA	5	5	5	5	5	5	5	5	5	5	5
USA	20	20	20	20	20	20	20	20	20	20	20

Table 1316: MAgPIE new_input — Resources—Land Cover—Forest—Managed Forest (million ha) [PART 1/2]

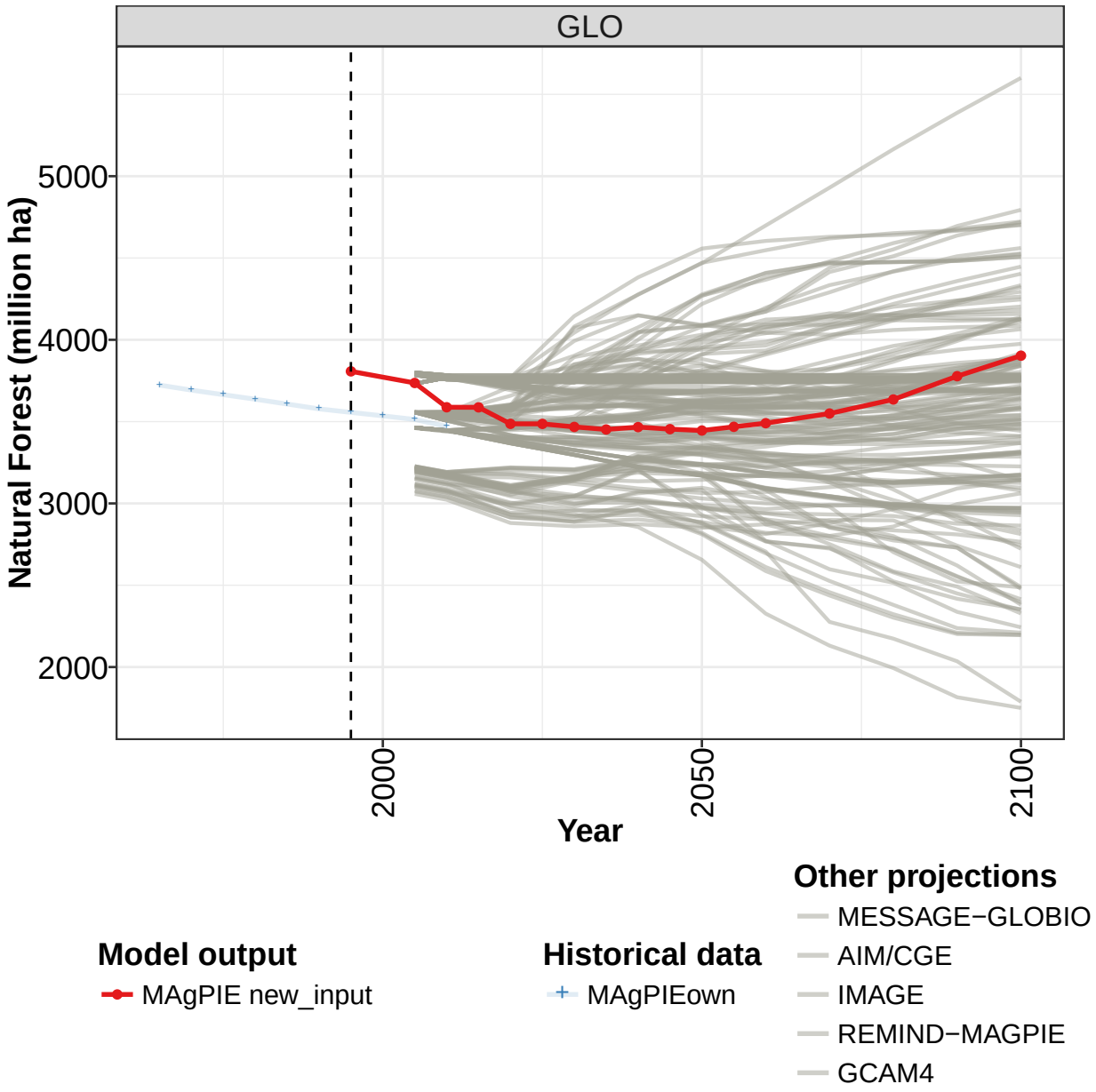
	2055	2060	2070	2080	2090	2100
GLO	258	258	258	258	258	258
CAZ	10	10	10	10	10	10
CHA	88	88	88	88	88	88
EUR	47	47	47	47	47	47
IND	11	11	11	11	11	11
LAM	17	17	17	17	17	17
MEA	8	8	8	8	8	8
NEU	4	4	4	4	4	4
OAS	25	25	25	25	25	25
REF	22	22	22	22	22	22
SSA	5	5	5	5	5	5
USA	20	20	20	20	20	20

Table 1317: MAgPIE new_input — Resources—Land Cover—Forest—Managed Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	160	160	160	160	161	161	178	195	223	245
CAZ	6	6	6	6	7	7	10	13	15	18
CHA	42	42	42	42	42	42	48	54	67	73
EUR	30	30	30	30	31	31	33	35	38	40
IND	6	6	6	6	6	6	6	7	9	11
LAM	9	9	9	9	9	9	10	11	12	14
MEA	0	0	0	0	0	0	0	0	0	0
NEU	4	4	4	4	4	4	4	5	5	5
OAS	25	25	25	25	25	25	25	25	27	29
REF	17	17	17	17	17	17	18	20	21	24
SSA	3	3	3	3	3	3	3	3	3	4
USA	18	18	18	18	18	18	20	23	24	26

Table 1318: MAgPIEown — Resources—Land Cover—Forest—Managed Forest (million ha)

54.2.2 Natural Forest



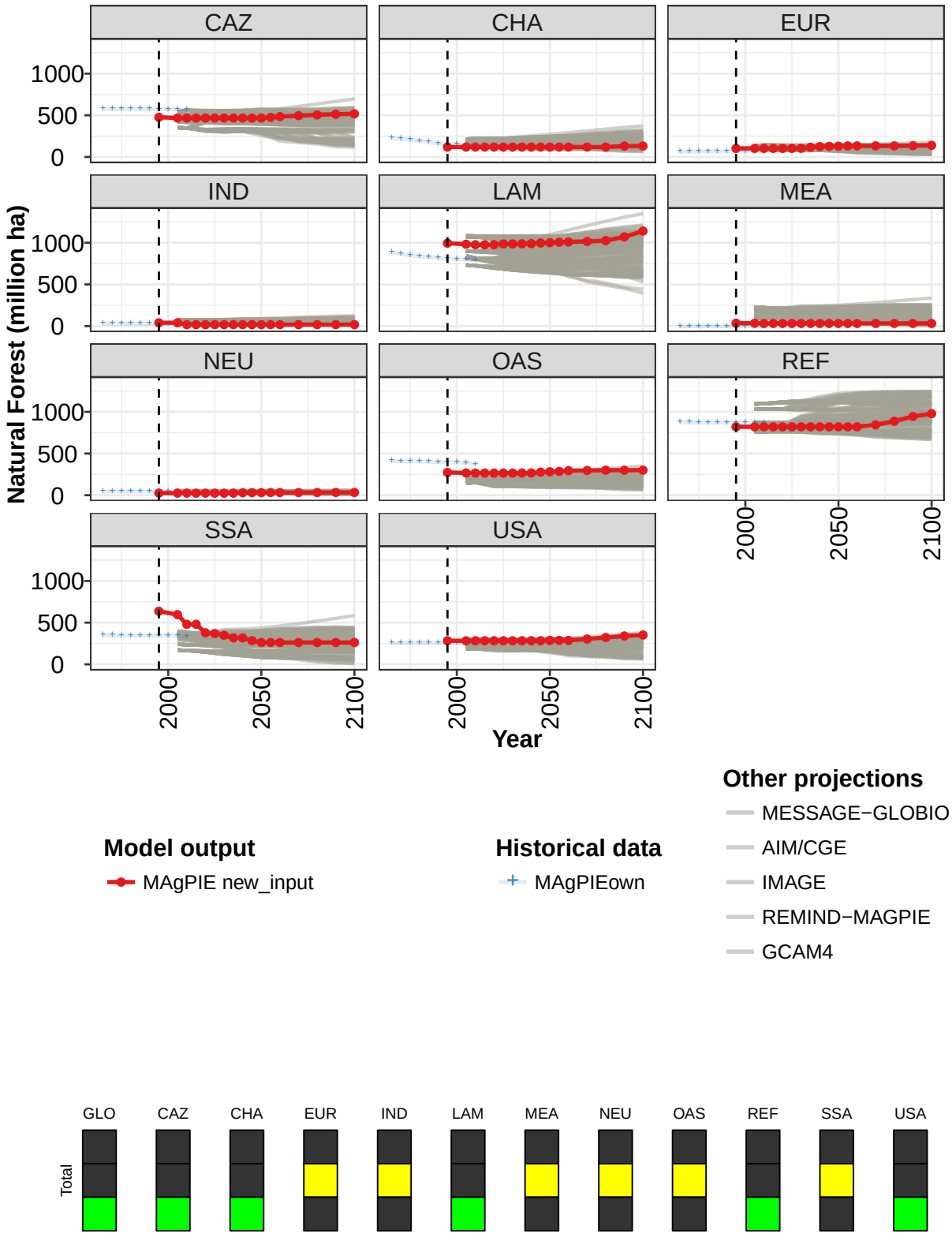


Figure 359: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3807	3736	3588	3587	3486	3486	3468	3452	3467	3454	3446
CAZ	477	467	467	467	467	467	467	467	467	467	467
CHA	119	119	119	119	119	119	119	119	119	119	119
EUR	103	103	103	103	103	103	104	117	124	127	129
IND	40	40	17	17	17	17	17	17	17	17	17
LAM	995	982	976	976	976	985	986	987	990	997	1000
MEA	35	34	32	32	32	32	32	32	32	32	32
NEU	25	25	25	25	25	25	25	26	30	31	31
OAS	273	267	266	266	266	266	266	267	267	276	282
REF	821	820	820	820	820	820	820	820	820	820	820
SSA	637	596	480	480	379	370	349	318	317	284	262
USA	283	283	283	283	283	283	283	283	283	283	286

Table 1319: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest (million ha) [PART 1/2]

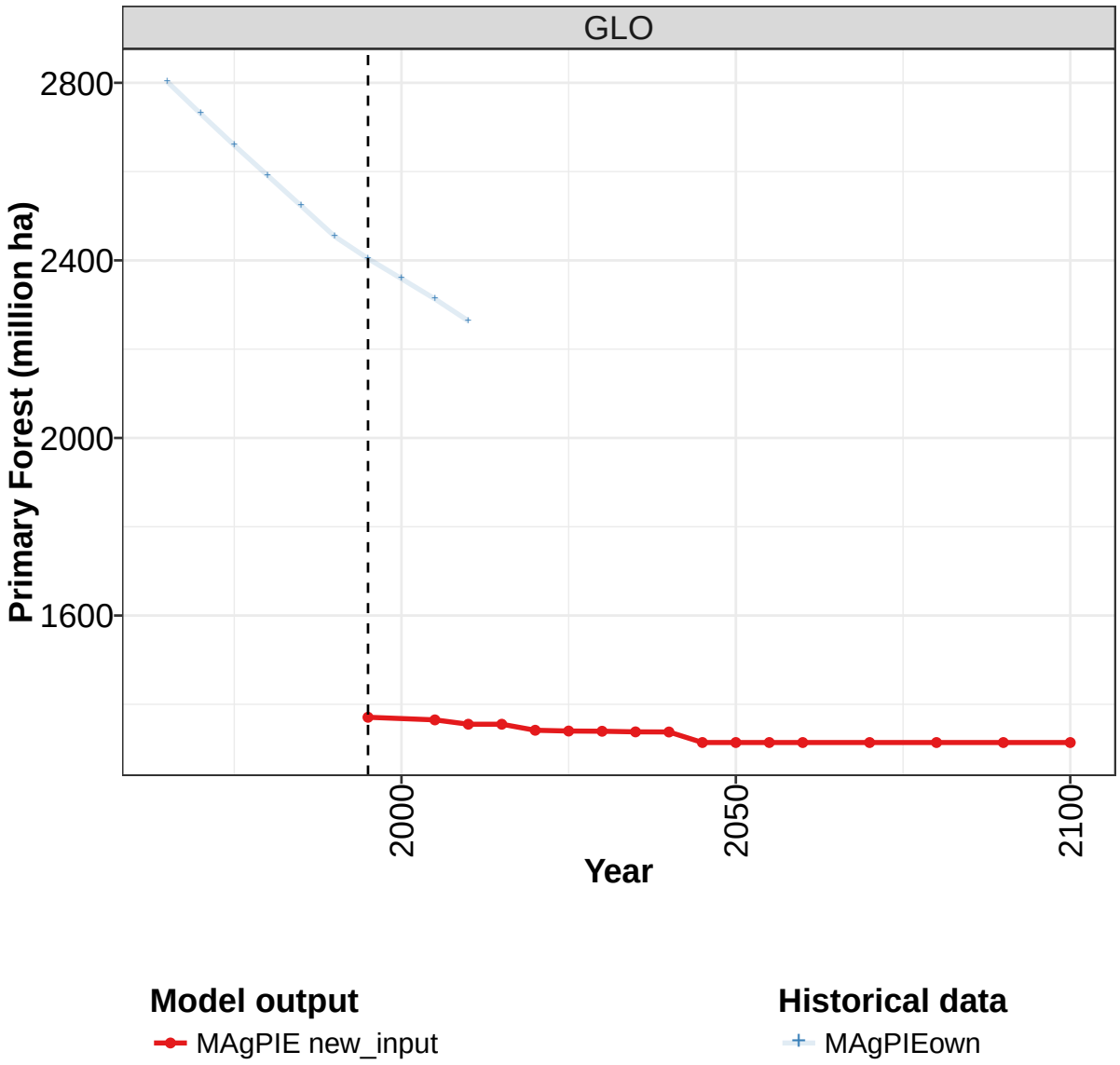
	2055	2060	2070	2080	2090	2100
GLO	3468	3490	3550	3635	3778	3903
CAZ	474	484	495	505	513	518
CHA	119	119	119	119	131	131
EUR	133	133	133	133	135	140
IND	17	17	17	17	17	17
LAM	1006	1010	1015	1026	1070	1140
MEA	32	32	32	32	32	32
NEU	32	32	32	32	33	33
OAS	286	295	297	300	300	300
REF	820	820	843	888	944	979
SSA	262	262	262	262	262	262
USA	286	286	304	322	340	352

Table 1320: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3723	3692	3665	3637	3607	3578	3556	3535	3513	3471
CAZ	577	576	576	576	576	576	574	571	572	572
CHA	225	219	207	195	178	161	156	151	137	134
EUR	64	65	66	66	67	68	67	67	66	63
IND	31	31	31	31	30	30	29	29	26	25
LAM	887	867	852	837	829	821	813	804	803	794
MEA	0	0	0	0	0	0	0	0	0	0
NEU	46	46	46	46	46	46	47	47	47	47
OAS	412	410	409	409	403	397	395	392	389	369
REF	875	875	874	874	874	873	872	870	873	871
SSA	351	349	347	346	346	345	346	346	342	339
USA	255	255	256	257	258	260	258	257	258	259

Table 1321: MAgPIEown — Resources—Land Cover—Forest—Natural Forest (million ha)

54.2.3 Natural Forest—Primary Forest



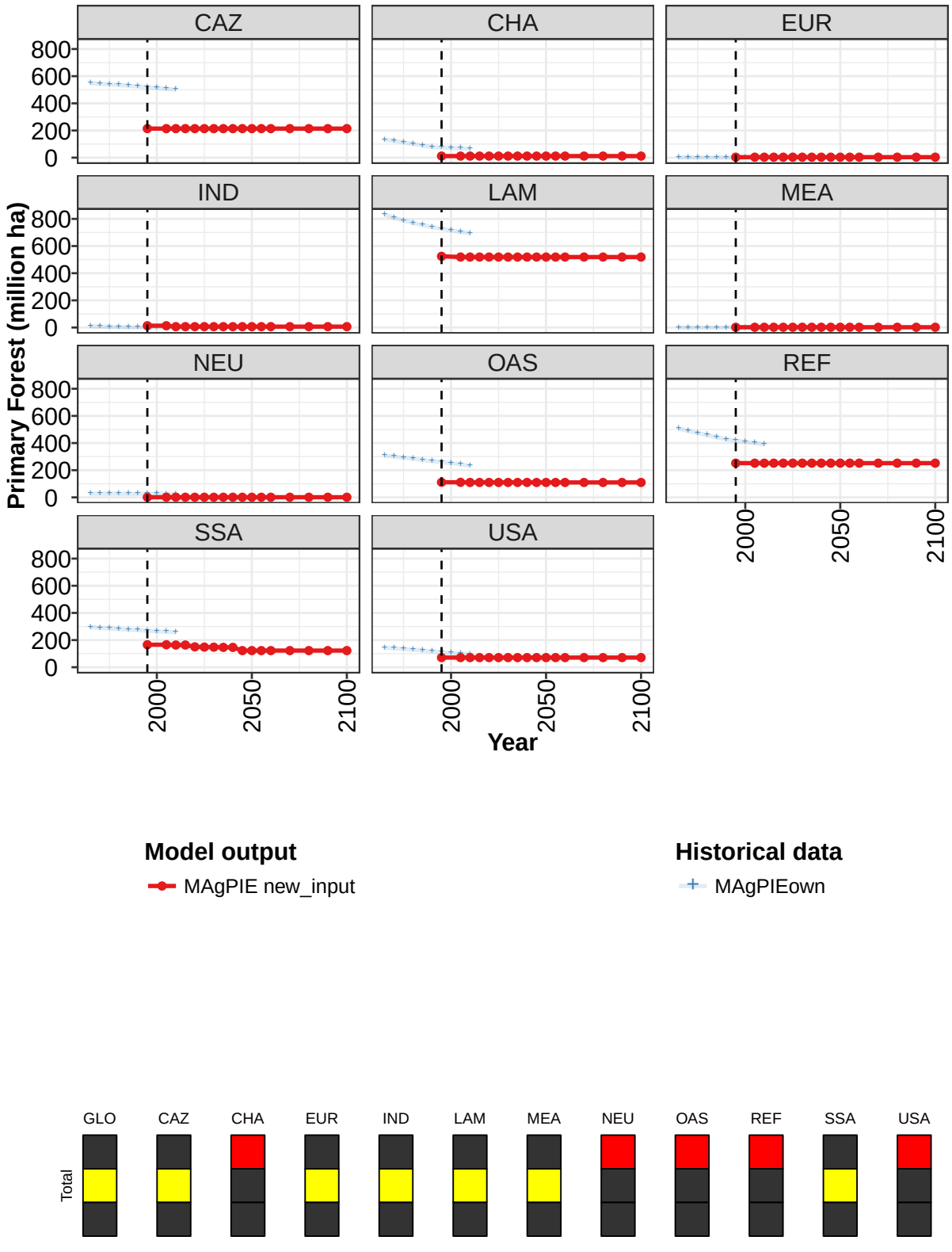


Figure 360: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1371	1365	1355	1355	1342	1340	1339	1338	1338	1314	1314
CAZ	214	214	214	214	214	214	214	214	214	214	214
CHA	12	12	12	12	12	12	12	12	12	12	12
EUR	4	4	4	4	4	4	4	4	4	4	4
IND	13	13	7	7	7	7	7	7	7	7	7
LAM	524	519	519	519	519	519	519	519	519	519	519
MEA	2	2	2	2	2	2	2	2	2	2	2
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	111	111	110	110	110	110	110	110	110	110	110
REF	252	252	252	252	252	252	252	252	252	252	252
SSA	166	166	164	164	150	148	148	147	146	123	123
USA	71	71	71	71	71	71	71	71	71	71	71

Table 1322: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha) [PART 1/2]

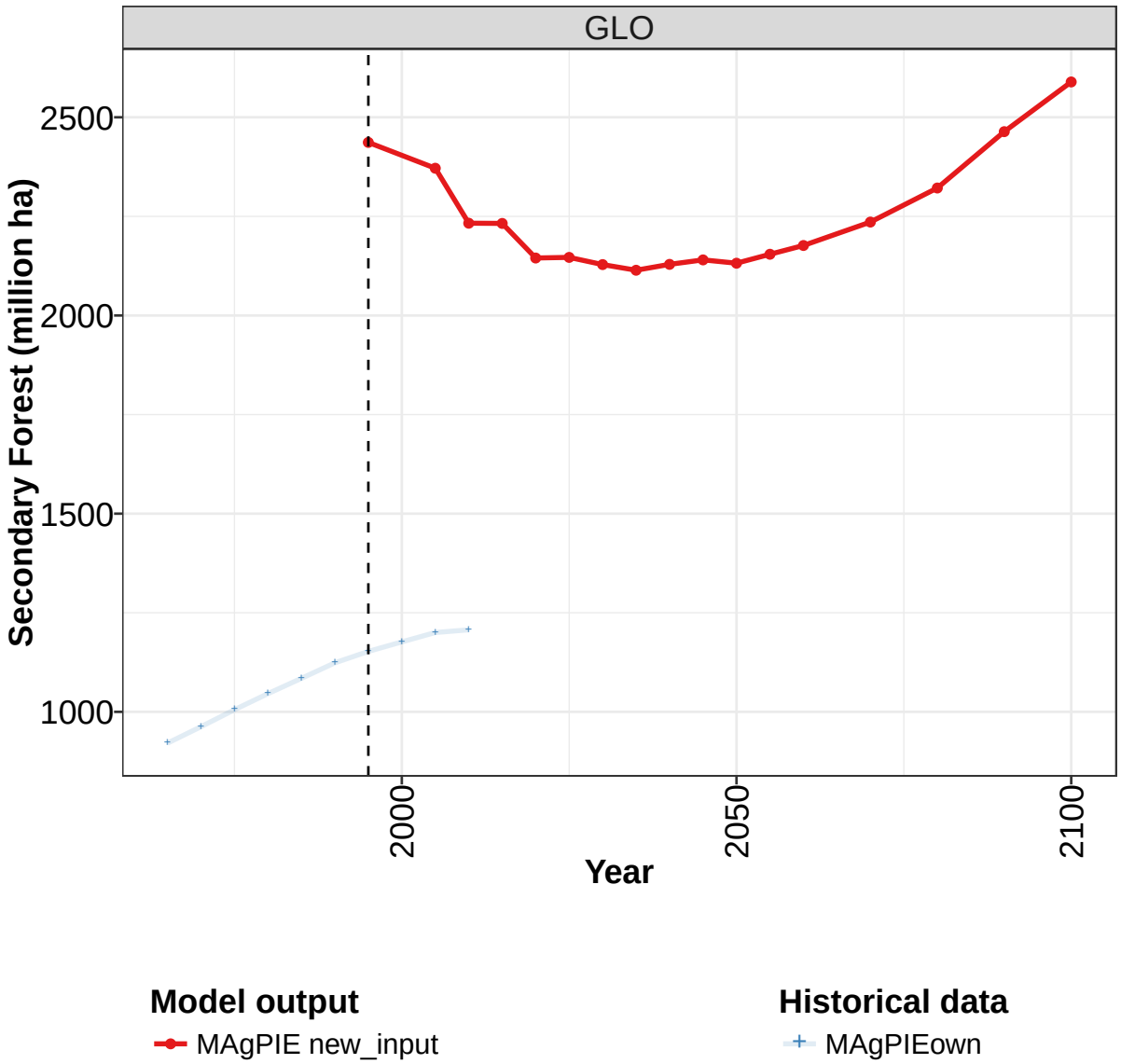
	2055	2060	2070	2080	2090	2100
GLO	1314	1314	1314	1314	1314	1314
CAZ	214	214	214	214	214	214
CHA	12	12	12	12	12	12
EUR	4	4	4	4	4	4
IND	7	7	7	7	7	7
LAM	519	519	519	519	519	519
MEA	2	2	2	2	2	2
NEU	1	1	1	1	1	1
OAS	110	110	110	110	110	110
REF	252	252	252	252	252	252
SSA	123	123	123	123	123	123
USA	71	71	71	71	71	71

Table 1323: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2802	2730	2659	2591	2523	2454	2404	2359	2313	2264
CAZ	548	545	540	535	530	525	519	513	506	501
CHA	132	124	113	103	90	78	75	72	68	66
EUR	2	1	1	1	1	1	1	1	1	1
IND	9	7	6	4	2	1	1	1	0	0
LAM	832	807	788	770	755	739	727	714	706	694
MEA	0	0	0	0	0	0	0	0	0	0
NEU	28	27	27	27	27	26	26	26	26	25
OAS	307	300	292	284	275	267	259	253	244	231
REF	505	490	474	458	444	428	417	410	400	390
SSA	295	289	285	280	277	273	269	265	261	257
USA	145	139	134	129	123	117	110	105	101	98

Table 1324: MAgPIEown — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha)

54.2.4 Natural Forest—Secondary Forest



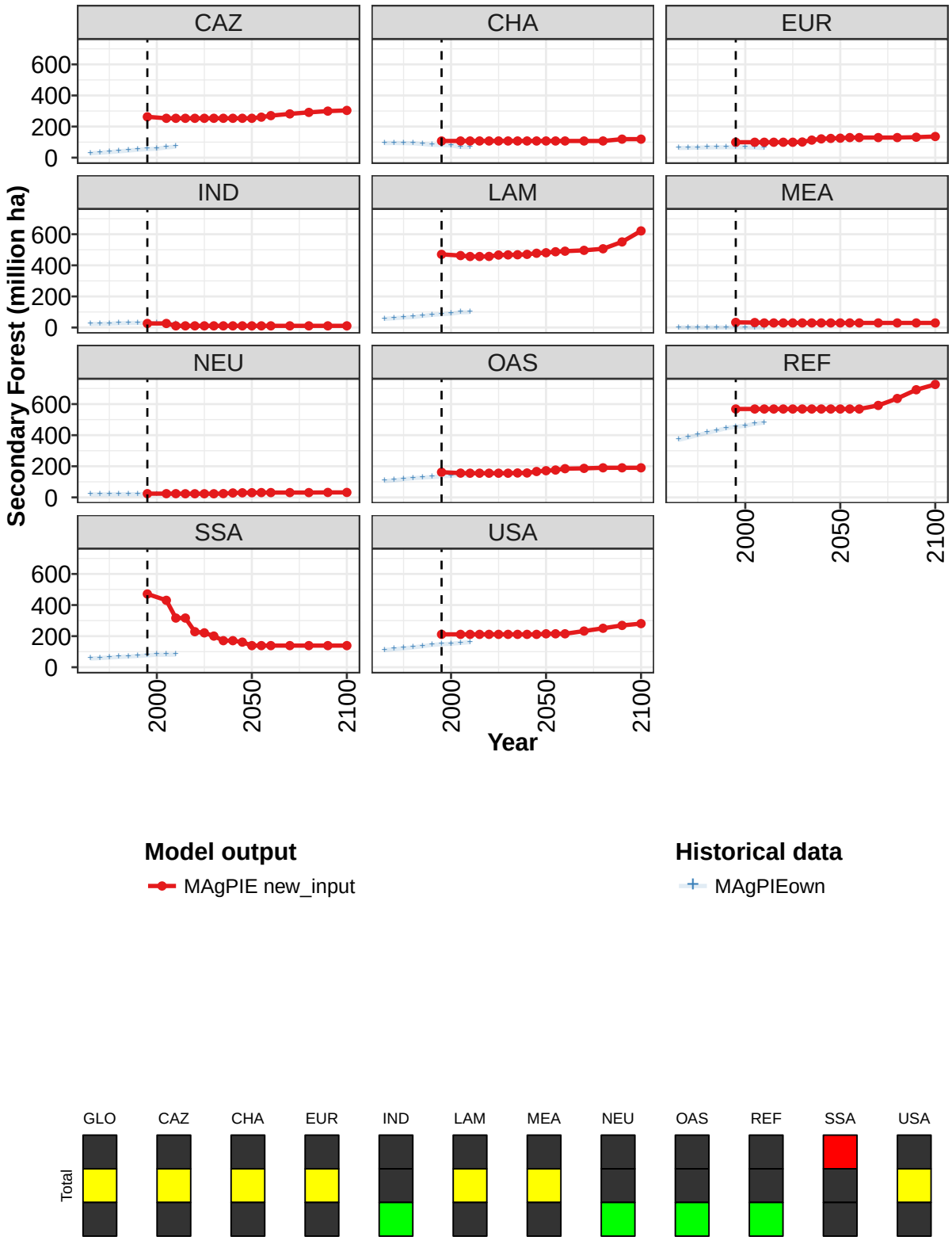


Figure 361: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2437	2371	2233	2232	2145	2147	2128	2114	2129	2140	2132
CAZ	263	253	253	253	253	253	253	253	253	253	253
CHA	107	107	107	107	107	107	107	107	107	107	107
EUR	99	99	99	99	99	99	101	113	121	124	125
IND	26	26	11	11	11	11	11	11	11	11	11
LAM	470	463	457	457	457	466	467	468	471	478	481
MEA	33	32	30	30	30	30	30	30	30	30	30
NEU	24	24	24	23	23	23	23	24	29	30	30
OAS	162	156	155	155	155	155	156	157	157	166	172
REF	569	568	568	568	568	568	568	568	568	568	568
SSA	471	430	316	316	229	221	201	171	171	162	139
USA	212	212	212	212	212	212	212	212	212	212	215

Table 1325: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha) [PART 1/2]

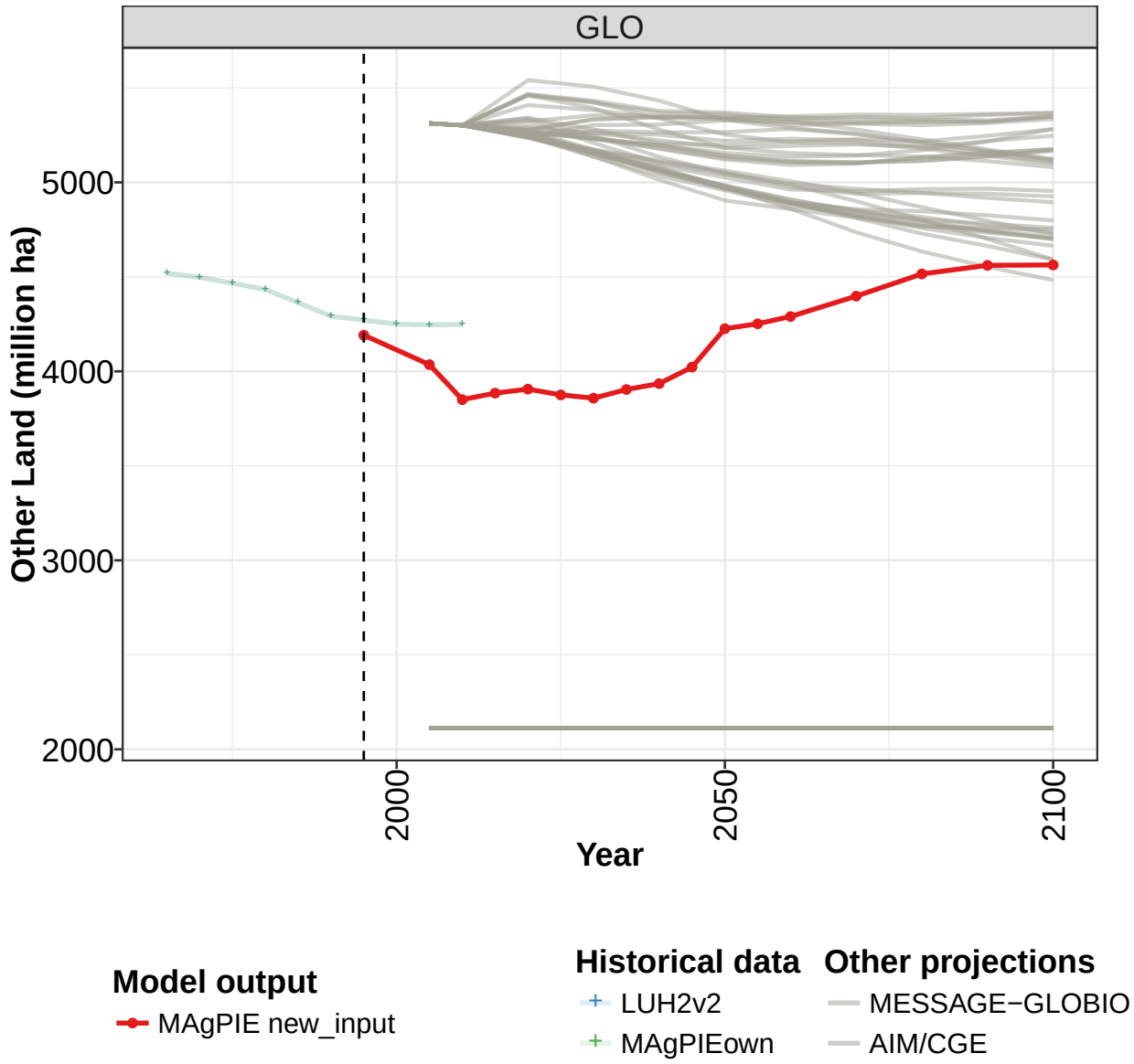
	2055	2060	2070	2080	2090	2100
GLO	2154	2177	2236	2322	2464	2589
CAZ	261	270	281	291	300	304
CHA	107	107	107	107	119	119
EUR	129	129	129	129	132	136
IND	11	11	11	11	11	11
LAM	487	491	496	506	551	621
MEA	30	30	30	30	30	30
NEU	31	31	31	31	32	32
OAS	176	185	187	190	190	190
REF	568	568	591	636	692	727
SSA	139	139	139	139	139	139
USA	215	215	233	251	269	281

Table 1326: MAgPIE new_input — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	921	963	1005	1046	1084	1124	1152	1176	1200	1207
CAZ	28	32	36	41	46	51	55	58	66	71
CHA	94	94	93	92	88	83	81	79	69	68
EUR	62	63	65	66	66	67	67	67	65	62
IND	22	24	25	27	29	30	29	28	26	24
LAM	56	60	65	67	75	82	86	90	97	99
MEA	0	0	0	0	0	0	0	0	0	0
NEU	19	19	19	20	20	20	21	22	22	22
OAS	105	110	117	124	127	130	135	139	145	137
REF	370	385	401	415	430	445	455	460	474	481
SSA	56	59	63	66	69	72	77	81	81	81
USA	110	116	122	128	135	144	148	152	157	161

Table 1327: MAgPIEown — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha)

54.3 Other Land



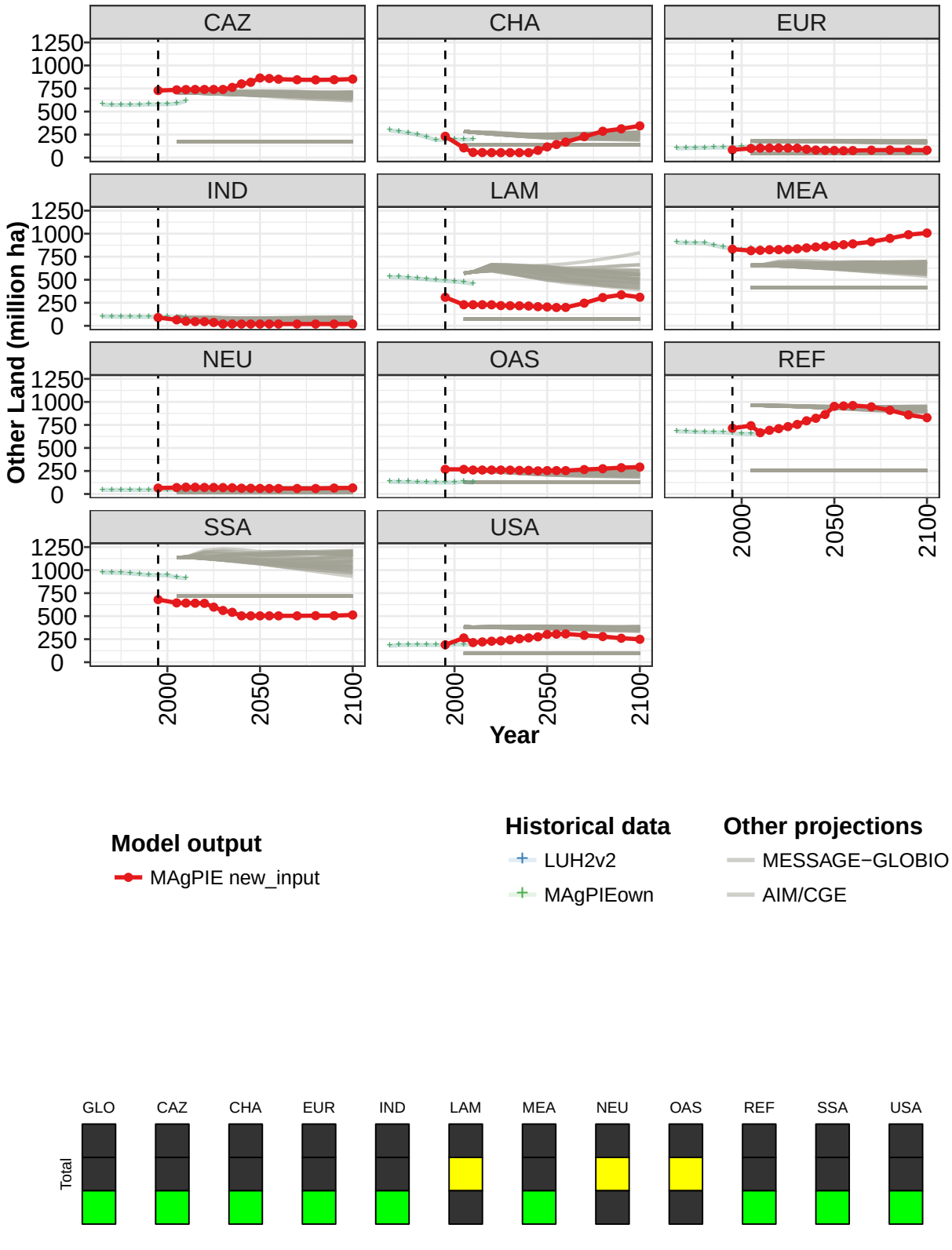


Figure 362: MAgPIE new_input — Resources—Land Cover—Other Land (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4192	4035	3850	3885	3906	3875	3858	3904	3935	4022	4226
CAZ	728	735	739	740	740	740	740	762	800	817	864
CHA	231	105	56	55	53	53	53	53	54	79	116
EUR	84	100	103	104	104	104	102	90	82	79	78
IND	90	65	49	45	45	36	19	19	19	19	19
LAM	310	229	229	229	228	219	218	217	215	208	204
MEA	832	816	819	826	827	830	836	846	855	865	872
NEU	65	70	74	73	71	71	70	67	63	62	61
OAS	268	267	260	260	260	260	260	257	257	251	254
REF	715	741	666	692	710	732	755	795	822	863	952
SSA	680	644	642	641	640	598	562	542	504	503	503
USA	189	264	213	220	228	231	243	254	264	275	302

Table 1328: MAgPIE new_input — Resources—Land Cover—Other Land (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	4252	4290	4398	4515	4561	4563
CAZ	859	851	845	843	846	852
CHA	143	169	227	286	313	344
EUR	74	76	81	83	83	81
IND	19	19	19	19	19	19
LAM	199	200	246	307	337	310
MEA	880	890	912	949	989	1007
NEU	60	60	60	60	64	66
OAS	254	254	266	274	286	292
REF	956	961	946	909	859	828
SSA	503	503	503	505	505	513
USA	305	307	292	279	260	249

Table 1329: MAgPIE new_input — Resources—Land Cover—Other Land (million ha) [PART 2/2]

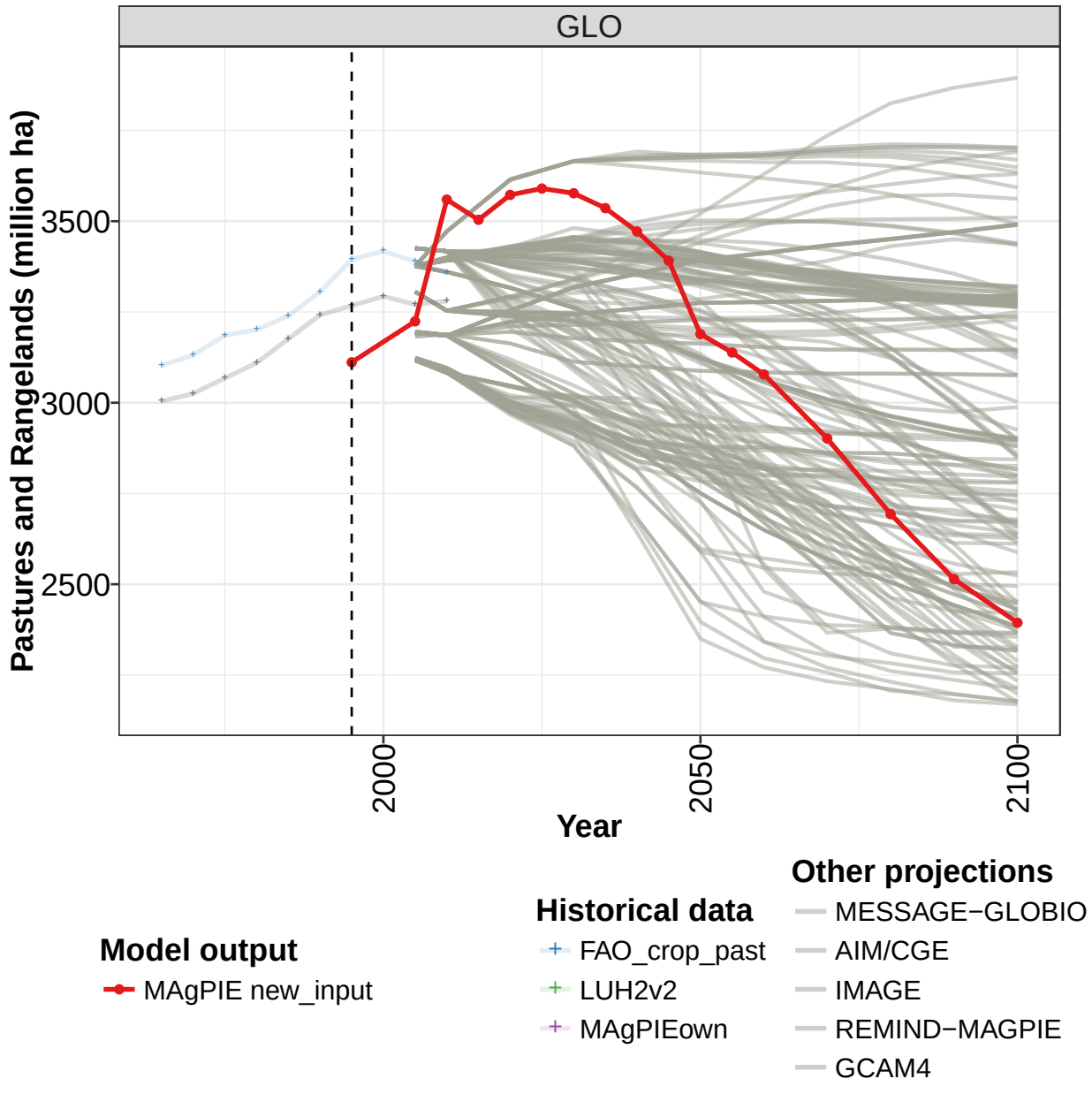
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4519	4498	4466	4434	4363	4292	4271	4250	4246	4248
CAZ	576	571	571	571	574	577	579	581	585	614
CHA	295	285	268	250	221	192	194	197	196	200
EUR	101	103	105	107	108	110	113	116	122	125
IND	101	99	98	97	96	96	95	94	93	93
LAM	531	528	521	513	505	496	487	478	472	456
MEA	904	902	900	897	874	852	839	825	835	835
NEU	45	44	44	44	44	43	43	44	43	45
OAS	133	131	130	130	128	126	125	125	133	122
REF	680	677	674	672	670	668	661	654	652	654
SSA	974	972	968	965	956	947	945	943	922	911
USA	179	185	187	189	188	186	190	193	192	192

Table 1330: LUH2v2 — Resources—Land Cover—Other Land (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4519	4498	4466	4434	4363	4292	4271	4250	4246	4248
CAZ	576	571	571	571	574	577	579	581	585	614
CHA	295	285	268	250	221	192	194	197	196	200
EUR	101	103	105	107	108	110	113	116	122	125
IND	101	99	98	97	96	96	95	94	93	93
LAM	531	528	521	513	505	496	487	478	472	456
MEA	904	902	900	897	874	852	839	825	835	835
NEU	45	44	44	44	44	43	43	44	43	45
OAS	133	131	130	130	128	126	125	125	133	122
REF	680	677	674	672	670	668	661	654	652	654
SSA	974	972	968	965	956	947	945	943	922	911
USA	179	185	187	189	188	186	190	193	192	192

Table 1331: MAgPIEown — Resources—Land Cover—Other Land (million ha)

54.4 Pastures and Rangelands



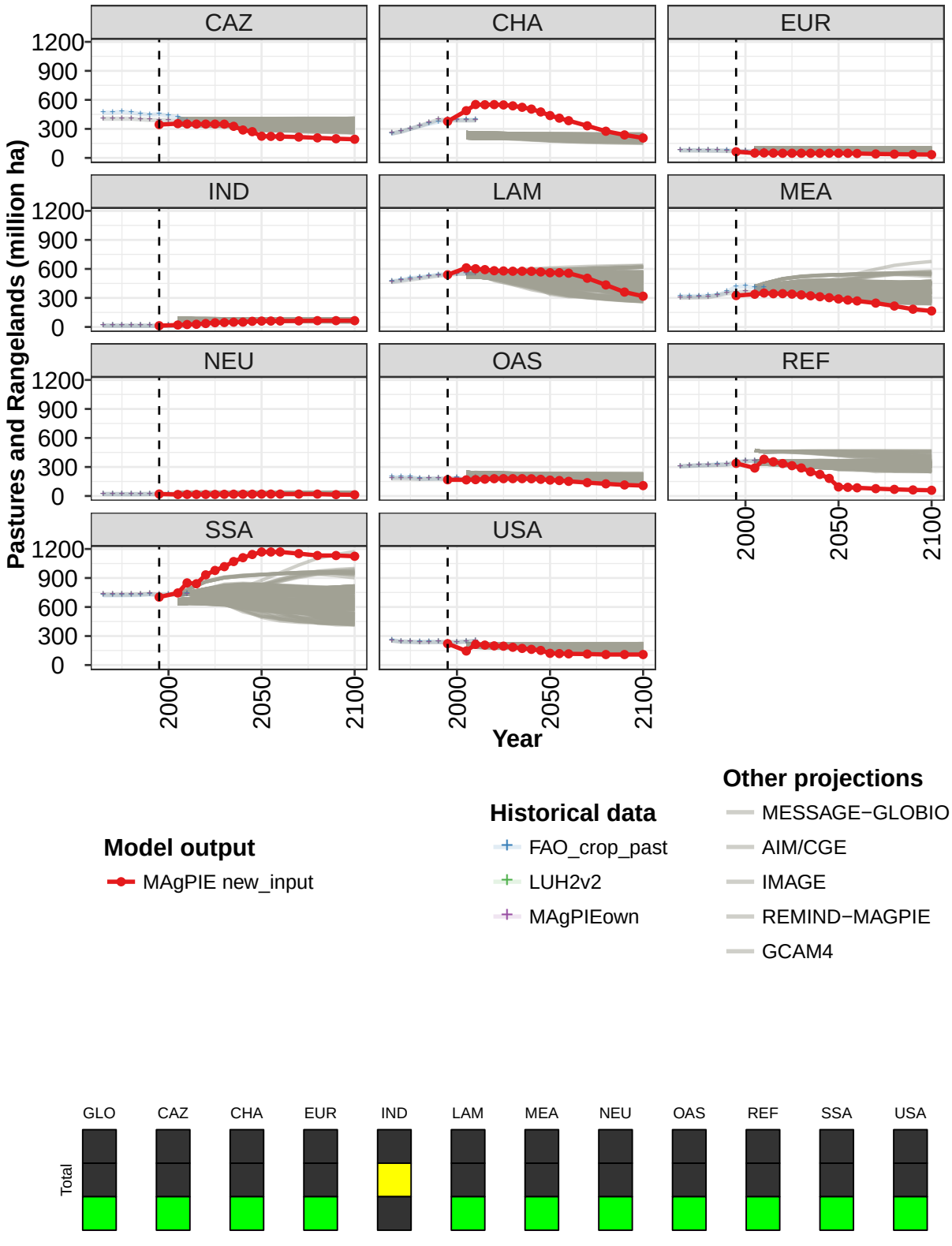


Figure 363: MAgPIE new_input — Resources—Land Cover—Pastures and Rangelands (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3111	3224	3560	3504	3573	3590	3577	3536	3472	3391	3189
CAZ	345	354	351	350	350	350	349	327	289	271	224
CHA	378	488	552	549	551	548	538	523	505	475	438
EUR	64	50	51	49	48	48	48	48	48	48	48
IND	13	20	25	28	36	44	46	49	50	58	61
LAM	540	611	602	593	582	579	576	576	575	569	561
MEA	324	338	350	344	344	340	332	322	313	302	290
NEU	21	15	16	16	16	16	18	19	19	19	20
OAS	168	167	169	174	179	179	179	179	178	172	165
REF	338	289	380	354	336	314	290	250	223	182	93
SSA	702	746	850	841	933	978	1018	1070	1110	1143	1169
USA	221	145	213	206	199	195	184	172	163	151	121

Table 1332: MAgPIE new_input — Resources—Land Cover—Pastures and Rangelands (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	3138	3078	2902	2693	2514	2394
CAZ	223	221	216	207	198	193
CHA	411	385	332	276	238	206
EUR	48	45	41	39	36	34
IND	61	62	63	65	65	65
LAM	561	556	504	434	361	318
MEA	278	269	247	216	183	165
NEU	20	20	20	20	14	12
OAS	160	152	138	126	114	108
REF	90	85	76	69	63	59
SSA	1169	1169	1152	1132	1132	1125
USA	118	116	113	109	109	109

Table 1333: MAgPIE new_input — Resources—Land Cover—Pastures and Rangelands (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3102	3131	3186	3201	3240	3305	3395	3418	3388	3358
CAZ	468	469	476	469	455	446	452	437	422	381
CHA	251	273	301	328	351	374	393	393	393	393
EUR	81	81	80	79	76	76	74	72	70	68
IND	15	13	13	12	12	11	11	11	10	10
LAM	473	486	503	514	527	539	547	554	555	561
MEA	316	318	319	322	329	362	416	420	405	406
NEU	20	20	19	19	19	20	20	21	22	22
OAS	195	196	195	179	179	181	173	185	169	169
REF	307	313	316	320	325	326	355	362	362	363
SSA	720	720	721	722	724	730	718	727	735	736
USA	257	244	242	238	242	239	236	236	244	250

Table 1334: FAO_crop_past — Resources—Land Cover—Pastures and Rangelands (million ha)

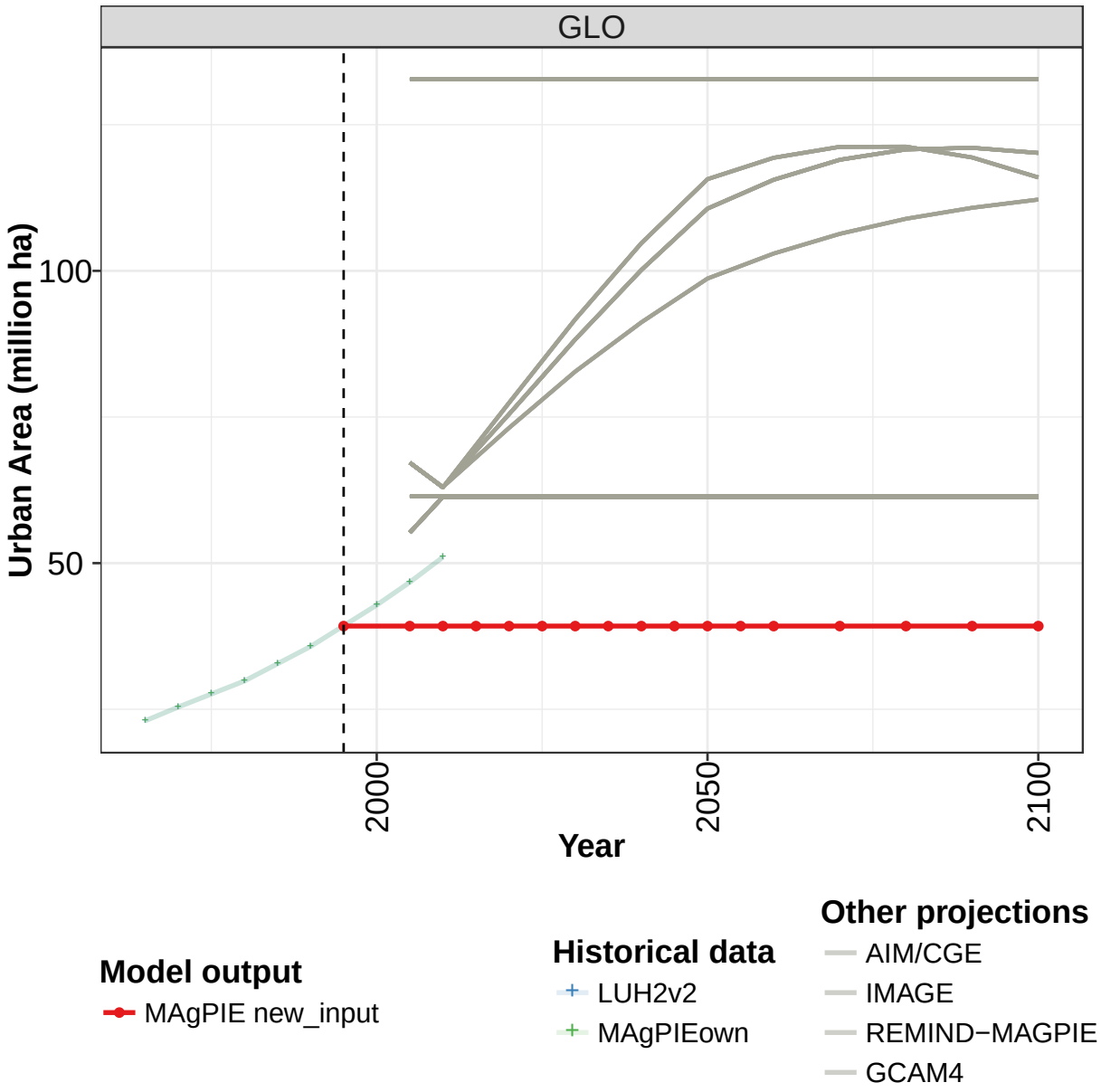
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3004	3025	3068	3110	3176	3242	3267	3293	3271	3280
CAZ	405	405	405	405	399	393	391	389	380	358
CHA	253	270	300	330	362	395	391	388	388	388
EUR	77	76	75	75	73	72	70	69	68	66
IND	14	13	13	13	12	12	12	12	11	11
LAM	465	476	490	503	516	529	539	549	549	555
MEA	303	303	306	308	327	346	356	367	353	353
NEU	21	20	20	19	20	21	21	20	21	21
OAS	181	181	178	176	177	178	179	180	166	187
REF	306	312	315	319	322	325	342	360	360	361
SSA	728	726	727	727	731	734	730	725	731	731
USA	252	241	238	236	236	237	236	236	243	249

Table 1335: LUH2v2 — Resources—Land Cover—Pastures and Rangelands (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3004	3025	3068	3110	3176	3242	3267	3293	3271	3280
CAZ	405	405	405	405	399	393	391	389	380	358
CHA	253	270	300	330	362	395	391	388	388	388
EUR	77	76	75	75	73	72	70	69	68	66
IND	14	13	13	13	12	12	12	12	11	11
LAM	465	476	490	503	516	529	539	549	549	555
MEA	303	303	306	308	327	346	356	367	353	353
NEU	21	20	20	19	20	21	21	20	21	21
OAS	181	181	178	176	177	178	179	180	166	187
REF	306	312	315	319	322	325	342	360	360	361
SSA	728	726	727	727	731	734	730	725	731	731
USA	252	241	238	236	236	237	236	236	243	249

Table 1336: MAgPIEown — Resources—Land Cover—Pastures and Rangelands (million ha)

54.5 Urban Area



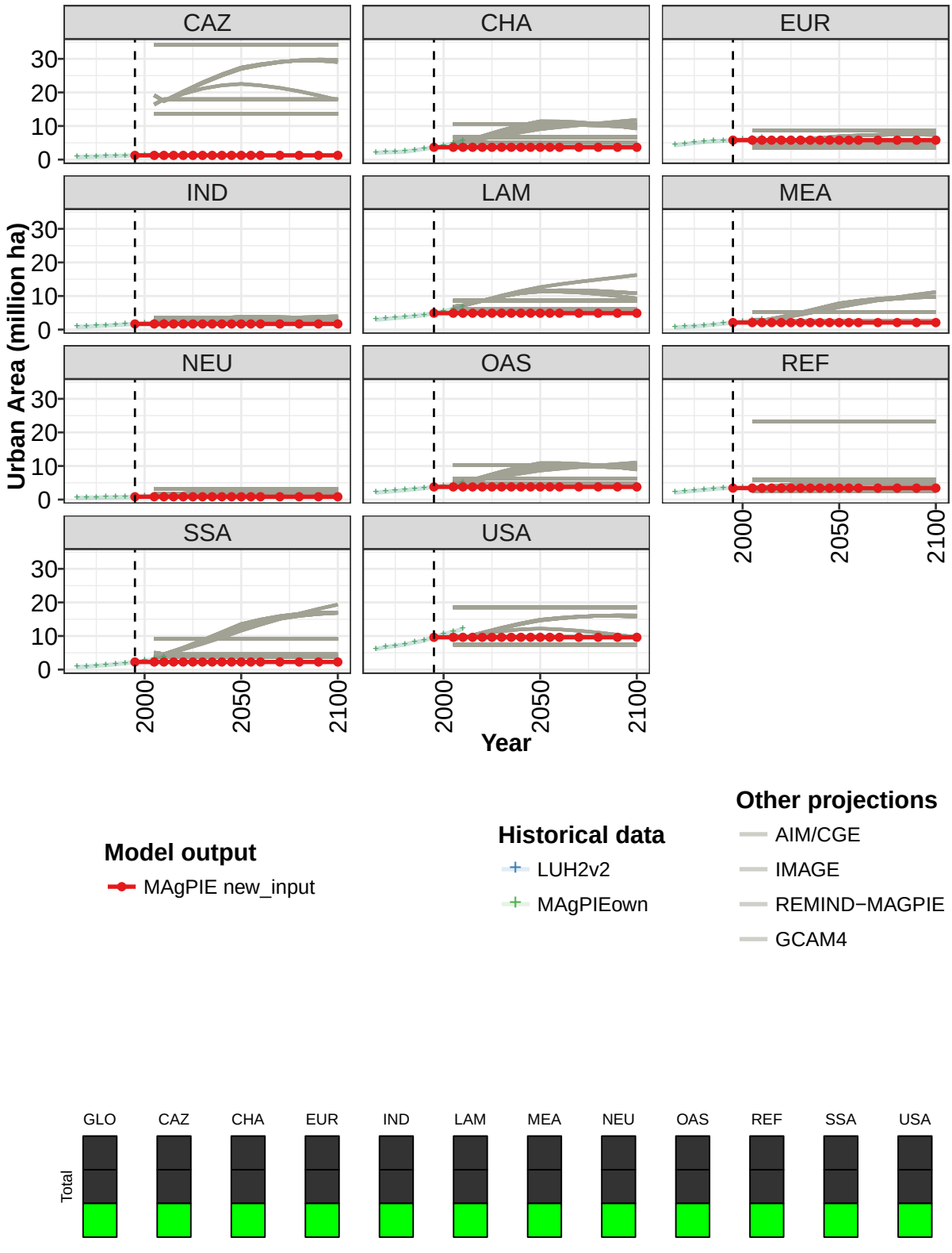


Figure 364: MAgPIE new_input — Resources—Land Cover—Urban Area (million ha)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2
CAZ	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
CHA	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
EUR	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
IND	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
LAM	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
MEA	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
NEU	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
OAS	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
REF	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
SSA	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
USA	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6

Table 1337: MAgPIE new_input — Resources—Land Cover—Urban Area (million ha) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	39.2	39.2	39.2	39.2	39.2	39.2
CAZ	1.3	1.3	1.3	1.3	1.3	1.3
CHA	3.7	3.7	3.7	3.7	3.7	3.7
EUR	5.8	5.8	5.8	5.8	5.8	5.8
IND	1.7	1.7	1.7	1.7	1.7	1.7
LAM	4.9	4.9	4.9	4.9	4.9	4.9
MEA	2.1	2.1	2.1	2.1	2.1	2.1
NEU	0.8	0.8	0.8	0.8	0.8	0.8
OAS	3.8	3.8	3.8	3.8	3.8	3.8
REF	3.4	3.4	3.4	3.4	3.4	3.4
SSA	2.3	2.3	2.3	2.3	2.3	2.3
USA	9.6	9.6	9.6	9.6	9.6	9.6

Table 1338: MAgPIE new_input — Resources—Land Cover—Urban Area (million ha) [PART 2/2]

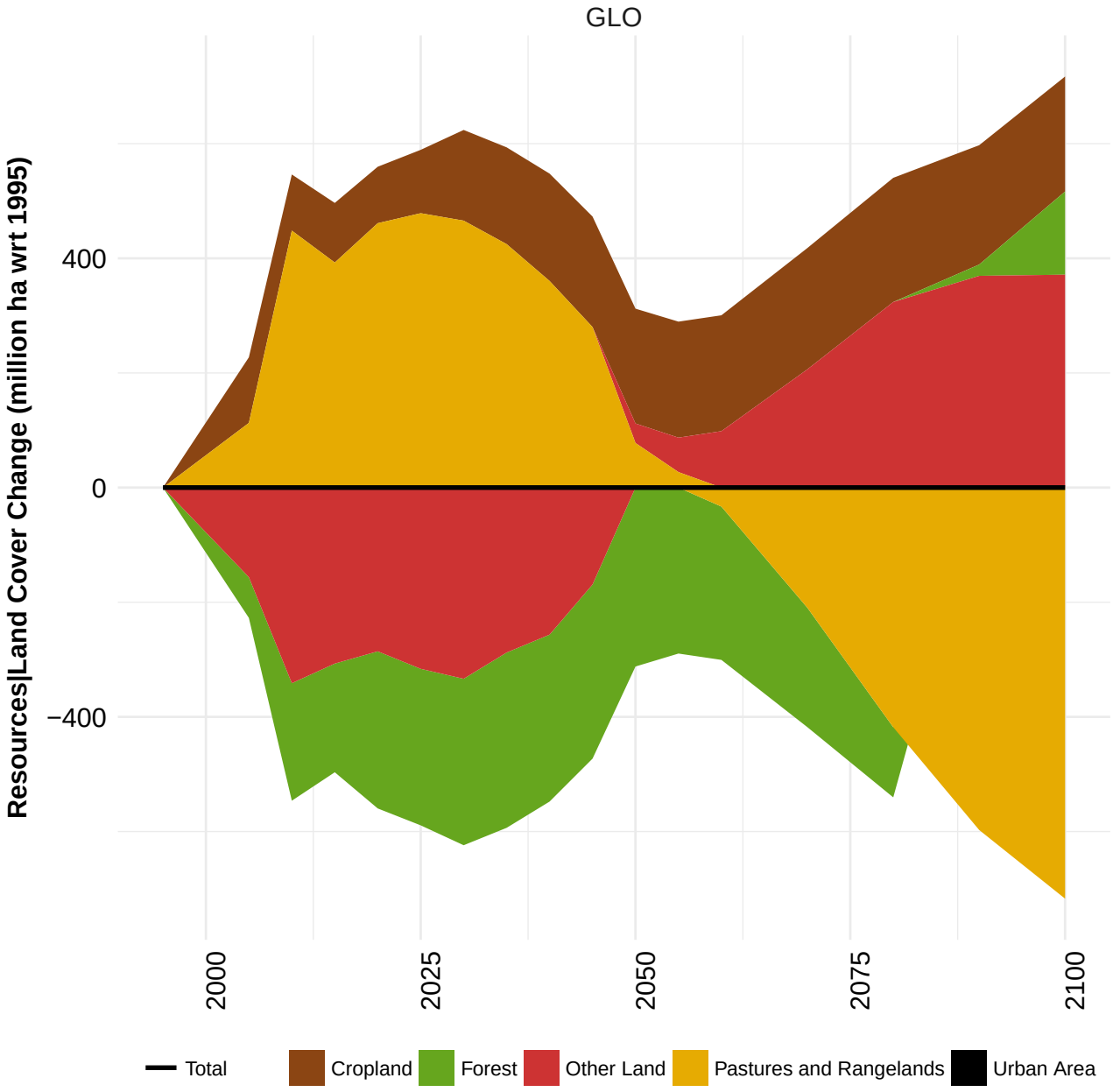
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	23.0	25.4	27.6	29.8	32.8	35.7	39.3	42.8	46.7	51.0
CAZ	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.5	1.6
CHA	2.1	2.2	2.3	2.3	2.8	3.2	3.7	4.1	4.7	5.5
EUR	4.3	4.6	4.9	5.3	5.5	5.6	5.8	5.9	6.2	6.4
IND	0.8	0.9	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.2
LAM	2.9	3.2	3.4	3.7	4.0	4.3	4.9	5.5	6.1	6.8
MEA	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.4	2.8	3.1
NEU	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1
OAS	2.1	2.3	2.6	2.8	3.1	3.4	3.8	4.2	4.5	4.9
REF	2.1	2.4	2.6	2.9	3.2	3.4	3.4	3.5	3.5	3.6
SSA	0.8	0.9	1.1	1.3	1.6	1.9	2.3	2.6	3.1	3.7
USA	6.1	6.7	7.1	7.5	8.1	8.7	9.6	10.5	11.3	12.1

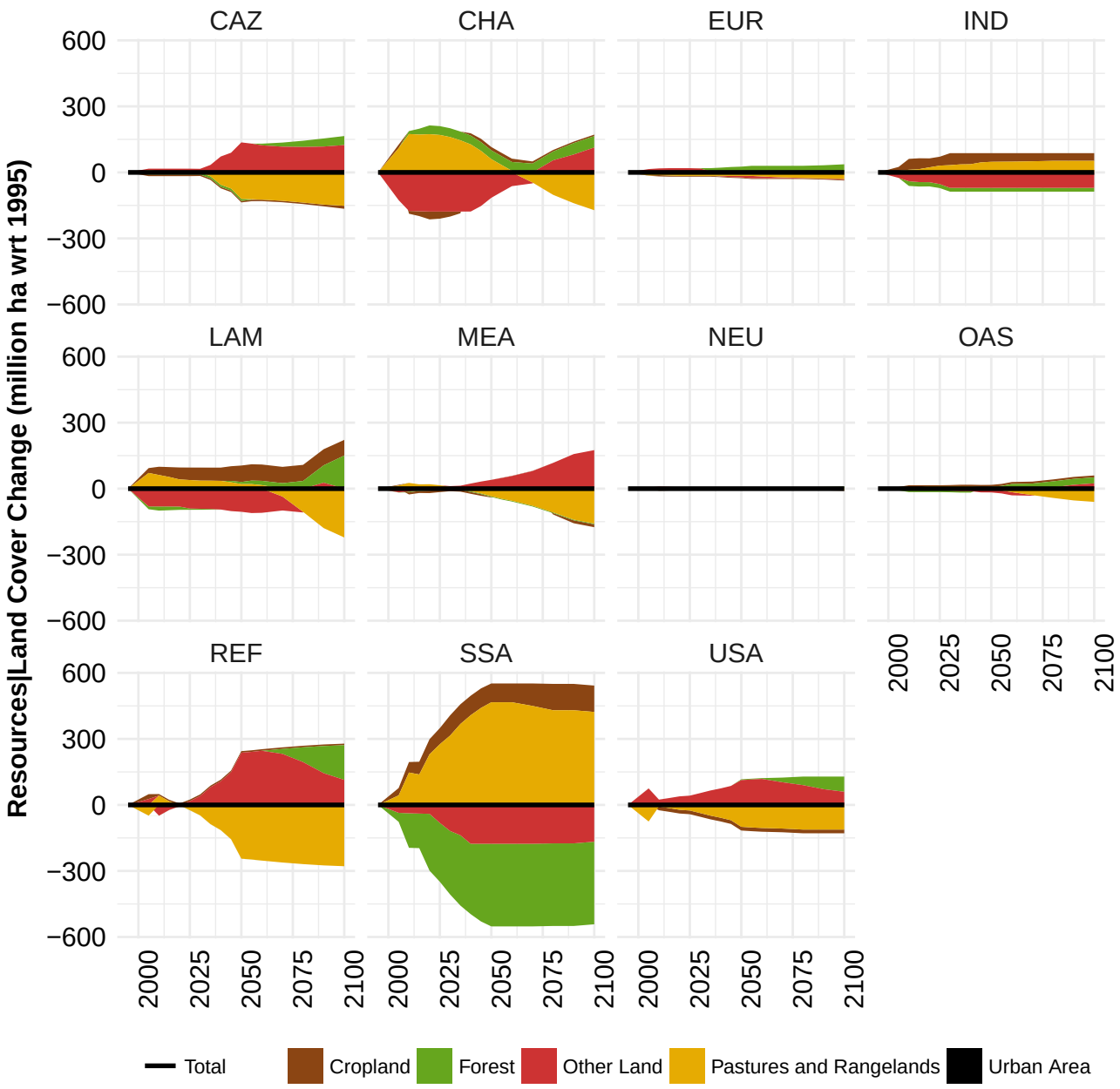
Table 1339: LUH2v2 — Resources—Land Cover—Urban Area (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	23.0	25.4	27.6	29.8	32.8	35.7	39.3	42.8	46.7	51.0
CAZ	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.5	1.6
CHA	2.1	2.2	2.3	2.3	2.8	3.2	3.7	4.1	4.7	5.5
EUR	4.3	4.6	4.9	5.3	5.5	5.6	5.8	5.9	6.2	6.4
IND	0.8	0.9	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.2
LAM	2.9	3.2	3.4	3.7	4.0	4.3	4.9	5.5	6.1	6.8
MEA	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.4	2.8	3.1
NEU	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1
OAS	2.1	2.3	2.6	2.8	3.1	3.4	3.8	4.2	4.5	4.9
REF	2.1	2.4	2.6	2.9	3.2	3.4	3.4	3.5	3.5	3.6
SSA	0.8	0.9	1.1	1.3	1.6	1.9	2.3	2.6	3.1	3.7
USA	6.1	6.7	7.1	7.5	8.1	8.7	9.6	10.5	11.3	12.1

Table 1340: MAgPIEown — Resources—Land Cover—Urban Area (million ha)

55 Land Cover Change




CAZ
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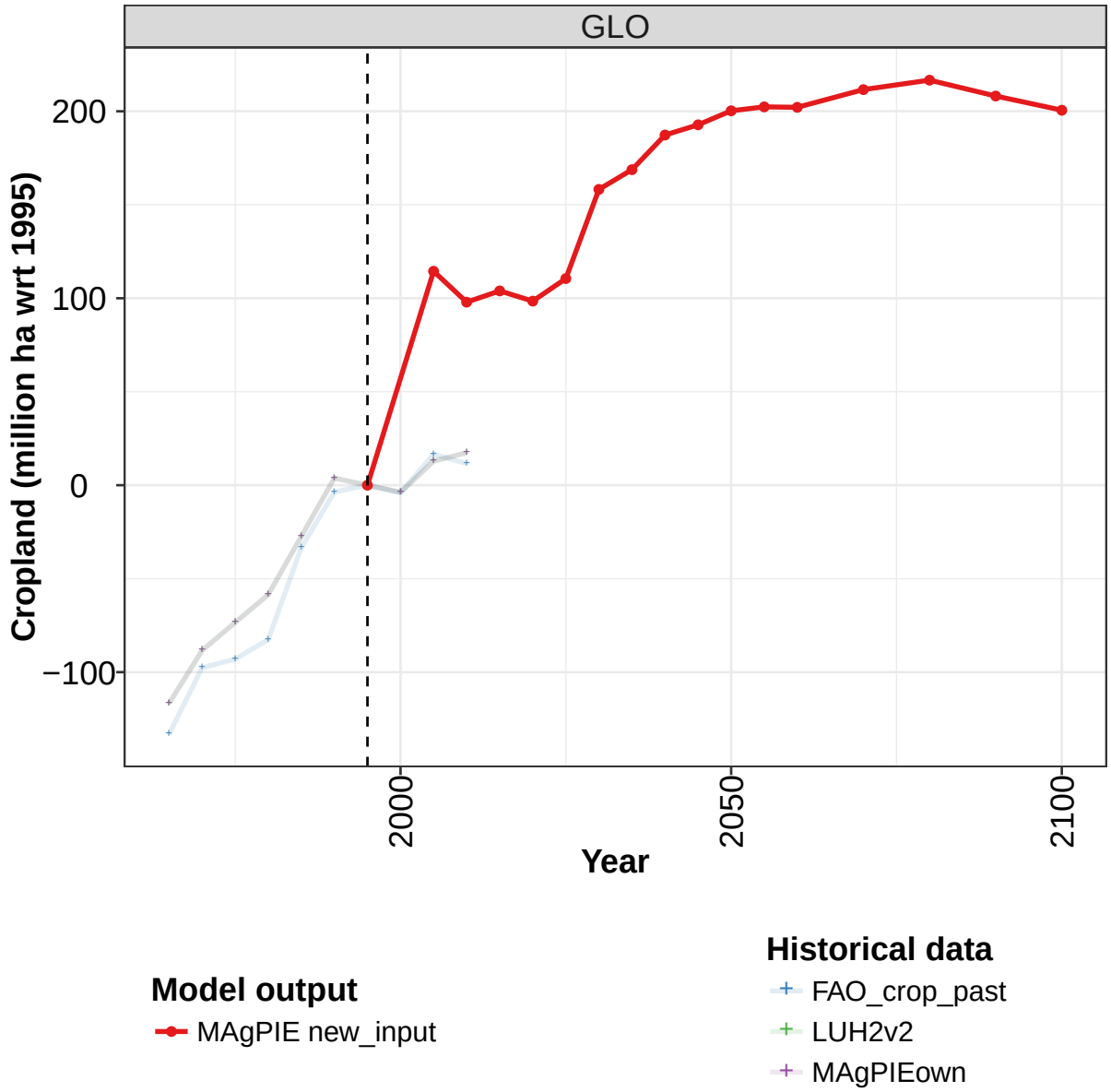
OAS
REF
SSA
USA
Resources|Land Cover Change (million ha wrt 1995)
600
300
0
−300
−600
2000
2025
2050
2075
2100
Total
Cropland
Forest
Other Land
Pastures and Rangelands
Urban Area

55.1 Cropland



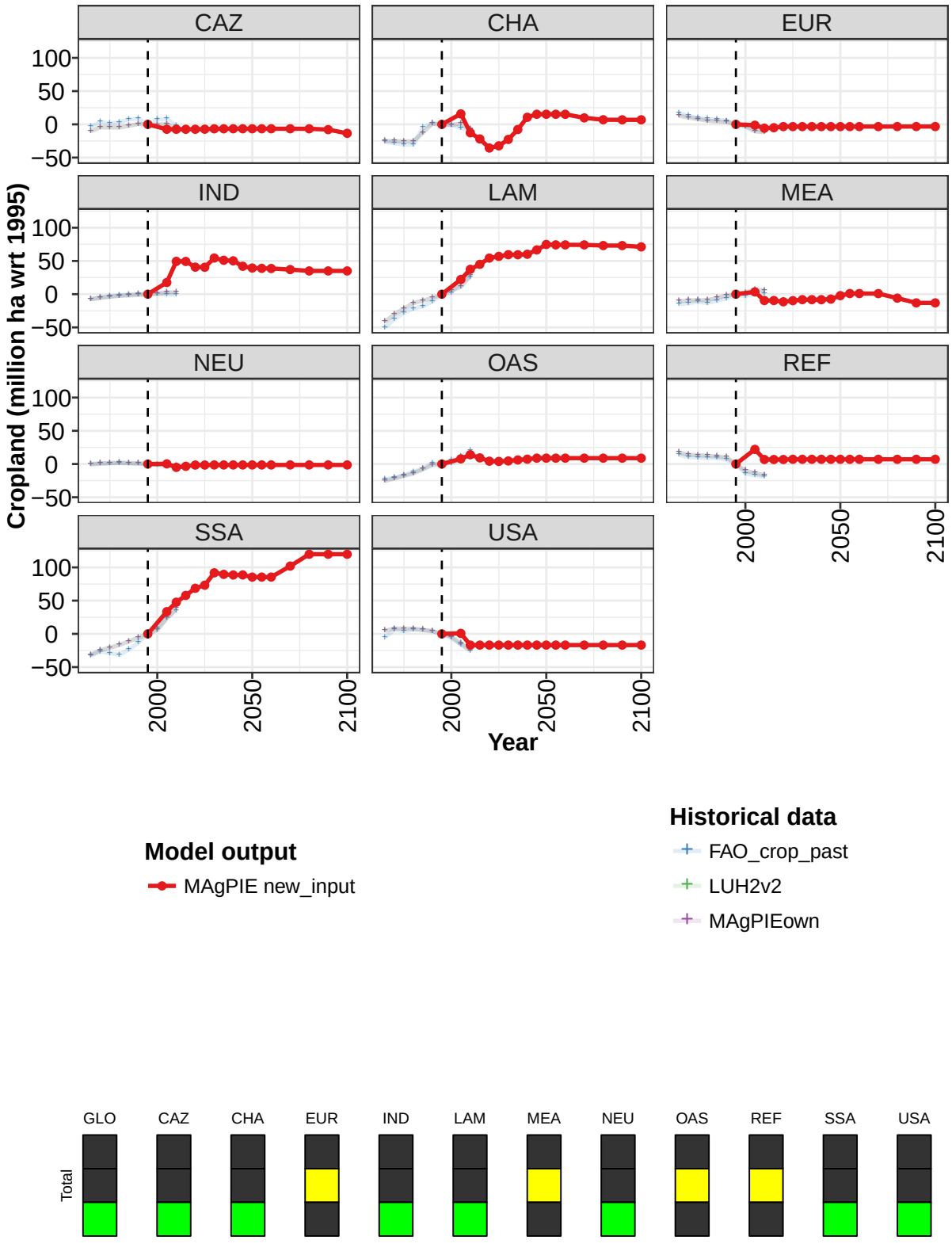


Figure 365: MAgPIE new_input — Resources—Land Cover Change—Cropland (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	114	98	104	98	111	158	169	187	193	200
CAZ	0	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7
CHA	0	16	-13	-22	-36	-32	-23	-8	11	15	15
EUR	0	-1	-6	-5	-3	-3	-3	-3	-3	-3	-3
IND	0	18	49	49	41	41	54	51	50	42	39
LAM	0	22	37	45	54	57	59	59	60	67	75
MEA	0	3	-10	-10	-11	-10	-8	-8	-8	-7	-2
NEU	0	0	-5	-3	-2	-2	-1	-1	-1	-1	-1
OAS	0	8	14	9	4	4	5	6	7	9	9
REF	0	22	7	7	7	7	7	7	7	7	7
SSA	0	33	48	58	69	73	92	90	89	89	85
USA	0	1	-17	-17	-17	-17	-17	-17	-17	-17	-17

Table 1341: MAgPIE new_input — Resources—Land Cover Change—Cropland (million ha wrt 1995) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	202	202	212	217	208	201
CAZ	-7	-7	-7	-7	-8	-14
CHA	15	15	10	7	7	7
EUR	-3	-3	-3	-3	-3	-3
IND	39	39	37	35	35	35
LAM	74	74	74	73	73	71
MEA	1	1	1	-6	-13	-13
NEU	-1	-1	-1	-1	-1	-1
OAS	9	9	9	9	9	9
REF	7	7	7	7	7	7
SSA	85	85	102	120	120	120
USA	-17	-17	-17	-17	-17	-17

Table 1342: MAgPIE new_input — Resources—Land Cover Change—Cropland (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-133.1	-97.7	-93.0	-82.6	-33.4	-3.7	0.0	-4.0	16.6	11.6
CAZ	-3.1	3.5	1.3	3.1	7.5	8.4	0.0	7.1	8.1	-2.3
CHA	-26.4	-28.4	-30.2	-30.7	-5.0	1.3	0.0	-0.9	-5.4	-8.3
EUR	16.5	13.1	9.1	8.0	7.4	5.5	0.0	-2.0	-7.4	-10.3
IND	-7.5	-4.9	-3.1	-1.8	-0.6	0.2	0.0	0.2	-0.2	-0.7
LAM	-50.1	-37.3	-27.9	-21.6	-18.2	-11.1	0.0	2.1	18.6	25.3
MEA	-14.9	-13.8	-11.2	-13.4	-9.5	-6.8	0.0	-3.2	1.5	1.2
NEU	-0.5	0.6	0.8	1.6	0.7	0.8	0.0	-1.1	-1.0	-3.3
OAS	-23.0	-20.9	-16.8	-11.9	-7.1	1.3	0.0	5.3	11.9	19.9
REF	13.9	10.4	9.9	9.0	9.3	6.5	0.0	-14.1	-17.0	-19.1
SSA	-32.8	-26.6	-29.0	-31.5	-23.6	-13.4	0.0	8.6	23.9	34.8
USA	-5.3	6.4	4.1	6.5	5.7	3.6	0.0	-6.1	-16.3	-25.6

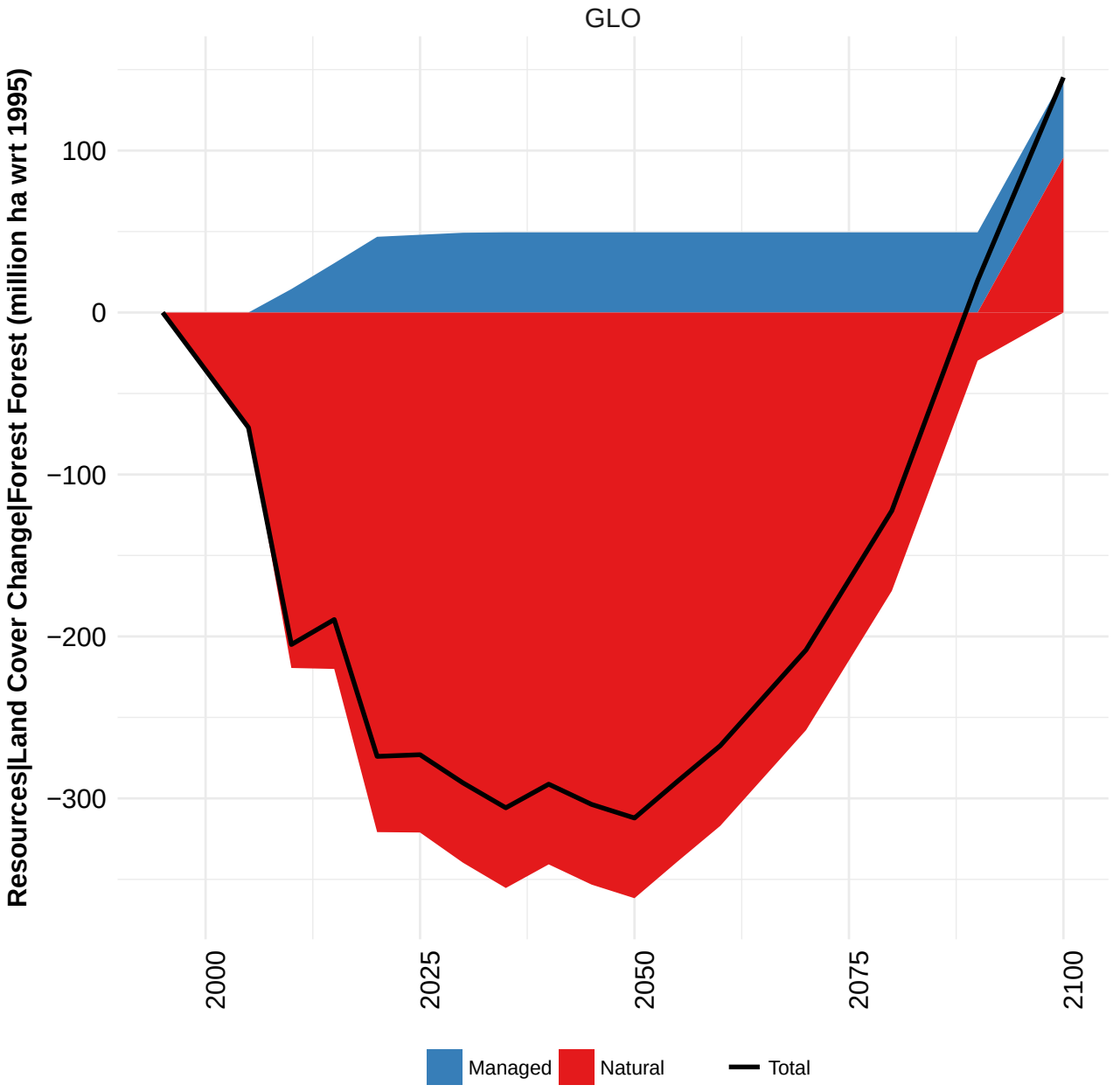
Table 1343: FAO_crop_past — Resources—Land Cover Change—Cropland (million ha wrt 1995)

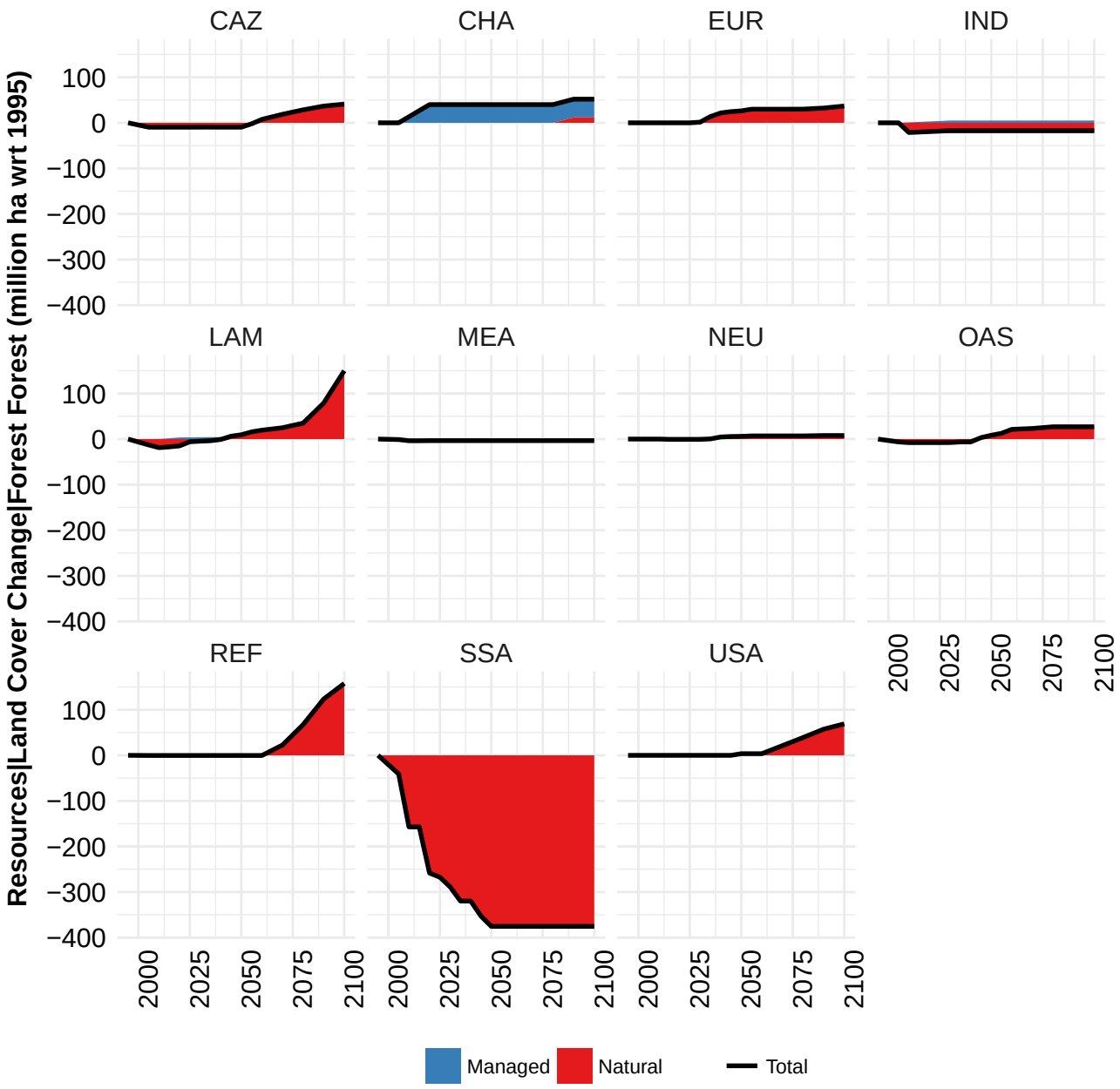
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-116.7	-88.3	-73.4	-58.5	-27.3	3.8	0.0	-3.8	12.9	17.4
CAZ	-10.3	-4.5	-4.6	-4.8	-2.1	0.6	0.0	-0.6	0.5	-9.8
CHA	-24.9	-25.3	-25.5	-25.7	-12.4	1.0	0.0	-1.0	1.1	-7.1
EUR	13.0	10.2	7.9	5.5	4.4	3.3	0.0	-3.3	-10.5	-11.8
IND	-7.5	-5.5	-4.0	-2.4	-1.8	-1.2	0.0	1.2	2.8	2.6
LAM	-41.5	-30.2	-21.8	-13.4	-9.7	-5.9	0.0	5.9	11.0	28.1
MEA	-10.7	-9.5	-9.2	-9.0	-5.6	-2.2	0.0	2.2	6.9	5.7
NEU	-0.0	1.0	1.4	1.9	1.5	1.1	0.0	-1.1	-0.9	-3.0
OAS	-25.3	-21.7	-17.9	-14.1	-7.8	-1.6	0.0	1.6	6.7	15.2
REF	17.2	14.0	13.3	12.6	11.3	10.1	0.0	-10.1	-13.8	-16.8
SSA	-31.4	-24.7	-20.8	-16.8	-11.3	-5.8	0.0	5.8	23.5	38.2
USA	4.8	8.0	7.8	7.7	6.1	4.4	0.0	-4.4	-14.6	-23.9

Table 1344: LUH2v2 — Resources—Land Cover Change—Cropland (million ha wrt 1995)

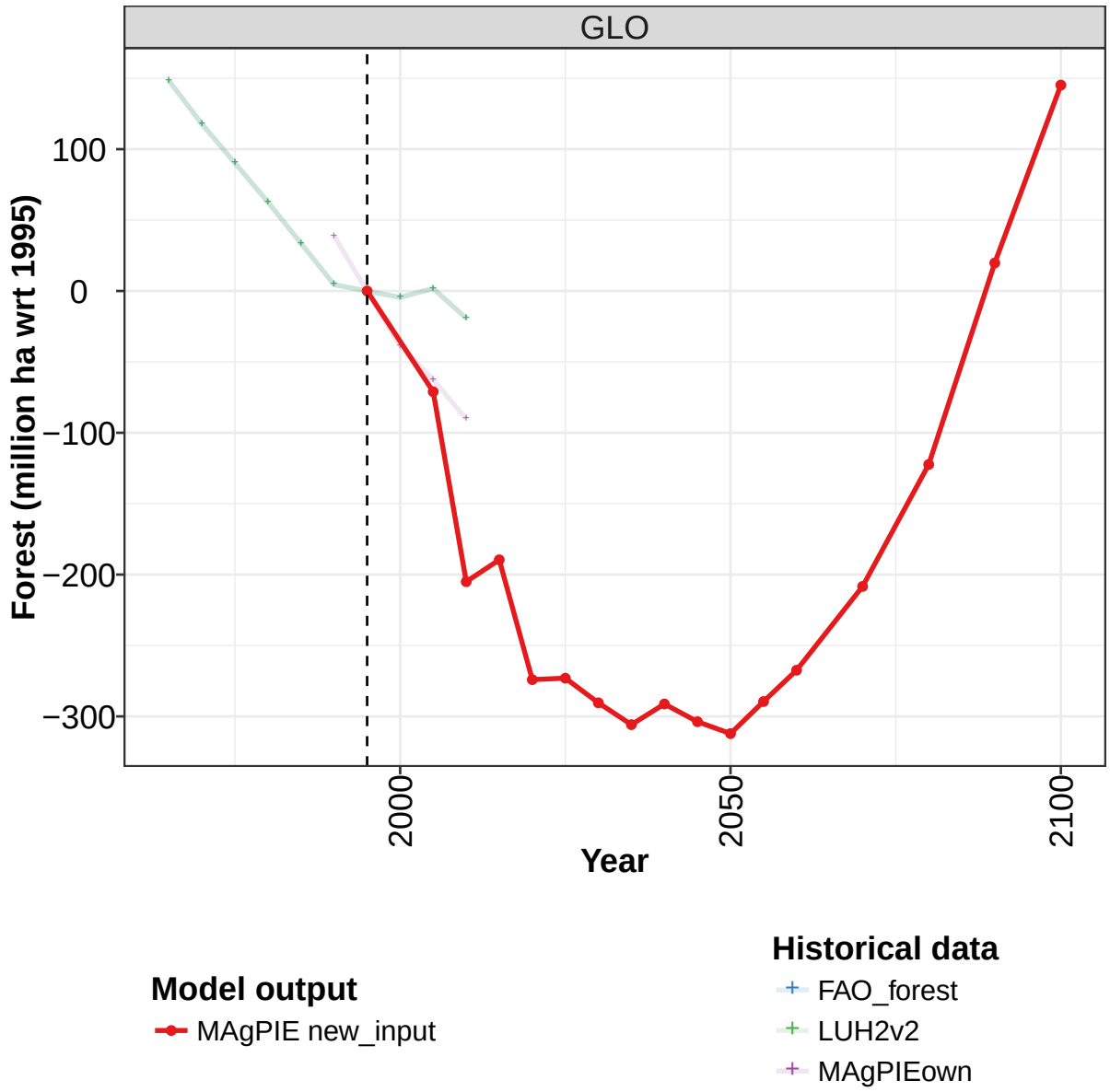
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-116.7	-88.3	-73.4	-58.5	-27.3	3.8	0.0	-3.8	12.9	17.4
CAZ	-10.3	-4.5	-4.6	-4.8	-2.1	0.6	0.0	-0.6	0.5	-9.8
CHA	-24.9	-25.3	-25.5	-25.7	-12.4	1.0	0.0	-1.0	1.1	-7.1
EUR	13.0	10.2	7.9	5.5	4.4	3.3	0.0	-3.3	-10.5	-11.8
IND	-7.5	-5.5	-4.0	-2.4	-1.8	-1.2	0.0	1.2	2.8	2.6
LAM	-41.5	-30.2	-21.8	-13.4	-9.7	-5.9	0.0	5.9	11.0	28.1
MEA	-10.7	-9.5	-9.2	-9.0	-5.6	-2.2	0.0	2.2	6.9	5.7
NEU	-0.0	1.0	1.4	1.9	1.5	1.1	0.0	-1.1	-0.9	-3.0
OAS	-25.3	-21.7	-17.9	-14.1	-7.8	-1.6	0.0	1.6	6.7	15.2
REF	17.2	14.0	13.3	12.6	11.3	10.1	0.0	-10.1	-13.8	-16.8
SSA	-31.4	-24.7	-20.8	-16.8	-11.3	-5.8	0.0	5.8	23.5	38.2
USA	4.8	8.0	7.8	7.7	6.1	4.4	0.0	-4.4	-14.6	-23.9

Table 1345: MAgPIEown — Resources—Land Cover Change—Cropland (million ha wrt 1995)


GLO
Resources|Land Cover Change|Forest Forest (million ha wrt 1995)
100
0
−100
−200
−300
2000
2025
2050
2075
2100
Managed
Natural
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Resources|Land Cover Change|Forest Forest (million ha wrt 1995)
100
0
−100
−200
−300
−400
2000
2025
2050
2075
2100
Managed
Natural
Total

55.2 Forest


GLO
Forest (million ha wrt 1995)
100
0
−100
−200
−300
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO_forest
LUH2v2
MAgPIEown

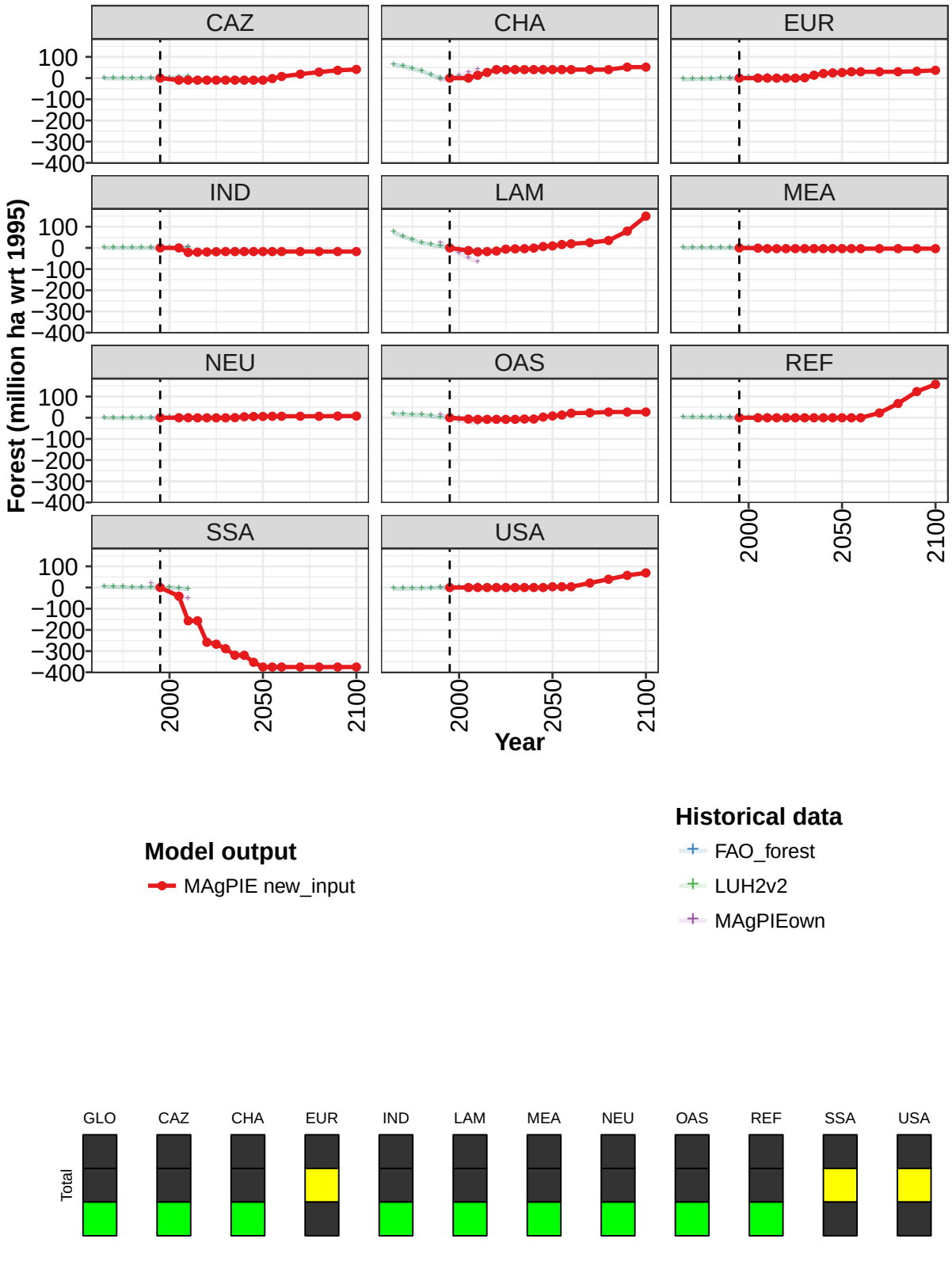


Figure 366: MAgPIE new_input — Resources—Land Cover Change—Forest (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	-71	-205	-190	-274	-273	-290	-306	-291	-304	-312
CAZ	0	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
CHA	0	0	13	27	40	40	40	40	40	40	40
EUR	0	0	0	0	0	0	1	14	22	25	26
IND	0	-0	-21	-20	-19	-18	-17	-17	-17	-17	-17
LAM	0	-13	-19	-17	-15	-6	-5	-4	-1	6	9
MEA	0	-1	-4	-4	-3	-3	-3	-3	-3	-3	-3
NEU	0	0	0	-1	-1	-1	-1	0	5	6	6
OAS	0	-6	-8	-8	-8	-8	-8	-6	-6	3	8
REF	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
SSA	0	-41	-157	-157	-258	-267	-289	-320	-320	-353	-375
USA	0	0	0	0	0	0	0	0	0	0	4

Table 1346: MAgPIE new_input — Resources—Land Cover Change—Forest (million ha wrt 1995) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	-290	-267	-208	-122	20	145
CAZ	-2	8	19	28	37	41
CHA	40	40	40	40	52	52
EUR	30	30	30	30	32	37
IND	-17	-17	-17	-17	-17	-17
LAM	16	19	25	35	79	150
MEA	-3	-3	-3	-3	-3	-3
NEU	7	7	7	7	8	8
OAS	13	21	23	27	27	27
REF	-0	-0	23	67	124	158
SSA	-375	-375	-375	-375	-375	-375
USA	4	4	21	39	57	69

Table 1347: MAgPIE new_input — Resources—Land Cover Change—Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	148	118	90	63	34	5	0	-5	2	-19
CAZ	-1	-1	-1	-1	-1	-0	0	0	4	7
CHA	63	56	45	33	16	-1	0	1	0	3
EUR	-6	-5	-4	-3	-2	-2	0	2	3	3
IND	1	1	0	0	0	0	0	-0	-0	-0
LAM	74	53	39	24	16	8	0	-8	-8	-15
MEA	0	0	0	0	0	0	0	0	0	0
NEU	-1	-1	-1	-1	-1	-1	0	1	1	1
OAS	17	15	15	14	8	2	0	-2	-3	-22
REF	2	2	1	1	1	0	0	-0	5	5
SSA	5	3	2	0	-0	-0	0	0	-4	-7
USA	-6	-5	-5	-4	-2	-1	0	1	3	6

Table 1348: LUH2v2 — Resources—Land Cover Change—Forest (million ha wrt 1995)

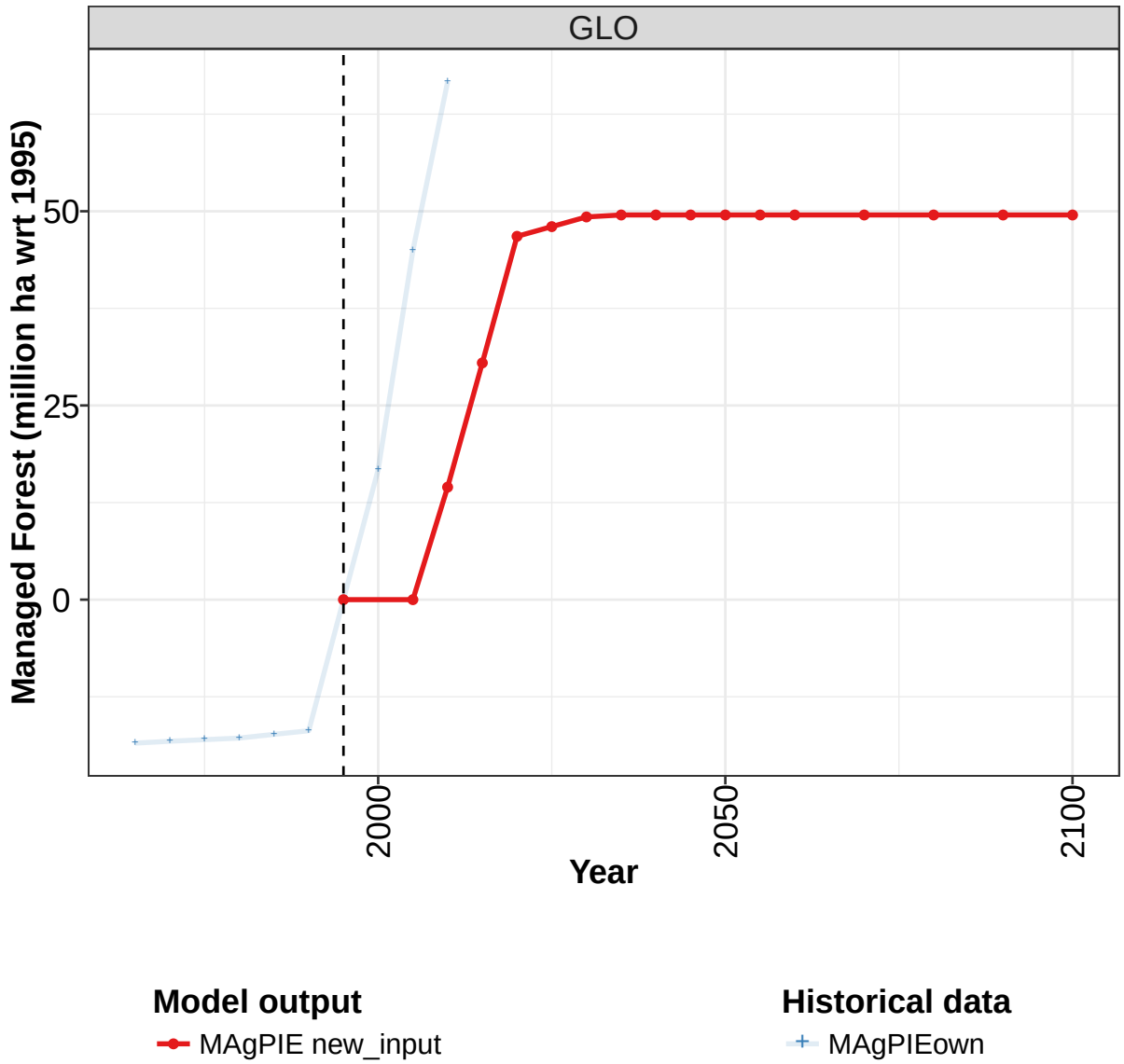
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	148	118	90	63	34	5	0	-5	2	-19
CAZ	-1	-1	-1	-1	-1	-0	0	0	4	7
CHA	63	56	45	33	16	-1	0	1	0	3
EUR	-6	-5	-4	-3	-2	-2	0	2	3	3
IND	1	1	0	0	0	0	0	-0	-0	-0
LAM	74	53	39	24	16	8	0	-8	-8	-15
MEA	0	0	0	0	0	0	0	0	0	0
NEU	-1	-1	-1	-1	-1	-1	0	1	1	1
OAS	17	15	15	14	8	2	0	-2	-3	-22
REF	2	2	1	1	1	0	0	-0	5	5
SSA	5	3	2	0	-0	-0	0	0	-4	-7
USA	-6	-5	-5	-4	-2	-1	0	1	3	6

Table 1349: MAgPIEown — Resources—Land Cover Change—Forest (million ha wrt 1995)

	1990	1995	2000	2005	2010
GLO	38.7	0.0	-38.7	-62.6	-90.2
CAZ	-0.5	0.0	0.5	-0.5	-5.1
CHA	-9.9	0.0	9.9	26.0	39.8
EUR	-3.6	0.0	3.7	6.3	8.9
IND	-0.7	0.0	0.7	3.0	3.8
LAM	24.4	0.0	-24.4	-48.6	-68.3
MEA	-0.1	0.0	0.1	0.3	0.4
NEU	-0.4	0.0	0.4	1.5	2.7
OAS	14.7	0.0	-14.7	-20.5	-27.9
REF	-0.6	0.0	0.6	0.4	1.0
SSA	17.4	0.0	-17.4	-34.4	-51.2
USA	-1.9	0.0	1.9	3.8	5.8

Table 1350: FAO_forest — Resources—Land Cover Change—Forest (million ha wrt 1995)

55.2.1 Managed Forest



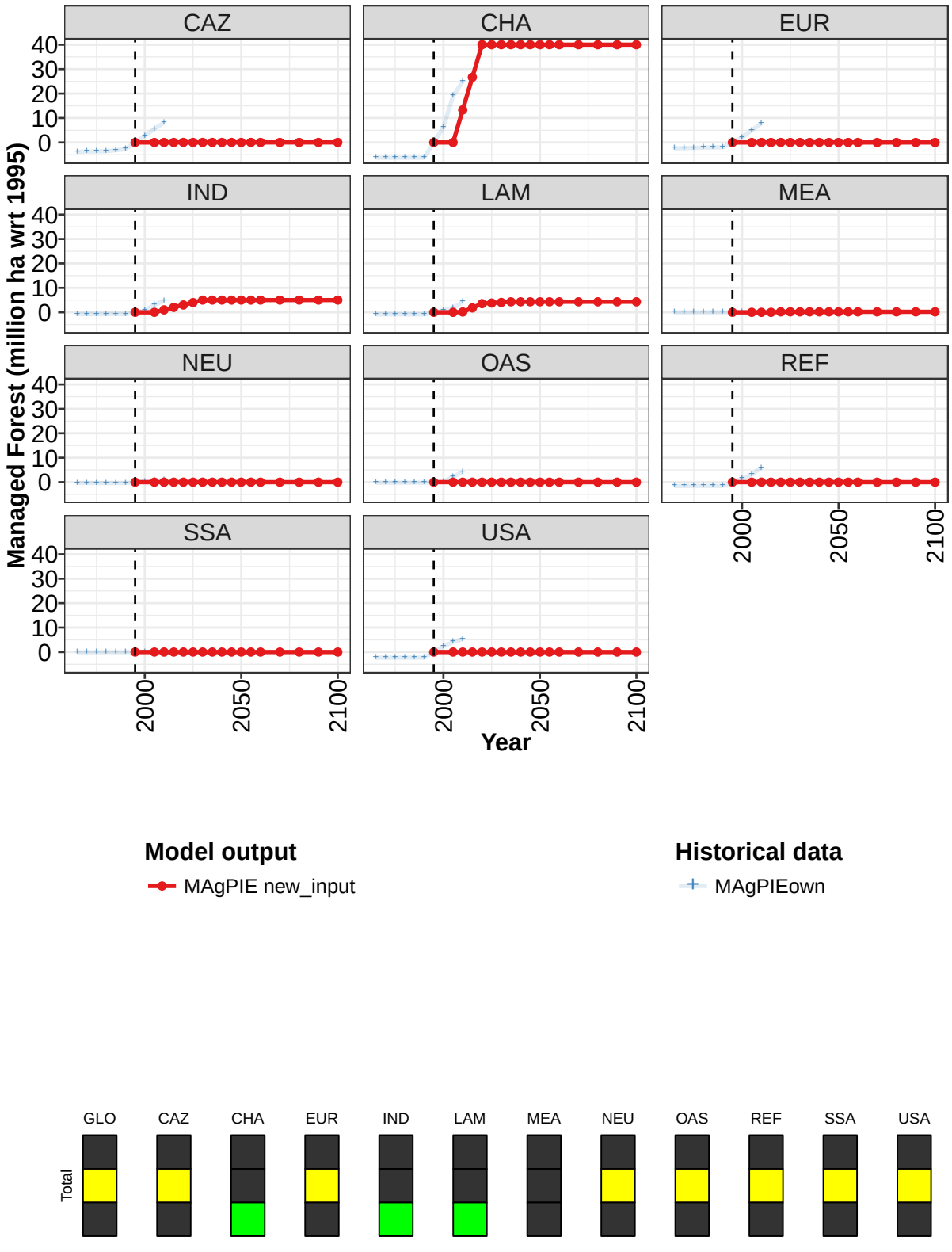


Figure 367: MAgPIE new_input — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0	0.0	14.5	30.5	46.8	48.0	49.3	49.5	49.5	49.5	49.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	13.3	26.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0
LAM	0.0	0.0	0.2	1.8	3.5	3.8	4.1	4.3	4.3	4.3	4.3
MEA	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1351: MAgPIE new_input — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995) [PART 1/2]

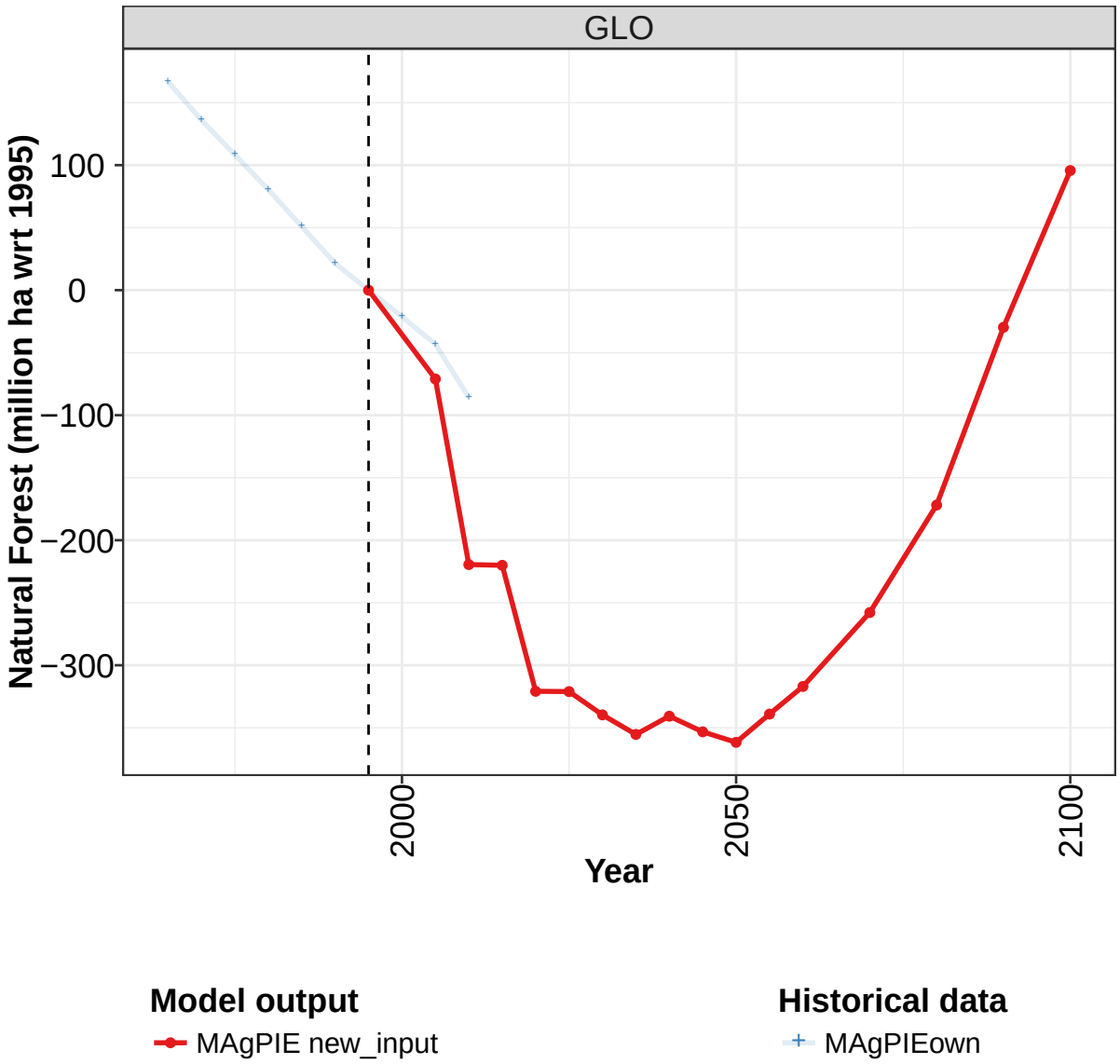
	2055	2060	2070	2080	2090	2100
GLO	49.5	49.5	49.5	49.5	49.5	49.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	40.0	40.0	40.0	40.0	40.0	40.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	5.0	5.0	5.0	5.0	5.0	5.0
LAM	4.3	4.3	4.3	4.3	4.3	4.3
MEA	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 1352: MAgPIE new_input — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-18.5	-18.2	-18.0	-17.8	-17.3	-16.9	0.0	16.7	44.9	66.6
CAZ	-3.8	-3.7	-3.6	-3.6	-3.2	-2.7	0.0	2.7	5.6	8.1
CHA	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	0.0	6.2	19.0	24.9
EUR	-2.4	-2.3	-2.2	-2.1	-2.0	-2.0	0.0	2.0	5.0	7.8
IND	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	0.0	0.7	3.0	4.7
LAM	-0.9	-0.9	-0.8	-0.8	-0.8	-0.8	0.0	0.8	1.8	4.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	0.3	0.6	0.9
OAS	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	0.2	2.2	4.2
REF	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	0.0	1.4	3.1	5.9
SSA	-0.1	-0.1	-0.1	-0.0	-0.0	-0.1	0.0	0.1	0.3	0.6
USA	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	0.0	2.3	4.2	5.3

Table 1353: MAgPIEown — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995)

55.2.2 Natural Forest



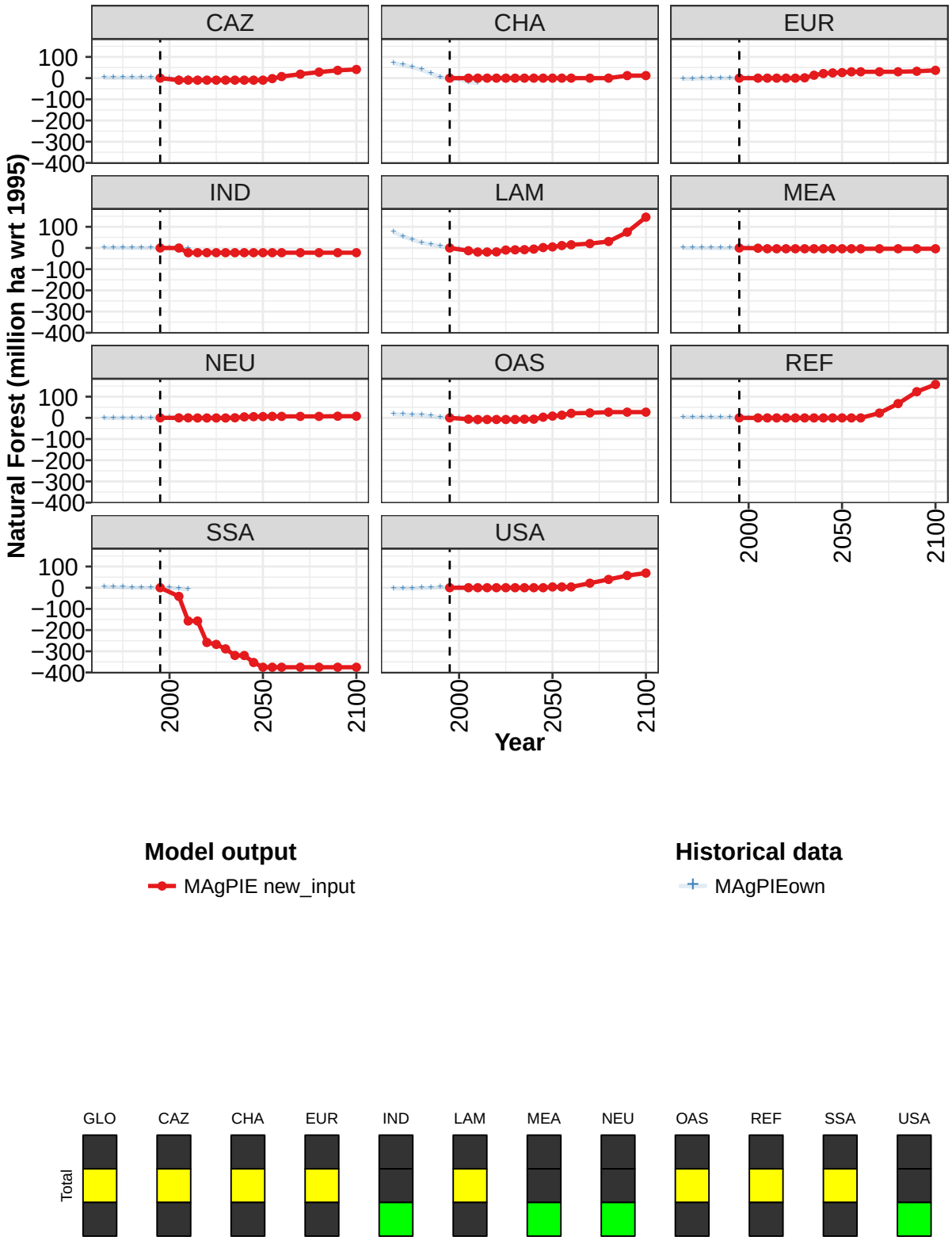


Figure 368: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	-71	-219	-220	-321	-321	-340	-355	-341	-353	-362
CAZ	0	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	1	14	22	25	26
IND	0	-0	-22	-22	-22	-22	-22	-22	-22	-22	-22
LAM	0	-13	-19	-19	-18	-10	-9	-8	-5	2	5
MEA	0	-1	-4	-4	-4	-4	-4	-4	-4	-4	-4
NEU	0	0	0	-1	-1	-1	-1	0	5	6	6
OAS	0	-6	-8	-8	-8	-8	-8	-6	-6	3	8
REF	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
SSA	0	-41	-157	-157	-258	-267	-289	-320	-320	-353	-375
USA	0	0	0	0	0	0	0	0	0	0	4

Table 1354: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995) [PART 1/2]

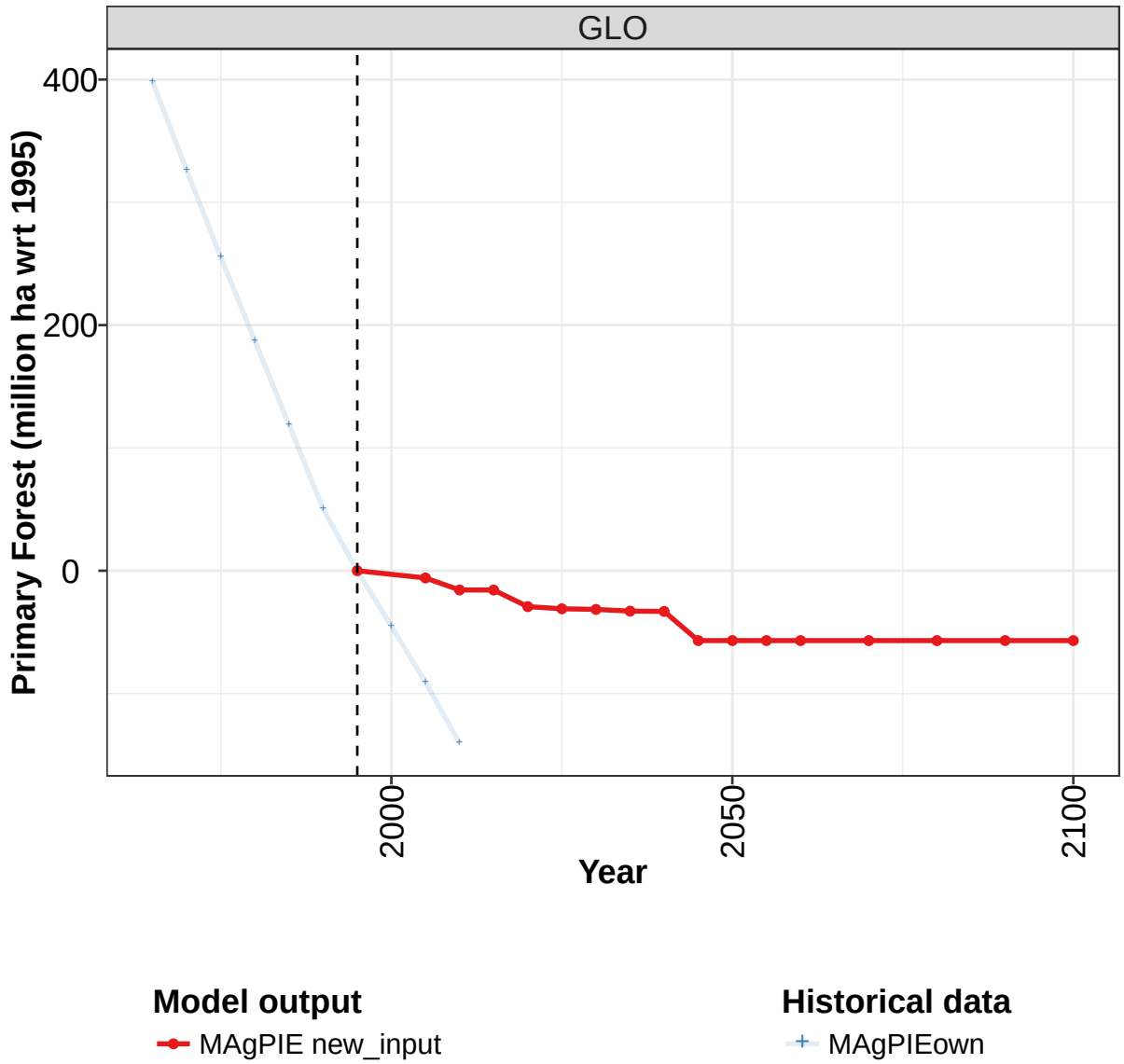
	2055	2060	2070	2080	2090	2100
GLO	-339	-317	-258	-172	-30	96
CAZ	-2	8	19	28	37	41
CHA	0	0	0	0	12	12
EUR	30	30	30	30	32	37
IND	-22	-22	-22	-22	-22	-22
LAM	12	15	21	31	75	146
MEA	-4	-4	-4	-4	-4	-4
NEU	7	7	7	7	8	8
OAS	13	21	23	27	27	27
REF	-0	-0	23	67	124	158
SSA	-375	-375	-375	-375	-375	-375
USA	4	4	21	39	57	69

Table 1355: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	167	136	108	80	51	21	0	-21	-43	-86
CAZ	3	3	2	2	2	2	0	-2	-2	-1
CHA	70	63	51	39	22	5	0	-5	-19	-22
EUR	-4	-3	-2	-1	-0	0	0	-0	-2	-4
IND	2	1	1	1	1	1	0	-1	-3	-5
LAM	75	54	40	25	17	8	0	-8	-9	-19
MEA	0	0	0	0	0	0	0	0	0	0
NEU	-1	-1	-1	-0	-0	-1	0	1	0	-0
OAS	17	16	15	14	8	2	0	-2	-5	-26
REF	3	3	3	2	2	2	0	-2	2	-1
SSA	5	3	2	0	-0	-0	0	0	-4	-7
USA	-4	-3	-2	-2	-0	2	0	-2	-1	1

Table 1356: MAgPIEown — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995)

55.2.3 Natural Forest—Primary Forest



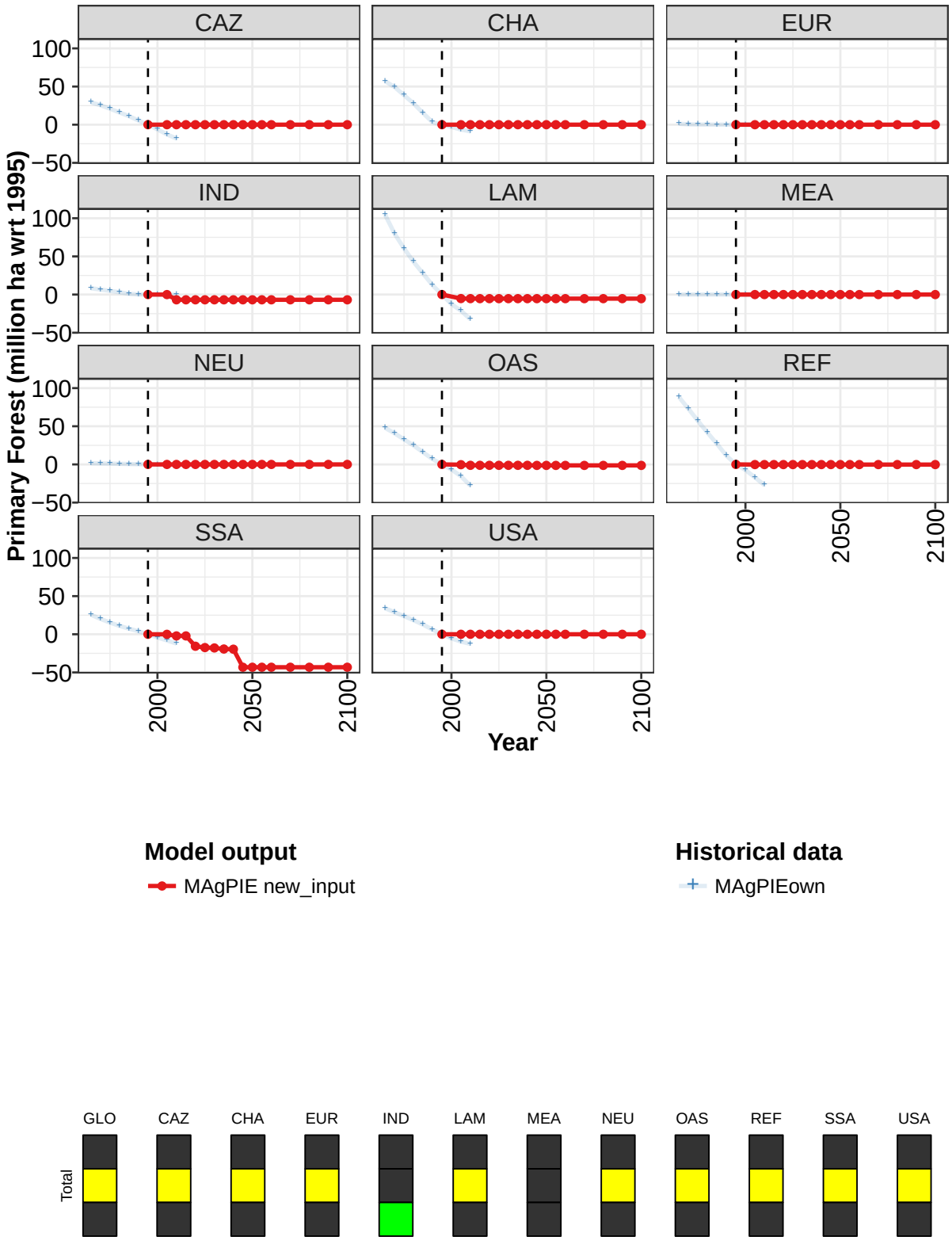


Figure 369: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	-6	-16	-16	-29	-31	-31	-33	-33	-57	-57
CAZ	0	0	0	0	-0	-0	-0	-0	-0	-0	-0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	-0	-7	-7	-7	-7	-7	-7	-7	-7	-7
LAM	0	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	-0	-1	-1	-1	-1	-1	-1	-1	-1	-1
REF	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
SSA	0	-0	-2	-2	-16	-17	-18	-19	-20	-43	-43
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1357: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995) [PART 1/2]

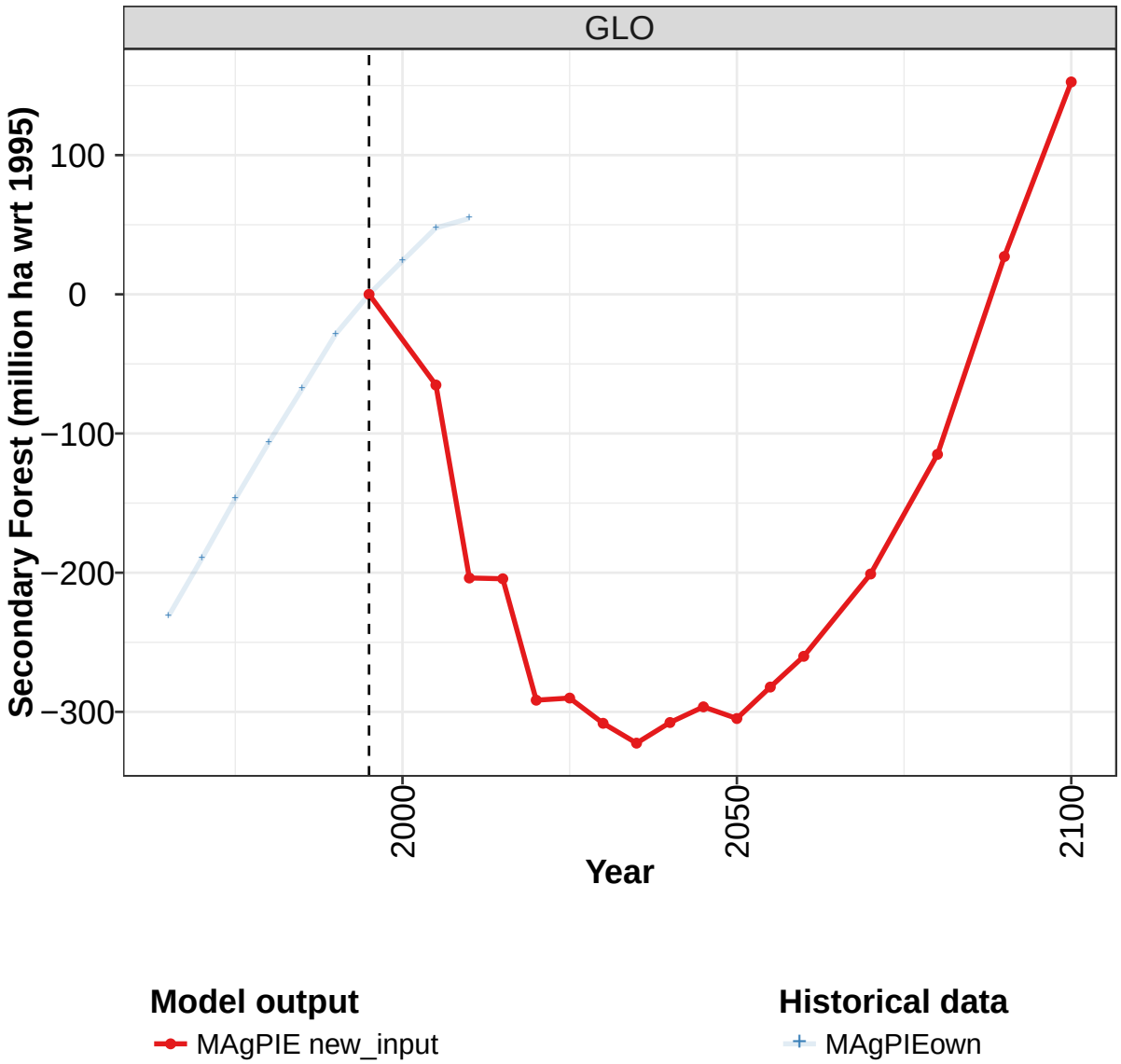
	2055	2060	2070	2080	2090	2100
GLO	-57	-57	-57	-57	-57	-57
CAZ	-0	-0	-0	-0	-0	-0
CHA	0	0	0	0	0	0
EUR	0	0	0	0	0	0
IND	-7	-7	-7	-7	-7	-7
LAM	-5	-5	-5	-5	-5	-5
MEA	0	0	0	0	0	0
NEU	0	0	0	0	0	0
OAS	-1	-1	-1	-1	-1	-1
REF	-0	-0	-0	-0	-0	-0
SSA	-43	-43	-43	-43	-43	-43
USA	0	0	0	0	0	0

Table 1358: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	398	326	255	187	119	50	0	-45	-91	-140
CAZ	29	25	21	16	11	5	0	-6	-13	-18
CHA	57	49	39	28	15	3	0	-3	-6	-9
EUR	1	0	0	0	0	0	0	-0	-0	-0
IND	8	7	5	3	1	0	0	-0	-0	-0
LAM	105	80	61	43	28	12	0	-13	-21	-33
MEA	0	0	0	0	0	0	0	0	0	0
NEU	2	1	1	1	1	0	0	-0	-0	-1
OAS	48	41	33	25	16	7	0	-7	-16	-28
REF	88	73	57	42	27	11	0	-7	-17	-27
SSA	26	20	15	11	7	4	0	-4	-8	-12
USA	34	29	24	18	13	6	0	-5	-10	-13

Table 1359: MAgPIEown — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995)

55.2.4 Natural Forest—Secondary Forest



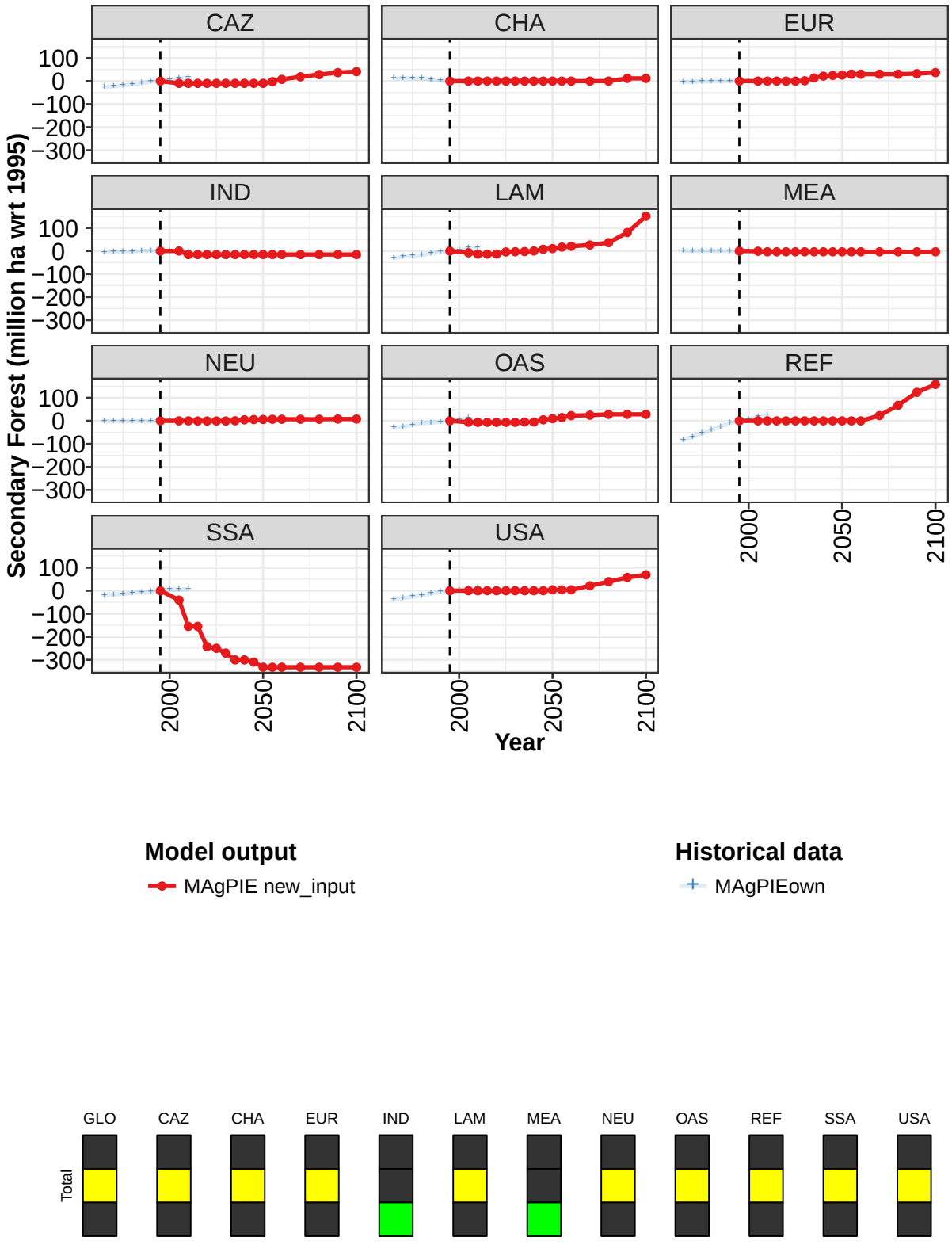


Figure 370: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	-65	-204	-204	-292	-290	-308	-322	-308	-296	-305
CAZ	0	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	1	14	22	25	26
IND	0	-0	-15	-15	-15	-15	-15	-15	-15	-15	-15
LAM	0	-8	-14	-14	-13	-4	-3	-3	0	7	11
MEA	0	-1	-4	-4	-4	-4	-4	-4	-4	-4	-4
NEU	0	0	0	-1	-1	-1	-1	0	5	6	6
OAS	0	-6	-7	-7	-7	-7	-6	-5	-5	4	10
REF	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
SSA	0	-41	-155	-155	-243	-250	-271	-300	-300	-310	-332
USA	0	-0	0	0	0	0	0	0	0	0	4

Table 1360: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995) [PART 1/2]

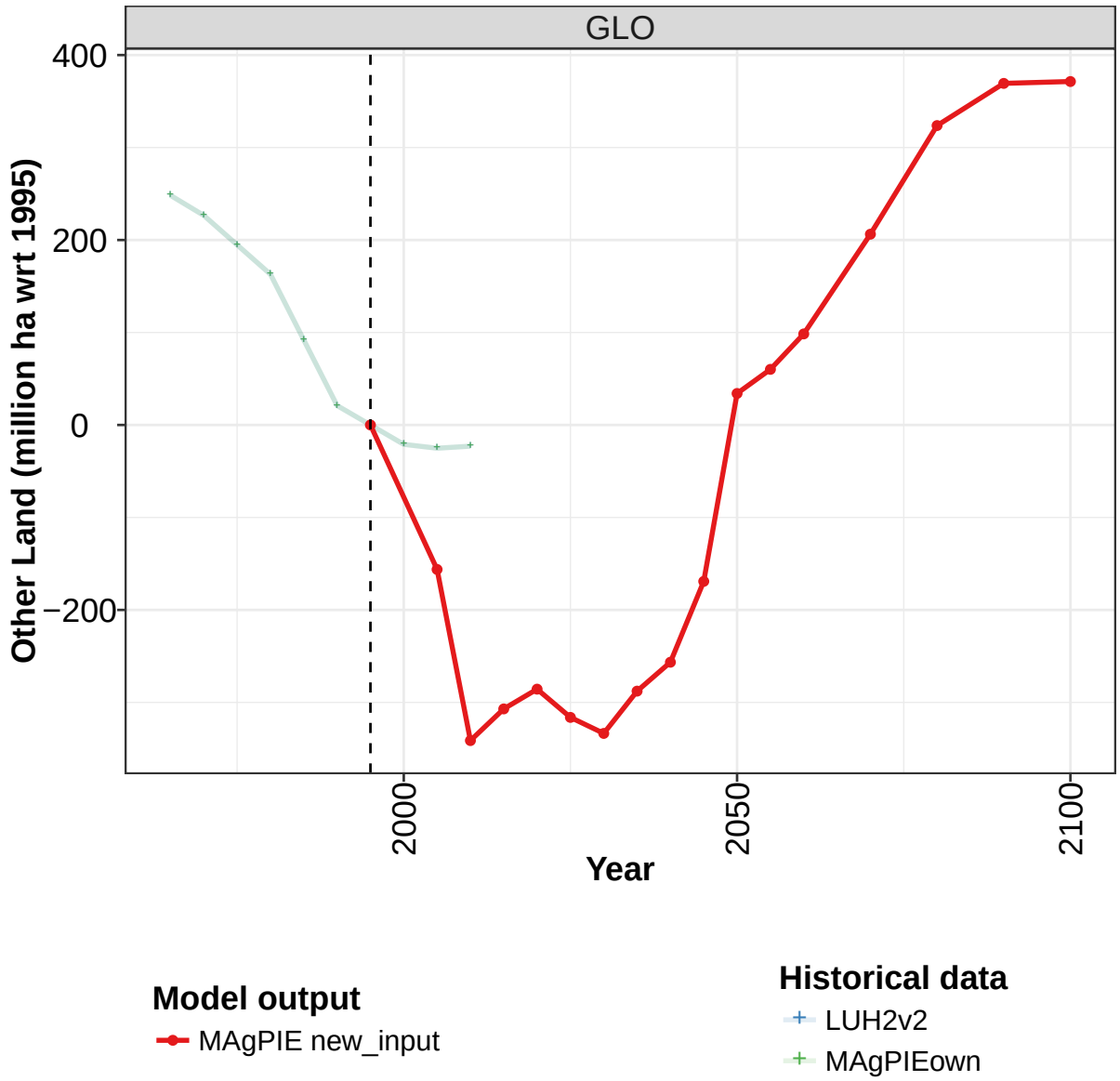
	2055	2060	2070	2080	2090	2100
GLO	-282	-260	-201	-115	27	153
CAZ	-2	8	19	28	37	41
CHA	0	0	0	0	12	12
EUR	30	30	30	30	32	37
IND	-15	-15	-15	-15	-15	-15
LAM	17	21	26	36	80	151
MEA	-4	-4	-4	-4	-4	-4
NEU	7	7	7	7	8	8
OAS	14	23	25	28	28	28
REF	-0	-0	23	67	124	158
SSA	-332	-332	-332	-332	-332	-332
USA	4	4	21	39	57	69

Table 1361: MAgPIE new_input — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-231.3	-189.9	-147.0	-106.5	-67.9	-28.7	0.0	24.0	47.7	54.6
CAZ	-26.4	-22.8	-18.6	-13.9	-9.0	-3.2	0.0	3.9	11.1	16.7
CHA	12.4	13.2	12.1	11.2	6.6	1.5	0.0	-1.8	-12.6	-13.6
EUR	-4.8	-3.2	-2.1	-1.1	-0.5	0.1	0.0	-0.1	-1.8	-4.4
IND	-6.6	-5.2	-3.6	-2.0	-0.1	0.7	0.0	-0.7	-3.1	-4.6
LAM	-30.0	-25.7	-21.0	-18.2	-11.1	-4.0	0.0	4.2	11.8	13.5
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	-2.3	-2.0	-1.6	-1.2	-1.0	-0.8	0.0	0.7	0.7	0.6
OAS	-30.6	-25.3	-18.1	-11.0	-7.9	-4.7	0.0	4.2	10.1	2.0
REF	-84.8	-69.7	-54.3	-39.4	-24.9	-9.5	0.0	5.6	18.7	26.2
SSA	-20.4	-17.3	-13.8	-10.6	-7.4	-4.4	0.0	4.6	4.2	4.7
USA	-37.8	-32.0	-26.2	-20.3	-12.7	-4.5	0.0	3.6	8.7	13.4

Table 1362: MAgPIEown — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995)

55.3 Other Land



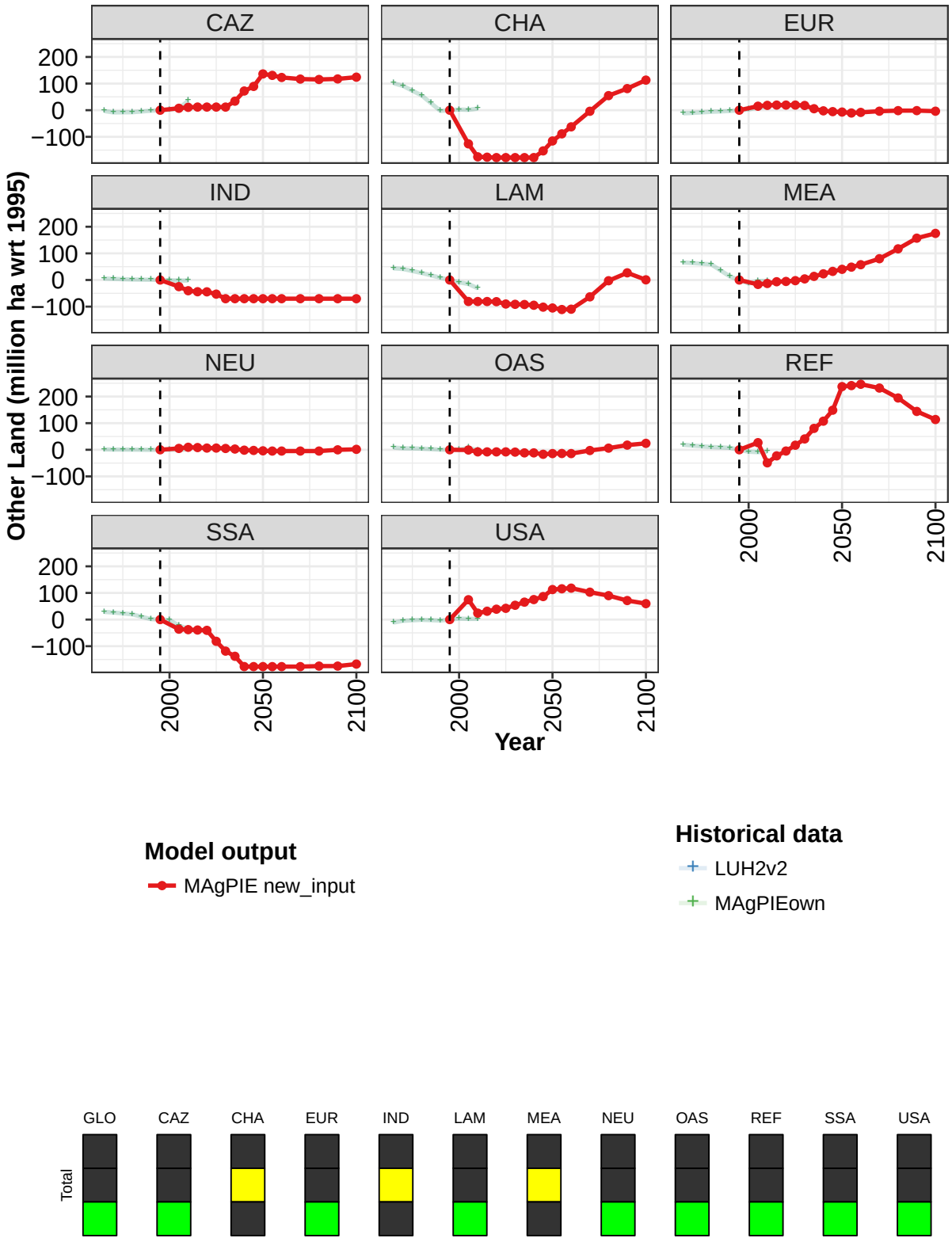


Figure 371: MAgPIE new_input — Resources—Land Cover Change—Other Land (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	-156	-341	-307	-286	-316	-334	-288	-257	-169	34
CAZ	0	7	11	12	12	12	12	34	72	89	136
CHA	0	-126	-175	-177	-178	-178	-178	-178	-178	-153	-115
EUR	0	15	18	19	19	19	18	6	-2	-5	-7
IND	0	-25	-40	-44	-44	-53	-70	-70	-70	-70	-70
LAM	0	-81	-81	-81	-81	-90	-91	-92	-95	-102	-105
MEA	0	-17	-13	-6	-5	-2	4	14	23	32	40
NEU	0	5	9	8	6	6	5	3	-1	-2	-4
OAS	0	-1	-8	-8	-8	-8	-9	-12	-12	-17	-14
REF	0	27	-49	-23	-5	17	41	80	108	149	237
SSA	0	-36	-38	-39	-40	-82	-118	-138	-177	-177	-177
USA	0	75	24	31	39	42	54	65	75	86	113

Table 1363: MAgPIE new_input — Resources—Land Cover Change—Other Land (million ha wrt 1995) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	60	98	206	324	369	371
CAZ	131	123	117	115	117	124
CHA	-89	-62	-4	55	81	113
EUR	-10	-8	-4	-2	-2	-4
IND	-70	-70	-70	-70	-70	-70
LAM	-111	-110	-63	-3	27	1
MEA	48	57	80	117	157	175
NEU	-5	-5	-5	-5	-0	2
OAS	-14	-14	-3	6	18	24
REF	241	246	232	195	144	114
SSA	-177	-177	-177	-175	-175	-167
USA	116	118	103	90	71	60

