

Weather updates

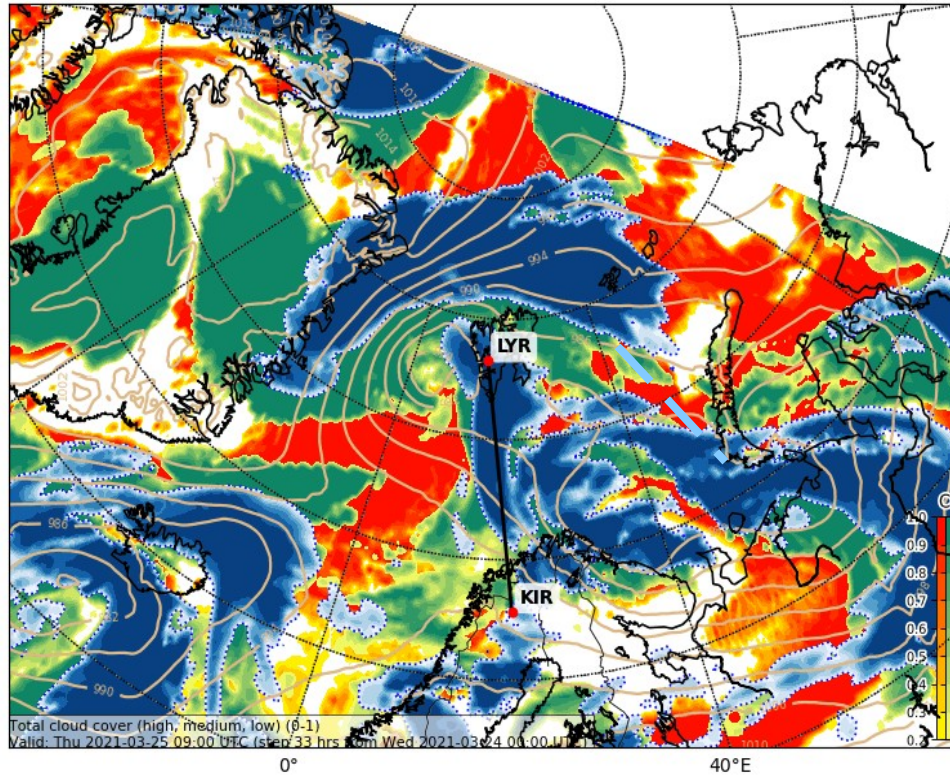
Thursday, 25 March 2021 – 12 UTC & 14 UTC

Thursday, 25 March 2021

Cloud cover forecast ECMWF vs. Satellite picture

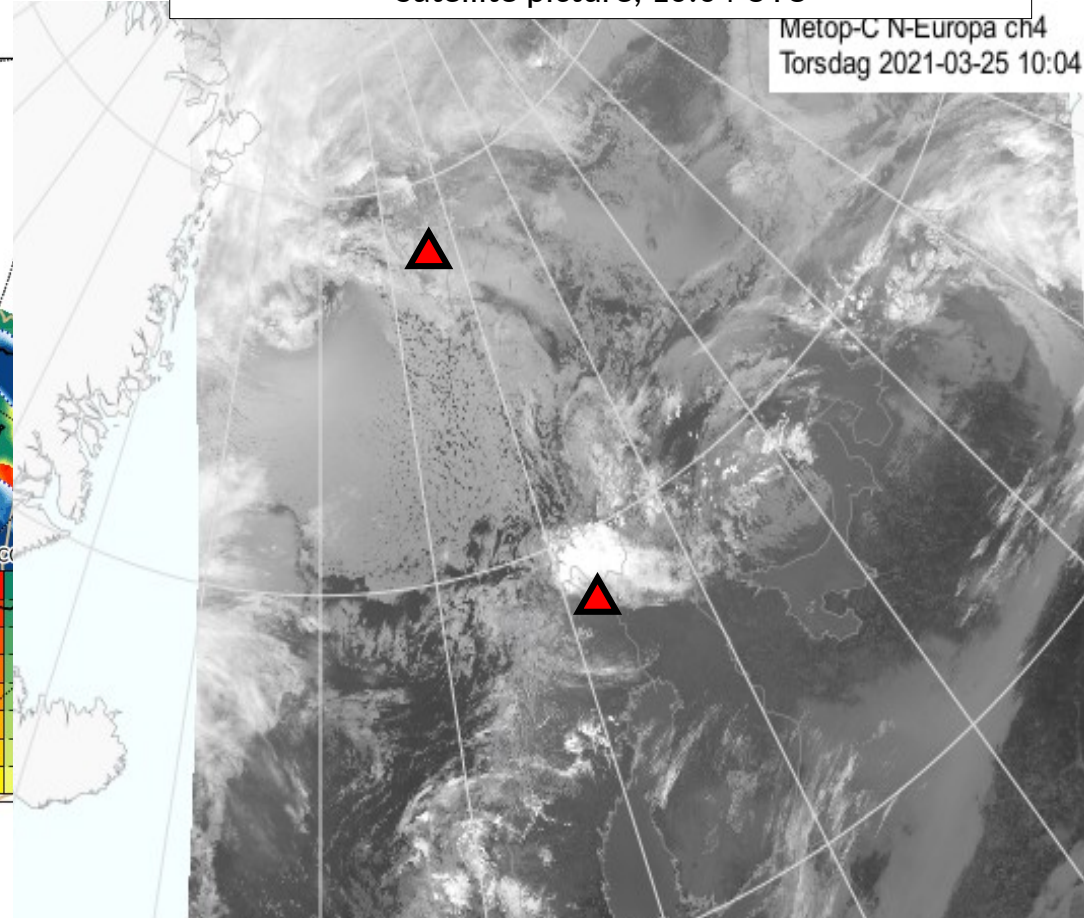
Total cloud cover, 09 UTC

Valid: Do 2021-03-25 09:00 UTC (step 33 hrs from Mi 2021-03-24 00:00 UTC)



Satellite picture, 10:04 UTC

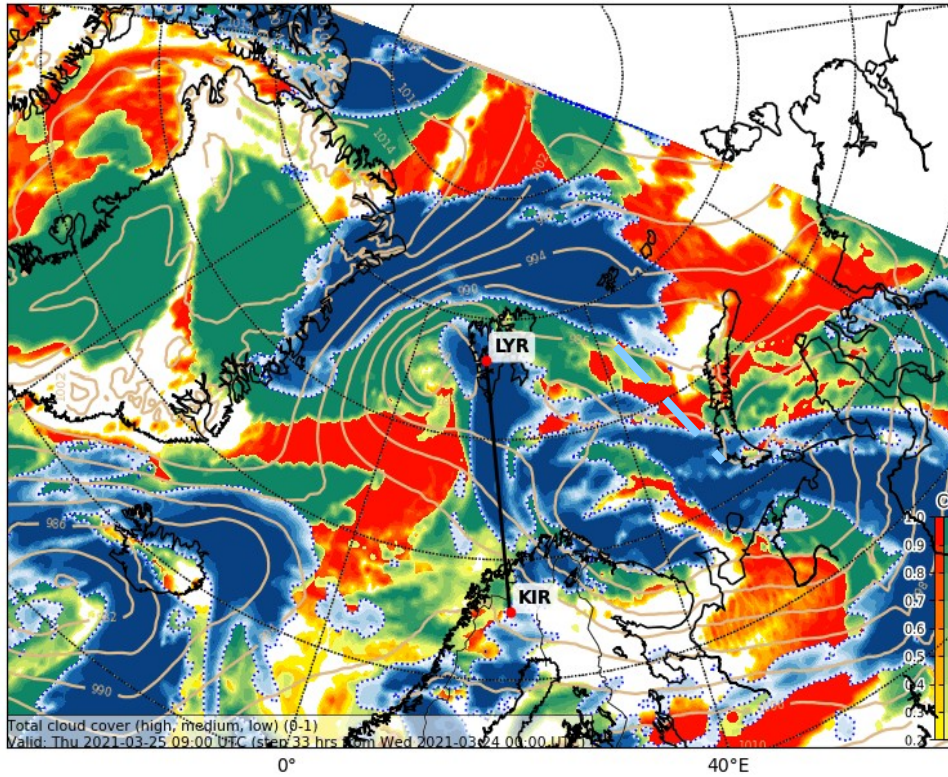
Metop-C N-Europa ch4
Torsdag 2021-03-25 10:04



Cloud cover forecast ECMWF vs. Satellite picture

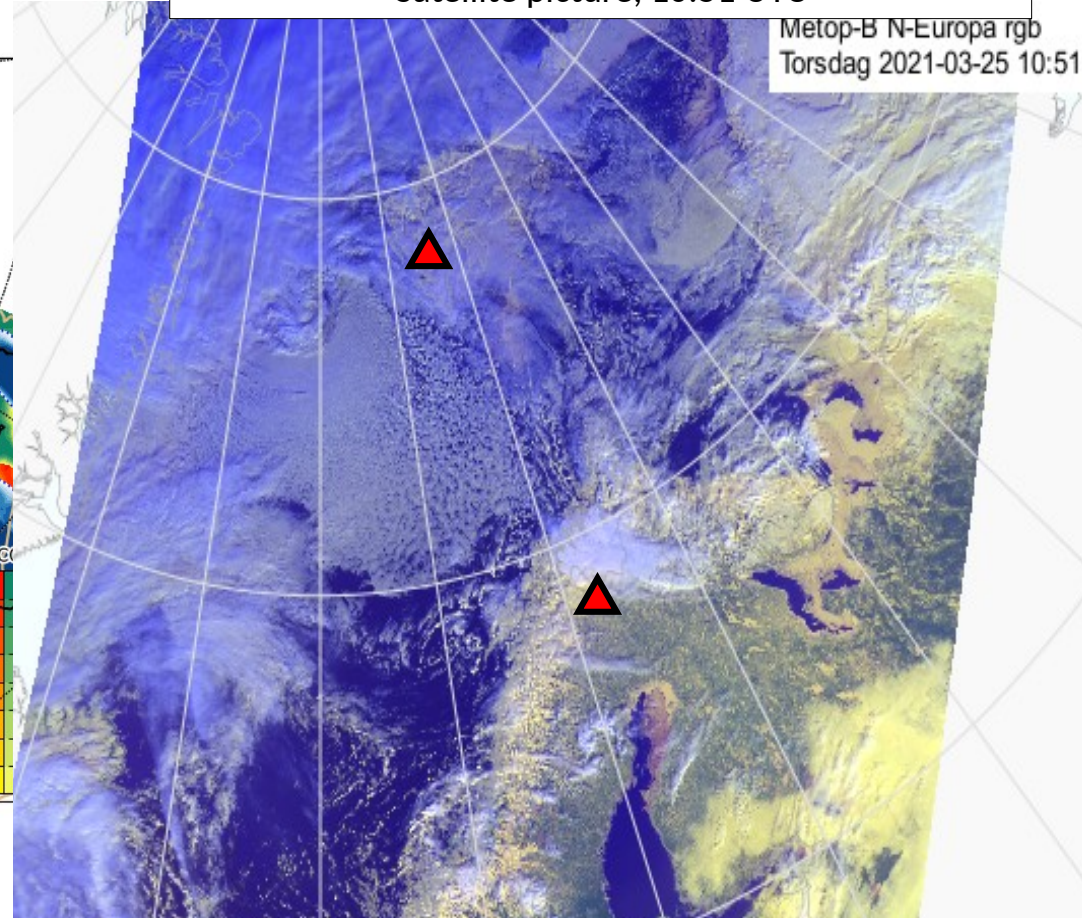
Total cloud cover, 09 UTC

Valid: Do 2021-03-25 09:00 UTC (step 33 hrs from Mi 2021-03-24 00:00 UTC)

