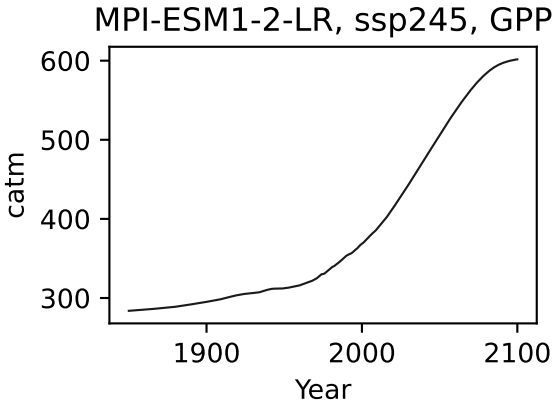
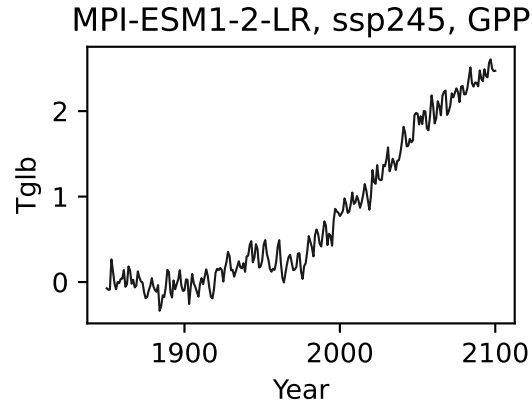
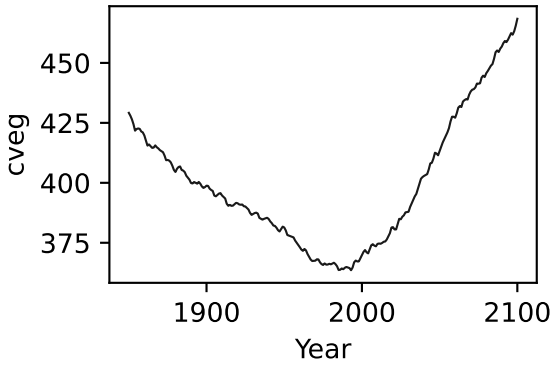
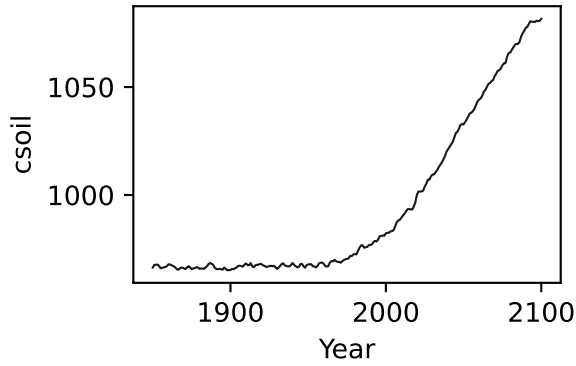
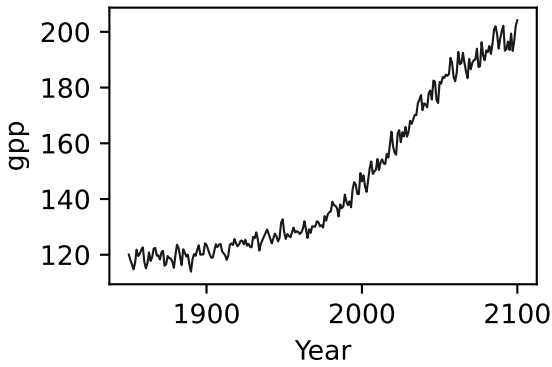
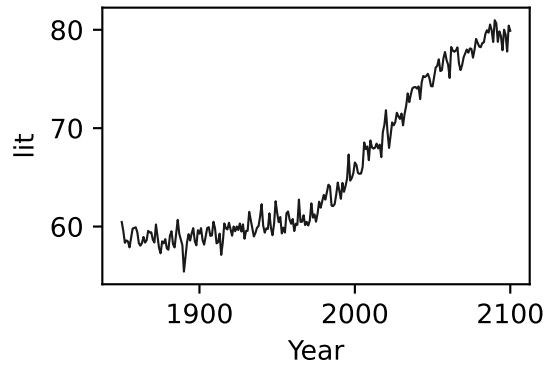

