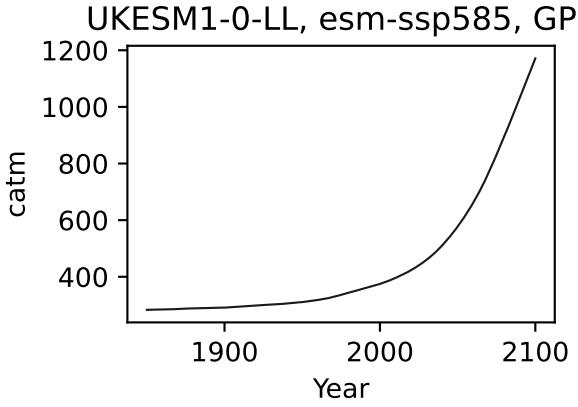
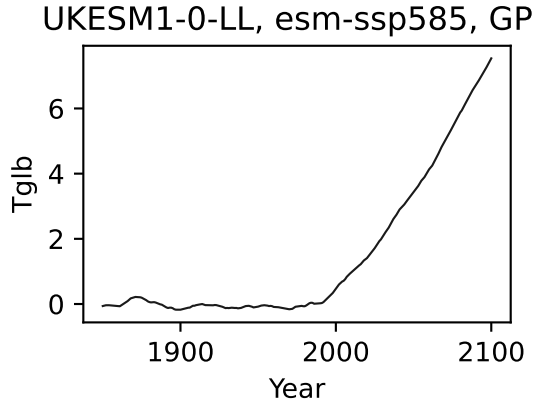

UKESM1-0-LL, esm-ssp585, GPP
catm
1200
1000
800
600
400
1900
2000
2100
Year


UKESM1-0-LL, esm-ssp585, GPP
Tglb
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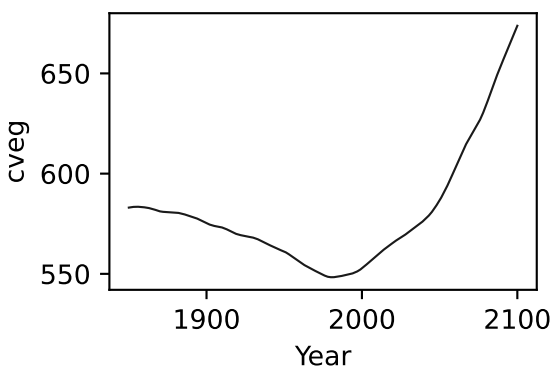
1900
2000
2100
Year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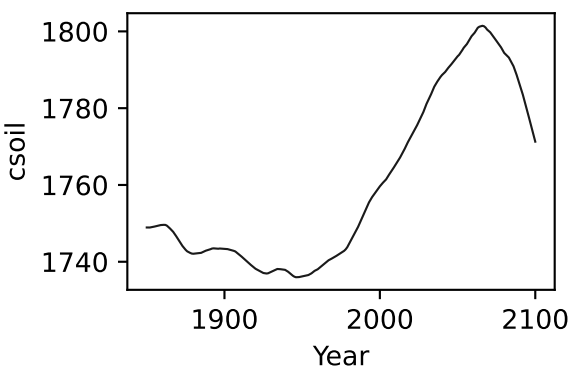
2000
2100
Year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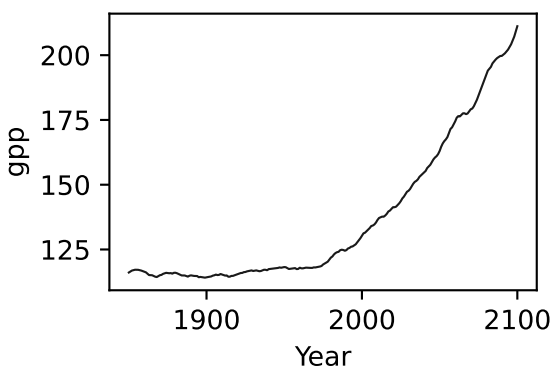
2100
Year


gpp
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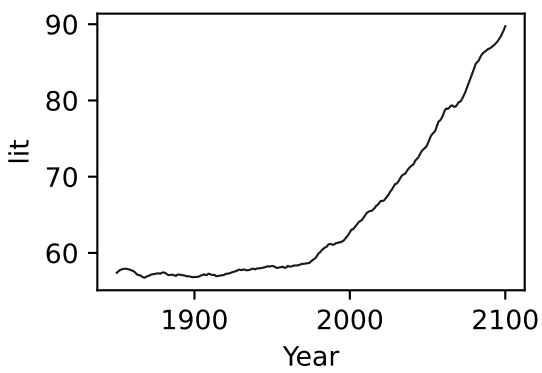
2100
Year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2000
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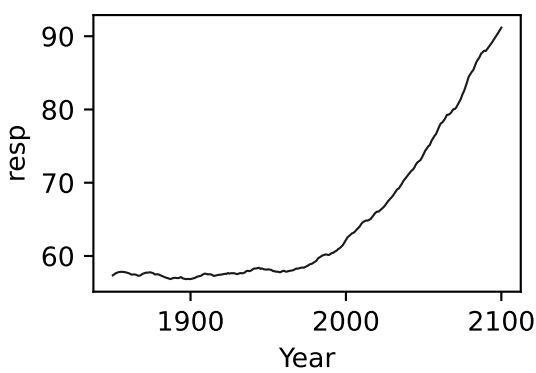
Year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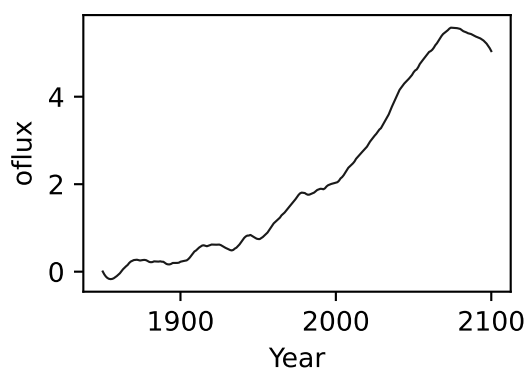
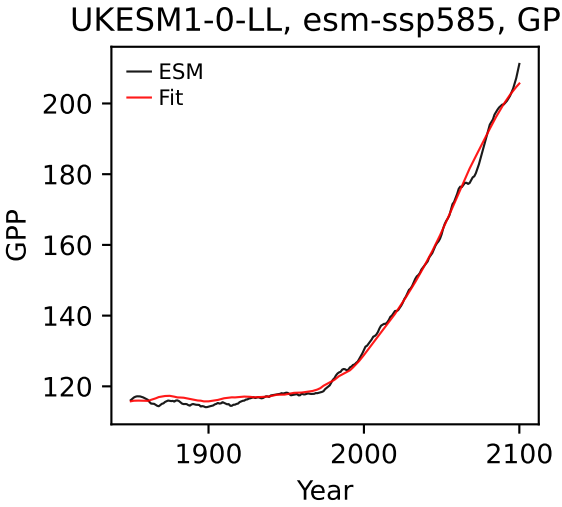
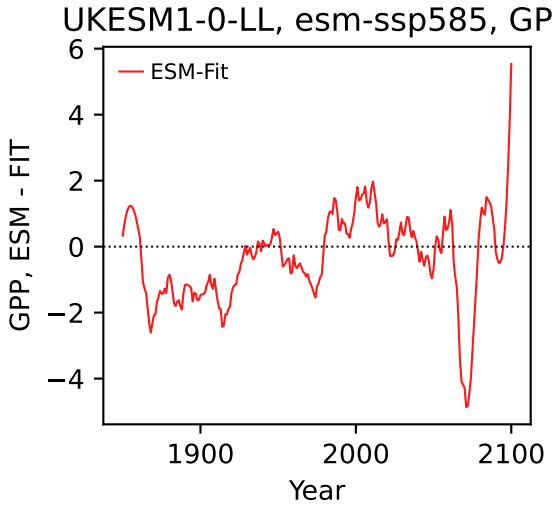
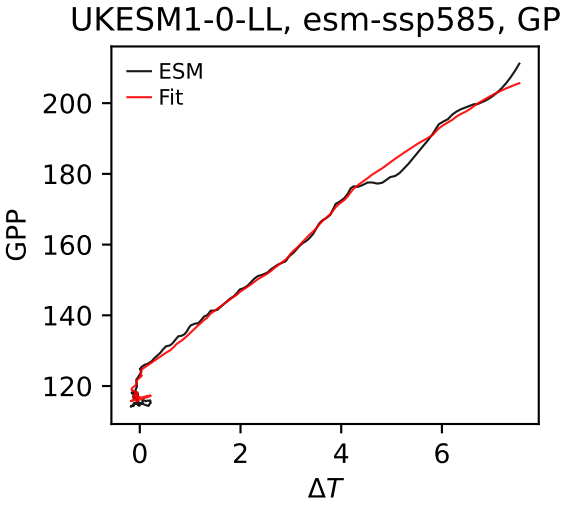
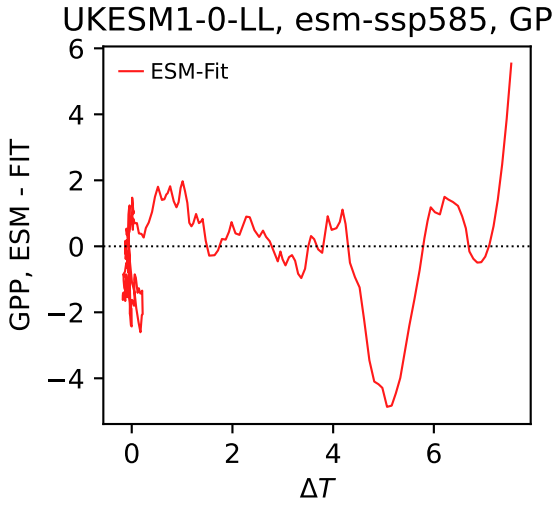
2000
2100
Year

