

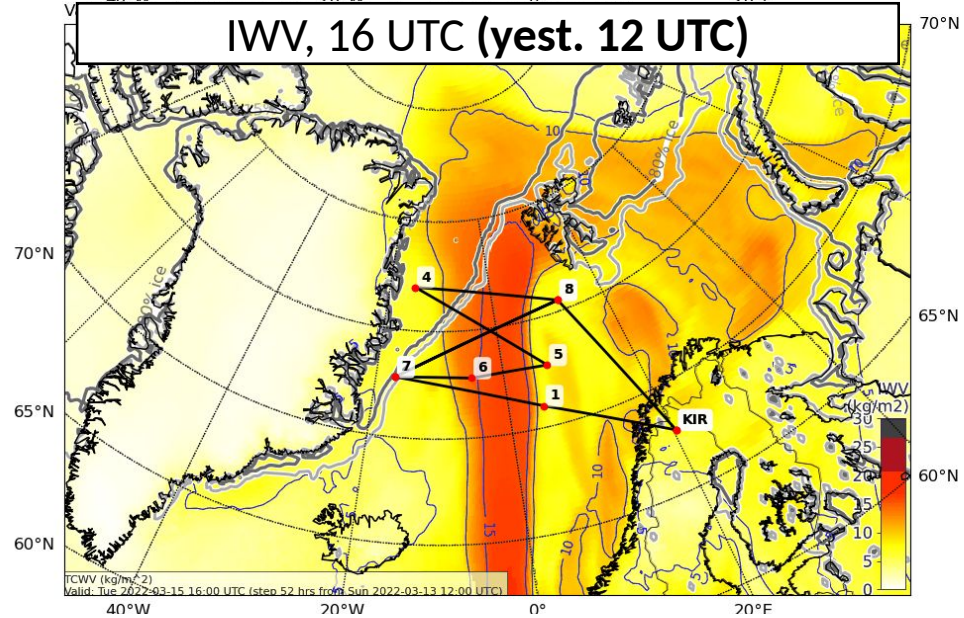
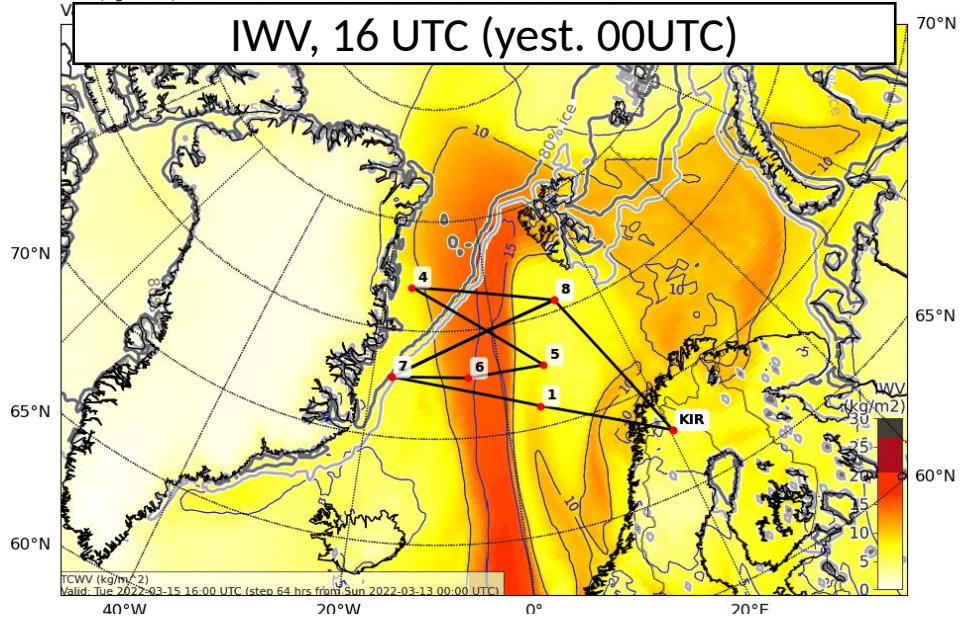
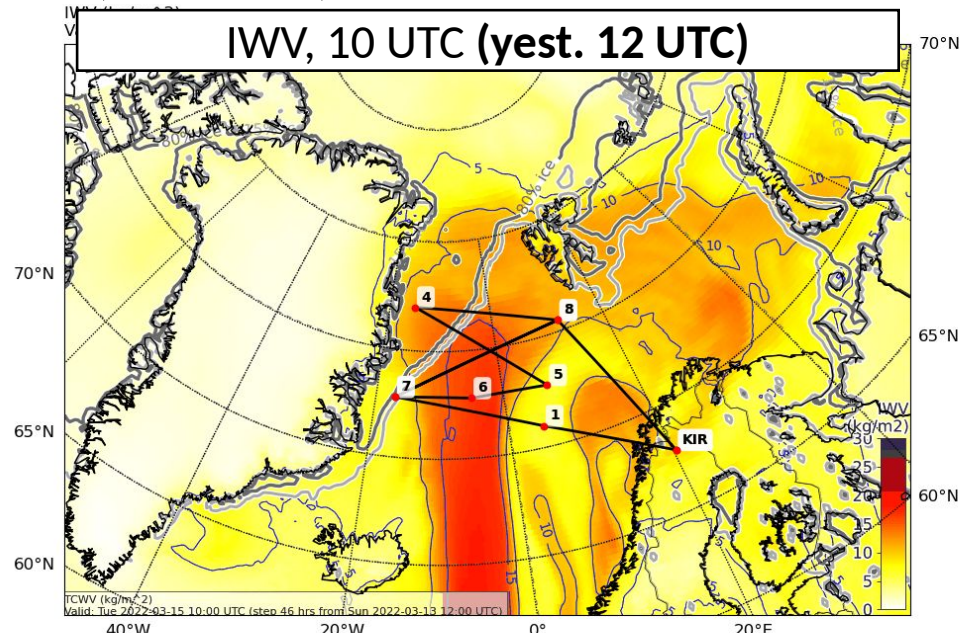
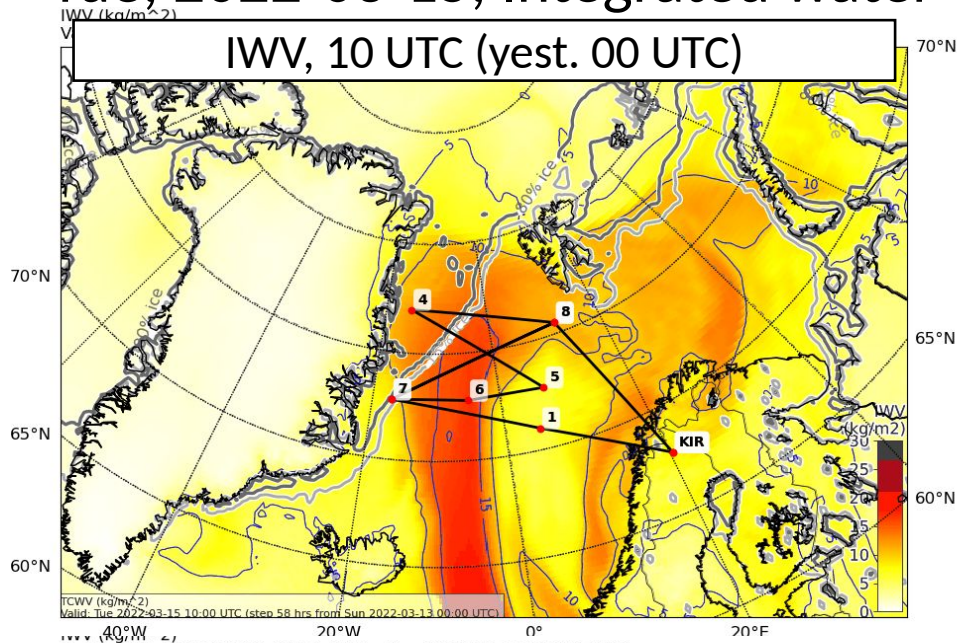
Weather update HALO-(AC)³

Monday, 2022-03-14, 09:00 LT

Forecast comparison yesterday 00 UTC vs. 12 UTC

Tuesday, 2022-03-15

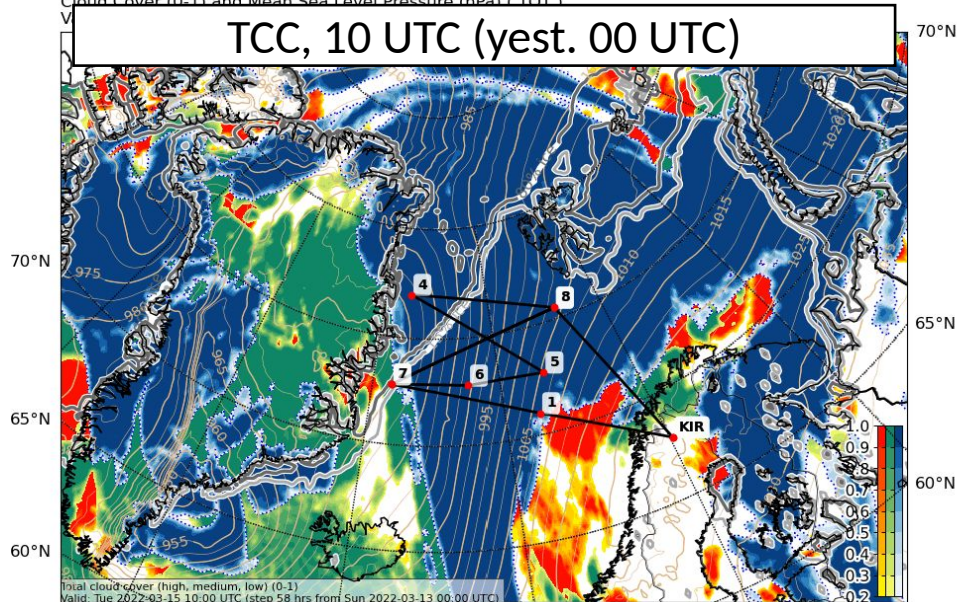
Tue, 2022-03-15, Integrated water vapour (ECMWF), 10 & 16 UTC



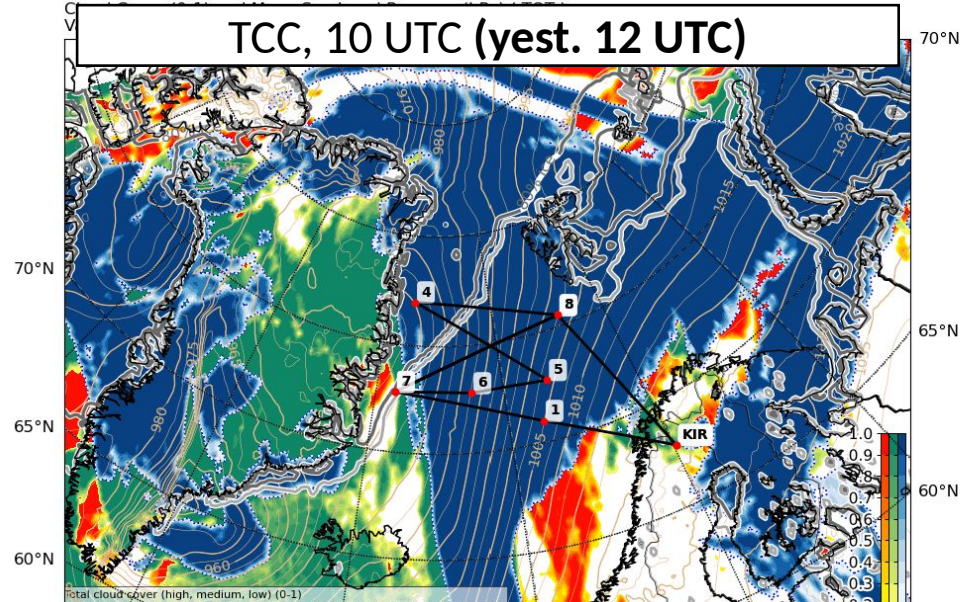
Tue, 2022-03-15, Total cloud cover (ECMWF), 10 & 16 UTC

Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) / TOT

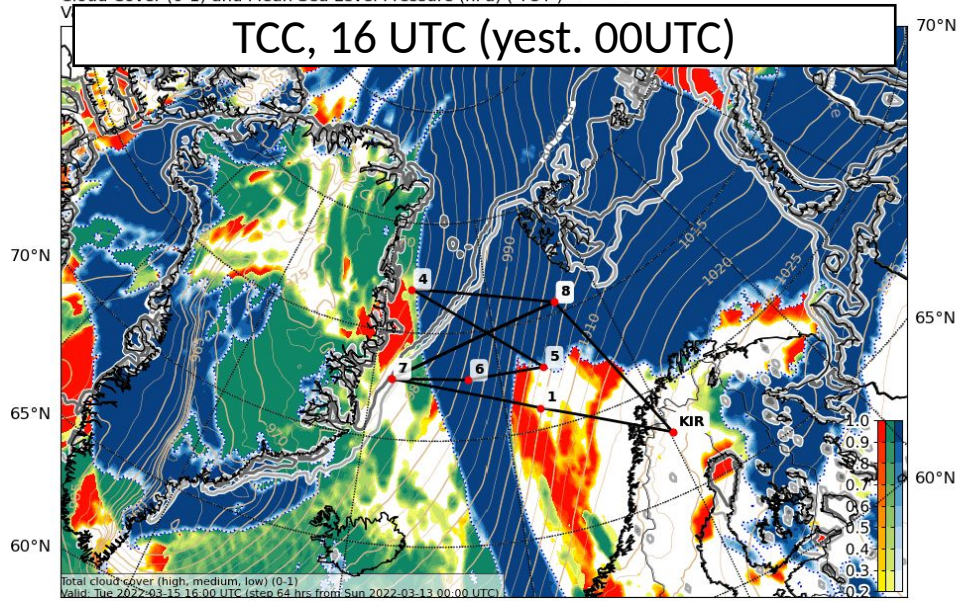
TCC, 10 UTC (yest. 00 UTC)



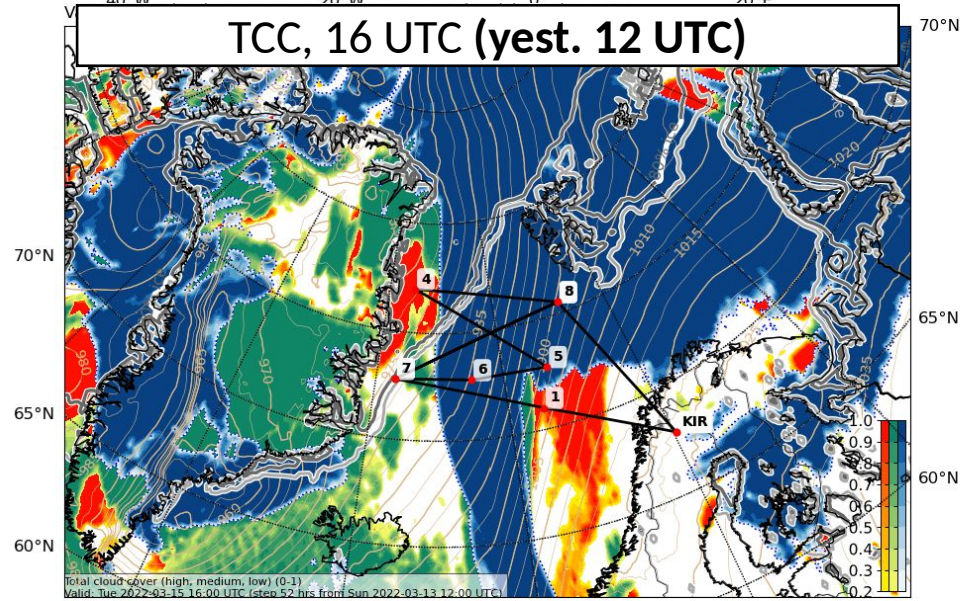
TCC, 10 UTC (yest. 12 UTC)



TCC, 16 UTC (yest. 00UTC)



TCC, 16 UTC (yest. 12 UTC)