Table 1364: MAgPIE new_input — Resources—Land Cover Change—Other Land (million ha wrt 1995) [PART 2/2]

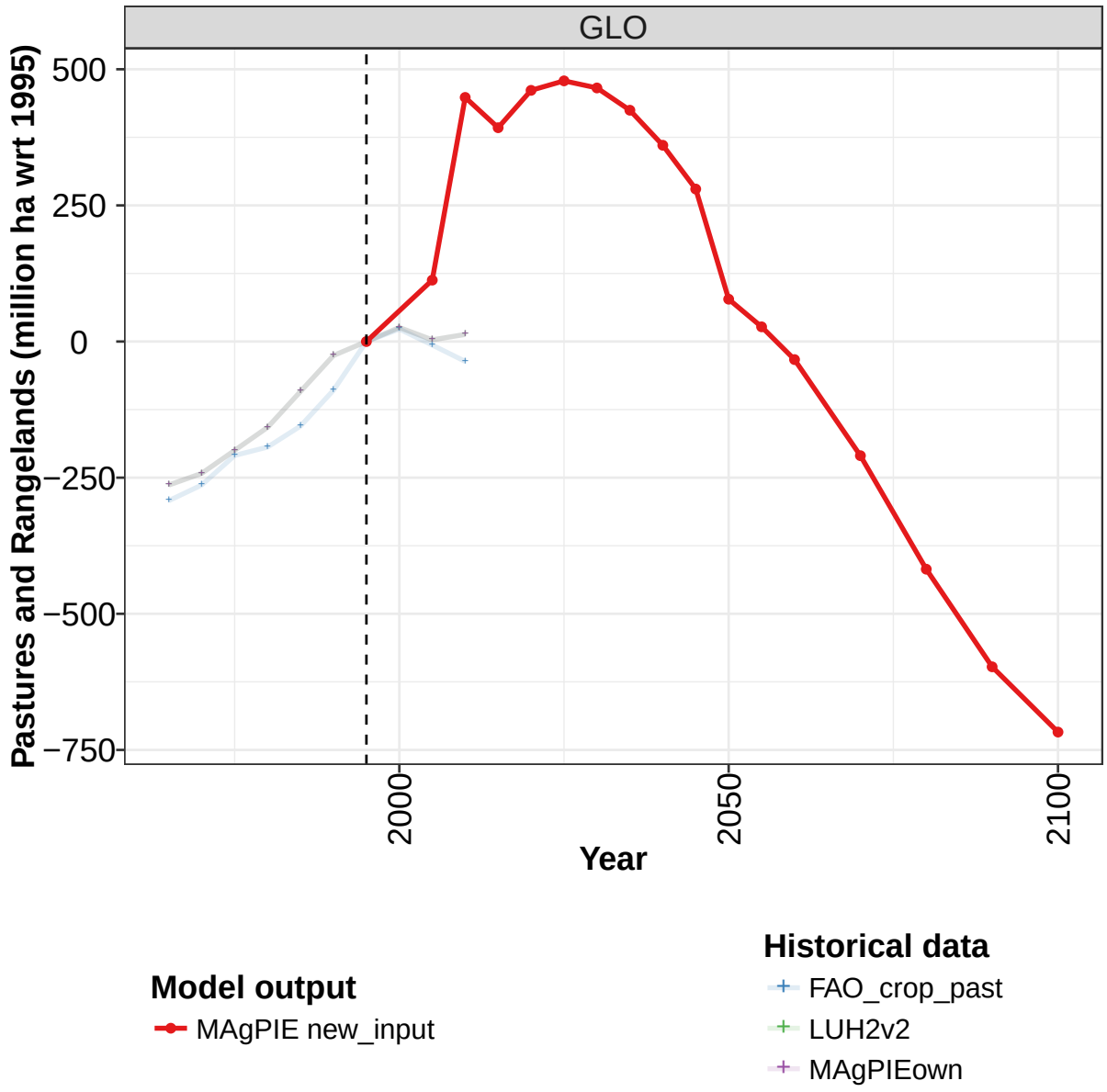
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	248	227	195	163	92	21	0	-21	-25	-23
CAZ	-3	-8	-8	-8	-5	-2	0	2	6	35
CHA	101	91	73	55	26	-3	0	3	1	6
EUR	-12	-10	-8	-6	-4	-3	0	3	10	13
IND	6	4	3	2	1	1	0	-1	-2	-2
LAM	44	41	34	26	17	9	0	-9	-15	-31
MEA	66	64	61	59	36	13	0	-13	-4	-4
NEU	1	1	1	1	0	-0	0	0	-0	2
OAS	8	6	5	4	2	1	0	-1	8	-3
REF	19	16	13	10	9	7	0	-7	-9	-7
SSA	29	27	23	20	11	2	0	-2	-23	-34
USA	-11	-5	-3	-1	-2	-3	0	3	3	3

Table 1365: LUH2v2 — Resources—Land Cover Change—Other Land (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	248	227	195	163	92	21	0	-21	-25	-23
CAZ	-3	-8	-8	-8	-5	-2	0	2	6	35
CHA	101	91	73	55	26	-3	0	3	1	6
EUR	-12	-10	-8	-6	-4	-3	0	3	10	13
IND	6	4	3	2	1	1	0	-1	-2	-2
LAM	44	41	34	26	17	9	0	-9	-15	-31
MEA	66	64	61	59	36	13	0	-13	-4	-4
NEU	1	1	1	1	0	-0	0	0	-0	2
OAS	8	6	5	4	2	1	0	-1	8	-3
REF	19	16	13	10	9	7	0	-7	-9	-7
SSA	29	27	23	20	11	2	0	-2	-23	-34
USA	-11	-5	-3	-1	-2	-3	0	3	3	3

Table 1366: MAgPIEown — Resources—Land Cover Change—Other Land (million ha wrt 1995)

55.4 Pastures and Rangelands



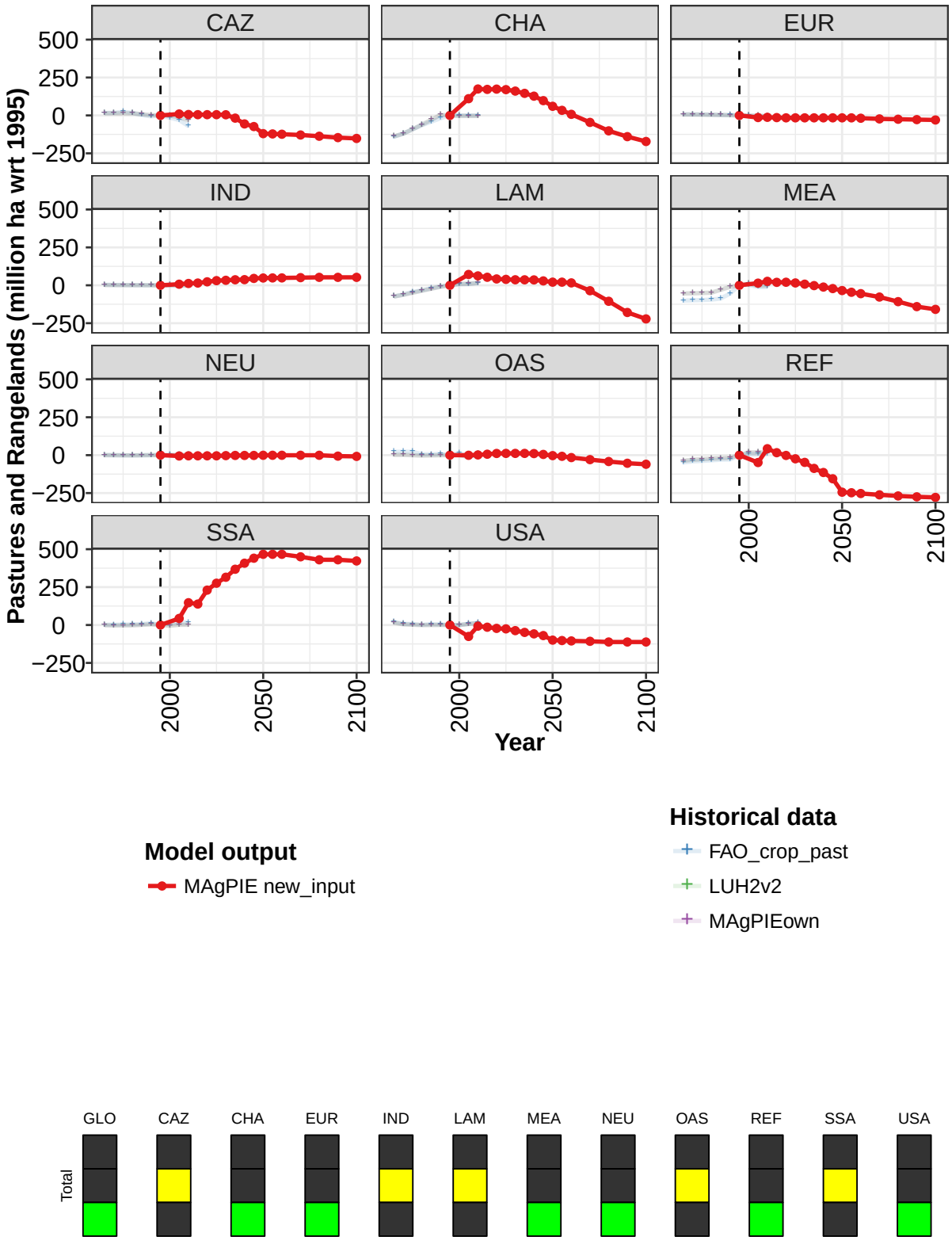


Figure 372: MAgPIE new_input — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0	113	448	393	461	479	466	425	360	280	78
CAZ	0	10	6	5	5	5	4	-18	-56	-73	-120
CHA	0	111	174	172	174	170	161	146	127	98	60
EUR	0	-14	-12	-14	-16	-16	-16	-16	-16	-16	-16
IND	0	7	12	15	23	31	33	36	37	45	48
LAM	0	71	62	53	42	39	36	36	36	29	21
MEA	0	14	26	20	20	16	8	-2	-12	-22	-35
NEU	0	-5	-4	-4	-4	-4	-3	-2	-2	-2	-1
OAS	0	-1	2	6	11	12	12	12	11	5	-3
REF	0	-49	43	16	-2	-24	-48	-87	-114	-156	-244
SSA	0	43	147	138	230	276	315	368	408	441	467
USA	0	-75	-7	-14	-22	-25	-37	-49	-58	-70	-100

Table 1367: MAgPIE new_input — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	27	-33	-210	-418	-597	-717
CAZ	-122	-124	-129	-137	-146	-152
CHA	34	7	-46	-102	-140	-172
EUR	-16	-18	-23	-25	-28	-30
IND	49	49	50	52	52	52
LAM	21	16	-36	-105	-179	-222
MEA	-46	-55	-77	-108	-141	-159
NEU	-1	-1	-1	-1	-6	-8
OAS	-8	-16	-29	-42	-53	-60
REF	-248	-253	-262	-269	-275	-279
SSA	467	467	450	430	430	423
USA	-102	-105	-107	-112	-112	-112

Table 1368: MAgPIE new_input — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-292.3	-263.4	-209.2	-193.8	-155.2	-89.4	0.0	22.9	-6.5	-36.5
CAZ	16.0	16.7	24.1	16.7	3.0	-6.3	0.0	-14.9	-30.0	-70.8
CHA	-141.8	-119.8	-91.8	-64.5	-41.5	-18.4	0.0	0.0	0.0	-0.0
EUR	7.2	6.8	6.1	4.8	2.7	2.3	0.0	-2.1	-3.3	-5.5
IND	3.7	2.0	1.8	1.1	1.0	0.3	0.0	-0.2	-0.6	-0.7
LAM	-73.9	-60.9	-43.7	-33.0	-19.7	-7.3	0.0	6.9	8.6	14.3
MEA	-100.7	-98.9	-97.1	-94.7	-87.2	-55.0	0.0	3.0	-11.6	-10.9
NEU	0.3	-0.3	-1.2	-1.4	-1.0	0.4	0.0	1.3	1.8	1.9
OAS	22.1	22.4	22.2	5.7	5.7	8.2	0.0	12.3	-4.3	-4.1
REF	-47.6	-41.3	-38.1	-34.2	-29.9	-28.7	0.0	7.1	7.8	8.2
SSA	1.4	2.1	2.6	4.1	6.2	12.0	0.0	9.1	17.1	17.4
USA	21.0	7.9	5.9	1.5	5.6	3.2	0.0	0.3	8.0	13.9

Table 1369: FAO_crop_past — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-263.6	-242.1	-199.8	-157.6	-91.7	-25.7	0.0	25.7	3.1	13.0
CAZ	14.5	14.3	14.2	14.0	8.0	2.0	0.0	-2.0	-11.1	-32.5
CHA	-137.9	-120.8	-91.0	-61.2	-28.9	3.4	0.0	-3.4	-3.6	-3.4
EUR	6.3	6.0	5.1	4.1	2.8	1.5	0.0	-1.5	-2.6	-4.8
IND	1.8	1.4	1.1	0.7	0.5	0.4	0.0	-0.4	-0.7	-0.8
LAM	-74.3	-62.8	-49.3	-35.7	-22.7	-9.6	0.0	9.6	10.3	15.9
MEA	-53.8	-53.0	-50.8	-48.7	-29.7	-10.6	0.0	10.6	-3.7	-2.9
NEU	-0.1	-0.5	-1.0	-1.5	-0.6	0.3	0.0	-0.3	0.2	0.2
OAS	1.9	2.0	-0.5	-3.0	-1.9	-0.8	0.0	0.8	-12.5	8.4
REF	-36.7	-30.4	-26.8	-23.3	-20.4	-17.6	0.0	17.6	17.9	18.7
SSA	-1.1	-3.3	-2.8	-2.4	1.2	4.8	0.0	-4.8	1.9	1.5
USA	15.8	4.9	2.2	-0.5	0.0	0.6	0.0	-0.6	7.0	12.7

Table 1370: LUH2v2 — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

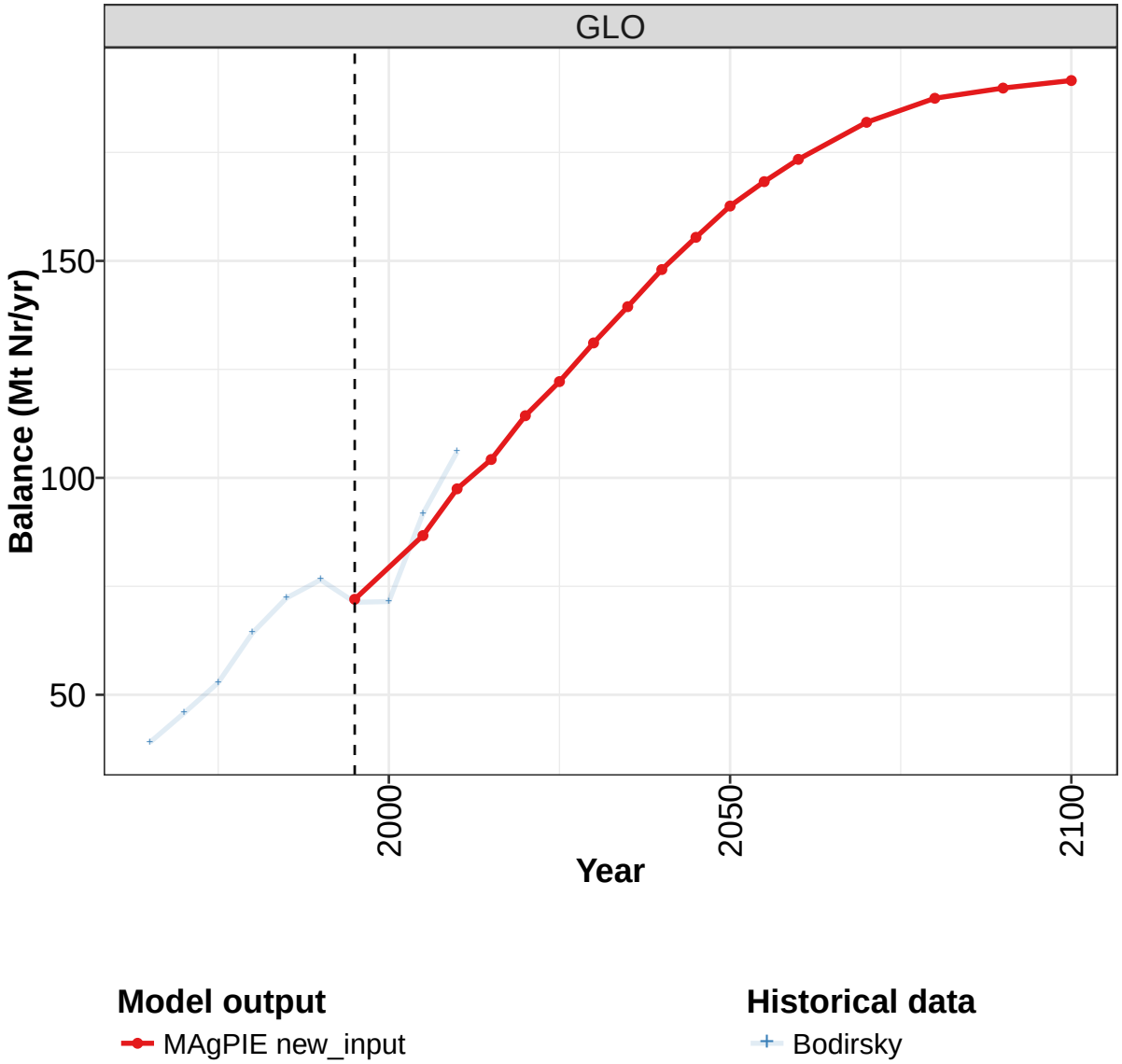
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-263.6	-242.1	-199.8	-157.6	-91.7	-25.7	0.0	25.7	3.1	13.0
CAZ	14.5	14.3	14.2	14.0	8.0	2.0	0.0	-2.0	-11.1	-32.5
CHA	-137.9	-120.8	-91.0	-61.2	-28.9	3.4	0.0	-3.4	-3.6	-3.4
EUR	6.3	6.0	5.1	4.1	2.8	1.5	0.0	-1.5	-2.6	-4.8
IND	1.8	1.4	1.1	0.7	0.5	0.4	0.0	-0.4	-0.7	-0.8
LAM	-74.3	-62.8	-49.3	-35.7	-22.7	-9.6	0.0	9.6	10.3	15.9
MEA	-53.8	-53.0	-50.8	-48.7	-29.7	-10.6	0.0	10.6	-3.7	-2.9
NEU	-0.1	-0.5	-1.0	-1.5	-0.6	0.3	0.0	-0.3	0.2	0.2
OAS	1.9	2.0	-0.5	-3.0	-1.9	-0.8	0.0	0.8	-12.5	8.4
REF	-36.7	-30.4	-26.8	-23.3	-20.4	-17.6	0.0	17.6	17.9	18.7
SSA	-1.1	-3.3	-2.8	-2.4	1.2	4.8	0.0	-4.8	1.9	1.5
USA	15.8	4.9	2.2	-0.5	0.0	0.6	0.0	-0.6	7.0	12.7

Table 1371: MAgPIEown — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

56 Nitrogen

56.1 Cropland Budget

56.1.1 Balance



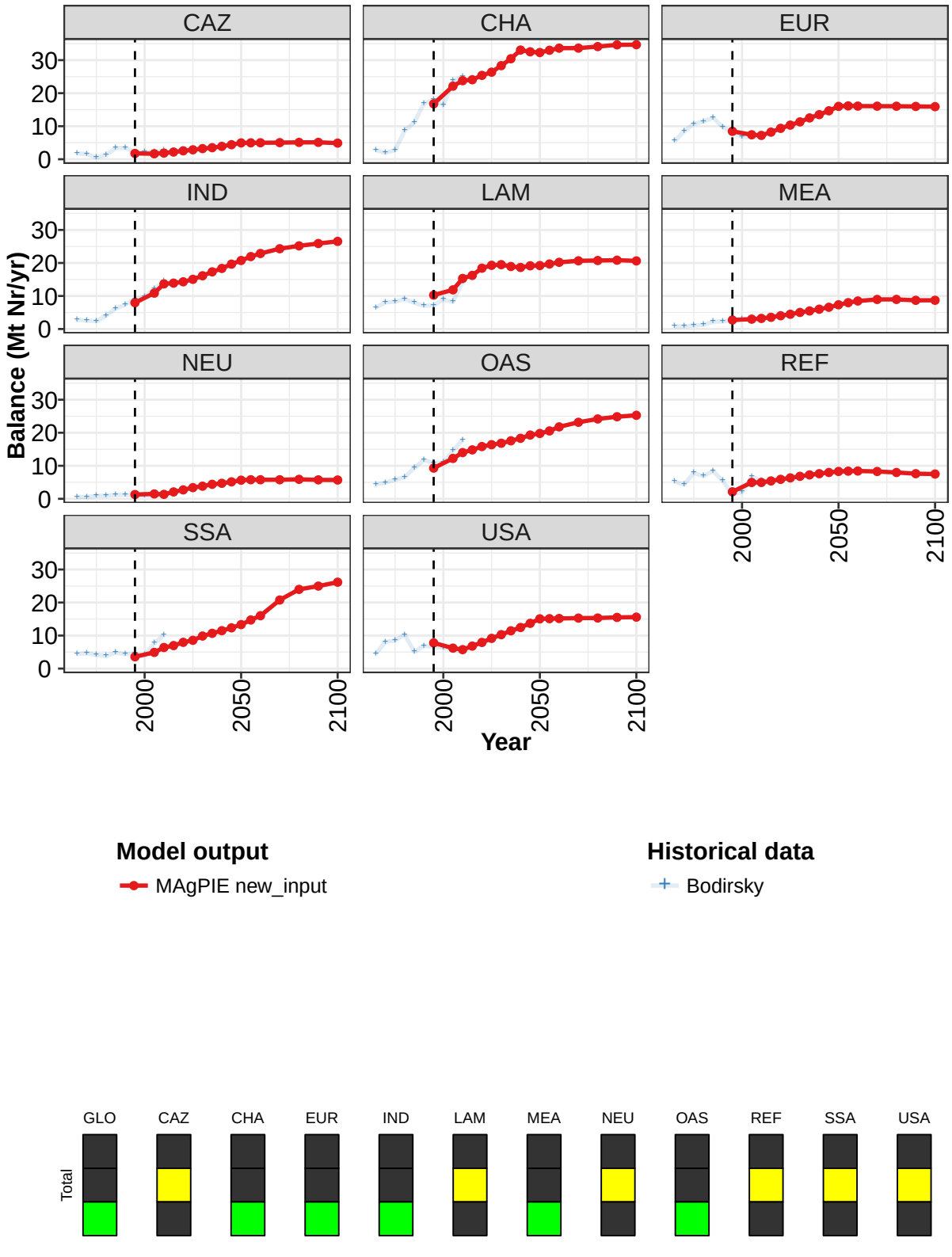


Figure 373: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	72	87	97	104	114	122	131	139	148	155	163
CAZ	2	2	2	2	3	3	3	3	4	4	5
CHA	17	22	24	24	25	26	28	30	33	33	32
EUR	8	7	7	8	9	10	11	13	14	15	16
IND	8	11	14	14	14	15	16	17	18	20	21
LAM	10	12	15	16	18	19	19	19	19	19	19
MEA	3	3	3	4	4	4	5	5	6	7	7
NEU	1	1	1	2	3	3	4	4	5	5	6
OAS	9	12	14	15	16	16	17	18	18	19	20
REF	2	5	5	5	6	6	7	7	8	8	8
SSA	4	5	6	7	8	9	10	11	11	12	13
USA	8	6	6	7	8	9	10	11	12	14	15

Table 1372: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr) [PART 1/2]

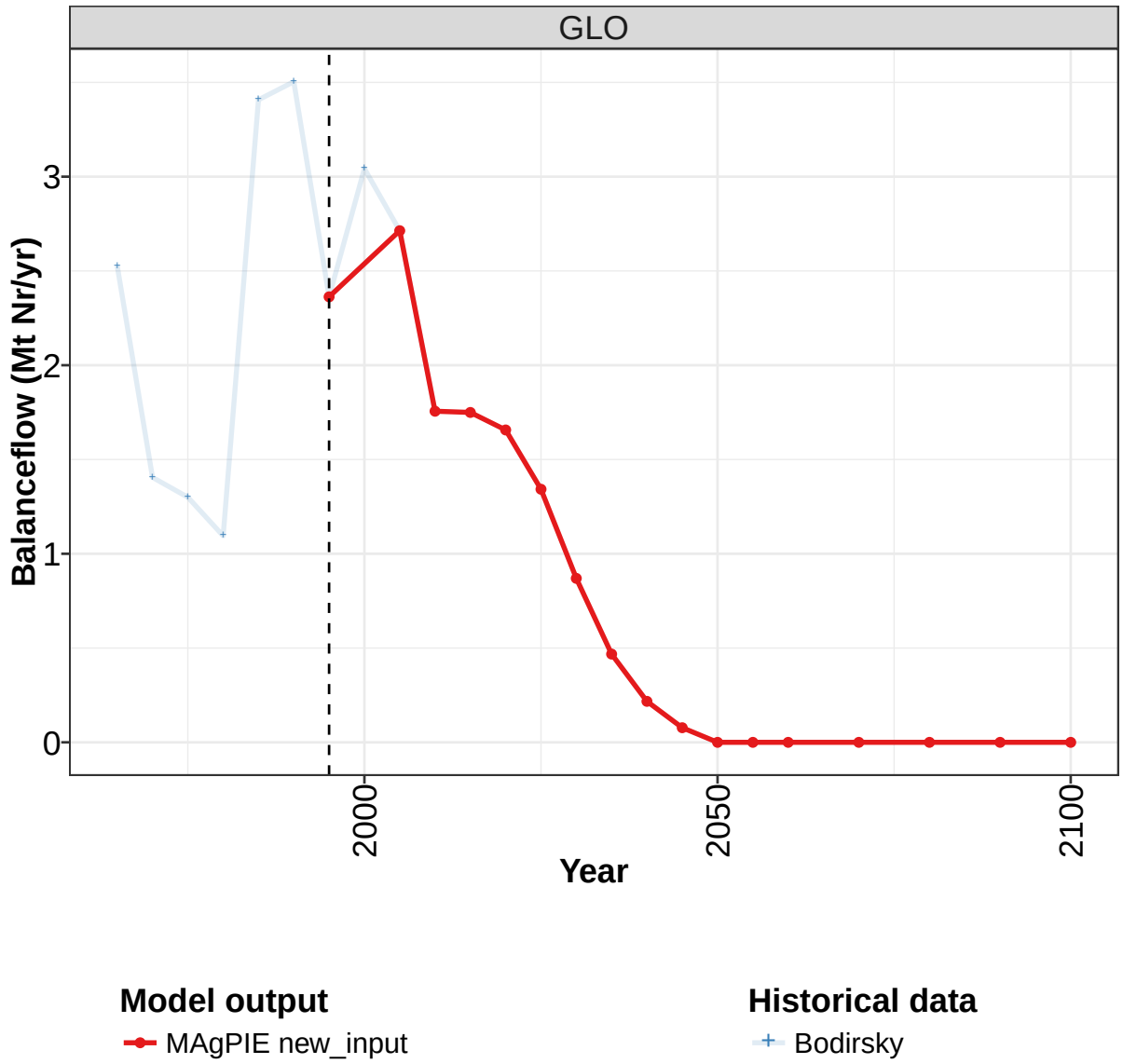
	2055	2060	2070	2080	2090	2100
GLO	168	173	182	187	190	192
CAZ	5	5	5	5	5	5
CHA	33	34	34	34	35	35
EUR	16	16	16	16	16	16
IND	22	23	24	25	26	27
LAM	20	20	21	21	21	21
MEA	8	8	9	9	9	9
NEU	6	6	6	6	6	6
OAS	21	22	23	24	25	25
REF	8	8	8	8	8	8
SSA	15	16	21	24	25	26
USA	15	15	15	15	15	16

Table 1373: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	39	46	53	64	72	76	71	71	92	106
CAZ	2	2	0	1	3	3	2	2	2	3
CHA	3	2	3	9	11	17	18	16	24	25
EUR	5	8	11	11	13	10	8	7	7	7
IND	3	3	2	4	6	7	9	10	12	14
LAM	6	8	8	9	8	7	7	9	8	14
MEA	1	1	1	1	2	2	3	3	3	3
NEU	1	1	1	1	1	1	1	1	1	1
OAS	4	5	6	7	9	12	11	11	15	18
REF	5	4	8	7	8	5	1	2	7	5
SSA	4	5	4	4	5	4	5	4	8	10
USA	5	8	9	10	5	7	7	6	6	5

Table 1374: Bodirsky — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr)

56.1.2 Balance—Balanceflow



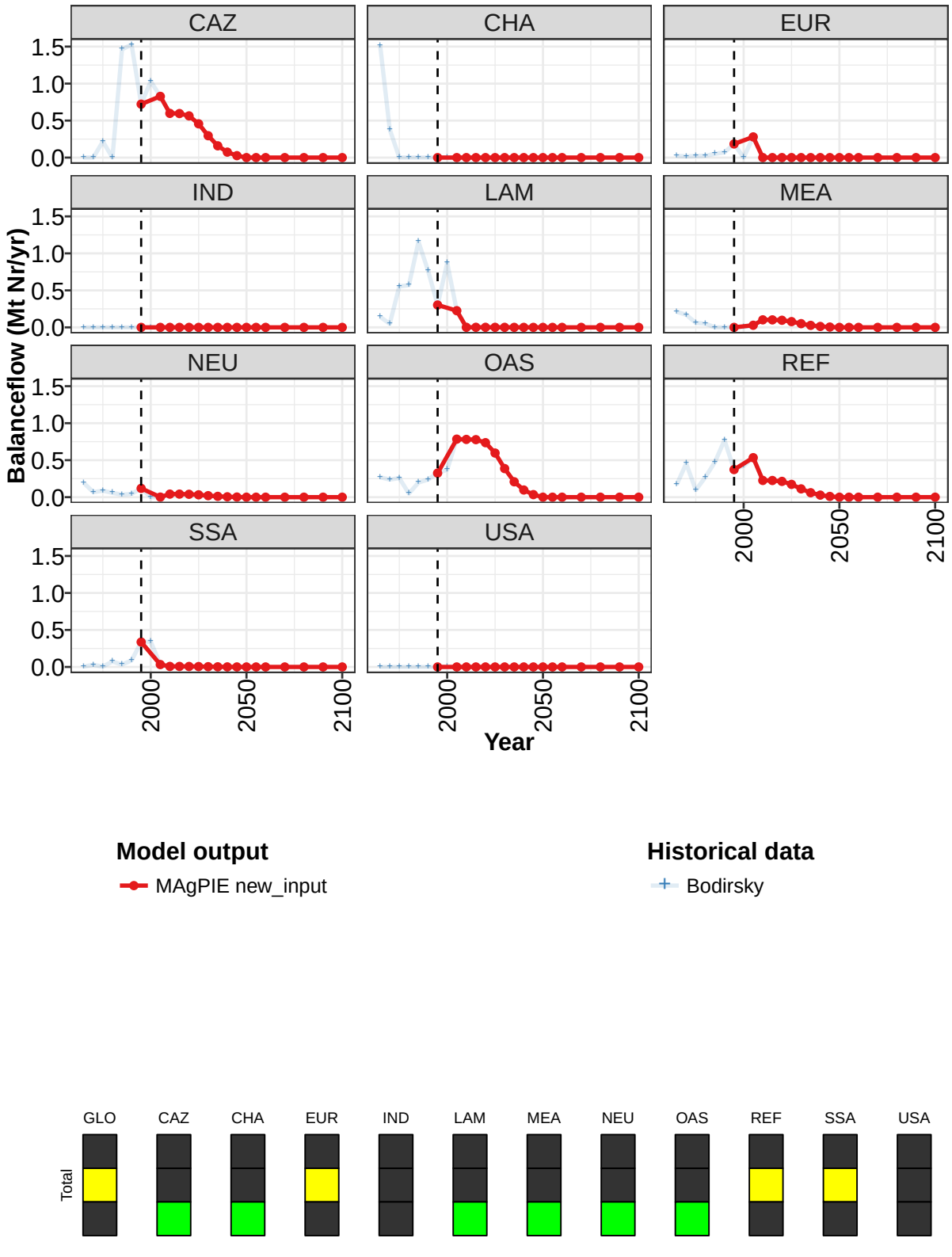


Figure 374: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.36	2.71	1.76	1.75	1.66	1.34	0.87	0.47	0.22	0.08	0.00
CAZ	0.72	0.83	0.60	0.60	0.56	0.46	0.30	0.16	0.07	0.03	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.18	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.30	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.03	0.10	0.10	0.10	0.08	0.05	0.03	0.01	0.00	0.00
NEU	0.12	0.00	0.04	0.04	0.04	0.03	0.02	0.01	0.01	0.00	0.00
OAS	0.33	0.78	0.78	0.78	0.74	0.60	0.39	0.21	0.10	0.03	0.00
REF	0.37	0.53	0.23	0.23	0.21	0.17	0.11	0.06	0.03	0.01	0.00
SSA	0.34	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1375: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr) [PART 1/2]

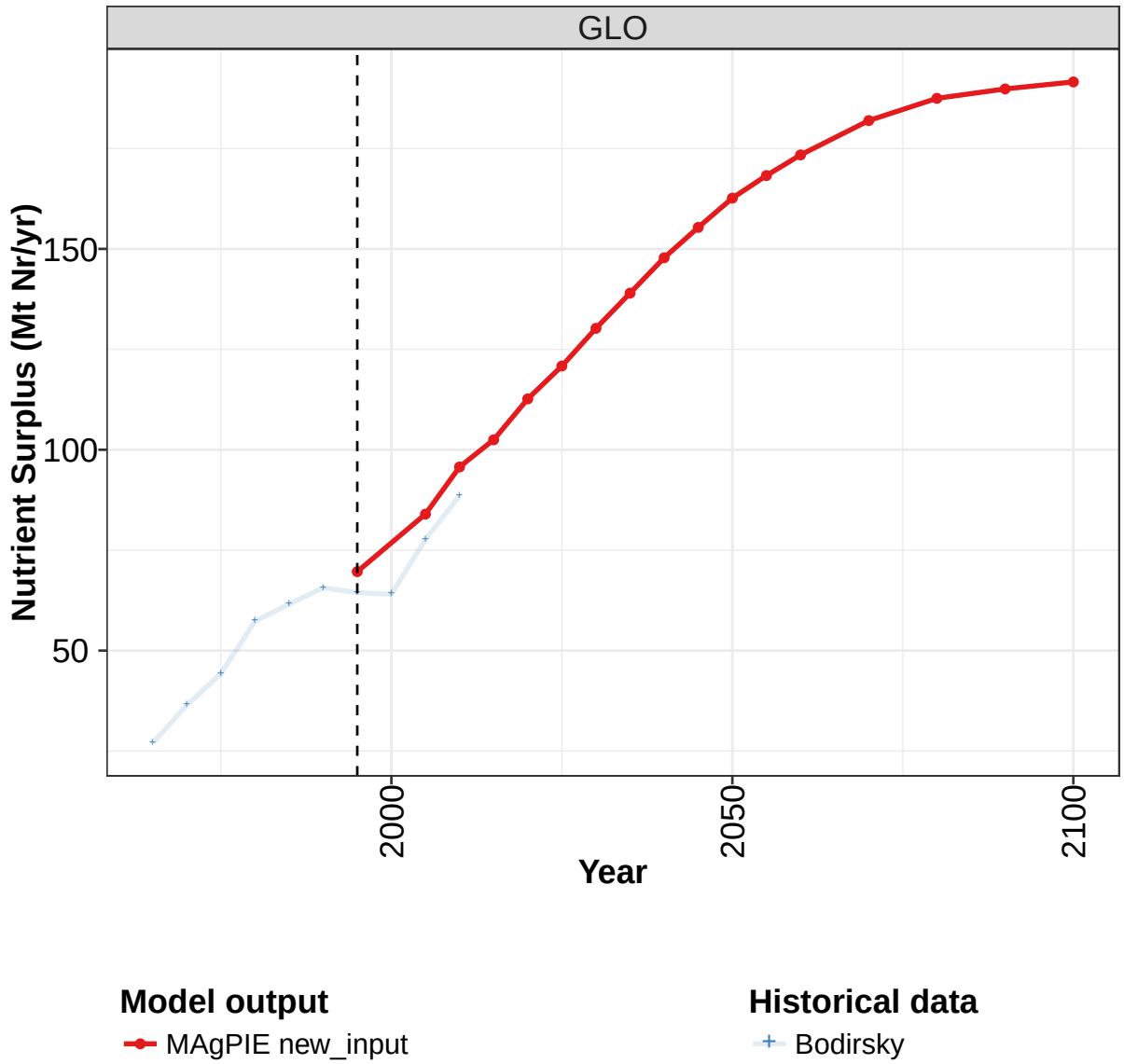
	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 1376: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.53	1.41	1.30	1.09	3.41	3.50	2.36	3.04	2.71	1.76
CAZ	0.00	0.00	0.22	0.00	1.46	1.53	0.72	1.03	0.83	0.60
CHA	1.52	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.02	0.02	0.02	0.03	0.05	0.07	0.18	0.00	0.28	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.14	0.05	0.55	0.57	1.16	0.77	0.30	0.87	0.23	0.00
MEA	0.21	0.17	0.06	0.05	0.00	0.00	0.00	0.00	0.03	0.10
NEU	0.19	0.07	0.09	0.06	0.03	0.04	0.12	0.00	0.00	0.04
OAS	0.27	0.24	0.26	0.05	0.20	0.24	0.33	0.37	0.78	0.78
REF	0.17	0.45	0.10	0.27	0.47	0.77	0.37	0.42	0.53	0.23
SSA	0.01	0.03	0.01	0.07	0.03	0.09	0.34	0.34	0.03	0.01
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1377: Bodirsky — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr)

56.1.3 Balance—Nutrient Surplus



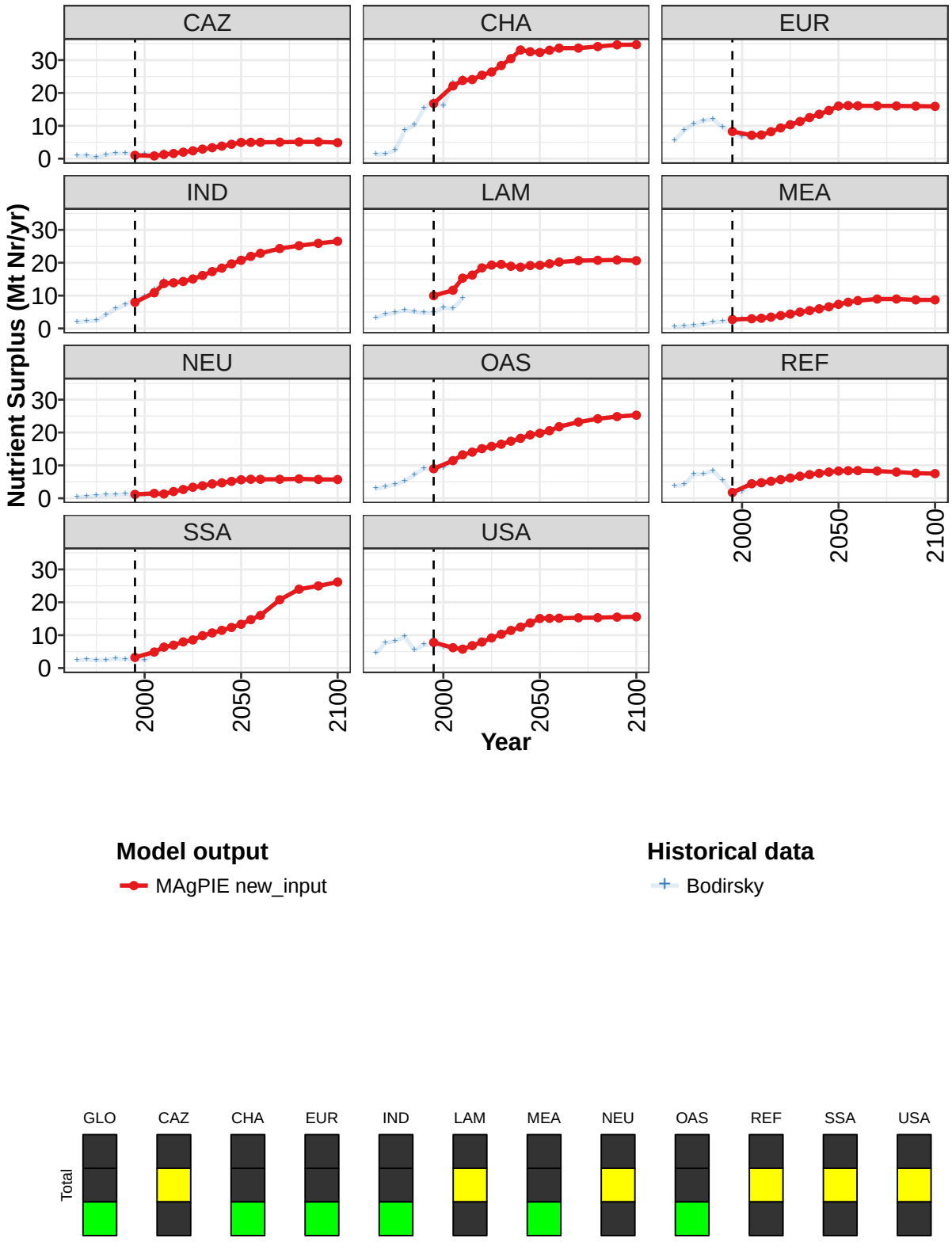


Figure 375: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	70	84	96	102	113	121	130	139	148	155	163
CAZ	1	1	1	2	2	2	3	3	4	4	5
CHA	17	22	24	24	25	26	28	30	33	33	32
EUR	8	7	7	8	9	10	11	13	14	15	16
IND	8	11	14	14	14	15	16	17	18	20	21
LAM	10	12	15	16	18	19	19	19	19	19	19
MEA	3	3	3	3	4	4	5	5	6	7	7
NEU	1	1	1	2	3	3	4	4	5	5	6
OAS	9	11	13	14	15	16	16	17	18	19	20
REF	2	4	5	5	6	6	7	7	8	8	8
SSA	3	5	6	7	8	9	10	11	11	12	13
USA	8	6	6	7	8	9	10	11	12	14	15

Table 1378: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 1/2]

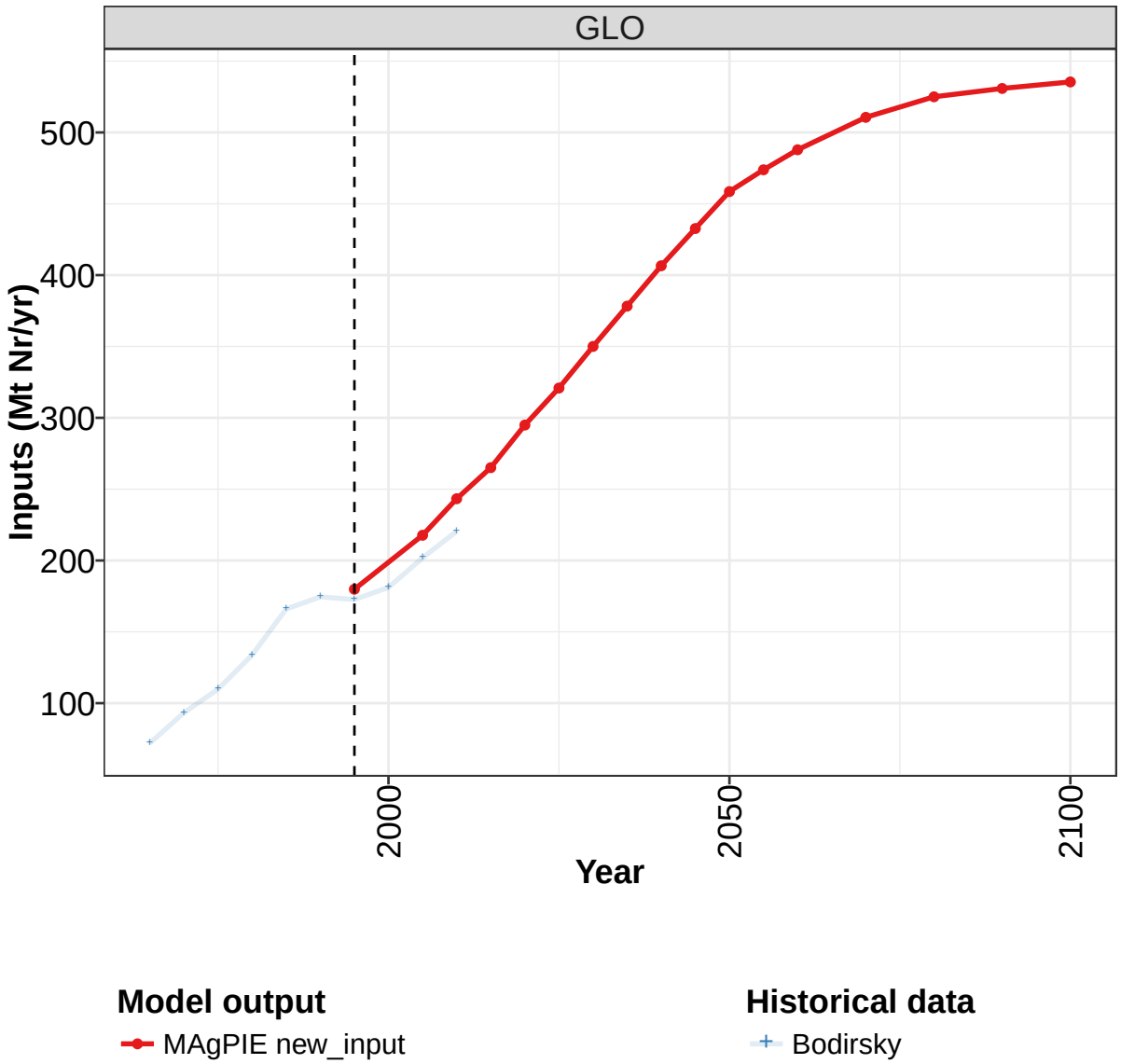
	2055	2060	2070	2080	2090	2100
GLO	168	173	182	187	190	192
CAZ	5	5	5	5	5	5
CHA	33	34	34	34	35	35
EUR	16	16	16	16	16	16
IND	22	23	24	25	26	27
LAM	20	20	21	21	21	21
MEA	8	8	9	9	9	9
NEU	6	6	6	6	6	6
OAS	21	22	23	24	25	25
REF	8	8	8	8	8	8
SSA	15	16	21	24	25	26
USA	15	15	15	15	15	16

Table 1379: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	27.0	36.4	44.3	57.3	61.6	65.6	64.4	64.0	77.7	88.6
CAZ	0.9	1.0	0.4	1.1	1.6	1.6	1.4	1.4	1.4	1.8
CHA	1.2	1.4	2.5	8.6	10.2	15.3	17.5	16.0	22.9	24.5
EUR	5.5	8.6	10.6	11.6	12.1	9.5	7.6	6.7	6.3	6.4
IND	2.0	2.2	2.4	4.0	6.0	7.2	8.9	9.6	11.8	14.4
LAM	3.2	4.3	4.7	5.6	5.0	4.8	4.9	6.3	6.0	9.2
MEA	0.5	0.6	0.9	1.2	1.9	2.1	2.4	2.9	2.6	2.8
NEU	0.3	0.5	0.7	0.9	1.1	1.2	1.0	1.1	1.2	1.2
OAS	2.8	3.5	4.2	5.2	7.2	9.0	8.8	9.3	11.4	13.3
REF	3.7	4.1	7.3	7.3	8.4	5.4	1.9	1.9	3.9	3.9
SSA	2.3	2.6	2.4	2.4	2.8	2.6	2.7	2.4	4.2	5.6
USA	4.4	7.6	8.2	9.5	5.4	7.0	7.4	6.4	5.9	5.5

Table 1380: Bodirsky — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr)

56.1.4 Inputs


GLO
Inputs (Mt Nr/yr)
100
200
300
400
500
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
Bodirsky

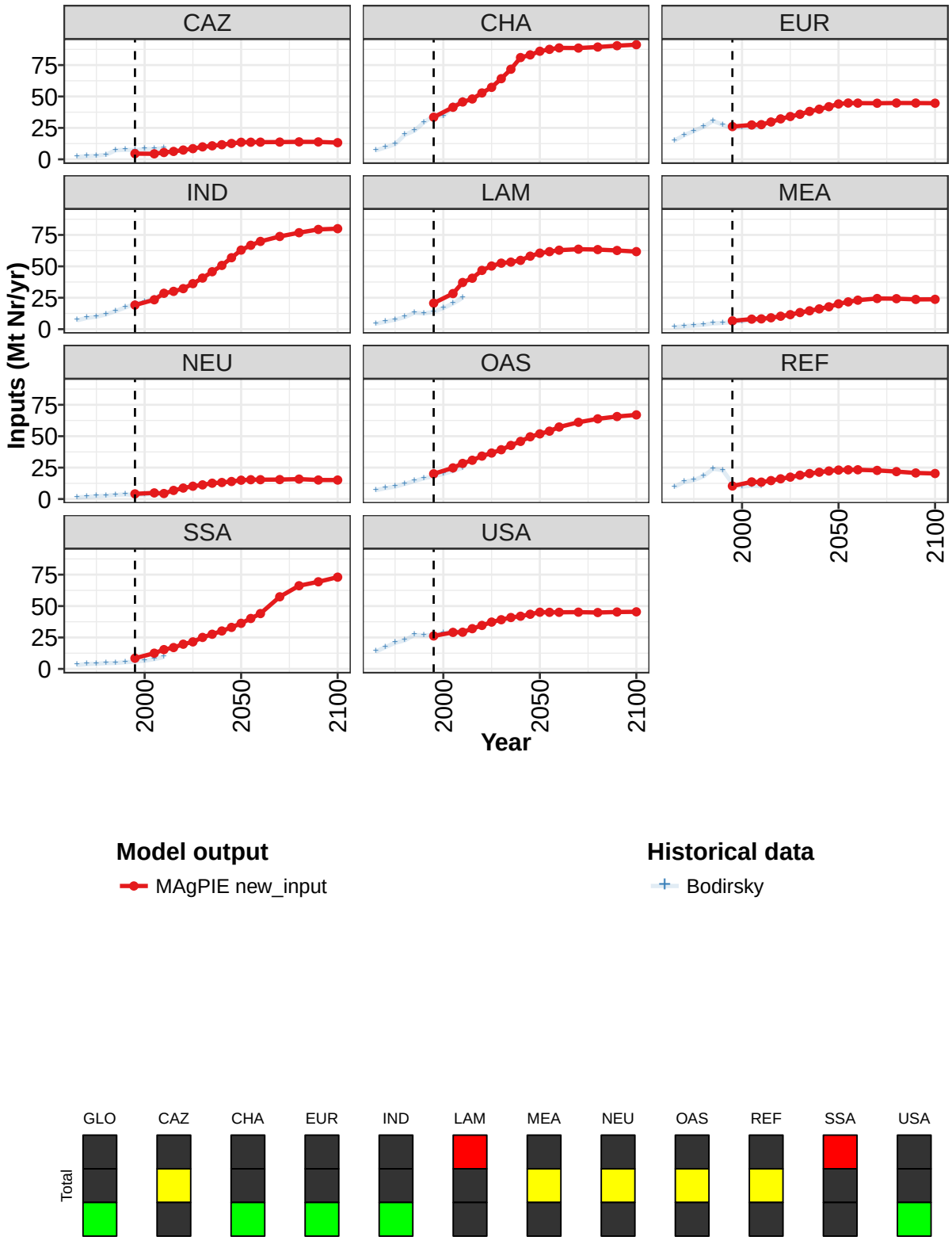


Figure 376: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	180	218	243	265	295	321	350	378	407	433	459
CAZ	4	4	5	6	7	8	10	11	12	13	14
CHA	34	41	46	48	53	57	64	72	81	83	86
EUR	26	27	28	30	32	34	36	38	40	42	44
IND	19	23	29	30	32	36	41	46	51	57	63
LAM	21	28	37	41	47	50	53	53	55	58	61
MEA	7	8	8	9	10	12	13	15	16	18	20
NEU	4	5	4	7	9	10	11	13	13	14	15
OAS	20	25	28	31	34	37	39	43	46	50	52
REF	10	14	13	15	16	17	19	20	21	22	23
SSA	9	12	15	17	20	22	25	28	30	33	36
USA	26	29	29	32	35	37	39	41	42	43	45

Table 1381: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr) [PART 1/2]

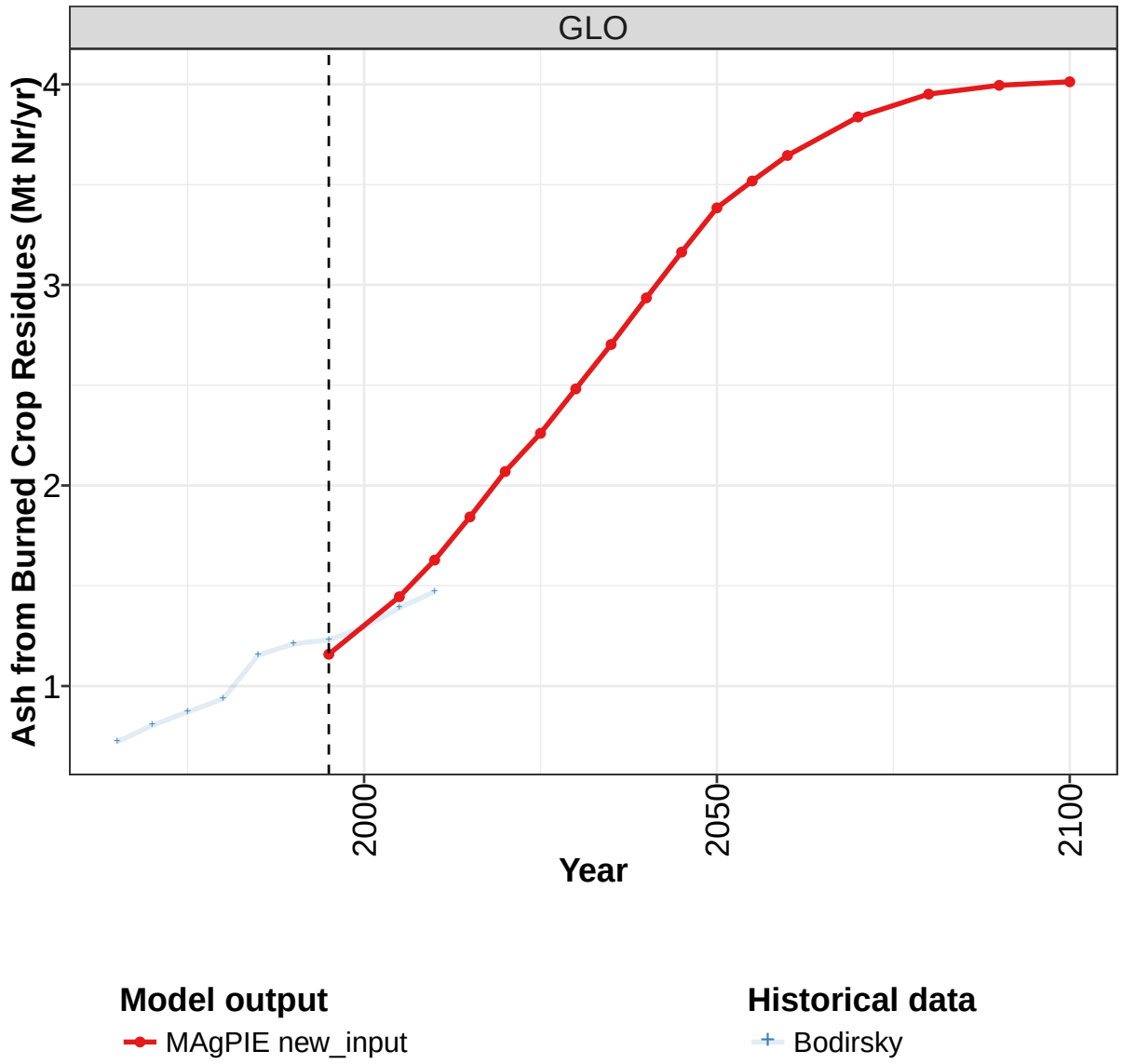
	2055	2060	2070	2080	2090	2100
GLO	474	488	511	525	531	535
CAZ	14	14	14	14	14	13
CHA	88	89	89	89	90	91
EUR	45	45	45	45	45	45
IND	67	70	74	77	79	80
LAM	62	63	64	63	63	62
MEA	22	23	24	24	24	24
NEU	15	15	15	16	15	15
OAS	54	57	61	64	66	67
REF	23	23	23	22	21	20
SSA	40	44	57	66	69	73
USA	45	45	45	45	45	45

Table 1382: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	72	93	110	134	166	175	173	181	202	221
CAZ	2	2	3	4	7	8	7	8	8	9
CHA	7	9	12	19	23	29	34	34	42	47
EUR	15	19	23	26	31	27	25	25	25	25
IND	7	9	10	12	14	17	20	22	24	29
LAM	4	6	8	10	13	13	14	17	20	25
MEA	2	2	3	4	5	5	6	6	7	7
NEU	1	2	2	3	3	4	3	4	4	4
OAS	7	9	10	12	14	17	18	20	22	25
REF	10	14	15	18	24	23	12	10	11	10
SSA	3	4	4	5	5	5	6	7	8	9
USA	14	17	21	23	27	27	27	29	30	30

Table 1383: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr)

56.1.5 Inputs—Ash from Burned Crop Residues



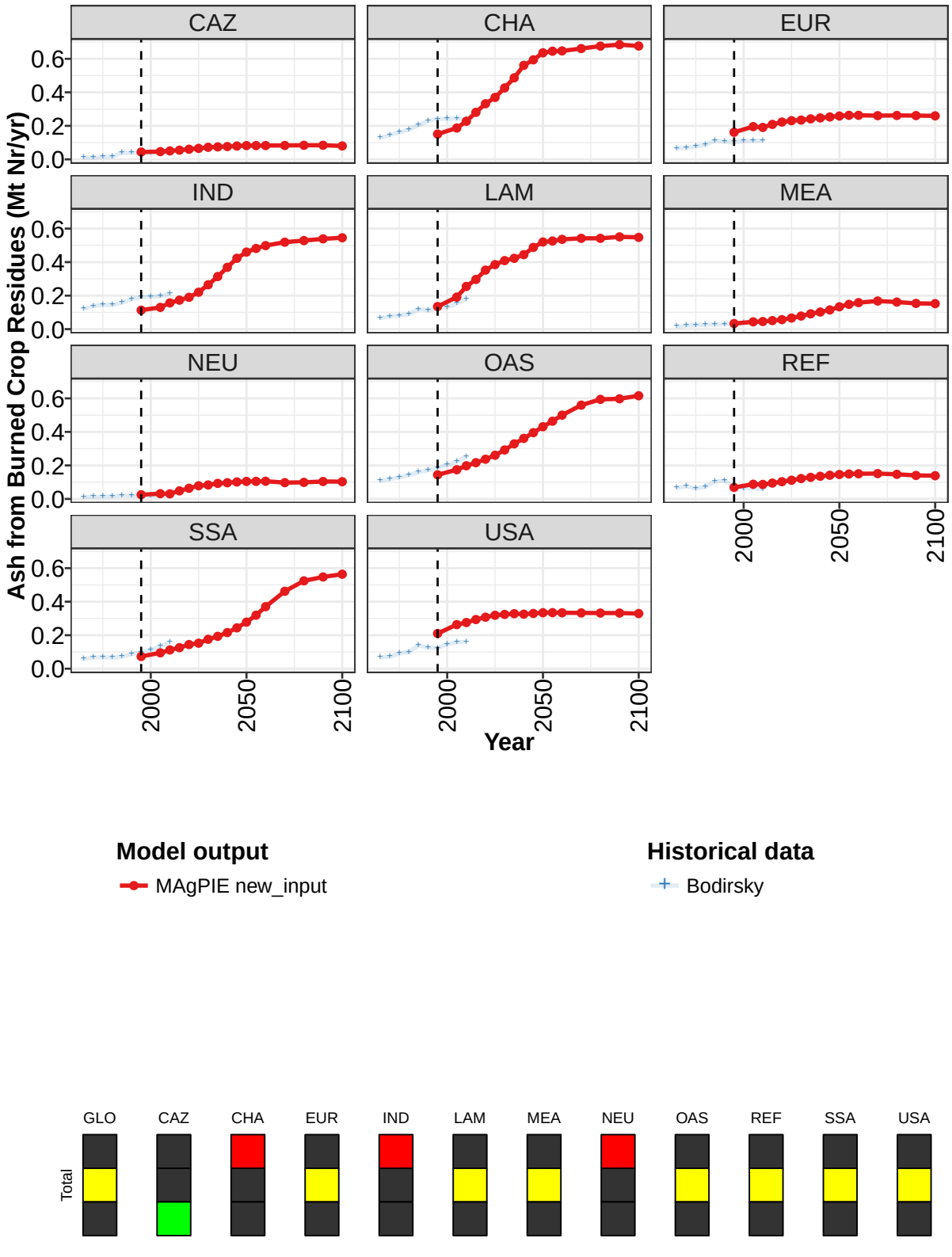


Figure 377: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.16	1.45	1.63	1.84	2.07	2.26	2.48	2.70	2.94	3.16	3.38
CAZ	0.04	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.08
CHA	0.15	0.19	0.23	0.28	0.33	0.37	0.43	0.49	0.56	0.59	0.64
EUR	0.16	0.20	0.19	0.21	0.22	0.23	0.23	0.24	0.25	0.25	0.26
IND	0.11	0.13	0.16	0.17	0.19	0.22	0.26	0.31	0.37	0.42	0.46
LAM	0.13	0.19	0.25	0.30	0.35	0.39	0.41	0.42	0.44	0.49	0.52
MEA	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.13
NEU	0.03	0.03	0.03	0.05	0.06	0.08	0.08	0.09	0.10	0.10	0.10
OAS	0.14	0.17	0.20	0.22	0.24	0.26	0.29	0.33	0.36	0.40	0.43
REF	0.07	0.09	0.09	0.09	0.10	0.11	0.12	0.13	0.14	0.14	0.15
SSA	0.07	0.09	0.11	0.13	0.14	0.15	0.18	0.19	0.22	0.24	0.28
USA	0.21	0.26	0.28	0.29	0.31	0.32	0.32	0.33	0.33	0.33	0.33

Table 1384: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr) [PART 1/2]

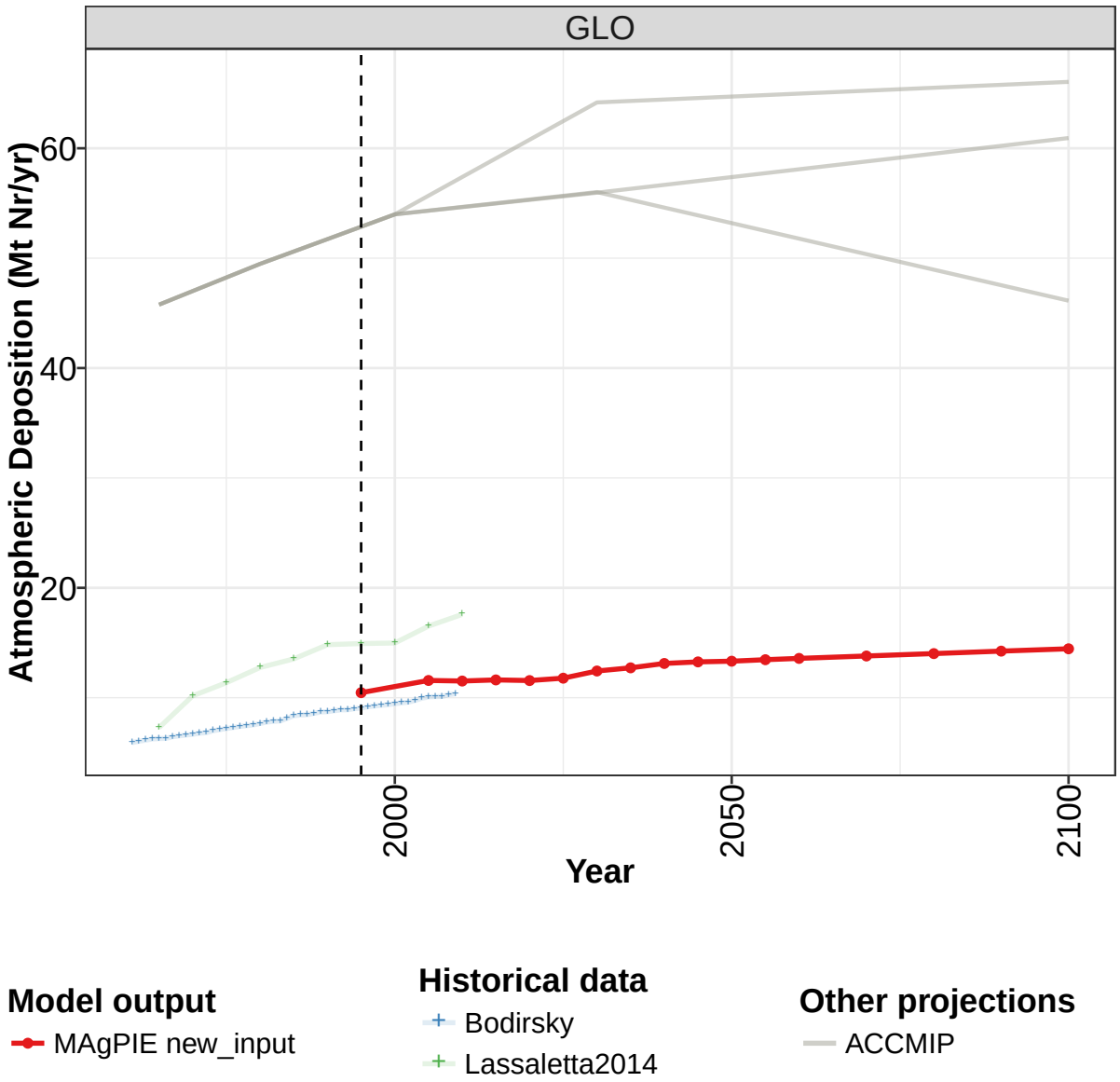
	2055	2060	2070	2080	2090	2100
GLO	3.52	3.65	3.84	3.95	3.99	4.01
CAZ	0.08	0.08	0.08	0.08	0.08	0.08
CHA	0.65	0.65	0.66	0.68	0.68	0.68
EUR	0.26	0.26	0.26	0.26	0.26	0.26
IND	0.48	0.50	0.52	0.53	0.54	0.55
LAM	0.53	0.54	0.54	0.54	0.55	0.55
MEA	0.15	0.16	0.17	0.16	0.15	0.15
NEU	0.10	0.11	0.10	0.10	0.10	0.10
OAS	0.46	0.50	0.56	0.59	0.60	0.62
REF	0.15	0.15	0.15	0.15	0.14	0.14
SSA	0.32	0.37	0.46	0.52	0.55	0.56
USA	0.33	0.33	0.33	0.33	0.33	0.33

Table 1385: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.72	0.80	0.87	0.94	1.15	1.21	1.23	1.29	1.39	1.47
CAZ	0.01	0.01	0.01	0.02	0.04	0.04	0.04	0.04	0.04	0.04
CHA	0.13	0.15	0.16	0.18	0.20	0.23	0.24	0.24	0.24	0.24
EUR	0.07	0.07	0.08	0.09	0.11	0.11	0.10	0.11	0.11	0.11
IND	0.12	0.14	0.14	0.14	0.16	0.18	0.19	0.19	0.20	0.21
LAM	0.07	0.08	0.08	0.09	0.12	0.11	0.12	0.13	0.15	0.18
MEA	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04
NEU	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.22	0.25
REF	0.07	0.07	0.06	0.07	0.10	0.11	0.08	0.06	0.06	0.06
SSA	0.06	0.07	0.07	0.07	0.07	0.09	0.10	0.11	0.13	0.16
USA	0.07	0.07	0.09	0.10	0.14	0.13	0.12	0.15	0.16	0.16

Table 1386: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr)

56.1.6 Inputs—Atmospheric Deposition



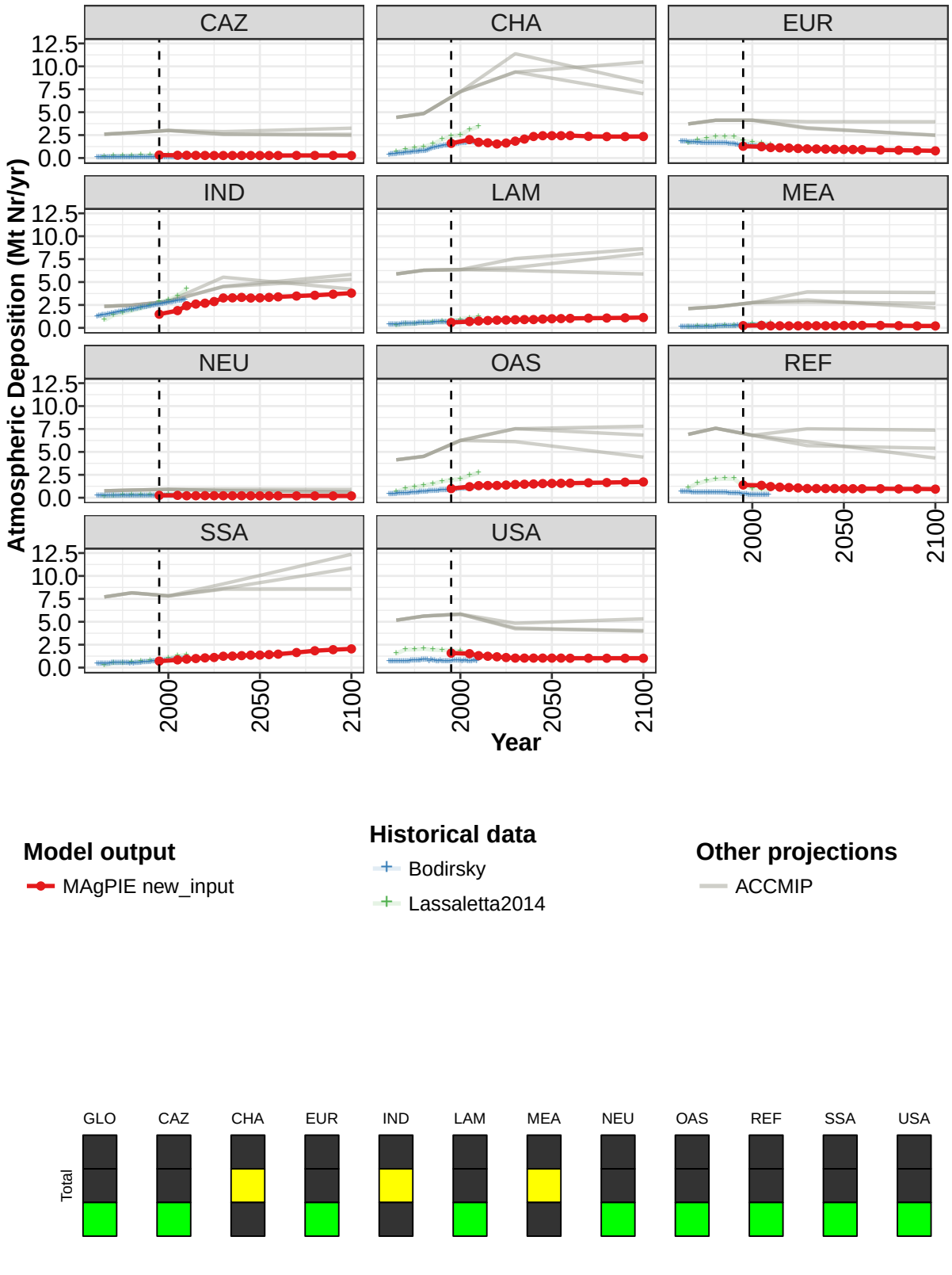


Figure 378: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	10.5	11.6	11.5	11.6	11.6	11.8	12.4	12.7	13.1	13.3	13.3
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	1.6	2.0	1.7	1.7	1.5	1.6	1.8	2.1	2.3	2.4	2.4
EUR	1.3	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9
IND	1.5	1.9	2.4	2.6	2.7	2.9	3.3	3.3	3.3	3.3	3.3
LAM	0.6	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0
MEA	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
NEU	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.0	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.5	1.6
REF	1.4	1.4	1.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0
SSA	0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4
USA	1.6	1.5	1.3	1.2	1.2	1.1	1.0	1.0	1.0	1.0	1.0

Table 1387: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	13.5	13.6	13.8	14.0	14.2	14.5
CAZ	0.3	0.3	0.3	0.3	0.3	0.3
CHA	2.4	2.4	2.4	2.3	2.3	2.3
EUR	0.9	0.9	0.9	0.9	0.8	0.8
IND	3.3	3.4	3.5	3.6	3.7	3.8
LAM	1.0	1.0	1.1	1.1	1.1	1.1
MEA	0.3	0.3	0.3	0.2	0.2	0.2
NEU	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.6	1.6	1.6	1.7	1.7	1.7
REF	1.0	1.0	1.0	1.0	1.0	0.9
SSA	1.4	1.5	1.6	1.8	2.0	2.0
USA	1.0	1.0	1.0	1.0	1.0	1.0

Table 1388: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	5.9	6.0	6.1	6.2	6.3	6.3	6.4	6.5	6.6	6.7	6.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
CHA	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6
EUR	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
IND	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6
LAM	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
REF	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
SSA	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
USA	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Table 1389: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	6.8	7.0	7.1	7.2	7.3	7.4	7.5	7.5	7.7	7.8	7.9
CAZ	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8
EUR	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
IND	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.1
LAM	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7
REF	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
SSA	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5
USA	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

Table 1390: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	7.9	8.1	8.4	8.4	8.5	8.6	8.7	8.7	8.8	8.9	8.9
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.4
EUR	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.4	1.4
IND	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.5
LAM	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
MEA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
REF	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
SSA	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7
USA	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Table 1391: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	9.0	9.1	9.2	9.2	9.3	9.4	9.5	9.5	9.6	9.7	10.0
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.7
EUR	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2
IND	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.9
LAM	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
REF	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9
USA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Table 1392: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 4/5]

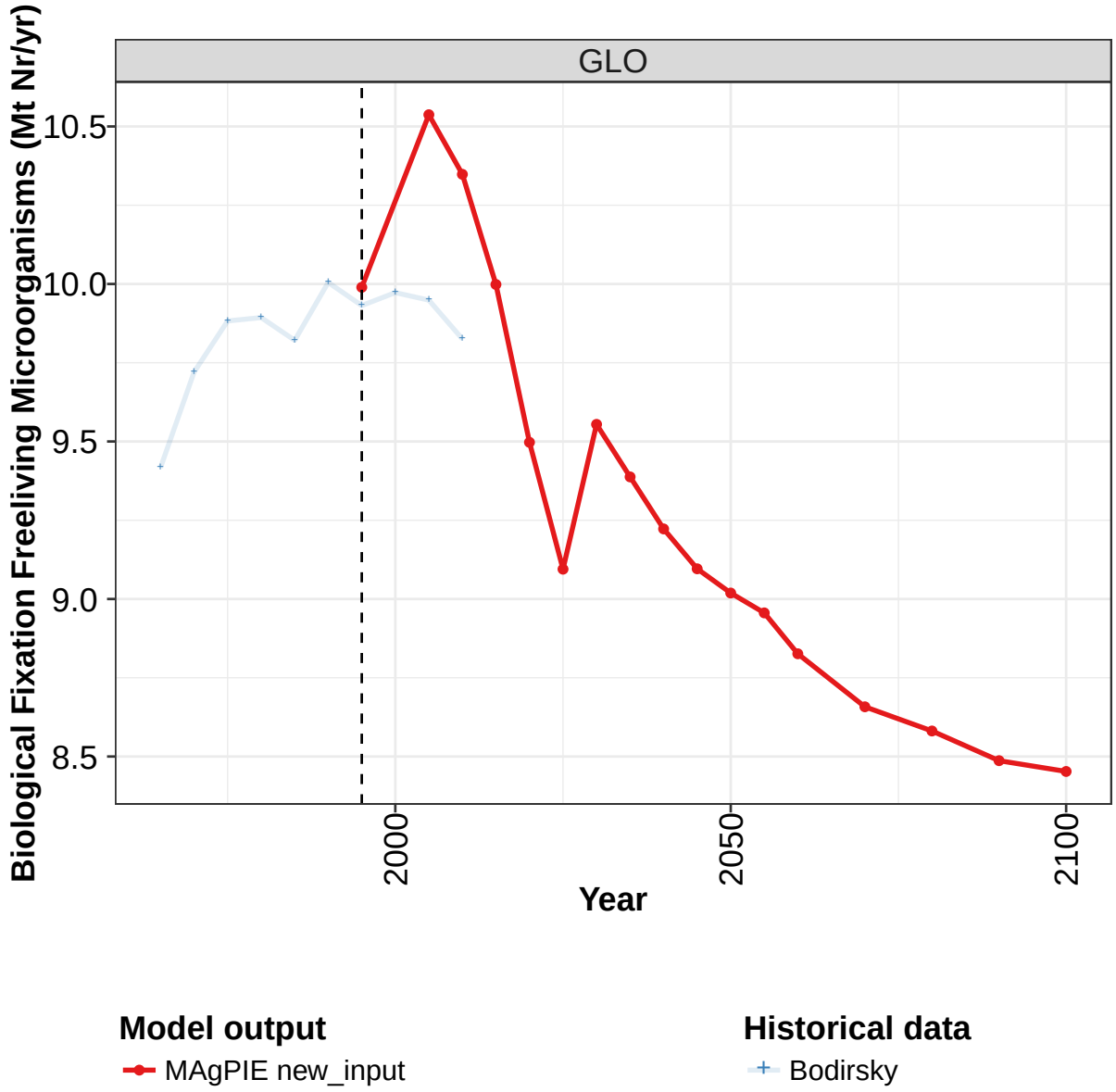
	2005	2006	2007	2008	2009
GLO	10.1	10.1	10.1	10.3	10.4
CAZ	0.1	0.1	0.1	0.1	0.1
CHA	1.7	1.8	1.7	1.7	1.7
EUR	1.2	1.2	1.1	1.2	1.1
IND	2.9	2.9	3.0	3.0	3.0
LAM	0.7	0.7	0.7	0.8	0.7
MEA	0.3	0.3	0.3	0.3	0.3
NEU	0.2	0.2	0.2	0.2	0.2
OAS	1.1	1.1	1.1	1.1	1.2
REF	0.3	0.3	0.3	0.3	0.3
SSA	0.9	0.9	0.9	0.9	0.9
USA	0.7	0.7	0.7	0.7	0.7

Table 1393: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 5/5]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.3	10.2	11.4	12.7	13.5	14.8	14.9	15.0	16.5	17.6
CAZ	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	0.6	0.9	1.1	1.2	1.5	2.0	2.4	2.5	3.1	3.4
EUR	1.6	1.9	2.1	2.3	2.3	2.3	1.9	1.7	1.6	1.4
IND	0.8	1.4	1.6	1.9	2.1	2.5	2.8	3.0	3.5	4.2
LAM	0.3	0.4	0.5	0.6	0.6	0.7	0.9	0.9	1.1	1.2
MEA	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5
NEU	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
OAS	0.6	1.0	1.2	1.3	1.5	1.8	1.9	2.0	2.4	2.7
REF	1.1	1.5	1.8	2.0	2.1	2.1	1.3	1.0	0.9	0.9
SSA	0.3	0.5	0.5	0.6	0.6	0.7	0.9	1.0	1.3	1.4
USA	1.5	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.5	1.3

Table 1394: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

56.1.7 Inputs—Biological Fixation Freeliving Microorganisms



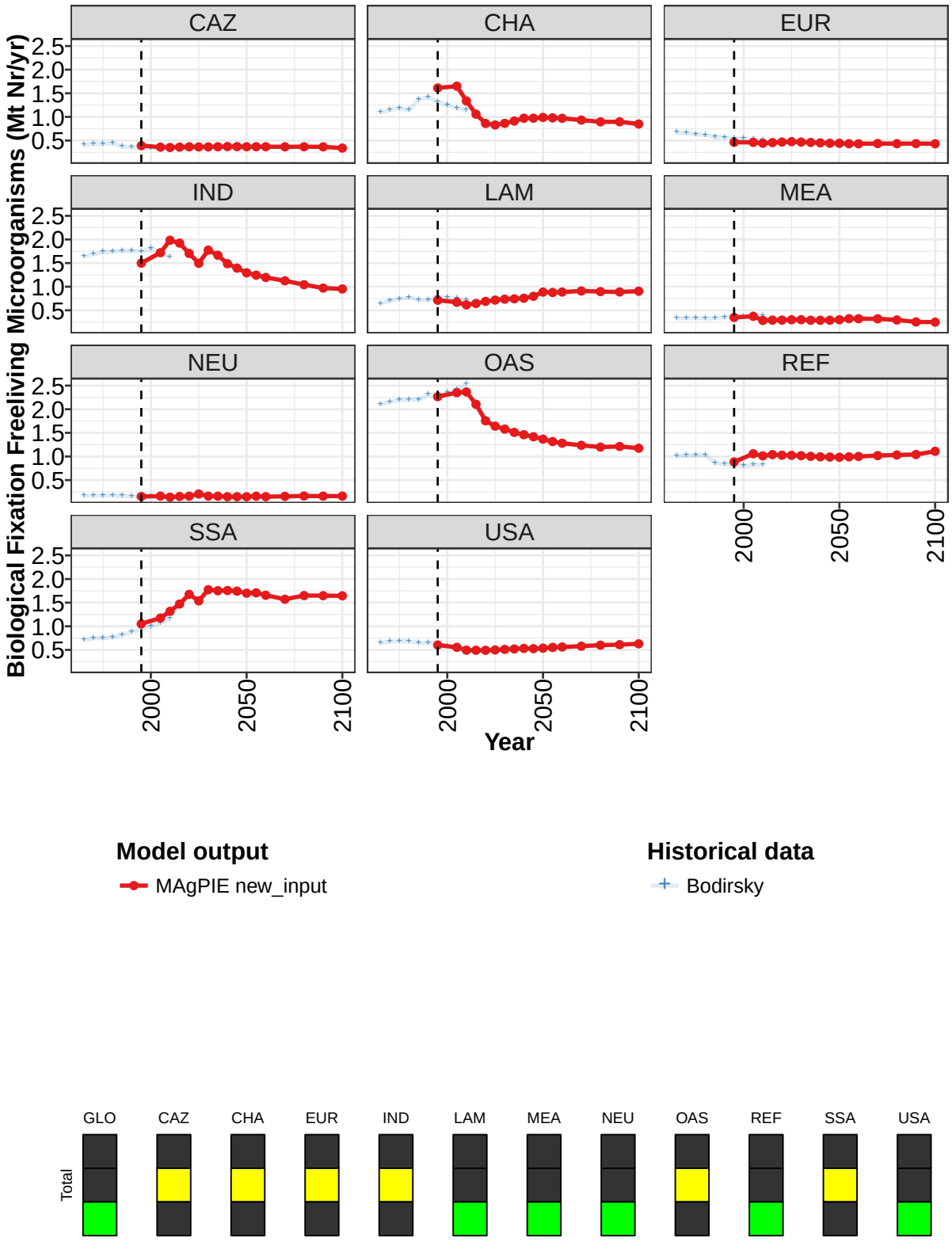


Figure 379: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Free-living Microorganisms (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	10.0	10.5	10.3	10.0	9.5	9.1	9.6	9.4	9.2	9.1	9.0
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	1.6	1.7	1.3	1.1	0.9	0.8	0.9	0.9	1.0	1.0	1.0
EUR	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
IND	1.5	1.7	2.0	1.9	1.7	1.5	1.8	1.7	1.5	1.4	1.3
LAM	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.9
MEA	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NEU	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
OAS	2.3	2.4	2.4	2.1	1.8	1.6	1.6	1.5	1.5	1.4	1.4
REF	0.9	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SSA	1.1	1.2	1.3	1.5	1.7	1.5	1.8	1.8	1.8	1.7	1.7
USA	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Table 1395: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Freeliving Microorganisms (Mt Nr/yr) [PART 1/2]

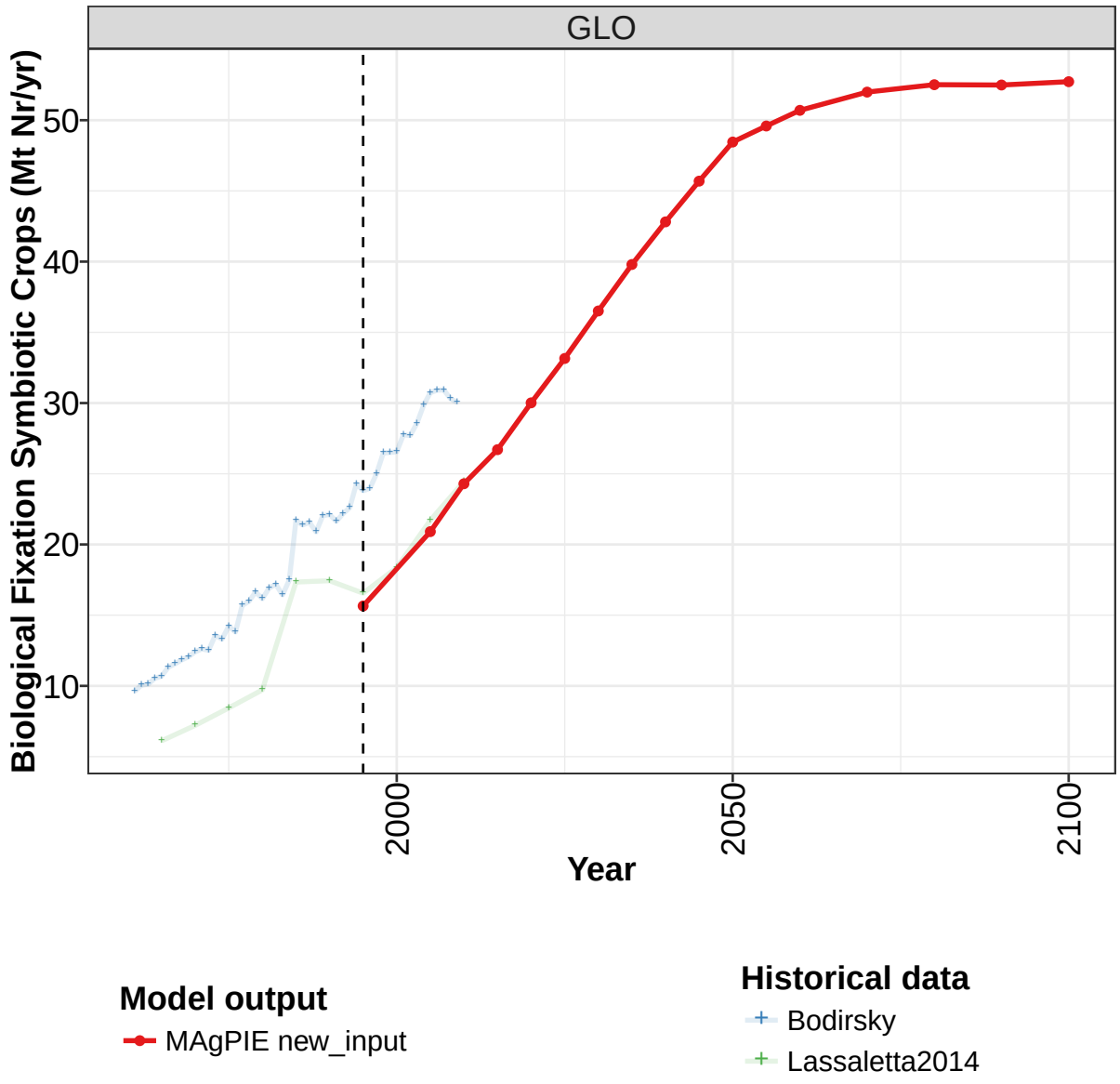
	2055	2060	2070	2080	2090	2100
GLO	9.0	8.8	8.7	8.6	8.5	8.5
CAZ	0.4	0.4	0.4	0.4	0.4	0.3
CHA	1.0	1.0	0.9	0.9	0.9	0.8
EUR	0.4	0.4	0.4	0.4	0.4	0.4
IND	1.2	1.2	1.1	1.0	1.0	1.0
LAM	0.9	0.9	0.9	0.9	0.9	0.9
MEA	0.3	0.3	0.3	0.3	0.3	0.3
NEU	0.2	0.1	0.2	0.2	0.2	0.2
OAS	1.3	1.3	1.2	1.2	1.2	1.2
REF	1.0	1.0	1.0	1.0	1.0	1.1
SSA	1.7	1.7	1.6	1.6	1.6	1.6
USA	0.6	0.6	0.6	0.6	0.6	0.6

Table 1396: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Freeliving Microorganisms (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.4	9.7	9.9	9.9	9.8	10.0	9.9	10.0	9.9	9.8
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3
CHA	1.1	1.1	1.2	1.1	1.4	1.4	1.3	1.3	1.2	1.1
EUR	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
IND	1.6	1.7	1.7	1.7	1.8	1.8	1.7	1.8	1.7	1.6
LAM	0.6	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.7
MEA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
OAS	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.5
REF	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.8	0.8	0.8
SSA	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.2
USA	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5

Table 1397: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Freeliving Microorganisms (Mt Nr/yr)

56.1.8 Inputs—Biological Fixation Symbiotic Crops



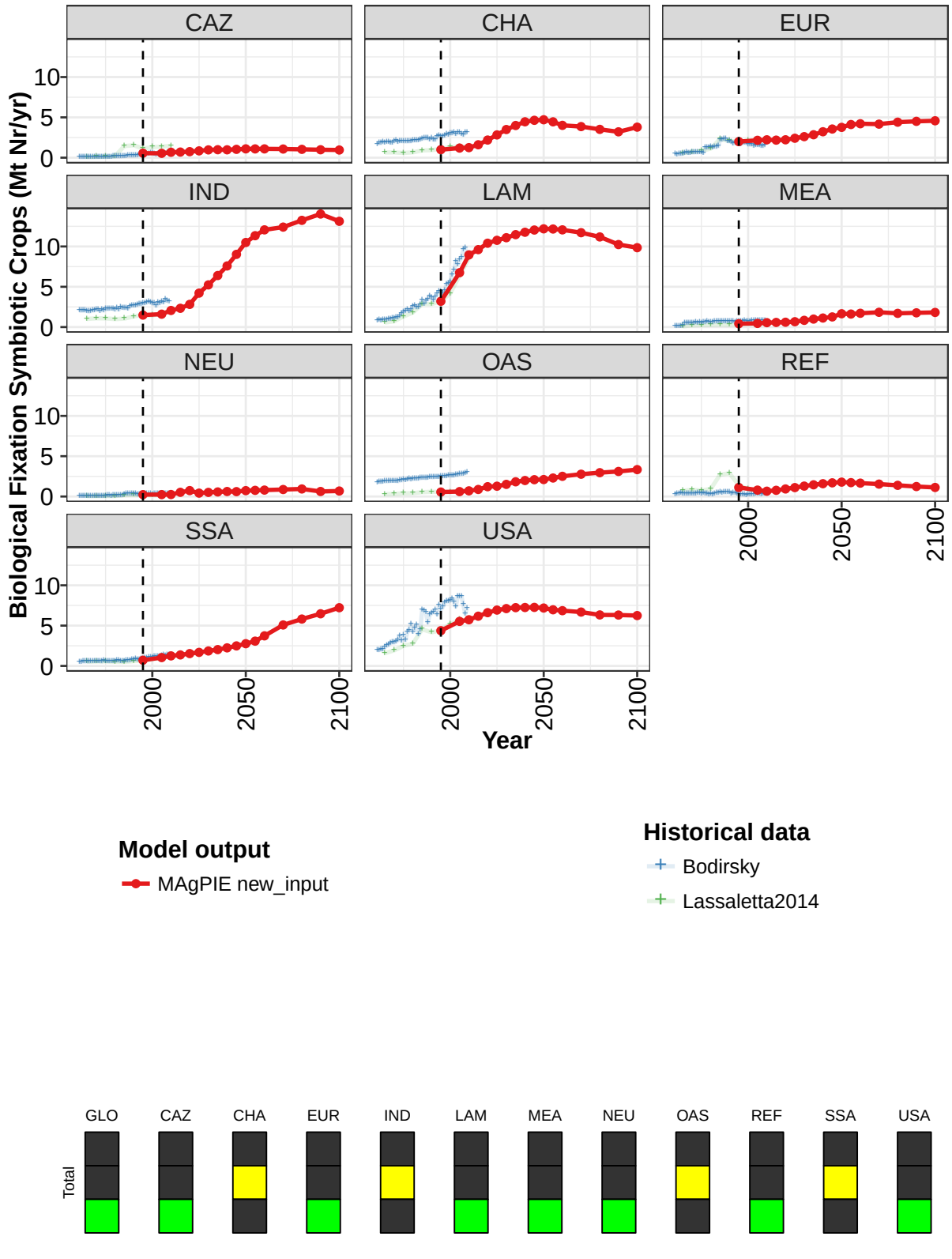


Figure 380: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	15.7	20.9	24.3	26.7	30.0	33.2	36.5	39.8	42.8	45.7	48.5
CAZ	0.6	0.5	0.7	0.7	0.7	0.8	1.0	1.0	1.0	1.0	1.1
CHA	1.0	1.2	1.2	1.6	2.2	2.8	3.5	4.0	4.5	4.6	4.7
EUR	2.0	2.2	2.2	2.2	2.2	2.4	2.6	2.8	3.2	3.6	3.8
IND	1.5	1.6	2.1	2.3	2.8	4.2	5.2	6.4	7.6	9.0	10.5
LAM	3.2	6.7	9.0	9.6	10.4	10.8	11.1	11.5	11.8	12.0	12.2
MEA	0.4	0.5	0.6	0.6	0.6	0.7	0.8	1.0	1.1	1.3	1.7
NEU	0.2	0.2	0.2	0.5	0.7	0.4	0.5	0.6	0.6	0.6	0.7
OAS	0.6	0.6	0.7	0.9	1.2	1.3	1.5	1.8	2.0	2.1	2.1
REF	1.1	0.8	0.7	0.8	0.9	1.1	1.3	1.5	1.6	1.7	1.8
SSA	0.7	1.0	1.2	1.4	1.5	1.7	1.9	2.0	2.2	2.5	2.8
USA	4.4	5.5	5.7	6.2	6.6	6.9	7.1	7.2	7.2	7.3	7.2

Table 1398: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	49.6	50.7	52.0	52.5	52.5	52.7
CAZ	1.1	1.1	1.1	1.0	1.0	1.0
CHA	4.4	4.0	3.9	3.5	3.2	3.8
EUR	4.1	4.2	4.2	4.4	4.5	4.6
IND	11.3	12.1	12.4	13.2	14.0	13.1
LAM	12.2	12.1	11.7	11.2	10.2	9.9
MEA	1.6	1.7	1.8	1.7	1.8	1.8
NEU	0.8	0.8	0.9	0.9	0.6	0.7
OAS	2.3	2.5	2.8	3.0	3.1	3.3
REF	1.7	1.7	1.5	1.4	1.2	1.1
SSA	3.1	3.7	5.1	5.8	6.5	7.2
USA	7.0	6.9	6.7	6.3	6.3	6.2

Table 1399: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	9.6	10.1	10.1	10.5	10.7	11.3	11.6	11.8	12.1	12.4	12.6
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.7	1.8	1.8	2.0	1.9	1.9	1.9	1.9	1.8	2.0	2.1
EUR	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
IND	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.1	2.1	2.2	2.2
LAM	0.8	0.9	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1
MEA	0.1	0.1	0.1	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	1.9	1.9
REF	0.2	0.4	0.4	0.5	0.3	0.3	0.3	0.4	0.4	0.4	0.3
SSA	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
USA	1.9	2.0	2.0	2.0	2.3	2.5	2.6	2.8	2.9	2.9	3.0

Table 1400: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	12.5	13.6	13.3	14.2	13.8	15.7	16.0	16.6	16.2	16.9	17.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.9	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1
EUR	0.7	0.7	0.7	0.7	0.6	1.2	1.2	1.3	1.3	1.3	1.3
IND	2.0	2.1	2.0	2.2	2.2	2.3	2.3	2.3	2.1	2.3	2.2
LAM	1.2	1.4	1.6	1.9	2.0	2.2	2.0	2.1	2.6	2.6	2.4
MEA	0.6	0.5	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.6	0.6
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.9	2.0	2.0	2.1	2.0	2.1	2.2	2.1	2.2	2.2	2.2
REF	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.2	0.3	0.2	0.3
SSA	0.6	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
USA	3.2	3.7	3.1	3.8	3.2	4.2	4.4	5.2	4.2	4.7	5.1

Table 1401: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	16.4	17.5	21.7	21.4	21.6	20.9	22.0	22.1	21.6	22.2	22.6
CAZ	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4
CHA	2.2	2.2	2.3	2.4	2.4	2.4	2.3	2.4	2.2	2.2	2.6
EUR	1.3	1.4	2.2	2.2	2.3	2.3	2.0	2.0	2.0	1.7	1.8
IND	2.4	2.4	2.3	2.4	2.3	2.6	2.7	2.7	2.7	2.7	2.8
LAM	2.5	2.7	3.3	2.9	3.2	3.5	3.9	3.7	3.3	3.8	4.1
MEA	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
NEU	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4
REF	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.3	0.4	0.4
SSA	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8
USA	3.9	4.5	6.9	6.9	6.6	5.4	6.3	6.5	6.7	6.9	6.4

Table 1402: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	24.3	23.8	24.0	25.0	26.5	26.5	26.6	27.8	27.7	28.6	29.8
CAZ	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5
CHA	2.8	2.7	2.7	2.7	2.9	2.9	3.0	3.0	3.1	2.9	3.1
EUR	1.7	1.7	1.7	1.8	1.8	1.8	1.6	1.6	1.6	1.5	1.6
IND	2.8	2.9	3.0	3.0	3.1	3.0	2.9	2.9	2.6	3.1	2.9
LAM	4.4	4.4	4.2	4.5	5.3	5.4	5.6	6.5	7.0	8.2	7.8
MEA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
OAS	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.7	2.7
REF	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3
SSA	0.8	0.8	0.9	0.9	1.0	1.1	1.0	1.1	1.1	1.2	1.2
USA	7.6	7.0	7.3	7.8	8.0	8.0	8.1	8.3	7.9	7.4	8.6

Table 1403: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 4/5]

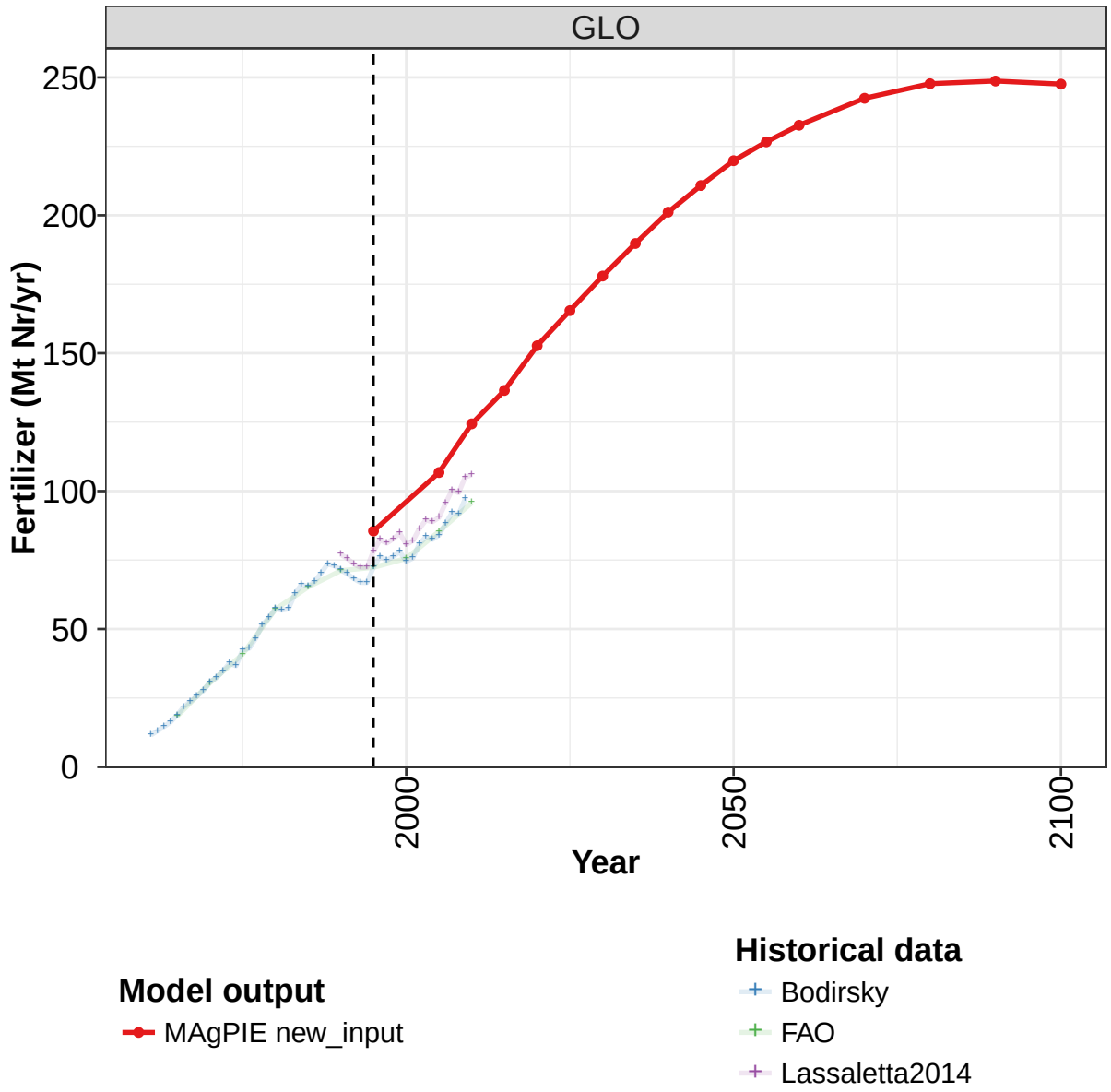
	2005	2006	2007	2008	2009
GLO	30.7	30.9	30.9	30.3	30.0
CAZ	0.6	0.5	0.5	0.6	0.6
CHA	3.1	2.9	2.8	3.1	3.1
EUR	1.6	1.5	1.4	1.4	1.5
IND	3.1	3.1	3.5	3.3	3.1
LAM	8.3	8.6	9.6	9.8	8.7
MEA	0.8	0.8	0.8	0.8	0.8
NEU	0.4	0.4	0.3	0.3	0.3
OAS	2.8	2.8	2.8	2.9	2.9
REF	0.3	0.3	0.3	0.3	0.3
SSA	1.3	1.4	1.3	1.4	1.4
USA	8.6	8.6	7.6	6.5	7.2

Table 1404: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 5/5]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.1	7.2	8.4	9.7	17.3	17.4	16.6	18.4	21.7	24.5
CAZ	0.1	0.1	0.1	0.2	1.4	1.5	1.1	1.3	1.4	1.5
CHA	0.6	0.7	0.6	0.7	0.9	0.9	1.1	1.3	1.4	1.3
EUR	0.5	0.7	0.8	1.1	2.3	2.1	2.0	2.1	2.1	2.2
IND	1.0	1.1	1.1	1.0	1.0	1.3	1.5	1.4	1.7	2.0
LAM	0.6	0.7	1.3	1.8	2.9	2.8	3.2	4.2	6.4	8.5
MEA	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.7
REF	0.7	0.8	0.7	0.9	2.7	2.9	1.4	0.9	0.8	0.6
SSA	0.5	0.6	0.6	0.5	0.5	0.6	0.7	0.8	1.0	1.3
USA	1.6	1.9	2.5	2.8	4.5	4.2	4.4	5.2	5.7	5.6

Table 1405: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr)

56.1.9 Inputs—Fertilizer



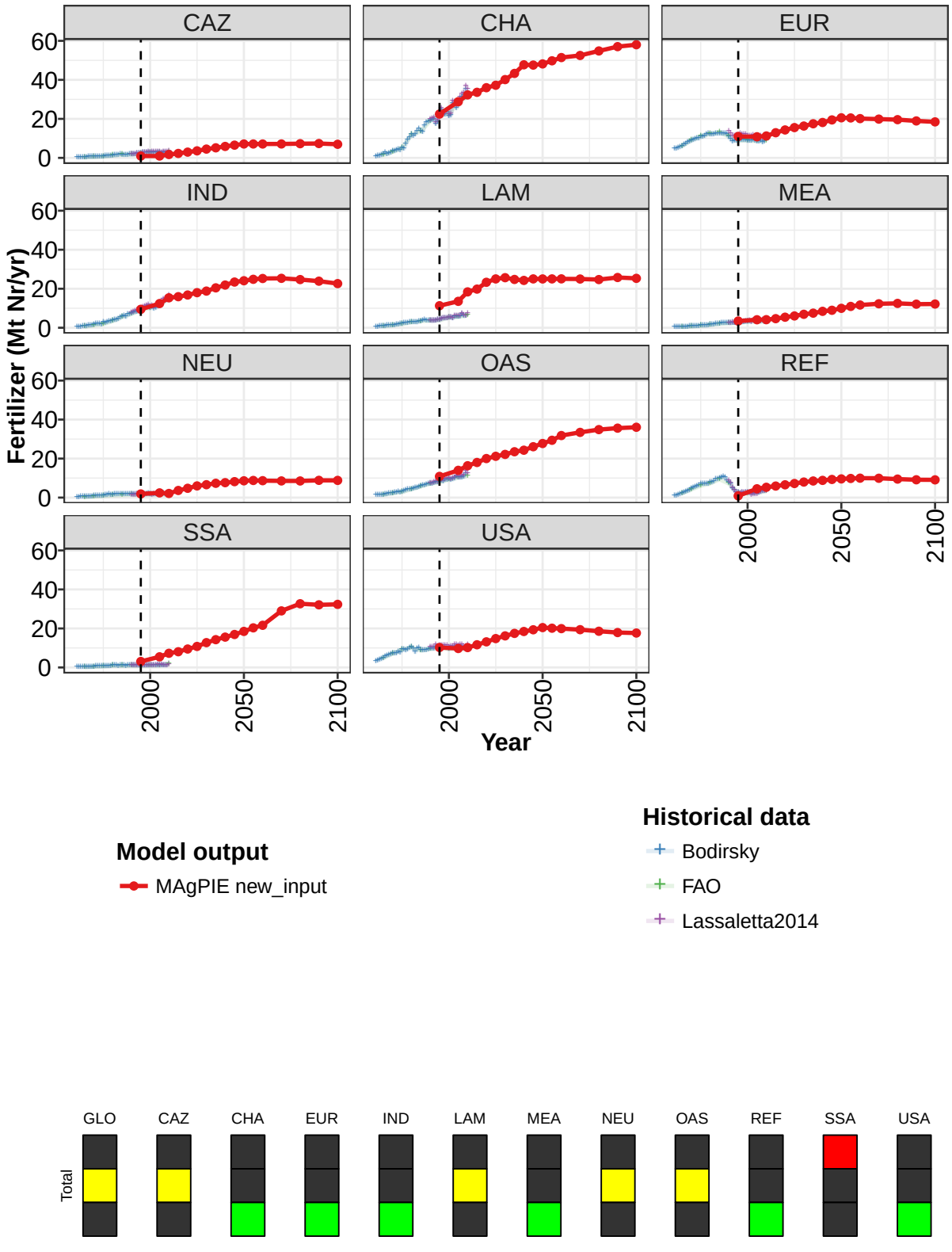


Figure 381: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	86	107	124	137	153	165	178	190	201	211	220
CAZ	1	1	2	2	3	4	5	5	6	7	7
CHA	22	29	32	34	36	37	40	43	48	48	48
EUR	11	11	11	13	14	16	16	17	18	19	21
IND	9	12	15	16	17	18	19	20	22	23	24
LAM	11	14	18	20	23	25	26	25	24	25	25
MEA	3	4	4	5	5	6	7	7	8	9	10
NEU	2	2	2	4	5	6	7	7	8	8	9
OAS	11	14	16	18	20	21	22	24	24	26	28
REF	1	5	5	6	7	7	8	9	9	9	10
SSA	3	5	7	8	9	11	13	14	16	17	18
USA	10	10	10	12	13	15	16	17	18	19	20

Table 1406: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	227	233	242	248	249	248
CAZ	7	7	7	7	7	7
CHA	50	51	53	55	57	58
EUR	20	20	20	20	19	18
IND	25	25	25	25	24	23
LAM	25	25	25	25	26	25
MEA	11	12	12	12	12	12
NEU	9	9	9	9	9	9
OAS	29	32	33	35	36	36
REF	10	10	10	9	9	9
SSA	20	22	29	33	32	32
USA	20	20	19	19	18	18

Table 1407: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	11.6	13.1	14.6	16.3	18.8	21.7	23.6	25.6	27.6	30.7	32.3
CAZ	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.4	0.4	0.4	0.5
CHA	0.5	0.8	1.0	1.2	1.8	2.7	1.9	2.1	2.6	3.3	3.3
EUR	4.5	4.7	5.0	5.4	6.0	6.6	7.2	7.9	8.2	8.7	9.1
IND	0.2	0.3	0.4	0.6	0.6	0.7	1.0	1.2	1.3	1.5	1.8
LAM	0.4	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.3	1.3
MEA	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.7
NEU	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.8
OAS	1.2	1.3	1.3	1.3	1.4	1.6	1.8	2.0	2.1	2.3	2.3
REF	0.9	1.1	1.3	1.7	2.2	2.6	3.0	3.4	3.7	4.4	5.0
SSA	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
USA	3.1	3.6	3.9	4.2	4.8	5.4	6.1	6.2	6.6	7.2	7.1

Table 1408: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	34.8	37.6	36.7	42.3	43.0	46.5	51.4	54.0	57.3	56.8	57.3
CAZ	0.6	0.7	0.7	0.7	0.8	1.0	1.1	1.1	1.2	1.2	1.3
CHA	3.8	4.4	3.8	5.0	4.7	7.0	9.1	10.5	11.9	11.3	12.0
EUR	9.4	9.9	9.9	10.6	10.8	11.0	11.8	12.2	11.9	11.9	12.1
IND	1.8	1.8	1.7	2.7	2.4	2.8	3.3	3.4	3.5	3.9	3.9
LAM	1.6	1.7	1.8	1.9	2.2	2.5	2.4	2.6	2.8	2.8	2.8
MEA	0.8	0.9	0.9	1.0	1.0	1.1	1.0	1.3	1.4	1.5	1.7
NEU	0.9	0.9	0.8	1.0	1.2	1.3	1.5	1.4	1.5	1.5	1.6
OAS	2.7	2.8	2.7	2.9	3.2	3.6	3.9	4.1	4.3	4.5	4.8
REF	5.4	5.9	6.3	6.9	6.8	7.0	7.1	6.9	7.6	7.7	8.3
SSA	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.9	1.0	0.9
USA	7.3	8.0	7.5	9.1	9.3	8.7	9.3	9.9	10.3	9.5	7.8

Table 1409: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	62.7	66.2	65.4	67.2	70.3	73.6	72.9	71.4	70.0	68.2	66.9
CAZ	1.6	1.7	1.6	1.5	1.6	1.6	1.6	1.6	1.8	1.9	2.0
CHA	13.4	14.8	13.5	13.2	16.4	18.0	18.3	19.0	19.4	19.7	17.4
EUR	12.3	12.3	12.5	12.5	12.3	12.5	12.2	10.5	9.4	8.4	8.6
IND	4.4	5.1	5.5	6.2	5.4	6.8	6.8	7.1	7.6	7.9	8.2
LAM	2.7	3.2	3.4	3.8	3.9	3.7	3.7	3.6	3.4	3.5	3.7
MEA	1.9	1.9	2.0	2.3	2.3	2.3	2.5	2.3	2.4	2.5	2.5
NEU	1.7	1.8	1.7	1.7	1.9	1.8	1.8	1.8	1.6	1.6	1.7
OAS	5.1	5.4	5.7	6.2	6.3	6.7	7.0	7.1	7.2	7.5	7.6
REF	9.4	9.3	9.9	10.3	10.5	10.3	8.8	7.7	6.9	4.7	3.5
SSA	0.8	0.9	0.9	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0
USA	9.5	9.8	8.9	8.7	8.9	8.9	9.3	9.5	9.6	9.5	10.5

Table 1410: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	66.8	72.4	76.3	74.9	76.2	78.0	74.5	75.7	80.9	83.3	82.5
CAZ	2.1	2.3	2.5	2.5	2.6	2.8	2.6	2.7	2.7	2.7	2.7
CHA	18.5	23.0	24.4	22.2	22.1	23.3	21.3	21.6	28.0	27.3	25.5
EUR	8.8	8.6	9.3	9.0	9.0	9.0	8.6	8.7	8.7	9.2	8.7
IND	8.9	9.2	9.6	10.1	10.5	10.7	10.1	10.4	9.6	10.1	10.7
LAM	3.8	3.8	4.4	4.7	4.8	4.8	5.0	5.1	4.7	5.6	5.6
MEA	2.4	2.6	2.7	2.8	3.0	3.0	3.1	3.3	3.3	3.4	3.5
NEU	1.4	1.5	1.6	1.7	1.9	1.9	1.8	1.6	1.7	1.8	2.0
OAS	7.8	8.0	8.6	8.3	9.0	9.2	9.2	9.0	9.3	9.7	10.4
REF	2.4	2.3	2.1	2.5	2.2	2.3	2.3	2.5	2.0	2.2	2.2
SSA	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1
USA	9.7	10.2	10.2	10.1	10.2	10.1	9.4	9.8	9.8	10.3	10.1

Table 1411: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 4/5]

	2005	2006	2007	2008	2009
GLO	84.0	88.1	92.2	91.5	97.2
CAZ	2.8	2.3	2.6	2.5	2.3
CHA	26.9	29.8	31.1	31.7	35.2
EUR	8.4	8.3	8.8	8.0	8.3
IND	11.6	12.5	13.1	13.7	14.2
LAM	5.6	5.7	7.0	6.0	5.8
MEA	3.5	3.4	3.3	3.6	2.9
NEU	1.9	1.9	1.9	1.7	2.0
OAS	10.1	10.0	10.3	10.6	12.4
REF	2.4	2.7	2.9	3.3	3.4
SSA	1.0	1.2	1.0	1.1	1.0
USA	9.8	10.3	10.2	9.4	9.7

Table 1412: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 5/5]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	18.4	30.4	40.8	57.1	65.2	71.1	72.3	75.6	85.4	95.8
CAZ	0.3	0.5	0.7	1.2	1.7	1.6	2.3	2.6	2.6	3.0
CHA	1.5	3.1	5.0	11.8	13.5	19.0	23.0	22.1	28.7	31.2
EUR	6.1	9.0	11.0	12.4	13.1	11.0	8.8	9.0	8.6	8.9
IND	0.5	1.3	1.9	3.4	5.5	7.1	9.2	10.1	11.6	15.1
LAM	0.7	1.3	1.9	2.8	3.4	3.7	3.8	5.3	5.6	6.4
MEA	0.4	0.6	1.0	1.4	2.0	2.3	2.6	3.0	3.2	3.1
NEU	0.2	0.5	0.8	1.2	1.4	1.6	1.3	1.6	1.7	1.5
OAS	1.5	2.2	2.9	4.3	5.7	7.2	8.0	9.3	10.3	11.2
REF	2.1	4.2	6.0	7.3	9.4	7.2	2.2	2.2	2.5	3.4
SSA	0.2	0.4	0.6	0.9	0.9	1.0	0.9	1.0	1.0	1.6
USA	4.8	7.2	9.1	10.3	8.7	9.5	10.2	9.4	9.7	10.3

Table 1413: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr)

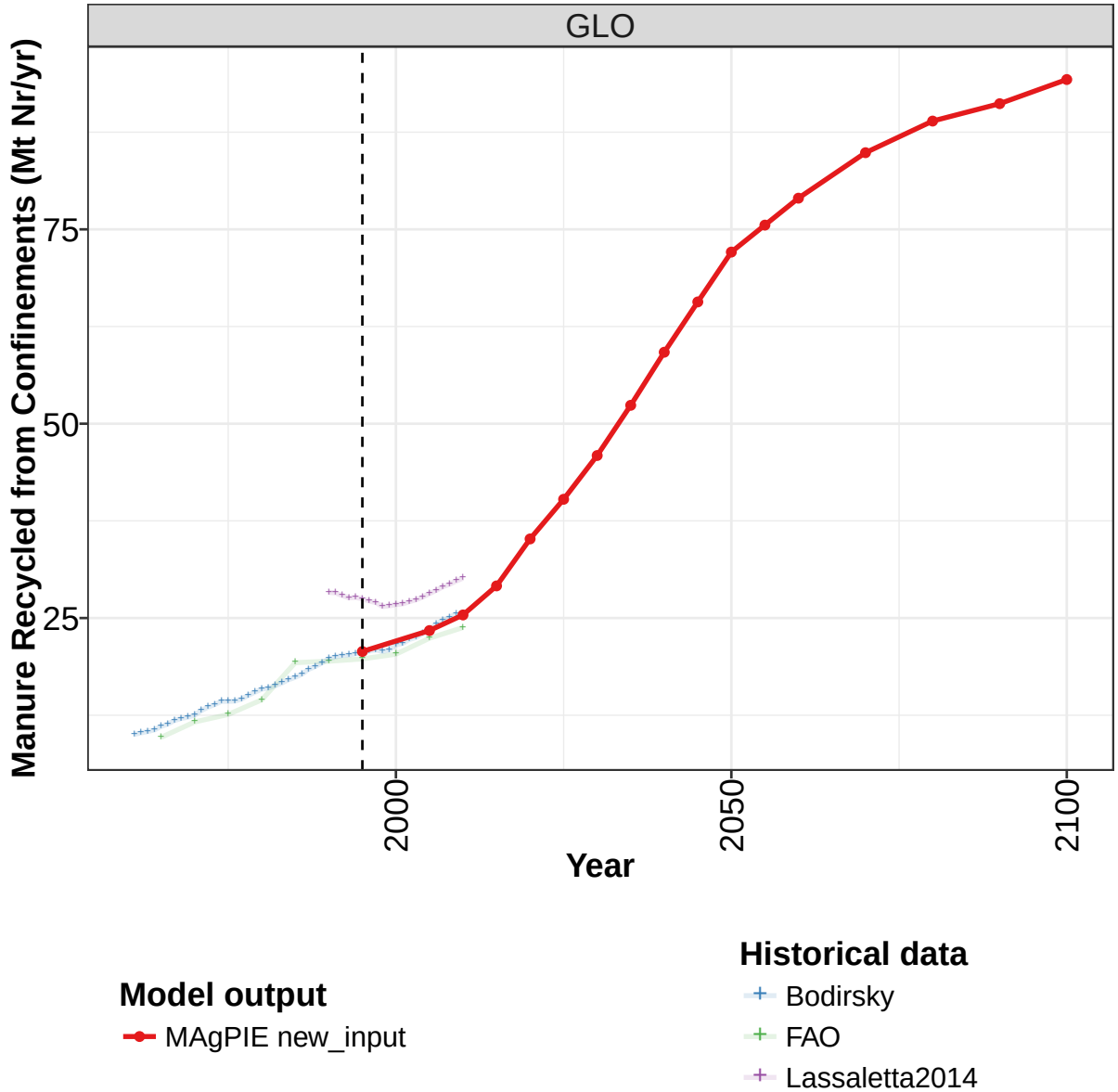
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	77	76	74	72	72	78	82	81	83	85	81
CAZ	2	2	2	2	2	2	3	3	3	3	3
CHA	20	20	20	18	19	24	25	23	23	24	22
EUR	14	12	11	11	12	11	12	12	12	12	11
IND	8	8	8	9	10	10	10	11	11	12	11
LAM	4	4	4	4	4	4	4	5	5	5	5
MEA	2	2	3	3	2	3	3	3	3	3	3
NEU	1	1	1	2	1	1	1	1	2	2	2
OAS	7	7	8	8	8	8	9	9	9	10	10
REF	8	8	5	4	3	3	2	3	2	2	2
SSA	1	1	1	1	1	1	1	1	1	1	1
USA	10	10	10	11	11	11	11	11	11	11	10

Table 1414: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 1/2]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLO	82	86	90	89	90	96	100	99	105	106
CAZ	3	3	3	3	3	2	3	3	3	3
CHA	22	29	28	27	28	31	33	33	37	35
EUR	11	11	12	11	10	10	11	10	10	11
IND	11	10	11	12	13	14	14	15	16	17
LAM	5	5	6	6	6	6	7	6	6	7
MEA	3	3	3	4	4	4	3	4	3	3
NEU	1	2	2	2	2	2	2	2	2	2
OAS	10	10	10	11	11	11	11	11	13	12
REF	3	1	2	2	2	3	3	3	3	3
SSA	1	1	1	1	1	1	1	1	1	1
USA	11	11	12	11	11	12	12	11	11	11

Table 1415: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 2/2]

56.1.10 Inputs—Manure Recycled from Confinements



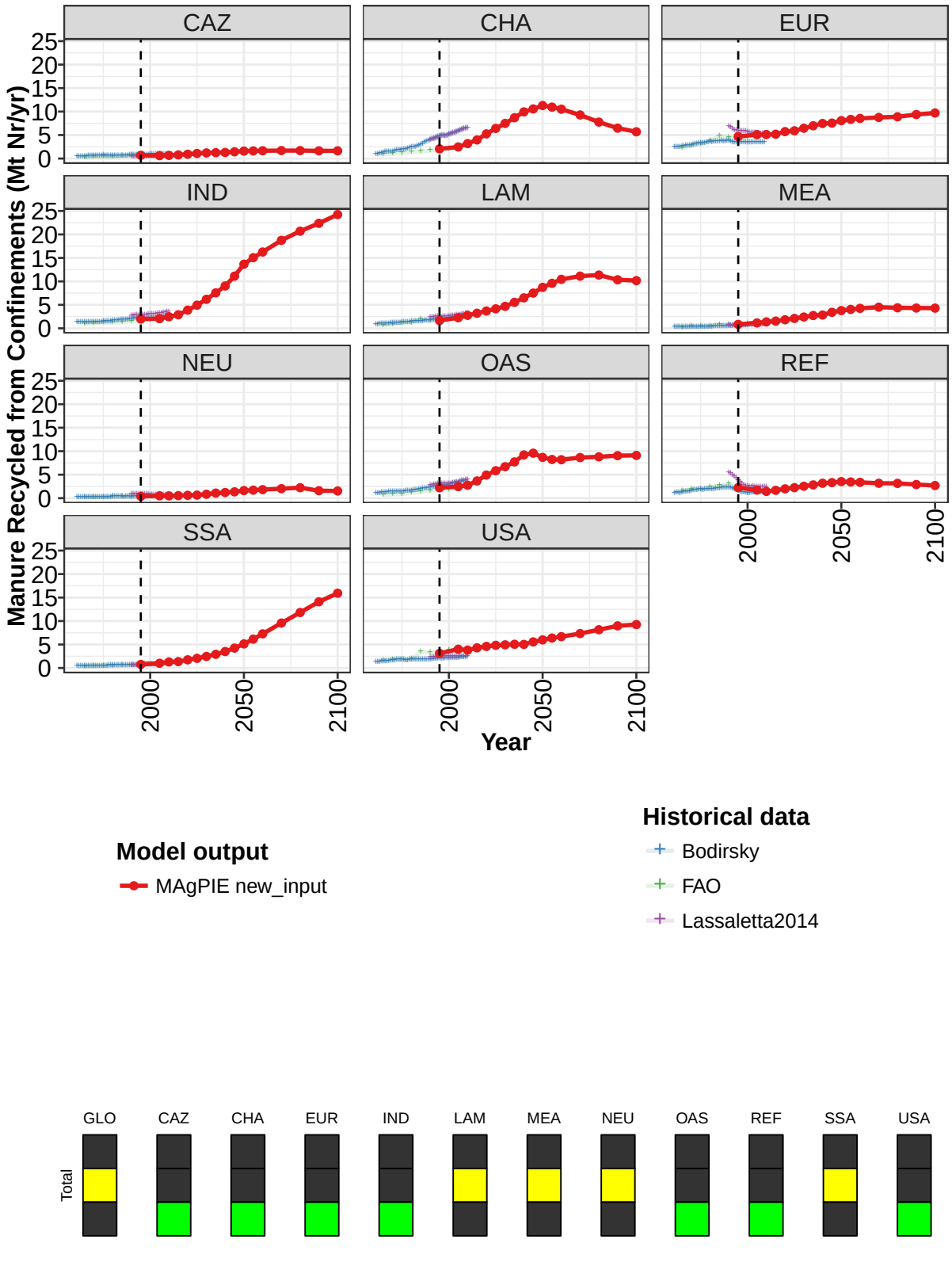


Figure 382: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	20.7	23.4	25.4	29.1	35.2	40.3	45.9	52.4	59.2	65.7	72.1
CAZ	0.7	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.3	1.4	1.6
CHA	2.1	2.5	3.2	4.0	5.2	6.4	7.5	8.7	9.9	10.6	11.3
EUR	4.7	5.1	5.1	5.2	5.7	5.9	6.5	7.0	7.5	7.6	8.1
IND	2.0	2.1	2.5	2.9	3.9	4.9	6.2	7.6	9.0	11.1	13.7
LAM	1.7	2.3	2.8	3.2	3.7	4.2	4.7	5.5	6.5	7.5	8.7
MEA	0.9	1.2	1.4	1.5	1.8	2.1	2.4	2.7	2.8	3.4	3.8
NEU	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.1	1.2	1.3	1.6
OAS	2.2	2.5	2.8	3.7	4.9	5.8	6.7	7.7	9.2	9.6	8.7
REF	2.3	1.7	1.4	1.7	2.0	2.2	2.5	2.8	3.2	3.3	3.5
SSA	0.8	1.0	1.3	1.4	1.7	2.1	2.5	2.9	3.5	4.2	5.1
USA	3.1	4.0	3.8	4.3	4.6	4.8	4.9	5.1	5.0	5.6	6.0

Table 1416: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	75.5	79.0	84.9	88.9	91.2	94.3
CAZ	1.6	1.7	1.7	1.7	1.6	1.6
CHA	11.0	10.5	9.3	7.8	6.5	5.7
EUR	8.3	8.5	8.8	8.9	9.4	9.7
IND	15.1	16.3	18.7	20.7	22.4	24.2
LAM	9.6	10.4	11.1	11.4	10.3	10.2
MEA	4.0	4.3	4.5	4.4	4.3	4.3
NEU	1.7	1.8	2.0	2.2	1.6	1.5
OAS	8.2	8.2	8.7	8.8	9.1	9.1
REF	3.5	3.4	3.2	3.2	2.9	2.7
SSA	6.2	7.3	9.6	11.8	14.1	15.9
USA	6.4	6.7	7.3	8.2	9.0	9.3

Table 1417: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	10.0	10.2	10.4	10.6	11.1	11.4	11.8	12.1	12.2	12.5	13.1
CAZ	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
CHA	0.9	0.9	1.0	1.1	1.2	1.3	1.5	1.5	1.5	1.4	1.6
EUR	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.8	2.8	2.8	2.9
IND	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
LAM	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4
REF	1.1	1.2	1.2	1.0	1.2	1.3	1.4	1.4	1.4	1.5	1.7
SSA	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
USA	1.2	1.3	1.3	1.4	1.3	1.4	1.4	1.5	1.5	1.6	1.6

Table 1418: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	13.5	13.9	14.3	14.3	14.3	14.6	15.1	15.5	15.8	16.0	16.3
CAZ	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
CHA	1.7	1.8	1.8	1.9	1.9	1.9	2.1	2.2	2.4	2.5	2.5
EUR	3.0	3.1	3.2	3.2	3.3	3.3	3.4	3.5	3.5	3.5	3.5
IND	1.3	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7
LAM	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5
MEA	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
OAS	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.7
REF	1.7	1.7	1.8	1.8	1.7	1.9	1.9	1.9	1.9	1.9	1.9
SSA	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
USA	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.7

Table 1419: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	16.6	17.1	17.4	17.8	18.4	18.8	19.3	19.7	20.0	20.2	20.2
CAZ	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
CHA	2.6	2.7	2.9	3.0	3.4	3.6	3.8	3.9	4.2	4.3	4.5
EUR	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.5	3.4
IND	1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1
LAM	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.8	1.8
MEA	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	1.8	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.5
REF	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.0	1.9
SSA	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
USA	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9

Table 1420: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	20.4	20.6	20.7	20.9	20.7	20.9	21.6	21.7	22.2	22.5	23.0
CAZ	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.9
CHA	4.6	4.7	4.9	5.0	4.8	4.8	5.2	5.3	5.4	5.4	5.6
EUR	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
IND	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
LAM	1.9	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.5
MEA	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.8	0.8
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.6	2.6	2.7	2.7	2.7	2.7	2.9	2.9	3.1	3.1	3.2
REF	1.7	1.5	1.3	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.1
SSA	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
USA	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1

Table 1421: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 4/5]

	2005	2006	2007	2008	2009
GLO	23.5	24.2	24.7	25.1	25.5
CAZ	0.9	0.9	0.9	0.8	0.8
CHA	5.7	6.0	6.1	6.3	6.5
EUR	3.4	3.4	3.4	3.4	3.4
IND	2.3	2.4	2.4	2.5	2.6
LAM	2.5	2.7	2.7	2.8	2.9
MEA	0.8	0.9	0.9	0.9	0.9
NEU	0.3	0.3	0.3	0.3	0.3
OAS	3.2	3.4	3.5	3.5	3.7
REF	1.1	1.2	1.2	1.2	1.2
SSA	0.9	0.9	1.0	1.0	1.0
USA	2.2	2.3	2.3	2.3	2.2

Table 1422: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 5/5]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.7	11.6	12.6	14.5	19.3	19.4	19.7	20.4	22.4	23.8
CAZ	0.3	0.3	0.3	0.3	0.6	0.7	0.7	0.7	0.8	0.7
CHA	0.9	1.0	1.2	1.3	1.5	1.7	1.8	2.1	2.4	3.1
EUR	2.2	2.7	3.1	3.7	4.8	4.5	4.5	4.6	4.7	4.7
IND	1.0	1.2	1.2	1.2	1.3	1.5	1.7	1.8	2.0	2.3
LAM	0.7	0.9	1.1	1.2	2.0	1.6	1.7	1.9	2.2	2.5
MEA	0.2	0.4	0.4	0.5	0.7	0.7	0.8	0.9	1.1	1.2
NEU	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.5
OAS	0.7	0.8	0.9	1.1	1.4	1.5	1.8	1.9	2.1	2.4
REF	1.5	1.9	1.9	2.4	2.7	3.0	2.5	1.7	1.7	1.3
SSA	0.3	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.0	1.1
USA	1.7	1.8	1.8	1.9	3.5	3.3	3.3	3.7	4.1	3.9

Table 1423: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr)

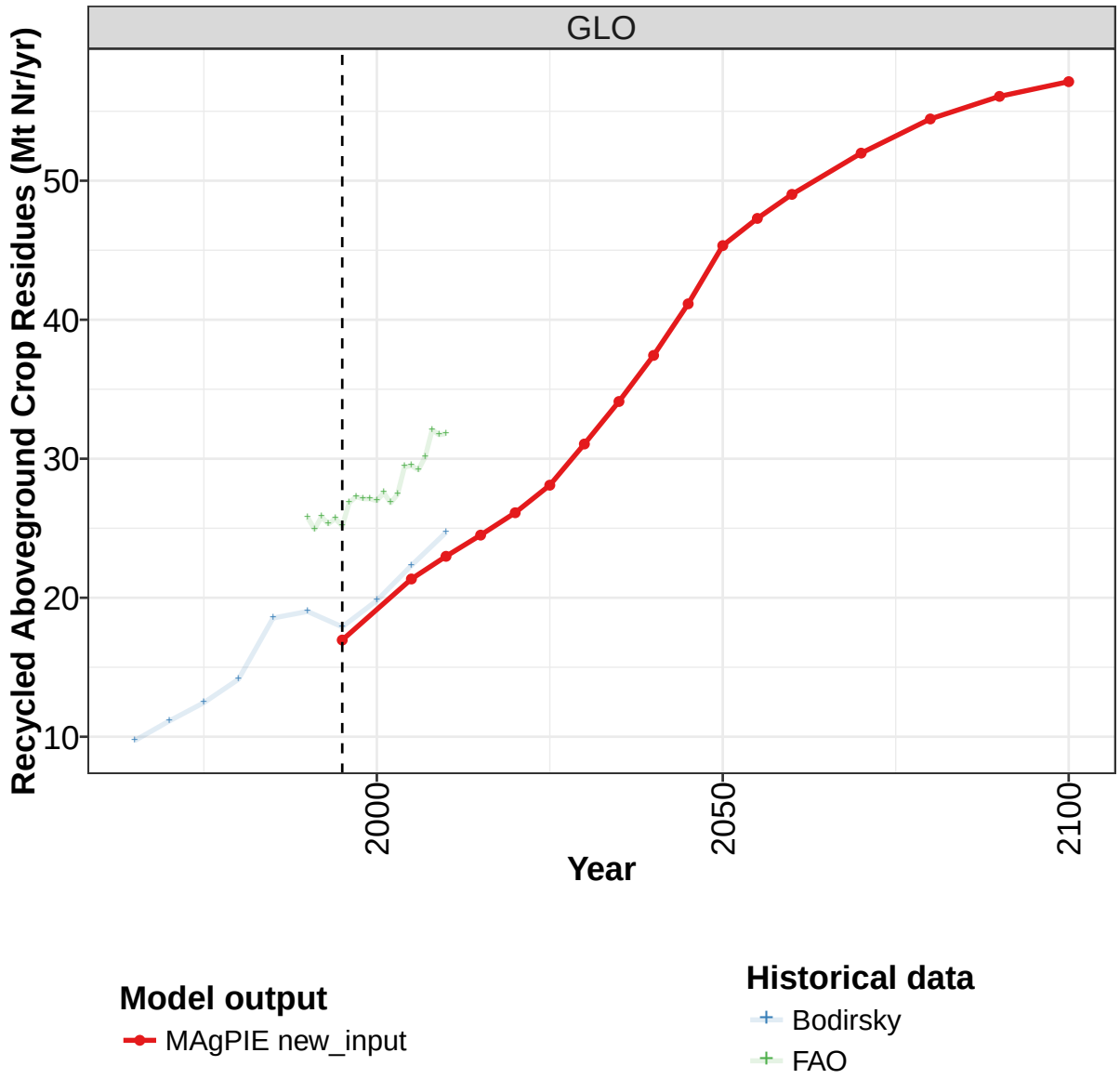
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	28.3	28.2	27.9	27.6	27.6	27.5	27.2	27.0	26.5	26.6	26.7
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	4.0	4.1	4.1	4.2	4.4	4.6	4.8	4.9	4.7	4.9	5.0
EUR	6.8	6.6	6.3	6.0	5.9	5.8	5.8	5.8	5.7	5.7	5.6
IND	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9
LAM	2.3	2.3	2.4	2.4	2.5	2.5	2.4	2.4	2.4	2.5	2.6
MEA	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
NEU	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
OAS	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.1	3.0	3.0	3.1
REF	5.3	5.2	4.8	4.6	4.3	3.8	3.4	3.0	2.7	2.6	2.5
SSA	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
USA	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4

Table 1424: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 1/2]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLO	26.8	27.1	27.3	27.7	28.1	28.6	29.0	29.3	29.8	30.1
CAZ	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
CHA	5.2	5.3	5.4	5.6	5.8	6.0	6.1	6.2	6.3	6.5
EUR	5.5	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.2	5.2
IND	3.0	3.0	3.0	3.1	3.2	3.2	3.3	3.4	3.4	3.5
LAM	2.6	2.7	2.7	2.8	2.9	2.9	2.9	3.0	3.1	3.1
MEA	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9
NEU	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
OAS	3.1	3.2	3.3	3.3	3.4	3.5	3.7	3.7	3.9	3.9
REF	2.4	2.4	2.5	2.4	2.3	2.3	2.4	2.4	2.4	2.5
SSA	0.7	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0
USA	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.4

Table 1425: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Manure Recycled from Confinements (Mt Nr/yr) [PART 2/2]

56.1.11 Inputs—Recycled Aboveground Crop Residues



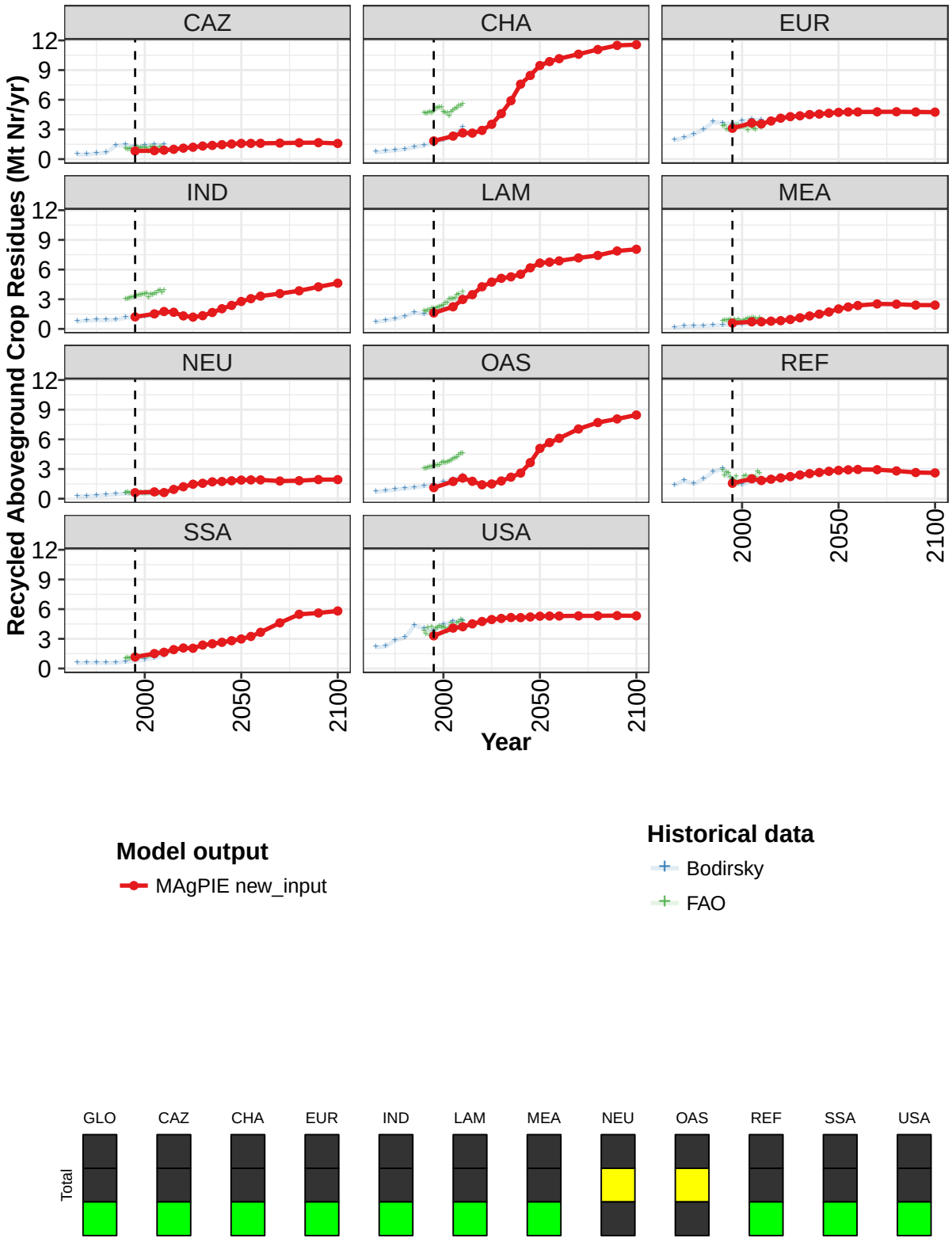


Figure 383: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	17.0	21.3	23.0	24.5	26.1	28.1	31.1	34.1	37.4	41.1	45.3
CAZ	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.6
CHA	1.8	2.3	2.7	2.6	2.9	3.5	4.6	5.9	7.6	8.5	9.5
EUR	3.1	3.7	3.6	3.9	4.1	4.3	4.4	4.5	4.6	4.6	4.7
IND	1.2	1.5	1.8	1.7	1.3	1.2	1.3	1.7	2.0	2.4	2.8
LAM	1.6	2.2	3.0	3.5	4.3	4.7	5.1	5.3	5.5	6.2	6.7
MEA	0.6	0.7	0.7	0.8	0.8	1.0	1.1	1.3	1.5	1.7	2.0
NEU	0.6	0.7	0.6	0.9	1.2	1.5	1.6	1.7	1.7	1.8	1.9
OAS	1.1	1.7	2.1	1.8	1.4	1.5	1.8	2.2	2.6	3.7	5.1
REF	1.6	2.0	1.8	2.0	2.1	2.2	2.4	2.5	2.7	2.8	2.9
SSA	1.2	1.5	1.6	1.9	2.1	2.0	2.4	2.5	2.6	2.8	3.0
USA	3.3	4.1	4.2	4.5	4.8	5.0	5.1	5.2	5.1	5.2	5.3

Table 1426: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	47.3	49.0	52.0	54.4	56.1	57.1
CAZ	1.6	1.6	1.6	1.7	1.7	1.6
CHA	9.9	10.2	10.6	11.1	11.5	11.6
EUR	4.8	4.8	4.8	4.8	4.8	4.8
IND	3.1	3.3	3.6	3.9	4.3	4.6
LAM	6.7	6.9	7.2	7.4	7.9	8.1
MEA	2.2	2.4	2.5	2.5	2.4	2.4
NEU	1.9	1.9	1.8	1.8	1.9	1.9
OAS	5.7	6.1	7.0	7.7	8.1	8.5
REF	2.9	3.0	2.9	2.8	2.6	2.6
SSA	3.2	3.7	4.6	5.5	5.6	5.8
USA	5.3	5.3	5.3	5.3	5.3	5.3

Table 1427: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.7	11.1	12.5	14.1	18.5	19.0	17.9	19.8	22.3	24.7
CAZ	0.5	0.5	0.6	0.7	1.4	1.4	1.3	1.4	1.5	1.4
CHA	0.7	0.8	0.9	1.0	1.2	1.4	1.7	1.9	2.4	3.2
EUR	1.9	2.1	2.5	3.0	3.7	3.6	3.5	3.8	4.0	4.0
IND	0.8	0.9	0.9	0.9	0.9	1.1	1.2	1.3	1.3	1.6
LAM	0.7	0.9	1.0	1.2	1.7	1.5	1.7	1.9	2.4	3.2
MEA	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.6
NEU	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6
OAS	0.7	0.8	0.9	1.1	1.1	1.3	1.4	1.7	1.9	2.3
REF	1.4	1.9	1.5	2.0	2.7	3.0	1.6	1.4	1.8	1.6
SSA	0.5	0.6	0.6	0.6	0.6	0.7	0.8	0.9	1.1	1.3
USA	2.1	2.2	2.9	3.1	4.4	4.0	3.8	4.5	4.8	4.9

Table 1428: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr)

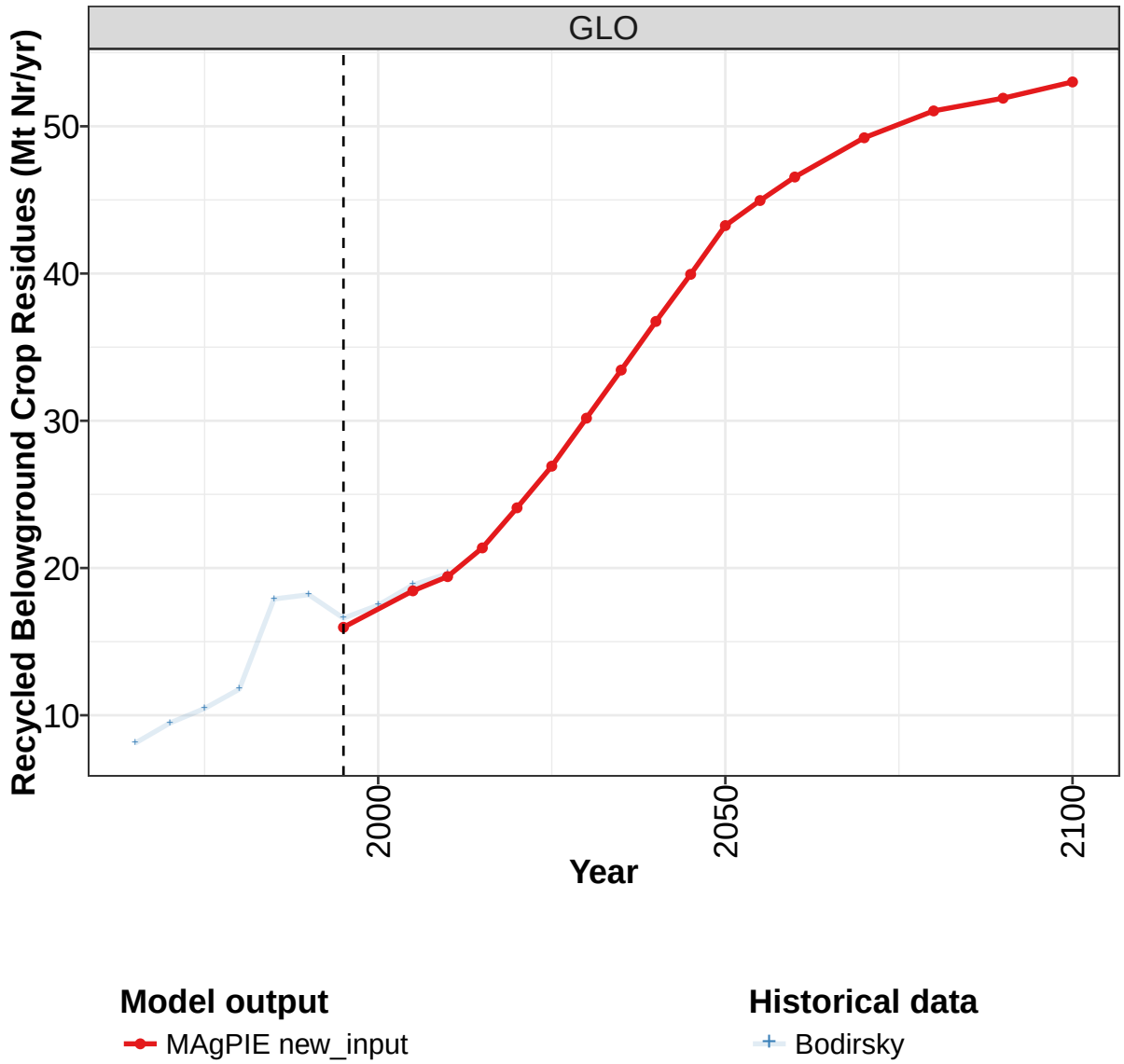
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	25.8	24.9	25.8	25.3	25.7	25.2	26.8	27.3	27.1	27.1	27.0
CAZ	1.0	1.0	1.0	1.0	0.8	1.0	1.2	1.1	1.1	1.2	1.1
CHA	4.7	4.6	4.7	4.8	4.6	4.8	5.1	5.2	5.2	5.2	4.7
EUR	3.3	3.4	3.0	3.0	3.0	3.0	3.2	3.4	3.4	3.2	3.2
IND	3.0	3.0	3.1	3.2	3.2	3.2	3.3	3.4	3.4	3.5	3.5
LAM	1.8	1.7	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4
MEA	0.7	0.9	0.8	0.8	0.9	0.8	1.0	0.8	0.9	0.7	0.7
NEU	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.5
OAS	3.0	3.0	3.1	3.2	3.2	3.3	3.3	3.3	3.4	3.6	3.7
REF	2.8	2.3	2.7	2.6	2.1	1.9	1.9	2.2	1.5	1.7	1.8
SSA	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
USA	3.8	3.4	4.1	3.3	4.2	3.5	4.0	4.1	4.3	4.1	4.2

Table 1429: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 1/2]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLO	27.6	26.8	27.4	29.4	29.5	29.2	30.1	32.1	31.7	31.8
CAZ	1.1	0.8	1.2	1.1	1.2	0.9	1.0	1.2	1.1	1.1
CHA	4.6	4.6	4.4	4.7	4.9	5.1	5.1	5.3	5.4	5.5
EUR	3.2	3.3	2.9	3.6	3.2	3.1	3.0	3.5	3.3	3.1
IND	3.5	3.2	3.5	3.4	3.5	3.6	3.8	3.9	3.7	3.9
LAM	2.6	2.6	3.0	3.0	3.0	3.1	3.4	3.4	3.1	3.7
MEA	0.8	0.9	1.0	1.0	1.1	1.1	1.0	0.8	1.0	1.0
NEU	0.5	0.6	0.5	0.6	0.6	0.6	0.5	0.5	0.6	0.6
OAS	3.6	3.7	3.8	3.8	4.0	4.0	4.2	4.4	4.5	4.6
REF	2.2	2.3	1.8	2.2	2.2	2.2	2.2	2.7	2.6	1.9
SSA	1.2	1.3	1.3	1.3	1.4	1.5	1.5	1.6	1.5	1.7
USA	4.0	3.7	4.1	4.6	4.4	4.1	4.6	4.7	4.9	4.7

Table 1430: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 2/2]

