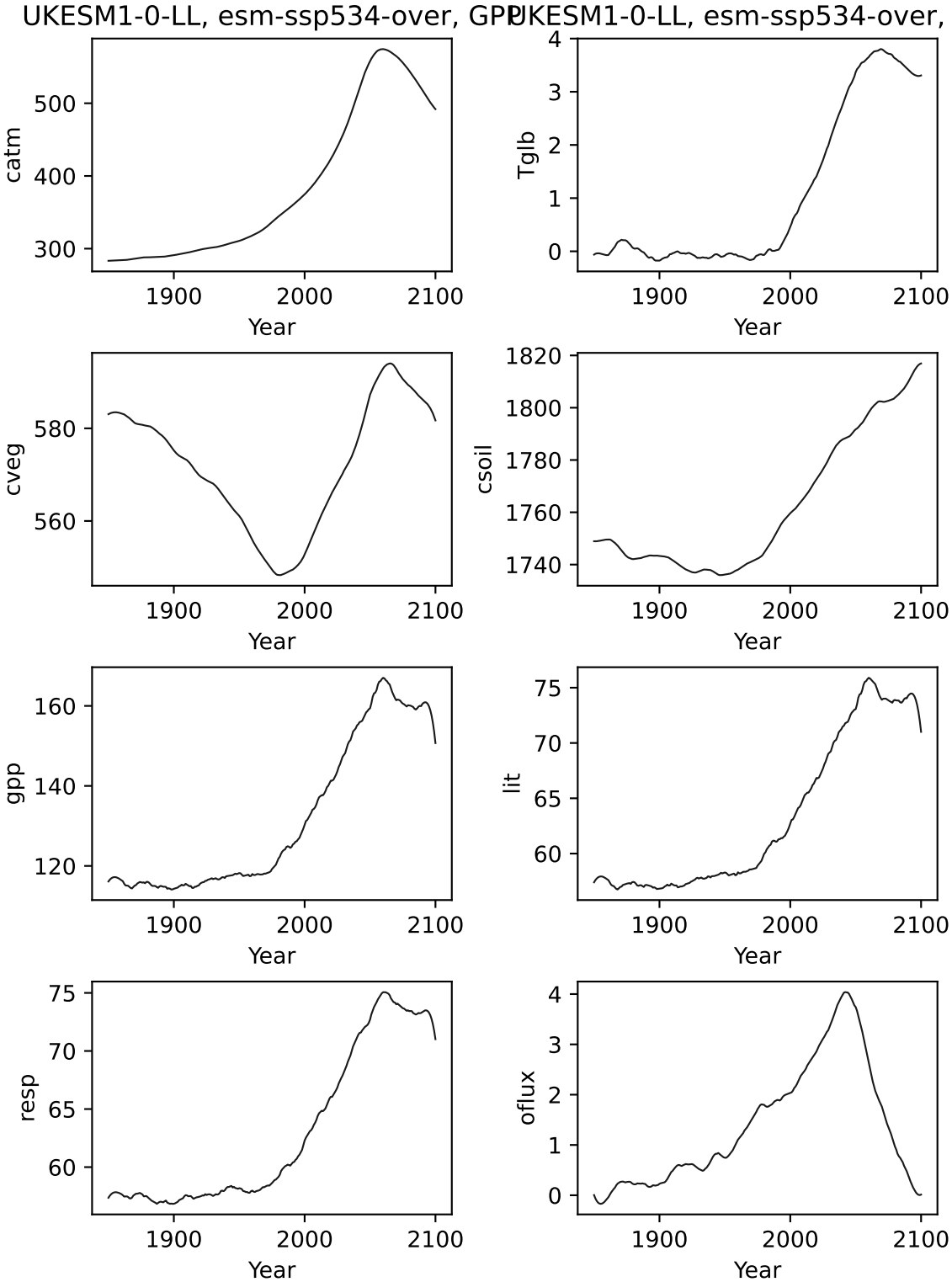
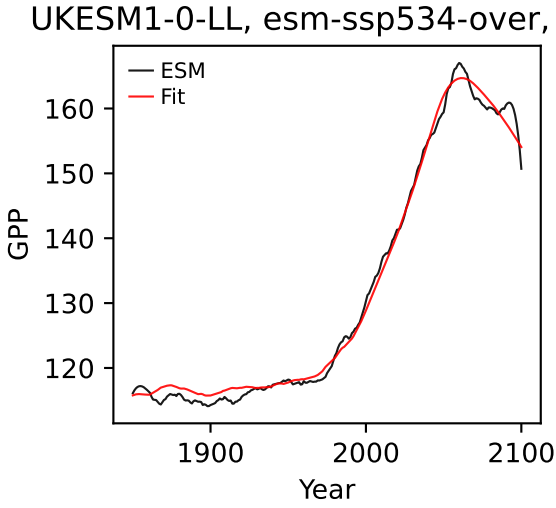
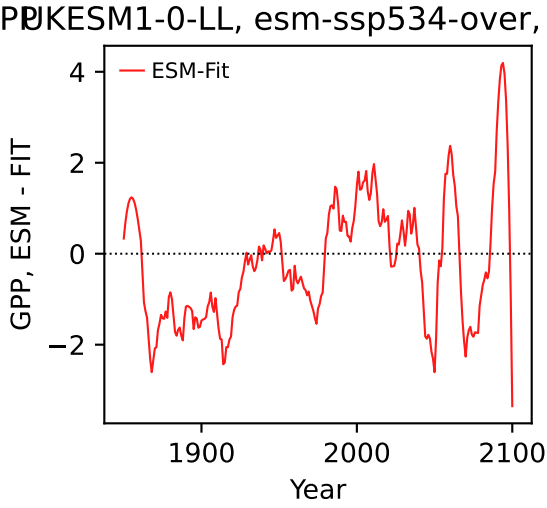
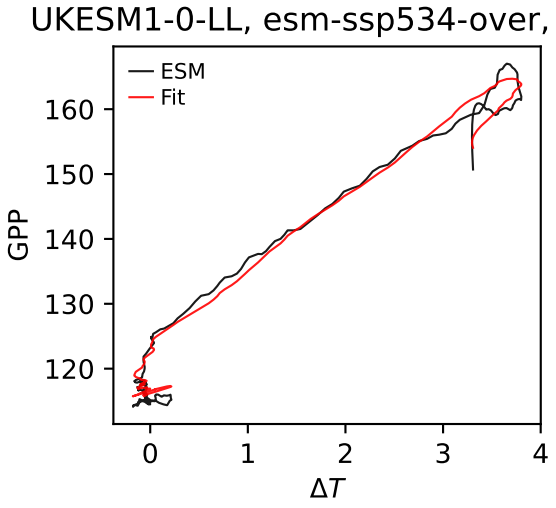
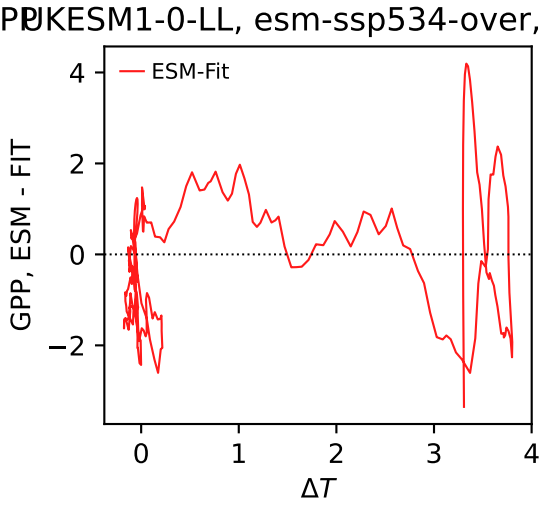
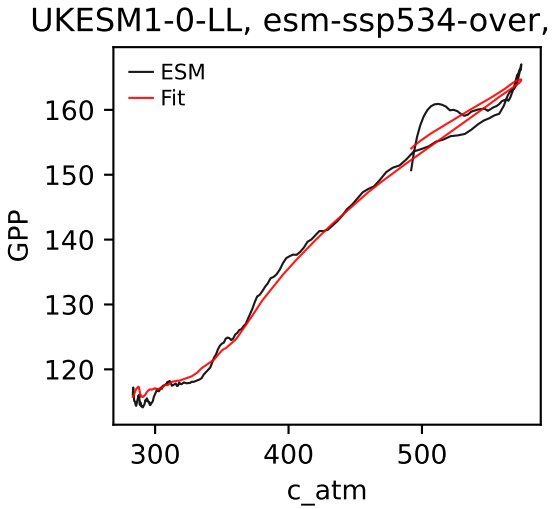

UKESM1-0-LL, esm-ssp534-over, GPP
UKESM1-0-LL, esm-ssp534-over, G
catm
Tglb
cveg
csoil
gpp
lit
resp
oflux
Year
1900
2000
2100

