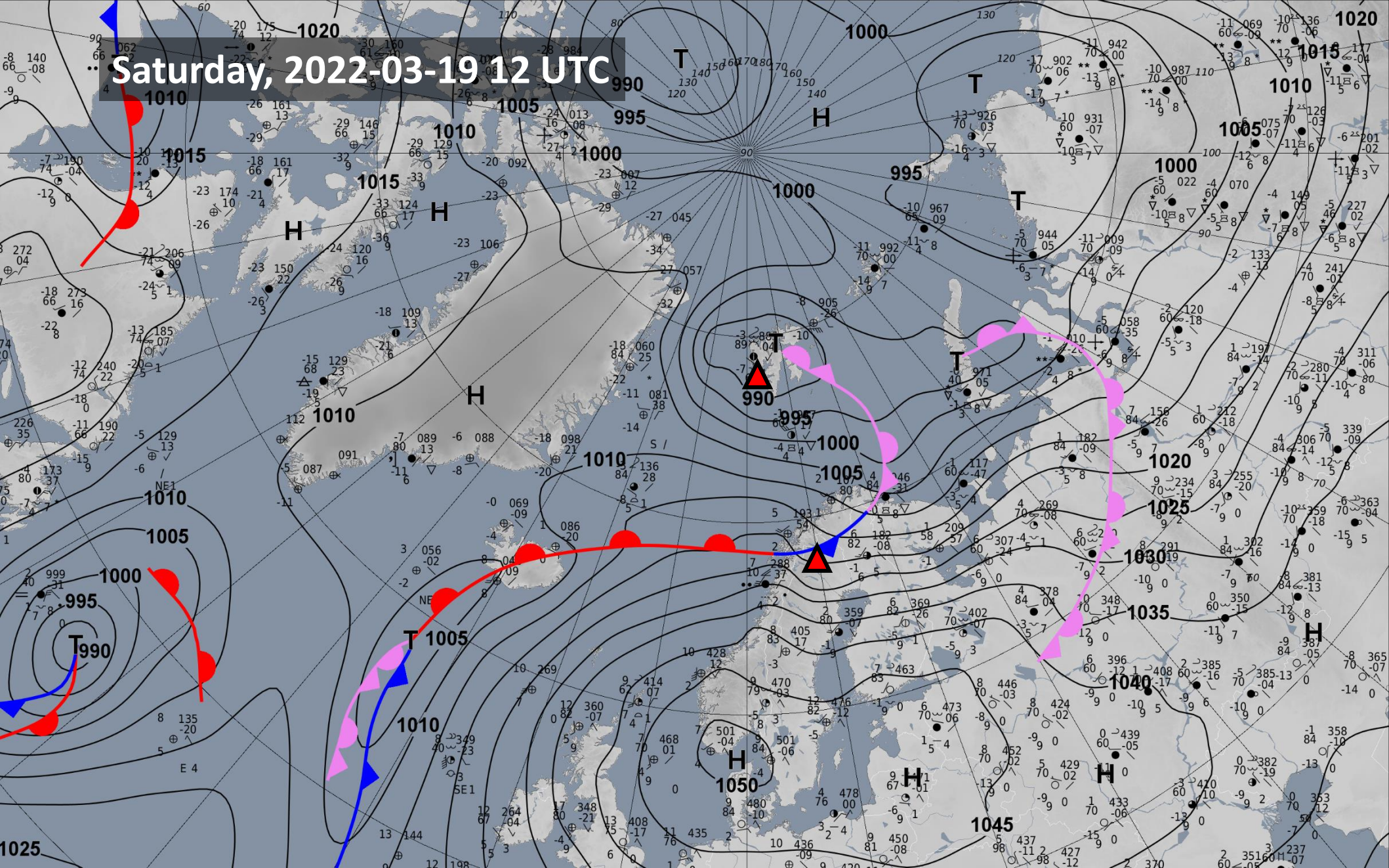


# Weather briefing HALO-(AC)<sup>3</sup>

Saturday, 2022-03-19, 17:00 LT

**Surface Analysis**  
Saturday, 2022-03-19 12 UTC  
DWD

Saturday, 2022-03-19 12 UTC



# Surface wind development and precipitation

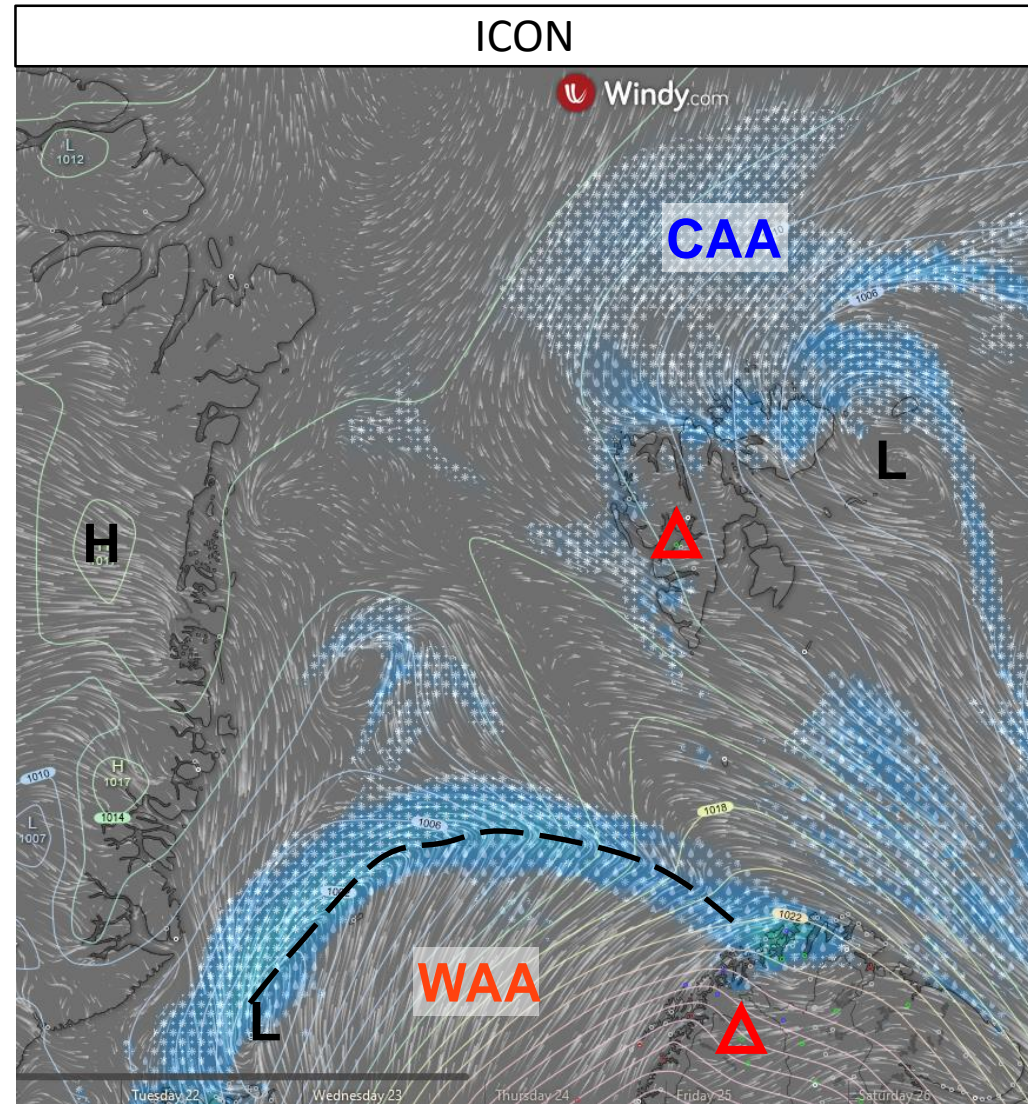
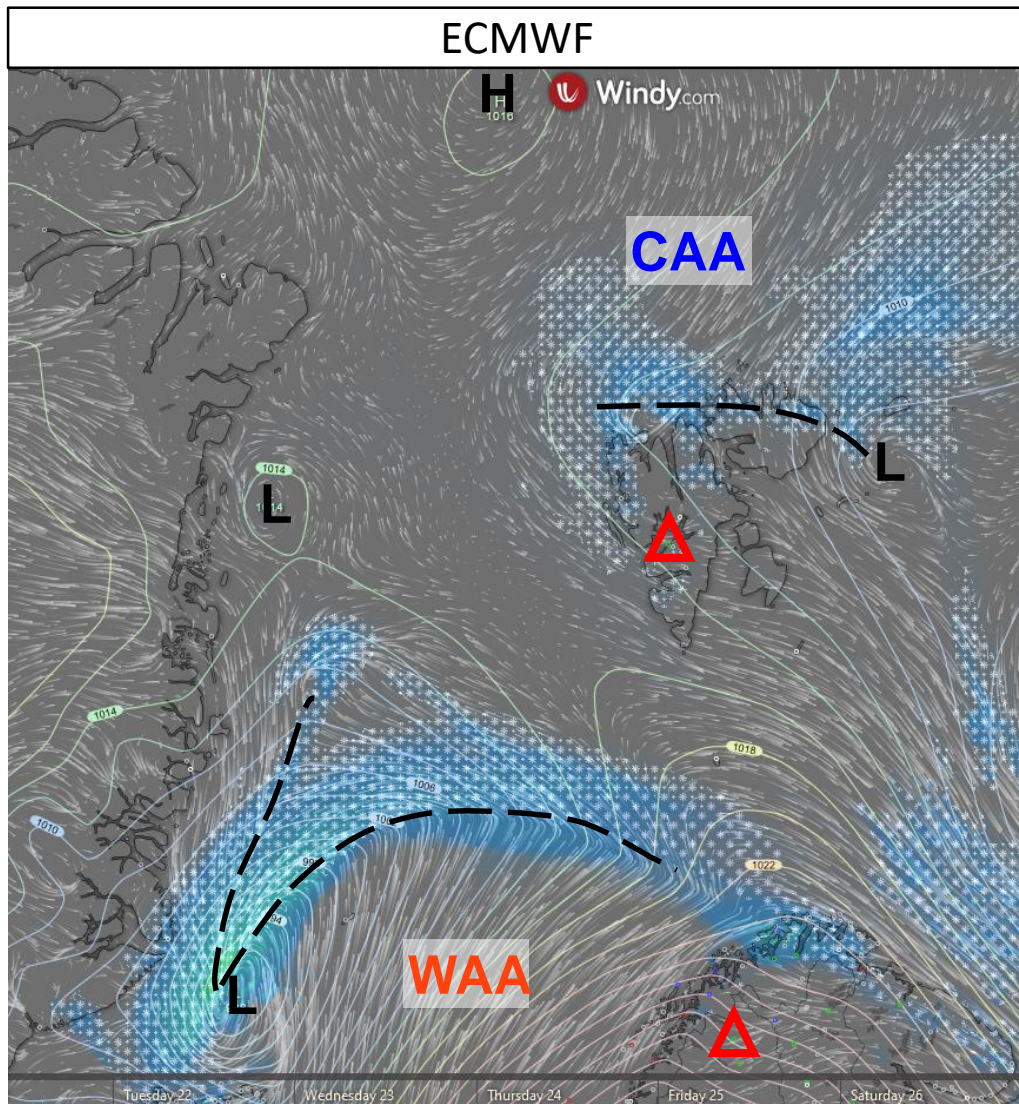
2022-03-19 00 UTC: 36 – 108h