56.1.12 Inputs—Recycled Belowground Crop Residues



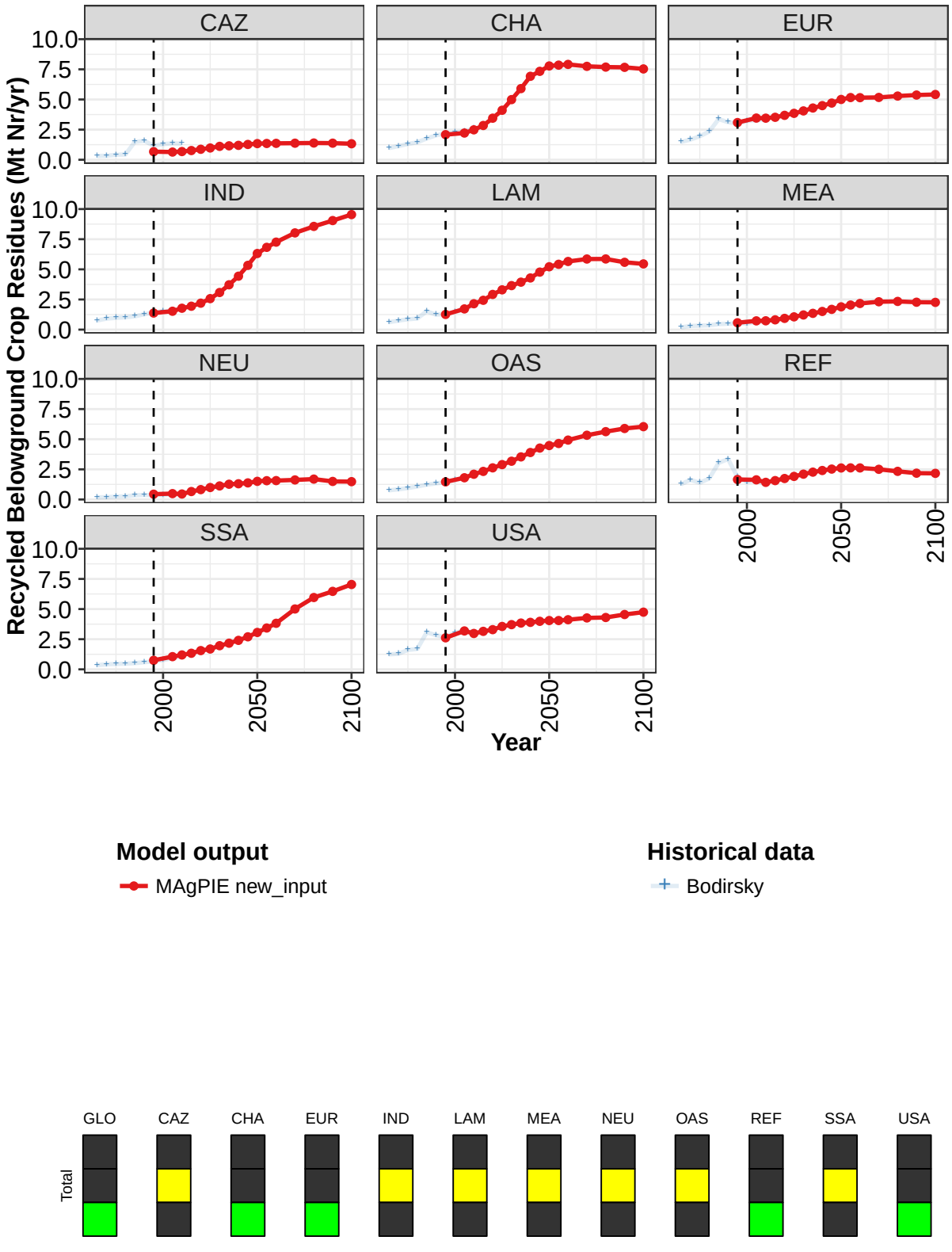


Figure 384: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	16.0	18.5	19.4	21.4	24.1	26.9	30.2	33.4	36.7	39.9	43.3
CAZ	0.7	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3
CHA	2.1	2.2	2.5	2.8	3.4	4.1	5.0	5.9	6.9	7.3	7.8
EUR	3.1	3.5	3.5	3.5	3.7	3.9	4.1	4.3	4.5	4.7	5.0
IND	1.4	1.5	1.8	1.9	2.2	2.6	3.1	3.7	4.4	5.3	6.3
LAM	1.3	1.7	2.1	2.4	2.9	3.3	3.7	3.9	4.3	4.8	5.2
MEA	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.4	1.5	1.7	1.9
NEU	0.4	0.5	0.5	0.7	0.8	1.0	1.1	1.3	1.3	1.4	1.5
OAS	1.5	1.8	2.1	2.3	2.6	2.9	3.2	3.5	3.9	4.3	4.5
REF	1.7	1.6	1.4	1.6	1.7	1.9	2.1	2.3	2.4	2.5	2.6
SSA	0.7	1.1	1.2	1.3	1.6	1.7	2.0	2.2	2.4	2.7	3.1
USA	2.6	3.2	3.0	3.2	3.3	3.6	3.7	3.8	3.9	4.0	4.1

Table 1431: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr) [PART 1/2]

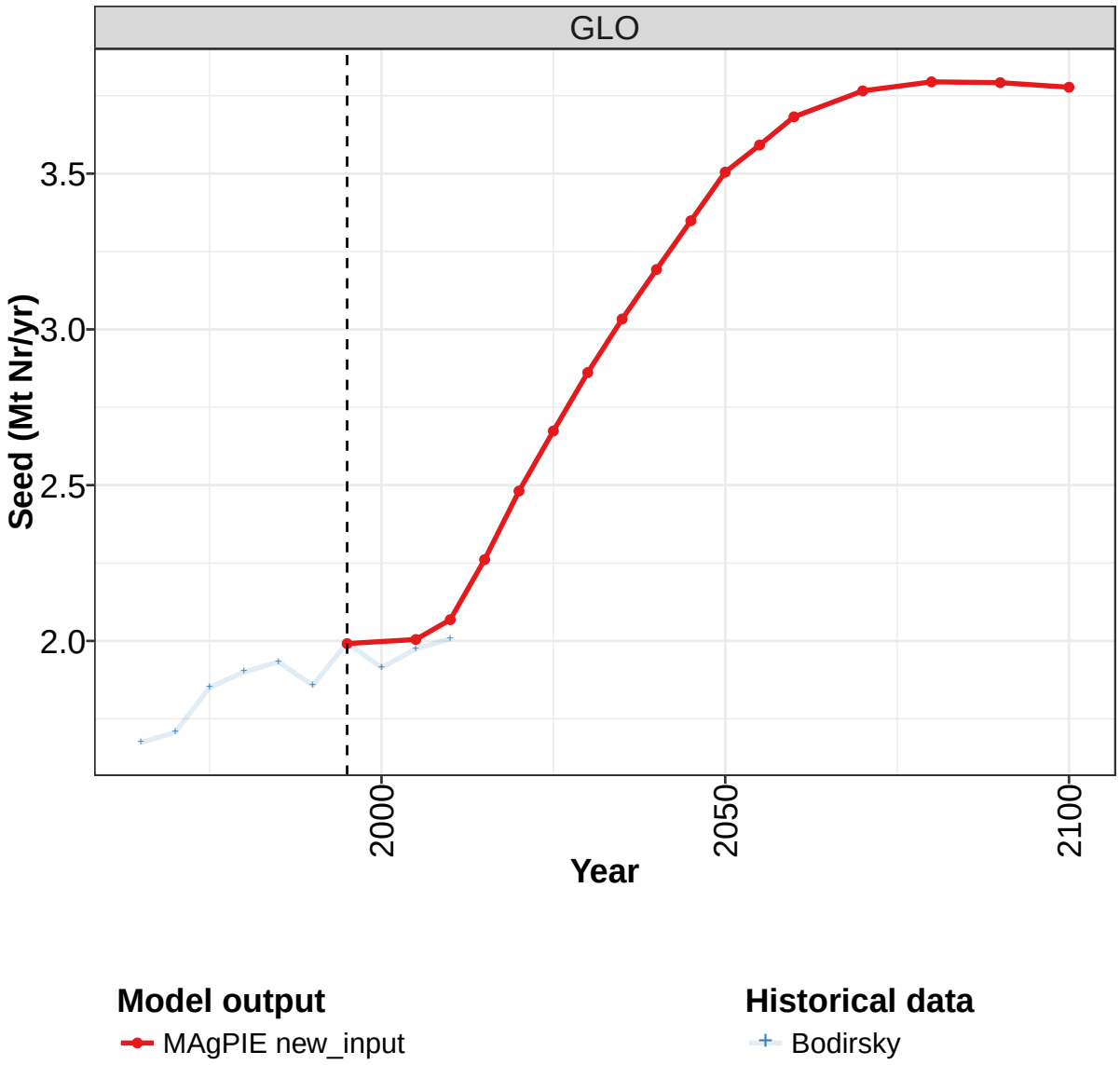
	2055	2060	2070	2080	2090	2100
GLO	45.0	46.6	49.2	51.0	51.9	53.0
CAZ	1.4	1.4	1.4	1.4	1.4	1.3
CHA	7.9	7.9	7.8	7.7	7.7	7.5
EUR	5.2	5.2	5.2	5.3	5.4	5.4
IND	6.8	7.3	8.0	8.6	9.0	9.5
LAM	5.4	5.7	5.9	5.9	5.6	5.5
MEA	2.0	2.2	2.3	2.3	2.3	2.3
NEU	1.6	1.6	1.6	1.7	1.5	1.5
OAS	4.6	4.9	5.3	5.6	5.9	6.0
REF	2.6	2.6	2.5	2.3	2.2	2.2
SSA	3.4	3.8	5.0	6.0	6.5	7.0
USA	4.0	4.1	4.3	4.3	4.5	4.7

Table 1432: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.1	9.5	10.5	11.8	17.9	18.2	16.6	17.5	18.9	19.6
CAZ	0.3	0.3	0.4	0.4	1.5	1.6	1.2	1.3	1.4	1.3
CHA	1.0	1.1	1.3	1.4	1.8	2.0	2.2	2.3	2.4	2.6
EUR	1.5	1.7	1.9	2.3	3.4	3.1	3.0	3.2	3.3	3.3
IND	0.8	0.9	1.0	1.0	1.1	1.3	1.4	1.5	1.6	1.8
LAM	0.6	0.7	0.9	0.9	1.5	1.2	1.3	1.5	1.7	2.0
MEA	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.7	0.7
NEU	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
OAS	0.8	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.1
REF	1.3	1.6	1.4	1.7	3.0	3.4	1.9	1.4	1.6	1.2
SSA	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.1
USA	1.2	1.3	1.6	1.7	3.1	2.8	2.7	3.0	3.2	3.0

Table 1433: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr)

56.1.13 Inputs—Seed



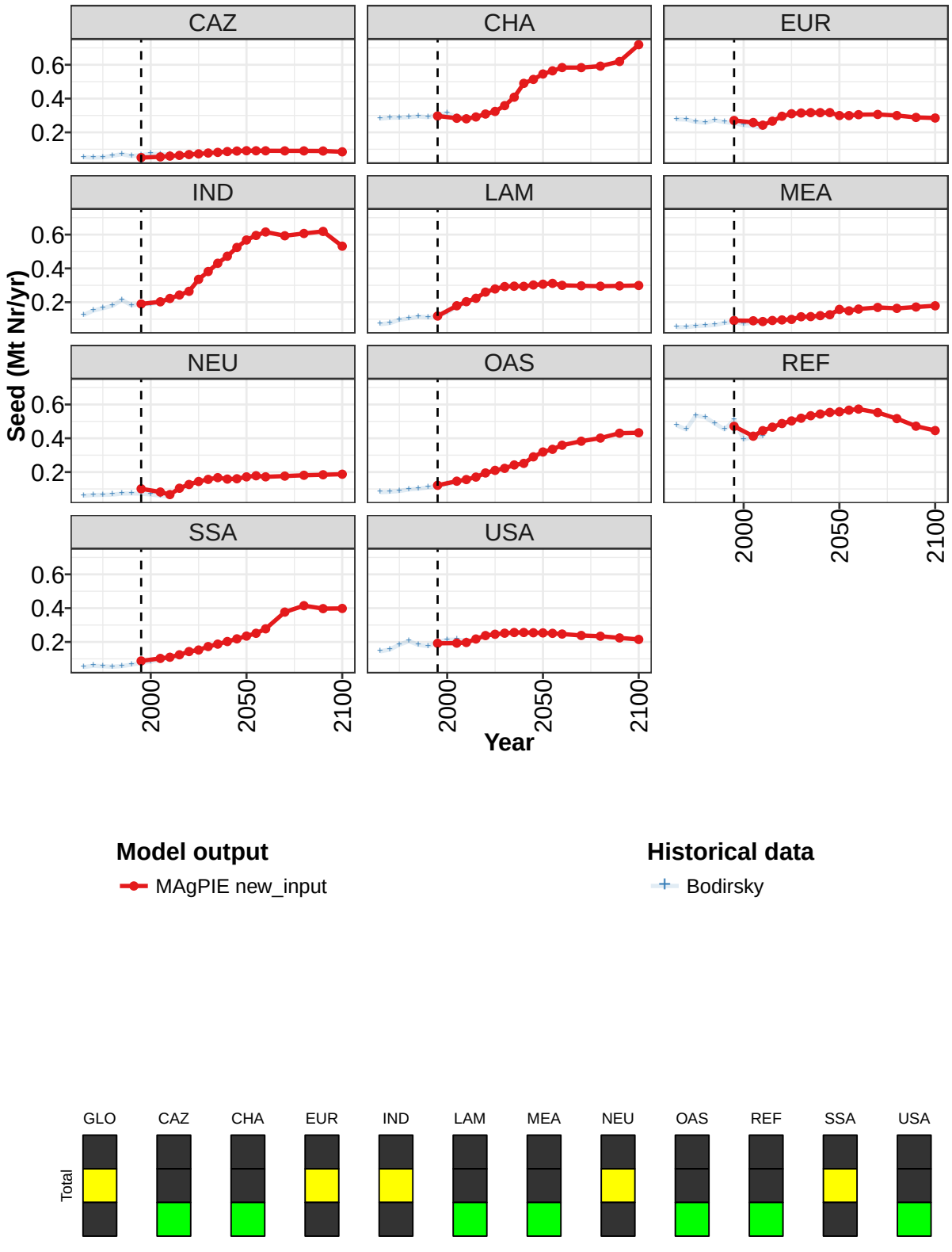


Figure 385: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.99	2.00	2.07	2.26	2.48	2.67	2.86	3.03	3.19	3.35	3.50
CAZ	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.09
CHA	0.30	0.28	0.28	0.29	0.31	0.32	0.36	0.41	0.49	0.51	0.55
EUR	0.27	0.26	0.24	0.27	0.30	0.31	0.31	0.32	0.32	0.32	0.30
IND	0.19	0.20	0.22	0.24	0.26	0.34	0.38	0.43	0.47	0.52	0.57
LAM	0.12	0.18	0.20	0.22	0.26	0.28	0.29	0.30	0.29	0.30	0.31
MEA	0.09	0.09	0.09	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.16
NEU	0.10	0.08	0.07	0.10	0.13	0.14	0.16	0.17	0.16	0.16	0.17
OAS	0.12	0.15	0.16	0.17	0.19	0.21	0.22	0.24	0.25	0.29	0.32
REF	0.47	0.41	0.45	0.47	0.49	0.50	0.52	0.53	0.54	0.55	0.56
SSA	0.09	0.10	0.11	0.12	0.14	0.15	0.17	0.19	0.20	0.22	0.23
USA	0.19	0.19	0.20	0.22	0.24	0.25	0.25	0.26	0.26	0.25	0.25

Table 1434: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr) [PART 1/2]

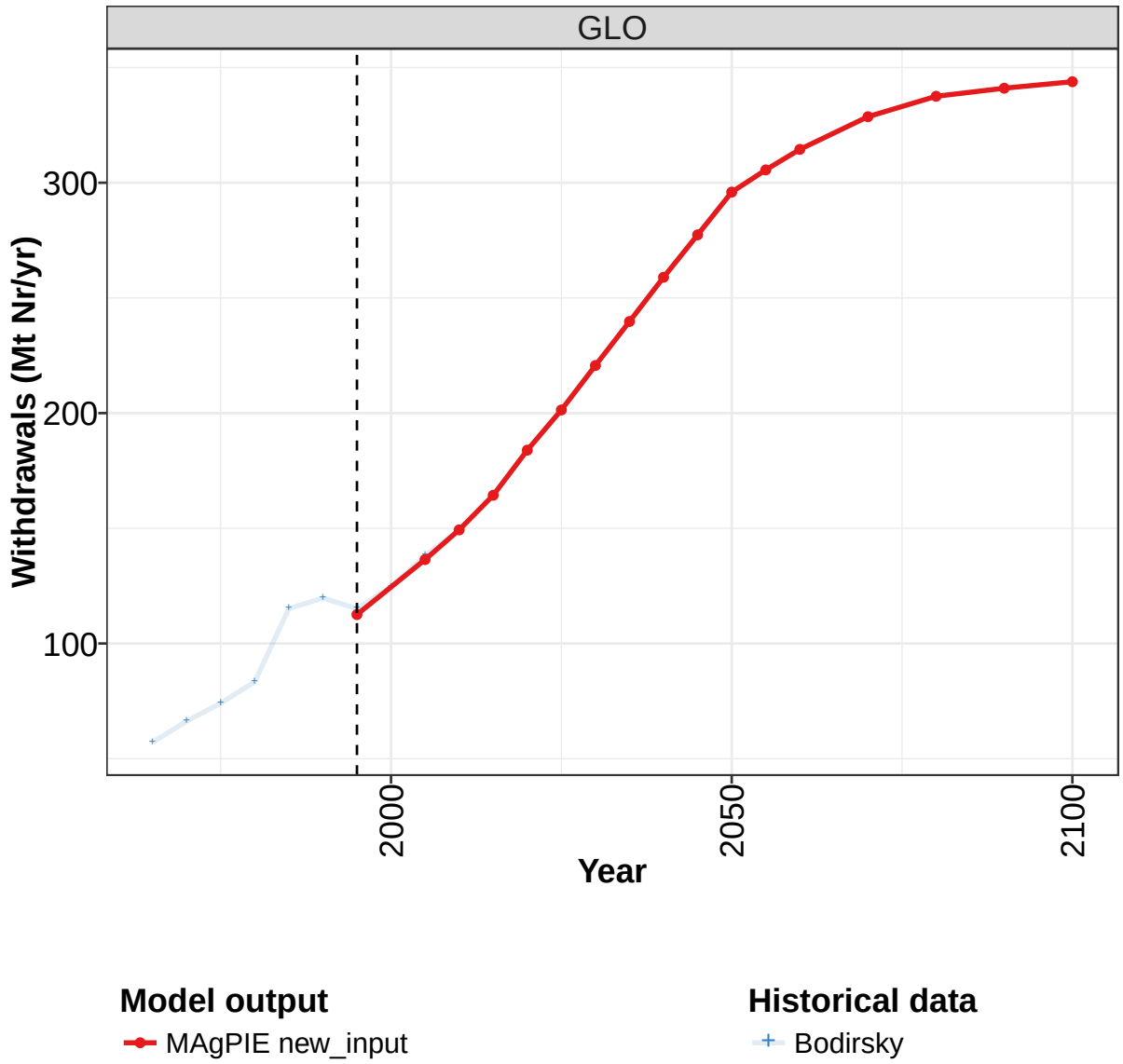
	2055	2060	2070	2080	2090	2100
GLO	3.59	3.68	3.77	3.79	3.79	3.78
CAZ	0.09	0.09	0.09	0.09	0.09	0.08
CHA	0.56	0.58	0.58	0.59	0.62	0.72
EUR	0.30	0.30	0.31	0.30	0.29	0.28
IND	0.59	0.62	0.59	0.61	0.62	0.53
LAM	0.31	0.30	0.30	0.29	0.30	0.30
MEA	0.15	0.16	0.17	0.16	0.17	0.18
NEU	0.18	0.17	0.18	0.18	0.18	0.19
OAS	0.33	0.36	0.38	0.40	0.43	0.43
REF	0.57	0.57	0.55	0.52	0.47	0.45
SSA	0.25	0.28	0.38	0.41	0.40	0.40
USA	0.25	0.25	0.24	0.23	0.22	0.21

Table 1435: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.67	1.71	1.85	1.90	1.93	1.86	1.99	1.91	1.97	2.01
CAZ	0.05	0.05	0.05	0.06	0.07	0.06	0.07	0.07	0.07	0.07
CHA	0.28	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.29	0.29
EUR	0.28	0.28	0.26	0.26	0.27	0.26	0.26	0.24	0.24	0.22
IND	0.12	0.15	0.16	0.18	0.21	0.18	0.19	0.19	0.20	0.22
LAM	0.07	0.08	0.10	0.10	0.11	0.11	0.12	0.14	0.17	0.20
MEA	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.07	0.08	0.07
NEU	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.05
OAS	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.15
REF	0.48	0.45	0.54	0.52	0.49	0.45	0.51	0.39	0.41	0.41
SSA	0.05	0.06	0.06	0.05	0.06	0.07	0.08	0.08	0.09	0.10
USA	0.14	0.16	0.18	0.20	0.18	0.18	0.20	0.21	0.21	0.21

Table 1436: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr)

56.1.14 Withdrawals



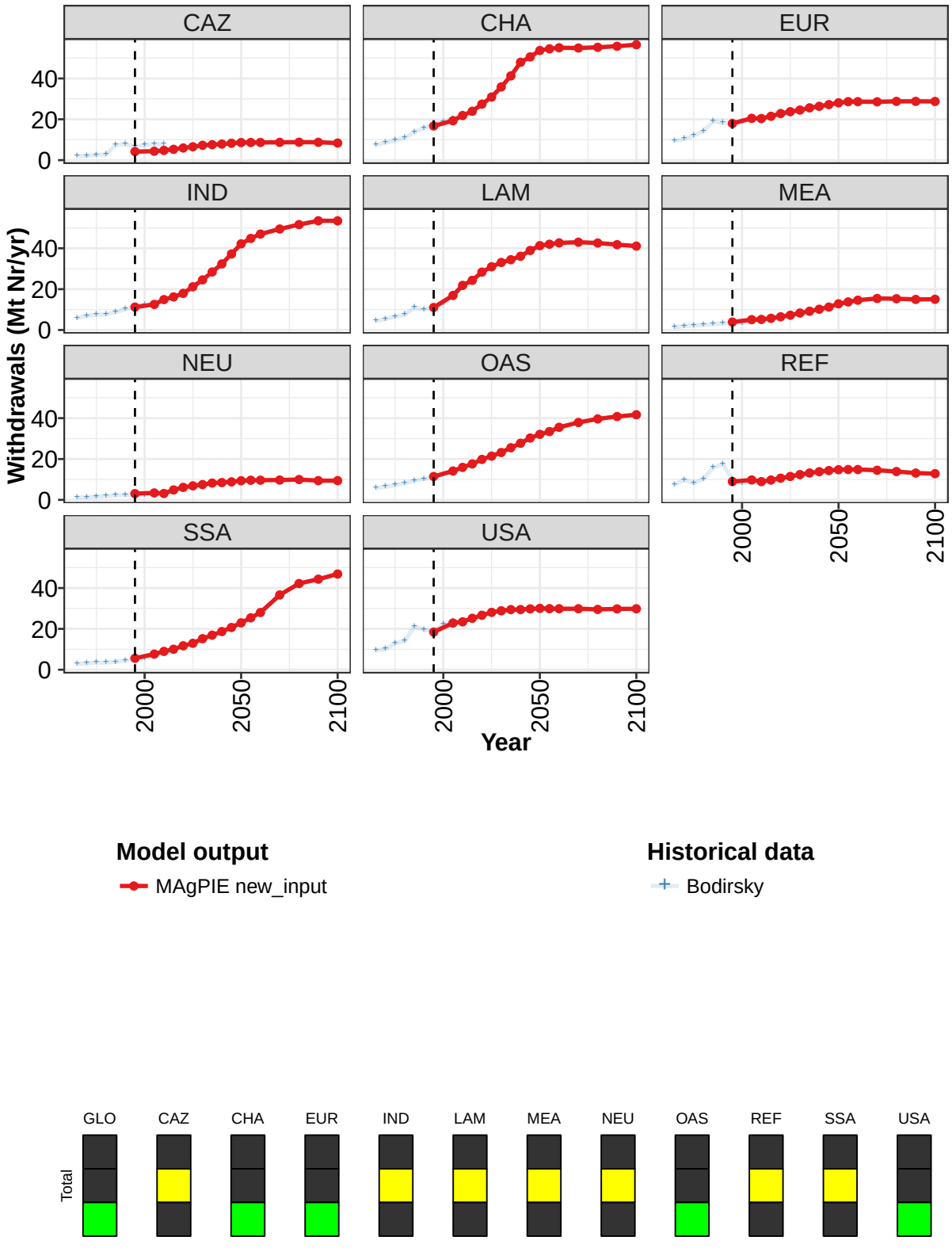


Figure 386: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	113	136	149	164	184	201	221	240	259	277	296
CAZ	4	4	5	5	6	7	7	8	8	8	9
CHA	17	19	22	24	27	31	36	41	48	51	54
EUR	18	20	20	21	23	24	25	26	26	27	28
IND	11	13	15	16	18	21	25	28	32	37	42
LAM	11	17	22	24	28	31	33	34	36	39	41
MEA	4	5	5	6	6	7	8	9	10	11	13
NEU	3	3	3	5	6	7	7	8	8	9	9
OAS	11	14	16	18	20	21	23	26	28	30	32
REF	9	10	9	10	11	11	12	13	14	14	15
SSA	6	8	9	10	12	13	15	17	19	21	23
USA	18	23	23	25	27	28	29	29	29	30	30

Table 1437: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr) [PART 1/2]

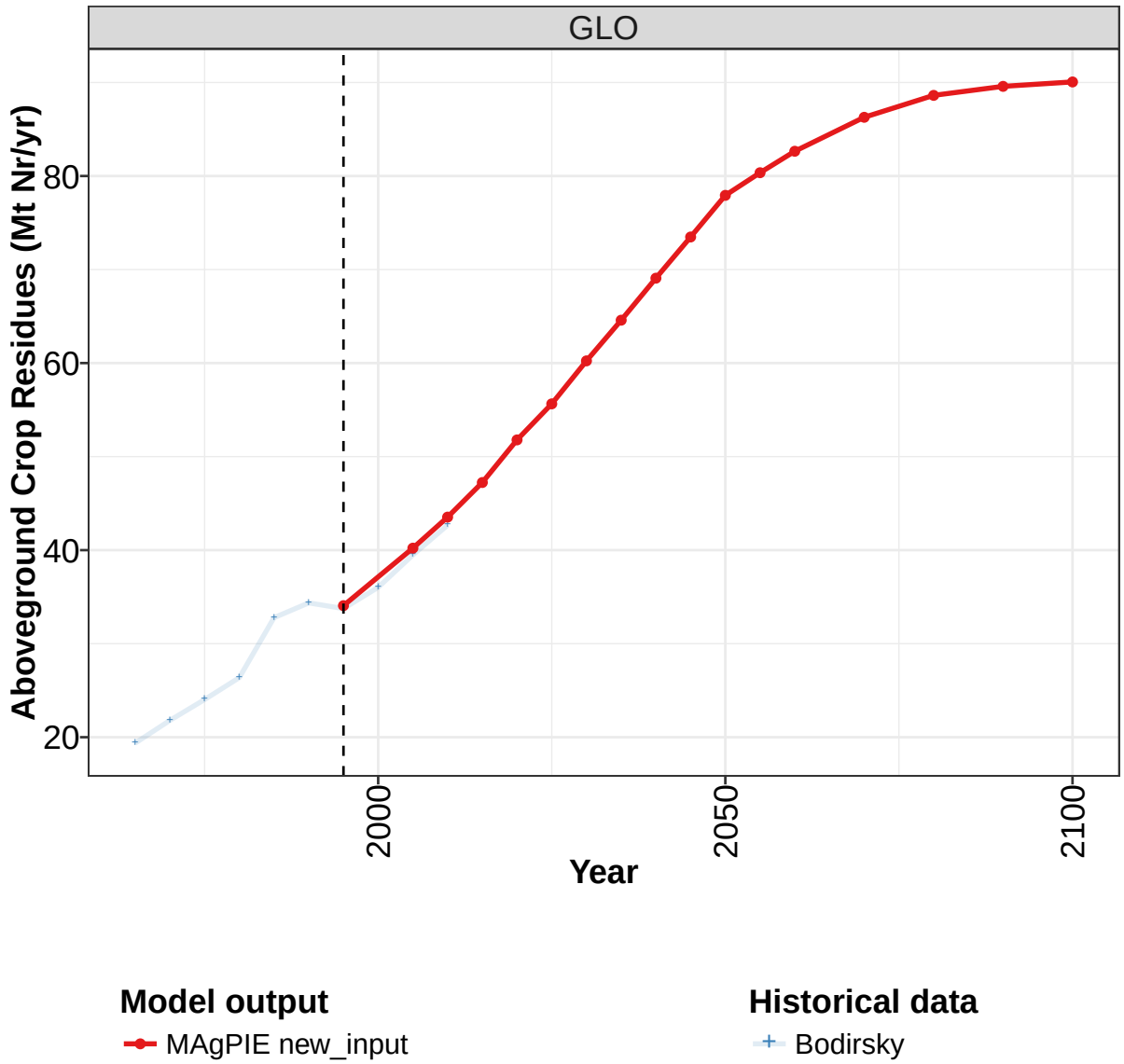
	2055	2060	2070	2080	2090	2100
GLO	306	314	329	338	341	344
CAZ	9	9	9	9	9	8
CHA	55	55	55	55	56	57
EUR	29	29	29	29	29	29
IND	45	47	49	52	53	53
LAM	42	43	43	43	42	41
MEA	14	15	15	15	15	15
NEU	10	10	10	10	9	9
OAS	33	36	38	40	41	42
REF	15	15	15	14	13	13
SSA	25	28	37	42	44	47
USA	30	30	30	30	30	30

Table 1438: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	57	66	74	83	115	120	115	125	138	149
CAZ	2	2	3	3	7	8	7	7	8	8
CHA	7	9	10	11	14	16	17	19	20	23
EUR	9	10	12	14	19	18	17	19	19	19
IND	6	7	7	8	9	10	12	12	13	15
LAM	4	5	6	8	11	10	11	13	17	21
MEA	1	2	2	2	3	3	3	3	5	5
NEU	1	1	2	2	2	3	2	2	3	3
OAS	6	6	7	8	9	10	11	12	14	16
REF	7	10	8	10	16	18	10	8	9	8
SSA	3	3	3	4	4	4	5	6	7	8
USA	10	10	13	14	21	20	19	22	24	24

Table 1439: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr)

56.1.15 Withdrawals—Aboveground Crop Residues



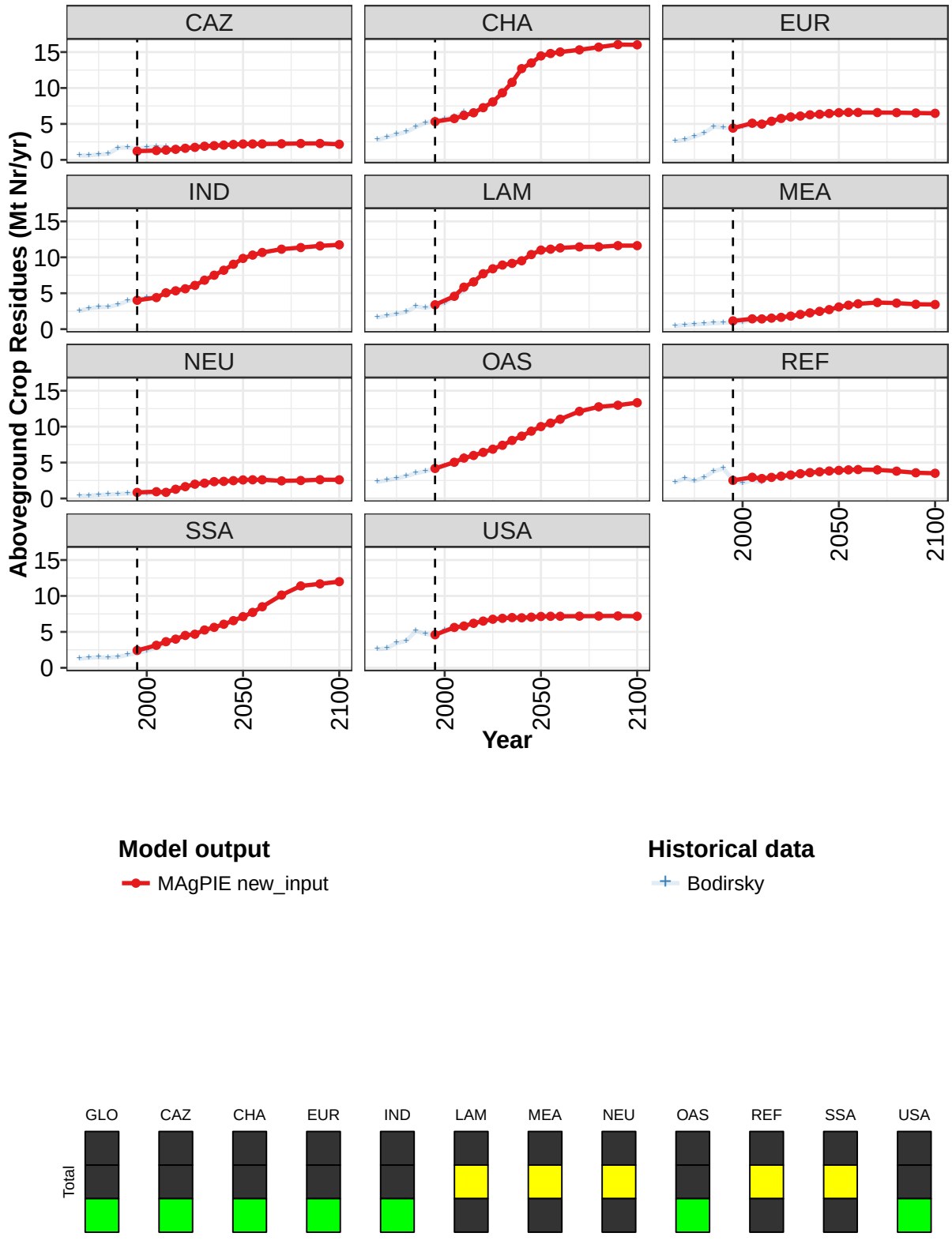


Figure 387: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	34.1	40.2	43.5	47.2	51.8	55.6	60.2	64.6	69.1	73.5	77.9
CAZ	1.2	1.3	1.3	1.5	1.6	1.7	1.9	2.0	2.1	2.1	2.2
CHA	5.3	5.7	6.2	6.5	7.3	8.1	9.3	10.8	12.7	13.5	14.5
EUR	4.4	5.1	5.0	5.4	5.8	6.0	6.1	6.3	6.3	6.4	6.6
IND	4.0	4.4	5.1	5.3	5.6	6.1	6.8	7.5	8.2	9.0	9.8
LAM	3.4	4.6	5.8	6.6	7.7	8.4	8.9	9.2	9.5	10.4	11.0
MEA	1.2	1.4	1.4	1.5	1.6	1.8	2.1	2.3	2.5	2.7	3.1
NEU	0.8	0.9	0.9	1.3	1.6	2.0	2.1	2.3	2.4	2.5	2.6
OAS	4.2	5.0	5.6	6.0	6.4	6.9	7.4	8.1	8.7	9.4	10.0
REF	2.5	3.0	2.8	2.9	3.1	3.3	3.4	3.6	3.7	3.8	3.9
SSA	2.4	3.1	3.6	4.0	4.5	4.7	5.3	5.6	6.1	6.6	7.1
USA	4.6	5.6	5.8	6.2	6.5	6.8	6.9	7.0	7.0	7.0	7.1

Table 1440: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr) [PART 1/2]

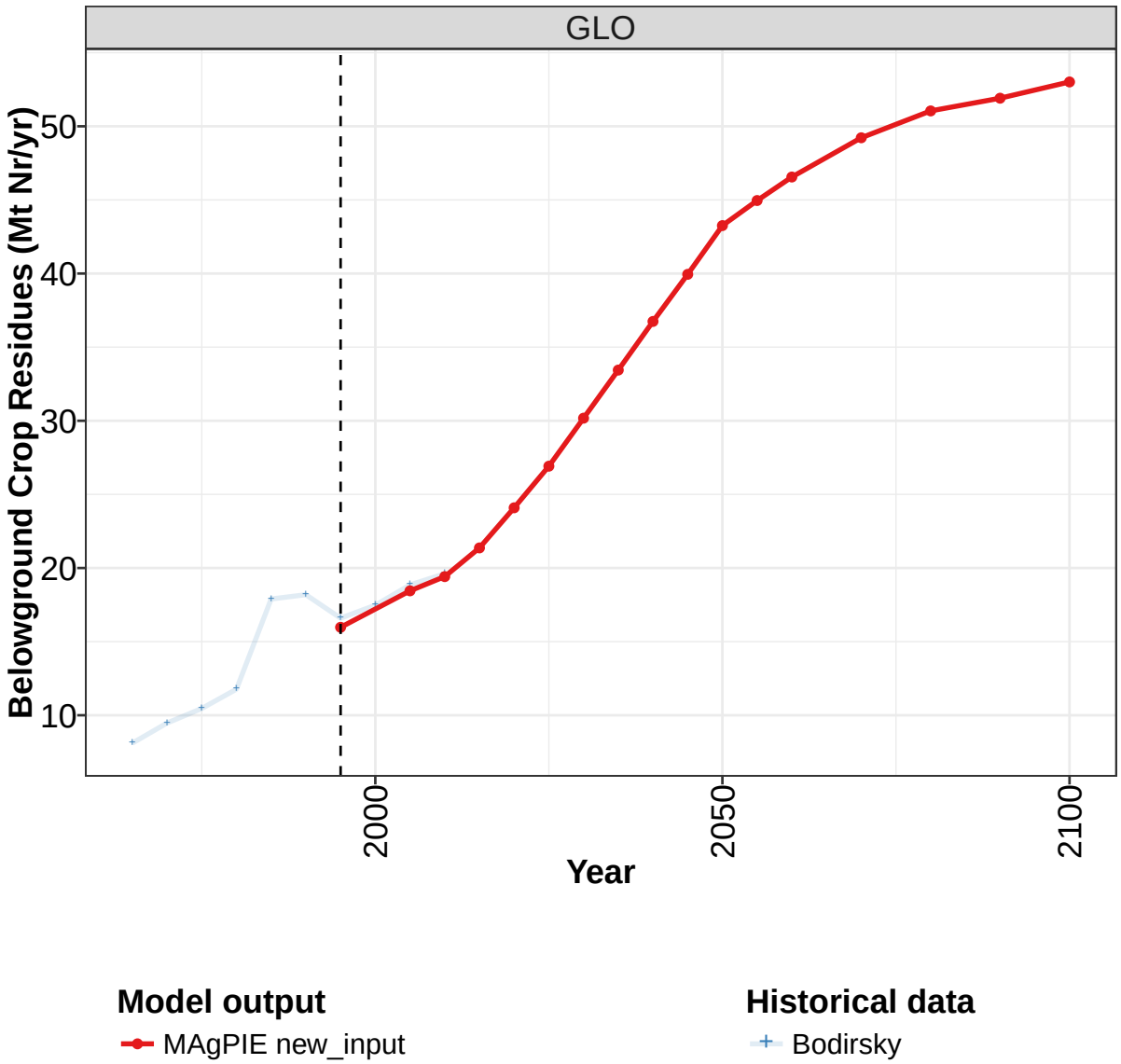
	2055	2060	2070	2080	2090	2100
GLO	80.4	82.6	86.3	88.6	89.6	90.1
CAZ	2.2	2.2	2.2	2.3	2.3	2.2
CHA	14.8	15.0	15.3	15.7	16.0	16.0
EUR	6.6	6.6	6.6	6.6	6.5	6.5
IND	10.3	10.7	11.1	11.4	11.6	11.7
LAM	11.1	11.3	11.5	11.5	11.6	11.6
MEA	3.3	3.5	3.7	3.6	3.5	3.4
NEU	2.6	2.6	2.5	2.5	2.6	2.6
OAS	10.5	11.0	12.1	12.8	13.0	13.3
REF	4.0	4.0	4.0	3.8	3.6	3.5
SSA	7.7	8.5	10.1	11.4	11.7	12.0
USA	7.2	7.2	7.2	7.2	7.2	7.2

Table 1441: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	19.4	21.8	24.0	26.4	32.8	34.4	33.8	36.0	39.5	42.7
CAZ	0.6	0.6	0.8	0.8	1.7	1.7	1.6	1.8	1.8	1.8
CHA	2.8	3.1	3.5	3.9	4.6	5.1	5.5	5.7	6.0	6.6
EUR	2.6	2.8	3.2	3.7	4.6	4.5	4.3	4.6	4.8	4.8
IND	2.5	2.9	3.1	3.1	3.4	3.9	4.2	4.4	4.5	5.0
LAM	1.6	1.9	2.1	2.4	3.1	3.0	3.3	3.6	4.3	5.4
MEA	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.3	1.2
NEU	0.4	0.4	0.5	0.5	0.6	0.7	0.6	0.7	0.7	0.7
OAS	2.3	2.5	2.8	3.1	3.5	3.8	4.1	4.6	5.1	5.8
REF	2.3	2.8	2.4	2.9	3.8	4.2	2.5	2.1	2.5	2.2
SSA	1.3	1.4	1.5	1.4	1.5	1.8	2.1	2.3	2.8	3.4
USA	2.6	2.7	3.4	3.7	5.1	4.7	4.5	5.2	5.6	5.7

Table 1442: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr)

56.1.16 Withdrawals—Belowground Crop Residues



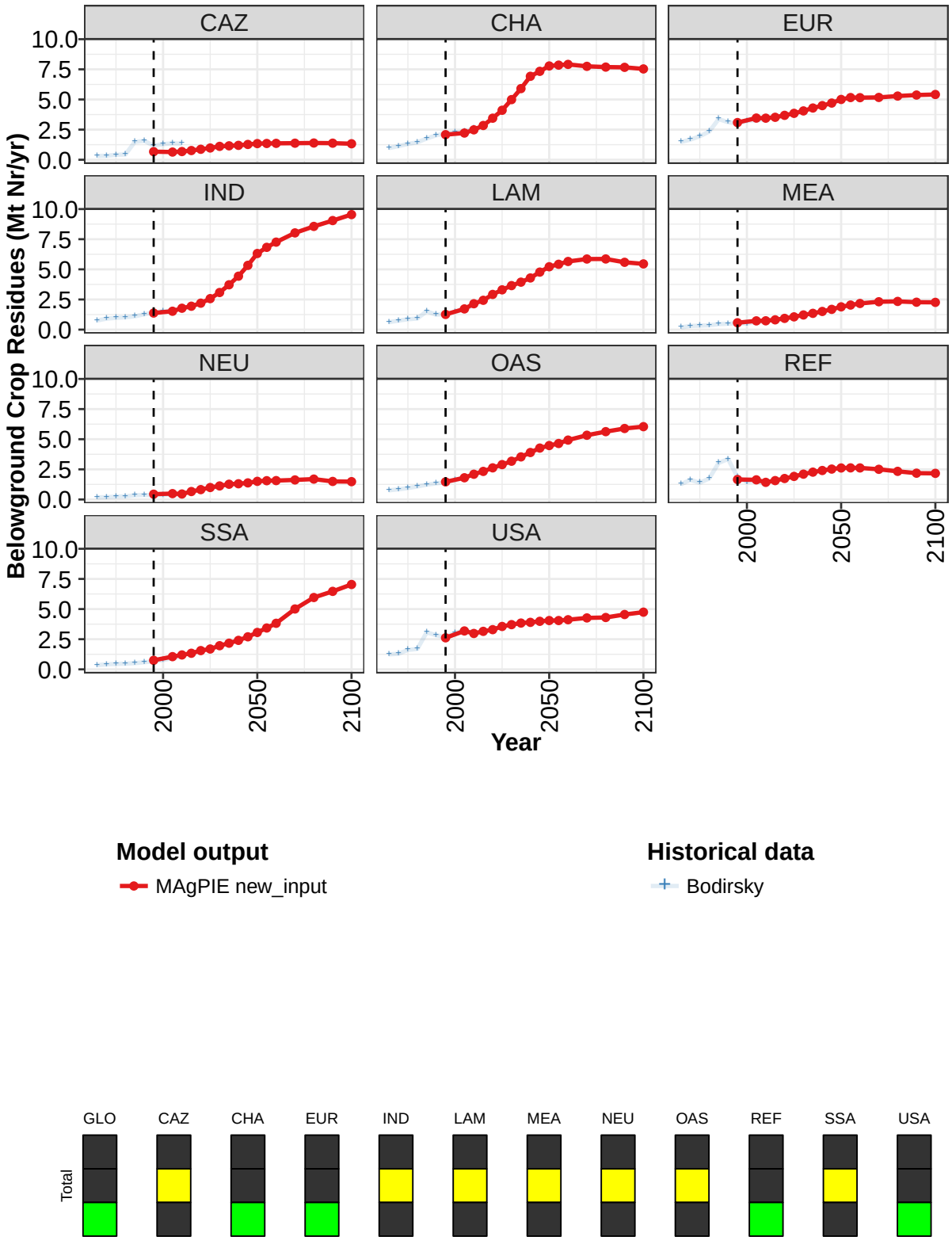


Figure 388: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	16.0	18.5	19.4	21.4	24.1	26.9	30.2	33.4	36.7	39.9	43.3
CAZ	0.7	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3
CHA	2.1	2.2	2.5	2.8	3.4	4.1	5.0	5.9	6.9	7.3	7.8
EUR	3.1	3.5	3.5	3.5	3.7	3.9	4.1	4.3	4.5	4.7	5.0
IND	1.4	1.5	1.8	1.9	2.2	2.6	3.1	3.7	4.4	5.3	6.3
LAM	1.3	1.7	2.1	2.4	2.9	3.3	3.7	3.9	4.3	4.8	5.2
MEA	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.4	1.5	1.7	1.9
NEU	0.4	0.5	0.5	0.7	0.8	1.0	1.1	1.3	1.3	1.4	1.5
OAS	1.5	1.8	2.1	2.3	2.6	2.9	3.2	3.5	3.9	4.3	4.5
REF	1.7	1.6	1.4	1.6	1.7	1.9	2.1	2.3	2.4	2.5	2.6
SSA	0.7	1.1	1.2	1.3	1.6	1.7	2.0	2.2	2.4	2.7	3.1
USA	2.6	3.2	3.0	3.2	3.3	3.6	3.7	3.8	3.9	4.0	4.1

Table 1443: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr) [PART 1/2]

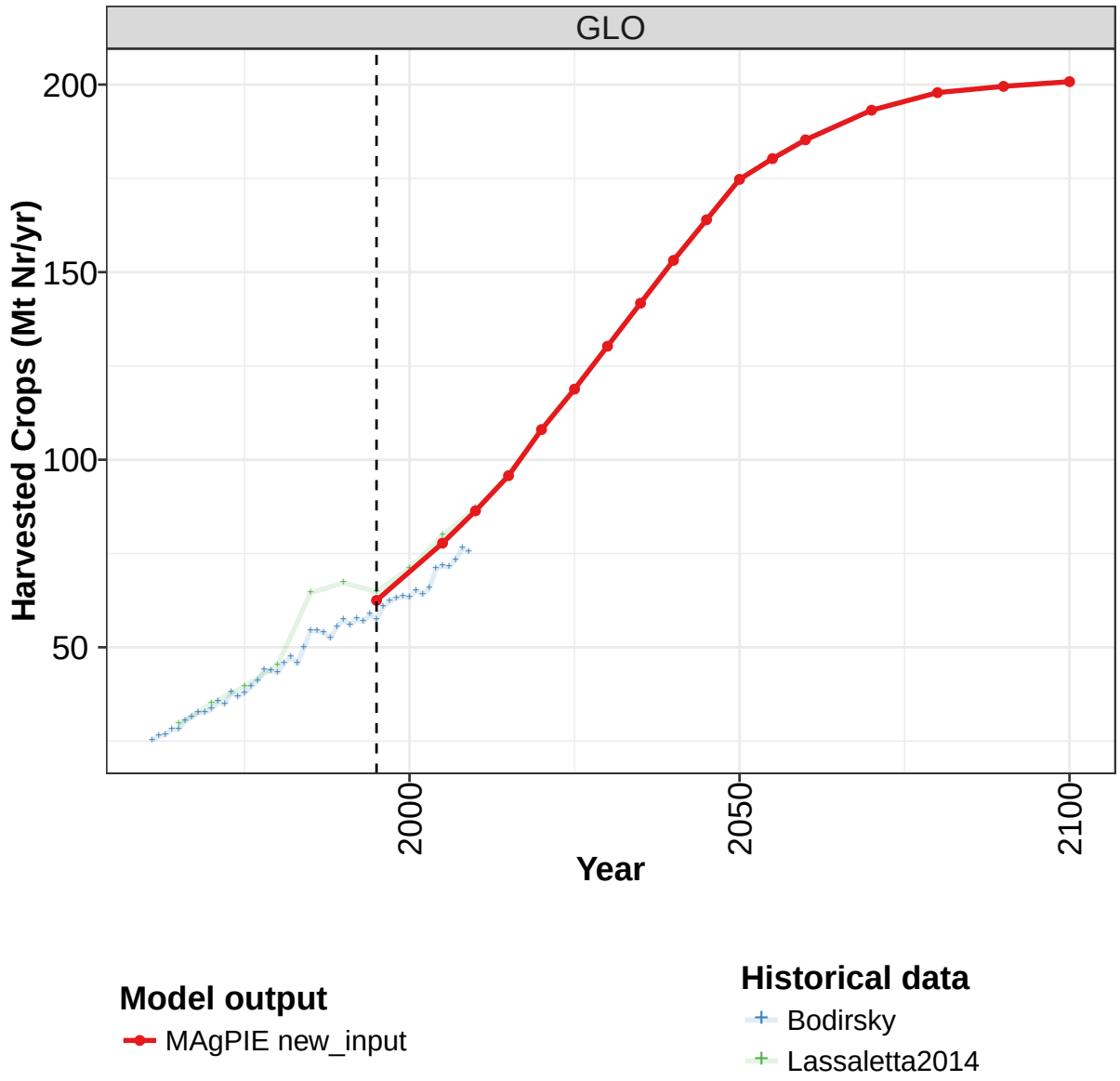
	2055	2060	2070	2080	2090	2100
GLO	45.0	46.6	49.2	51.0	51.9	53.0
CAZ	1.4	1.4	1.4	1.4	1.4	1.3
CHA	7.9	7.9	7.8	7.7	7.7	7.5
EUR	5.2	5.2	5.2	5.3	5.4	5.4
IND	6.8	7.3	8.0	8.6	9.0	9.5
LAM	5.4	5.7	5.9	5.9	5.6	5.5
MEA	2.0	2.2	2.3	2.3	2.3	2.3
NEU	1.6	1.6	1.6	1.7	1.5	1.5
OAS	4.6	4.9	5.3	5.6	5.9	6.0
REF	2.6	2.6	2.5	2.3	2.2	2.2
SSA	3.4	3.8	5.0	6.0	6.5	7.0
USA	4.0	4.1	4.3	4.3	4.5	4.7

Table 1444: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.1	9.5	10.5	11.8	17.9	18.2	16.6	17.5	18.9	19.6
CAZ	0.3	0.3	0.4	0.4	1.5	1.6	1.2	1.3	1.4	1.3
CHA	1.0	1.1	1.3	1.4	1.8	2.0	2.2	2.3	2.4	2.6
EUR	1.5	1.7	1.9	2.3	3.4	3.1	3.0	3.2	3.3	3.3
IND	0.8	0.9	1.0	1.0	1.1	1.3	1.4	1.5	1.6	1.8
LAM	0.6	0.7	0.9	0.9	1.5	1.2	1.3	1.5	1.7	2.0
MEA	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.7	0.7
NEU	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
OAS	0.8	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.1
REF	1.3	1.6	1.4	1.7	3.0	3.4	1.9	1.4	1.6	1.2
SSA	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.1
USA	1.2	1.3	1.6	1.7	3.1	2.8	2.7	3.0	3.2	3.0

Table 1445: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr)

56.1.17 Withdrawals—Harvested Crops



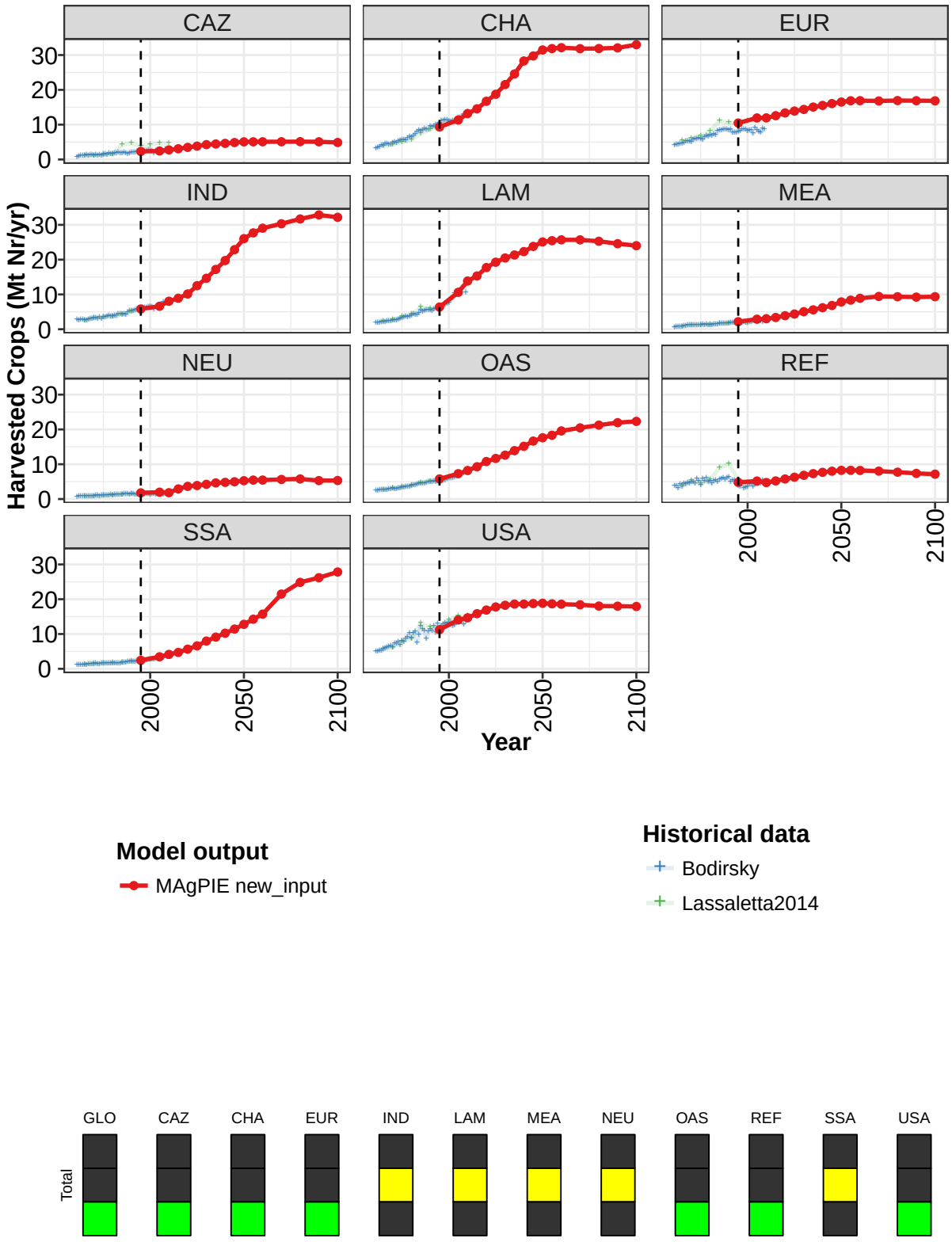


Figure 389: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	63	78	86	96	108	119	130	142	153	164	175
CAZ	2	2	3	3	3	4	4	4	5	5	5
CHA	9	11	13	15	17	19	22	25	28	30	31
EUR	10	12	12	13	13	14	14	15	16	16	17
IND	6	7	8	9	10	13	15	17	20	23	26
LAM	6	11	14	15	18	19	20	21	22	24	25
MEA	2	3	3	3	4	4	5	6	6	7	8
NEU	2	2	2	3	4	4	4	5	5	5	5
OAS	6	7	8	9	11	12	13	14	15	17	18
REF	5	5	5	5	6	6	7	7	8	8	8
SSA	2	3	4	5	6	7	8	9	10	11	13
USA	11	14	15	16	17	18	18	19	19	19	19

Table 1446: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	180	185	193	198	200	201
CAZ	5	5	5	5	5	5
CHA	32	32	32	32	32	33
EUR	17	17	17	17	17	17
IND	28	29	30	32	33	32
LAM	25	26	26	25	25	24
MEA	8	9	9	9	9	9
NEU	5	5	6	6	5	5
OAS	18	20	20	21	22	22
REF	8	8	8	8	7	7
SSA	14	16	21	25	26	28
USA	19	19	18	18	18	18

Table 1447: MAgPIE new_input — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	25.1	26.3	26.6	28.1	28.2	30.3	31.3	32.5	32.6	33.5	35.5
CAZ	0.6	0.9	1.0	1.0	1.0	1.2	0.9	1.2	1.2	1.0	1.3
CHA	3.0	3.3	3.5	3.9	4.0	4.4	4.4	4.3	4.3	4.8	5.0
EUR	4.0	4.2	4.2	4.3	4.5	4.7	5.1	5.1	5.1	5.0	5.5
IND	2.6	2.6	2.6	2.7	2.5	2.4	2.7	2.9	2.9	3.2	3.2
LAM	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.5
MEA	0.5	0.7	0.7	0.7	0.7	0.9	1.0	1.0	1.0	1.0	1.0
NEU	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9
OAS	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.8	2.9	2.9	2.9
REF	3.7	3.8	3.1	4.1	3.5	4.5	4.2	4.6	4.4	4.9	4.7
SSA	1.0	1.1	1.1	1.1	1.1	1.1	1.3	1.2	1.3	1.3	1.4
USA	5.0	5.0	5.3	5.0	5.7	5.7	6.2	6.4	6.5	6.2	7.1

Table 1448: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	34.8	37.9	36.9	37.8	39.6	41.1	43.9	43.7	43.3	45.6	47.5
CAZ	1.1	1.2	1.1	1.3	1.4	1.4	1.6	1.5	1.4	1.7	1.6
CHA	4.7	5.2	5.3	5.5	5.5	5.4	6.1	6.4	6.3	6.6	7.2
EUR	5.7	5.8	6.0	5.7	5.6	6.4	6.8	6.6	6.9	6.8	7.2
IND	3.0	3.3	3.0	3.5	3.4	3.7	3.8	3.5	3.6	3.9	3.8
LAM	2.5	2.7	3.0	3.2	3.3	3.5	3.4	3.5	3.8	4.2	4.1
MEA	1.2	1.0	1.1	1.1	1.2	1.1	1.2	1.1	1.2	1.2	1.3
NEU	0.9	0.8	0.9	1.0	1.1	1.1	1.0	1.1	1.1	1.1	1.2
OAS	2.9	3.1	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.9	3.9
REF	4.4	5.7	5.1	3.9	5.7	5.2	5.9	4.7	5.0	4.3	5.1
SSA	1.4	1.2	1.5	1.4	1.4	1.4	1.5	1.4	1.5	1.6	1.5
USA	7.1	7.8	6.7	7.9	7.6	8.7	9.0	10.1	8.7	10.2	10.5

Table 1449: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	45.6	49.8	54.4	54.3	53.9	52.4	55.5	57.3	55.9	57.5	56.8
CAZ	1.8	1.8	1.8	2.0	1.8	1.5	1.7	1.9	1.9	1.9	2.1
CHA	7.9	8.4	8.1	8.4	8.7	8.5	8.6	9.5	9.3	9.4	9.9
EUR	6.9	8.1	8.4	8.4	8.5	8.6	8.5	8.3	8.5	7.6	7.7
IND	4.4	4.4	4.3	4.3	4.1	4.7	5.2	5.1	5.2	5.4	5.6
LAM	4.0	4.4	5.4	5.0	5.2	5.5	5.4	5.3	5.2	5.7	5.8
MEA	1.3	1.2	1.5	1.6	1.5	1.6	1.5	1.6	1.8	1.8	1.7
NEU	1.2	1.2	1.2	1.4	1.4	1.4	1.3	1.4	1.4	1.2	1.3
OAS	4.1	4.3	4.4	4.5	4.3	4.5	4.7	4.7	4.8	5.0	4.9
REF	5.2	4.9	5.5	5.8	5.9	5.5	6.0	6.3	4.8	5.4	5.2
SSA	1.4	1.4	1.6	1.8	1.7	1.9	2.0	1.9	2.1	1.9	2.1
USA	7.4	9.7	12.1	11.4	10.8	8.6	10.5	11.2	10.8	12.2	10.3

Table 1450: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	58.7	57.5	60.7	62.2	63.1	63.5	63.3	65.1	64.0	65.7	70.9
CAZ	1.9	2.2	2.5	2.3	2.5	2.7	2.5	2.3	1.7	2.5	2.5
CHA	9.9	10.3	10.9	11.0	11.2	11.2	10.9	10.8	11.0	10.5	11.5
EUR	7.6	7.8	8.2	8.6	8.6	8.5	8.2	8.2	8.3	7.4	9.1
IND	5.7	5.8	6.0	6.2	6.2	6.4	6.3	6.3	5.6	6.5	6.4
LAM	6.2	6.2	6.2	6.4	7.2	7.3	7.5	8.5	8.8	10.1	9.9
MEA	1.9	1.8	2.1	1.8	2.0	1.8	1.7	1.9	2.1	2.3	2.3
NEU	1.2	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.4	1.3	1.5
OAS	5.0	5.2	5.3	5.3	5.4	5.7	5.9	5.9	6.0	6.2	6.4
REF	4.2	3.7	3.5	4.2	2.9	3.2	3.4	4.1	4.2	3.5	4.2
SSA	2.2	2.2	2.4	2.4	2.4	2.5	2.5	2.6	2.7	2.8	2.9
USA	12.8	11.0	12.2	12.7	13.1	12.8	13.1	13.0	12.3	12.5	14.3

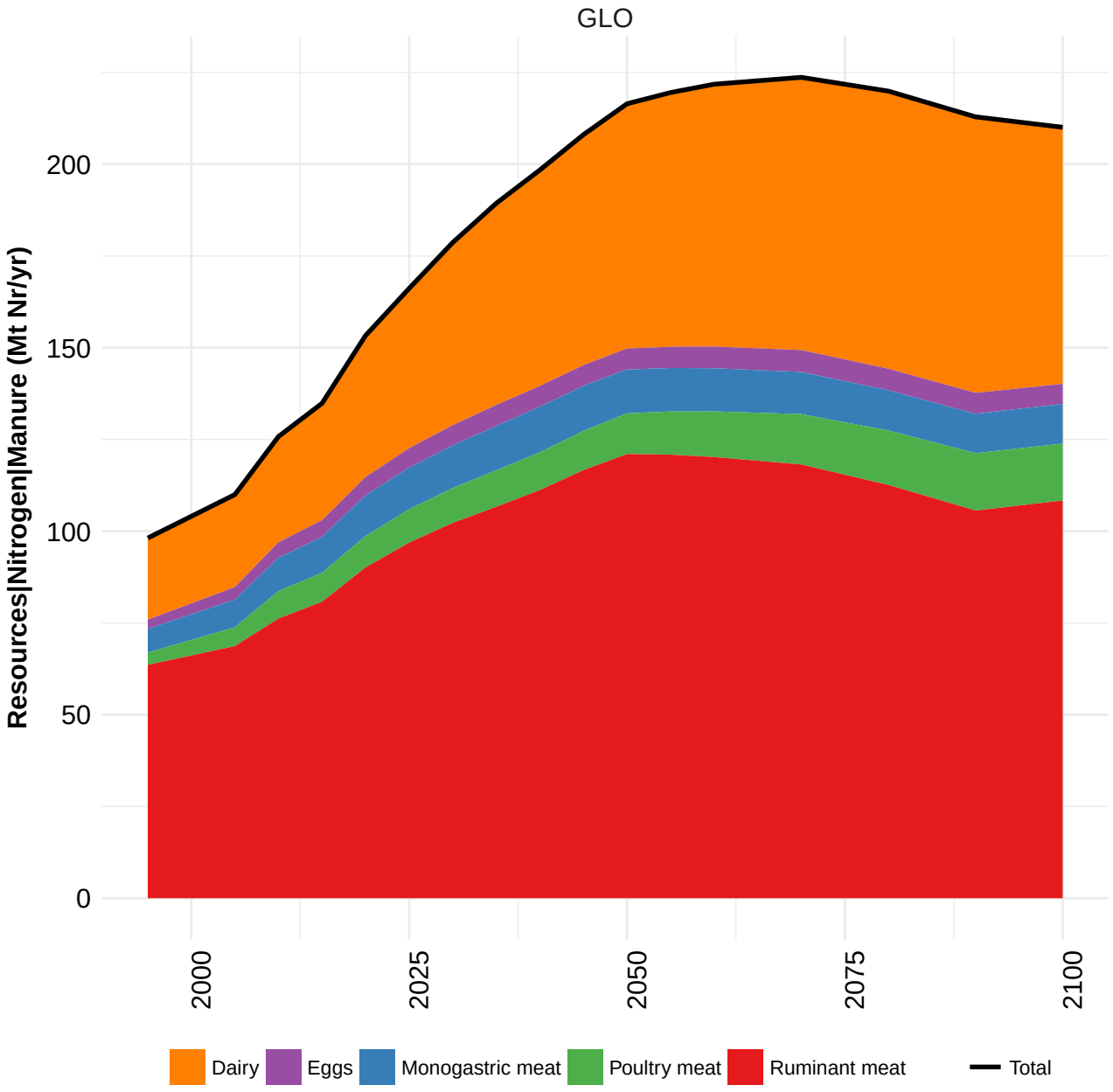
Table 1451: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 4/5]

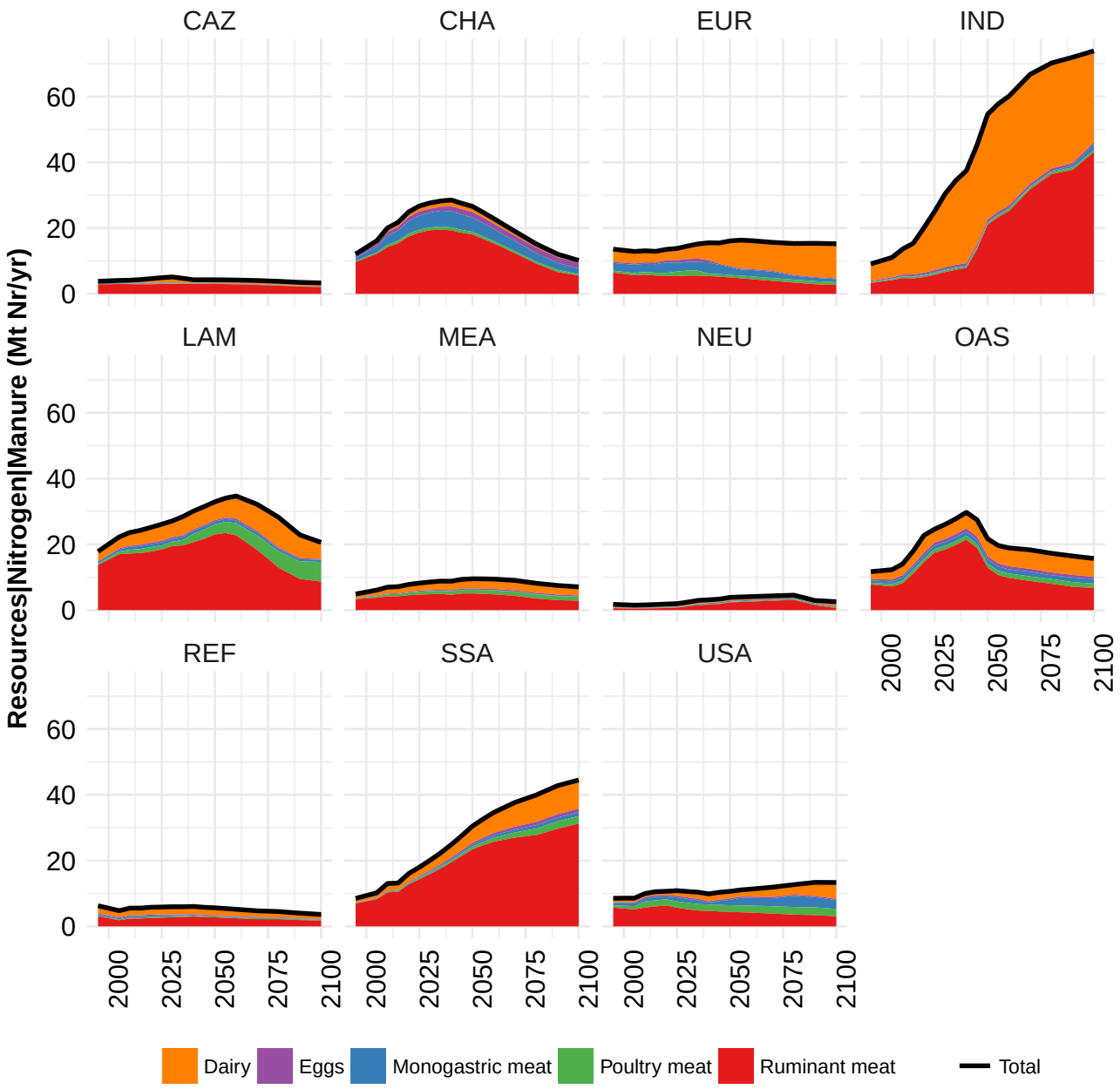
	2005	2006	2007	2008	2009
GLO	71.6	71.4	73.3	76.4	75.4
CAZ	2.7	2.2	2.3	2.8	2.7
CHA	11.7	12.0	12.1	12.9	12.9
EUR	8.3	8.0	7.7	8.7	8.6
IND	6.8	6.9	7.6	7.5	7.2
LAM	10.2	10.6	11.9	12.1	10.5
MEA	2.3	2.4	2.3	2.0	2.4
NEU	1.5	1.5	1.3	1.4	1.5
OAS	6.7	6.8	7.1	7.4	7.7
REF	4.3	4.3	4.3	5.4	5.1
SSA	3.1	3.2	3.1	3.4	3.4
USA	13.9	13.5	13.6	12.7	13.5

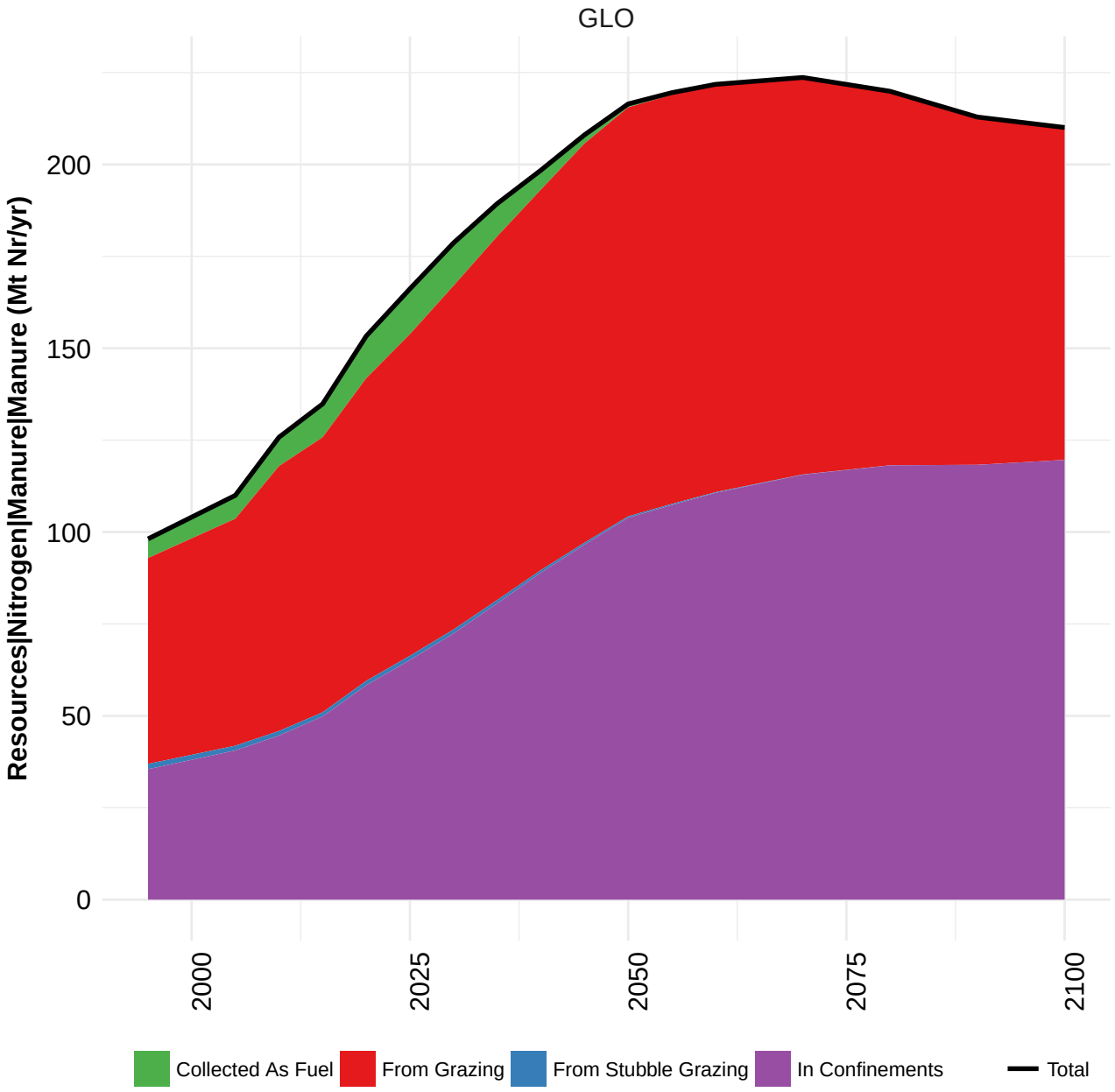
Table 1452: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 5/5]

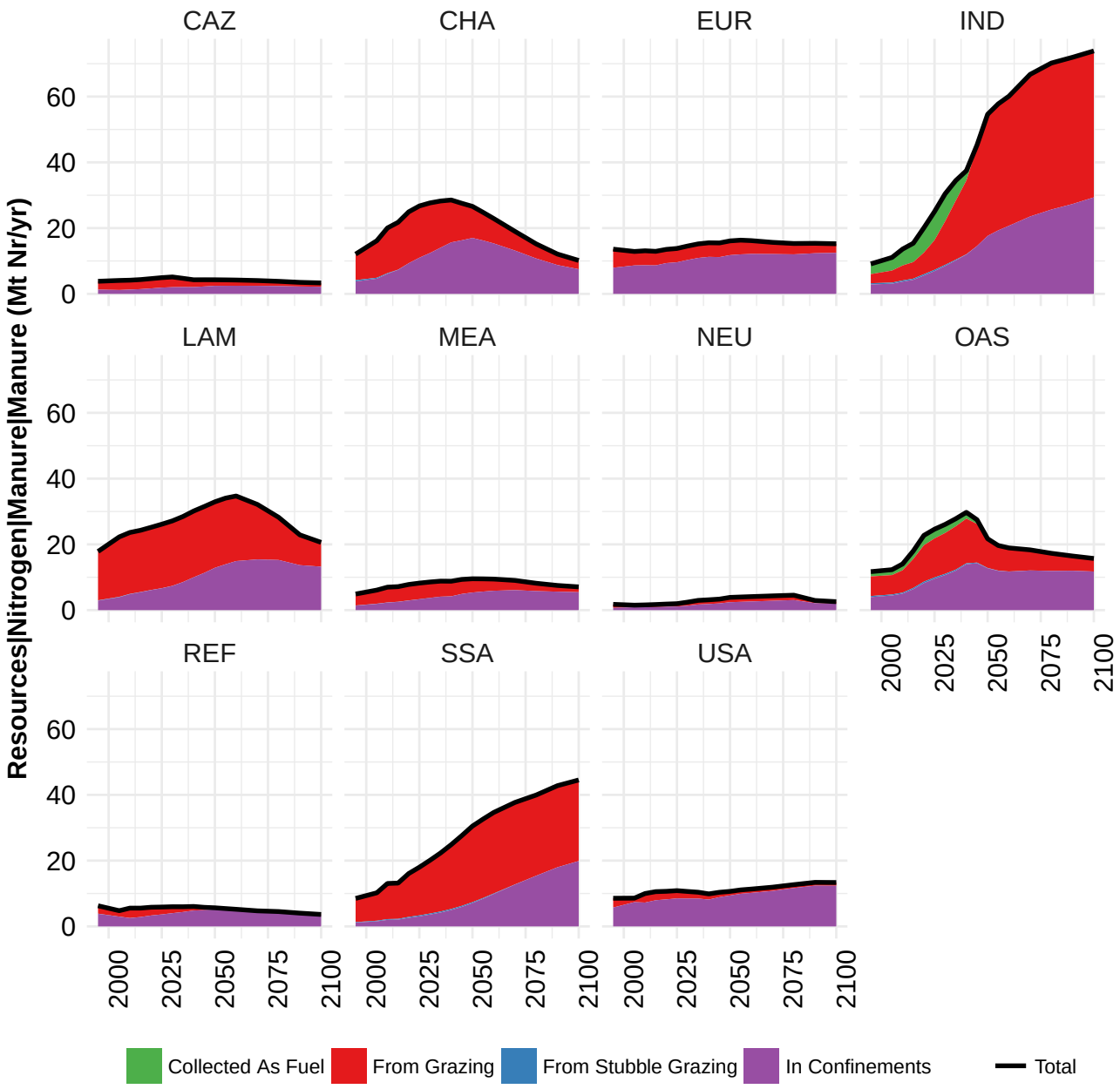
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	29.6	35.0	39.6	45.2	64.5	67.2	64.8	71.0	79.9	87.1
CAZ	1.0	1.1	1.4	1.5	4.3	4.6	3.8	4.3	4.6	4.6
CHA	3.7	4.3	4.9	5.6	7.4	8.7	9.8	10.8	11.9	13.5
EUR	5.3	5.9	6.8	8.1	11.0	10.6	10.1	10.9	11.2	11.4
IND	2.6	3.2	3.5	3.6	4.2	5.0	5.9	6.3	6.7	8.1
LAM	2.2	2.7	3.5	4.2	6.3	5.8	6.6	8.0	10.5	13.5
MEA	0.8	1.1	1.2	1.3	1.7	1.8	2.0	2.0	2.6	2.7
NEU	0.7	0.8	0.9	1.1	1.3	1.4	1.4	1.4	1.6	1.6
OAS	2.7	3.0	3.5	3.9	4.6	5.1	5.6	6.2	7.1	8.1
REF	3.9	5.4	4.4	5.6	8.9	10.0	5.6	4.5	5.2	4.4
SSA	1.2	1.4	1.6	1.7	1.8	2.1	2.3	2.7	3.3	4.0
USA	5.7	6.1	7.9	8.6	13.0	12.0	11.8	13.9	15.1	15.1

Table 1453: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr)

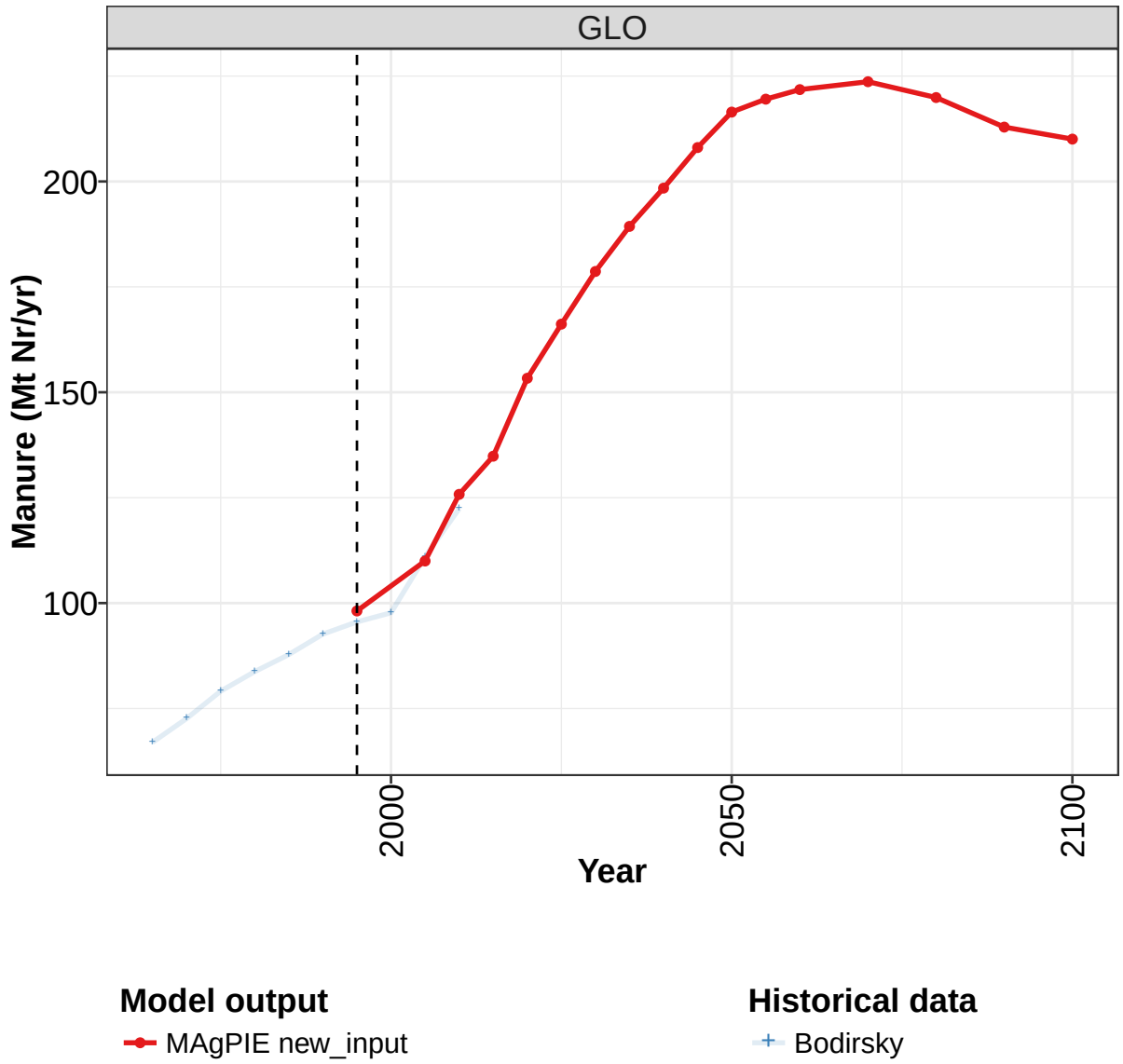

GLO
Resources|Nitrogen|Manure (Mt Nr/yr)
200
150
100
50
0
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Resources|Nitrogen|Manure (Mt Nr/yr)
0
20
40
60
2000
2025
2050
2075
2100
Dairy
Eggs
Monogastric meat
Poultry meat
Ruminant meat
Total


GLO
Resources|Nitrogen|Manure|Manure (Mt Nr/yr)
200
150
100
50
0
2000
2025
2050
2075
2100
Collected As Fuel
From Grazing
From Stubble Grazing
In Confinements
Total


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Resources|Nitrogen|Manure|Manure (Mt Nr/yr)
0
20
40
60
2000
2025
2050
2075
2100
Collected As Fuel
From Grazing
From Stubble Grazing
In Confinements
Total

56.2 Manure


GLO
Manure (Mt Nr/yr)
200
150
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
Bodirsky

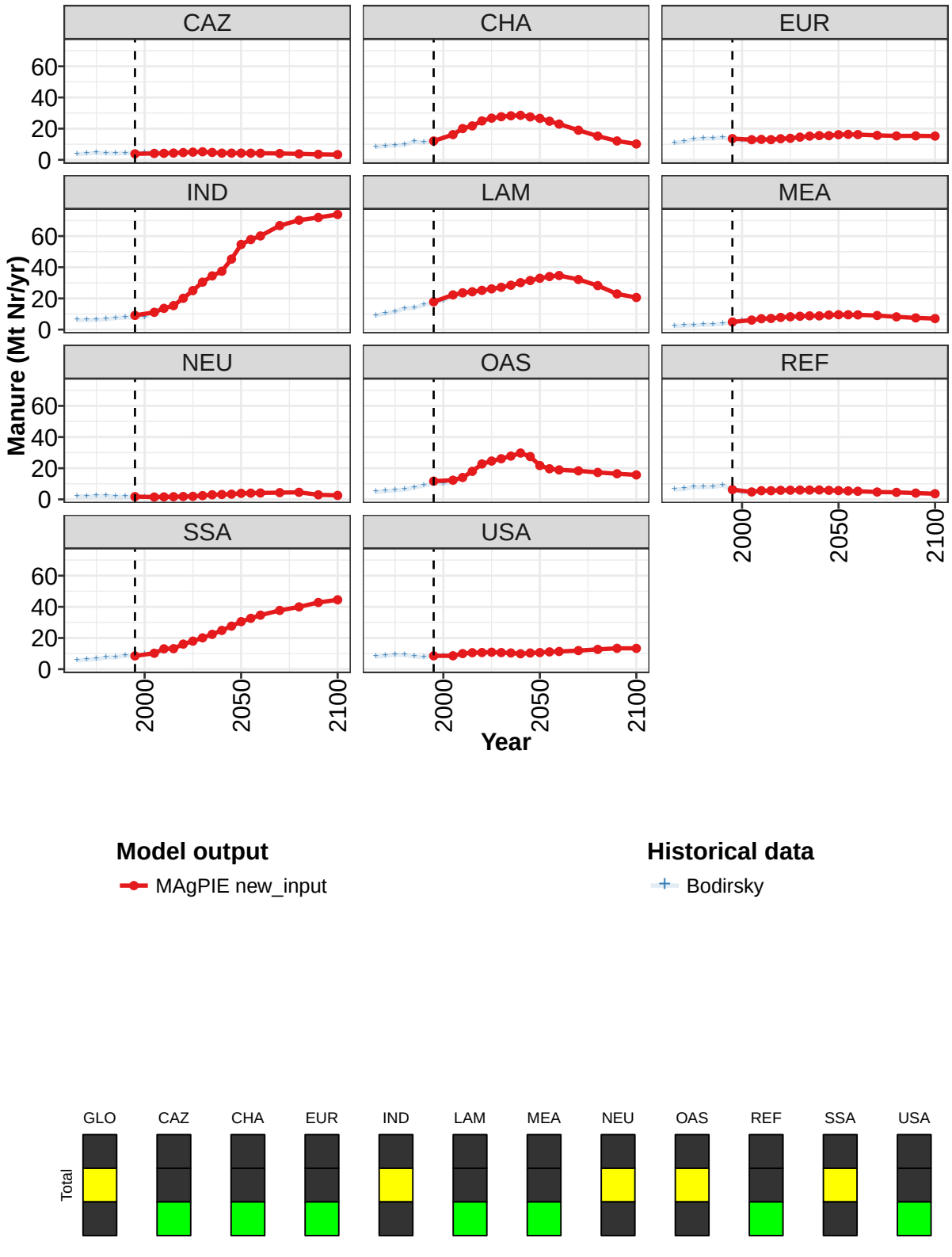


Figure 390: MAgPIE new_input — Resources—Nitrogen—Manure (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	98	110	126	135	153	166	179	189	198	208	216
CAZ	4	4	4	4	5	5	5	5	4	4	4
CHA	12	16	20	22	25	27	28	28	29	28	27
EUR	14	13	13	13	14	14	15	15	16	15	16
IND	9	11	14	15	20	25	30	34	37	45	55
LAM	18	22	24	24	25	26	27	28	30	31	33
MEA	5	6	7	7	8	8	9	9	9	9	10
NEU	2	2	2	2	2	2	2	3	3	3	4
OAS	12	12	14	18	23	25	26	28	30	27	22
REF	6	5	6	6	6	6	6	6	6	6	6
SSA	9	10	13	13	16	18	20	22	25	28	30
USA	9	9	10	11	11	11	11	10	10	10	11

Table 1454: MAgPIE new_input — Resources—Nitrogen—Manure (Mt Nr/yr) [PART 1/2]

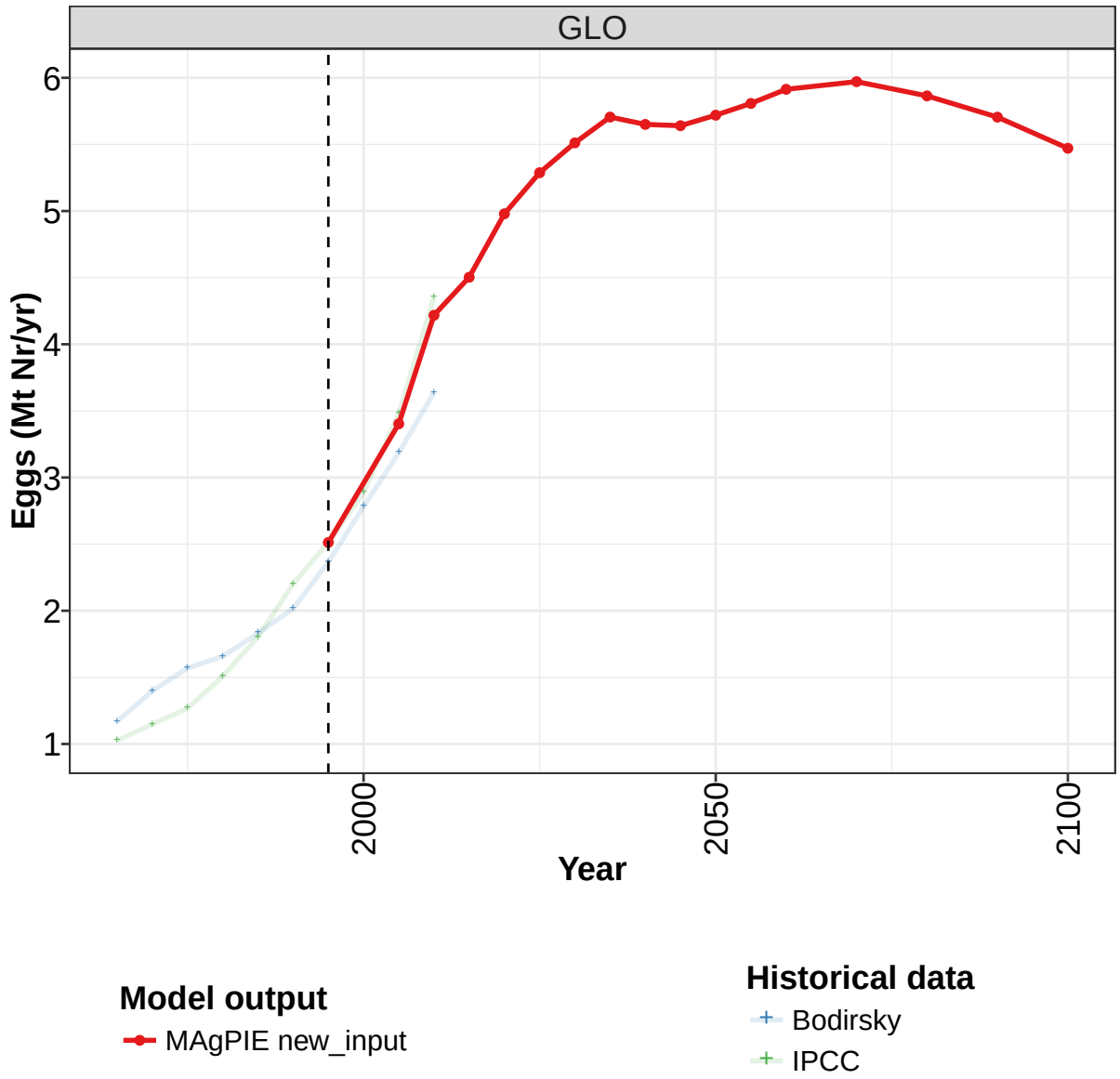
	2055	2060	2070	2080	2090	2100
GLO	220	222	224	220	213	210
CAZ	4	4	4	4	3	3
CHA	25	23	19	15	12	10
EUR	16	16	16	15	15	15
IND	58	60	67	70	72	74
LAM	34	35	32	28	23	21
MEA	10	9	9	8	8	7
NEU	4	4	4	5	3	3
OAS	20	19	18	17	16	16
REF	5	5	5	5	4	4
SSA	33	35	38	40	43	45
USA	11	11	12	13	13	13

Table 1455: MAgPIE new_input — Resources—Nitrogen—Manure (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	67	73	79	84	88	93	96	98	111	122
CAZ	4	4	5	4	4	4	4	5	5	5
CHA	8	9	9	10	12	11	12	14	17	20
EUR	11	12	13	14	14	14	13	12	12	12
IND	6	6	6	7	7	8	8	8	12	14
LAM	9	10	12	14	14	16	17	19	22	22
MEA	2	3	3	3	3	4	5	6	6	7
NEU	2	2	2	2	2	2	2	2	1	1
OAS	5	5	6	6	8	9	10	10	12	13
REF	6	7	8	8	8	9	6	5	5	5
SSA	6	6	6	7	8	9	9	10	11	13
USA	8	9	9	9	8	8	9	9	9	10

Table 1456: Bodirsky — Resources—Nitrogen—Manure (Mt Nr/yr)

56.2.1 Eggs


GLO
Eggs (Mt Nr/yr)
1
2
3
4
5
6
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
Bodirsky
IPCC

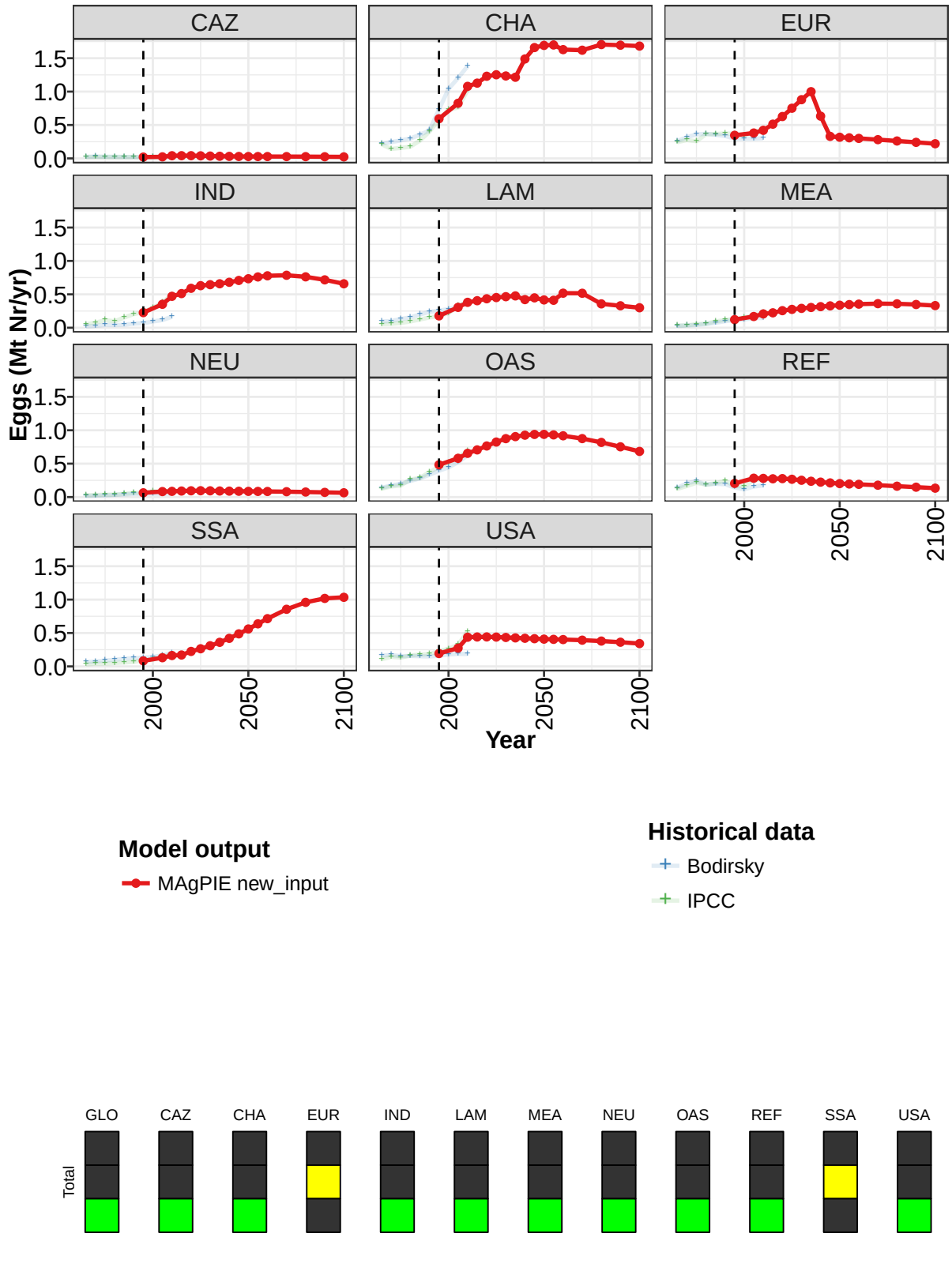


Figure 391: MAgPIE new_input — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.51	3.40	4.22	4.50	4.98	5.29	5.51	5.71	5.65	5.64	5.72
CAZ	0.02	0.02	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
CHA	0.59	0.83	1.08	1.13	1.23	1.25	1.23	1.21	1.49	1.66	1.69
EUR	0.35	0.38	0.42	0.51	0.63	0.75	0.88	1.00	0.63	0.33	0.32
IND	0.23	0.35	0.47	0.51	0.59	0.63	0.64	0.66	0.68	0.71	0.73
LAM	0.18	0.31	0.38	0.41	0.43	0.45	0.47	0.48	0.42	0.45	0.42
MEA	0.12	0.17	0.21	0.22	0.26	0.27	0.29	0.30	0.32	0.33	0.34
NEU	0.06	0.08	0.09	0.09	0.09	0.10	0.09	0.09	0.09	0.09	0.09
OAS	0.48	0.58	0.65	0.71	0.76	0.82	0.87	0.91	0.93	0.94	0.94
REF	0.20	0.28	0.28	0.27	0.28	0.27	0.25	0.24	0.22	0.21	0.20
SSA	0.08	0.13	0.16	0.17	0.22	0.26	0.31	0.36	0.42	0.49	0.56
USA	0.19	0.27	0.44	0.44	0.44	0.44	0.43	0.43	0.42	0.41	0.41

Table 1457: MAgPIE new_input — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	5.81	5.91	5.97	5.86	5.70	5.47
CAZ	0.03	0.03	0.03	0.03	0.02	0.02
CHA	1.70	1.63	1.62	1.70	1.69	1.68
EUR	0.31	0.30	0.28	0.26	0.24	0.22
IND	0.76	0.78	0.79	0.76	0.72	0.66
LAM	0.41	0.52	0.52	0.36	0.33	0.30
MEA	0.35	0.35	0.36	0.36	0.35	0.33
NEU	0.08	0.08	0.08	0.08	0.07	0.06
OAS	0.93	0.92	0.88	0.82	0.75	0.68
REF	0.20	0.19	0.18	0.16	0.15	0.13
SSA	0.64	0.71	0.85	0.96	1.02	1.03
USA	0.41	0.40	0.39	0.38	0.36	0.34

Table 1458: MAgPIE new_input — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr) [PART 2/2]

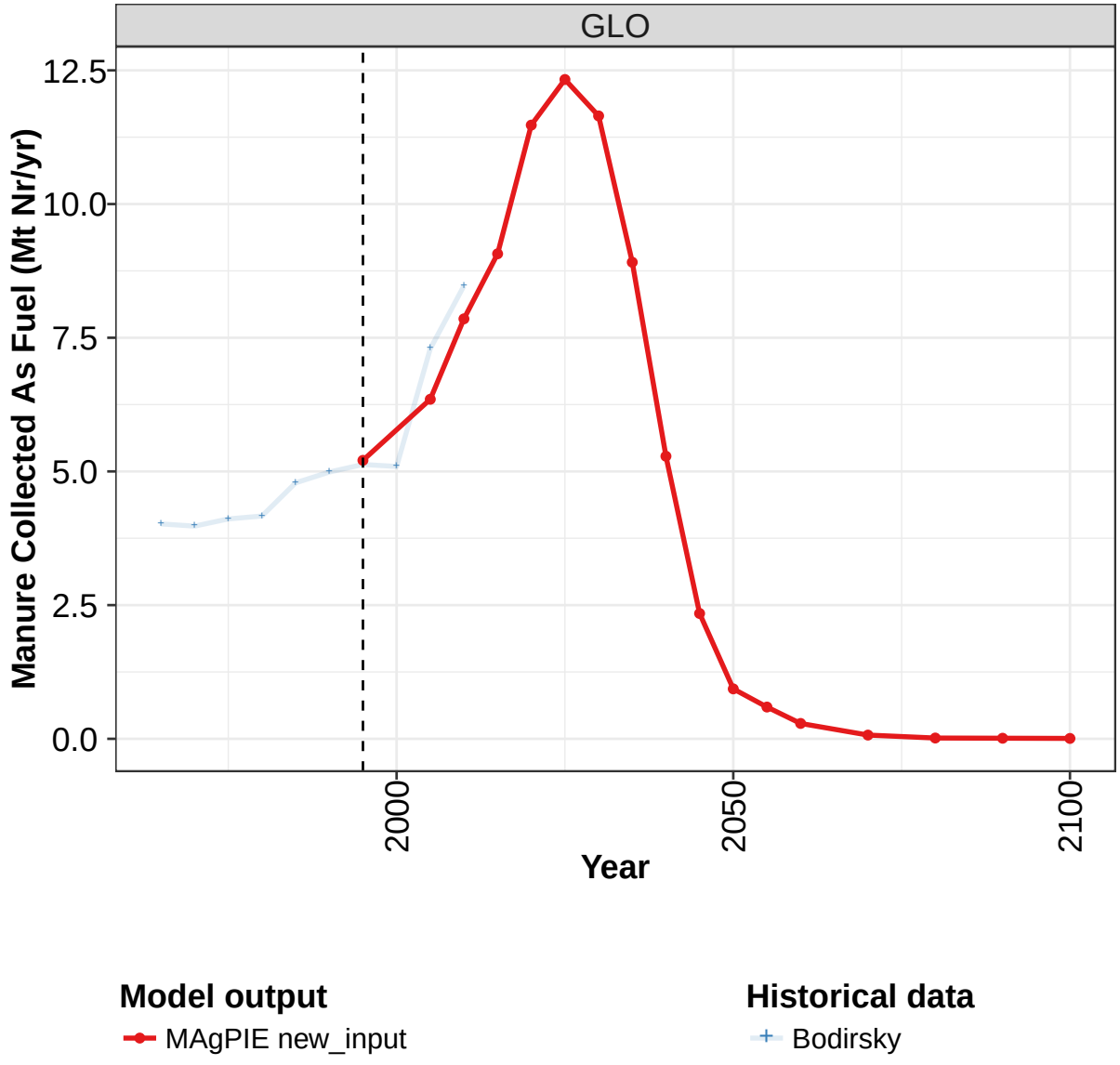
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.17	1.40	1.57	1.66	1.83	2.02	2.37	2.78	3.19	3.64
CAZ	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.22	0.24	0.27	0.30	0.35	0.42	0.73	1.04	1.20	1.38
EUR	0.26	0.32	0.36	0.37	0.35	0.34	0.30	0.29	0.30	0.30
IND	0.02	0.03	0.04	0.04	0.04	0.06	0.07	0.09	0.12	0.16
LAM	0.09	0.10	0.13	0.15	0.20	0.24	0.26	0.28	0.32	0.38
MEA	0.03	0.03	0.04	0.05	0.07	0.10	0.12	0.12	0.15	0.15
NEU	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.05
OAS	0.14	0.18	0.20	0.24	0.28	0.33	0.39	0.44	0.52	0.63
REF	0.14	0.21	0.24	0.19	0.20	0.19	0.14	0.12	0.16	0.18
SSA	0.06	0.07	0.09	0.10	0.12	0.12	0.13	0.14	0.17	0.20
USA	0.16	0.17	0.15	0.16	0.15	0.15	0.16	0.18	0.19	0.19

Table 1459: IPCC — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.03	1.15	1.27	1.51	1.80	2.20	2.51	2.89	3.48	4.35
CAZ	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04
CHA	0.21	0.14	0.16	0.18	0.27	0.40	0.58	0.73	0.76	1.02
EUR	0.24	0.28	0.26	0.36	0.36	0.38	0.37	0.34	0.39	0.44
IND	0.05	0.07	0.11	0.10	0.15	0.20	0.24	0.30	0.38	0.49
LAM	0.05	0.06	0.07	0.09	0.12	0.15	0.17	0.22	0.33	0.39
MEA	0.03	0.04	0.05	0.06	0.09	0.12	0.13	0.15	0.18	0.22
NEU	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10
OAS	0.13	0.16	0.17	0.26	0.29	0.37	0.45	0.52	0.60	0.69
REF	0.12	0.17	0.21	0.19	0.21	0.24	0.17	0.16	0.25	0.27
SSA	0.03	0.04	0.04	0.05	0.06	0.07	0.10	0.10	0.15	0.17
USA	0.11	0.14	0.13	0.16	0.18	0.18	0.23	0.26	0.32	0.52

Table 1460: Bodirsky — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr)

56.2.2 Manure Collected As Fuel



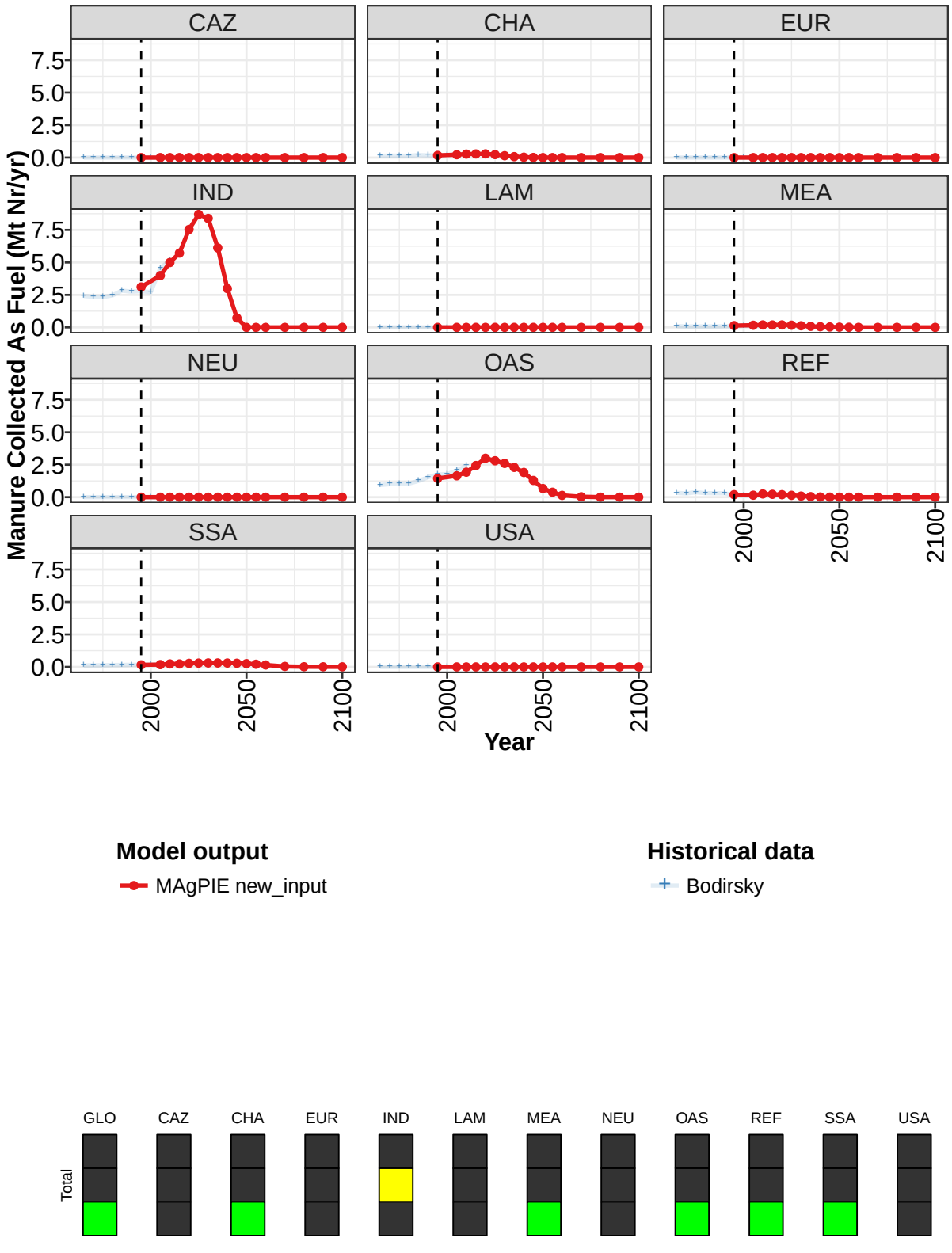


Figure 392: MAgPIE new_input — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	5.2	6.3	7.9	9.1	11.5	12.3	11.6	8.9	5.3	2.3	0.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.2	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.1	4.0	5.0	5.7	7.5	8.7	8.4	6.1	3.0	0.7	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.4	1.6	1.9	2.4	3.0	2.8	2.6	2.3	1.9	1.3	0.7
REF	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0
SSA	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1461: MAgPIE new_input — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr) [PART 1/2]

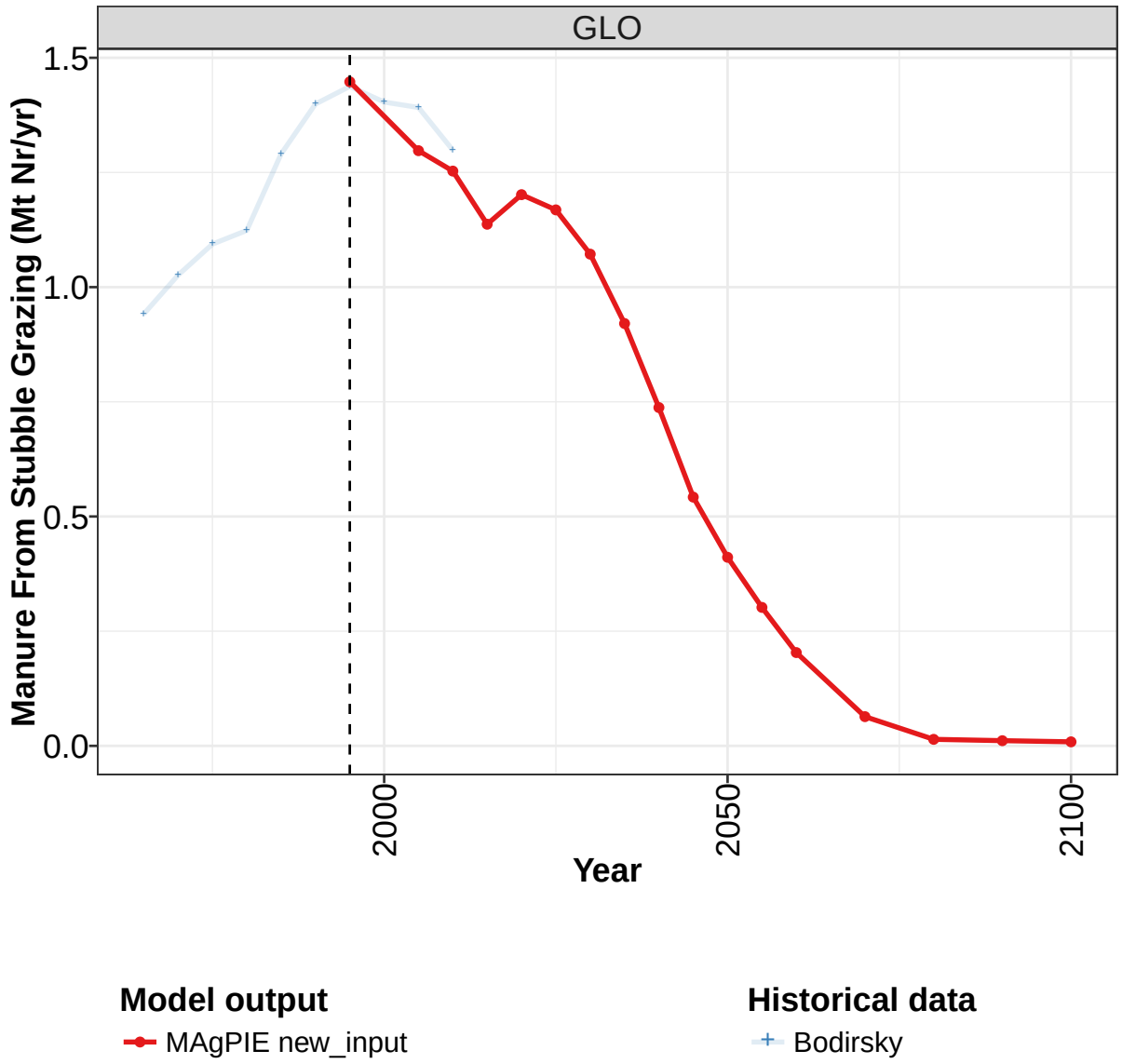
	2055	2060	2070	2080	2090	2100
GLO	0.6	0.3	0.1	0.0	0.0	0.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.4	0.1	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.2	0.1	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 1462: MAgPIE new_input — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.02	3.98	4.11	4.17	4.79	4.99	5.13	5.09	7.29	8.47
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.13	0.15	0.15	0.14	0.19	0.17	0.18	0.19	0.24	0.27
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	2.42	2.35	2.34	2.46	2.83	2.75	2.79	2.71	4.56	5.16
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.10	0.07	0.07	0.07	0.07	0.08	0.09	0.12	0.12	0.13
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.93	1.00	1.06	1.05	1.25	1.53	1.75	1.77	2.05	2.42
REF	0.33	0.28	0.38	0.31	0.30	0.30	0.15	0.12	0.13	0.26
SSA	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.18	0.20	0.23
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1463: Bodirsky — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr)

56.2.3 Manure From Stubble Grazing



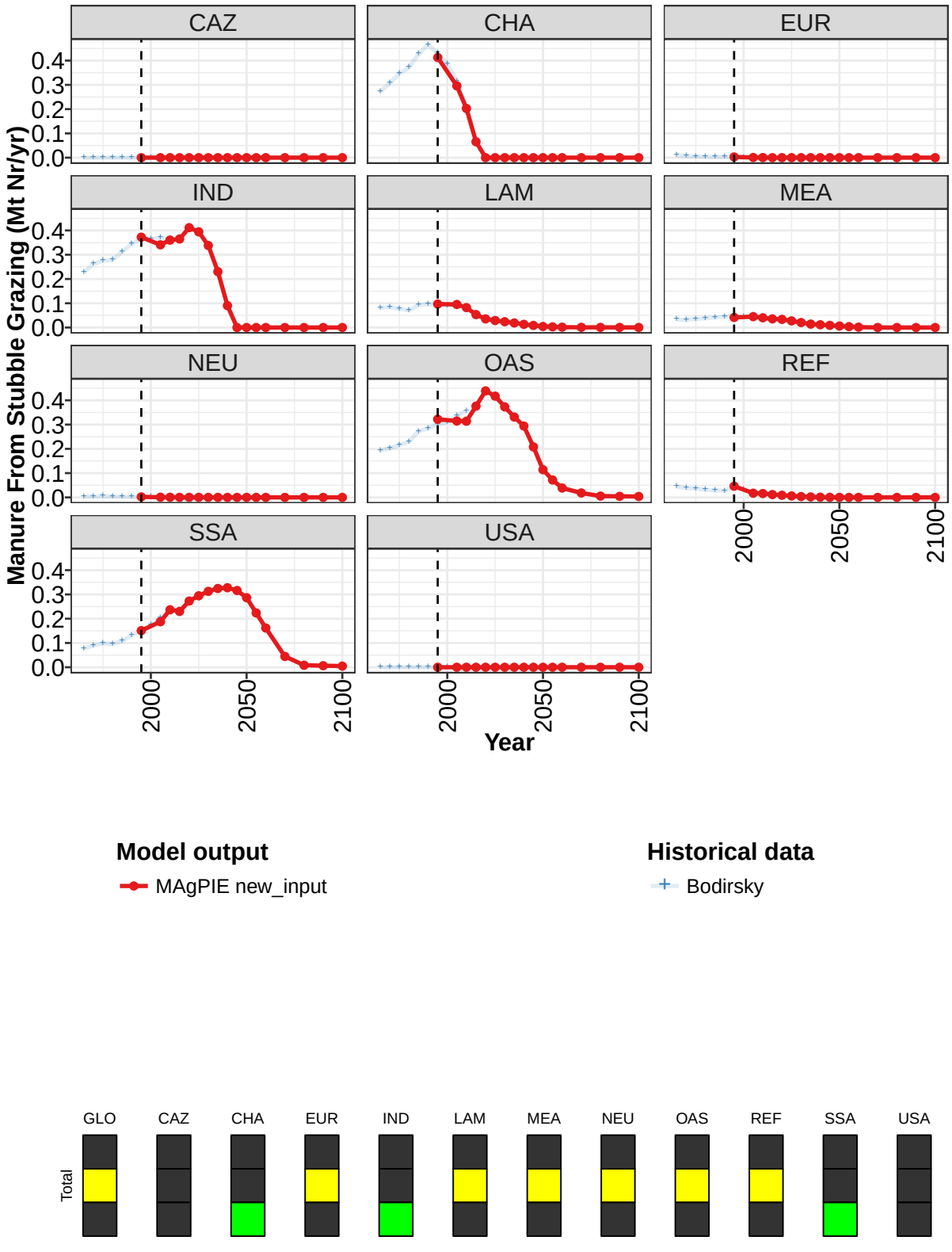


Figure 393: MAgPIE new_input — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.45	1.30	1.25	1.14	1.20	1.17	1.07	0.92	0.74	0.54	0.41
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.41	0.30	0.20	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.37	0.34	0.36	0.36	0.41	0.39	0.34	0.23	0.09	0.00	0.00
LAM	0.10	0.10	0.08	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.00
MEA	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.32	0.31	0.31	0.38	0.44	0.42	0.37	0.33	0.29	0.21	0.11
REF	0.05	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
SSA	0.15	0.19	0.24	0.23	0.27	0.29	0.31	0.32	0.33	0.32	0.29
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1464: MAgPIE new_input — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr) [PART 1/2]

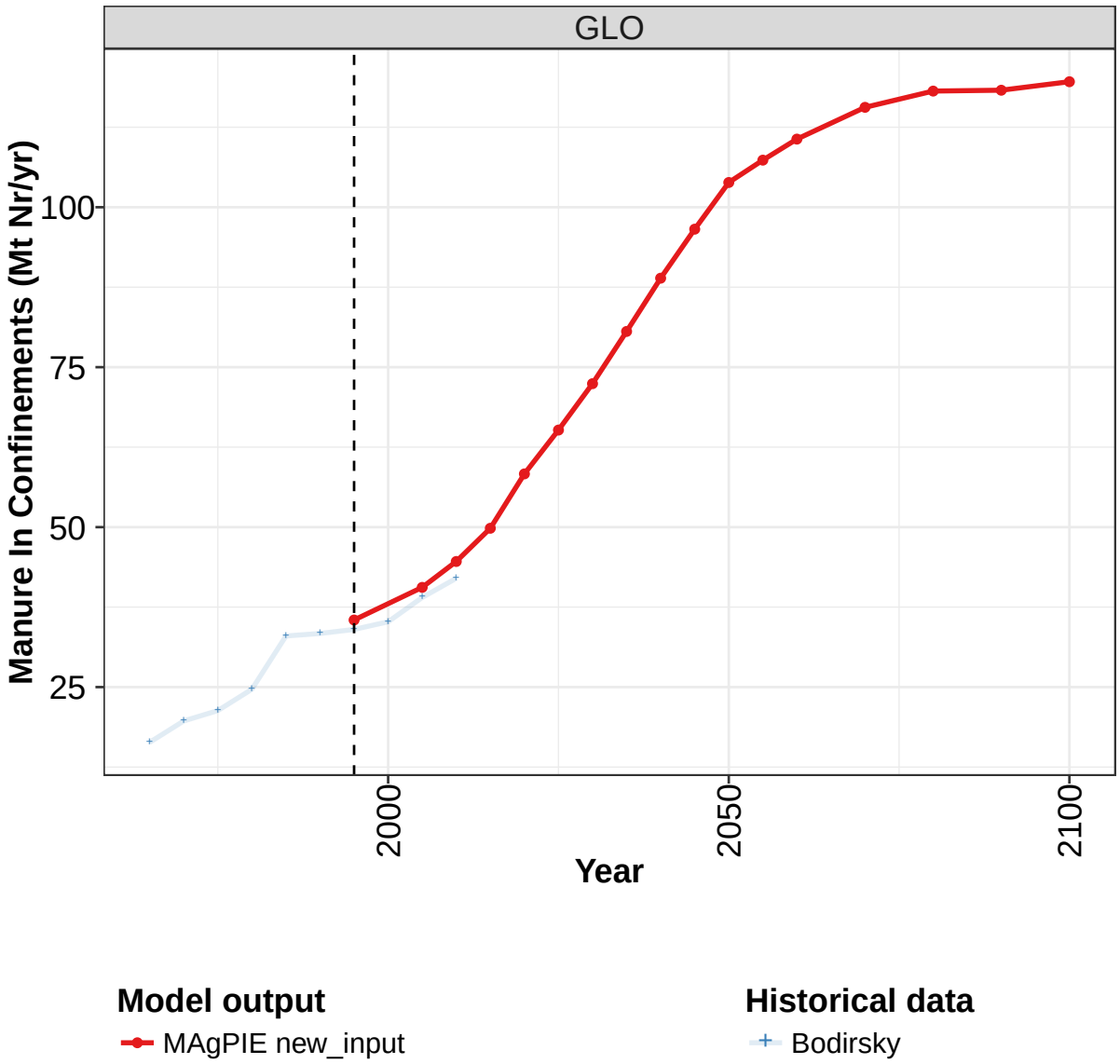
	2055	2060	2070	2080	2090	2100
GLO	0.30	0.20	0.06	0.01	0.01	0.01
CAZ	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.07	0.04	0.02	0.01	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.22	0.16	0.04	0.01	0.01	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00

Table 1465: MAgPIE new_input — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	1.03	1.09	1.12	1.29	1.40	1.44	1.40	1.39	1.30
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.27	0.31	0.35	0.37	0.43	0.47	0.43	0.39	0.32	0.21
EUR	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.23	0.26	0.28	0.28	0.31	0.34	0.37	0.37	0.37	0.36
LAM	0.08	0.08	0.08	0.07	0.09	0.10	0.09	0.09	0.10	0.08
MEA	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.19	0.20	0.22	0.23	0.27	0.28	0.30	0.31	0.34	0.36
REF	0.04	0.04	0.04	0.03	0.03	0.03	0.05	0.03	0.02	0.02
SSA	0.08	0.09	0.10	0.10	0.11	0.13	0.15	0.17	0.20	0.24
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1466: Bodirsky — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr)

56.2.4 Manure In Confinements



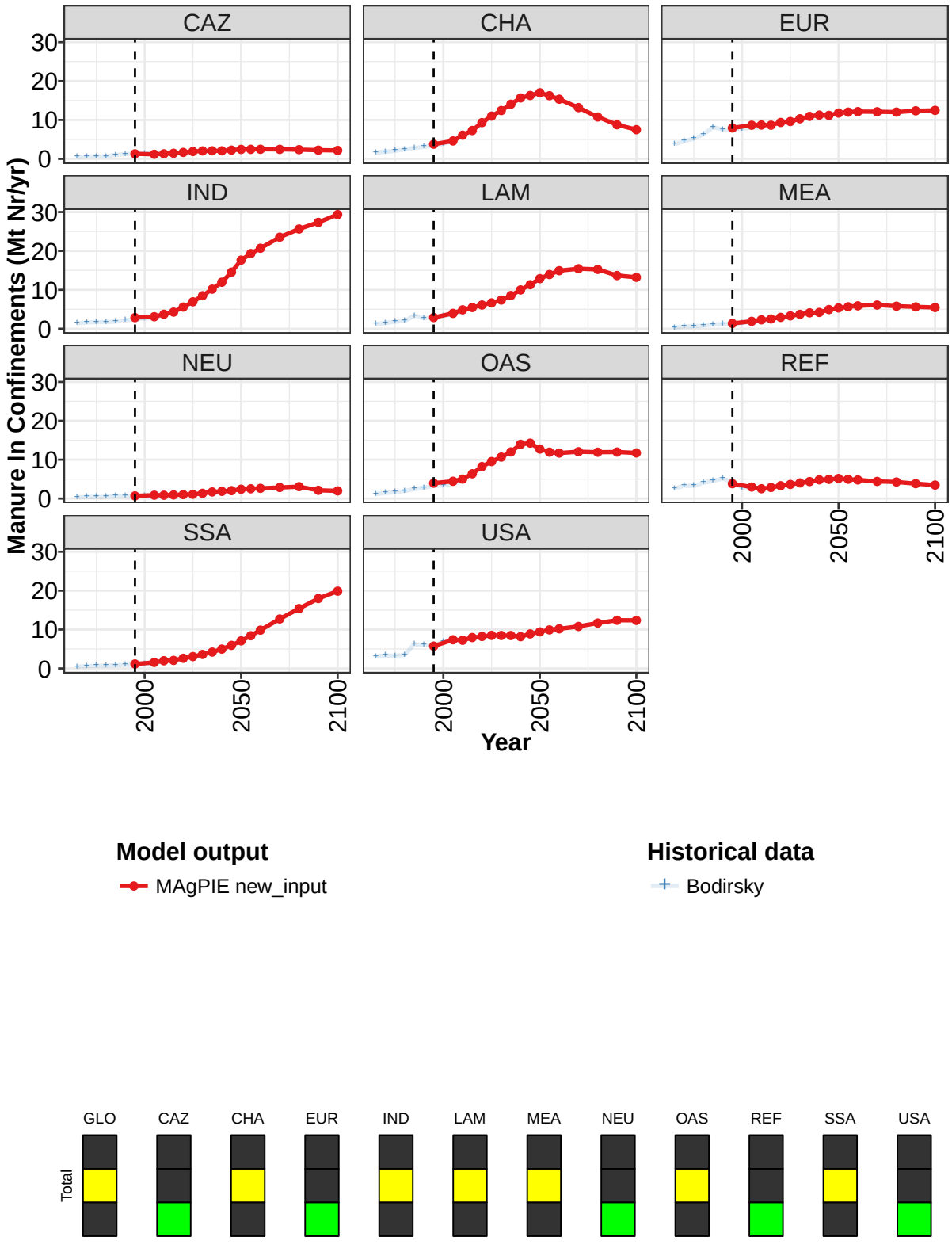


Figure 394: MAgPIE new_input — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	35	41	45	50	58	65	72	81	89	97	104
CAZ	1	1	1	1	2	2	2	2	2	2	2
CHA	4	5	6	7	9	11	12	14	16	16	17
EUR	8	9	9	9	9	10	10	11	11	11	12
IND	3	3	4	4	6	7	8	10	12	15	18
LAM	3	4	5	5	6	7	7	9	10	11	13
MEA	1	2	2	3	3	3	4	4	4	5	5
NEU	1	1	1	1	1	1	1	2	2	2	2
OAS	4	4	5	6	8	10	11	12	14	14	13
REF	4	3	3	3	3	4	4	4	5	5	5
SSA	1	2	2	2	3	3	4	4	5	6	7
USA	6	7	7	8	8	9	8	8	8	9	9

Table 1467: MAgPIE new_input — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr) [PART 1/2]

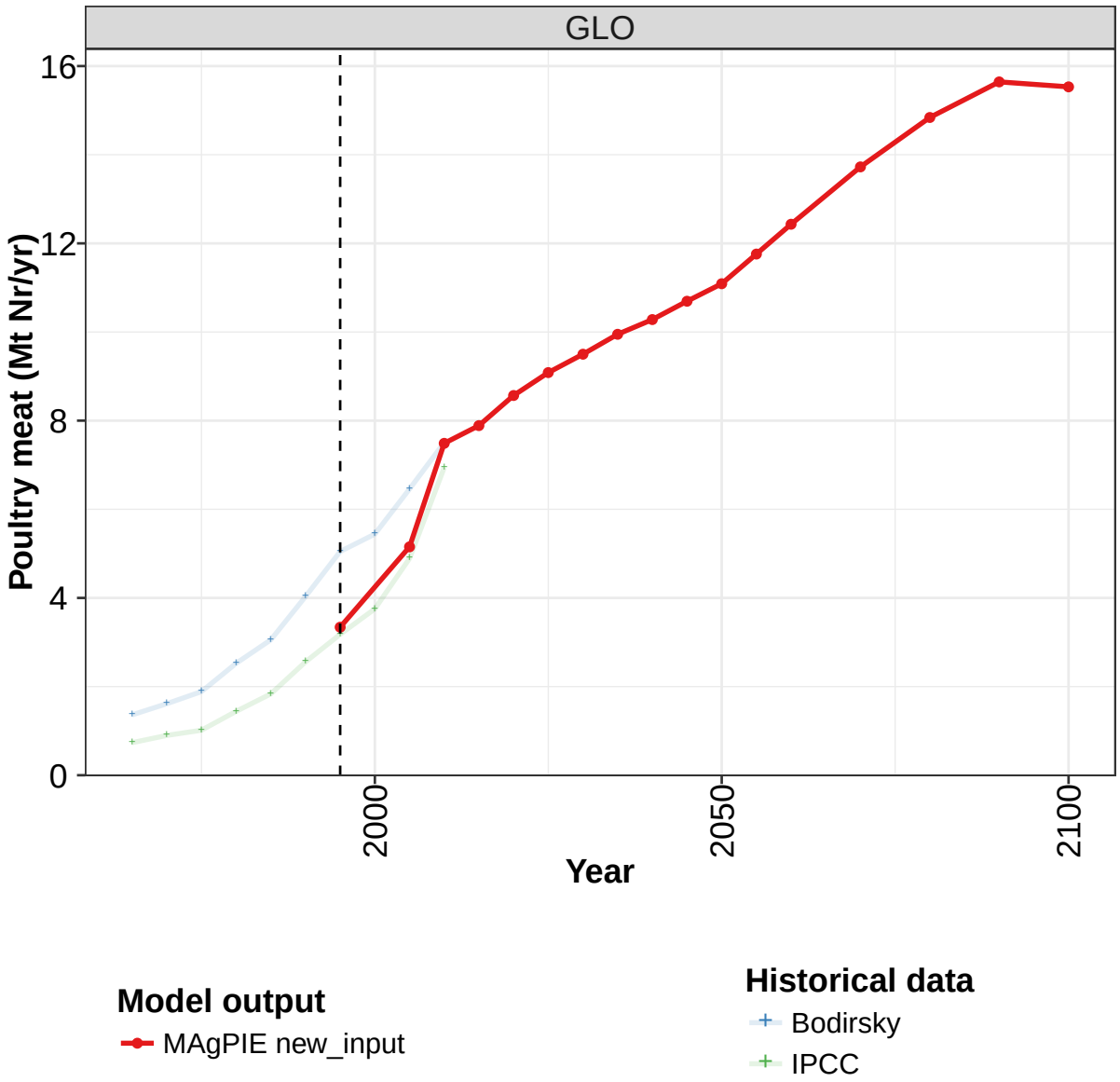
	2055	2060	2070	2080	2090	2100
GLO	107	111	116	118	118	120
CAZ	2	2	2	2	2	2
CHA	16	15	13	11	9	8
EUR	12	12	12	12	12	12
IND	19	21	24	26	27	29
LAM	14	15	15	15	14	13
MEA	6	6	6	6	6	5
NEU	3	3	3	3	2	2
OAS	12	12	12	12	12	12
REF	5	5	4	4	4	3
SSA	8	10	13	15	18	20
USA	10	10	11	12	12	12

Table 1468: MAgPIE new_input — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	16.4	19.7	21.3	24.7	33.0	33.4	34.0	35.2	39.0	42.0
CAZ	0.5	0.6	0.6	0.6	1.0	1.2	1.3	1.4	1.4	1.4
CHA	1.6	1.8	2.1	2.4	2.8	3.1	3.4	3.9	4.6	6.0
EUR	3.8	4.5	5.2	6.3	8.2	7.5	7.6	7.8	8.0	8.1
IND	1.4	1.6	1.7	1.7	1.8	2.2	2.4	2.6	3.0	3.5
LAM	1.2	1.5	1.8	2.0	3.4	2.7	2.9	3.3	3.8	4.4
MEA	0.3	0.6	0.7	0.8	1.1	1.2	1.3	1.5	1.7	2.1
NEU	0.4	0.4	0.4	0.5	0.7	0.6	0.7	0.7	0.8	0.8
OAS	1.2	1.4	1.6	2.0	2.4	2.8	3.3	3.4	3.9	4.4
REF	2.6	3.3	3.3	4.1	4.5	5.1	4.2	2.8	2.8	2.3
SSA	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.4	1.7
USA	3.1	3.4	3.2	3.5	6.2	6.0	6.0	6.8	7.5	7.4

Table 1469: Bodirsky — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr)

56.2.5 Poultry meat



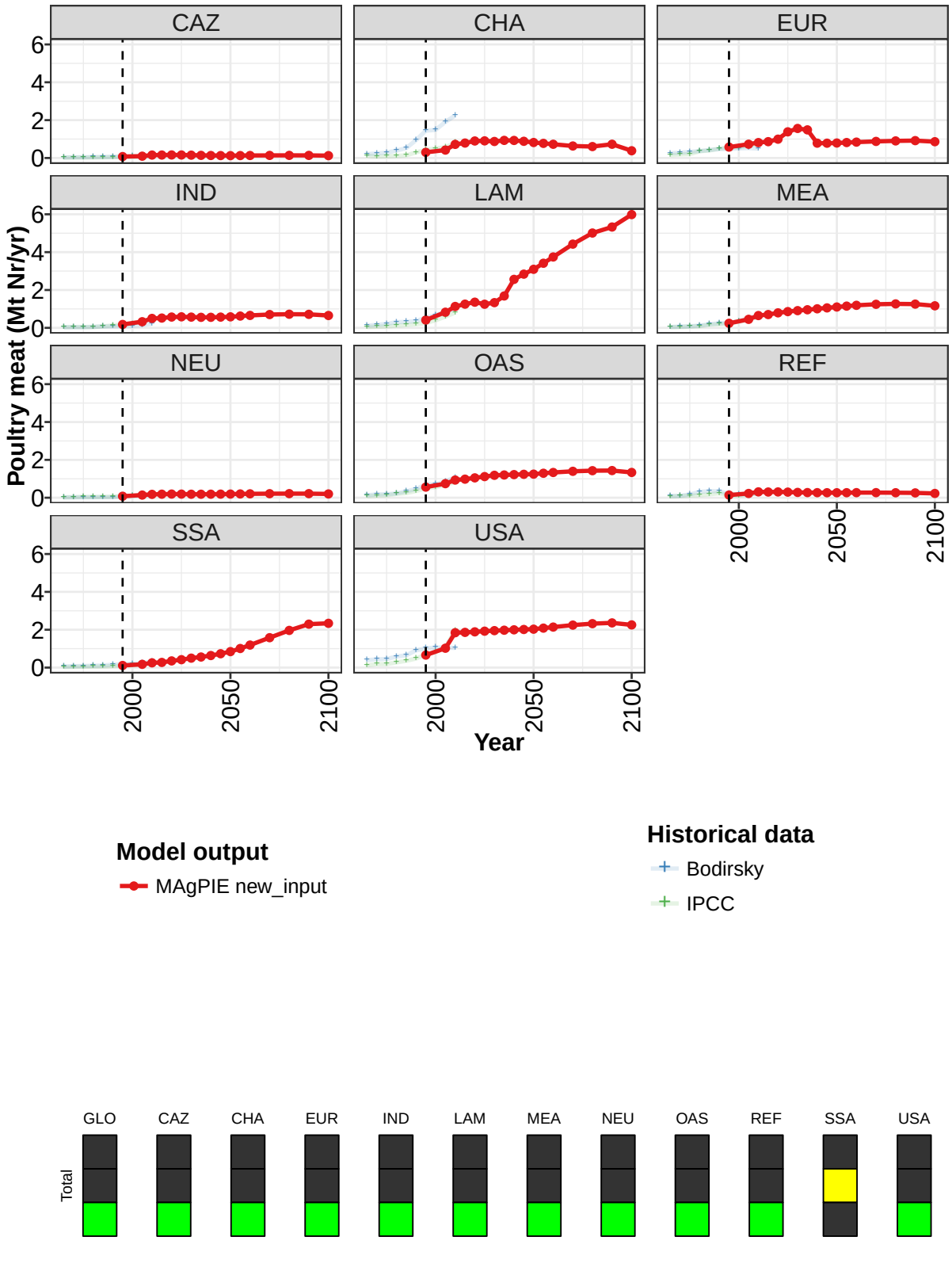


Figure 395: MAgPIE new_input — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3.3	5.2	7.5	7.9	8.6	9.1	9.5	9.9	10.3	10.7	11.1
CAZ	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
CHA	0.3	0.4	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8
EUR	0.6	0.7	0.8	0.9	1.0	1.4	1.6	1.5	0.8	0.8	0.8
IND	0.2	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
LAM	0.4	0.8	1.1	1.3	1.4	1.2	1.3	1.7	2.6	2.8	3.1
MEA	0.2	0.5	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1
NEU	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.6	0.7	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2
REF	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.8
USA	0.7	1.0	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0

Table 1470: MAgPIE new_input — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	11.8	12.4	13.7	14.8	15.6	15.5
CAZ	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.8	0.7	0.6	0.6	0.7	0.4
EUR	0.8	0.8	0.9	0.9	0.9	0.9
IND	0.6	0.7	0.7	0.7	0.7	0.7
LAM	3.4	3.7	4.4	5.0	5.3	6.0
MEA	1.1	1.2	1.2	1.3	1.3	1.2
NEU	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.3	1.3	1.4	1.4	1.4	1.3
REF	0.3	0.3	0.3	0.3	0.3	0.2
SSA	1.0	1.2	1.6	2.0	2.3	2.3
USA	2.1	2.1	2.2	2.3	2.4	2.3

Table 1471: MAgPIE new_input — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr) [PART 2/2]

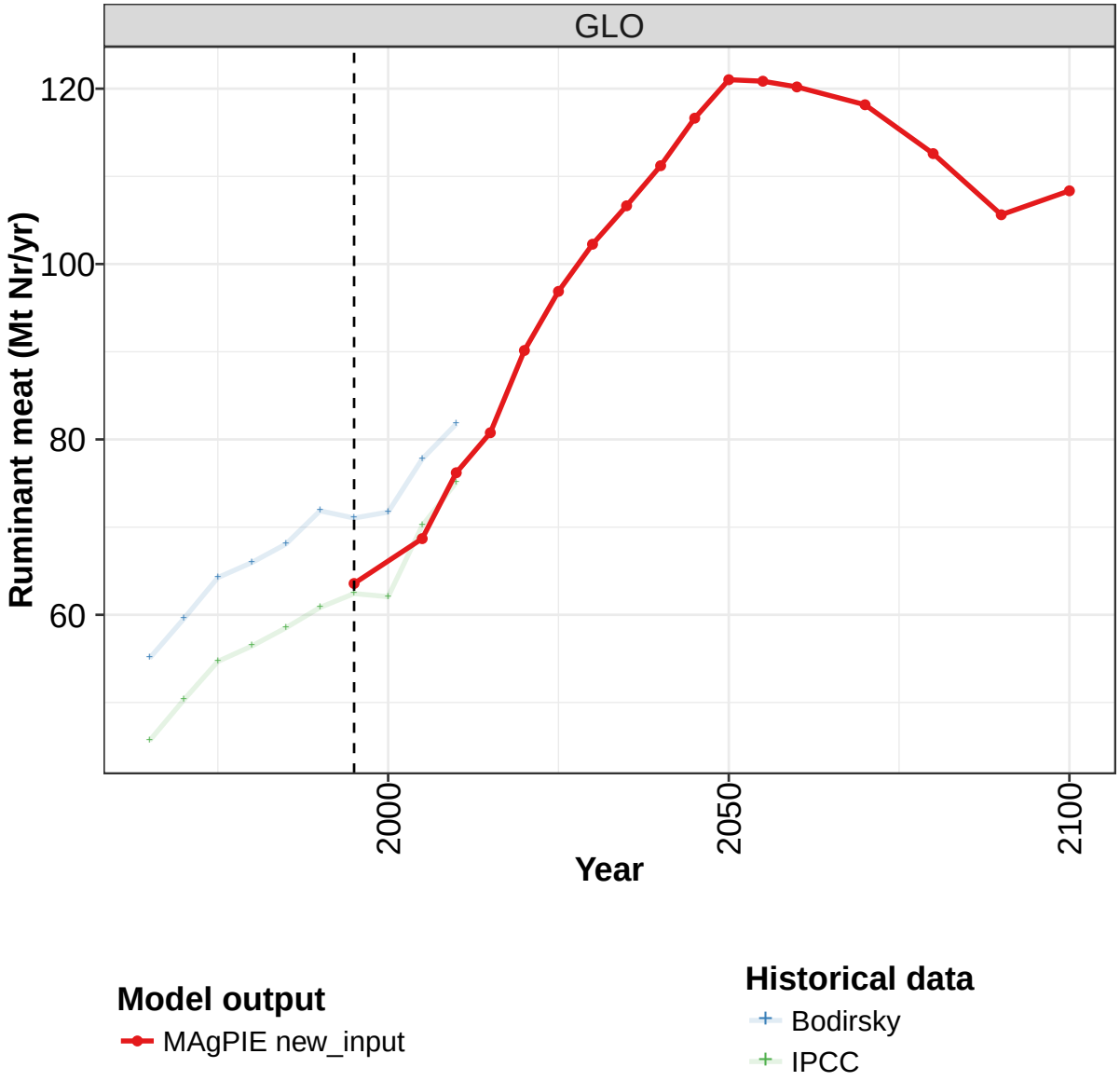
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.36	1.61	1.89	2.52	3.06	4.03	5.05	5.44	6.46	7.51
CAZ	0.03	0.04	0.04	0.05	0.05	0.06	0.08	0.09	0.09	0.09
CHA	0.20	0.24	0.29	0.39	0.52	0.94	1.44	1.49	1.91	2.25
EUR	0.25	0.28	0.32	0.37	0.42	0.47	0.47	0.51	0.52	0.50
IND	0.03	0.04	0.03	0.05	0.08	0.07	0.09	0.10	0.14	0.22
LAM	0.12	0.16	0.21	0.30	0.32	0.36	0.53	0.67	0.84	1.02
MEA	0.04	0.06	0.08	0.12	0.19	0.24	0.26	0.35	0.51	0.67
NEU	0.02	0.02	0.02	0.03	0.03	0.03	0.07	0.09	0.11	0.09
OAS	0.13	0.18	0.18	0.23	0.34	0.46	0.70	0.71	0.87	1.08
REF	0.09	0.10	0.17	0.31	0.35	0.34	0.21	0.16	0.17	0.24
SSA	0.05	0.07	0.08	0.10	0.11	0.16	0.17	0.21	0.23	0.33
USA	0.39	0.44	0.45	0.58	0.65	0.91	1.02	1.06	1.06	1.04

Table 1472: IPCC — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.73	0.90	1.02	1.44	1.84	2.56	3.18	3.75	4.89	6.94
CAZ	0.02	0.02	0.02	0.03	0.04	0.04	0.06	0.05	0.07	0.12
CHA	0.12	0.08	0.09	0.11	0.14	0.30	0.43	0.51	0.57	0.81
EUR	0.15	0.19	0.21	0.35	0.40	0.50	0.55	0.55	0.66	0.73
IND	0.04	0.05	0.05	0.05	0.08	0.13	0.18	0.22	0.34	0.50
LAM	0.05	0.06	0.08	0.12	0.15	0.19	0.26	0.40	0.60	0.80
MEA	0.04	0.05	0.07	0.09	0.16	0.19	0.23	0.33	0.42	0.59
NEU	0.02	0.03	0.04	0.04	0.04	0.05	0.08	0.10	0.14	0.18
OAS	0.08	0.11	0.12	0.20	0.24	0.35	0.50	0.55	0.68	0.82
REF	0.06	0.08	0.11	0.13	0.18	0.24	0.11	0.10	0.18	0.23
SSA	0.03	0.04	0.04	0.05	0.06	0.08	0.10	0.12	0.17	0.21
USA	0.12	0.18	0.18	0.27	0.36	0.48	0.69	0.82	1.08	1.95

Table 1473: Bodirsky — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr)

56.2.6 Ruminant meat



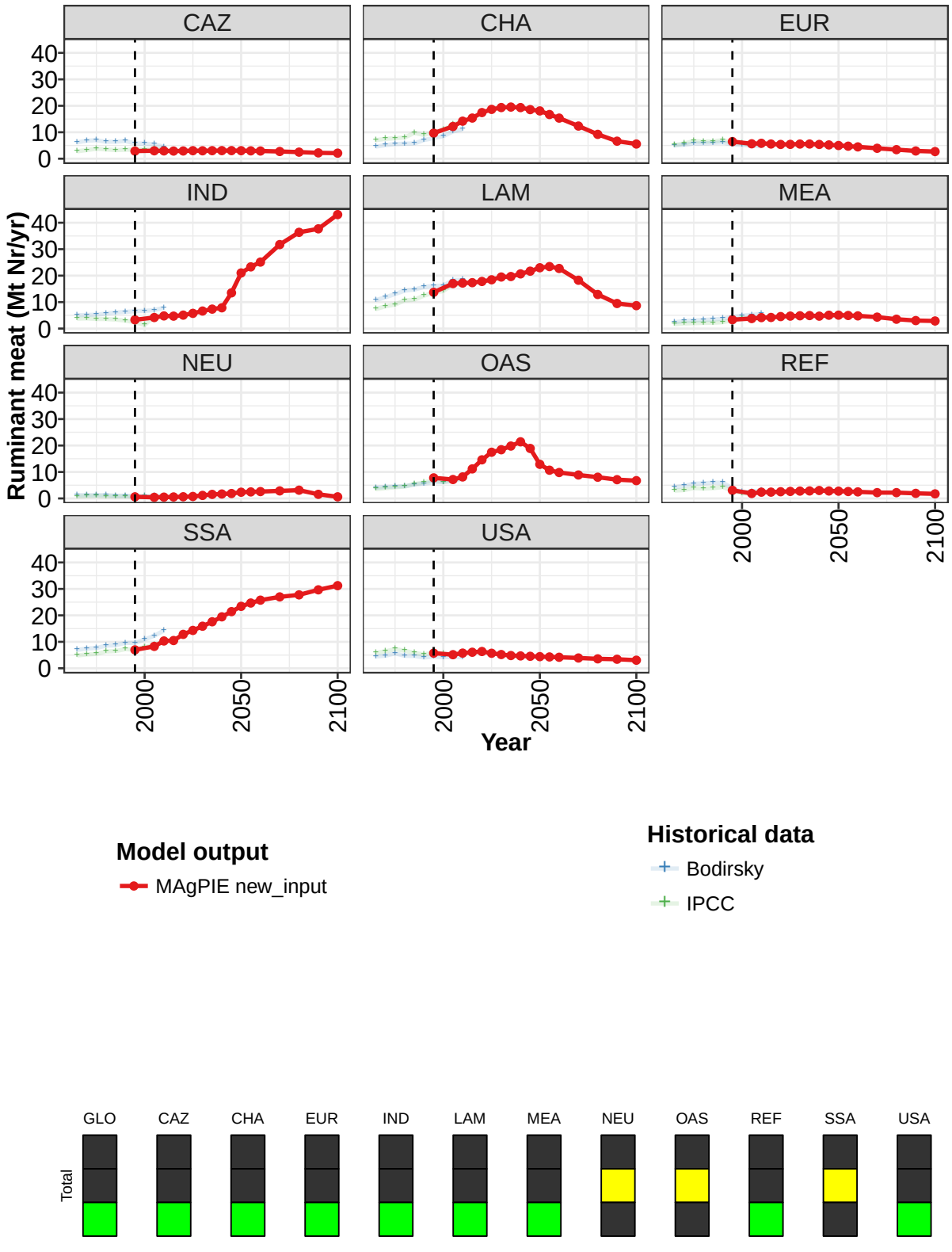


Figure 396: MAgPIE new_input — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	64	69	76	81	90	97	102	107	111	117	121
CAZ	3	3	3	3	3	3	3	3	3	3	3
CHA	10	12	14	15	17	19	19	20	19	19	18
EUR	6	6	6	6	5	5	6	6	5	5	5
IND	3	4	5	5	5	6	7	7	8	14	21
LAM	14	17	17	17	18	18	19	20	21	22	23
MEA	3	4	4	4	5	5	5	5	5	5	5
NEU	1	0	0	1	1	1	1	2	2	2	2
OAS	8	7	8	11	15	17	18	20	21	19	13
REF	3	2	2	2	3	3	3	3	3	3	3
SSA	7	8	10	10	13	14	16	18	19	21	23
USA	6	5	6	6	6	6	5	5	5	5	4

Table 1474: MAgPIE new_input — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	121	120	118	113	106	108
CAZ	3	3	3	2	2	2
CHA	17	15	12	9	7	6
EUR	5	4	4	3	3	3
IND	23	25	32	36	38	43
LAM	23	23	18	13	9	9
MEA	5	5	4	4	3	3
NEU	2	3	3	3	2	1
OAS	11	10	9	8	7	7
REF	3	2	2	2	2	2
SSA	25	26	27	28	30	31
USA	4	4	4	4	3	3

Table 1475: MAgPIE new_input — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	55.1	59.5	64.2	66.0	68.1	71.9	71.0	71.7	77.8	81.8
CAZ	6.2	6.8	7.0	6.4	6.4	6.7	5.8	5.7	5.4	4.5
CHA	4.6	5.1	5.5	5.7	5.8	7.1	7.8	8.5	10.3	11.1
EUR	5.1	5.2	5.8	5.7	6.0	6.2	5.4	5.3	4.9	4.7
IND	5.0	5.1	5.3	5.7	6.1	6.3	6.6	6.7	7.0	7.9
LAM	10.8	11.8	13.1	14.3	14.8	15.7	16.1	16.2	18.3	18.4
MEA	2.4	2.9	3.1	3.3	3.5	3.7	4.4	4.9	5.2	5.6
NEU	1.2	1.2	1.2	1.3	1.0	1.0	0.9	0.8	0.9	0.8
OAS	4.1	4.4	4.5	4.6	5.2	5.6	6.2	6.2	6.6	7.4
REF	4.3	4.8	5.5	5.7	6.0	5.9	3.9	2.3	2.6	3.0
SSA	7.0	7.5	7.7	8.6	8.8	9.6	9.6	10.9	12.3	14.3
USA	4.5	4.8	5.6	4.7	4.6	4.1	4.4	4.2	4.2	4.2

