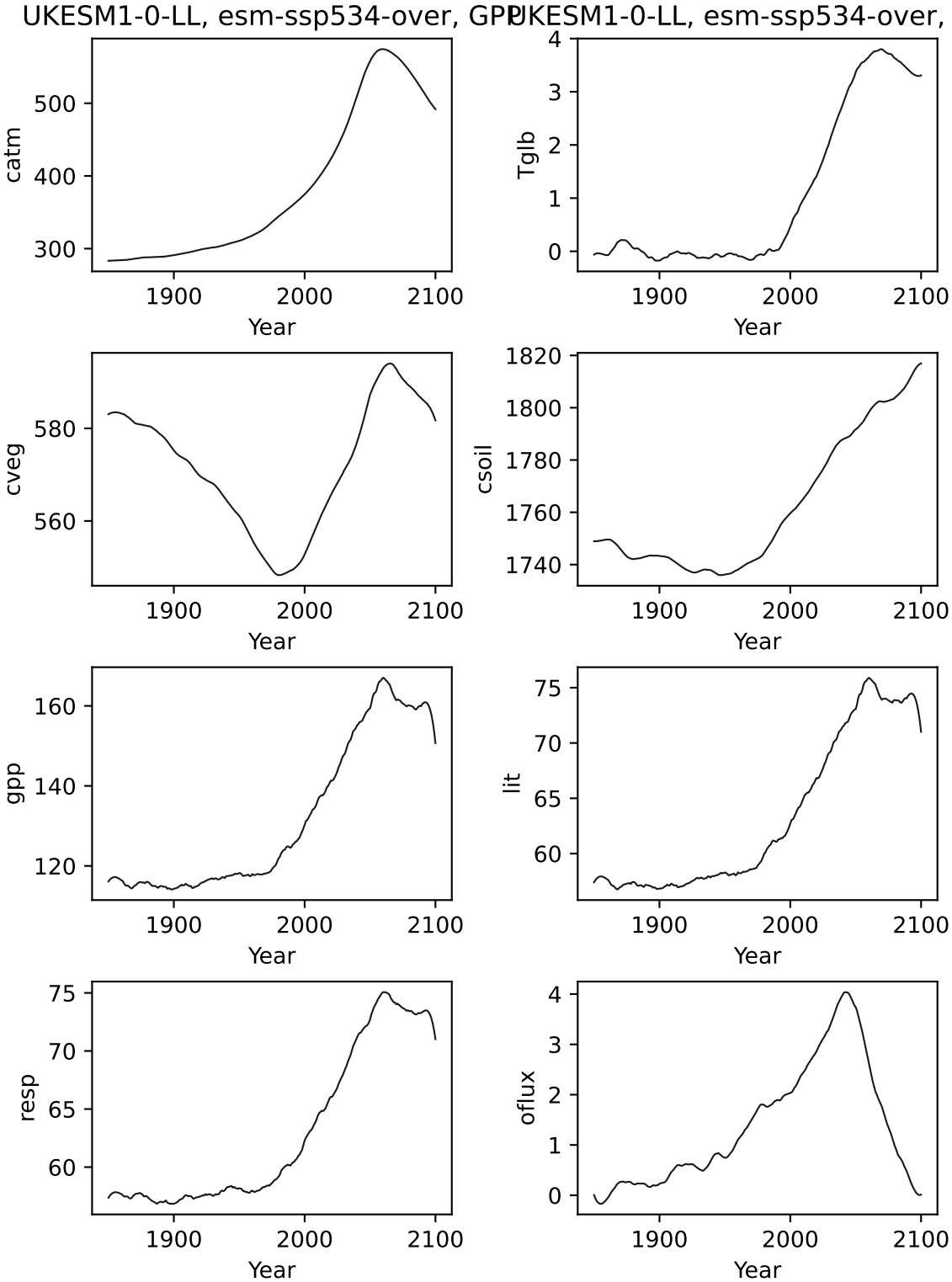
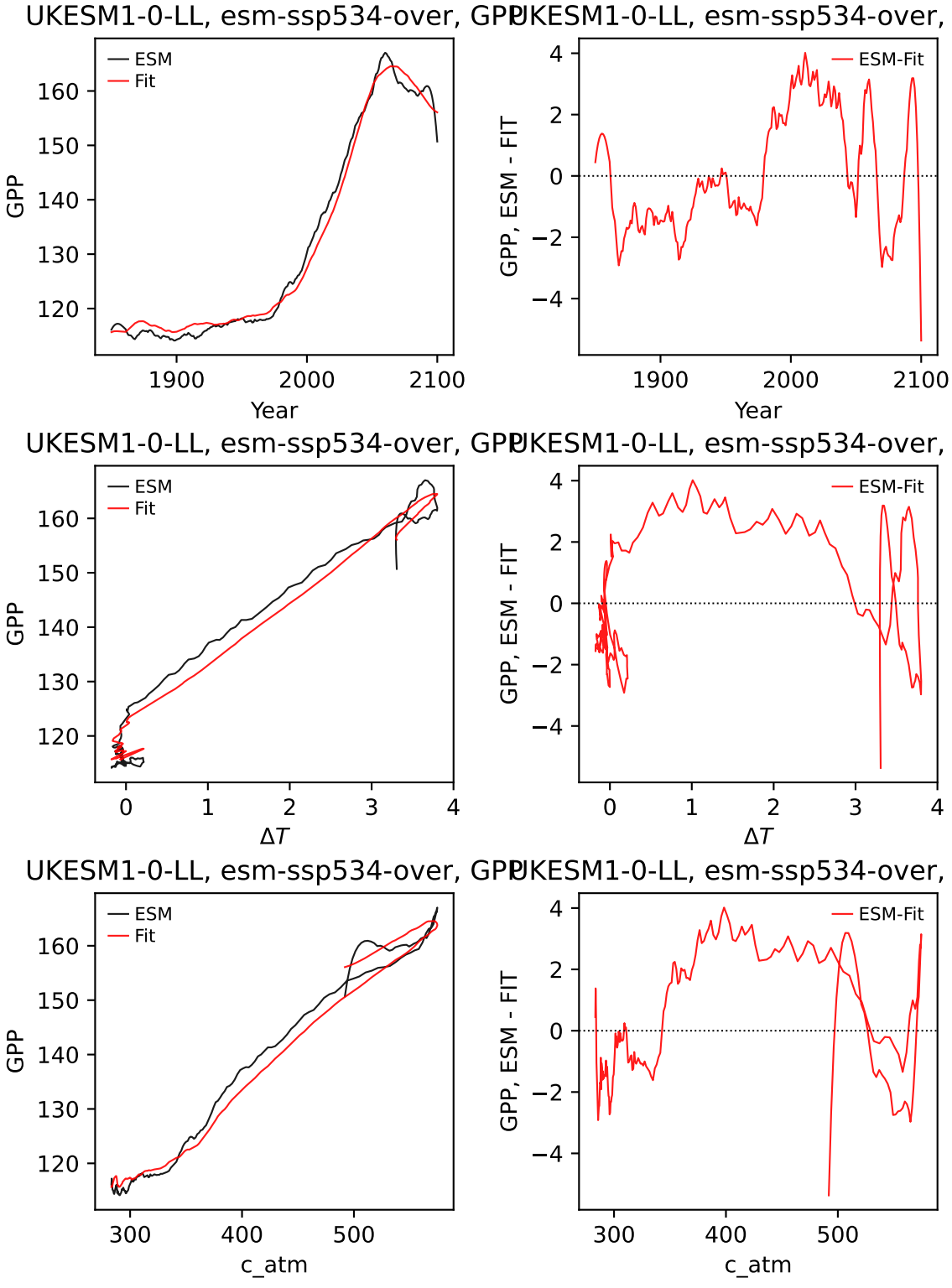
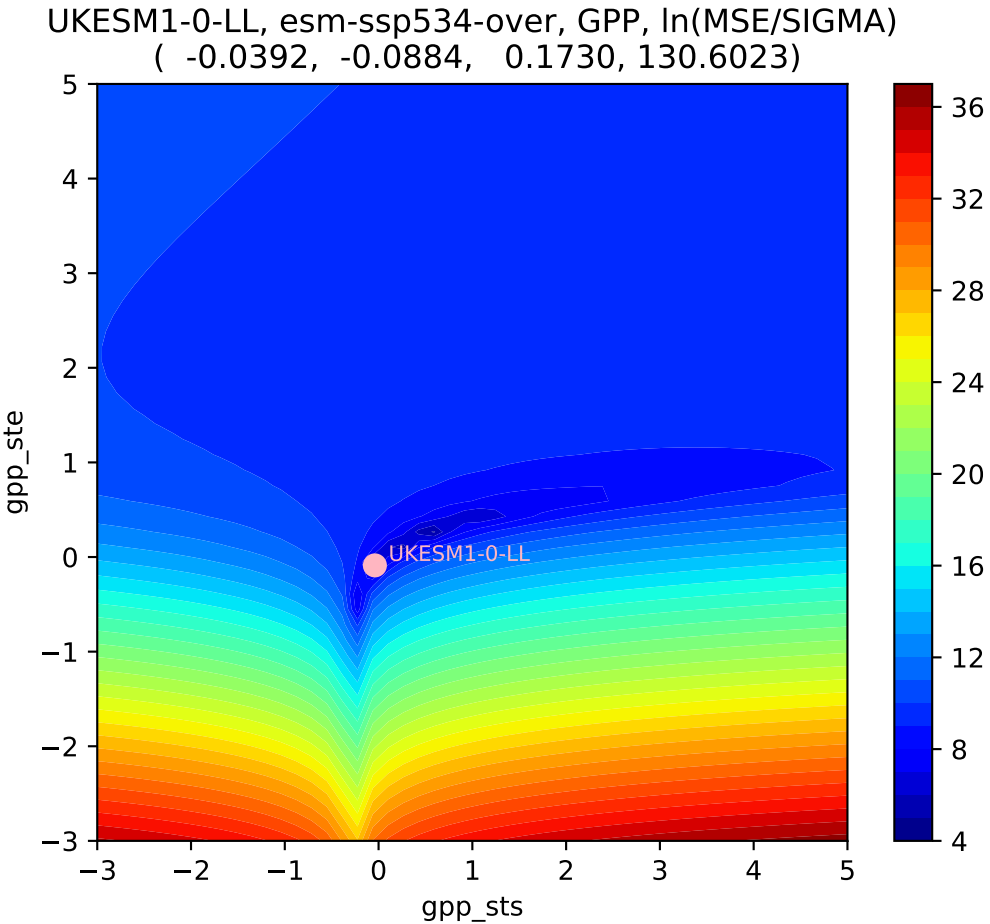

