

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

Monday, 2022-03-28, 09:00 LT

## **Surface wind development and precipitation**

2022-03-27 12 UTC: 48 – 120h

ECMWF

2022-03-28 00 UTC: 36 – 108h

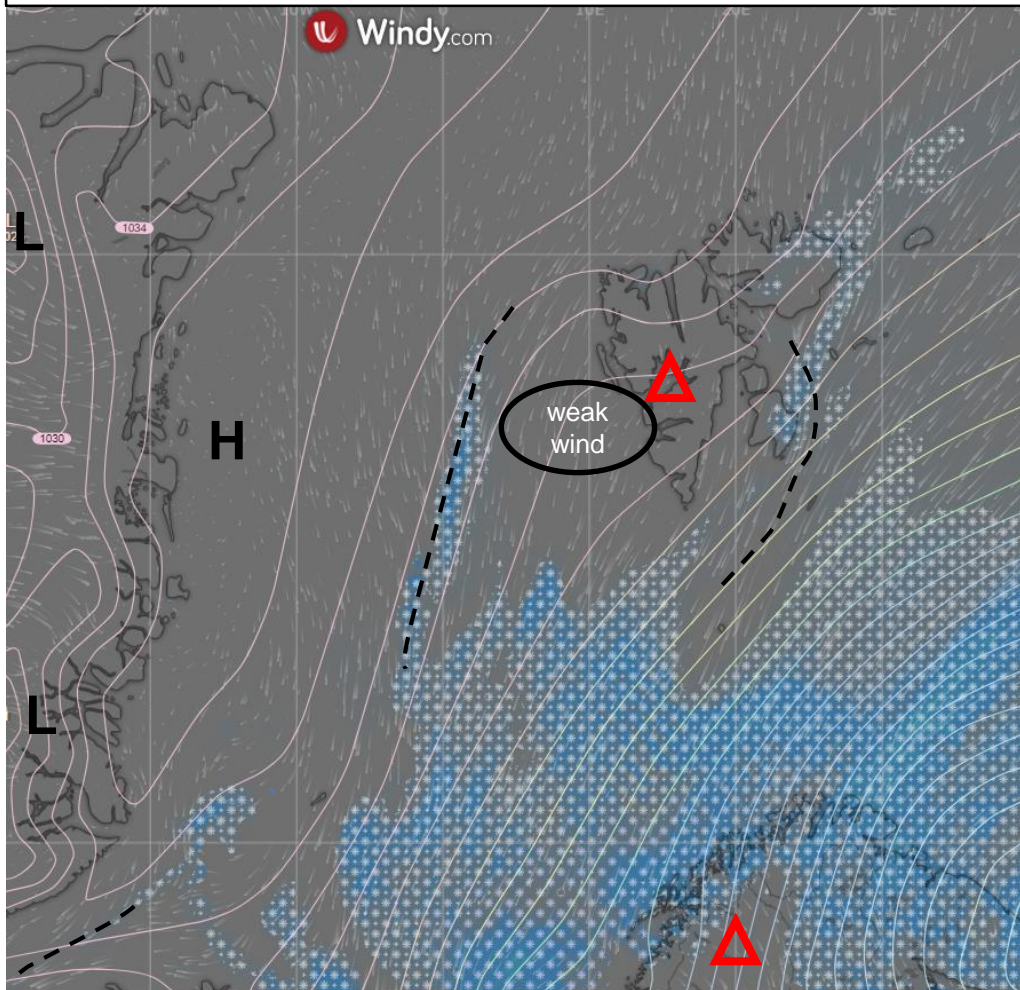
ICON

**CAA: Cold Air Advection**

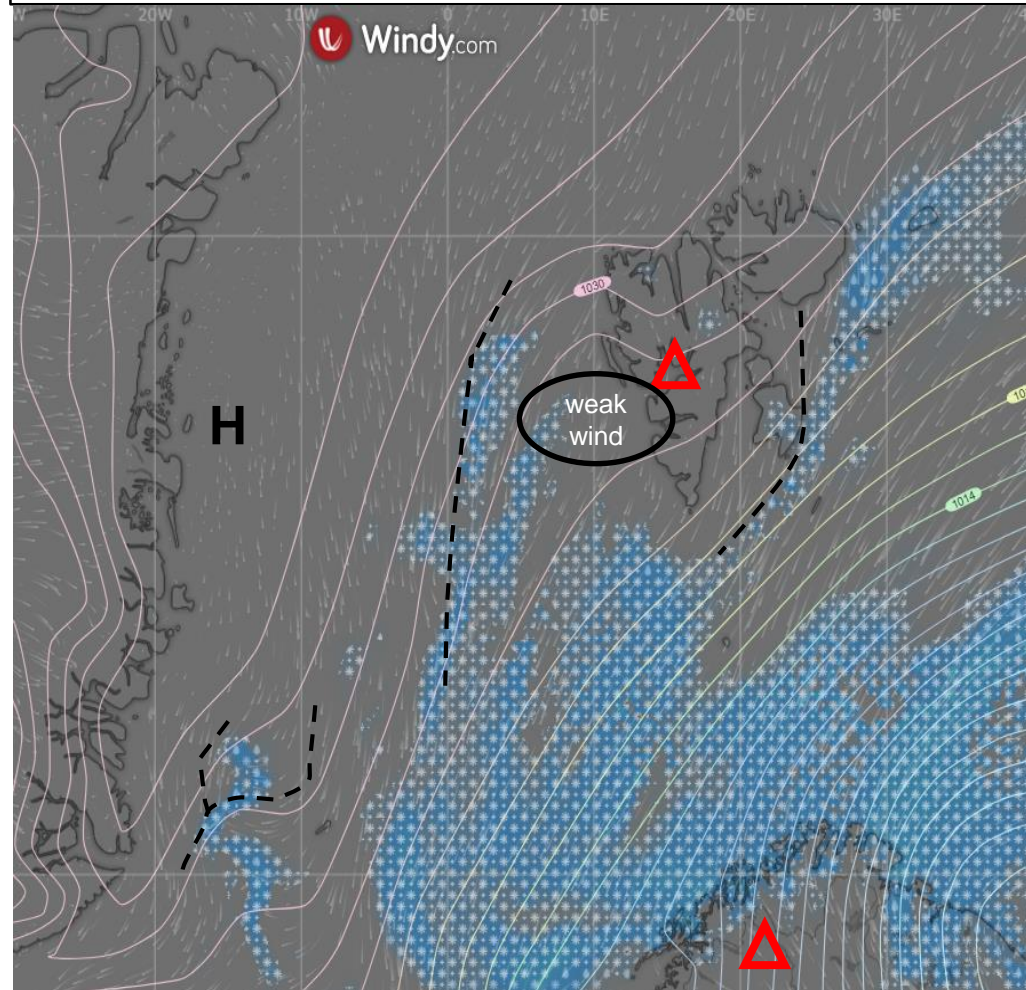
**WAA: Warm Air Advection**

Tuesday, 2022-03-29 12 UTC

ECMWF (y12)

