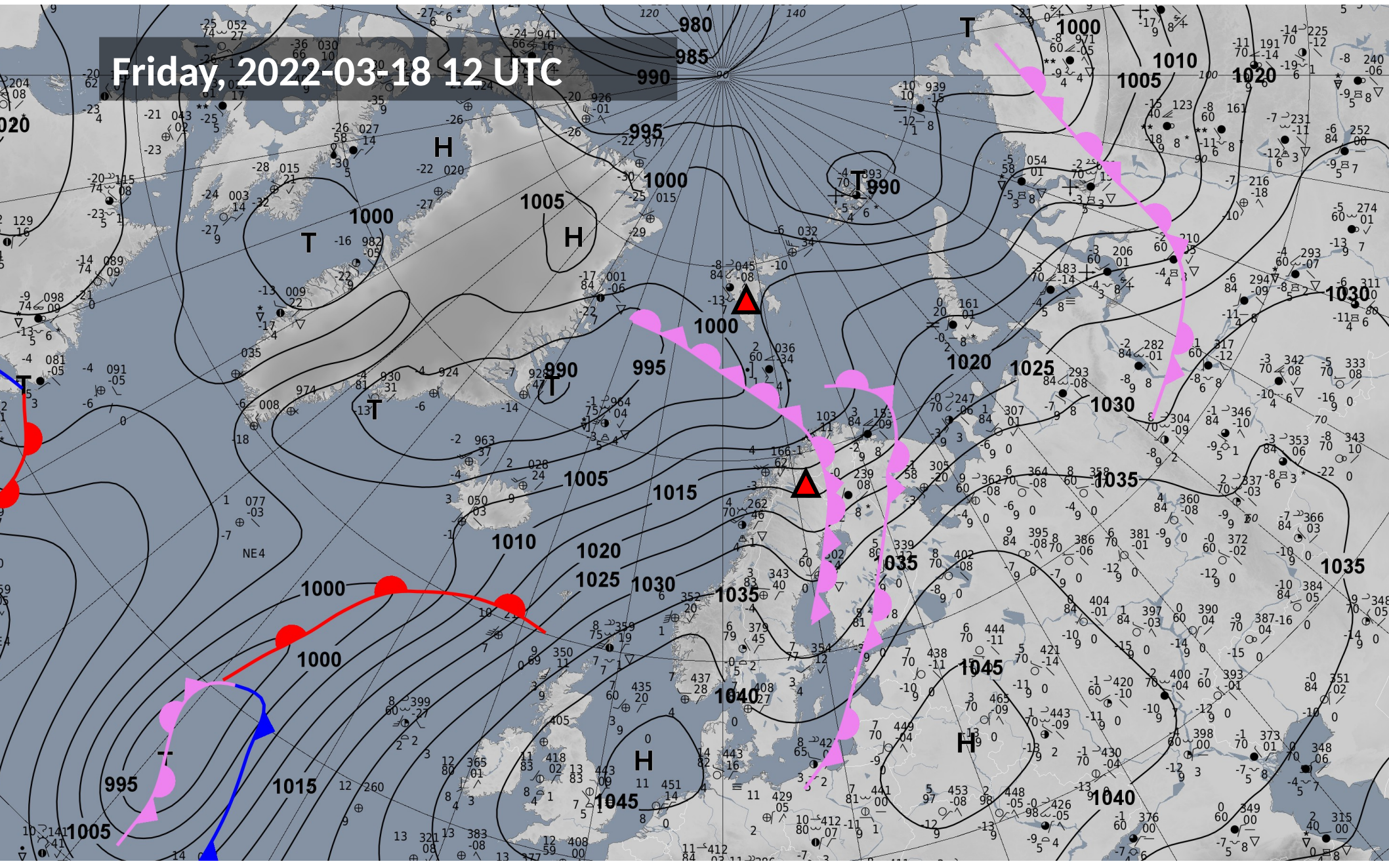


# Weather briefing HALO-(AC)<sup>3</sup>

Friday, 2022-03-18, 17:00 LT

**Surface Analysis**  
Friday, 2022-03-18 12 UTC  
DWD

Friday, 2022-03-18 12 UTC



# Surface wind development and precipitation

2022-03-18 00 UTC: 36 – 108h

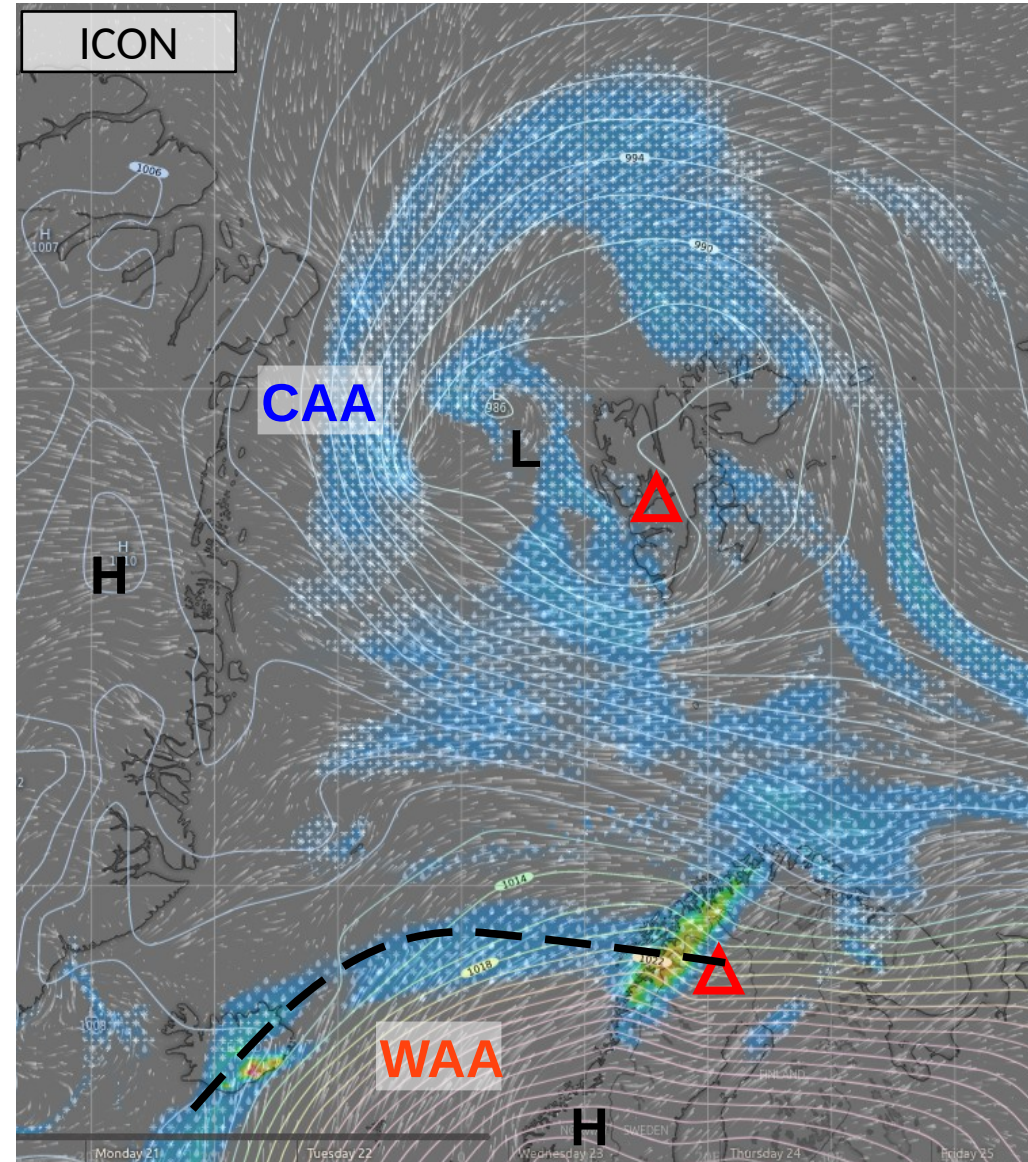
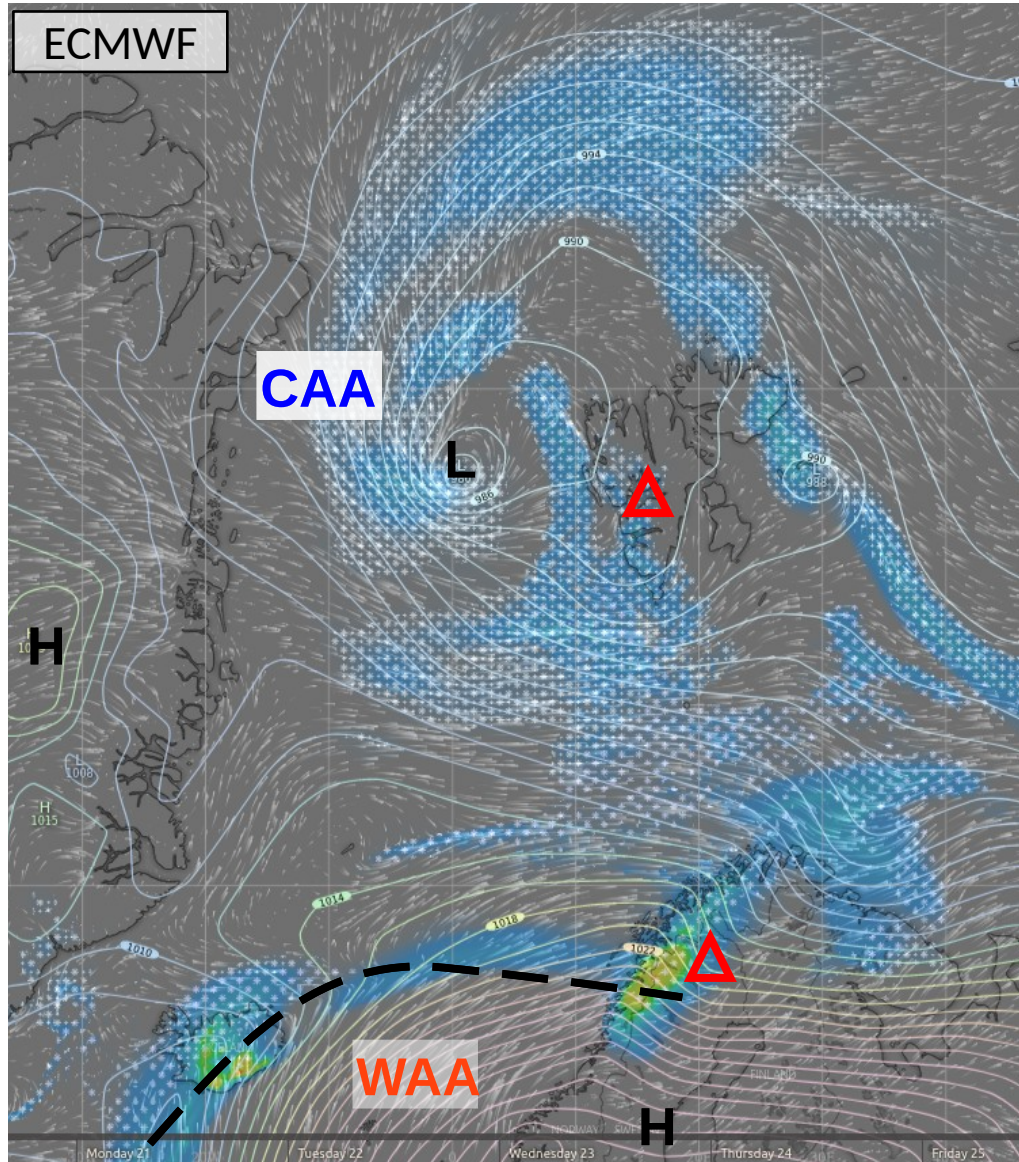
ECMWF & ICON

