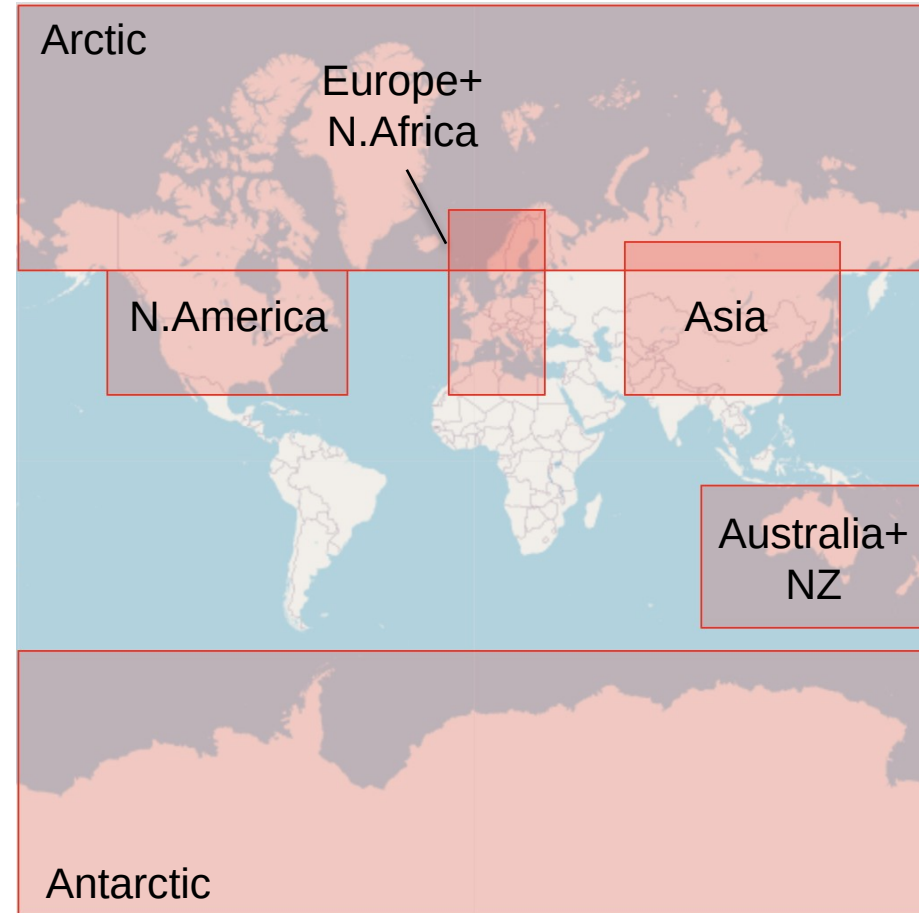
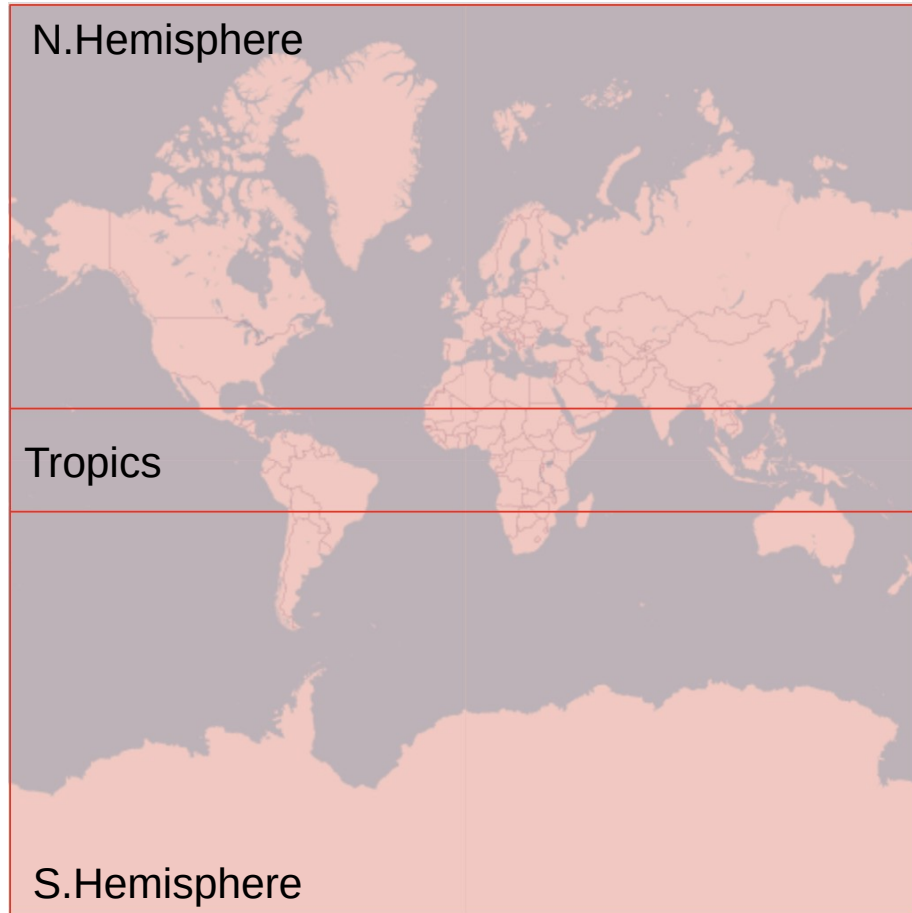


