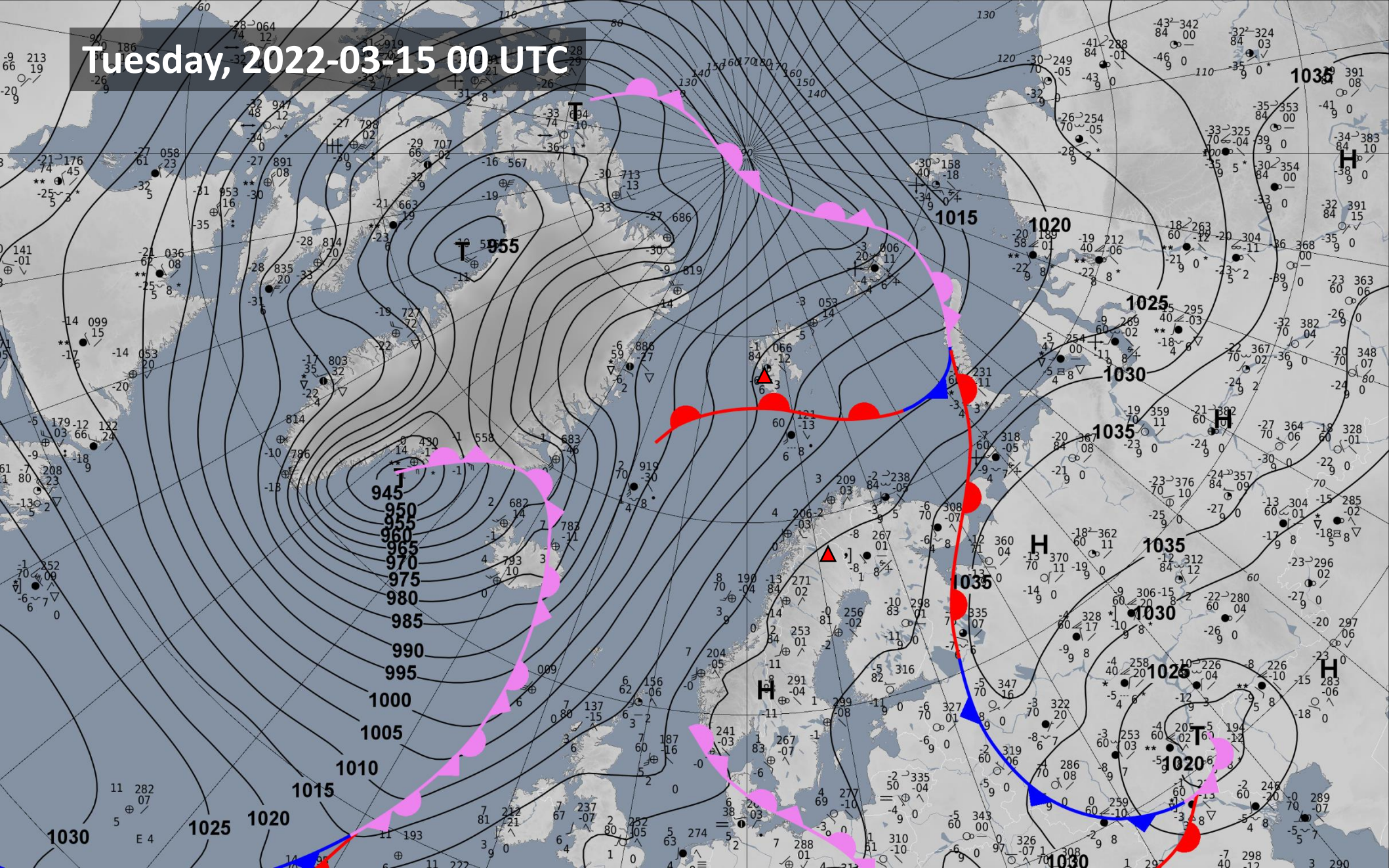


Weather briefing HALO-(AC)³

Tuesday, 2022-03-15 17:00

Surface Analysis
2022-03-15 00 UTC
DWD

Tuesday, 2022-03-15 00 UTC



Circulation pattern development

2022-03-15 00 UTC: 12 – 132h

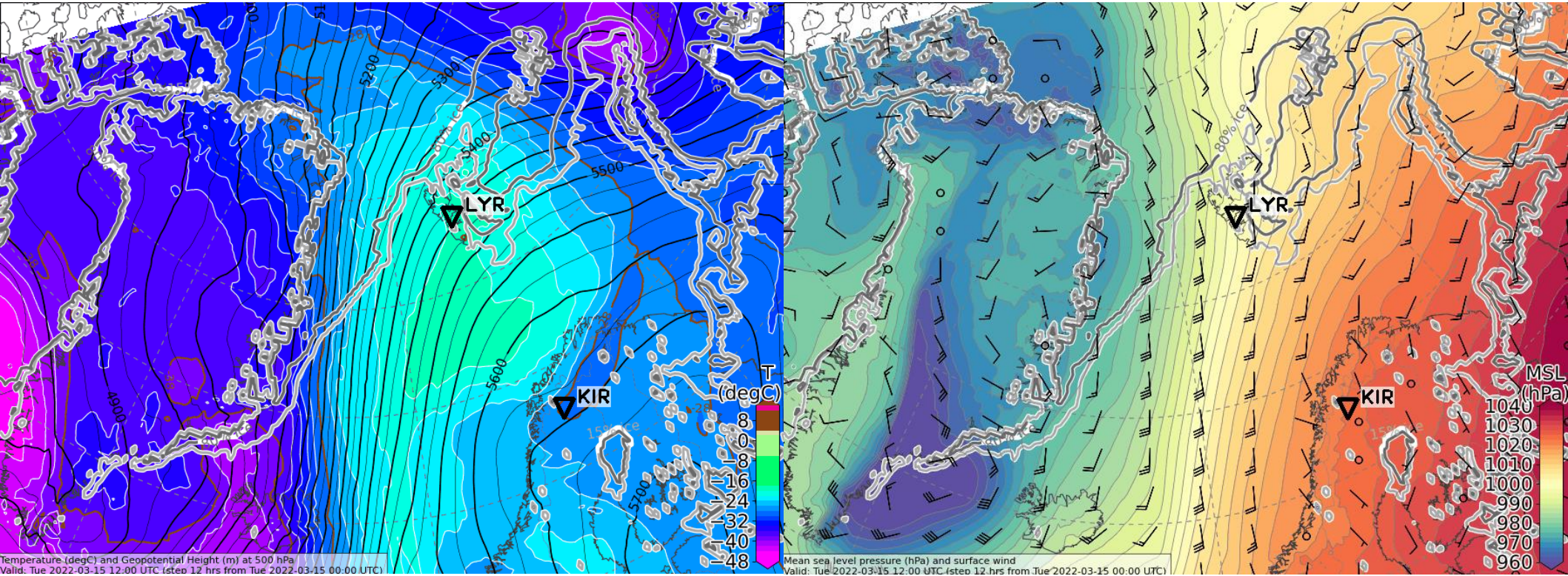
500 hPa Geopot & T

Sea level pressure

Tuesday, 2022-03-15 12 UTC (+12h)

500 hPa Geopot & T

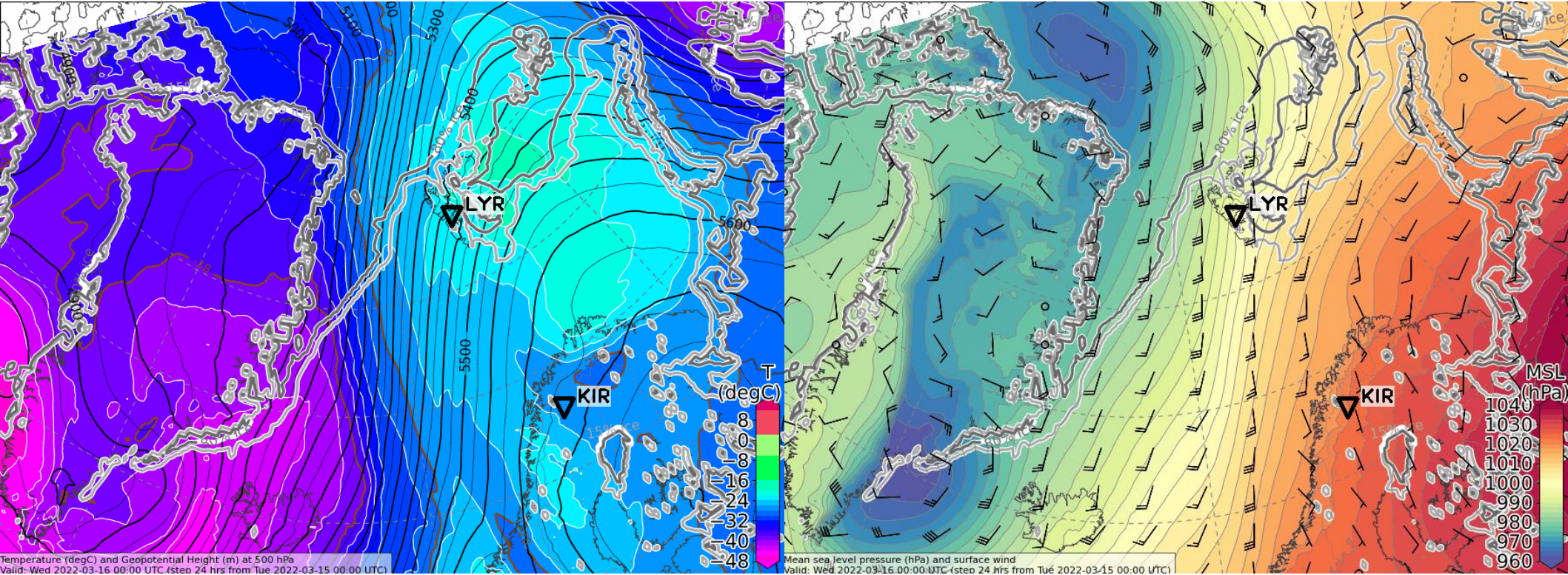
Sea level pressure



Wednesday, 2022-03-16 00 UTC (+24h)

500 hPa Geopot & T

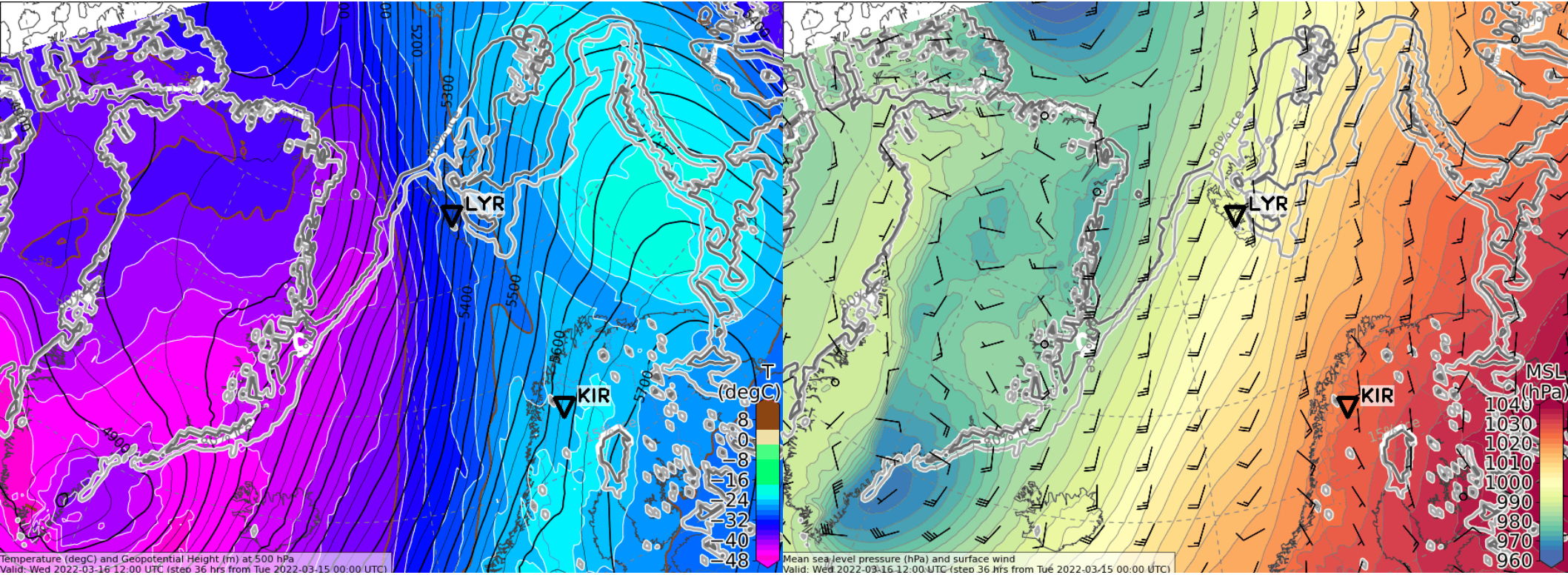
Sea level pressure



Wednesday, 2022-03-16 12 UTC (+36h)

500 hPa Geopot & T

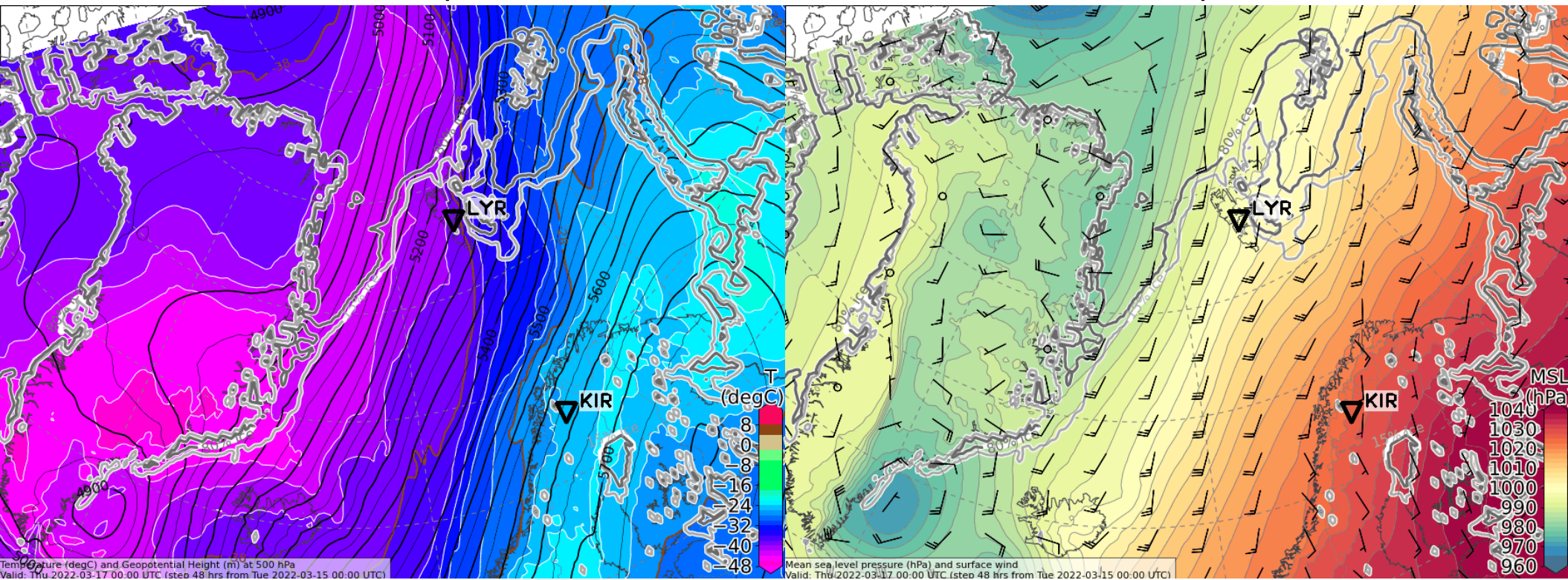
Sea level pressure



Thursday, 2022-03-17 00 UTC (+48h)

500 hPa Geopot & T

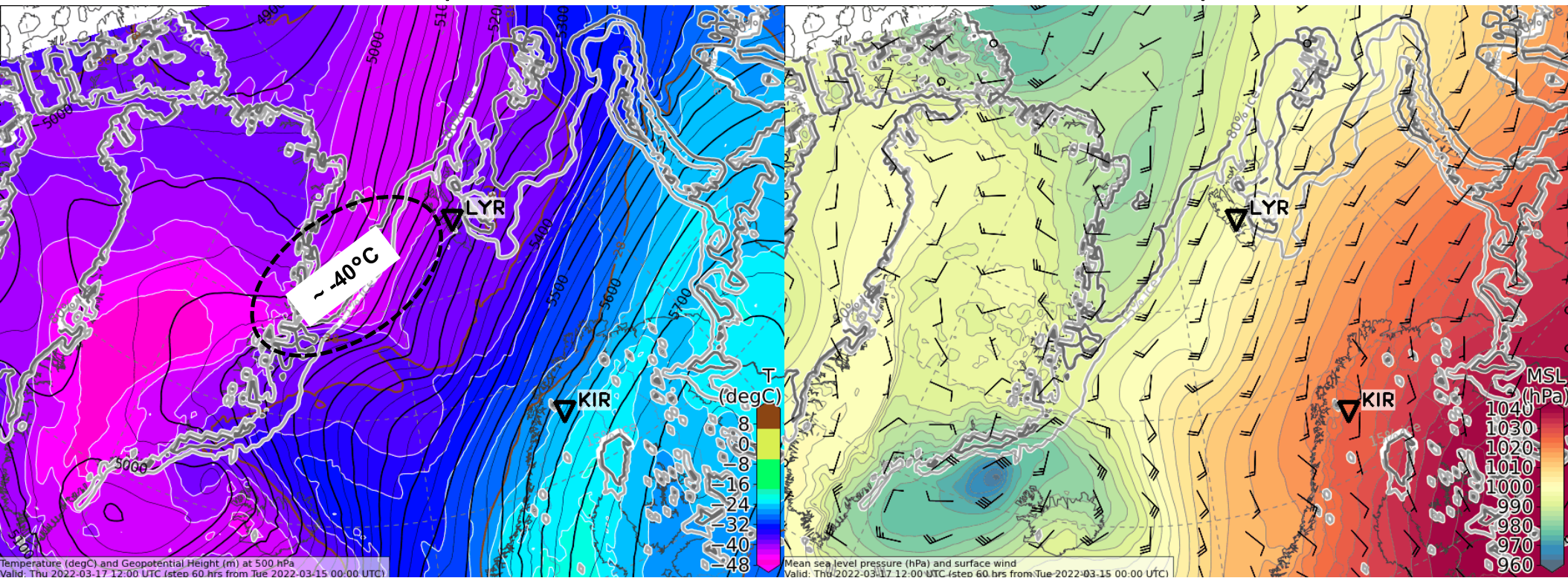
Sea level pressure



Thursday, 2022-03-17 12 UTC (+60h)

