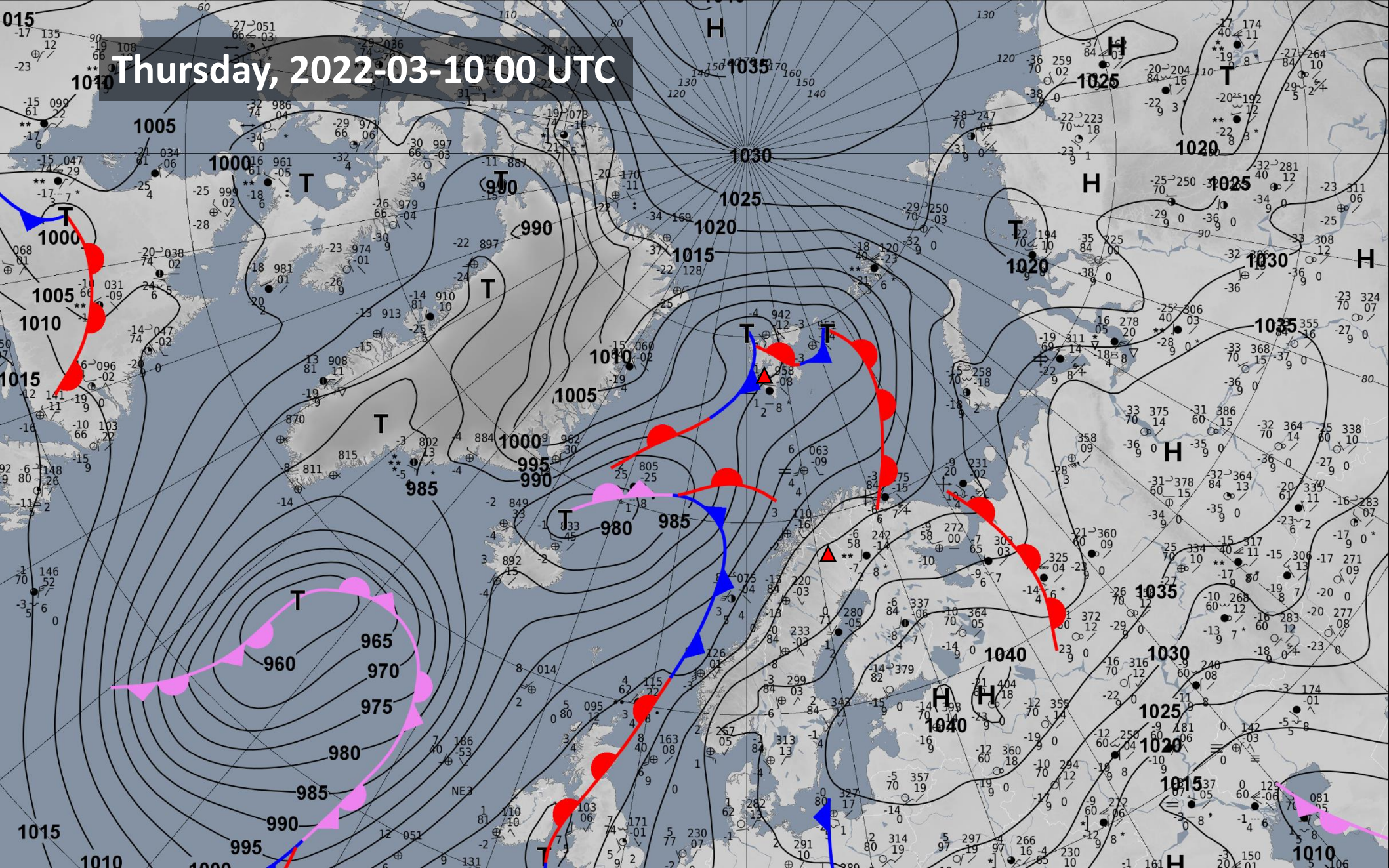


Weather briefing HALO-(AC)³

Thursday, 2022-03-10 17:00

Surface Analysis
2022-03-10 00 UTC
DWD

Thursday, 2022-03-10 00 UTC



Circulation pattern development

2022-03-10 00 UTC: 00 – 108h

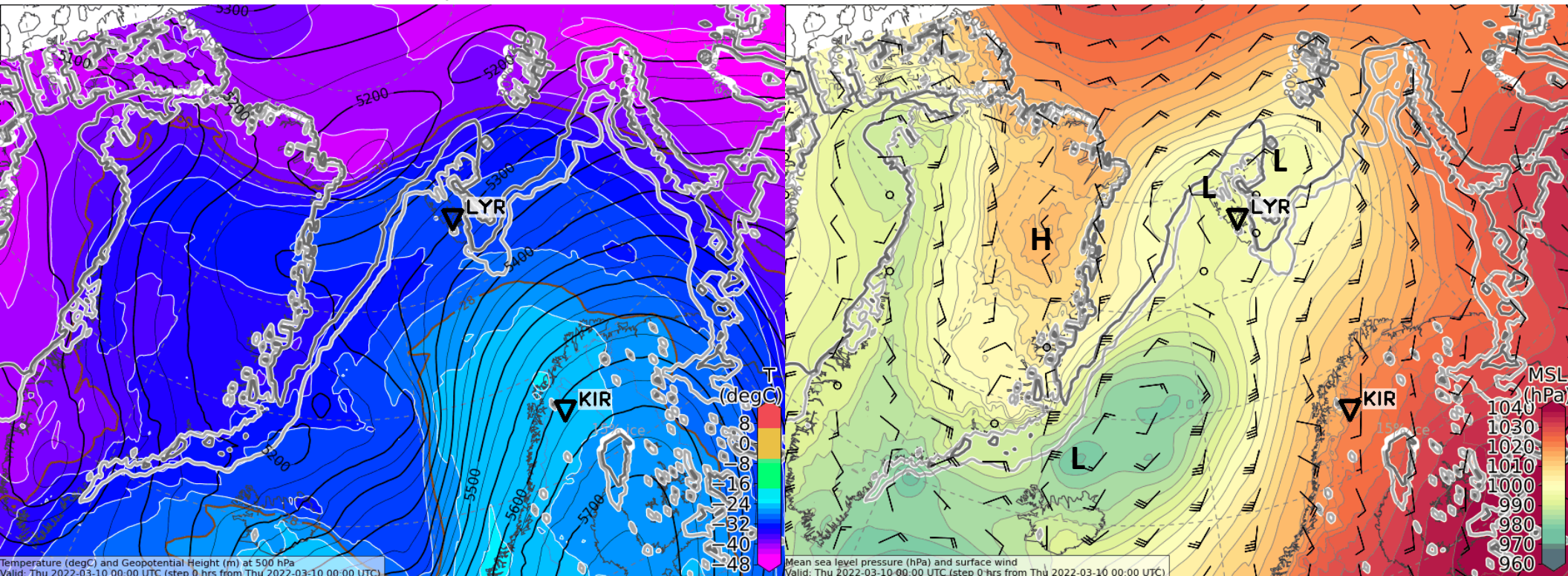
500 hPa Geopot & T

Sea level pressure

Thursday, 2022-03-10 00 UTC (+00h)

500 hPa Geopot & T

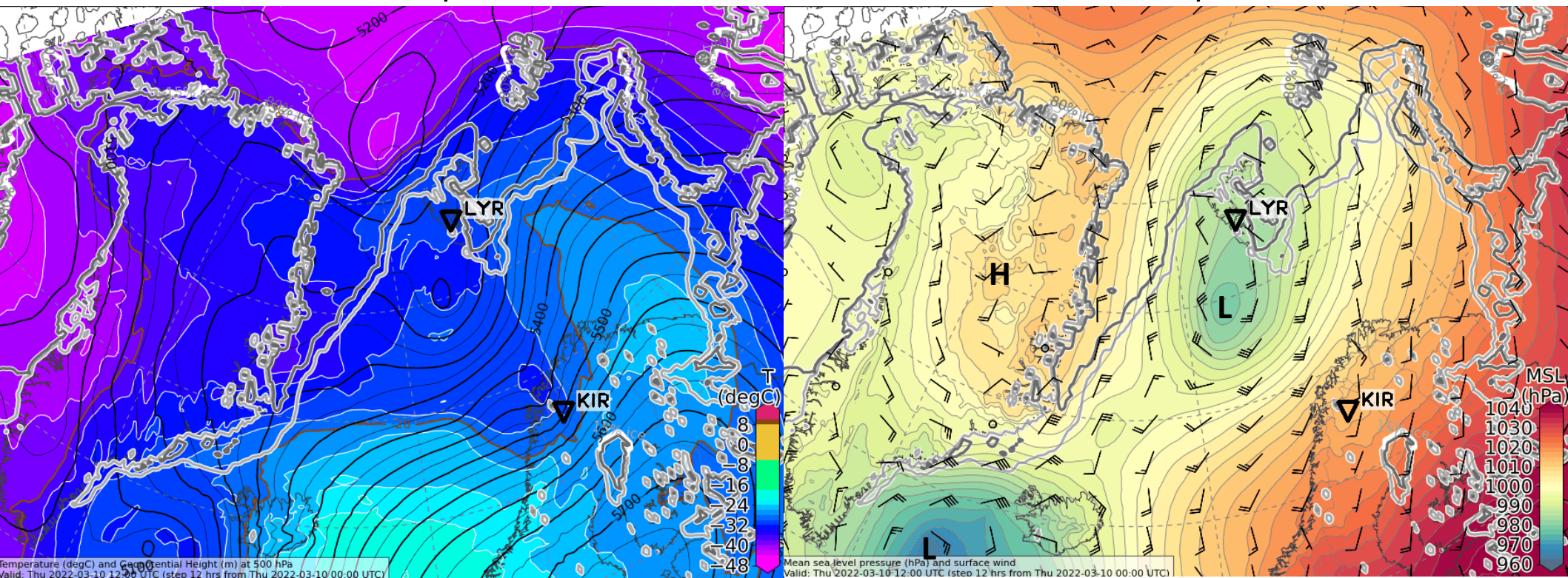
Sea level pressure



Thursday, 2022-03-10 12 UTC (+12h)

500 hPa Geopot & T

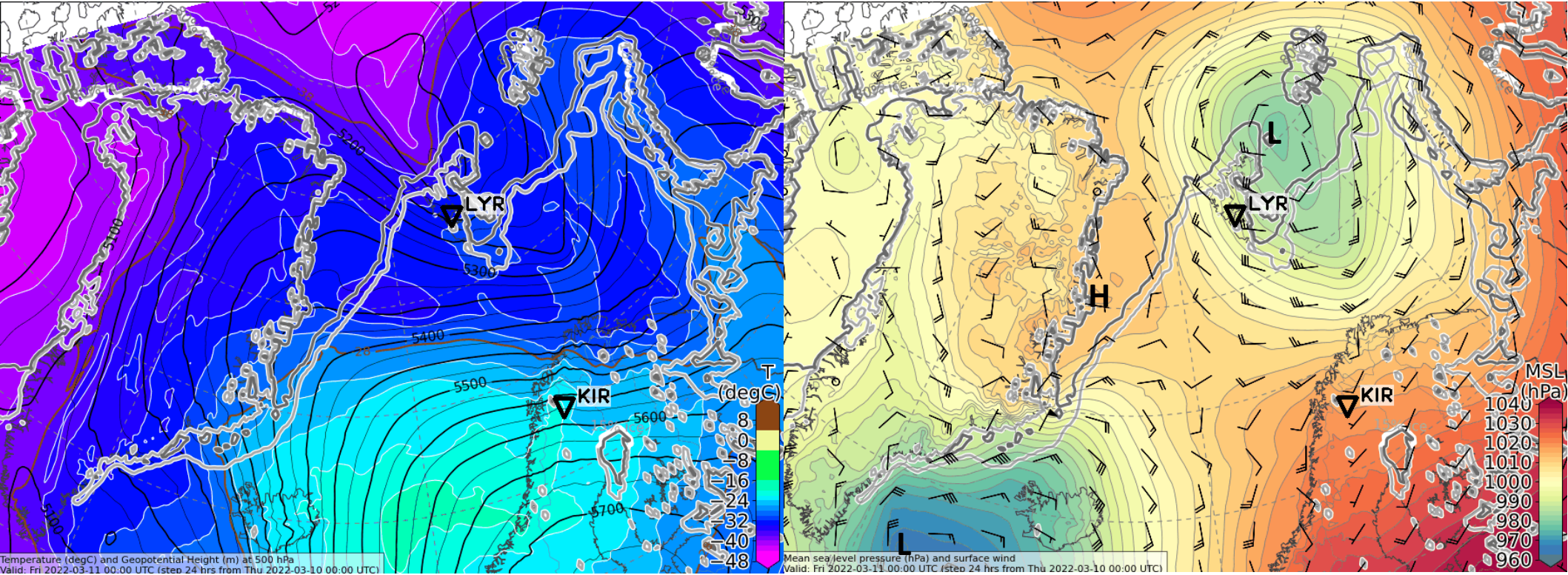
Sea level pressure



Friday, 2022-03-11 00 UTC (+24h)

500 hPa Geopot & T

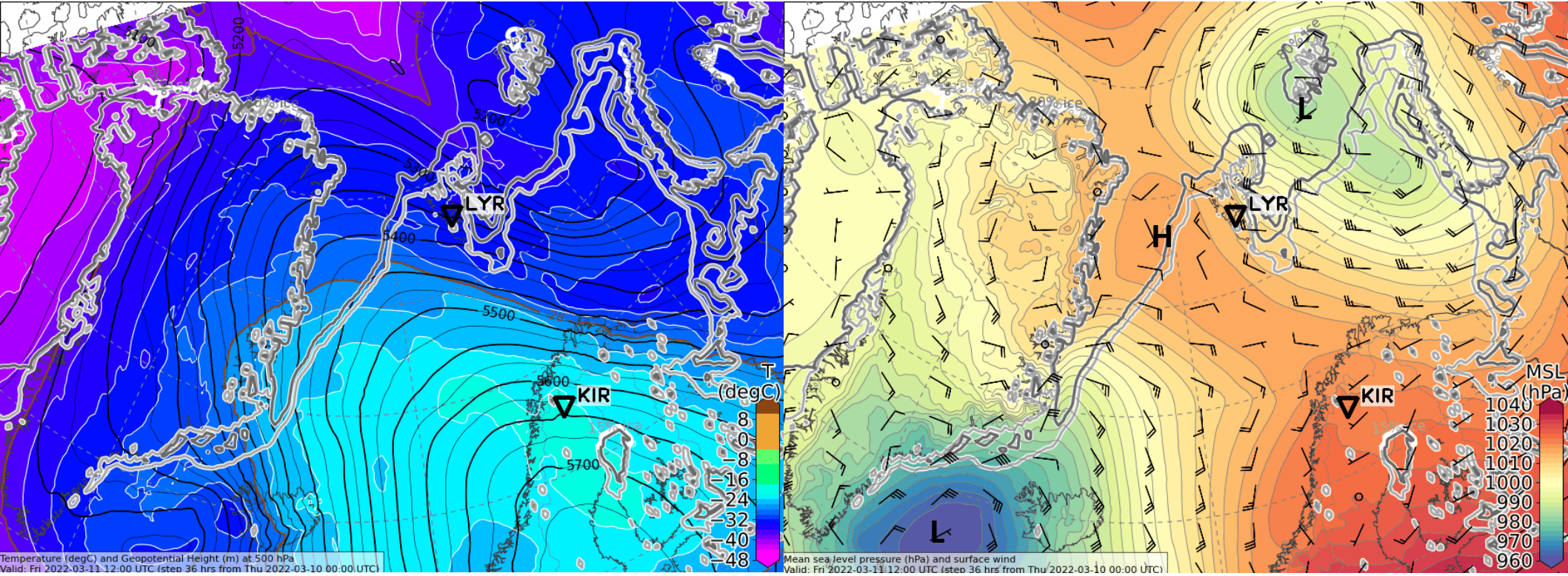
Sea level pressure



Friday, 2022-03-11 12 UTC (+36h)