MPI-ESM1-2-LR, ssp245, GPP
catm
600
500
400
300
1900
2000
2100
Year

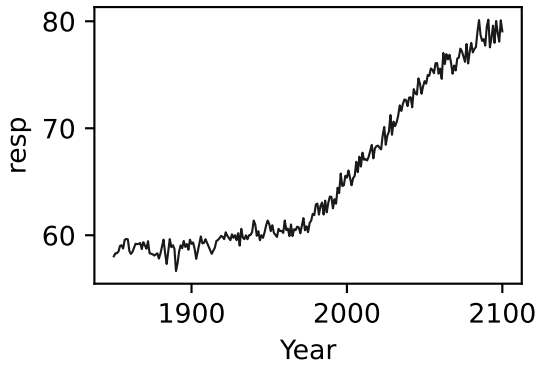

MPI-ESM1-2-LR, ssp245, GPP
Tglb
2
1
0
1900
2000
2100
Year

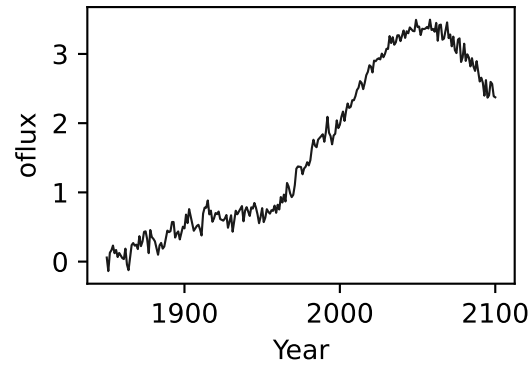

cveg
450
425
400
375
1900
2000
2100
Year

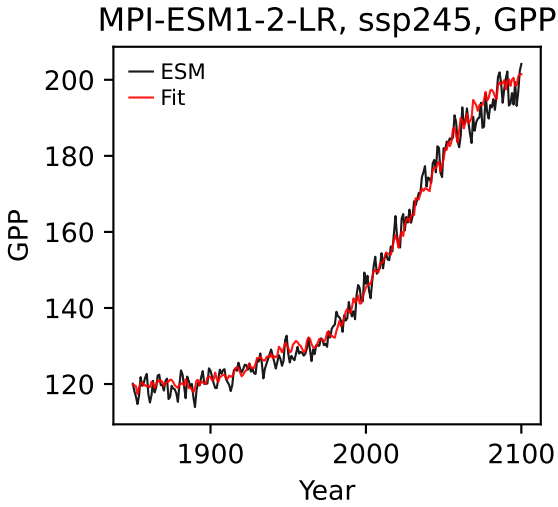

csoil
1050
1000
1900
2000
2100
Year

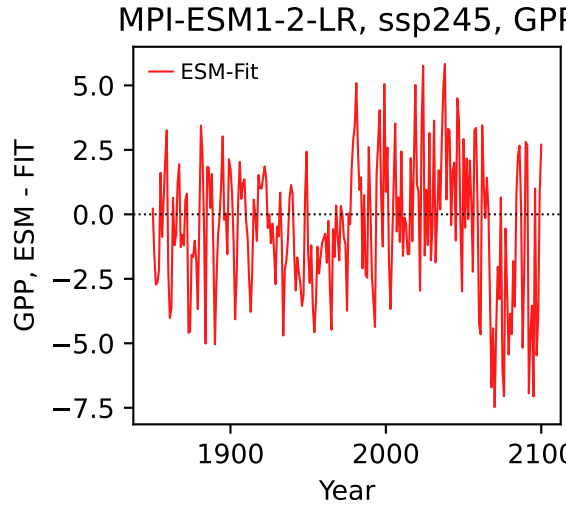

gpp
200
180
160
140
120
1900
2000
2100
Year

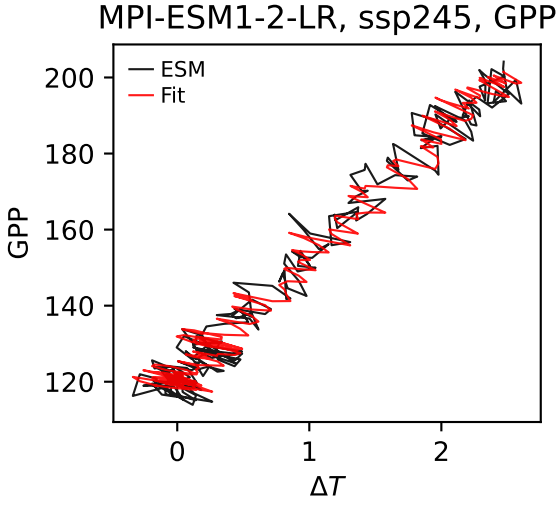

lit
80
70
60
1900
2000
2100
Year

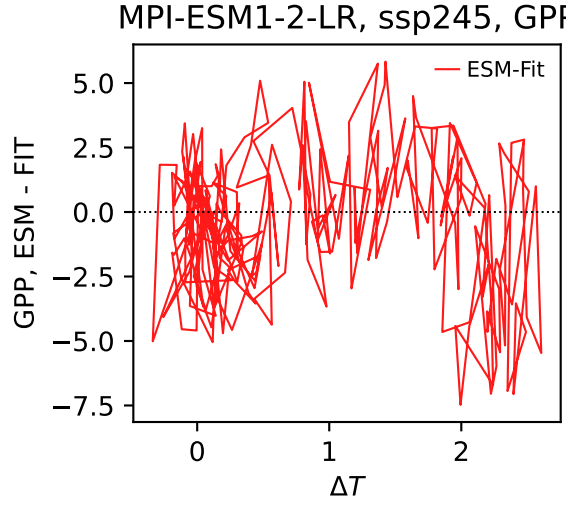

resp
80
70
60
1900
2000
2100
Year

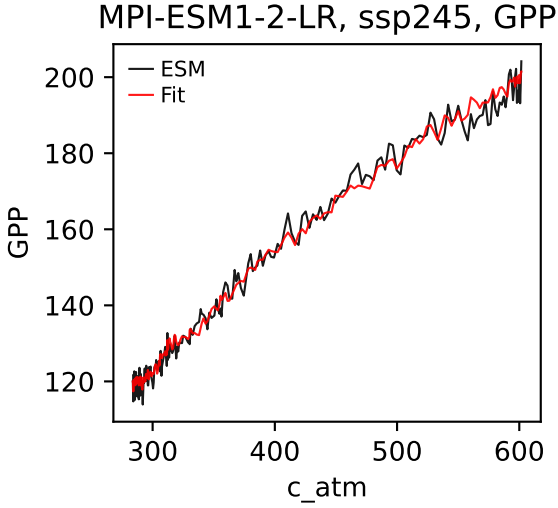

oflux
3
2
1
0
1900
2000
2100
Year

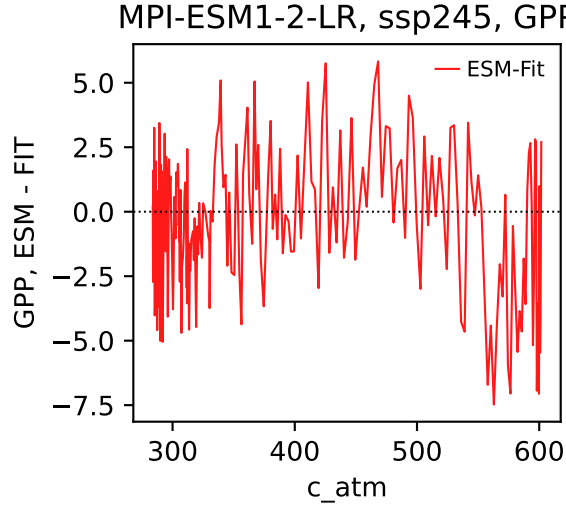

MPI-ESM1-2-LR, ssp245, GPP
ESM
Fit
GPP
Year

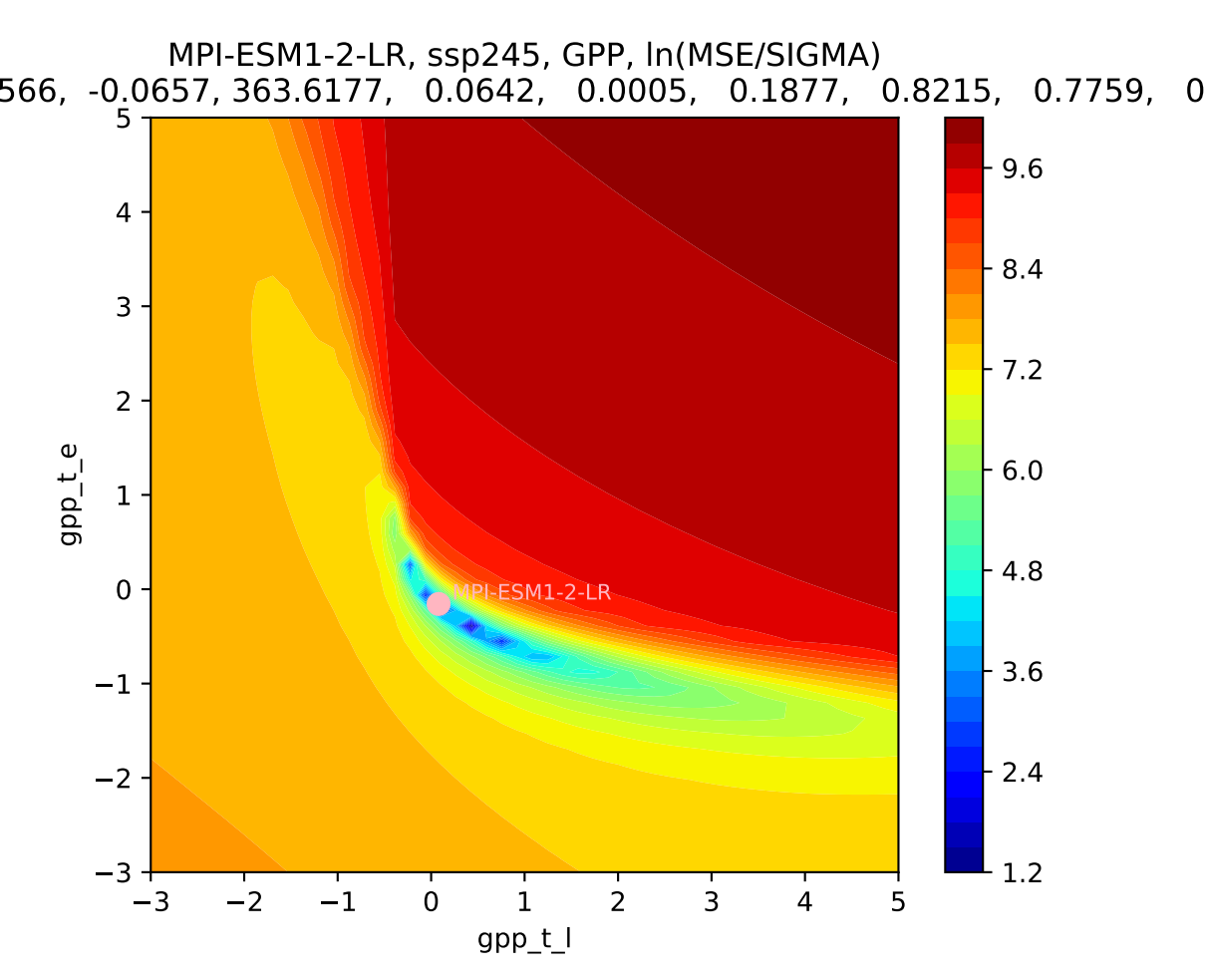

MPI-ESM1-2-LR, ssp245, GPP
ESM-Fit
GPP, ESM - FIT
Year

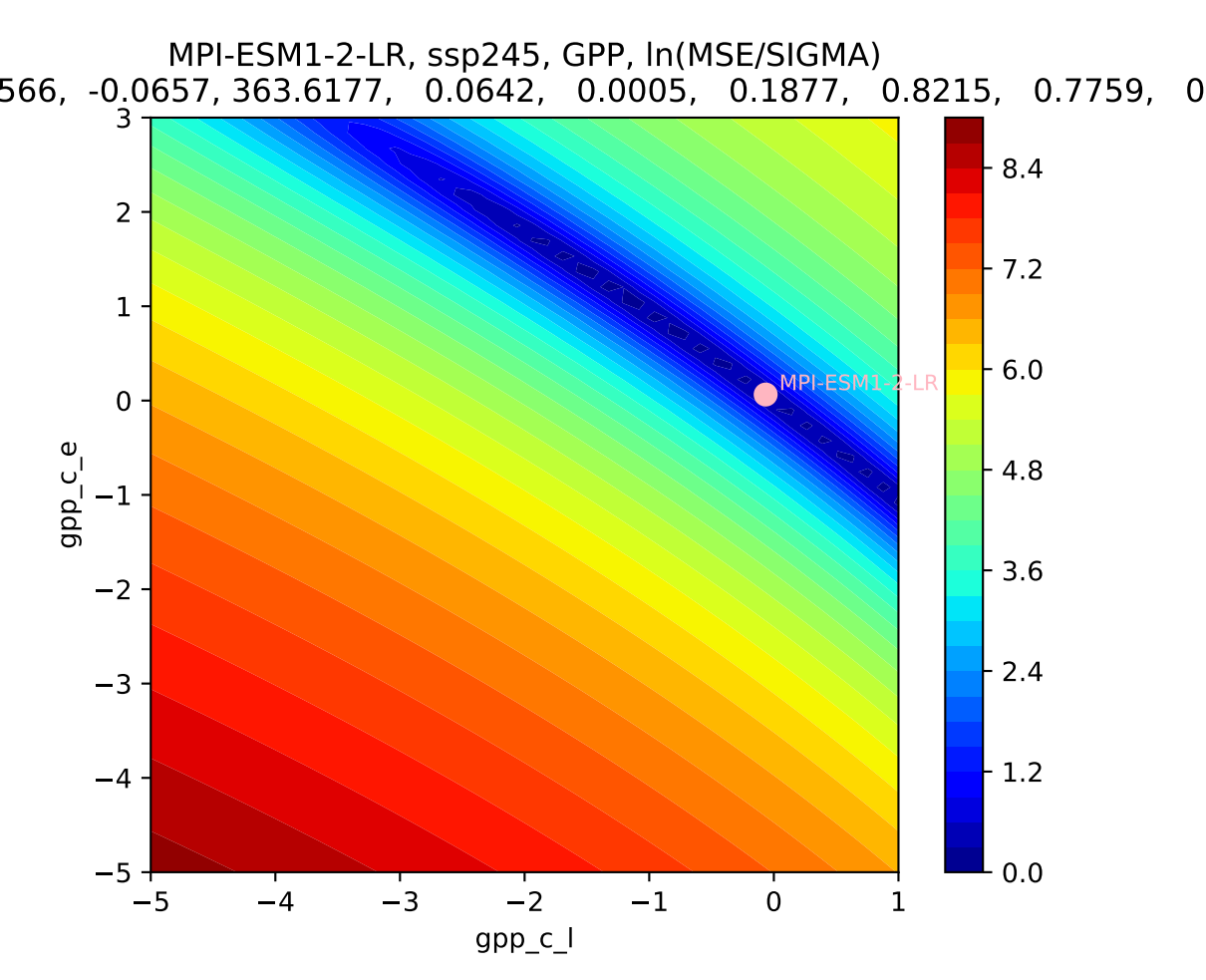

MPI-ESM1-2-LR, ssp245, GPP
ESM
Fit
GPP
ΔT

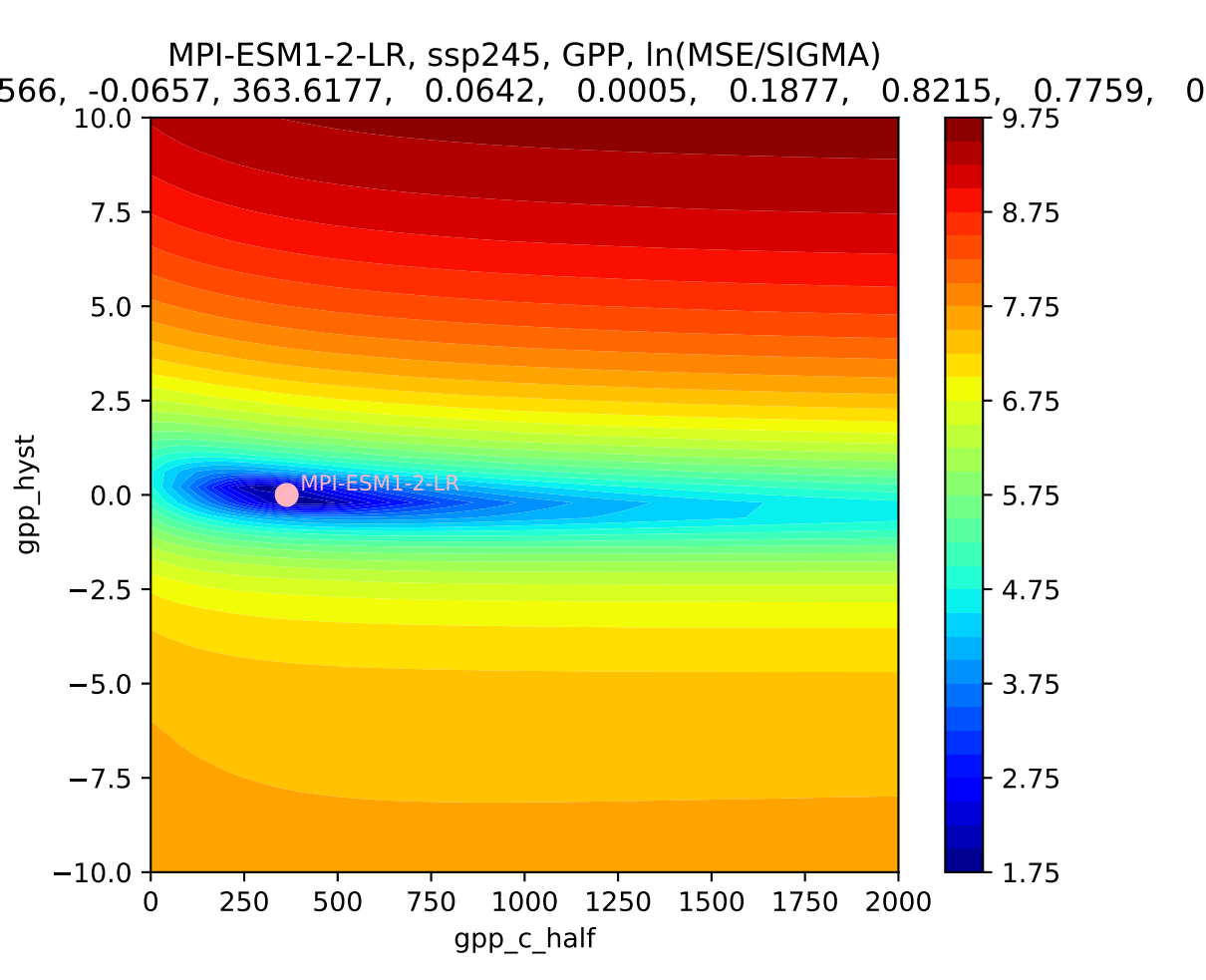

MPI-ESM1-2-LR, ssp245, GPP
ESM-Fit
GPP, ESM - FIT
ΔT

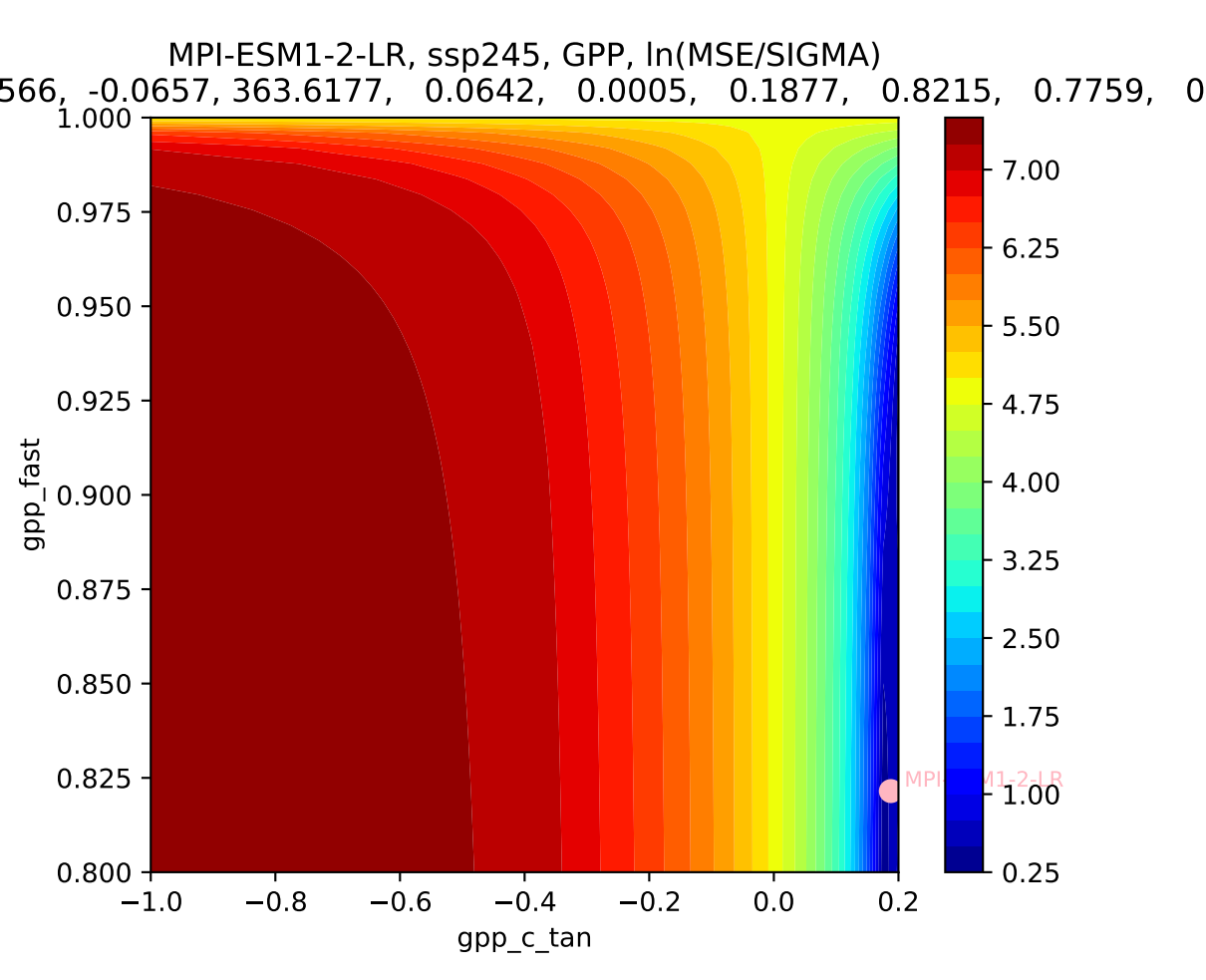

MPI-ESM1-2-LR, ssp245, GPP
ESM
Fit
GPP
c_atm

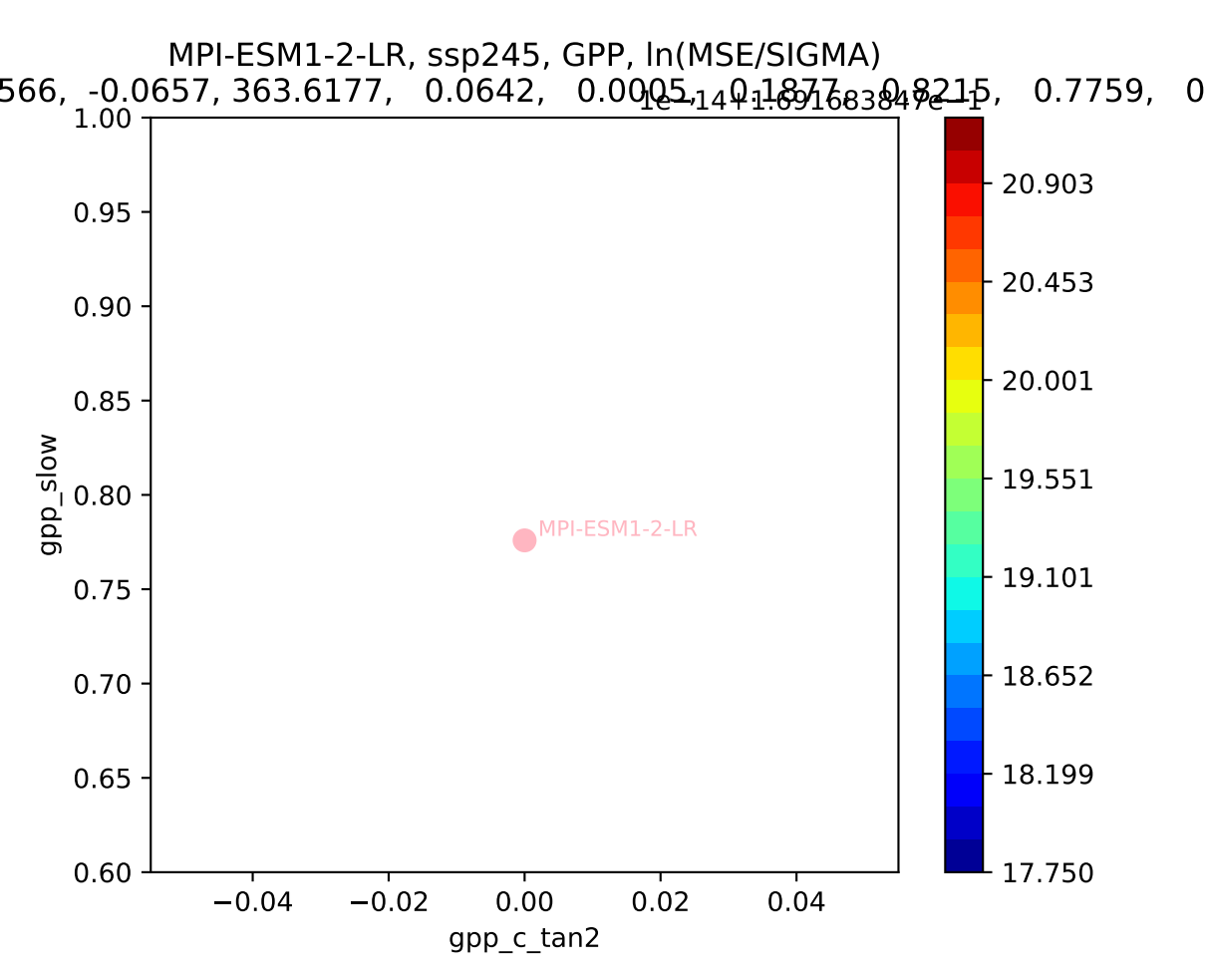

MPI-ESM1-2-LR, ssp245, GPP
ESM-Fit
GPP, ESM - FIT
c_atm

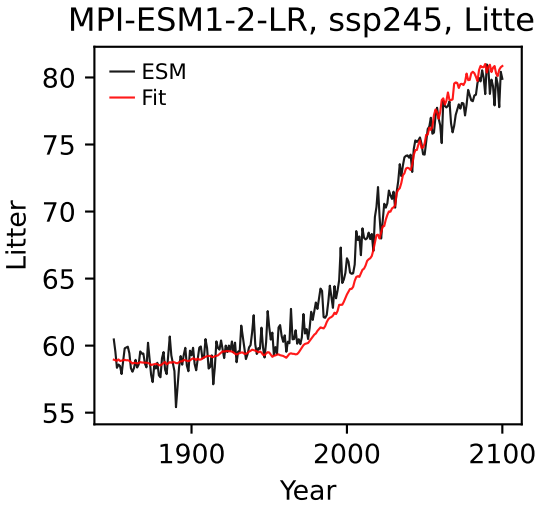

MPI-ESM1-2-LR, ssp245, GPP, ln(MSE/SIGMA)
566, -0.0657, 363.6177, 0.0642, 0.0005, 0.1877, 0.8215, 0.7759, 0
MPI-ESM1-2-LR
gpp_t_e
gpp_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
9.6
8.4
7.2
6.0
4.8
3.6
2.4
1.2

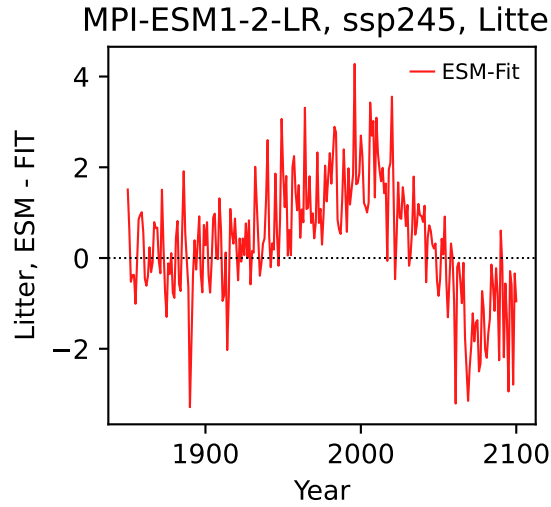

MPI-ESM1-2-LR, ssp245, GPP, ln(MSE/SIGMA)
566, -0.0657, 363.6177, 0.0642, 0.0005, 0.1877, 0.8215, 0.7759, 0
MPI-ESM1-2-LR
gpp_c_e
gpp_c_l
3
2
1
0
−1
−2
−3
−4
−5
−5
−4
−3
−2
−1
0
1
8.4
7.2
6.0
4.8
3.6
2.4
1.2
0.0

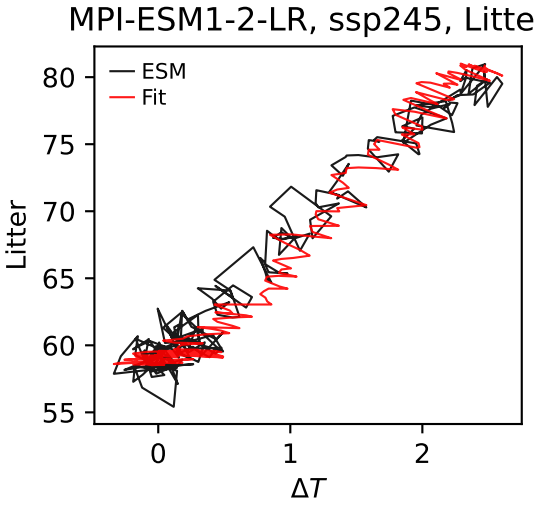

MPI-ESM1-2-LR, ssp245, GPP, ln(MSE/SIGMA)
566, -0.0657, 363.6177, 0.0642, 0.0005, 0.1877, 0.8215, 0.7759, 0
MPI-ESM1-2-LR
gpp_hyst
gpp_c_half
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
0
250
500
750
1000
1250
1500
1750
2000
9.75
8.75
7.75
6.75
5.75
4.75
3.75
2.75
1.75

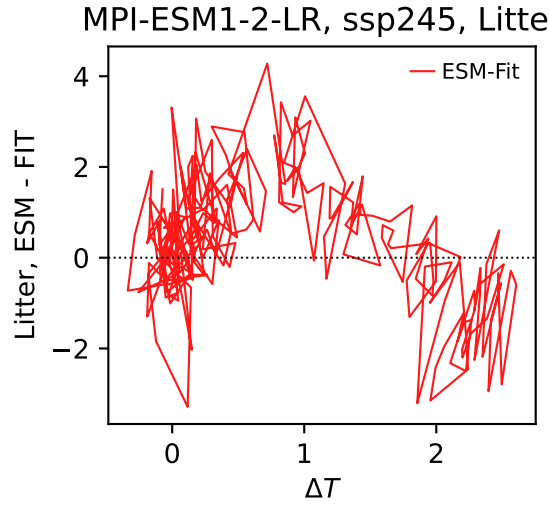

MPI-ESM1-2-LR, ssp245, GPP, ln(MSE/SIGMA)
566, -0.0657, 363.6177, 0.0642, 0.0005, 0.1877, 0.8215, 0.7759, 0
gpp_fast
gpp_c_tan
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
7.00
6.25
5.50
4.75
4.00
3.25
2.50
1.75
1.00
0.25

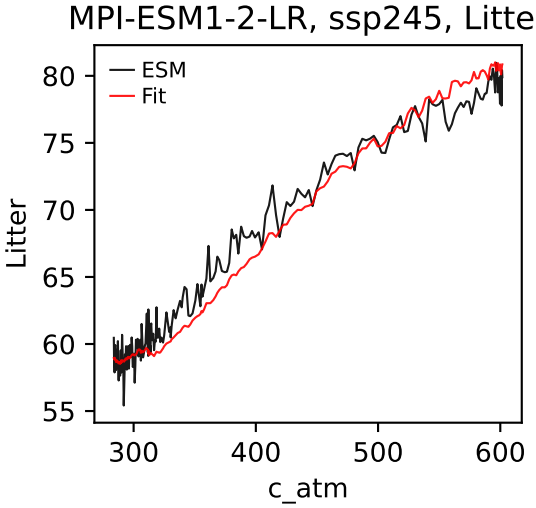

MPI-ESM1-2-LR, ssp245, GPP, ln(MSE/SIGMA)
566, -0.0657, 363.6177, 0.0642, 0.0005, 0.1877, 0.8215, 0.7759, 0
1e−14+1.691683847e−1
MPI-ESM1-2-LR
gpp_slow
gpp_c_tan2
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
−0.04
−0.02
0.00
0.02
0.04
20.903
20.453
20.001
19.551
19.101
18.652
18.199
17.750

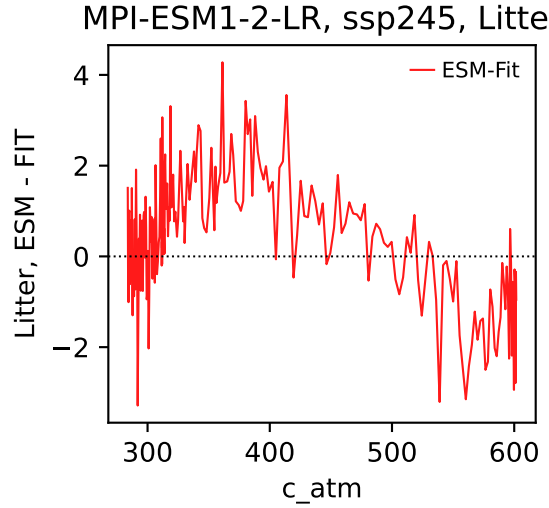

MPI-ESM1-2-LR, ssp245, Litter
ESM
Fit
Litter
Year
55
60
65
70
75
80
1900
2000
2100