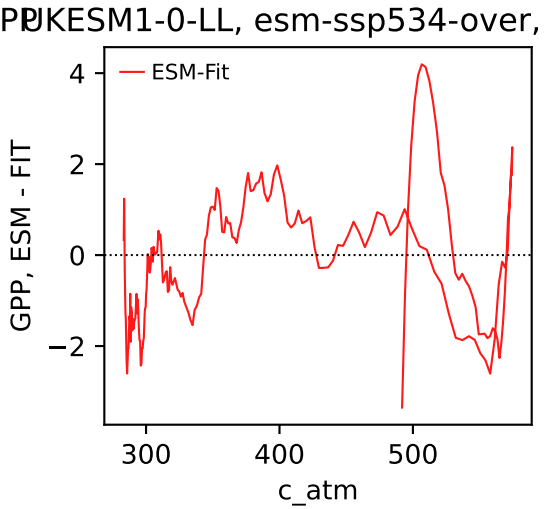

UKESM1-0-LL, esm-ssp534-over, GPP
ESM
Fit
GPP
Year

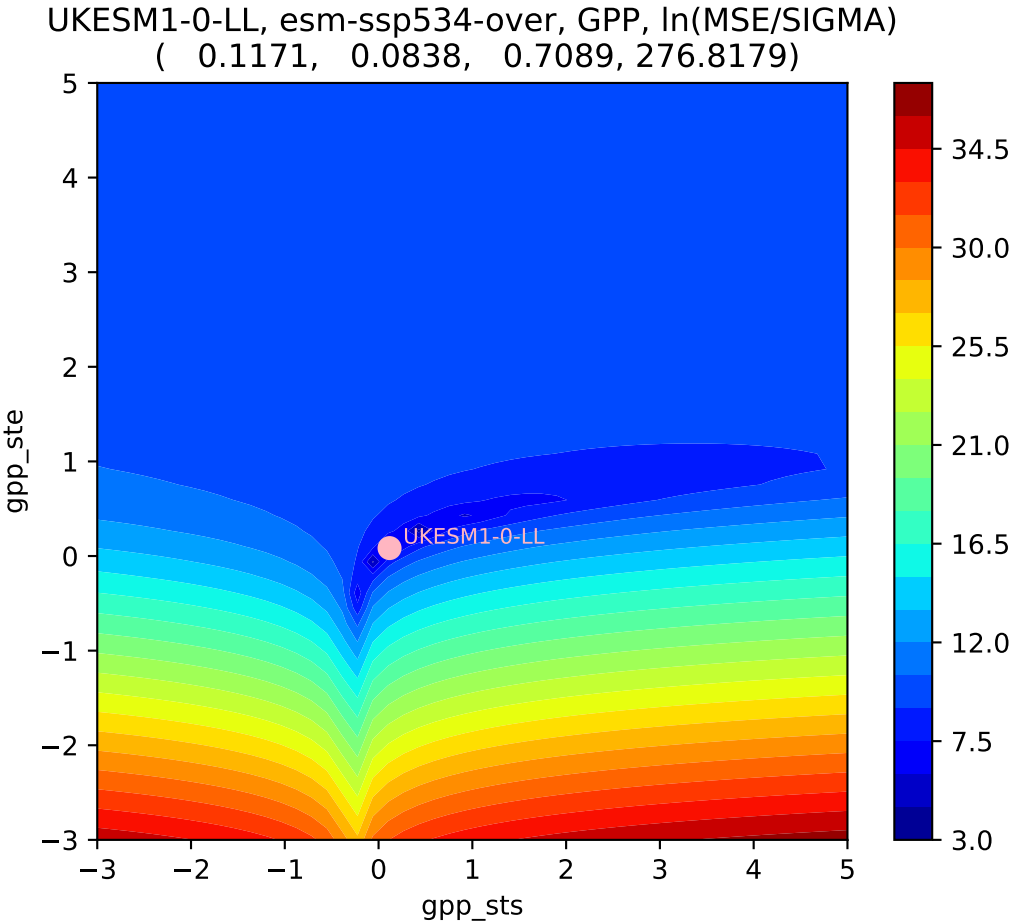

UKESM1-0-LL, esm-ssp534-over, G
ESM-Fit
GPP, ESM - FIT
Year


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


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


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


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


UKESM1-0-LL, esm-ssp534-over, GPP, ln(MSE/SIGMA)
( 0.1171, 0.0838, 0.7089, 276.8179)
UKESM1-0-LL
gpp_ste
gpp_sts
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
34.5
30.0
25.5
21.0
16.5
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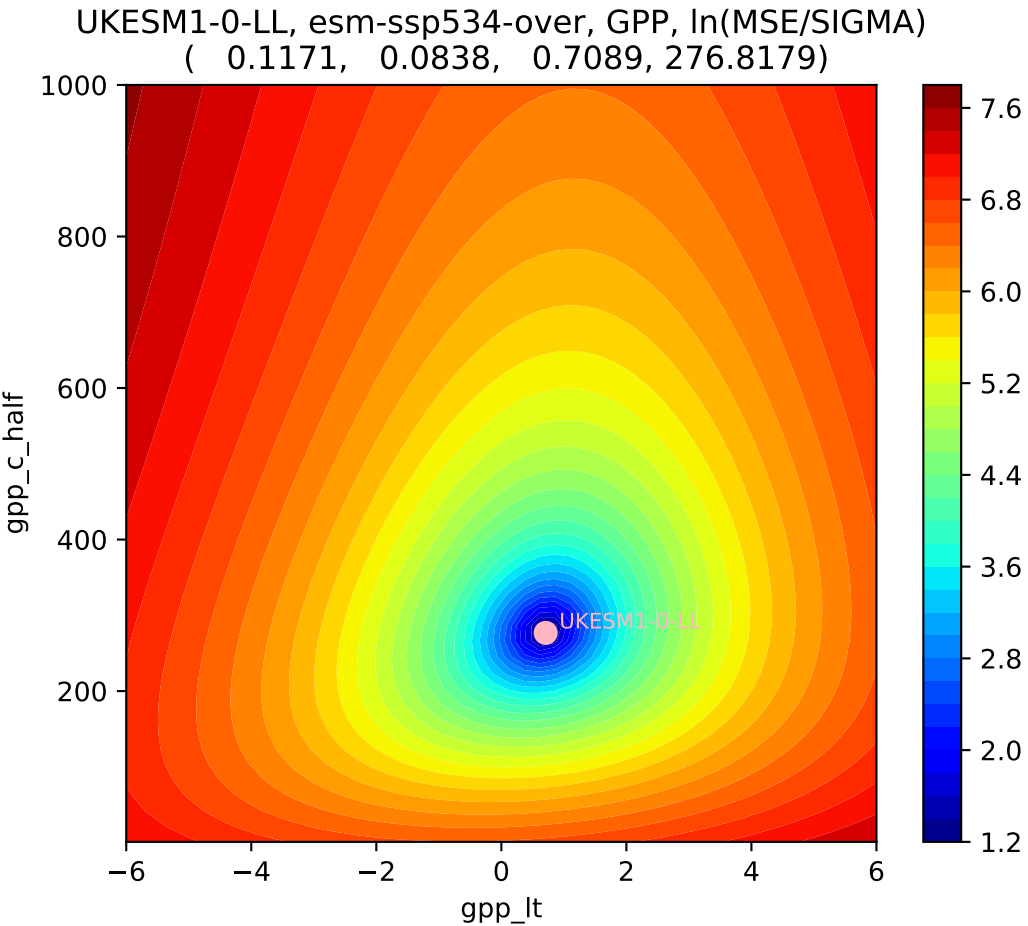
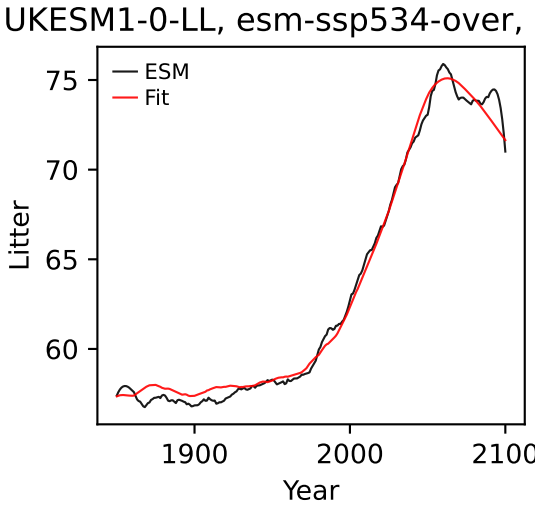
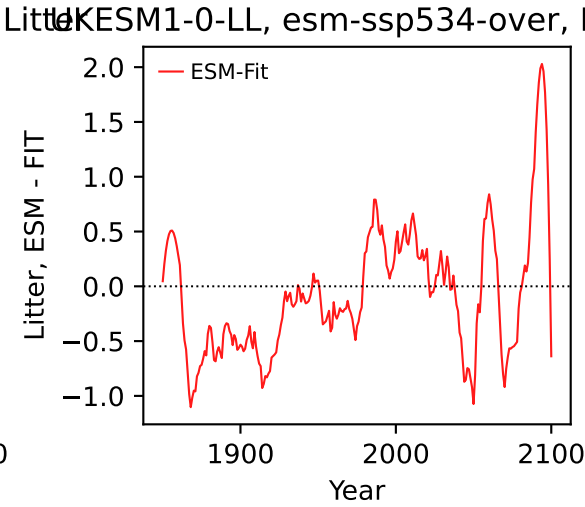
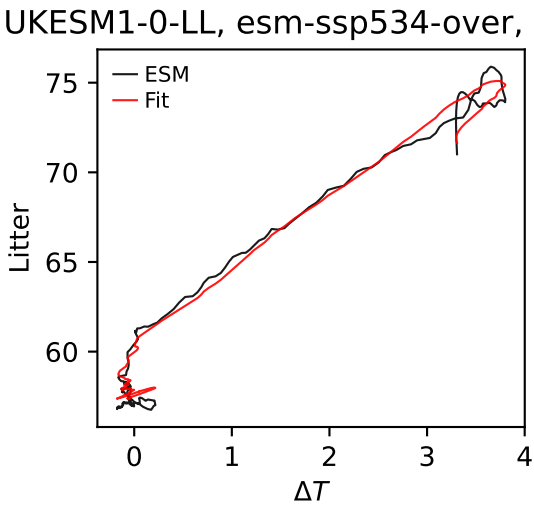
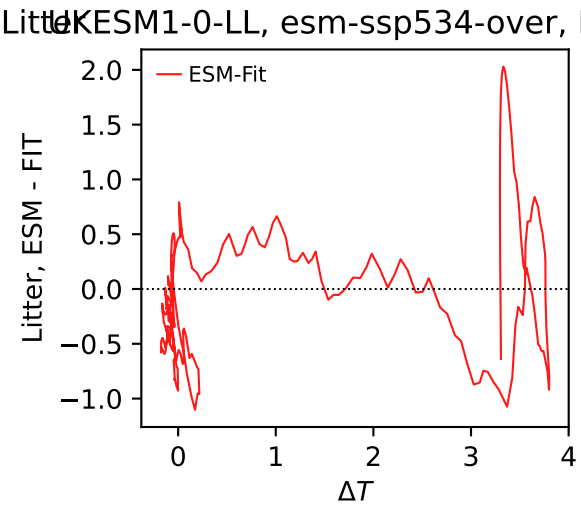
7.5
3.0