500 hPa Geopot & T

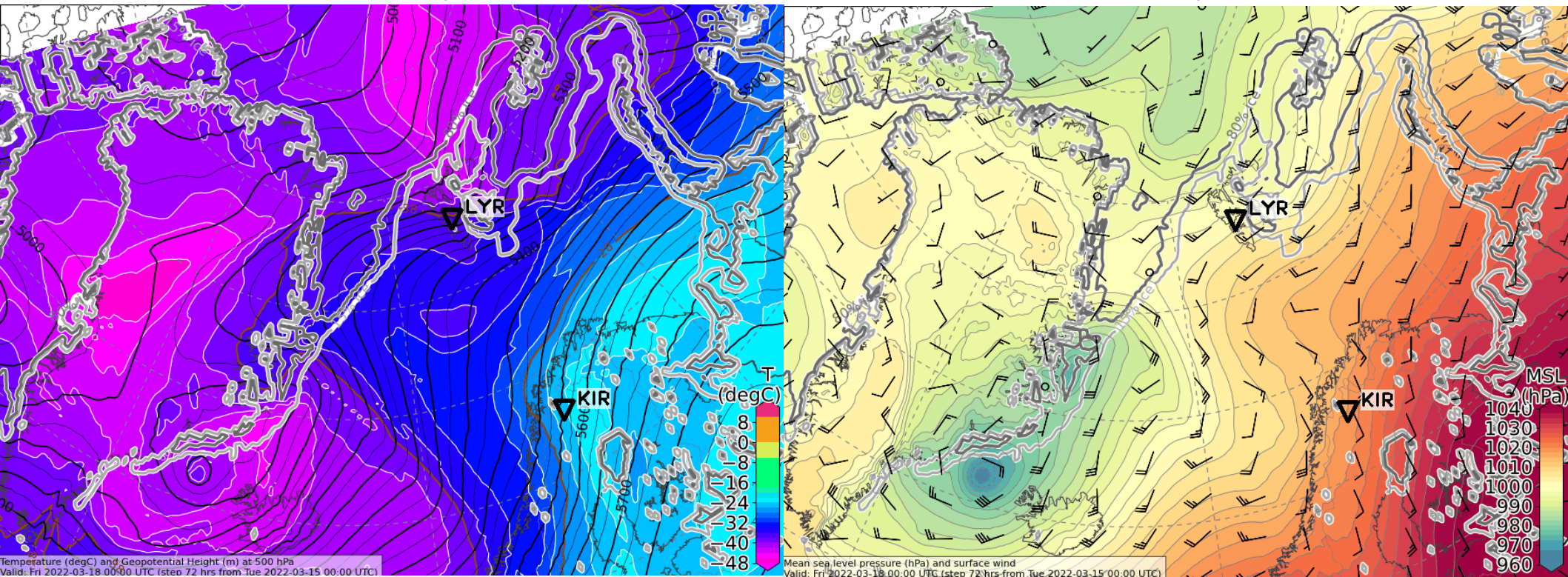
Sea level pressure



Friday, 2022-03-18 00 UTC (+72h)

500 hPa Geopot & T

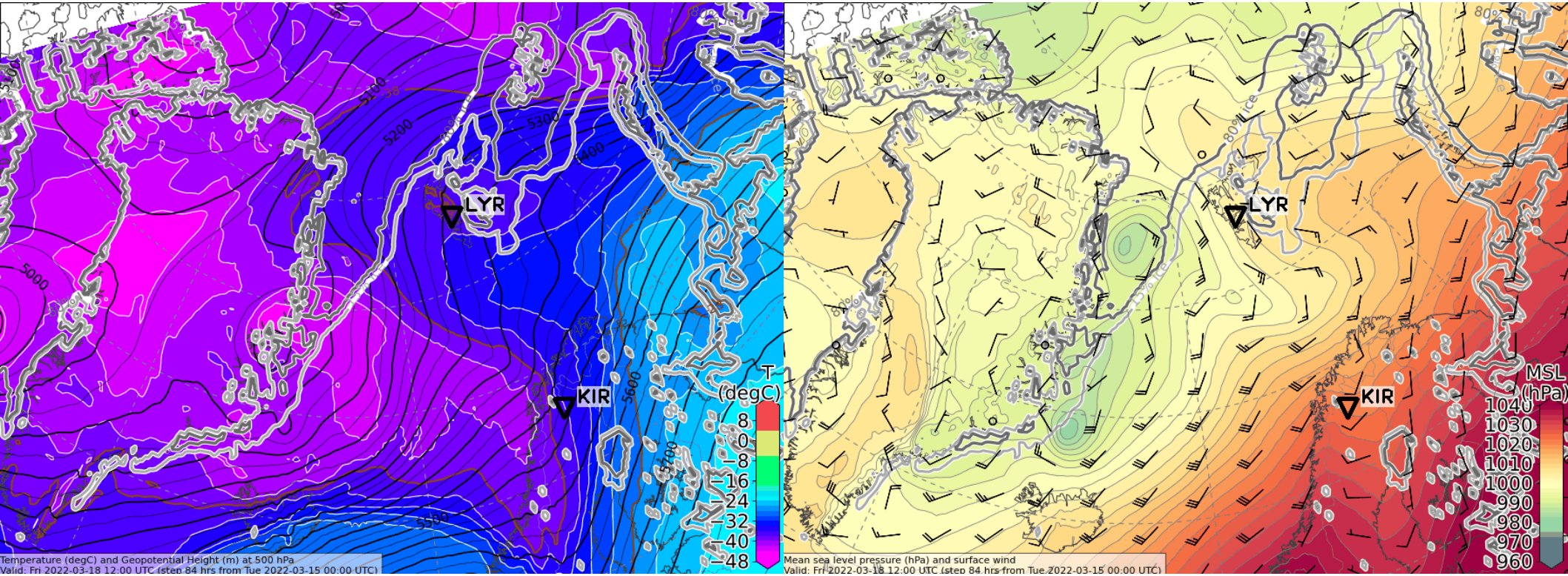
Sea level pressure



Friday, 2022-03-18 12 UTC (+84h)

500 hPa Geopot & T

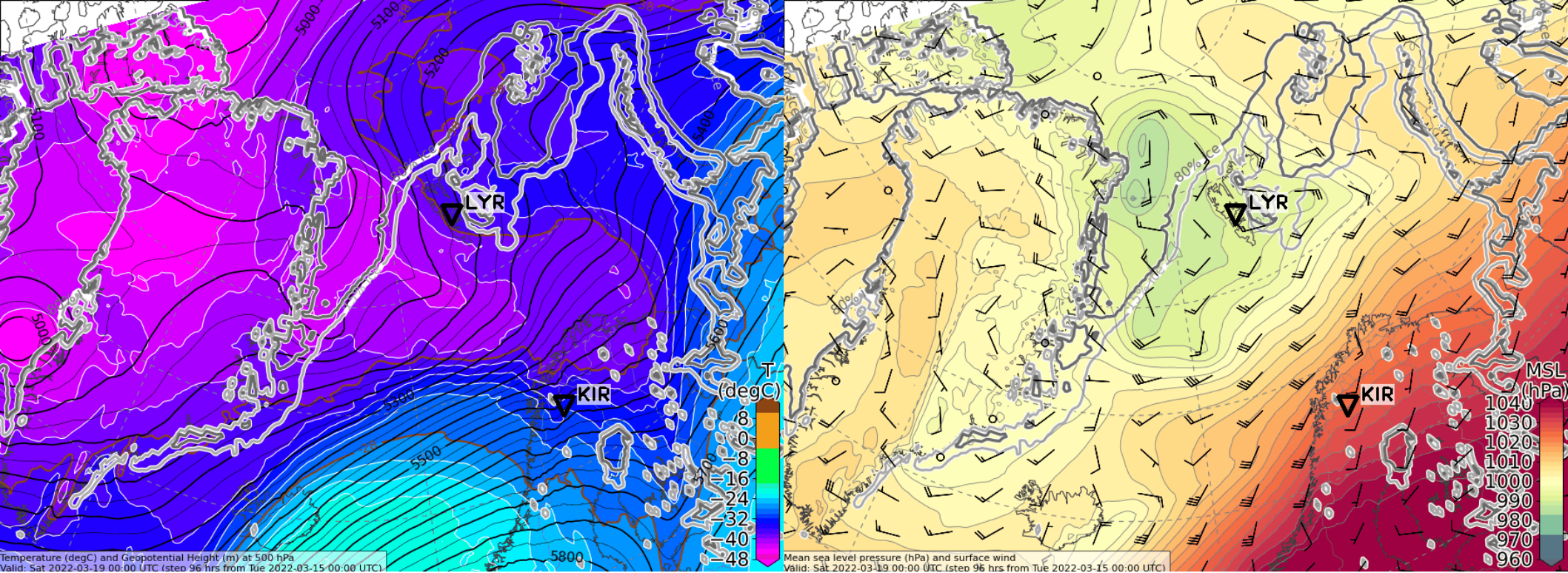
Sea level pressure



Saturday, 2022-03-19 00 UTC (+96h)

500 hPa Geopot & T

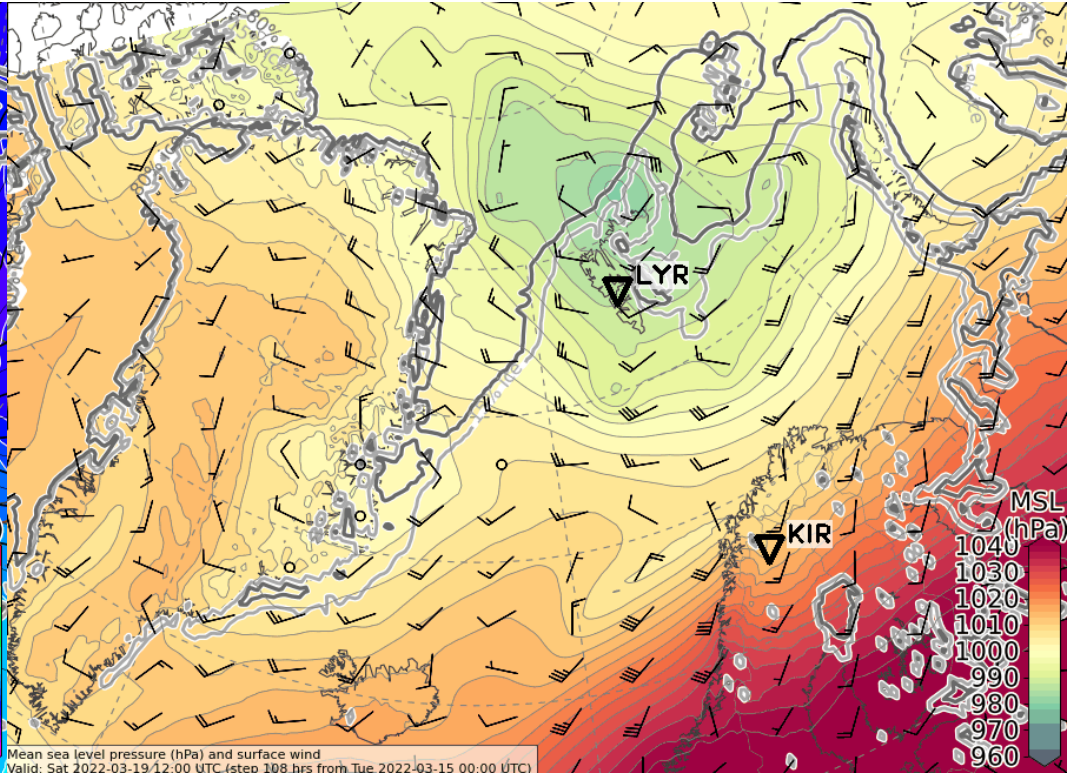
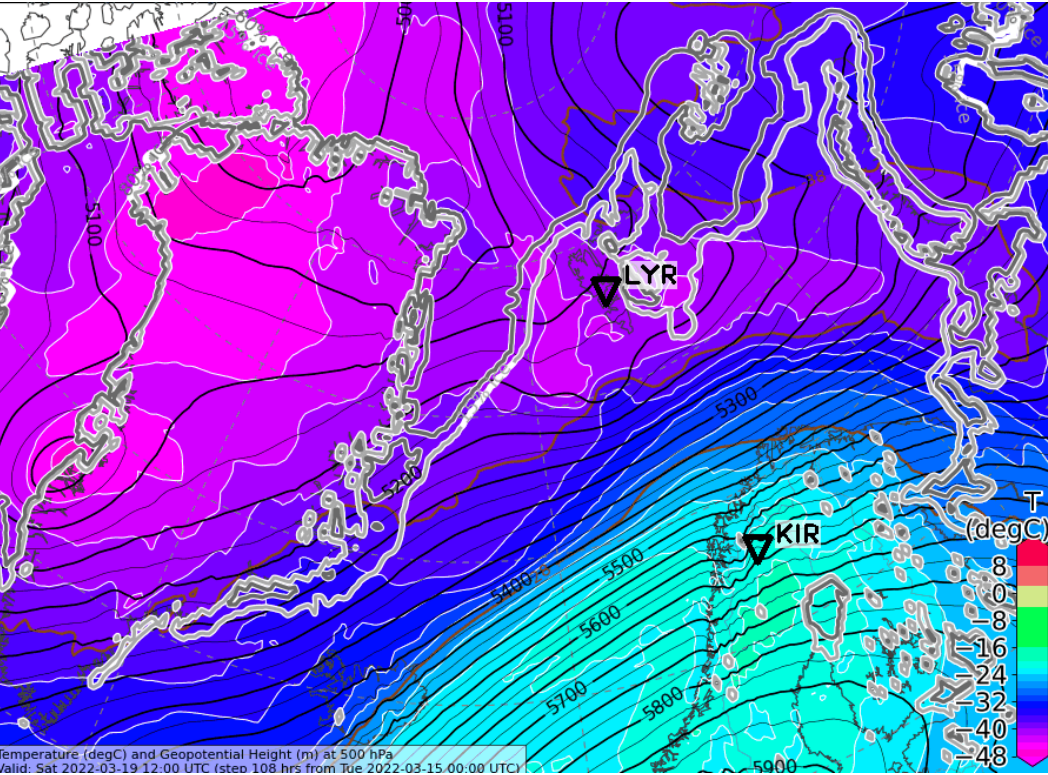
Sea level pressure



Saturday, 2022-03-19 12 UTC (+108h)

500 hPa Geopot & T

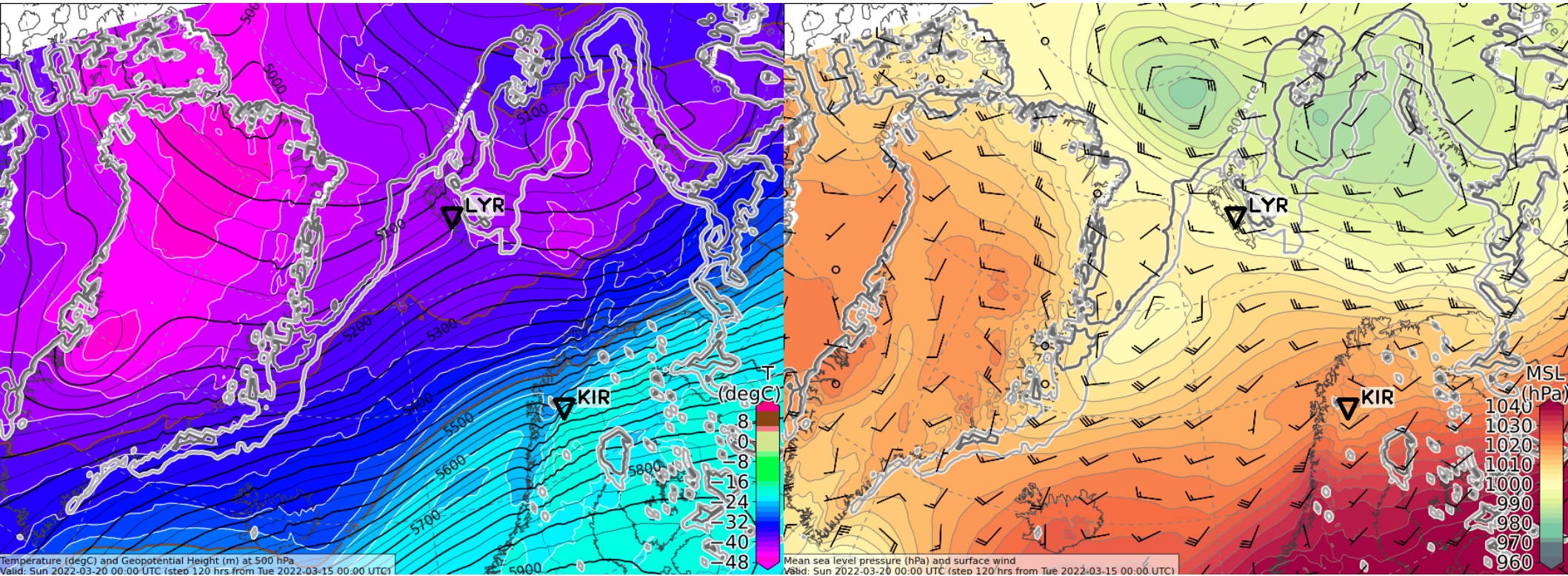
Sea level pressure



Sunday, 2022-03-20 00 UTC (+120h)

500 hPa Geopot & T

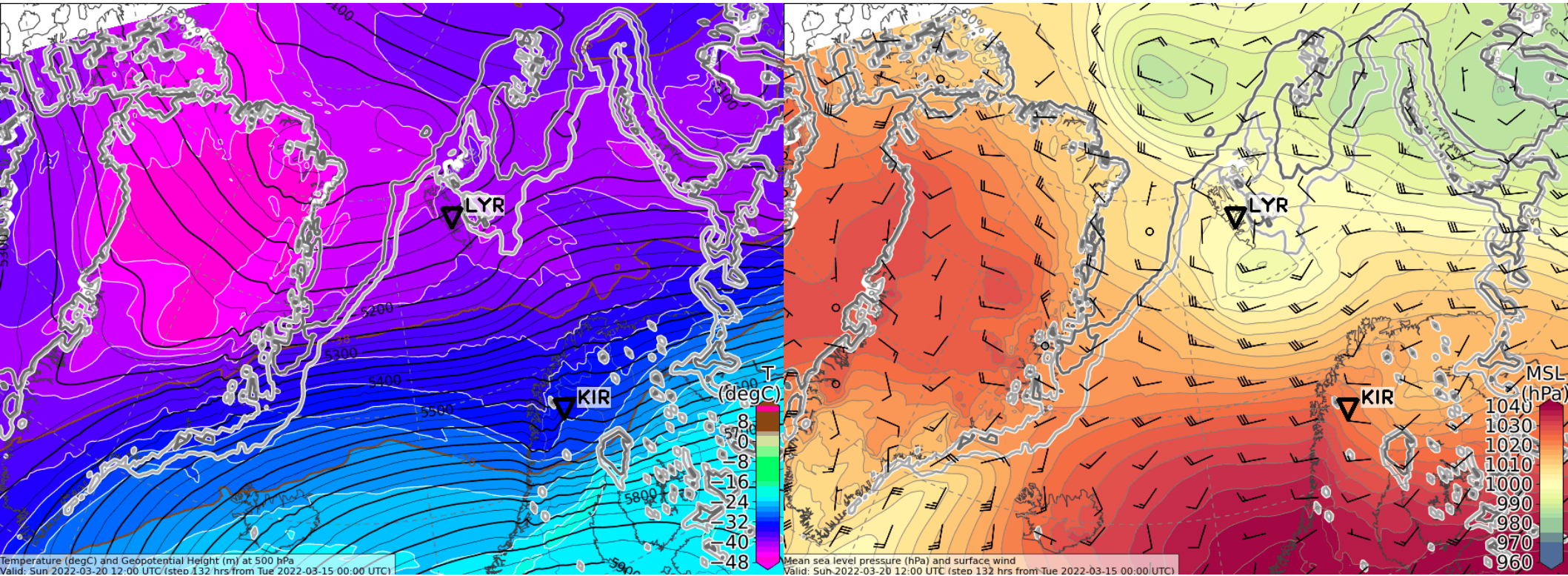
Sea level pressure



Sunday, 2022-03-20 12 UTC (+132h)

