

Weather briefing HALO-(AC)³

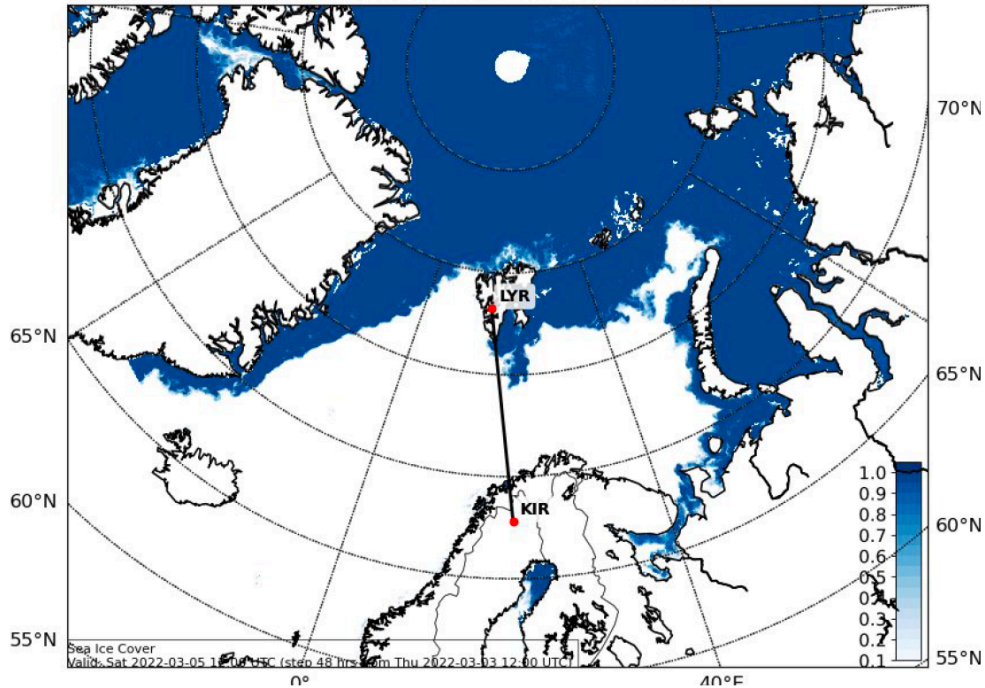
Wednesday, 2022-03-16 17:00

Development of sea ice cover

2022-03-05

Sea Ice Cover AMSR2 (0-1) (CONT)

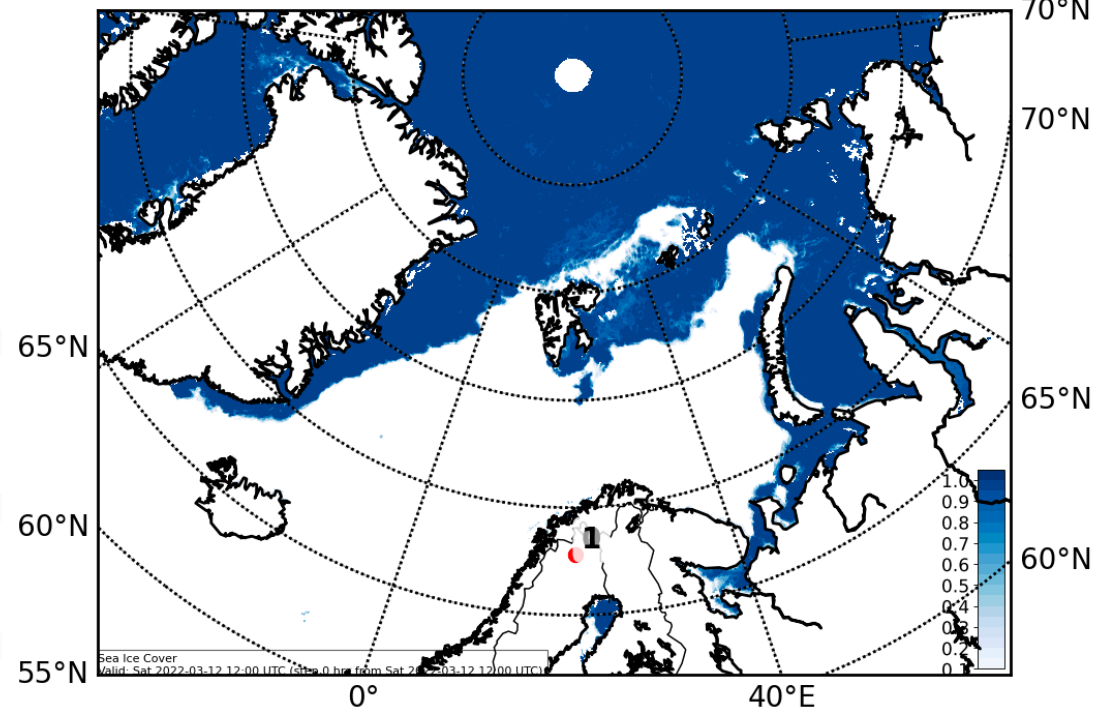
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2022-03-12

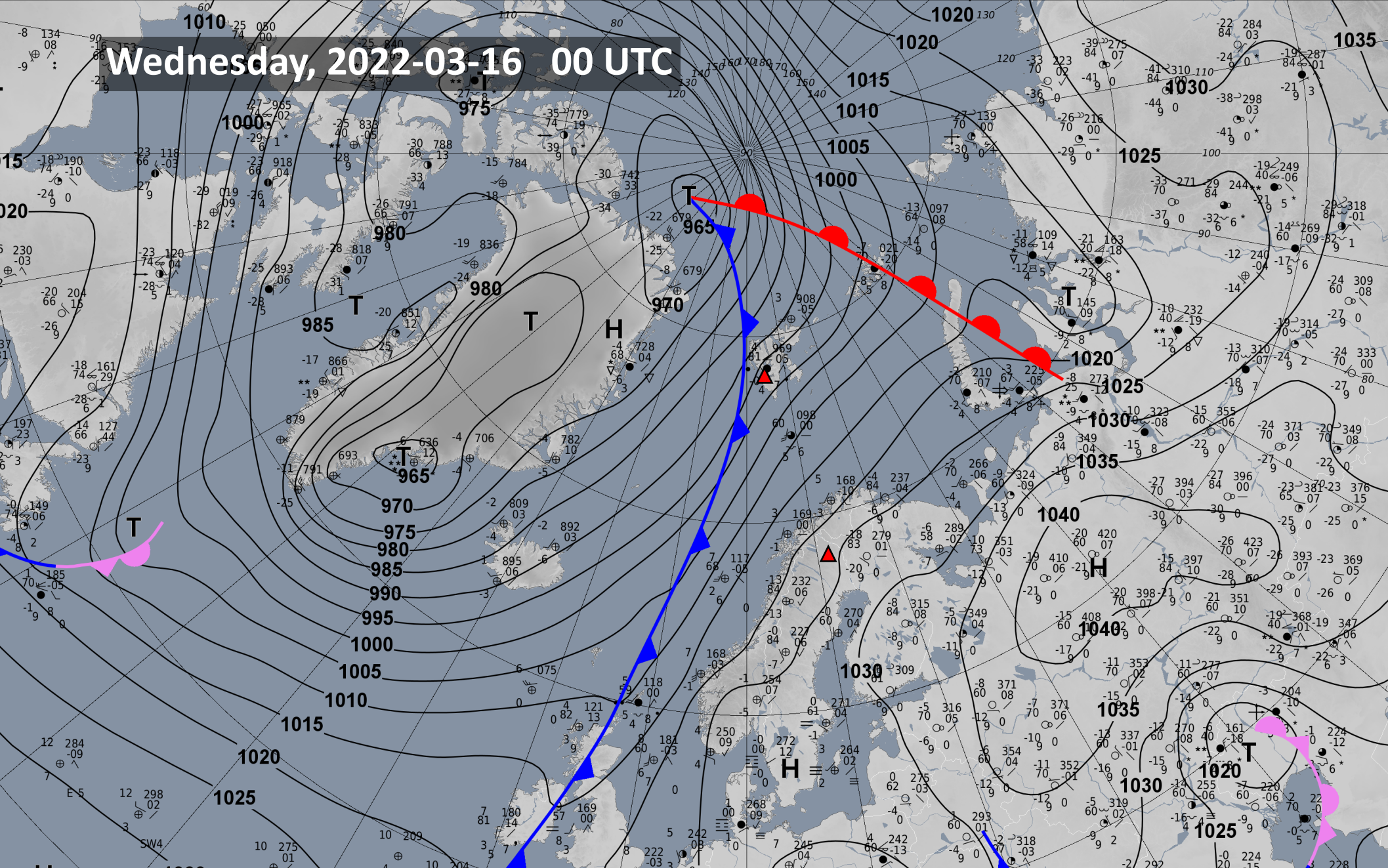
Sea Ice Cover AMSR2 (0-1) (CONT)

Valid: 2022-03-12T12:00:00Z (initialisation: 2022-03-12T12:00:00Z)



Surface Analysis
2022-03-16 00 UTC
DWD

Wednesday, 2022-03-16 00 UTC



Circulation pattern development

2022-03-16 00 UTC: 12 – 108h

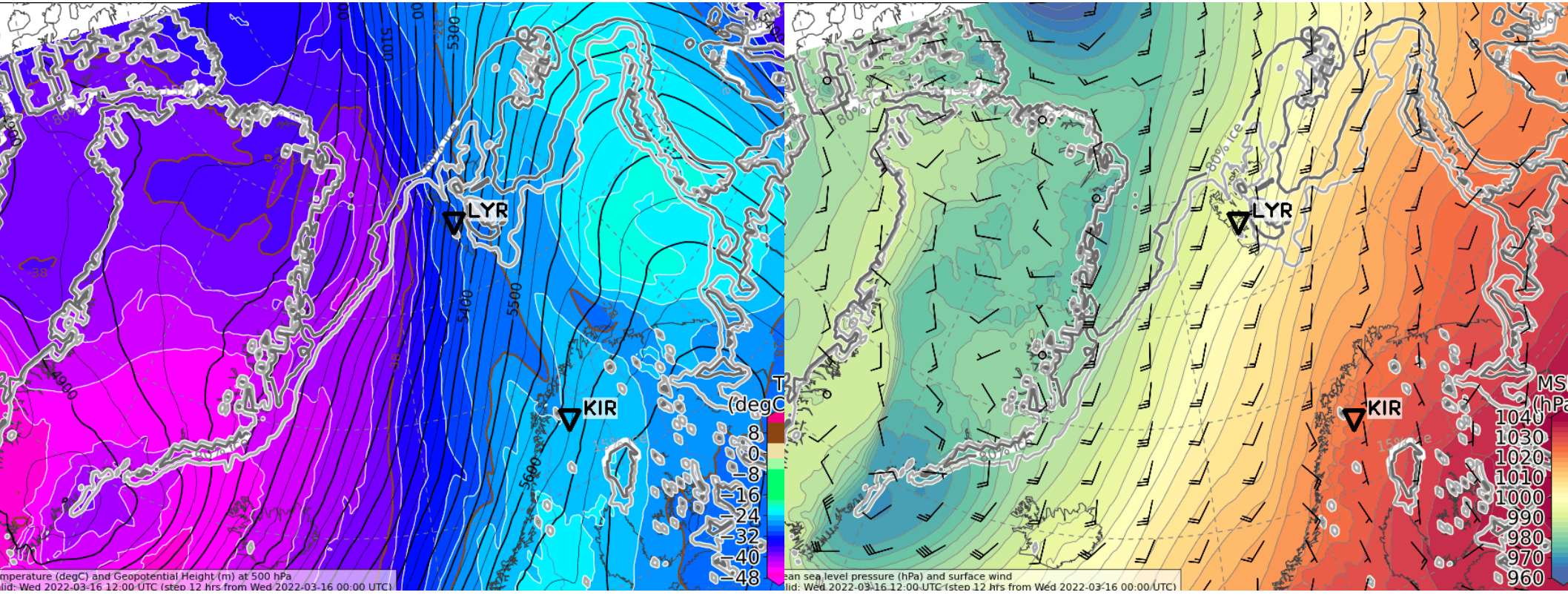
500 hPa Geopot & T

Sea level pressure

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

500 hPa Geopot & T

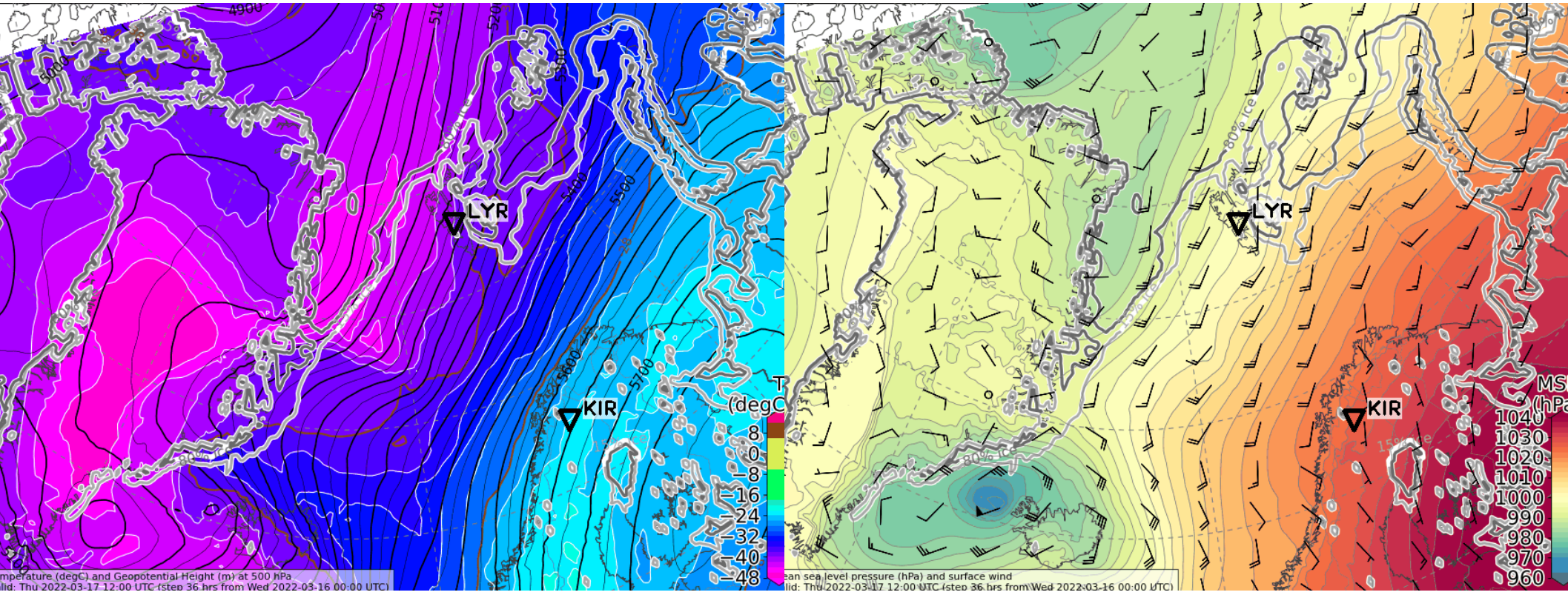
Sea level pressure



Thursday, 2022-03-17 12 UTC (+36h)

