

# Assessment of atmospheric circulation indices over Greenland in an ensemble of CMIP6 models

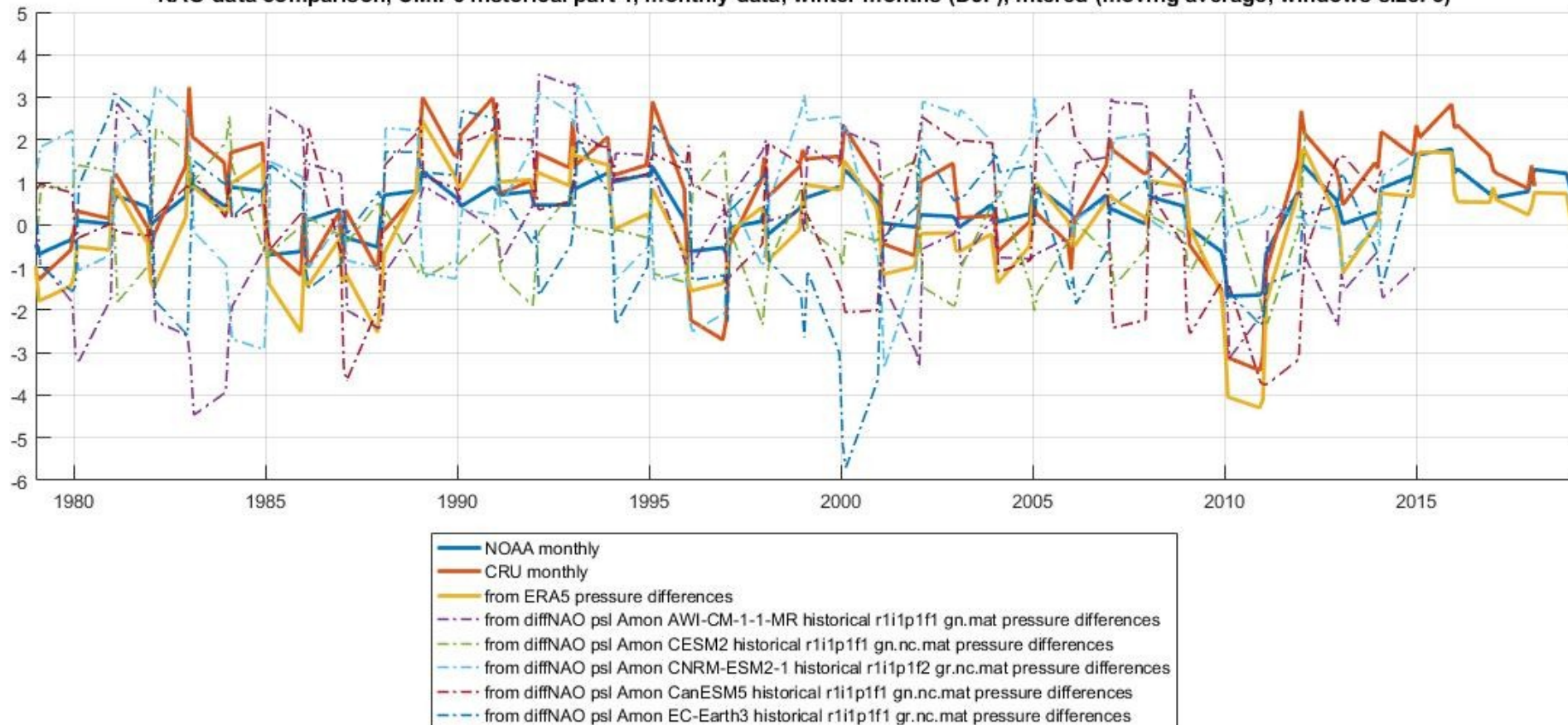
vi hedder: Florian & Susann

- North Atlantic Oscillation (NAO)
- Greenland Blocking Index (GBI)