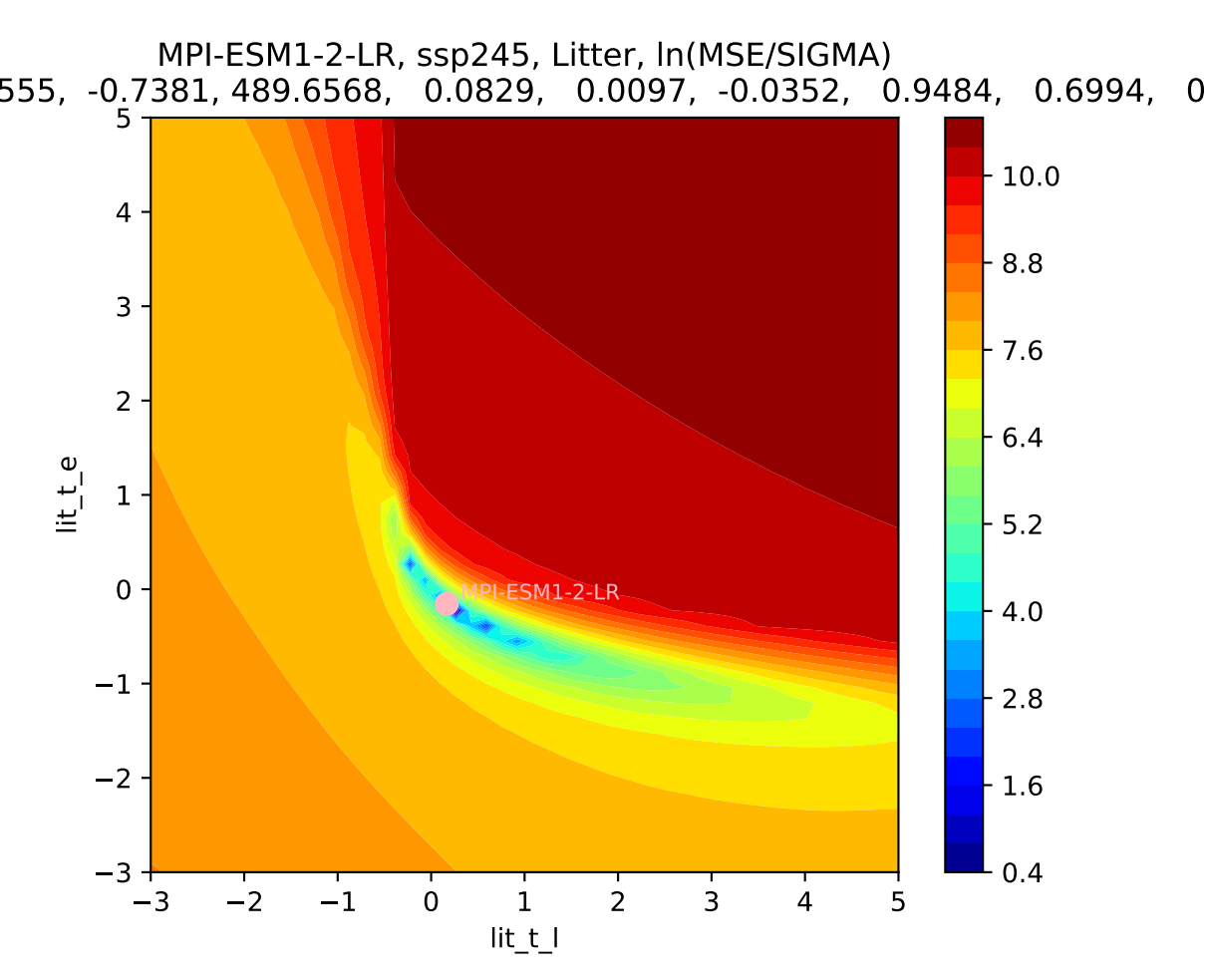

MPI-ESM1-2-LR, ssp245, Litter
ESM-Fit
Litter, ESM - FIT
Year
−2
0
2
4
1900
2000
2100

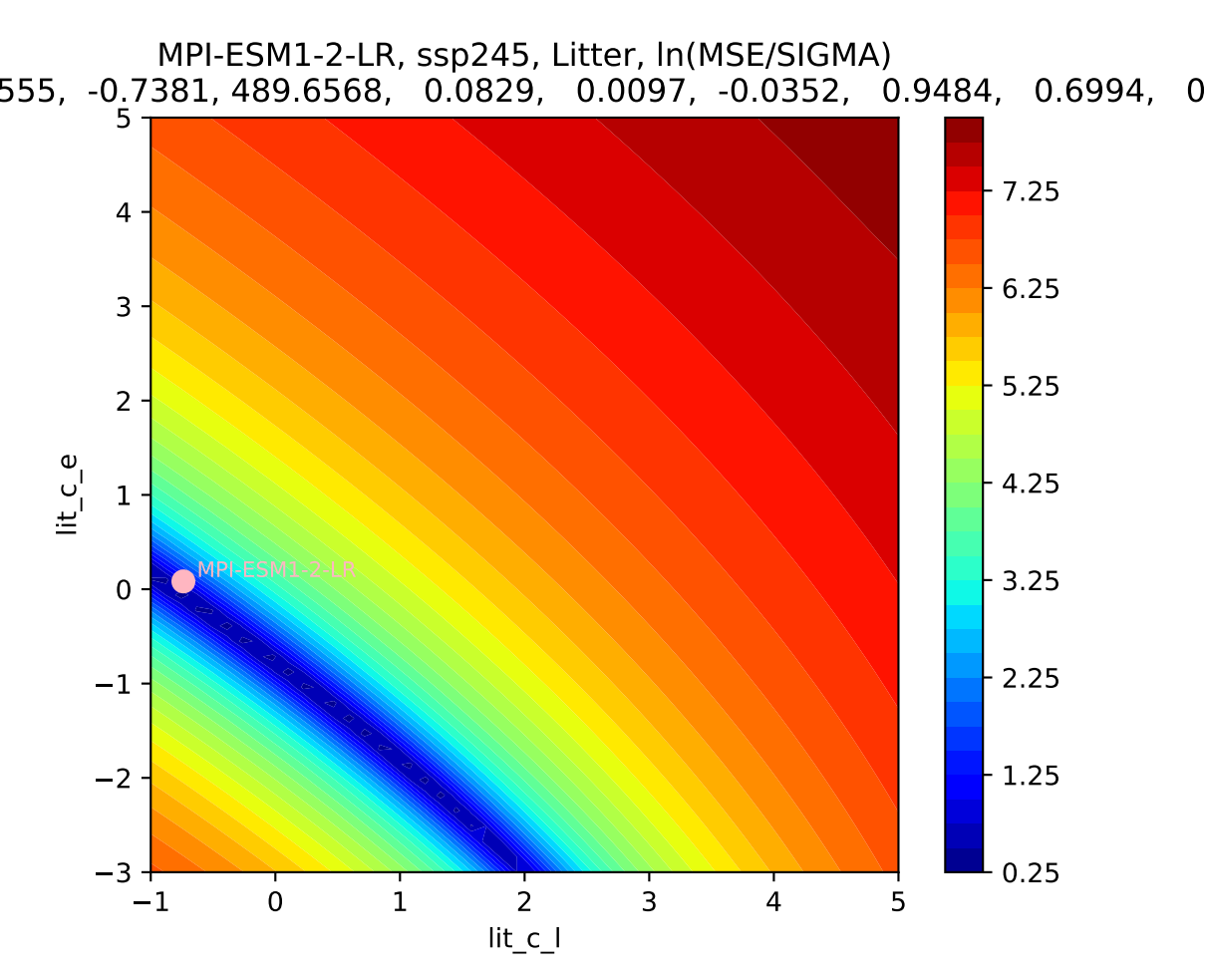

MPI-ESM1-2-LR, ssp245, Litter
ESM
Fit
Litter
ΔT
55
60
65
70
75
80
0
1
2

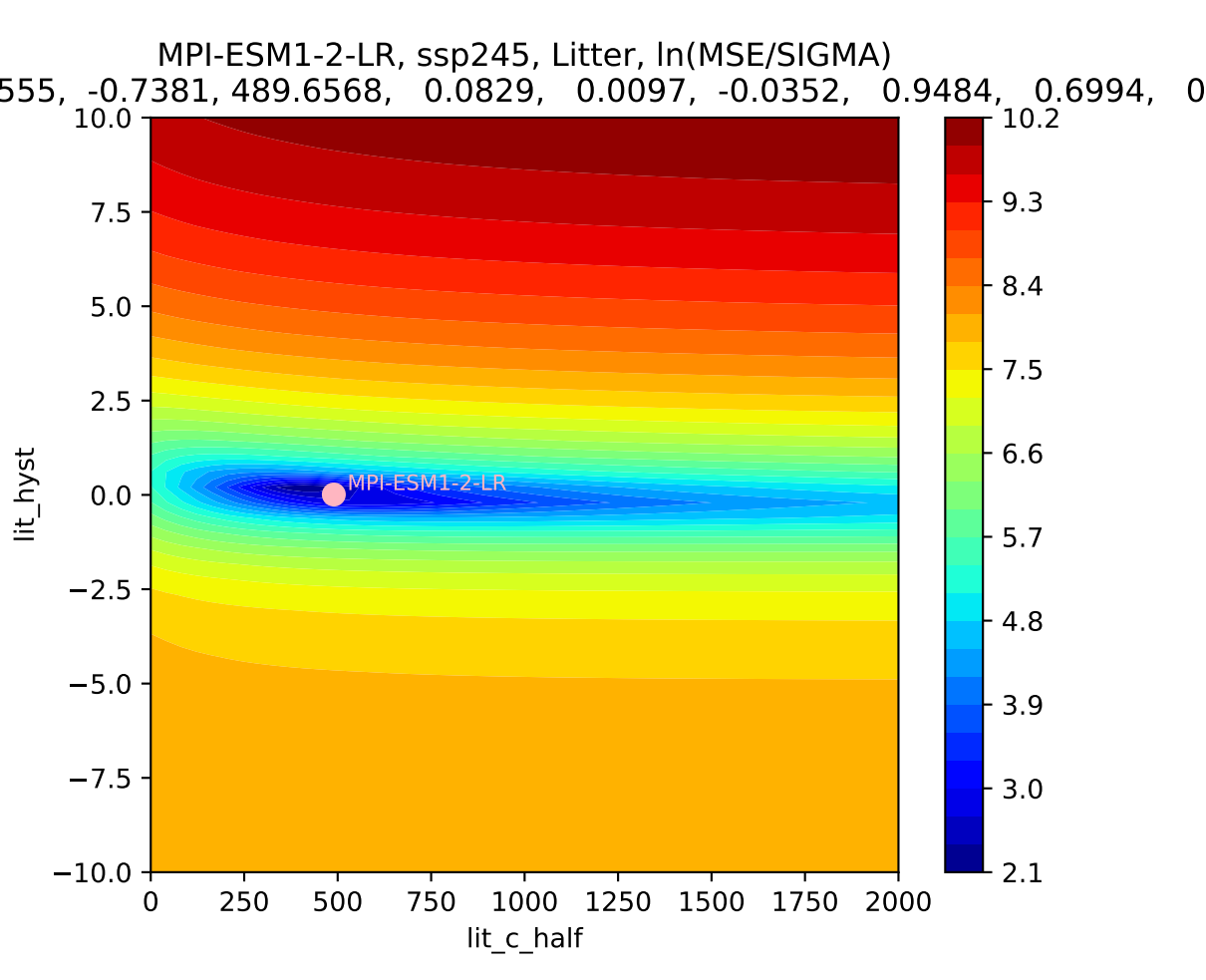

MPI-ESM1-2-LR, ssp245, Litter
ESM-Fit
Litter, ESM - FIT
ΔT
−2
0
2
4
0
1
2

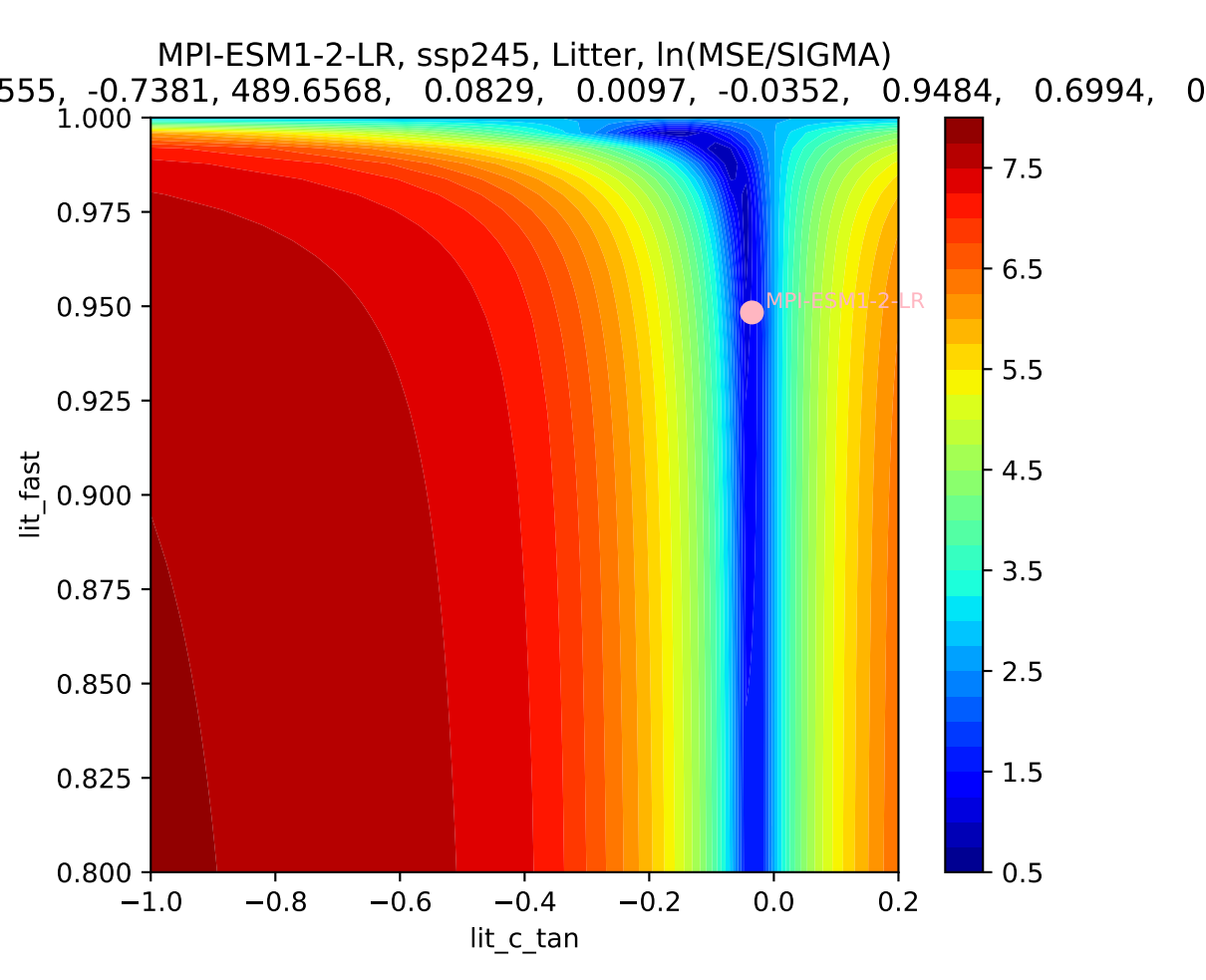

MPI-ESM1-2-LR, ssp245, Litter
ESM
Fit
Litter
c_atm
55
60
65
70
75
80
300
400
500
600

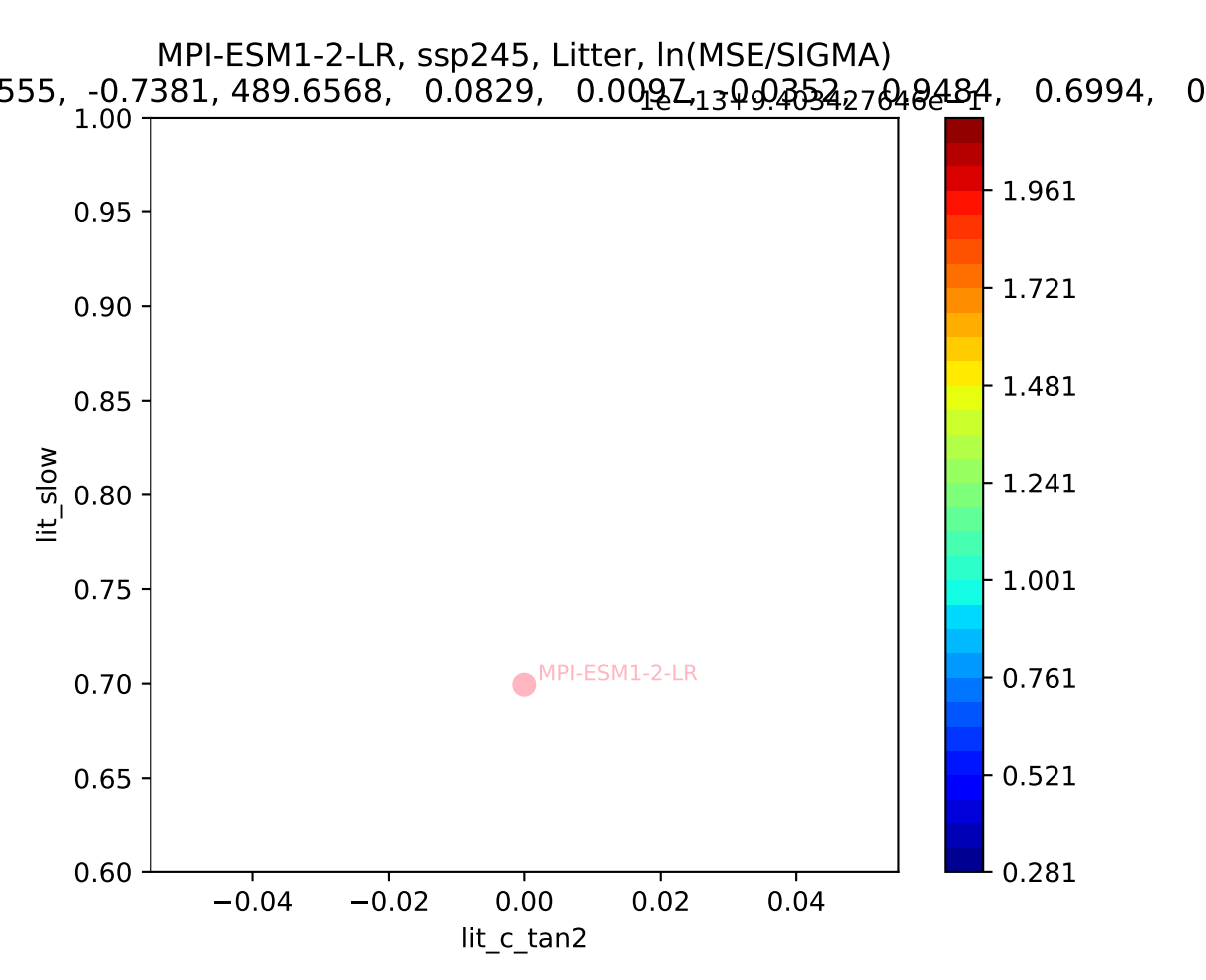

MPI-ESM1-2-LR, ssp245, Litter
ESM-Fit
Litter, ESM - FIT
c_atm
−2
0
2
4
300
400
500
600