500 hPa Geopot & T

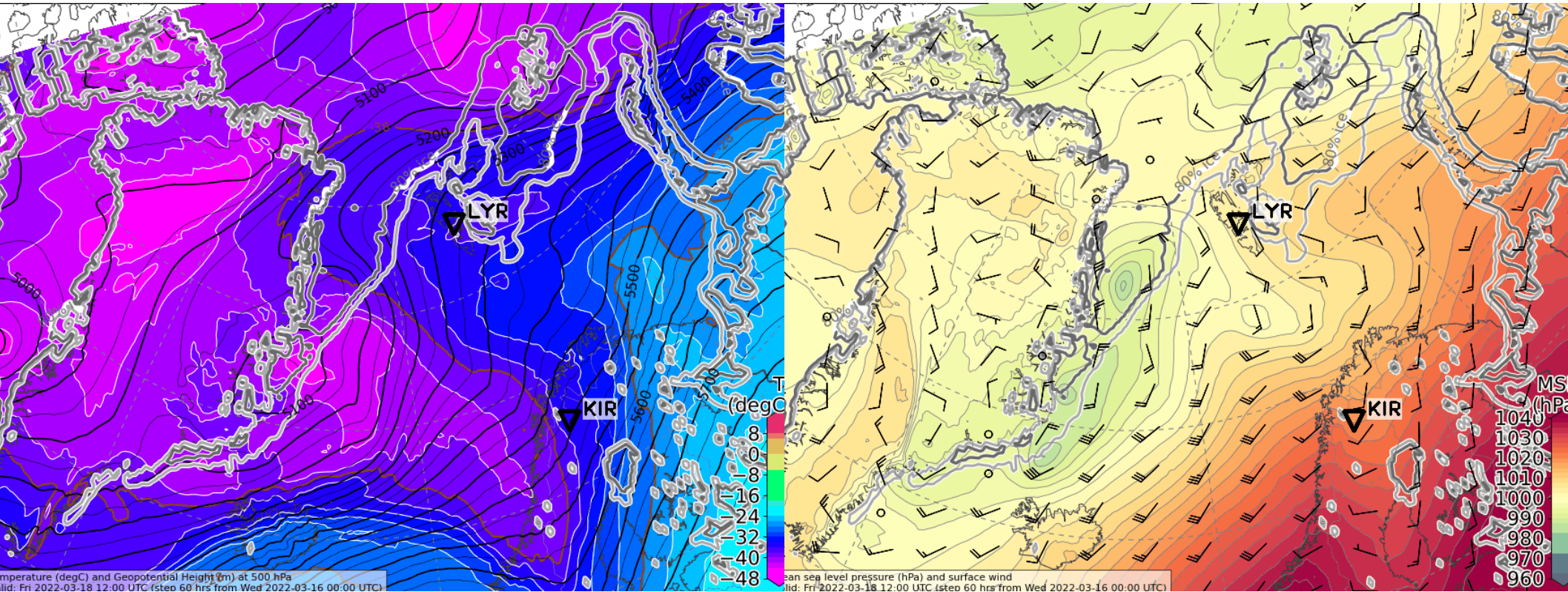
Sea level pressure



Friday, 2022-03-18 12 UTC (+60h)

500 hPa Geopot & T

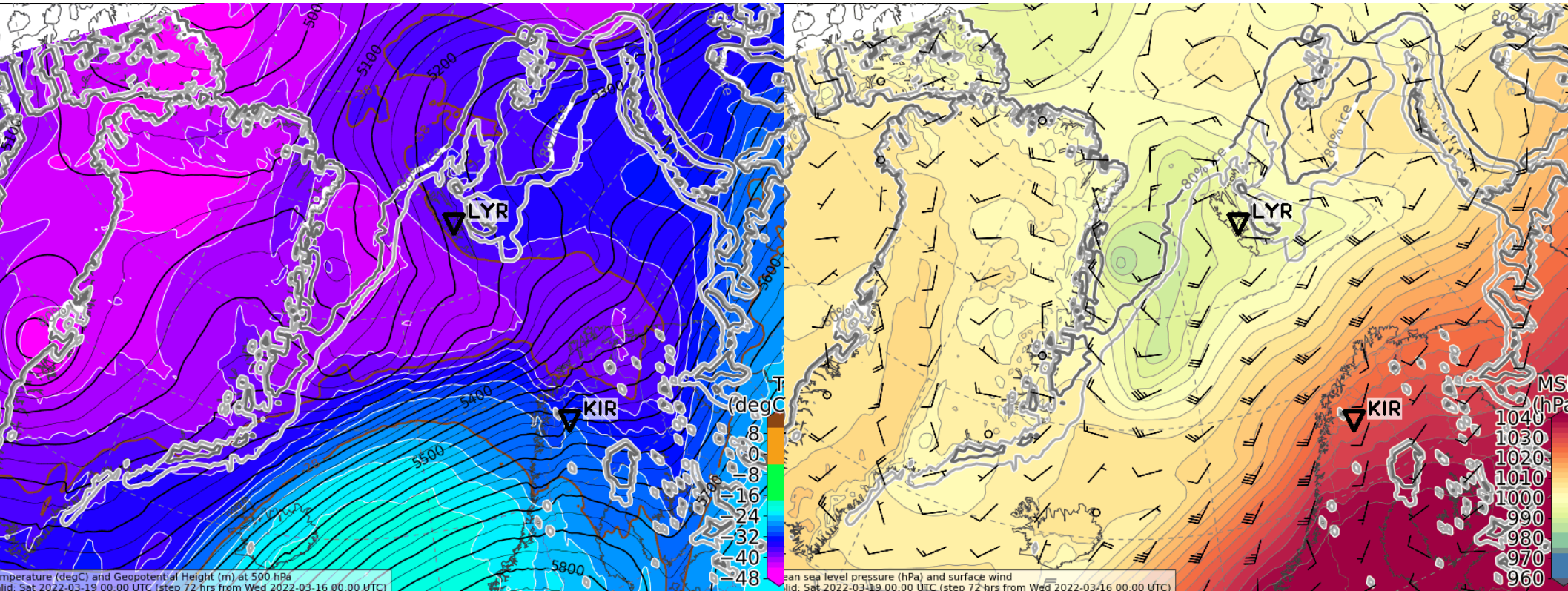
Sea level pressure



Saturday, 2022-03-19 00 UTC (+72h)

500 hPa Geopot & T

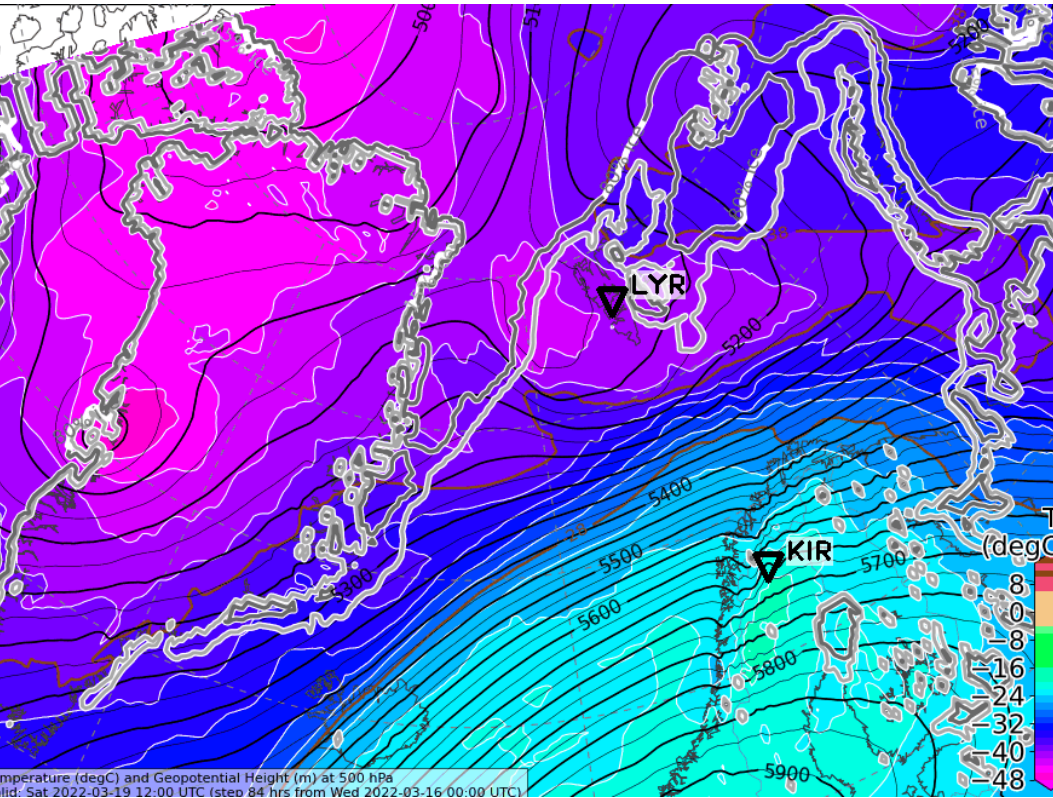
Sea level pressure



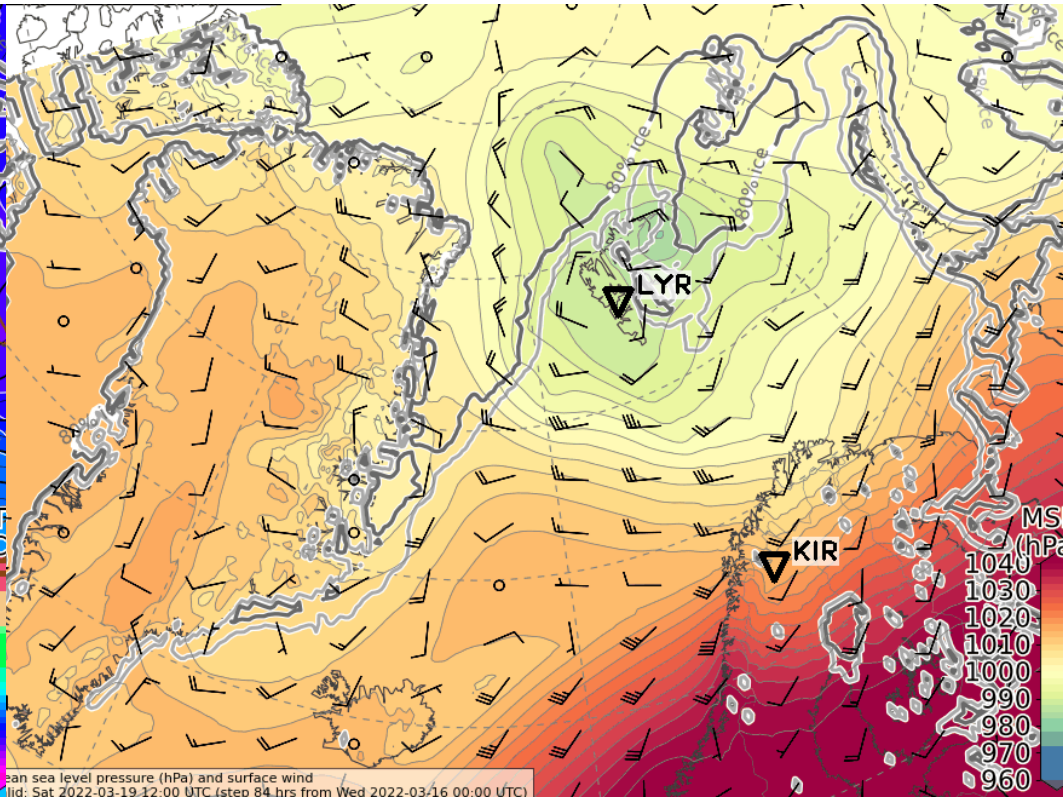
Saturday, 2022-03-19 12 UTC (+84h)

500 hPa Geopot & T

Sea level pressure



Temperature (degC) and Geopotential Height (m) at 500 hPa
Valid: Sat 2022-03-19 12:00 UTC (stepped 84 hrs from Wed 2022-03-16 00:00 UTC)

