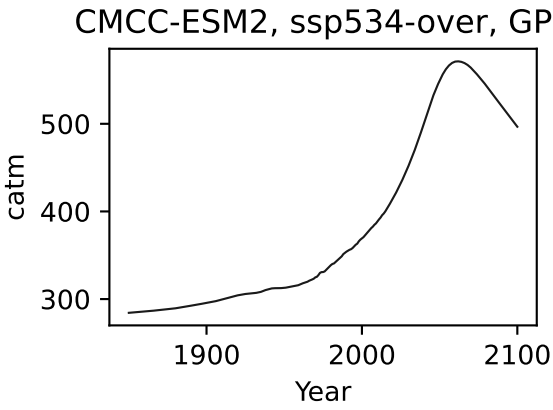
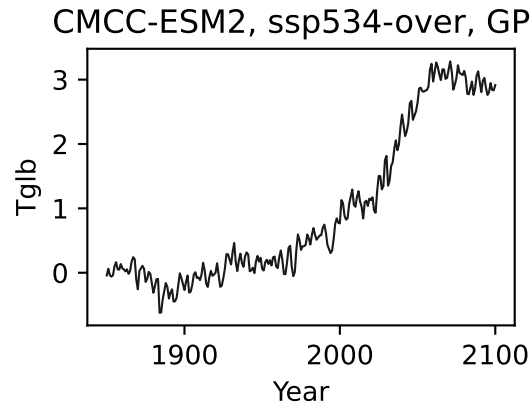
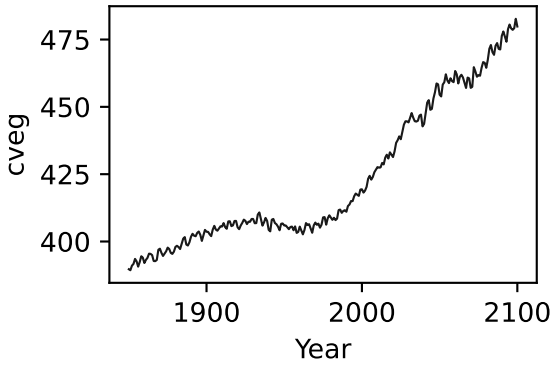
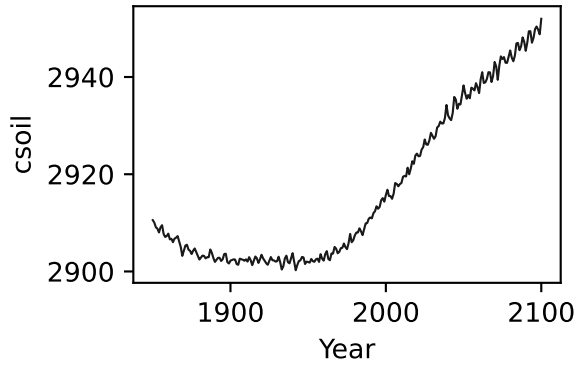
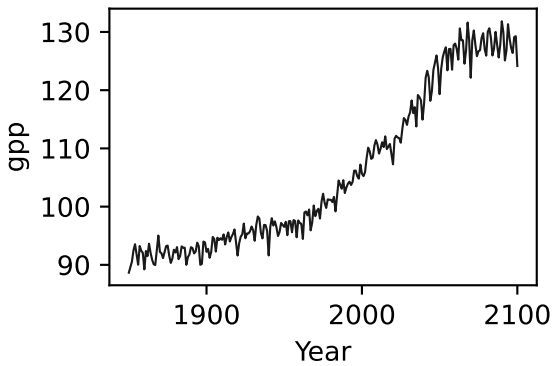
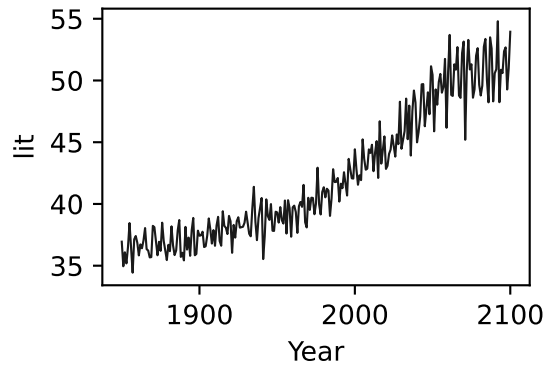

