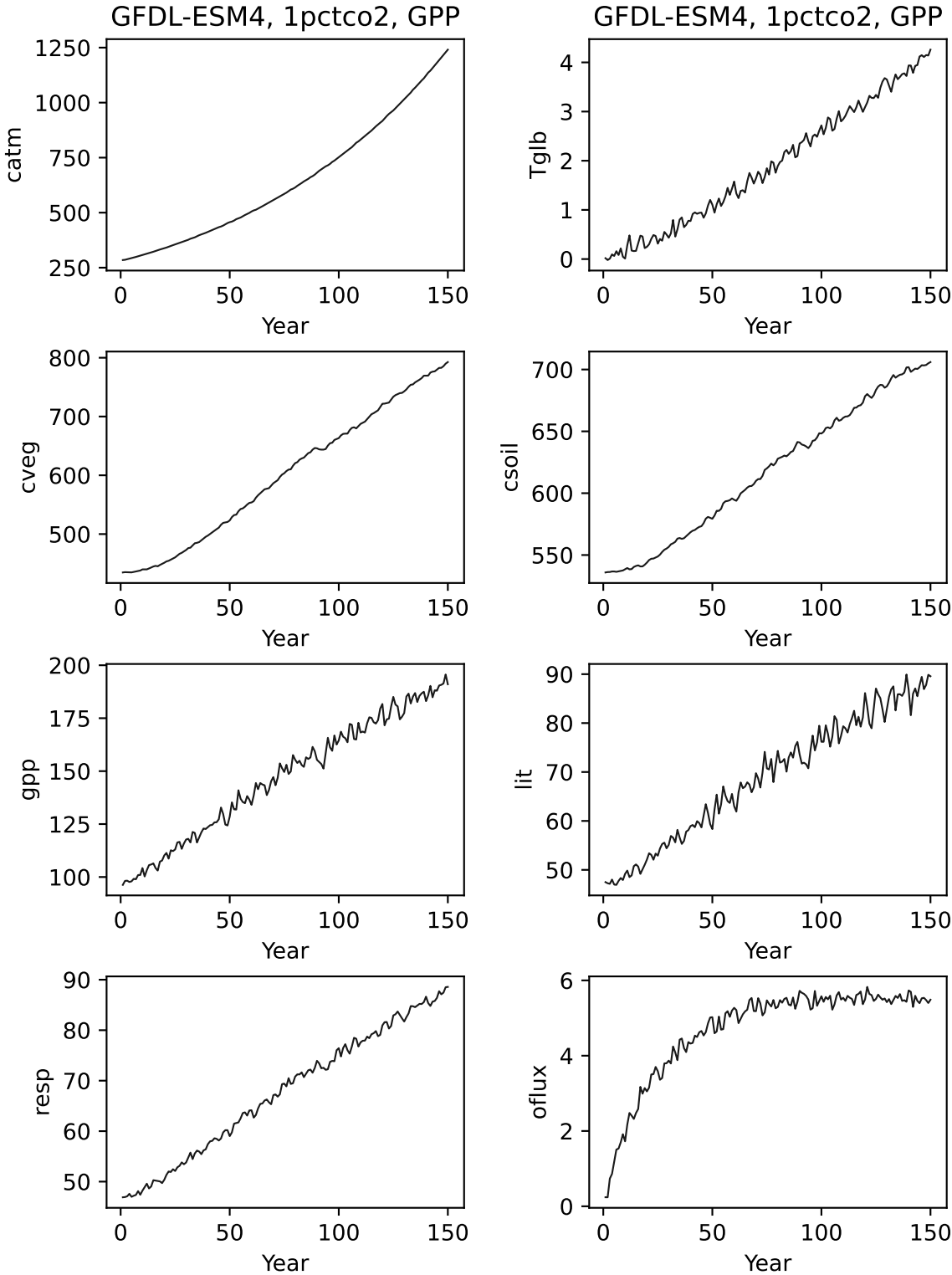
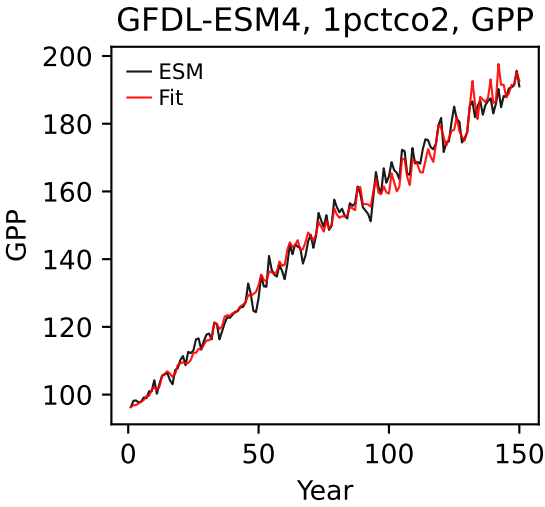
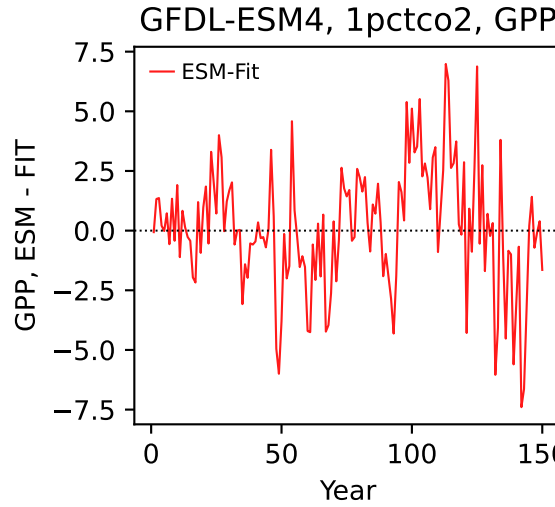
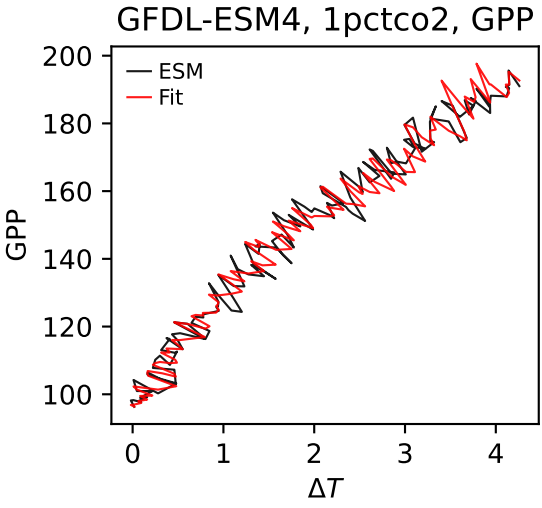
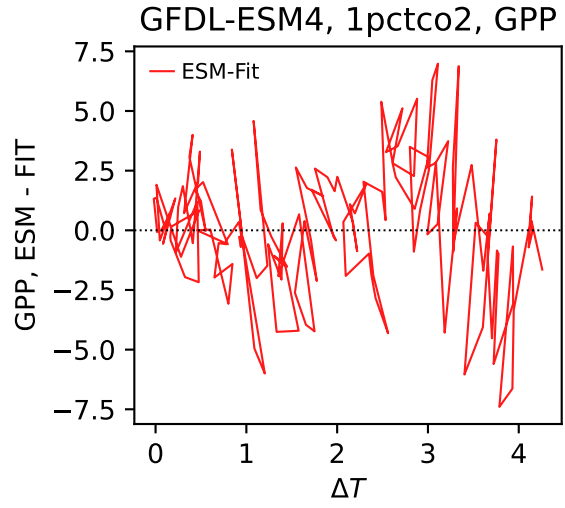
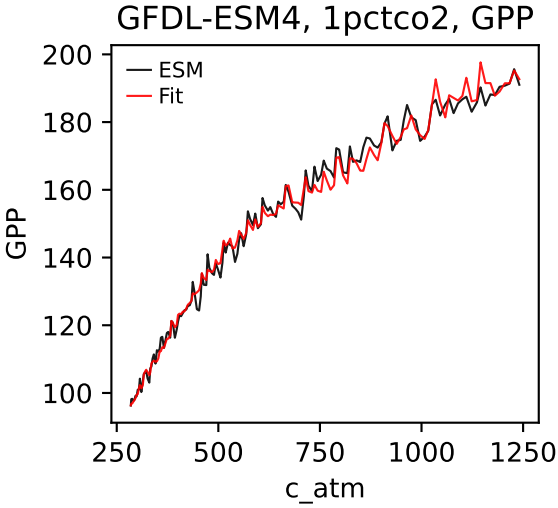

GFDL-ESM4, 1pctco2, GPP
GFDL-ESM4, 1pctco2, GPP
catm
Tglb
cveg
csoil
gpp
lit
resp
oflux
Year