ECMWF & ICON

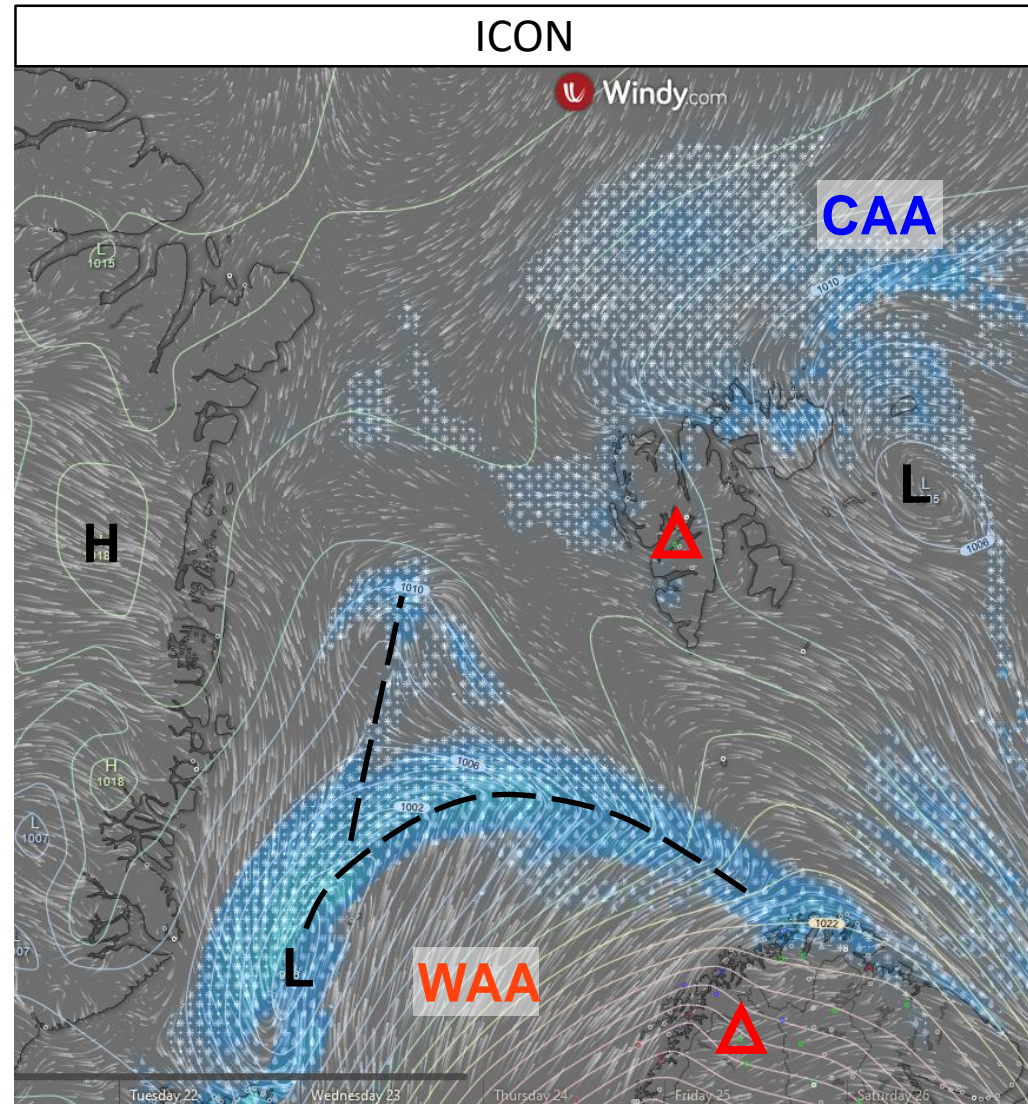
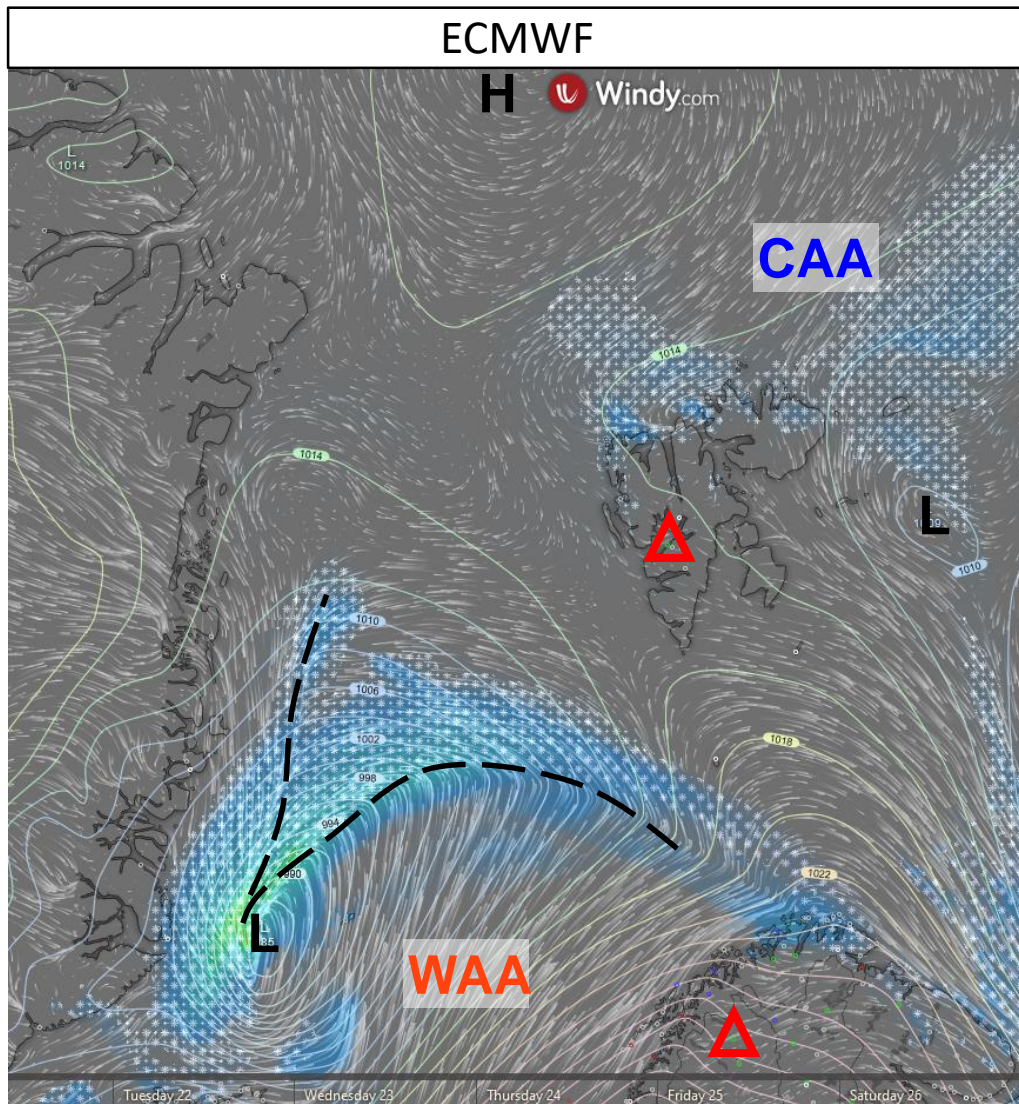
**CAA: Cold Air Advection**

**WAA: Warm Air Advection**

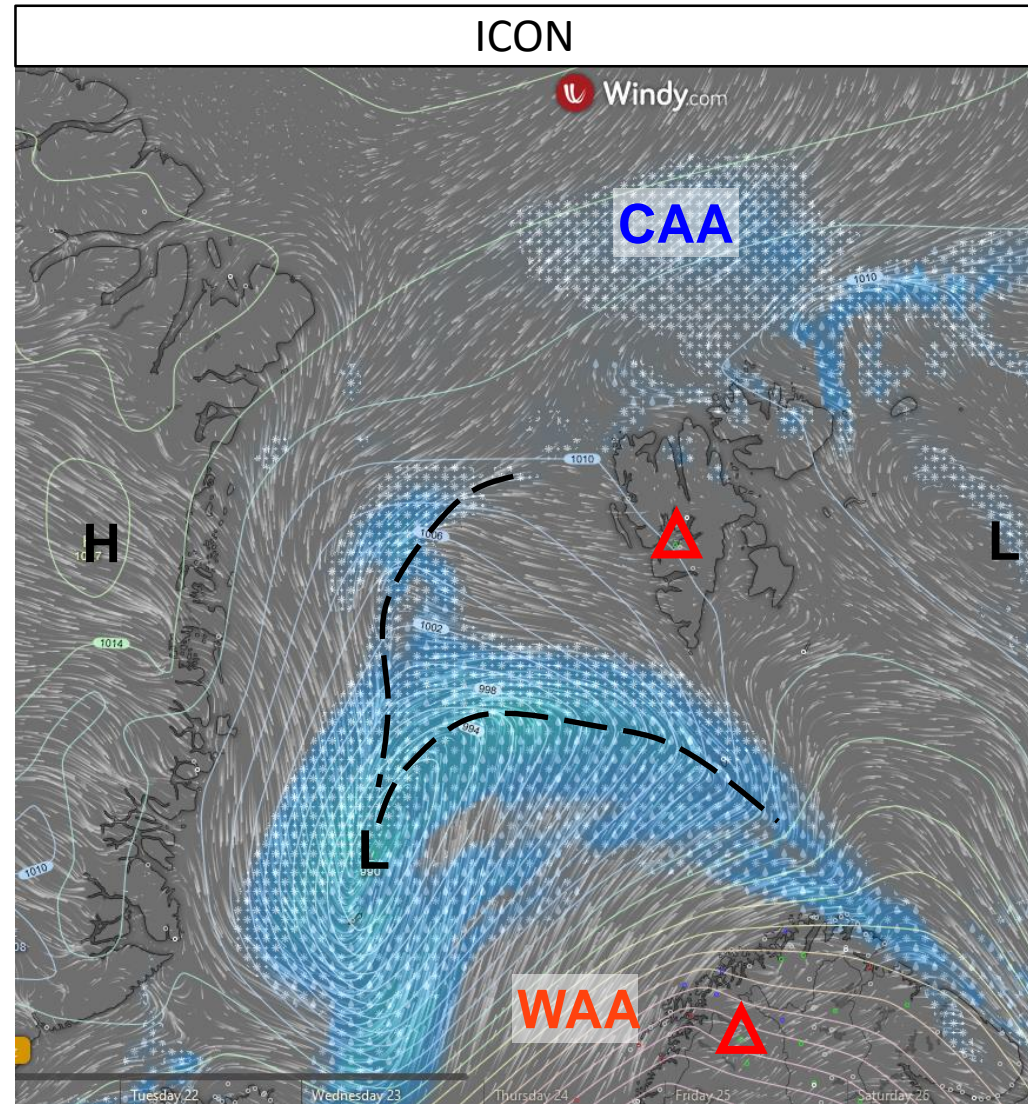
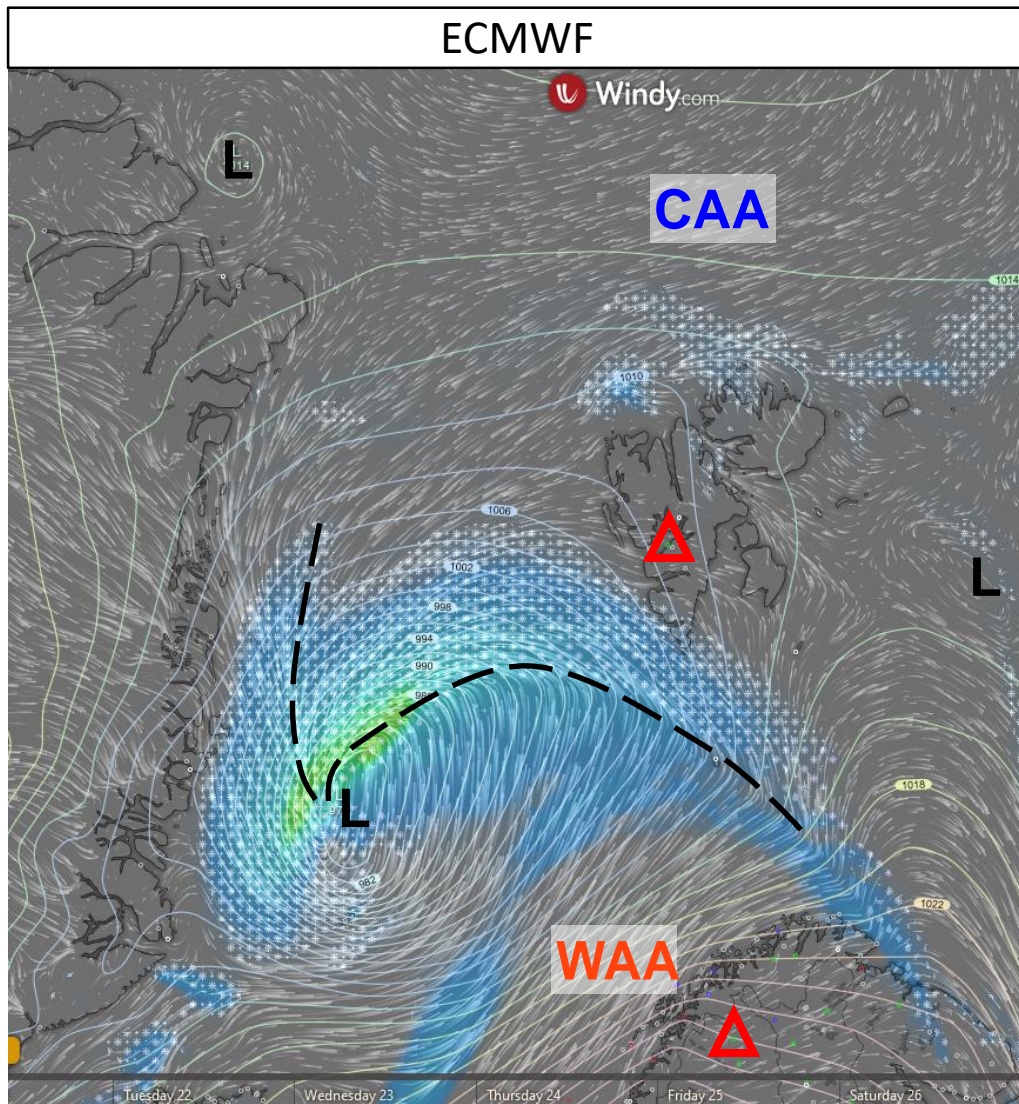
Sunday, 2022-03-20 09 UTC (+33h)



