

Weather briefing

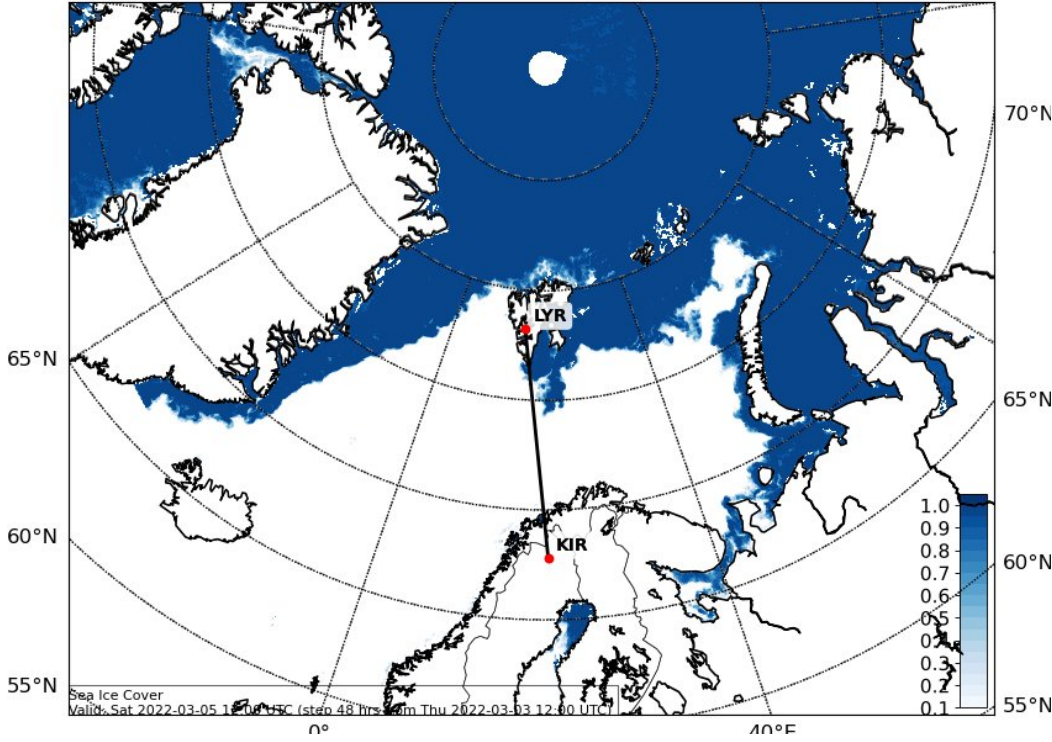
HALO-(AC)³

Monday, 2022-03-07, 17:00 LT

Sea ice cover

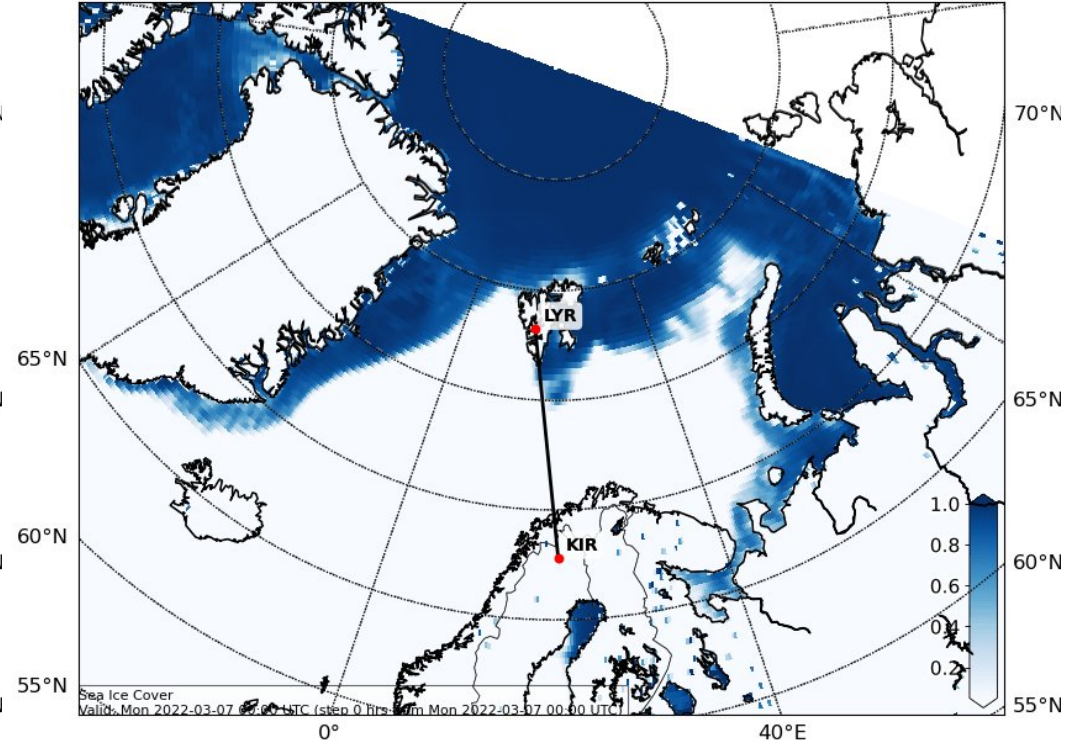
Uni Bremen (two days ago)

Sea Ice Cover AMSR2 (0-1) (CONT)
Valid: 2022-03-05T12:00:00Z (initialisation: 2022-03-03T12:00:00Z)



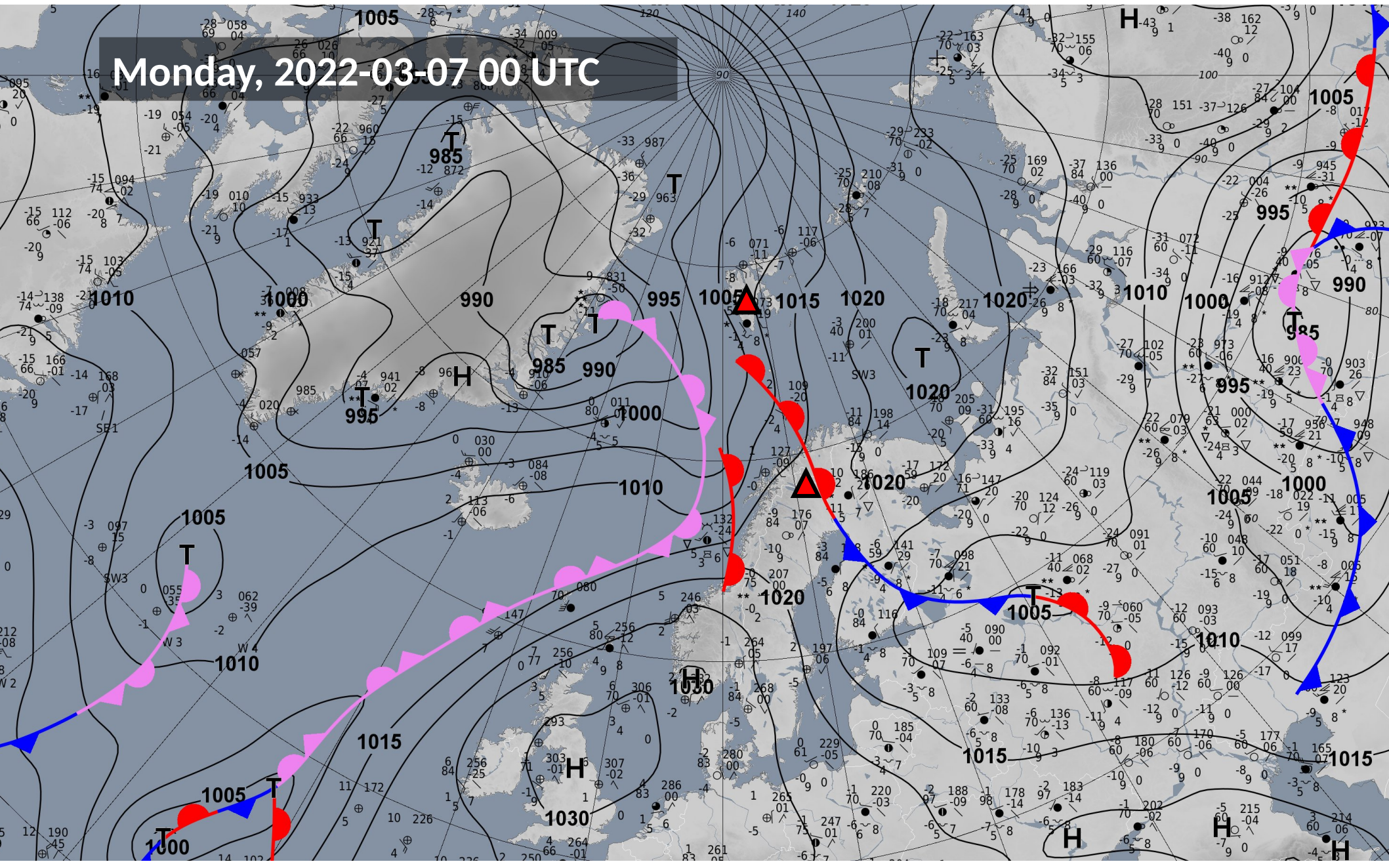
ECMWF (today)

Sea Ice Cover Fraction (0-1) (default)
Valid: 2022-03-07T00:00:00Z (initialisation: 2022-03-07T00:00:00Z)



Surface Analysis
Monday, 2022-03-07 00 UTC
DWD

Monday, 2022-03-07 00 UTC



Circulation pattern development

2022-03-07 00 UTC: 00 – 108h

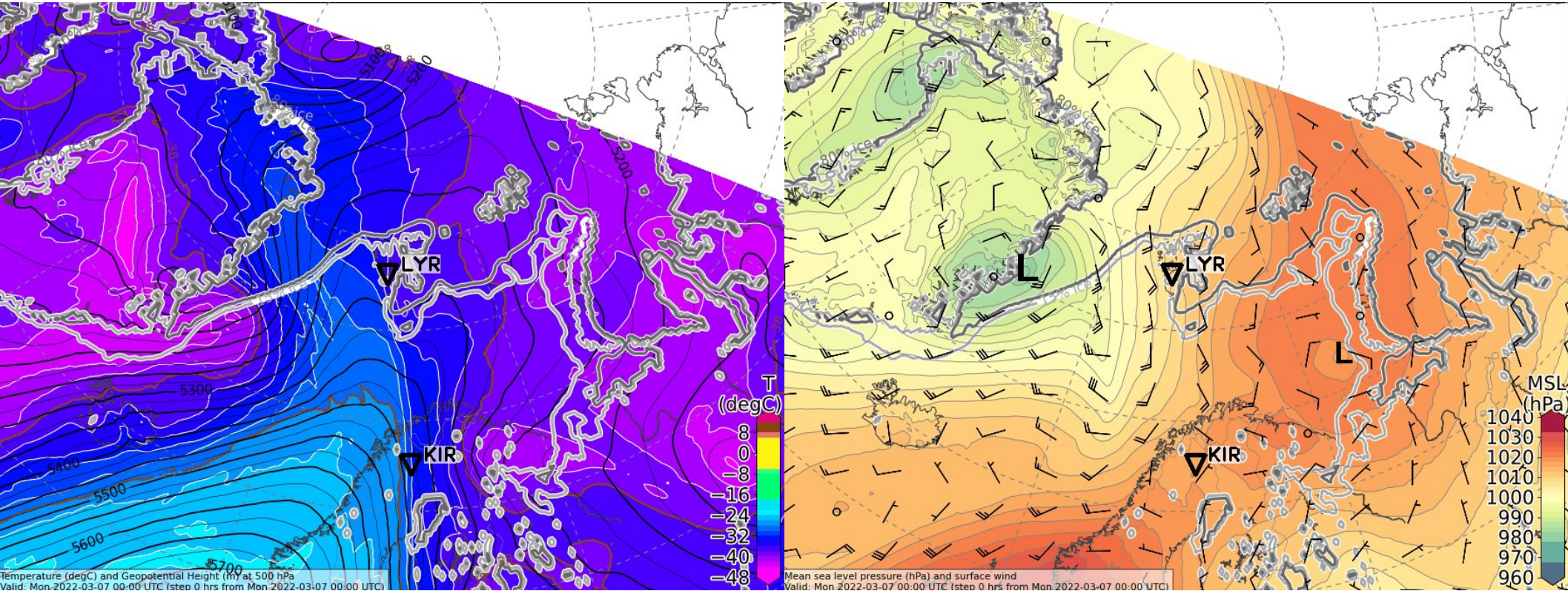
500 hPa Geopot & T

Sea level pressure

Monday, 2022-03-07 00 UTC (+00h)

500 hPa Geopot. (lines) & T (colours)

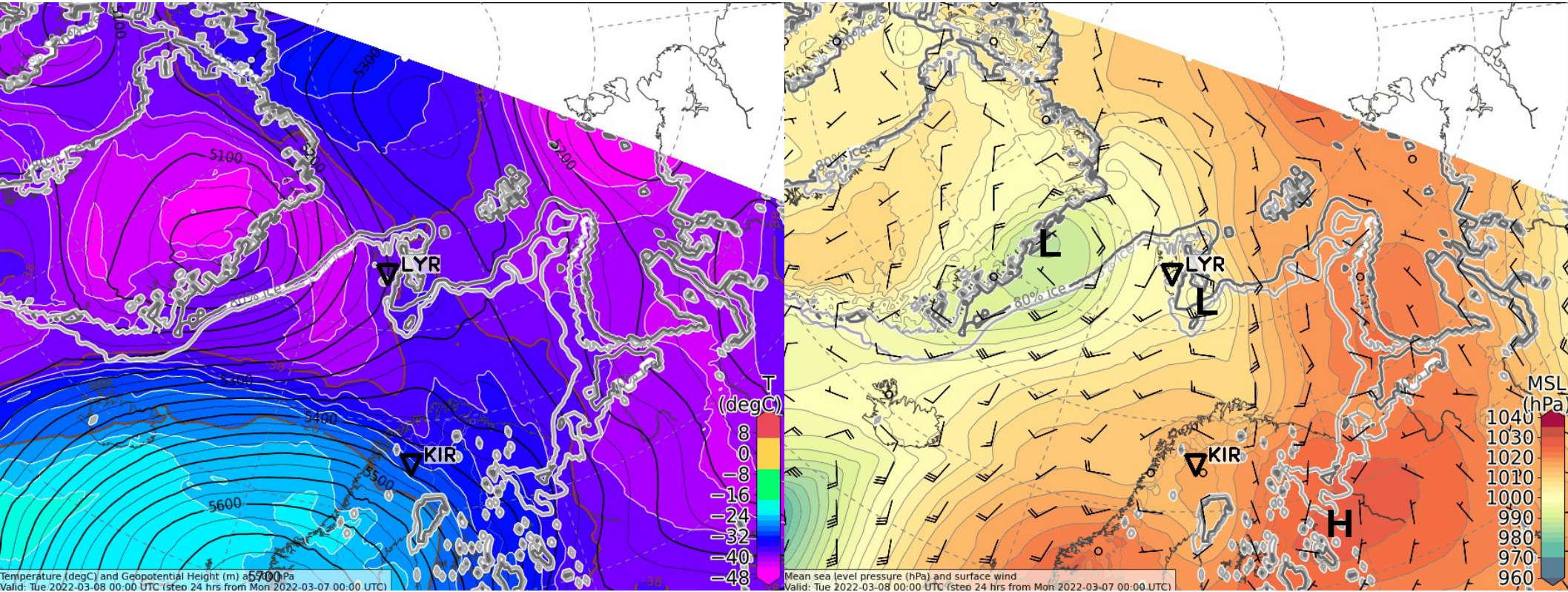
Sea level pressure



Tuesday, 2022-03-08 00 UTC (+24h)