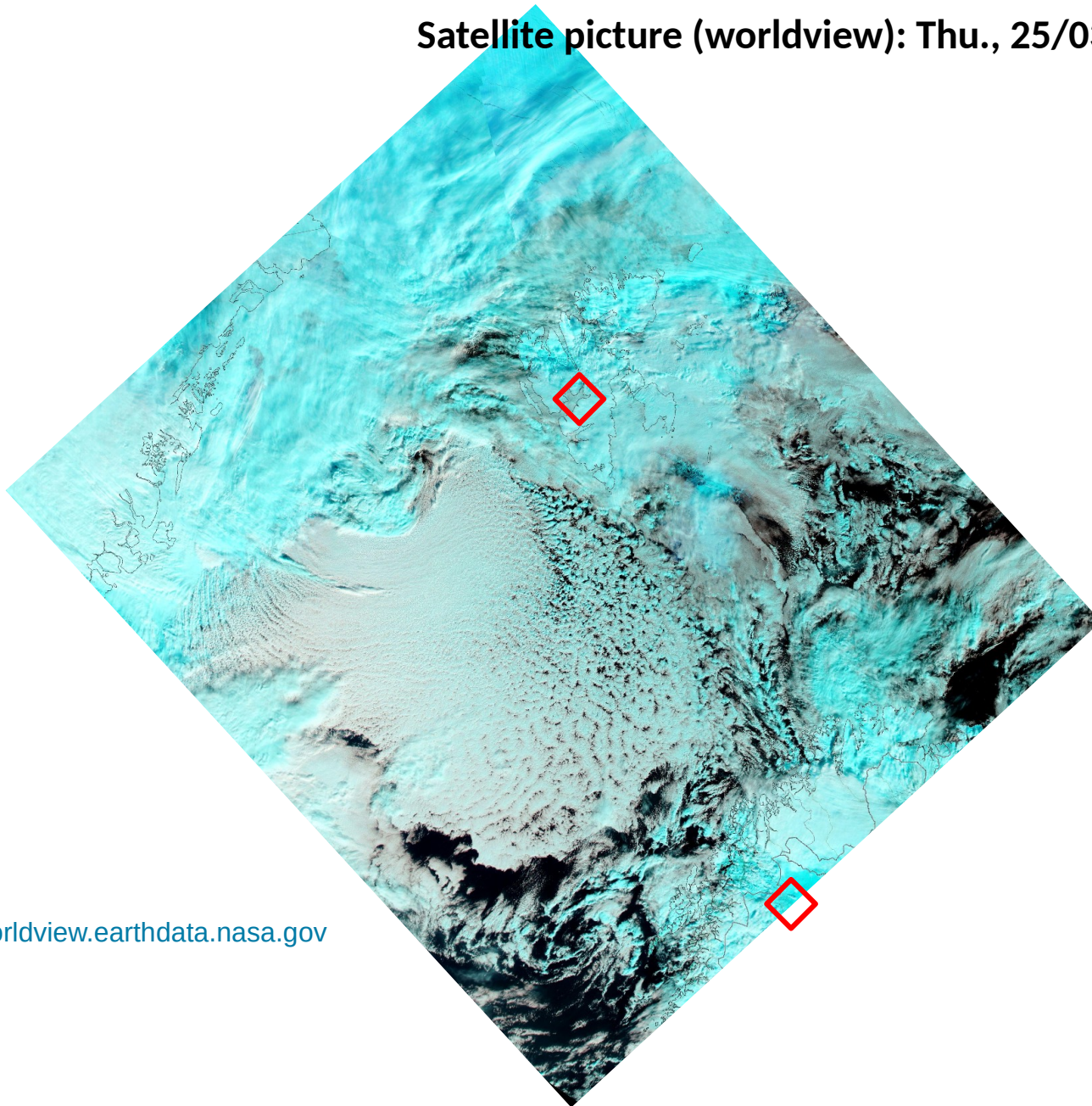


Satellite picture, 10:51 UTC

Metop-B N-Europa rgb
Torsdag 2021-03-25 10:51



Satellite picture (worldview): Thu., 25/03



<https://worldview.earthdata.nasa.gov>



SPITSBERGEN

BOREALIS PANORAMA PORT OF LONGYEARBYEN 360



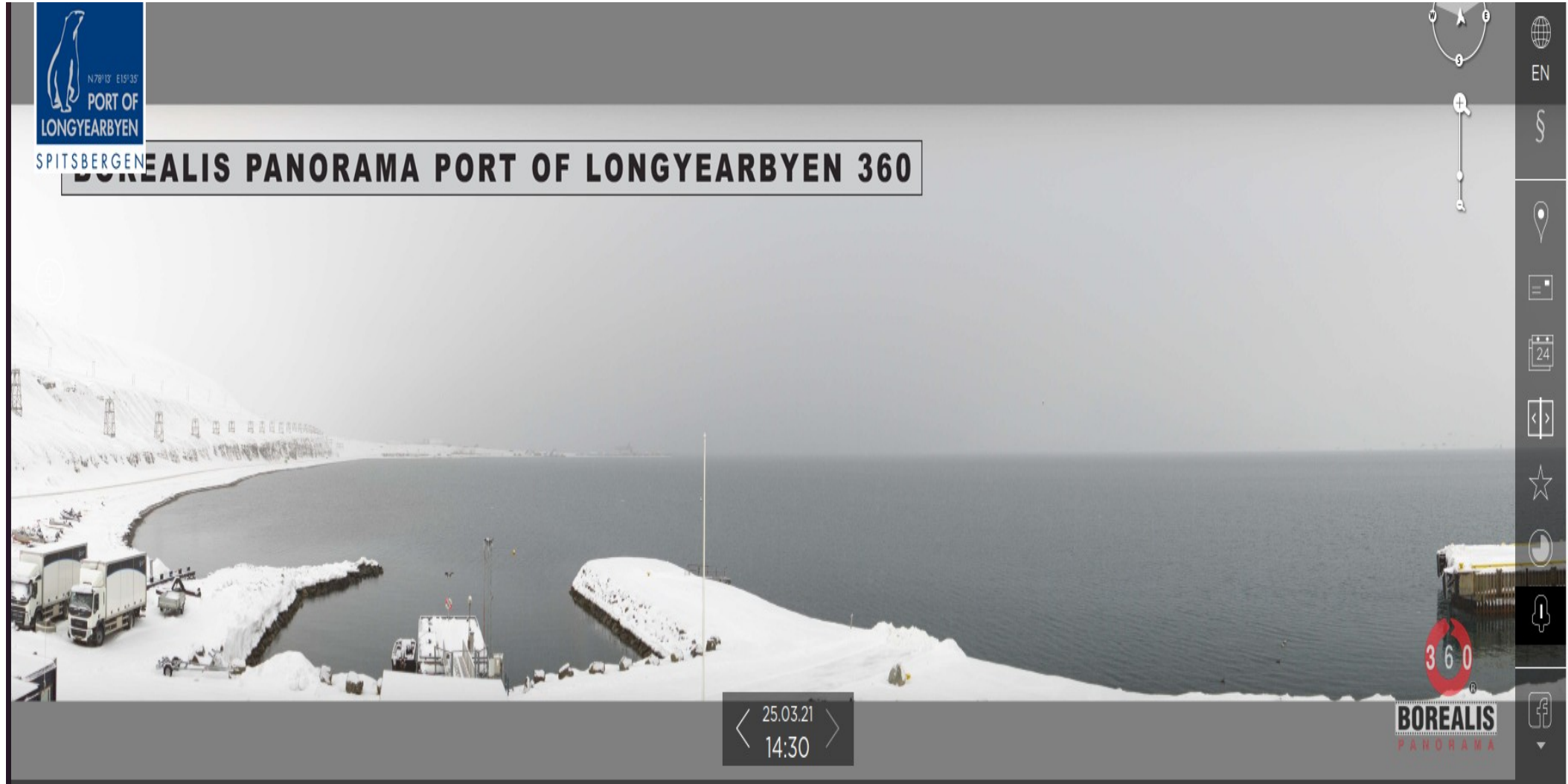
< 25.03.21 11:55 >





SPITSBERGEN

BOREALIS PANORAMA PORT OF LONGYEARBYEN 360



< 25.03.21 14:30 >



Latest METAR & TAF (at 13:30 UTC)

Longyearbyen

Svalbard Airport. Longyear

Longyearbyen, Norway

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

Current weather observation

The report was made **10** minutes ago, at **13:20** UTC

Wind **6** kt from the **East/Southeast**

Temperature **-4°C**

Humidity **93%**

Pressure **985** hPa

Visibility **10** km or more

Few clouds at a height of **800** ft
Scattered clouds at a height of **1200** ft
Broken clouds at a height of **2000** ft

light snow

Time: 14:30 (13:30 UTC)

Forecast

Forecast valid from 25 at 12 UTC to 26 at 12 UTC

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

Visibility **10** km or more

Few clouds at a height of **1000** ft
Broken clouds at a height of **2000** ft

*Temporary
from 25 at 13 UTC to 25 at 20 UTC*

Visibility: **4000** m

at a height of **1200** ft

light snow

TAF: ENSB 2512/2612 12008KT 9999
FEW010 BKN020 TEMPO 2513/2520 4000
-SN VV012

Kiruna

Kiruna Airport

Kiruna, Sweden

latitude: 67-49N, longitude: 020-20E,
elevation: 452 m

Current weather observation

The report was made **10** minutes ago, at **13:20** UTC

Wind **9** kt from the **West/Southwest**

Temperature **1°C**

Humidity **64%**

Pressure **998** hPa

Visibility **10** km or more

Time: 14:30 (13:30 UTC)

Forecast

The report was made **2** hours and **0** minutes ago, at **11:30** UTC

Forecast valid from 25 at 12 UTC to 25 at 14 UTC

Wind **7** kt from the **Southwest**

Visibility **10** km or more

no clouds below 1500 m and no cumulonimbus

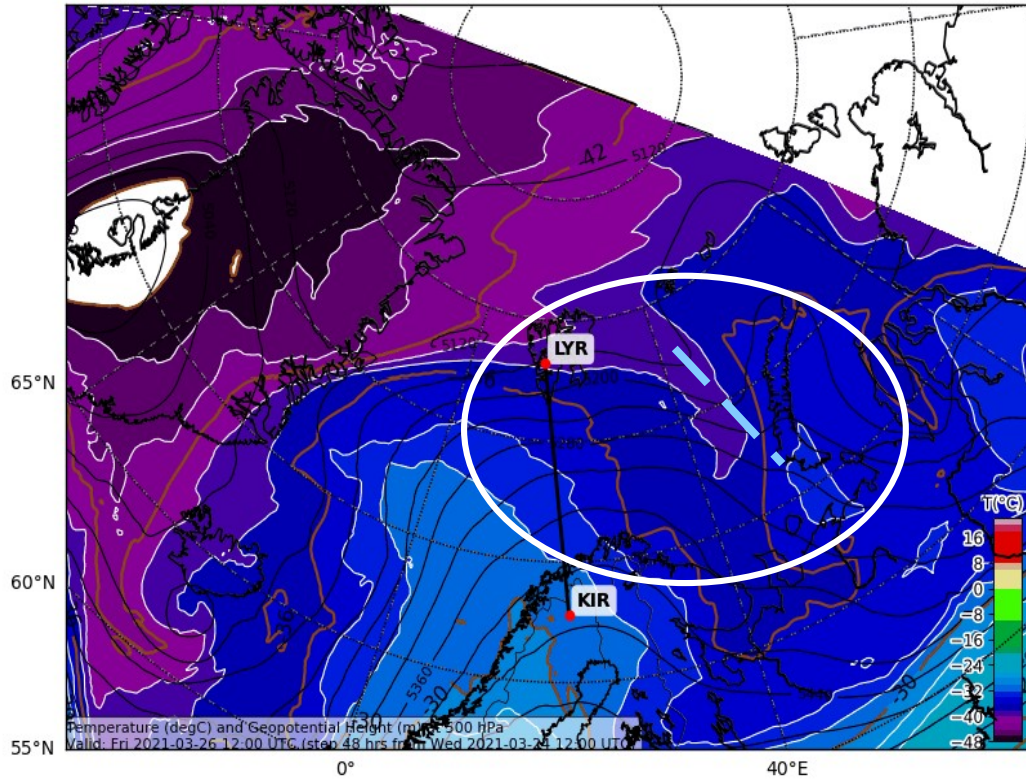
TAF: ESNQ 251130Z 2512/2514 22007KT
CAVOK

Friday, 26 March 2021

500 hPa: Temperature (°C) & Geopotential (gpm) from ECMWF: Fri., 26/03, 12 UTC

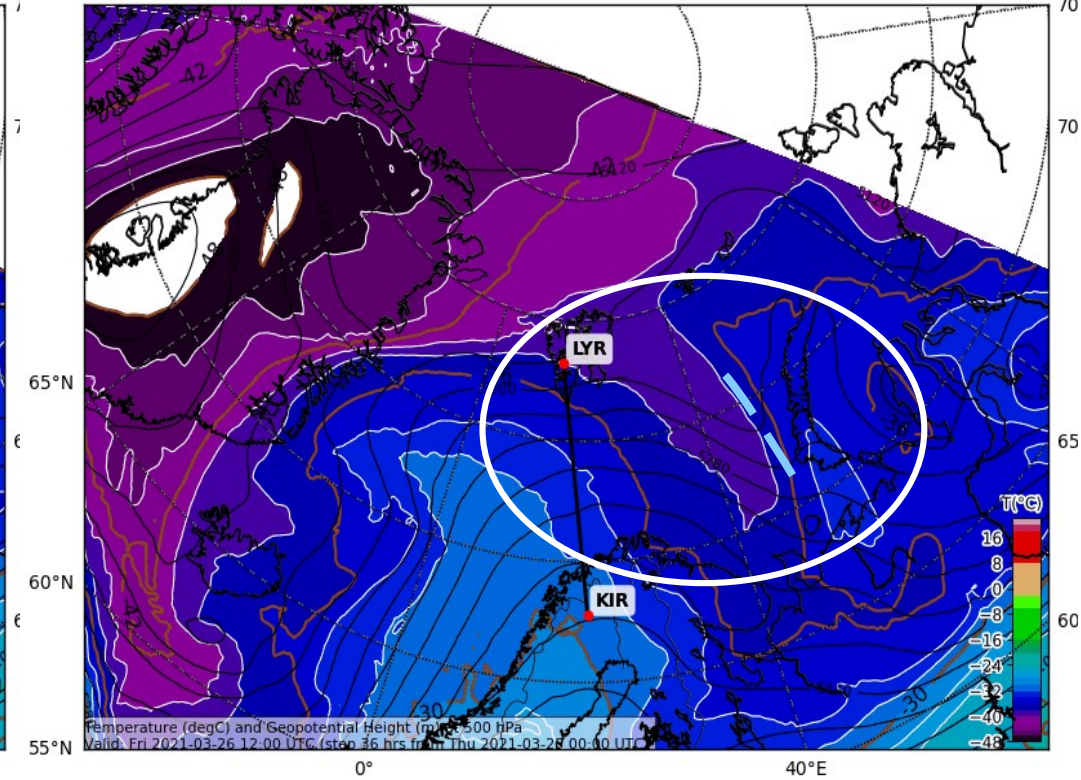
Previous forecast (24/03, 12 UTC)

Valid: Fr 2021-03-26 12:00 UTC (step 48 hrs from Mi 2021-03-24 12:00 UTC)



Most recent forecast (25/03, 00 UTC)

Valid: Fr 2021-03-26 12:00 UTC (step 36 hrs from Do 2021-03-25 00:00 UTC)

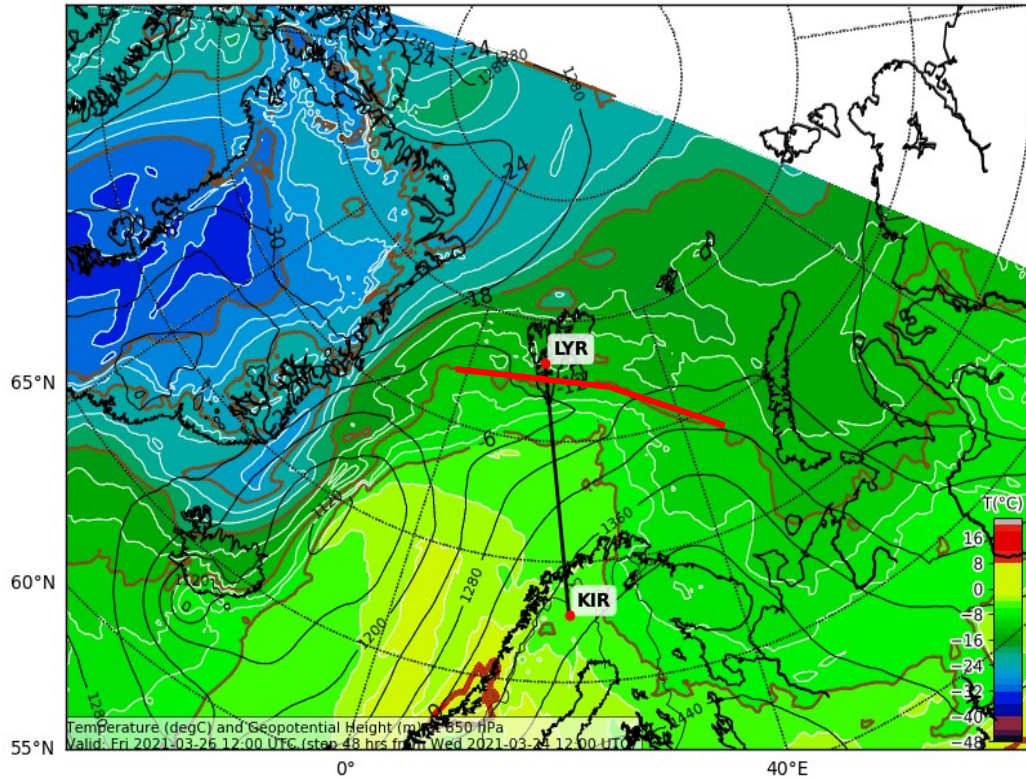


- Trough in the East slightly steeper
→ High-level flow slightly more towards SE as compared to previous forecast

