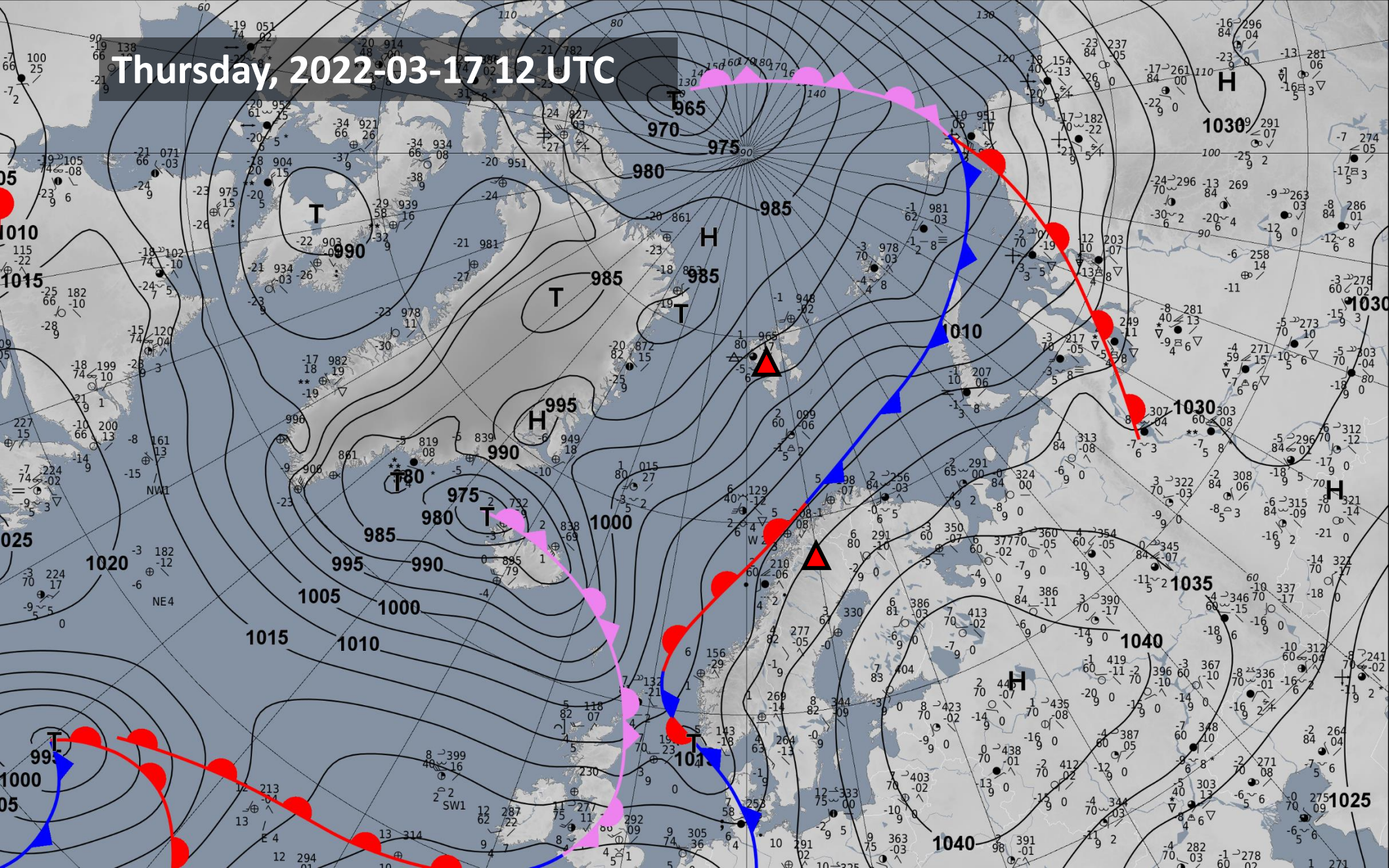


# Weather briefing HALO-(AC)<sup>3</sup>

Thursday, 2022-03-17, 17:00 LT

**Surface Analysis**  
Thursday, 2022-03-17 12 UTC  
DWD

# Thursday, 2022-03-17 12 UTC



# Surface wind development and precipitation

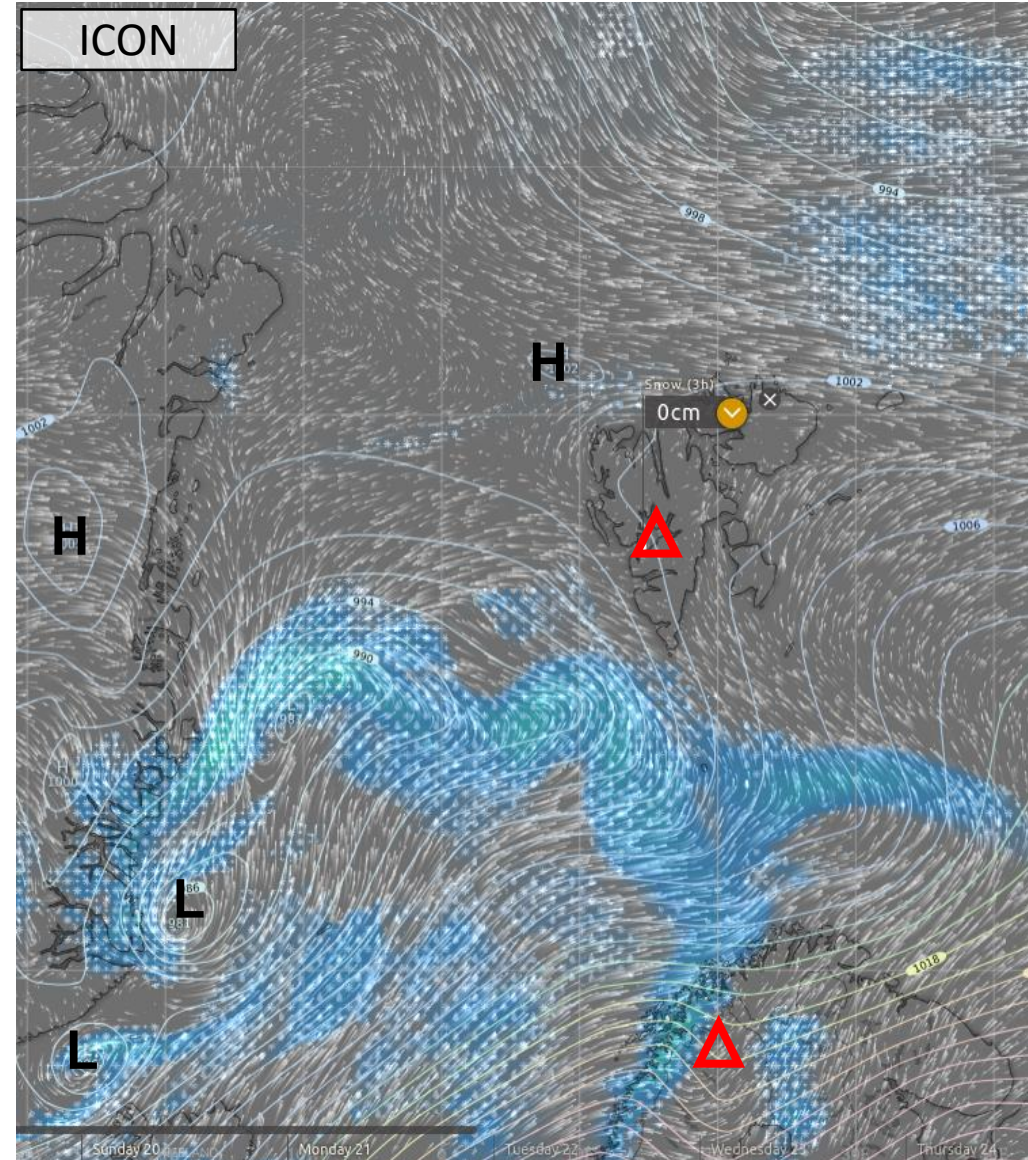
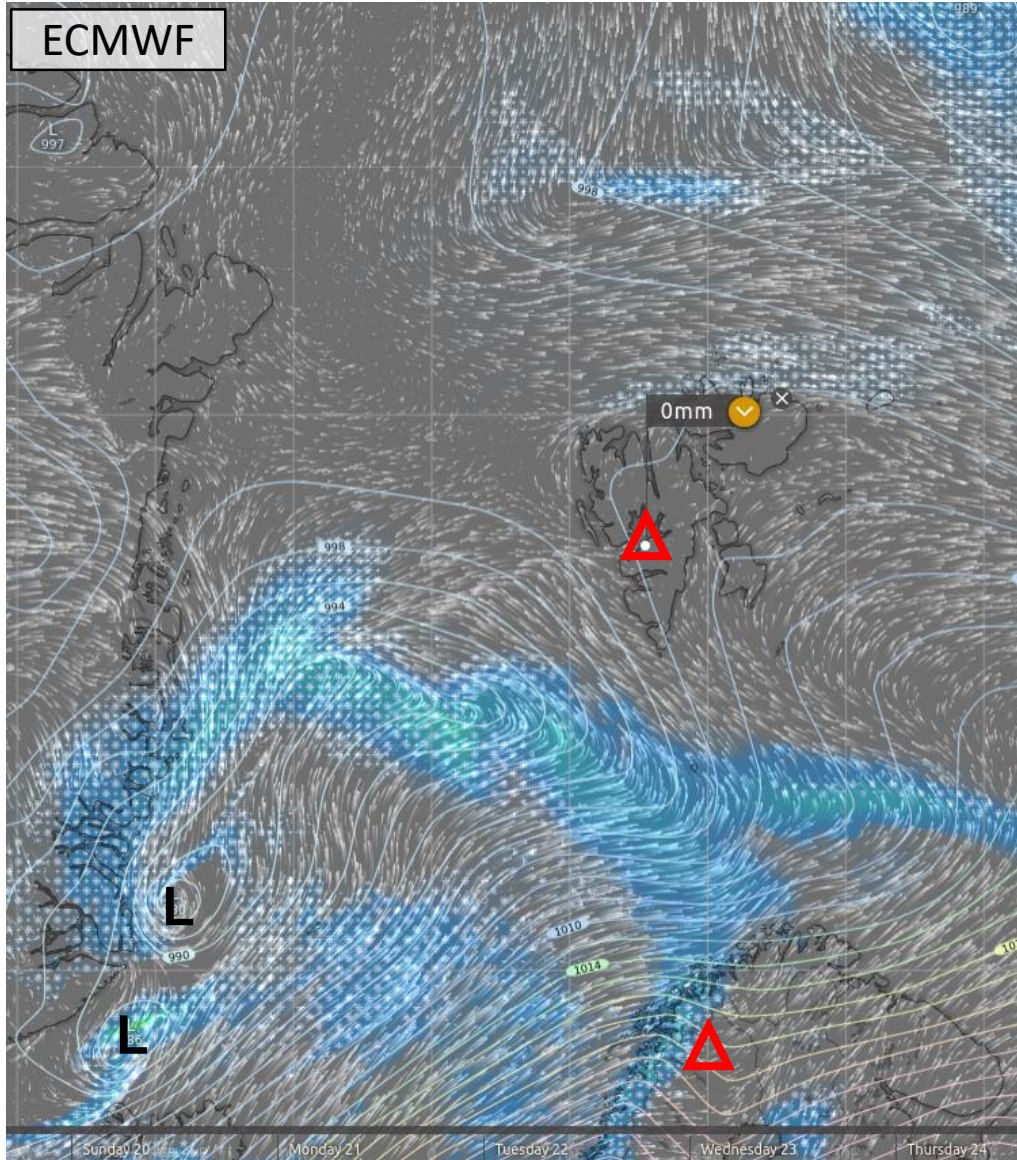
2022-03-17 00 UTC: 57 – 108h