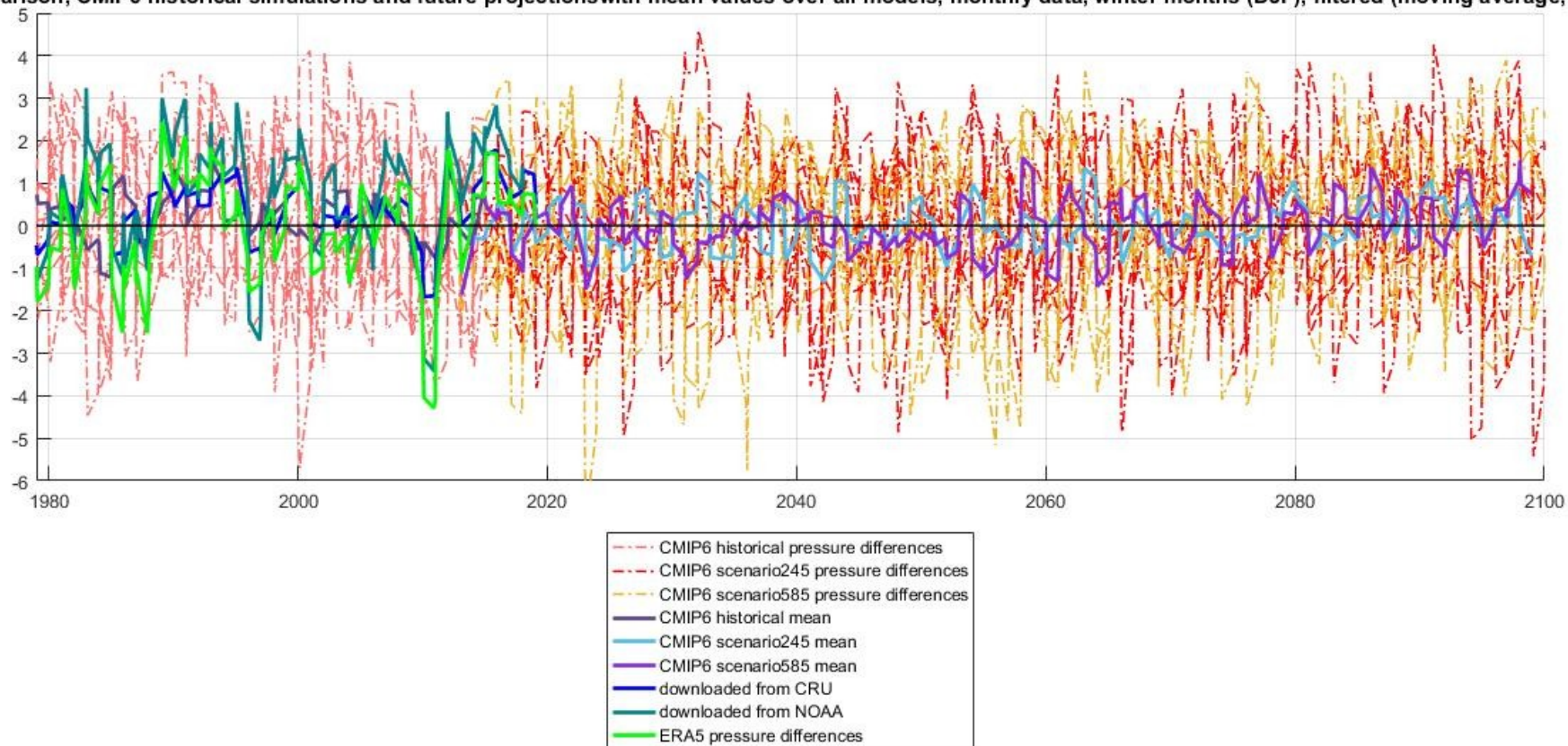
--> effects on Surface Mass Balances of Greenland Ice Sheet



NAO data comparison, CMIP6 historical part 1, monthly data, winter months (DJF), filtered (moving average, windows size: 3)



NAO data comparison, CMIP6 historical simulations and future projections with mean values over all models, monthly data, winter months (DJF), filtered (moving average, windows size: 3)