Domain definitions for WMO score exchange

Thomas Haiden



Scores for South America computed at ECMWF

Upper-air variables

Geopotential
Temperature
U-wind
V-wind
Wind speed
Relative humidity
Ozone

Levels (hPa)

1000, 925, 850, 700, 500, 300,
250, 200, 100, 50, 30, 10

Surface variables

MSL pressure
10m wind speed
2m temperature

Scores

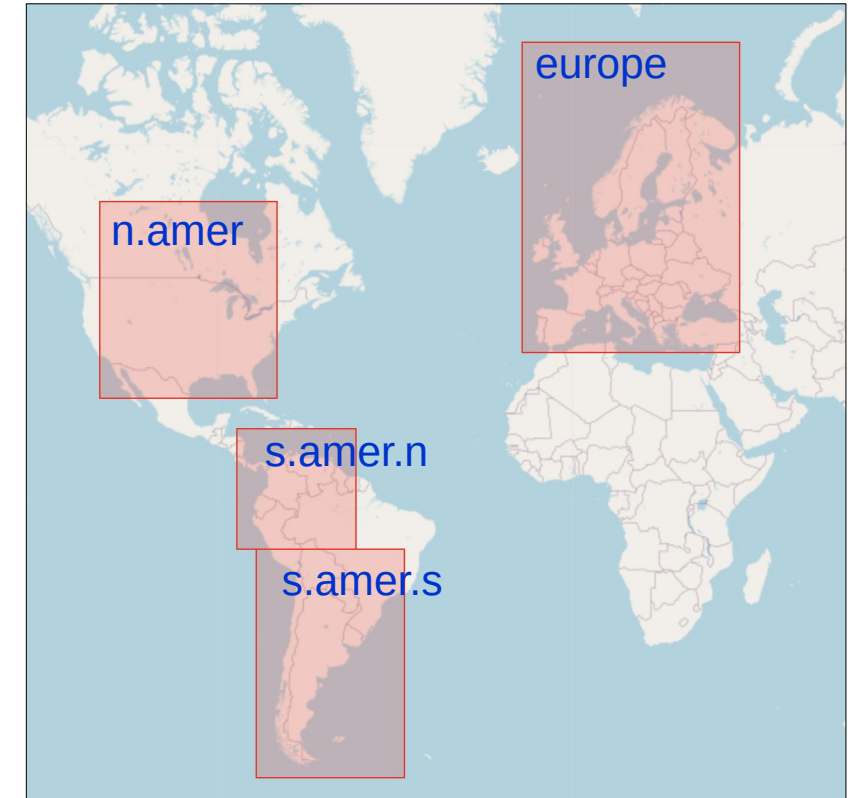
Root mean square error
Error standard deviation
Mean error (bias)
Anomaly correlation
Activity of the forecast
Activity of the analysis