ECMWF & ICON

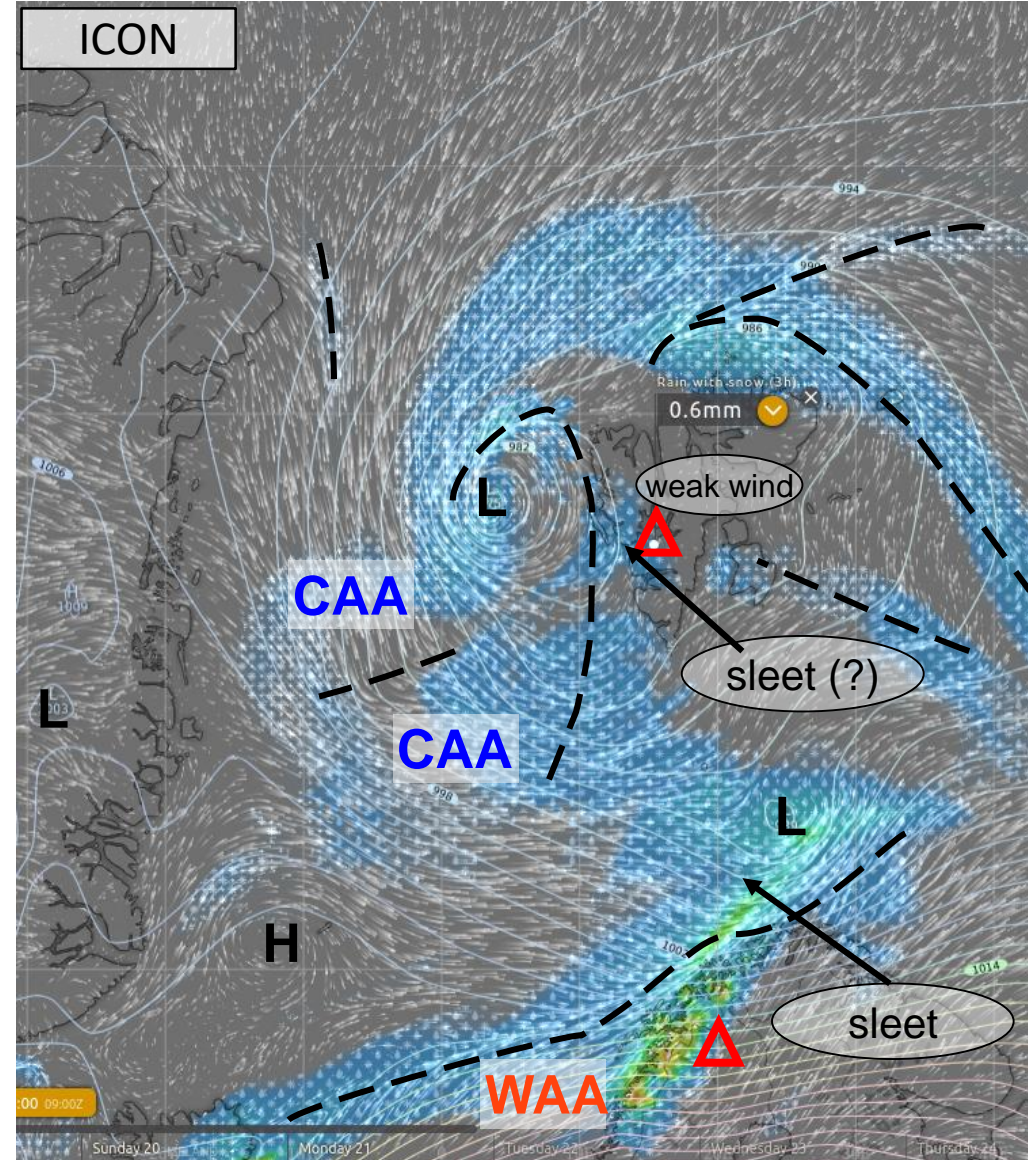
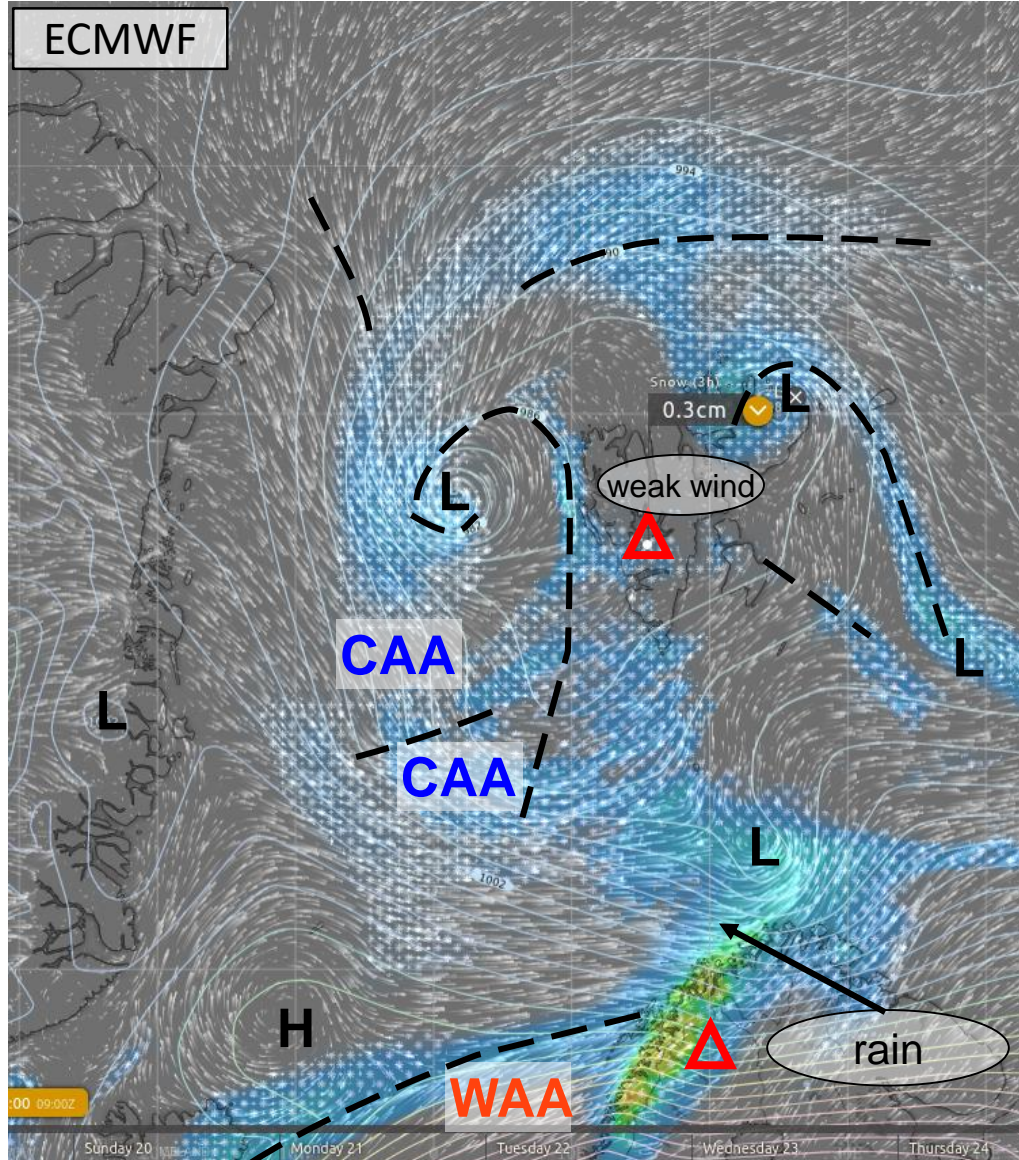
**CAA: Cold Air Advection**

**WAA: Warm Air Advection**

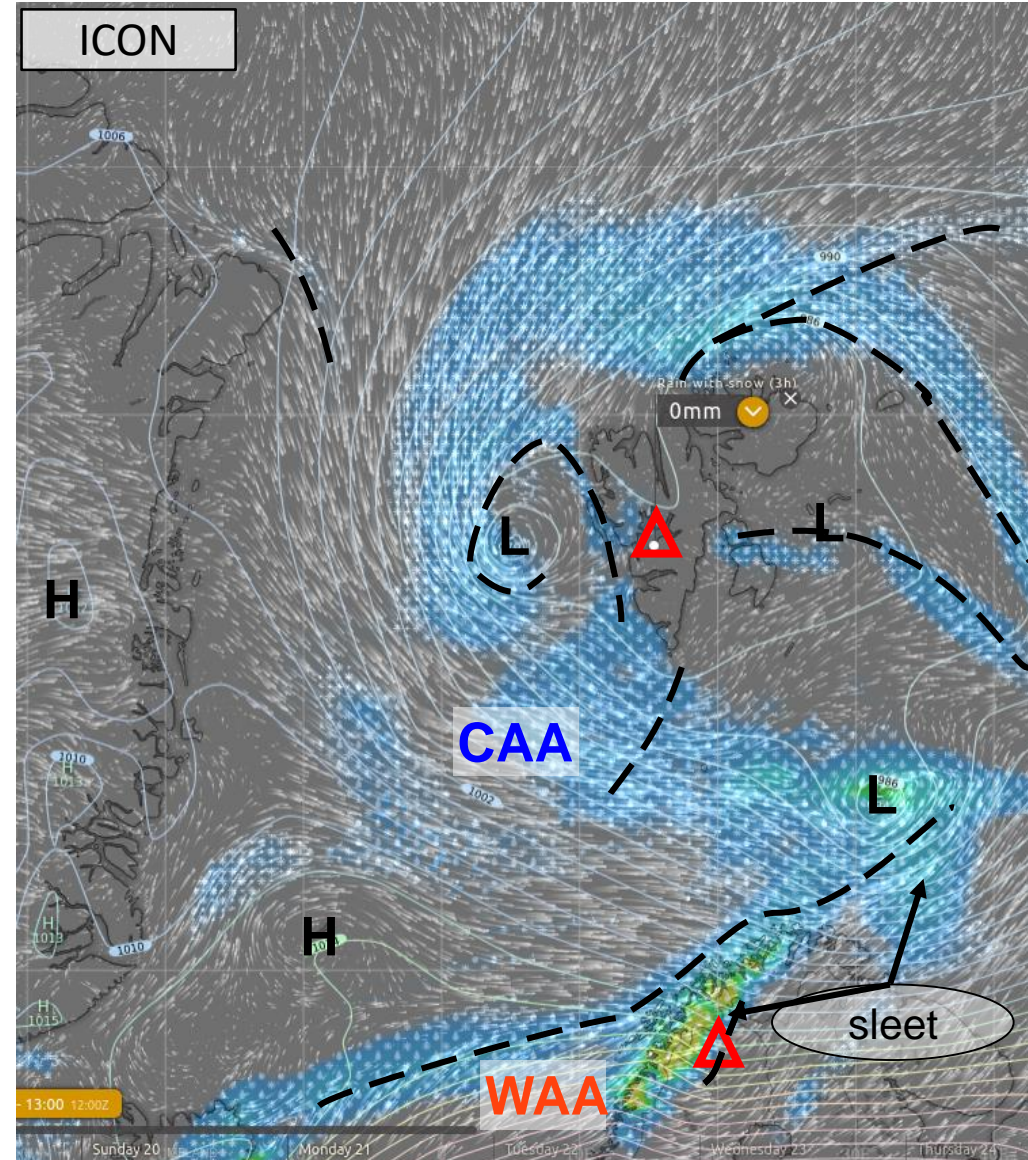
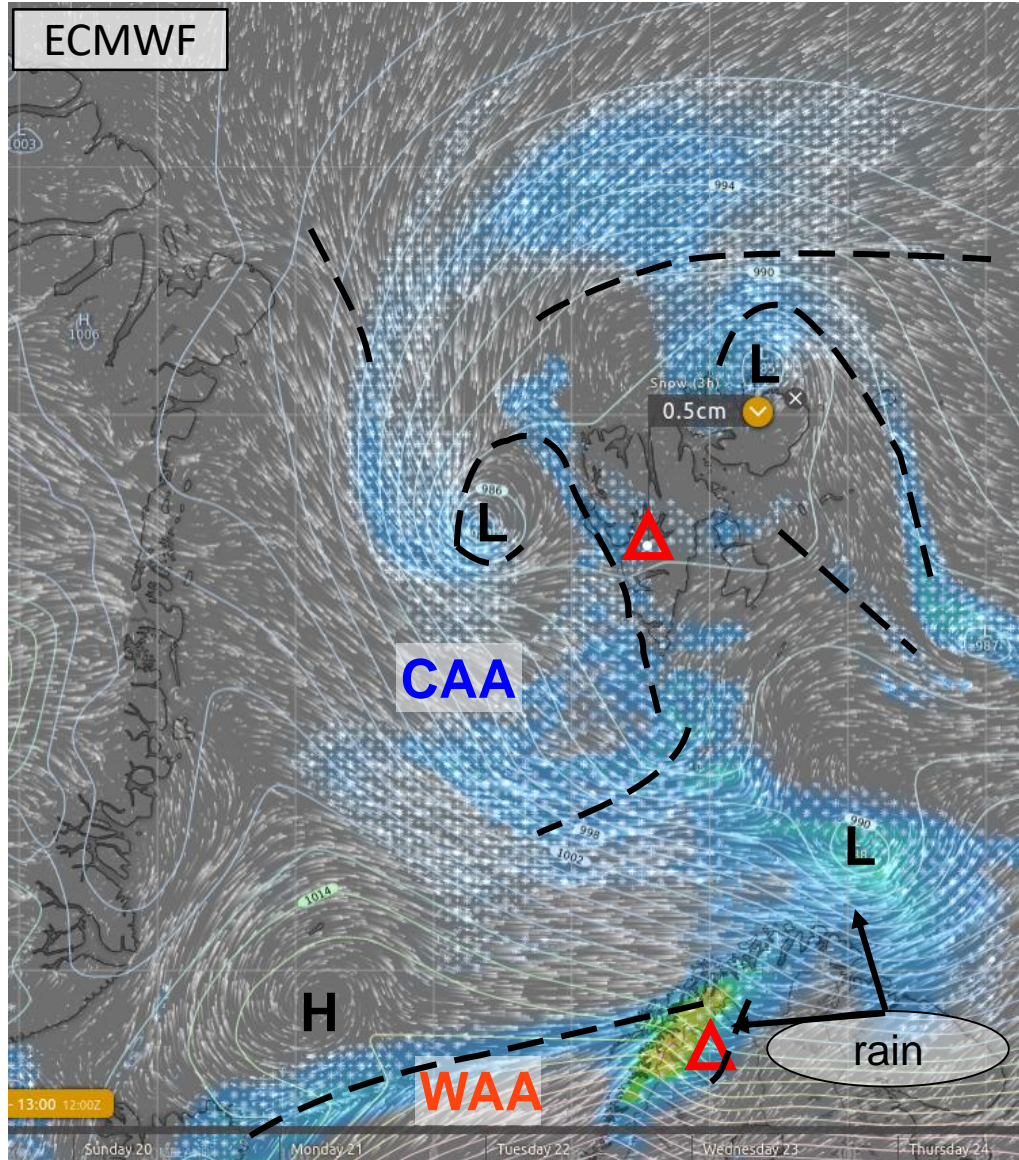
Friday, 2022-03-18 12 UTC (+36h)



