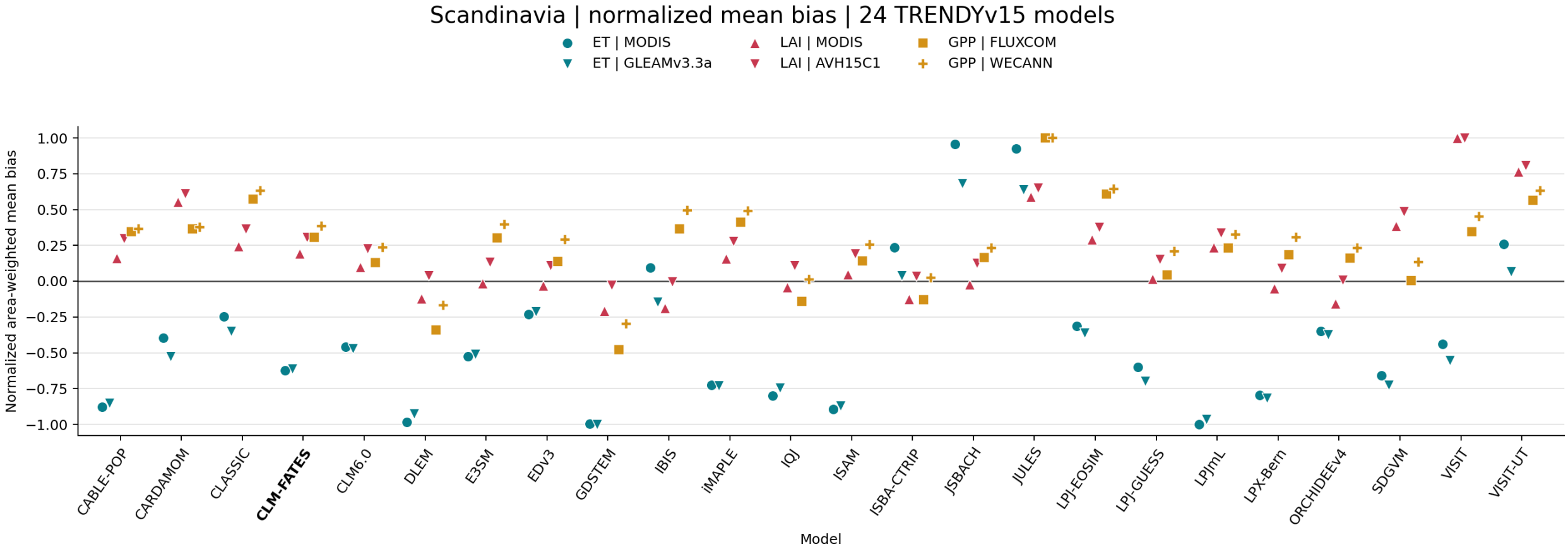
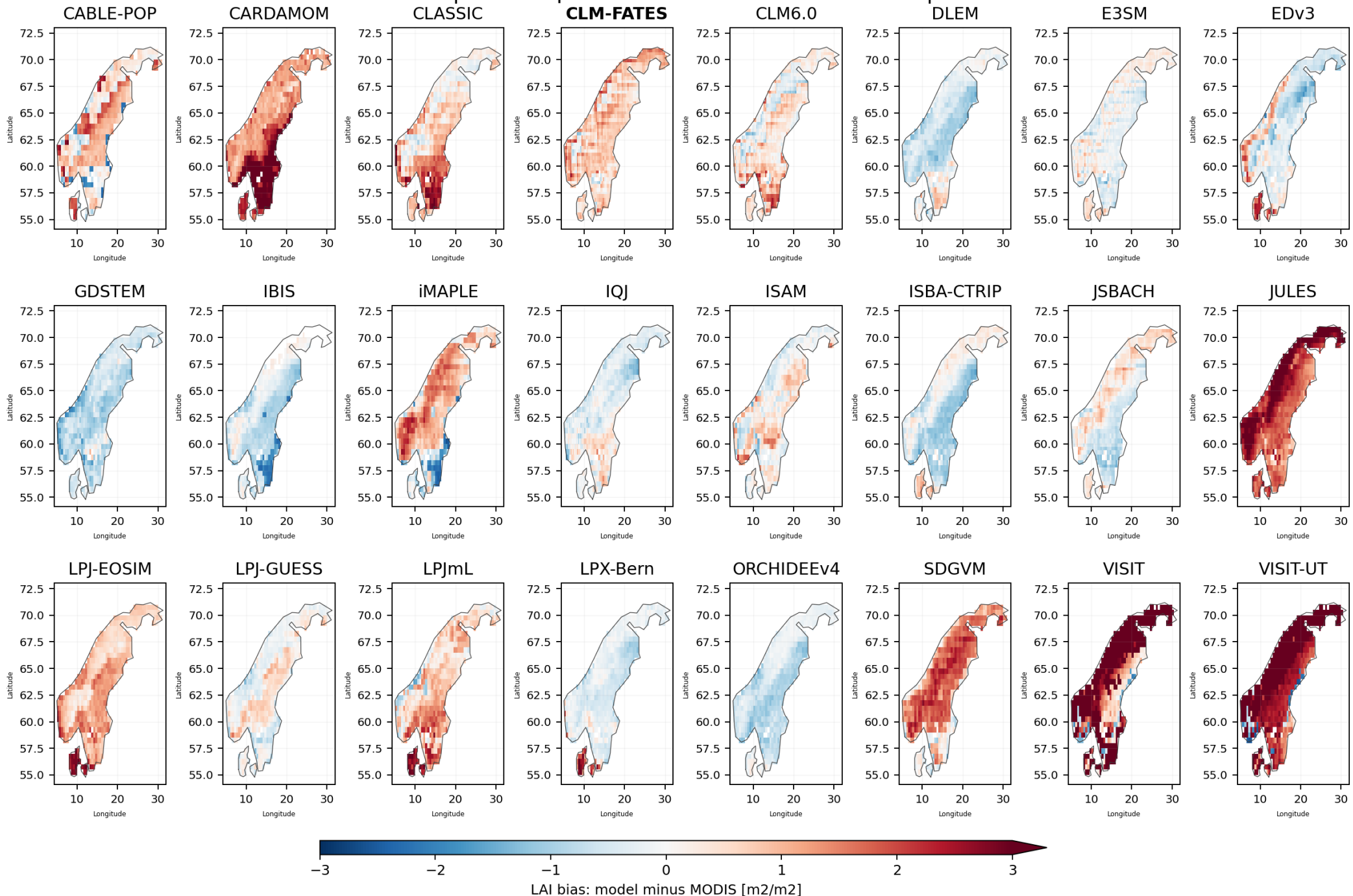
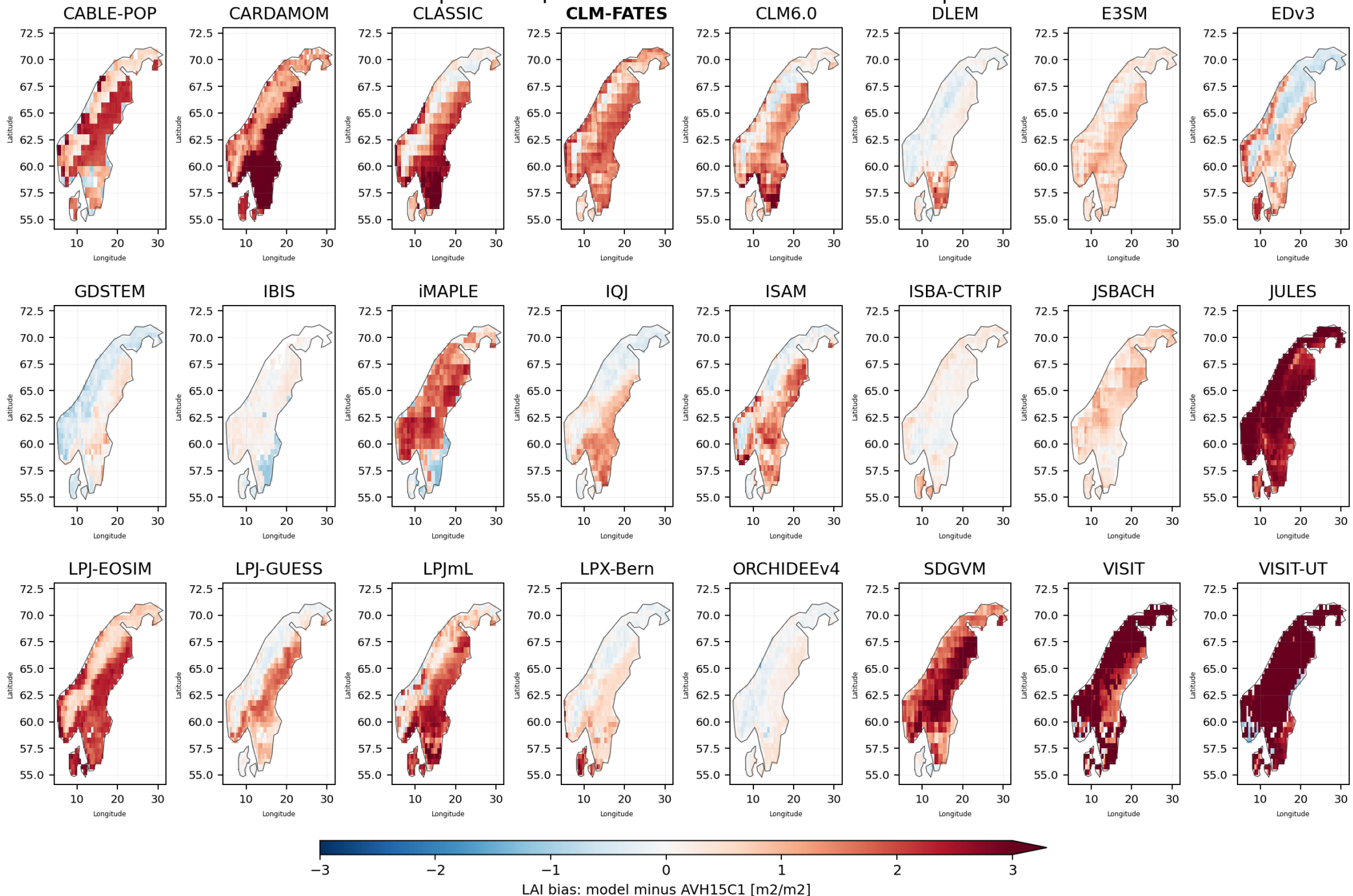