CMCC-ESM2, ssp534-over, GPP
catm
500
400
300
1900
2000
2100
Year

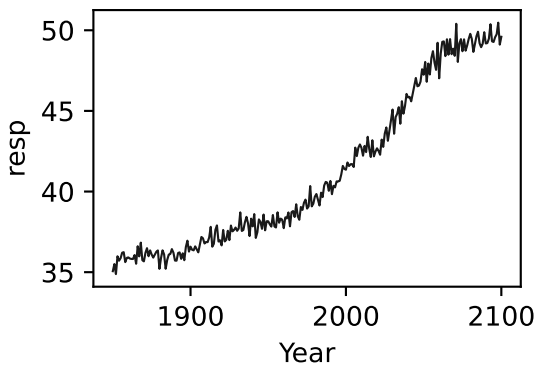

CMCC-ESM2, ssp534-over, GPP
Tglb
3
2
1
0
1900
2000
2100
Year

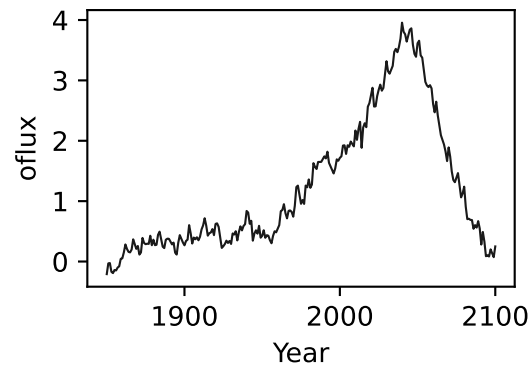

cveg
475
450
425
400
1900
2000
2100
Year

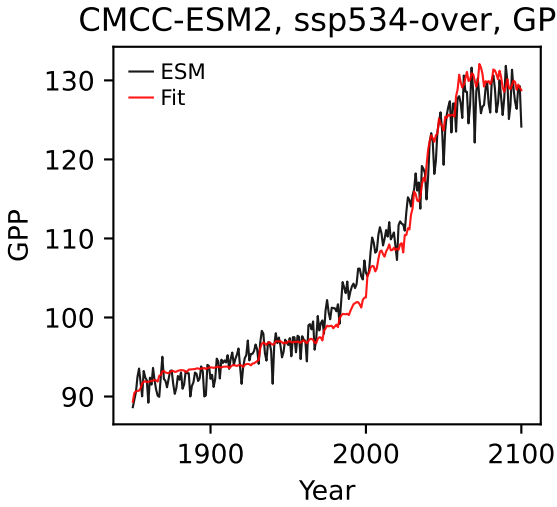

csoil
2940
2920
2900
1900
2000
2100
Year

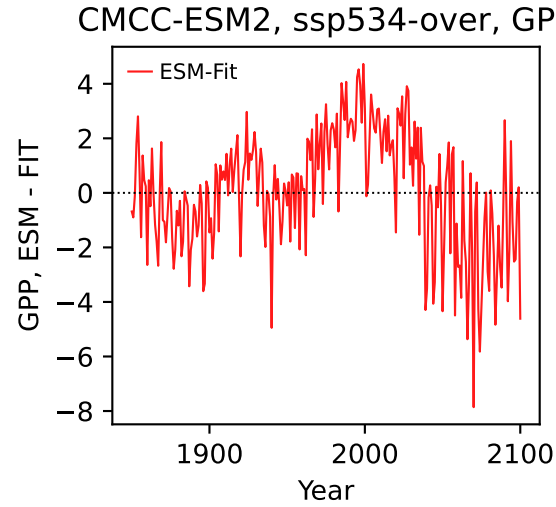

gpp
130
120
110
100
90
1900
2000
2100
Year

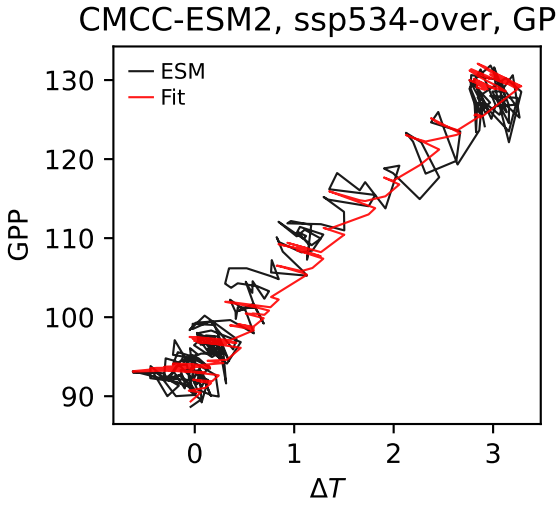

lit
55
50
45
40
35
1900
2000
2100
Year

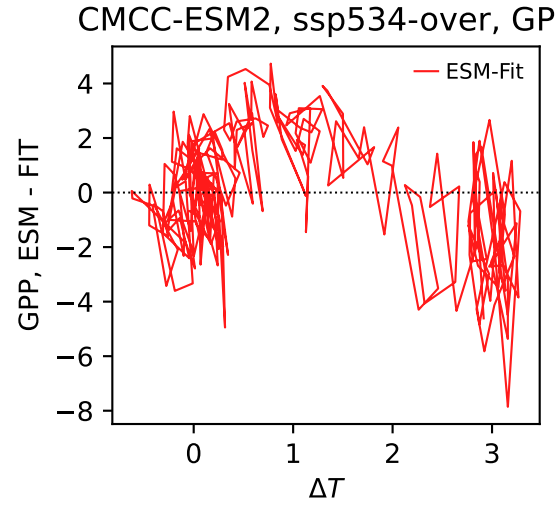

resp
50
45
40
35
1900
2000
2100
Year

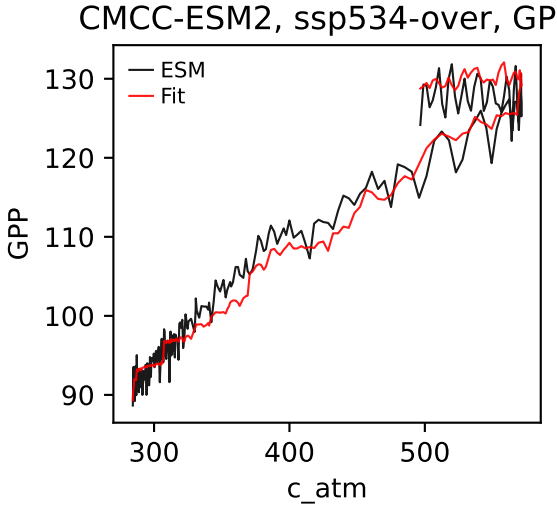

oflux
4
3
2
1
0
1900
2000
2100
Year

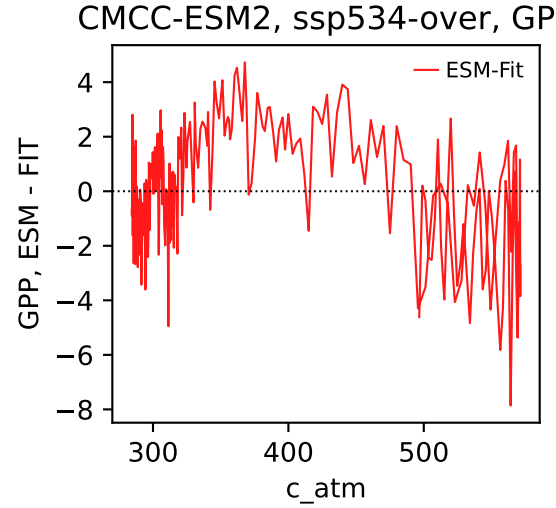

CMCC-ESM2, ssp534-over, GPP
ESM
Fit
GPP
Year

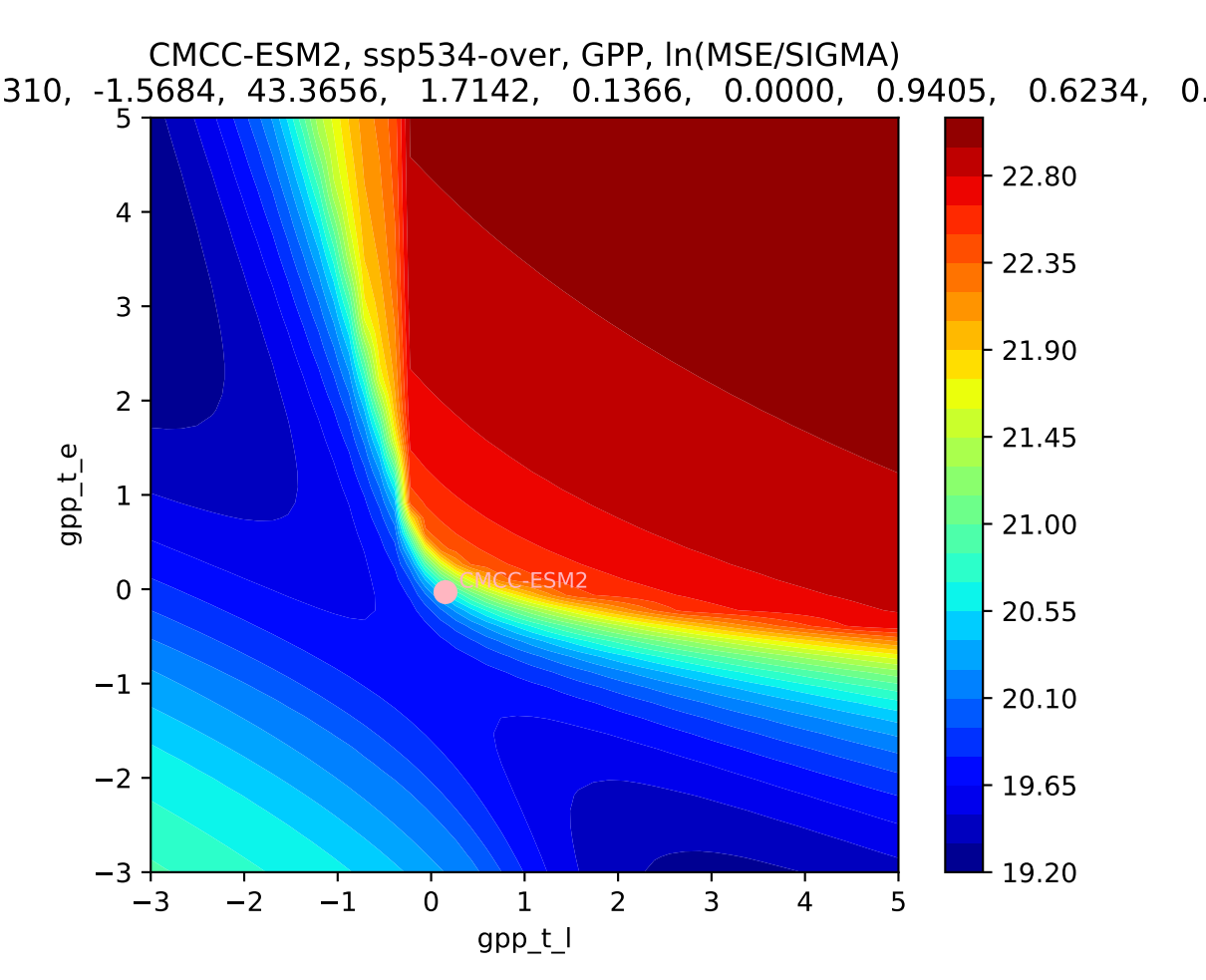

CMCC-ESM2, ssp534-over, GPP
ESM-Fit
GPP, ESM - FIT
Year

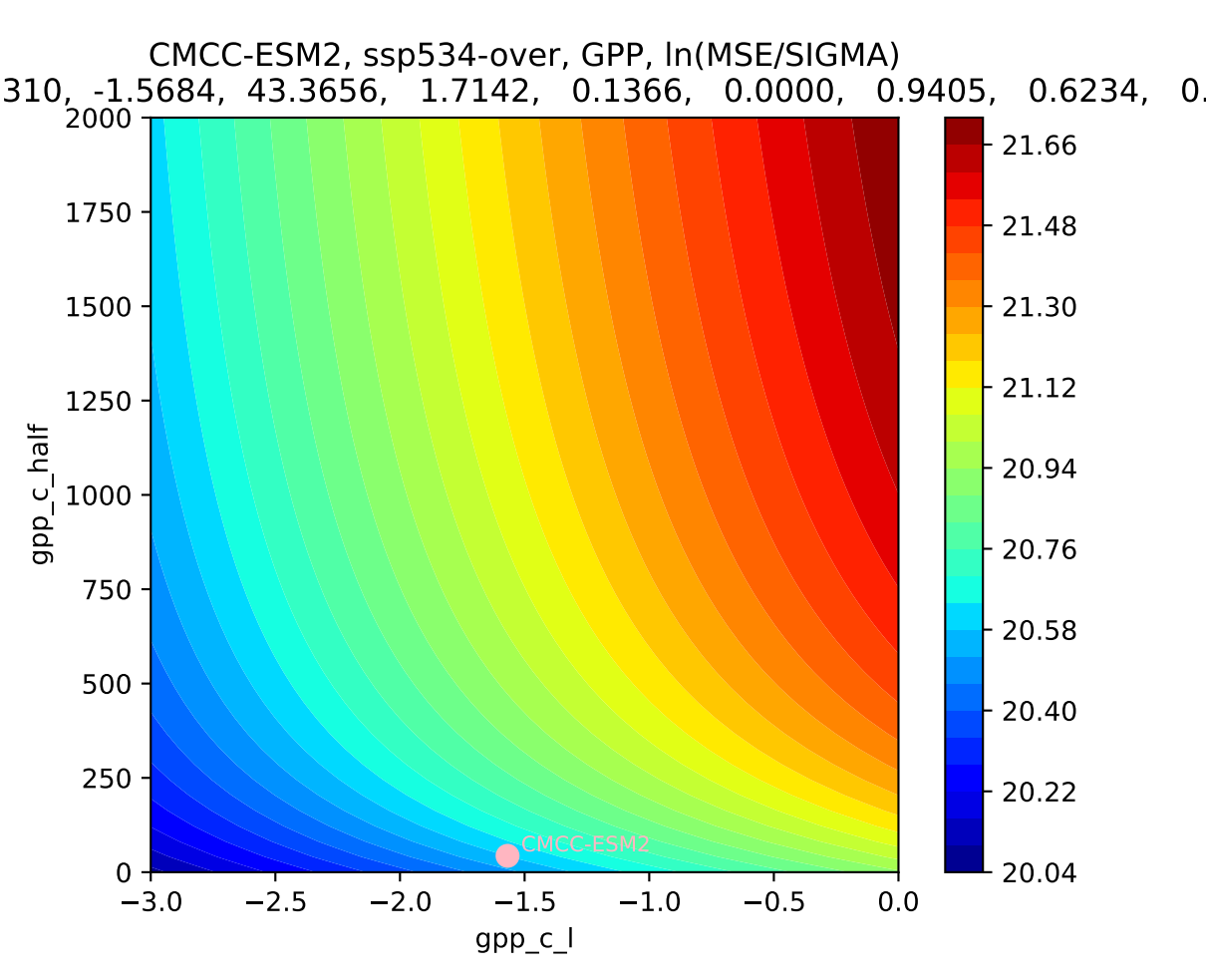

CMCC-ESM2, ssp534-over, GPP
ESM
Fit
GPP
ΔT

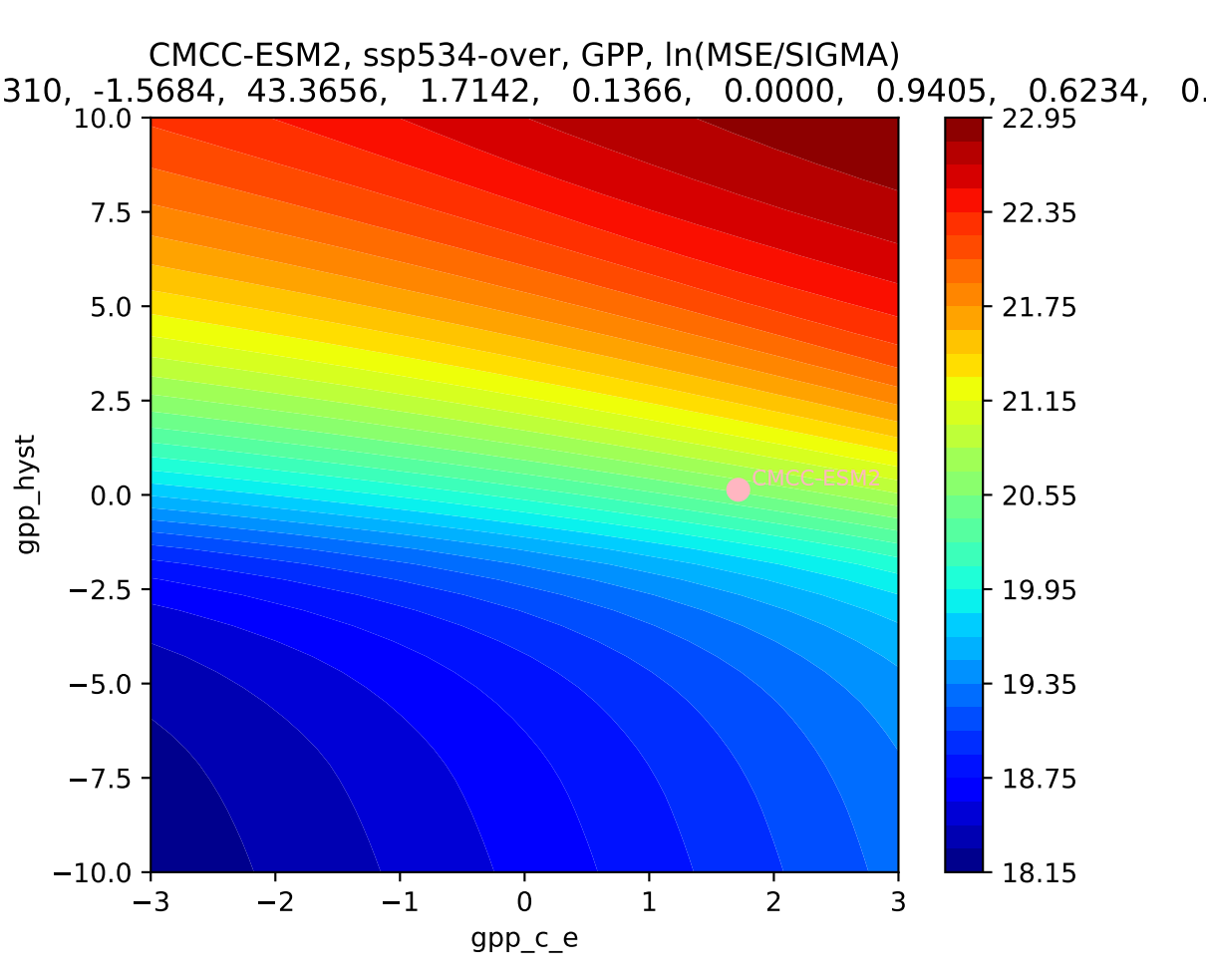

CMCC-ESM2, ssp534-over, GPP
ESM-Fit
GPP, ESM - FIT
ΔT

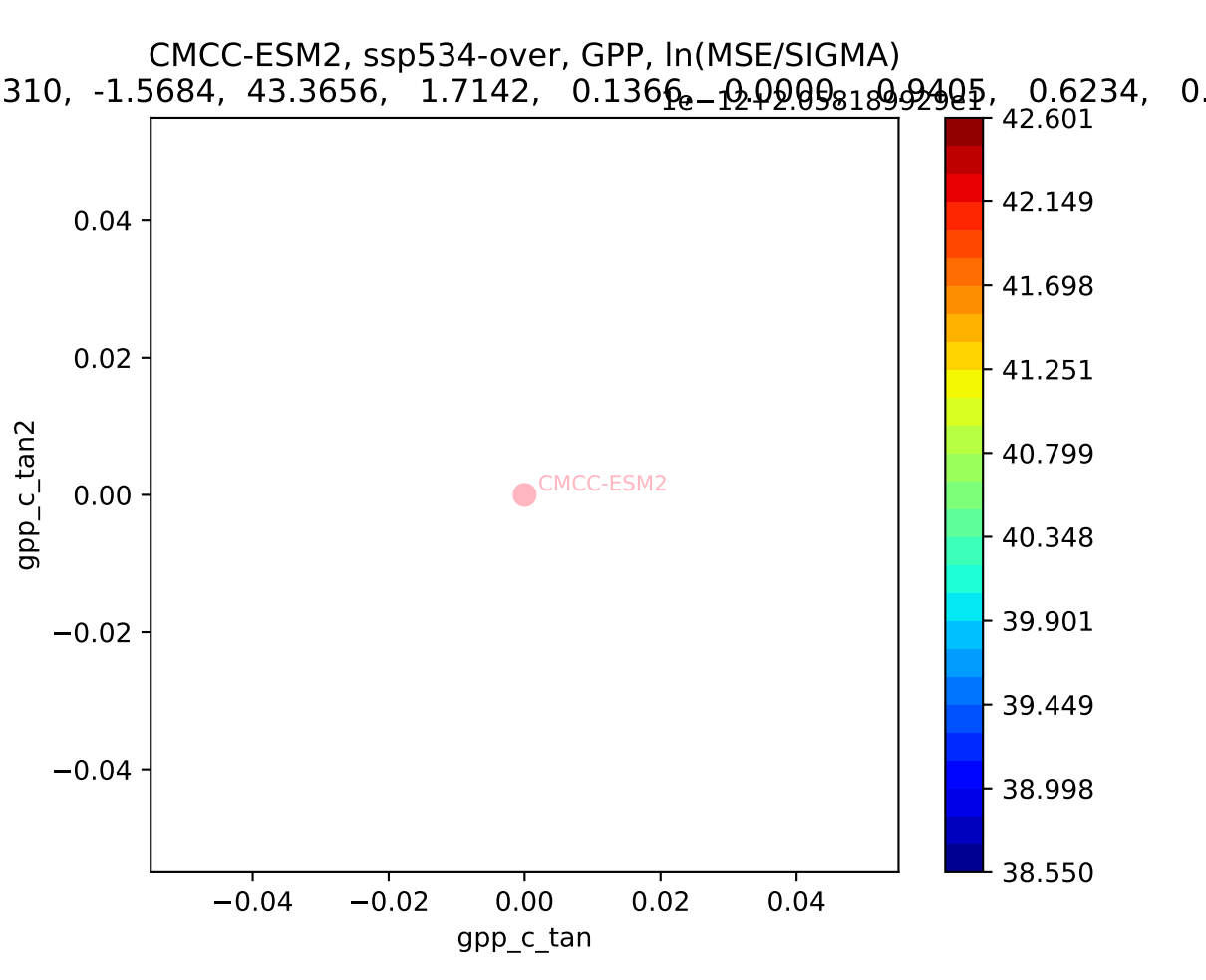

CMCC-ESM2, ssp534-over, GPP
ESM
Fit
GPP
c_atm

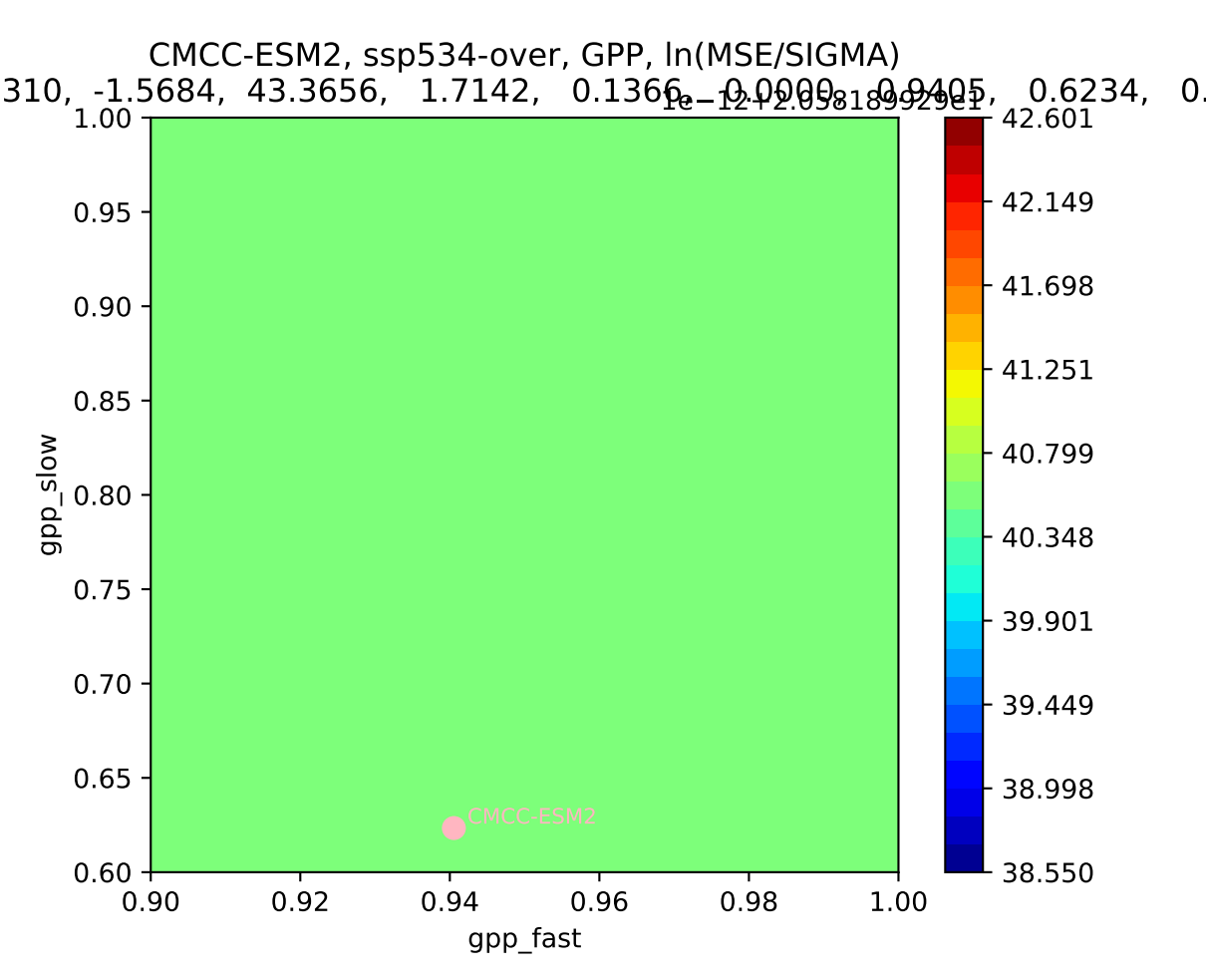

CMCC-ESM2, ssp534-over, GPP
ESM-Fit
GPP, ESM - FIT
c_atm

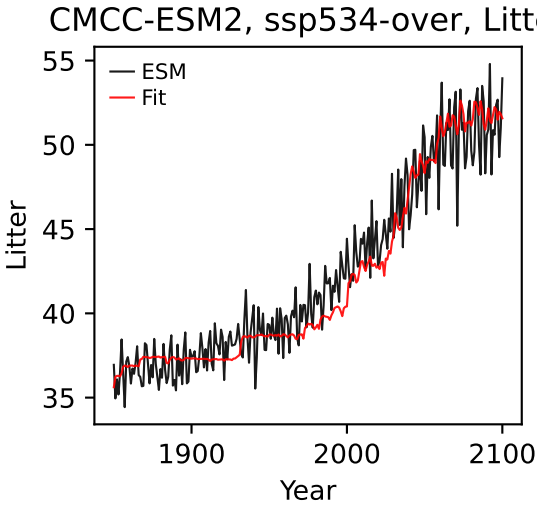

CMCC-ESM2, ssp534-over, GPP, ln(MSE/SIGMA)
310, -1.5684, 43.3656, 1.7142, 0.1366, 0.0000, 0.9405, 0.6234, 0.
CMCC-ESM2
gpp_t_e