Verification against Analysis

Verification times 00 and 12 UTC

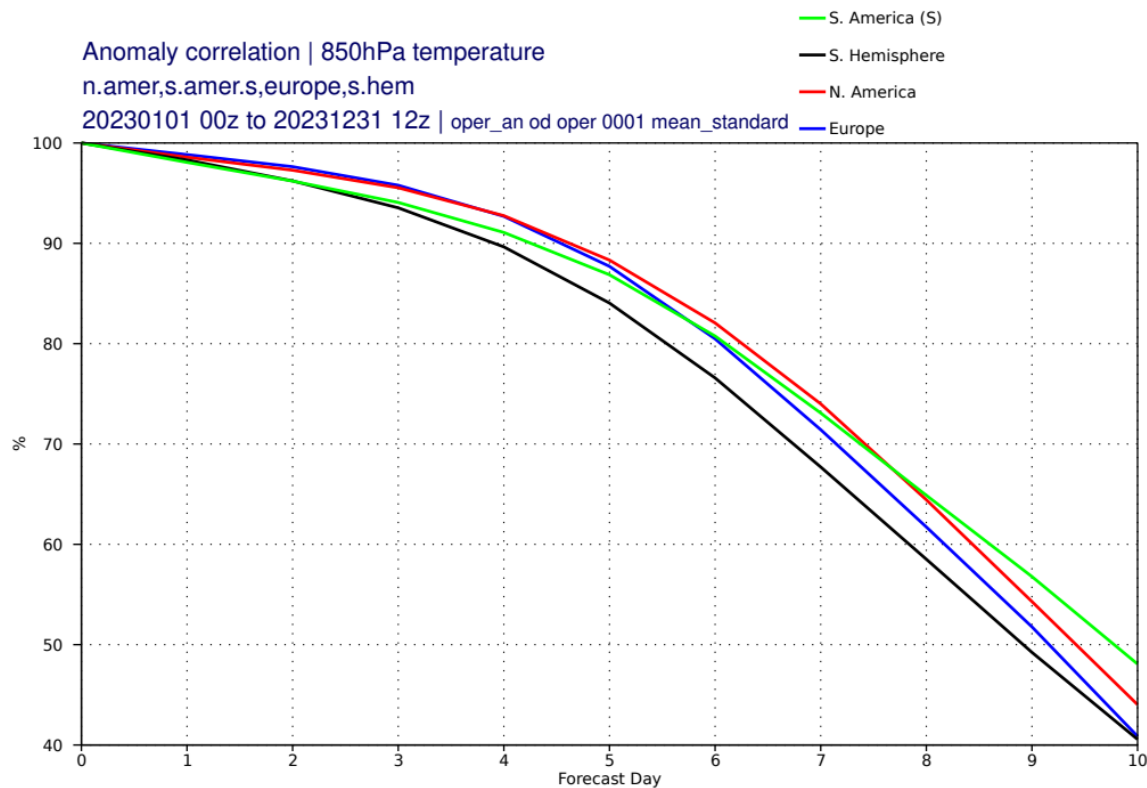
Forecasts

HRES
ENS control