Scandinavia | normalized mean bias | 24 TRENDYv15 models
ET | MODIS
ET | GLEAMv3.3a
LAI | MODIS
LAI | AVH15C1
GPP | FLUXCOM
GPP | WECANN
Normalized area-weighted mean bias
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
CABLE-POP
CARDAMOM
CLASSIC
CLM-FATES
CLM6.0
DLEM
E3SM
EDv3
GDSTEM
IBIS
iMAPLE
IQJ
ISAM
ISBA-CTRIP
JSBACH
JULES
LPJ-EOSIM
LPJ-GUESS
LPJmL
LPX-Bern
ORCHIDEEv4
SDGVM
VISIT
VISIT-UT
Model


Scandinavia | aggregate mean-bias scores
ET | MODIS
ET | GLEAMv3.3a
LAI | MODIS
LAI | AVH15C1
GPP | FLUXCOM
GPP | WECANN
Biomass change | ESACCI6.0
Biomass stock | ESACCI6.0
Aggregate
EDv3
ORCHIDEEv4
ISBA-CTRIP
IBIS
IQJ
LPJ-GUESS
CLM6.0
E3SM
LPX-Bern
JSBACH
DLEM
CABLE-POP
CLM-FATES
GDSTEM
LPJmL
iMAPLE
SDGVM
CARDAMOM
CLASSIC
VISIT-UT
ISAM
VISIT
LPJ-EOSIM
JULES
Model
0.0
0.2
0.4
0.6
0.8
1.0
Mean-bias score (higher is better)

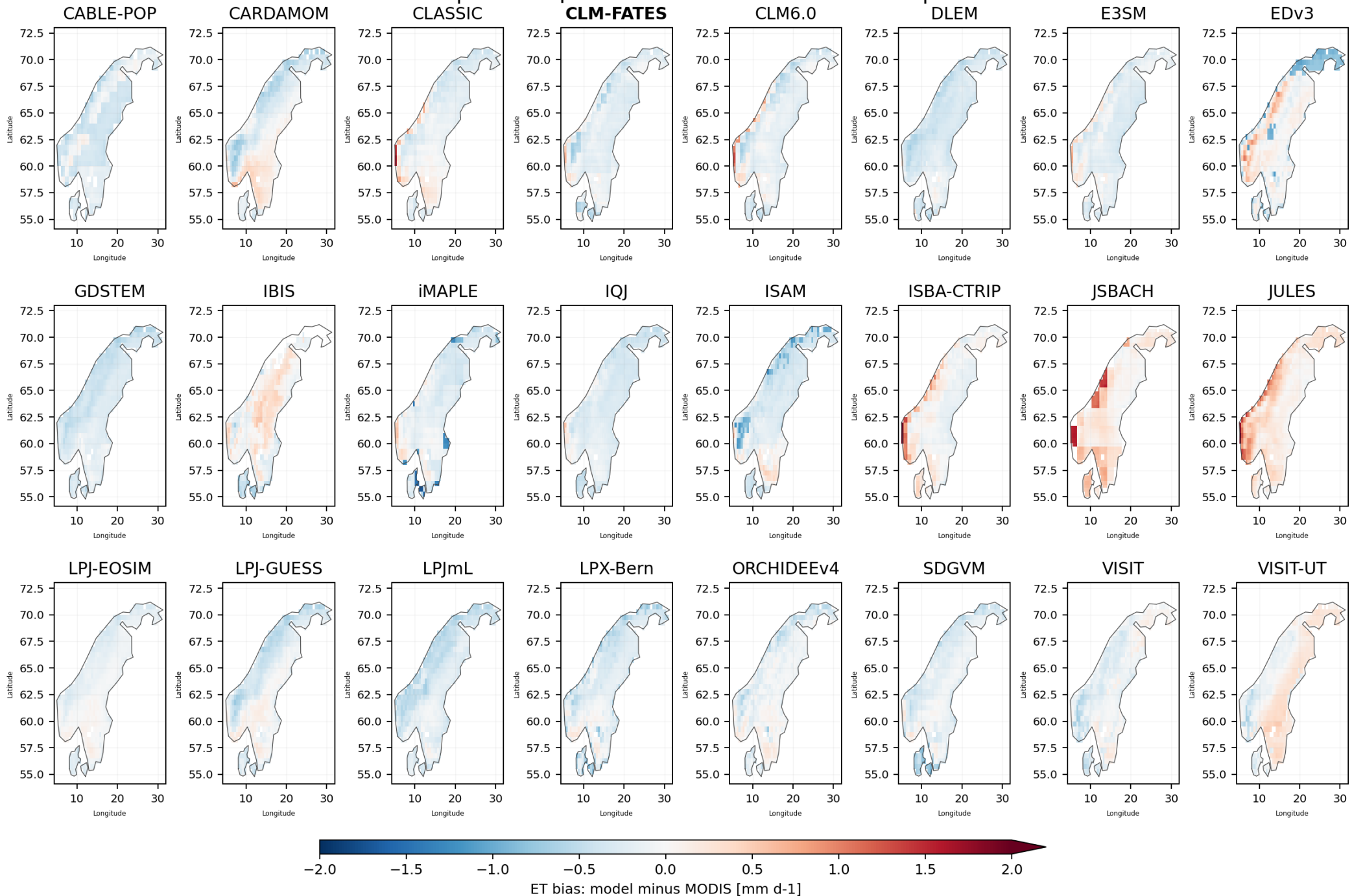
Scandinavia | Bias map: TRENDY models vs MODIS LAI | 24 models