500 hPa Geopot & T

Sea level pressure

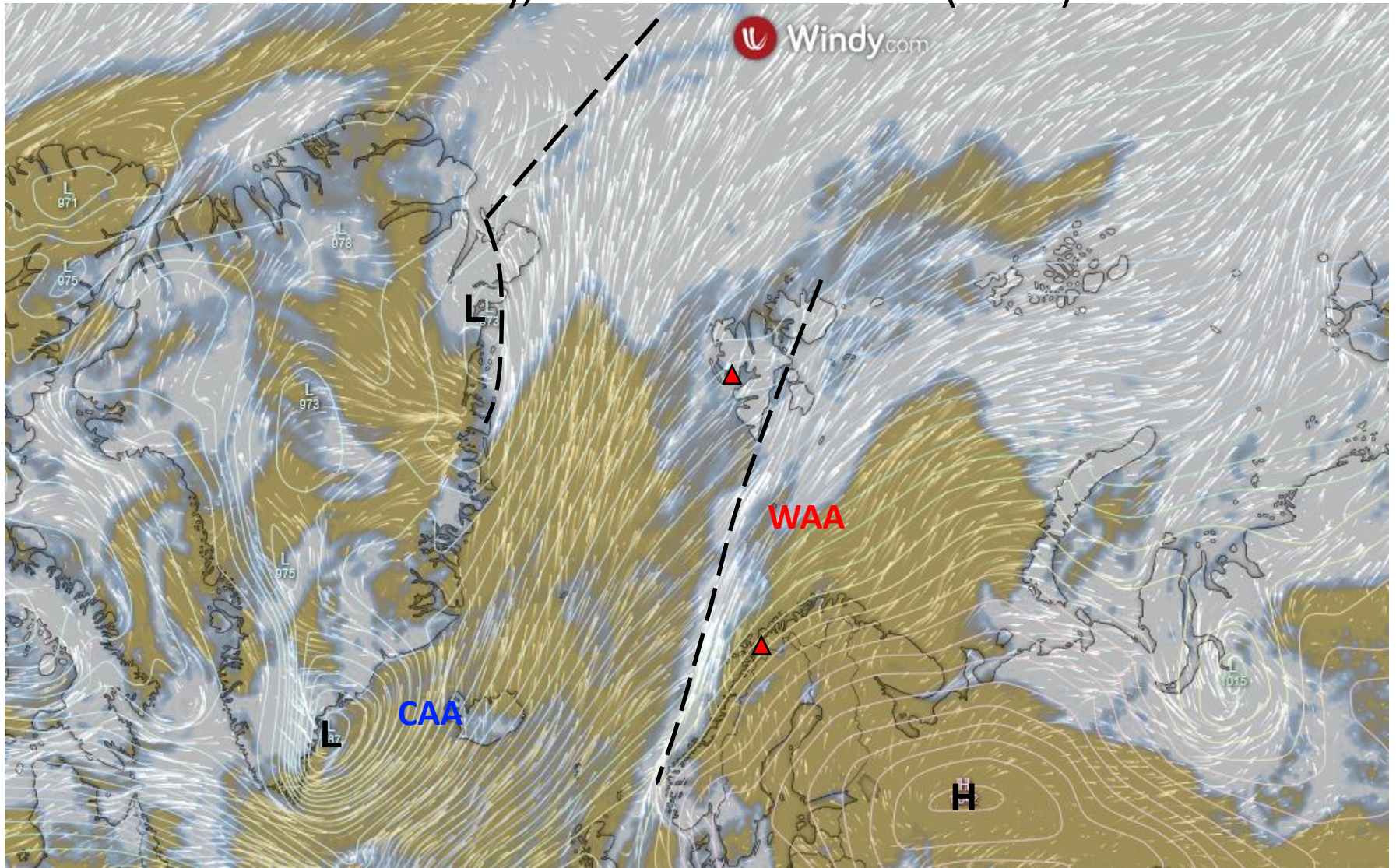


Surface wind development
2022-03-15 00 UTC: 36 – 132h
ECMWF

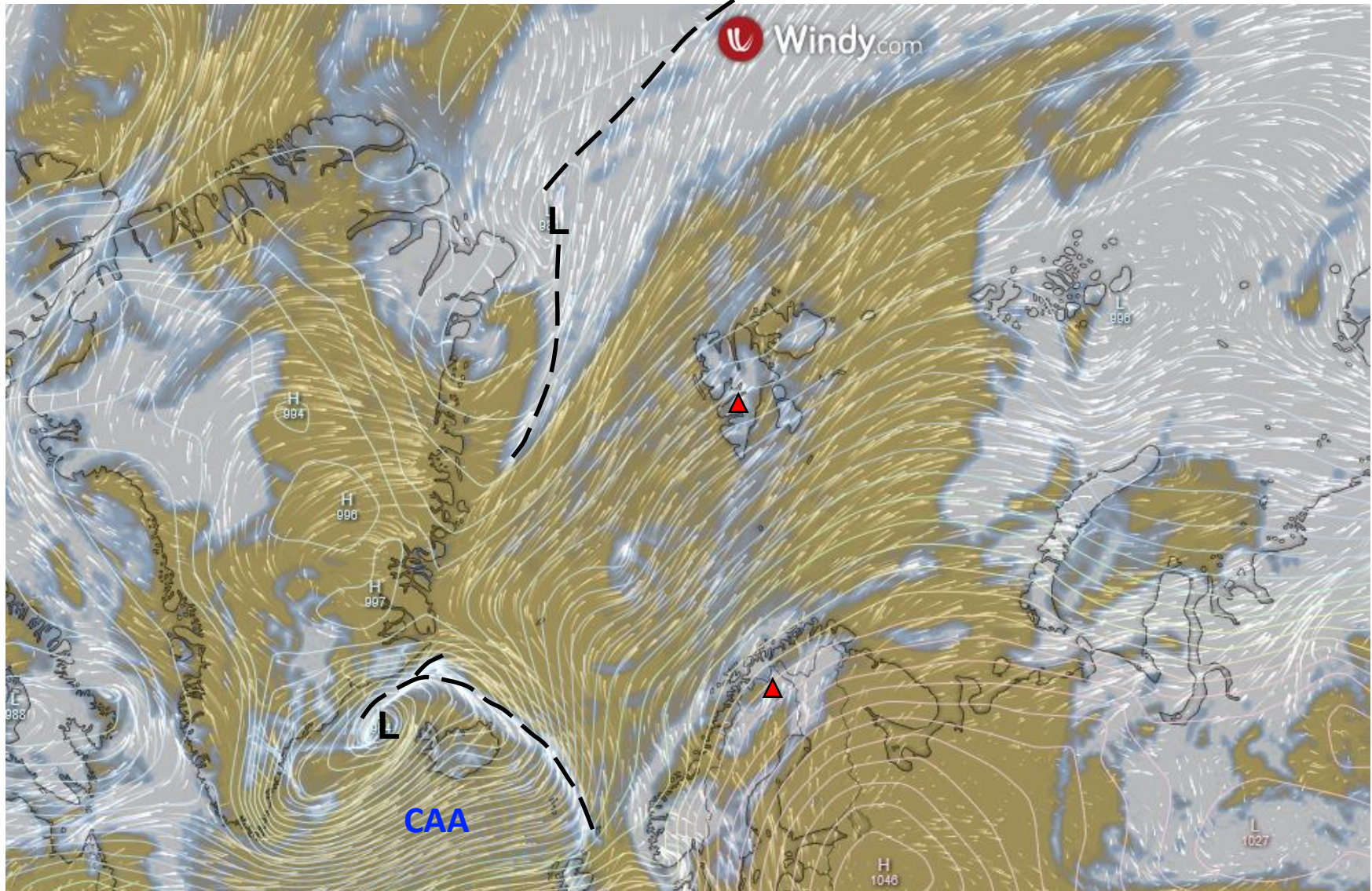
CAA: Cold Air Advection

WAA: Warm Air Advection

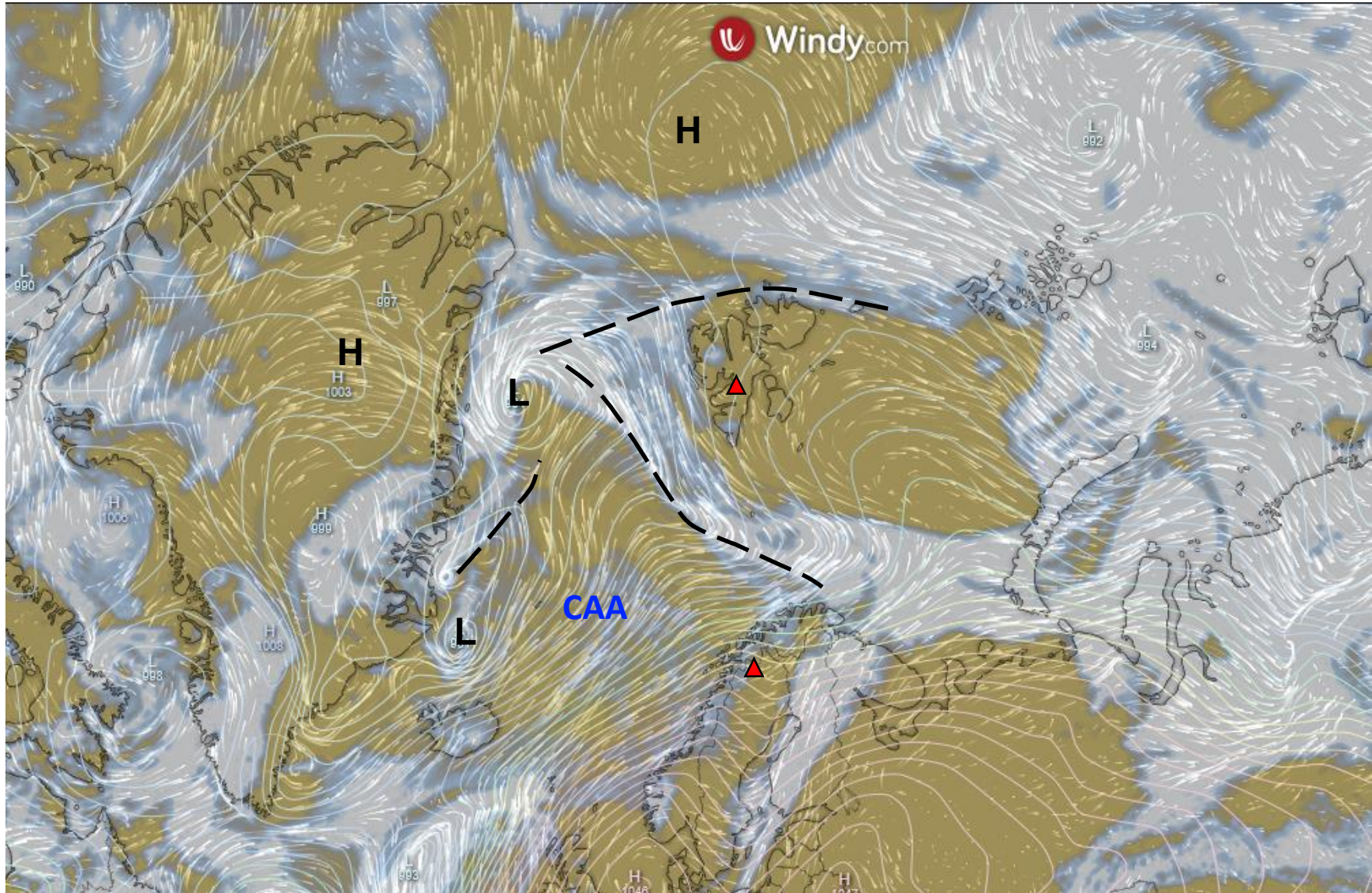
Wednesday, 2022-03-16 12 UTC (+36h)



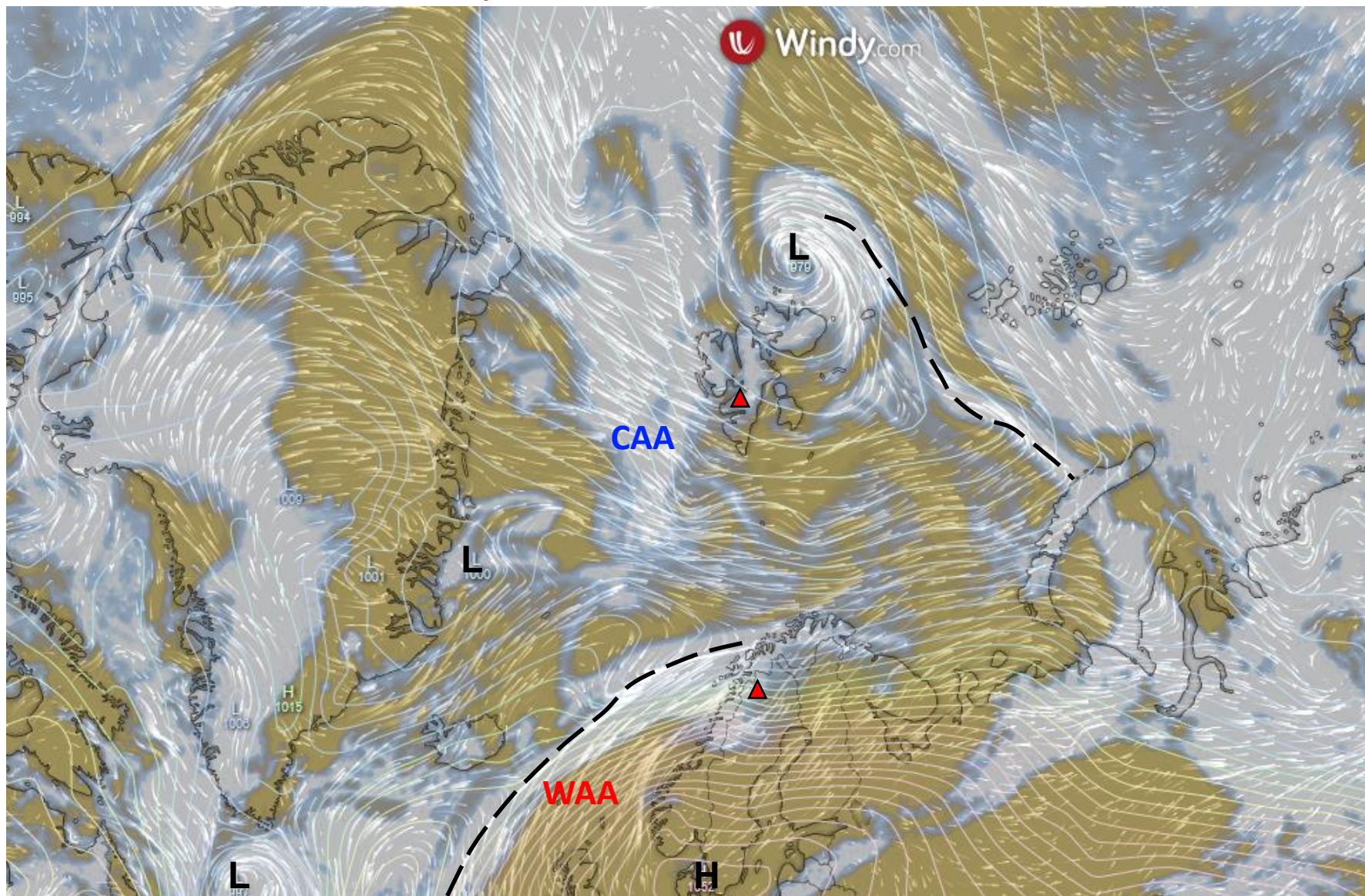
Thursday, 2022-03-17 12 UTC (+60h)



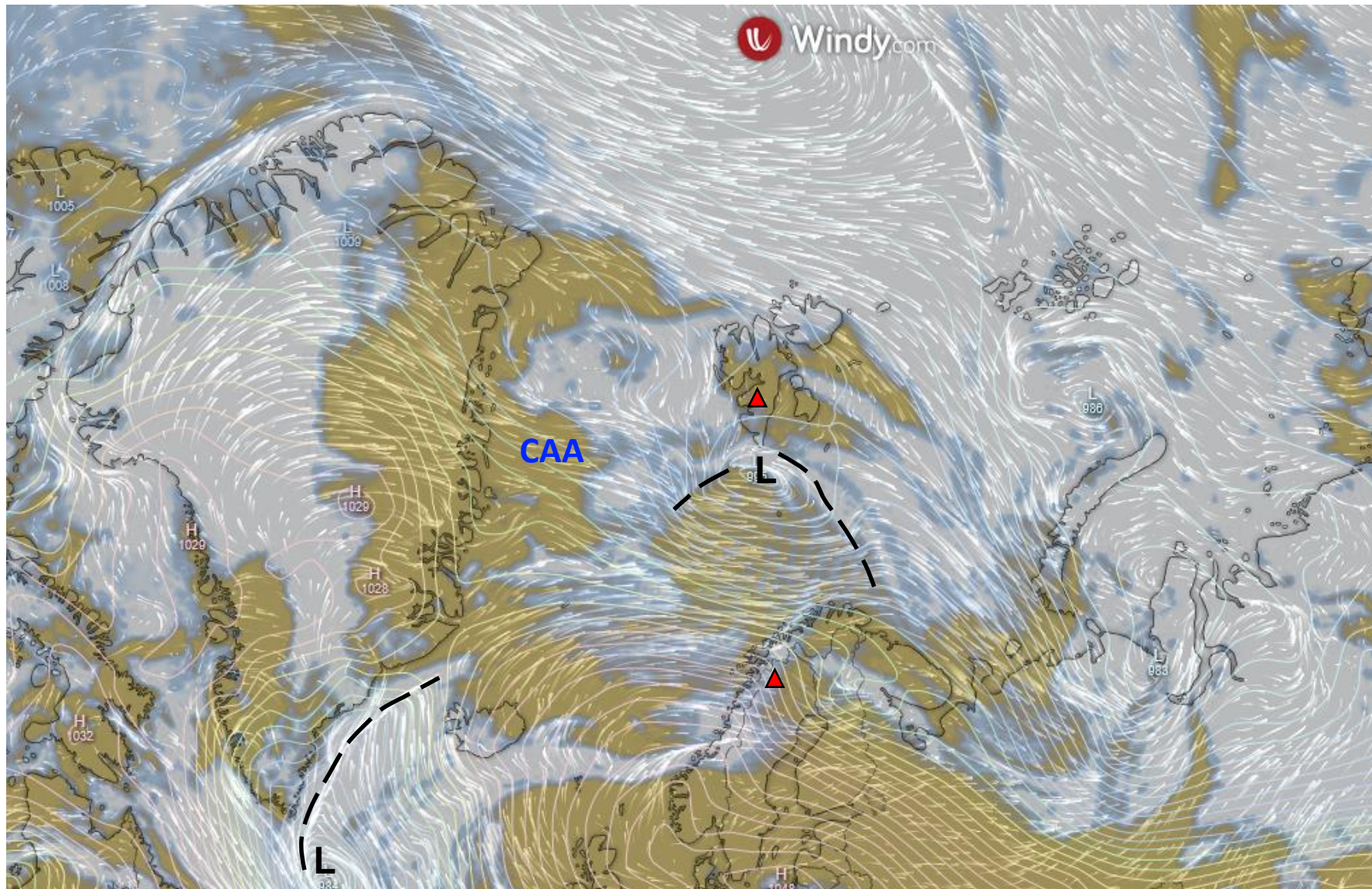
Friday, 2022-03-18 12 UTC (+84h)