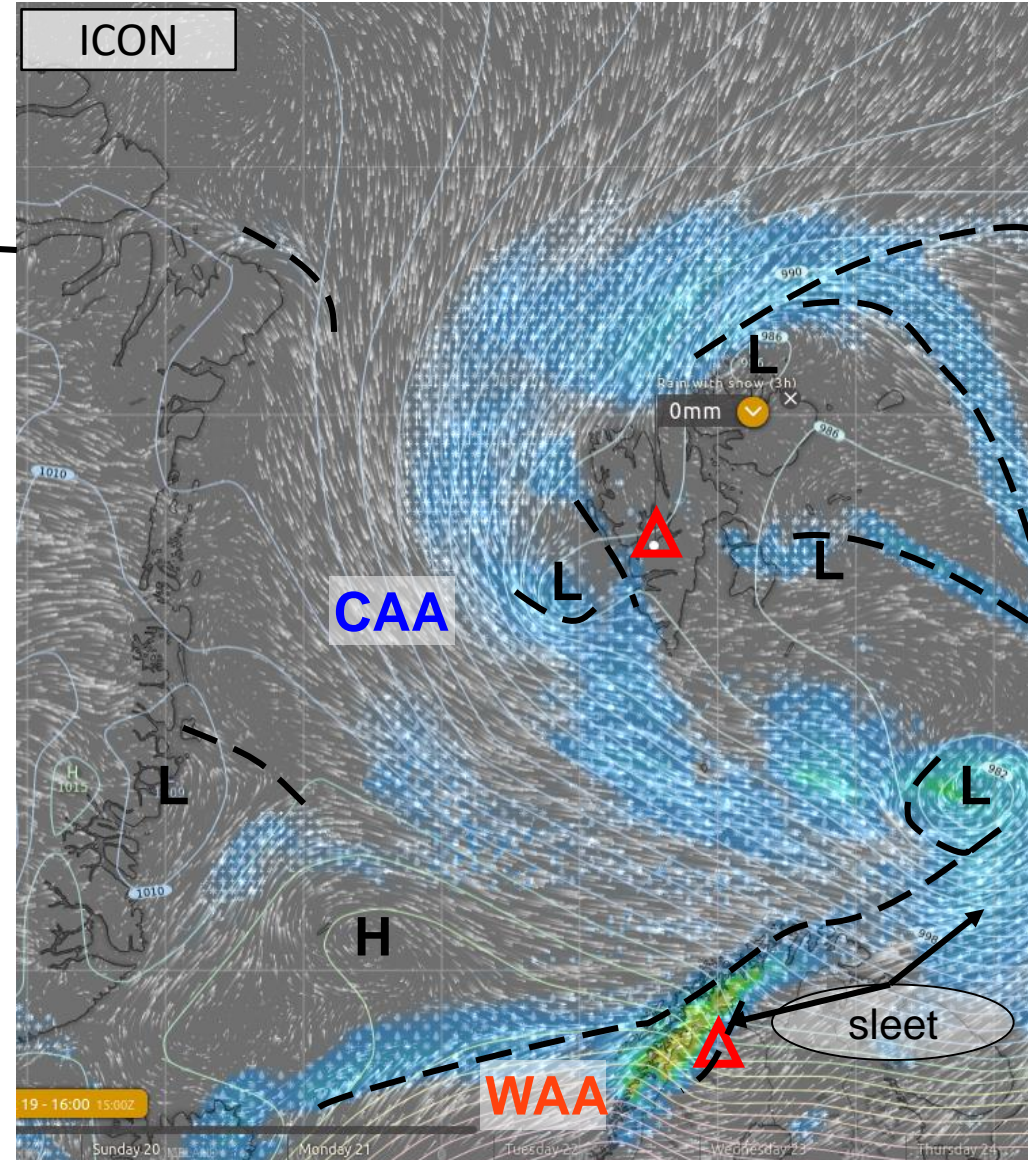
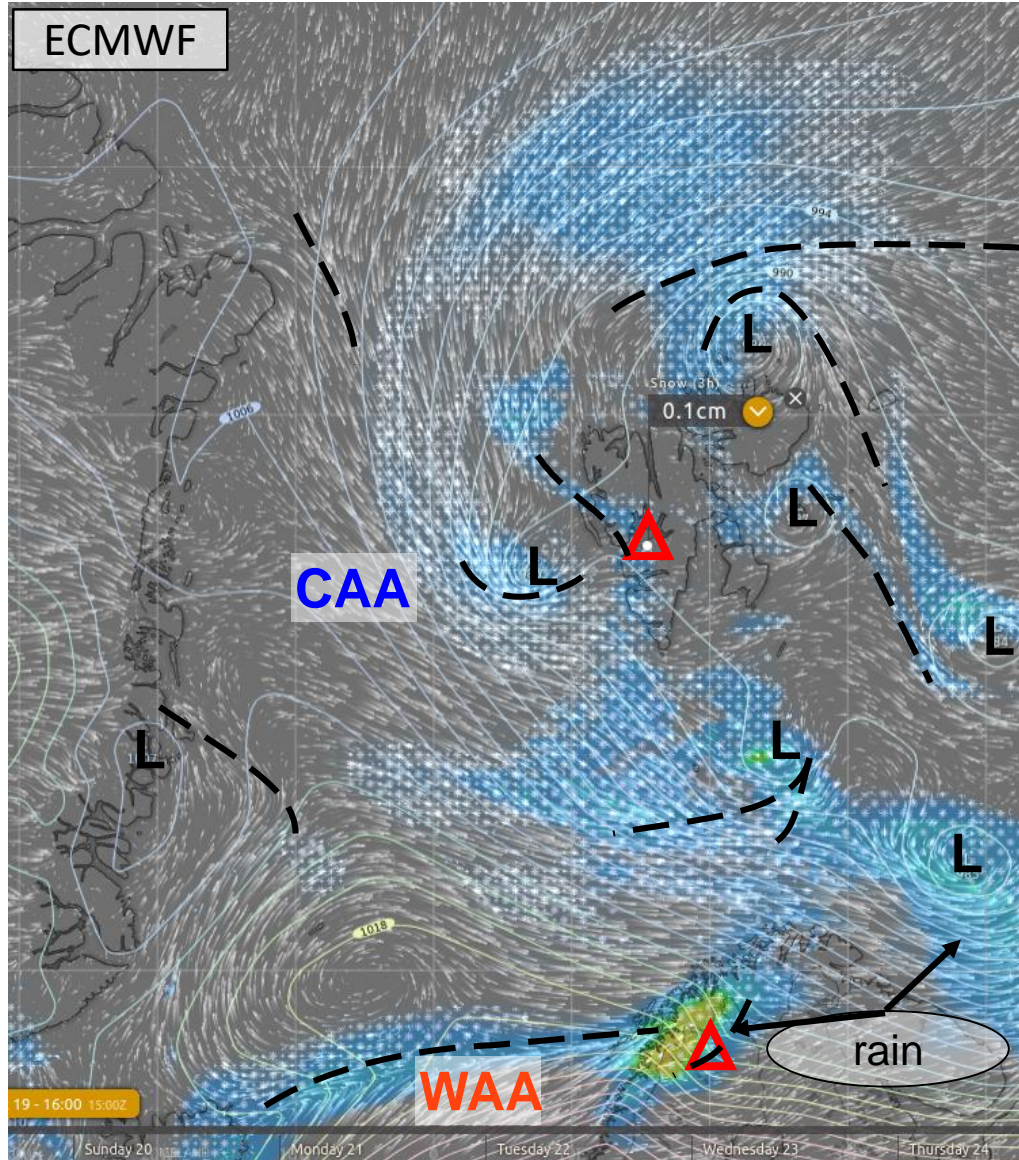
Saturday, 2022-03-19 09 UTC (+57h)



# Saturday, 2022-03-19 12 UTC (+60h)

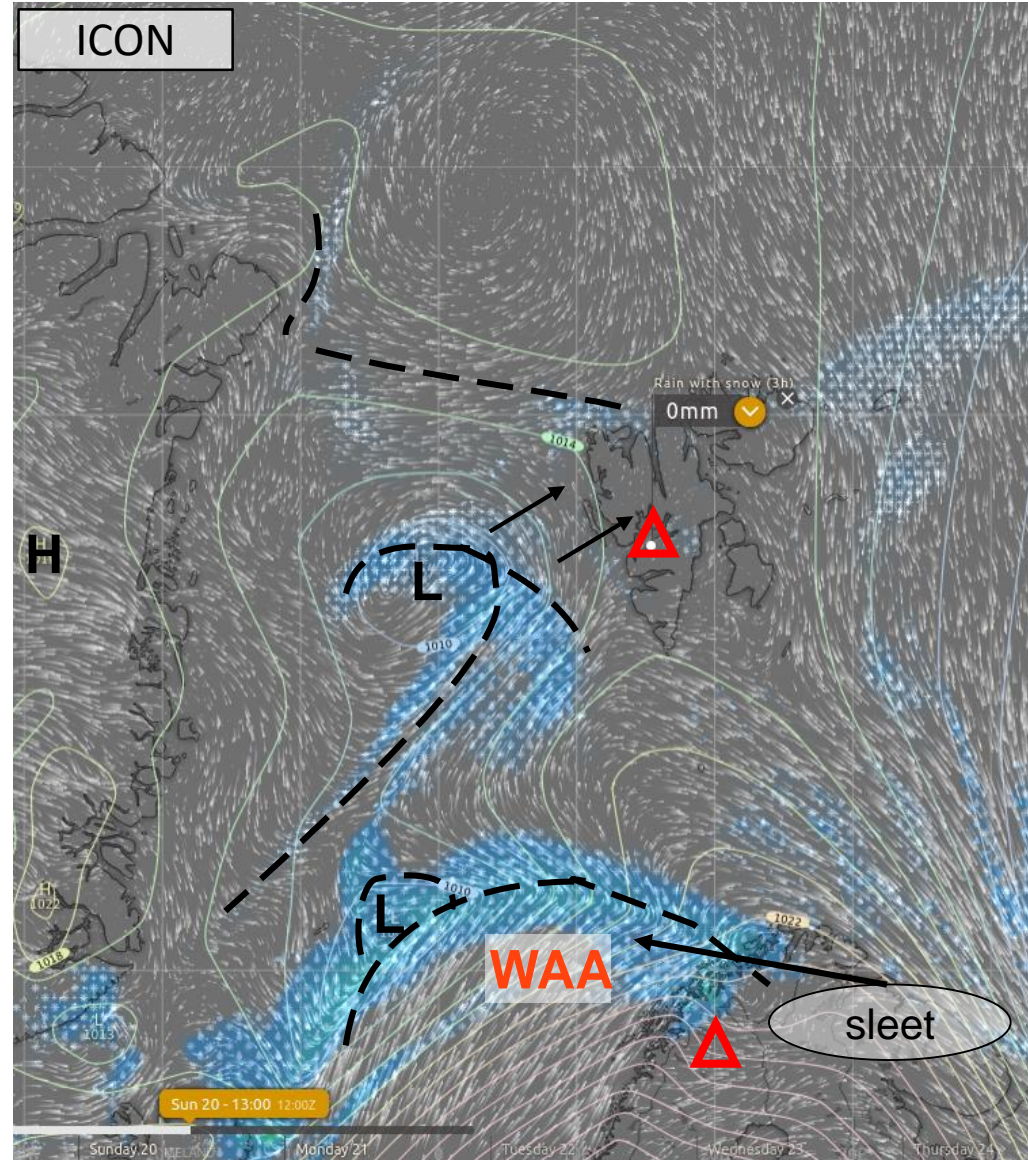
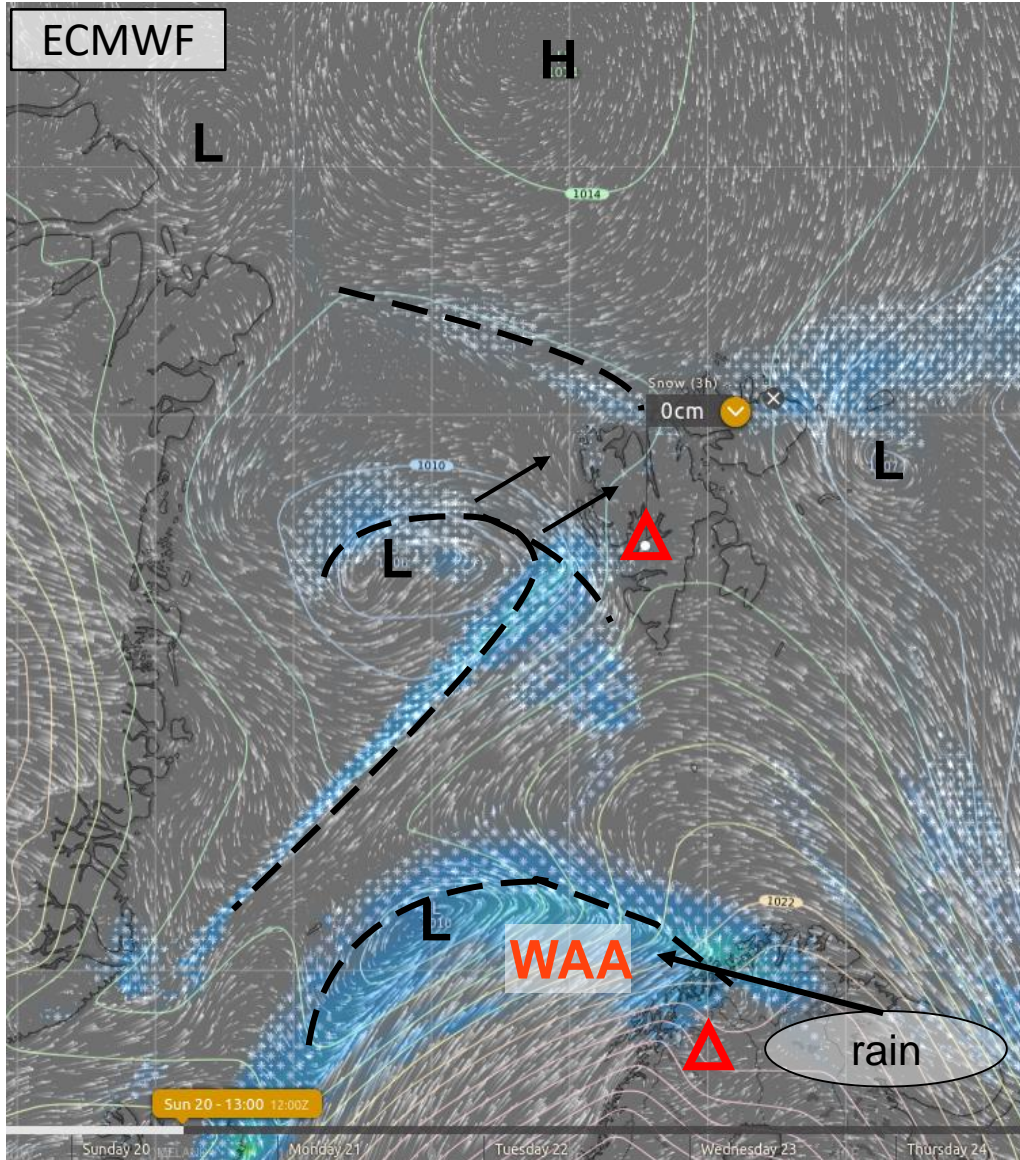