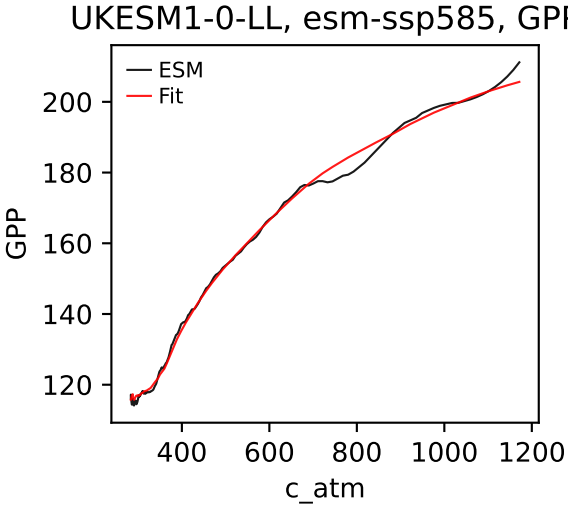

oflux
4
2
0
1900
2000
2100
Year

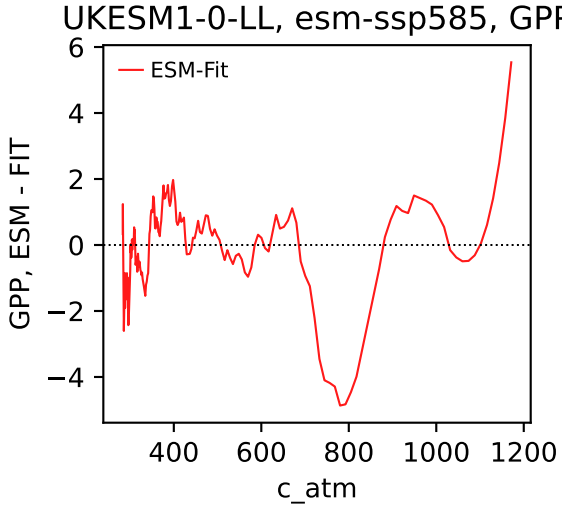

UKESM1-0-LL, esm-ssp585, GPP
ESM
Fit
GPP
Year

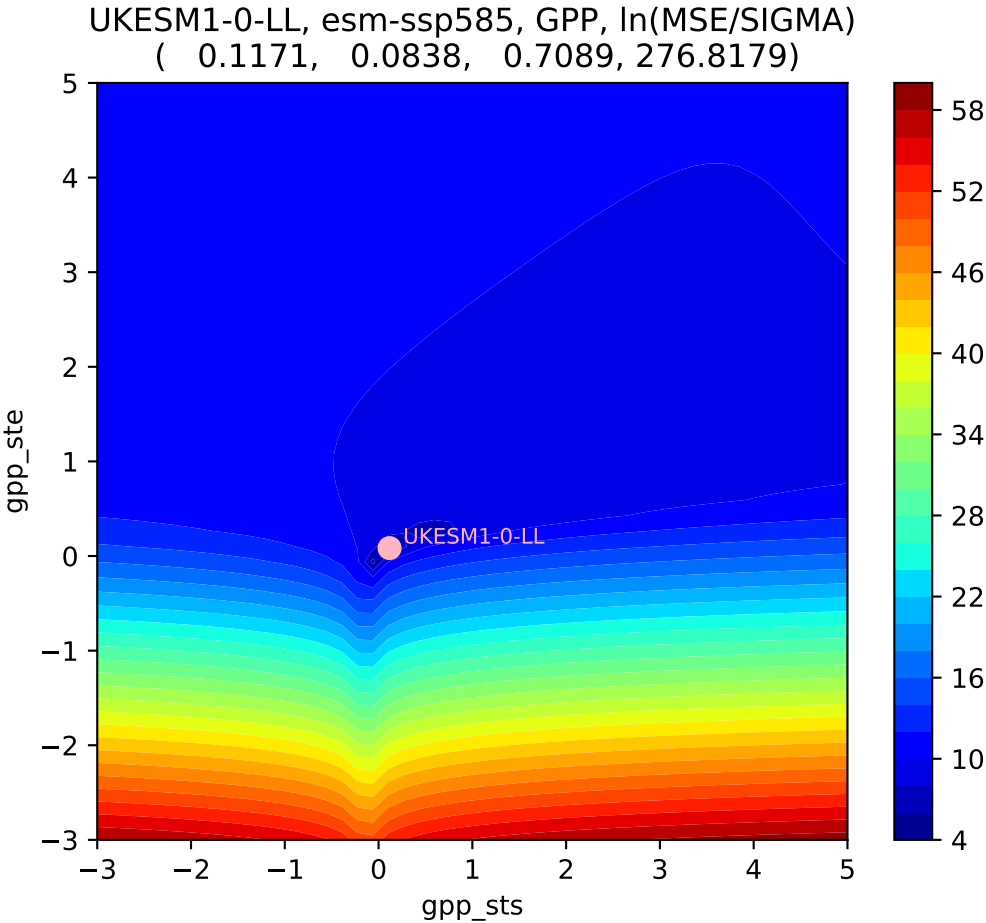

UKESM1-0-LL, esm-ssp585, GPP
ESM-Fit
GPP, ESM - FIT
Year

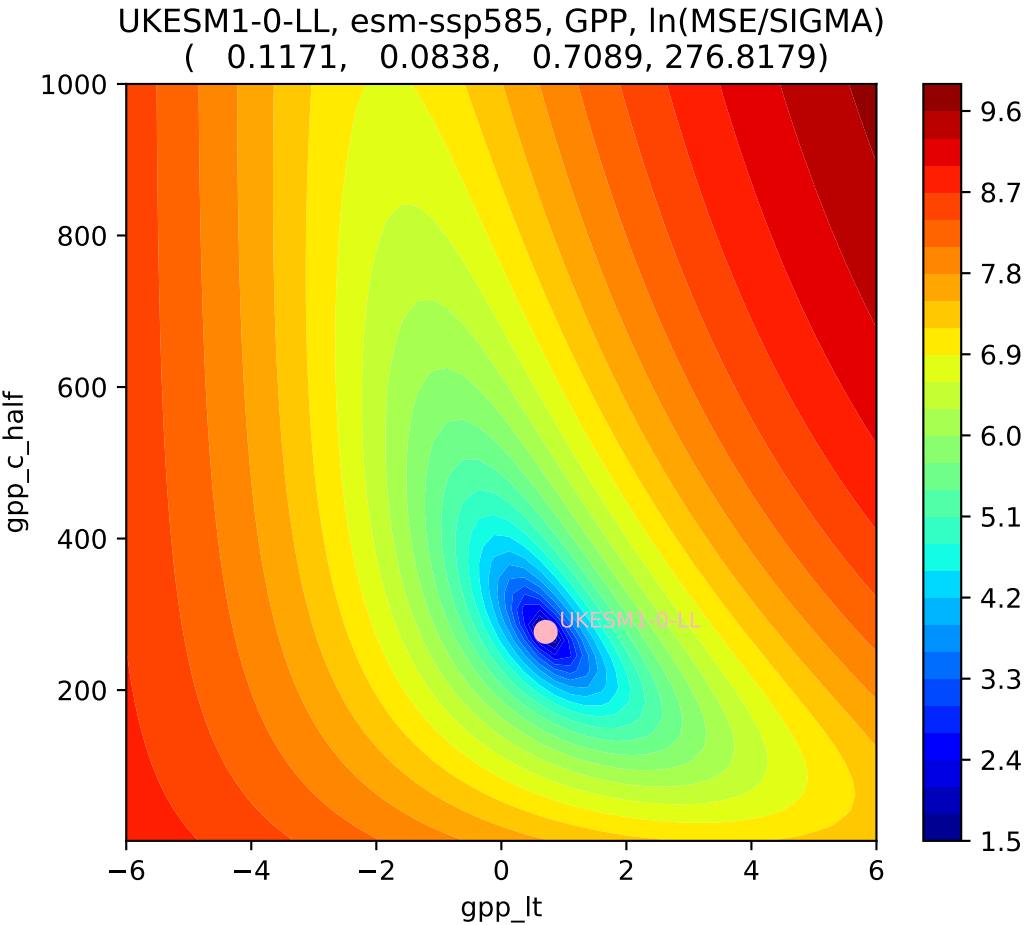

UKESM1-0-LL, esm-ssp585, GPP
ESM
Fit
GPP
ΔT

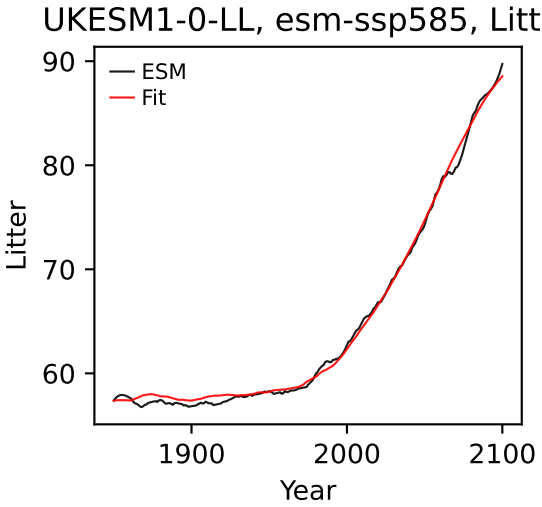

UKESM1-0-LL, esm-ssp585, GPP
ESM-Fit
GPP, ESM - FIT
ΔT

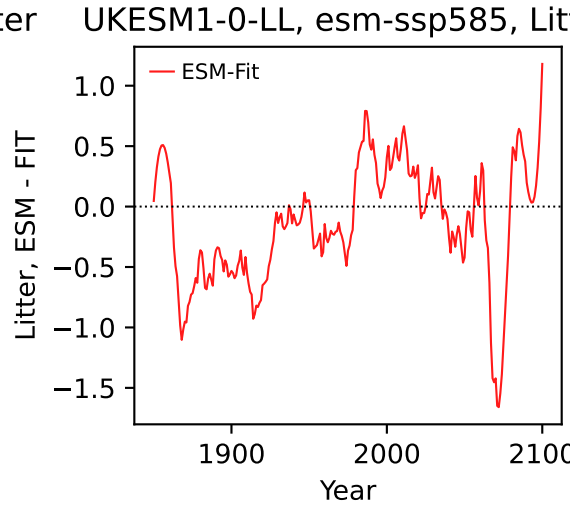

UKESM1-0-LL, esm-ssp585, GPP
ESM
Fit
GPP
c_atm