Saturday, 2022-03-19 12 UTC (+108h)



Sunday, 2022-03-20 12 UTC (+132h)

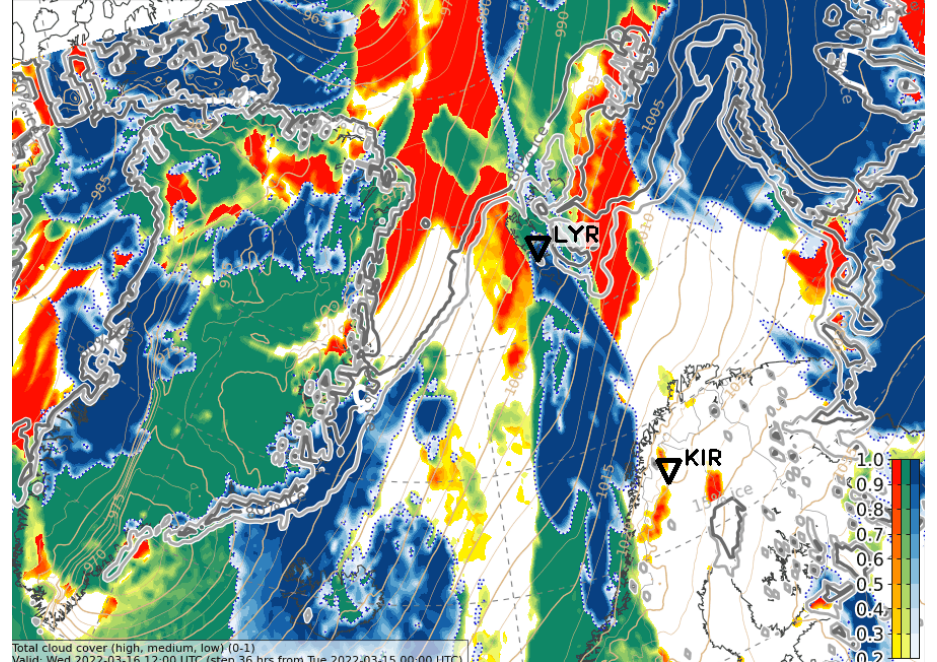
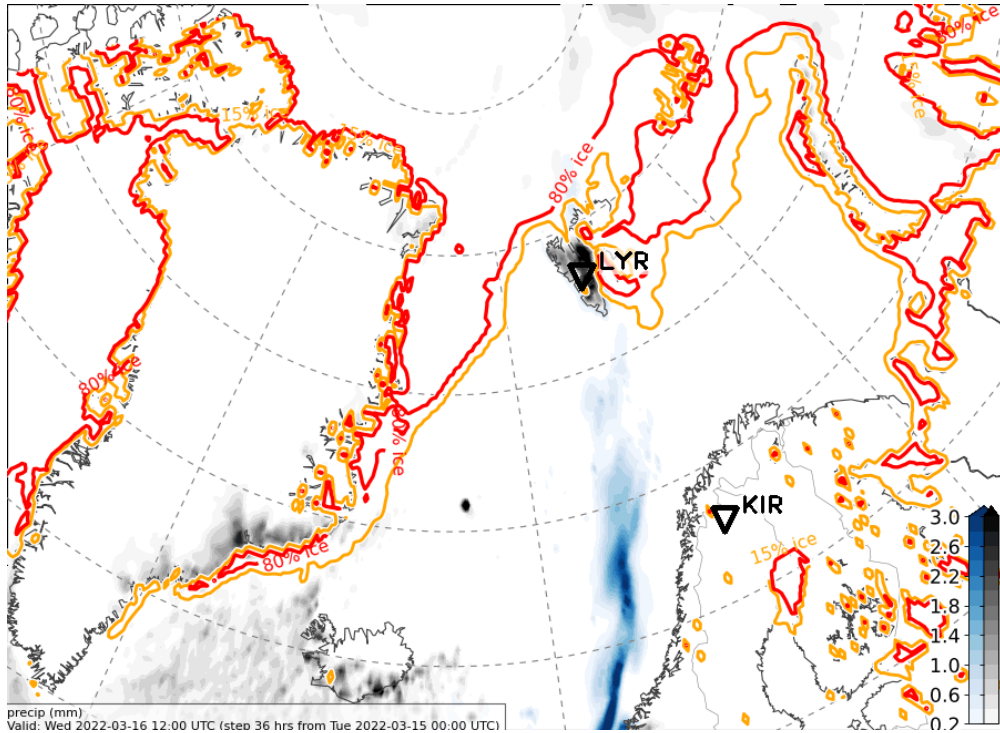


Cloud cover & precip development
2022-03-15 00 UTC: 36 – 132h
ECMWF + ICON

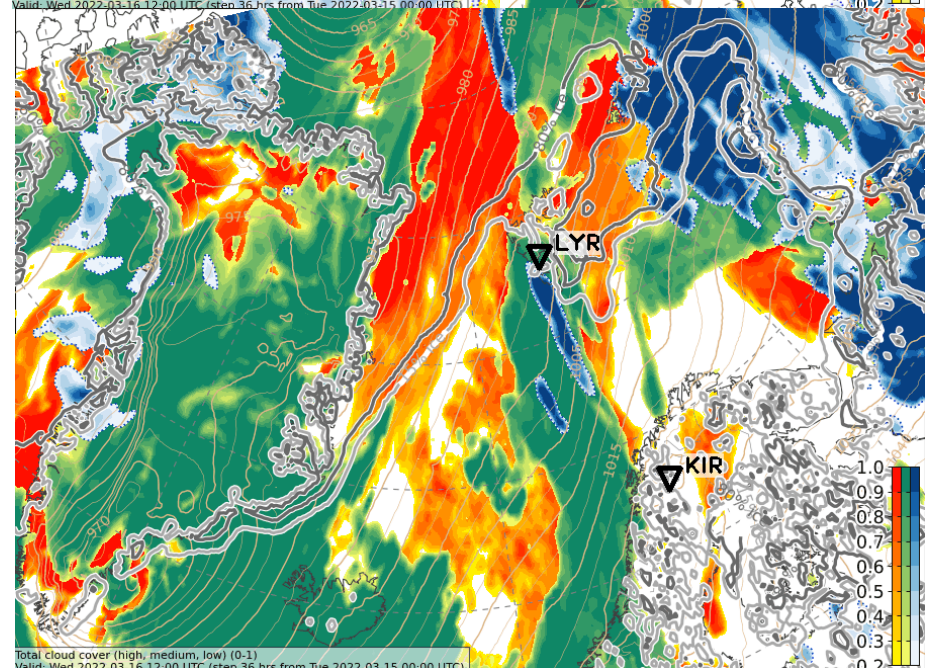
Wed, 2022-03-16 12 UTC (+36h)

ECMWF

2h precip.

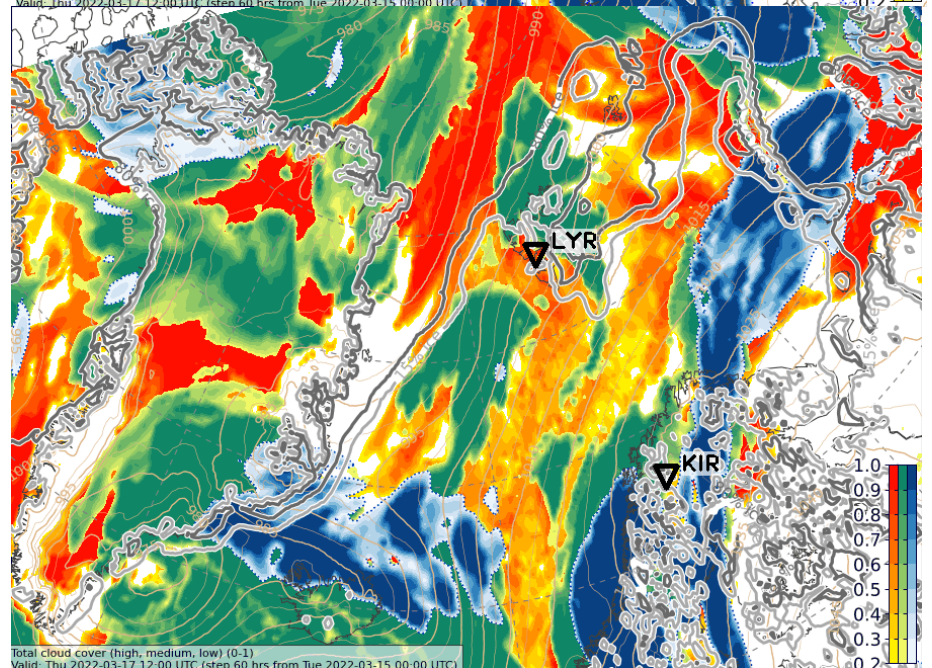
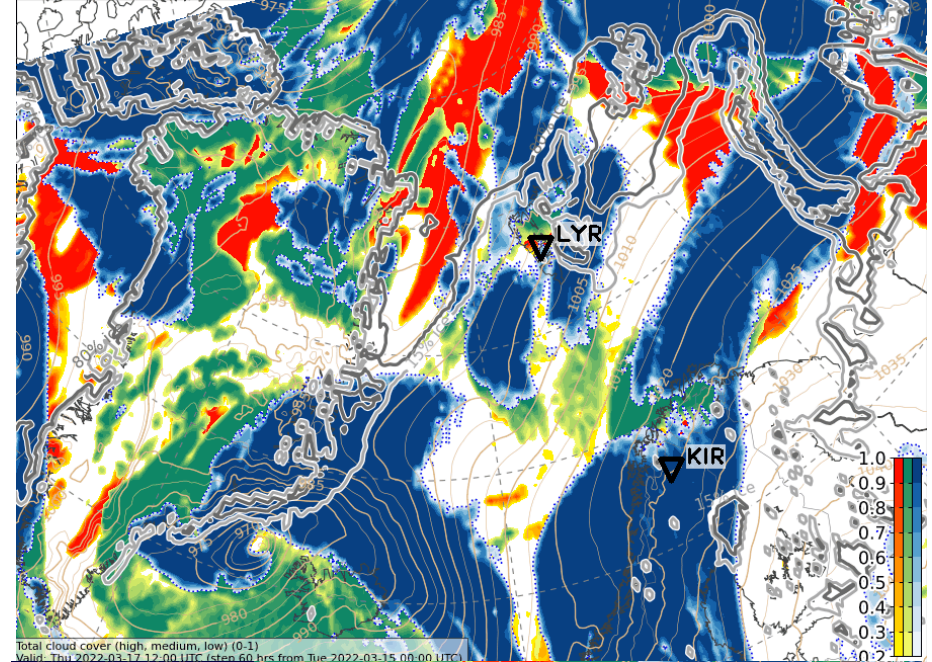
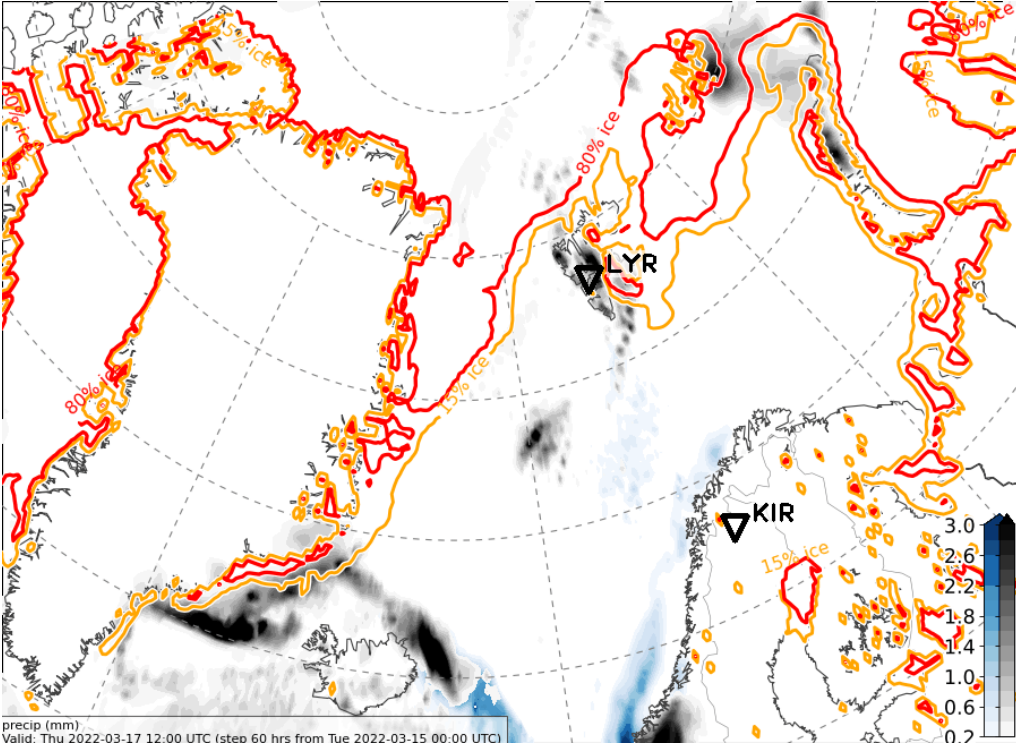


ICON



Thu, 2022-03-17 12 UTC (+60h) ECMWF

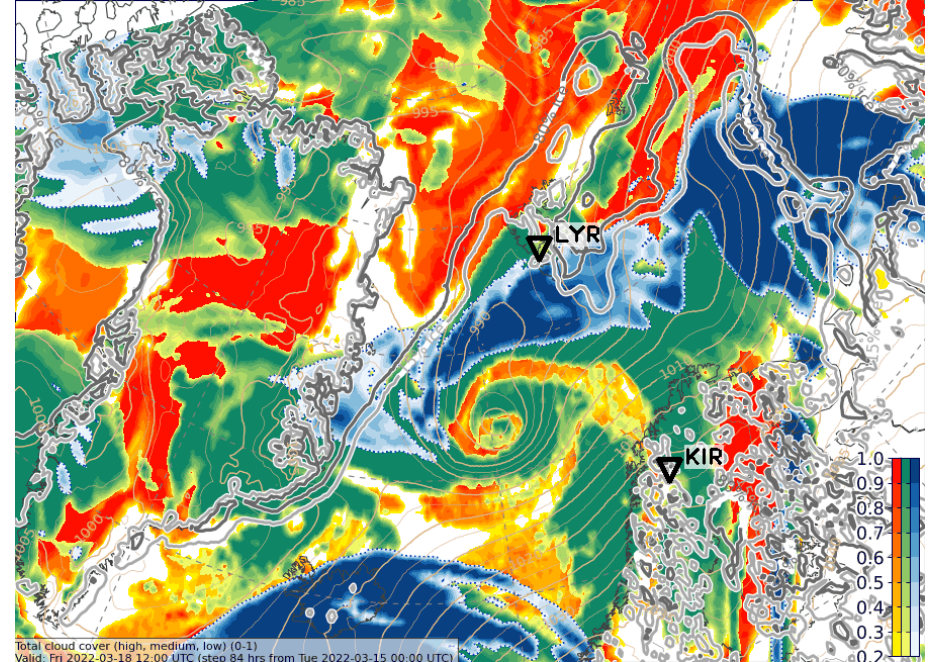
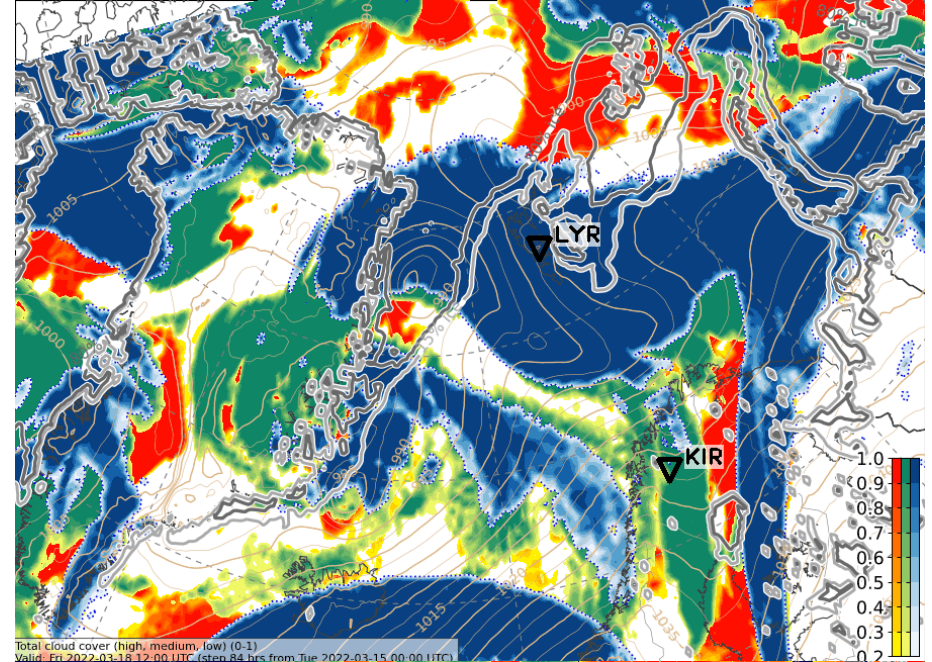
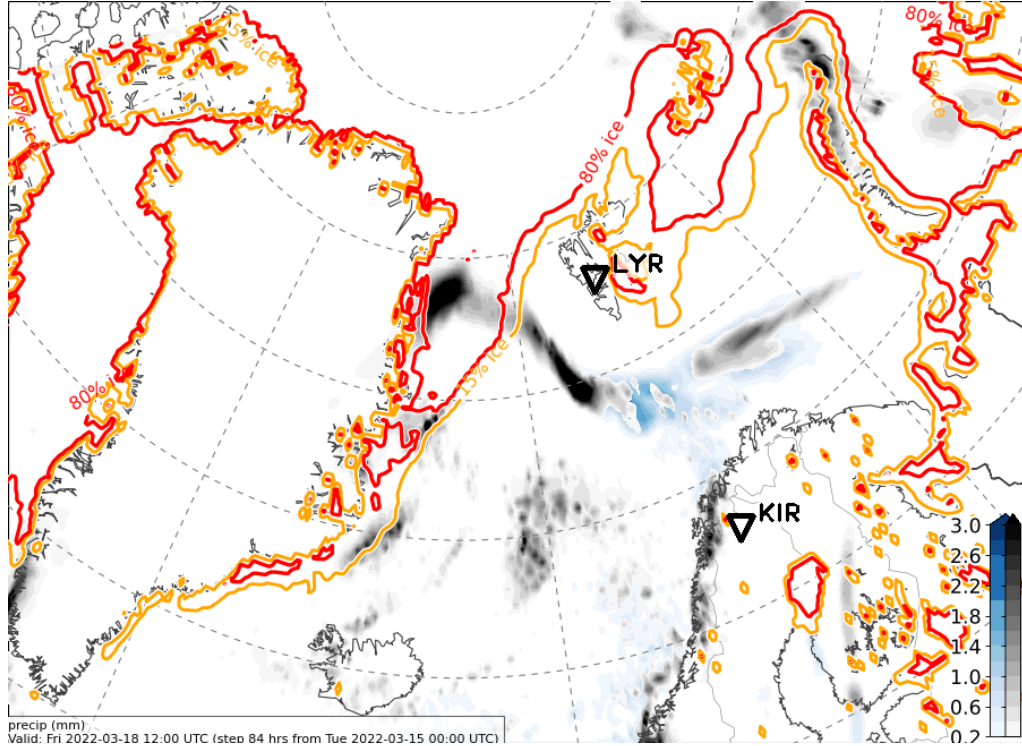
2h precip.