850 hPa: Temperature (°C) & Geopotential (gpm) from ECMWF: Fri., 26/03, 12 UTC

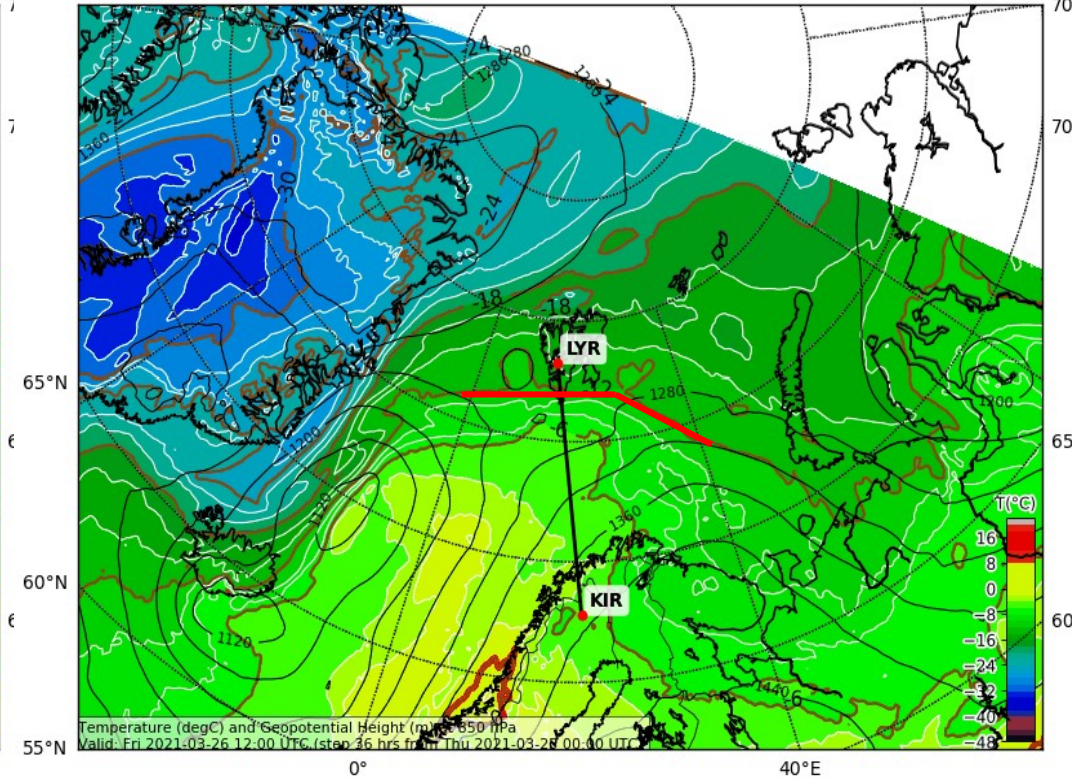
Previous forecast

Valid: Fr 2021-03-26 12:00 UTC (step 48 hrs from Mi 2021-03-24 12:00 UTC)



Most recent forecast

Valid: Fr 2021-03-26 12:00 UTC (step 36 hrs from Do 2021-03-25 00:00 UTC)

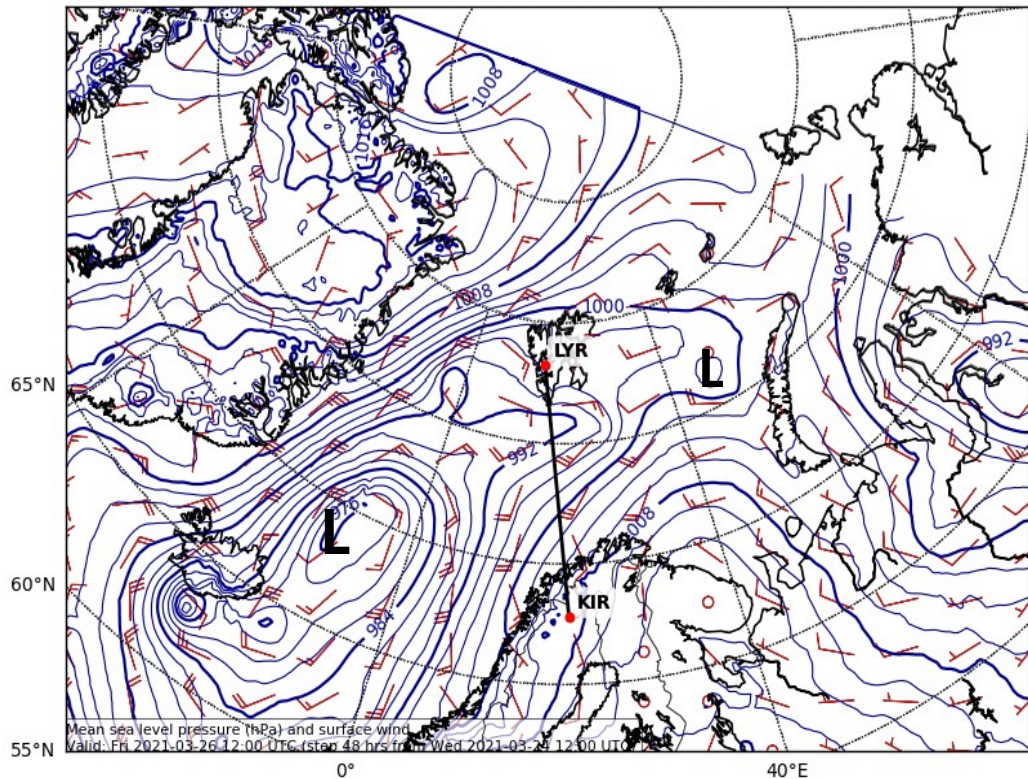


- Warm air advection at tomorrow 12 UTC slightly less towards North/Northeast than in the previous forecast

Mean sea level pressure (hPa) & surface wind from ECMWF: Fri., 26/03, 12 UTC

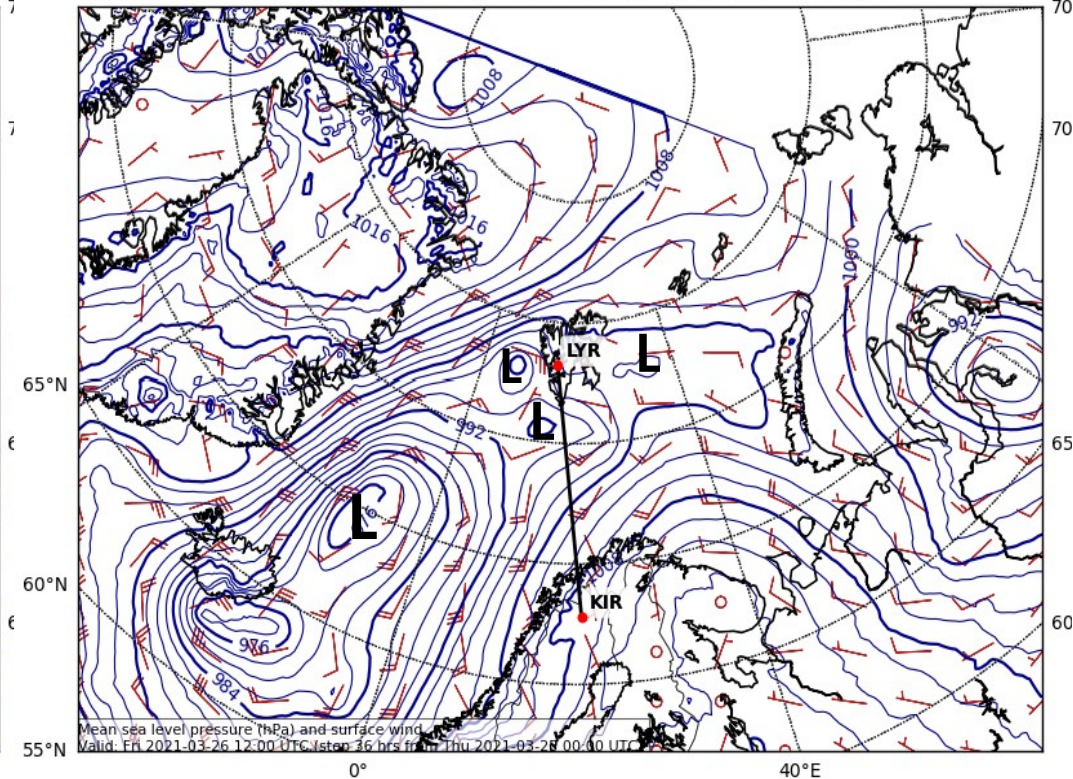
Previous forecast

Valid: Fr 2021-03-26 12:00 UTC (step 48 hrs from Mi 2021-03-24 12:00 UTC)



Most recent forecast

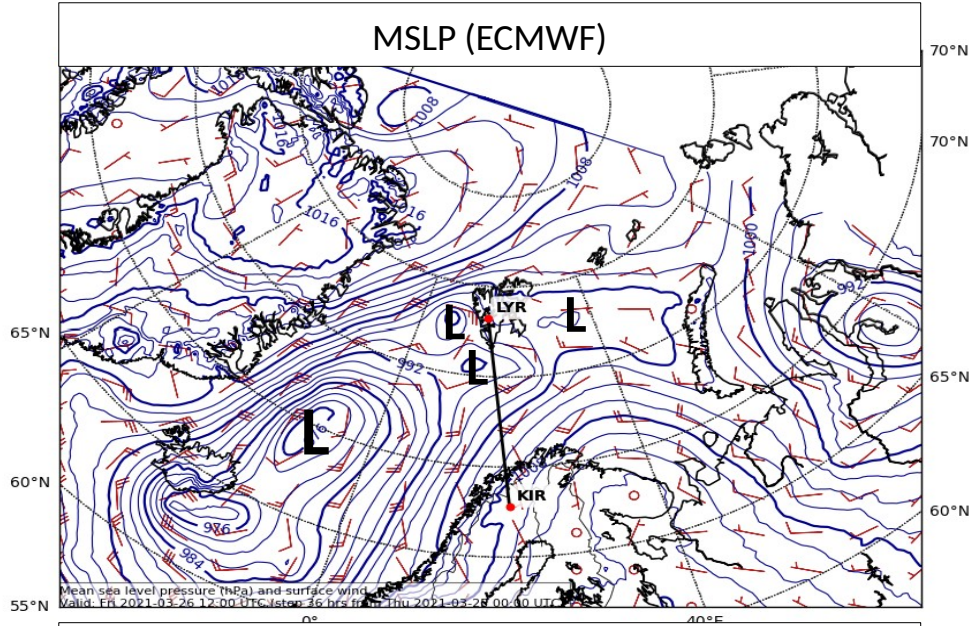
Valid: Fr 2021-03-26 12:00 UTC (step 36 hrs from Do 2021-03-25 00:00 UTC)



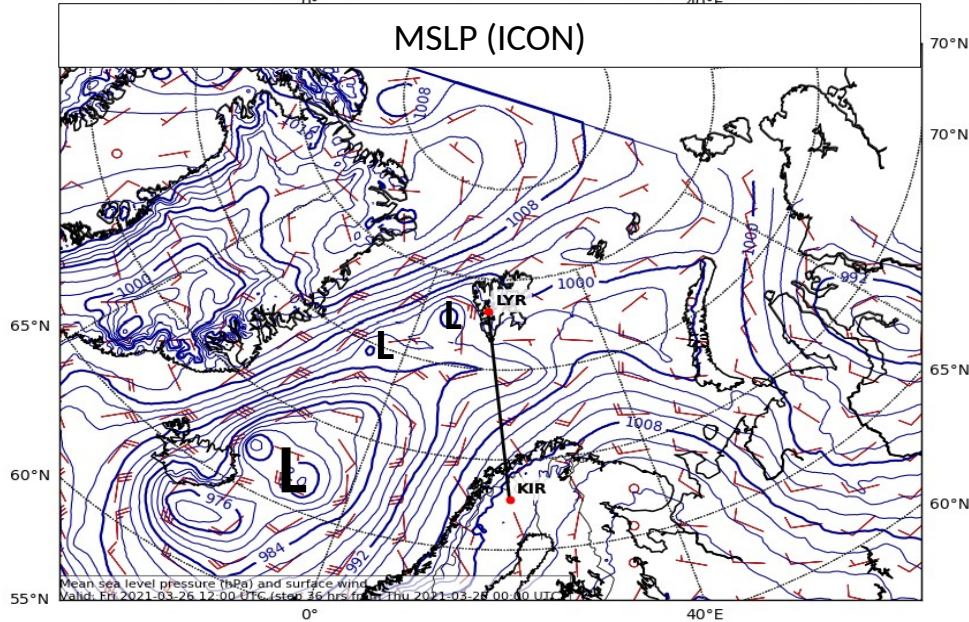
- Around Svalbard: Some more closed isobars, so probably many different locations with varying wind near the surface
- Low W of Svalbard slightly closer to the island

