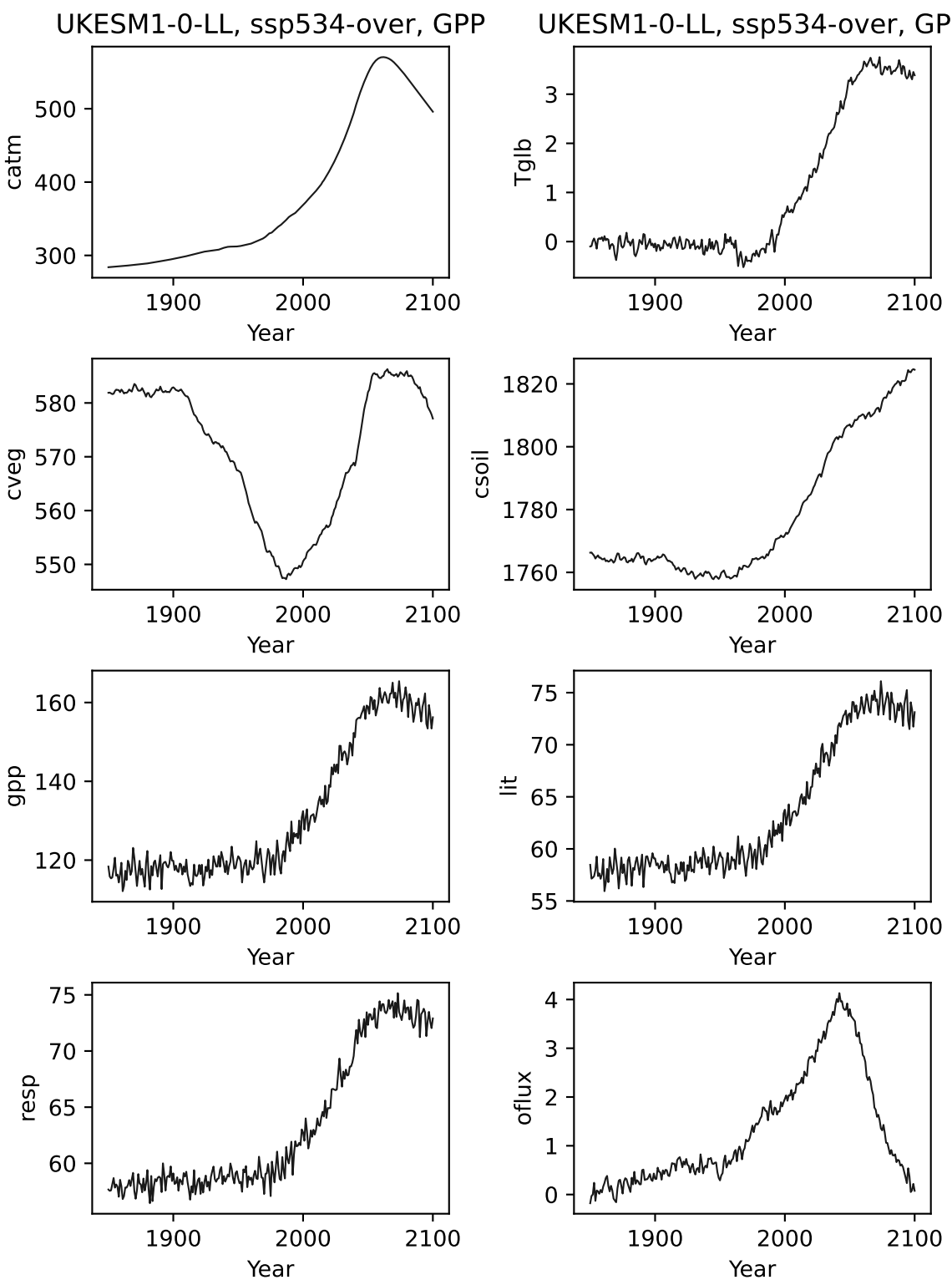
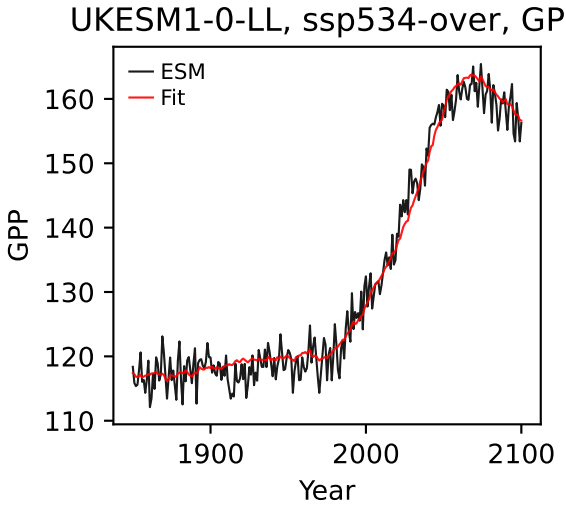
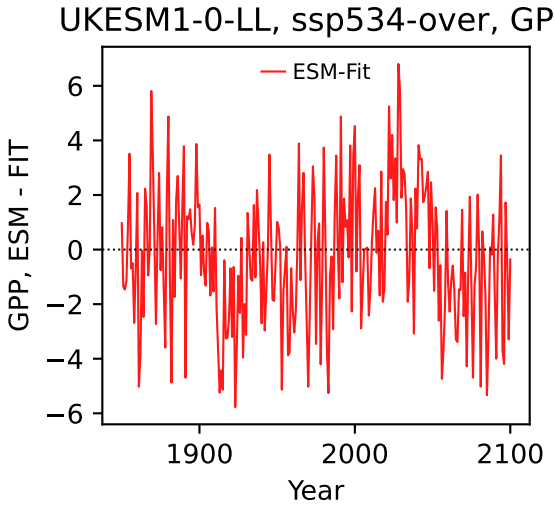
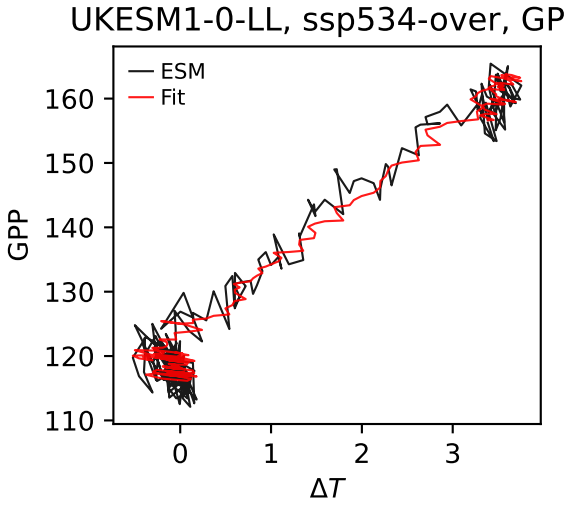
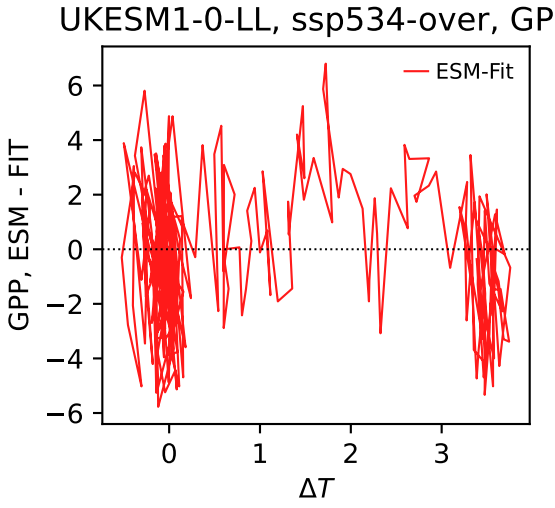
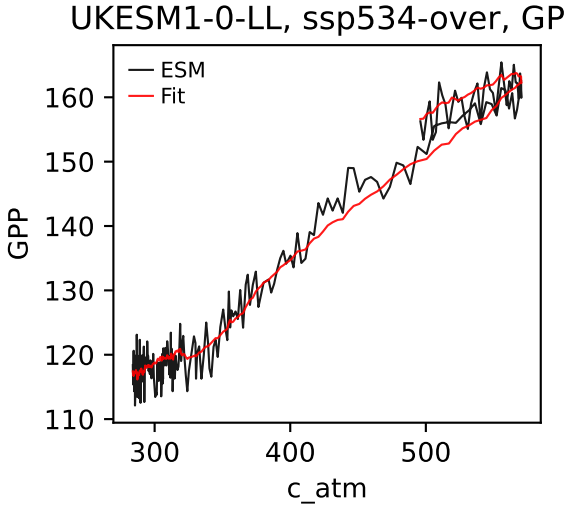

UKESM1-0-LL, ssp534-over, GPP
catm
Year
UKESM1-0-LL, ssp534-over, GPP
Tglb
Year
cveg
Year
csoil
Year
gpp
Year
lit
Year
resp
Year
oflux
Year