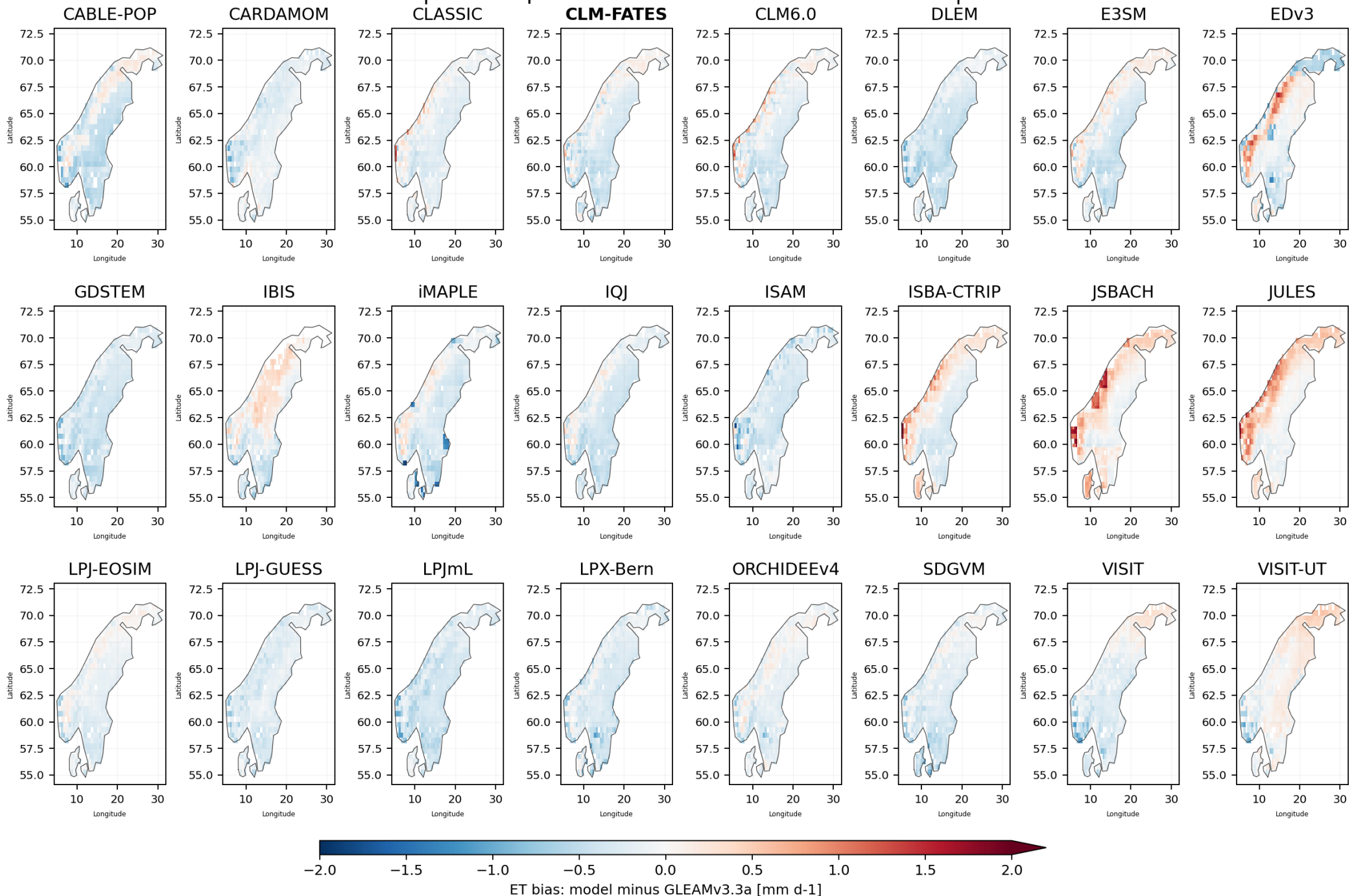


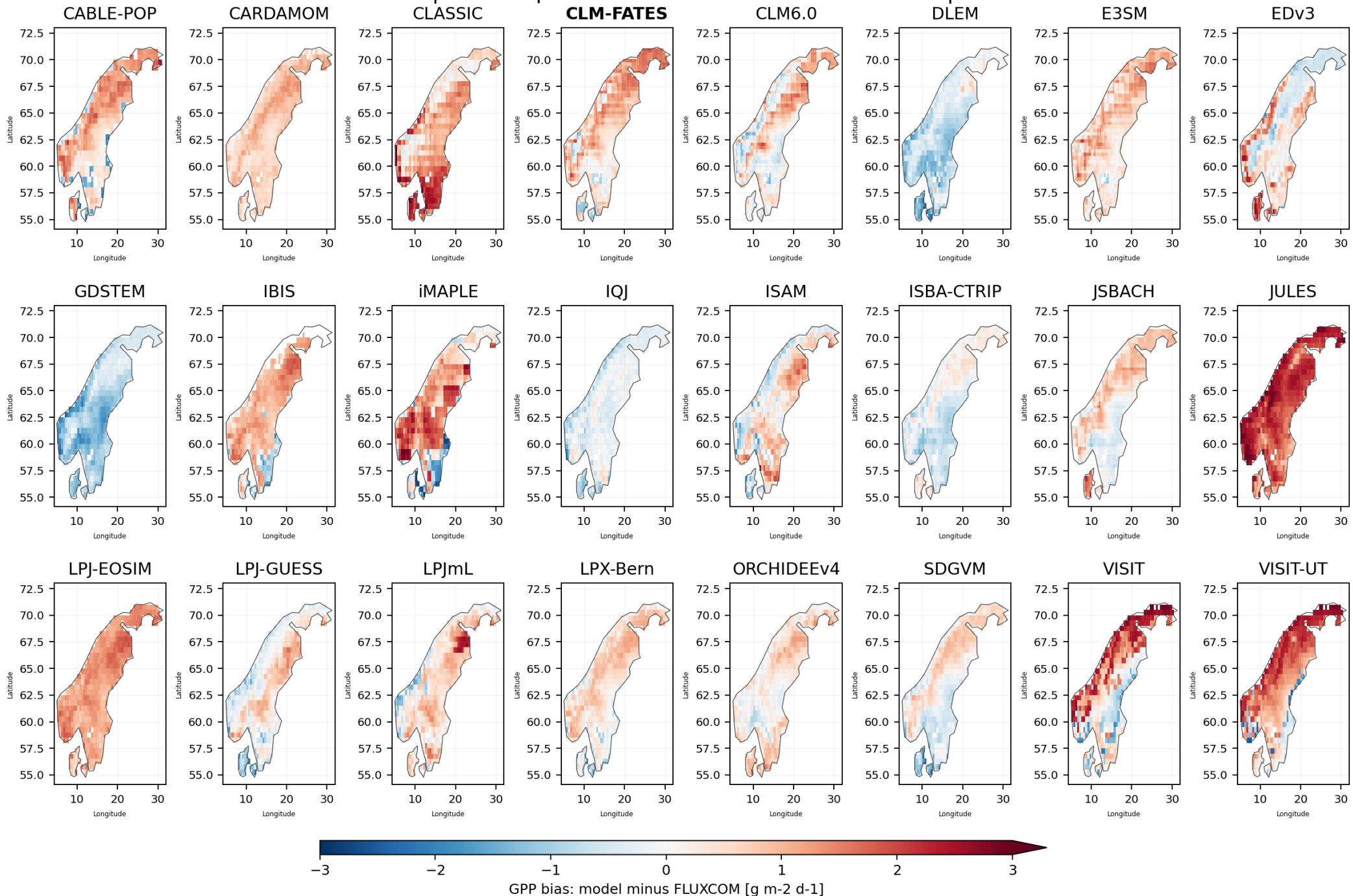
Scandinavia | Bias map: TRENDY models vs AVH15C1 LAI | 24 models