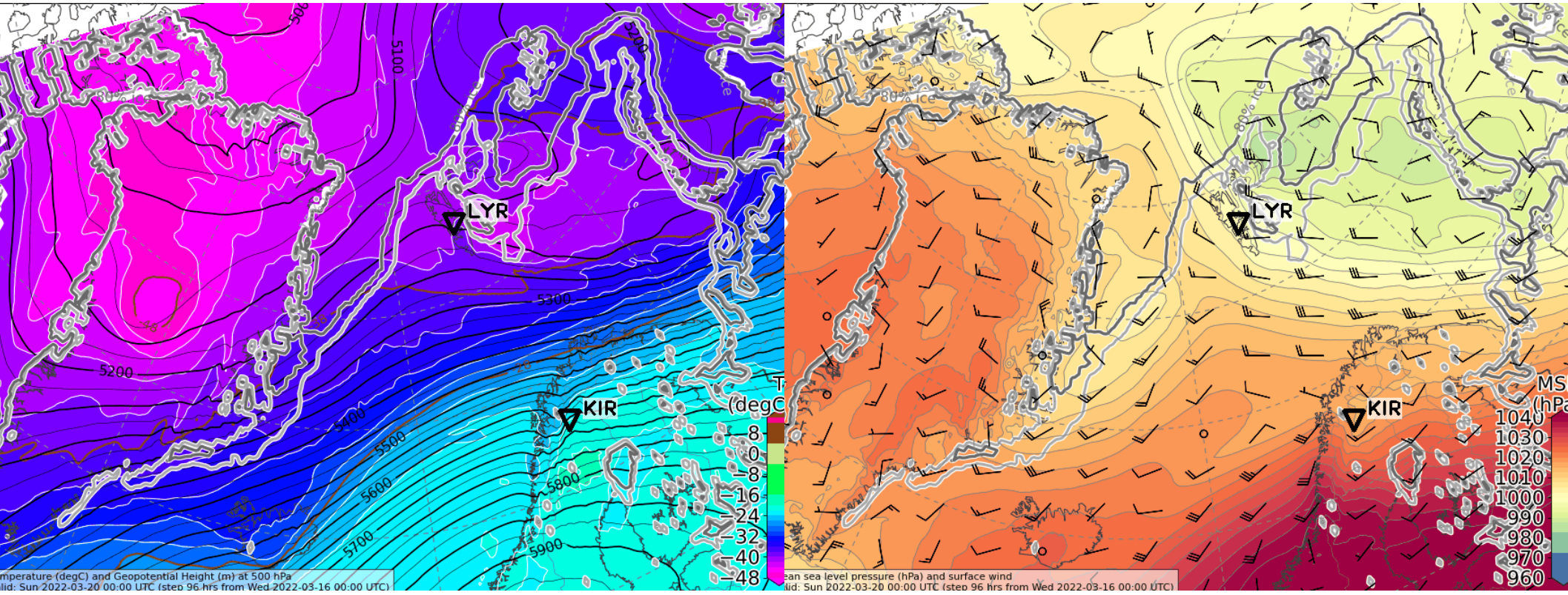


Mean sea level pressure (hPa) and surface wind
Valid: Sat 2022-03-19 12:00 UTC (stepped 84 hrs from Wed 2022-03-16 00:00 UTC)

Sunday, 2022-03-20 00 UTC (+96h)

500 hPa Geopot & T

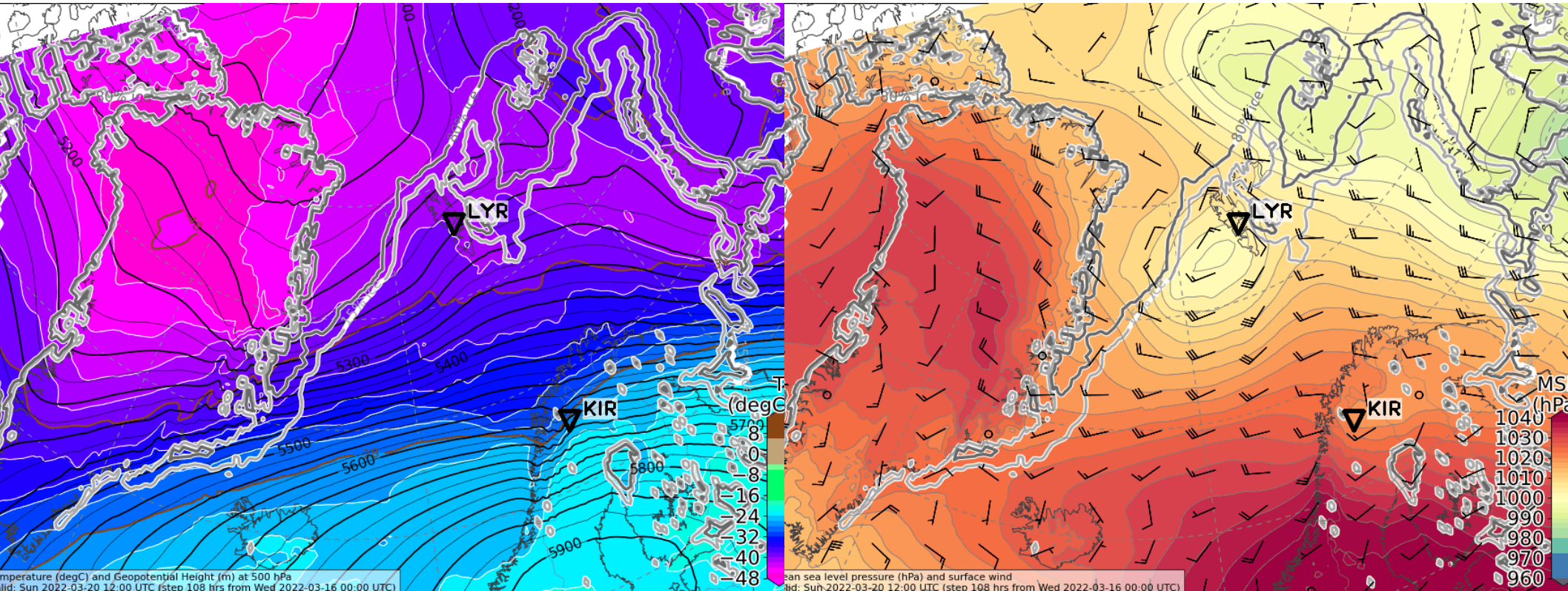
Sea level pressure



Sunday, 2022-03-20 12 UTC (+108h)

500 hPa Geopot & T

Sea level pressure



Temperature (degC) and Geopotential Height (m) at 500 hPa
Valid: Sun 2022-03-20 12:00 UTC (step 108 hrs from Wed 2022-03-16 00:00 UTC)

Mean sea level pressure (hPa) and surface wind
Valid: Sun 2022-03-20 12:00 UTC (step 108 hrs from Wed 2022-03-16 00:00 UTC)

Surface wind development
2022-03-16 00 UTC: 84 – 108h
ECMWF

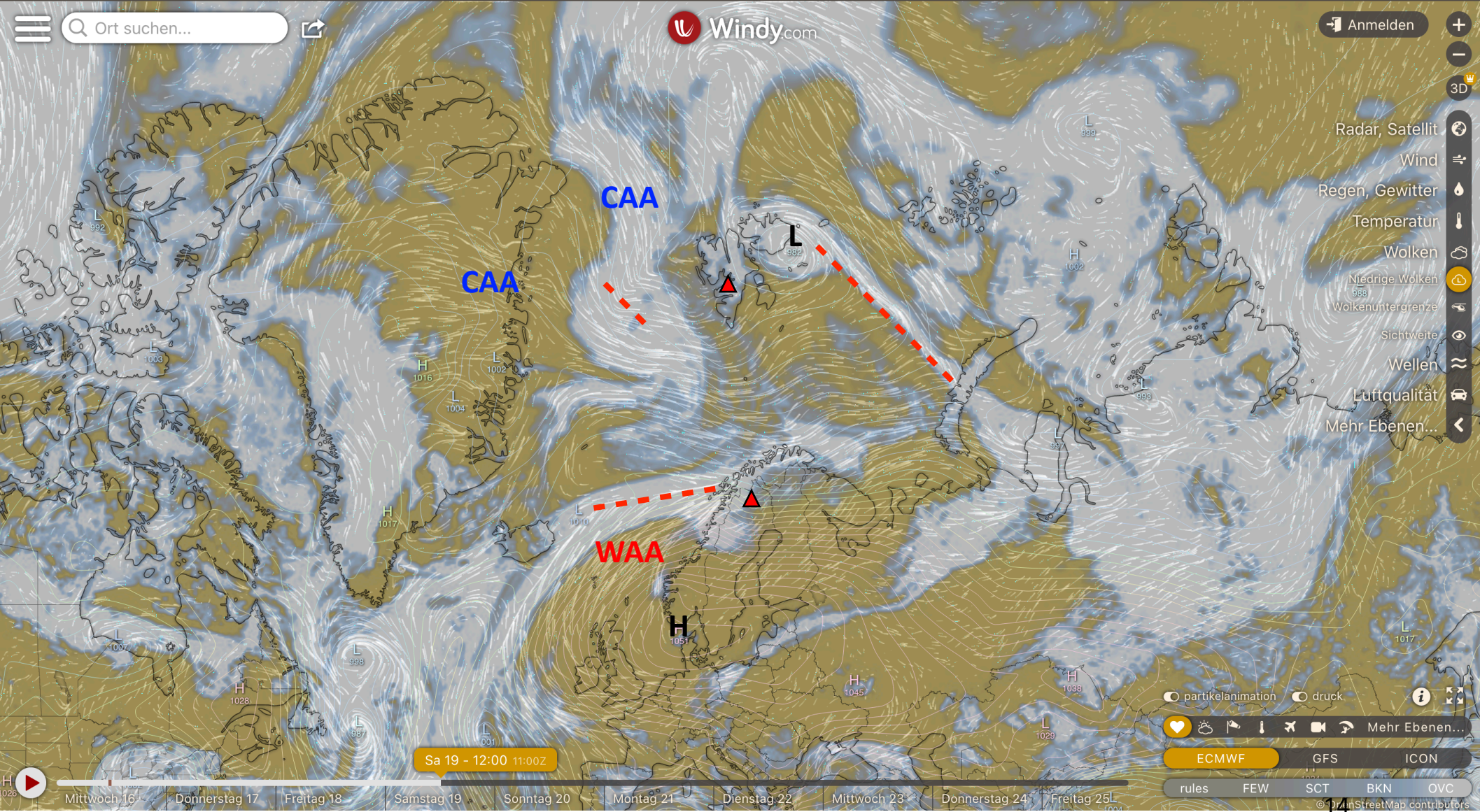
L: Low

H: High

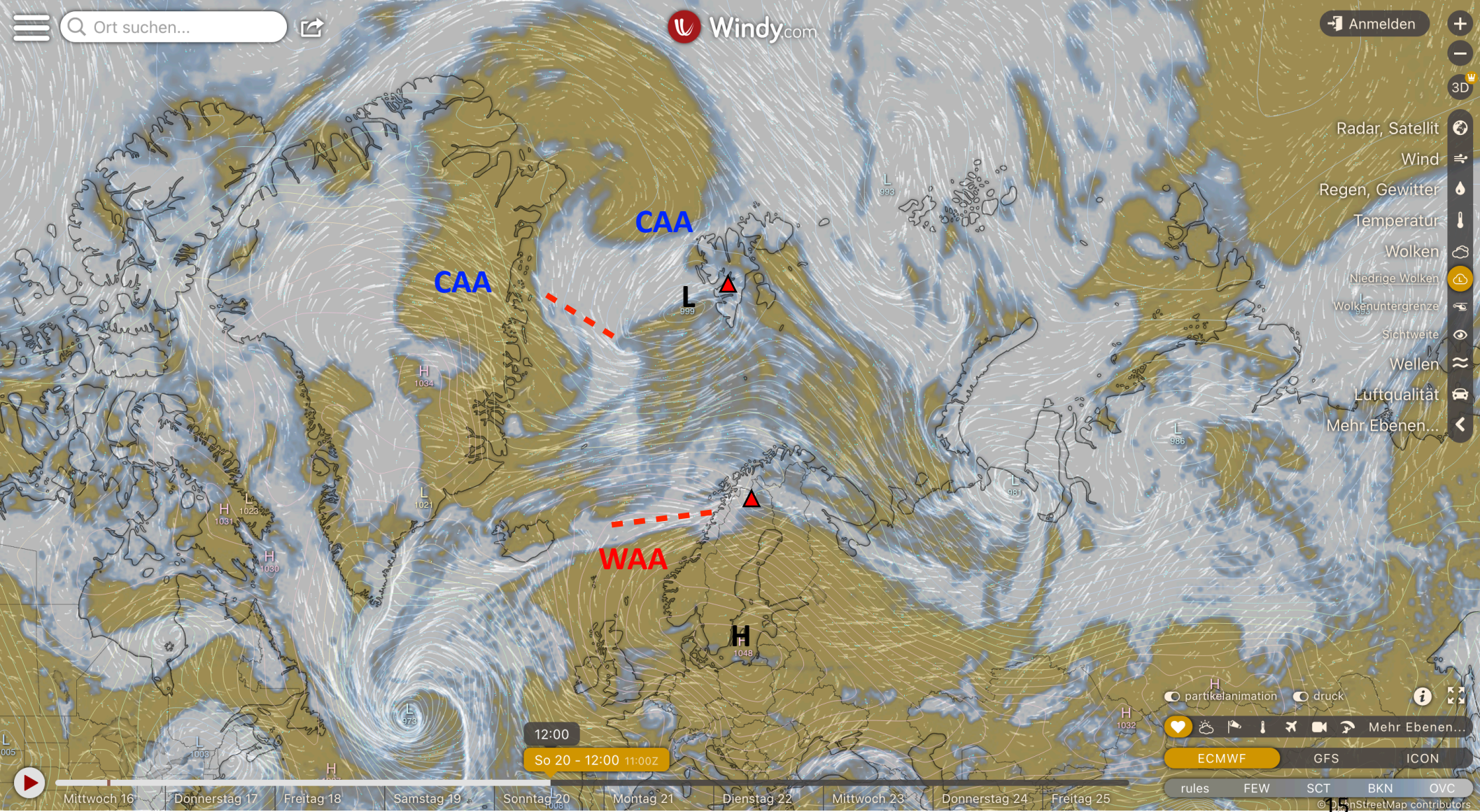
CAA: Cold Air Advection

WAA: Warm Air Advection

Saturday, 2022-03-19 12 UTC (+84h)



Sunday, 2022-03-20 12 UTC (+108h)