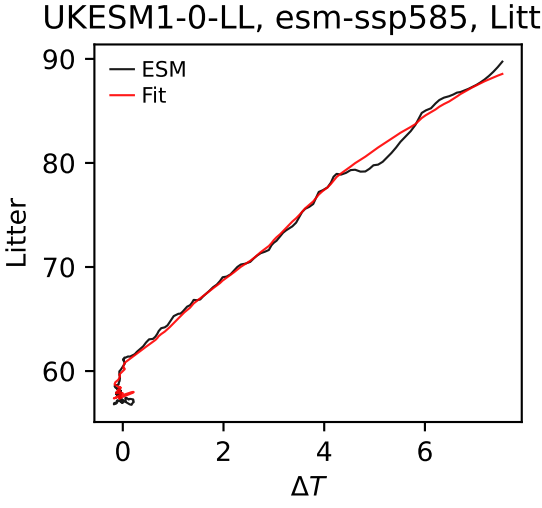

UKESM1-0-LL, esm-ssp585, GPP
ESM-Fit
GPP, ESM - FIT
c_atm

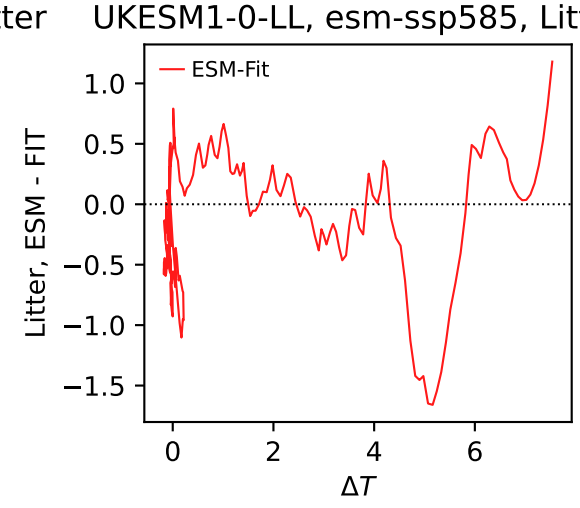

UKESM1-0-LL, esm-ssp585, GPP, ln(MSE/SIGMA)
(0.1171, 0.0838, 0.7089, 276.8179)
UKESM1-0-LL
gpp_ste
gpp_sts
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3
4
5
58
52
46
40
34
28
22
16
10
4

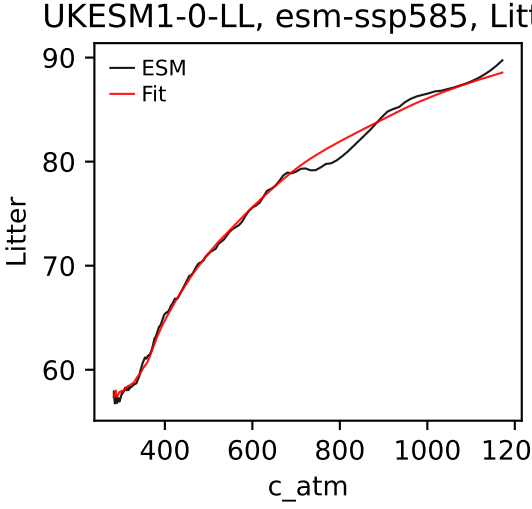

UKESM1-0-LL, esm-ssp585, GPP, ln(MSE/SIGMA)
(0.1171, 0.0838, 0.7089, 276.8179)
1000
800
600
400
200
gpp_c_half
−6
−4
−2
0
2
4
6
gpp_lt
UKESM1-0-LL
9.6
8.7
7.8
6.9
6.0
5.1
4.2
3.3
2.4
1.5