ENS mean

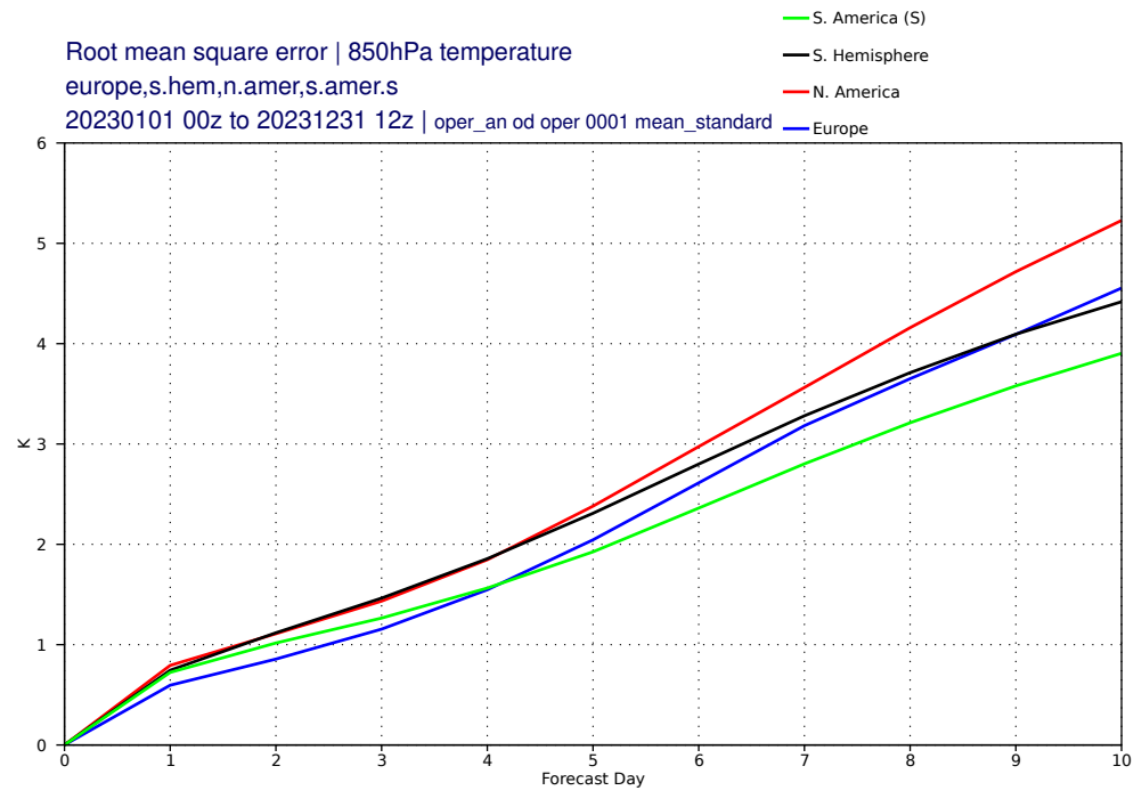


T850 scores in 2023

Verification against own analysis