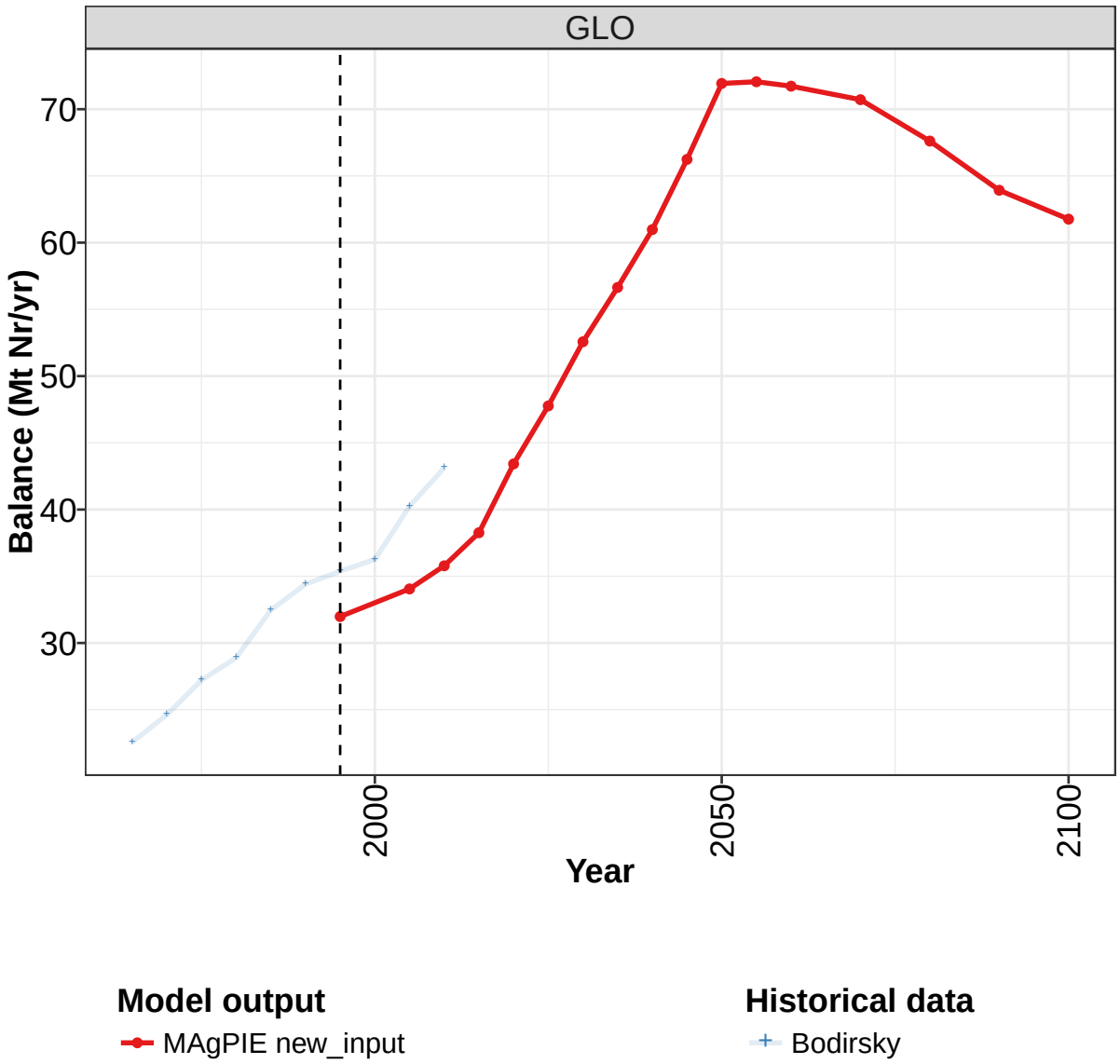
Table 1476: IPCC — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	45.7	50.3	54.7	56.4	58.5	60.8	62.4	62.1	70.2	75.1
CAZ	2.8	3.3	3.8	3.5	3.3	3.4	3.5	3.5	3.7	3.4
CHA	7.0	7.5	7.7	8.0	9.7	9.0	10.0	11.0	12.9	14.4
EUR	5.1	5.8	6.7	6.5	6.6	7.0	6.0	5.8	5.3	5.5
IND	3.7	3.9	3.6	3.6	3.4	3.0	2.4	1.3	4.7	5.1
LAM	7.4	8.4	9.1	10.7	10.9	12.4	13.6	14.2	16.7	16.4
MEA	1.7	1.9	2.0	2.2	2.2	2.4	3.2	3.9	3.8	4.0
NEU	0.8	0.9	1.0	0.8	0.8	0.8	0.6	0.6	0.4	0.4
OAS	3.5	3.9	4.2	4.5	5.4	6.0	6.9	6.2	6.8	7.7
REF	3.0	3.2	3.9	3.8	3.9	4.3	3.0	1.9	1.8	2.3
SSA	4.8	5.2	5.4	6.3	6.5	7.2	7.1	8.0	8.8	10.1
USA	5.9	6.4	7.3	6.6	5.8	5.2	6.1	5.5	5.2	5.8

Table 1477: Bodirsky — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr)

56.3 Pasture Budget

56.3.1 Balance



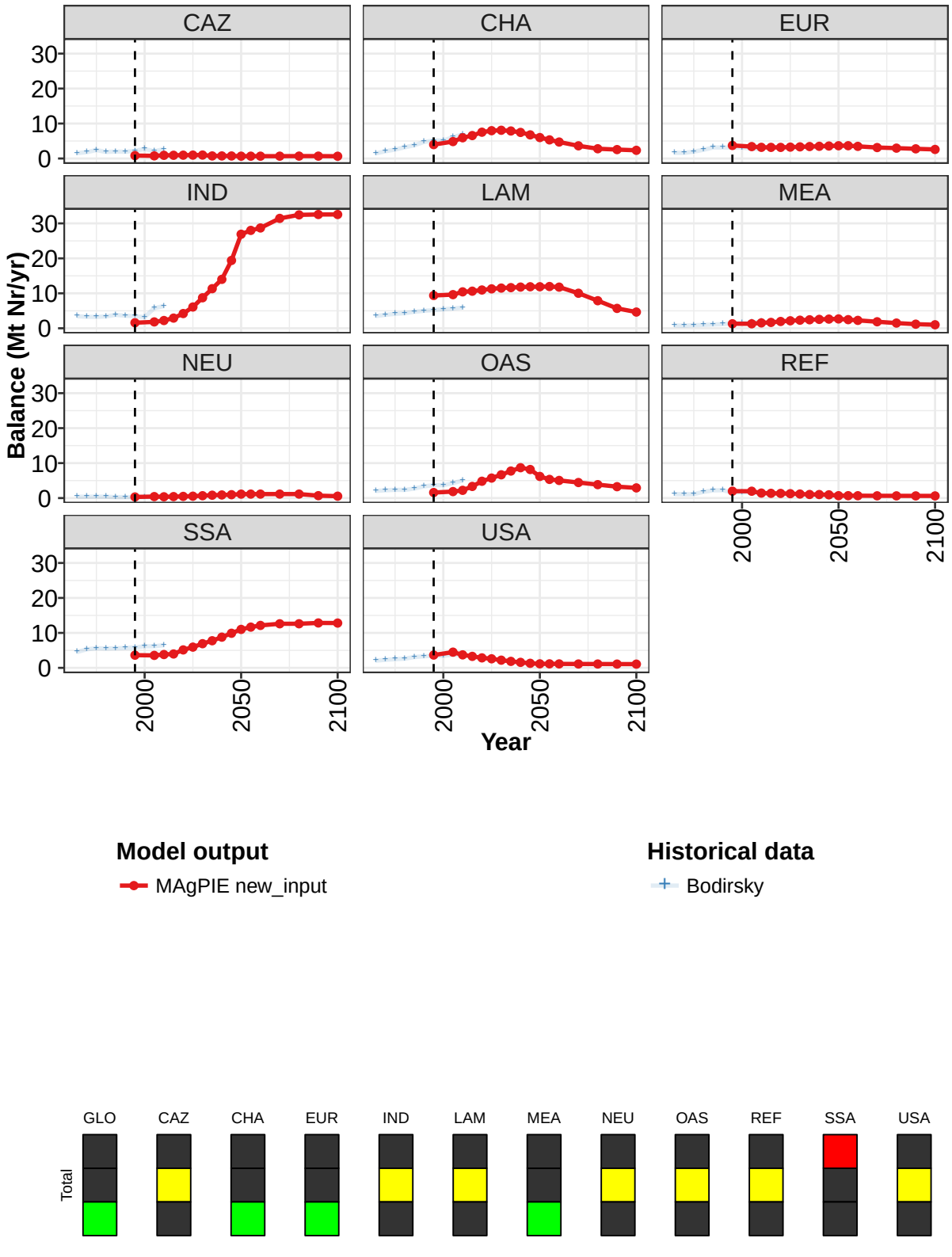


Figure 397: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	32.0	34.1	35.8	38.3	43.4	47.8	52.6	56.6	61.0	66.2	71.9
CAZ	0.8	0.8	0.9	0.9	1.0	1.0	1.0	0.7	0.7	0.7	0.7
CHA	4.0	4.8	5.9	6.6	7.5	8.0	8.1	7.9	7.5	6.8	6.0
EUR	3.7	3.4	3.2	3.2	3.2	3.3	3.3	3.4	3.5	3.6	3.7
IND	1.6	1.8	2.2	2.9	4.2	6.1	8.7	11.3	14.0	19.4	26.9
LAM	9.4	9.6	10.4	10.6	11.0	11.3	11.5	11.6	11.8	11.9	11.9
MEA	1.3	1.3	1.5	1.7	2.0	2.2	2.3	2.4	2.5	2.6	2.7
NEU	0.3	0.4	0.4	0.4	0.5	0.5	0.7	0.8	0.9	1.0	1.1
OAS	1.6	1.9	2.2	3.3	4.8	5.7	6.7	7.7	8.7	8.2	6.2
REF	2.0	2.0	1.4	1.4	1.3	1.3	1.2	1.0	1.0	0.9	0.7
SSA	3.6	3.6	3.8	4.0	5.1	5.9	6.9	7.8	8.8	9.9	11.0
USA	3.7	4.5	3.7	3.3	2.9	2.6	2.2	1.9	1.6	1.3	1.2

Table 1478: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr) [PART 1/2]

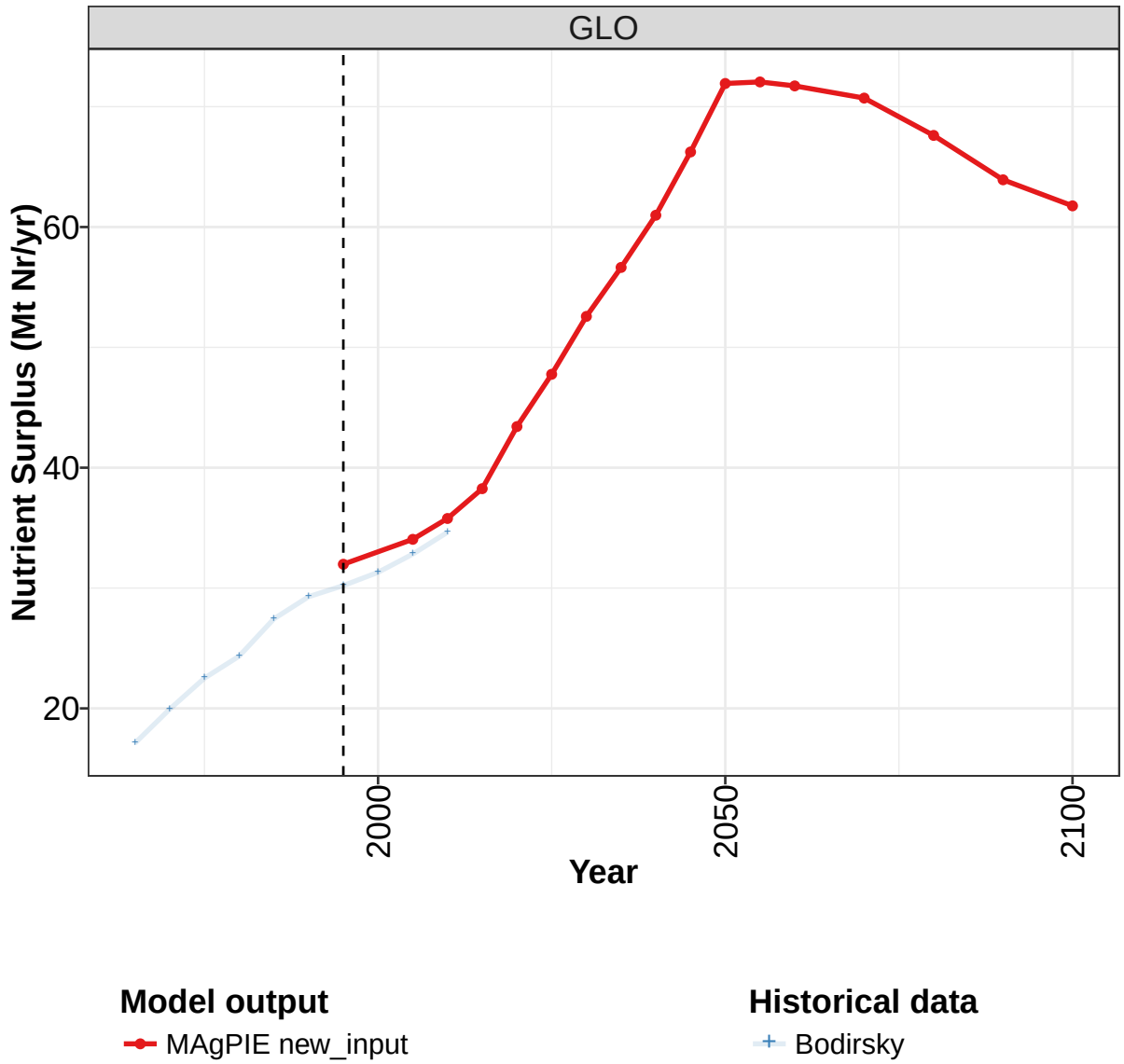
	2055	2060	2070	2080	2090	2100
GLO	72.1	71.7	70.7	67.6	63.9	61.8
CAZ	0.7	0.7	0.7	0.7	0.7	0.7
CHA	5.3	4.7	3.6	2.8	2.5	2.3
EUR	3.7	3.5	3.1	3.0	2.8	2.6
IND	28.0	28.7	31.4	32.4	32.6	32.6
LAM	11.9	11.8	10.0	7.9	5.7	4.6
MEA	2.5	2.3	1.9	1.5	1.2	1.0
NEU	1.1	1.1	1.1	1.1	0.7	0.5
OAS	5.3	5.0	4.4	3.8	3.3	2.9
REF	0.7	0.7	0.7	0.6	0.6	0.6
SSA	11.7	12.1	12.6	12.6	12.8	12.8
USA	1.2	1.1	1.1	1.1	1.1	1.1

Table 1479: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	22.6	24.6	27.2	28.9	32.5	34.4	35.4	36.3	40.2	43.1
CAZ	1.5	1.8	2.4	1.9	2.0	1.9	2.2	2.7	2.1	2.7
CHA	1.5	2.1	2.6	3.2	3.8	4.7	5.2	5.2	6.1	6.9
EUR	1.6	1.6	2.0	2.5	3.1	3.1	3.1	3.1	2.8	2.6
IND	3.4	3.3	3.2	3.4	3.8	3.6	3.4	3.2	5.8	6.4
LAM	3.5	3.8	4.1	4.3	4.7	5.0	5.2	5.4	5.7	5.9
MEA	0.8	0.7	0.9	1.0	1.1	1.2	1.5	1.5	1.7	1.9
NEU	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.0	2.2	2.4	2.3	2.7	3.3	3.7	3.7	4.3	5.1
REF	1.2	1.1	1.1	1.8	2.2	2.2	1.6	1.6	1.6	1.3
SSA	4.5	5.3	5.6	5.5	5.6	5.7	5.9	6.2	6.2	6.5
USA	2.1	2.3	2.5	2.6	3.1	3.3	3.4	3.4	3.8	3.6

Table 1480: Bodirsky — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr)

56.3.2 Balance—Nutrient Surplus



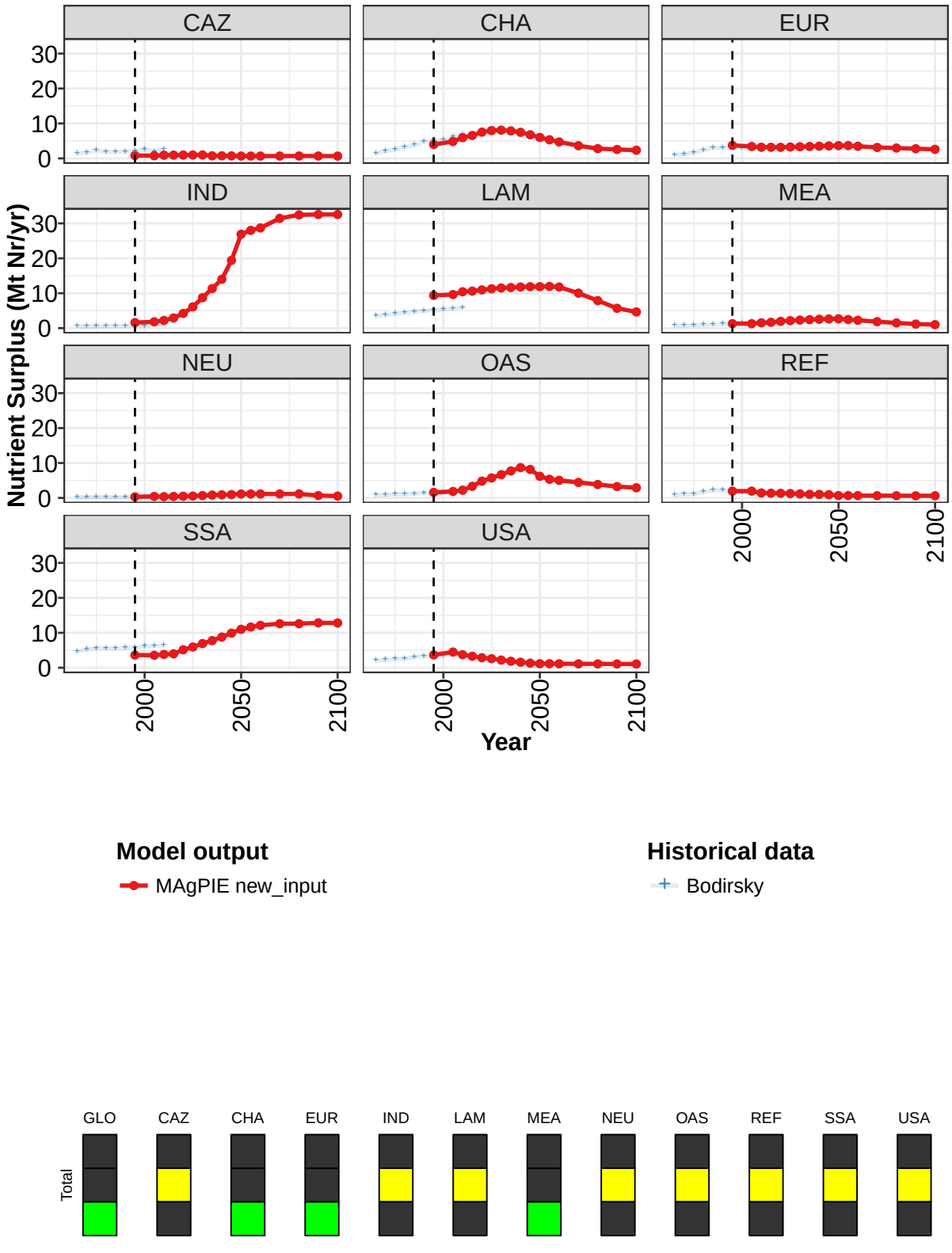


Figure 398: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	32.0	34.1	35.8	38.3	43.4	47.8	52.6	56.6	61.0	66.2	71.9
CAZ	0.8	0.8	0.9	0.9	1.0	1.0	1.0	0.7	0.7	0.7	0.7
CHA	4.0	4.8	5.9	6.6	7.5	8.0	8.1	7.9	7.5	6.8	6.0
EUR	3.7	3.4	3.2	3.2	3.2	3.3	3.3	3.4	3.5	3.6	3.7
IND	1.6	1.8	2.2	2.9	4.2	6.1	8.7	11.3	14.0	19.4	26.9
LAM	9.4	9.6	10.4	10.6	11.0	11.3	11.5	11.6	11.8	11.9	11.9
MEA	1.3	1.3	1.5	1.7	2.0	2.2	2.3	2.4	2.5	2.6	2.7
NEU	0.3	0.4	0.4	0.4	0.5	0.5	0.7	0.8	0.9	1.0	1.1
OAS	1.6	1.9	2.2	3.3	4.8	5.7	6.7	7.7	8.7	8.2	6.2
REF	2.0	2.0	1.4	1.4	1.3	1.3	1.2	1.0	1.0	0.9	0.7
SSA	3.6	3.6	3.8	4.0	5.1	5.9	6.9	7.8	8.8	9.9	11.0
USA	3.7	4.5	3.7	3.3	2.9	2.6	2.2	1.9	1.6	1.3	1.2

Table 1481: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 1/2]

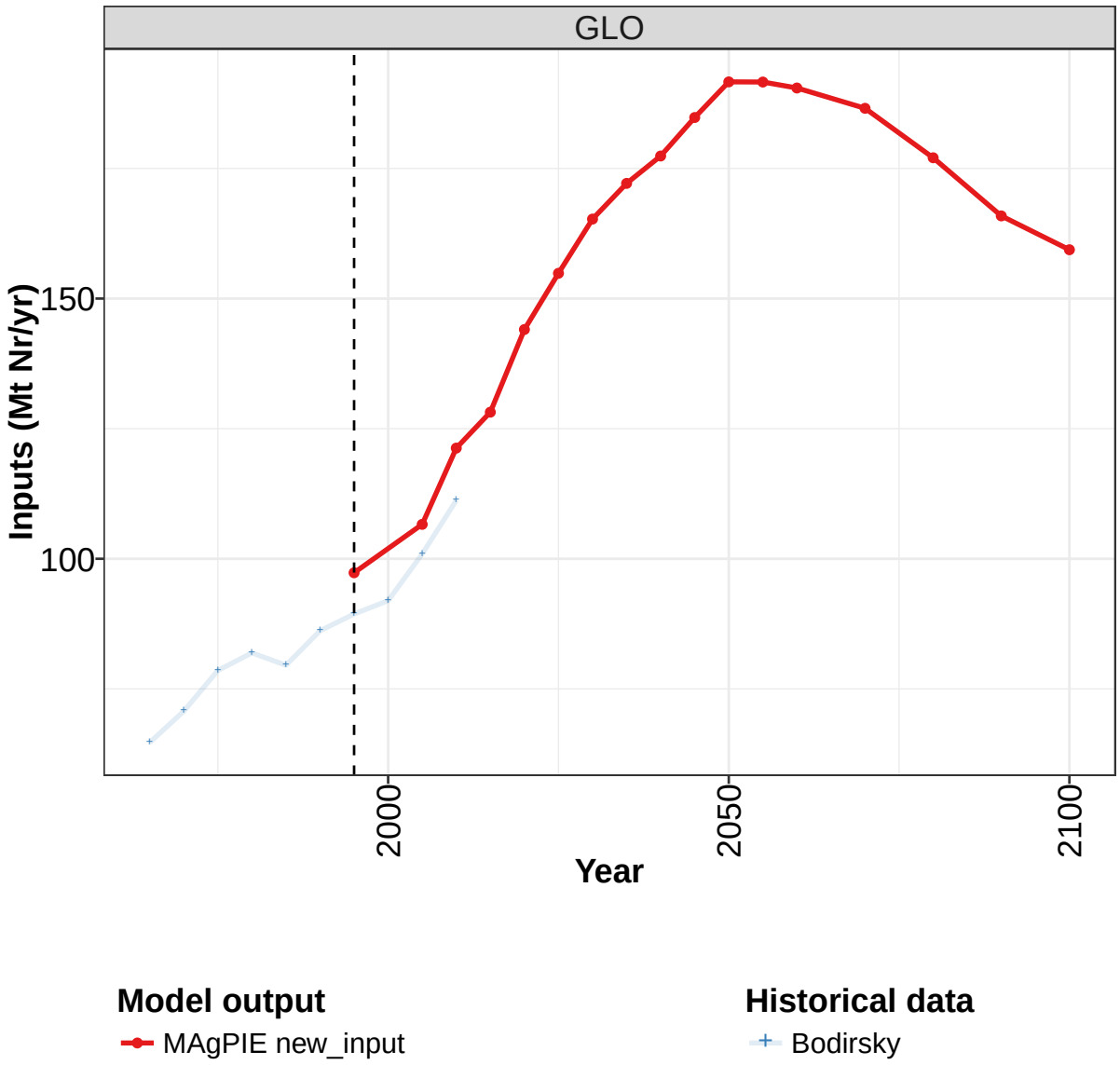
	2055	2060	2070	2080	2090	2100
GLO	72.1	71.7	70.7	67.6	63.9	61.8
CAZ	0.7	0.7	0.7	0.7	0.7	0.7
CHA	5.3	4.7	3.6	2.8	2.5	2.3
EUR	3.7	3.5	3.1	3.0	2.8	2.6
IND	28.0	28.7	31.4	32.4	32.6	32.6
LAM	11.9	11.8	10.0	7.9	5.7	4.6
MEA	2.5	2.3	1.9	1.5	1.2	1.0
NEU	1.1	1.1	1.1	1.1	0.7	0.5
OAS	5.3	5.0	4.4	3.8	3.3	2.9
REF	0.7	0.7	0.7	0.6	0.6	0.6
SSA	11.7	12.1	12.6	12.6	12.8	12.8
USA	1.2	1.1	1.1	1.1	1.1	1.1

Table 1482: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.1	19.9	22.5	24.3	27.4	29.3	30.2	31.3	32.8	34.6
CAZ	1.4	1.7	2.3	1.8	1.9	1.8	2.1	2.6	1.9	2.5
CHA	1.5	2.1	2.6	3.2	3.8	4.7	5.2	5.2	6.1	6.9
EUR	1.0	1.3	1.7	2.3	3.1	3.1	3.1	3.1	2.8	2.6
IND	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	1.0	1.2
LAM	3.5	3.8	4.1	4.3	4.7	5.0	5.2	5.4	5.6	5.9
MEA	0.7	0.7	0.9	0.9	1.1	1.2	1.5	1.4	1.7	1.8
NEU	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3
OAS	0.8	1.0	1.0	1.0	1.2	1.4	1.5	1.5	1.8	2.2
REF	0.8	1.1	1.1	1.8	2.2	2.2	1.6	1.6	1.6	1.3
SSA	4.5	5.3	5.6	5.5	5.6	5.7	5.8	6.2	6.2	6.4
USA	2.1	2.3	2.5	2.6	3.1	3.3	3.4	3.4	3.8	3.6

Table 1483: Bodirsky — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr)

56.3.3 Inputs


GLO
Inputs (Mt Nr/yr)
150
100
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
Bodirsky

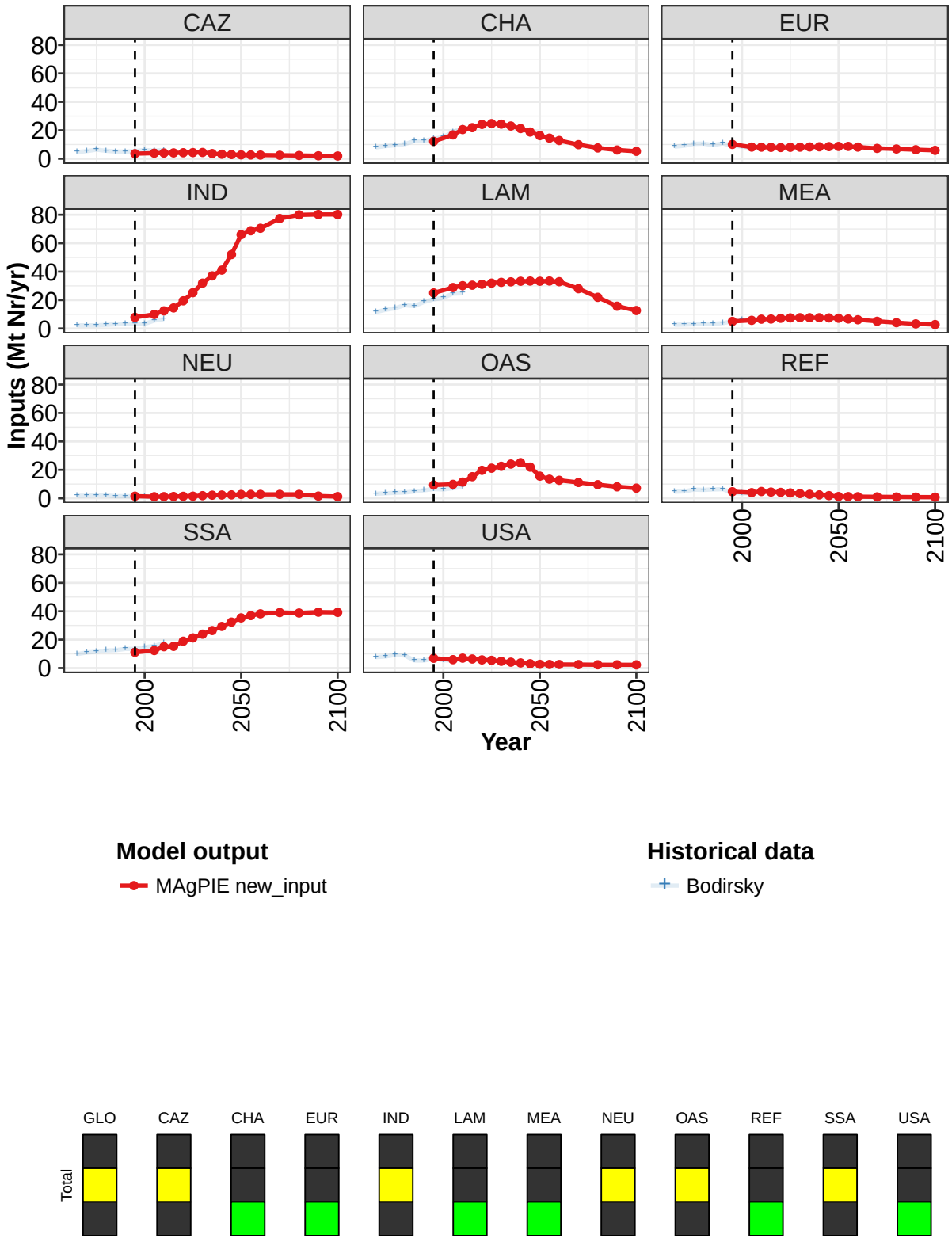


Figure 399: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	97	107	121	128	144	155	165	172	177	185	192
CAZ	4	4	4	4	4	4	4	4	3	3	3
CHA	12	17	21	22	24	25	24	23	21	19	16
EUR	10	8	8	8	8	8	8	8	8	9	9
IND	8	10	12	14	19	25	32	37	41	52	66
LAM	25	29	30	30	31	32	32	33	33	33	33
MEA	5	6	7	7	7	7	8	8	8	7	7
NEU	1	1	1	1	1	2	2	2	2	2	3
OAS	9	10	11	15	20	21	23	24	25	22	16
REF	5	4	5	4	4	4	3	3	2	2	1
SSA	11	12	15	15	19	21	24	26	29	32	35
USA	7	6	7	6	6	5	5	4	4	3	3

Table 1484: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr) [PART 1/2]

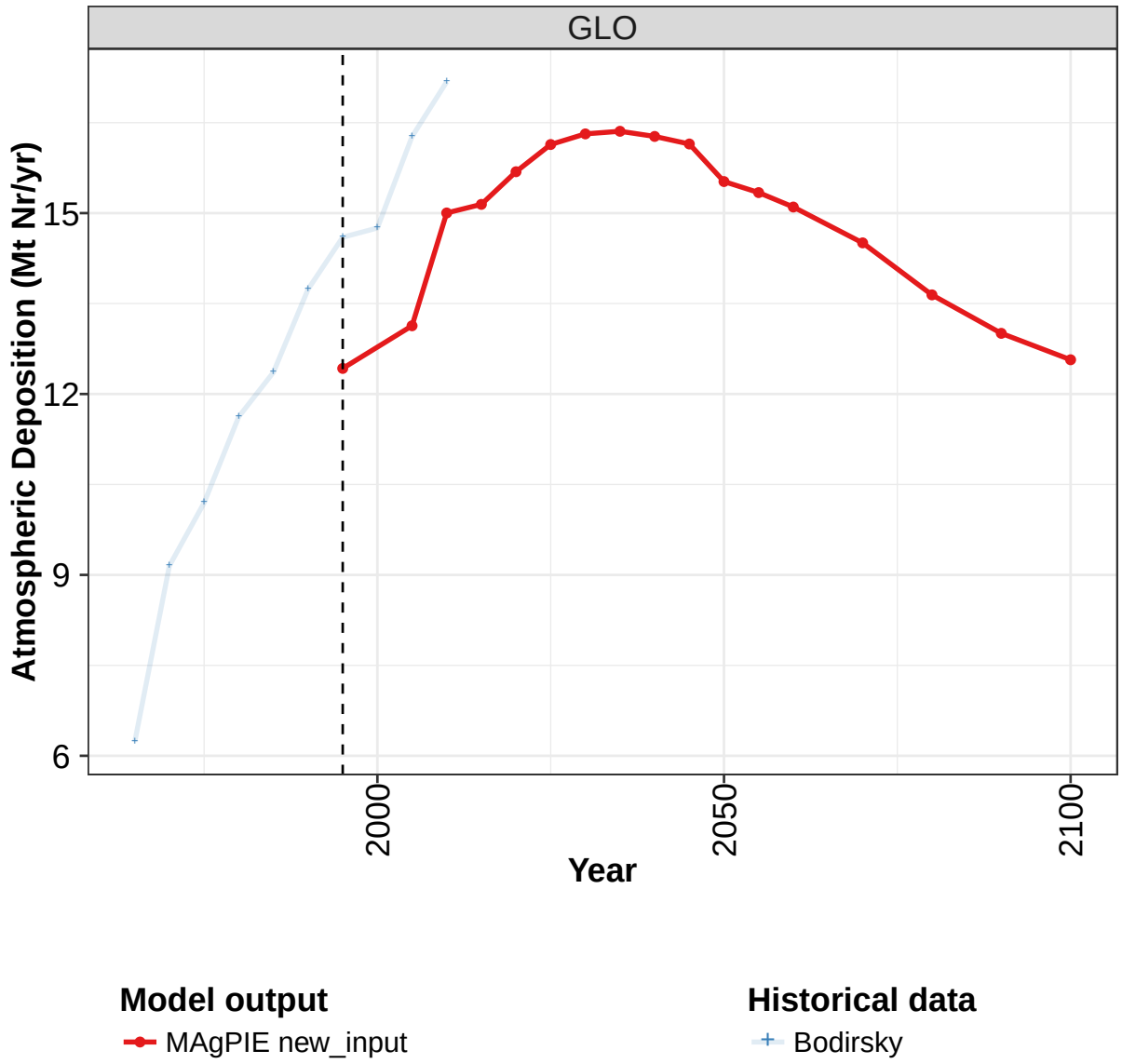
	2055	2060	2070	2080	2090	2100
GLO	192	190	187	177	166	159
CAZ	3	3	2	2	2	2
CHA	14	13	10	8	6	5
EUR	9	8	7	7	6	6
IND	69	71	77	80	80	80
LAM	33	33	28	22	16	13
MEA	7	6	5	4	3	3
NEU	3	3	3	3	2	1
OAS	13	13	11	10	8	7
REF	1	1	1	1	1	1
SSA	37	38	39	39	39	39
USA	3	3	2	2	2	2

Table 1485: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	65	71	79	82	80	86	89	92	101	111
CAZ	5	5	6	6	5	5	5	6	6	6
CHA	8	9	9	10	12	12	14	15	19	22
EUR	8	9	10	11	10	11	9	8	7	7
IND	2	2	2	3	3	3	3	3	6	7
LAM	12	13	14	16	16	19	21	22	25	25
MEA	3	3	3	3	3	4	5	6	6	7
NEU	2	2	2	2	1	2	1	1	1	1
OAS	3	4	4	4	5	6	7	6	7	8
REF	5	5	6	6	6	6	4	3	4	5
SSA	10	11	11	12	13	13	13	15	16	17
USA	8	8	9	9	5	5	7	6	5	7

Table 1486: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr)

56.3.4 Inputs—Atmospheric Deposition



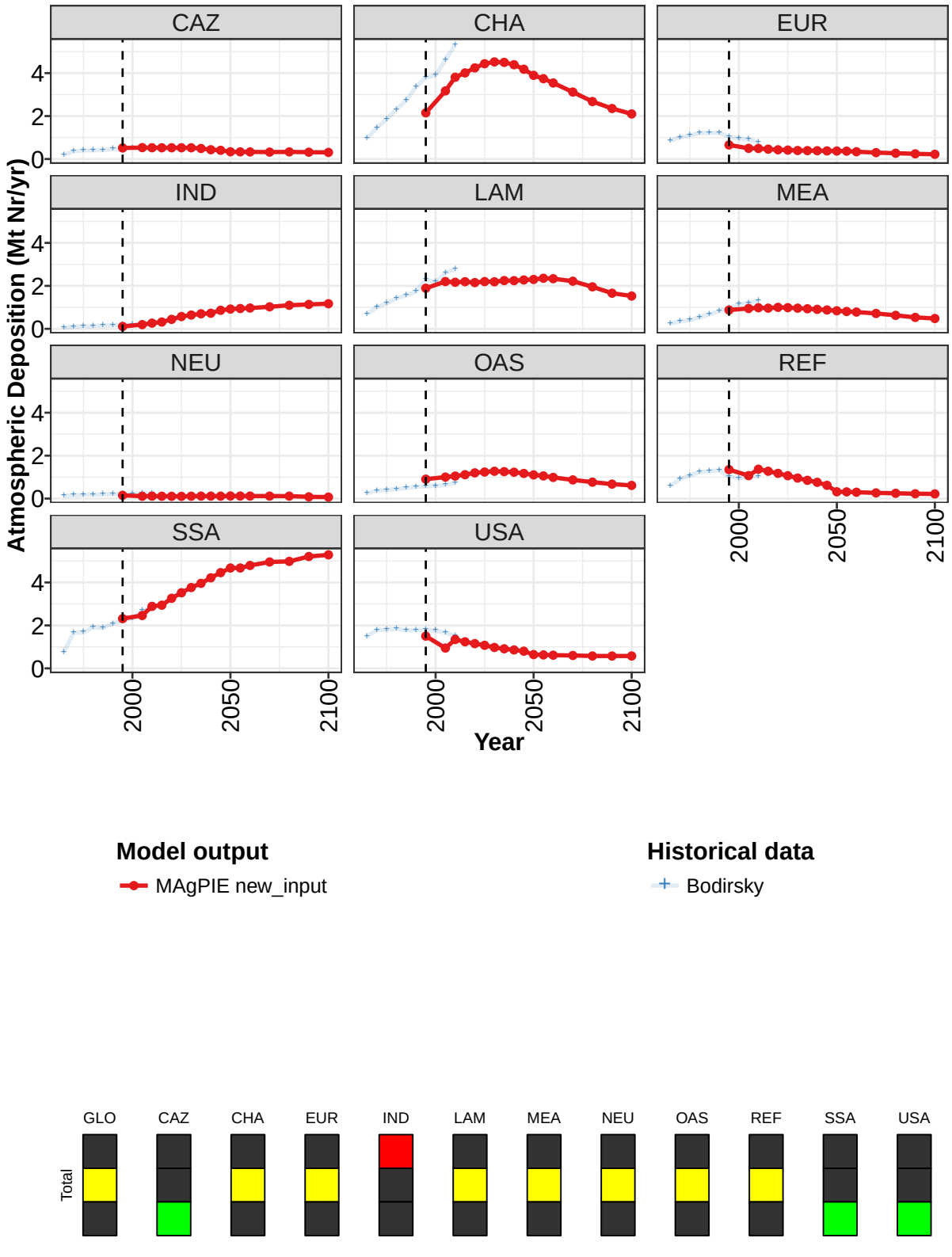


Figure 400: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	12.4	13.1	15.0	15.1	15.7	16.1	16.3	16.4	16.3	16.1	15.5
CAZ	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3
CHA	2.2	3.2	3.8	4.0	4.2	4.4	4.5	4.5	4.4	4.2	3.9
EUR	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
IND	0.1	0.2	0.3	0.3	0.4	0.6	0.6	0.7	0.7	0.9	0.9
LAM	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3
MEA	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.8
NEU	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.3	1.2	1.2	1.1
REF	1.4	1.1	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.6	0.3
SSA	2.3	2.5	2.9	2.9	3.3	3.5	3.8	4.0	4.2	4.5	4.7
USA	1.5	0.9	1.3	1.2	1.2	1.1	1.0	0.9	0.9	0.8	0.6

Table 1487: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 1/2]

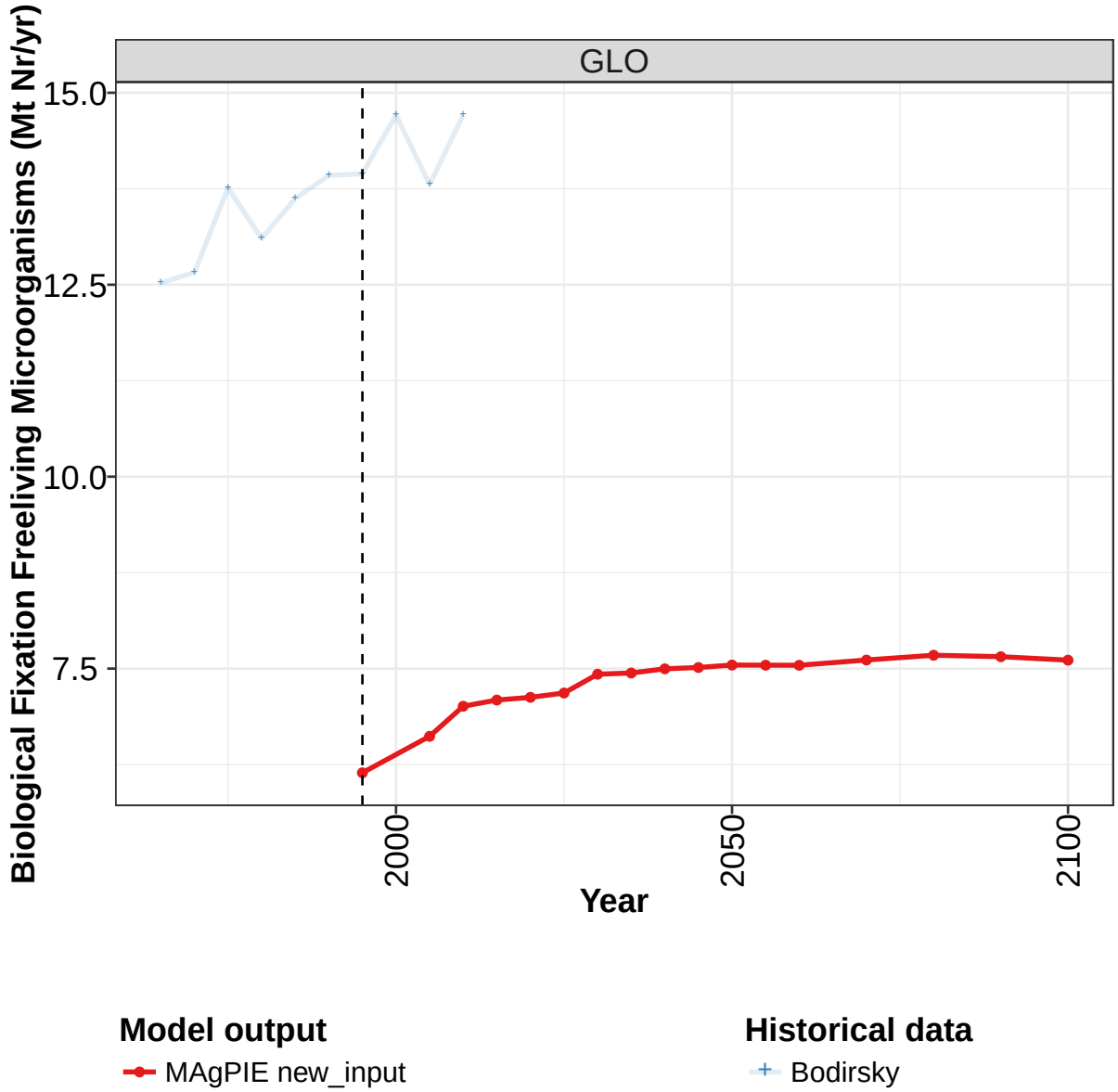
	2055	2060	2070	2080	2090	2100
GLO	15.3	15.1	14.5	13.6	13.0	12.6
CAZ	0.3	0.3	0.3	0.3	0.3	0.3
CHA	3.7	3.5	3.1	2.7	2.4	2.1
EUR	0.4	0.3	0.3	0.3	0.2	0.2
IND	0.9	1.0	1.0	1.1	1.1	1.2
LAM	2.4	2.3	2.2	2.0	1.7	1.5
MEA	0.8	0.8	0.7	0.6	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.1	1.0	0.9	0.8	0.7	0.6
REF	0.3	0.3	0.3	0.2	0.2	0.2
SSA	4.7	4.8	5.0	5.0	5.2	5.3
USA	0.6	0.6	0.6	0.6	0.6	0.6

Table 1488: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.2	9.2	10.2	11.6	12.4	13.7	14.6	14.8	16.3	17.2
CAZ	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
CHA	1.0	1.4	1.9	2.3	2.7	3.4	3.8	3.9	4.6	5.3
EUR	0.9	1.0	1.1	1.2	1.2	1.2	1.0	1.0	0.9	0.8
IND	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
LAM	0.7	1.0	1.2	1.4	1.6	1.7	2.3	2.2	2.6	2.8
MEA	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.1	1.2	1.3
NEU	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.7
REF	0.6	0.9	1.1	1.2	1.3	1.3	1.0	0.9	1.0	1.0
SSA	0.8	1.7	1.7	1.9	1.9	2.1	2.2	2.3	2.7	2.8
USA	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.5

Table 1489: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

56.3.5 Inputs—Biological Fixation Freeliving Microorganisms



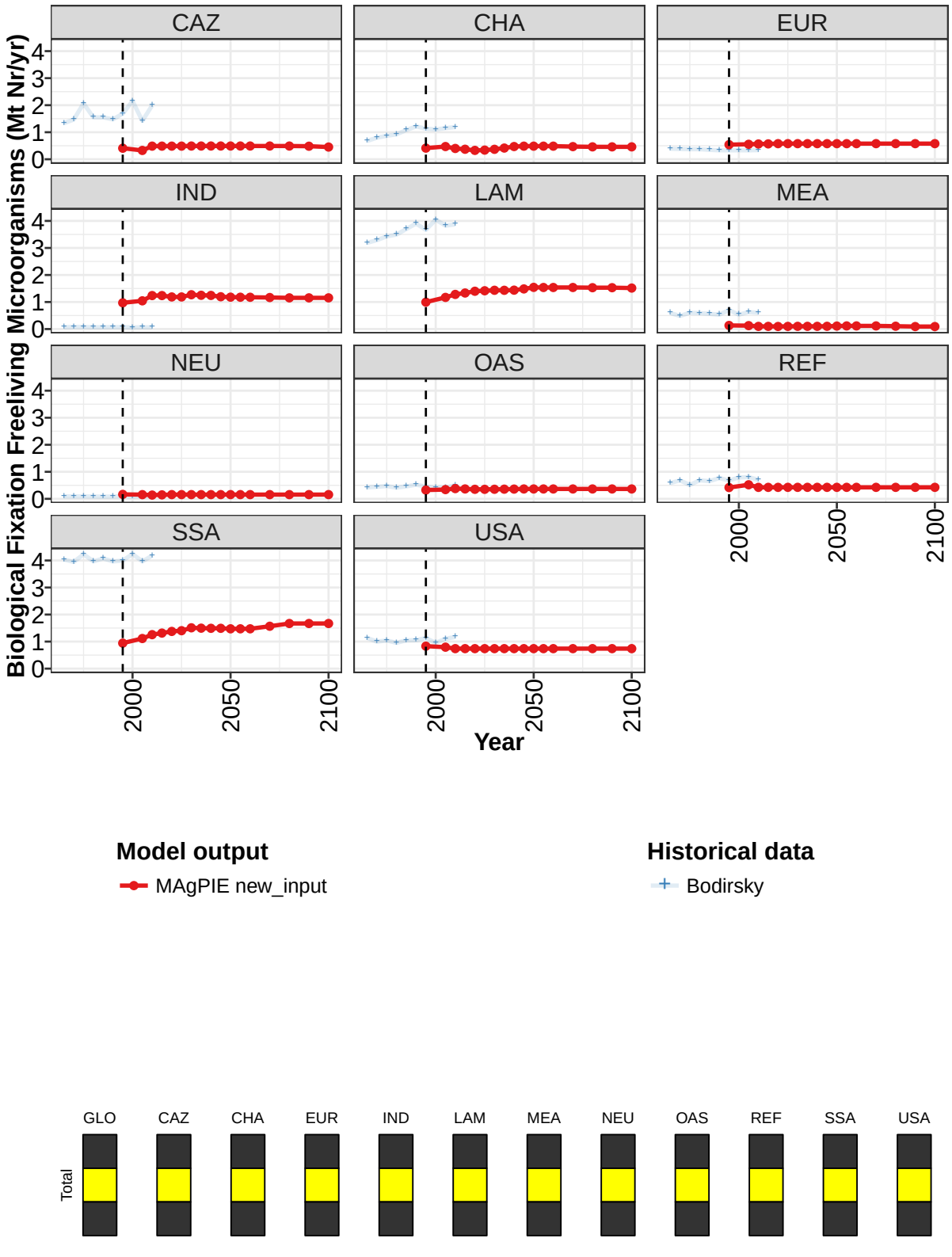


Figure 401: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Freeliving Microorganisms (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	6.14	6.62	7.01	7.09	7.13	7.18	7.43	7.44	7.50	7.51	7.55
CAZ	0.41	0.33	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
CHA	0.41	0.47	0.40	0.37	0.33	0.34	0.37	0.41	0.47	0.48	0.48
EUR	0.54	0.55	0.57	0.57	0.58	0.58	0.58	0.58	0.58	0.58	0.58
IND	0.97	1.04	1.24	1.24	1.19	1.19	1.27	1.25	1.24	1.20	1.18
LAM	0.99	1.17	1.28	1.33	1.40	1.42	1.43	1.43	1.44	1.48	1.54
MEA	0.13	0.13	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11
NEU	0.16	0.16	0.14	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16
OAS	0.33	0.34	0.38	0.37	0.35	0.35	0.35	0.36	0.36	0.37	0.37
REF	0.42	0.52	0.42	0.42	0.42	0.43	0.43	0.43	0.43	0.43	0.43
SSA	0.94	1.11	1.26	1.32	1.38	1.40	1.51	1.50	1.49	1.49	1.47
USA	0.83	0.79	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74

Table 1490: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Freeliving Microorganisms (Mt Nr/yr) [PART 1/2]

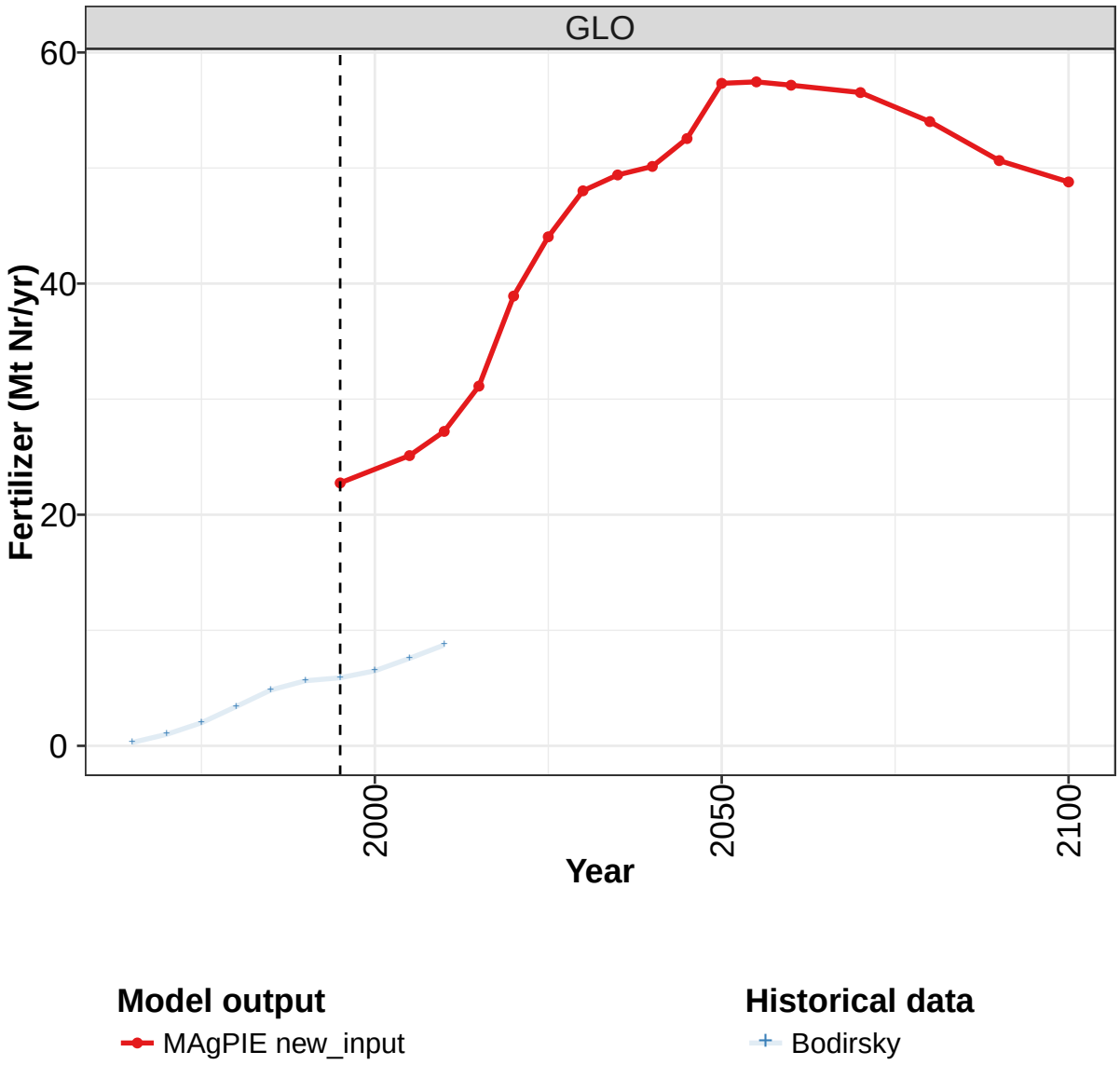
	2055	2060	2070	2080	2090	2100
GLO	7.54	7.54	7.61	7.67	7.65	7.61
CAZ	0.49	0.49	0.49	0.49	0.48	0.45
CHA	0.48	0.48	0.47	0.46	0.46	0.46
EUR	0.58	0.58	0.58	0.58	0.58	0.58
IND	1.18	1.18	1.17	1.15	1.15	1.15
LAM	1.54	1.54	1.54	1.53	1.53	1.52
MEA	0.12	0.12	0.12	0.10	0.09	0.09
NEU	0.16	0.16	0.16	0.16	0.16	0.16
OAS	0.37	0.37	0.37	0.37	0.37	0.37
REF	0.43	0.43	0.43	0.43	0.43	0.43
SSA	1.47	1.47	1.57	1.67	1.67	1.67
USA	0.74	0.74	0.74	0.74	0.74	0.74

Table 1491: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Freeliving Microorganisms (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.5	12.7	13.8	13.1	13.6	13.9	13.9	14.7	13.8	14.7
CAZ	1.3	1.5	2.1	1.6	1.5	1.5	1.7	2.2	1.4	2.0
CHA	0.7	0.8	0.9	0.9	1.1	1.2	1.1	1.1	1.2	1.2
EUR	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
IND	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	3.2	3.3	3.4	3.5	3.7	3.9	3.7	4.0	3.8	3.9
MEA	0.6	0.5	0.6	0.6	0.6	0.5	0.7	0.5	0.6	0.6
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.5
REF	0.6	0.7	0.5	0.7	0.7	0.8	0.7	0.8	0.8	0.7
SSA	4.0	3.9	4.2	4.0	4.1	4.0	4.0	4.2	4.0	4.2
USA	1.1	1.0	1.0	1.0	1.0	1.1	1.1	1.0	1.1	1.2

Table 1492: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Freeliving Microorganisms (Mt Nr/yr)

56.3.6 Inputs—Fertilizer



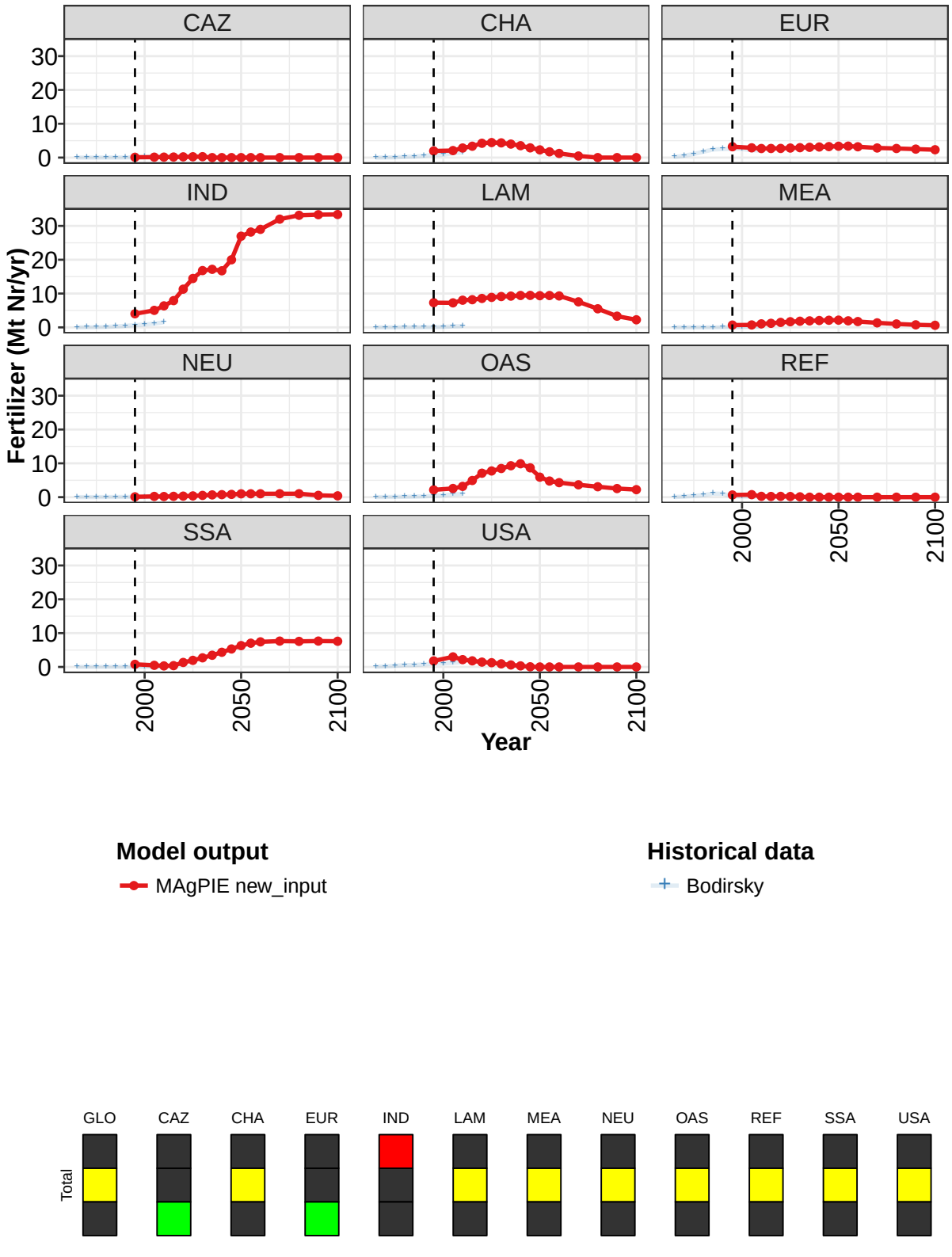


Figure 402: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	22.8	25.1	27.2	31.1	38.9	44.0	48.0	49.4	50.1	52.5	57.3
CAZ	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.0	0.0	0.0	0.0
CHA	2.0	2.1	2.8	3.4	4.2	4.4	4.4	4.0	3.5	2.9	2.3
EUR	3.2	2.9	2.7	2.7	2.7	2.8	2.9	3.0	3.1	3.3	3.4
IND	4.0	5.0	6.4	7.9	11.3	14.5	16.8	17.2	16.7	20.0	27.0
LAM	7.3	7.2	8.0	8.2	8.6	8.9	9.1	9.2	9.4	9.5	9.4
MEA	0.7	0.7	1.0	1.2	1.5	1.7	1.8	1.9	2.0	2.1	2.1
NEU	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.7	0.7	0.8	1.0
OAS	2.2	2.6	3.2	4.9	7.1	7.7	8.5	9.3	9.9	8.7	5.9
REF	0.7	0.7	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0
SSA	0.8	0.5	0.3	0.4	1.3	2.0	2.7	3.5	4.3	5.3	6.3
USA	1.8	3.0	2.2	1.8	1.4	1.3	0.9	0.6	0.3	0.0	0.0

Table 1493: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 1/2]

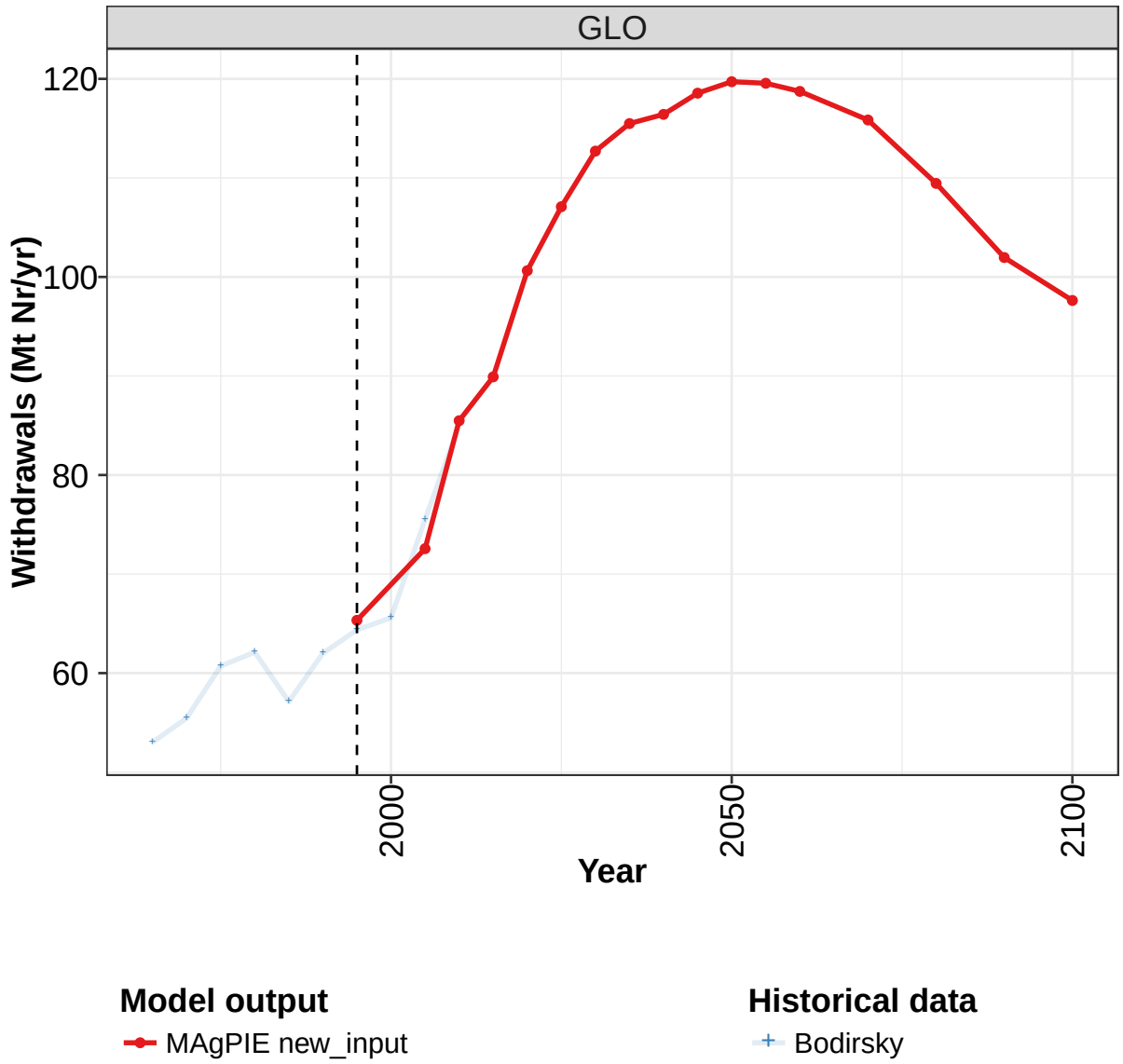
	2055	2060	2070	2080	2090	2100
GLO	57.5	57.2	56.5	54.0	50.6	48.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.7	1.2	0.5	0.0	0.0	0.0
EUR	3.4	3.2	2.8	2.7	2.5	2.3
IND	28.2	29.0	32.0	33.1	33.3	33.4
LAM	9.4	9.3	7.6	5.5	3.3	2.2
MEA	1.9	1.7	1.3	1.0	0.8	0.6
NEU	1.0	1.0	1.0	1.0	0.5	0.4
OAS	4.8	4.3	3.7	3.1	2.5	2.2
REF	0.0	0.0	0.0	0.0	0.0	0.0
SSA	7.0	7.4	7.6	7.6	7.7	7.6
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 1494: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.29	0.99	1.99	3.40	4.83	5.63	5.89	6.49	7.57	8.72
CAZ	0.00	0.00	0.00	0.01	0.01	0.02	0.08	0.16	0.25	0.30
CHA	0.01	0.03	0.07	0.21	0.31	0.54	0.77	0.86	1.28	1.53
EUR	0.17	0.56	1.07	1.74	2.40	2.53	2.57	2.53	2.15	2.10
IND	0.00	0.02	0.05	0.13	0.28	0.44	0.67	0.85	1.12	1.49
LAM	0.00	0.00	0.01	0.02	0.03	0.05	0.06	0.12	0.29	0.37
MEA	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.09	0.15	0.16
NEU	0.00	0.01	0.01	0.03	0.04	0.05	0.05	0.06	0.09	0.09
OAS	0.01	0.03	0.06	0.10	0.15	0.25	0.39	0.52	0.80	0.95
REF	0.04	0.16	0.37	0.63	1.03	0.98	0.26	0.21	0.20	0.26
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.03
USA	0.05	0.17	0.34	0.53	0.56	0.76	0.97	1.05	1.22	1.44

Table 1495: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr)

56.3.7 Withdrawals



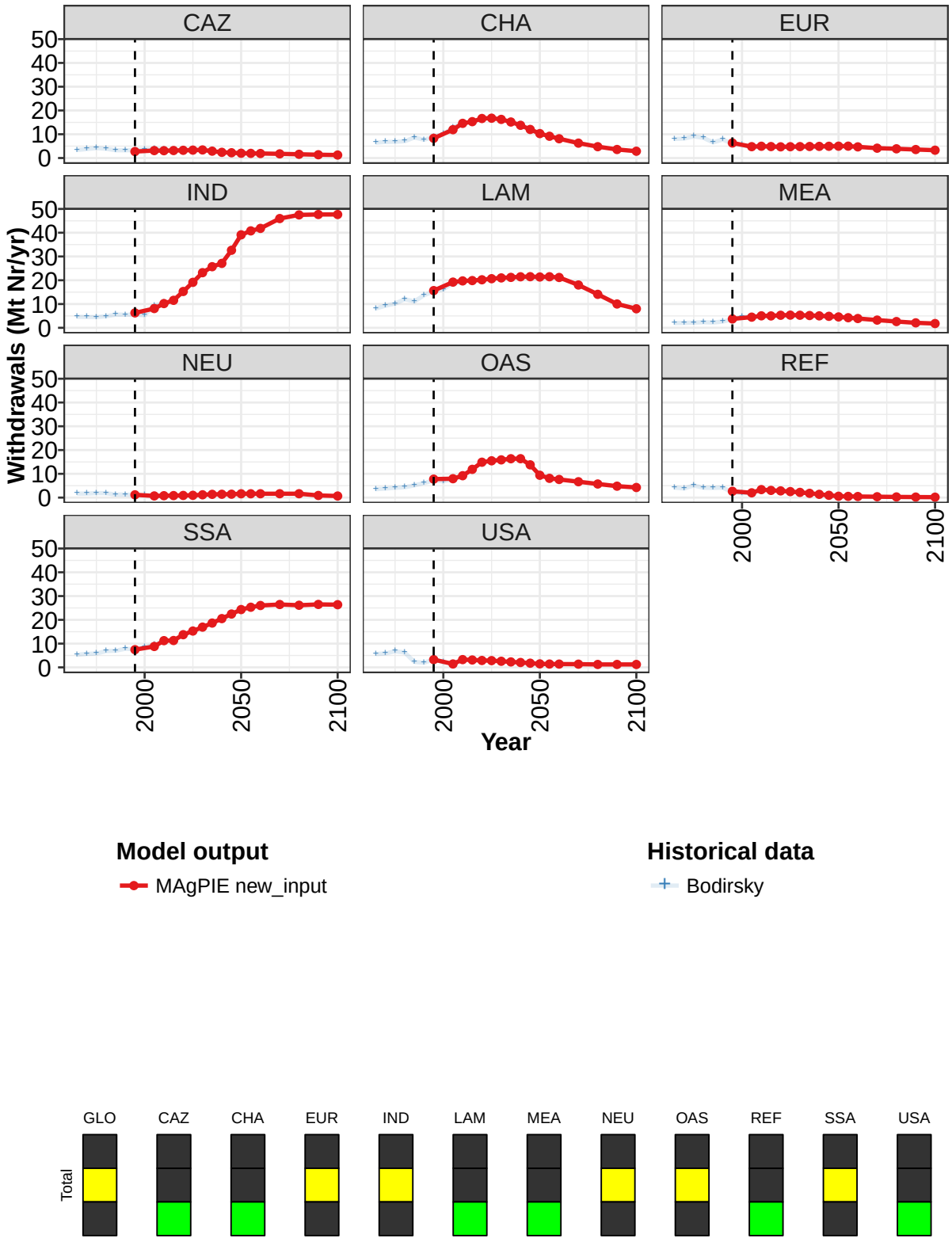


Figure 403: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	65	73	85	90	101	107	113	115	116	119	120
CAZ	3	3	3	3	3	3	3	3	2	2	2
CHA	8	12	15	15	17	17	16	15	14	12	10
EUR	6	5	5	5	5	5	5	5	5	5	5
IND	6	8	10	12	15	19	23	26	27	33	39
LAM	16	19	20	20	20	21	21	21	21	22	21
MEA	4	4	5	5	5	5	5	5	5	5	5
NEU	1	1	1	1	1	1	1	1	1	1	2
OAS	8	8	9	12	15	15	16	16	16	14	9
REF	3	2	3	3	3	3	2	2	1	1	1
SSA	7	9	11	11	14	15	17	19	21	22	24
USA	3	1	3	3	3	3	3	2	2	2	1

Table 1496: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr) [PART 1/2]

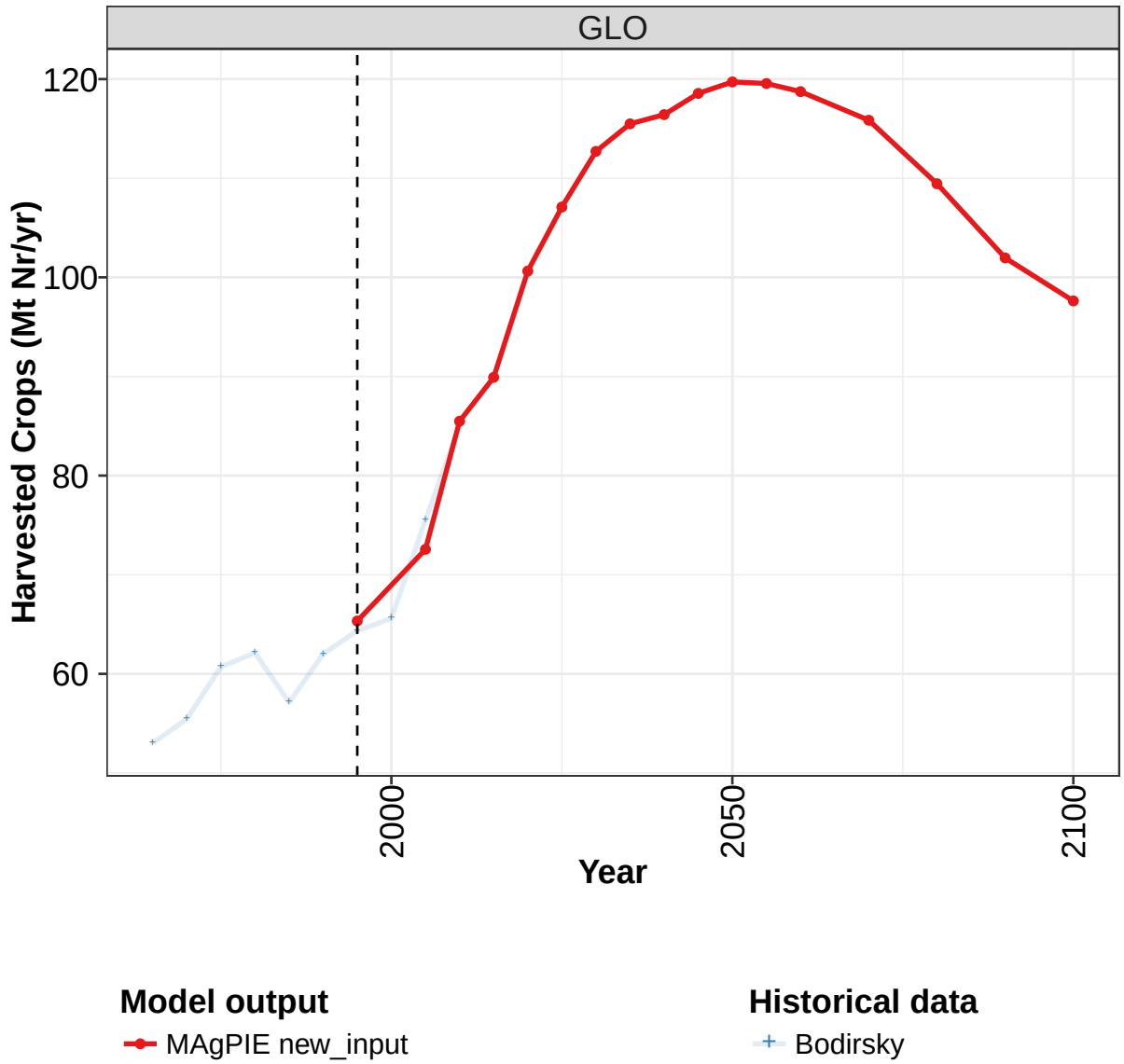
	2055	2060	2070	2080	2090	2100
GLO	120	119	116	109	102	98
CAZ	2	2	2	2	1	1
CHA	9	8	6	5	4	3
EUR	5	5	4	4	4	3
IND	41	42	46	48	48	48
LAM	21	21	18	14	10	8
MEA	4	4	3	3	2	2
NEU	2	2	2	2	1	1
OAS	8	8	7	6	5	4
REF	1	0	0	0	0	0
SSA	25	26	26	26	26	26
USA	1	1	1	1	1	1

Table 1497: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	53.0	55.5	60.7	62.1	57.1	62.0	64.4	65.6	75.5	85.1
CAZ	3.4	3.8	4.2	3.9	3.3	3.3	3.4	3.6	3.8	3.7
CHA	6.5	6.8	6.8	7.1	8.7	7.7	8.9	10.1	12.8	14.8
EUR	8.0	8.2	9.1	8.5	6.6	7.8	6.1	5.4	4.6	4.8
IND	4.6	4.5	4.5	4.9	5.5	5.5	5.5	5.3	9.3	10.6
LAM	8.1	9.3	10.2	12.0	11.1	13.7	15.3	16.2	18.9	18.9
MEA	2.0	2.1	2.2	2.3	2.2	2.6	3.6	4.6	4.7	4.8
NEU	1.7	1.7	1.9	1.8	1.3	1.3	1.1	1.0	0.7	0.8
OAS	3.5	3.8	4.1	4.4	5.1	6.1	7.2	6.8	7.7	8.9
REF	4.2	3.8	5.1	4.1	4.1	4.2	2.3	1.9	2.0	3.3
SSA	5.3	5.7	5.8	6.8	7.0	7.8	7.6	8.6	9.5	11.1
USA	5.6	5.8	6.8	6.3	2.3	2.0	3.4	2.2	1.5	3.4

Table 1498: Bodirsky — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr)

56.3.8 Withdrawals—Harvested Crops



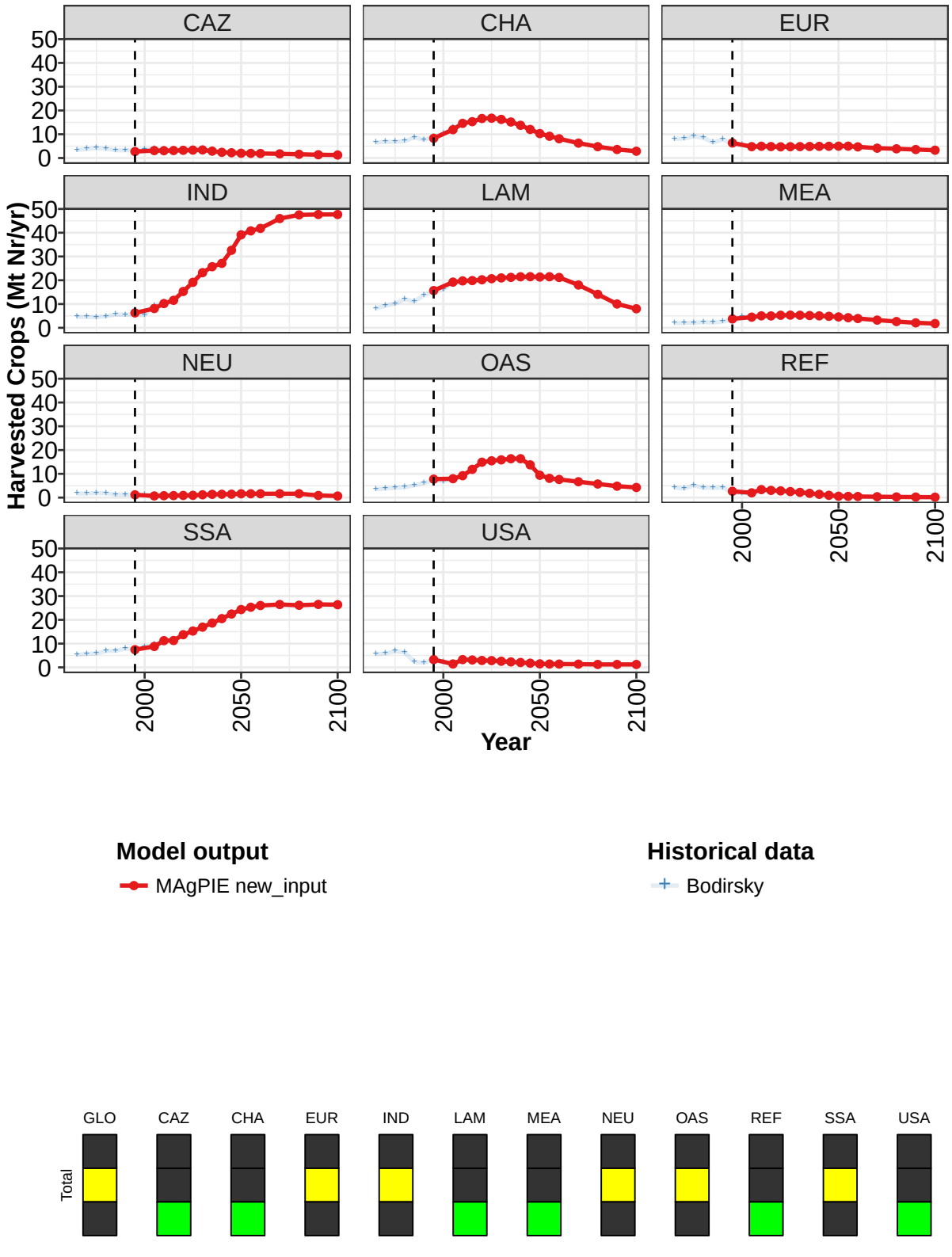


Figure 404: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	65	73	85	90	101	107	113	115	116	119	120
CAZ	3	3	3	3	3	3	3	3	2	2	2
CHA	8	12	15	15	17	17	16	15	14	12	10
EUR	6	5	5	5	5	5	5	5	5	5	5
IND	6	8	10	12	15	19	23	26	27	33	39
LAM	16	19	20	20	20	21	21	21	21	22	21
MEA	4	4	5	5	5	5	5	5	5	5	5
NEU	1	1	1	1	1	1	1	1	1	1	2
OAS	8	8	9	12	15	15	16	16	16	14	9
REF	3	2	3	3	3	3	2	2	1	1	1
SSA	7	9	11	11	14	15	17	19	21	22	24
USA	3	1	3	3	3	3	3	2	2	2	1

Table 1499: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	120	119	116	109	102	98
CAZ	2	2	2	2	1	1
CHA	9	8	6	5	4	3
EUR	5	5	4	4	4	3
IND	41	42	46	48	48	48
LAM	21	21	18	14	10	8
MEA	4	4	3	3	2	2
NEU	2	2	2	2	1	1
OAS	8	8	7	6	5	4
REF	1	0	0	0	0	0
SSA	25	26	26	26	26	26
USA	1	1	1	1	1	1

Table 1500: MAgPIE new_input — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	53.0	55.5	60.7	62.1	57.1	62.0	64.4	65.6	75.5	85.1
CAZ	3.4	3.8	4.2	3.9	3.3	3.3	3.4	3.6	3.8	3.7
CHA	6.5	6.8	6.8	7.1	8.7	7.7	8.9	10.1	12.8	14.8
EUR	8.0	8.2	9.1	8.5	6.6	7.8	6.1	5.4	4.6	4.8
IND	4.6	4.5	4.5	4.9	5.5	5.5	5.5	5.3	9.3	10.6
LAM	8.1	9.3	10.2	12.0	11.1	13.7	15.3	16.2	18.9	18.9
MEA	2.0	2.1	2.2	2.3	2.2	2.6	3.6	4.6	4.7	4.8
NEU	1.7	1.7	1.9	1.8	1.3	1.3	1.1	1.0	0.7	0.8
OAS	3.5	3.8	4.1	4.4	5.1	6.1	7.2	6.8	7.7	8.9
REF	4.2	3.8	5.1	4.1	4.1	4.2	2.3	1.9	2.0	3.3
SSA	5.3	5.7	5.8	6.8	7.0	7.8	7.6	8.6	9.5	11.1
USA	5.6	5.8	6.8	6.3	2.3	2.0	3.4	2.2	1.5	3.4

Table 1501: Bodirsky — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr)

57 Water

57.1 Withdrawal

57.1.1 Agriculture

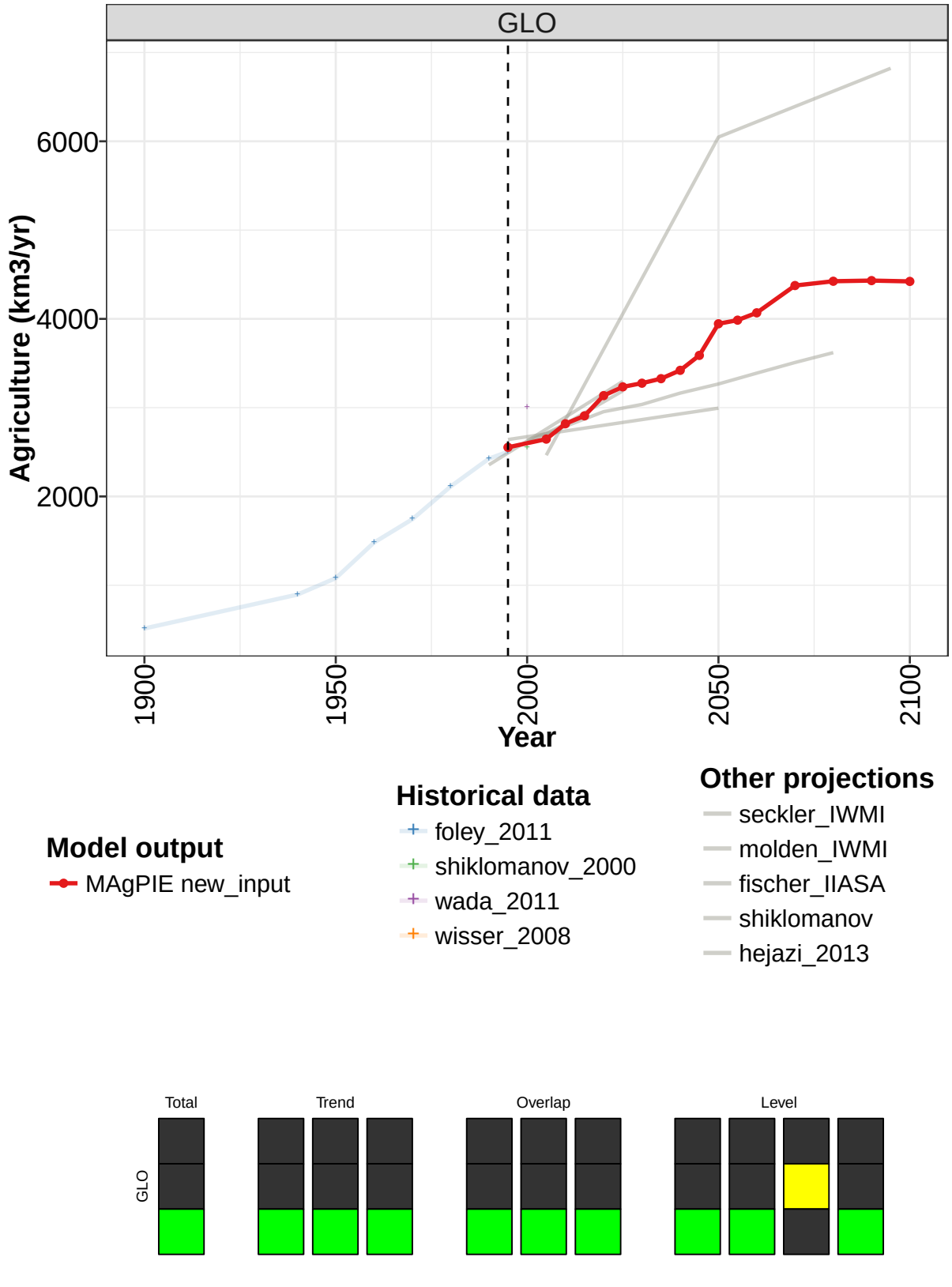


Figure 405: MAgPIE new_input — Resources—Water—Withdrawal—Agriculture (km3/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2553	2646	2819	2908	3136	3234	3276	3327	3421	3589	3945

Table 1502: MAgPIE new_input — Resources—Water—Withdrawal—Agriculture (km3/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	3986	4068	4375	4424	4431	4422

Table 1503: MAgPIE new_input — Resources—Water—Withdrawal—Agriculture (km3/yr) [PART 2/2]

	1900	1940	1950	1960	1970	1980	1990	1995
GLO	513	895	1080	1481	1743	2112	2425	2504

Table 1504: shiklomanov_2000 — Resources—Water—Withdrawal—Agriculture (km3/yr)

	2000
GLO	2548

Table 1505: wada_2011 — Resources—Water—Withdrawal—Agriculture (km3/yr)

	2000
GLO	3000

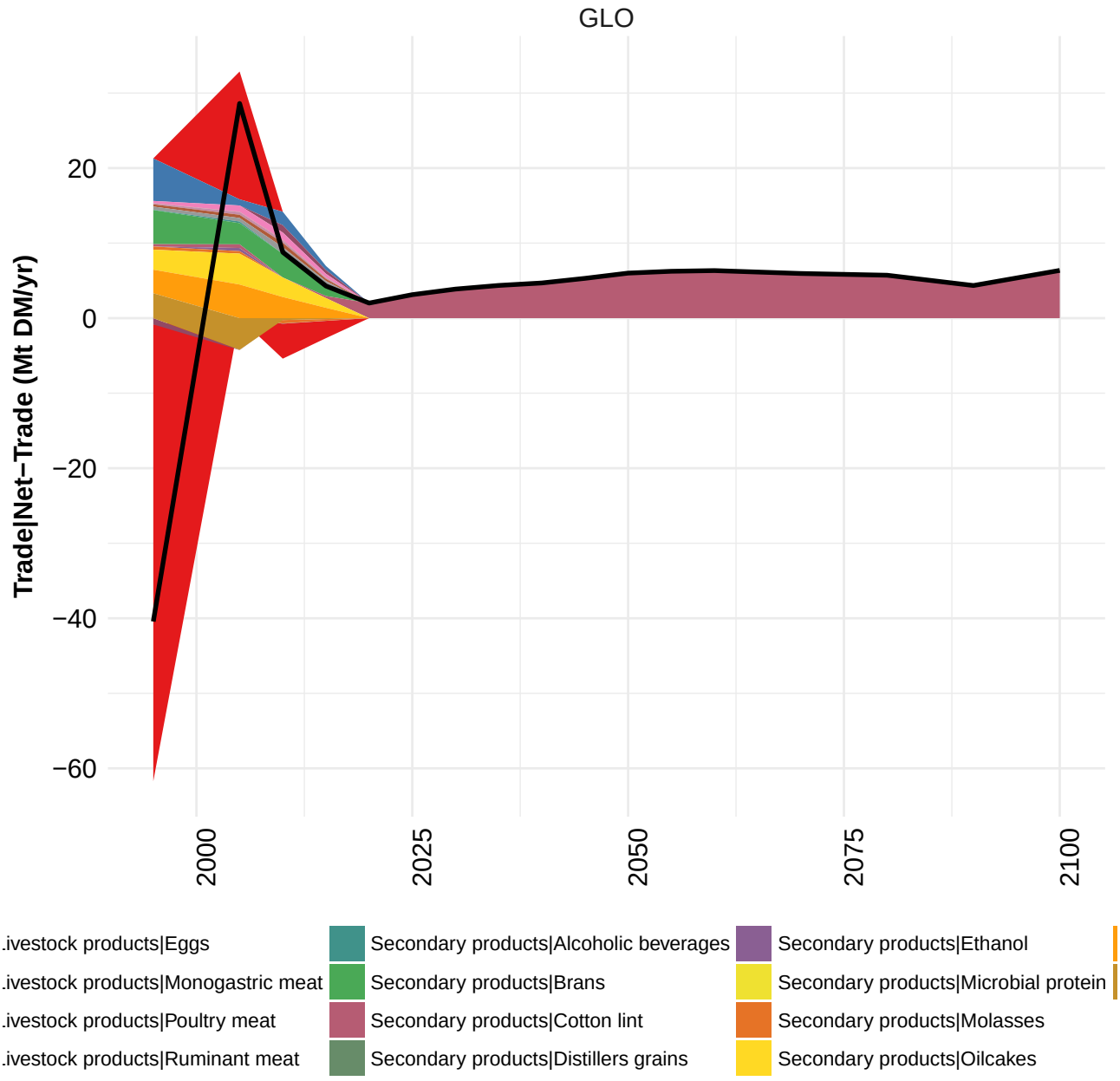
Table 1506: wisser_2008 — Resources—Water—Withdrawal—Agriculture (km3/yr)

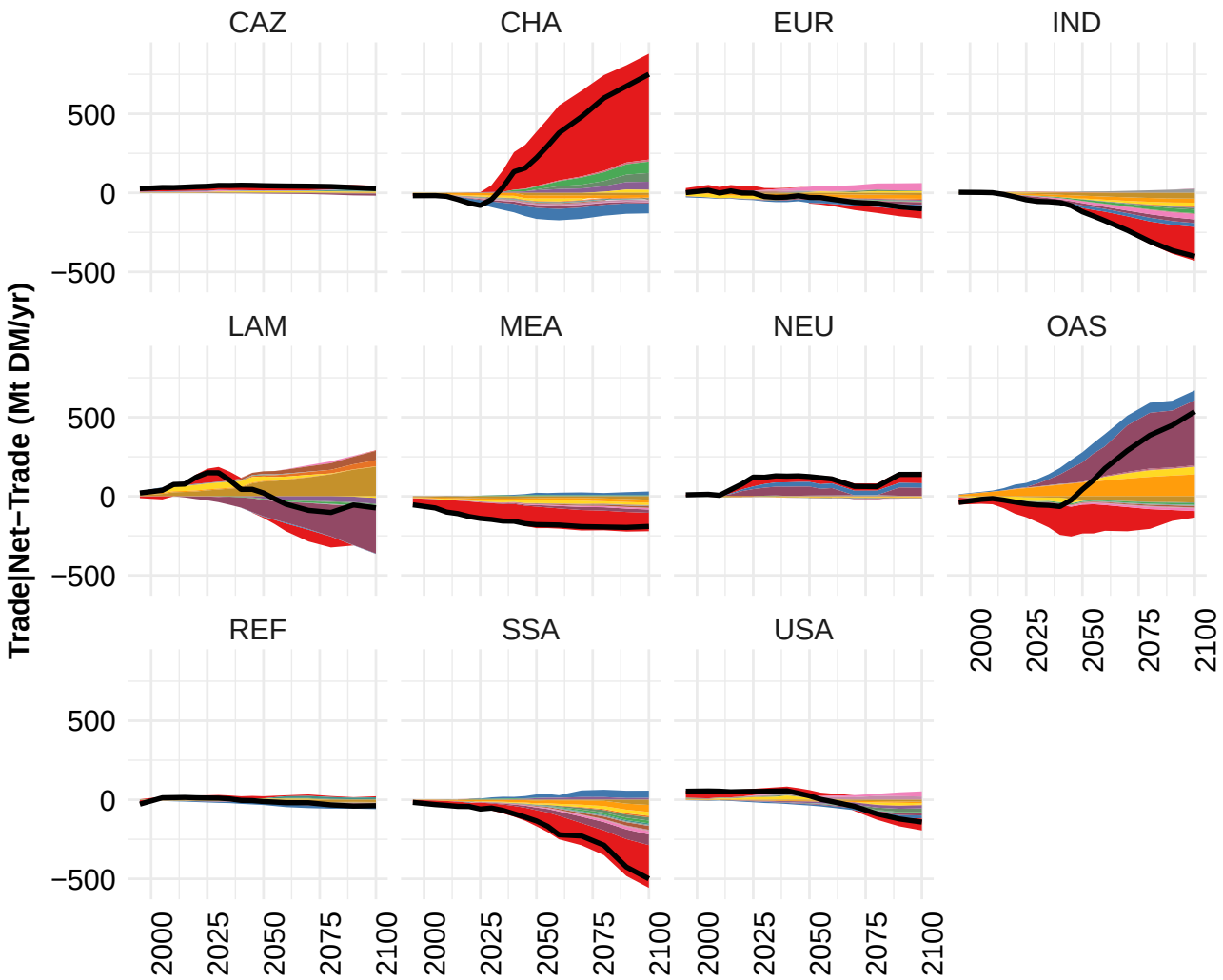
	2010
GLO	2800

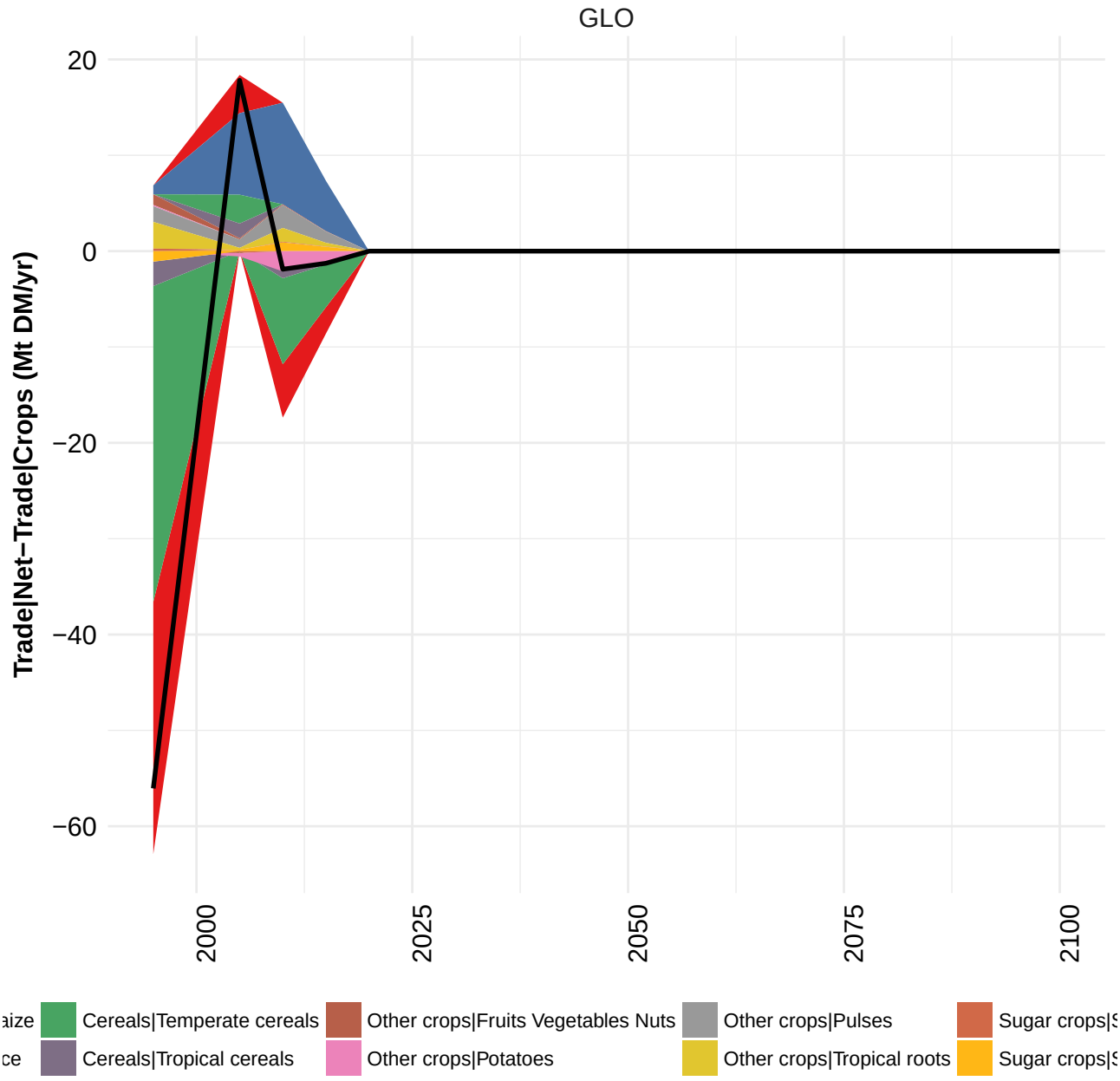
Table 1507: foley_2011 — Resources—Water—Withdrawal—Agriculture (km3/yr)

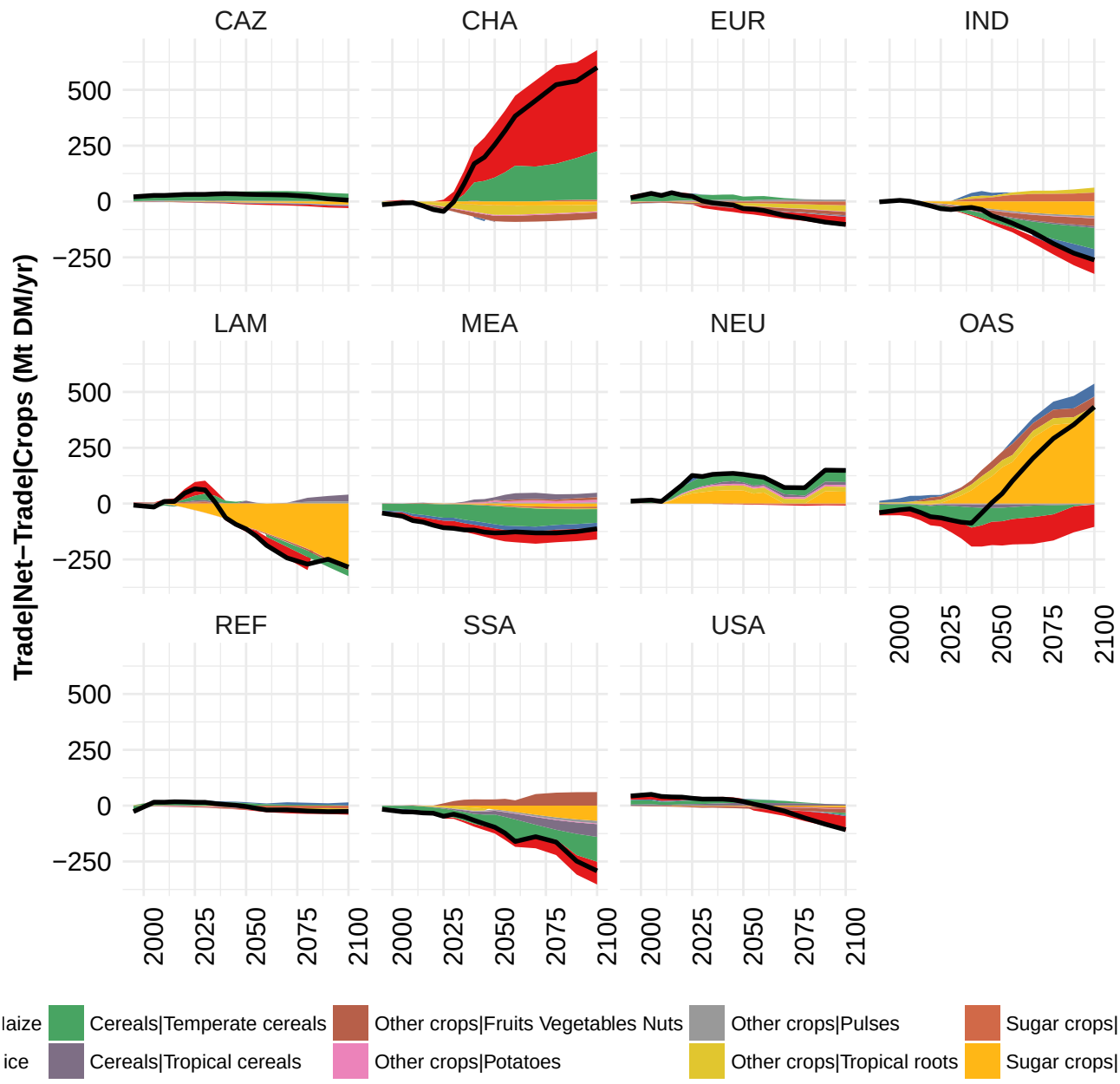
Part XVII
Trade

58 Net-Trade



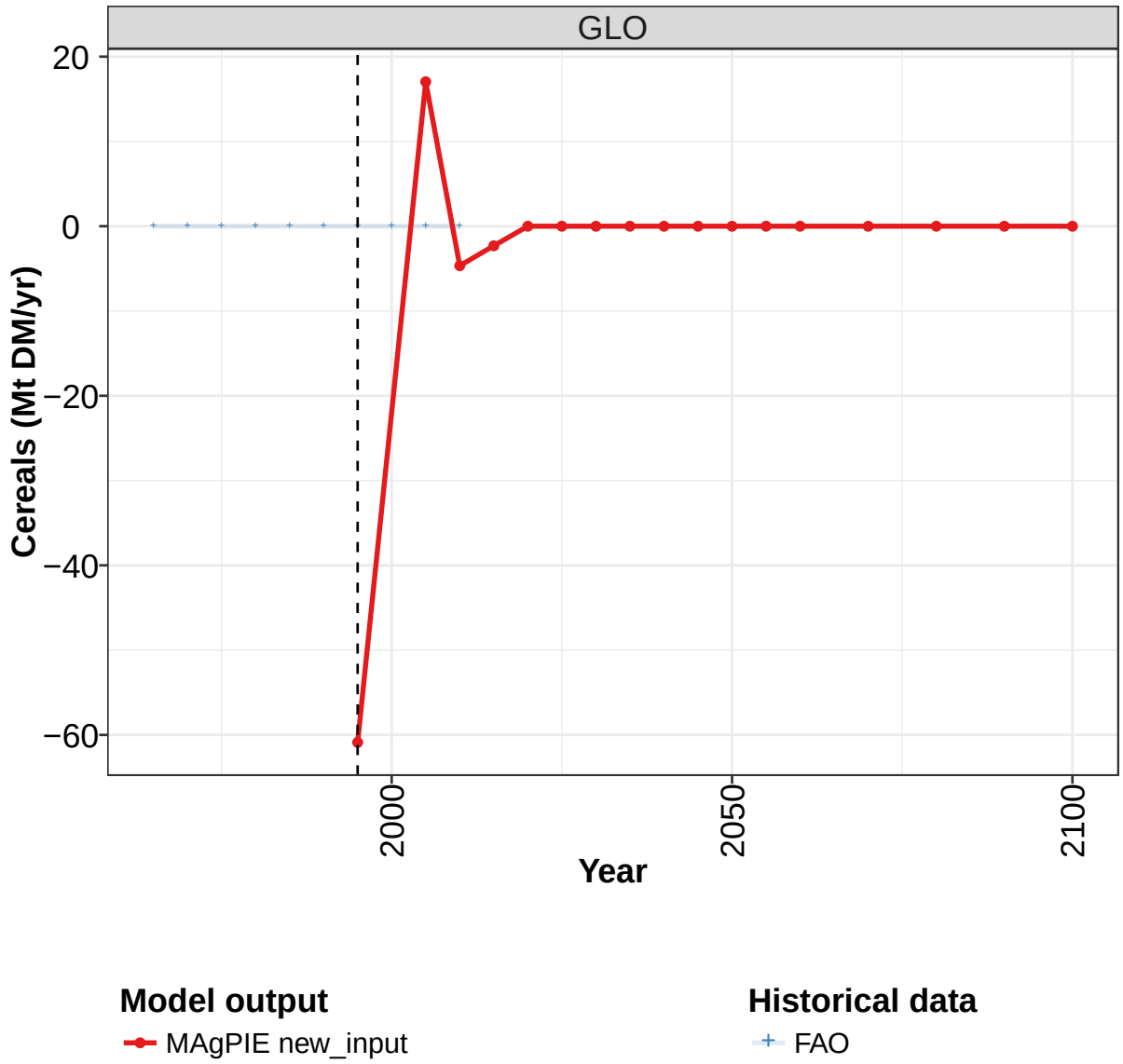

CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Trade|Net−Trade (Mt DM/yr)
500
0
−500
2000
2025
2050
2075
2100
Livestock products|Eggs
Livestock products|Monogastric meat
Livestock products|Poultry meat
Livestock products|Ruminant meat
Secondary products|Alcoholic beverages
Secondary products|Brans
Secondary products|Cotton lint
Secondary products|Distillers grains
Secondary products|Ethanol
Secondary products|Microbial protein
Secondary products|Molasses
Secondary products|Oilcakes


GLO
Trade|Net−Trade|Crops (Mt DM/yr)
20
0
−20
−40
−60
2000
2025
2050
2075
2100
aize
ce
Cereals|Temperate cereals
Cereals|Tropical cereals
Other crops|Fruits Vegetables Nuts
Other crops|Potatoes
Other crops|Pulses
Other crops|Tropical roots
Sugar crops|S
Sugar crops|S


CAZ
CHA
EUR
IND
LAM
MEA
NEU
OAS
REF
SSA
USA
Trade|Net−Trade|Crops (Mt DM/yr)
500
250
0
−250
2000
2025
2050
2075
2100
laize
ice
Cereals|Temperate cereals
Cereals|Tropical cereals
Other crops|Fruits Vegetables Nuts
Other crops|Potatoes
Other crops|Pulses
Other crops|Tropical roots
Sugar crops|
Sugar crops|

58.1 Crops

58.1.1 Cereals



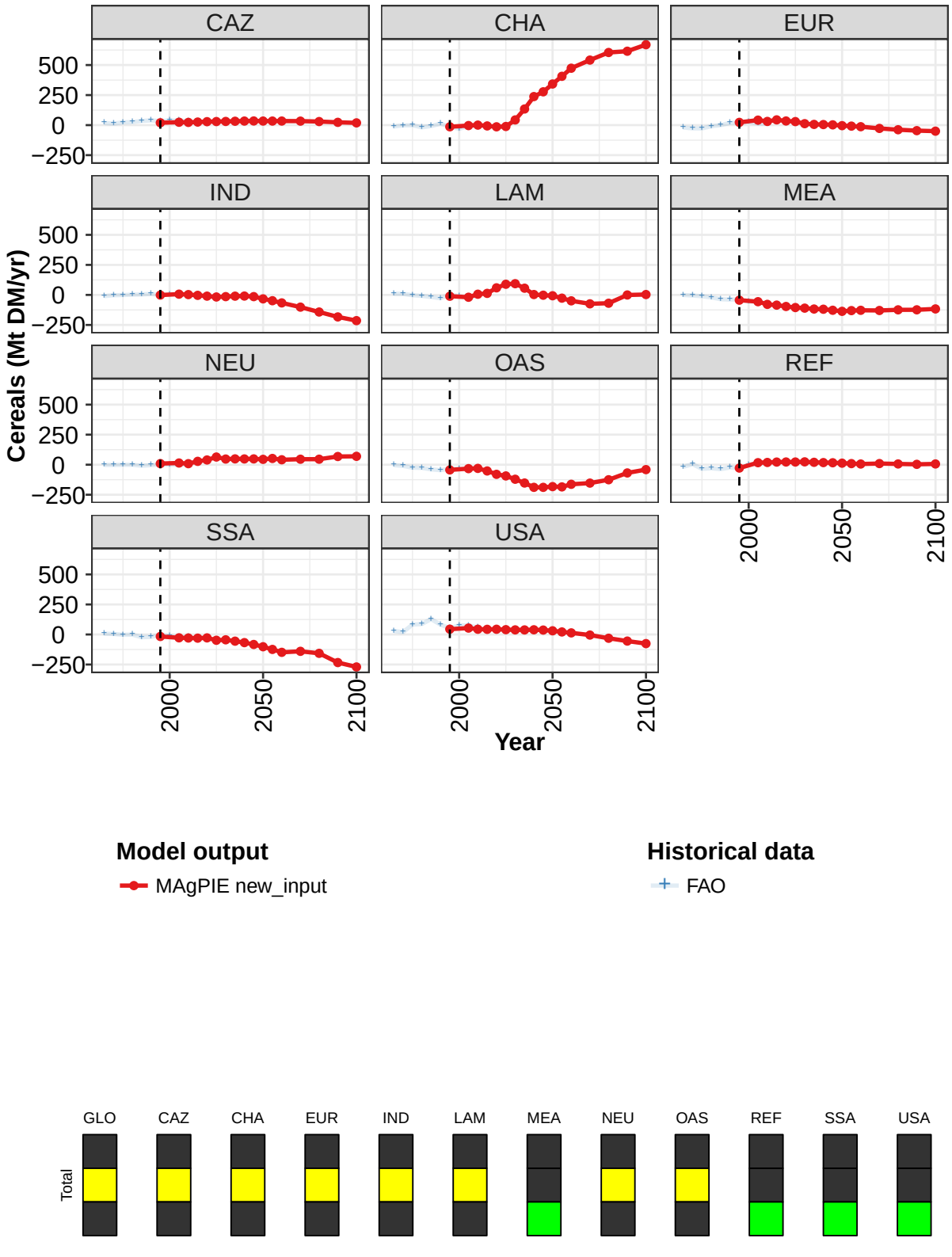


Figure 406: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-61	17	-5	-2	-0	-0	0	-0	-0	0	0
CAZ	20	24	23	26	29	30	31	32	34	35	34
CHA	-14	-4	0	-7	-14	-11	43	135	238	277	343
EUR	23	42	31	44	35	30	12	6	5	2	-4
IND	-1	6	3	-3	-10	-17	-14	-10	-9	-14	-33
LAM	-11	-19	6	13	59	89	93	56	3	-2	-7
MEA	-44	-56	-79	-85	-96	-105	-110	-117	-119	-128	-136
NEU	9	14	9	28	40	64	47	49	48	48	45
OAS	-43	-33	-31	-52	-80	-93	-121	-153	-188	-189	-182
REF	-28	17	19	22	23	22	24	20	18	16	13
SSA	-17	-28	-29	-30	-28	-48	-44	-55	-68	-83	-102
USA	44	53	44	43	44	40	38	38	39	37	31

Table 1508: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals (Mt DM/yr) [PART 1/2]

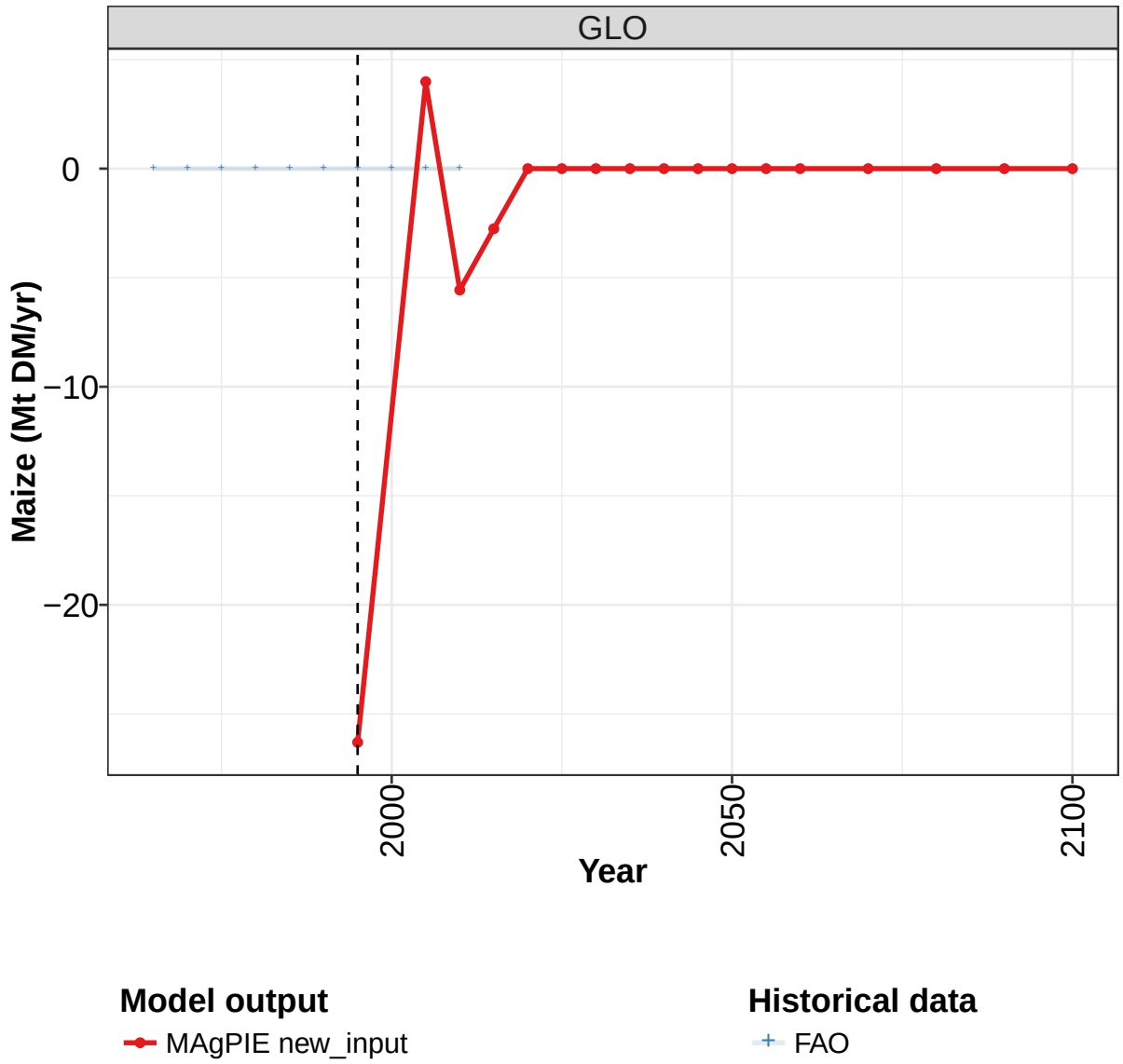
	2055	2060	2070	2080	2090	2100
GLO	-0	-0	0	-0	0	-0
CAZ	34	34	33	30	23	19
CHA	406	474	541	605	615	670
EUR	-8	-13	-27	-38	-46	-50
IND	-48	-66	-102	-142	-183	-214
LAM	-27	-49	-74	-69	-1	3
MEA	-130	-128	-130	-124	-124	-117
NEU	52	41	46	46	68	70
OAS	-185	-163	-153	-125	-68	-41
REF	9	6	10	6	3	6
SSA	-124	-148	-140	-157	-233	-270
USA	21	14	-5	-31	-55	-76

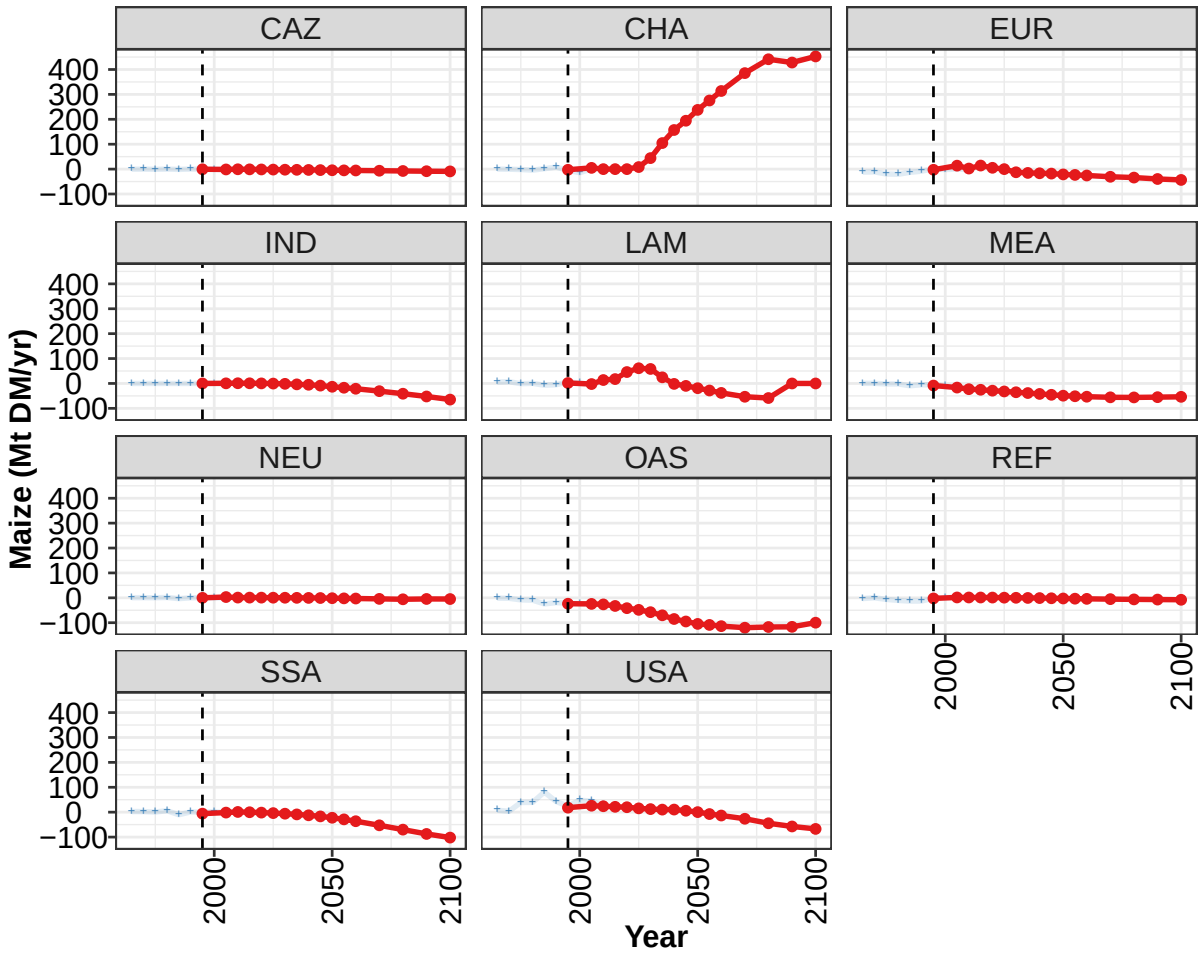
Table 1509: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	18	12	23	26	35	39	34	38	39	32
CHA	-11	-2	-1	-18	-8	12	-13	-31	-8	3
EUR	-20	-27	-27	-9	-0	18	22	26	12	11
IND	-10	-3	-1	2	4	9	1	5	6	6
LAM	10	9	-3	-8	-17	-28	1	-10	-25	-1
MEA	-1	-5	-11	-20	-36	-39	-36	-55	-54	-73
NEU	-2	-3	-1	-1	-9	-4	2	-1	-0	1
OAS	-4	-10	-25	-27	-39	-46	-33	-33	-37	-28
REF	-17	4	-34	-30	-37	-23	-27	-3	16	9
SSA	7	4	-3	-1	-23	-20	-3	-12	-24	-19
USA	29	20	83	87	128	82	53	76	75	59

Table 1510: FAO — Trade—Net-Trade—Crops—Cereals (Mt DM/yr)

58.1.2 Cereals—Maize





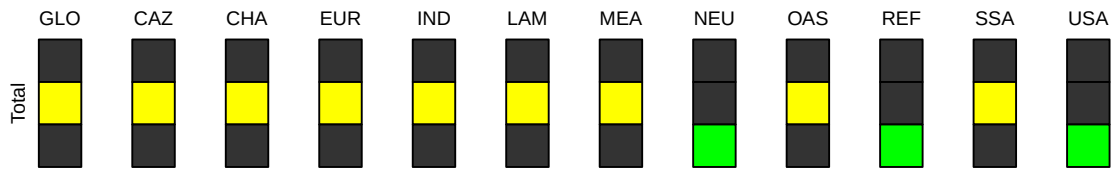


Figure 407: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-26	4	-6	-3	-0	-0	0	-0	-0	0	0
CAZ	-1	-1	-1	-1	-1	-2	-2	-3	-3	-4	-5
CHA	-3	5	-0	-0	-0	8	44	105	157	194	238
EUR	-3	14	2	14	5	-0	-13	-15	-17	-18	-21
IND	-0	1	1	1	0	-0	-1	-4	-5	-9	-13
LAM	2	-2	14	18	46	61	58	25	-2	-10	-19
MEA	-8	-17	-23	-25	-29	-32	-35	-38	-42	-46	-49
NEU	0	3	1	1	1	1	0	-0	-0	-1	-2
OAS	-24	-24	-26	-33	-42	-48	-58	-70	-85	-95	-105
REF	-2	2	1	1	1	1	0	-0	-1	-2	-3
SSA	-6	-2	1	-0	-2	-4	-6	-9	-12	-17	-22
USA	18	26	24	22	20	15	12	10	11	6	0

Table 1511: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

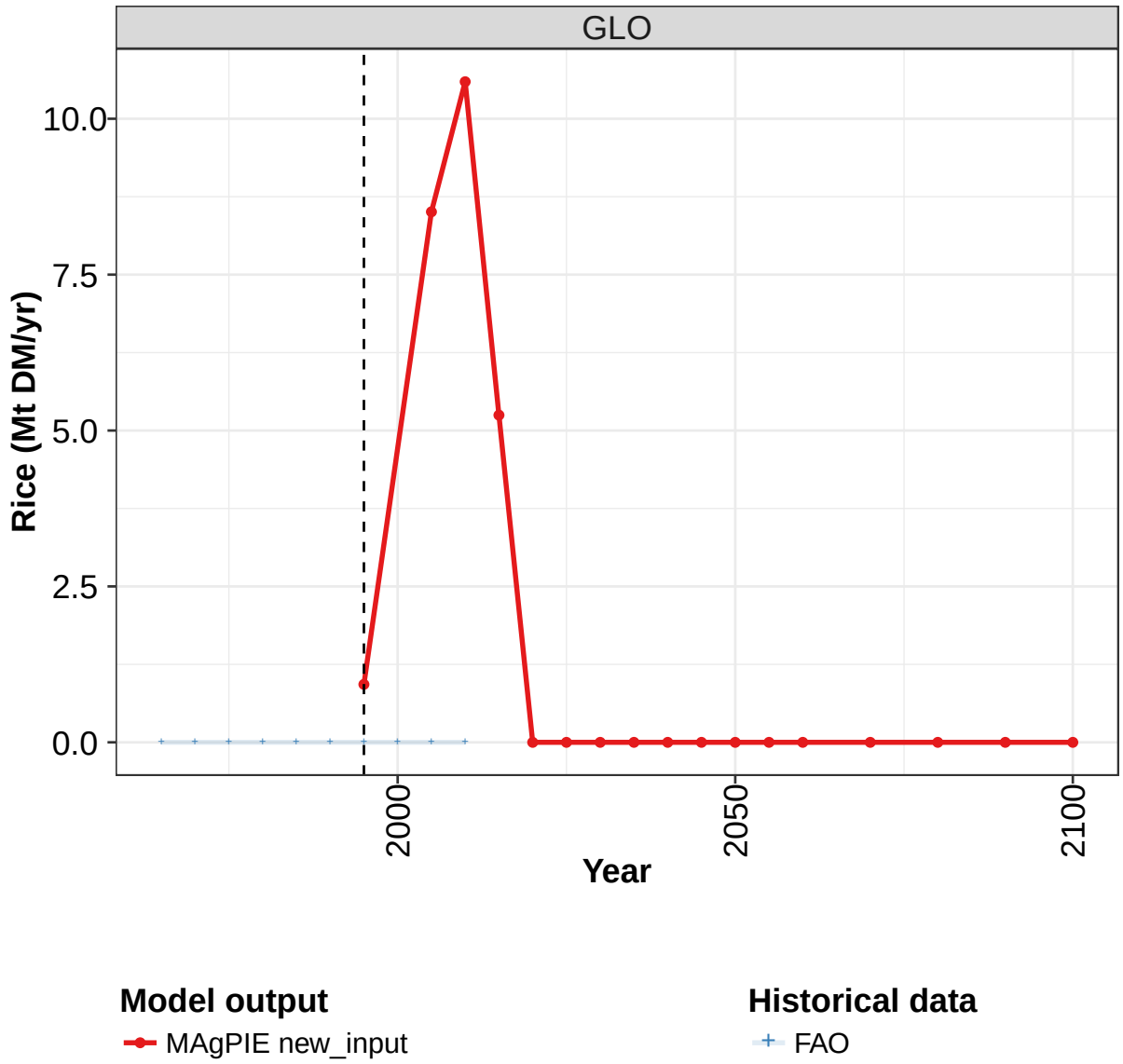
	2055	2060	2070	2080	2090	2100
GLO	0	-0	0	-0	0	-0
CAZ	-5	-6	-6	-7	-8	-9
CHA	276	314	386	441	428	453
EUR	-23	-26	-31	-34	-40	-43
IND	-17	-21	-31	-41	-52	-65
LAM	-28	-38	-53	-59	0	0
MEA	-51	-53	-56	-56	-55	-54
NEU	-2	-3	-4	-6	-5	-5
OAS	-109	-114	-120	-117	-116	-100
REF	-3	-4	-5	-6	-7	-8
SSA	-29	-36	-53	-70	-87	-102
USA	-7	-13	-26	-45	-57	-67

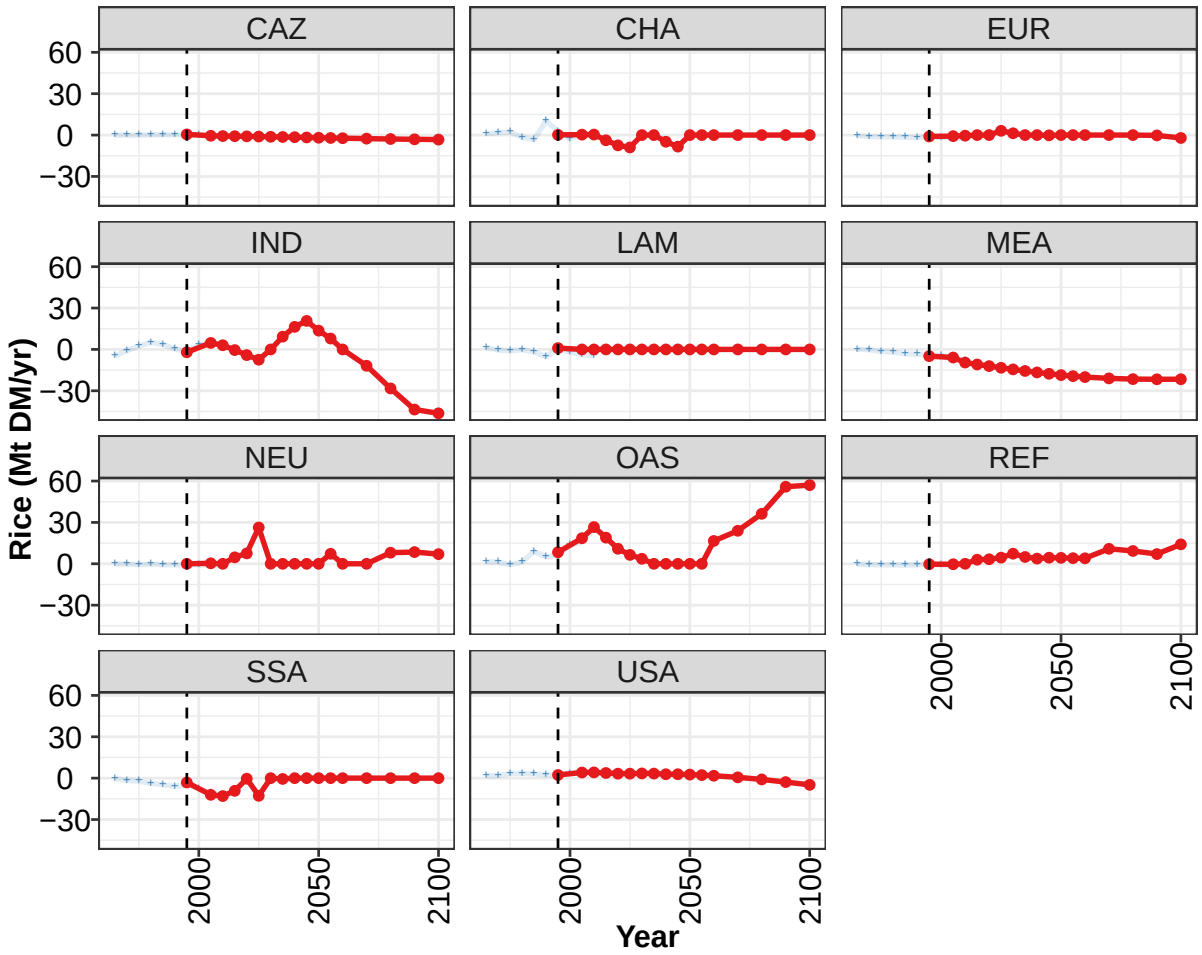
Table 1512: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	-0.3	-0.3	-0.9	-0.2	-1.1	-0.1	-0.1	-1.5	-1.6	-0.6
CHA	0.1	-0.6	-1.6	-4.2	1.7	7.7	-4.6	-14.7	1.1	2.2
EUR	-12.2	-11.2	-19.7	-20.8	-13.1	-8.4	1.0	-2.1	0.3	-2.7
IND	-0.2	0.0	-0.1	0.0	-0.2	0.0	0.1	0.0	0.4	3.9
LAM	5.5	7.1	-0.9	0.5	-7.1	-5.2	6.5	1.4	-2.8	9.3
MEA	0.3	0.4	-2.0	-2.0	-9.3	-5.4	-5.7	-10.3	-15.8	-21.3
NEU	0.6	0.5	0.2	1.4	-3.3	-0.1	1.0	-0.1	-0.1	1.0
OAS	-1.2	-1.9	-8.3	-9.5	-24.5	-19.4	-20.9	-23.5	-25.4	-25.3
REF	-3.0	-0.0	-6.3	-10.5	-13.4	-12.9	-1.5	0.9	1.7	0.4
SSA	2.6	2.4	0.6	5.9	-10.4	1.1	-0.4	2.2	-2.4	5.3
USA	7.9	3.5	38.9	39.3	80.7	42.7	24.6	47.8	44.5	27.7

Table 1513: FAO — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr)

58.1.3 Cereals—Rice





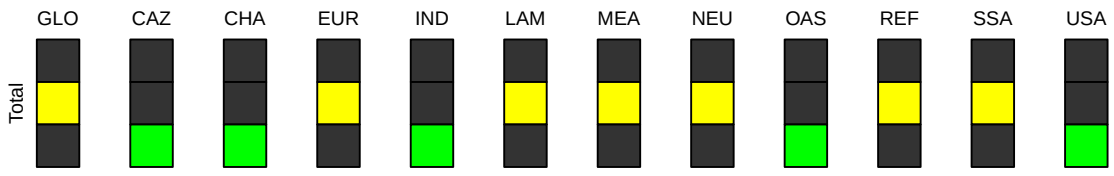


Figure 408: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.9	8.5	10.6	5.2	-0.0	-0.0	0.0	0.0	-0.0	0.0	0.0
CAZ	0.5	-0.5	-0.7	-0.8	-0.9	-1.1	-1.2	-1.4	-1.5	-1.7	-1.9
CHA	0.2	0.3	0.4	-3.8	-7.5	-9.0	0.0	0.0	-4.8	-8.4	0.0
EUR	-1.0	-0.8	-0.4	0.0	0.0	3.1	1.3	0.0	0.0	-0.2	0.0
IND	-2.0	4.7	3.0	-0.5	-4.1	-7.5	0.0	9.3	16.4	20.7	13.6
LAM	1.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	-4.9	-5.9	-9.5	-10.9	-12.1	-13.3	-14.5	-15.6	-16.7	-17.7	-18.6
NEU	0.0	0.4	-0.0	4.7	7.5	26.3	0.0	0.0	0.0	0.0	0.0
OAS	8.4	18.6	26.6	19.0	10.9	6.5	3.6	0.0	-0.0	0.0	0.0
REF	-0.3	-0.3	0.0	3.0	3.3	4.5	7.3	4.9	3.8	4.4	4.3
SSA	-3.1	-12.1	-13.0	-9.2	-0.4	-12.8	0.0	-0.6	0.0	0.0	0.0
USA	2.3	4.1	4.2	3.8	3.3	3.3	3.4	3.3	2.9	2.9	2.6

Table 1514: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

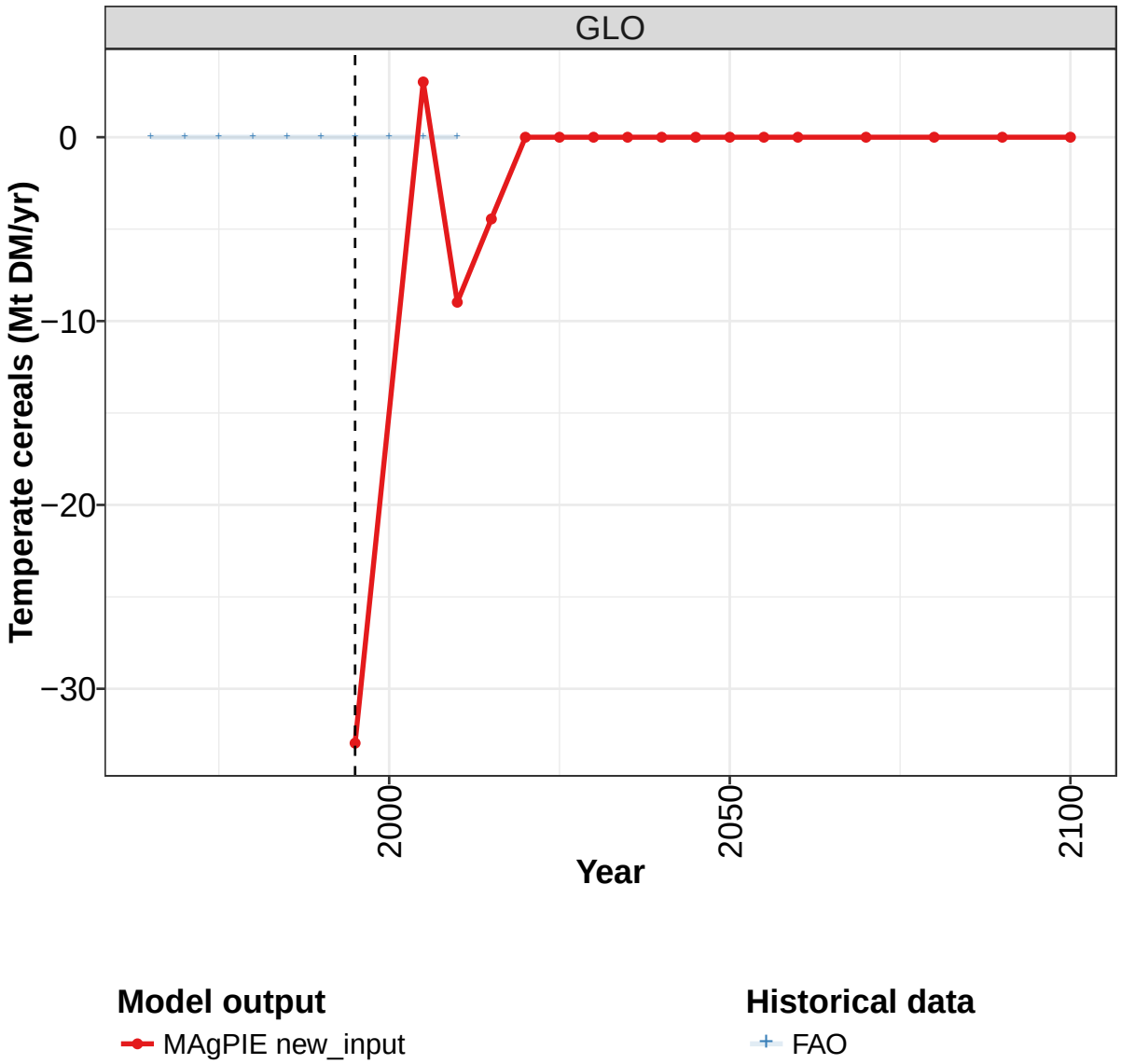
	2055	2060	2070	2080	2090	2100
GLO	-0.0	0.0	0.0	0.0	0.0	-0.0
CAZ	-2.1	-2.3	-2.6	-2.9	-3.1	-3.3
CHA	0.0	0.0	0.0	0.0	-0.0	0.0
EUR	0.0	0.0	0.0	-0.0	-0.3	-2.1
IND	7.9	0.0	-11.8	-28.3	-43.6	-46.3
LAM	0.0	0.0	0.0	0.0	0.0	0.0
MEA	-19.4	-20.0	-21.0	-21.5	-21.7	-21.6
NEU	7.3	-0.0	0.0	8.0	8.5	7.0
OAS	0.0	16.6	23.9	36.2	55.9	57.0
REF	4.1	4.0	10.9	9.3	7.1	14.1
SSA	0.0	0.0	0.0	0.0	0.0	0.0
USA	2.2	1.8	0.6	-0.9	-2.8	-4.8

Table 1515: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.0	-0.0	0.0	0.2	0.4	0.2	0.4	0.1	-0.7	-0.9
CHA	0.9	1.8	2.1	-1.7	-3.3	10.3	2.6	-2.8	0.0	-0.6
EUR	-0.4	-1.0	-1.4	-1.4	-1.6	-1.9	-1.1	-1.6	-2.2	-2.6
IND	-4.8	-0.8	2.3	5.1	3.6	0.4	-1.5	3.3	5.3	2.2
LAM	1.5	-0.4	-1.0	-0.2	-1.8	-5.4	0.8	-2.0	-3.7	-4.6
MEA	0.1	-0.2	-1.4	-2.1	-3.2	-3.5	-4.0	-4.7	-5.5	-8.6
NEU	0.1	-0.4	-0.6	-0.3	-0.6	-0.9	-0.6	-0.9	-1.1	-1.1
OAS	1.4	1.3	-0.7	1.3	8.9	5.1	6.3	13.5	15.6	25.2
REF	-0.2	-0.6	-0.7	-0.8	-1.0	-0.8	-0.4	-1.0	-1.2	-0.7
SSA	-0.3	-1.7	-2.1	-3.8	-4.7	-5.9	-4.8	-7.5	-10.8	-12.5
USA	1.7	1.9	3.3	3.5	3.2	2.2	2.4	3.5	4.4	4.2

Table 1516: FAO — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr)

58.1.4 Cereals—Temperate cereals



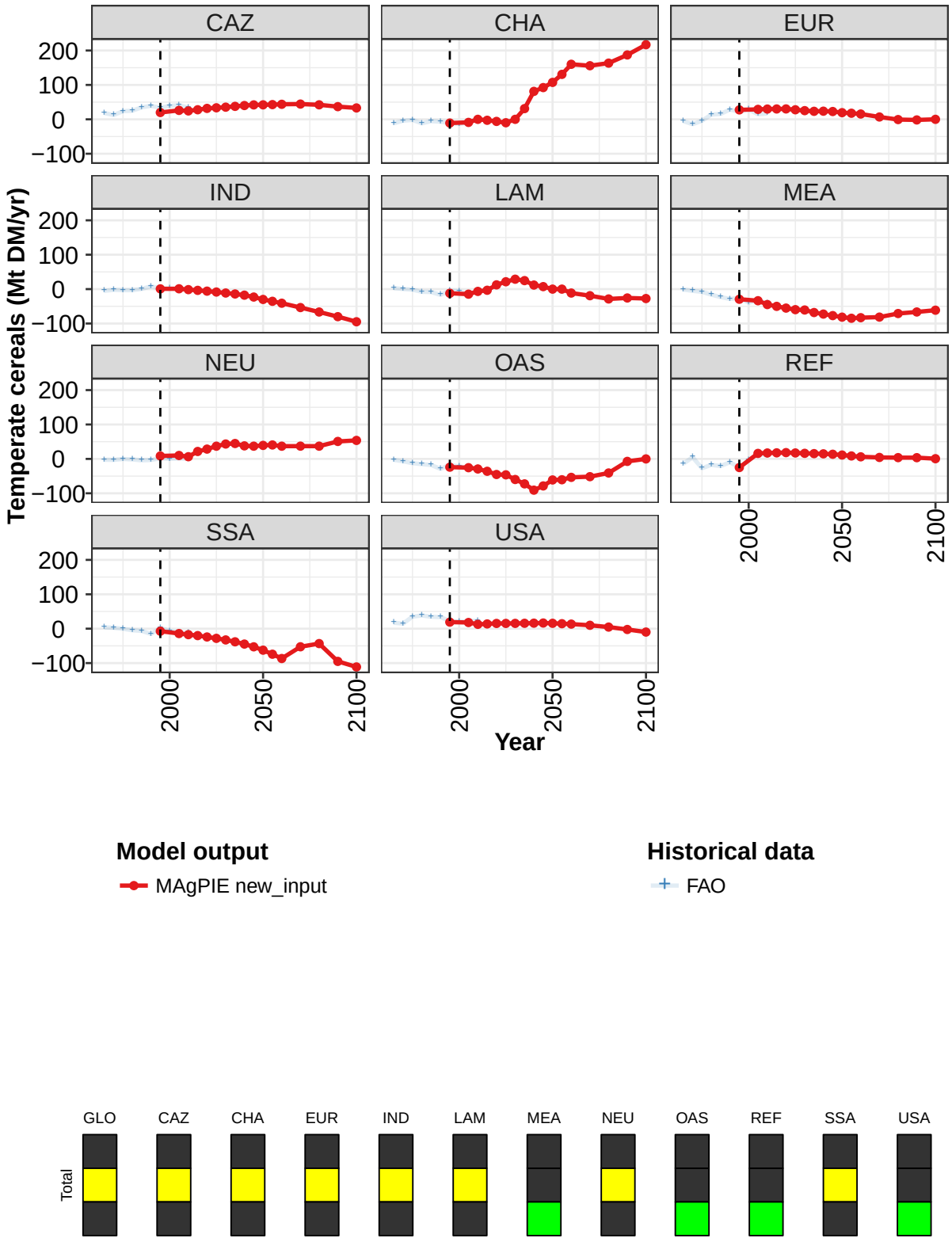


Figure 409: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-33	3	-9	-4	-0	0	0	-0	-0	0	0
CAZ	20	26	24	28	32	34	35	38	40	42	42
CHA	-11	-9	0	-3	-6	-10	0	31	81	92	107
EUR	27	29	30	30	30	28	25	23	24	23	19
IND	1	1	-1	-4	-6	-8	-11	-14	-18	-23	-30
LAM	-12	-15	-7	-3	12	21	29	25	12	7	0
MEA	-29	-34	-45	-50	-55	-60	-61	-68	-73	-77	-81
NEU	9	10	6	22	28	37	43	45	38	37	39
OAS	-24	-26	-29	-36	-45	-46	-60	-73	-91	-79	-61
REF	-25	16	17	18	18	17	16	15	15	14	11
SSA	-7	-14	-17	-20	-24	-28	-33	-38	-45	-53	-62
USA	19	18	13	14	15	15	15	16	16	17	16

Table 1517: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

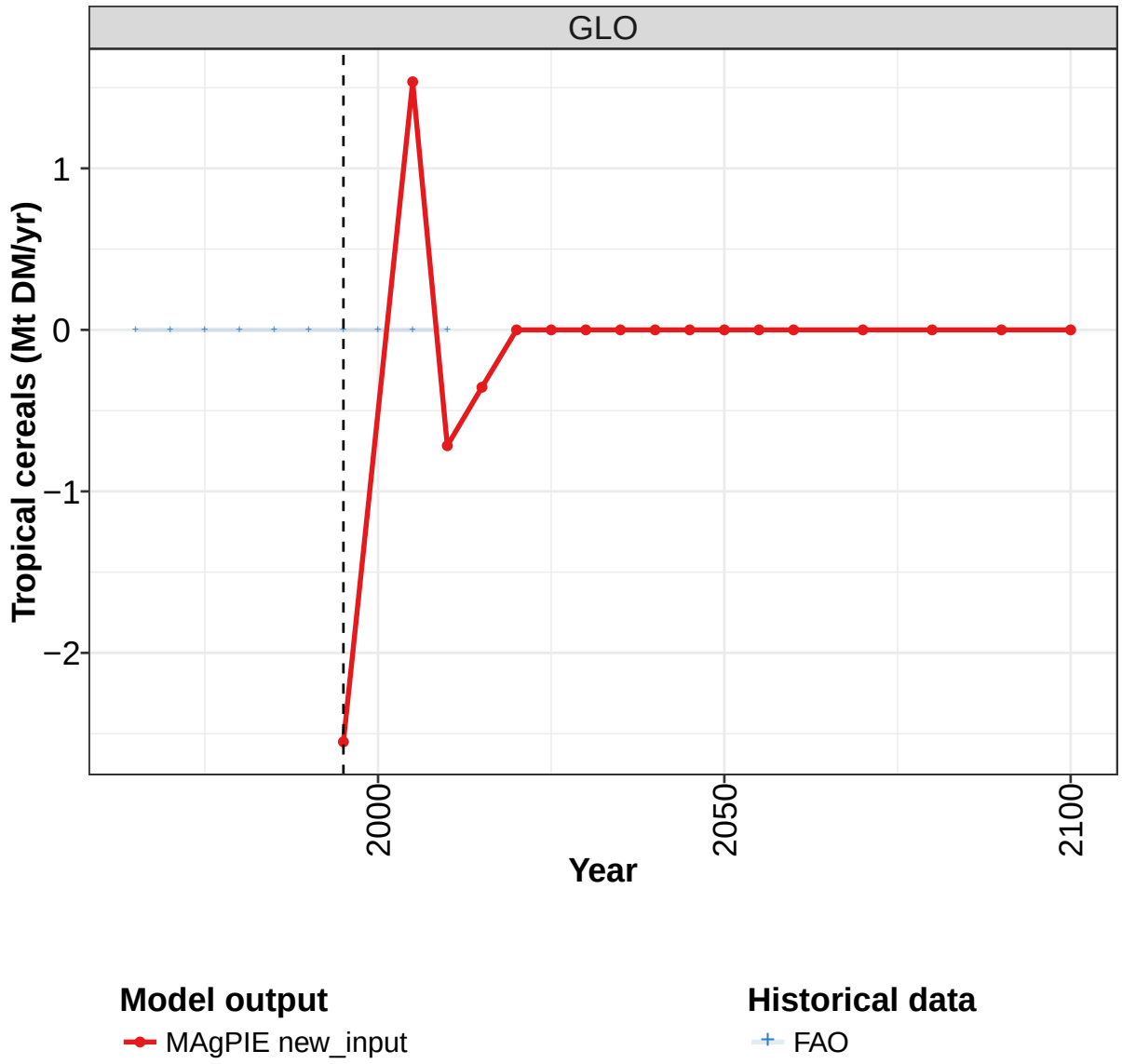
	2055	2060	2070	2080	2090	2100
GLO	-0	-0	0	0	0	0
CAZ	43	44	44	42	37	33
CHA	131	160	156	163	187	217
EUR	18	15	7	-1	-2	0
IND	-35	-41	-54	-67	-80	-95
LAM	0	-11	-19	-29	-26	-27
MEA	-85	-83	-81	-71	-66	-61
NEU	41	37	37	37	51	54
OAS	-61	-54	-52	-41	-7	0
REF	9	6	4	4	4	1
SSA	-74	-87	-53	-43	-95	-111
USA	15	13	10	5	-2	-10

Table 1518: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	18.4	12.5	23.7	25.0	34.9	39.2	33.6	39.1	40.9	34.4
CHA	-11.4	-3.9	-1.8	-11.5	-5.4	-6.9	-10.9	-13.5	-8.8	1.7
EUR	-5.3	-14.2	-4.3	13.6	15.8	28.4	22.1	28.8	14.7	17.1
IND	-4.9	-2.1	-3.1	-3.0	0.6	8.1	2.0	1.9	-0.2	-1.4
LAM	2.9	0.3	-1.6	-7.7	-8.6	-16.7	-4.7	-6.0	-15.4	-4.6
MEA	-1.2	-5.1	-7.8	-16.1	-23.1	-28.5	-25.6	-39.6	-32.0	-41.9
NEU	-2.6	-2.9	-0.2	-1.6	-4.2	-3.1	1.6	0.1	1.2	0.6
OAS	-2.6	-6.9	-12.5	-15.2	-17.7	-29.0	-17.3	-22.0	-25.9	-26.9
REF	-14.1	4.8	-27.1	-17.3	-20.7	-9.8	-25.0	-3.5	15.3	9.1
SSA	3.6	2.8	-0.3	-4.6	-6.5	-15.2	1.8	-6.1	-11.4	-11.8
USA	17.3	14.7	35.0	38.3	34.8	33.6	22.4	20.6	21.6	23.7

Table 1519: FAO — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr)