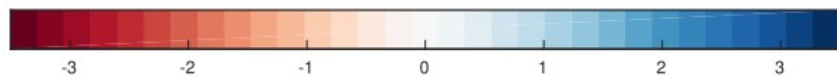
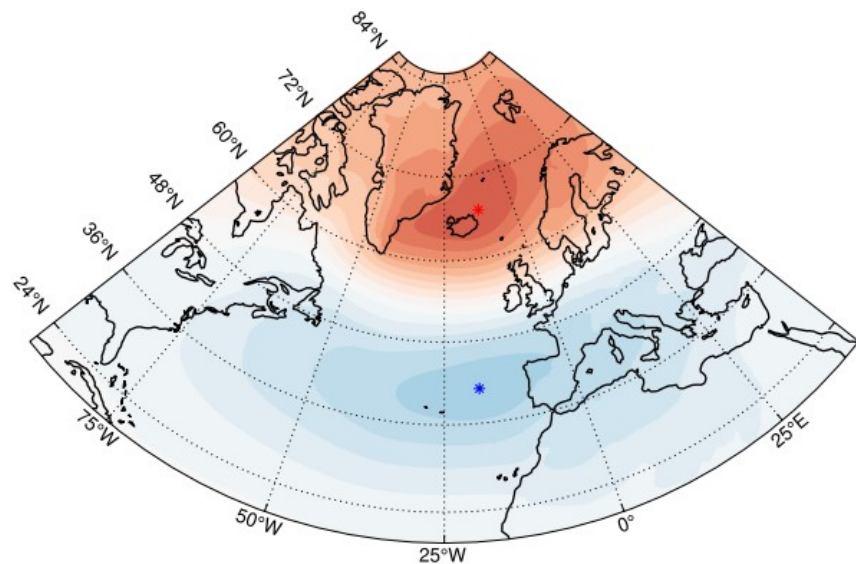




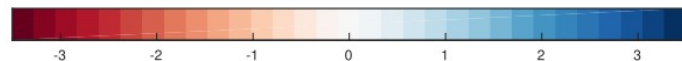
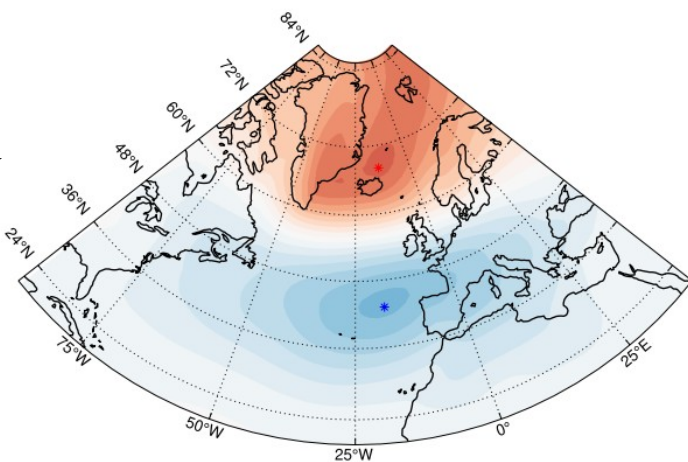
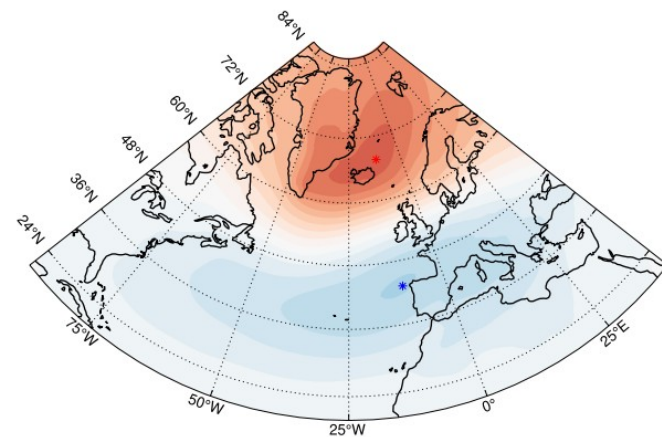
years 1979 - 2015