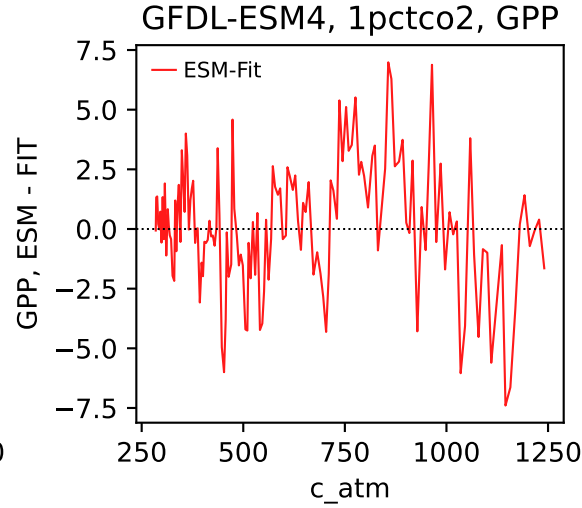

GFDL-ESM4, 1pctco2, GPP
ESM
Fit
GPP
Year

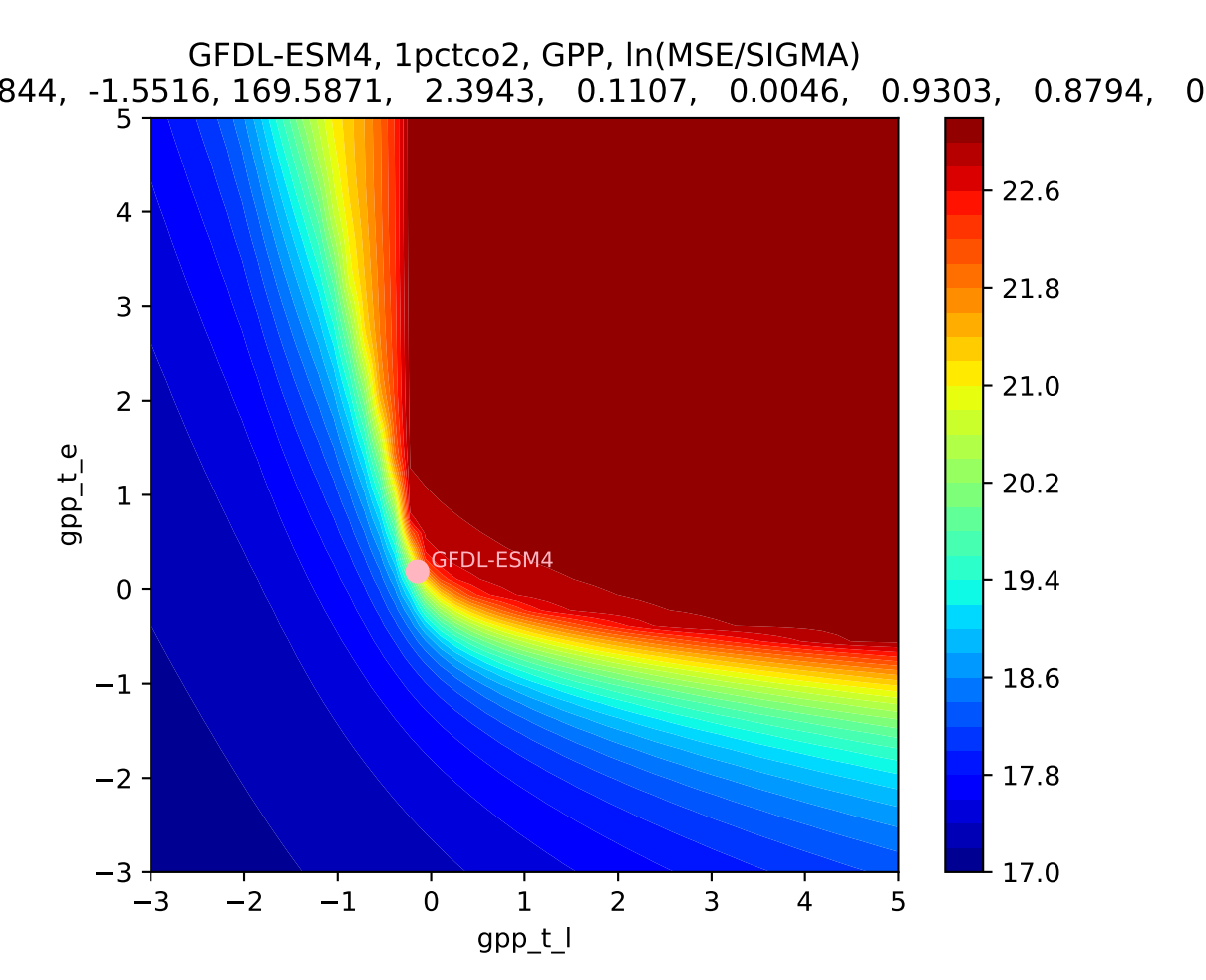

GFDL-ESM4, 1pctco2, GPP
ESM-Fit
GPP, ESM - FIT
Year

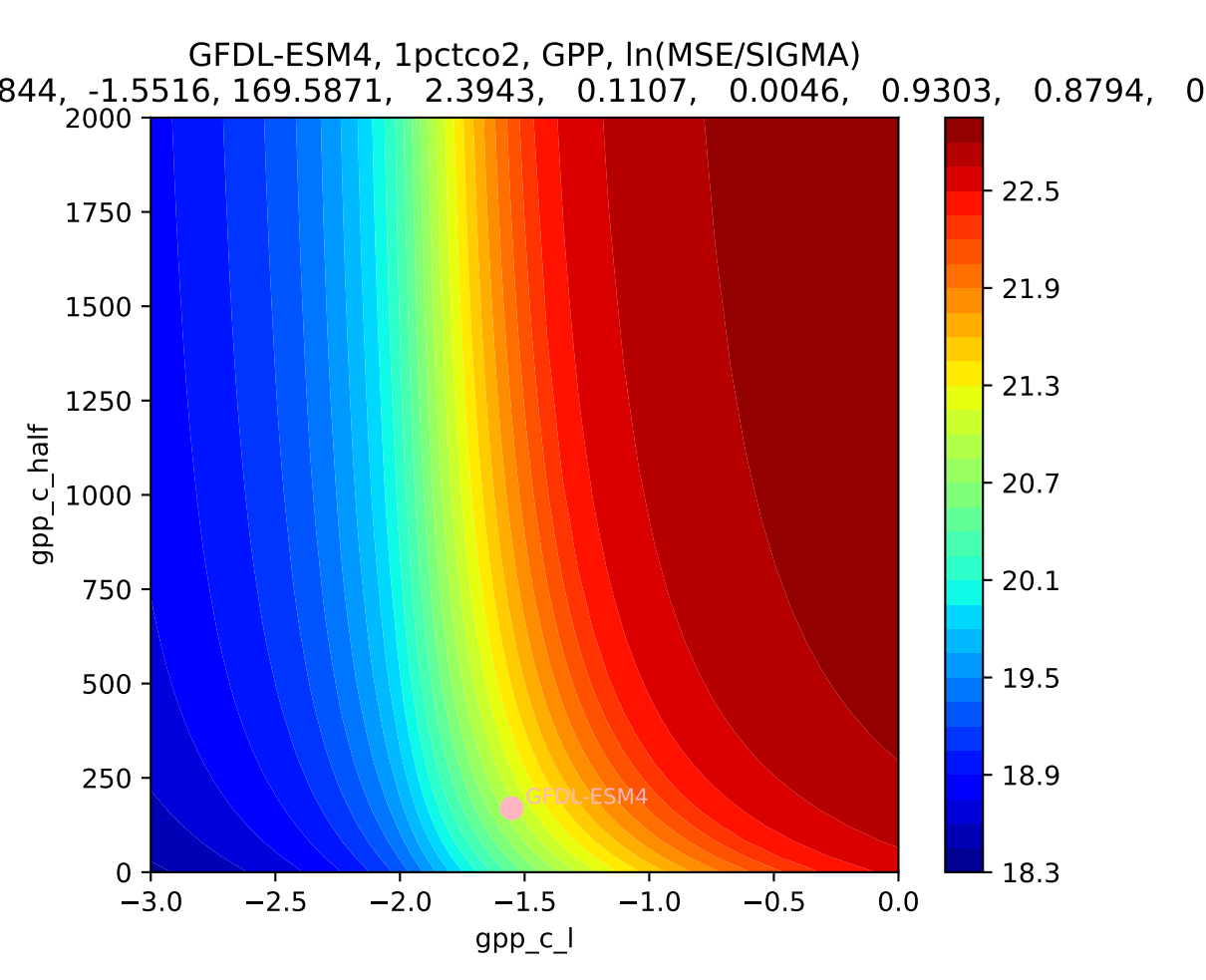

GFDL-ESM4, 1pctco2, GPP
ESM
Fit
GPP
ΔT

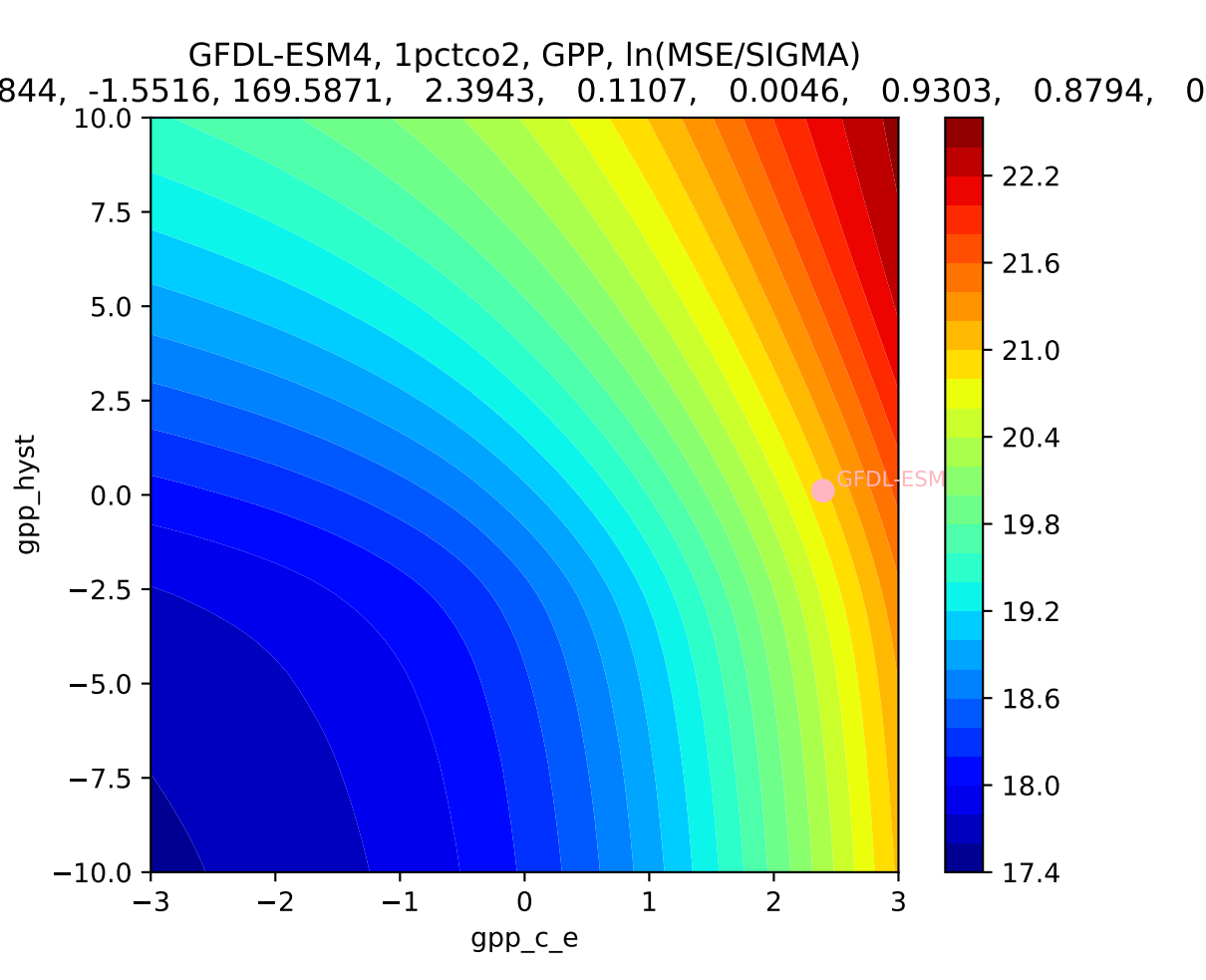

GFDL-ESM4, 1pctco2, GPP
ESM-Fit
GPP, ESM - FIT
ΔT

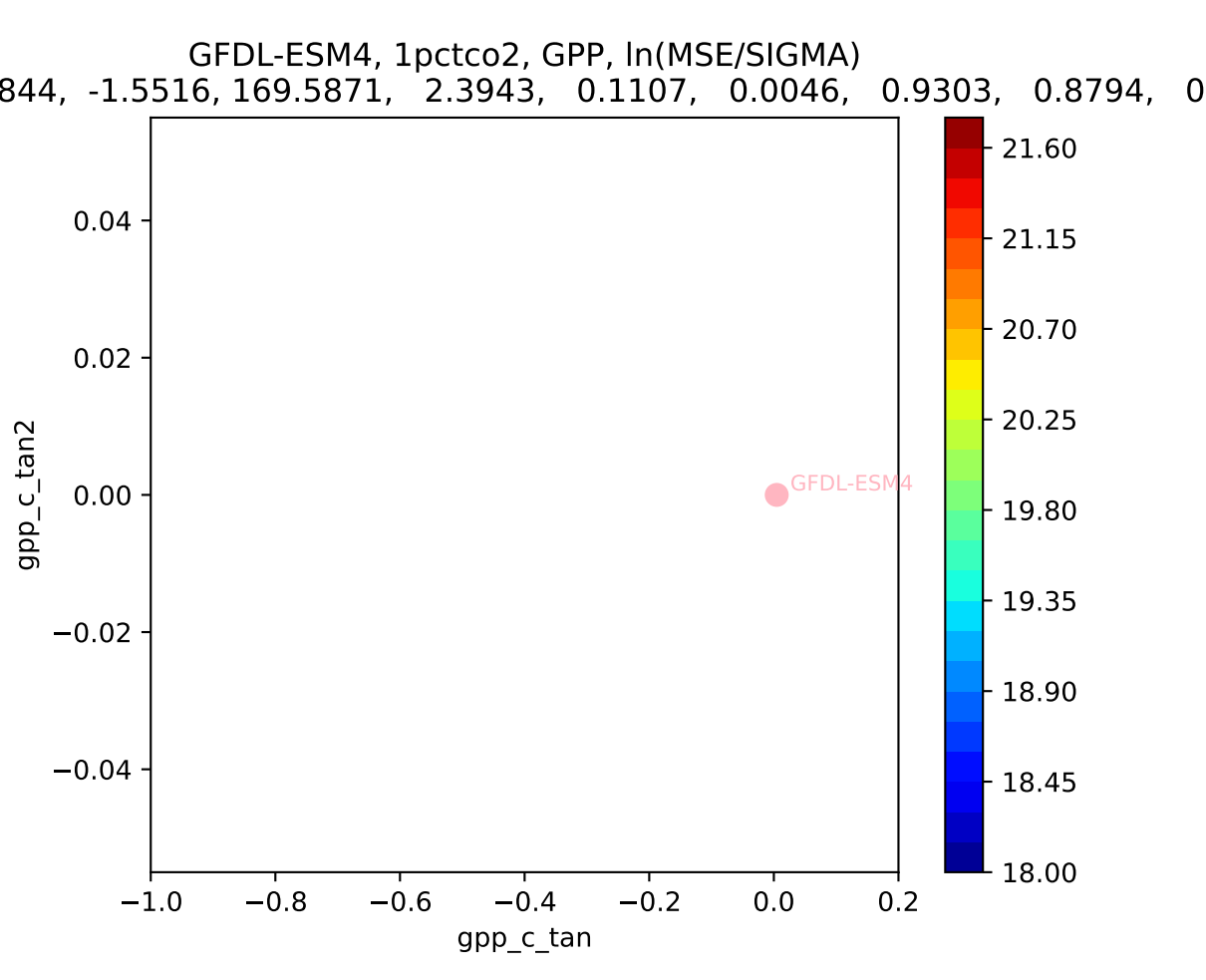

GFDL-ESM4, 1pctco2, GPP
ESM
Fit
GPP
c_atm

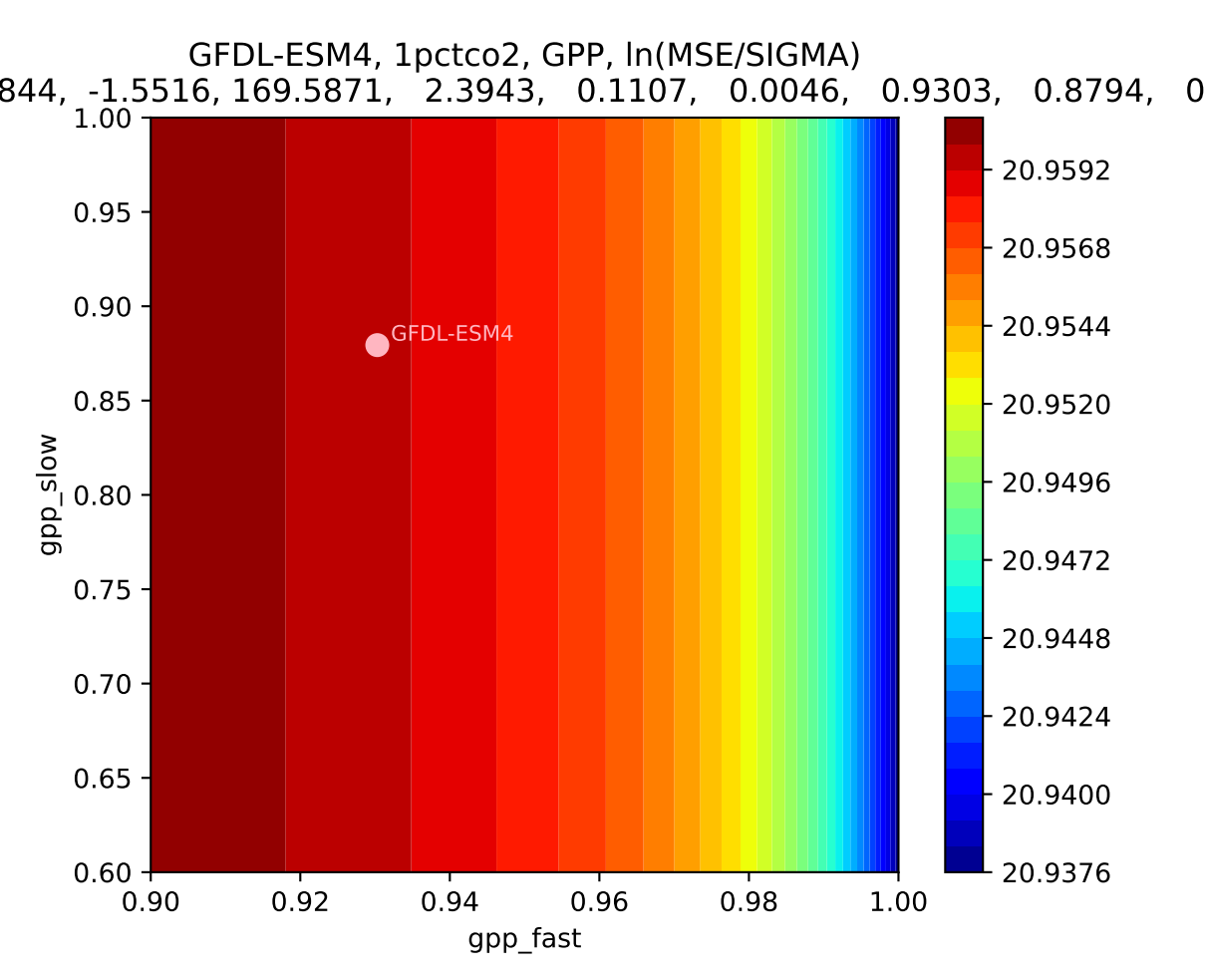

GFDL-ESM4, 1pctco2, GPP
ESM-Fit
GPP, ESM - FIT
c_atm

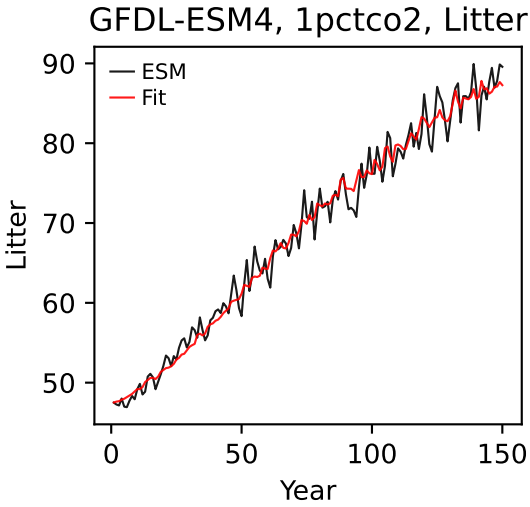

GFDL-ESM4, 1pctco2, GPP, ln(MSE/SIGMA)
844, -1.5516, 169.5871, 2.3943, 0.1107, 0.0046, 0.9303, 0.8794, 0
GFDL-ESM4
gpp_t_e
gpp_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
22.6
21.8
21.0
20.2
19.4
18.6
17.8
17.0

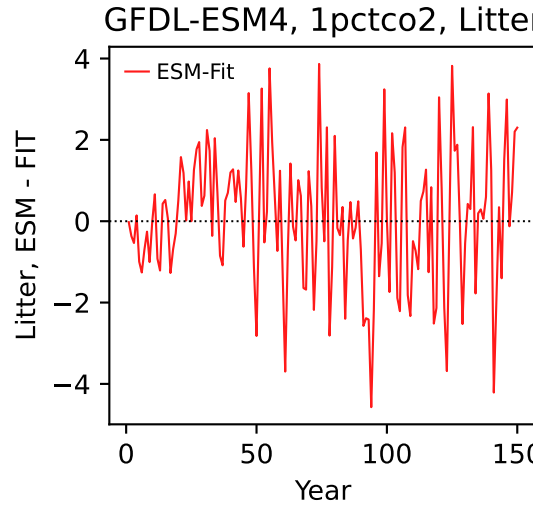

GFDL-ESM4, 1pctco2, GPP, ln(MSE/SIGMA)
844, -1.5516, 169.5871, 2.3943, 0.1107, 0.0046, 0.9303, 0.8794, 0
2000
1750
1500
1250
1000
750
500
250
0
gpp_c_half
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
gpp_c_l
GFDL-ESM4
22.5
21.9
21.3
20.7
20.1
19.5
18.9
18.3

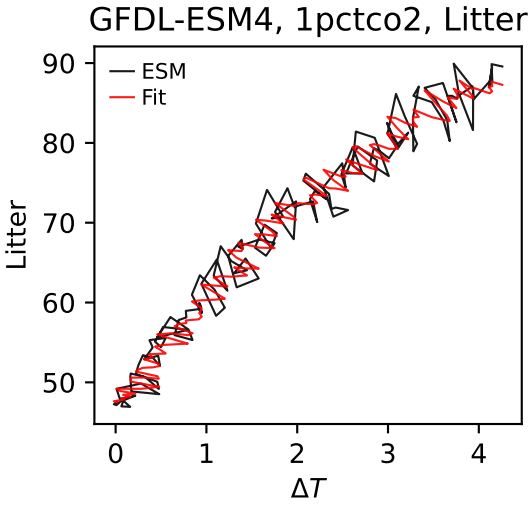

GFDL-ESM4, 1pctco2, GPP, ln(MSE/SIGMA)
844, -1.5516, 169.5871, 2.3943, 0.1107, 0.0046, 0.9303, 0.8794, 0
gpp_hyst
gpp_c_e
GFDL-ESM
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
22.2
21.6
21.0
20.4
19.8
19.2
18.6
18.0
17.4

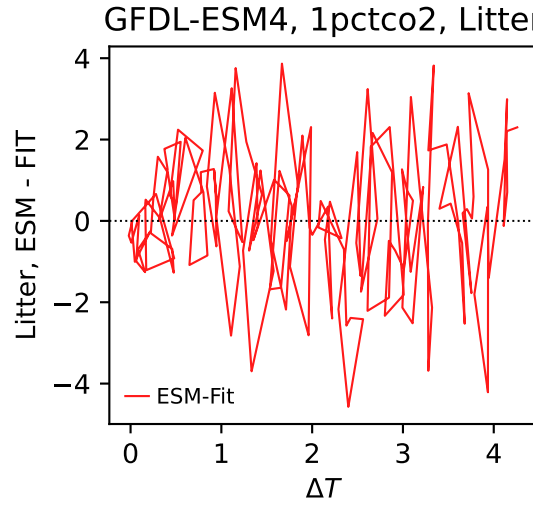

GFDL-ESM4, 1pctco2, GPP, ln(MSE/SIGMA)
844, -1.5516, 169.5871, 2.3943, 0.1107, 0.0046, 0.9303, 0.8794, 0
GFDL-ESM4
0.04
0.02
0.00
−0.02
−0.04
gpp_c_tan2
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
gpp_c_tan
21.60
21.15
20.70
20.25
19.80
19.35
18.90
18.45
18.00

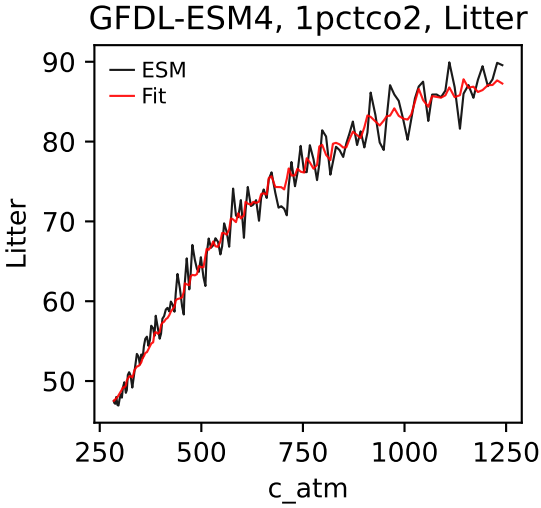

GFDL-ESM4, 1pctco2, GPP, ln(MSE/SIGMA)
844, -1.5516, 169.5871, 2.3943, 0.1107, 0.0046, 0.9303, 0.8794, 0
GFDL-ESM4
gpp_slow
gpp_fast
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.90
0.92
0.94
0.96
0.98
1.00
20.9592
20.9568
20.9544
20.9520
20.9496
20.9472
20.9448
20.9424
20.9400
20.9376