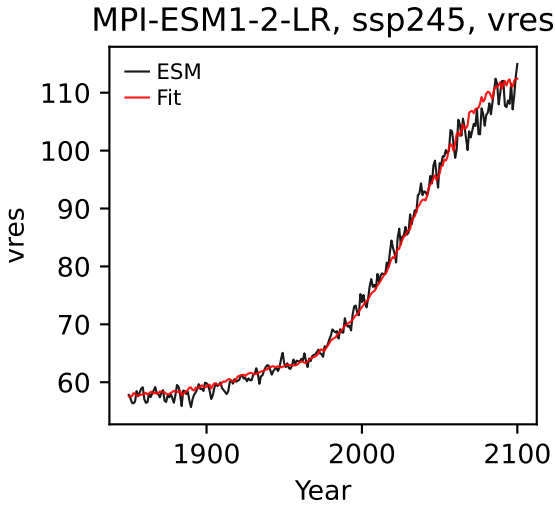

MPI-ESM1-2-LR, ssp245, Litter, ln(MSE/SIGMA)
555, -0.7381, 489.6568, 0.0829, 0.0097, -0.0352, 0.9484, 0.6994, 0
MPI-ESM1-2-LR
lit_t_e
lit_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
10.0
8.8
7.6
6.4
5.2
4.0
2.8
1.6
0.4

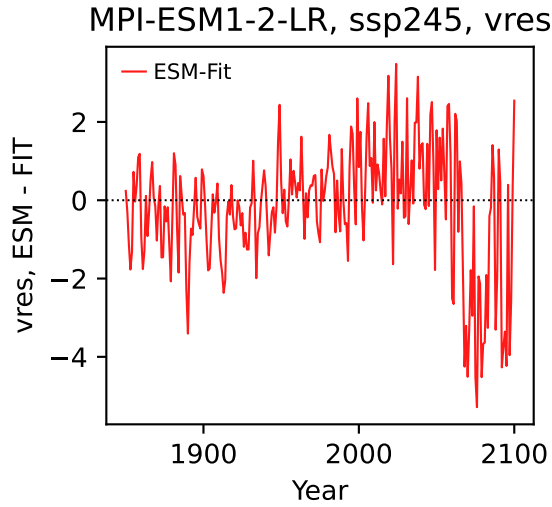

MPI-ESM1-2-LR, ssp245, Litter, ln(MSE/SIGMA)
555, -0.7381, 489.6568, 0.0829, 0.0097, -0.0352, 0.9484, 0.6994, 0
MPI-ESM1-2-LR
lit_c_e
lit_c_l
5
4
3
2
1
0
−1
−2
−3
−1
0
1
2
3
4
5
7.25
6.25
5.25
4.25
3.25
2.25
1.25
0.25

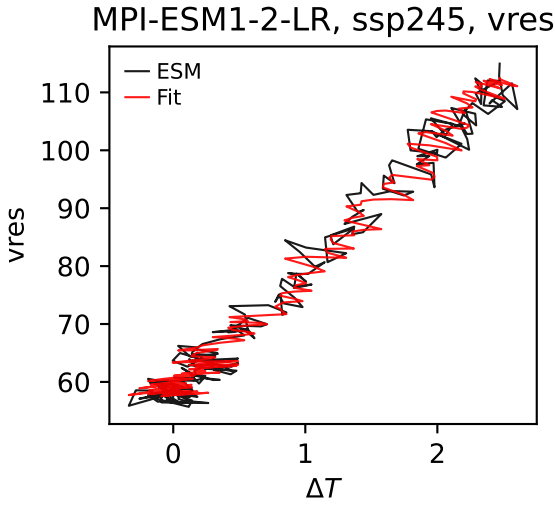

MPI-ESM1-2-LR, ssp245, Litter, ln(MSE/SIGMA)
555, -0.7381, 489.6568, 0.0829, 0.0097, -0.0352, 0.9484, 0.6994, 0
MPI-ESM1-2-LR
lit_hyst
lit_c_half
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
0
250
500
750
1000
1250
1500
1750
2000
10.2
9.3
8.4
7.5
6.6
5.7
4.8
3.9
3.0
2.1

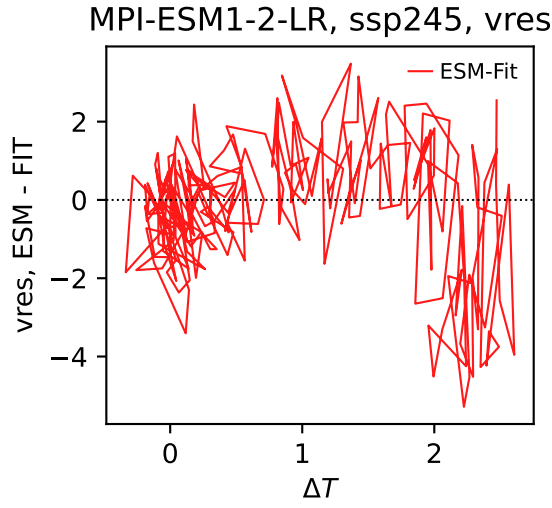

MPI-ESM1-2-LR, ssp245, Litter, ln(MSE/SIGMA)
555, -0.7381, 489.6568, 0.0829, 0.0097, -0.0352, 0.9484, 0.6994, 0
MPI-ESM1-2-LR
lit_fast
lit_c_tan
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
7.5
6.5
5.5
4.5
3.5
2.5
1.5
0.5

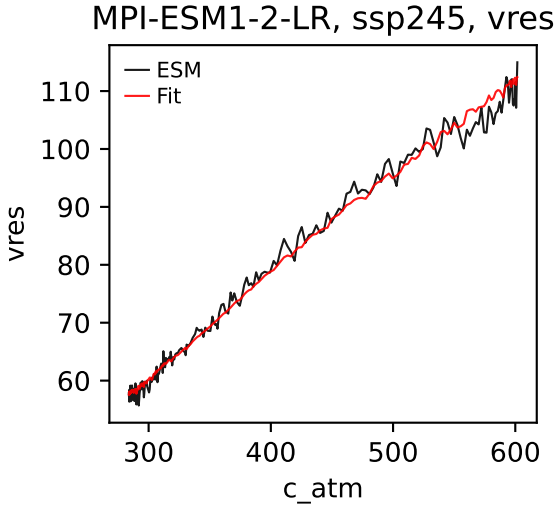

MPI-ESM1-2-LR, ssp245, Litter, ln(MSE/SIGMA)
555, -0.7381, 489.6568, 0.0829, 0.0097, -0.0352, 0.9484, 0.6994, 0
1e−13+9.4034276646e−1
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
lit_slow
MPI-ESM1-2-LR
−0.04
−0.02
0.00
0.02
0.04
lit_c_tan2
1.961
1.721
1.481
1.241
1.001
0.761
0.521
0.281