500 hPa Geopot & T

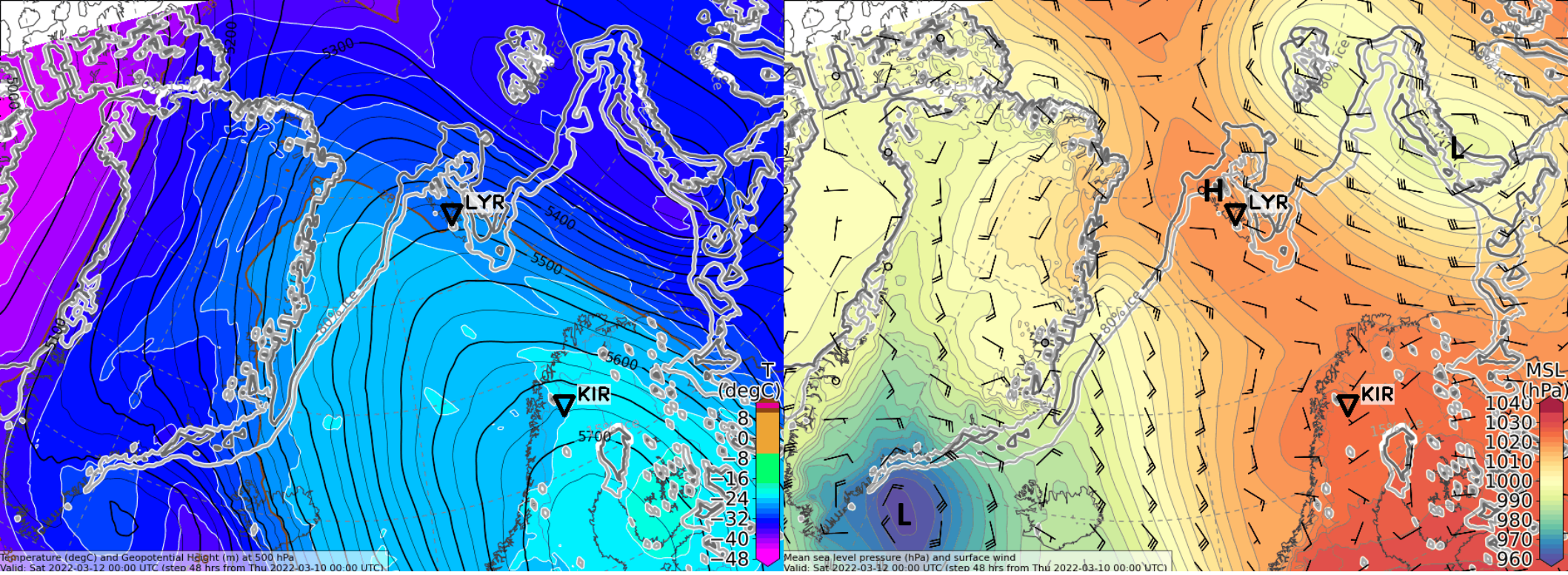
Sea level pressure



Saturday, 2022-03-12 00 UTC (+48h)

500 hPa Geopot & T

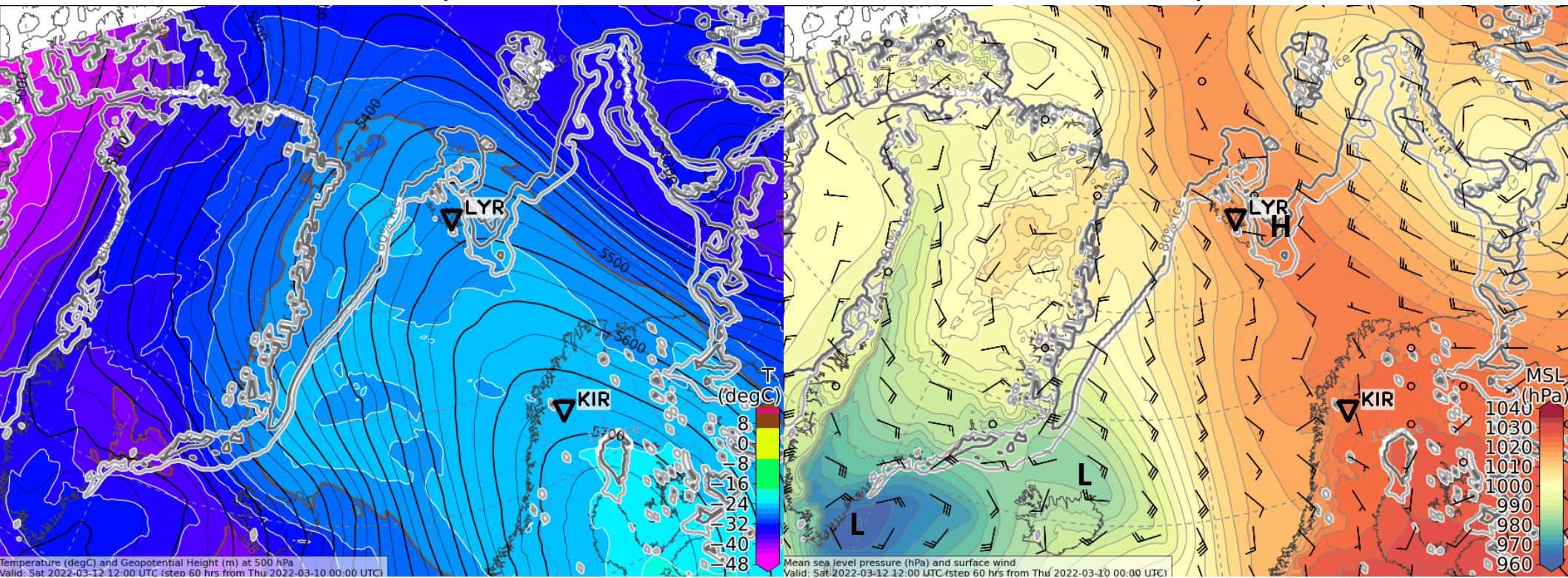
Sea level pressure



Saturday, 2022-03-12 12 UTC (+60h)

500 hPa Geopot & T

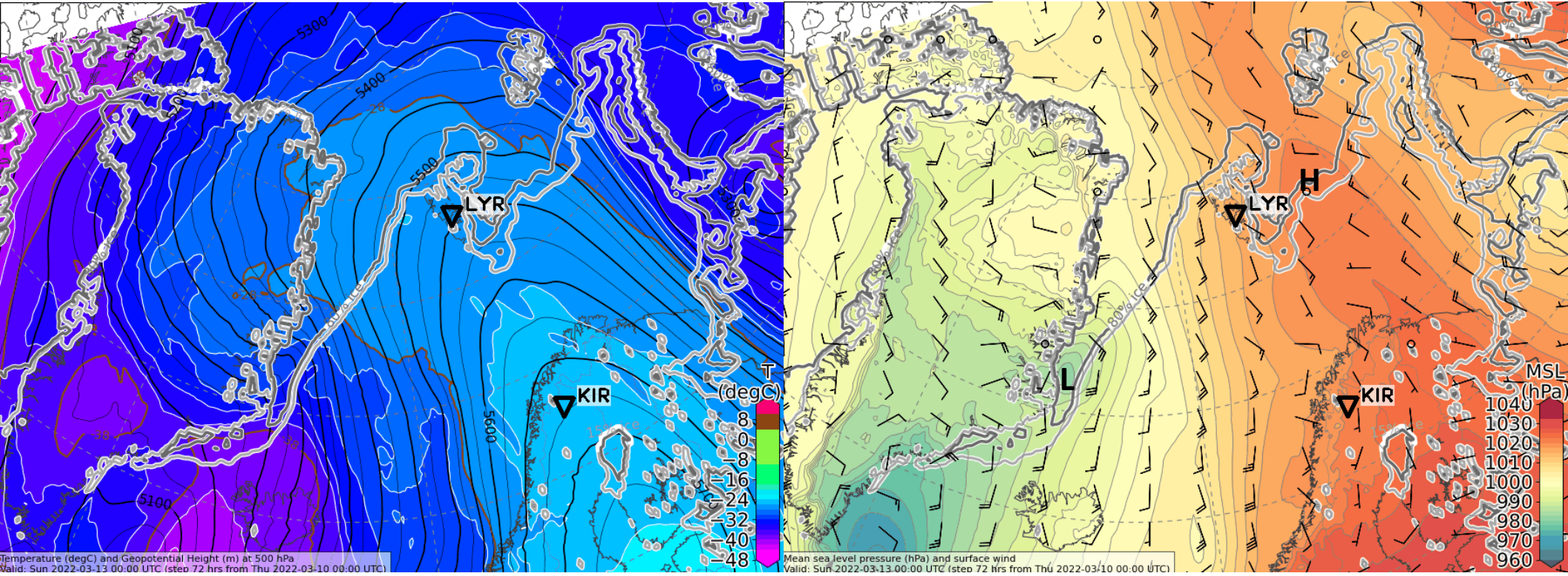
Sea level pressure



Sunday, 2022-03-13 00 UTC (+72h)

500 hPa Geopot & T

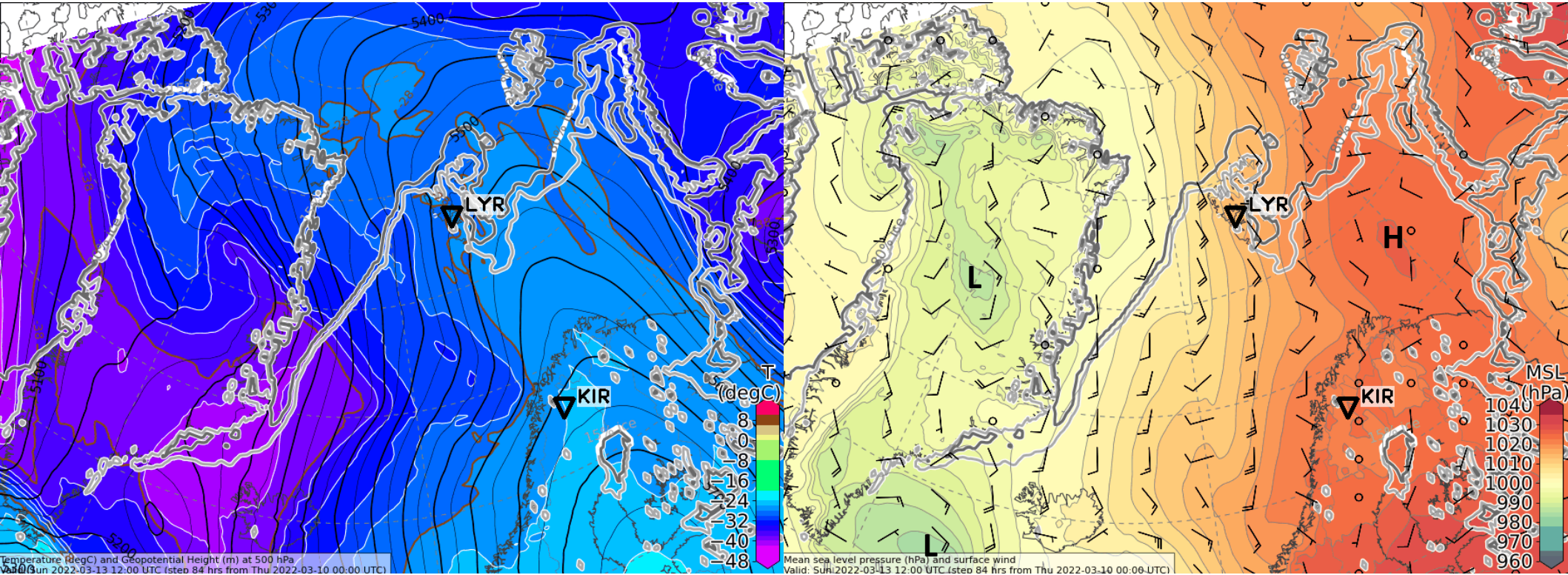
Sea level pressure



Sunday, 2022-03-13 12 UTC (+84h)

500 hPa Geopot & T

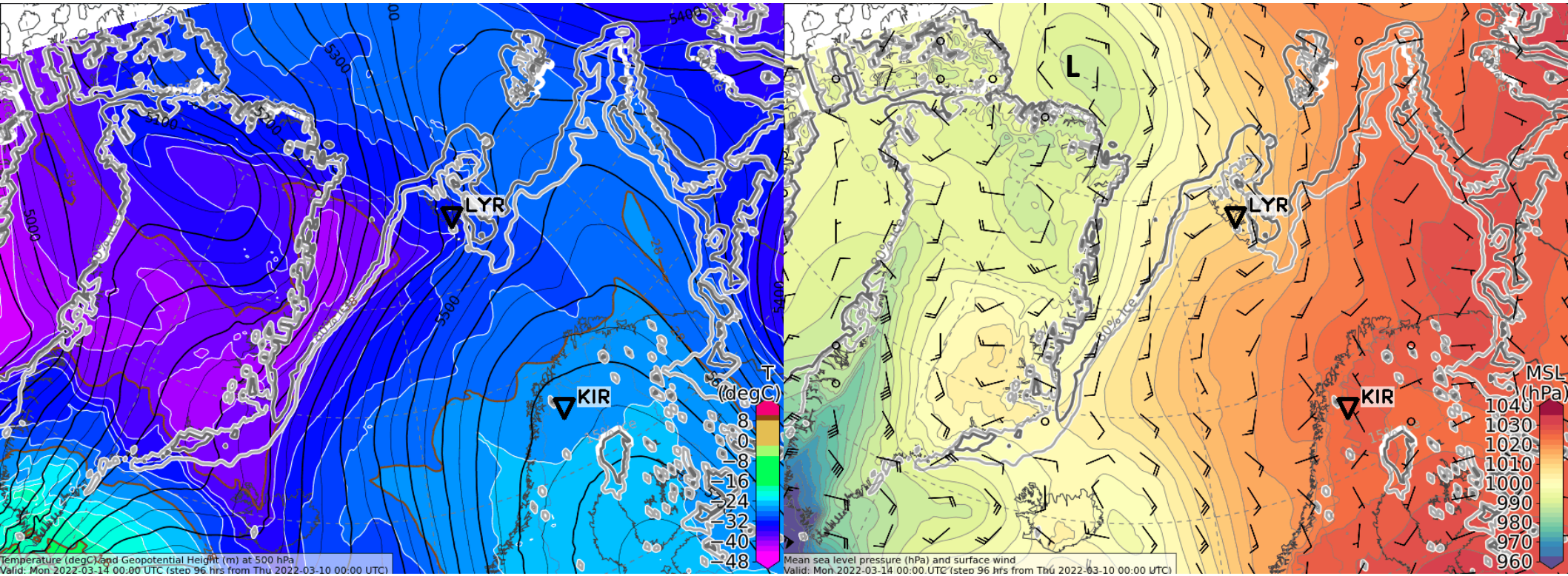
Sea level pressure



Monday, 2022-03-14 00 UTC (+96h)

500 hPa Geopot & T

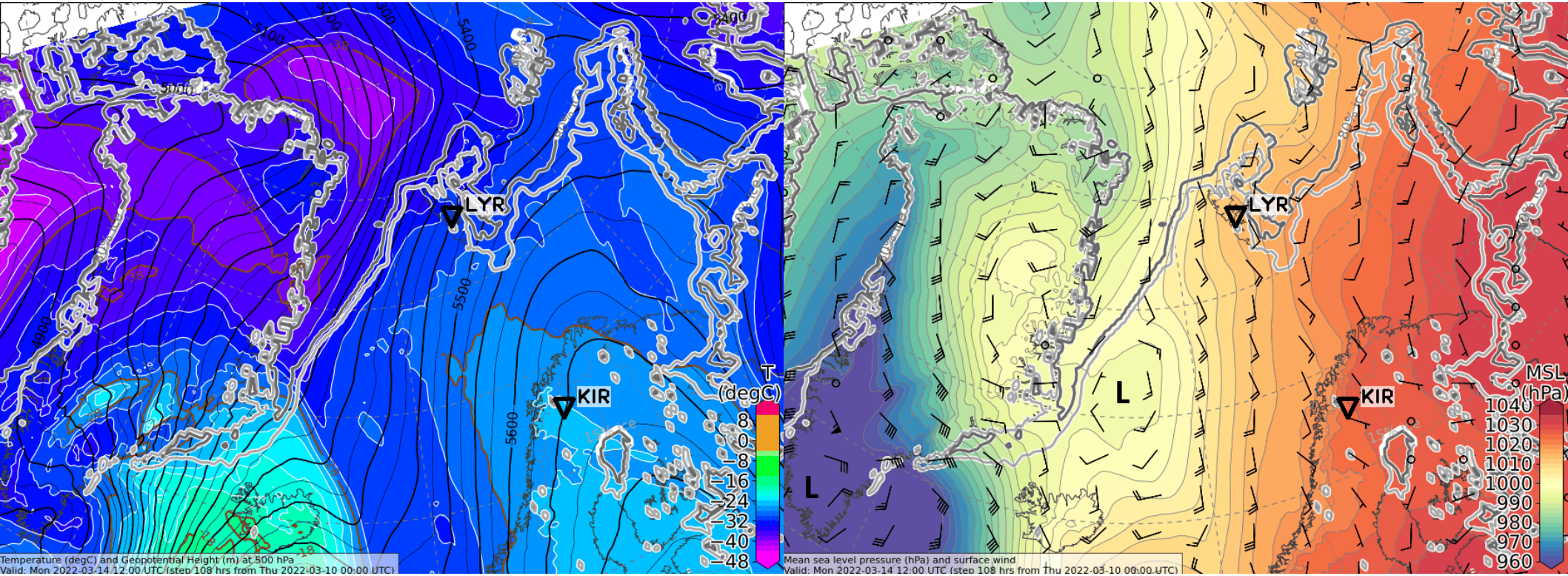
Sea level pressure



Monday, 2022-03-13 12 UTC (+108h)