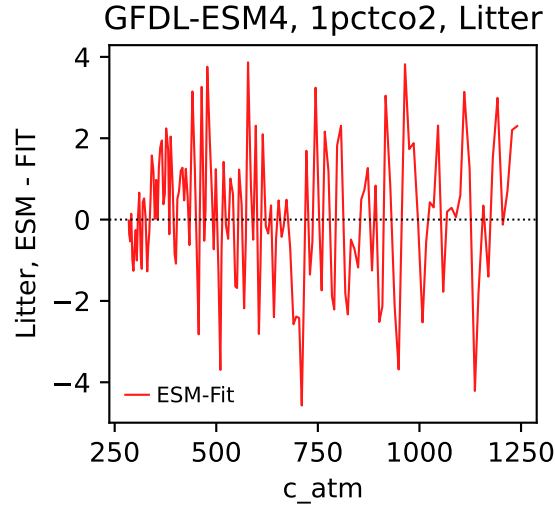

GFDL-ESM4, 1pctco2, Litter
ESM
Fit
Litter
Year

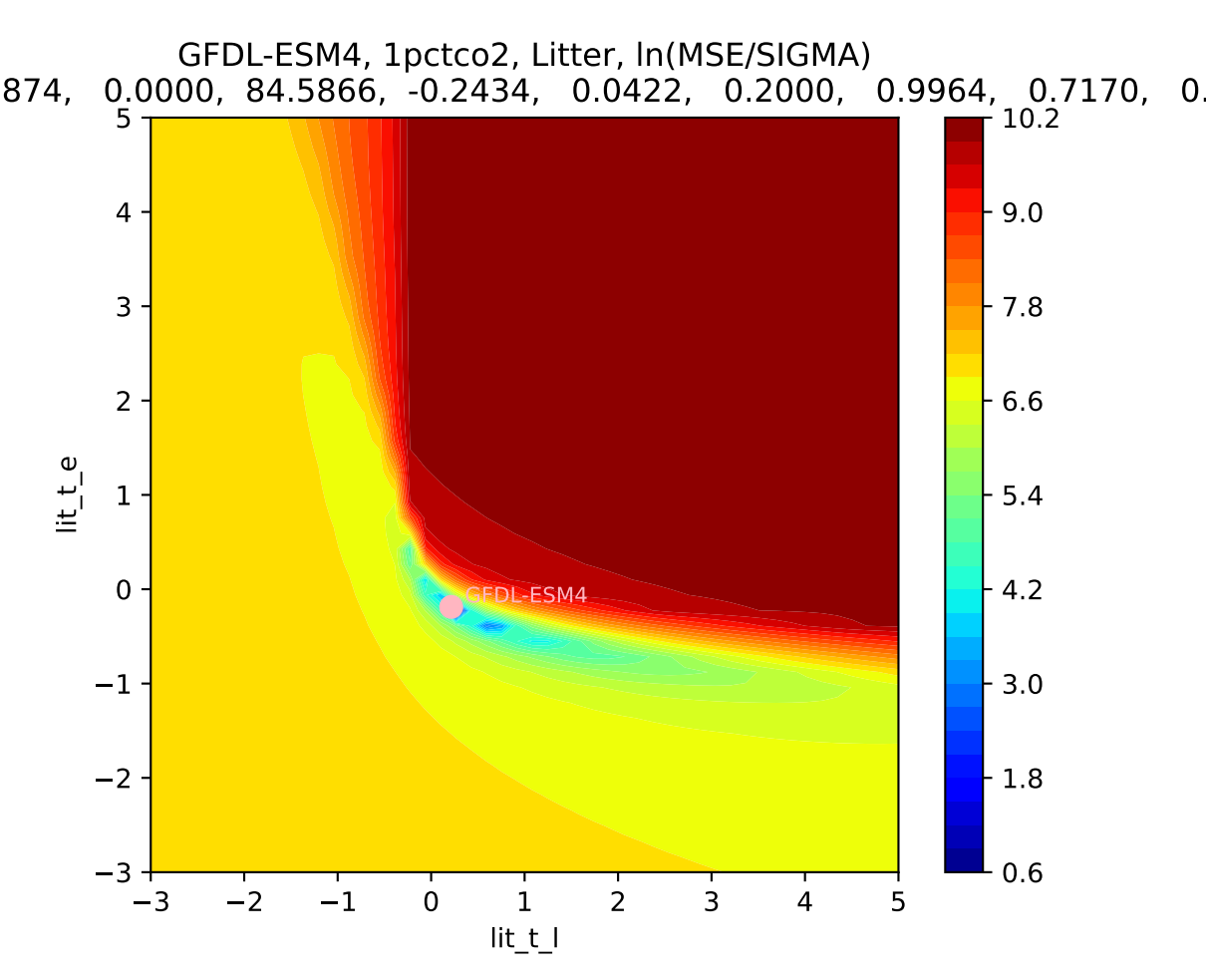

GFDL-ESM4, 1pctco2, Litter
ESM-Fit
Litter, ESM - FIT
Year

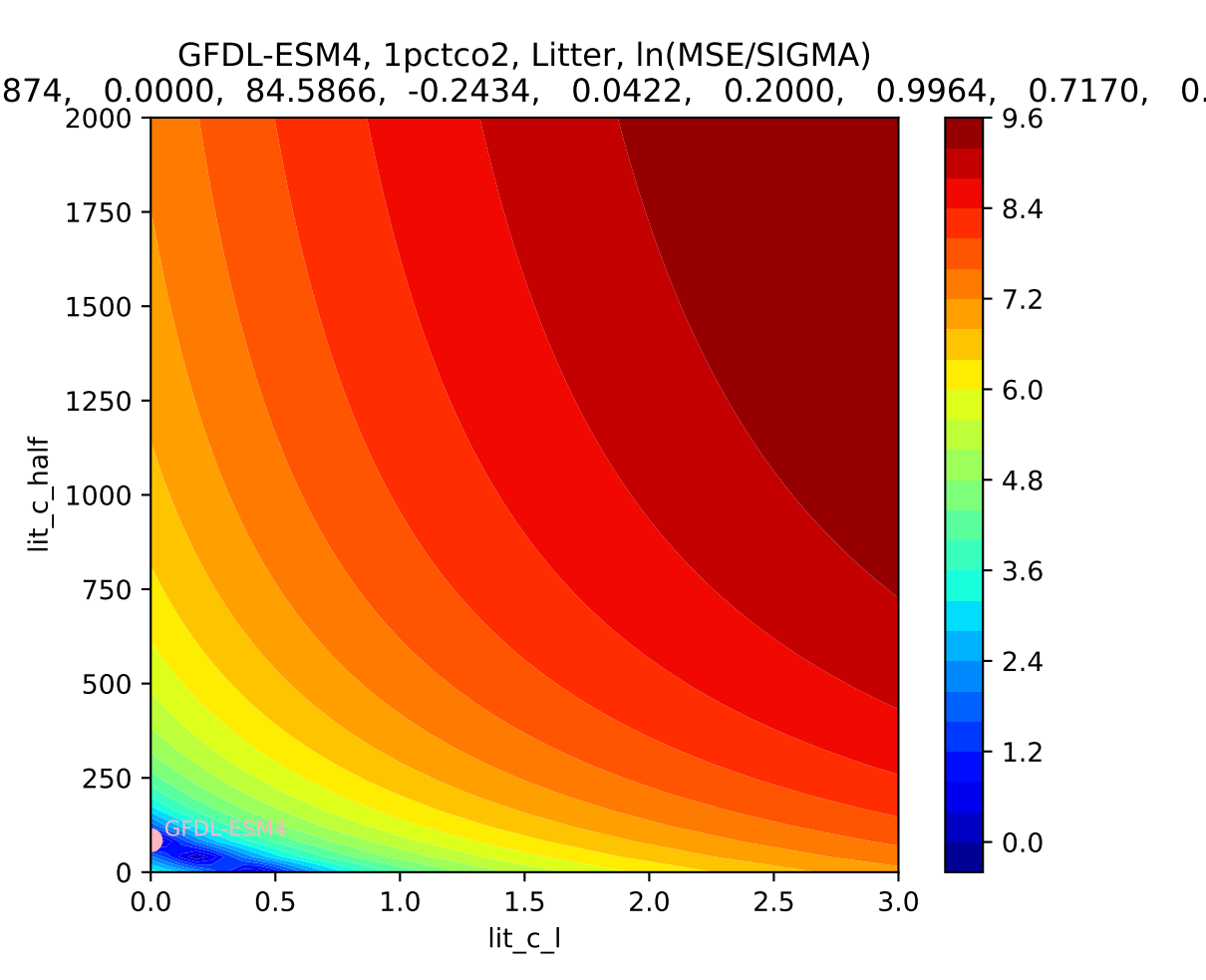

GFDL-ESM4, 1pctco2, Litter
ESM
Fit
Litter
ΔT

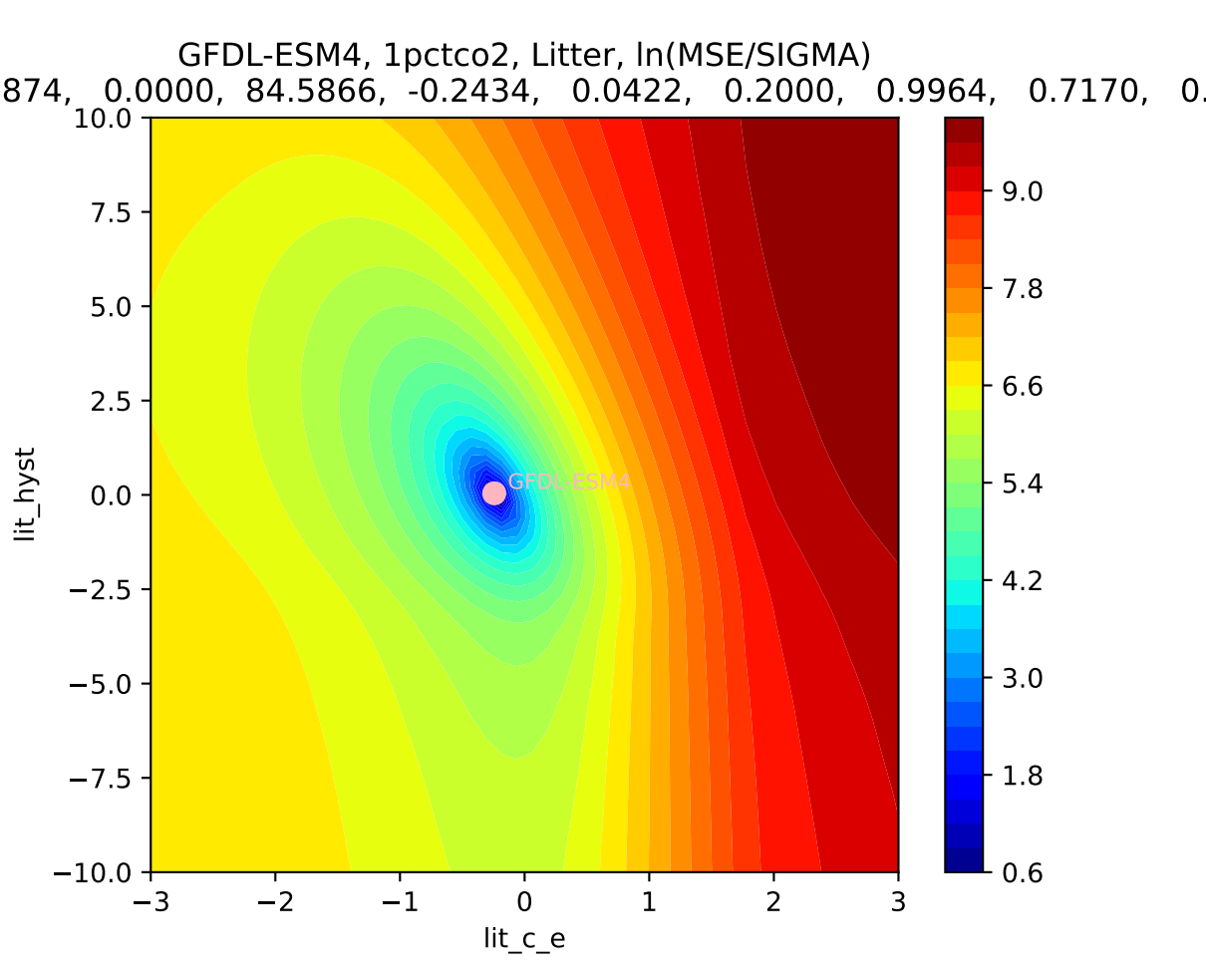

GFDL-ESM4, 1pctco2, Litter
ESM-Fit
Litter, ESM - FIT
ΔT

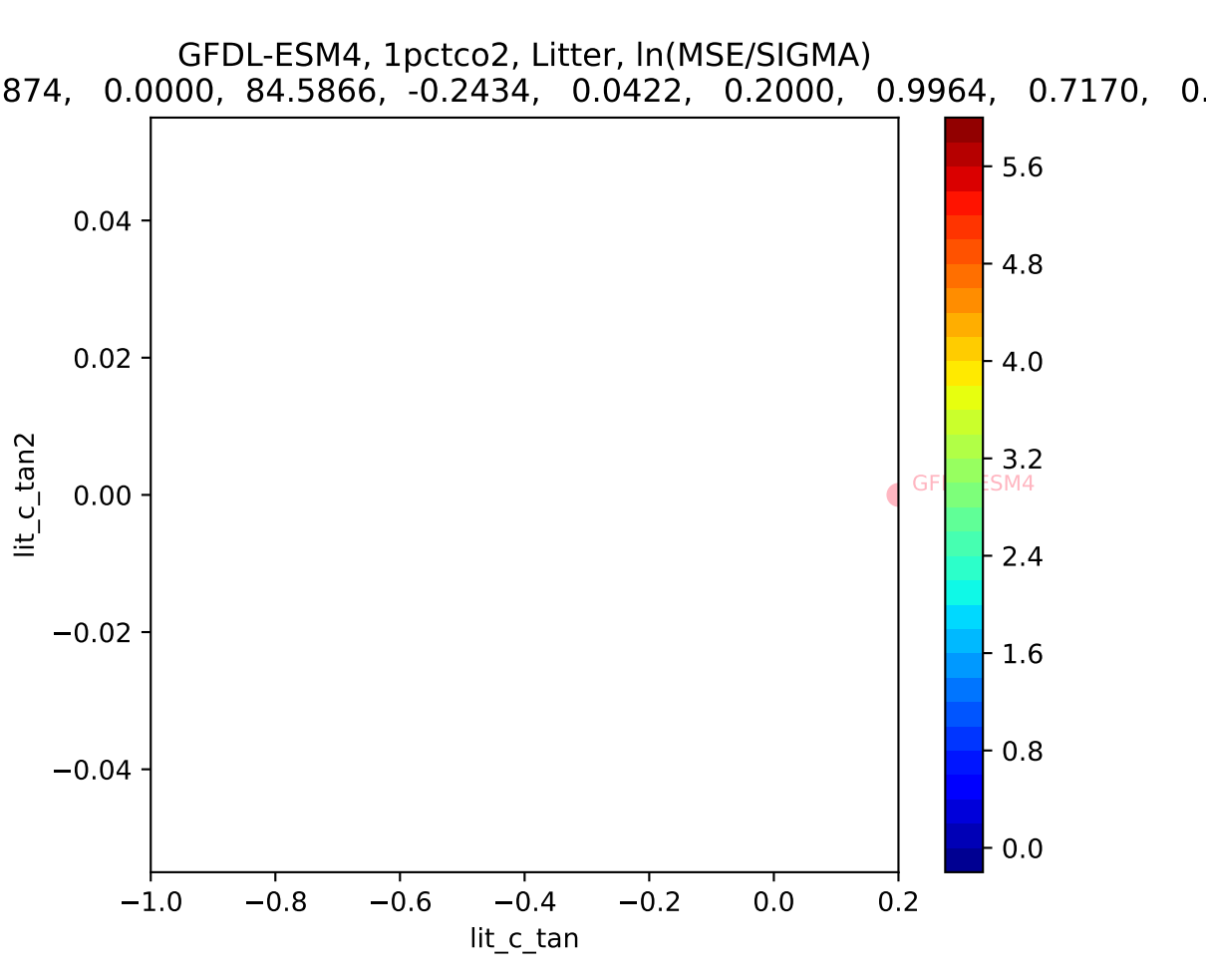

GFDL-ESM4, 1pctco2, Litter
ESM
Fit
Litter
c_atm

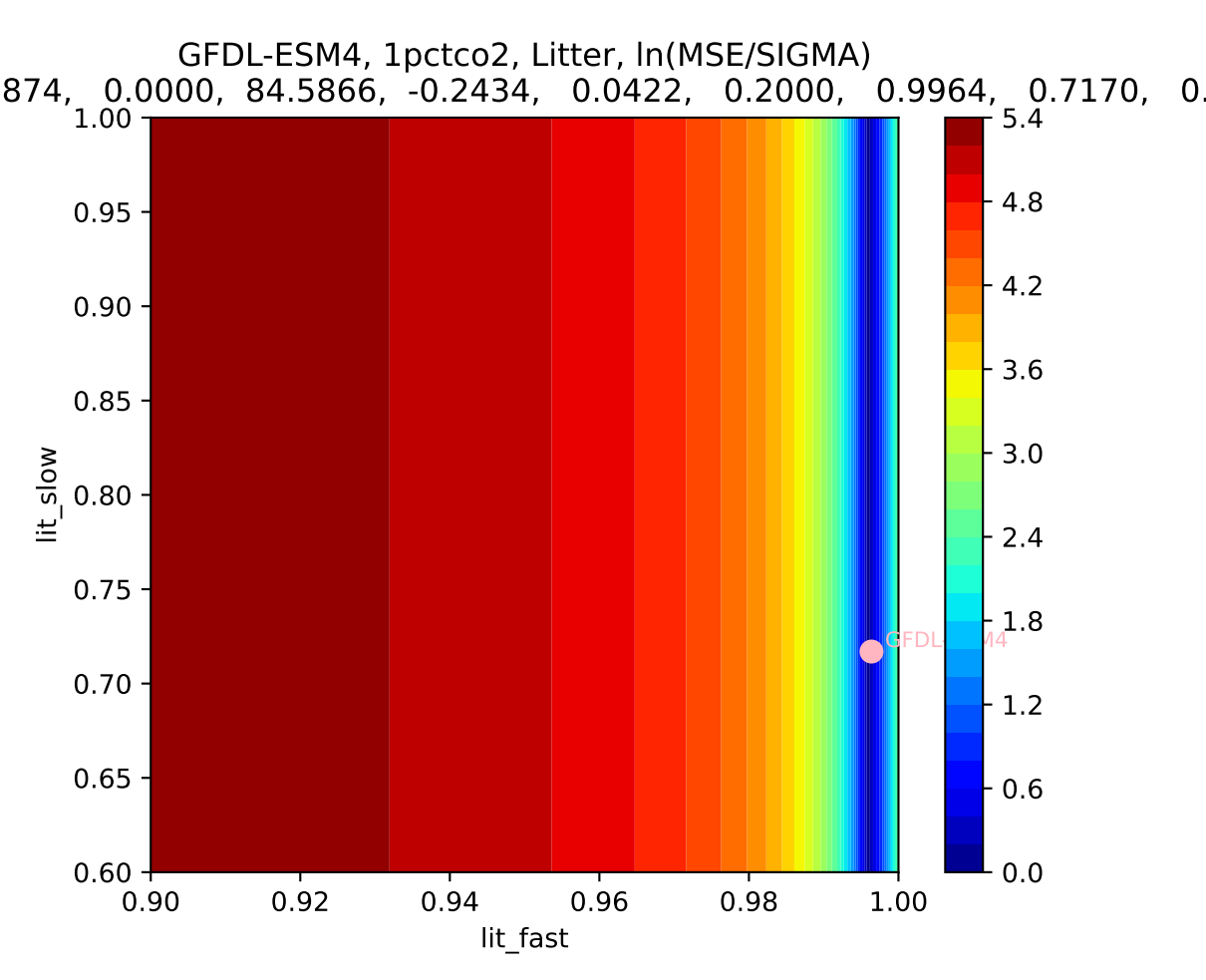

GFDL-ESM4, 1pctco2, Litter
ESM-Fit
Litter, ESM - FIT
c_atm

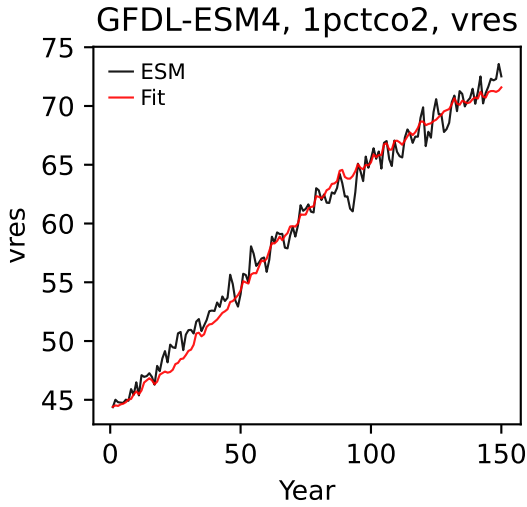

GFDL-ESM4, 1pctco2, Litter, ln(MSE/SIGMA)
874, 0.0000, 84.5866, -0.2434, 0.0422, 0.2000, 0.9964, 0.7170, 0.
GFDL-ESM4
lit_t_e
lit_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
10.2
9.0
7.8
6.6
5.4
4.2
3.0
1.8
0.6