# Sunday, 2022-03-20 12 UTC (+36h)

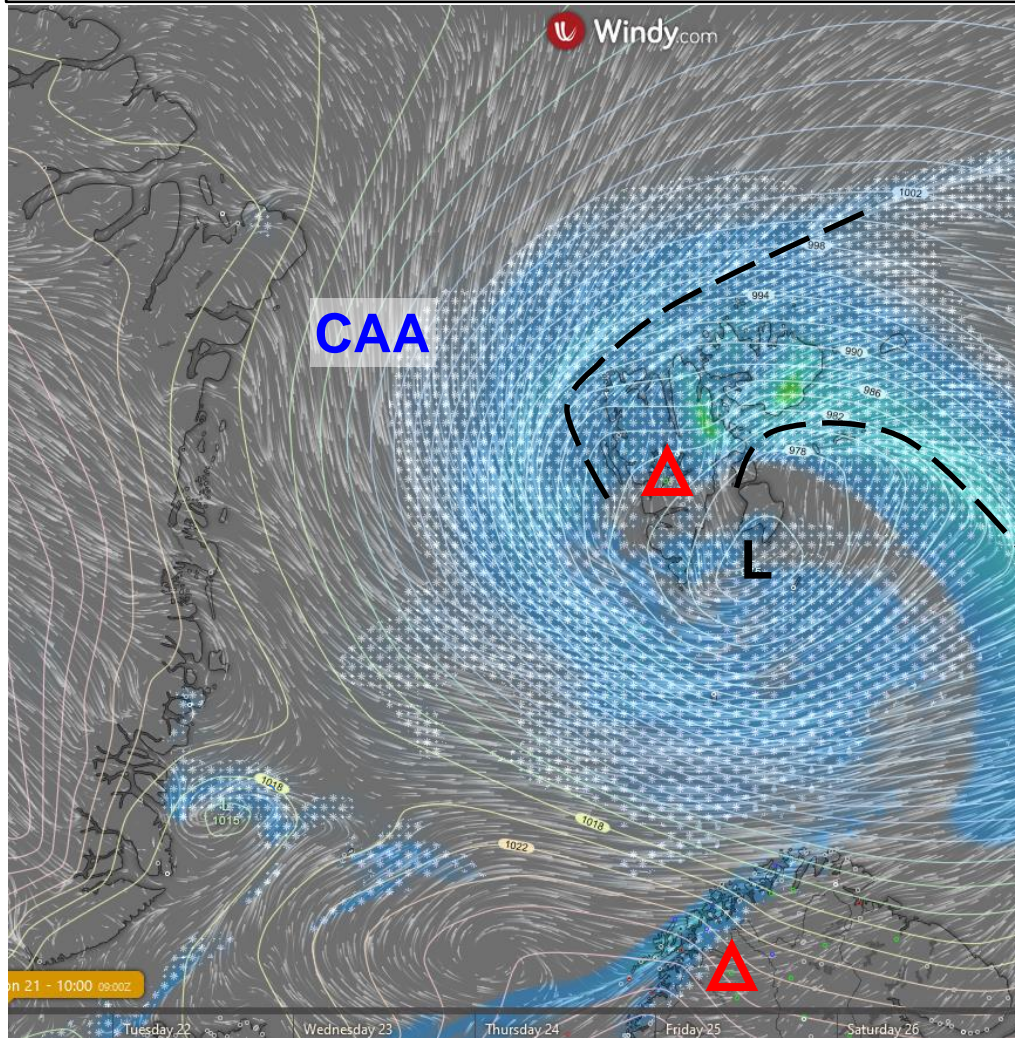


# Sunday, 2022-03-20 18 UTC (+42h)

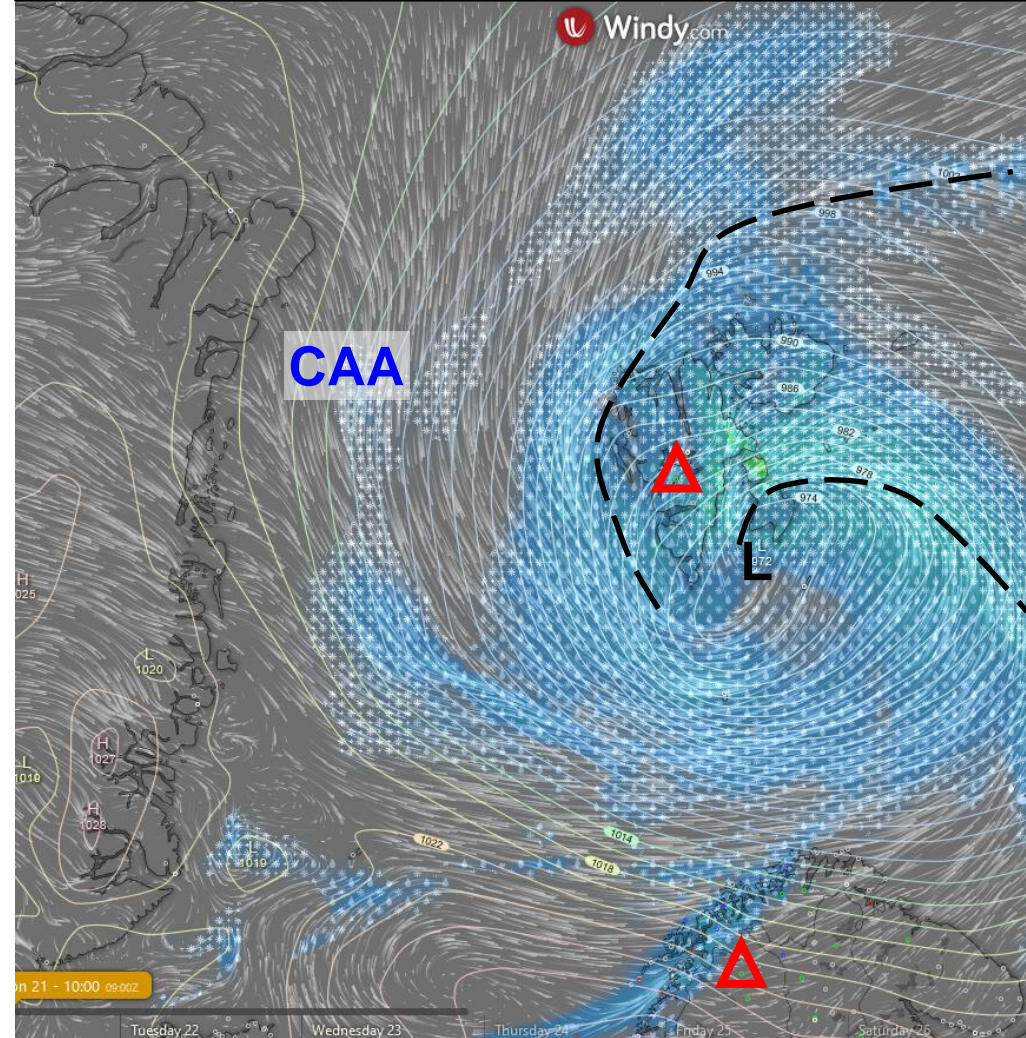


Monday, 2022-03-21 09 UTC (+57h)