**CAA: Cold Air Advection**

**WAA: Warm Air Advection**

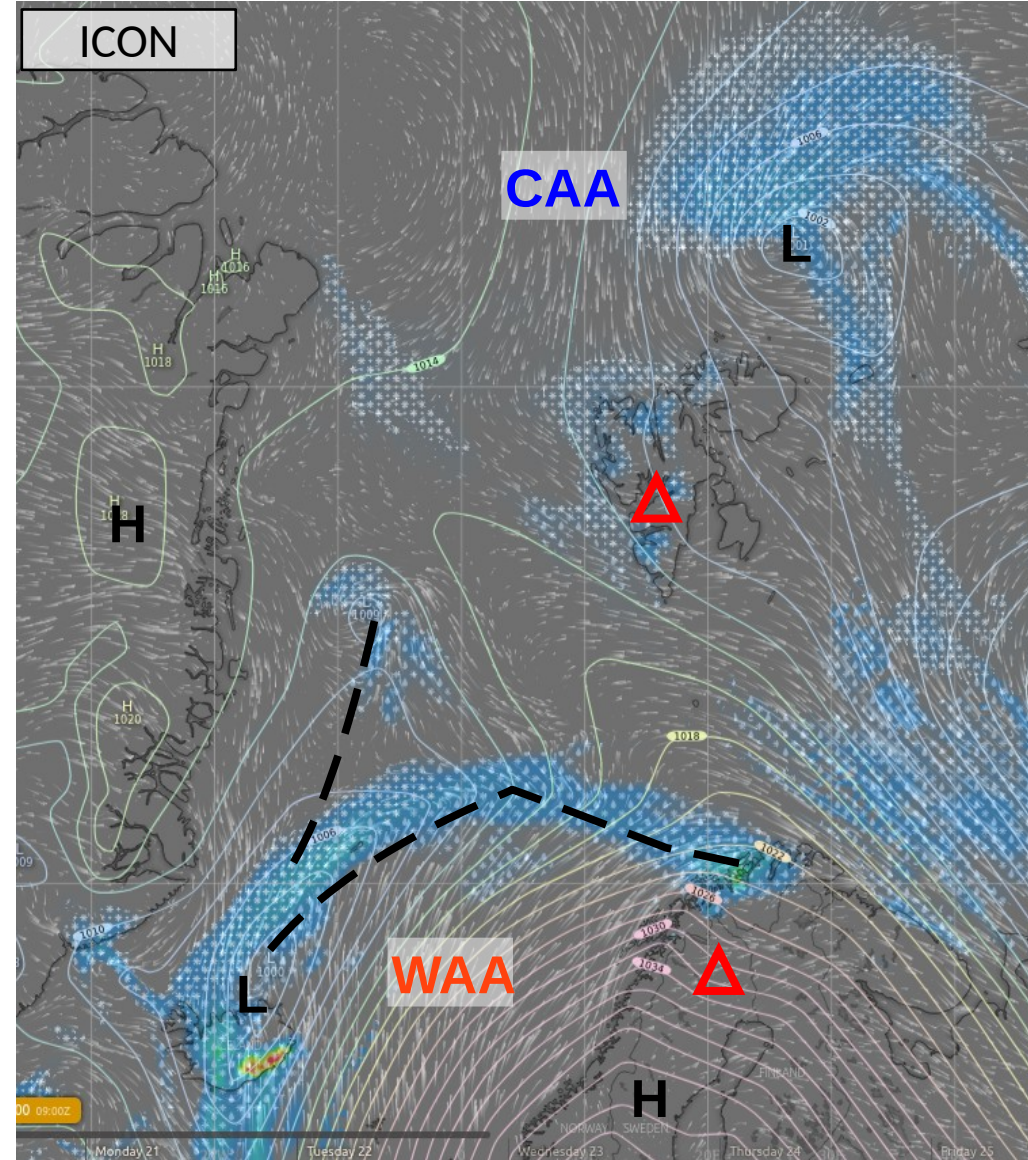
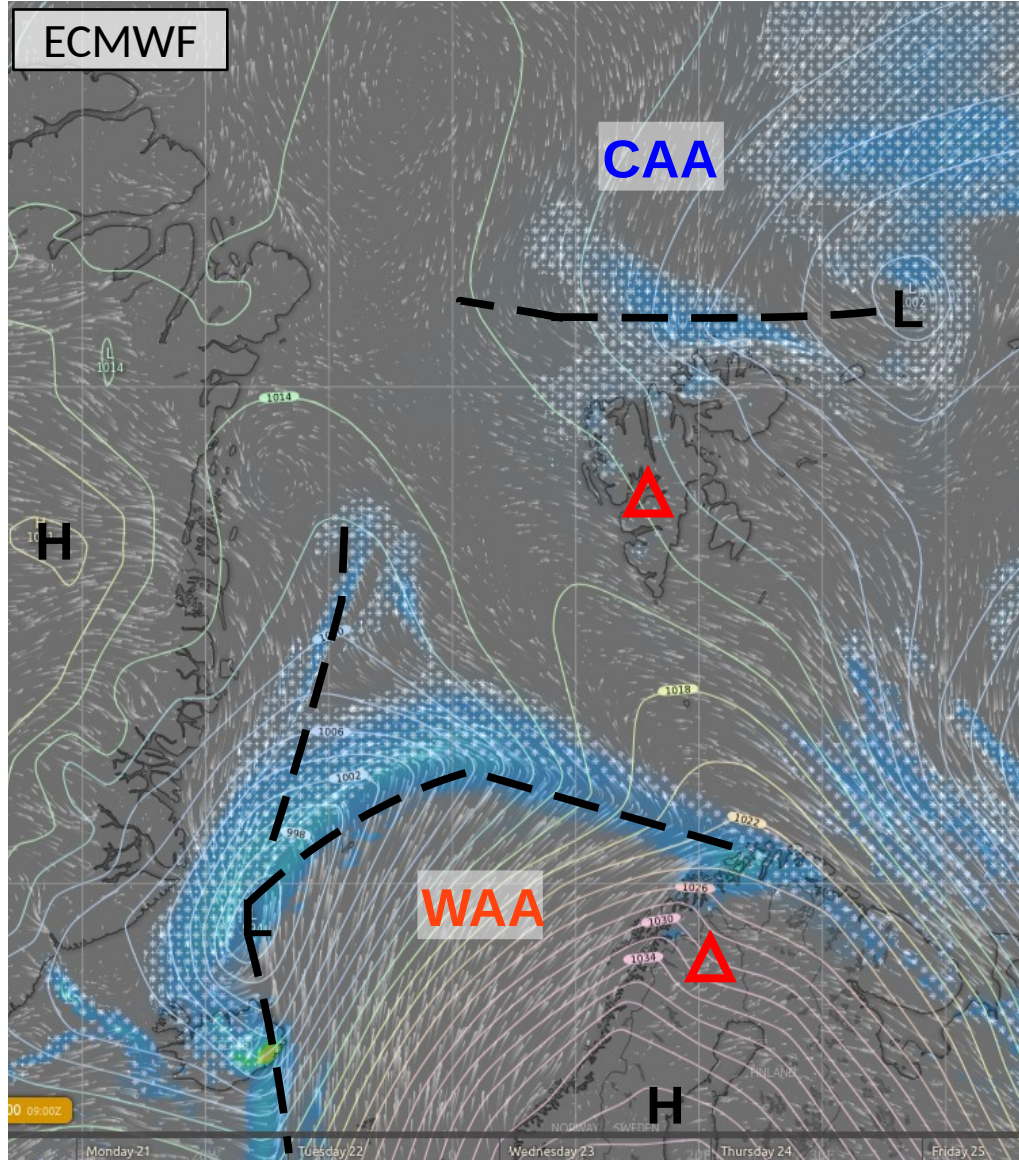


Saturday, 2022-03-19 12 UTC (+36h)



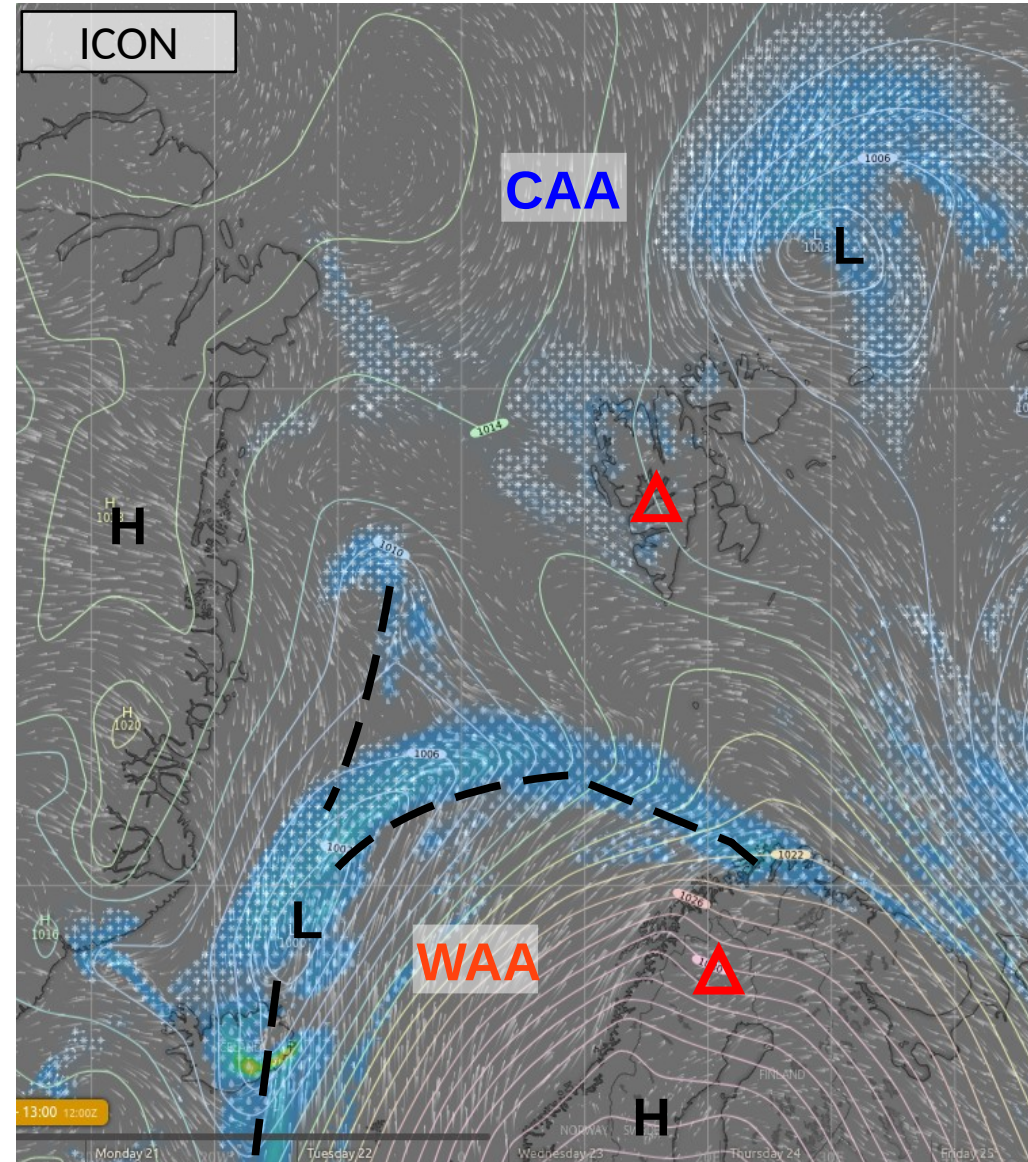
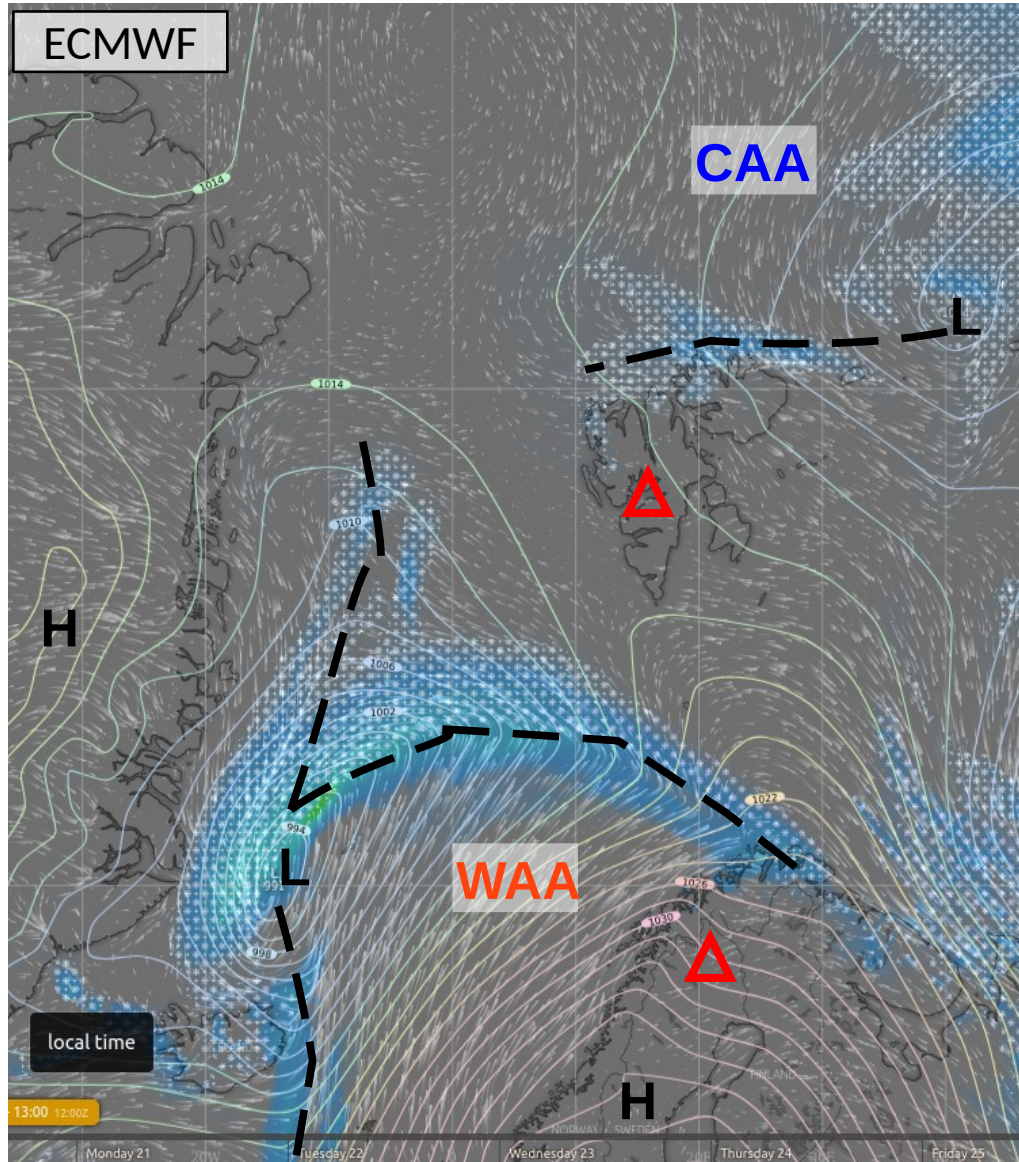