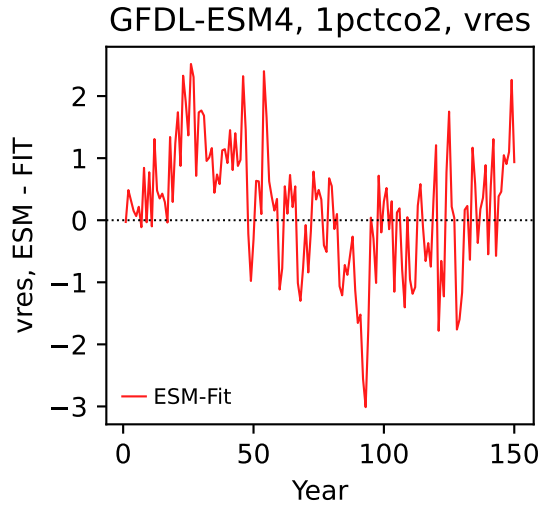

GFDL-ESM4, 1pctco2, Litter, ln(MSE/SIGMA)
874, 0.0000, 84.5866, -0.2434, 0.0422, 0.2000, 0.9964, 0.7170, 0.
lit_c_half
lit_c_l
GFDL-ESM4
0
250
500
750
1000
1250
1500
1750
2000
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0.0
1.2
2.4
3.6
4.8
6.0
7.2
8.4
9.6

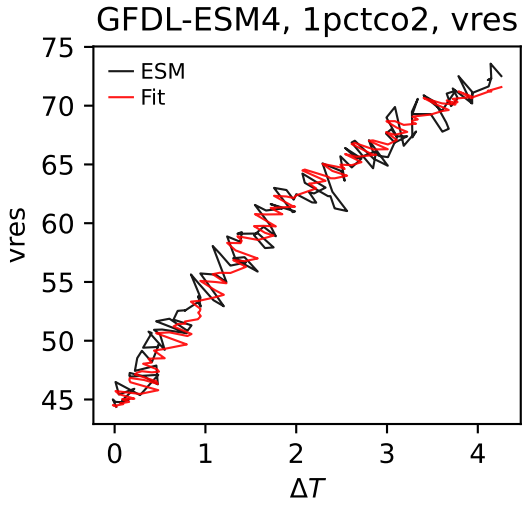

GFDL-ESM4, 1pctco2, Litter, ln(MSE/SIGMA)
874, 0.0000, 84.5866, -0.2434, 0.0422, 0.2000, 0.9964, 0.7170, 0.
GFDL-ESM4
lit_hyst
lit_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
9.0
7.8
6.6
5.4
4.2
3.0
1.8
0.6

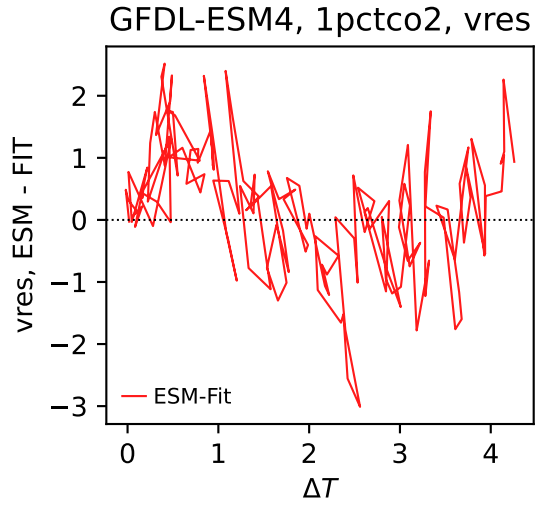

GFDL-ESM4, 1pctco2, Litter, ln(MSE/SIGMA)
874, 0.0000, 84.5866, -0.2434, 0.0422, 0.2000, 0.9964, 0.7170, 0.
lit_c_tan2
lit_c_tan
0.04
0.02
0.00
−0.02
−0.04
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
5.6
4.8
4.0
3.2
2.4
1.6
0.8
0.0

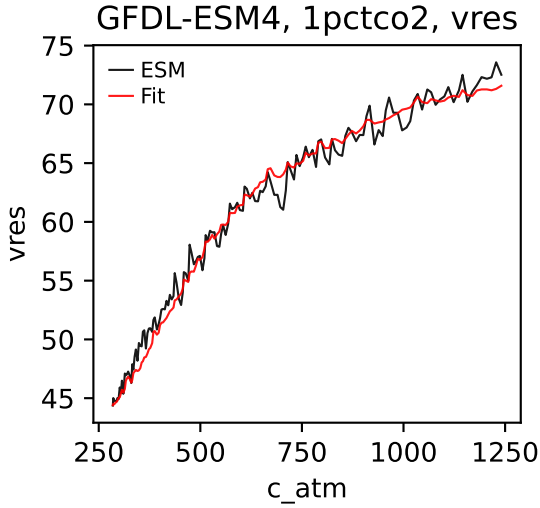

GFDL-ESM4, 1pctco2, Litter, ln(MSE/SIGMA)
874, 0.0000, 84.5866, -0.2434, 0.0422, 0.2000, 0.9964, 0.7170, 0.
lit_slow
lit_fast
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.90
0.92
0.94
0.96
0.98
1.00
5.4
4.8
4.2
3.6
3.0
2.4
1.8
1.2
0.6
0.0
GFDL