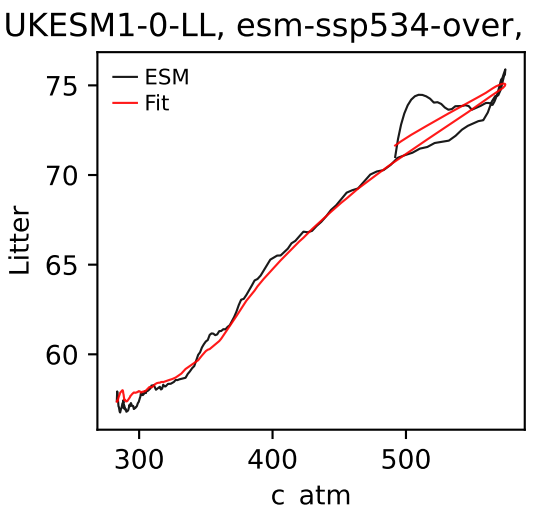

UKESM1-0-LL, esm-ssp534-over, GPP, ln(MSE/SIGMA)
( 0.1171, 0.0838, 0.7089, 276.8179)
1000
800
600
400
200
gpp_c_half
−6
−4
−2
0
2
4
6
gpp_lt
UKESM1-0-LL
7.6
6.8
6.0
5.2
4.4
3.6
2.8
2.0
1.2