500 hPa Geopot & T

Sea level pressure



Surface wind development
2022-03-10 00 UTC: 36 – 108h
ECMWF

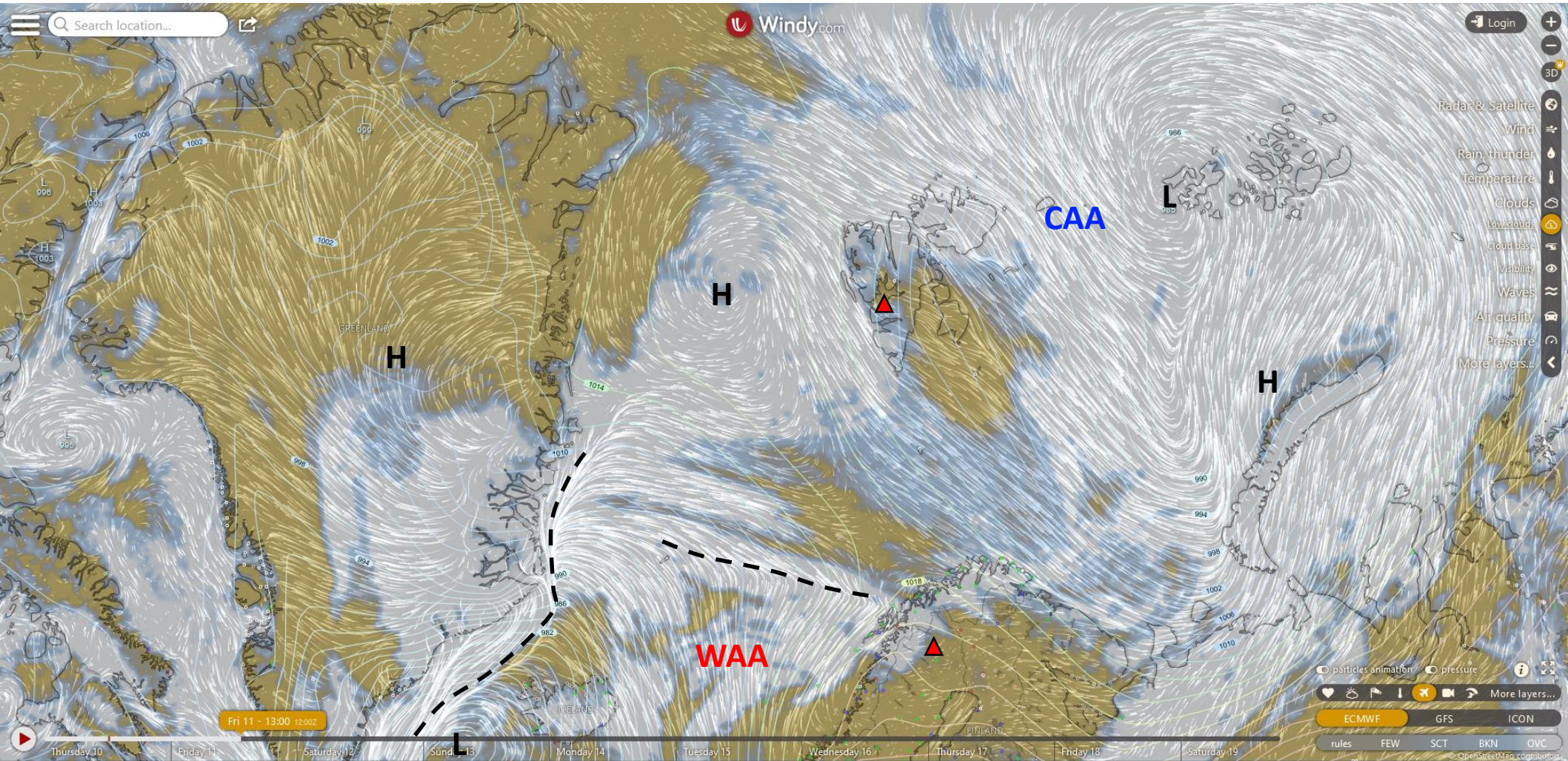
L: Low

H: High

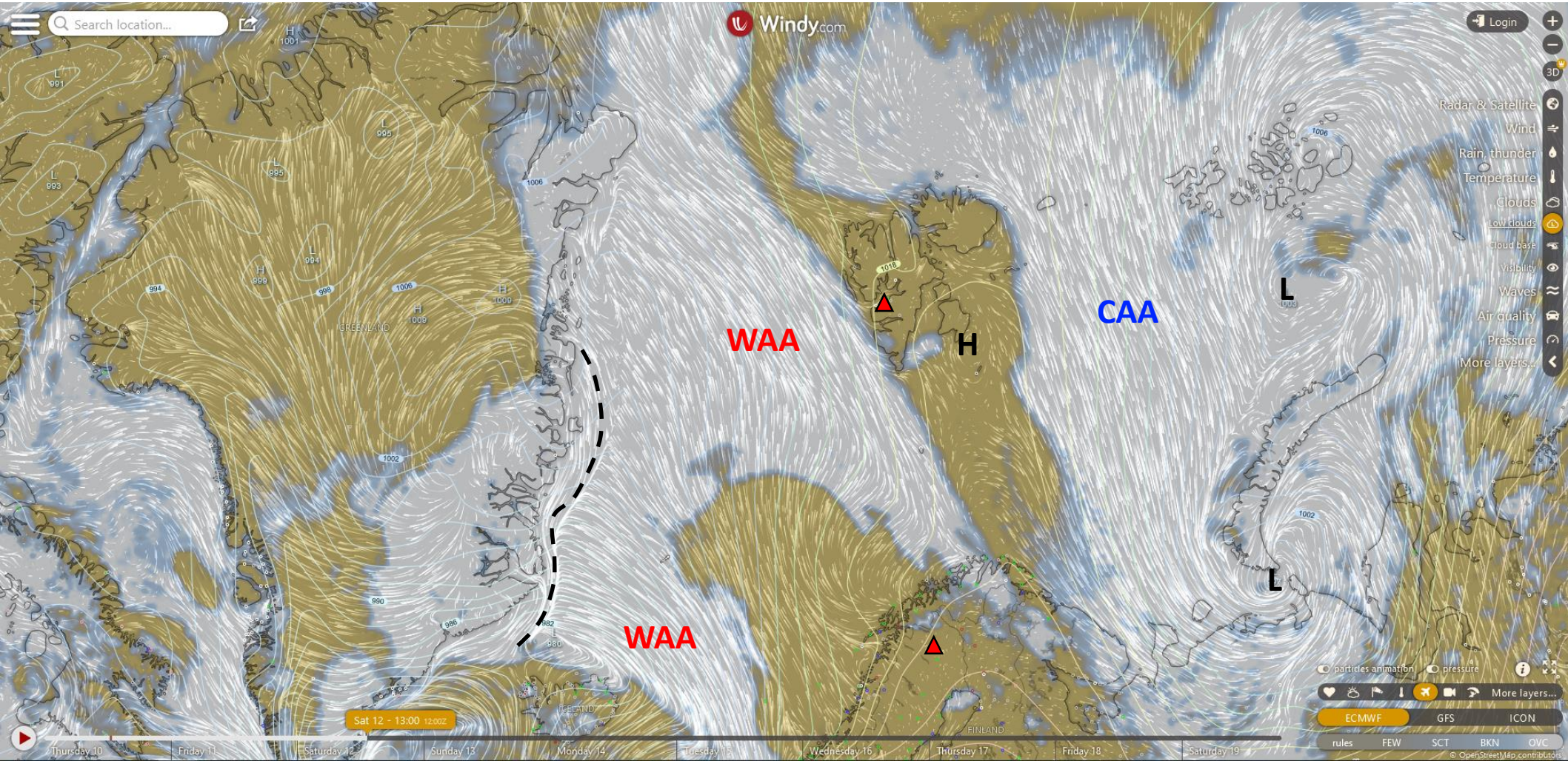
CAA: Cold Air Advection

WAA: Warm Air Advection

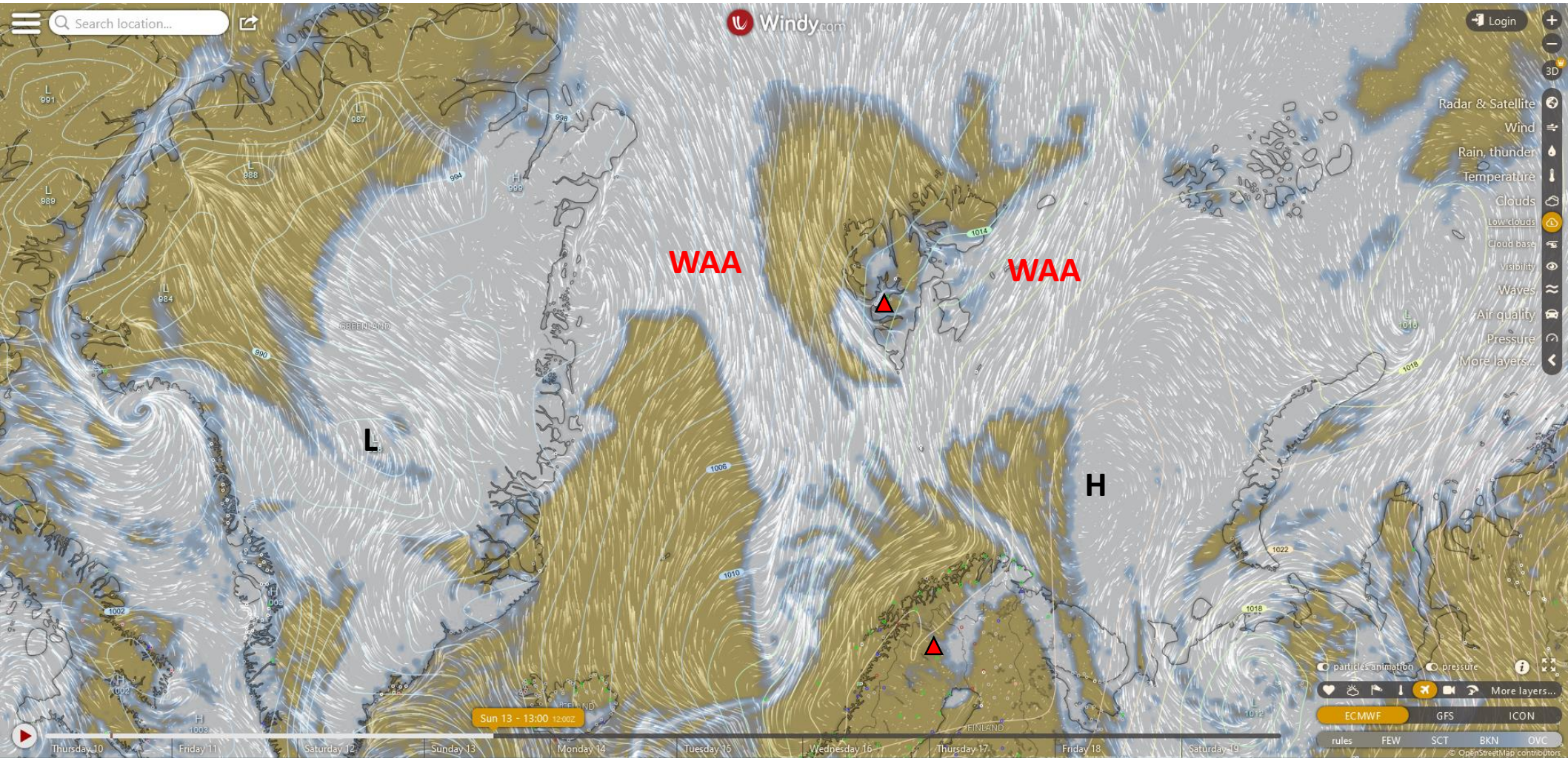
Friday, 2022-03-11 12 UTC (+36h)



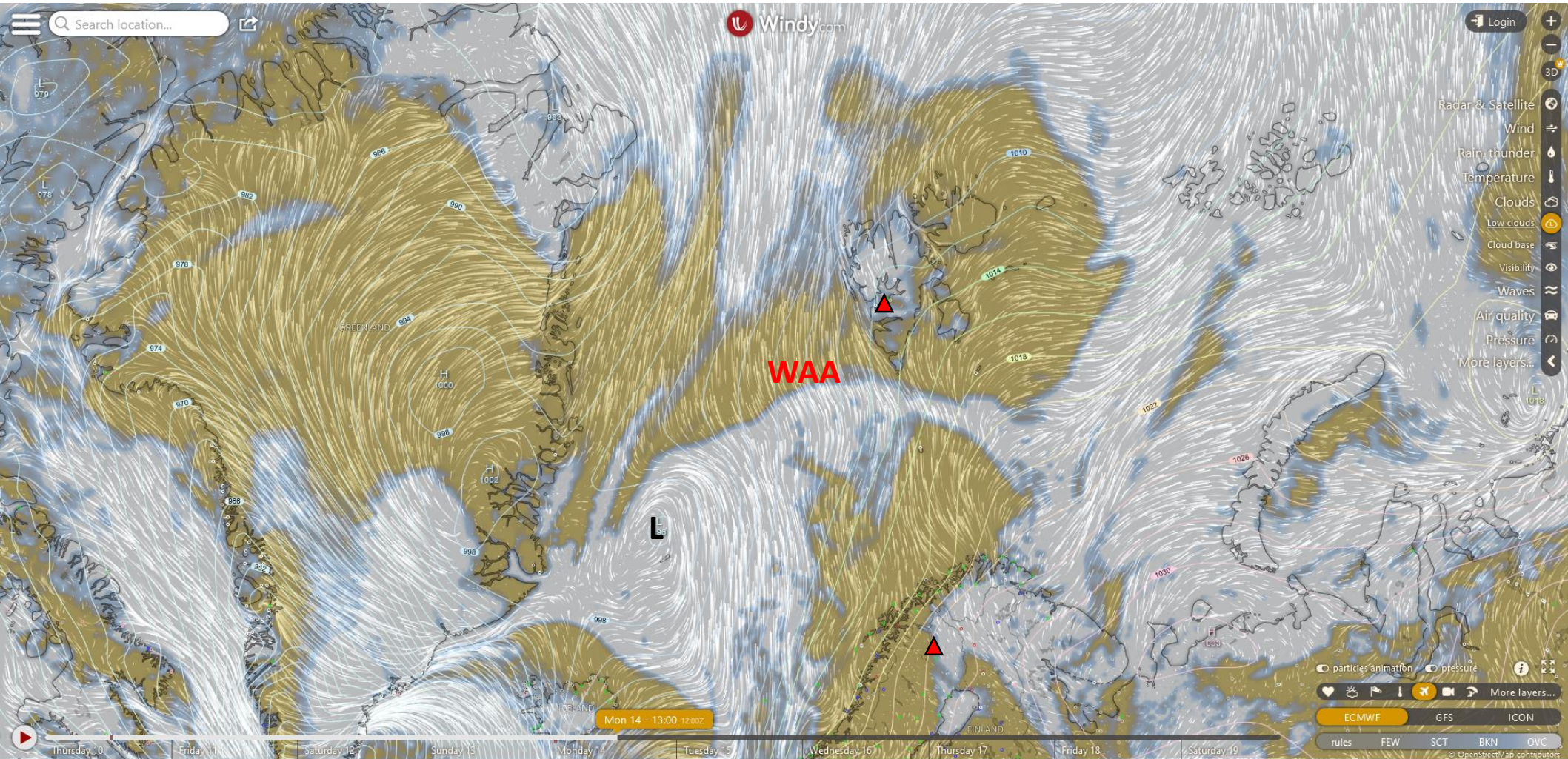
Saturday, 2022-03-12 12 UTC (+60h)