Saturday, 2022-03-19 15 UTC (+63h)

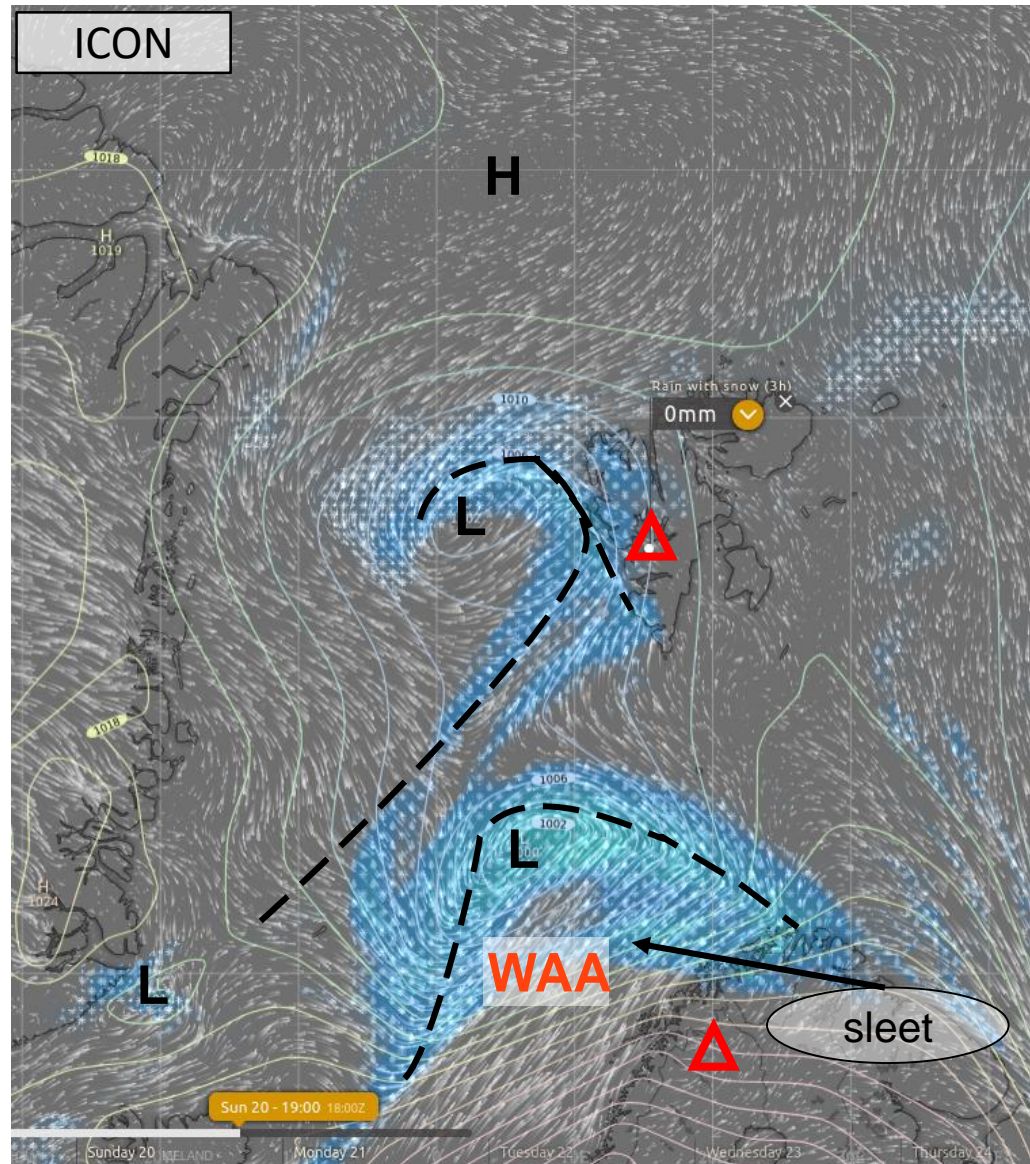
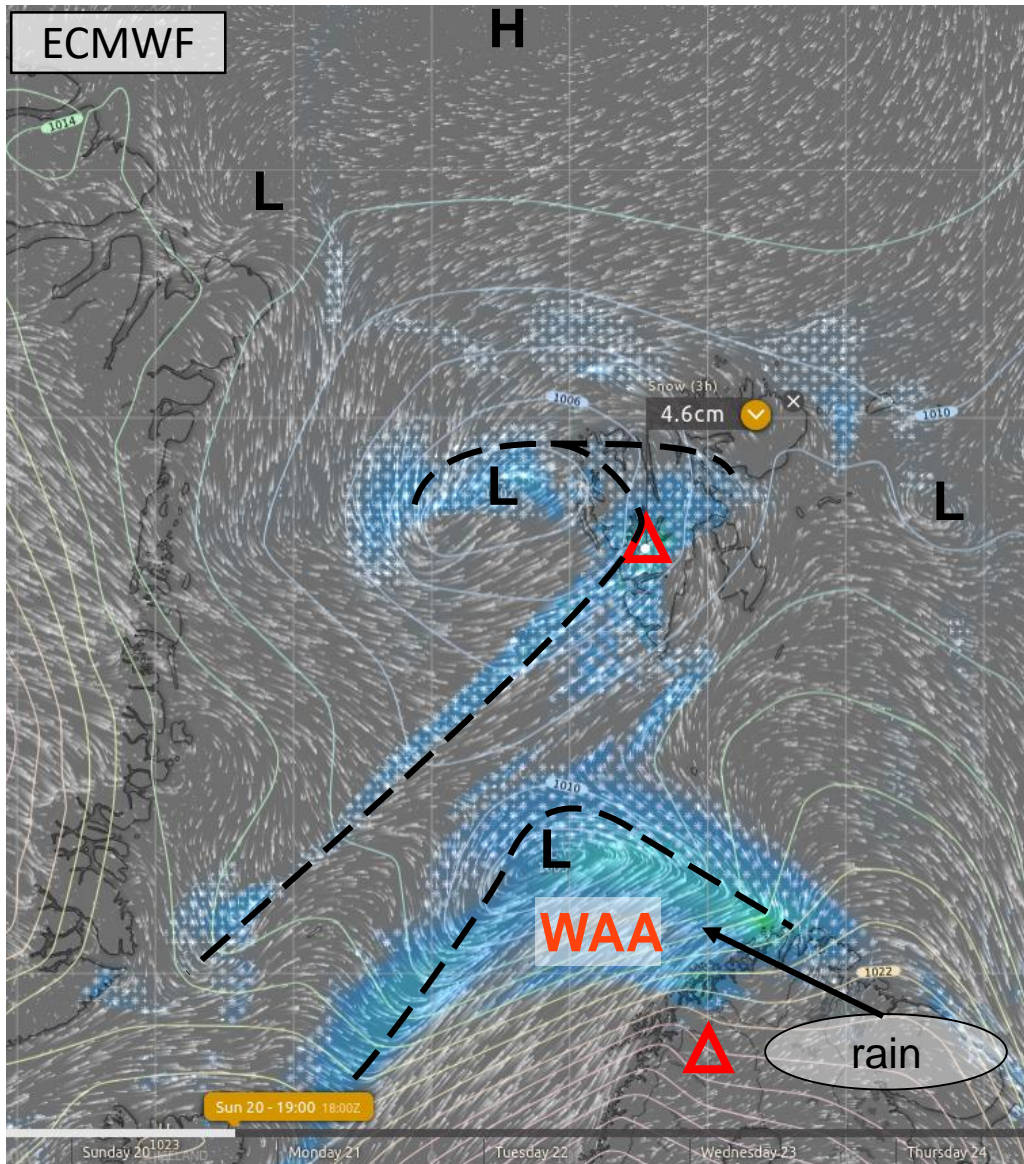