gpp_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
22.80
22.35
21.90
21.45
21.00
20.55
20.10
19.65
19.20

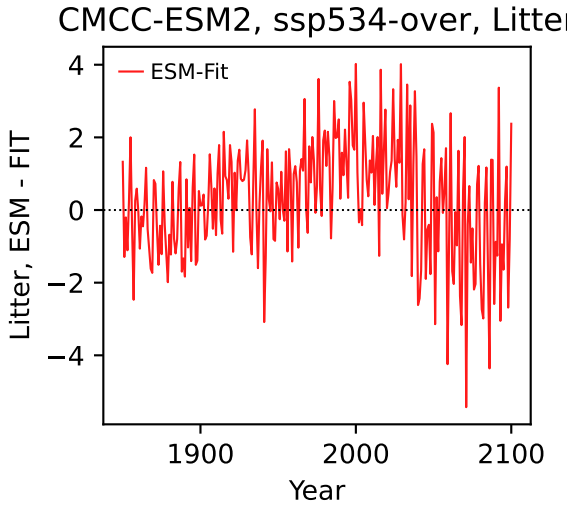

CMCC-ESM2, ssp534-over, GPP, ln(MSE/SIGMA)
310, -1.5684, 43.3656, 1.7142, 0.1366, 0.0000, 0.9405, 0.6234, 0.
gpp_c_half
gpp_c_l
CMCC-ESM2
2000
1750
1500
1250
1000
750
500
250
0
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
21.66
21.48
21.30
21.12
20.94
20.76
20.58
20.40
20.22
20.04

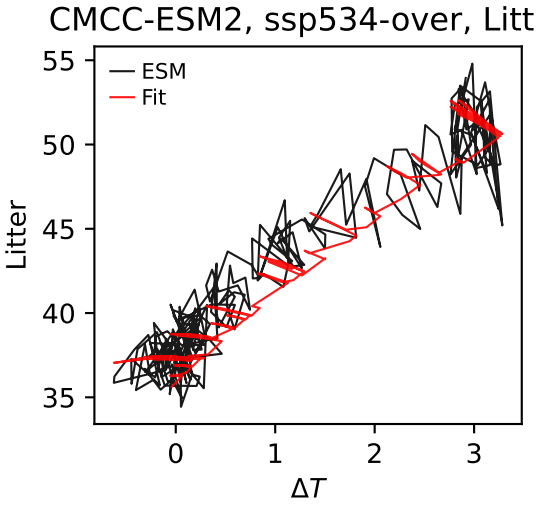

CMCC-ESM2, ssp534-over, GPP, ln(MSE/SIGMA)
310, -1.5684, 43.3656, 1.7142, 0.1366, 0.0000, 0.9405, 0.6234, 0.
CMCC-ESM2
gpp_hyst
gpp_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
22.95
22.35
21.75
21.15
20.55
19.95
19.35
18.75
18.15

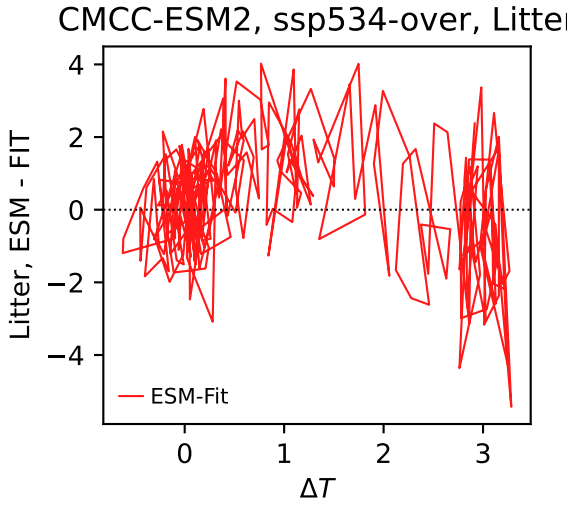

CMCC-ESM2, ssp534-over, GPP, ln(MSE/SIGMA)
310, -1.5684, 43.3656, 1.7142, 0.1366, 0.0000, 0.9405, 0.6234, 0.
1e−12+2.058189929e1
42.601
42.149
41.698
41.251
40.799
40.348
39.901
39.449
38.998
38.550
CMCC-ESM2
0.04
0.02
0.00
−0.02
−0.04
gpp_c_tan2
−0.04
−0.02
0.00
0.02
0.04
gpp_c_tan

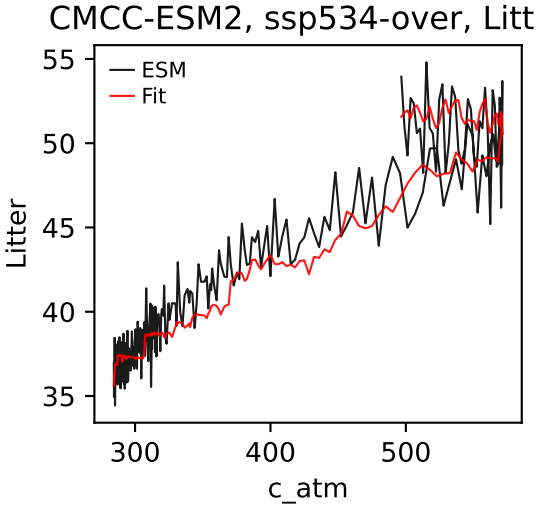

CMCC-ESM2, ssp534-over, GPP, ln(MSE/SIGMA)
310, -1.5684, 43.3656, 1.7142, 0.1366, 0.0000, 0.9405, 0.6234, 0.
1e−12+2.058189929e1
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
gpp_slow
0.90
0.92
0.94
0.96
0.98
1.00
gpp_fast
CMCC-ESM2
42.601
42.149
41.698
41.251
40.799
40.348
39.901
39.449
38.998
38.550