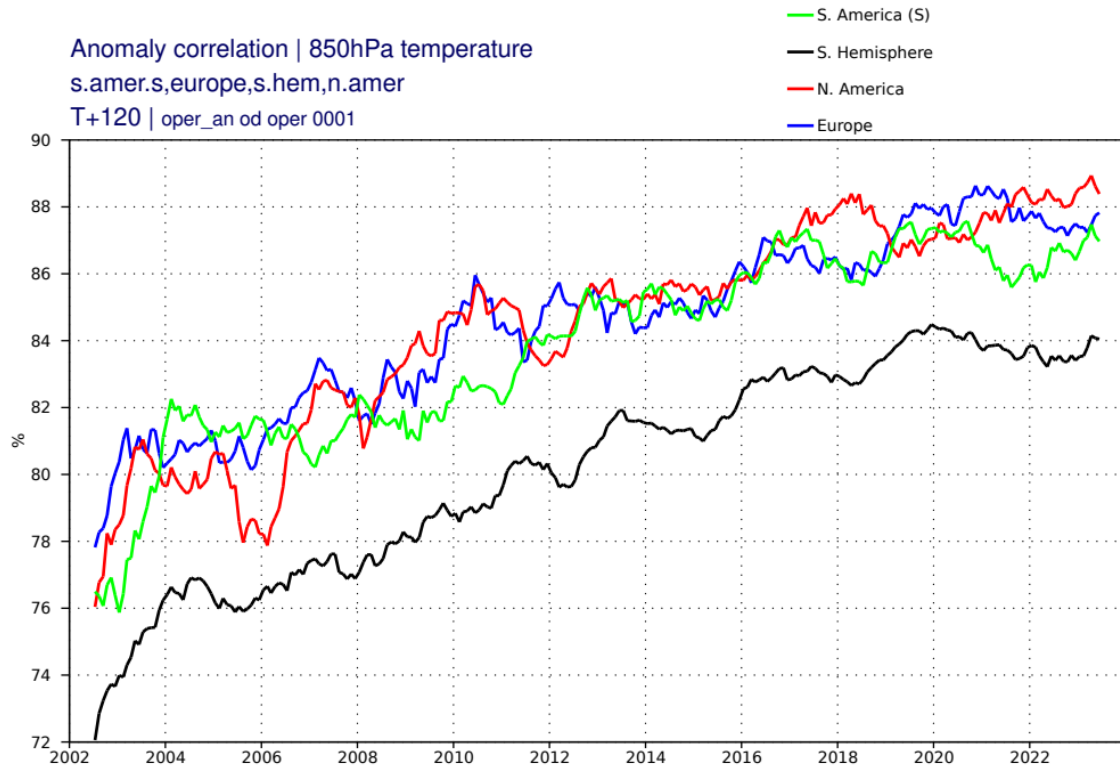
Anomaly correlation



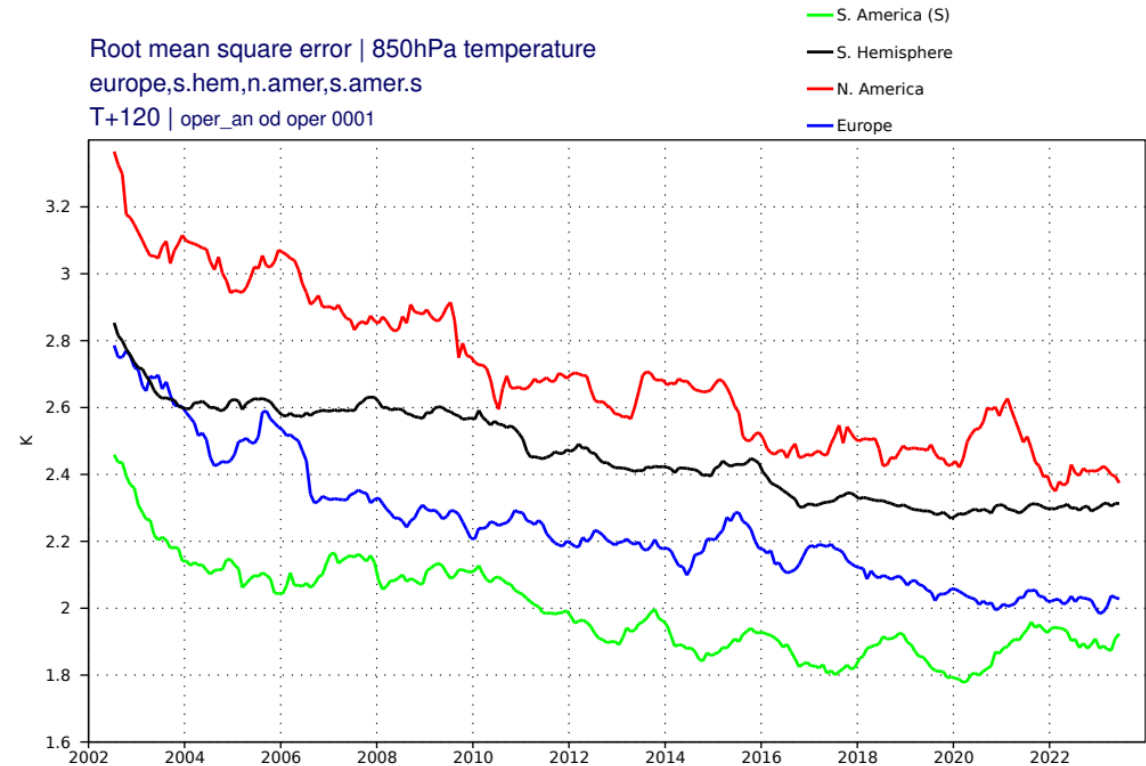
RMSE

T850 long-term evolution of scores (D+5)