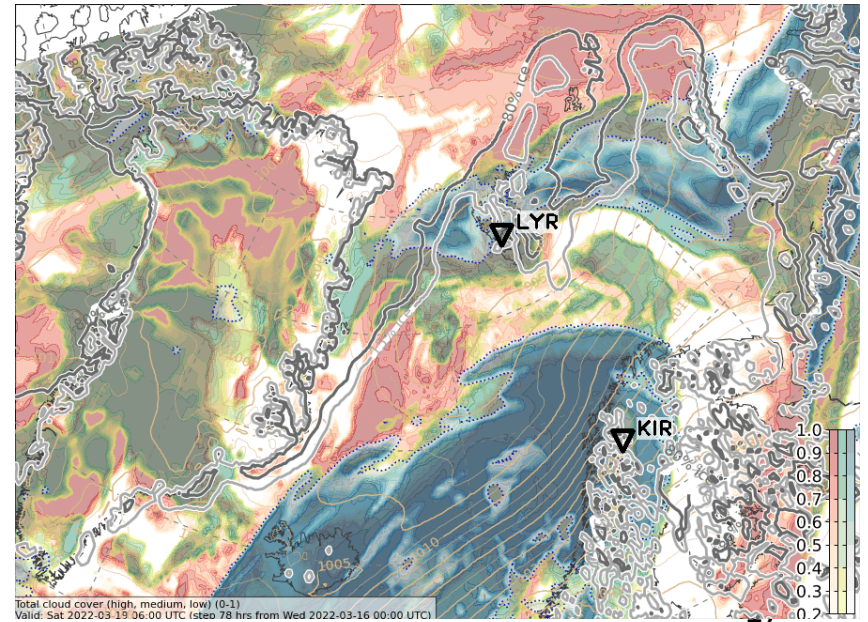
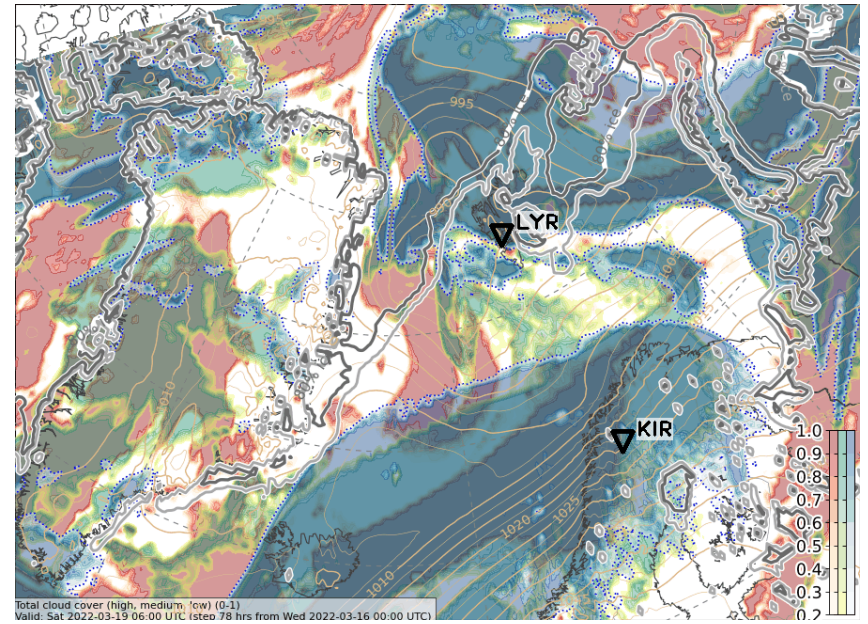
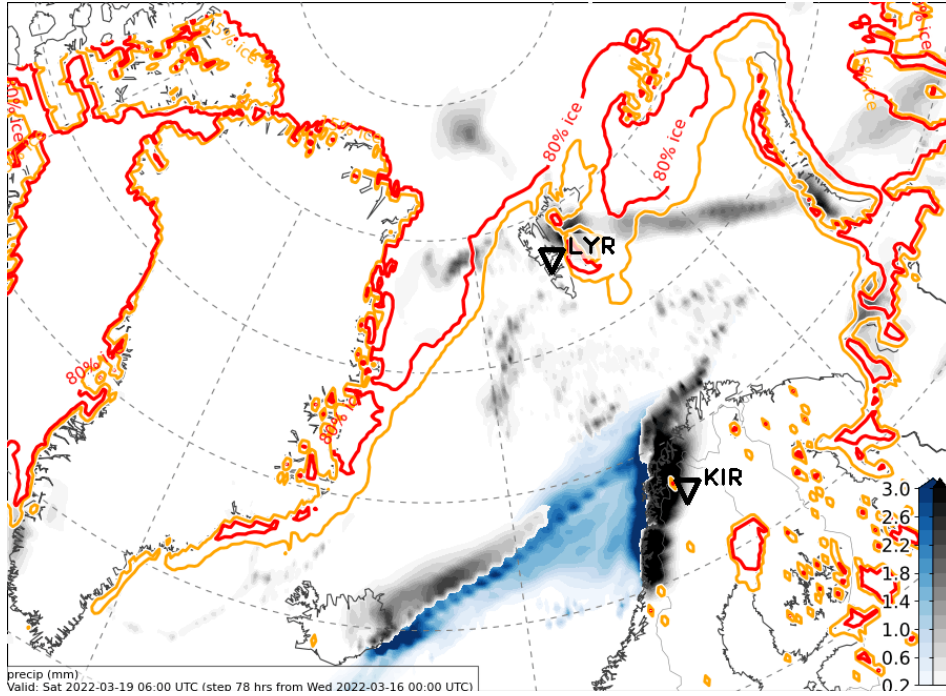
Cloud cover & precip development

2022-03-16 00 UTC: 78 – 114h

ECMWF + ICON

Sat, 2022-03-19 06 UTC (+78h)

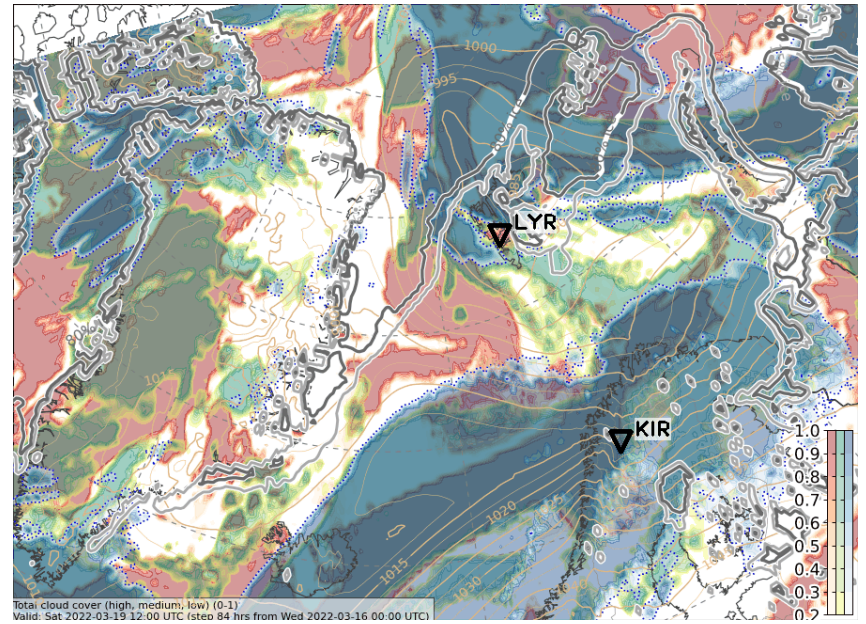
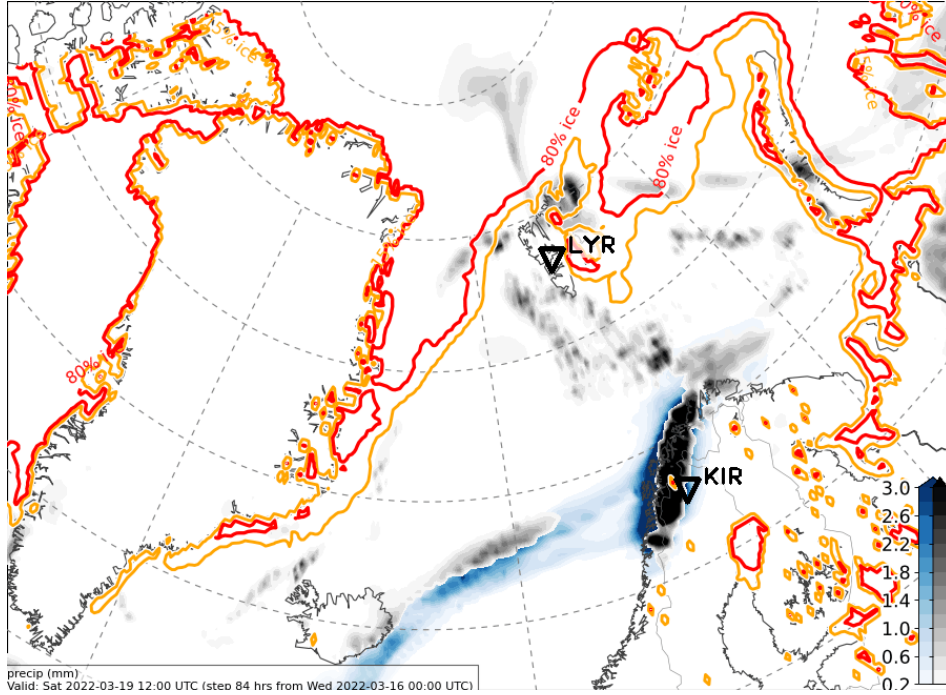
ECMWF



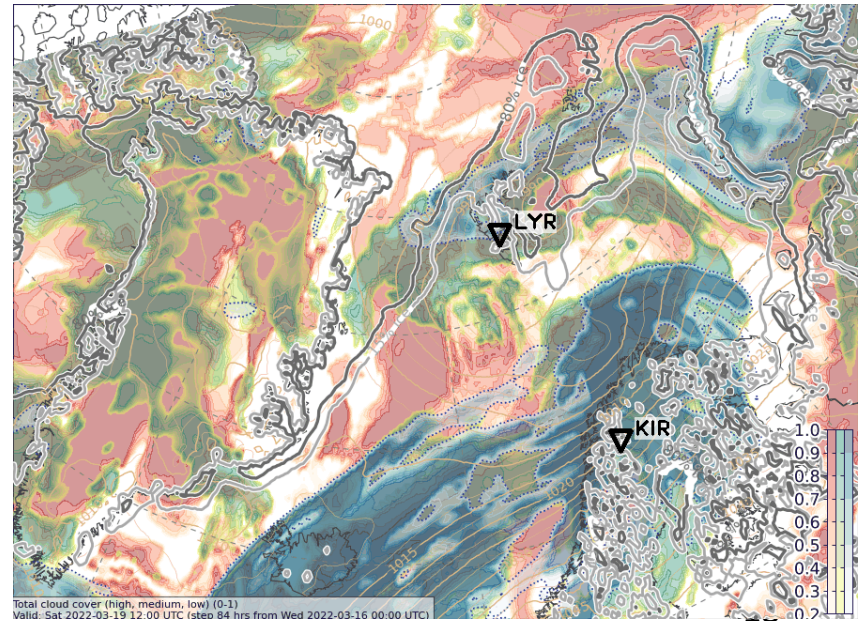
ICON

Sat, 2022-03-19 12 UTC (+84h)

ECMWF

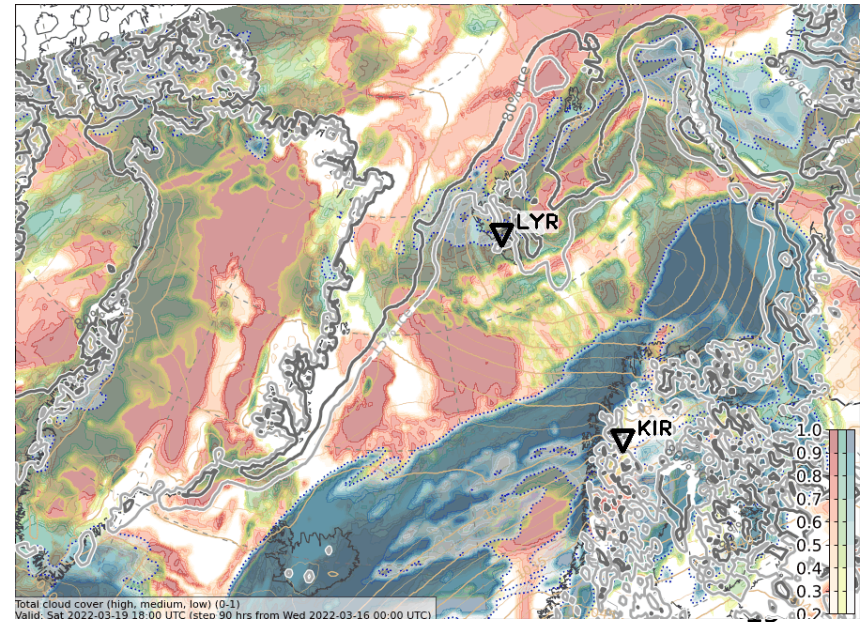
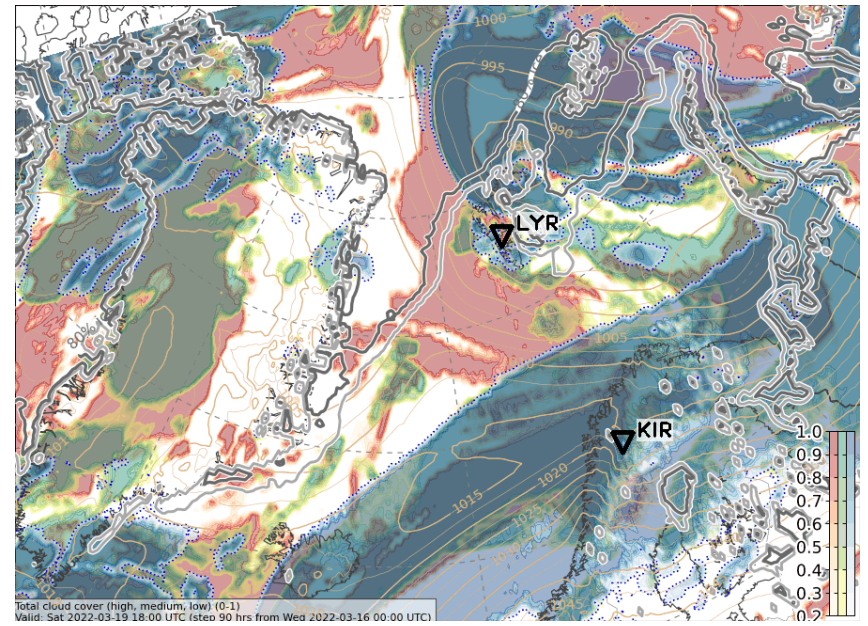
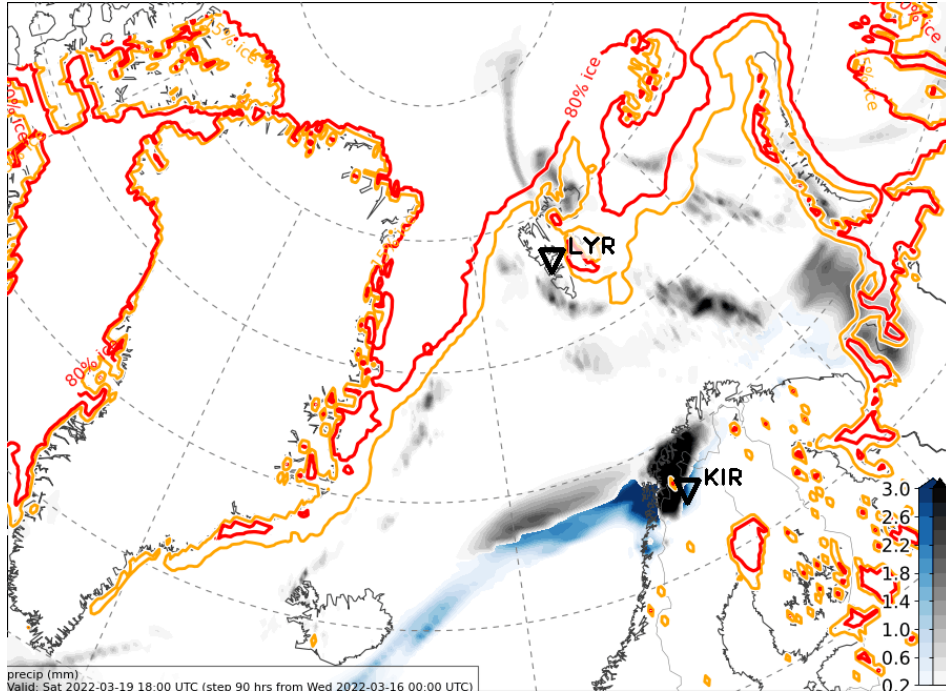