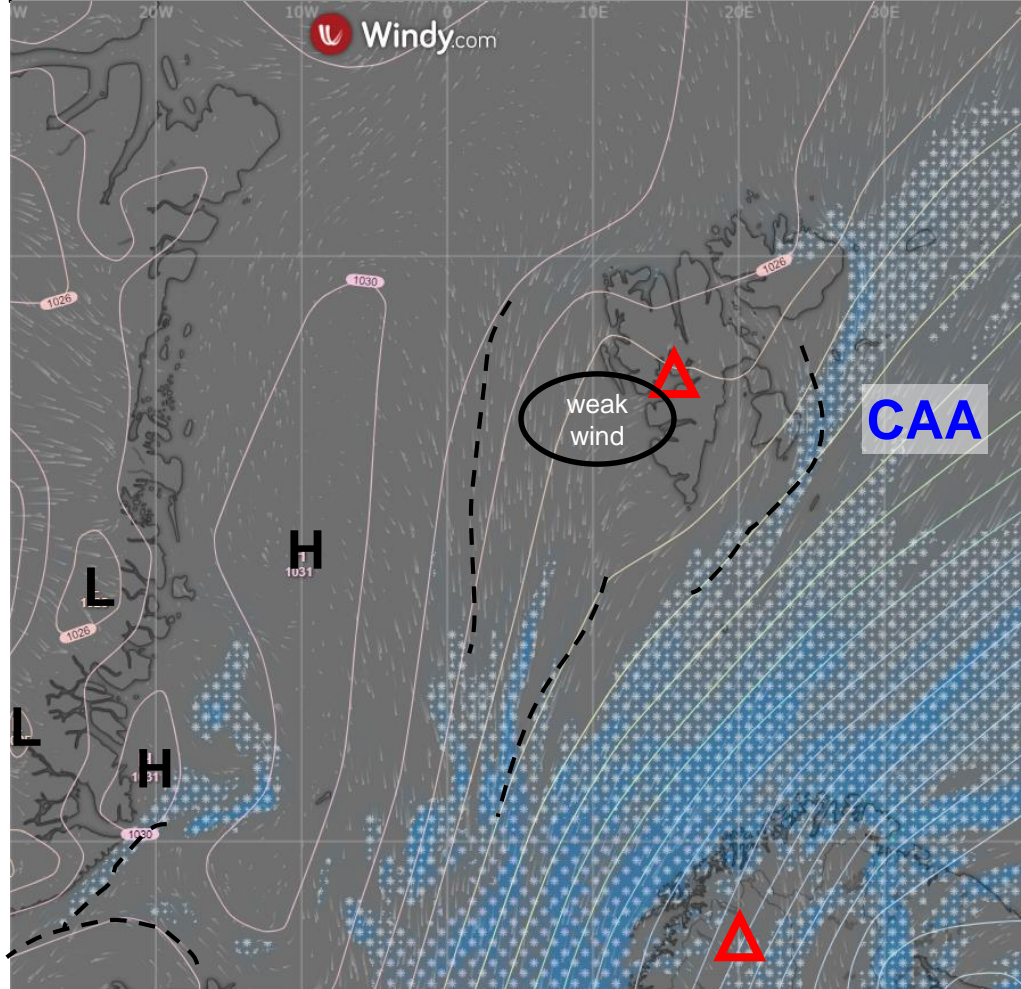


ICON (t00)