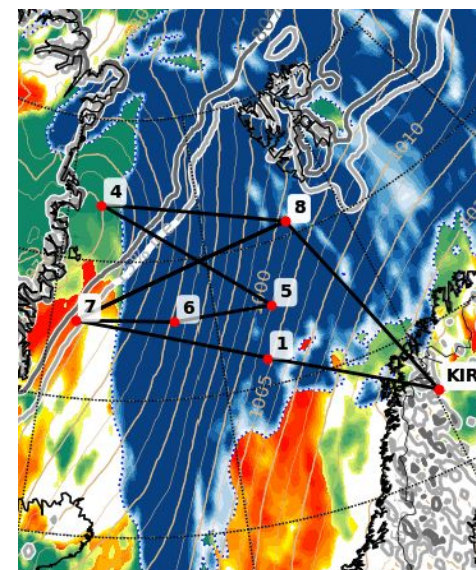
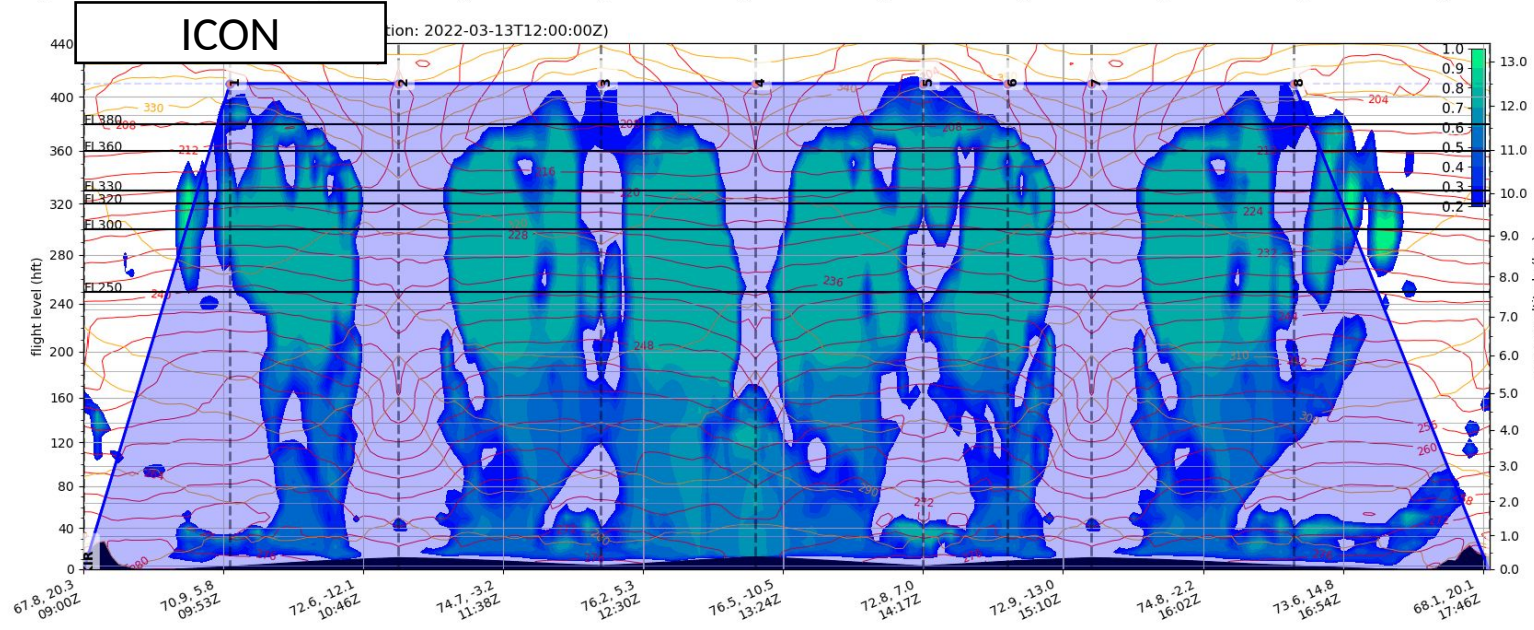
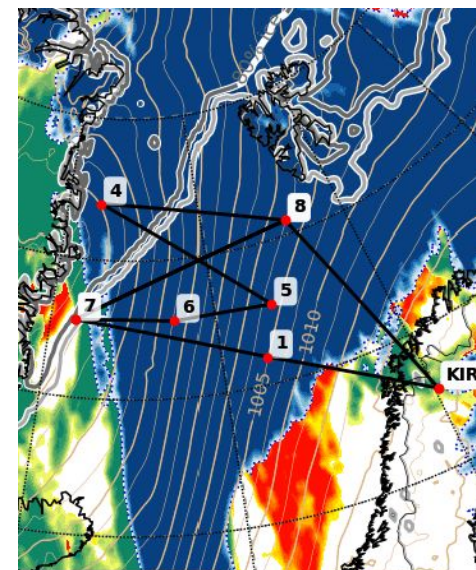
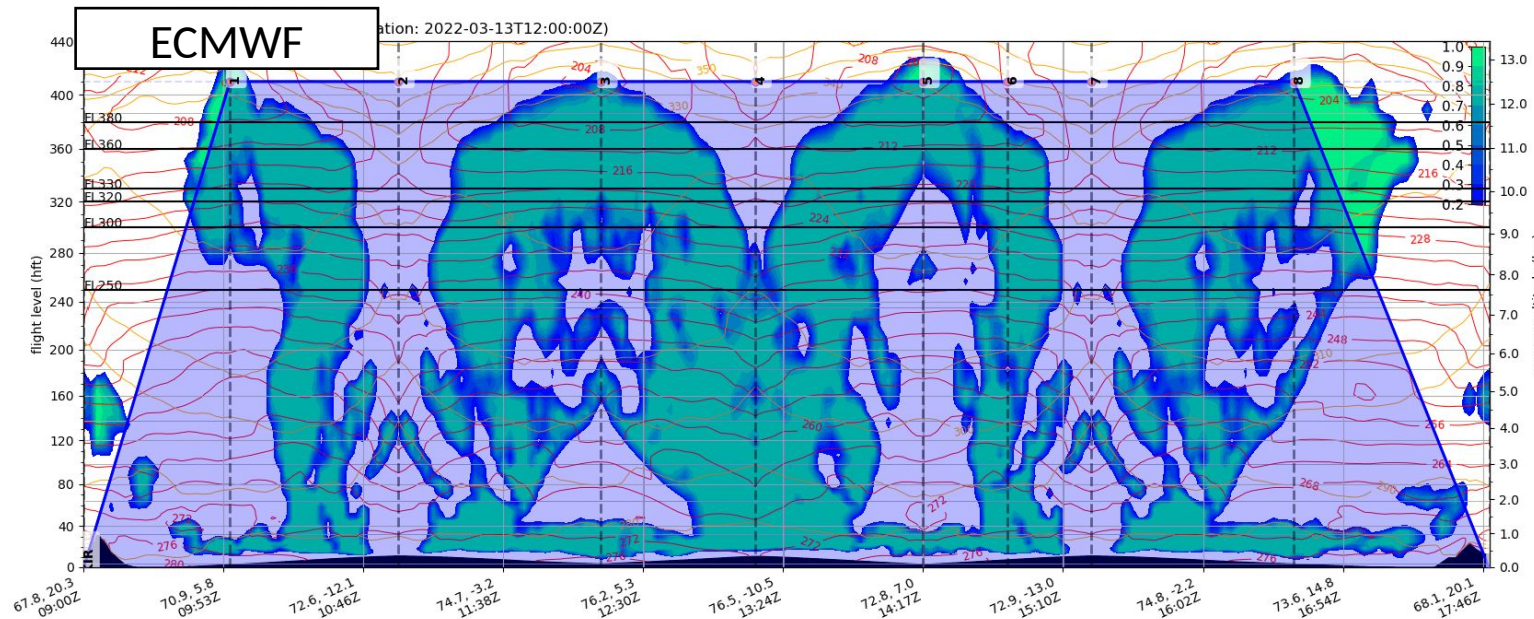
Cross sections

Tuesday, 2022-03-15 10 & 16 UTC

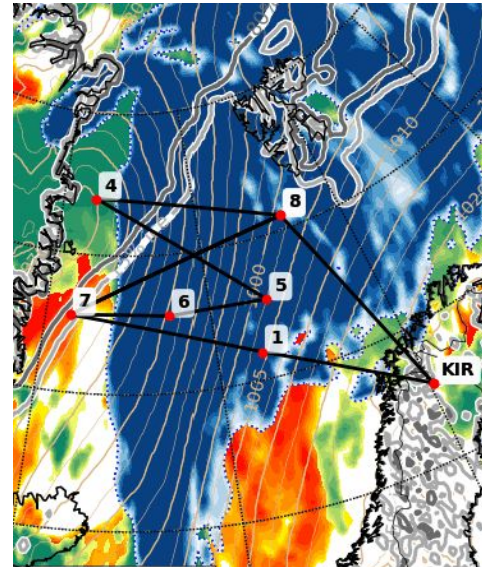
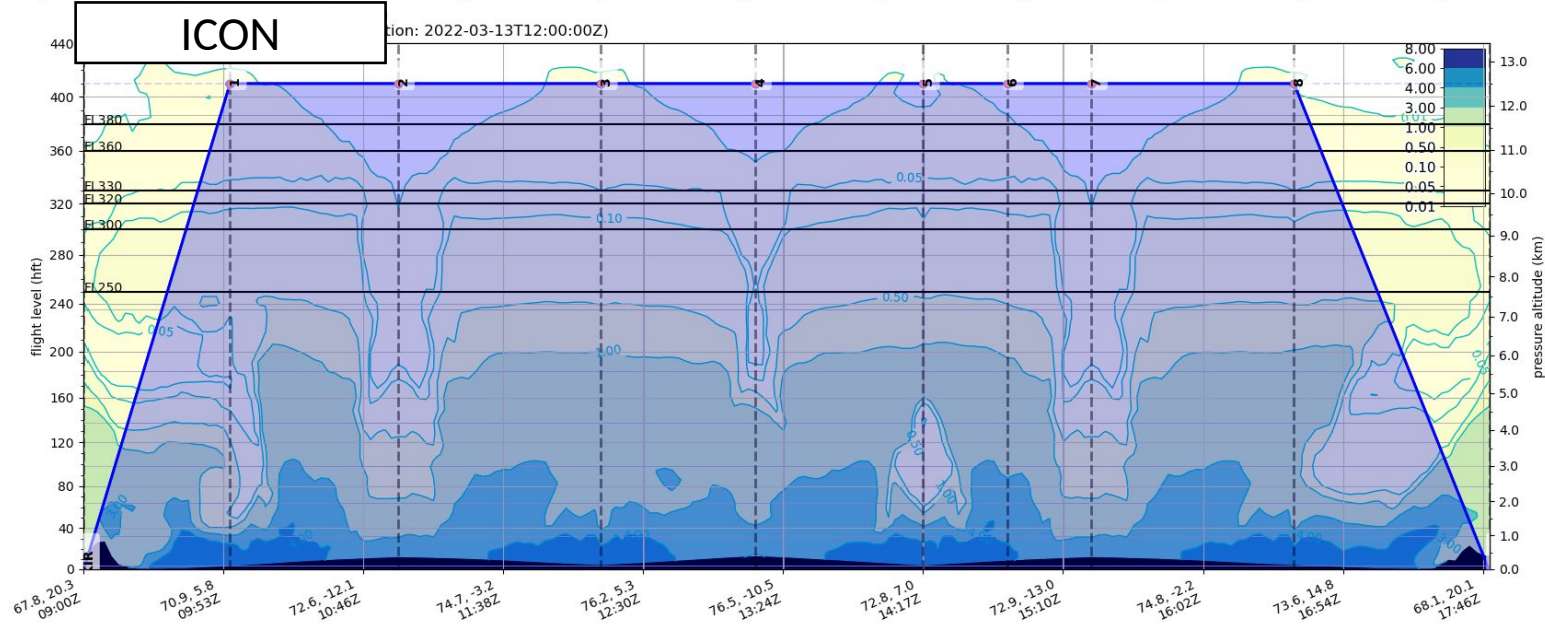
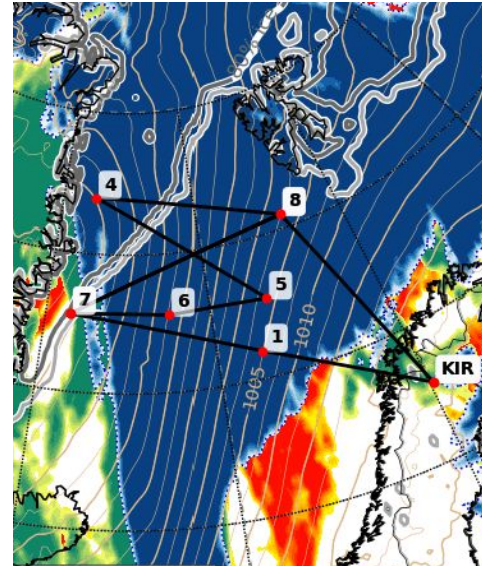
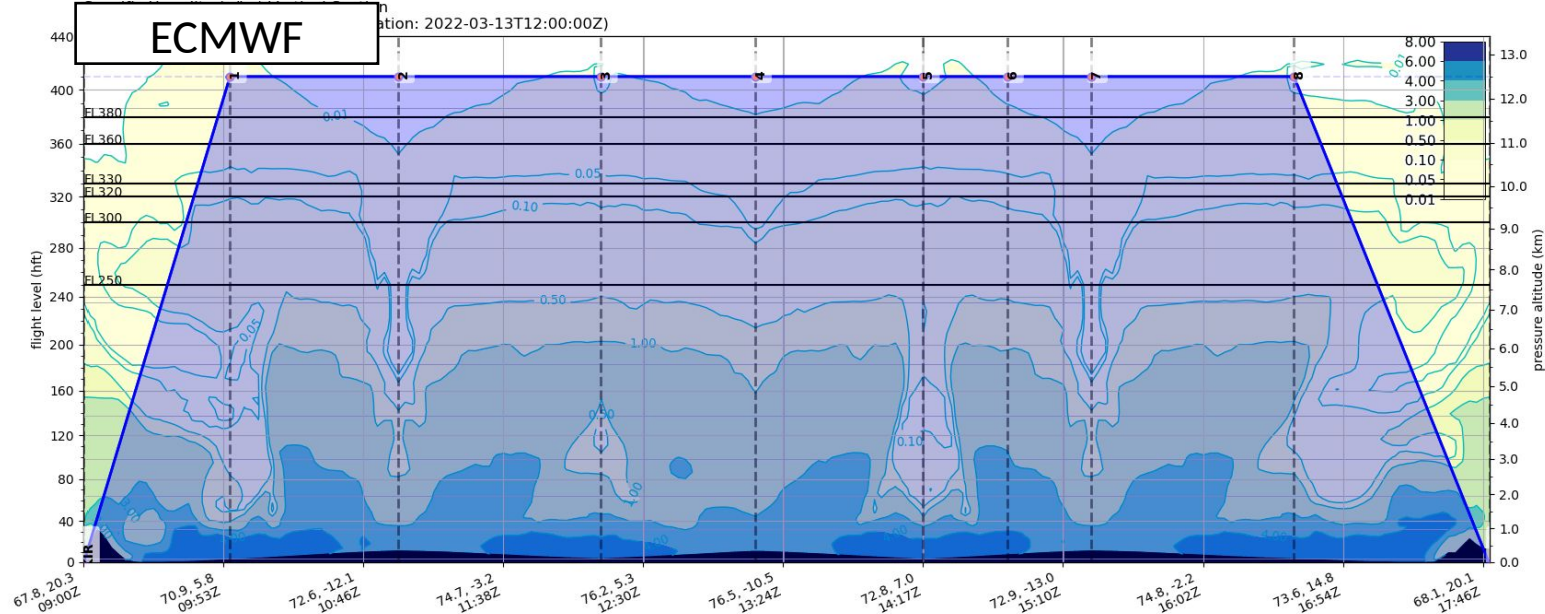
Clouds, specific humidity

(+ cloud tops)

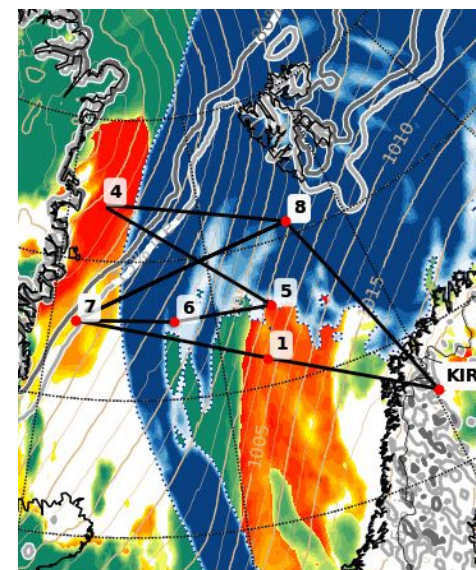
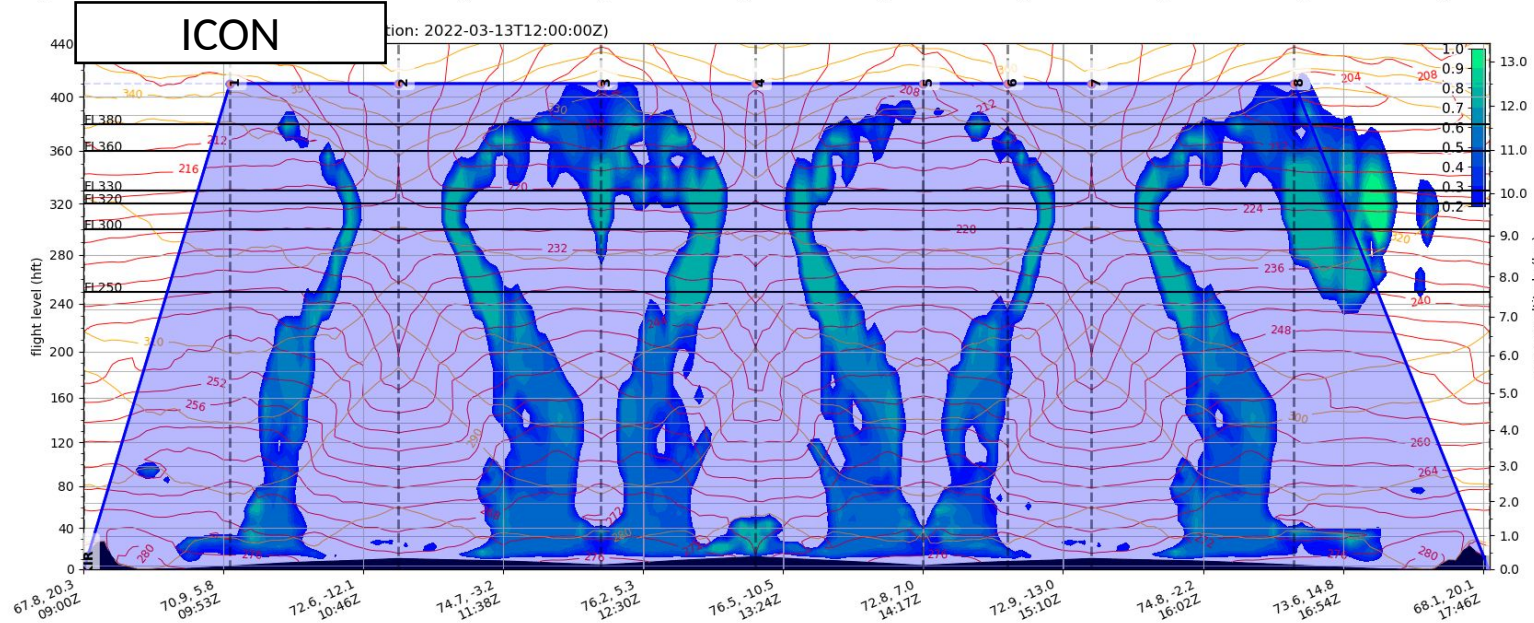
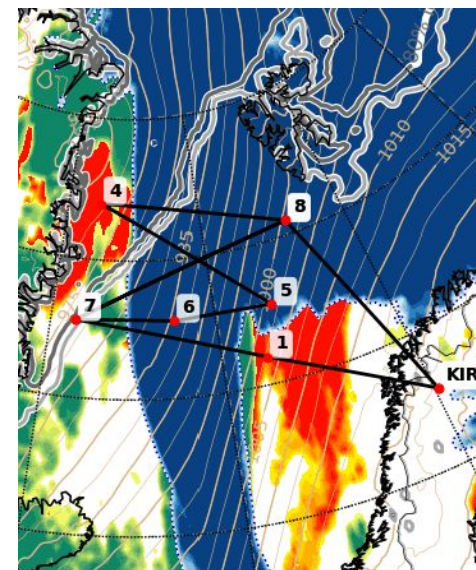
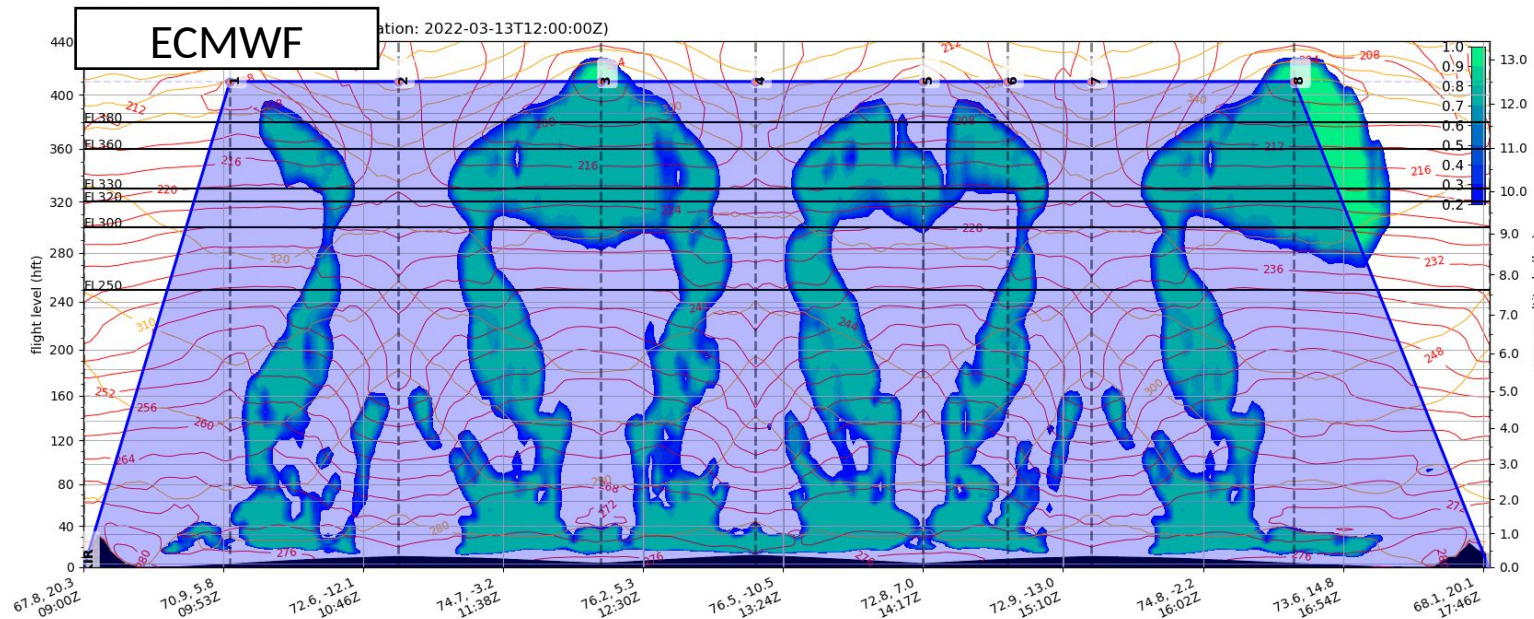
Tue, 2022-03-15, Clouds, 10 UTC