500 hPa Geopot. & T

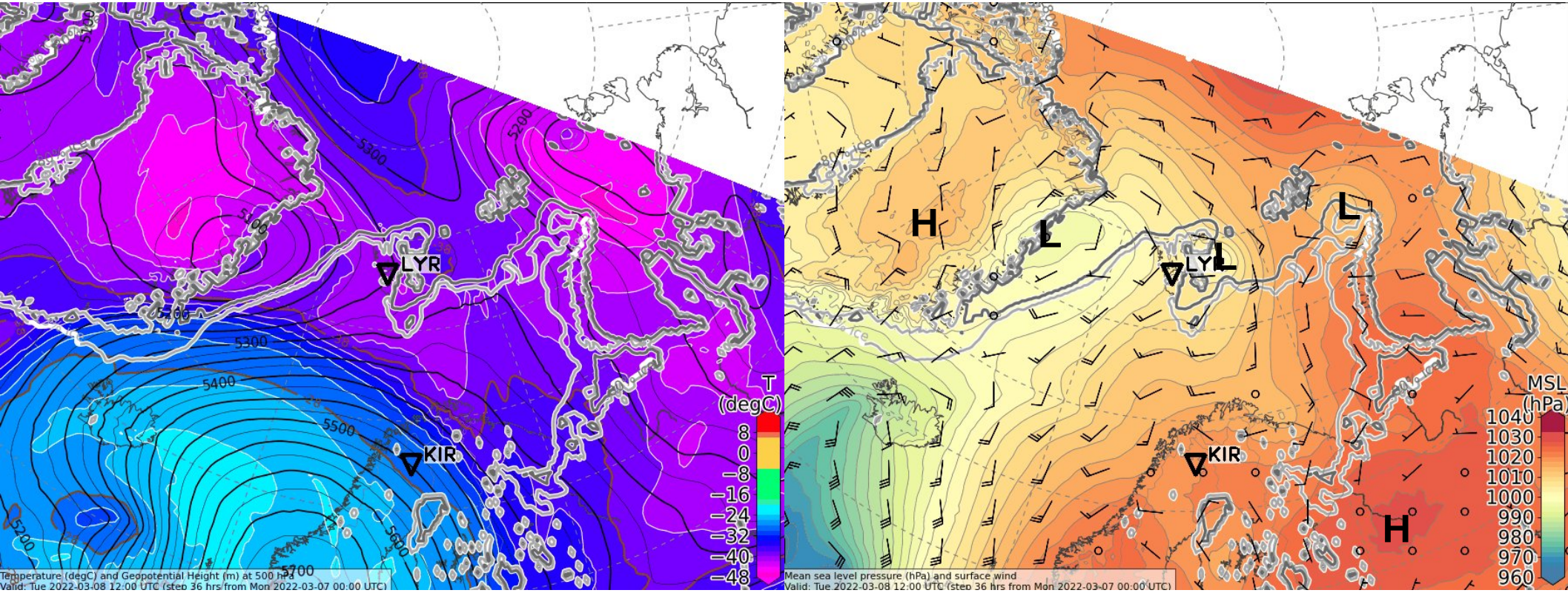
Sea level pressure



Tuesday, 2022-03-08 12 UTC (+36h)

500 hPa Geopot. & T

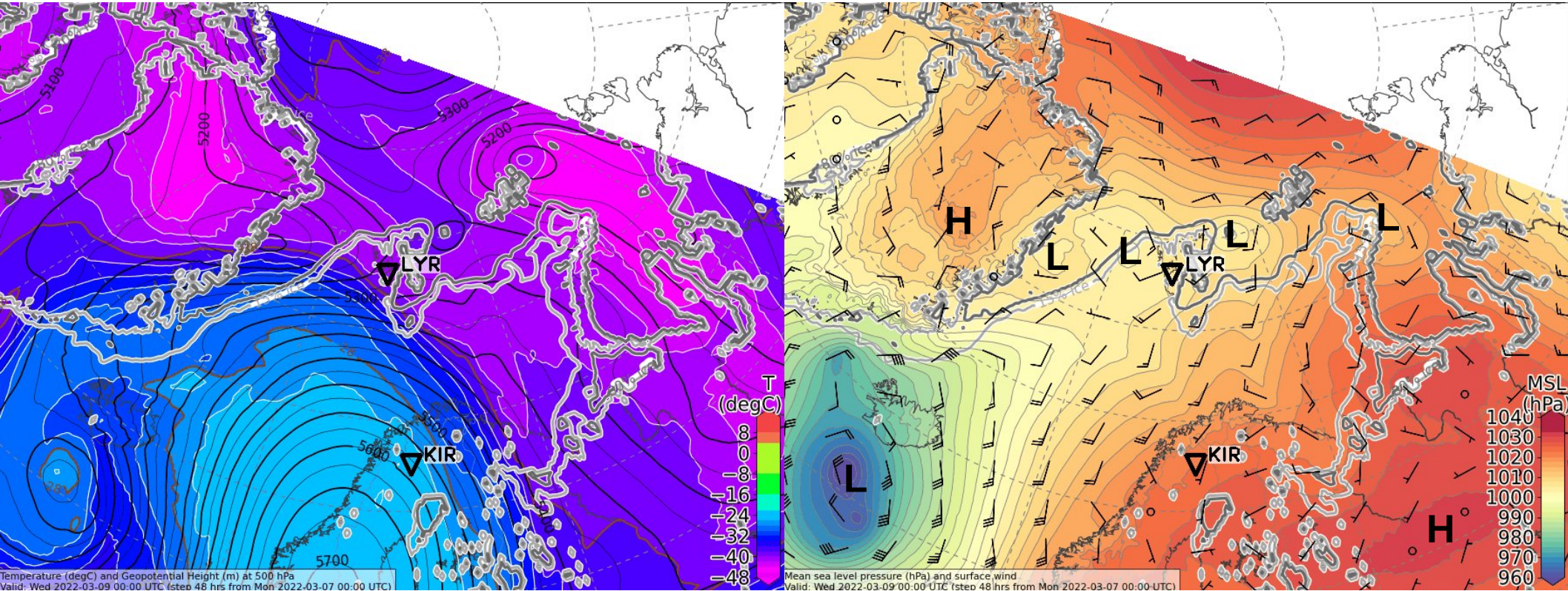
Sea level pressure



Wednesday, 2022-03-09 00 UTC (+48h)

500 hPa Geopot. & T

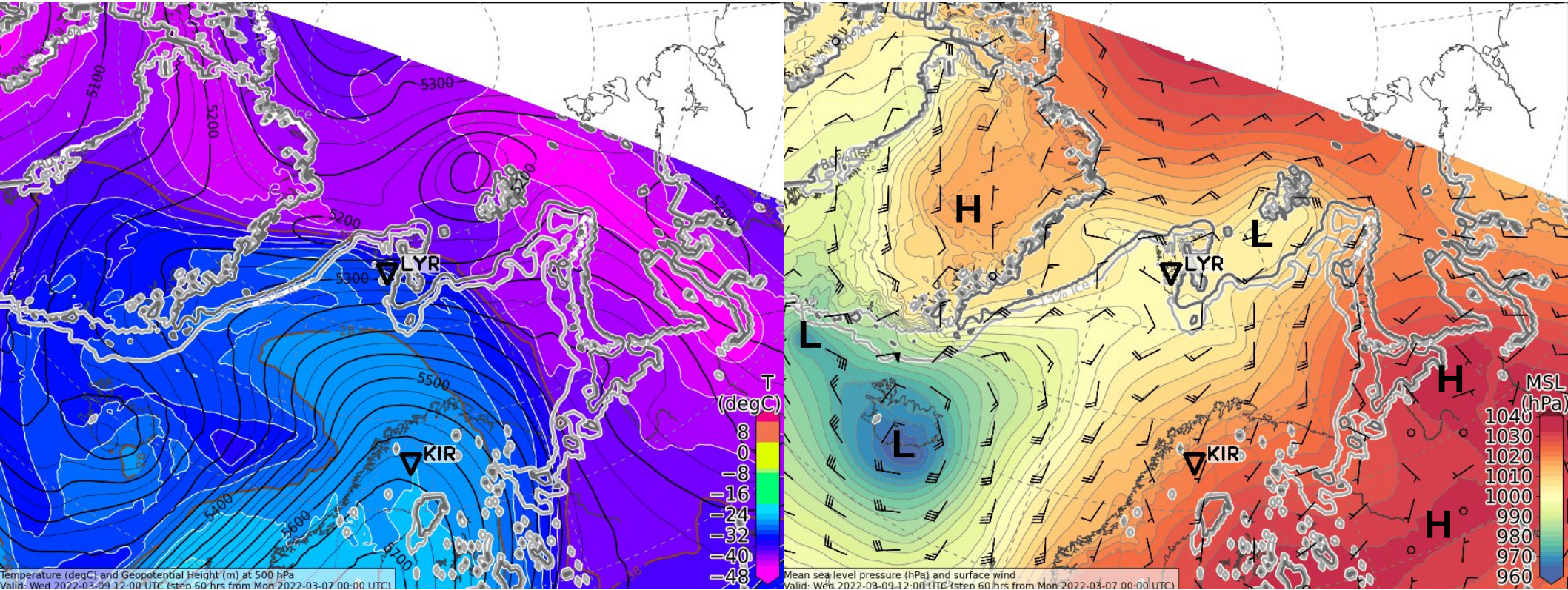
Sea level pressure



Wednesday, 2022-03-09 12 UTC (+60h)

500 hPa Geopot. & T

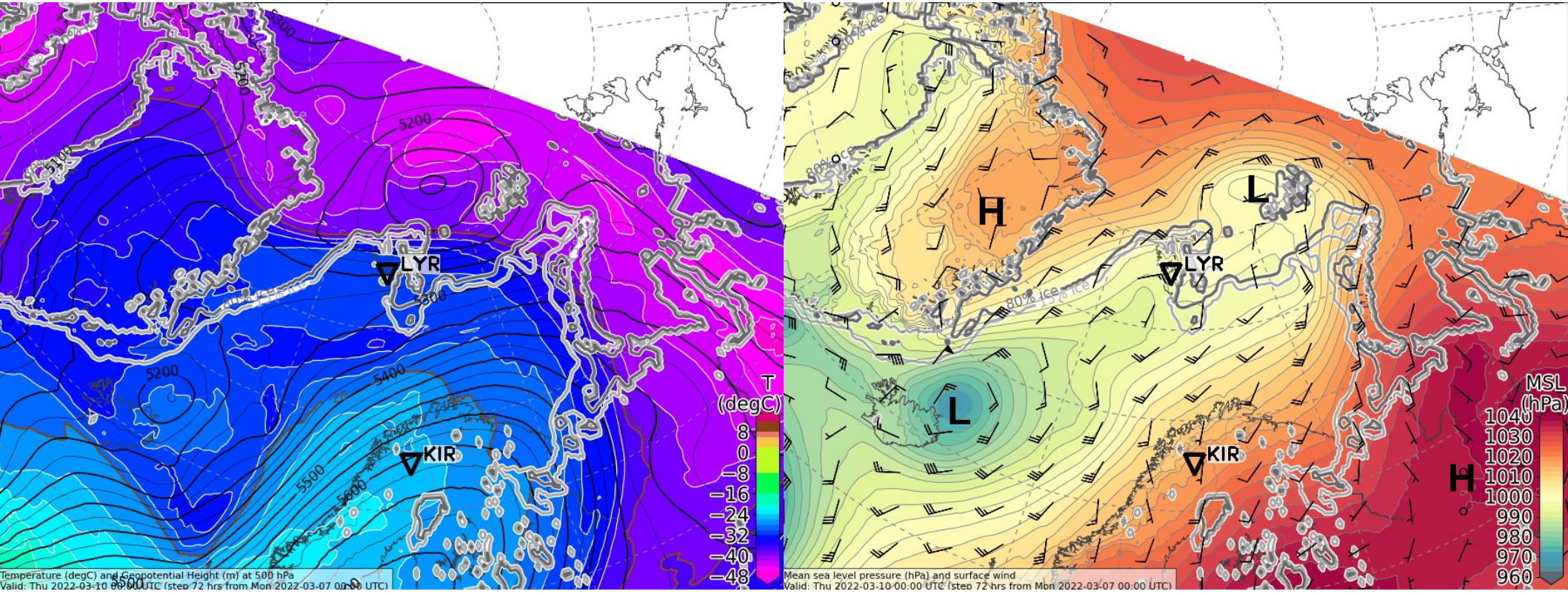
Sea level pressure



Thursday, 2022-03-10 00 UTC (+72h)

500 hPa Geopot. & T

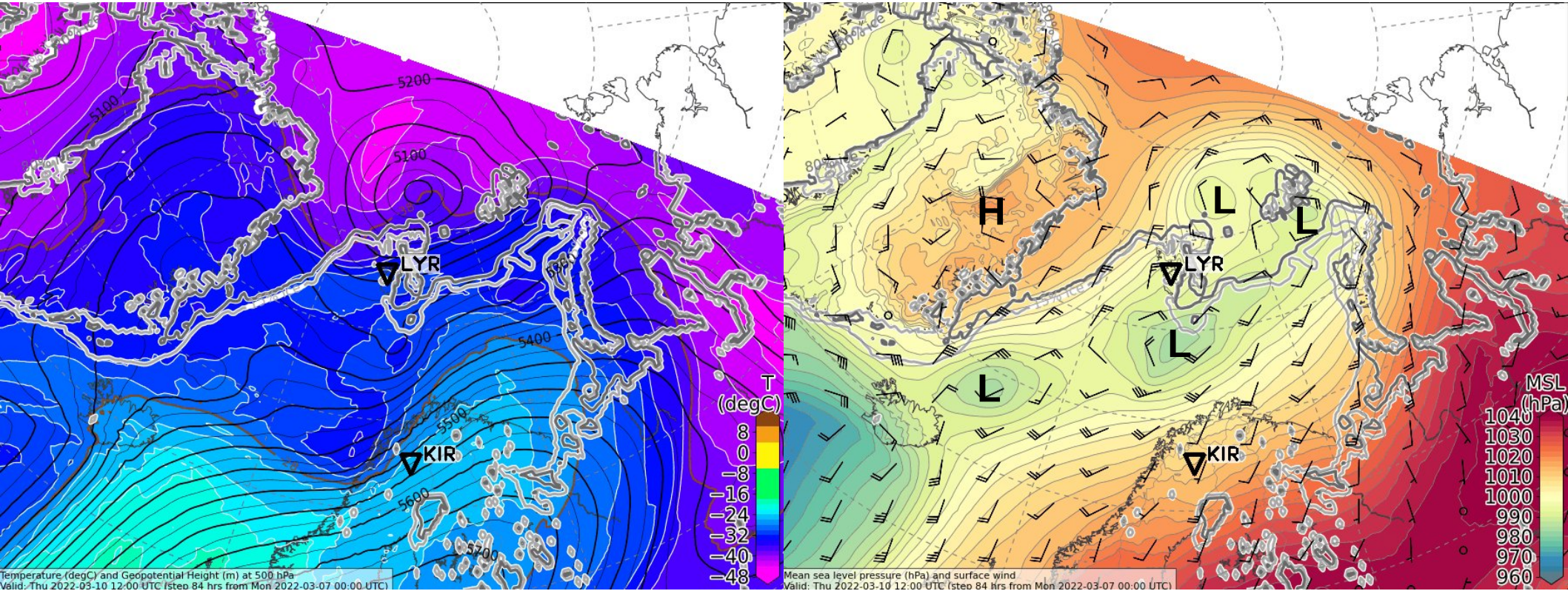
Sea level pressure



Thursday, 2022-03-10 12 UTC (+84h)