Model comparison MSLP: Fri. 26/03, 12 UTC

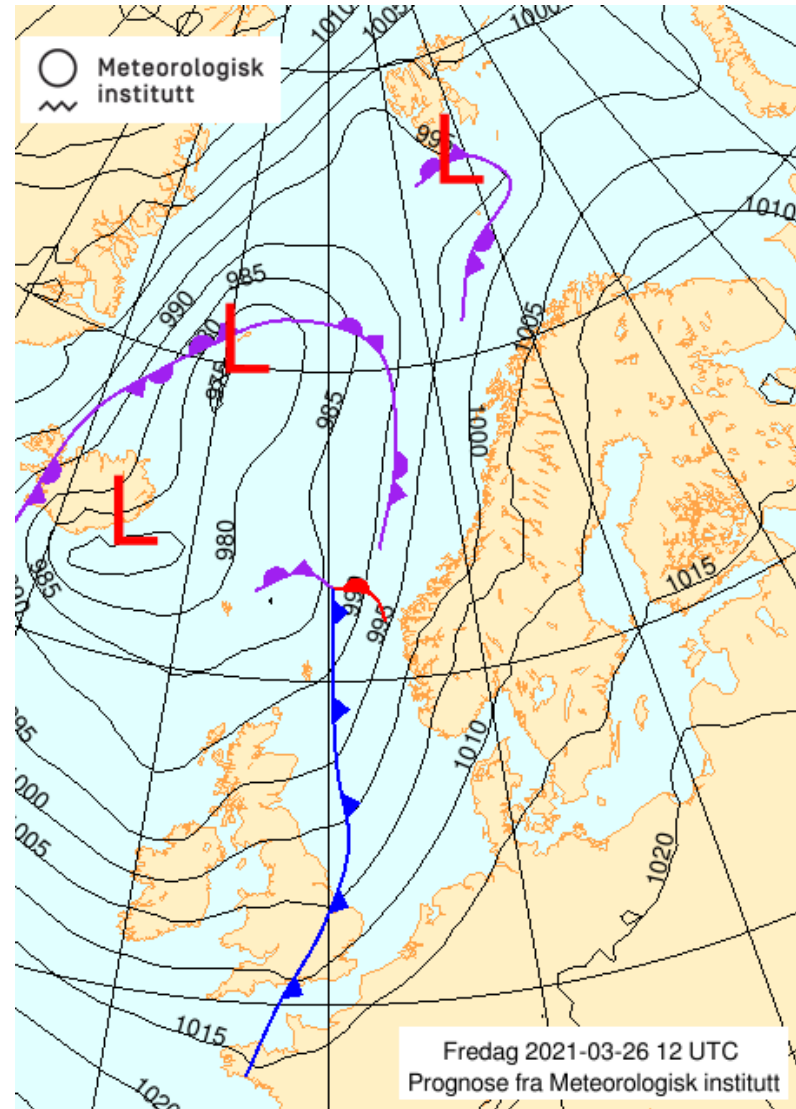
MSLP (ECMWF)



MSLP (ICON)

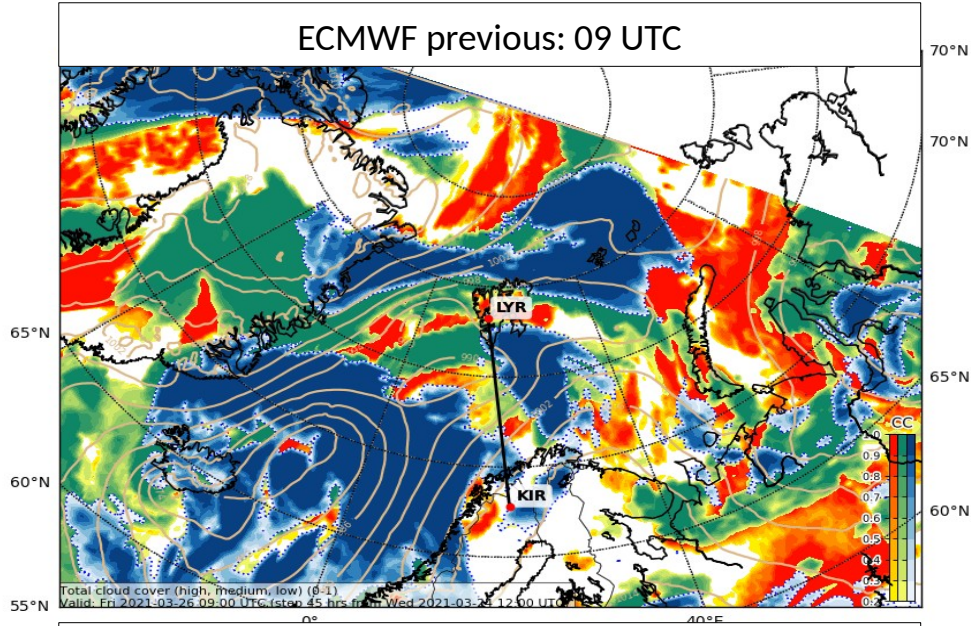


Forecasted surface analysis by NMI

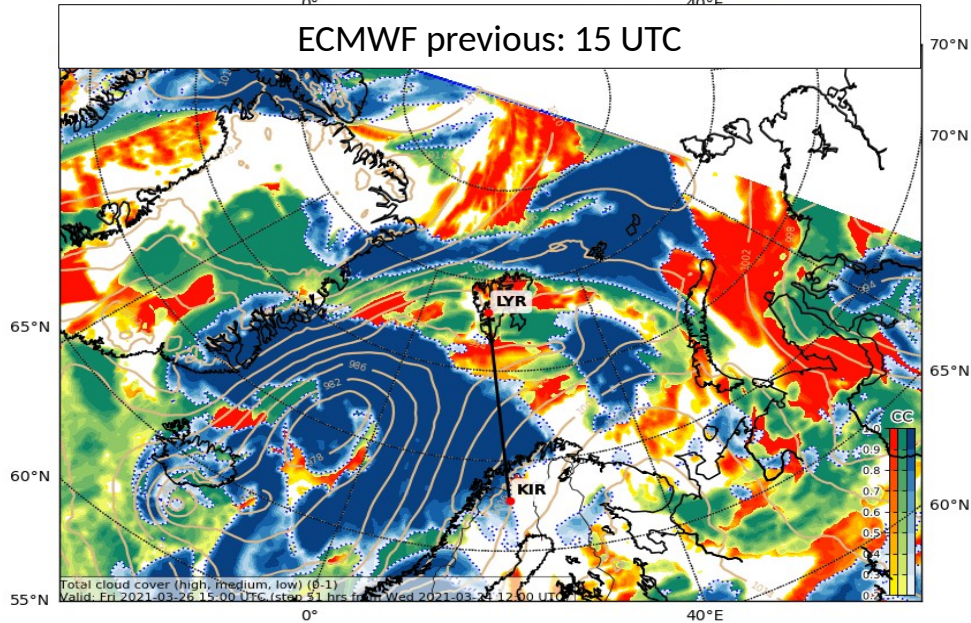


Cloud cover (ECMWF): Fri. 26/03, 09 & 15 UTC

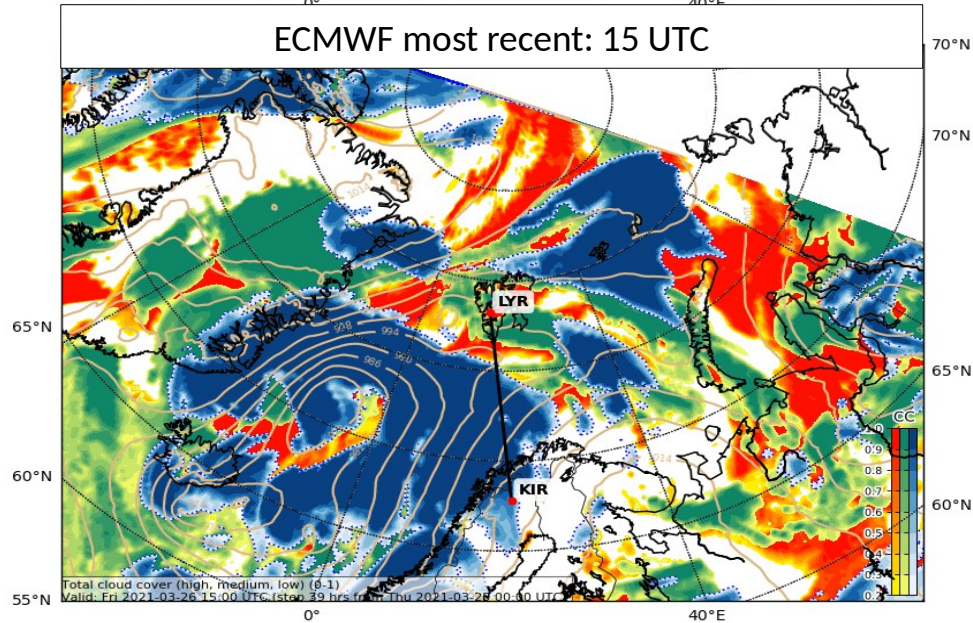
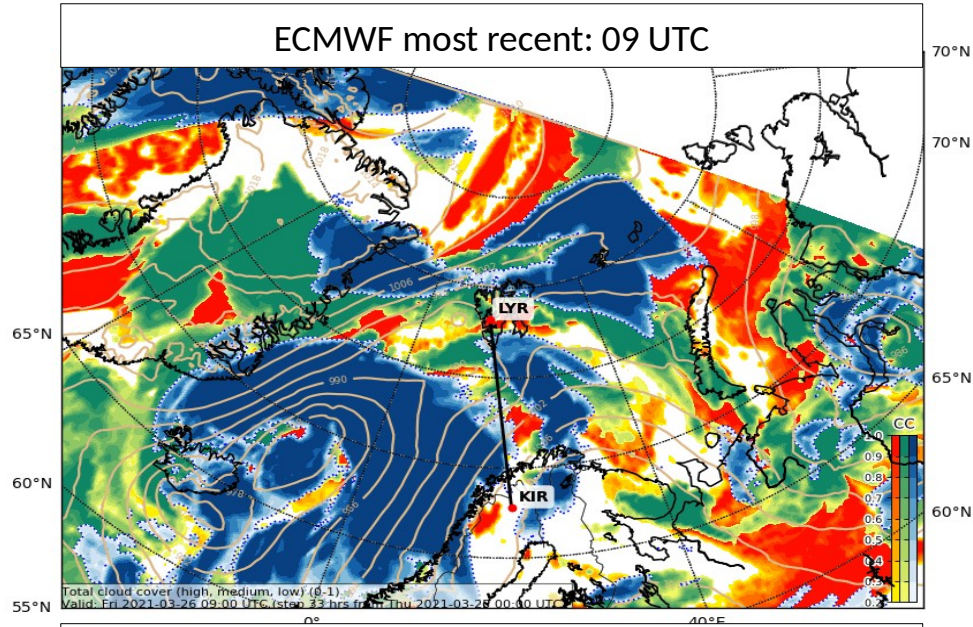
ECMWF previous: 09 UTC



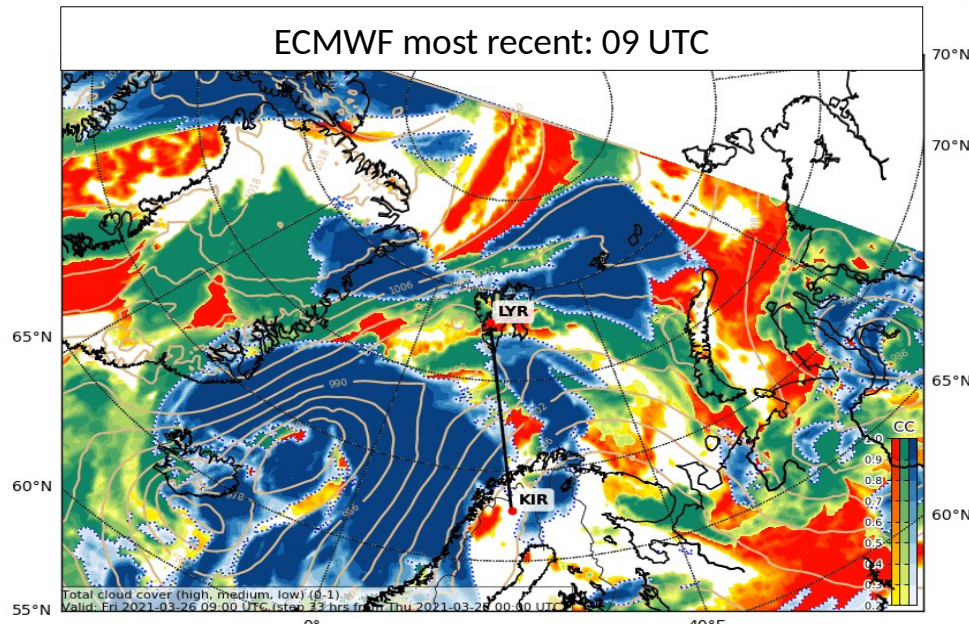
ECMWF previous: 15 UTC



Cloud cover (ECMWF): Fri. 26/03, 09 & 15 UTC



Cloud cover (ECMWF): Fri. 26/03, 09 & 15 UTC

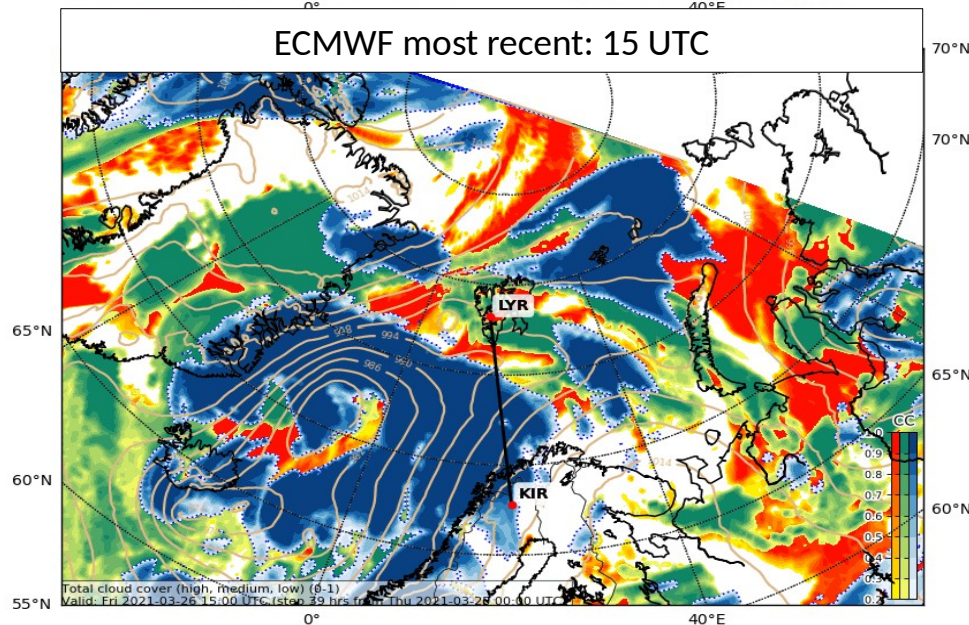


Occlusion N of Svalbard:

- Now slightly more to the South
- Less high clouds in NW and they dissolve faster

Small warm front S of Svalbard:

- SW-NE extension slightly narrower
- Does not move so far to NE as compared to previous forecast