UKESM1-0-LL, esm-ssp534-over, GPP
UKESM1-0-LL, esm-ssp534-over, G
catm
Tglb
cveg
csoil
gpp
lit
resp
oflux
Year
1900
2000
2100


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)
(-0.0392, -0.0884, 0.1730, 130.6023)
UKESM1-0-LL
gpp_ste
gpp_sts
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
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3
4
5
36
32
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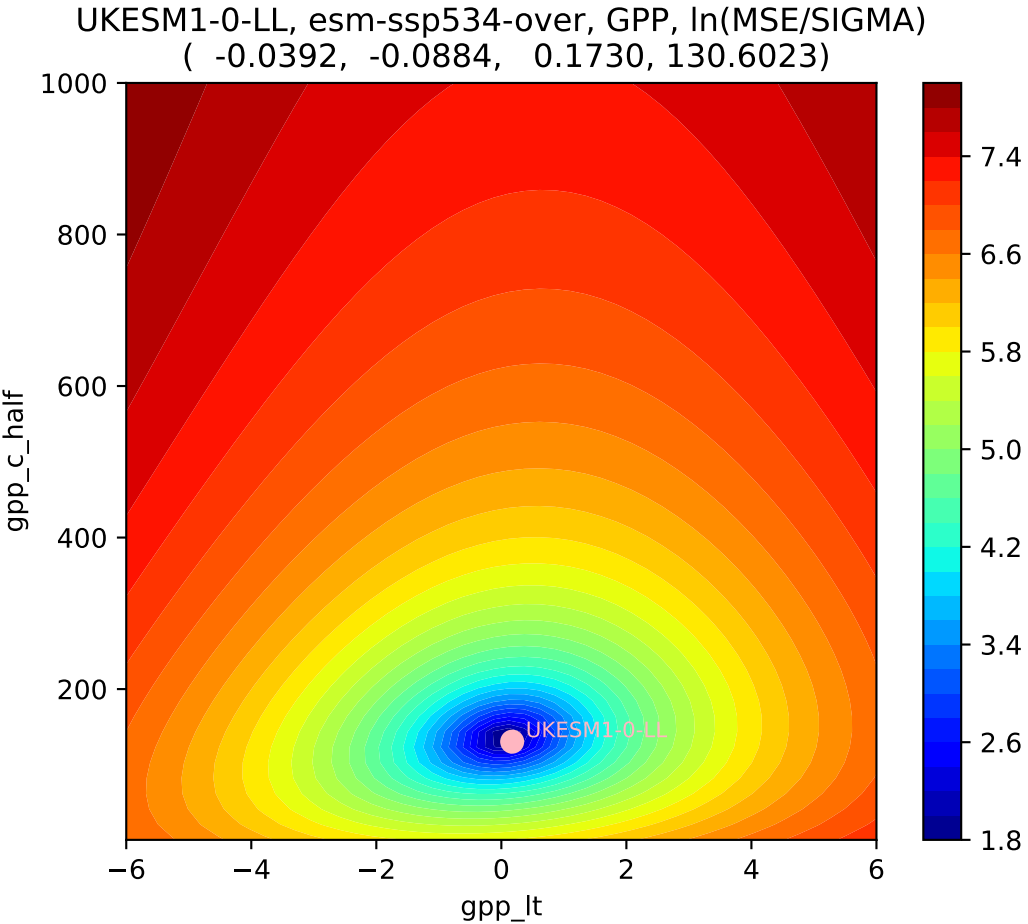
24
20
16
12
8
4


UKESM1-0-LL, esm-ssp534-over, GPP, ln(MSE/SIGMA)
(-0.0392, -0.0884, 0.1730, 130.6023)
gpp_c_half
gpp_lt
UKESM1-0-LL
1000
800
600
400
200
−6
−4
−2
0
2
4
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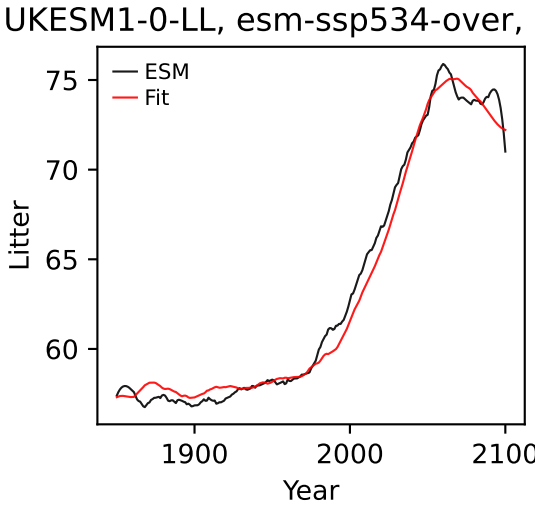
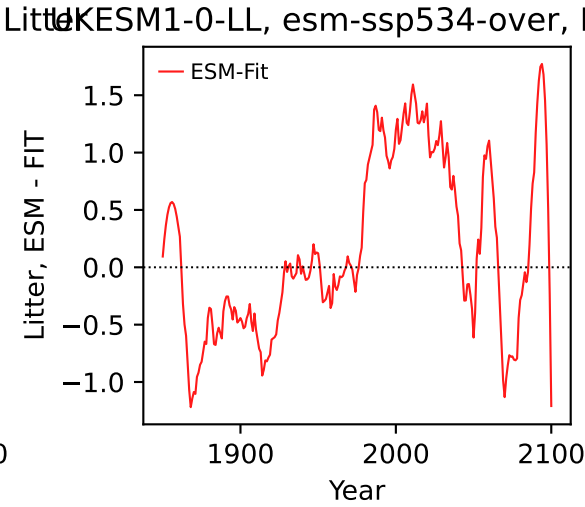
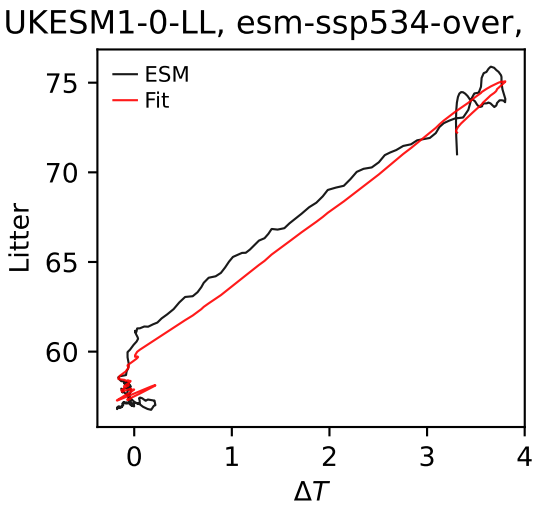
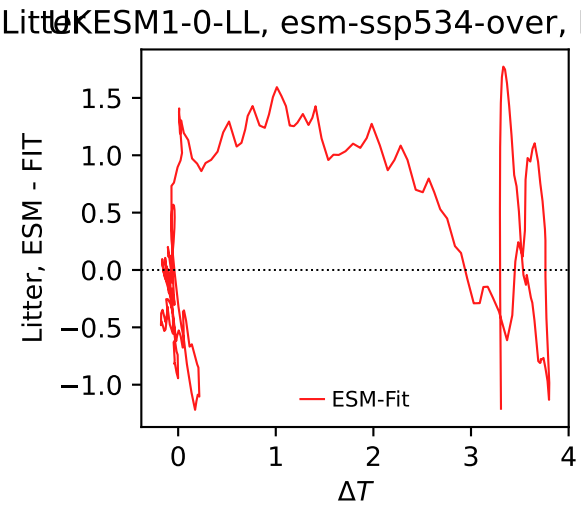
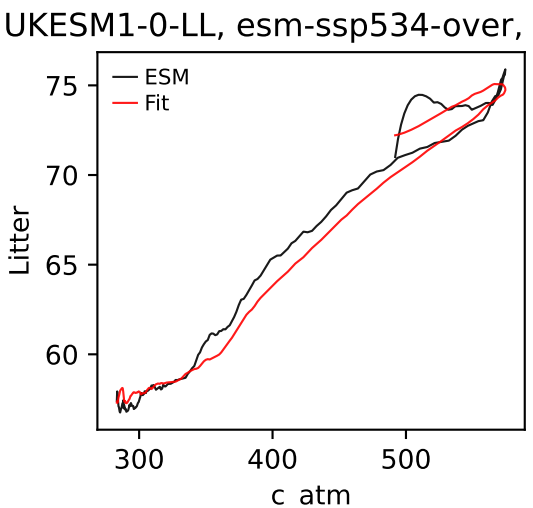
6.6
5.8
5.0
4.2
3.4
2.6
1.8