Sunday, 2022-03-13 12 UTC (+84h)

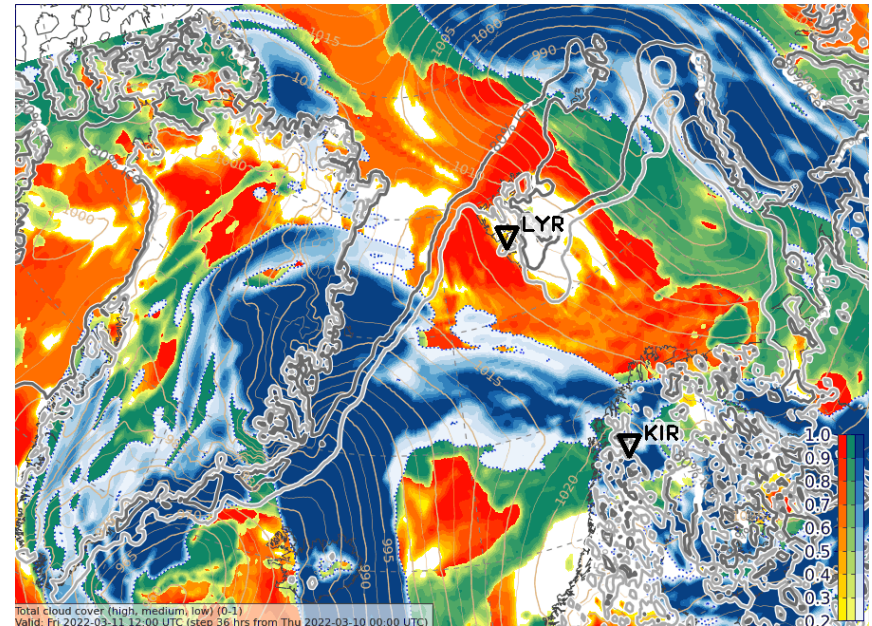
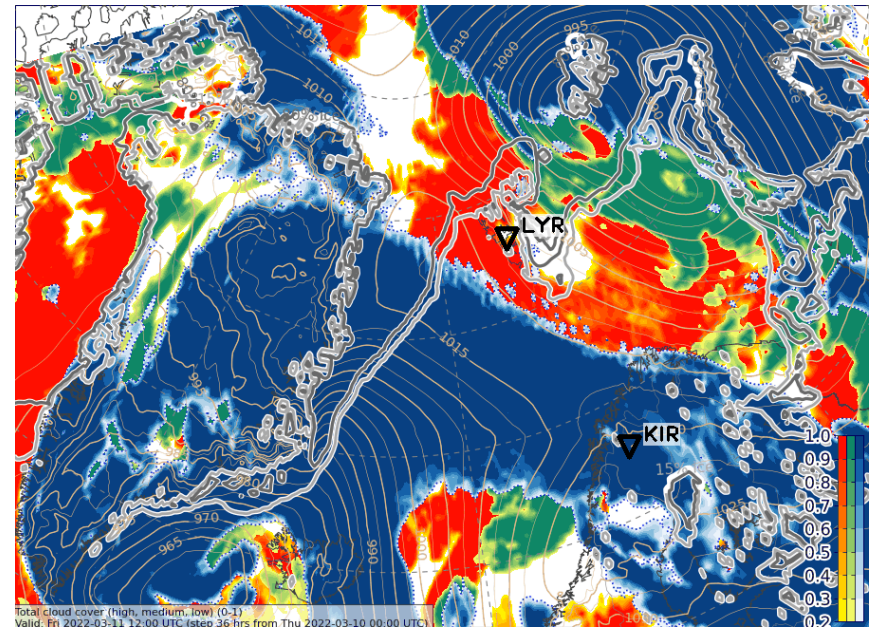
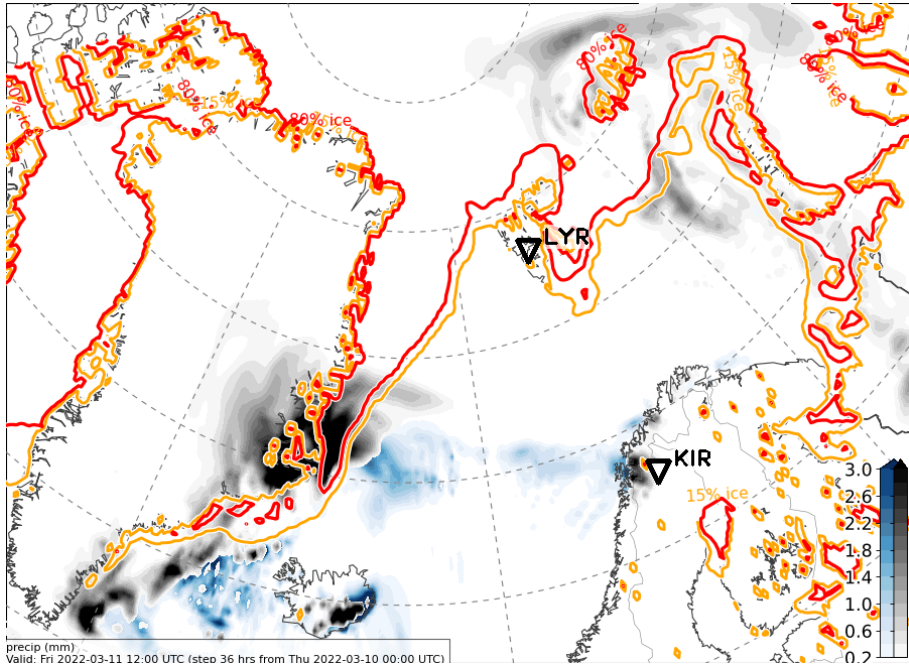


Monday, 2022-03-14 12 UTC (+108h)



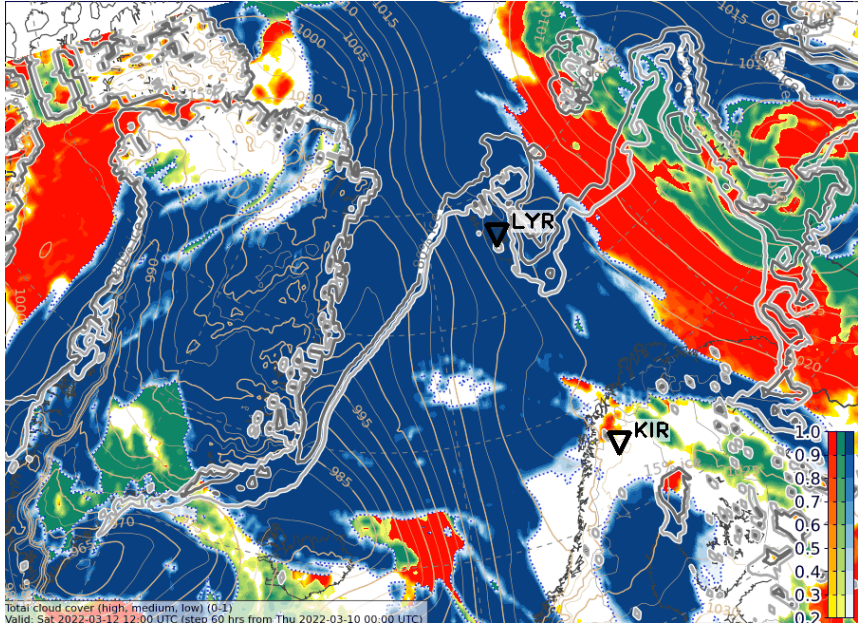
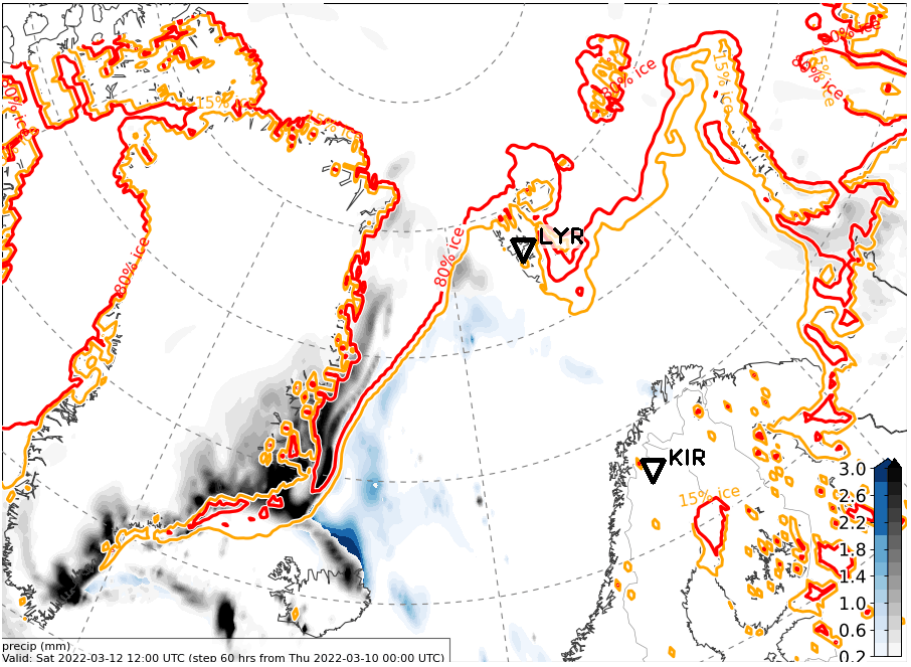
Cloud cover & precip development
2022-03-10 00 UTC: 36 – 108h
ECMWF + ICON

Fri, 2022-03-11 12 UTC (+36h) ECMWF

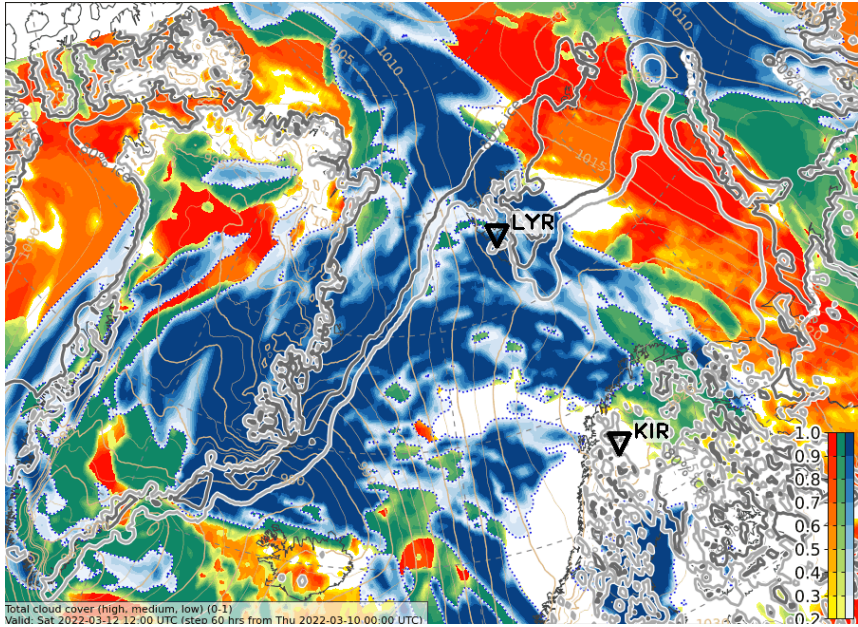


ICON

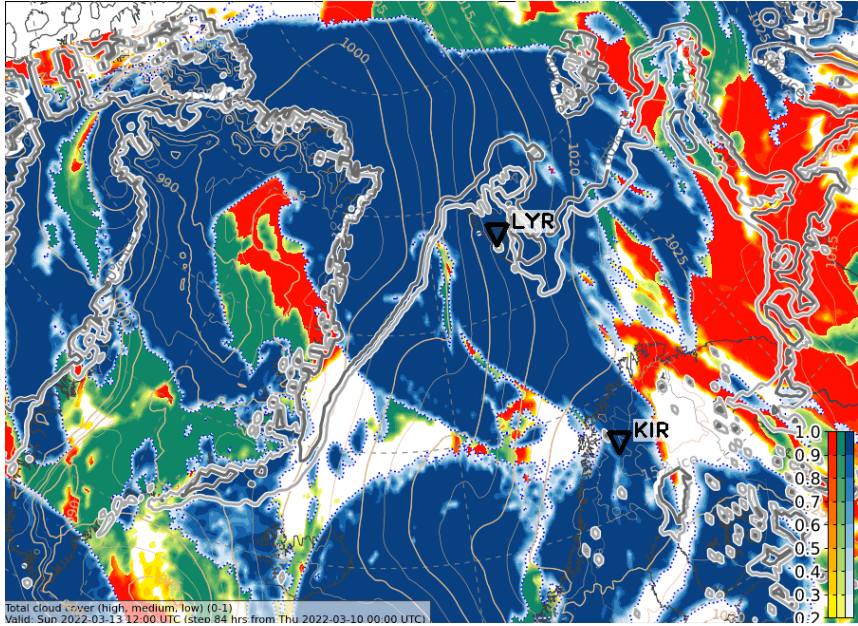
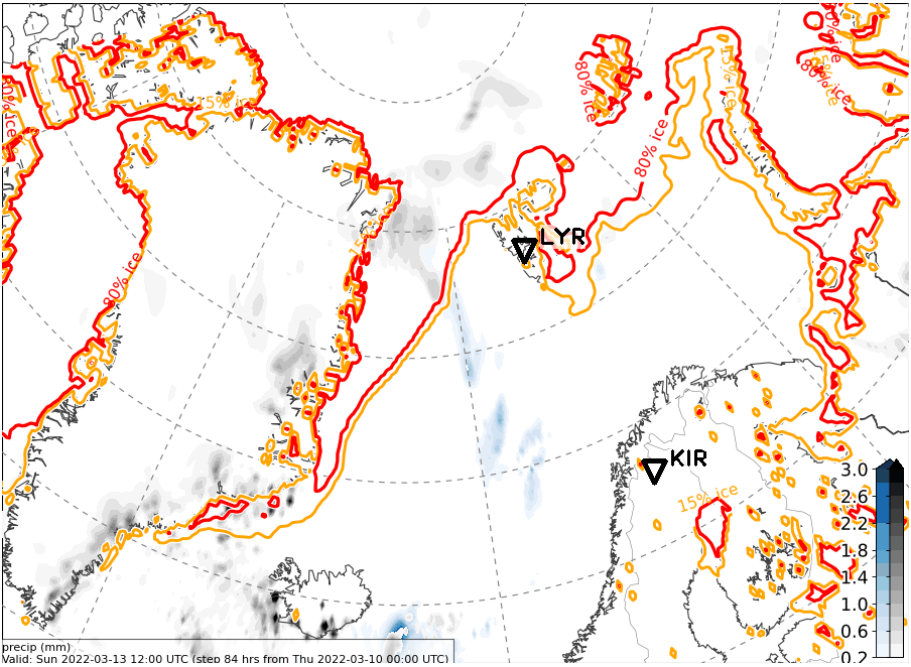
Sat, 2022-03-12 12 UTC (+60h) ECMWF