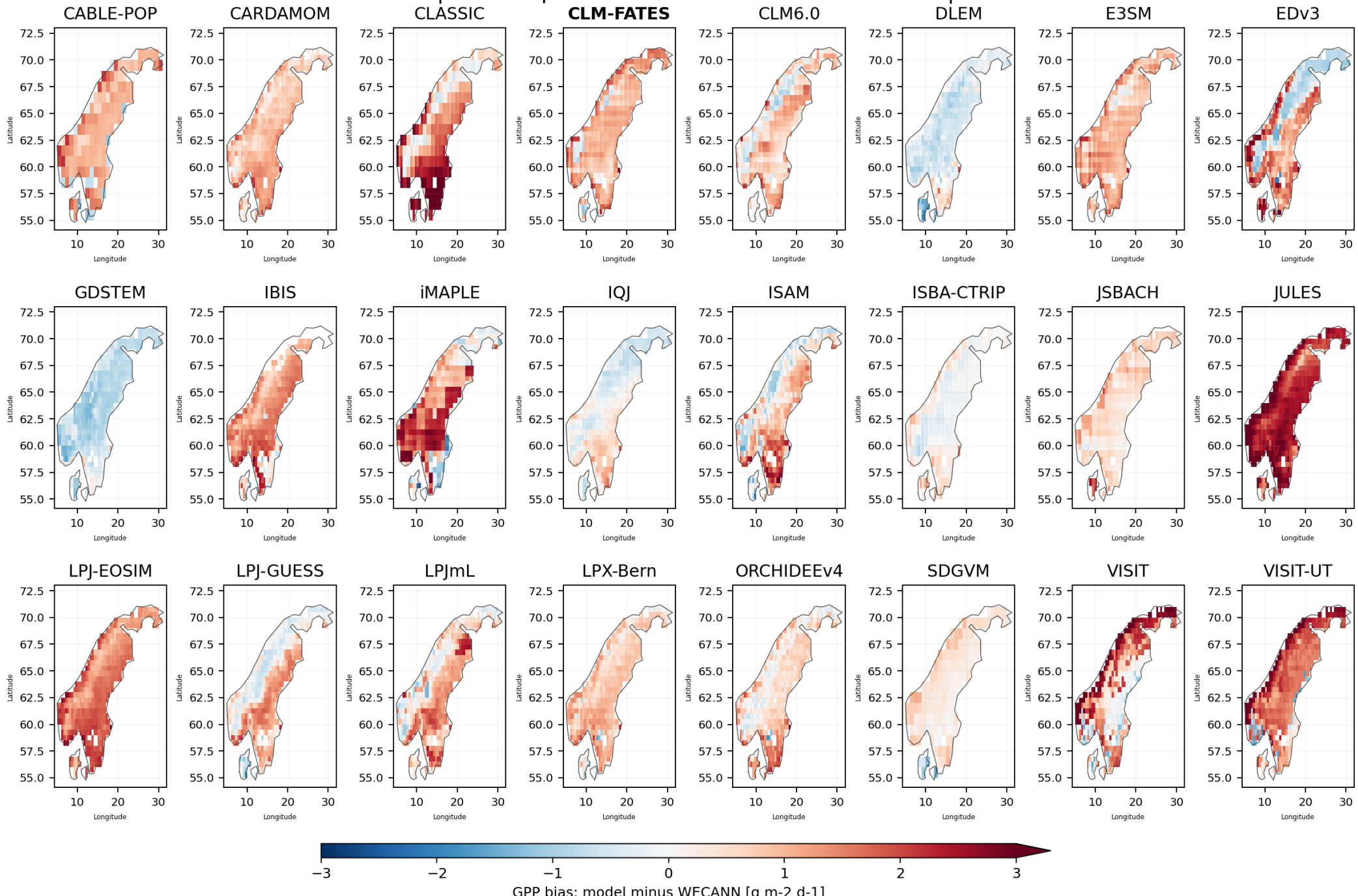
Scandinavia | Bias map: TRENDY models vs MODIS ET | 24 models