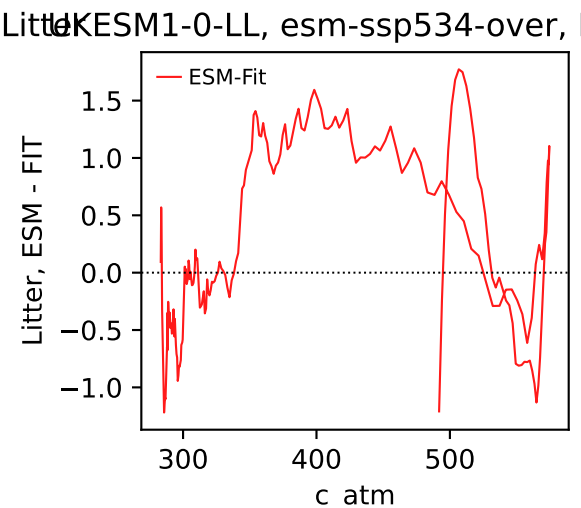

UKESM1-0-LL, esm-ssp534-over, Litter
ESM
Fit
Litter
Year

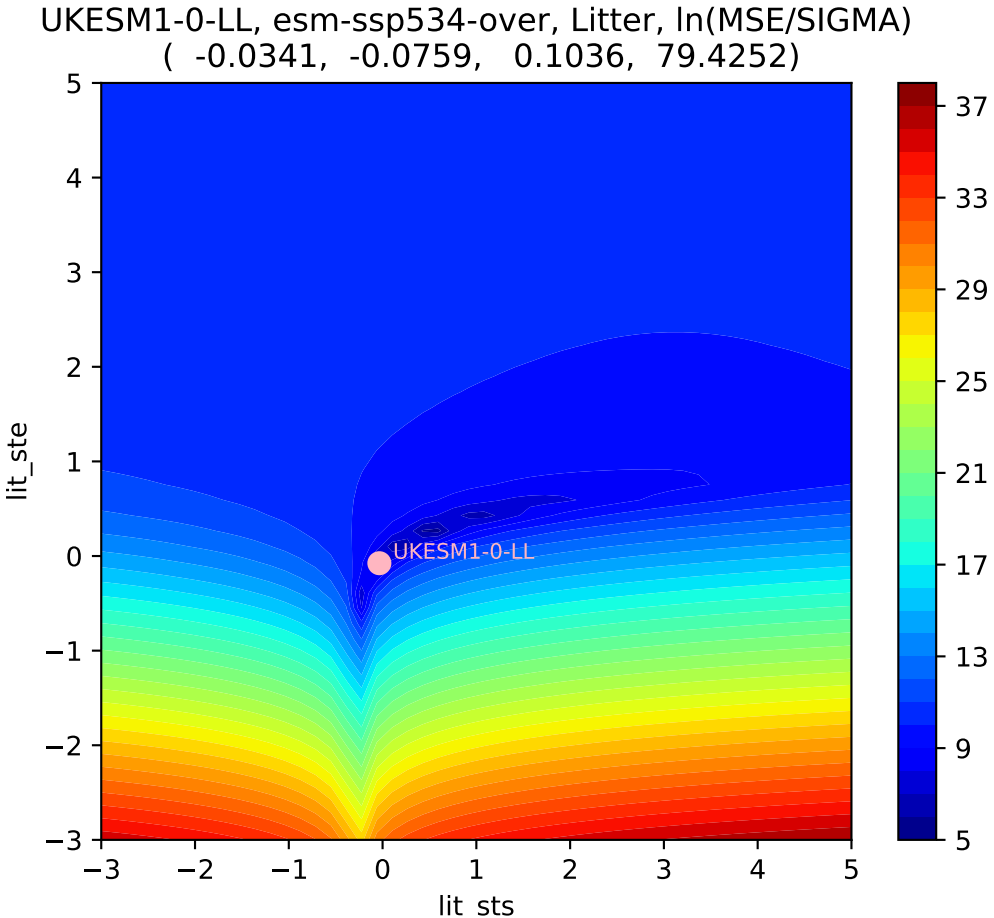

UKESM1-0-LL, esm-ssp534-over, Li
ESM-Fit
Litter, ESM - FIT
Year

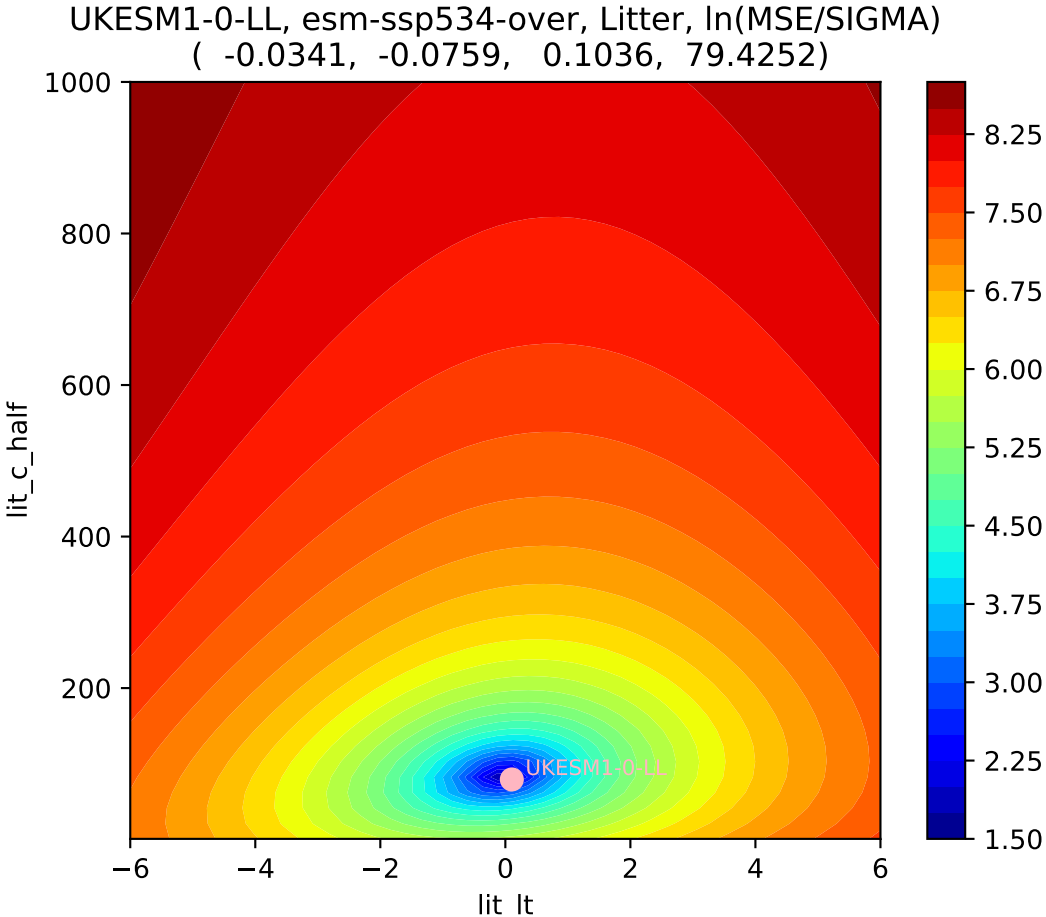

UKESM1-0-LL, esm-ssp534-over, Litter
ESM
Fit
Litter
ΔT

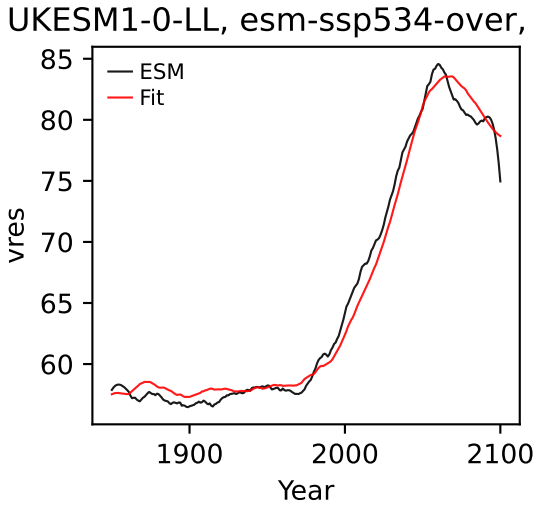

UKESM1-0-LL, esm-ssp534-over, Li
ESM-Fit
Litter, ESM - FIT
ΔT

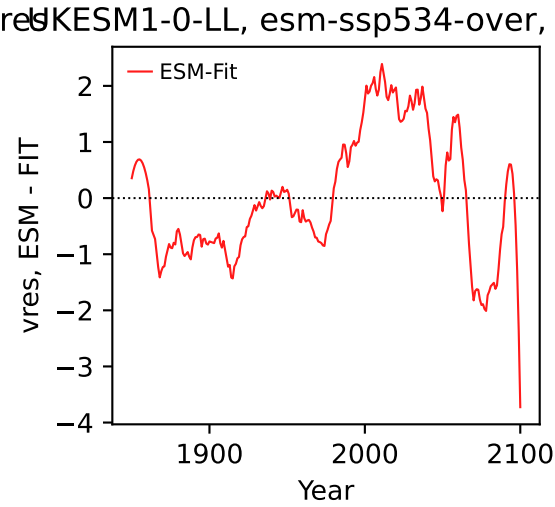

UKESM1-0-LL, esm-ssp534-over, Litter
ESM
Fit
Litter
c_atm

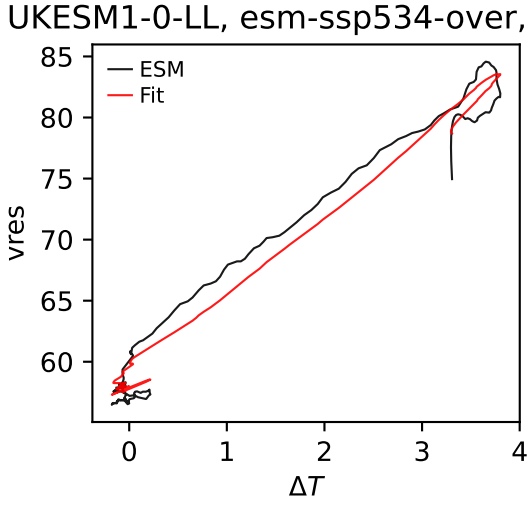