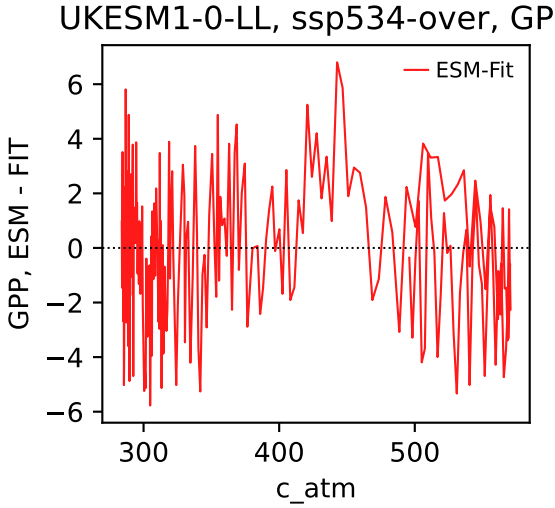

UKESM1-0-LL, ssp534-over, GPP
ESM
Fit
GPP
Year

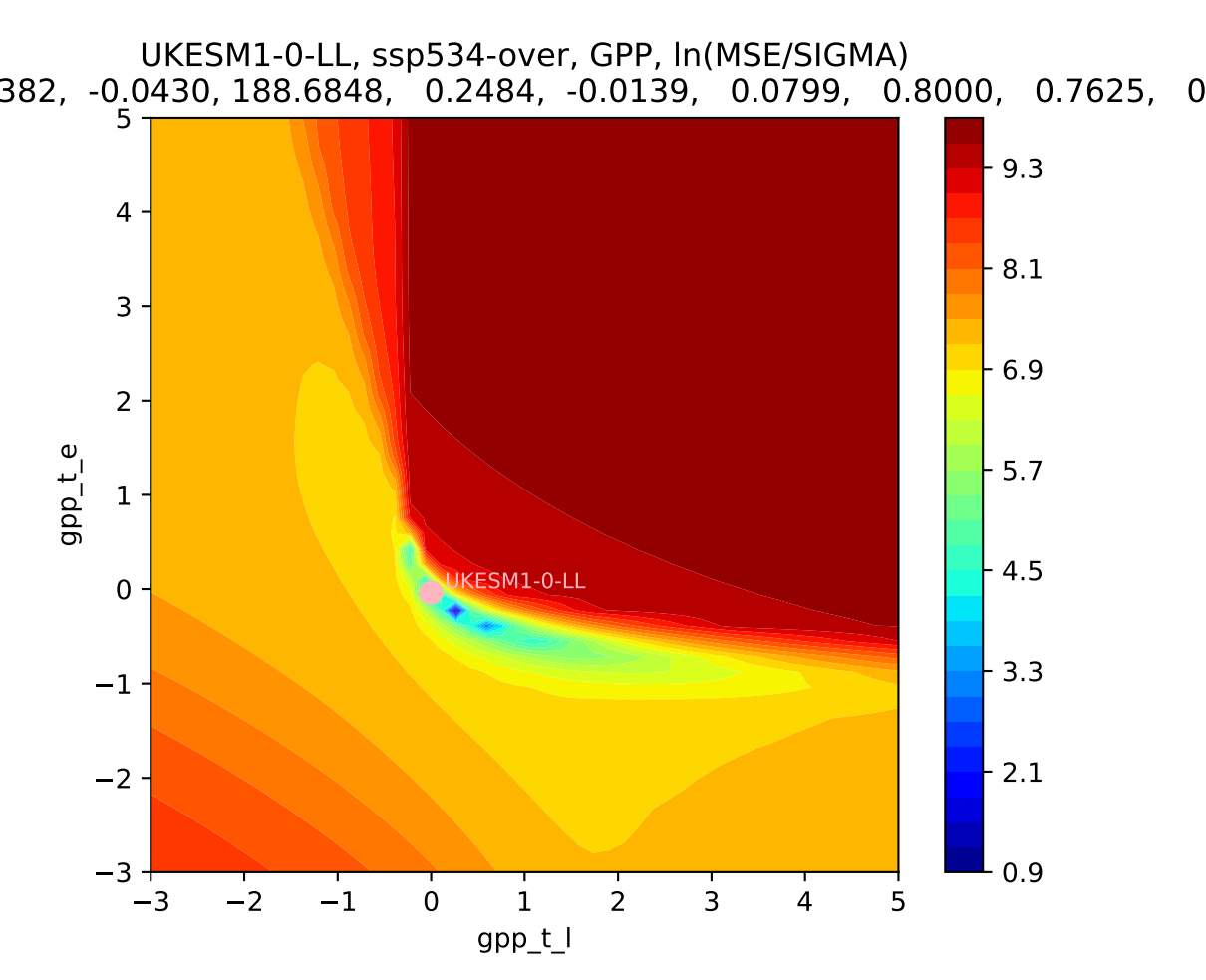

UKESM1-0-LL, ssp534-over, GPP
ESM-Fit
GPP, ESM - FIT
Year

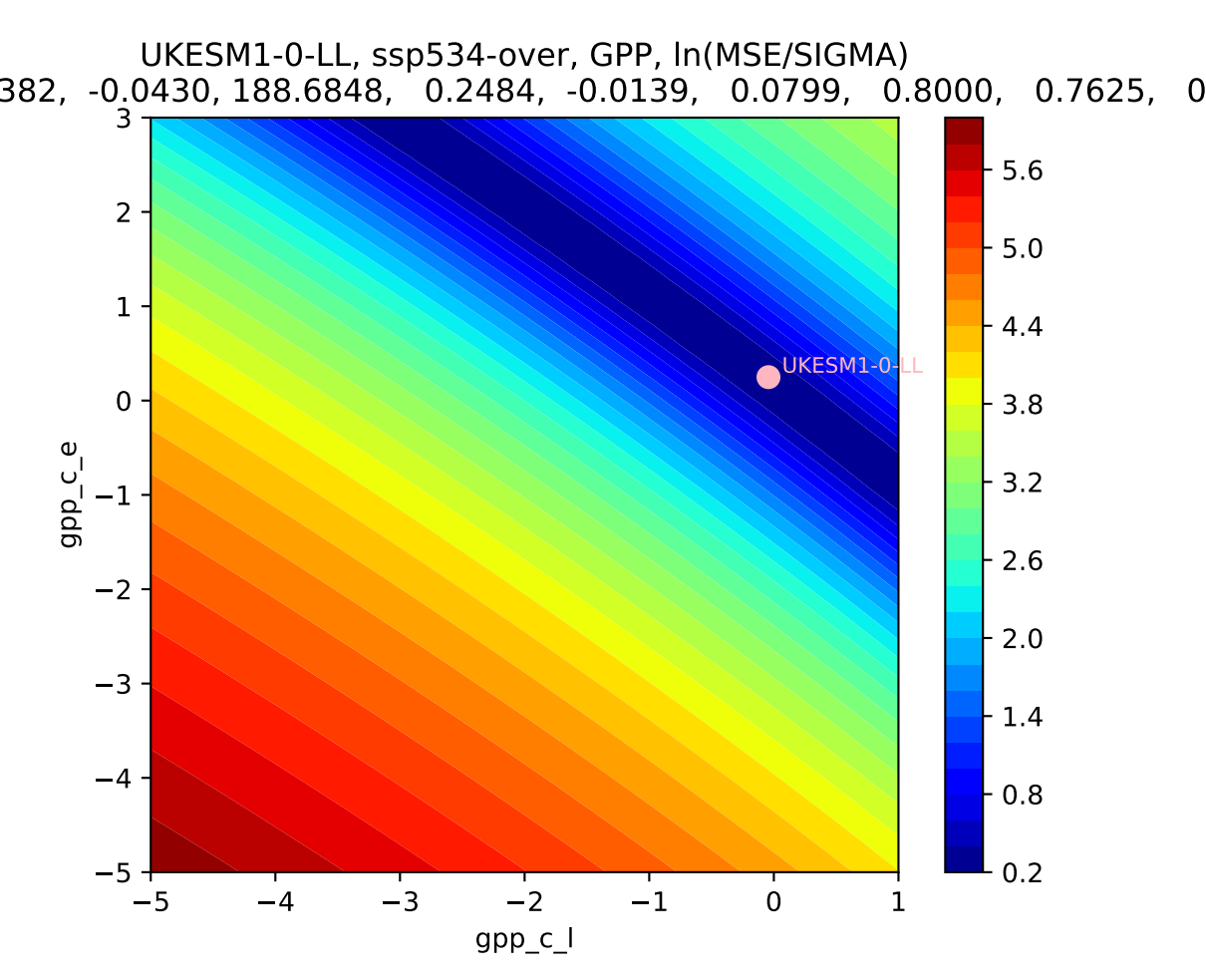

UKESM1-0-LL, ssp534-over, GPP
ESM
Fit
GPP
ΔT

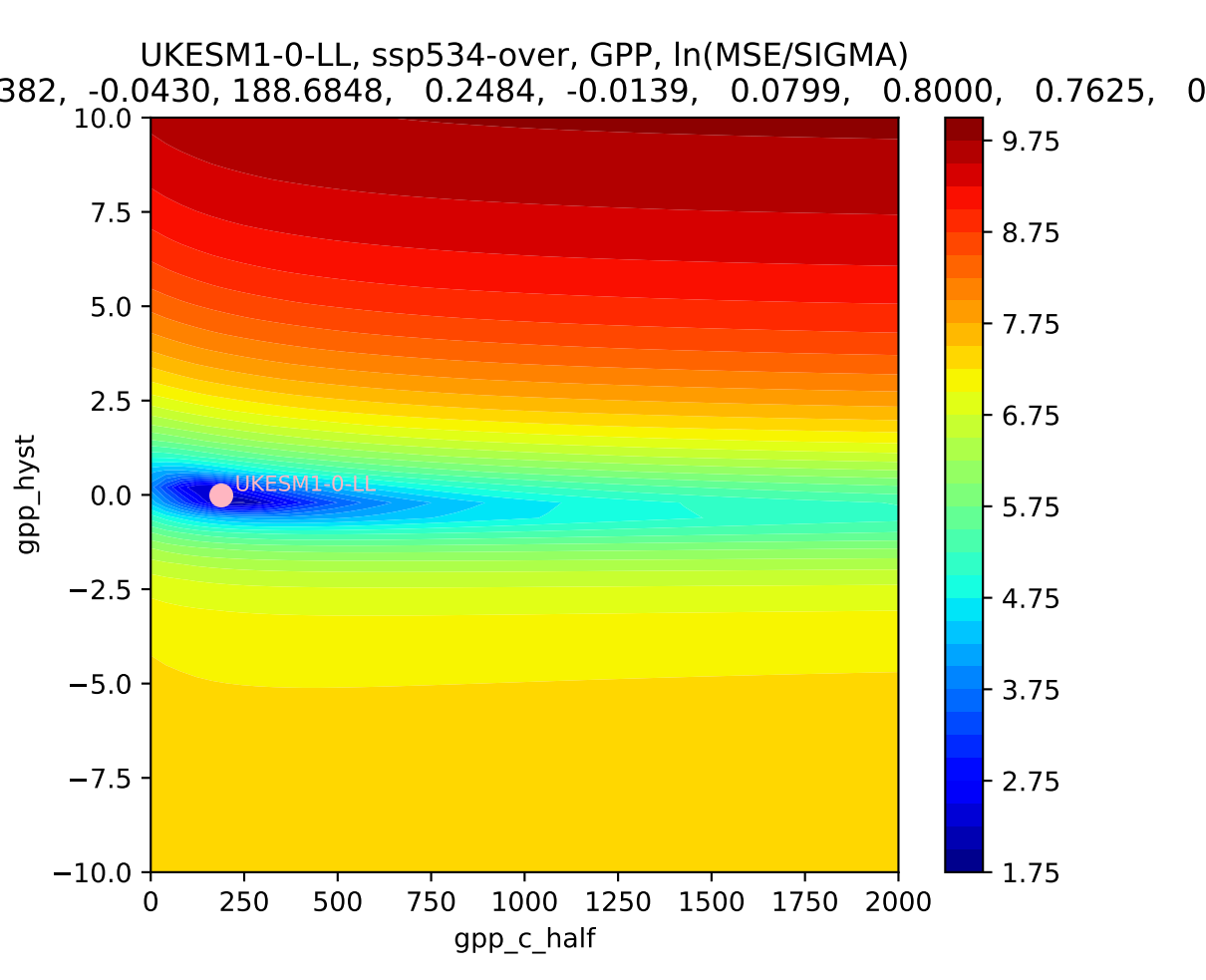

UKESM1-0-LL, ssp534-over, GPP
ESM-Fit
GPP, ESM - FIT
ΔT

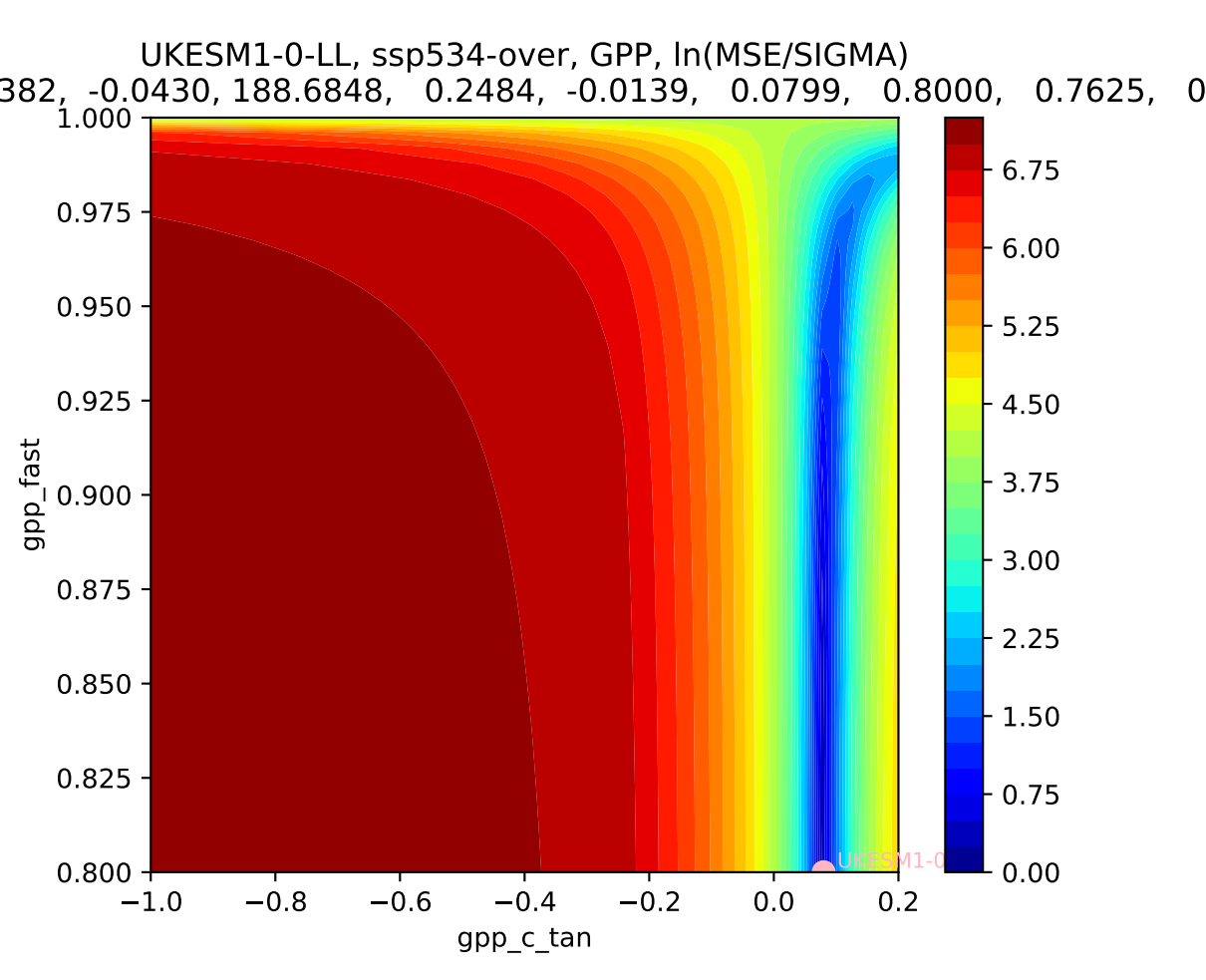

UKESM1-0-LL, ssp534-over, GPP
ESM
Fit
GPP
c_atm

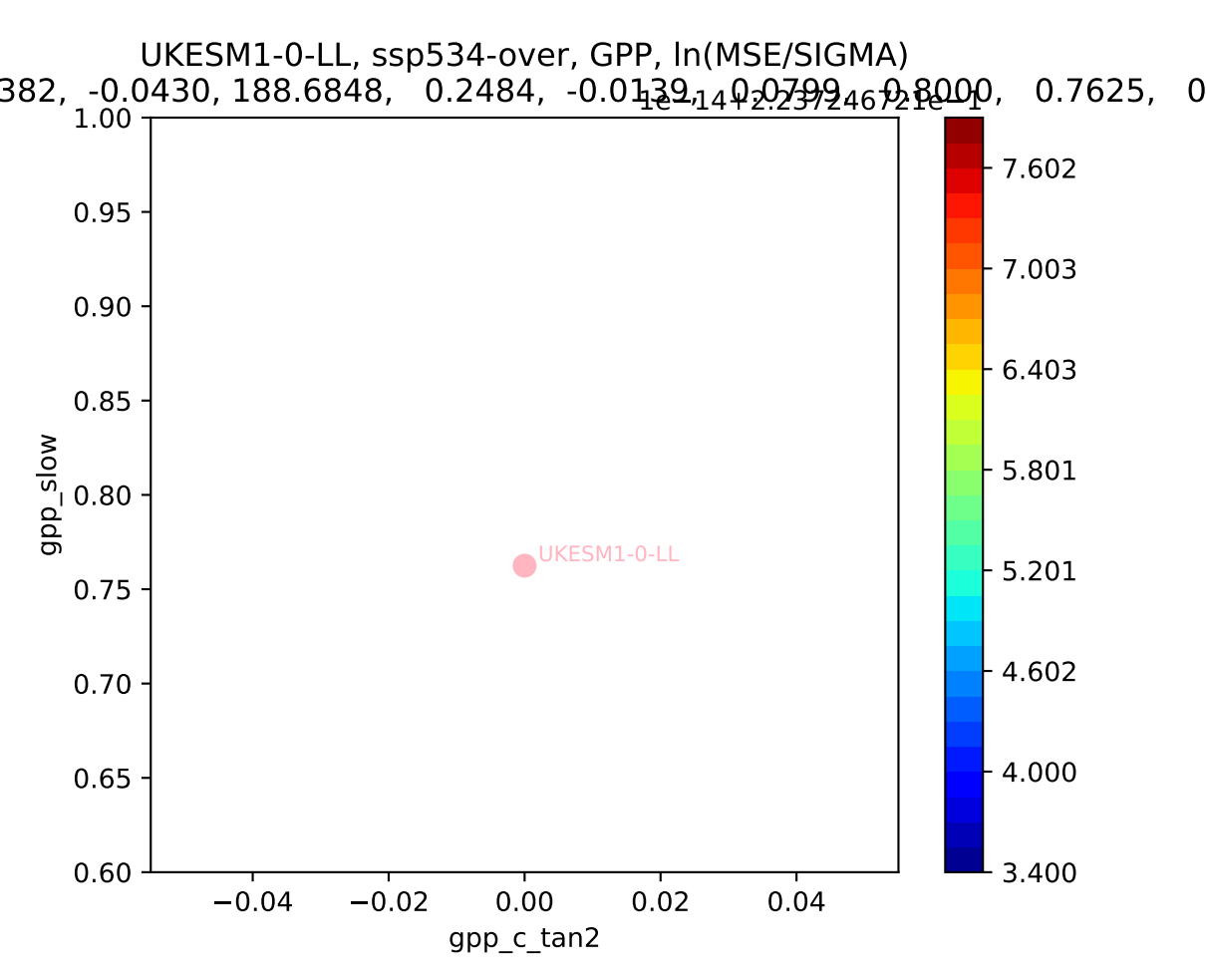

UKESM1-0-LL, ssp534-over, GPP
ESM-Fit
GPP, ESM - FIT
c_atm

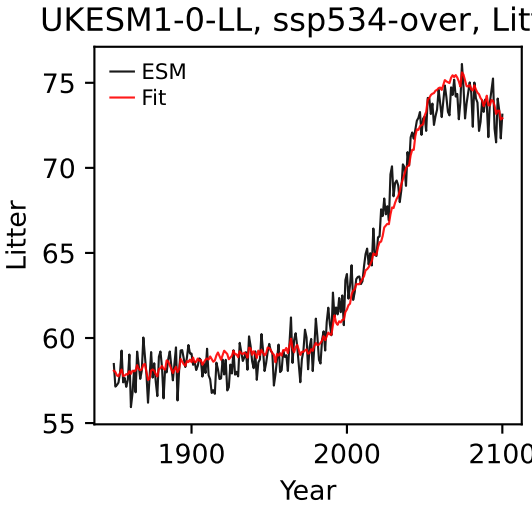

UKESM1-0-LL, ssp534-over, GPP, ln(MSE/SIGMA)
382, -0.0430, 188.6848, 0.2484, -0.0139, 0.0799, 0.8000, 0.7625, 0
UKESM1-0-LL
gpp_t_e
gpp_t_l
9.3
8.1
6.9
5.7
4.5
3.3
2.1
0.9

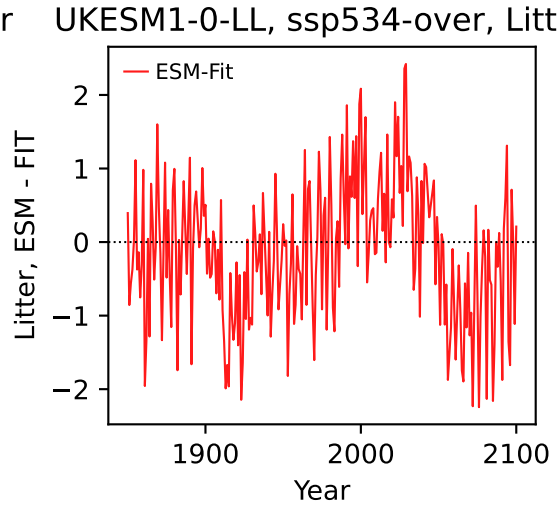

UKESM1-0-LL, ssp534-over, GPP, ln(MSE/SIGMA)
382, -0.0430, 188.6848, 0.2484, -0.0139, 0.0799, 0.8000, 0.7625, 0
UKESM1-0-LL
gpp_c_e
gpp_c_l
3
2
1
0
−1
−2
−3
−4
−5
−5
−4
−3
−2
−1
0
1
5.6
5.0
4.4
3.8
3.2
2.6
2.0
1.4
0.8
0.2

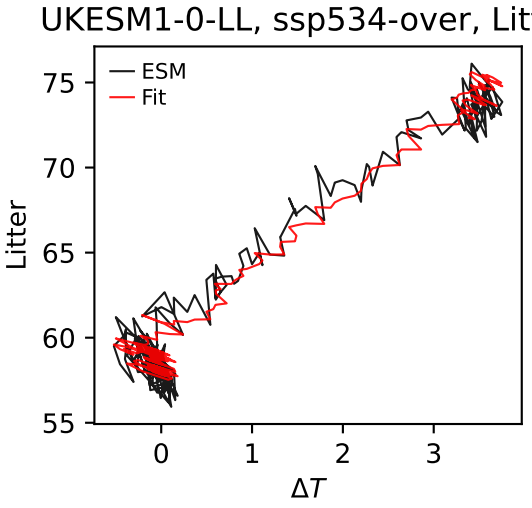

UKESM1-0-LL, ssp534-over, GPP, ln(MSE/SIGMA)
382, -0.0430, 188.6848, 0.2484, -0.0139, 0.0799, 0.8000, 0.7625, 0
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
gpp_hyst
UKESM1-0-LL
0
250
500
750
1000
1250
1500
1750
2000
gpp_c_half
9.75
8.75
7.75
6.75
5.75
4.75
3.75
2.75
1.75

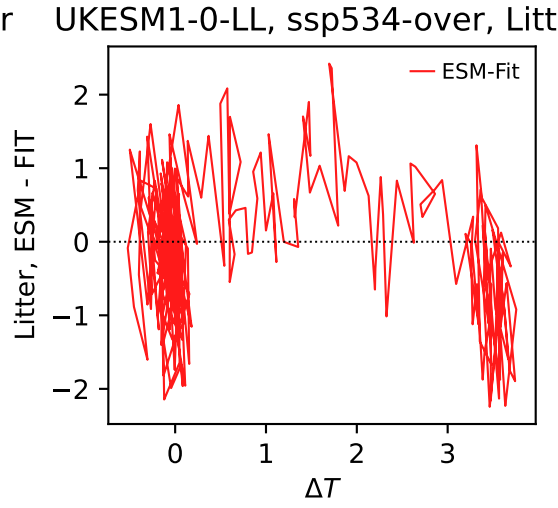

UKESM1-0-LL, ssp534-over, GPP, ln(MSE/SIGMA)
382, -0.0430, 188.6848, 0.2484, -0.0139, 0.0799, 0.8000, 0.7625, 0
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
gpp_fast
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
gpp_c_tan
6.75
6.00
5.25
4.50
3.75
3.00
2.25
1.50
0.75
0.00

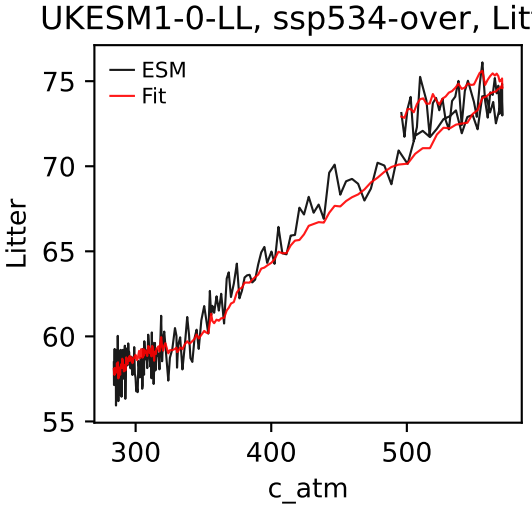

UKESM1-0-LL, ssp534-over, GPP, ln(MSE/SIGMA)
382, -0.0430, 188.6848, 0.2484, -0.0139, 0.0799, 0.8000, 0.7625, 0
1e−14+2.372467e−1
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
gpp_slow
UKESM1-0-LL
−0.04
−0.02
0.00
0.02
0.04
gpp_c_tan2
7.602
7.003
6.403
5.801
5.201
4.602
4.000
3.400