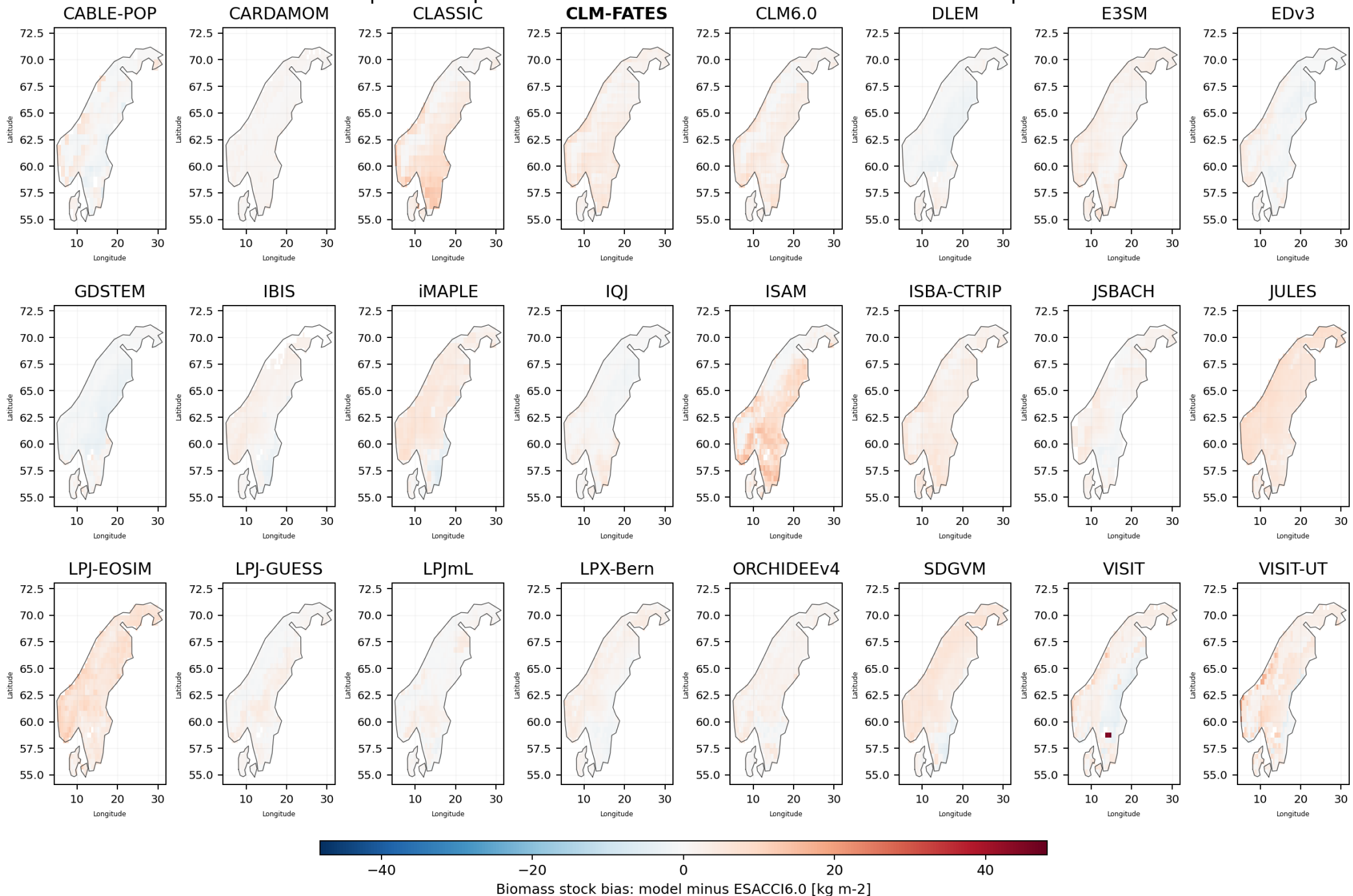

Scandinavia | Bias map: TRENDY models vs GLEAMv3.3a ET | 24 models
CABLE-POP
CARDAMOM
CLASSIC
CLM-FATES
CLM6.0
DLEM
E3SM
EDv3
GDSTEM
IBIS
iMAPLE
IQJ
ISAM
ISBA-CTRIP
JSBACH
JULES
LPJ-EOSIM
LPJ-GUESS
LPJmL
LPX-Bern
ORCHIDEEv4
SDGVM
VISIT
VISIT-UT
Latitude
Longitude
ET bias: model minus GLEAMv3.3a [mm d-1]


Scandinavia | Bias map: TRENDY models vs FLUXCOM GPP | 24 models
CABLE-POP
CARDAMOM
CLASSIC
CLM-FATES
CLM6.0
DLEM
E3SM
EDv3
GDSTEM
IBIS
iMAPLE
IQJ
ISAM
ISBA-CTRIP
JSBACH
JULES
LPJ-EOSIM
LPJ-GUESS
LPJmL
LPX-Bern
ORCHIDEEv4
SDGVM
VISIT
VISIT-UT
Latitude
Longitude
GPP bias: model minus FLUXCOM [g m-2 d-1]

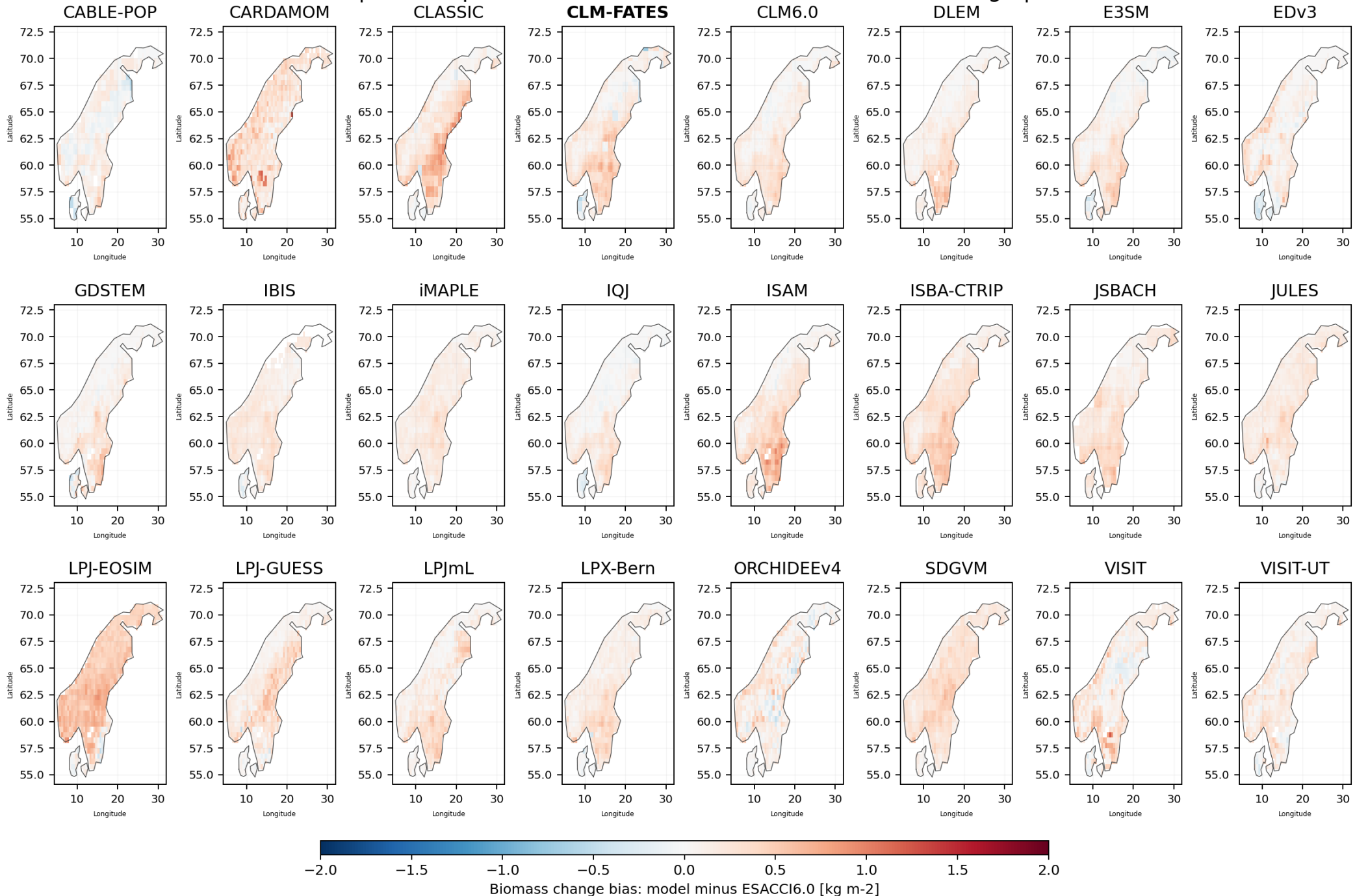
Scandinavia | Bias map: TRENDY models vs WECANN GPP | 24 models