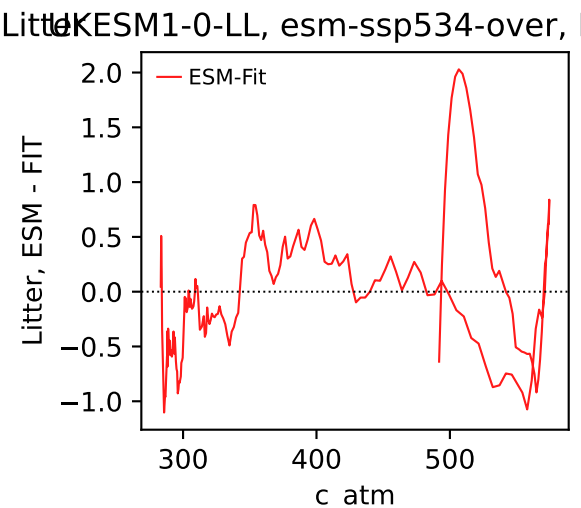

UKESM1-0-LL, esm-ssp534-over, Litter
ESM
Fit
Litter
Year

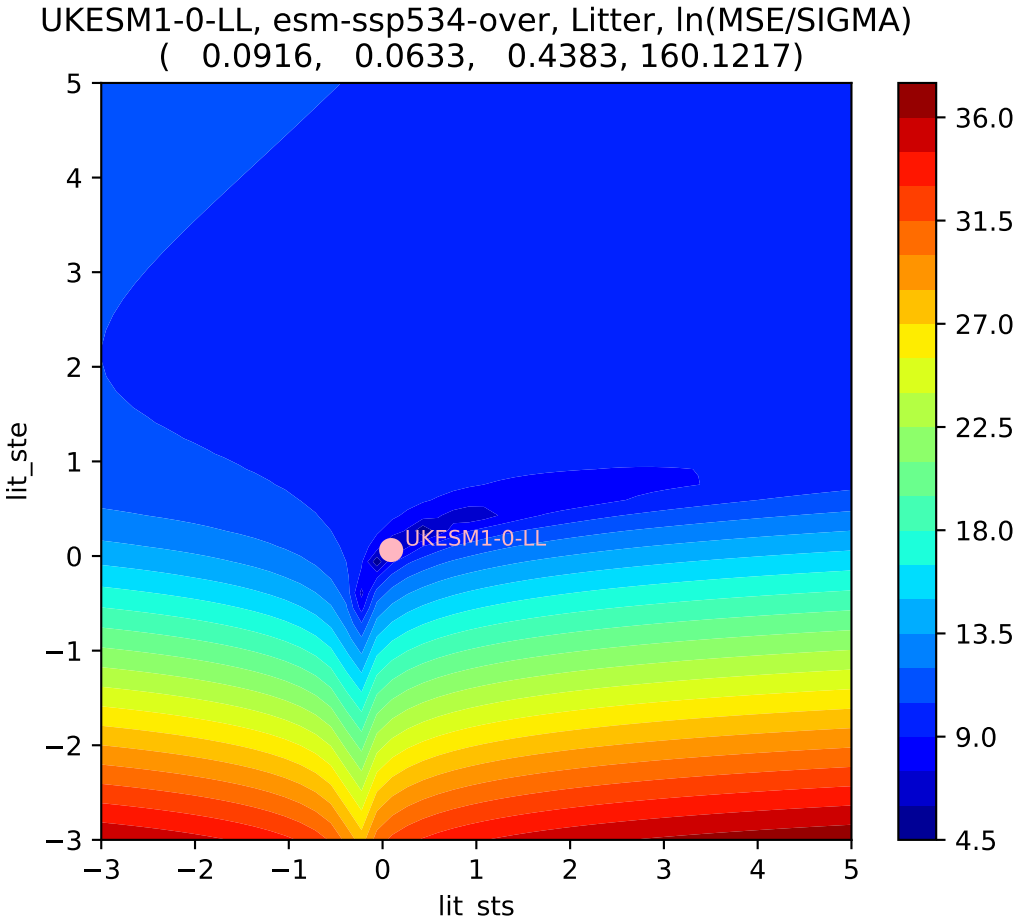

UKESM1-0-LL, esm-ssp534-over, Li
ESM-Fit
Litter, ESM - FIT
Year

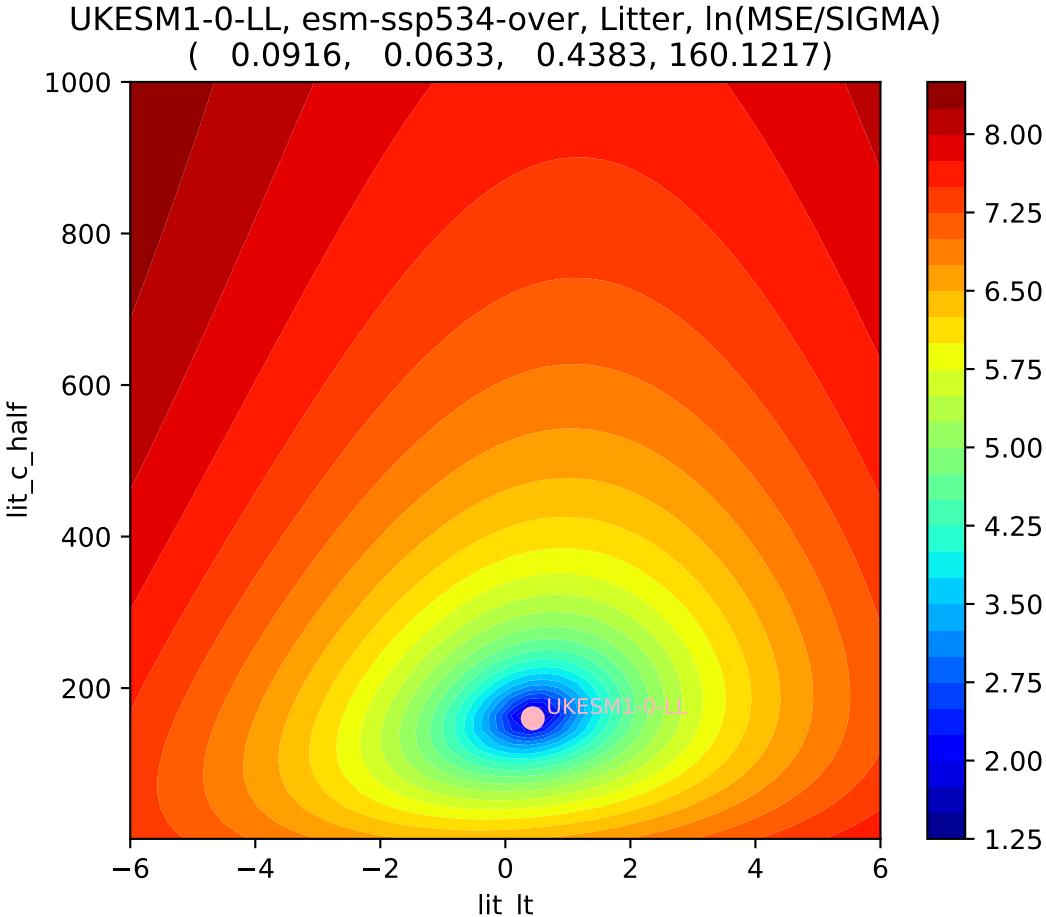

UKESM1-0-LL, esm-ssp534-over, Litter
ESM
Fit
Litter
ΔT

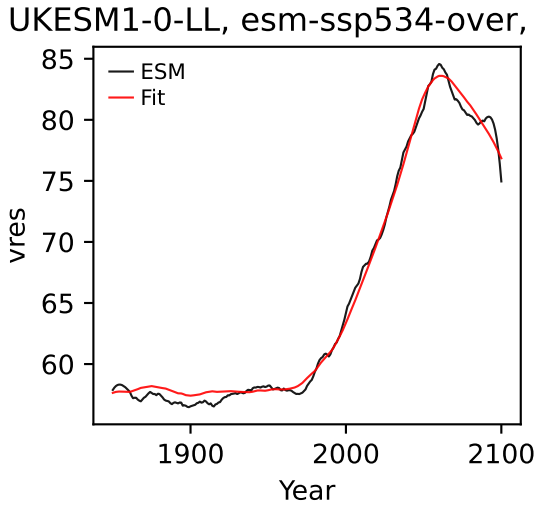

UKESM1-0-LL, esm-ssp534-over, Li
ESM-Fit
Litter, ESM - FIT
ΔT

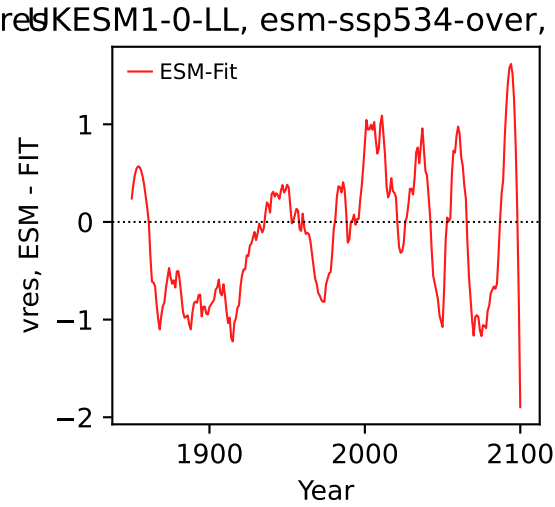

UKESM1-0-LL, esm-ssp534-over, Litter
ESM
Fit
Litter
c_atm

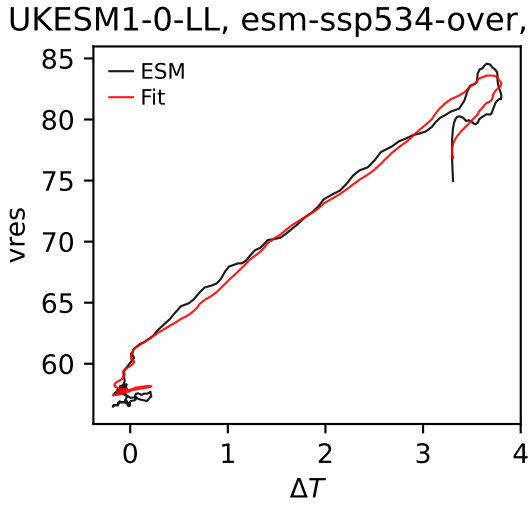

UKESM1-0-LL, esm-ssp534-over, Li
ESM-Fit
Litter, ESM - FIT
c_atm

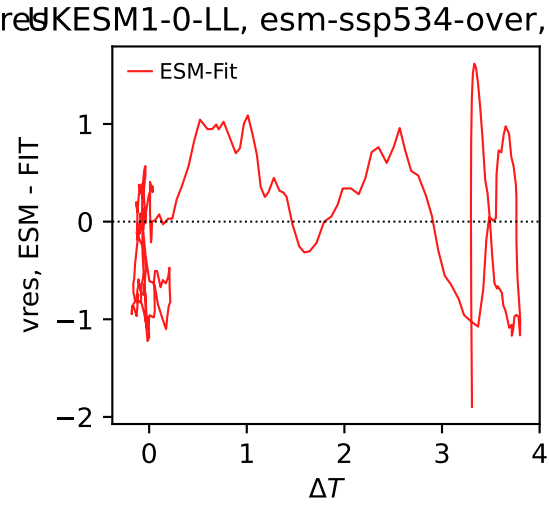

UKESM1-0-LL, esm-ssp534-over, Litter, ln(MSE/SIGMA)
( 0.0916, 0.0633, 0.4383, 160.1217)
UKESM1-0-LL
lit_ste
lit_sts
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
36.0
31.5
27.0
22.5
18.0
13.5
9.0
4.5

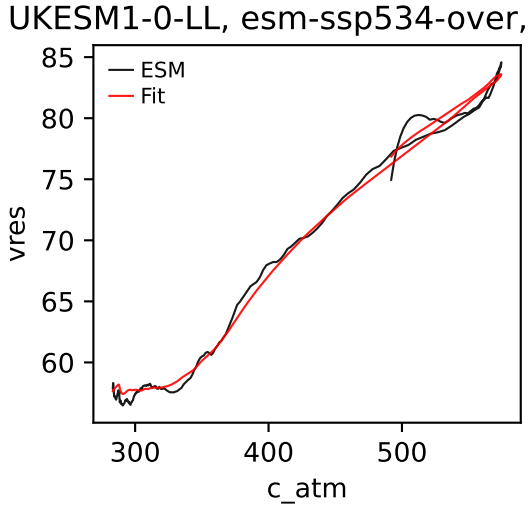

UKESM1-0-LL, esm-ssp534-over, Litter, ln(MSE/SIGMA)
( 0.0916, 0.0633, 0.4383, 160.1217)
1000
800
600
400
200
lit_c_half
−6
−4
−2
0
2
4
6
lit_lt
UKESM1-0-LL
8.00
7.25
6.50
5.75
5.00
4.25
3.50
2.75
2.00
1.25