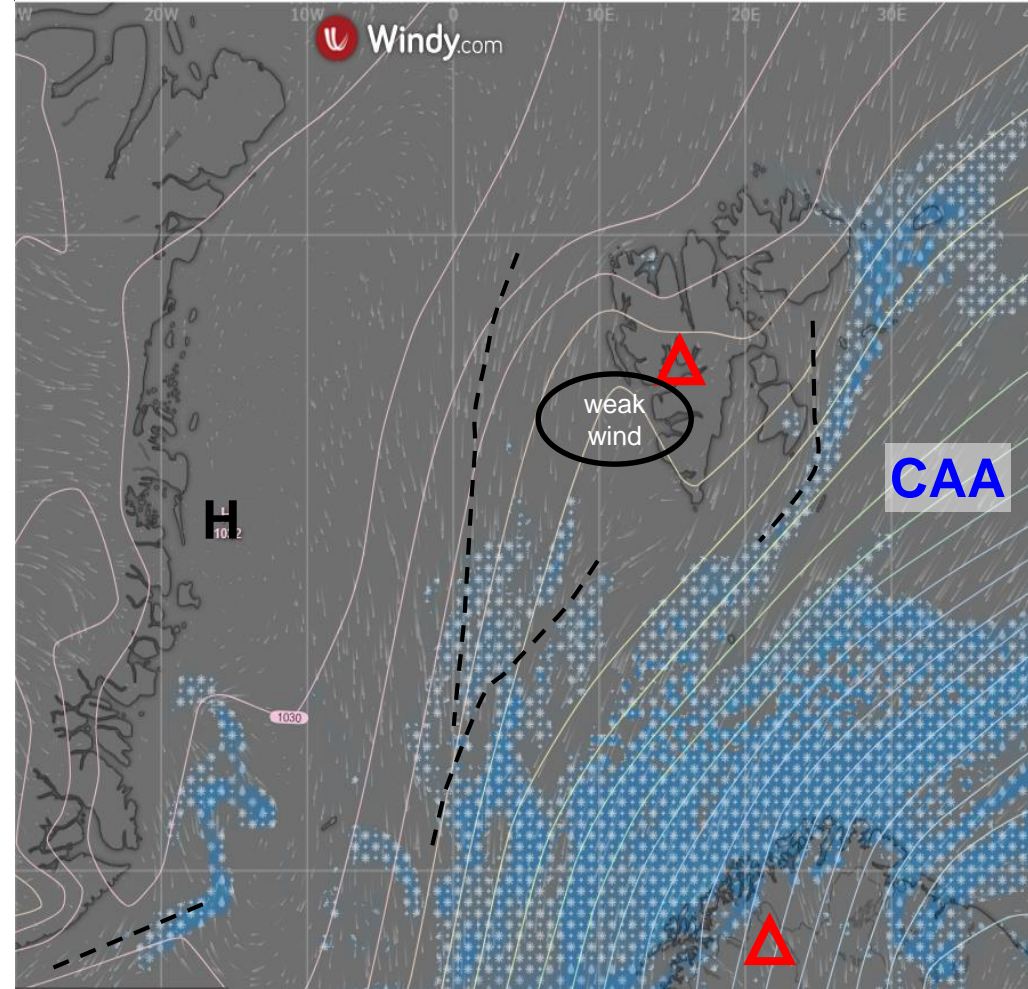


# Wednesday, 2022-03-30 12 UTC

## ECMWF (y12)

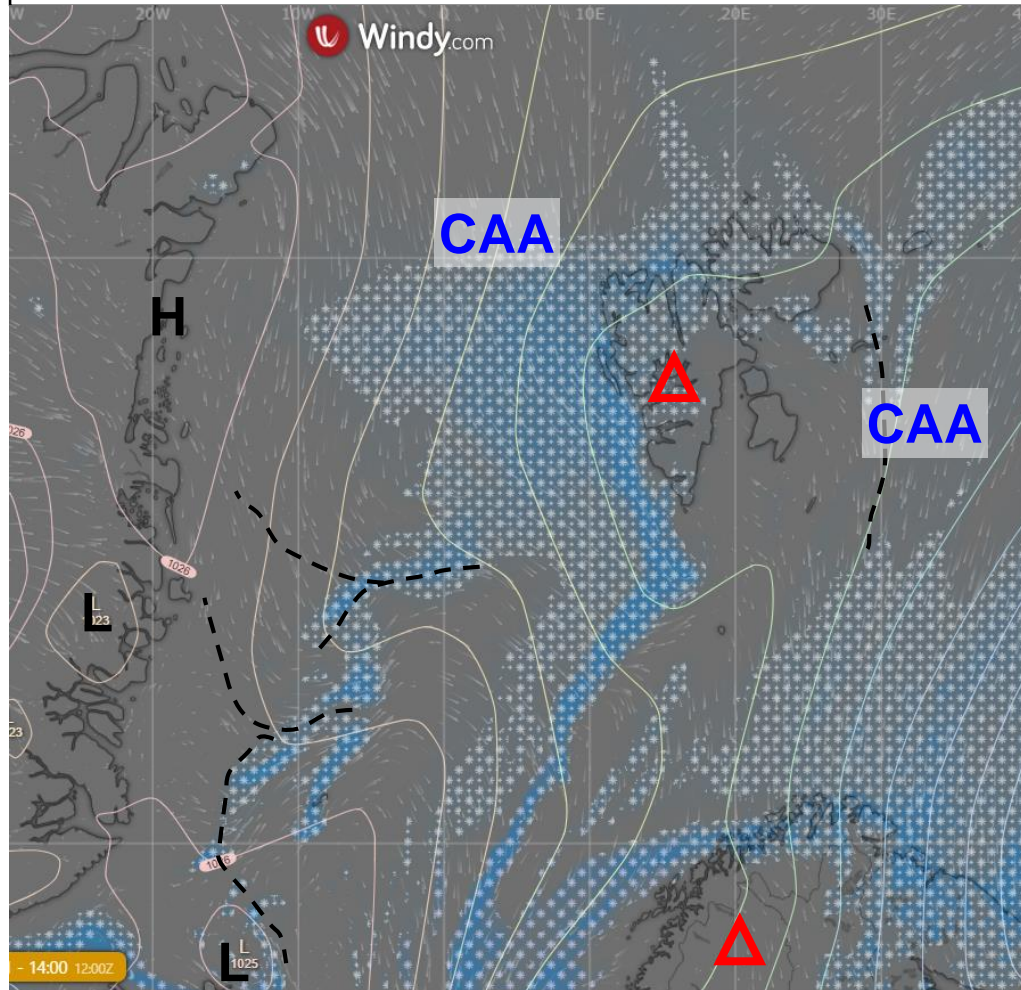


## ICON (t00)

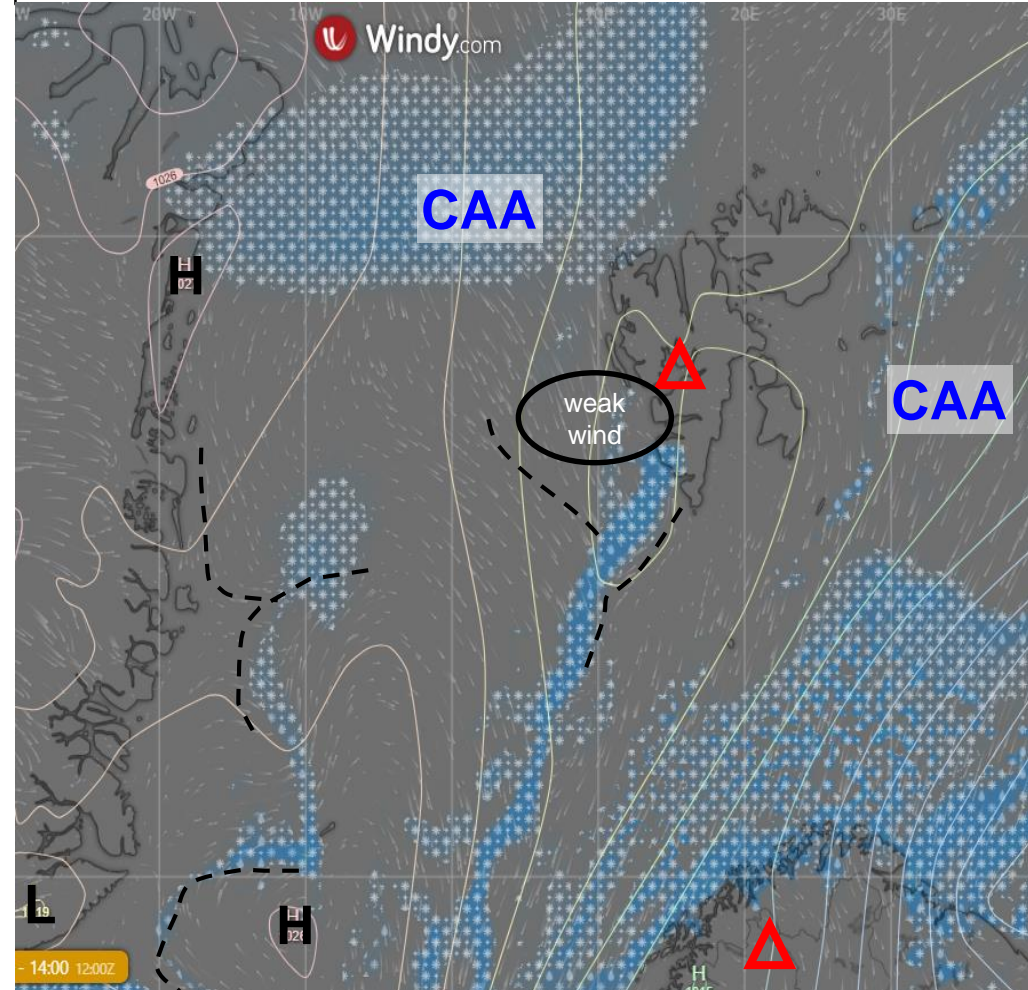


