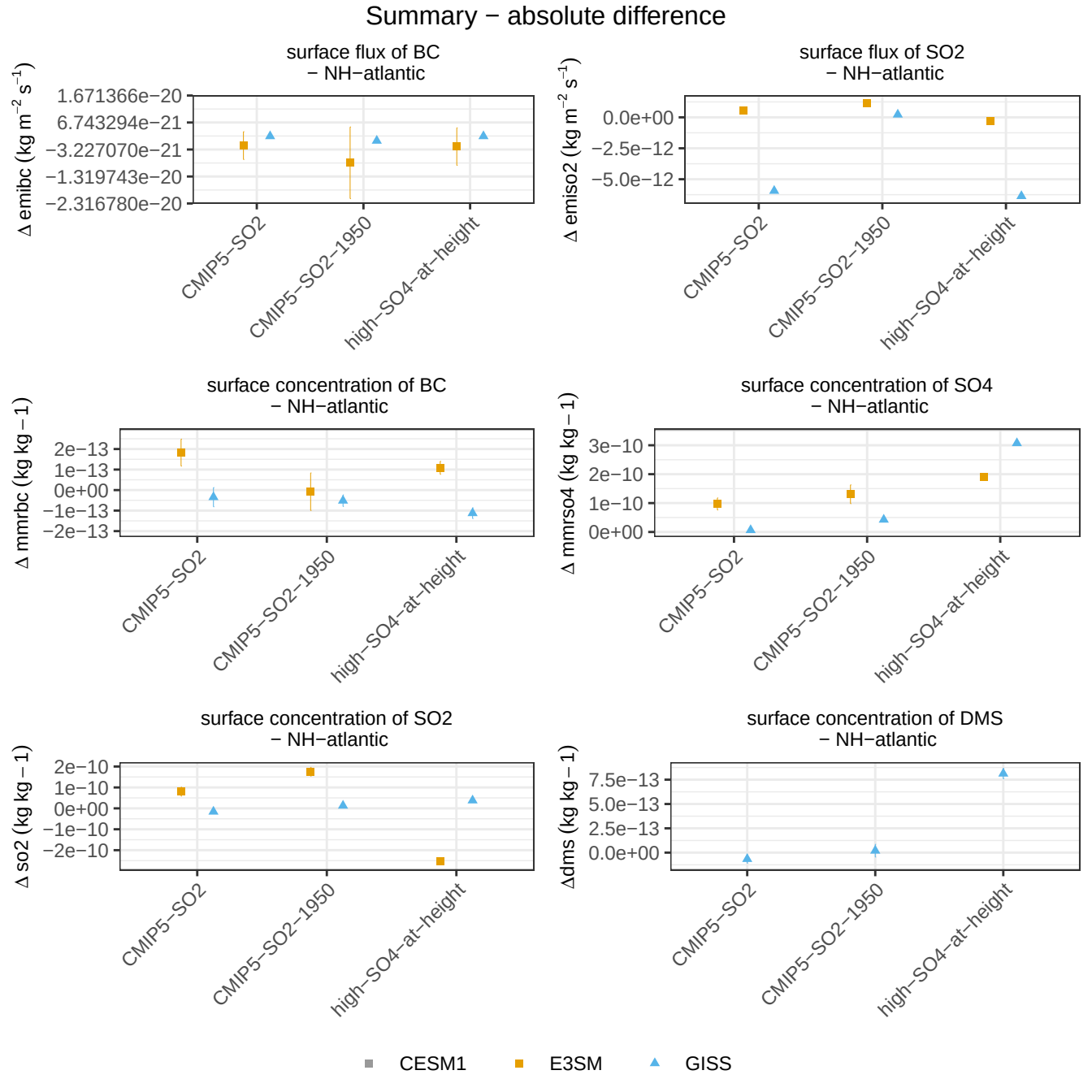
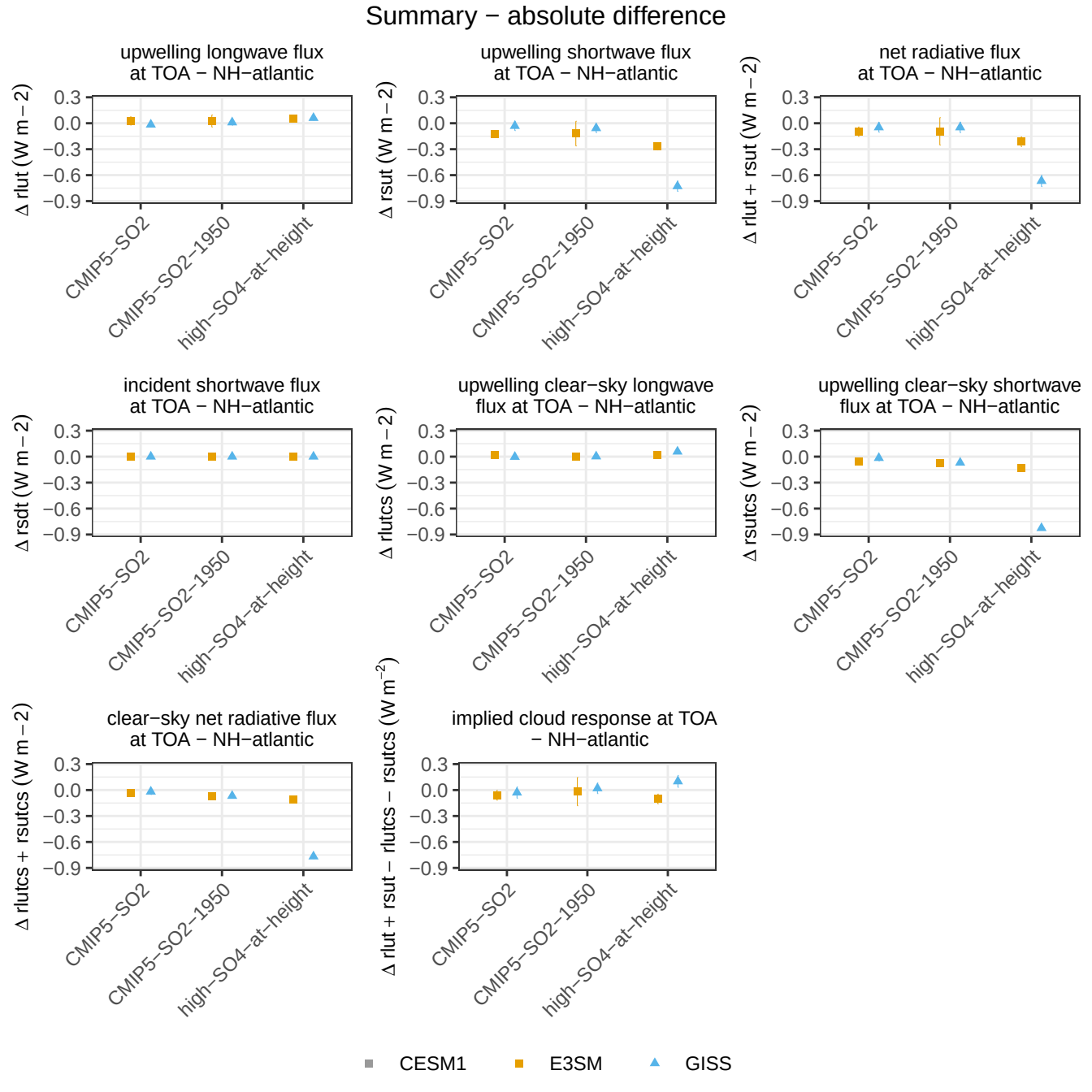
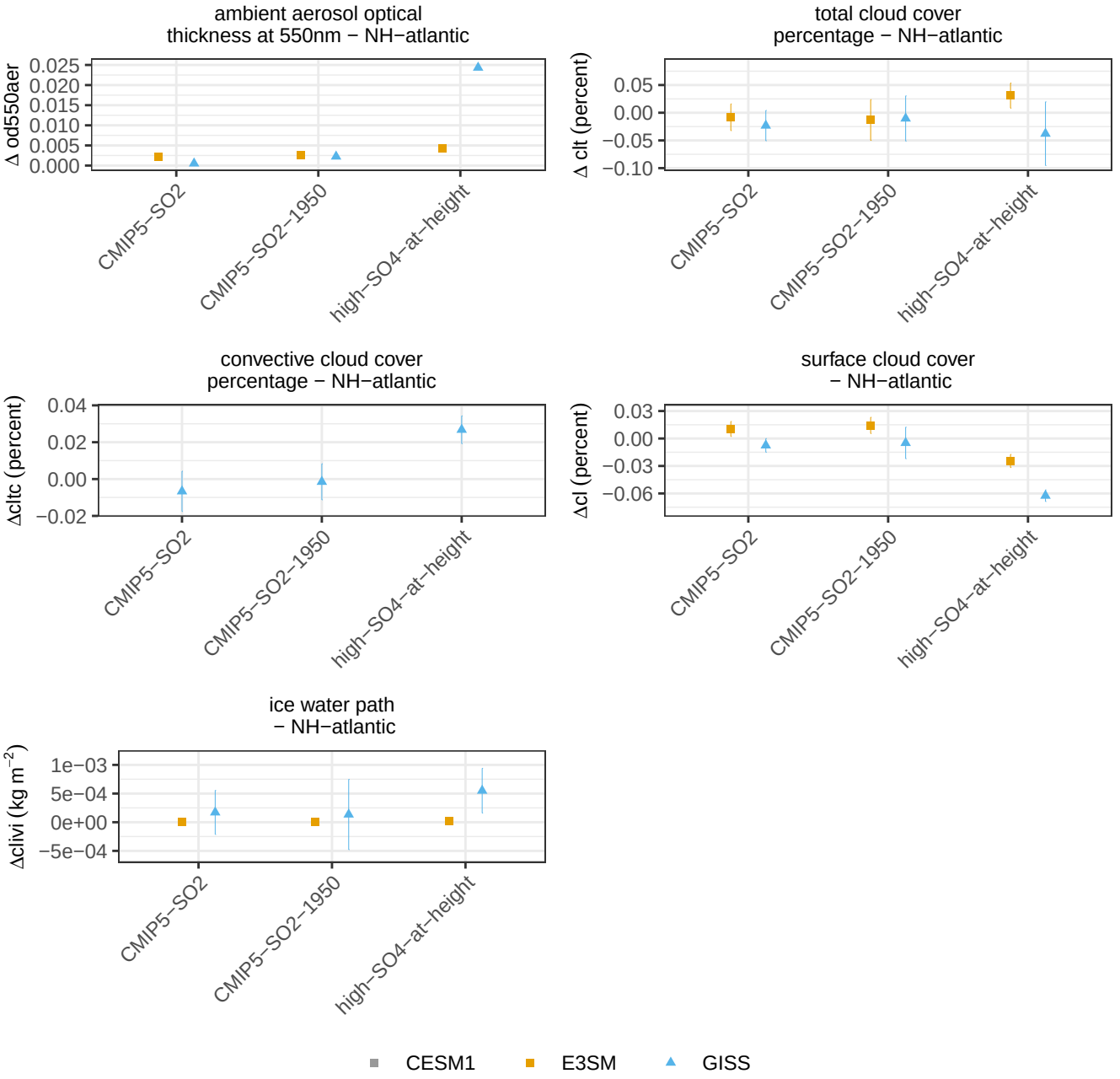
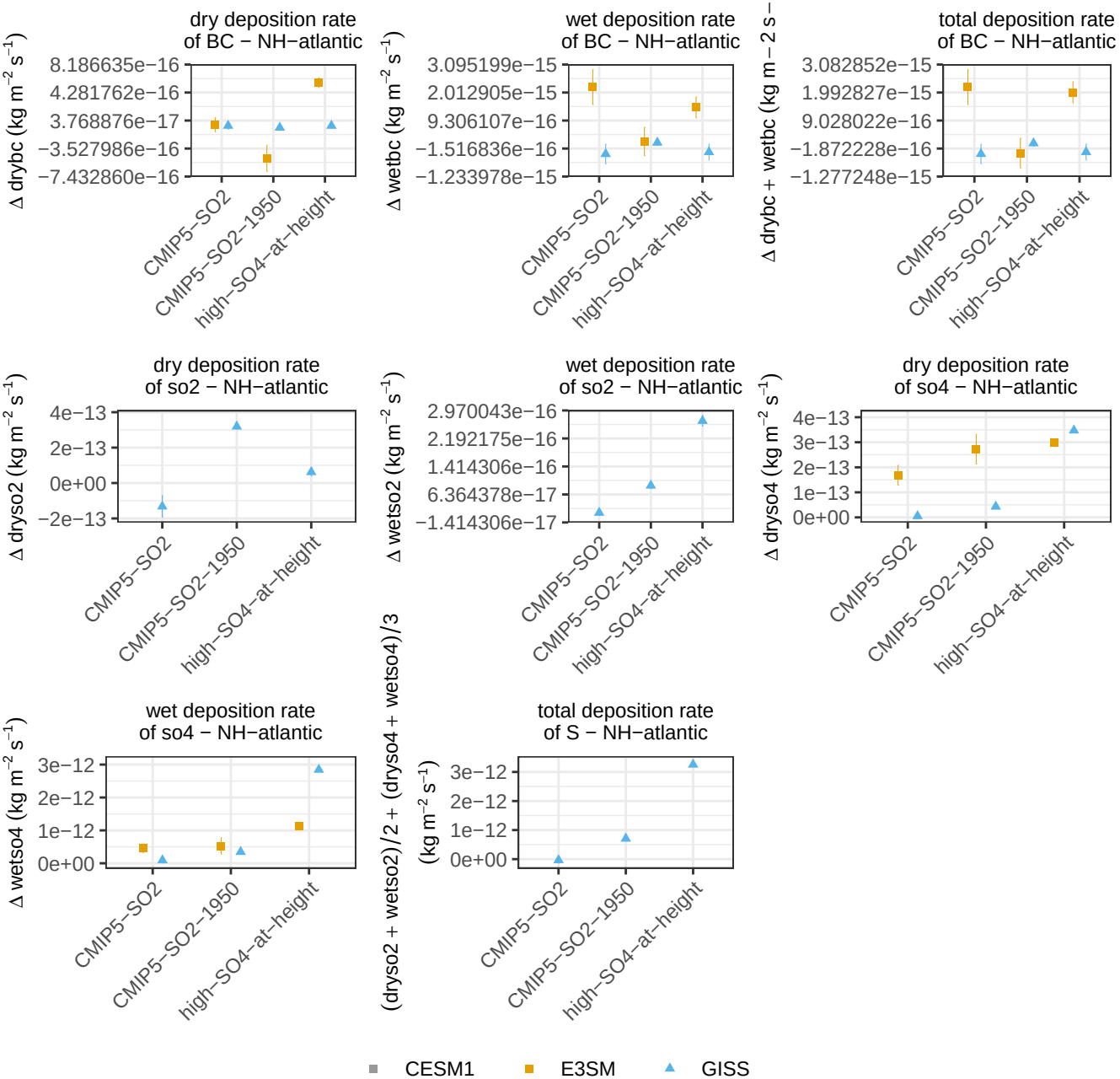

Summary − absolute difference
surface flux of BC
− NH−atlantic
Δ emibc (kg m−2 s−1)
1.671366e−20
6.743294e−21
−3.227070e−21
−1.319743e−20
−2.316780e−20
surface flux of SO2
− NH−atlantic
Δ emiso2 (kg m−2 s−1)
0.0e+00
−2.5e−12
−5.0e−12
surface concentration of BC