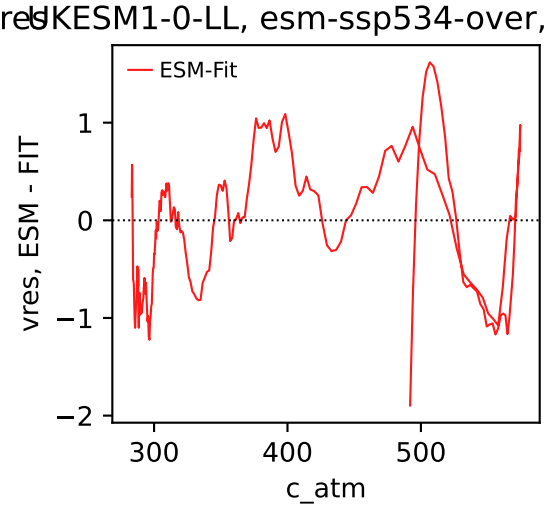

UKESM1-0-LL, esm-ssp534-over, vres
ESM
Fit
vres
Year

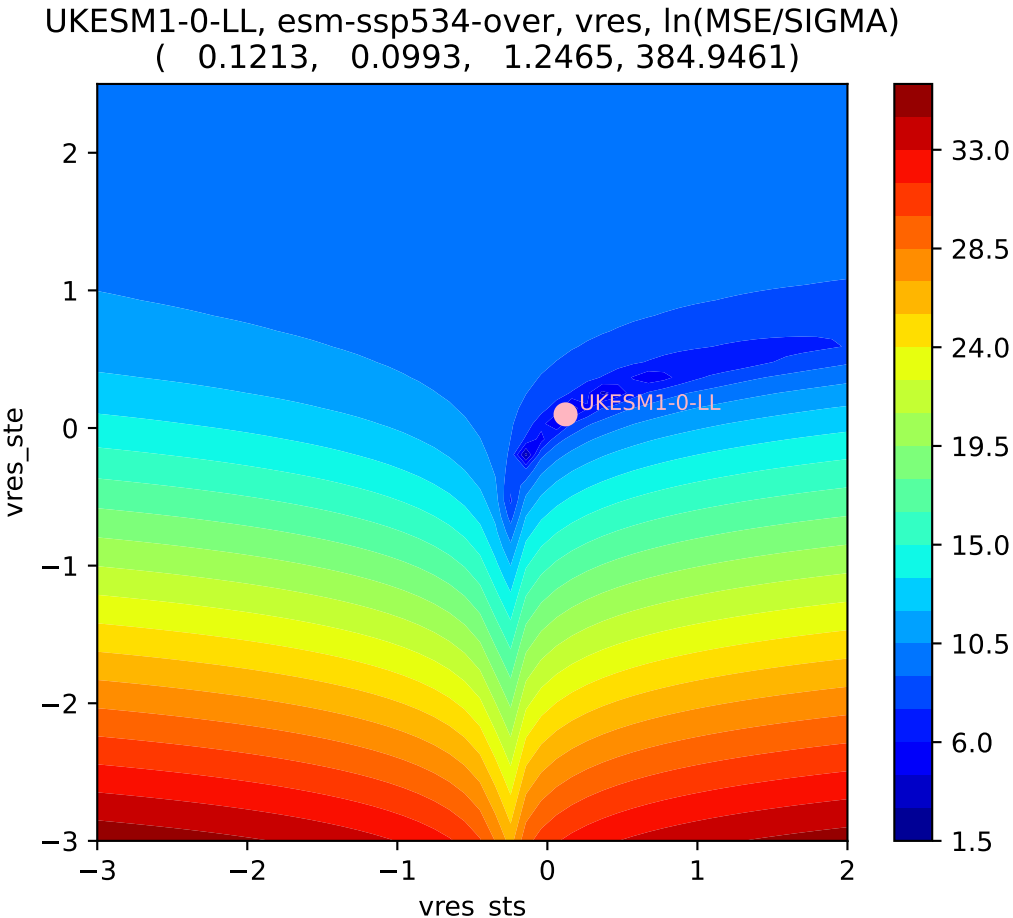

UKESM1-0-LL, esm-ssp534-over, v
ESM-Fit
vres, ESM - FIT
Year

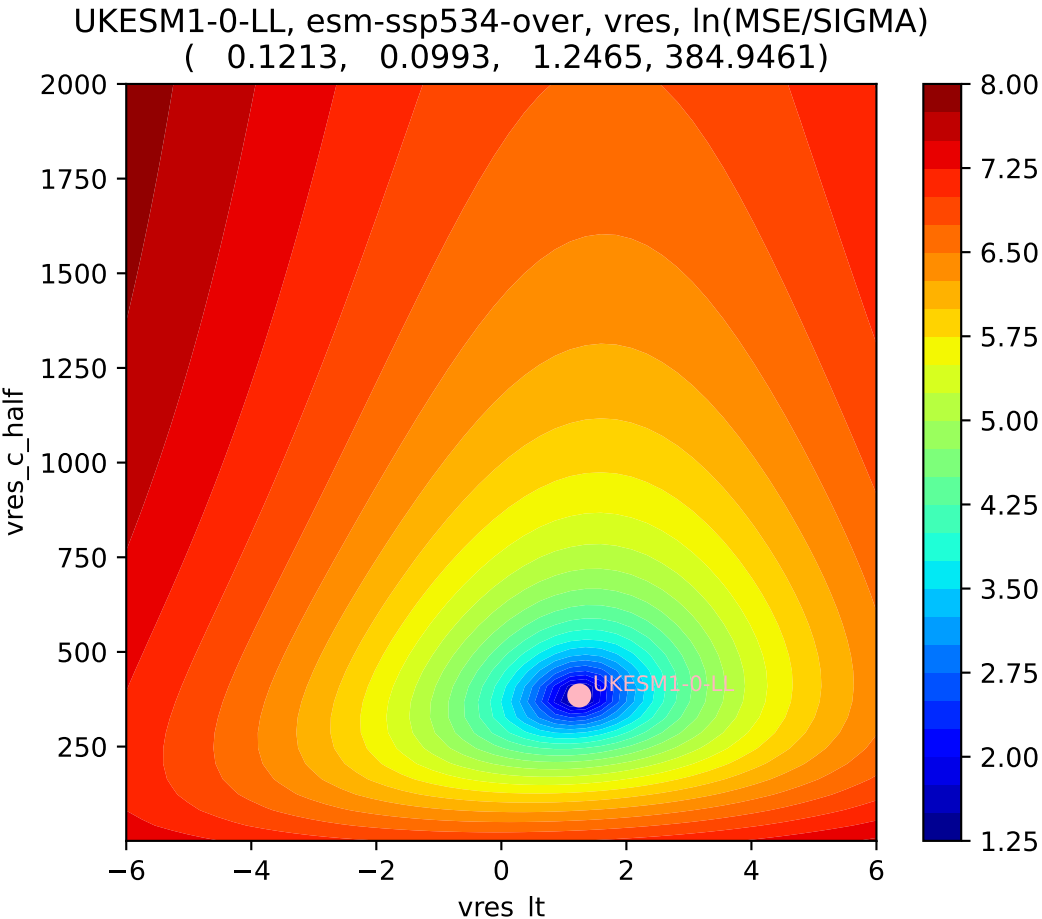

UKESM1-0-LL, esm-ssp534-over, vres
ESM
Fit
vres
ΔT

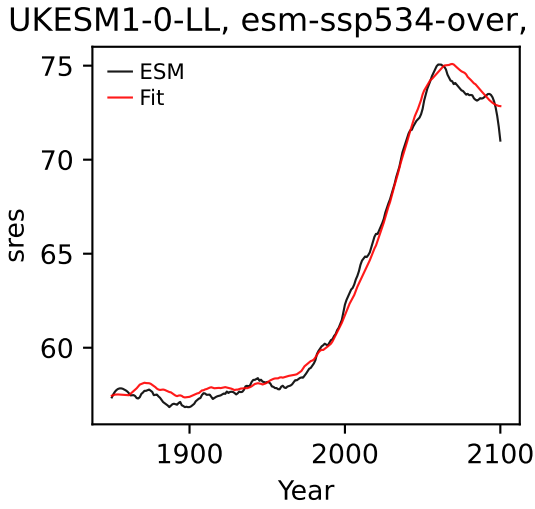

UKESM1-0-LL, esm-ssp534-over, v
ESM-Fit
vres, ESM - FIT
ΔT

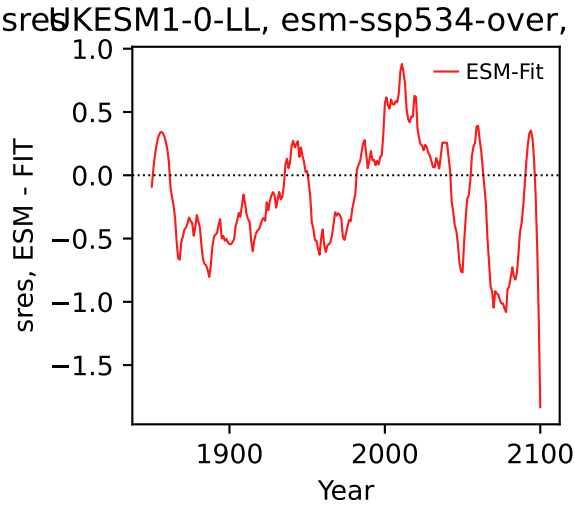

UKESM1-0-LL, esm-ssp534-over, vres
ESM
Fit
vres
c_atm

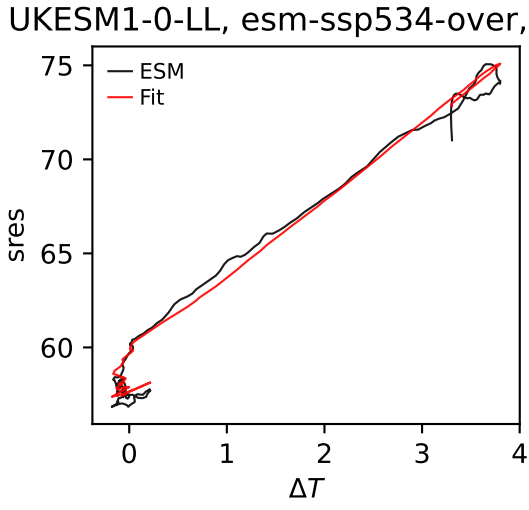

UKESM1-0-LL, esm-ssp534-over, v
ESM-Fit
vres, ESM - FIT
c_atm

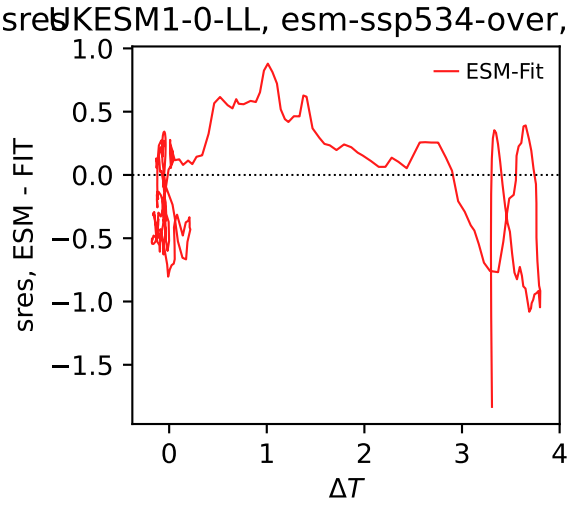

UKESM1-0-LL, esm-ssp534-over, vres, ln(MSE/SIGMA)
( 0.1213, 0.0993, 1.2465, 384.9461)
UKESM1-0-LL
vres_ste
vres_sts
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
33.0
28.5
24.0
19.5
15.0
10.5
6.0
1.5

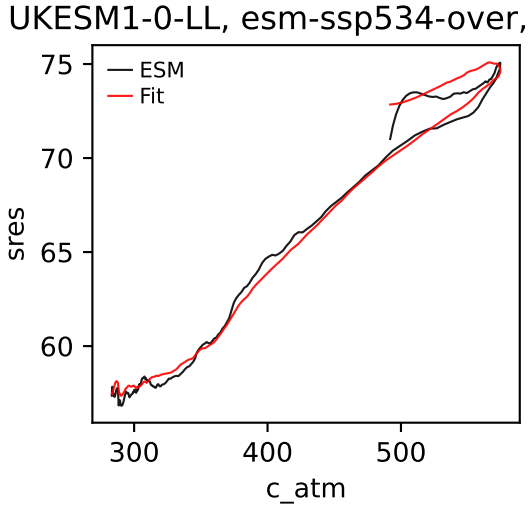

UKESM1-0-LL, esm-ssp534-over, vres, ln(MSE/SIGMA)
( 0.1213, 0.0993, 1.2465, 384.9461)
vres_c_half
vres_lt
2000
1750
1500
1250
1000
750
500
250
−6
−4
−2
0
2
4
6
8.00
7.25
6.50
5.75
5.00
4.25
3.50
2.75
2.00
1.25
UKESM1-0-LL