58.1.5 Cereals—Tropical cereals



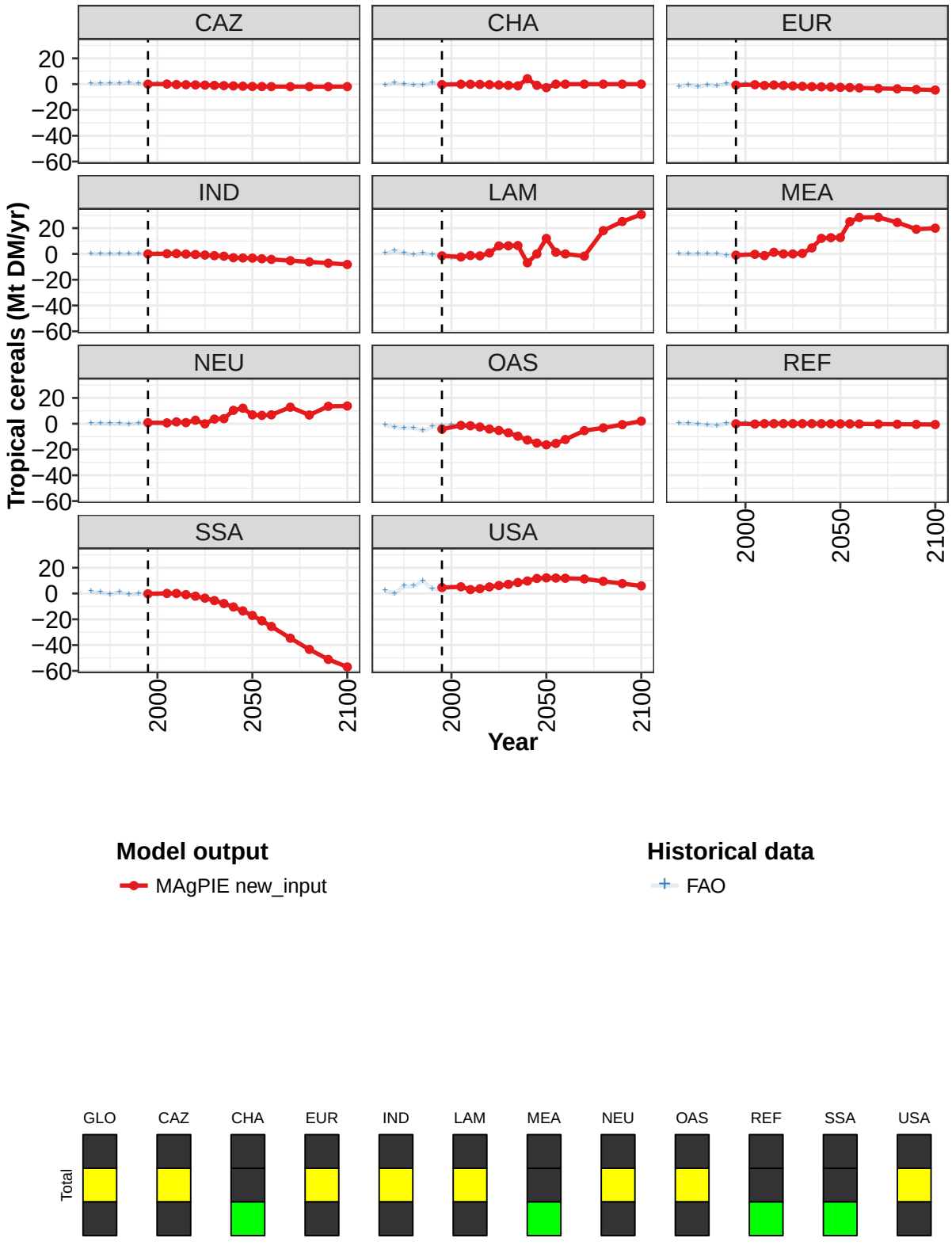


Figure 410: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-2.6	1.5	-0.7	-0.4	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0
CAZ	0.0	0.1	-0.3	-0.4	-0.6	-0.7	-1.0	-1.1	-1.4	-1.6	-1.8
CHA	-0.4	-0.0	-0.1	-0.2	-0.4	-0.6	-0.9	-1.3	4.2	-0.9	-2.7
EUR	-0.8	-0.4	-1.0	-0.7	-1.0	-1.4	-1.7	-2.0	-2.1	-2.2	-2.5
IND	0.0	0.2	0.2	-0.1	-0.5	-0.9	-1.3	-1.8	-3.0	-3.1	-3.2
LAM	-1.5	-2.4	-1.2	-1.5	0.8	6.2	6.3	6.5	-6.9	-0.0	12.0
MEA	-1.0	-0.3	-1.3	1.3	0.0	-0.0	0.4	4.7	12.1	12.6	12.7
NEU	0.8	0.7	1.4	0.9	2.7	-0.1	3.6	3.9	10.4	12.0	6.9
OAS	-4.2	-1.3	-1.6	-2.5	-4.1	-5.2	-7.1	-9.7	-12.6	-15.0	-16.4
REF	-0.0	-0.3	0.0	0.1	0.1	0.1	0.1	0.0	0.0	-0.0	-0.1
SSA	-0.2	0.1	0.0	-0.9	-2.1	-3.6	-5.5	-7.8	-10.4	-13.5	-17.1
USA	4.6	5.2	3.0	3.7	5.1	6.2	7.1	8.5	9.7	11.7	12.1

Table 1520: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

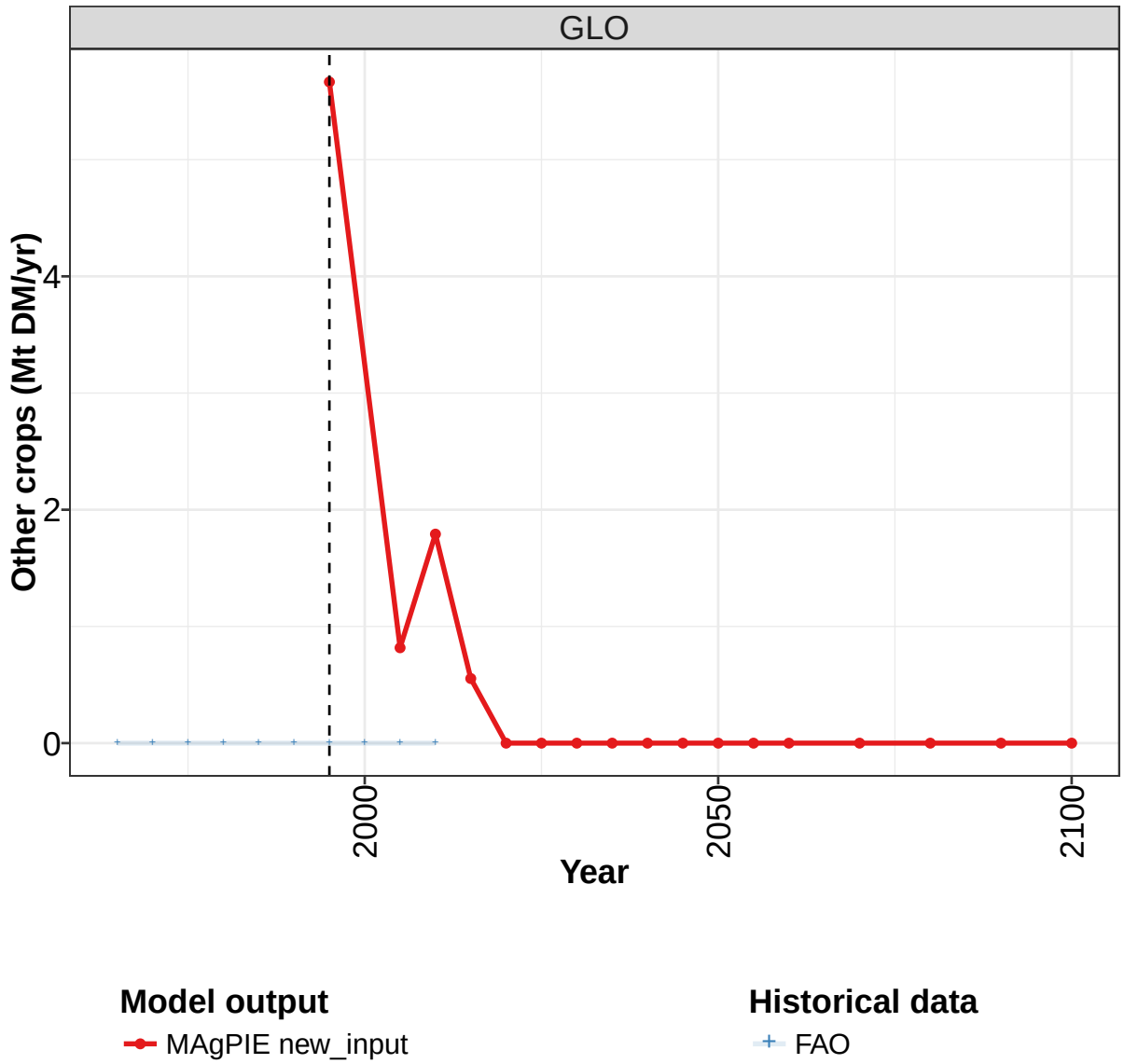
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	-0.0	-0.0	0.0
CAZ	-1.9	-1.9	-1.9	-2.0	-2.0	-1.9
CHA	0.0	0.0	0.0	-0.0	0.0	0.0
EUR	-2.6	-2.9	-3.4	-3.6	-4.1	-4.6
IND	-3.8	-4.2	-5.2	-6.2	-7.2	-8.2
LAM	1.3	0.0	-1.7	18.1	25.2	30.6
MEA	25.0	28.3	28.4	24.4	19.2	20.0
NEU	6.5	6.9	12.8	6.8	13.5	13.7
OAS	-15.3	-12.3	-5.4	-3.2	-0.7	2.0
REF	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6
SSA	-21.1	-25.5	-34.7	-43.3	-51.1	-57.0
USA	12.0	11.8	11.3	9.5	7.7	5.9

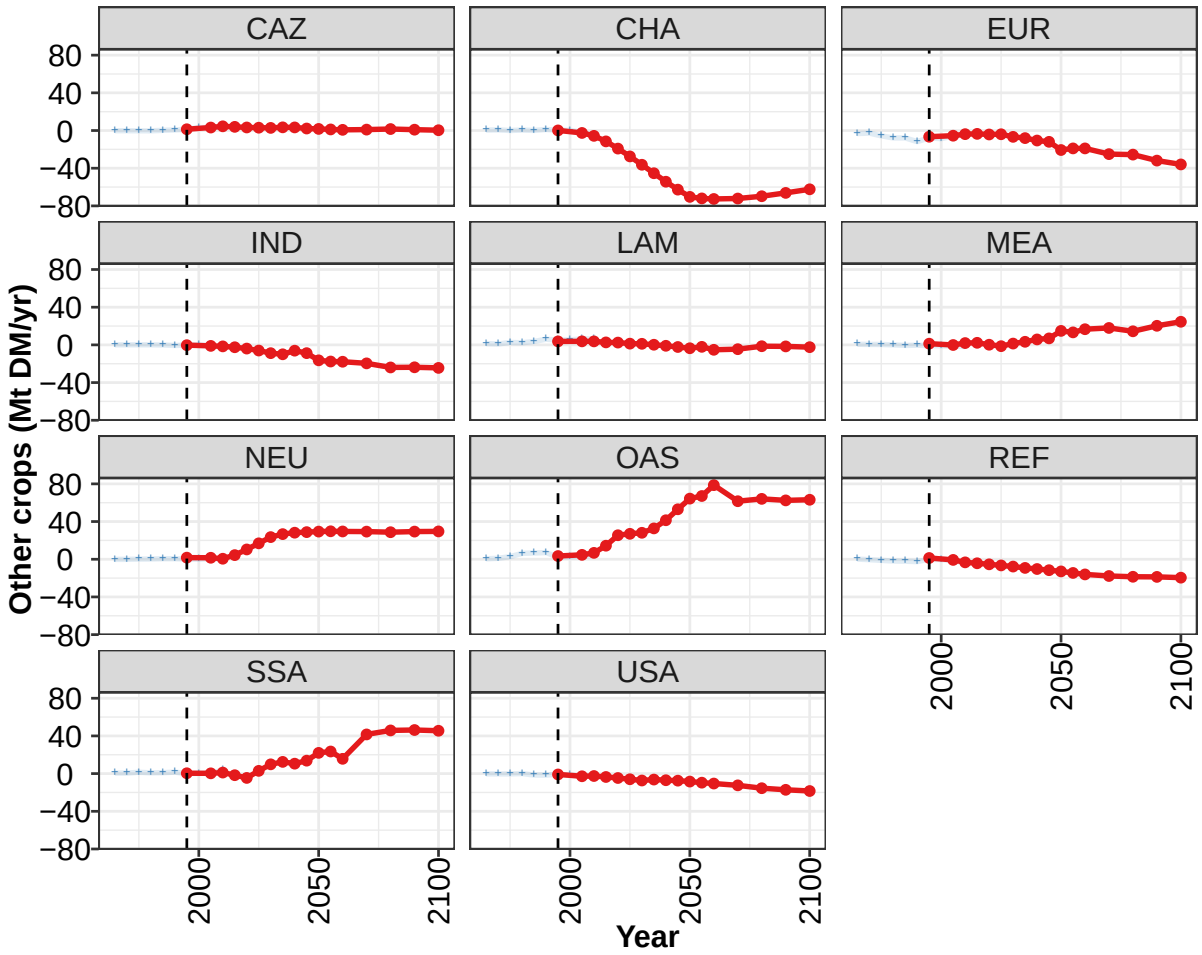
Table 1521: MAgPIE new_input — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.02	0.11	0.55	0.54	0.75	0.11	0.08	0.38	0.17	-0.34
CHA	-0.77	0.66	-0.08	-0.79	-0.81	0.84	-0.33	-0.36	-0.05	-0.07
EUR	-2.00	-0.64	-2.07	-0.66	-1.36	0.23	-0.31	0.42	-0.45	-0.63
IND	-0.04	-0.02	-0.18	0.00	-0.01	0.03	0.03	0.03	0.12	1.57
LAM	0.34	2.07	0.70	-0.85	0.30	-0.57	-1.08	-3.21	-2.82	-1.11
MEA	0.03	-0.16	0.03	-0.18	0.05	-1.57	-0.68	-0.85	-0.40	-1.17
NEU	-0.03	0.09	-0.15	-0.13	-0.45	0.28	0.12	0.26	-0.12	0.03
OAS	-1.06	-2.83	-3.39	-3.29	-5.56	-2.33	-1.60	-1.00	-1.62	-1.40
REF	0.03	0.09	-0.23	-1.23	-1.60	0.03	0.08	0.50	-0.33	0.06
SSA	1.28	0.80	-0.74	1.03	-0.90	-0.40	0.40	-0.66	0.85	0.16
USA	2.21	-0.16	5.57	5.55	9.59	3.34	3.29	4.47	4.65	2.90

Table 1522: FAO — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr)

58.1.6 Other crops





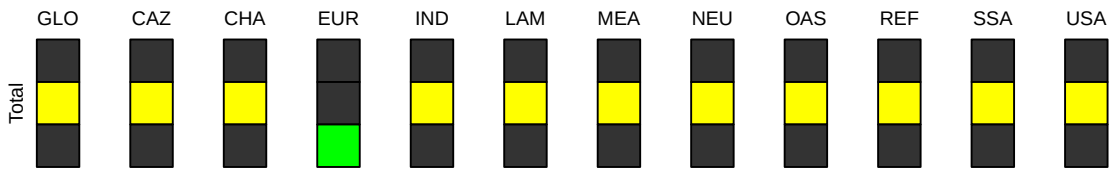


Figure 411: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	5.7	0.8	1.8	0.6	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0
CAZ	1.4	3.2	4.5	3.9	3.3	3.0	2.8	3.4	3.3	2.1	1.7
CHA	0.1	-2.6	-5.7	-11.5	-19.1	-27.5	-36.3	-45.3	-54.3	-62.7	-70.4
EUR	-6.6	-5.5	-3.8	-3.5	-4.2	-3.9	-6.7	-8.0	-10.6	-12.0	-20.7
IND	-0.3	-1.1	-1.6	-2.5	-3.9	-6.0	-8.8	-10.0	-6.1	-8.7	-16.4
LAM	3.7	3.8	3.7	2.7	2.5	1.3	1.2	0.2	-0.9	-2.2	-3.5
MEA	1.3	-0.1	1.9	2.2	0.2	-1.3	1.4	3.3	5.8	6.9	14.9
NEU	1.7	1.6	0.6	4.4	10.4	16.9	23.5	26.7	28.2	28.8	29.4
OAS	3.4	4.7	6.8	14.4	25.5	27.0	28.1	32.8	41.4	53.1	64.4
REF	1.4	-0.7	-3.3	-4.3	-5.4	-6.5	-7.8	-9.2	-10.3	-11.6	-12.9
SSA	0.4	0.3	1.1	-1.7	-4.6	2.9	9.9	12.5	10.6	13.8	22.0
USA	-0.9	-2.8	-2.5	-3.6	-4.7	-6.0	-7.3	-6.3	-7.0	-7.5	-8.4

Table 1523: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops (Mt DM/yr) [PART 1/2]

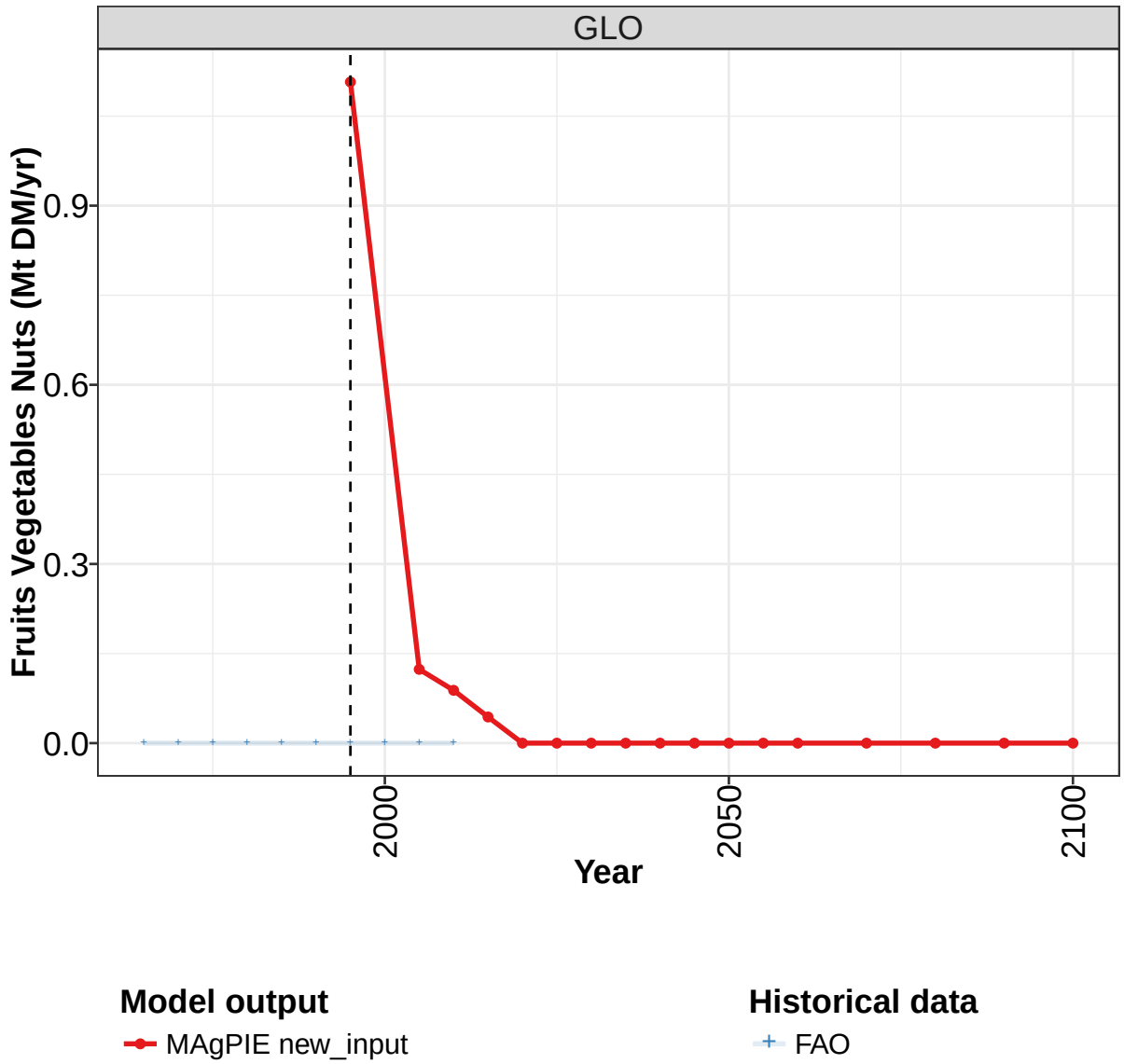
	2055	2060	2070	2080	2090	2100
GLO	-0.0	-0.0	0.0	-0.0	0.0	-0.0
CAZ	1.2	0.7	1.0	1.6	0.9	0.3
CHA	-72.0	-72.6	-72.2	-69.7	-66.2	-62.4
EUR	-19.0	-19.0	-25.0	-25.6	-31.9	-36.0
IND	-17.6	-17.9	-19.6	-23.9	-23.8	-24.4
LAM	-2.1	-5.2	-4.6	-1.4	-1.6	-2.4
MEA	13.3	16.7	18.0	14.4	20.3	24.6
NEU	29.7	29.5	29.4	28.7	29.4	29.6
OAS	67.1	78.7	61.6	64.1	62.5	63.2
REF	-14.5	-16.1	-17.8	-18.6	-18.7	-19.5
SSA	23.5	15.7	41.6	45.9	46.3	45.5
USA	-9.6	-10.5	-12.5	-15.5	-17.2	-18.5

Table 1524: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.20	-0.20	-0.27	-0.34	0.20	0.60	1.35	3.10	3.29	4.01
CHA	0.44	0.69	0.03	0.47	0.11	1.12	0.35	0.21	-1.81	-5.02
EUR	-3.20	-2.74	-5.64	-7.89	-7.87	-11.78	-7.79	-8.65	-5.78	-4.12
IND	0.06	0.09	0.10	0.08	-0.11	-0.61	-0.18	0.12	-0.88	-1.23
LAM	1.37	0.94	2.58	2.24	3.63	5.98	5.14	5.32	6.44	6.35
MEA	0.67	0.49	0.44	-0.03	-0.52	-0.37	-0.75	-1.02	-1.15	-1.72
NEU	-0.14	-0.08	0.13	0.26	0.59	0.57	0.22	-0.03	0.51	0.33
OAS	0.46	1.02	2.71	6.22	6.63	7.06	2.31	2.51	2.86	4.02
REF	0.17	-0.42	-1.19	-1.89	-2.08	-2.49	-0.05	-0.27	-1.46	-4.04
SSA	0.62	0.53	1.41	0.84	0.98	1.56	-0.02	0.28	0.60	3.70
USA	-0.26	-0.30	-0.31	0.06	-1.56	-1.65	-0.56	-1.57	-2.62	-2.27

Table 1525: FAO — Trade—Net-Trade—Crops—Other crops (Mt DM/yr)

58.1.7 Other crops—Fruits Vegetables Nuts



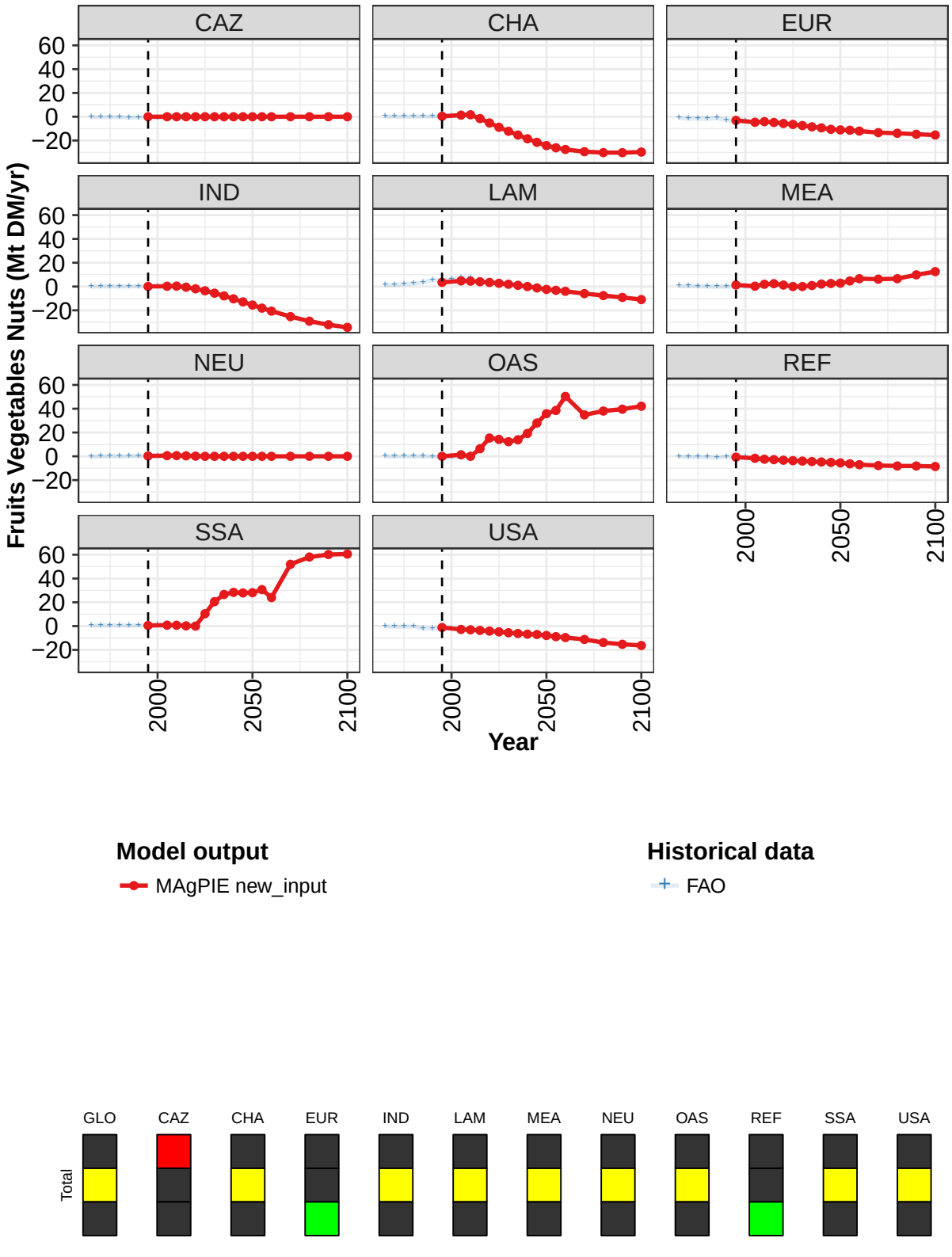


Figure 412: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.1	0.1	0.1	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0
CAZ	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.4	1.4	1.7	-1.5	-5.2	-8.8	-12.2	-15.4	-18.5	-21.5	-24.3
EUR	-3.1	-4.7	-4.1	-4.8	-5.6	-6.5	-7.4	-8.5	-9.4	-10.6	-11.1
IND	0.1	0.2	0.4	-0.6	-1.9	-3.6	-5.6	-7.9	-10.3	-12.9	-15.6
LAM	3.5	4.7	4.5	4.0	3.4	2.7	1.9	1.0	0.0	-1.2	-2.4
MEA	1.3	0.3	1.9	2.4	1.2	0.0	0.0	0.8	2.1	2.6	2.8
NEU	0.3	0.6	0.6	0.4	0.2	0.0	-0.0	0.0	0.0	0.0	0.0
OAS	0.0	1.3	-0.0	6.4	15.4	14.2	12.3	13.9	19.3	28.0	35.8
REF	-0.7	-1.7	-2.4	-2.8	-3.3	-3.7	-4.0	-4.4	-4.8	-5.1	-5.5
SSA	0.5	0.8	0.7	0.2	0.0	10.4	20.6	26.6	28.4	27.9	28.1
USA	-1.2	-2.8	-3.1	-3.6	-4.2	-4.8	-5.6	-6.2	-6.8	-7.1	-7.9

Table 1526: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

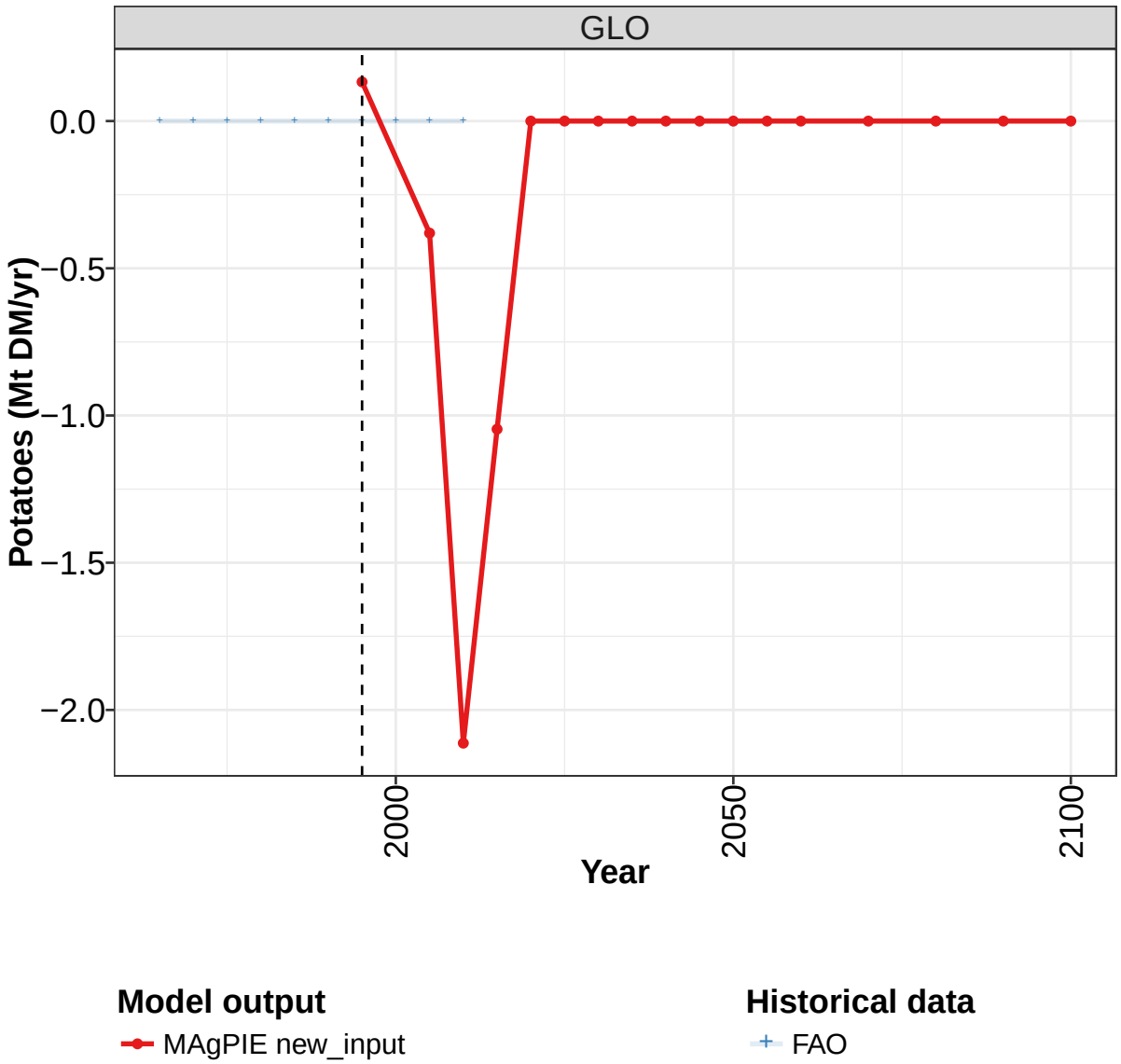
	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	-0.0	0.0	0.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0
CHA	-26.1	-27.5	-29.4	-30.1	-30.2	-29.7
EUR	-11.3	-12.1	-13.4	-13.9	-14.7	-15.4
IND	-18.1	-20.7	-25.3	-29.1	-32.1	-34.3
LAM	-3.2	-4.0	-5.9	-7.6	-9.2	-11.0
MEA	4.7	6.6	6.2	6.6	9.8	12.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	38.6	50.3	34.8	38.0	39.6	42.1
REF	-6.3	-7.0	-7.8	-8.1	-8.1	-8.5
SSA	30.7	24.0	51.9	58.1	60.1	60.6
USA	-8.9	-9.6	-11.2	-13.8	-15.3	-16.3

Table 1527: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.23	-0.26	-0.47	-0.55	-0.61	-0.62	-0.70	-0.80	-1.01	-1.19
CHA	0.09	0.14	0.12	0.16	0.18	0.24	0.36	0.49	1.80	2.35
EUR	-1.19	-1.51	-1.59	-1.75	-1.18	-3.04	-3.17	-3.42	-4.66	-4.23
IND	0.05	0.06	0.09	0.13	0.16	0.12	0.18	0.21	0.38	0.61
LAM	1.27	1.38	1.85	2.59	3.50	5.22	5.48	6.03	7.42	7.43
MEA	0.34	0.46	0.30	-0.00	-0.07	0.00	-0.16	-0.07	-0.11	-0.09
NEU	-0.12	-0.03	-0.01	-0.02	0.17	0.11	0.14	0.29	0.51	0.61
OAS	-0.03	-0.04	-0.00	0.01	-0.02	-0.18	-0.78	-0.76	-0.82	-0.91
REF	-0.25	-0.35	-0.54	-0.70	-0.82	-0.36	-0.77	-0.74	-1.74	-2.43
SSA	0.48	0.67	0.65	0.57	0.64	0.64	0.61	0.79	1.07	0.97
USA	-0.40	-0.53	-0.41	-0.42	-1.95	-2.14	-1.17	-2.03	-2.84	-3.12

Table 1528: FAO — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

58.1.8 Other crops—Potatoes



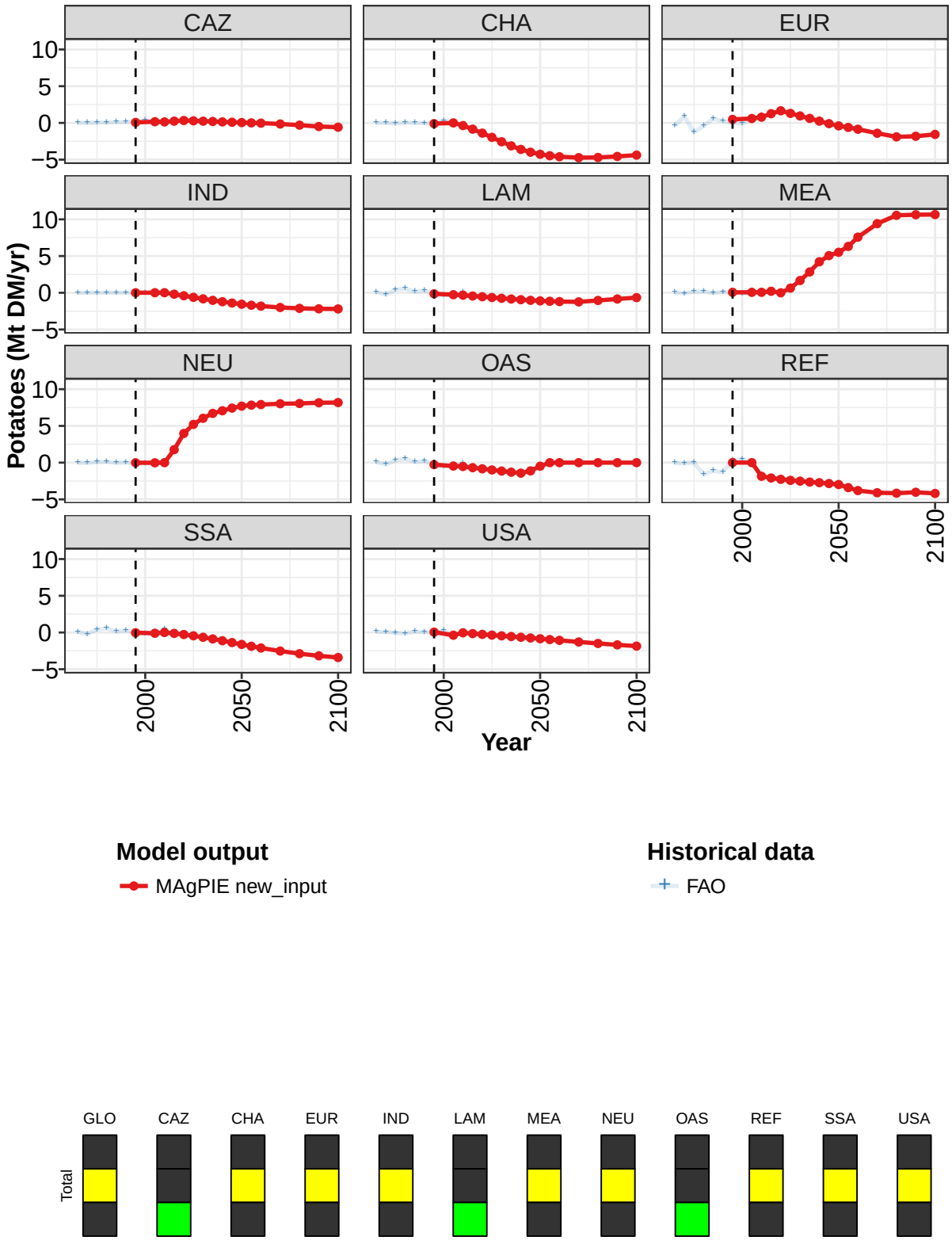


Figure 413: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.1	-0.4	-2.1	-1.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0
CAZ	0.1	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.0
CHA	-0.1	0.0	-0.4	-0.8	-1.4	-2.0	-2.6	-3.1	-3.6	-4.0	-4.3
EUR	0.5	0.6	0.8	1.3	1.7	1.3	1.0	0.6	0.2	-0.1	-0.4
IND	0.0	0.0	0.0	-0.2	-0.4	-0.6	-0.8	-1.0	-1.2	-1.4	-1.6
LAM	-0.1	-0.3	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9	-1.0	-1.1
MEA	0.1	0.1	0.1	0.2	0.0	0.6	1.7	2.8	4.2	5.1	5.5
NEU	-0.0	-0.0	0.0	1.8	4.0	5.2	6.0	6.7	7.1	7.4	7.7
OAS	-0.3	-0.5	-0.5	-0.7	-0.8	-1.0	-1.1	-1.3	-1.4	-1.1	-0.5
REF	0.0	0.0	-1.9	-2.1	-2.3	-2.4	-2.5	-2.6	-2.7	-2.8	-3.0
SSA	-0.0	-0.1	0.0	-0.1	-0.3	-0.4	-0.6	-0.9	-1.1	-1.4	-1.6
USA	0.0	-0.4	-0.0	-0.1	-0.3	-0.4	-0.5	-0.5	-0.6	-0.7	-0.8

Table 1529: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

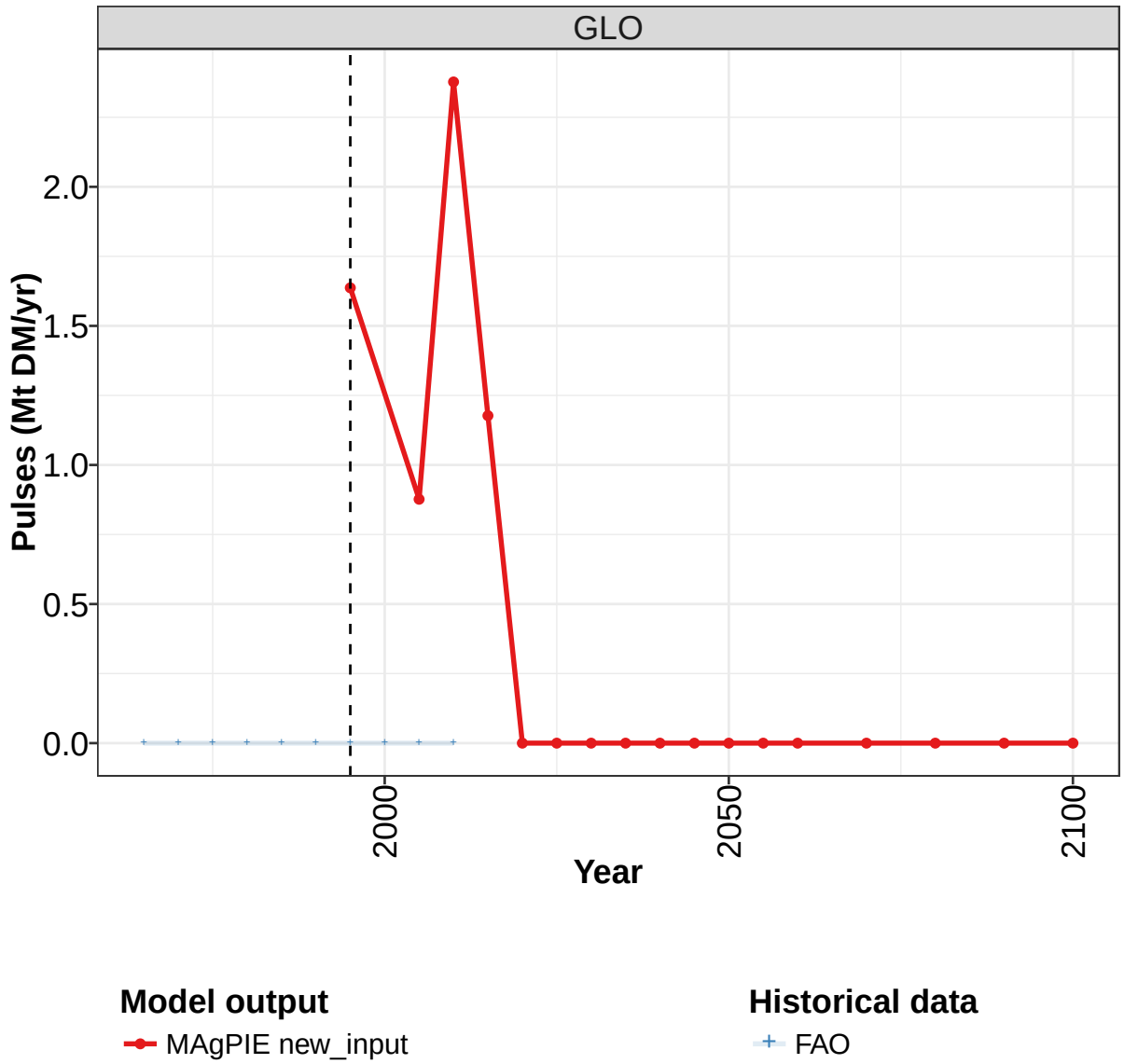
	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	0.0	0.0	0.0
CAZ	0.0	-0.0	-0.1	-0.3	-0.5	-0.6
CHA	-4.5	-4.6	-4.7	-4.7	-4.6	-4.4
EUR	-0.6	-0.9	-1.4	-1.9	-1.8	-1.6
IND	-1.7	-1.8	-2.0	-2.1	-2.2	-2.2
LAM	-1.2	-1.2	-1.2	-1.0	-0.8	-0.7
MEA	6.3	7.6	9.4	10.5	10.6	10.6
NEU	7.8	7.9	8.0	8.1	8.2	8.2
OAS	0.0	0.0	0.0	0.0	0.0	0.0
REF	-3.4	-3.8	-4.1	-4.2	-4.0	-4.2
SSA	-1.9	-2.1	-2.5	-2.9	-3.2	-3.4
USA	-1.0	-1.1	-1.3	-1.5	-1.7	-1.9

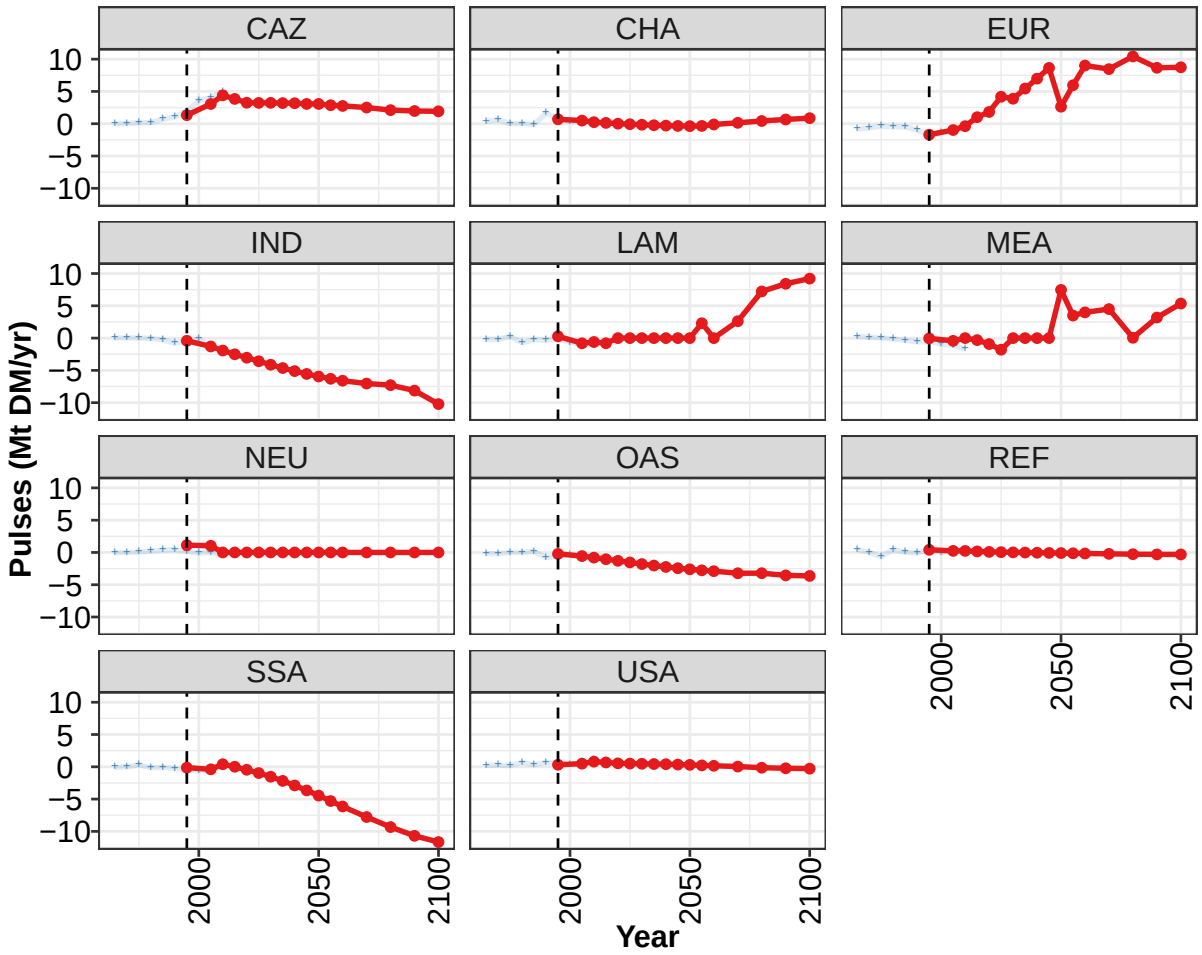
Table 1530: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.02	0.03	0.04	0.08	0.10	0.11	0.18	0.31	0.29	0.26
CHA	-0.01	-0.01	-0.09	0.06	-0.01	-0.03	-0.08	0.29	0.20	-0.28
EUR	-0.36	0.87	-1.27	-0.42	0.58	0.23	-0.00	-0.07	0.35	1.02
IND	0.00	-0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.02	0.05
LAM	0.09	-0.27	0.41	0.56	0.14	0.30	-0.18	-0.35	-0.16	0.12
MEA	0.04	-0.09	0.13	0.20	-0.03	0.10	0.02	-0.11	0.08	0.16
NEU	-0.00	-0.04	0.07	0.14	-0.02	0.03	-0.05	-0.13	-0.02	0.09
OAS	0.07	-0.24	0.30	0.54	0.09	0.19	-0.29	-0.51	-0.37	-0.08
REF	-0.04	-0.09	0.01	-1.61	-1.12	-1.27	0.33	0.46	-0.04	-1.76
SSA	0.09	-0.23	0.41	0.59	0.14	0.30	-0.05	-0.13	0.01	0.47
USA	0.11	0.08	-0.04	-0.15	0.13	0.03	0.11	0.22	-0.37	-0.05

Table 1531: FAO — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr)

58.1.9 Other crops—Pulses





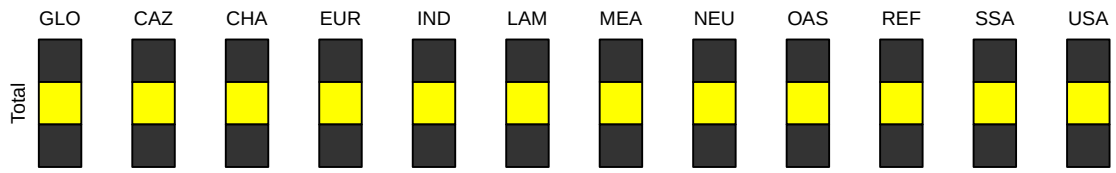


Figure 414: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.6	0.9	2.4	1.2	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0
CAZ	1.3	3.1	4.4	3.8	3.3	3.2	3.2	3.2	3.2	3.1	3.1
CHA	0.7	0.5	0.2	0.1	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4
EUR	-1.7	-1.0	-0.4	1.0	1.8	4.2	3.9	5.4	7.0	8.6	2.6
IND	-0.4	-1.3	-1.9	-2.5	-3.0	-3.6	-4.1	-4.6	-5.1	-5.6	-5.9
LAM	0.3	-0.8	-0.6	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	-0.0	-0.4	0.0	-0.3	-0.9	-1.8	0.0	0.0	0.0	0.0	7.5
NEU	1.1	1.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0
OAS	-0.2	-0.6	-0.8	-1.0	-1.3	-1.5	-1.8	-2.0	-2.2	-2.4	-2.6
REF	0.4	0.2	0.2	0.2	0.1	0.0	0.0	-0.0	-0.0	-0.1	-0.1
SSA	-0.1	-0.4	0.4	0.0	-0.5	-1.0	-1.5	-2.2	-2.9	-3.7	-4.5
USA	0.3	0.5	0.8	0.7	0.5	0.5	0.5	0.4	0.4	0.3	0.3

Table 1532: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

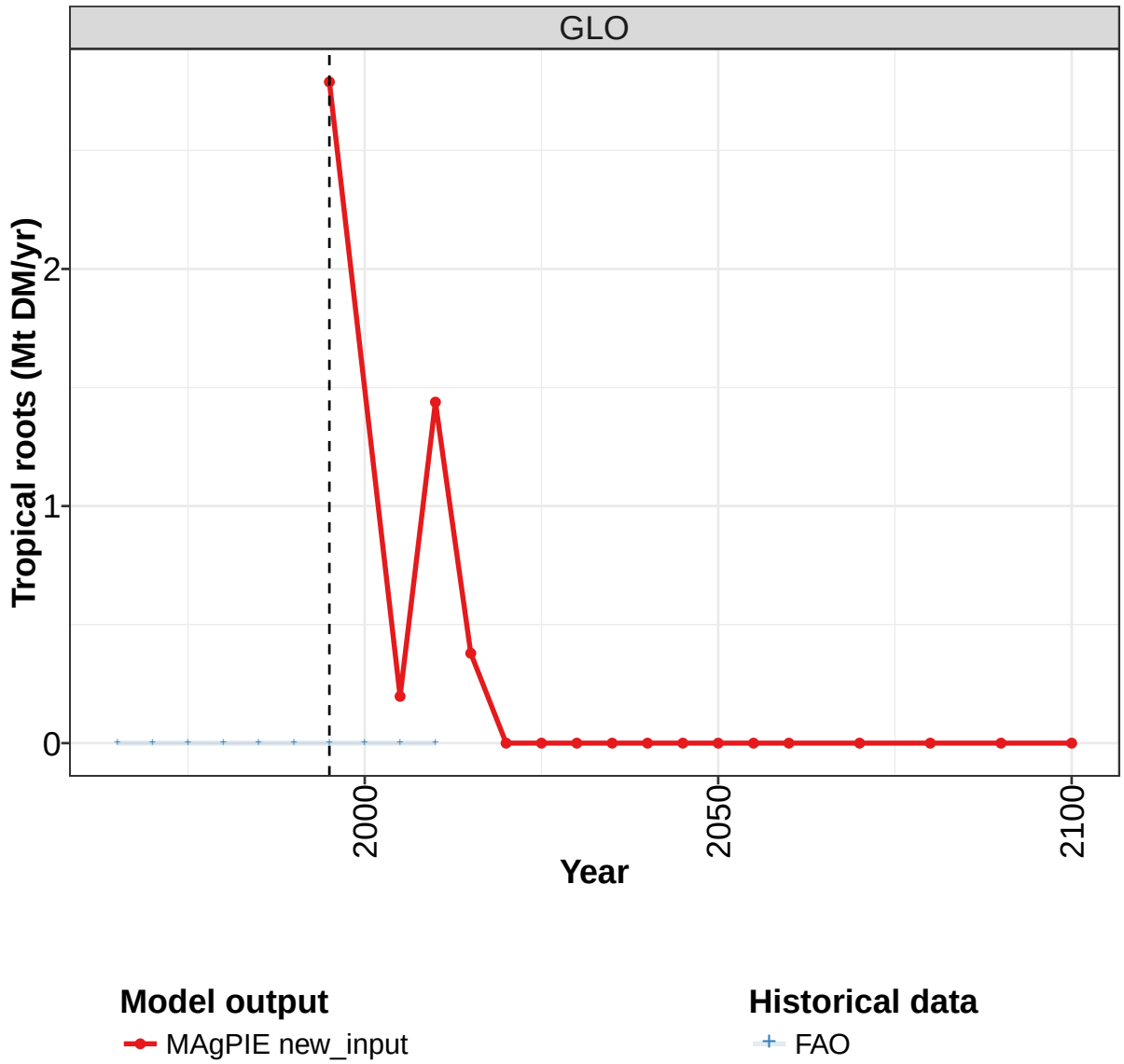
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	-0.0	-0.0	0.0	-0.0
CAZ	2.9	2.8	2.5	2.1	2.0	1.9
CHA	-0.3	-0.1	0.1	0.4	0.7	0.9
EUR	6.0	9.0	8.5	10.4	8.7	8.7
IND	-6.3	-6.6	-7.0	-7.3	-8.1	-10.2
LAM	2.3	-0.0	2.6	7.2	8.4	9.2
MEA	3.5	4.0	4.5	0.1	3.2	5.4
NEU	0.0	0.0	0.0	0.0	0.0	0.0
OAS	-2.8	-2.9	-3.2	-3.2	-3.5	-3.6
REF	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3
SSA	-5.3	-6.1	-7.8	-9.3	-10.7	-11.7
USA	0.2	0.2	0.0	-0.1	-0.2	-0.3

Table 1533: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.01	0.04	0.16	0.17	0.70	1.06	1.93	3.60	4.03	5.02
CHA	0.37	0.58	0.04	0.03	-0.11	1.64	0.84	0.25	0.63	0.19
EUR	-0.86	-0.61	-0.39	-0.48	-0.50	-0.98	-1.86	-1.43	-1.10	-0.71
IND	-0.00	0.03	0.00	-0.07	-0.28	-0.78	-0.41	-0.10	-1.29	-1.89
LAM	-0.19	-0.22	0.28	-0.72	-0.26	-0.33	-0.12	-0.66	-0.99	-1.12
MEA	0.26	0.12	0.01	-0.15	-0.34	-0.58	-0.56	-0.93	-1.15	-1.72
NEU	-0.03	-0.00	0.07	0.20	0.38	0.43	0.17	-0.09	-0.01	-0.31
OAS	-0.18	-0.20	-0.00	0.00	0.16	-0.79	-0.52	-0.32	-0.65	-1.30
REF	0.44	0.03	-0.66	0.47	0.03	-0.07	0.42	-0.03	0.32	0.20
SSA	-0.06	-0.02	0.31	-0.13	-0.09	-0.28	-0.48	-0.62	-0.51	0.55
USA	0.23	0.26	0.19	0.68	0.32	0.68	0.58	0.33	0.72	1.08

Table 1534: FAO — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr)

58.1.10 Other crops—Tropical roots



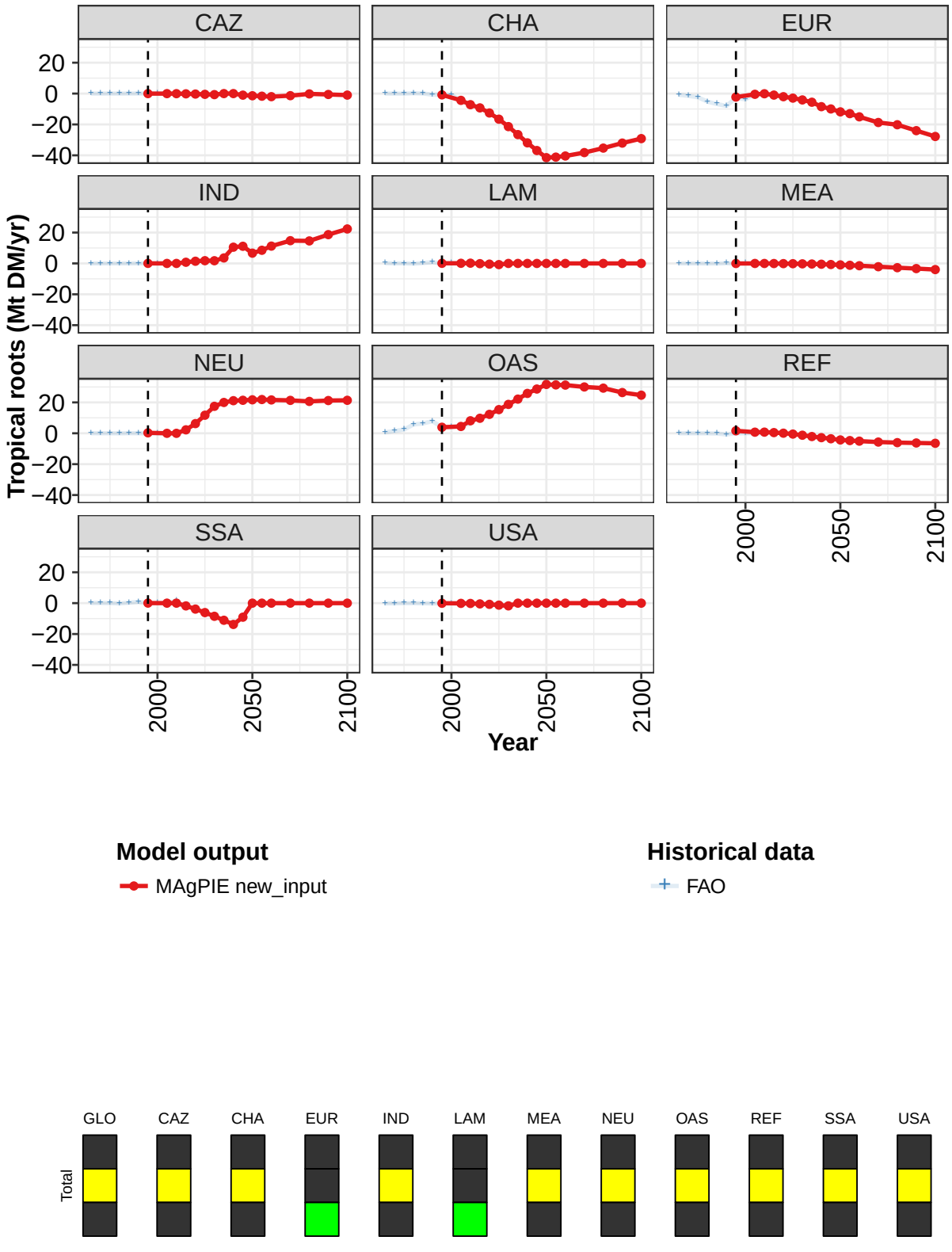


Figure 415: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.8	0.2	1.4	0.4	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0
CAZ	-0.0	-0.0	-0.1	-0.2	-0.3	-0.5	-0.7	0.0	0.0	-1.0	-1.4
CHA	-0.8	-4.4	-7.2	-9.3	-12.6	-16.6	-21.4	-26.6	-31.9	-36.9	-41.5
EUR	-2.3	-0.5	-0.1	-1.0	-2.0	-2.9	-4.1	-5.6	-8.5	-10.0	-11.8
IND	0.0	-0.0	0.0	0.8	1.4	1.8	1.8	3.6	10.5	11.1	6.7
LAM	0.1	0.1	0.2	-0.1	-0.4	-0.8	0.0	0.0	-0.0	0.0	0.0
MEA	-0.0	-0.0	-0.0	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5	-0.7	-0.9
NEU	0.3	0.0	-0.0	2.3	6.3	11.7	17.5	20.0	21.1	21.4	21.7
OAS	3.9	4.4	8.1	9.7	12.3	15.3	18.7	22.2	25.8	28.7	31.7
REF	1.6	0.7	0.8	0.5	0.1	-0.5	-1.2	-2.1	-2.8	-3.5	-4.3
SSA	0.0	0.0	0.0	-1.8	-3.8	-6.1	-8.5	-11.1	-13.8	-9.1	0.0
USA	-0.1	-0.1	-0.2	-0.5	-0.8	-1.3	-1.8	0.0	-0.0	0.0	0.0

Table 1535: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

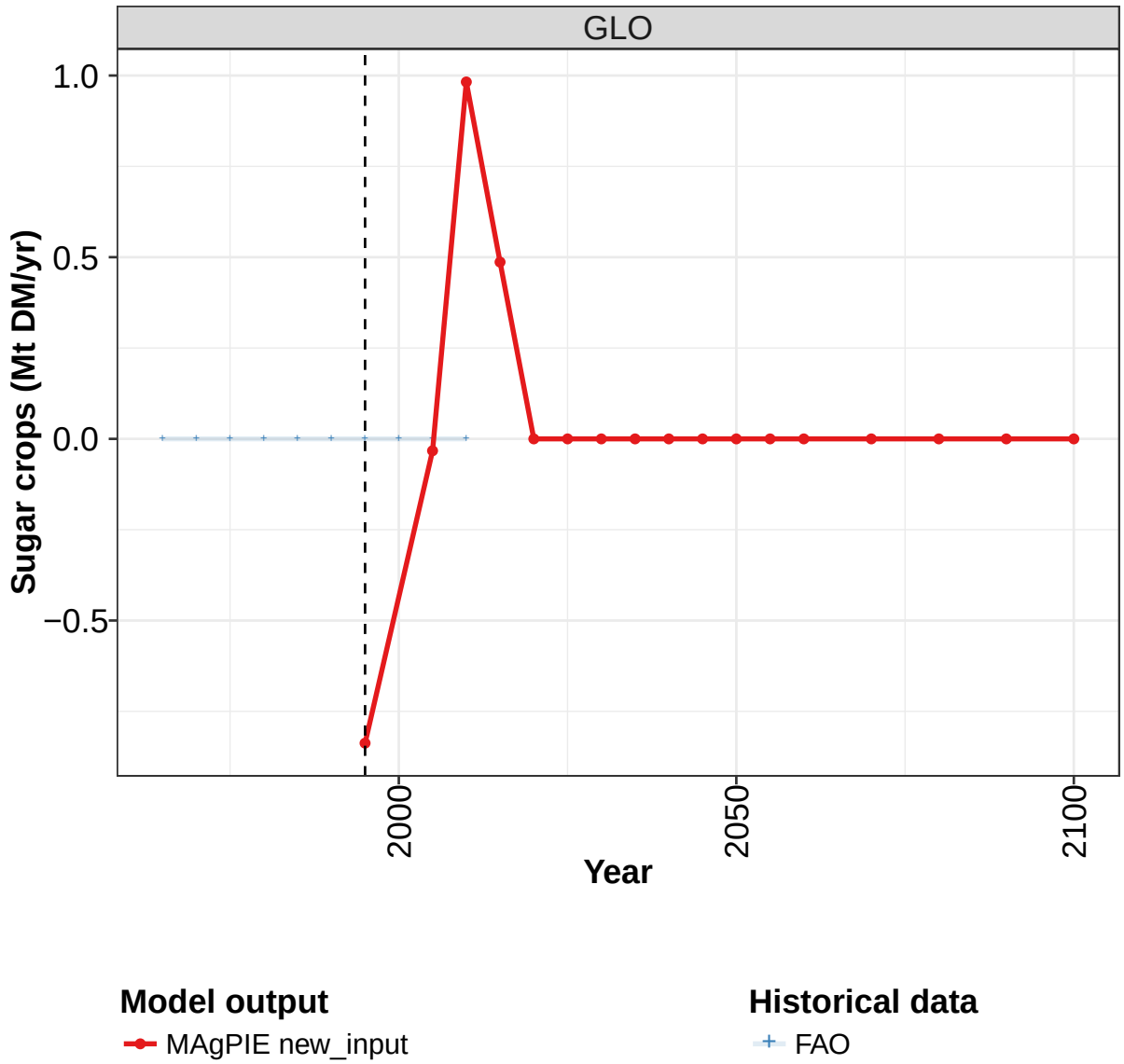
	2055	2060	2070	2080	2090	2100
GLO	-0.0	-0.0	-0.0	-0.0	0.0	0.0
CAZ	-1.7	-2.0	-1.4	-0.2	-0.6	-1.0
CHA	-41.2	-40.4	-38.2	-35.3	-32.1	-29.2
EUR	-13.0	-15.1	-18.7	-20.2	-24.0	-27.8
IND	8.5	11.2	14.7	14.6	18.7	22.3
LAM	0.0	-0.0	-0.0	0.0	-0.0	-0.0
MEA	-1.2	-1.5	-2.1	-2.8	-3.3	-4.0
NEU	21.9	21.6	21.3	20.7	21.2	21.4
OAS	31.4	31.2	30.0	29.3	26.4	24.7
REF	-4.7	-5.1	-5.7	-6.0	-6.3	-6.5
SSA	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0

Table 1536: MAgPIE new_input — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.00	-0.02	-0.01	-0.03	0.01	0.05	-0.05	-0.01	-0.03	-0.08
CHA	-0.00	-0.02	-0.04	0.22	0.06	-0.72	-0.77	-0.83	-4.44	-7.28
EUR	-0.79	-1.50	-2.39	-5.23	-6.77	-8.00	-2.75	-3.74	-0.37	-0.21
IND	0.00	-0.00	0.00	-0.00	0.00	0.04	0.03	0.00	0.01	0.00
LAM	0.20	0.04	0.04	-0.19	0.25	0.79	-0.05	0.30	0.17	-0.08
MEA	0.03	-0.00	-0.00	-0.08	-0.07	0.11	-0.06	0.09	0.04	-0.08
NEU	0.02	-0.00	0.00	-0.06	0.06	-0.00	-0.04	-0.10	0.03	-0.07
OAS	0.61	1.50	2.41	5.67	6.40	7.84	3.90	4.09	4.70	6.31
REF	0.02	-0.00	0.00	-0.05	-0.17	-0.78	-0.03	0.05	-0.00	-0.04
SSA	0.11	0.12	0.04	-0.19	0.29	0.90	-0.11	0.23	0.03	1.71
USA	-0.19	-0.12	-0.05	-0.04	-0.07	-0.23	-0.08	-0.09	-0.13	-0.19

Table 1537: FAO — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr)

58.1.11 Sugar crops



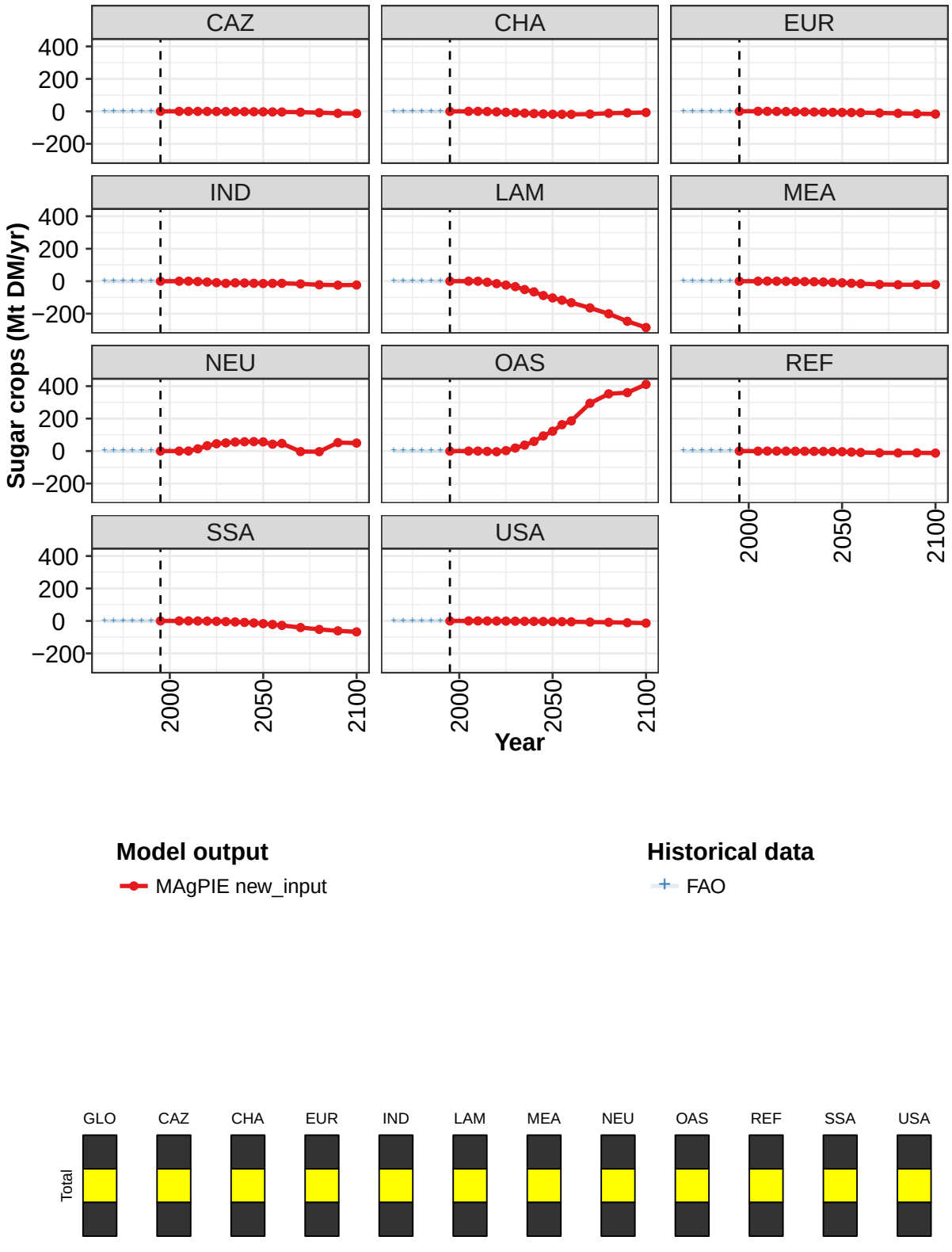


Figure 416: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-1	-0	1	0	-0	0	-0	-0	0	-0	0
CAZ	-0	0	0	-0	-1	-1	-2	-2	-2	-3	-3
CHA	-1	0	-0	-1	-3	-6	-8	-11	-14	-16	-18
EUR	0	0	0	-1	-1	-2	-3	-4	-5	-6	-7
IND	-0	0	0	-2	-5	-9	-13	-10	-11	-13	-14
LAM	-0	0	0	-6	-15	-24	-34	-51	-65	-88	-103
MEA	0	0	1	-0	-1	-1	-2	-4	-5	-7	-10
NEU	-0	0	0	14	33	45	50	56	57	58	57
OAS	-1	0	0	-2	-4	3	19	36	59	93	122
REF	-0	-1	0	-0	-1	-1	-1	-2	-2	-3	-4
SSA	-0	-0	0	-0	-1	-2	-4	-6	-9	-12	-17
USA	0	0	0	-0	-1	-1	-2	-2	-3	-3	-4

Table 1538: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

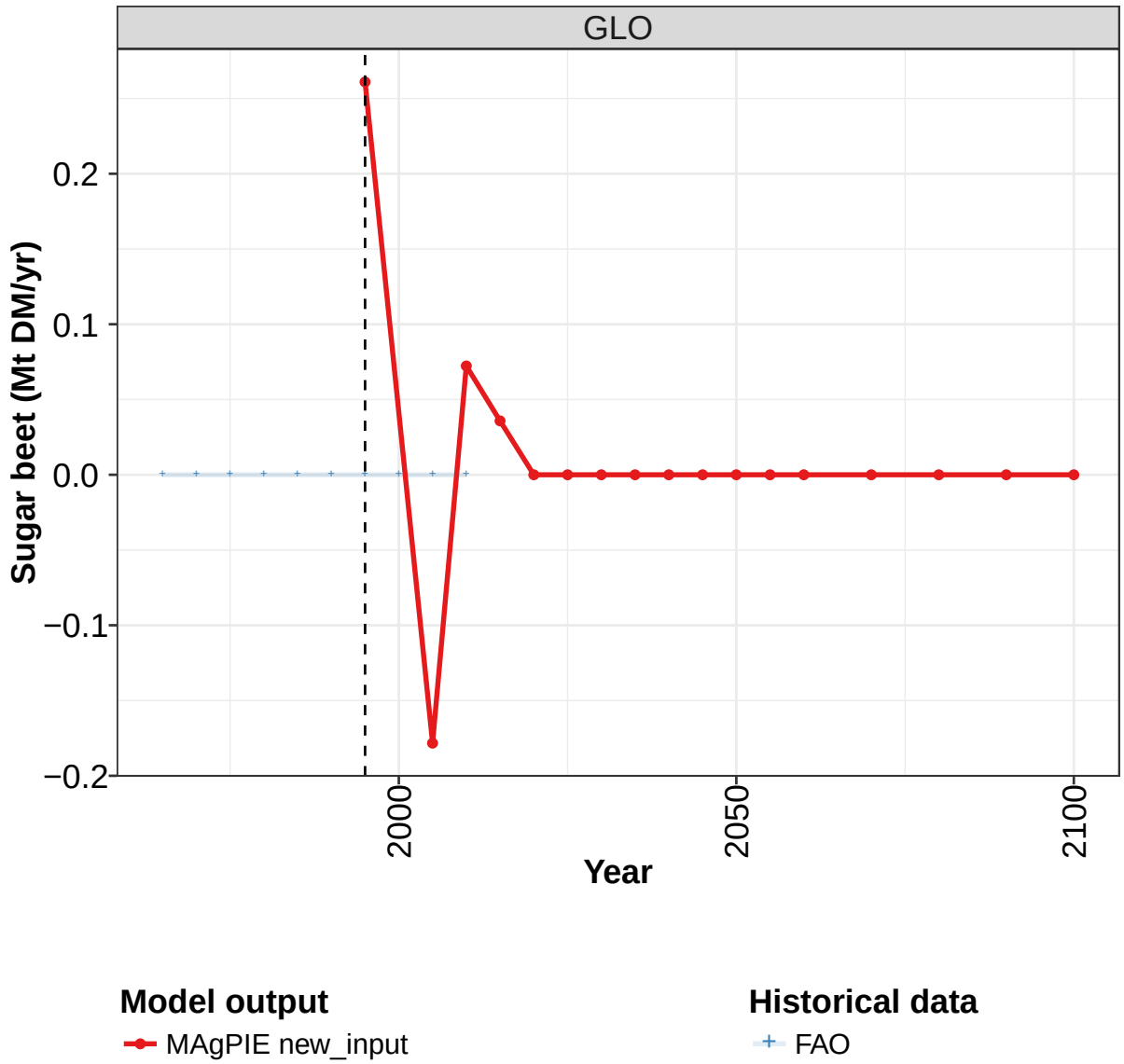
	2055	2060	2070	2080	2090	2100
GLO	0	-0	-0	0	0	-0
CAZ	-3	-4	-5	-8	-12	-13
CHA	-18	-19	-17	-12	-9	-7
EUR	-7	-8	-10	-12	-15	-17
IND	-13	-13	-17	-22	-24	-23
LAM	-117	-132	-164	-201	-247	-285
MEA	-13	-15	-20	-22	-22	-21
NEU	42	47	-3	-4	52	49
OAS	162	186	295	353	360	411
REF	-6	-9	-11	-12	-11	-12
SSA	-22	-28	-41	-52	-61	-67
USA	-4	-5	-7	-8	-11	-14

Table 1539: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.004	0.000	-0.001	-0.002	-0.016	0.000	0.017	-0.001	0.001	-0.020
CHA	-0.269	-0.002	-0.003	-0.002	0.715	0.406	-0.526	-0.001	0.784	-0.016
EUR	0.091	0.001	0.014	0.036	-0.093	-0.304	0.235	-0.080	0.106	-0.236
IND	0.001	0.000	-0.000	-0.000	-0.003	0.000	0.003	0.000	0.000	-0.004
LAM	0.053	0.011	0.002	-0.007	-0.165	0.026	0.170	0.052	-0.256	-0.098
MEA	0.016	-0.000	-0.004	-0.009	-0.066	0.000	0.071	-0.003	0.002	-0.086
NEU	0.026	0.016	0.012	0.023	-0.015	0.011	0.058	-0.020	0.006	0.008
OAS	0.045	-0.006	0.006	-0.001	-0.140	-0.117	-0.370	-0.004	0.009	0.613
REF	-0.007	-0.018	-0.017	-0.023	-0.056	-0.019	0.177	0.062	-0.658	0.056
SSA	0.039	-0.000	-0.008	-0.018	-0.159	0.000	0.172	-0.009	0.007	-0.202
USA	0.001	0.000	-0.000	0.002	-0.002	-0.002	-0.007	0.003	-0.001	-0.017

Table 1540: FAO — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr)

58.1.12 Sugar crops—Sugar beet



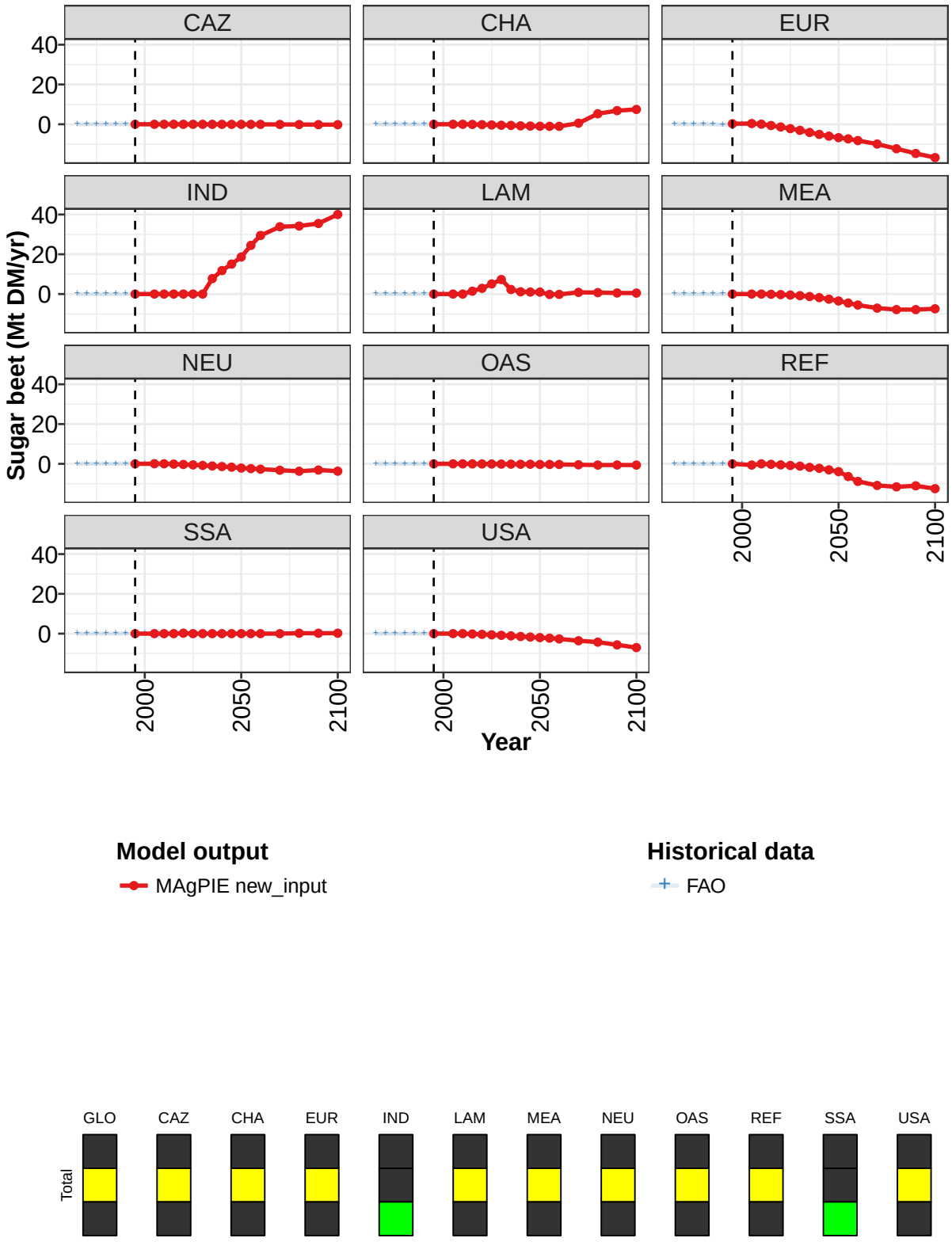


Figure 417: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.3	-0.2	0.1	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0
CAZ	-0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
CHA	0.0	0.0	-0.0	-0.1	-0.2	-0.3	-0.5	-0.6	-0.8	-0.9	-1.0
EUR	0.3	0.4	0.0	-0.6	-1.4	-2.2	-3.1	-4.1	-5.1	-6.0	-6.7
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	11.8	15.1	18.6
LAM	-0.0	0.0	0.0	1.4	2.9	5.1	7.3	2.3	1.2	1.0	1.0
MEA	0.0	-0.0	0.0	-0.1	-0.3	-0.5	-0.8	-1.2	-1.8	-2.6	-3.5
NEU	-0.0	0.1	0.0	-0.1	-0.3	-0.5	-0.8	-1.1	-1.4	-1.7	-2.1
OAS	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3
REF	0.0	-0.6	0.0	-0.2	-0.5	-0.8	-1.2	-1.8	-2.2	-3.0	-3.9
SSA	-0.0	-0.0	-0.0	-0.0	0.2	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
USA	0.0	0.0	0.0	-0.2	-0.4	-0.6	-0.8	-1.1	-1.4	-1.7	-2.0

Table 1541: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

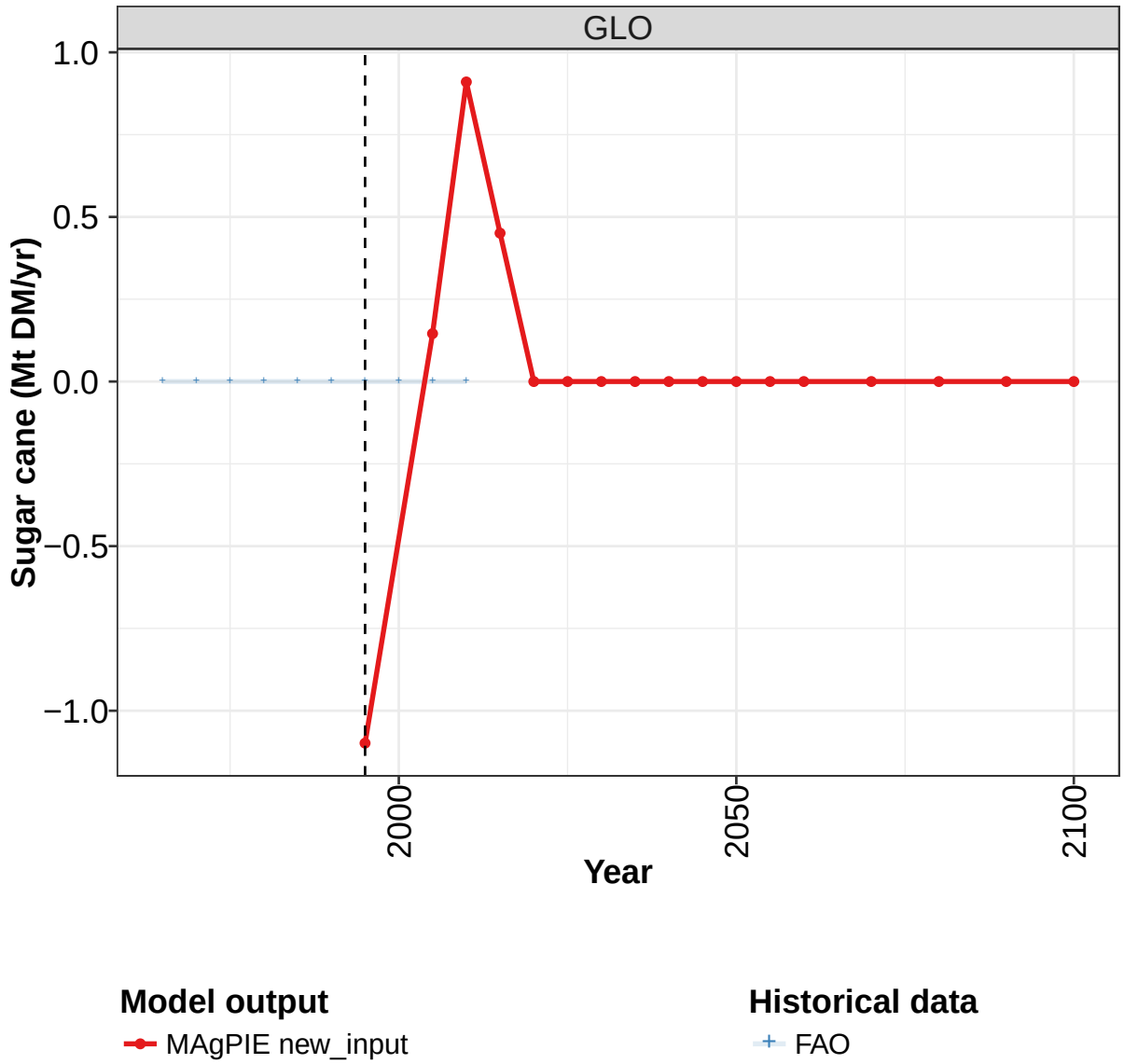
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	-0.0	-0.0	0.0	0.0
CAZ	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
CHA	-1.0	-1.1	0.6	5.3	6.9	7.5
EUR	-7.3	-8.2	-9.9	-12.3	-14.7	-16.8
IND	24.5	29.5	33.9	34.2	35.5	40.0
LAM	-0.2	-0.2	0.8	0.7	0.5	0.5
MEA	-4.5	-5.5	-7.1	-7.8	-7.8	-7.4
NEU	-2.4	-2.7	-3.2	-3.7	-3.1	-3.7
OAS	-0.3	-0.3	-0.5	-0.6	-0.6	-0.6
REF	-6.4	-8.8	-10.9	-11.6	-11.1	-12.5
SSA	-0.0	-0.0	-0.0	0.2	0.2	0.2
USA	-2.3	-2.7	-3.6	-4.3	-5.7	-7.0

Table 1542: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	-0.001	0.000	-0.000	-0.001	-0.001	0.006	-0.005	0.000	0.004	-0.001
CHA	-0.004	-0.003	-0.003	-0.001	-0.001	0.005	-0.005	0.001	0.382	-0.001
EUR	0.057	0.001	0.018	0.040	0.009	-0.262	0.086	-0.072	0.123	-0.110
IND	-0.000	0.000	-0.000	-0.000	-0.000	0.001	-0.001	0.000	0.001	-0.000
LAM	-0.013	0.001	-0.004	-0.013	-0.006	0.068	-0.057	0.006	0.039	-0.016
MEA	-0.005	0.000	-0.002	-0.005	-0.003	0.026	-0.022	0.002	0.014	-0.009
NEU	0.010	0.016	0.014	0.025	0.033	0.031	-0.013	-0.016	0.015	0.068
OAS	-0.012	0.001	-0.004	-0.012	-0.006	0.063	-0.052	0.005	0.036	-0.015
REF	-0.019	-0.018	-0.016	-0.021	-0.020	-0.004	0.124	0.065	-0.651	0.100
SSA	-0.012	0.001	-0.004	-0.013	-0.006	0.064	-0.053	0.005	0.036	-0.015
USA	-0.000	0.000	-0.000	0.002	0.001	0.001	-0.001	0.003	0.001	0.000

Table 1543: FAO — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr)

58.1.13 Sugar crops—Sugar cane



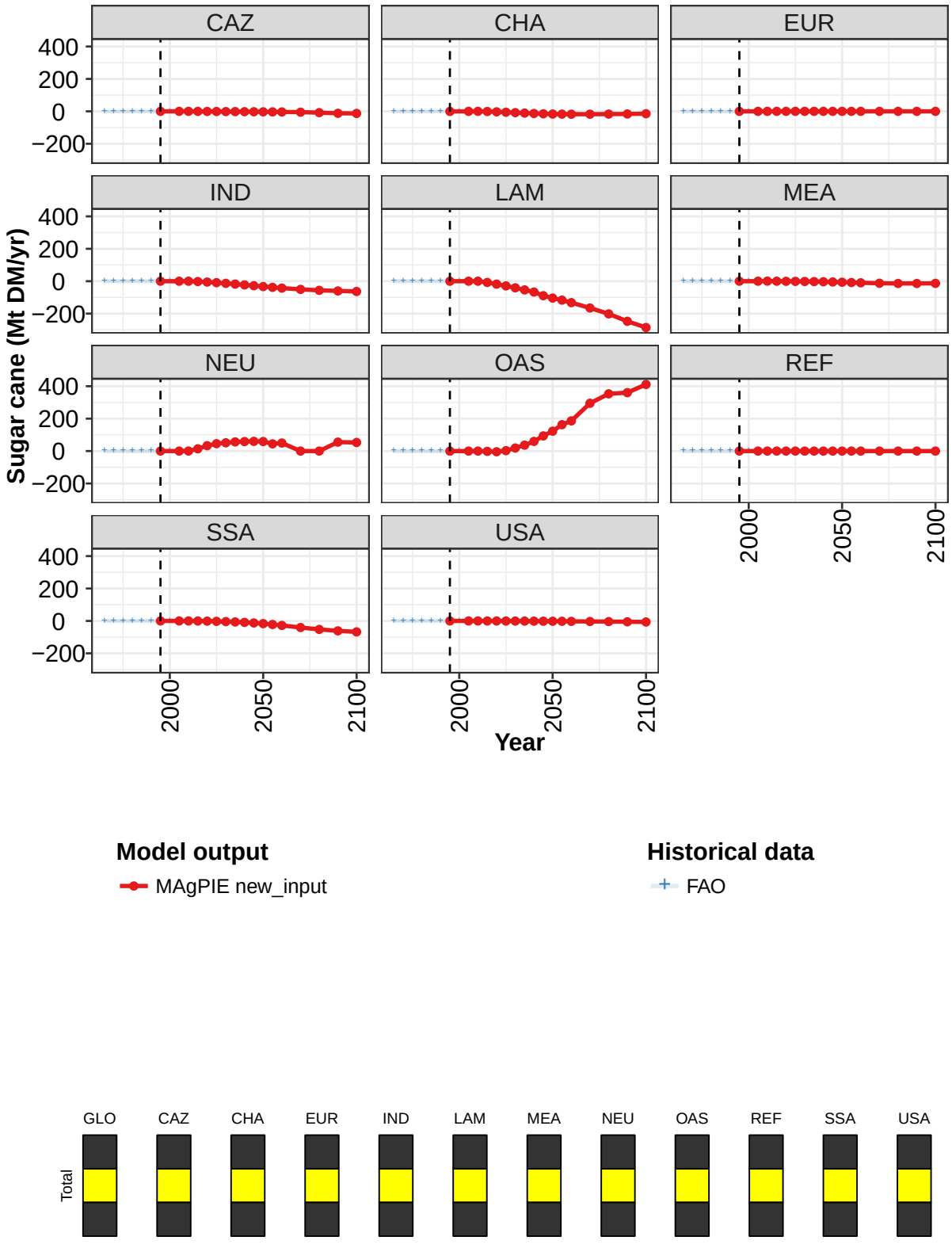


Figure 418: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-1	0	1	0	-0	0	-0	0	0	0	0
CAZ	0	0	0	-0	-1	-1	-2	-2	-2	-3	-3
CHA	-1	0	0	-1	-3	-5	-8	-11	-13	-15	-17
EUR	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0
IND	-0	0	0	-2	-5	-9	-13	-18	-23	-28	-33
LAM	-0	0	0	-8	-18	-29	-41	-54	-67	-89	-104
MEA	0	0	1	0	-1	-1	-2	-2	-3	-5	-6
NEU	-0	0	0	14	33	46	51	57	59	60	59
OAS	-1	0	0	-2	-4	3	19	37	60	94	123
REF	-0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	-0	-1	-2	-4	-6	-9	-12	-17
USA	0	0	0	-0	-0	-1	-1	-1	-1	-2	-2

Table 1544: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

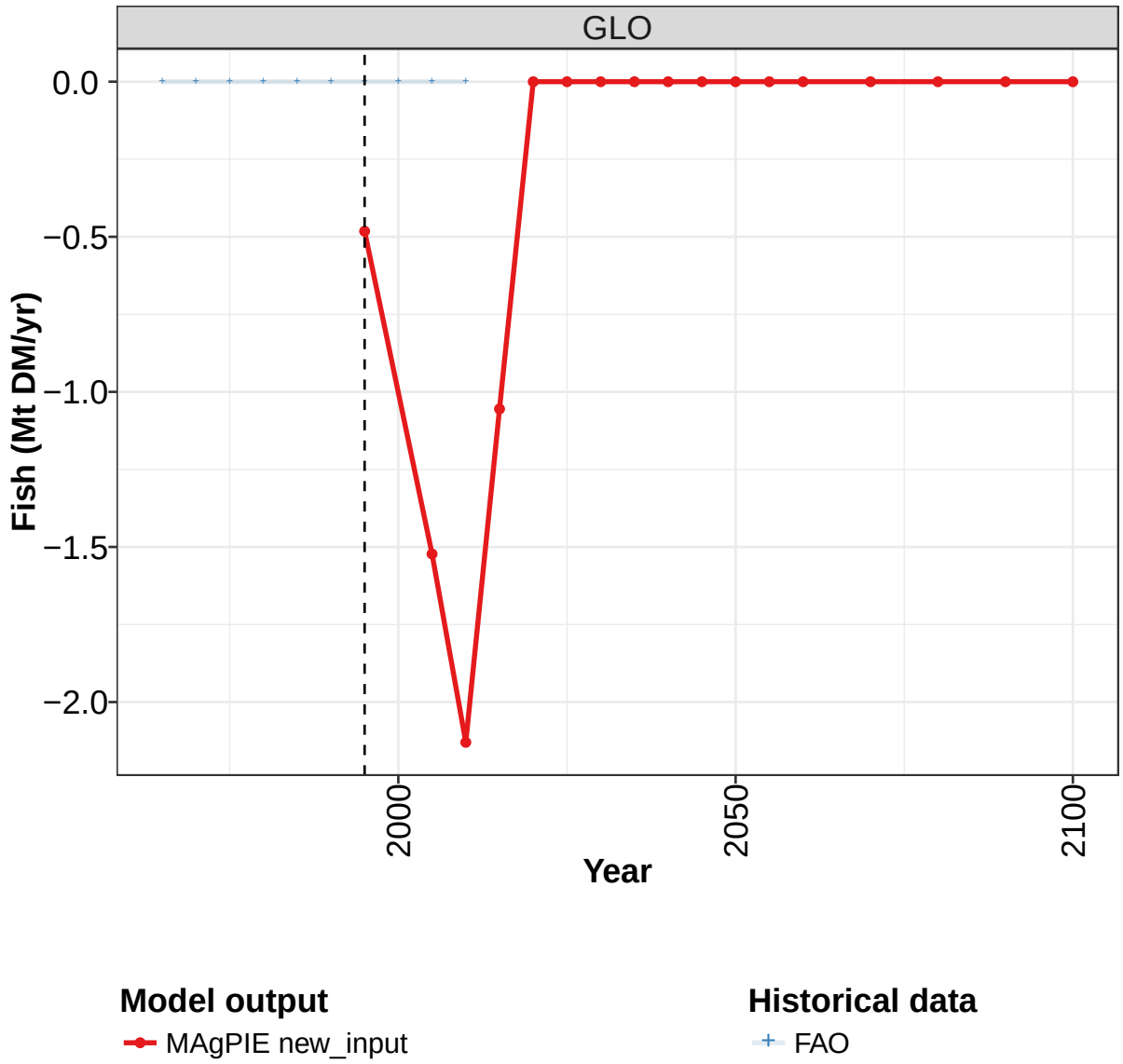
	2055	2060	2070	2080	2090	2100
GLO	0	-0	-0	0	0	-0
CAZ	-3	-4	-5	-8	-12	-13
CHA	-17	-18	-18	-17	-16	-15
EUR	-0	-0	-0	-0	-0	-0
IND	-38	-42	-50	-56	-60	-63
LAM	-117	-132	-165	-202	-247	-286
MEA	-8	-10	-13	-14	-14	-13
NEU	45	50	-0	-0	55	53
OAS	163	186	295	353	361	411
REF	0	0	0	0	0	0
SSA	-22	-28	-41	-52	-61	-68
USA	-2	-3	-3	-4	-5	-7

Table 1545: MAgPIE new_input — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.005	-0.000	-0.001	-0.001	-0.015	-0.006	0.022	-0.001	-0.003	-0.018
CHA	-0.265	0.000	-0.000	-0.001	0.716	0.401	-0.521	-0.001	0.402	-0.015
EUR	0.034	-0.001	-0.004	-0.004	-0.102	-0.043	0.150	-0.008	-0.017	-0.126
IND	0.001	0.000	-0.000	-0.000	-0.003	-0.001	0.004	0.000	-0.001	-0.004
LAM	0.066	0.010	0.005	0.007	-0.158	-0.042	0.227	0.046	-0.294	-0.082
MEA	0.021	-0.001	-0.002	-0.004	-0.063	-0.026	0.093	-0.005	-0.012	-0.076
NEU	0.016	-0.000	-0.002	-0.002	-0.048	-0.020	0.071	-0.004	-0.009	-0.059
OAS	0.057	-0.007	0.009	0.011	-0.134	-0.180	-0.318	-0.009	-0.027	0.627
REF	0.012	-0.000	-0.001	-0.001	-0.036	-0.015	0.053	-0.003	-0.007	-0.044
SSA	0.051	-0.001	-0.004	-0.005	-0.153	-0.064	0.225	-0.014	-0.030	-0.186
USA	0.001	0.000	-0.000	-0.000	-0.003	-0.003	-0.006	0.000	-0.002	-0.017

Table 1546: FAO — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr)

58.2 Fish


GLO
0.0
−0.5
−1.0
−1.5
−2.0
Fish (Mt DM/yr)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

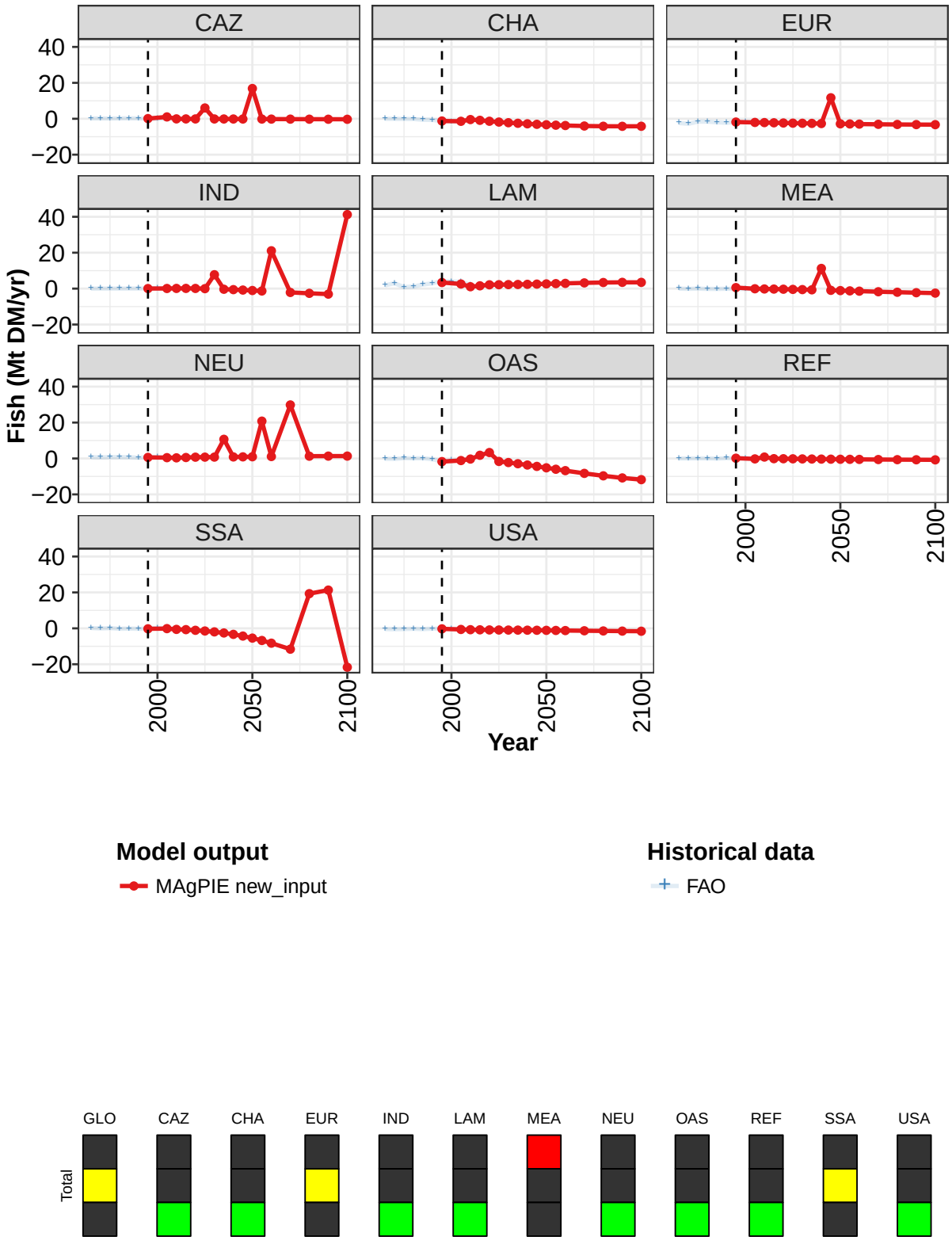


Figure 419: MAgPIE new_input — Trade—Net-Trade—Fish (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	-0.5	-1.5	-2.1	-1.1	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
CAZ	0.1	1.0	-0.1	-0.1	-0.1	6.0	-0.1	-0.1	-0.1	-0.1	16.9
CHA	-1.2	-1.4	-0.4	-0.9	-1.4	-1.8	-2.2	-2.5	-2.8	-3.1	-3.3
EUR	-1.8	-2.0	-2.1	-2.2	-2.4	-2.4	-2.5	-2.6	-2.7	11.7	-2.8
IND	0.1	0.1	0.1	0.1	0.1	-0.0	7.7	-0.4	-0.6	-0.8	-1.0
LAM	3.4	2.6	1.1	1.6	2.1	2.2	2.2	2.3	2.4	2.5	2.6
MEA	0.6	-0.1	-0.2	-0.2	-0.3	-0.4	-0.5	-0.7	11.2	-0.9	-1.1
NEU	0.6	0.5	0.4	0.5	0.7	0.7	0.8	10.7	0.9	0.9	1.0
OAS	-1.7	-1.1	-0.3	1.8	3.3	-1.6	-2.3	-2.9	-3.6	-4.4	-5.2
REF	0.2	-0.2	0.8	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4
SSA	-0.3	-0.1	-0.6	-0.7	-1.1	-1.5	-2.0	-2.6	-3.3	-4.3	-5.4
USA	-0.3	-0.6	-0.7	-0.8	-0.9	-0.9	-0.9	-1.0	-1.0	-1.1	-1.1

Table 1547: MAgPIE new_input — Trade—Net-Trade—Fish (Mt DM/yr) [PART 1/2]

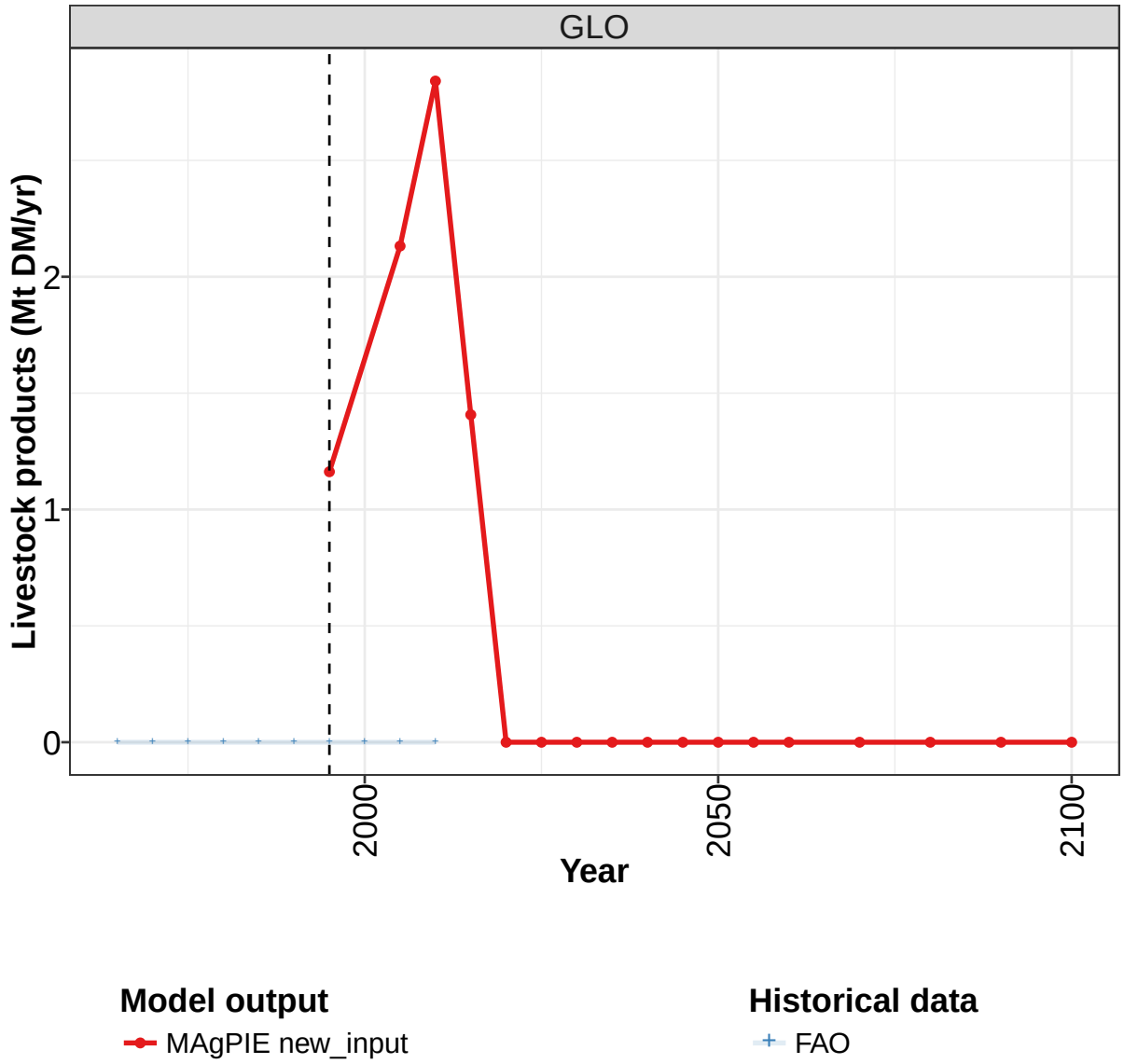
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	0.0	-0.0	-0.0
CAZ	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
CHA	-3.6	-3.8	-4.0	-4.2	-4.2	-4.2
EUR	-2.9	-3.0	-3.1	-3.2	-3.3	-3.3
IND	-1.3	21.1	-2.1	-2.6	-3.1	41.2
LAM	2.8	2.9	3.2	3.4	3.5	3.5
MEA	-1.3	-1.4	-1.7	-2.0	-2.3	-2.5
NEU	20.8	1.1	29.8	1.3	1.3	1.3
OAS	-6.0	-6.8	-8.3	-9.7	-10.8	-11.8
REF	-0.5	-0.5	-0.6	-0.7	-0.7	-0.8
SSA	-6.8	-8.3	-11.6	19.3	21.3	-21.7
USA	-1.2	-1.2	-1.3	-1.4	-1.5	-1.6

Table 1548: MAgPIE new_input — Trade—Net-Trade—Fish (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.20	0.18	0.12	0.22	0.24	0.21	0.06	-0.02	0.08	-0.02
CHA	-0.01	-0.05	-0.10	-0.14	-0.59	-0.66	-1.27	-1.53	-1.44	-0.47
EUR	-2.38	-2.81	-1.61	-1.59	-1.97	-2.24	-1.80	-1.86	-1.84	-1.86
IND	0.01	0.01	0.02	0.03	0.03	0.04	0.08	0.14	0.12	0.25
LAM	1.80	3.01	0.82	1.18	2.28	2.94	4.32	3.95	3.83	2.15
MEA	-0.02	-0.11	0.00	-0.16	-0.18	-0.05	-0.16	-0.17	0.05	0.01
NEU	0.76	0.60	0.79	0.77	0.71	0.45	0.71	0.82	0.70	0.75
OAS	-0.15	-0.25	0.16	0.09	0.12	-0.44	-1.68	-1.06	-0.83	0.07
REF	0.02	0.01	0.08	0.06	-0.06	0.16	0.18	0.07	-0.16	0.03
SSA	0.18	-0.09	0.11	-0.23	-0.16	-0.24	-0.17	0.15	0.14	-0.14
USA	-0.41	-0.50	-0.39	-0.24	-0.43	-0.17	-0.28	-0.49	-0.63	-0.78

Table 1549: FAO — Trade—Net-Trade—Fish (Mt DM/yr)

58.3 Livestock products



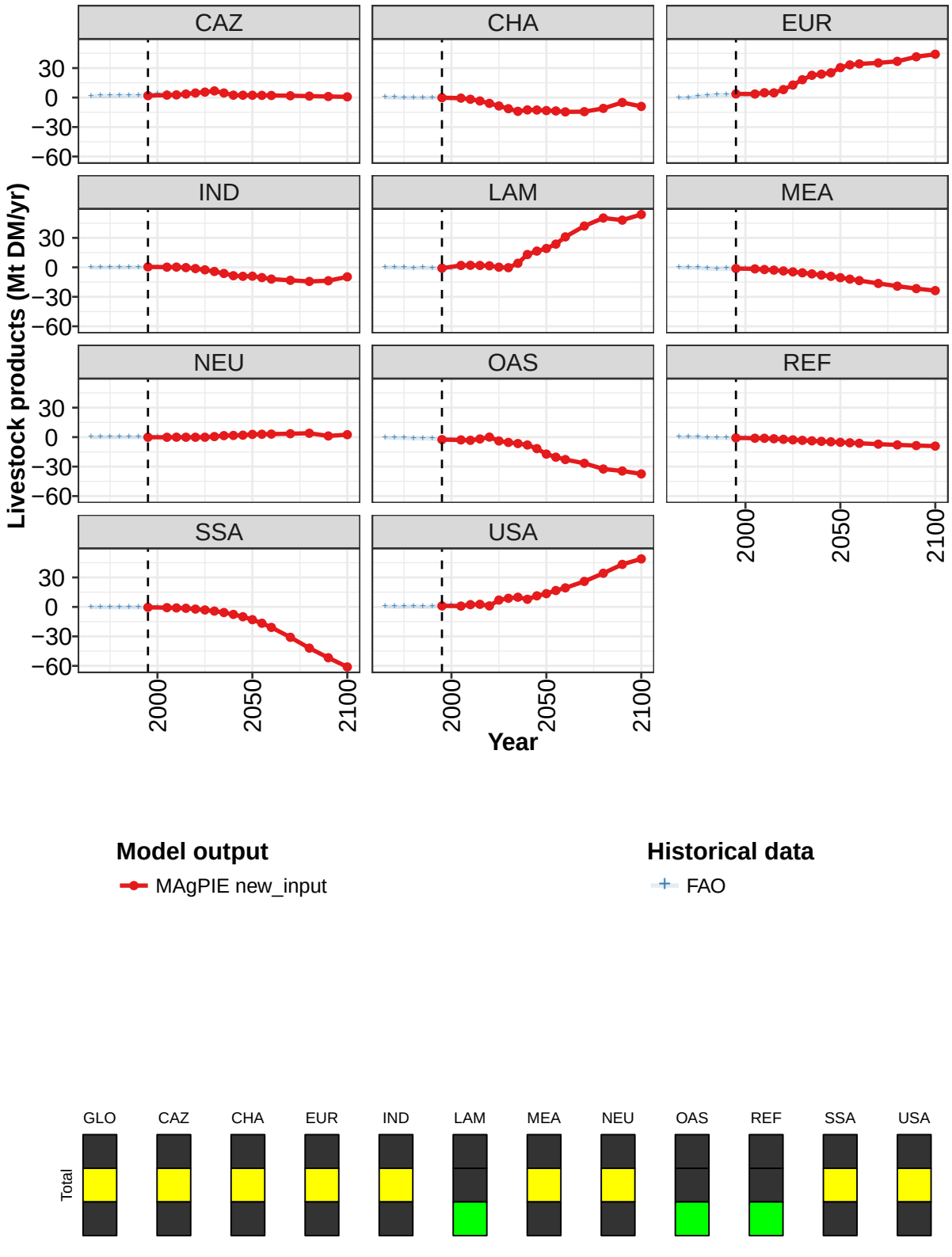


Figure 420: MAgPIE new_input — Trade—Net-Trade—Livestock products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.2	2.1	2.8	1.4	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0
CAZ	1.9	2.5	2.7	3.6	4.6	5.5	6.8	4.7	2.5	2.4	2.3
CHA	-0.1	-0.6	-1.7	-3.5	-5.9	-8.6	-11.3	-14.0	-12.6	-12.7	-13.3
EUR	3.7	3.6	4.9	4.8	8.1	12.8	18.2	22.6	23.8	25.2	30.5
IND	0.5	0.2	0.3	-0.3	-1.3	-2.5	-4.2	-6.2	-8.5	-9.1	-9.0
LAM	-0.8	1.9	2.1	1.9	1.6	0.2	-0.3	4.2	13.0	16.6	19.2
MEA	-1.2	-1.6	-2.2	-2.8	-3.7	-4.6	-5.6	-6.7	-7.9	-9.2	-10.5
NEU	-0.1	-0.2	-0.0	-0.1	-0.1	-0.1	0.6	1.5	1.7	2.0	2.8
OAS	-2.5	-2.8	-3.3	-1.9	0.0	-3.9	-5.4	-6.5	-8.0	-11.7	-17.3
REF	-0.8	-1.1	-1.2	-1.7	-2.2	-2.7	-3.3	-3.8	-4.3	-4.8	-5.3
SSA	-0.4	-0.7	-1.0	-1.4	-2.2	-3.1	-4.2	-5.7	-7.6	-10.0	-13.0
USA	1.0	0.9	2.3	2.6	1.0	7.0	8.8	9.9	7.8	11.3	13.5

Table 1550: MAgPIE new_input — Trade—Net-Trade—Livestock products (Mt DM/yr) [PART 1/2]

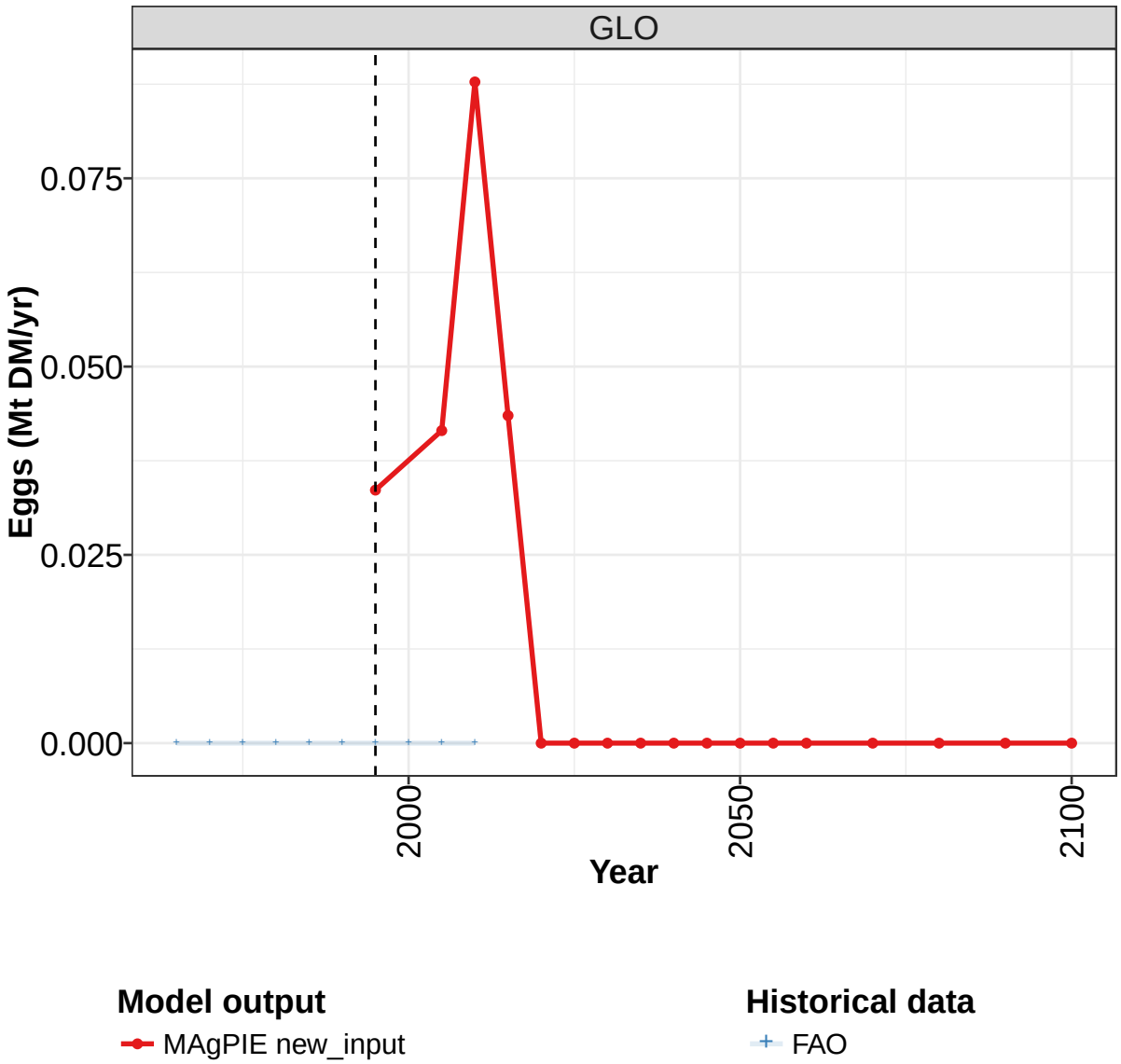
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	-0.0	0.0	-0.0	0.0
CAZ	2.2	2.1	1.8	1.5	1.1	0.7
CHA	-13.6	-14.6	-14.4	-11.0	-5.0	-9.0
EUR	33.2	34.3	35.3	36.9	41.5	44.1
IND	-10.4	-11.9	-13.2	-14.3	-13.6	-9.7
LAM	23.6	31.0	42.1	50.2	48.0	53.8
MEA	-12.0	-13.5	-16.4	-19.2	-21.6	-23.7
NEU	2.9	3.1	3.5	3.9	1.2	2.5
OAS	-20.4	-22.8	-26.6	-32.4	-34.5	-37.4
REF	-5.8	-6.3	-7.2	-7.9	-8.6	-9.1
SSA	-16.6	-20.8	-30.9	-41.9	-51.7	-61.1
USA	16.7	19.4	26.0	34.3	43.3	48.9

Table 1551: MAgPIE new_input — Trade—Net-Trade—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	1.41	1.69	1.61	2.05	2.19	2.08	2.84	3.74	3.97	3.92
CHA	0.03	-0.02	-0.10	-0.15	-0.15	-0.10	-0.33	-1.14	-0.70	-1.80
EUR	-0.62	-0.30	1.09	2.06	2.66	2.79	2.71	2.52	1.91	3.23
IND	-0.08	-0.07	-0.05	-0.03	-0.03	0.03	0.07	0.17	0.34	0.38
LAM	-0.13	-0.04	-0.43	-0.79	-0.54	-0.71	-1.18	-1.02	1.16	0.57
MEA	-0.24	-0.30	-0.58	-1.25	-1.64	-1.36	-1.25	-1.39	-1.73	-2.29
NEU	-0.01	-0.03	-0.00	-0.01	0.03	-0.14	-0.21	-0.22	-0.30	-0.28
OAS	-0.64	-0.80	-0.98	-1.30	-1.30	-1.58	-2.75	-3.07	-3.47	-4.05
REF	-0.23	-0.05	-0.29	-0.71	-0.80	-0.85	-0.80	-0.70	-1.31	-1.51
SSA	-0.20	-0.22	-0.41	-0.47	-0.49	-0.39	-0.70	-0.78	-1.23	-1.57
USA	0.70	0.15	0.15	0.61	0.05	0.24	1.60	1.89	1.37	3.41

Table 1552: FAO — Trade—Net-Trade—Livestock products (Mt DM/yr)

58.3.1 Eggs


GLO
Eggs (Mt DM/yr)
0.075
0.050
0.025
0.000
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

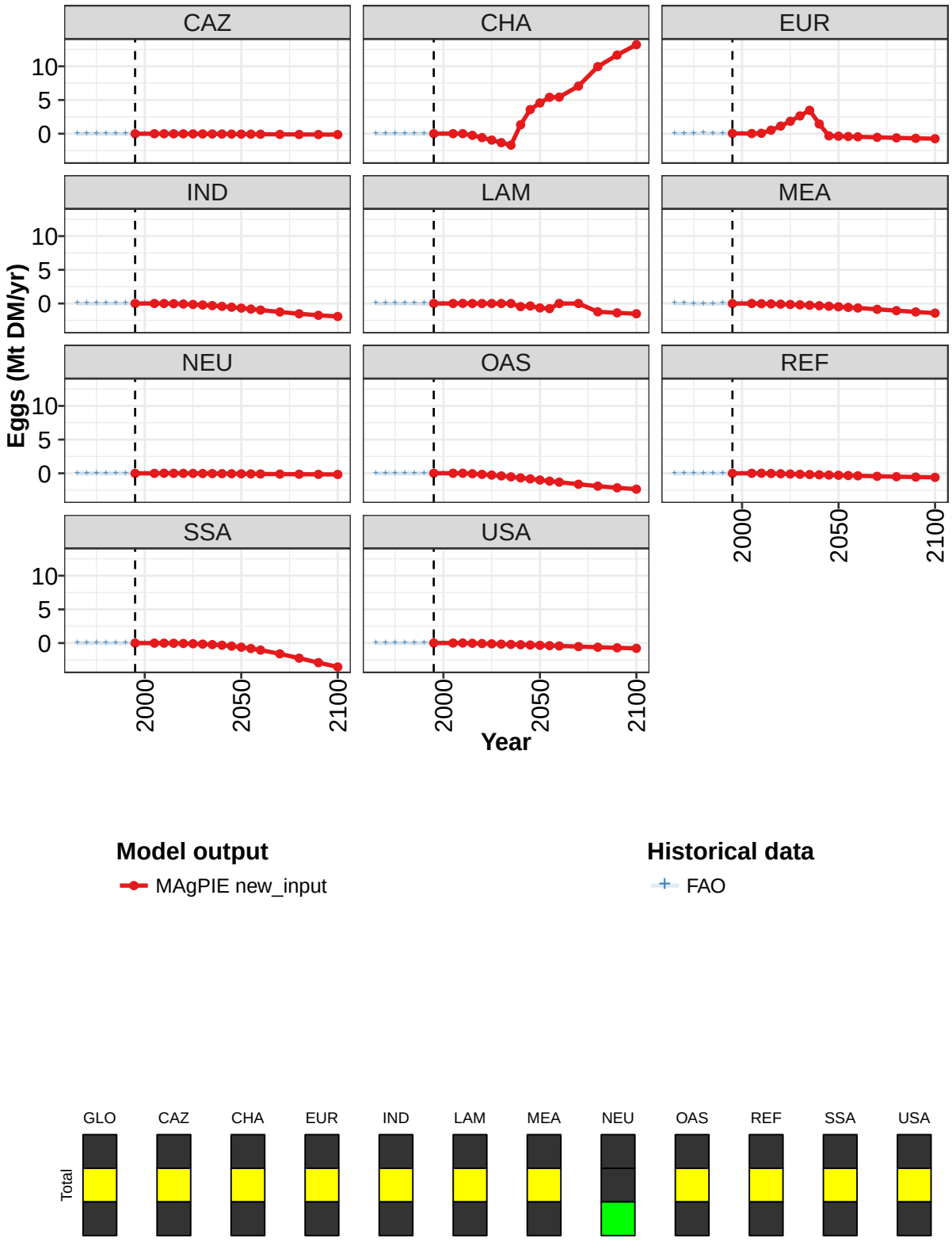


Figure 421: MAgPIE new_input — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0	0.0	0.1	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
CHA	0.0	0.0	0.0	-0.2	-0.6	-0.9	-1.3	-1.7	1.3	3.6	4.6
EUR	0.0	0.0	0.1	0.5	1.1	1.8	2.6	3.5	1.4	-0.3	-0.4
IND	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5	-0.7
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.4	-0.7
MEA	-0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.4	-0.5
NEU	-0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
OAS	0.0	0.0	0.0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.7	-0.8	-1.0
REF	-0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3
SSA	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.4	-0.6
USA	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3

Table 1553: MAgPIE new_input — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

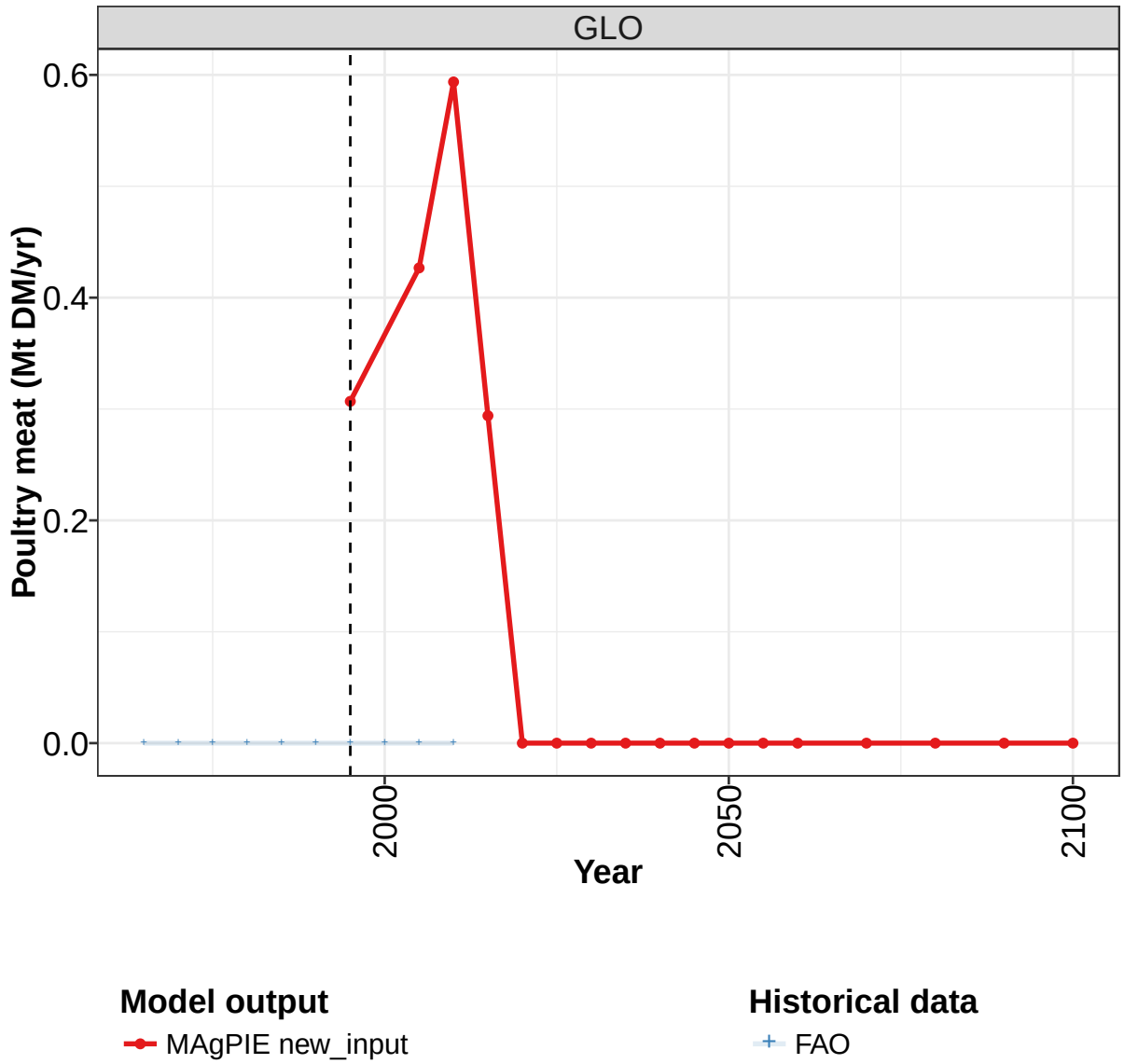
	2055	2060	2070	2080	2090	2100
GLO	-0.0	-0.0	0.0	0.0	0.0	0.0
CAZ	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
CHA	5.4	5.4	7.1	10.0	11.7	13.2
EUR	-0.4	-0.5	-0.5	-0.6	-0.7	-0.7
IND	-0.8	-1.0	-1.3	-1.5	-1.8	-1.9
LAM	-0.8	0.0	0.0	-1.2	-1.4	-1.5
MEA	-0.6	-0.7	-0.9	-1.1	-1.3	-1.4
NEU	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
OAS	-1.2	-1.3	-1.6	-1.9	-2.2	-2.4
REF	-0.3	-0.4	-0.4	-0.5	-0.6	-0.6
SSA	-0.8	-1.0	-1.6	-2.2	-2.9	-3.5
USA	-0.4	-0.4	-0.5	-0.6	-0.7	-0.8

Table 1554: MAgPIE new_input — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0022	0.0067	0.0044	0.0028	-0.0010	-0.0037	-0.0054	-0.0055	-0.0053	-0.0094
CHA	0.0062	-0.0003	-0.0020	-0.0028	-0.0060	-0.0145	-0.0205	-0.0071	-0.0013	0.0000
EUR	0.0218	0.0422	0.0452	0.0647	0.0515	0.0447	0.0450	0.0191	0.0078	0.0076
IND	0.0000	0.0000	-0.0001	0.0007	0.0000	0.0012	0.0054	0.0084	0.0285	0.0209
LAM	-0.0036	-0.0033	-0.0003	-0.0046	-0.0003	-0.0083	-0.0098	-0.0146	-0.0121	-0.0152
MEA	0.0007	-0.0073	-0.0212	-0.0454	-0.0413	-0.0088	-0.0112	-0.0046	-0.0060	-0.0400
NEU	-0.0100	-0.0117	-0.0091	-0.0116	0.0032	-0.0143	-0.0159	-0.0133	-0.0136	0.0229
OAS	-0.0026	-0.0136	-0.0111	-0.0132	-0.0026	-0.0049	-0.0103	-0.0033	-0.0154	-0.0074
REF	-0.0186	-0.0116	-0.0140	-0.0151	-0.0084	0.0010	-0.0069	0.0007	-0.0025	0.0012
SSA	-0.0004	0.0004	0.0048	-0.0021	0.0006	-0.0057	-0.0092	-0.0113	-0.0199	-0.0325
USA	0.0044	-0.0015	0.0034	0.0267	0.0041	0.0133	0.0387	0.0313	0.0399	0.0519

Table 1555: FAO — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr)

58.3.2 Poultry meat



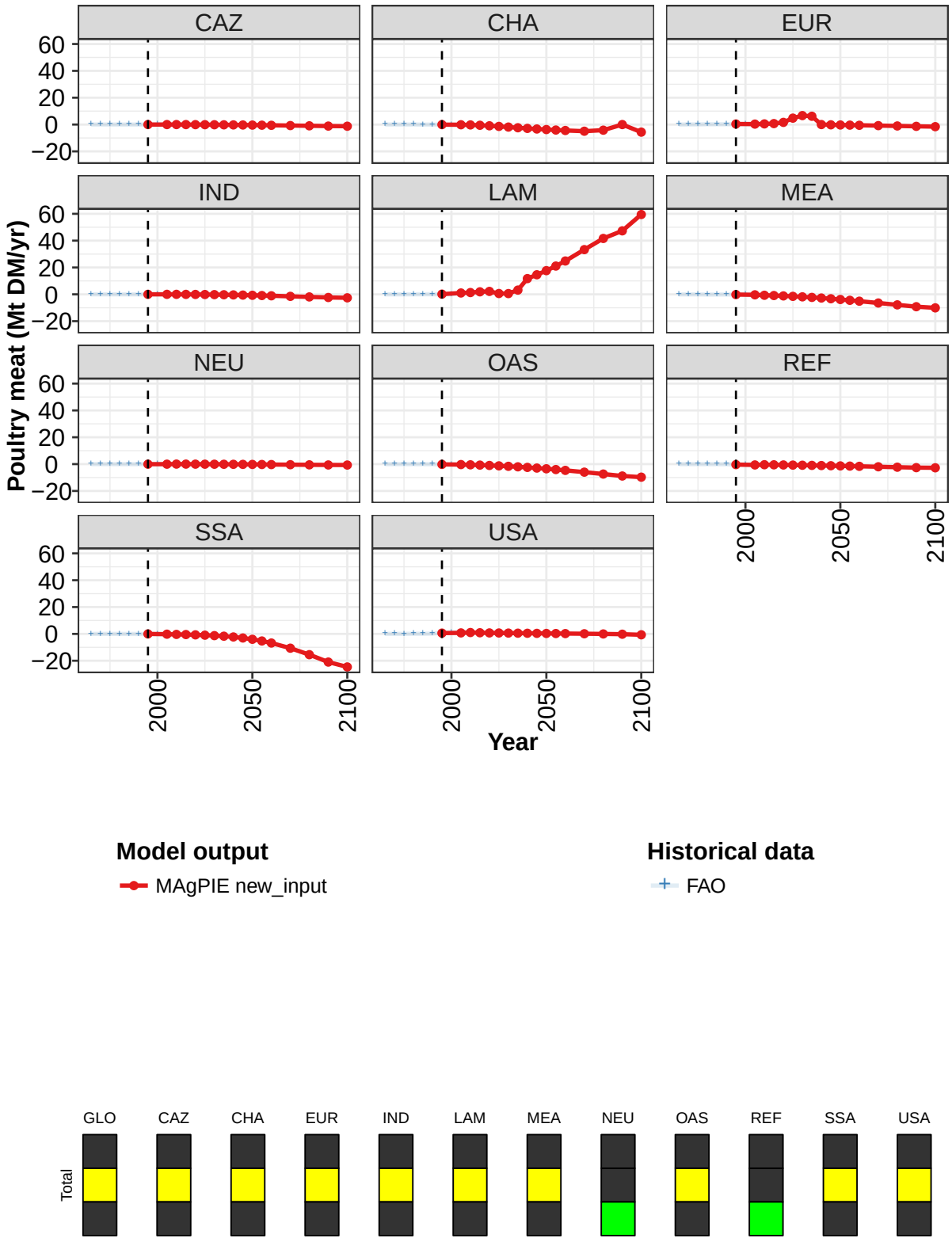


Figure 422: MAgPIE new_input — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.3	0.4	0.6	0.3	0.0	-0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.4
CHA	-0.1	-0.2	-0.3	-0.5	-0.9	-1.4	-1.9	-2.4	-2.9	-3.3	-3.7
EUR	0.4	0.3	0.5	0.7	1.6	4.8	6.7	6.2	0.0	-0.2	-0.3
IND	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.2	-0.3	-0.4	-0.6	-0.7
LAM	0.1	1.0	1.3	1.9	2.2	0.6	0.6	3.2	11.7	14.6	17.7
MEA	-0.2	-0.4	-0.7	-0.9	-1.2	-1.5	-1.9	-2.3	-2.8	-3.3	-3.8
NEU	-0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2
OAS	-0.2	-0.3	-0.5	-0.7	-1.0	-1.3	-1.6	-2.0	-2.4	-2.9	-3.5
REF	-0.4	-0.6	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9	-1.1	-1.2	-1.3
SSA	-0.0	-0.2	-0.4	-0.5	-0.7	-0.9	-1.3	-1.7	-2.3	-3.0	-4.0
USA	0.6	0.8	1.0	0.9	0.7	0.7	0.6	0.6	0.5	0.4	0.4

Table 1556: MAgPIE new_input — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

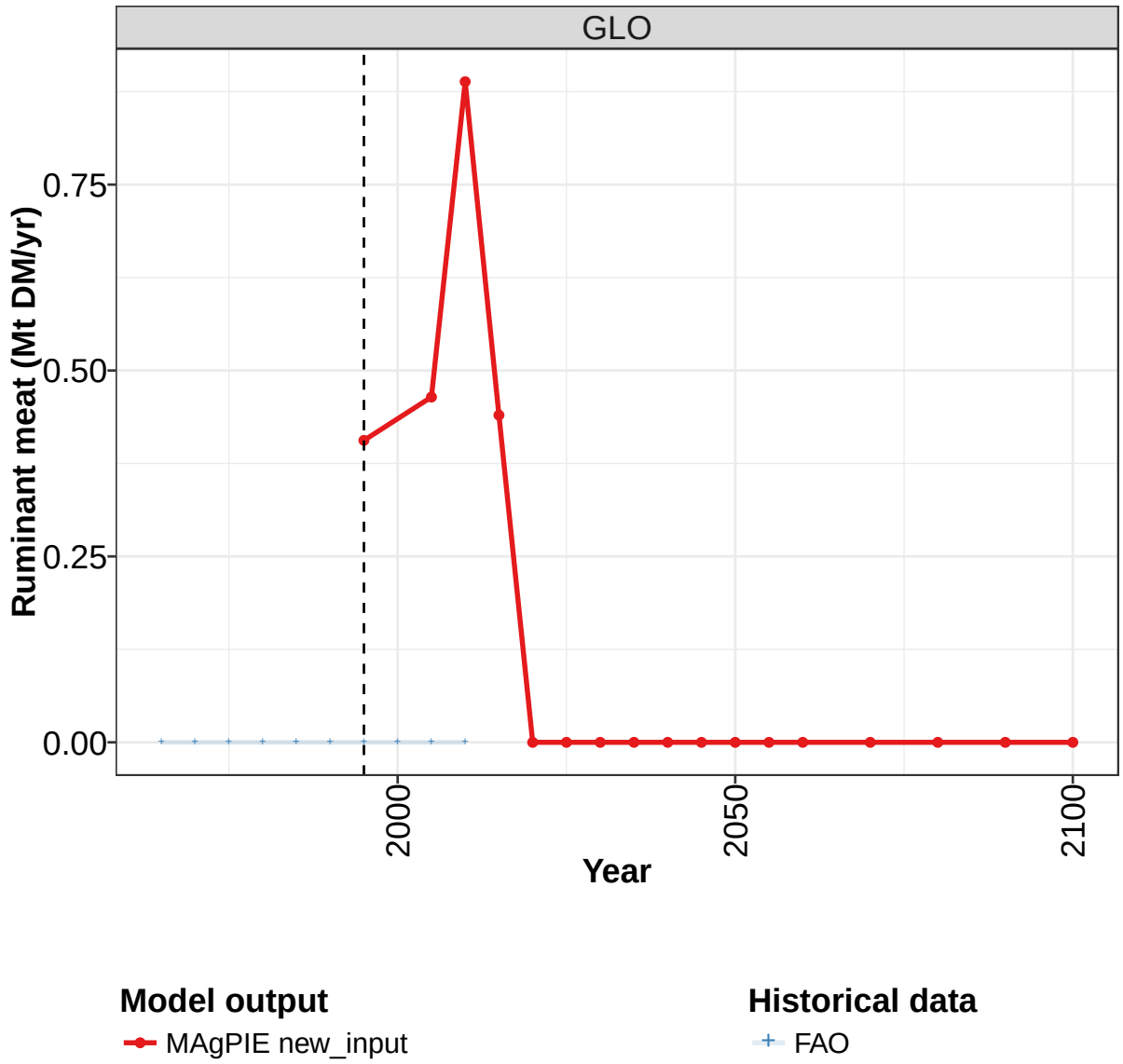
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	-0.5	-0.6	-0.7	-0.9	-1.1	-1.2
CHA	-4.1	-4.4	-5.0	-4.2	0.0	-5.7
EUR	-0.4	-0.5	-0.8	-1.0	-1.3	-1.6
IND	-0.9	-1.1	-1.5	-1.9	-2.3	-2.6
LAM	21.1	24.8	33.3	41.6	47.3	59.5
MEA	-4.4	-5.1	-6.4	-7.8	-9.2	-10.1
NEU	-0.3	-0.3	-0.4	-0.5	-0.6	-0.7
OAS	-4.0	-4.7	-6.0	-7.4	-8.8	-9.7
REF	-1.5	-1.6	-2.0	-2.3	-2.6	-2.7
SSA	-5.3	-6.8	-10.6	-15.5	-21.0	-24.6
USA	0.3	0.2	0.1	-0.0	-0.2	-0.6

Table 1557: MAgPIE new_input — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.00	0.00	-0.01	-0.00	-0.01	-0.01	-0.01	-0.01	-0.00	-0.02
CHA	-0.00	-0.01	-0.00	-0.01	-0.03	-0.05	-0.11	-0.28	-0.16	-0.27
EUR	0.00	0.06	0.09	0.19	0.20	0.18	0.30	0.30	0.01	0.22
IND	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
LAM	-0.00	-0.02	-0.02	0.02	0.06	0.05	-0.01	0.06	0.80	0.95
MEA	-0.00	-0.01	-0.03	-0.19	-0.17	-0.13	-0.19	-0.26	-0.40	-0.72
NEU	-0.01	-0.02	-0.02	-0.03	-0.02	-0.04	-0.05	-0.06	-0.05	-0.04
OAS	-0.00	-0.01	-0.01	-0.04	-0.05	-0.10	-0.27	-0.34	-0.41	-0.64
REF	-0.01	-0.03	-0.02	-0.07	-0.06	-0.12	-0.39	-0.35	-0.64	-0.46
SSA	0.00	-0.01	0.00	-0.02	-0.03	-0.05	-0.12	-0.21	-0.30	-0.48
USA	0.03	0.04	0.01	0.14	0.10	0.26	0.84	1.16	1.16	1.46

Table 1558: FAO — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr)

58.3.3 Ruminant meat



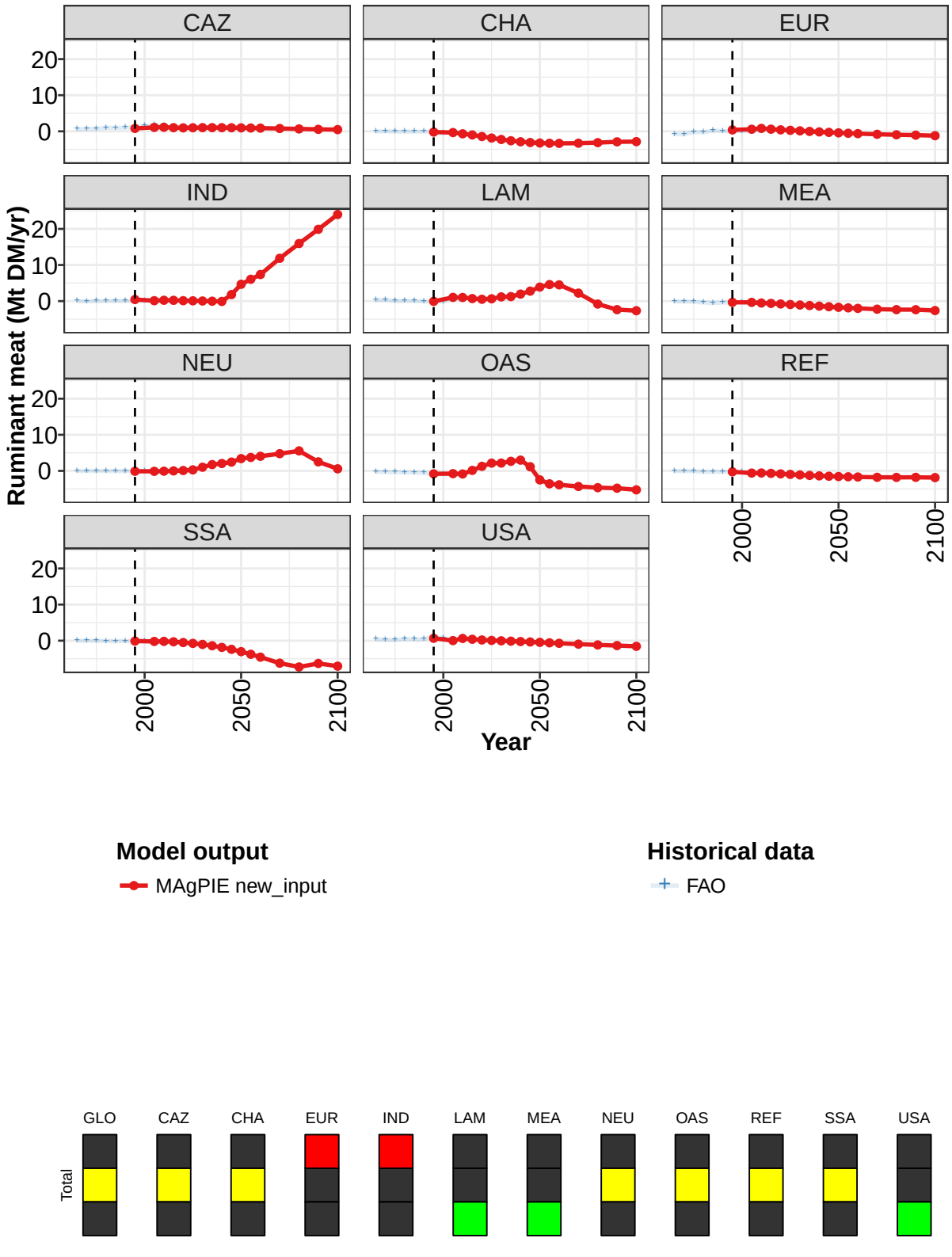


Figure 423: MAgPIE new_input — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.4	0.5	0.9	0.4	0.0	0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	0.8	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CHA	-0.2	-0.3	-0.7	-1.0	-1.4	-1.9	-2.3	-2.6	-2.9	-3.1	-3.2
EUR	0.4	0.6	0.8	0.6	0.4	0.3	0.1	-0.0	-0.2	-0.3	-0.4
IND	0.4	0.1	0.2	0.2	0.1	0.1	0.0	-0.0	-0.1	1.8	4.7
LAM	-0.1	1.0	1.0	0.7	0.5	0.6	1.2	1.2	1.9	2.8	3.9
MEA	-0.3	-0.4	-0.5	-0.6	-0.8	-0.9	-1.1	-1.2	-1.4	-1.6	-1.7
NEU	-0.1	-0.1	-0.1	0.0	0.1	0.3	1.0	1.8	2.1	2.4	3.4
OAS	-0.8	-0.8	-0.9	0.1	1.3	2.2	2.2	2.7	3.0	1.2	-2.5
REF	-0.3	-0.6	-0.6	-0.7	-0.8	-1.0	-1.1	-1.3	-1.4	-1.5	-1.6
SSA	-0.1	-0.2	-0.2	-0.3	-0.5	-0.7	-1.0	-1.4	-1.9	-2.4	-3.0
USA	0.7	0.0	0.6	0.4	0.2	0.1	-0.0	-0.1	-0.2	-0.3	-0.5

Table 1559: MAgPIE new_input — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

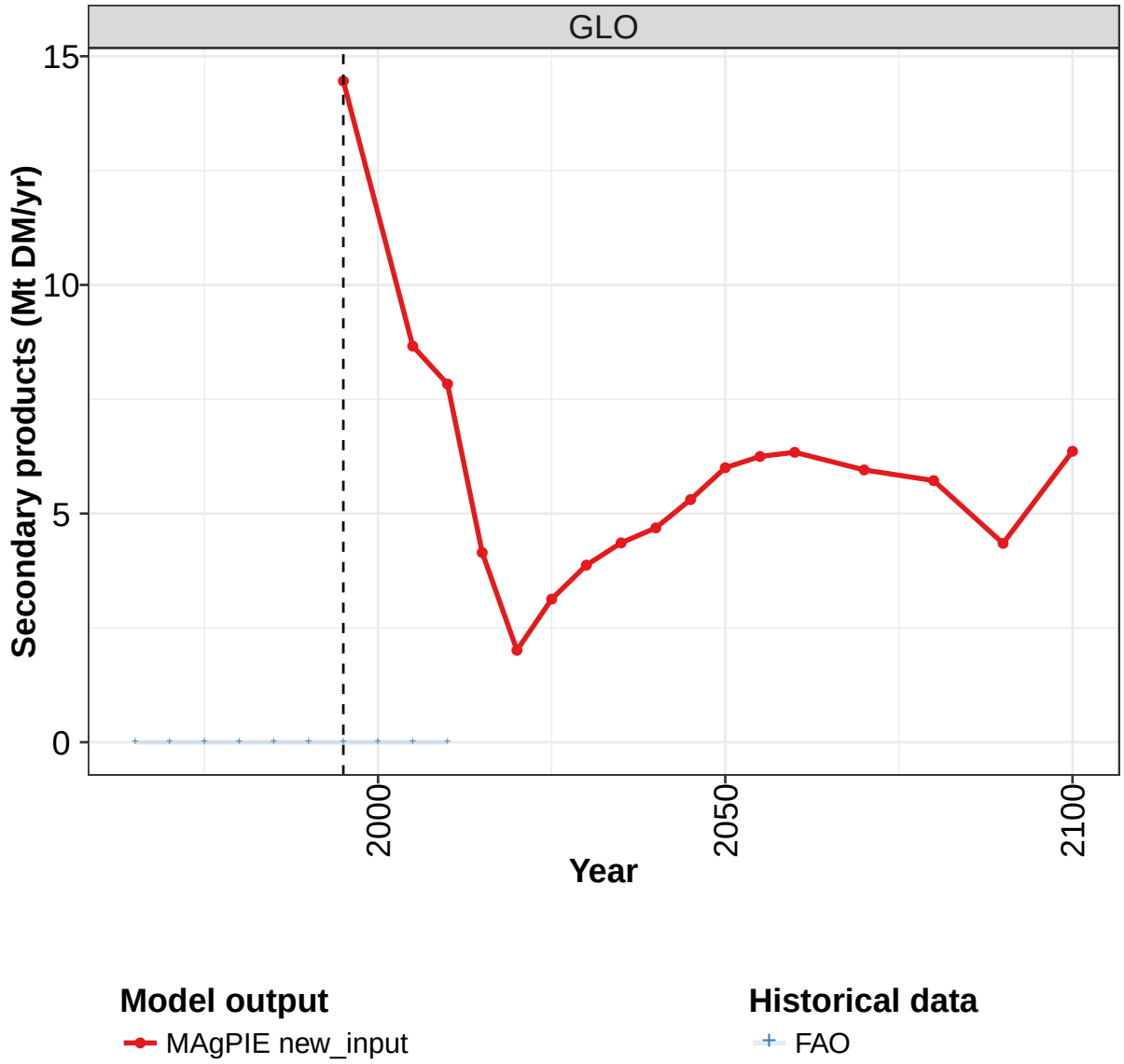
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	-0.0	-0.0	0.0
CAZ	0.9	0.9	0.8	0.7	0.5	0.5
CHA	-3.3	-3.3	-3.3	-3.1	-2.9	-2.9
EUR	-0.5	-0.6	-0.8	-1.0	-1.1	-1.2
IND	6.0	7.4	11.9	15.9	19.9	24.0
LAM	4.6	4.5	2.2	-0.8	-2.4	-2.7
MEA	-1.9	-2.0	-2.2	-2.4	-2.4	-2.6
NEU	3.7	4.1	4.8	5.5	2.5	0.6
OAS	-3.6	-3.9	-4.3	-4.6	-4.8	-5.2
REF	-1.6	-1.7	-1.8	-1.8	-1.8	-1.9
SSA	-3.8	-4.6	-6.2	-7.3	-6.3	-7.1
USA	-0.6	-0.7	-1.0	-1.2	-1.4	-1.6