Verification against own analysis



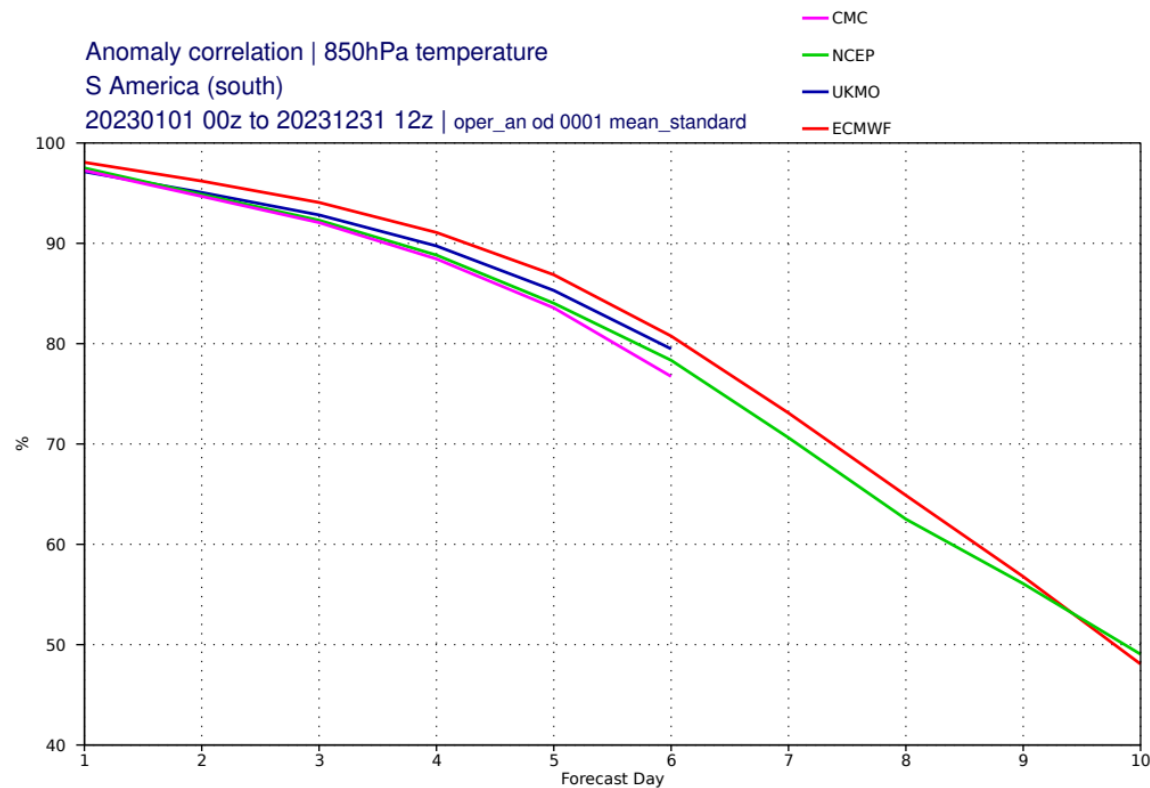
Anomaly correlation



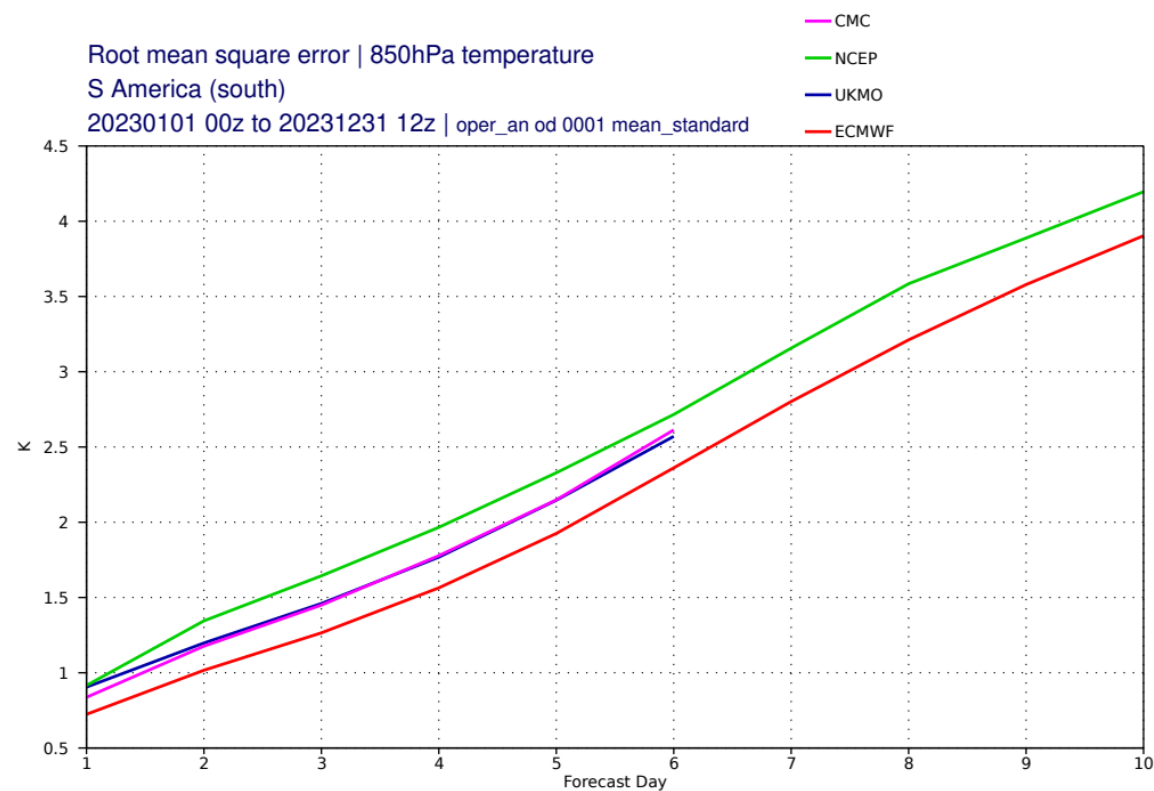
RMSE

T850 comparison between centres

Verification against own analysis



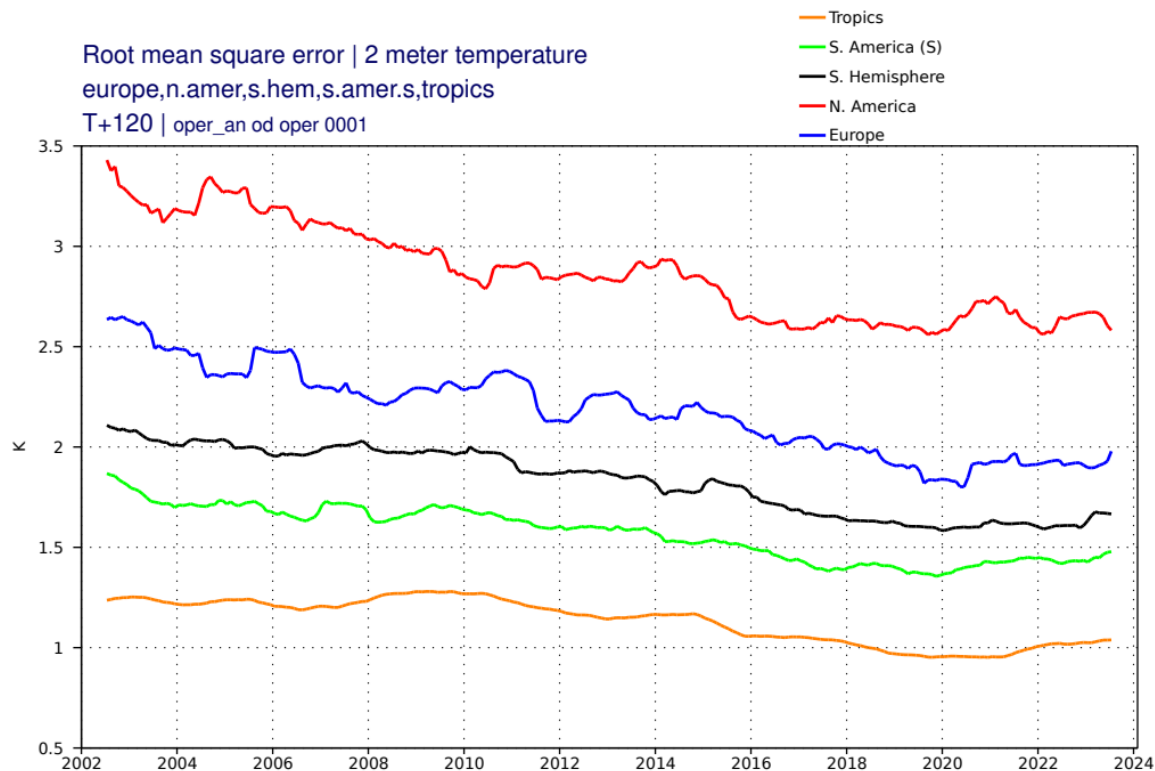