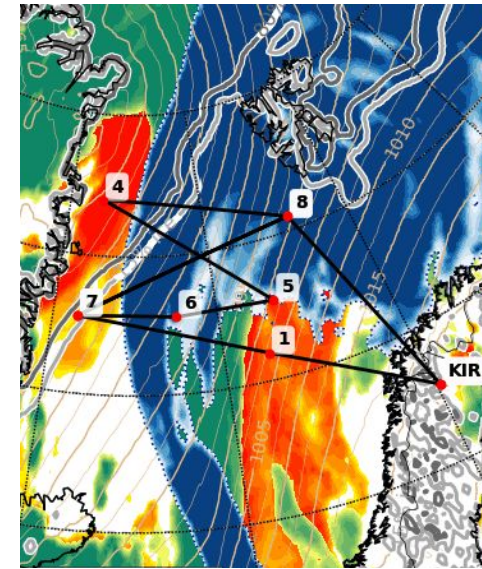
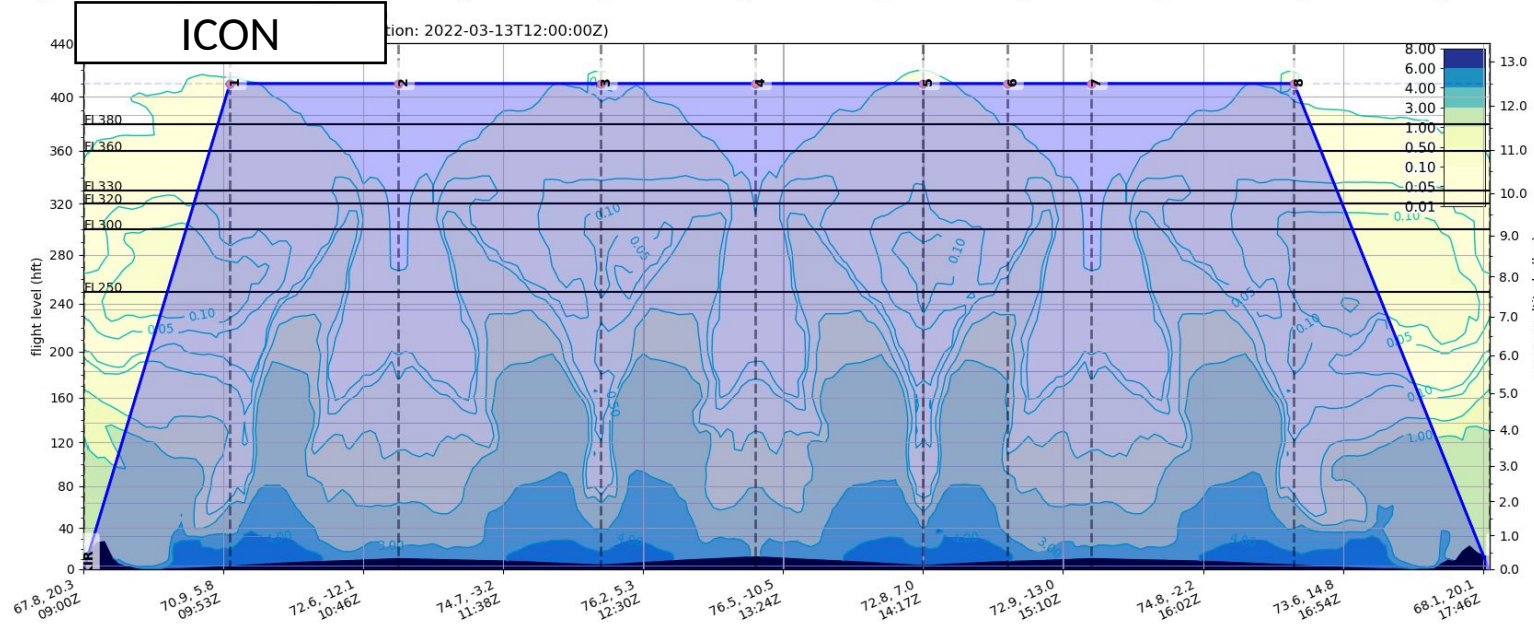
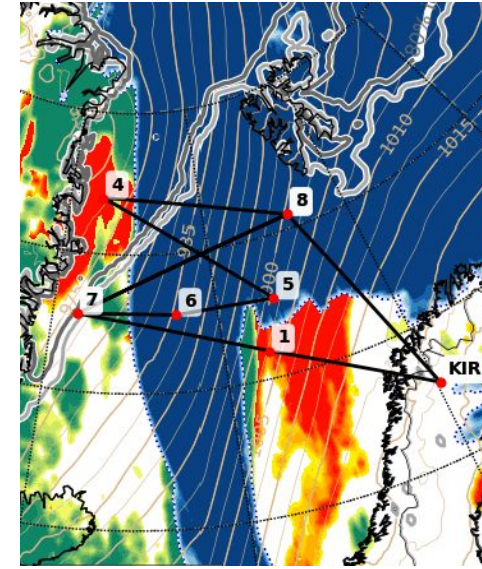
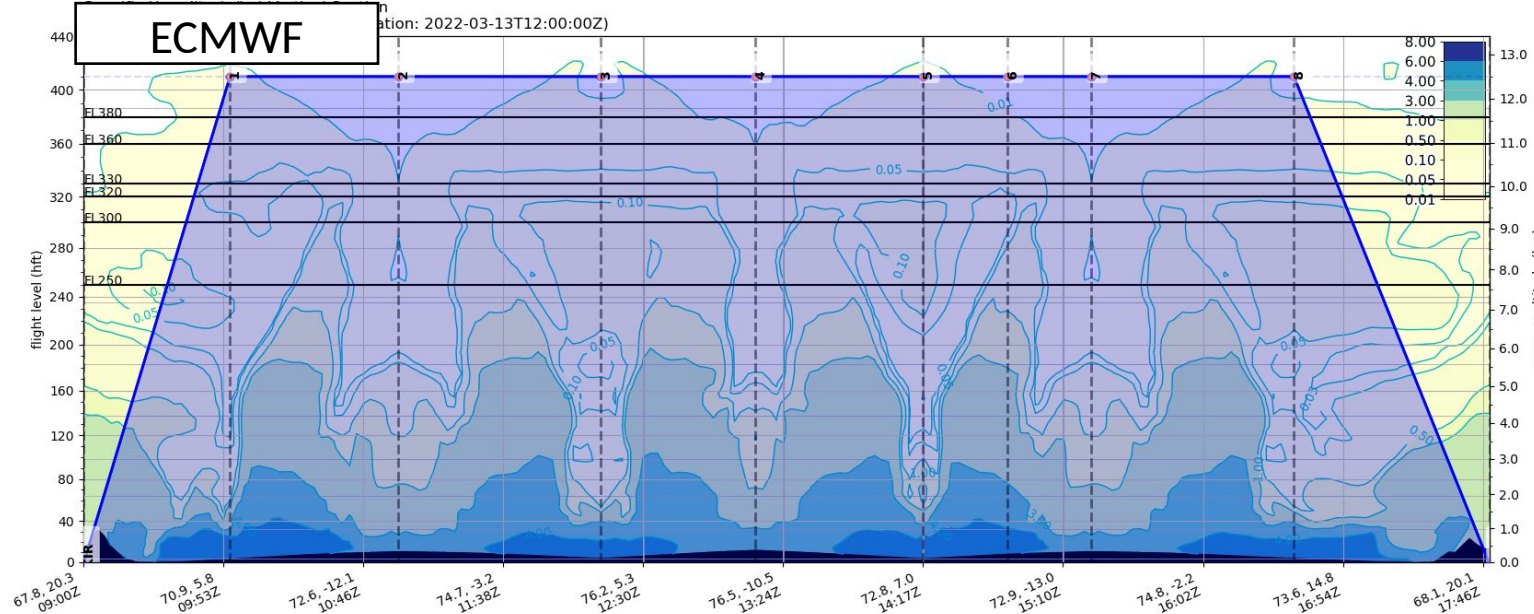
Tue, 2022-03-15, Specific humidity, 10 UTC



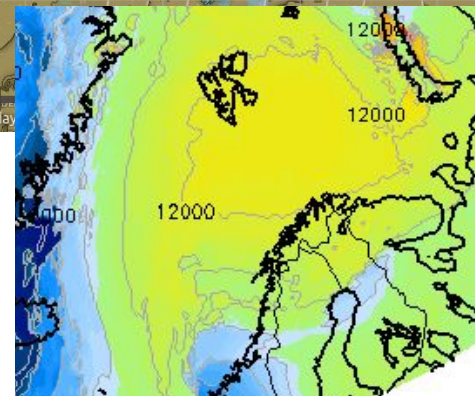
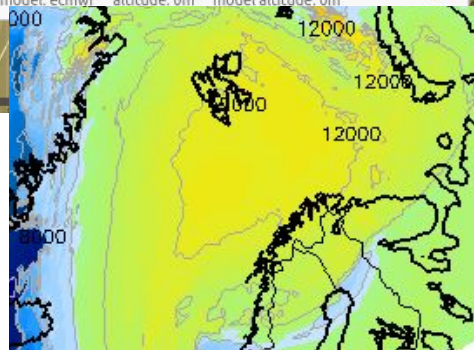
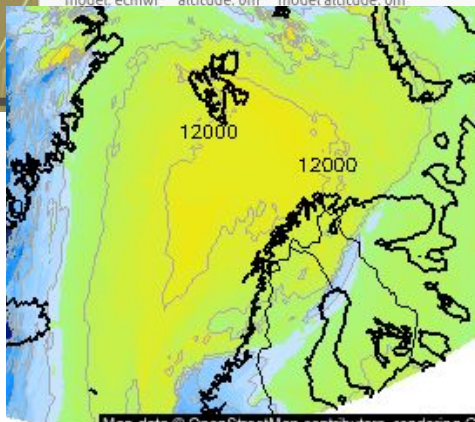
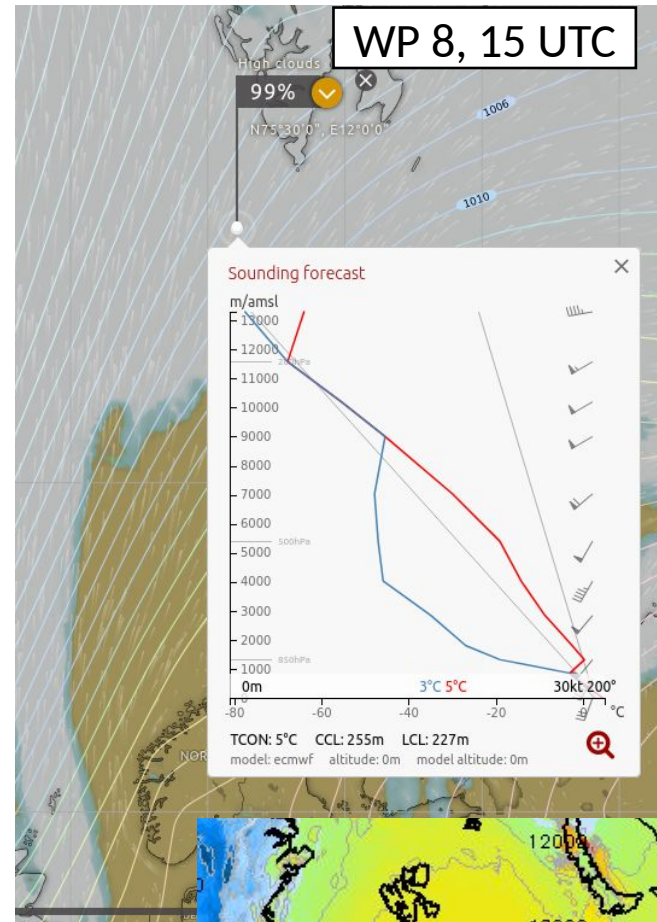
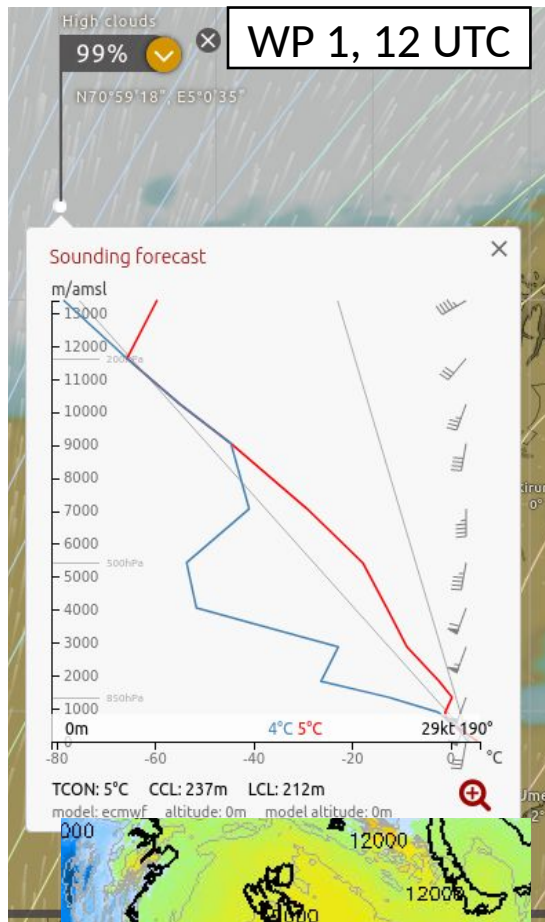
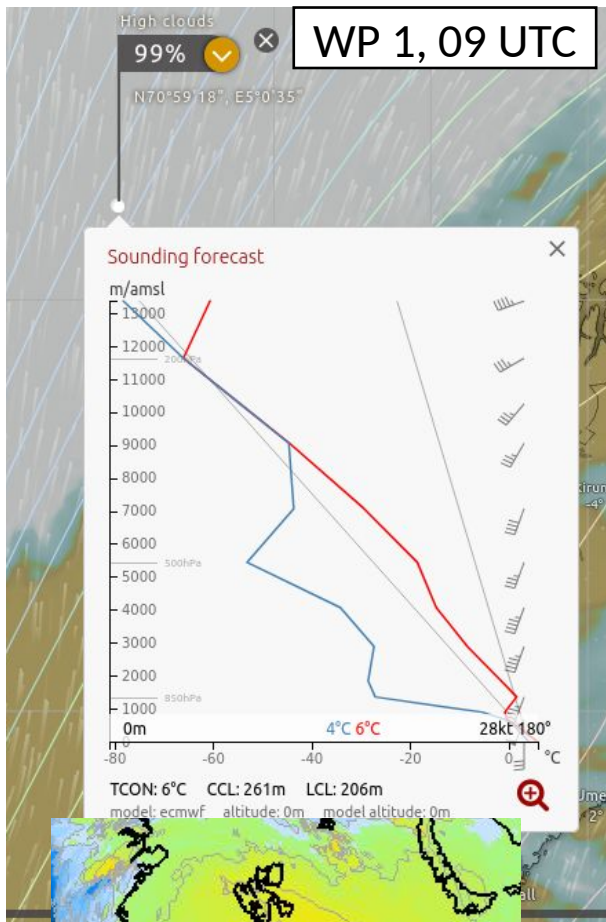
Tue, 2022-03-15, Clouds, 16 UTC