ECMWF



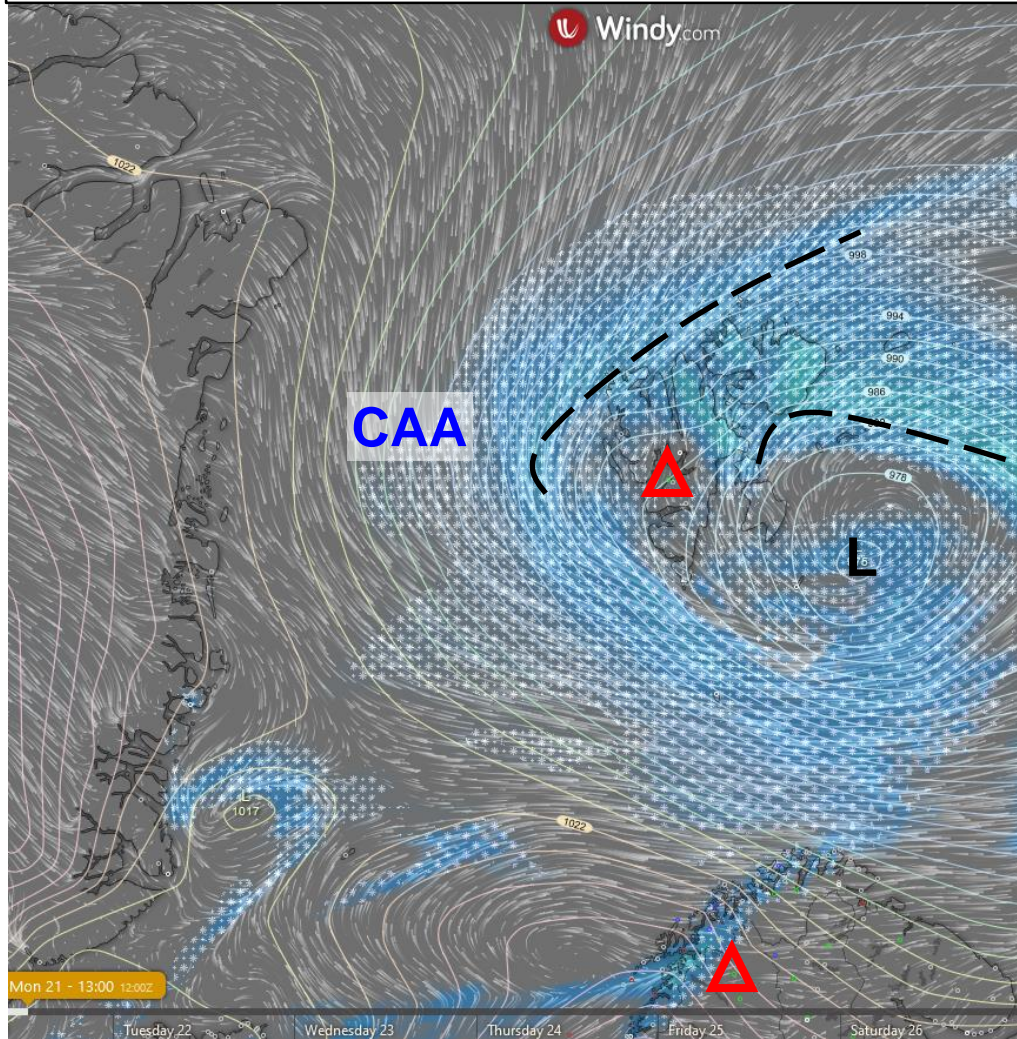
ICON



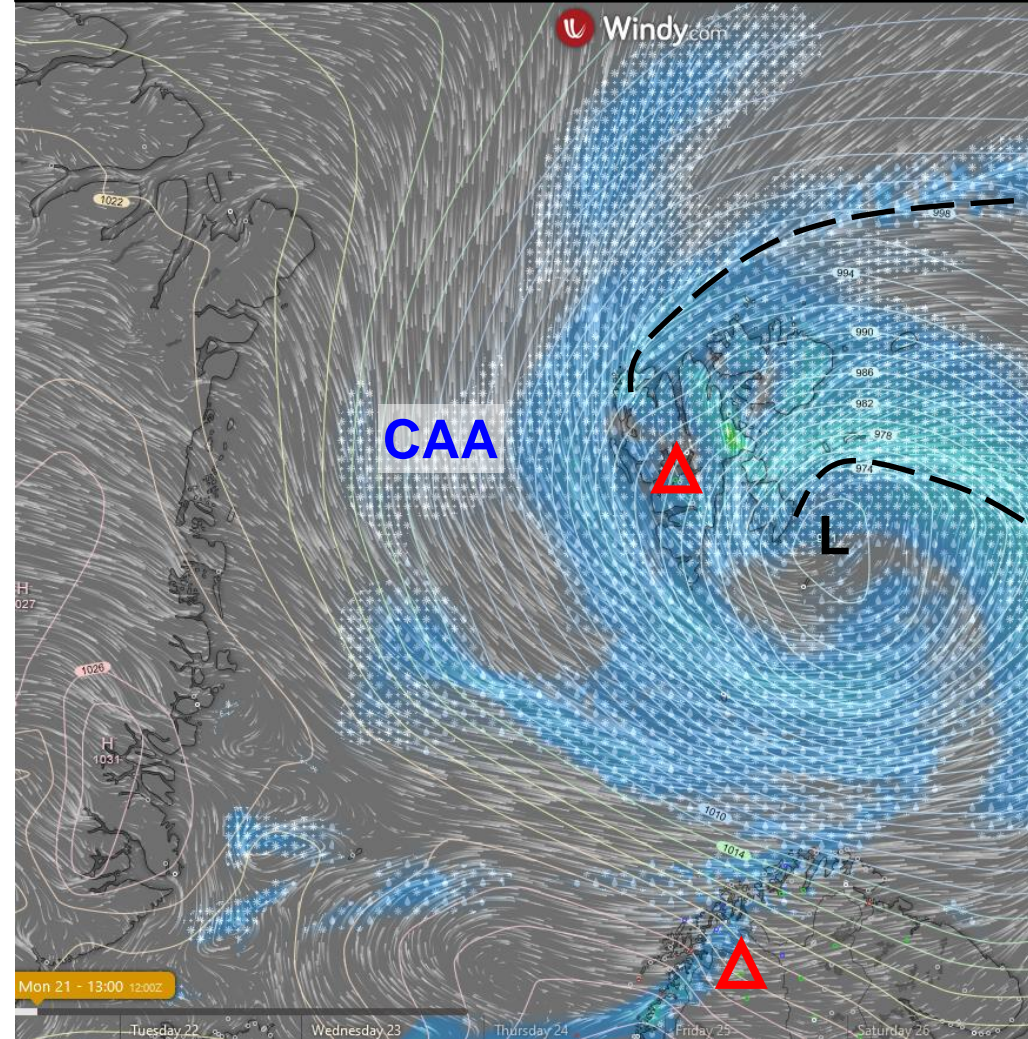


# Monday, 2022-03-21 12 UTC (+60h)

ECMWF

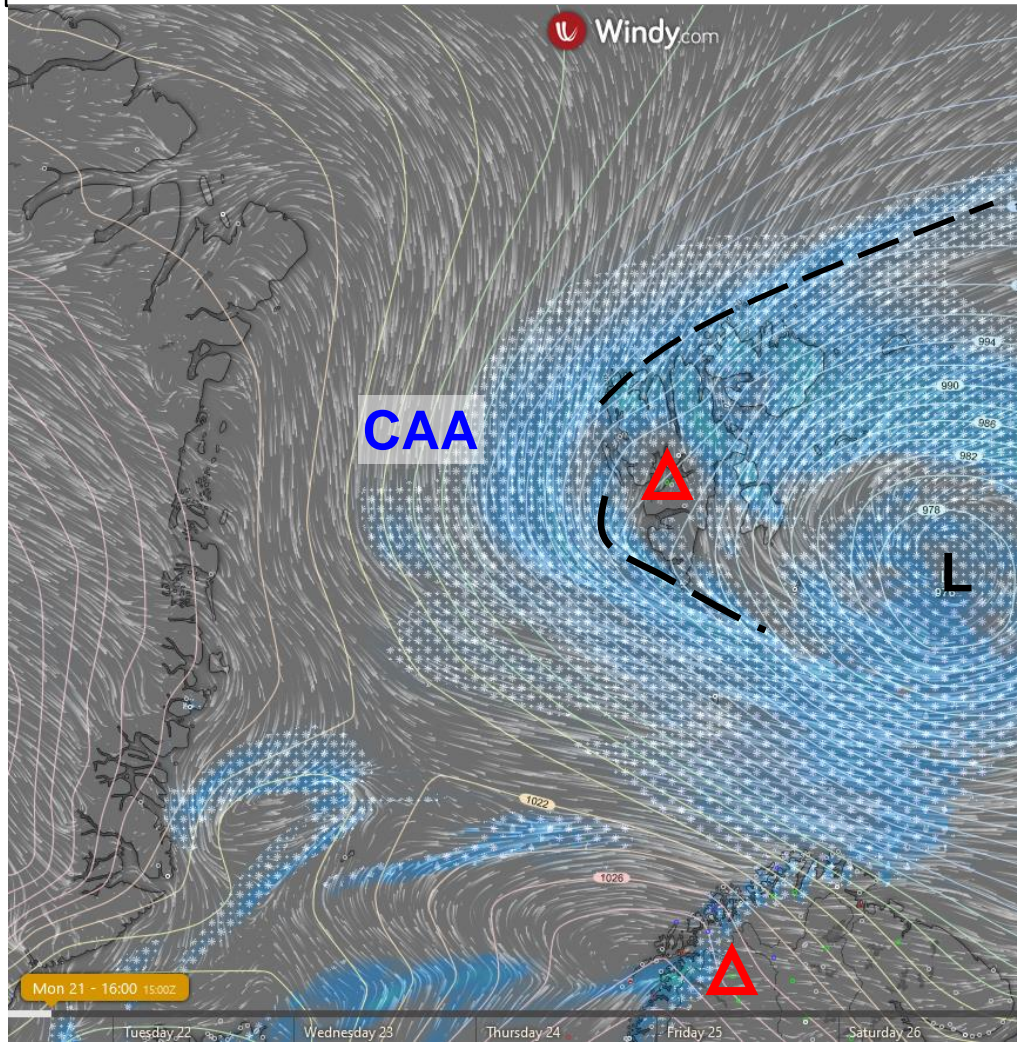


ICON

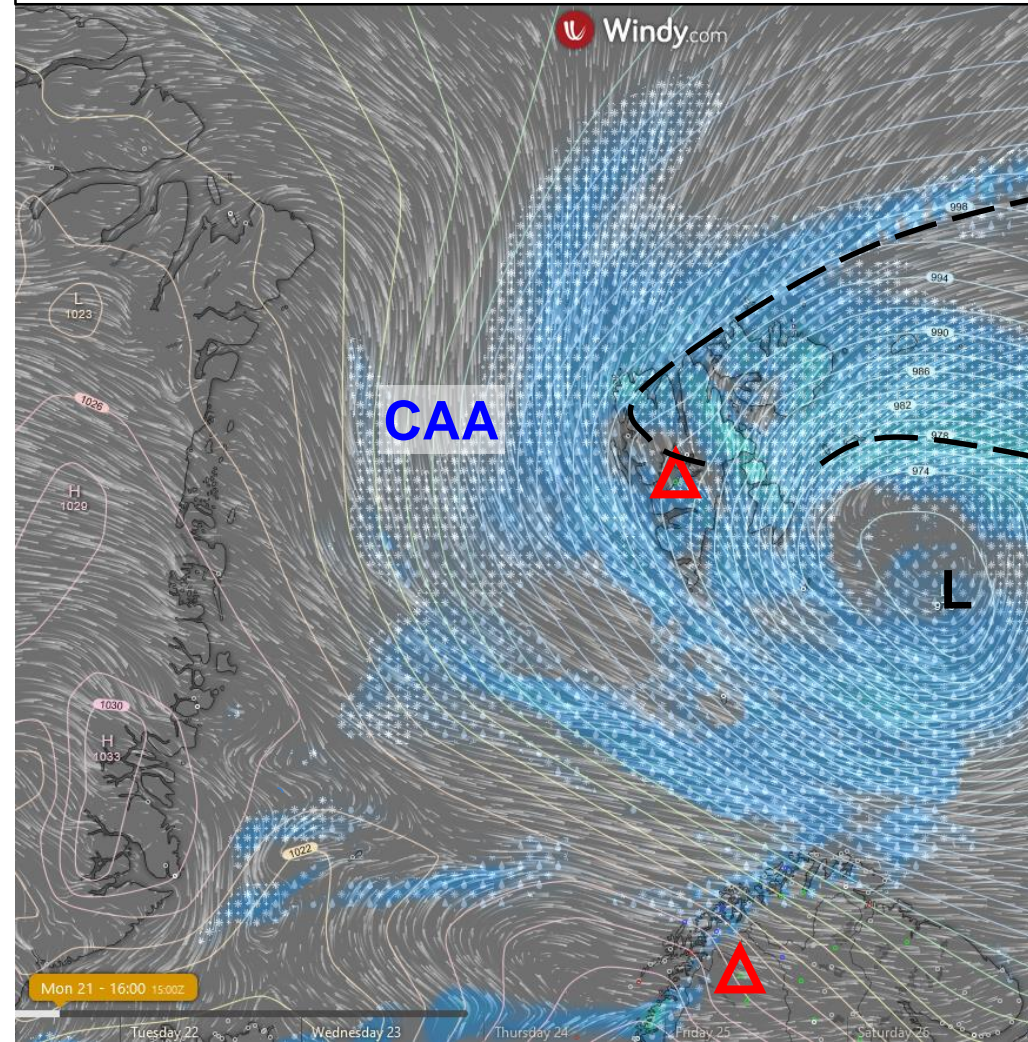


# Monday, 2022-03-21 15 UTC (+63h)

ECMWF

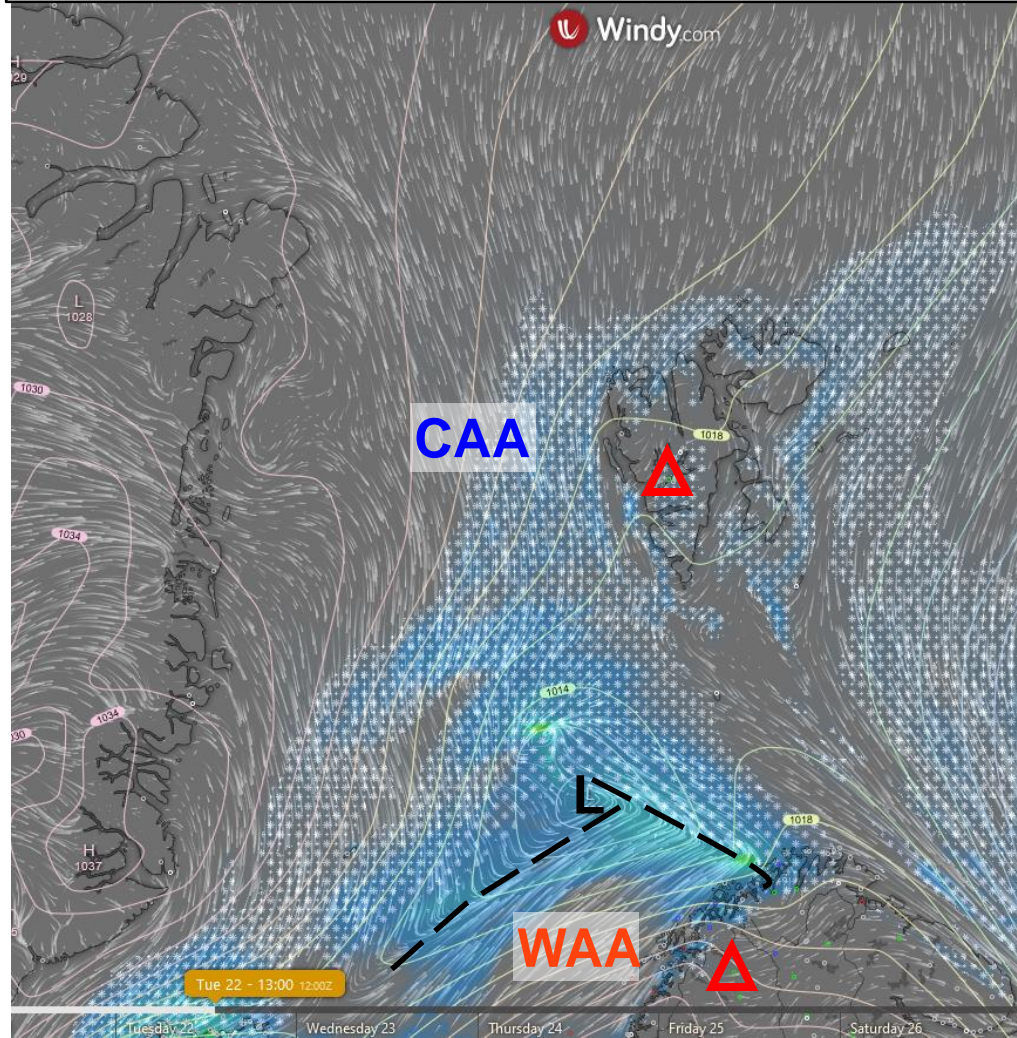


ICON

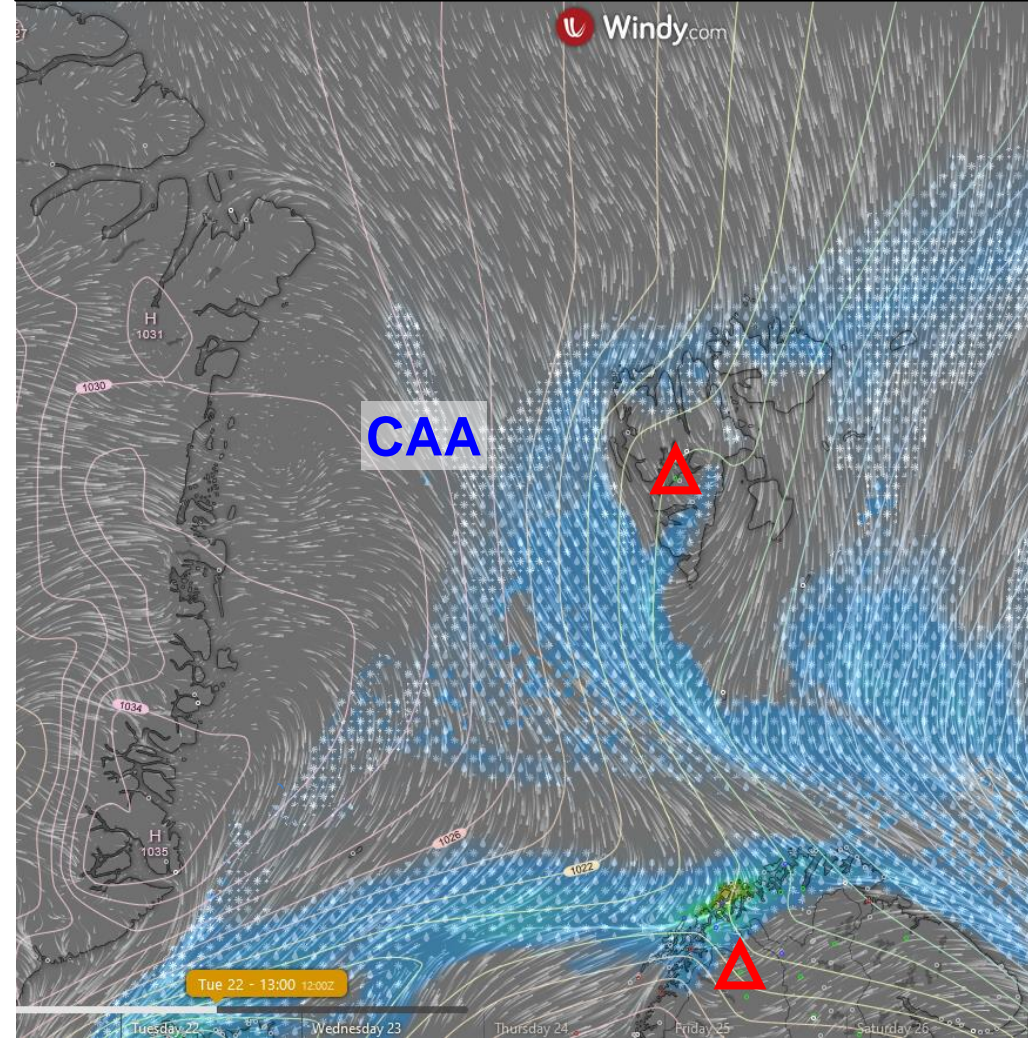


Tuesday, 2022-03-22 12 UTC (+84h)