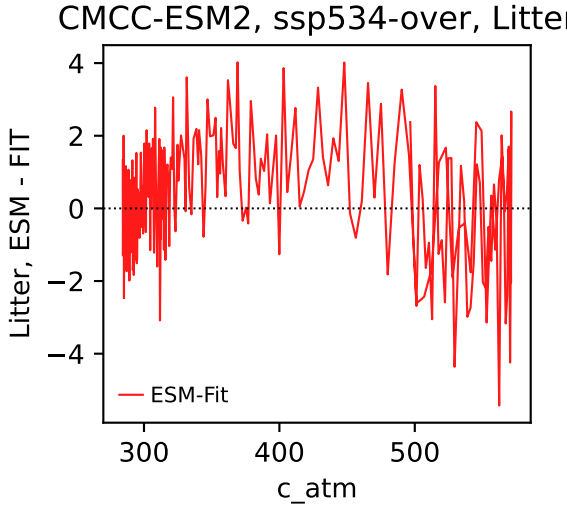

CMCC-ESM2, ssp534-over, Litter
ESM
Fit
Litter
Year

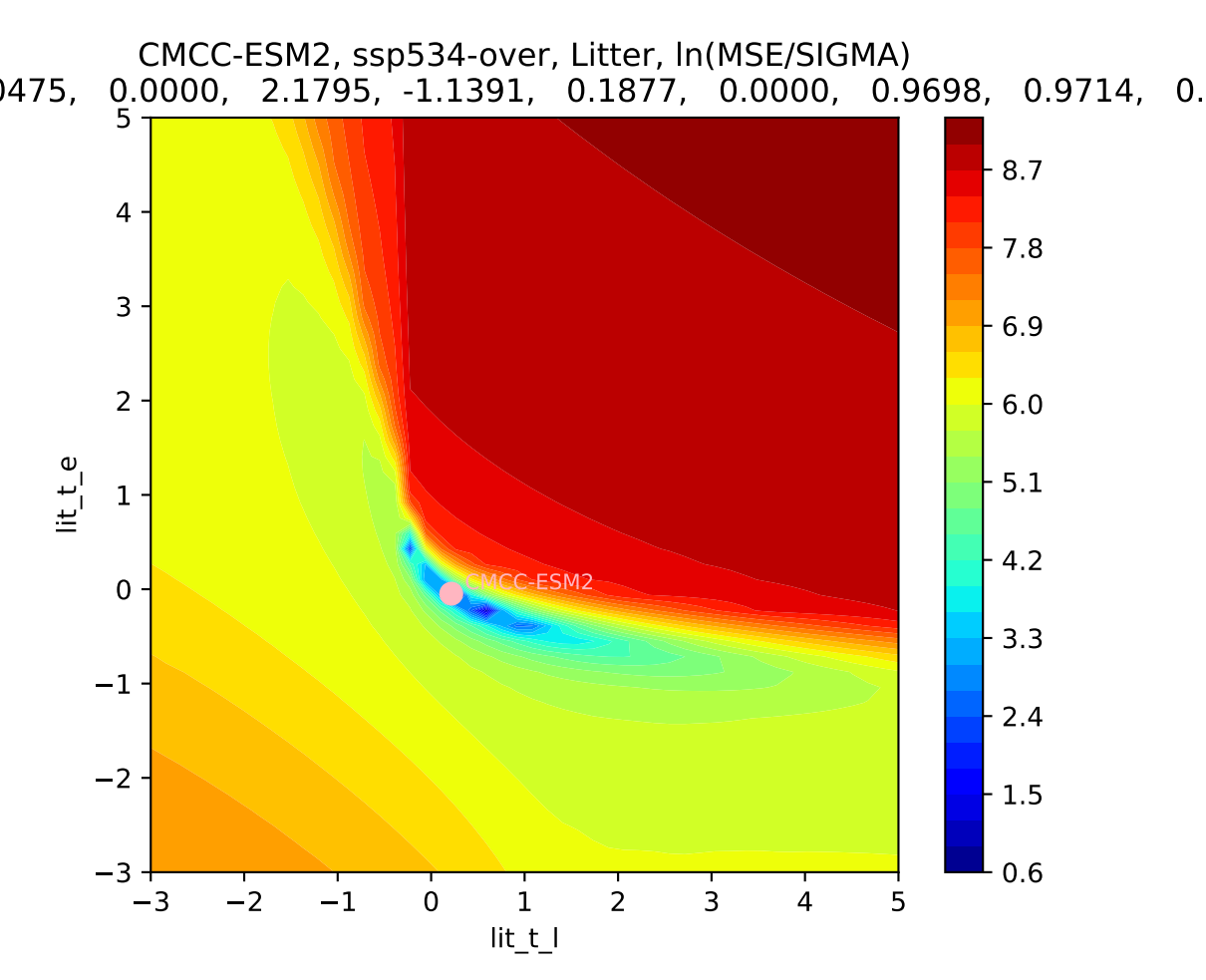

CMCC-ESM2, ssp534-over, Litter
ESM-Fit
Litter, ESM - FIT
Year

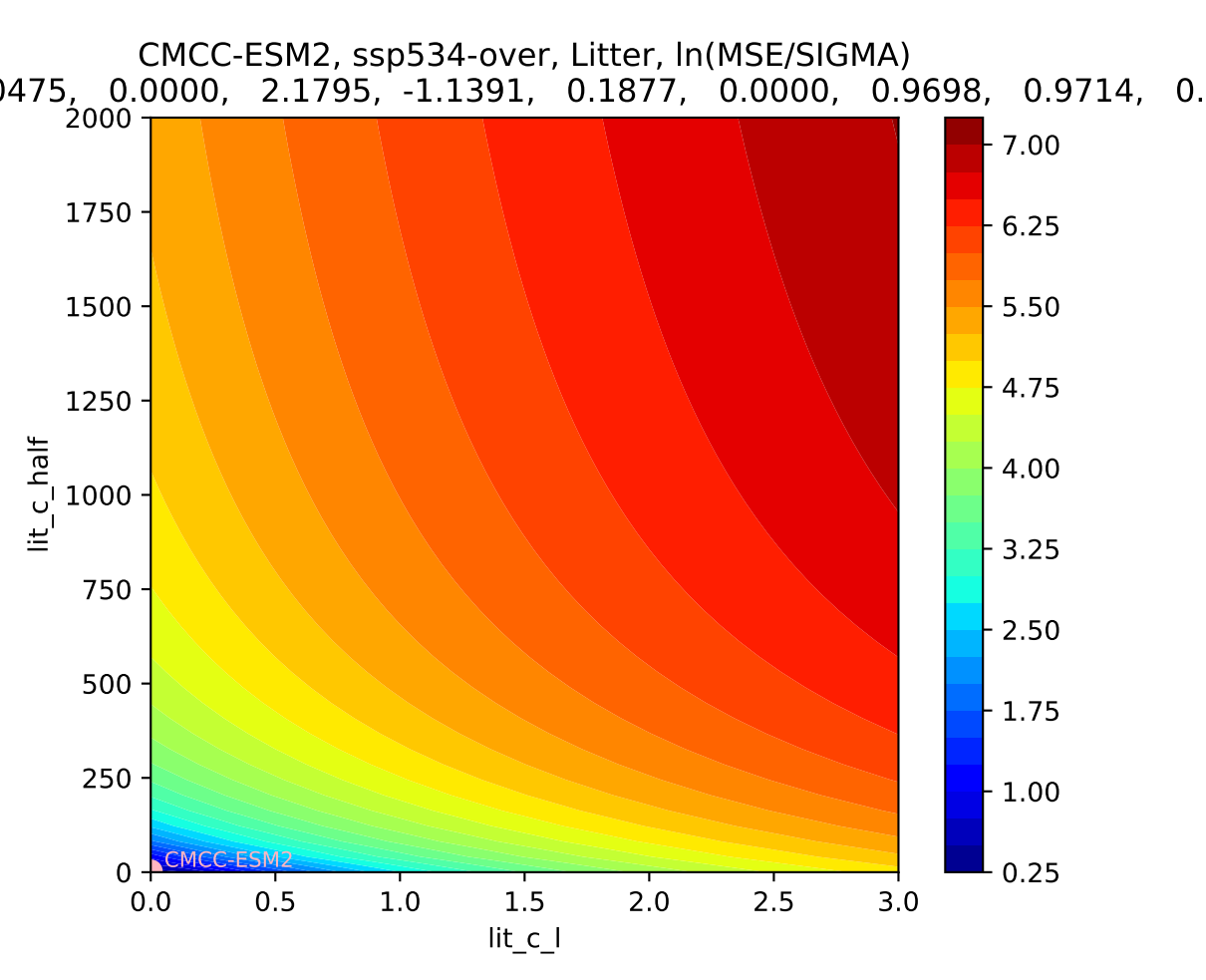

CMCC-ESM2, ssp534-over, Litter
ESM
Fit
Litter
ΔT

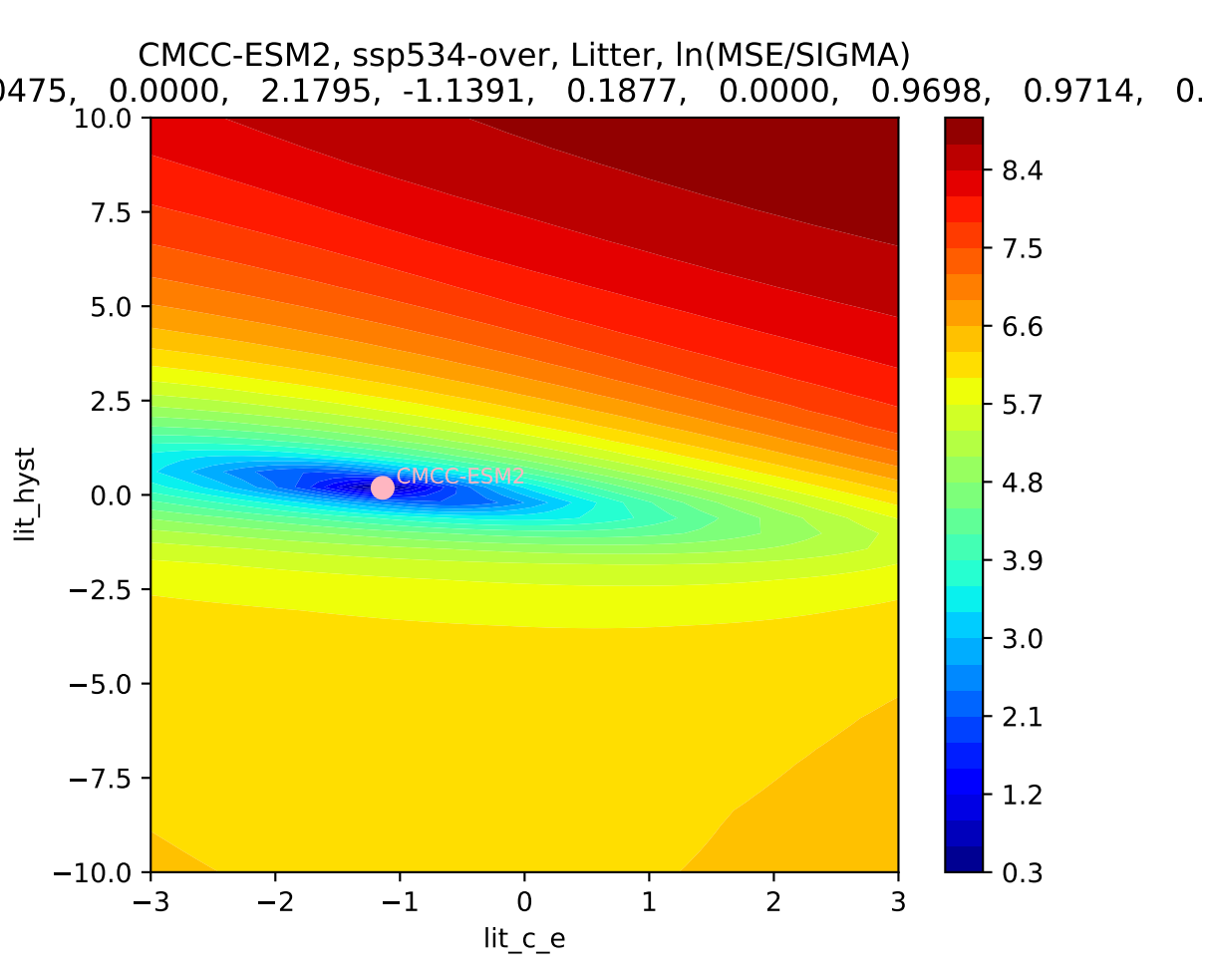

CMCC-ESM2, ssp534-over, Litter
ESM-Fit
Litter, ESM - FIT
ΔT

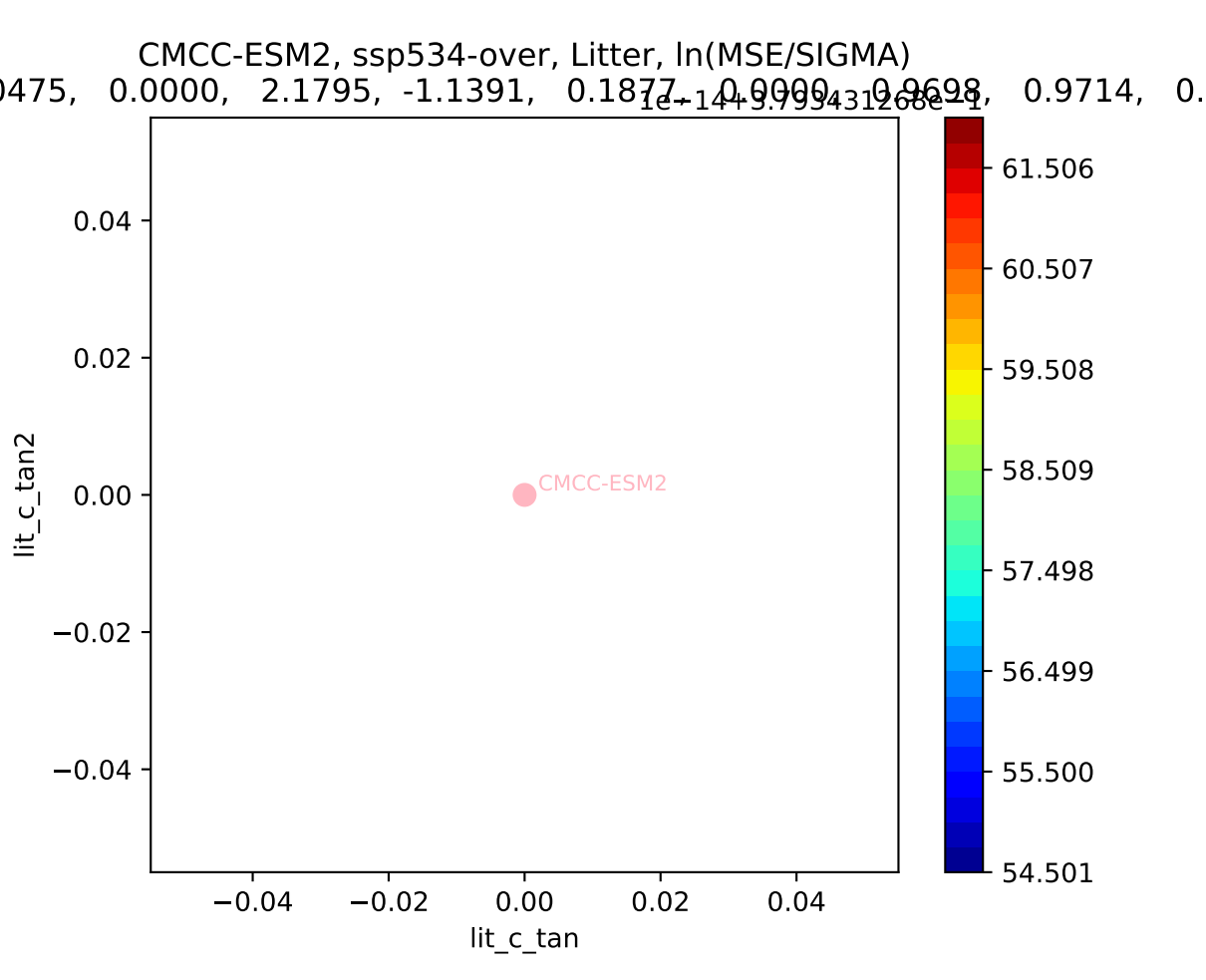

CMCC-ESM2, ssp534-over, Litter
ESM
Fit
Litter
c_atm

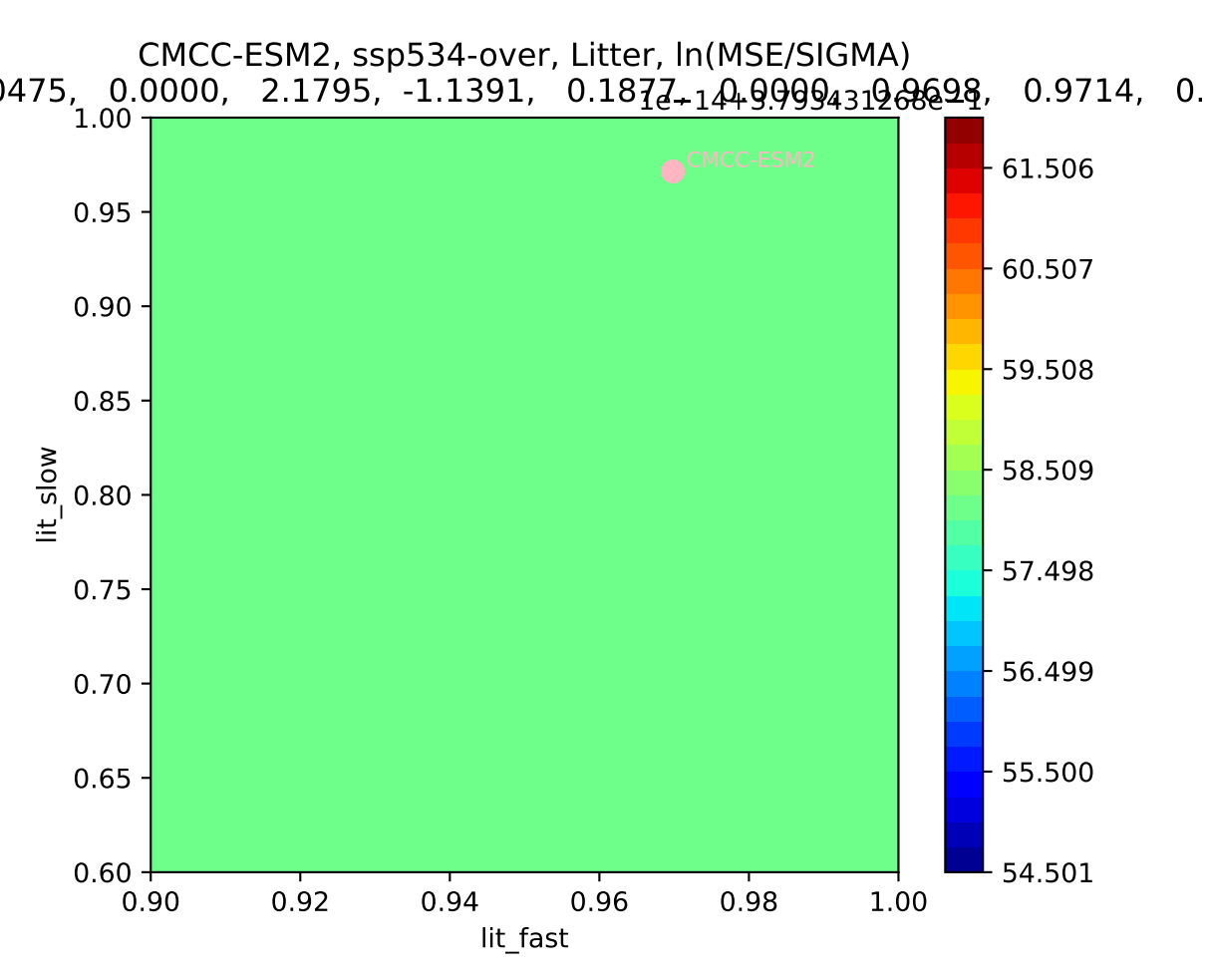

CMCC-ESM2, ssp534-over, Litter
ESM-Fit
Litter, ESM - FIT
c_atm

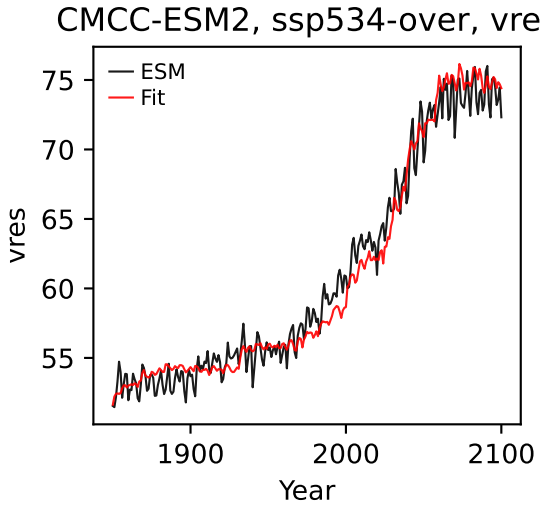

CMCC-ESM2, ssp534-over, Litter, ln(MSE/SIGMA)
0475, 0.0000, 2.1795, -1.1391, 0.1877, 0.0000, 0.9698, 0.9714, 0.
CMCC-ESM2
lit_t_e
lit_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
8.7
7.8
6.9
6.0
5.1
4.2
3.3
2.4
1.5
0.6

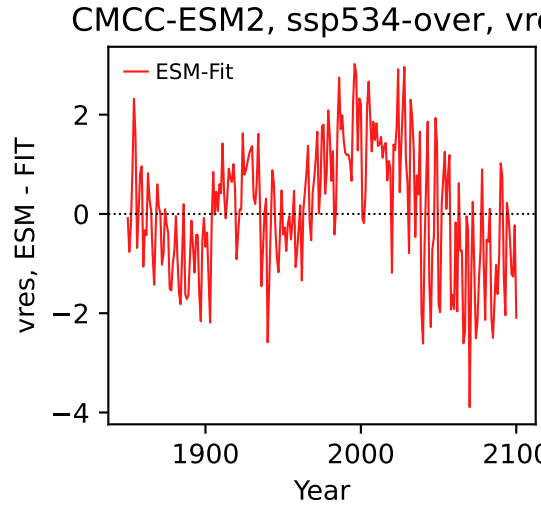

CMCC-ESM2, ssp534-over, Litter, ln(MSE/SIGMA)
0475, 0.0000, 2.1795, -1.1391, 0.1877, 0.0000, 0.9698, 0.9714, 0.
lit_c_half
lit_c_l
CMCC-ESM2
2000
1750
1500
1250
1000
750
500
250
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
7.00
6.25
5.50
4.75
4.00
3.25
2.50
1.75
1.00
0.25

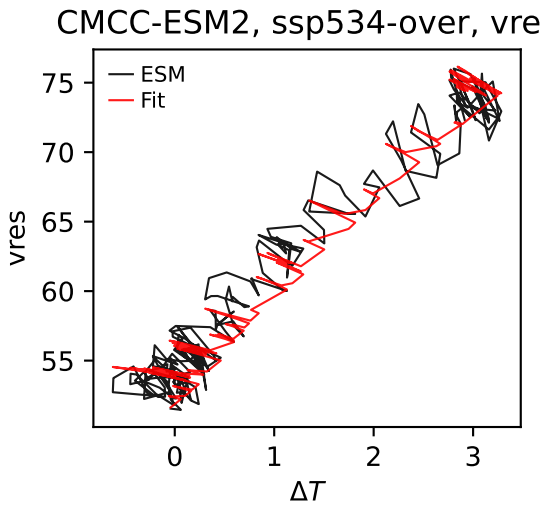

CMCC-ESM2, ssp534-over, Litter, ln(MSE/SIGMA)
0475, 0.0000, 2.1795, -1.1391, 0.1877, 0.0000, 0.9698, 0.9714, 0.
CMCC-ESM2
lit_hyst
lit_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
8.4
7.5
6.6
5.7
4.8
3.9
3.0
2.1
1.2
0.3

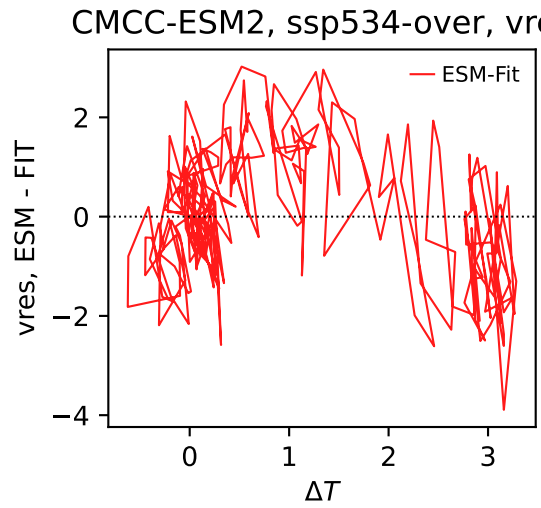

CMCC-ESM2, ssp534-over, Litter, ln(MSE/SIGMA)
0475, 0.0000, 2.1795, -1.1391, 0.1877, 0.0000, 0.9698, 0.9714, 0.
1e+14+3.793431268e-1
CMCC-ESM2
lit_c_tan2
lit_c_tan
0.04
0.02
0.00
−0.02
−0.04
61.506
60.507
59.508
58.509
57.498
56.499
55.500
54.501

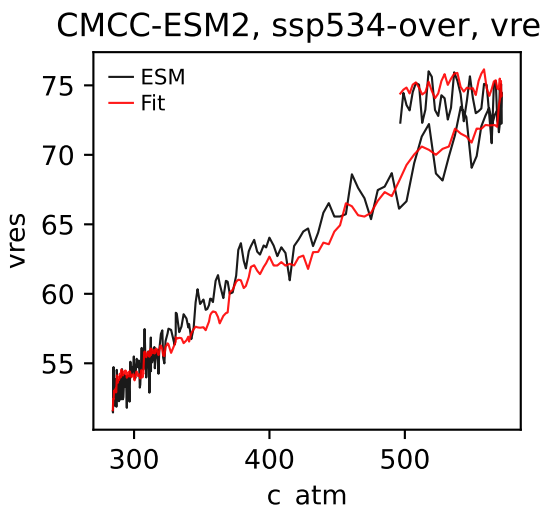

CMCC-ESM2, ssp534-over, Litter, ln(MSE/SIGMA)
0475, 0.0000, 2.1795, -1.1391, 0.1877, 0.0000, 0.9698, 0.9714, 0.
1e+14+3.793431268e+1
CMCC-ESM2
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
lit_slow
0.90
0.92
0.94
0.96
0.98
1.00
lit_fast
61.506
60.507
59.508
58.509
57.498
56.499
55.500
54.501