# Thursday, 2022-03-31 12 UTC

## ECMWF (y12)

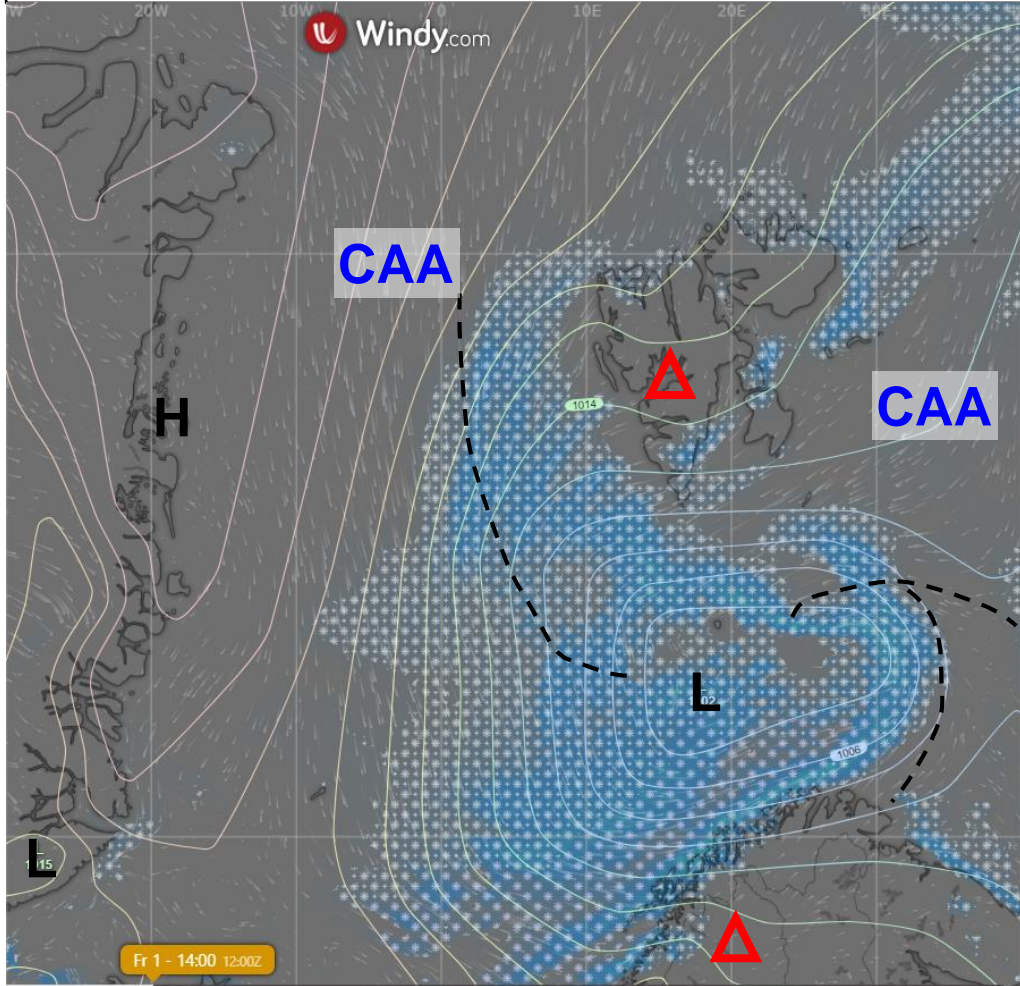


## ICON (t00)

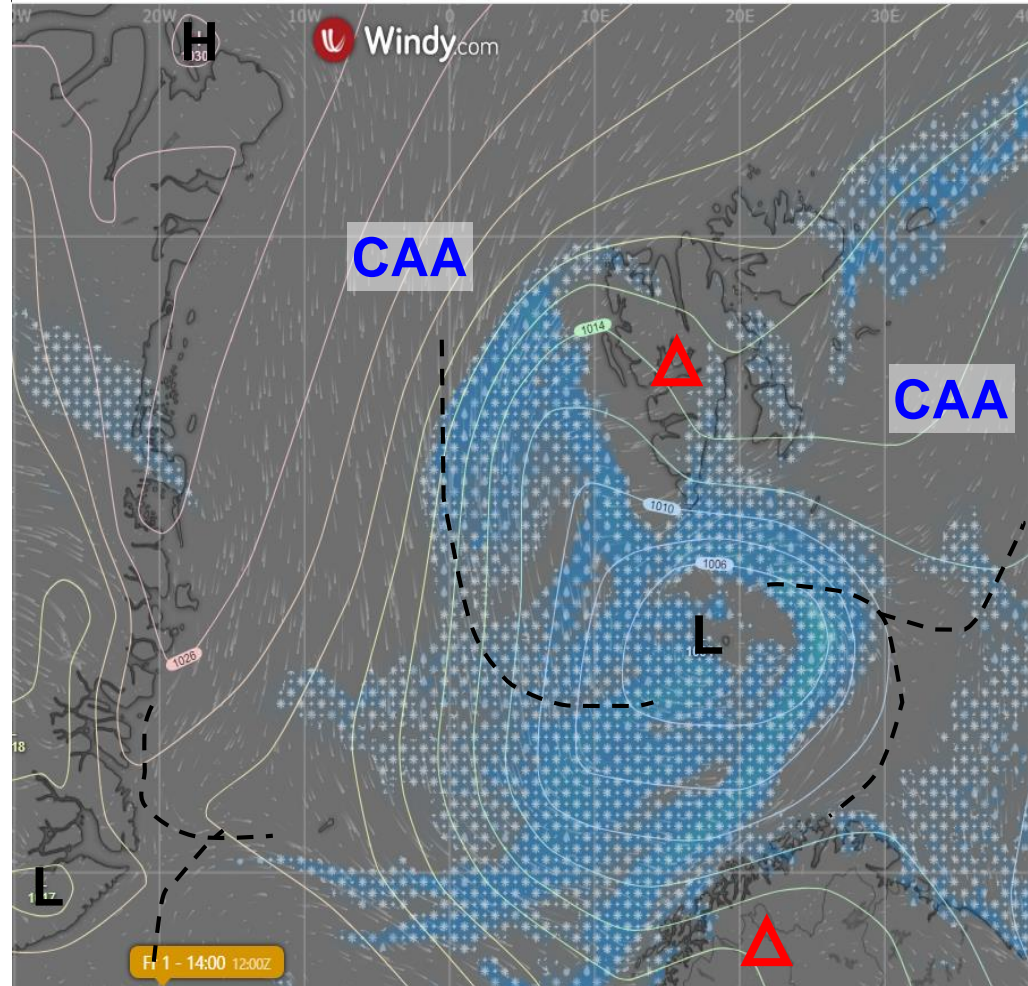


# Friday, 2022-04-01 12 UTC

## ECMWF (y12)



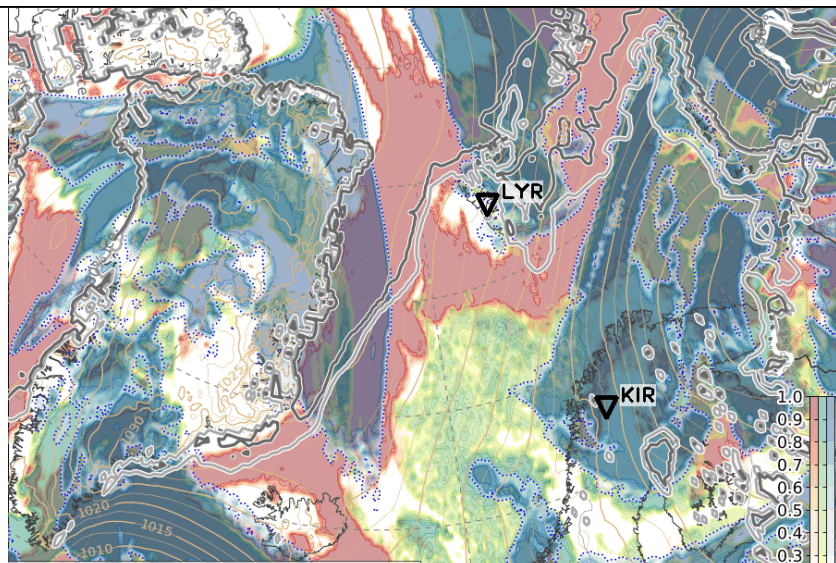
## ICON (t00)