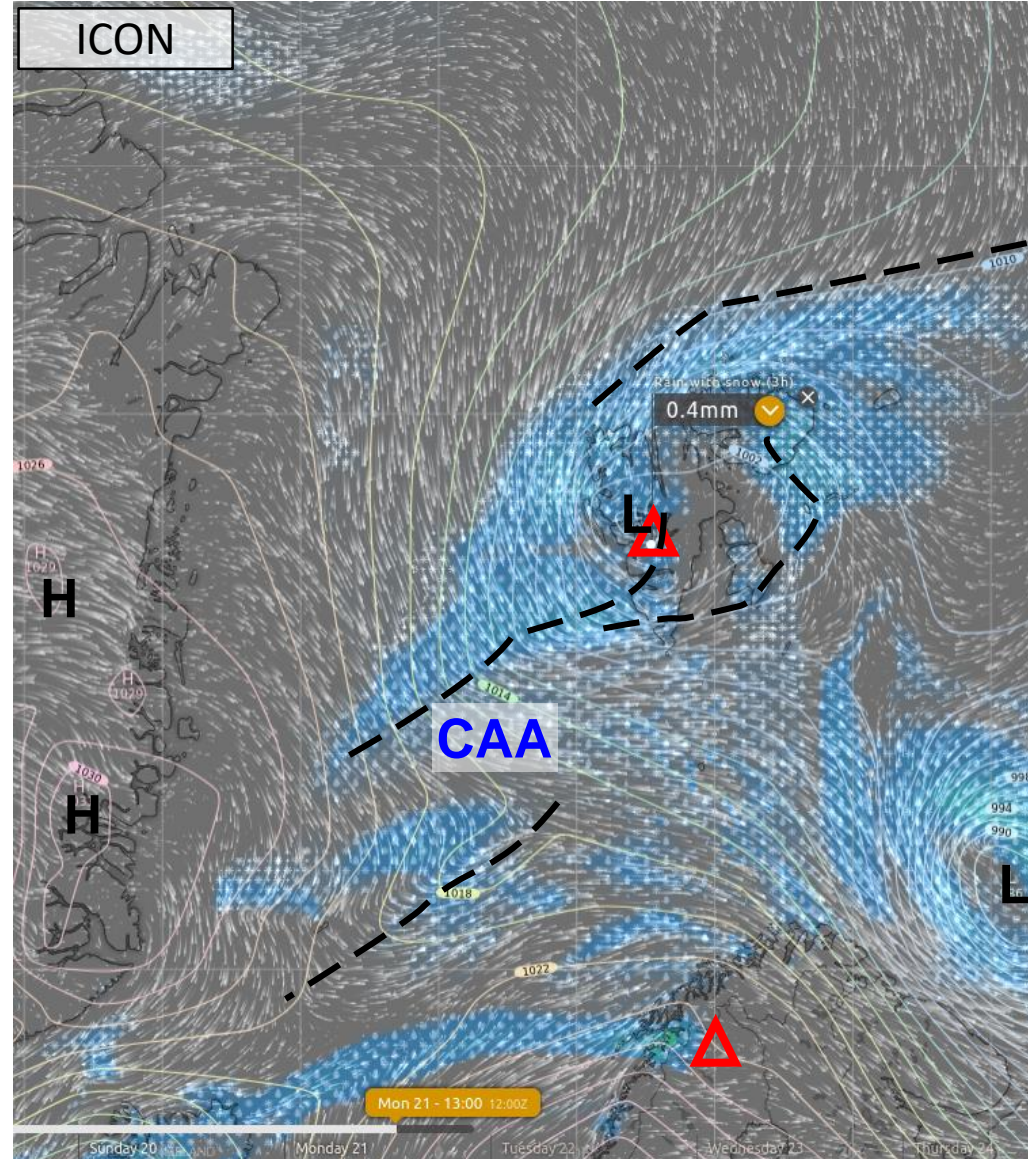
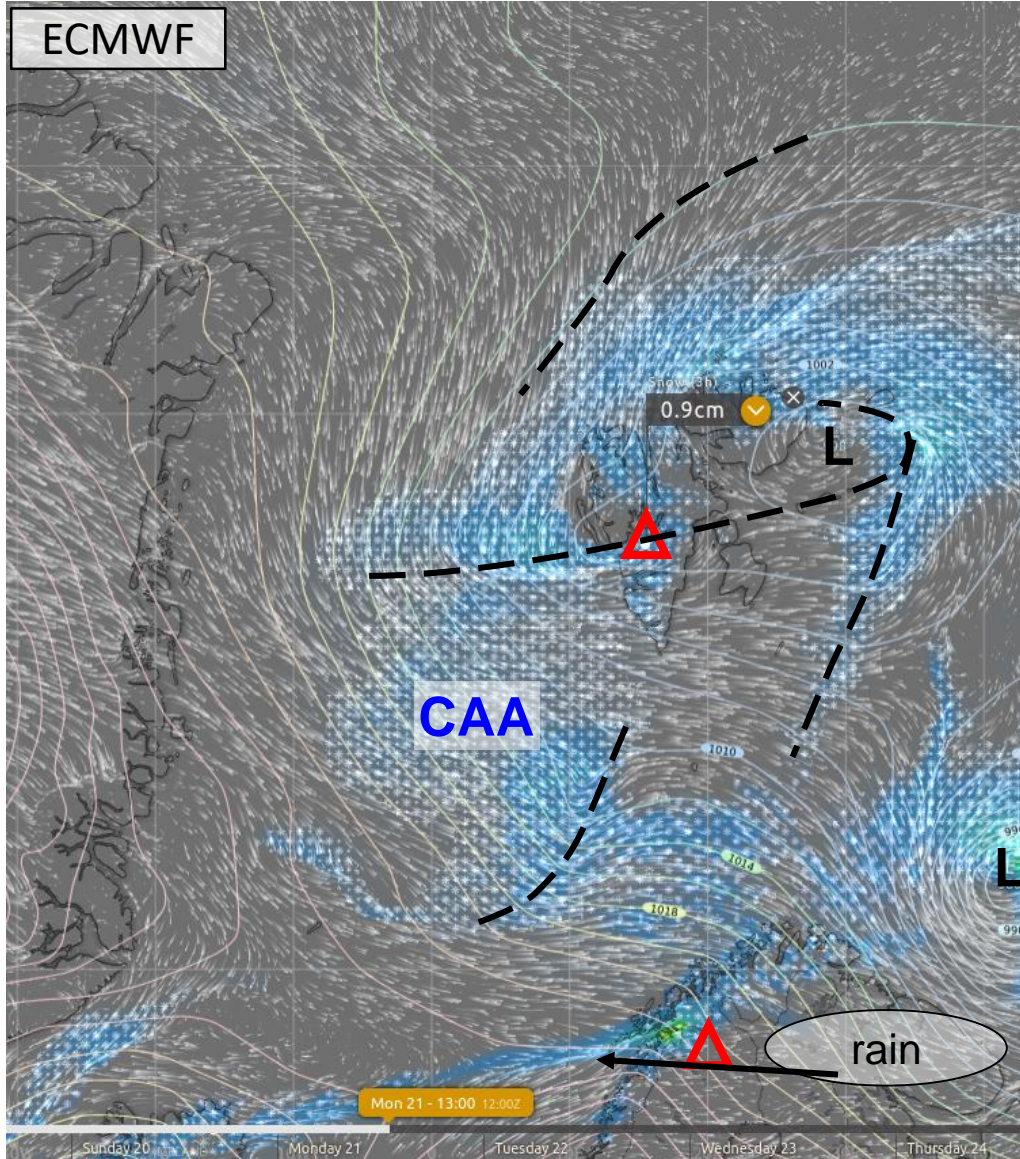
# Sunday, 2022-03-20 12 UTC (+84h)



# Sunday, 2022-03-20 18 UTC (+90h)



# Monday, 2022-03-21 12 UTC (+108h)



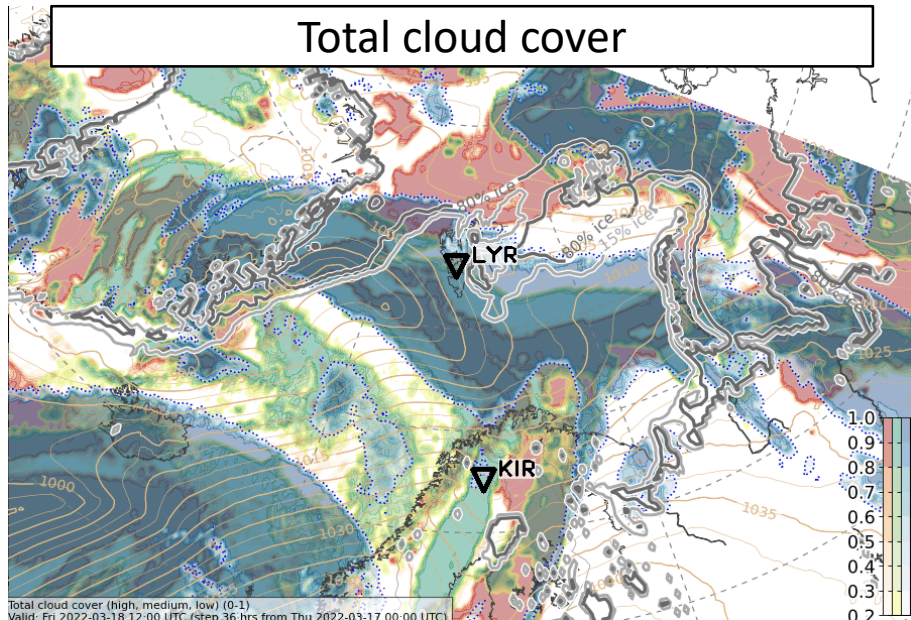
## **Cloud cover, CAO index, Airmasses, IVT**

2022-03-17 00 UTC: 60 – 108h

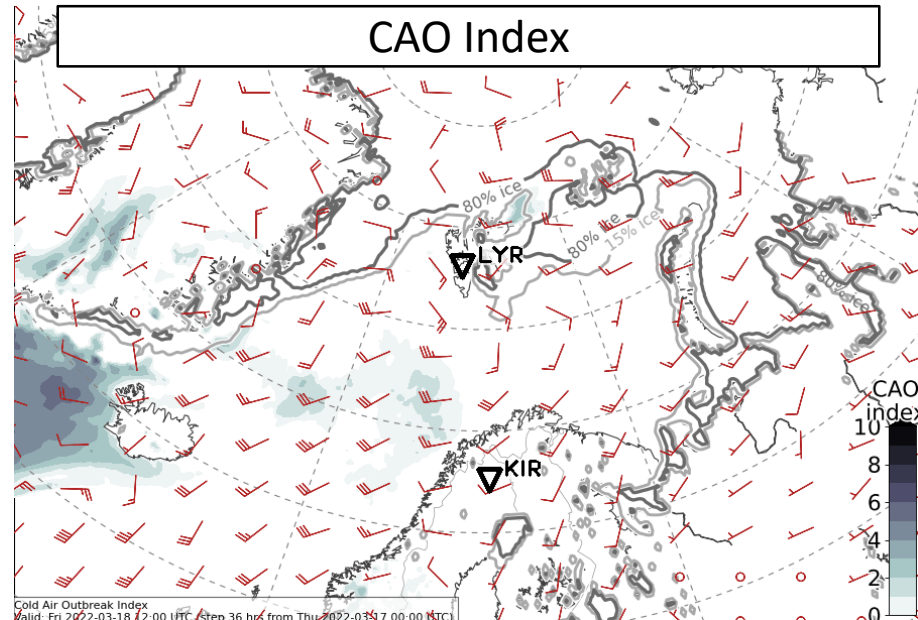
Cloud cover & 850hPa  $\theta_e$  & CAO & IVT

Fri, 2022-03-18 12 UTC (+36h)