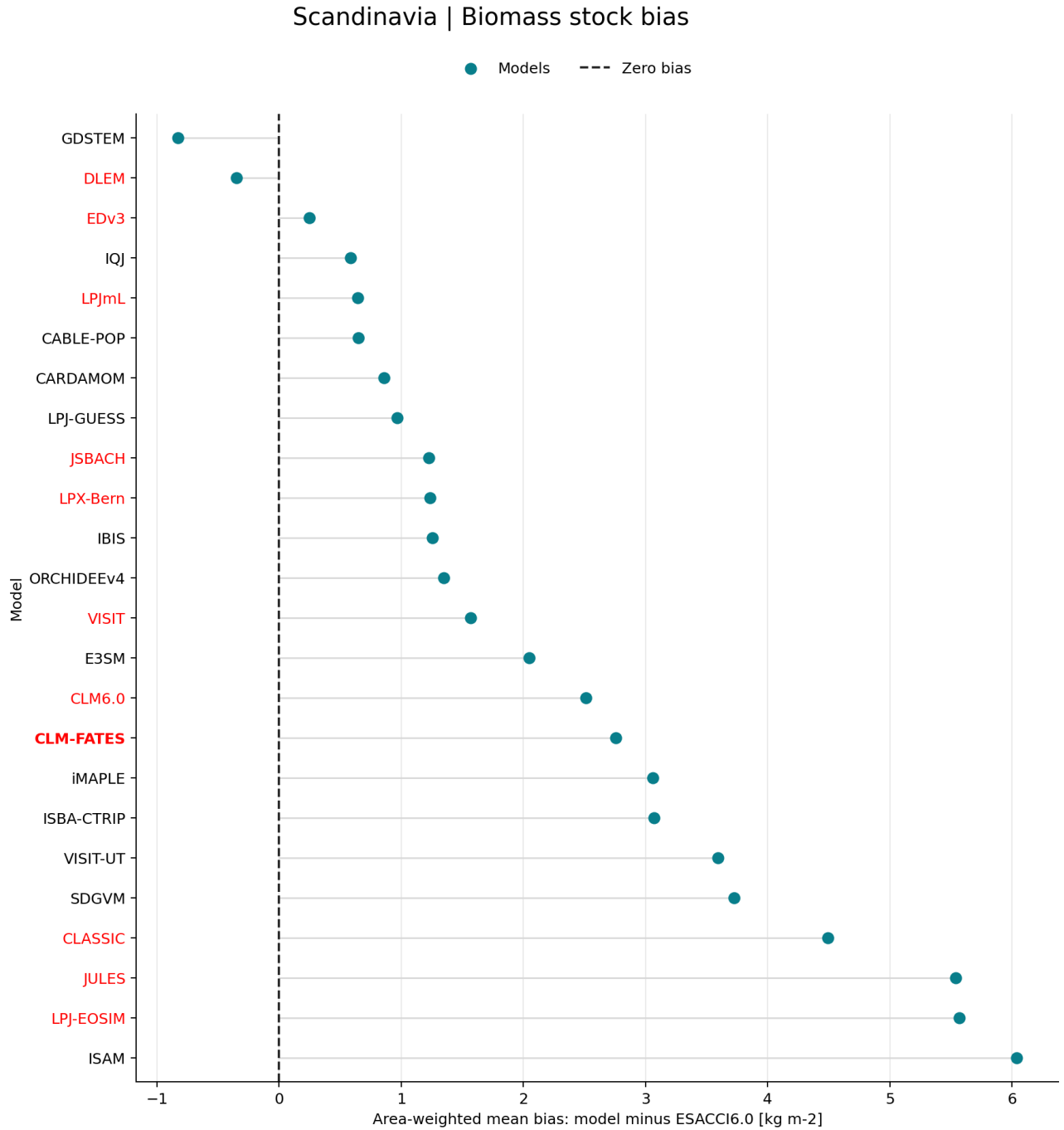


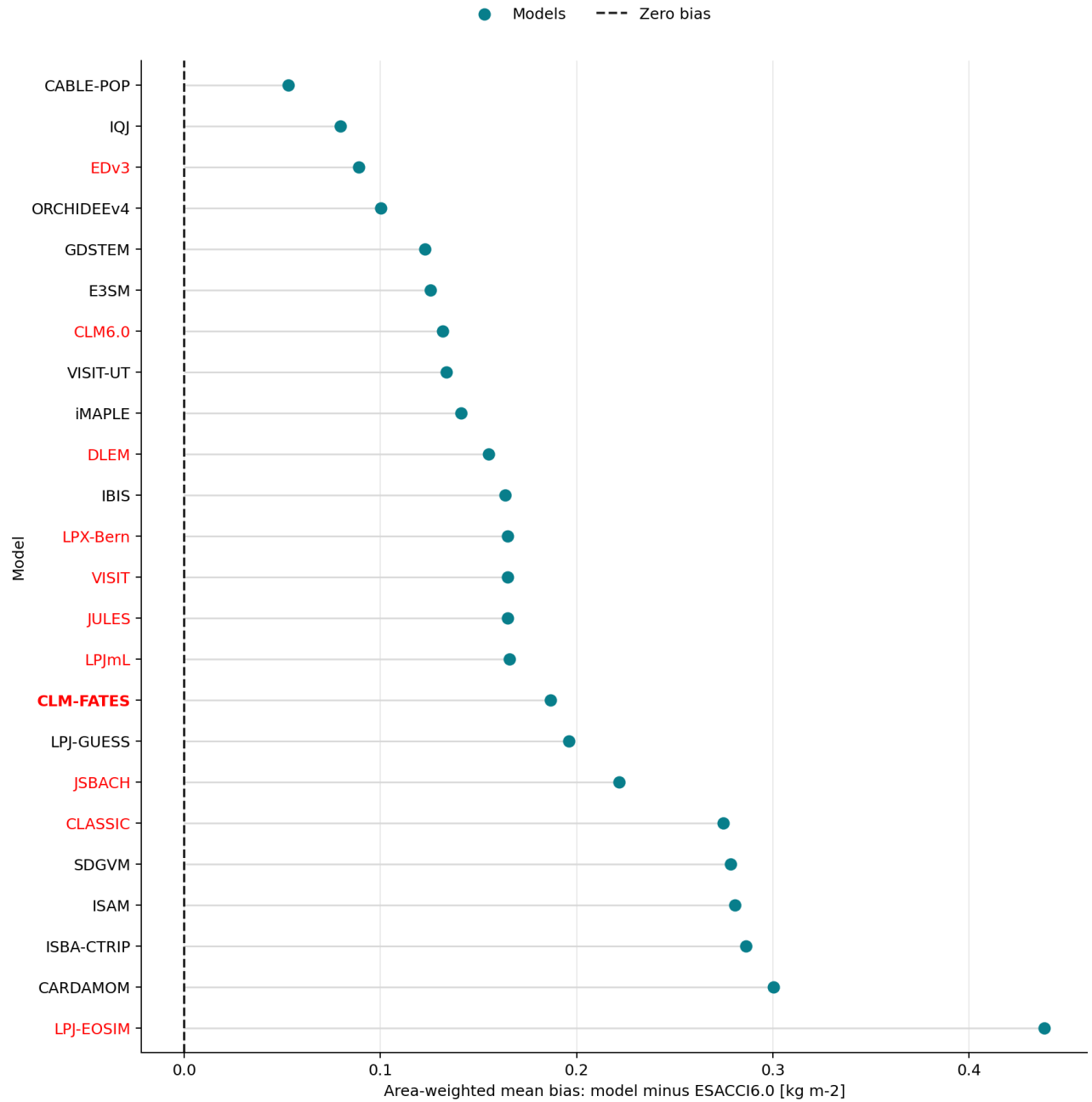
Scandinavia | Bias map: TRENDY models vs ESACCI6.0 Biomass stock | 24 models