ICON

Fri, 2022-03-18 12 UTC (+84h) ECMWF

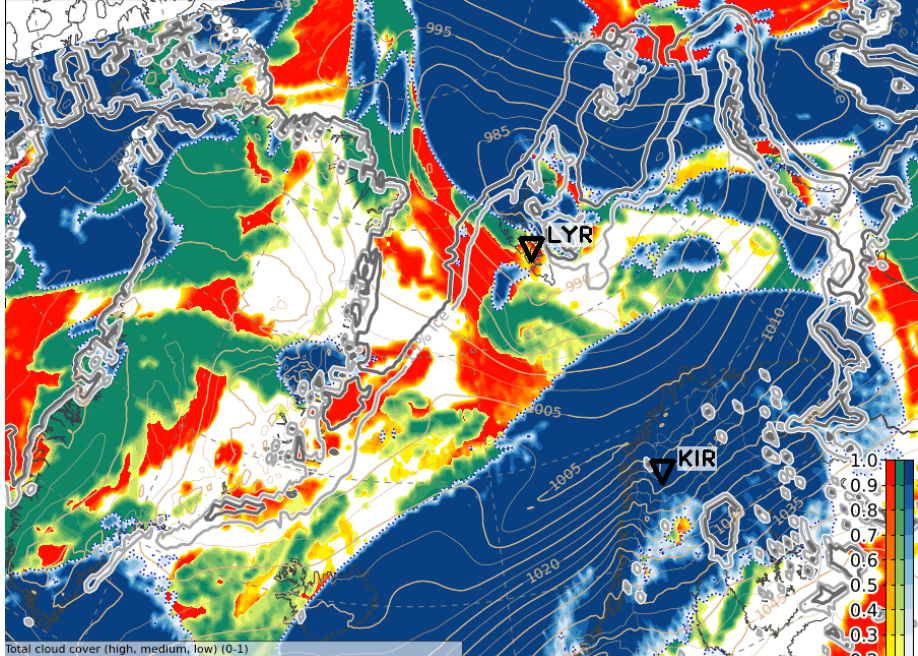
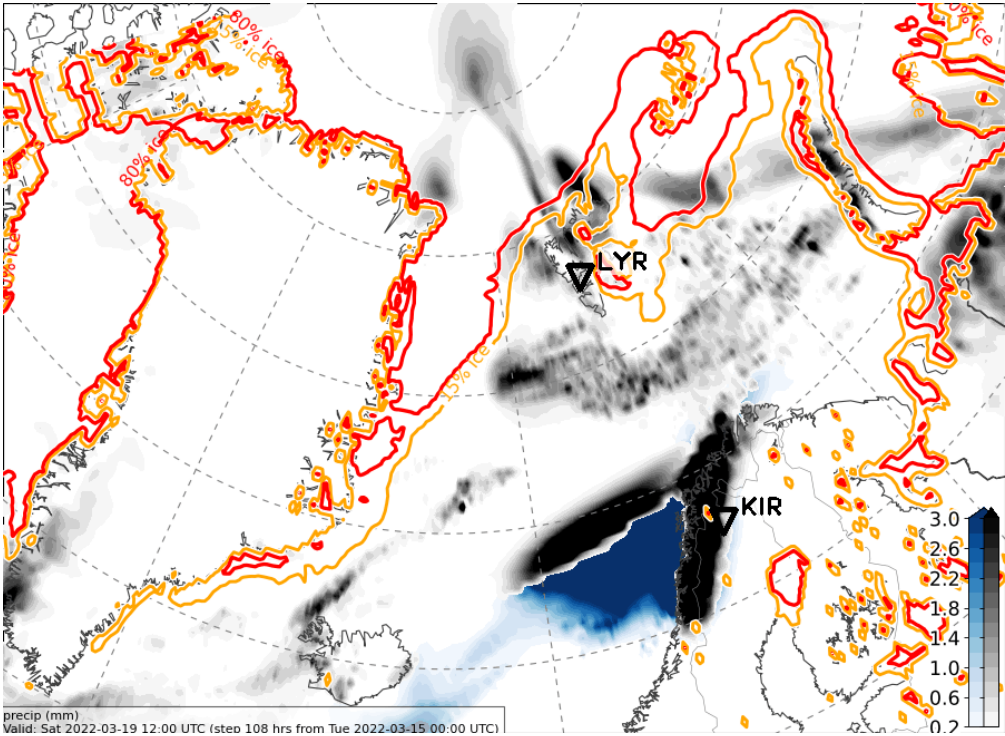
2h precip.



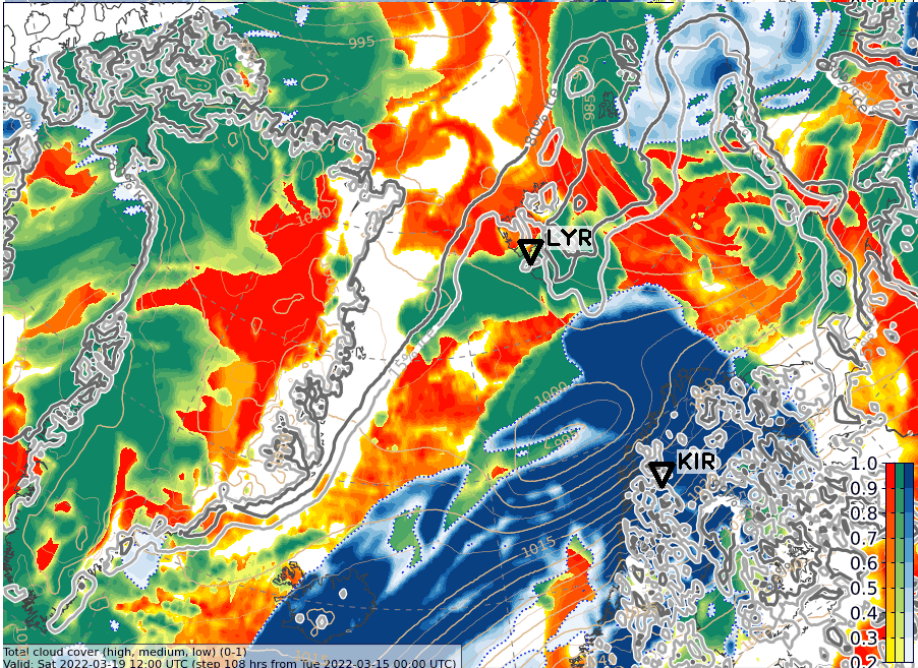
ICON

Sat, 2022-03-19 12 UTC (+108h) ECMWF

6h precip.

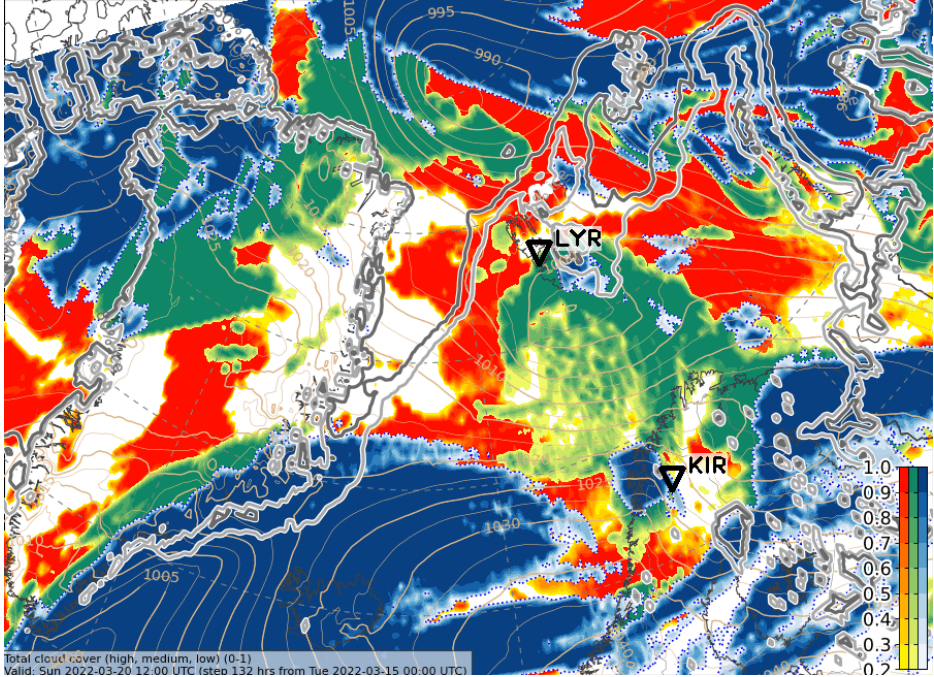
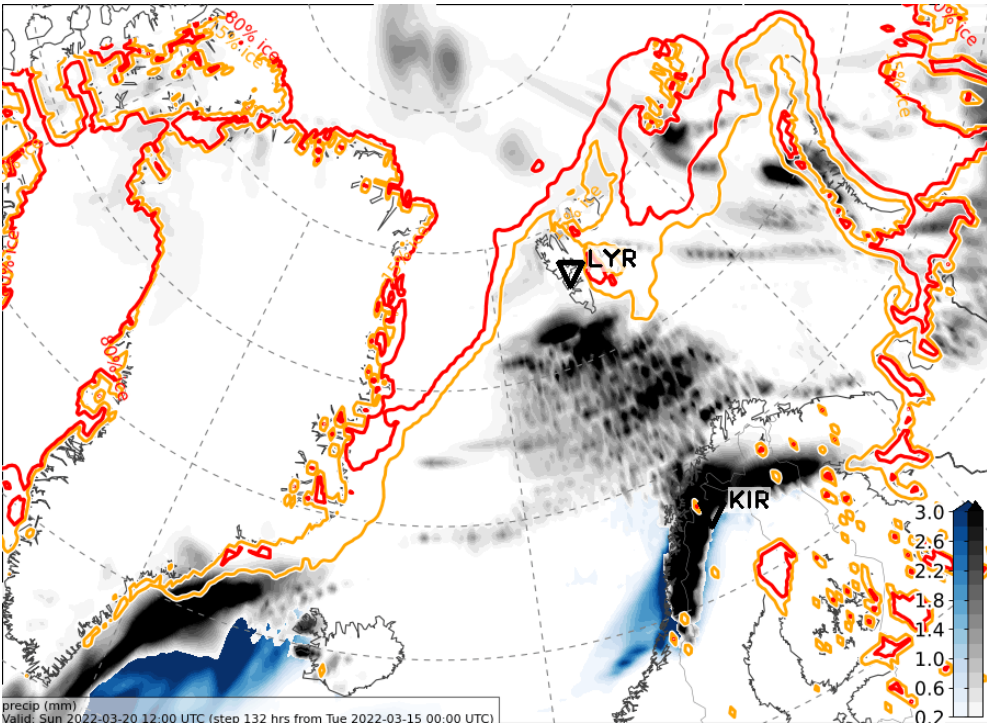


ICON



Sun, 2022-03-20 12 UTC (+132h) ECMWF

6h precip.



not available

ICON

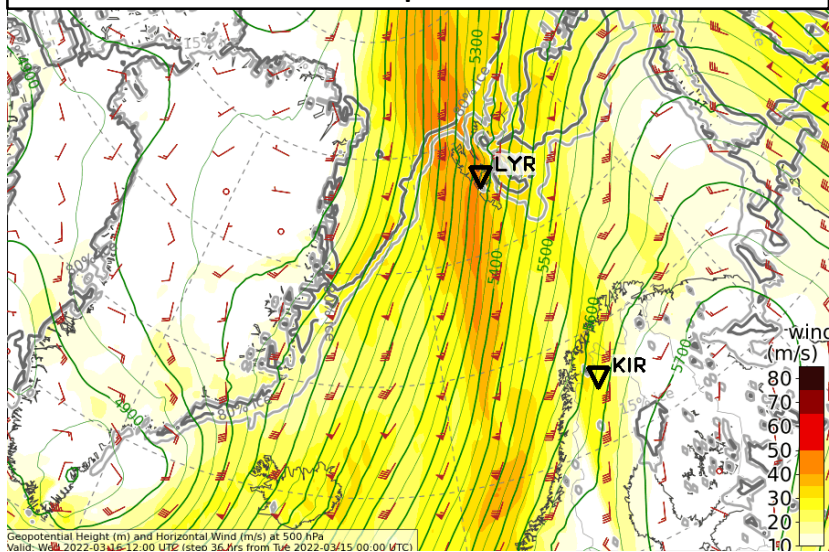
Extra variables

2022-03-15 00 UTC: 36 – 132h

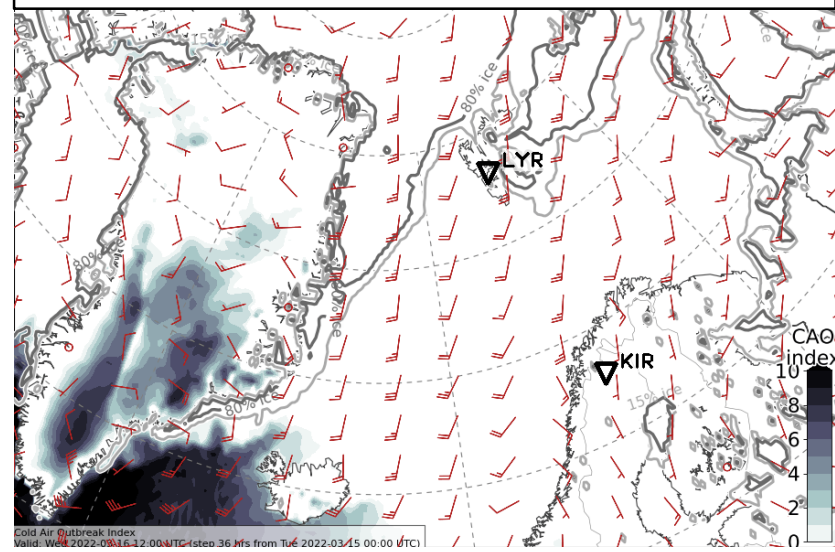
500 hPa wind & 850hPa θ_e & CAO & IVT

Wed, 2022-03-16 12 UTC (+36h)