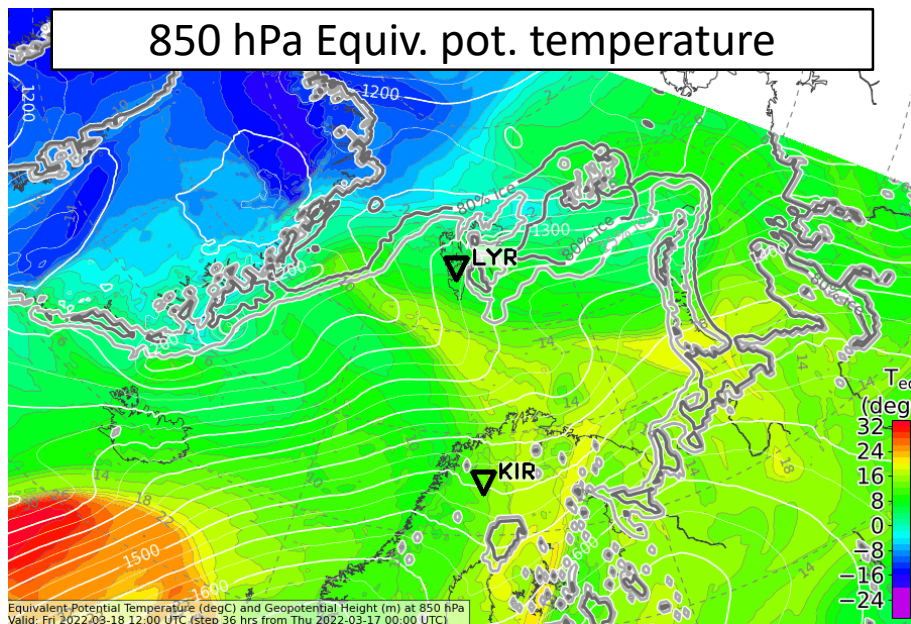
Total cloud cover



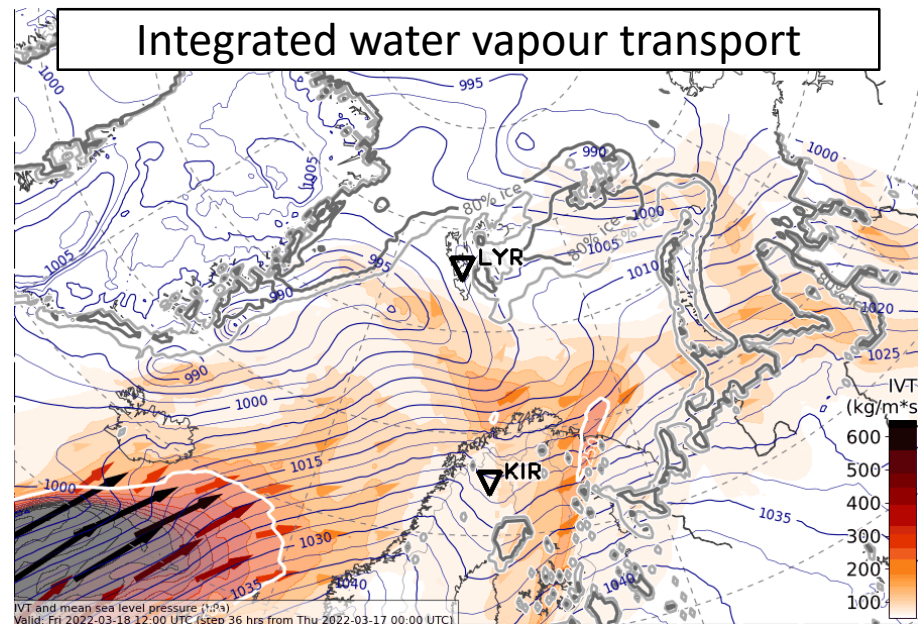
CAO Index



850 hPa Equiv. pot. temperature

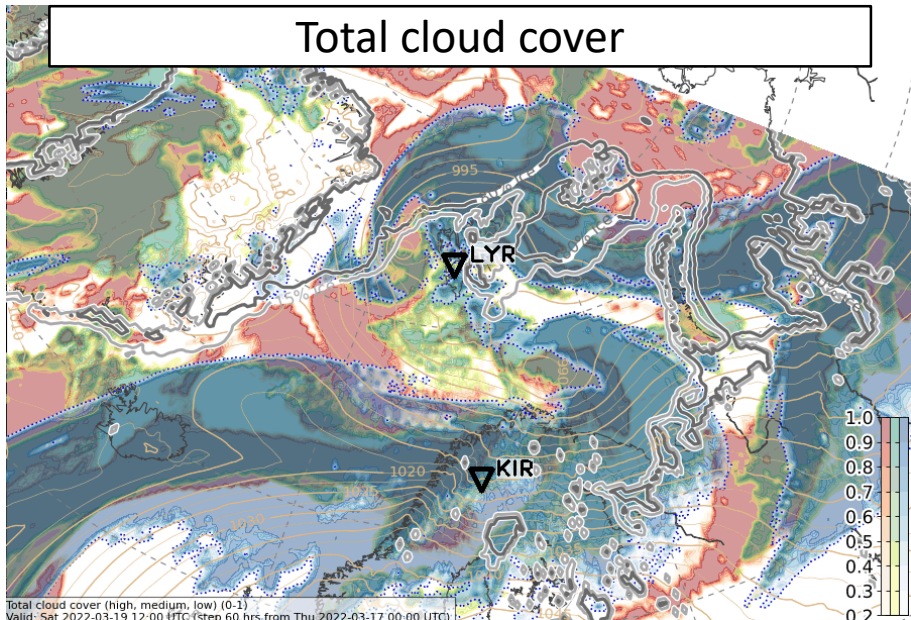


Integrated water vapour transport

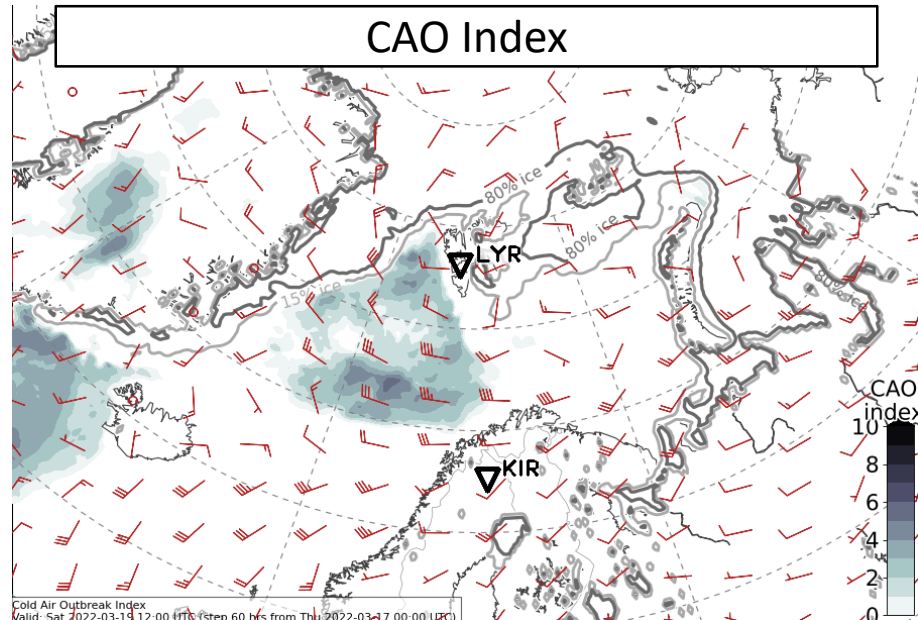


Sat, 2022-03-19 12 UTC (+60h)

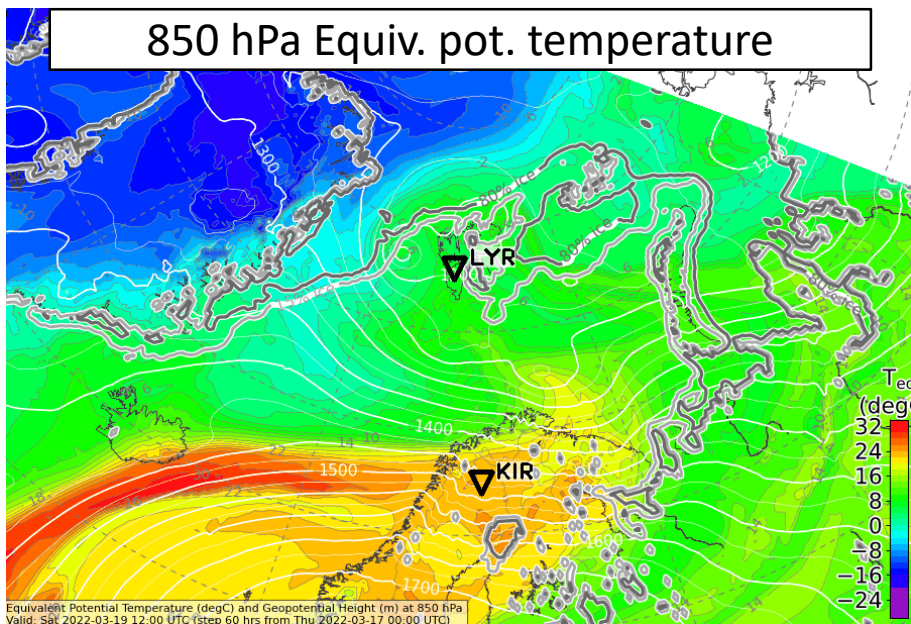
Total cloud cover



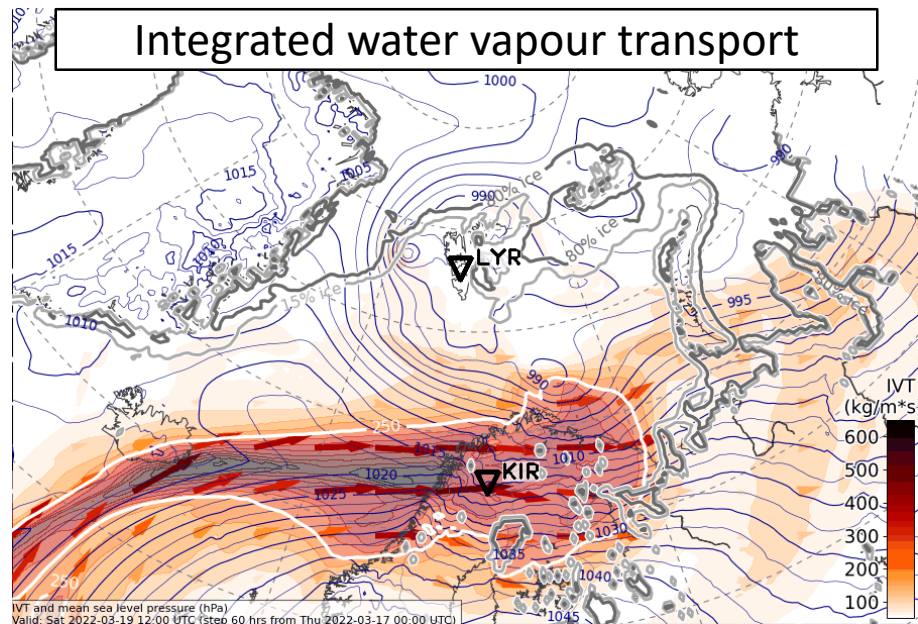
CAO Index



850 hPa Equiv. pot. temperature

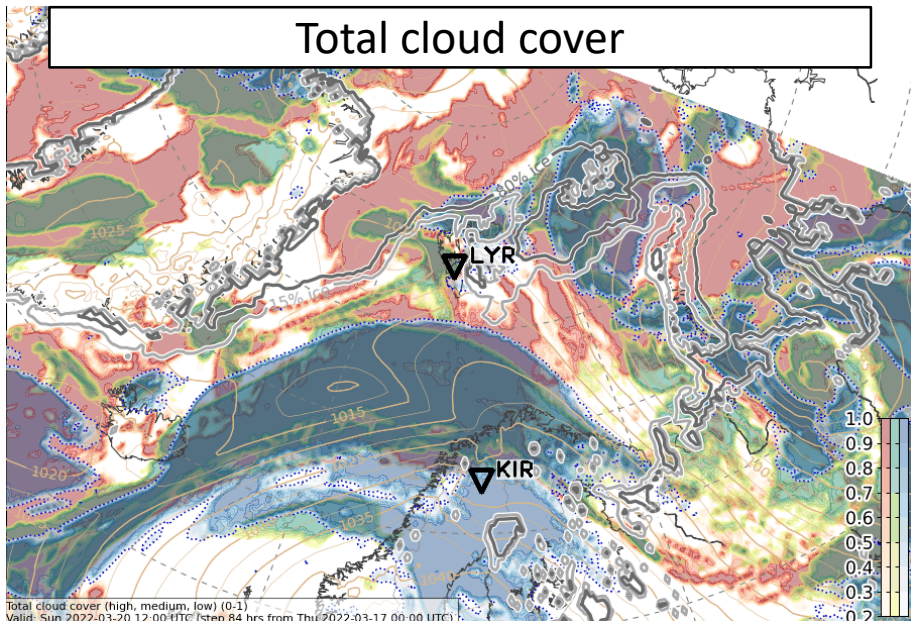


Integrated water vapour transport

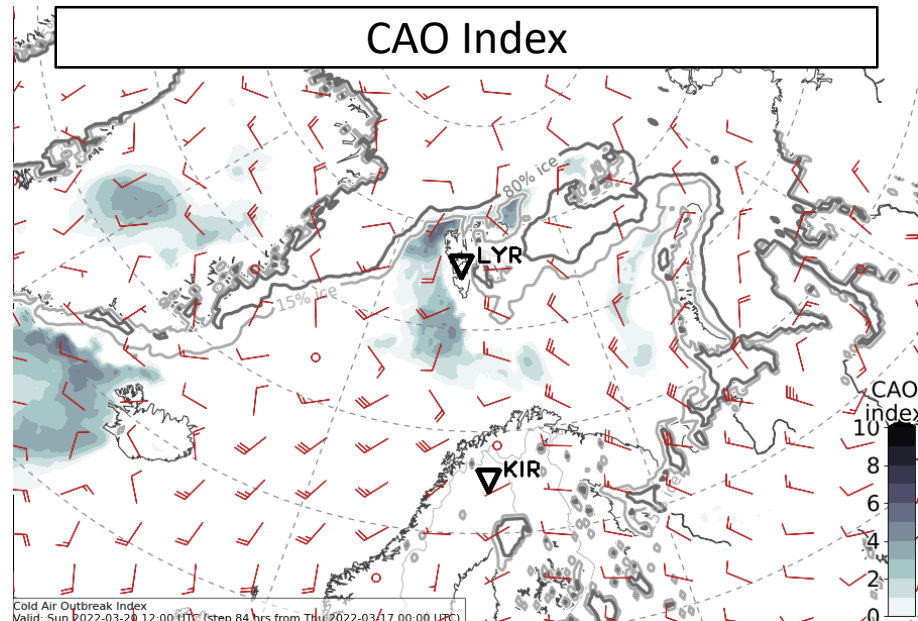


Sun, 2022-03-20 12 UTC (+84h)