UKESM1-0-LL, esm-ssp534-over, Li
ESM-Fit
Litter, ESM - FIT
c_atm

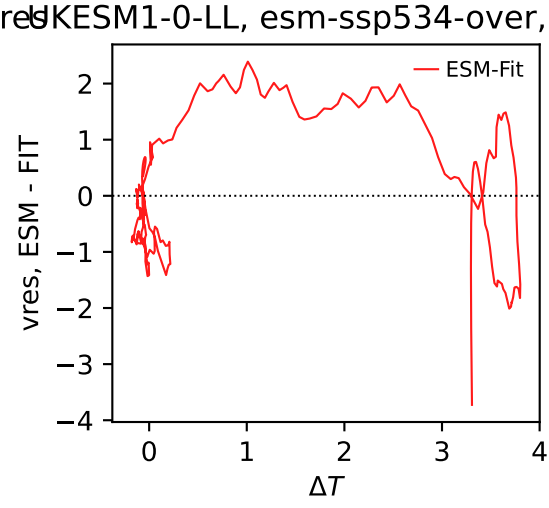

UKESM1-0-LL, esm-ssp534-over, Litter, ln(MSE/SIGMA)
(-0.0341, -0.0759, 0.1036, 79.4252)
UKESM1-0-LL
lit_ste
lit_sts
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
37
33
29
25
21
17
13
9
5

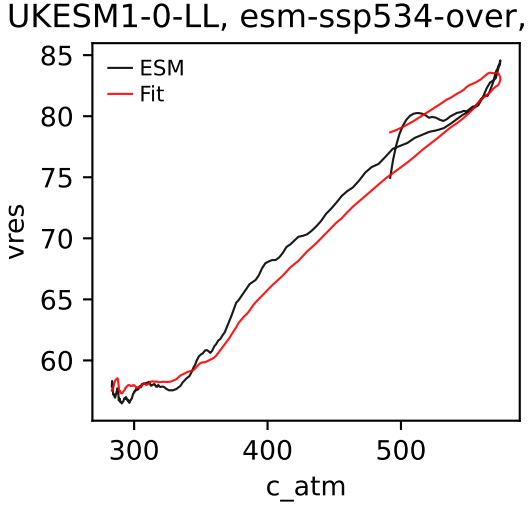

UKESM1-0-LL, esm-ssp534-over, Litter, ln(MSE/SIGMA)
(-0.0341, -0.0759, 0.1036, 79.4252)
1000
800
600
400
200
lit_c_half
−6
−4
−2
0
2
4
6
lit_lt
UKESM1-0-LL
8.25
7.50
6.75
6.00
5.25
4.50
3.75
3.00
2.25
1.50