Table 1560: MAgPIE new_input — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.58	0.71	0.72	0.99	0.93	0.99	1.22	1.53	1.71	1.57
CHA	-0.03	-0.02	-0.07	-0.09	-0.08	-0.03	-0.24	-0.50	-0.40	-0.74
EUR	-0.77	-0.84	-0.20	-0.26	0.15	0.10	-0.03	0.09	0.20	0.47
IND	-0.02	-0.03	-0.00	0.01	0.02	0.03	0.07	0.12	0.19	0.32
LAM	0.25	0.39	0.02	0.06	0.02	-0.07	-0.15	-0.16	0.69	0.35
MEA	-0.09	-0.10	-0.20	-0.39	-0.54	-0.42	-0.36	-0.32	-0.38	-0.57
NEU	-0.01	-0.01	-0.00	-0.03	-0.04	-0.07	-0.14	-0.10	-0.16	-0.19
OAS	-0.23	-0.31	-0.35	-0.43	-0.48	-0.58	-0.90	-0.90	-0.86	-1.06
REF	-0.07	-0.04	-0.08	-0.25	-0.26	-0.29	-0.27	-0.37	-0.65	-0.63
SSA	-0.01	-0.03	-0.07	-0.13	-0.16	-0.12	-0.20	-0.13	-0.34	-0.37
USA	0.41	0.28	0.23	0.52	0.44	0.45	1.00	0.73	0.01	0.84

Table 1561: FAO — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr)

58.4 Secondary products



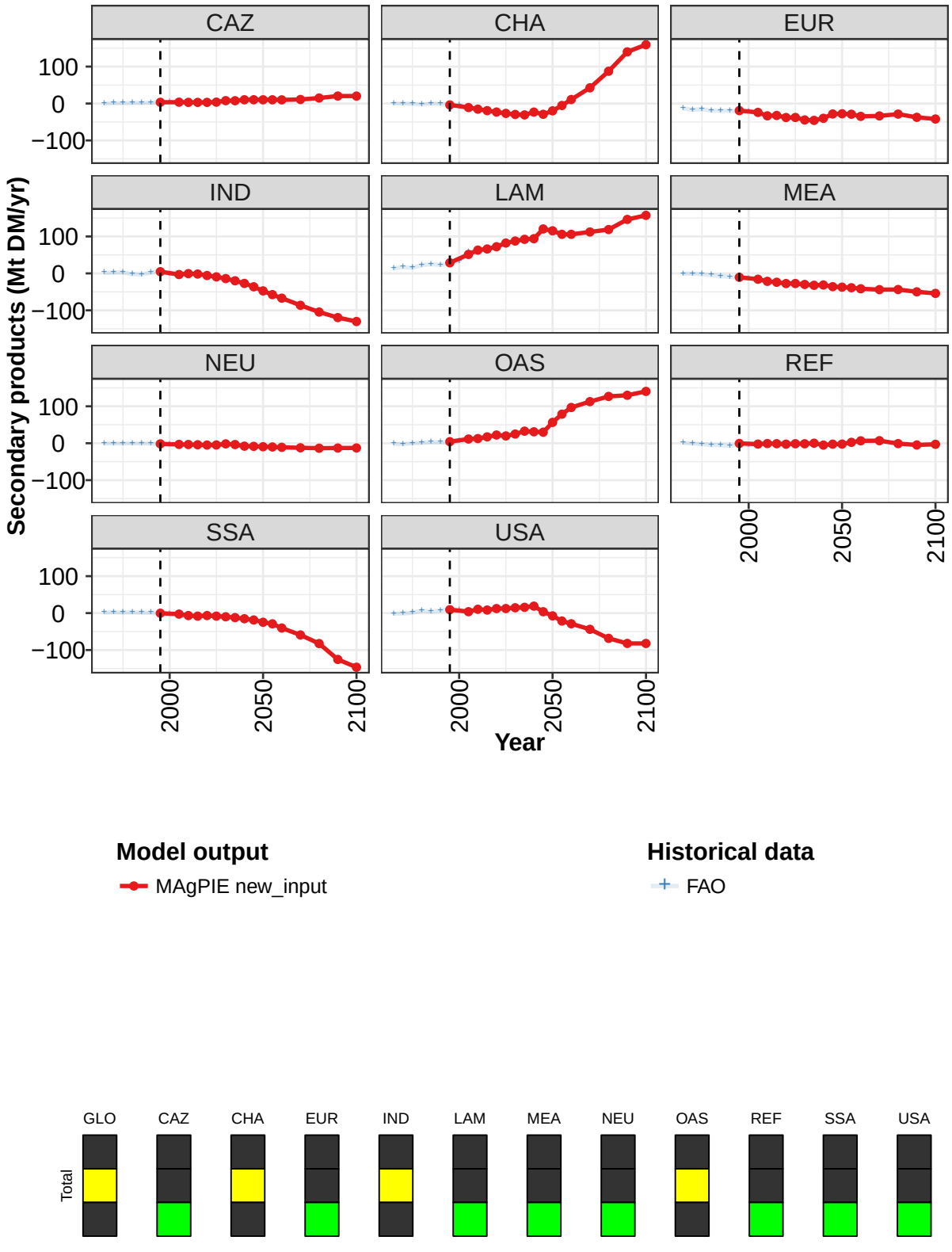


Figure 424: MAgPIE new_input — Trade—Net-Trade—Secondary products (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	14	9	8	4	2	3	4	4	5	5	6
CAZ	3	4	3	3	3	4	8	8	10	10	10
CHA	-4	-11	-15	-19	-23	-27	-30	-31	-23	-29	-20
EUR	-19	-24	-33	-32	-38	-38	-45	-46	-40	-28	-28
IND	5	-3	-1	-2	-6	-9	-14	-20	-27	-36	-47
LAM	29	51	63	66	72	82	88	92	94	120	115
MEA	-11	-16	-22	-24	-28	-27	-30	-32	-31	-36	-37
NEU	-2	-3	-3	-4	-5	-5	-2	-3	-8	-8	-9
OAS	4	11	13	17	22	20	25	33	31	30	57
REF	-1	-2	-1	-1	-2	-1	-1	0	-5	-2	-2
SSA	-0	-3	-7	-8	-7	-8	-10	-12	-15	-19	-25
USA	9	4	10	8	12	12	15	16	19	4	-7

Table 1562: MAgPIE new_input — Trade—Net-Trade—Secondary products (Mt DM/yr) [PART 1/2]

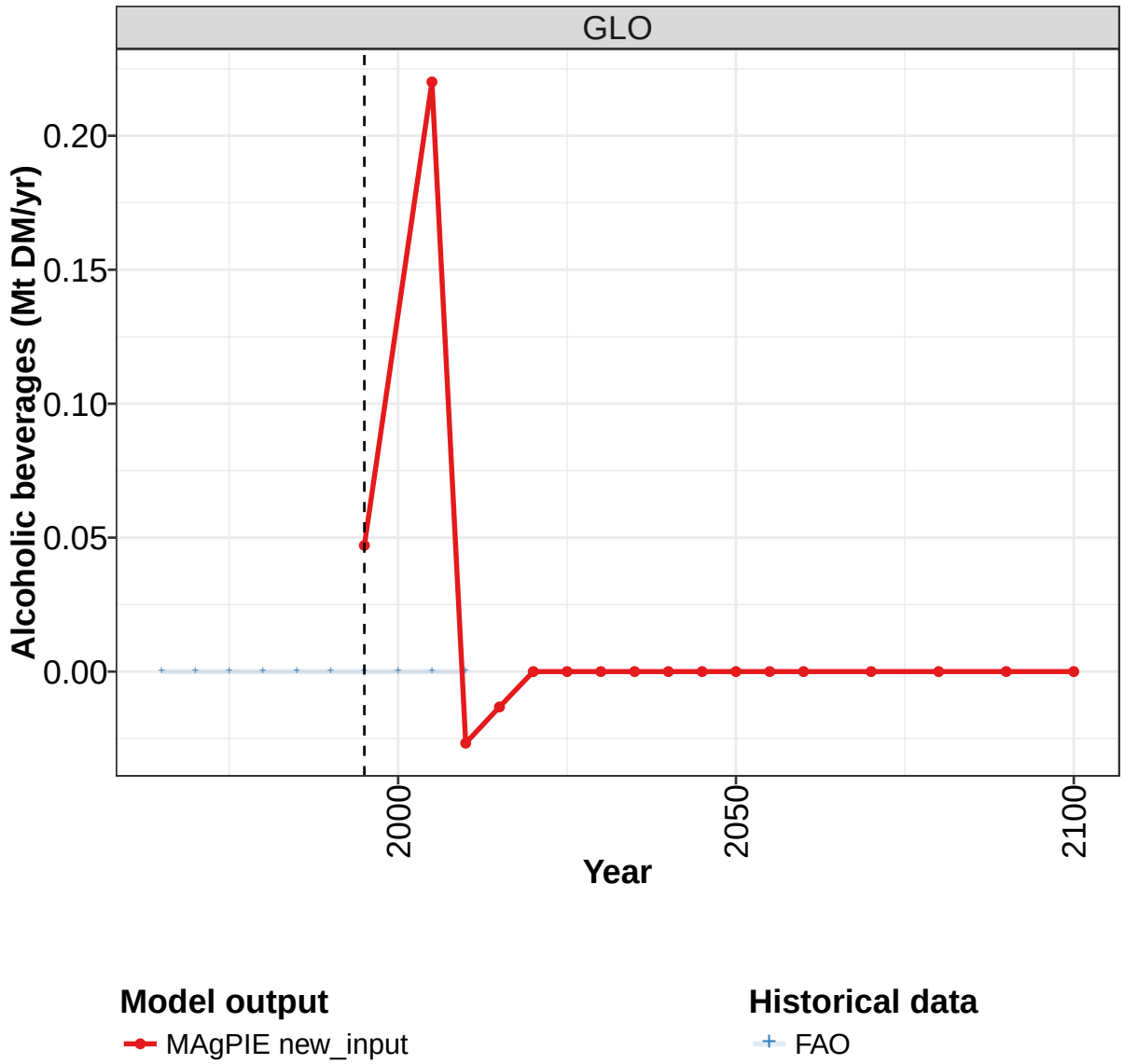
	2055	2060	2070	2080	2090	2100
GLO	6	6	6	6	4	6
CAZ	10	10	11	15	20	20
CHA	-5	11	43	87	140	159
EUR	-29	-35	-34	-29	-37	-42
IND	-57	-67	-86	-105	-120	-130
LAM	106	106	112	119	146	157
MEA	-39	-42	-44	-44	-50	-54
NEU	-10	-11	-12	-13	-13	-13
OAS	79	97	113	127	130	140
REF	2	7	7	-1	-5	-3
SSA	-29	-40	-59	-82	-125	-147
USA	-21	-29	-44	-68	-82	-82

Table 1563: MAgPIE new_input — Trade—Net-Trade—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.2	0.8	0.9	1.7	1.6	2.2	3.3	4.0	2.1	2.2
CHA	0.4	-0.4	-0.8	-2.8	-0.2	-1.1	-4.8	-4.4	-12.7	-15.8
EUR	-13.4	-16.5	-15.7	-19.1	-19.3	-19.6	-21.8	-21.3	-28.1	-34.7
IND	1.7	2.5	2.7	-2.4	-2.8	2.1	5.5	-1.1	-3.8	0.0
LAM	13.9	16.7	15.5	22.3	24.9	23.0	26.9	33.6	57.7	62.8
MEA	-1.1	-0.8	-2.6	-4.7	-7.1	-9.7	-11.8	-13.7	-16.8	-21.8
NEU	-0.6	-0.6	-0.6	-0.3	-0.4	-1.2	-2.8	-3.2	-3.9	-3.9
OAS	-1.7	-2.5	0.2	1.3	2.9	3.0	0.9	5.0	7.6	10.8
REF	0.9	-0.7	-2.3	-5.0	-5.2	-7.2	-2.3	-5.2	-2.9	-1.2
SSA	1.3	2.7	1.8	2.1	1.3	1.2	-3.4	-2.7	-4.6	-8.4
USA	-1.4	-1.1	1.1	6.8	4.2	7.2	10.1	8.9	5.4	10.0

Table 1564: FAO — Trade—Net-Trade—Secondary products (Mt DM/yr)

58.4.1 Alcoholic beverages



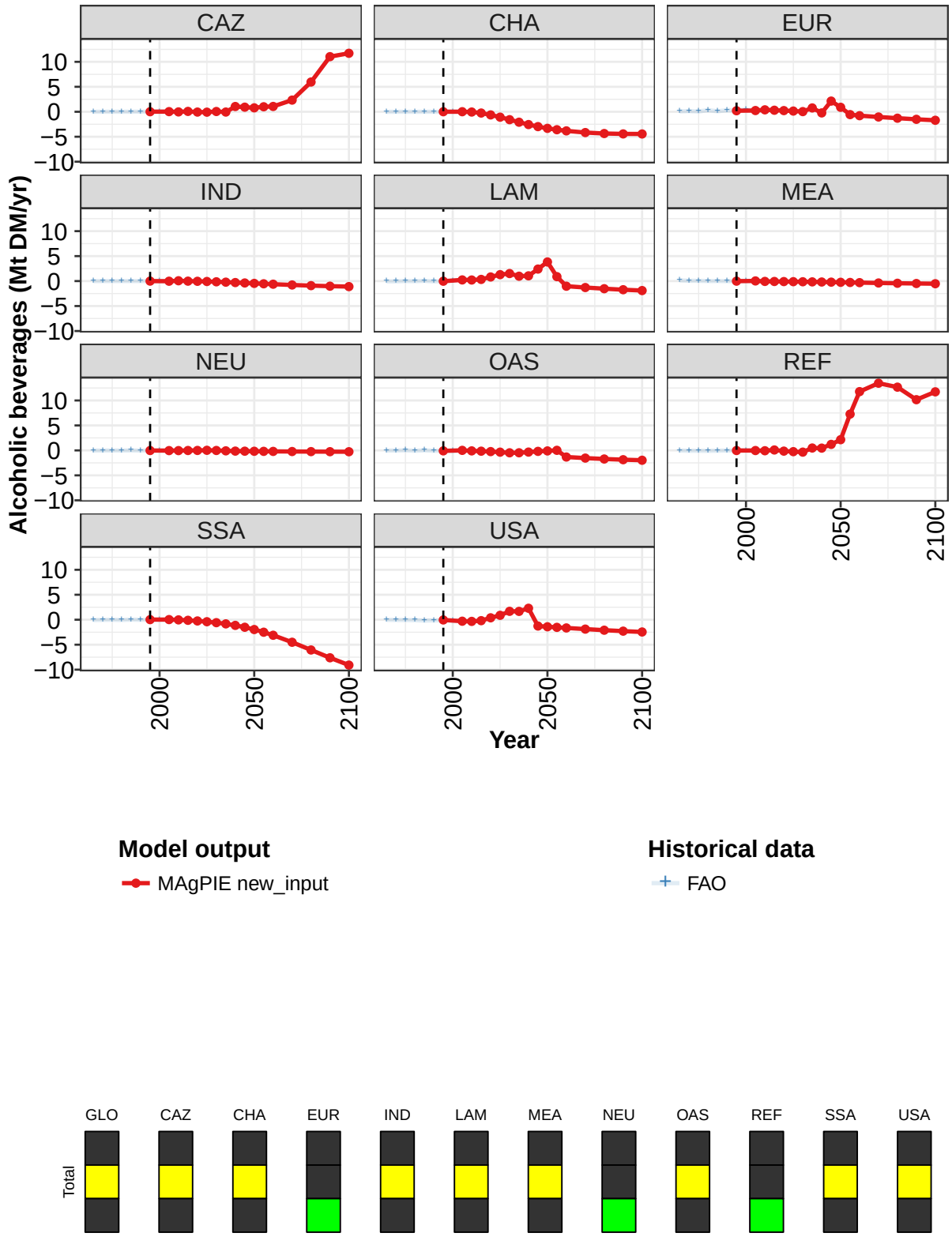


Figure 425: MAgPIE new_input — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.0	0.2	-0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	0.0
CAZ	0.0	0.0	-0.0	0.1	-0.1	-0.1	0.1	-0.1	1.1	0.9	0.8
CHA	0.0	0.0	-0.1	-0.3	-0.6	-1.1	-1.6	-2.1	-2.6	-3.0	-3.3
EUR	0.2	0.2	0.4	0.3	0.2	0.1	0.0	0.8	-0.2	2.1	0.9
IND	0.0	-0.0	0.1	-0.0	-0.0	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5
LAM	-0.0	0.2	0.2	0.3	0.8	1.3	1.5	1.0	1.1	2.4	3.8
MEA	-0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
NEU	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	-0.1	-0.1	-0.2	-0.2
OAS	-0.1	0.0	-0.1	-0.2	-0.2	-0.3	-0.5	-0.5	-0.3	-0.2	-0.1
REF	-0.0	-0.0	-0.1	0.1	-0.1	-0.2	-0.3	0.5	0.5	1.2	2.2
SSA	0.0	0.0	-0.0	-0.1	-0.2	-0.4	-0.6	-0.8	-1.1	-1.5	-2.0
USA	-0.0	-0.3	-0.3	-0.2	0.4	0.9	1.7	1.7	2.3	-1.3	-1.4

Table 1565: MAgPIE new_input — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

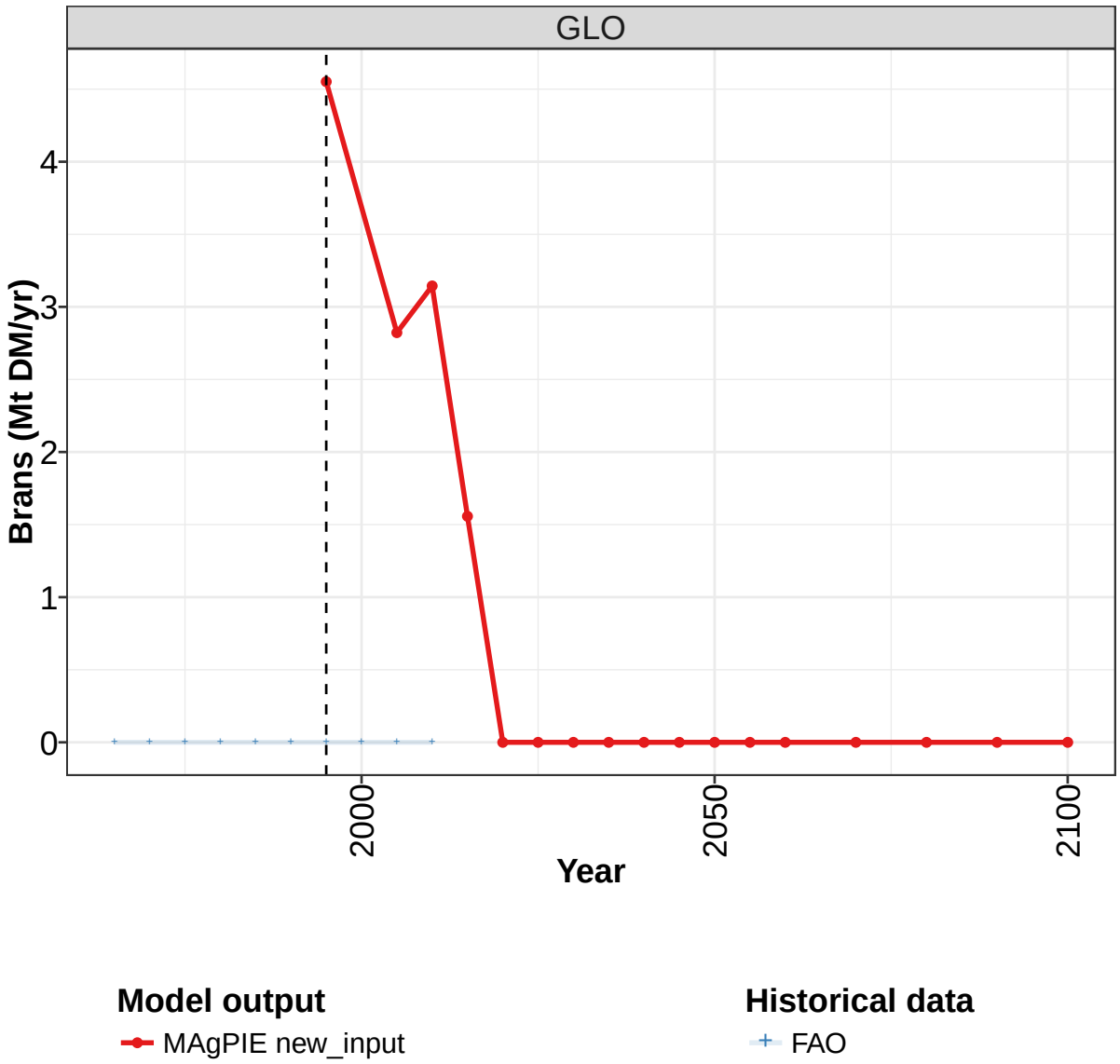
	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	-0.0	0.0	0.0	-0.0
CAZ	1.0	1.1	2.3	6.0	11.0	11.7
CHA	-3.6	-3.8	-4.2	-4.4	-4.4	-4.4
EUR	-0.6	-0.8	-1.0	-1.3	-1.5	-1.7
IND	-0.5	-0.6	-0.8	-0.9	-1.0	-1.1
LAM	0.9	-1.0	-1.3	-1.5	-1.7	-1.9
MEA	-0.3	-0.3	-0.4	-0.4	-0.5	-0.5
NEU	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
OAS	0.0	-1.3	-1.5	-1.7	-1.9	-2.0
REF	7.3	11.8	13.5	12.7	10.2	11.7
SSA	-2.5	-3.1	-4.5	-6.1	-7.6	-9.1
USA	-1.5	-1.6	-1.9	-2.1	-2.3	-2.5

Table 1566: MAgPIE new_input — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.005	0.012	0.016	0.014	0.014	0.018	0.022	0.020	0.038	-0.029
CHA	-0.006	-0.003	-0.001	-0.009	0.002	-0.003	-0.009	-0.013	-0.012	-0.029
EUR	0.079	0.145	0.056	0.325	0.100	0.309	0.299	0.426	0.205	0.343
IND	-0.001	-0.000	0.000	-0.001	0.001	0.002	0.001	0.006	-0.023	0.000
LAM	-0.054	-0.054	0.012	-0.022	0.062	-0.066	-0.036	0.088	0.318	0.364
MEA	0.141	0.077	0.057	0.007	0.020	-0.010	-0.011	-0.023	-0.030	-0.041
NEU	-0.025	-0.014	-0.014	-0.016	-0.008	-0.021	-0.026	-0.038	-0.054	-0.034
OAS	-0.038	-0.014	0.012	-0.068	0.011	-0.063	-0.098	-0.151	-0.051	-0.088
REF	-0.024	-0.070	-0.075	-0.089	-0.058	-0.019	-0.027	-0.018	-0.036	-0.065
SSA	-0.060	-0.033	-0.006	-0.053	0.028	-0.020	-0.003	-0.060	-0.049	-0.026
USA	-0.019	-0.046	-0.057	-0.088	-0.171	-0.126	-0.112	-0.237	-0.305	-0.396

Table 1567: FAO — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr)

58.4.2 Brans


GLO
Brans (Mt DM/yr)
0
1
2
3
4
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

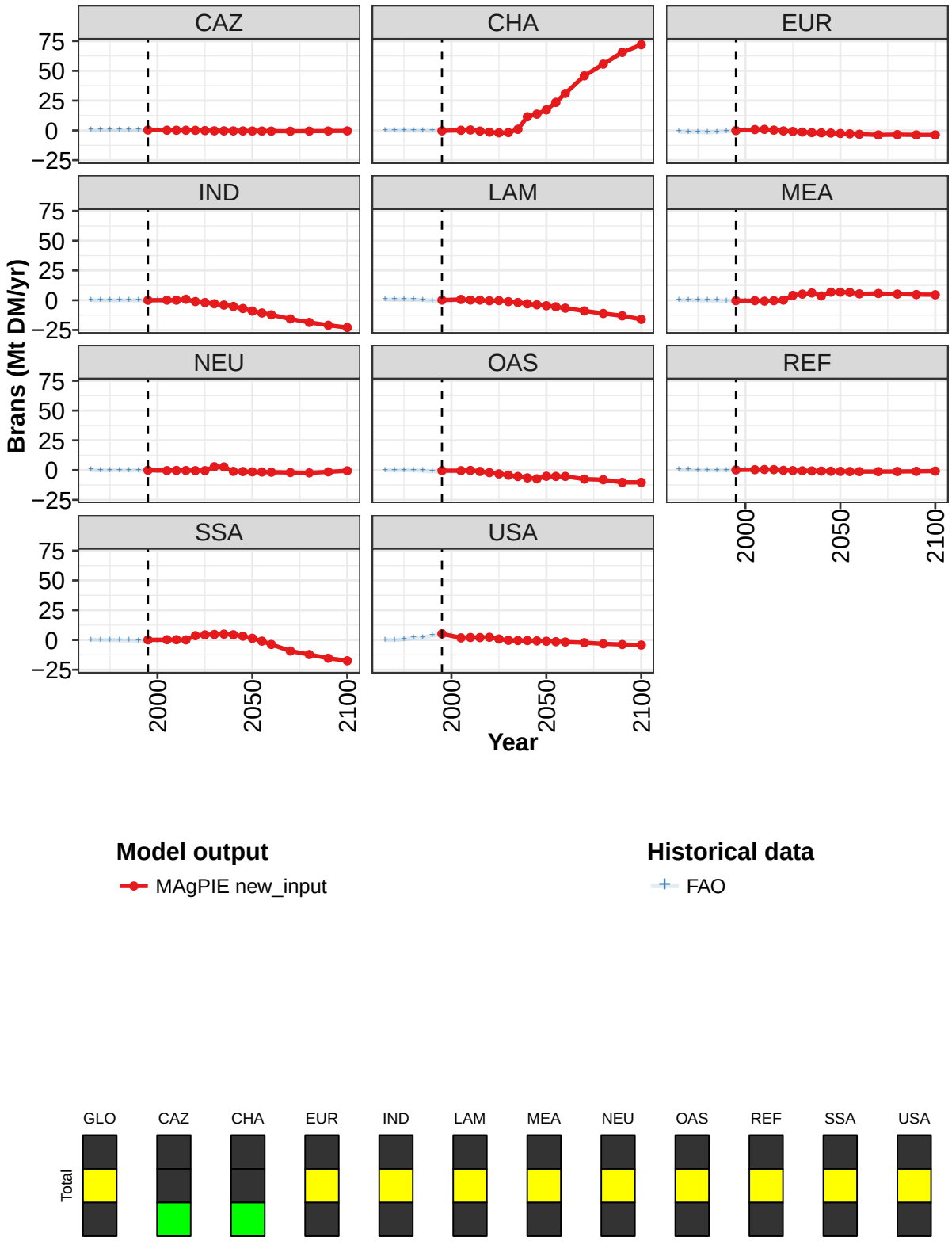


Figure 426: MAgPIE new_input — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	4.6	2.8	3.1	1.6	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0
CAZ	0.4	0.2	0.2	0.2	0.1	-0.2	-0.3	-0.4	-0.4	-0.4	-0.5
CHA	-0.3	0.1	0.4	-0.5	-1.4	-2.0	-1.8	1.0	11.5	13.6	17.3
EUR	-0.1	0.7	0.9	0.3	-0.4	-0.9	-1.4	-1.8	-2.0	-2.2	-2.6
IND	0.0	0.1	0.0	0.8	-1.1	-1.9	-2.9	-4.0	-5.2	-6.9	-9.1
LAM	0.1	0.7	0.1	0.1	-0.4	-0.3	-1.2	-1.9	-3.0	-3.8	-4.6
MEA	-0.4	-0.4	-0.7	-0.3	0.1	4.1	5.2	6.1	3.6	6.8	6.8
NEU	-0.1	-0.4	-0.3	-0.3	-0.4	-0.4	2.8	2.7	-1.1	-1.2	-1.5
OAS	-0.5	-0.5	-0.3	-1.1	-2.1	-3.2	-4.3	-5.4	-6.5	-7.3	-5.2
REF	0.2	0.3	0.5	0.4	-0.2	-0.4	-0.6	-0.7	-0.8	-1.0	-1.1
SSA	0.1	0.2	0.2	0.1	3.7	4.3	4.7	4.9	4.4	3.2	1.4
USA	5.2	1.8	2.1	2.1	2.3	0.8	-0.3	-0.4	-0.5	-0.8	-1.1

Table 1568: MAgPIE new_input — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr) [PART 1/2]

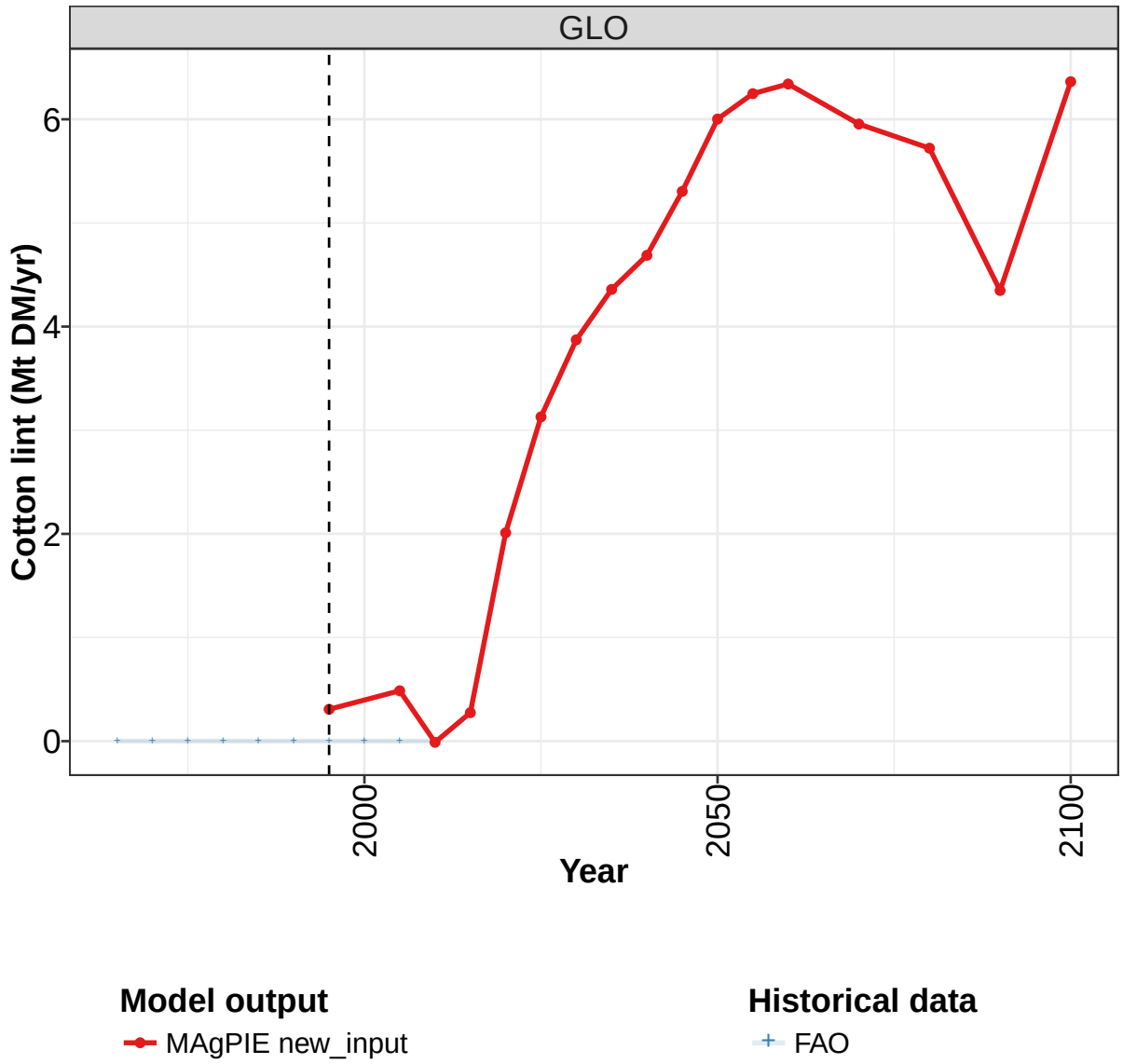
	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	0.0	0.0	0.0
CAZ	-0.5	-0.6	-0.7	-0.6	-0.5	-0.4
CHA	23.5	31.0	45.8	55.7	65.5	72.0
EUR	-2.9	-3.2	-3.8	-3.5	-3.8	-3.8
IND	-10.7	-12.2	-15.7	-18.6	-21.0	-22.9
LAM	-5.5	-6.7	-9.0	-11.1	-13.1	-16.1
MEA	6.6	5.4	5.7	5.2	4.8	4.6
NEU	-1.6	-1.7	-2.0	-2.3	-1.5	-0.6
OAS	-5.3	-5.3	-7.6	-8.1	-10.3	-10.3
REF	-1.2	-1.2	-1.2	-1.2	-1.0	-0.8
SSA	-1.0	-3.8	-9.3	-12.2	-15.4	-17.5
USA	-1.4	-1.7	-2.3	-3.2	-3.8	-4.3

Table 1569: MAgPIE new_input — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.26	0.54	0.39	0.54	0.28	0.39	0.31	0.05	-0.17	-0.17
CHA	-0.01	-0.06	-0.08	-0.11	-0.04	-0.24	-0.28	-0.12	0.00	0.34
EUR	-1.11	-1.28	-1.25	-1.73	-1.16	-0.69	-0.76	-0.19	0.04	0.23
IND	0.00	0.01	-0.00	-0.01	-0.02	-0.02	-0.02	-0.00	0.10	0.04
LAM	0.57	0.64	0.47	0.42	0.25	-0.51	-0.95	-0.61	-0.16	0.29
MEA	0.18	0.26	-0.00	-0.19	-0.17	-0.40	-0.71	-0.67	-0.61	-0.97
NEU	0.03	-0.02	-0.07	-0.14	-0.14	-0.29	-0.39	-0.73	-0.57	-0.46
OAS	-0.19	-0.20	-0.02	-0.17	-0.57	-1.11	-1.33	-1.01	-1.06	-0.93
REF	0.02	-0.02	-0.03	-0.09	-0.09	-0.16	-0.09	0.01	0.33	0.31
SSA	0.21	0.15	-0.02	-0.20	-0.35	-0.61	-0.86	-0.58	-0.36	-0.44
USA	0.04	-0.02	0.61	1.68	2.02	3.61	5.07	3.86	2.46	1.75

Table 1570: FAO — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr)

58.4.3 Cotton lint



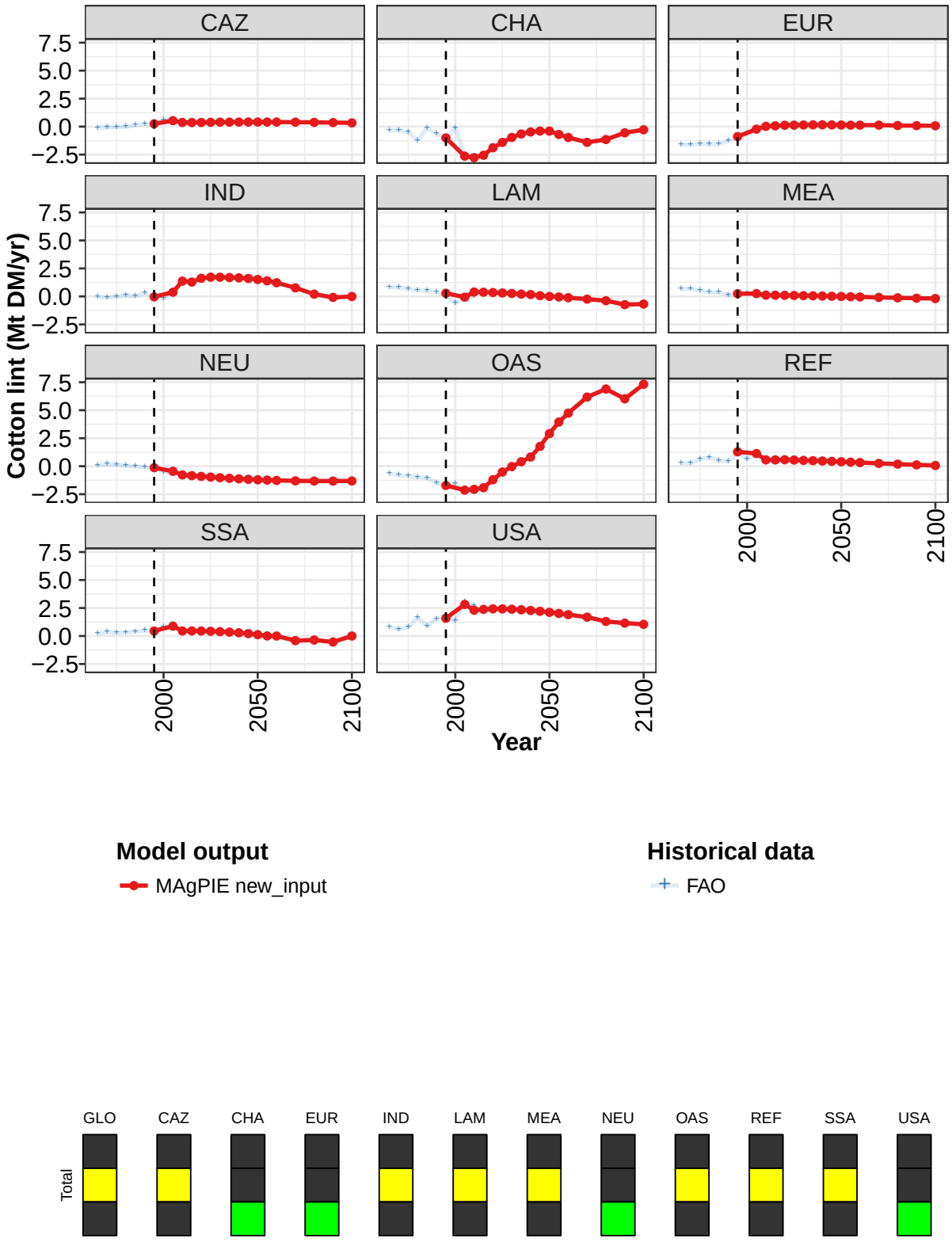


Figure 427: MAgPIE new_input — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.31	0.49	-0.01	0.27	2.01	3.13	3.87	4.36	4.69	5.30	6.00
CAZ	0.25	0.54	0.37	0.37	0.37	0.39	0.40	0.40	0.41	0.41	0.41
CHA	-1.01	-2.64	-2.77	-2.55	-1.89	-1.41	-0.97	-0.66	-0.47	-0.40	-0.40
EUR	-0.89	-0.22	0.03	0.07	0.12	0.13	0.15	0.16	0.16	0.15	0.15
IND	-0.04	0.38	1.37	1.28	1.62	1.72	1.72	1.69	1.66	1.60	1.51
LAM	0.28	-0.07	0.39	0.37	0.35	0.31	0.27	0.21	0.17	0.07	0.00
MEA	0.24	0.25	0.11	0.11	0.10	0.09	0.07	0.05	0.04	0.02	-0.00
NEU	-0.13	-0.45	-0.78	-0.85	-0.91	-0.97	-1.03	-1.08	-1.13	-1.17	-1.21
OAS	-1.72	-2.14	-2.07	-1.92	-1.20	-0.52	-0.03	0.40	0.82	1.77	2.91
REF	1.29	1.13	0.57	0.56	0.58	0.55	0.52	0.49	0.46	0.43	0.40
SSA	0.45	0.88	0.45	0.45	0.45	0.42	0.39	0.35	0.29	0.21	0.12
USA	1.58	2.82	2.31	2.38	2.42	2.42	2.39	2.34	2.28	2.20	2.11

Table 1571: MAgPIE new_input — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

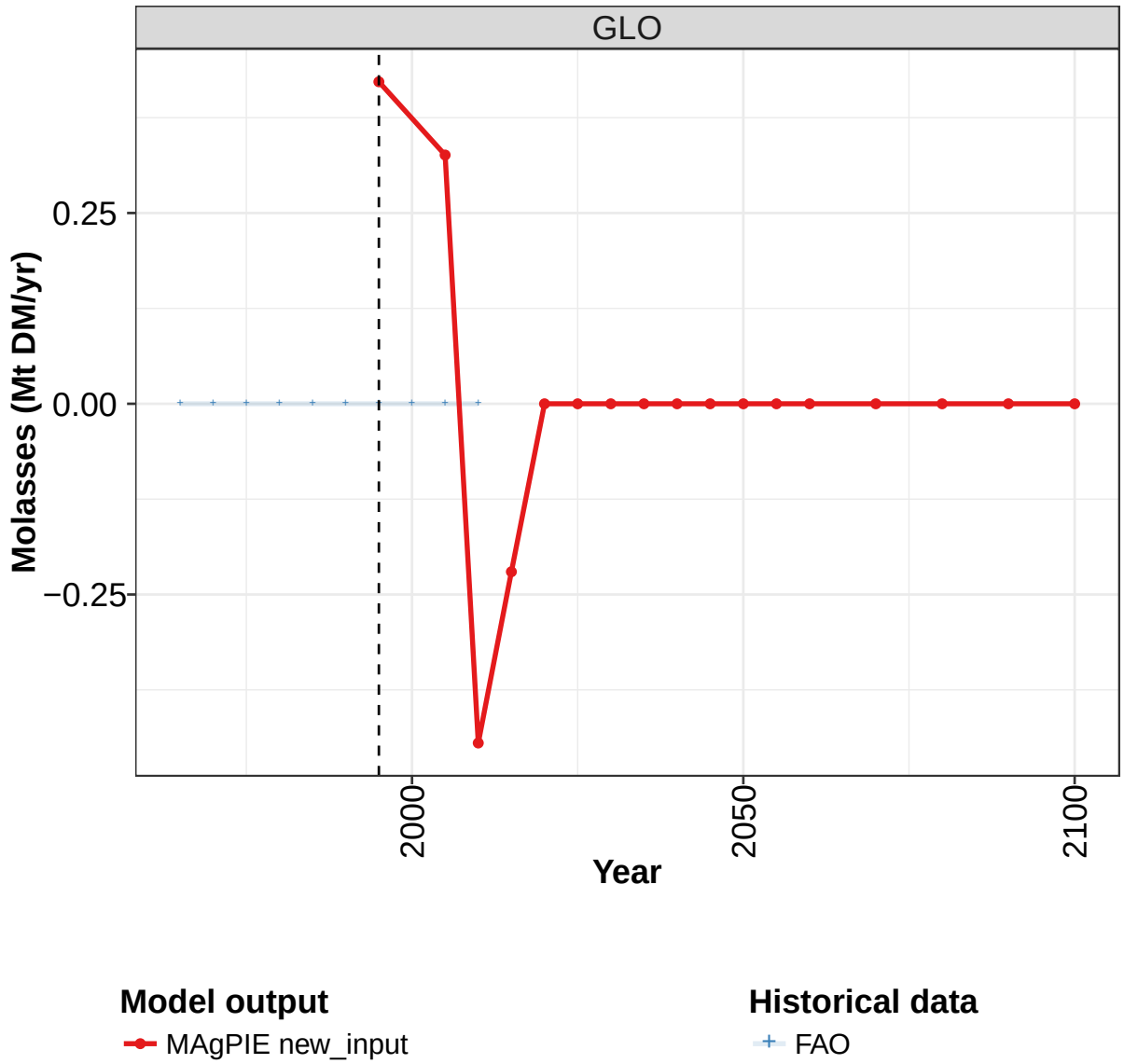
	2055	2060	2070	2080	2090	2100
GLO	6.25	6.34	5.95	5.72	4.35	6.36
CAZ	0.41	0.41	0.40	0.38	0.36	0.34
CHA	-0.70	-0.97	-1.40	-1.15	-0.55	-0.28
EUR	0.13	0.13	0.13	0.10	0.09	0.08
IND	1.39	1.23	0.76	0.20	-0.09	-0.01
LAM	-0.05	-0.11	-0.24	-0.38	-0.73	-0.68
MEA	-0.03	-0.05	-0.09	-0.13	-0.16	-0.19
NEU	-1.24	-1.27	-1.31	-1.32	-1.33	-1.32
OAS	3.95	4.74	6.18	6.89	6.02	7.32
REF	0.36	0.33	0.25	0.18	0.12	0.06
SSA	0.01	0.00	-0.42	-0.36	-0.54	0.00
USA	2.01	1.91	1.69	1.30	1.15	1.04

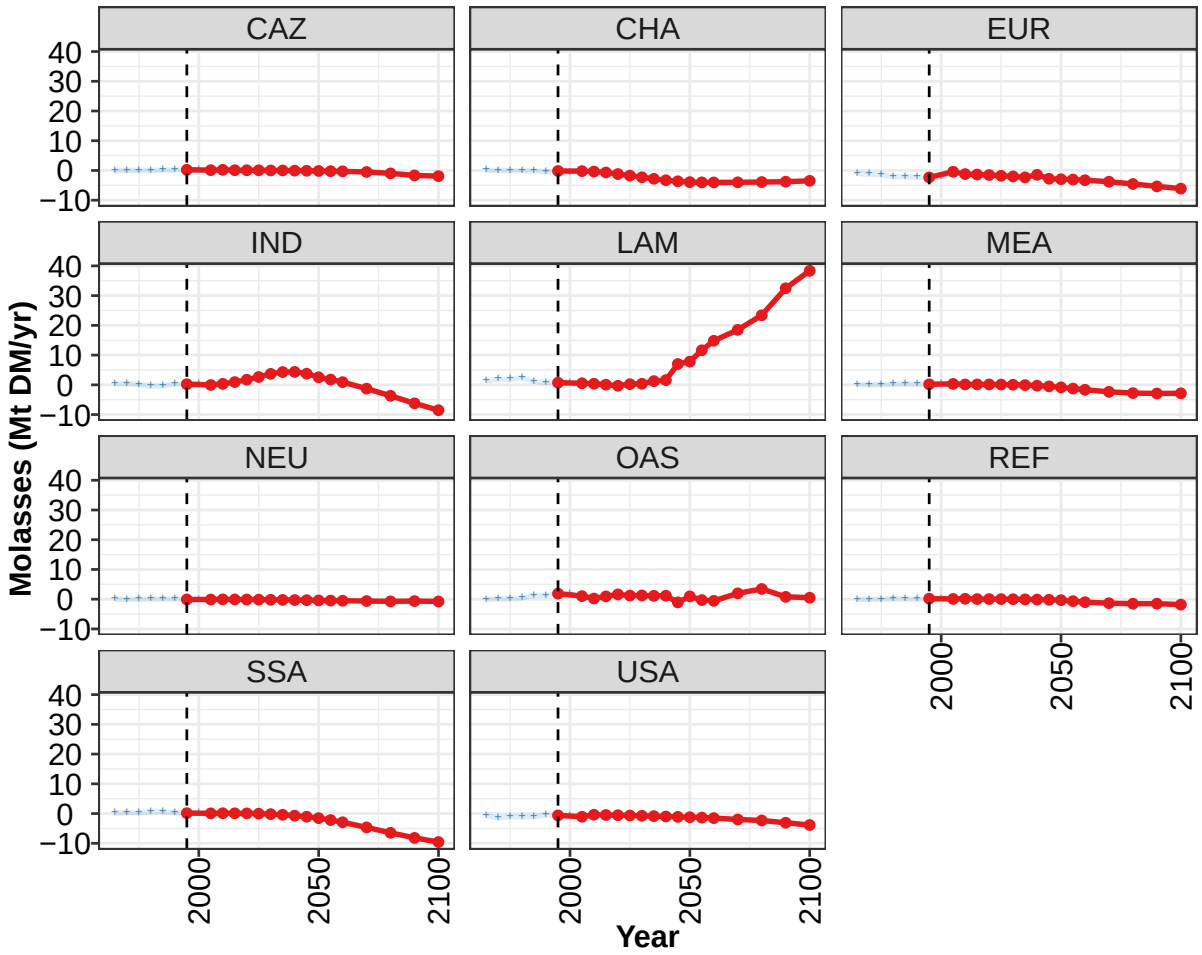
Table 1572: MAgPIE new_input — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.12	-0.05	-0.04	-0.01	0.14	0.23	0.22	0.58	0.51	0.35
CHA	-0.36	-0.32	-0.50	-1.23	-0.16	-0.62	-1.02	-0.12	-2.62	-2.76
EUR	-1.60	-1.62	-1.54	-1.58	-1.56	-1.27	-0.92	-0.66	-0.30	0.04
IND	-0.07	-0.09	-0.01	0.10	0.03	0.30	-0.04	-0.18	0.46	1.38
LAM	0.83	0.78	0.65	0.55	0.51	0.37	0.05	-0.58	-0.17	0.04
MEA	0.64	0.68	0.52	0.36	0.36	0.12	0.16	0.24	0.17	0.01
NEU	0.07	0.20	0.14	0.07	-0.02	-0.09	-0.21	-0.50	-0.71	-0.77
OAS	-0.64	-0.82	-0.89	-0.99	-1.07	-1.48	-1.75	-1.60	-2.29	-2.03
REF	0.28	0.28	0.64	0.77	0.48	0.44	1.20	0.66	1.05	0.57
SSA	0.22	0.37	0.26	0.32	0.40	0.48	0.48	0.80	0.85	0.50
USA	0.76	0.60	0.77	1.64	0.89	1.53	1.84	1.36	3.05	2.67

Table 1573: FAO — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr)

58.4.4 Molasses





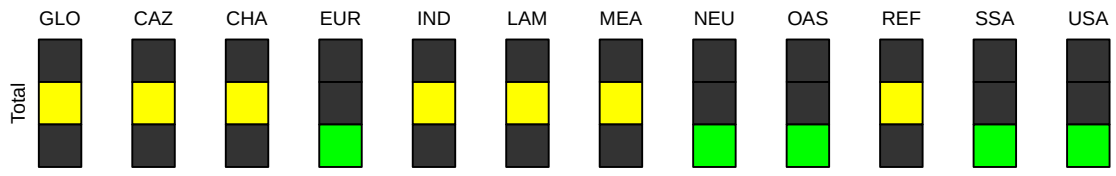


Figure 428: MAgPIE new_input — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.4	0.3	-0.4	-0.2	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0
CAZ	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	-0.2
CHA	-0.2	-0.2	-0.4	-0.7	-1.2	-1.7	-2.3	-2.8	-3.3	-3.6	-3.9
EUR	-2.3	-0.4	-1.2	-1.4	-1.5	-1.8	-2.0	-2.3	-1.4	-2.8	-2.9
IND	0.2	-0.0	0.3	0.9	1.7	2.7	3.7	4.3	4.4	3.8	2.5
LAM	0.7	0.5	0.4	0.1	-0.3	0.2	0.4	1.3	1.6	7.0	7.8
MEA	0.2	0.3	0.1	0.1	0.1	0.1	0.0	-0.1	-0.3	-0.5	-0.8
NEU	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4
OAS	1.9	1.0	0.2	1.0	1.6	1.2	1.3	1.1	1.2	-1.1	1.0
REF	0.2	0.1	0.2	0.1	0.1	0.0	0.0	-0.0	-0.1	-0.2	-0.3
SSA	0.2	0.1	0.1	0.1	0.1	-0.0	-0.2	-0.4	-0.7	-1.1	-1.5
USA	-0.6	-1.1	-0.4	-0.5	-0.5	-0.7	-0.8	-0.9	-1.0	-1.1	-1.2

Table 1574: MAgPIE new_input — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

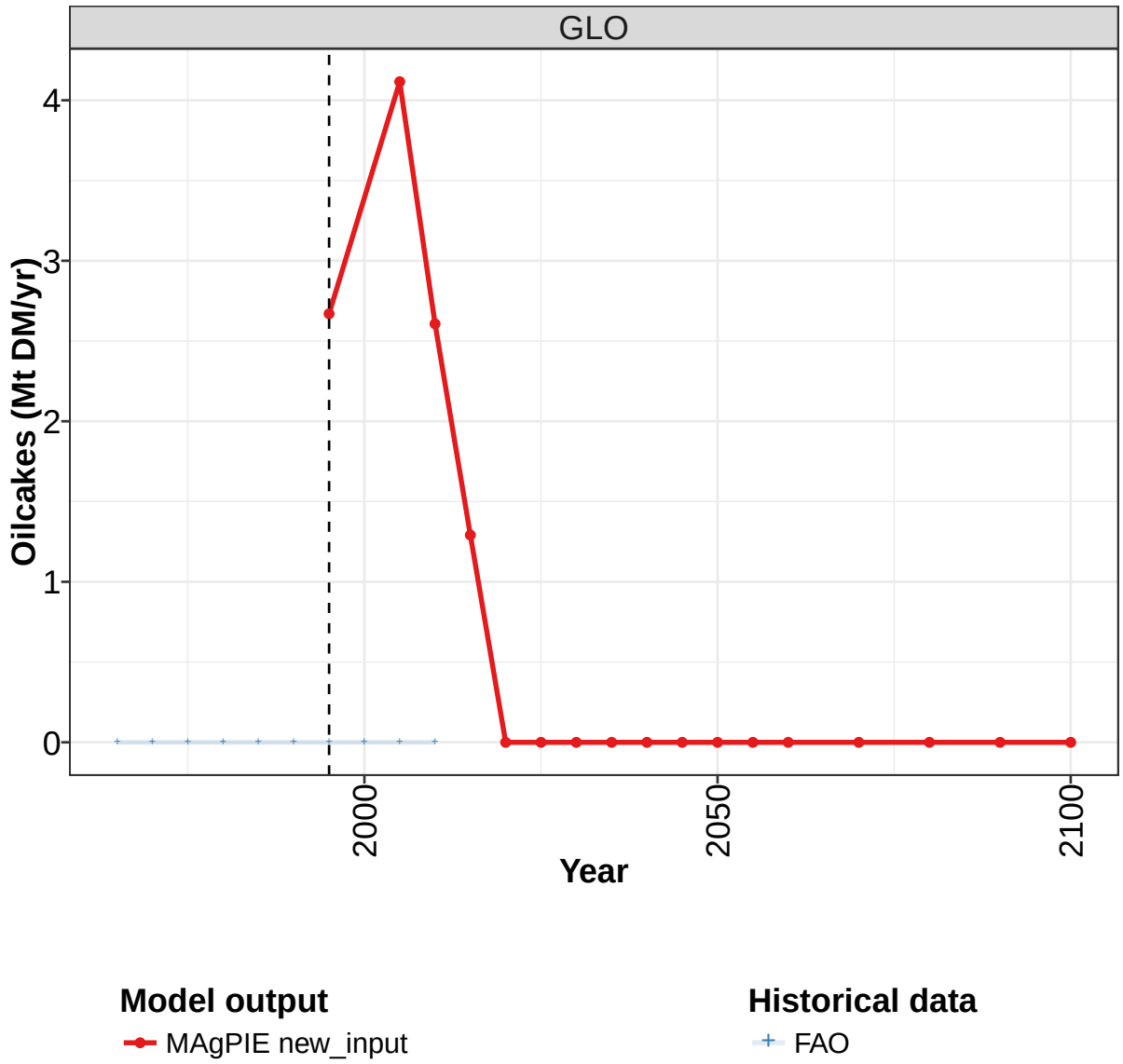
	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	-0.0	0.0	0.0
CAZ	-0.2	-0.3	-0.5	-1.0	-1.7	-1.9
CHA	-4.0	-4.0	-4.0	-3.9	-3.8	-3.5
EUR	-3.0	-3.3	-3.8	-4.5	-5.4	-6.1
IND	1.8	0.9	-1.3	-3.7	-6.2	-8.5
LAM	11.6	14.8	18.5	23.4	32.5	38.4
MEA	-1.2	-1.7	-2.3	-2.8	-2.9	-2.8
NEU	-0.5	-0.5	-0.6	-0.7	-0.6	-0.8
OAS	-0.3	-0.6	2.0	3.5	0.8	0.5
REF	-0.6	-1.0	-1.3	-1.5	-1.5	-1.8
SSA	-2.2	-2.9	-4.7	-6.5	-8.2	-9.6
USA	-1.3	-1.5	-2.0	-2.3	-3.1	-3.9

Table 1575: MAgPIE new_input — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.08	0.01	0.02	-0.03	0.13	0.21	0.17	0.08	0.09	0.04
CHA	0.08	0.01	-0.03	-0.13	-0.19	-0.44	-0.51	-0.69	-0.30	-0.37
EUR	-0.97	-1.27	-1.36	-2.02	-2.05	-2.27	-2.66	-2.14	-0.87	-1.15
IND	0.32	0.44	0.17	-0.45	-0.34	0.27	0.33	0.29	-0.05	0.57
LAM	1.32	1.91	1.90	2.30	1.16	0.78	0.99	0.77	0.93	0.80
MEA	0.02	0.04	0.04	0.25	0.31	0.24	0.23	0.39	0.51	0.17
NEU	-0.02	-0.06	-0.02	0.01	0.04	0.06	-0.08	-0.19	-0.10	-0.02
OAS	-0.04	0.07	0.14	0.34	1.27	1.32	1.80	1.93	0.62	0.06
REF	-0.03	-0.03	-0.04	0.20	0.03	0.00	0.06	0.01	0.17	0.17
SSA	0.12	0.34	0.19	0.66	0.69	0.31	0.31	0.17	0.10	0.16
USA	-0.72	-1.46	-1.00	-1.13	-1.04	-0.48	-0.63	-0.62	-1.10	-0.42

Table 1576: FAO — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr)

58.4.5 Oilcakes



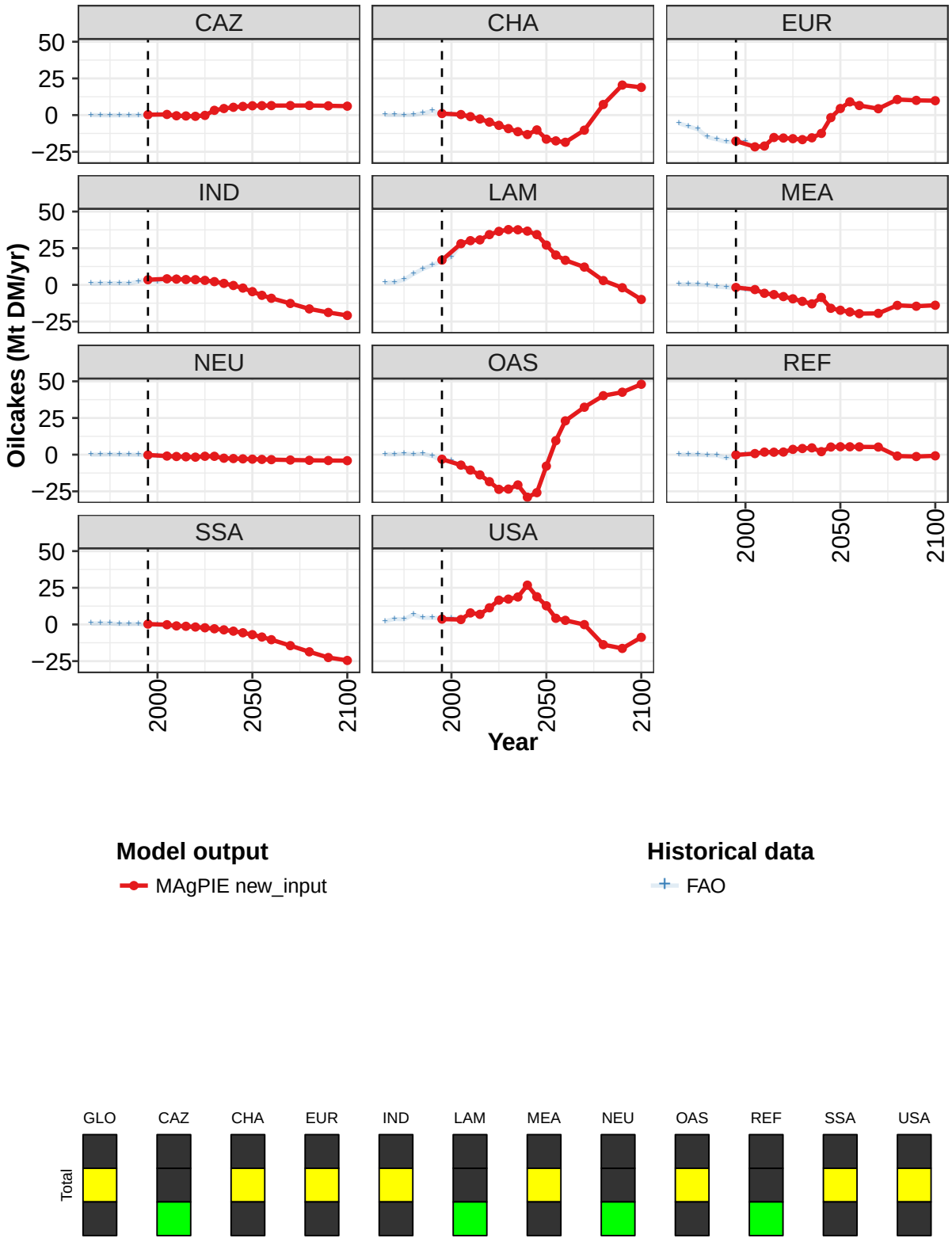


Figure 429: MAgPIE new_input — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	2.7	4.1	2.6	1.3	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0
CAZ	0.3	0.5	-0.5	-0.6	-0.8	-0.2	3.2	4.5	5.3	5.9	6.4
CHA	1.0	0.4	-1.1	-2.7	-4.8	-7.0	-9.2	-11.3	-13.3	-10.1	-16.4
EUR	-17.7	-21.6	-21.1	-15.3	-15.6	-16.1	-16.7	-15.5	-12.5	-1.7	4.5
IND	3.5	4.1	3.9	3.6	3.6	3.1	2.2	1.0	-0.4	-2.2	-4.6
LAM	16.9	28.1	30.1	30.7	34.3	36.5	37.7	37.6	36.7	34.3	27.1
MEA	-1.8	-3.2	-5.7	-6.6	-8.0	-9.5	-11.2	-12.9	-8.5	-16.0	-17.3
NEU	-0.2	-0.9	-1.2	-1.4	-1.7	-1.1	-1.1	-2.4	-2.6	-2.8	-3.0
OAS	-3.1	-7.1	-10.5	-13.8	-18.4	-23.6	-23.5	-20.6	-29.0	-25.9	-7.8
REF	-0.2	0.8	1.7	1.7	1.8	3.6	4.2	4.6	2.1	5.2	5.4
SSA	0.3	-0.2	-1.0	-1.2	-1.7	-2.3	-2.9	-3.7	-4.6	-5.7	-7.0
USA	3.6	3.4	7.9	6.9	11.4	16.5	17.3	18.7	26.8	18.9	12.7

Table 1577: MAgPIE new_input — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

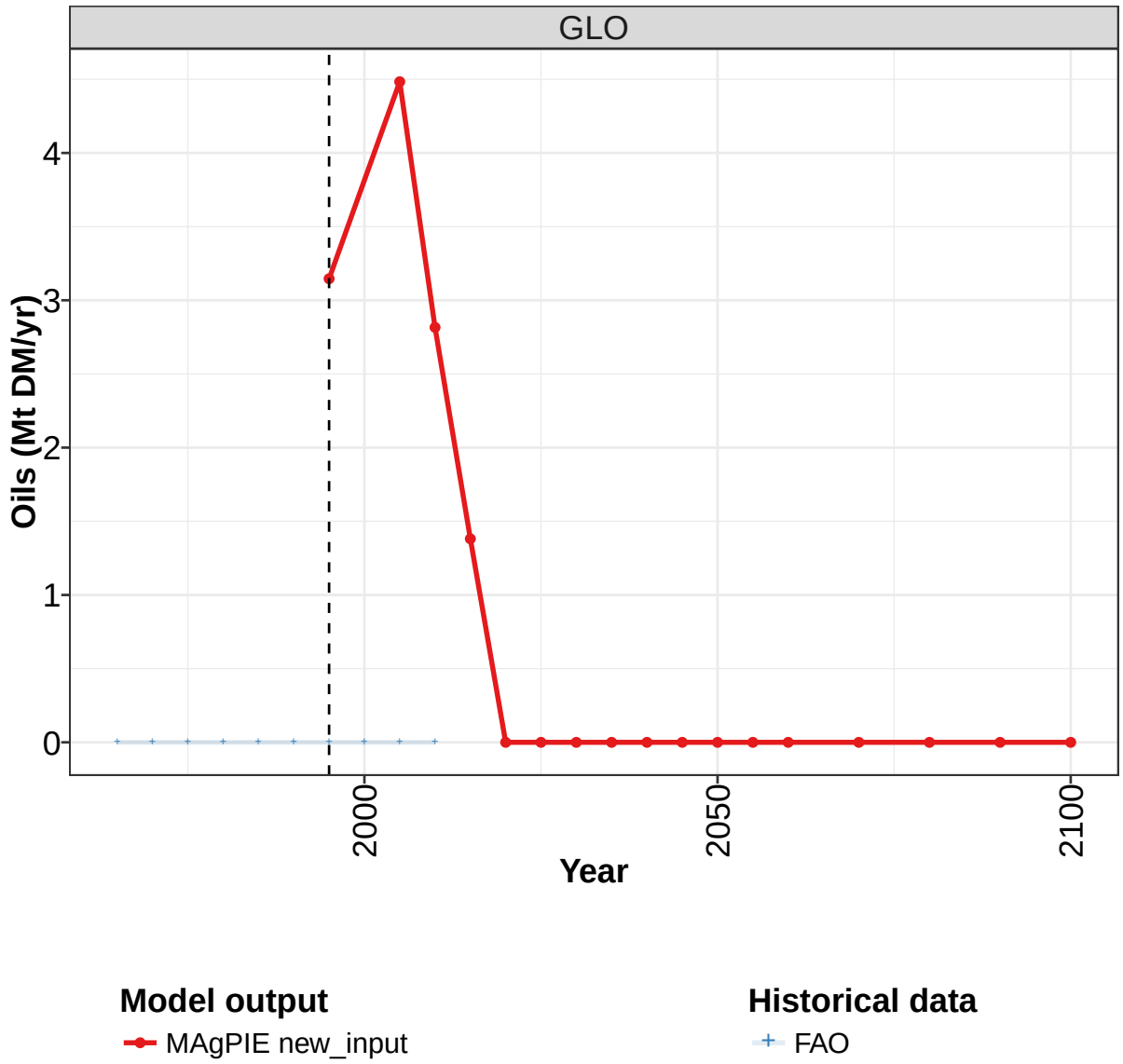
	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	0.0	0.0	-0.0
CAZ	6.4	6.5	6.5	6.5	6.3	6.1
CHA	-17.6	-18.5	-10.3	7.2	20.5	18.9
EUR	9.0	6.5	4.4	10.6	10.0	9.8
IND	-7.1	-9.1	-12.7	-16.4	-18.8	-20.8
LAM	20.3	16.8	12.1	2.9	-1.9	-9.9
MEA	-18.5	-19.6	-19.4	-14.0	-14.6	-13.9
NEU	-3.2	-3.4	-3.6	-3.9	-4.0	-4.1
OAS	9.6	23.1	32.4	40.2	42.6	48.0
REF	5.4	5.3	5.2	-0.9	-1.3	-0.8
SSA	-8.6	-10.4	-14.4	-18.6	-22.5	-24.5
USA	4.2	2.8	-0.1	-13.8	-16.3	-8.8

Table 1578: MAgPIE new_input — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.0	-0.1	-0.2	-0.1	-0.3	-0.2	-0.0	0.3	-0.2	-0.5
CHA	0.0	0.0	0.0	0.0	1.3	2.7	0.8	0.3	-0.0	-1.0
EUR	-5.6	-7.7	-9.7	-15.0	-16.6	-18.2	-18.0	-18.2	-22.0	-21.1
IND	0.8	1.0	1.1	1.0	0.9	2.3	4.0	2.0	4.0	4.6
LAM	1.4	1.8	3.5	7.5	10.9	13.5	16.4	19.1	28.5	29.7
MEA	0.3	0.4	0.2	-0.3	-1.1	-1.7	-2.2	-3.1	-3.6	-5.8
NEU	-0.1	0.0	0.2	-0.0	0.0	-0.1	-0.4	-0.7	-1.2	-1.4
OAS	0.3	0.2	0.7	0.3	0.5	-1.0	-4.0	-4.1	-8.2	-11.1
REF	0.0	-0.0	-0.0	-0.4	-0.4	-2.3	-0.3	0.2	0.5	1.6
SSA	0.6	0.7	0.6	0.3	0.3	0.4	-0.5	-0.1	-1.3	-1.5
USA	2.2	3.8	3.5	6.8	4.5	4.6	4.1	4.3	3.5	6.5

Table 1579: FAO — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr)

58.4.6 Oils


GLO
Oils (Mt DM/yr)
0
1
2
3
4
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

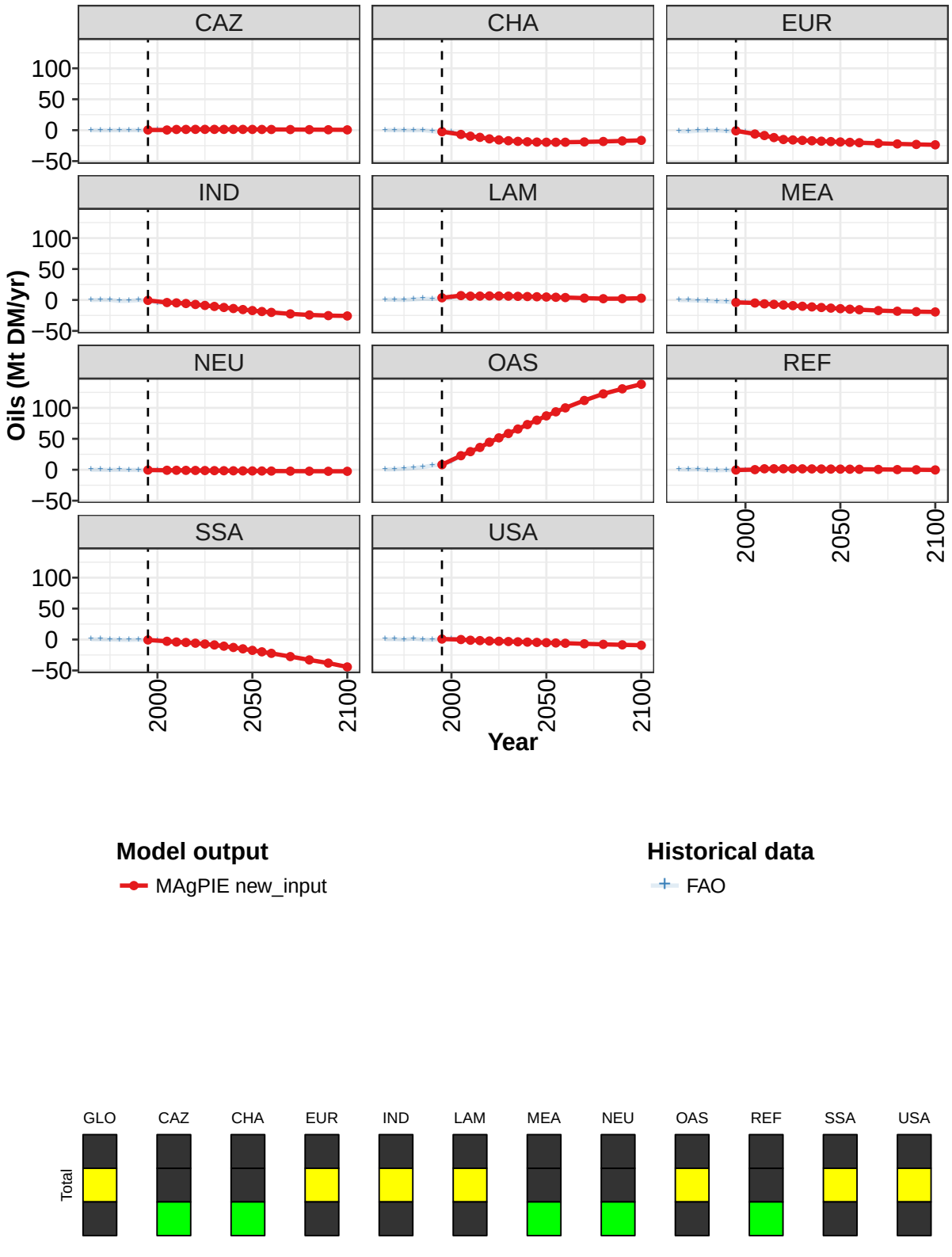


Figure 430: MAgPIE new_input — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3	4	3	1	-0	0	0	0	0	0	0
CAZ	0	0	1	1	1	1	1	1	1	1	1
CHA	-2	-7	-10	-12	-14	-16	-17	-18	-19	-19	-19
EUR	-1	-6	-9	-12	-15	-16	-16	-17	-18	-18	-19
IND	-1	-4	-5	-6	-7	-9	-10	-12	-14	-15	-17
LAM	4	7	6	6	7	6	6	6	6	5	5
MEA	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14
NEU	-0	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2
OAS	8	23	29	36	44	52	59	66	73	80	87
REF	-0	0	2	2	2	2	1	1	1	1	1
SSA	-1	-3	-4	-5	-6	-7	-9	-11	-13	-15	-17
USA	1	-0	-1	-2	-2	-3	-3	-4	-4	-5	-5

Table 1580: MAgPIE new_input — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr) [PART 1/2]

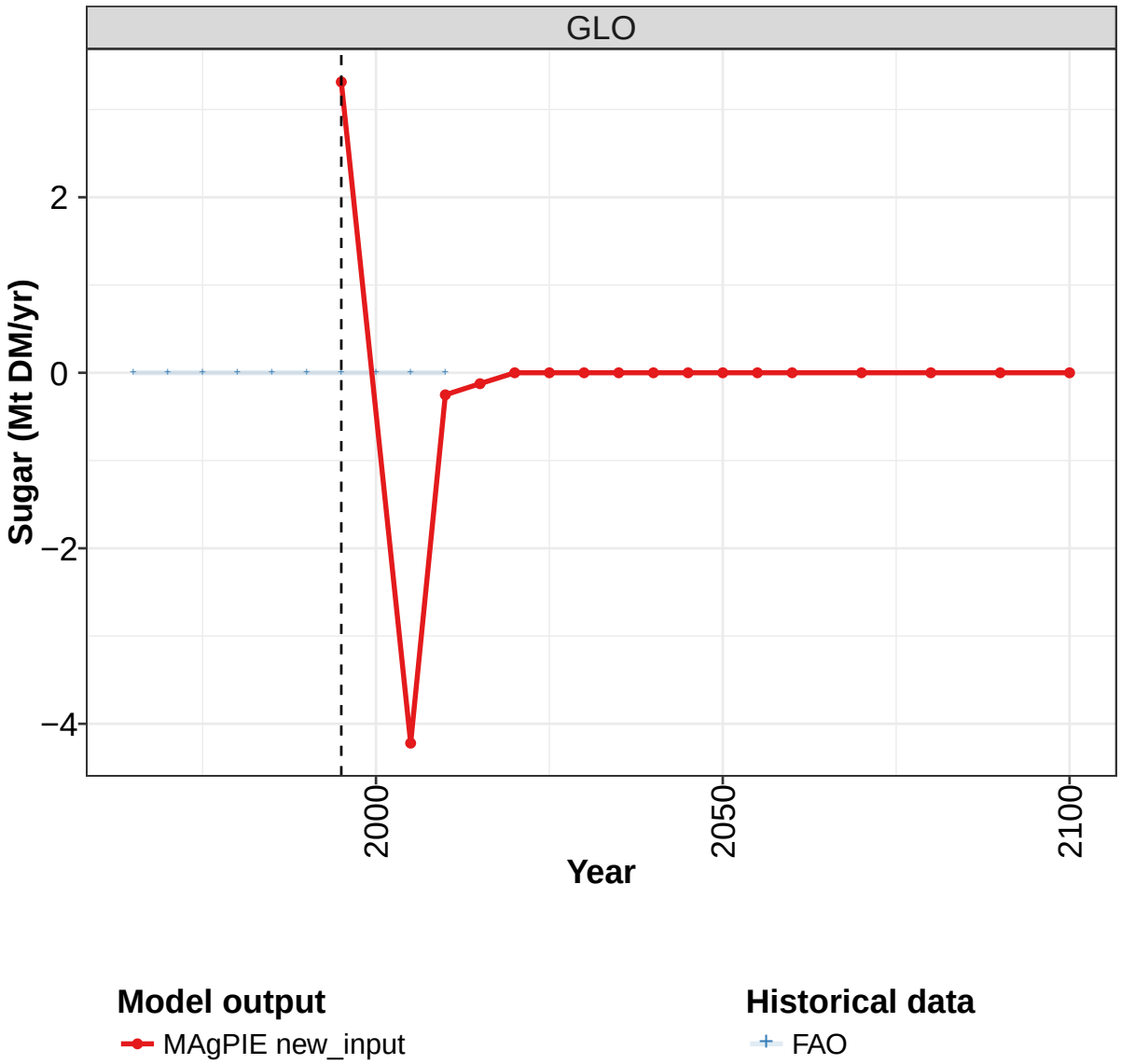
	2055	2060	2070	2080	2090	2100
GLO	0	0	-0	0	0	0
CAZ	1	1	1	1	1	1
CHA	-20	-19	-19	-18	-17	-16
EUR	-20	-20	-21	-22	-23	-24
IND	-19	-20	-22	-24	-25	-26
LAM	4	4	3	2	2	3
MEA	-15	-16	-17	-18	-19	-19
NEU	-2	-2	-2	-2	-2	-2
OAS	94	100	112	123	131	138
REF	1	1	1	0	-0	-0
SSA	-20	-22	-28	-33	-38	-44
USA	-6	-6	-7	-8	-9	-9

Table 1581: MAgPIE new_input — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	-0.1	-0.1	-0.2	-0.1	-0.0	-0.1	0.2	0.3	0.2	1.3
CHA	0.0	-0.0	-0.1	-0.3	0.0	-1.8	-2.8	-3.2	-7.6	-9.9
EUR	-1.6	-1.9	-1.1	-0.5	-0.5	-1.5	-1.6	-3.0	-7.0	-9.3
IND	-0.2	0.2	0.0	-1.7	-1.3	-0.5	-0.6	-4.8	-4.3	-4.8
LAM	0.5	0.4	-0.1	1.0	1.9	1.7	2.9	3.5	6.4	4.7
MEA	-0.3	-0.5	-0.9	-1.5	-2.3	-3.0	-4.2	-3.8	-5.2	-6.3
NEU	-0.1	-0.1	-0.3	-0.2	-0.4	-0.4	-0.8	-0.8	-1.2	-1.1
OAS	0.4	0.8	1.7	2.9	4.3	7.0	8.0	13.4	22.4	29.7
REF	0.5	0.3	0.8	-0.6	-1.0	-0.6	-0.7	-0.5	-0.3	1.4
SSA	0.5	0.3	0.2	-0.4	-0.7	-0.2	-1.5	-1.9	-3.8	-4.6
USA	0.4	0.6	-0.0	1.5	-0.1	-0.5	1.2	0.7	0.5	-1.1

Table 1582: FAO — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr)

58.4.7 Sugar


GLO
Sugar (Mt DM/yr)
2
0
−2
−4
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

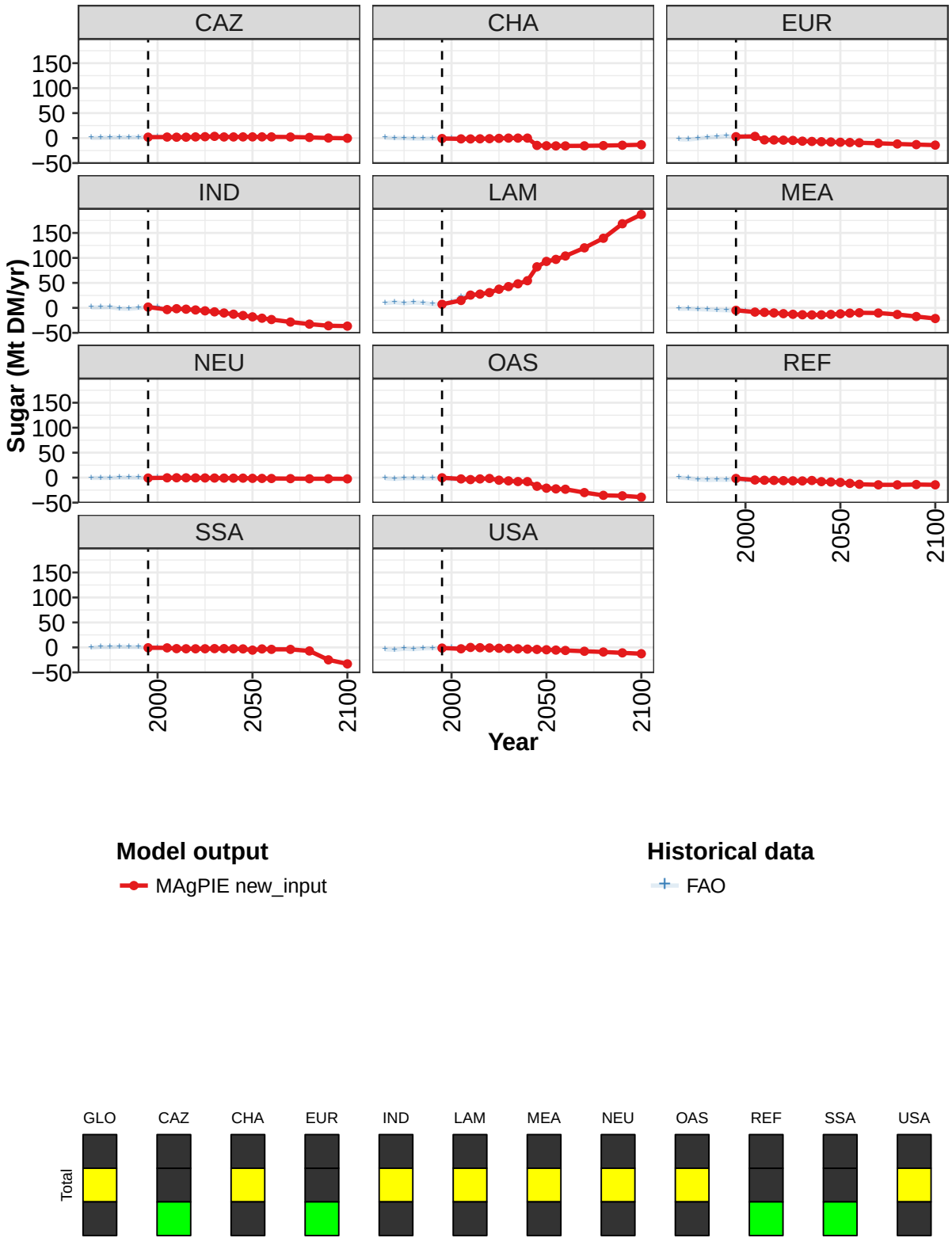


Figure 431: MAgPIE new_input — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3	-4	-0	-0	0	0	0	0	0	-0	0
CAZ	2	2	2	2	2	3	3	2	2	2	2
CHA	-1	-2	-2	-1	-1	-1	0	0	0	-15	-15
EUR	3	3	-4	-4	-4	-5	-6	-7	-7	-8	-8
IND	2	-3	-2	-3	-4	-6	-8	-10	-13	-15	-18
LAM	7	15	26	28	31	37	43	48	54	82	93
MEA	-5	-8	-9	-10	-12	-13	-14	-14	-14	-13	-12
NEU	-1	-0	-0	-0	-0	-1	-1	-1	-1	-1	-1
OAS	-0	-3	-4	-3	-2	-5	-6	-8	-8	-17	-21
REF	-2	-5	-5	-5	-6	-6	-7	-6	-8	-9	-9
SSA	-1	-1	-2	-3	-3	-3	-2	-2	-3	-3	-5
USA	-1	-3	0	-0	-1	-2	-2	-3	-3	-4	-5

Table 1583: MAgPIE new_input — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	-0	0	0	0	0	-0
CAZ	2	2	2	1	0	-0
CHA	-16	-16	-15	-15	-14	-13
EUR	-9	-9	-10	-12	-13	-14
IND	-21	-23	-28	-33	-36	-37
LAM	97	104	120	139	168	187
MEA	-11	-10	-10	-13	-17	-21
NEU	-2	-2	-2	-2	-2	-2
OAS	-22	-23	-30	-35	-36	-39
REF	-11	-13	-14	-14	-14	-14
SSA	-3	-4	-4	-7	-25	-33
USA	-5	-6	-8	-9	-11	-13

Table 1584: MAgPIE new_input — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

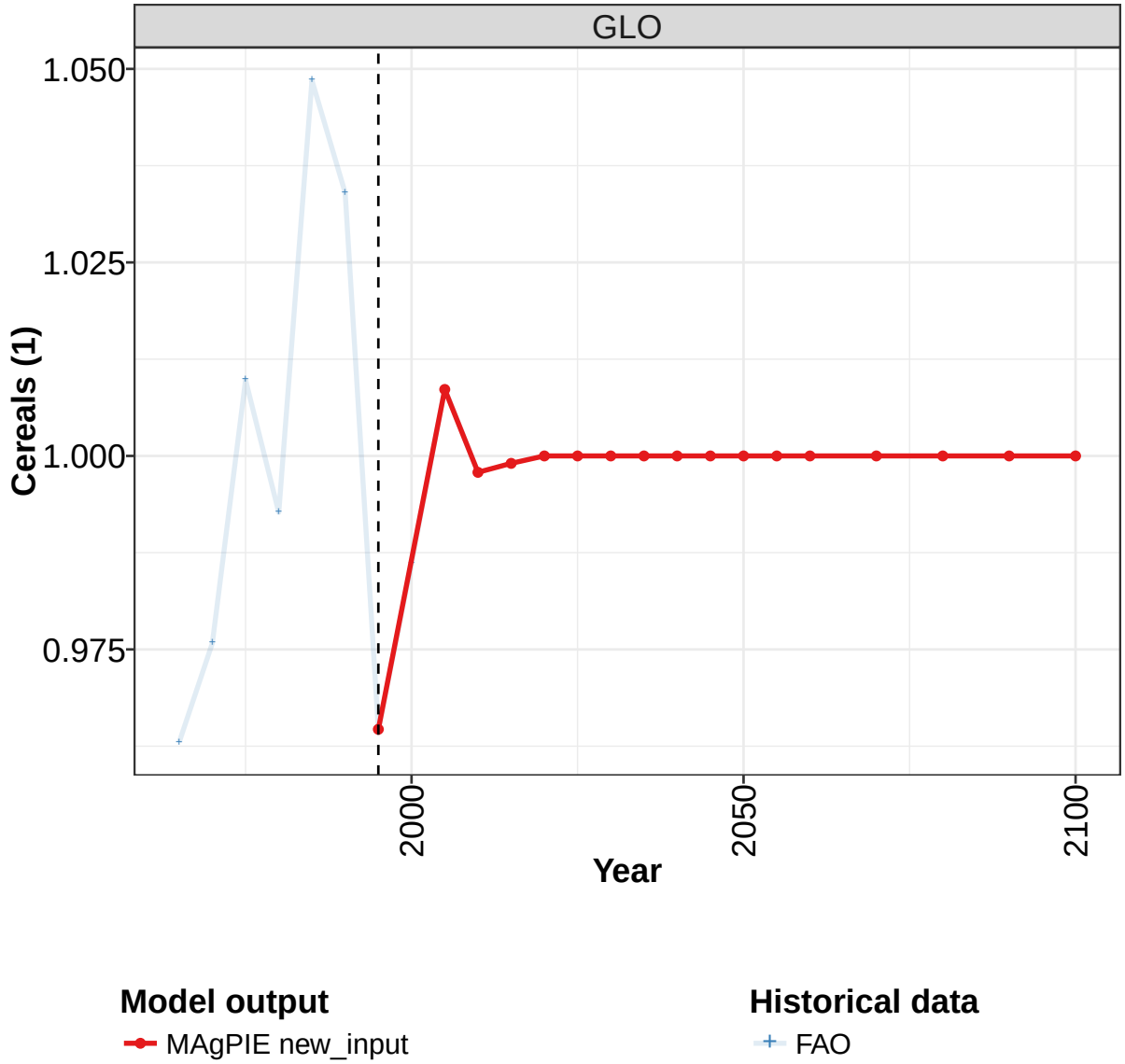
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.2	0.6	0.9	1.3	1.4	1.6	2.4	2.6	1.7	1.2
CHA	0.7	-0.1	-0.1	-1.0	-1.1	-0.6	-1.0	-0.6	-2.2	-2.1
EUR	-2.5	-2.9	-0.8	1.5	2.4	4.1	1.9	2.4	1.9	-3.8
IND	0.7	1.0	1.4	-1.4	-2.0	-0.3	1.9	1.6	-4.0	-1.8
LAM	9.4	11.2	9.0	10.6	10.1	7.3	7.6	11.3	21.9	27.0
MEA	-2.1	-1.7	-2.6	-3.3	-4.2	-5.0	-5.1	-6.7	-8.1	-8.9
NEU	-0.6	-0.6	-0.5	0.1	0.0	-0.2	-1.0	-0.2	-0.1	-0.2
OAS	-1.5	-2.6	-1.4	-1.0	-1.5	-1.6	-1.6	-3.4	-3.7	-4.8
REF	0.1	-1.2	-3.6	-4.8	-4.1	-4.6	-2.4	-5.6	-4.6	-5.2
SSA	-0.4	0.8	0.6	1.6	1.0	0.9	-1.3	-1.0	0.0	-2.5
USA	-4.1	-4.6	-2.7	-3.5	-1.9	-1.4	-1.3	-0.6	-2.8	1.0

Table 1585: FAO — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr)

59 Self-sufficiency

59.1 Crops

59.1.1 Cereals



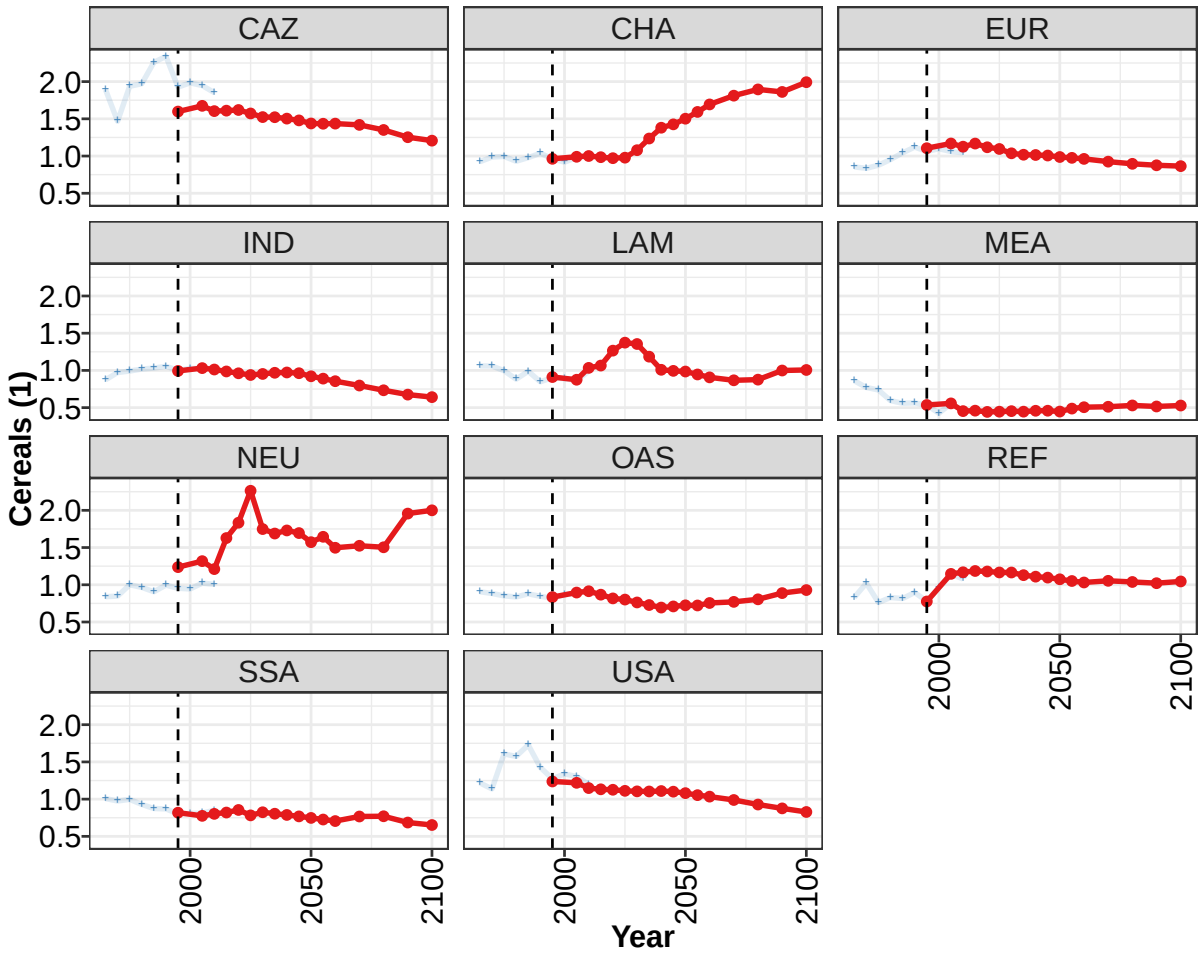


Figure 432: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.96	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.60	1.67	1.60	1.61	1.62	1.57	1.52	1.52	1.50	1.48	1.44
CHA	0.96	0.99	1.00	0.99	0.97	0.98	1.08	1.24	1.38	1.43	1.50
EUR	1.11	1.17	1.13	1.17	1.12	1.10	1.04	1.02	1.01	1.01	0.99
IND	0.99	1.03	1.01	0.99	0.96	0.94	0.95	0.97	0.97	0.96	0.92
LAM	0.91	0.87	1.03	1.07	1.27	1.37	1.35	1.18	1.01	0.99	0.99
MEA	0.54	0.56	0.45	0.46	0.44	0.45	0.45	0.45	0.46	0.46	0.45
NEU	1.24	1.32	1.21	1.63	1.83	2.26	1.75	1.69	1.73	1.69	1.57
OAS	0.83	0.90	0.91	0.87	0.82	0.80	0.76	0.73	0.69	0.71	0.72
REF	0.78	1.15	1.17	1.19	1.18	1.17	1.16	1.13	1.11	1.10	1.07
SSA	0.82	0.78	0.80	0.82	0.85	0.78	0.82	0.80	0.79	0.77	0.75
USA	1.24	1.22	1.15	1.13	1.13	1.11	1.10	1.10	1.11	1.10	1.08

Table 1586: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals (1) [PART 1/2]

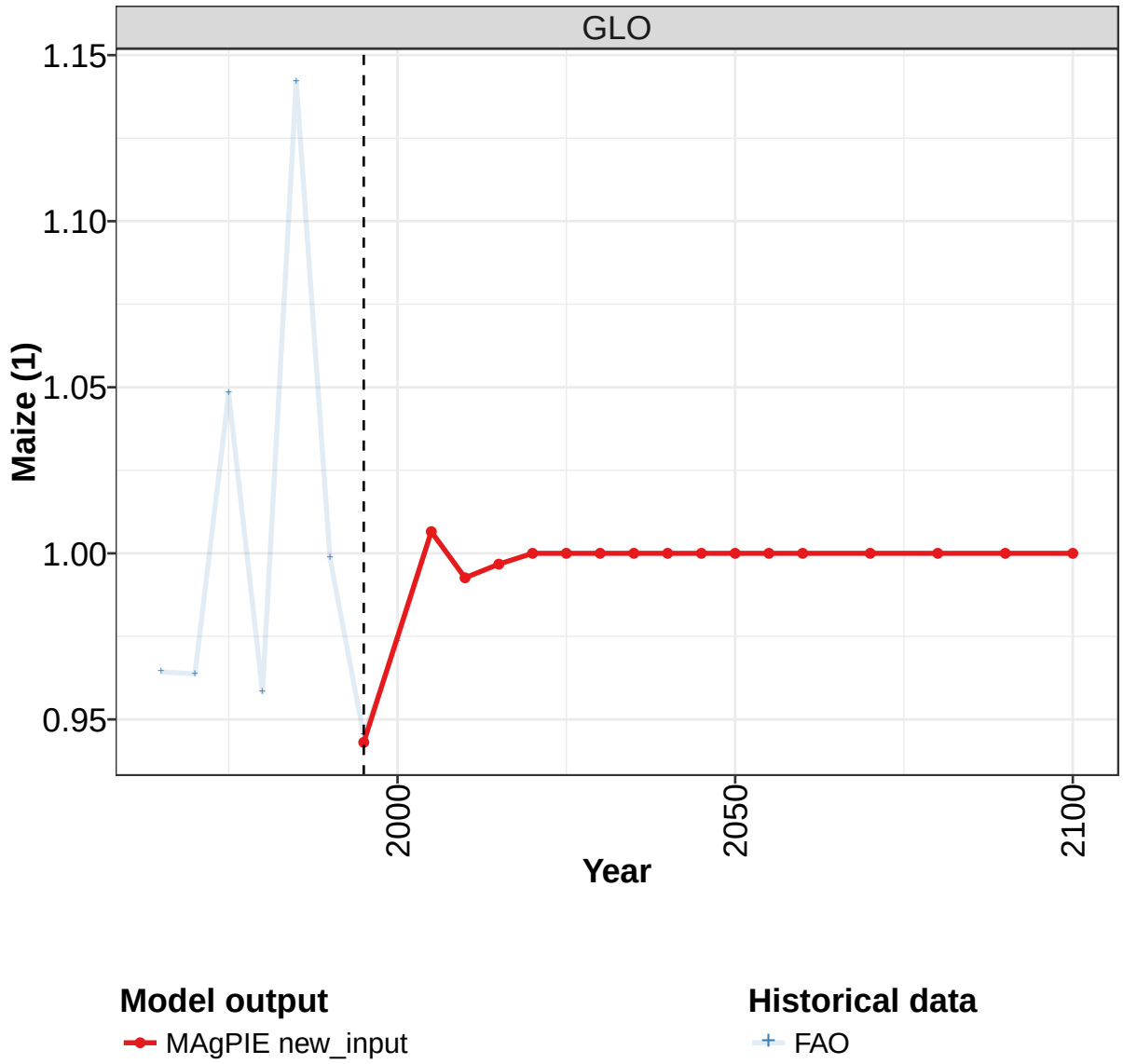
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.43	1.44	1.42	1.35	1.25	1.21
CHA	1.59	1.69	1.81	1.90	1.86	1.99
EUR	0.98	0.96	0.92	0.90	0.88	0.86
IND	0.89	0.86	0.80	0.73	0.68	0.64
LAM	0.95	0.91	0.87	0.88	1.00	1.01
MEA	0.49	0.51	0.51	0.53	0.52	0.53
NEU	1.64	1.50	1.52	1.50	1.96	2.00
OAS	0.72	0.76	0.77	0.80	0.89	0.93
REF	1.05	1.03	1.05	1.04	1.02	1.04
SSA	0.73	0.71	0.77	0.77	0.69	0.65
USA	1.05	1.03	0.99	0.93	0.88	0.83

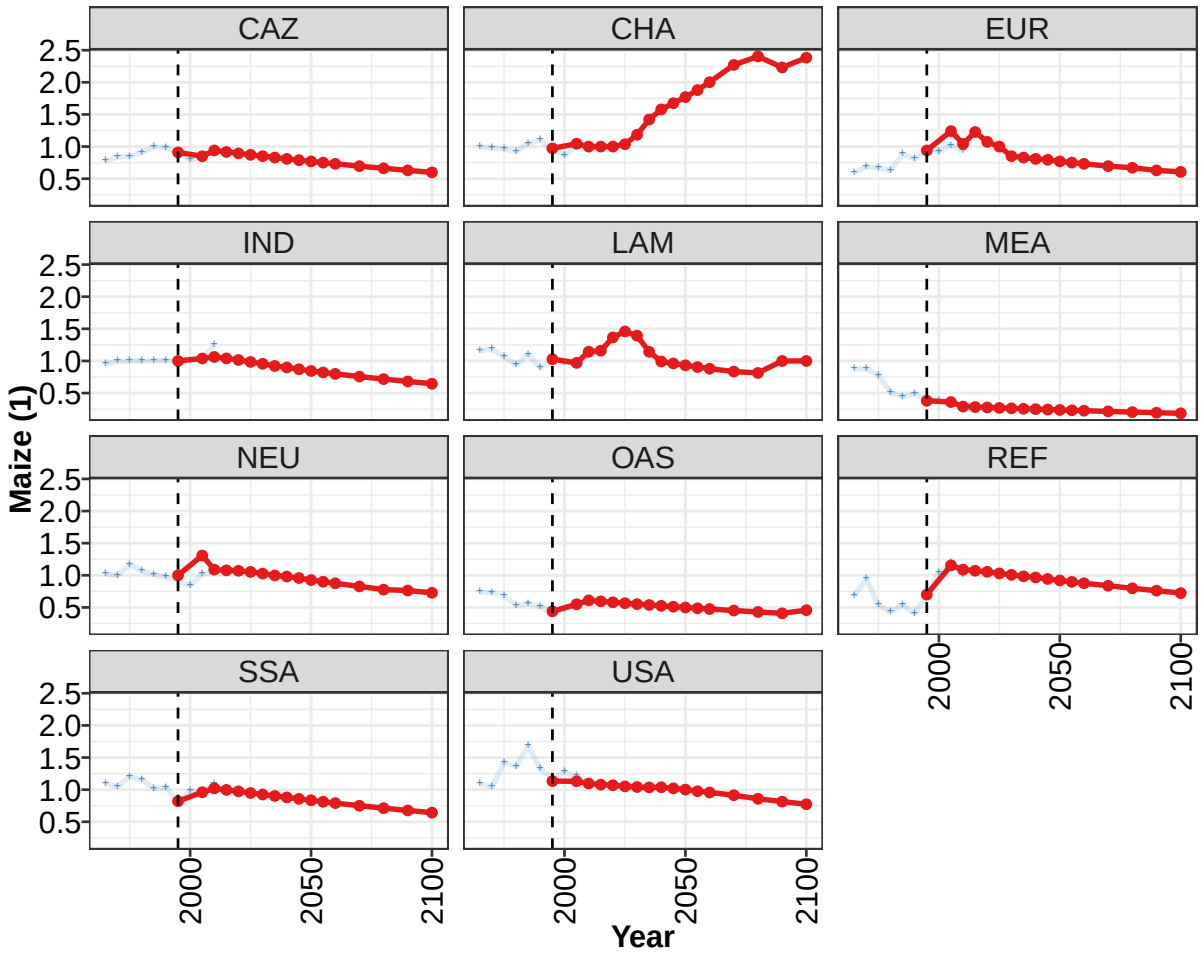
Table 1587: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.96	0.98	1.01	0.99	1.05	1.03	0.96	0.99	1.01	1.00
CAZ	1.89	1.47	1.94	1.97	2.26	2.34	1.93	1.98	1.95	1.85
CHA	0.92	0.99	0.99	0.93	0.98	1.04	0.96	0.92	0.98	1.01
EUR	0.85	0.84	0.88	0.95	1.04	1.12	1.06	1.10	1.06	1.04
IND	0.87	0.97	0.99	1.02	1.03	1.05	1.00	1.03	1.03	1.03
LAM	1.06	1.06	1.00	0.88	0.99	0.85	0.90	0.89	0.86	0.99
MEA	0.86	0.77	0.74	0.59	0.56	0.56	0.53	0.42	0.56	0.46
NEU	0.84	0.85	1.00	0.97	0.91	0.99	0.95	0.94	1.02	1.01
OAS	0.91	0.88	0.85	0.84	0.88	0.85	0.82	0.86	0.89	0.92
REF	0.83	1.02	0.76	0.83	0.82	0.90	0.78	0.96	1.14	1.08
SSA	1.01	0.98	1.00	0.93	0.87	0.87	0.80	0.81	0.81	0.85
USA	1.22	1.14	1.61	1.57	1.73	1.43	1.27	1.34	1.30	1.20

Table 1588: FAO — Trade—Self-sufficiency—Crops—Cereals (1)

59.1.2 Cereals—Maize





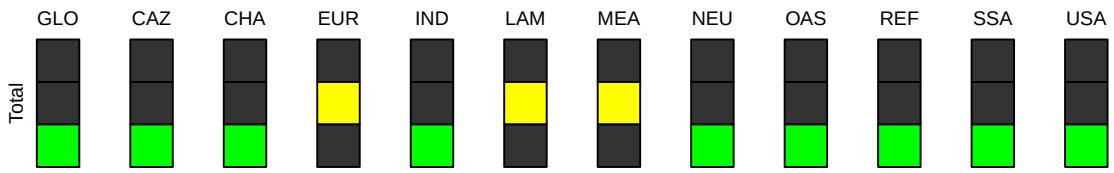


Figure 433: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Maize (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.94	1.01	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.91	0.85	0.94	0.92	0.89	0.87	0.85	0.83	0.81	0.79	0.77
CHA	0.97	1.04	1.00	1.00	1.00	1.04	1.18	1.42	1.58	1.68	1.77
EUR	0.94	1.24	1.04	1.23	1.07	1.00	0.85	0.83	0.81	0.80	0.77
IND	1.00	1.04	1.06	1.04	1.02	0.98	0.96	0.92	0.90	0.87	0.84
LAM	1.03	0.97	1.14	1.16	1.37	1.46	1.39	1.14	0.99	0.96	0.93
MEA	0.38	0.36	0.29	0.28	0.28	0.27	0.26	0.26	0.25	0.24	0.24
NEU	1.00	1.31	1.09	1.08	1.07	1.05	1.03	1.00	0.98	0.96	0.93
OAS	0.44	0.55	0.61	0.59	0.58	0.57	0.55	0.54	0.52	0.51	0.50
REF	0.70	1.16	1.09	1.07	1.05	1.03	1.01	0.98	0.97	0.94	0.92
SSA	0.82	0.96	1.02	1.00	0.97	0.95	0.92	0.90	0.88	0.86	0.83
USA	1.13	1.13	1.10	1.08	1.07	1.05	1.04	1.04	1.04	1.02	1.00

Table 1589: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Maize (1) [PART 1/2]

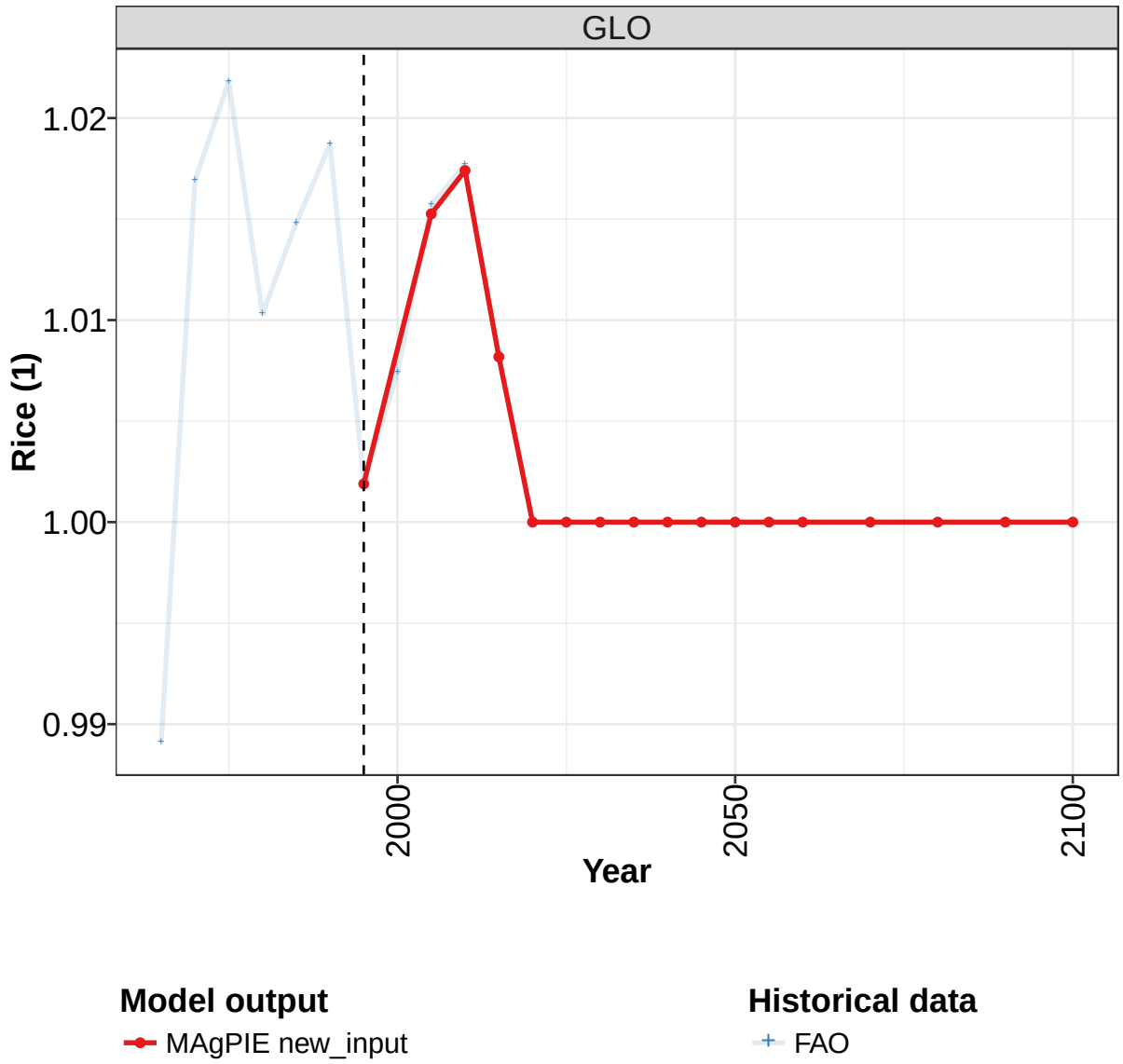
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.75	0.73	0.70	0.66	0.63	0.60
CHA	1.88	2.00	2.27	2.40	2.23	2.38
EUR	0.75	0.73	0.70	0.67	0.63	0.61
IND	0.82	0.80	0.76	0.72	0.68	0.65
LAM	0.90	0.88	0.84	0.81	1.00	1.00
MEA	0.23	0.23	0.21	0.20	0.19	0.18
NEU	0.90	0.88	0.83	0.78	0.76	0.73
OAS	0.49	0.47	0.45	0.43	0.41	0.46
REF	0.90	0.88	0.84	0.80	0.76	0.72
SSA	0.81	0.79	0.75	0.71	0.68	0.64
USA	0.98	0.96	0.91	0.86	0.81	0.77

Table 1590: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Maize (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.96	0.96	1.05	0.96	1.14	1.00	0.95	0.97	1.01	0.99
CAZ	0.77	0.84	0.85	0.91	0.99	0.99	0.91	0.79	0.85	0.94
CHA	1.00	0.98	0.97	0.93	1.05	1.10	0.95	0.86	1.01	1.01
EUR	0.59	0.69	0.67	0.63	0.89	0.80	0.94	0.92	1.02	0.94
IND	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.25
LAM	1.16	1.18	1.07	0.93	1.10	0.89	1.01	0.98	0.97	1.09
MEA	0.87	0.88	0.77	0.51	0.44	0.49	0.38	0.38	0.36	0.29
NEU	1.02	1.00	1.17	1.06	1.01	0.97	0.91	0.84	1.02	1.06
OAS	0.74	0.73	0.68	0.53	0.56	0.51	0.44	0.46	0.55	0.61
REF	0.68	0.95	0.54	0.43	0.54	0.40	0.70	1.03	1.19	1.01
SSA	1.10	1.04	1.21	1.15	1.02	1.04	0.82	0.98	0.96	1.09
USA	1.09	1.04	1.43	1.36	1.69	1.32	1.17	1.27	1.22	1.11

Table 1591: FAO — Trade—Self-sufficiency—Crops—Cereals—Maize (1)

59.1.3 Cereals—Rice



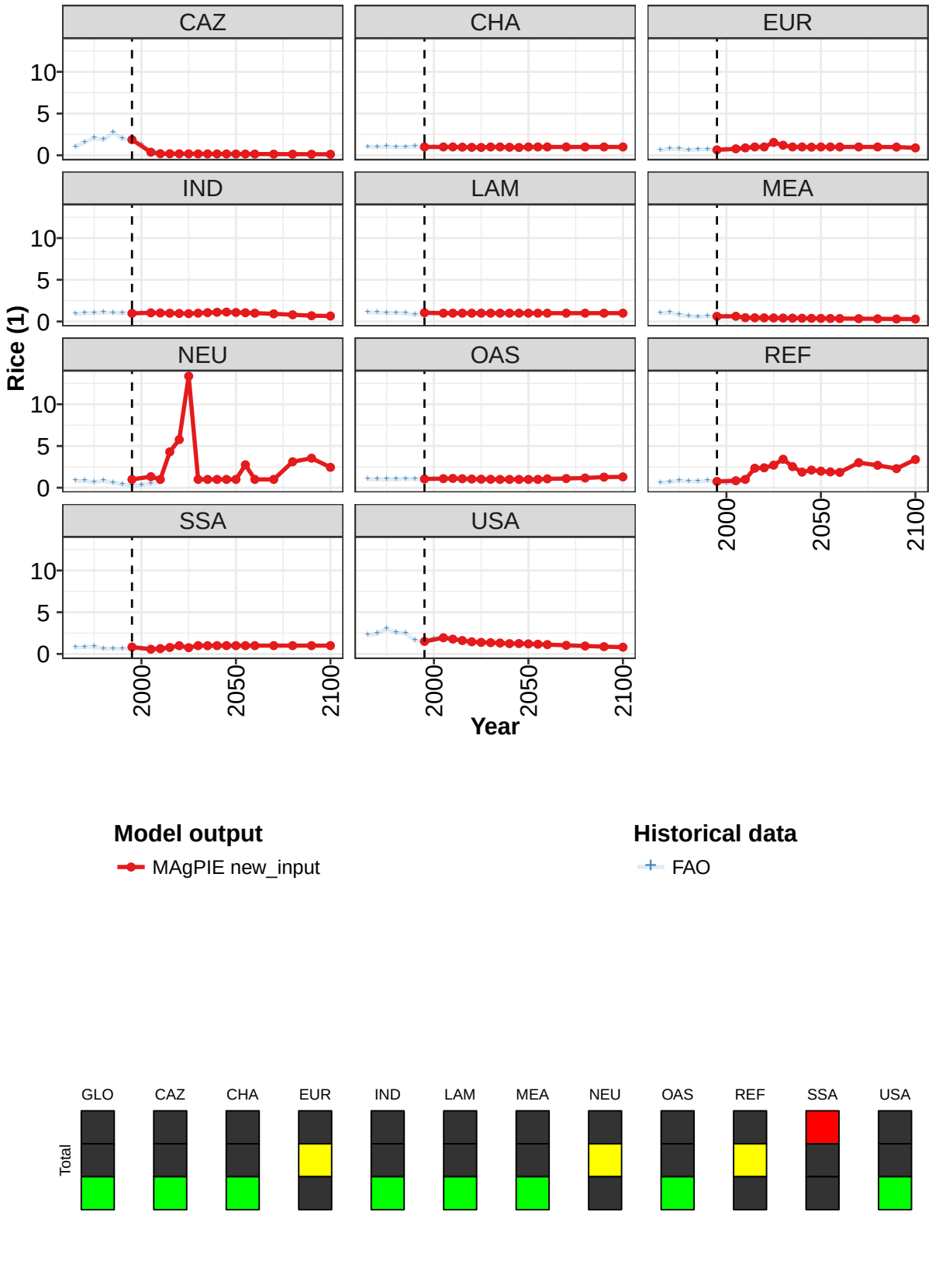


Figure 434: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Rice (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	1.9	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.0	0.9	1.0
EUR	0.7	0.8	0.9	1.0	1.0	1.5	1.2	1.0	1.0	1.0	1.0
IND	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.1	1.1	1.1	1.1
LAM	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEA	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
NEU	1.0	1.3	1.0	4.3	5.8	13.4	1.0	1.0	1.0	1.0	1.0
OAS	1.0	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
REF	0.8	0.8	1.0	2.3	2.4	2.7	3.4	2.5	1.9	2.1	2.0
SSA	0.8	0.6	0.6	0.8	1.0	0.8	1.0	1.0	1.0	1.0	1.0
USA	1.5	1.9	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.3	1.2

Table 1592: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Rice (1) [PART 1/2]

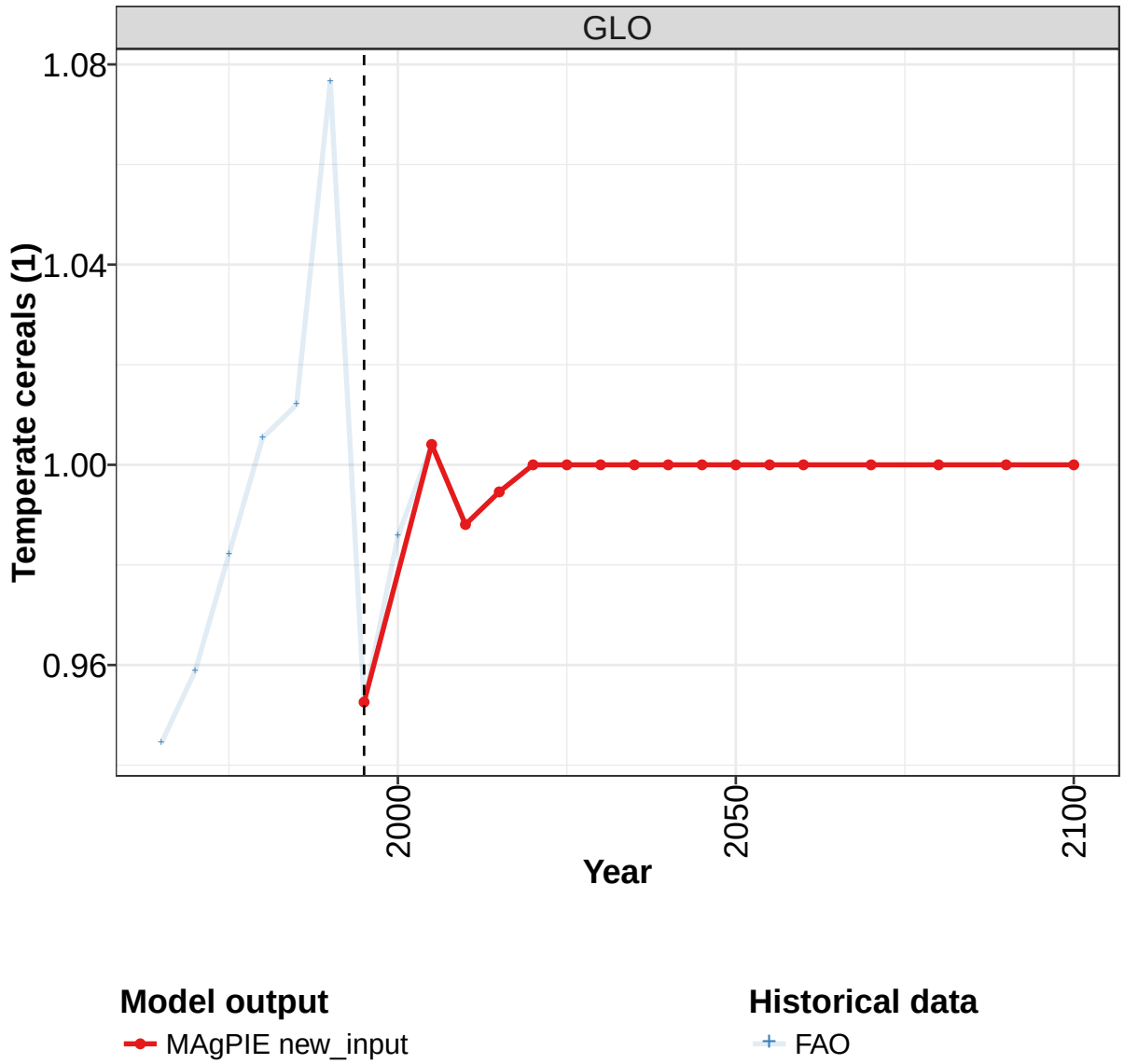
	2055	2060	2070	2080	2090	2100
GLO	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	0.2	0.1	0.1	0.1	0.1	0.1
CHA	1.0	1.0	1.0	1.0	1.0	1.0
EUR	1.0	1.0	1.0	1.0	1.0	0.9
IND	1.1	1.0	0.9	0.8	0.7	0.7
LAM	1.0	1.0	1.0	1.0	1.0	1.0
MEA	0.4	0.4	0.3	0.3	0.3	0.3
NEU	2.7	1.0	1.0	3.1	3.5	2.4
OAS	1.0	1.1	1.1	1.2	1.3	1.3
REF	1.9	1.8	3.0	2.7	2.3	3.4
SSA	1.0	1.0	1.0	1.0	1.0	1.0
USA	1.2	1.1	1.0	1.0	0.9	0.8

Table 1593: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Rice (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.02	1.02	1.01	1.01	1.02	1.00	1.01	1.02	1.02
CAZ	1.01	1.57	2.07	1.86	2.73	1.97	1.76	1.28	0.37	0.19
CHA	1.01	1.02	1.02	0.99	0.98	1.07	1.02	0.98	1.00	1.00
EUR	0.60	0.79	0.75	0.64	0.70	0.73	0.65	0.66	0.68	0.70
IND	0.89	0.99	1.04	1.08	1.05	1.00	0.98	1.03	1.05	1.02
LAM	1.11	1.06	1.04	1.04	0.97	0.79	1.06	0.95	0.92	0.90
MEA	0.97	1.07	0.80	0.66	0.58	0.63	0.62	0.62	0.63	0.46
NEU	0.83	0.81	0.65	0.82	0.62	0.39	0.25	0.34	0.49	0.64
OAS	1.01	1.02	1.01	1.02	1.08	1.05	1.04	1.08	1.09	1.12
REF	0.60	0.71	0.82	0.78	0.75	0.83	0.76	0.56	0.60	0.91
SSA	0.79	0.84	0.86	0.63	0.63	0.65	0.64	0.59	0.57	0.64
USA	2.26	2.43	2.99	2.53	2.50	1.59	1.53	1.85	2.02	1.80

Table 1594: FAO — Trade—Self-sufficiency—Crops—Cereals—Rice (1)

59.1.4 Cereals—Temperate cereals



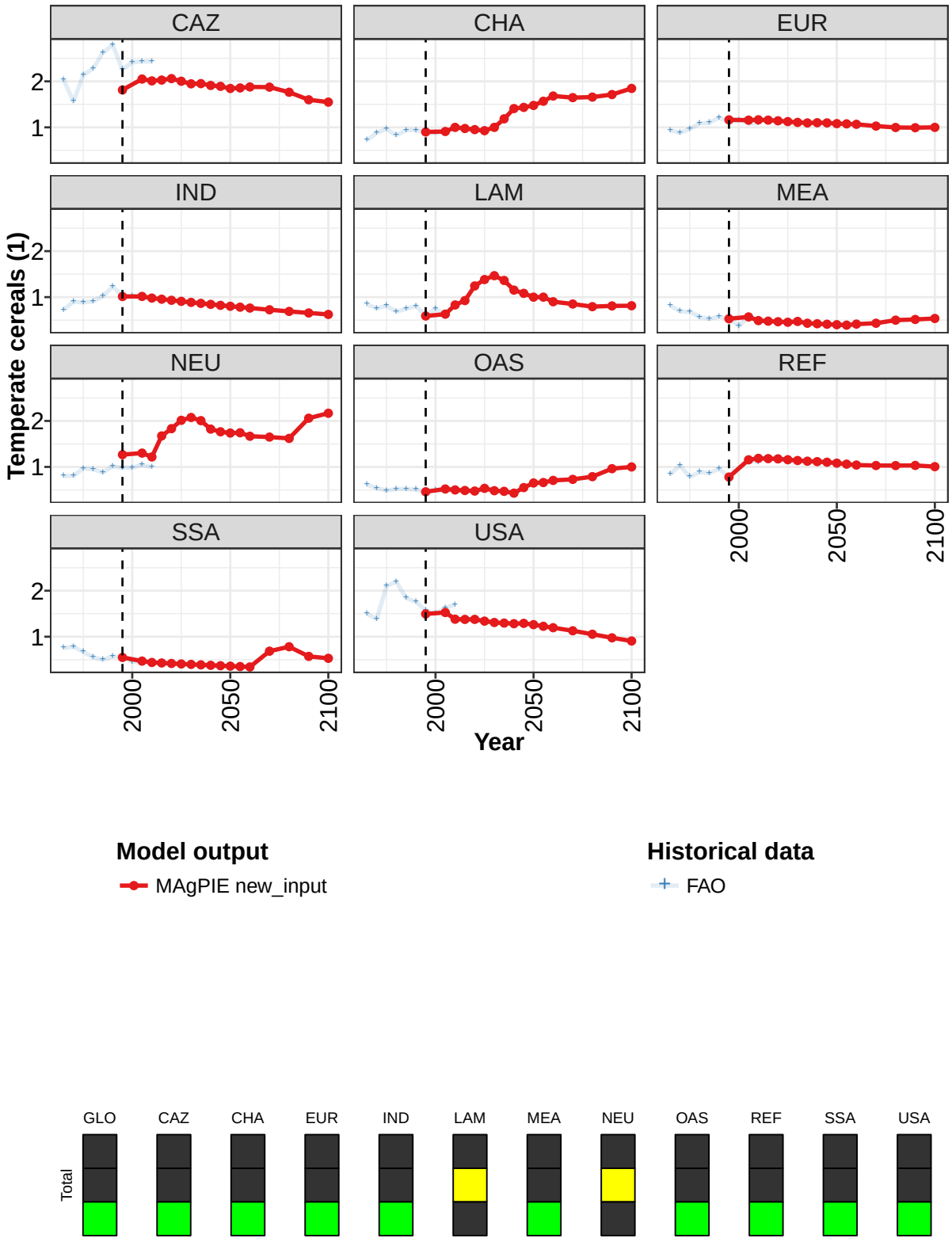


Figure 435: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	0.95	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.81	2.05	2.01	2.03	2.06	2.00	1.95	1.95	1.91	1.89	1.85
CHA	0.90	0.91	1.00	0.98	0.95	0.93	1.00	1.19	1.41	1.43	1.48
EUR	1.16	1.16	1.16	1.16	1.14	1.12	1.11	1.10	1.10	1.10	1.08
IND	1.01	1.02	0.98	0.96	0.93	0.91	0.89	0.86	0.84	0.82	0.80
LAM	0.59	0.63	0.83	0.93	1.24	1.38	1.47	1.36	1.15	1.08	1.00
MEA	0.53	0.57	0.49	0.48	0.47	0.45	0.47	0.43	0.42	0.41	0.40
NEU	1.27	1.30	1.22	1.67	1.83	2.01	2.08	2.01	1.82	1.76	1.74
OAS	0.46	0.52	0.50	0.49	0.48	0.53	0.48	0.47	0.43	0.55	0.65
REF	0.78	1.16	1.19	1.18	1.18	1.16	1.14	1.12	1.12	1.10	1.08
SSA	0.55	0.47	0.44	0.43	0.42	0.41	0.40	0.39	0.38	0.37	0.36
USA	1.49	1.53	1.38	1.38	1.38	1.34	1.31	1.30	1.28	1.29	1.26

Table 1595: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1) [PART 1/2]

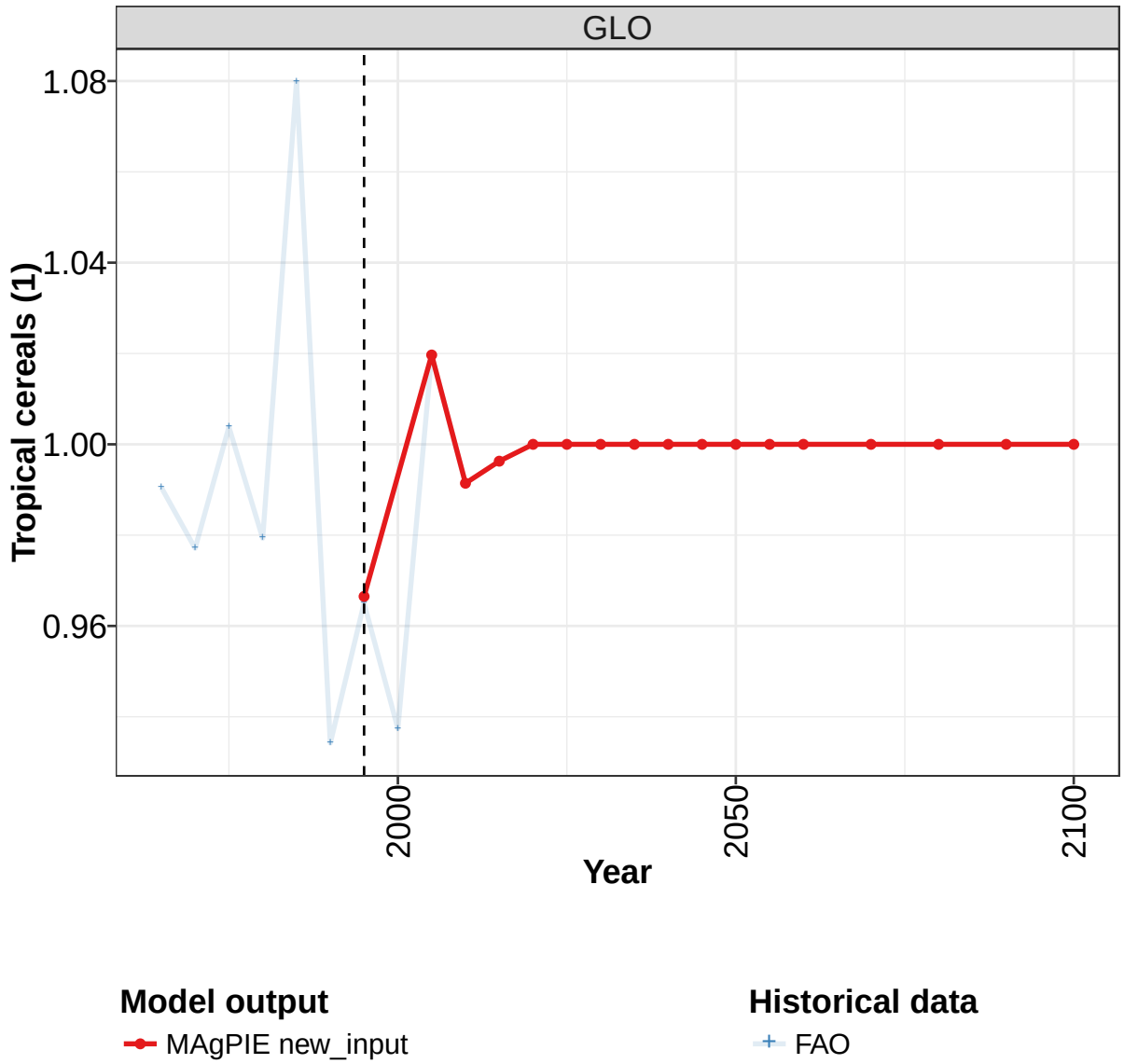
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.86	1.88	1.87	1.76	1.60	1.55
CHA	1.57	1.68	1.65	1.66	1.71	1.85
EUR	1.08	1.07	1.03	1.00	0.99	1.00
IND	0.78	0.76	0.73	0.69	0.66	0.62
LAM	1.00	0.90	0.85	0.79	0.81	0.81
MEA	0.39	0.41	0.43	0.50	0.52	0.54
NEU	1.74	1.67	1.65	1.62	2.06	2.17
OAS	0.66	0.71	0.73	0.79	0.96	1.00
REF	1.06	1.04	1.03	1.03	1.03	1.01
SSA	0.35	0.34	0.69	0.78	0.57	0.53
USA	1.23	1.20	1.13	1.05	0.98	0.91

Table 1596: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	0.96	0.98	1.01	1.01	1.08	0.95	0.99	1.00	0.99
CAZ	2.03	1.56	2.14	2.28	2.62	2.80	2.25	2.42	2.43	2.43
CHA	0.72	0.88	0.96	0.83	0.94	0.94	0.90	0.87	0.91	1.02
EUR	0.94	0.88	0.96	1.09	1.10	1.21	1.11	1.16	1.08	1.09
IND	0.72	0.90	0.89	0.91	1.02	1.23	1.03	1.03	1.00	0.98
LAM	0.84	0.75	0.81	0.69	0.74	0.81	0.59	0.75	0.63	0.83
MEA	0.82	0.69	0.68	0.57	0.53	0.57	0.53	0.37	0.57	0.49
NEU	0.80	0.81	0.97	0.95	0.88	1.01	0.98	0.98	1.04	1.00
OAS	0.62	0.54	0.49	0.52	0.52	0.51	0.46	0.50	0.52	0.50
REF	0.84	1.03	0.78	0.89	0.86	0.96	0.78	0.96	1.15	1.10
SSA	0.75	0.78	0.67	0.55	0.50	0.57	0.55	0.45	0.47	0.44
USA	1.50	1.38	2.10	2.20	1.84	1.76	1.57	1.50	1.63	1.70

Table 1597: FAO — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1)

59.1.5 Cereals—Tropical cereals



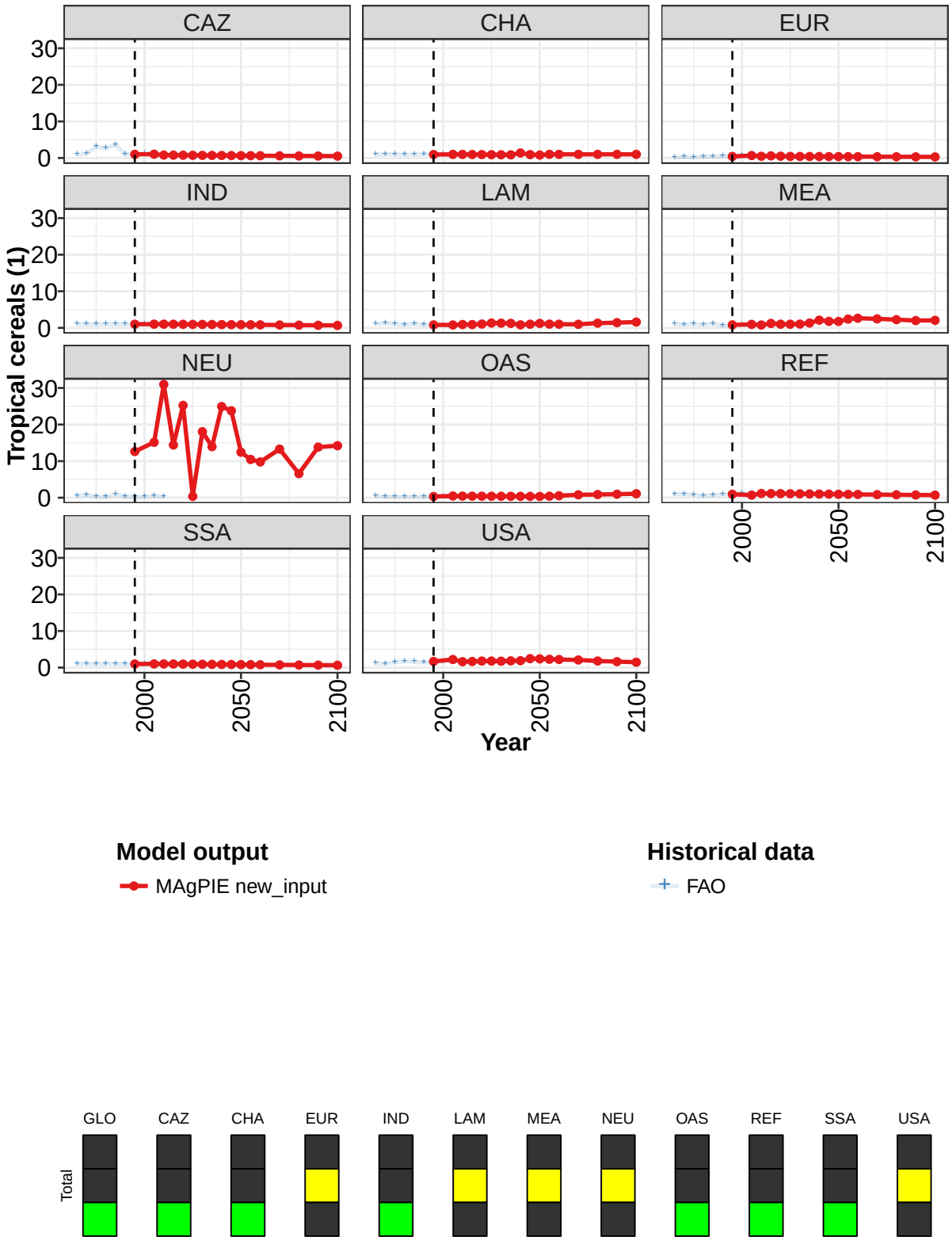


Figure 436: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	1.0	1.0	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
CHA	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9	1.4	0.9	0.8
EUR	0.4	0.7	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4
IND	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
LAM	0.8	0.8	0.9	0.9	1.0	1.3	1.3	1.2	0.8	1.0	1.2
MEA	0.8	1.0	0.8	1.2	1.0	1.0	1.0	1.3	2.1	1.8	1.8
NEU	12.6	15.2	31.0	14.4	25.2	0.4	18.1	14.0	24.9	23.8	12.4
OAS	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
REF	0.9	0.7	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0
SSA	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8
USA	1.7	2.2	1.6	1.7	1.8	1.8	1.7	1.8	1.9	2.4	2.4

Table 1598: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1) [PART 1/2]

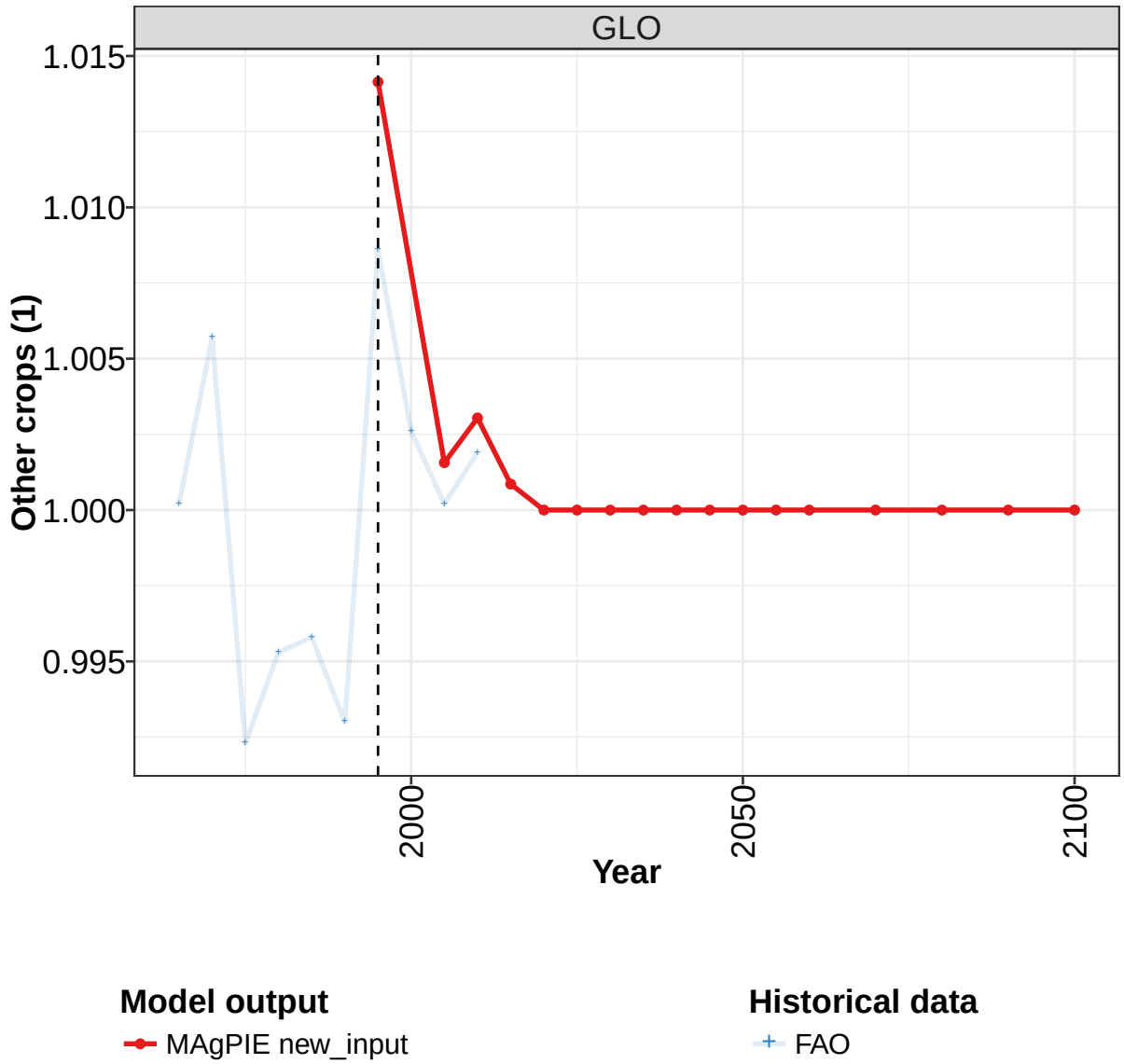
	2055	2060	2070	2080	2090	2100
GLO	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	0.6	0.6	0.6	0.6	0.5	0.5
CHA	1.0	1.0	1.0	1.0	1.0	1.0
EUR	0.4	0.4	0.3	0.3	0.3	0.3
IND	0.8	0.8	0.8	0.7	0.7	0.7
LAM	1.0	1.0	1.0	1.3	1.4	1.6
MEA	2.4	2.6	2.5	2.2	2.0	2.1
NEU	10.5	9.8	13.3	6.6	13.8	14.2
OAS	0.4	0.5	0.8	0.9	1.0	1.1
REF	0.9	0.9	0.9	0.8	0.8	0.7
SSA	0.8	0.8	0.7	0.7	0.7	0.6
USA	2.3	2.2	2.1	1.8	1.6	1.5

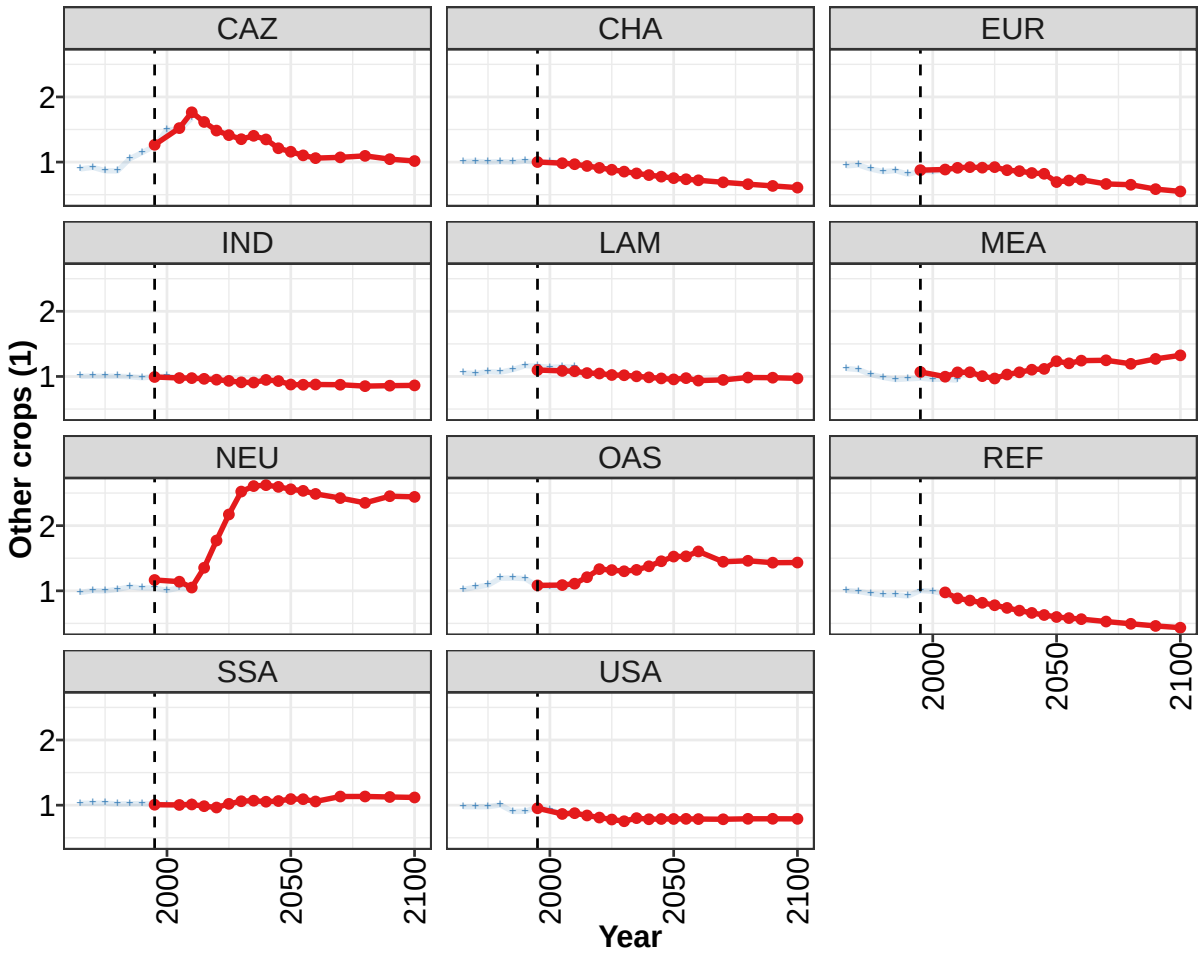
Table 1599: MAgPIE new_input — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	0.98	1.00	0.98	1.08	0.93	0.96	0.94	1.02	0.99
CAZ	1.07	1.15	3.12	2.63	3.61	1.00	1.03	1.18	1.12	0.80
CHA	0.94	1.04	0.99	0.93	0.94	1.09	0.95	0.91	0.99	0.98
EUR	0.09	0.31	0.19	0.40	0.44	0.49	0.42	0.71	0.67	0.47
IND	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.01	1.10
LAM	1.11	1.33	1.09	0.88	1.15	0.84	0.81	0.70	0.80	0.91
MEA	0.99	0.92	1.01	0.92	1.17	0.53	0.81	0.76	0.96	0.78
NEU	0.52	0.75	0.34	0.19	0.87	0.34	0.21	0.21	0.41	0.39
OAS	0.48	0.25	0.25	0.21	0.23	0.24	0.32	0.36	0.47	0.44
REF	1.00	1.00	0.83	0.55	0.67	0.93	0.95	1.21	0.71	1.09
SSA	1.09	1.03	0.95	1.05	1.03	0.92	0.99	0.93	1.04	1.00
USA	1.17	0.99	1.49	1.74	1.62	1.34	1.46	1.72	2.06	1.57

Table 1600: FAO — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1)

59.1.6 Other crops





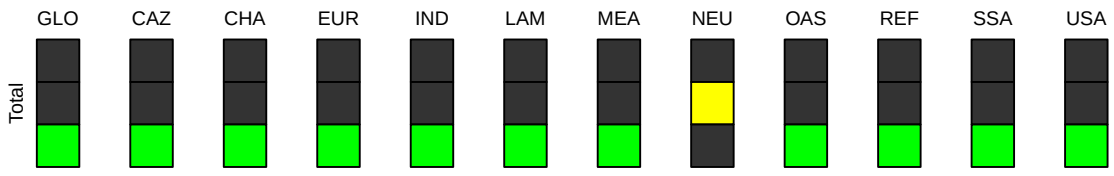


Figure 437: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	1	2	2	2	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	1	1	1	1	1	1	1	1	1	1	1
IND	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	1	2	2	3	3	3	3	3
OAS	1	1	1	1	1	1	1	1	1	1	2
REF		1	1	1	1	1	1	1	1	1	1
SSA	1	1	1	1	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 1601: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops (1) [PART 1/2]

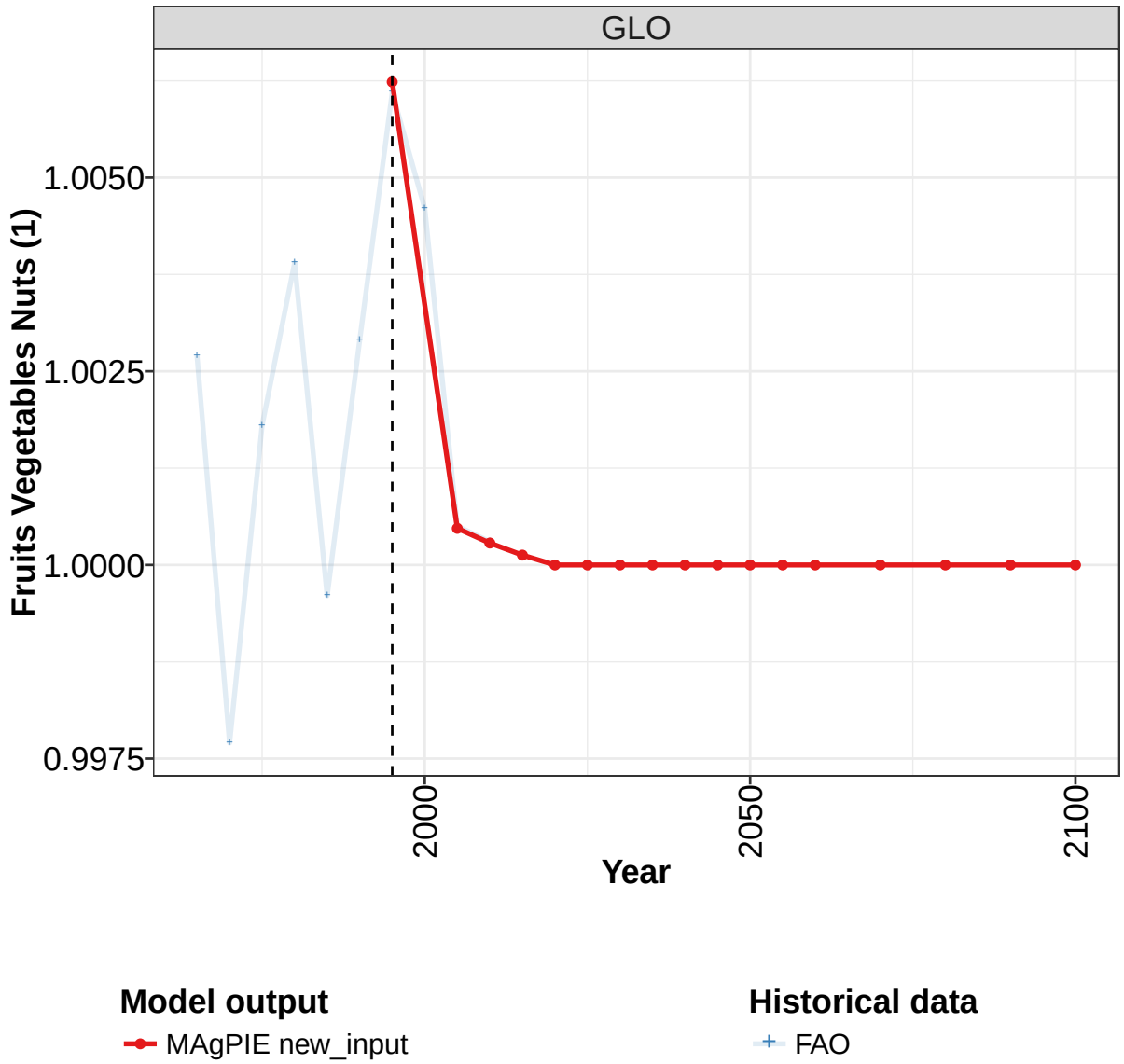
	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1
CAZ	1	1	1	1	1	1
CHA	1	1	1	1	1	1
EUR	1	1	1	1	1	1
IND	1	1	1	1	1	1
LAM	1	1	1	1	1	1
MEA	1	1	1	1	1	1
NEU	3	2	2	2	2	2
OAS	2	2	1	1	1	1
REF	1	1	1	0	0	0
SSA	1	1	1	1	1	1
USA	1	1	1	1	1	1