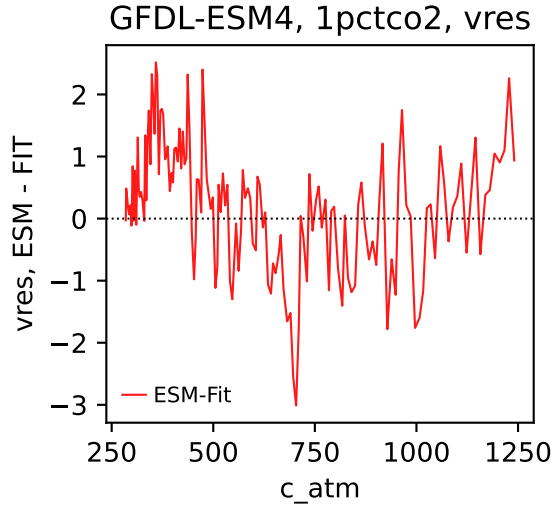

GFDL-ESM4, 1pctco2, vres
ESM
Fit
vres
Year

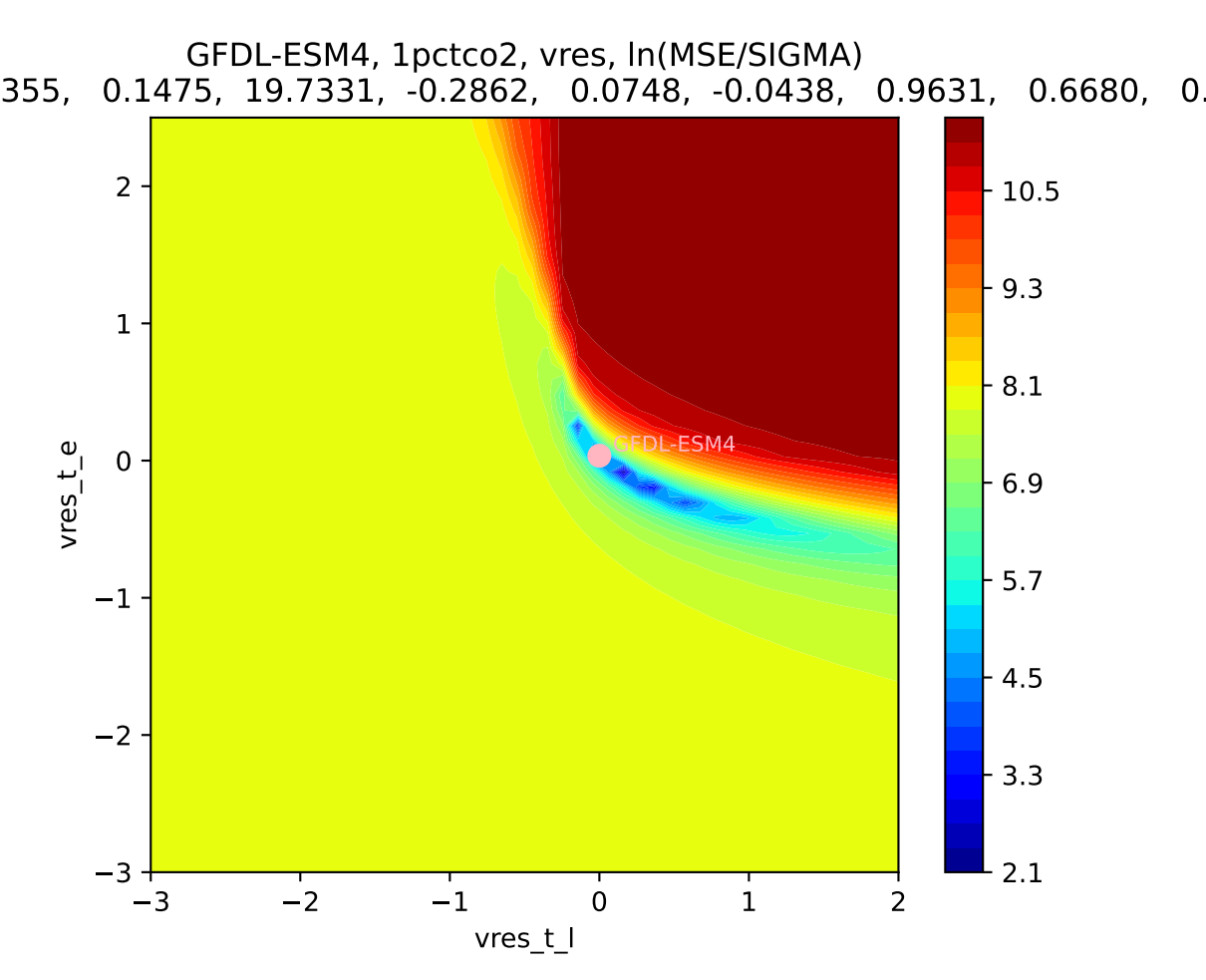

GFDL-ESM4, 1pctco2, vres
vres, ESM - FIT
ESM-Fit
Year

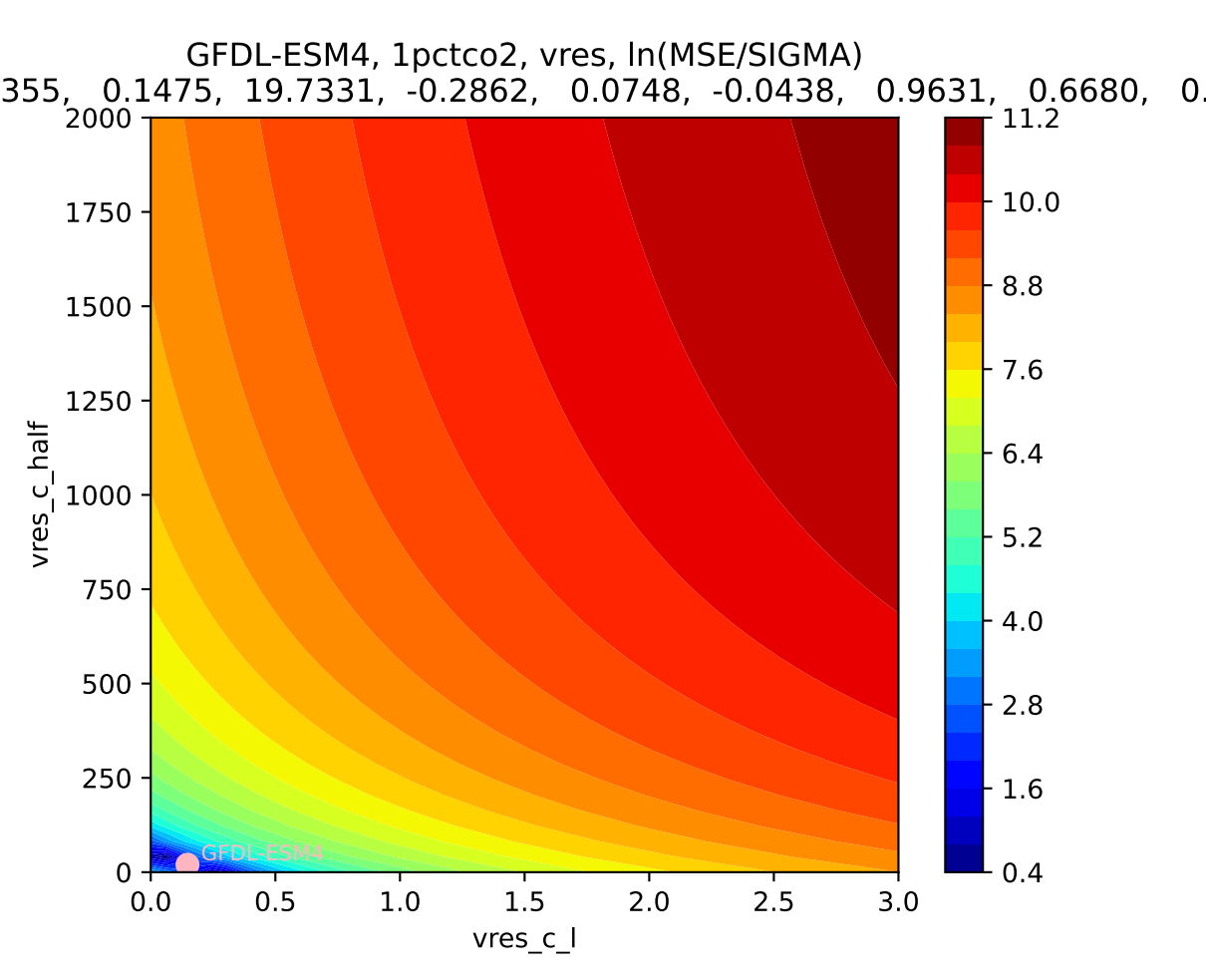

GFDL-ESM4, 1pctco2, vres
ESM
Fit
vres
ΔT

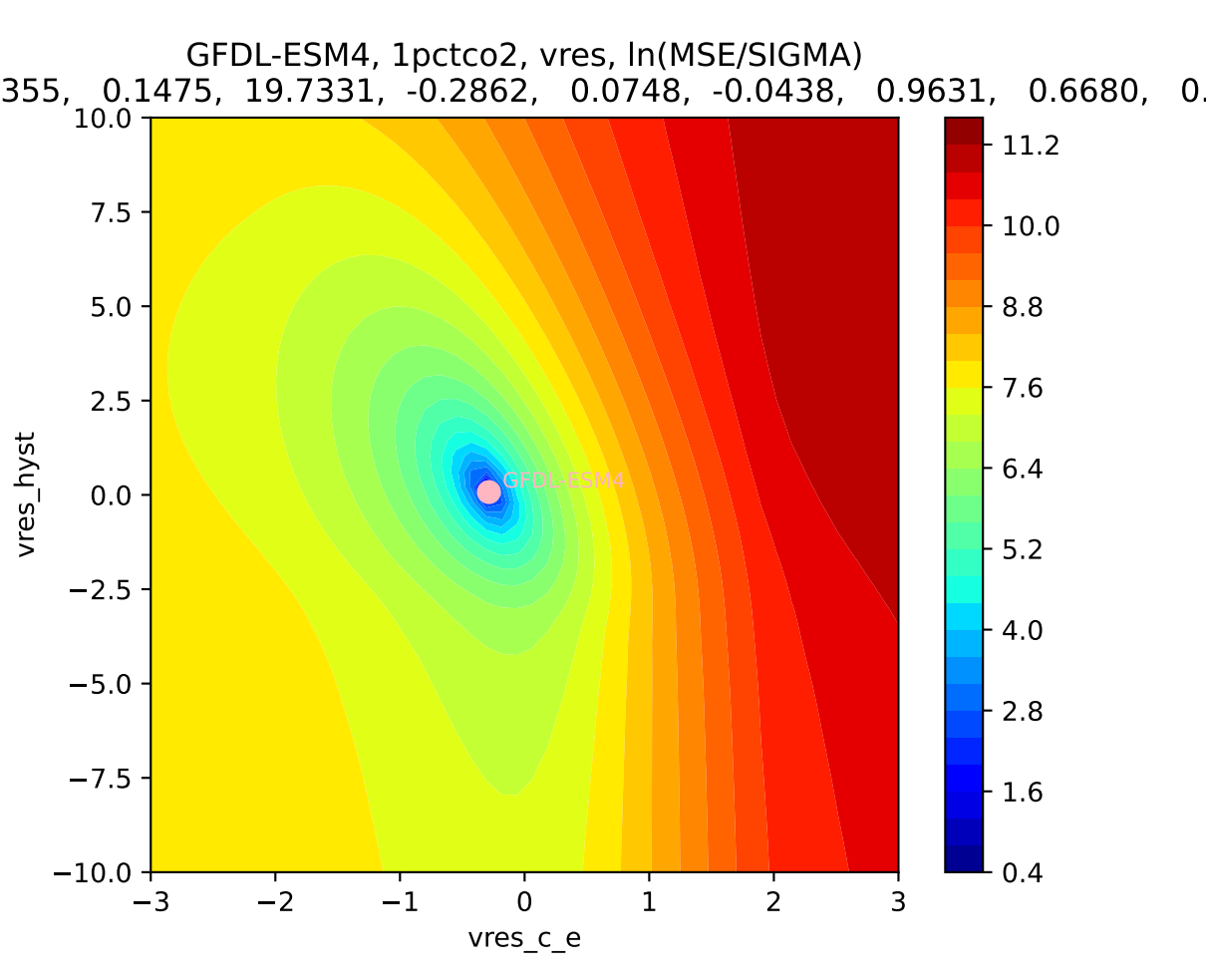

GFDL-ESM4, 1pctco2, vres
vres, ESM - FIT
ESM-Fit
ΔT

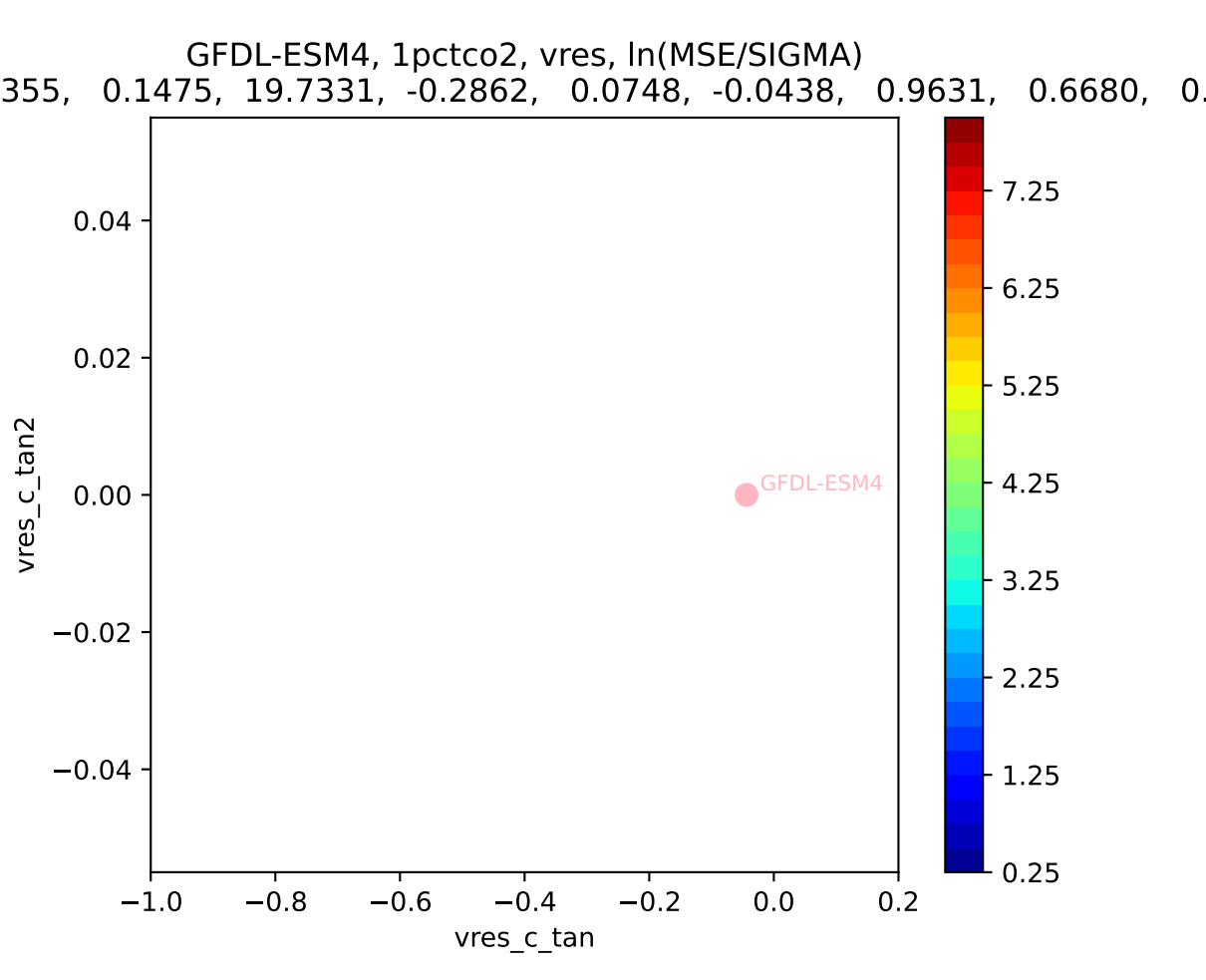

GFDL-ESM4, 1pctco2, vres
ESM
Fit
vres
c_atm

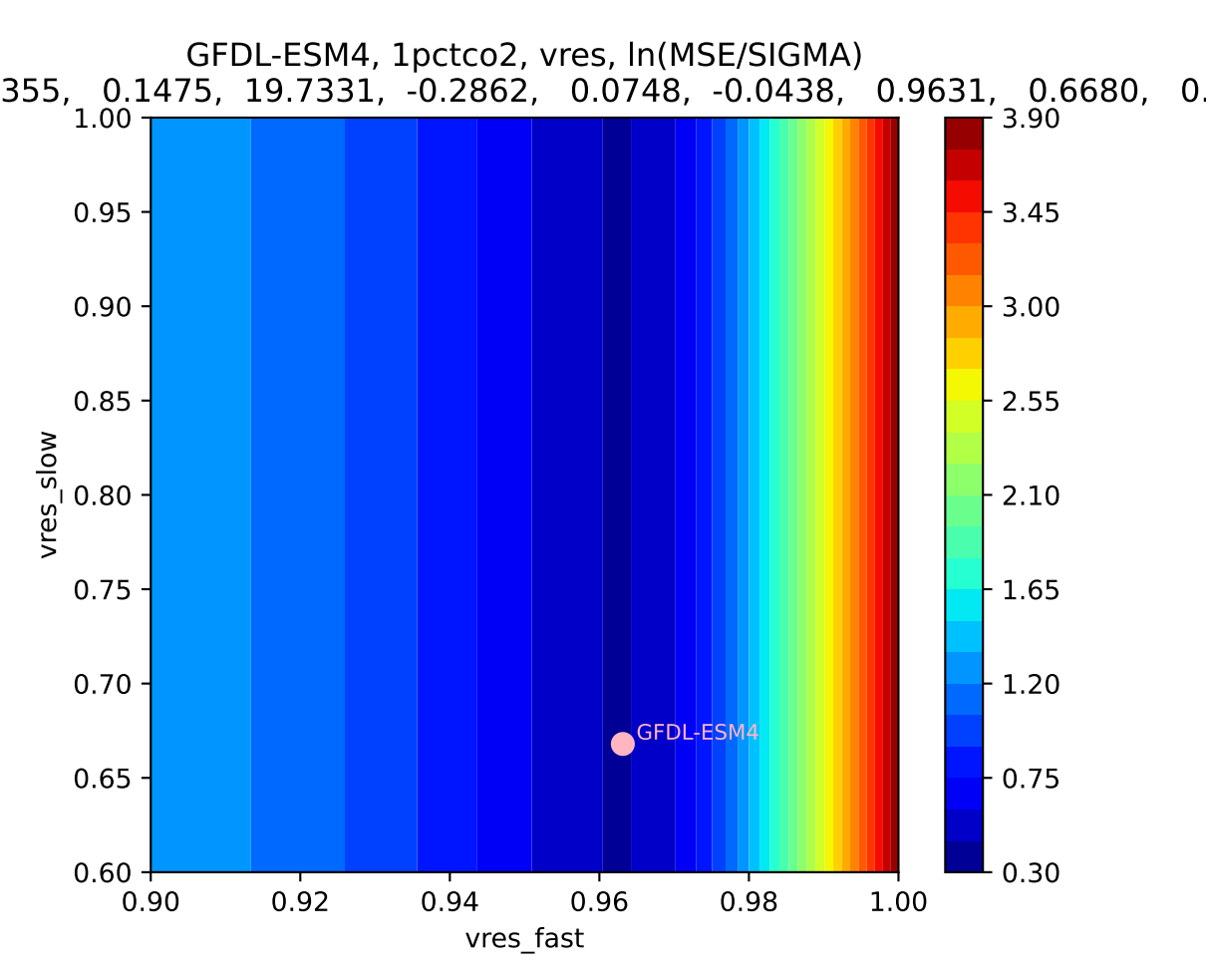

GFDL-ESM4, 1pctco2, vres
vres, ESM - FIT
ESM-Fit
c_atm

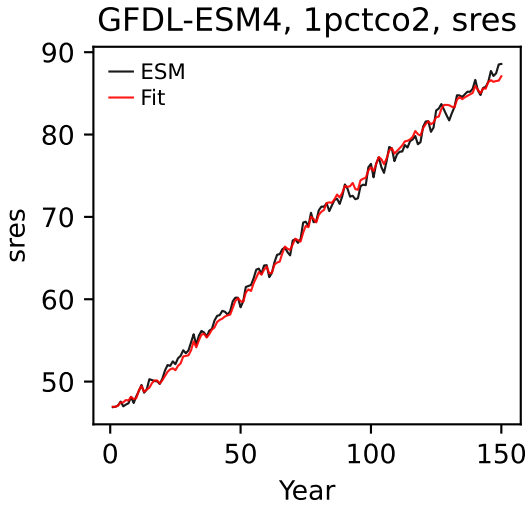

GFDL-ESM4, 1pctco2, vres, ln(MSE/SIGMA)
355, 0.1475, 19.7331, -0.2862, 0.0748, -0.0438, 0.9631, 0.6680, 0.
GFDL-ESM4
vres_t_e
vres_t_l
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
10.5
9.3
8.1
6.9
5.7
4.5
3.3
2.1

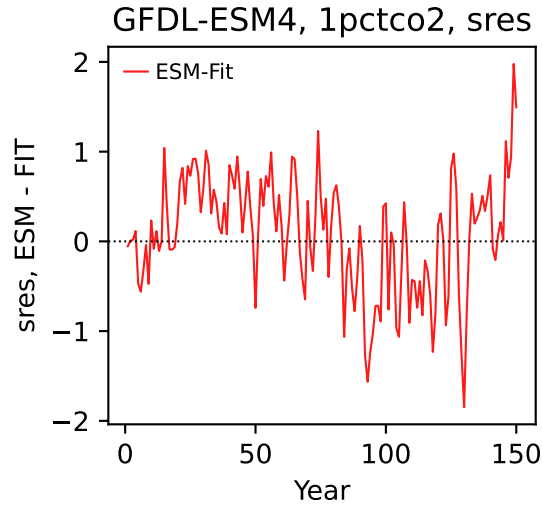

GFDL-ESM4, 1pctco2, vres, ln(MSE/SIGMA)
355, 0.1475, 19.7331, -0.2862, 0.0748, -0.0438, 0.9631, 0.6680, 0.
vres_c_half
vres_c_l
GFDL-ESM4
2000
1750
1500
1250
1000
750
500
250
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
11.2
10.0
8.8
7.6
6.4
5.2
4.0
2.8
1.6
0.4

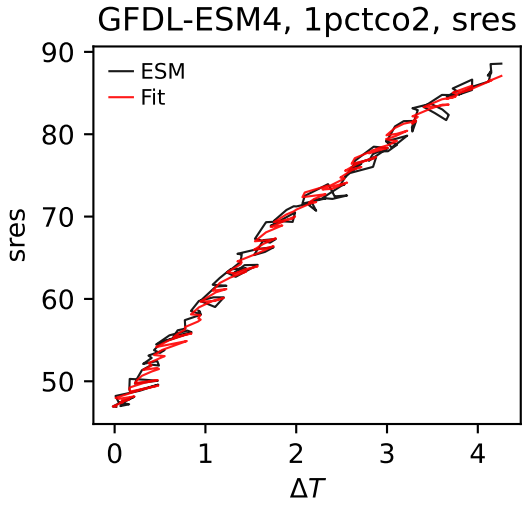

GFDL-ESM4, 1pctco2, vres, ln(MSE/SIGMA)
355, 0.1475, 19.7331, -0.2862, 0.0748, -0.0438, 0.9631, 0.6680, 0.
GFDL-ESM4
vres_hyst
vres_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
11.2
10.0
8.8
7.6
6.4
5.2
4.0
2.8
1.6
0.4

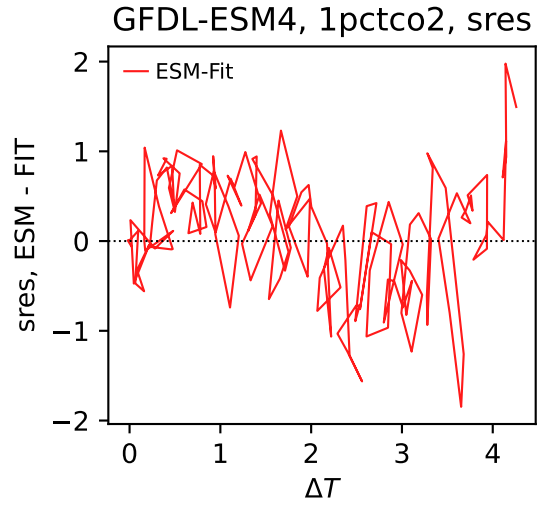

GFDL-ESM4, 1pctco2, vres, ln(MSE/SIGMA)
355, 0.1475, 19.7331, -0.2862, 0.0748, -0.0438, 0.9631, 0.6680, 0.
GFDL-ESM4
0.04
0.02
0.00
−0.02
−0.04
vres_c_tan2
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
vres_c_tan
7.25
6.25
5.25
4.25
3.25
2.25
1.25
0.25

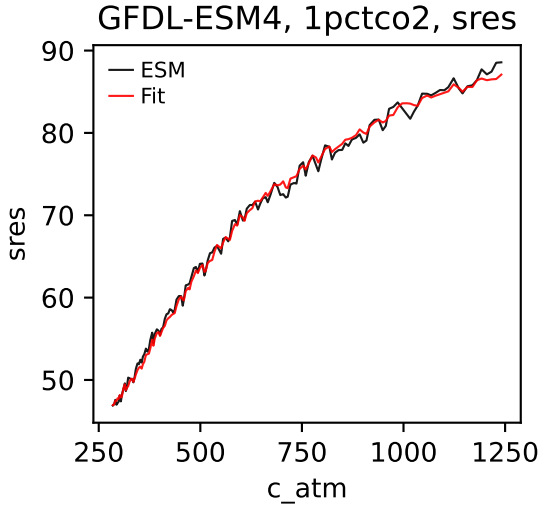

GFDL-ESM4, 1pctco2, vres, ln(MSE/SIGMA)
355, 0.1475, 19.7331, -0.2862, 0.0748, -0.0438, 0.9631, 0.6680, 0.
vres_slow
vres_fast
GFDL-ESM4
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.90
0.92
0.94
0.96
0.98
1.00
3.90
3.45
3.00
2.55
2.10
1.65
1.20
0.75
0.30