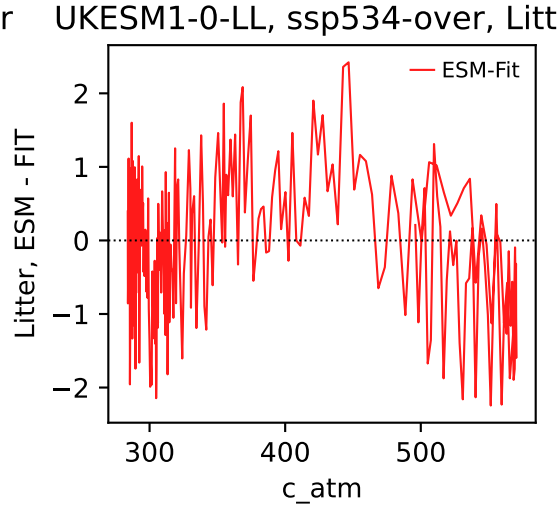

UKESM1-0-LL, ssp534-over, Litter
ESM
Fit
Litter
Year

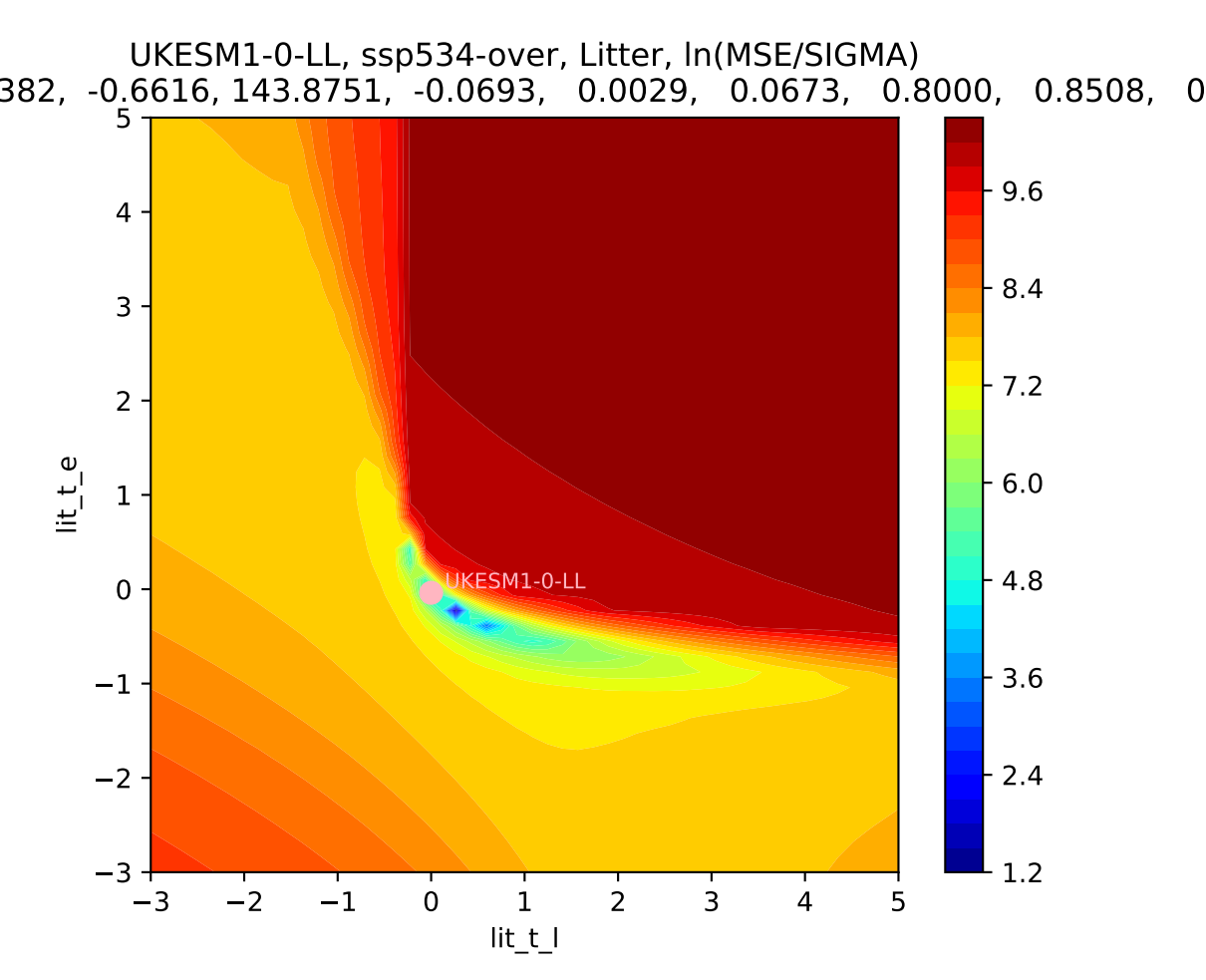

UKESM1-0-LL, ssp534-over, Litte
ESM-Fit
Litter, ESM - FIT
Year

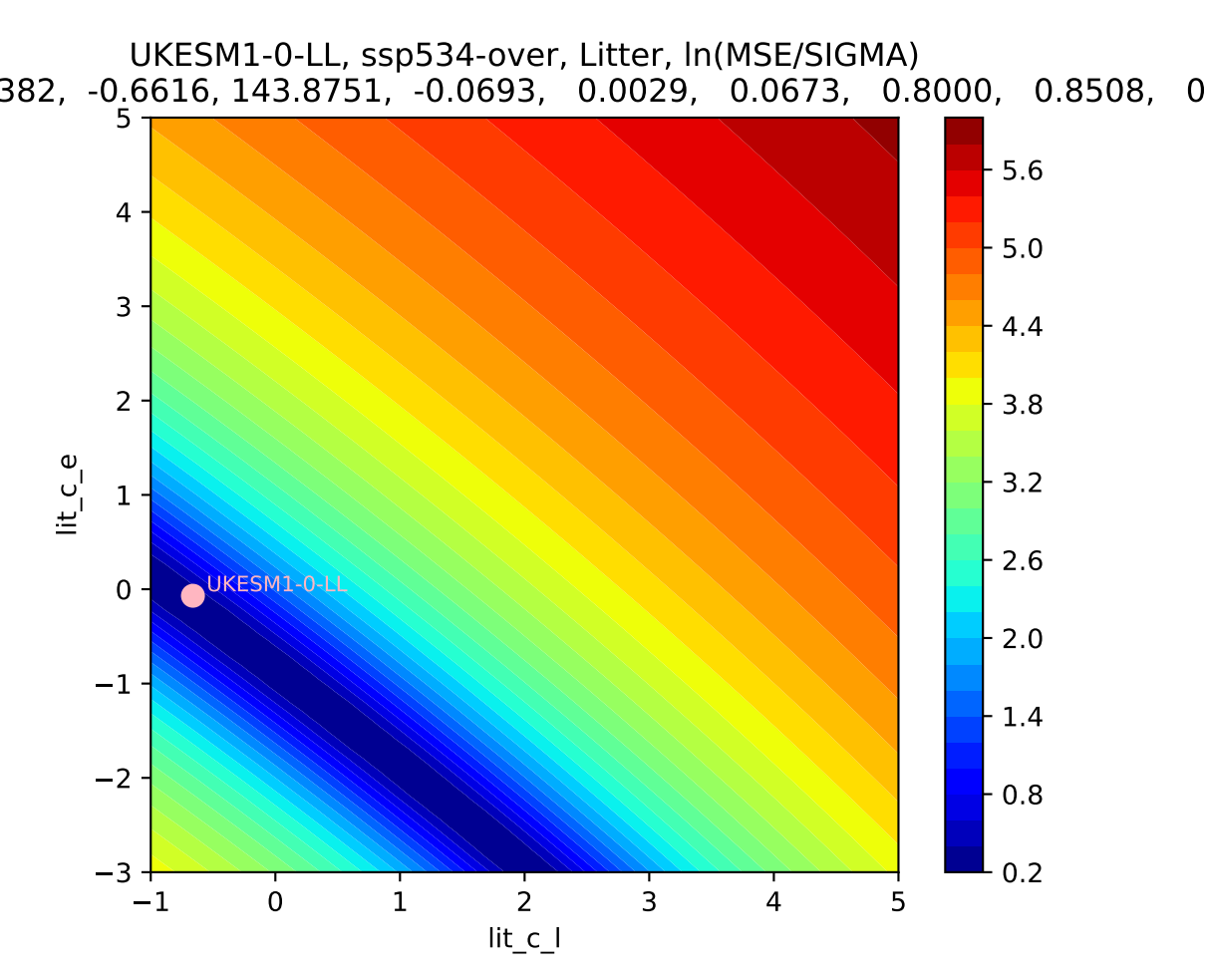

UKESM1-0-LL, ssp534-over, Litter
ESM
Fit
Litter
ΔT

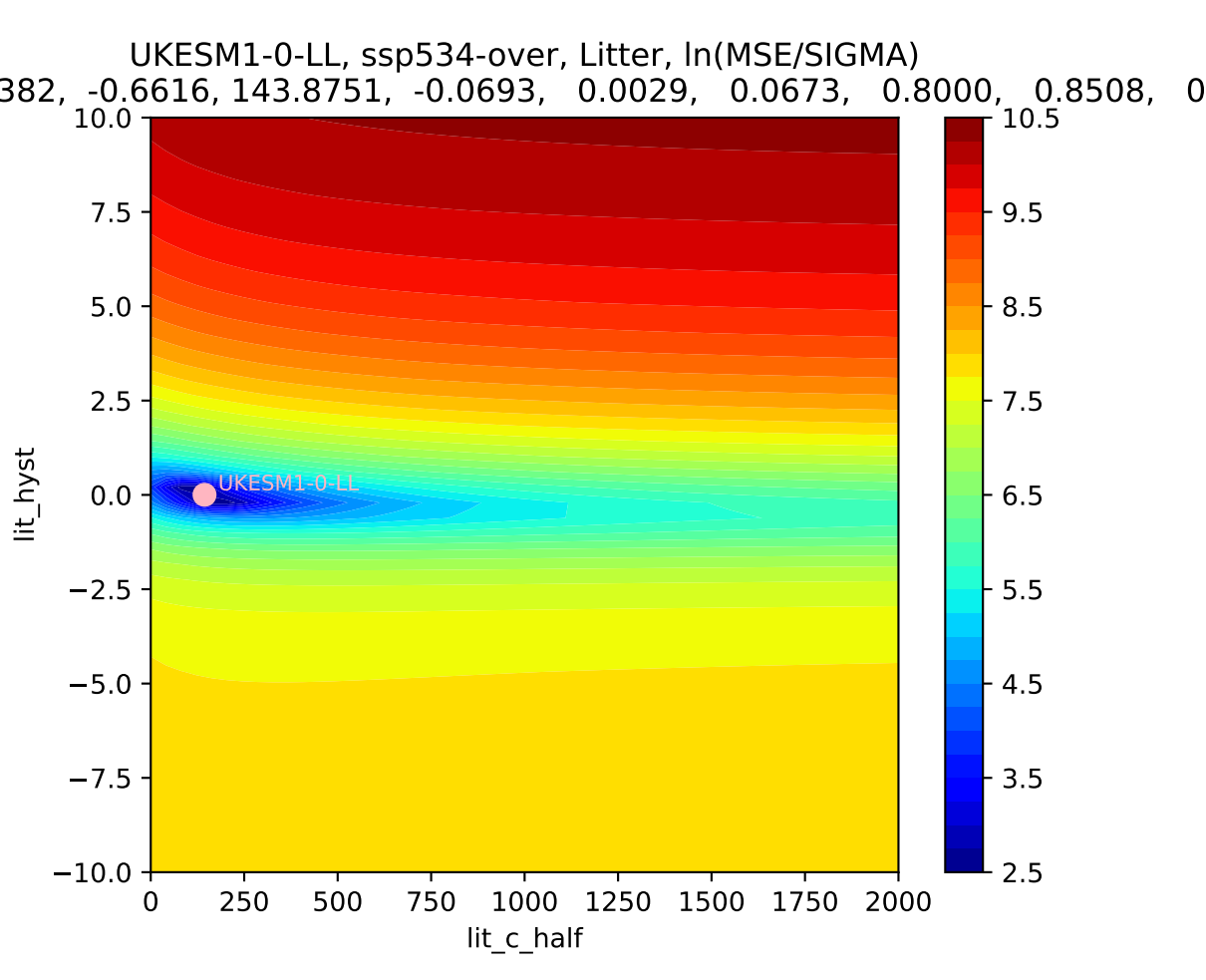

UKESM1-0-LL, ssp534-over, Litte
ESM-Fit
Litter, ESM - FIT
ΔT

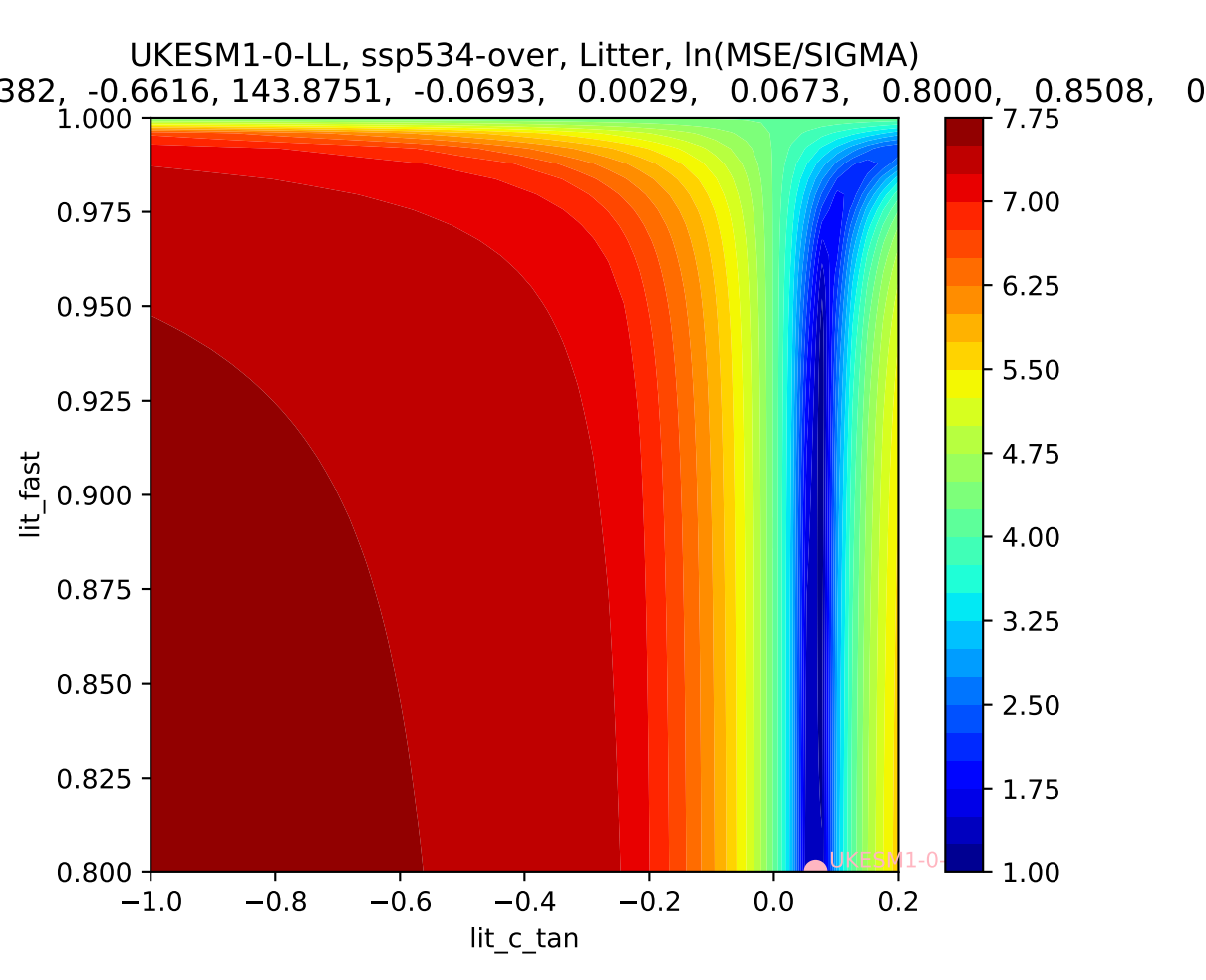

UKESM1-0-LL, ssp534-over, Litter
ESM
Fit
Litter
c_atm

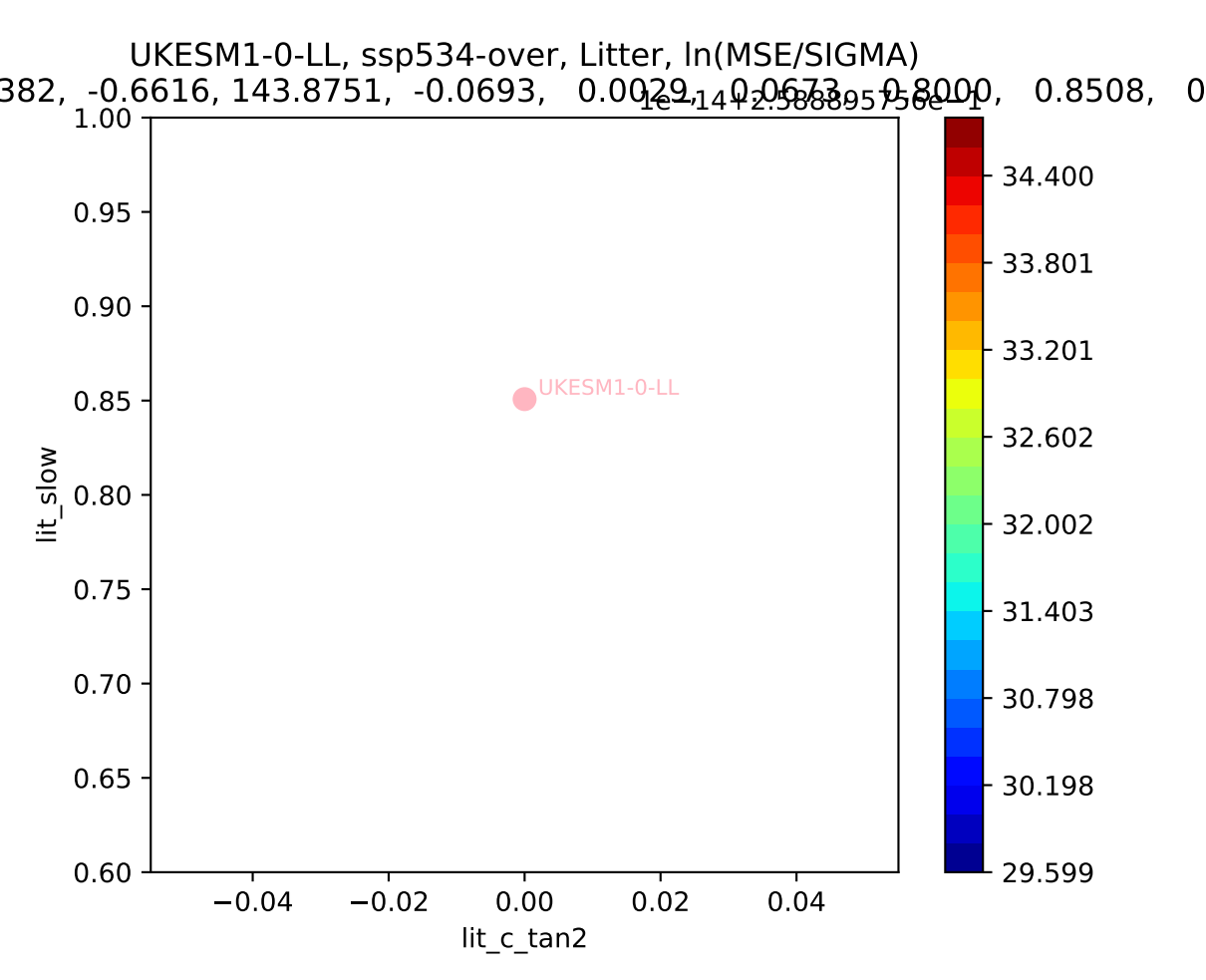

UKESM1-0-LL, ssp534-over, Litte
ESM-Fit
Litter, ESM - FIT
c_atm

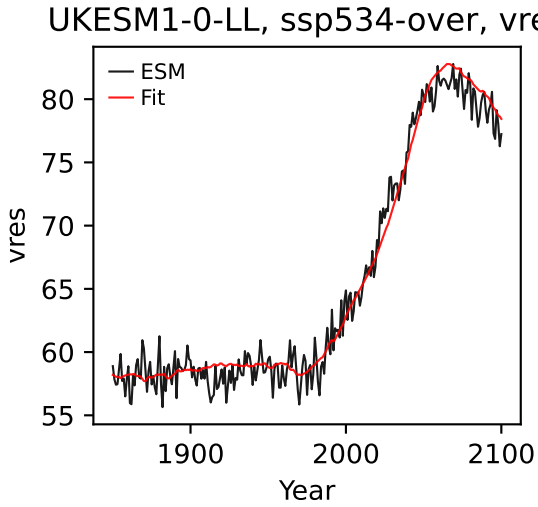

UKESM1-0-LL, ssp534-over, Litter, ln(MSE/SIGMA)
382, -0.6616, 143.8751, -0.0693, 0.0029, 0.0673, 0.8000, 0.8508, 0
UKESM1-0-LL
lit_t_e
lit_t_l
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
9.6
8.4
7.2
6.0
4.8
3.6
2.4
1.2