500 hPa Geopot. & T

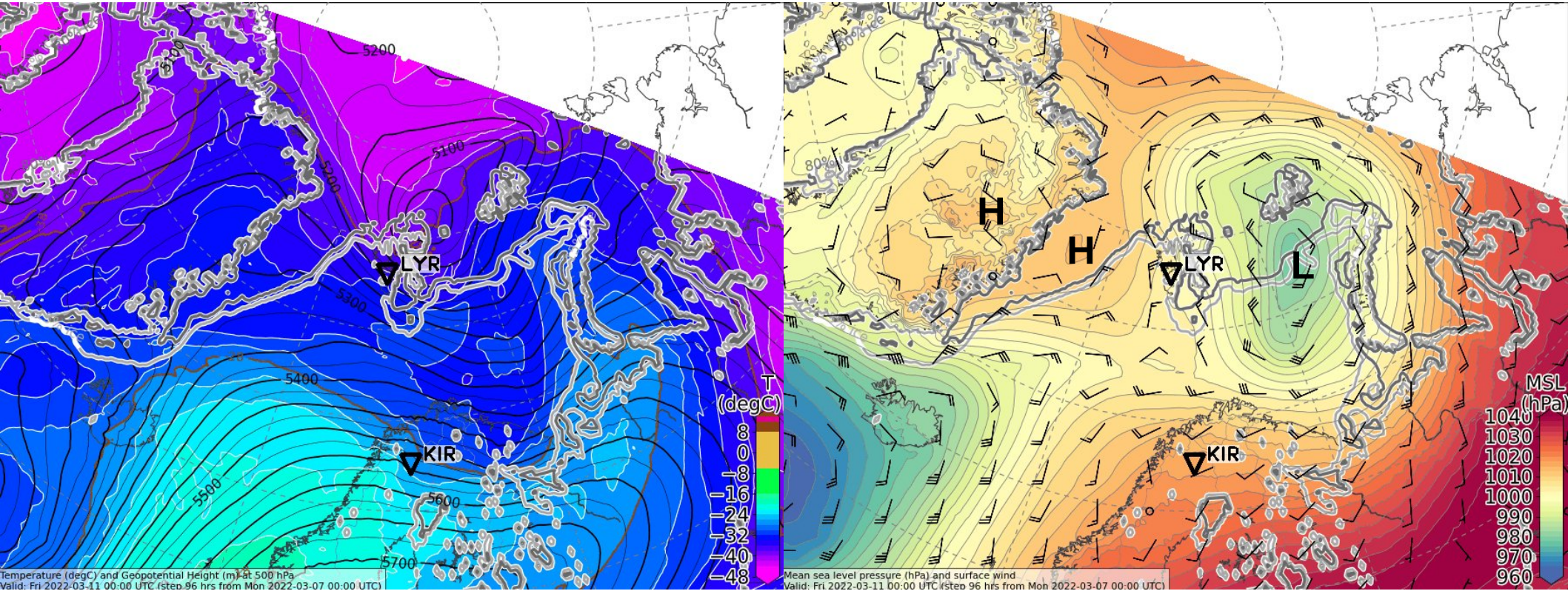
Sea level pressure



Friday, 2022-03-11 00 UTC (+96h)

500 hPa Geopot. & T

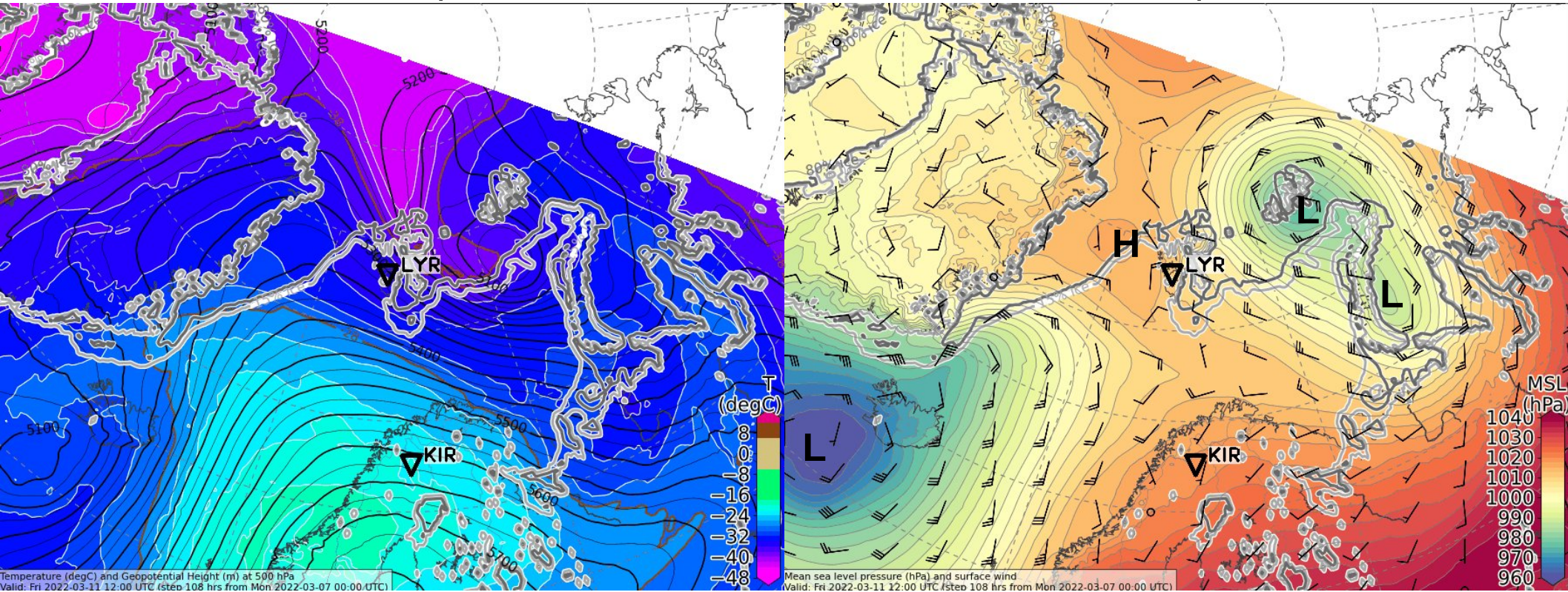
Sea level pressure



Friday, 2022-03-11 12 UTC (+108h)

500 hPa Geopot. & T

Sea level pressure

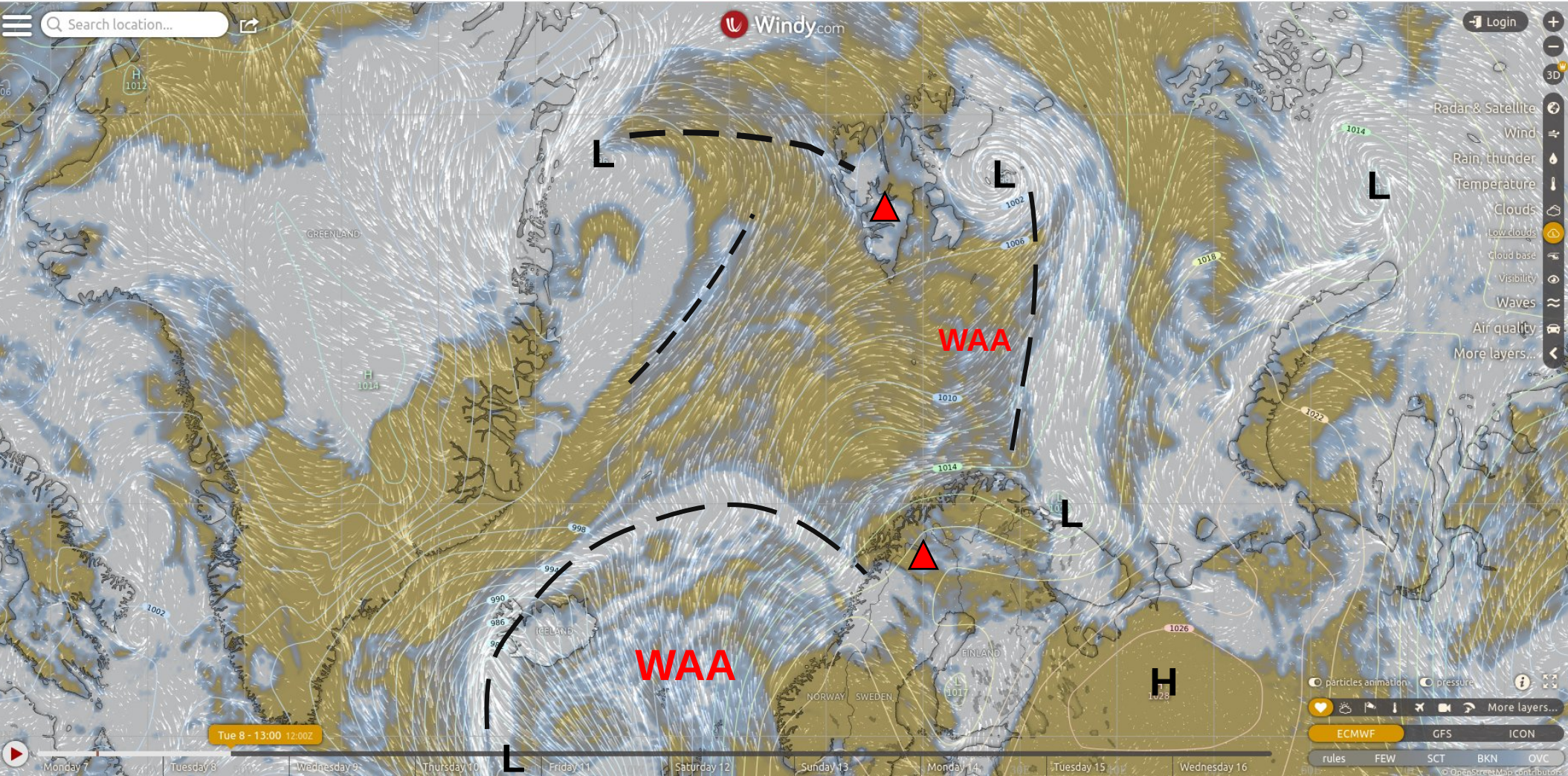


Surface wind development
2022-03-07 00 UTC: 36 – 108h
ECMWF

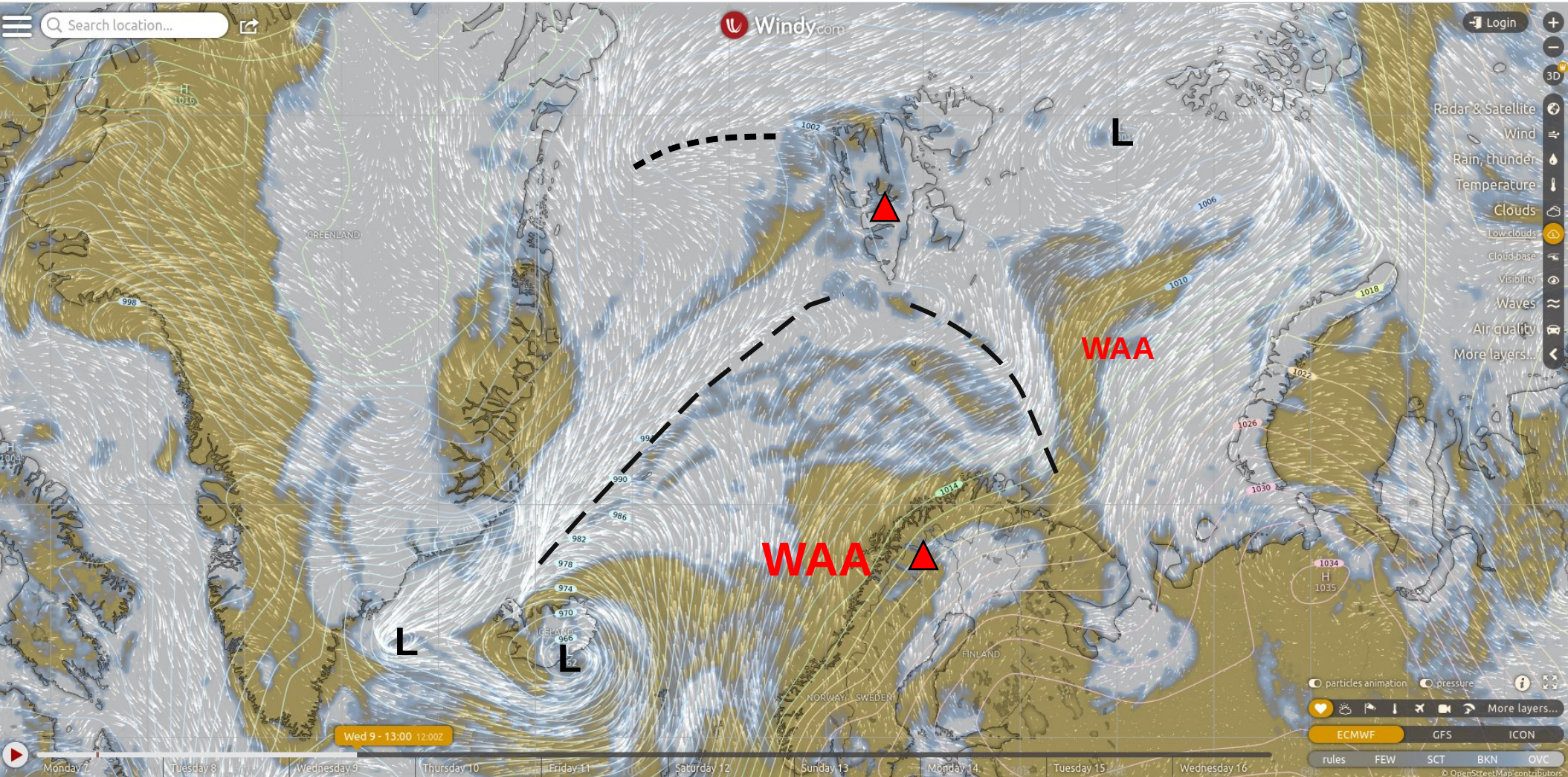
CAA: Cold Air Advection

WAA: Warm Air Advection

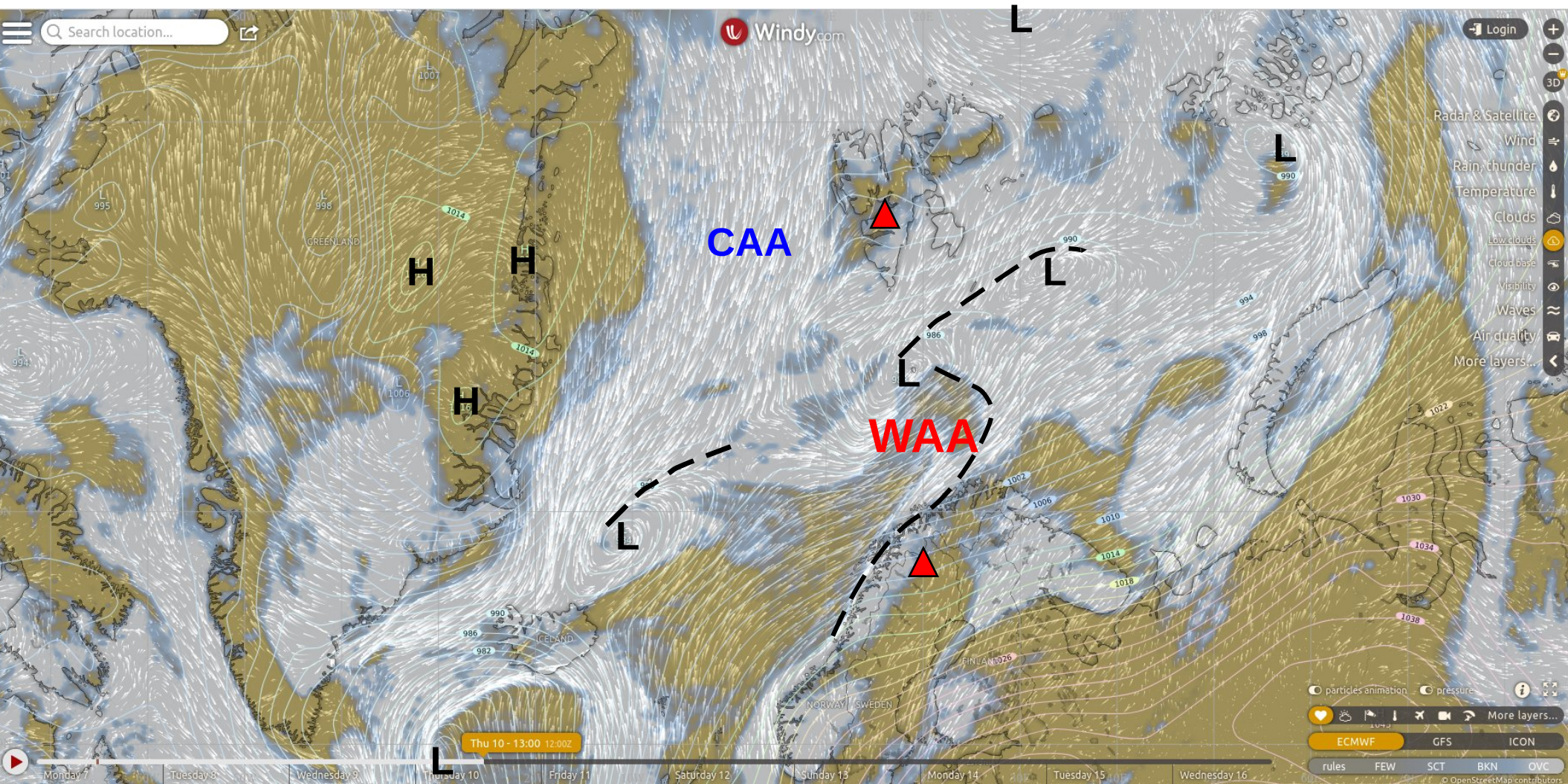
Tuesday, 2022-03-08 12 UTC (+36h)