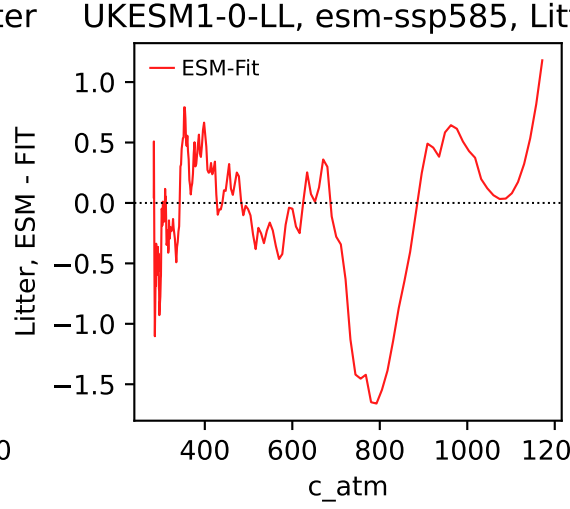

UKESM1-0-LL, esm-ssp585, Litter
ESM
Fit
Litter
Year

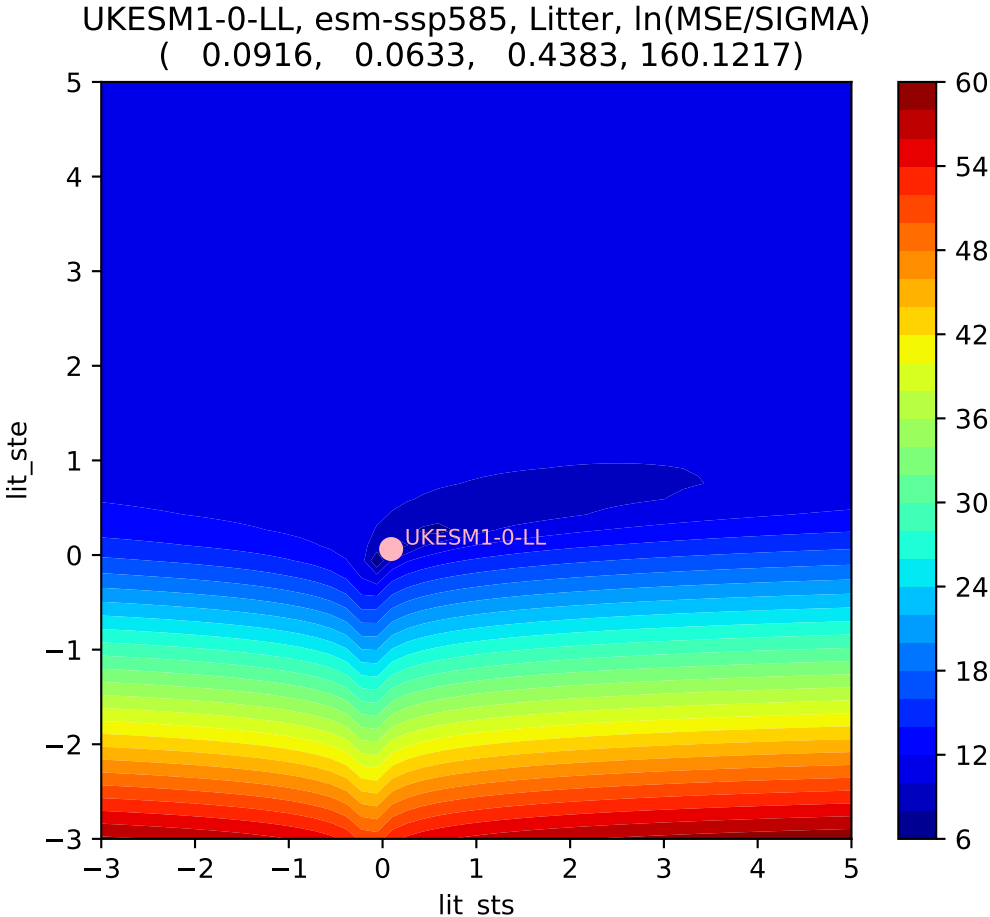

UKESM1-0-LL, esm-ssp585, Litte
ESM-Fit
Litter, ESM - FIT
Year


UKESM1-0-LL, esm-ssp585, Litter
ESM
Fit
Litter
ΔT


UKESM1-0-LL, esm-ssp585, Litte
ESM-Fit
Litter, ESM - FIT
ΔT


UKESM1-0-LL, esm-ssp585, Litter
ESM
Fit
Litter
c_atm


UKESM1-0-LL, esm-ssp585, Litte
ESM-Fit
Litter, ESM - FIT
c_atm


UKESM1-0-LL, esm-ssp585, Litter, ln(MSE/SIGMA)
(0.0916, 0.0633, 0.4383, 160.1217)
lit_ste
lit_sts
UKESM1-0-LL
5
4
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
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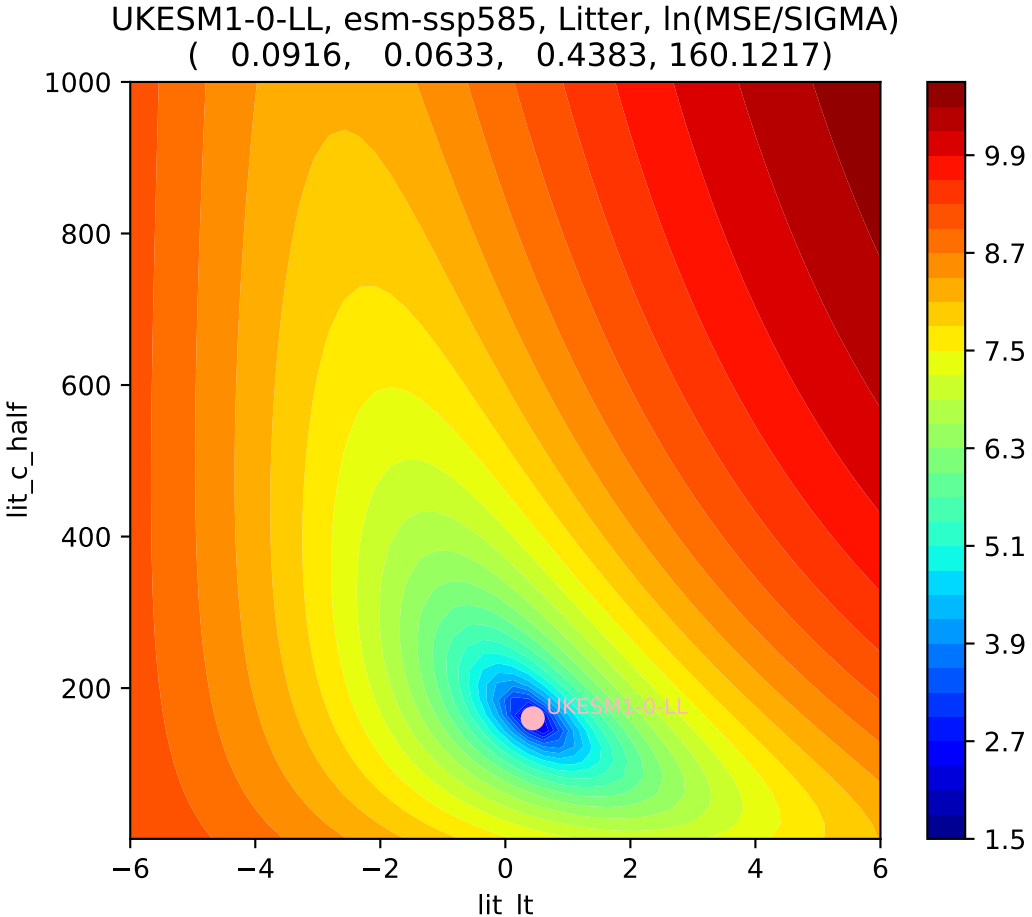
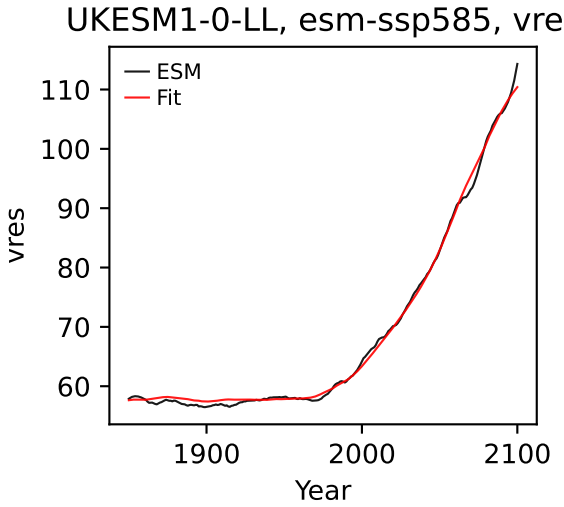
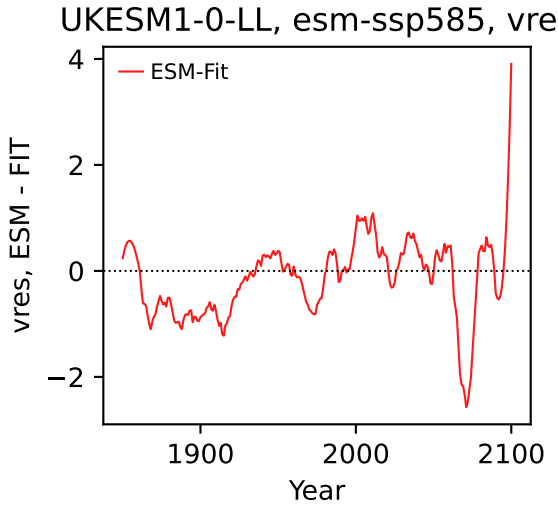
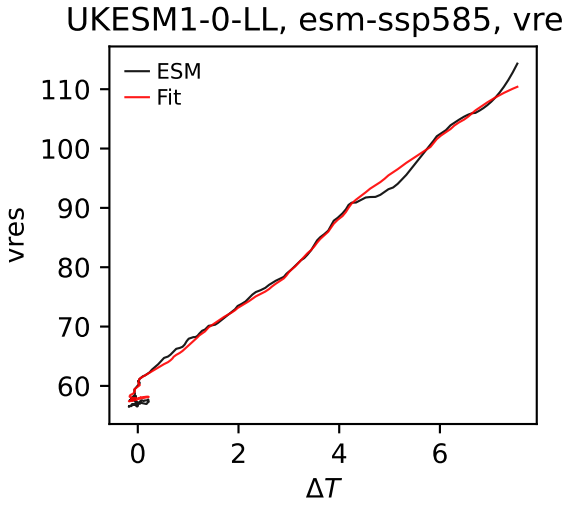
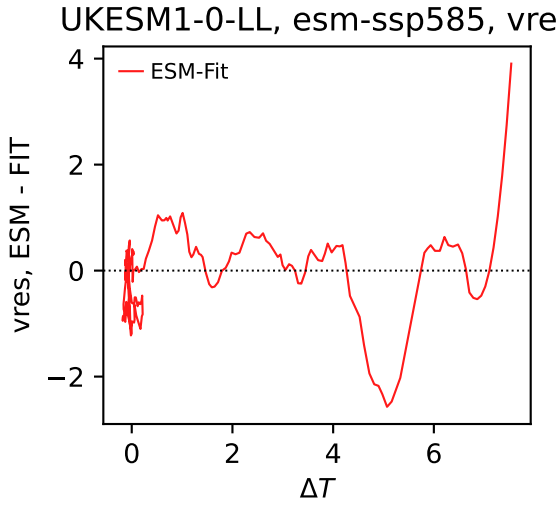
3
4
5
60
54
48
42
36
30
24
18
12
6

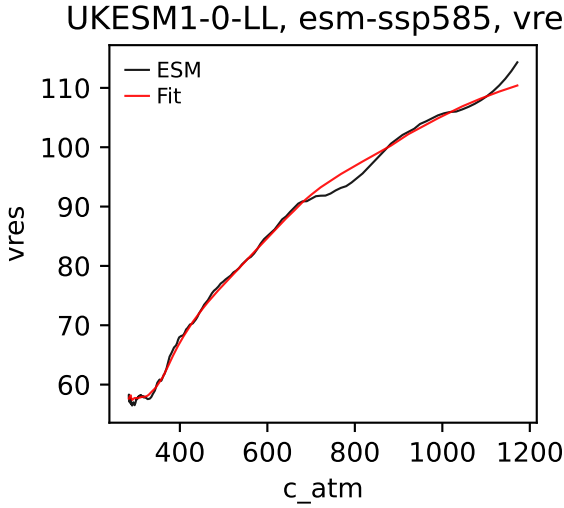

UKESM1-0-LL, esm-ssp585, Litter, ln(MSE/SIGMA)
(0.0916, 0.0633, 0.4383, 160.1217)
1000
800
600
400
200
lit_c_half
−6
−4
−2
0
2
4
6
lit_lt
UKESM1-0-LL
9.9
8.7
7.5
6.3
5.1
3.9
2.7
1.5

