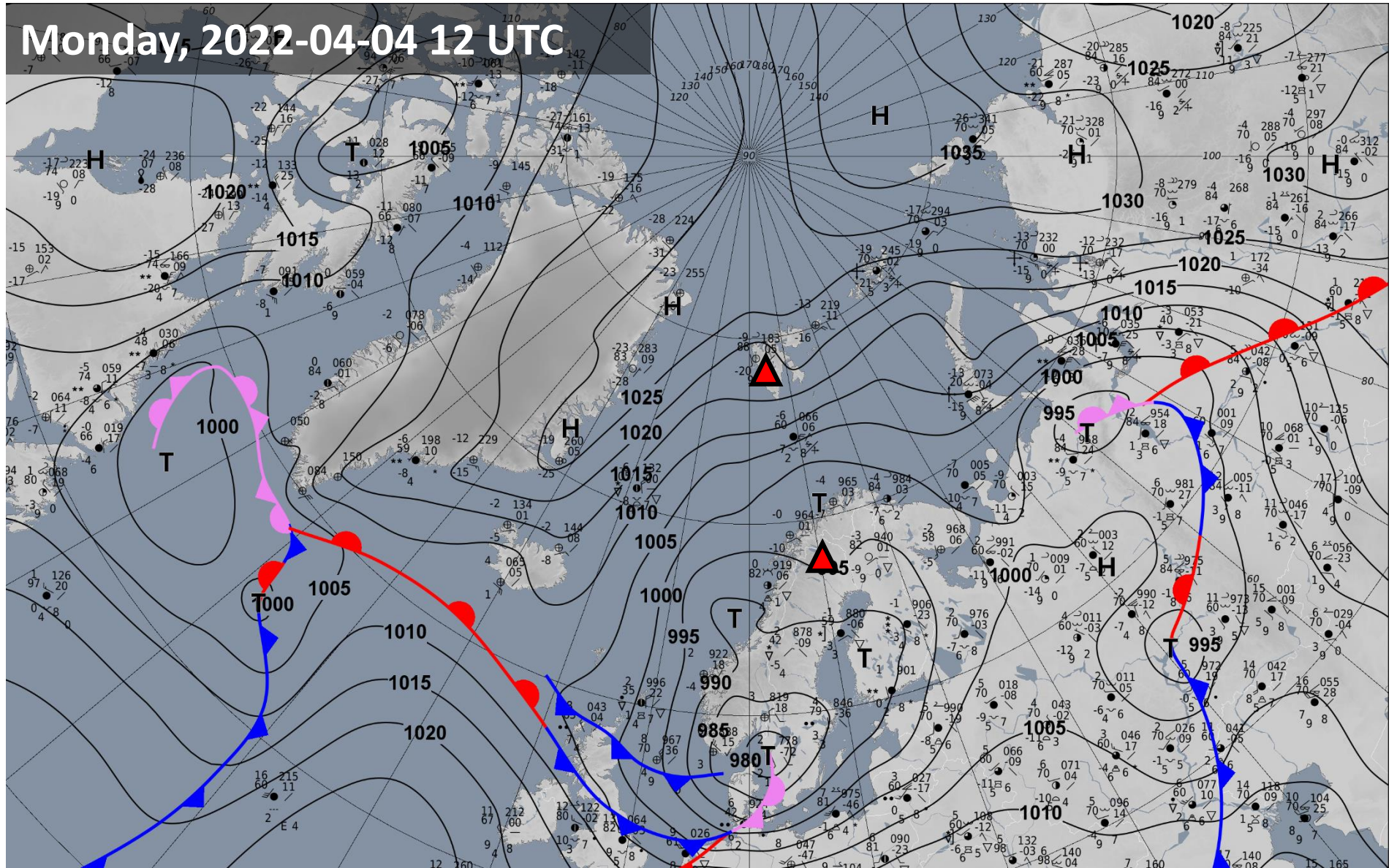


Weather briefing HALO-(AC)³

Monday, 2022-04-04, 17:00 LT

Surface Analysis
Monday, 2022-04-04 12 UTC
DWD

Monday, 2022-04-04 12 UTC



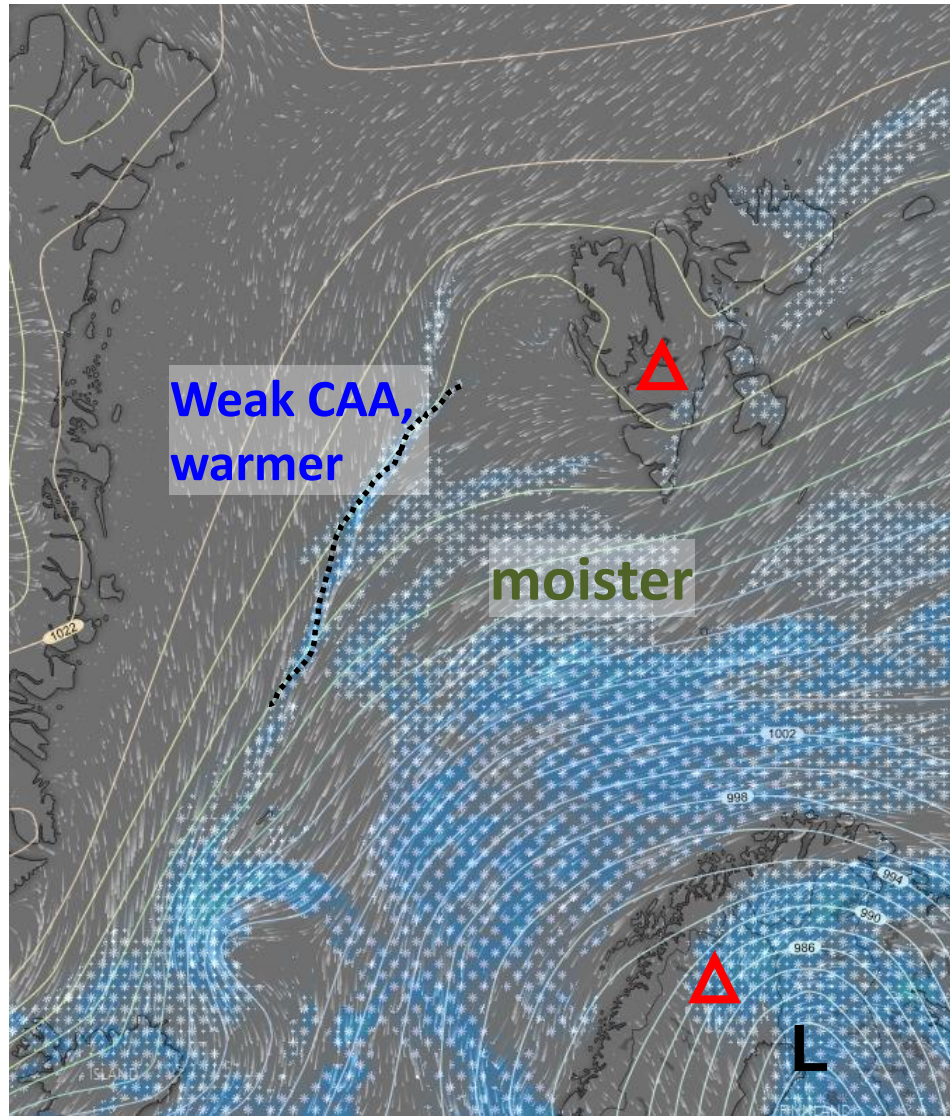
Surface wind development and precipitation