ECMWF

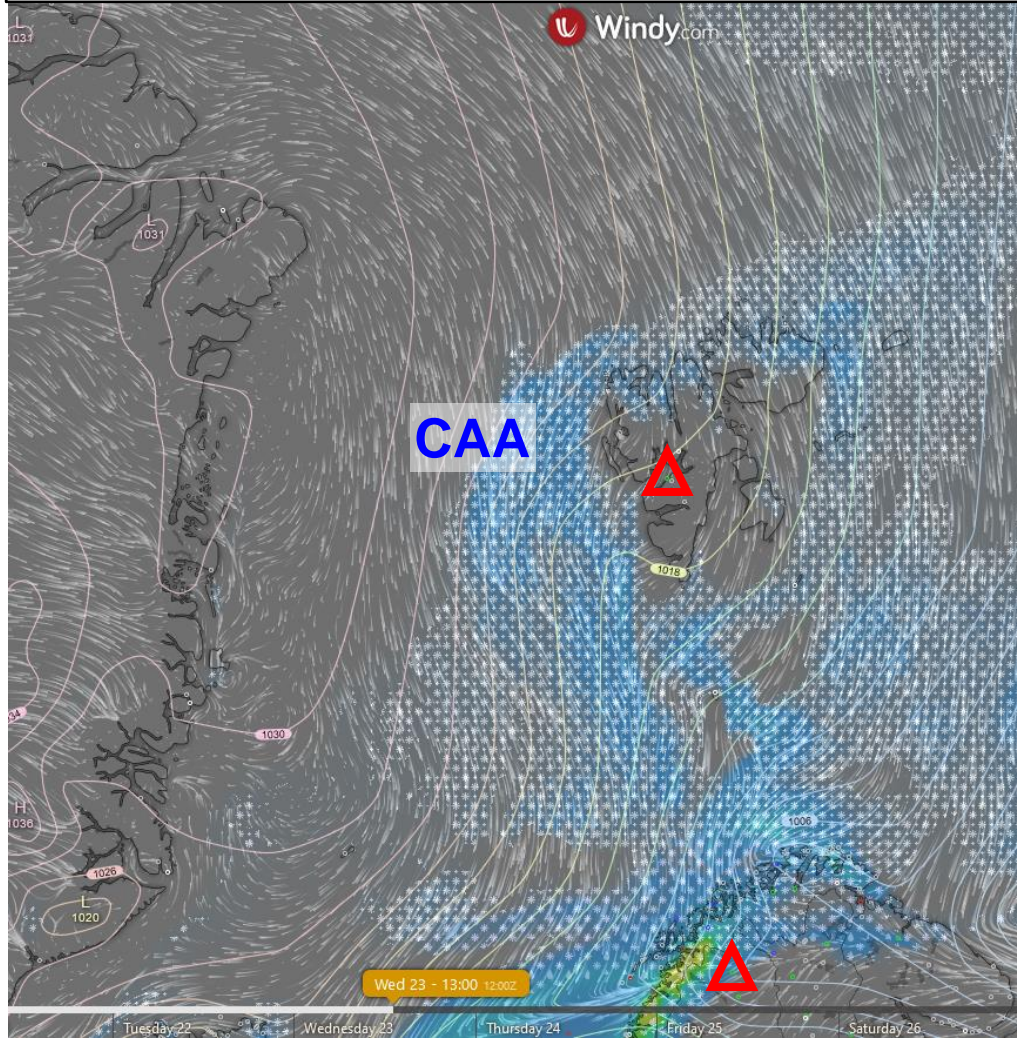


ICON

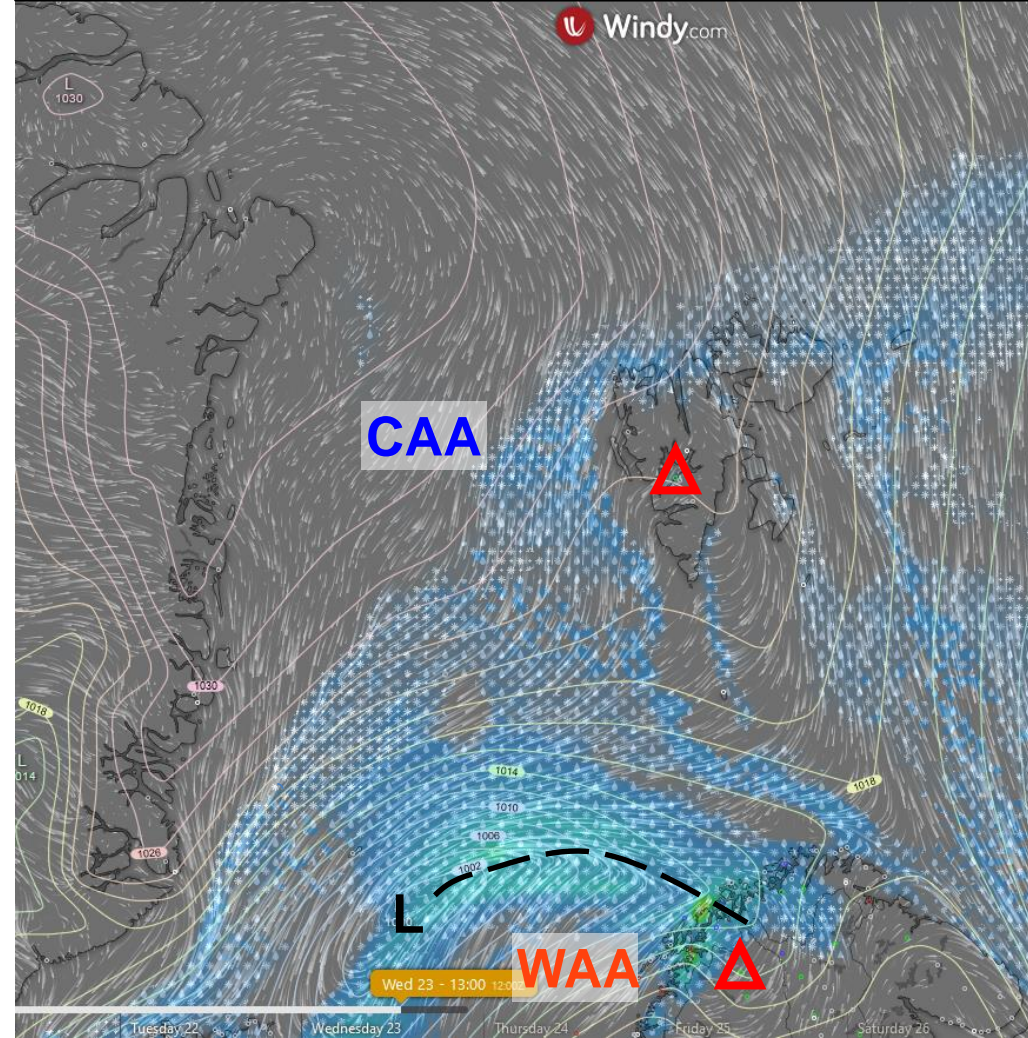


# Wednesday, 2022-03-23 12 UTC (+108h)

ECMWF



ICON

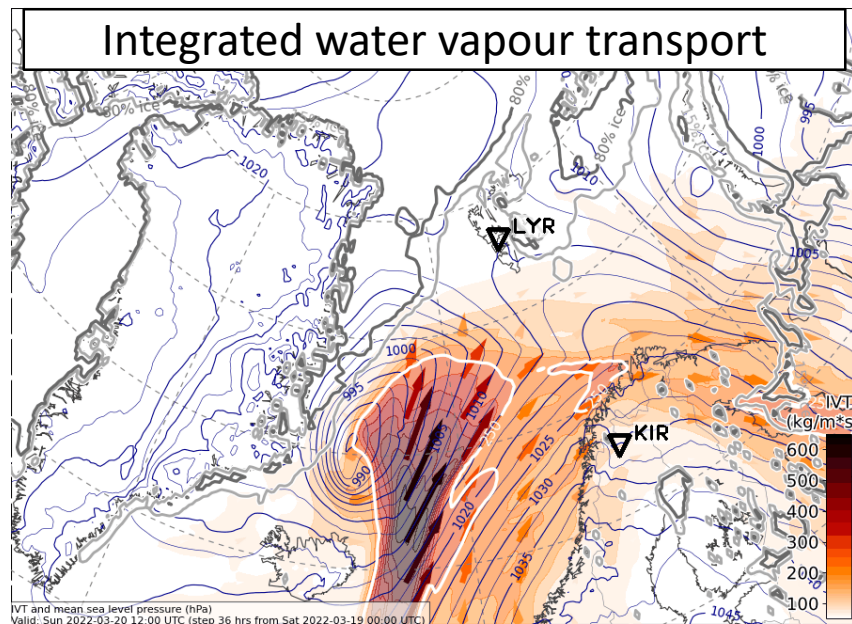
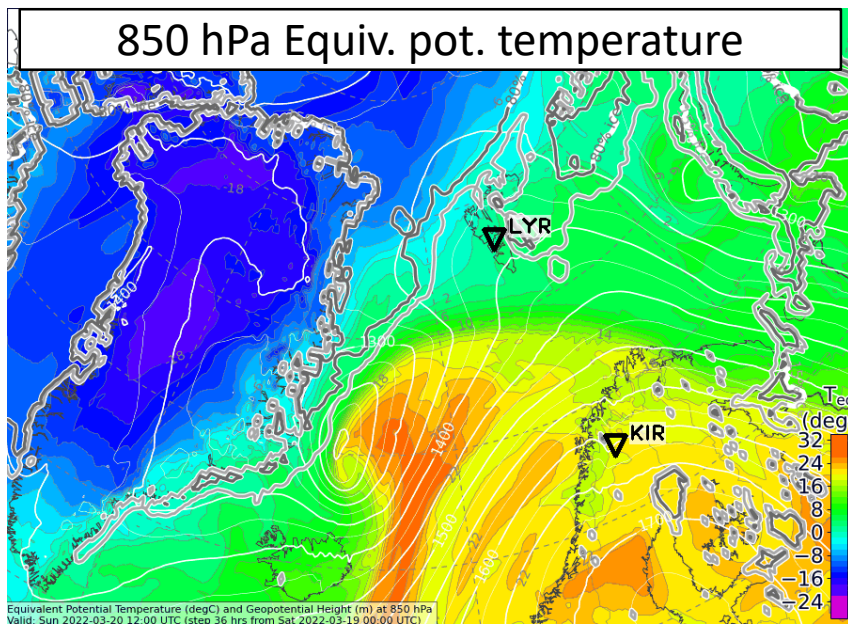
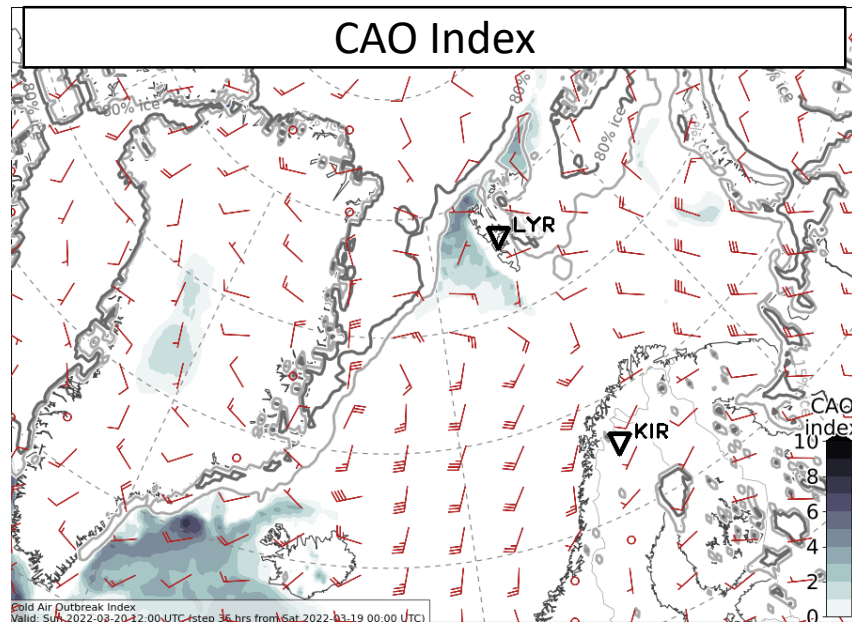
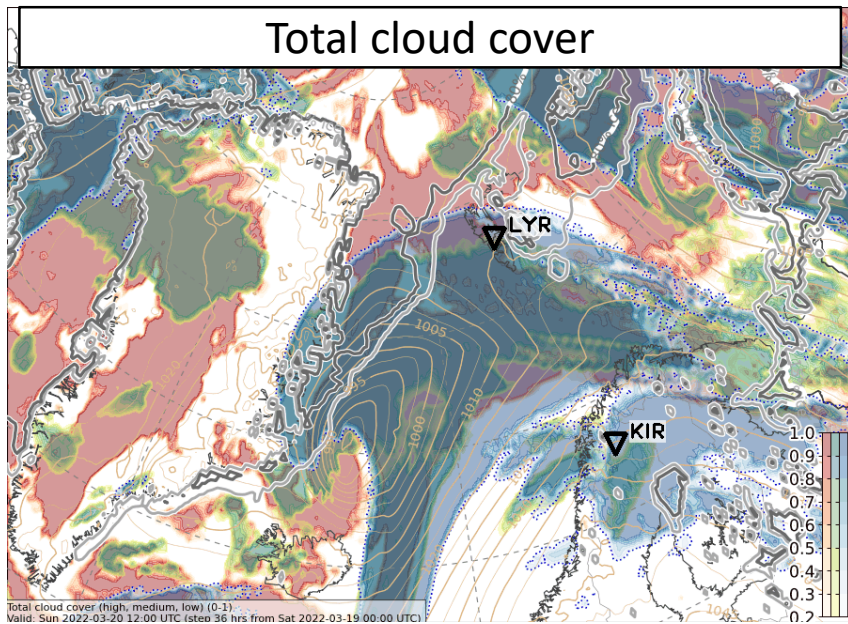


## **Cloud cover, CAO index, Airmasses, IVT**

2022-03-19 00 UTC: 36 – 108h

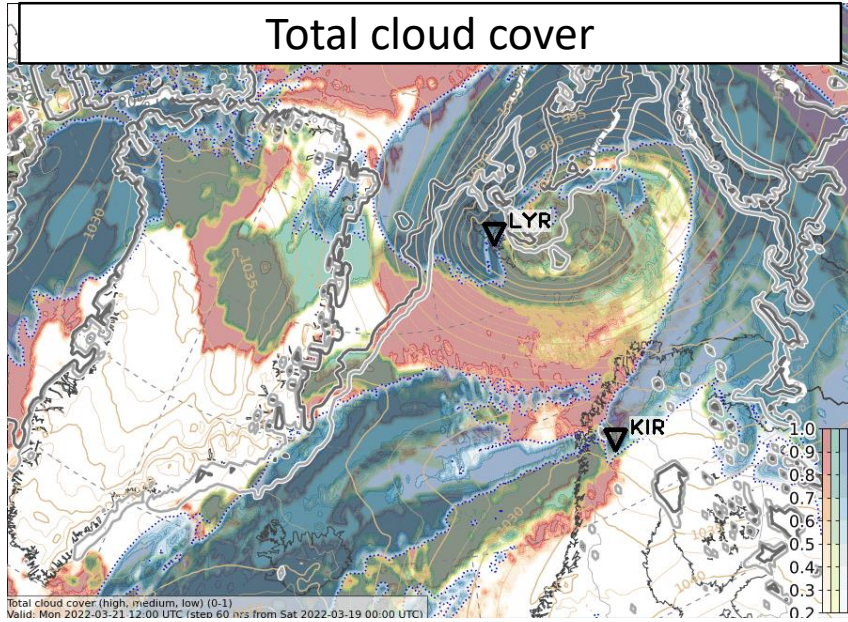
Cloud cover & 850hPa  $\theta_e$  & CAO & IVT

Sun, 2022-03-20 12 UTC (+36h)

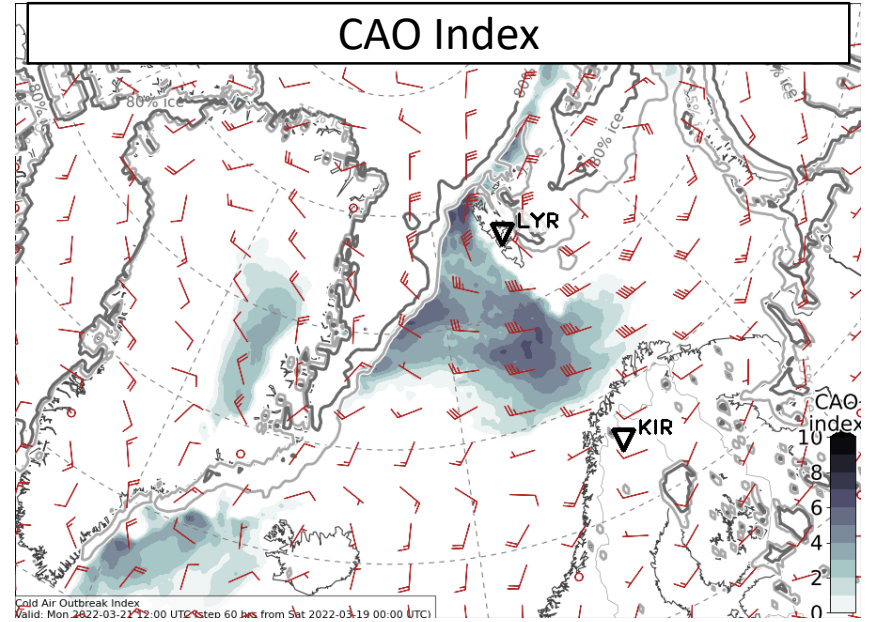


Mon, 2022-03-21 12 UTC (+60h)