Tue, 2022-03-15, Specific humidity, 16 UTC

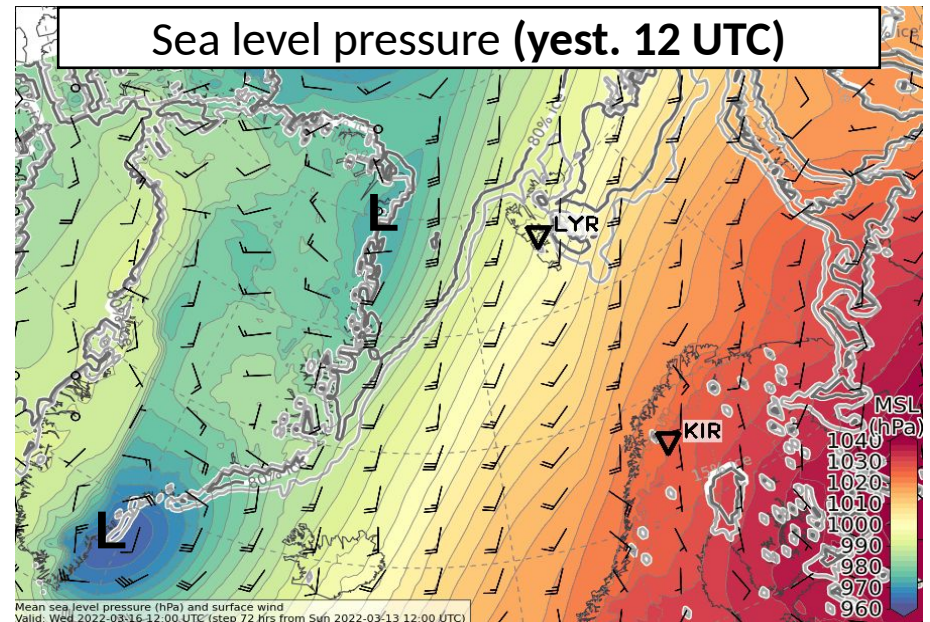
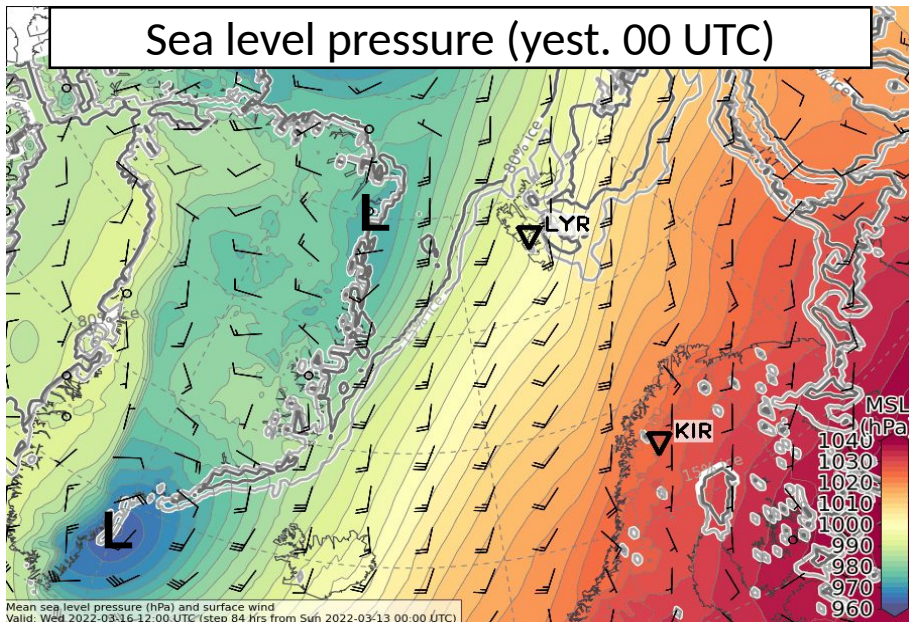
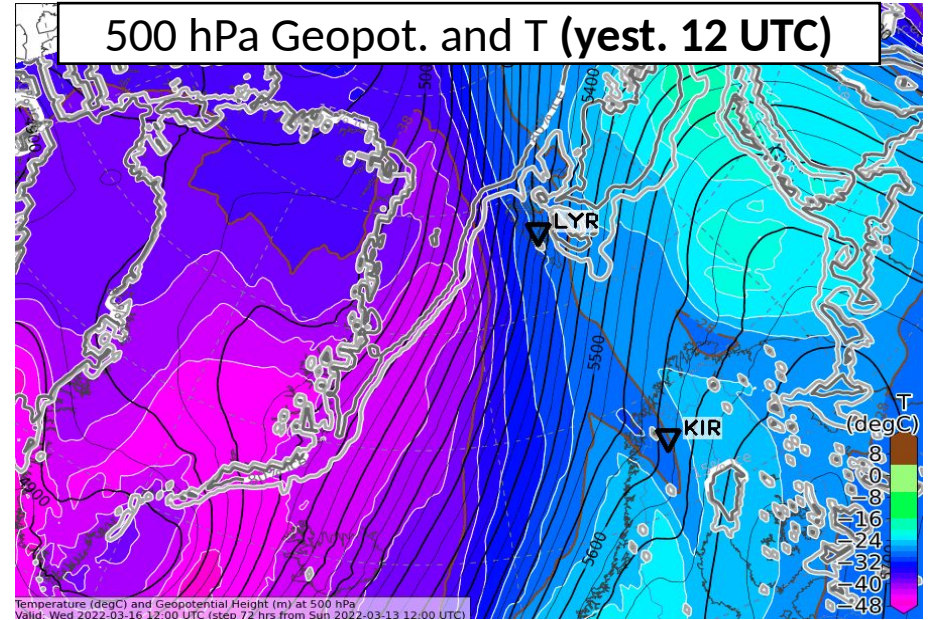
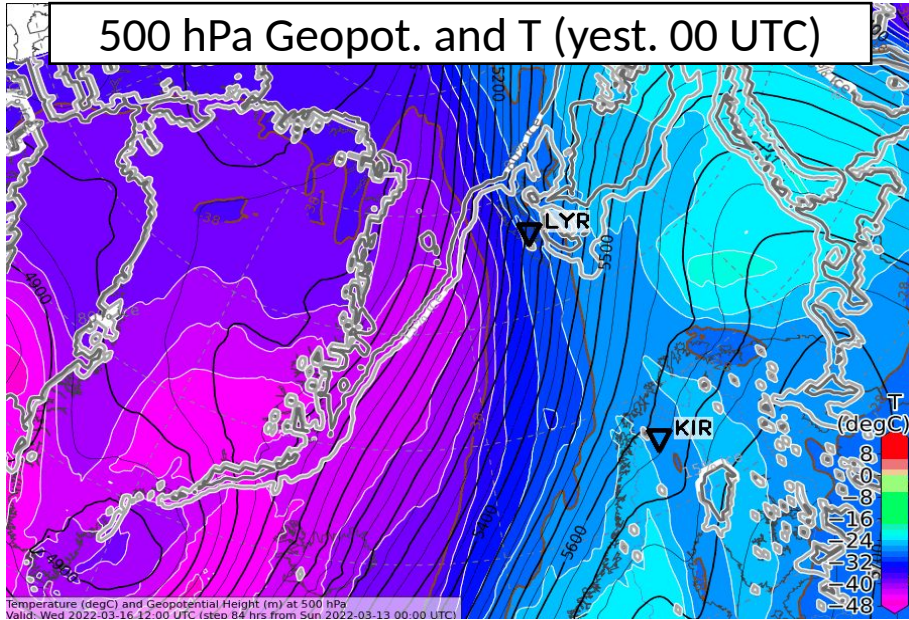


Tue, 2022-03-15, Soundings (ECMWF), Tropopause height (GFS)

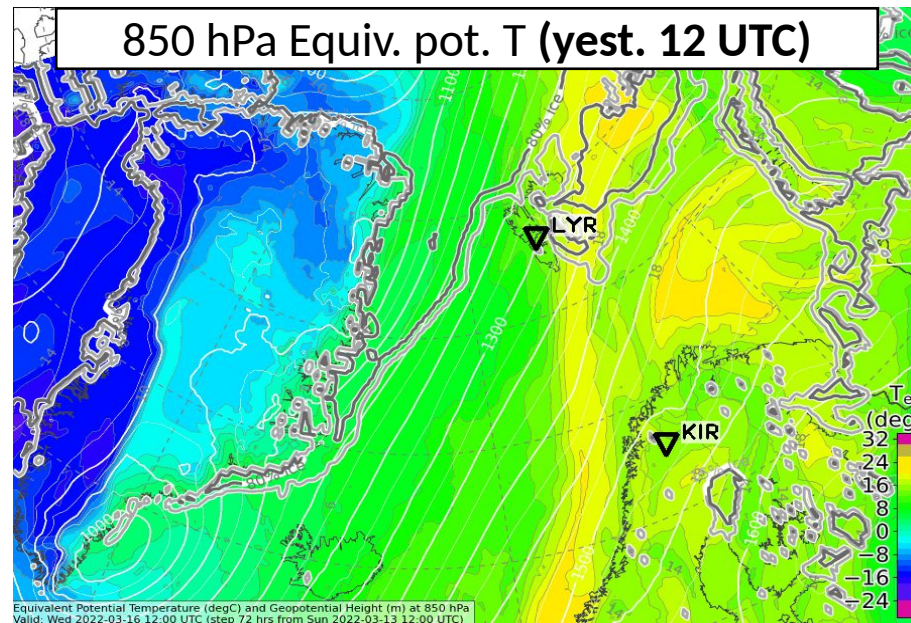
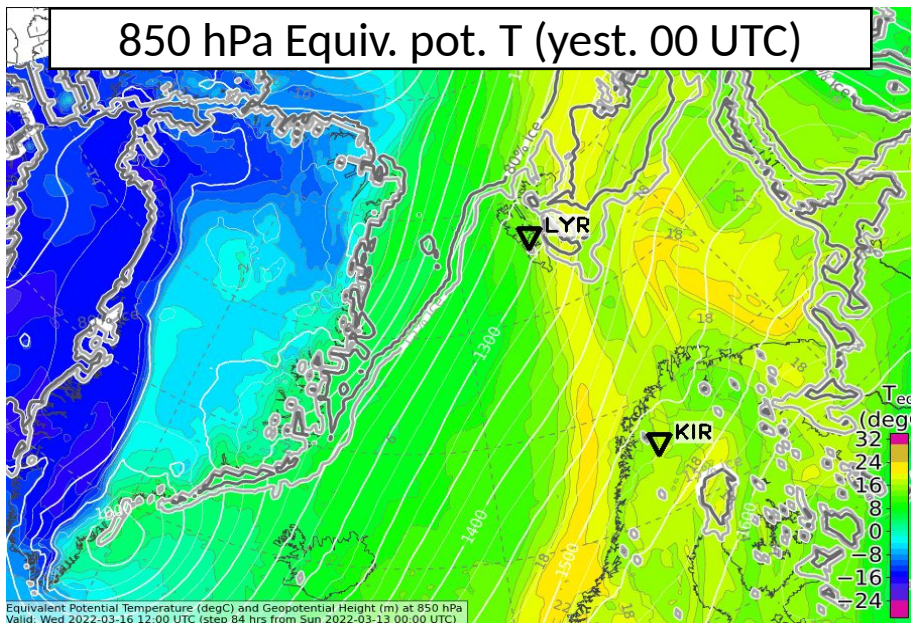
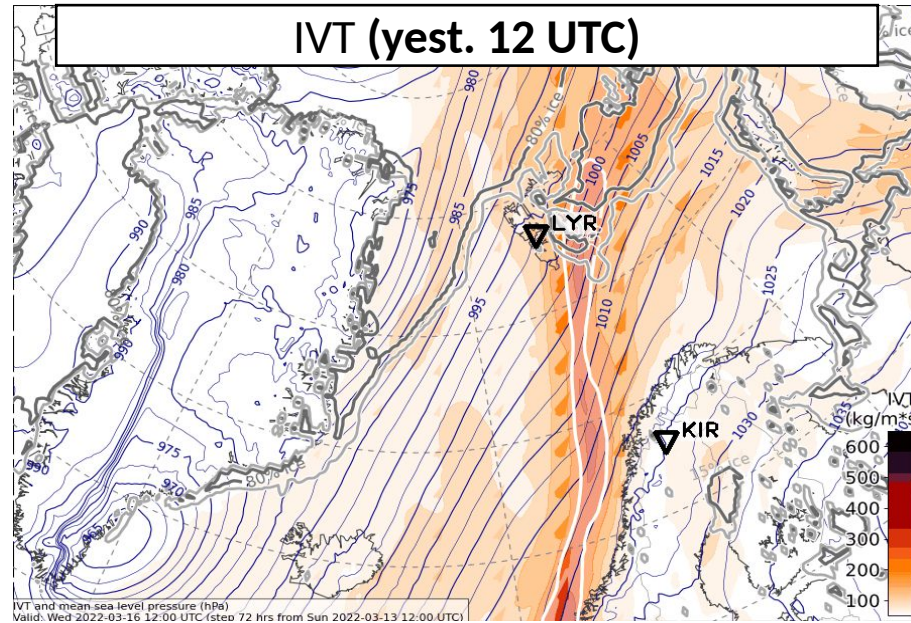
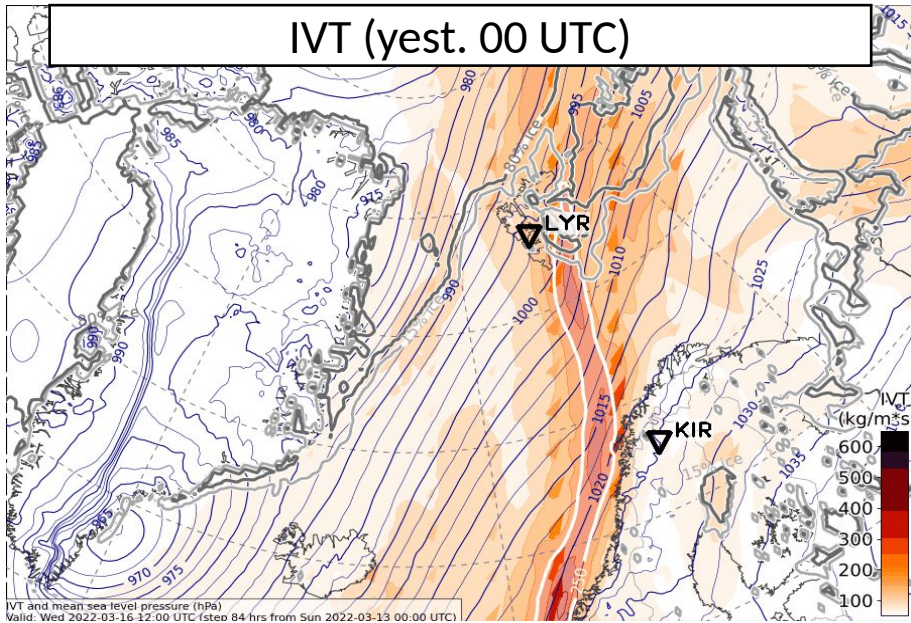


Forecast comparison yesterday 00 UTC vs. 12 UTC
Wednesday, 2022-03-16

Wed, 2022-03-16 12 UTC (+72h)



Wed, 2022-03-16 12 UTC (+72h)

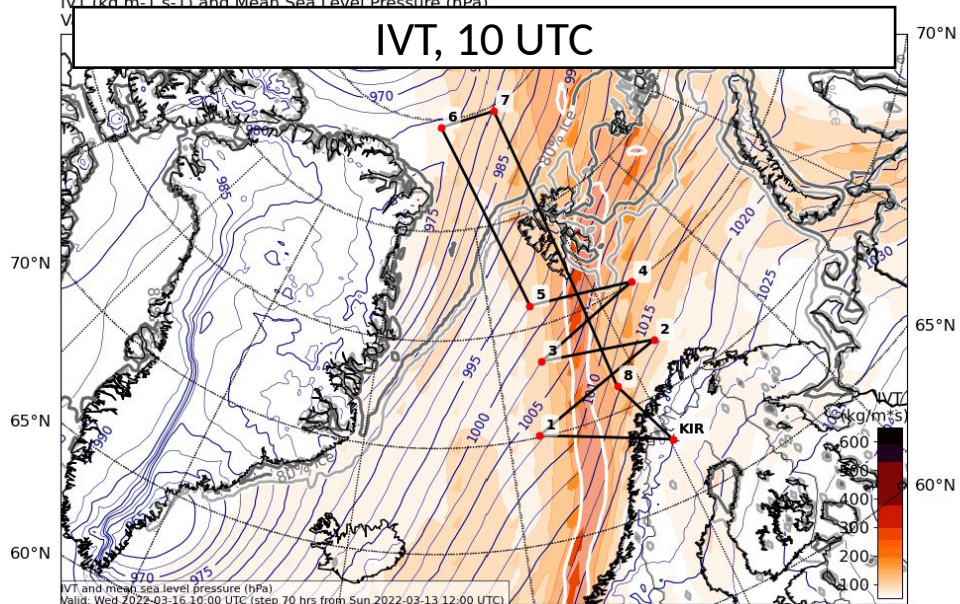


Detailed forecast
Wednesday, 2022-03-16

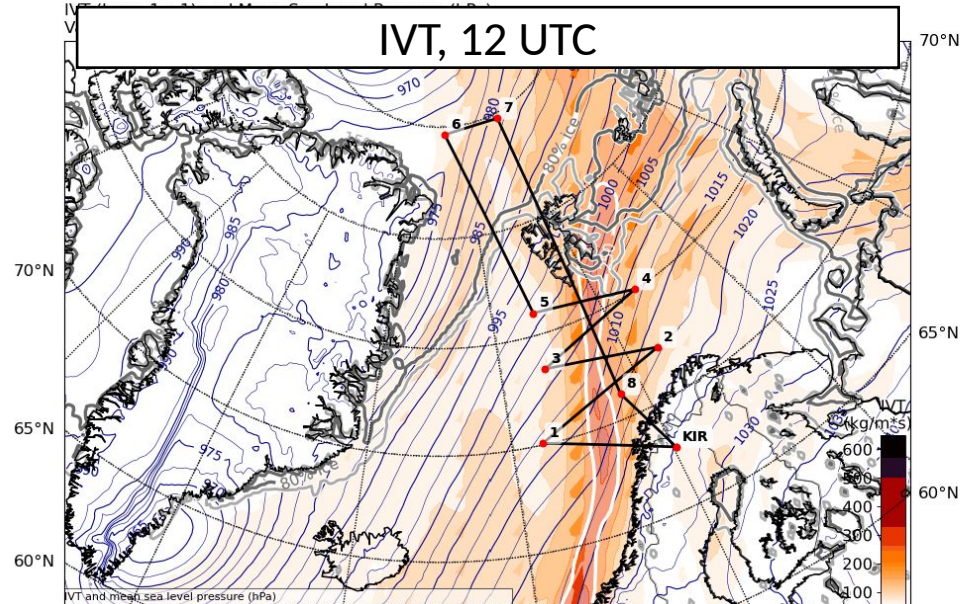
Wed, 2022-03-16, Integrated water vapour transport (ECMWF), 10 - 16 UTC

IVT ($\text{kg m}^{-1} \text{s}^{-1}$) and Mean Sea Level Pressure (hPa)