ICON



Sat, 2022-03-19 18 UTC (+90h)

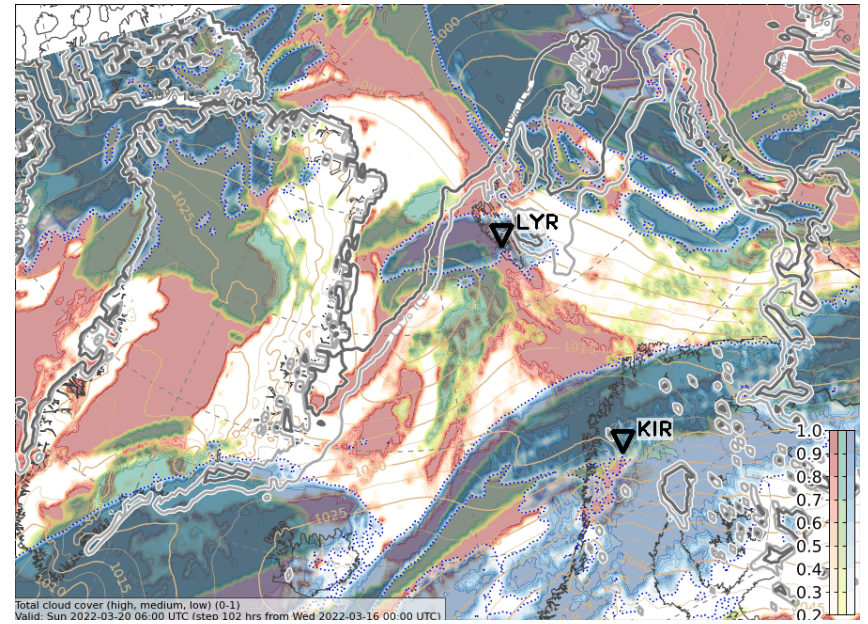
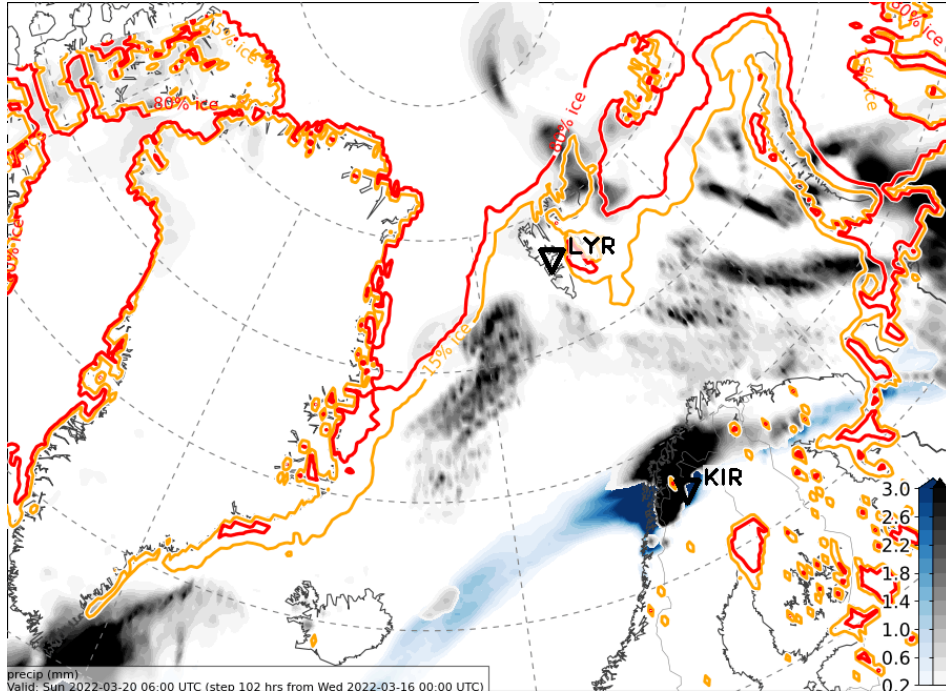
ECMWF



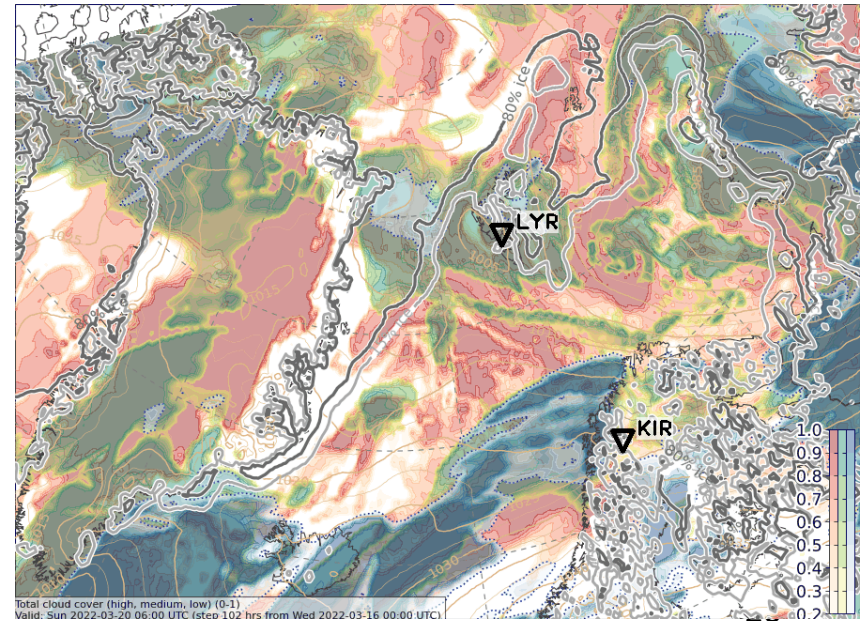
ICON

Sun, 2022-03-20 06 UTC (+102h)

ECMWF

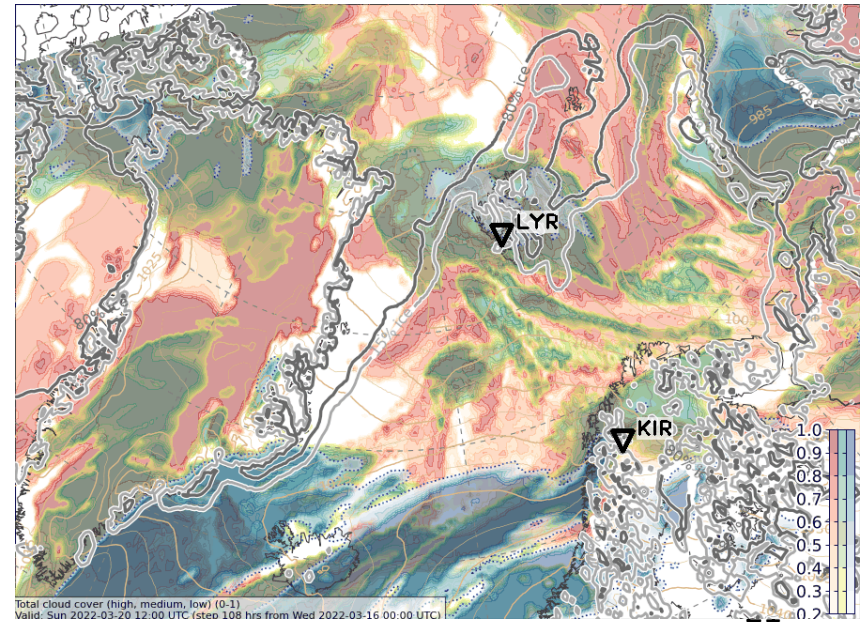
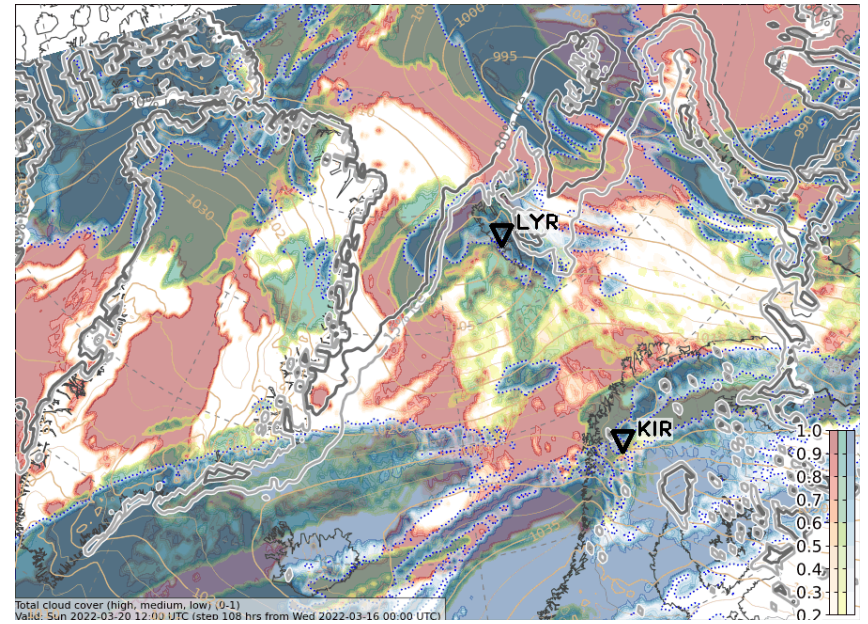
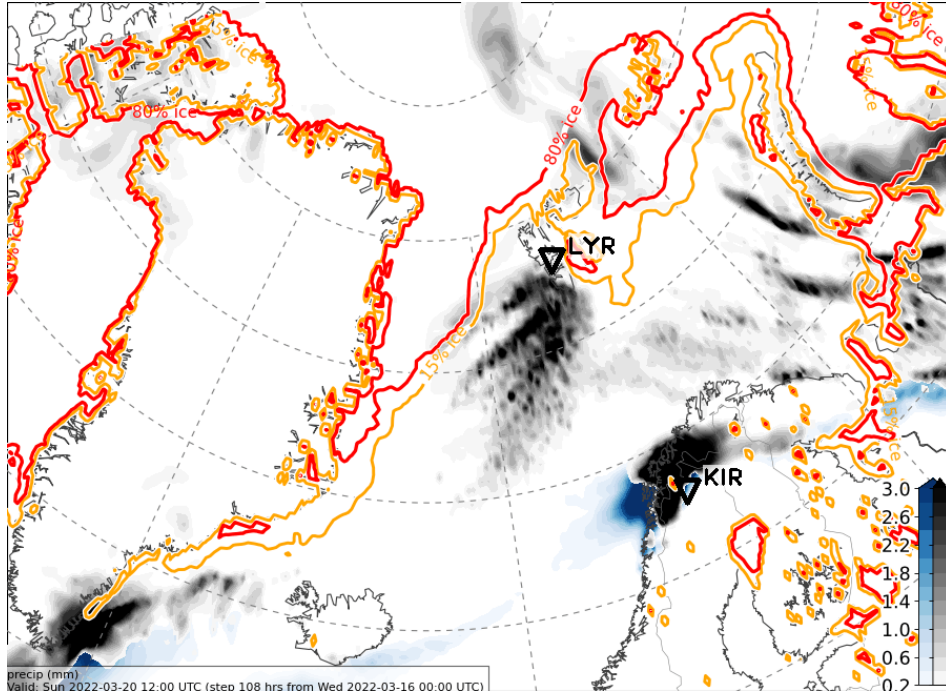


ICON



Sun, 2022-03-20 12 UTC (+108h)