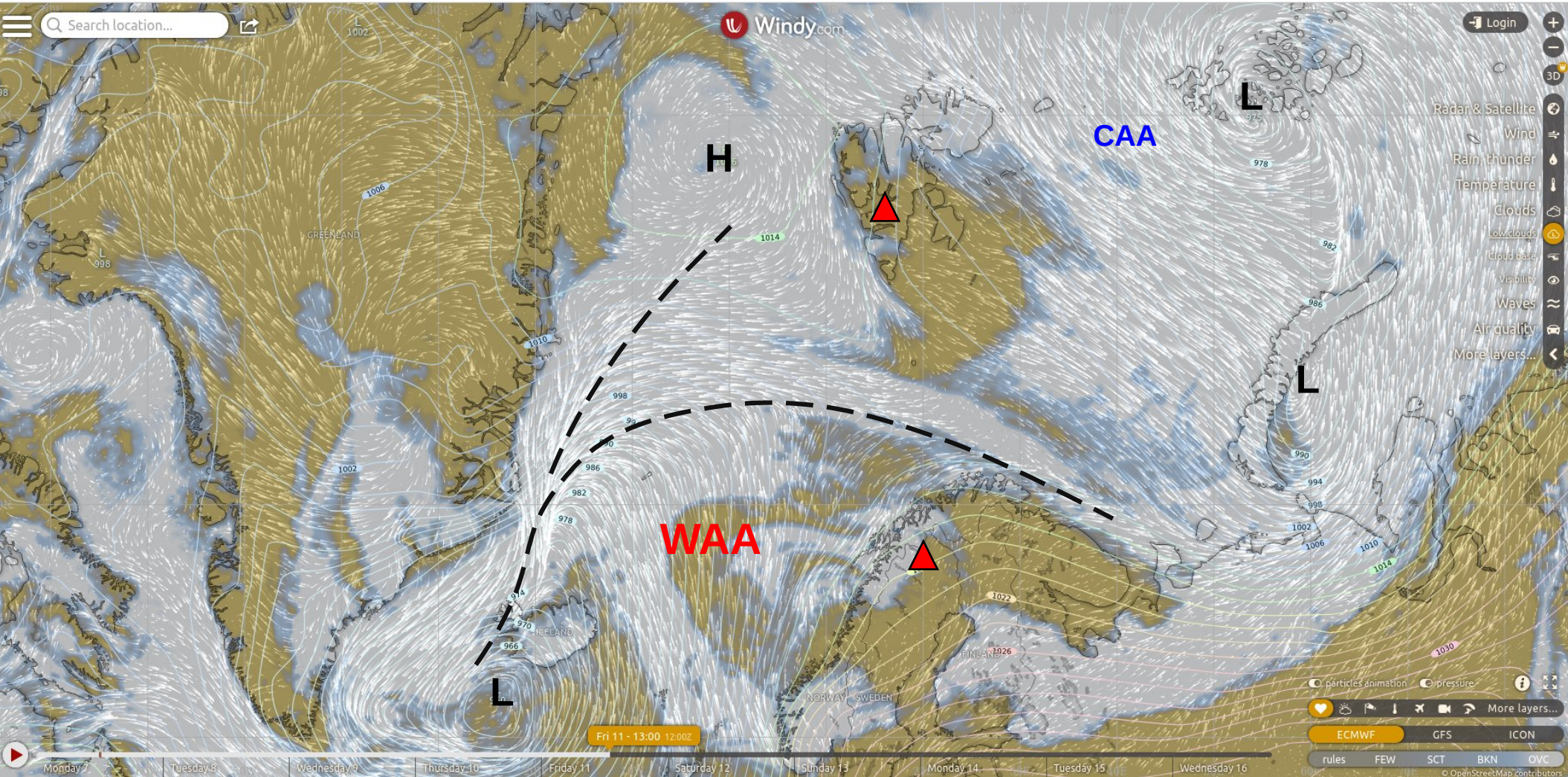
Wednesday, 2022-03-09 12 UTC (+60h)



Thursday, 2022-03-10 12 UTC (+84h)



Friday, 2022-03-11 12 UTC (+108h)



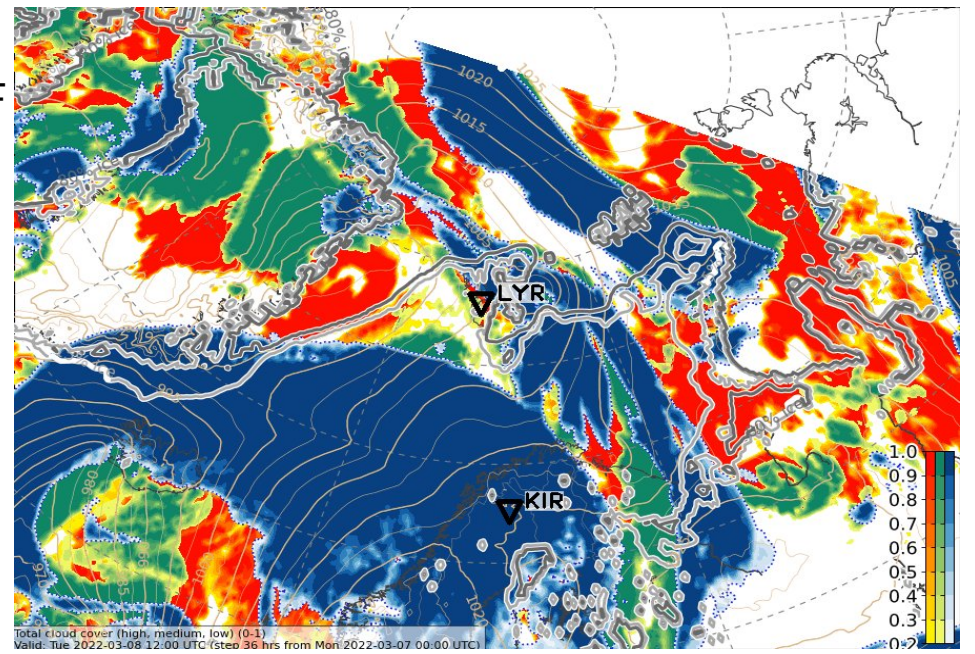
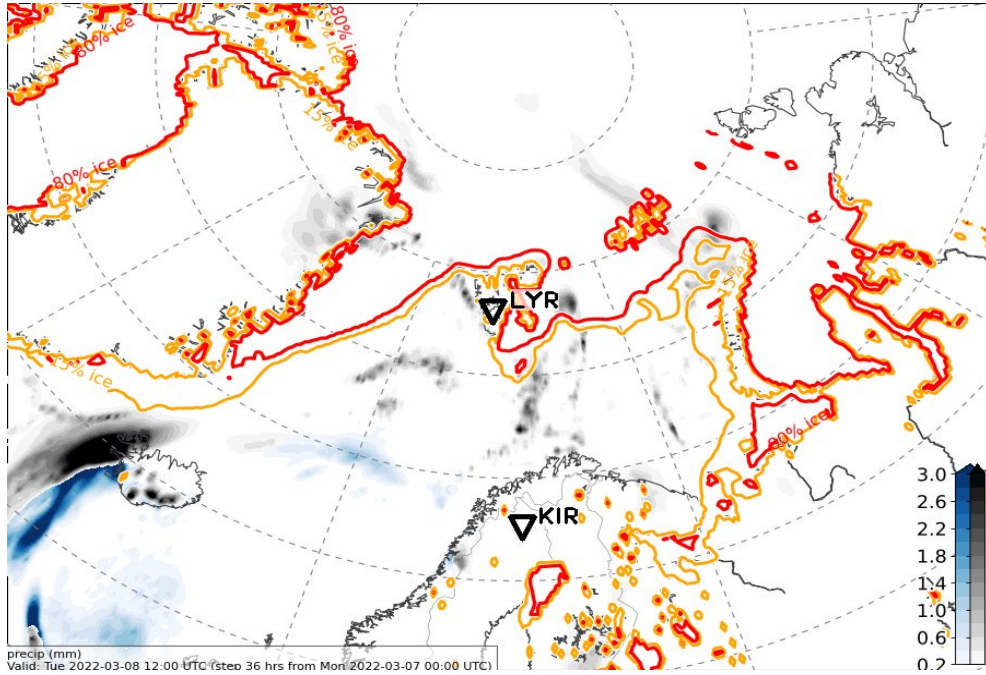
Cloud cover & precip development

2022-03-07 00 UTC: 36 - 84h

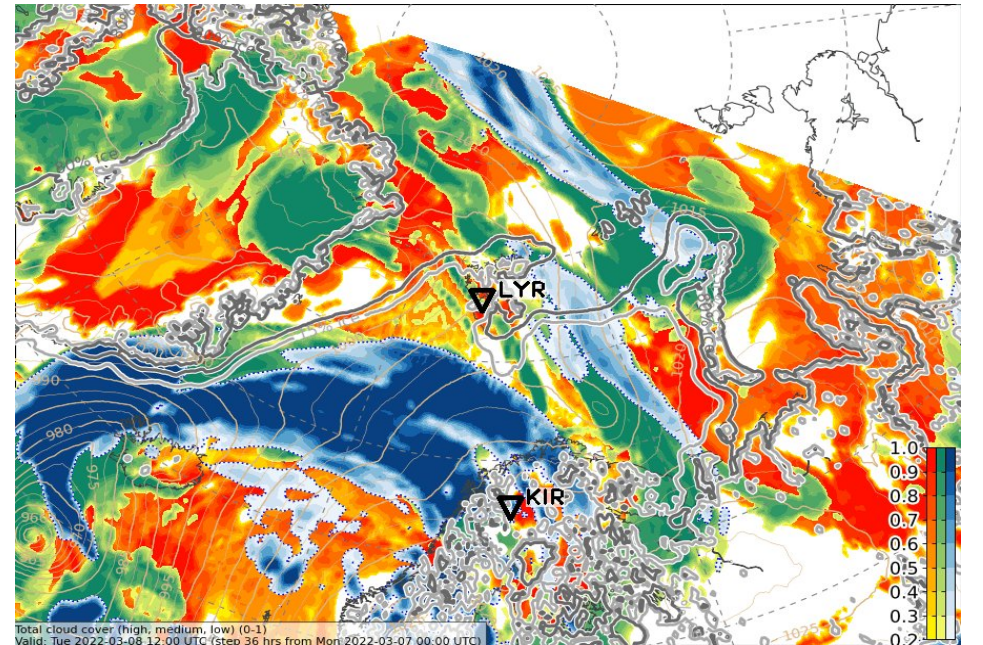
ECMWF + ICON

Tue, 2022-03-08 12 UTC (+36h) ECMWF

2h prec.

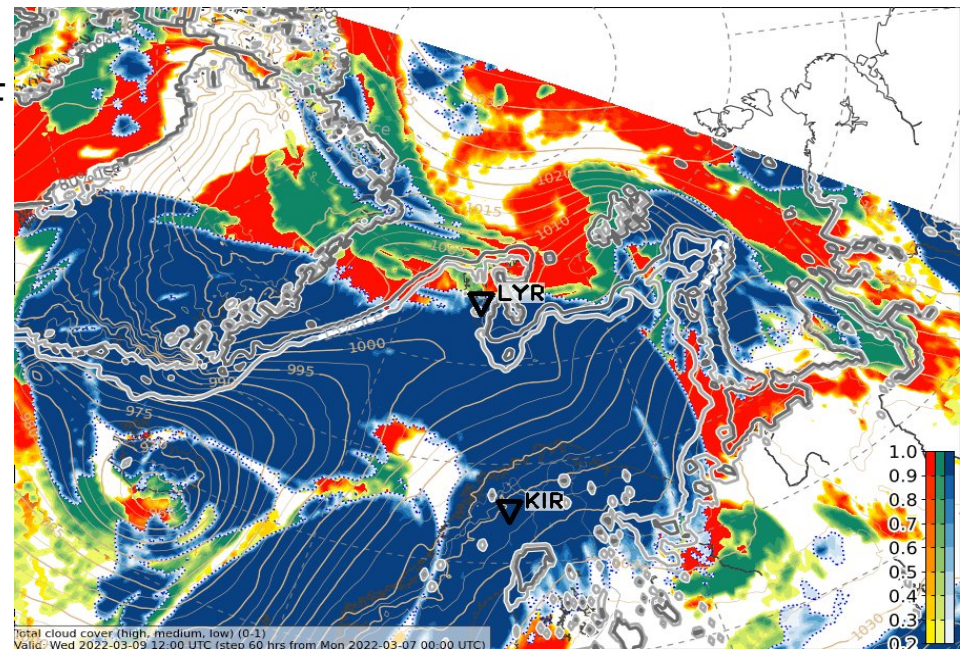
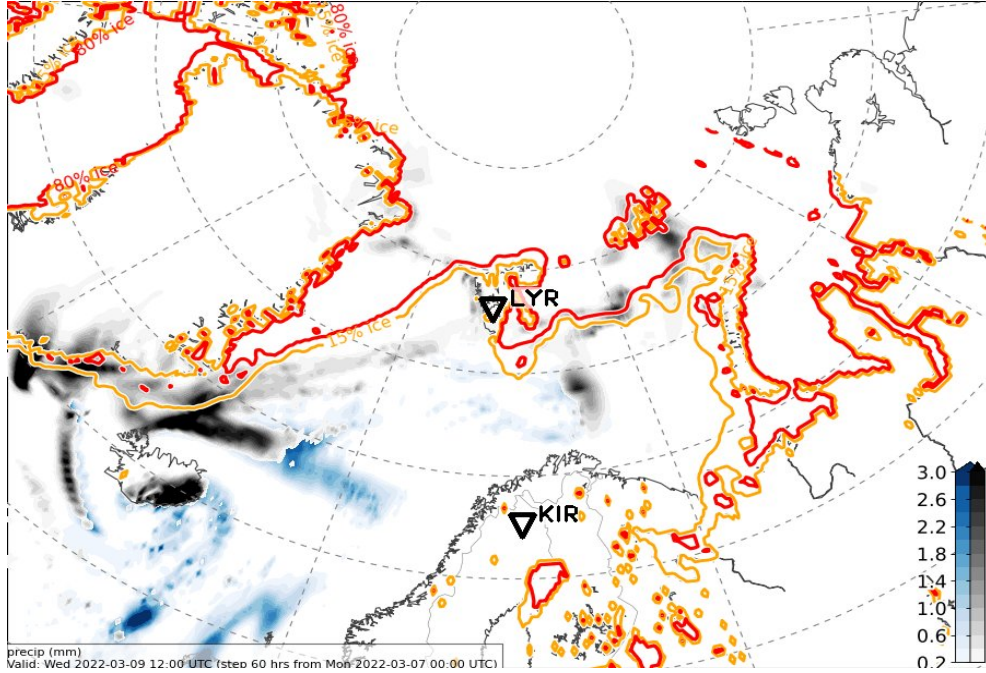