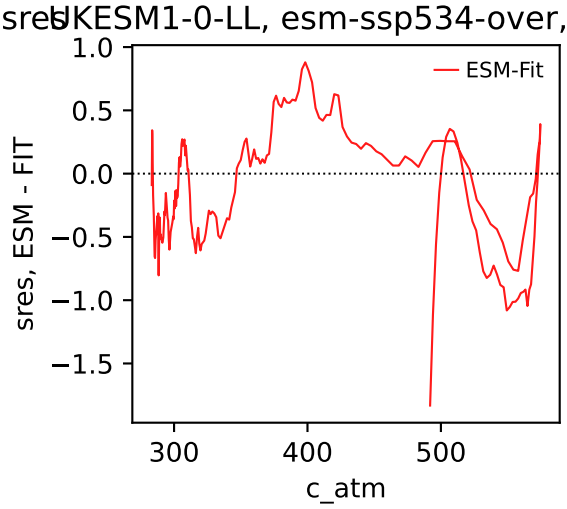

UKESM1-0-LL, esm-ssp534-over, sres
ESM
Fit
sres
Year

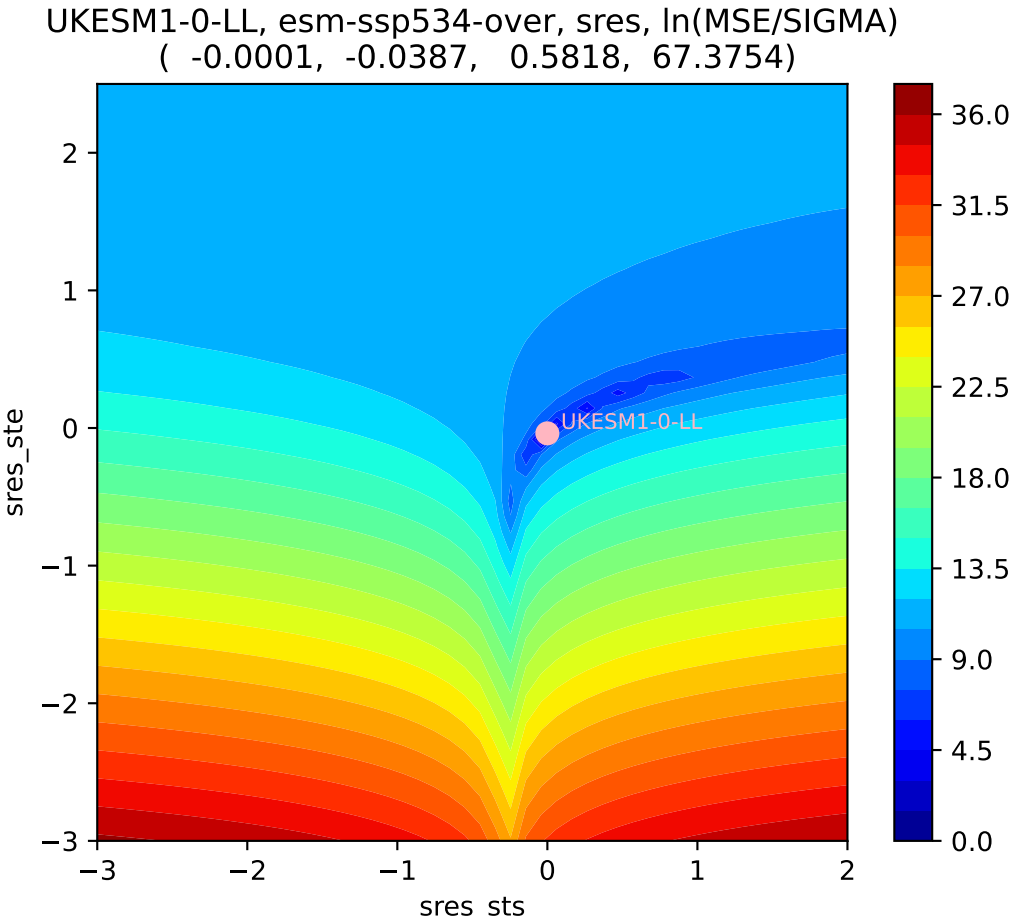

UKESM1-0-LL, esm-ssp534-over, s
ESM-Fit
sres, ESM - FIT
Year

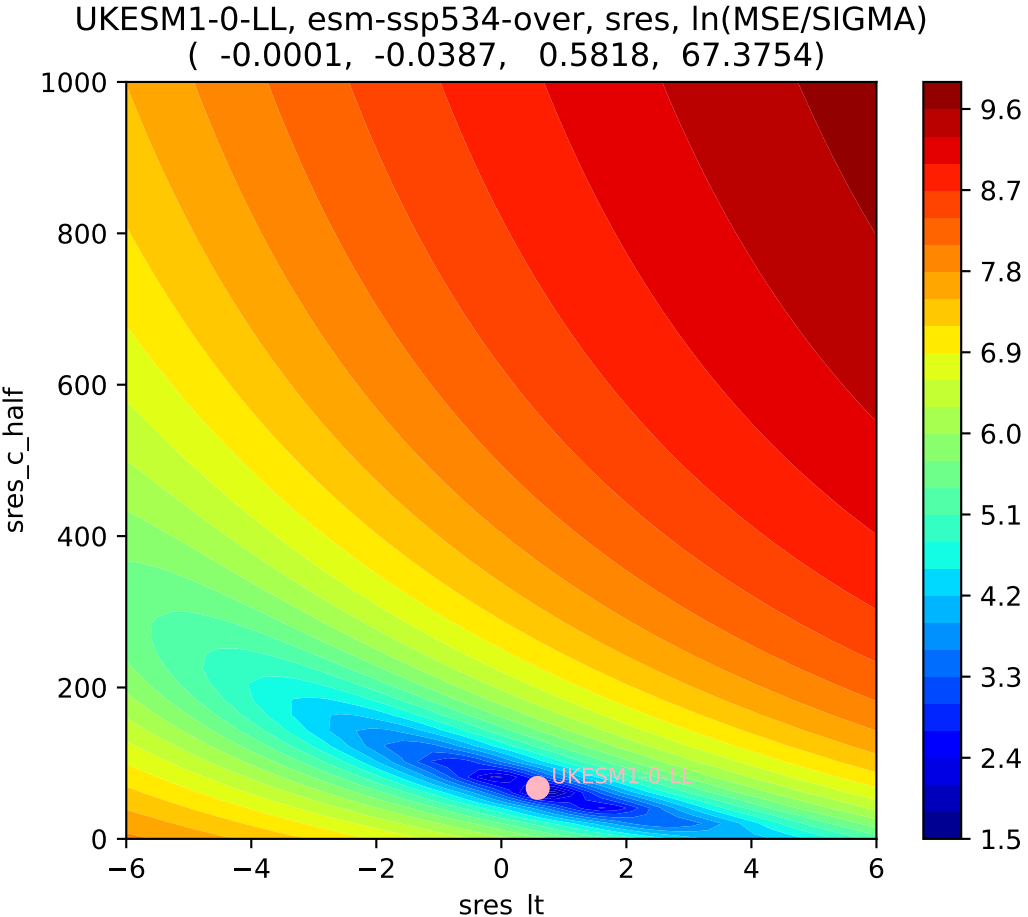

UKESM1-0-LL, esm-ssp534-over, sres
ESM
Fit
sres
ΔT

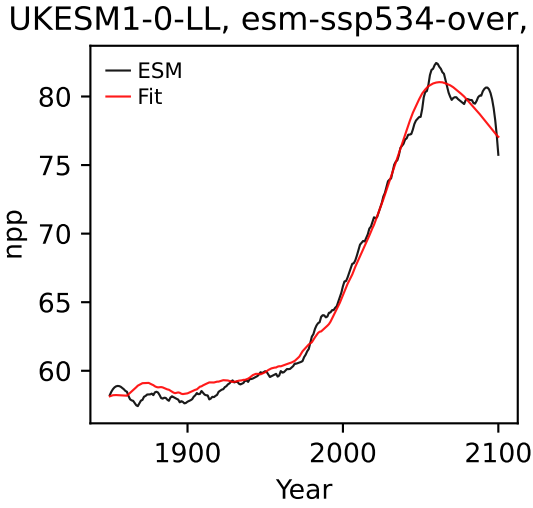

UKESM1-0-LL, esm-ssp534-over, s
ESM-Fit
sres, ESM - FIT
ΔT

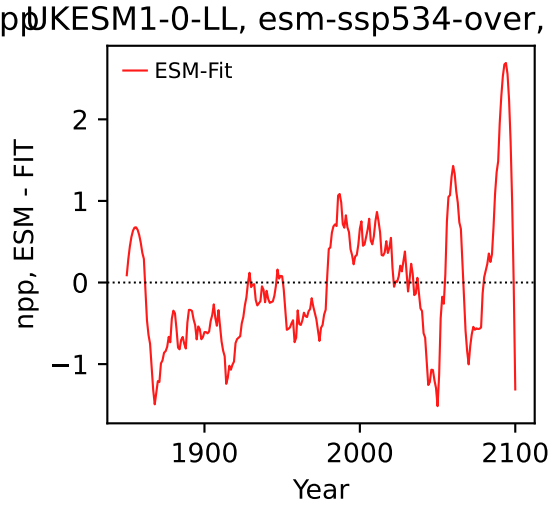

UKESM1-0-LL, esm-ssp534-over, sres
ESM
Fit
sres
c_atm

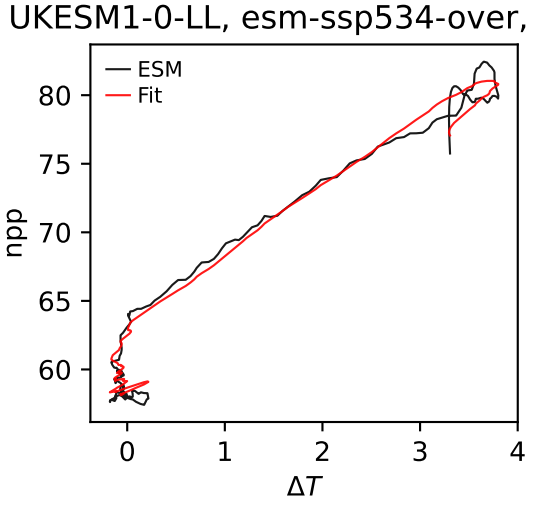

UKESM1-0-LL, esm-ssp534-over, s
ESM-Fit
sres, ESM - FIT
c_atm

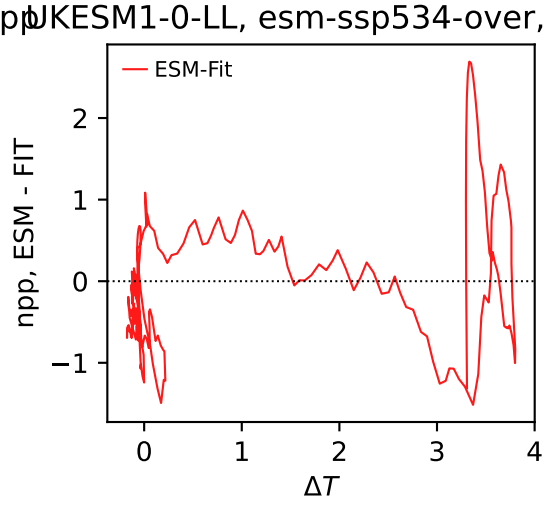

UKESM1-0-LL, esm-ssp534-over, sres, ln(MSE/SIGMA)
( -0.0001, -0.0387, 0.5818, 67.3754)
UKESM1-0-LL
sres_ste
sres_sts
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
36.0
31.5
27.0
22.5
18.0
13.5
9.0
4.5
0.0

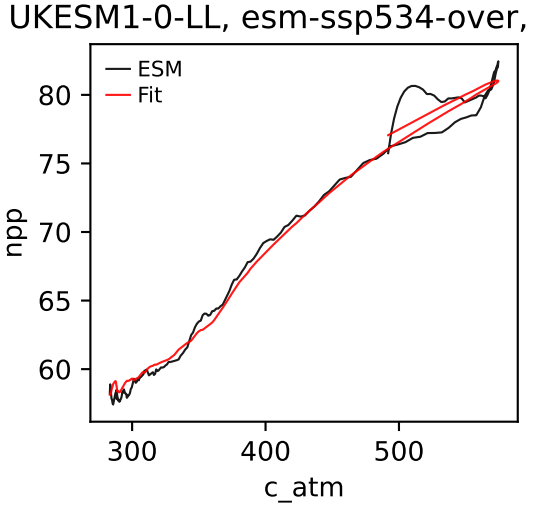

UKESM1-0-LL, esm-ssp534-over, sres, ln(MSE/SIGMA)
( -0.0001, -0.0387, 0.5818, 67.3754)
1000
800
600
400
200
0
sres_c_half
−6
−4
−2
0
2
4
6
sres_lt
UKESM1-0-LL
9.6
8.7
7.8
6.9
6.0
5.1
4.2
3.3
2.4
1.5