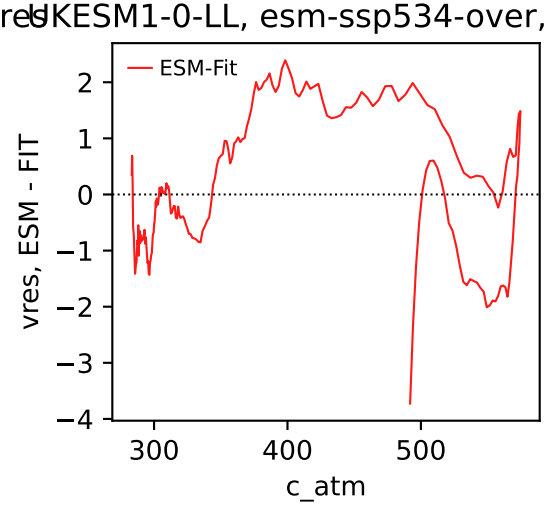

UKESM1-0-LL, esm-ssp534-over, vres
ESM
Fit
vres
Year

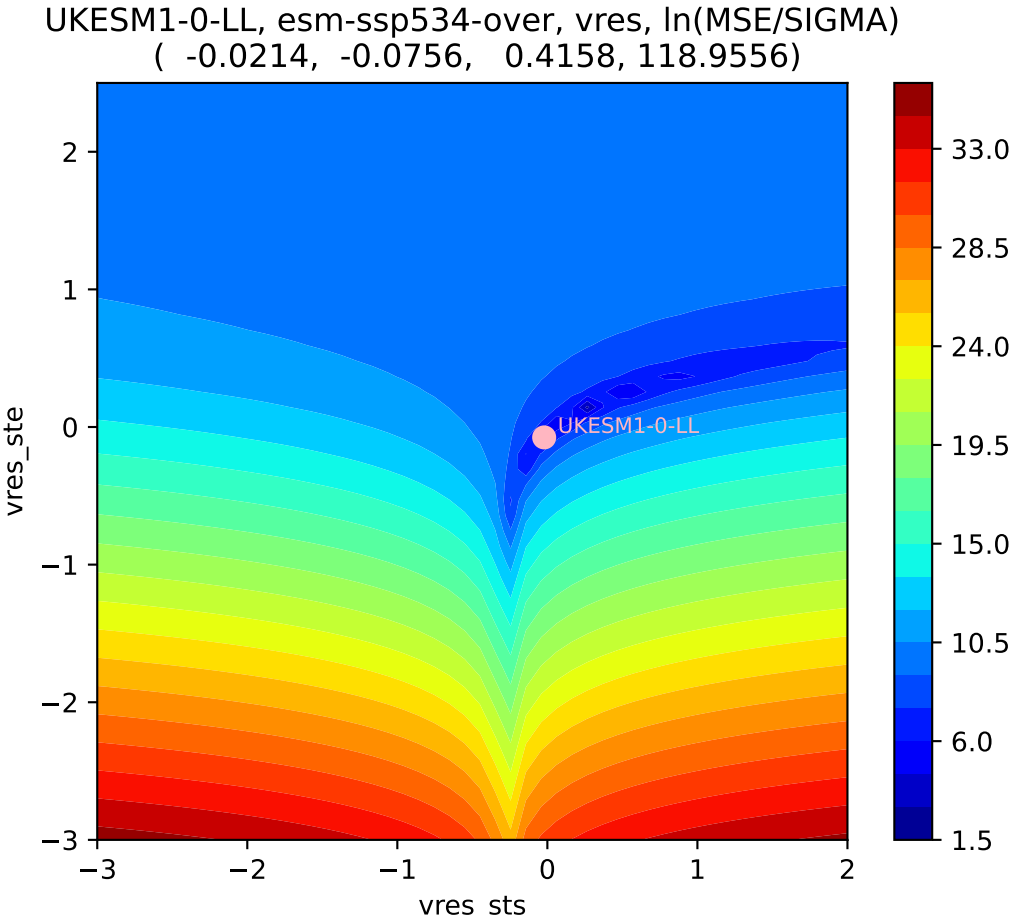

UKESM1-0-LL, esm-ssp534-over, v
ESM-Fit
vres, ESM - FIT
Year

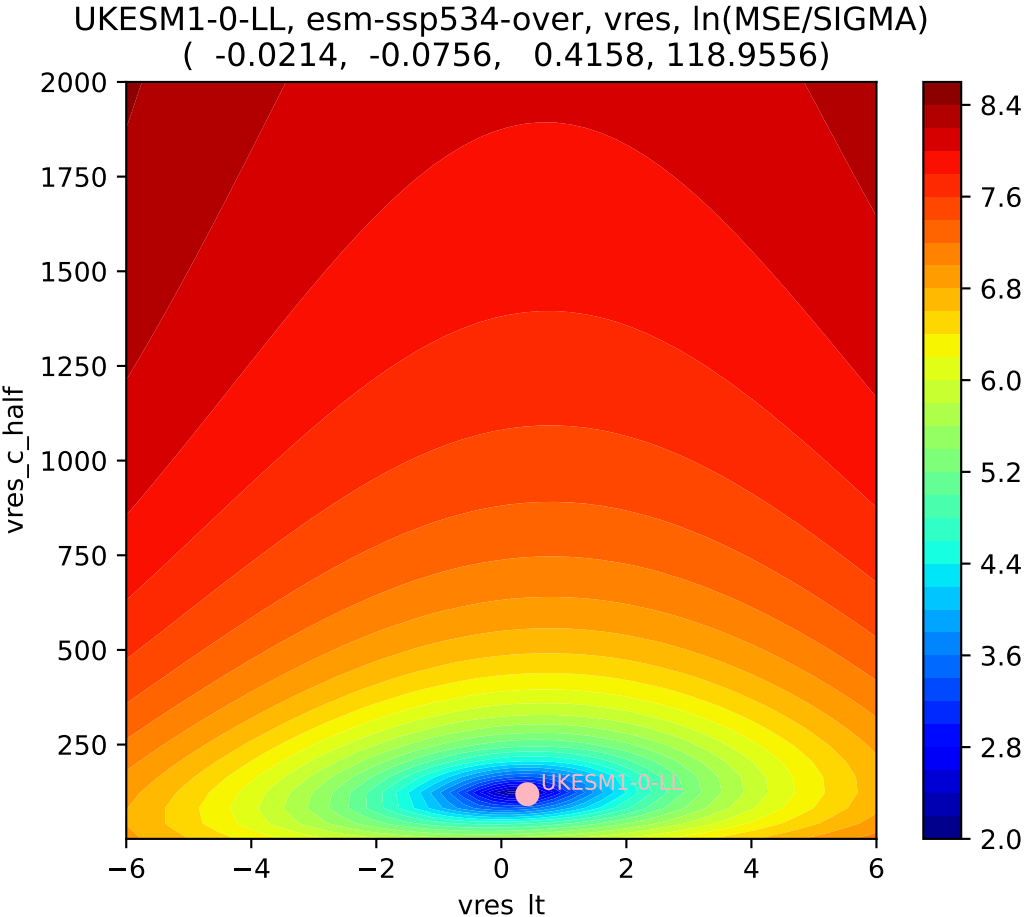

UKESM1-0-LL, esm-ssp534-over, vres
ESM
Fit
vres
ΔT

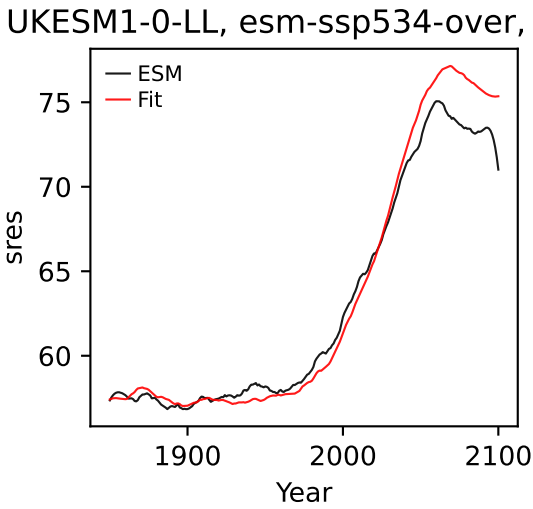

UKESM1-0-LL, esm-ssp534-over, v
ESM-Fit
vres, ESM - FIT
ΔT

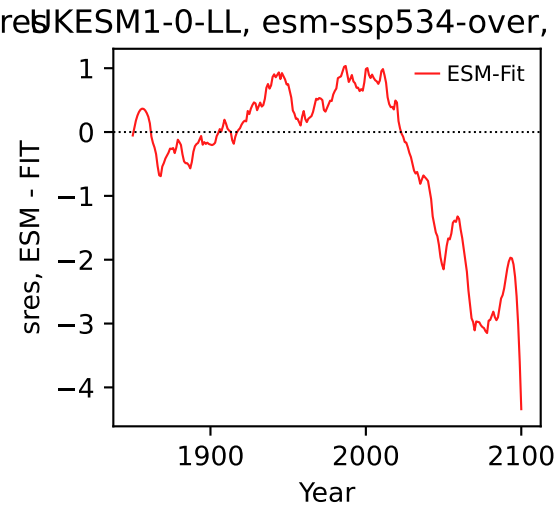

UKESM1-0-LL, esm-ssp534-over, vres
ESM
Fit
vres
c_atm

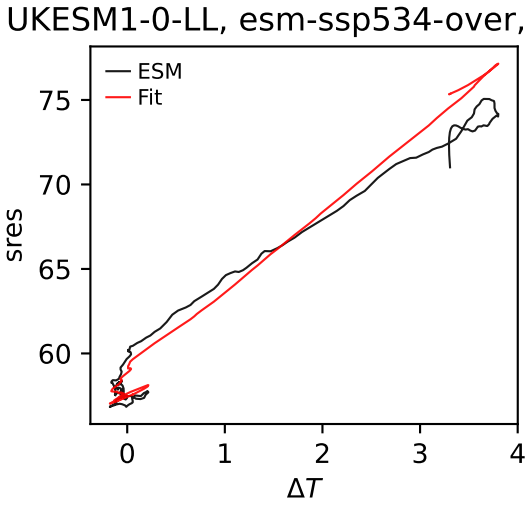

UKESM1-0-LL, esm-ssp534-over, v
ESM-Fit
vres, ESM - FIT
c_atm

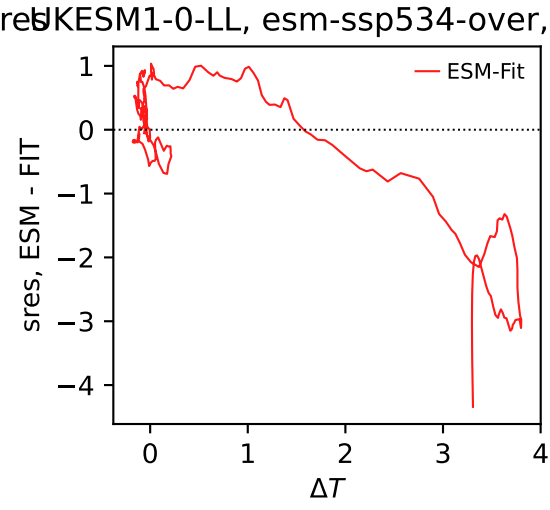

UKESM1-0-LL, esm-ssp534-over, vres, ln(MSE/SIGMA)
(-0.0214, -0.0756, 0.4158, 118.9556)
UKESM1-0-LL
vres_ste
vres_sts
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
33.0
28.5
24.0
19.5
15.0
10.5
6.0
1.5

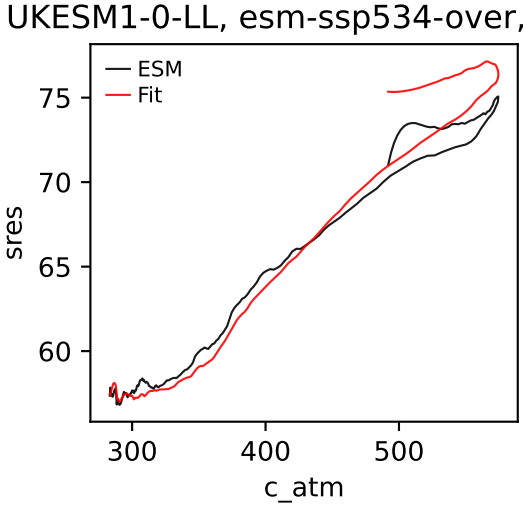

UKESM1-0-LL, esm-ssp534-over, vres, ln(MSE/SIGMA)
(-0.0214, -0.0756, 0.4158, 118.9556)
vres_c_half
vres_lt
UKESM1-0-LL
2000
1750
1500
1250
1000
750
500
250
−6
−4
−2
0
2
4
6
8.4
7.6
6.8
6.0
5.2
4.4
3.6
2.8
2.0