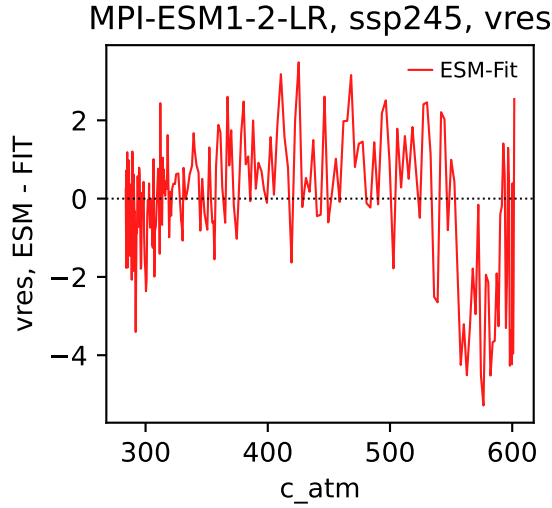

MPI-ESM1-2-LR, ssp245, vres
ESM
Fit
vres
Year

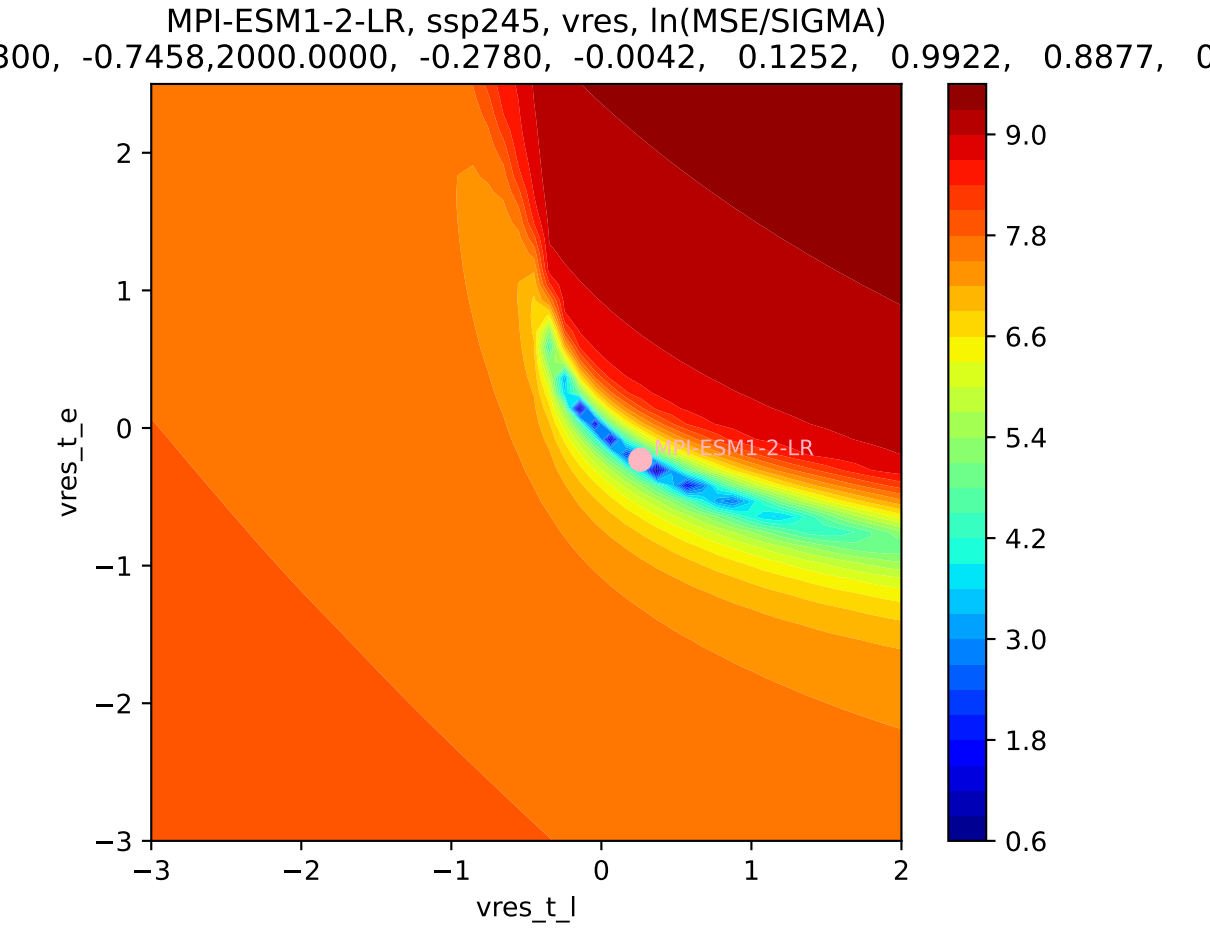

MPI-ESM1-2-LR, ssp245, vres
ESM-Fit
vres, ESM - FIT
Year

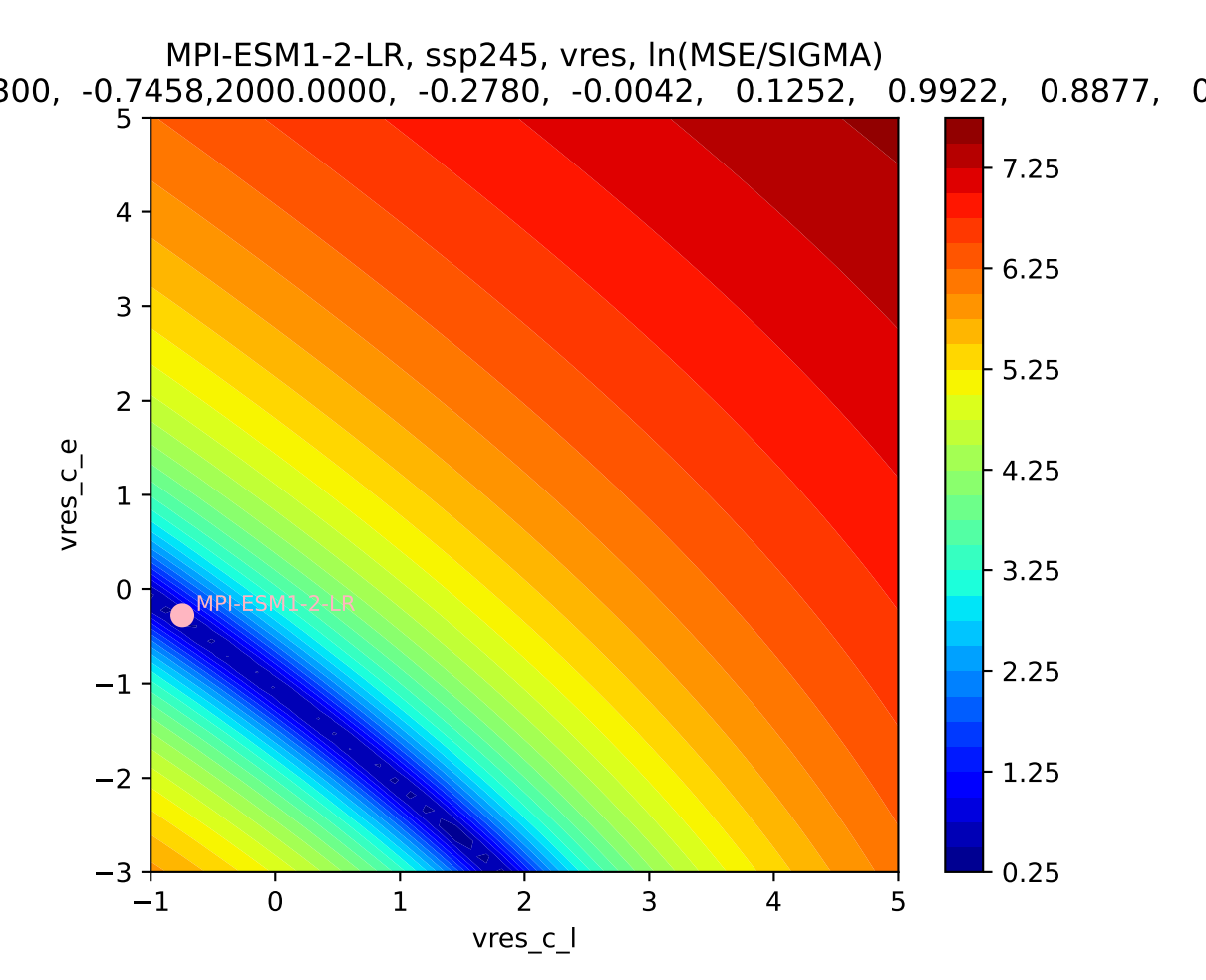

MPI-ESM1-2-LR, ssp245, vres
ESM
Fit
vres
ΔT

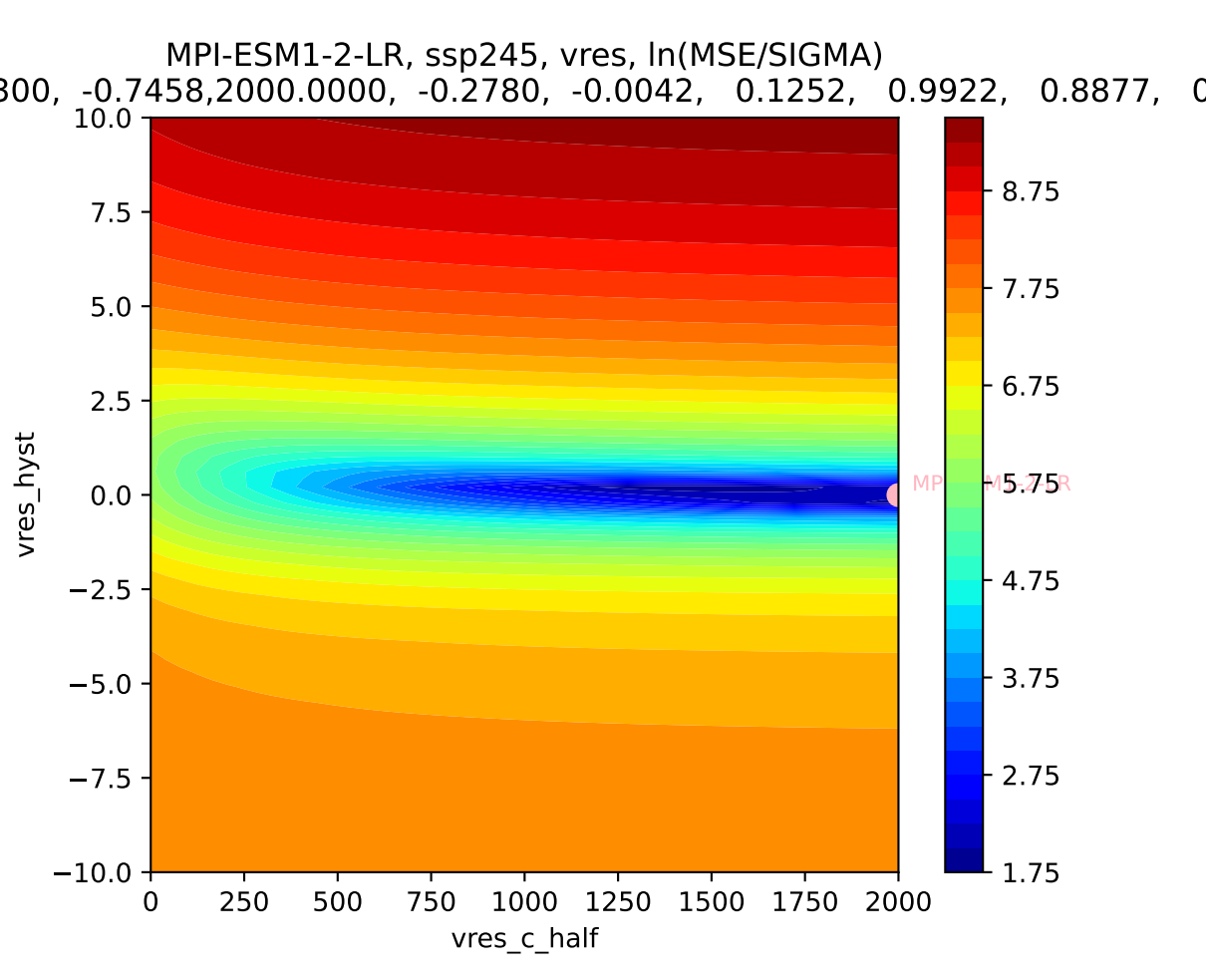

MPI-ESM1-2-LR, ssp245, vres
ESM-Fit
vres, ESM - FIT
ΔT

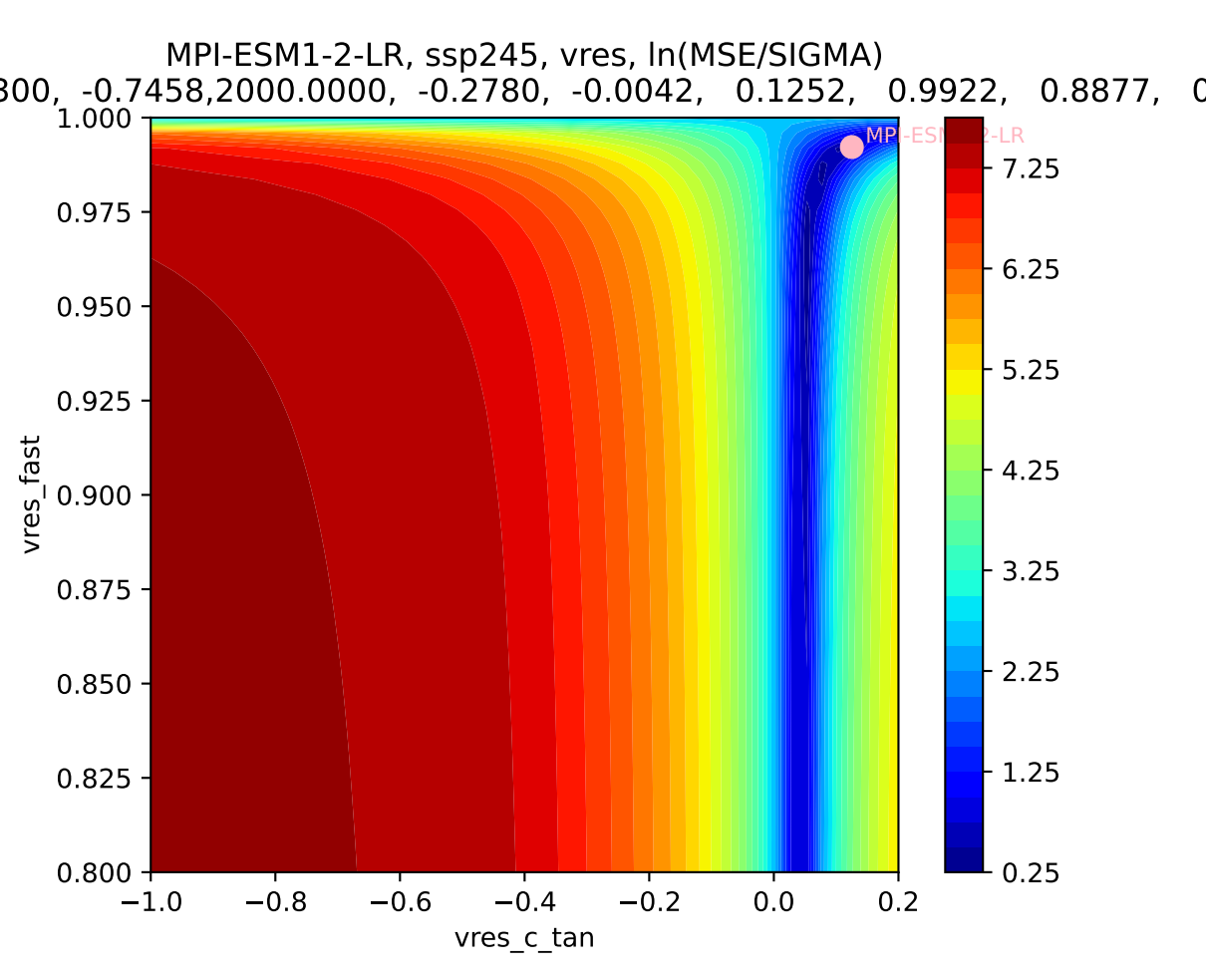

MPI-ESM1-2-LR, ssp245, vres
ESM
Fit
vres
c_atm

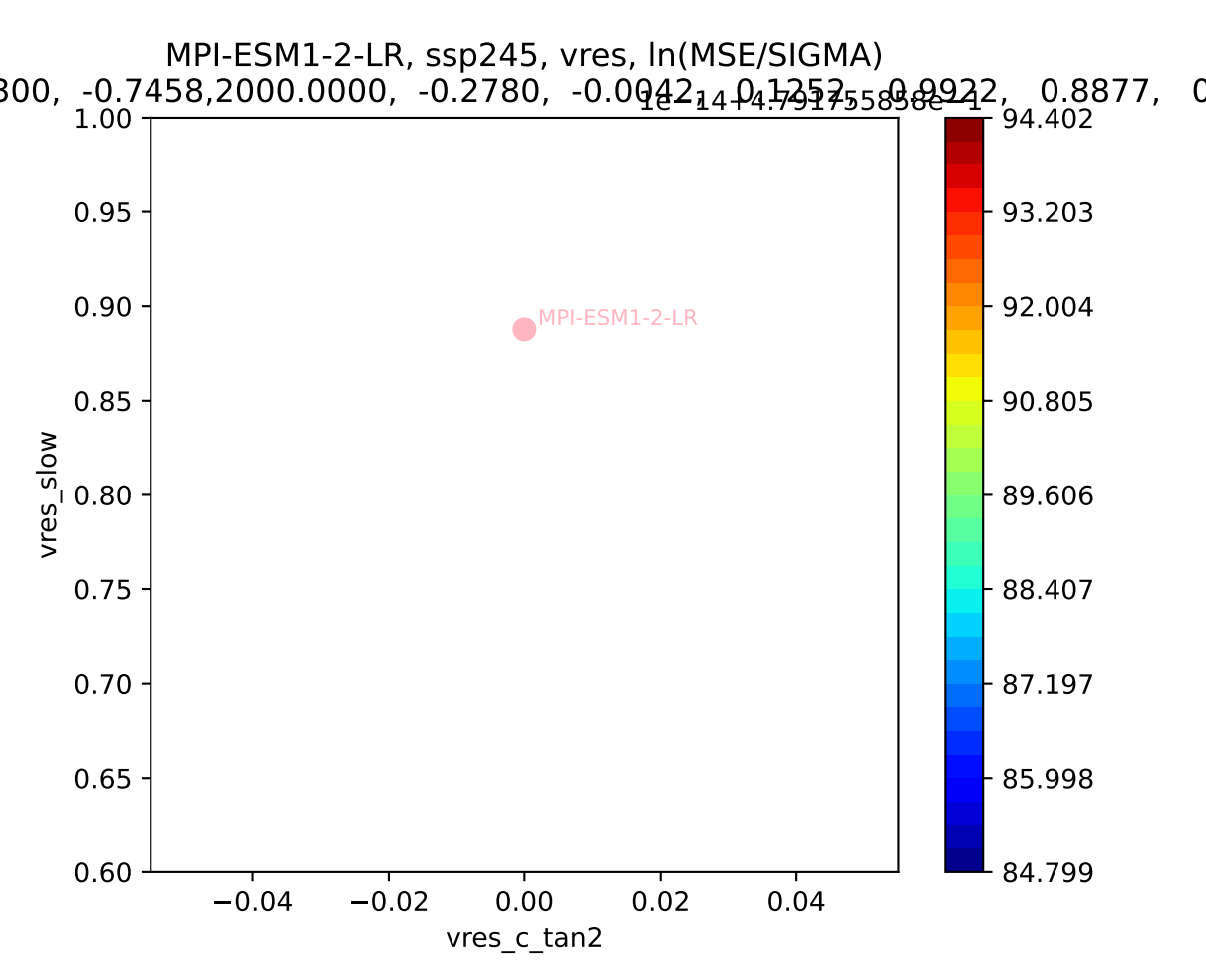

MPI-ESM1-2-LR, ssp245, vres
ESM-Fit
vres, ESM - FIT
c_atm

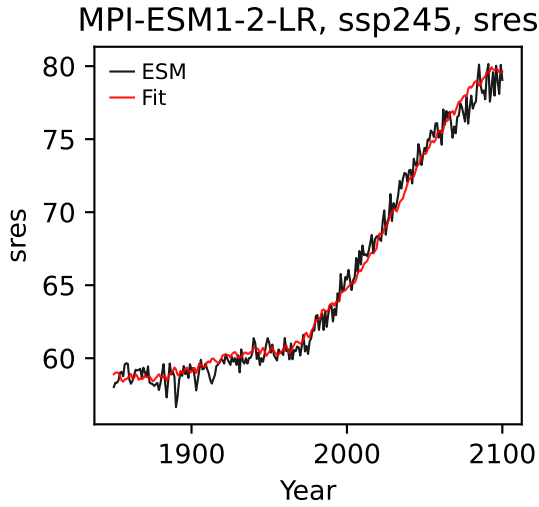

MPI-ESM1-2-LR, ssp245, vres, ln(MSE/SIGMA)
300, -0.7458,2000.0000, -0.2780, -0.0042, 0.1252, 0.9922, 0.8877, 0
MPI-ESM1-2-LR
vres_t_e
vres_t_l
2
1
0
−1
−2
−3
9.0
7.8
6.6
5.4
4.2
3.0
1.8
0.6

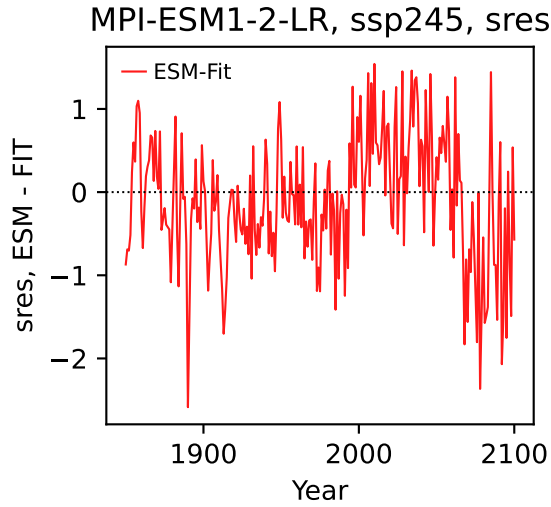

MPI-ESM1-2-LR, ssp245, vres, ln(MSE/SIGMA)
300, -0.7458,2000.0000, -0.2780, -0.0042, 0.1252, 0.9922, 0.8877, 0
vres_c_e
vres_c_l
MPI-ESM1-2-LR
5
4
3
2
1
0
−1
−2
−3
−1
0
1
2
3
4
5
7.25
6.25
5.25
4.25
3.25
2.25
1.25
0.25

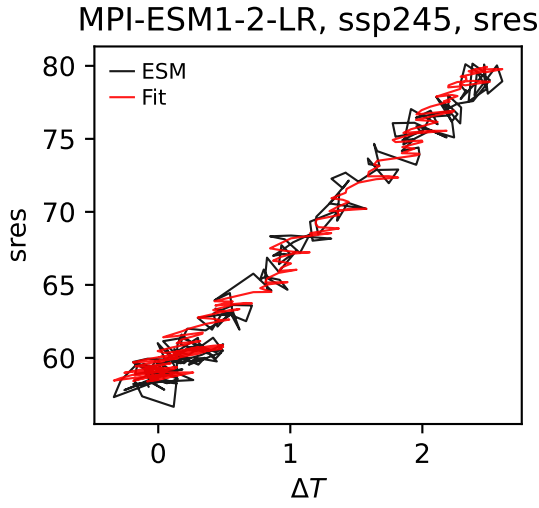

MPI-ESM1-2-LR, ssp245, vres, ln(MSE/SIGMA)
300, -0.7458,2000.0000, -0.2780, -0.0042, 0.1252, 0.9922, 0.8877, 0
vres_hyst
vres_c_half
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
0
250
500
750
1000
1250
1500
1750
2000
8.75
7.75
6.75
5.75
4.75
3.75
2.75
1.75

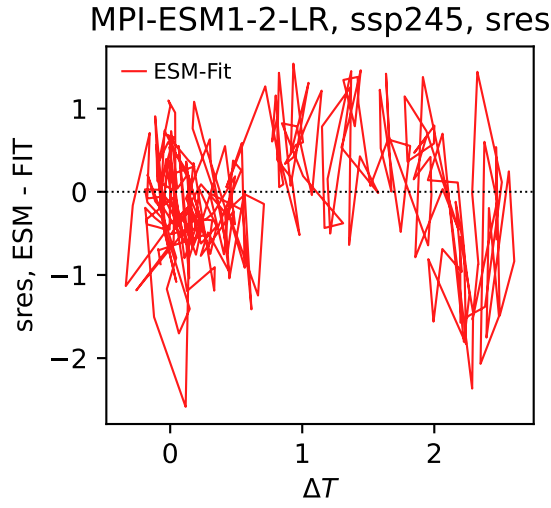

MPI-ESM1-2-LR, ssp245, vres, ln(MSE/SIGMA)
300, -0.7458,2000.0000, -0.2780, -0.0042, 0.1252, 0.9922, 0.8877, 0
MPI-ESM1-2-LR
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
vres_fast
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
vres_c_tan
7.25
6.25
5.25
4.25
3.25
2.25
1.25
0.25

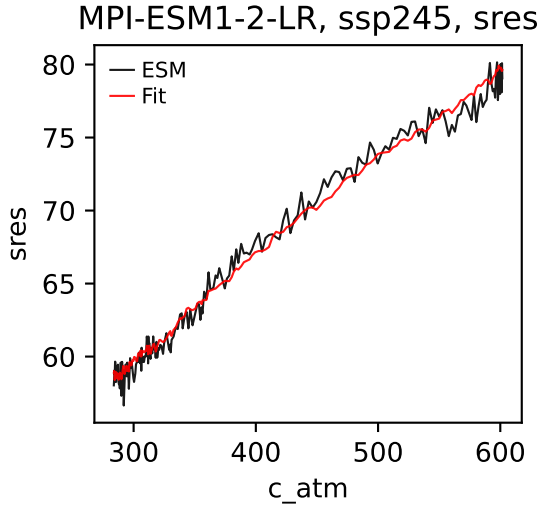

MPI-ESM1-2-LR, ssp245, vres, ln(MSE/SIGMA)
300, -0.7458,2000.0000, -0.2780, -0.0042, 0.1252, 0.9922, 0.8877, 0
1e−14+4.791755858e−1
MPI-ESM1-2-LR
vres_slow
vres_c_tan2
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
−0.04
−0.02
0.00
0.02
0.04
94.402
93.203
92.004
90.805
89.606
88.407
87.197
85.998
84.799