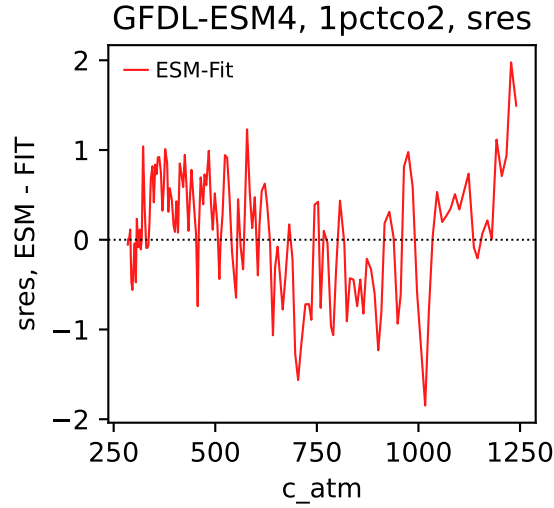

GFDL-ESM4, 1pctco2, sres
ESM
Fit
sres
Year

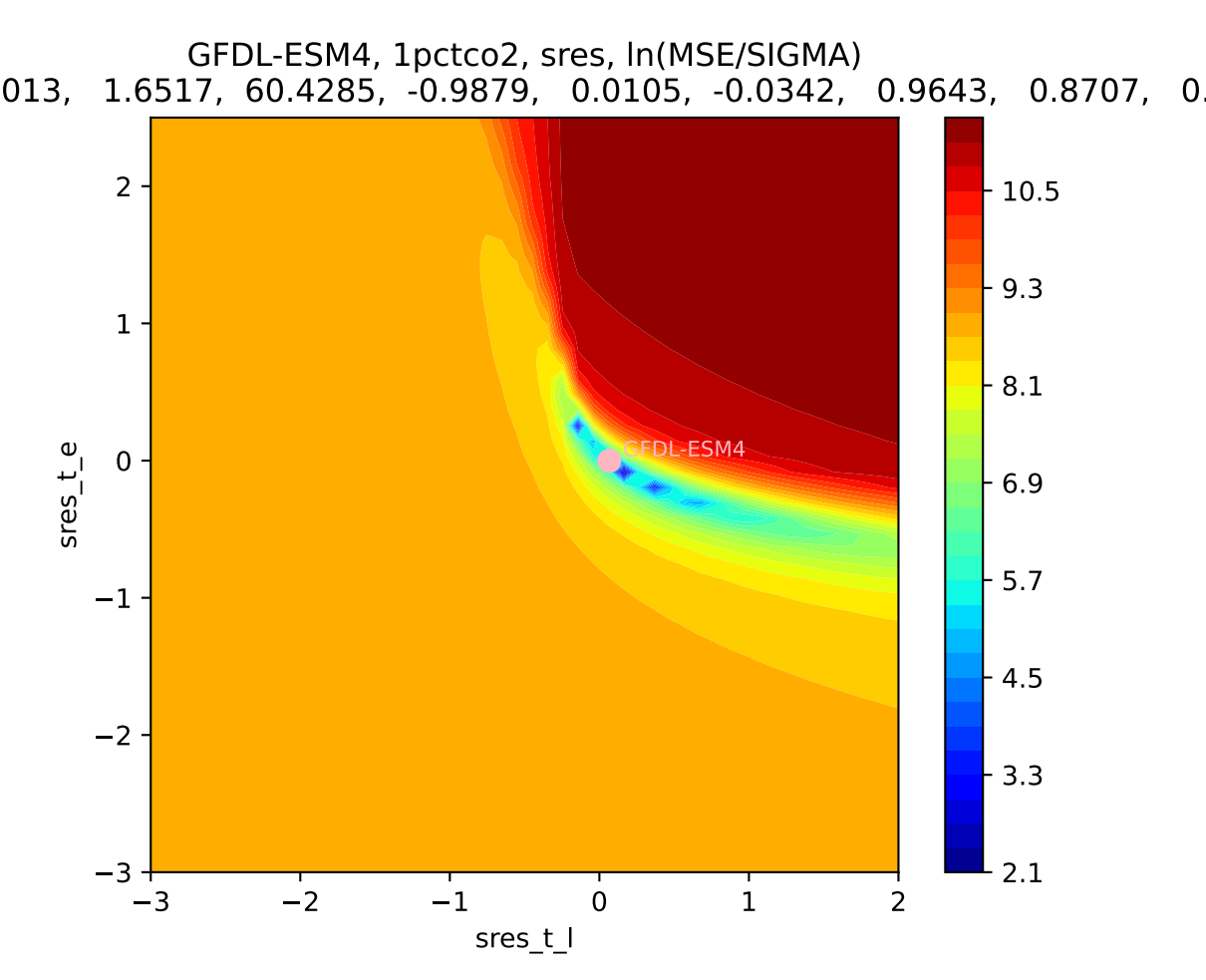

GFDL-ESM4, 1pctco2, sres
ESM-Fit
sres, ESM - FIT
Year

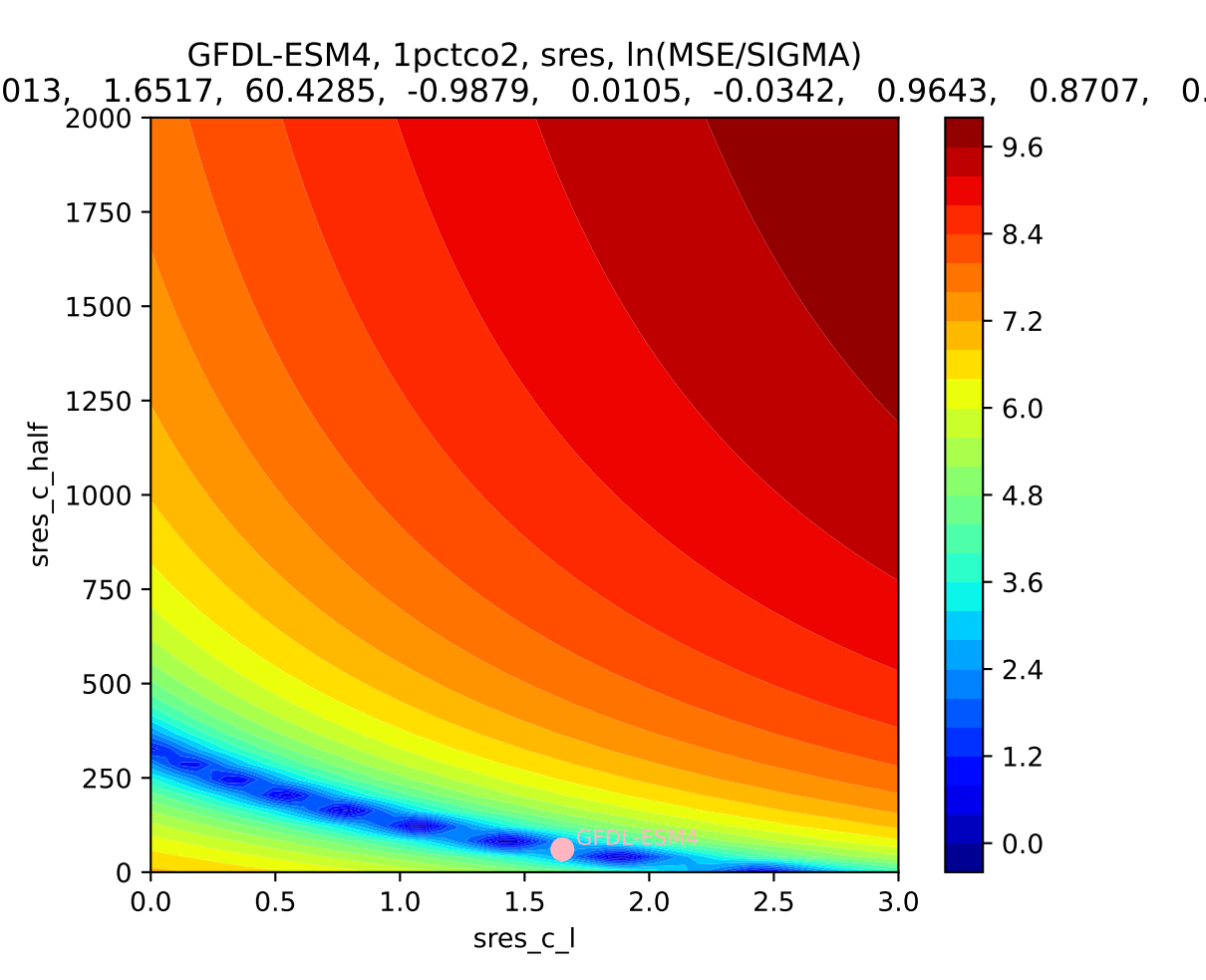

GFDL-ESM4, 1pctco2, sres
ESM
Fit
sres
ΔT

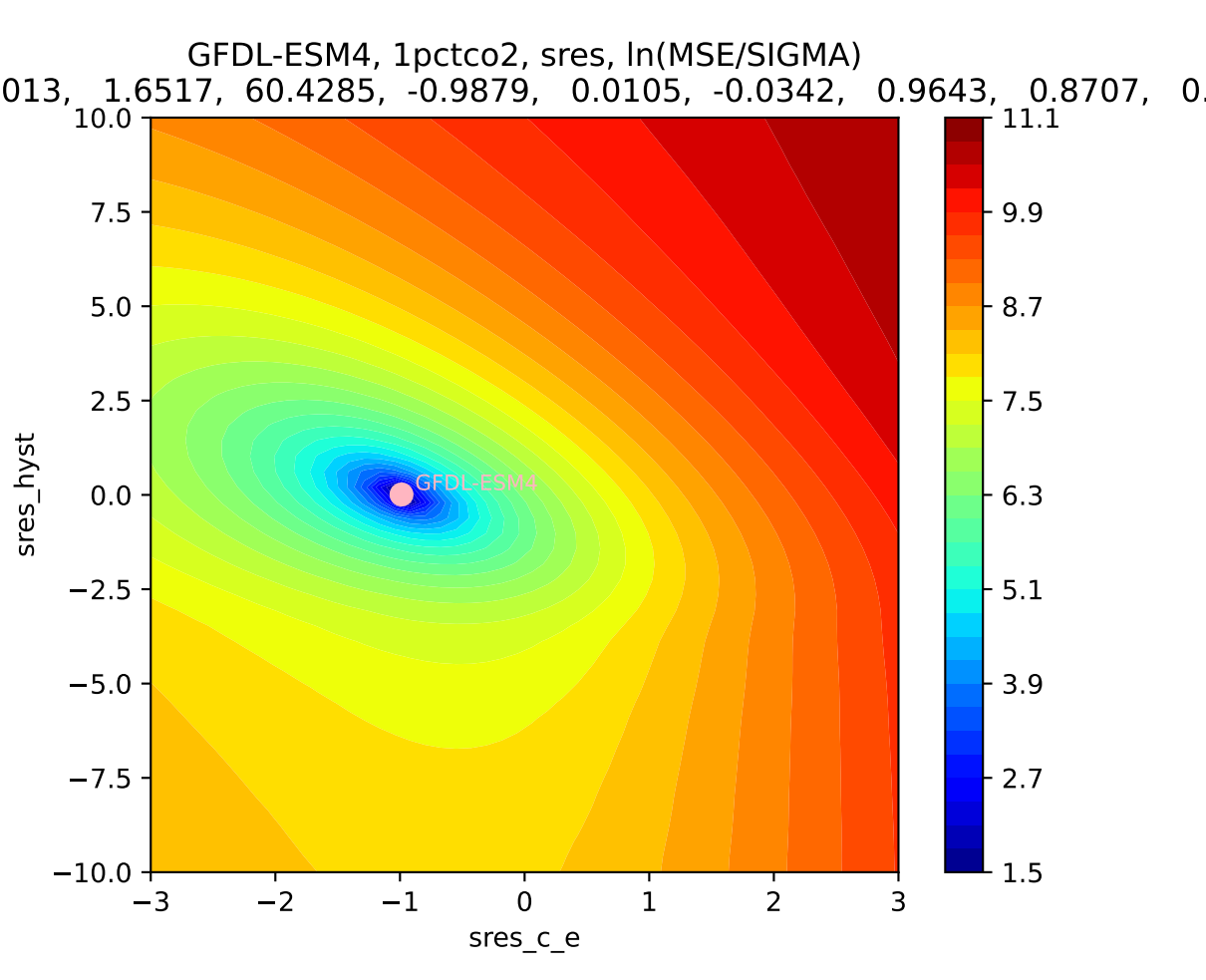

GFDL-ESM4, 1pctco2, sres
ESM-Fit
sres, ESM - FIT
ΔT

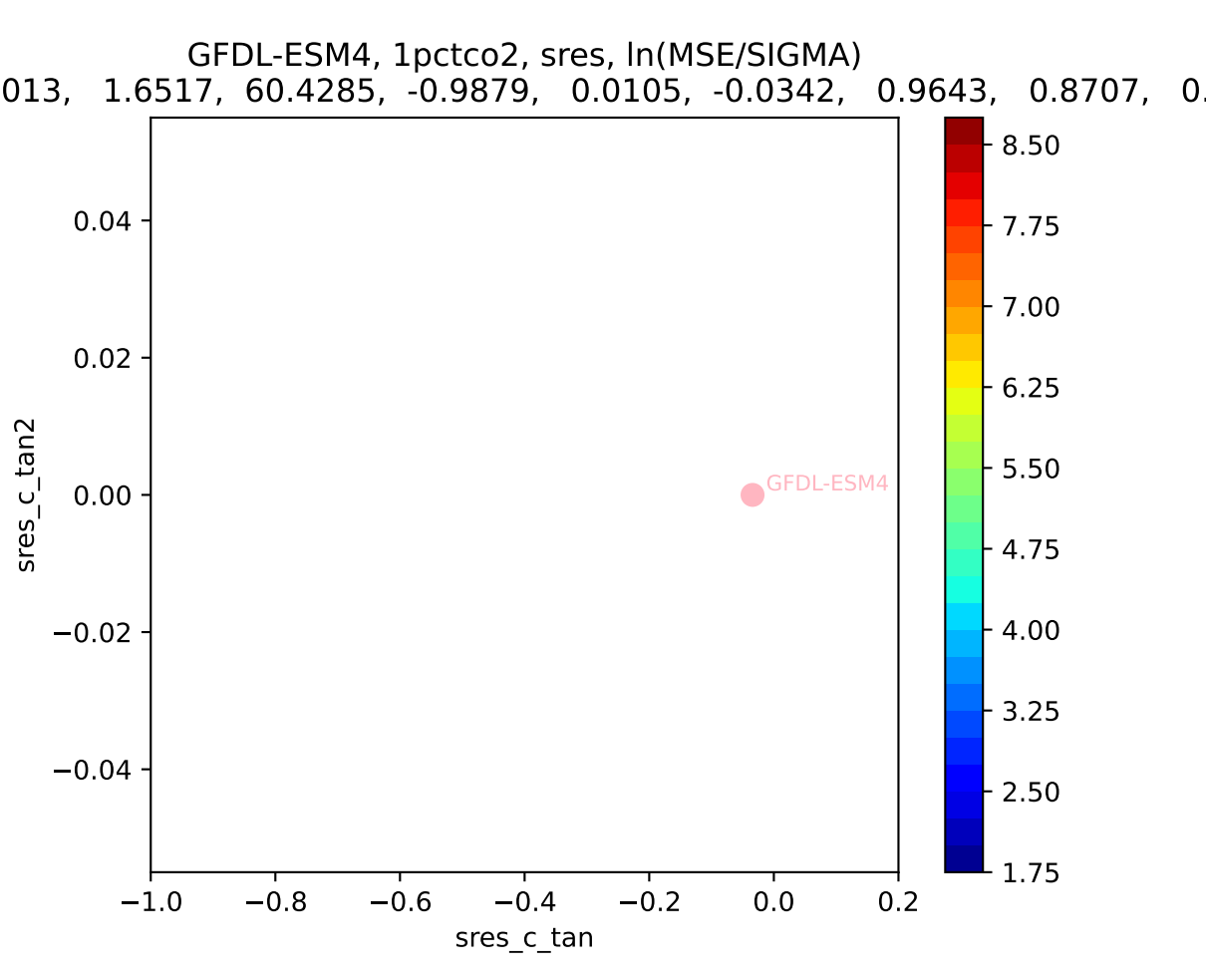

GFDL-ESM4, 1pctco2, sres
ESM
Fit
sres
c_atm

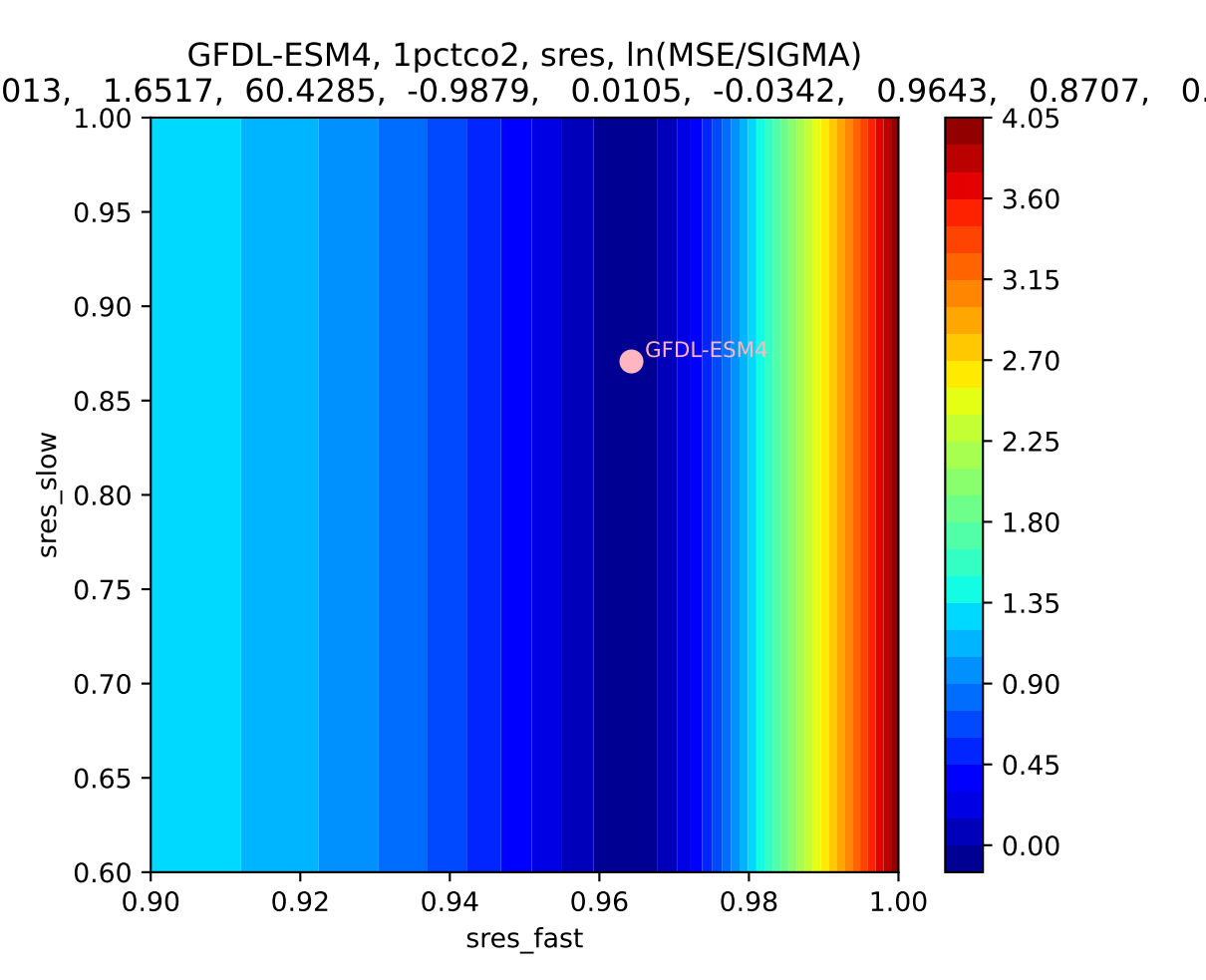

GFDL-ESM4, 1pctco2, sres
ESM-Fit
sres, ESM - FIT
c_atm

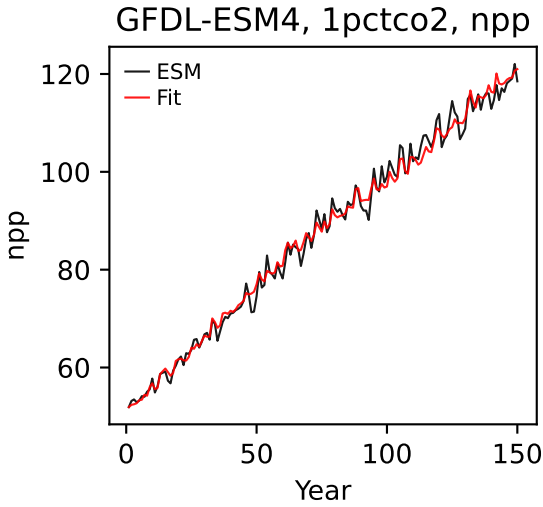

GFDL-ESM4, 1pctco2, sres, ln(MSE/SIGMA)
013, 1.6517, 60.4285, -0.9879, 0.0105, -0.0342, 0.9643, 0.8707, 0.
GFDL-ESM4
sres_t_e
sres_t_l
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
10.5
9.3
8.1
6.9
5.7
4.5
3.3
2.1