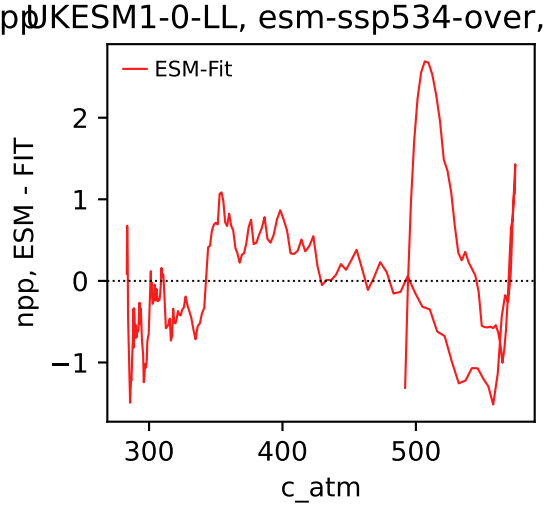

UKESM1-0-LL, esm-ssp534-over, npp
ESM
Fit
npp
Year

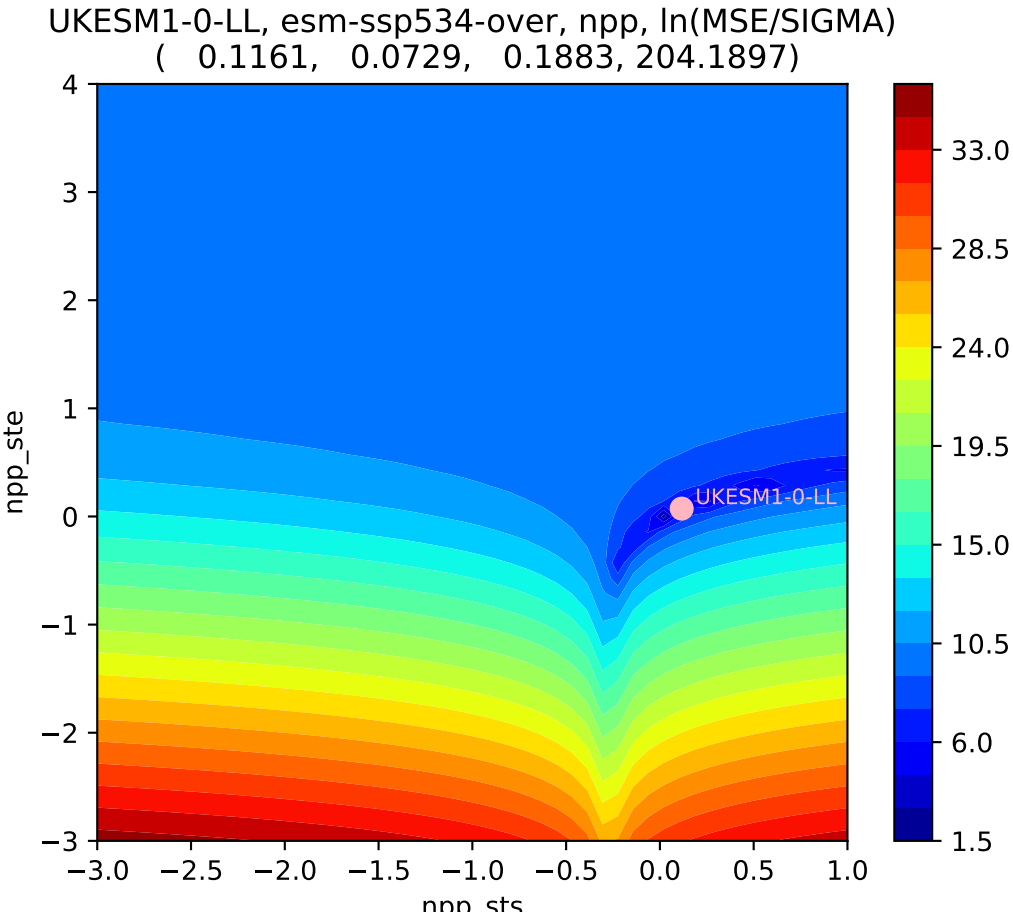

UKESM1-0-LL, esm-ssp534-over, n
ESM-Fit
npp, ESM - FIT
Year

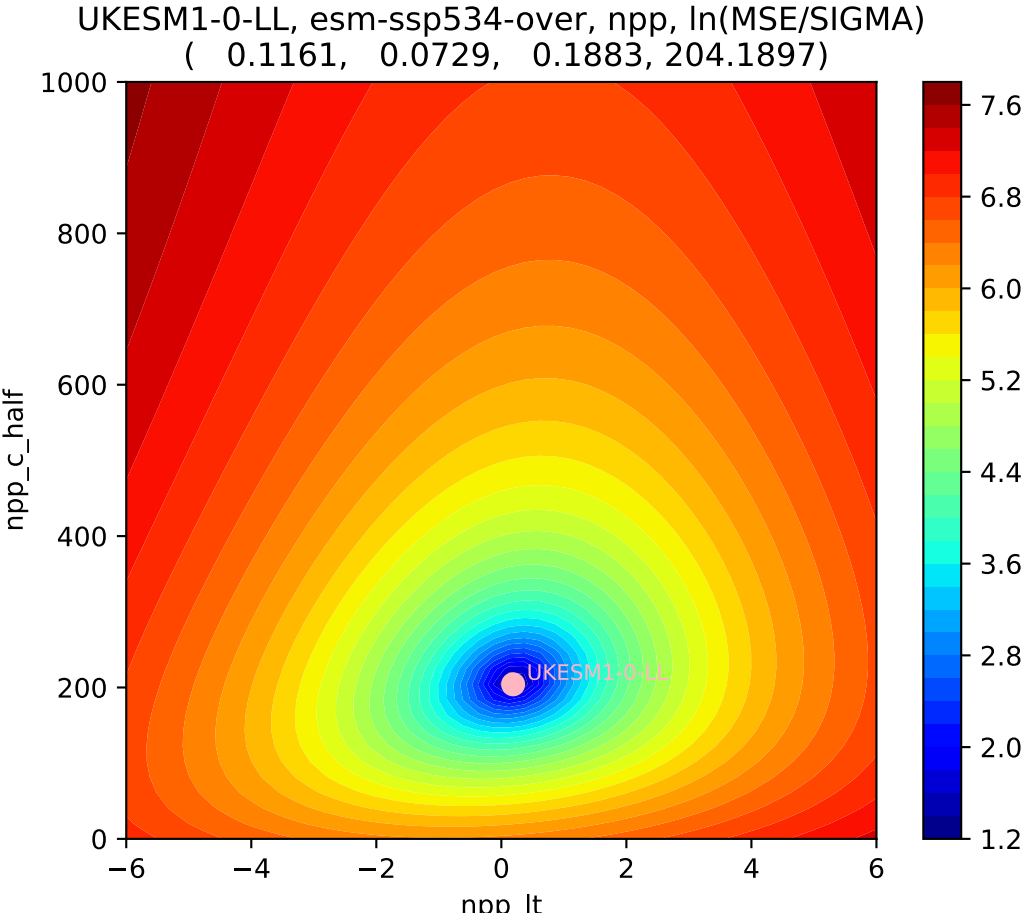

UKESM1-0-LL, esm-ssp534-over, npp
ESM
Fit
npp
ΔT

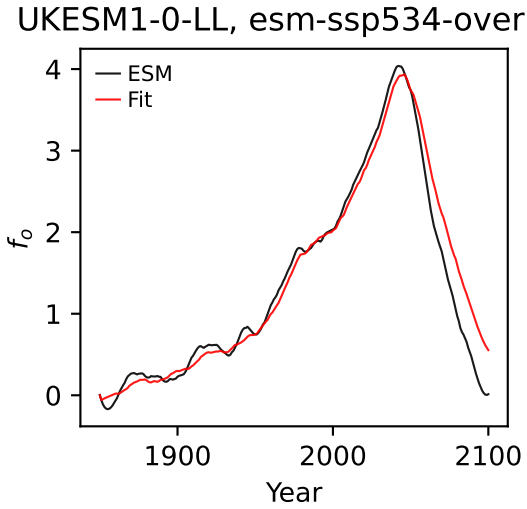

UKESM1-0-LL, esm-ssp534-over, n
ESM-Fit
npp, ESM - FIT
ΔT

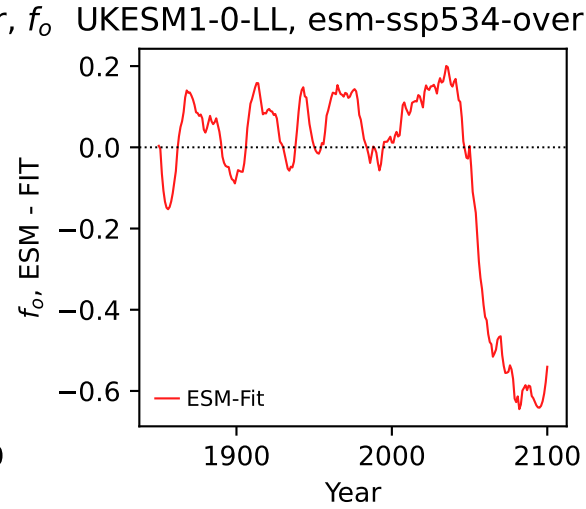

UKESM1-0-LL, esm-ssp534-over, npp
ESM
Fit
npp
c_atm

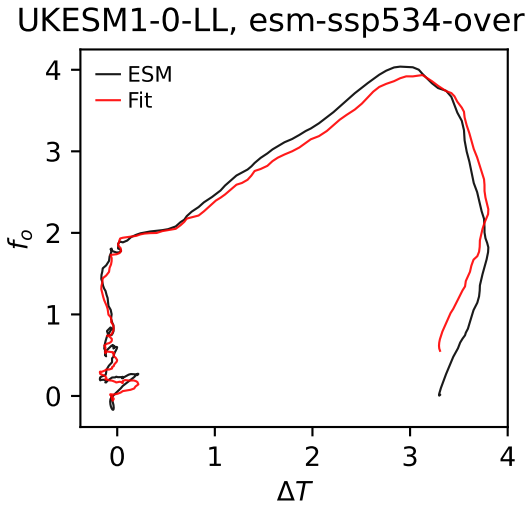

UKESM1-0-LL, esm-ssp534-over, n
ESM-Fit
npp, ESM - FIT
c_atm

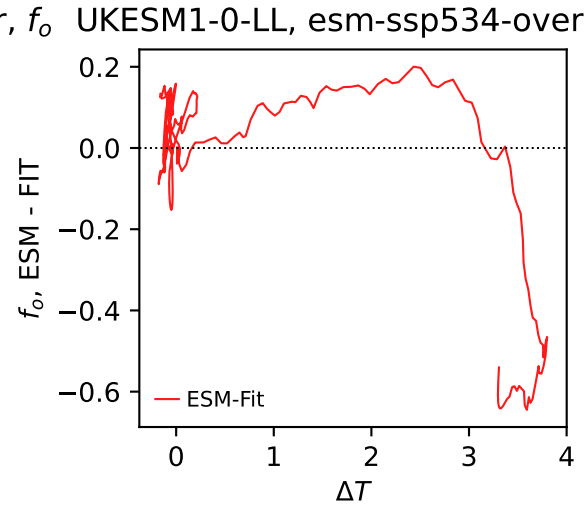

UKESM1-0-LL, esm-ssp534-over, npp, ln(MSE/SIGMA)
( 0.1161, 0.0729, 0.1883, 204.1897)
UKESM1-0-LL
npp_ste
npp_sts
4
3
2
1
0
−1
−2
−3
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
0.5
1.0
33.0
28.5
24.0
19.5
15.0
10.5
6.0
1.5