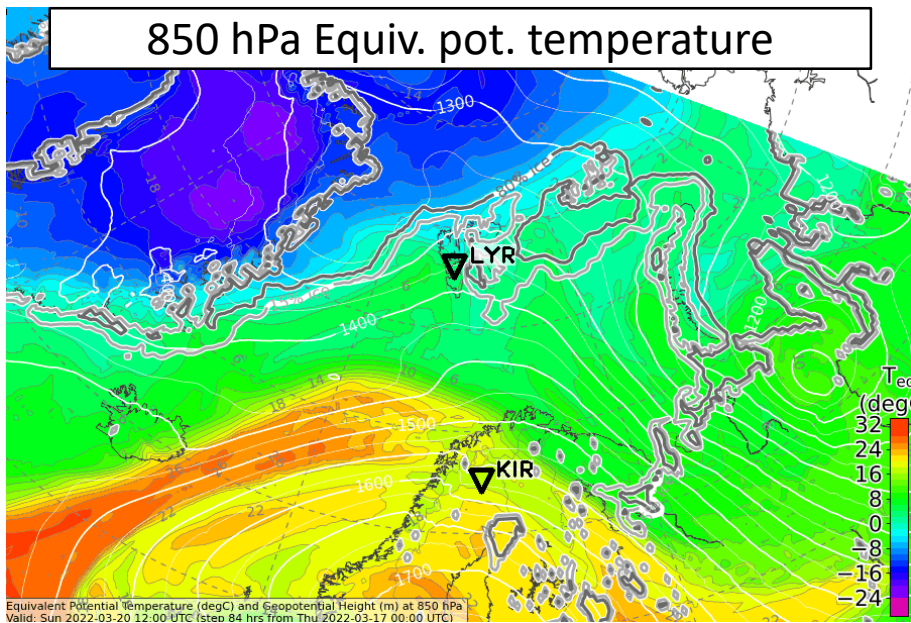
Total cloud cover



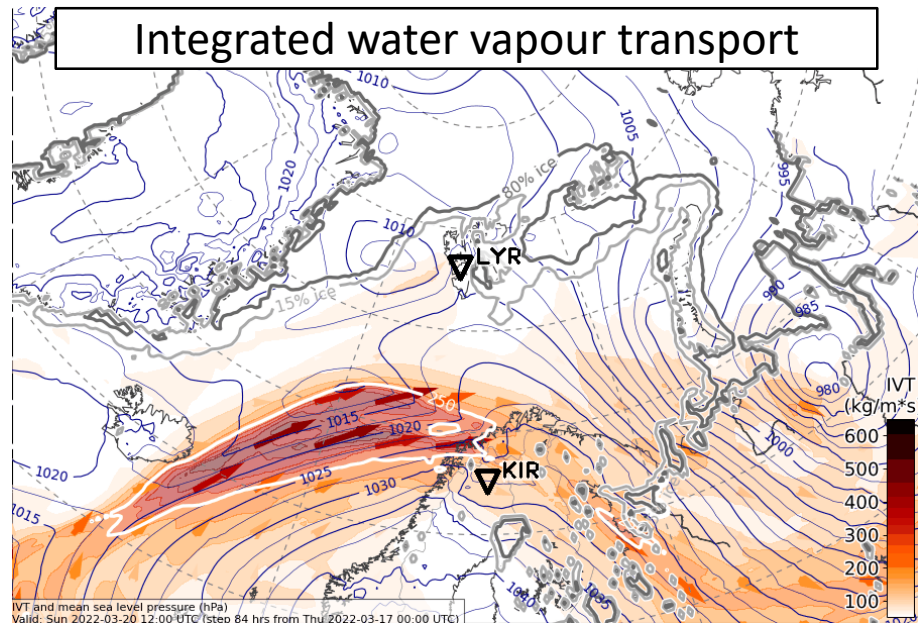
CAO Index



850 hPa Equiv. pot. temperature

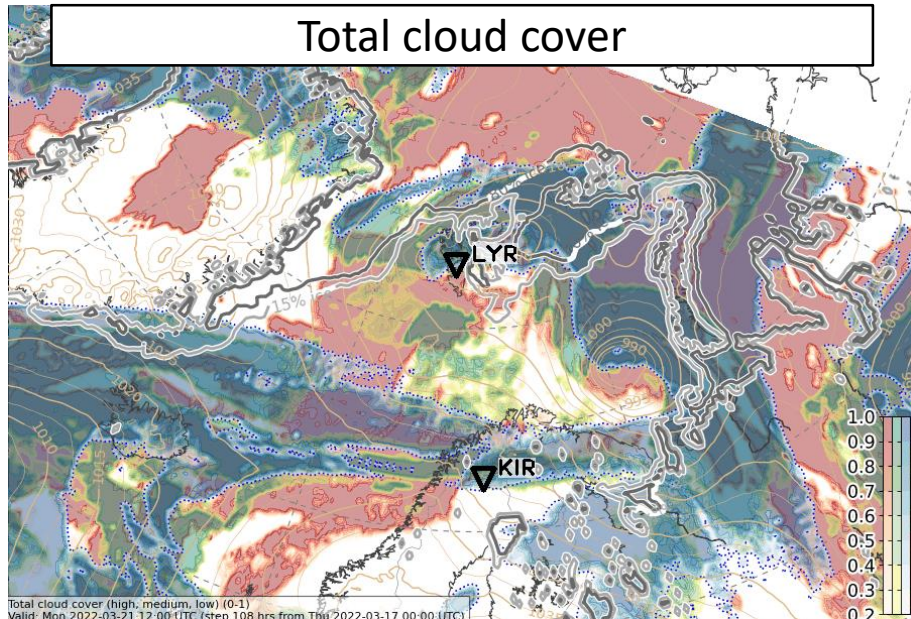


Integrated water vapour transport

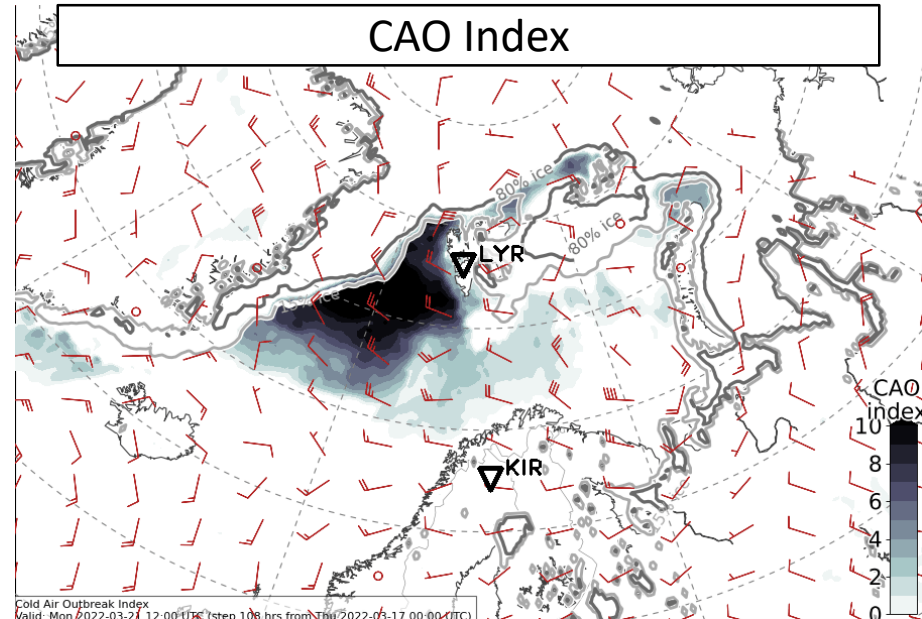


Mon, 2022-03-21 12 UTC (+108h)

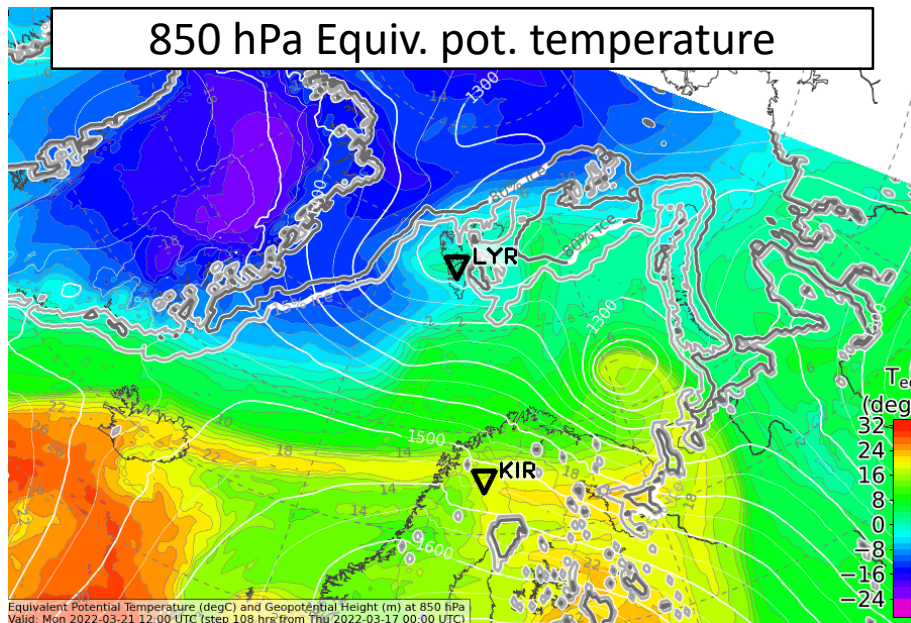
Total cloud cover



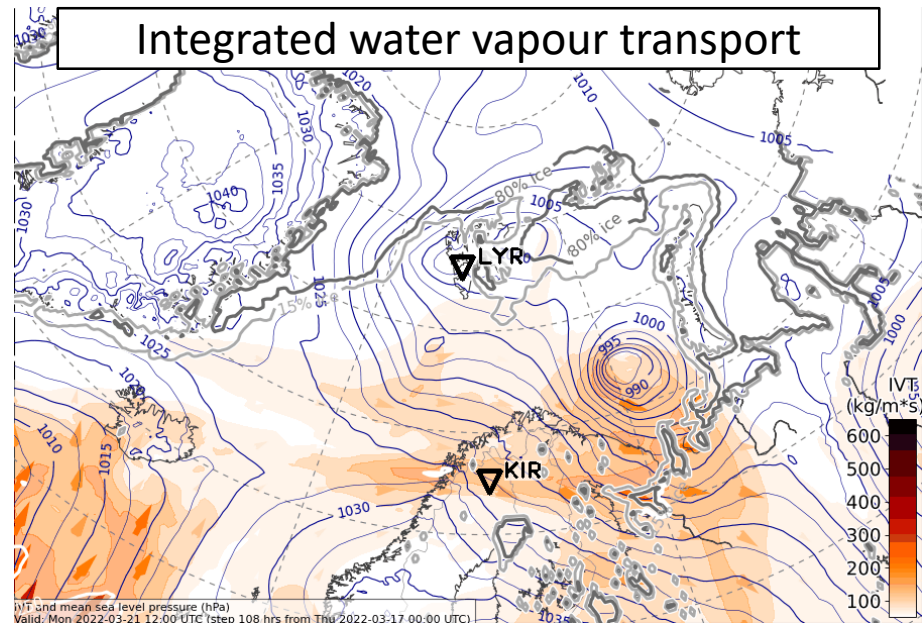
CAO Index



850 hPa Equiv. pot. temperature



Integrated water vapour transport



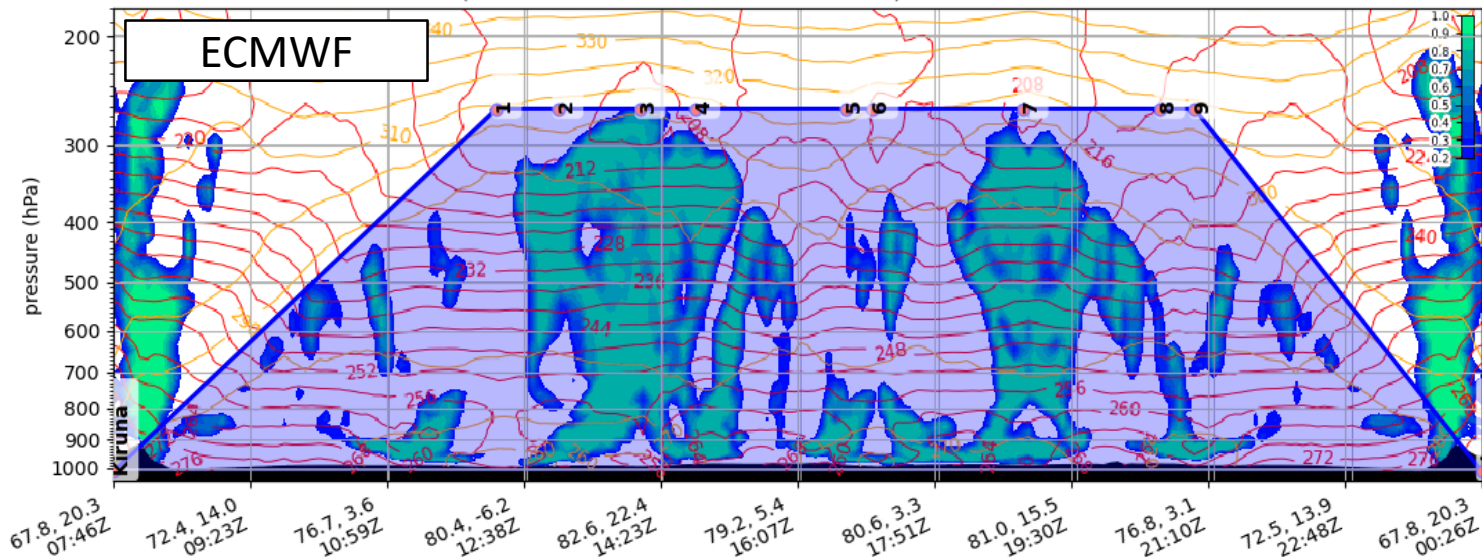


**Cloud cross-sections: HALO RF07**  
2022-03-17 00 UTC: 60h  
ECMWF & ICON

# Sat, 2022-03-19, Clouds, 12 UTC

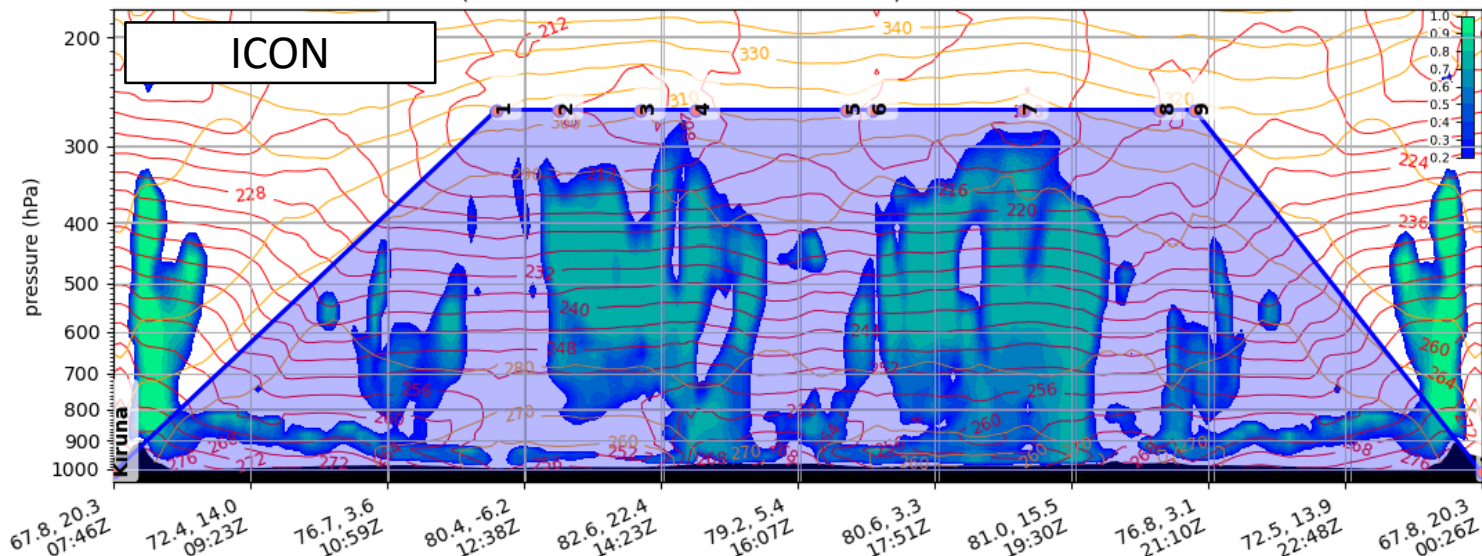
Cloud Cover (0-1) Vertical Section

Valid: 2022-03-19T12:00:00Z (initialisation: 2022-03-17T00:00:00Z)