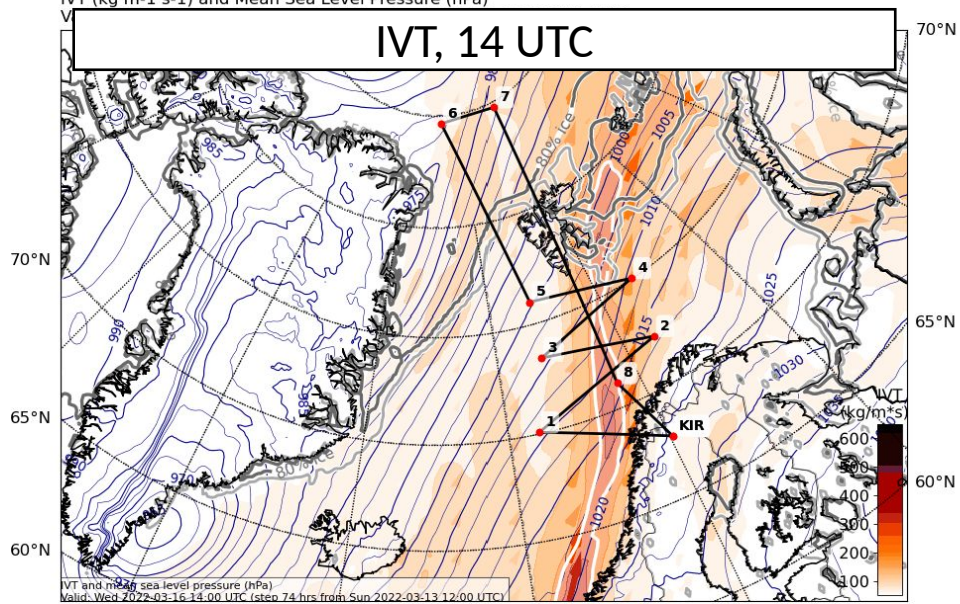
IVT, 10 UTC



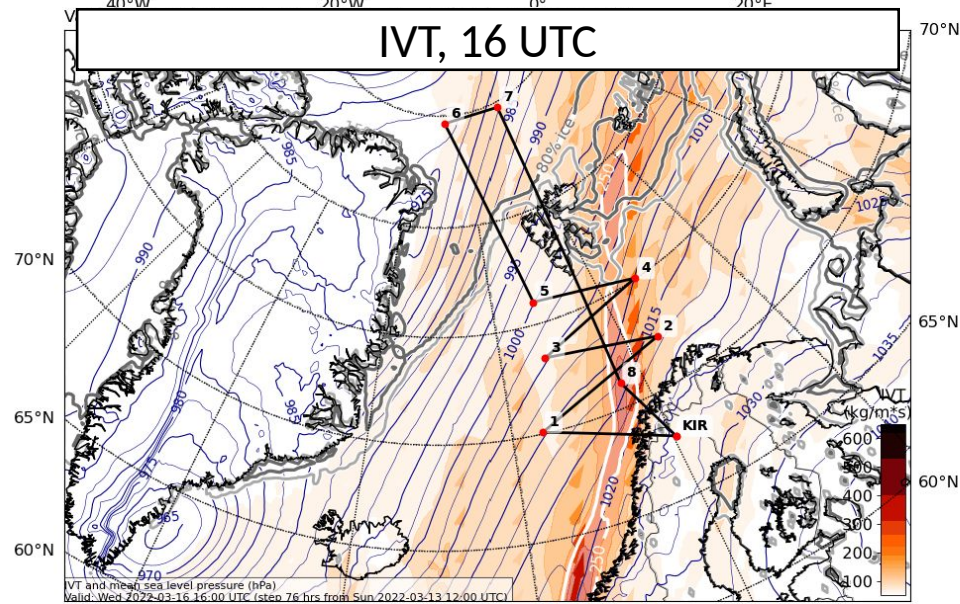
IVT, 12 UTC



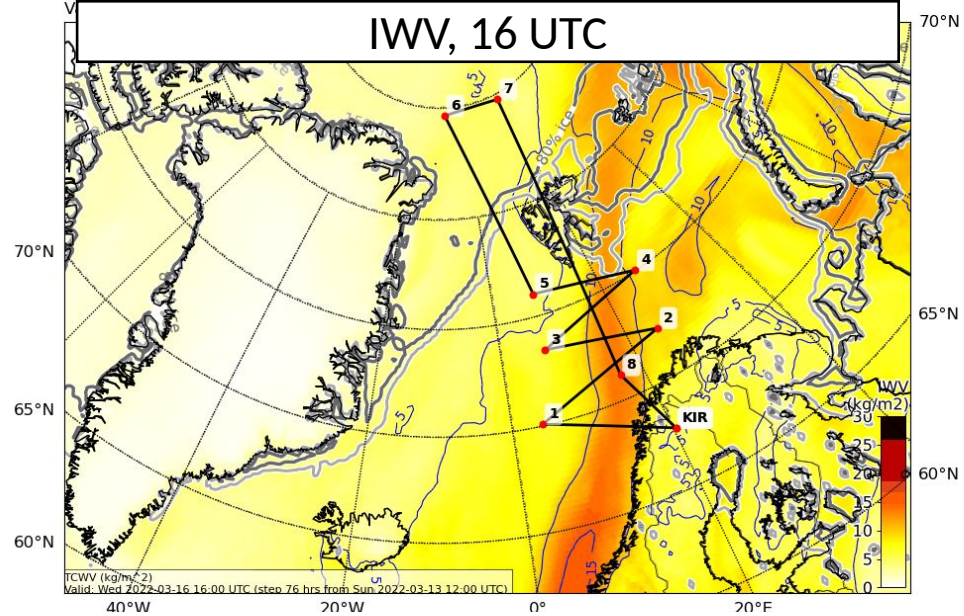
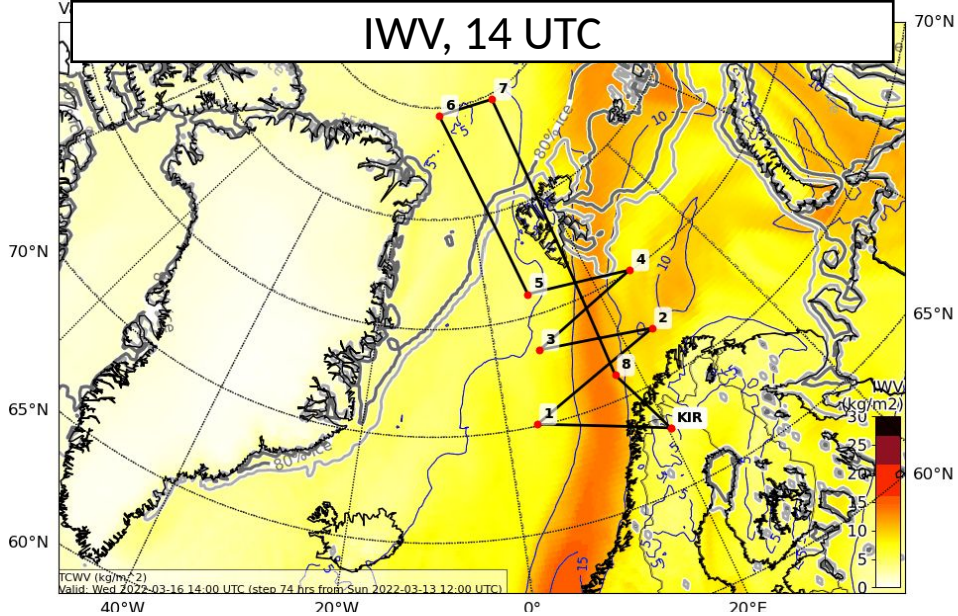
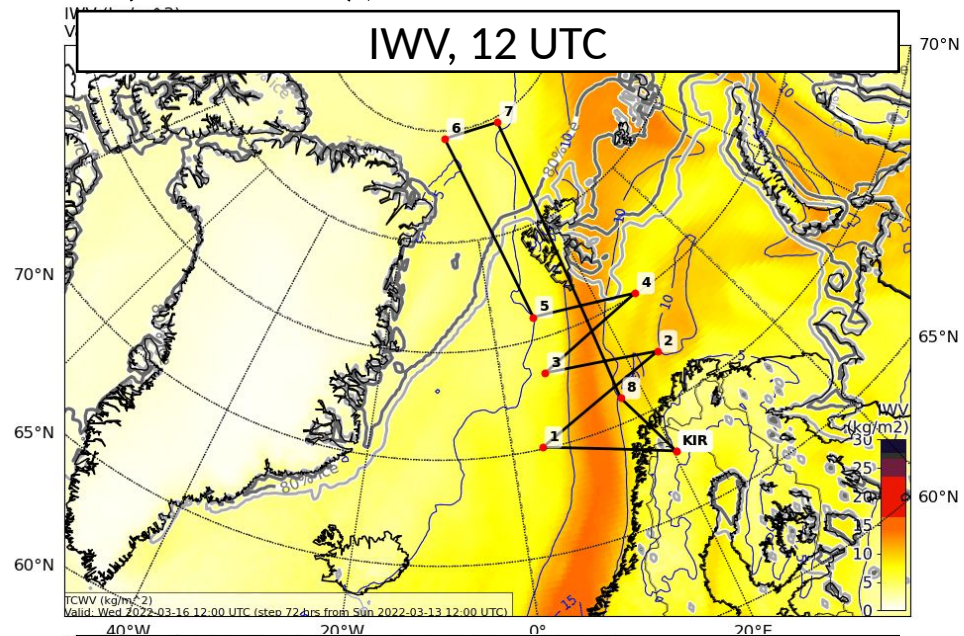
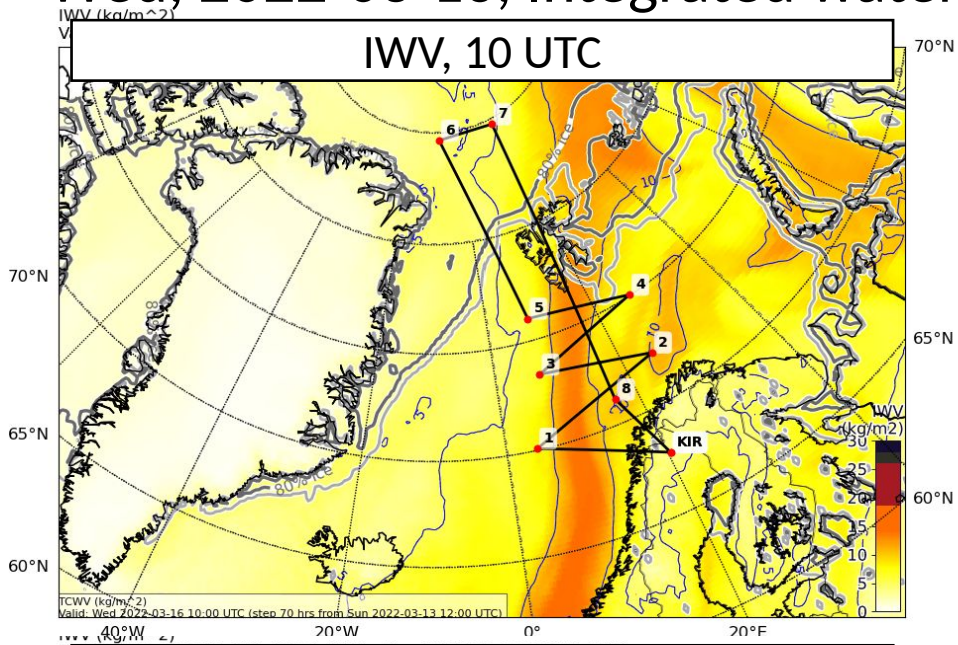
IVT, 14 UTC



IVT, 16 UTC



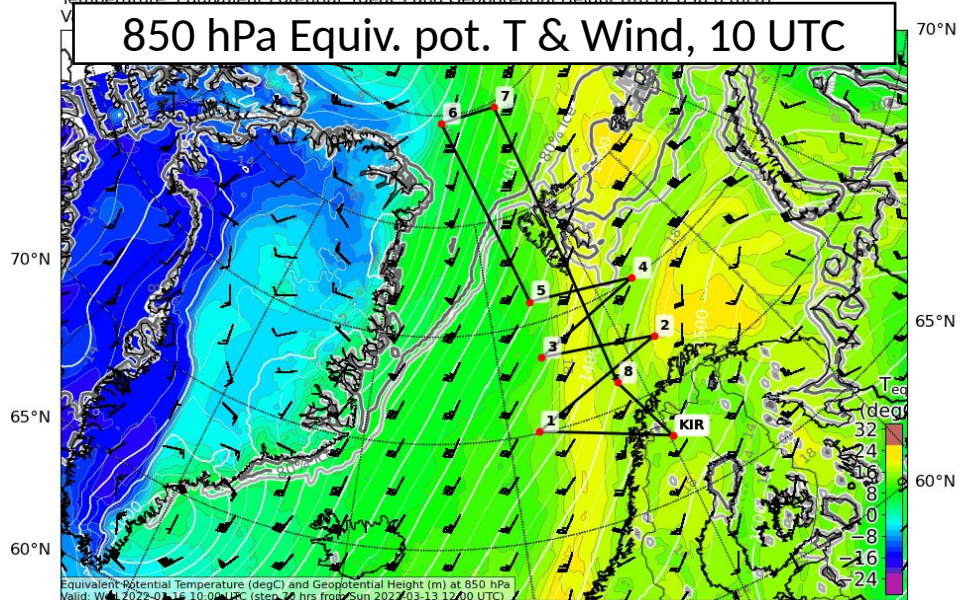
Wed, 2022-03-16, Integrated water vapour (ECMWF), 10 - 16 UTC



Wed, 2022-03-16, 850 hPa Equiv. pot. T. & Wind (ECMWF), 10 - 16 UTC

Temperature, Equivalent Potential (degC) and Geopotential Height (m) at 850.0 (hPa)

850 hPa Equiv. pot. T & Wind, 10 UTC

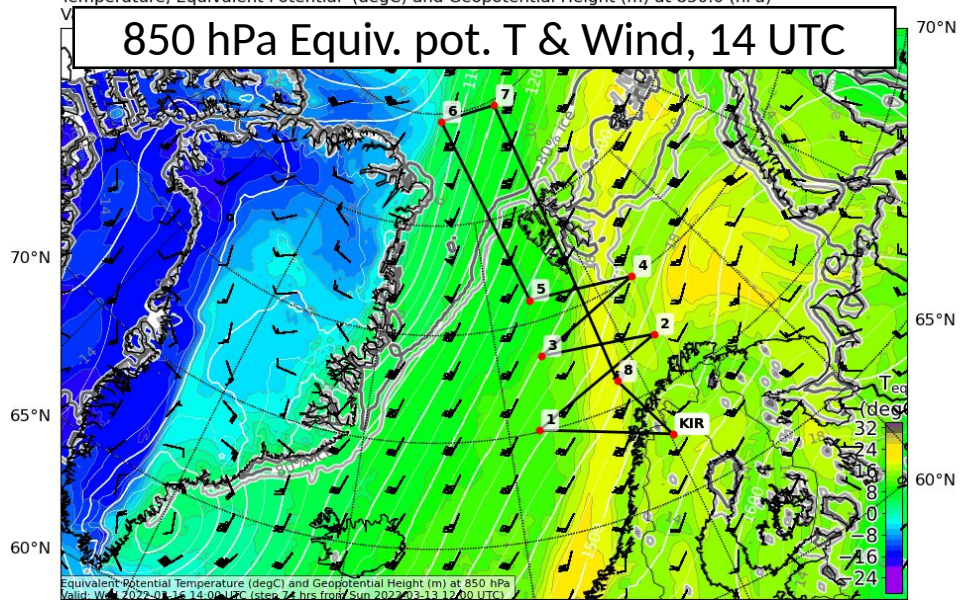


Equivalent Potential Temperature (degC) and Geopotential Height (m) at 850 hPa

Valid: Wed 2022-03-16 10:00 UTC (step 72 hrs from Sun 2022-03-13 12:00 UTC)

Temperature, Equivalent Potential (degC) and Geopotential Height (m) at 850.0 (hPa)

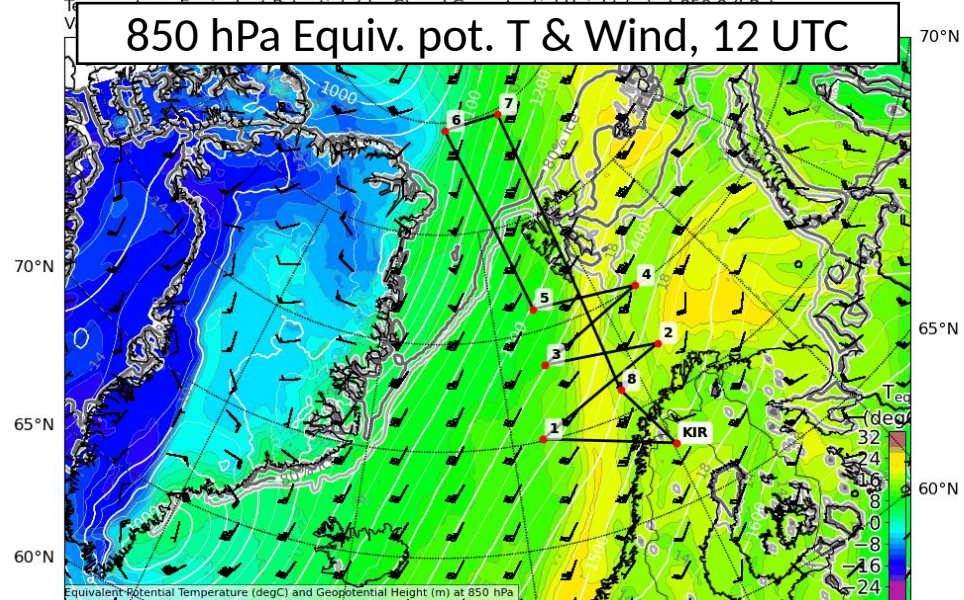
850 hPa Equiv. pot. T & Wind, 14 UTC



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

Valid: Wed 2022-03-16 14:00 UTC (step 72 hrs from Sun 2022-03-13 12:00 UTC)

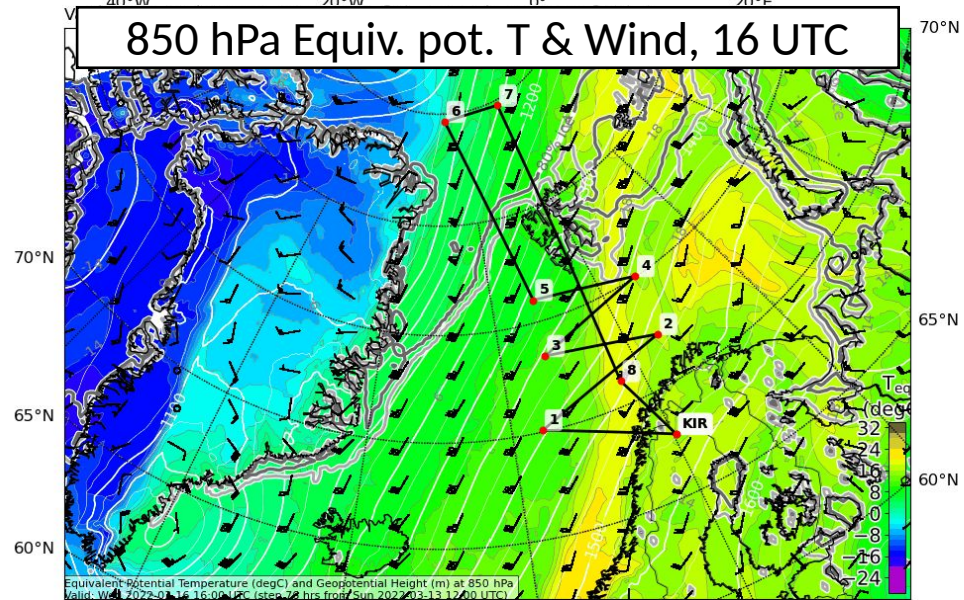
850 hPa Equiv. pot. T & Wind, 12 UTC



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

Valid: Wed 2022-03-16 12:00 UTC (step 72 hrs from Sun 2022-03-13 12:00 UTC)