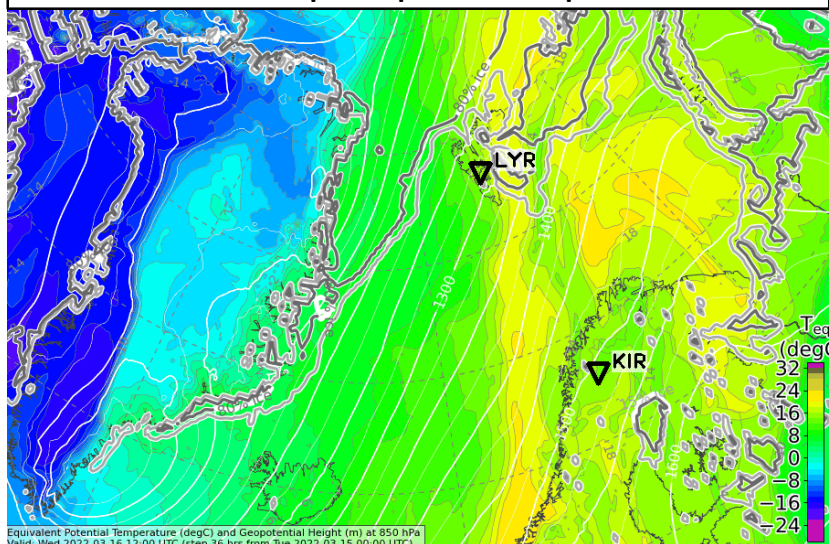
500 hPa Geopot. and Wind



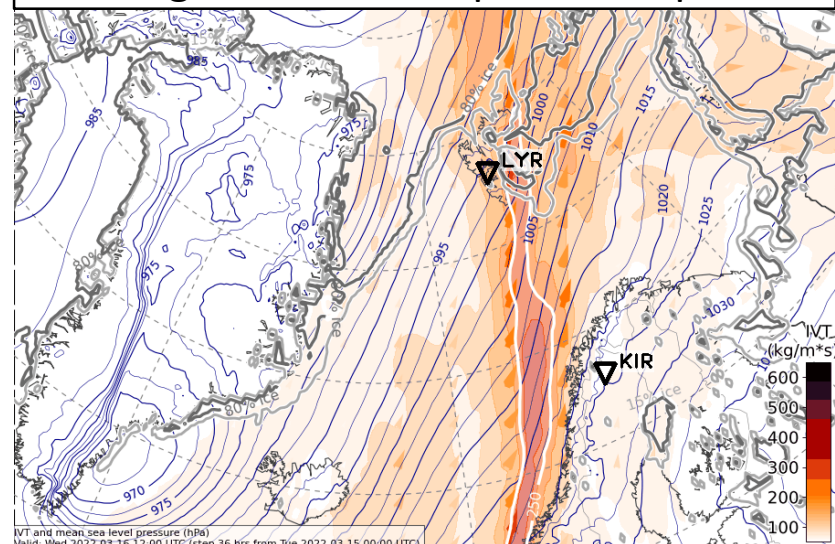
CAO Index



850 hPa Equiv. pot. temperature

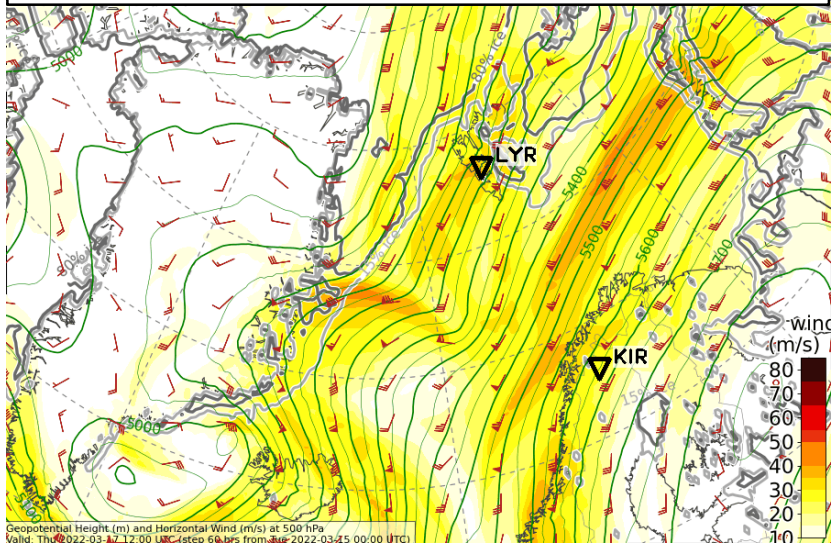


Integrated water vapour transport

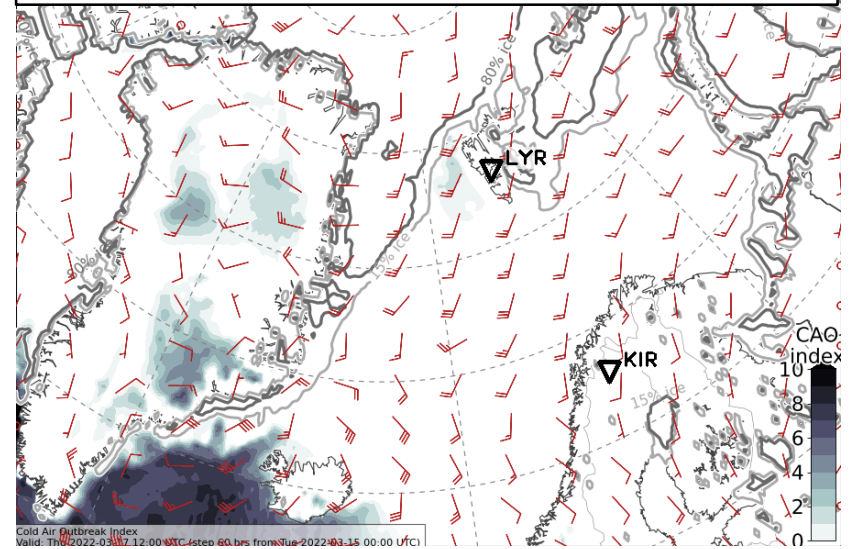


Thu, 2022-03-17 12 UTC (+60h)

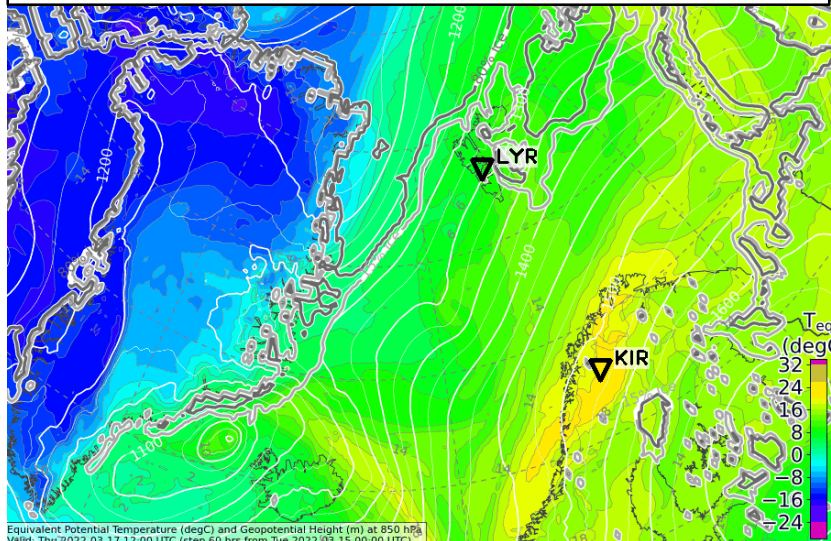
500 hPa Geopot. and Wind



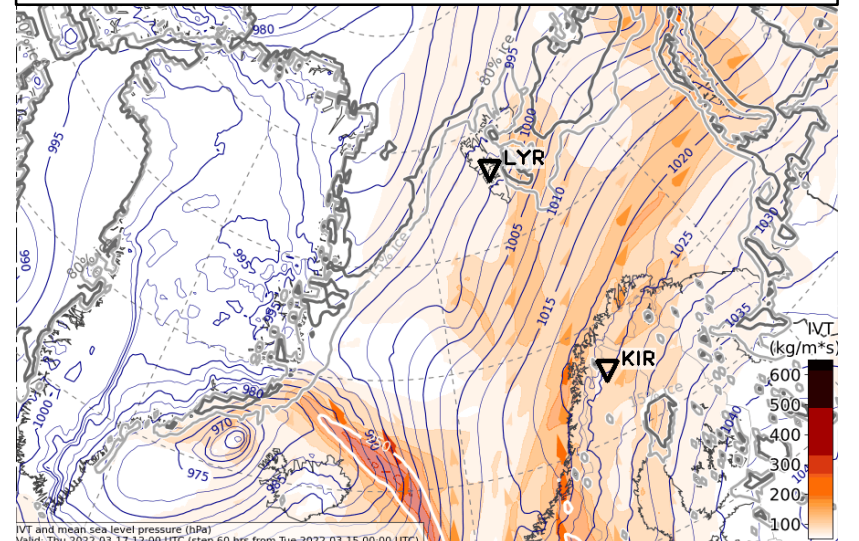
CAO Index



850 hPa Equiv. pot. temperature

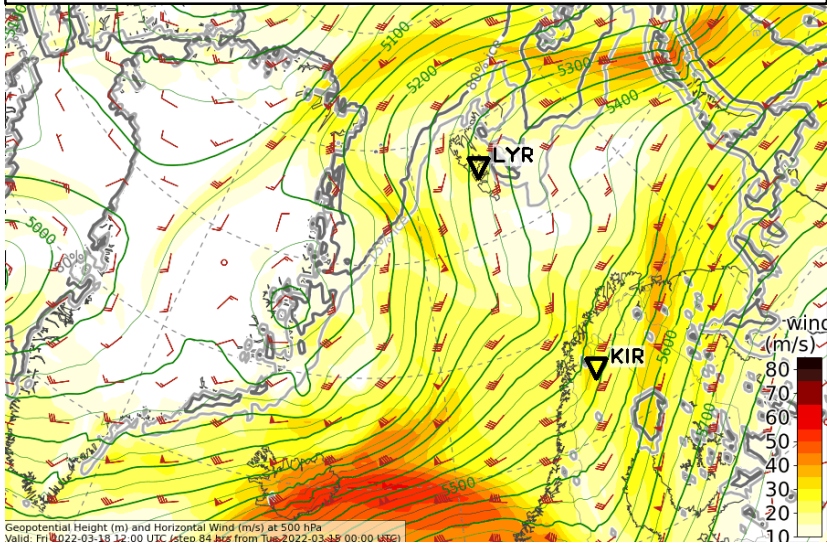


Integrated water vapour transport

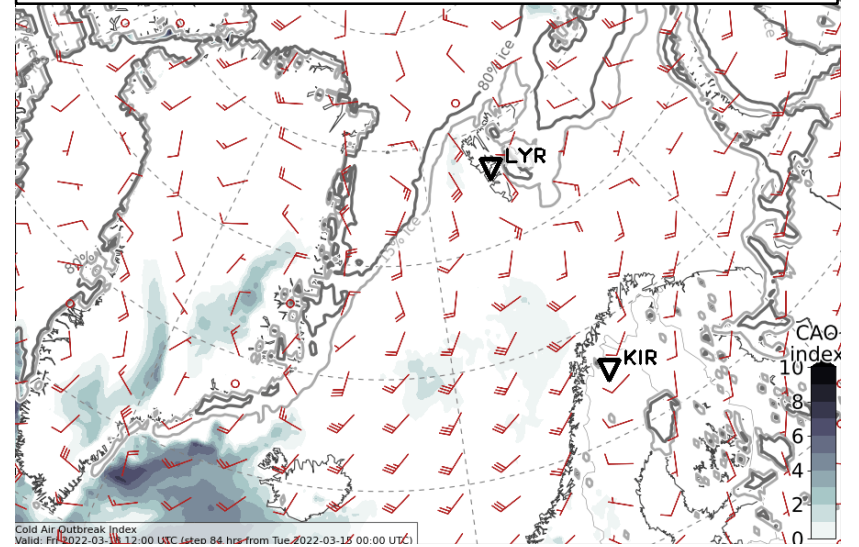


Fri, 2022-03-18 12 UTC (+84h)

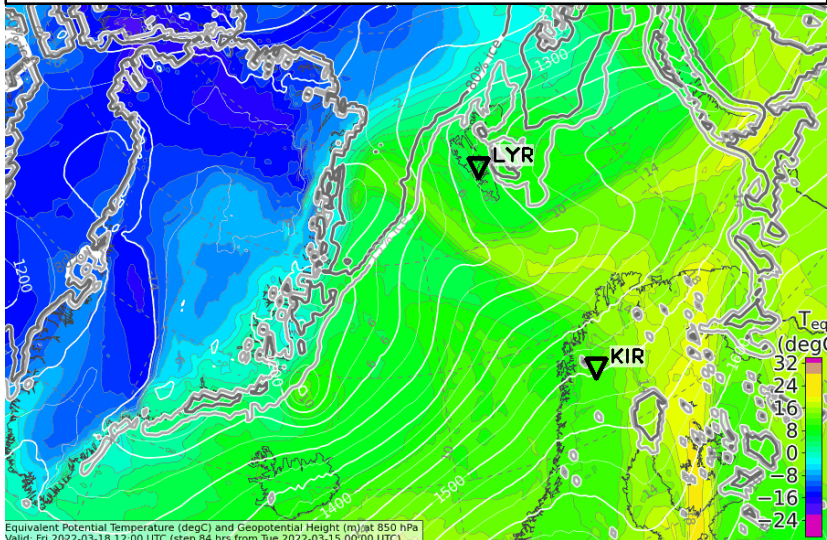
500 hPa Geopot. and Wind



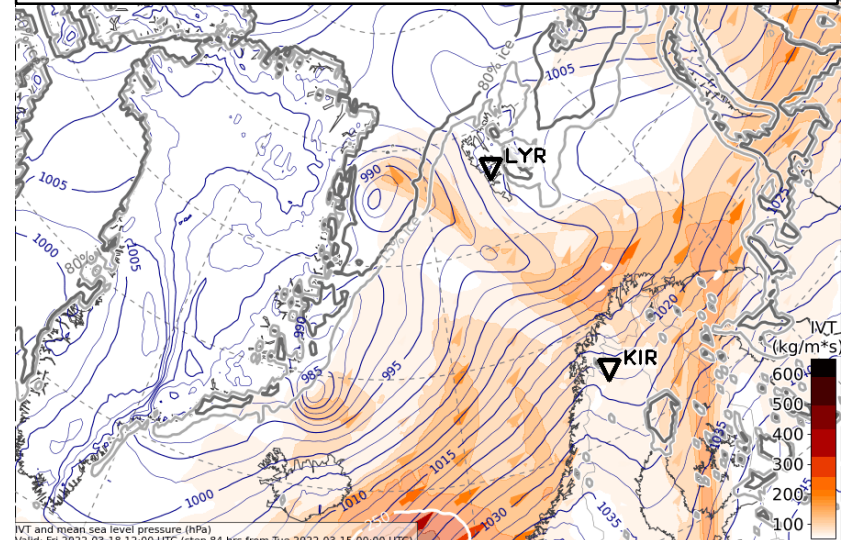
CAO Index



850 hPa Equiv. pot. temperature

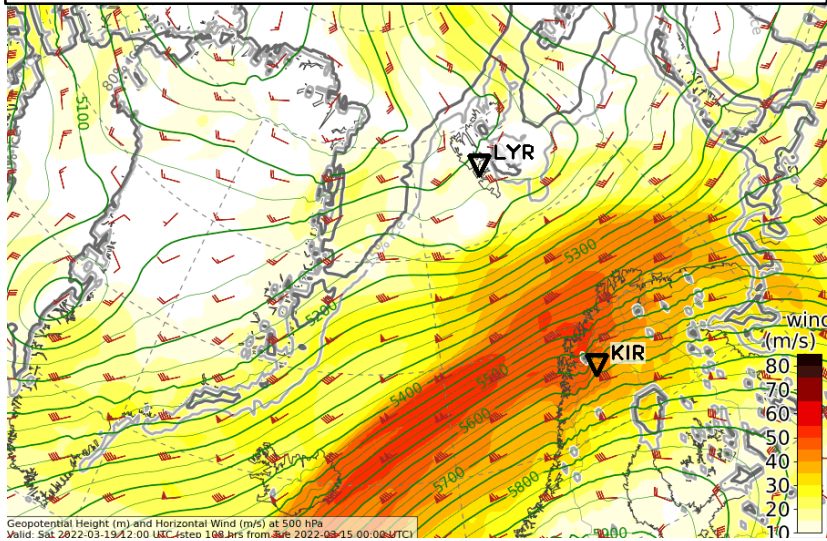


Integrated water vapour transport

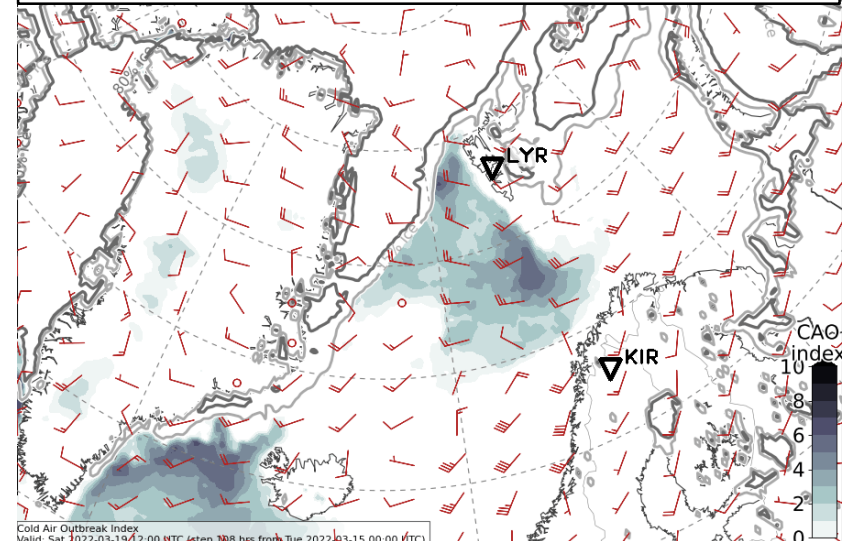


Sat, 2022-03-19 12 UTC (+108h)