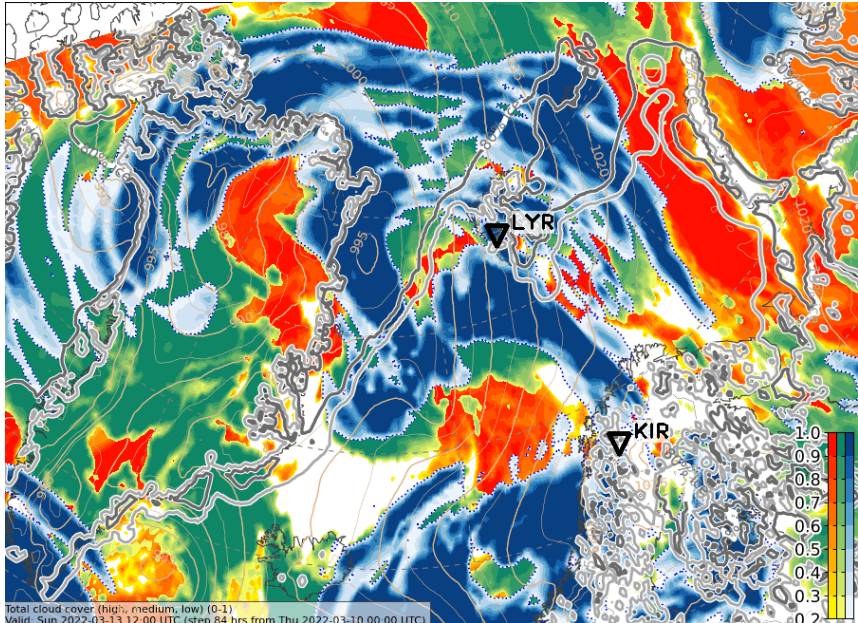
ICON



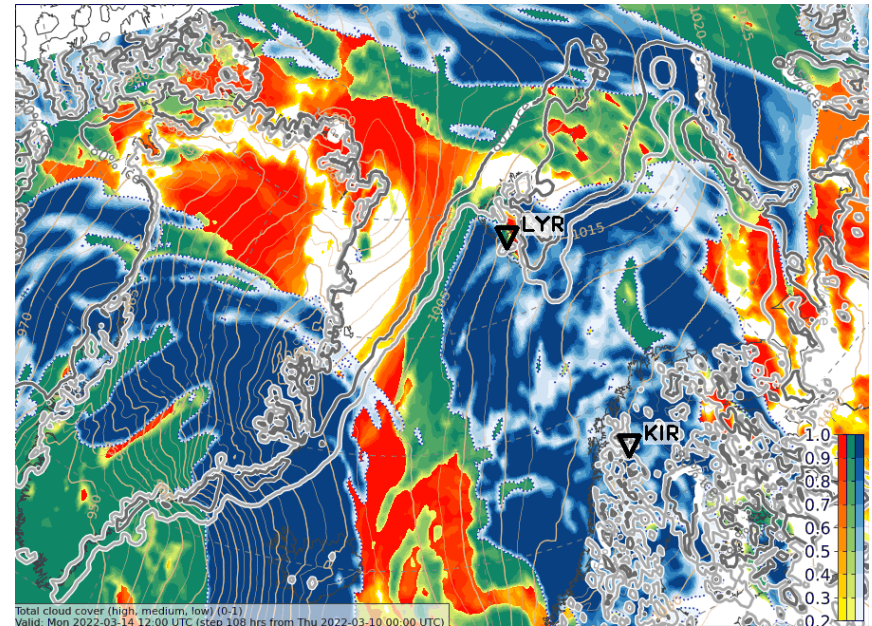
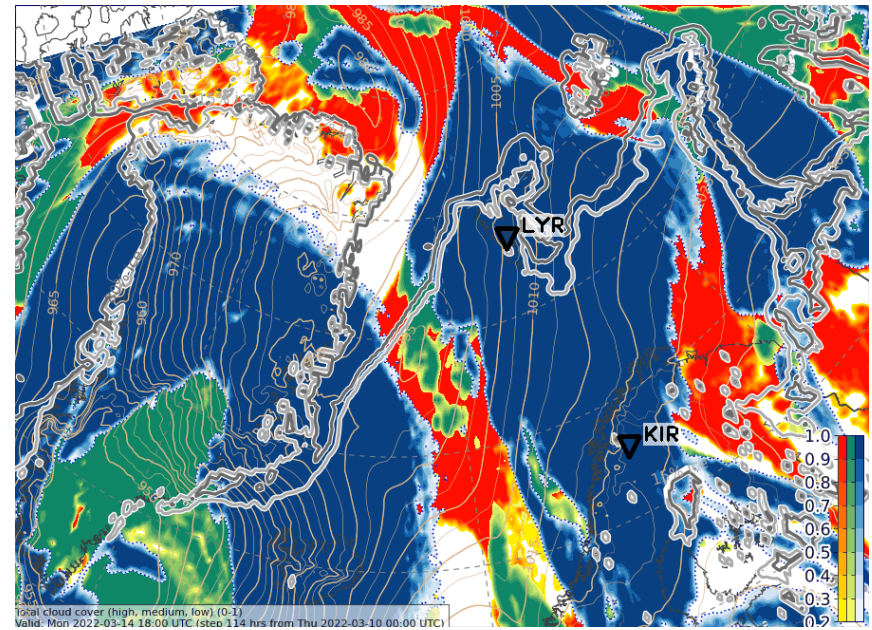
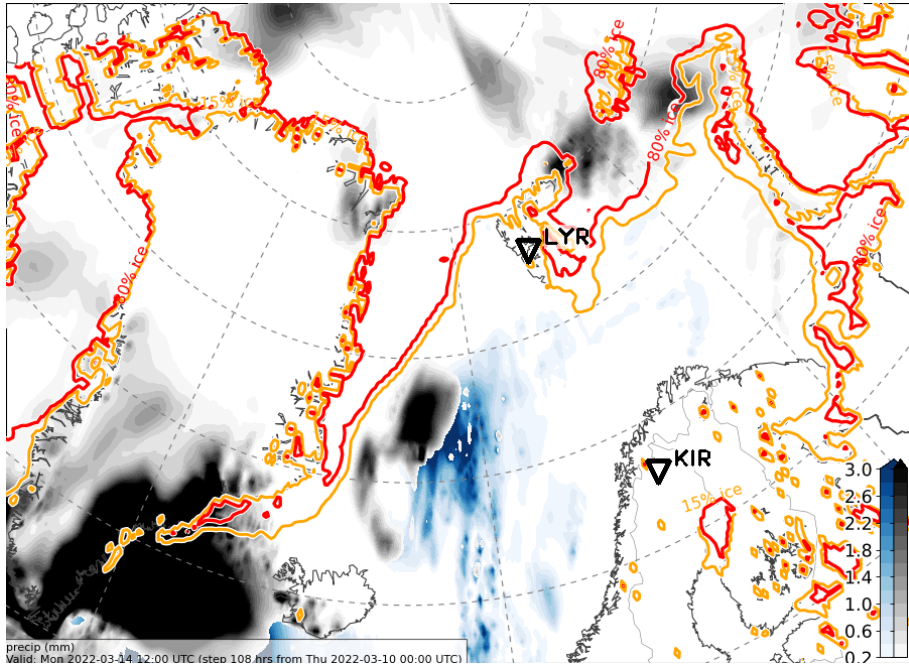
Sun, 2022-03-13 12 UTC (+84h) ECMWF



ICON

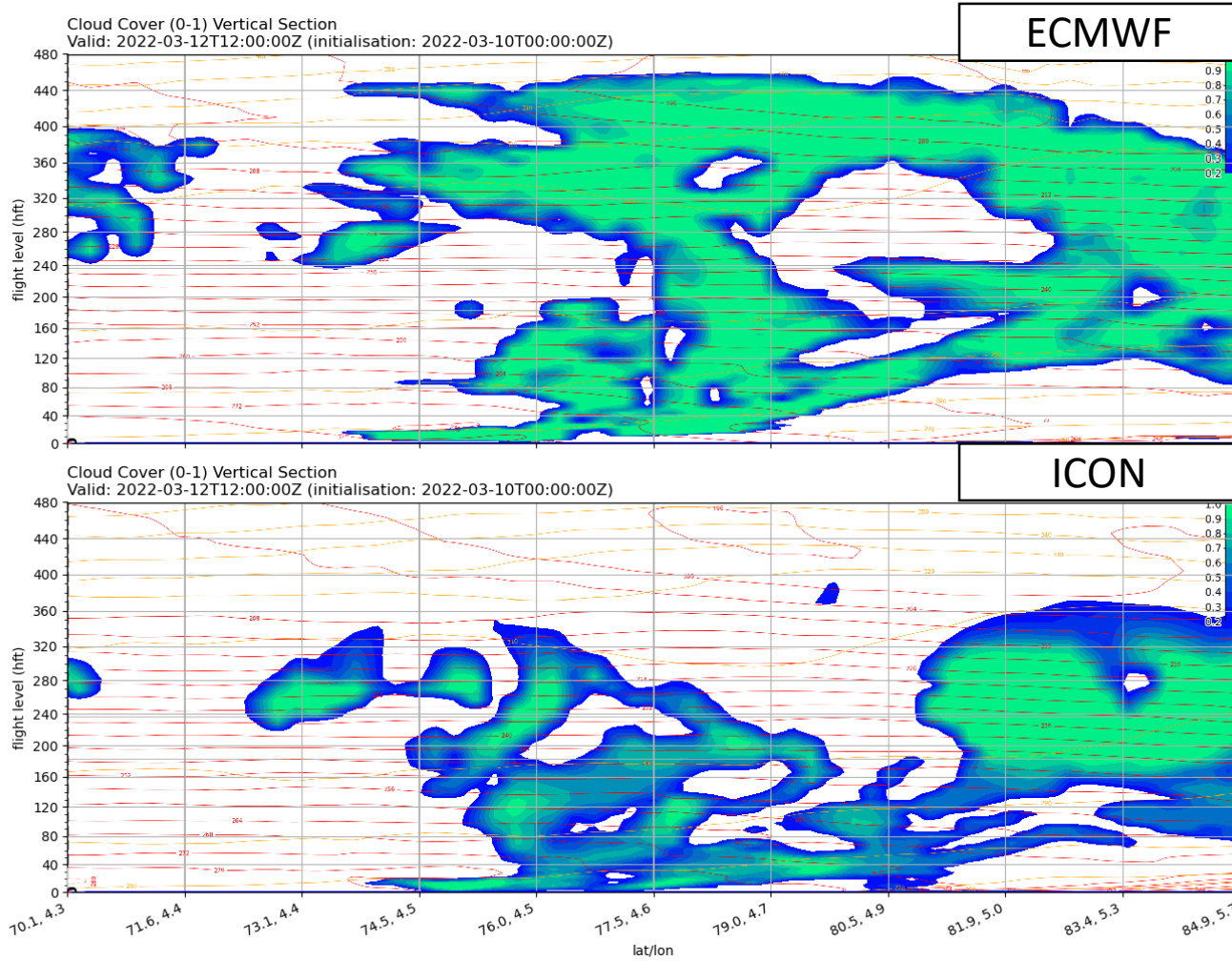


Mon, 2022-03-14 12 UTC (+108h)_{ECMWF}

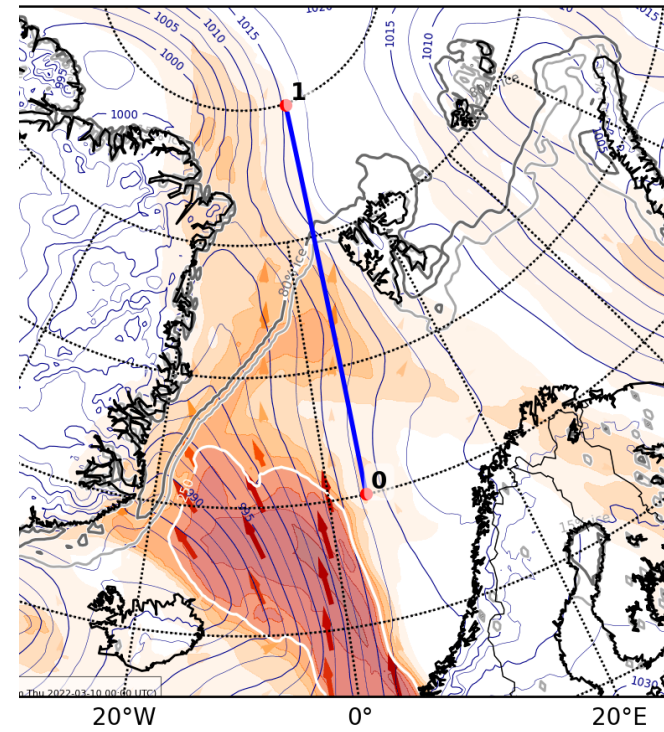


ICON

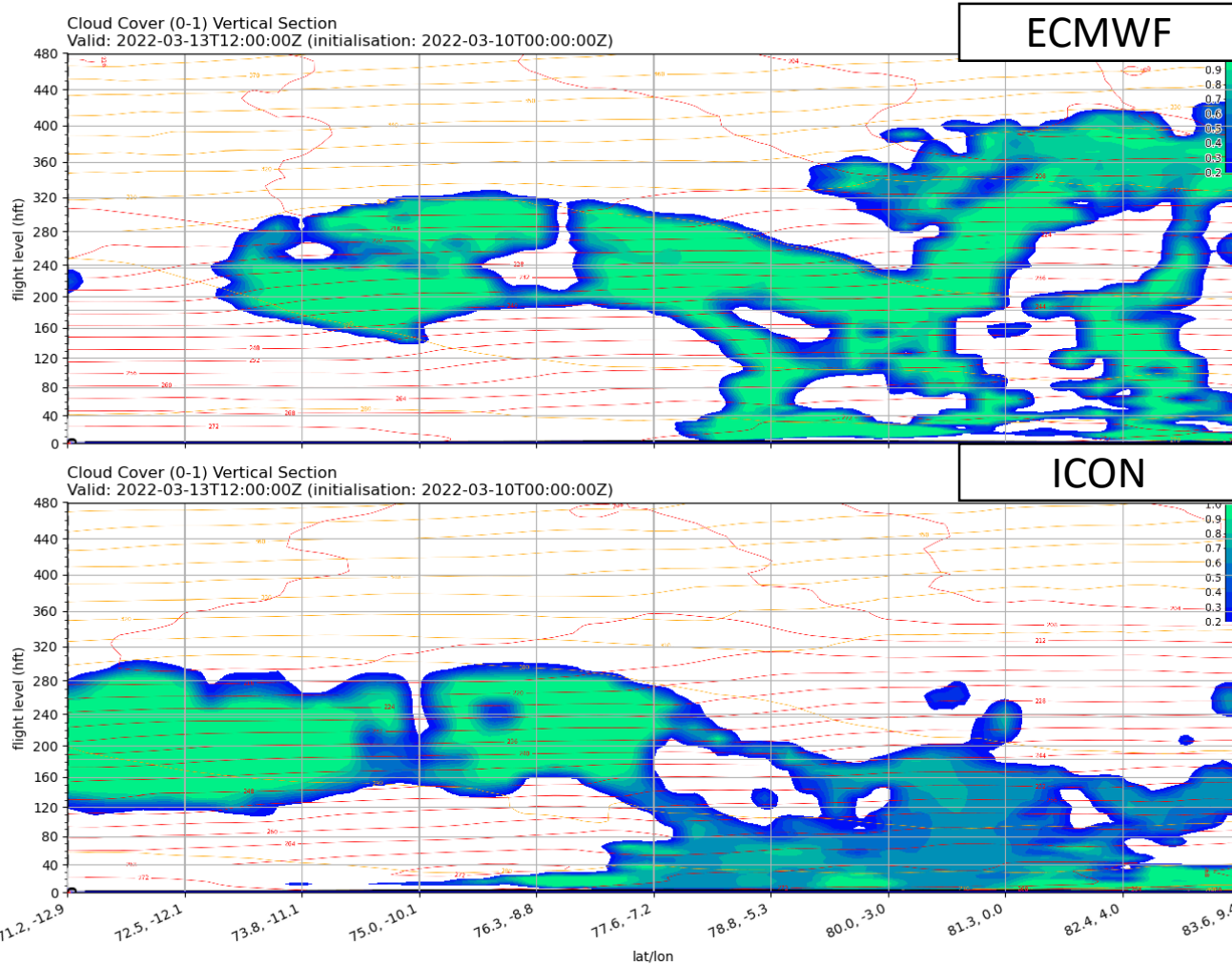
Sat, 2022-03-12 12 UTC



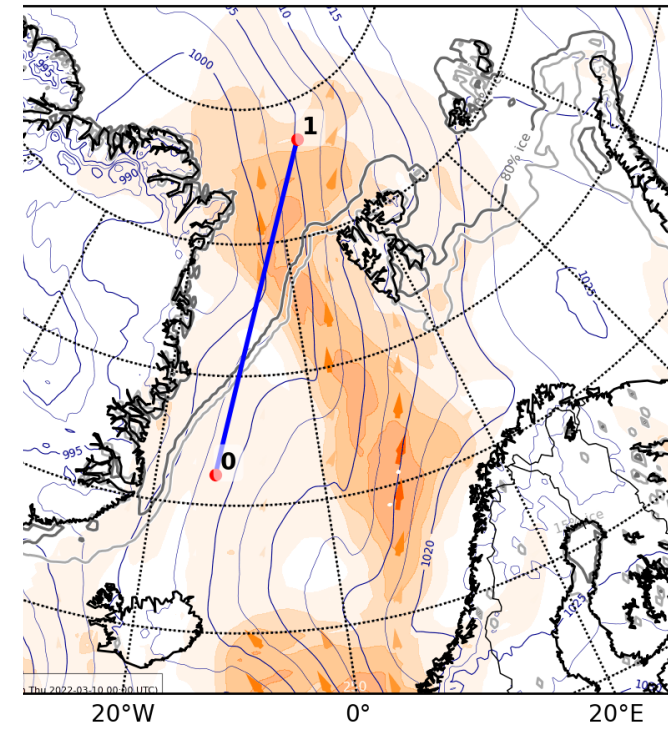
and Mean Sea Level Pressure (hPa)
2T12:00:00Z (initialisation: 2022-03-10T00:00:00Z)