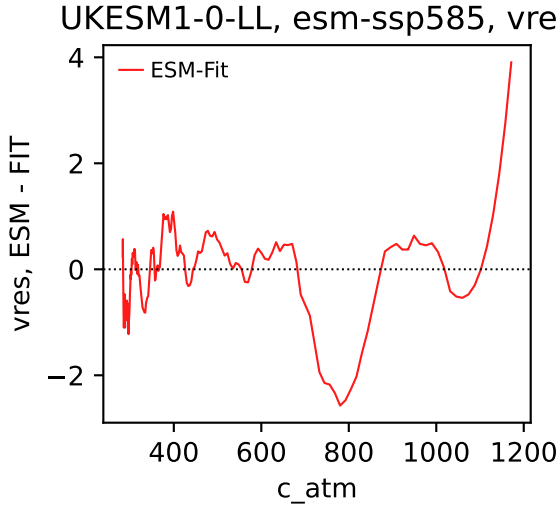

UKESM1-0-LL, esm-ssp585, vres
ESM
Fit
vres
Year

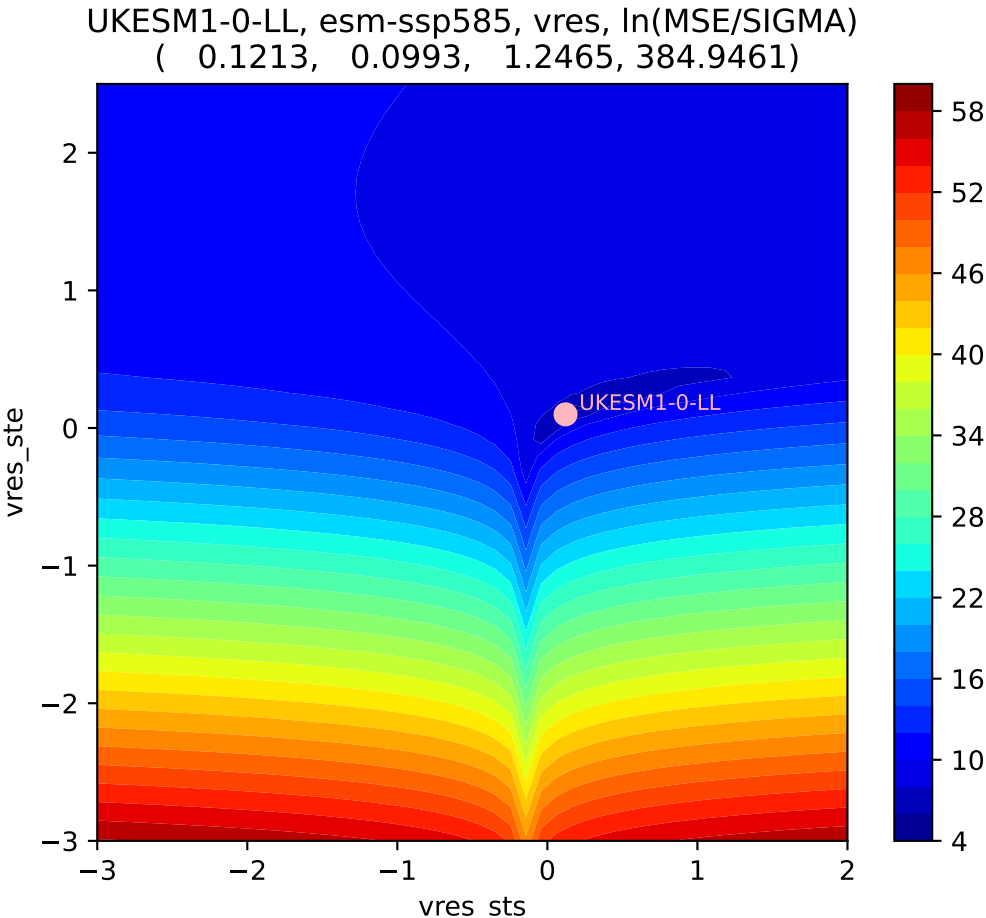

UKESM1-0-LL, esm-ssp585, vres
ESM-Fit
vres, ESM - FIT
Year

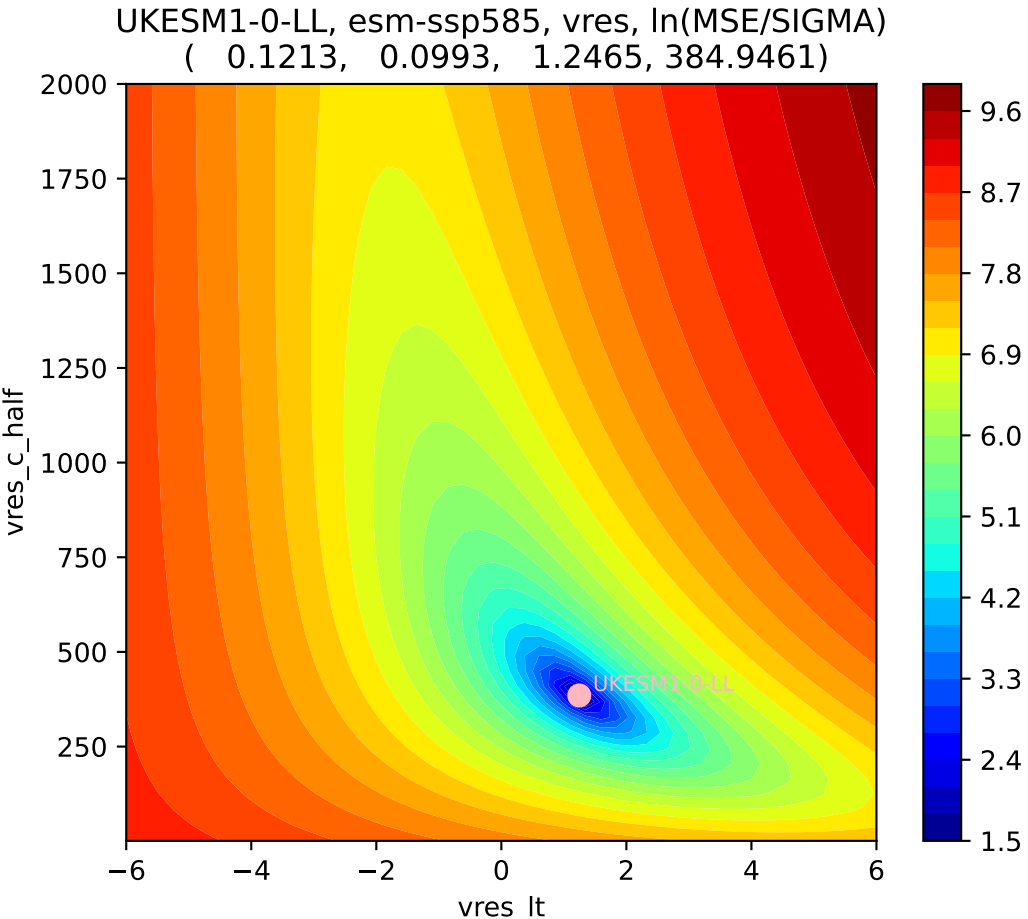

UKESM1-0-LL, esm-ssp585, vres
ESM
Fit
vres
ΔT

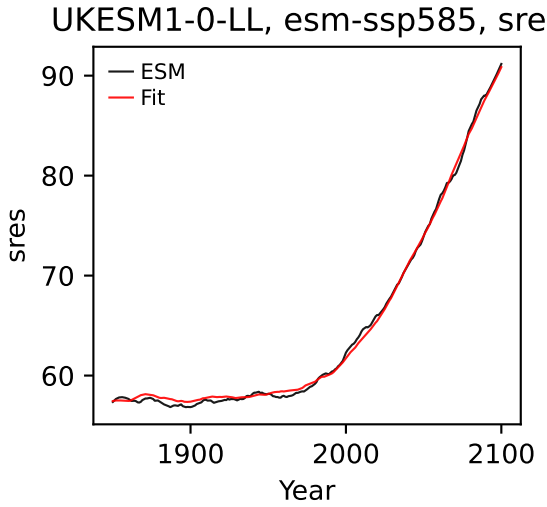

UKESM1-0-LL, esm-ssp585, vres
ESM-Fit
vres, ESM - FIT
ΔT

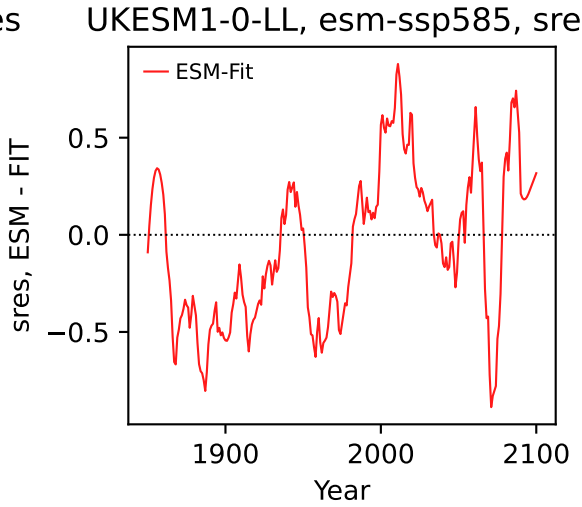

UKESM1-0-LL, esm-ssp585, vres
ESM
Fit
vres
c_atm

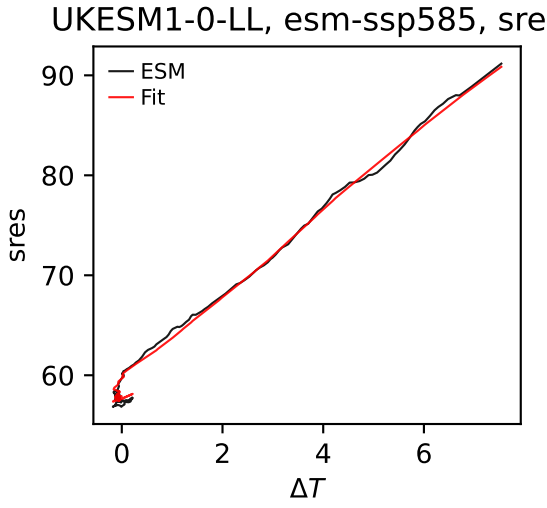

UKESM1-0-LL, esm-ssp585, vres
ESM-Fit
vres, ESM - FIT
c_atm

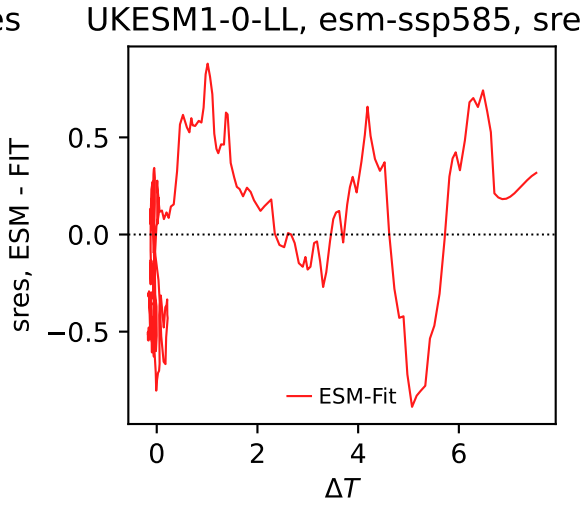

UKESM1-0-LL, esm-ssp585, vres, ln(MSE/SIGMA)
(0.1213, 0.0993, 1.2465, 384.9461)
UKESM1-0-LL
vres_ste
vres_sts
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
58
52
46
40
34
28
22
16
10
4

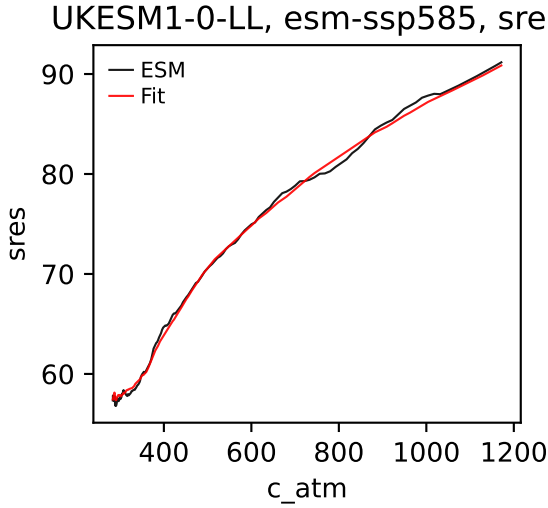

UKESM1-0-LL, esm-ssp585, vres, ln(MSE/SIGMA)
(0.1213, 0.0993, 1.2465, 384.9461)
2000
1750
1500
1250
1000
750
500
250
vres_c_half
−6
−4
−2
0
2
4
6
vres_lt
UKESM1-0-LL
9.6
8.7
7.8
6.9
6.0
5.1
4.2
3.3
2.4
1.5