Anomaly correlation



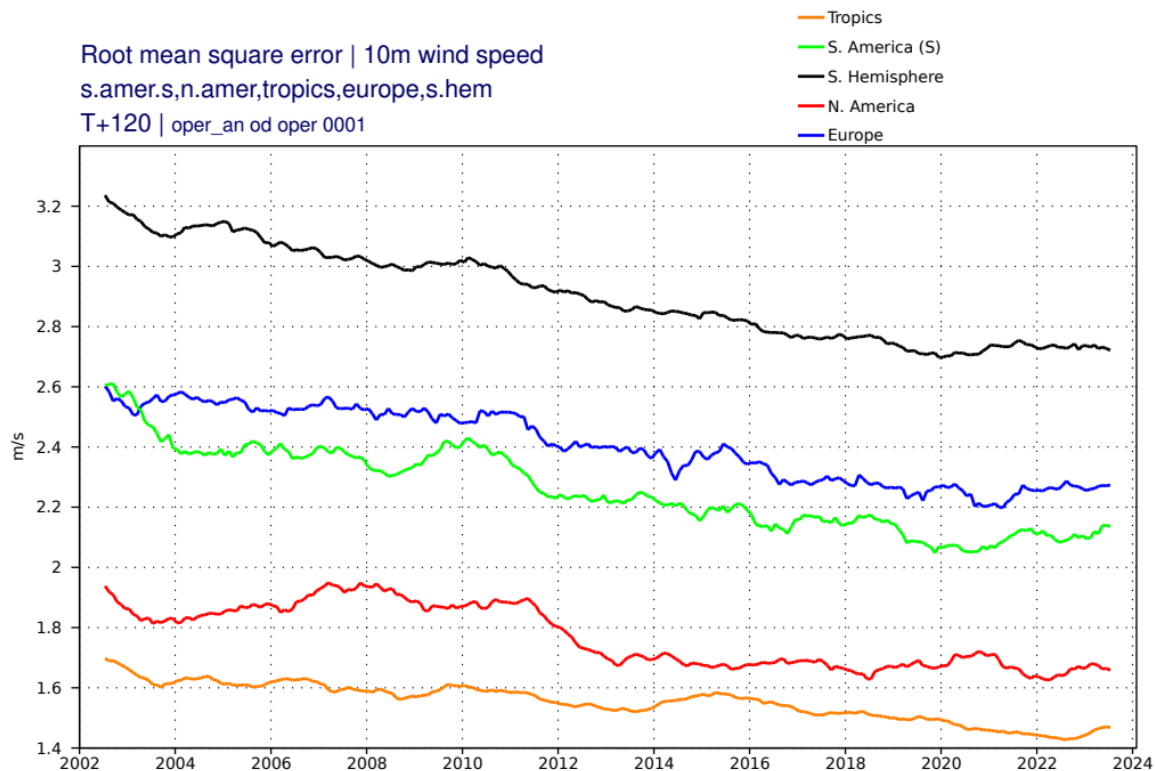
RMSE

2m temperature and 10m wind speed

Verification against SYNOP



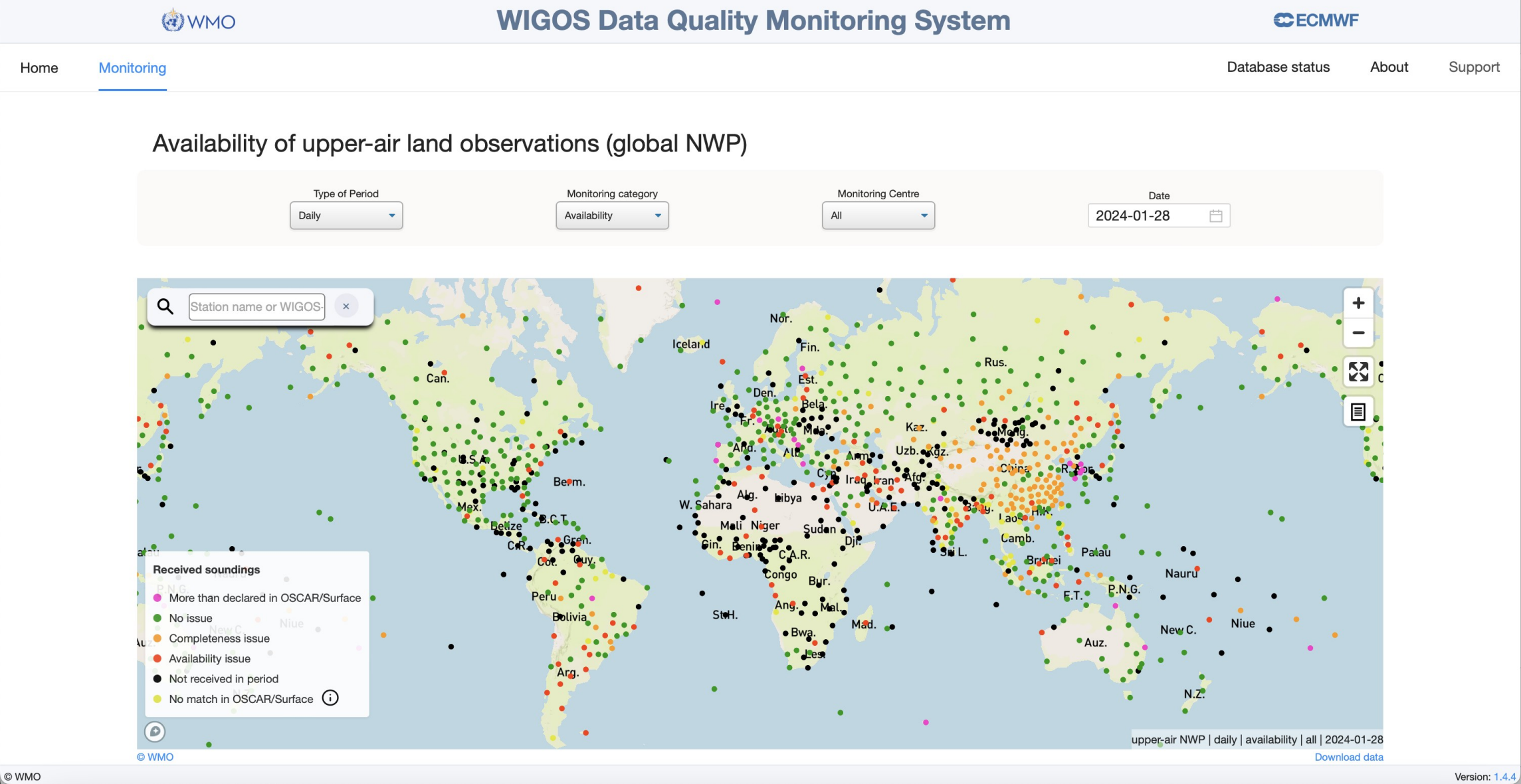
2m temperature



10m wind speed

Radiosonde availability (WDQMS)

<https://wdqms.wmo.int>



Surface station availability (WDQMS)

<https://wdqms.wmo.int>

Availability of surface land observations (global NWP)

Type of Period

Monitoring category

Variable

Monitoring Centre

Date

Six-hour period

Six-hour

Availability

2m temperature

All

2024-01-28

00

06

12

18