− NH−atlantic
Δ mmrbc (kg kg − 1)
2e−13
1e−13
0e+00
−1e−13
−2e−13
surface concentration of SO4
− NH−atlantic
Δ mmrso4 (kg kg − 1)
3e−10
2e−10
1e−10
0e+00
surface concentration of SO2
− NH−atlantic
Δ so2 (kg kg − 1)
2e−10
1e−10
0e+00
−1e−10
−2e−10
surface concentration of DMS
− NH−atlantic
Δdms (kg kg − 1)
7.5e−13
5.0e−13
2.5e−13
0.0e+00
CMIP5−SO2
CMIP5−SO2−1950
high−SO4−at−height
CESM1
E3SM
GISS

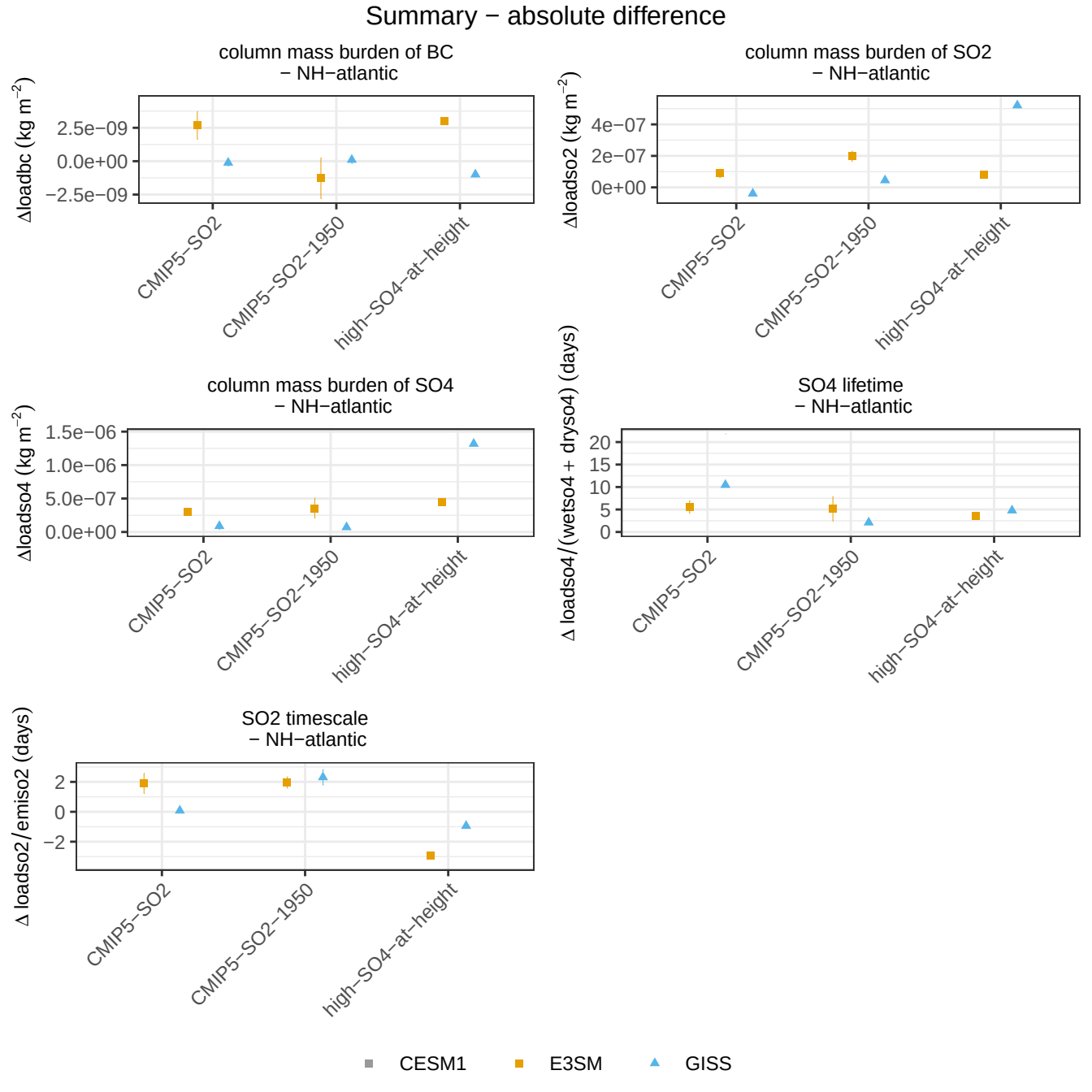

Summary − absolute difference
upwelling longwave flux at TOA − NH−atlantic
upwelling shortwave flux at TOA − NH−atlantic
net radiative flux at TOA − NH−atlantic
incident shortwave flux at TOA − NH−atlantic
upwelling clear−sky longwave flux at TOA − NH−atlantic
upwelling clear−sky shortwave flux at TOA − NH−atlantic
clear−sky net radiative flux at TOA − NH−atlantic