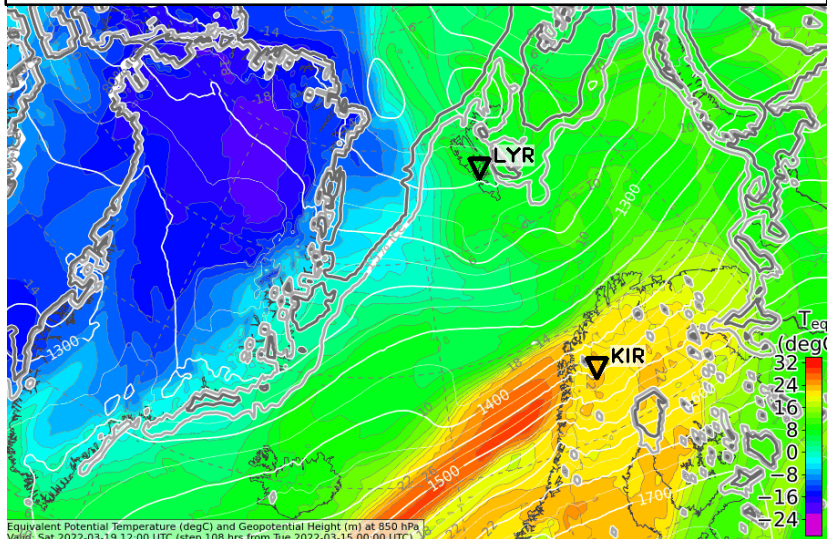
500 hPa Geopot. and Wind



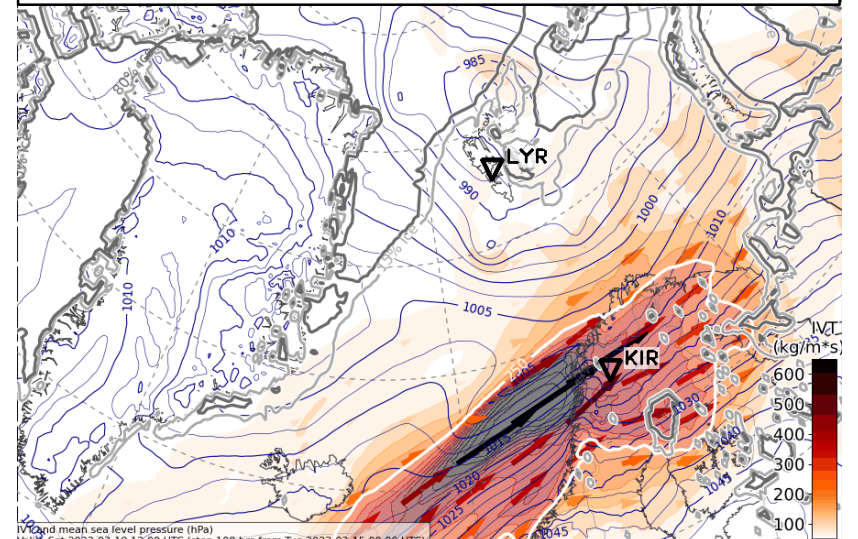
CAO Index



850 hPa Equiv. pot. temperature

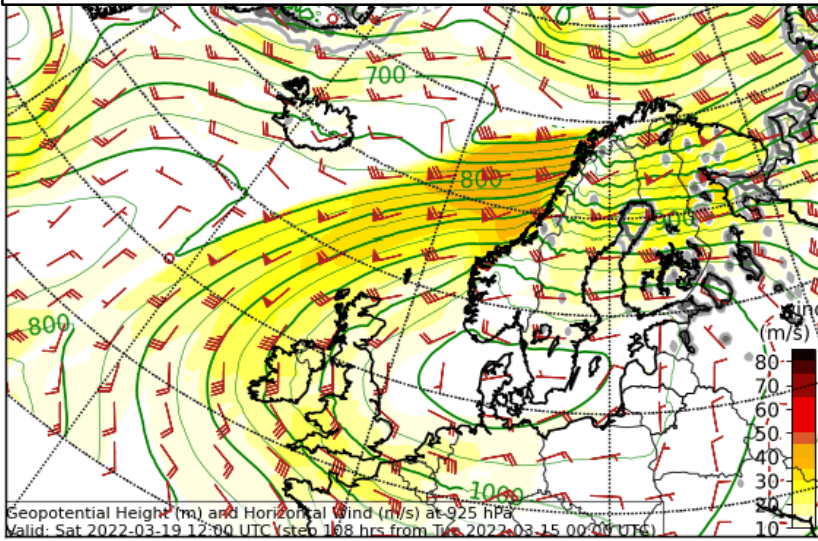


Integrated water vapour transport

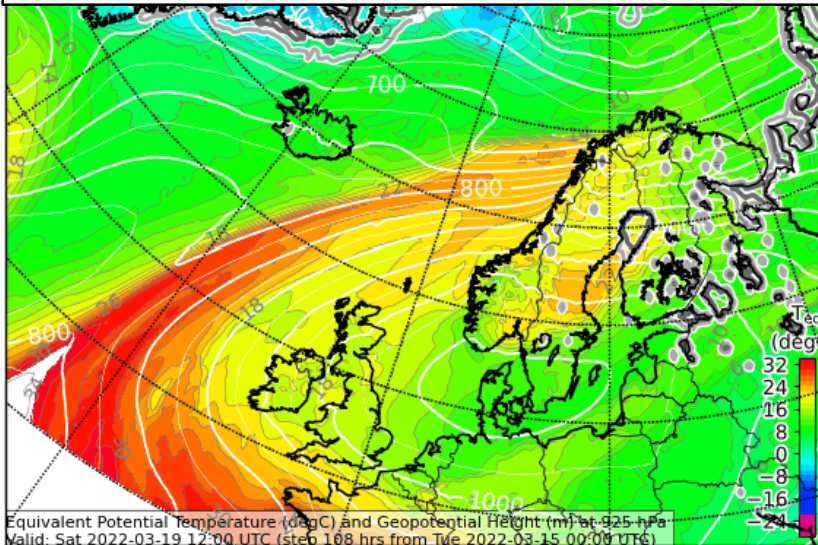


Sat, 2022-03-19 12 UTC (+108h)

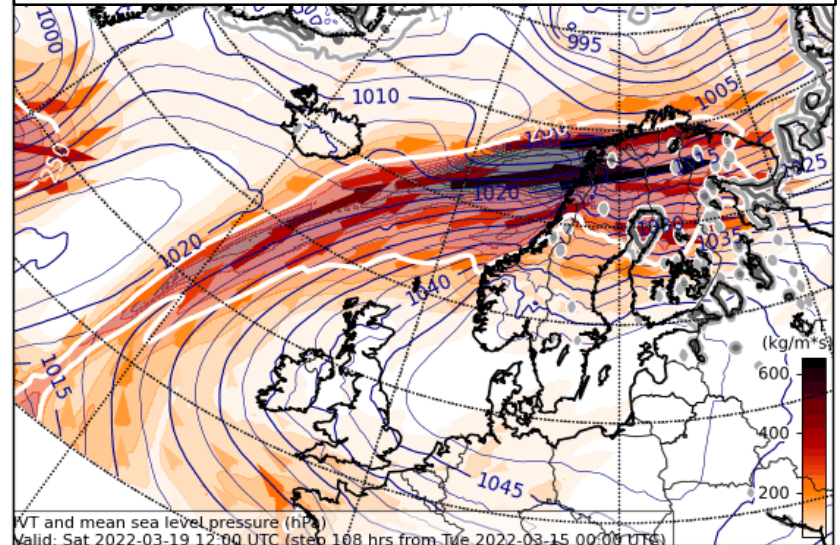
500 hPa Geopot. and Wind



850 hPa Equiv. pot. temperature

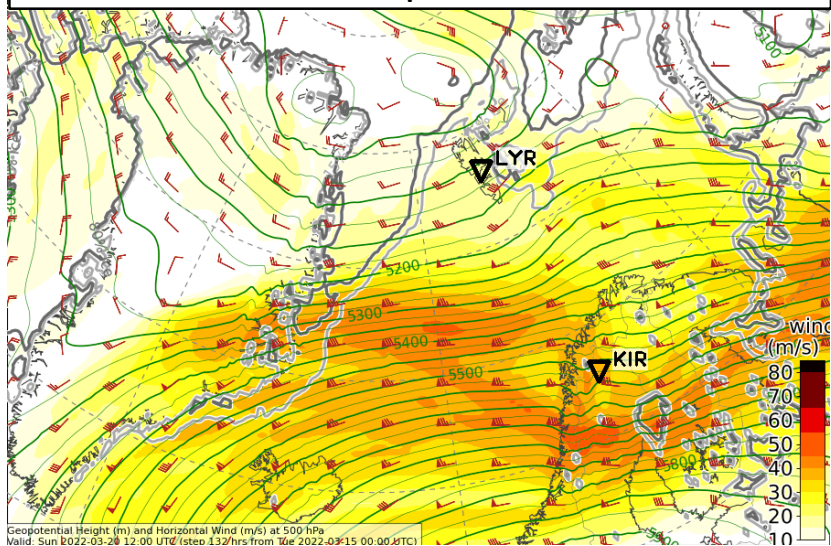


Integrated water vapour transport

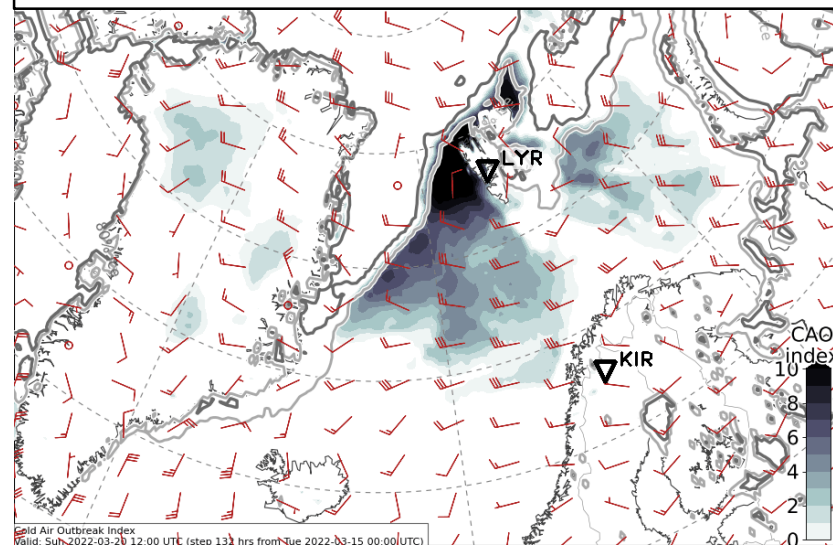


Sun, 2022-03-20 12 UTC (+132h)

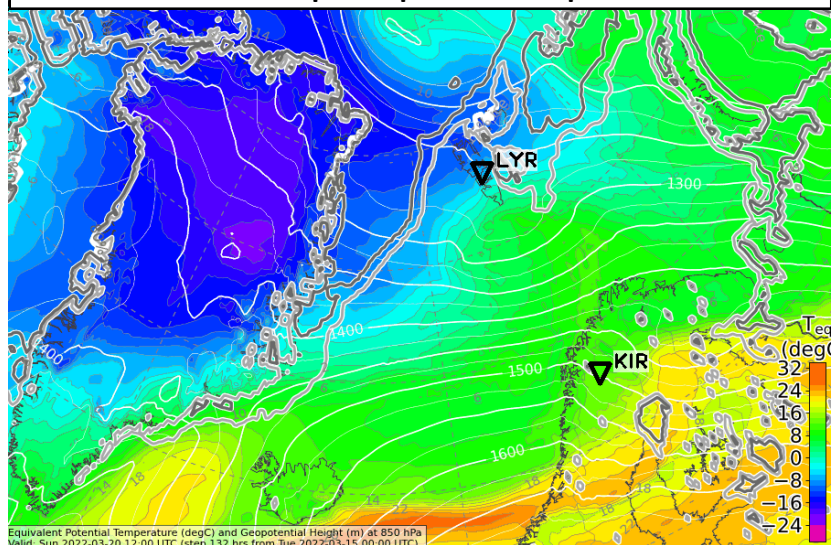
500 hPa Geopot. and Wind



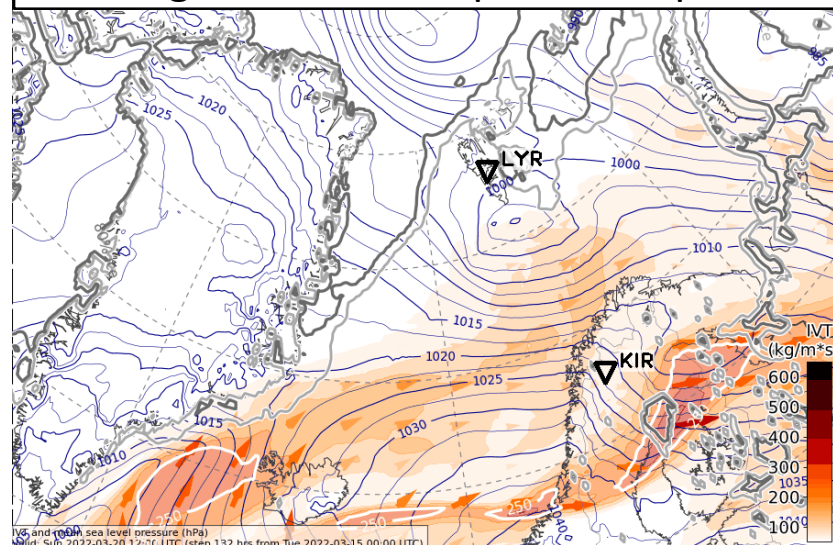
CAO Index



850 hPa Equiv. pot. temperature

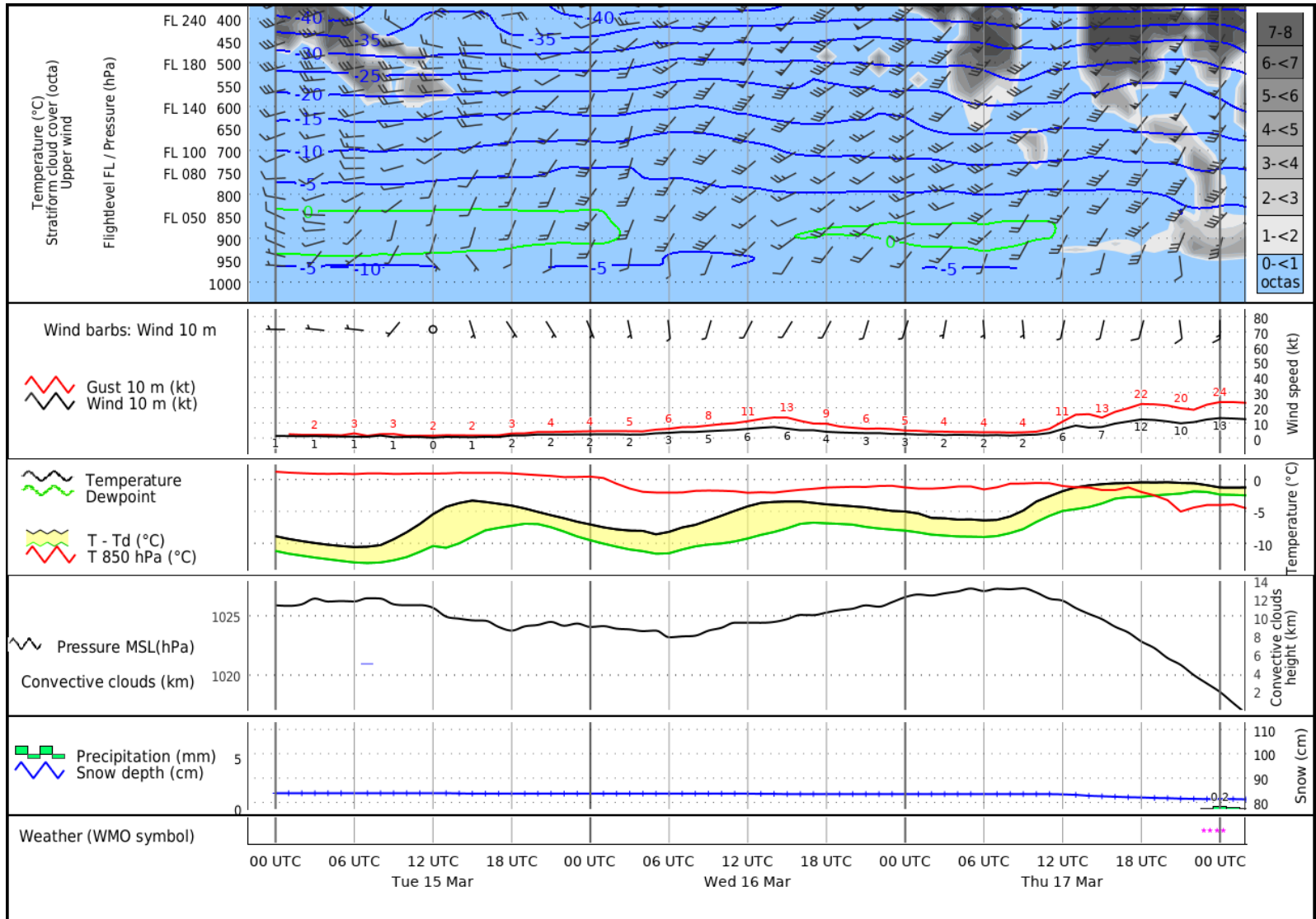


Integrated water vapour transport



Airport meteograms

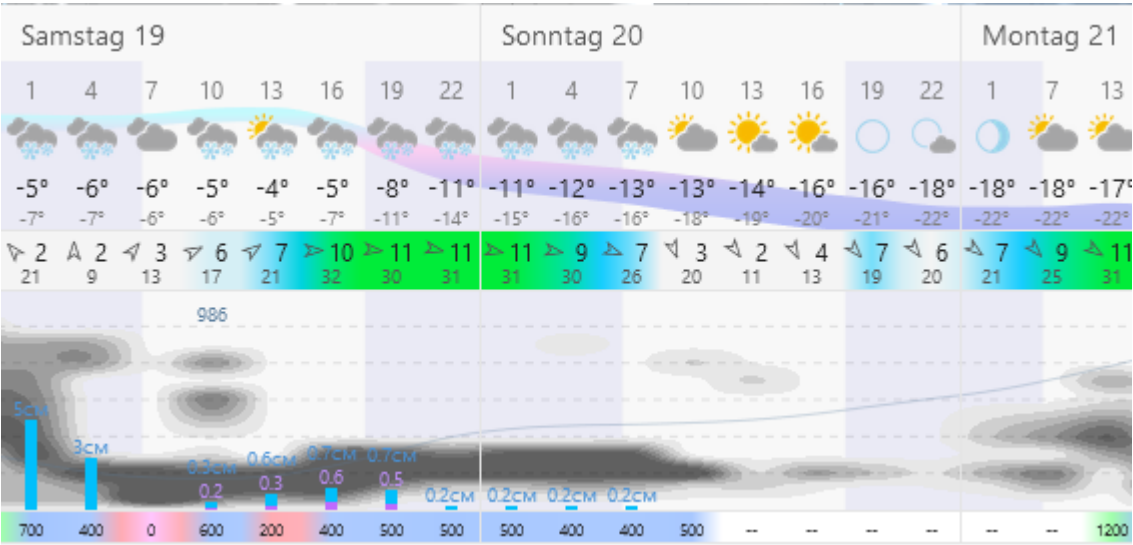
Kiruna:



Meteogram Kiruna (ESNQ), 460 m, LAT/LON: N 67°49' E 20°20'
 ICON-EU 2022-03-15 00 UTC, model height: 460 m

Longyearbyen:

ECMWF

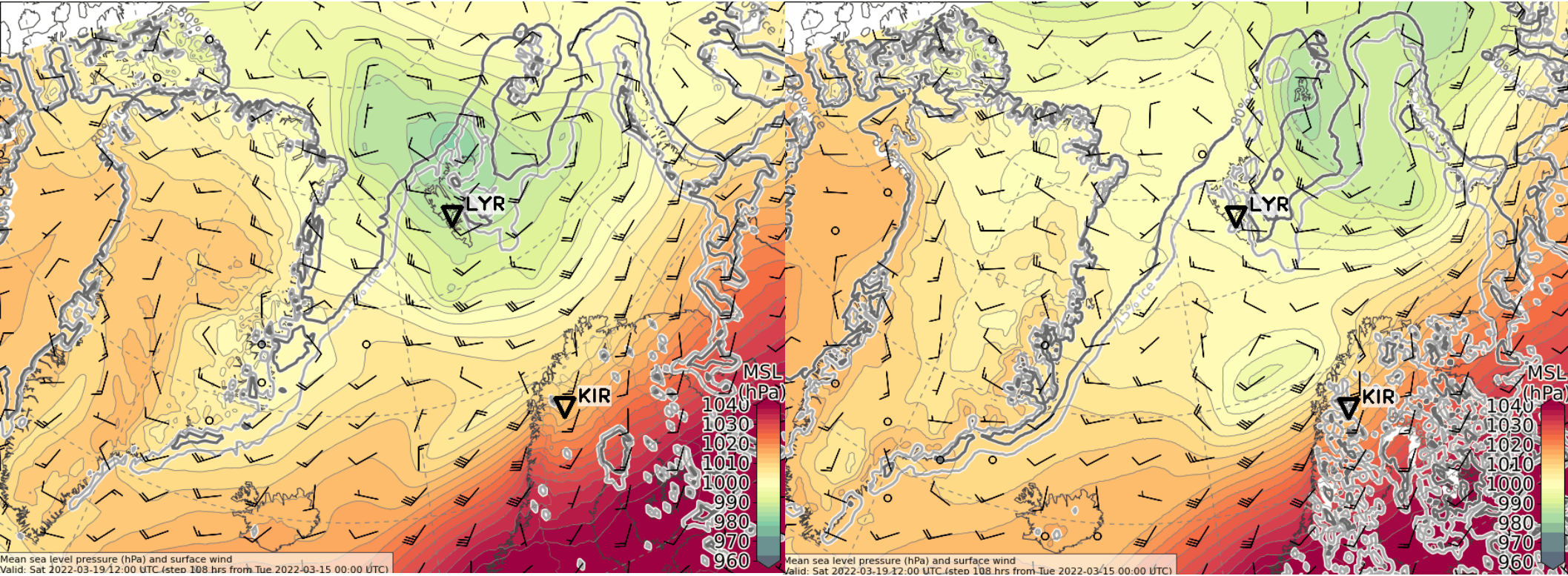


Forecast uncertainty
2022-03-15 00 UTC: 96 – 120h

Saturday, 2022-03-19 12 UTC (+108h)