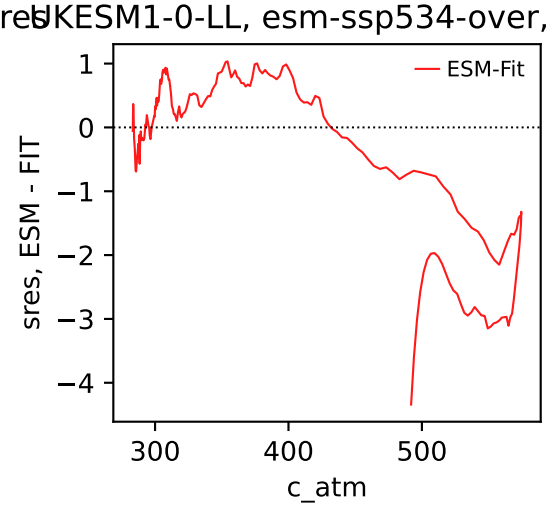

UKESM1-0-LL, esm-ssp534-over, sres
ESM
Fit
sres
Year

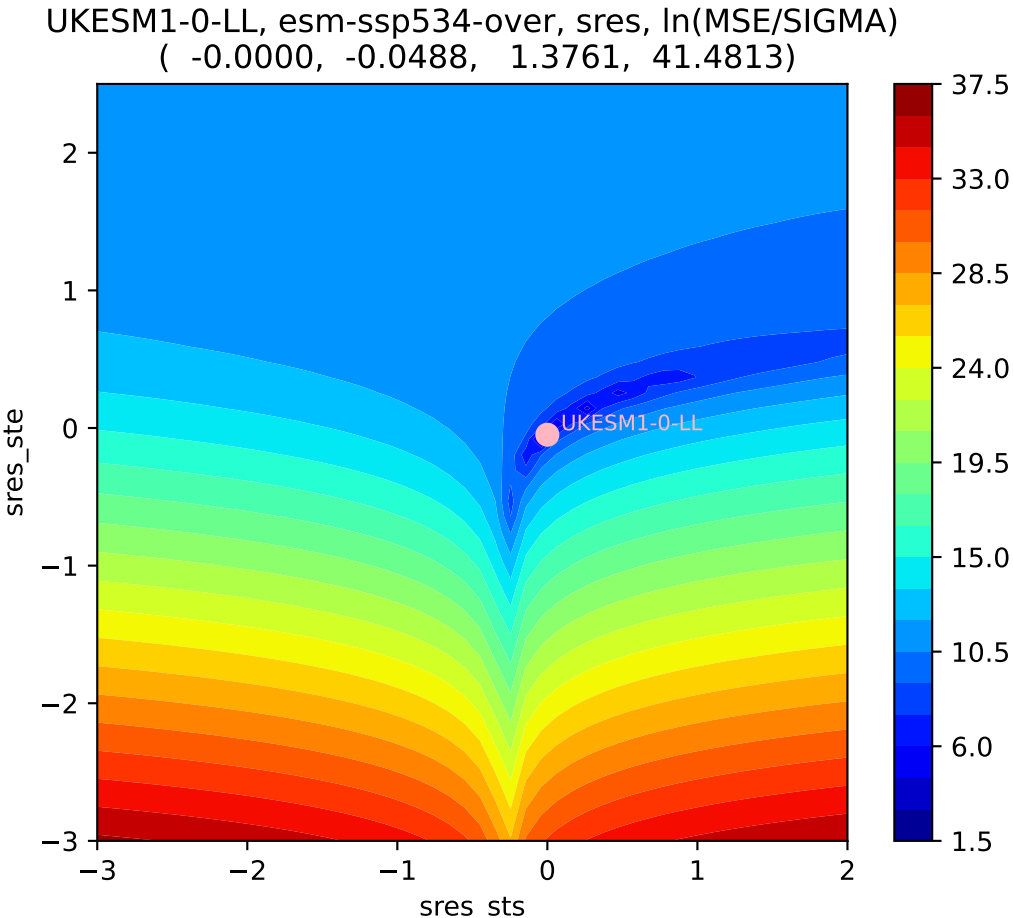

UKESM1-0-LL, esm-ssp534-over, s
ESM-Fit
sres, ESM - FIT
Year

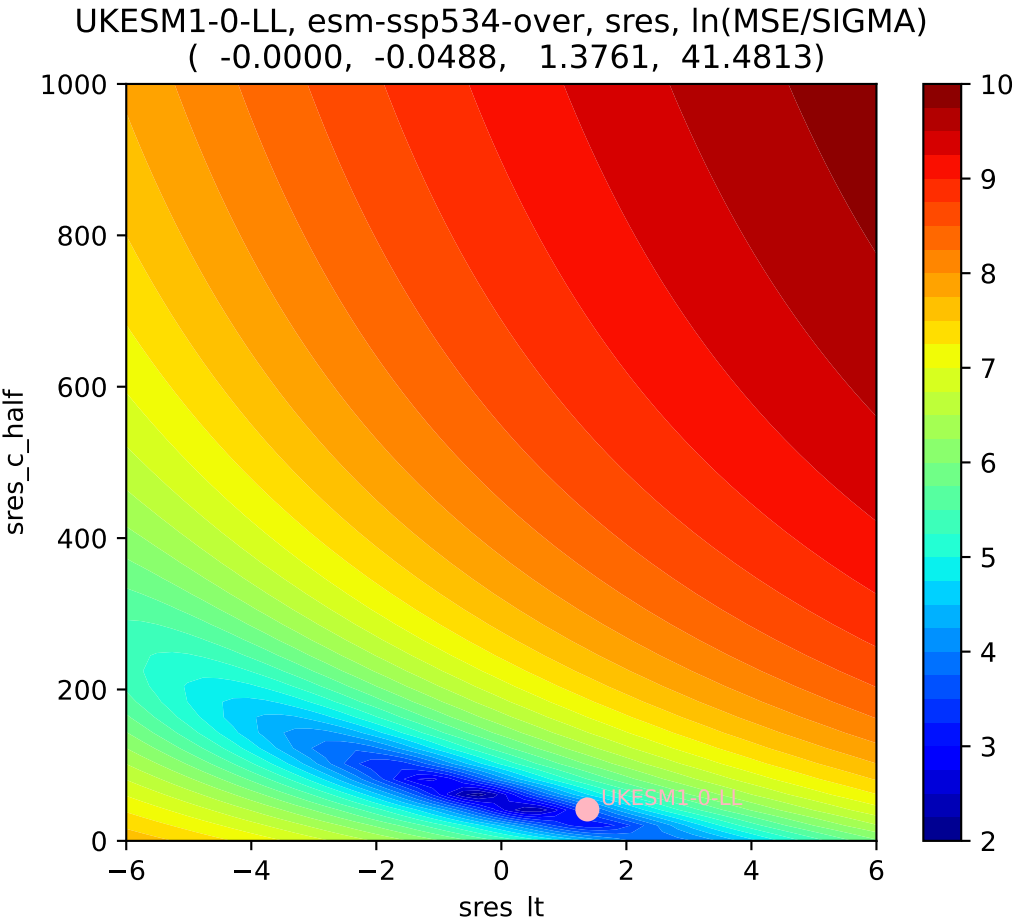

UKESM1-0-LL, esm-ssp534-over, sres
ESM
Fit
sres
ΔT


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)
(-0.0000, -0.0488, 1.3761, 41.4813)
UKESM1-0-LL
sres_ste
sres_sts
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
37.5
33.0
28.5
24.0
19.5
15.0
10.5
6.0
1.5


UKESM1-0-LL, esm-ssp534-over, sres, ln(MSE/SIGMA)
(-0.0000, -0.0488, 1.3761, 41.4813)
sres_c_half
sres_lt
UKESM1-0-LL
1000
800
600
400
200
0
−6
−4
−2
0
2
4
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10
9
8
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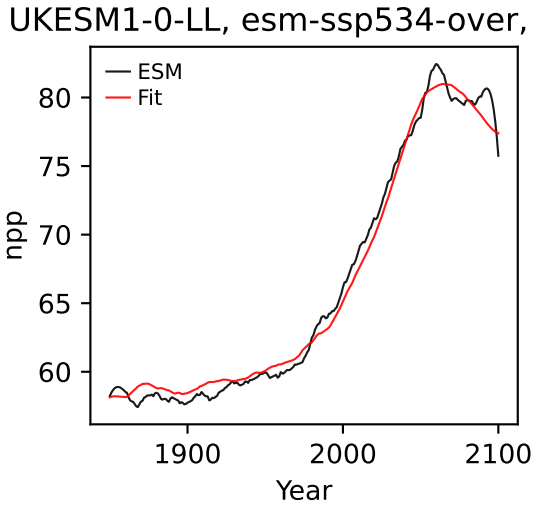
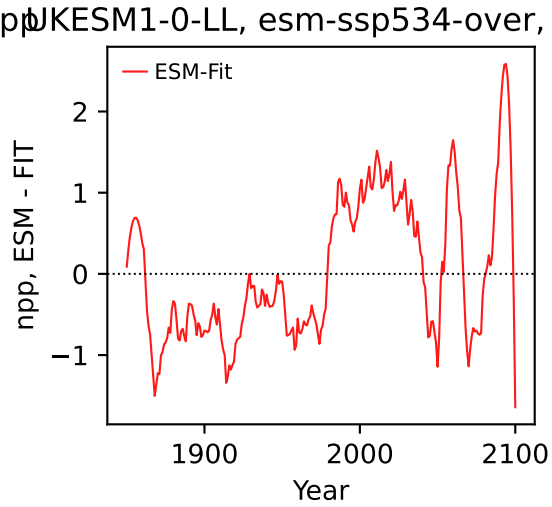
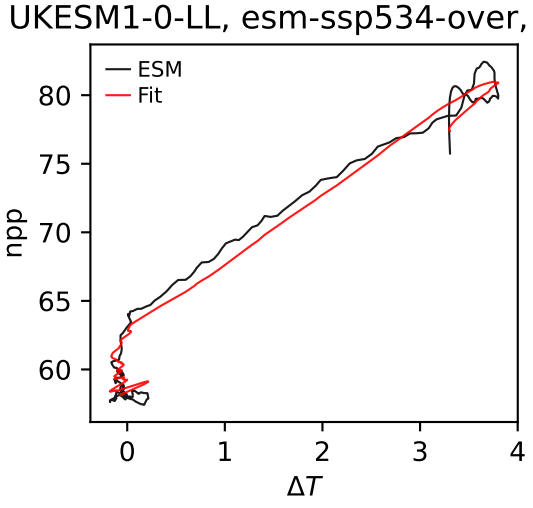
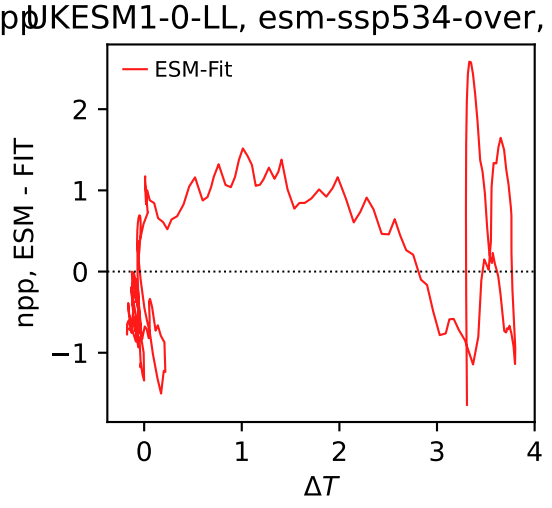
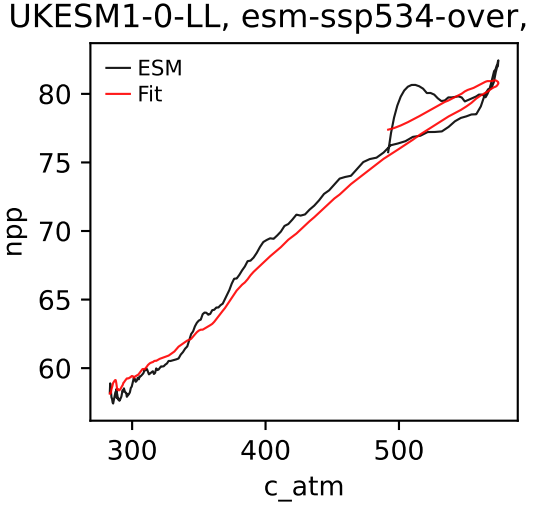
5
4
3
2