Sunday, 2022-03-20 09 UTC (+57h)



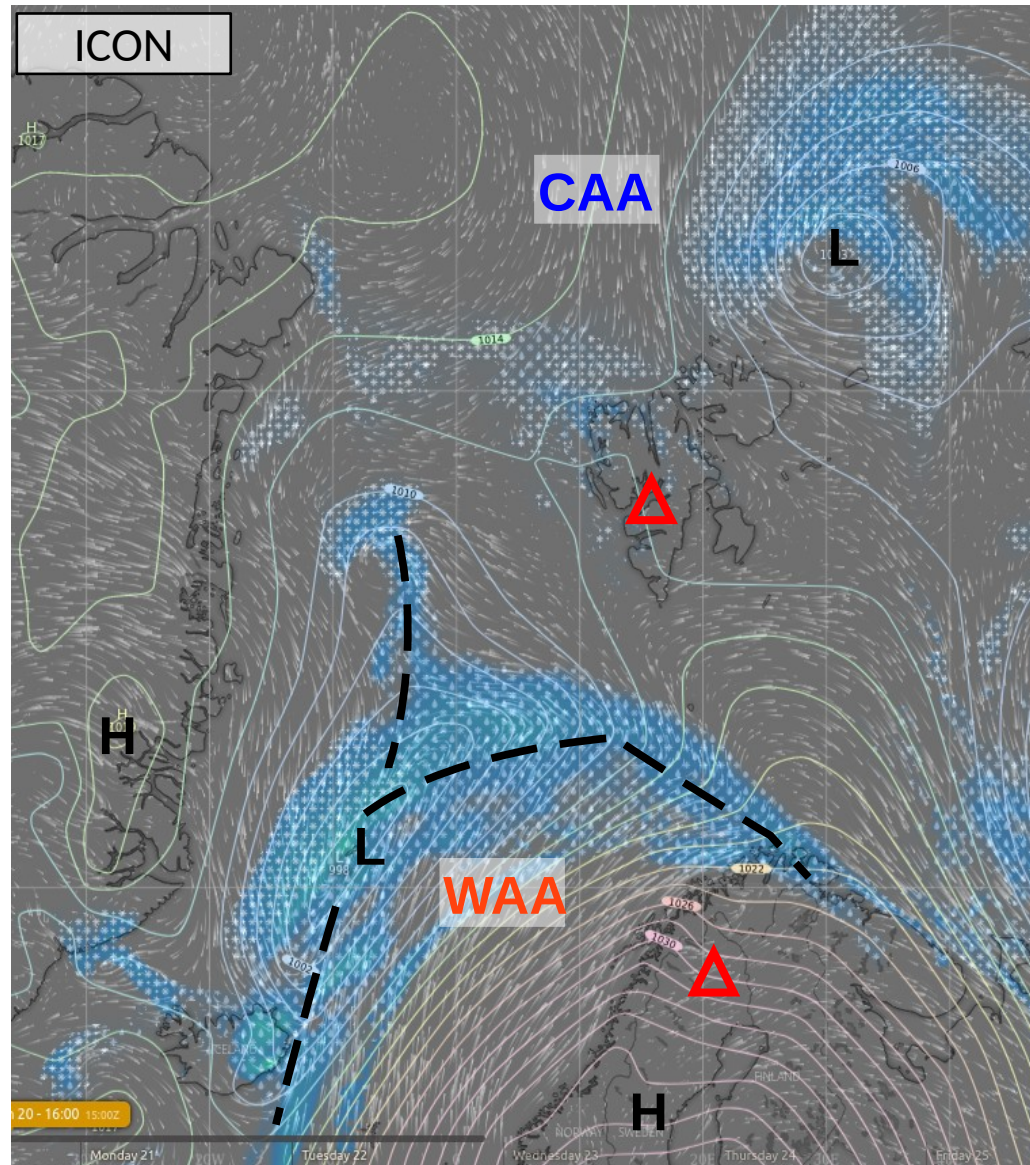
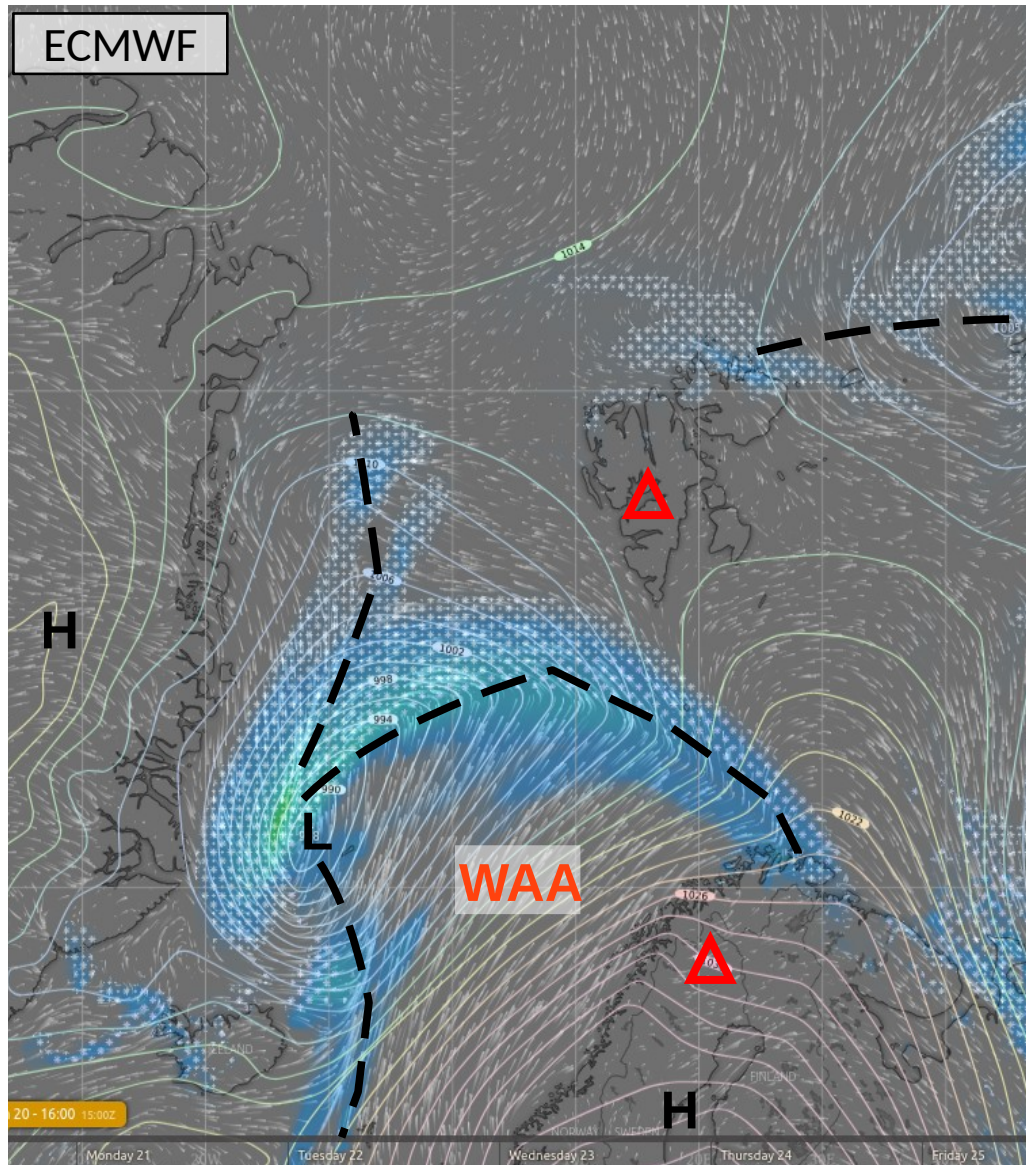