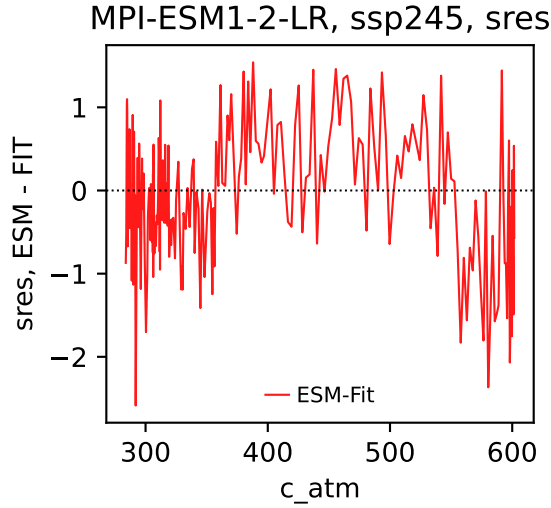

MPI-ESM1-2-LR, ssp245, sres
ESM
Fit
sres
Year

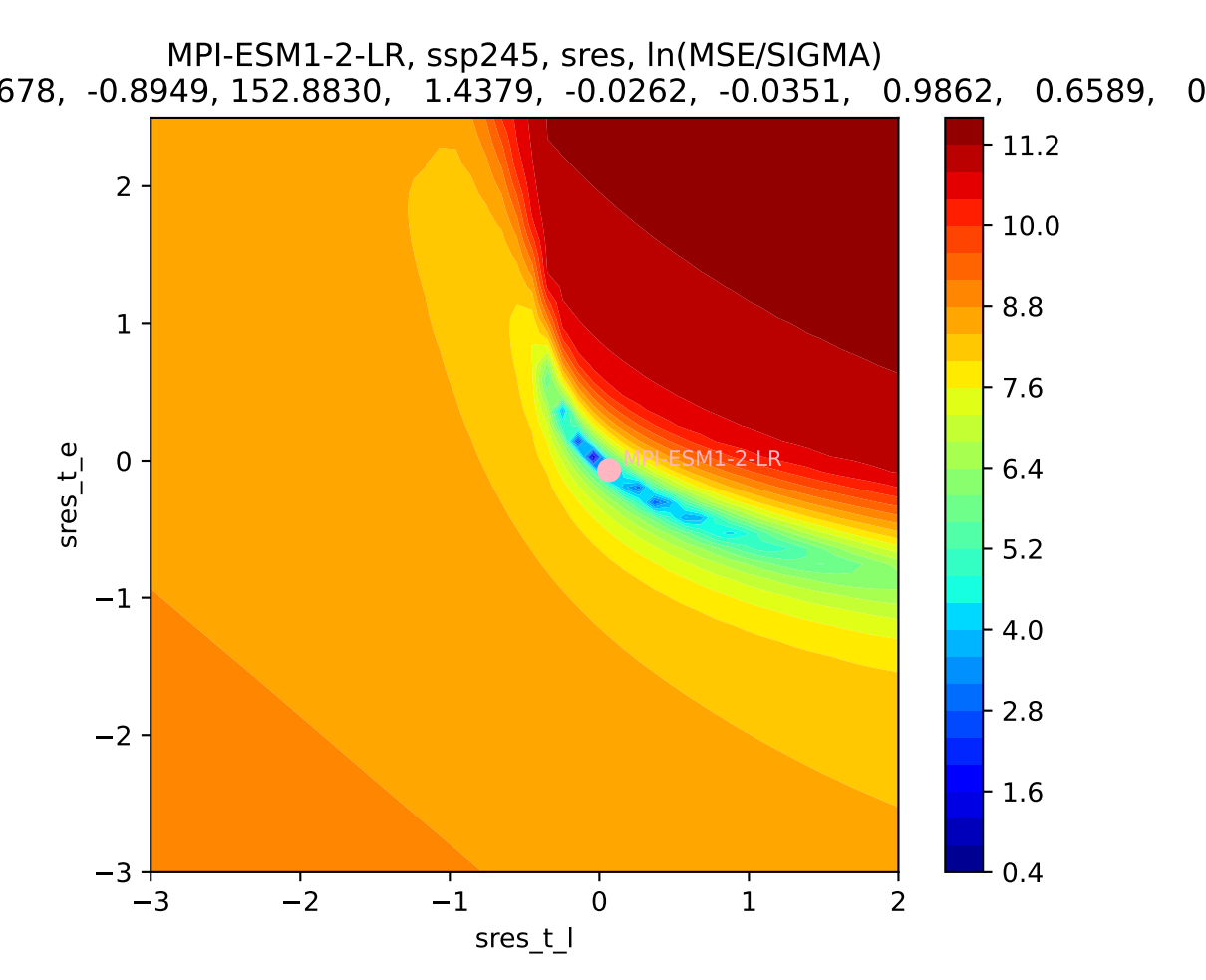

MPI-ESM1-2-LR, ssp245, sres
ESM-Fit
sres, ESM - FIT
Year

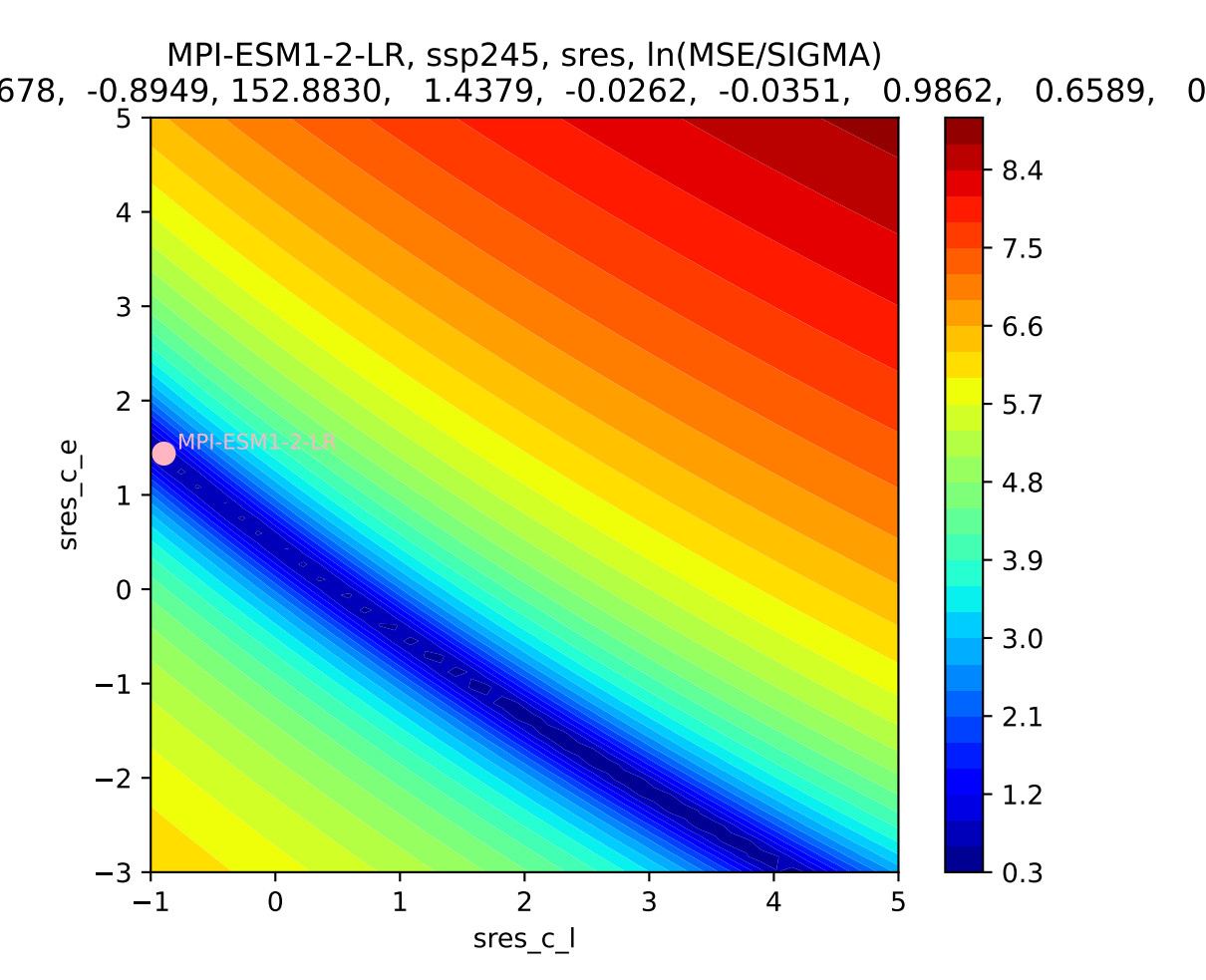

MPI-ESM1-2-LR, ssp245, sres
ESM
Fit
sres
ΔT

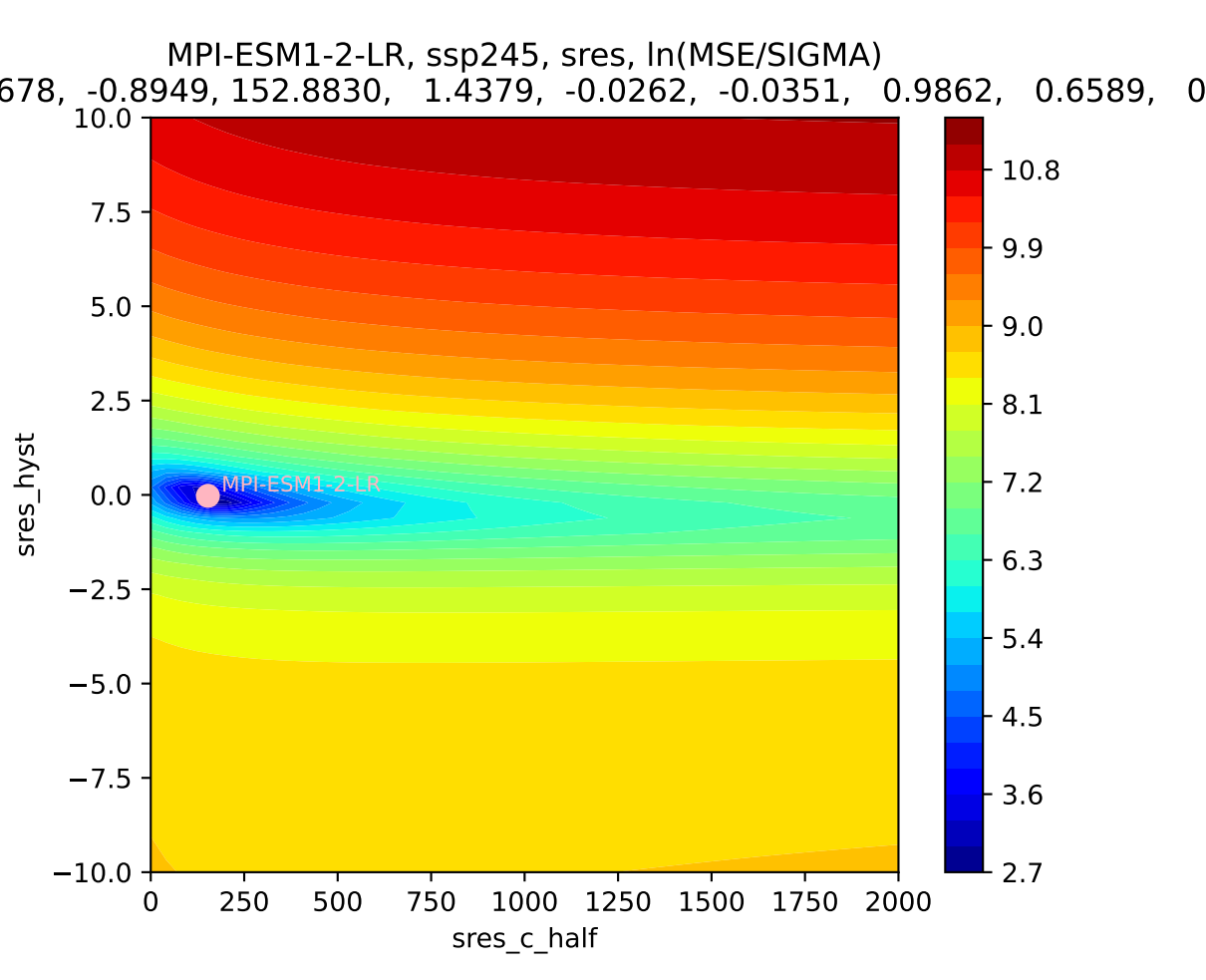

MPI-ESM1-2-LR, ssp245, sres
ESM-Fit
sres, ESM - FIT
ΔT

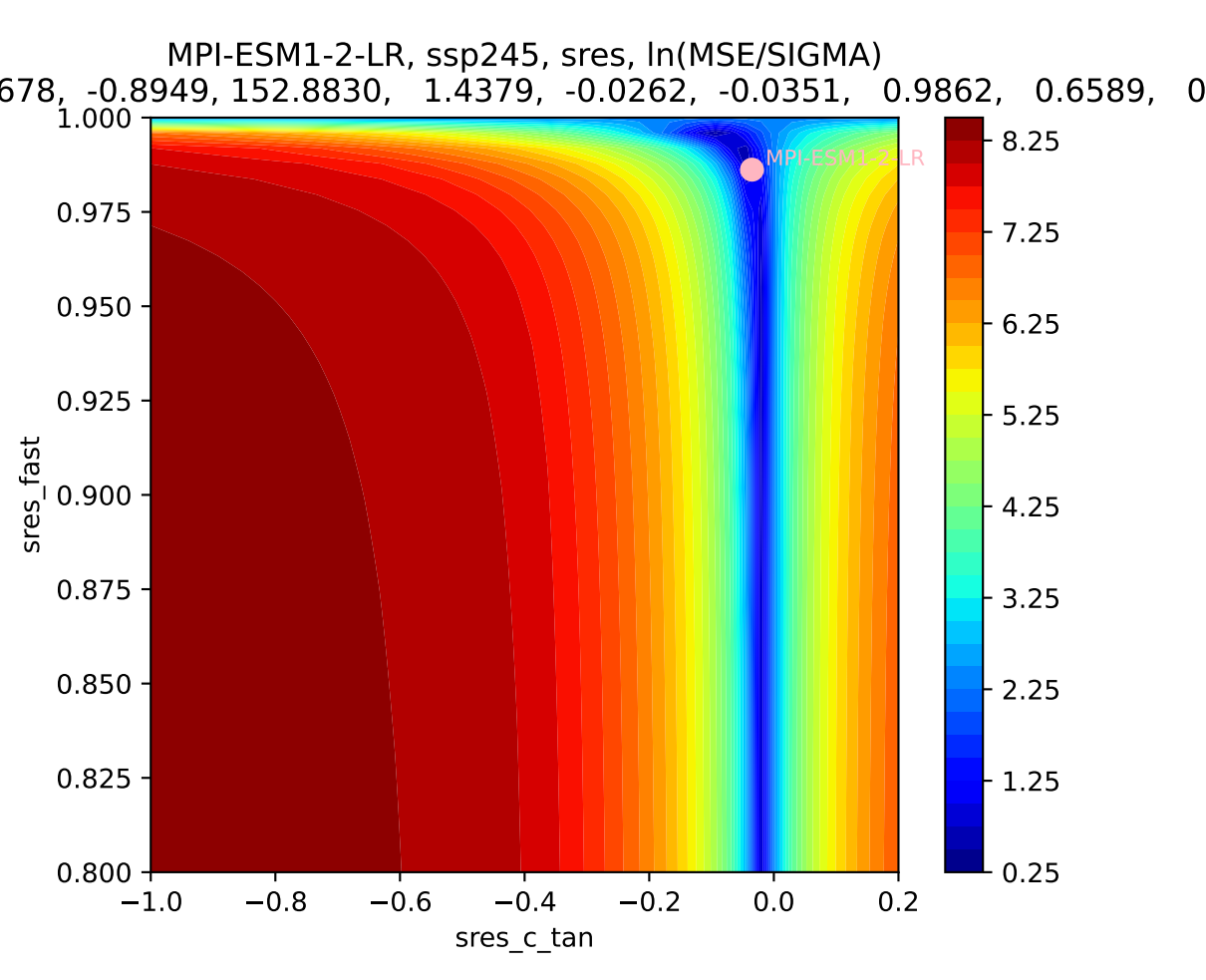

MPI-ESM1-2-LR, ssp245, sres
ESM
Fit
sres
c_atm

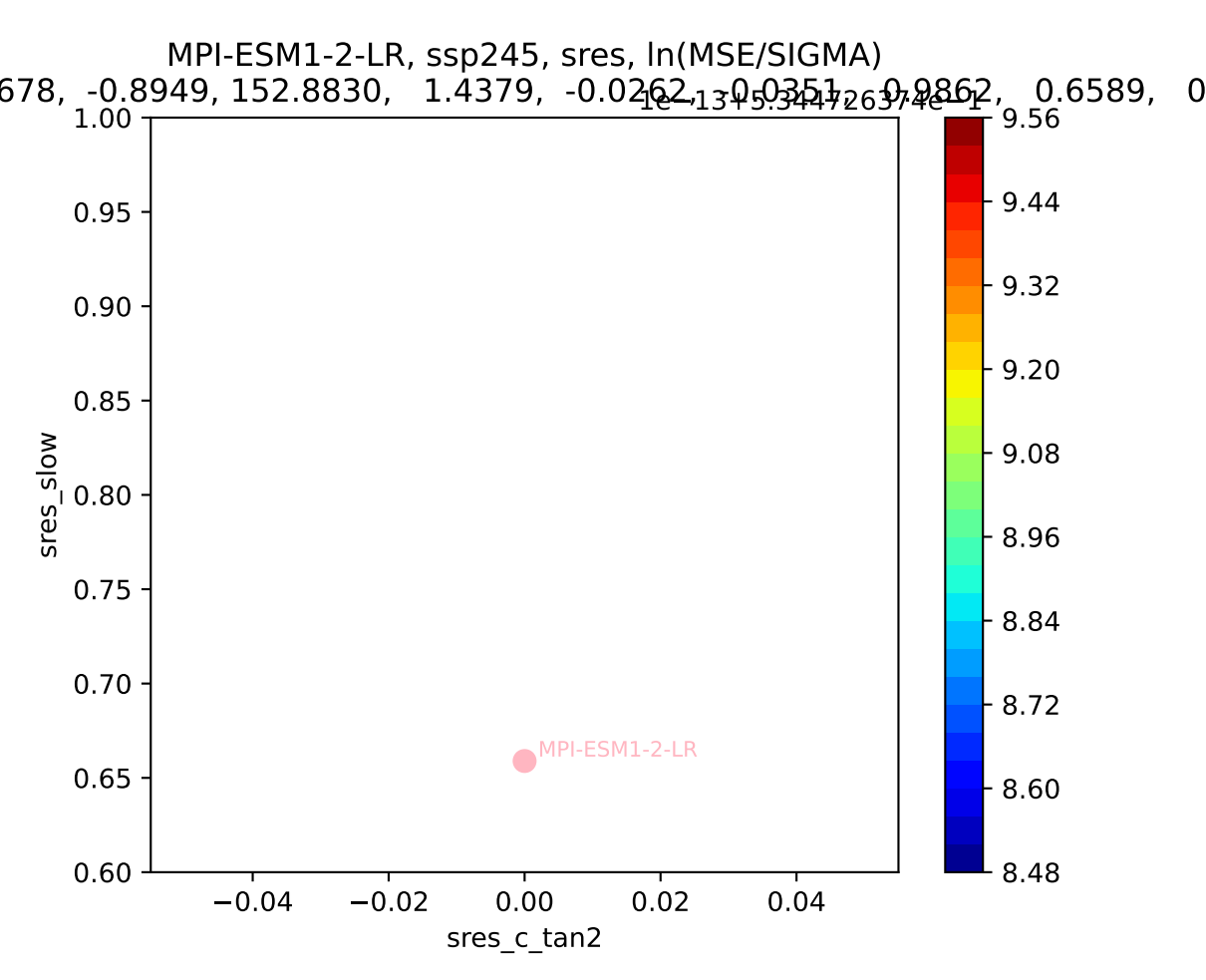

MPI-ESM1-2-LR, ssp245, sres
ESM-Fit
sres, ESM - FIT
c_atm

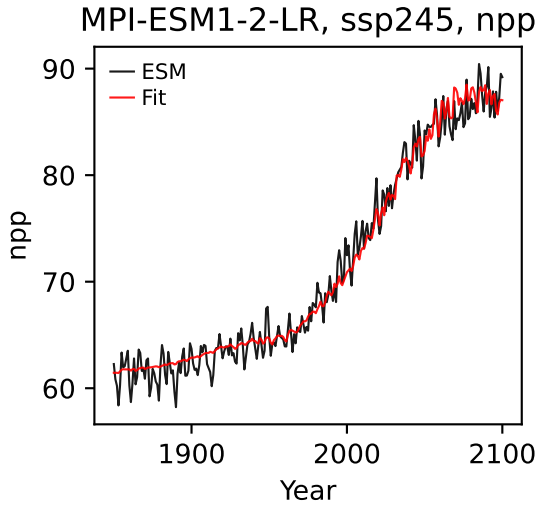

MPI-ESM1-2-LR, ssp245, sres, ln(MSE/SIGMA)
678, -0.8949, 152.8830, 1.4379, -0.0262, -0.0351, 0.9862, 0.6589, 0
MPI-ESM1-2-LR
sres_t_e
sres_t_l
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
11.2
10.0
8.8
7.6
6.4
5.2
4.0
2.8
1.6
0.4

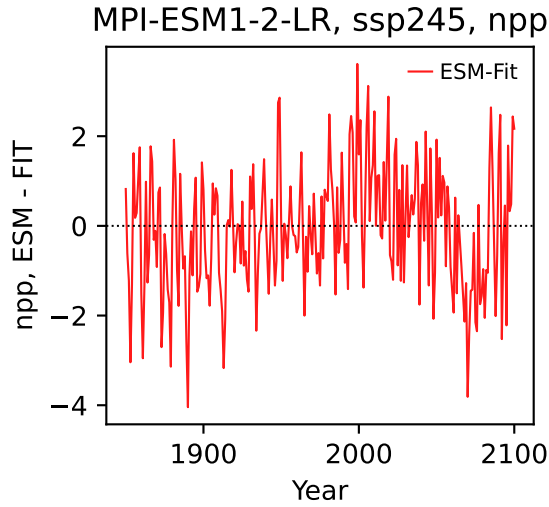

MPI-ESM1-2-LR, ssp245, sres, ln(MSE/SIGMA)
678, -0.8949, 152.8830, 1.4379, -0.0262, -0.0351, 0.9862, 0.6589, 0
MPI-ESM1-2-LR
sres_c_e
sres_c_l
5
4
3
2
1
0
−1
−2
−3
−1
0
1
2
3
4
5
8.4
7.5
6.6
5.7
4.8
3.9
3.0
2.1
1.2
0.3

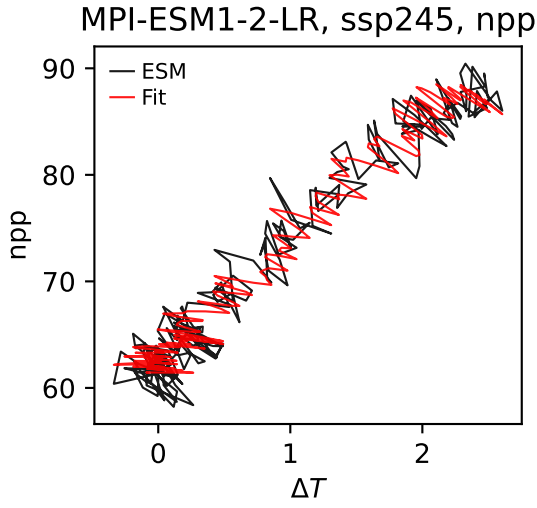

MPI-ESM1-2-LR, ssp245, sres, ln(MSE/SIGMA)
678, -0.8949, 152.8830, 1.4379, -0.0262, -0.0351, 0.9862, 0.6589, 0
MPI-ESM1-2-LR
sres_hyst
sres_c_half
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
0
250
500
750
1000
1250
1500
1750
2000
10.8
9.9
9.0
8.1
7.2
6.3
5.4
4.5
3.6
2.7