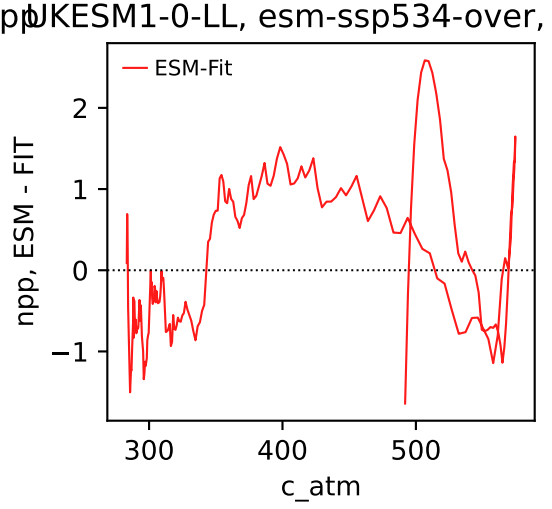

UKESM1-0-LL, esm-ssp534-over, npp
ESM
Fit
npp
Year

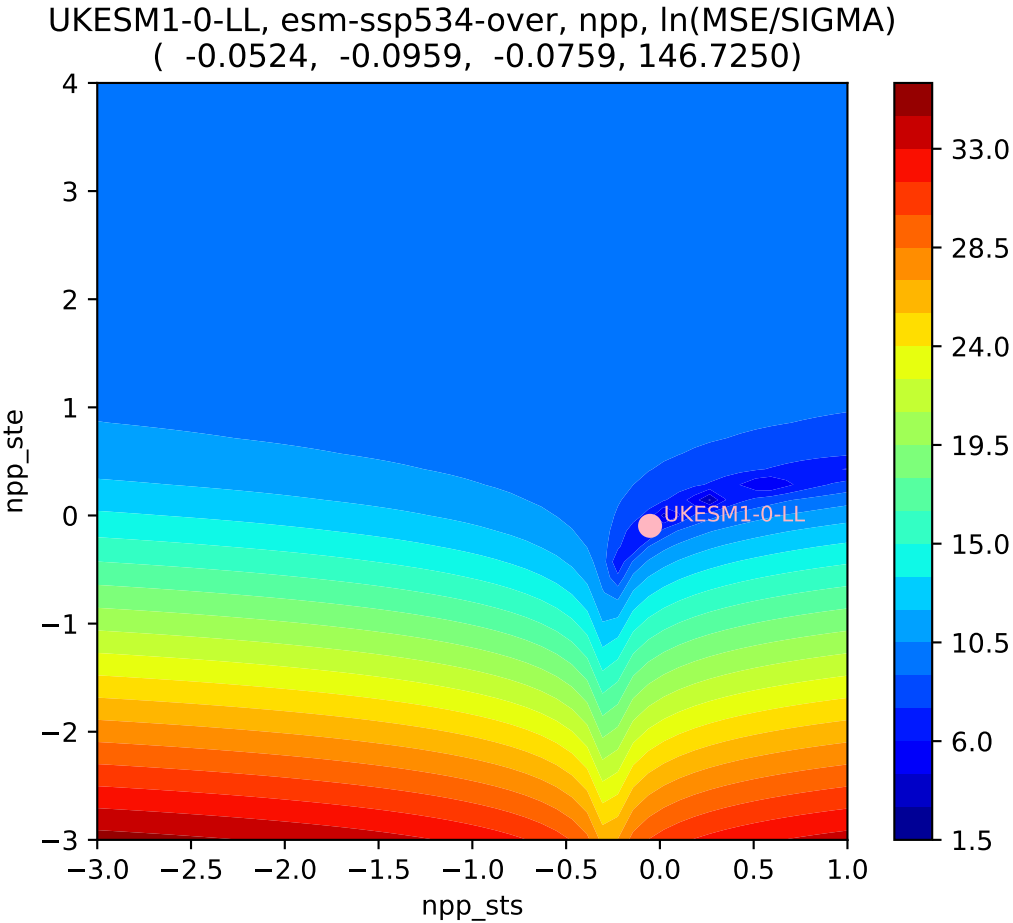

UKESM1-0-LL, esm-ssp534-over, n
ESM-Fit
npp, ESM - FIT
Year


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)
(-0.0524, -0.0959, -0.0759, 146.7250)
npp_ste
npp_sts
UKESM1-0-LL
4
3
2
1
0
−1
−2
−3
−3.0
−2.5
−2.0
−1.5
−1.0
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0.5
1.0
33.0
28.5
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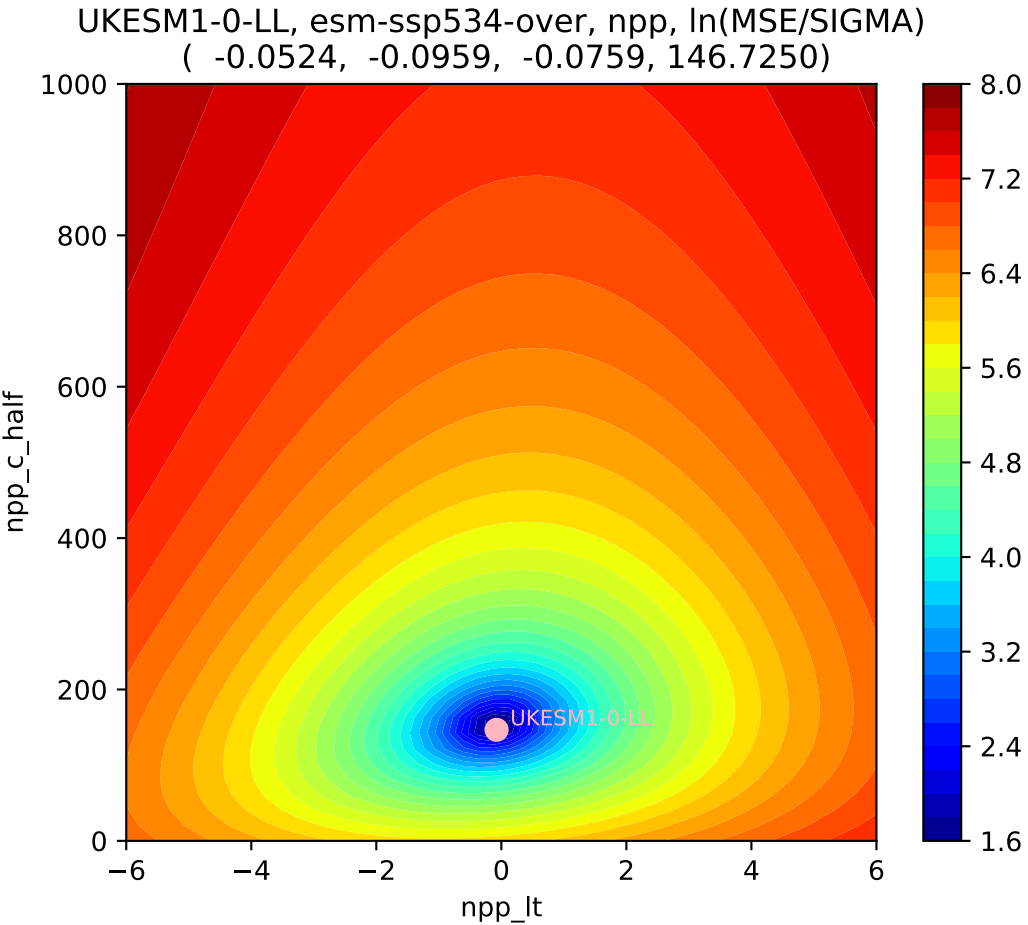
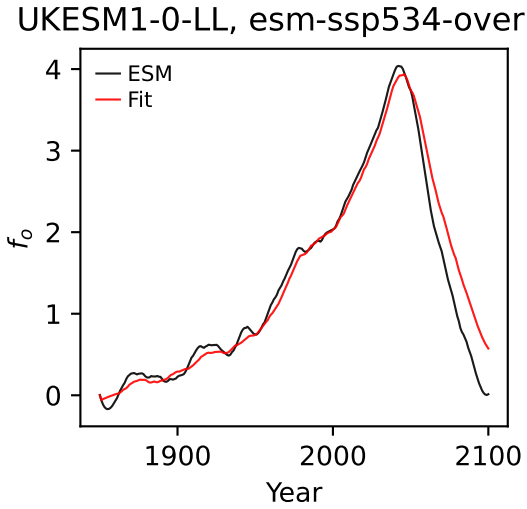
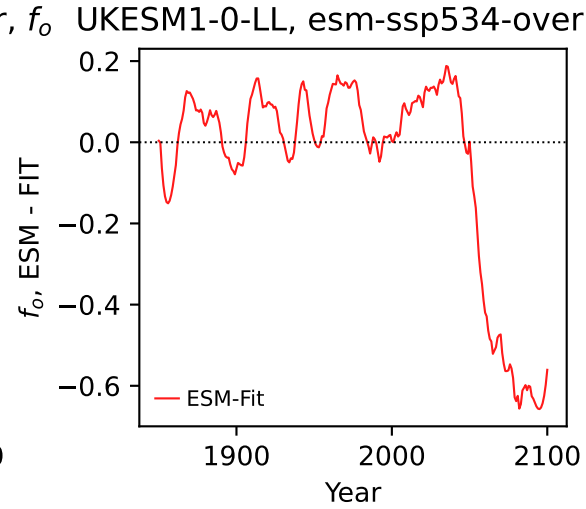
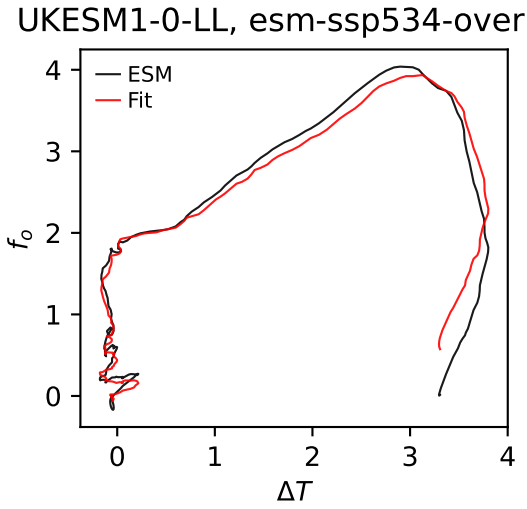