2022-04-04 00 UTC: 36 – 108h

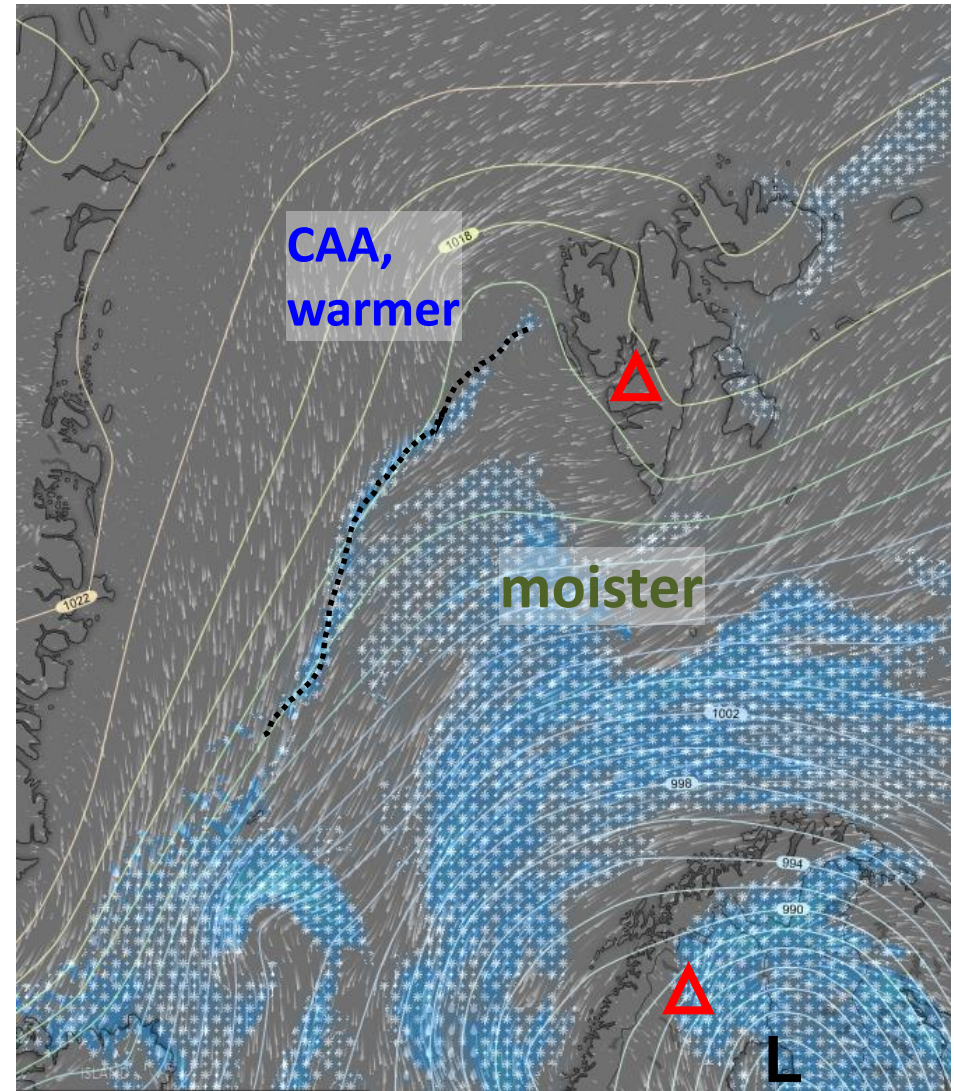
ECMWF & ICON

Tuesday, 2022-04-05 12 UTC (+36h)