ICON

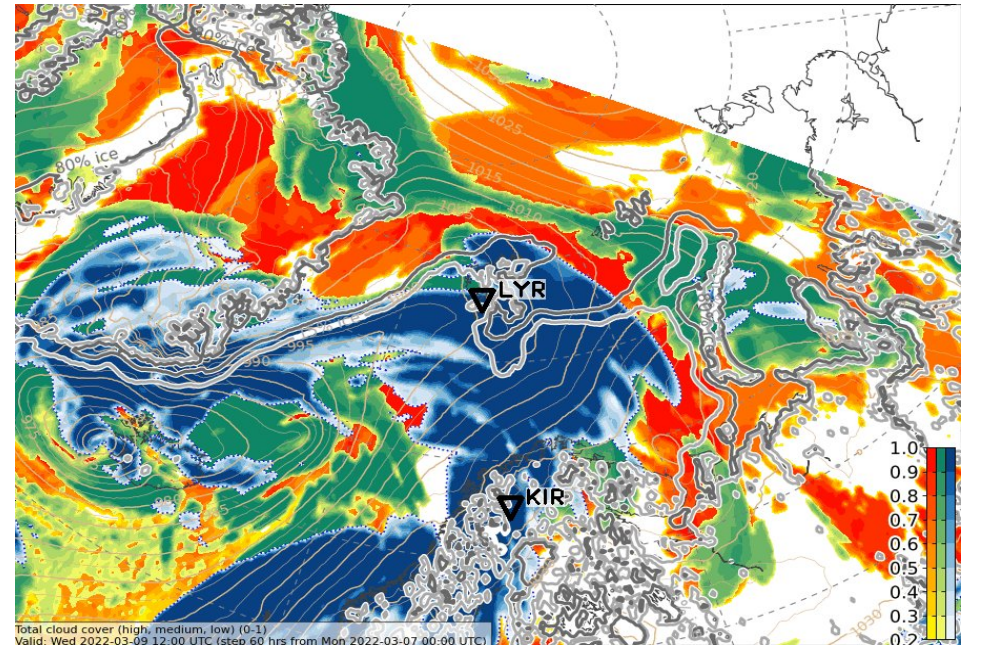


Wed, 2022-03-09 12 UTC (+60h) ECMWF

2h prec.

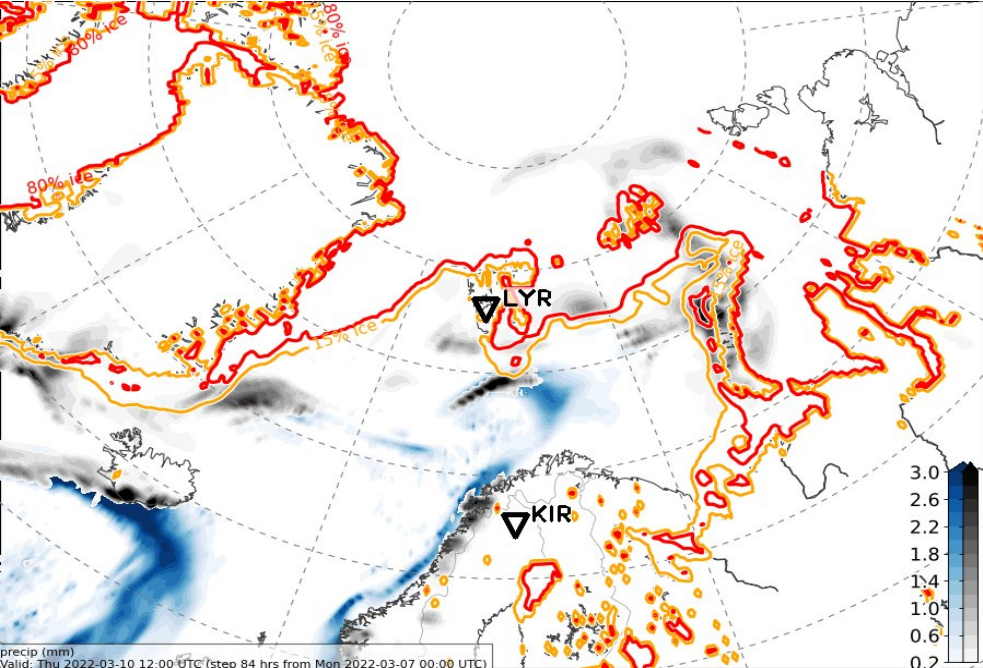


ICON



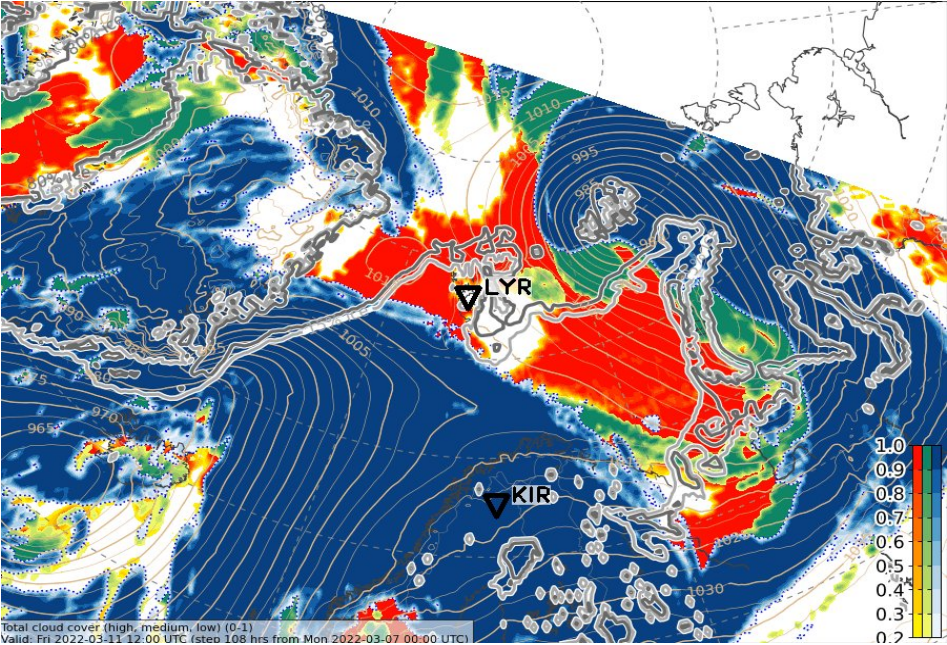
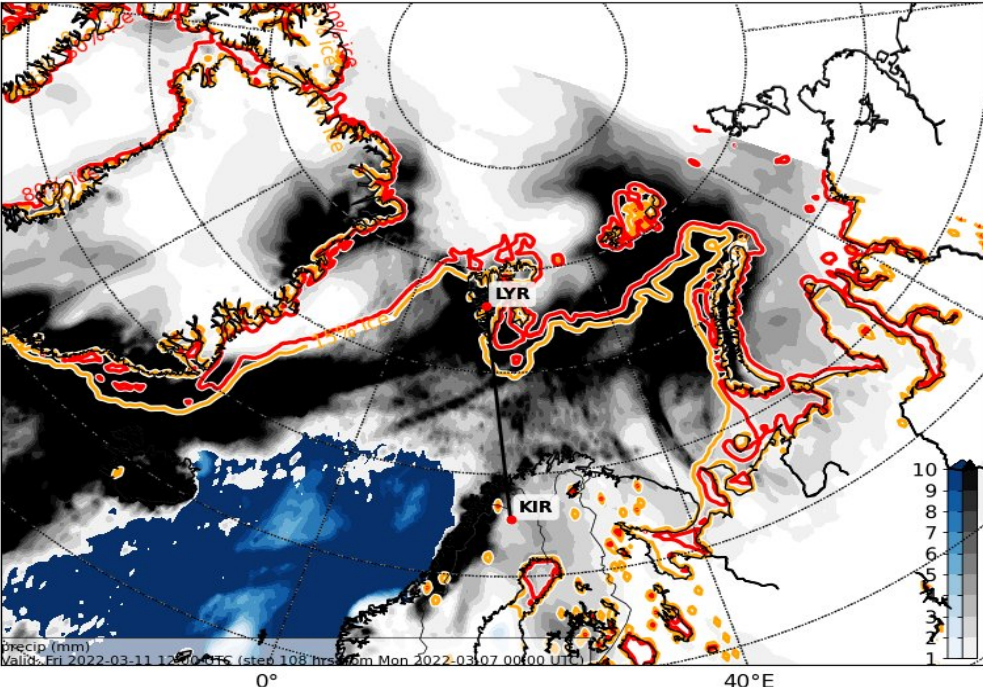
Thu, 2022-03-10 12 UTC (+84h) ECMWF

2h prec.



Fri, 2022-03-11 12 UTC (+108h) ECMWF

ACC. prec.



not available

ICON

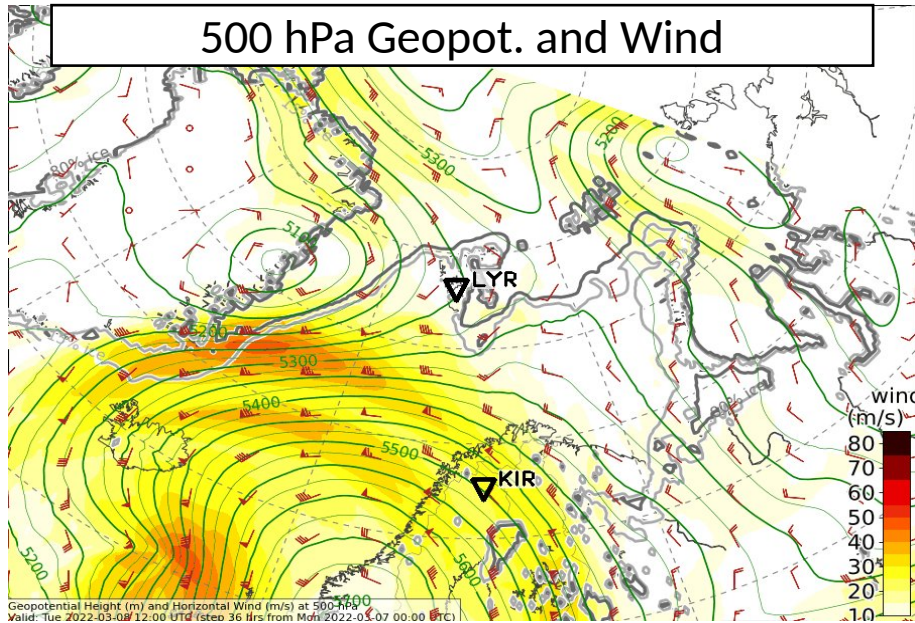
Extra variables

2022-03-07 00 UTC: 36 – 108h

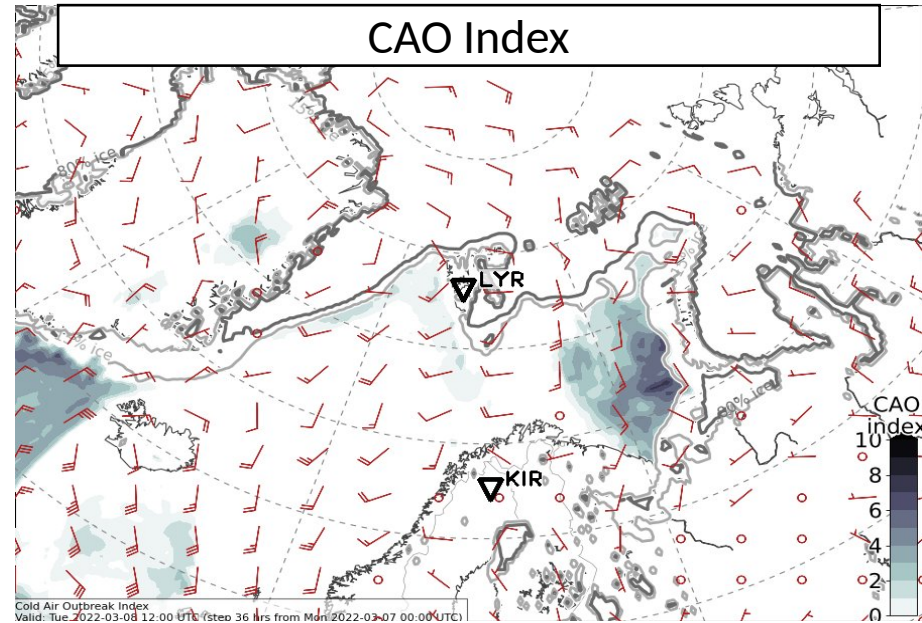
500 hPa wind & 850hPa θ_e & CAO & IVT

Tue, 2022-03-08 12 UTC (+36h)