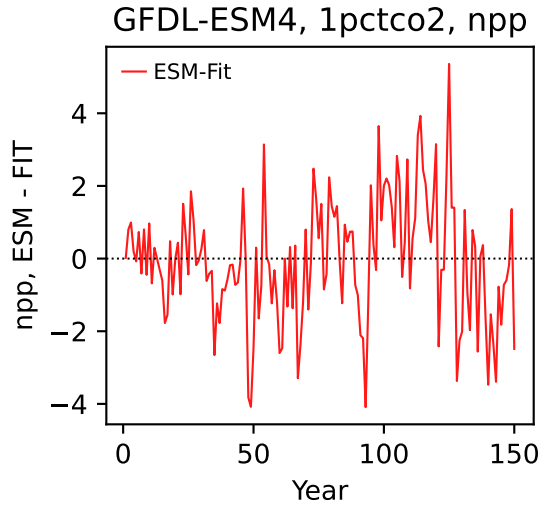

GFDL-ESM4, 1pctco2, sres, ln(MSE/SIGMA)
013, 1.6517, 60.4285, -0.9879, 0.0105, -0.0342, 0.9643, 0.8707, 0.
sres_c_half
sres_c_l
GFDL-ESM4
2000
1750
1500
1250
1000
750
500
250
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
9.6
8.4
7.2
6.0
4.8
3.6
2.4
1.2
0.0

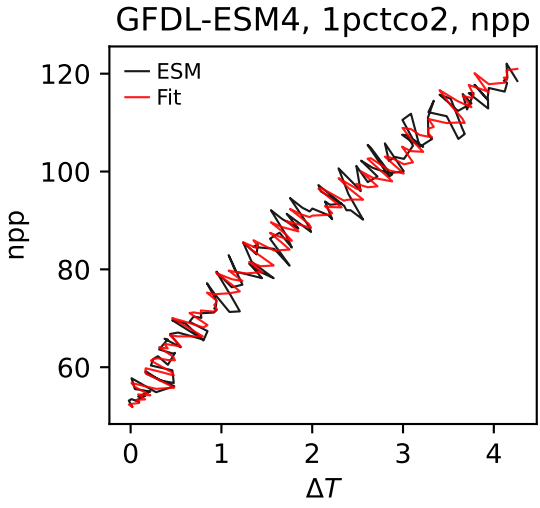

GFDL-ESM4, 1pctco2, sres, ln(MSE/SIGMA)
013, 1.6517, 60.4285, -0.9879, 0.0105, -0.0342, 0.9643, 0.8707, 0.
GFDL-ESM4
sres_hyst
sres_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
11.1
9.9
8.7
7.5
6.3
5.1
3.9
2.7
1.5

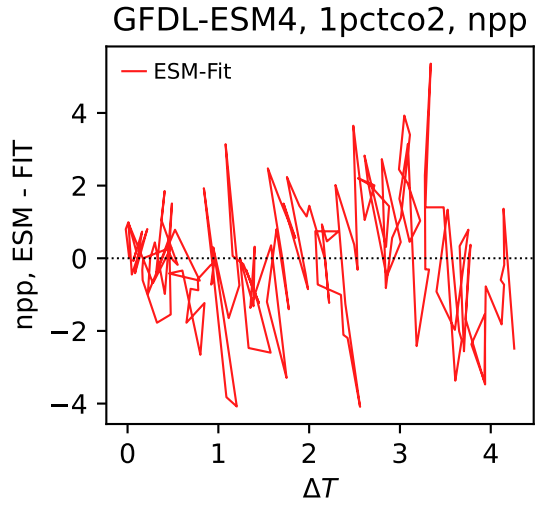

GFDL-ESM4, 1pctco2, sres, ln(MSE/SIGMA)
013, 1.6517, 60.4285, -0.9879, 0.0105, -0.0342, 0.9643, 0.8707, 0.
GFDL-ESM4
sres_c_tan2
sres_c_tan
0.04
0.02
0.00
−0.02
−0.04
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
8.50
7.75
7.00
6.25
5.50
4.75
4.00
3.25
2.50
1.75

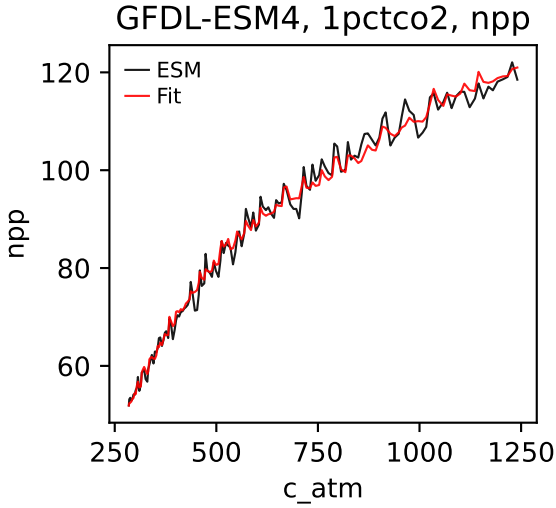

GFDL-ESM4, 1pctco2, sres, ln(MSE/SIGMA)
013, 1.6517, 60.4285, -0.9879, 0.0105, -0.0342, 0.9643, 0.8707, 0.
GFDL-ESM4
sres_slow
sres_fast
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.90
0.92
0.94
0.96
0.98
1.00
4.05
3.60
3.15
2.70
2.25
1.80
1.35
0.90
0.45
0.00