ECMWF

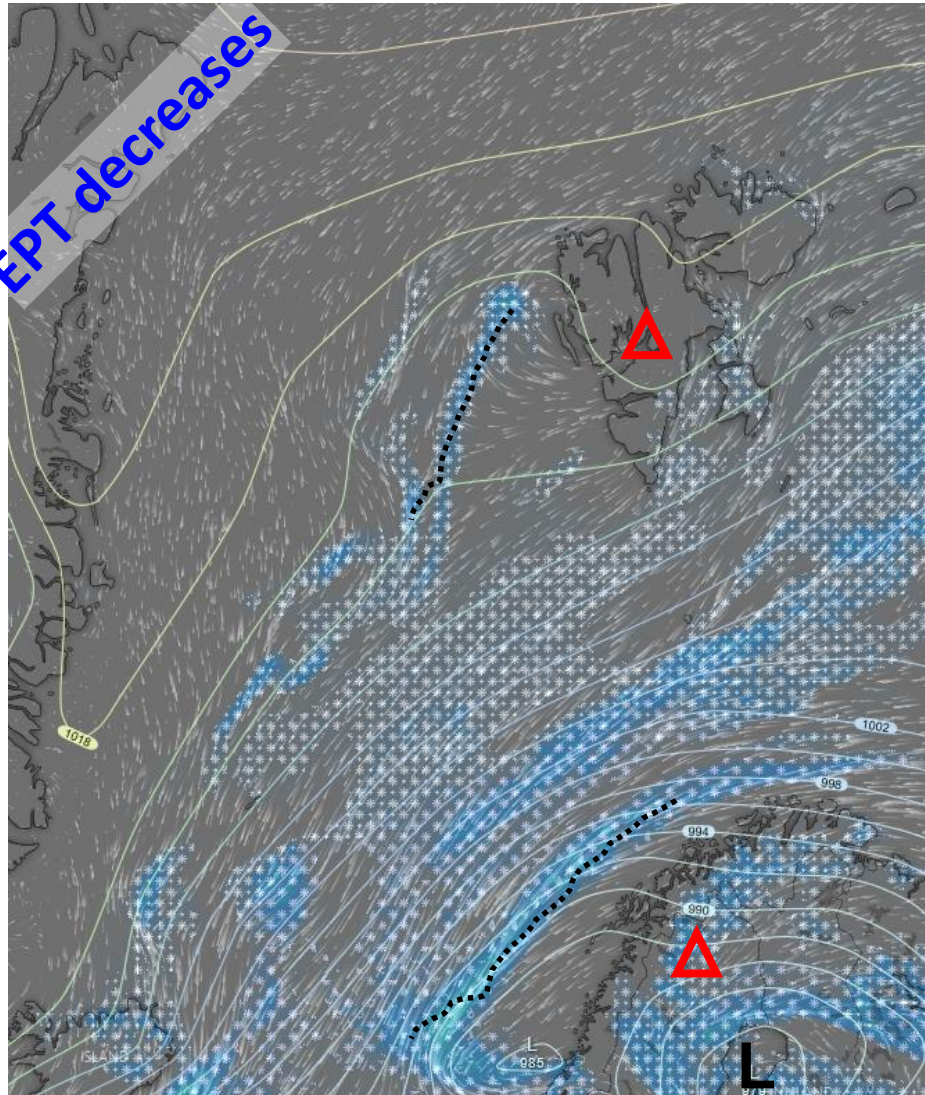


ICON

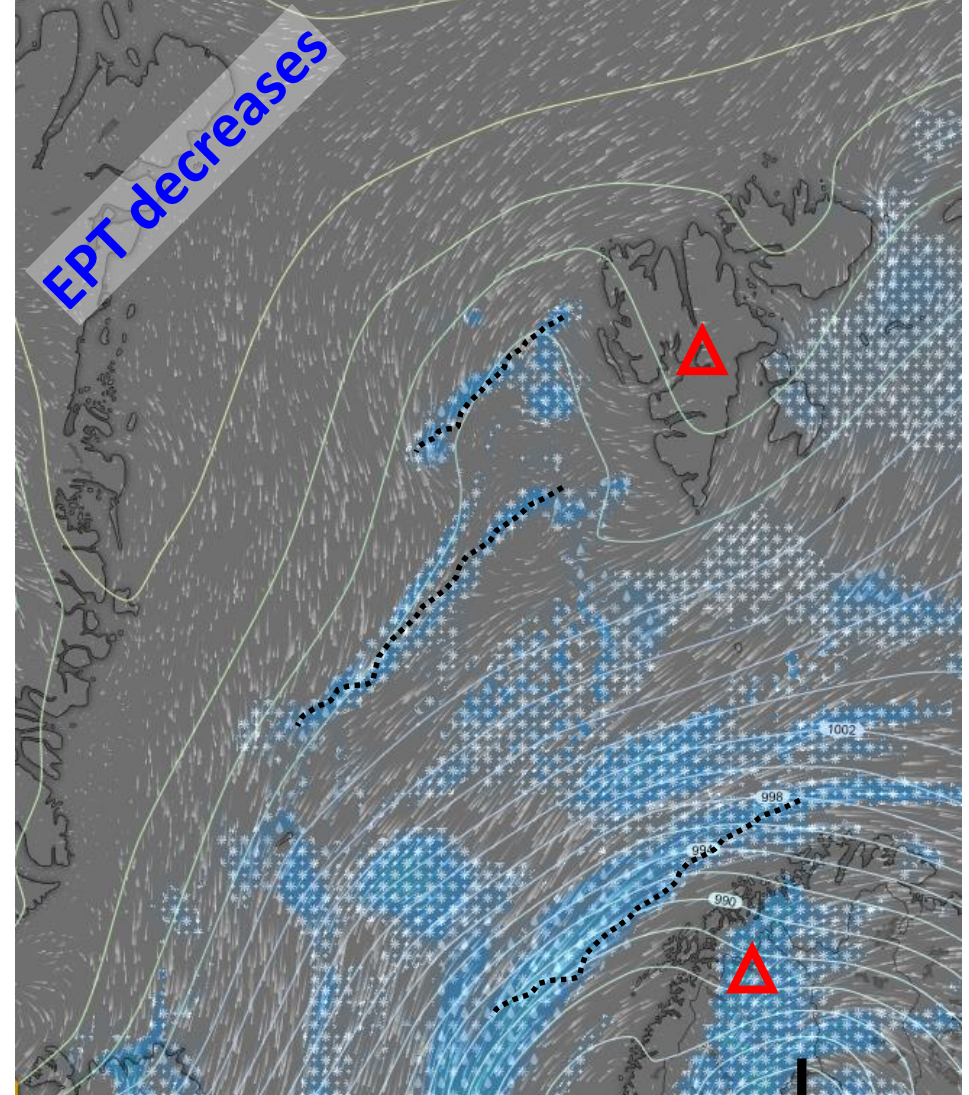


Wednesday, 2022-04-06 12 UTC (+60h)

ECMWF

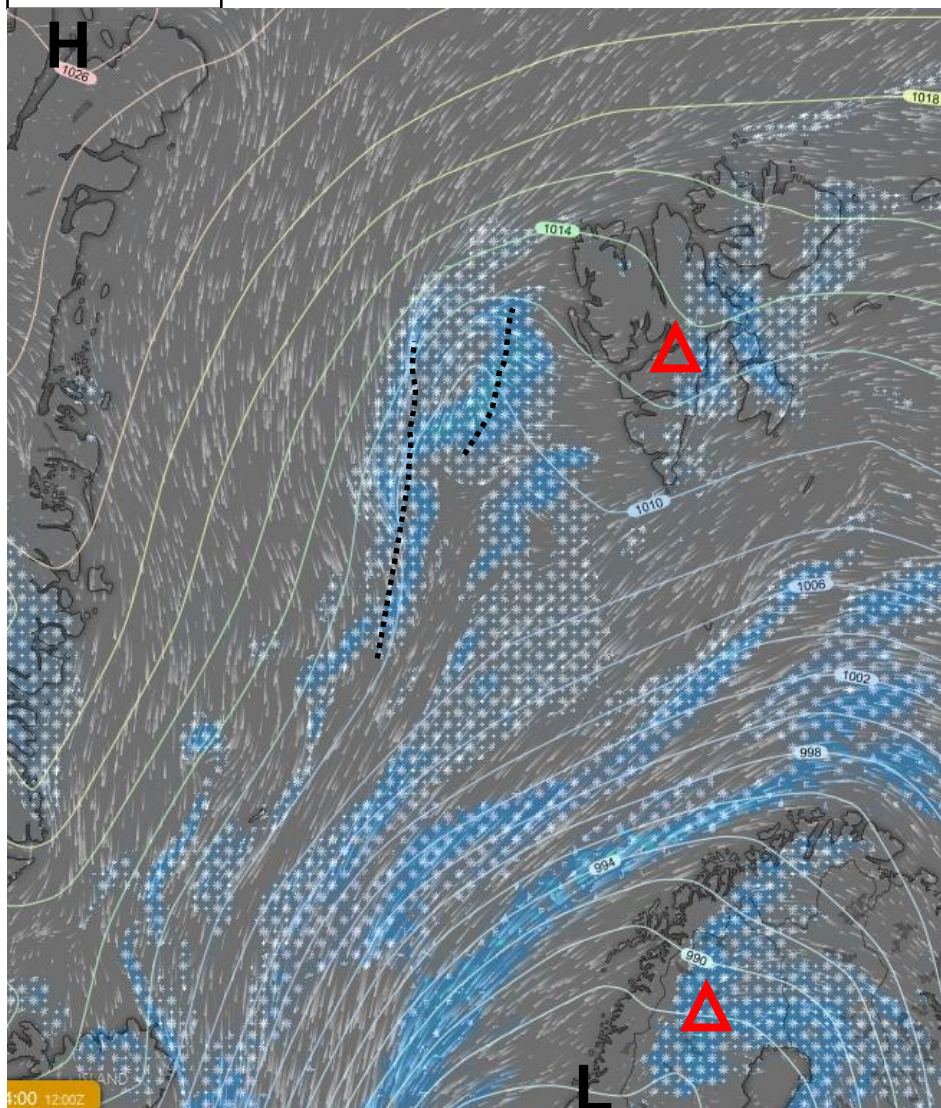


ICON

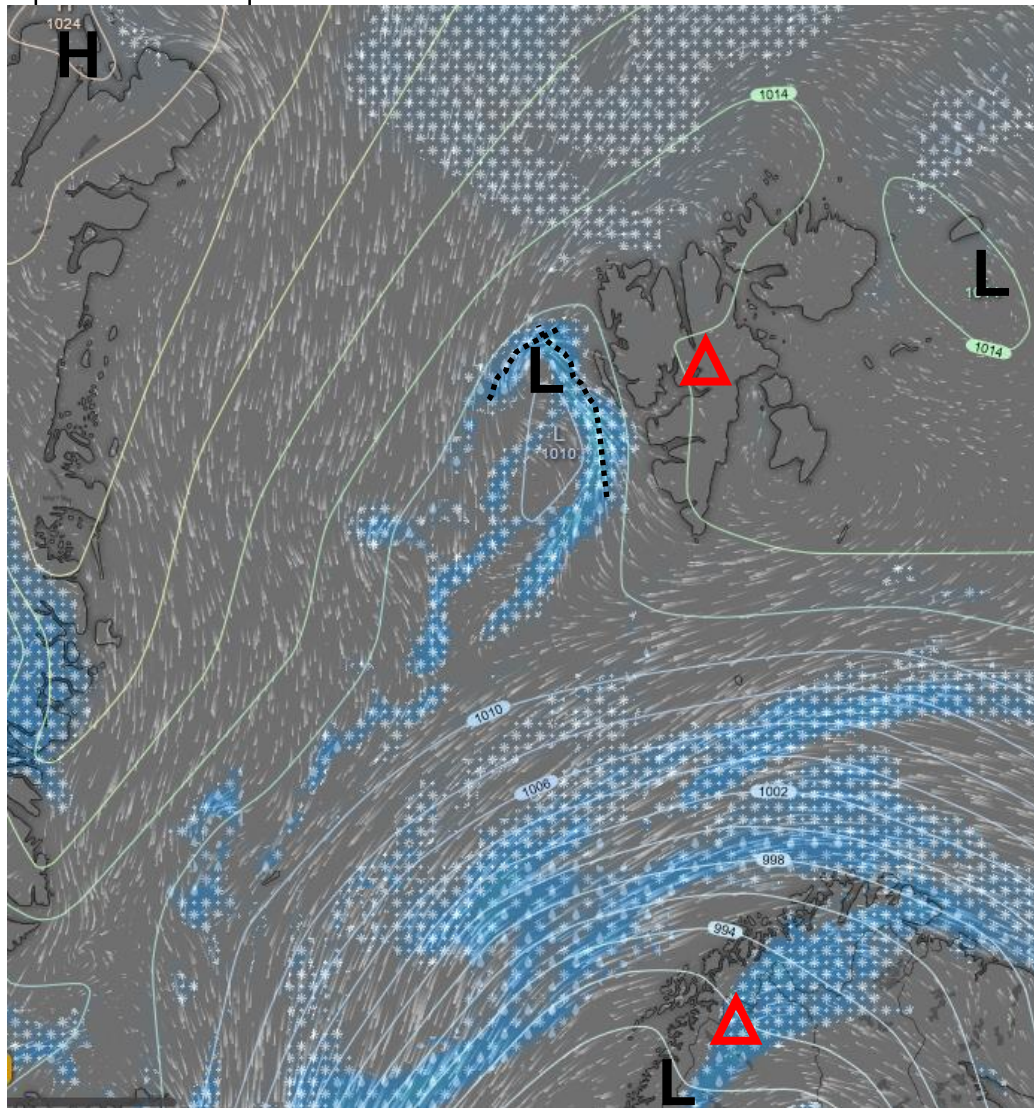


Thursday, 2022-04-07 12 UTC (+84h)