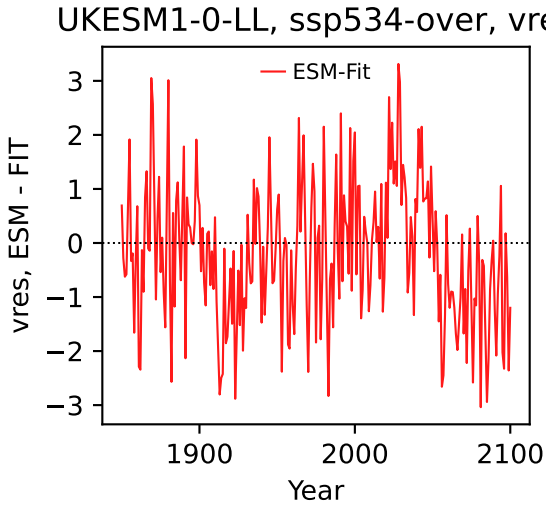

UKESM1-0-LL, ssp534-over, Litter, ln(MSE/SIGMA)
382, -0.6616, 143.8751, -0.0693, 0.0029, 0.0673, 0.8000, 0.8508, 0
lit_c_e
lit_c_l
UKESM1-0-LL
5
4
3
2
1
0
−1
−2
−3
−1
0
1
2
3
4
5
5.6
5.0
4.4
3.8
3.2
2.6
2.0
1.4
0.8
0.2

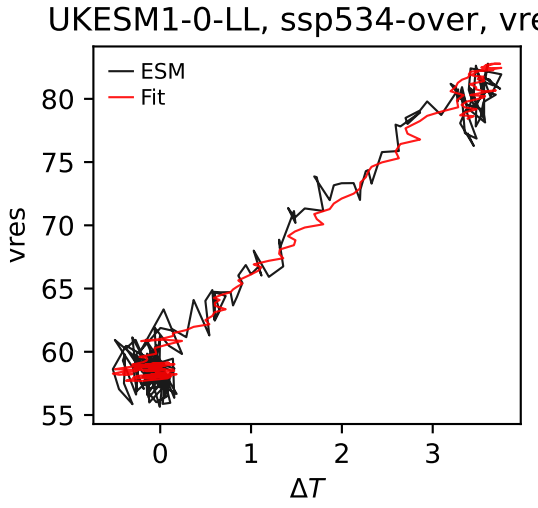

UKESM1-0-LL, ssp534-over, Litter, ln(MSE/SIGMA)
382, -0.6616, 143.8751, -0.0693, 0.0029, 0.0673, 0.8000, 0.8508, 0
UKESM1-0-LL
lit_hyst
lit_c_half
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
0
250
500
750
1000
1250
1500
1750
2000
10.5
9.5
8.5
7.5
6.5
5.5
4.5
3.5
2.5

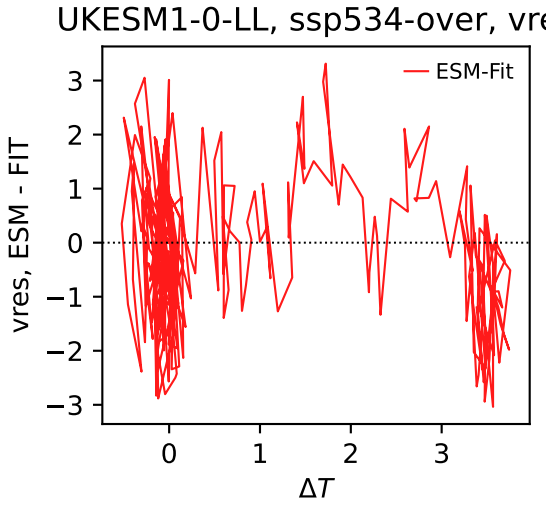

UKESM1-0-LL, ssp534-over, Litter, ln(MSE/SIGMA)
382, -0.6616, 143.8751, -0.0693, 0.0029, 0.0673, 0.8000, 0.8508, 0
lit_fast
lit_c_tan
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
7.75
7.00
6.25
5.50
4.75
4.00
3.25
2.50
1.75
1.00

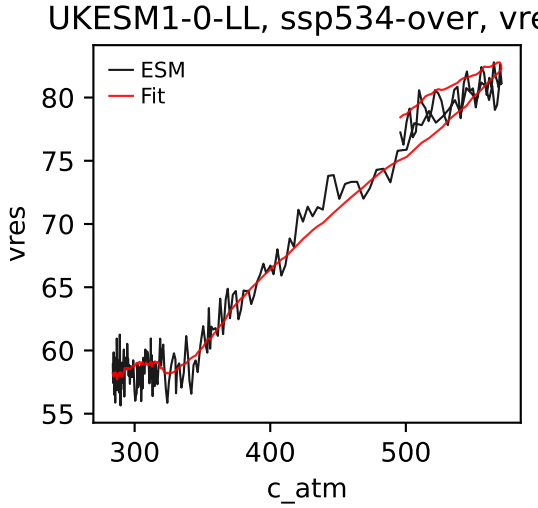

UKESM1-0-LL, ssp534-over, Litter, ln(MSE/SIGMA)
382, -0.6616, 143.8751, -0.0693, 0.0029, 0.0673, -0.8000, 0.8508, 0
1e−14+2.588957e−1
UKESM1-0-LL
lit_slow
lit_c_tan2
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
−0.04
−0.02
0.00
0.02
0.04
34.400
33.801
33.201
32.602
32.002
31.403
30.798
30.198
29.599