implied cloud response at TOA − NH−atlantic
Δ rlut (W m − 2)
Δ rsut (W m − 2)
Δ rlut + rsut (W m − 2)
Δ rsdt (W m − 2)
Δ rlutcs (W m − 2)
Δ rsutcs (W m − 2)
Δ rlutcs + rsutcs (W m − 2)
Δ rlut + rsut − rlutcs − rsutcs (W m−2)
0.3
0.0
−0.3
−0.6
−0.9
CMIP5−SO2
CMIP5−SO2−1950
high−SO4−at−height
CESM1
E3SM
GISS

Summary − absolute difference



Summary − absolute difference




Summary − absolute difference
column mass burden of BC
− NH−atlantic
Δloadbc (kg m−2)
2.5e−09
0.0e+00
−2.5e−09
column mass burden of SO2
− NH−atlantic
Δloadso2 (kg m−2)
4e−07
2e−07
0e+00
column mass burden of SO4
− NH−atlantic
Δloadso4 (kg m−2)
1.5e−06
1.0e−06
5.0e−07
0.0e+00
SO4 lifetime
− NH−atlantic
Δ loadso4/(wetso4 + dryso4) (days)
20
15
10
5
0
SO2 timescale
− NH−atlantic
Δ loadso2/emiso2 (days)
2
0
−2
CMIP5−SO2
CMIP5−SO2−1950
high−SO4−at−height
CESM1
E3SM
GISS