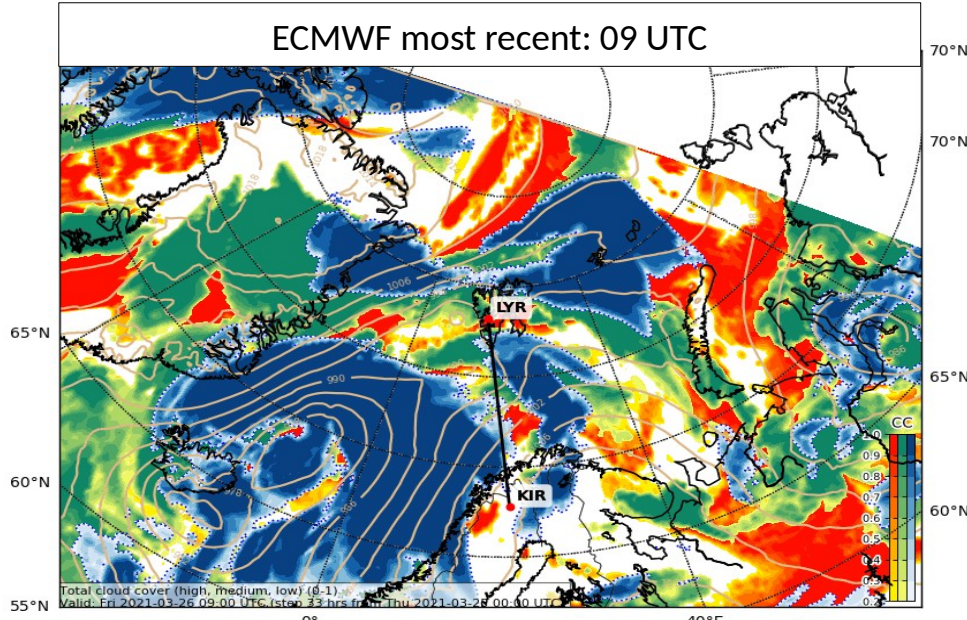


Low NE of iceland:

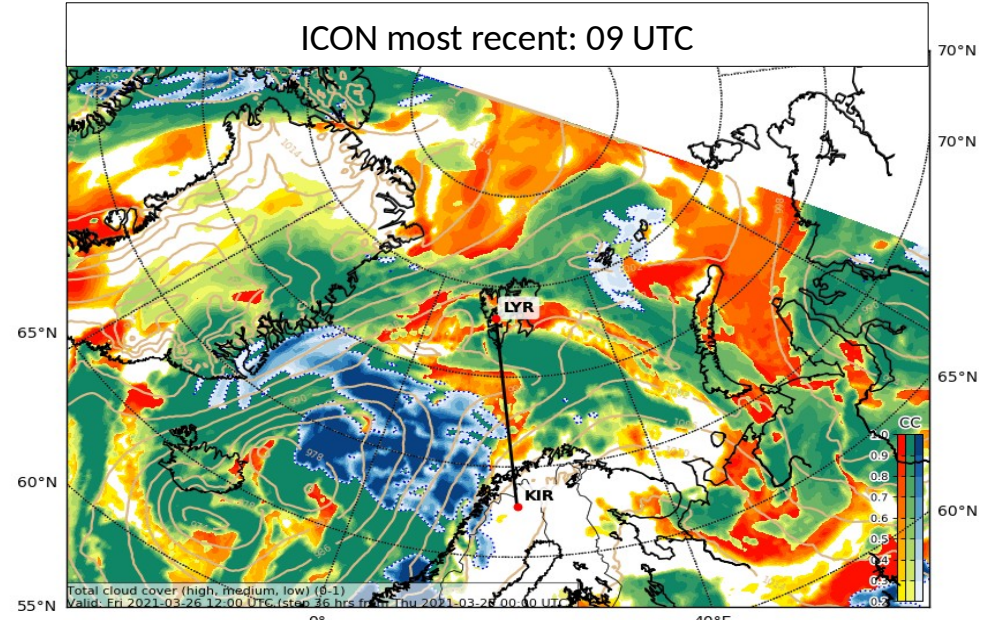
- Clouds move slightly faster towards NE

Cloud cover (ECMWF & ICON): Fri. 26/03, 09 & 15 UTC

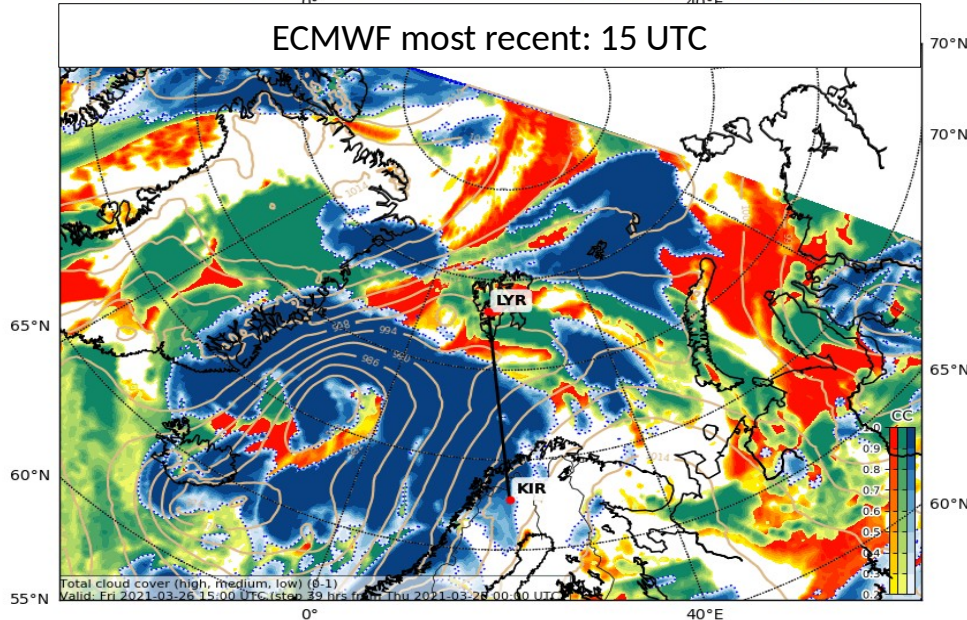
ECMWF most recent: 09 UTC



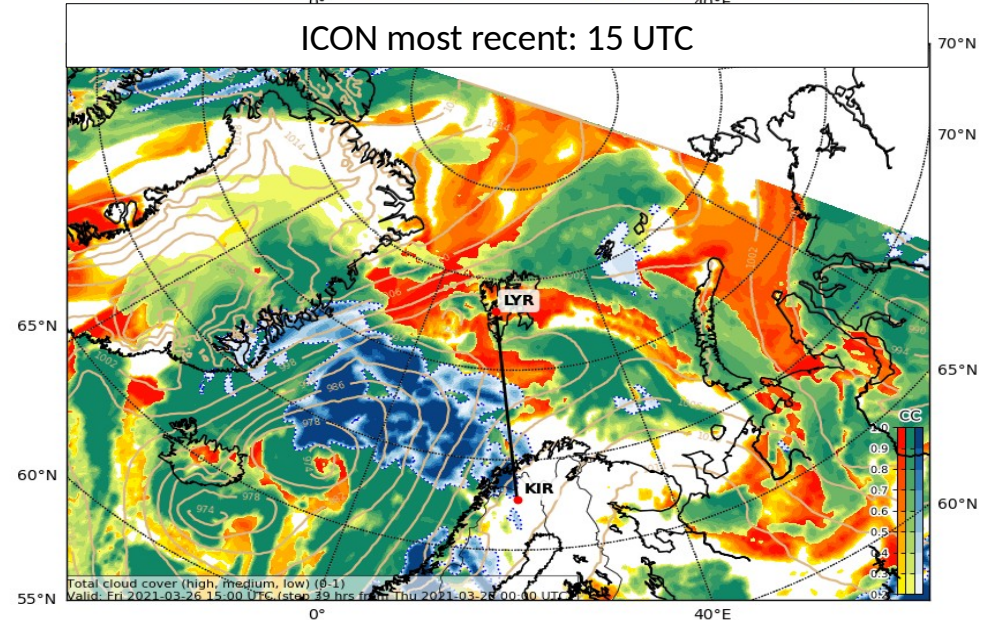
ICON most recent: 09 UTC



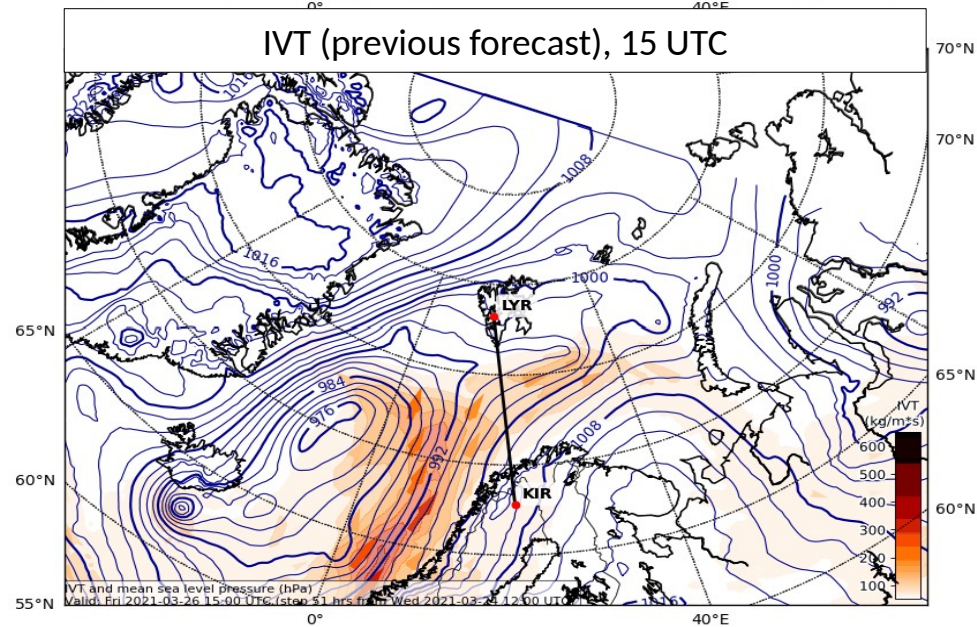
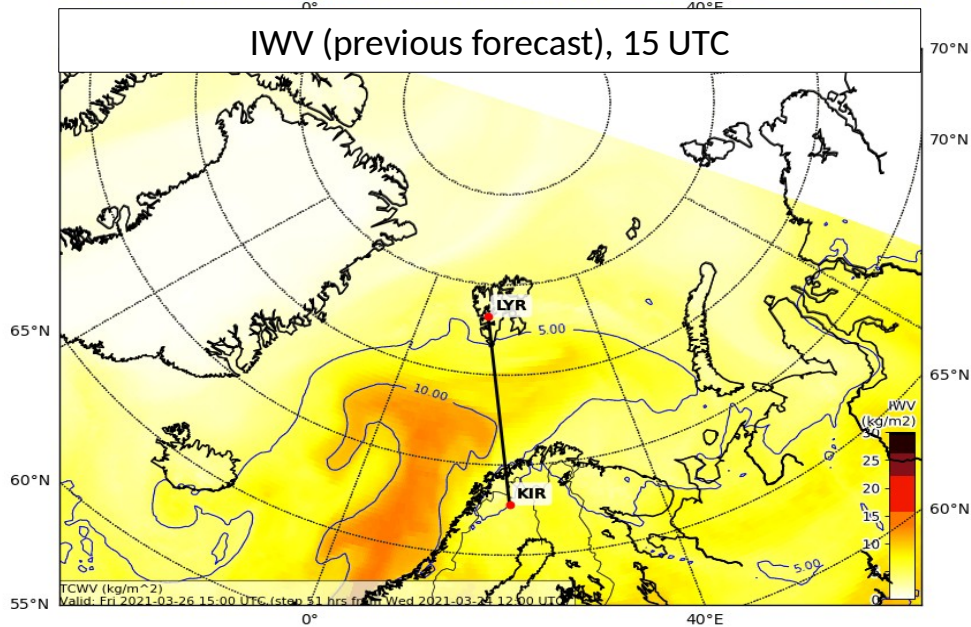
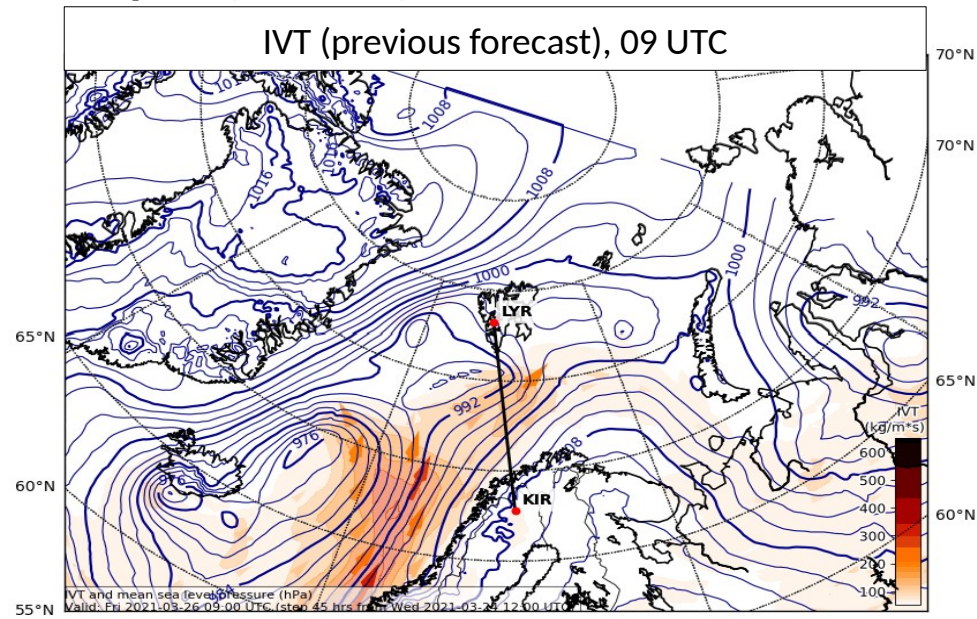
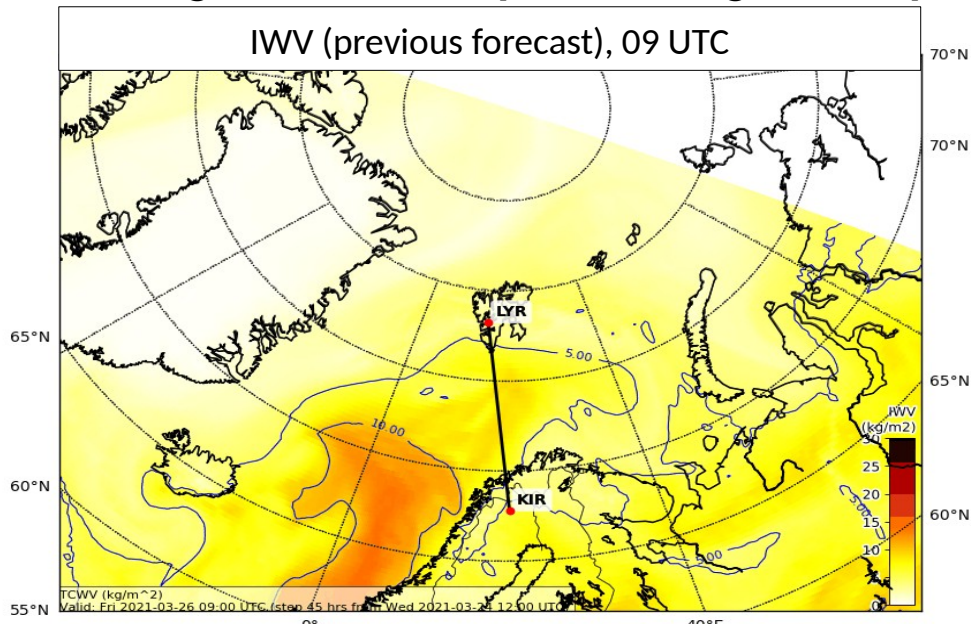
ECMWF most recent: 15 UTC