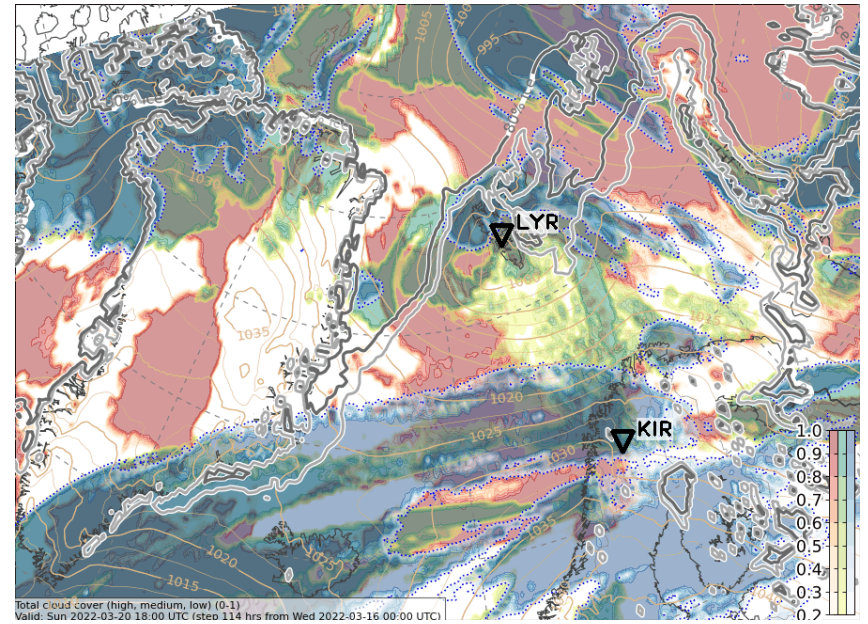
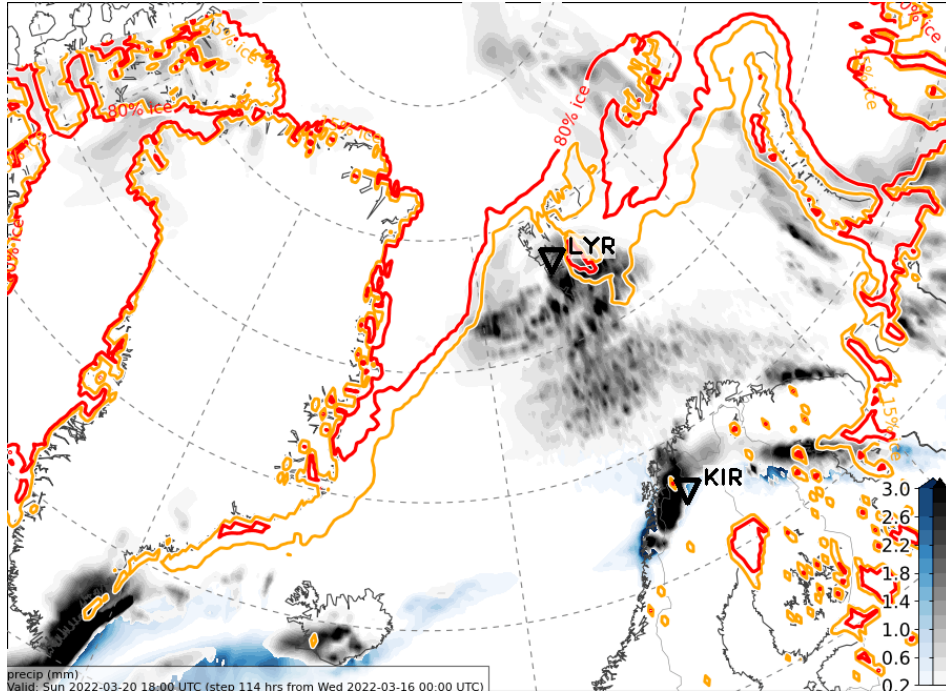
ECMWF



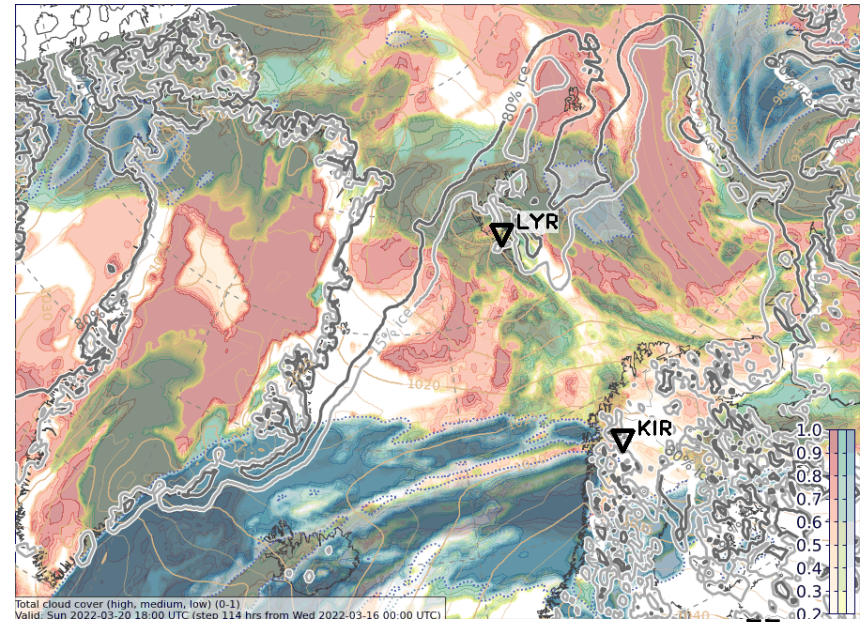
ICON

Sun, 2022-03-20 18 UTC (+114h)

ECMWF



ICON



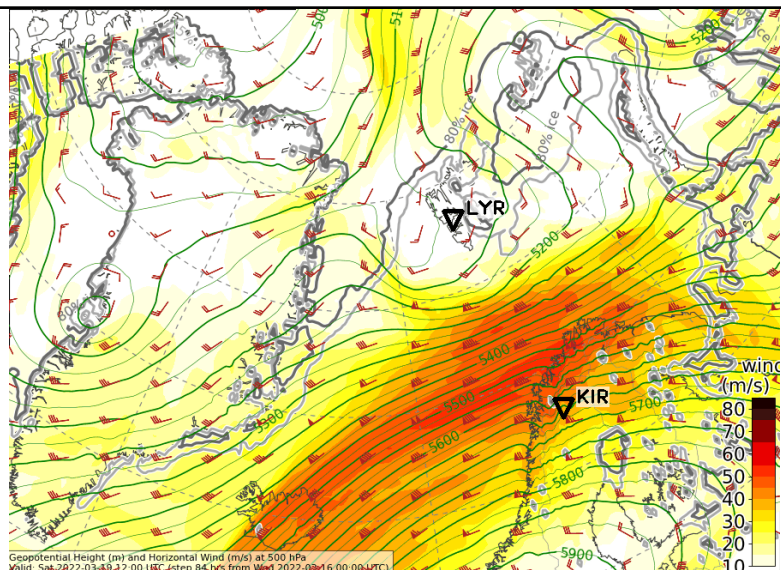
Extra variables

2022-03-16 00 UTC: 00 – 84h

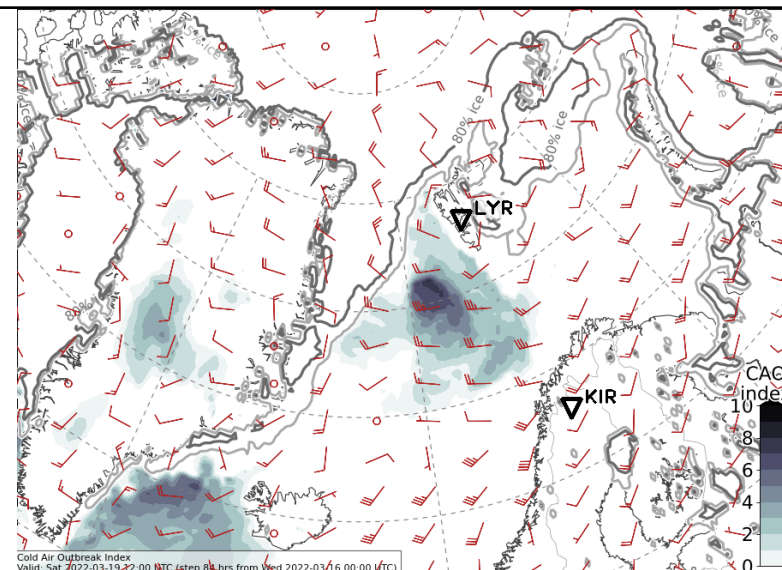
500 hPa wind & 850hPa θ_e & CAO & IVT

Sat, 2022-03-19 12 UTC (+84h)

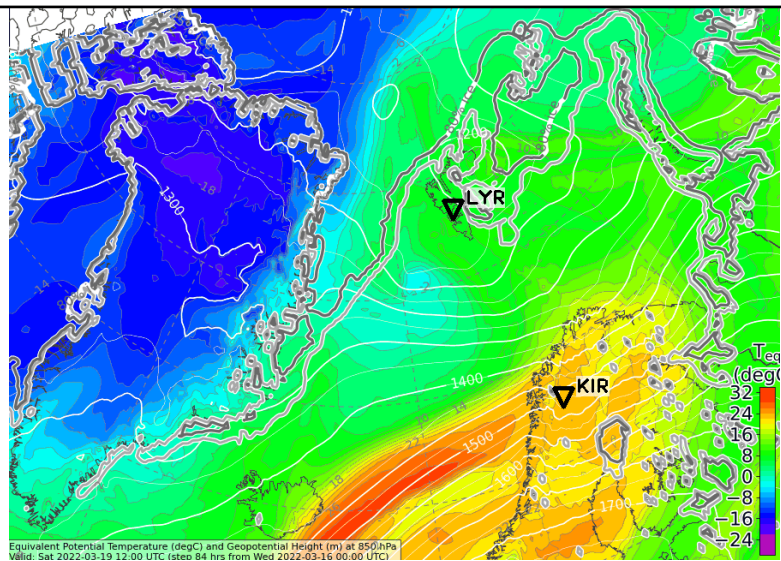
500 hPa Geopot. and Wind



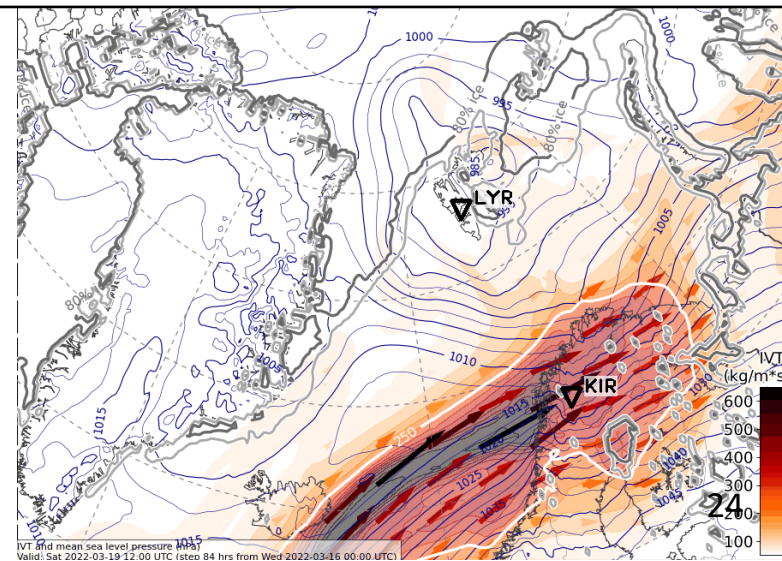
CAO Index



850 hPa Equiv. pot. temperature

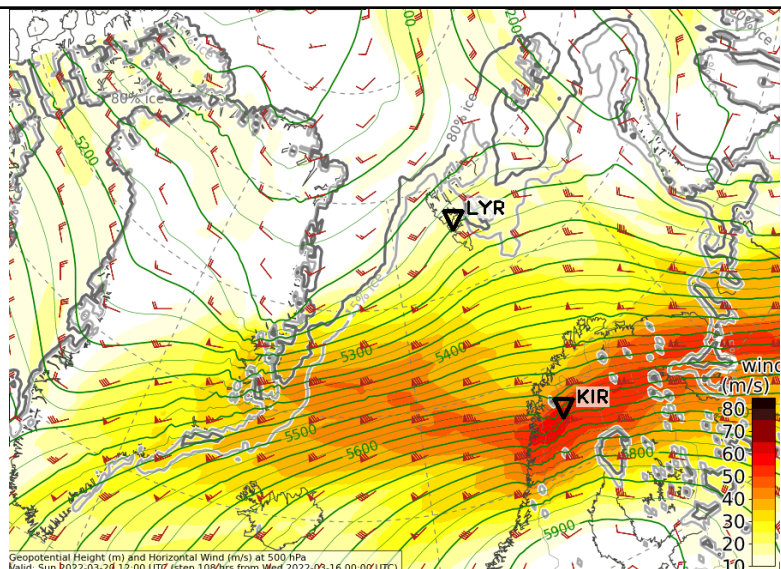


Integrated water vapour transport

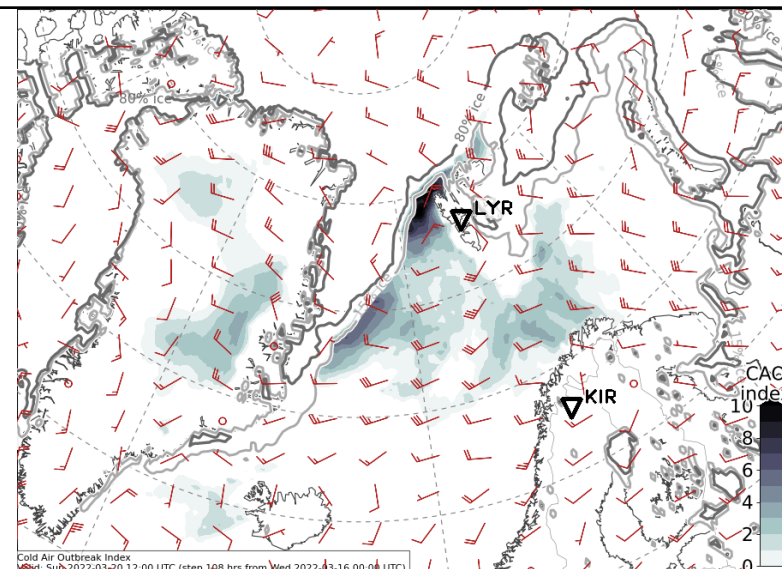


Sun, 2022-03-20 12 UTC (+108h)