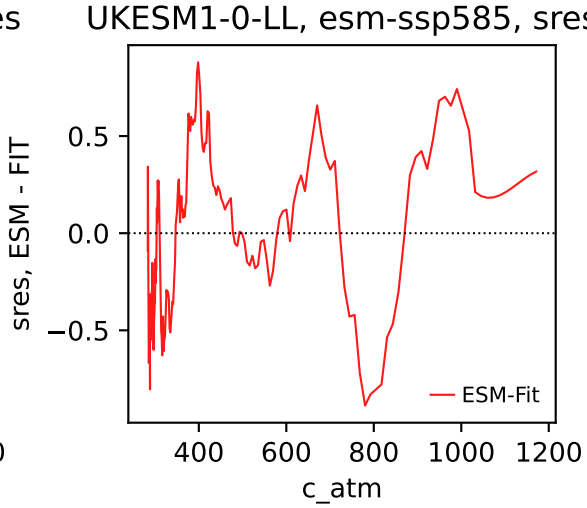

UKESM1-0-LL, esm-ssp585, sres
ESM
Fit
sres
Year

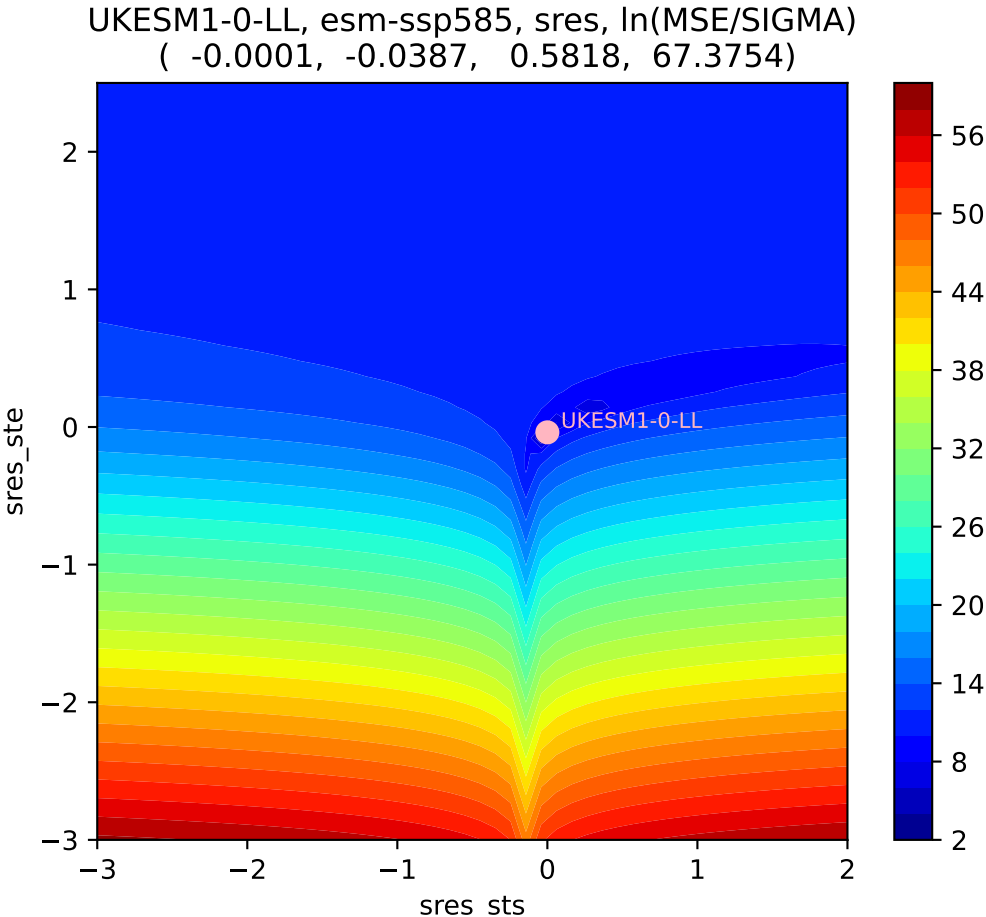

UKESM1-0-LL, esm-ssp585, sres
ESM-Fit
sres, ESM - FIT
Year

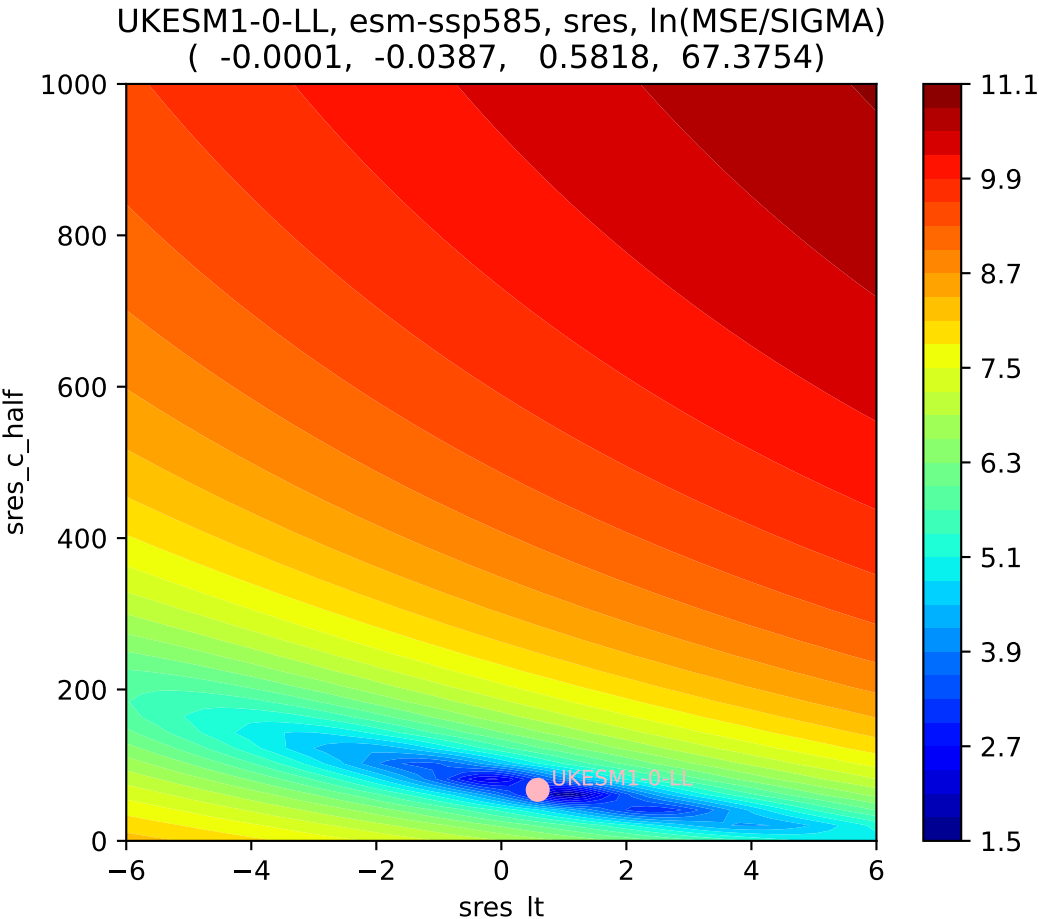

UKESM1-0-LL, esm-ssp585, sres
ESM
Fit
sres
ΔT


UKESM1-0-LL, esm-ssp585, sres
ESM-Fit
sres, ESM - FIT
ΔT


UKESM1-0-LL, esm-ssp585, sres
ESM
Fit
sres
c_atm


UKESM1-0-LL, esm-ssp585, sres
ESM-Fit
sres, ESM - FIT
c_atm


UKESM1-0-LL, esm-ssp585, 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
56
50
44
38
32
26
20
14
8
2


UKESM1-0-LL, esm-ssp585, 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
11.1
9.9
8.7
7.5
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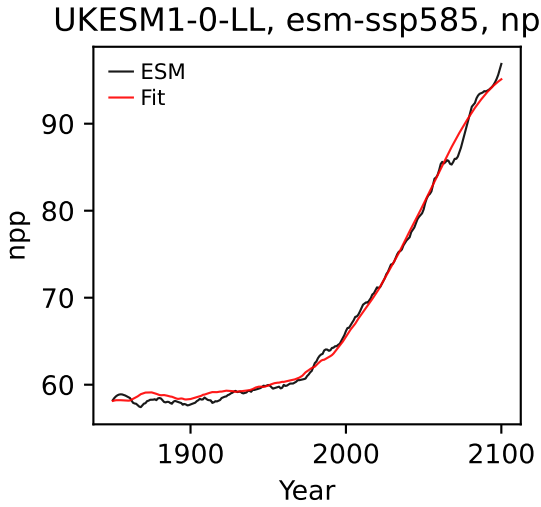
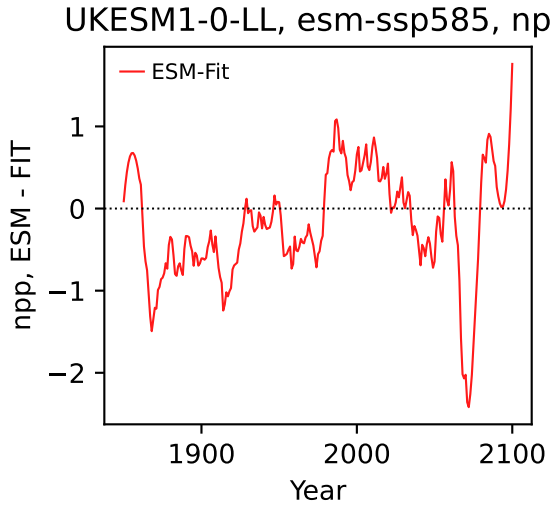
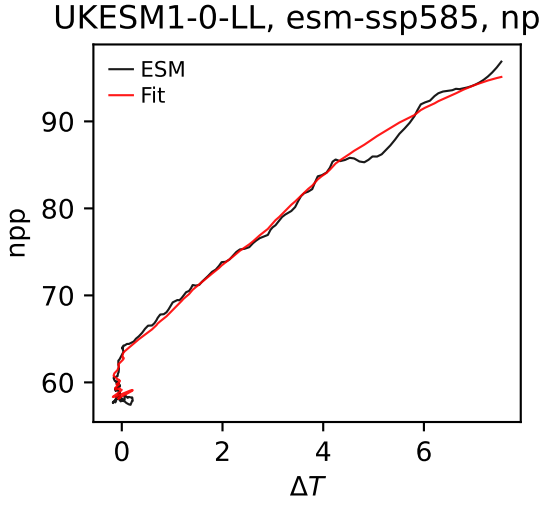
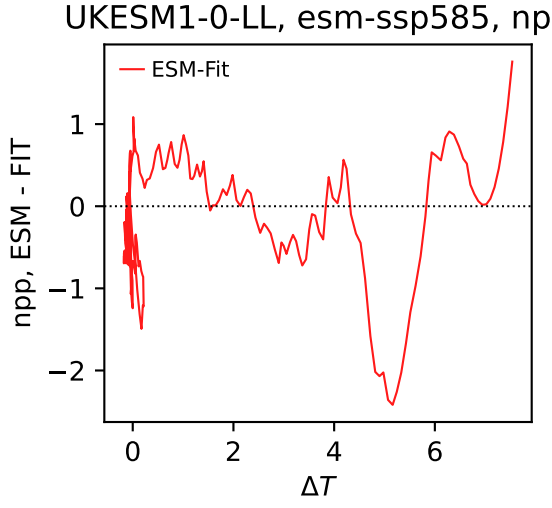
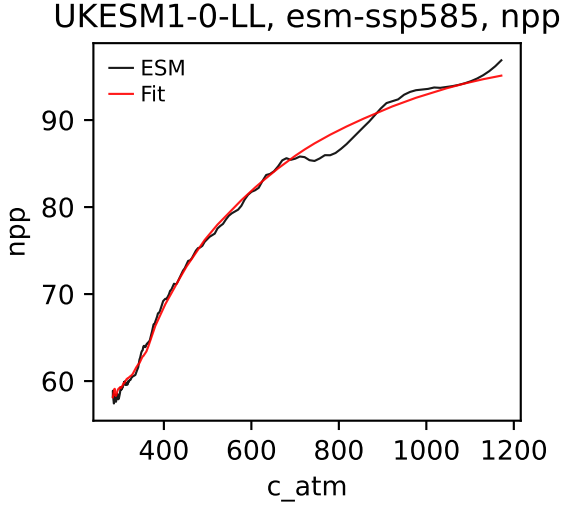
3.9
2.7
1.5