850 hPa Equiv. pot. T & Wind, 16 UTC



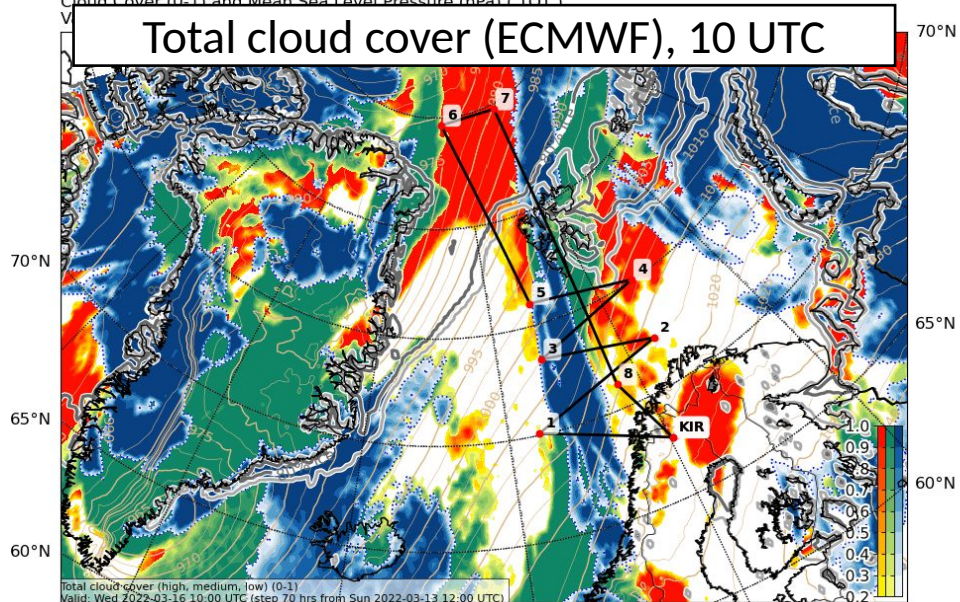
Equivalent Potential Temperature (degC) and Geopotential Height (m) at 850 hPa

Valid: Wed 2022-03-16 16:00 UTC (step 72 hrs from Sun 2022-03-13 12:00 UTC)

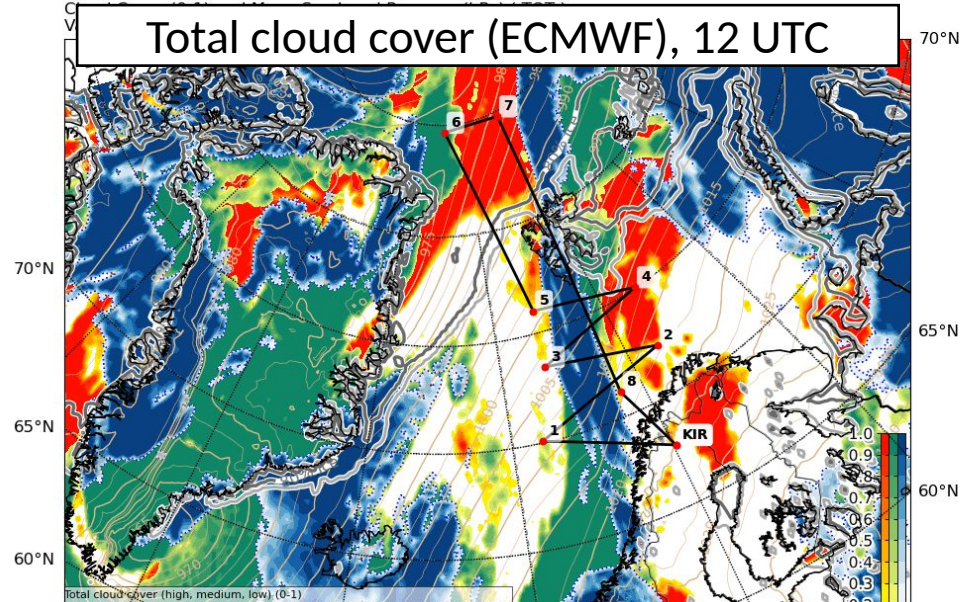
Wed, 2022-03-16, Total cloud cover (ECMWF), 10 - 16 UTC

Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) / TOT

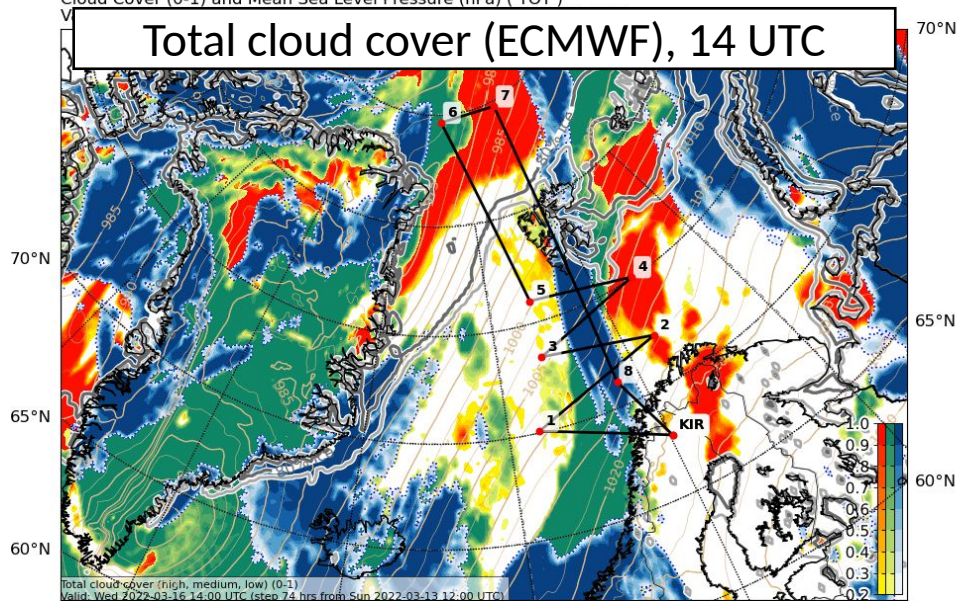
Total cloud cover (ECMWF), 10 UTC



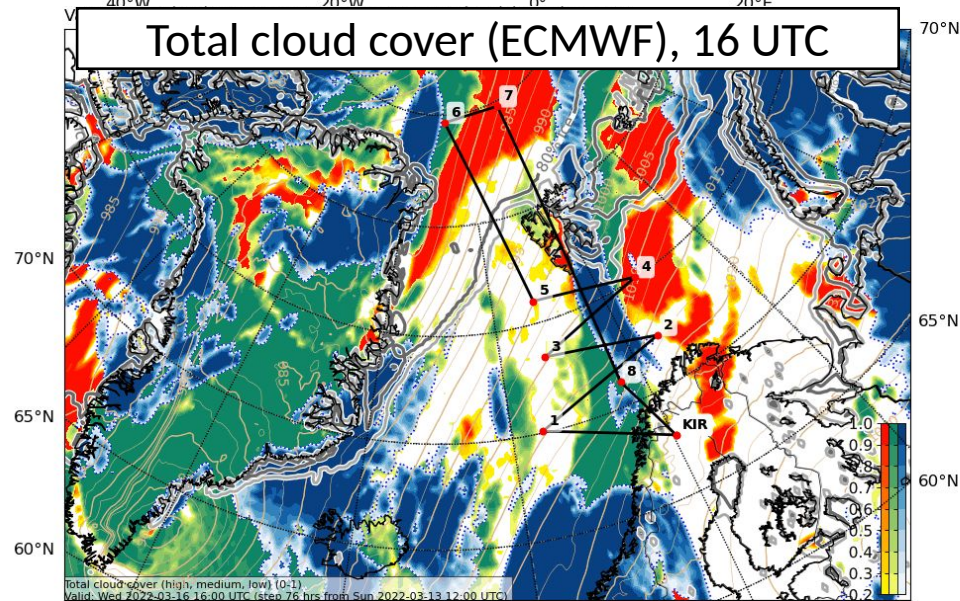
Total cloud cover (ECMWF), 12 UTC



Total cloud cover (ECMWF), 14 UTC



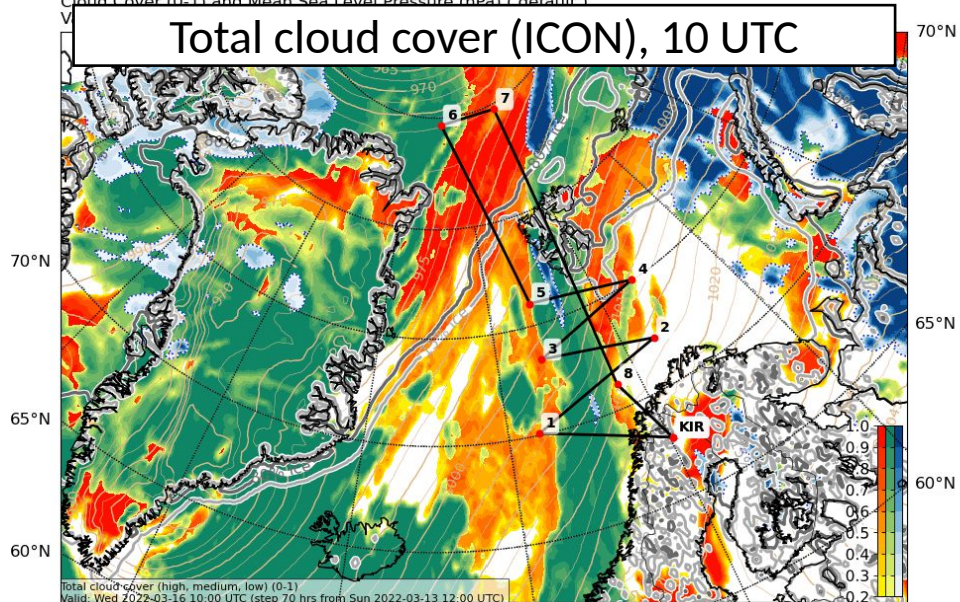
Total cloud cover (ECMWF), 16 UTC



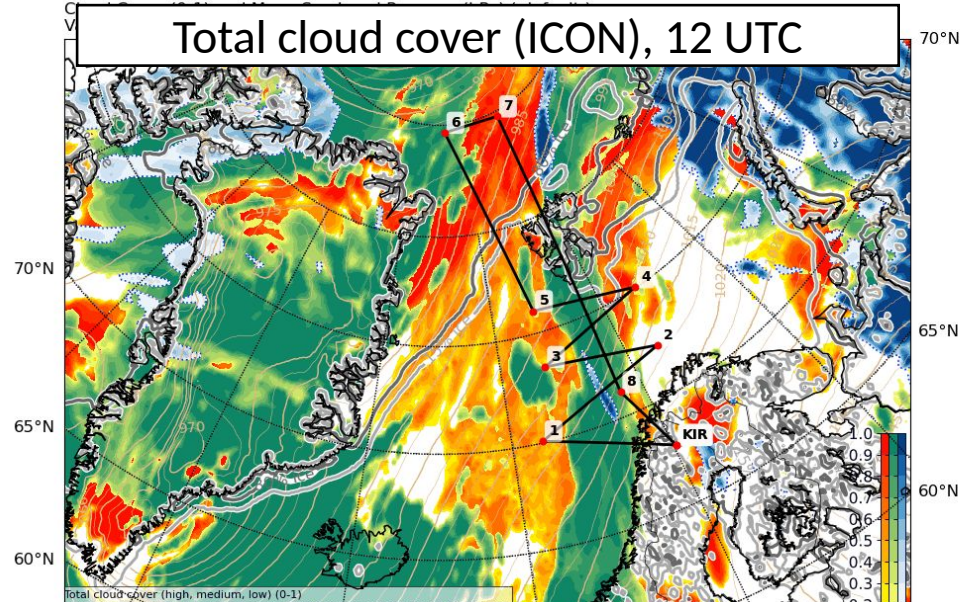
Wed, 2022-03-16, Total cloud cover (ICON), 10 - 16 UTC

Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (default)