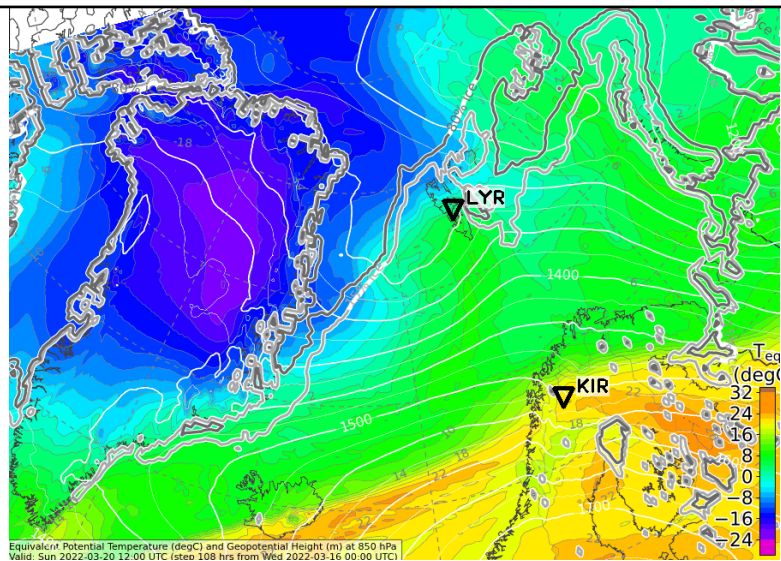
500 hPa Geopot. and Wind



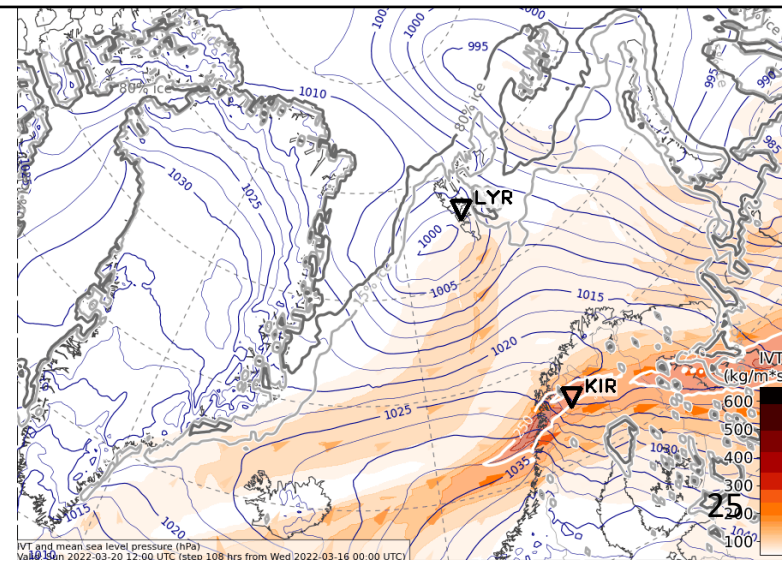
CAO Index



850 hPa Equiv. pot. temperature



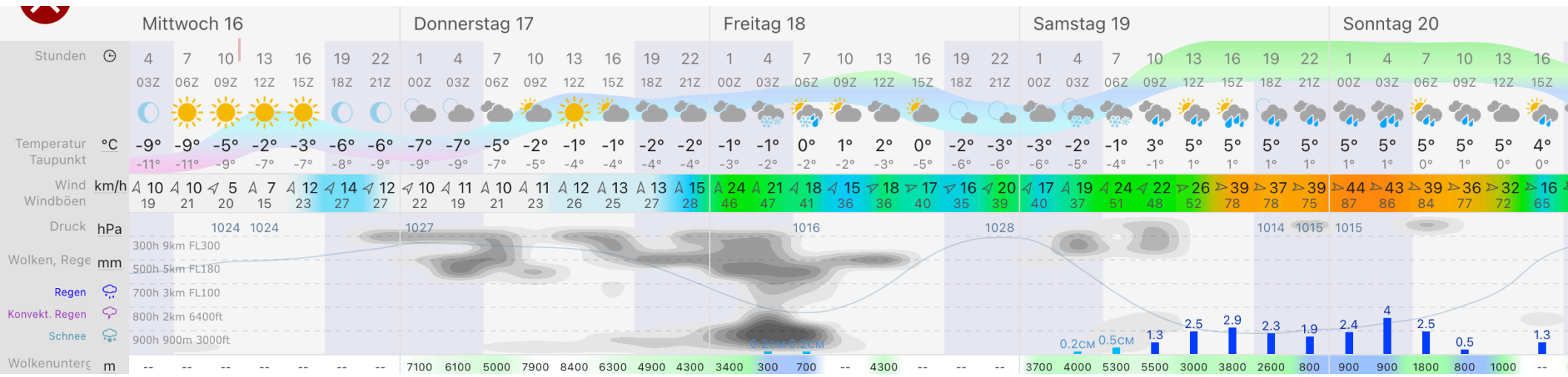
Integrated water vapour transport



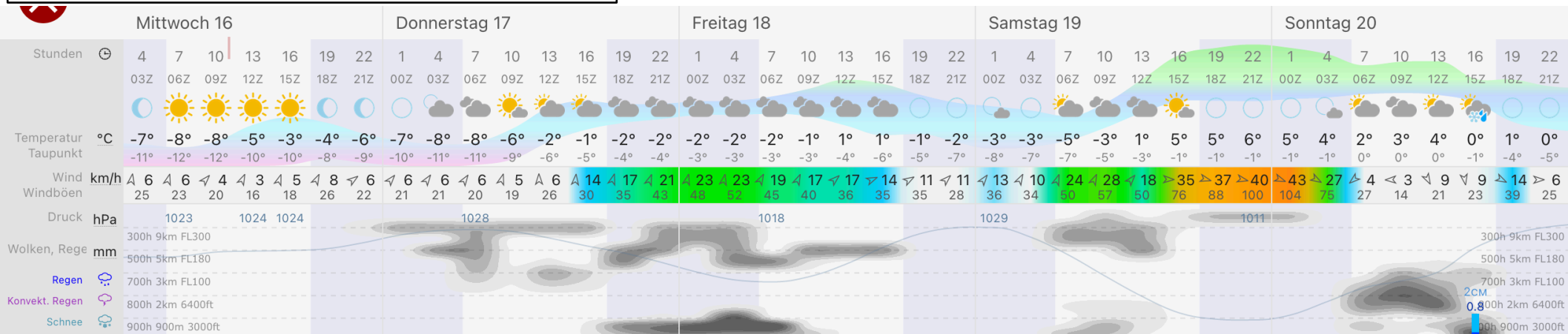
Airport meteograms
2022-03-16 00 UTC: 00 – 117h

Kiruna:

ECMWF



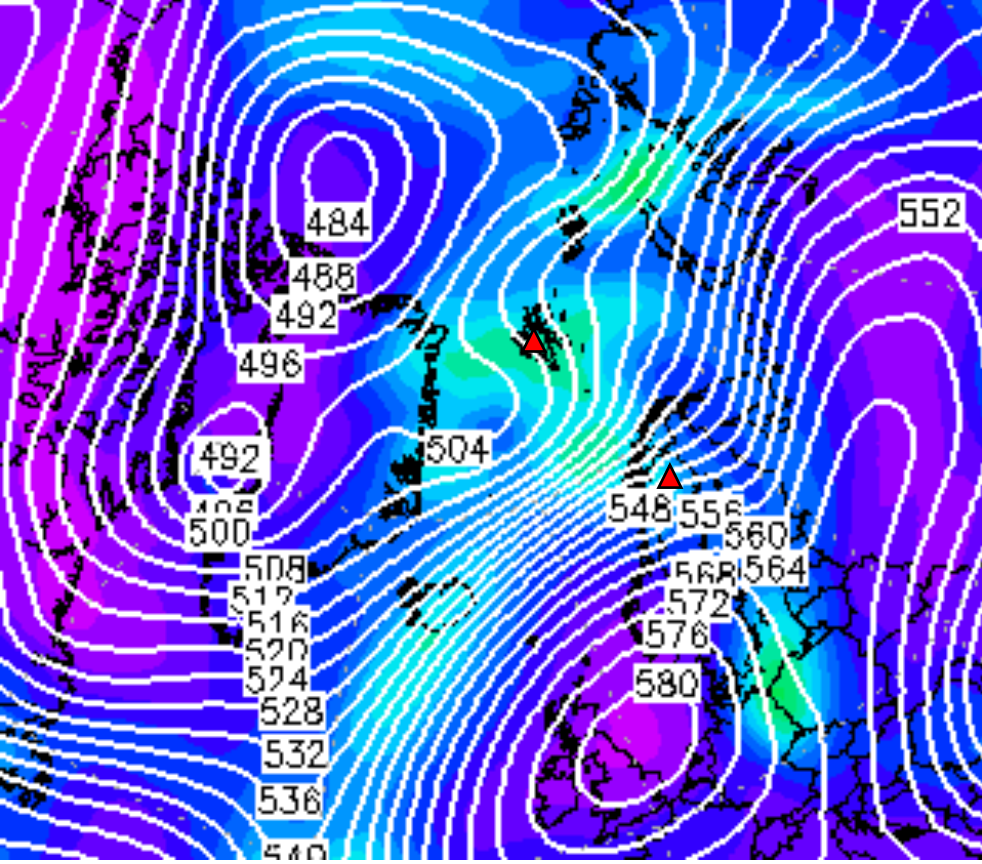
ICON



Forecast uncertainty
2022-03-16 00 UTC: 72 – 96h

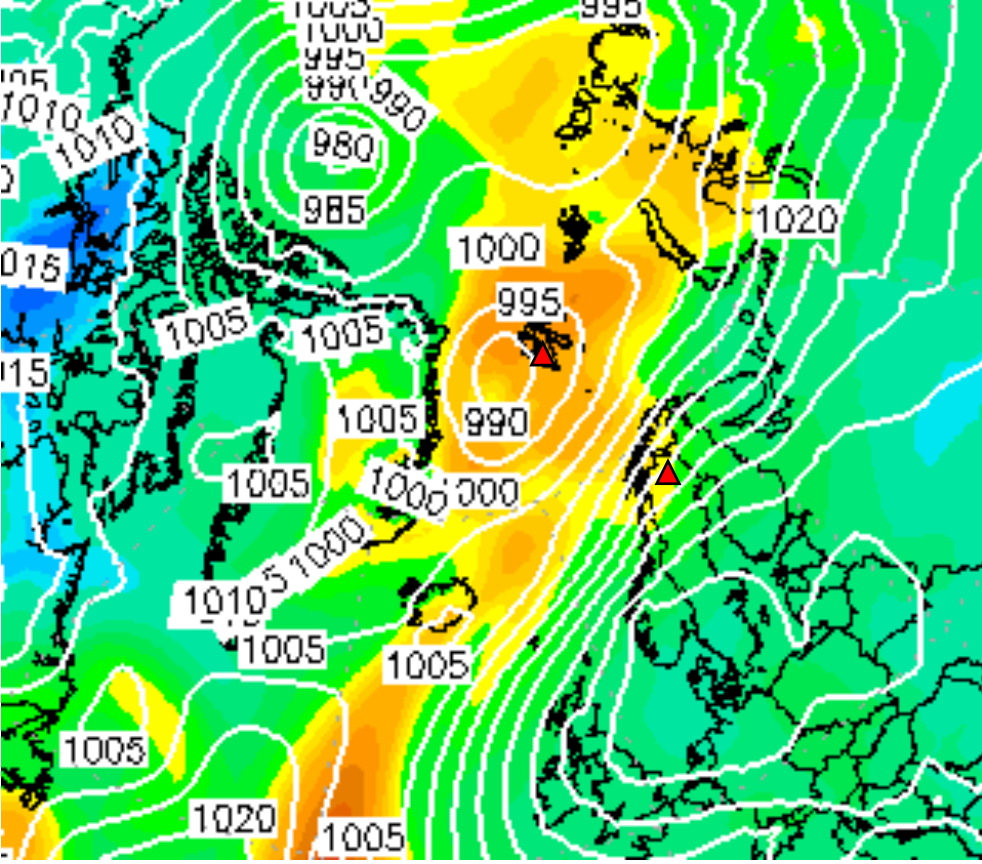
Saturday, 2022-03-19 00 UTC (+72h)

500 hPa Geopot



gdam

Sfc pressure

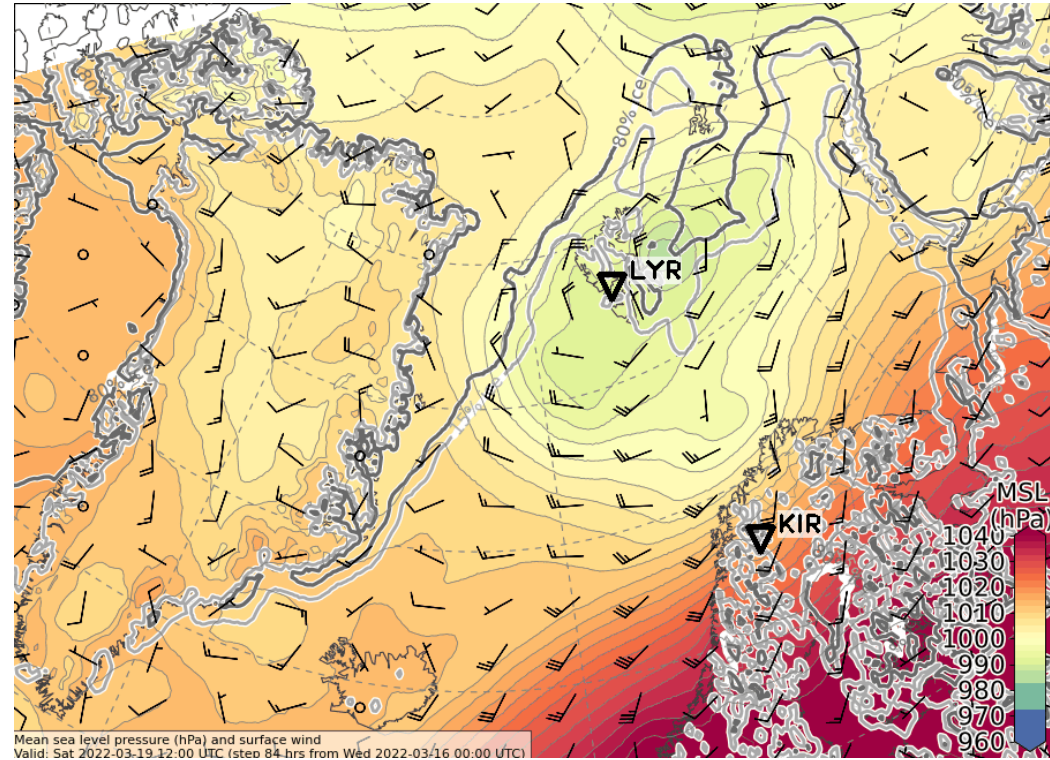
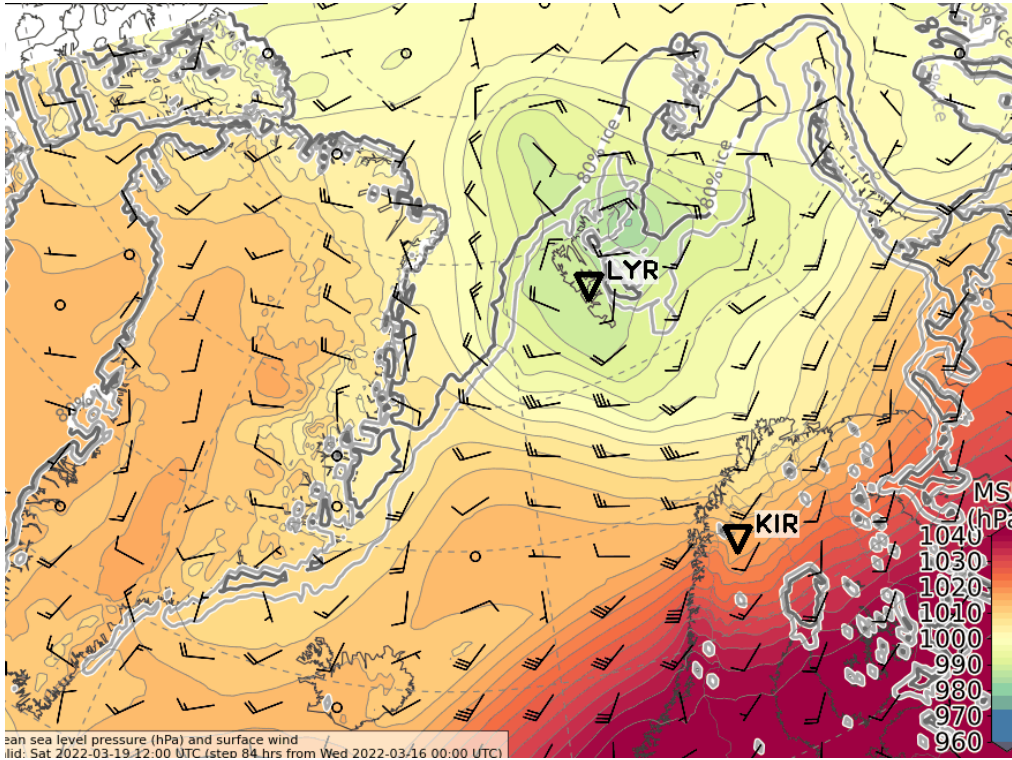