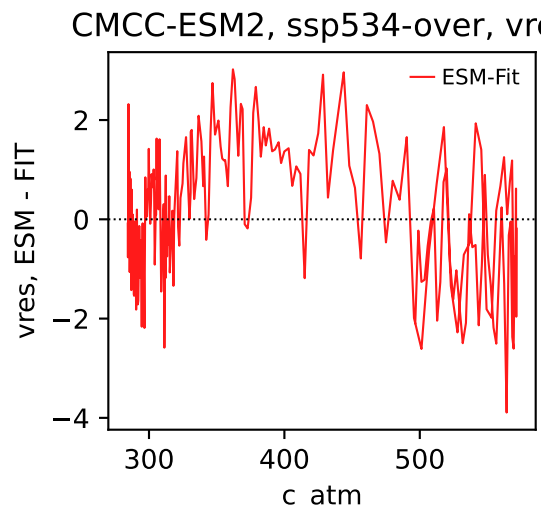

CMCC-ESM2, ssp534-over, vres
ESM
Fit
vres
Year

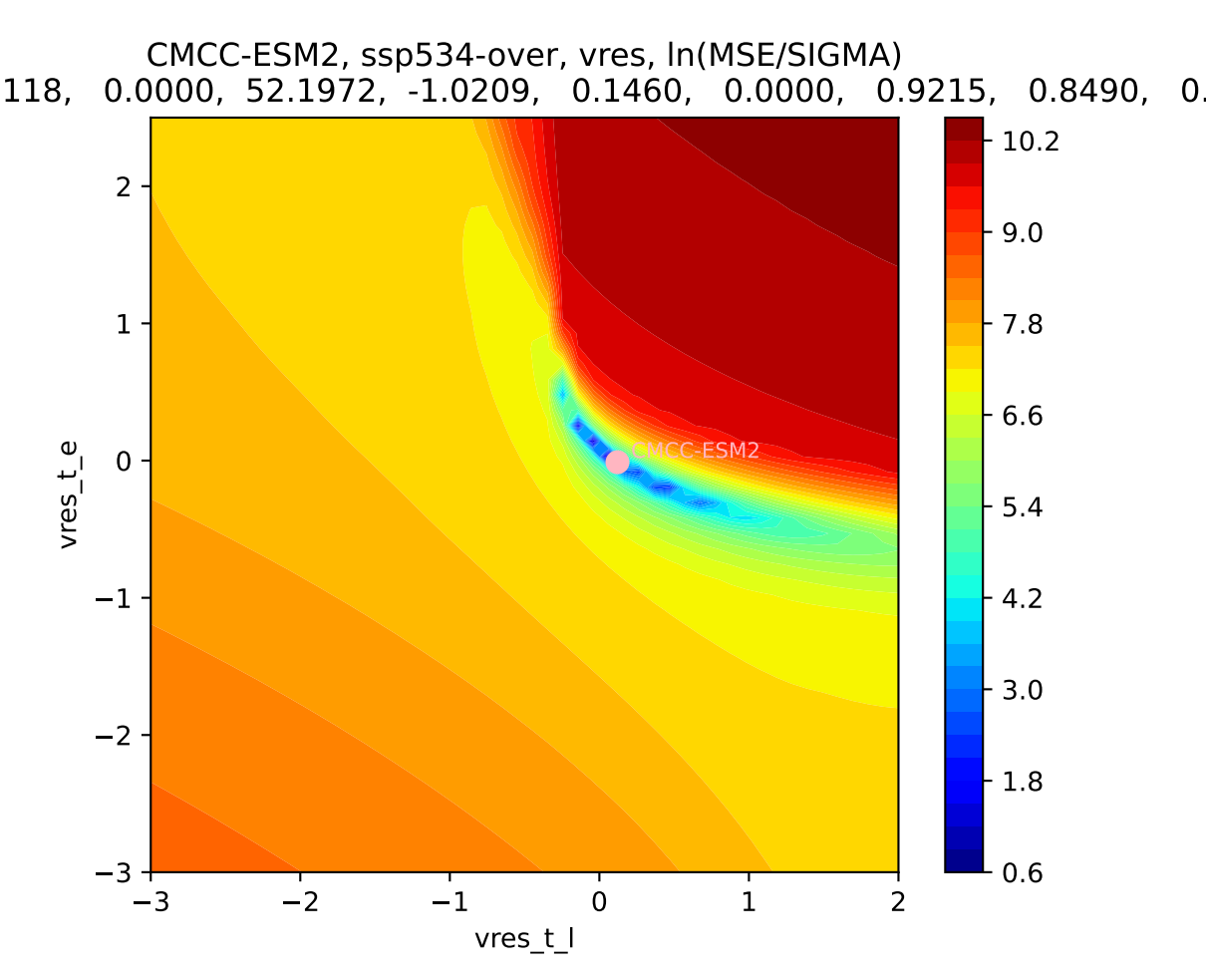

CMCC-ESM2, ssp534-over, vres
ESM-Fit
vres, ESM - FIT
Year

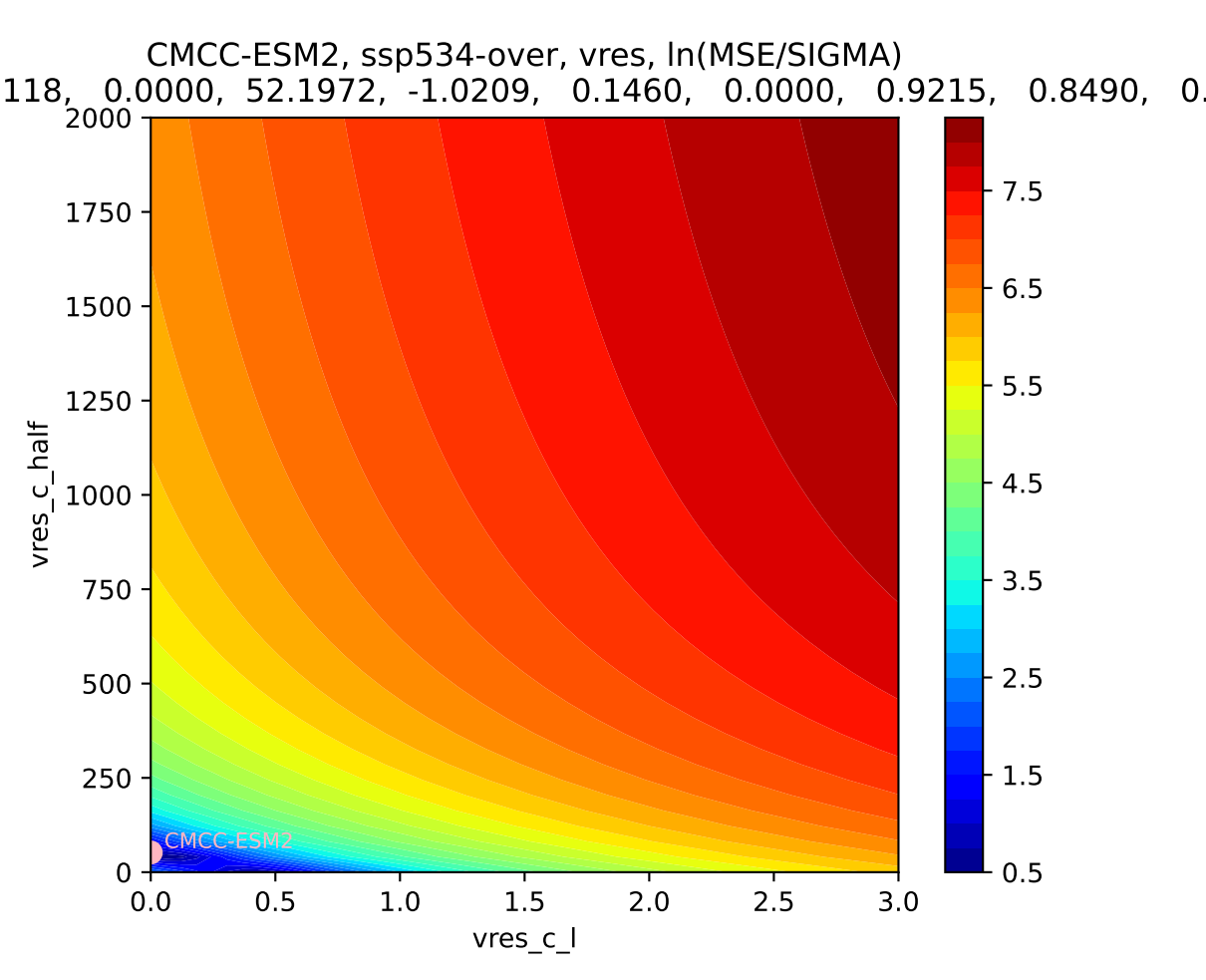

CMCC-ESM2, ssp534-over, vres
ESM
Fit
vres
ΔT

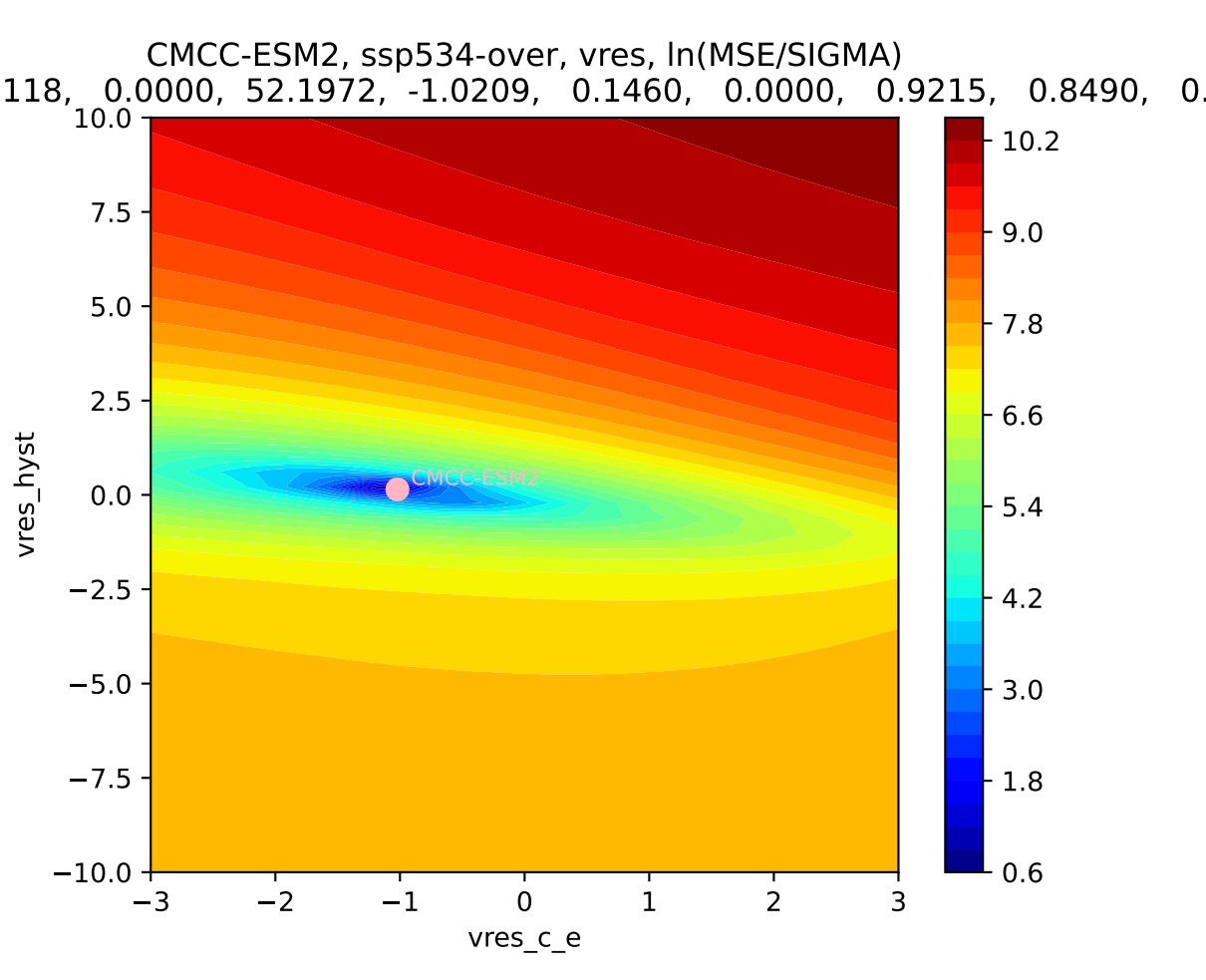

CMCC-ESM2, ssp534-over, vres
ESM-Fit
vres, ESM - FIT
ΔT

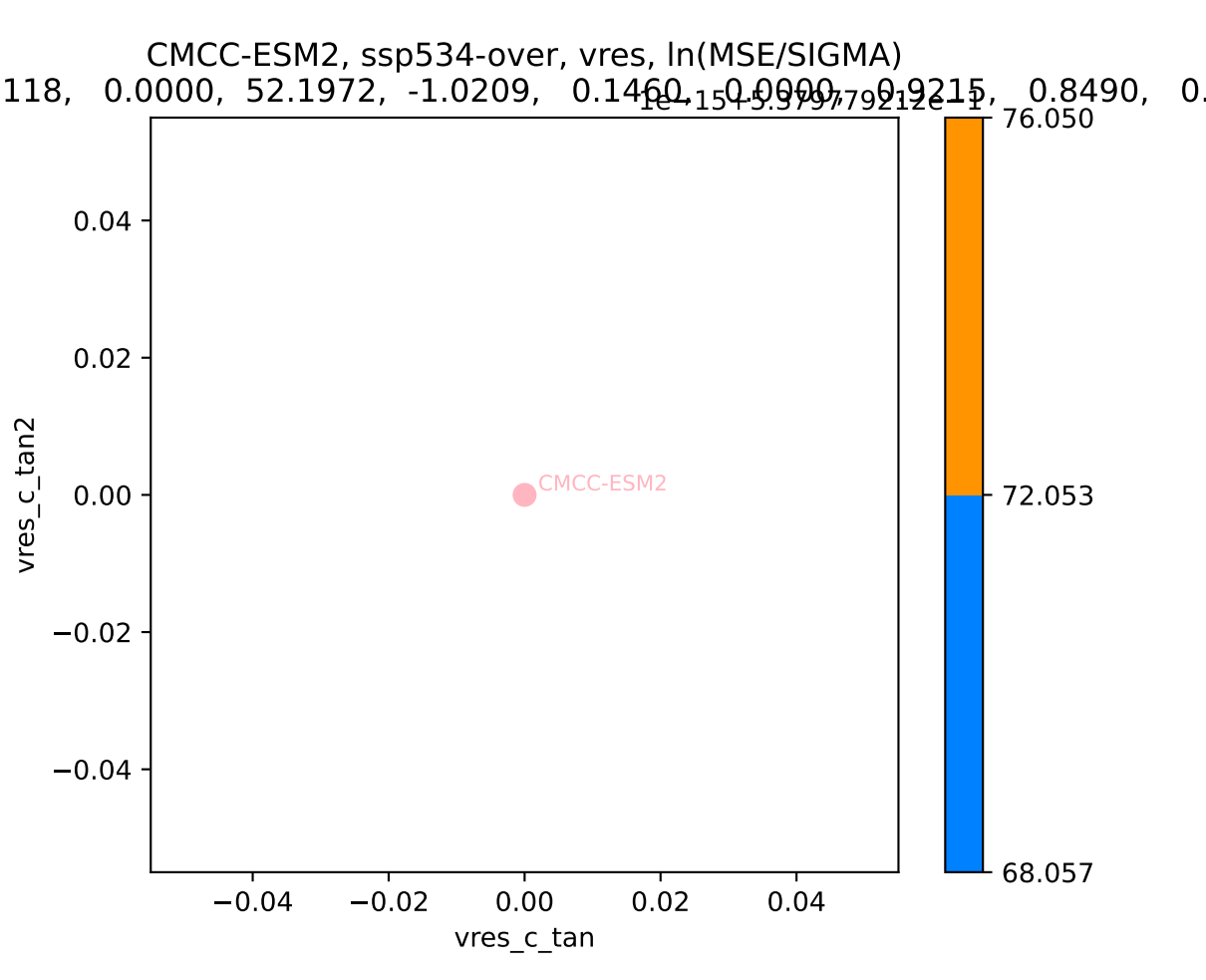

CMCC-ESM2, ssp534-over, vres
ESM
Fit
vres
c_atm

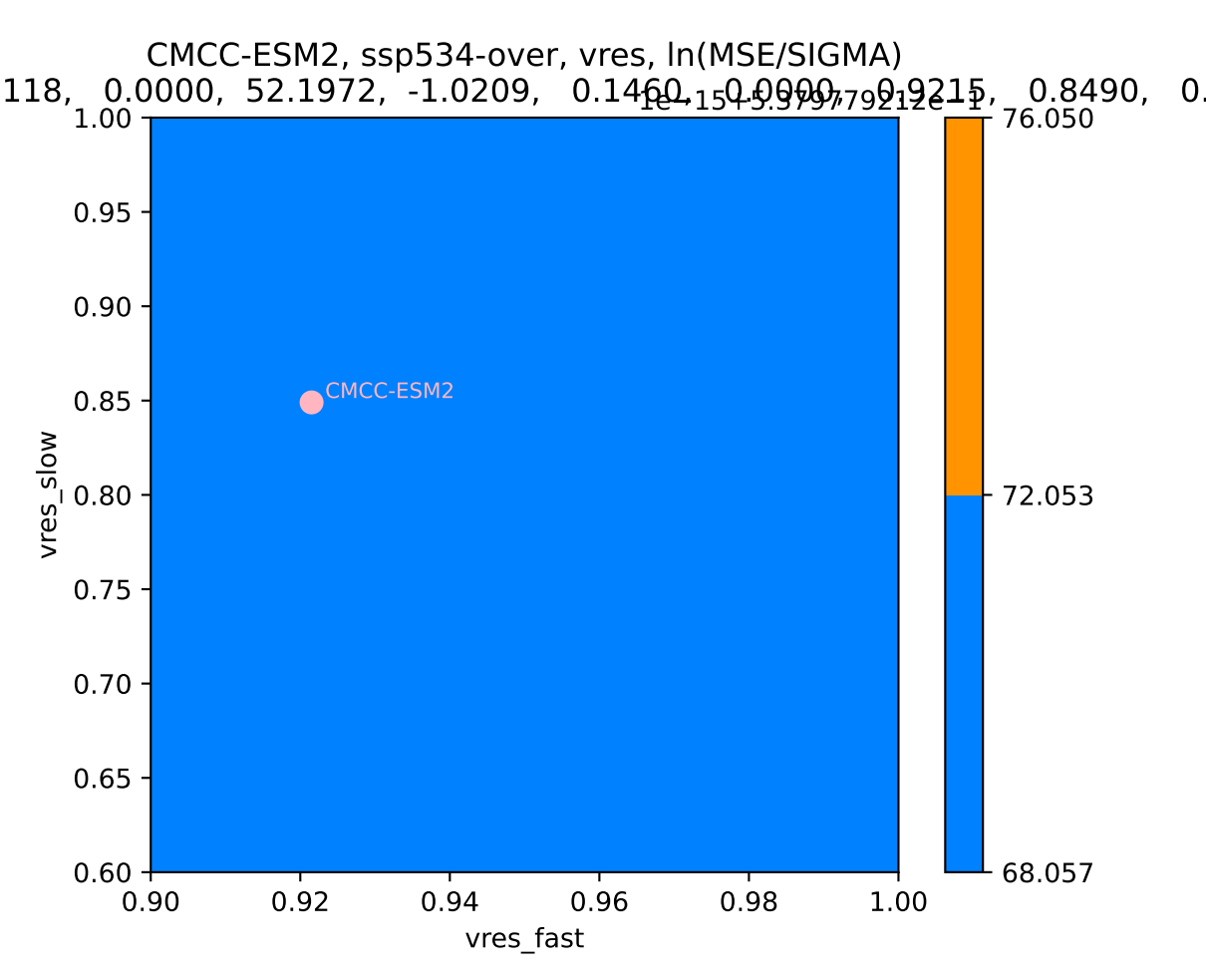

CMCC-ESM2, ssp534-over, vres
ESM-Fit
vres, ESM - FIT
c_atm

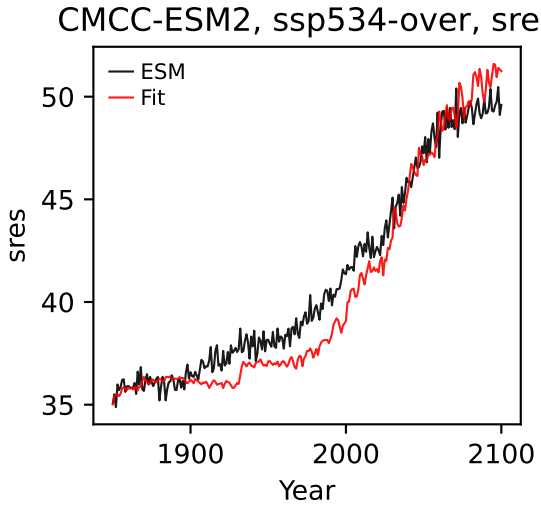

CMCC-ESM2, ssp534-over, vres, ln(MSE/SIGMA)
118, 0.0000, 52.1972, -1.0209, 0.1460, 0.0000, 0.9215, 0.8490, 0.
CMCC-ESM2
vres_t_e
vres_t_l
10.2
9.0
7.8
6.6
5.4
4.2
3.0
1.8
0.6

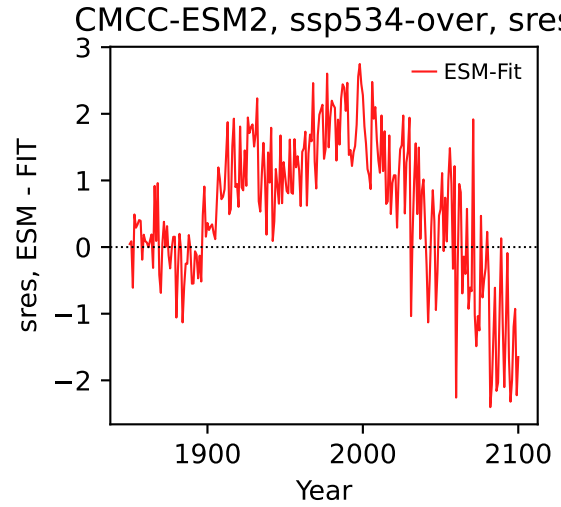

CMCC-ESM2, ssp534-over, vres, ln(MSE/SIGMA)
118, 0.0000, 52.1972, -1.0209, 0.1460, 0.0000, 0.9215, 0.8490, 0.
vres_c_half
vres_c_l
CMCC-ESM2
2000
1750
1500
1250
1000
750
500
250
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
7.5
6.5
5.5
4.5
3.5
2.5
1.5
0.5

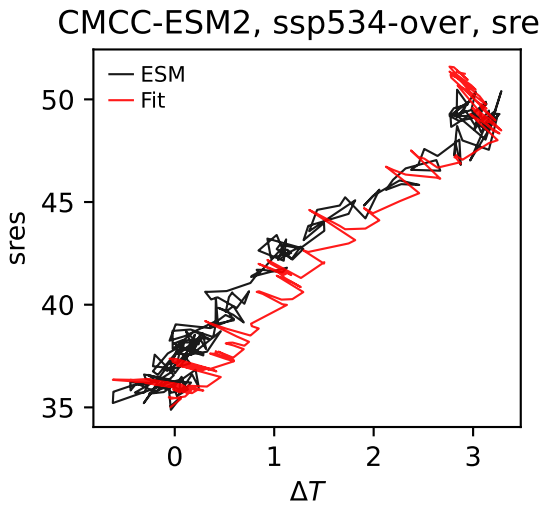

CMCC-ESM2, ssp534-over, vres, ln(MSE/SIGMA)
118, 0.0000, 52.1972, -1.0209, 0.1460, 0.0000, 0.9215, 0.8490, 0.
CMCC-ESM2
vres_hyst
vres_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
10.2
9.0
7.8
6.6
5.4
4.2
3.0
1.8
0.6

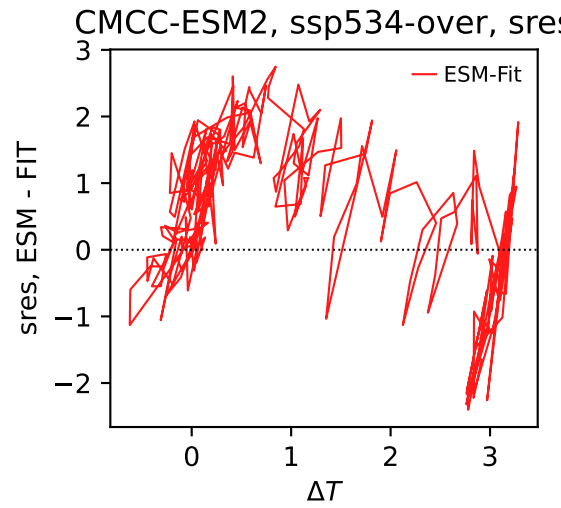

CMCC-ESM2, ssp534-over, vres, ln(MSE/SIGMA)
118, 0.0000, 52.1972, -1.0209, 0.1460, 0.0000, 0.9215, 0.8490, 0.
1e−15+5.3797792126−1
76.050
72.053
68.057
CMCC-ESM2
0.04
0.02
0.00
−0.02
−0.04
vres_c_tan2
−0.04
−0.02
0.00
0.02
0.04
vres_c_tan

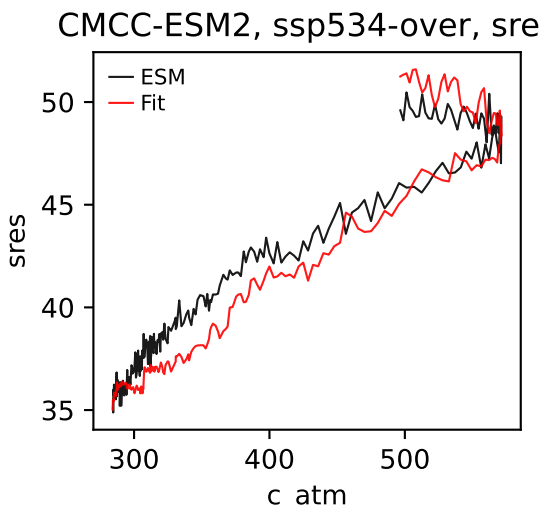

CMCC-ESM2, ssp534-over, vres, ln(MSE/SIGMA)
118, 0.0000, 52.1972, -1.0209, 0.1460, 0.0000, 0.9215, 0.8490, 0.
1e−15 +5.3797792126−1
CMCC-ESM2
vres_slow
vres_fast
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.90
0.92
0.94
0.96
0.98
1.00
76.050
72.053
68.057