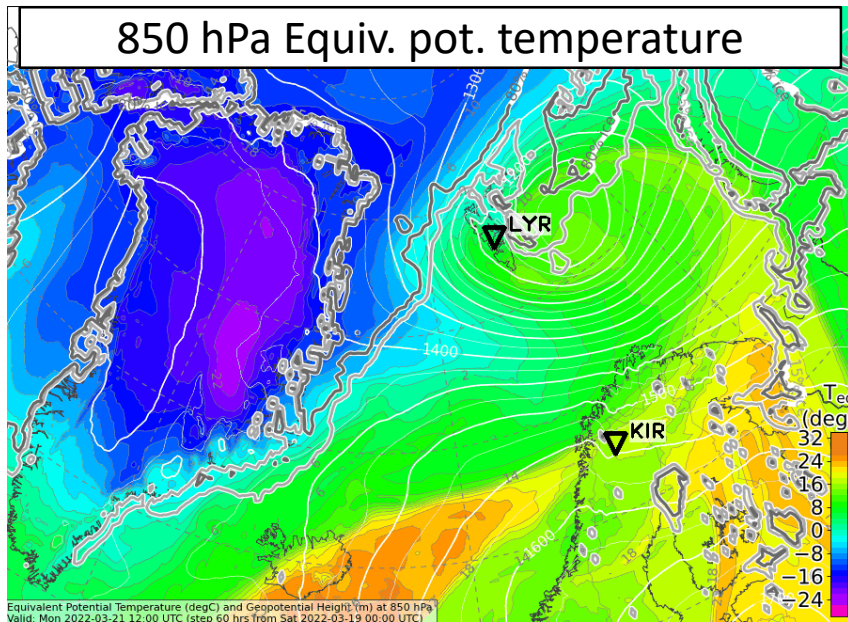
Total cloud cover



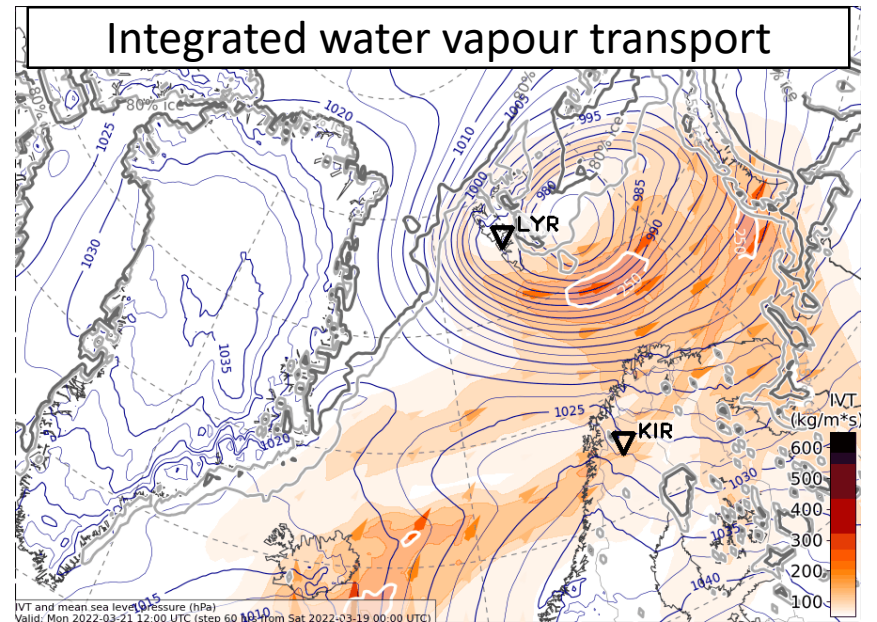
CAO Index



850 hPa Equiv. pot. temperature

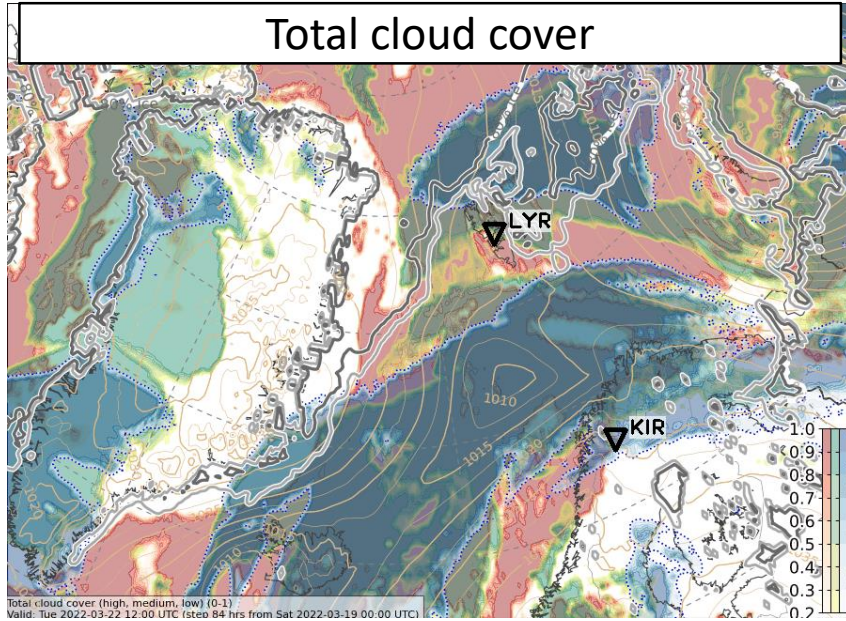


Integrated water vapour transport

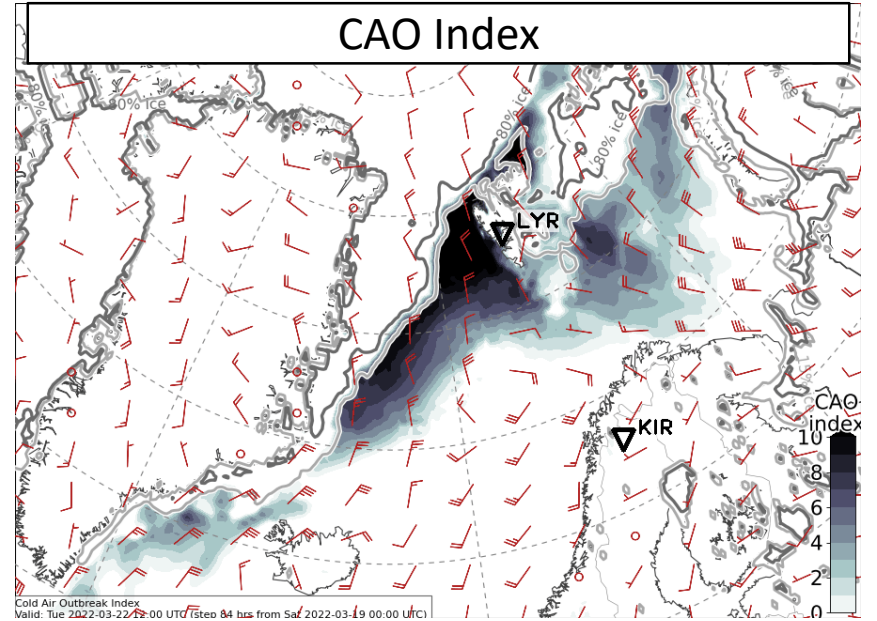


Tue, 2022-03-22 12 UTC (+84h)

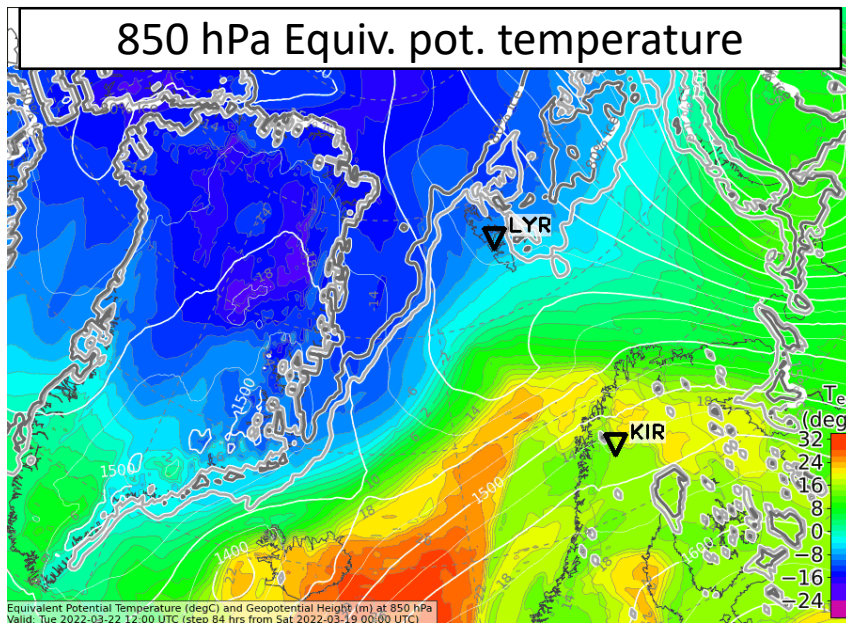
Total cloud cover



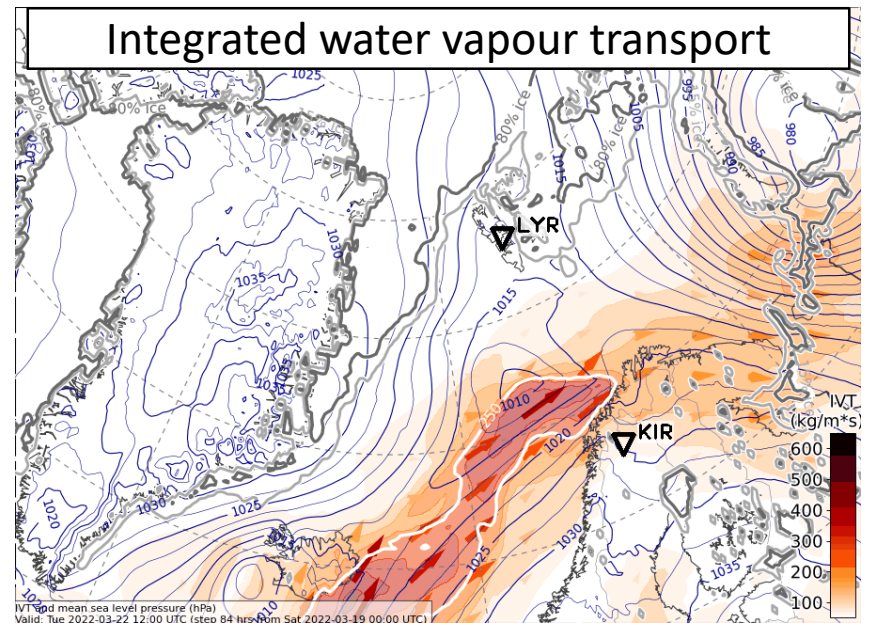
CAO Index



850 hPa Equiv. pot. temperature



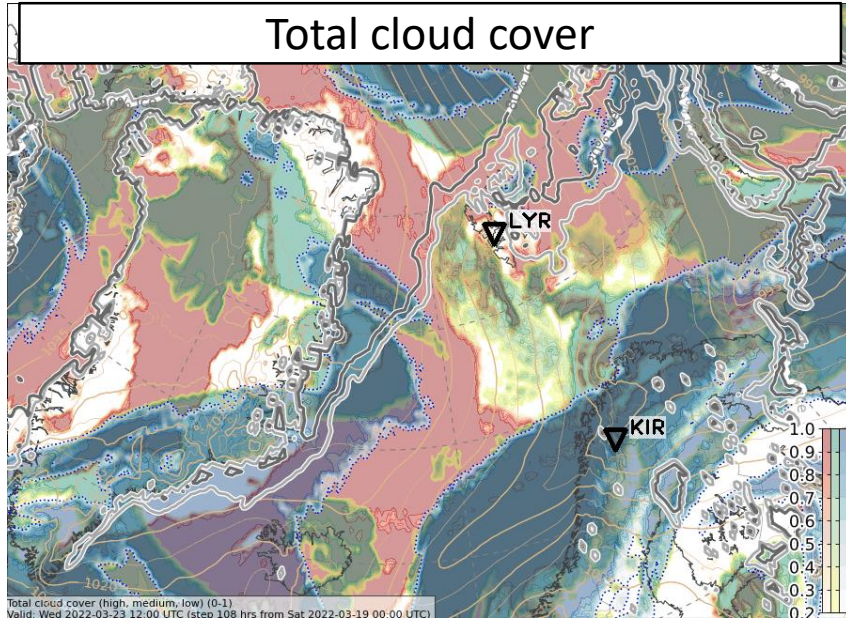
Integrated water vapour transport



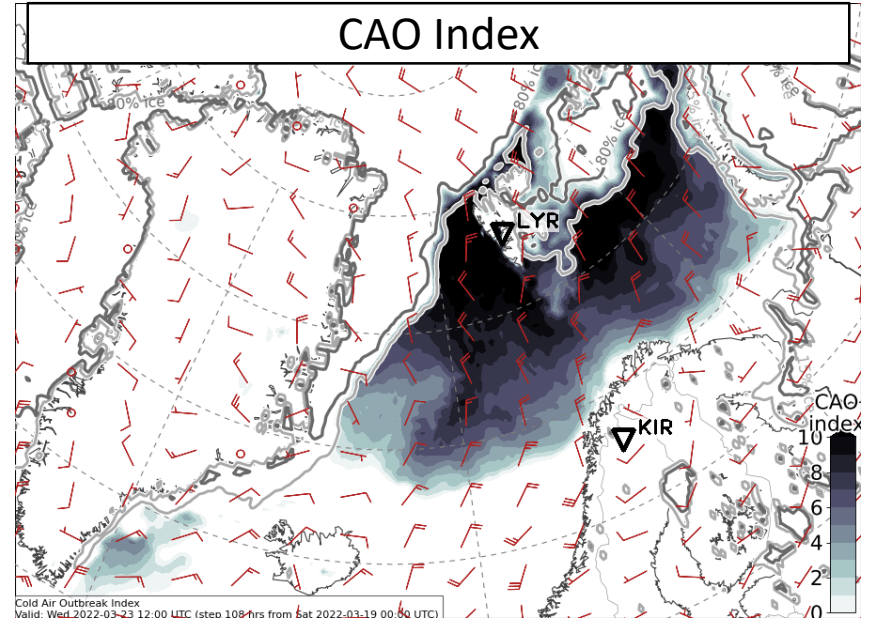


Wed, 2022-03-23 12 UTC (+108h)