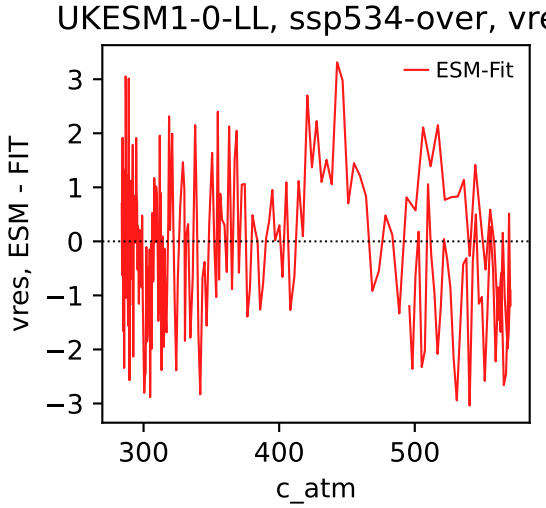

UKESM1-0-LL, ssp534-over, vres
ESM
Fit
vres
Year

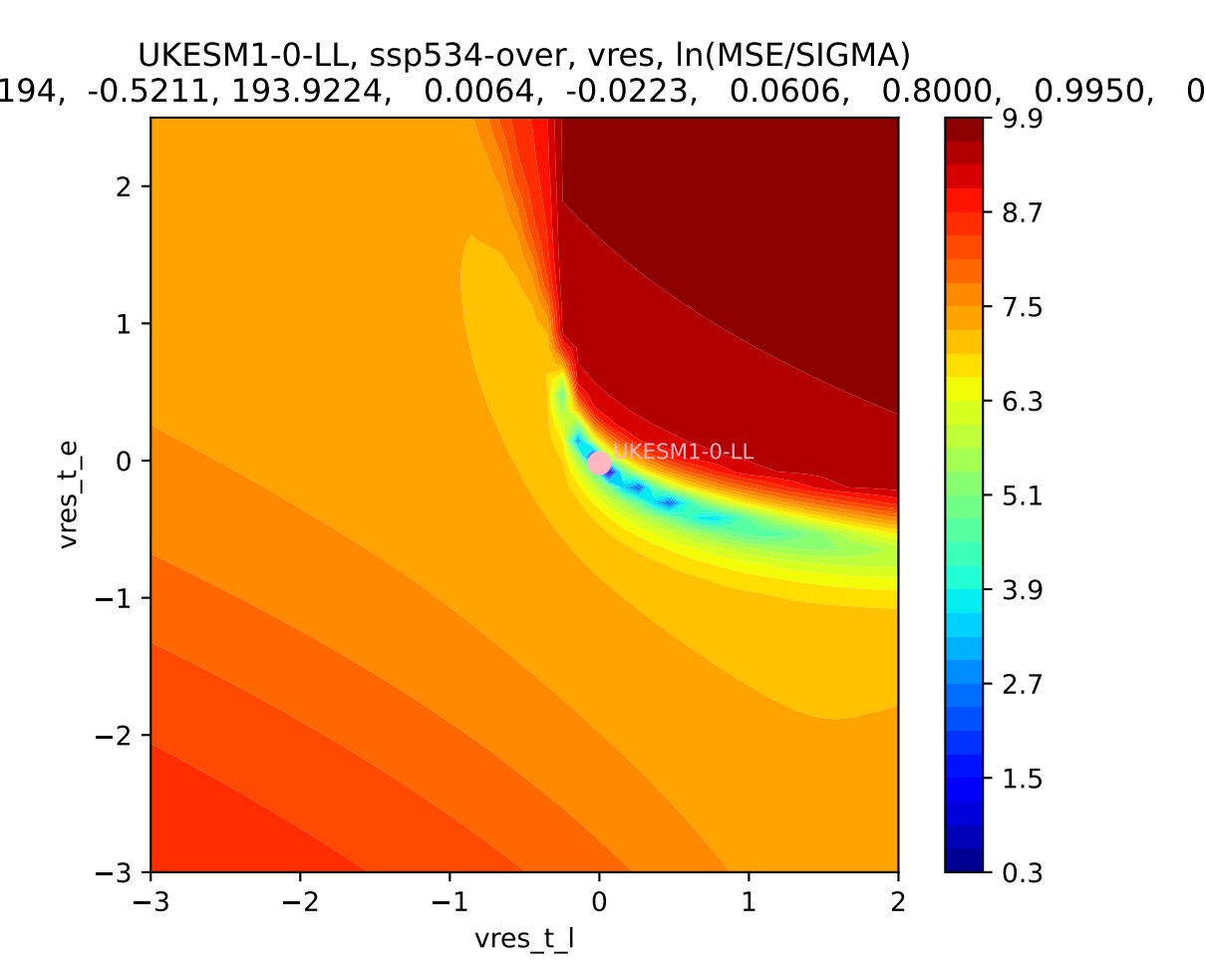

UKESM1-0-LL, ssp534-over, vres
ESM-Fit
vres, ESM - FIT
Year

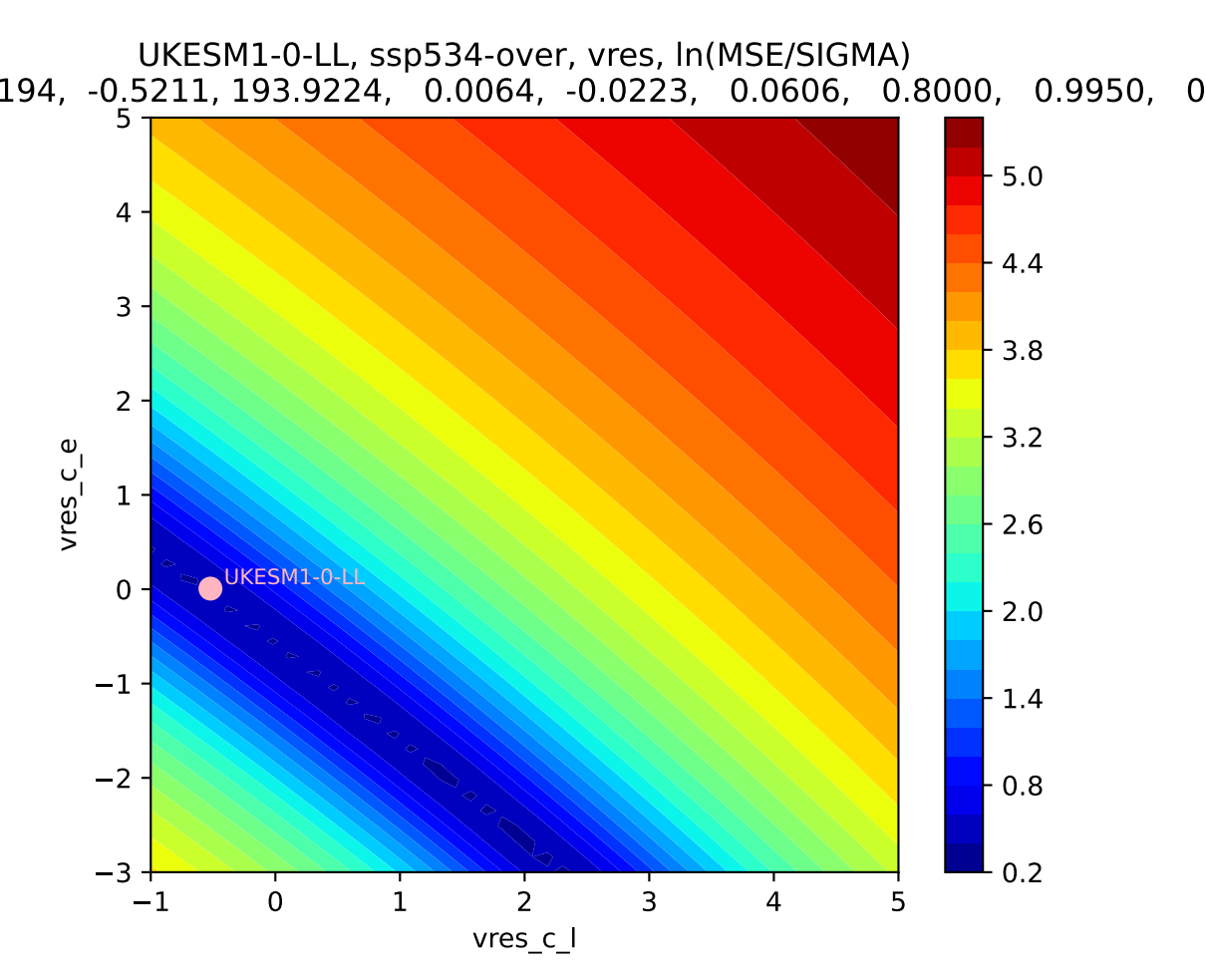

UKESM1-0-LL, ssp534-over, vres
ESM
Fit
vres
ΔT

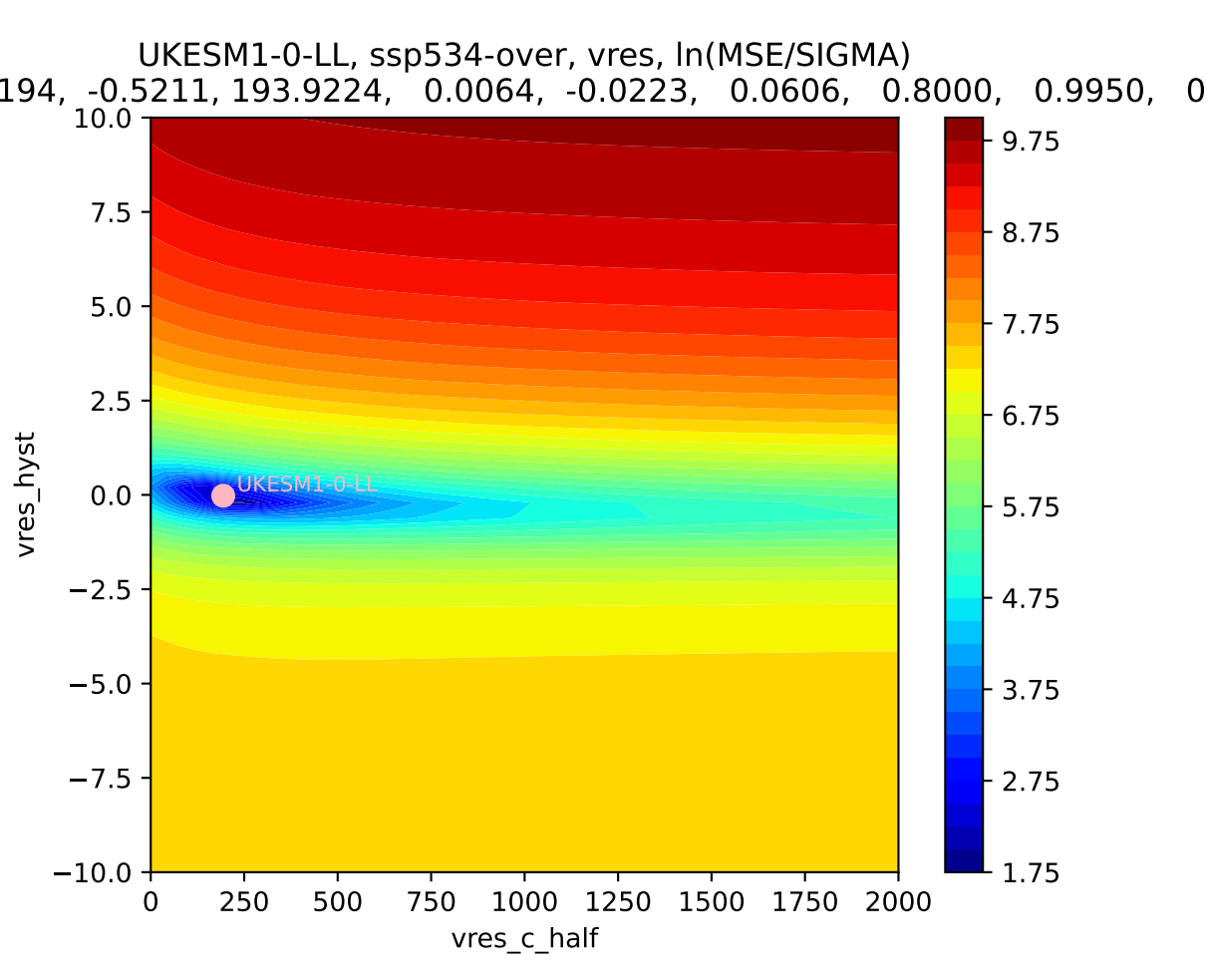

UKESM1-0-LL, ssp534-over, vres
ESM-Fit
vres, ESM - FIT
ΔT

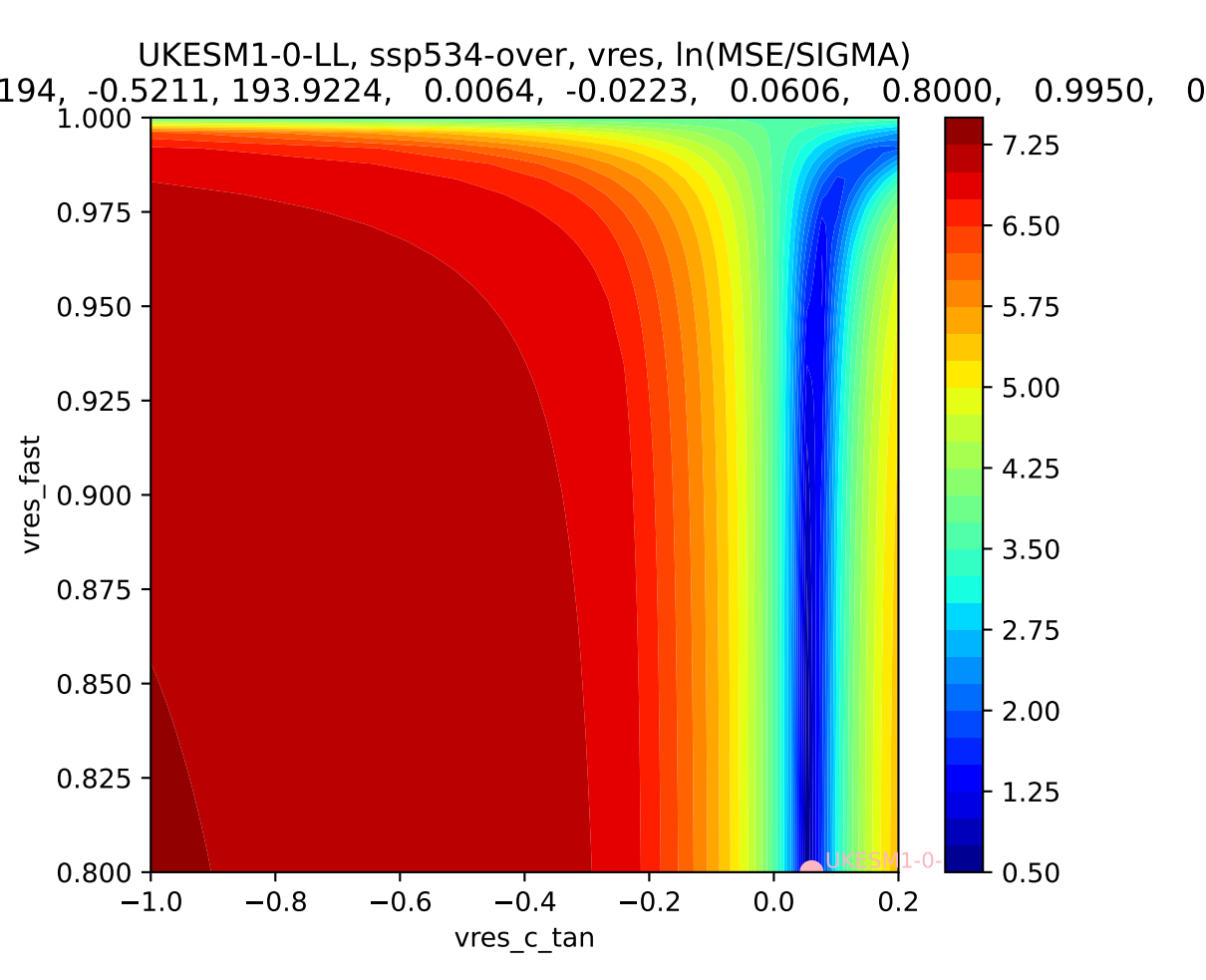

UKESM1-0-LL, ssp534-over, vres
ESM
Fit
vres
c_atm

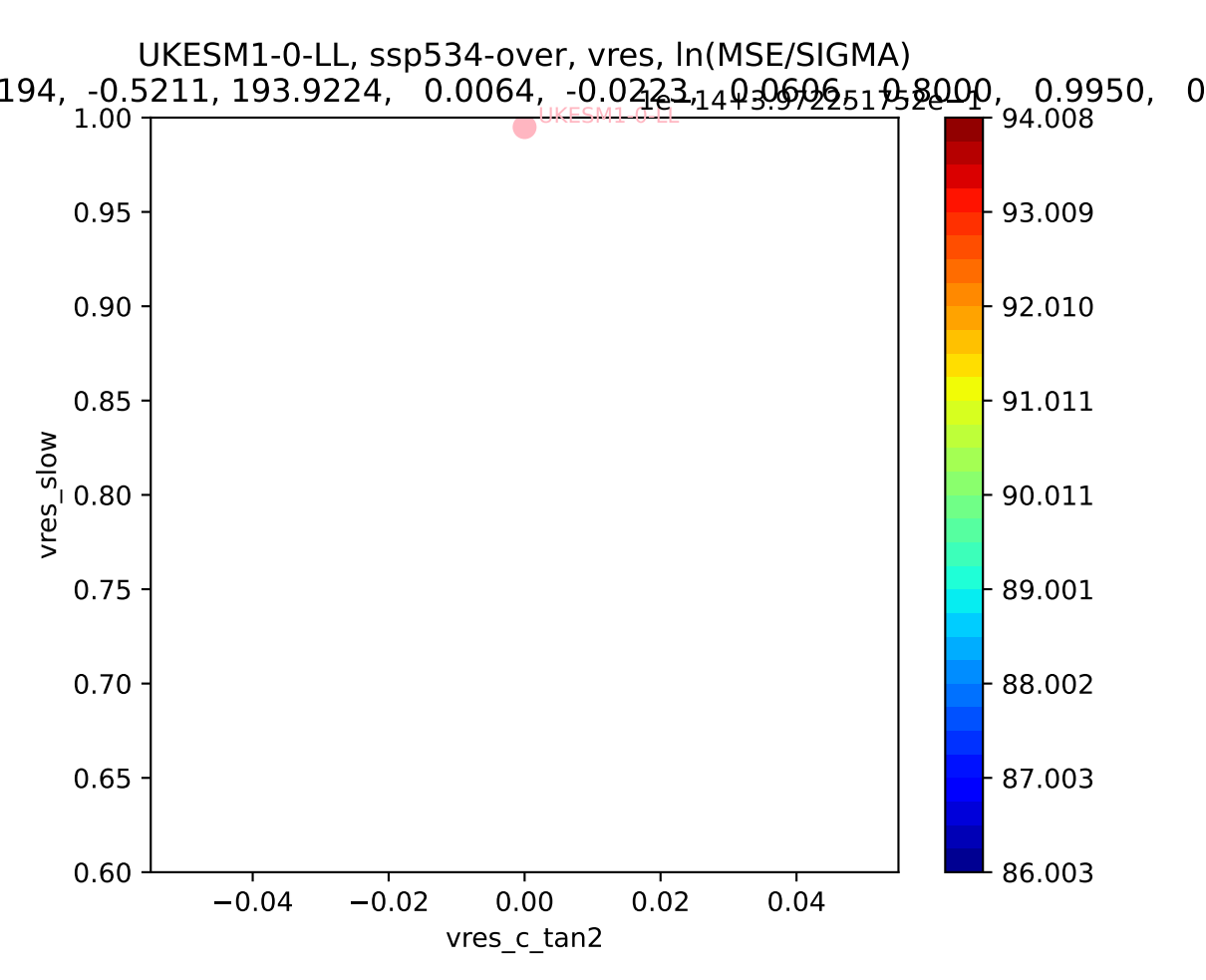

UKESM1-0-LL, ssp534-over, vres
ESM-Fit
vres, ESM - FIT
c_atm

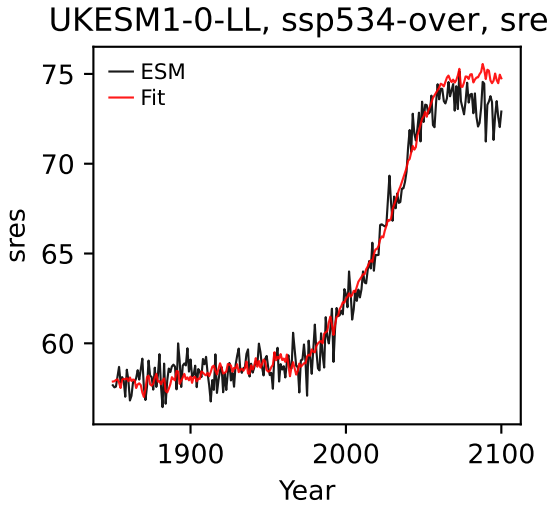

UKESM1-0-LL, ssp534-over, vres, ln(MSE/SIGMA)
194, -0.5211, 193.9224, 0.0064, -0.0223, 0.0606, 0.8000, 0.9950, 0
UKESM1-0-LL
vres_t_e
vres_t_l
−3
−2
−1
0
1
2
9.9
8.7
7.5
6.3
5.1
3.9
2.7
1.5
0.3

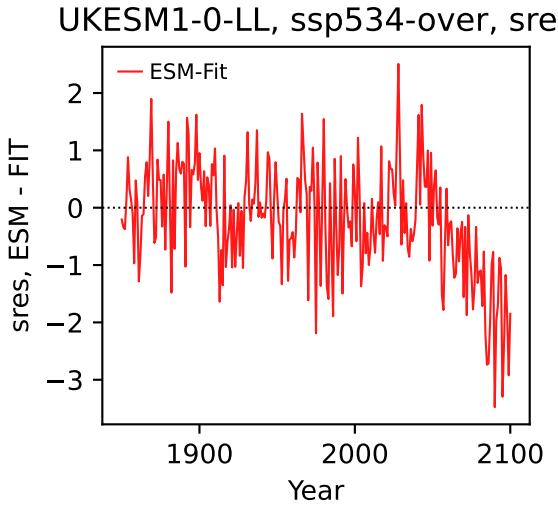

UKESM1-0-LL, ssp534-over, vres, ln(MSE/SIGMA)
194, -0.5211, 193.9224, 0.0064, -0.0223, 0.0606, 0.8000, 0.9950, 0
vres_c_e
vres_c_l
UKESM1-0-LL
5
4
3
2
1
0
−1
−2
−3
−1
0
1
2
3
4
5
5.0
4.4
3.8
3.2
2.6
2.0
1.4
0.8
0.2

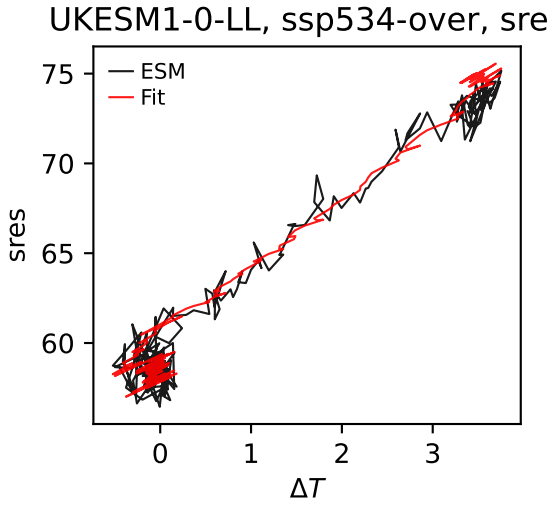

UKESM1-0-LL, ssp534-over, vres, ln(MSE/SIGMA)
194, -0.5211, 193.9224, 0.0064, -0.0223, 0.0606, 0.8000, 0.9950, 0
UKESM1-0-LL
vres_hyst
vres_c_half
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
0
250
500
750
1000
1250
1500
1750
2000
9.75
8.75
7.75
6.75
5.75
4.75
3.75
2.75
1.75

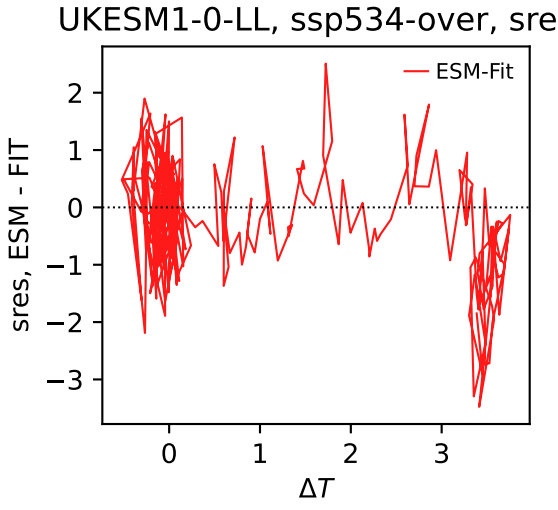

UKESM1-0-LL, ssp534-over, vres, ln(MSE/SIGMA)
194, -0.5211, 193.9224, 0.0064, -0.0223, 0.0606, 0.8000, 0.9950, 0
vres_fast
vres_c_tan
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
7.25
6.50
5.75
5.00
4.25
3.50
2.75
2.00
1.25
0.50

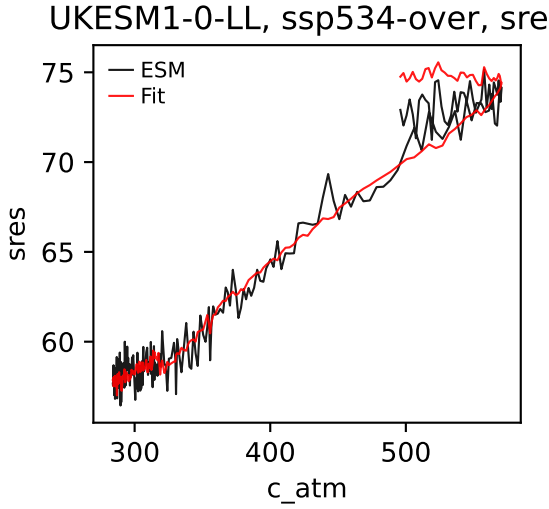

UKESM1-0-LL, ssp534-over, vres, ln(MSE/SIGMA)
194, -0.5211, 193.9224, 0.0064, -0.0223, 0.0606, 0.8000, 0.9950, 0
1e−14+3.972251752e−1
UKESM1-0-LL
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
vres_slow
−0.04
−0.02
0.00
0.02
0.04
vres_c_tan2
94.008
93.009
92.010
91.011
90.011
89.001
88.002
87.003
86.003