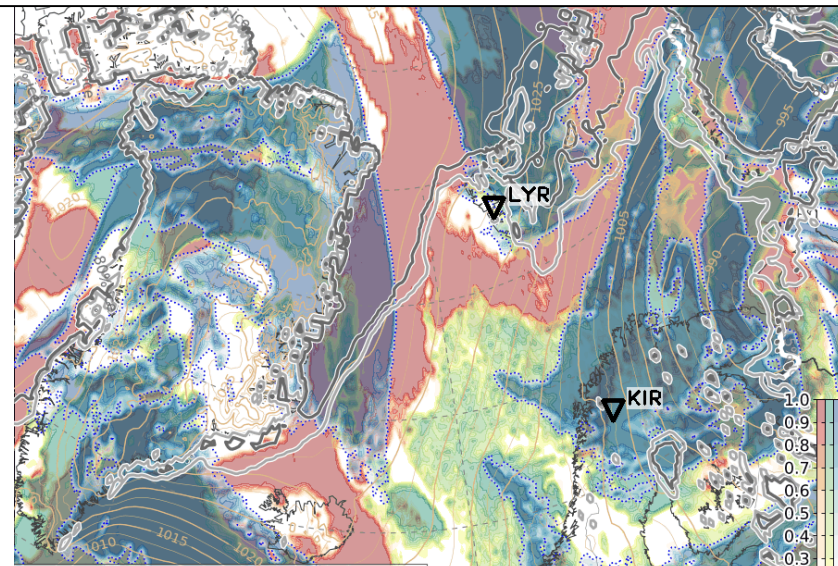
**Forecast comparison (TCC, ThetaE850hPa)**  
ECMWF  
2022-03-27 00 UTC and 12 UTC

Tuesday, 2022-03-29 12 UTC

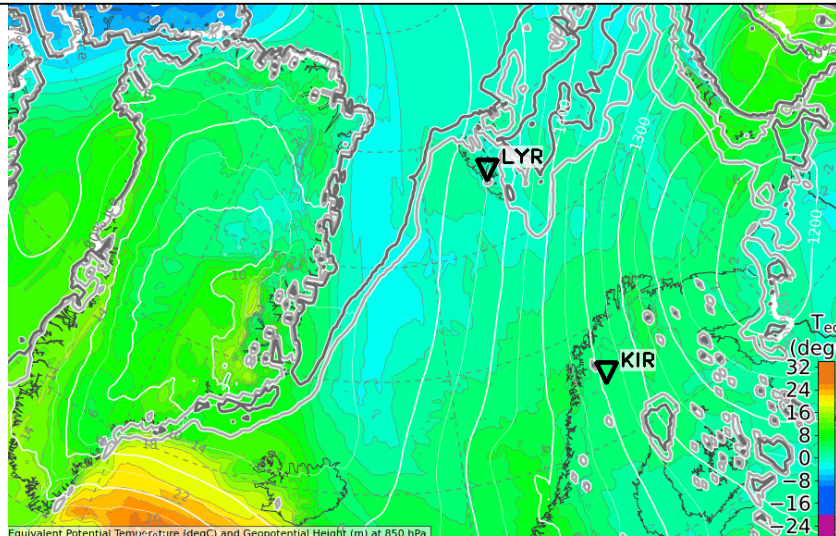
Total Cloud Cover – 00 UTC



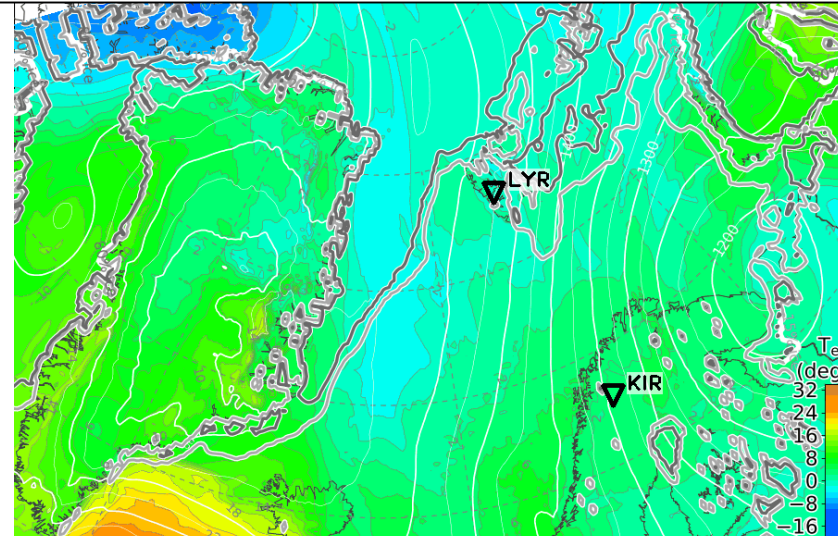
Total Cloud Cover – 12 UTC



850 hPa Equ. pot. Temperature – 00 UTC



850 hPa Equ. pot. Temperature – 12 UTC



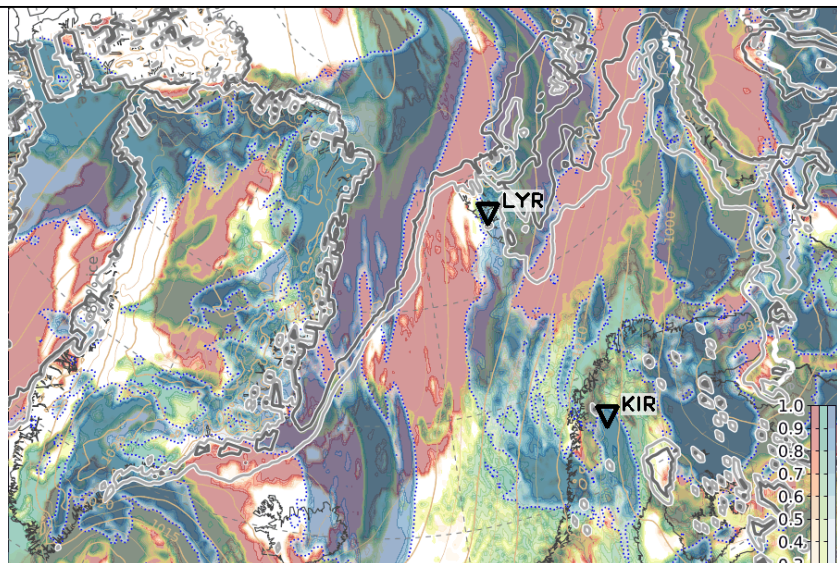
Equivalent Potential Temperature (degC) and Geopotential Height (m) at 850 hPa

T<sub>eq</sub>  
(degC)