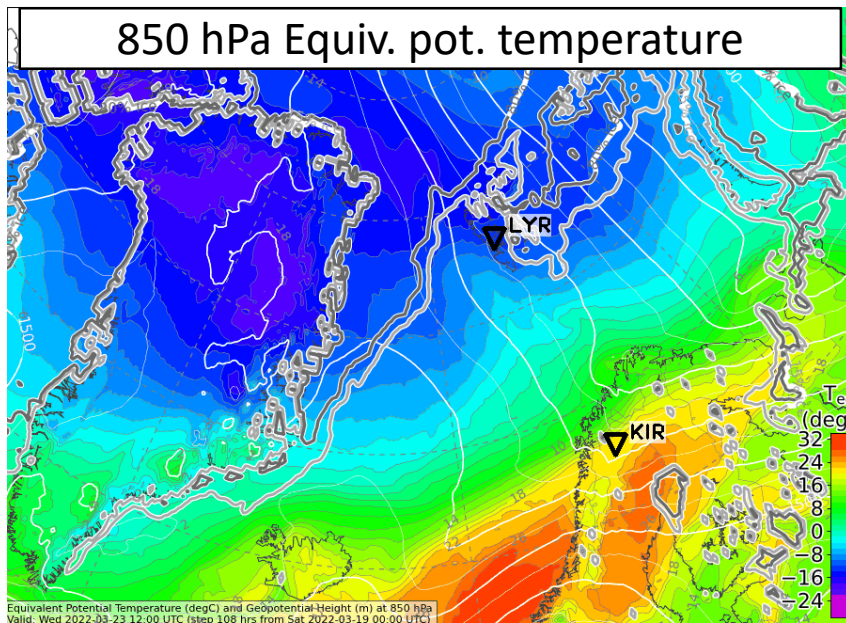
Total cloud cover



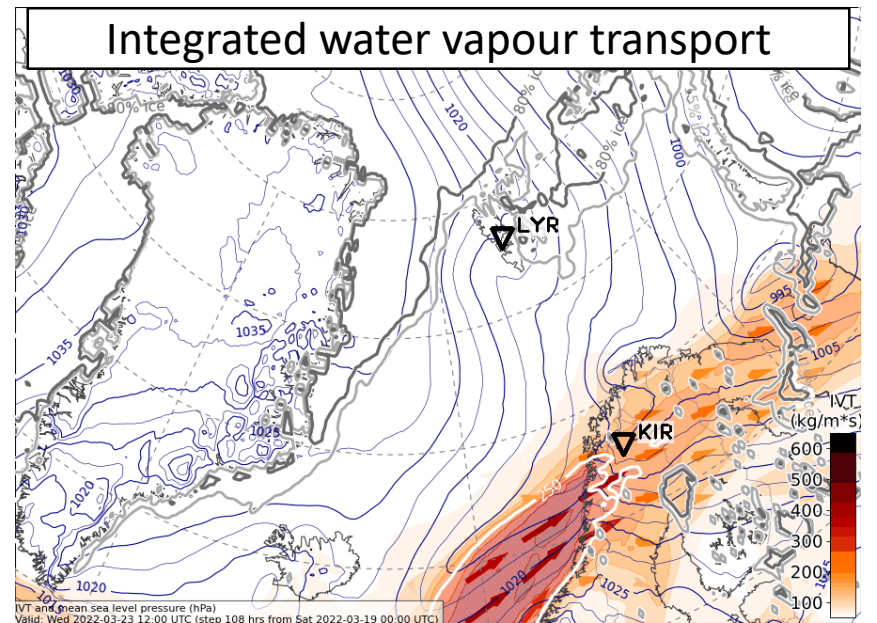
CAO Index



850 hPa Equiv. pot. temperature



Integrated water vapour transport

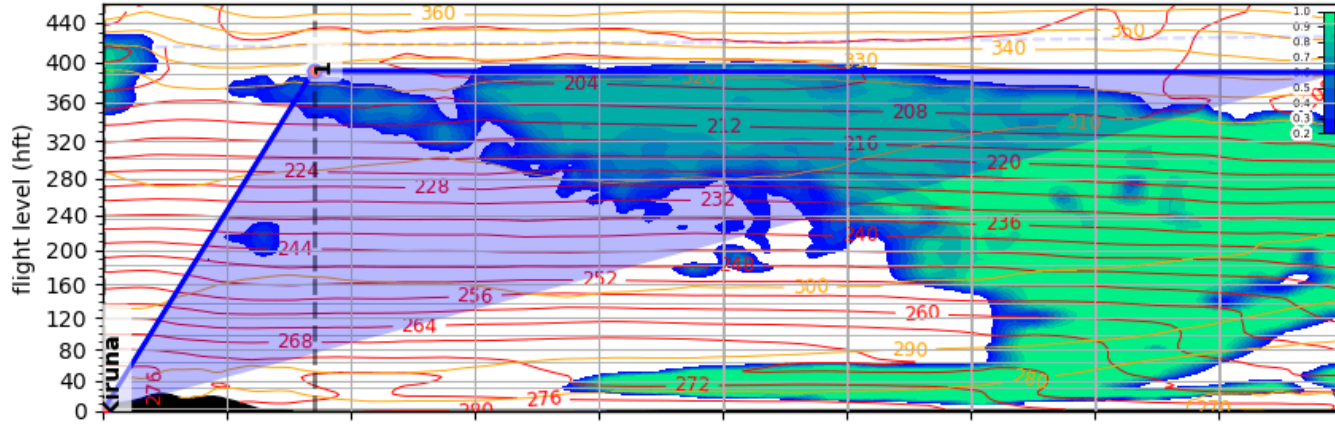


**Cloud cross-sections: Fram Strait**  
2022-03-19 00 UTC: 36 – 60h  
ECMWF & ICON

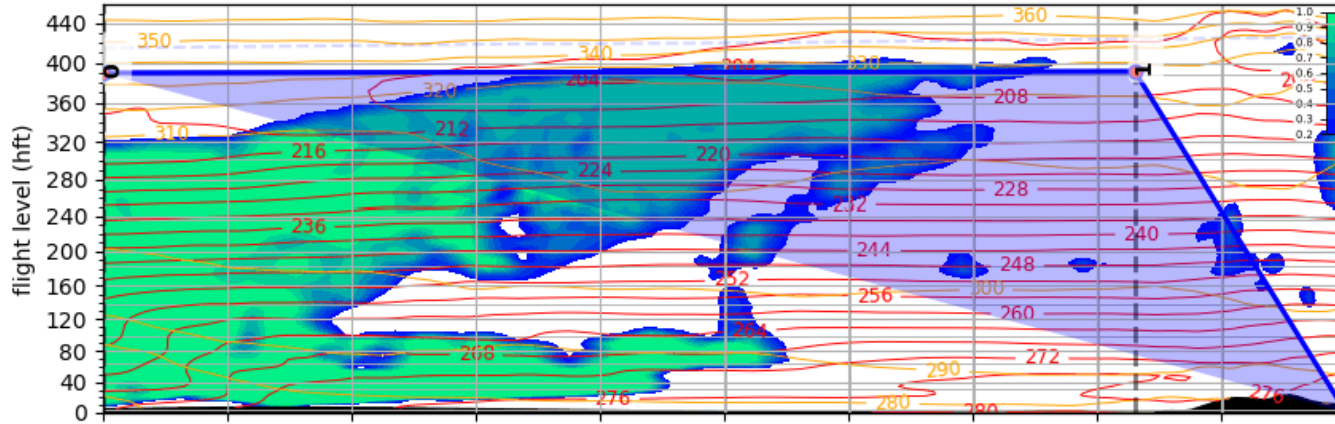
# Sun, 2022-03-20, Clouds, 12 UTC

ECMWF

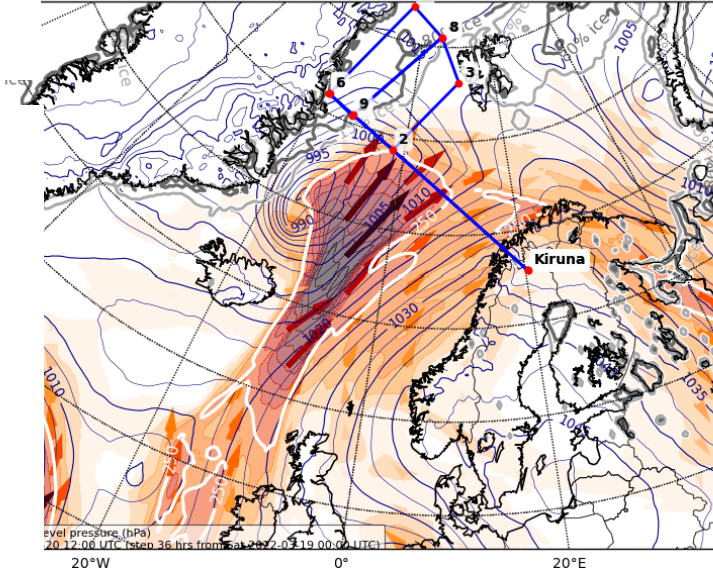
Valid: 2022-03-20T10:00:00Z (initialisation: 2022-03-19T00:00:00Z)



Valid: 2022-03-20T16:00:00Z (initialisation: 2022-03-19T00:00:00Z)

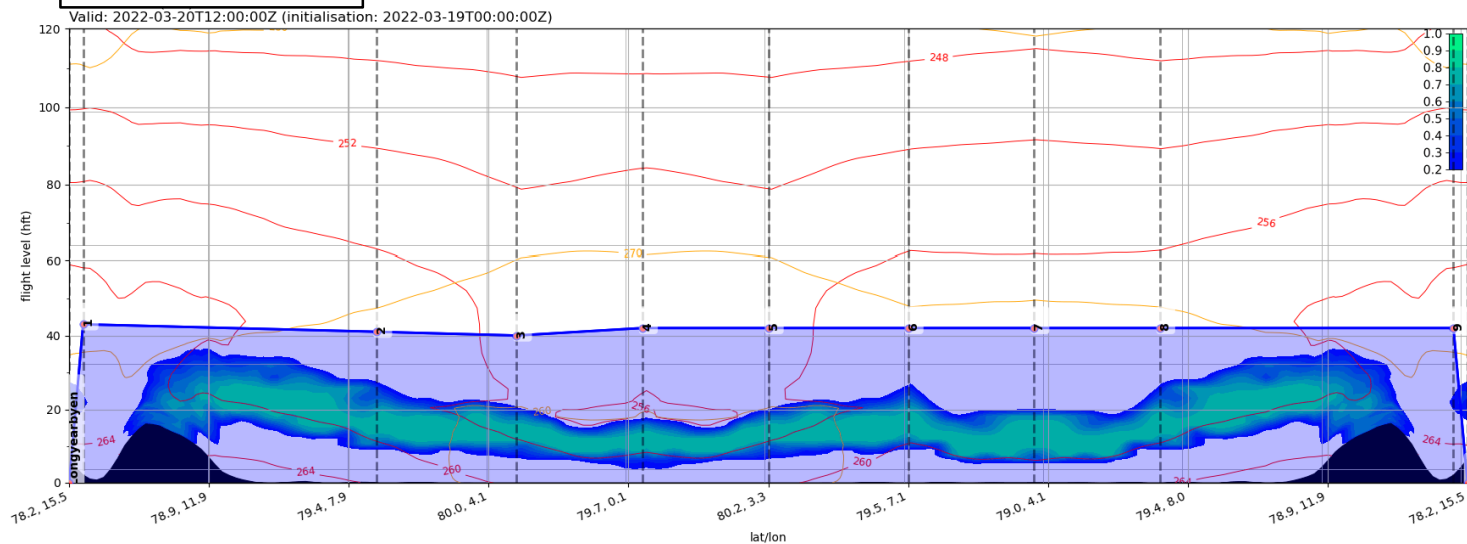


5-1) and Mean Sea Level Pressure (hPa)  
2022-03-20T12:00:00Z (initialisation: 2022-03-19T00:00:00Z)

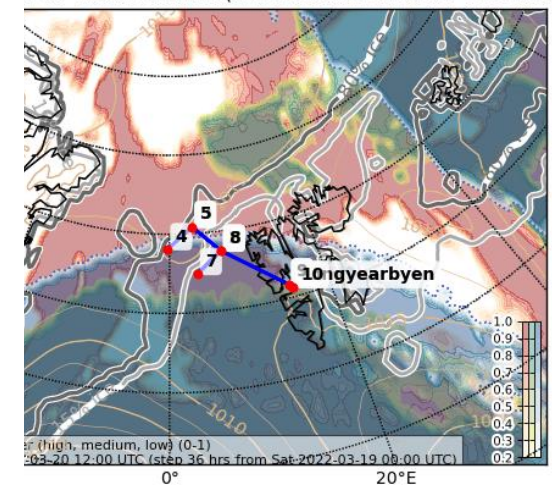


# Sun, 2022-03-20, Clouds, 12 UTC – Flight track Polar 6

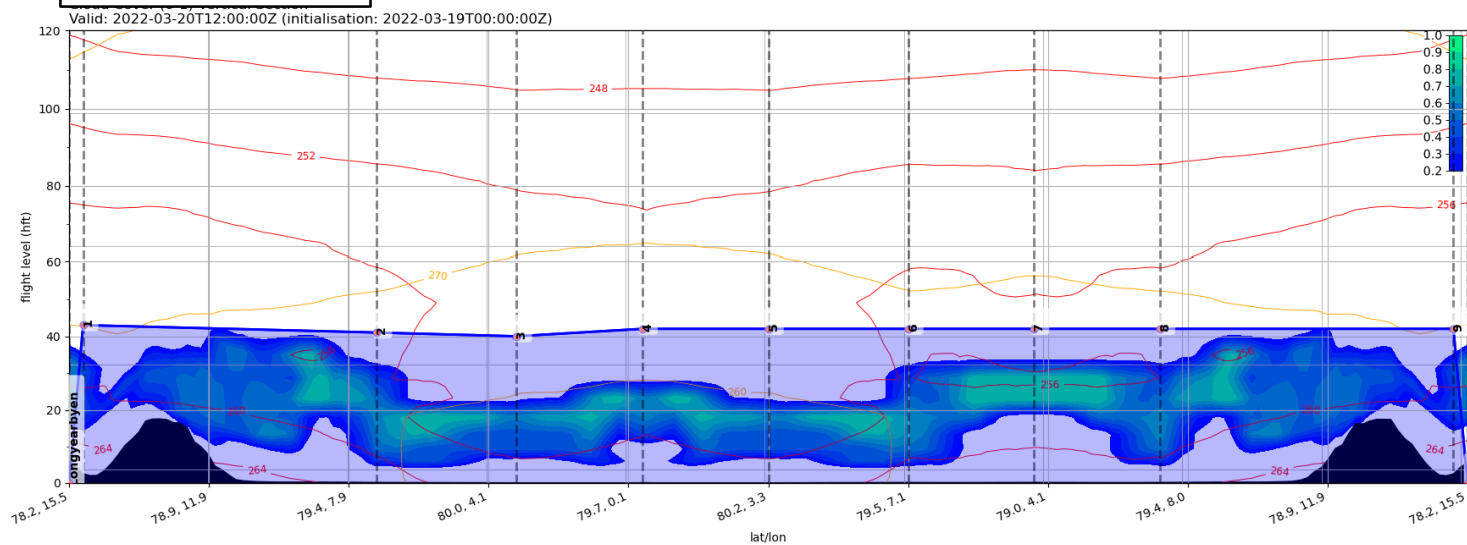
ECMWF



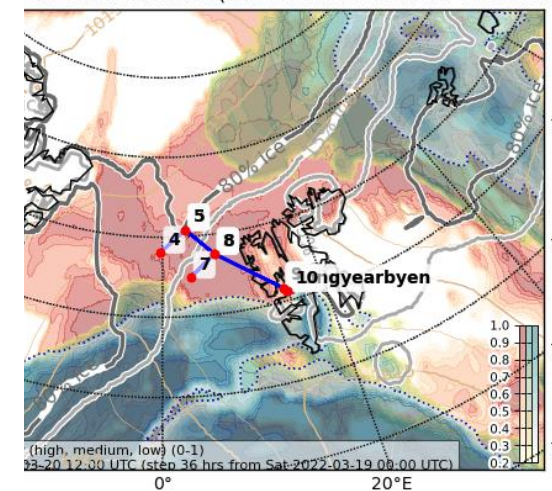
er (0-1) and Mean Sea Level Pressure (hPa) ( default  
2-03-20T12:00:00Z (initialisation: 2022-03-19T00:00:00Z)