ICON most recent: 15 UTC

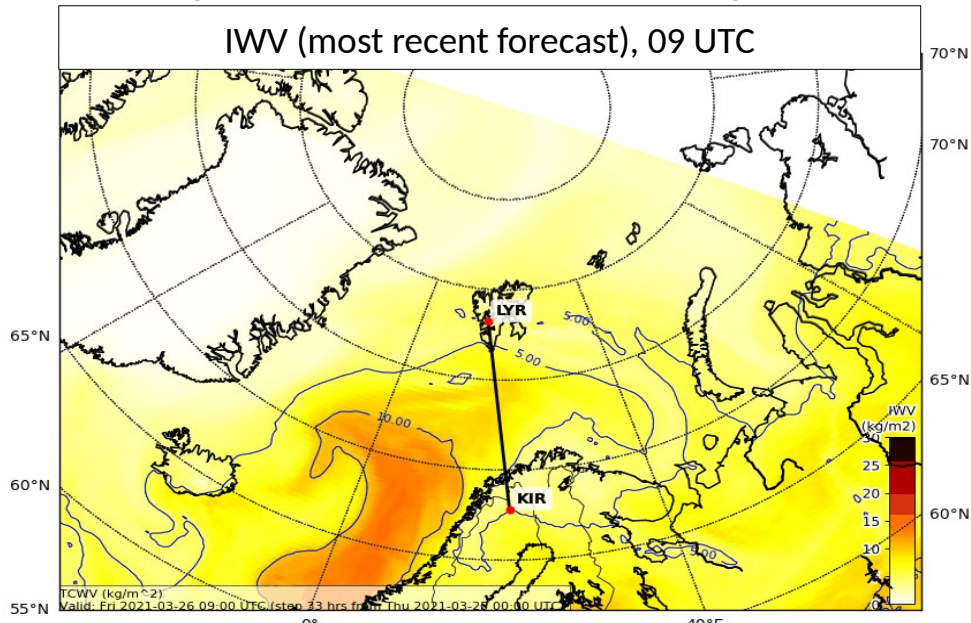


Integrated water vapour & integrated vapour transport (ECMWF): Fri. 26/03, 09 & 15 UTC

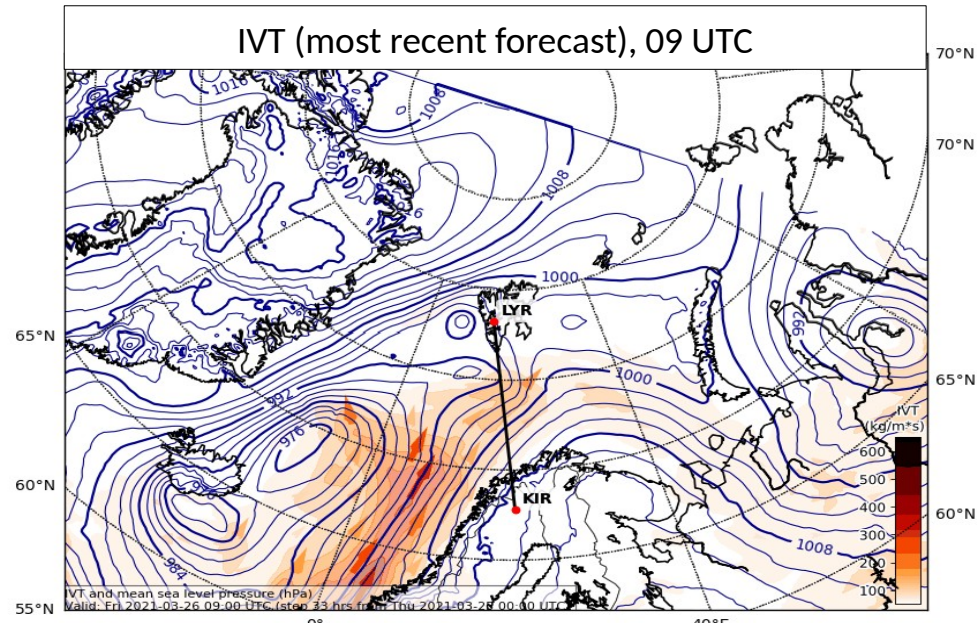


Integrated water vapour & integrated vapour transport (ECMWF): Fri. 26/03, 09 & 15 UTC

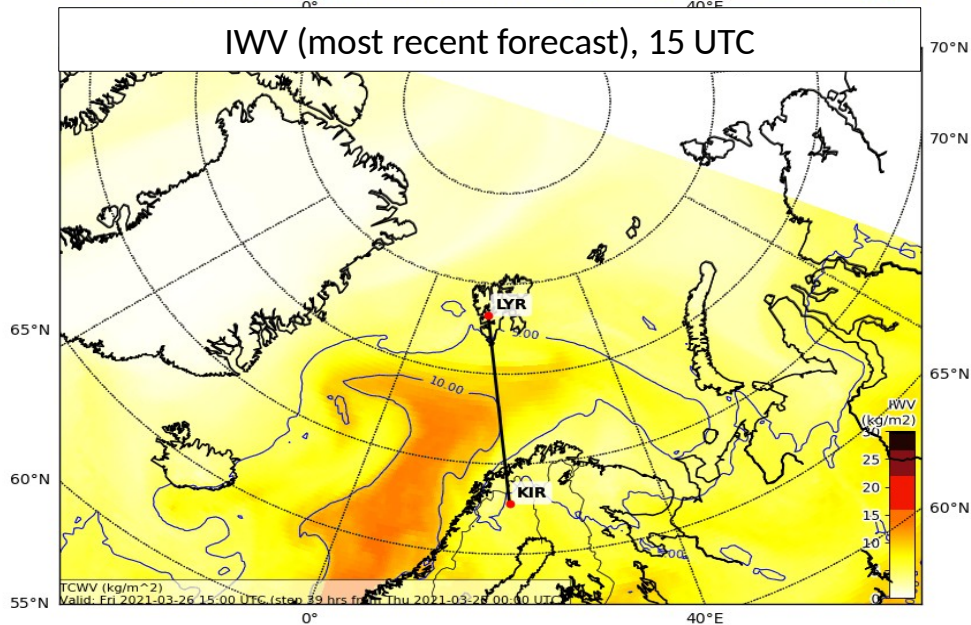
IWV (most recent forecast), 09 UTC



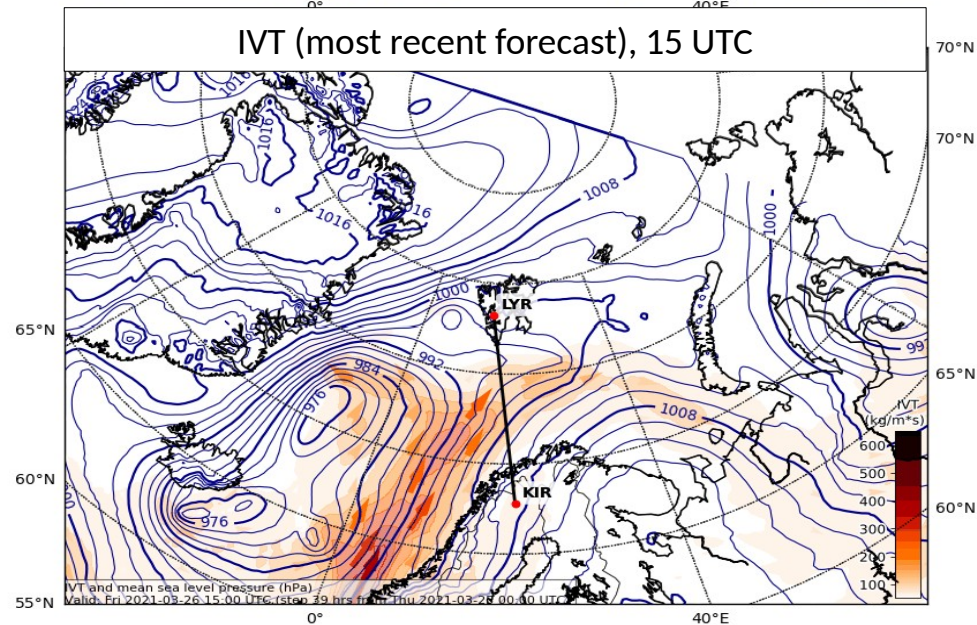
IVT (most recent forecast), 09 UTC



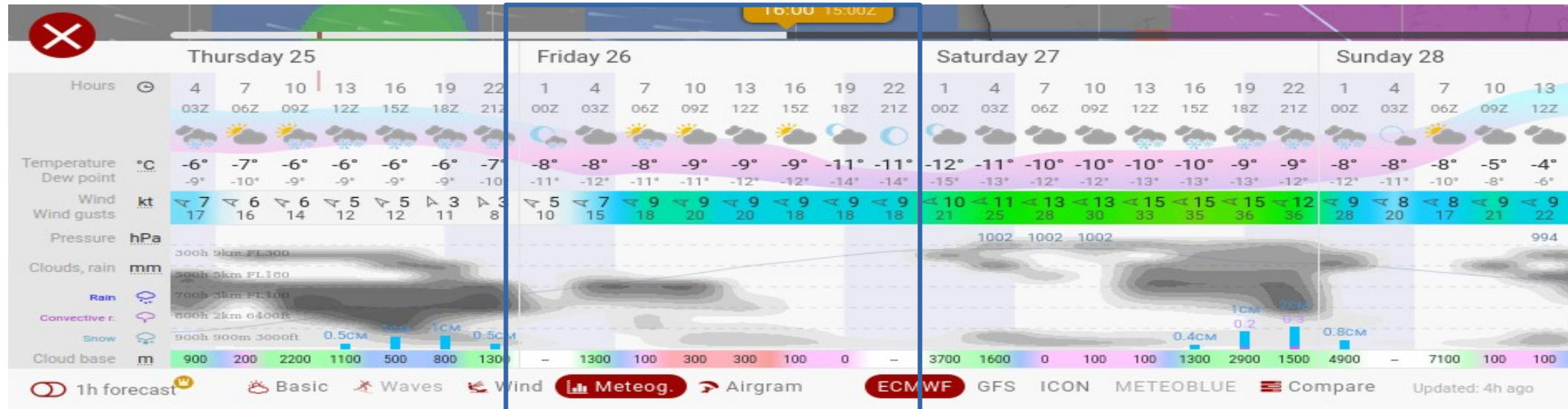
IWV (most recent forecast), 15 UTC



IVT (most recent forecast), 15 UTC

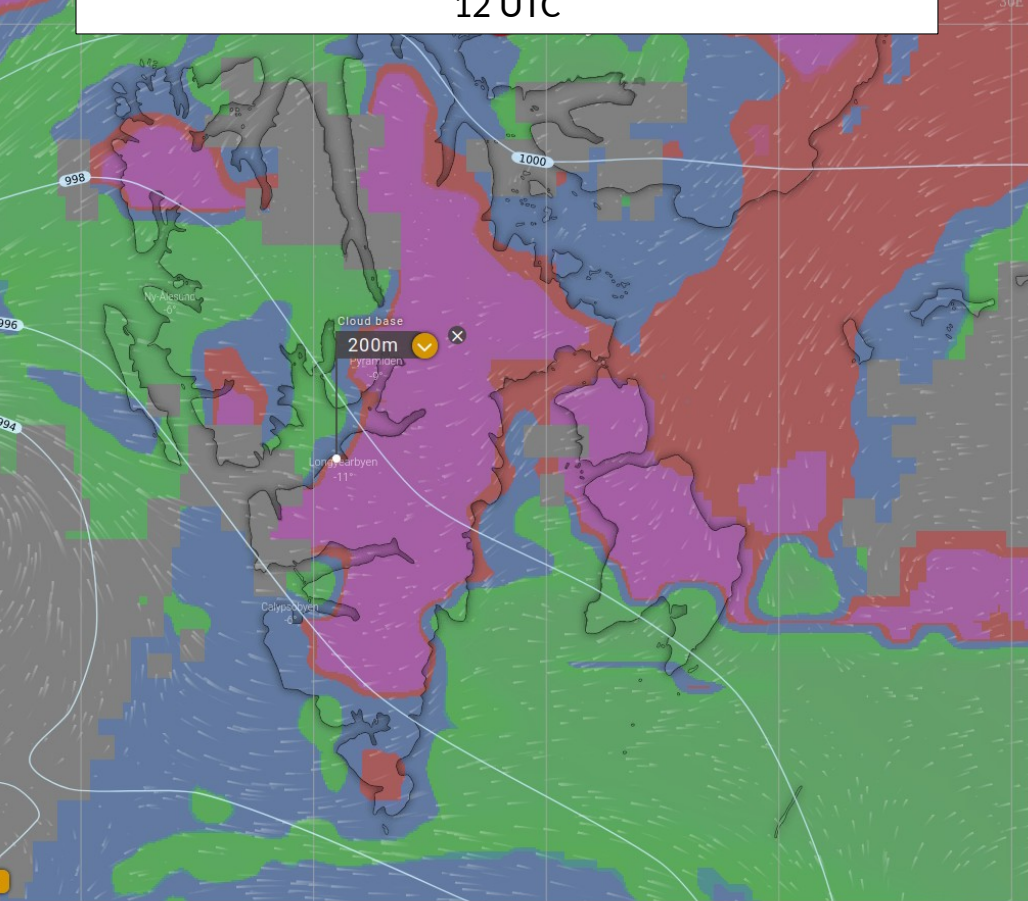


Meteograms LYR (top) and Kiruna (bottom)

