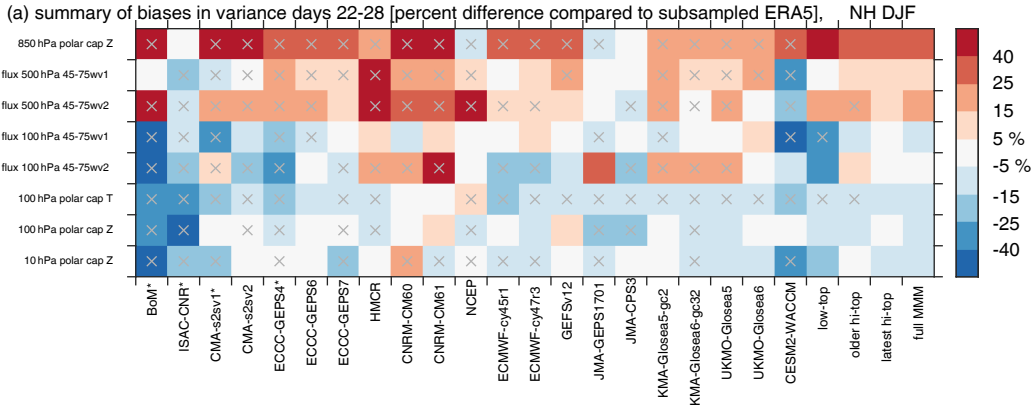
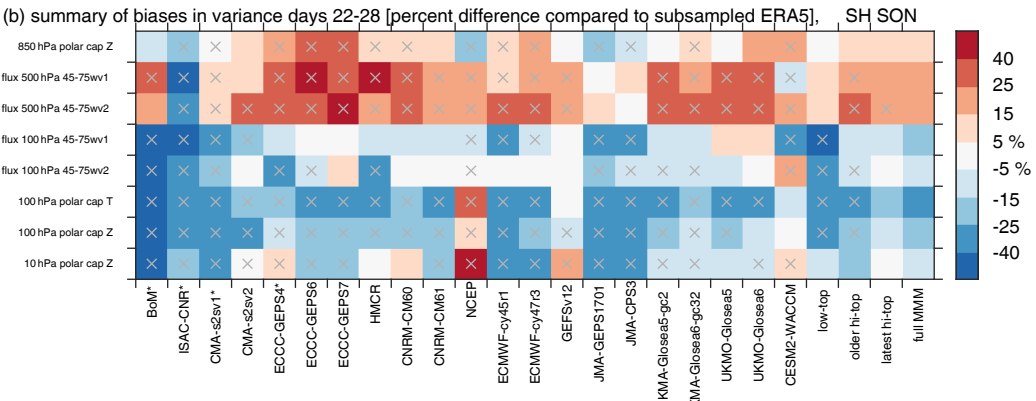

(a) summary of biases in variance days 22-28 [percent difference compared to subsampled ERA5], NH DJF
850 hPa polar cap Z
heat flux 500 hPa 45-75wv1
heat flux 500 hPa 45-75wv2
heat flux 100 hPa 45-75wv1
heat flux 100 hPa 45-75wv2
100 hPa polar cap T
100 hPa polar cap Z
10 hPa polar cap Z
BoM*
ISAC-CNR*
CMA-s2sv1*
CMA-s2sv2
ECCC-GEPS4*
ECCC-GEPS6
ECCC-GEPS7
HMCR
CNRM-CM60
CNRM-CM61
NCEP
ECMWF-cy45r1
ECMWF-cy47r3
GEFSv12
JMA-GEPS1701
JMA-CPS3
KMA-Glosea5-gc2
KMA-Glosea6-gc32
UKMO-Glosea5
UKMO-Glosea6
CESM2-WACCM
low-top
older hi-top
latest hi-top
full MMM
40
25
15
5 %
-5 %
-15
-25
-40


(b) summary of biases in variance days 22-28 [percent difference compared to subsampled ERA5], SH SON
850 hPa polar cap Z
heat flux 500 hPa 45-75wv1
heat flux 500 hPa 45-75wv2
heat flux 100 hPa 45-75wv1
heat flux 100 hPa 45-75wv2
100 hPa polar cap T
100 hPa polar cap Z
10 hPa polar cap Z
BoM*
ISAC-CNR*
CMA-s2sv1*
CMA-s2sv2
ECCC-GEPS4*
ECCC-GEPS6
ECCC-GEPS7
HMCR
CNRM-CM60
CNRM-CM61
NCEP
ECMWF-cy45r1
ECMWF-cy47r3
GEFSv12
JMA-GEPS1701
JMA-CPS3
KMA-Glosea5-gc2
KMA-Glosea6-gc32
UKMO-Glosea5
UKMO-Glosea6
CESM2-WACCM
low-top
older hi-top
latest hi-top
full MMM
40
25
15
5 %
-5 %
-15
-25
-40