ICON

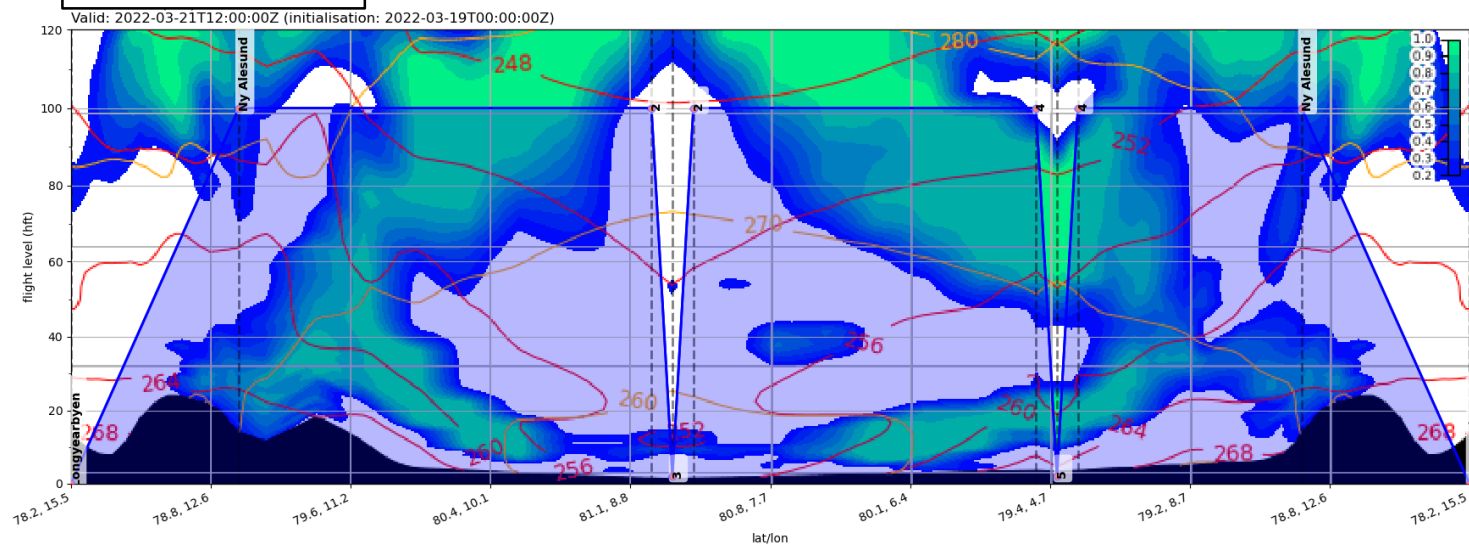


er (0-1) and Mean Sea Level Pressure (hPa) ( default  
2-03-20T12:00:00Z (initialisation: 2022-03-19T00:00:00Z)

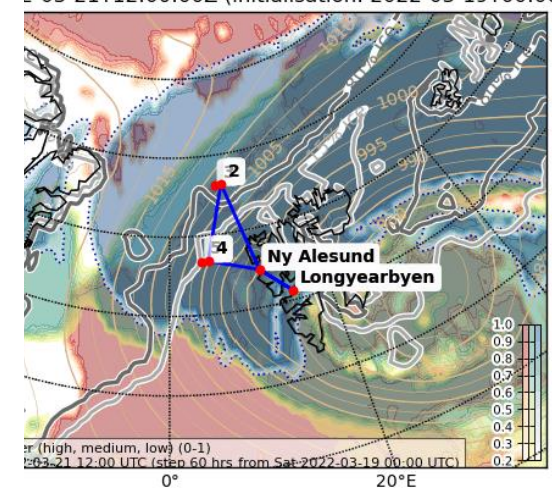


# Mon, 2022-03-21, Clouds, 12 UTC – Flight track Polar 5

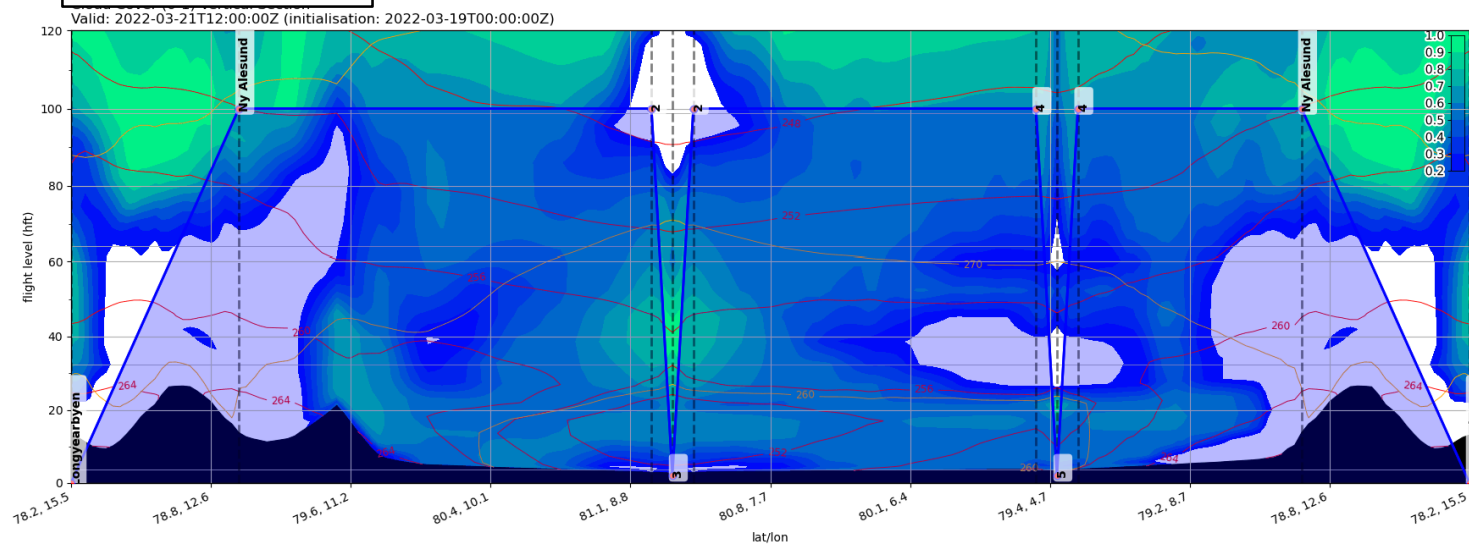
## ECMWF



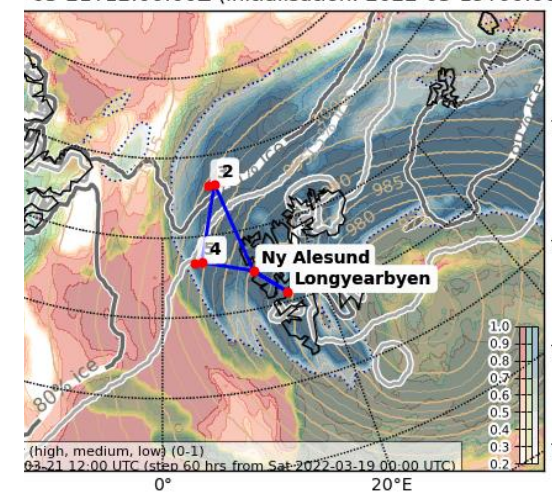
er (0-1) and Mean Sea Level Pressure (hPa) ( default  
2-03-21T12:00:00Z (initialisation: 2022-03-19T00:00:00Z)



## ICON



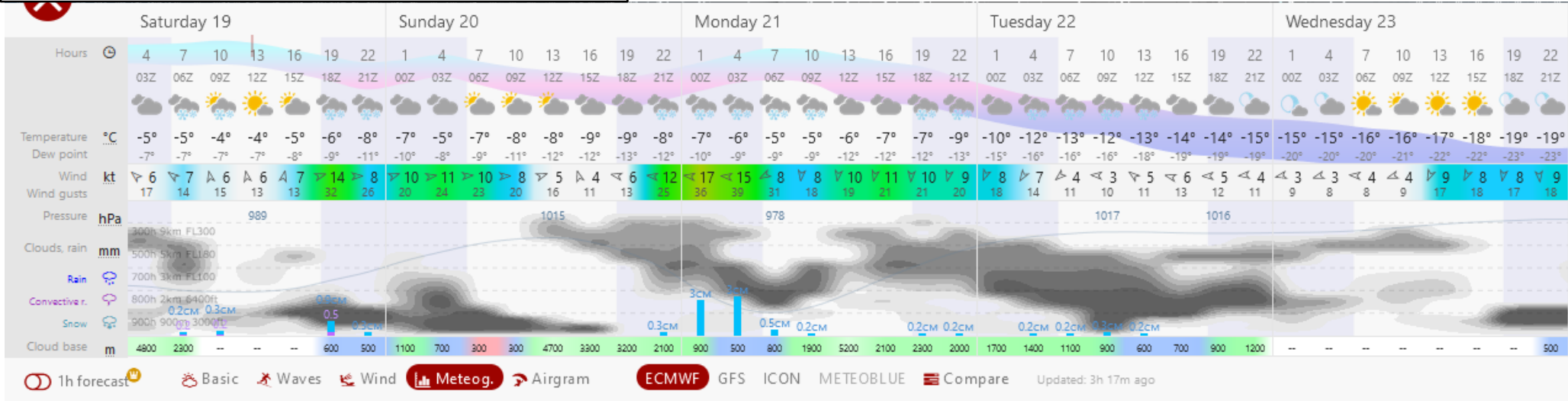
er (0-1) and Mean Sea Level Pressure (hPa) ( default  
03-21 12:00 UTC (step 60 hrs from Sat 2022-03-19 00:00 UTC)



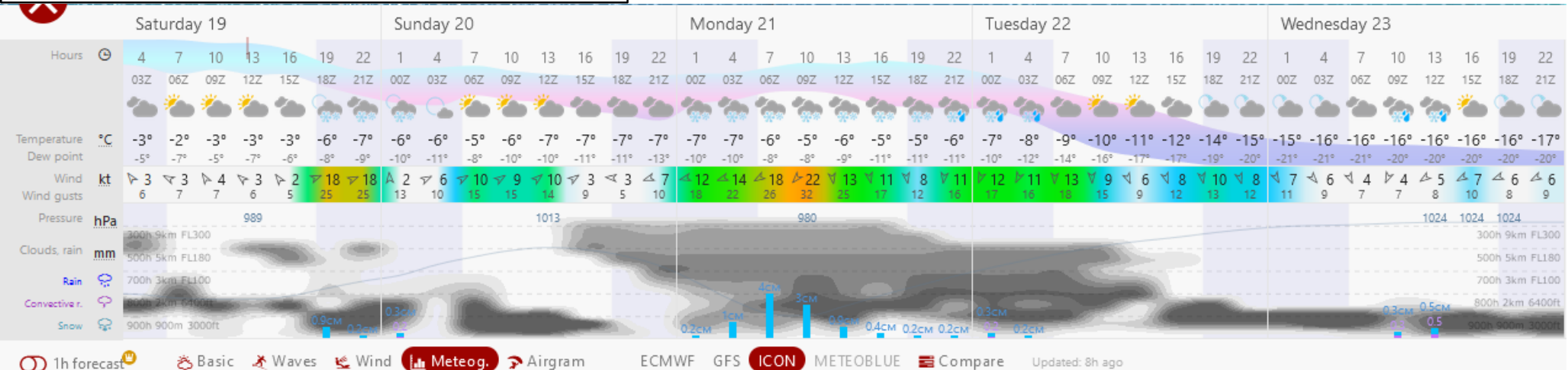
## **Airport meteograms & local weather at Svalbard**

# Longyearbyen:

## ECWMF



## ICON



# Latest METAR and TAF from Longyearbyen airport (& airport forecast)

## Svalbard Airport. Longyear

Longyearbyen, Norway

latitude: 78-15N, longitude: 015-28E,  
elevation: 2 m

### Current weather observation

The report was made **20** minutes ago, at **15:20** UTC

**Calm wind**

Temperature **-4°C**

Humidity **93%**

Pressure **989** hPa

Visibility **10 km or more**

**Few clouds** at a height of **700** ft  
**Broken clouds** at a height of **2800** ft

**showers in vicinity**

[Change units](#)

Time: 16:40 (15:40 UTC)

### Forecast

*Forecast valid from 19 at 12 UTC to 20 at 12 UTC*

Wind **8** kt from the **South/Southwest**

Visibility **10** km or more

**Few clouds** at a height of **1000** ft  
**Broken clouds** at a height of **3000** ft

*Temporary*  
*from 19 at 12 UTC to 19 at 22 UTC*

Visibility: **2000** m

at a height of **800** ft

**snow showers**

*Temporary*  
*from 19 at 15 UTC to 19 at 24 UTC*

Wind **15** kt from the **West/Southwest** with  
gusts up to **25** kt

*Temporary*  
*from 20 at 00 UTC to 20 at 10 UTC*

Wind **15** kt from the **Northwest**

**TAF:** ENSB 1912/2012 20008KT 9999  
FEW010 BKN030 TEMPO 1912/1922 2000  
SHSN VV008 TEMPO 1915/1924  
25015G25KT TEMPO 2000/2010 32015KT



# Summary

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

- **Sunday, 2022-03-20:**
  - SK cyclone providing WAI/AR west of Scandinavia
  - Low level clouds in Fram Strait
- **Monday, 2022-03-21:**
  - SK cyclone reaching Svalbard and starts dissipating
  - Unfavourable flight conditions in LYR (Wind, precip.)
  - High-reaching clouds in Fram Strait
- **Tuesday, 2022-03-22:**
  - CAO developing in Fram Strait perpendicular to sea ice edge
- **Wednesday, 2022-03-23:**
  - CAA reaching further to open ocean, probably blocked by WAA in North Atlantic