ECMWF

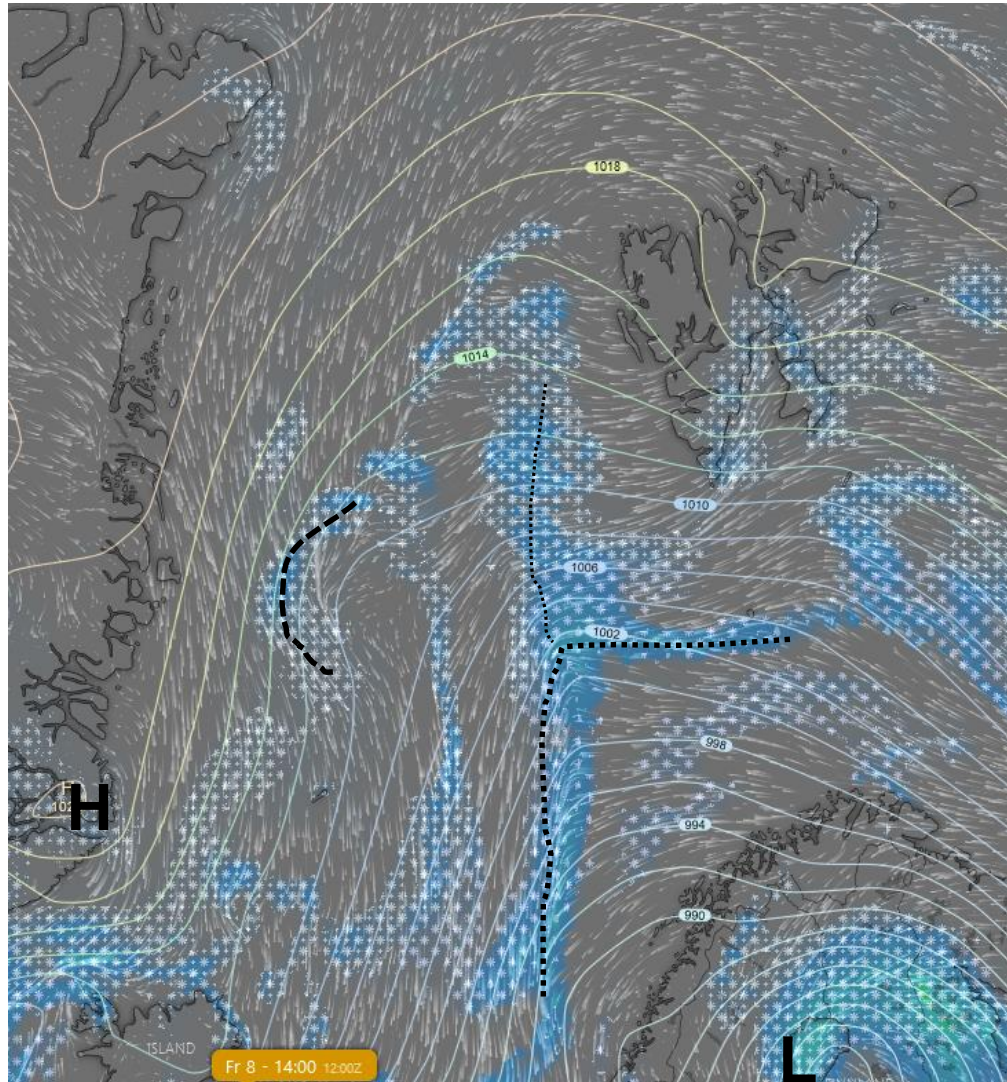


ICON

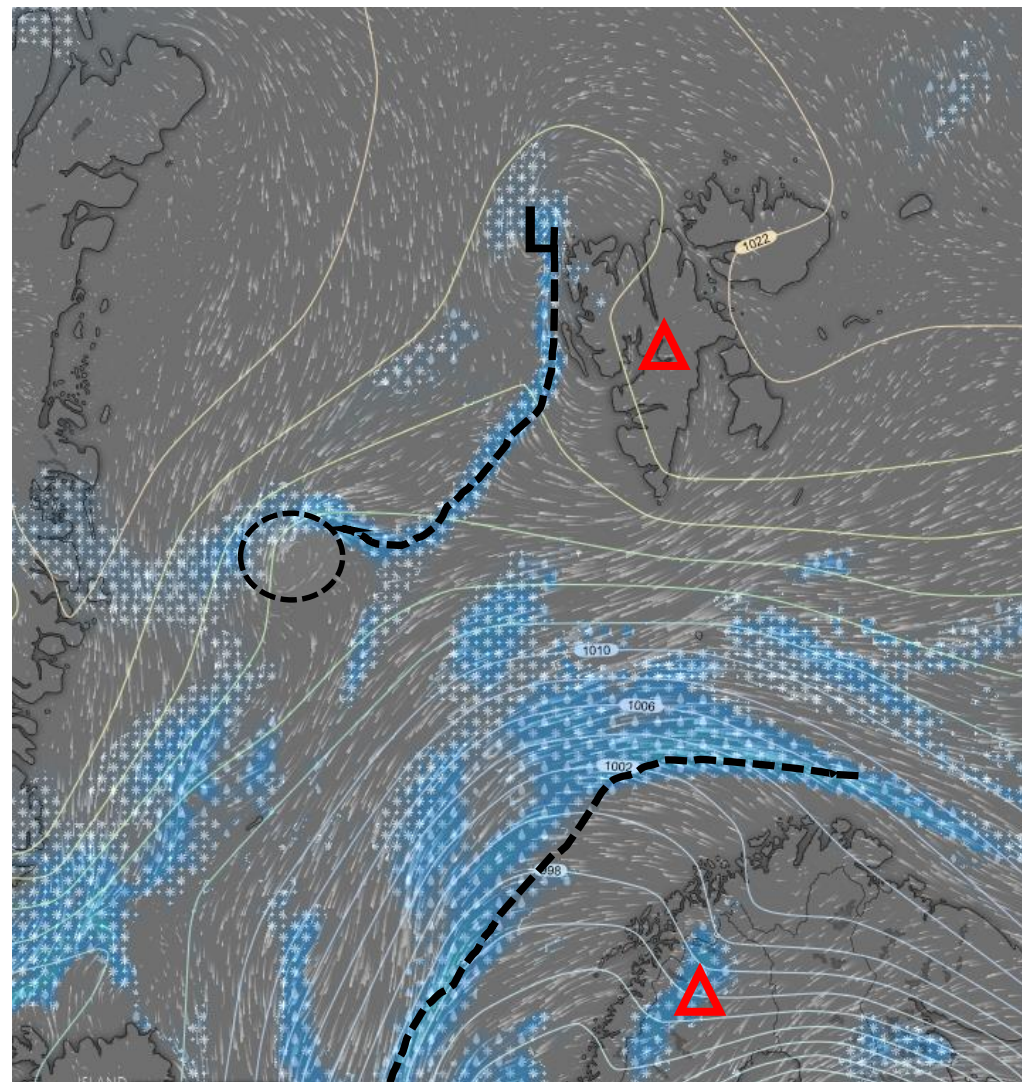


Friday, 2022-04-08 12 UTC (+108h)