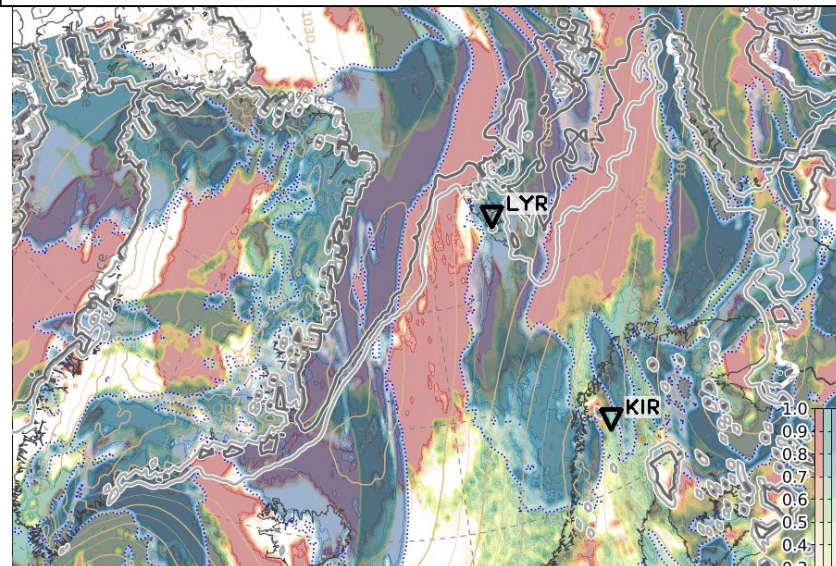


Wednesday, 2022-03-30 12 UTC

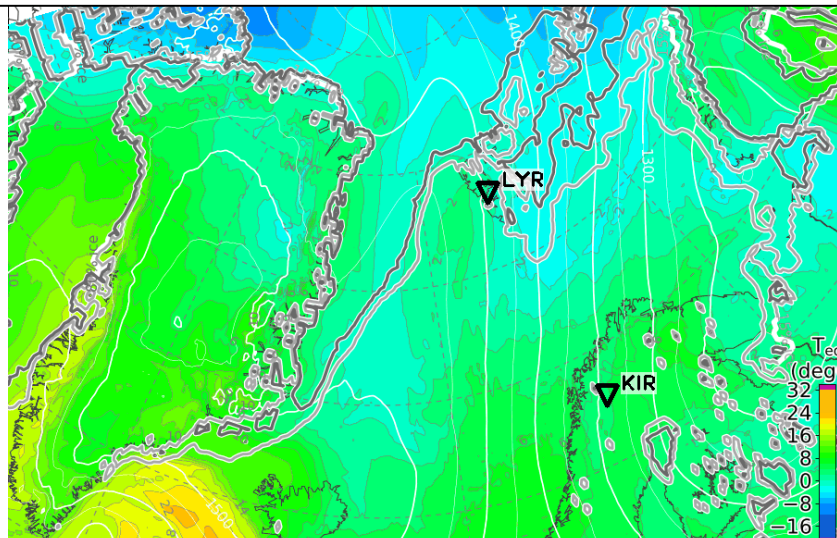
Total Cloud Cover – 00 UTC



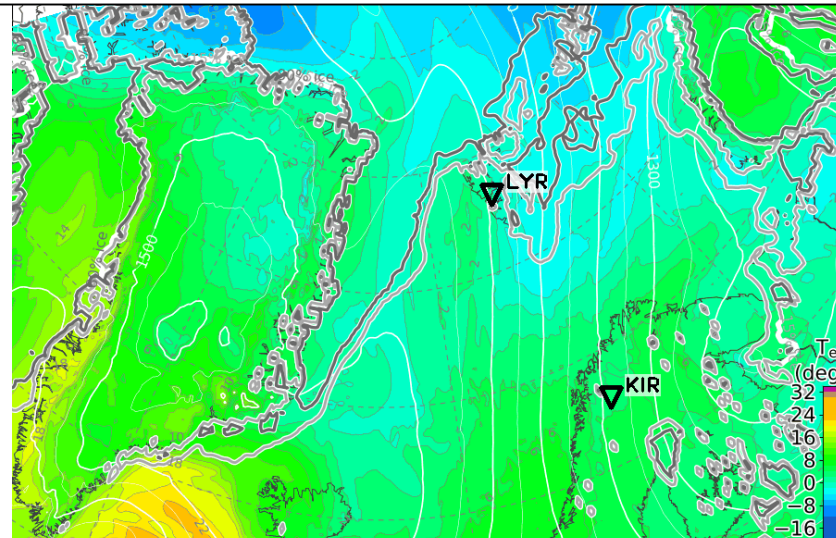
Total Cloud Cover – 12 UTC



850 hPa Equ. pot. Temperature – 00 UTC

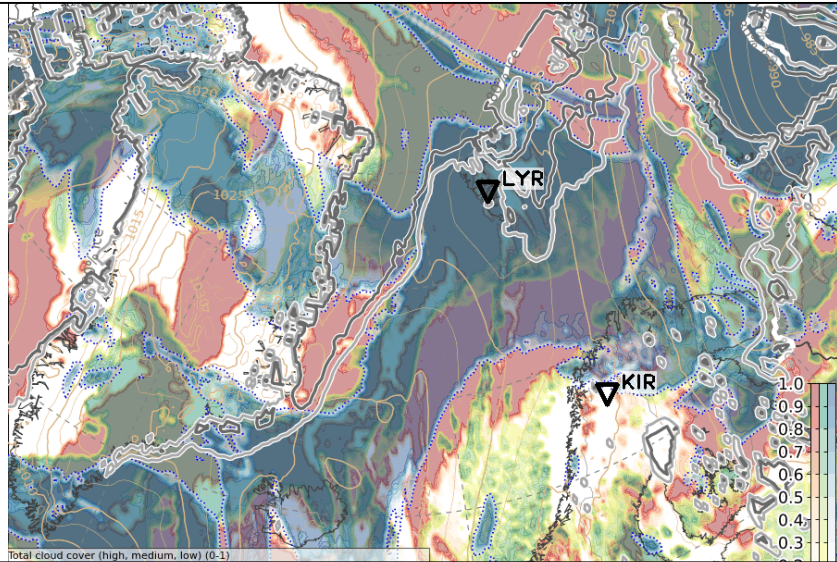


850 hPa Equ. pot. Temperature – 12 UTC

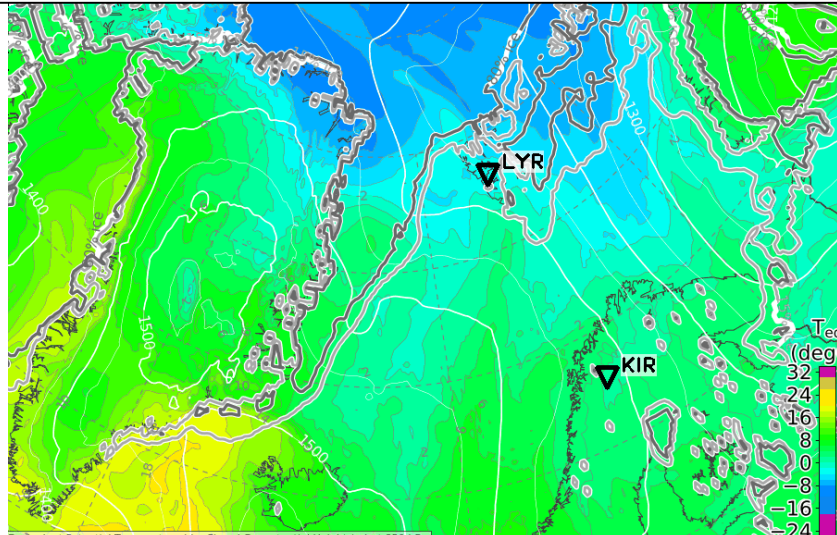


Thursday, 2022-03-31 12 UTC

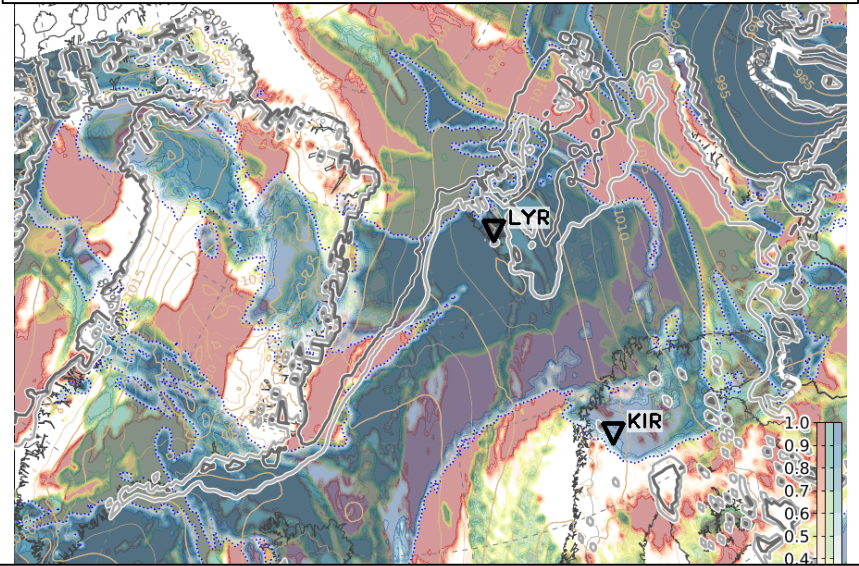
Total Cloud Cover – 00 UTC



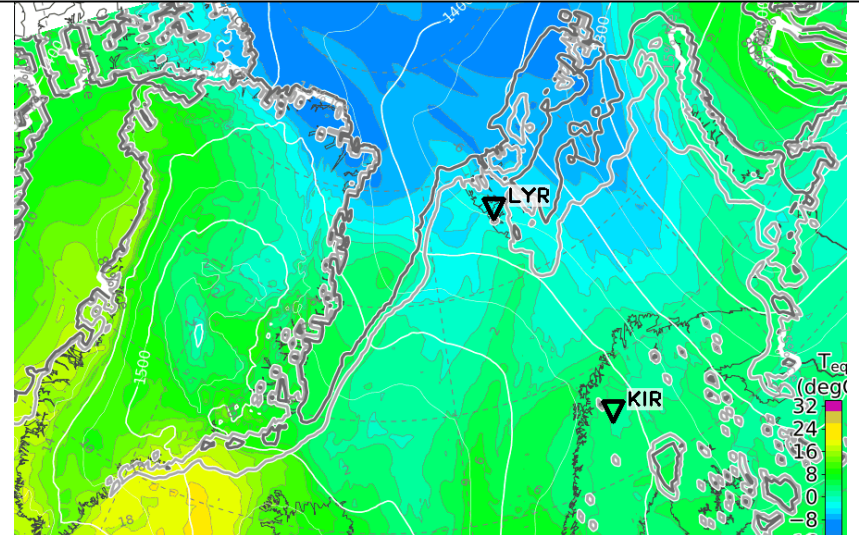
850 hPa Equ. pot. Temperature – 00 UTC