# Sunday, 2022-03-20 12 UTC (+60h)





# Sunday, 2022-03-20 15 UTC (+63h)

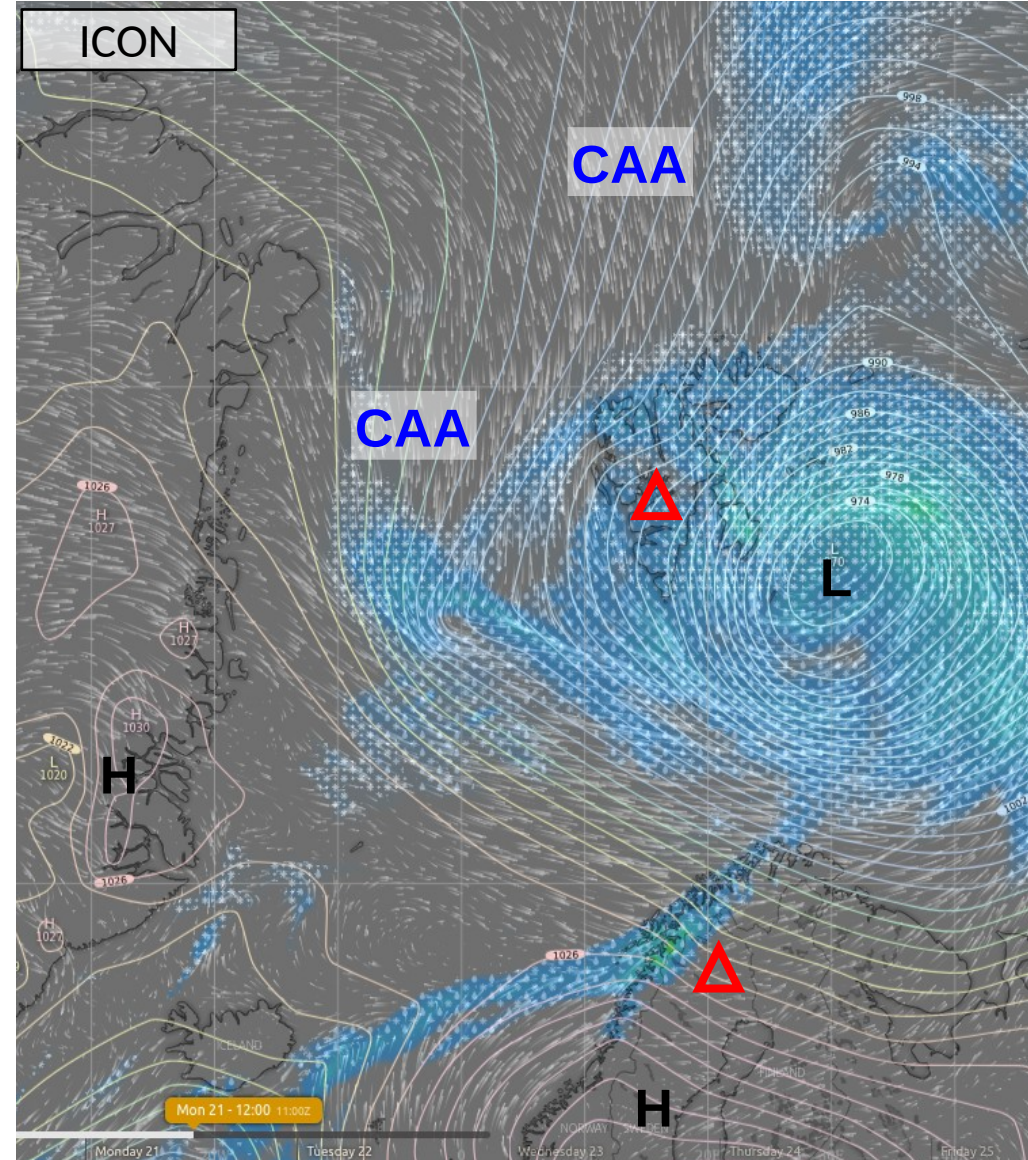
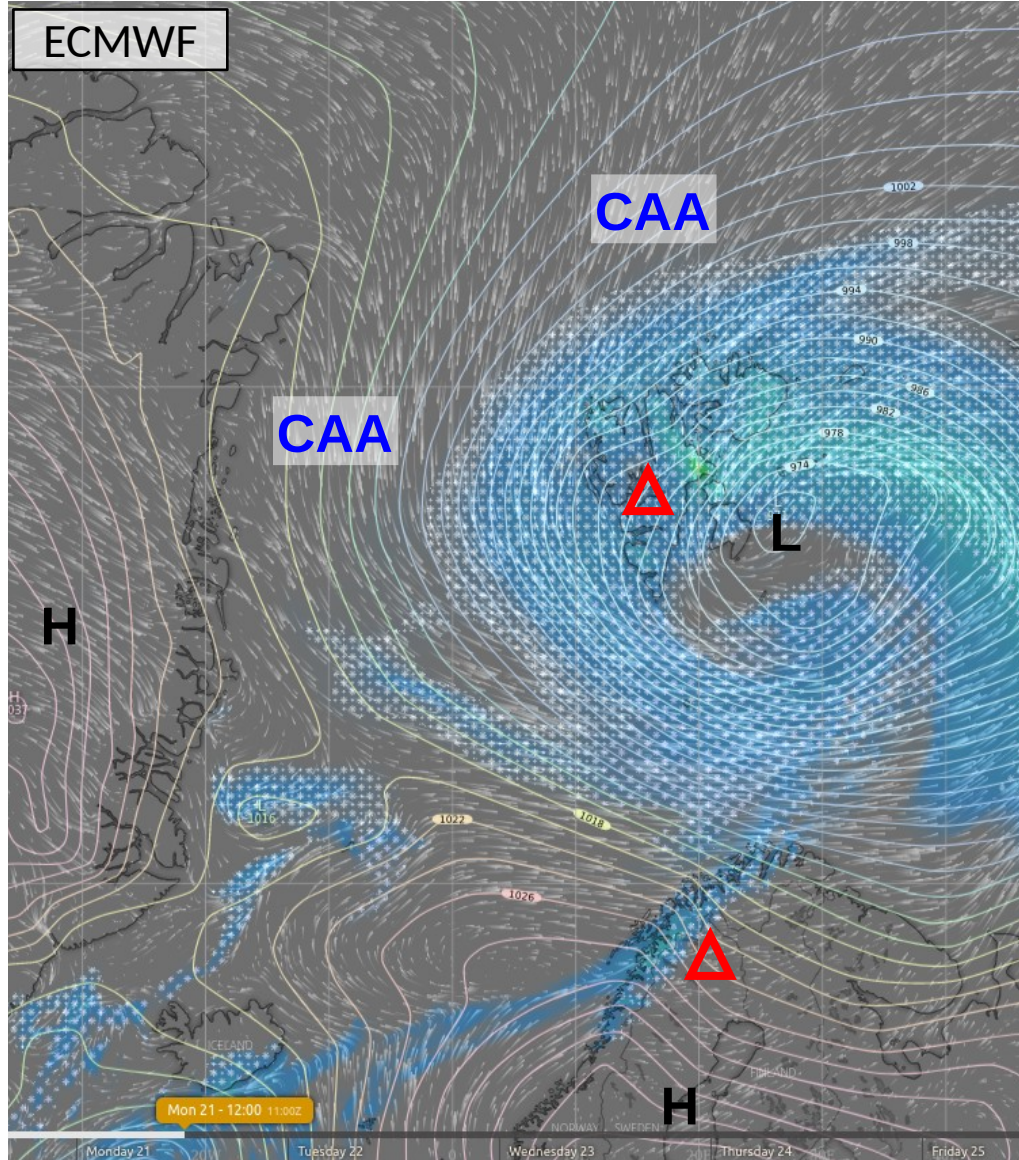






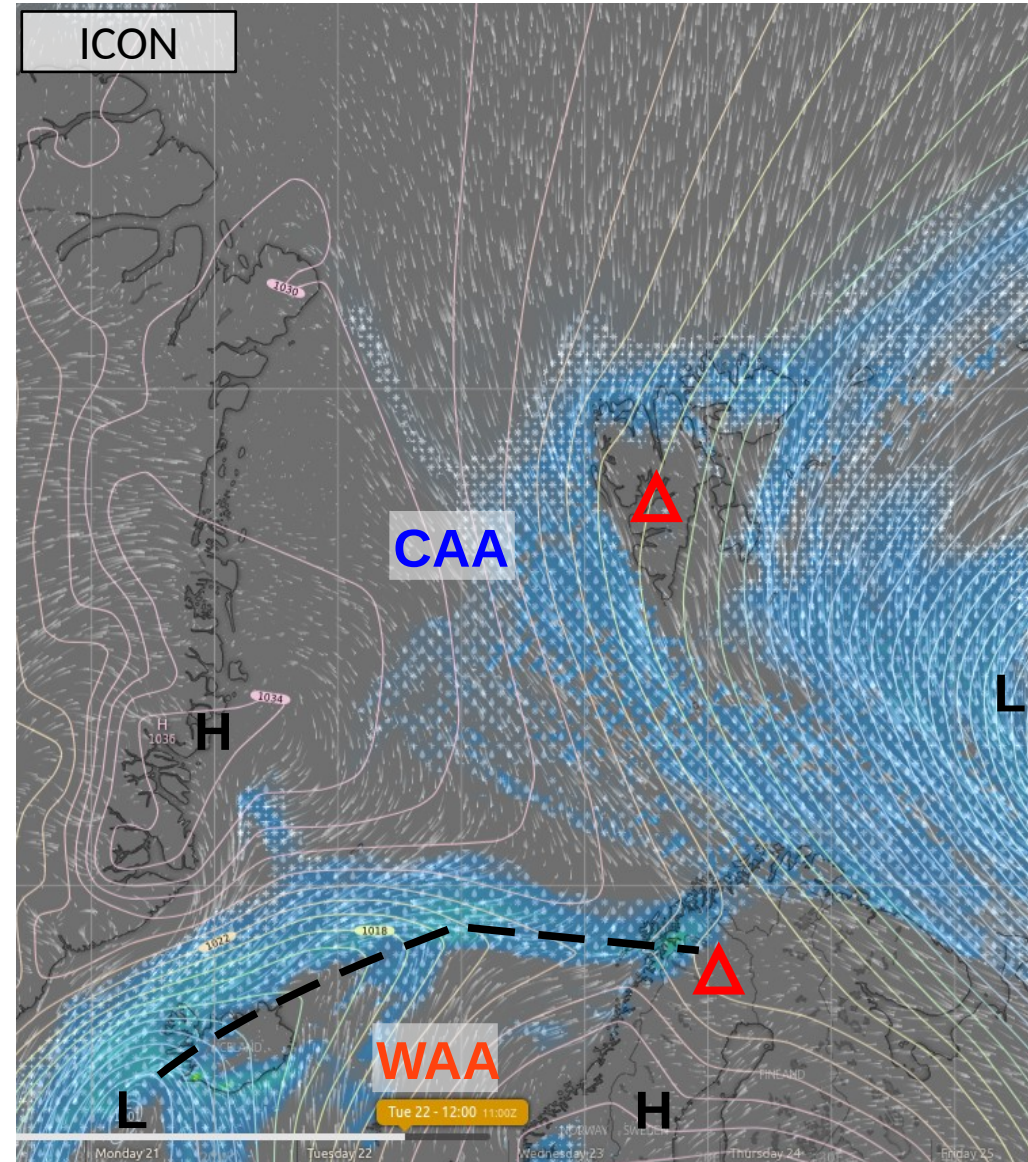
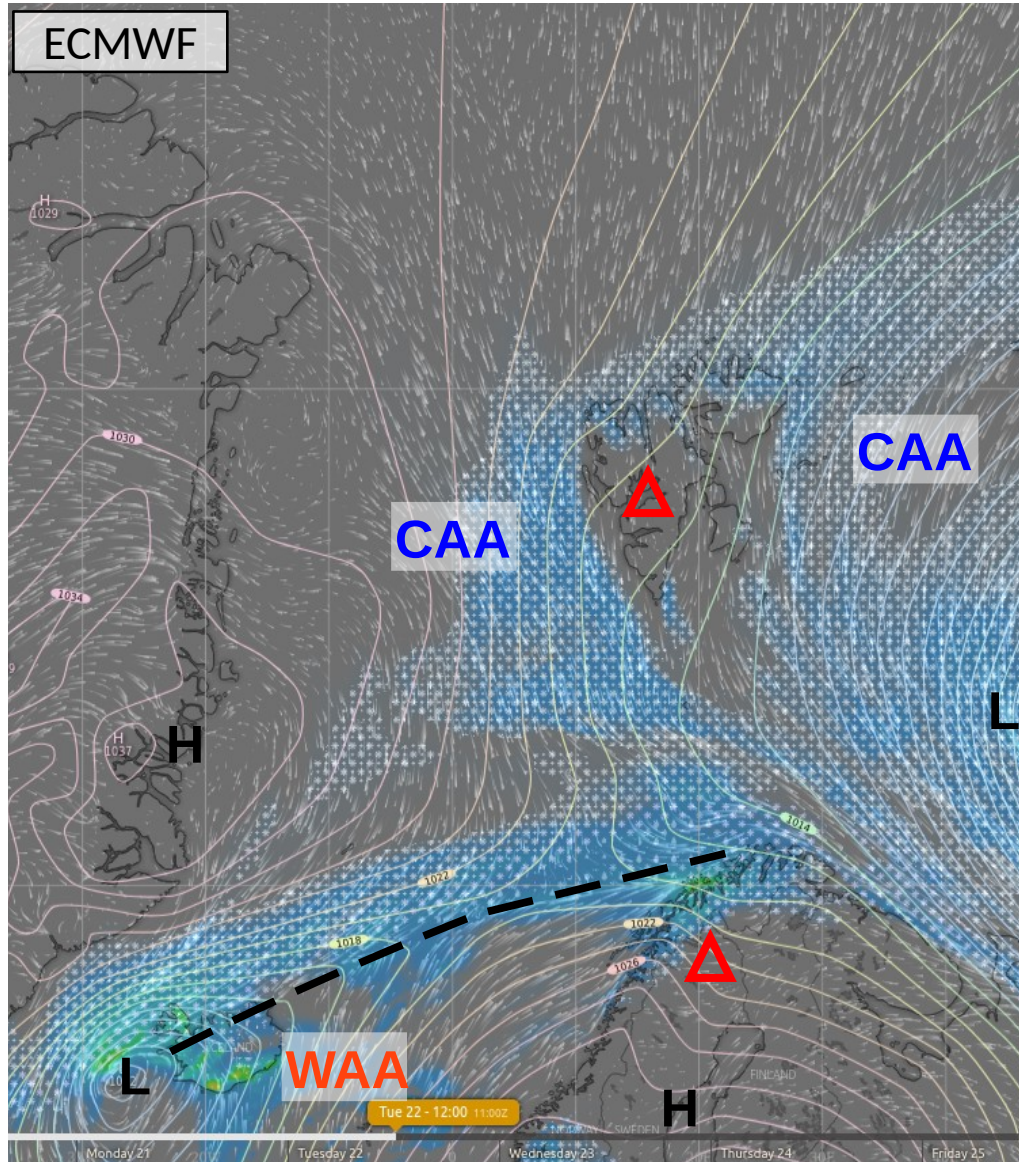