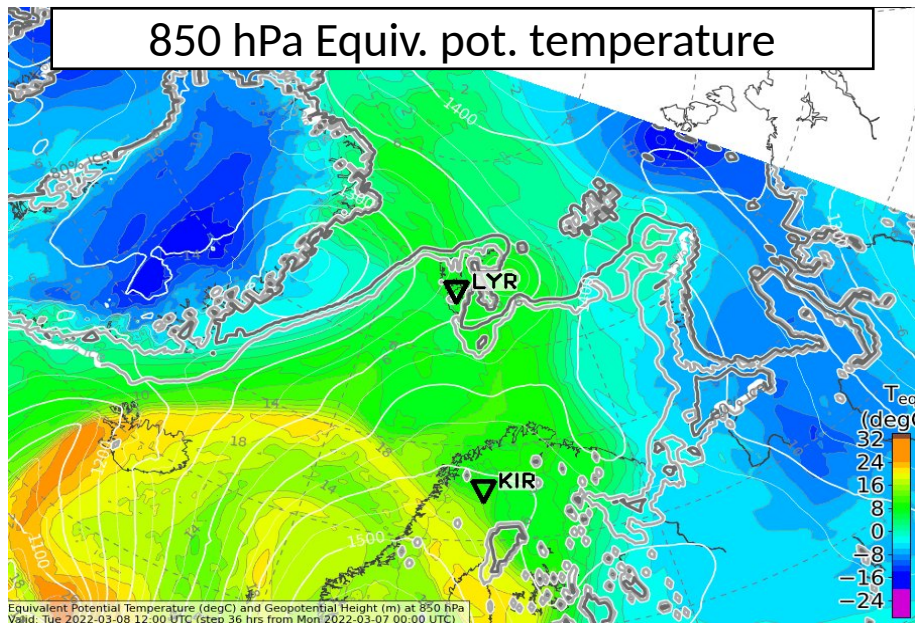
500 hPa Geopot. and Wind



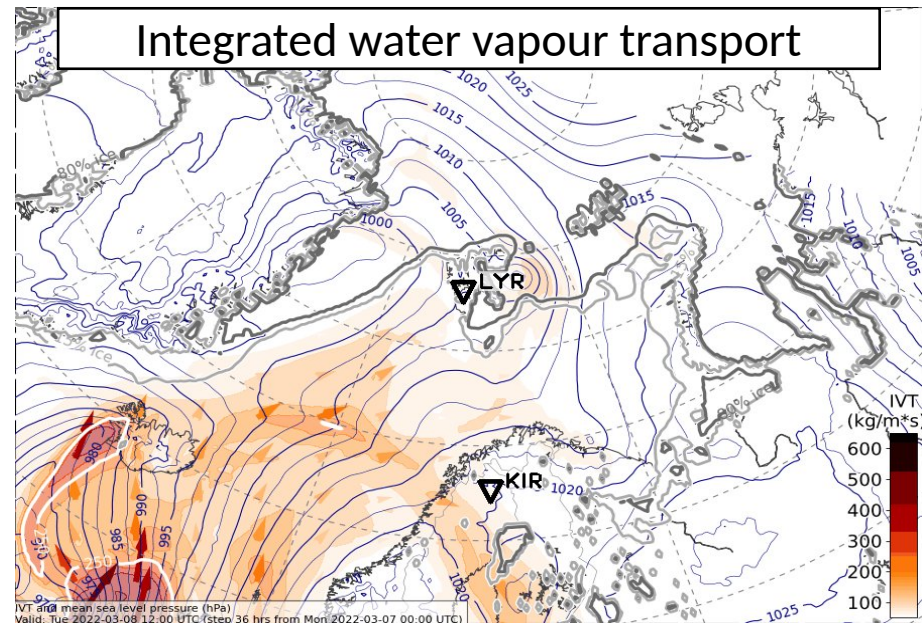
CAO Index



850 hPa Equiv. pot. temperature

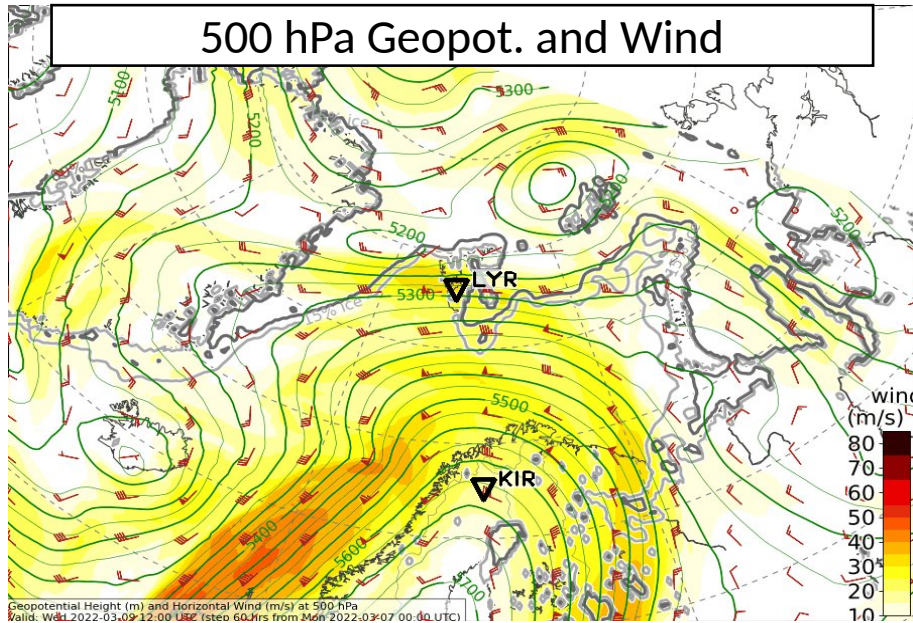


Integrated water vapour transport

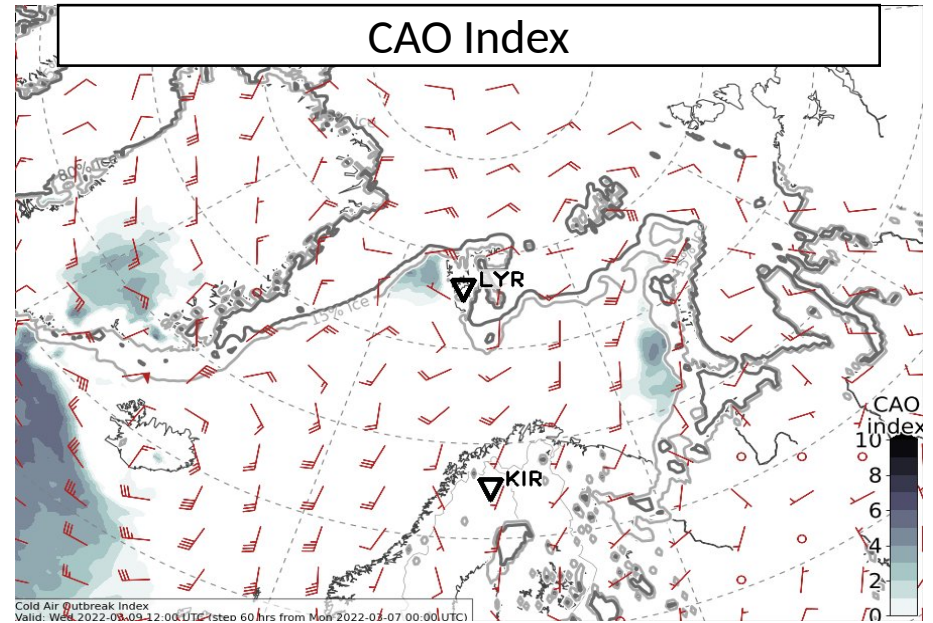


Wed, 2022-03-09 12 UTC (+60h)

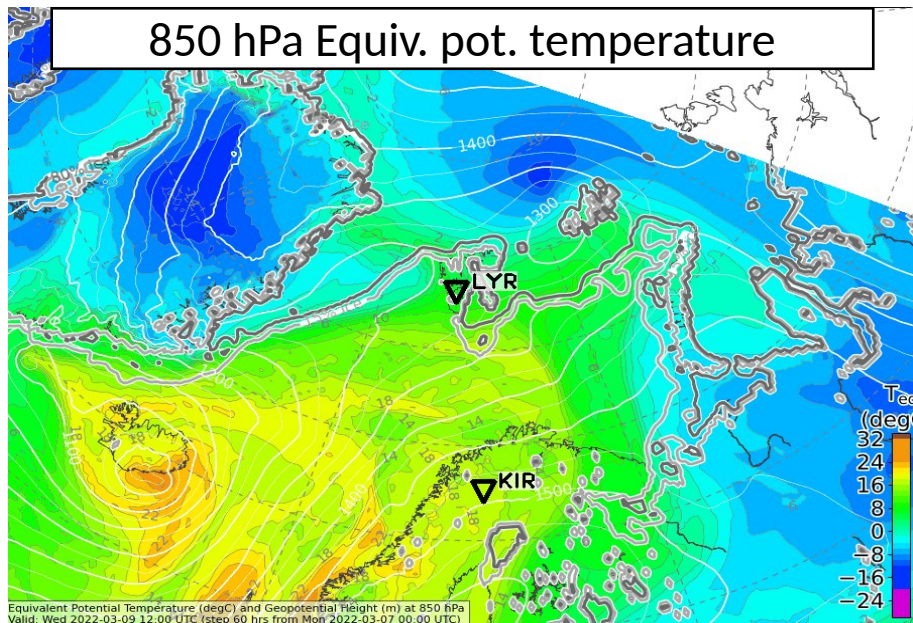
500 hPa Geopot. and Wind



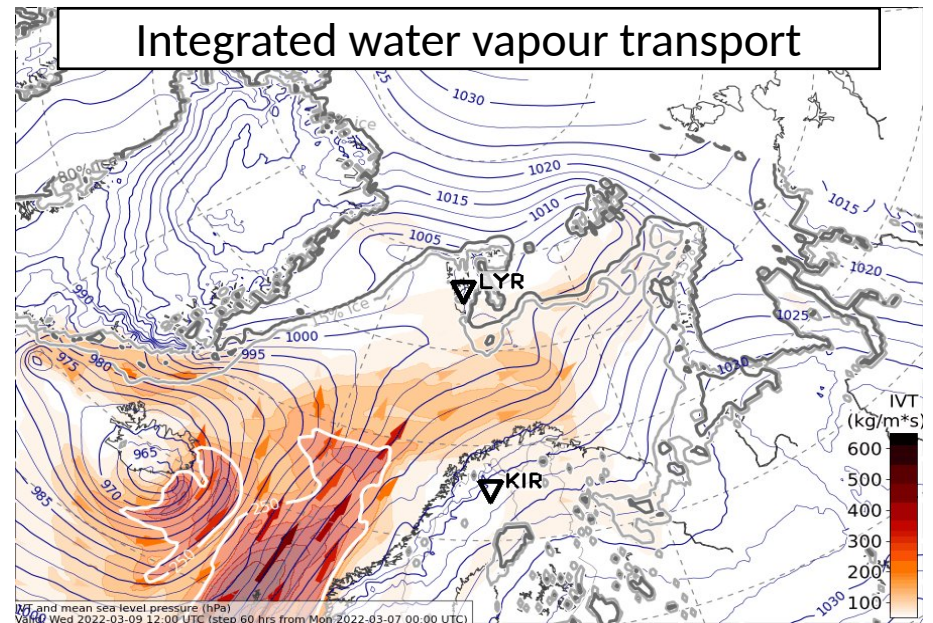
CAO Index



850 hPa Equiv. pot. temperature

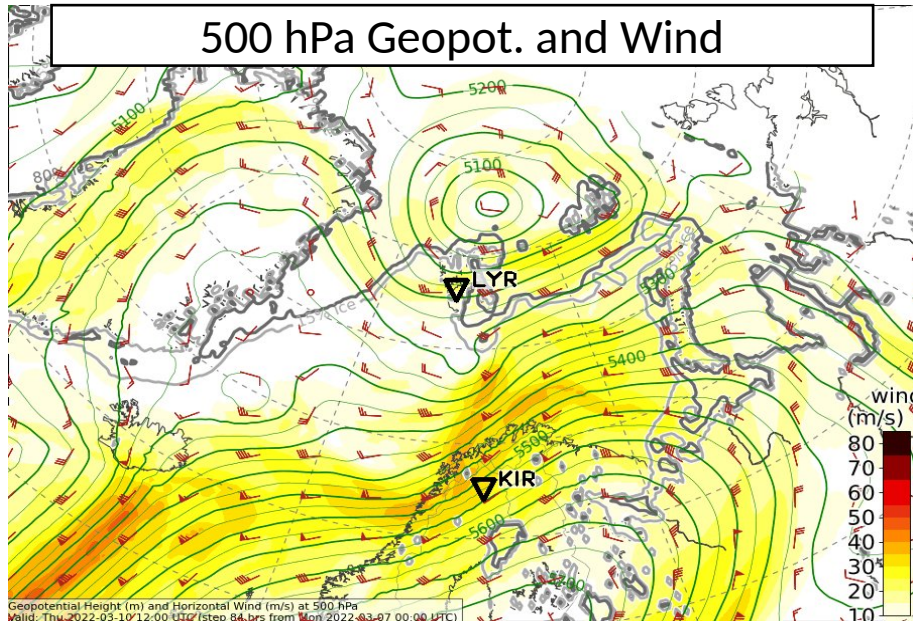


Integrated water vapour transport

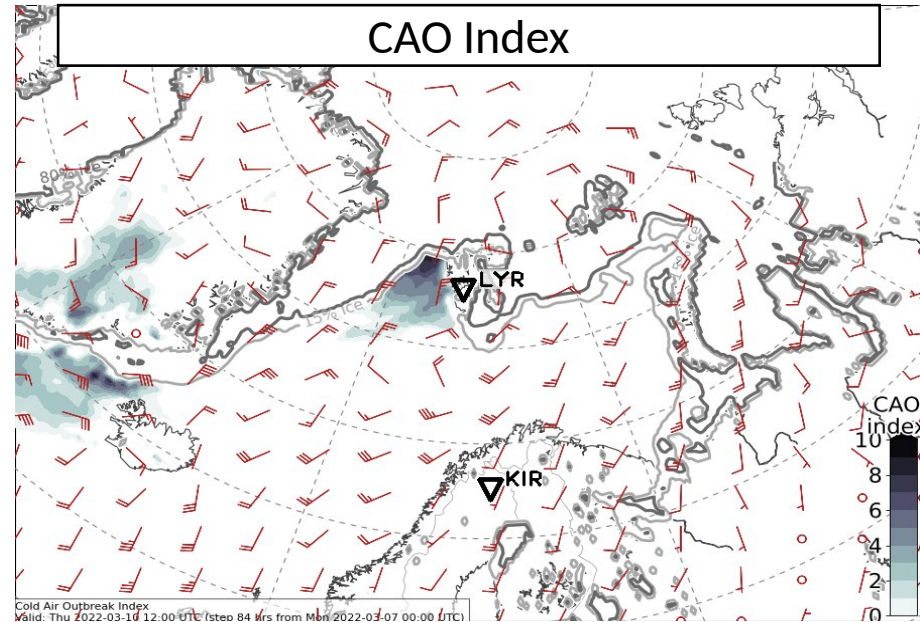


Thu, 2022-03-10 12 UTC (+84h)

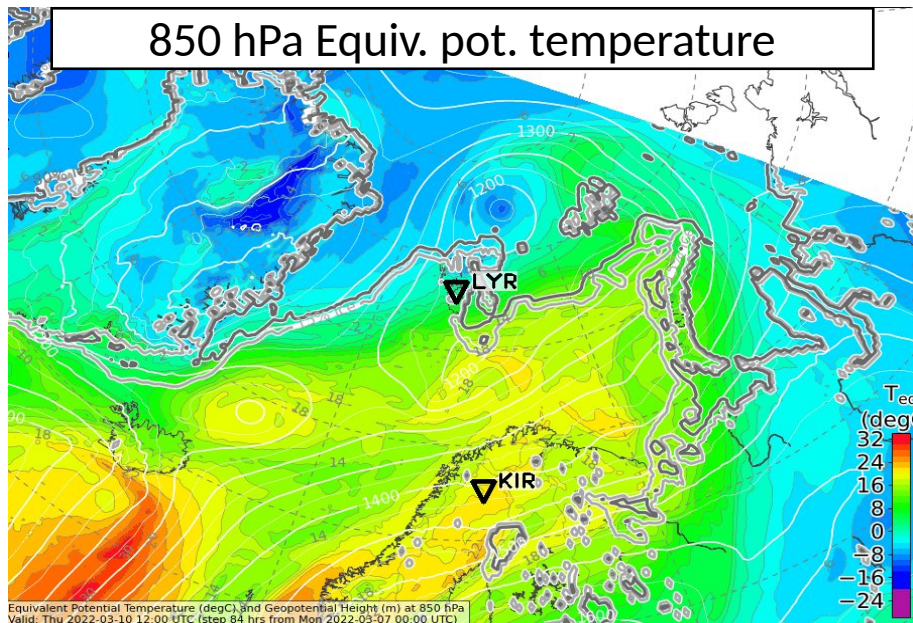
500 hPa Geopot. and Wind



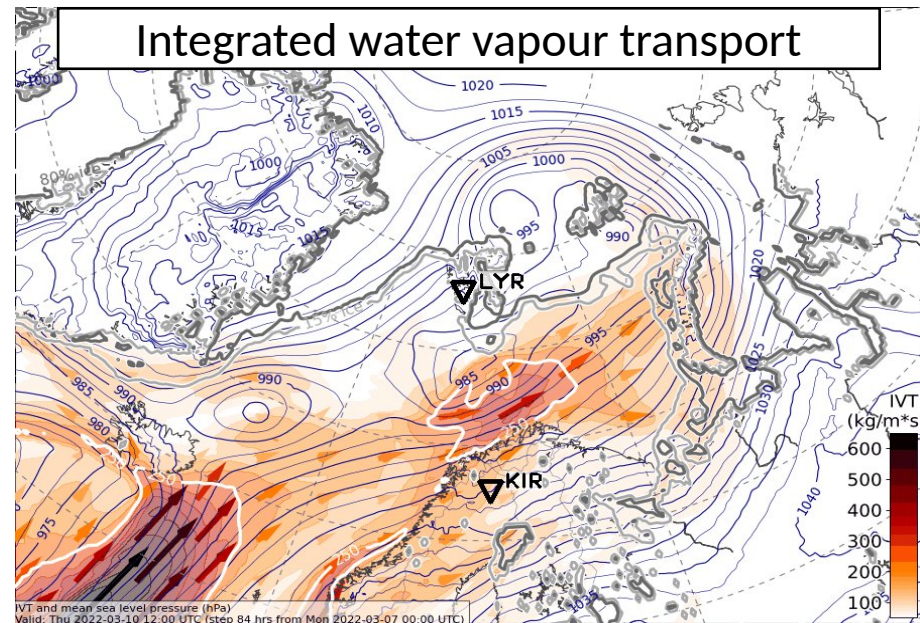
CAO Index



850 hPa Equiv. pot. temperature

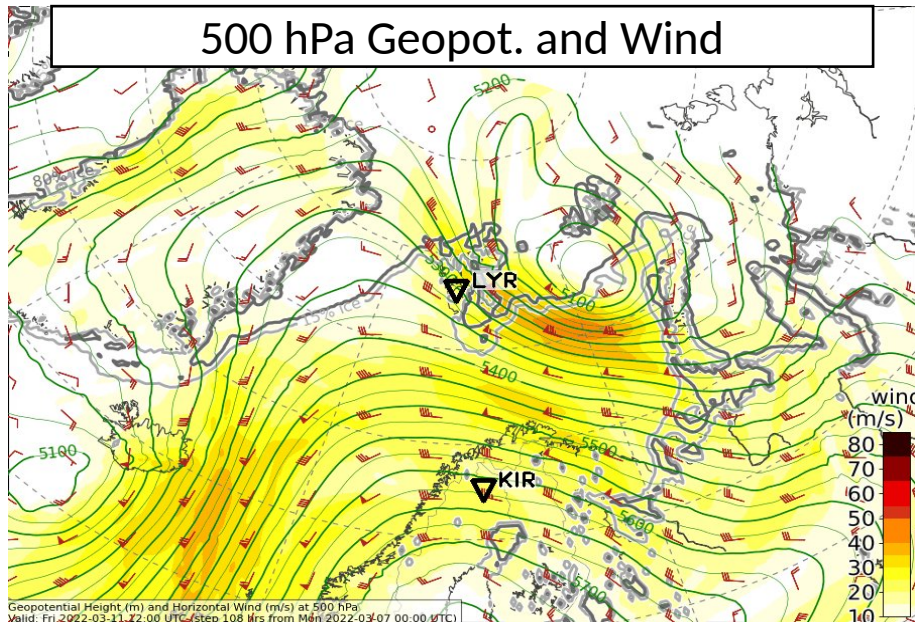


Integrated water vapour transport



Fri, 2022-03-11 12 UTC (+108h)