Total Cloud Cover – 12 UTC

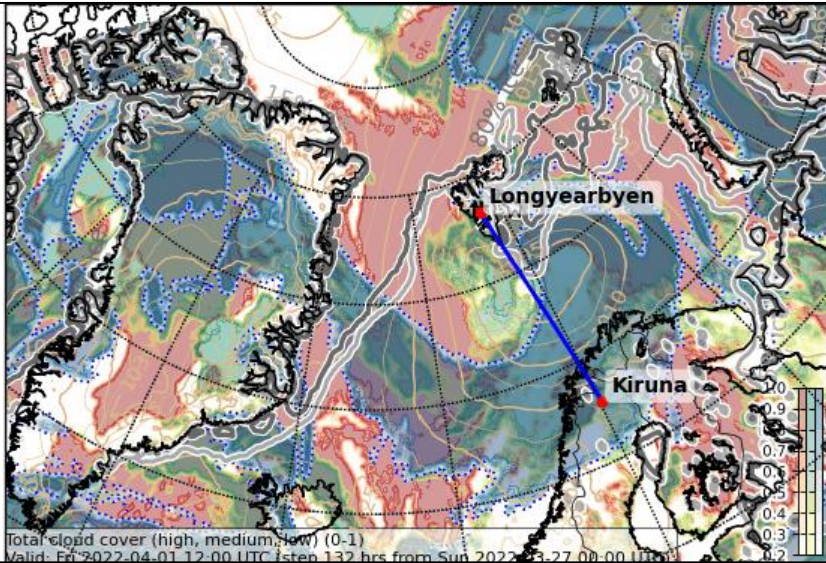


850 hPa Equ. pot. Temperature – 12 UTC

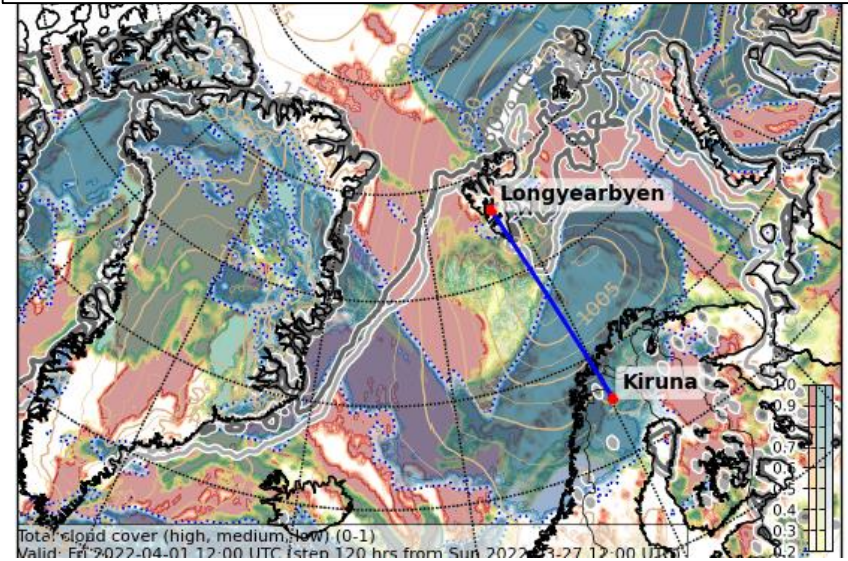


Friday, 2022-04-01 12 UTC

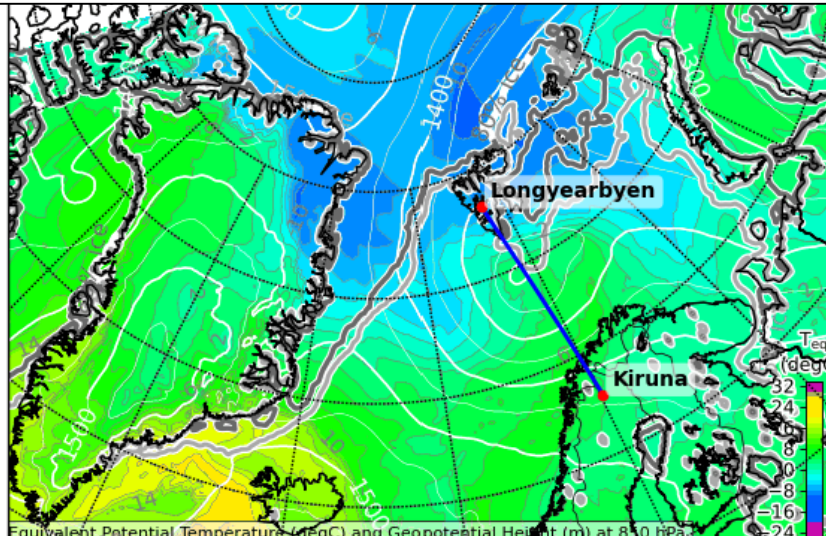
Total Cloud Cover – 00 UTC



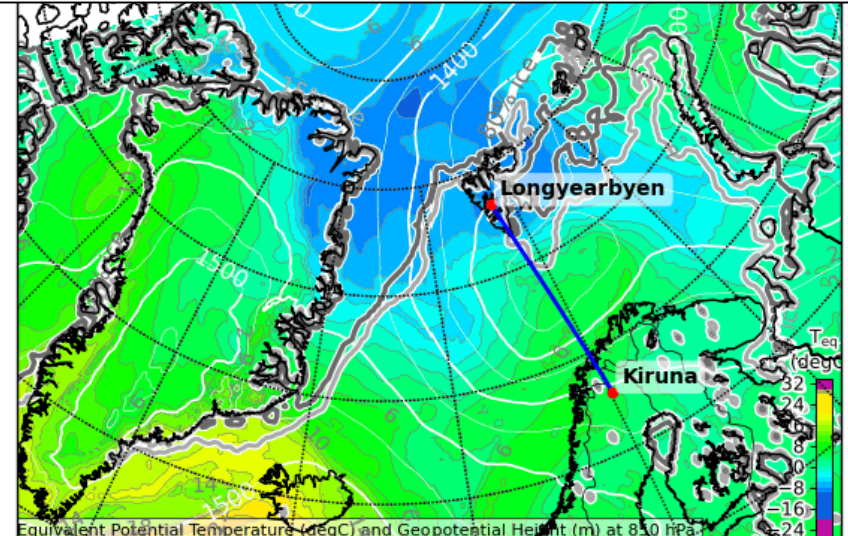
Total Cloud Cover – 12 UTC



850 hPa Equ. pot. Temperature – 00 UTC

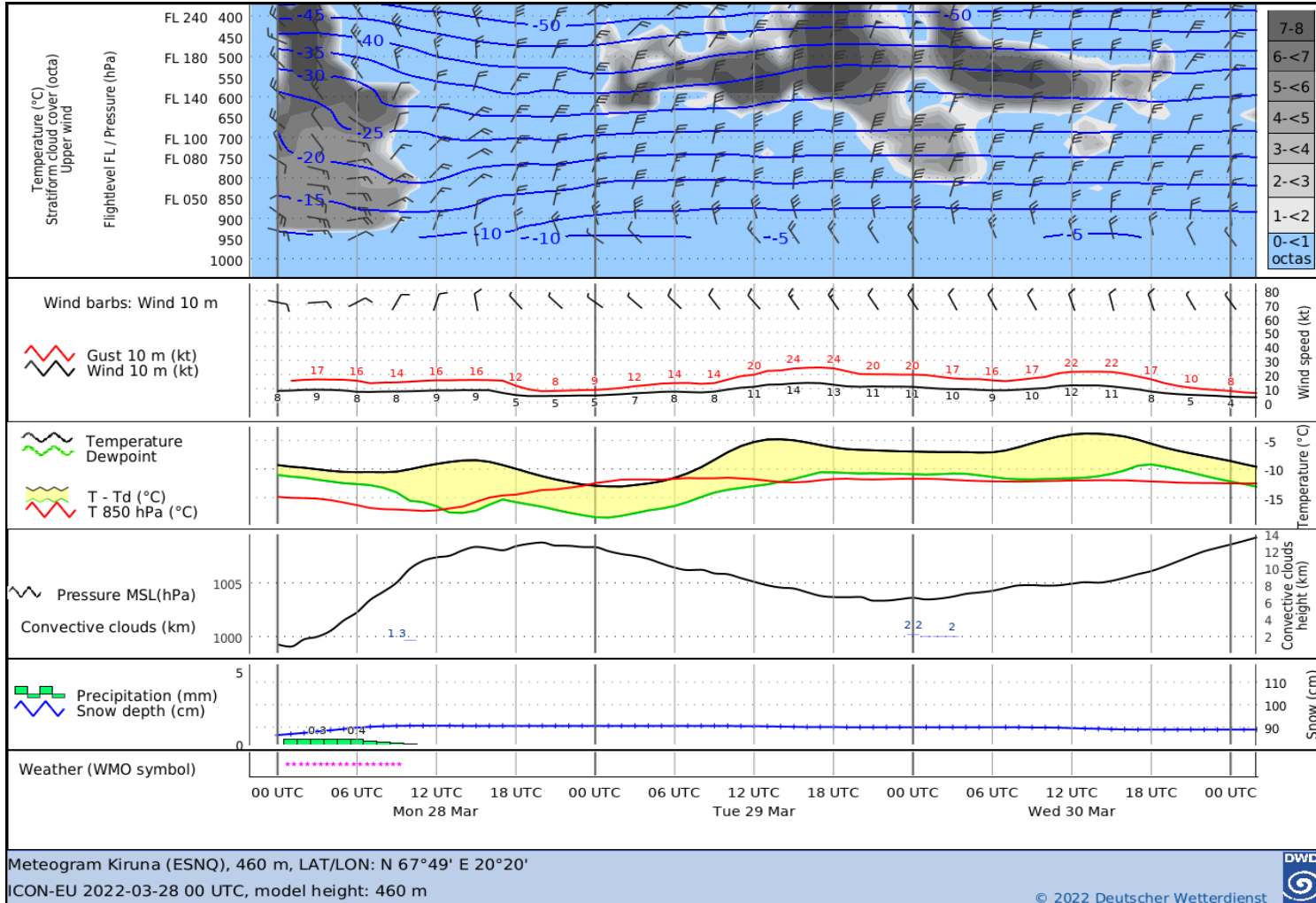


850 hPa Equ. pot. Temperature – 12 UTC



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

# Kiruna





## Summary

# Summary Weather Update 2022-03-28 9:00 LT

- **Tuesday, 2022-03-29**
  - high pressure system east of Greenland
  - calm wind conditions west of Svalbard
- **Wednesday, 2022-03-30**
  - similar to Tuesday
  - high cloud advection over Fram Strait
  - cold air advected (origin: Russia and Alaska)
- **Thursday, 2022-03-31**
  - high and mid-level clouds over Svalbard
  - Formation of low pressure system south west of Svalbard
  - unfavorable flight conditions at LYR
  - CAA over Kara sea, weak CAA over Fram Strait
- **Friday, 2022-04-01**
  - high cloud cover over Svalbard dissolve, still mid-level clouds
  - intensification of CAAs