# Monday, 2022-03-21 12 UTC (+84h)





Tuesday, 2022-03-22 12 UTC (+108h)



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

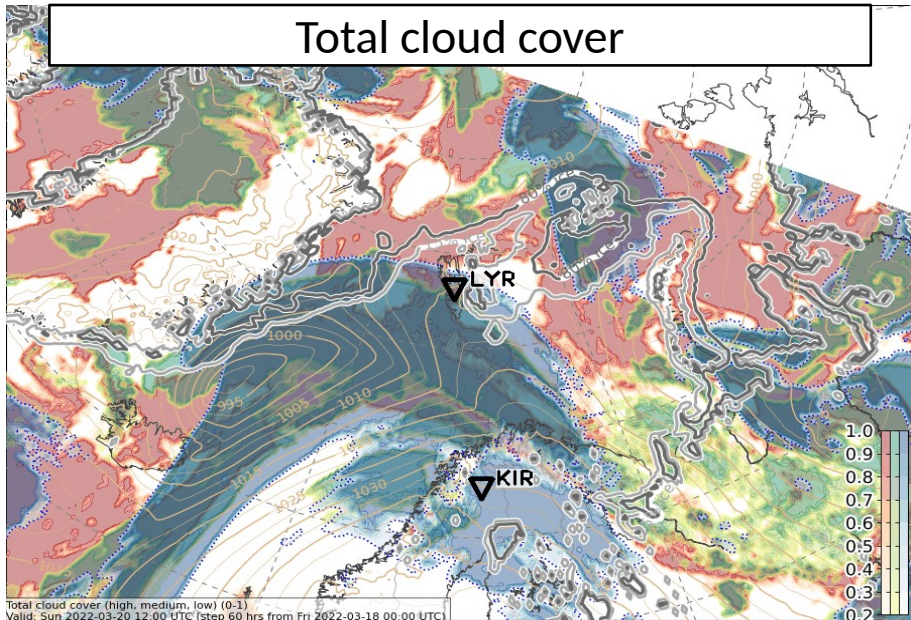
2022-03-18 00 UTC: 60 – 108h

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

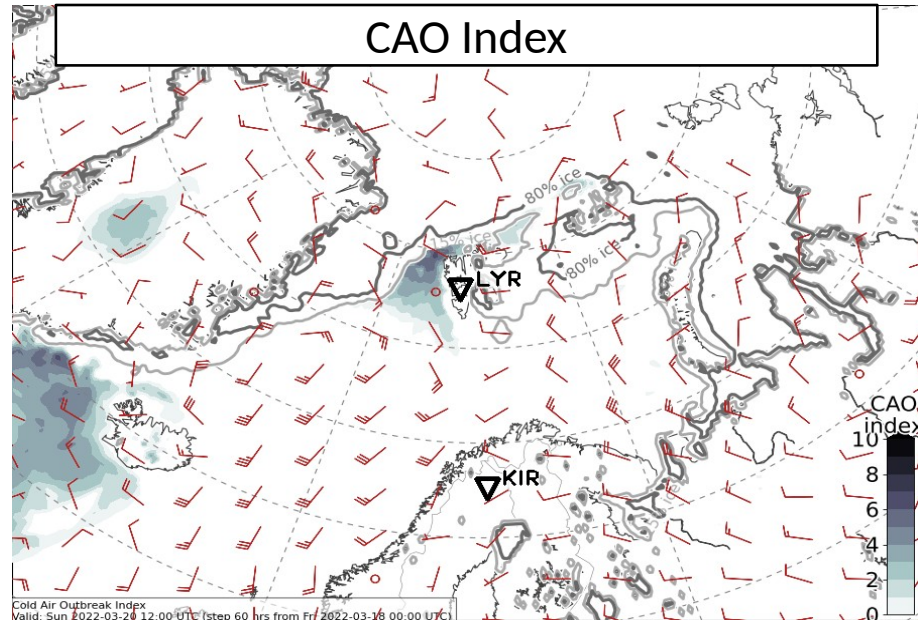


Sun, 2022-03-20 12 UTC (+60h)

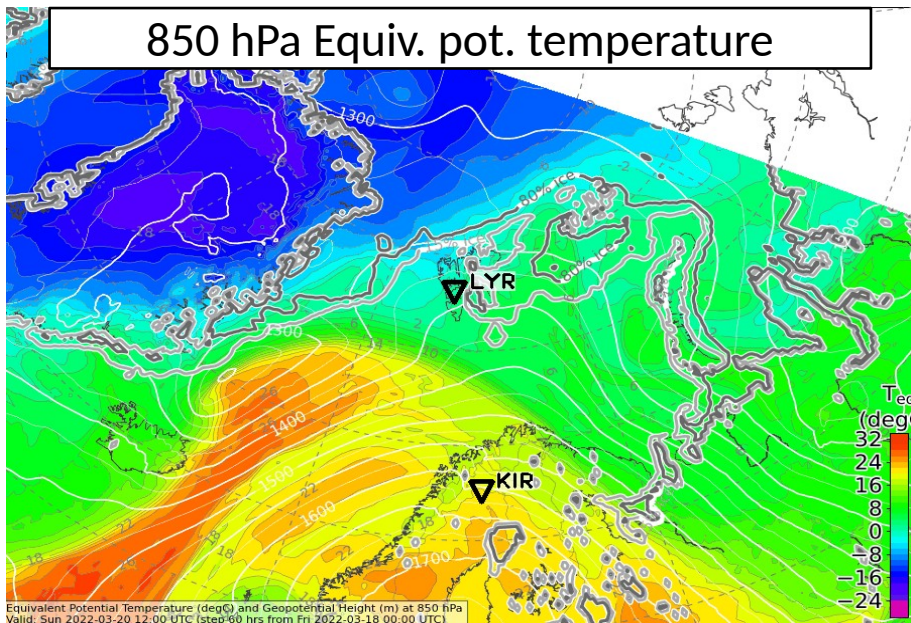
Total cloud cover



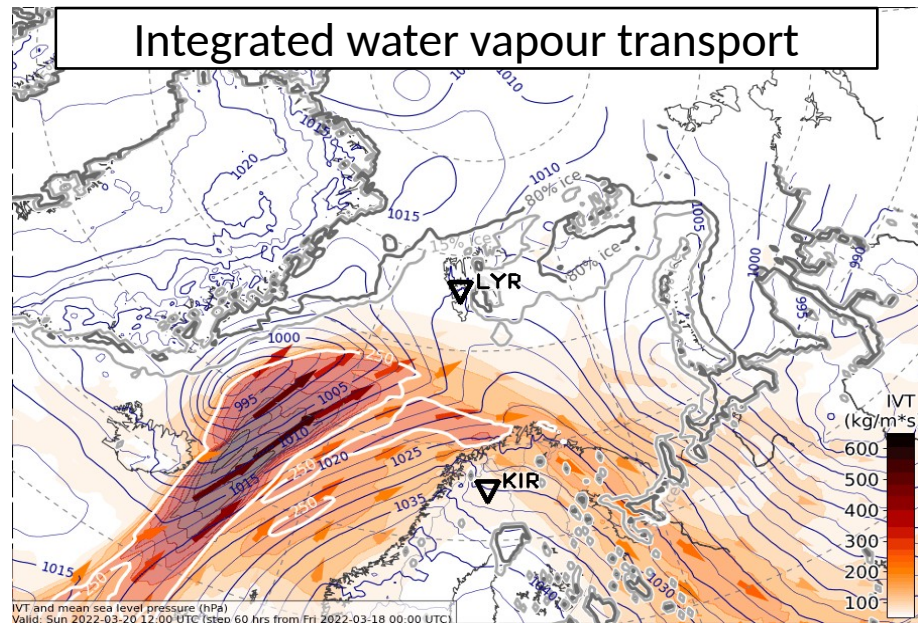
CAO Index



850 hPa Equiv. pot. temperature



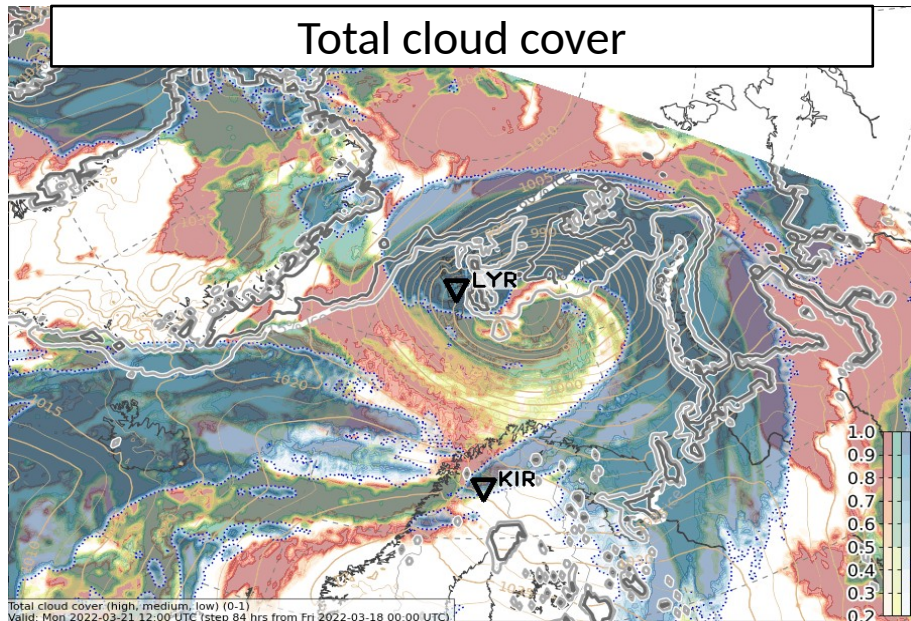
Integrated water vapour transport



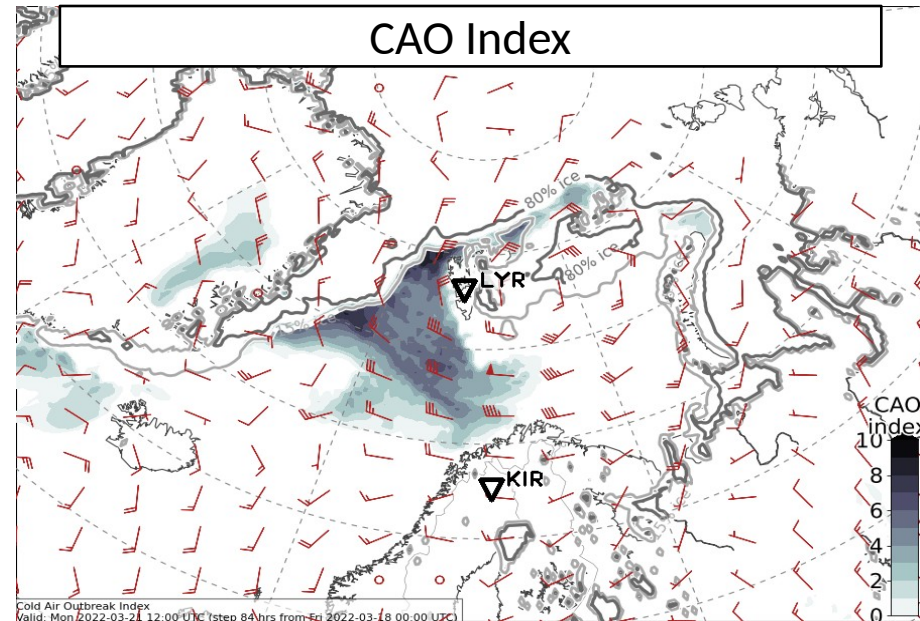


Mon, 2022-03-21 12 UTC (+84h)