ECMWF



ICON



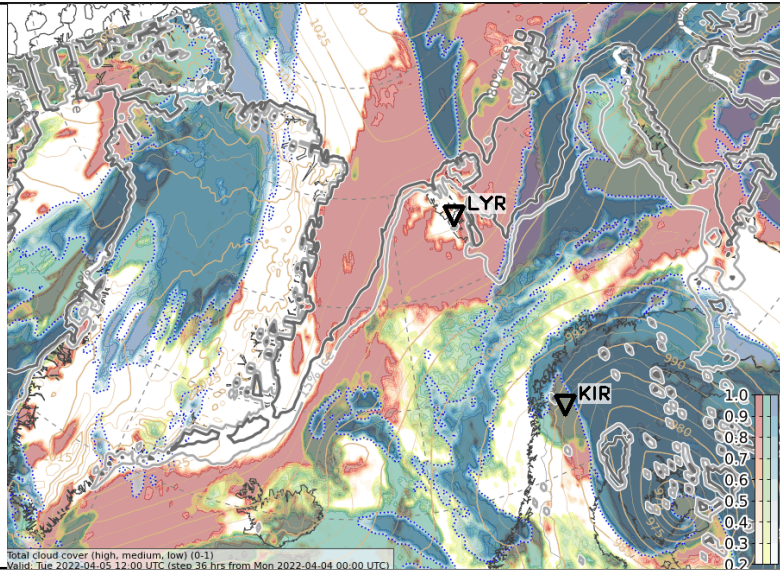
Cloud cover, CAO index, Airmasses, IVT

2022-03-17 00 UTC: 36 – 108h

Cloud cover & 850hPa θ_e & CAO & IVT

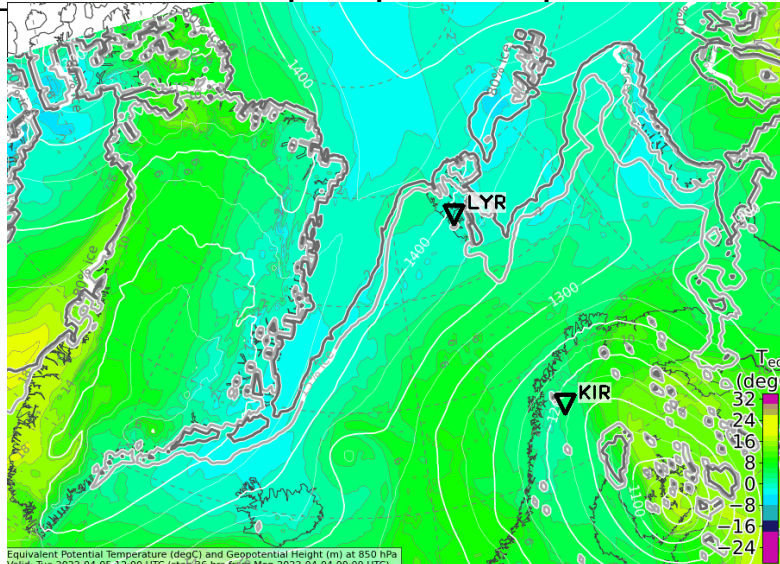
Tue, 2022-04-05 12 UTC (+36h)

Total cloud cover

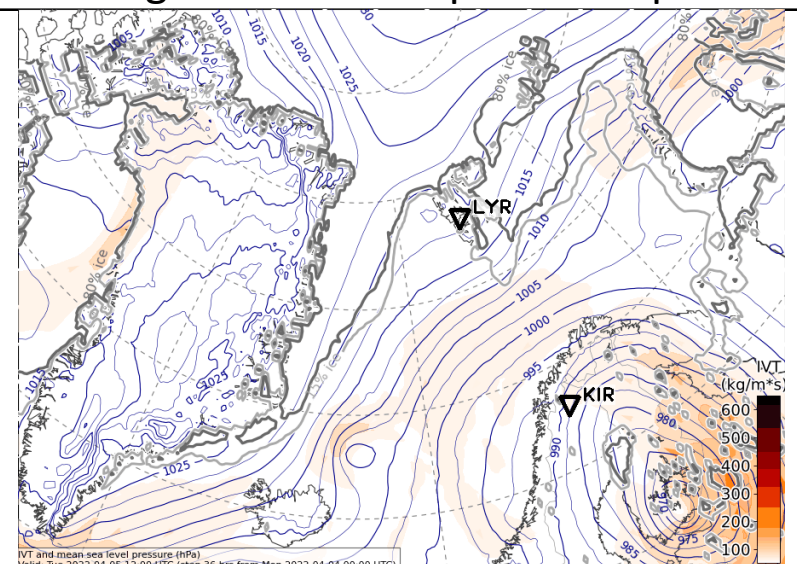


CAO Index

850 hPa Equiv. pot. temperature

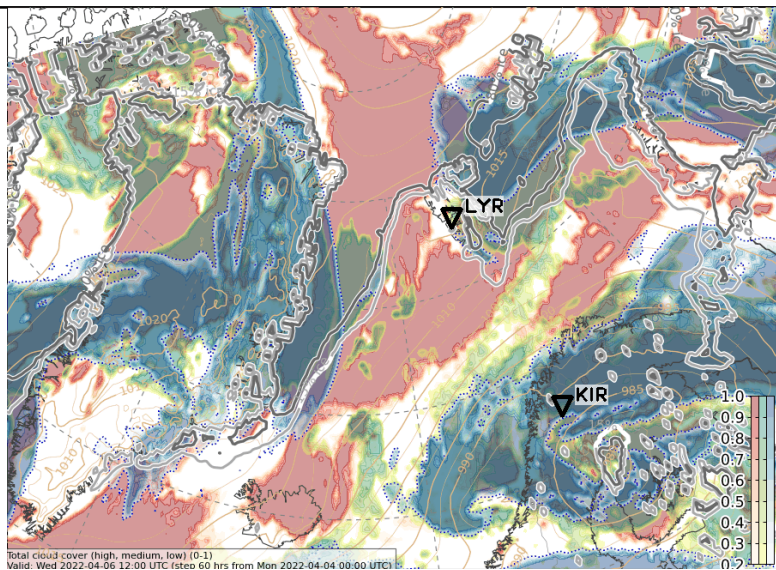


Integrated water vapour transport

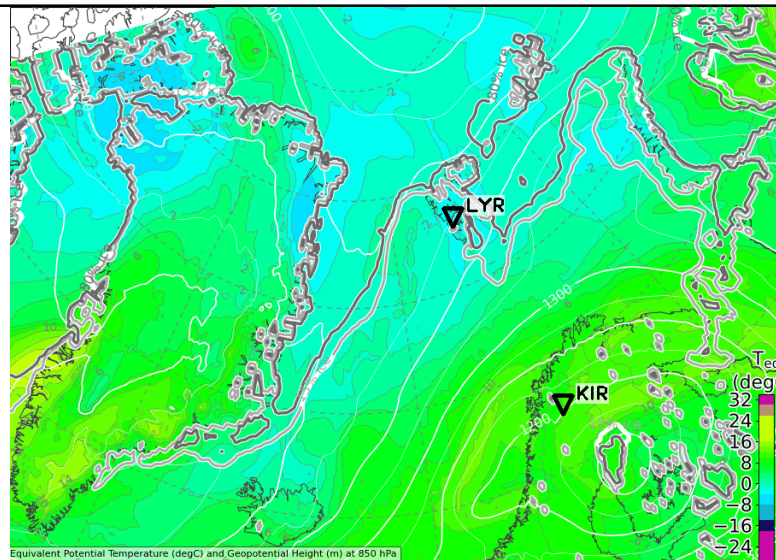


Wed, 2022-04-06 12 UTC (+60h)