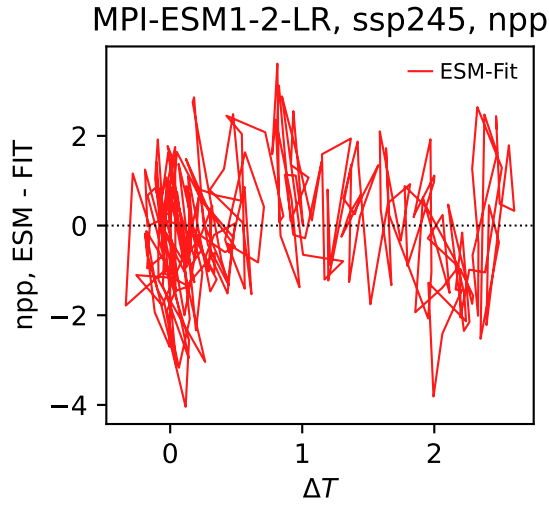

MPI-ESM1-2-LR, ssp245, sres, ln(MSE/SIGMA)
678, -0.8949, 152.8830, 1.4379, -0.0262, -0.0351, 0.9862, 0.6589, 0
MPI-ESM1-2-LR
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
sres_fast
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
sres_c_tan
8.25
7.25
6.25
5.25
4.25
3.25
2.25
1.25
0.25

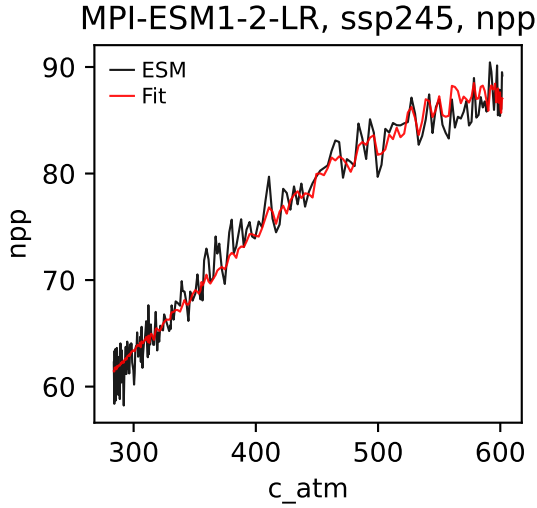

MPI-ESM1-2-LR, ssp245, sres, ln(MSE/SIGMA)
678, -0.8949, 152.8830, 1.4379, -0.0262, -0.0351, 0.9862, 0.6589, 0
1e−13+5.3447263774e−1
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
sres_slow
MPI-ESM1-2-LR
−0.04
−0.02
0.00
0.02
0.04
sres_c_tan2
9.56
9.44
9.32
9.20
9.08
8.96
8.84
8.72
8.60
8.48