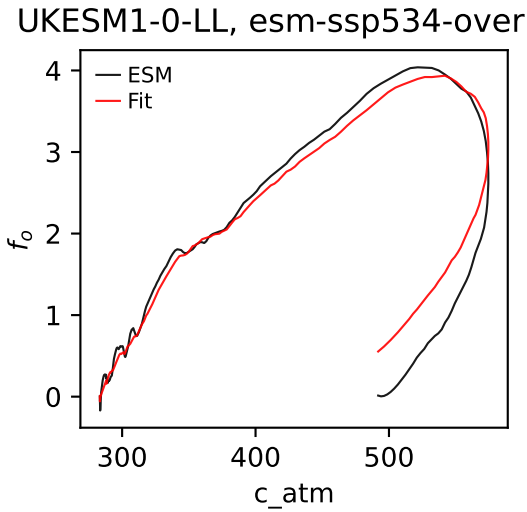

UKESM1-0-LL, esm-ssp534-over, npp, ln(MSE/SIGMA)
( 0.1161, 0.0729, 0.1883, 204.1897)
1000
800
600
400
200
0
npp_c_half
−6
−4
−2
0
2
4
6
npp_lt
UKESM1-0-LL
7.6
6.8
6.0
5.2
4.4
3.6
2.8
2.0
1.2

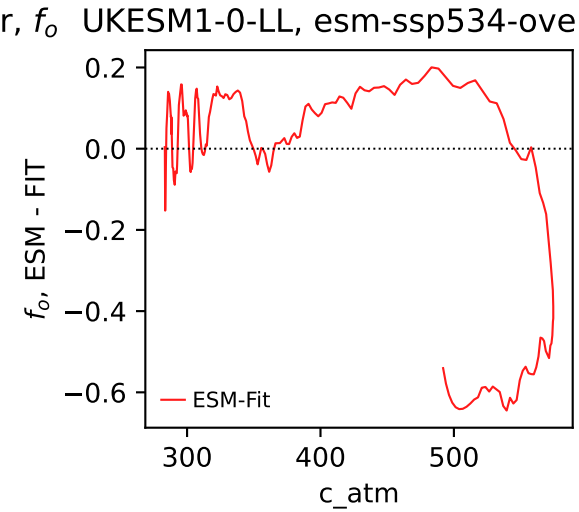

UKESM1-0-LL, esm-ssp534-over, $f_o$
ESM
Fit
$f_o$
Year

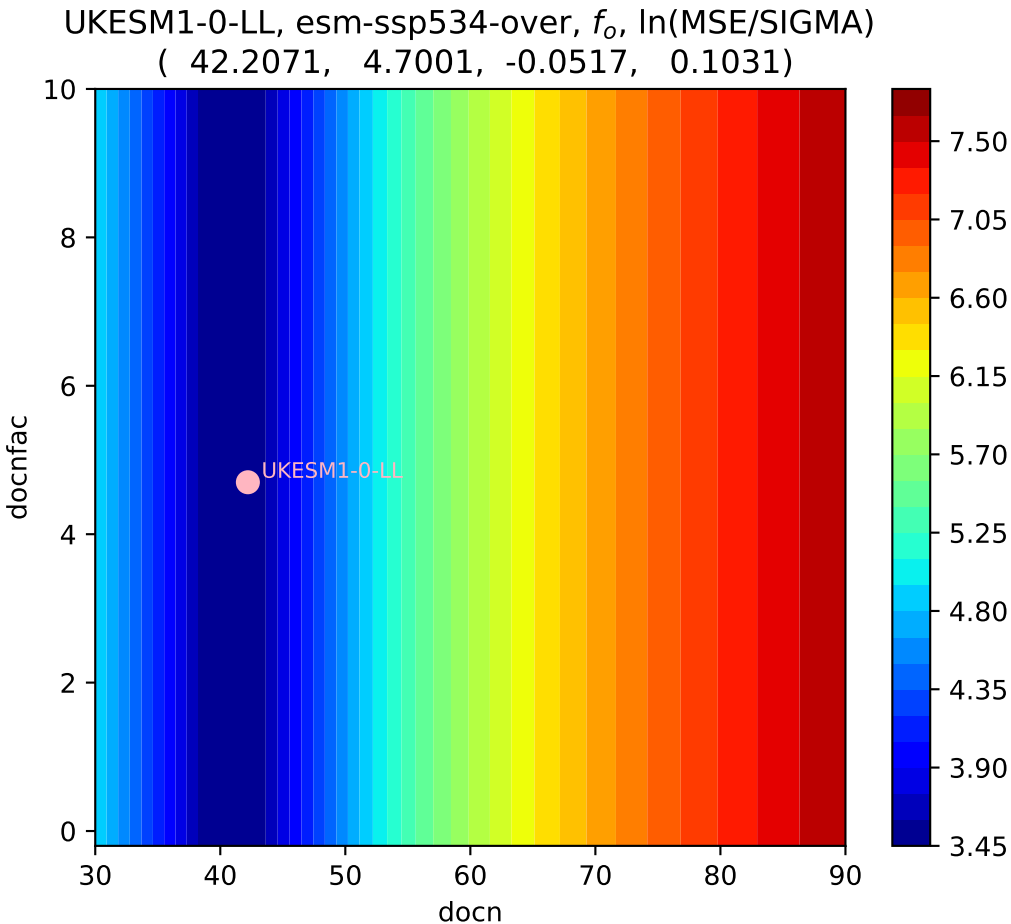

UKESM1-0-LL, esm-ssp534-over,
$f_o$, ESM - FIT
ESM-Fit
Year

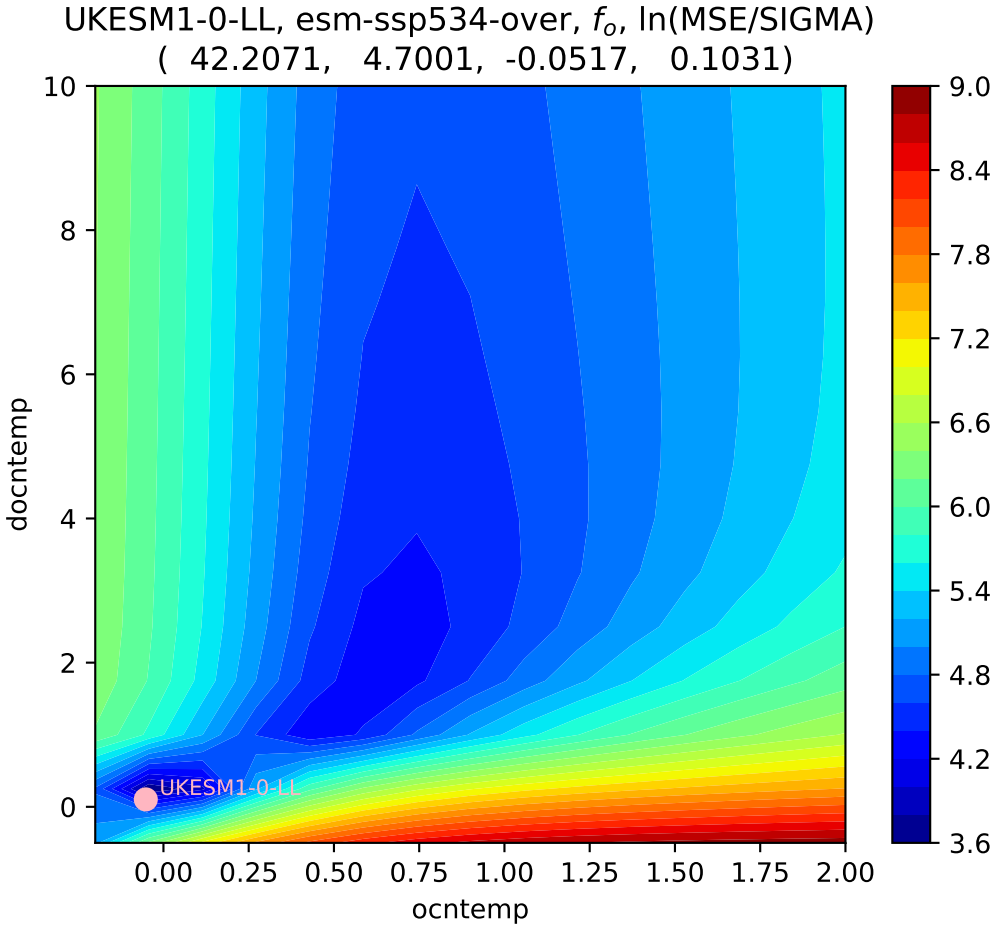

UKESM1-0-LL, esm-ssp534-over, $f_o$
ESM
Fit
$f_o$
$\Delta T$


UKESM1-0-LL, esm-ssp534-over,
$f_o$, ESM - FIT
ESM-Fit
$\Delta T$


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


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


UKESM1-0-LL, esm-ssp534-over, $f_o$, ln(MSE/SIGMA)
( 42.2071, 4.7001, -0.0517, 0.1031)
UKESM1-0-LL
docnfac
docn
0
2
4
6
8
10
30
40
50
60
70
80
90
7.50
7.05
6.60
6.15
5.70
5.25
4.80
4.35
3.90
3.45


UKESM1-0-LL, esm-ssp534-over, $f_o$, ln(MSE/SIGMA)
( 42.2071, 4.7001, -0.0517, 0.1031)
UKESM1-0-LL
docntemp
ocntemp
0
2
4
6
8
10
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
9.0
8.4
7.8
7.2
6.6
6.0
5.4
4.8
4.2
3.6