hPa

Saturday, 2022-03-19 12 UTC (+84h)

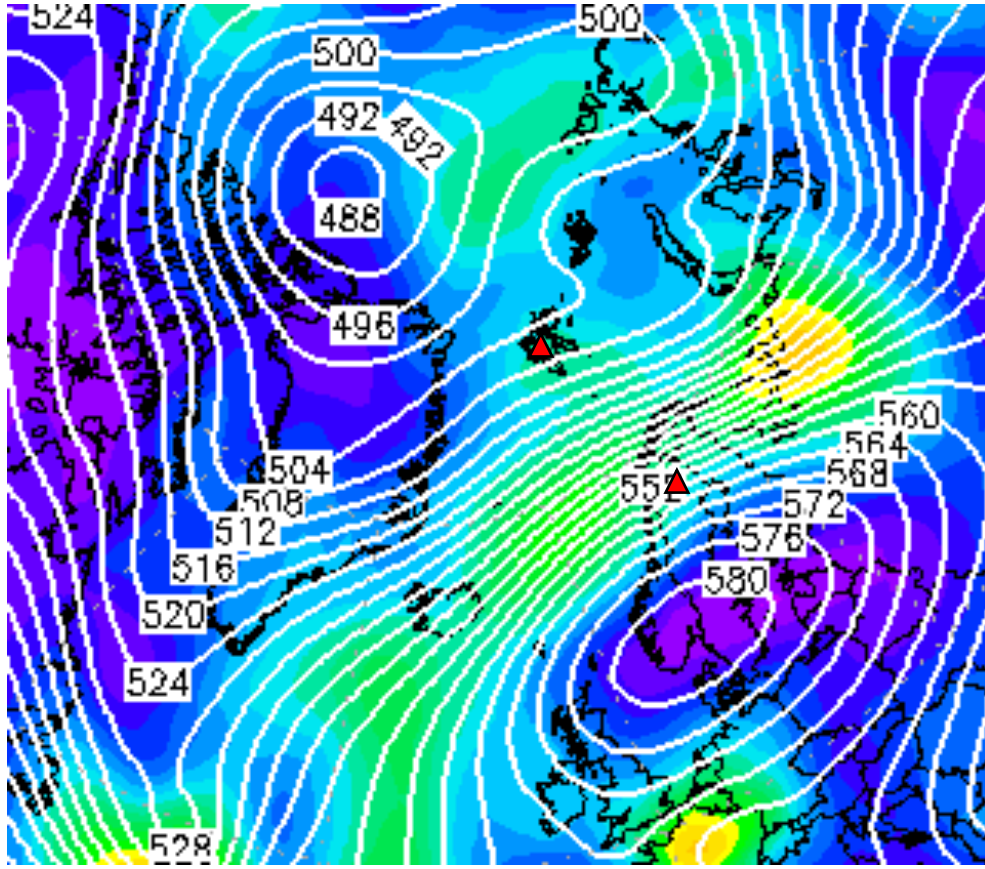
ECMWF

ICON



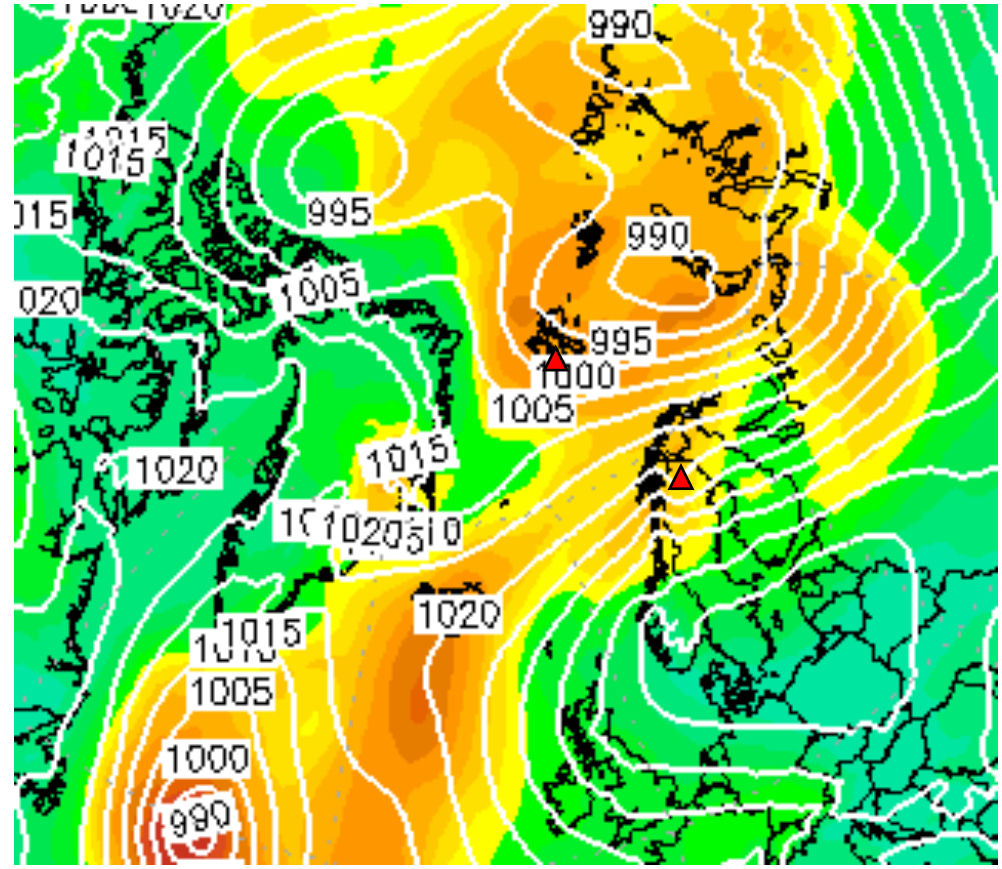
Sunday, 2022-03-20 00 UTC (+96h)

500 hPa Geopot



gdam

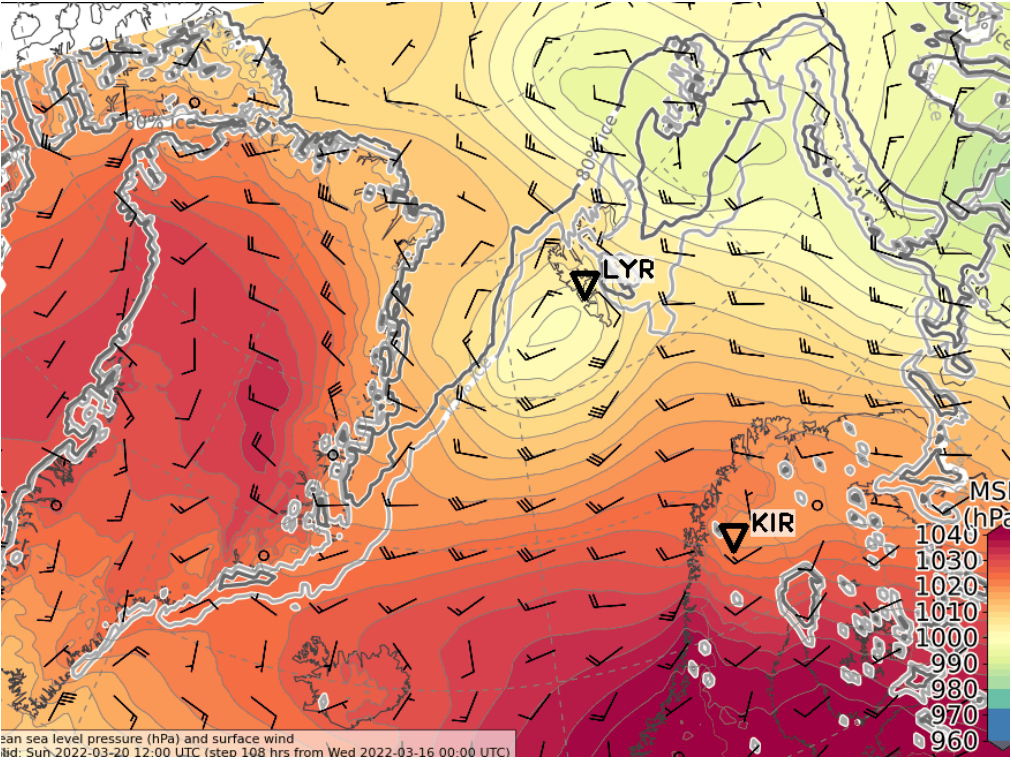
Sfc pressure



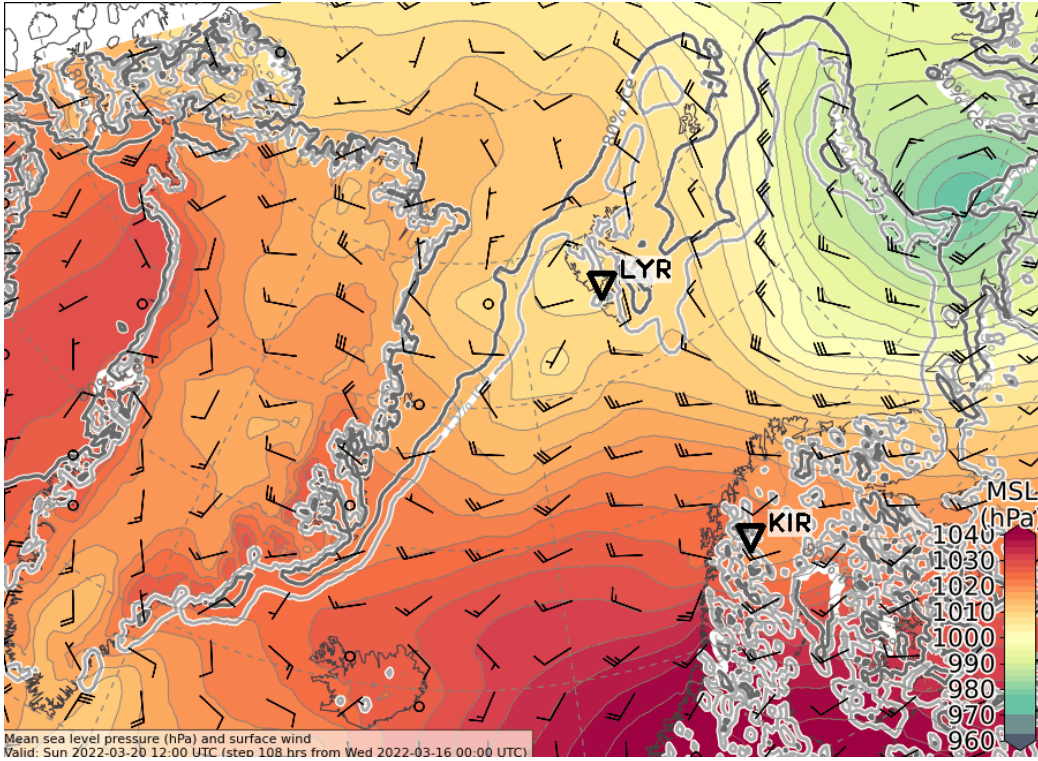
hPa

Sunday, 2022-03-20 12 UTC (+108h)

ECMWF



ICON



Summary

Summary: Weather Briefing 2022-03-16

•Wednesday 2022-03-16 - Friday 2022-03-18:

- General (upper level) flow pattern changes from south to southwest
- Low pressure system moves along sea ice edge towards Svalbard

•Saturday, 2022-03-19:

- Low pressure system located over Svalbard causing low level clouds and precipitation
- CAA (from Greenland & central Arctic) over sea ice in Fram Strait
- Location and intensity of low pressure system still uncertain
- Atmospheric river directed towards Scandinavia

•Sunday, 2022-03-20:

- General (upper level) flow pattern changed to zonal east-west flow
- New, developing low pressure system over Fram Strait approaching Svalbard
- CAA (from Greenland & central Arctic) over sea ice in Fram Strait
- Location and intensity of low pressure system still uncertain