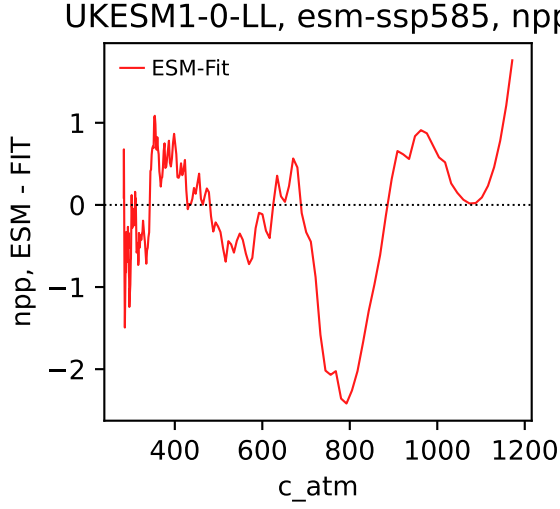

UKESM1-0-LL, esm-ssp585, npp
ESM
Fit
npp
Year

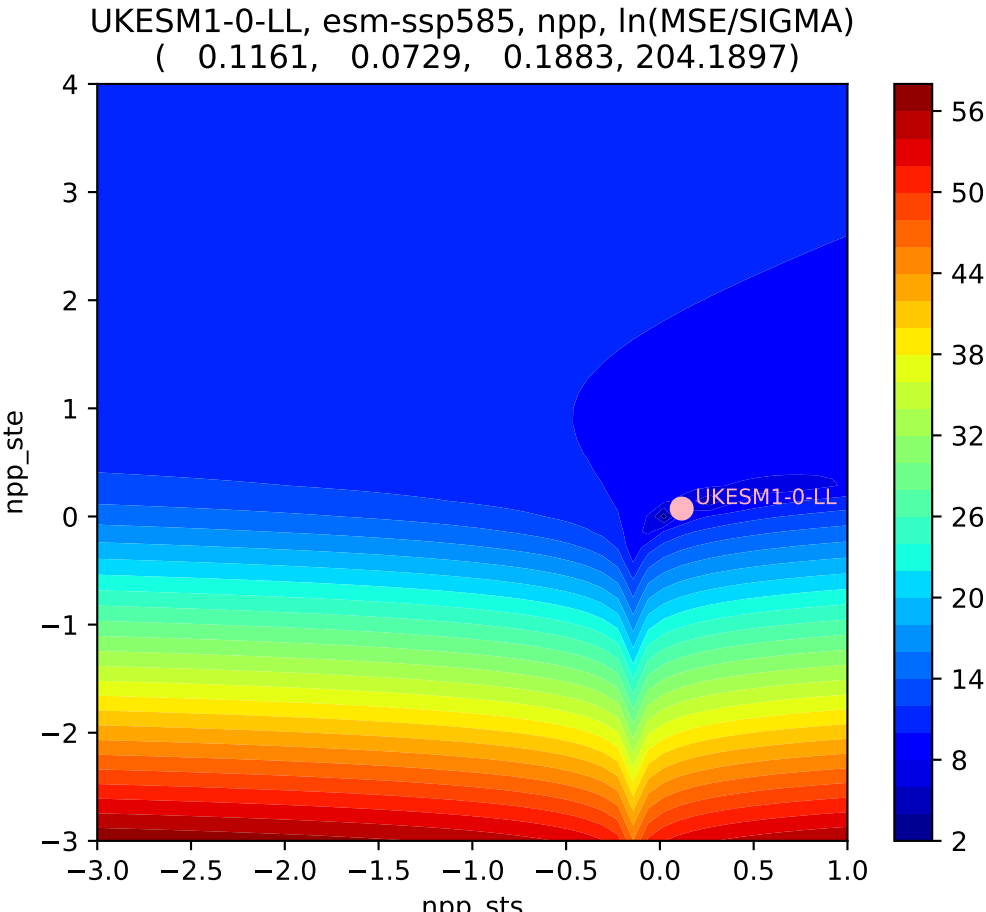

UKESM1-0-LL, esm-ssp585, npp
ESM-Fit
npp, ESM - FIT
Year

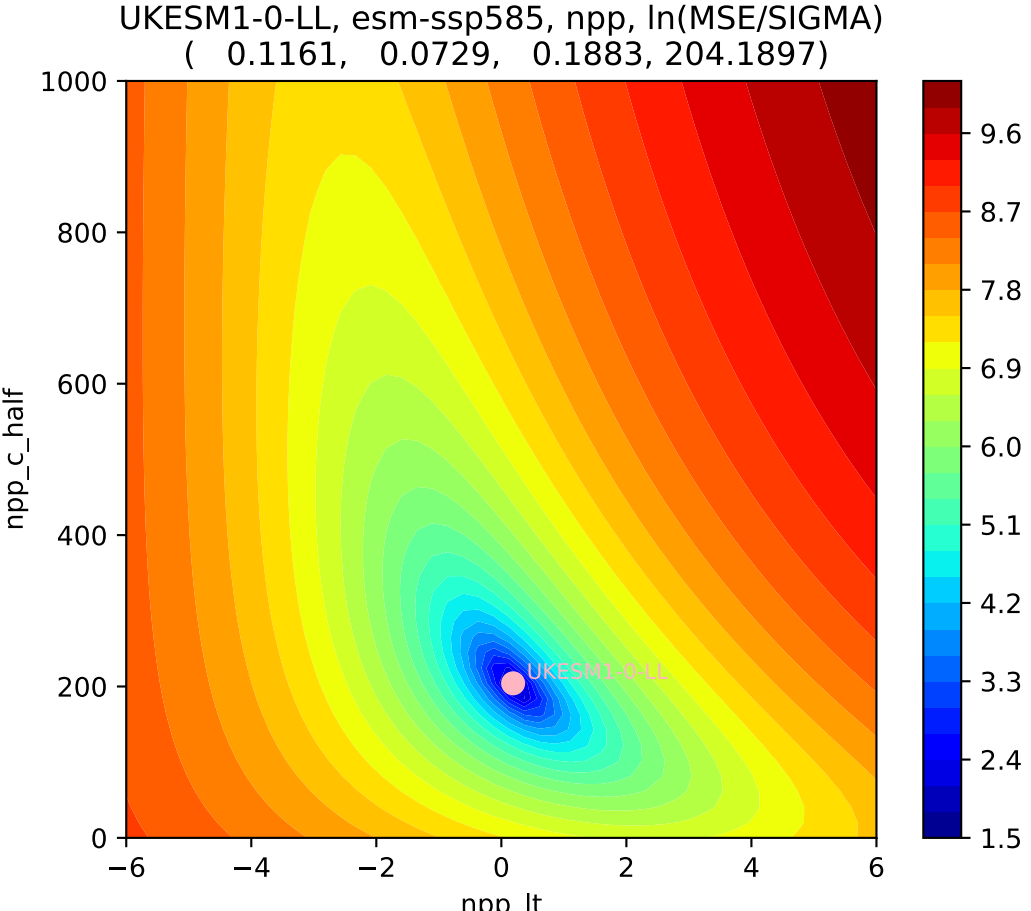

UKESM1-0-LL, esm-ssp585, npp
ESM
Fit
npp
ΔT

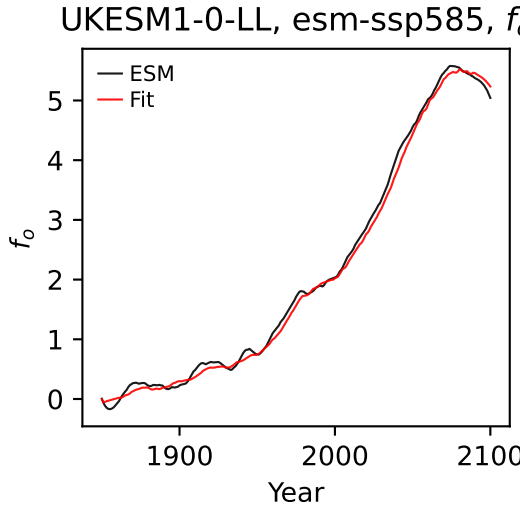

UKESM1-0-LL, esm-ssp585, npp
ESM-Fit
npp, ESM - FIT
ΔT

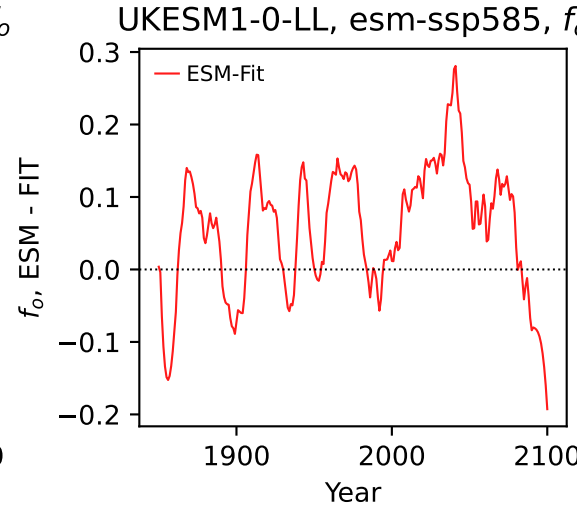

UKESM1-0-LL, esm-ssp585, npp
ESM
Fit
npp
c_atm

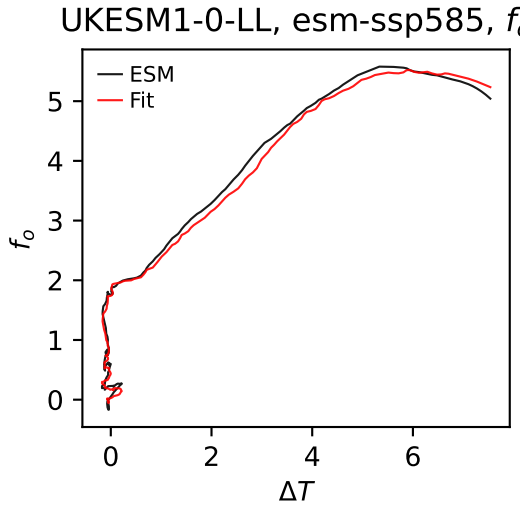

UKESM1-0-LL, esm-ssp585, npp
ESM-Fit
npp, ESM - FIT
c_atm

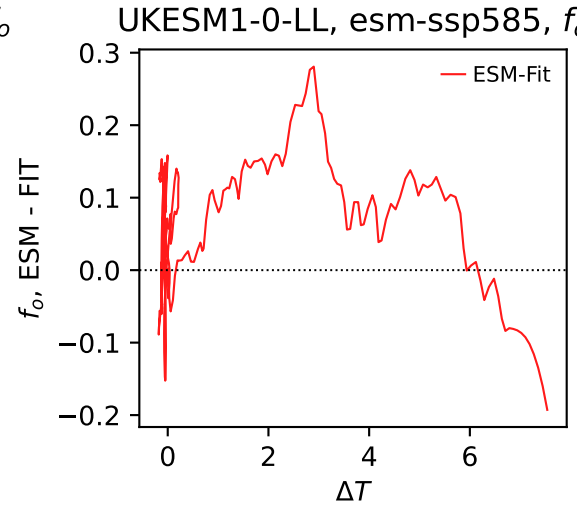

UKESM1-0-LL, esm-ssp585, npp, ln(MSE/SIGMA)
(0.1161, 0.0729, 0.1883, 204.1897)
UKESM1-0-LL
npp_ste
npp_sts
4
3
2
1
0
−1
−2
−3
−3.0
−2.5
−2.0
−1.5
−1.0
−0.5
0.0
0.5
1.0
56
50
44
38
32
26
20
14
8
2