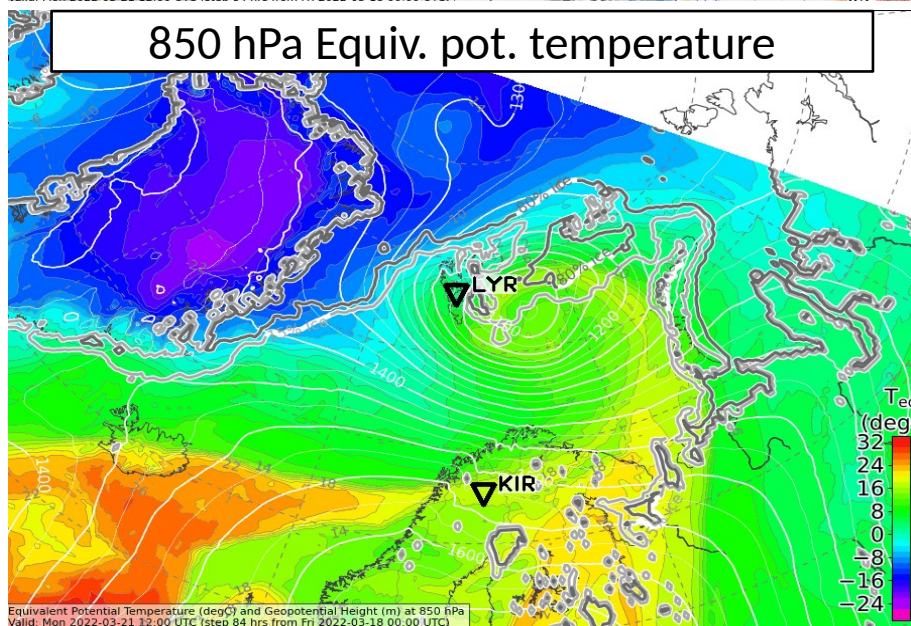
Total cloud cover



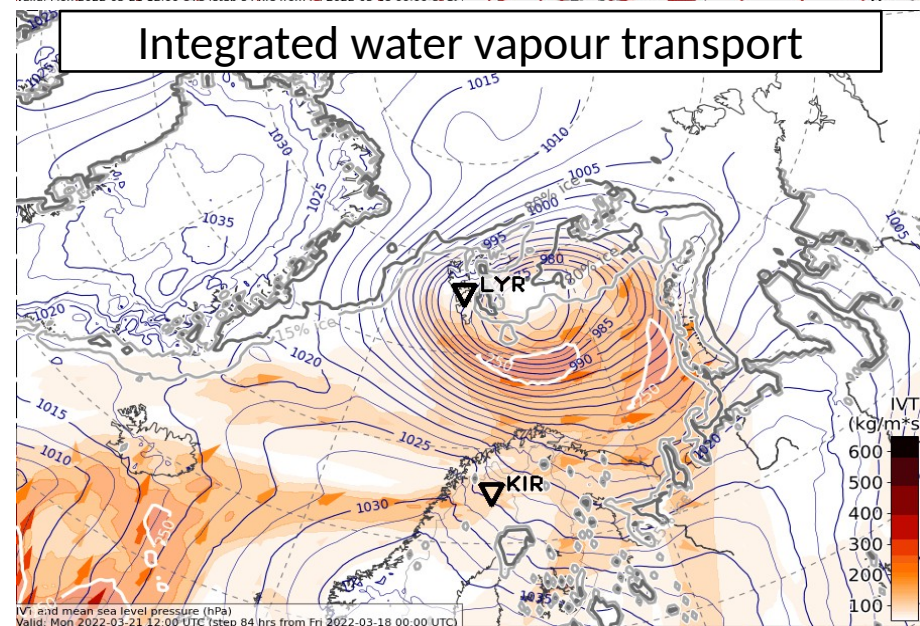
CAO Index



850 hPa Equiv. pot. temperature

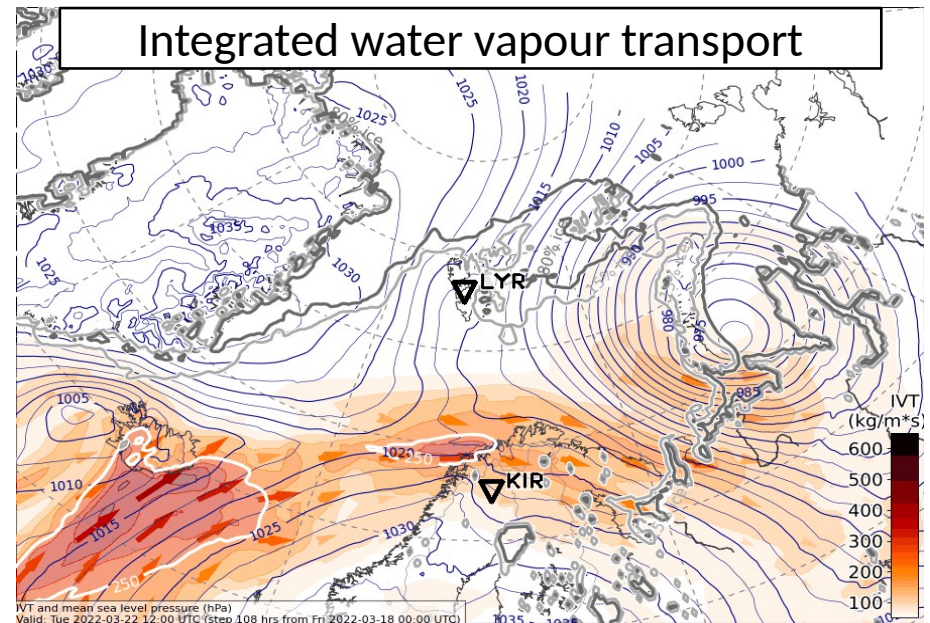
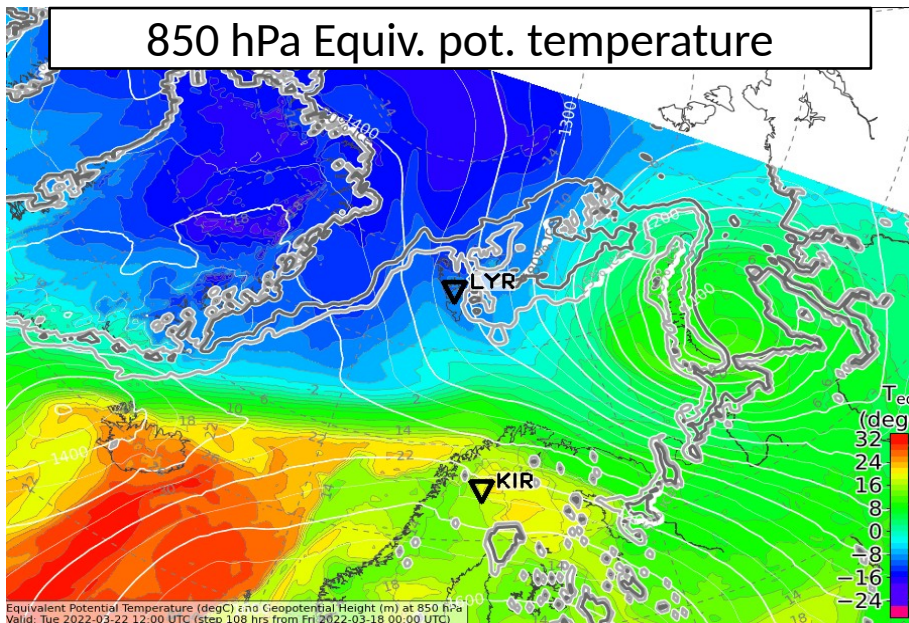
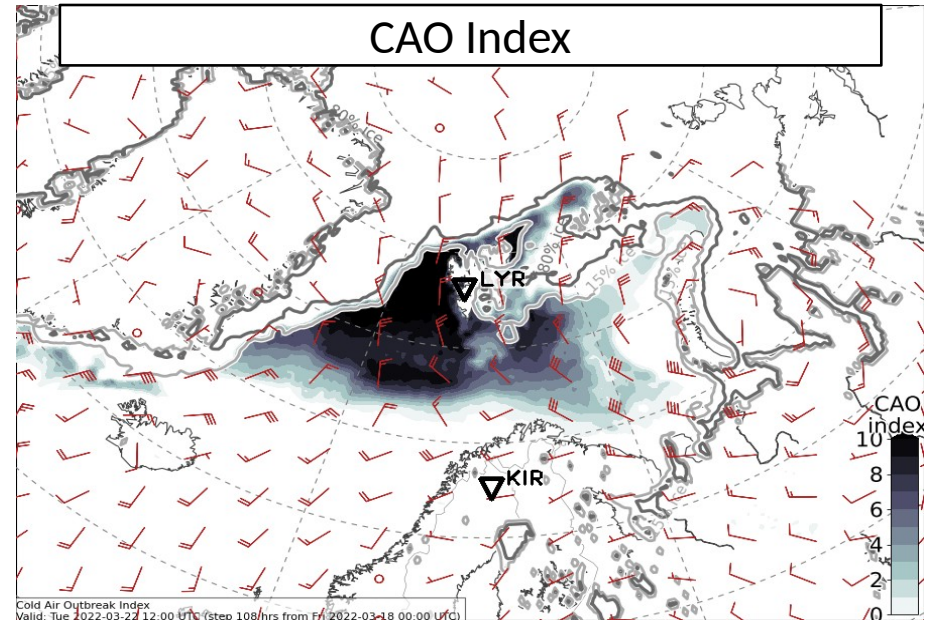
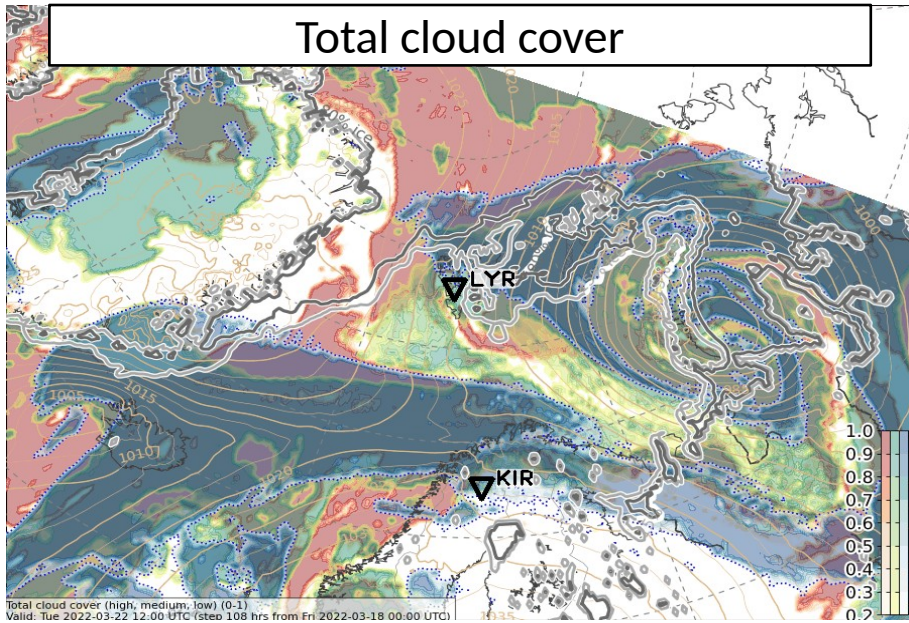