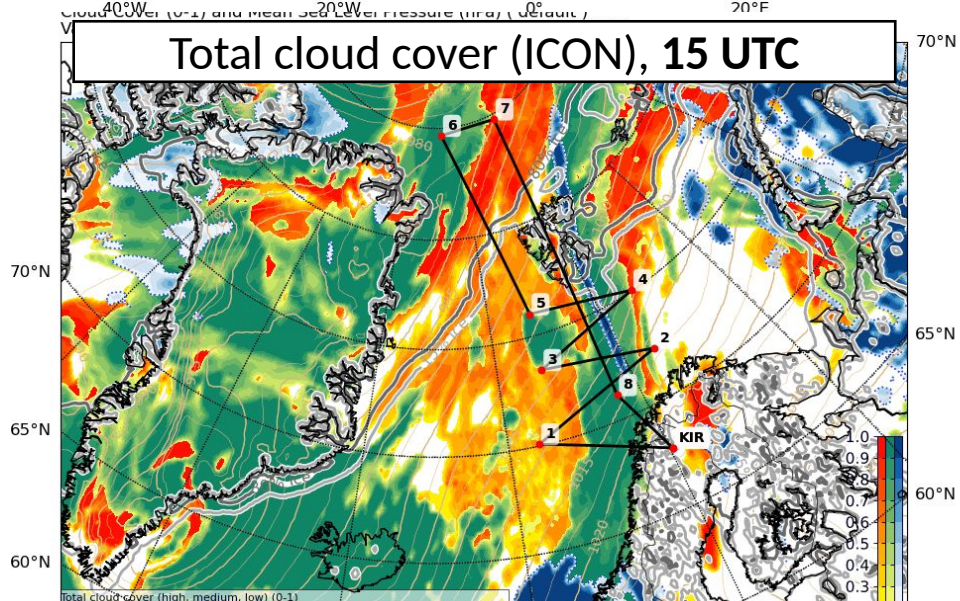
Total cloud cover (ICON), 10 UTC



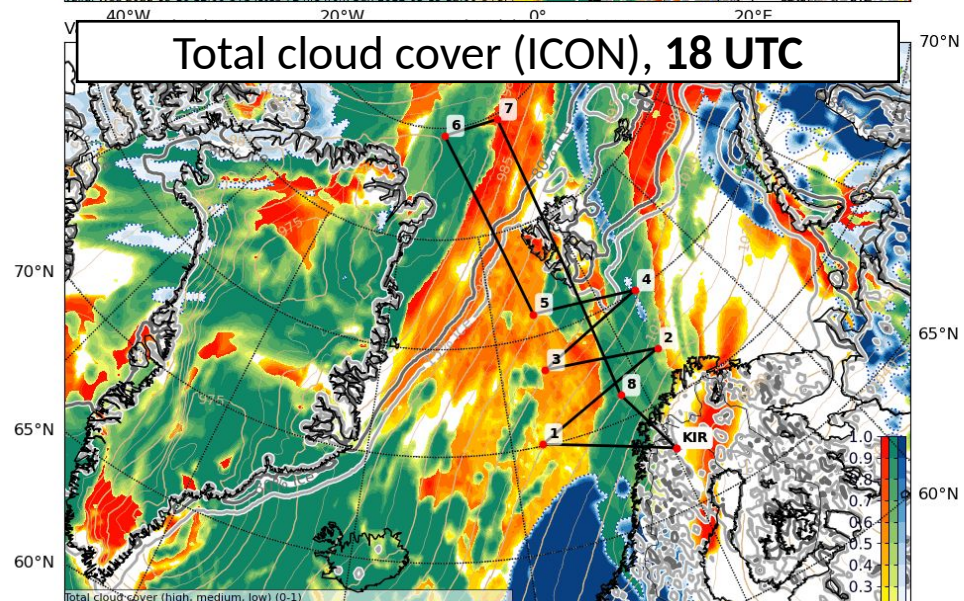
Total cloud cover (ICON), 12 UTC



Total cloud cover (ICON), 15 UTC

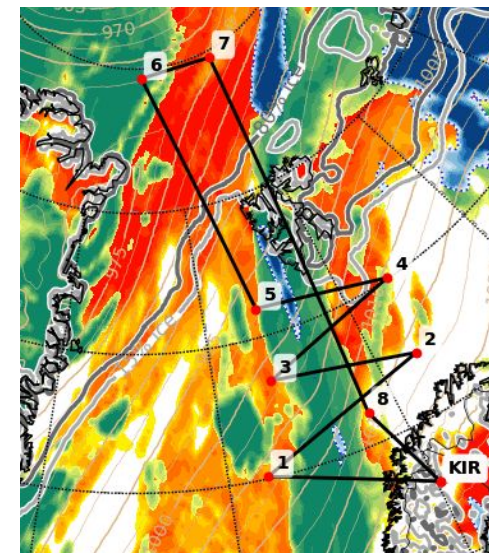
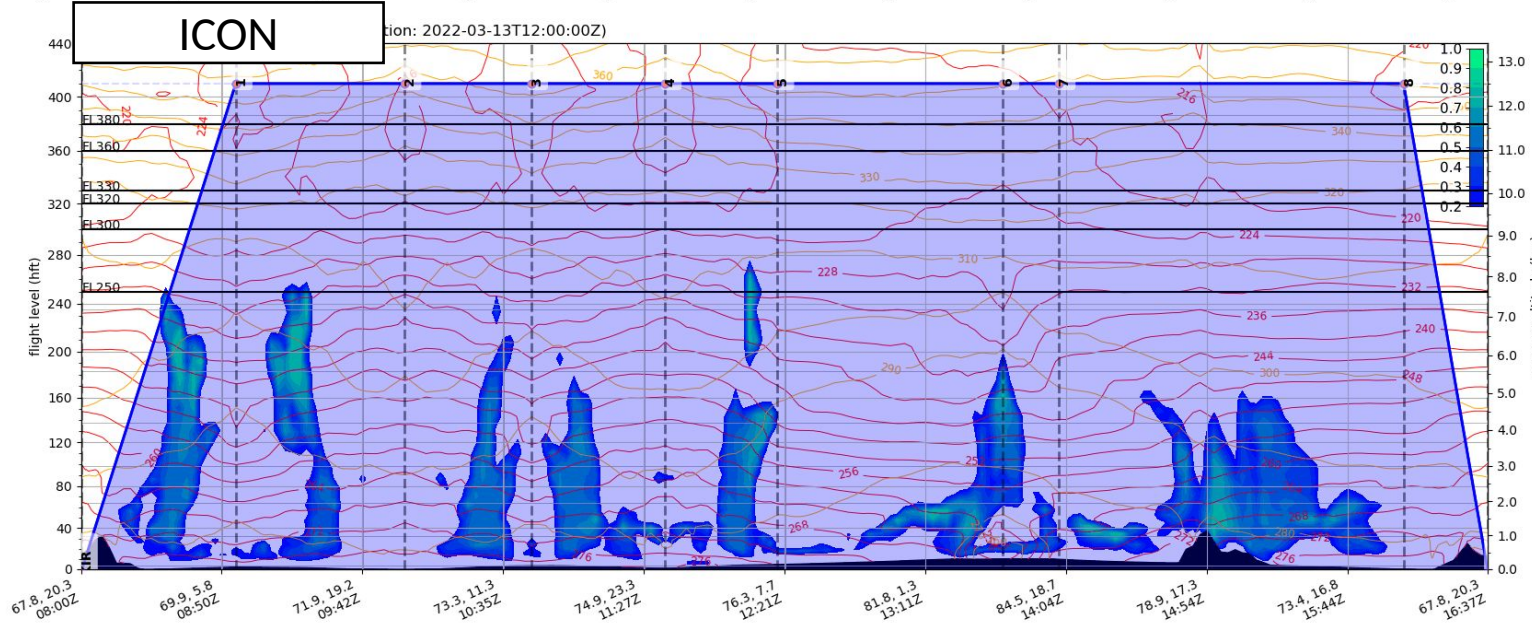
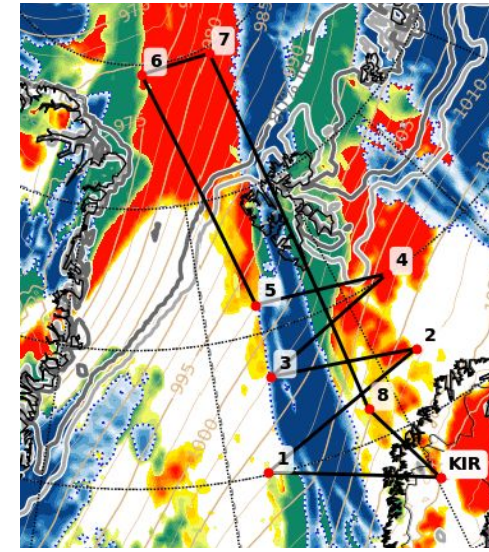
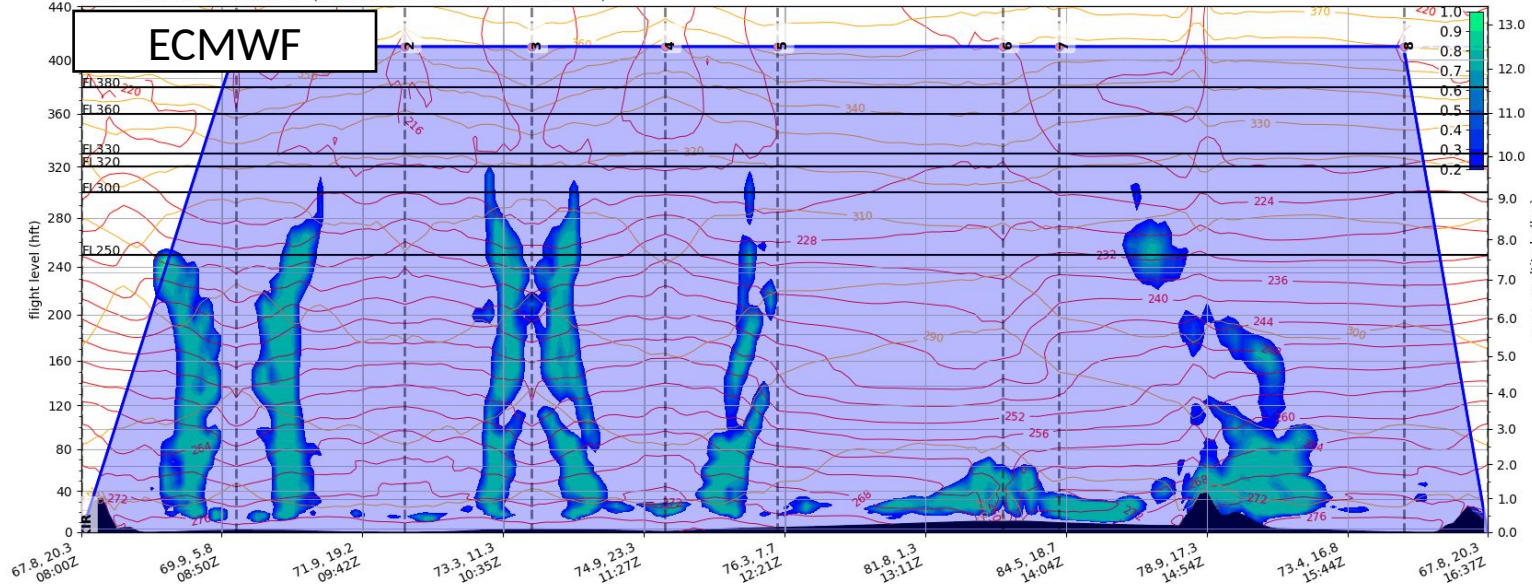


Total cloud cover (ICON), 18 UTC

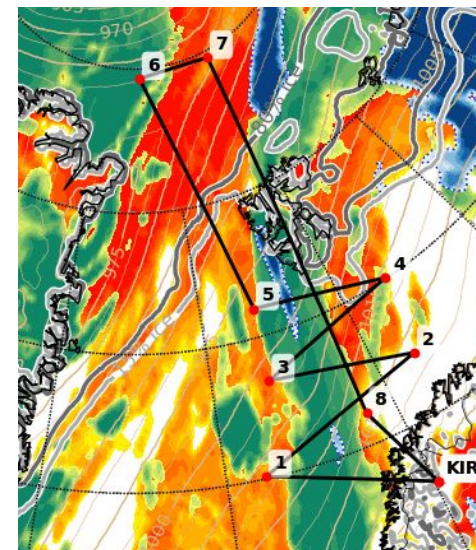
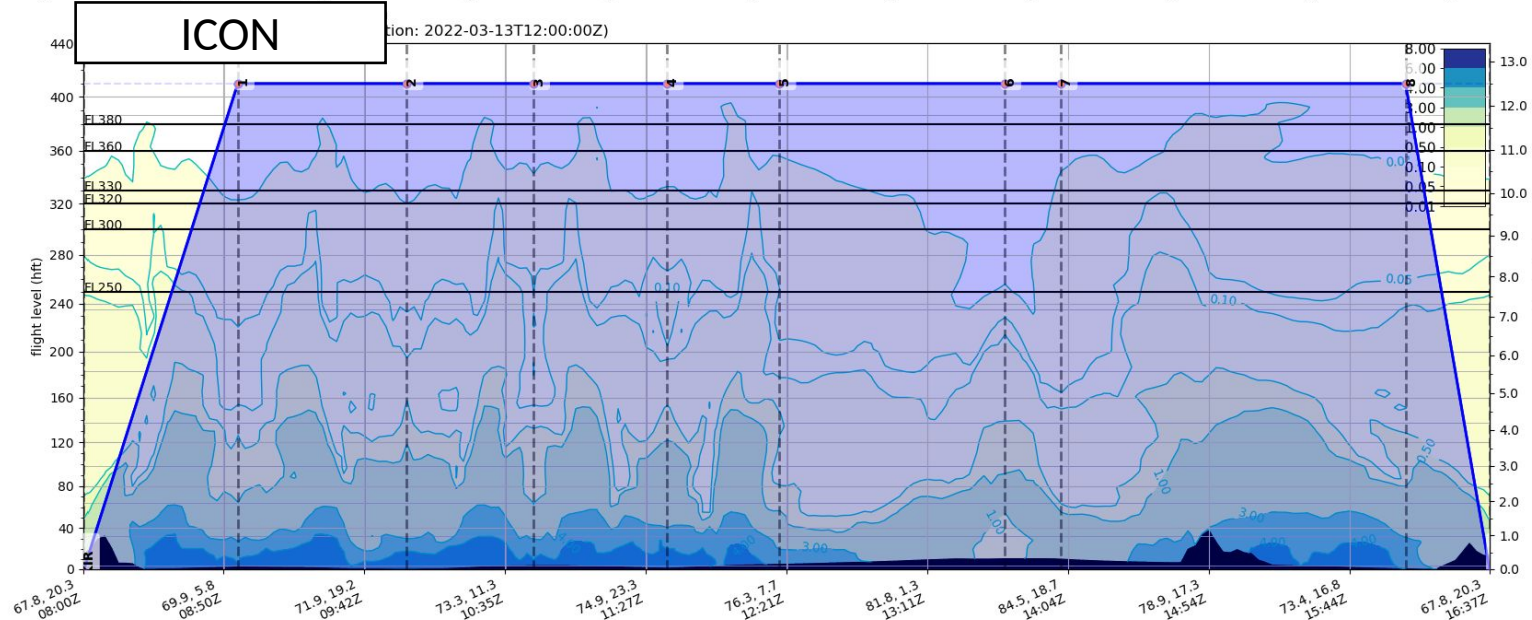
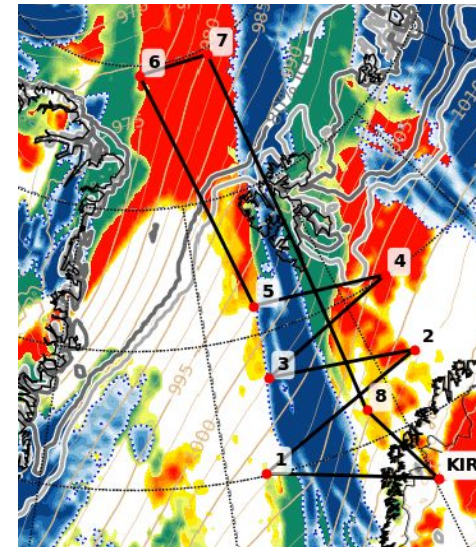
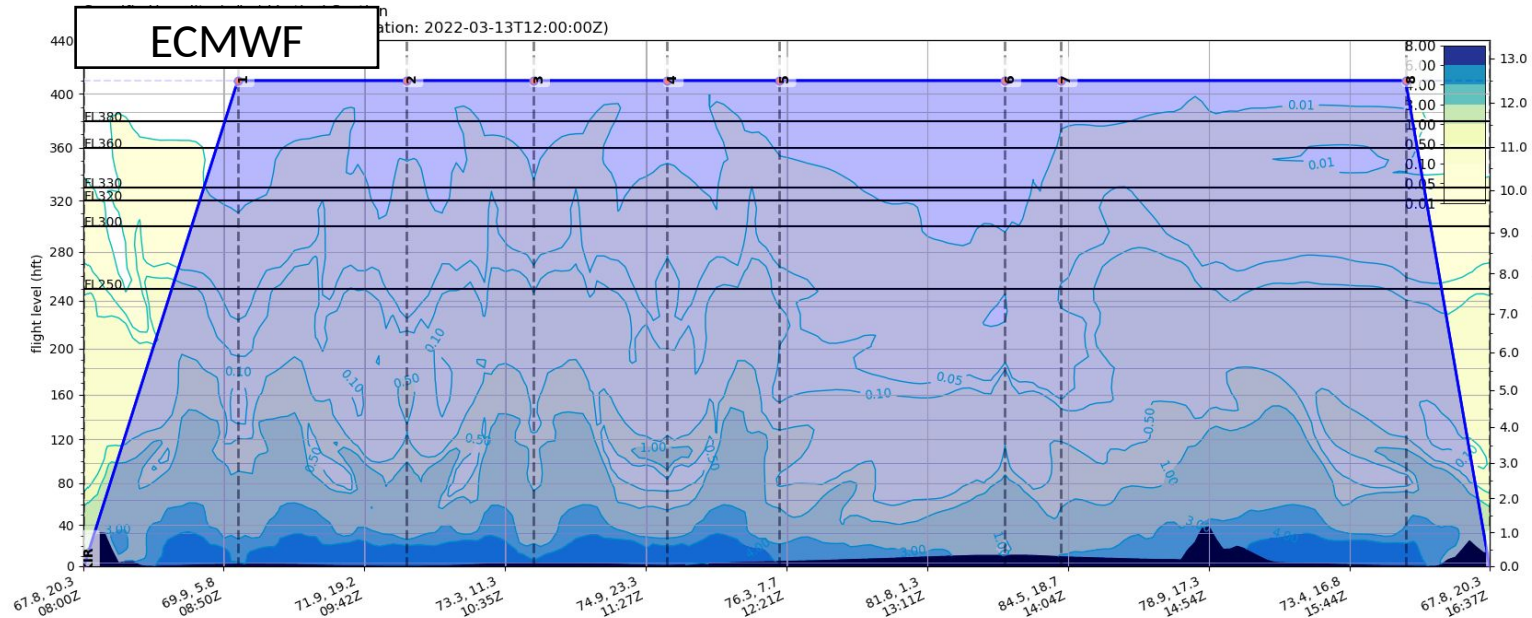


Wed, 2022-03-16, Clouds, 10 UTC

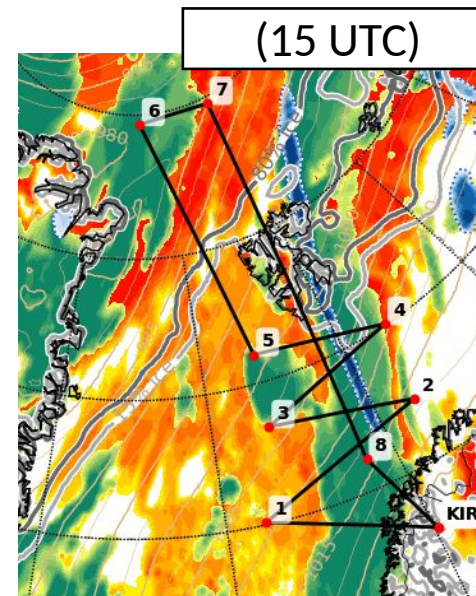
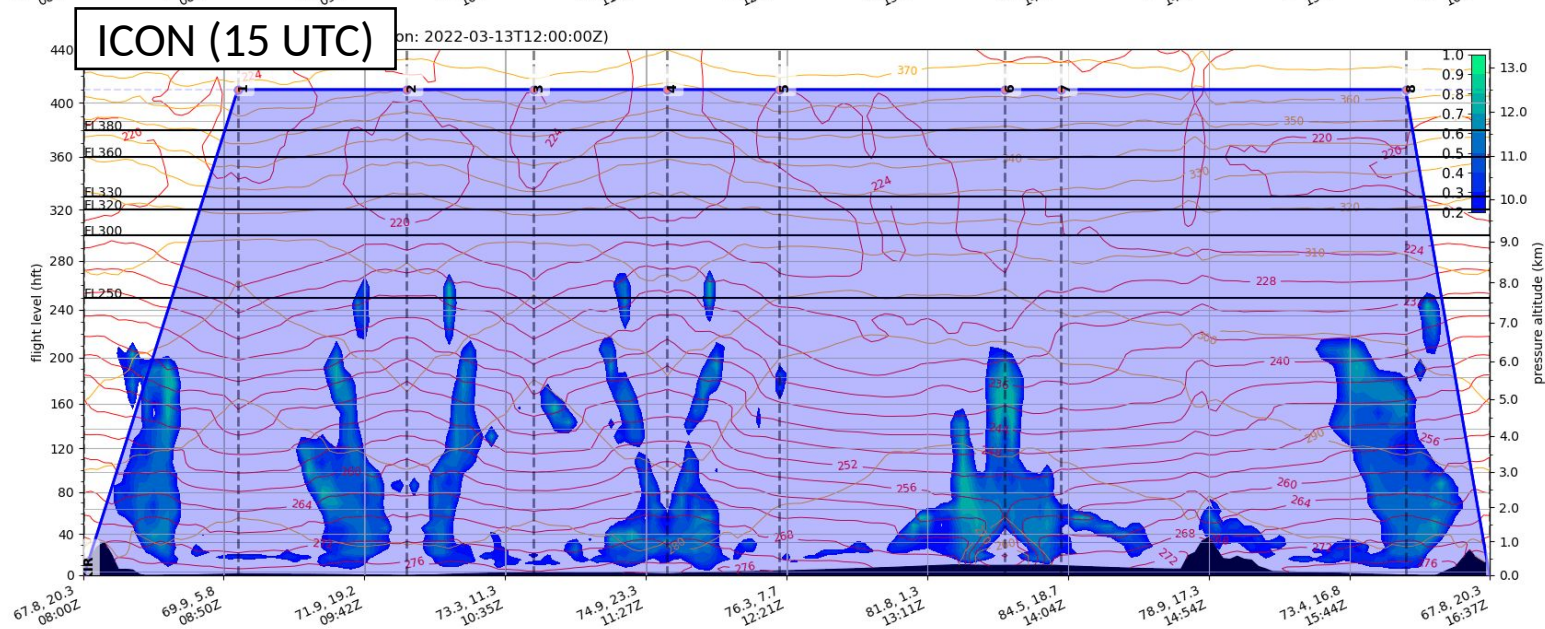
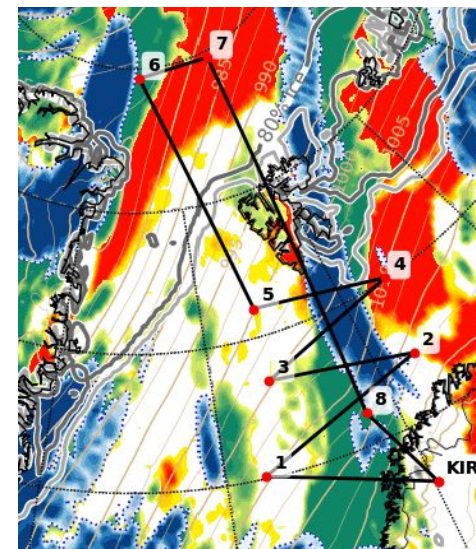
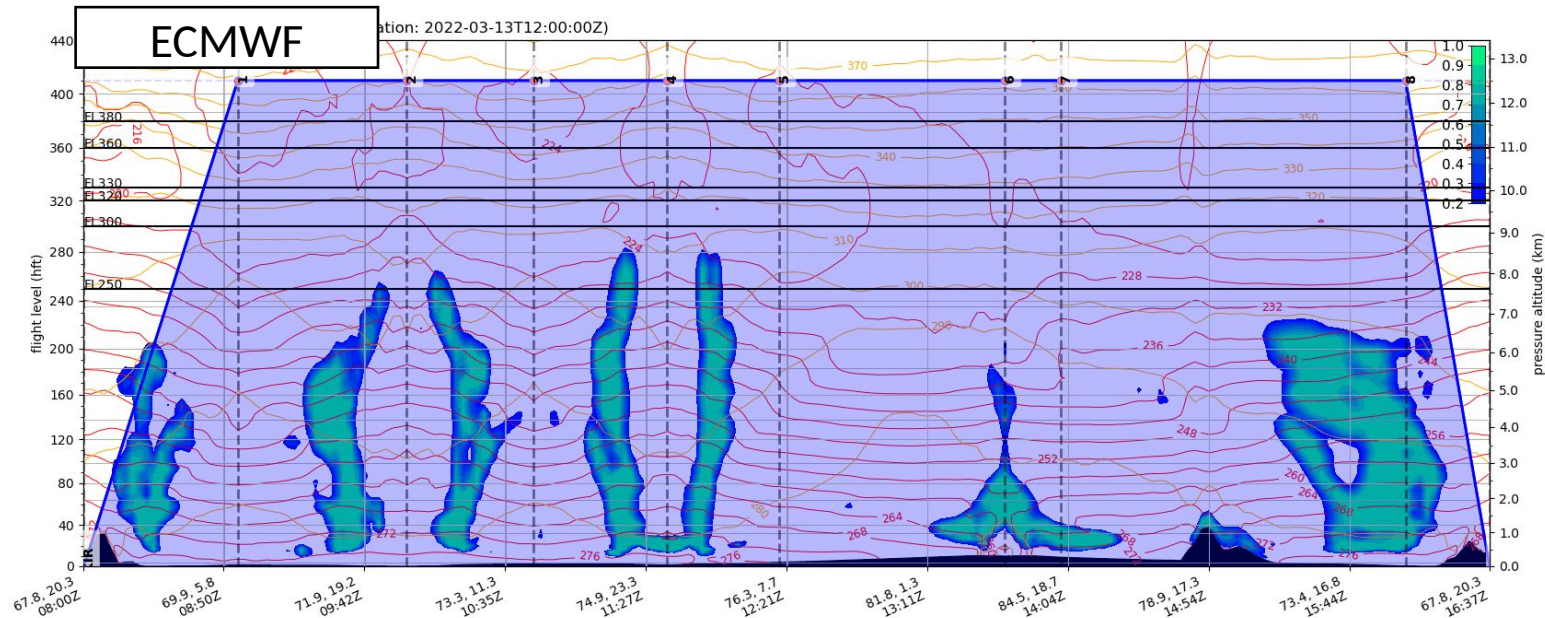
Cloud Cover (0-1) Vertical Section
Valid: 2022-03-16T10:00:00Z (initialisation: 2022-03-13T12:00:00Z)