Sat, 2022-03-12 12 UTC



and Mean Sea Level Pressure (hPa)
3T12:00:00Z (initialisation: 2022-03-10T00:00:00Z)



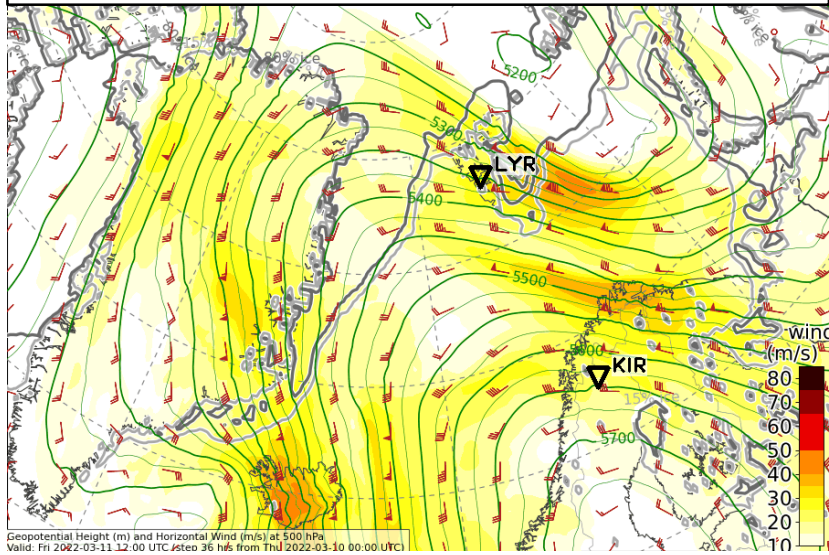
Extra variables

2022-03-11 00 UTC: 36 – 108h

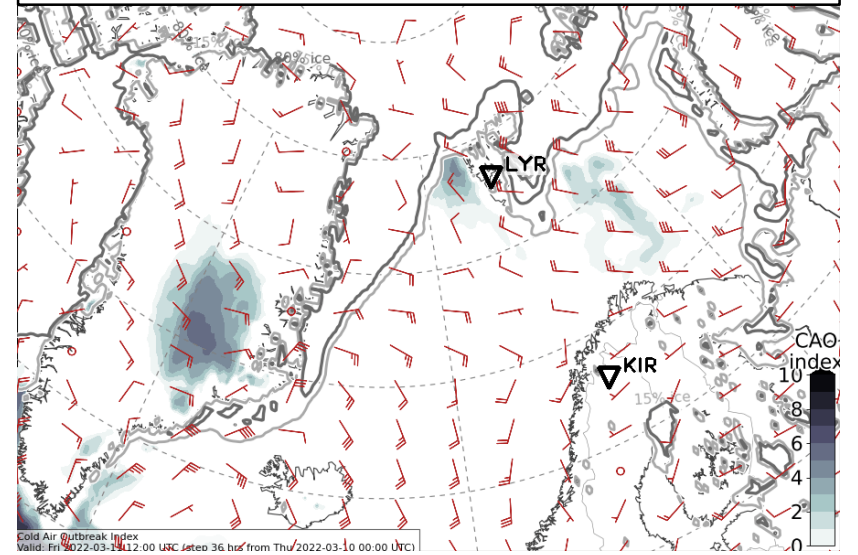
500 hPa wind & 850hPa θ_e & CAO & IVT

Fri, 2022-03-11 12 UTC (+36h)

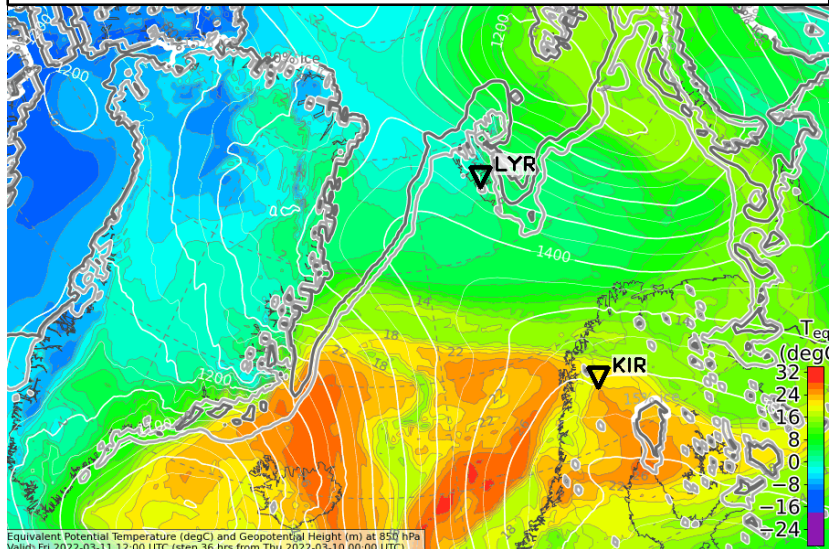
500 hPa Geopot. and Wind



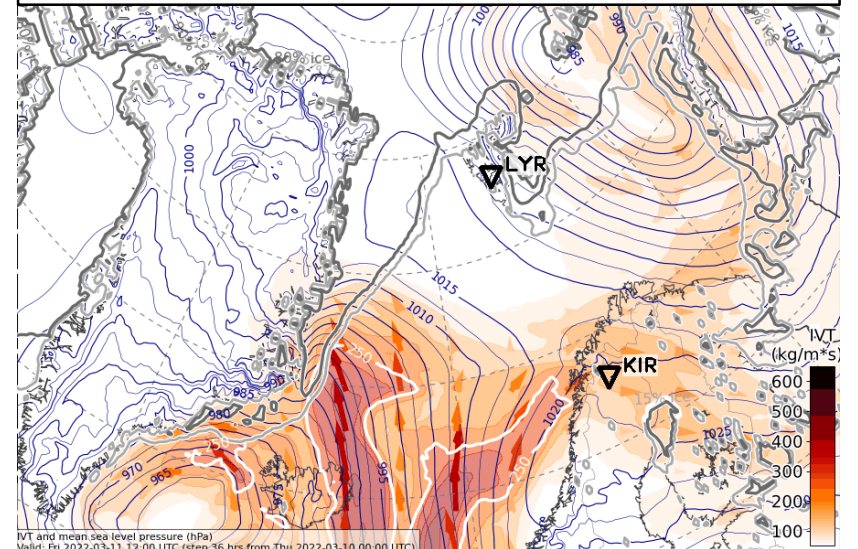
CAO Index



850 hPa Equiv. pot. temperature

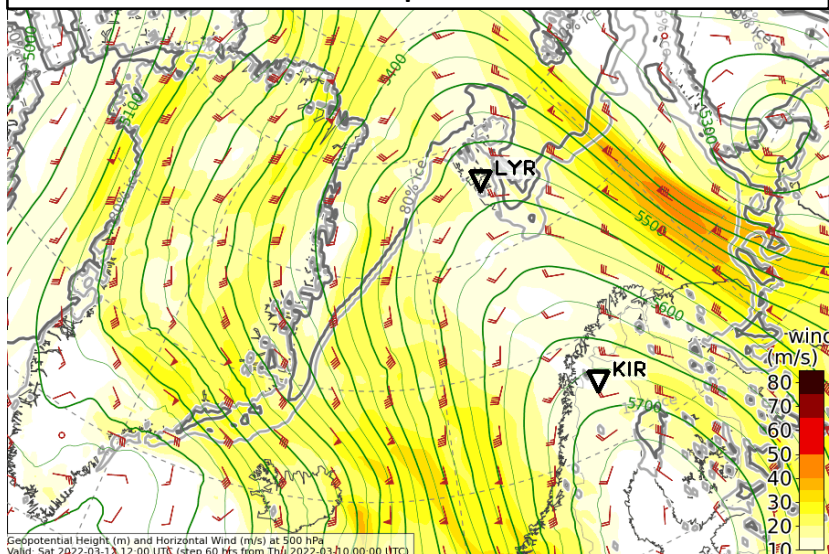


Integrated water vapour transport

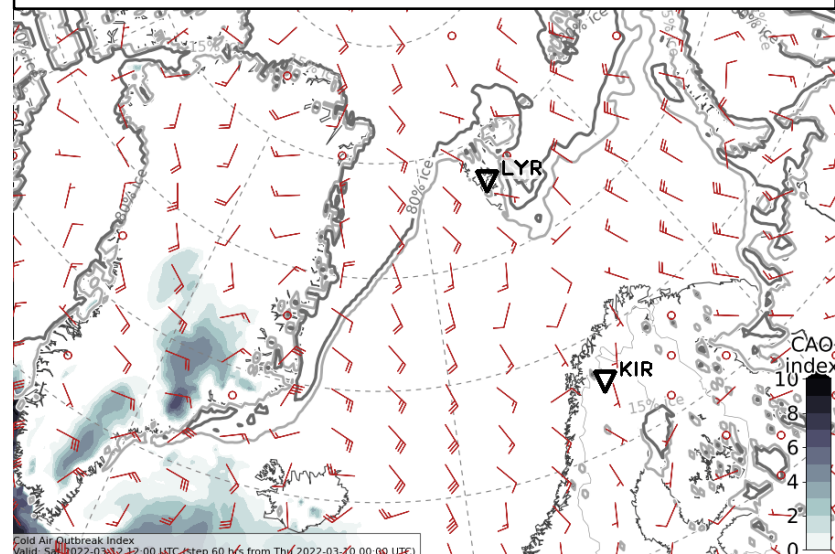


Sat, 2022-03-12 12 UTC (+60h)

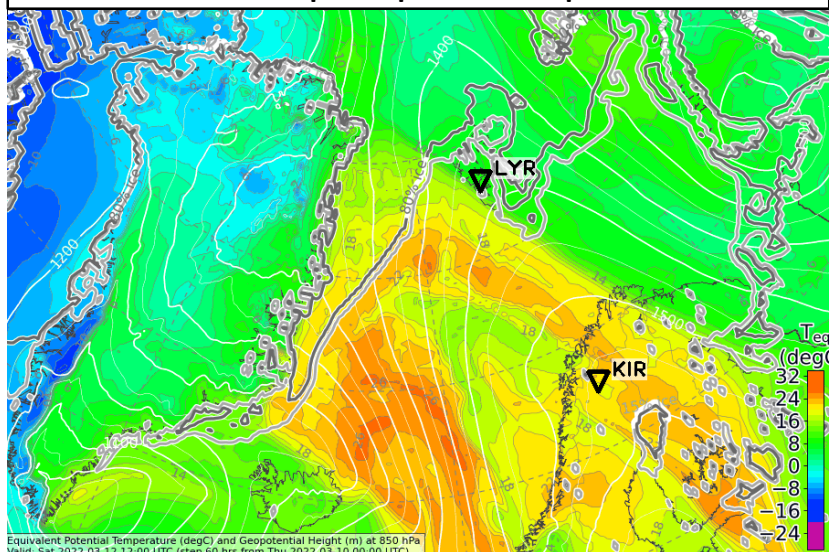
500 hPa Geopot. and Wind



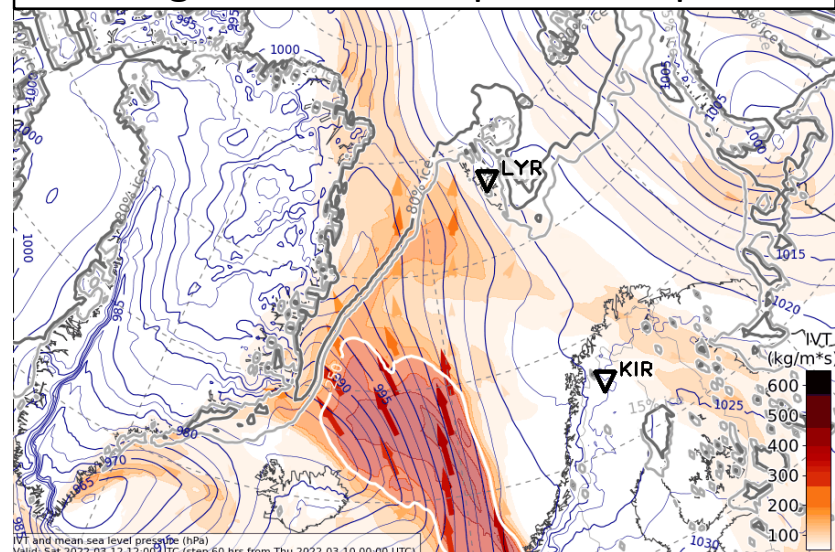
CAO Index



850 hPa Equiv. pot. temperature

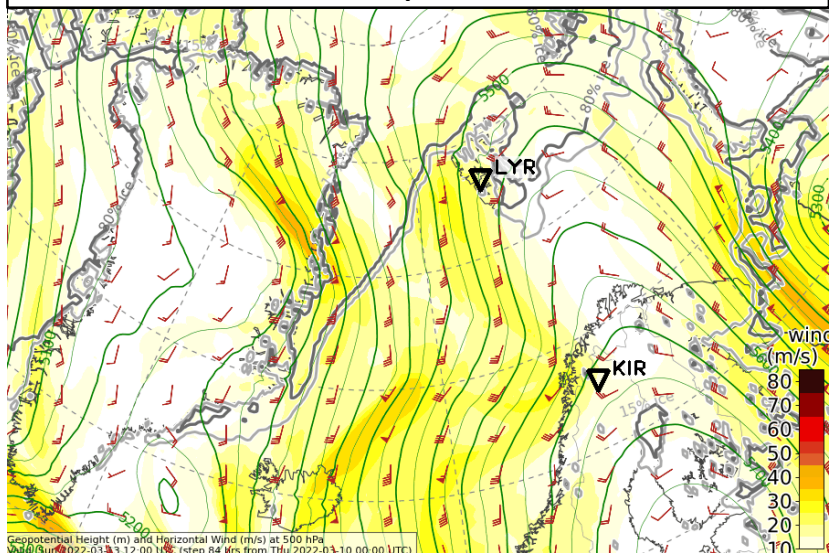


Integrated water vapour transport

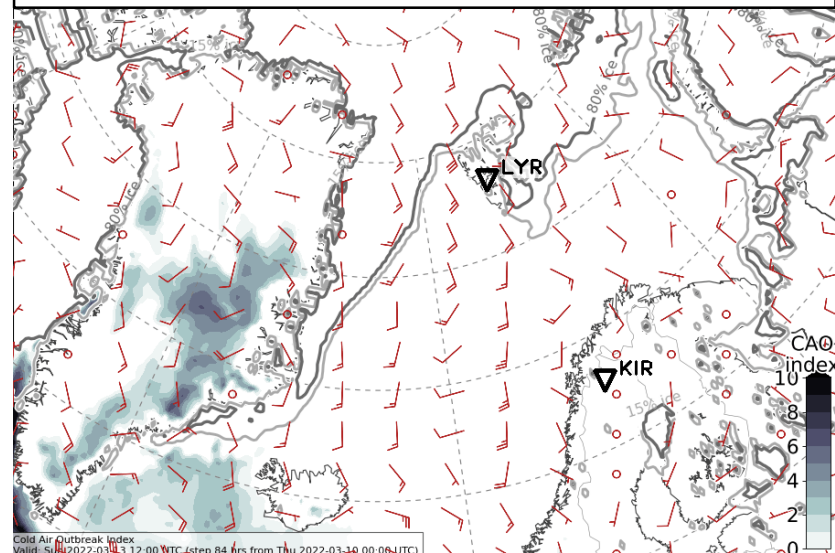


Sun, 2022-03-13 12 UTC (+84h)