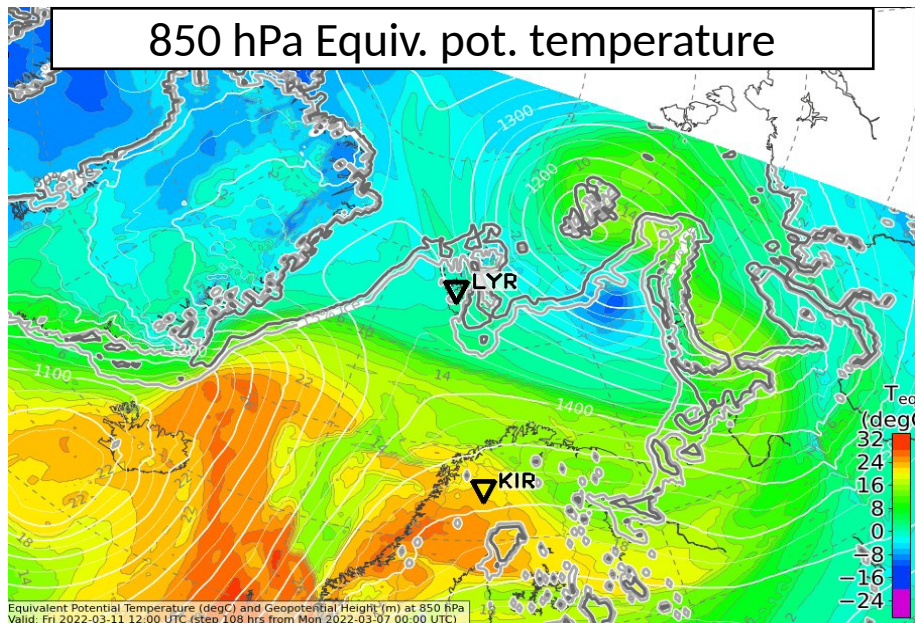
500 hPa Geopot. and Wind



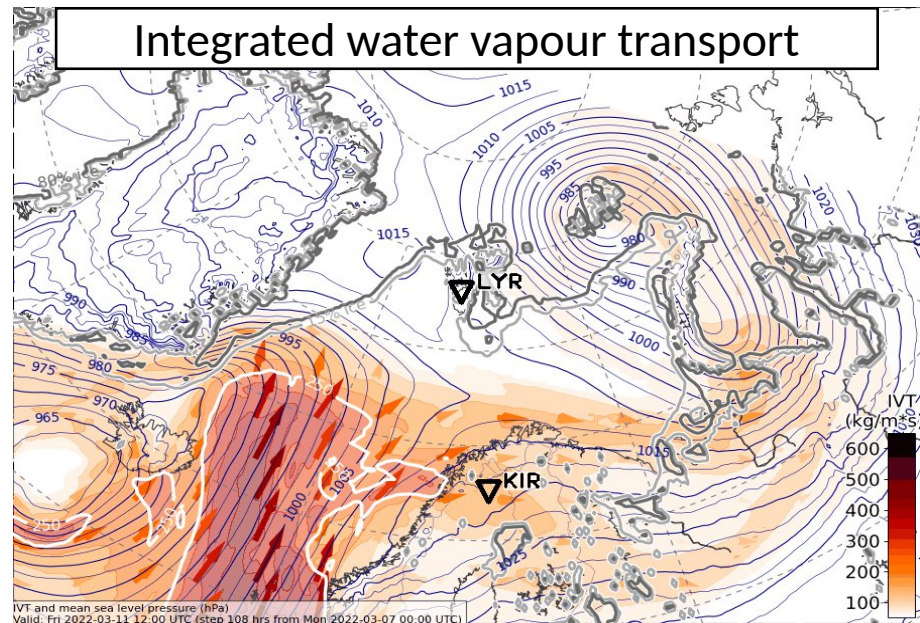
CAO Index

not available

850 hPa Equiv. pot. temperature

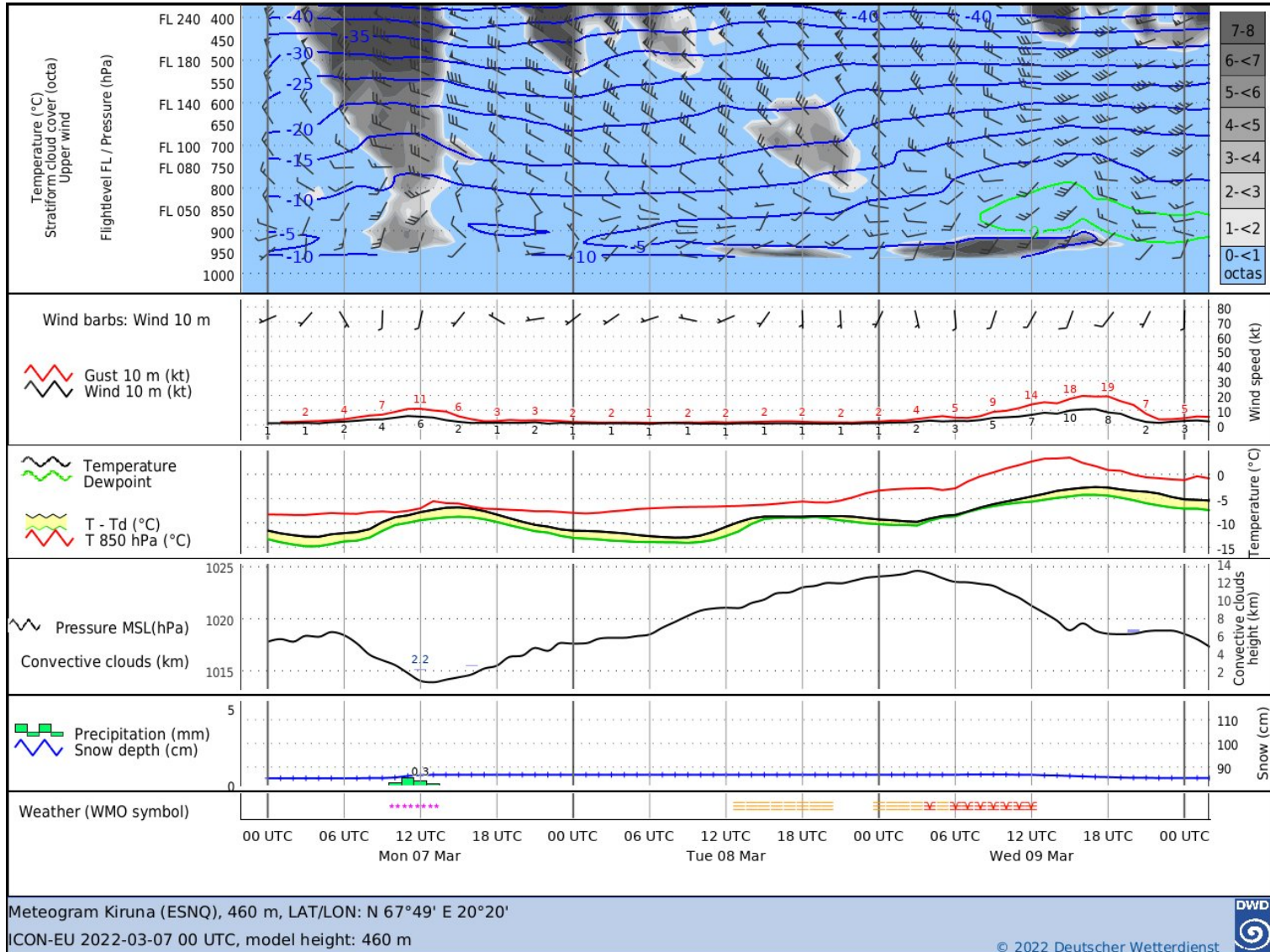


Integrated water vapour transport



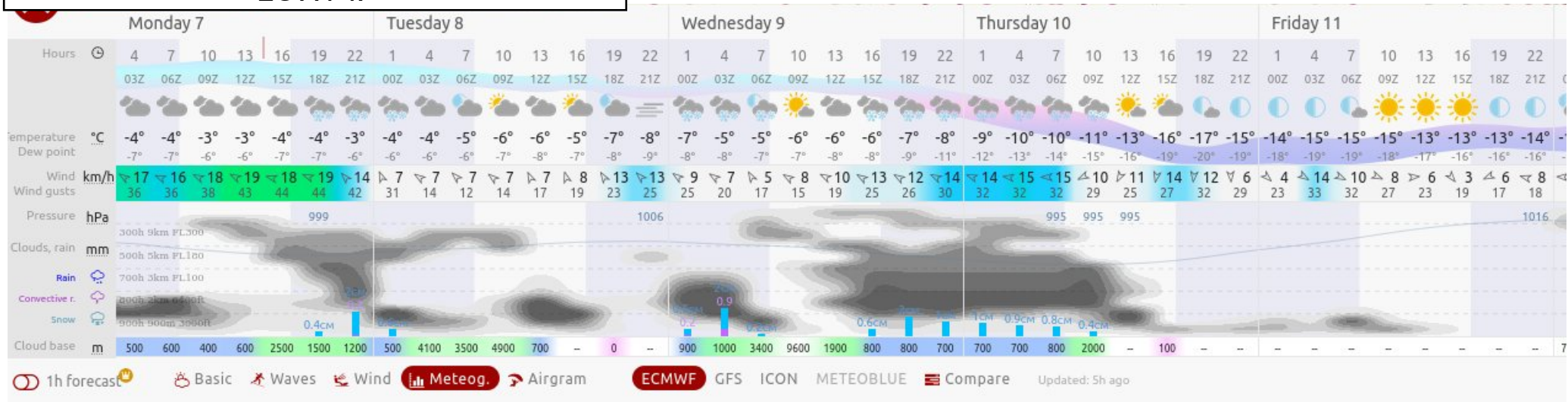
Airport meteograms

Kiruna:

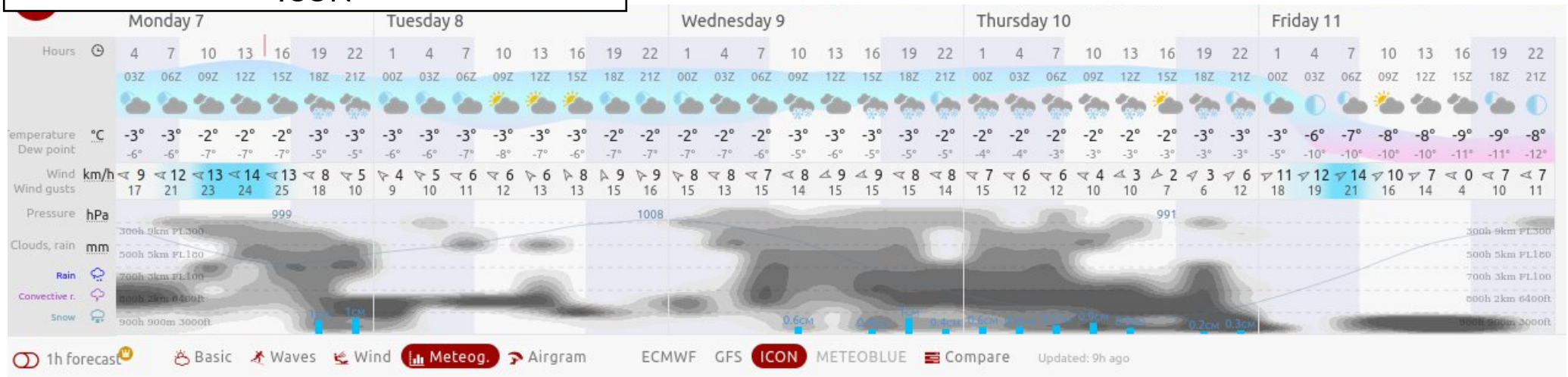


Longyearbyen:

ECWMF



ICON

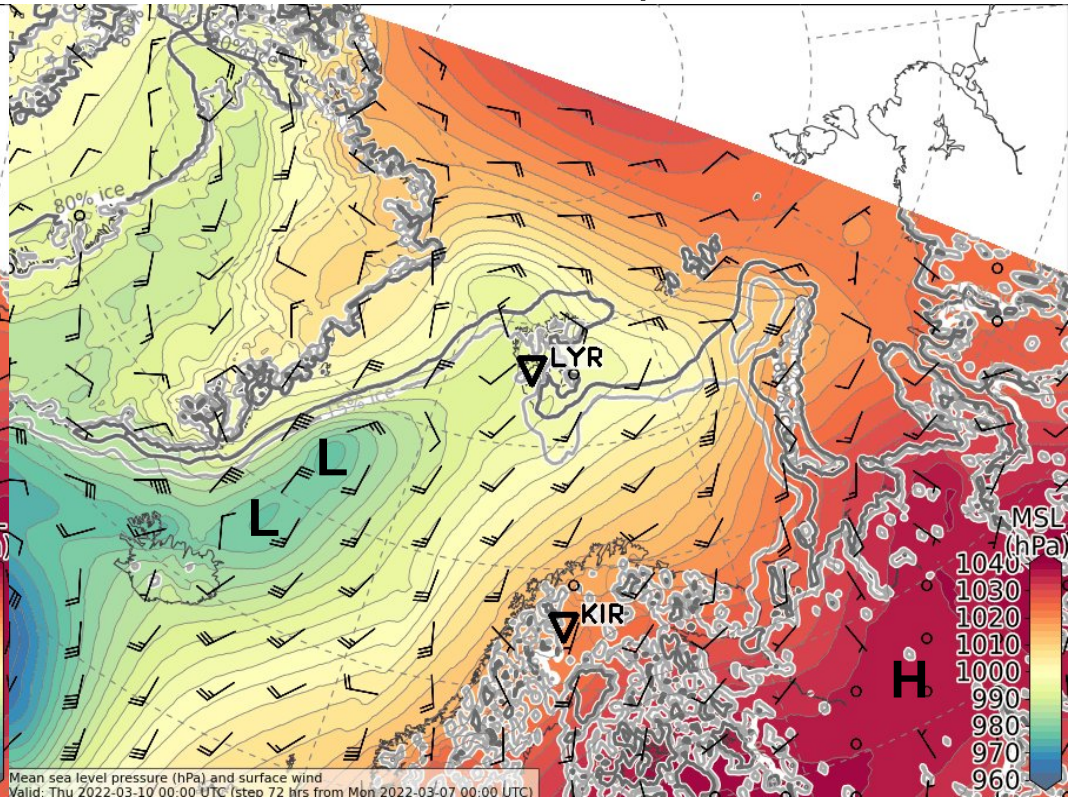
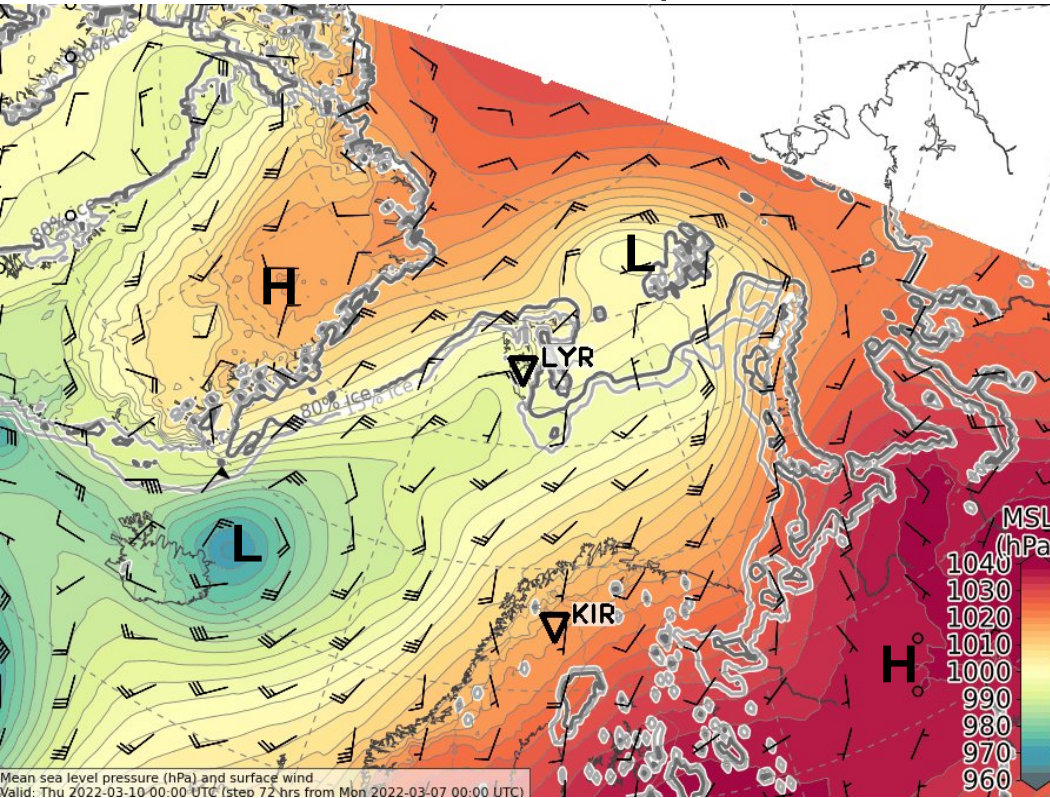


Forecast uncertainty
2022-03-07 00 UTC: 72 - 96h

Thursday, 2022-03-10 00 UTC (+72h)

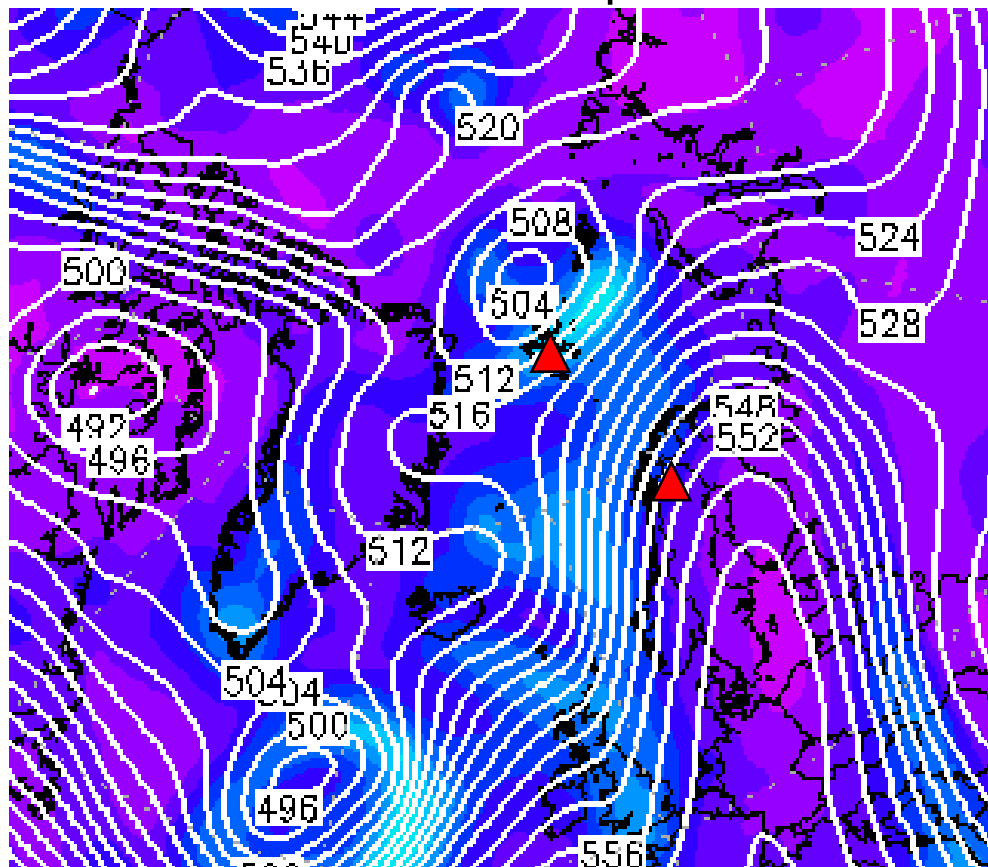
ECMWF - Sea level pressure

ICON - Sea level pressure



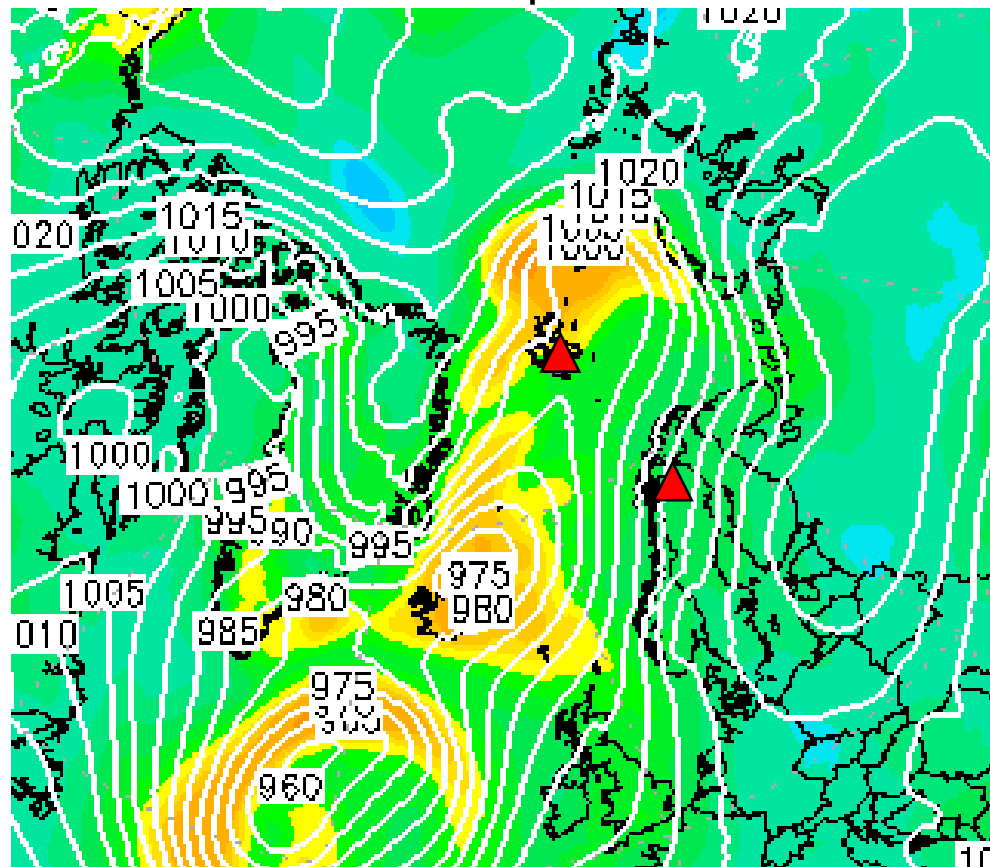
Thursday, 2022-03-10 00 UTC (+72h)

500 hPa Geopot.



gpdam

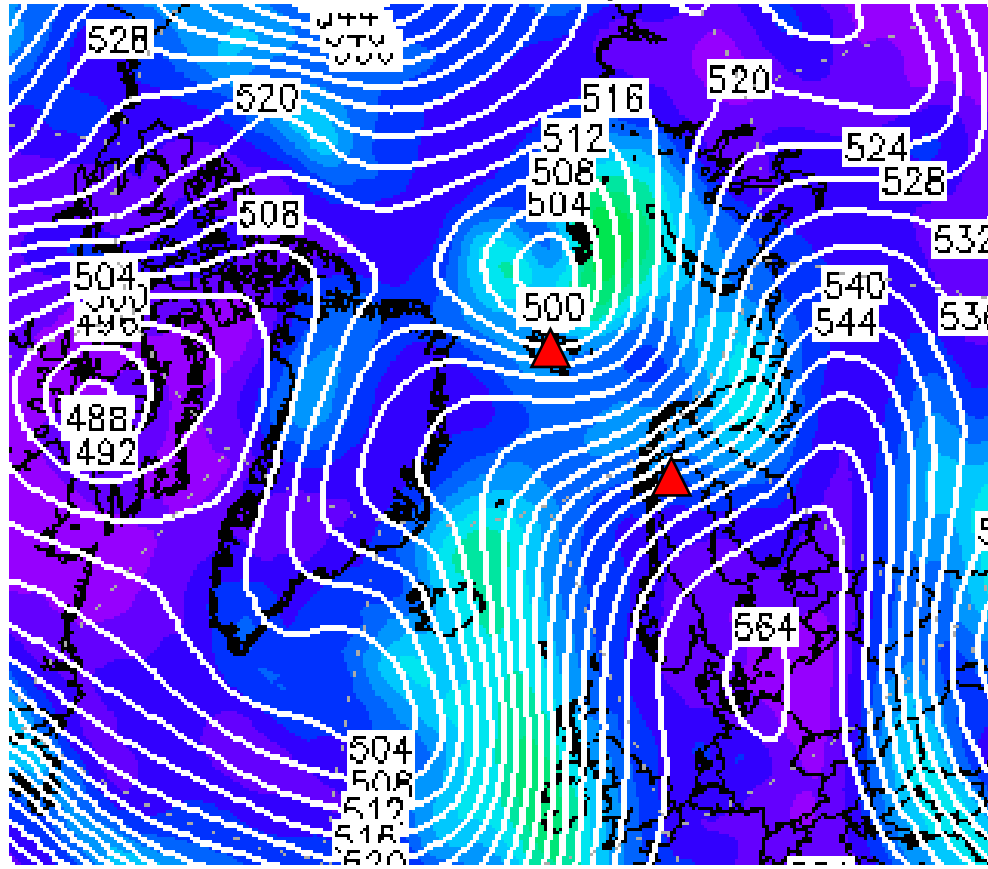
Sea level pressure



hPa

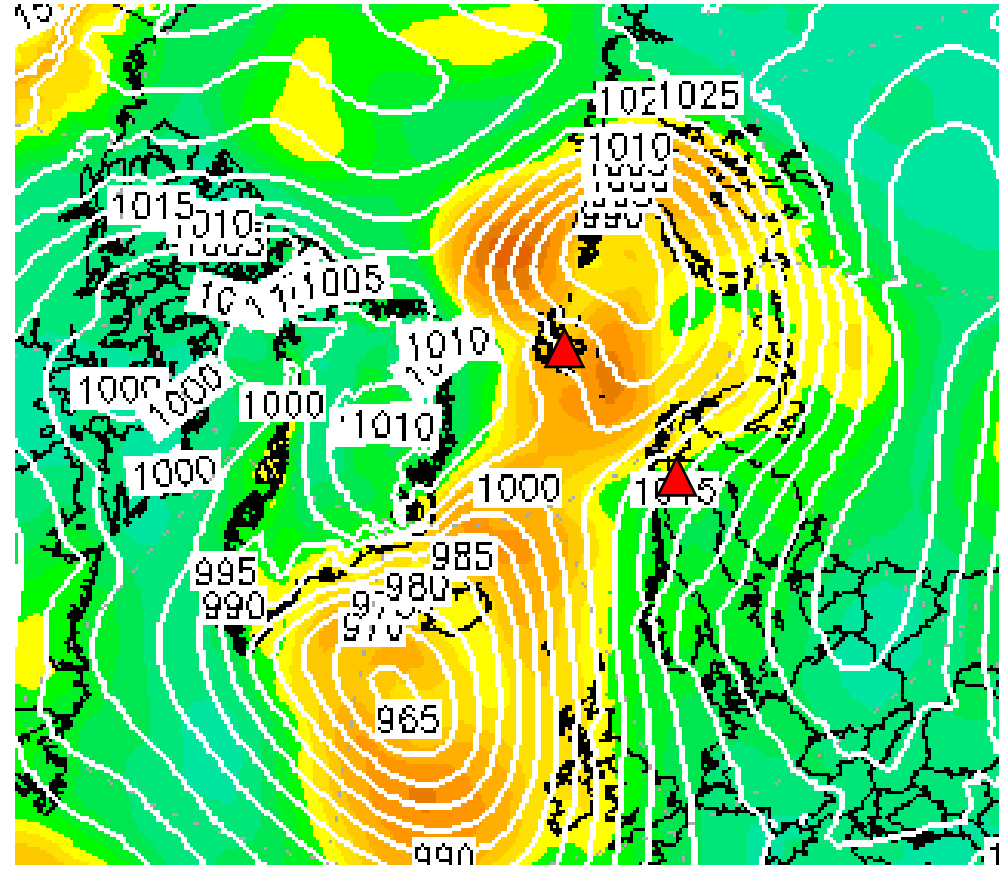
Friday, 2022-03-11 00 UTC (+96h)

500 hPa Geopot.



gpdam

Sea level pressure



hPa

Summary

Summary: Weather Briefing 2022-03-07, 17:00 LT

•Overall

- **Blocking pattern → Strong SW flow towards Norwegian Sea/Barents Sea**

•Tuesday, 2022-03-08:

- Strong warm/moist air advection from region between Iceland and Norway towards NE
- Flow over parts of Fram Strait converging and slightly parallel to ice edge

•Wednesday, 2022-03-09:

- Warm/moist air advection intensifies and reaches Barents Sea
- Precipitation with rain between Kiruna and Svalbard
- $T > 0^{\circ}\text{C}$ at Kiruna airport

•Thursday, 2022-03-10:

- Peak of warm/moist air intrusion over Barents Sea
- Weak cold-air outbreak NW of Svalbard with low clouds
- Small discrepancy in sea level pressure NE of Svalbard between ICON and ECMWF

•Friday, 2022-03-11:

- High moves to Fram Strait → weak cold-air outbreak dissolves
- New warm/moist air intrusion forms between Iceland and Norway, now more northern component than in the days before