Integrated water vapour transport





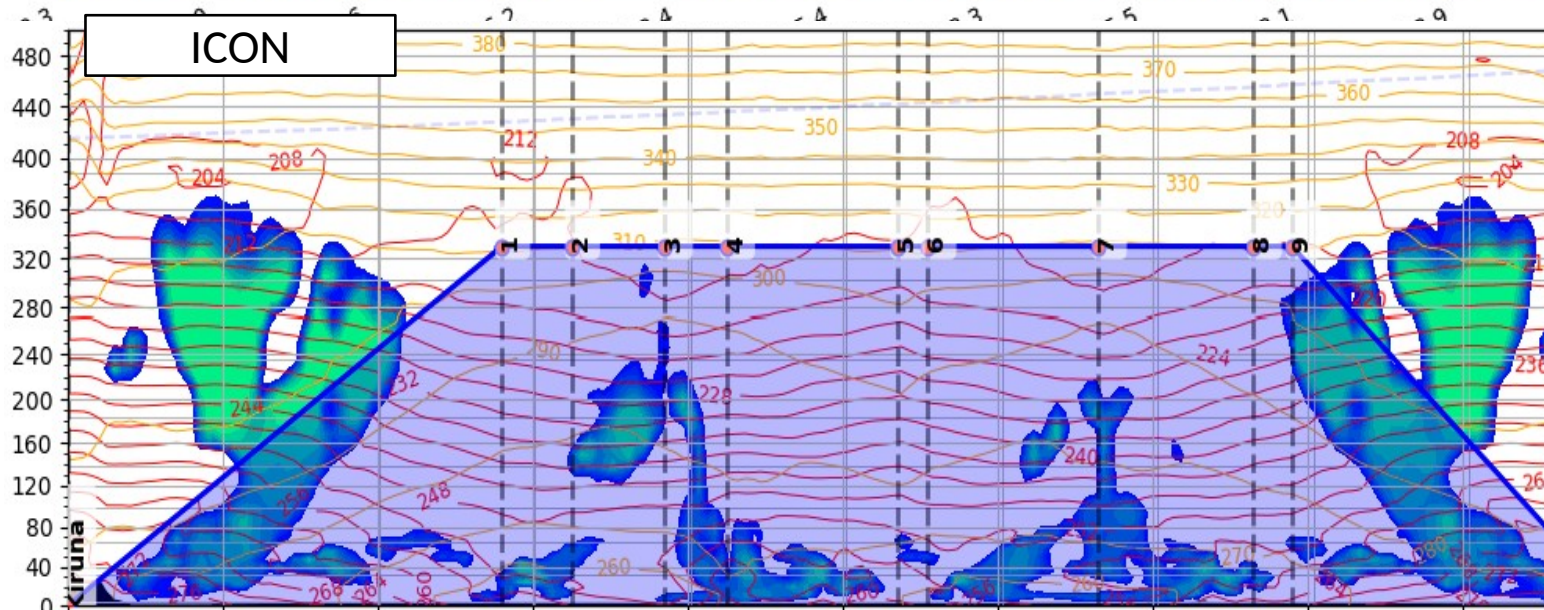
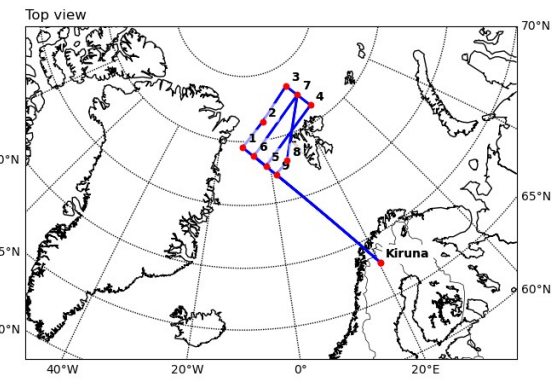
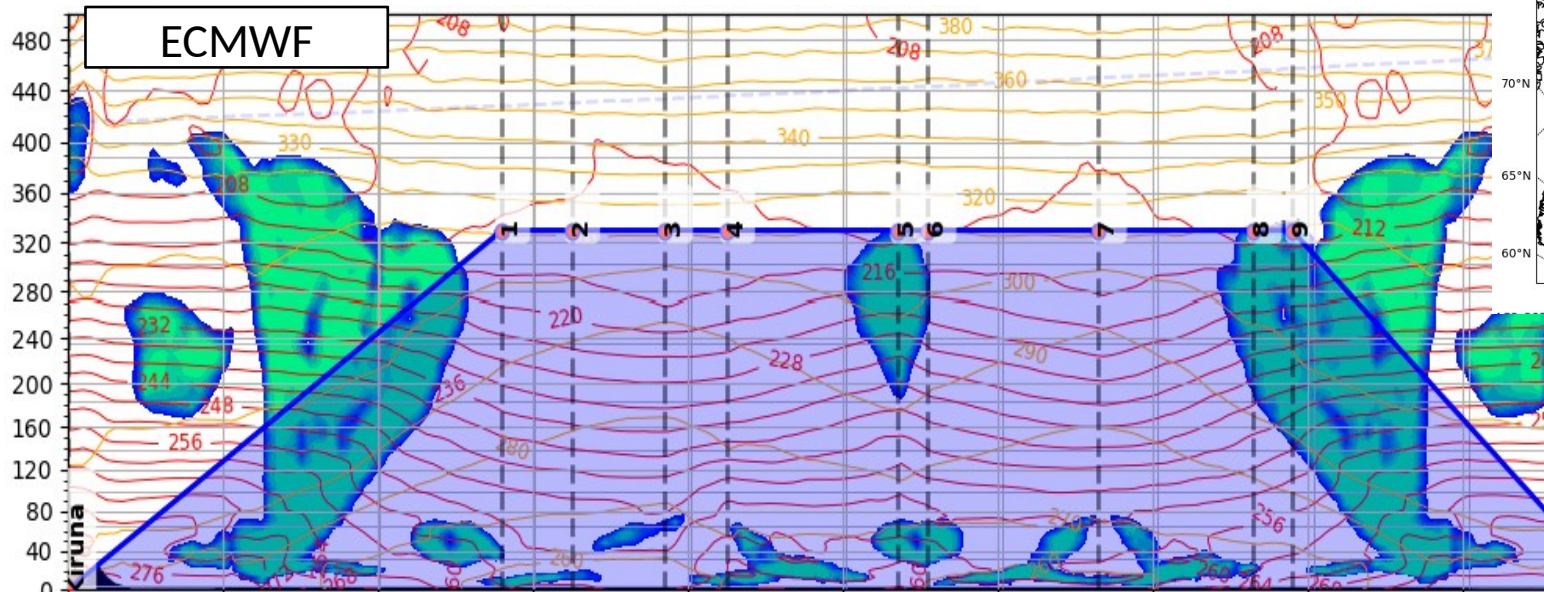
Tue, 2022-03-22 12 UTC (+108h)



**Cloud cross-sections: HALO**  
2022-03-18 00 UTC: 60h  
ECMWF & ICON



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



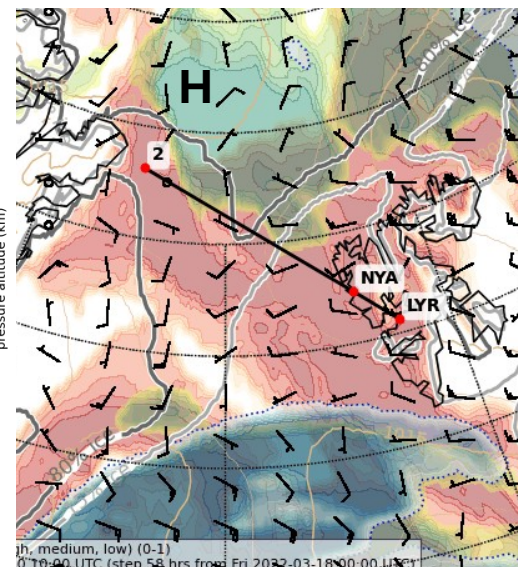
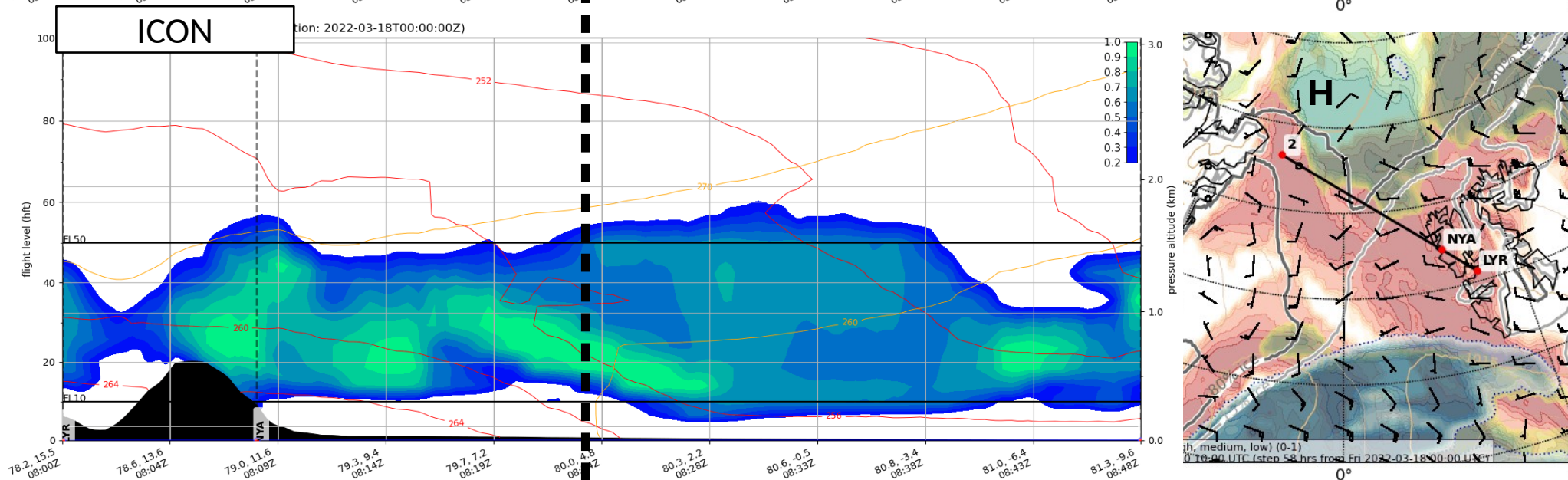
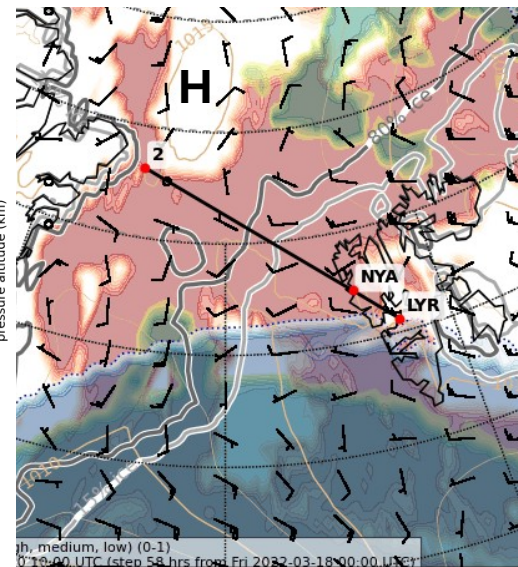
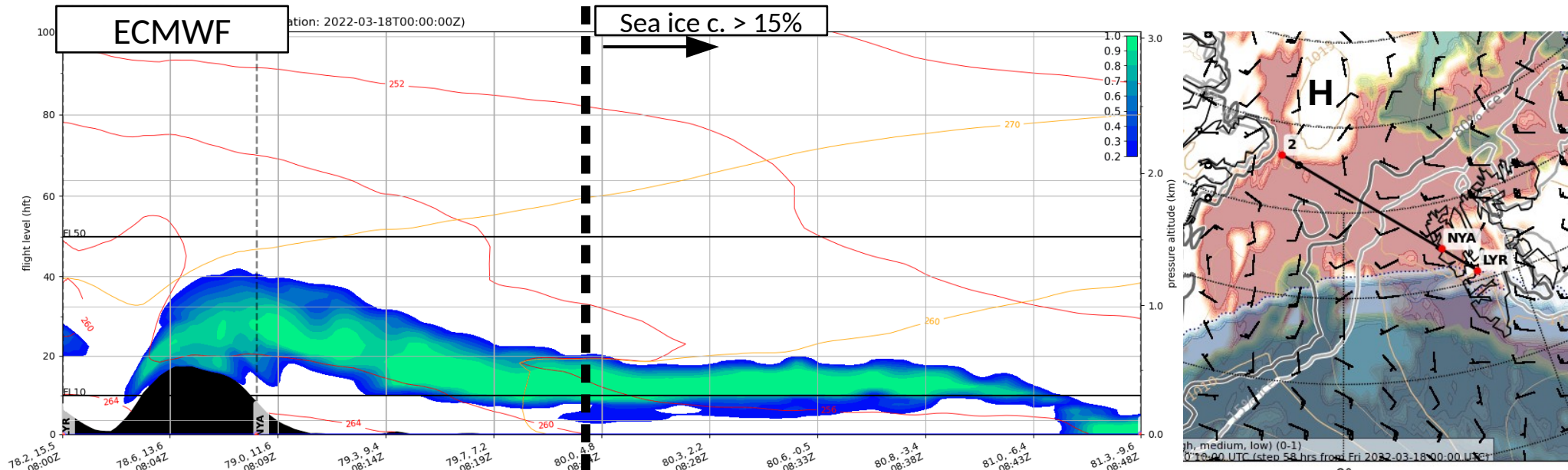
# **Cloud cross-sections: LYR – NYA – Sea ice Fram Strait**