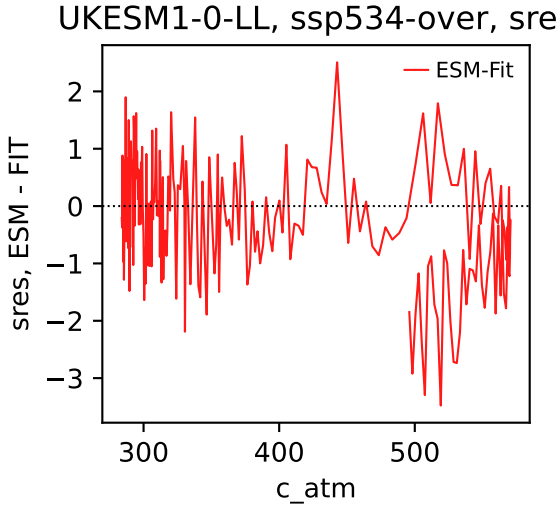

UKESM1-0-LL, ssp534-over, sres
ESM
Fit
sres
Year

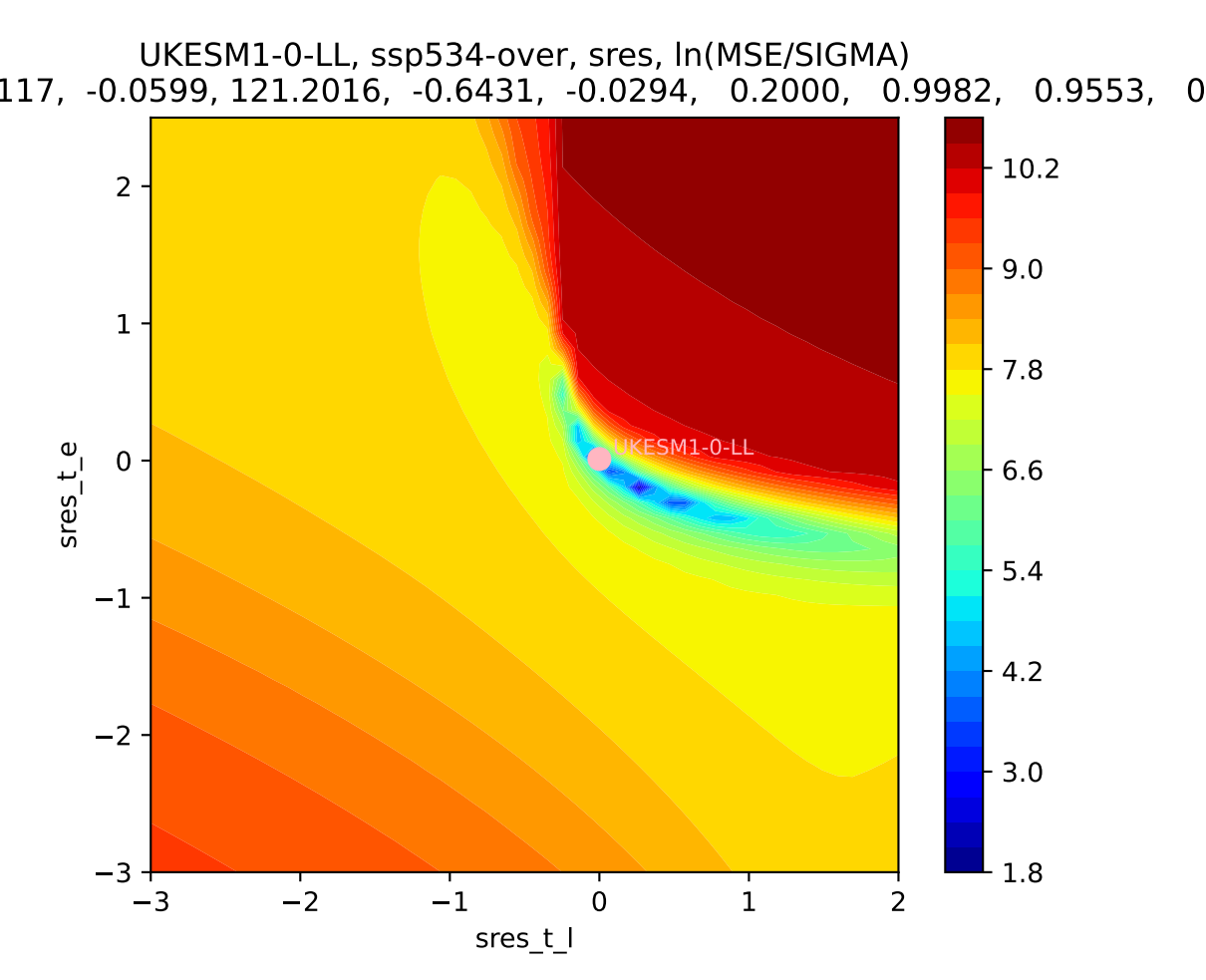

UKESM1-0-LL, ssp534-over, sres
ESM-Fit
sres, ESM - FIT
Year

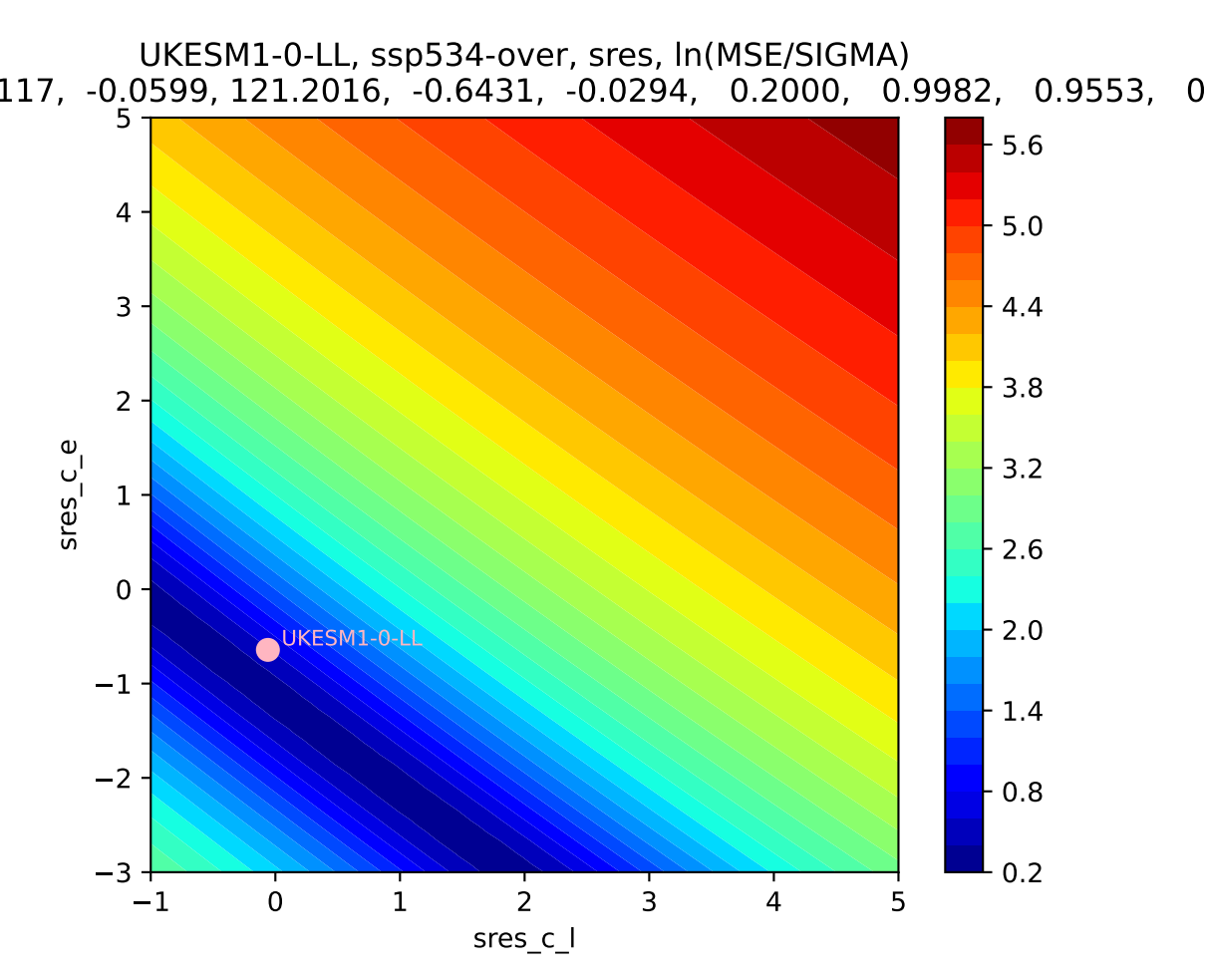

UKESM1-0-LL, ssp534-over, sres
ESM
Fit
sres
ΔT

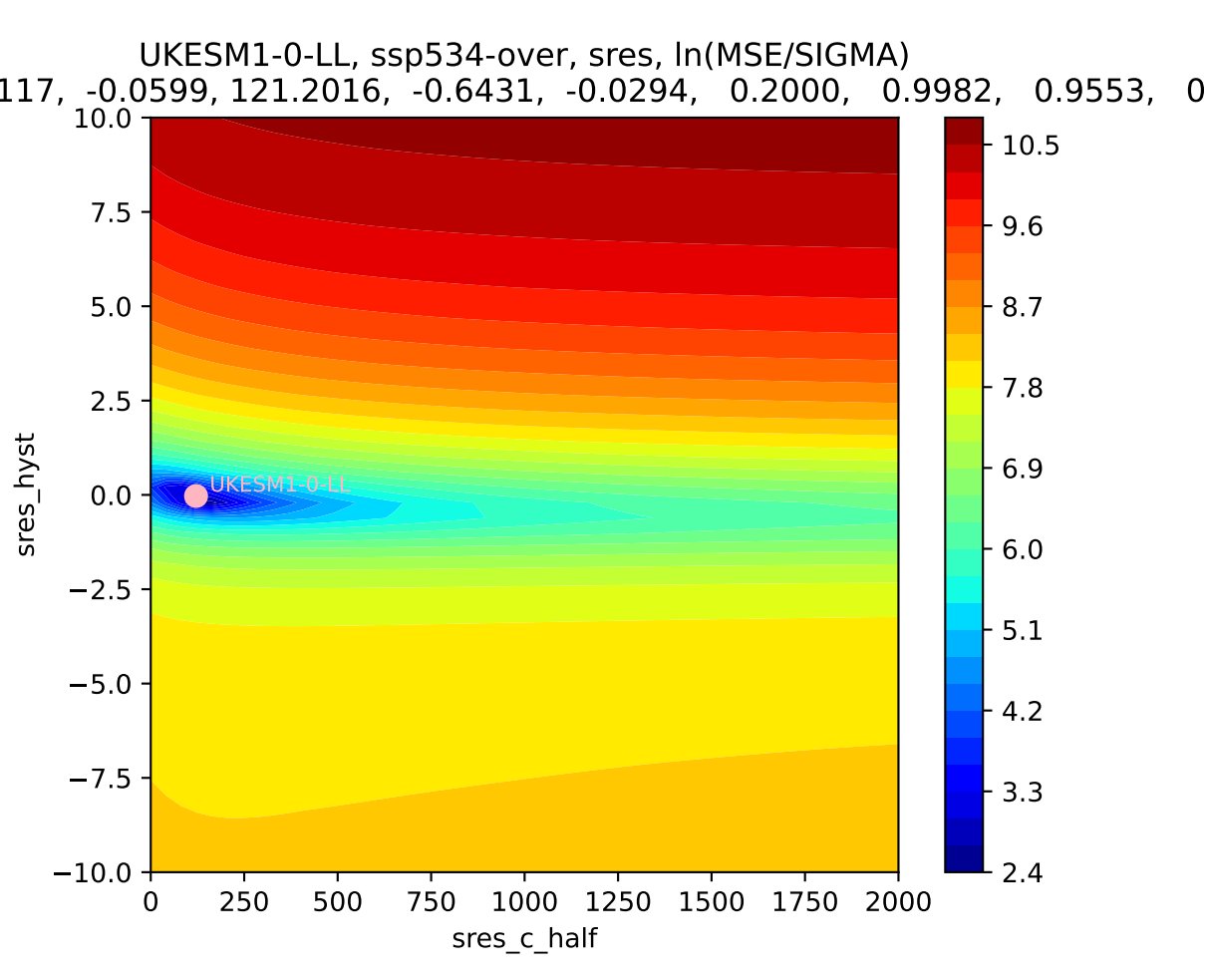

UKESM1-0-LL, ssp534-over, sres
ESM-Fit
sres, ESM - FIT
ΔT

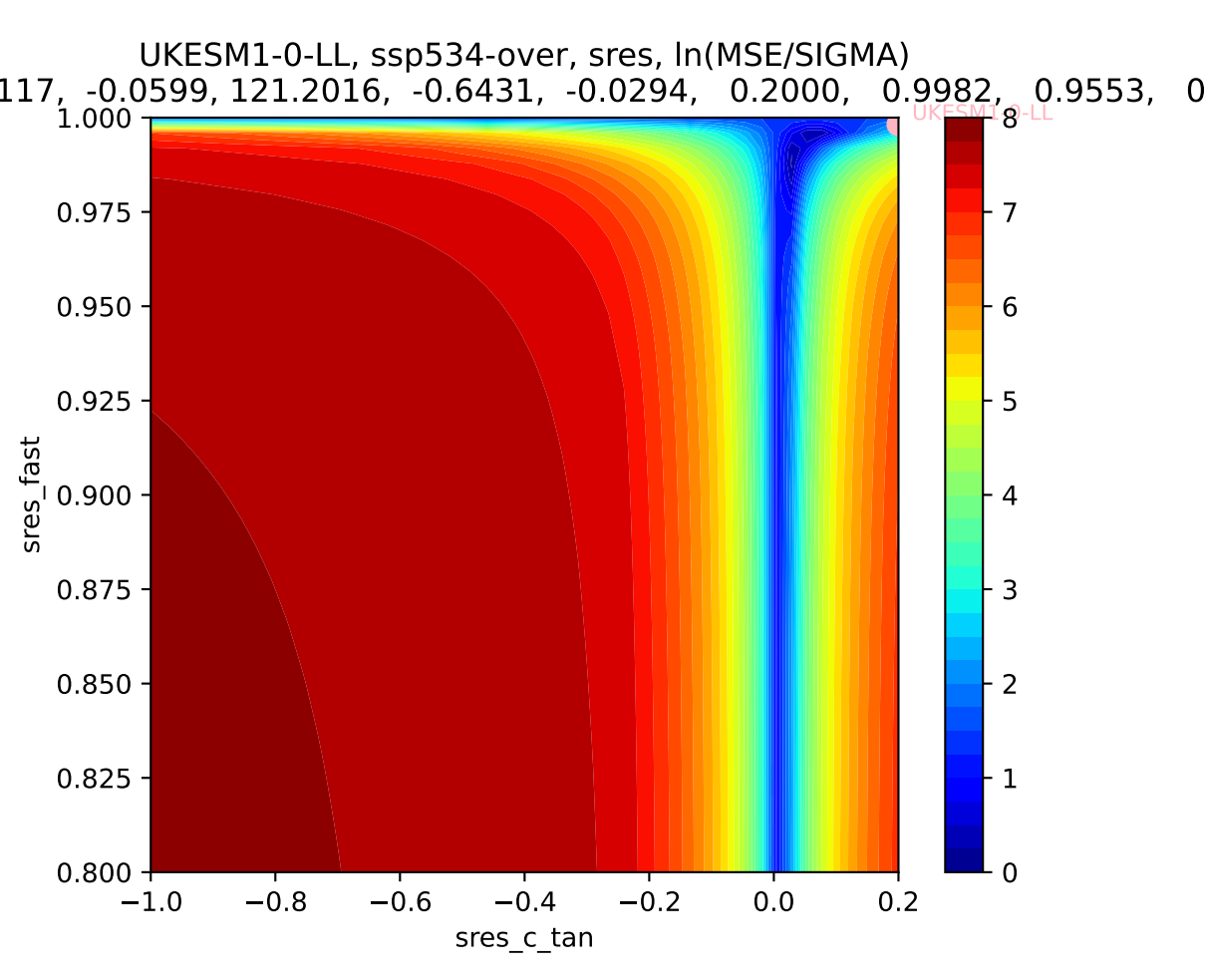

UKESM1-0-LL, ssp534-over, sres
ESM
Fit
sres
c_atm

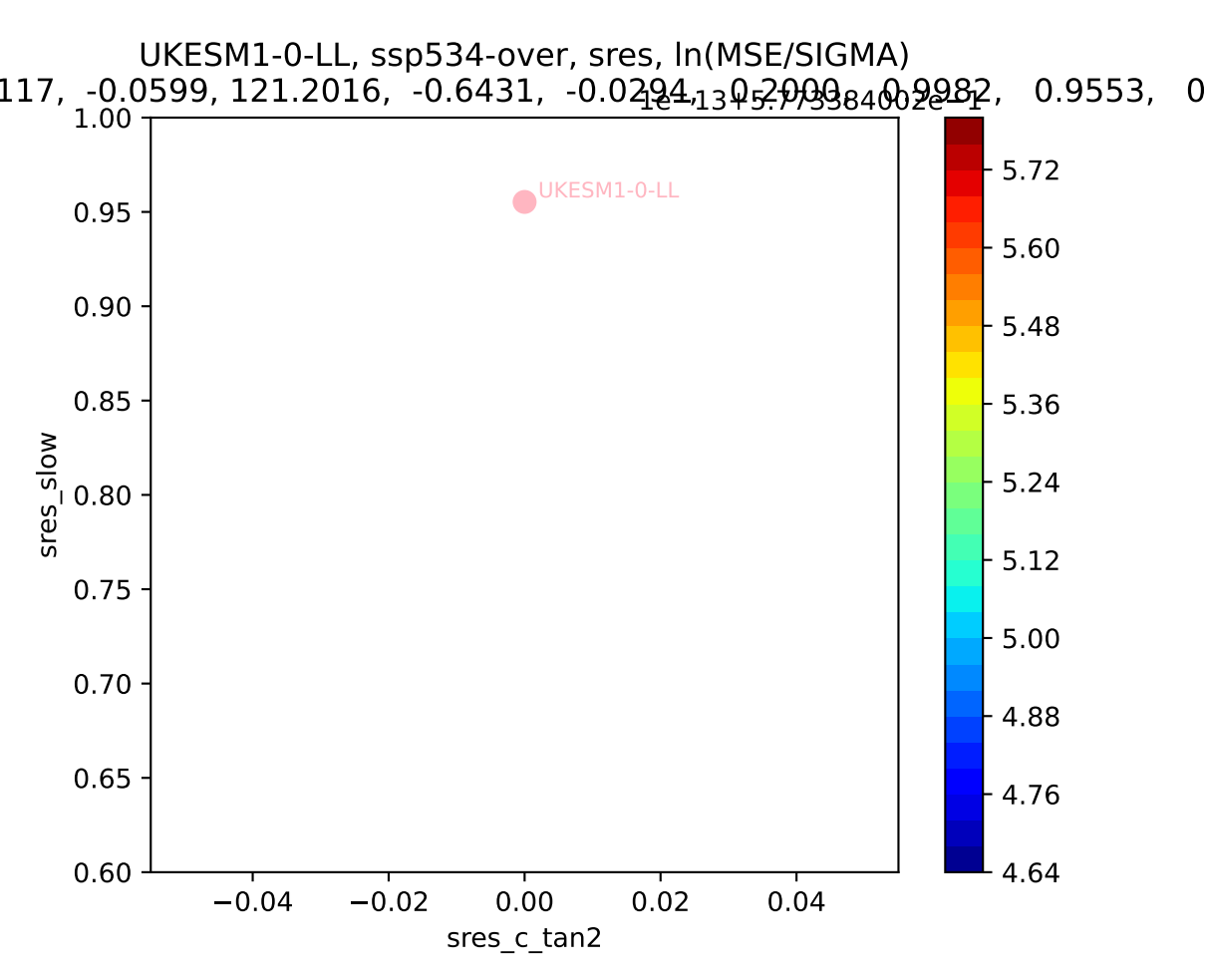

UKESM1-0-LL, ssp534-over, sres
ESM-Fit
sres, ESM - FIT
c_atm

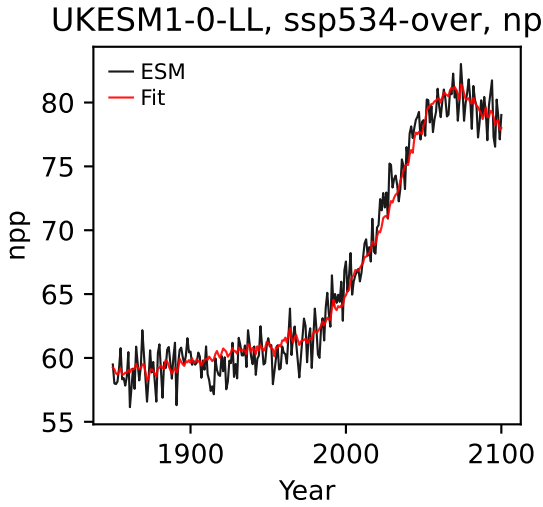

UKESM1-0-LL, ssp534-over, sres, ln(MSE/SIGMA)
117, -0.0599, 121.2016, -0.6431, -0.0294, 0.2000, 0.9982, 0.9553, 0
UKESM1-0-LL
sres_t_e
sres_t_l
2
1
0
−1
−2
−3
10.2
9.0
7.8
6.6
5.4
4.2
3.0
1.8

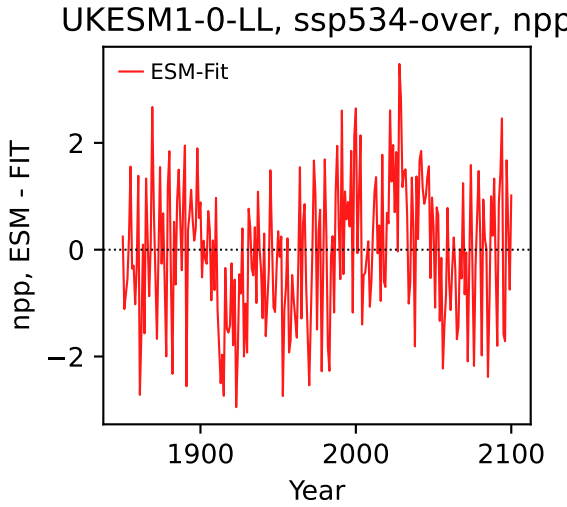

UKESM1-0-LL, ssp534-over, sres, ln(MSE/SIGMA)
117, -0.0599, 121.2016, -0.6431, -0.0294, 0.2000, 0.9982, 0.9553, 0
sres_c_e
sres_c_l
UKESM1-0-LL
5
4
3
2
1
0
−1
−2
−3
−1
0
1
2
3
4
5
5.6
5.0
4.4
3.8
3.2
2.6
2.0
1.4
0.8
0.2

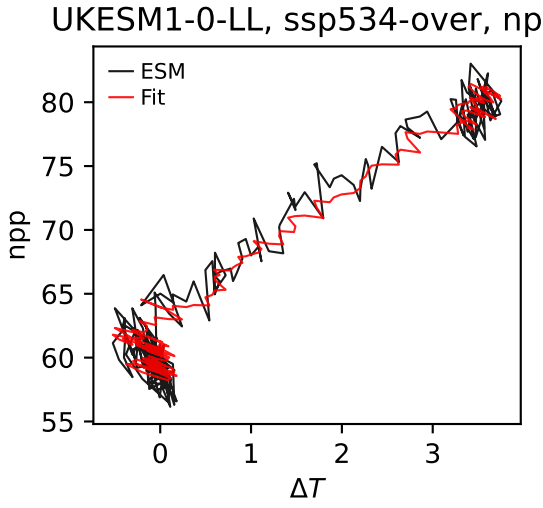

UKESM1-0-LL, ssp534-over, sres, ln(MSE/SIGMA)
117, -0.0599, 121.2016, -0.6431, -0.0294, 0.2000, 0.9982, 0.9553, 0
10.0
7.5
5.0
2.5
0.0
−2.5
−5.0
−7.5
−10.0
sres_hyst
UKESM1-0-LL
0
250
500
750
1000
1250
1500
1750
2000
sres_c_half
10.5
9.6
8.7
7.8
6.9
6.0
5.1
4.2
3.3
2.4