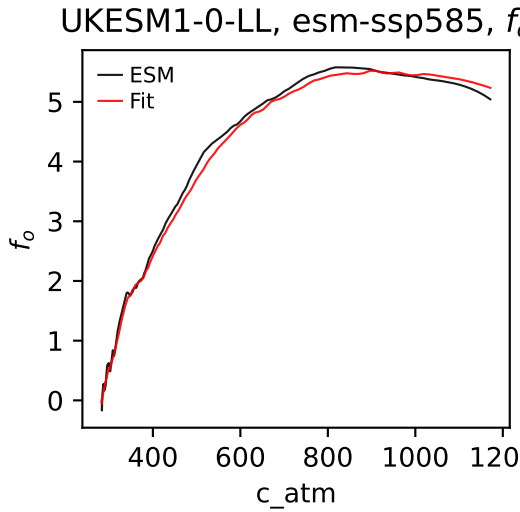

UKESM1-0-LL, esm-ssp585, npp, ln(MSE/SIGMA)
(0.1161, 0.0729, 0.1883, 204.1897)
UKESM1-0-LL
npp_c_half
npp_lt
1000
800
600
400
200
0
−6
−4
−2
0
2
4
6
9.6
8.7
7.8
6.9
6.0
5.1
4.2
3.3
2.4
1.5

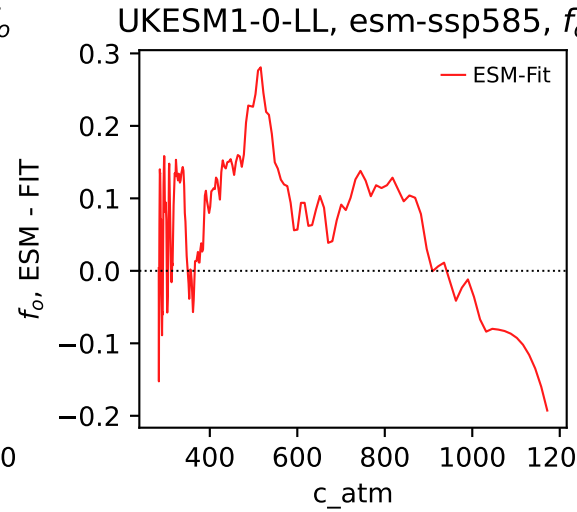

UKESM1-0-LL, esm-ssp585, f_o
ESM
Fit
f_o
Year

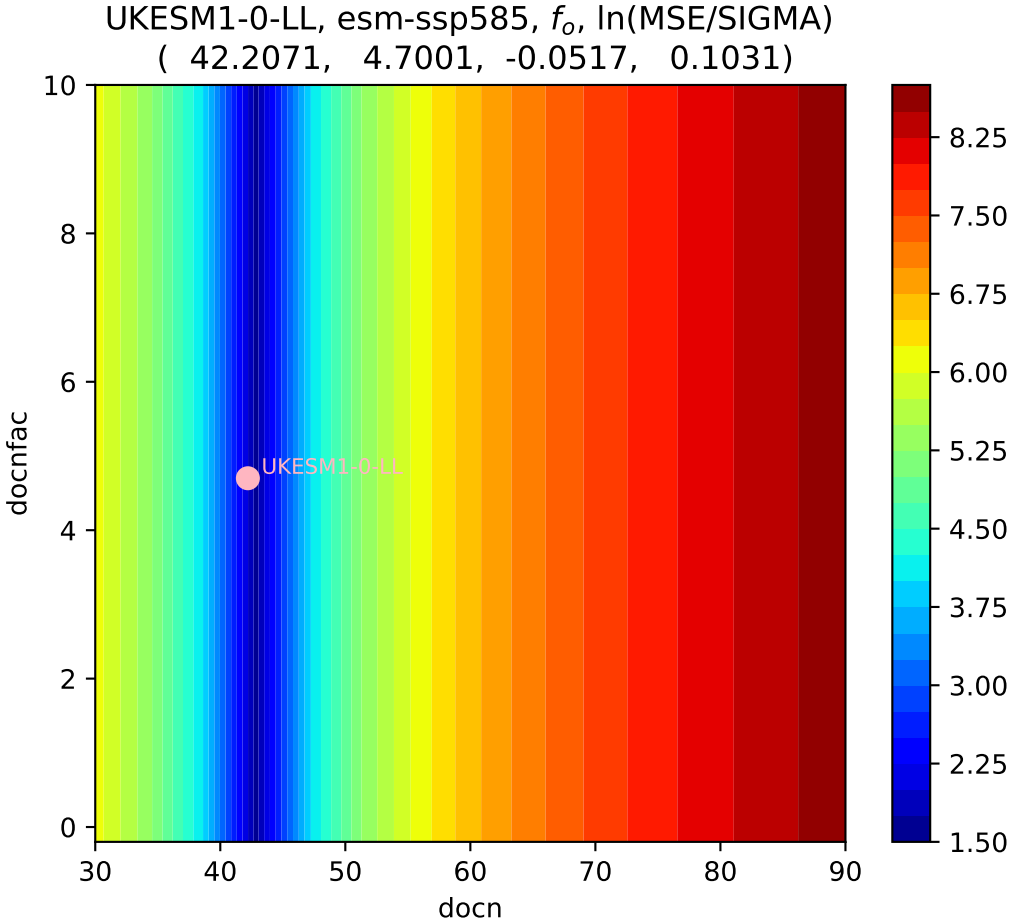

UKESM1-0-LL, esm-ssp585, f_o
ESM-Fit
f_o, ESM - FIT
Year

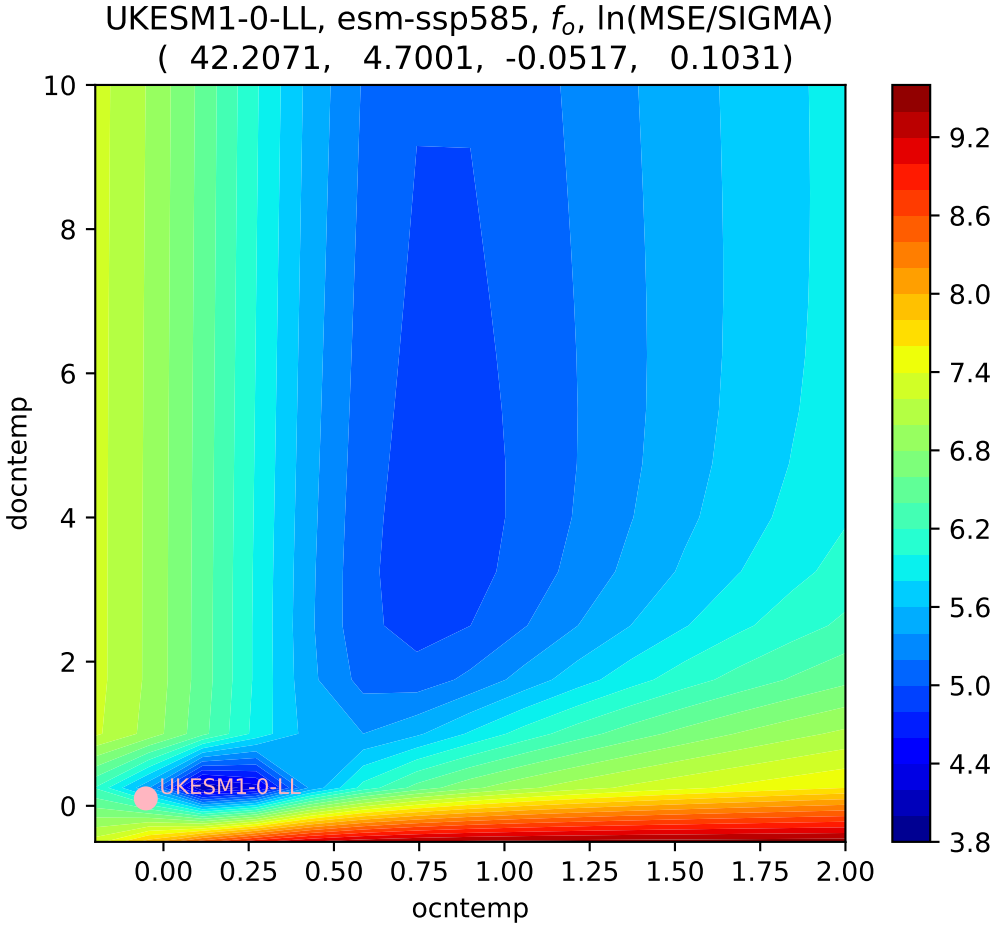

UKESM1-0-LL, esm-ssp585, f_o
ESM
Fit
f_o
ΔT


UKESM1-0-LL, esm-ssp585, f_o
ESM-Fit
f_o, ESM - FIT
ΔT


UKESM1-0-LL, esm-ssp585, f_o
ESM
Fit
f_o
c_atm


UKESM1-0-LL, esm-ssp585, f_o
ESM-Fit
f_o, ESM - FIT
c_atm


UKESM1-0-LL, esm-ssp585, 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
8.25
7.50
6.75
6.00
5.25
4.50
3.75
3.00
2.25
1.50


UKESM1-0-LL, esm-ssp585, 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
9.2
8.6
8.0
7.4
6.8
6.2
5.6
5.0
4.4
3.8