UKESM1-0-LL, esm-ssp534-over, npp, ln(MSE/SIGMA)
(-0.0524, -0.0959, -0.0759, 146.7250)
npp_c_half
npp_lt
UKESM1-0-LL
1000
800
600
400
200
0
−6
−4
−2
0
2
4
6
8.0
7.2
6.4
5.6
4.8
4.0
3.2
2.4
1.6


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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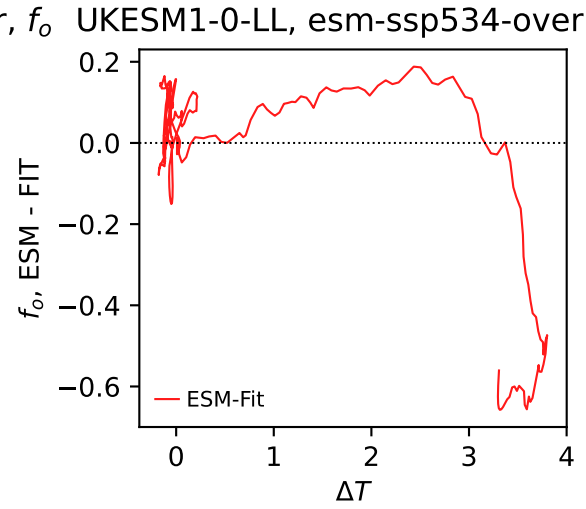
ESM
Fit
f_o
ΔT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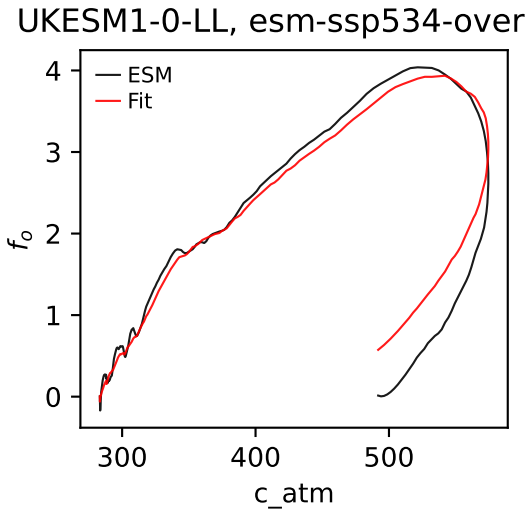
ESM-Fit
ΔT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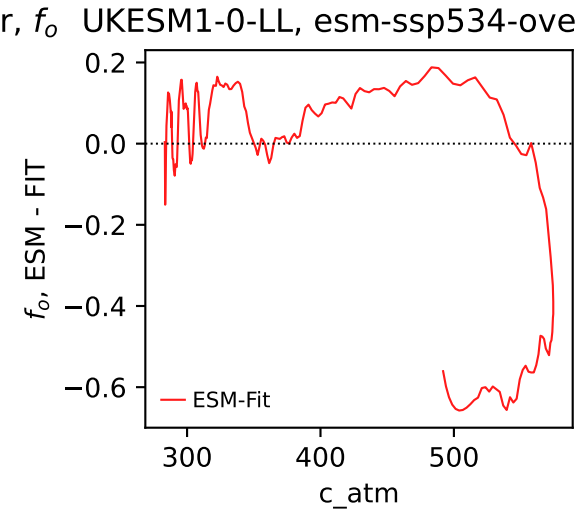
ESM
Fit
f_o
c_atm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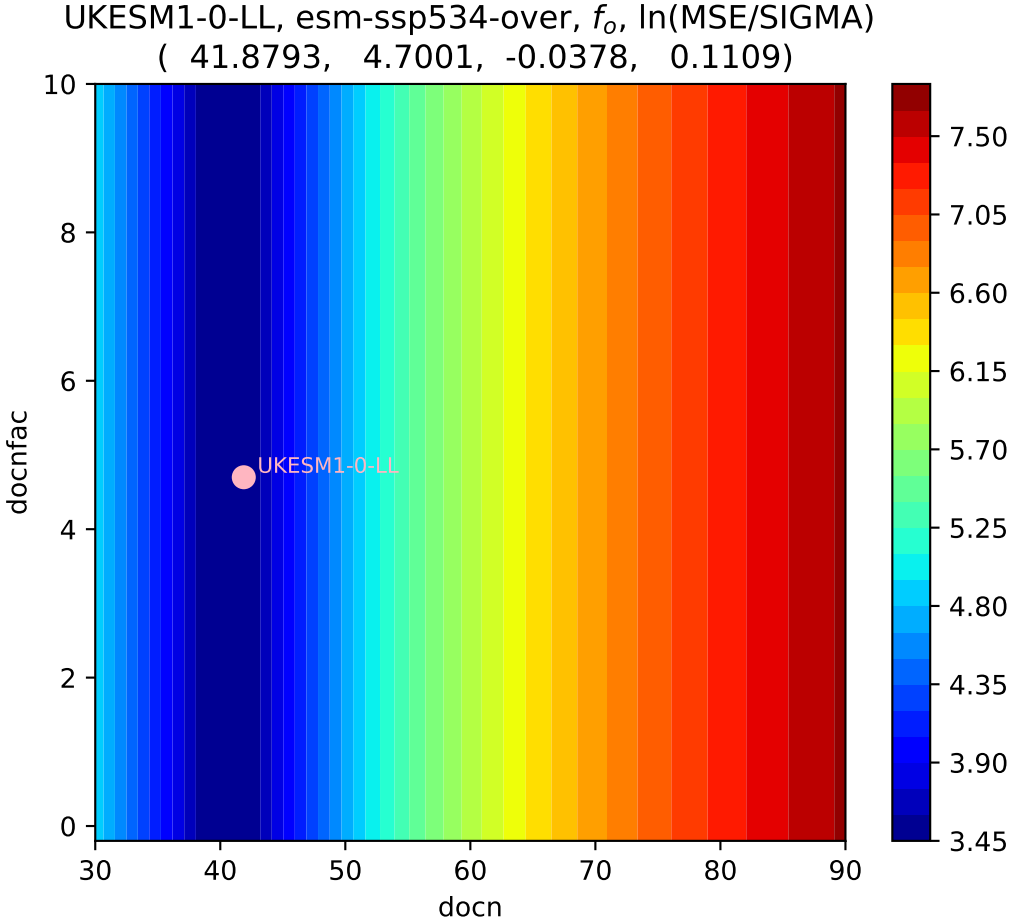
f_o, ESM - FIT
ESM-Fit
c_atm


UKESM1-0-LL, esm-ssp534-over, f_o, ln(MSE/SIGMA)
(41.8793, 4.7001, -0.0378, 0.1109)
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
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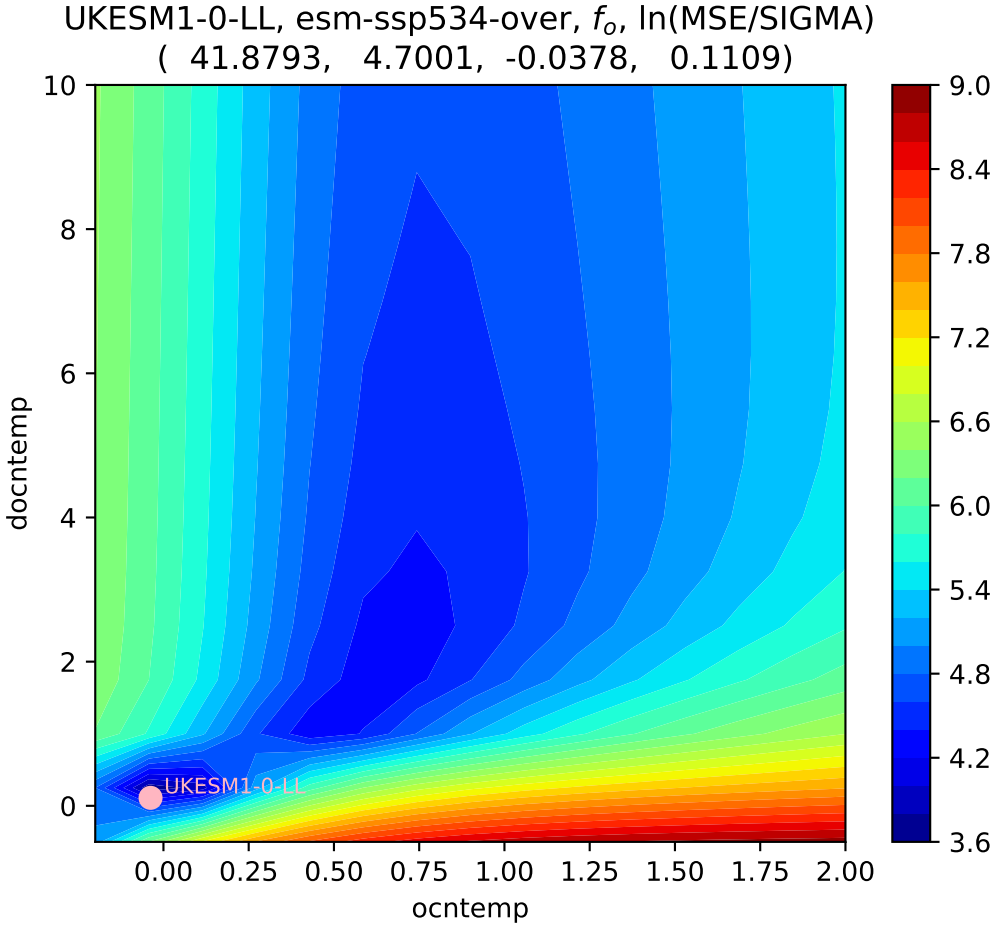
3.90
3.45


UKESM1-0-LL, esm-ssp534-over, f_o, ln(MSE/SIGMA)
(41.8793, 4.7001, -0.0378, 0.1109)
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