Total cloud cover

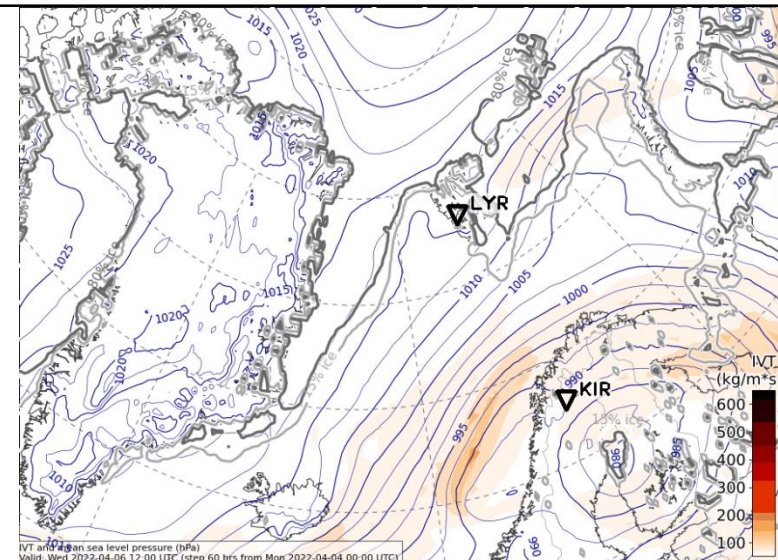


850 hPa Equiv. pot. temperature



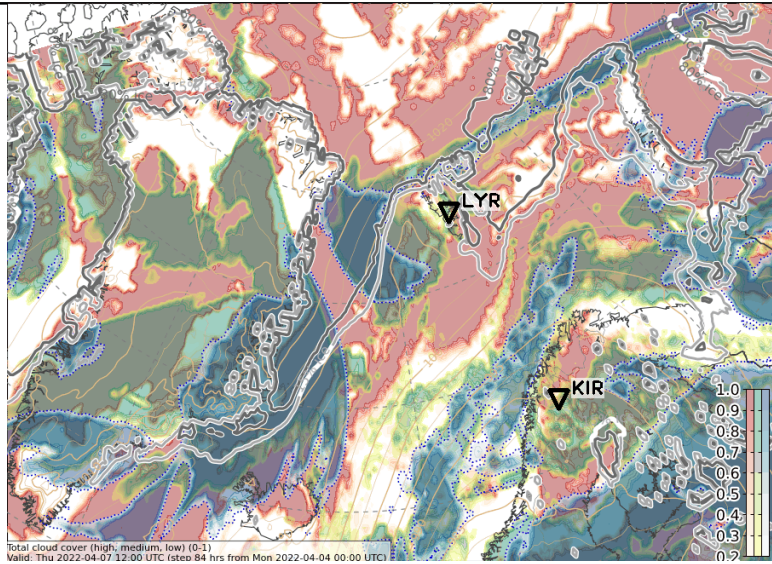
CAO Index

Integrated water vapour transport



Thu, 2022-04-07 12 UTC (+84h)

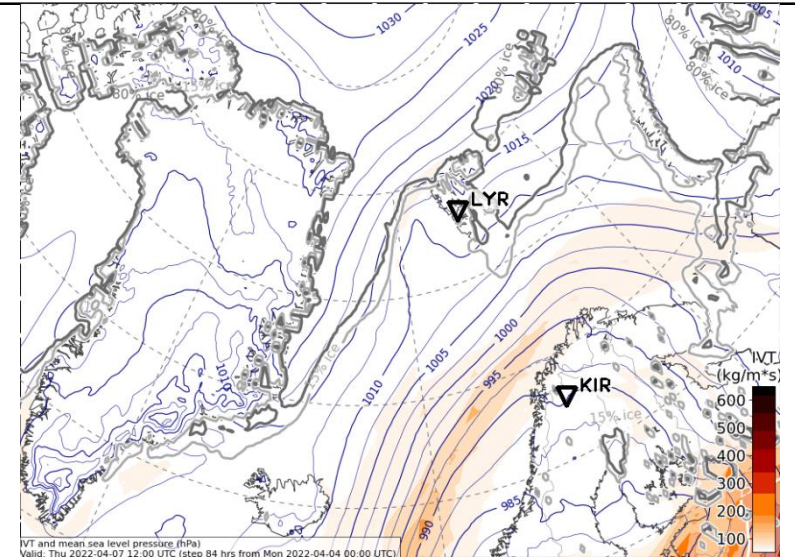
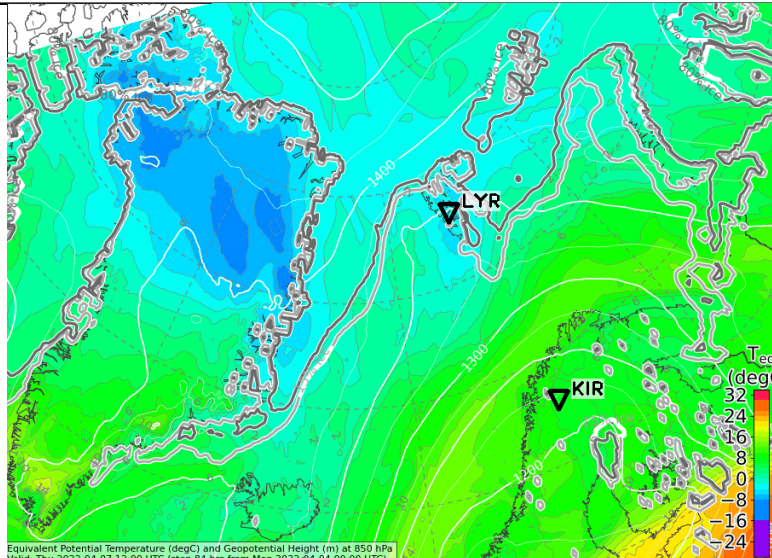
Total cloud cover



CAO Index

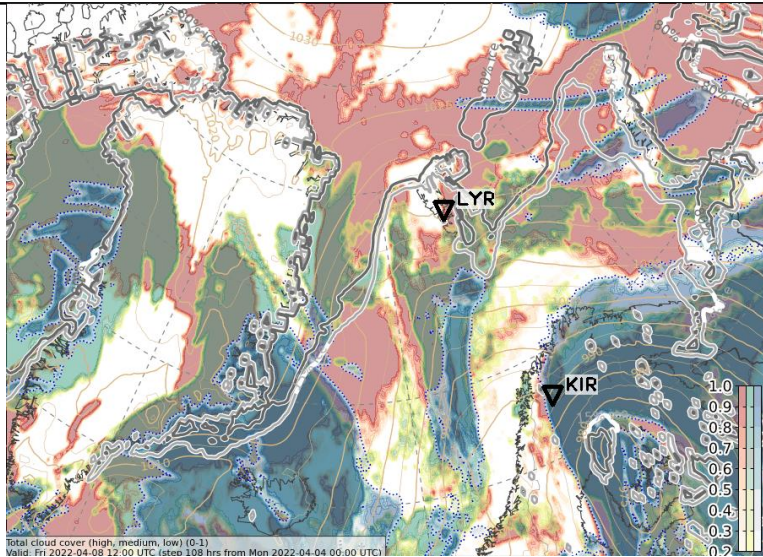
Integrated water vapour transport

850 hPa Equiv. pot. temperature



Fri, 2022-04-08 12 UTC (+108h)