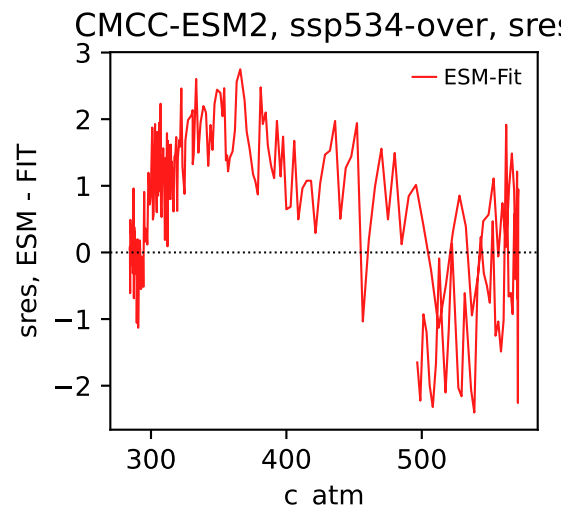

CMCC-ESM2, ssp534-over, sres
ESM
Fit
sres
Year

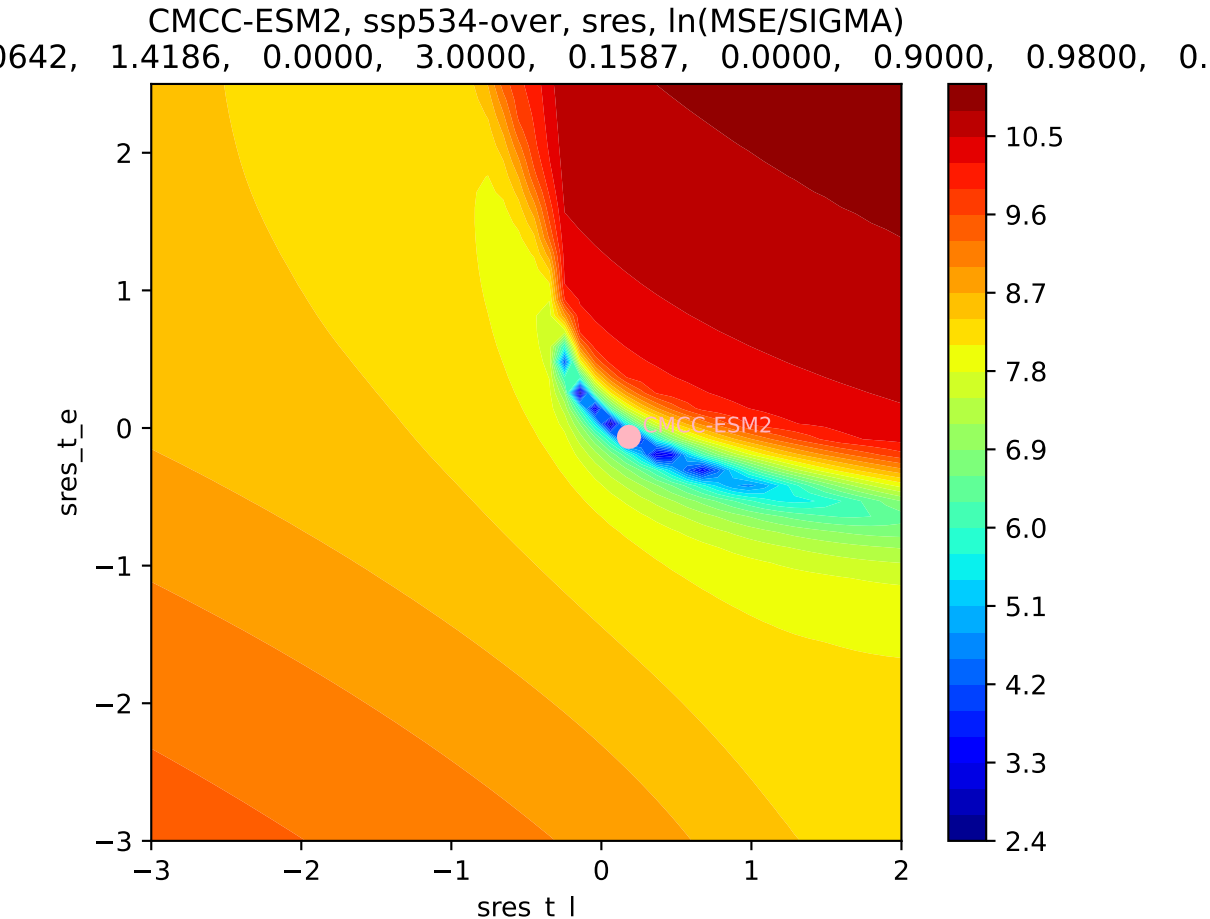

CMCC-ESM2, ssp534-over, sres
ESM-Fit
sres, ESM - FIT
Year

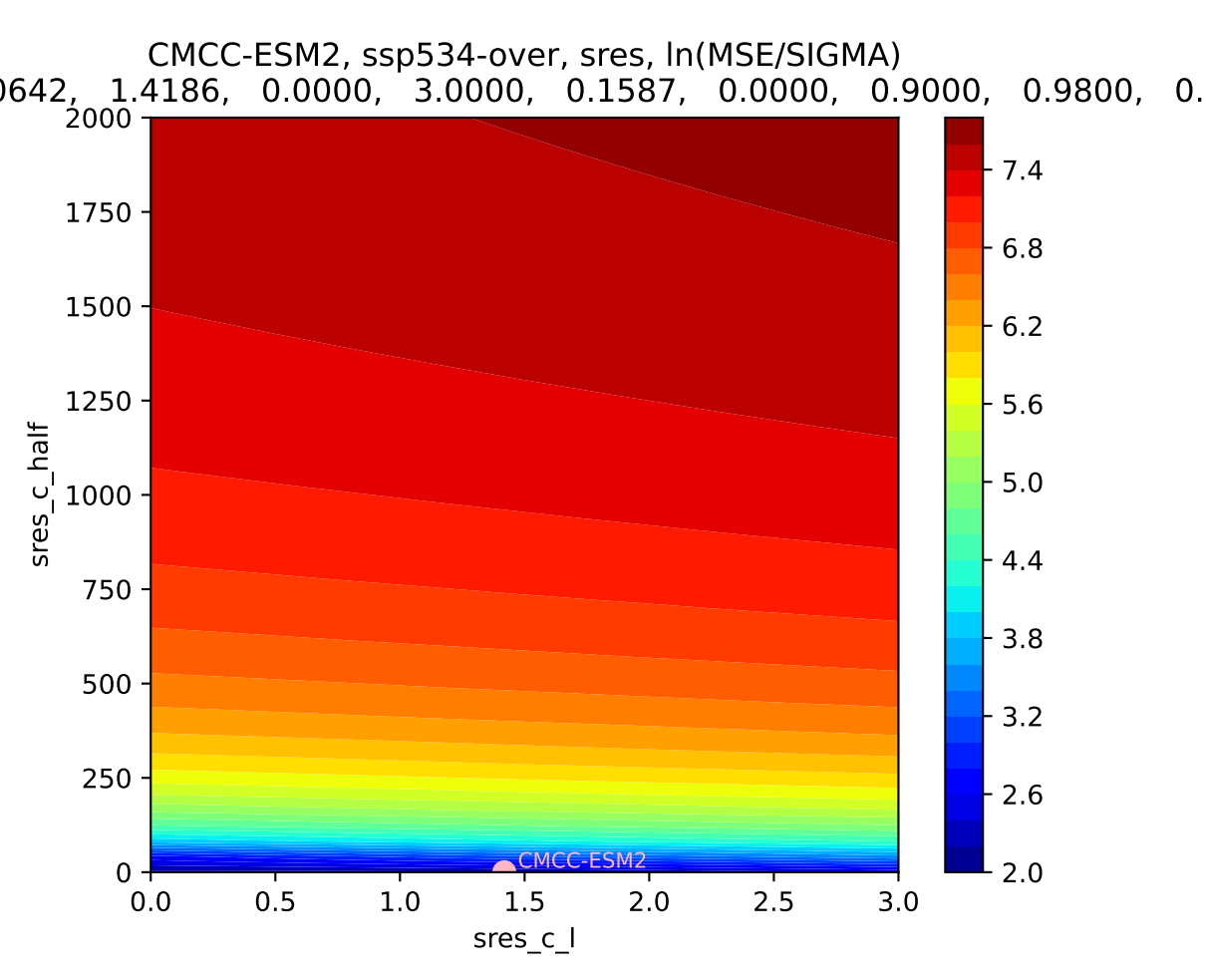

CMCC-ESM2, ssp534-over, sres
ESM
Fit
sres
ΔT

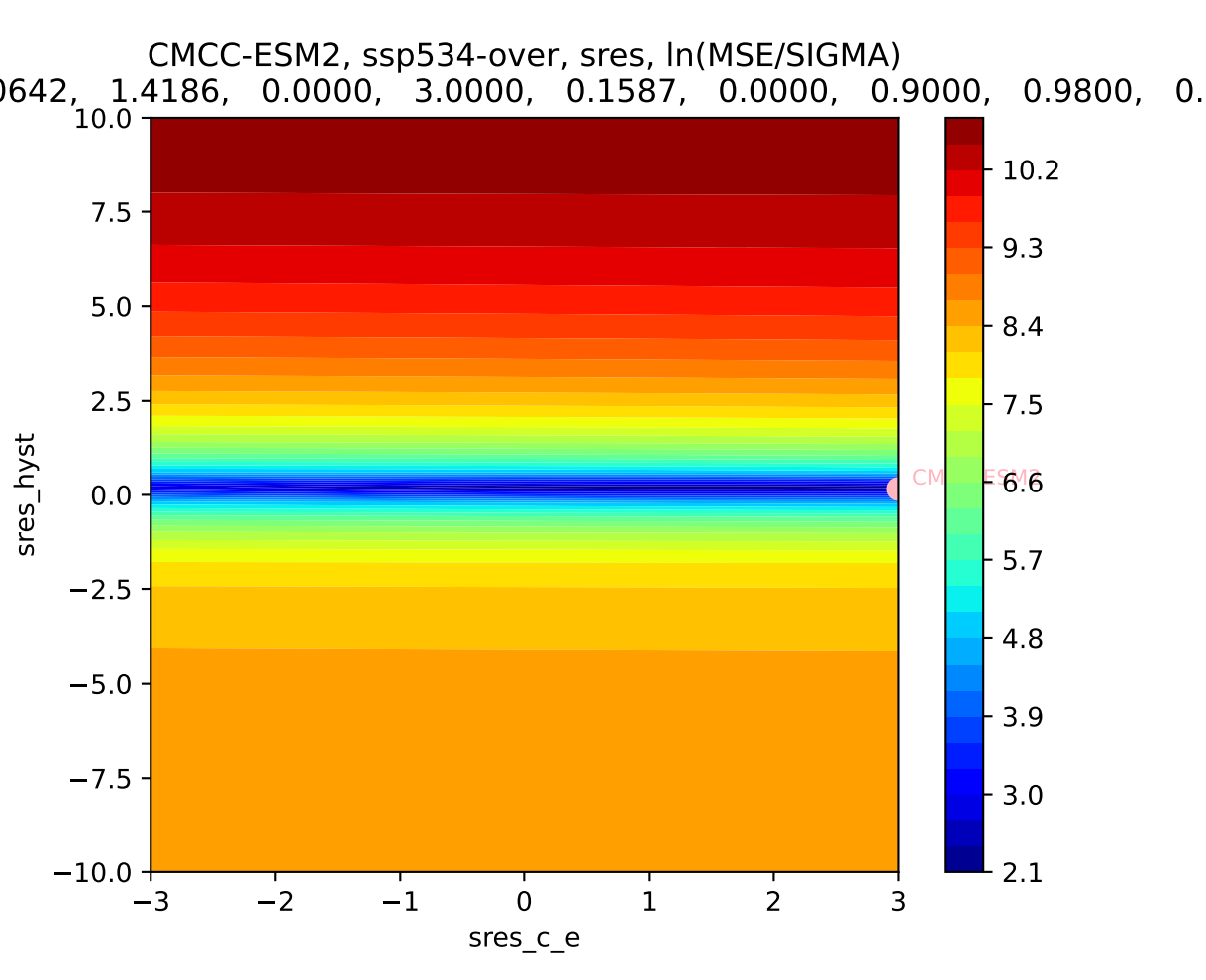

CMCC-ESM2, ssp534-over, sres
ESM-Fit
sres, ESM - FIT
ΔT

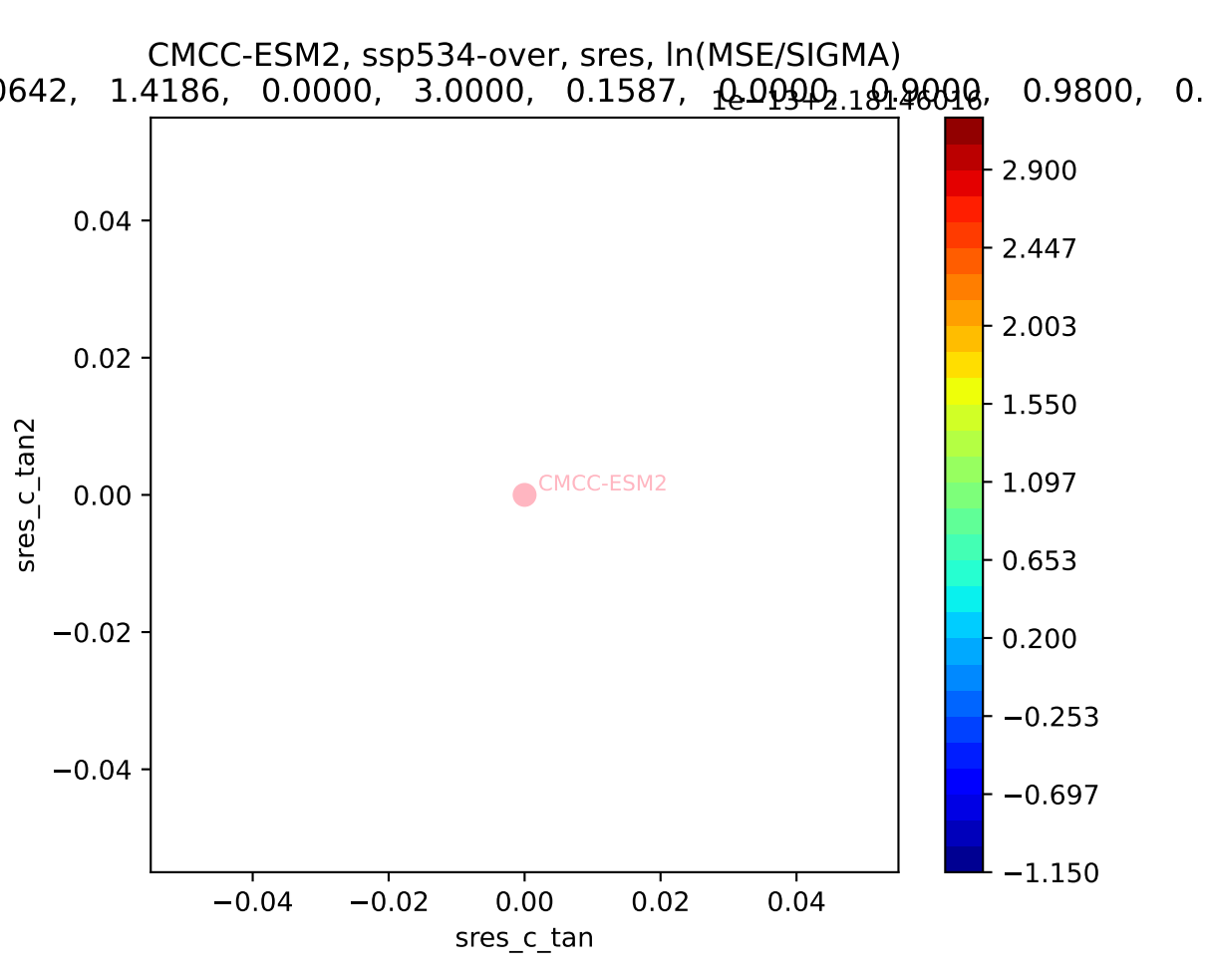

CMCC-ESM2, ssp534-over, sres
ESM
Fit
sres
c_atm

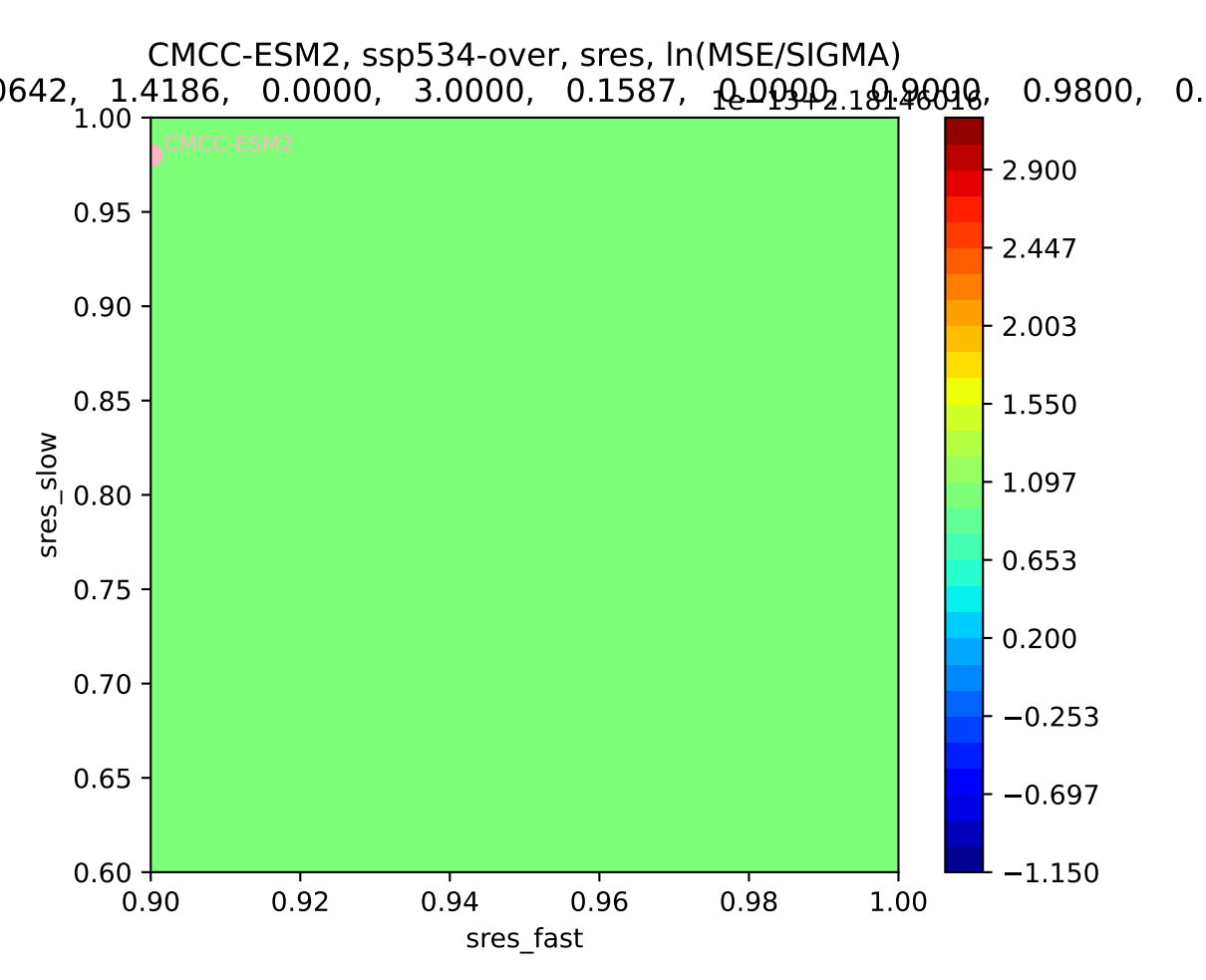

CMCC-ESM2, ssp534-over, sres
ESM-Fit
sres, ESM - FIT
c_atm

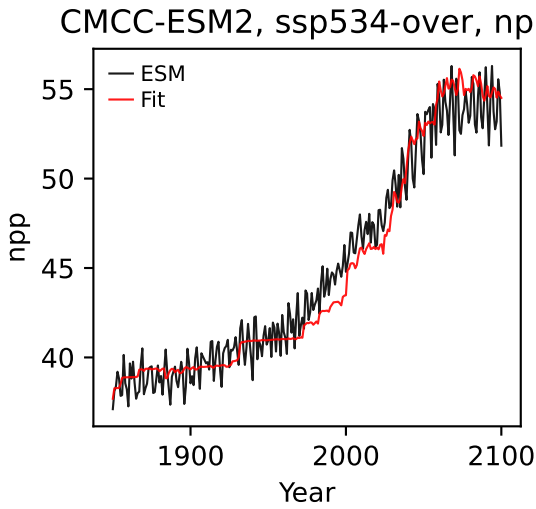

CMCC-ESM2, ssp534-over, sres, ln(MSE/SIGMA)
0642, 1.4186, 0.0000, 3.0000, 0.1587, 0.0000, 0.9000, 0.9800, 0.
CMCC-ESM2
sres_t_e
sres_t_l
2
1
0
−1
−2
−3
10.5
9.6
8.7
7.8
6.9
6.0
5.1
4.2
3.3
2.4