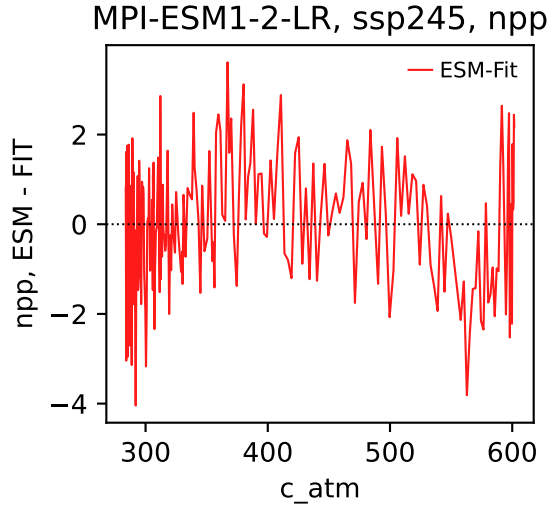

MPI-ESM1-2-LR, ssp245, npp
ESM
Fit
npp
Year

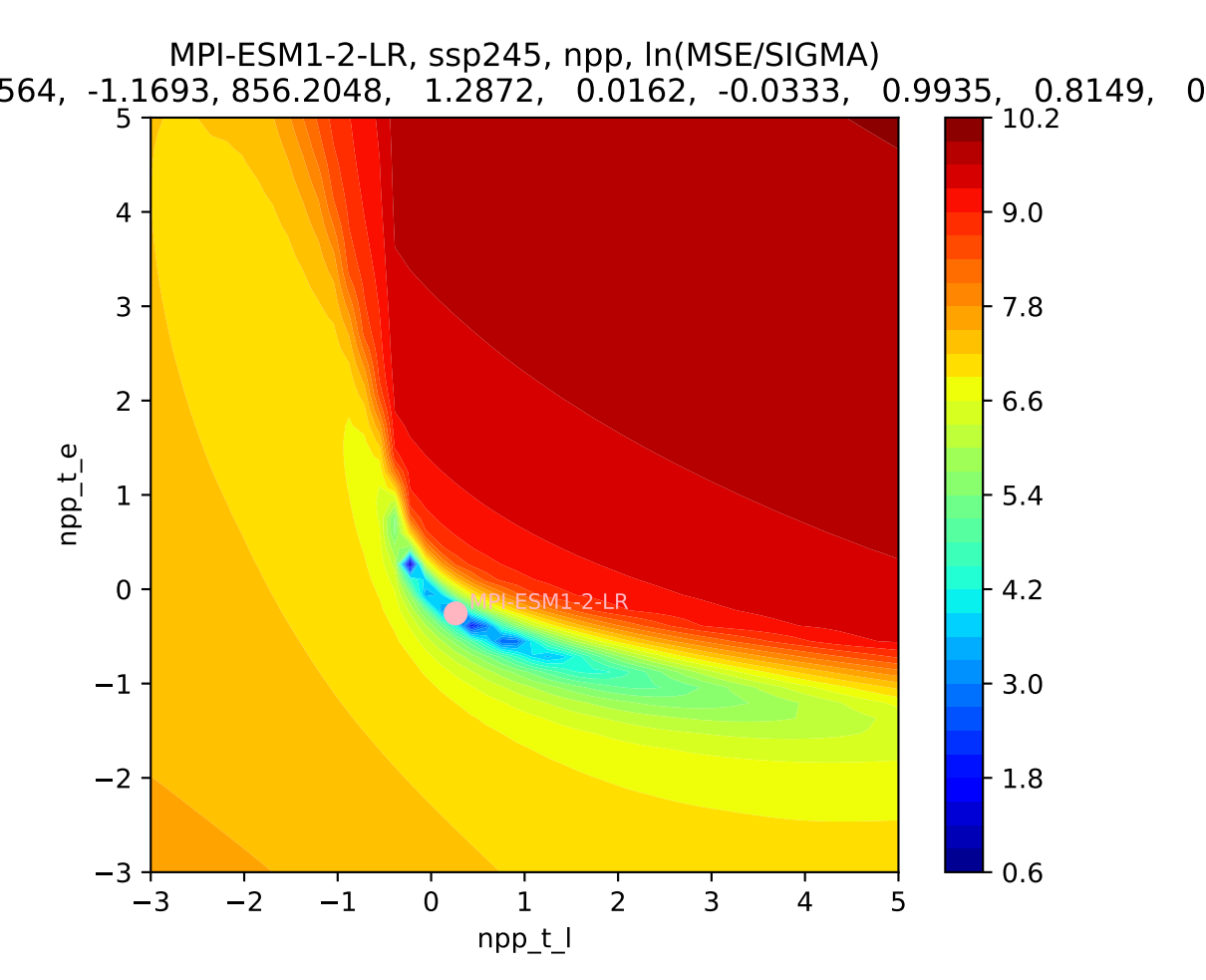

MPI-ESM1-2-LR, ssp245, npp
ESM-Fit
npp, ESM - FIT
Year

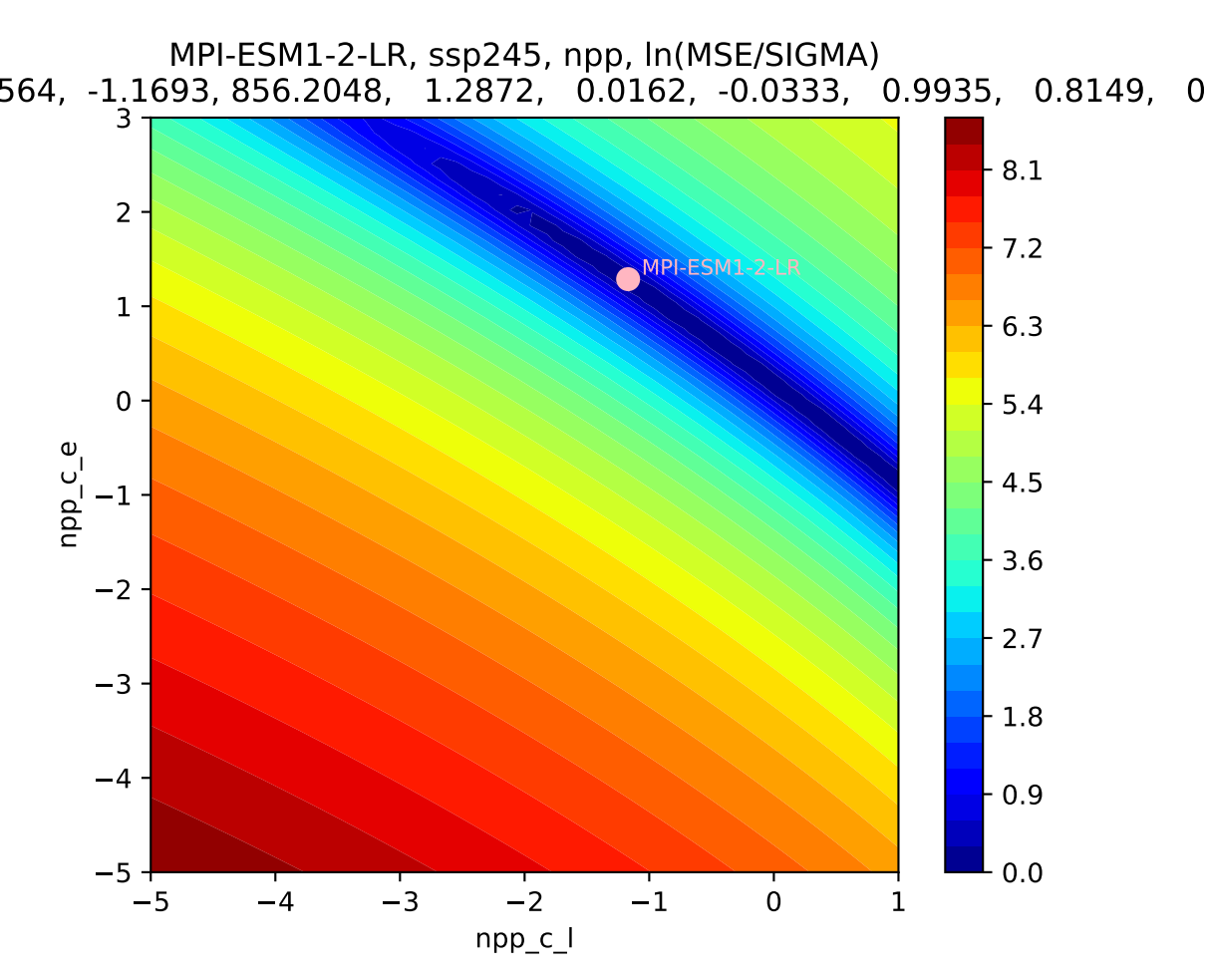

MPI-ESM1-2-LR, ssp245, npp
ESM
Fit
npp
ΔT

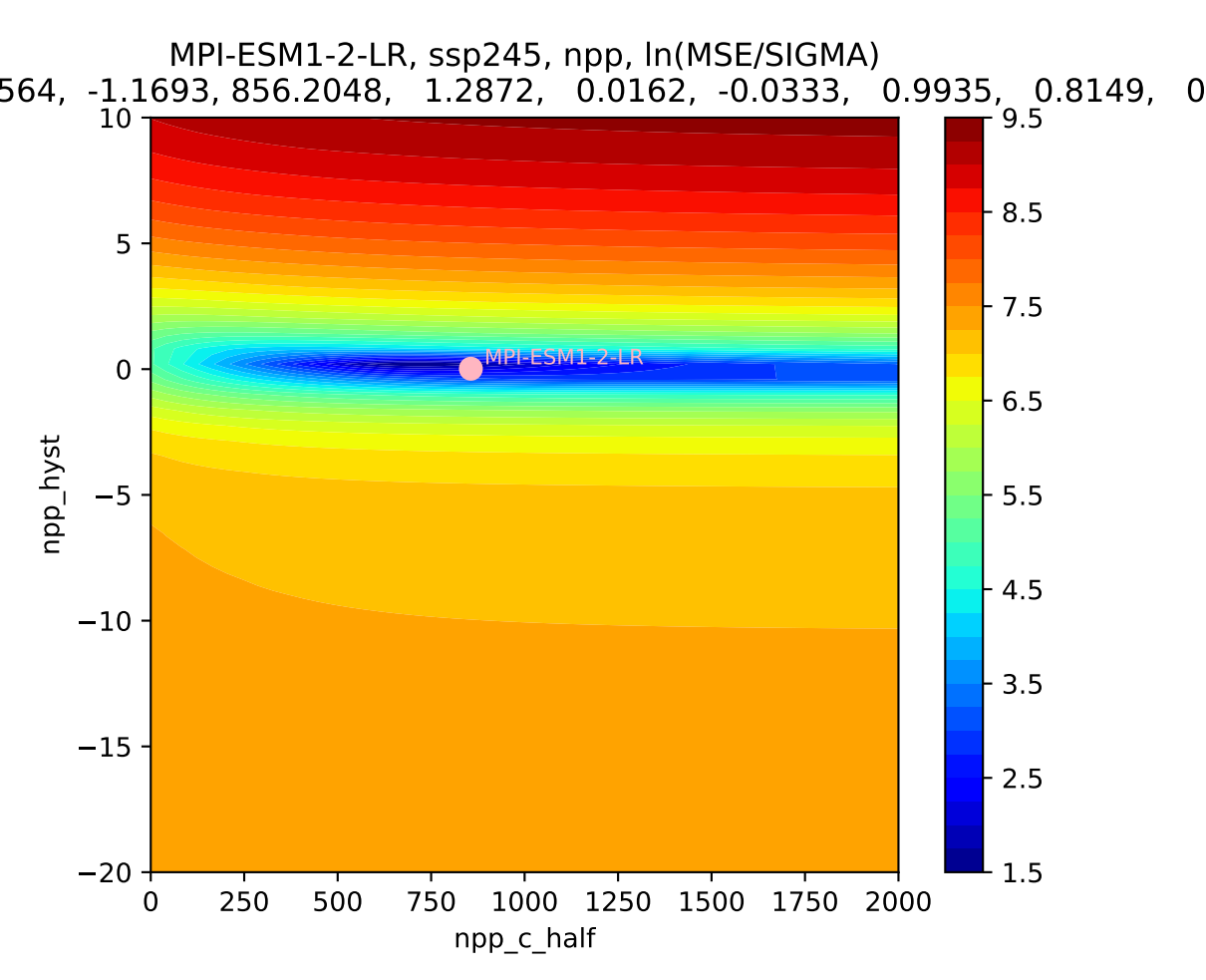

MPI-ESM1-2-LR, ssp245, npp
ESM-Fit
npp, ESM - FIT
ΔT

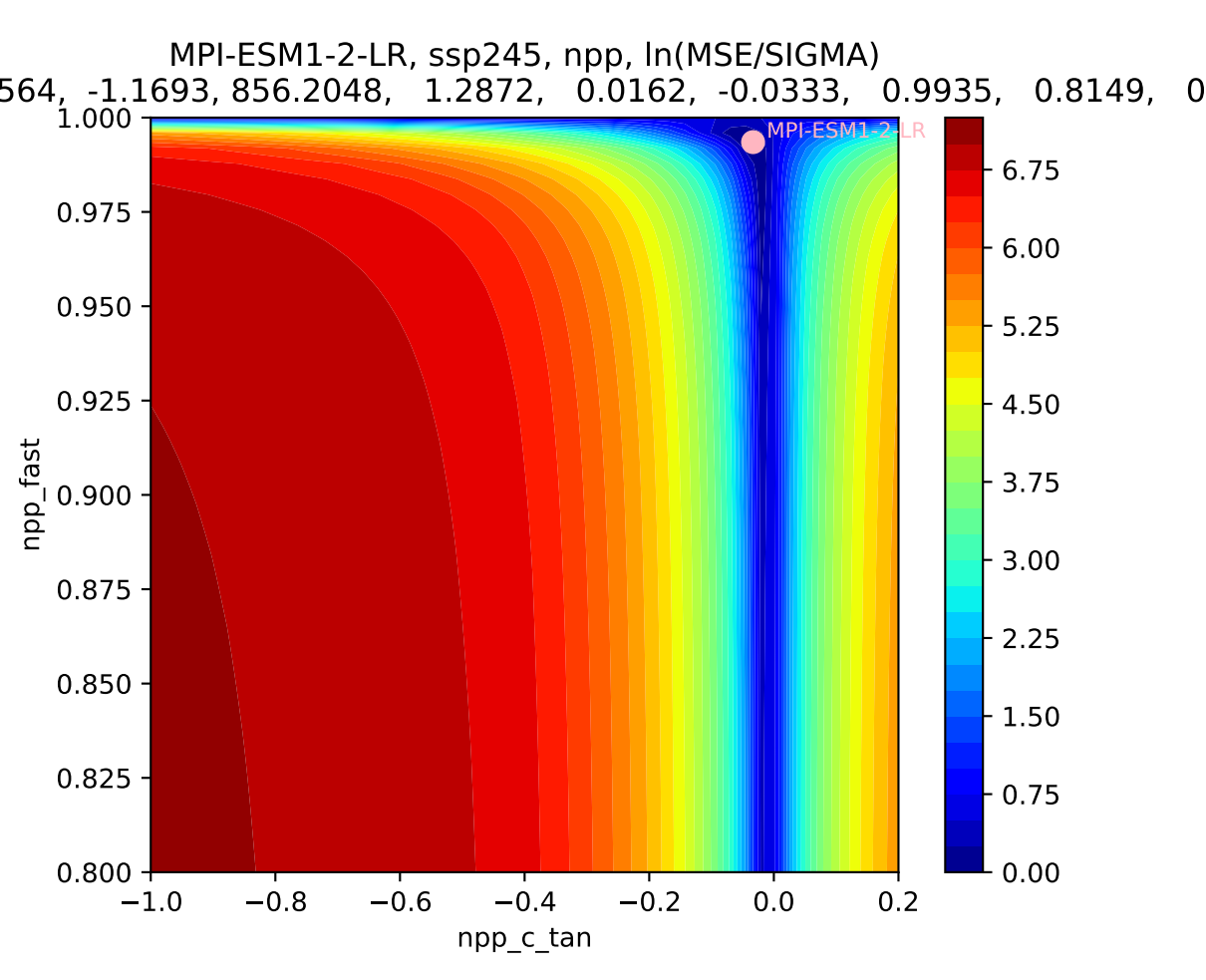

MPI-ESM1-2-LR, ssp245, npp
ESM
Fit
npp
c_atm

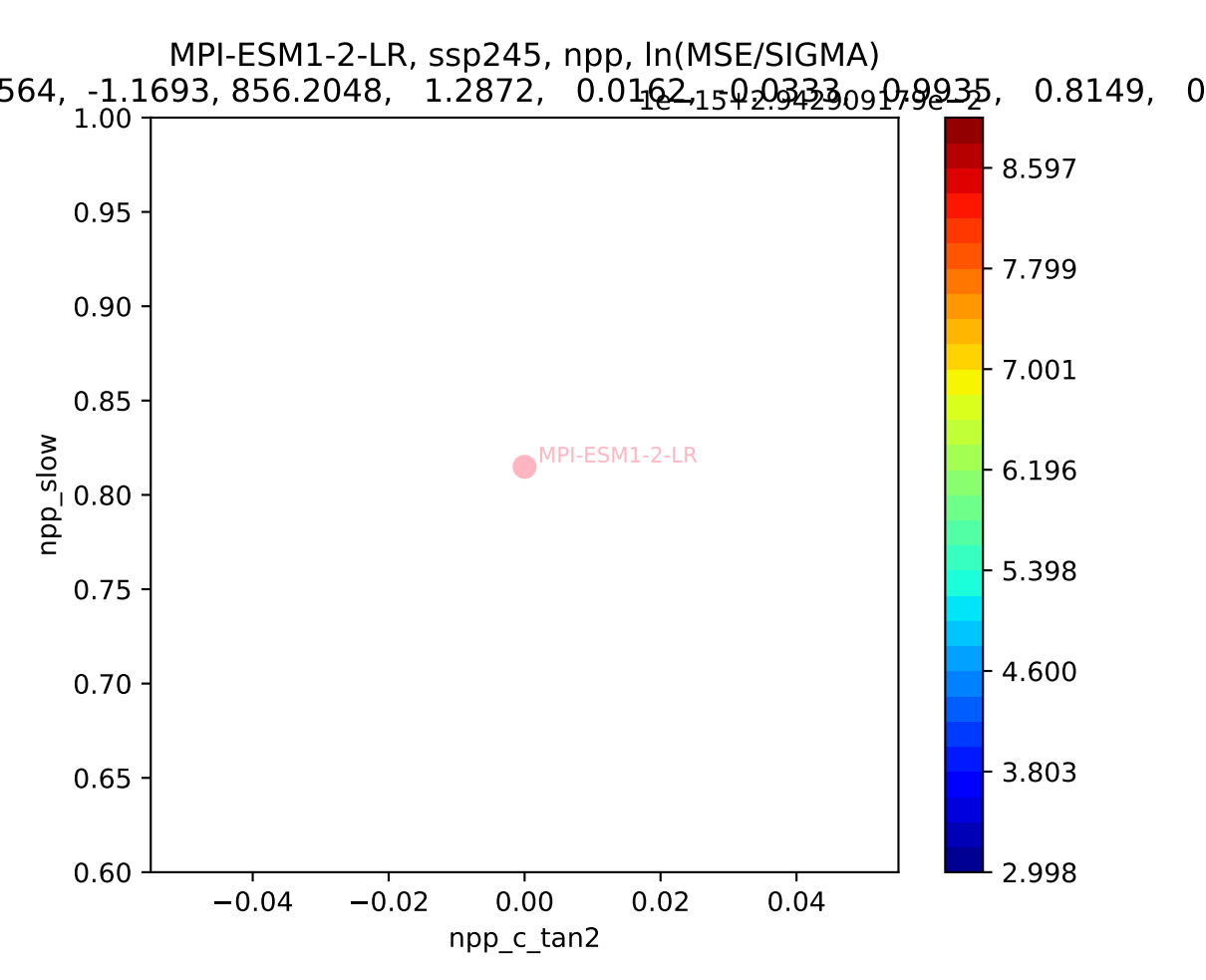

MPI-ESM1-2-LR, ssp245, npp
ESM-Fit
npp, ESM - FIT
c_atm

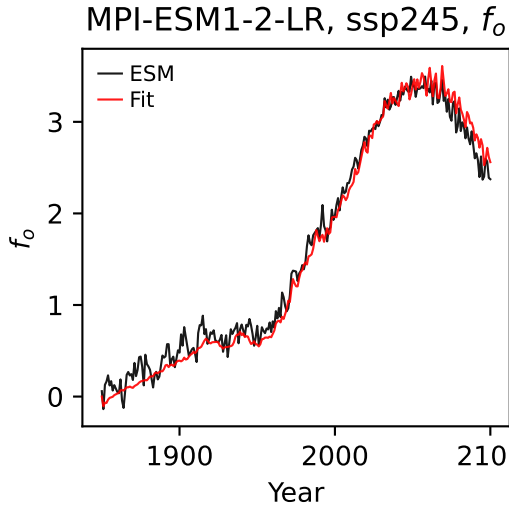

MPI-ESM1-2-LR, ssp245, npp, ln(MSE/SIGMA)
564, -1.1693, 856.2048, 1.2872, 0.0162, -0.0333, 0.9935, 0.8149, 0
MPI-ESM1-2-LR
npp_t_e
npp_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
10.2
9.0
7.8
6.6
5.4
4.2
3.0
1.8
0.6

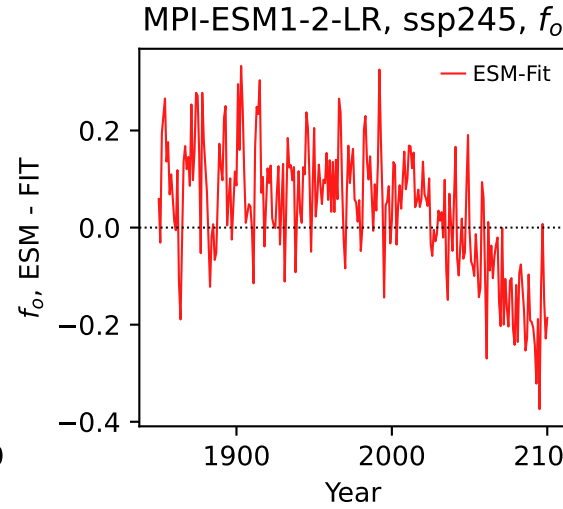

MPI-ESM1-2-LR, ssp245, npp, ln(MSE/SIGMA)
564, -1.1693, 856.2048, 1.2872, 0.0162, -0.0333, 0.9935, 0.8149, 0
MPI-ESM1-2-LR
npp_c_e
npp_c_l
3
2
1
0
−1
−2
−3
−4
−5
−5
−4
−3
−2
−1
0
1
8.1
7.2
6.3
5.4
4.5
3.6
2.7
1.8
0.9
0.0

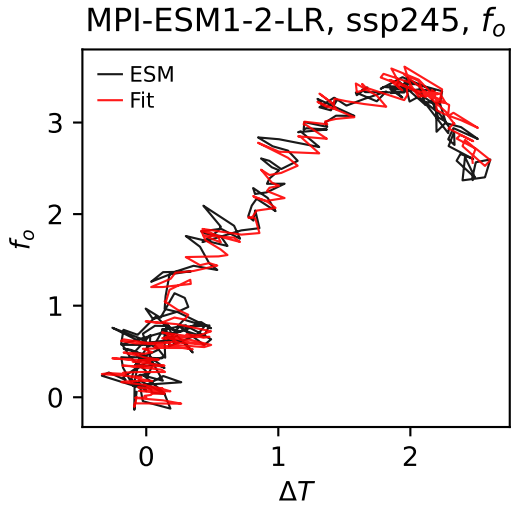

MPI-ESM1-2-LR, ssp245, npp, ln(MSE/SIGMA)
564, -1.1693, 856.2048, 1.2872, 0.0162, -0.0333, 0.9935, 0.8149, 0
MPI-ESM1-2-LR
npp_hyst
npp_c_half
10
5
0
−5
−10
−15
−20
0
250
500
750
1000
1250
1500
1750
2000
9.5
8.5
7.5
6.5
5.5
4.5
3.5
2.5
1.5

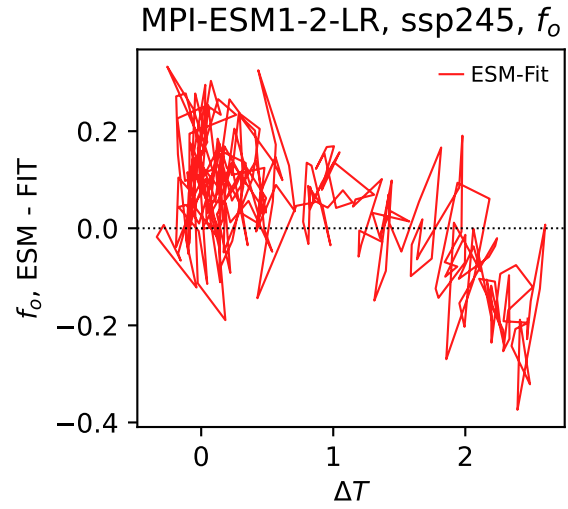

MPI-ESM1-2-LR, ssp245, npp, ln(MSE/SIGMA)
564, -1.1693, 856.2048, 1.2872, 0.0162, -0.0333, 0.9935, 0.8149, 0
MPI-ESM1-2-LR
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
npp_fast
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
npp_c_tan
6.75
6.00
5.25
4.50
3.75
3.00
2.25
1.50
0.75
0.00

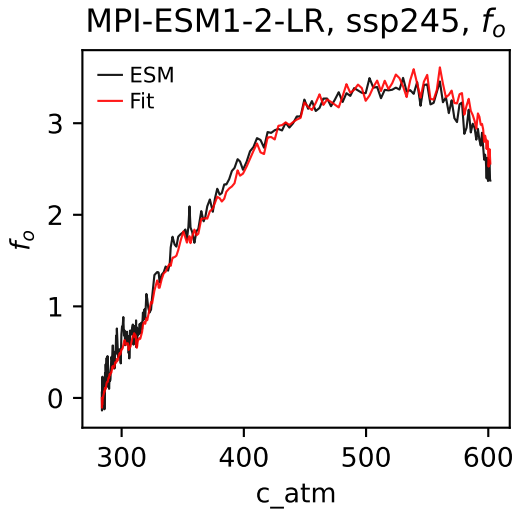

MPI-ESM1-2-LR, ssp245, npp, ln(MSE/SIGMA)
564, -1.1693, 856.2048, 1.2872, 0.0162, -0.0333, 0.9935, 0.8149, 0
1e−15+2.9429091e−2
MPI-ESM1-2-LR
npp_slow
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
−0.04
−0.02
0.00
0.02
0.04
npp_c_tan2
8.597
7.799
7.001
6.196
5.398
4.600
3.803
2.998

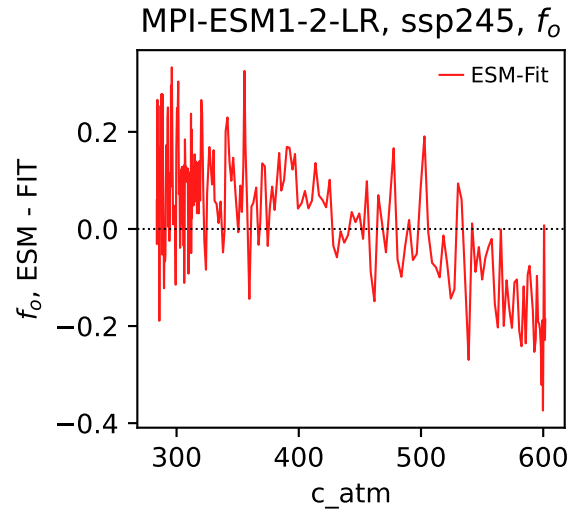

MPI-ESM1-2-LR, ssp245, f_o
ESM
Fit
f_o
Year

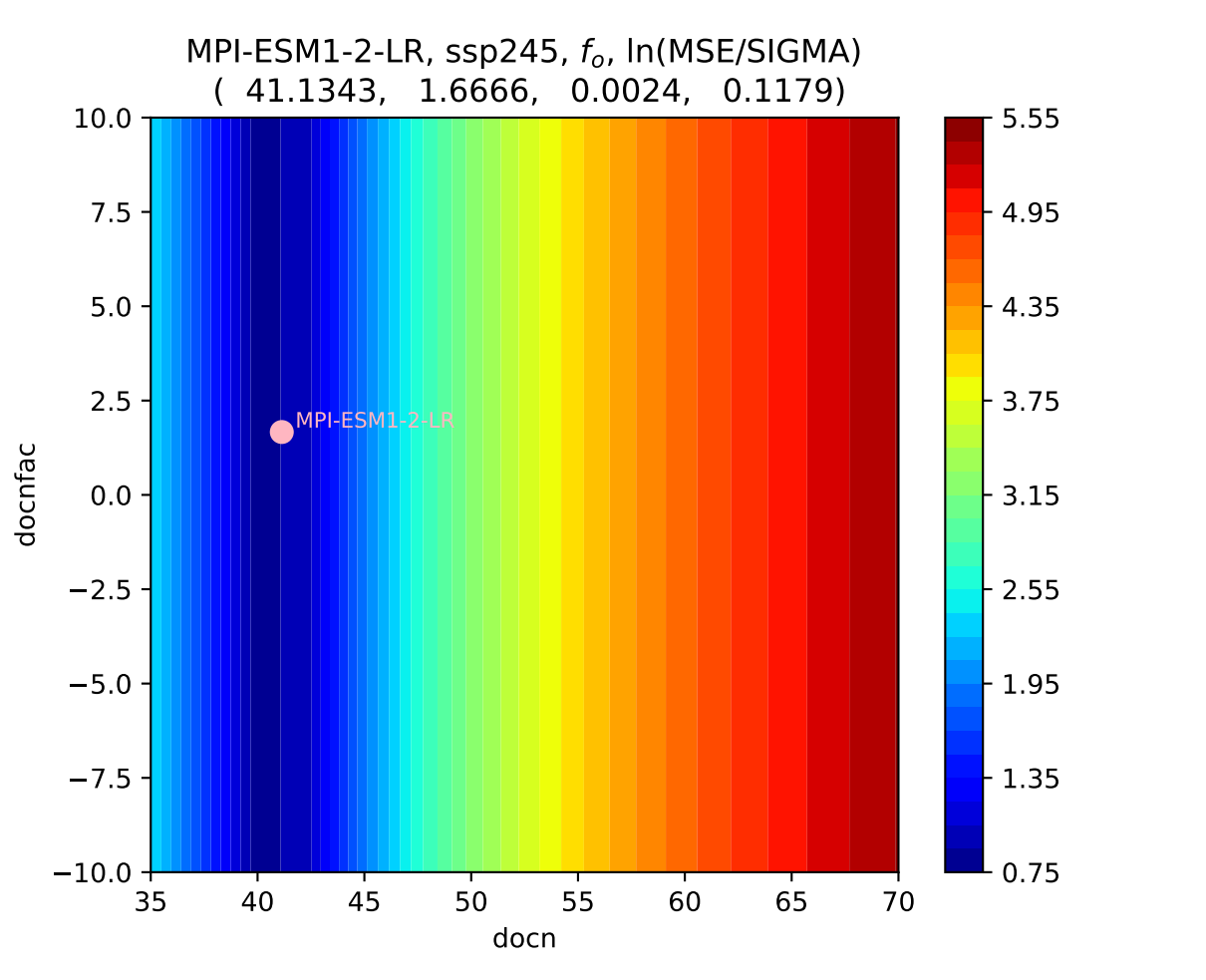

MPI-ESM1-2-LR, ssp245, f_o
ESM-Fit
f_o, ESM - FIT
Year

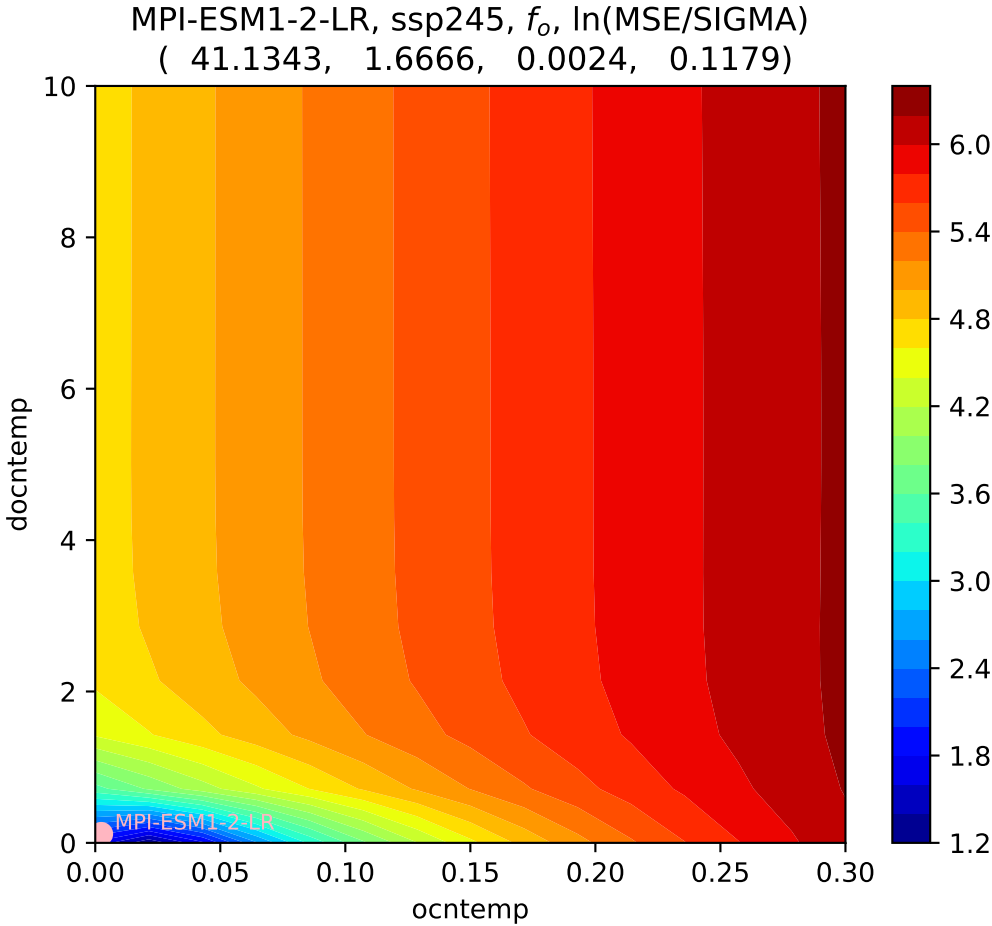

MPI-ESM1-2-LR, ssp245, f_o
ESM
Fit
f_o
ΔT


MPI-ESM1-2-LR, ssp245, f_o
ESM-Fit
f_o, ESM - FIT
ΔT


MPI-ESM1-2-LR, ssp245, f_o
ESM
Fit
f_o
c_atm


MPI-ESM1-2-LR, ssp245, f_o
ESM-Fit
f_o, ESM - FIT
c_atm


MPI-ESM1-2-LR, ssp245, f_o, ln(MSE/SIGMA)
(41.1343, 1.6666, 0.0024, 0.1179)
MPI-ESM1-2-LR
docnfac
docn
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
35
40
45
50
55
60
65
70
5.55
4.95
4.35
3.75
3.15
2.55
1.95
1.35
0.75


MPI-ESM1-2-LR, ssp245, f_o, ln(MSE/SIGMA)
(41.1343, 1.6666, 0.0024, 0.1179)
docntemp
ocntemp
MPI-ESM1-2-LR
0
2
4
6
8
10
0.00
0.05
0.10
0.15
0.20
0.25
0.30
1.2
1.8
2.4
3.0
3.6
4.2
4.8
5.4
6.0