Table 1602: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.01	0.99	1.00	1.00	0.99	1.01	1.00	1.00	1.00
CAZ	0.90	0.92	0.87	0.86	1.05	1.15	1.25	1.50	1.49	1.67
CHA	1.01	1.01	1.00	1.01	1.00	1.01	1.00	1.00	0.99	0.97
EUR	0.94	0.96	0.89	0.85	0.87	0.81	0.86	0.85	0.88	0.91
IND	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	0.98
LAM	1.06	1.05	1.07	1.06	1.11	1.17	1.16	1.14	1.15	1.14
MEA	1.12	1.11	1.03	0.99	0.95	0.96	0.97	0.96	0.96	0.94
NEU	0.97	1.00	1.00	1.02	1.06	1.04	1.04	1.00	1.05	1.03
OAS	1.02	1.06	1.09	1.19	1.20	1.19	1.07	1.06	1.06	1.07
REF	1.01	0.99	0.96	0.93	0.94	0.92	1.00	0.99	0.95	0.86
SSA	1.03	1.03	1.03	1.02	1.02	1.02	1.01	1.01	1.01	1.04
USA	0.98	0.98	0.98	1.00	0.90	0.91	0.97	0.93	0.87	0.89

Table 1603: FAO — Trade—Self-sufficiency—Crops—Other crops (1)

59.1.7 Other crops—Fruits Vegetables Nuts



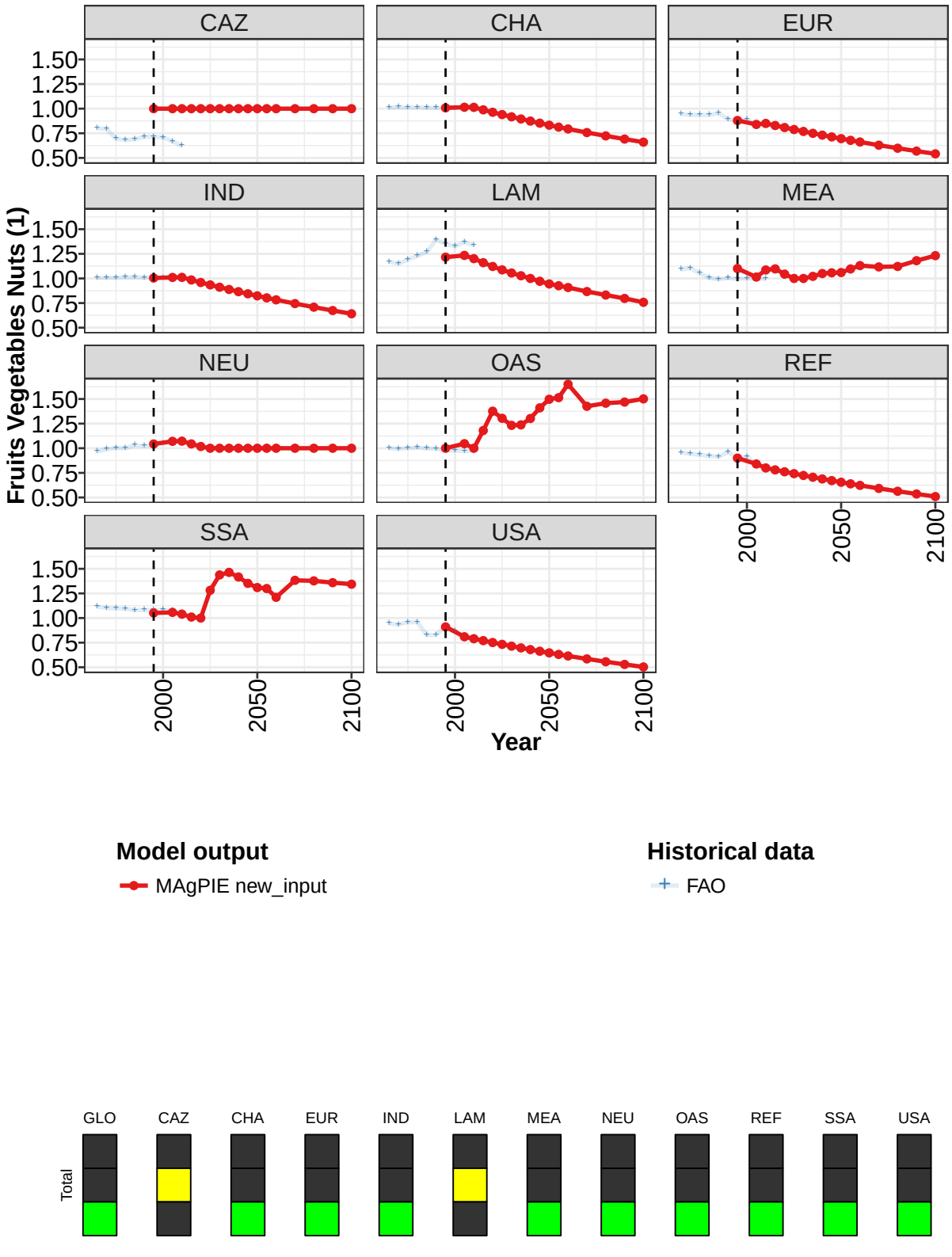


Figure 438: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	1.01	1.01	1.01	0.99	0.96	0.94	0.92	0.90	0.87	0.85	0.83
EUR	0.88	0.84	0.85	0.83	0.81	0.79	0.77	0.75	0.73	0.71	0.70
IND	1.00	1.01	1.01	0.98	0.96	0.93	0.91	0.89	0.87	0.84	0.82
LAM	1.22	1.23	1.20	1.16	1.12	1.09	1.06	1.03	1.00	0.97	0.94
MEA	1.10	1.01	1.09	1.10	1.04	1.00	1.00	1.02	1.05	1.06	1.06
NEU	1.04	1.07	1.07	1.04	1.02	1.00	1.00	1.00	1.00	1.00	1.00
OAS	1.00	1.05	1.00	1.18	1.38	1.30	1.23	1.24	1.30	1.41	1.50
REF	0.90	0.84	0.80	0.78	0.76	0.74	0.72	0.71	0.69	0.67	0.65
SSA	1.05	1.06	1.04	1.01	1.00	1.28	1.44	1.46	1.42	1.35	1.31
USA	0.91	0.81	0.79	0.77	0.75	0.73	0.71	0.70	0.68	0.66	0.65

Table 1604: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1) [PART 1/2]

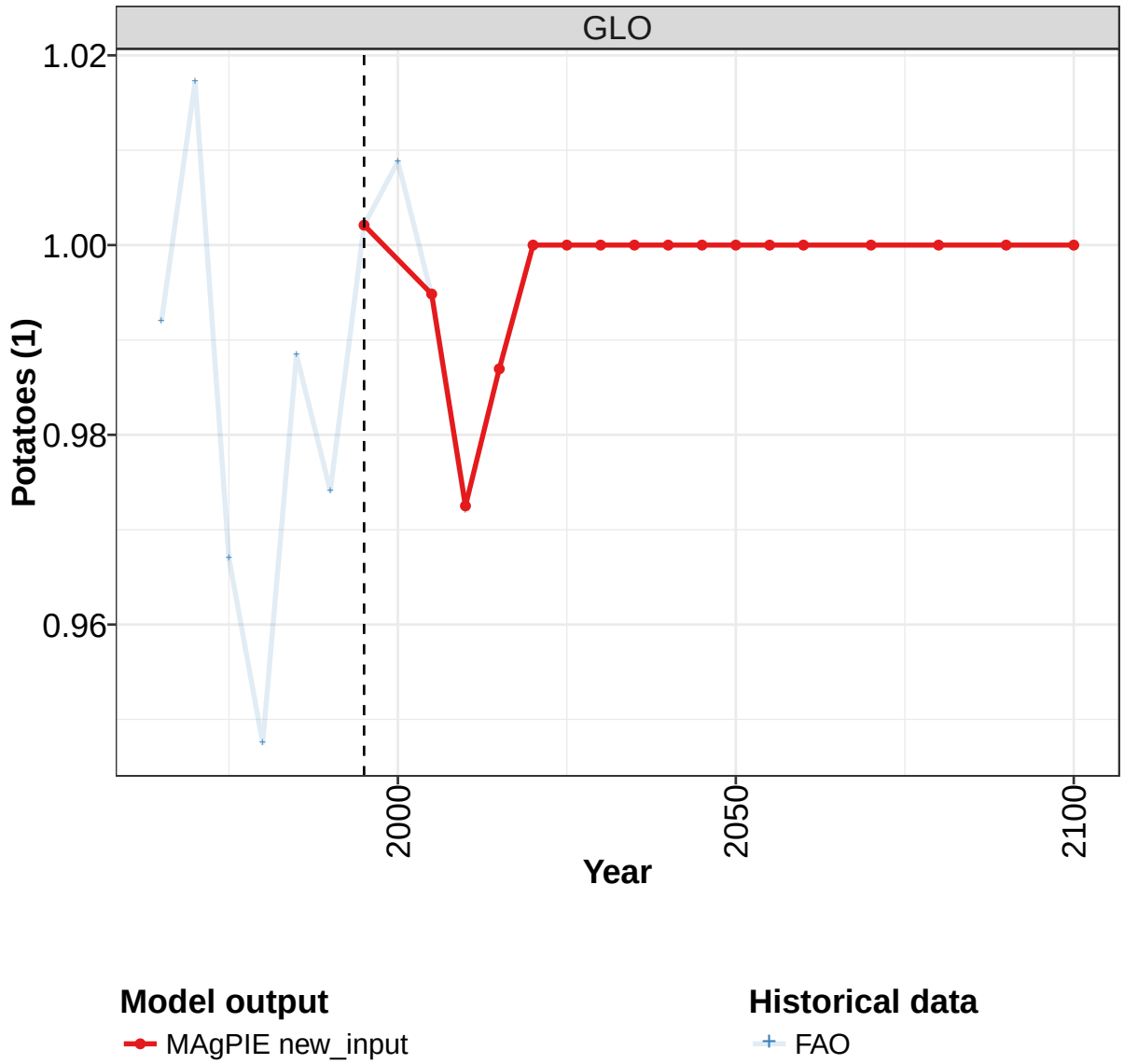
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00
CHA	0.81	0.79	0.76	0.72	0.69	0.66
EUR	0.68	0.66	0.63	0.60	0.57	0.54
IND	0.80	0.78	0.74	0.71	0.67	0.64
LAM	0.93	0.91	0.87	0.83	0.80	0.76
MEA	1.10	1.13	1.12	1.12	1.18	1.23
NEU	1.00	1.00	1.00	1.00	1.00	1.00
OAS	1.51	1.65	1.43	1.46	1.47	1.50
REF	0.64	0.62	0.59	0.56	0.54	0.51
SSA	1.30	1.21	1.38	1.38	1.36	1.34
USA	0.63	0.61	0.58	0.56	0.53	0.50

Table 1605: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.00	1.00	1.00
CAZ	0.80	0.79	0.69	0.68	0.69	0.71	0.71	0.71	0.67	0.62
CHA	1.01	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.02	1.02
EUR	0.95	0.94	0.94	0.94	0.95	0.89	0.88	0.89	0.84	0.85
IND	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.02	1.02
LAM	1.17	1.15	1.19	1.23	1.27	1.39	1.35	1.33	1.37	1.33
MEA	1.09	1.10	1.05	1.00	0.99	1.00	0.99	1.00	0.99	1.00
NEU	0.97	0.99	1.00	1.00	1.03	1.02	1.03	1.05	1.06	1.07
OAS	1.00	0.99	1.00	1.01	1.00	0.99	0.97	0.98	0.97	0.97
REF	0.96	0.94	0.93	0.92	0.91	0.96	0.90	0.91	0.84	0.80
SSA	1.12	1.10	1.10	1.09	1.08	1.08	1.08	1.08	1.07	1.06
USA	0.94	0.93	0.96	0.96	0.83	0.83	0.91	0.87	0.81	0.79

Table 1606: FAO — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1)

59.1.8 Other crops—Potatoes



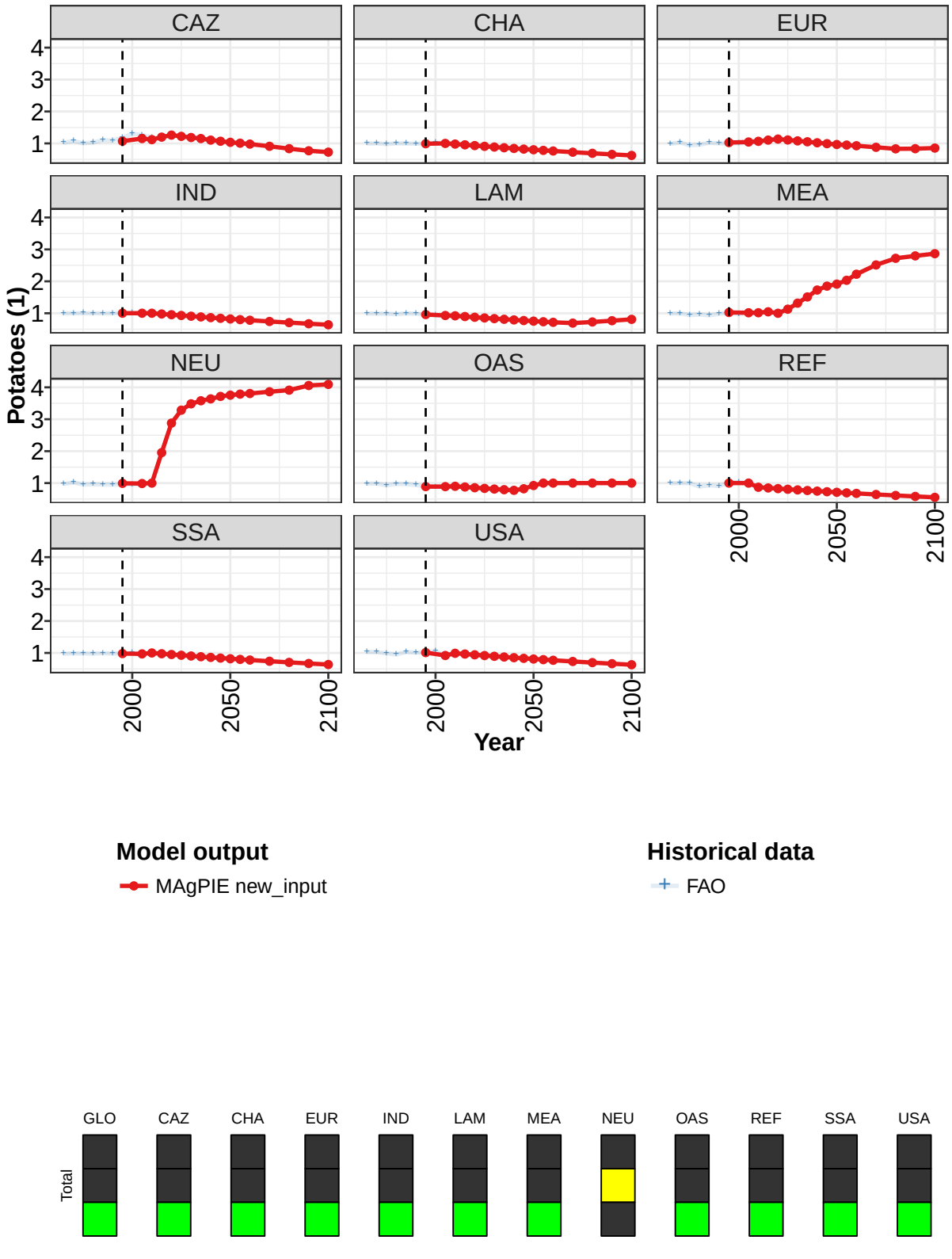


Figure 439: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.00	0.99	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.07	1.15	1.12	1.20	1.26	1.22	1.18	1.15	1.10	1.07	1.03
CHA	0.99	1.00	0.98	0.96	0.93	0.91	0.89	0.86	0.84	0.82	0.80
EUR	1.03	1.04	1.07	1.10	1.14	1.11	1.08	1.05	1.02	0.99	0.97
IND	1.00	1.00	1.00	0.98	0.95	0.93	0.91	0.89	0.86	0.84	0.82
LAM	0.96	0.93	0.92	0.90	0.88	0.85	0.83	0.81	0.79	0.77	0.75
MEA	1.02	1.02	1.02	1.05	1.00	1.13	1.32	1.51	1.73	1.85	1.91
NEU	0.99	0.99	1.00	1.95	2.88	3.28	3.48	3.58	3.64	3.71	3.76
OAS	0.89	0.89	0.90	0.88	0.86	0.83	0.81	0.79	0.77	0.82	0.92
REF	1.00	1.00	0.87	0.85	0.83	0.81	0.79	0.77	0.75	0.73	0.71
SSA	0.98	0.97	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
USA	1.01	0.92	0.99	0.97	0.94	0.92	0.90	0.87	0.85	0.83	0.81

Table 1607: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1) [PART 1/2]

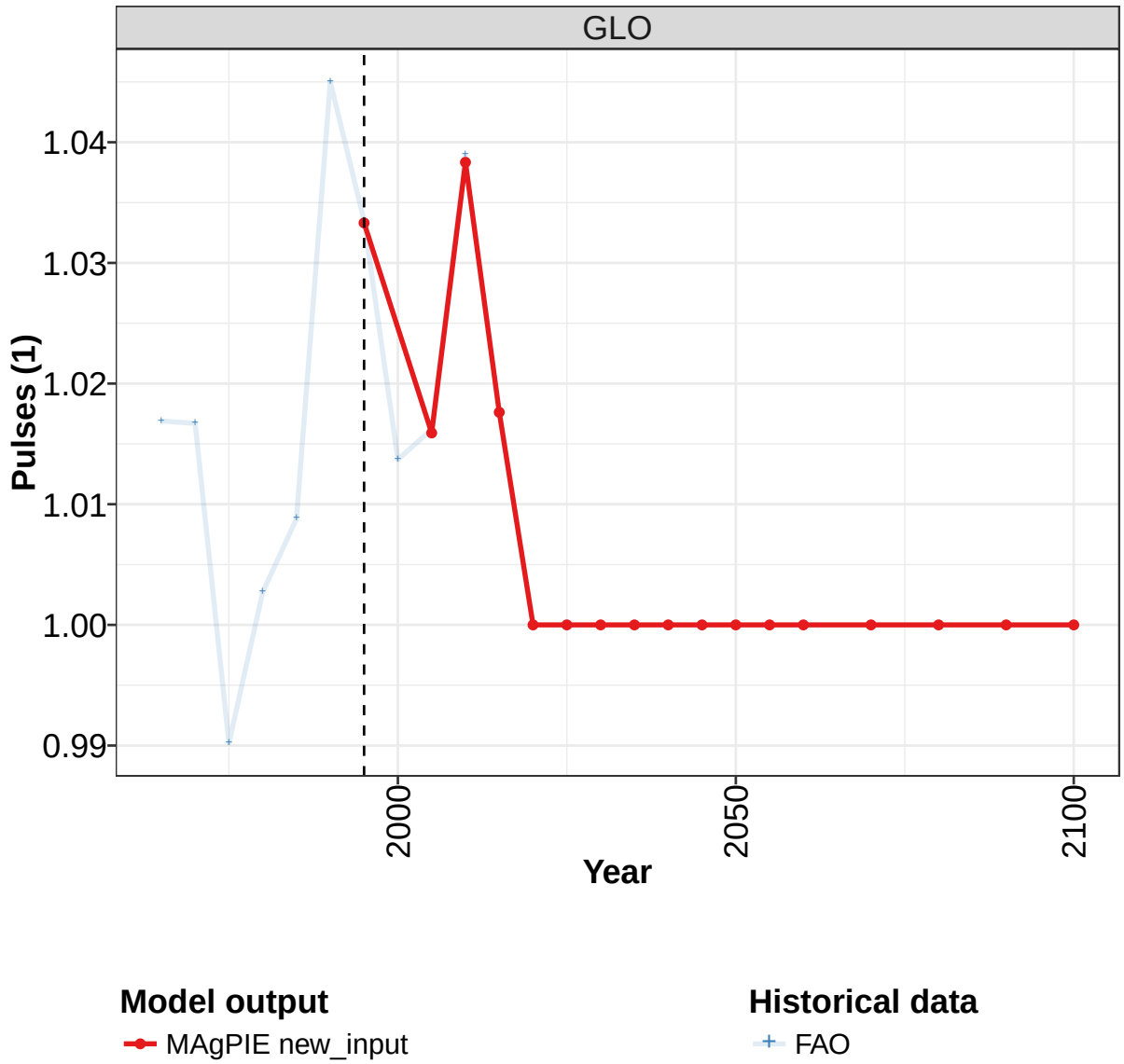
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.01	0.98	0.91	0.84	0.77	0.73
CHA	0.78	0.76	0.73	0.69	0.66	0.62
EUR	0.95	0.93	0.88	0.83	0.83	0.85
IND	0.80	0.78	0.74	0.71	0.67	0.64
LAM	0.73	0.72	0.69	0.73	0.77	0.81
MEA	2.03	2.22	2.51	2.72	2.80	2.87
NEU	3.79	3.81	3.86	3.91	4.06	4.09
OAS	1.00	1.00	1.00	1.00	1.00	1.00
REF	0.69	0.68	0.64	0.61	0.58	0.55
SSA	0.80	0.78	0.74	0.70	0.67	0.64
USA	0.79	0.77	0.73	0.70	0.66	0.63

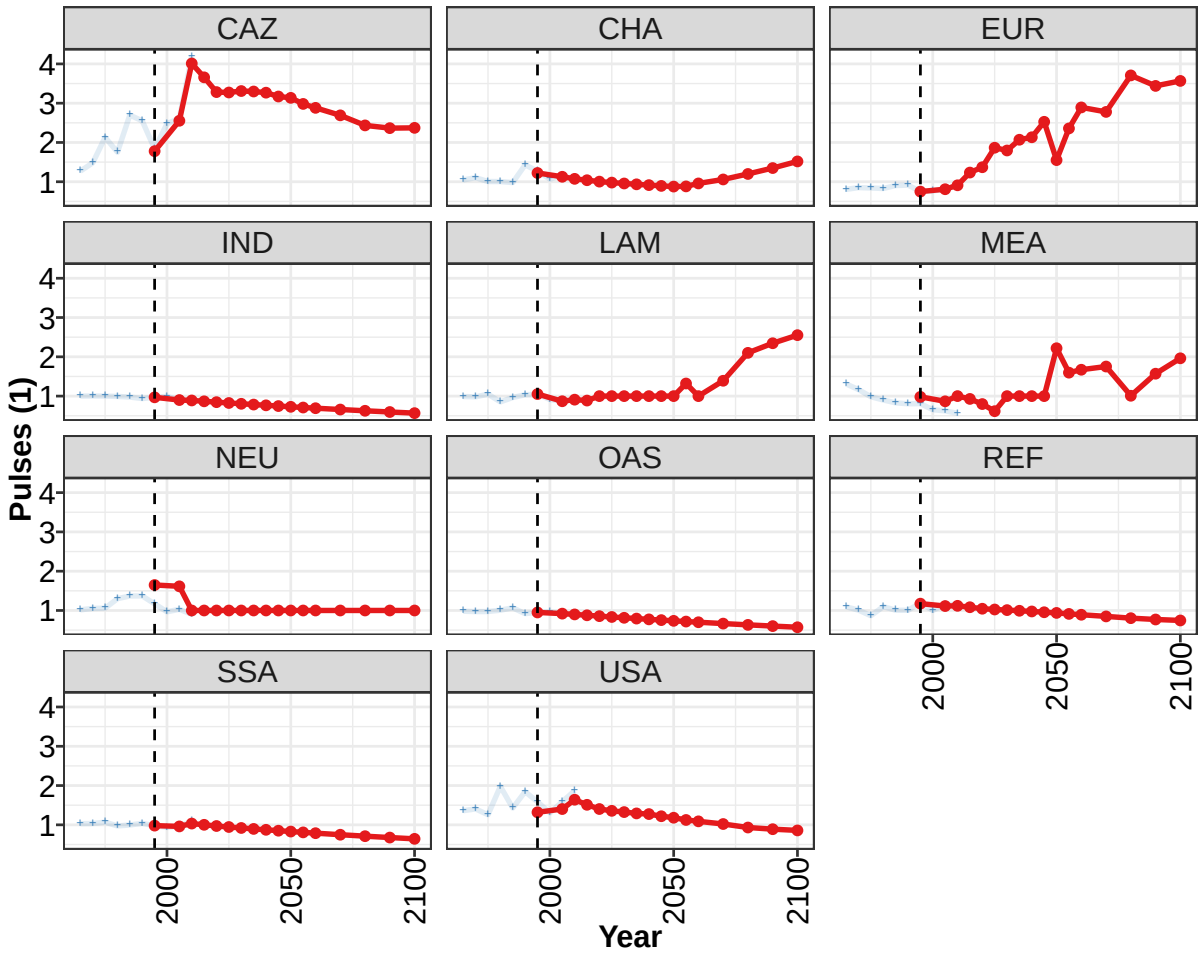
Table 1608: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.02	0.97	0.95	0.99	0.97	1.00	1.01	0.99	0.97
CAZ	1.02	1.08	1.00	1.03	1.10	1.09	1.18	1.30	1.26	1.18
CHA	1.00	1.00	0.98	1.00	1.00	0.99	0.99	1.02	1.01	0.98
EUR	0.98	1.04	0.94	0.96	1.02	1.00	1.00	1.00	1.02	1.06
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.01
LAM	0.99	0.99	0.99	0.97	0.99	0.99	0.96	0.94	0.93	0.92
MEA	0.99	1.00	0.94	0.96	0.94	0.98	1.01	0.98	1.01	1.00
NEU	0.97	1.02	0.95	0.96	0.96	0.96	0.98	0.95	0.97	0.97
OAS	0.98	0.99	0.93	0.97	0.97	0.94	0.89	0.89	0.89	0.90
REF	1.00	1.00	1.00	0.89	0.93	0.91	1.02	1.03	1.00	0.87
SSA	0.97	0.98	0.98	0.98	0.99	0.98	0.98	1.00	0.97	1.01
USA	1.04	1.03	0.99	0.95	1.03	1.01	1.02	1.05	0.92	0.99

Table 1609: FAO — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1)

59.1.9 Other crops—Pulses





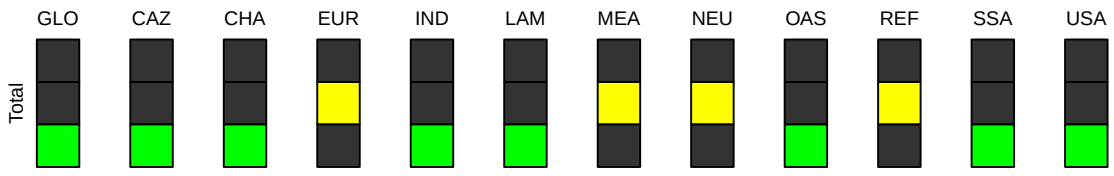


Figure 440: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Pulses (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.03	1.02	1.04	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.78	2.55	4.01	3.66	3.28	3.27	3.31	3.30	3.27	3.17	3.14
CHA	1.22	1.13	1.07	1.04	1.00	0.98	0.96	0.93	0.91	0.89	0.88
EUR	0.75	0.81	0.91	1.23	1.37	1.87	1.80	2.07	2.13	2.53	1.55
IND	0.97	0.90	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.75	0.73
LAM	1.05	0.87	0.91	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	0.98	0.87	1.00	0.93	0.80	0.62	1.00	1.00	1.00	1.00	2.22
NEU	1.65	1.62	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
OAS	0.95	0.92	0.90	0.88	0.86	0.83	0.81	0.79	0.77	0.76	0.74
REF	1.17	1.11	1.12	1.08	1.04	1.03	1.01	0.99	0.98	0.96	0.94
SSA	0.98	0.96	1.03	1.00	0.97	0.94	0.92	0.90	0.87	0.85	0.83
USA	1.32	1.40	1.64	1.51	1.40	1.36	1.33	1.29	1.27	1.22	1.18

Table 1610: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Pulses (1) [PART 1/2]

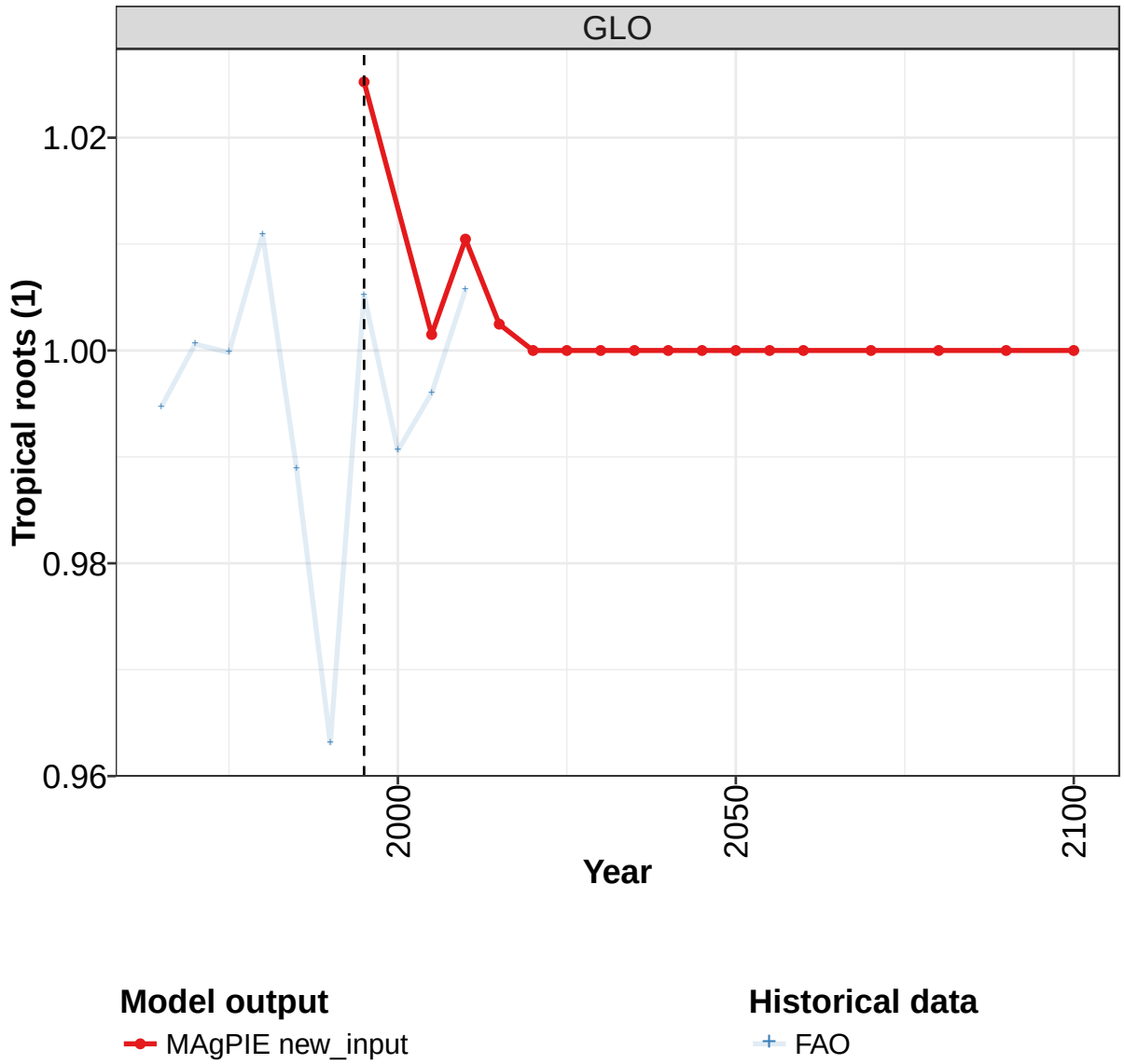
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	2.98	2.88	2.69	2.44	2.37	2.37
CHA	0.88	0.96	1.06	1.20	1.35	1.52
EUR	2.36	2.89	2.78	3.71	3.44	3.57
IND	0.71	0.69	0.66	0.63	0.60	0.57
LAM	1.32	1.00	1.39	2.10	2.35	2.55
MEA	1.60	1.67	1.75	1.01	1.57	1.96
NEU	1.00	1.00	1.00	1.00	1.00	1.00
OAS	0.72	0.70	0.67	0.63	0.60	0.57
REF	0.91	0.89	0.85	0.80	0.77	0.75
SSA	0.81	0.79	0.75	0.71	0.68	0.64
USA	1.12	1.09	1.02	0.93	0.89	0.86

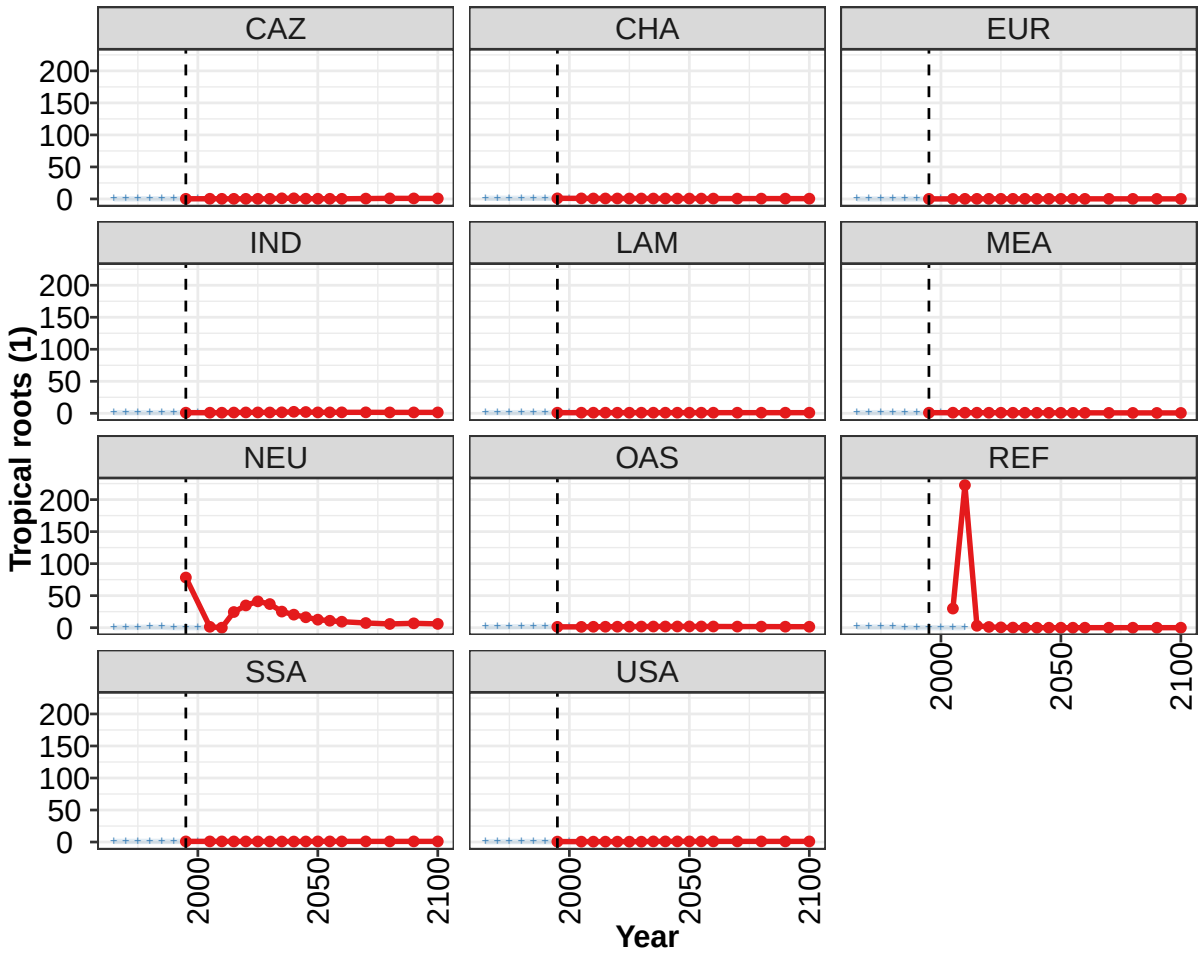
Table 1611: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Pulses (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.02	1.02	0.99	1.00	1.01	1.04	1.03	1.01	1.02	1.04
CAZ	1.27	1.48	2.13	1.75	2.70	2.55	1.84	2.48	2.62	4.19
CHA	1.05	1.10	1.01	1.00	0.98	1.43	1.27	1.06	1.16	1.07
EUR	0.81	0.85	0.84	0.83	0.90	0.91	0.75	0.77	0.81	0.91
IND	1.00	1.00	1.00	0.99	0.98	0.94	0.97	0.99	0.90	0.89
LAM	0.99	0.98	1.05	0.85	0.96	1.03	1.05	0.91	0.87	0.91
MEA	1.31	1.17	0.98	0.90	0.83	0.80	0.81	0.65	0.62	0.56
NEU	1.02	1.05	1.06	1.30	1.37	1.37	1.17	0.97	1.03	0.90
OAS	0.98	0.97	0.97	1.01	1.07	0.92	0.95	0.96	0.92	0.90
REF	1.09	1.01	0.87	1.10	1.01	1.00	1.19	1.00	1.15	1.15
SSA	1.03	1.03	1.07	0.97	1.00	1.04	0.98	0.93	0.96	1.09
USA	1.36	1.40	1.26	1.98	1.43	1.84	1.59	1.30	1.59	1.87

Table 1612: FAO — Trade—Self-sufficiency—Crops—Other crops—Pulses (1)

59.1.10 Other crops—Tropical roots





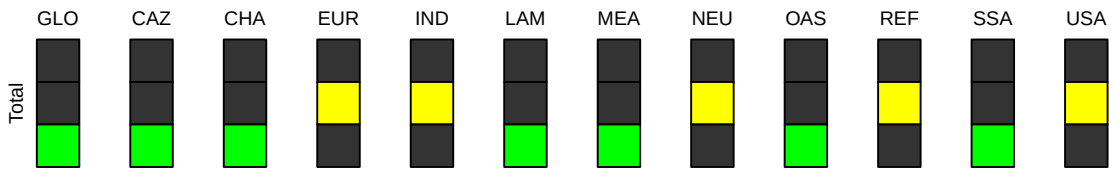


Figure 441: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	0	0	0	0	0	0	0	1	1	0	0
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	1	1	1	1	1	1	1	2	2	2	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	78	1	0	24	35	41	37	25	20	16	13
OAS	1	1	1	2	2	2	2	2	2	2	2
REF		30	223	3	1	0	0	0	0	0	0
SSA	1	1	1	1	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 1613: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1) [PART 1/2]

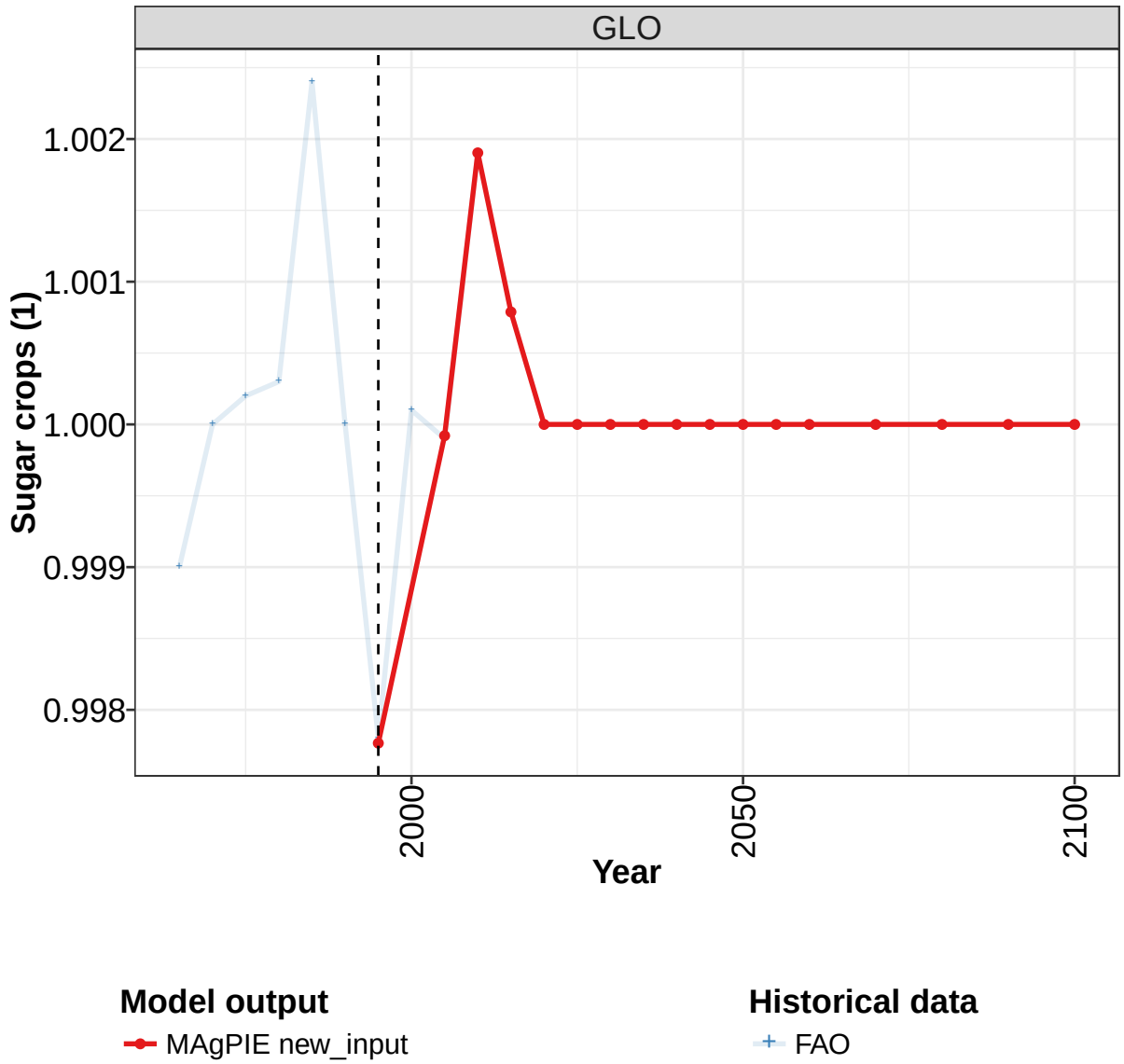
	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1
CAZ	0	0	1	1	1	1
CHA	1	1	1	1	1	1
EUR	0	0	0	0	0	0
IND	2	2	2	1	1	1
LAM	1	1	1	1	1	1
MEA	1	1	1	1	1	1
NEU	11	9	7	6	7	6
OAS	2	2	2	2	2	2
REF	0	0	0	0	0	0
SSA	1	1	1	1	1	1
USA	1	1	1	1	1	1

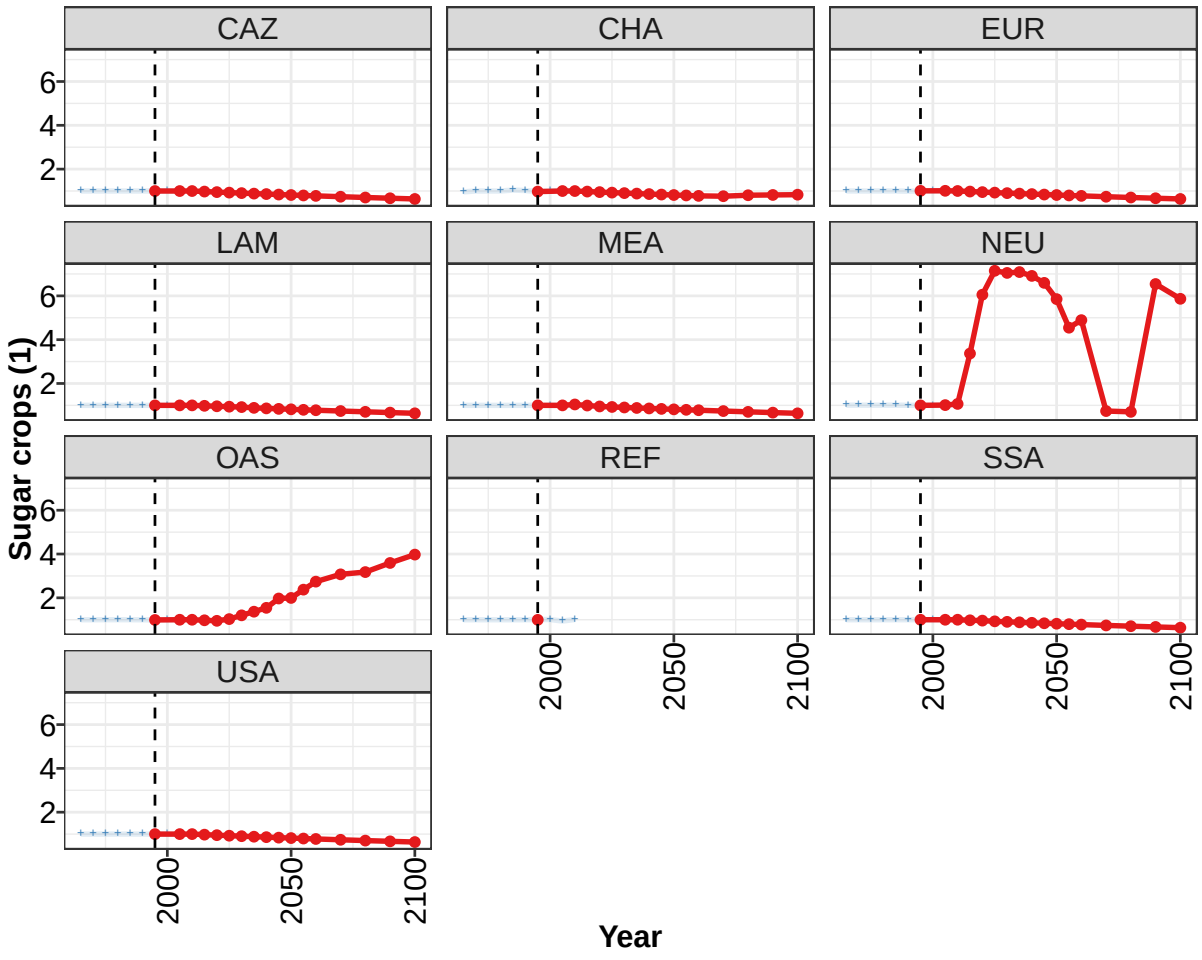
Table 1614: MAgPIE new_input — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.00	1.00	1.01	0.99	0.96	1.01	0.99	1.00	1.01
CAZ	0.18	0.16	0.28	0.35	0.24	0.19	0.25	0.31	0.35	0.24
CHA	1.00	1.00	1.00	1.01	1.00	0.98	0.98	0.98	0.89	0.79
EUR	0.07	0.03	0.02	0.01	0.01	0.00	0.01	0.00	0.05	0.22
IND	1.00	1.00	1.00	1.00	1.00	1.01	1.02	1.00	1.00	1.00
LAM	1.01	1.00	1.00	1.00	1.00	1.00	1.01	1.00	1.00	1.01
MEA	1.00	1.00	0.99	1.00	0.50	0.36	0.95	0.96	0.98	0.97
NEU	0.11	0.57	0.40	0.89	0.80	0.00	0.13	0.00	0.00	0.02
OAS	1.05	1.18	1.27	1.57	1.59	1.69	1.35	1.31	1.33	1.37
REF	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.00	1.01	1.00	1.00	1.00	1.01	1.00	1.00	1.00	1.03
USA	0.55	0.64	0.80	0.81	0.76	0.45	0.72	0.69	0.64	0.66

Table 1615: FAO — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1)

59.1.11 Sugar crops





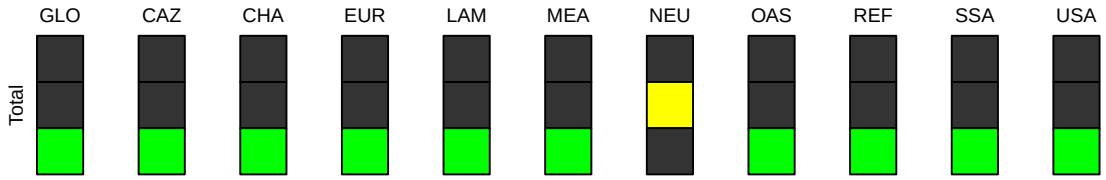


Figure 442: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	3	6	7	7	7	7	7	6
OAS	1	1	1	1	1	1	1	1	2	2	2
REF	1										
SSA	1	1	1	1	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 1616: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops (1) [PART 1/2]

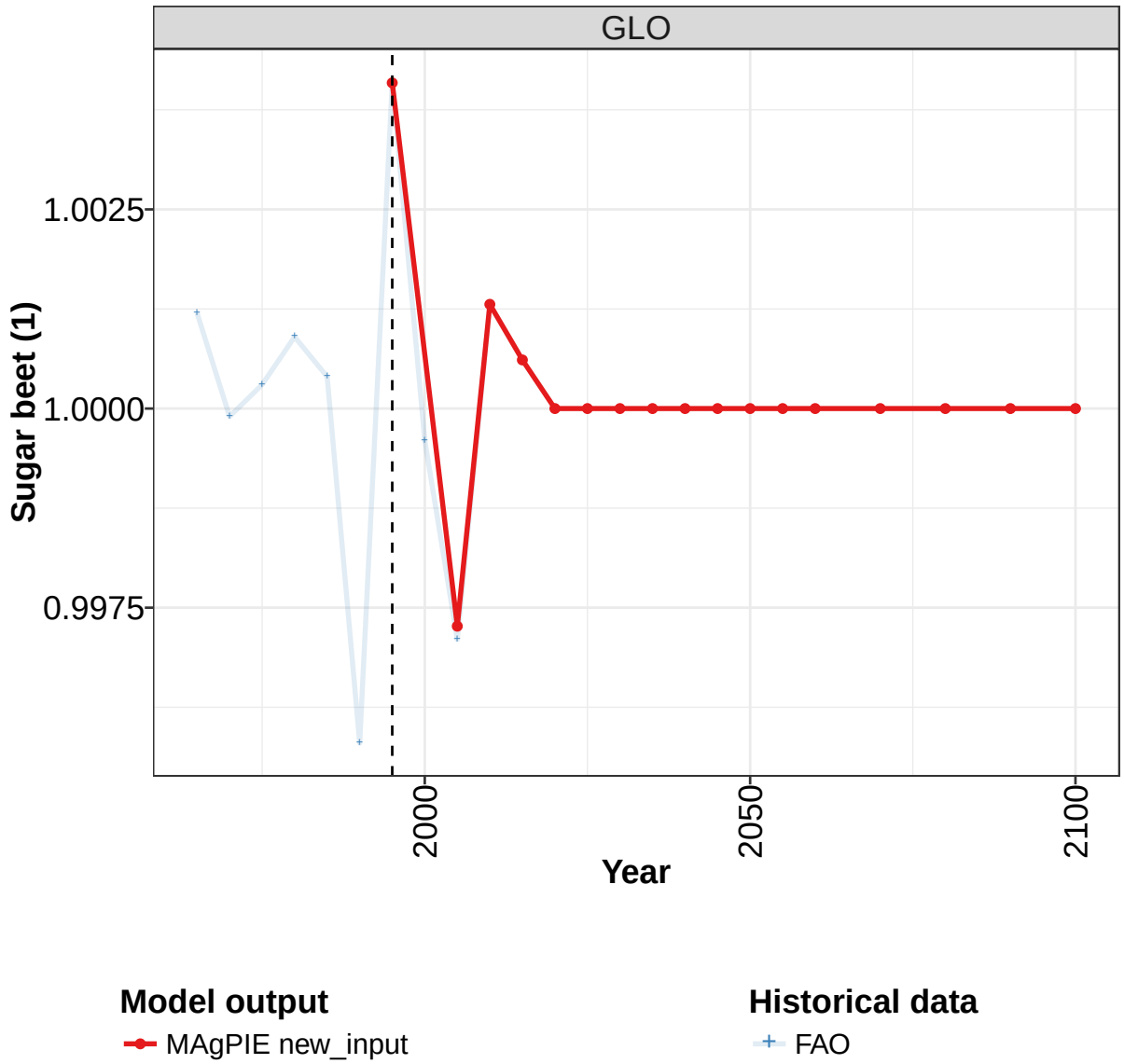
	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1
CAZ	1	1	1	1	1	1
CHA	1	1	1	1	1	1
EUR	1	1	1	1	1	1
LAM	1	1	1	1	1	1
MEA	1	1	1	1	1	1
NEU	5	5	1	1	7	6
OAS	2	3	3	3	4	4
REF						
SSA	1	1	1	1	1	1
USA	1	1	1	1	1	1

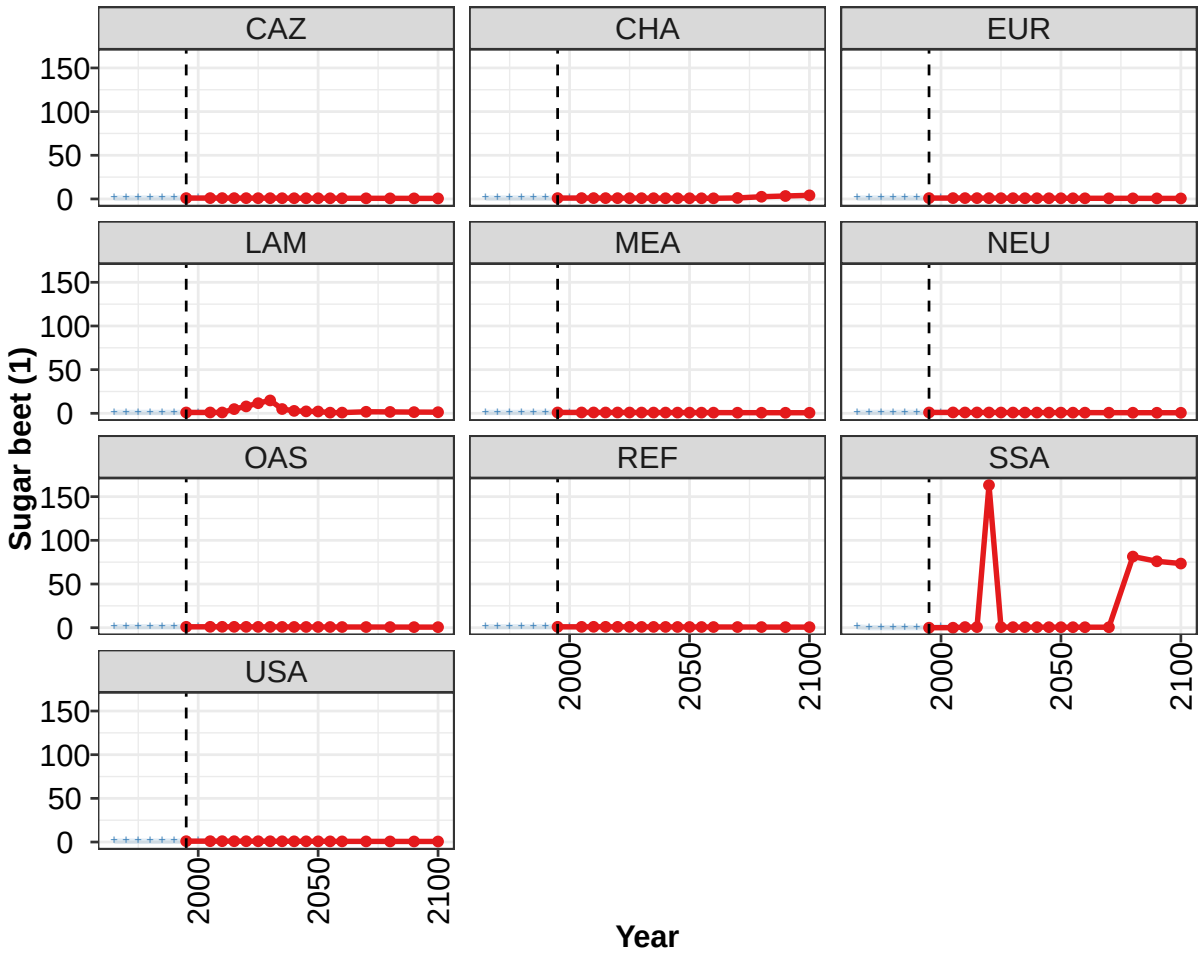
Table 1617: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	0.96	1.00	1.00	1.00	1.04	1.02	0.98	1.00	1.03	1.00
EUR	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEU	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.01
OAS	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.01
REF	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	0.94	1.01
SSA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 1618: FAO — Trade—Self-sufficiency—Crops—Sugar crops (1)

59.1.12 Sugar crops—Sugar beet





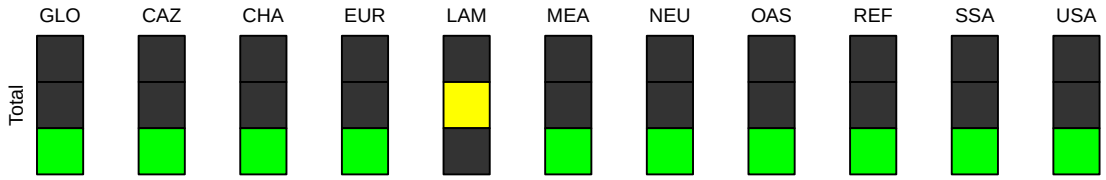


Figure 443: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	5	8	12	15	5	3	2	2
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	1	1	1	1	1	1	1	1	1	1	1
REF	1	1	1	1	1	1	1	1	1	1	1
SSA	0	0	1	1	163	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 1619: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1) [PART 1/2]

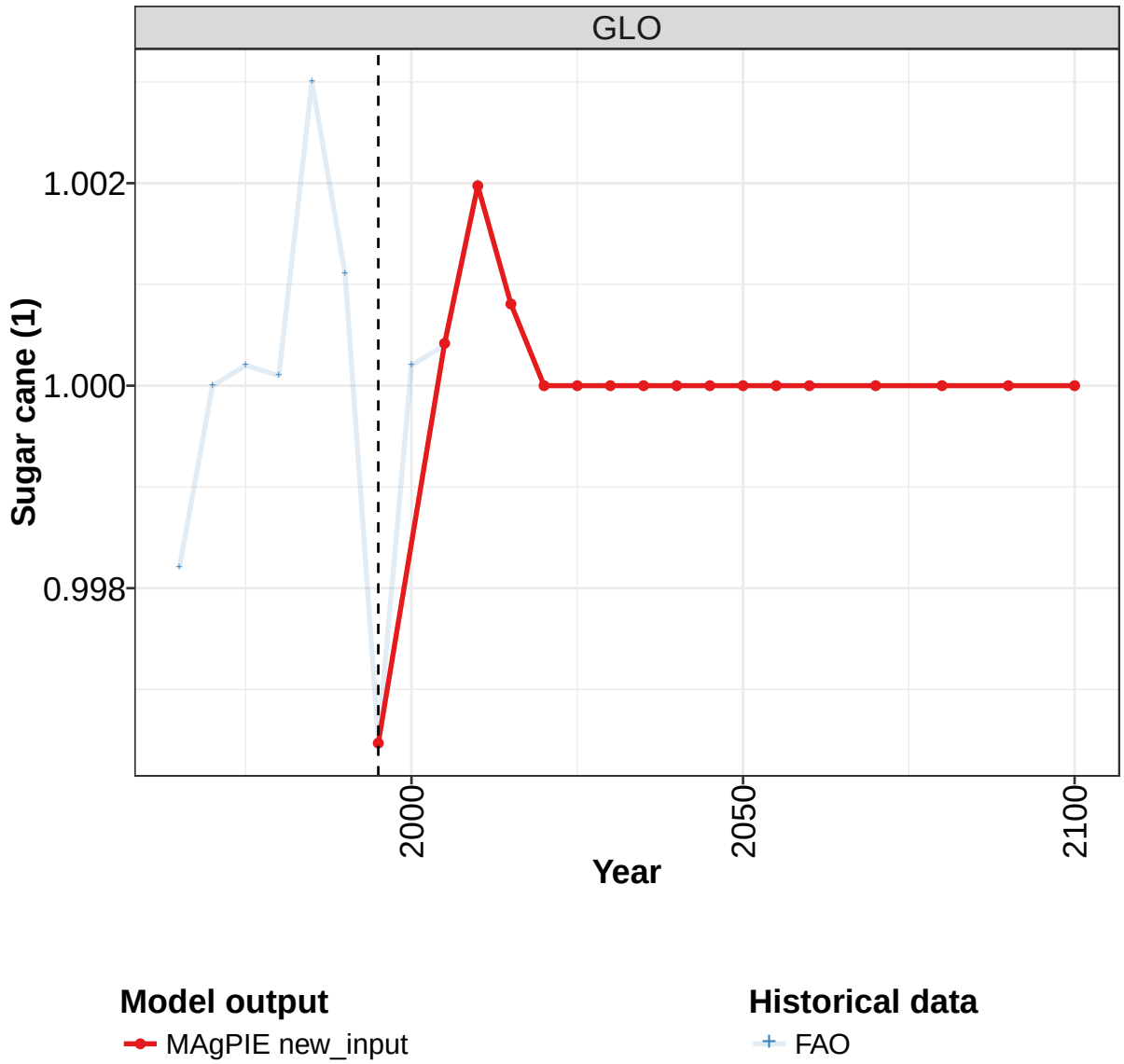
	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1
CAZ	1	1	1	1	1	1
CHA	1	1	1	3	3	4
EUR	1	1	1	1	1	1
LAM	1	1	2	2	1	1
MEA	1	1	1	1	1	1
NEU	1	1	1	1	1	1
OAS	1	1	1	1	1	1
REF	1	1	1	1	1	1
SSA	1	1	1	81	76	73
USA	1	1	1	1	1	1

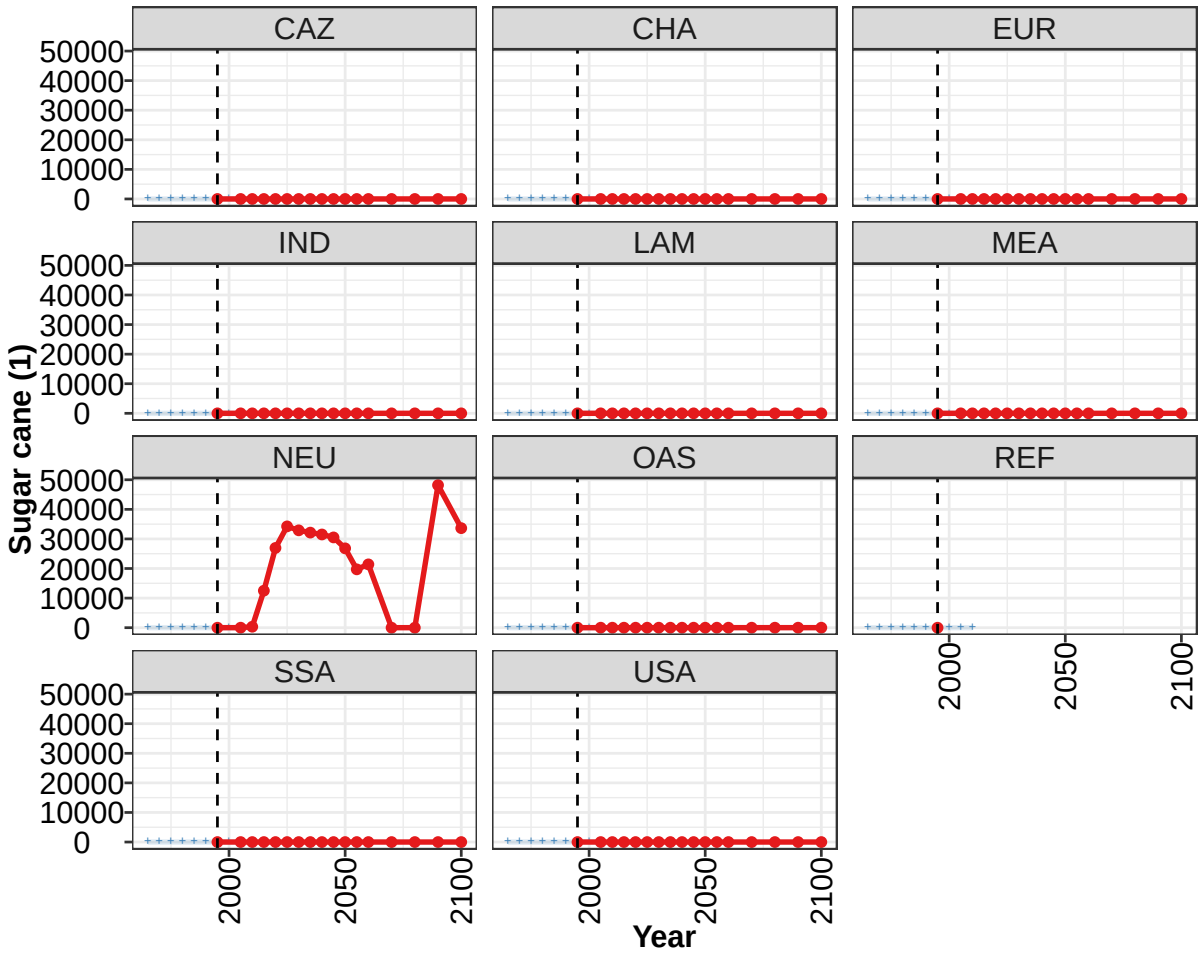
Table 1620: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.00
EUR	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEU	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.01
OAS	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REF	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	0.94	1.01
SSA	1.00	0.00	0.00	0.01	0.00	0.02	0.00	1.00	0.01	0.71
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 1621: FAO — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1)

59.1.13 Sugar crops—Sugar cane





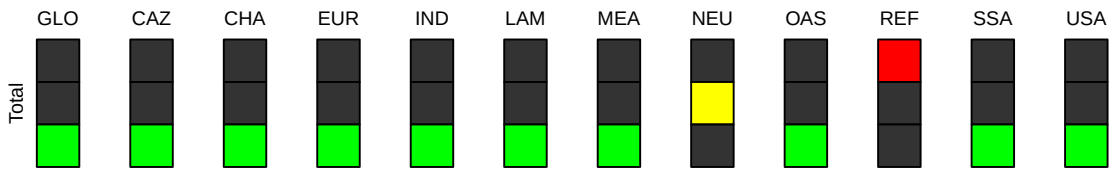


Figure 444: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	1	1	0	0	0	0	0	0	0	0	0
IND	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	0	8	323	12509	26963	34243	32907	32140	31514	30519	26818
OAS	1	1	1	1	1	1	1	1	2	2	2
REF	0										
SSA	1	1	1	1	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 1622: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1) [PART 1/2]

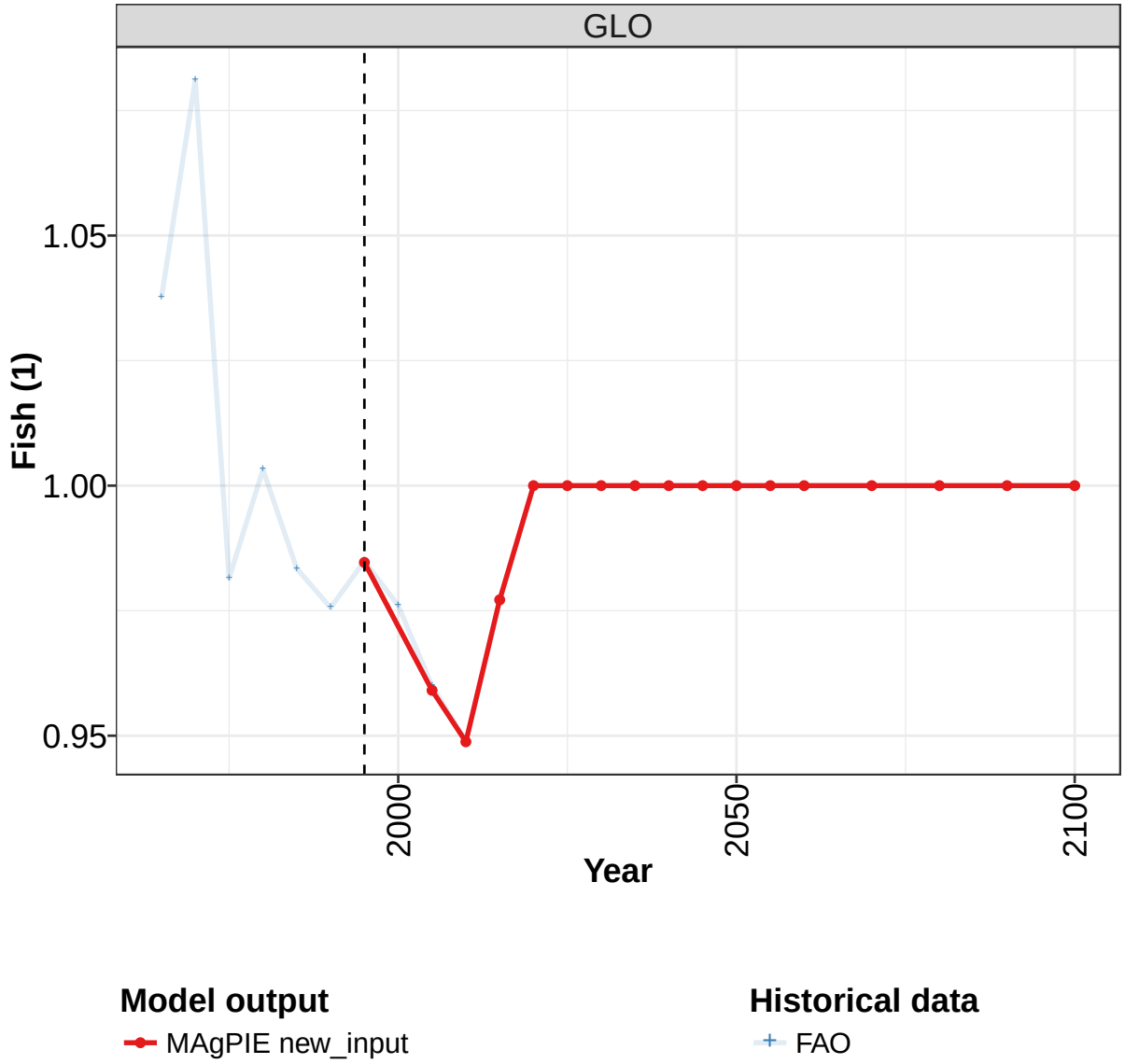
	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1
CAZ	1	1	1	1	1	1
CHA	1	1	1	1	1	1
EUR	0	0	0	0	0	0
IND	1	1	1	1	1	1
LAM	1	1	1	1	1	1
MEA	1	1	1	1	1	1
NEU	19727	21410	0	0	48187	33651
OAS	2	3	3	3	4	4
REF						
SSA	1	1	1	1	1	1
USA	1	1	1	1	1	1

Table 1623: MAgPIE new_input — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	0.96	1.00	1.00	1.00	1.05	1.02	0.97	1.00	1.02	1.00
EUR	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.26	0.49
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEU	1.00	1.00	1.00	1.00	1.00	0.01	0.01	0.00	1.00	0.00
OAS	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.01
REF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 1624: FAO — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1)

59.2 Fish


GLO
1.05
1.00
0.95
Fish (1)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

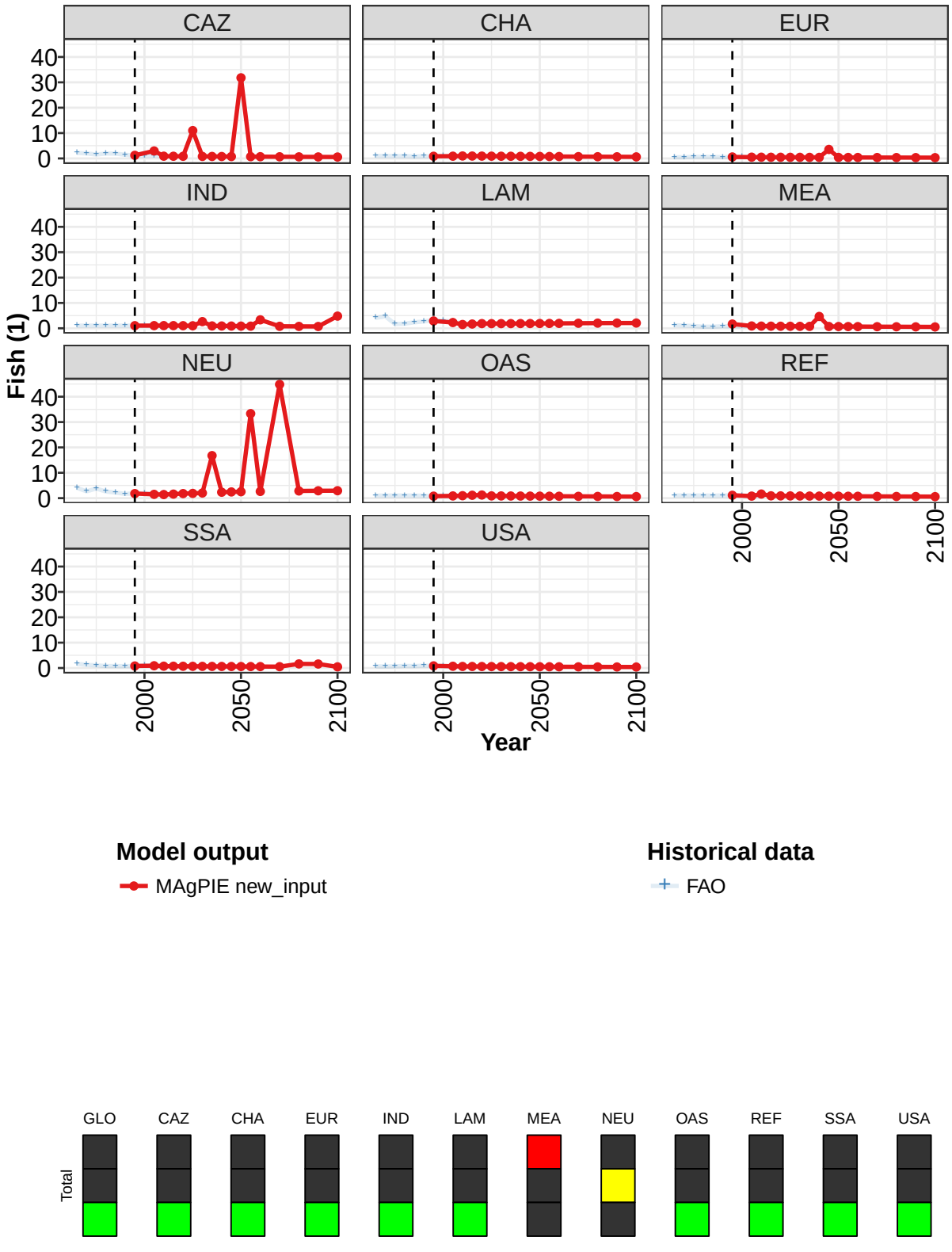


Figure 445: MAgPIE new_input — Trade—Self-sufficiency—Fish (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	1.2	3.0	0.9	0.9	0.8	11.0	0.8	0.8	0.8	0.7	31.8
CHA	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
EUR	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	3.5	0.4
IND	1.0	1.1	1.1	1.1	1.0	1.0	2.6	0.9	0.9	0.9	0.9
LAM	2.9	2.3	1.5	1.7	1.9	1.8	1.8	1.9	1.9	1.9	1.9
MEA	1.7	0.9	0.9	0.8	0.8	0.8	0.8	0.8	4.7	0.7	0.7
NEU	1.8	1.5	1.4	1.6	1.8	1.9	2.0	16.8	2.3	2.5	2.5
OAS	0.8	0.9	1.0	1.1	1.2	0.9	0.9	0.9	0.8	0.8	0.8
REF	1.1	0.8	1.6	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8
SSA	0.8	0.9	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
USA	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5

Table 1625: MAgPIE new_input — Trade—Self-sufficiency—Fish (1) [PART 1/2]

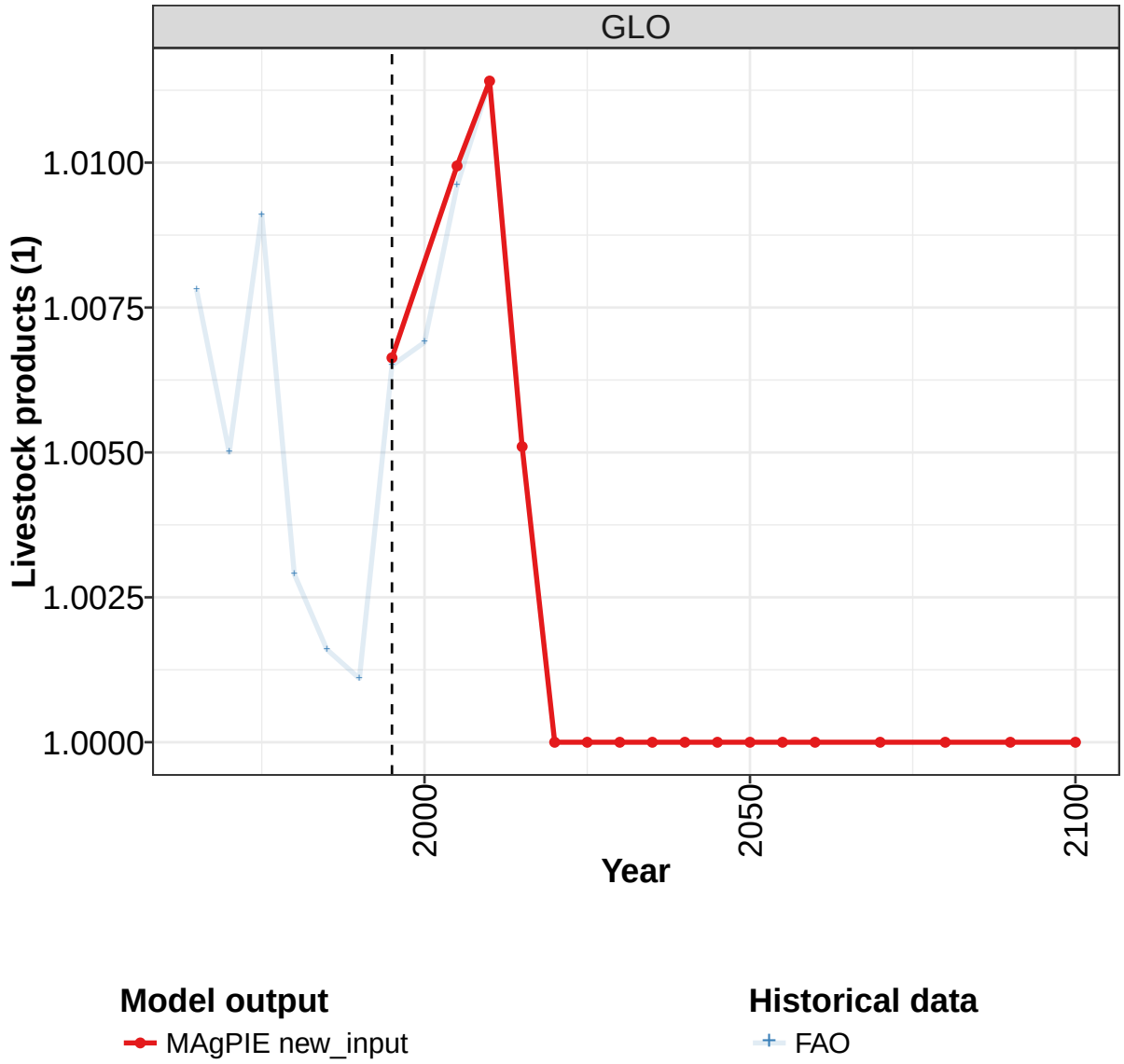
	2055	2060	2070	2080	2090	2100
GLO	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	0.7	0.7	0.7	0.6	0.6	0.6
CHA	0.8	0.8	0.7	0.7	0.6	0.6
EUR	0.4	0.4	0.4	0.3	0.3	0.3
IND	0.8	3.3	0.8	0.8	0.7	4.8
LAM	1.9	1.9	2.0	2.0	2.1	2.1
MEA	0.7	0.7	0.6	0.6	0.6	0.5
NEU	33.3	2.6	44.8	2.8	2.9	2.9
OAS	0.8	0.8	0.7	0.7	0.6	0.6
REF	0.8	0.7	0.7	0.7	0.6	0.6
SSA	0.6	0.6	0.5	1.6	1.6	0.5
USA	0.5	0.5	0.5	0.4	0.4	0.4

Table 1626: MAgPIE new_input — Trade—Self-sufficiency—Fish (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.04	1.08	0.98	1.00	0.98	0.98	0.98	0.98	0.96	0.95
CAZ	2.18	1.98	1.53	1.92	1.88	1.45	1.12	0.93	1.10	0.89
CHA	1.00	0.98	0.93	0.92	0.79	0.85	0.86	0.87	0.89	0.97
EUR	0.47	0.47	0.62	0.62	0.57	0.51	0.59	0.54	0.50	0.48
IND	1.02	1.04	1.03	1.05	1.05	1.04	1.07	1.10	1.07	1.12
LAM	4.07	4.70	1.68	1.82	2.36	2.70	3.34	2.91	2.73	1.81
MEA	1.22	1.04	0.87	0.62	0.62	0.80	0.76	0.76	0.92	0.86
NEU	4.07	2.69	3.81	2.62	2.21	1.67	1.89	1.92	1.67	1.70
OAS	0.98	1.00	1.02	1.02	1.01	0.93	0.80	0.86	0.88	0.97
REF	1.04	1.04	1.02	1.03	0.97	1.05	1.14	1.03	0.81	0.95
SSA	1.65	1.28	1.05	0.78	0.78	0.73	0.81	0.98	0.90	0.73
USA	0.64	0.61	0.67	0.82	0.76	0.90	0.85	0.75	0.70	0.63

Table 1627: FAO — Trade—Self-sufficiency—Fish (1)

59.3 Livestock products



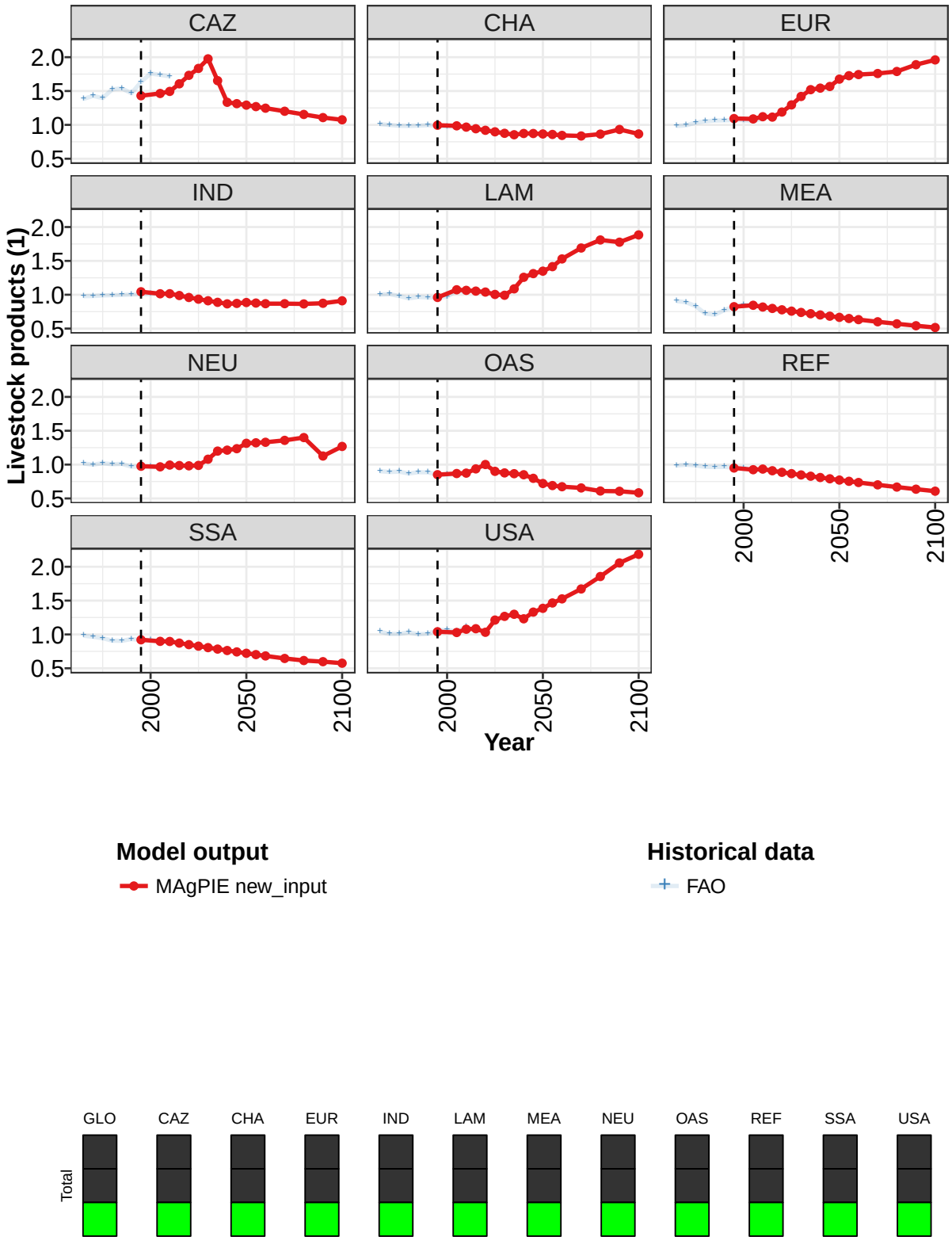


Figure 446: MAgPIE new_input — Trade—Self-sufficiency—Livestock products (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.43	1.46	1.49	1.61	1.73	1.83	1.98	1.65	1.33	1.31	1.29
CHA	0.99	0.99	0.97	0.94	0.92	0.90	0.88	0.85	0.87	0.87	0.87
EUR	1.09	1.09	1.12	1.11	1.19	1.30	1.42	1.52	1.54	1.57	1.68
IND	1.04	1.01	1.02	0.99	0.96	0.93	0.91	0.89	0.87	0.87	0.89
LAM	0.96	1.07	1.06	1.05	1.04	1.00	0.99	1.09	1.26	1.31	1.35
MEA	0.82	0.84	0.82	0.80	0.78	0.76	0.74	0.72	0.70	0.68	0.67
NEU	0.98	0.97	0.99	0.99	0.98	0.99	1.08	1.20	1.21	1.24	1.31
OAS	0.85	0.87	0.87	0.94	1.00	0.90	0.88	0.87	0.85	0.80	0.72
REF	0.95	0.92	0.93	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77
SSA	0.92	0.90	0.90	0.87	0.85	0.83	0.81	0.78	0.76	0.74	0.72
USA	1.04	1.03	1.08	1.08	1.03	1.21	1.27	1.30	1.23	1.33	1.39

Table 1628: MAgPIE new_input — Trade—Self-sufficiency—Livestock products (1) [PART 1/2]

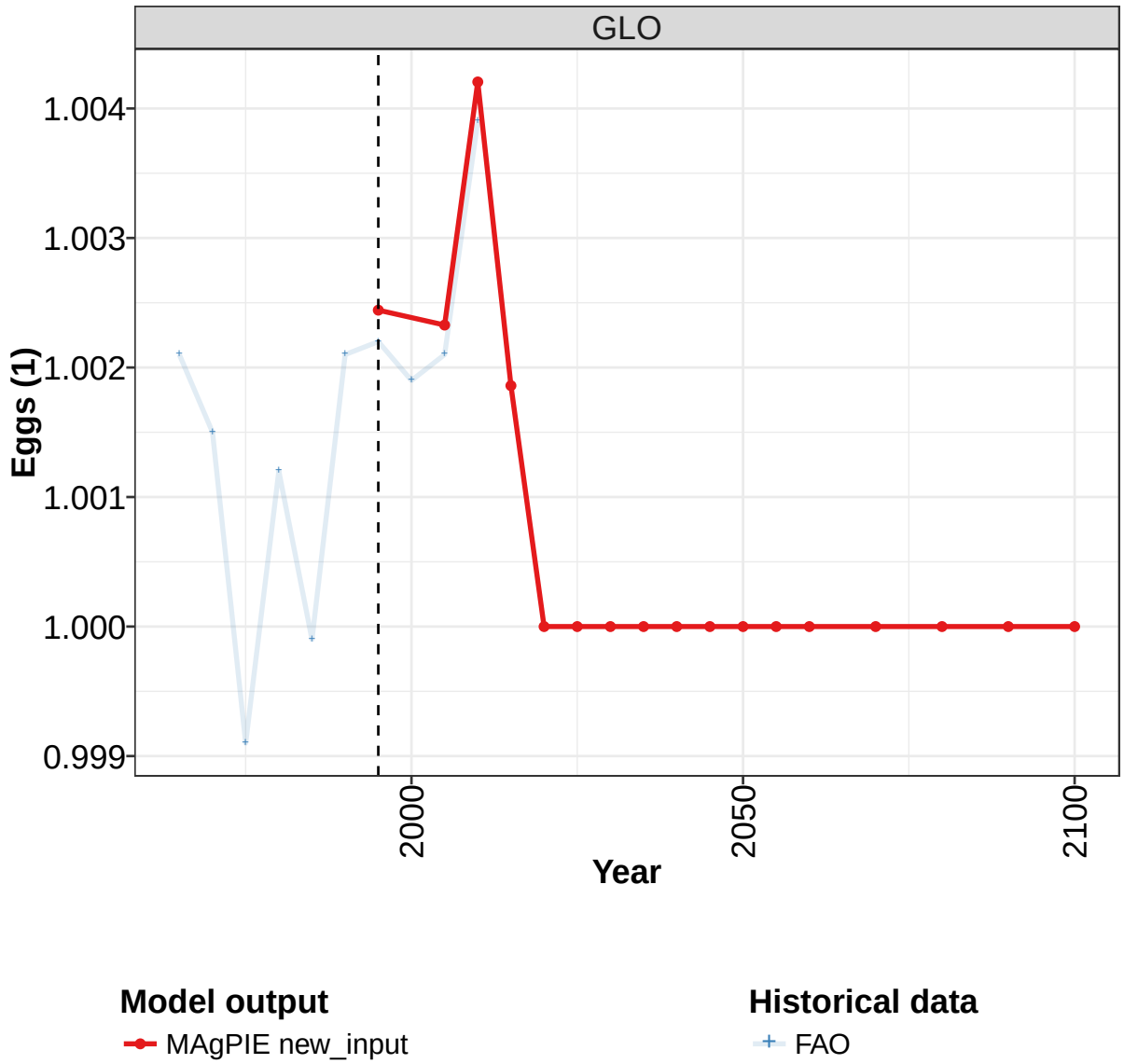
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.27	1.25	1.20	1.15	1.11	1.07
CHA	0.86	0.84	0.84	0.86	0.93	0.87
EUR	1.73	1.74	1.76	1.79	1.89	1.96
IND	0.88	0.87	0.87	0.86	0.87	0.91
LAM	1.42	1.53	1.69	1.81	1.78	1.88
MEA	0.65	0.63	0.60	0.57	0.54	0.52
NEU	1.32	1.33	1.36	1.40	1.13	1.27
OAS	0.69	0.67	0.66	0.61	0.61	0.58
REF	0.75	0.74	0.70	0.67	0.64	0.61
SSA	0.70	0.68	0.65	0.62	0.60	0.58
USA	1.47	1.53	1.67	1.86	2.06	2.18

Table 1629: MAgPIE new_input — Trade—Self-sufficiency—Livestock products (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.00	1.01	1.00	1.00	1.00	1.01	1.01	1.01	1.01
CAZ	1.38	1.43	1.40	1.52	1.54	1.47	1.63	1.76	1.74	1.72
CHA	1.01	1.00	0.99	0.98	0.99	0.99	0.99	0.97	0.98	0.97
EUR	0.98	0.99	1.03	1.05	1.06	1.07	1.07	1.07	1.05	1.09
IND	0.98	0.98	0.99	0.99	1.00	1.00	1.01	1.01	1.02	1.02
LAM	1.00	1.01	0.98	0.95	0.97	0.96	0.96	0.97	1.06	1.04
MEA	0.91	0.89	0.83	0.72	0.71	0.77	0.83	0.85	0.85	0.82
NEU	1.01	1.00	1.02	1.01	1.01	0.97	0.97	0.97	0.96	0.98
OAS	0.90	0.89	0.90	0.87	0.89	0.89	0.85	0.85	0.86	0.86
REF	0.99	1.00	0.99	0.97	0.96	0.97	0.95	0.95	0.92	0.92
SSA	0.98	0.97	0.94	0.91	0.91	0.93	0.92	0.92	0.90	0.90
USA	1.04	1.01	1.01	1.03	1.00	1.01	1.06	1.07	1.05	1.11

Table 1630: FAO — Trade—Self-sufficiency—Livestock products (1)

59.3.1 Eggs


GLO
Eggs (1)
1.004
1.003
1.002
1.001
1.000
0.999
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

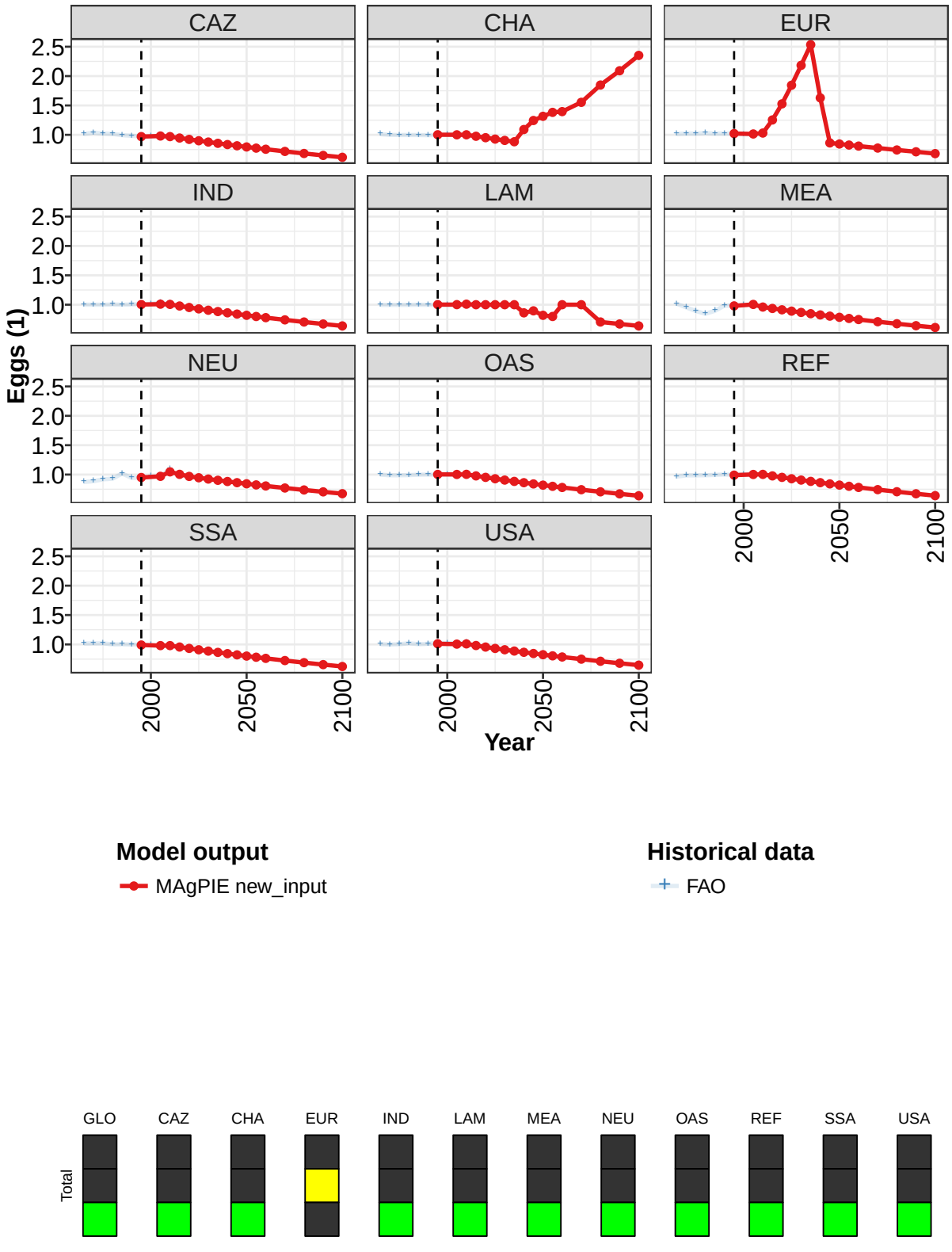


Figure 447: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Eggs (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.97	0.98	0.97	0.95	0.92	0.90	0.88	0.86	0.83	0.81	0.79
CHA	1.00	1.00	1.00	0.98	0.95	0.93	0.91	0.88	1.09	1.24	1.32
EUR	1.02	1.01	1.03	1.25	1.53	1.84	2.18	2.53	1.63	0.86	0.84
IND	1.00	1.01	1.01	0.98	0.95	0.93	0.91	0.88	0.86	0.84	0.82
LAM	1.00	1.00	1.01	1.00	1.00	1.00	1.00	1.00	0.86	0.90	0.82
MEA	0.98	1.00	0.96	0.94	0.91	0.89	0.87	0.85	0.83	0.81	0.79
NEU	0.95	0.97	1.05	1.00	0.97	0.95	0.92	0.90	0.88	0.86	0.84
OAS	1.00	1.00	1.00	0.98	0.95	0.93	0.91	0.88	0.86	0.84	0.82
REF	0.99	1.00	1.00	0.98	0.95	0.93	0.91	0.88	0.86	0.84	0.82
SSA	0.99	0.98	0.98	0.96	0.93	0.91	0.89	0.86	0.84	0.82	0.80
USA	1.01	1.01	1.01	0.98	0.96	0.93	0.91	0.89	0.87	0.85	0.83

Table 1631: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Eggs (1) [PART 1/2]

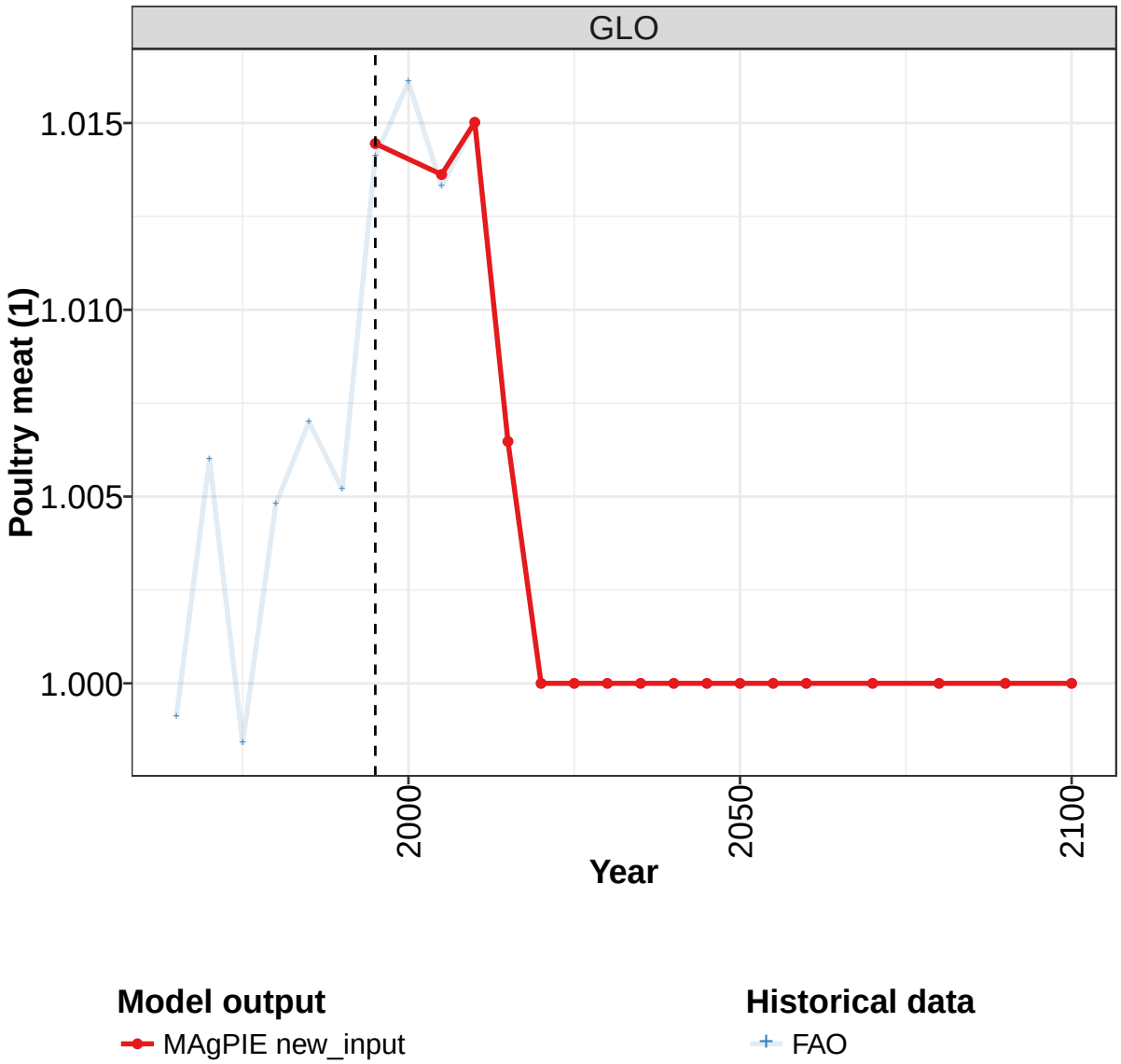
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.77	0.75	0.72	0.68	0.65	0.62
CHA	1.38	1.40	1.55	1.85	2.09	2.35
EUR	0.83	0.81	0.78	0.74	0.71	0.68
IND	0.80	0.78	0.74	0.71	0.67	0.64
LAM	0.80	1.00	1.00	0.71	0.67	0.64
MEA	0.77	0.75	0.71	0.68	0.64	0.61
NEU	0.82	0.81	0.77	0.74	0.71	0.67
OAS	0.80	0.78	0.74	0.71	0.67	0.64
REF	0.80	0.78	0.74	0.71	0.67	0.64
SSA	0.78	0.76	0.73	0.69	0.66	0.62
USA	0.81	0.79	0.75	0.71	0.68	0.65

Table 1632: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Eggs (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.02	1.04	1.02	1.02	0.99	0.98	0.97	0.97	0.98	0.97
CHA	1.01	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
EUR	1.01	1.02	1.02	1.03	1.02	1.02	1.02	1.01	1.01	1.01
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.04	1.02
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.02	0.95	0.89	0.85	0.90	0.98	0.98	1.00	1.00	0.96
NEU	0.87	0.89	0.92	0.93	1.02	0.94	0.95	0.97	0.97	1.10
OAS	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
REF	0.97	0.98	0.99	0.99	0.99	1.00	0.99	1.00	1.00	1.00
SSA	1.02	1.02	1.02	1.00	1.00	1.00	0.99	0.99	0.98	0.98
USA	1.00	1.00	1.00	1.02	1.00	1.01	1.03	1.02	1.02	1.03

Table 1633: FAO — Trade—Self-sufficiency—Livestock products—Eggs (1)

59.3.2 Poultry meat



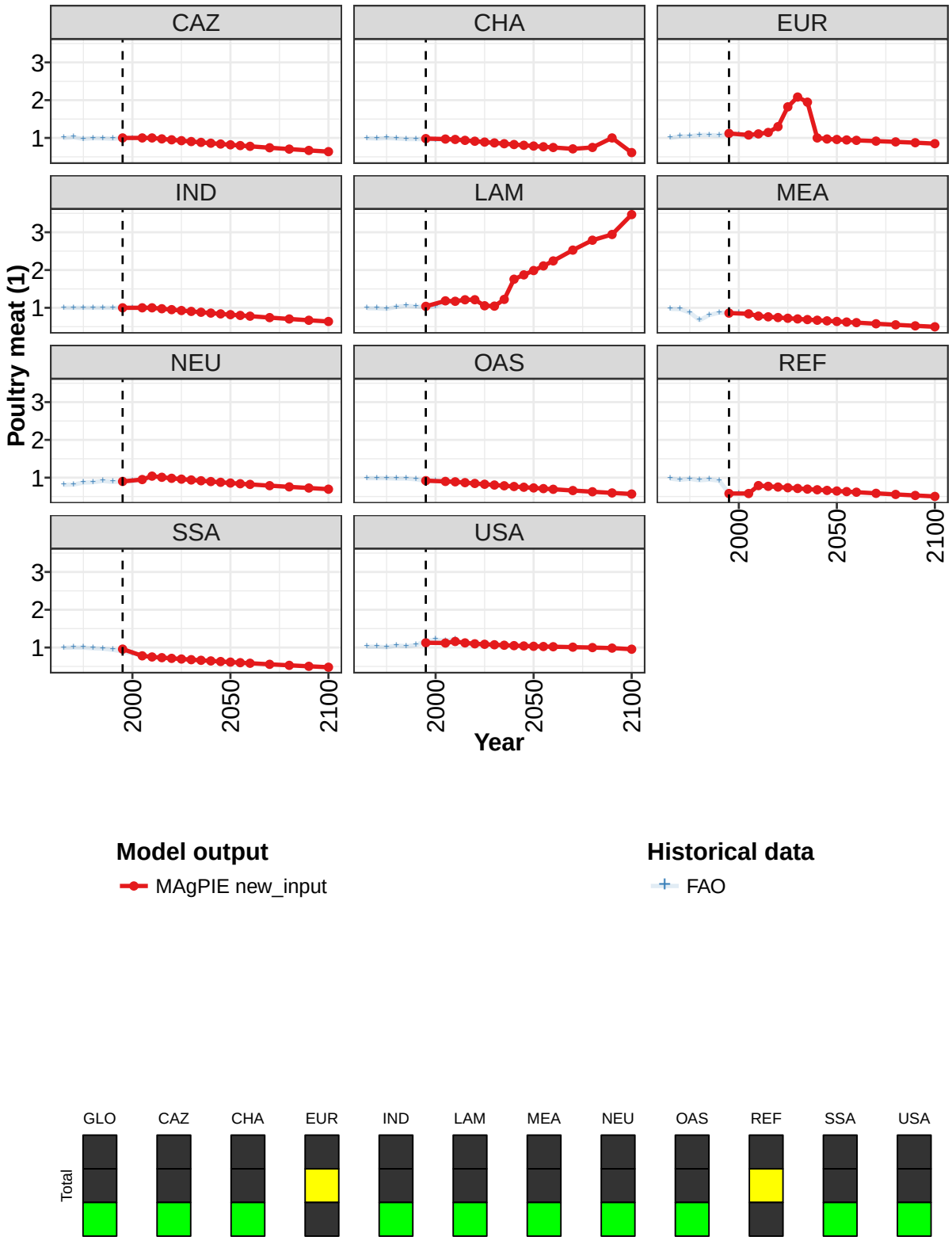


Figure 448: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Poultry meat (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.01	1.01	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
CHA	0.98	0.97	0.96	0.94	0.91	0.89	0.87	0.85	0.83	0.81	0.79
EUR	1.12	1.08	1.11	1.14	1.30	1.82	2.08	1.95	1.00	0.97	0.96
IND	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
LAM	1.04	1.18	1.17	1.21	1.21	1.05	1.04	1.22	1.76	1.87	1.99
MEA	0.86	0.84	0.78	0.76	0.74	0.72	0.71	0.69	0.67	0.65	0.64
NEU	0.90	0.95	1.04	1.01	0.98	0.96	0.94	0.92	0.90	0.88	0.86
OAS	0.92	0.90	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.75	0.73
REF	0.58	0.58	0.79	0.77	0.75	0.73	0.71	0.70	0.68	0.66	0.65
SSA	0.96	0.78	0.75	0.73	0.71	0.70	0.68	0.66	0.65	0.63	0.61
USA	1.13	1.12	1.16	1.12	1.10	1.09	1.07	1.06	1.05	1.04	1.03

Table 1634: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Poultry meat (1) [PART 1/2]

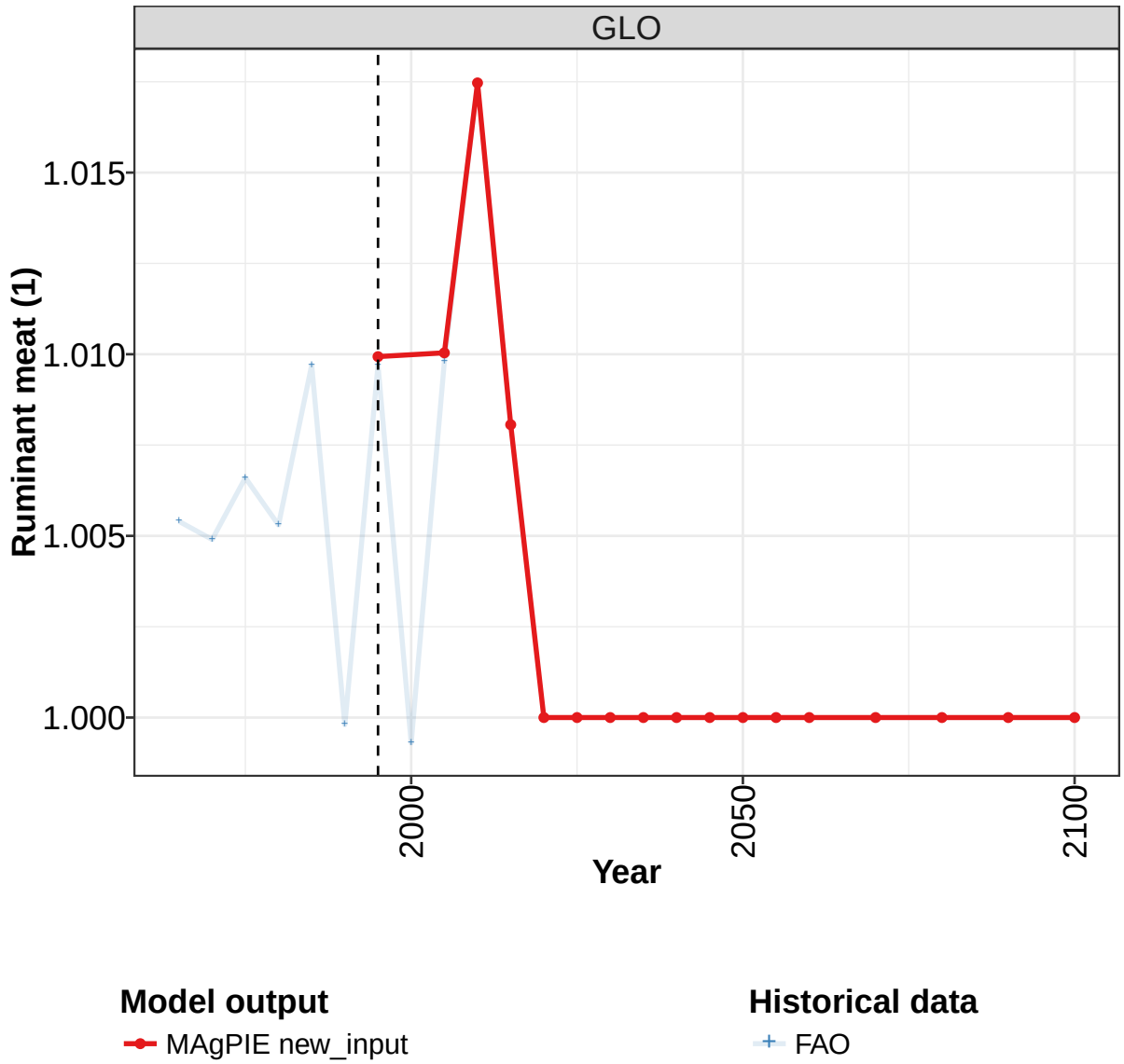
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.80	0.78	0.74	0.70	0.67	0.64
CHA	0.77	0.75	0.71	0.75	1.00	0.61
EUR	0.95	0.94	0.92	0.90	0.87	0.85
IND	0.80	0.78	0.74	0.70	0.67	0.64
LAM	2.11	2.24	2.53	2.79	2.94	3.47
MEA	0.62	0.61	0.58	0.55	0.52	0.50
NEU	0.84	0.82	0.79	0.76	0.73	0.69
OAS	0.71	0.69	0.66	0.63	0.60	0.57
REF	0.63	0.61	0.58	0.56	0.53	0.50
SSA	0.60	0.58	0.56	0.53	0.50	0.48
USA	1.03	1.02	1.01	1.00	0.98	0.96

Table 1635: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Poultry meat (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.01	1.00	1.00	1.01	1.01	1.01	1.02	1.01	1.01
CAZ	1.00	1.02	0.97	0.99	0.99	0.98	1.00	0.99	1.00	1.00
CHA	0.99	0.98	1.00	0.99	0.97	0.97	0.97	0.95	0.97	0.96
EUR	1.00	1.04	1.04	1.08	1.08	1.06	1.10	1.09	1.02	1.07
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	0.99	0.98	0.97	1.02	1.05	1.03	1.02	1.03	1.16	1.14
MEA	0.97	0.96	0.88	0.67	0.81	0.87	0.86	0.87	0.84	0.78
NEU	0.81	0.82	0.87	0.88	0.91	0.89	0.90	0.91	0.95	1.00
OAS	0.99	0.99	0.98	0.97	0.98	0.95	0.92	0.91	0.90	0.89
REF	0.98	0.94	0.97	0.93	0.95	0.92	0.58	0.58	0.58	0.79
SSA	0.99	1.00	1.00	0.98	0.97	0.94	0.90	0.84	0.78	0.75
USA	1.02	1.02	1.01	1.05	1.03	1.06	1.18	1.21	1.18	1.23

Table 1636: FAO — Trade—Self-sufficiency—Livestock products—Poultry meat (1)

59.3.3 Ruminant meat



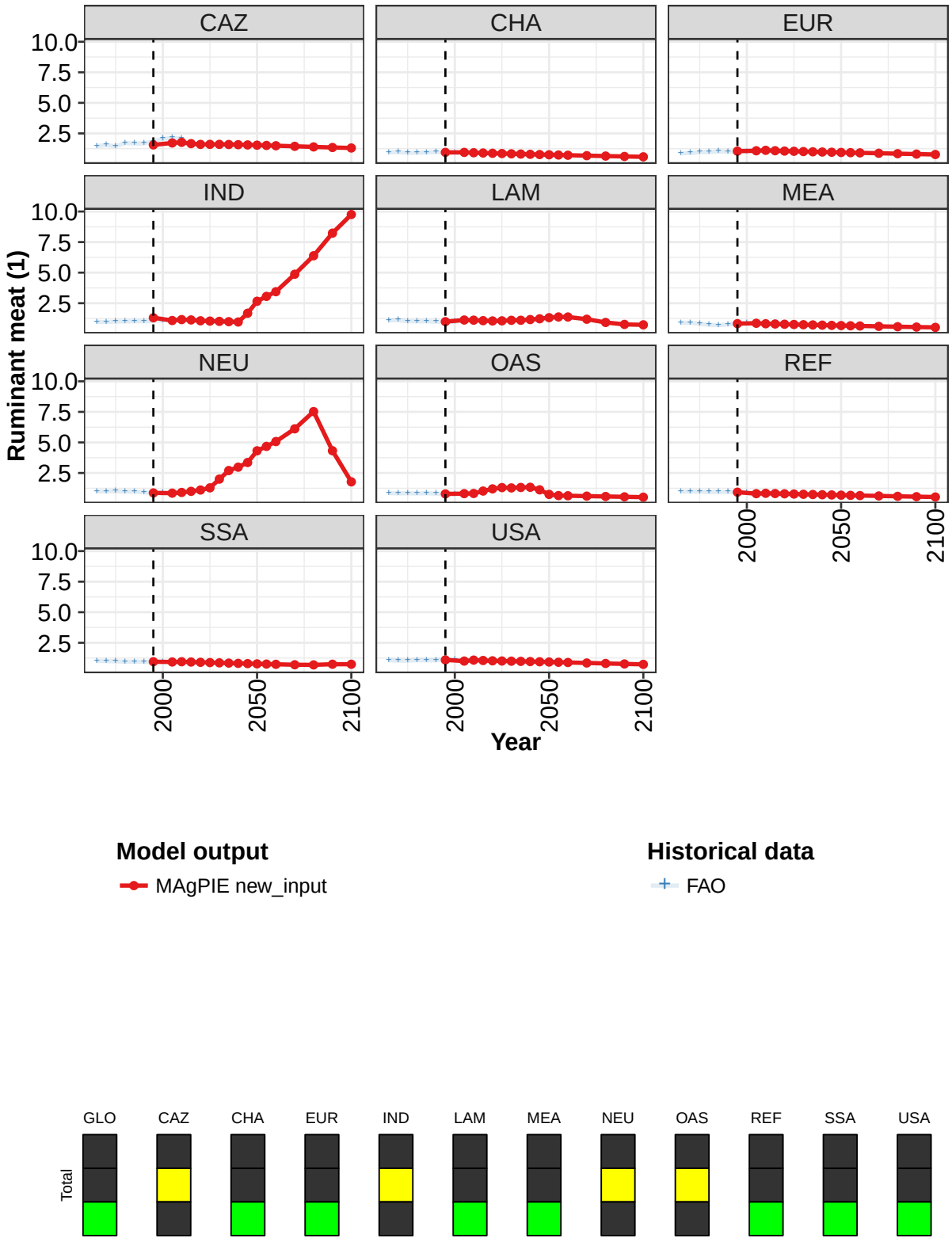


Figure 449: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Ruminant meat (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.01	1.01	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.56	1.72	1.77	1.66	1.60	1.61	1.60	1.59	1.58	1.56	1.54
CHA	0.95	0.95	0.92	0.90	0.88	0.85	0.83	0.81	0.79	0.77	0.75
EUR	1.05	1.08	1.12	1.08	1.06	1.04	1.02	1.00	0.98	0.96	0.94
IND	1.31	1.08	1.16	1.13	1.06	1.04	1.01	0.99	0.96	1.68	2.66
LAM	0.99	1.12	1.11	1.07	1.05	1.06	1.10	1.11	1.16	1.23	1.32
MEA	0.83	0.86	0.82	0.80	0.78	0.76	0.74	0.72	0.71	0.69	0.67
NEU	0.87	0.85	0.91	1.00	1.11	1.29	2.00	2.70	2.98	3.36	4.32
OAS	0.79	0.81	0.83	1.02	1.20	1.31	1.28	1.32	1.33	1.12	0.75
REF	0.93	0.81	0.84	0.82	0.80	0.78	0.76	0.74	0.72	0.70	0.69
SSA	0.95	0.93	0.95	0.93	0.90	0.88	0.86	0.84	0.82	0.80	0.78
USA	1.10	1.00	1.08	1.05	1.03	1.01	1.00	0.98	0.96	0.95	0.93

Table 1637: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Ruminant meat (1) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.52	1.49	1.45	1.40	1.35	1.31
CHA	0.73	0.72	0.68	0.65	0.62	0.59
EUR	0.93	0.91	0.88	0.84	0.81	0.78
IND	3.06	3.44	4.87	6.38	8.23	9.76
LAM	1.37	1.37	1.19	0.93	0.76	0.73
MEA	0.65	0.64	0.61	0.58	0.55	0.52
NEU	4.68	5.07	6.11	7.52	4.32	1.78
OAS	0.65	0.64	0.61	0.58	0.55	0.52
REF	0.67	0.65	0.62	0.59	0.56	0.54
SSA	0.76	0.74	0.70	0.69	0.75	0.74
USA	0.91	0.89	0.85	0.81	0.77	0.73

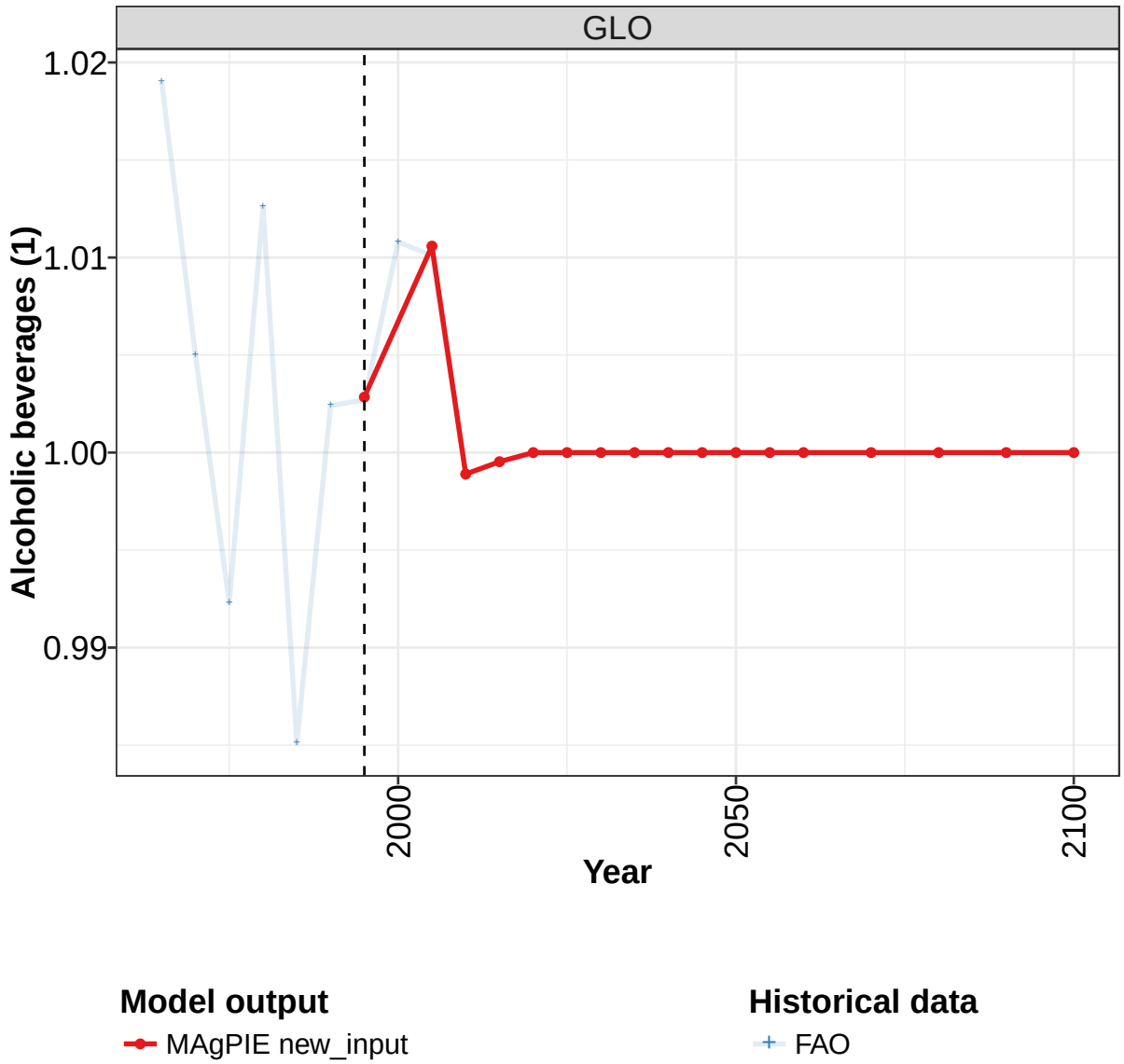
Table 1638: MAgPIE new_input — Trade—Self-sufficiency—Livestock products—Ruminant meat (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.00	1.01	1.01	1.01	1.00	1.01	1.00	1.01	1.02
CAZ	1.47	1.54	1.45	1.71	1.67	1.68	1.86	2.06	2.13	2.09
CHA	0.96	0.97	0.92	0.92	0.95	0.99	0.95	0.92	0.95	0.92
EUR	0.88	0.89	0.98	0.97	1.02	1.01	1.00	1.01	1.04	1.08
IND	0.97	0.96	1.00	1.01	1.02	1.02	1.05	1.09	1.13	1.22
LAM	1.09	1.11	1.02	1.02	1.02	0.99	0.99	0.98	1.09	1.06
MEA	0.90	0.90	0.83	0.74	0.70	0.77	0.83	0.86	0.86	0.82
NEU	0.99	0.99	1.02	0.98	0.98	0.92	0.87	0.87	0.83	0.85
OAS	0.86	0.83	0.84	0.83	0.85	0.81	0.79	0.77	0.81	0.82
REF	0.98	0.99	0.98	0.95	0.95	0.95	0.93	0.88	0.81	0.84
SSA	1.01	1.00	0.98	0.96	0.96	0.95	0.95	0.95	0.93	0.95
USA	1.07	1.04	1.03	1.08	1.06	1.07	1.15	1.10	1.00	1.11

Table 1639: FAO — Trade—Self-sufficiency—Livestock products—Ruminant meat (1)

59.4 Secondary products

59.4.1 Alcoholic beverages



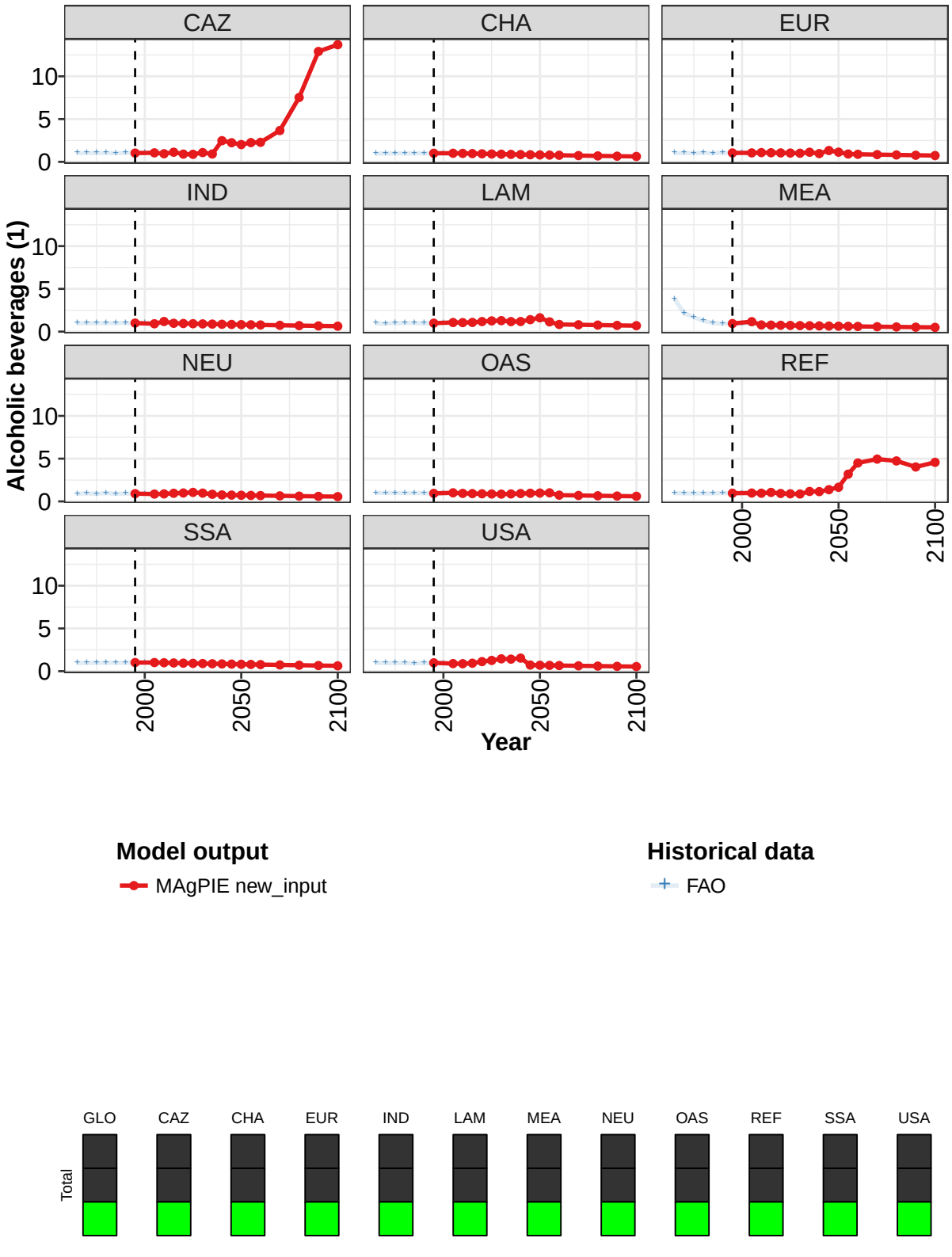


Figure 450: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	1.0	1.1	0.9	1.1	0.9	0.9	1.1	0.9	2.5	2.2	2.0
CHA	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8
EUR	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.1	1.0	1.3	1.1
IND	1.0	0.9	1.2	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8
LAM	1.0	1.1	1.1	1.1	1.2	1.3	1.3	1.2	1.2	1.4	1.6
MEA	0.9	1.2	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6
NEU	0.9	0.9	0.9	1.0	1.0	1.1	1.0	0.8	0.8	0.7	0.7
OAS	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
REF	1.0	1.0	1.0	1.1	0.9	0.9	0.9	1.2	1.1	1.4	1.7
SSA	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8
USA	1.0	0.9	0.9	0.9	1.1	1.3	1.4	1.4	1.5	0.7	0.7

Table 1640: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1) [PART 1/2]

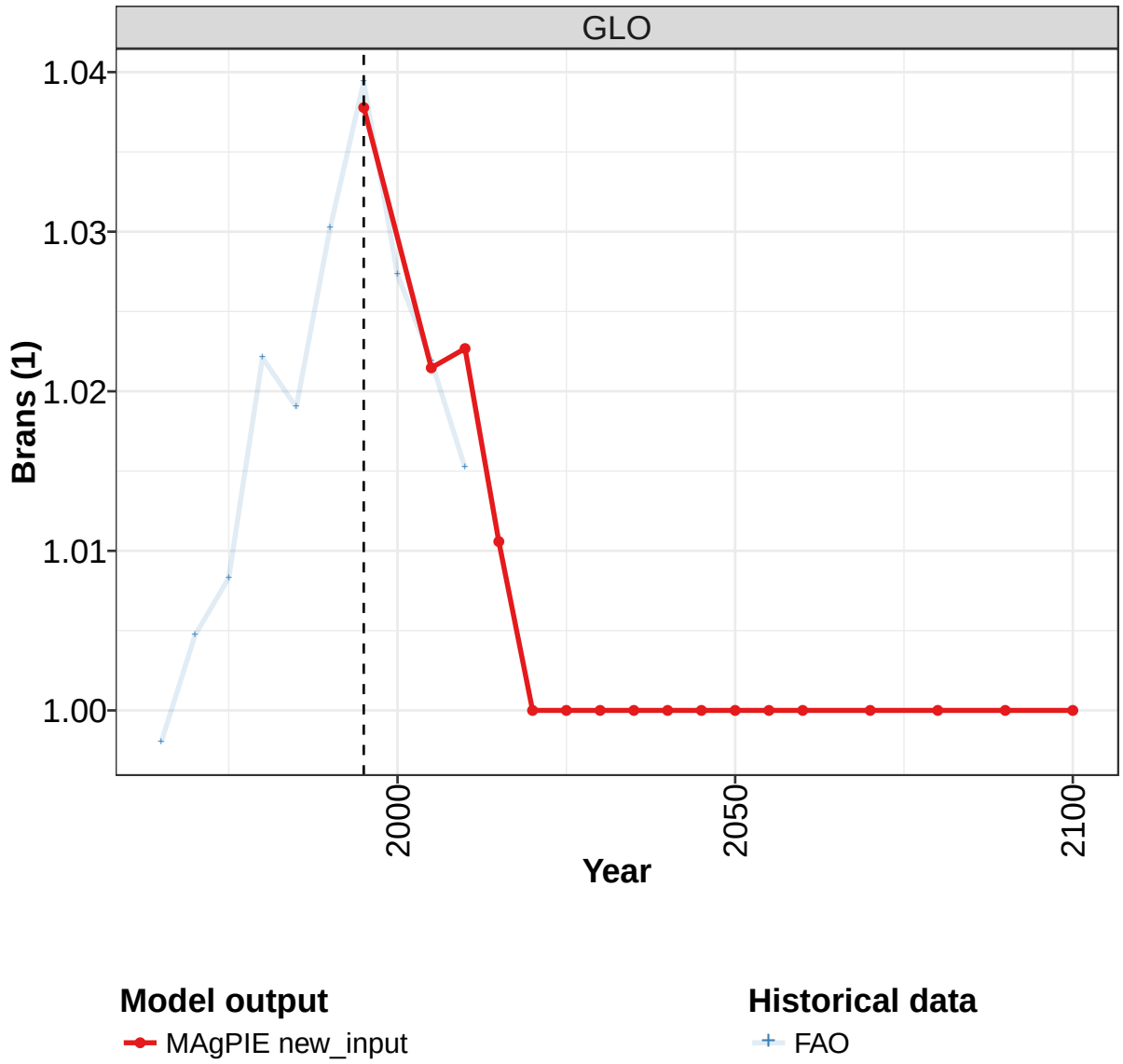
	2055	2060	2070	2080	2090	2100
GLO	1.0	1.0	1.0	1.0	1.0	1.0
CAZ	2.3	2.3	3.7	7.5	12.9	13.7
CHA	0.8	0.8	0.7	0.7	0.7	0.6
EUR	0.9	0.9	0.8	0.8	0.8	0.7
IND	0.8	0.8	0.7	0.7	0.7	0.6
LAM	1.1	0.8	0.8	0.8	0.7	0.7
MEA	0.6	0.6	0.6	0.5	0.5	0.5
NEU	0.7	0.7	0.7	0.6	0.6	0.6
OAS	1.0	0.7	0.7	0.7	0.6	0.6
REF	3.2	4.5	4.9	4.7	4.0	4.6
SSA	0.8	0.8	0.7	0.7	0.7	0.6
USA	0.7	0.7	0.6	0.6	0.6	0.5

Table 1641: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.02	1.00	0.99	1.01	0.99	1.00	1.00	1.01	1.01	1.00
CAZ	1.03	1.04	1.03	1.04	1.02	1.04	1.05	1.05	1.08	0.95
CHA	0.97	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	0.99
EUR	1.02	1.03	1.01	1.06	1.01	1.06	1.06	1.09	1.05	1.07
IND	1.00	1.00	1.00	1.00	1.00	1.01	1.00	1.02	0.92	1.00
LAM	0.97	0.95	0.99	1.01	1.01	0.97	0.99	1.06	1.10	1.09
MEA	3.82	2.16	1.68	1.26	1.01	0.93	0.94	0.95	0.93	0.78
NEU	0.90	0.93	0.89	0.98	0.89	0.92	0.91	0.90	0.86	0.88
OAS	0.99	0.99	0.99	0.97	0.97	0.96	0.94	0.92	1.00	0.94
REF	0.98	0.93	0.93	0.93	0.94	0.98	0.96	0.99	0.98	0.96
SSA	0.97	0.98	0.98	0.99	0.99	0.99	1.00	0.99	1.00	0.99
USA	0.99	0.97	0.97	0.96	0.93	0.95	0.95	0.91	0.89	0.85

Table 1642: FAO — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1)

59.4.2 Brans


GLO
1.04
1.03
1.02
1.01
1.00
Brans (1)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

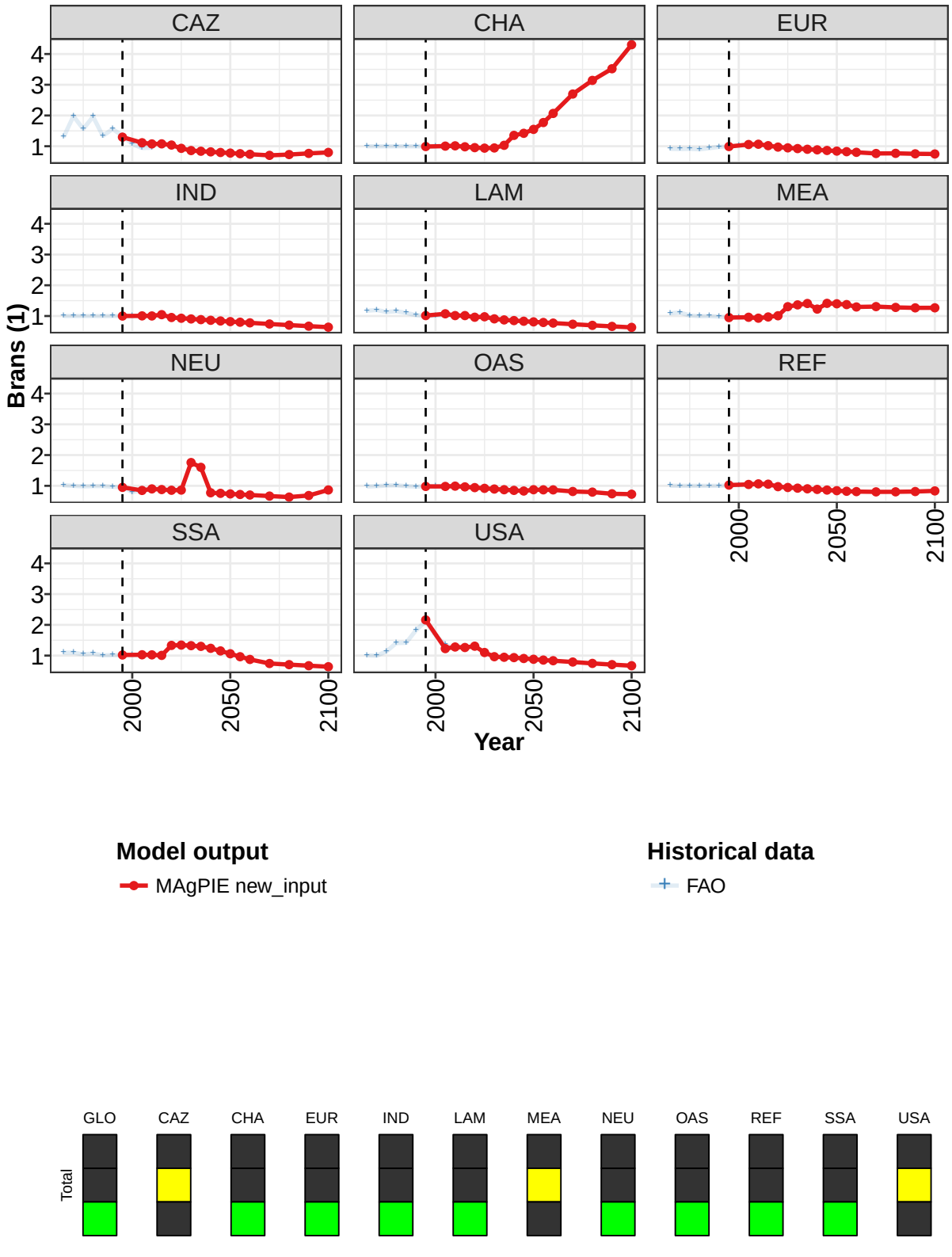


Figure 451: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Brans (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.04	1.02	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.30	1.11	1.08	1.08	1.04	0.93	0.86	0.84	0.82	0.80	0.78
CHA	0.99	1.00	1.01	0.98	0.95	0.94	0.94	1.03	1.35	1.42	1.55
EUR	0.99	1.06	1.07	1.02	0.97	0.95	0.92	0.90	0.88	0.86	0.84
IND	1.00	1.01	1.00	1.04	0.95	0.93	0.91	0.88	0.86	0.84	0.82
LAM	1.01	1.07	1.01	1.01	0.96	0.98	0.91	0.87	0.85	0.83	0.81
MEA	0.95	0.96	0.93	0.97	1.01	1.30	1.36	1.41	1.23	1.41	1.40
NEU	0.95	0.85	0.90	0.88	0.86	0.86	1.76	1.60	0.77	0.76	0.74
OAS	0.98	0.98	0.99	0.97	0.94	0.92	0.90	0.87	0.85	0.83	0.87
REF	1.02	1.04	1.06	1.05	0.97	0.95	0.92	0.90	0.88	0.86	0.84
SSA	1.02	1.03	1.02	1.01	1.33	1.34	1.32	1.30	1.24	1.15	1.06
USA	2.16	1.23	1.28	1.26	1.31	1.10	0.96	0.95	0.93	0.91	0.88

Table 1643: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Brans (1) [PART 1/2]

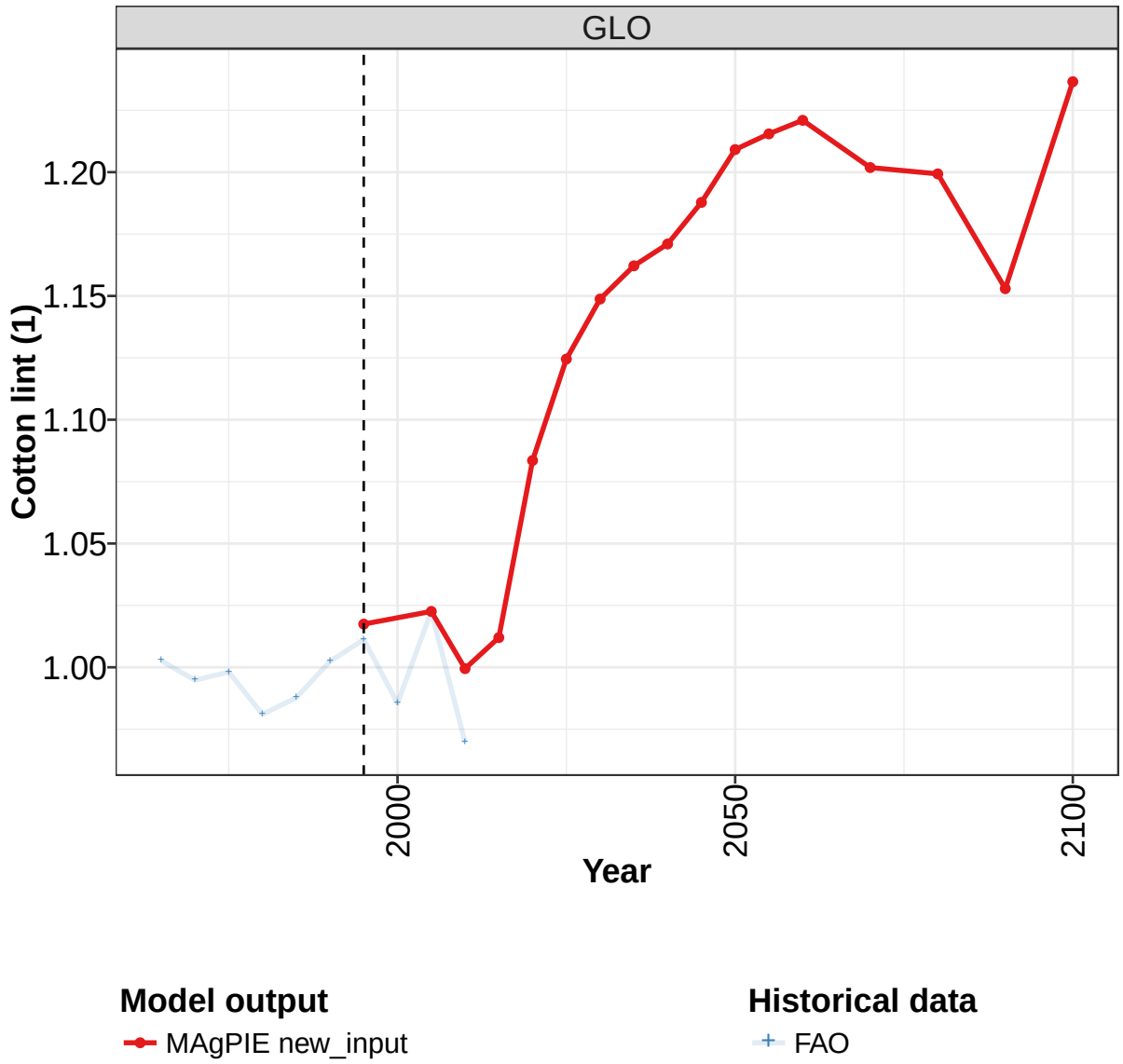
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.76	0.74	0.70	0.73	0.77	0.80
CHA	1.77	2.07	2.70	3.14	3.52	4.30
EUR	0.82	0.80	0.76	0.77	0.75	0.75
IND	0.80	0.78	0.74	0.70	0.67	0.64
LAM	0.79	0.77	0.73	0.70	0.66	0.63
MEA	1.37	1.30	1.31	1.28	1.27	1.27
NEU	0.72	0.70	0.67	0.63	0.68	0.87
OAS	0.87	0.87	0.82	0.80	0.74	0.73
REF	0.82	0.81	0.80	0.80	0.81	0.83
SSA	0.96	0.88	0.74	0.71	0.67	0.64
USA	0.85	0.83	0.79	0.75	0.71	0.67

Table 1644: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Brans (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.01	1.02	1.02	1.03	1.04	1.03	1.02	1.02
CAZ	1.30	1.98	1.56	1.96	1.34	1.56	1.34	1.07	0.94	0.95
CHA	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	1.01
EUR	0.92	0.91	0.91	0.90	0.94	0.98	0.99	1.02	1.03	1.05
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.00
LAM	1.17	1.20	1.13	1.16	1.10	1.03	1.00	1.01	1.05	0.99
MEA	1.09	1.12	1.02	0.99	1.00	0.98	0.95	0.95	0.96	0.93
NEU	1.02	1.00	0.98	0.99	0.99	0.97	0.95	0.79	0.85	0.90
OAS	0.98	0.99	1.01	1.02	0.99	0.97	0.98	0.99	0.98	0.99
REF	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.06	1.06
SSA	1.09	1.10	1.04	1.06	1.01	1.01	1.02	1.02	1.03	1.03
USA	1.01	1.00	1.14	1.41	1.42	1.82	2.11	1.66	1.35	1.22

Table 1645: FAO — Trade—Self-sufficiency—Secondary products—Brans (1)

59.4.3 Cotton lint



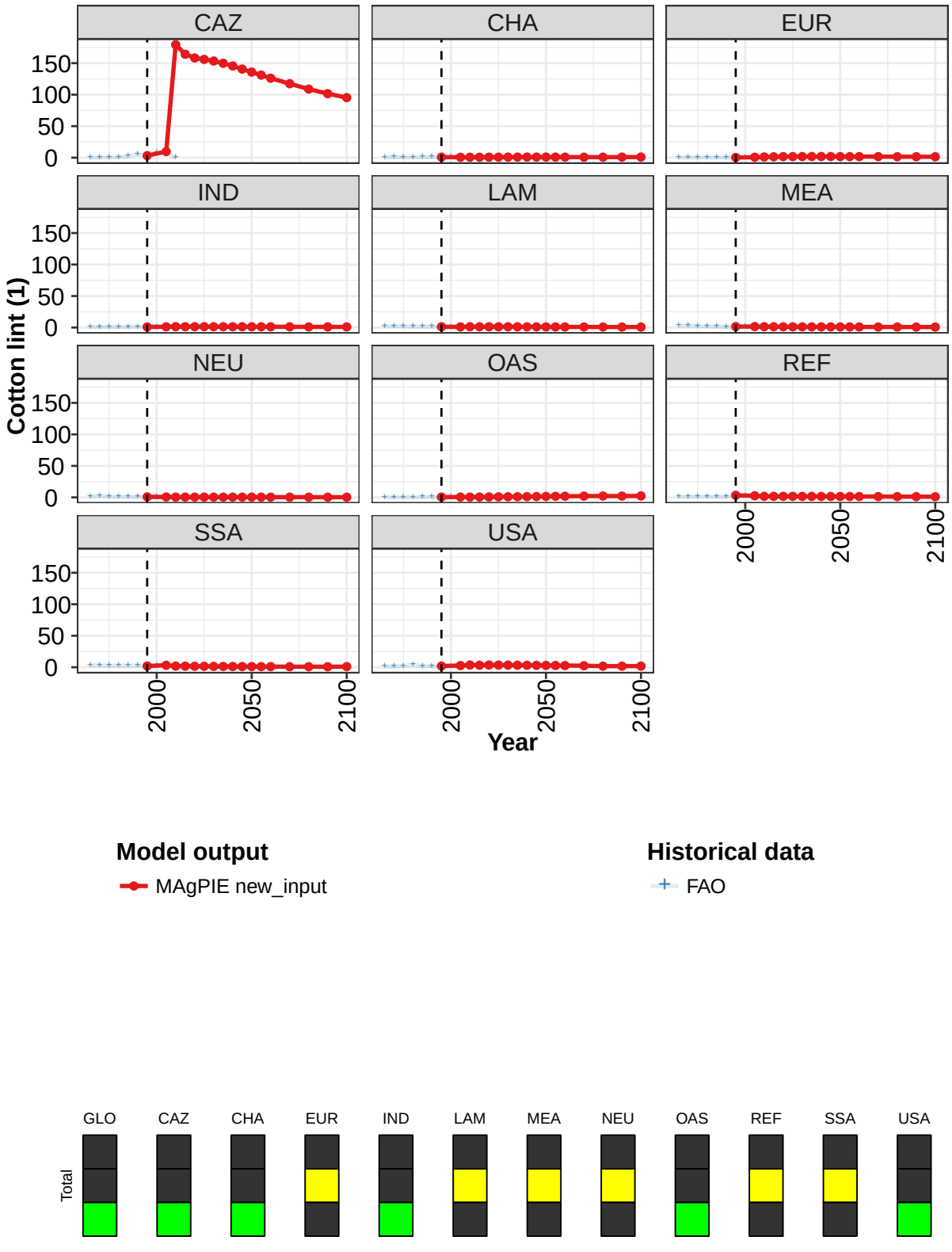


Figure 452: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Cotton lint (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	3	10	179	164	158	156	153	150	146	141	136
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	0	1	1	1	2	2	2	2	2	2	2
IND	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	2	1	1	1	1	1	1	1	1	1
NEU	1	1	0	0	0	0	0	0	0	0	0
OAS	0	1	0	1	1	1	1	1	1	1	2
REF	3	3	2	2	2	2	2	2	2	1	1
SSA	2	3	2	2	2	1	1	1	1	1	1
USA	2	3	4	3	4	3	3	3	3	3	3

Table 1646: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Cotton lint (1) [PART 1/2]