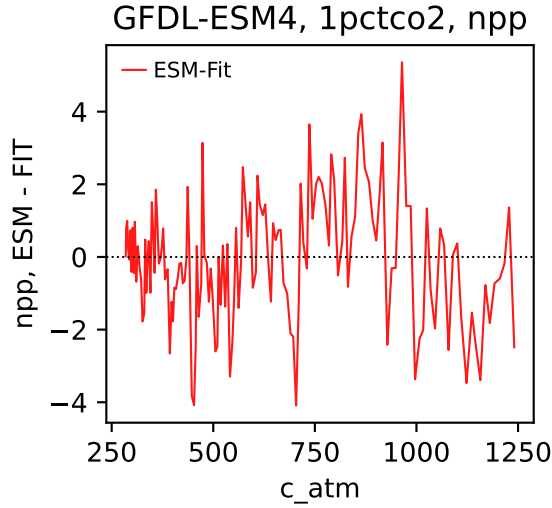

GFDL-ESM4, 1pctco2, npp
ESM
Fit
npp
Year

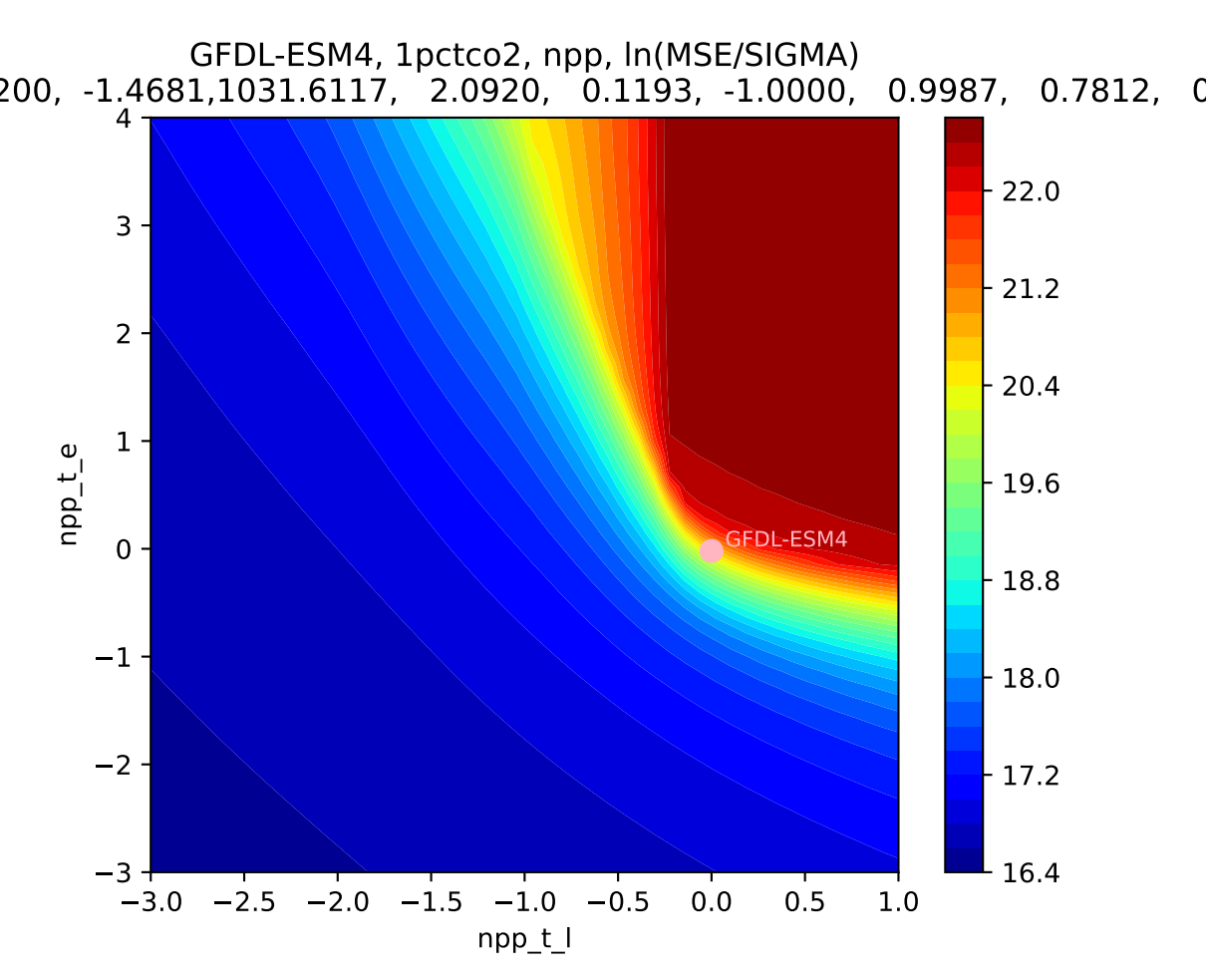

GFDL-ESM4, 1pctco2, npp
ESM-Fit
npp, ESM - FIT
Year

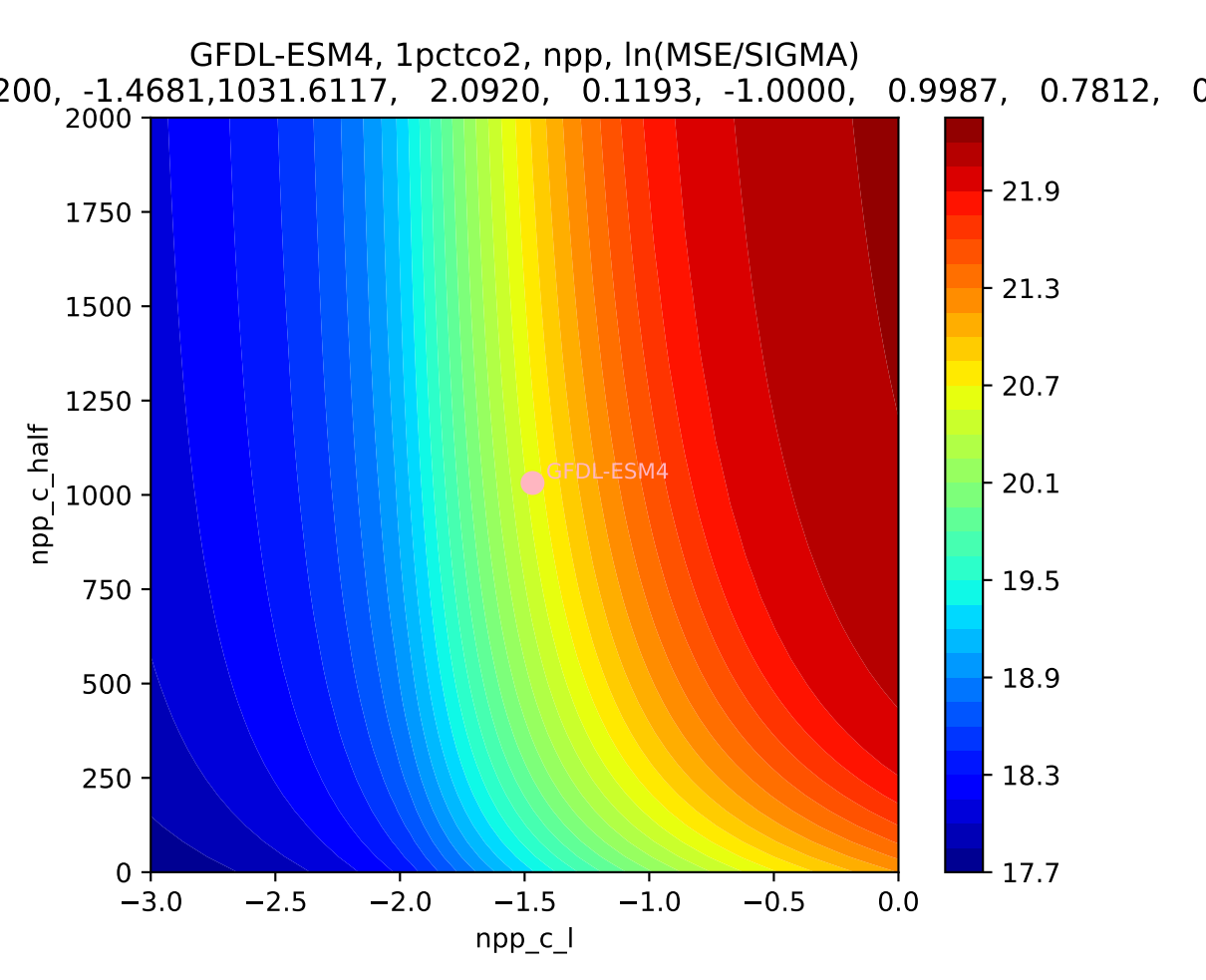

GFDL-ESM4, 1pctco2, npp
ESM
Fit
npp
ΔT

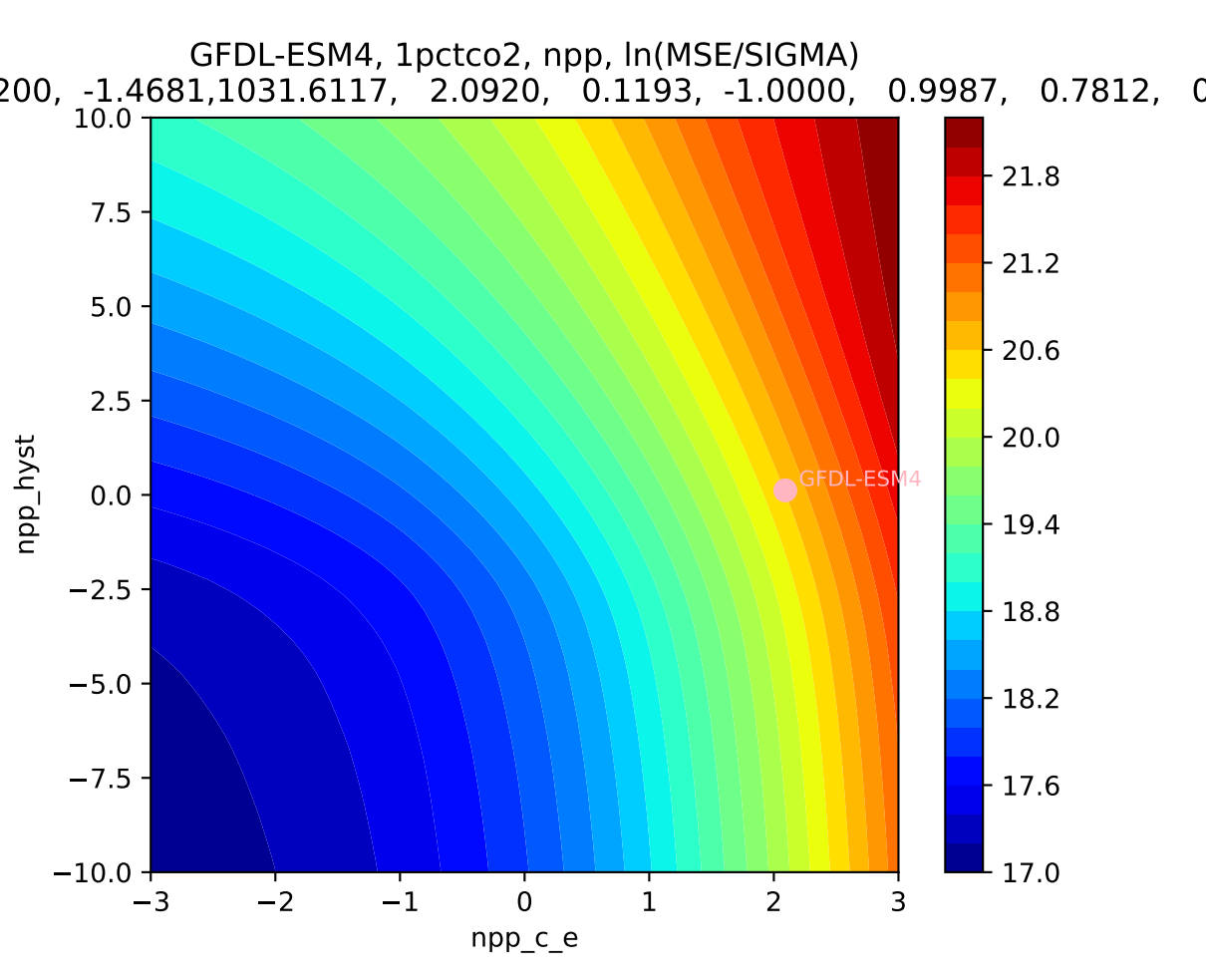

GFDL-ESM4, 1pctco2, npp
ESM-Fit
npp, ESM - FIT
ΔT

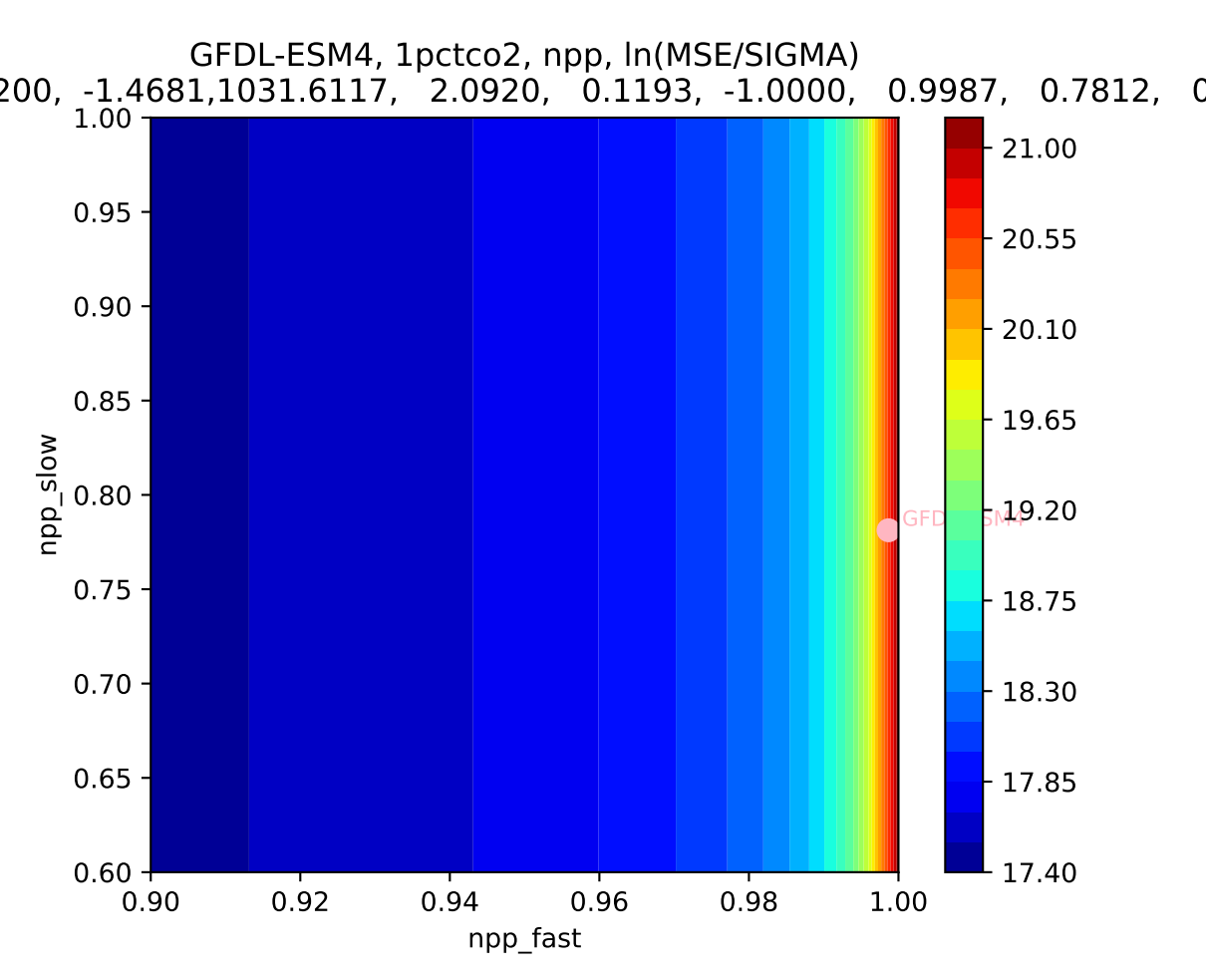

GFDL-ESM4, 1pctco2, npp
ESM
Fit
npp
c_atm

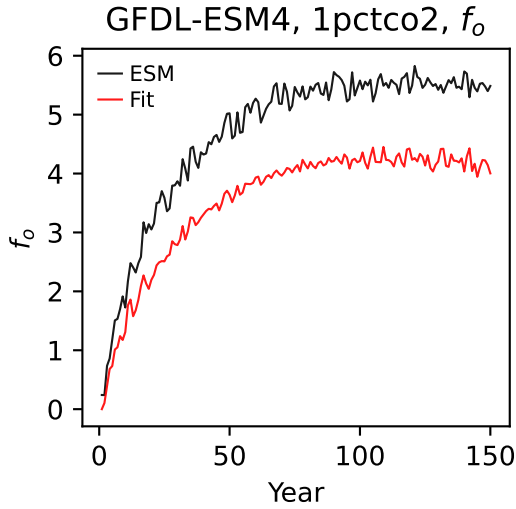

GFDL-ESM4, 1pctco2, npp
ESM-Fit
npp, ESM - FIT
c_atm

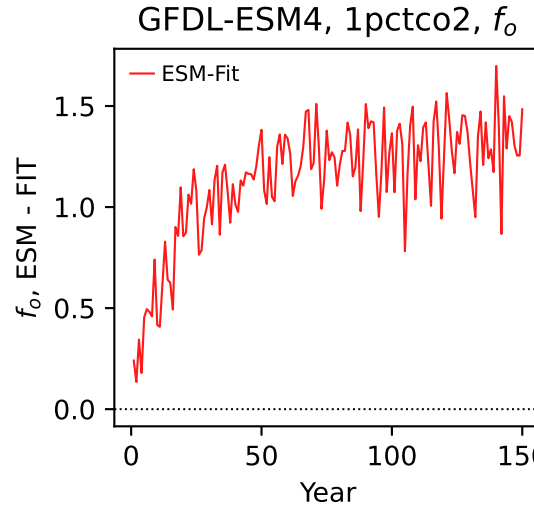

GFDL-ESM4, 1pctco2, npp, ln(MSE/SIGMA)
200, -1.4681,1031.6117, 2.0920, 0.1193, -1.0000, 0.9987, 0.7812, 0
GFDL-ESM4
npp_t_e
npp_t_l
4
3
2
1
0
−1
−2
−3
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
0.5
1.0
22.0
21.2
20.4
19.6
18.8
18.0
17.2
16.4

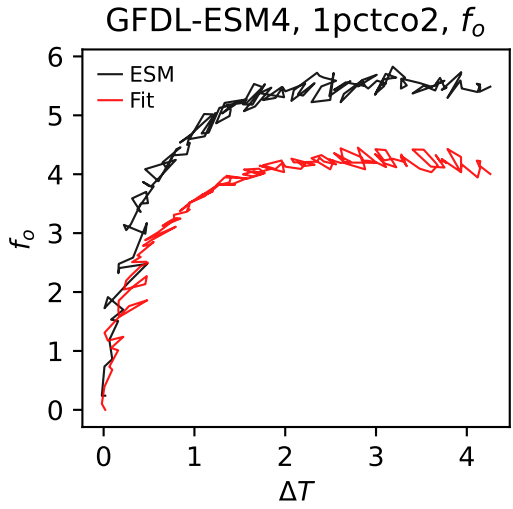

GFDL-ESM4, 1pctco2, npp, ln(MSE/SIGMA)
200, -1.4681,1031.6117, 2.0920, 0.1193, -1.0000, 0.9987, 0.7812, 0
GFDL-ESM4
npp_c_half
npp_c_l
2000
1750
1500
1250
1000
750
500
250
0
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
21.9
21.3
20.7
20.1
19.5
18.9
18.3
17.7

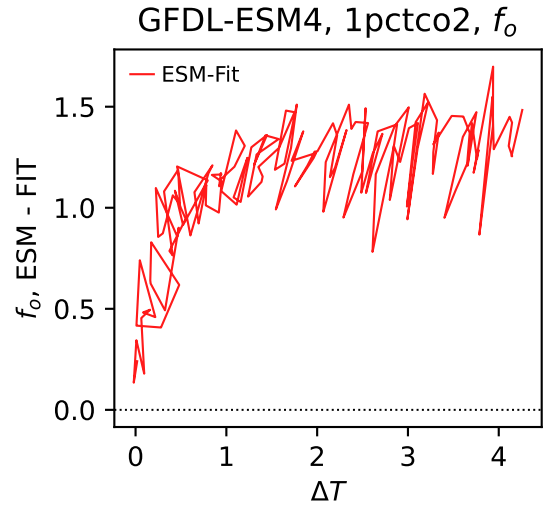

GFDL-ESM4, 1pctco2, npp, ln(MSE/SIGMA)
200, -1.4681,1031.6117, 2.0920, 0.1193, -1.0000, 0.9987, 0.7812, 0
GFDL-ESM4
npp_hyst
npp_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
21.8
21.2
20.6
20.0
19.4
18.8
18.2
17.6
17.0

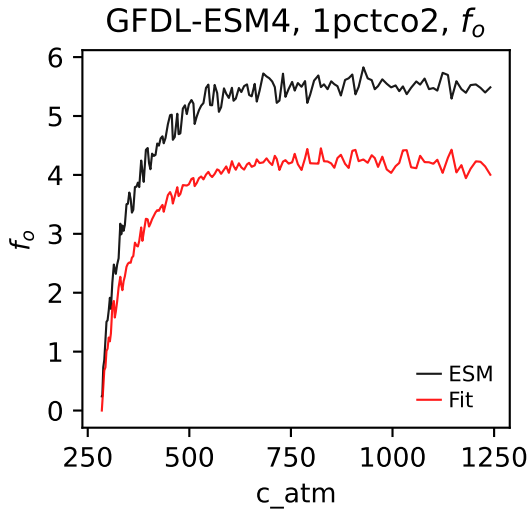

GFDL-ESM4, 1pctco2, npp, ln(MSE/SIGMA)
200, -1.4681,1031.6117, 2.0920, 0.1193, -1.0000, 0.9987, 0.7812, 0
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
npp_slow
0.90
0.92
0.94
0.96
0.98
1.00
npp_fast
21.00
20.55
20.10
19.65
19.20
18.75
18.30
17.85
17.40

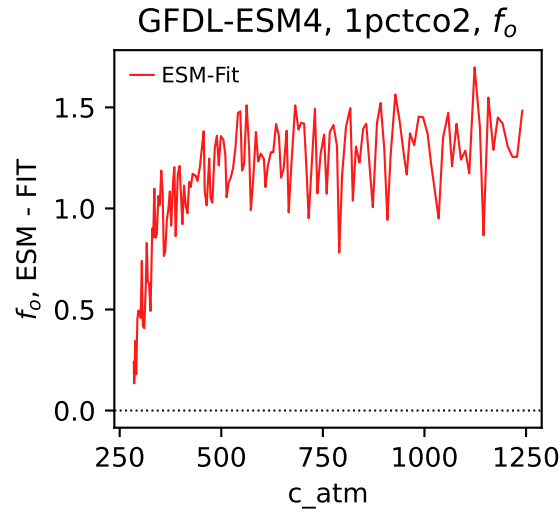

GFDL-ESM4, 1pctco2, f_o
ESM
Fit
f_o
Year

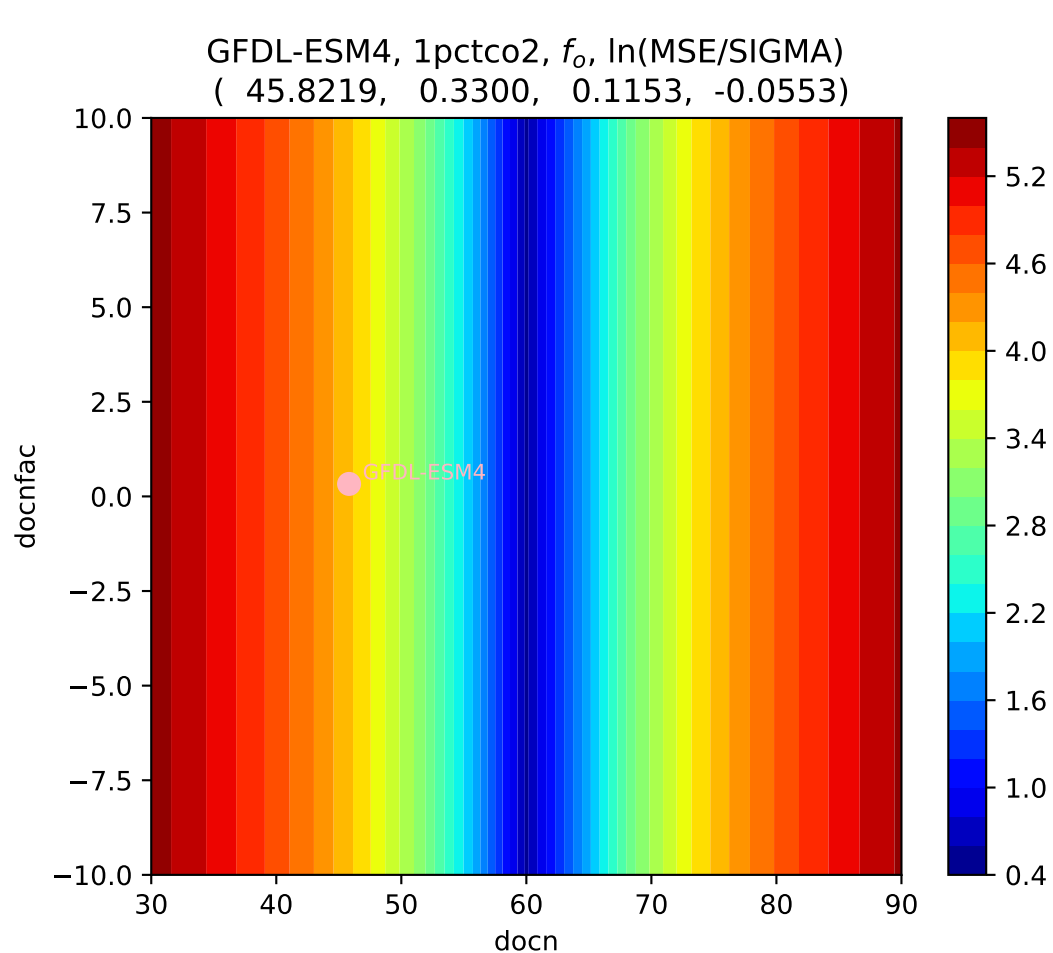

GFDL-ESM4, 1pctco2, f_o
ESM-Fit
f_o, ESM - FIT
Year

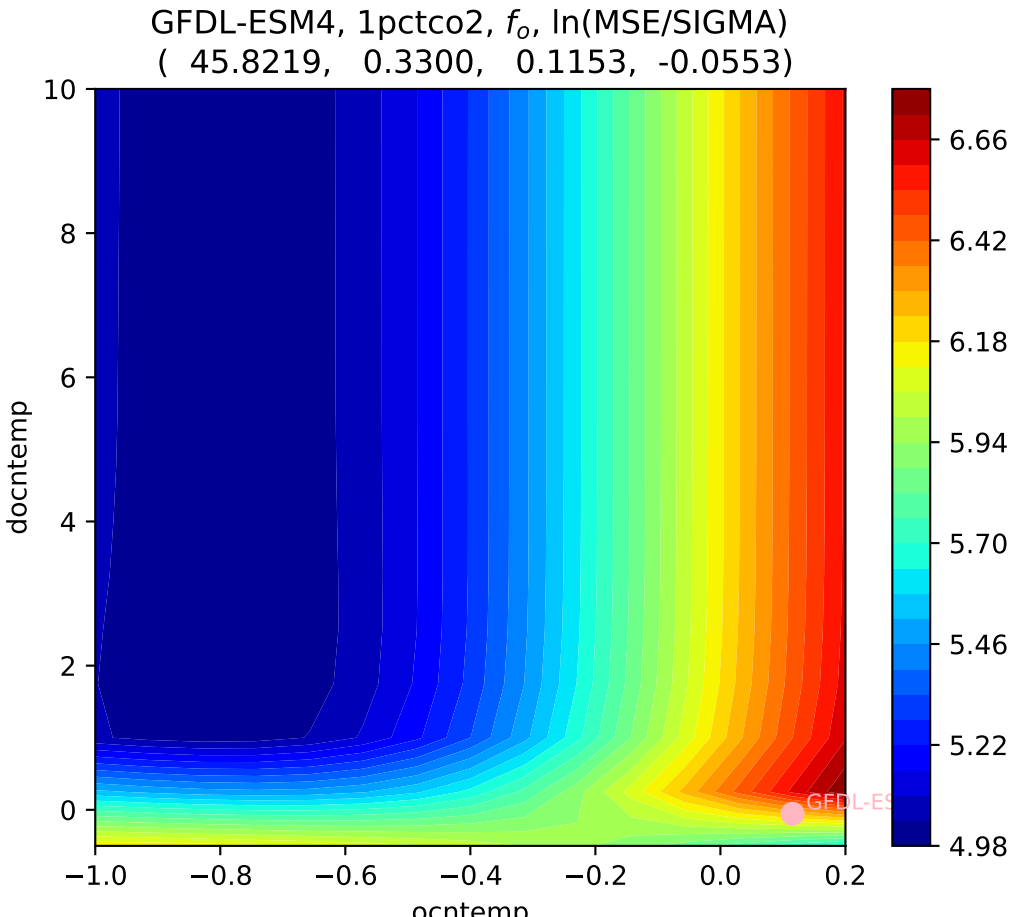

GFDL-ESM4, 1pctco2, f_o
ESM
Fit
f_o
ΔT


GFDL-ESM4, 1pctco2, f_o
ESM-Fit
f_o, ESM - FIT
ΔT


GFDL-ESM4, 1pctco2, f_o
ESM
Fit
f_o
c_atm


GFDL-ESM4, 1pctco2, f_o
ESM-Fit
f_o, ESM - FIT
c_atm


GFDL-ESM4, 1pctco2, f_o, ln(MSE/SIGMA)
(45.8219, 0.3300, 0.1153, -0.0553)
GFDL-ESM4
docnfac
docn
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
30
40
50
60
70
80
90
5.2
4.6
4.0
3.4
2.8
2.2
1.6
1.0
0.4


GFDL-ESM4, 1pctco2, f_o, ln(MSE/SIGMA)
(45.8219, 0.3300, 0.1153, -0.0553)
10
8
6
4
2
0
docntemp
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
ocntemp
6.66
6.42
6.18
5.94
5.70
5.46
5.22
4.98
GFDL-ES