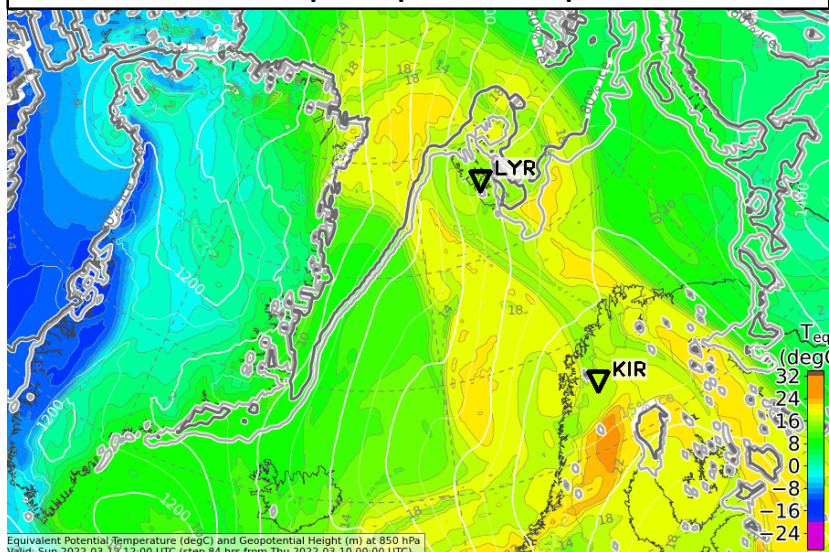
500 hPa Geopot. and Wind



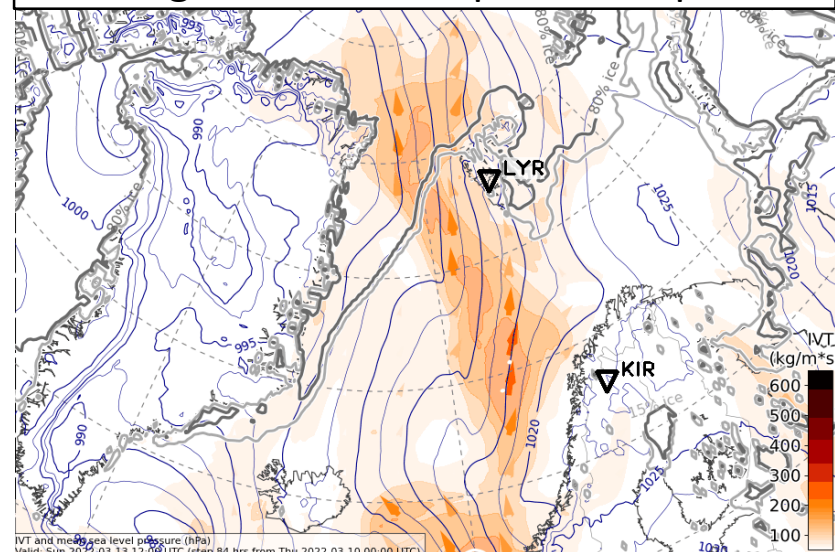
CAO Index



850 hPa Equiv. pot. temperature

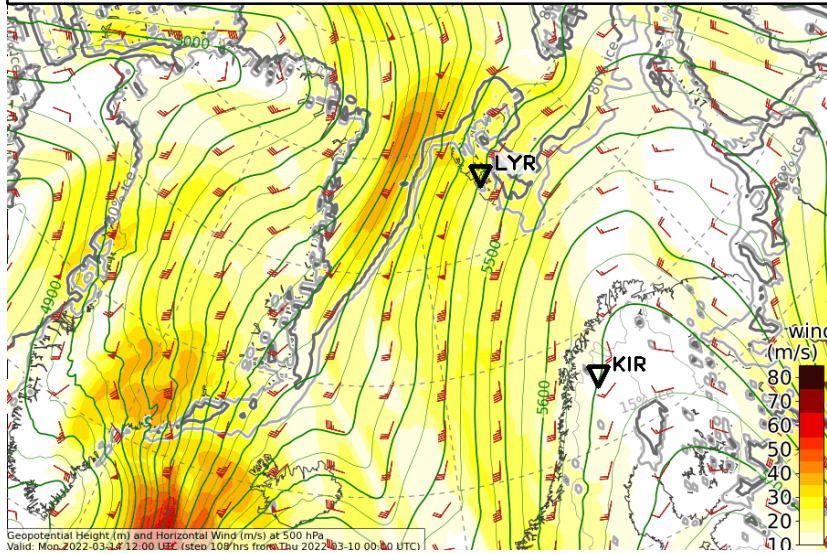


Integrated water vapour transport

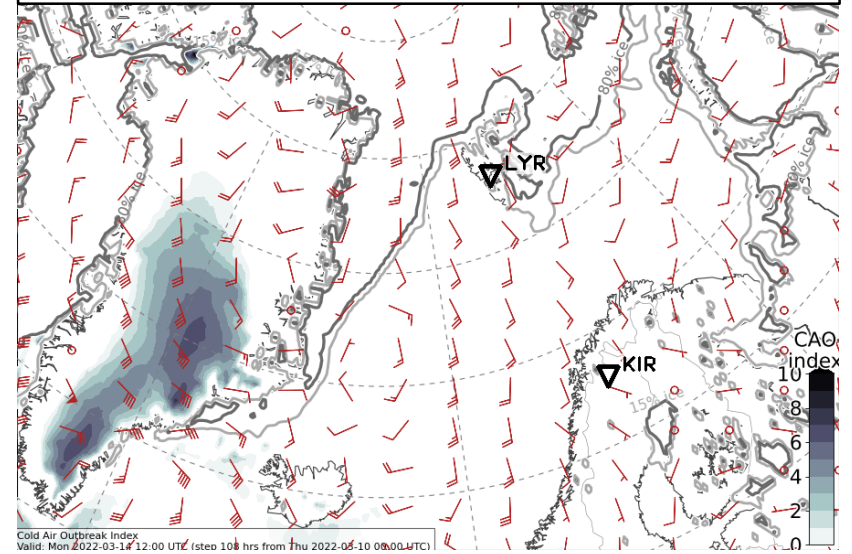


Mon, 2022-03-14 12 UTC (+108h)

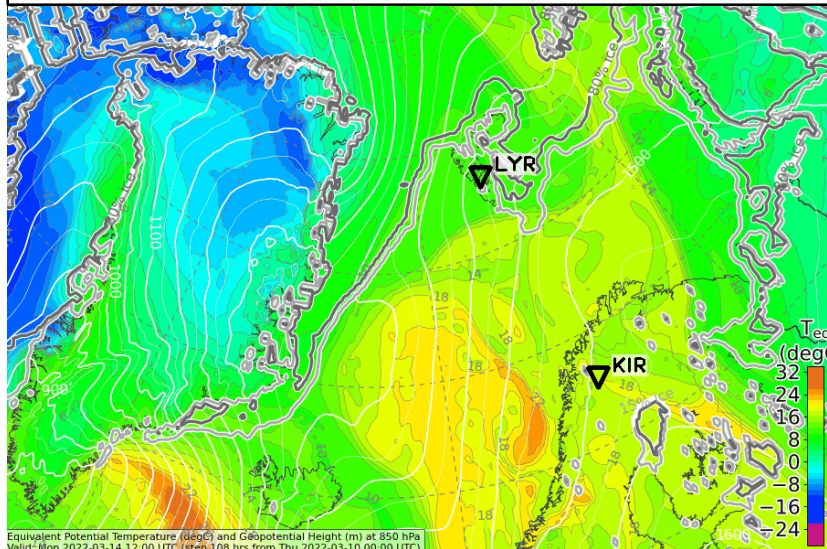
500 hPa Geopot. and Wind



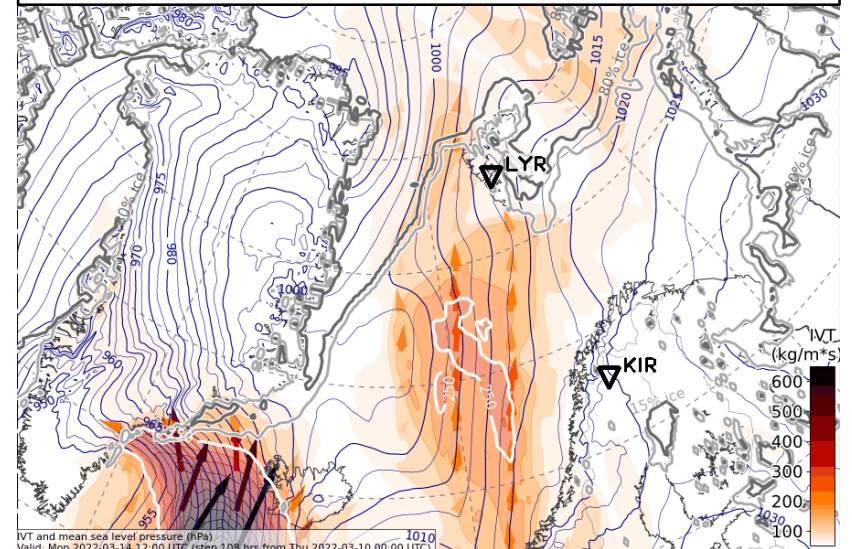
CAO Index



850 hPa Equiv. pot. temperature

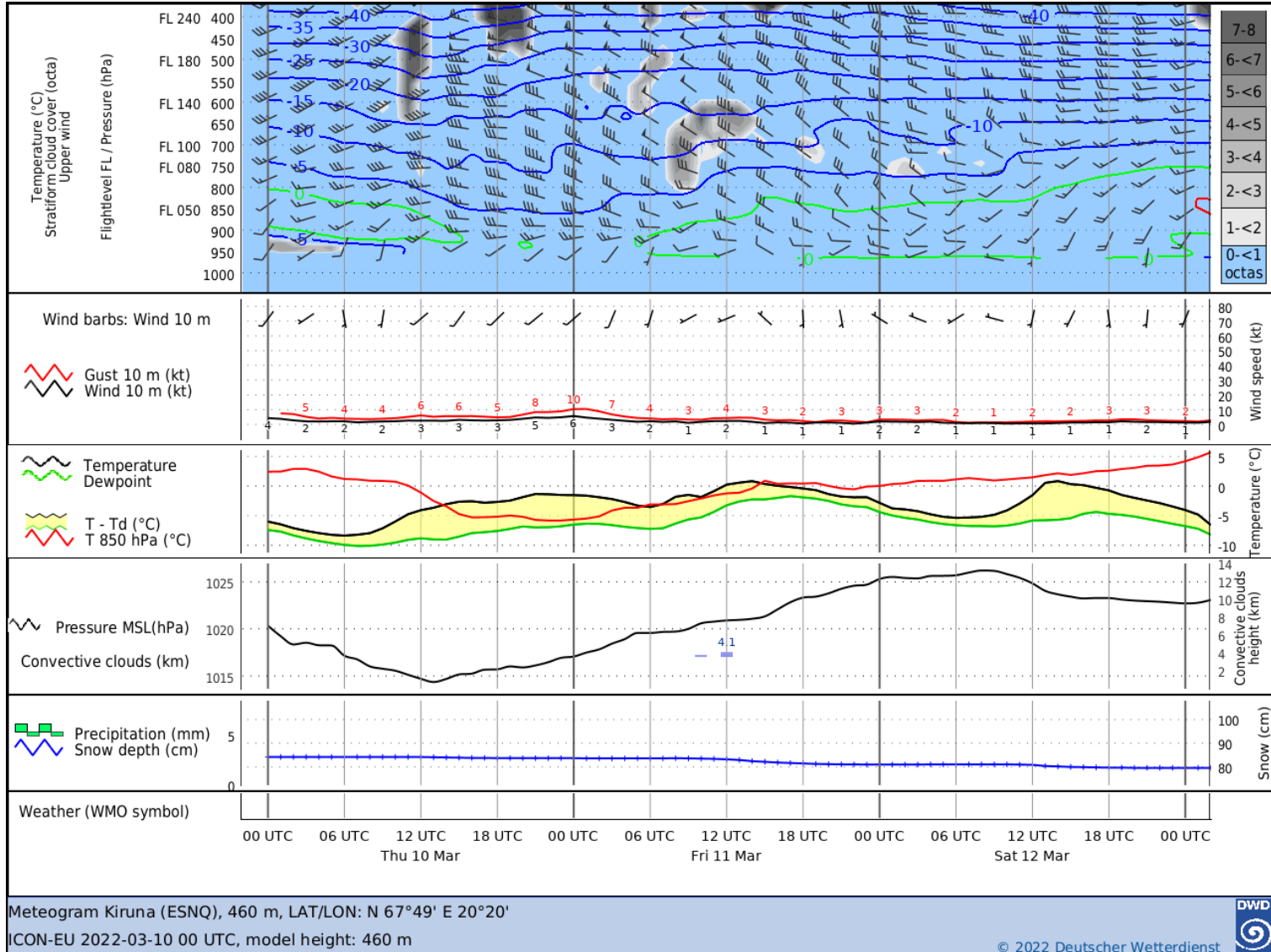


Integrated water vapour transport



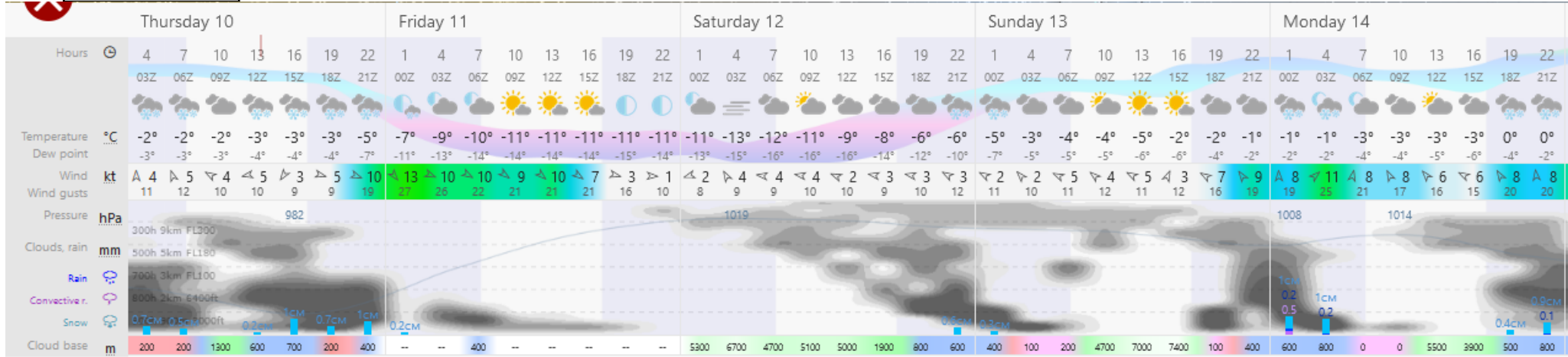
Airport meteograms
2022-03-10 00 UTC: 00 – 72h

Kiruna:

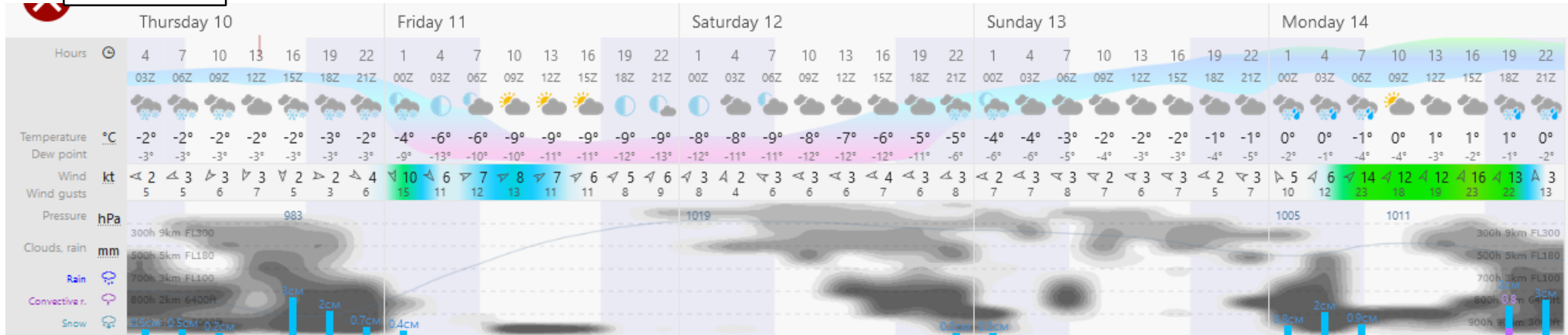


Longyearbyen:

ECMWF



ICON

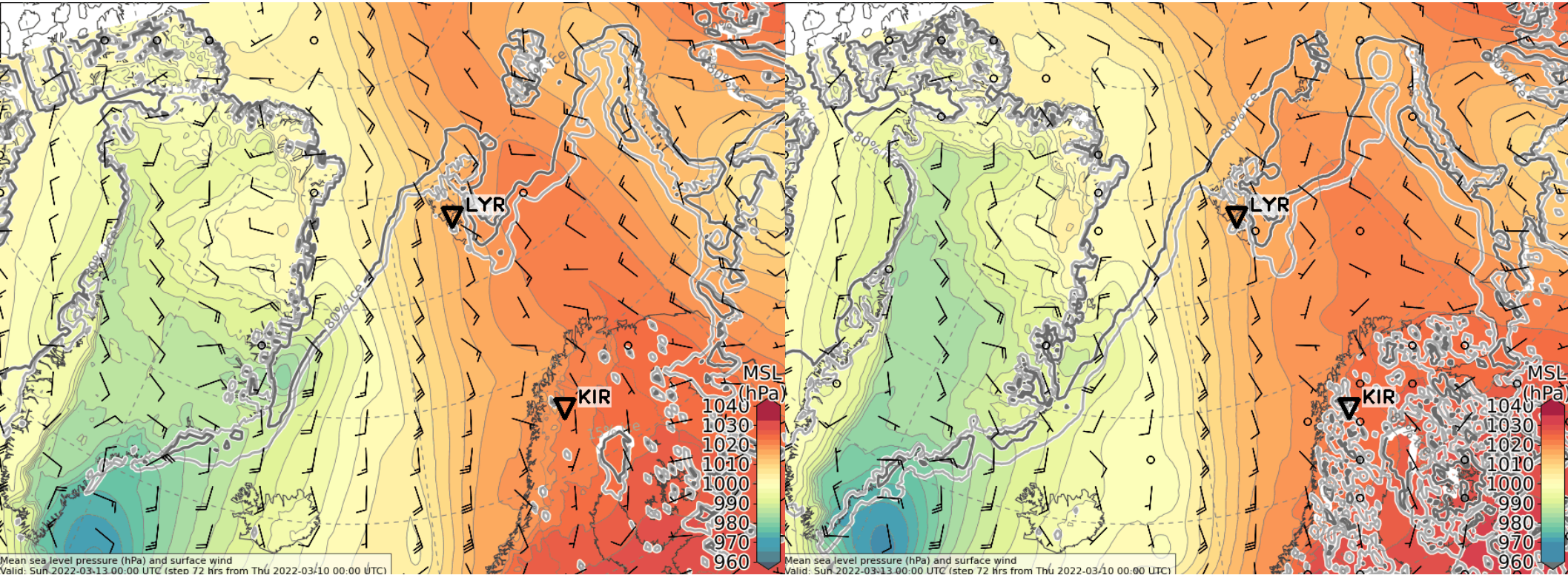


Forecast uncertainty
2022-03-10 00 UTC: 72 – 96h

Sunday, 2022-03-13 00 UTC (+72h)

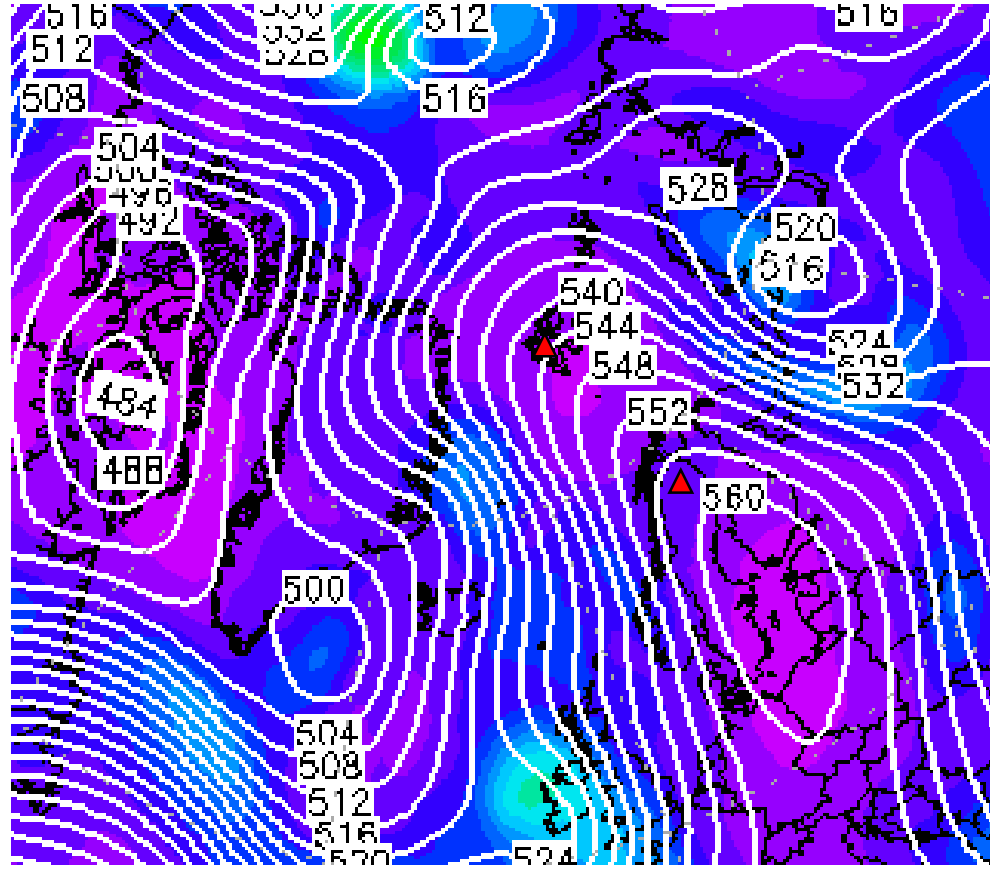
ECMWF

ICON



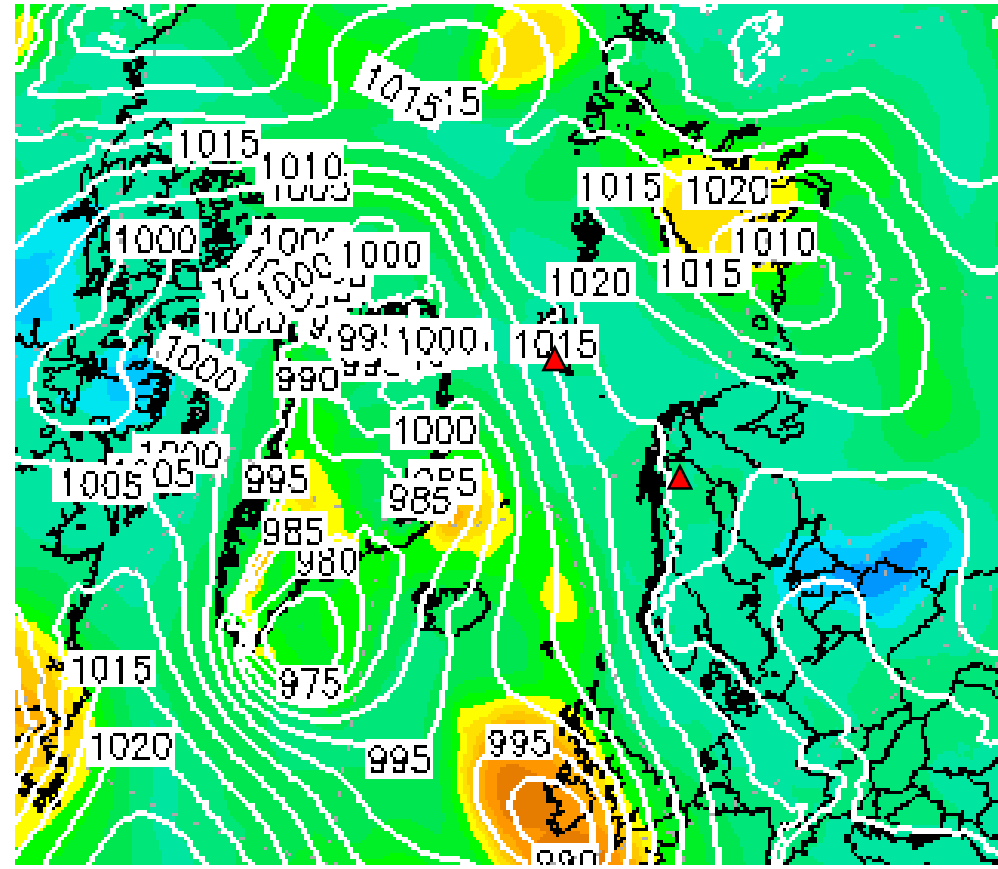
Sunday, 2022-03-13 00 UTC (+72h)

500 hPa Geopot



gpdam

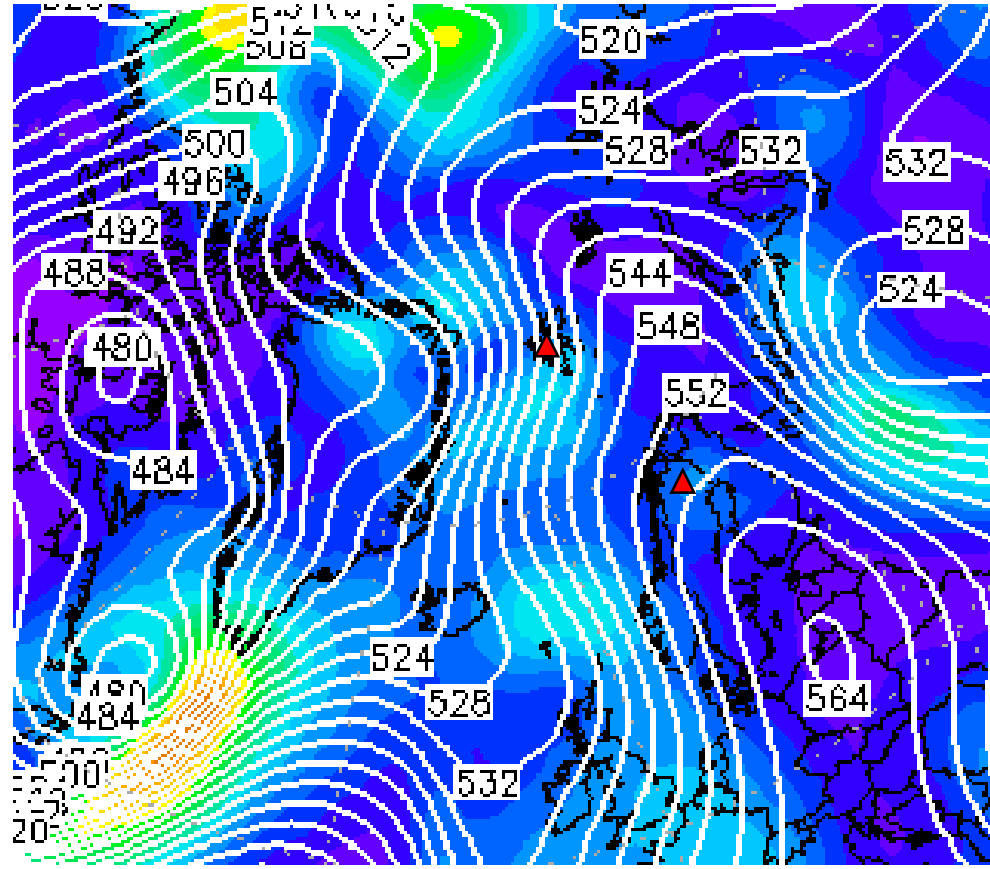
Sfc pressure



hPa

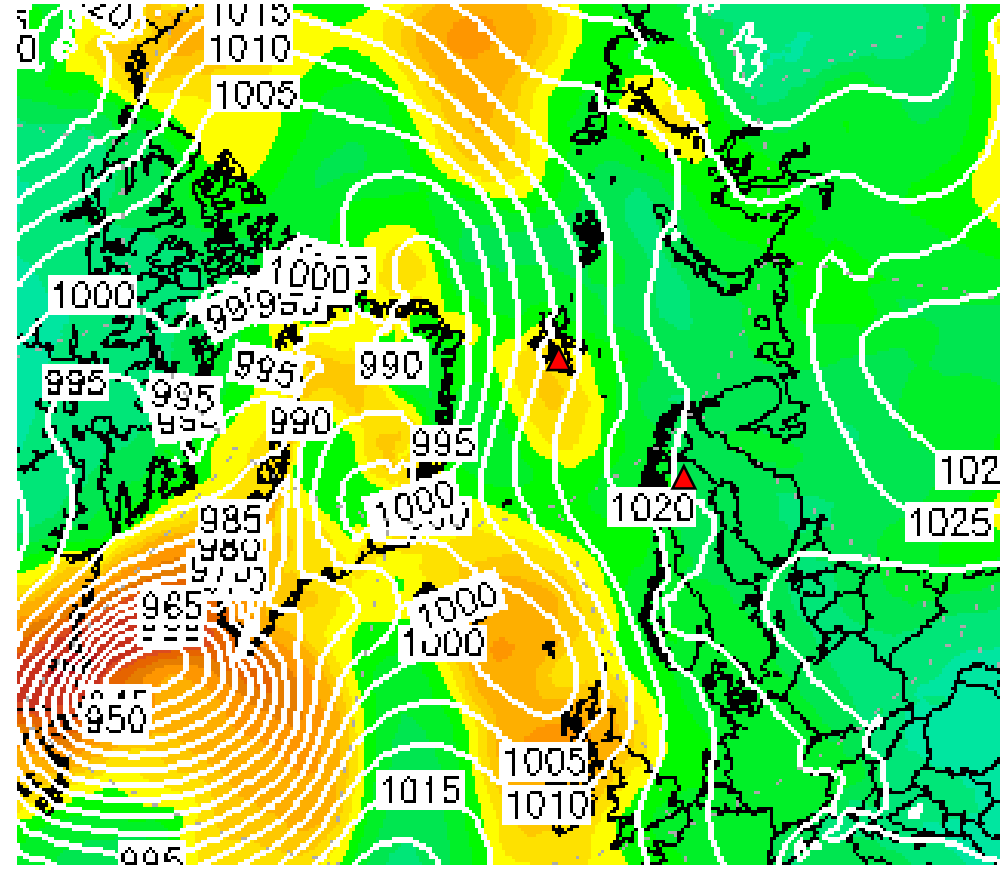
Monday, 2022-03-14 00 UTC (+96h)

500 hPa Geopot



gpdam

Sfc pressure



hPa

Summary

Summary: Weather Briefing 2022-03-10

- **Overall**
 - **Stable WAI through Fram Strait after eastward-passage of ridge**
- **Friday, 2022-03-11:**
 - Calm conditions associated with high over Fram Strait
 - Weak CAA in eastern Fram Strait leads to decreasing temperatures in LYR
 - Ridge over North Atlantic redirecting the WAI towards Greenland coast
- **Saturday, 2022-03-12:**
 - Eastward motion of ridge opens way for WAI into Fram Strait
 - Still very high clouds predicted by ECMWF
- **Sunday, 2022-03-13:**
 - WAI propagating into Central Arctic
- **Monday, 2022-03-14:**
 - Still WAI from North Atlantic trough Fram Strait
 - new WAI arriving south-west of Iceland
 - Still large uncertainties