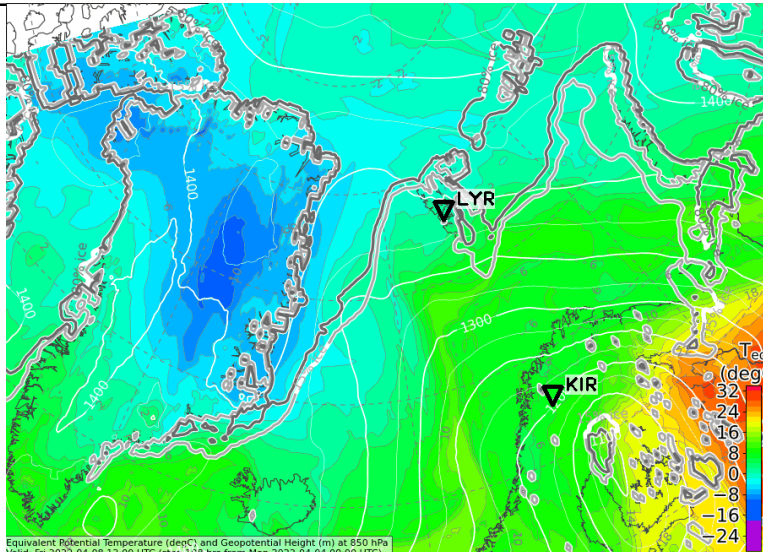
Total cloud cover



Total cloud cover (high, medium, low) (0-1)
Valid: Fri 2022-04-08 12:00 UTC (start 108 hrs from Mon 2022-04-04 00:00 UTC)

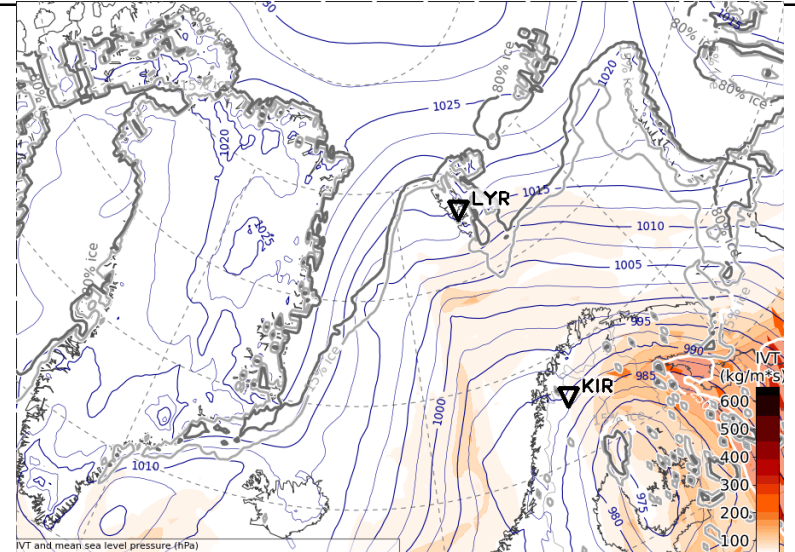
CAO Index

850 hPa Equiv. pot. temperature



Equivalent Potential Temperature (degC) and Geopotential Height (m) at 850 hPa
Valid: Fri 2022-04-08 12:00 UTC (start 108 hrs from Mon 2022-04-04 00:00 UTC)

Integrated water vapour transport

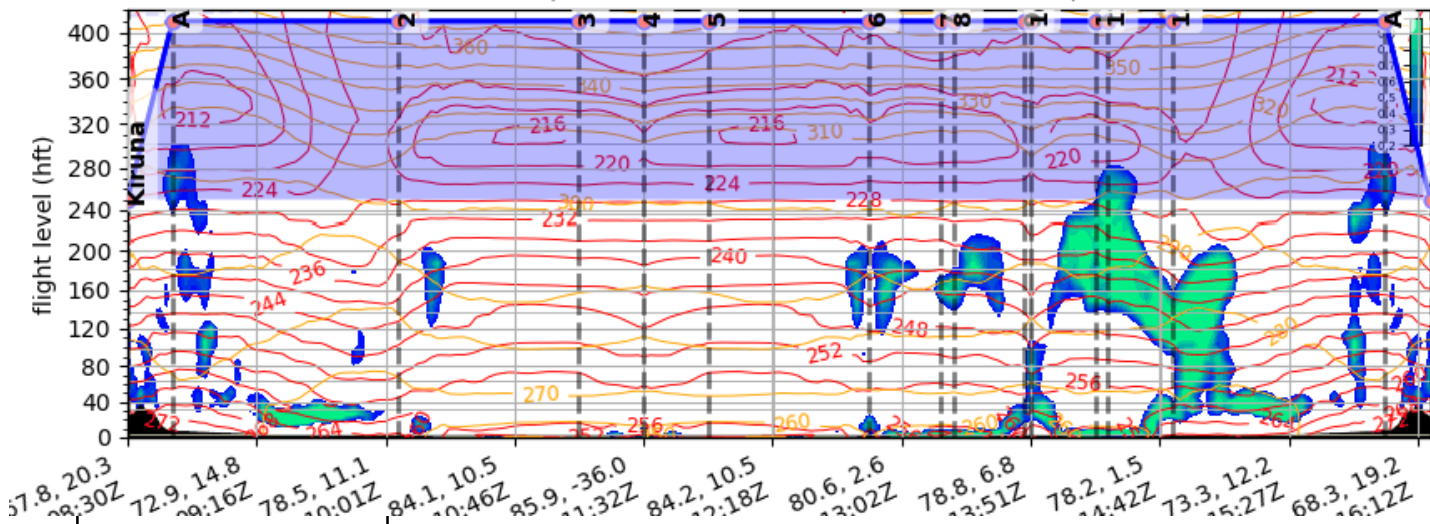


IVT and mean sea level pressure (hPa)
Valid: Fri 2022-04-08 12:00 UTC (start 108 hrs from Mon 2022-04-04 00:00 UTC)

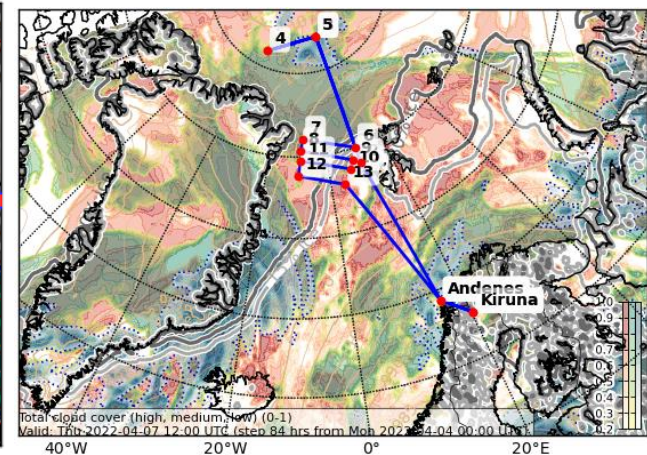
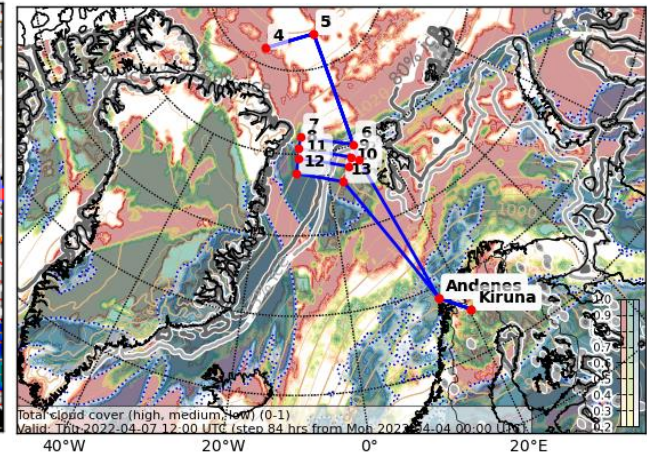
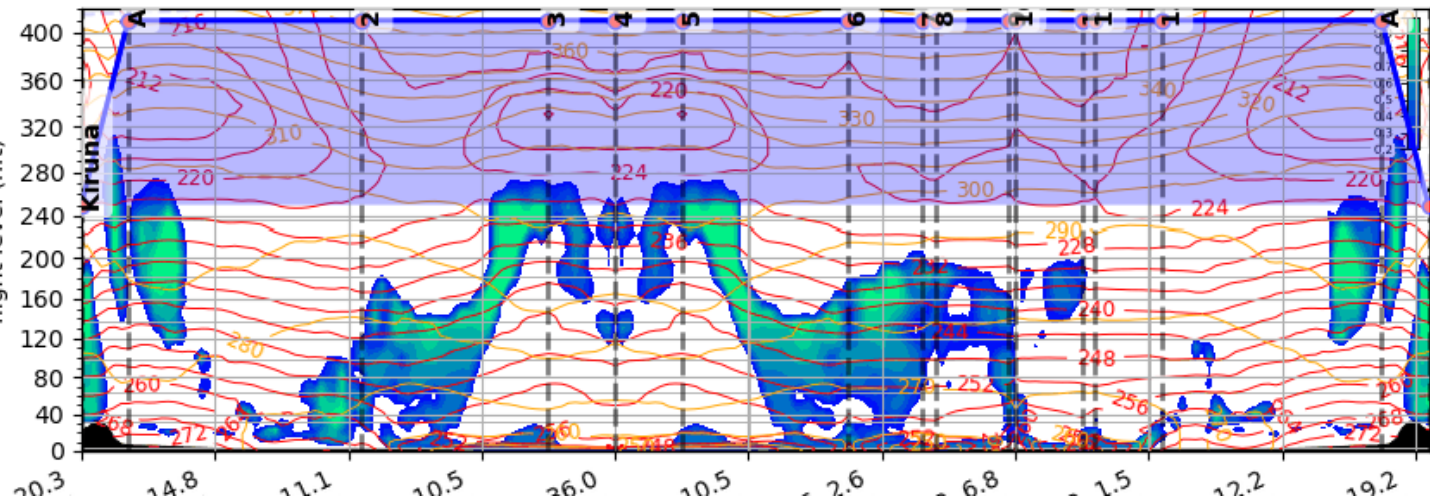
Cloud cross-sections: Fram Strait
2022-04-07 12 UTC: Thursday
ECMWF & ICON