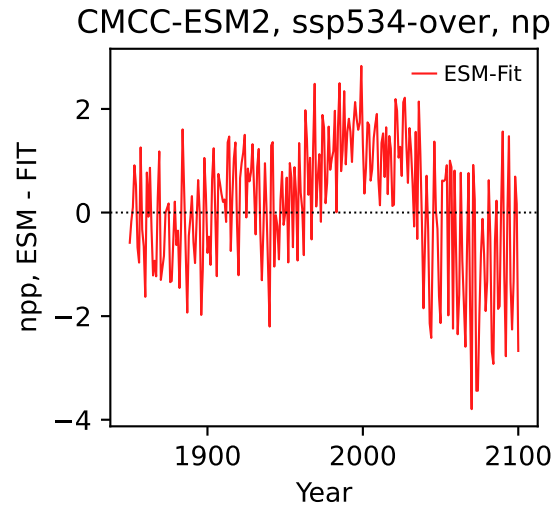

CMCC-ESM2, ssp534-over, sres, ln(MSE/SIGMA)
0642, 1.4186, 0.0000, 3.0000, 0.1587, 0.0000, 0.9000, 0.9800, 0.
sres_c_half
sres_c_l
CMCC-ESM2
2000
1750
1500
1250
1000
750
500
250
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
7.4
6.8
6.2
5.6
5.0
4.4
3.8
3.2
2.6
2.0

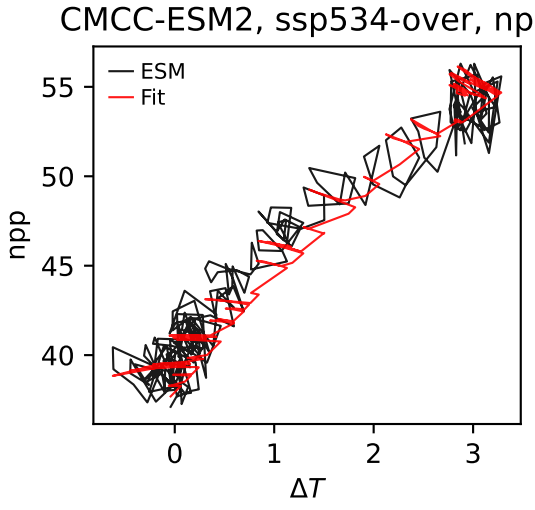

CMCC-ESM2, ssp534-over, sres, ln(MSE/SIGMA)
0642, 1.4186, 0.0000, 3.0000, 0.1587, 0.0000, 0.9000, 0.9800, 0.
sres_hyst
sres_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
10.2
9.3
8.4
7.5
6.6
5.7
4.8
3.9
3.0
2.1

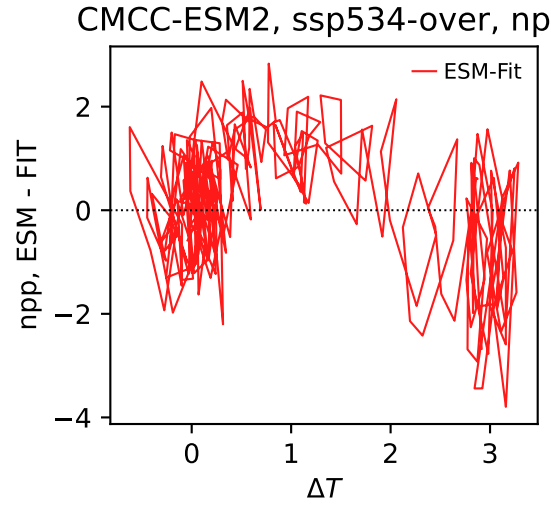

CMCC-ESM2, ssp534-over, sres, ln(MSE/SIGMA)
0642, 1.4186, 0.0000, 3.0000, 0.1587, 0.0000, 0.9000, 0.9800, 0.
1e−134 2.181460 16
CMCC-ESM2
sres_c_tan2
sres_c_tan
0.04
0.02
0.00
−0.02
−0.04
2.900
2.447
2.003
1.550
1.097
0.653
0.200
−0.253
−0.697
−1.150

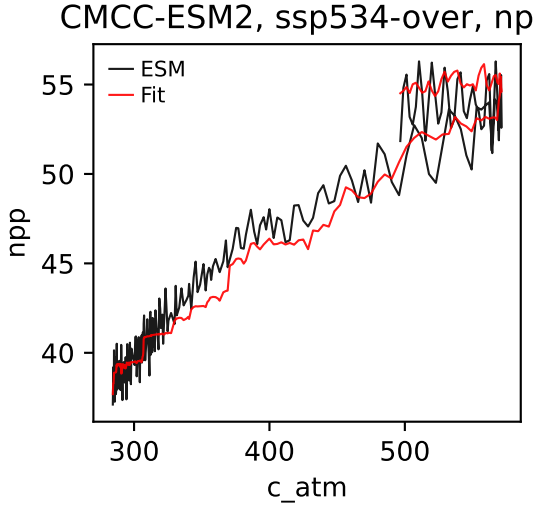

CMCC-ESM2, ssp534-over, sres, ln(MSE/SIGMA)
0642, 1.4186, 0.0000, 3.0000, 0.1587, 0.0000, 0.9000, 0.9800, 0.
1e-134 2.181460e+00
CMCC-ESM2
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
sres_slow
0.90
0.92
0.94
0.96
0.98
1.00
sres_fast
2.900
2.447
2.003
1.550
1.097
0.653
0.200
−0.253
−0.697
−1.150