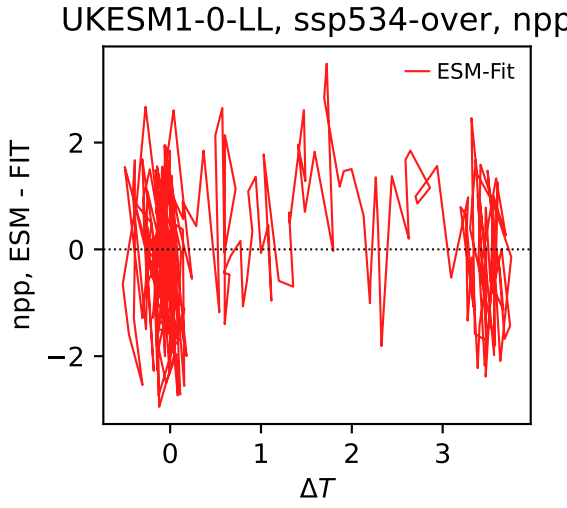

UKESM1-0-LL, ssp534-over, sres, ln(MSE/SIGMA)
117, -0.0599, 121.2016, -0.6431, -0.0294, 0.2000, 0.9982, 0.9553, 0
UKESM1-0-LL
sres_fast
sres_c_tan
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
8
7
6
5
4
3
2
1
0

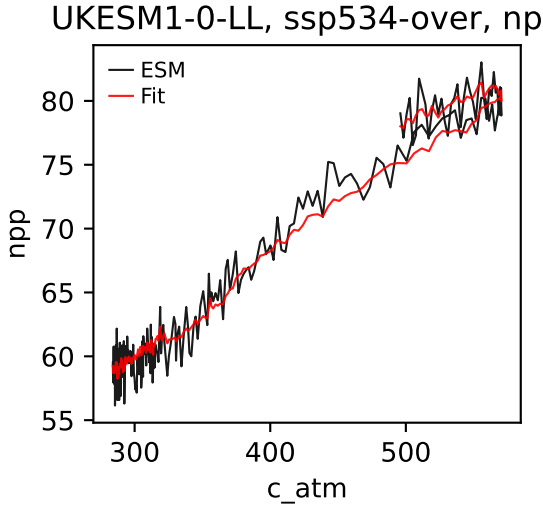

UKESM1-0-LL, ssp534-over, sres, ln(MSE/SIGMA)
117, -0.0599, 121.2016, -0.6431, -0.0294, 0.2000, 0.9982, 0.9553, 0
1e−13+5.773384002e−1
UKESM1-0-LL
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
sres_slow
−0.04
−0.02
0.00
0.02
0.04
sres_c_tan2
5.72
5.60
5.48
5.36
5.24
5.12
5.00
4.88
4.76
4.64