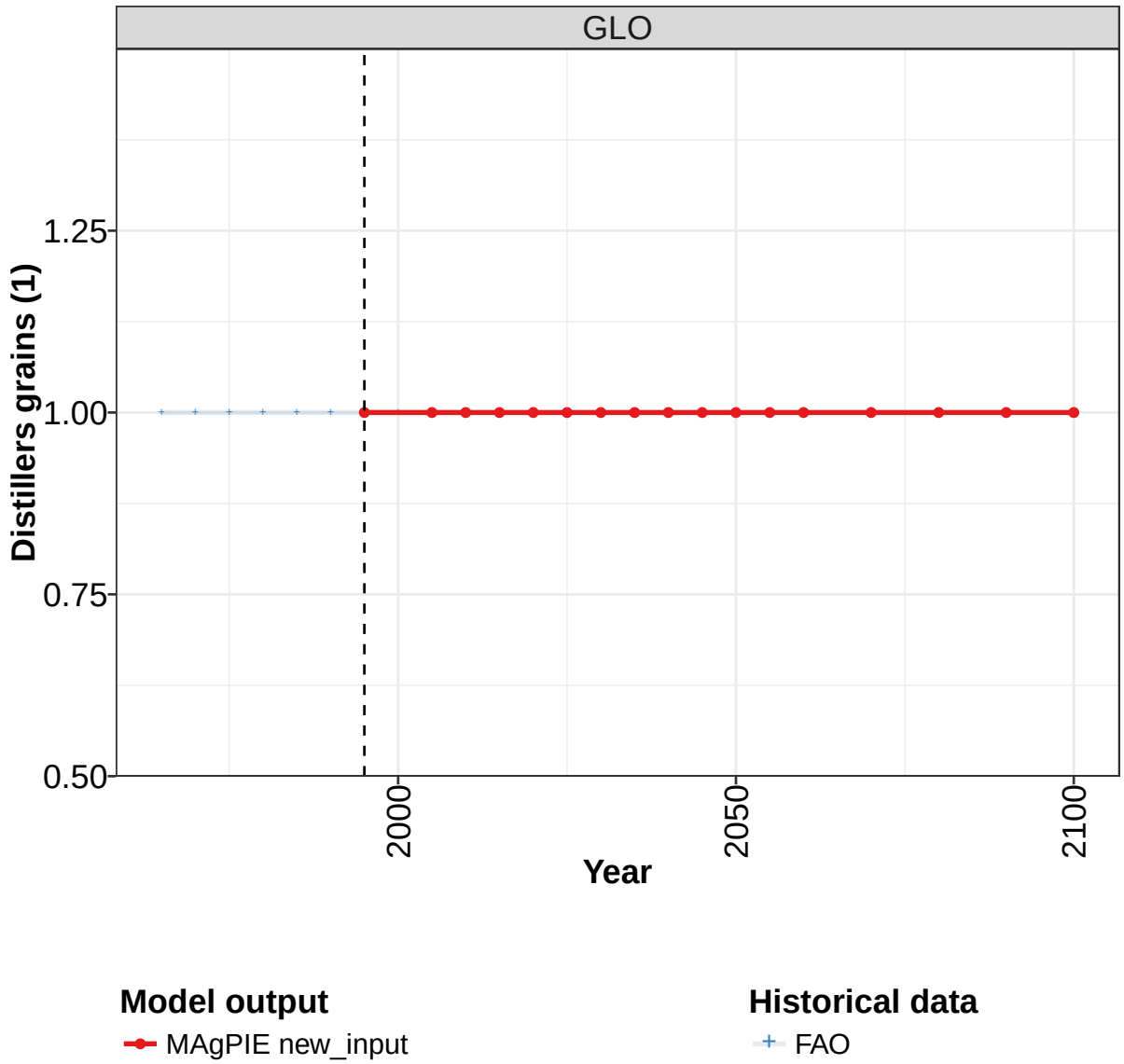
	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1
CAZ	131	126	117	109	102	95
CHA	1	1	1	1	1	1
EUR	2	2	2	2	1	1
IND	1	1	1	1	1	1
LAM	1	1	1	1	1	1
MEA	1	1	1	1	1	1
NEU	0	0	0	0	0	0
OAS	2	2	2	2	2	2
REF	1	1	1	1	1	1
SSA	1	1	1	1	1	1
USA	3	3	2	2	2	2

Table 1647: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Cotton lint (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	0.99	1.00	0.98	0.99	1.00	1.01	0.99	1.02	0.97
CAZ	0.06	0.28	0.41	0.84	2.47	5.75	2.98	7.25	9.37	0.00
CHA	0.84	0.87	0.81	0.66	0.96	0.87	0.81	0.97	0.66	0.66
EUR	0.09	0.09	0.09	0.09	0.12	0.18	0.32	0.41	0.67	0.20
IND	0.92	0.90	0.99	1.09	1.02	1.25	0.98	0.89	1.20	1.37
LAM	2.21	2.20	1.82	1.52	1.37	1.33	1.08	0.60	0.96	1.01
MEA	3.08	3.13	2.44	1.70	1.59	1.20	1.34	1.41	1.43	1.00
NEU	1.31	2.16	1.45	1.13	0.94	0.87	0.80	0.60	0.53	0.48
OAS	0.41	0.39	0.38	0.42	0.52	0.52	0.50	0.52	0.49	0.47
REF	1.19	1.17	1.37	1.43	1.23	1.23	3.22	1.99	2.48	1.65
SSA	3.34	3.25	2.23	2.44	2.53	2.55	2.30	2.99	3.32	2.09
USA	1.35	1.43	1.91	4.02	1.51	2.01	2.10	1.68	2.88	4.02

Table 1648: FAO — Trade—Self-sufficiency—Secondary products—Cotton lint (1)

59.4.4 Distillers grains



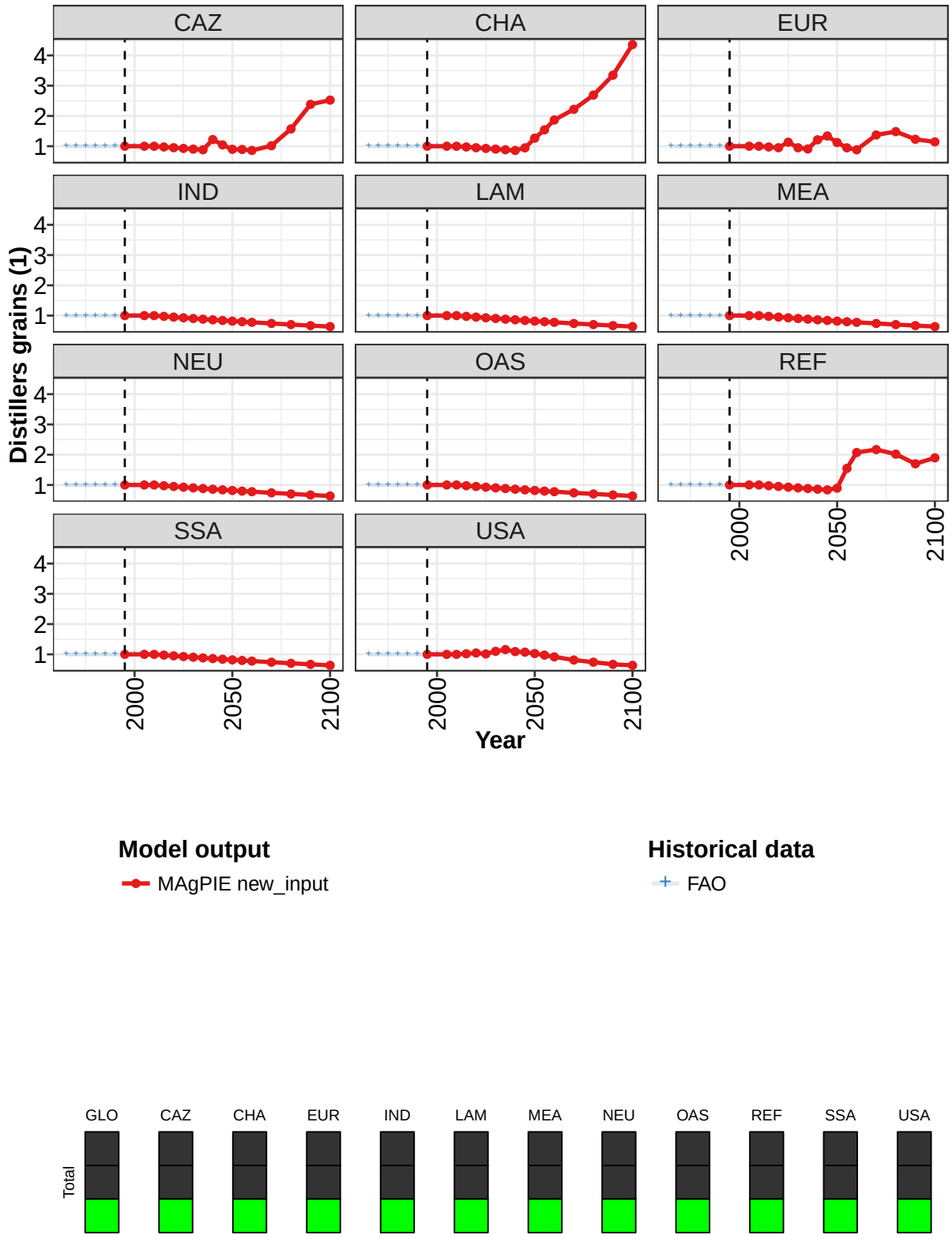


Figure 453: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Distillers grains (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	1.22	1.04	0.90
CHA	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.95	1.27
EUR	1.00	1.00	1.00	0.98	0.95	1.13	0.95	0.91	1.21	1.34	1.12
IND	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
LAM	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
MEA	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
NEU	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
OAS	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
REF	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.90
SSA	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
USA	1.00	1.00	1.00	1.02	1.05	1.01	1.10	1.16	1.09	1.07	1.03

Table 1649: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Distillers grains (1) [PART 1/2]

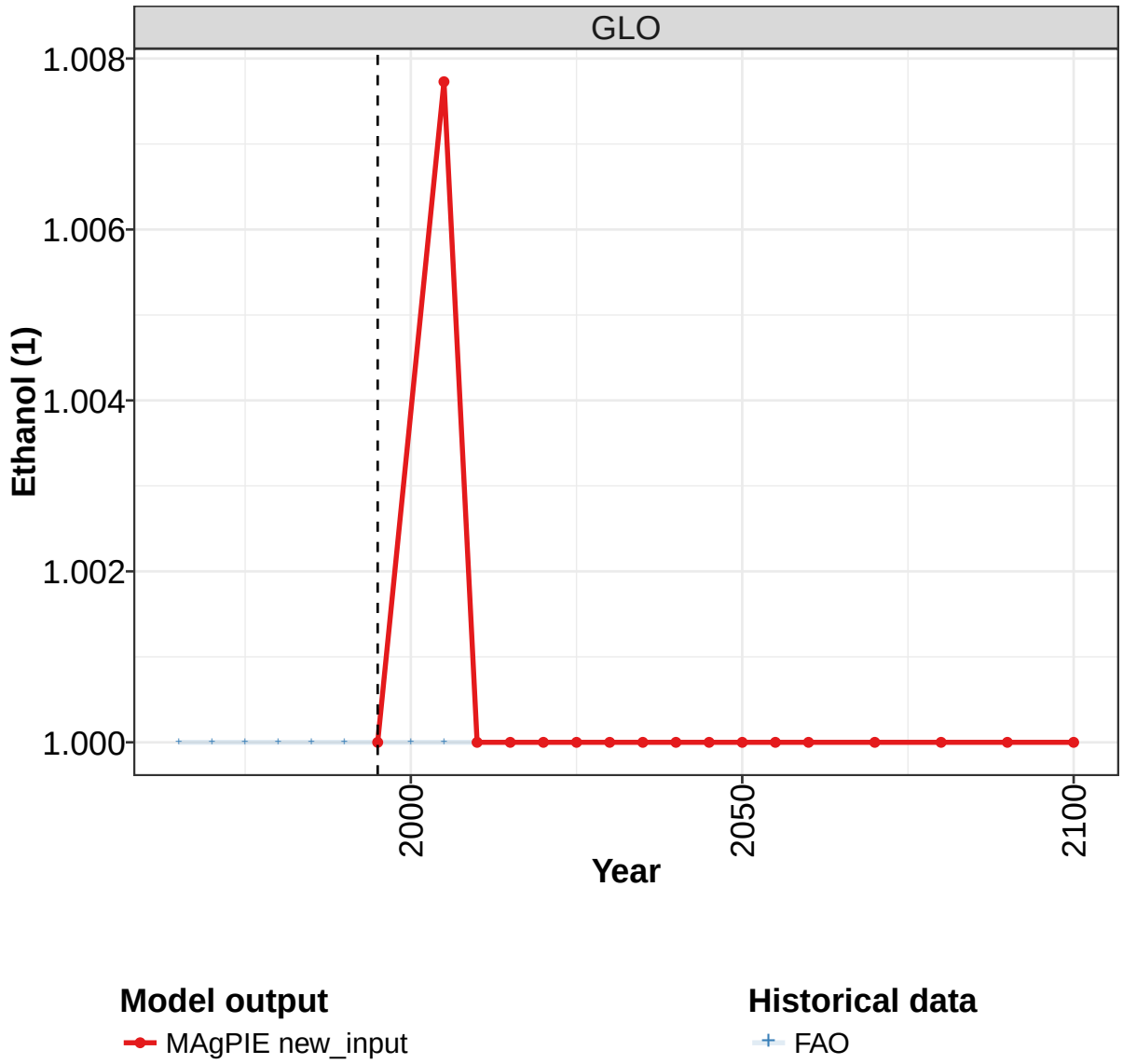
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.89	0.86	1.02	1.57	2.38	2.52
CHA	1.54	1.87	2.22	2.69	3.35	4.36
EUR	0.95	0.88	1.37	1.48	1.23	1.14
IND	0.80	0.78	0.74	0.70	0.67	0.64
LAM	0.80	0.78	0.74	0.70	0.67	0.64
MEA	0.80	0.78	0.74	0.70	0.67	0.64
NEU	0.80	0.78	0.74	0.70	0.67	0.64
OAS	0.80	0.78	0.74	0.70	0.67	0.64
REF	1.55	2.07	2.17	2.02	1.70	1.90
SSA	0.80	0.78	0.74	0.70	0.67	0.64
USA	0.98	0.92	0.81	0.74	0.67	0.64

Table 1650: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Distillers grains (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CAZ	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CHA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EUR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
IND	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LAM	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MEA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
NEU	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
OAS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
REF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
SSA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
USA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Table 1651: FAO — Trade—Self-sufficiency—Secondary products—Distillers grains (1)

59.4.5 Ethanol



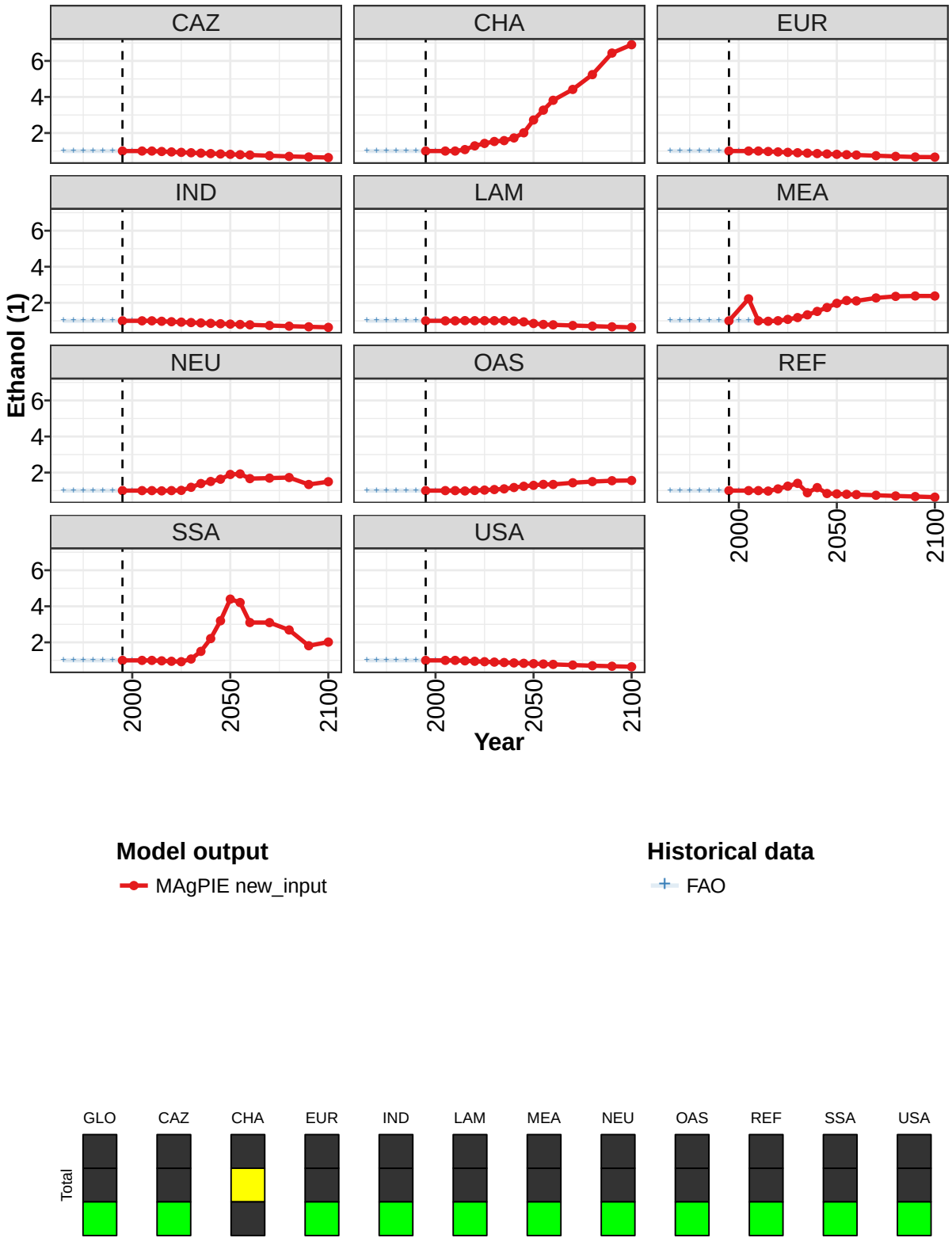


Figure 454: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Ethanol (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.00	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
CHA	1.00	1.00	1.00	1.08	1.29	1.42	1.53	1.58	1.73	2.01	2.72
EUR	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
IND	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82
LAM	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	0.98	0.94	0.85
MEA	1.00	2.22	1.00	0.98	1.01	1.08	1.18	1.33	1.52	1.74	1.97
NEU	1.00	1.00	1.00	0.99	1.00	1.01	1.18	1.39	1.51	1.63	1.90
OAS	1.00	1.00	1.00	0.98	1.01	1.03	1.06	1.10	1.17	1.24	1.29
REF	1.00	1.00	1.00	0.98	1.09	1.25	1.40	0.88	1.17	0.84	0.82
SSA	1.00	1.00	1.00	0.98	0.95	0.93	1.08	1.50	2.21	3.20	4.40
USA	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82

Table 1652: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Ethanol (1) [PART 1/2]

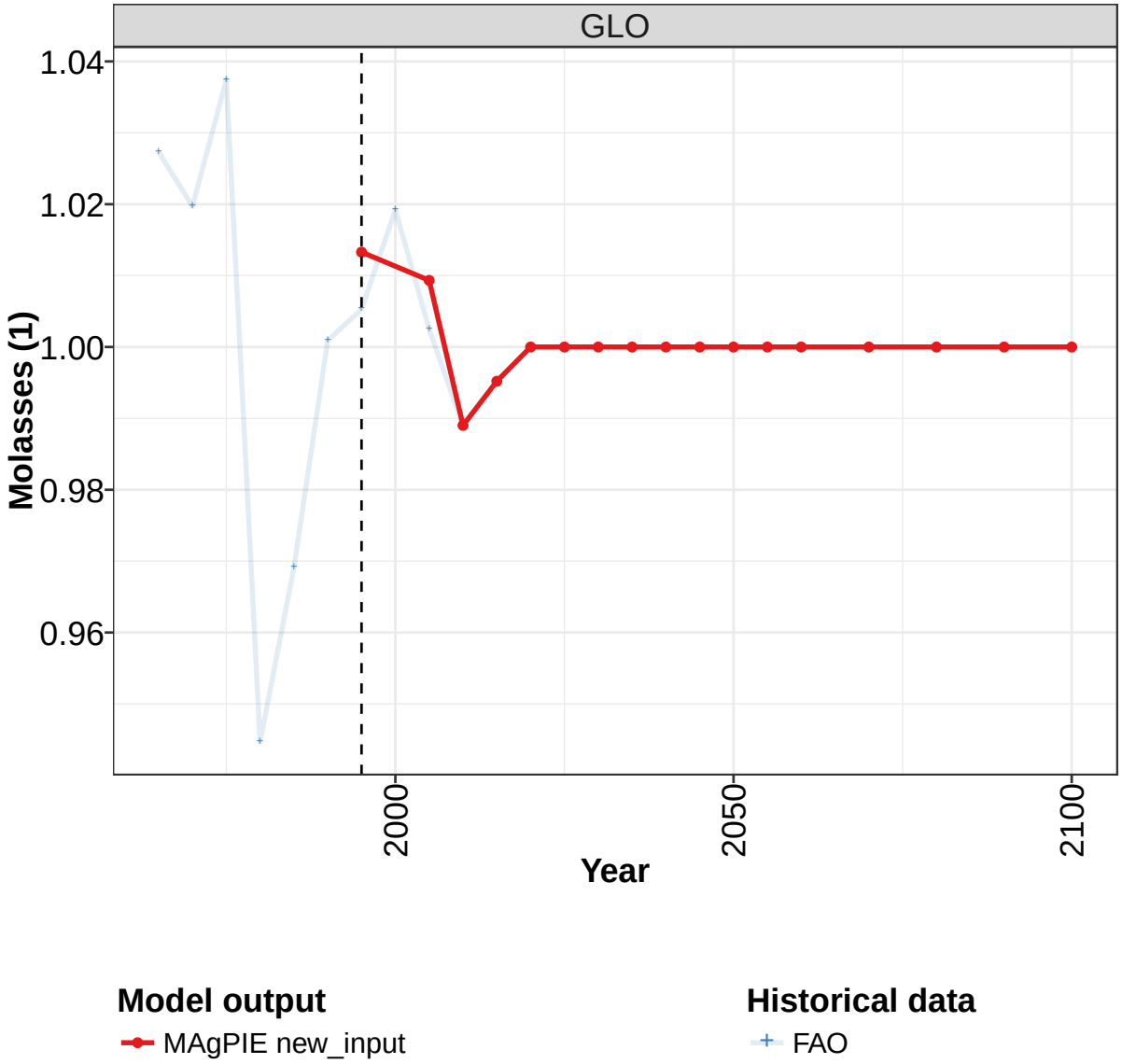
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.80	0.78	0.74	0.70	0.67	0.64
CHA	3.27	3.82	4.42	5.24	6.43	6.90
EUR	0.80	0.78	0.74	0.70	0.67	0.66
IND	0.80	0.78	0.74	0.70	0.67	0.64
LAM	0.80	0.78	0.74	0.70	0.67	0.64
MEA	2.13	2.11	2.27	2.36	2.38	2.38
NEU	1.92	1.67	1.69	1.72	1.34	1.49
OAS	1.34	1.34	1.44	1.50	1.55	1.56
REF	0.80	0.78	0.74	0.70	0.67	0.64
SSA	4.21	3.10	3.10	2.69	1.81	2.02
USA	0.80	0.78	0.74	0.70	0.67	0.65

Table 1653: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Ethanol (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CAZ	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CHA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EUR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
IND	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LAM	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MEA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
NEU	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
OAS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
REF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
SSA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
USA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Table 1654: FAO — Trade—Self-sufficiency—Secondary products—Ethanol (1)

59.4.6 Molasses



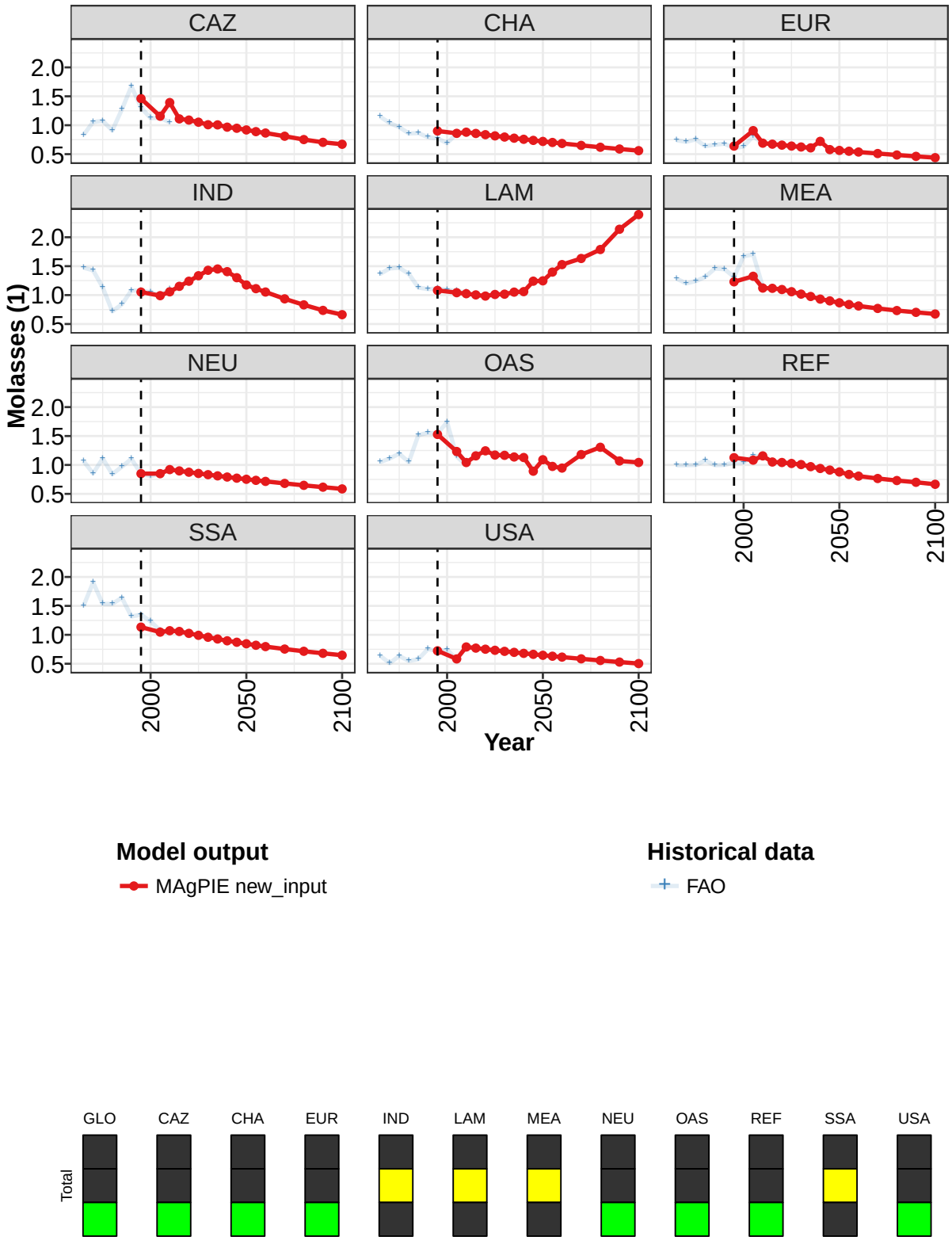


Figure 455: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Molasses (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.01	1.01	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.46	1.16	1.39	1.11	1.09	1.05	1.01	1.01	0.97	0.95	0.92
CHA	0.90	0.86	0.88	0.86	0.84	0.82	0.80	0.78	0.76	0.74	0.72
EUR	0.64	0.91	0.69	0.67	0.66	0.64	0.62	0.61	0.72	0.58	0.56
IND	1.05	0.99	1.06	1.15	1.24	1.33	1.43	1.45	1.41	1.30	1.17
LAM	1.08	1.04	1.02	1.00	0.98	1.01	1.02	1.05	1.06	1.24	1.25
MEA	1.23	1.33	1.12	1.12	1.10	1.06	1.02	0.98	0.93	0.90	0.87
NEU	0.85	0.85	0.92	0.90	0.88	0.85	0.83	0.81	0.79	0.77	0.75
OAS	1.53	1.23	1.04	1.16	1.24	1.17	1.17	1.14	1.13	0.89	1.09
REF	1.13	1.08	1.16	1.05	1.04	1.03	1.01	0.97	0.94	0.91	0.88
SSA	1.13	1.05	1.07	1.06	1.03	0.99	0.96	0.93	0.90	0.87	0.85
USA	0.72	0.58	0.79	0.77	0.75	0.73	0.71	0.70	0.68	0.66	0.65

Table 1655: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Molasses (1) [PART 1/2]

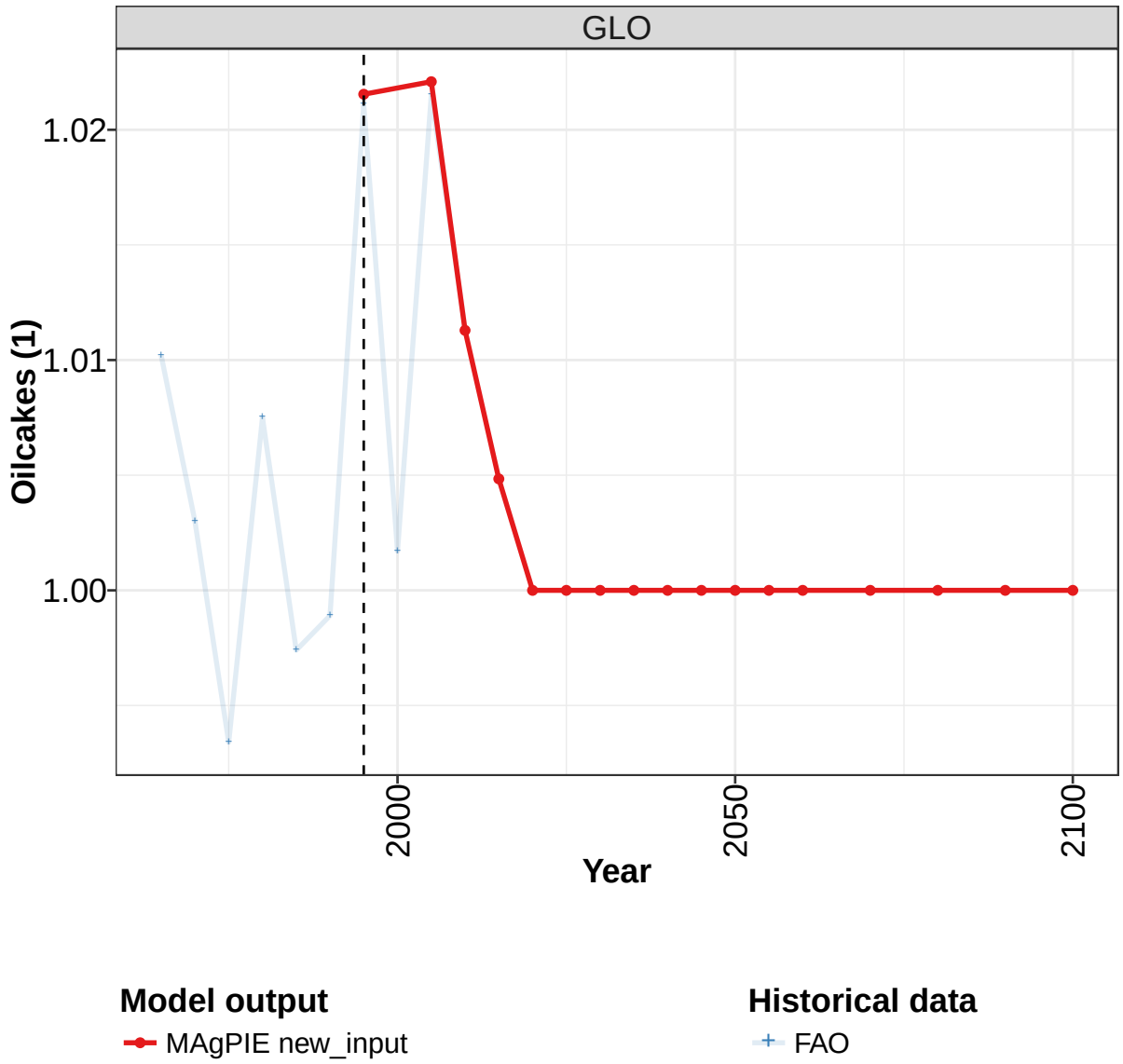
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.89	0.87	0.81	0.75	0.70	0.67
CHA	0.70	0.68	0.65	0.62	0.59	0.56
EUR	0.55	0.54	0.51	0.49	0.46	0.44
IND	1.11	1.05	0.94	0.83	0.74	0.66
LAM	1.40	1.53	1.63	1.79	2.14	2.39
MEA	0.84	0.81	0.77	0.73	0.70	0.67
NEU	0.73	0.72	0.68	0.65	0.62	0.59
OAS	0.98	0.95	1.18	1.31	1.07	1.04
REF	0.84	0.81	0.77	0.73	0.70	0.67
SSA	0.82	0.80	0.75	0.72	0.68	0.65
USA	0.63	0.61	0.58	0.56	0.53	0.50

Table 1656: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Molasses (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.03	1.02	1.04	0.94	0.97	1.00	1.01	1.02	1.00	0.99
CAZ	0.83	1.05	1.08	0.91	1.27	1.67	1.31	1.12	1.13	1.05
CHA	1.15	1.04	0.97	0.86	0.86	0.79	0.77	0.69	0.86	0.88
EUR	0.74	0.71	0.76	0.64	0.66	0.68	0.60	0.63	0.81	0.69
IND	1.47	1.43	1.13	0.72	0.84	1.08	1.08	1.05	0.99	1.10
LAM	1.37	1.46	1.47	1.37	1.13	1.10	1.11	1.09	1.07	1.05
MEA	1.29	1.20	1.24	1.31	1.46	1.45	1.31	1.67	1.70	1.14
NEU	1.07	0.85	1.11	0.84	0.97	1.10	0.85	0.81	0.85	0.92
OAS	1.05	1.11	1.19	1.05	1.52	1.56	1.54	1.74	1.15	0.99
REF	0.99	0.99	1.00	1.08	1.00	1.00	1.04	1.04	1.16	1.15
SSA	1.50	1.90	1.54	1.53	1.64	1.32	1.35	1.23	1.08	1.04
USA	0.64	0.51	0.63	0.55	0.58	0.75	0.72	0.74	0.57	0.79

Table 1657: FAO — Trade—Self-sufficiency—Secondary products—Molasses (1)

59.4.7 Oilcakes



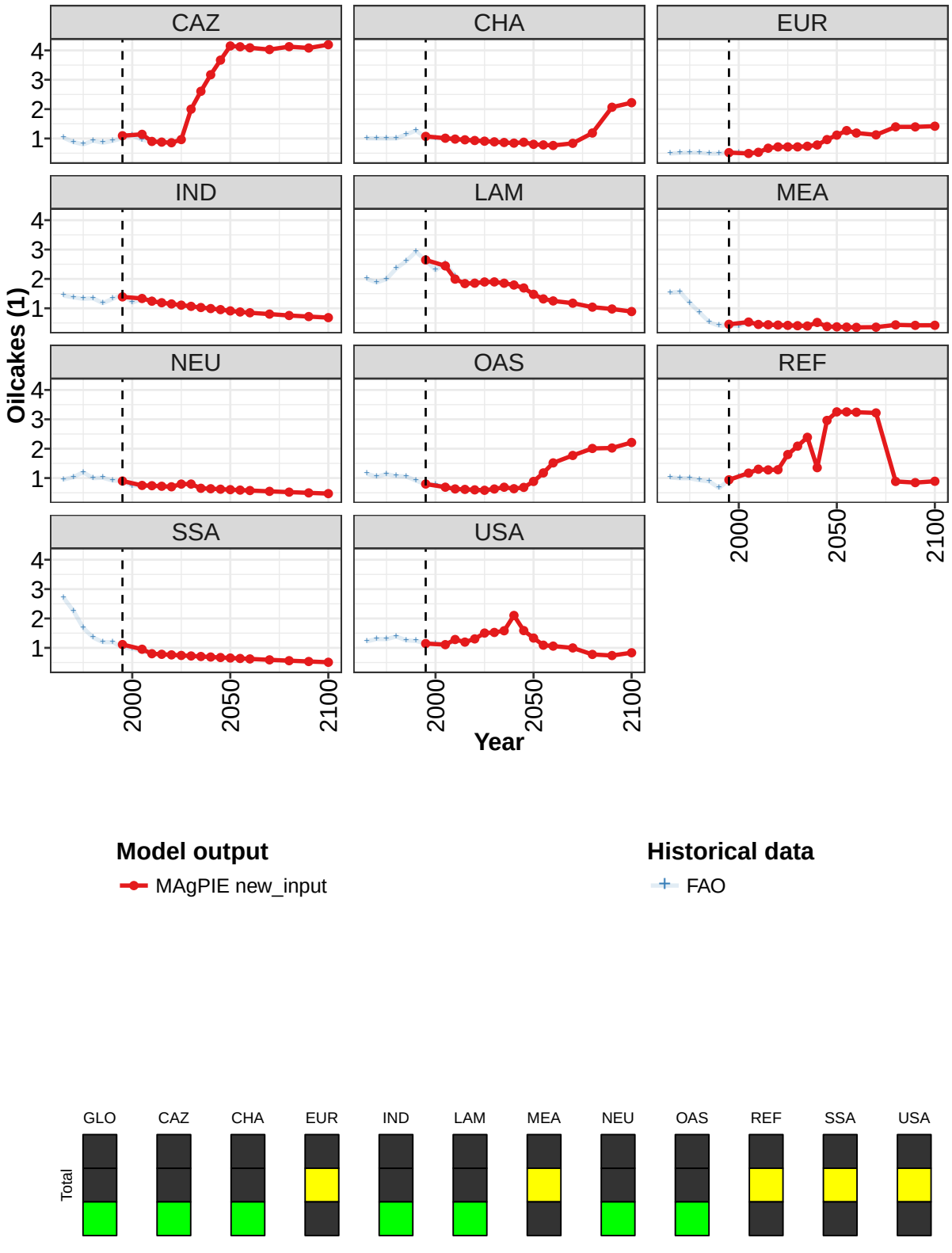


Figure 456: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Oilcakes (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.02	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.09	1.14	0.90	0.88	0.86	0.96	2.00	2.61	3.17	3.67	4.15
CHA	1.07	1.01	0.98	0.96	0.93	0.91	0.89	0.86	0.84	0.87	0.80
EUR	0.52	0.49	0.53	0.67	0.71	0.71	0.72	0.74	0.78	0.96	1.12
IND	1.39	1.33	1.24	1.19	1.15	1.11	1.07	1.03	0.99	0.95	0.91
LAM	2.64	2.44	1.99	1.84	1.86	1.90	1.90	1.85	1.79	1.69	1.48
MEA	0.45	0.53	0.45	0.44	0.43	0.42	0.41	0.40	0.52	0.38	0.37
NEU	0.90	0.75	0.74	0.72	0.70	0.80	0.80	0.65	0.64	0.62	0.61
OAS	0.80	0.69	0.63	0.61	0.60	0.58	0.63	0.69	0.64	0.68	0.89
REF	0.94	1.17	1.30	1.28	1.29	1.80	2.09	2.39	1.35	2.96	3.25
SSA	1.11	0.95	0.80	0.78	0.76	0.74	0.72	0.71	0.69	0.67	0.65
USA	1.15	1.11	1.28	1.20	1.30	1.50	1.52	1.58	2.10	1.59	1.33

Table 1658: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Oilcakes (1) [PART 1/2]

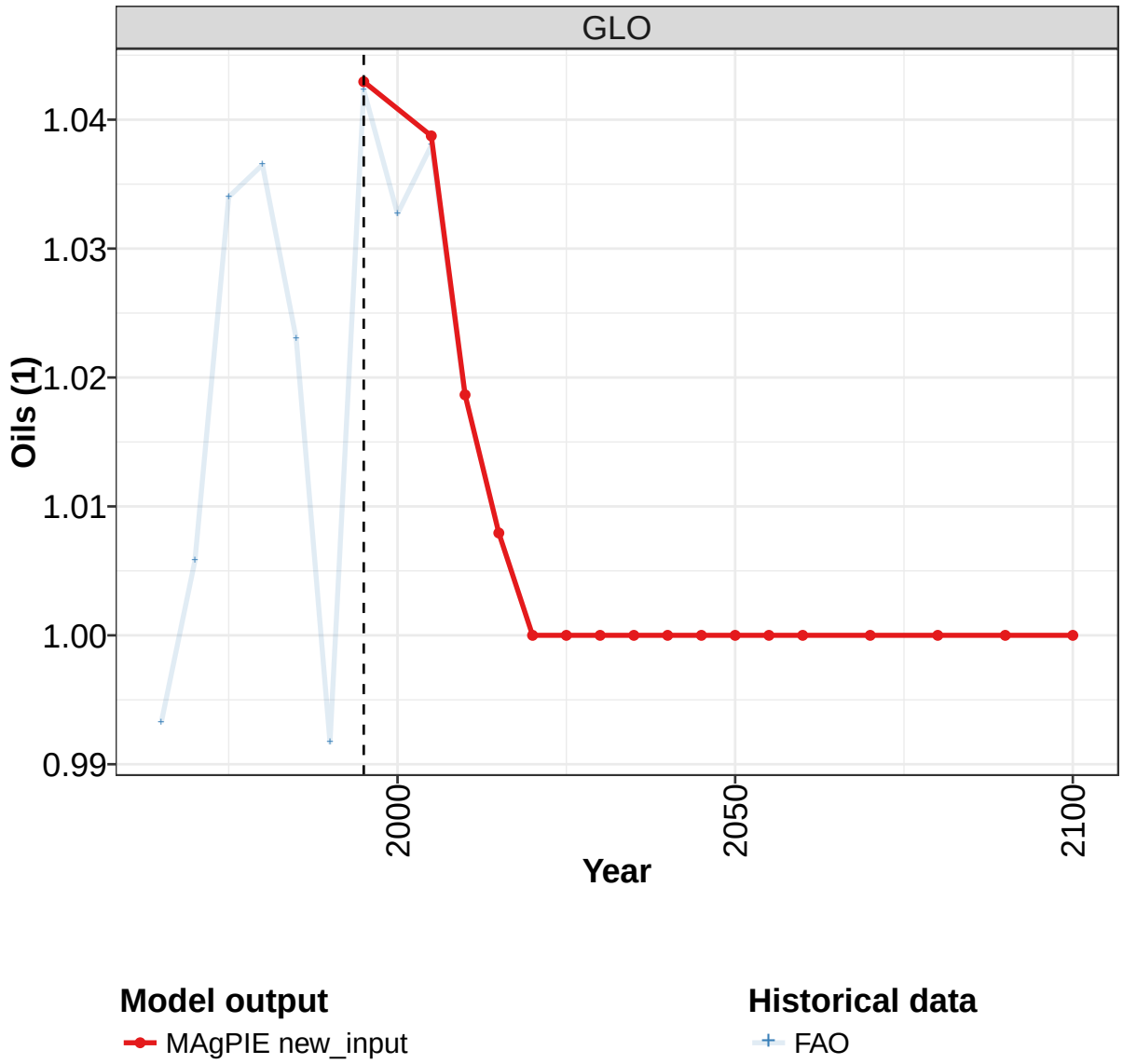
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	4.12	4.09	4.03	4.13	4.08	4.20
CHA	0.78	0.76	0.84	1.19	2.06	2.22
EUR	1.27	1.19	1.12	1.40	1.40	1.42
IND	0.87	0.85	0.80	0.75	0.72	0.68
LAM	1.32	1.25	1.17	1.04	0.98	0.89
MEA	0.36	0.35	0.36	0.43	0.42	0.42
NEU	0.59	0.58	0.55	0.52	0.50	0.47
OAS	1.18	1.52	1.77	2.01	2.02	2.21
REF	3.25	3.24	3.22	0.89	0.85	0.89
SSA	0.64	0.62	0.59	0.56	0.54	0.51
USA	1.09	1.06	1.00	0.78	0.74	0.83

Table 1659: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Oilcakes (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.00	0.99	1.01	1.00	1.00	1.02	1.00	1.02	1.01
CAZ	1.03	0.88	0.80	0.93	0.86	0.92	1.01	1.11	0.96	0.90
CHA	1.01	1.00	1.00	1.00	1.14	1.27	1.06	1.01	1.00	0.98
EUR	0.49	0.51	0.52	0.51	0.49	0.48	0.52	0.52	0.49	0.53
IND	1.43	1.37	1.32	1.34	1.18	1.32	1.47	1.20	1.31	1.29
LAM	2.00	1.88	1.99	2.36	2.60	2.92	2.63	2.30	2.52	2.10
MEA	1.53	1.56	1.19	0.86	0.53	0.41	0.41	0.40	0.52	0.45
NEU	0.95	1.03	1.20	1.00	1.01	0.92	0.90	0.74	0.75	0.74
OAS	1.14	1.05	1.14	1.07	1.06	0.92	0.78	0.78	0.69	0.63
REF	1.02	0.99	0.99	0.93	0.89	0.66	0.94	1.06	1.16	1.30
SSA	2.70	2.26	1.68	1.35	1.19	1.19	1.02	0.98	0.89	0.80
USA	1.22	1.30	1.30	1.39	1.26	1.23	1.16	1.14	1.11	1.22

Table 1660: FAO — Trade—Self-sufficiency—Secondary products—Oilcakes (1)

59.4.8 Oils


GLO
Oils (1)
1.04
1.03
1.02
1.01
1.00
0.99
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

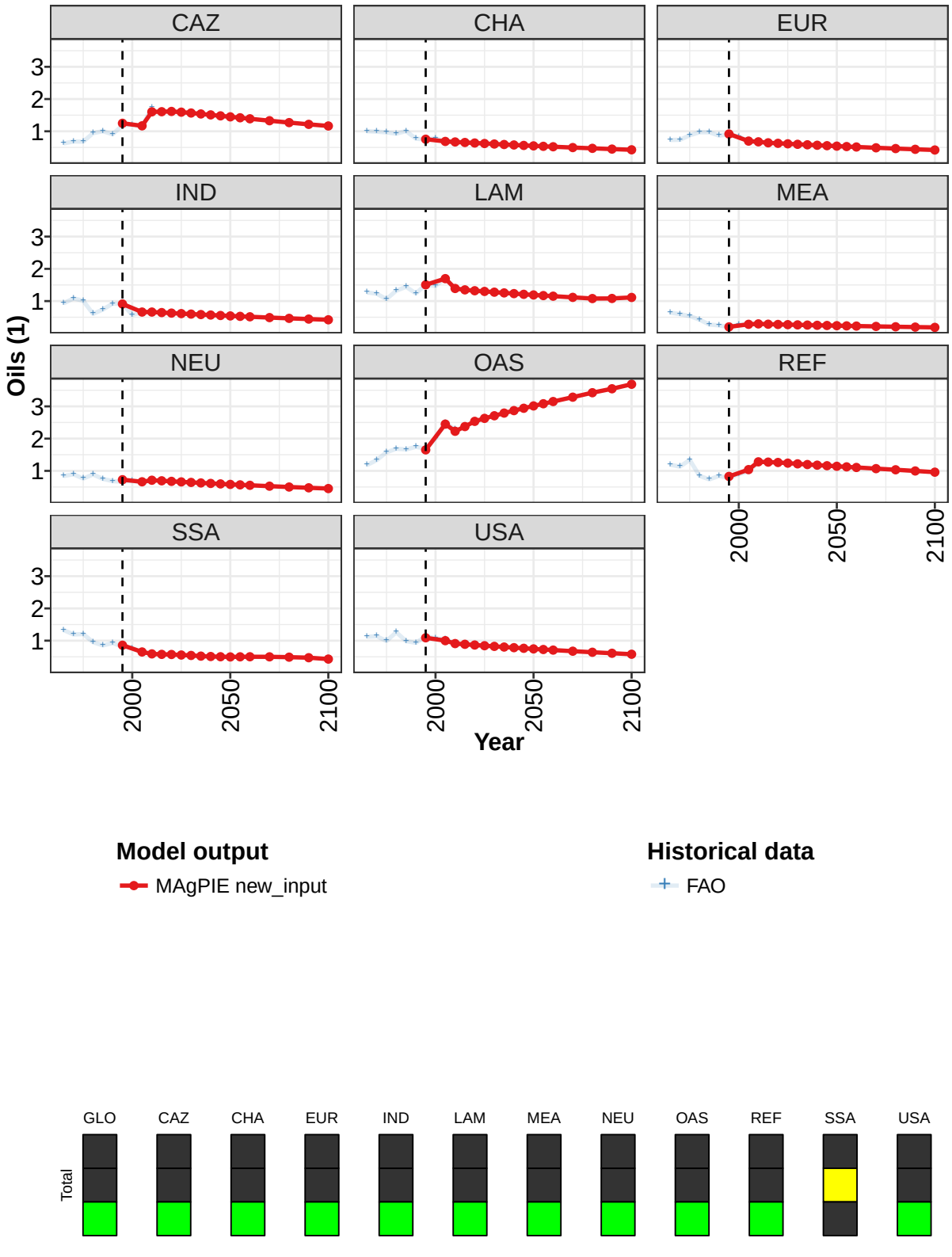


Figure 457: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Oils (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.04	1.04	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.25	1.17	1.60	1.61	1.62	1.59	1.57	1.54	1.51	1.48	1.45
CHA	0.76	0.69	0.67	0.65	0.64	0.62	0.61	0.59	0.58	0.56	0.55
EUR	0.92	0.70	0.67	0.64	0.63	0.61	0.60	0.58	0.57	0.55	0.54
IND	0.91	0.66	0.66	0.64	0.63	0.61	0.60	0.58	0.57	0.55	0.54
LAM	1.51	1.70	1.39	1.35	1.32	1.30	1.28	1.25	1.23	1.21	1.19
MEA	0.20	0.28	0.29	0.28	0.28	0.27	0.26	0.26	0.25	0.24	0.24
NEU	0.73	0.66	0.71	0.69	0.68	0.66	0.64	0.63	0.61	0.60	0.58
OAS	1.65	2.45	2.23	2.37	2.54	2.63	2.71	2.79	2.87	2.94	3.01
REF	0.83	1.04	1.28	1.27	1.26	1.24	1.22	1.20	1.18	1.16	1.14
SSA	0.86	0.65	0.59	0.58	0.57	0.55	0.54	0.52	0.51	0.50	0.50
USA	1.09	1.00	0.91	0.89	0.87	0.84	0.82	0.80	0.78	0.76	0.74

Table 1661: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Oils (1) [PART 1/2]

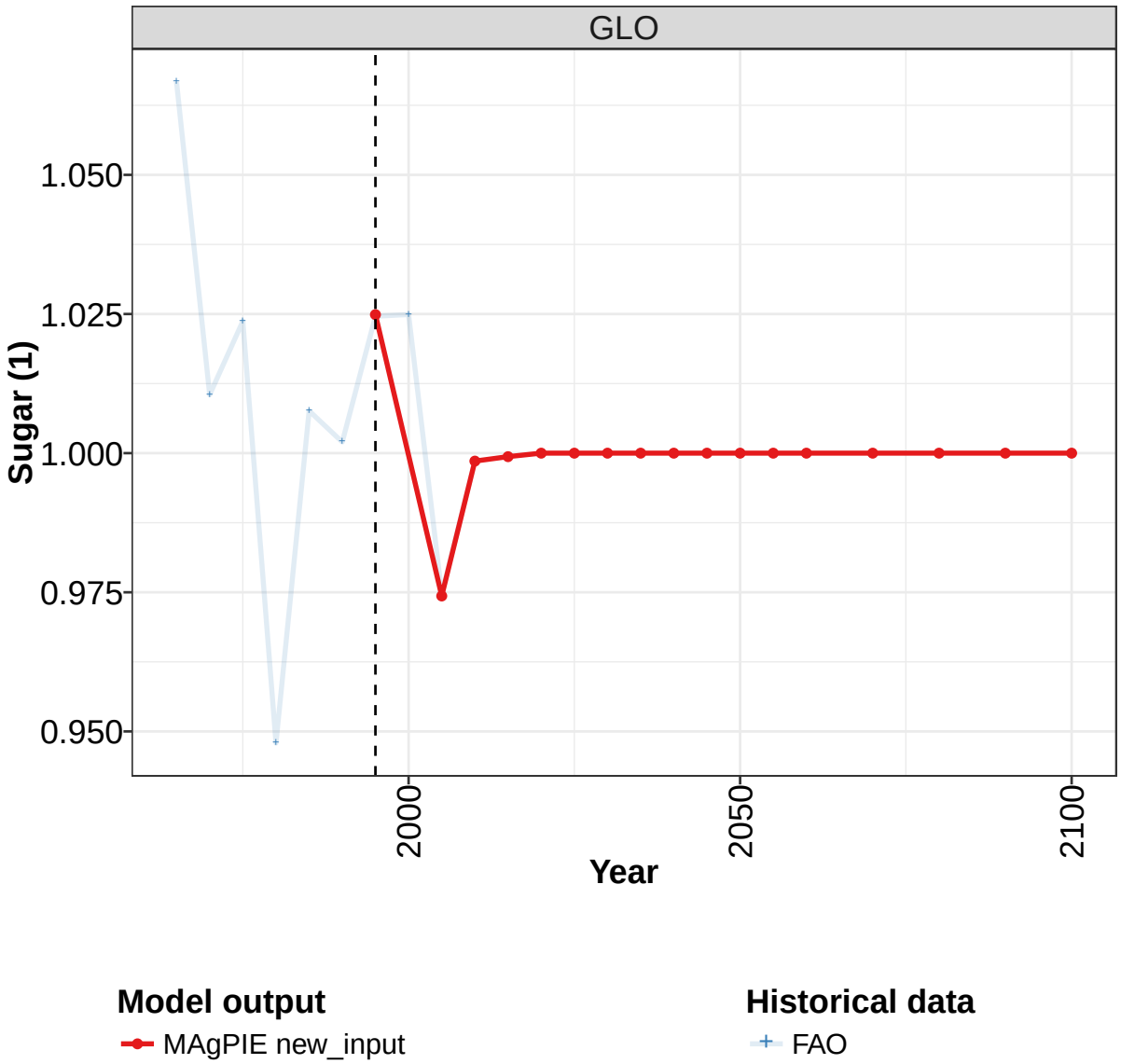
	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.42	1.39	1.33	1.27	1.22	1.17
CHA	0.53	0.52	0.50	0.47	0.45	0.43
EUR	0.53	0.51	0.49	0.46	0.44	0.42
IND	0.53	0.51	0.49	0.46	0.44	0.42
LAM	1.17	1.15	1.12	1.08	1.08	1.11
MEA	0.23	0.23	0.21	0.20	0.19	0.18
NEU	0.57	0.55	0.53	0.50	0.48	0.45
OAS	3.08	3.15	3.29	3.42	3.55	3.69
REF	1.12	1.11	1.07	1.03	1.00	0.96
SSA	0.50	0.50	0.50	0.49	0.47	0.43
USA	0.73	0.71	0.67	0.64	0.61	0.58

Table 1662: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Oils (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.01	1.03	1.04	1.02	0.99	1.04	1.03	1.04	1.02
CAZ	0.62	0.69	0.68	0.94	1.00	0.91	1.19	1.21	1.14	1.75
CHA	1.00	0.99	0.97	0.93	1.01	0.77	0.75	0.79	0.68	0.67
EUR	0.73	0.74	0.88	0.97	0.97	0.86	0.91	0.83	0.69	0.66
IND	0.93	1.08	1.01	0.60	0.74	0.92	0.91	0.57	0.66	0.66
LAM	1.27	1.23	1.06	1.32	1.44	1.24	1.51	1.47	1.73	1.34
MEA	0.65	0.59	0.54	0.42	0.27	0.24	0.20	0.28	0.28	0.29
NEU	0.84	0.89	0.76	0.89	0.75	0.68	0.66	0.69	0.63	0.71
OAS	1.18	1.33	1.58	1.68	1.67	1.74	1.69	2.01	2.49	2.29
REF	1.19	1.13	1.34	0.84	0.74	0.84	0.78	0.90	0.98	1.27
SSA	1.33	1.19	1.21	0.95	0.85	0.92	0.82	0.77	0.65	0.59
USA	1.12	1.14	0.99	1.26	0.99	0.93	1.14	1.07	1.05	0.91

Table 1663: FAO — Trade—Self-sufficiency—Secondary products—Oils (1)

59.4.9 Sugar


GLO
1.050
1.025
1.000
0.975
0.950
Sugar (1)
2000
2050
2100
Year
Model output
MAgPIE new_input
Historical data
FAO

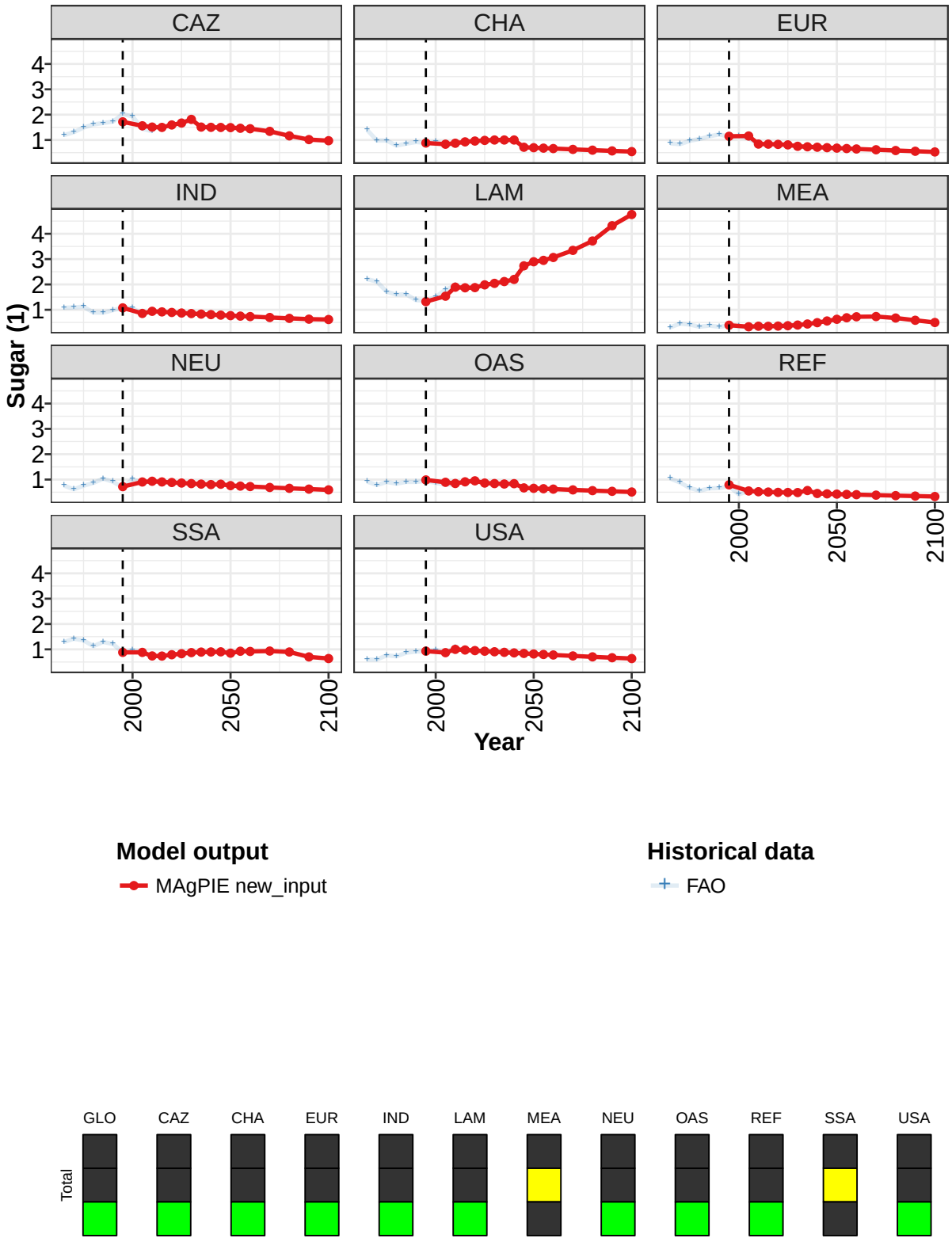


Figure 458: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Sugar (1)

	1995	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	1.02	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.72	1.56	1.51	1.50	1.59	1.67	1.81	1.51	1.50	1.50	1.49
CHA	0.88	0.83	0.87	0.93	0.96	0.98	1.00	1.00	1.00	0.71	0.70
EUR	1.15	1.16	0.84	0.84	0.83	0.81	0.75	0.73	0.71	0.70	0.68
IND	1.08	0.86	0.94	0.92	0.89	0.87	0.85	0.83	0.81	0.79	0.77
LAM	1.32	1.54	1.89	1.87	1.87	1.98	2.04	2.11	2.20	2.73	2.90
MEA	0.39	0.33	0.35	0.35	0.36	0.37	0.40	0.44	0.49	0.56	0.63
NEU	0.72	0.90	0.93	0.91	0.88	0.86	0.84	0.82	0.80	0.82	0.76
OAS	0.98	0.89	0.85	0.91	0.95	0.86	0.84	0.83	0.84	0.67	0.65
REF	0.79	0.55	0.52	0.51	0.49	0.49	0.49	0.57	0.45	0.44	0.43
SSA	0.88	0.88	0.74	0.74	0.79	0.83	0.87	0.89	0.90	0.90	0.85
USA	0.93	0.87	1.00	0.98	0.95	0.93	0.90	0.88	0.86	0.84	0.82

Table 1664: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Sugar (1) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.46	1.44	1.34	1.16	1.02	0.97
CHA	0.68	0.66	0.63	0.60	0.57	0.54
EUR	0.66	0.65	0.61	0.58	0.56	0.53
IND	0.75	0.73	0.70	0.66	0.63	0.62
LAM	2.95	3.06	3.34	3.72	4.32	4.76
MEA	0.68	0.72	0.73	0.67	0.59	0.50
NEU	0.74	0.72	0.69	0.65	0.62	0.59
OAS	0.64	0.62	0.59	0.56	0.54	0.51
REF	0.41	0.40	0.38	0.37	0.35	0.33
SSA	0.93	0.92	0.93	0.90	0.70	0.64
USA	0.80	0.78	0.74	0.70	0.67	0.64

Table 1665: MAgPIE new_input — Trade—Self-sufficiency—Secondary products—Sugar (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.07	1.01	1.02	0.95	1.01	1.00	1.02	1.02	0.97	1.00
CAZ	1.19	1.31	1.49	1.61	1.67	1.73	2.02	1.93	1.44	1.34
CHA	1.40	0.98	0.98	0.78	0.86	0.92	0.88	0.93	0.81	0.85
EUR	0.86	0.83	0.97	1.04	1.14	1.22	1.12	1.14	1.06	0.83
IND	1.08	1.09	1.12	0.89	0.89	0.98	1.09	1.06	0.84	0.94
LAM	2.21	2.11	1.71	1.60	1.61	1.38	1.37	1.50	1.80	1.94
MEA	0.30	0.45	0.42	0.33	0.38	0.33	0.39	0.35	0.33	0.33
NEU	0.76	0.61	0.76	0.87	1.04	0.91	0.70	1.01	0.88	0.93
OAS	0.92	0.79	0.90	0.84	0.91	0.91	0.95	0.87	0.81	0.80
REF	1.04	0.88	0.67	0.56	0.65	0.66	0.73	0.42	0.55	0.52
SSA	1.29	1.42	1.35	1.13	1.29	1.21	0.88	0.97	0.88	0.72
USA	0.59	0.60	0.76	0.73	0.87	0.91	0.93	0.97	0.87	1.05

Table 1666: FAO — Trade—Self-sufficiency—Secondary products—Sugar (1)

Part XVIII
Trade Value

Part XIX
Statistics

63 Traffic Lights

63.1 Total

	green	yellow	red	NA.
total	261	192	5	0
relative	57%	42%	1%	0%

Table 1667: Global

	green	yellow	red	NA.
total	2339	2203	104	364
relative	47%	44%	2%	7%

Table 1668: Regional

63.2 Trend

	green	yellow	red	NA.
total	201	143	114	0
relative	44%	31%	25%	0%

Table 1669: Global

	green	yellow	red	NA.
total	2110	1226	1302	372
relative	42%	24%	26%	7%

Table 1670: Regional

63.3 Overlap

	green	yellow	red	NA.
total	417	40	1	0
relative	91%	9%	0%	0%

Table 1671: Global

	green	yellow	red	NA.
total	4119	406	73	412
relative	82%	8%	1%	8%

Table 1672: Regional

63.4 Level

	green	yellow	red	NA.
total	296	98	58	6
relative	65%	21%	13%	1%

Table 1673: Global

	green	yellow	red	NA.
total	2183	1729	620	478
relative	44%	35%	12%	10%

Table 1674: Regional

64 Ignored data

Variables of data and validation data that only contain a mix of 0 and NA values and are ignored.

```
## Demand|Agricultural Supply Chain Loss|Crop residues (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crop residues|Straw (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Fish (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forage (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forest products (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forest products|Wood fuel (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Pasture (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Bioenergy|Crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Bioenergy|Crops|Sugar crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Bioenergy|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Bioenergy|Fish (Mt DM/yr)
## Demand|Bioenergy|Forage (Mt DM/yr)
## Demand|Bioenergy|Forest products (Mt DM/yr)
## Demand|Bioenergy|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Bioenergy|Forest products|Wood fuel (Mt DM/yr)
## Demand|Bioenergy|Livestock products (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Eggs (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Bioenergy|Pasture (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Brans (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Molasses (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Oilcakes (Mt DM/yr)
```

```
## Demand|Bioenergy|Secondary products|Sugar (Mt DM/yr)
## Demand|Domestic Balanceflow|Bioenergy crops (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues|Straw (Mt DM/yr)
## Demand|Domestic Balanceflow|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Domestic Balanceflow|Forage (Mt DM/yr)
## Demand|Domestic Balanceflow|Forest products (Mt DM/yr)
## Demand|Domestic Balanceflow|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Domestic Balanceflow|Forest products|Wood fuel (Mt DM/yr)
## Demand|Domestic Balanceflow|Pasture (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Ethanol (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Forest products (Mt DM/yr)
## Demand|Feed|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Food|Bioenergy crops (Mt DM/yr)
## Demand|Food|Crop residues (Mt DM/yr)
## Demand|Food|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Food|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Food|Crop residues|Straw (Mt DM/yr)
## Demand|Food|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Food|Forage (Mt DM/yr)
## Demand|Food|Forest products (Mt DM/yr)
## Demand|Food|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Food|Forest products|Wood fuel (Mt DM/yr)
## Demand|Food|Pasture (Mt DM/yr)
## Demand|Food|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Food|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Food|Secondary products|Ethanol (Mt DM/yr)
## Demand|Food|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Food|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Material|Bioenergy crops (Mt DM/yr)
## Demand|Material|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Material|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Material|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Material|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Material|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Material|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Material|Forage (Mt DM/yr)
## Demand|Material|Pasture (Mt DM/yr)
## Demand|Material|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Material|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Processing|Bioenergy crops (Mt DM/yr)
## Demand|Processing|Crop residues (Mt DM/yr)
## Demand|Processing|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Processing|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Processing|Crop residues|Straw (Mt DM/yr)
## Demand|Processing|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Processing|Fish (Mt DM/yr)
## Demand|Processing|Forage (Mt DM/yr)
## Demand|Processing|Forest products (Mt DM/yr)
## Demand|Processing|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Processing|Forest products|Wood fuel (Mt DM/yr)
```

```
## Demand|Processing|Livestock products (Mt DM/yr)
## Demand|Processing|Livestock products|Eggs (Mt DM/yr)
## Demand|Processing|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Processing|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Processing|Pasture (Mt DM/yr)
## Demand|Processing|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Processing|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Processing|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Processing|Secondary products|Ethanol (Mt DM/yr)
## Demand|Processing|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Processing|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Seed|Crop residues (Mt DM/yr)
## Demand|Seed|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Seed|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Seed|Crop residues|Straw (Mt DM/yr)
## Demand|Seed|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Seed|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Seed|Forage (Mt DM/yr)
## Demand|Seed|Forest products (Mt DM/yr)
## Demand|Seed|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Seed|Forest products|Wood fuel (Mt DM/yr)
## Demand|Seed|Pasture (Mt DM/yr)
## Demand|Seed|Secondary products (Mt DM/yr)
## Demand|Seed|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Seed|Secondary products|Brans (Mt DM/yr)
## Demand|Seed|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Seed|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Seed|Secondary products|Ethanol (Mt DM/yr)
## Demand|Seed|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Seed|Secondary products|Molasses (Mt DM/yr)
## Demand|Seed|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Seed|Secondary products|Oils (Mt DM/yr)
## Demand|Seed|Secondary products|Sugar (Mt DM/yr)
## Production|Secondary products|Microbial protein (Mt DM/yr)
## Trade|Net-Trade|Secondary products|Microbial protein (Mt DM/yr)
```

Data contains only a mix of 0 and NA values and is ignored, but validation data contains other values.

```
## Costs|MainSolve|Bioenergy (million US$05/yr)
## Costs|MainSolve|CDR (million US$05/yr)
## Costs|MainSolve|GHG Emissions (million US$05/yr)
## Costs|MainSolve|P Fertilizer (million US$05/yr)
## Costs|MainSolve|Reward for Afforestation (million US$05/yr)
## Demand|Bioenergy|Livestock products|Dairy (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Domestic Balanceflow|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Food|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Processing|Livestock products|Dairy (Mt DM/yr)
## Demand|Processing|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Seed|Fish (Mt DM/yr)
## Demand|Seed|Livestock products (Mt DM/yr)
## Demand|Seed|Livestock products|Dairy (Mt DM/yr)
## Demand|Seed|Livestock products|Eggs (Mt DM/yr)
## Demand|Seed|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Seed|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Seed|Livestock products|Ruminant meat (Mt DM/yr)
## Food Consumption Value|Bioenergy crops (million US$05/yr)
```

```
## Food Consumption Value|Crop residues (million US$05/yr)
## Food Consumption Value|Forage (million US$05/yr)
## Food Consumption Value|Pasture (million US$05/yr)
## Food Expenditure Share|Bioenergy crops (% of GDP)
## Food Expenditure Share|Crop residues (% of GDP)
## Food Expenditure Share|Forage (% of GDP)
## Food Expenditure Share|Pasture (% of GDP)
## Prices|GHG Emission|CH4 (US$2005/tCH4)
## Prices|GHG Emission|CO2 (US$2005/tCO2)
## Prices|GHG Emission|N2O (US$2005/tN2O)
## Production|Forest products (Mt DM/yr)
## Production|Forest products|Industrial roundwood (Mt DM/yr)
## Production|Forest products|Wood fuel (Mt DM/yr)
## Resources|Land Cover|Cropland|Bioenergy crops|irrigated (million ha)
## Resources|Land Cover Change|Forest|Plantations|Forestry (million ha wrt 1995)
## Resources|Land Cover Change|Urban Area (million ha wrt 1995)
## Resources|Nitrogen|Cropland Budget|Balance|Soil Organic Matter Loss (Mt Nr/yr)
```

Validation data contains only a mix of 0 and NA values and is ignored, but data contains other values.

```
## Demand|Agricultural Supply Chain Loss|Bioenergy crops (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Ethanol (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Bioenergy|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Processing|Secondary products|Oils (Mt DM/yr)
## Demand|Seed|Bioenergy crops (Mt DM/yr)
## Production|Bioenergy crops (Mt DM/yr)
## Productivity|Yield|Bioenergy crops (t DM/ha)
## Trade|Net-Trade|Bioenergy crops (Mt DM/yr)
## Trade|Net-Trade|Secondary products|Distillers grains (Mt DM/yr)
## Trade|Net-Trade|Secondary products|Ethanol (Mt DM/yr)
```

65 Non-Matching Data

65.1 Model outputs

```
## Household Expenditure|Food|Expenditure (USD/capita)
## Household Expenditure|Food|Expenditure|Crops (USD/capita)
## Household Expenditure|Food|Expenditure|Crops|Cereals (USD/capita)
## Household Expenditure|Food|Expenditure|Crops|Oil crops (USD/capita)
## Household Expenditure|Food|Expenditure|Crops|Sugar crops (USD/capita)
## Household Expenditure|Food|Expenditure|Crops|Other crops (USD/capita)
## Household Expenditure|Food|Expenditure|Secondary products (USD/capita)
## Household Expenditure|Food|Expenditure|Livestock products (USD/capita)
## Household Expenditure|Food|Expenditure|Fish (USD/capita)
## Household Expenditure|Food|Food Expenditure Share (USD/USD)
## Food Supply|Calorie Supply|Undernourished (Mio People)
## Food Supply|Calorie Supply|Share of population undernourished (People/People)
## Demand|Food|Livestock products|Dairy (Mt DM/yr)
## Demand|Food|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Livestock products|Dairy (Mt DM/yr)
## Demand|Feed|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Processing|Livestock products|Dairy (Mt DM/yr)
## Demand|Processing|Livestock products|Monogastric meat (Mt DM/yr)
```

```
## Demand|Material|Livestock products|Dairy (Mt DM/yr)
## Demand|Material|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Dairy (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Seed|Livestock products|Dairy (Mt DM/yr)
## Demand|Seed|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Livestock products|Dairy (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Domestic Balanceflow|Livestock products|Dairy (Mt DM/yr)
## Demand|Domestic Balanceflow|Livestock products|Monogastric meat (Mt DM/yr)
## Production|Livestock products|Dairy (Mt DM/yr)
## Production|Livestock products|Monogastric meat (Mt DM/yr)
## Trade|Net-Trade|Livestock products|Dairy (Mt DM/yr)
## Trade|Net-Trade|Livestock products|Monogastric meat (Mt DM/yr)
## Trade|Self-sufficiency|Livestock products|Dairy (1)
## Trade|Self-sufficiency|Livestock products|Monogastric meat (1)
## Resources|Land Cover|Forest|Plantations|Forestry (million ha)
## Resources|Land Cover|Forest|Plantations|Afforestation (million ha)
## Resources|Land Cover Change|Forest|Plantations|Forestry (million ha wrt 1995)
## Resources|Land Cover Change|Forest|Plantations|Afforestation (million ha wrt 1995)
## Resources|Land Cover|Forest|Natural Forest|Primary Forest|Protected (million ha)
## Resources|Land Cover|Forest|Natural Forest|Secondary Forest|Protected (million ha)
## Resources|Land Cover|Other Land|Protected (million ha)
## Resources|Land Cover|Cropland|Crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Maize|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Maize|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Rice|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Rice|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Temperate cereals|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Temperate cereals|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Tropical cereals|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Tropical cereals|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Cotton seed|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Cotton seed|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Groundnuts|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Groundnuts|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Oilpalms|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Oilpalms|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Other oil crops (incl rapeseed)|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Other oil crops (incl rapeseed)|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Soybean|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Soybean|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Sunflower|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Sunflower|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar beet|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar beet|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar cane|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar cane|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Tropical roots|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Tropical roots|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Fruits Vegetables Nuts|rainfed (million ha)
```

```
## Resources|Land Cover|Cropland|Crops|Other crops|Fruits Vegetables Nuts|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Potatoes|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Potatoes|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Pulses|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Pulses|irrigated (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Forage|rainfed (million ha)
## Resources|Land Cover|Cropland|Forage|irrigated (million ha)
## Resources|Nitrogen|Cropland Budget|Inputs|Manure From Stubble Grazing (Mt Nr/yr)
## Resources|Nitrogen|Pasture Budget|Inputs|Manure From Grazing (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Grazing (Mt Nr/yr)
## Resources|Nitrogen|Manure|Monogastric meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Dairy (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Other Land (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Anaerobic lagoon (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Liquid slurry (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Solid storage (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Dry lot (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Daily spread (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Anaerobic digester (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Pit storage longer than a month (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Pit storage less than a month (Mt Nr/yr)
## Productivity|Yield|Crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Maize|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Maize|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Rice|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Rice|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Temperate cereals|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Temperate cereals|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Tropical cereals|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Tropical cereals|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Cotton seed|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Cotton seed|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Groundnuts|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Groundnuts|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Oilpalms|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Oilpalms|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Other oil crops (incl rapeseed)|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Other oil crops (incl rapeseed)|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Soybean|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Soybean|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Sunflower|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Sunflower|irrigated (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|irrigated (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|Sugar beet|rainfed (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|Sugar beet|irrigated (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|Sugar cane|rainfed (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|Sugar cane|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Tropical roots|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|Tropical roots|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Fruits Vegetables Nuts|rainfed (t DM/ha)
```

```
## Productivity|Yield|Crops|Other crops|Fruits Vegetables Nuts|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Potatoes|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|Potatoes|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Pulses|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|Pulses|irrigated (t DM/ha)
## Productivity|Yield|Bioenergy crops|rainfed (t DM/ha)
## Productivity|Yield|Forage|rainfed (t DM/ha)
## Productivity|Yield|Forage|irrigated (t DM/ha)
## Productivity|Yield-increasing technological change (%/yr)
## Emissions|CO2|Land (Mt CO2/yr)
## Emissions|CO2|Land|Climate Change (Mt CO2/yr)
## Emissions|CO2|Land|Cumulative (Gt CO2)
## Emissions|CO2|Land|Cumulative|Land-use Change (Gt CO2)
## Emissions|CO2|Land|Cumulative|Climate Change (Gt CO2)
## Emissions|N2O|Land|Agriculture (Mt N2O/yr)
## Emissions|N2O|Land|Agriculture|Animal Waste Management (Mt N2O/yr)
## Emissions|N2O|Land|Agriculture|Agricultural Soils (Mt N2O/yr)
## Emissions|N2O|Land|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt N2O/yr)
## Emissions|N2O|Land|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt N2O/yr)
## Emissions|N2O|Land|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt N2O/yr)
## Emissions|N2O|Land|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt N2O/yr)
## Emissions|N2O|Land|Agriculture|Agricultural Soils|Pasture (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture|Animal Waste Management (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt N2O/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils|Pasture (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture|Animal Waste Management (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture|Agricultural Soils (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt N2O/yr)
## Emissions|NOx|Land|Agriculture|Agricultural Soils|Pasture (Mt N2O/yr)
## Emissions|NO3Land|Agriculture (Mt N2O/yr)
## Emissions|NO3Land|Agriculture|Animal Waste Management (Mt N2O/yr)
## Emissions|NO3Land|Agriculture|Agricultural Soils (Mt N2O/yr)
## Emissions|NO3Land|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt N2O/yr)
## Emissions|NO3Land|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt N2O/yr)
## Emissions|NO3Land|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt N2O/yr)
## Emissions|NO3Land|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt N2O/yr)
## Emissions|NO3Land|Agriculture|Agricultural Soils|Pasture (Mt N2O/yr)
## Emissions|CH4|Land|Agriculture (Mt CH4/yr)
## Emissions|CH4|Land|Agriculture|Rice (Mt CH4/yr)
## Emissions|CH4|Land|Agriculture|Animal waste management (Mt CH4/yr)
## Emissions|CH4|Land|Agriculture|Enteric fermentation (Mt CH4/yr)
## Costs|MainSolve (million US$05/yr)
## Costs|MainSolve|Input Factors (million US$05/yr)
## Costs|MainSolve|Land Conversion (million US$05/yr)
## Costs|MainSolve|Transport (million US$05/yr)
## Costs|MainSolve|TC (million US$05/yr)
## Costs|MainSolve|N Fertilizer (million US$05/yr)
## Costs|MainSolve|P Fertilizer (million US$05/yr)
## Costs|MainSolve|GHG Emissions (million US$05/yr)
## Costs|MainSolve|Reward for Afforestation (million US$05/yr)
## Costs|MainSolve|MACCS (million US$05/yr)
```

```
## Costs|MainSolve|AEI (million US$05/yr)
## Costs|MainSolve|Trade (million US$05/yr)
## Costs|MainSolve|Forestry (million US$05/yr)
## Costs|MainSolve|CDR (million US$05/yr)
## Costs|MainSolve|Bioenergy (million US$05/yr)
## Costs|MainSolve w/o GHG Emissions (million US$05/yr)
## Prices|Agriculture|Oilpalms (US$05/tDM)
## Prices|Agriculture|Pasture (US$05/tDM)
## Prices|Agriculture|Short rotation grasses (US$05/tDM)
## Prices|Agriculture|Oilcakes (US$05/tDM)
## Prices|Agriculture|Molasses (US$05/tDM)
## Prices|Agriculture|Ethanol (US$05/tDM)
## Prices|Agriculture|Distillers grains (US$05/tDM)
## Prices|Agriculture|Brans (US$05/tDM)
## Prices|Agriculture|Monogastric meat (US$05/tDM)
## Prices|Agriculture|Dairy (US$05/tDM)
## Prices|Agriculture|Straw (US$05/tDM)
## Prices|Agriculture|Other fibrous crop residues (US$05/tDM)
## Prices|Agriculture|Non fibrous crop residues (US$05/tDM)
## Prices|Land|Cropland (US$05/ha)
## Prices|Water|Agriculture (Index 2005=100)
## Trade Value|Net-Exports|Crops|Cereals (million US$05/yr)
## Trade Value|Net-Exports|Crops|Sugar crops (million US$05/yr)
## Trade Value|Net-Exports|Crops|Other crops (million US$05/yr)
## Trade Value|Net-Exports|Bioenergy crops (million US$05/yr)
## Trade Value|Net-Exports|Secondary products (million US$05/yr)
## Trade Value|Net-Exports|Livestock products (million US$05/yr)
## Trade Value|Net-Exports|Fish (million US$05/yr)
## Trade Value|Exports|Crops|Cereals (million US$05/yr)
## Trade Value|Exports|Crops|Sugar crops (million US$05/yr)
## Trade Value|Exports|Crops|Other crops (million US$05/yr)
## Trade Value|Exports|Bioenergy crops (million US$05/yr)
## Trade Value|Exports|Secondary products (million US$05/yr)
## Trade Value|Exports|Livestock products (million US$05/yr)
## Trade Value|Exports|Fish (million US$05/yr)
## Trade Value|Imports|Crops|Cereals (million US$05/yr)
## Trade Value|Imports|Crops|Sugar crops (million US$05/yr)
## Trade Value|Imports|Crops|Other crops (million US$05/yr)
## Trade Value|Imports|Bioenergy crops (million US$05/yr)
## Trade Value|Imports|Secondary products (million US$05/yr)
## Trade Value|Imports|Livestock products (million US$05/yr)
## Trade Value|Imports|Fish (million US$05/yr)
## Food Consumption Value|Crops (million US$05/yr)
## Food Consumption Value|Crops|Cereals (million US$05/yr)
## Food Consumption Value|Crops|Oil crops (million US$05/yr)
## Food Consumption Value|Crops|Sugar crops (million US$05/yr)
## Food Consumption Value|Crops|Other crops (million US$05/yr)
## Food Consumption Value|Bioenergy crops (million US$05/yr)
## Food Consumption Value|Forage (million US$05/yr)
## Food Consumption Value|Pasture (million US$05/yr)
## Food Consumption Value|Secondary products (million US$05/yr)
## Food Consumption Value|Crop residues (million US$05/yr)
## Food Consumption Value|Livestock products (million US$05/yr)
## Food Consumption Value|Fish (million US$05/yr)
## Food Expenditure Share|Crops (% of GDP)
## Food Expenditure Share|Crops|Cereals (% of GDP)
## Food Expenditure Share|Crops|Oil crops (% of GDP)
## Food Expenditure Share|Crops|Sugar crops (% of GDP)
## Food Expenditure Share|Crops|Other crops (% of GDP)
## Food Expenditure Share|Bioenergy crops (% of GDP)
```

```
## Food Expenditure Share|Forage (% of GDP)
## Food Expenditure Share|Pasture (% of GDP)
## Food Expenditure Share|Secondary products (% of GDP)
## Food Expenditure Share|Crop residues (% of GDP)
## Food Expenditure Share|Livestock products (% of GDP)
## Food Expenditure Share|Fish (% of GDP)
```

65.2 Validation data

```
## Emissions|CH4|Agriculture (Mt CH4/yr)
## Emissions|CH4|Land|Land-use Change (Mt CH4/yr)
## Emissions|CO2|Agriculture (Mt CO2/yr)
## Emissions|N2O|Agriculture (Mt N2O/yr)
## Emissions|N2O|Land|Land-use Change (Mt N2O/yr)
## Resources|Carbon Stocks|Litter Carbon (Mt C)
## Resources|Carbon Stocks|Soil Carbon in top 30 cm (Mt C)
## Resources|Carbon Stocks|Vegetation Carbon (Mt C)
## Income (US$05 PPP/cap/yr)
## Income (million US$05 MER/yr)
## Income (million US$05 PPP/yr)
## Nutrition|Calorie Supply (NA)
## Nutrition|Calorie Supply|Bioenergy crops (NA)
## Nutrition|Calorie Supply|Crop residues (NA)
## Nutrition|Calorie Supply|Crops (NA)
## Nutrition|Calorie Supply|Fish (NA)
## Nutrition|Calorie Supply|Forage (NA)
## Nutrition|Calorie Supply|Forest products (NA)
## Nutrition|Calorie Supply|Livestock products (NA)
## Nutrition|Calorie Supply|Pasture (NA)
## Nutrition|Calorie Supply|Secondary products (NA)
## Nutrition|Calorie Supply|Crop residues|Non fibrous crop residues (NA)
## Nutrition|Calorie Supply|Crop residues|Other fibrous crop residues (NA)
## Nutrition|Calorie Supply|Crop residues|Straw (NA)
## Nutrition|Calorie Supply|Crops|Cereals (NA)
## Nutrition|Calorie Supply|Crops|Oil crops (NA)
## Nutrition|Calorie Supply|Crops|Other crops (NA)
## Nutrition|Calorie Supply|Crops|Sugar crops (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Maize (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Rice (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Temperate cereals (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Tropical cereals (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Cotton seed (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Groundnuts (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Oilpalms (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Other oil crops (incl rapeseed)
## Nutrition|Calorie Supply|Crops|Oil crops|Soybean (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Sunflower (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Fruits Vegetables Nuts (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Potatoes (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Pulses (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Tropical roots (NA)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar beet (NA)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar cane (NA)
## Nutrition|Calorie Supply|Forest products|Industrial roundwood (NA)
## Nutrition|Calorie Supply|Forest products|Wood fuel (NA)
## Nutrition|Calorie Supply|Livestock products|Eggs (NA)
## Nutrition|Calorie Supply|Livestock products|Pig meat (NA)
## Nutrition|Calorie Supply|Livestock products|Poultry meat (NA)
```

```
## Nutrition|Calorie Supply|Livestock products|Ruminant meat (NA)
## Nutrition|Calorie Supply|Livestock products|Ruminant milk (NA)
## Nutrition|Calorie Supply|Secondary products|Alcoholic beverages (NA)
## Nutrition|Calorie Supply|Secondary products|Brans (NA)
## Nutrition|Calorie Supply|Secondary products|Cotton lint (NA)
## Nutrition|Calorie Supply|Secondary products|Distillers grains (NA)
## Nutrition|Calorie Supply|Secondary products|Ethanol (NA)
## Nutrition|Calorie Supply|Secondary products|Microbial protein (NA)
## Nutrition|Calorie Supply|Secondary products|Molasses (NA)
## Nutrition|Calorie Supply|Secondary products|Oilcakes (NA)
## Nutrition|Calorie Supply|Secondary products|Oils (NA)
## Nutrition|Calorie Supply|Secondary products|Sugar (NA)
## Resources|Carbon Stocks|Soil Carbon in top 30 cm|Cropland Soils (Mt C)
## Resources|Carbon Stocks|Soil Carbon in top 30 cm|Noncropland Soils (Mt C)
## Emissions|CH4|Agriculture|Animal waste management (Mt CH4/yr)
## Emissions|CH4|Agriculture|Enteric Fermentation (Mt CH4/yr)
## Emissions|CH4|Agriculture|Rice (Mt CH4/yr)
## Emissions|N2O|Agriculture|Agricultural Soils (Mt N2O/yr)
## Emissions|N2O|Agriculture|Animal waste management (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Decay of crop residues (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Pasture (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Soil organic matter loss (Mt N2O/yr)
## Prices|Agriculture|Pig meat (US$05/tDM)
## Prices|Agriculture|Ruminant milk (US$05/tDM)
## Prices|Food Price Index (Index 2005=100)
## Nutrition|Calorie Supply|Crops|Cereals|Maize (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Cereals|Rice (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Cereals|Temperate cereals (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Cereals|Tropical cereals (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Groundnuts (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Other oil crops (incl rapeseed) (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Soybean (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Sunflower (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Fruits Vegetables Nuts (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Potatoes (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Pulses (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Tropical roots (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar beet (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar cane (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Eggs (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Pig meat (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Poultry meat (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Ruminant meat (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Ruminant milk (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Alcoholic beverages (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Brans (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Molasses (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Oils (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Sugar (kcal/capita/day)
## Nutrition|Dietary Composition|Vegetables Fruits and Nuts Share (kcal/kcal)
## Demand|Agricultural Supply Chain Loss|Livestock products|Pig meat (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Pig meat (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Domestic Balanceflow|Livestock products|Pig meat (Mt DM/yr)
## Demand|Domestic Balanceflow|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Feed|Livestock products|Pig meat (Mt DM/yr)
## Demand|Feed|Livestock products|Ruminant milk (Mt DM/yr)
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## Demand|Food|Livestock products|Pig meat (Mt DM/yr)
## Demand|Food|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Material|Livestock products|Pig meat (Mt DM/yr)
## Demand|Material|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Processing|Livestock products|Pig meat (Mt DM/yr)
## Demand|Processing|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Seed|Livestock products|Pig meat (Mt DM/yr)
## Demand|Seed|Livestock products|Ruminant milk (Mt DM/yr)
## Production|Livestock products|Pig meat (Mt DM/yr)
## Production|Livestock products|Ruminant milk (Mt DM/yr)
## Trade|Net-Trade (Mt DM/yr)
## Trade|Net-Trade|Crop residues (Mt DM/yr)
## Trade|Net-Trade|Crops (Mt DM/yr)
## Trade|Net-Trade|Forage (Mt DM/yr)
## Trade|Net-Trade|Forest products (Mt DM/yr)
## Trade|Net-Trade|Pasture (Mt DM/yr)
## Trade|Net-Trade|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Trade|Net-Trade|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Trade|Net-Trade|Crop residues|Straw (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops|Soybean (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops|Sunflower (Mt DM/yr)
## Trade|Net-Trade|Forest products|Industrial roundwood (Mt DM/yr)
## Trade|Net-Trade|Forest products|Wood fuel (Mt DM/yr)
## Trade|Net-Trade|Livestock products|Pig meat (Mt DM/yr)
## Trade|Net-Trade|Livestock products|Ruminant milk (Mt DM/yr)
## Trade|Self-sufficiency|Bioenergy crops (1)
## Trade|Self-sufficiency|Forest products (1)
## Trade|Self-sufficiency|Forest products|Industrial roundwood (1)
## Trade|Self-sufficiency|Forest products|Wood fuel (1)
## Trade|Self-sufficiency|Livestock products|Pig meat (1)
## Trade|Self-sufficiency|Livestock products|Ruminant milk (1)
## Trade|Self-sufficiency|Secondary products (1)
## Trade|Self-sufficiency|Secondary products|Microbial protein (1)
## Demand|Feed|Feed for Aquaculture (Mt DM/yr)
## Demand|Feed|Feed for Eggs (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Fish (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Forage (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Sugar crops (Mt DM/yr)
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## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Pig meat (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Fish (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forage (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
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## Demand|Feed|Feed for Eggs|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Pig meat (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Fish (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Forage (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Livestock products|Pig meat (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Livestock products|Ruminant meat (Mt DM/yr)
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## Demand|Feed|Feed for Pig Meat|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Pig Meat|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Fish (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Forage (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Livestock products|Pig meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Poultry Meat|Secondary products|Sugar (Mt DM/yr)
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## Demand|Feed|Feed for Ruminant Meat|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Fish (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Forage (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Livestock products|Pig meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Meat|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Fish (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Forage (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crop residues|Other fibrous crop residues (Mt DM/yr)
```

```
## Demand|Feed|Feed for Ruminant Milk|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Livestock products|Pig meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Livestock products|Ruminant milk (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Ruminant Milk|Secondary products|Sugar (Mt DM/yr)
## Resources|Land Cover (million ha wrt 1995)
## Resources|Nitrogen|Cropland Budget|Inputs|Manure From Pasture Grazing (Mt Nr/yr)
## Resources|Nitrogen|Pasture Budget|Balance|Balanceflow (Mt Nr/yr)
## Resources|Nitrogen|Pasture Budget|Inputs|Manure From Pasture Grazing (Mt Nr/yr)
## Resources|Nitrogen|Manure|Pig meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Ruminant milk (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Pasture Grazing (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Pig meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Ruminant meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Ruminant milk (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Pasture Grazing|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Pasture Grazing|Pig meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Pasture Grazing|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Pasture Grazing|Ruminant meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Pasture Grazing|Ruminant milk (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Pig meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Ruminant meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Ruminant milk (Mt Nr/yr)
```

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## Resources|Nitrogen|Manure|Manure In Confinements|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Pig meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Ruminant meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Ruminant milk (Mt Nr/yr)
## Emissions|BC|Agriculture (Mt BC/yr)
## Emissions|BC|Agriculture|Agricultural Soils (Mt BC/yr)
## Emissions|BC|Agriculture|Agricultural Waste Burning (Mt BC/yr)
## Emissions|BC|Agriculture|Animal Waste Management (Mt BC/yr)
## Emissions|BC|Agriculture|Enteric Fermentation (Mt BC/yr)
## Emissions|BC|Agriculture|Other (Mt BC/yr)
## Emissions|BC|Agriculture|Rice (Mt BC/yr)
## Emissions|BC|Land|Forest Burning (Mt BC/yr)
## Emissions|BC|Land|Land-use Change (Mt BC/yr)
## Emissions|BC|Land|Savannah Burning (Mt BC/yr)
## Emissions|CO|Agriculture (Mt CO/yr)
## Emissions|CO|Agriculture|Agricultural Soils (Mt CO/yr)
## Emissions|CO|Agriculture|Agricultural Waste Burning (Mt CO/yr)
## Emissions|CO|Agriculture|Animal Waste Management (Mt CO/yr)
## Emissions|CO|Agriculture|Enteric Fermentation (Mt CO/yr)
## Emissions|CO|Agriculture|Other (Mt CO/yr)
## Emissions|CO|Agriculture|Rice (Mt CO/yr)
## Emissions|CO|Land|Forest Burning (Mt CO/yr)
## Emissions|CO|Land|Land-use Change (Mt CO/yr)
## Emissions|CO|Land|Savannah Burning (Mt CO/yr)
## Emissions|NH3-N|Agriculture (Mt NH3-N/yr)
## Emissions|NH3-N|Agriculture|Agricultural Soils (Mt NH3-N/yr)
## Emissions|NH3-N|Agriculture|Agricultural Waste Burning (Mt NH3-N/yr)
## Emissions|NH3-N|Agriculture|Animal Waste Management (Mt NH3-N/yr)
## Emissions|NH3-N|Agriculture|Enteric Fermentation (Mt NH3-N/yr)
## Emissions|NH3-N|Agriculture|Other (Mt NH3-N/yr)
## Emissions|NH3-N|Agriculture|Rice (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Forest Burning (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Land-use Change (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Savannah Burning (Mt NH3-N/yr)
## Emissions|NH3|Agriculture (Mt NH3/yr)
## Emissions|NH3|Agriculture|Agricultural Soils (Mt NH3/yr)
## Emissions|NH3|Agriculture|Agricultural Waste Burning (Mt NH3/yr)
## Emissions|NH3|Agriculture|Animal Waste Management (Mt NH3/yr)
## Emissions|NH3|Agriculture|Enteric Fermentation (Mt NH3/yr)
## Emissions|NH3|Agriculture|Other (Mt NH3/yr)
## Emissions|NH3|Agriculture|Rice (Mt NH3/yr)
## Emissions|NH3|Land|Forest Burning (Mt NH3/yr)
## Emissions|NH3|Land|Land-use Change (Mt NH3/yr)
## Emissions|NH3|Land|Savannah Burning (Mt NH3/yr)
## Emissions|NMHC|Agriculture (Mt NMHC/yr)
## Emissions|NMHC|Agriculture|Agricultural Soils (Mt NMHC/yr)
## Emissions|NMHC|Agriculture|Agricultural Waste Burning (Mt NMHC/yr)
## Emissions|NMHC|Agriculture|Animal Waste Management (Mt NMHC/yr)
## Emissions|NMHC|Agriculture|Enteric Fermentation (Mt NMHC/yr)
## Emissions|NMHC|Agriculture|Other (Mt NMHC/yr)
## Emissions|NMHC|Agriculture|Rice (Mt NMHC/yr)
## Emissions|NMHC|Land|Forest Burning (Mt NMHC/yr)
## Emissions|NMHC|Land|Land-use Change (Mt NMHC/yr)
## Emissions|NMHC|Land|Savannah Burning (Mt NMHC/yr)
## Emissions|NO2-N|Agriculture (Mt NO2-N/yr)
## Emissions|NO2-N|Agriculture|Agricultural Soils (Mt NO2-N/yr)
## Emissions|NO2-N|Agriculture|Agricultural Waste Burning (Mt NO2-N/yr)
## Emissions|NO2-N|Agriculture|Animal Waste Management (Mt NO2-N/yr)
## Emissions|NO2-N|Agriculture|Enteric Fermentation (Mt NO2-N/yr)
```

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## Emissions|NO2-N|Agriculture|Other (Mt NO2-N/yr)
## Emissions|NO2-N|Agriculture|Rice (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Forest Burning (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Land-use Change (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Savannah Burning (Mt NO2-N/yr)
## Emissions|NO3-N|Agriculture (Mt NO3-N/yr)
## Emissions|NO3-N|Agriculture|Agricultural Soils (Mt NO3-N/yr)
## Emissions|NO3-N|Agriculture|Agricultural Waste Burning (Mt NO3-N/yr)
## Emissions|NO3-N|Agriculture|Animal Waste Management (Mt NO3-N/yr)
## Emissions|NO3-N|Agriculture|Enteric Fermentation (Mt NO3-N/yr)
## Emissions|NO3-N|Agriculture|Other (Mt NO3-N/yr)
## Emissions|NO3-N|Agriculture|Rice (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Forest Burning (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Land-use Change (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Savannah Burning (Mt NO3-N/yr)
## Emissions|NO3Agriculture (Mt NO3-/yr)
## Emissions|NO3Agriculture|Agricultural Soils (Mt NO3-/yr)
## Emissions|NO3Agriculture|Agricultural Waste Burning (Mt NO3-/yr)
## Emissions|NO3Agriculture|Animal Waste Management (Mt NO3-/yr)
## Emissions|NO3Agriculture|Enteric Fermentation (Mt NO3-/yr)
## Emissions|NO3Agriculture|Other (Mt NO3-/yr)
## Emissions|NO3Agriculture|Rice (Mt NO3-/yr)
## Emissions|NO3Land|Forest Burning (Mt NO3-/yr)
## Emissions|NO3Land|Land-use Change (Mt NO3-/yr)
## Emissions|NO3Land|Savannah Burning (Mt NO3-/yr)
## Emissions|NOx|Agriculture (Mt NOx/yr)
## Emissions|NOx|Agriculture|Agricultural Soils (Mt NOx/yr)
## Emissions|NOx|Agriculture|Agricultural Waste Burning (Mt NOx/yr)
## Emissions|NOx|Agriculture|Animal Waste Management (Mt NOx/yr)
## Emissions|NOx|Agriculture|Enteric Fermentation (Mt NOx/yr)
## Emissions|NOx|Agriculture|Other (Mt NOx/yr)
## Emissions|NOx|Agriculture|Rice (Mt NOx/yr)
## Emissions|NOx|Land|Forest Burning (Mt NOx/yr)
## Emissions|NOx|Land|Land-use Change (Mt NOx/yr)
## Emissions|NOx|Land|Savannah Burning (Mt NOx/yr)
## Emissions|OC|Agriculture (Mt OC/yr)
## Emissions|OC|Agriculture|Agricultural Soils (Mt OC/yr)
## Emissions|OC|Agriculture|Agricultural Waste Burning (Mt OC/yr)
## Emissions|OC|Agriculture|Animal Waste Management (Mt OC/yr)
## Emissions|OC|Agriculture|Enteric Fermentation (Mt OC/yr)
## Emissions|OC|Agriculture|Other (Mt OC/yr)
## Emissions|OC|Agriculture|Rice (Mt OC/yr)
## Emissions|OC|Land|Forest Burning (Mt OC/yr)
## Emissions|OC|Land|Land-use Change (Mt OC/yr)
## Emissions|OC|Land|Savannah Burning (Mt OC/yr)
## Emissions|SO2|Agriculture (Mt SO2/yr)
## Emissions|SO2|Agriculture|Agricultural Soils (Mt SO2/yr)
## Emissions|SO2|Agriculture|Agricultural Waste Burning (Mt SO2/yr)
## Emissions|SO2|Agriculture|Animal Waste Management (Mt SO2/yr)
## Emissions|SO2|Agriculture|Enteric Fermentation (Mt SO2/yr)
## Emissions|SO2|Agriculture|Other (Mt SO2/yr)
## Emissions|SO2|Agriculture|Rice (Mt SO2/yr)
## Emissions|SO2|Land|Forest Burning (Mt SO2/yr)
## Emissions|SO2|Land|Land-use Change (Mt SO2/yr)
## Emissions|SO2|Land|Savannah Burning (Mt SO2/yr)
## Emissions|N2O-N|Agriculture (Mt)
## Emissions|N2O-N|Agriculture|Agricultural Soils (Mt)
## Emissions|N2O-N|Agriculture|Animal Waste Management (Mt)
## Emissions|N2O-N|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt)
## Emissions|N2O-N|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt)
```

```
## Emissions|N2O-N|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt)
## Emissions|N2O-N|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|N2O-N|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt)
## Emissions|N2O-N|Land|Land-use Change (Mt)
## Emissions|NH3-N|Agriculture (Mt)
## Emissions|NH3-N|Agriculture|Agricultural Soils (Mt)
## Emissions|NH3-N|Agriculture|Animal Waste Management (Mt)
## Emissions|NH3-N|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt)
## Emissions|NH3-N|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt)
## Emissions|NH3-N|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt)
## Emissions|NH3-N|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|NH3-N|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt)
## Emissions|NH3-N|Land|Land-use Change (Mt)
## Emissions|NO2-N|Agriculture (Mt)
## Emissions|NO2-N|Agriculture|Agricultural Soils (Mt)
## Emissions|NO2-N|Agriculture|Animal Waste Management (Mt)
## Emissions|NO2-N|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt)
## Emissions|NO2-N|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt)
## Emissions|NO2-N|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt)
## Emissions|NO2-N|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|NO2-N|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt)
## Emissions|NO2-N|Land|Land-use Change (Mt)
## Emissions|NO3-N|Agriculture (Mt)
## Emissions|NO3-N|Agriculture|Agricultural Soils (Mt)
## Emissions|NO3-N|Agriculture|Animal Waste Management (Mt)
## Emissions|NO3-N|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt)
## Emissions|NO3-N|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt)
## Emissions|NO3-N|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt)
## Emissions|NO3-N|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|NO3-N|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt)
## Emissions|NO3-N|Land|Land-use Change (Mt)
## Emissions|direct N2O-N emissions|Agriculture (Mt)
## Emissions|direct N2O-N emissions|Agriculture|Agricultural Soils (Mt)
## Emissions|direct N2O-N emissions|Agriculture|Animal Waste Management (Mt)
## Emissions|direct N2O-N emissions|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt)
## Emissions|direct N2O-N emissions|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt)
## Emissions|direct N2O-N emissions|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt)
## Emissions|direct N2O-N emissions|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|direct N2O-N emissions|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt)
## Emissions|direct N2O-N emissions|Land|Land-use Change (Mt)
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture (Mt)
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture|Agricultural Soils (
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture|Animal Waste Managem
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture|Agricultural Soils|D
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture|Agricultural Soils|I
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture|Agricultural Soils|M
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture|Agricultural Soils|P
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Agriculture|Agricultural Soils|S
## Emissions|indirect N2O-N emissions from leaching and volatilisation|Land|Land-use Change (Mt)
## Emissions|N2O|Agriculture (Mt)
## Emissions|N2O|Agriculture|Agricultural Soils (Mt)
## Emissions|N2O|Agriculture|Animal Waste Management (Mt)
## Emissions|N2O|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|N2O|Land|Land-use Change (Mt)
## Emissions|NH3|Agriculture (Mt)
## Emissions|NH3|Agriculture|Agricultural Soils (Mt)
## Emissions|NH3|Agriculture|Animal Waste Management (Mt)
## Emissions|NH3|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|NH3|Land|Land-use Change (Mt)
## Emissions|NO3Agriculture (Mt)
```

```
## Emissions|NO3Agriculture|Agricultural Soils (Mt)
## Emissions|NO3Agriculture|Animal Waste Management (Mt)
## Emissions|NO3Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|NO3Land|Land-use Change (Mt)
## Emissions|NOx|Agriculture (Mt)
## Emissions|NOx|Agriculture|Agricultural Soils (Mt)
## Emissions|NOx|Agriculture|Animal Waste Management (Mt)
## Emissions|NOx|Agriculture|Agricultural Soils|Pasture (Mt)
## Emissions|NOx|Land|Land-use Change (Mt)
## Resources|Land Cover|Other Natural Land (million ha)
## Resources|Land Cover|Forest|Forestry|Harvested Area (million ha)
## Resources|Land Cover|Other Arable Land (million ha)
## Resources|Land Cover (million ha wrt 2005)
## Resources|Land Cover Change|Cropland (million ha wrt 2005)
## Resources|Land Cover Change|Forest (million ha wrt 2005)
## Resources|Land Cover Change|Other Land (million ha wrt 2005)
## Resources|Land Cover Change|Pastures and Rangelands (million ha wrt 2005)
## Resources|Land Cover Change|Cropland|Bioenergy crops (million ha wrt 2005)
## Resources|Land Cover Change|Forest|Managed Forest (million ha wrt 2005)
## Resources|Land Cover Change|Forest|Natural Forest (million ha wrt 2005)
## Resources|Land Cover Change|Other Natural Land (million ha wrt 2005)
## Resources|Land Cover Change|Urban Area (million ha wrt 2005)
## Resources|Land Cover Change|Forest|Forestry|Harvested Area (million ha wrt 2005)
## Resources|Land Cover Change|Other Arable Land (million ha wrt 2005)
## Prices|Agriculture|Microbial protein (US$05/tDM)
```

Part XX
Run Information

66 Calibration

66.1 Yield calibration factors

	SSA	MEA	OAS	CHA	IND	REF	NEU	EUR	LAM	USA	CAZ
crops	0.71	0.69	0.63	0.72	0.81	0.76	0.85	0.75	0.56	0.57	0.28
pasture	0.11	0.96	1.10	0.46	5.57	0.17	0.84	0.92	0.16	0.25	0.21

66.2 Land use change in 1995 (reshuffling)

Table 1675: Land use change cropland 1995 (Mio. ha)

	CAZ	CHA	EUR	IND	LAM	MEA	NEU	OAS	REF	SSA	USA	GLO
expansion	3.95	30.85	9.88	19.85	26.83	2.61	1.06	36.48	0.00	20.25	0.13	151.89
contraction	-9.96	-17.18	-24.49	-25.27	-34.44	-7.52	-0.39	-46.96	-1.79	-21.49	-8.16	-197.65
net changes	-6.01	13.67	-14.61	-5.41	-7.61	-4.91	0.67	-10.48	-1.79	-1.24	-8.03	-45.76
gross changes	13.91	48.04	34.36	45.12	61.26	10.14	1.45	83.45	1.79	41.74	8.29	349.55

67 Model settings

67.1 Code settings

```
## ### GIT revision ###
## b45e6bd52f1510436c9bdc21ad29ecabdf065b09
##
```

```
## ### Modifications ###
##
## On branch rf_npi_test
## Your branch is up-to-date with origin/rf_npi_test.
##
## Changes not staged for commit:
##
##   (use "git add <file>..." to update what will be committed)
##
##   (use "git checkout -- <file>..." to discard changes in working directory)
##
##
##  modified:   main.gms
##  modified:   modules/09_drivers/aug17/input.gms
##
##  modified:   modules/15_food/anthropometrics_jan18/declarations.gms
##
##  modified:   modules/15_food/anthropometrics_jan18/input.gms
##
##  modified:   modules/35_natveg/dynamic_may18/input.gms
##
##  modified:   modules/56_ghg_policy/price_sep16/declarations.gms
##
## Untracked files:
##
##   (use "git add <file>..." to include in what will be committed)
##
##
##  calibration_results.log
##  calibration_results.pdf
##
##  scripts/npi_ndc/policies/country2cell.rds
##  scripts/start/test_ms.R
##
##  test_ms-9944180.out
##
##
## no changes added to commit (use "git add" and/or "git commit -a")
##
##
##
## ### MODULE SETUP ###
## $setglobal drivers  aug17
## $setglobal land  feb15
##
## $setglobal costs  default
## $setglobal interest_rate  reg_feb18
##
## $setglobal tc  endo_JUN16
## $setglobal yields  biocorrect
##
## $setglobal food  anthropometrics_jan18
## $setglobal demand  sector_may15
##
## $setglobal production  flexreg_apr16
## $setglobal residues  flexreg_apr16
##
## $setglobal processing  coupleproducts_feb17
## $setglobal trade  selfsuff_flexreg_cost
##
```

```
## $setglobal crop  endo_jun13
## $setglobal past  endo_jun13
##
## $setglobal forestry  affore_vegc_dec16
## $setglobal urban  static
##
## $setglobal natveg  dynamic_may18
## $setglobal factor_costs  mixed_feb17
##
## $setglobal landconversion  gdp_vegc_mar18
## $setglobal transport  gtap_nov12
##
## $setglobal area_equipped_for_irrigation  endo_apr13
##
## $setglobal water_demand  agr_sector_aug13
##
## $setglobal water_availability  total_water_aug13
## $setglobal climate  static
##
## $setglobal nr_soil_budget  exoeff_aug16
## $setglobal nitrogen  ipcc2006_sep16
##
## $setglobal carbon  normal_dec17
## $setglobal methane  ipcc2006_flexreg_apr16
##
## $setglobal phosphorus  off
## $setglobal awms  ipcc2006_aug16
##
## $setglobal ghg_policy  price_sep16
## $setglobal maccs  on_sep16
##
## $setglobal carbon_removal  off_sep16
## $setglobal som  off
##
## $setglobal bioenergy  standard_flexreg_may17
## $setglobal material  exo_flexreg_apr16
##
## $setglobal livestock  fbask_jan16
## $setglobal optimization  lp_nlp_apr17
```

67.2 Dataset

```
##
##
## Used data set: isimip_rcp-IPSL_CM5A_LR-rcp2p6-noco2_rev30_h200_8a828c6ed5004e77d1ba2025e8ea2261.tgz
##
## md5sum: 3808a8dcb0c704f65a6bb173e259d5a7
##
## Repository: /p/projects/landuse/data/input/archive
##
##
## Used data set: rev3.15_8a828c6ed5004e77d1ba2025e8ea2261_magpie.tgz
##
## md5sum: 82a3dc0dc98f734cc0e272a04e7eafc0
##
## Repository: /p/projects/rd3mod/inputdata/output
##
##
## Used data set: rev3.15_8a828c6ed5004e77d1ba2025e8ea2261_validation.tgz
```

```
##
## md5sum: 61f03961601001ee63070e761c998b49
##
## Repository: /p/projects/rd3mod/inputdata/output
##
##
## Used data set: additional_data_rev3.30.tgz
## md5sum: 8843442b21be0e7dc4820378f0285634
##
## Repository: /p/projects/landuse/data/input/archive
##
## Low resolution: h200
##
## High resolution: 0.5
##
## Total number of cells: 200
##
## Number of cells per region:
##
##   SSA  MEA  OAS  CHA  IND  REF  NEU  EUR  LAM  USA  CAZ
##
##    10   15   22   19    8    5    8   15   57   11   30
##
##
## Regionscode: 8a828c6ed5004e77d1ba2025e8ea2261
##
## Regions data revision: 3.15
##
##
## lpj2magpie settings:
##
## * LPJmL data folder: /p/projects/landuse/data/input/lpj_input/isimip_rcp/IPSL_CM5A_LR/rcp2p6/noco2
##
## * Additional input folder: /p/projects/landuse/data/input/other/rev30
## * Revision: 30
##
## * Call: lpj2magpie(input_folder = path(cfg$lpj_input_folder, gsub("-",     "/", cfg$input)), input2_
##
##
## aggregation settings:
## * Input resolution: 0.5
## * Output resolution: h200
##
## * Input file: /p/projects/landuse/data/input/archive/isimip_rcp-IPSL_CM5A_LR-rcp2p6-noco2_rev30_0.5.
##
## * Output file: /p/projects/landuse/data/input/archive/isimip_rcp-IPSL_CM5A_LR-rcp2p6-noco2_rev30_h20
##
## * Regionscode: 8a828c6ed5004e77d1ba2025e8ea2261
## * (clustering) n-repeat: 5
##
## * (clustering) n-redistribute: 0
##
## * Call: aggregation(input_file = paste0(cfg$base_folder, "/", set_folder,     "_", cfg$high_res, ".t
##
##
##
## Warning message:
##
## In lucode::singleGAMSfile(mainfile = cfg$model, output = lucode::path(cfg$results_folder,  ... :
##
```

```
##   No value set for $setglobal "c12_interest_rate"! Value is set to "MISSING"!
##
##
## Last modification (input data): Tue May 29 16:55:36 2018
```

67.3 R Information

```
## R version 3.3.2 (2016-10-31)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: SUSE Linux Enterprise Server 12 SP2
##
## locale:
## [1] C
##
## attached base packages:
## [1] grid      stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
## [1] lusweave_1.45.0 magpie4_1.14.1  gdx_1.48.0      magclass_4.85.6 gdxrrw_1.0.2
## [6] lucode_2.125.2
##
## loaded via a namespace (and not attached):
##  [1] httr_1.3.1          maps_3.1.1          tidyr_0.7.2         jsonlite_1.5
##  [5] viridisLite_0.3.0   splines_3.3.2       Formula_1.2-3       shiny_1.0.5
##  [9] assertthat_0.2.0    sp_1.2-4            rworldmap_1.3-6     latticeExtra_0.6-28
## [13] nonparaeff_0.5-8    qualV_0.3-2         backports_1.1.2     lattice_0.20-35
## [17] glue_1.2.0          luscale_2.12.0      digest_0.6.15       RColorBrewer_1.1-2
## [21] checkmate_1.8.2     colorspace_1.3-2    htmltools_0.3.6     httpuv_1.3.5
## [25] Matrix_1.2-8        plyr_1.8.4          pkgconfig_2.0.1     trafficlight_1.11.1
## [29] purrr_0.2.4         xtable_1.8-2        scales_0.5.0        htmlTable_1.9
## [33] tibble_1.3.3        ggplot2_2.2.1       nnet_7.3-12         lazyeval_0.2.1
## [37] survival_2.41-2     magrittr_1.5        mime_0.5            maptools_0.9-2
## [41] xml2_1.1.1          foreign_0.8-67      mip_0.103.2         tools_3.3.2
## [45] data.table_1.11.4   stringr_1.3.1       plotly_4.5.6        munsell_0.4.3
## [49] cluster_2.0.6       bindrcpp_0.2.2      luplot_3.39.0       rlang_0.2.0
## [53] quitte_0.3068.0     htmlwidgets_1.2     spam_1.4-0          base64enc_0.1-3
## [57] gtable_0.2.0        curl_2.3            reshape2_1.4.3      R6_2.2.2
## [61] gridExtra_2.2.1     knitr_1.20          dplyr_0.7.1         magpiesets_0.33.1
## [65] bindr_0.1.1         Hmisc_4.0-2         KernSmooth_2.23-15  stringi_1.2.2
## [69] Rcpp_0.12.17        fields_8.10         rpart_4.1-13        acepack_1.4.1
```

```
## [1] "/p/projects/rd3mod/R/libraries/main"
## [2] "/p/system/packages/R/3.3.2/lib64/R/library"
```

```
##                BBmisc                    BH            BatchJobs         BiocInstaller
##               "1.11"           "1.66.0-1"                "1.6"               "1.24.0"
##                 CVST                   DBI             DEoptimR                   DRR
##               "0.2-1"                 "1.0.0"               "1.0-8"               "0.0.3"
##                   DT           DiagrammeR                   FNN           FactoMineR
##                "0.4"                 "0.9.0"                 "1.1"                "1.36"
##              Formula                 GGally                 Gmisc                 Hmisc
##              "1.2-3"                 "1.4.0"               "1.4.1"               "4.0-2"
##               Lahman              LandMark           LearnBayes              Lmoments
```

```
##             "6.0-0"             "1.1.0"            "2.15.1"             "1.2-3"
##                MASS                 NLP                 NMF             PIKTools
##            "7.3-50"           "0.1-10"            "0.20.6"               "1.1"
##             R.matlab        R.methodsS3                R.oo             R.utils
##             "3.6.1"             "1.7.1"            "1.21.0"             "2.5.0"
##                  R6                RANN               RCurl              RISmed
##             "2.2.2"             "2.5.1"          "1.95-4.8"             "2.1.7"
##             RJSONIO             RSQLite        RandomFields    RandomFieldsUtils
##             "1.3-0"             "2.1.1"            "3.1.50"             "0.3.25"
##                Rcpp        RcppArmadillo         RcppOctave        RcppParallel
##           "0.12.17"       "0.7.700.0.0"            "0.18.1"             "4.3.20"
##            RcppRoll                Rook                SPEI              SQUAREM
##             "0.2.2"             "1.1-1"             "1.6"           "2017.10-1"
##           SnowballC             TH.data                 WDI                 XML
##             "0.5.1"             "1.0-8"             "2.5"            "3.98-1.5"
##               abind               aqfig           ar5data            areaplot
##             "1.4-5"               "0.8"           "1.7.1"             "1.2-0"
##                 arm              assertr         assertthat            backports
##             "1.9-3"               "2.5"           "0.2.0"             "1.1.2"
##               bfast        bibliometrix              bibtex               bindr
##             "1.5.7"             "1.6"            "0.4.2"             "0.1.1"
##            bindrcpp               bit64                blob               brew
##             "0.2.2"            "0.9-7"            "1.1.1"             "1.0-6"
##               broom        burdensharing               callr               caret
##             "0.4.2"            "1.4.20"            "1.0.0"            "6.0-80"
##           cellranger           classInt                 cli               clipr
##             "1.1.0"            "0.1-23"            "1.0.0"             "0.4.0"
##                coda                coin          colorRamps          commonmark
##            "0.19-1"             "1.2-2"               "2.3"               "1.5"
##             compare             corpcor             corrplot         countrycode
##             "0.2-6"             "1.6.9"              "0.84"            "1.00.0"
##                covr             cowplot              cowsay              crayon
##             "3.1.0"             "0.9.2"             "0.6.0"             "1.3.4"
##           crosstalk                curl           d3Network          data.table
##             "1.0.0"              "2.3"           "0.5.2.1"            "1.11.4"
##           data.tree             ddalpha              deldir          dendextend
##             "0.7.4"             "1.3.3"            "0.1-15"             "1.5.2"
##                desc             devtools              digest              dimRed
##             "1.2.0"            "1.13.3"            "0.6.15"             "0.1.0"
##             diptest                doMC                doMPI               doSNOW
##            "0.75-7"             "1.3.5"             "0.2.2"            "1.0.16"
##           dotCall64          downloader               dplyr               dtplyr
##            "0.9-5.2"               "0.4"             "0.7.1"             "0.0.2"
##             dummies               e1071             ellipse        estimability
##             "1.5.6"             "1.6-8"             "0.4.1"               "1.3"
##            evaluate                expm          factoextra                fail
##            "0.10.1"           "0.999-2"             "1.0.4"               "1.3"
##             faodata             fdrtool              fields        fitdistrplus
##              "1.09"             "1.2.15"              "8.10"             "1.0-9"
##           flashClust              flexmix             forcats            forecast
##             "1.01-2"            "2.3-14"             "0.2.0"               "8.0"
##           forestplot              formatR            fortunes                 fpc
##             "1.7.2"               "1.5"            "1.5-4"            "2.1-10"
##            fracdiff        futile.logger       futile.options               gdata
##             "1.4-2"             "1.4.3"             "1.0.1"            "2.18.0"
##                 gdx              gdxrrw                geoR             geodata
##            "1.48.0"             "1.0.2"           "1.7-5.2"              "1.56"
##            geometry           geosphere                 ggm             ggplot2
##             "0.3-6"             "1.5-7"               "2.3"             "2.2.1"
##              ggpubr              ggrepel               ggsci            ggsignif
```

```
##             "0.1.4"             "0.8.0"               "2.9"             "0.4.0"
##               git2r          givemeall              glasso             glodato
##            "0.21.0"              "0.02"              "1.8"              "1.12"
##                glue             gmodels                gmp             goftest
##             "1.2.0"             "2.16.2"          "0.5-13.1"              "1.1-1"
##               gower             goxygen              gplots            gridBase
##             "0.1.2"             "0.7.4"             "3.0.1"             "0.4-7"
##               gstat                 gsw              guidr               gvlma
##             "1.1-5"             "1.0-5"          "0.0.5.0000"            "1.0.0.2"
##               haven                 hms          htmlTable           htmltools
##             "1.1.0"             "0.4.2"              "1.12"             "0.3.6"
##          htmlwidgets              httpuv                httr                huge
##               "1.2"             "1.3.5"             "1.3.1"             "1.2.7"
##                iamc              igraph          influenceR           intervals
##            "0.24.0"             "1.2.1"             "0.1.0"            "0.15.1"
##                inum               ipred               irlba                jpeg
##             "1.0-0"             "0.9-6"             "2.3.2"             "0.1-8"
##            jsonlite              kernlab               knitr            lambda.r
##               "1.5"            "0.9-26"              "1.20"              "1.1.9"
##               later              lattice                lava              lavaan
##             "0.7.2"           "0.20-35"             "1.6.1"             "0.6-1"
##            lazyeval              leaflet               leaps             libcoin
##             "0.2.1"             "1.1.0"               "3.0"             "1.0-1"
##               limes                 lme4              lmomco              lmtest
##            "0.3.25"            "1.1-17"             "2.2.7"            "0.9-36"
##             lpSolve              lpjclass              lsmeans               lubase
##            "5.6.13"              "1.13"            "2.25-5"              "1.06"
##          lubridate               lucode               ludata        luplayground
##             "1.7.1"            "2.125.2"            "1.43.3"              "1.05"
##              luplot              luscale             lusweave             mFilter
##            "3.39.0"            "2.12.0"            "1.45.0"             "0.1-3"
##              madrat             magclass                magic              magpie
##            "1.47.1"            "4.85.6"             "1.5-8"           "0.2266.1"
##              magpie4       magpieflexreg           magpiesets             magrittr
##            "1.14.1"            "0.0036"             "0.33.1"              "1.5"
##              mapdata             markdown               matlab           matrixcalc
##             "2.3.0"               "0.8"             "1.0.2"             "1.0-3"
##              mclust             memoise                mgcv                  mi
##               "5.3"             "1.0.0"           "1.8-23"              "1.0"
##                mice       microbenchmark                 mip              misc3d
##              "2.30"             "1.4-4"          "0.103.2"             "0.8-4"
##              mlapi              mnormt              modelr          modeltools
##             "0.1.0"             "1.5-5"             "0.1.1"            "0.2-21"
##             moinput              mrfood       mrregression       mrvalidation
##            "9.75.1"             "0.7.3"             "3.7.0"            "1.26.1"
##            multcomp              mvtnorm               ncdf4              network
##             "1.4-8"             "1.0-7"              "1.15"            "1.13.0"
##            nitrogen              nleqslv                nnls           nonparaeff
##             "1.0.3"             "3.3.2"              "1.4"              "0.5-8"
##             nortest             numDeriv       nycflights13                 oce
##             "1.0-4"           "2016.8-1"             "0.2.2"            "0.9-23"
##             openssl             openxlsx               osmar                pROC
##             "0.9.6"             "4.0.0"             "1.1-7"            "1.12.1"
##                 pan              pander               party             partykit
##               "1.4"             "0.6.0"             "1.2-4"             "1.2-0"
##             pastecs              pbapply             pbivnorm                piam
##            "1.3-18"             "1.3-4"             "0.6.0"             "0.8.2"
##           pikcluster               pillar            pkgconfig             pkgmaker
##               "0.04"             "1.2.3"             "2.0.1"              "0.22"
##                plogr               plot3D               plotly              plotrix
```

```
##             "0.2.0"               "1.1"             "4.5.6"             "3.6-4"
##                 png           polspline           polyclip           prabclus
##             "0.1-7"            "1.1.12"             "1.6-1"             "2.2-6"
##        prettyunits            processx            prodlim             profvis
##             "1.0.2"             "3.1.0"        "2018.04.18"             "0.3.3"
##            progress               proto               psych               purrr
##             "1.1.2"             "1.0.0"            "1.6.12"             "0.2.4"
##                 pwt              qgraph            quadprog               qualV
##             "7.1-1"             "1.4.2"             "1.5-5"             "0.3-2"
##              quitte         randomForest randomForestExplainer              raster
##          "0.3068.0"            "4.6-14"                 "0.9"             "2.5-8"
##           rasterVis               readr         readstata13              readxl
##              "0.41"             "1.1.1"             "0.9.0"             "1.0.0"
##             recipes            registry            rematch              remind
##             "0.1.2"               "0.3"             "1.0.1"           "36.45.1"
##            remulator              reprex             reshape            reshape2
##             "1.7.1"             "0.1.1"             "0.8.7"             "1.4.3"
##           rfPermute               rgdal            rgenoud               rgeos
##             "2.1.5"             "1.2-5"           "5.7-12.4"            "0.3-17"
##               rgexf               rhdf5               rjson               rlang
##            "0.15.3"            "2.18.0"            "0.2.15"             "0.2.0"
##           rmarkdown                 rms            rmsfact           rngtools
##               "1.9"             "5.1-0"             "0.0.3"             "1.2.4"
##          robustbase            roxygen2               rpart           rpart.plot
##            "0.92-7"             "6.0.1"            "4.1-13"             "2.1.2"
##           rprojroot              rscopus                 rsm           rstudioapi
##             "1.3-2"             "0.4.6"               "2.8"               "0.7"
##               rvest           rworldmap          rworldxtra            sandwich
##             "0.3.2"             "1.3-6"              "1.01"             "2.4-0"
##           satellite              scales        scatterplot3d             selectr
##             "0.2.0"             "0.5.0"            "0.3-38"             "0.3-1"
##                 sem            sendmailR             sfsmisc               shiny
##             "3.1-8"             "1.2-1"             "1.1-2"             "1.0.5"
##         shinyresults                slam                 sna               snow
##            "0.12.1"            "0.1-40"               "2.4"             "0.4-2"
##          soiltexture         sourcetools              spData          spacetime
##             "1.4.1"             "0.1.5"           "0.2.8.3"             "1.2-0"
##                spam            sparsepp             spatstat       spatstat.data
##             "1.4-0"             "0.2.0"            "1.55-1"             "1.2-0"
##       spatstat.utils               spdep             splancs       statnet.common
##             "1.8-0"            "0.6-11"           "2.01-40"             "3.3.0"
##           stringdist             stringi             stringr         strucchange
##            "0.9.4.4"             "1.2.2"             "1.3.1"             "1.5-1"
##            swfscMisc              tensor            testthat            text2vec
##                "1.2"               "1.5"             "2.0.0"             "0.4.0"
##               tibble               tidyr           tidyselect                tiff
##             "1.3.3"             "0.7.2"             "0.2.4"             "0.1-5"
##            timeDate                  tm         trafficlight             trefoil
##           "3012.100"             "0.7-1"             "1.11.1"              "0.01"
##          trimcluster              tseries              tweenr             txtplot
##             "0.1-2"            "0.10-38"             "0.1.5"             "1.0-3"
##            udunits2               units                urca               uroot
##              "0.13"             "0.4-6"             "1.3-0"             "2.0-9"
##                utf8          validation                 vcd             viridis
##             "1.1.4"             "1.195"             "1.4-3"             "0.3.4"
##          viridisLite           visNetwork             webshot             weights
##             "0.3.0"             "1.0.3"             "0.4.0"              "0.85"
##             whisker               withr                xml2              xtable
##             "0.3-2"             "2.1.2"             "1.1.1"             "1.8-2"
##                 xts                yaml                 zip           zlibbioc
```

```
##              "0.9-7"            "2.1.19"             "1.0.0"            "1.20.0"
##                 zoo               abind             acepack          assertthat
##              "1.8-1"             "1.4-5"             "1.4.1"               "0.1"
##           backports                base          base64enc           bdsmatrix
##              "1.0.5"             "3.3.2"             "0.1-3"             "1.3-2"
##                   BH                 bit              bitops                boot
##            "1.62.0-1"            "1.1-12"             "1.0-6"            "1.3-18"
##                  car              caTools               cffdrs           checkmate
##              "2.1-4"            "1.17.1"             "1.7.5"             "1.8.2"
##                chron               class             cluster           codetools
##             "2.3-50"            "7.3-14"             "2.0.6"            "0.2-15"
##           colorspace            compiler               crayon          data.table
##              "1.3-2"             "3.3.2"             "1.3.2"            "1.10.4"
##             datasets           dichromat              digest               doMPI
##              "3.3.2"             "2.0-0"            "0.6.12"             "0.2.1"
##           doParallel            evaluate           fastmatch             foreach
##             "1.0.10"              "0.10"             "1.1-0"             "1.4.3"
##              foreign             Formula              fwi.fbp             gdtools
##             "0.8-67"             "1.2-1"               "1.7"             "0.1.4"
##         ggplot2movies            graphics           grDevices                 grid
##              "0.0.1"             "3.3.2"             "3.3.2"             "3.3.2"
##             gridExtra               gtable              gtools              hexbin
##              "2.2.1"             "0.2.0"             "3.5.0"            "1.27.1"
##                highr           htmlTable           htmltools          htmlwidgets
##                "0.6"              "1.9"             "0.3.5"               "0.8"
##            iterators            jsonlite          KernSmooth               knitr
##              "1.0.8"              "1.3"            "2.23-15"            "1.15.1"
##              labeling             lattice         latticeExtra             lazyeval
##                 "0.3"            "0.20-35"            "0.6-28"             "0.2.0"
##                  lme4            magrittr             mapproj                maps
##             "1.1-12"              "1.5"             "1.2-4"             "3.1.1"
##              maptools            markdown                MASS              Matrix
##              "0.9-2"             "0.7.7"            "7.3-45"             "1.2-8"
##          MatrixModels             methods                mgcv                mime
##              "0.4-1"             "3.3.2"            "1.8-17"               "0.5"
##                 minqa             mlbench                mmap        ModelMetrics
##             "1.2.4"             "2.1-1"            "0.6-12"             "1.1.0"
##              multcomp             munsell             mvtnorm               ncdf4
##              "1.4-6"             "0.4.3"             "1.0-6"              "1.15"
##                  nlme              nloptr                nnet            parallel
##            "3.1-131"             "1.0.4"            "7.3-12"             "3.3.2"
##              pbkrtest                plyr             praise            quantreg
##              "0.4-7"             "1.8.4"             "1.0.0"              "5.29"
##                   R6              raster         RColorBrewer                Rcpp
##              "2.2.0"             "2.5-8"             "1.1-2"           "0.12.10"
##             RcppEigen            reshape2                 rex            rmarkdown
##           "0.3.2.9.1"             "1.4.2"             "1.1.1"               "1.4"
##                 Rmpi               rpart            rprojroot            sandwich
##              "0.6-6"            "4.1-10"                "1.2"             "2.3-4"
##               scales                  sp             SparseM             spatial
##              "0.4.1"             "1.2-4"              "1.76"            "7.3-11"
##         spatial.tools             splines               stats              stats4
##              "1.4.8"             "3.3.2"             "3.3.2"             "3.3.2"
##              stringi             stringr            survival             svglite
##              "1.1.3"             "1.2.0"            "2.41-2"             "1.2.0"
##                tcltk            testthat             TH.data              tibble
##              "3.3.2"             "1.0.2"             "1.0-8"             "1.3.0"
##                tools               utils               withr                yaml
##              "3.3.2"             "3.3.2"             "1.0.2"            "2.1.14"
##                 zoo
```

```
##             "1.7-14"
```

start_functions

```
## R version 3.3.2 (2016-10-31)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: SUSE Linux Enterprise Server 12 SP2
##
## locale:
##  [1] LC_CTYPE=en_US.UTF-8    LC_NUMERIC=C            LC_TIME=en_US.UTF-8
##  [4] LC_COLLATE=en_US.UTF-8  LC_MONETARY=en_US.UTF-8 LC_MESSAGES=C
##  [7] LC_PAPER=C              LC_NAME=C               LC_ADDRESS=C
## [10] LC_TELEPHONE=C          LC_MEASUREMENT=C        LC_IDENTIFICATION=C
##
## attached base packages:
## [1] grid      methods   stats     graphics  grDevices utils     datasets  base
##
## other attached packages:
## [1] magpie4_1.14.1  gdx_1.48.0      gdxrrw_1.0.2    lucode_2.125.2  magclass_4.85.6
##
## loaded via a namespace (and not attached):
##  [1] httr_1.3.1          maps_3.1.1          tidyr_0.7.2         jsonlite_1.5
##  [5] viridisLite_0.3.0   splines_3.3.2       Formula_1.2-3       shiny_1.0.5
##  [9] assertthat_0.2.0    sp_1.2-4            rworldmap_1.3-6     latticeExtra_0.6-28
## [13] lusweave_1.45.0     nonparaeff_0.5-8    qualV_0.3-2         backports_1.1.2
## [17] lattice_0.20-35     glue_1.2.0          luscale_2.12.0      digest_0.6.15
## [21] RColorBrewer_1.1-2  checkmate_1.8.2     colorspace_1.3-2    htmltools_0.3.6
## [25] httpuv_1.3.5        Matrix_1.2-8        plyr_1.8.4          pkgconfig_2.0.1
## [29] trafficlight_1.11.1 purrr_0.2.4         xtable_1.8-2        scales_0.5.0
## [33] htmlTable_1.12      tibble_1.3.3        ggplot2_2.2.1       nnet_7.3-12
## [37] lazyeval_0.2.1      survival_2.41-2     magrittr_1.5        mime_0.5
## [41] maptools_0.9-2      xml2_1.1.1          foreign_0.8-67      mip_0.103.2
## [45] tools_3.3.2         data.table_1.11.4   stringr_1.3.1       plotly_4.5.6
## [49] munsell_0.4.3       cluster_2.0.6       bindrcpp_0.2.2      luplot_3.39.0
## [53] rlang_0.2.0         quitte_0.3068.0     rstudioapi_0.7      htmlwidgets_1.2
## [57] spam_1.4-0          base64enc_0.1-3     gtable_0.2.0        reshape2_1.4.3
## [61] R6_2.2.2            gridExtra_2.2.1     knitr_1.20          dplyr_0.7.1
## [65] magpiesets_0.33.1   bindr_0.1.1         Hmisc_4.0-2         KernSmooth_2.23-15
## [69] stringi_1.2.2       Rcpp_0.12.17        fields_8.10         rpart_4.1-13
## [73] acepack_1.4.1
```

```
## [1] "/p/projects/rd3mod/R/libraries/main"
## [2] "/p/system/packages/R/3.3.2/lib64/R/library"
```

```
##                abind                aqfig              ar5data             areaplot
##              "1.4-5"                "0.8"              "1.7.1"              "1.2-0"
##                  arm              assertr           assertthat             backports
##              "1.9-3"                "2.5"              "0.2.0"              "1.1.2"
##            BatchJobs               BBmisc                bfast                   BH
##                "1.6"                "1.11"             "1.5.7"           "1.66.0-1"
##         bibliometrix               bibtex                bindr              bindrcpp
##                "1.6"               "0.4.2"             "0.1.1"              "0.2.2"
##        BiocInstaller                bit64                 blob                 brew
##             "1.24.0"               "0.9-7"             "1.1.1"              "1.0-6"
```

```
##              broom       burdensharing              callr              caret
##            "0.4.2"            "1.4.20"            "1.0.0"           "6.0-80"
##         cellranger          classInt                cli              clipr
##            "1.1.0"            "0.1-23"            "1.0.0"            "0.4.0"
##               coda               coin         colorRamps         commonmark
##           "0.19-1"             "1.2-2"              "2.3"              "1.5"
##            compare             corpcor           corrplot        countrycode
##            "0.2-6"             "1.6.9"             "0.84"           "1.00.0"
##               covr             cowplot             cowsay              crayon
##            "3.1.0"             "0.9.2"             "0.6.0"            "1.3.4"
##          crosstalk                curl                CVST          d3Network
##            "1.0.0"              "2.3"             "0.2-1"            "0.5.2.1"
##         data.table           data.tree                DBI             ddalpha
##           "1.11.4"             "0.7.4"             "1.0.0"            "1.3.3"
##             deldir          dendextend           DEoptimR               desc
##           "0.1-15"             "1.5.2"             "1.0-8"            "1.2.0"
##            devtools          DiagrammeR              digest              dimRed
##            "1.13.3"             "0.9.0"            "0.6.15"            "0.1.0"
##            diptest               doMC                doMPI              doSNOW
##            "0.75-7"             "1.3.5"             "0.2.2"           "1.0.16"
##          dotCall64         downloader               dplyr                DRR
##           "0.9-5.2"              "0.4"             "0.7.1"            "0.0.3"
##                  DT             dtplyr             dummies               e1071
##               "0.4"             "0.0.2"             "1.5.6"            "1.6-8"
##             ellipse        estimability            evaluate                expm
##             "0.4.1"              "1.3"            "0.10.1"          "0.999-2"
##          factoextra          FactoMineR                fail             faodata
##             "1.0.4"             "1.36"              "1.3"              "1.09"
##             fdrtool              fields        fitdistrplus          flashClust
##            "1.2.15"             "8.10"              "1.0-9"            "1.01-2"
##             flexmix                FNN             forcats            forecast
##            "2.3-14"              "1.1"             "0.2.0"               "8.0"
##          forestplot             formatR             Formula            fortunes
##             "1.7.2"              "1.5"             "1.2-3"            "1.5-4"
##                 fpc            fracdiff      futile.logger     futile.options
##            "2.1-10"             "1.4-2"             "1.4.3"            "1.0.1"
##               gdata                gdx              gdxrrw             geodata
##            "2.18.0"            "1.48.0"             "1.0.2"             "1.56"
##            geometry                geoR           geosphere              GGally
##             "0.3-6"            "1.7-5.2"             "1.5-7"            "1.4.0"
##                 ggm             ggplot2              ggpubr             ggrepel
##               "2.3"             "2.2.1"             "0.1.4"            "0.8.0"
##               ggsci            ggsignif               git2r          givemeall
##               "2.9"             "0.4.0"            "0.21.0"              "0.02"
##              glasso             glodato                glue               Gmisc
##               "1.8"              "1.12"             "1.2.0"            "1.4.1"
##            gmodels                gmp             goftest               gower
##           "2.16.2"          "0.5-13.1"             "1.1-1"            "0.1.2"
##            goxygen              gplots           gridBase               gstat
##             "0.7.4"             "3.0.1"             "0.4-7"            "1.1-5"
##                 gsw               guidr               gvlma               haven
##             "1.0-5"          "0.0.5.0000"          "1.0.0.2"            "1.1.0"
##               Hmisc                 hms          htmlTable           htmltools
##             "4.0-2"             "0.4.2"              "1.12"            "0.3.6"
##         htmlwidgets              httpuv                httr                huge
##               "1.2"             "1.3.5"             "1.3.1"            "1.2.7"
##                iamc              igraph          influenceR           intervals
##            "0.24.0"             "1.2.1"             "0.1.0"            "0.15.1"
##                inum               ipred               irlba                jpeg
##             "1.0-0"             "0.9-6"             "2.3.2"            "0.1-8"
```

```
##             jsonlite               kernlab                 knitr               Lahman
##                "1.5"              "0.9-26"              "1.20"              "6.0-0"
##             lambda.r              LandMark                 later              lattice
##              "1.1.9"               "1.1.0"              "0.7.2"            "0.20-35"
##                 lava                lavaan              lazyeval               leaflet
##              "1.6.1"               "0.6-1"              "0.2.1"              "1.1.0"
##                leaps             LearnBayes               libcoin                limes
##                "3.0"              "2.15.1"              "1.0-1"             "0.3.27"
##                 lme4                lmomco             Lmoments                lmtest
##              "1.1-17"               "2.2.7"              "1.2-3"             "0.9-36"
##             lpjclass               lpSolve              lsmeans                lubase
##                "1.13"              "5.6.13"             "2.25-5"              "1.06"
##            lubridate                lucode               ludata         luplayground
##              "1.7.1"             "2.125.2"             "1.43.3"              "1.05"
##               luplot               luscale              lusweave               madrat
##             "3.39.0"              "2.12.0"              "1.45.0"             "1.47.1"
##             magclass                magic               magpie               magpie4
##             "4.85.6"               "1.5-8"            "0.2266.1"             "1.14.1"
##          magpieflexreg            magpiesets             magrittr               mapdata
##              "0.0036"              "0.33.1"                "1.5"              "2.3.0"
##             markdown                  MASS                matlab            matrixcalc
##                "0.8"              "7.3-50"              "1.0.2"              "1.0-3"
##               mclust               memoise              mFilter                  mgcv
##                "5.3"               "1.0.0"              "0.1-3"             "1.8-23"
##                   mi                  mice       microbenchmark                   mip
##                "1.0"                "2.30"              "1.4-4"            "0.103.2"
##              misc3d                 mlapi               mnormt               modelr
##              "0.8-4"               "0.1.0"              "1.5-5"              "0.1.1"
##          modeltools               moinput               mrfood         mrregression
##             "0.2-21"              "9.75.1"              "0.7.3"              "3.7.0"
##          mrvalidation              multcomp               mvtnorm                ncdf4
##             "1.26.1"               "1.4-8"              "1.0-7"               "1.15"
##               network              nitrogen              nleqslv                  NLP
##             "1.13.0"               "1.0.3"              "3.3.2"            "0.1-10"
##                   NMF                  nnls           nonparaeff              nortest
##             "0.20.6"                "1.4"              "0.5-8"              "1.0-4"
##              numDeriv           nycflights13                 oce              openssl
##            "2016.8-1"              "0.2.2"            "0.9-23"              "0.9.6"
##              openxlsx                osmar                 pan               pander
##               "4.0.0"               "1.1-7"                "1.4"              "0.6.0"
##                 party              partykit              pastecs              pbapply
##              "1.2-4"               "1.2-0"             "1.3-18"              "1.3-4"
##             pbivnorm                 piam            pikcluster             PIKTools
##              "0.6.0"               "0.8.2"                "0.04"                "1.1"
##               pillar              pkgconfig              pkgmaker                plogr
##              "1.2.3"               "2.0.1"                "0.22"              "0.2.0"
##               plot3D                plotly              plotrix                   png
##                "1.1"               "4.5.6"              "3.6-4"              "0.1-7"
##            polspline              polyclip              prabclus           prettyunits
##              "1.1.12"               "1.6-1"              "2.2-6"              "1.0.2"
##                  pROC              processx              prodlim              profvis
##              "1.12.1"               "3.1.0"          "2018.04.18"              "0.3.3"
##             progress                 proto                 psych                purrr
##              "1.1.2"               "1.0.0"             "1.6.12"              "0.2.4"
##                   pwt                qgraph              quadprog                qualV
##              "7.1-1"               "1.4.2"              "1.5-5"              "0.3-2"
##               quitte              R.matlab           R.methodsS3                 R.oo
##            "0.3068.0"               "3.6.1"              "1.7.1"             "1.21.0"
##              R.utils                    R6           RandomFields     RandomFieldsUtils
##              "2.5.0"               "2.2.2"              "3.1.50"              "0.3.25"
```

```
##          randomForest randomForestExplainer                RANN               raster
##             "4.6-14"                 "0.9"             "2.5.1"              "2.5-8"
##            rasterVis                  Rcpp         RcppArmadillo            RcppOctave
##                "0.41"              "0.12.17"         "0.7.700.0.0"              "0.18.1"
##         RcppParallel               RcppRoll                RCurl                readr
##             "4.3.20"                "0.2.2"            "1.95-4.8"              "1.1.1"
##           readstata13                readxl               recipes             registry
##             "0.9.0"                "1.0.0"             "0.1.2"                "0.3"
##              rematch                remind             remulator               reprex
##              "1.0.1"              "36.45.1"             "1.7.1"              "0.1.1"
##              reshape               reshape2             rfPermute                rgdal
##              "0.8.7"                "1.4.3"             "2.1.5"              "1.2-5"
##              rgenoud                  rgeos                rgexf                rhdf5
##            "5.7-12.4"               "0.3-17"            "0.15.3"             "2.18.0"
##                RISmed                 rjson               RJSONIO                rlang
##              "2.1.7"                "0.2.15"             "1.3-0"              "0.2.0"
##            rmarkdown                    rms               rmsfact             rngtools
##                "1.9"                "5.1-0"             "0.0.3"              "1.2.4"
##           robustbase                   Rook             roxygen2                rpart
##             "0.92-7"                "1.1-1"             "6.0.1"             "4.1-13"
##           rpart.plot              rprojroot               rscopus                  rsm
##              "2.1.2"                "1.3-2"             "0.4.6"                "2.8"
##              RSQLite              rstudioapi                rvest              rworldmap
##              "2.1.1"                   "0.7"             "0.3.2"              "1.3-6"
##           rworldxtra                sandwich            satellite                scales
##                "1.01"                "2.4-0"             "0.2.0"              "0.5.0"
##         scatterplot3d                selectr                  sem             sendmailR
##             "0.3-38"                "0.3-1"             "3.1-8"              "1.2-1"
##              sfsmisc                  shiny           shinyresults                 slam
##              "1.1-2"                "1.0.5"            "0.12.1"             "0.1-40"
##                  sna                   snow            SnowballC           soiltexture
##                "2.4"                "0.4-2"             "0.5.1"              "1.4.1"
##           sourcetools              spacetime                 spam              sparsepp
##              "0.1.5"                "1.2-0"             "1.4-0"              "0.2.0"
##              spatstat          spatstat.data        spatstat.utils               spData
##              "1.55-1"                "1.2-0"             "1.8-0"             "0.2.8.3"
##                 spdep                   SPEI             splancs              SQUAREM
##             "0.6-11"                 "1.6"            "2.01-40"           "2017.10-1"
##        statnet.common              stringdist               stringi              stringr
##                "3.3.0"               "0.9.4.4"             "1.2.2"              "1.3.1"
##           strucchange              swfscMisc               tensor             testthat
##              "1.5-1"                   "1.2"              "1.5"              "2.0.0"
##              text2vec                TH.data               tibble                tidyr
##              "0.4.0"                "1.0-8"             "1.3.3"              "0.7.2"
##            tidyselect                   tiff             timeDate                  tm
##              "0.2.4"                "0.1-5"           "3012.100"             "0.7-1"
##           trafficlight                trefoil          trimcluster              tseries
##              "1.11.1"                 "0.01"             "0.1-2"            "0.10-38"
##                tweenr                txtplot             udunits2                units
##              "0.1.5"                "1.0-3"              "0.13"              "0.4-6"
##                  urca                 uroot                utf8            validation
##              "1.3-0"                "2.0-9"             "1.1.4"               "1.195"
##                   vcd                viridis           viridisLite            visNetwork
##              "1.4-3"                "0.3.4"             "0.3.0"              "1.0.3"
##                   WDI                webshot             weights              whisker
##                "2.5"                "0.4.0"              "0.85"              "0.3-2"
##                withr                    XML                 xml2               xtable
##              "2.1.2"              "3.98-1.5"             "1.1.1"              "1.8-2"
##                  xts                   yaml                  zip             zlibbioc
##              "0.9-7"               "2.1.19"             "1.0.0"             "1.20.0"
```

```
##                 zoo              abind             acepack          assertthat
##               "1.8-1"             "1.4-5"             "1.4.1"               "0.1"
##            backports                base          base64enc           bdsmatrix
##               "1.0.5"             "3.3.2"             "0.1-3"             "1.3-2"
##                  BH                 bit              bitops                boot
##            "1.62.0-1"             "1.1-12"             "1.0-6"             "1.3-18"
##                 car              caTools              cffdrs           checkmate
##               "2.1-4"             "1.17.1"             "1.7.5"             "1.8.2"
##                chron                class              cluster           codetools
##              "2.3-50"             "7.3-14"             "2.0.6"             "0.2-15"
##           colorspace             compiler               crayon          data.table
##               "1.3-2"             "3.3.2"             "1.3.2"             "1.10.4"
##              datasets            dichromat               digest                doMPI
##               "3.3.2"             "2.0-0"            "0.6.12"             "0.2.1"
##            doParallel             evaluate            fastmatch             foreach
##               "1.0.10"              "0.10"             "1.1-0"             "1.4.3"
##              foreign             Formula              fwi.fbp             gdtools
##               "0.8-67"             "1.2-1"               "1.7"             "0.1.4"
##         ggplot2movies            graphics          grDevices                grid
##               "0.0.1"             "3.3.2"             "3.3.2"             "3.3.2"
##             gridExtra              gtable               gtools              hexbin
##               "2.2.1"             "0.2.0"             "3.5.0"            "1.27.1"
##                 highr           htmlTable            htmltools          htmlwidgets
##                 "0.6"               "1.9"             "0.3.5"               "0.8"
##             iterators            jsonlite           KernSmooth               knitr
##               "1.0.8"               "1.3"            "2.23-15"            "1.15.1"
##              labeling              lattice         latticeExtra             lazyeval
##                 "0.3"            "0.20-35"             "0.6-28"             "0.2.0"
##                  lme4             magrittr              mapproj                maps
##              "1.1-12"               "1.5"             "1.2-4"             "3.1.1"
##              maptools             markdown                MASS              Matrix
##               "0.9-2"             "0.7.7"            "7.3-45"             "1.2-8"
##          MatrixModels              methods                 mgcv                mime
##               "0.4-1"             "3.3.2"            "1.8-17"               "0.5"
##                 minqa             mlbench                mmap         ModelMetrics
##               "1.2.4"             "2.1-1"            "0.6-12"             "1.1.0"
##              multcomp             munsell              mvtnorm               ncdf4
##               "1.4-6"             "0.4.3"             "1.0-6"              "1.15"
##                  nlme              nloptr                nnet            parallel
##              "3.1-131"             "1.0.4"            "7.3-12"             "3.3.2"
##              pbkrtest                plyr               praise            quantreg
##               "0.4-7"             "1.8.4"             "1.0.0"              "5.29"
##                    R6              raster         RColorBrewer                Rcpp
##               "2.2.0"             "2.5-8"             "1.1-2"            "0.12.10"
##             RcppEigen            reshape2                 rex           rmarkdown
##           "0.3.2.9.1"             "1.4.2"             "1.1.1"               "1.4"
##                  Rmpi               rpart            rprojroot            sandwich
##               "0.6-6"            "4.1-10"                "1.2"             "2.3-4"
##                scales                  sp              SparseM             spatial
##               "0.4.1"             "1.2-4"              "1.76"            "7.3-11"
##         spatial.tools             splines               stats              stats4
##               "1.4.8"             "3.3.2"             "3.3.2"             "3.3.2"
##               stringi             stringr            survival             svglite
##               "1.1.3"             "1.2.0"            "2.41-2"             "1.2.0"
##                 tcltk            testthat             TH.data              tibble
##               "3.3.2"             "1.0.2"             "1.0-8"             "1.3.0"
##                 tools               utils               withr                yaml
##               "3.3.2"             "3.3.2"             "1.0.2"            "2.1.14"
##                   zoo
##              "1.7-14"
```

model_run

68 Runtime information

```
## calibration          :  0h 12m 11s
## magpie.gms           :  0h 57m 55s
```