Thu, 2022-04-07, Clouds, 12 UTC

ECMWF

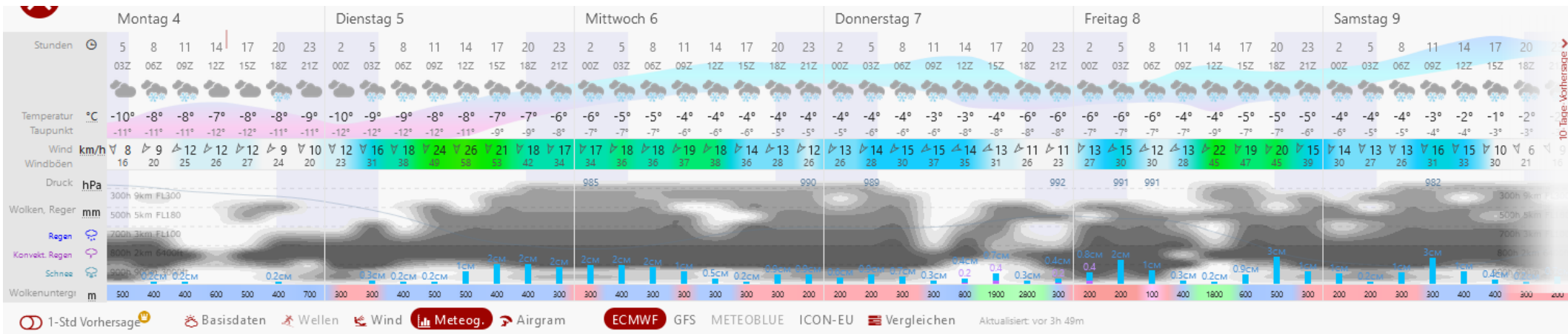


ICON



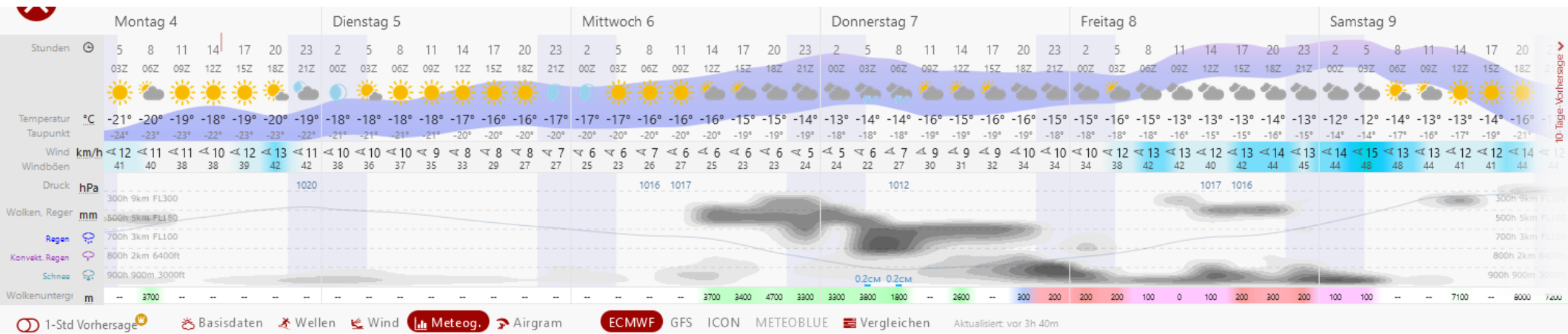
Airport meteograms & local weather at Svalbard

Kiruna:

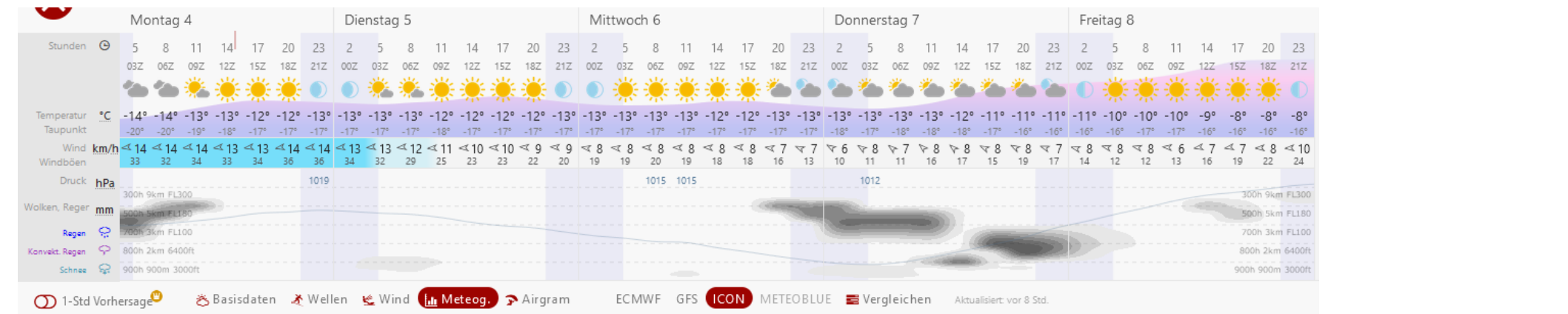


Longyearbyen:

ECWMF



ICON



Summary

Summary: Weather Briefing 2022-04-04, 17:00 LT

- **Tuesday, 2022-04-05:**
 - Convergence line west of Svalbard remains along sea ice edge
 - Temperature in Fram Strait increases, moist air with precip. between Norway and Svalbard
 - significant snowfall expected for Kiruna (peak from Tuesday evening to Wednesday)
- **Wednesday, 2022-04-06:**
 - high pressure along Greenland east coast: cooling & drying
 - easterly flow of moister airmasses drift to southwest
 - characteristics of low pressure over Scandinavia quite consistent
 - Weak T gradients in Fram Strait
- **Thursday, 2022-04-07:**
 - Northeastern Greenland become very dry and cold compared to previous days
 - Chance for cyclogenesis (but uncertain) in cold airmass at 500 hPa west of Svalbard
 - weaker cooling over Svalbard at 850 hPa
- **Friday, 2022-04-08:**
 - Eastern Fram Strait warmer than Western
 - Precipitation west of Svalbard along frontal system, chance of dissolving polar low
- **Saturday, 2022-04-08:**
 - Intensification of easterly flow with moisture and precipitation between Scandinavia and Svalbard, airmass origin south of Balkan