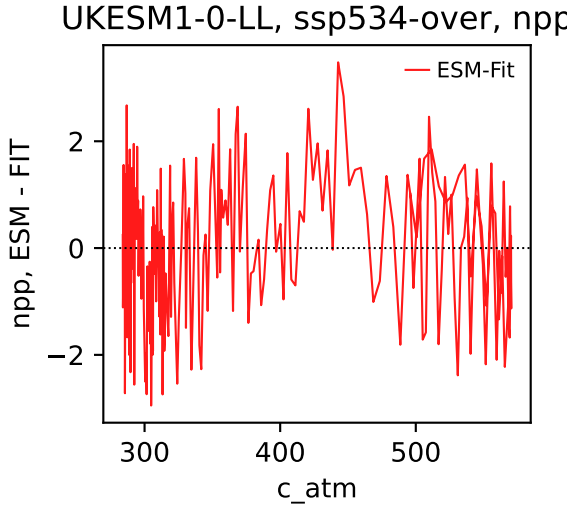

UKESM1-0-LL, ssp534-over, npp
ESM
Fit
npp
Year

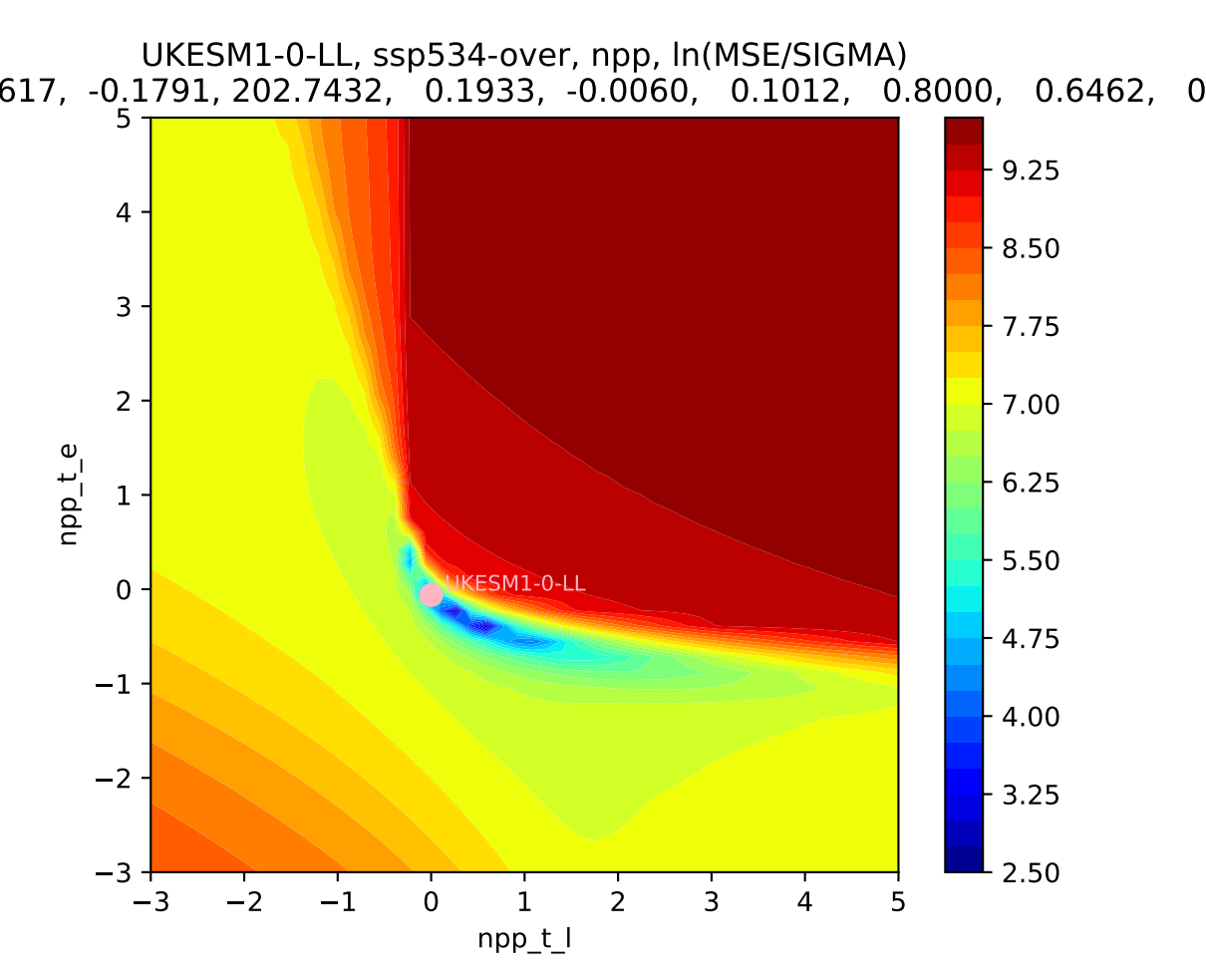

UKESM1-0-LL, ssp534-over, npp
ESM-Fit
npp, ESM - FIT
Year

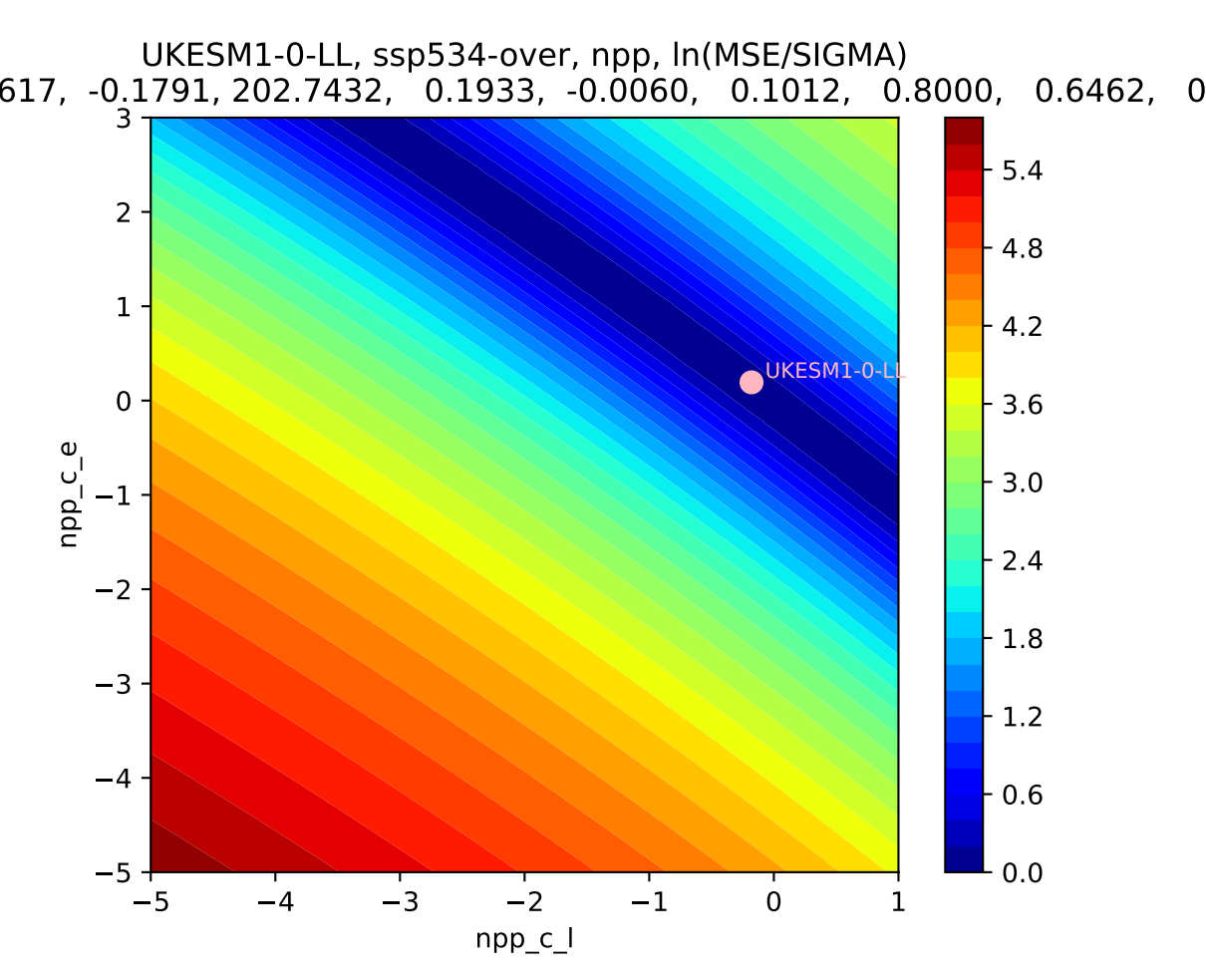

UKESM1-0-LL, ssp534-over, npp
ESM
Fit
npp
ΔT

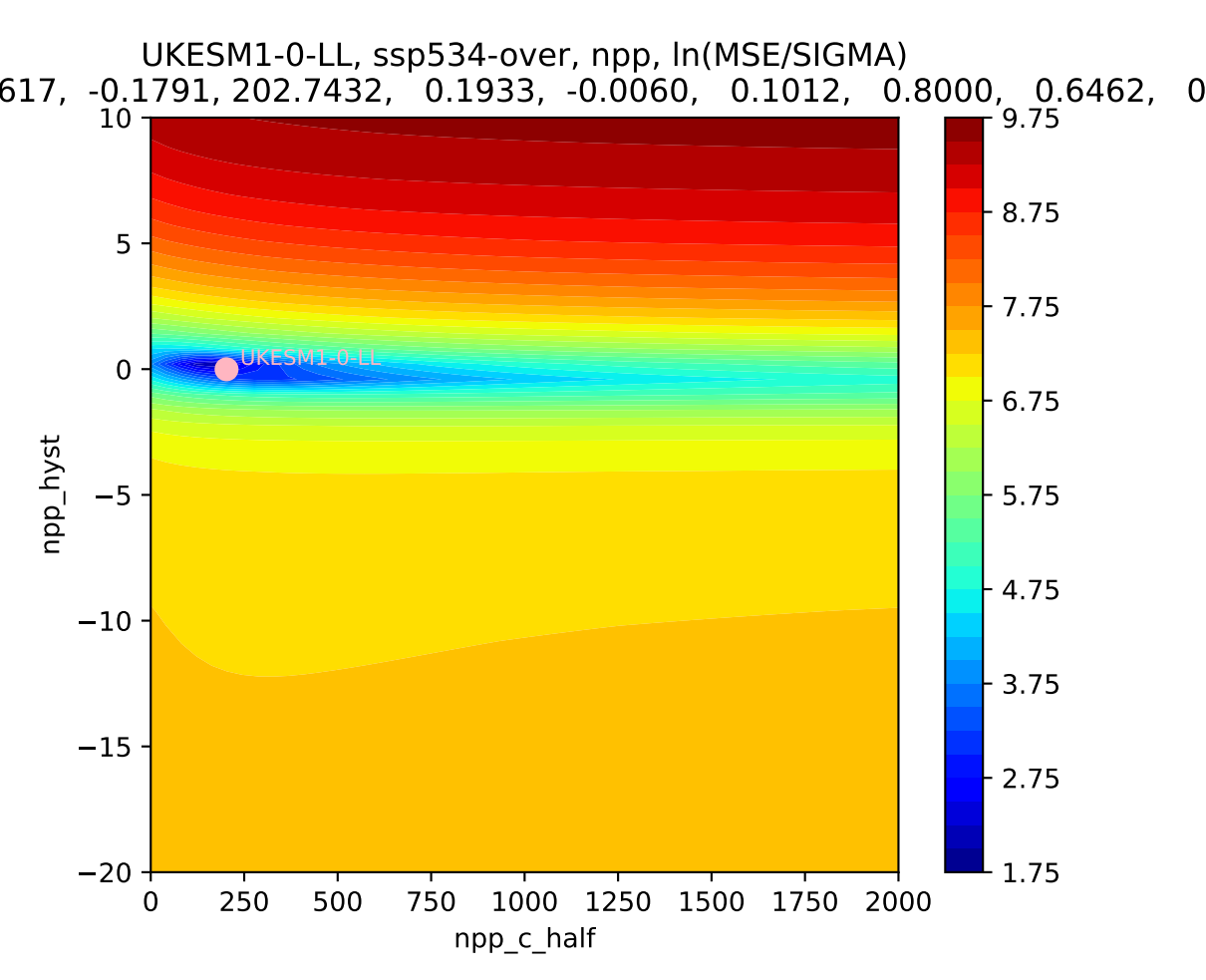

UKESM1-0-LL, ssp534-over, npp
ESM-Fit
npp, ESM - FIT
ΔT

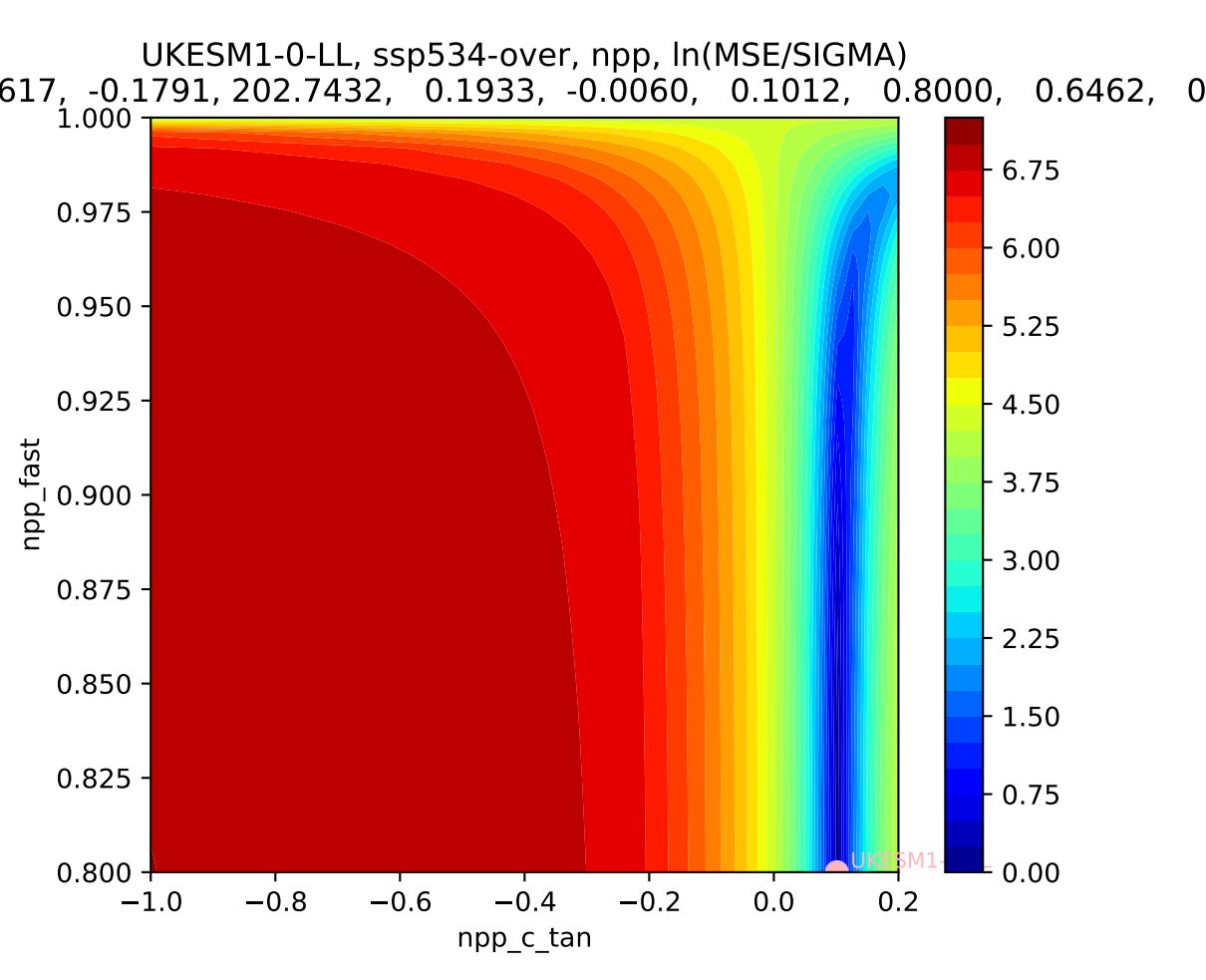

UKESM1-0-LL, ssp534-over, npp
ESM
Fit
npp
c_atm

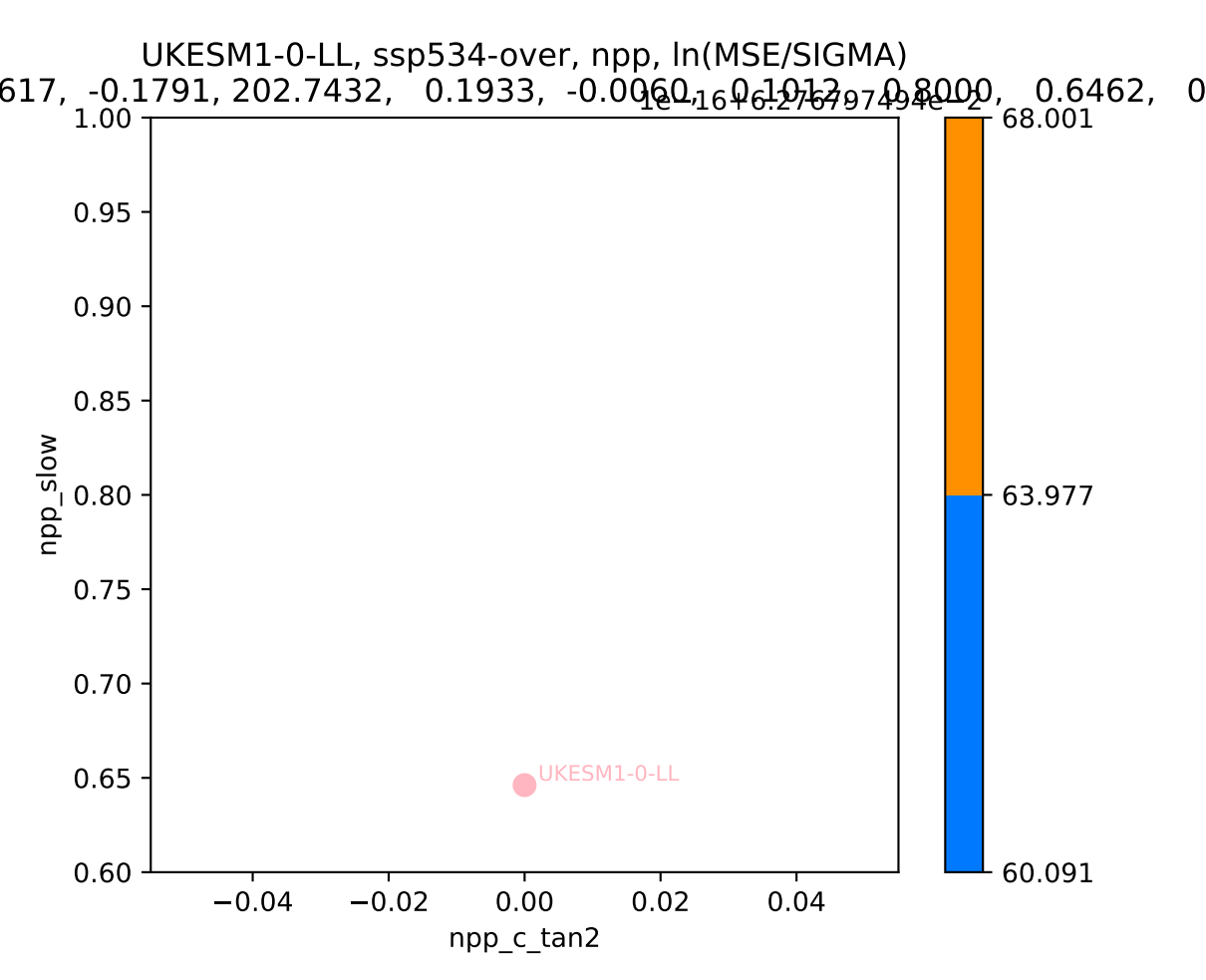

UKESM1-0-LL, ssp534-over, npp
ESM-Fit
npp, ESM - FIT
c_atm

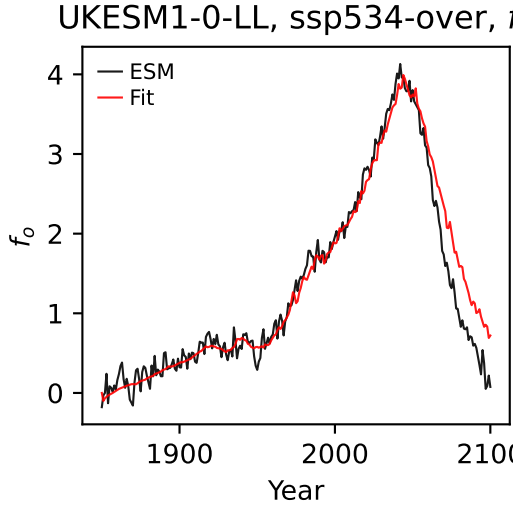

UKESM1-0-LL, ssp534-over, npp, ln(MSE/SIGMA)
617, -0.1791, 202.7432, 0.1933, -0.0060, 0.1012, 0.8000, 0.6462, 0
UKESM1-0-LL
npp_t_e
npp_t_l
9.25
8.50
7.75
7.00
6.25
5.50
4.75
4.00
3.25
2.50

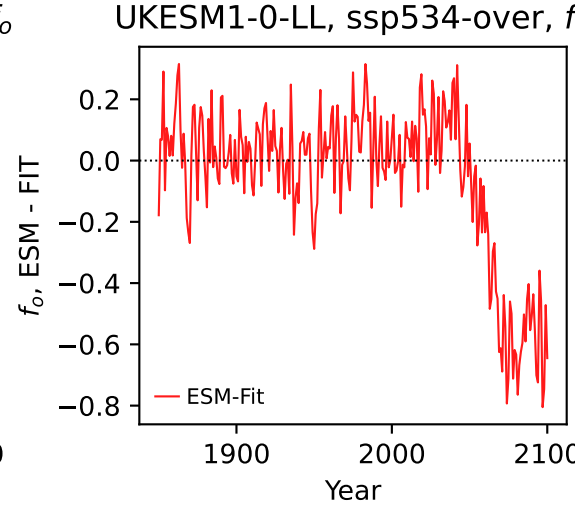

UKESM1-0-LL, ssp534-over, npp, ln(MSE/SIGMA)
617, -0.1791, 202.7432, 0.1933, -0.0060, 0.1012, 0.8000, 0.6462, 0
UKESM1-0-LL
npp_c_e
npp_c_l
3
2
1
0
−1
−2
−3
−4
−5
−5
−4
−3
−2
−1
0
1
5.4
4.8
4.2
3.6
3.0
2.4
1.8
1.2
0.6
0.0

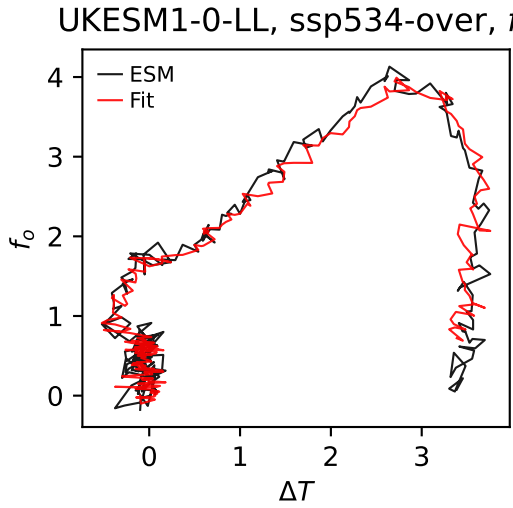

UKESM1-0-LL, ssp534-over, npp, ln(MSE/SIGMA)
617, -0.1791, 202.7432, 0.1933, -0.0060, 0.1012, 0.8000, 0.6462, 0
UKESM1-0-LL
npp_hyst
npp_c_half
10
5
0
−5
−10
−15
−20
0
250
500
750
1000
1250
1500
1750
2000
9.75
8.75
7.75
6.75
5.75
4.75
3.75
2.75
1.75

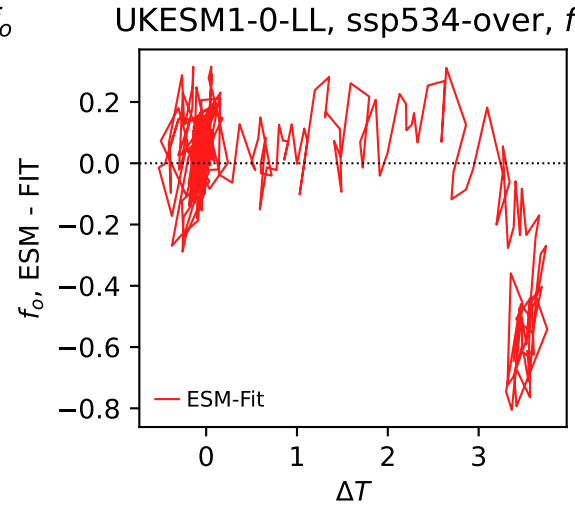

UKESM1-0-LL, ssp534-over, npp, ln(MSE/SIGMA)
617, -0.1791, 202.7432, 0.1933, -0.0060, 0.1012, 0.8000, 0.6462, 0
1.000
0.975
0.950
0.925
0.900
0.875
0.850
0.825
0.800
npp_fast
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
npp_c_tan
6.75
6.00
5.25
4.50
3.75
3.00
2.25
1.50
0.75
0.00

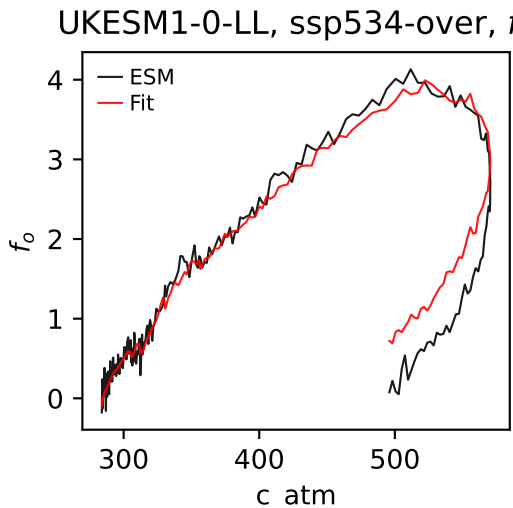

UKESM1-0-LL, ssp534-over, npp, ln(MSE/SIGMA)
617, -0.1791, 202.7432, 0.1933, -0.0060, 0.1012, 0.8000, 0.6462, 0
1e−16+6.276797494e−2
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
npp_slow
UKESM1-0-LL
−0.04
−0.02
0.00
0.02
0.04
npp_c_tan2
68.001
63.977
60.091

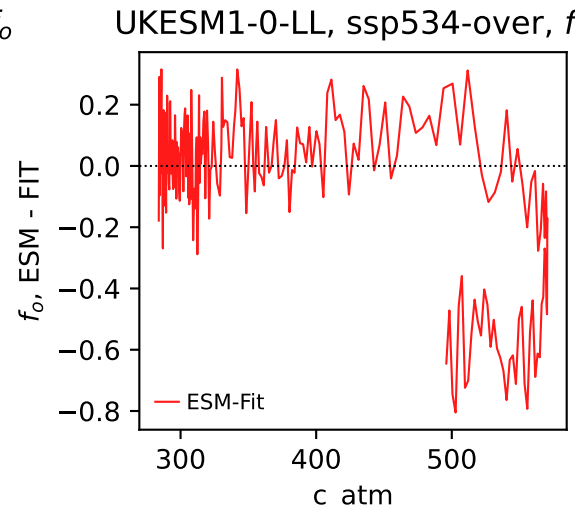

UKESM1-0-LL, ssp534-over, f_o
ESM
Fit
f_o
Year

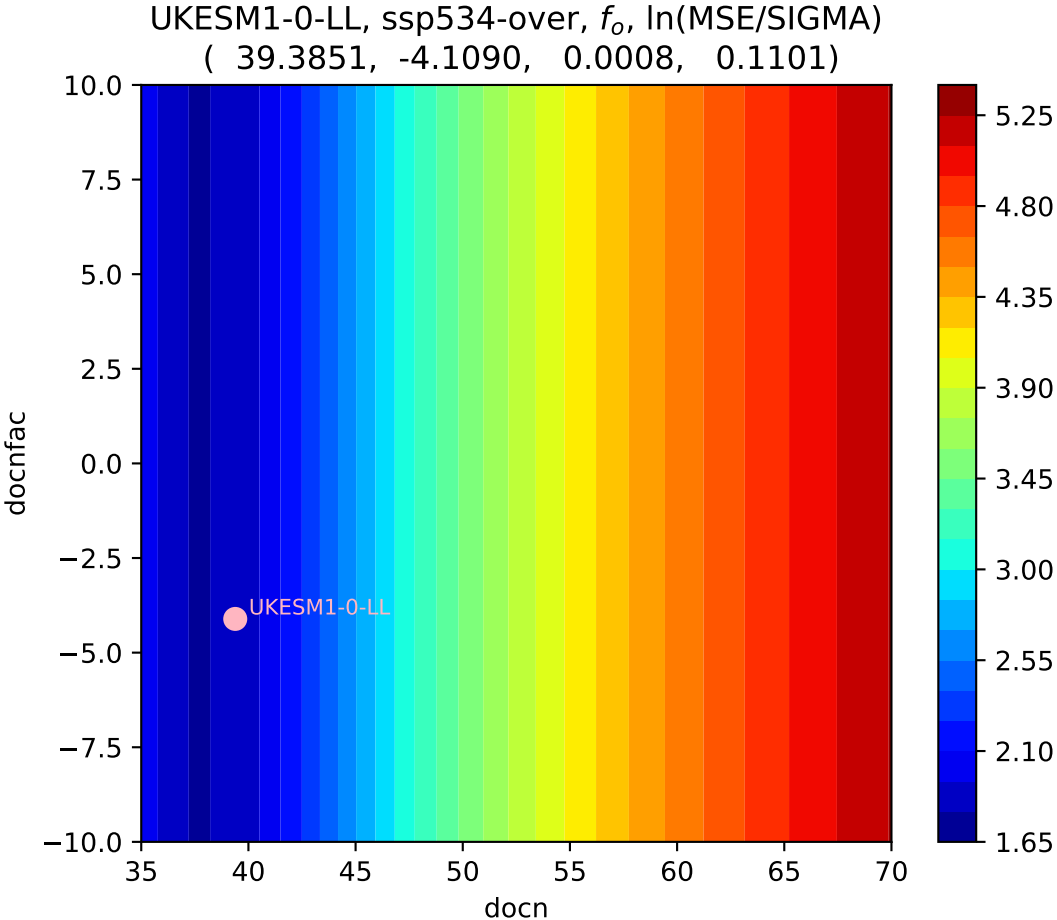

UKESM1-0-LL, ssp534-over, f_o
f_o, ESM - FIT
ESM-Fit
Year

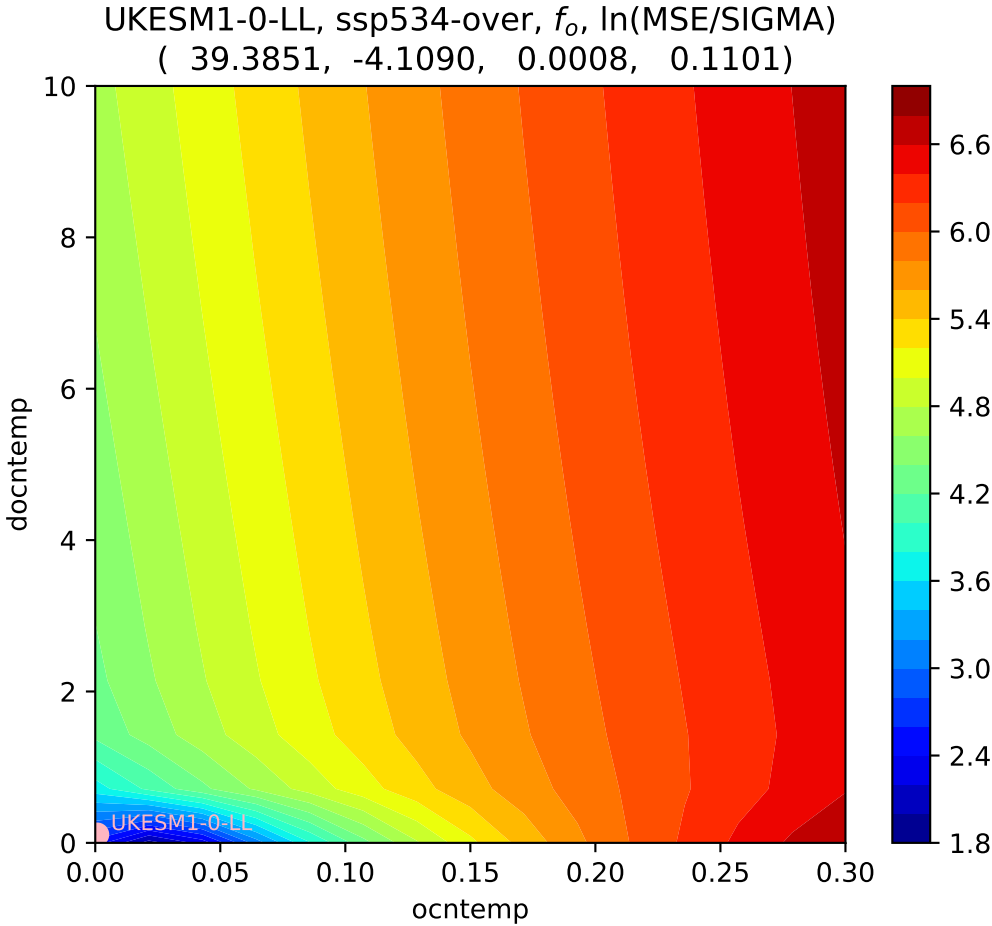

UKESM1-0-LL, ssp534-over, f_o
ESM
Fit
f_o
ΔT


UKESM1-0-LL, ssp534-over, f_o
f_o, ESM - FIT
ESM-Fit
ΔT


UKESM1-0-LL, ssp534-over, f_o
ESM
Fit
f_o
c_atm


UKESM1-0-LL, ssp534-over, f_o
f_o, ESM - FIT
ESM-Fit
c_atm


UKESM1-0-LL, ssp534-over, f_o, ln(MSE/SIGMA)
(39.3851, -4.1090, 0.0008, 0.1101)
docnfac
docn
UKESM1-0-LL
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
5.25
4.80
4.35
3.90
3.45
3.00
2.55
2.10
1.65


UKESM1-0-LL, ssp534-over, f_o, ln(MSE/SIGMA)
(39.3851, -4.1090, 0.0008, 0.1101)
docntemp
ocntemp
UKESM1-0-LL
0
2
4
6
8
10
0.00
0.05
0.10
0.15
0.20
0.25
0.30
1.8
2.4
3.0
3.6
4.2
4.8
5.4
6.0
6.6