ECMWF - Sea Level Pressure

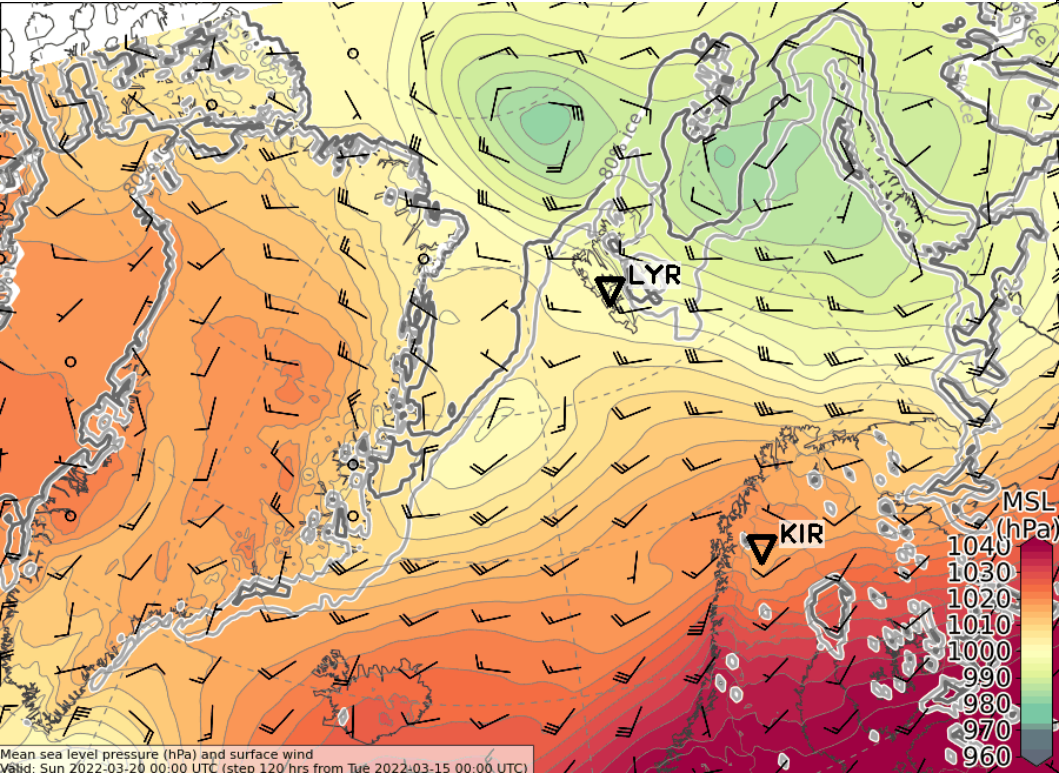
ICON - Sea level pressure



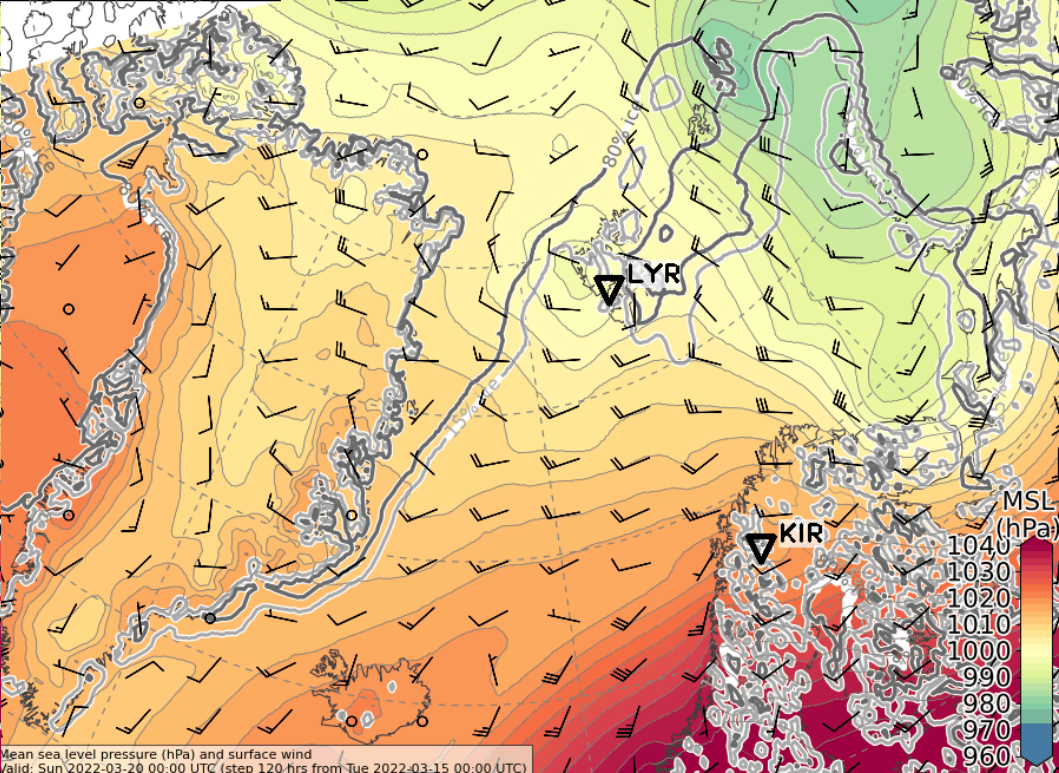
Sunday, 2022-03-20 00 UTC (+120h)

ECMWF - Sea Level Pressure

ICON - Sea level pressure



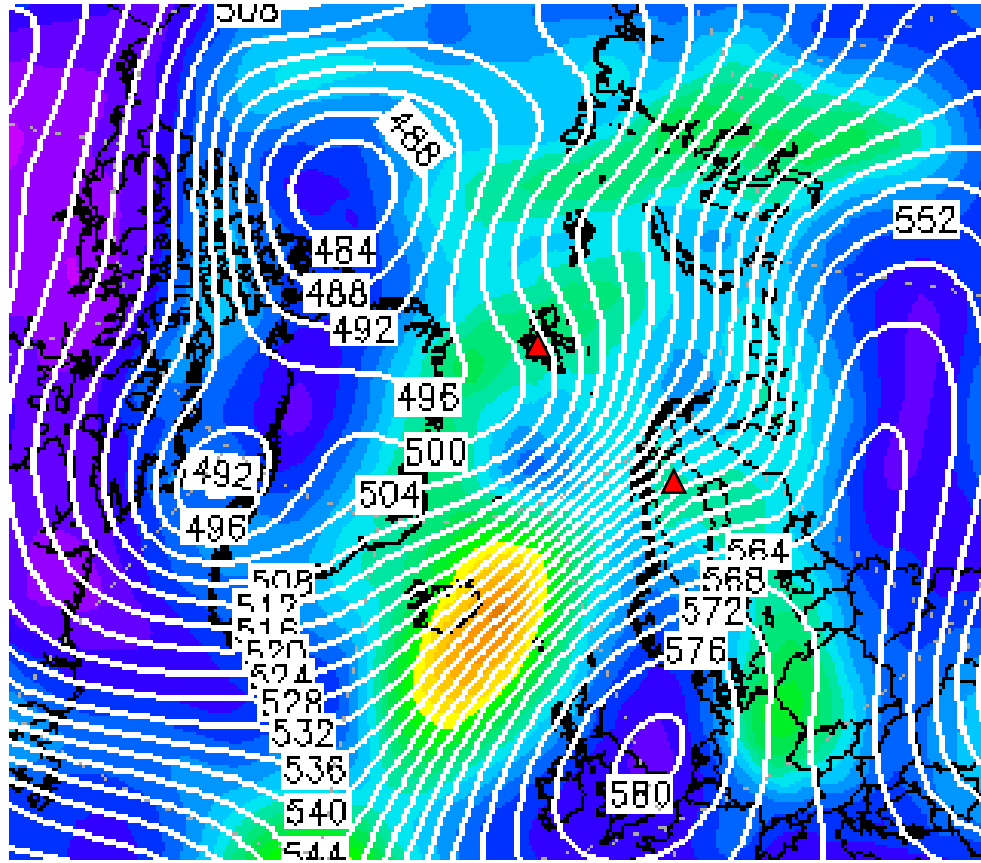
Mean sea level pressure (hPa) and surface wind
Valid: Sun 2022-03-20 00:00 UTC (step 120 hrs from Tue 2022-03-15 00:00 UTC)



Mean sea level pressure (hPa) and surface wind
Valid: Sun 2022-03-20 00:00 UTC (step 120 hrs from Tue 2022-03-15 00:00 UTC)

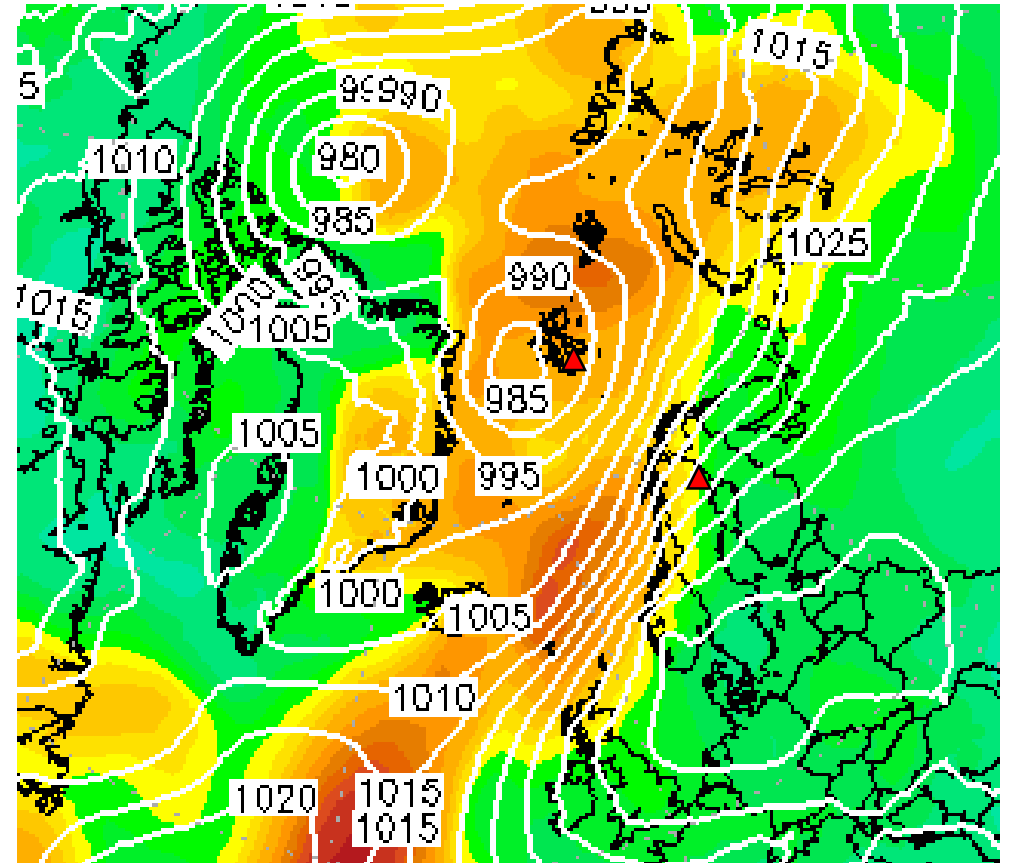
Saturday, 2022-03-19 00 UTC (+96h)

500 hPa Geopot



gpdam

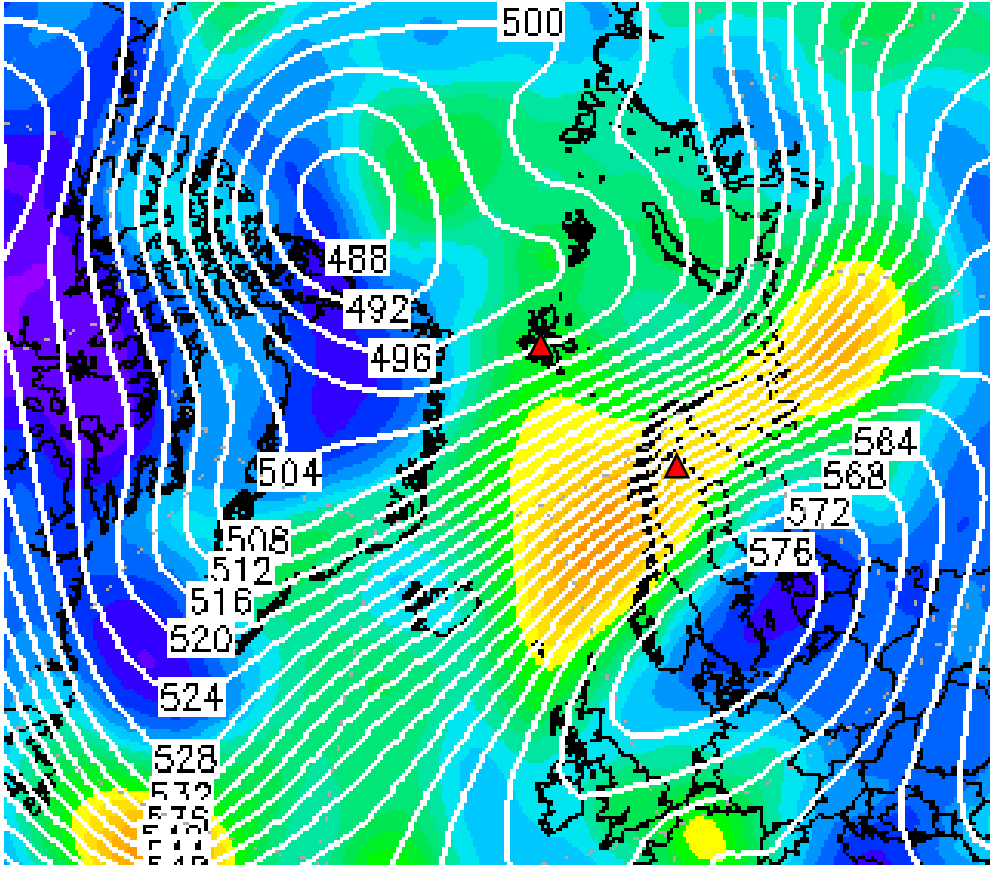
Sfc pressure



hPa

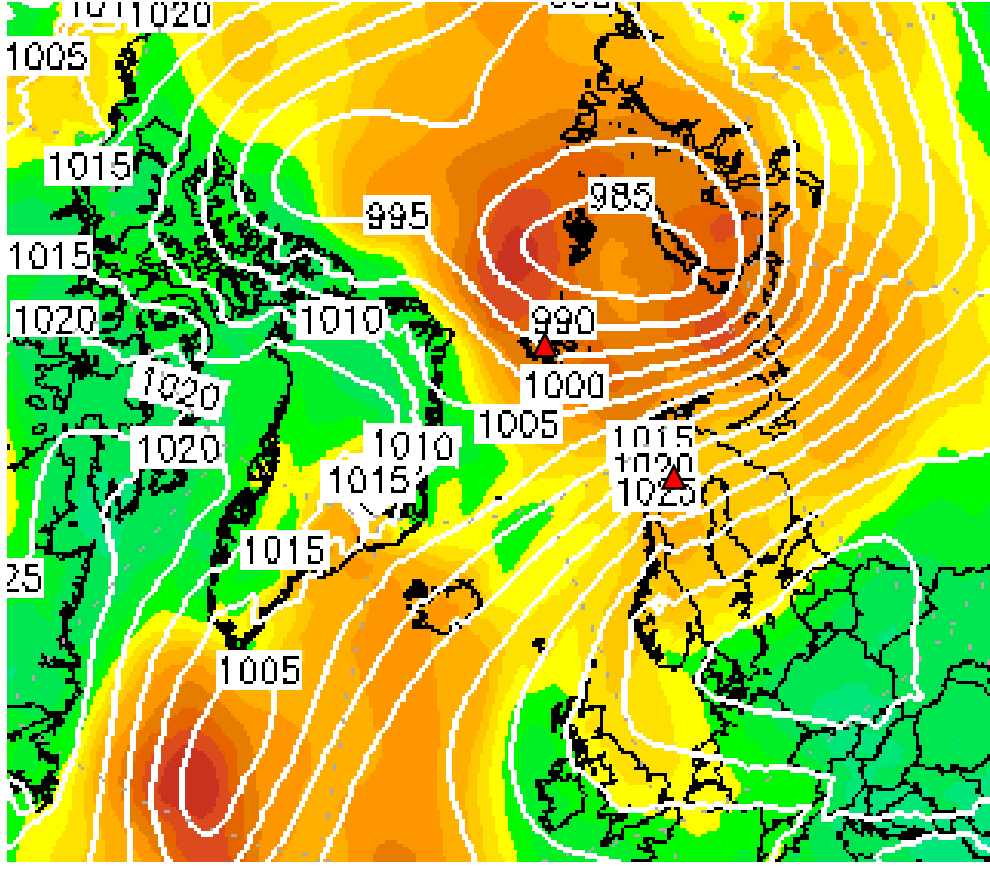
Sunday, 2022-03-20 00 UTC (+120h)

500 hPa Geopot



gdam

Sfc pressure



hPa

Summary

Summary: Weather Briefing 2022-03-02

- **Wednesday, 2022-03-16:**
 - AR directed from Norwegian coast (offshore) to Svalbard and Arctic Ocean further north
 - Front over sea ice NE of Greenland causing snow over presumably closed sea ice
- **Thursday, 2022-03-17:**
 - Slightly cooler and drier airmasses over Fram Strait
 - SW flow over open water + unstable air mass = snow showers over Svalbard
- **Friday, 2022-03-18:**
 - Change of air flow due to cyclone positioned over Fram Strait
- **Saturday, 2022-03-19:**
 - Cold air advection/cold air outbreak over Fram Strait almost from West to East originating from Greenland
 - AR towards Norwegian coast (?)
 - High Uncertainties
- **Sunday, 2022-03-20:**
 - CAO with uncertainties over Fram Strait and Svalbard