ERA5

EC-Earth



UKESM

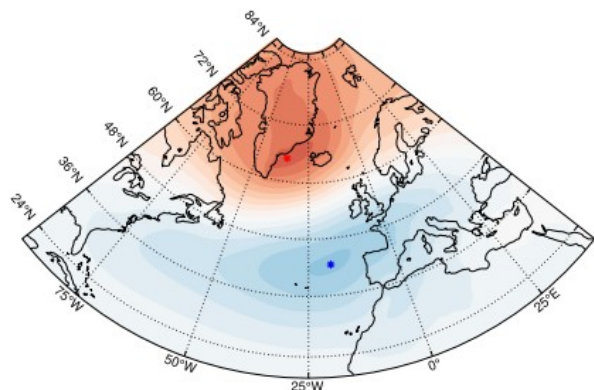


# SSP 245

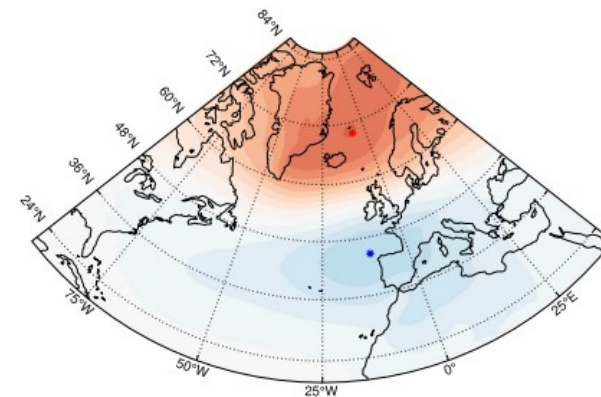
years 2080 - 2100

# SSP 585

## EC-Earth

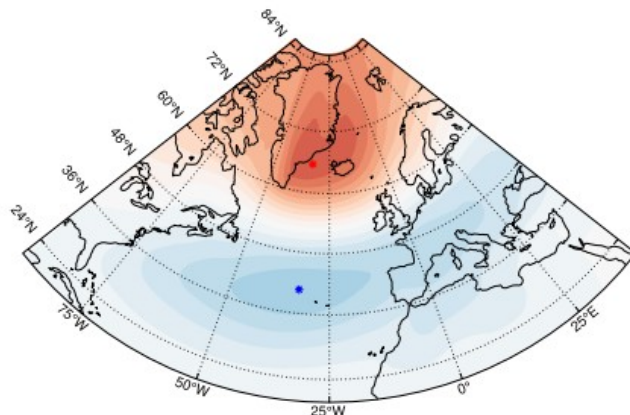


psl\_Amon\_EC-Earth3\_ssp245\_r1i1p1f1.mat  
EOF-1; Months: 1 1 0 0 0 0 0 0 0 0 1  
Variance: 48.8%

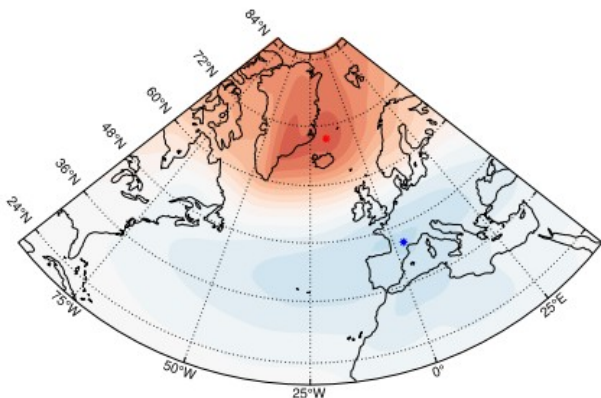


psl\_Amon\_EC-Earth3\_ssp585\_r1i1p1f1.mat  
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Variance: 39%

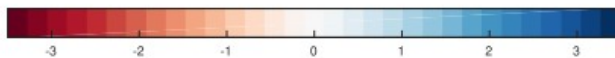
## UKESM



psl\_Amon\_UKESM1-0-LL\_ssp245\_r1i1p1f2.mat  
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Variance: 52.6%



psl\_Amon\_UKESM1-0-LL\_ssp585\_r1i1p1f2.mat  
EOF-1; Months: 1 1 0 0 0 0 0 0 0 0 1  
Variance: 45.8%



GBI as a weighted mean of the geopotential height at 500hPa pressure level part 1