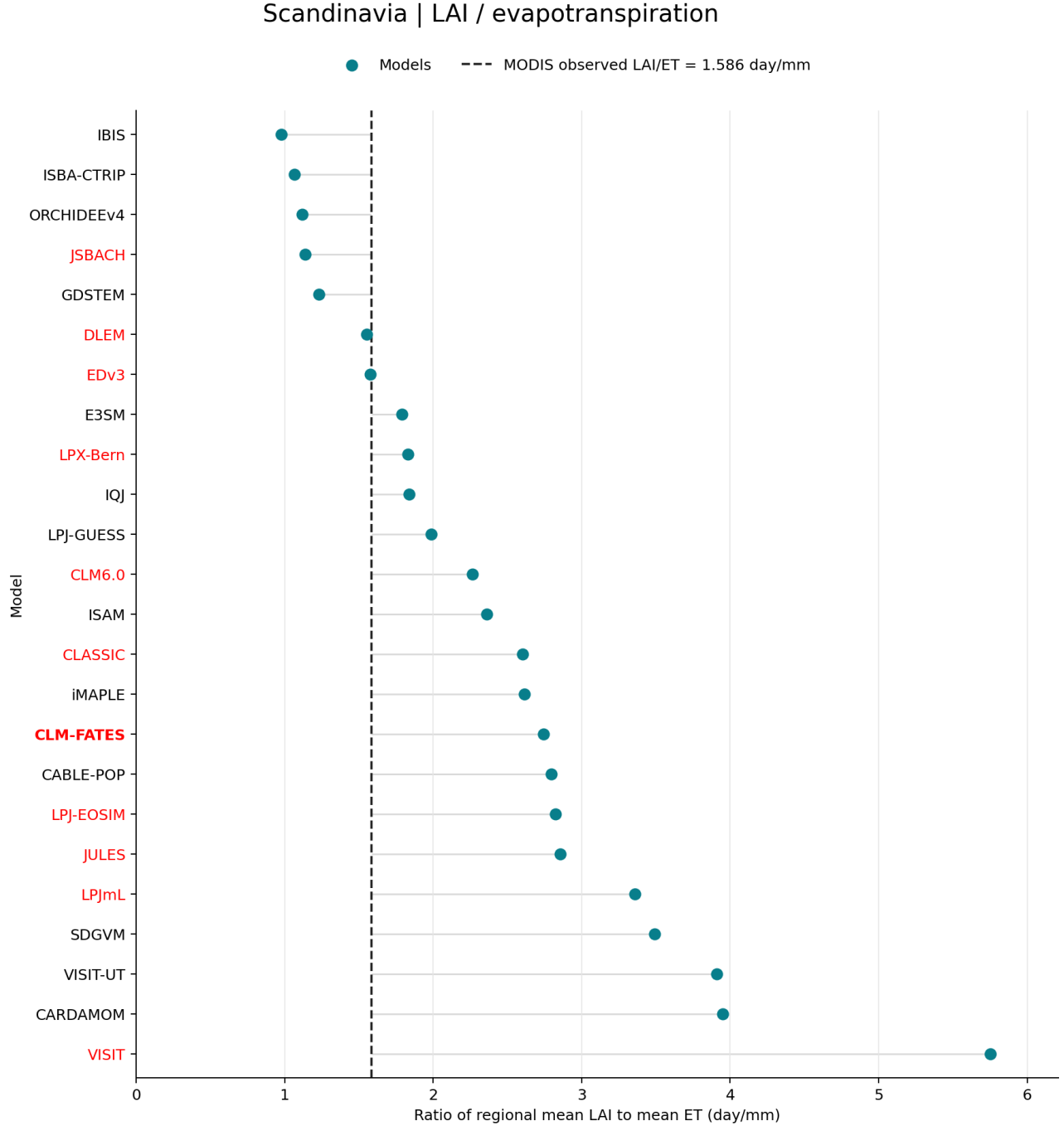


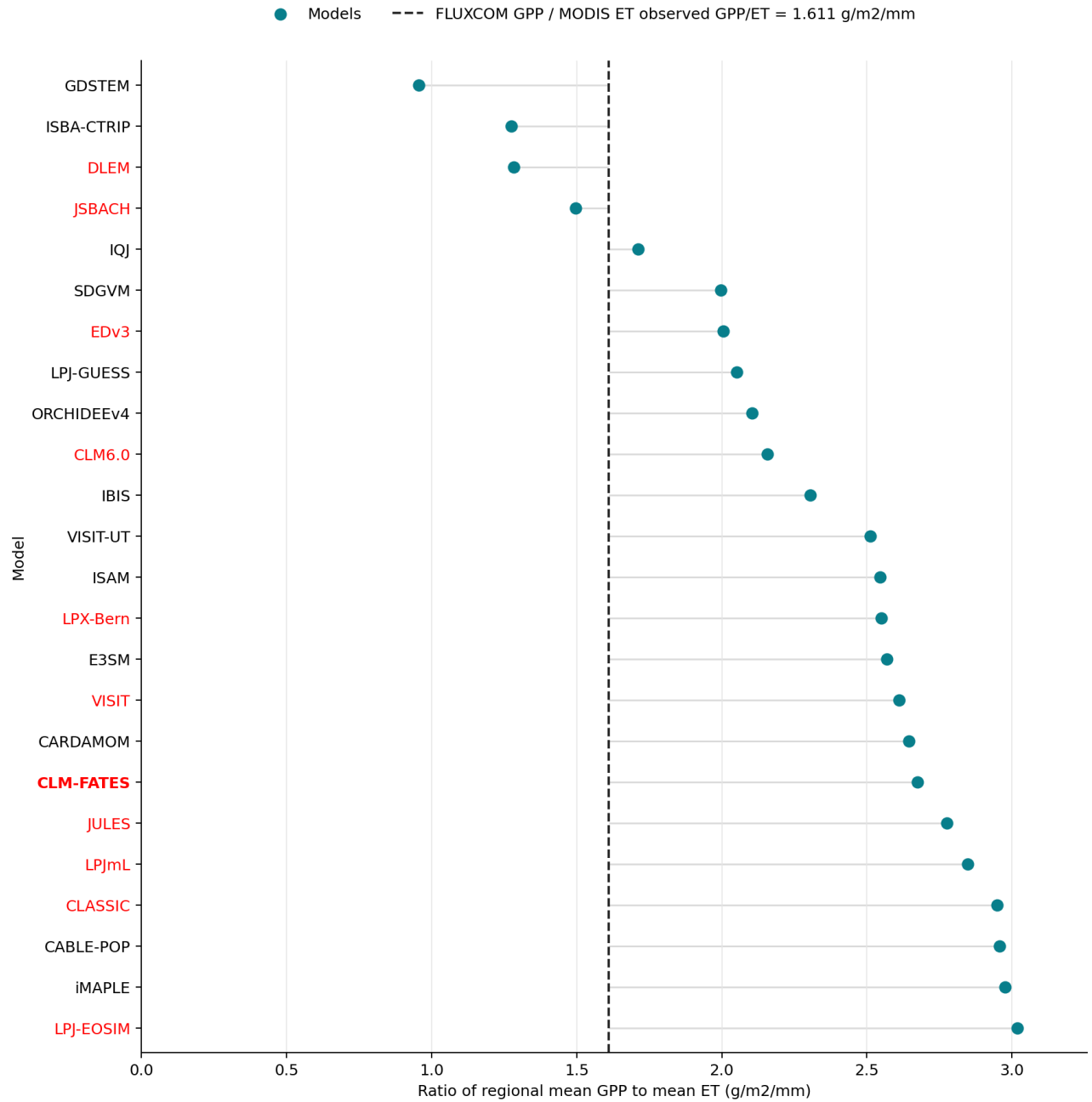
Scandinavia | Bias map: TRENDY models vs ESACCI6.0 Biomass change | 24 models