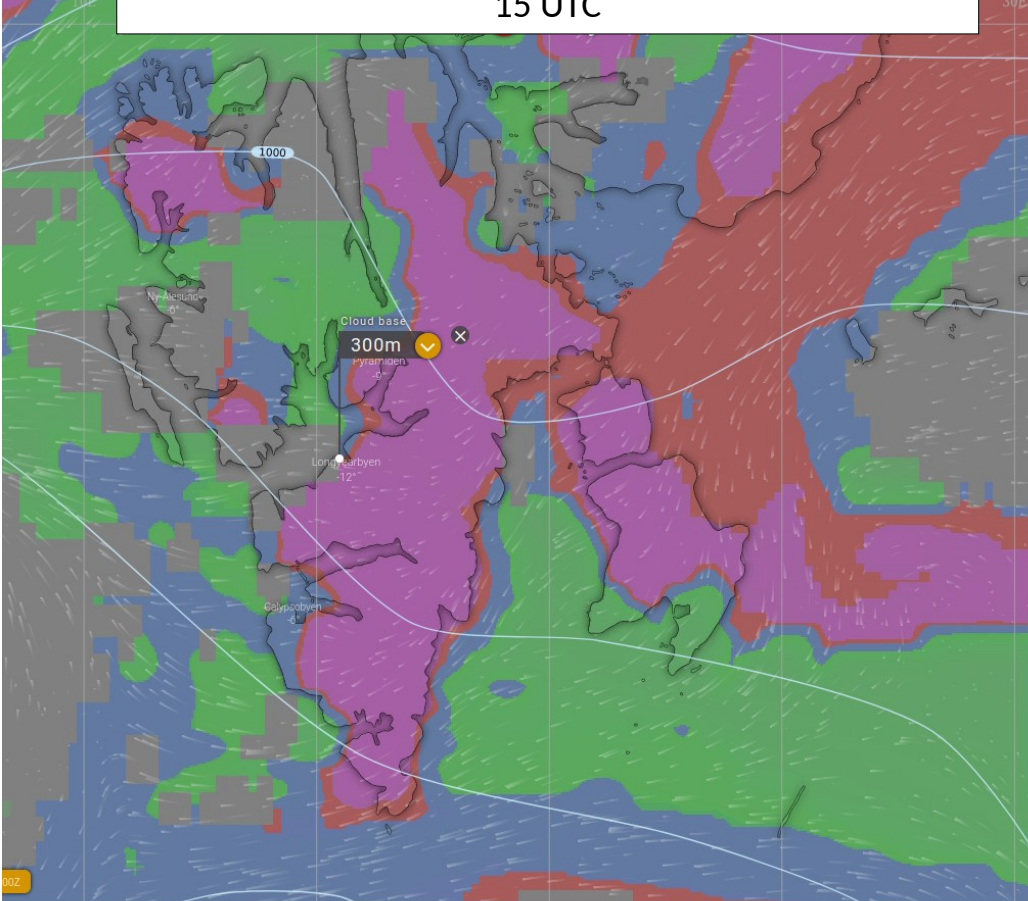


Cloud base (ECMWF): Fri., 26/03, 12 & 15 UTC

12 UTC



15 UTC

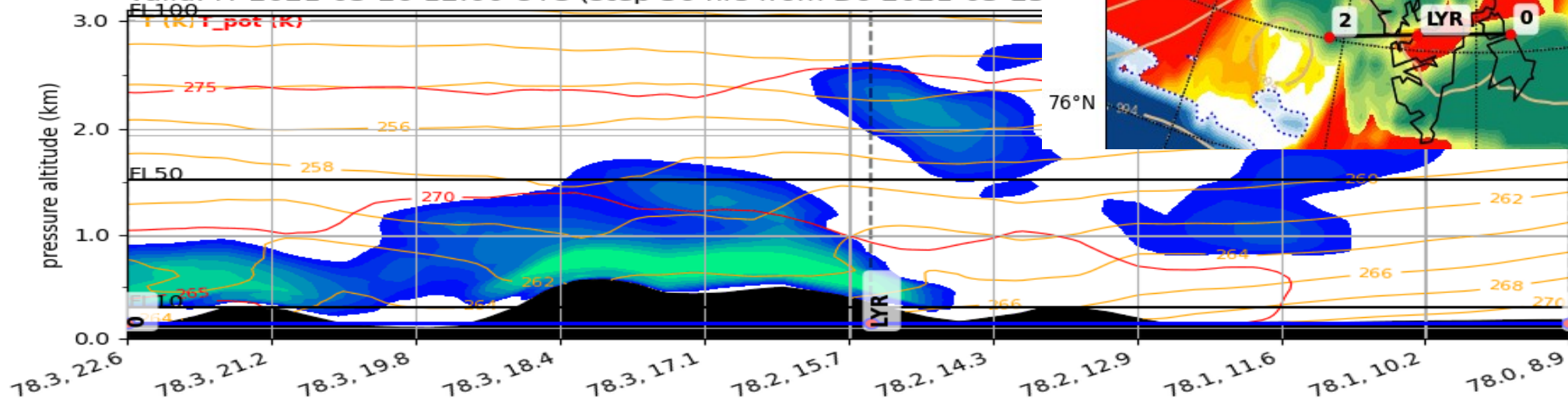


Cross-sections ECMWF: Fri, 26.03

Cloud Cover (0-1) (Total Cloud Cover)
Valid: Fr 2021-03-26 15:00 UTC (step 39 hrs)

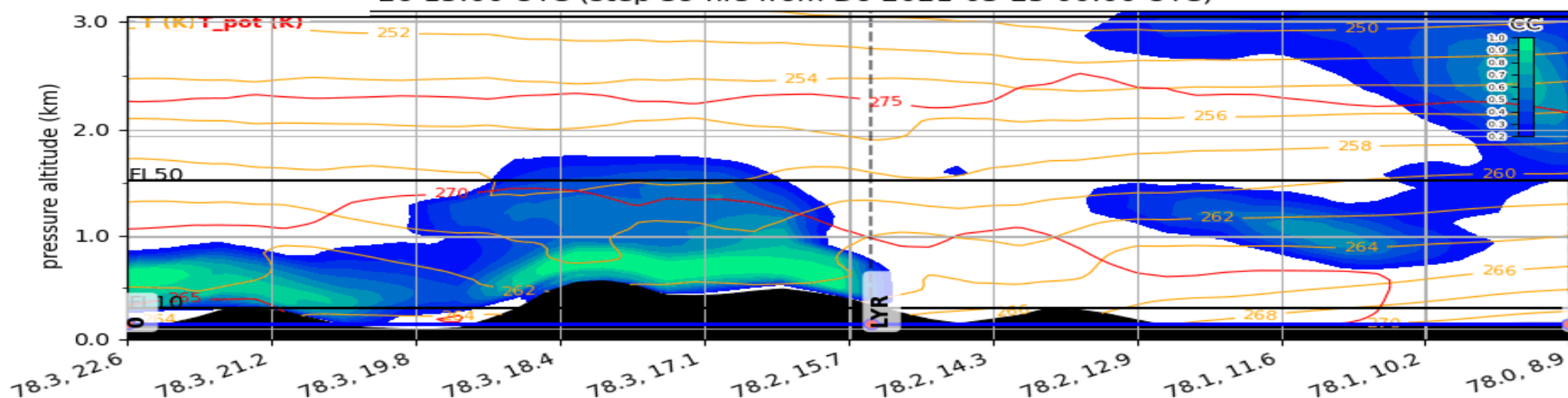
12 UTC

Cloud Cover (0-1) Vertical Section
Valid: Fr 2021-03-26 12:00 UTC (step 36 hrs from Do 2021-03-25)



15 UTC

Cloud Cover (0-1) Vertical Section
Valid: Fr 2021-03-26 15:00 UTC (step 39 hrs from Do 2021-03-25 00:00 UTC)

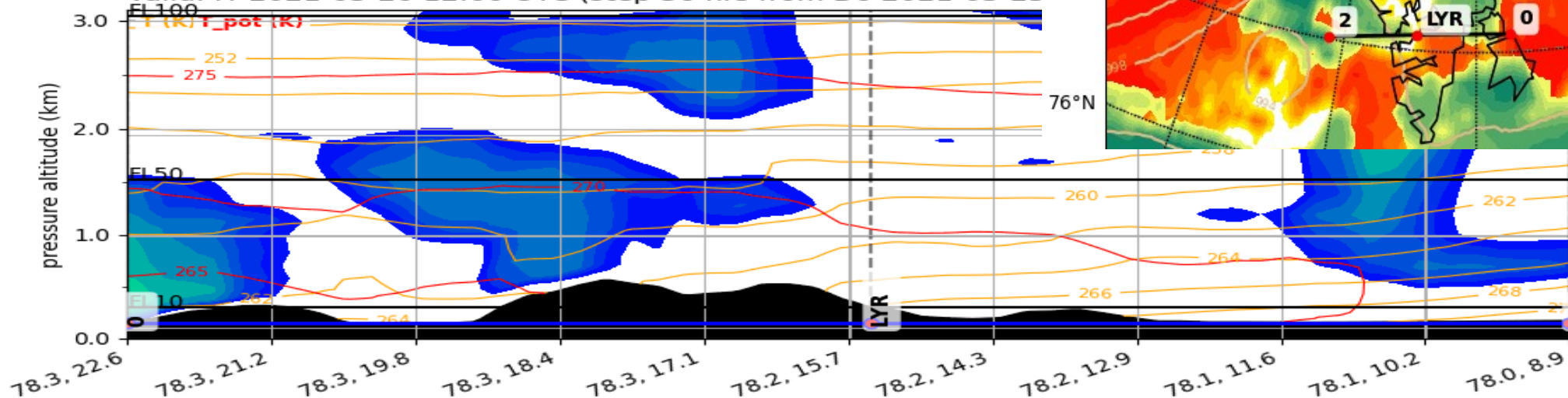


Cross-sections ICON: Fri, 26.03

Cloud Cover (0-1) (Total Cloud Cover)
Valid: Fr 2021-03-26 15:00 UTC (step 39 hrs)

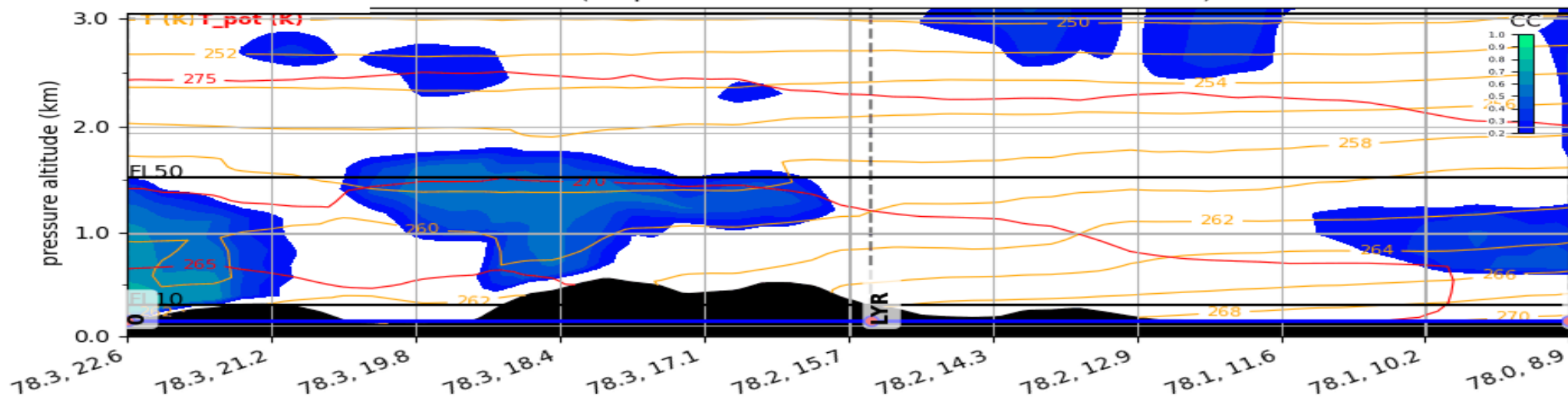
12 UTC

Cloud Cover (0-1) Vertical Section
Valid: Fr 2021-03-26 12:00 UTC (step 36 hrs from Do 2021-03-25)