2022-03-18 00 UTC: 58 – 64h

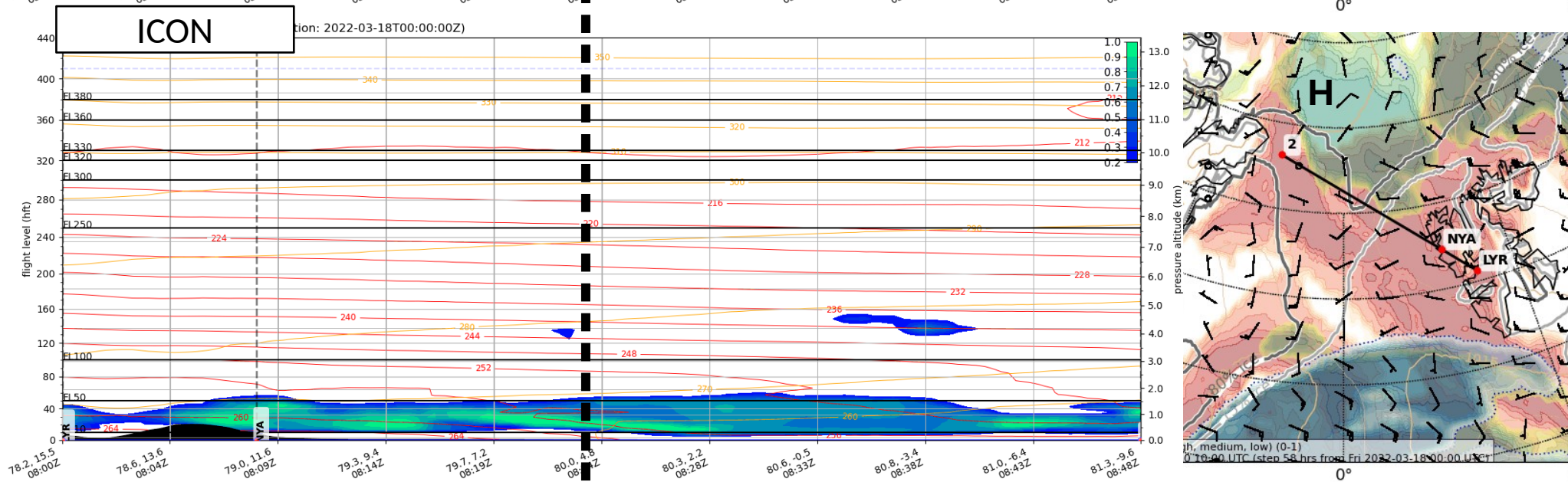
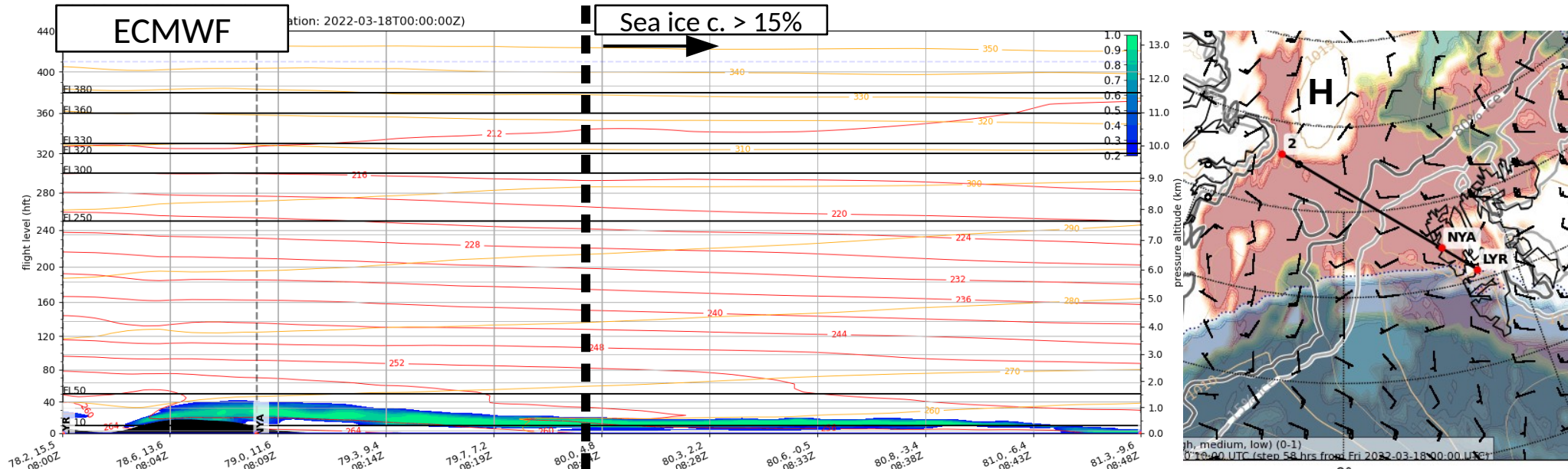
ECMWF & ICON



# Sun, 2022-03-20, Clouds, 10 UTC (+58h): Below 10 000ft



# Sun, 2022-03-20, Clouds, 10 UTC (+58h): Entire troposphere





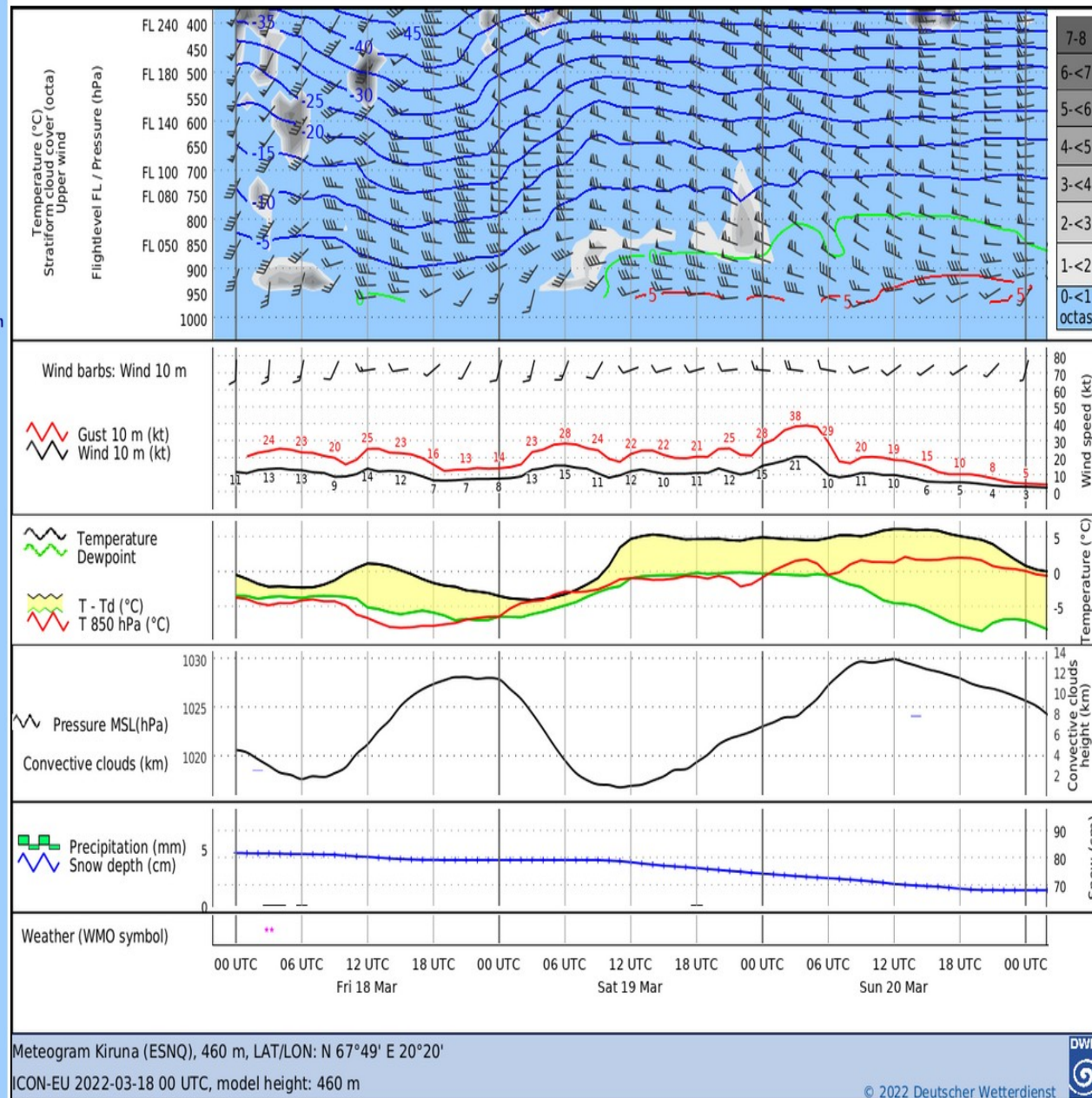




## **Airport meteograms & local weather at Svalbard**



# Kiruna:



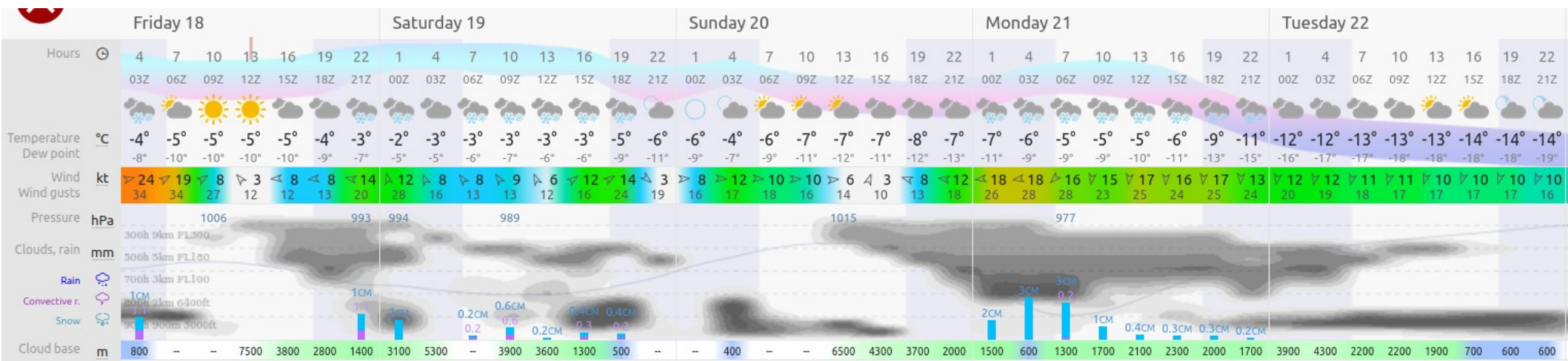


# Longyearbyen:

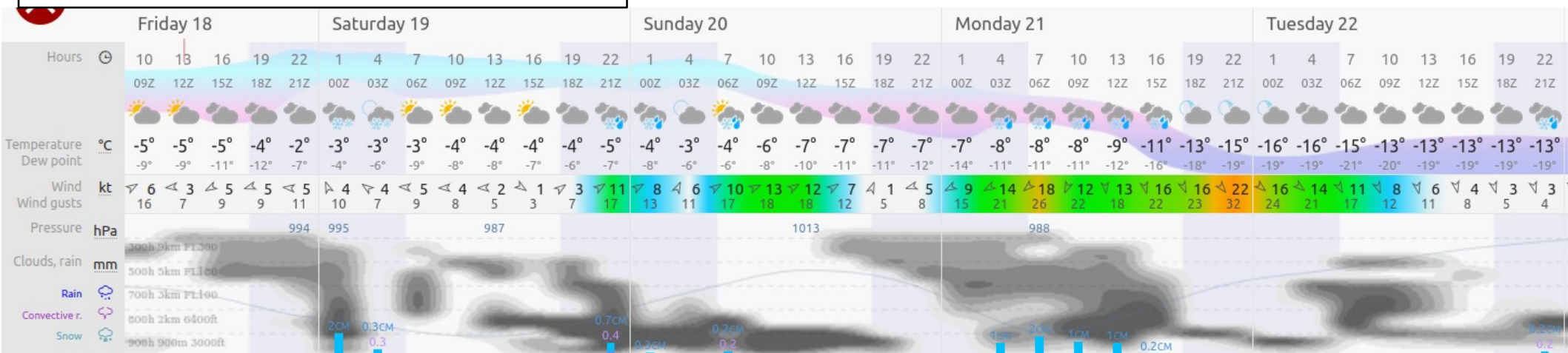
ECWMF

# Sunday

(partly) cloudy first part of day (SCT/BKN 2000FT), later SCT/FEW, midnight snow from south



ICON





# Summary



## Summary: Weather Briefing 2022-03-18, 17:00 LT

- **Sunday, 2022-03-20:**
  - Weak winds, variable wind direction NW of Svalbard
  - Rather favorable starting conditions
  - Low clouds over sea-ice, advection of higher clouds from south
- **Monday, 2022-03-21:**
  - Icelandic Low shifts over Svalbard, clouds in all altitudes, snow showers → bad starting conditions
  - Svalbard Low + Greenland High → Initiation of Cold Air Outbreak west of Svalbard
  - Warm Air Intrusion impacts Barents Sea
- **Tuesday, 2022-03-22:**
  - Continued Cold Air Outbreak west of Svalbard
  - Cold Air Outbreak partly blocked by new Low around Iceland