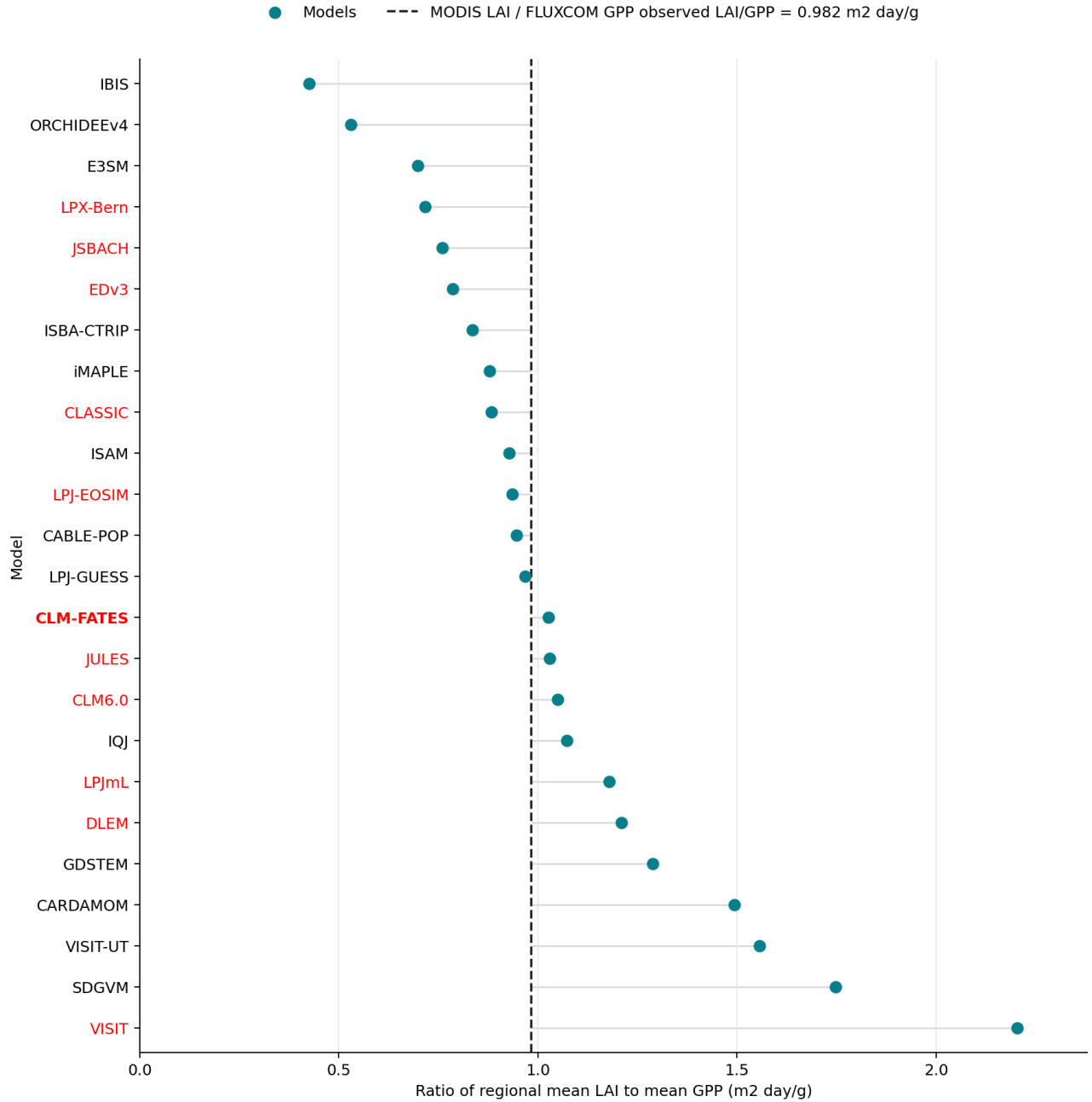



Scandinavia | Biomass stock bias
Models
Zero bias
GDSTEM
DLEM
EDv3
IQJ
LPJmL
CABLE-POP
CARDAMOM
LPJ-GUESS
JSBACH
LPX-Bern
IBIS
ORCHIDEEv4
VISIT
E3SM
CLM6.0
CLM-FATES
iMAPLE
ISBA-CTRIP
VISIT-UT
SDGVM
CLASSIC
JULES
LPJ-EOSIM
ISAM
Model
−1
0
1
2
3
4
5
6
Area-weighted mean bias: model minus ESACCI6.0 [kg m-2]


Scandinavia | Biomass change bias
Models
Zero bias
CABLE-POP
IQJ
EDv3
ORCHIDEEv4
GDSTEM
E3SM
CLM6.0
VISIT-UT
iMAPLE
DLEM
IBIS
LPX-Bern
VISIT
JULES
LPJmL
CLM-FATES
LPJ-GUESS
JSBACH
CLASSIC
SDGVM
ISAM
ISBA-CTRIP
CARDAMOM
LPJ-EOSIM
Model
0.0
0.1
0.2
0.3
0.4
Area-weighted mean bias: model minus ESACCI6.0 [kg m-2]


Scandinavia | LAI / evapotranspiration
Models
MODIS observed LAI/ET = 1.586 day/mm
IBIS
ISBA-CTRIP
ORCHIDEEv4
JSBACH
GDSTEM
DLEM
EDv3
E3SM
LPX-Bern
IQJ
LPJ-GUESS
CLM6.0
ISAM
CLASSIC
iMAPLE
CLM-FATES
CABLE-POP
LPJ-EOSIM
JULES
LPJmL
SDGVM
VISIT-UT
CARDAMOM
VISIT
Model
0
1
2
3
4
5
6
Ratio of regional mean LAI to mean ET (day/mm)


Scandinavia | GPP / evapotranspiration
Models
FLUXCOM GPP / MODIS ET observed GPP/ET = 1.611 g/m2/mm
GDSTEM
ISBA-CTRIP
DLEM
JSBACH
IQJ
SDGVM
EDv3
LPJ-GUESS
ORCHIDEEv4
CLM6.0
IBIS
VISIT-UT
ISAM
LPX-Bern
E3SM
VISIT
CARDAMOM
CLM-FATES
JULES
LPJmL
CLASSIC
CABLE-POP
iMAPLE
LPJ-EOSIM
Model
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Ratio of regional mean GPP to mean ET (g/m2/mm)


Scandinavia | LAI / GPP
Models
MODIS LAI / FLUXCOM GPP observed LAI/GPP = 0.982 m2 day/g
IBIS
ORCHIDEEv4
E3SM
LPX-Bern
JSBACH
EDv3
ISBA-CTRIP
iMAPLE
CLASSIC
ISAM
LPJ-EOSIM
CABLE-POP
LPJ-GUESS
CLM-FATES
JULES
CLM6.0
IQJ
LPJmL
DLEM
GDSTEM
CARDAMOM
VISIT-UT
SDGVM
VISIT
Model
0.0
0.5
1.0
1.5
2.0
Ratio of regional mean LAI to mean GPP (m2 day/g)