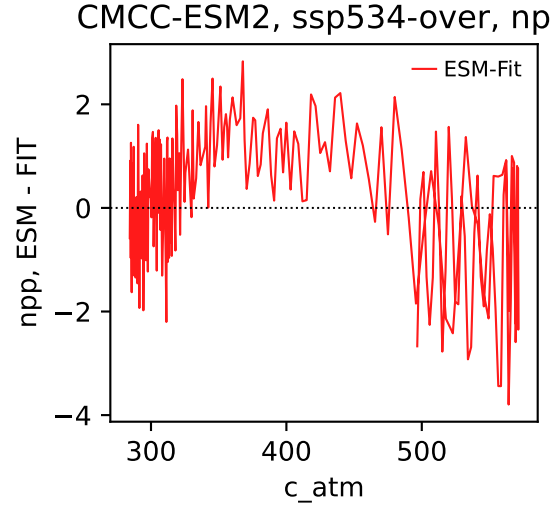

CMCC-ESM2, ssp534-over, npp
ESM
Fit
npp
Year

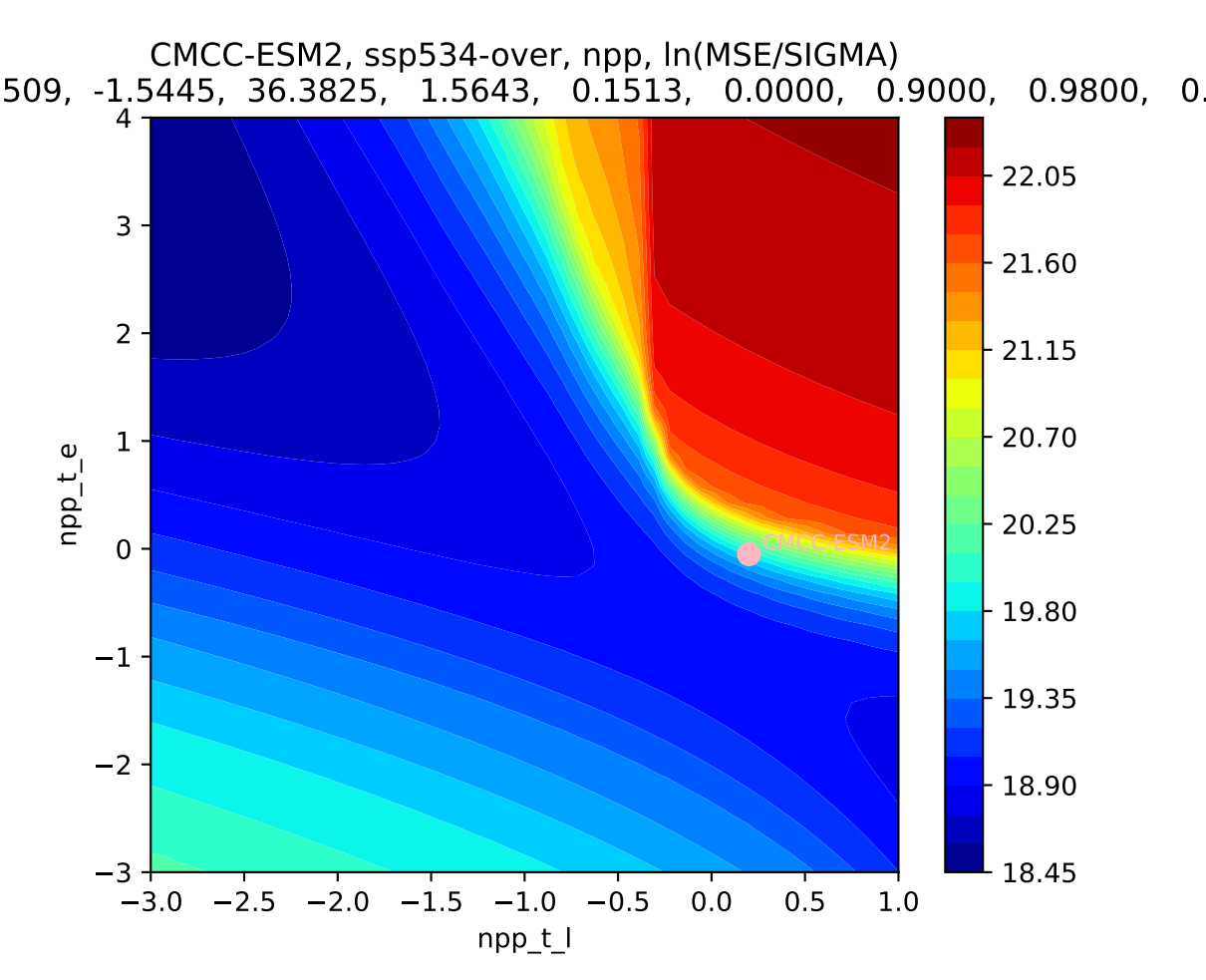

CMCC-ESM2, ssp534-over, npp
ESM-Fit
npp, ESM - FIT
Year

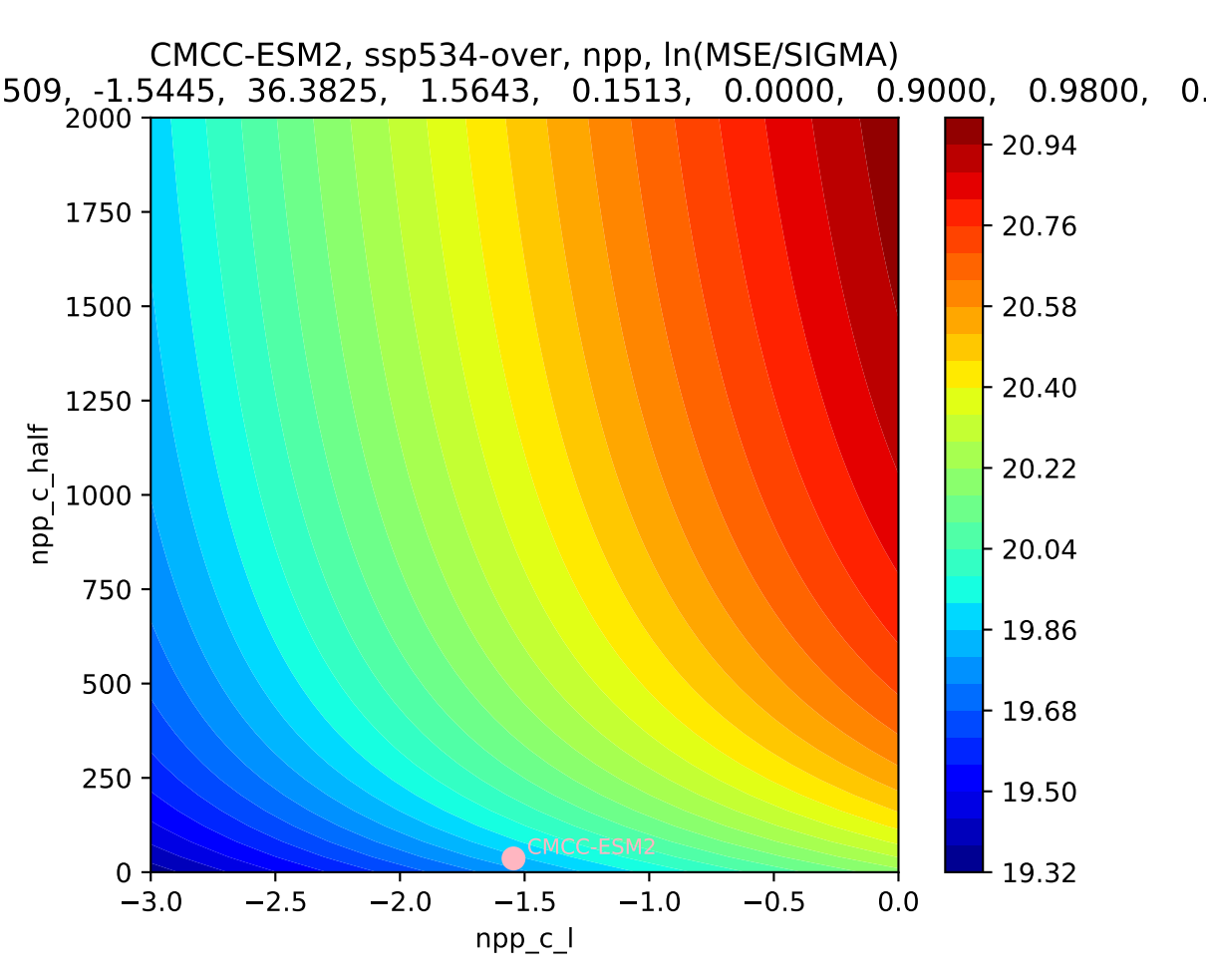

CMCC-ESM2, ssp534-over, npp
ESM
Fit
npp
ΔT

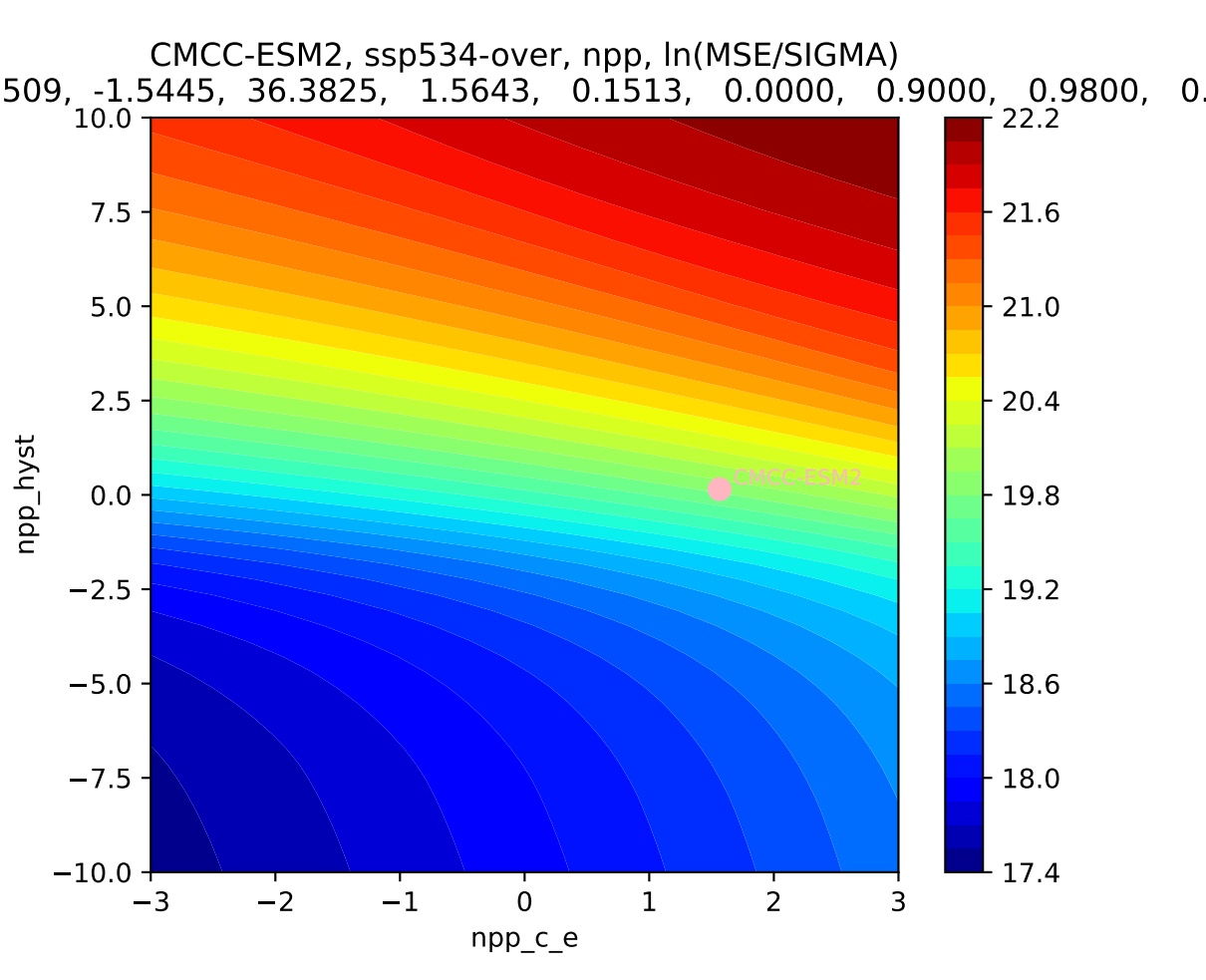

CMCC-ESM2, ssp534-over, npp
ESM-Fit
npp, ESM - FIT
ΔT

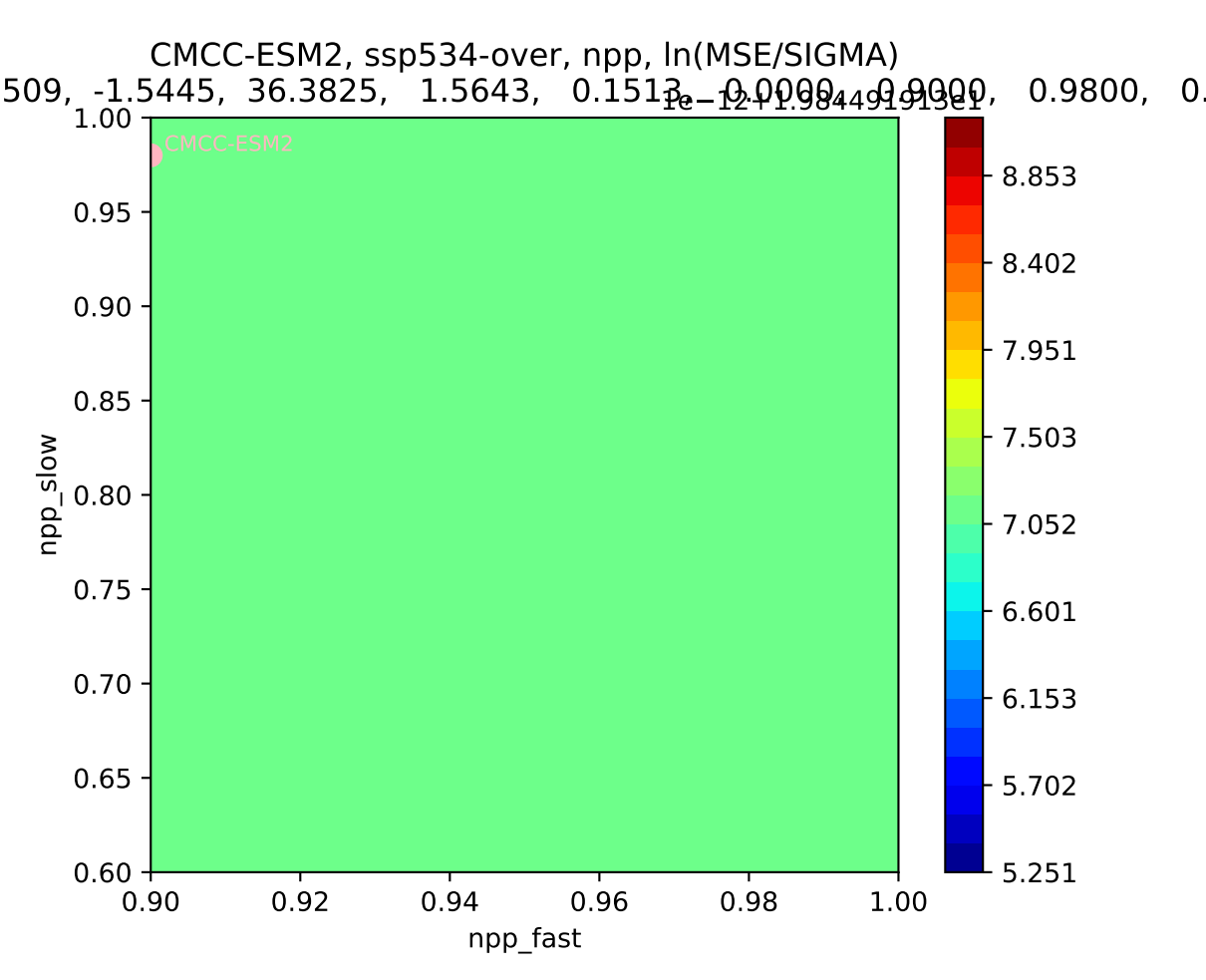

CMCC-ESM2, ssp534-over, npp
ESM
Fit
npp
c_atm

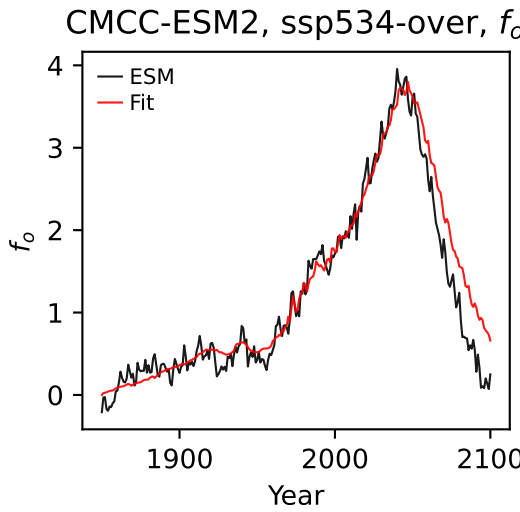

CMCC-ESM2, ssp534-over, npp
ESM-Fit
npp, ESM - FIT
c_atm

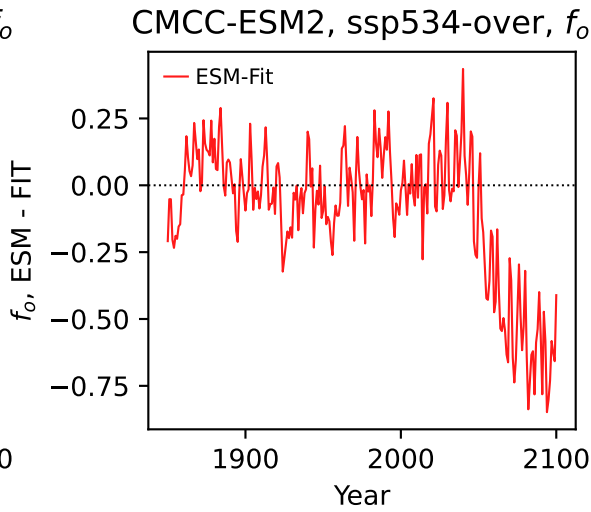

CMCC-ESM2, ssp534-over, npp, ln(MSE/SIGMA)
509, -1.5445, 36.3825, 1.5643, 0.1513, 0.0000, 0.9000, 0.9800, 0.
CMCC-ESM2
npp_t_e
npp_t_l
4
3
2
1
0
−1
−2
−3
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
0.5
1.0
22.05
21.60
21.15
20.70
20.25
19.80
19.35
18.90
18.45

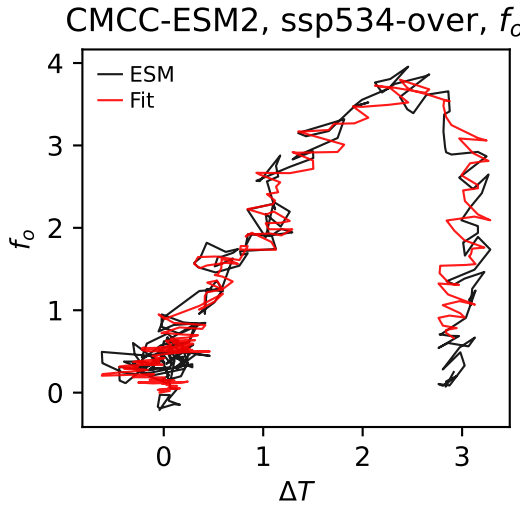

CMCC-ESM2, ssp534-over, npp, ln(MSE/SIGMA)
509, -1.5445, 36.3825, 1.5643, 0.1513, 0.0000, 0.9000, 0.9800, 0.
2000
1750
1500
1250
1000
750
500
250
0
npp_c_half
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
npp_c_l
CMCC-ESM2
20.94
20.76
20.58
20.40
20.22
20.04
19.86
19.68
19.50
19.32

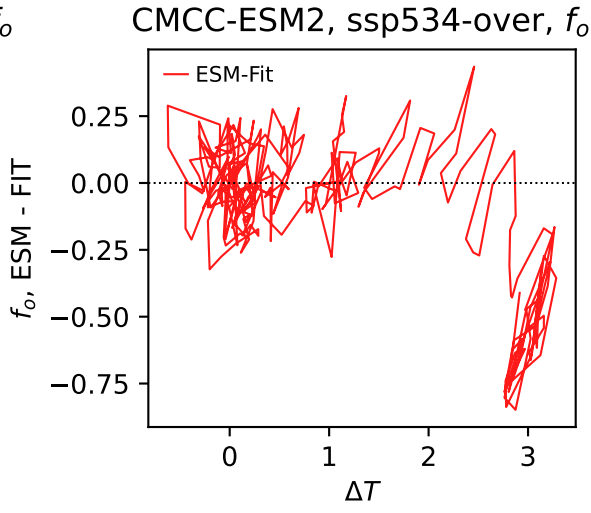

CMCC-ESM2, ssp534-over, npp, ln(MSE/SIGMA)
509, -1.5445, 36.3825, 1.5643, 0.1513, 0.0000, 0.9000, 0.9800, 0.
CMCC-ESM2
npp_hyst
npp_c_e
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
−3
−2
−1
0
1
2
3
22.2
21.6
21.0
20.4
19.8
19.2
18.6
18.0
17.4

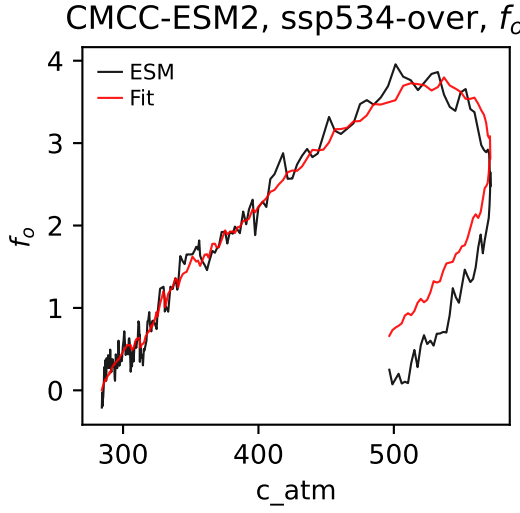

CMCC-ESM2, ssp534-over, npp, ln(MSE/SIGMA)
509, -1.5445, 36.3825, 1.5643, 0.1513, 0.0000, 0.9000, 0.9800, 0.
1e−12+1.9844919136e1
CMCC-ESM2
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
npp_slow
0.90
0.92
0.94
0.96
0.98
1.00
npp_fast
8.853
8.402
7.951
7.503
7.052
6.601
6.153
5.702
5.251

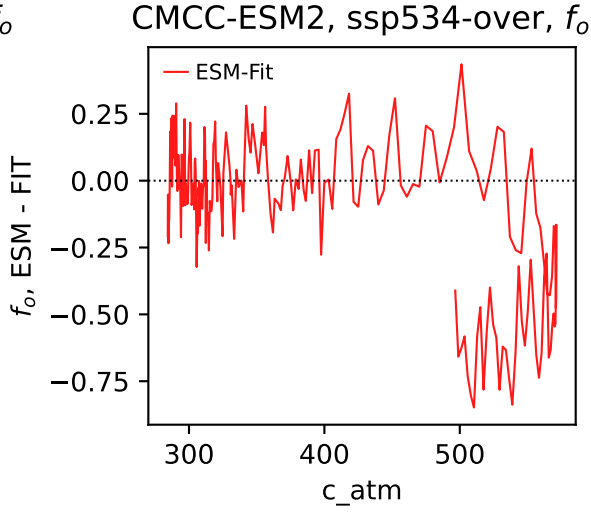

CMCC-ESM2, ssp534-over, f_o
ESM
Fit
f_o
Year

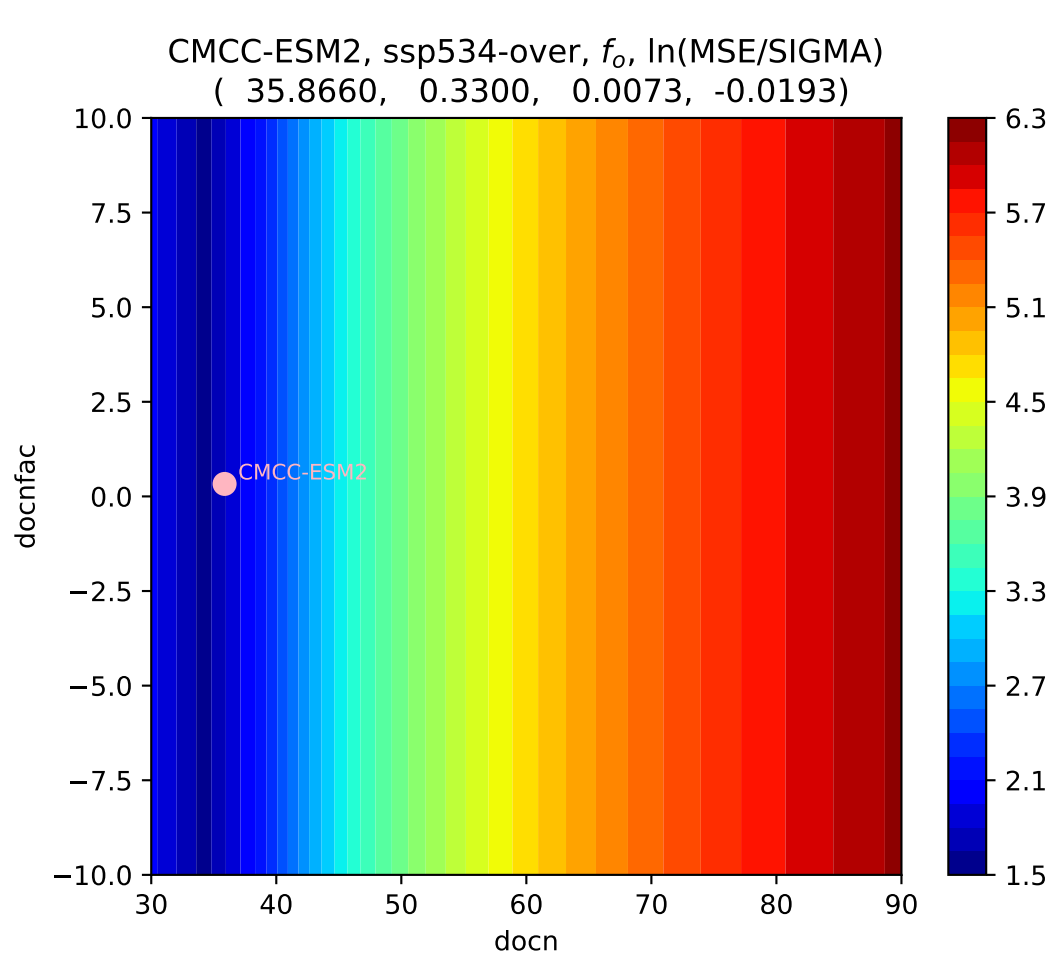

CMCC-ESM2, ssp534-over, f_o
ESM-Fit
f_o, ESM - FIT
Year

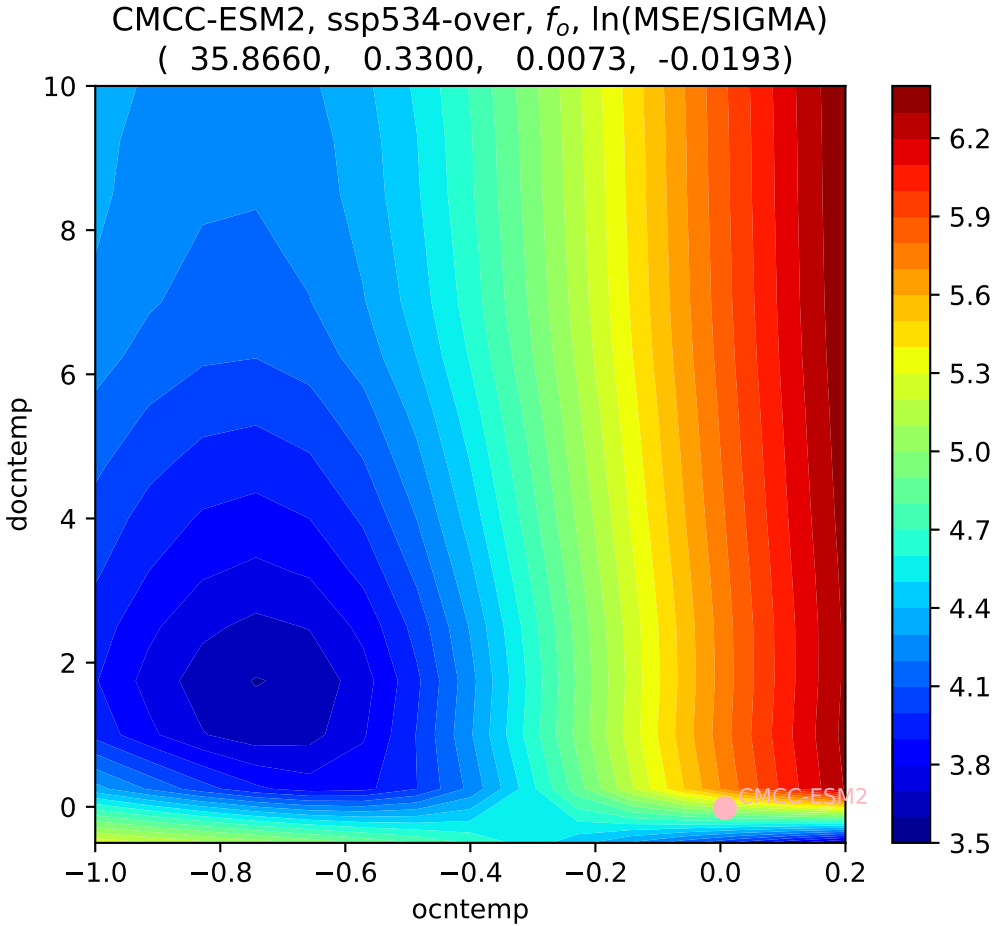

CMCC-ESM2, ssp534-over, f_o
ESM
Fit
f_o
ΔT


CMCC-ESM2, ssp534-over, f_o
ESM-Fit
f_o, ESM - FIT
ΔT


CMCC-ESM2, ssp534-over, f_o
ESM
Fit
f_o
c_atm


CMCC-ESM2, ssp534-over, f_o
ESM-Fit
f_o, ESM - FIT
c_atm


CMCC-ESM2, ssp534-over, f_o, ln(MSE/SIGMA)
(35.8660, 0.3300, 0.0073, -0.0193)
CMCC-ESM2
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
6.3
5.7
5.1
4.5
3.9
3.3
2.7
2.1
1.5


CMCC-ESM2, ssp534-over, f_o, ln(MSE/SIGMA)
(35.8660, 0.3300, 0.0073, -0.0193)
docntemp
ocntemp
CMCC-ESM2
10
8
6
4
2
0
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
6.2
5.9
5.6
5.3
5.0
4.7
4.4
4.1
3.8
3.5