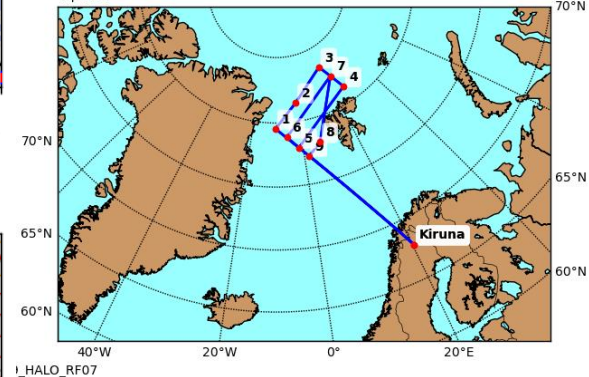


Cloud Cover (0-1) Vertical Section

Valid: 2022-03-19T12:00:00Z (initialisation: 2022-03-17T00:00:00Z)

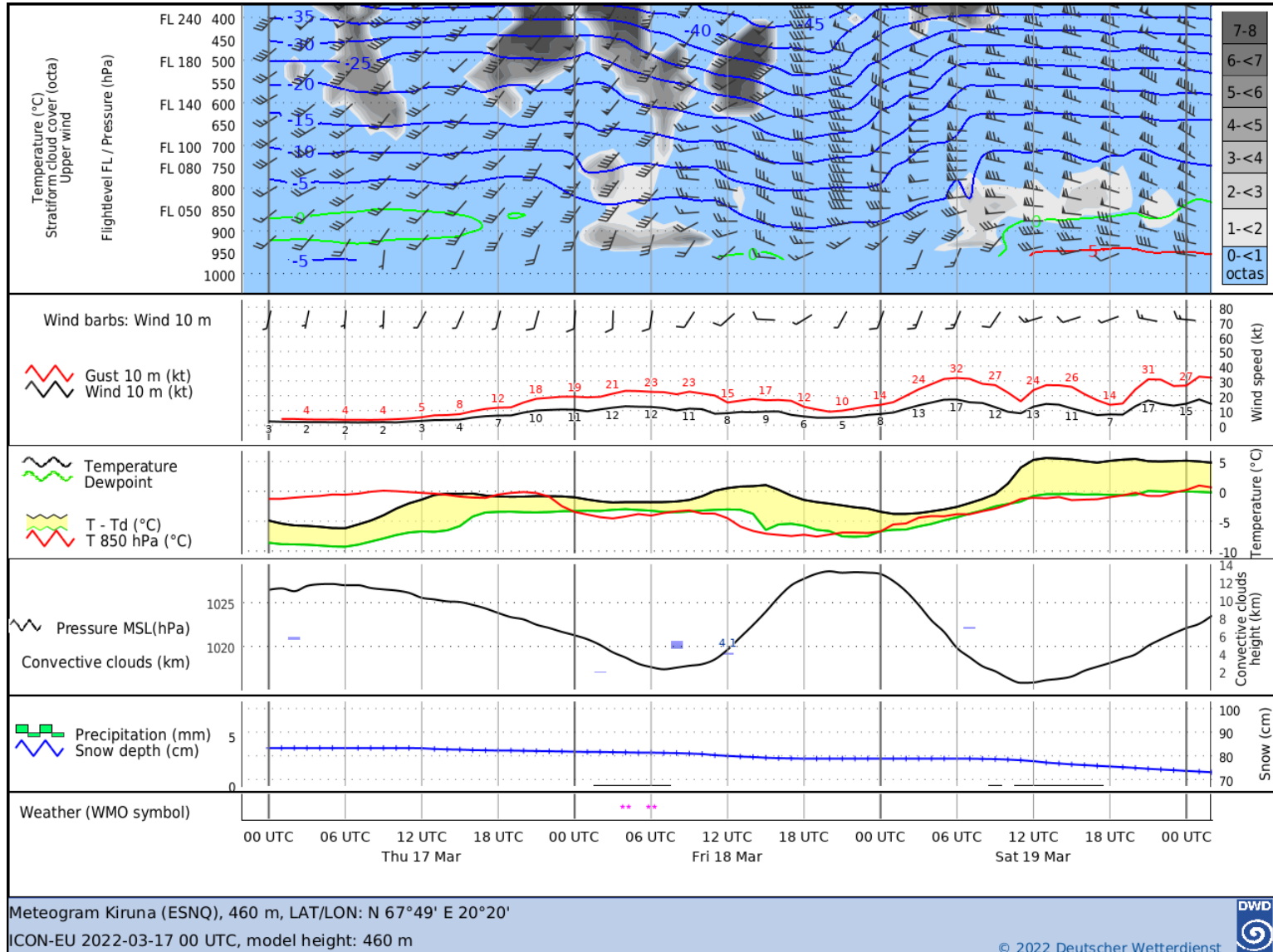


Top view



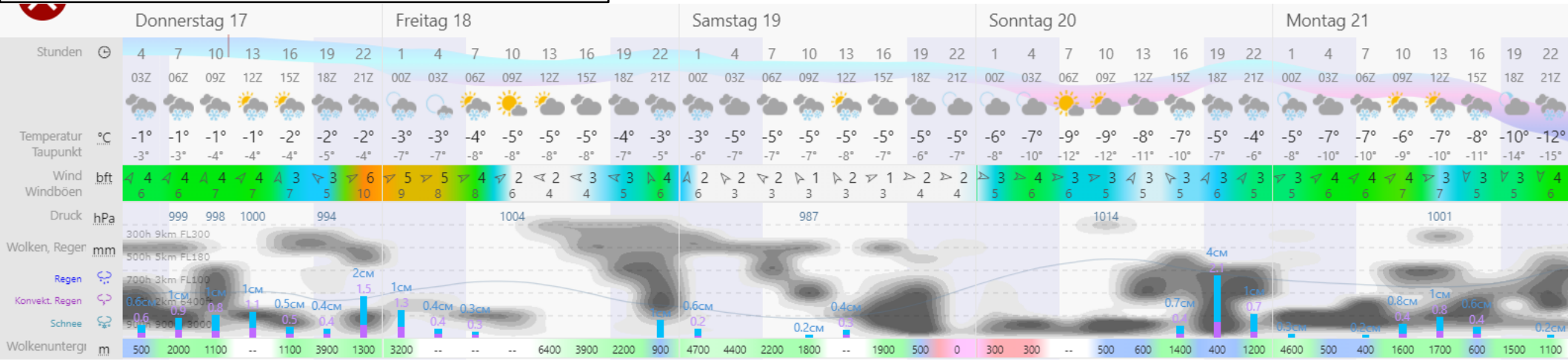
## **Airport conditions**

# Kiruna:

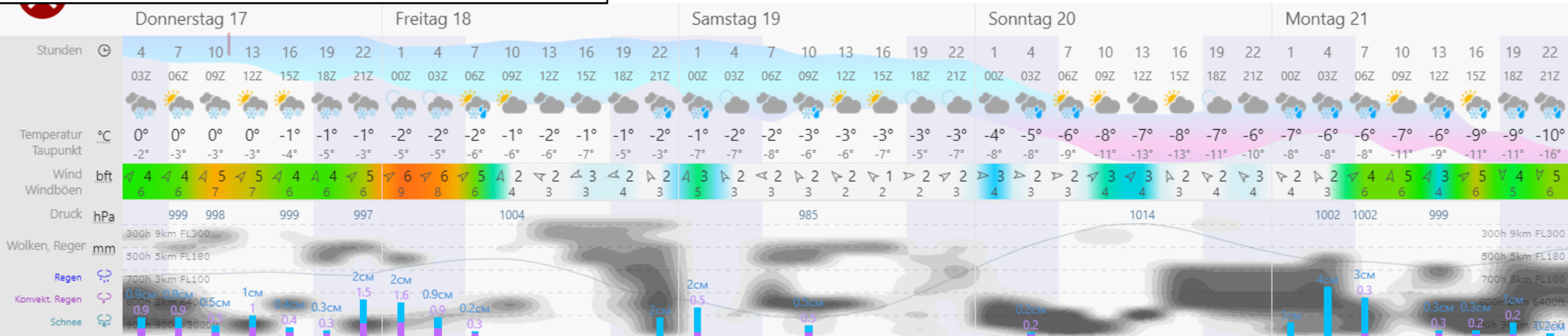


# Longyearbyen: Meteogram

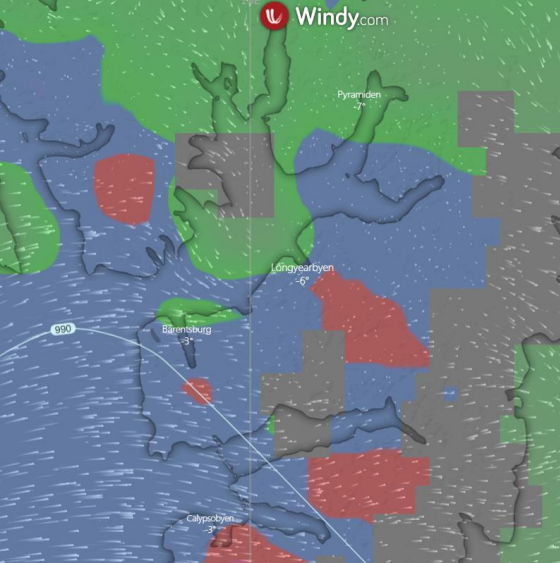
## ECWMF



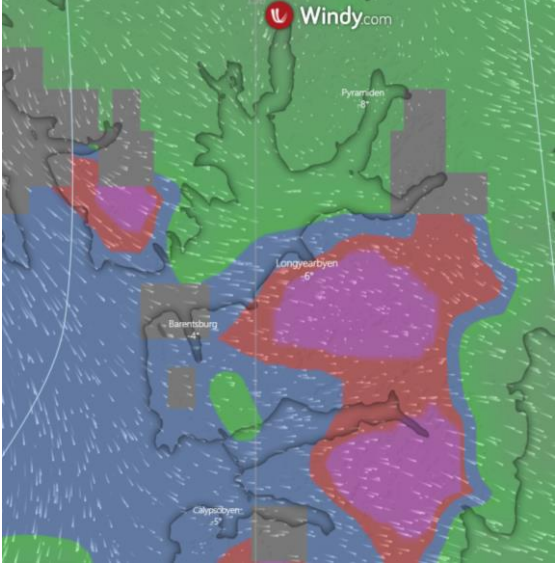
## ICON



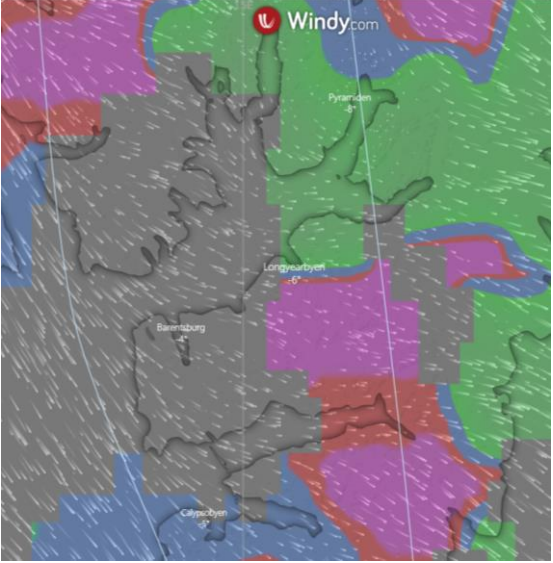
# Sat, 2022-03-19, Cloud base height, Longyearbyen



15 UTC



18 UTC



21 UTC



# Latest TAF from Longyearbyen airport

Time: 15:55 (14:55 UTC)

## Forecast

Forecast valid from 17 at 12 UTC to 18 at 12 UTC

Wind **9** kt from the **Southwest**

Visibility 10 km or more

**Few clouds** at a height of **1000** ft  
**Broken clouds** at a height of **2500** ft

*Temporary*  
from 17 at 12 UTC to 17 at 14 UTC

Wind **25** kt from the **Southwest** with gusts up to **35** kt

**Scattered clouds** at a height of **2000** ft,  
**Cumulonimbus.**

*Temporary*  
from 17 at 14 UTC to 17 at 18 UTC

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

*Becoming*  
from 17 at 18 UTC to 17 at 21 UTC

Wind **20** kt from the **West**

*Temporary*  
from 17 at 20 UTC to 18 at 06 UTC

Wind **40** kt from the **West** with gusts up to **60** kt

Visibility: **0800** m

at a height of **400** ft

**Blowing snow, snow showers**

*Temporary*  
from 18 at 06 UTC to 18 at 09 UTC

Wind **20** kt from the **West** with gusts up to **30** kt

**Low drifting snow**

*Becoming*  
from 18 at 09 UTC to 18 at 12 UTC

Wind **8** kt from the **East/Southeast**

**TAF:** ENSB 1712/1812 22009KT 9999  
FEW010 BKN025 TEMPO 1712/1714  
22025G35KT SCT020CB TEMPO 1714/1718  
20015G25KT BECMG 1718/1721 28020KT  
TEMPO 1720/1806 28040G60KT 0800 BLSN  
SHSN VV004 TEMPO 1806/1809  
27020G30KT DRSN BECMG 1809/1812  
12008KT

# Summary



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

- **Saturday, 2022-03-19:**

- Low pressure system west of Svalbard, connected to some snowfall at LYR (weakens in the afternoon)
- General weak flow conditions at Svalbard
- Cold air advection from Greenland

- **Sunday, 2022-03-20:**

- New low pressure system above Fram Strait (moves NE towards Svalbard)
- Snowfall at Svalbard from the late afternoon
- Flight conditions before noon look more favourable

- **Monday, 2022-03-21**

- Low pressure systems over Svalbard with snowfall
- Intense Cold Air Outbreak