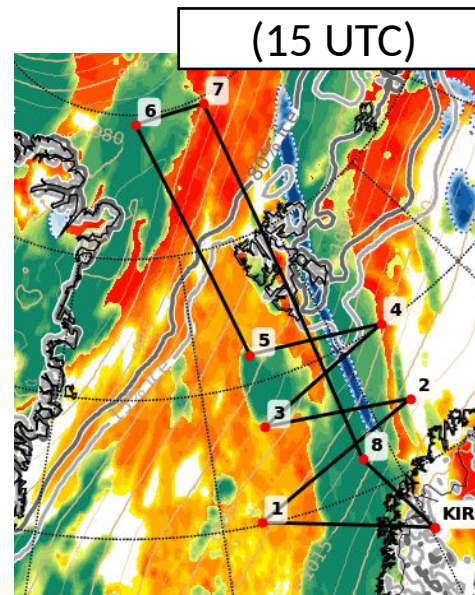
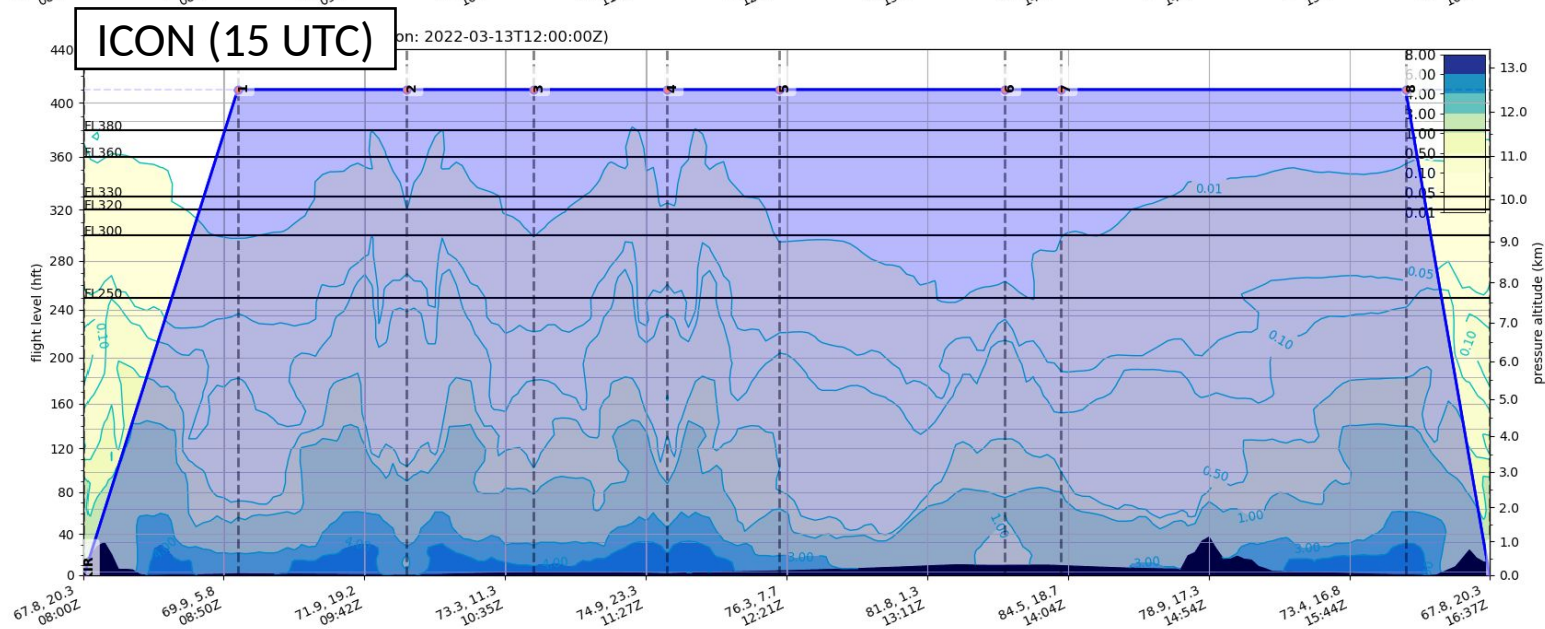
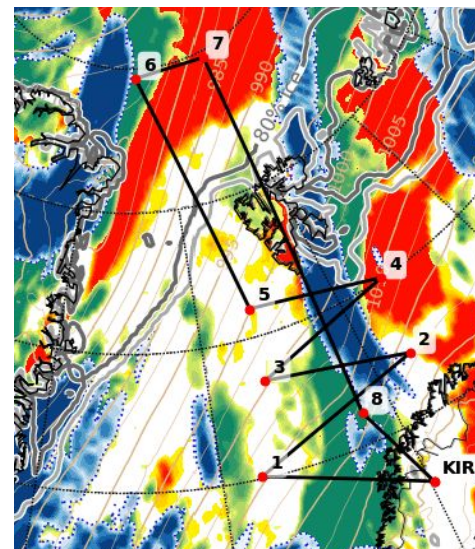
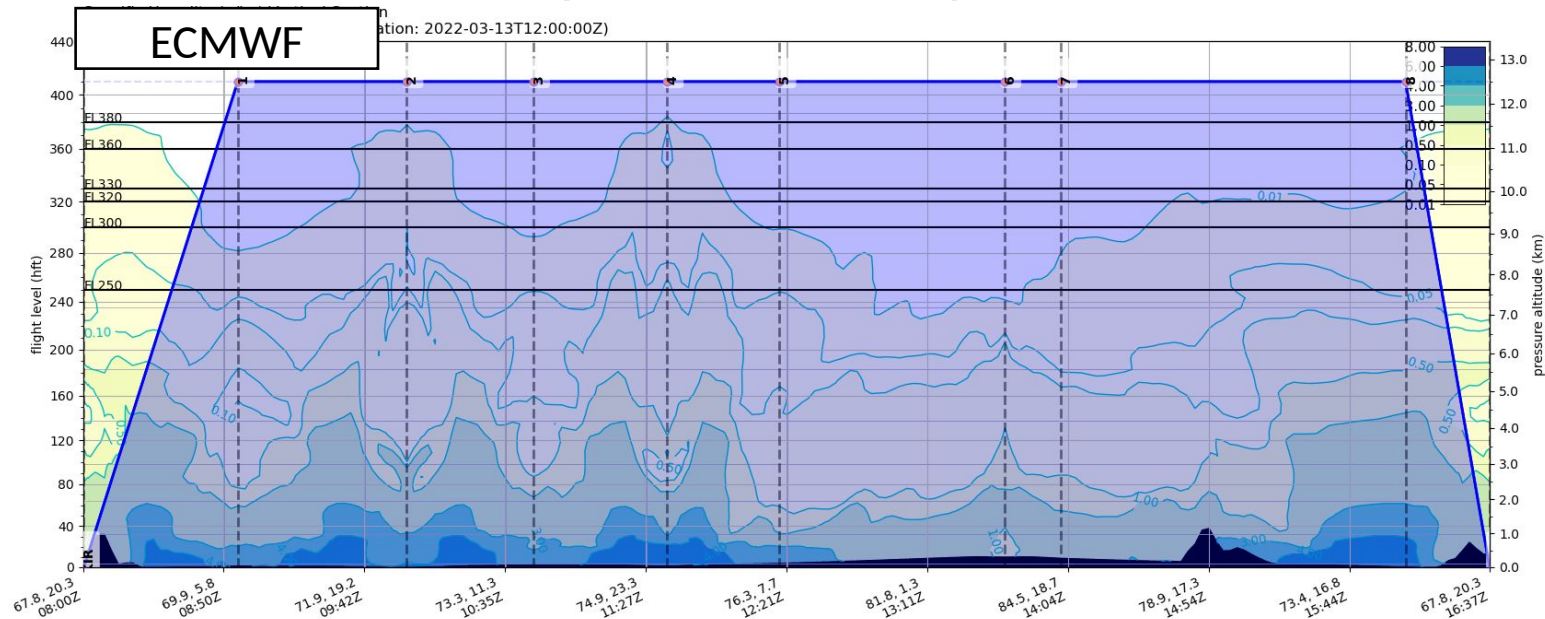
Wed, 2022-03-16, Specific humidity, 10 UTC



Wed, 2022-03-16, Clouds, 16 UTC

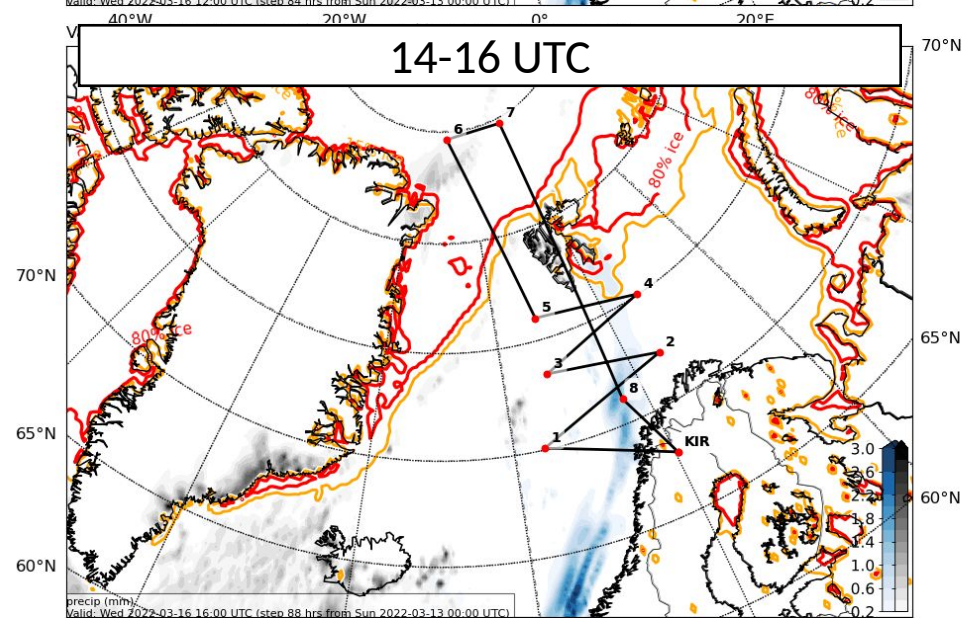
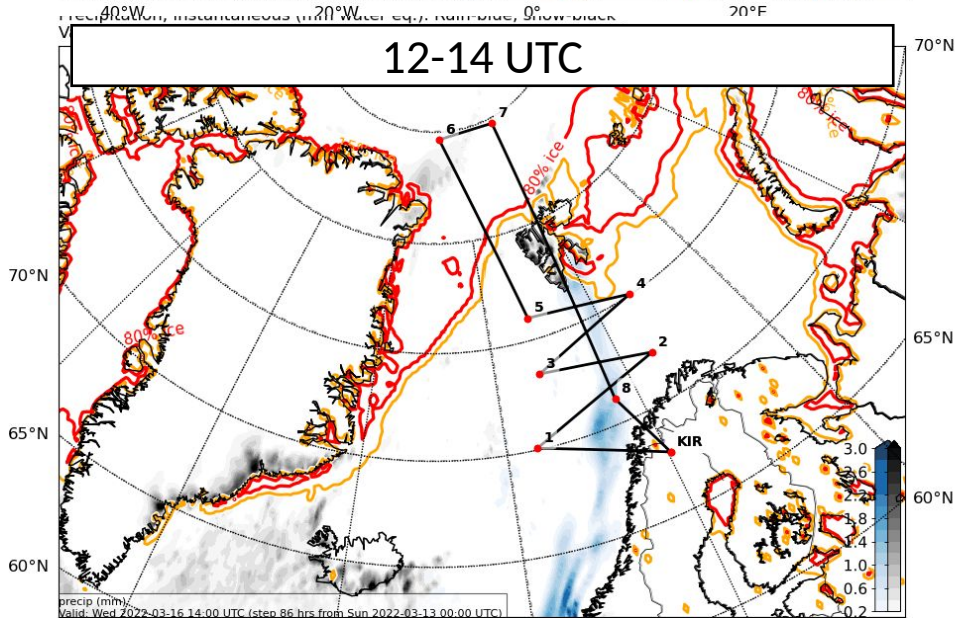
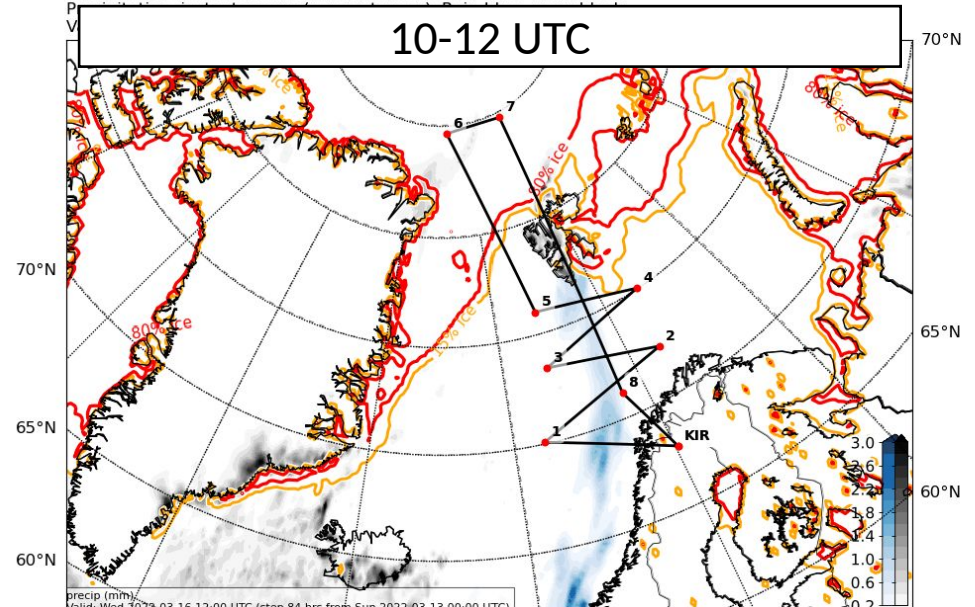
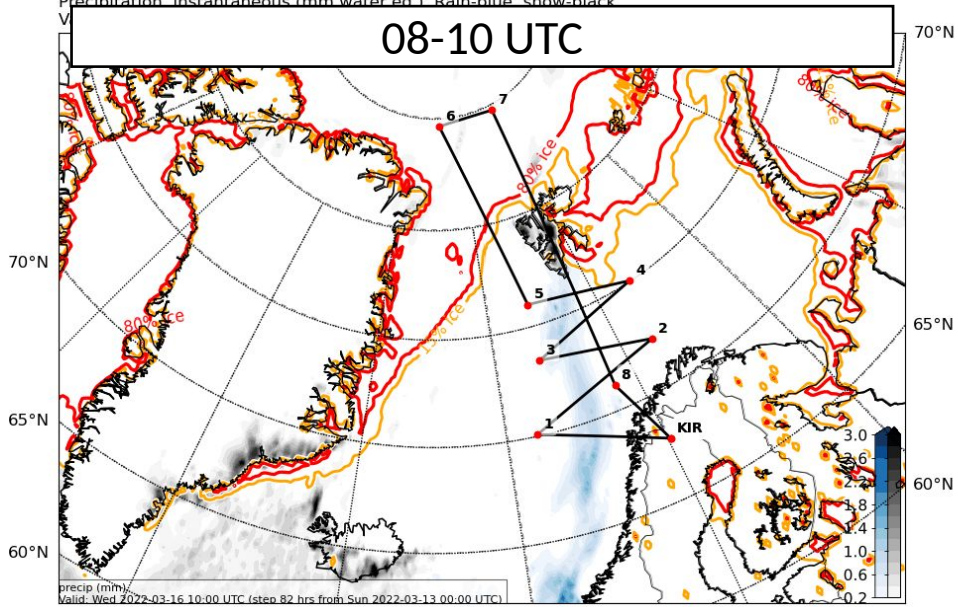


Wed, 2022-03-16, Specific humidity, 16 UTC



Wed, 2022-03-16, 2h Precipitation (ECMWF), 08 - 16 UTC

Precipitation instantaneous (mm water eq.) Rain-blue, snow-black



Summary

Summary: Weather Update 2022-03-14, 09:00 LT

•Tuesday, 2022-03-15:

- AR directed towards Fram Strait predicted slightly more to the East than 12h before
- ECMWF cross-sections denote cloud tops near 12.5km, but might be rather near 12km according to simulated soundings
- ICON with slightly lower cloud top height and smaller cloud cover in general
- Tropopause height in eastern Fram Strait probably above 12km (GFS)

•Wednesday, 2022-03-16:

- Southern part of AR predicted slightly more to the West than 12h before
- AR moves to East/Northeast with only little changes in intensity
- Multi-layered clouds associated with AR from Norwegian coast to Arctic Ocean
- Rain between Norwegian coast and Svalbard, some snow further north
- Cloud tops in AR event lower than 10km
- Low-level clouds with only little snow in warm sector of cyclone over Arctic Ocean
- Northeast of Greenland also higher level clouds and some snow mainly due to cold front