15 UTC

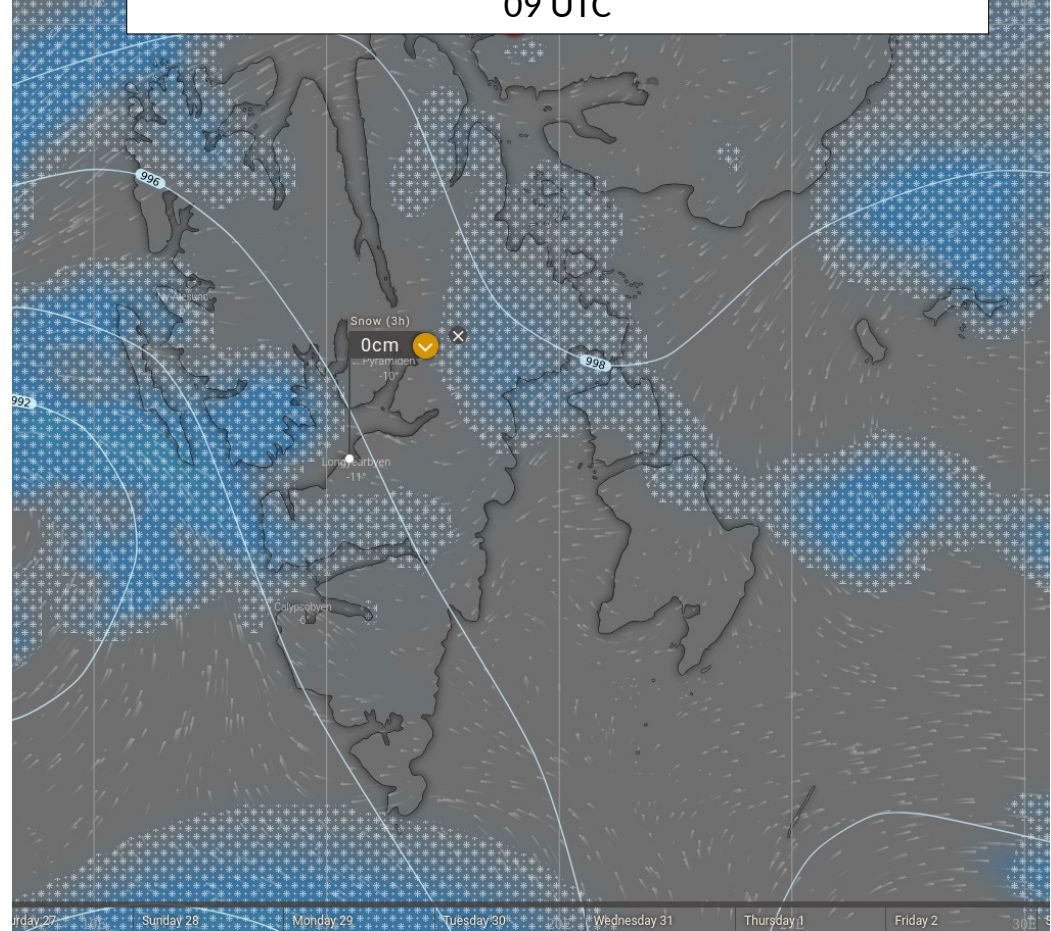
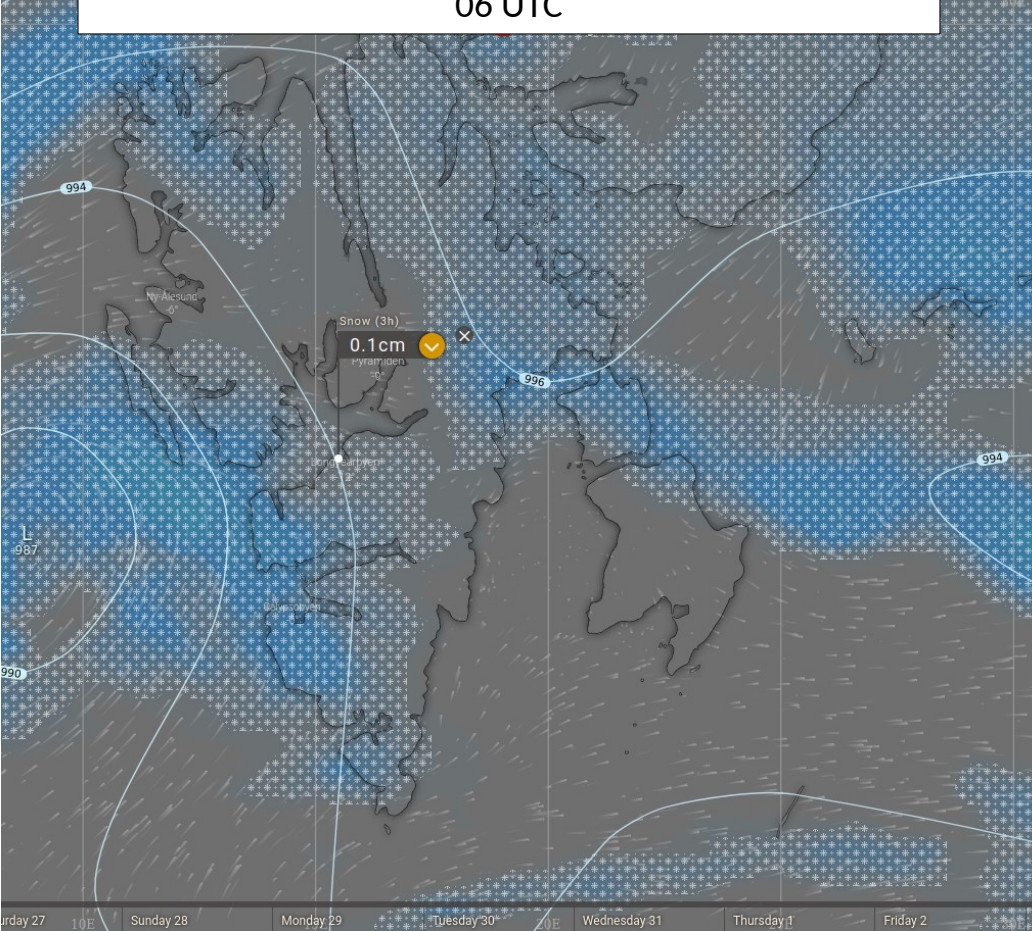
) Vertical Section
-26 15:00 UTC (step 39 hrs from Do 2021-03-25 00:00 UTC)



Precipitation (ECMWF): Fri., 26/03, 06 & 12 UTC

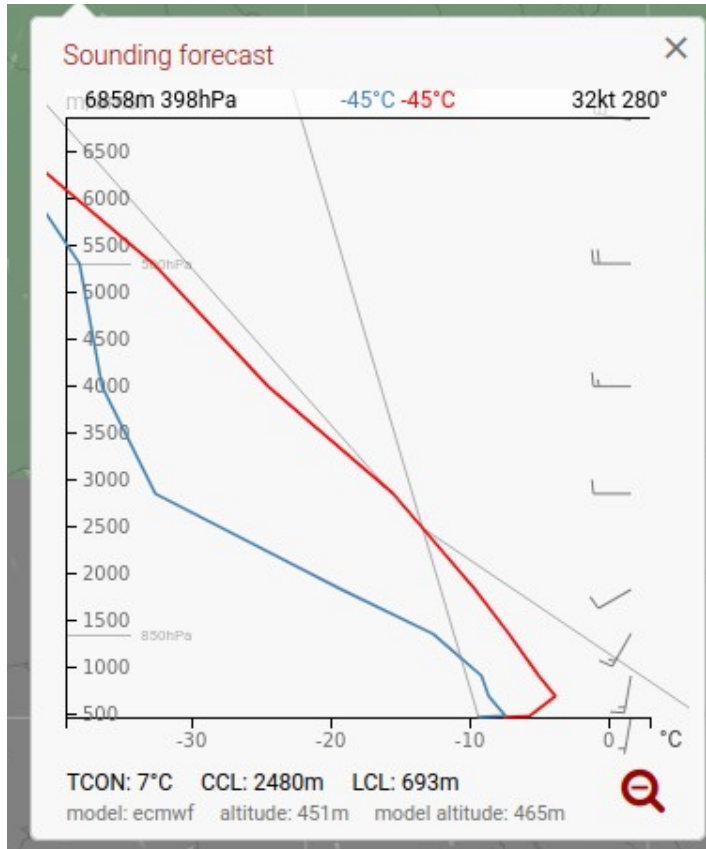
06 UTC

09 UTC

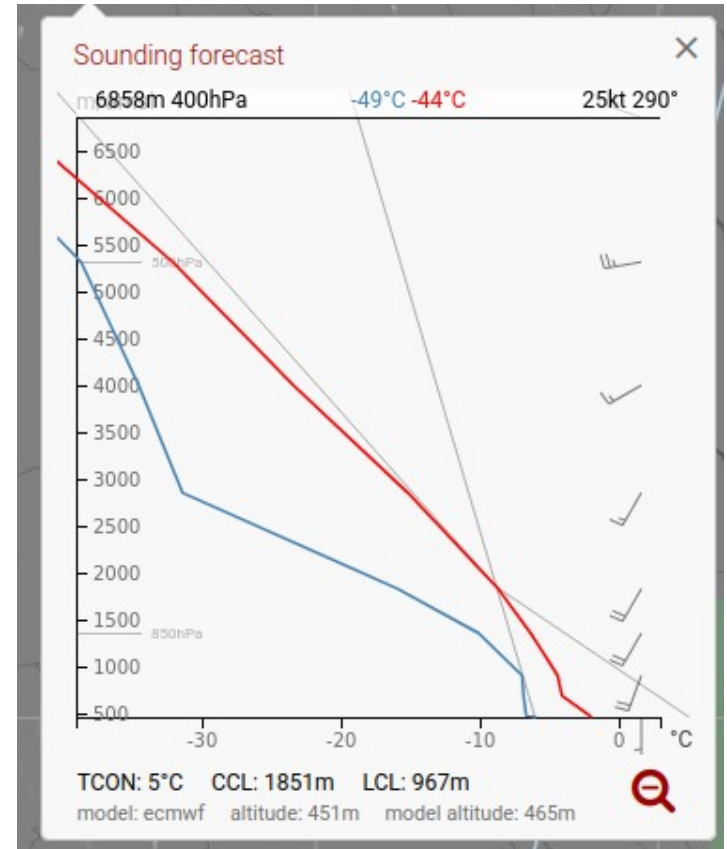


Sounding forecast Kiruna (ECMWF): Fri., 26/03, 06 & 09 UTC

06 UTC



09 UTC



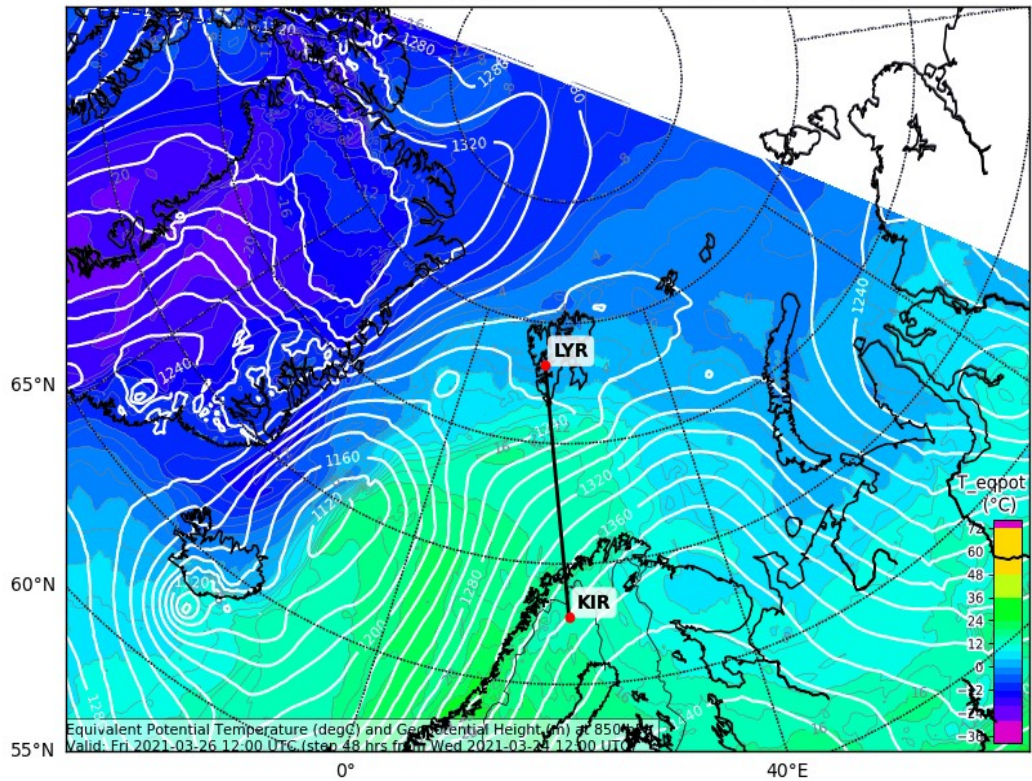
Summary

- Small low pressure system SW of Svalbard and its associated front move more slowly and not so far to NE as compared to previous forecast
- Large low pressure system NE of Iceland moves a bit faster, but still small area with little cloud cover inbetween
- Small, almost stationary low W of Svalbard a bit closer to the island than predicted yesterday → light precipitation in the morning
- Cloud situation at LYR still challenging, got even slightly worse in the most recent forecast
- At Kiruna, there are signals for some fog, mist, or thin clouds with very low altitude in the morning, but most probably they dissolve towards 9 UTC

850 hPa: Equivalent Pot. Temperature (°C) & Geopotential (gpm) from ECMWF: Fri., 26/03, 12 UTC

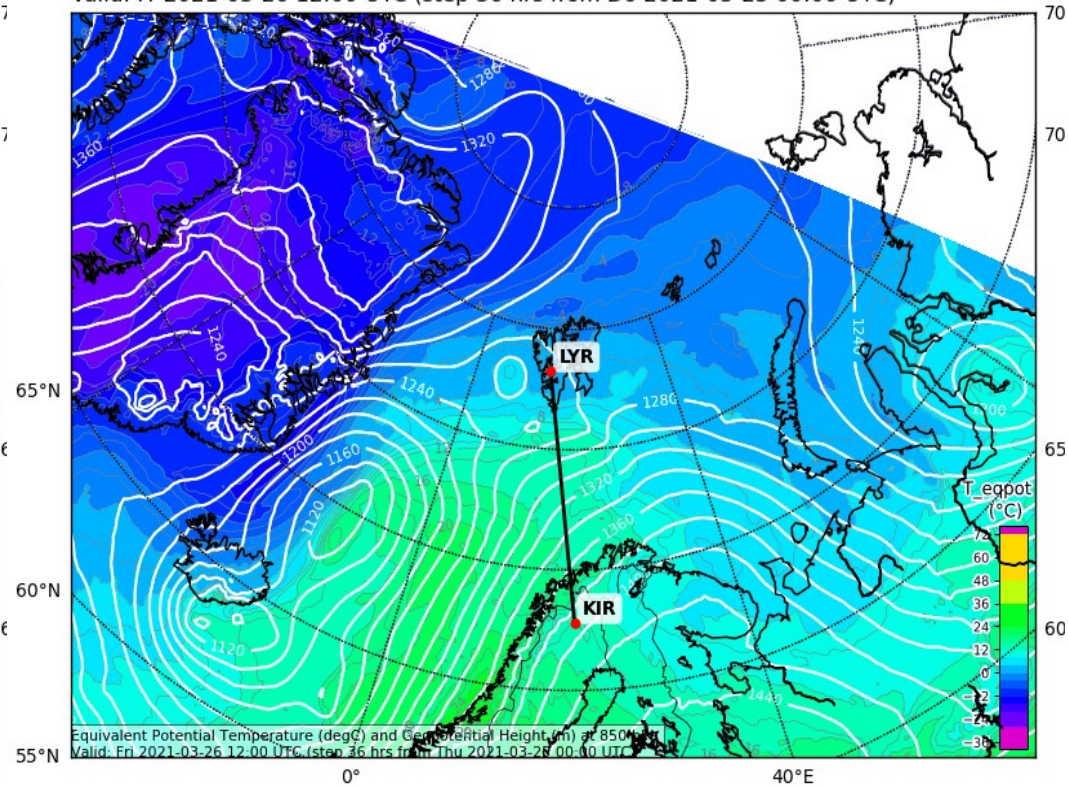
Previous forecast

Valid: Fr 2021-03-26 12:00 UTC (step 48 hrs from Mi 2021-03-24 12:00 UTC)



Most recent forecast

Valid: Fr 2021-03-26 12:00 UTC (step 36 hrs from Do 2021-03-25 00:00 UTC)



- Slightly lower T_epot SE of Svalbard
- Air mass advected by low NE of Iceland a bit warmer/more humid