

Weather briefing HALO-(AC)³

Thursday, 2022-03-02 17:00

GO / NO GO

Thursday, 2022-03-03

METAR LYR and KRN

LYR

Svalbard Airport. Longyear

Longyearbyen, Norway

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

Current weather observation

The report was made **28** minutes ago, at **08:20** UTC

Wind **9** kt from the **North**

Temperature **-13°C**

Humidity **92%**

Pressure **1016** hPa

Visibility: **0900** m

snow

[Change units](#)

Time: 09:48 (08:48 UTC)

Forecast

Forecast valid from 03 at 06 UTC to 04 at 06 UTC

Wind **9** kt from the **North/Northwest**

Visibility 10 km or more

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

light snow

*Temporary
from 03 at 06 UTC to 04 at 06 UTC*

Visibility: **1000** m

at a height of **600** ft

snow

TAF: ENSB 0306/0406 33009KT 9999 -SN
FEW010 BKN020 TEMPO 0306/0406 1000
SN VV006

KRN

Kiruna Airport

Kiruna, Sweden

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

Current weather observation

The report was made **28** minutes ago, at **08:20** UTC

Wind **11** kt from the **West/Northwest**, varying
between **West** and **North/Northwest**

Temperature **-2°C**

Humidity **63%**

Pressure **1017** hPa

Visibility 10 km or more

[Change units](#)

Time: 09:48 (08:48 UTC)

Forecast

The report was made **18** minutes ago, at **08:30** UTC

Forecast valid from 03 at 09 UTC to 03 at 18 UTC

Wind **8** kt from the **West/Northwest**

Visibility 10 km or more

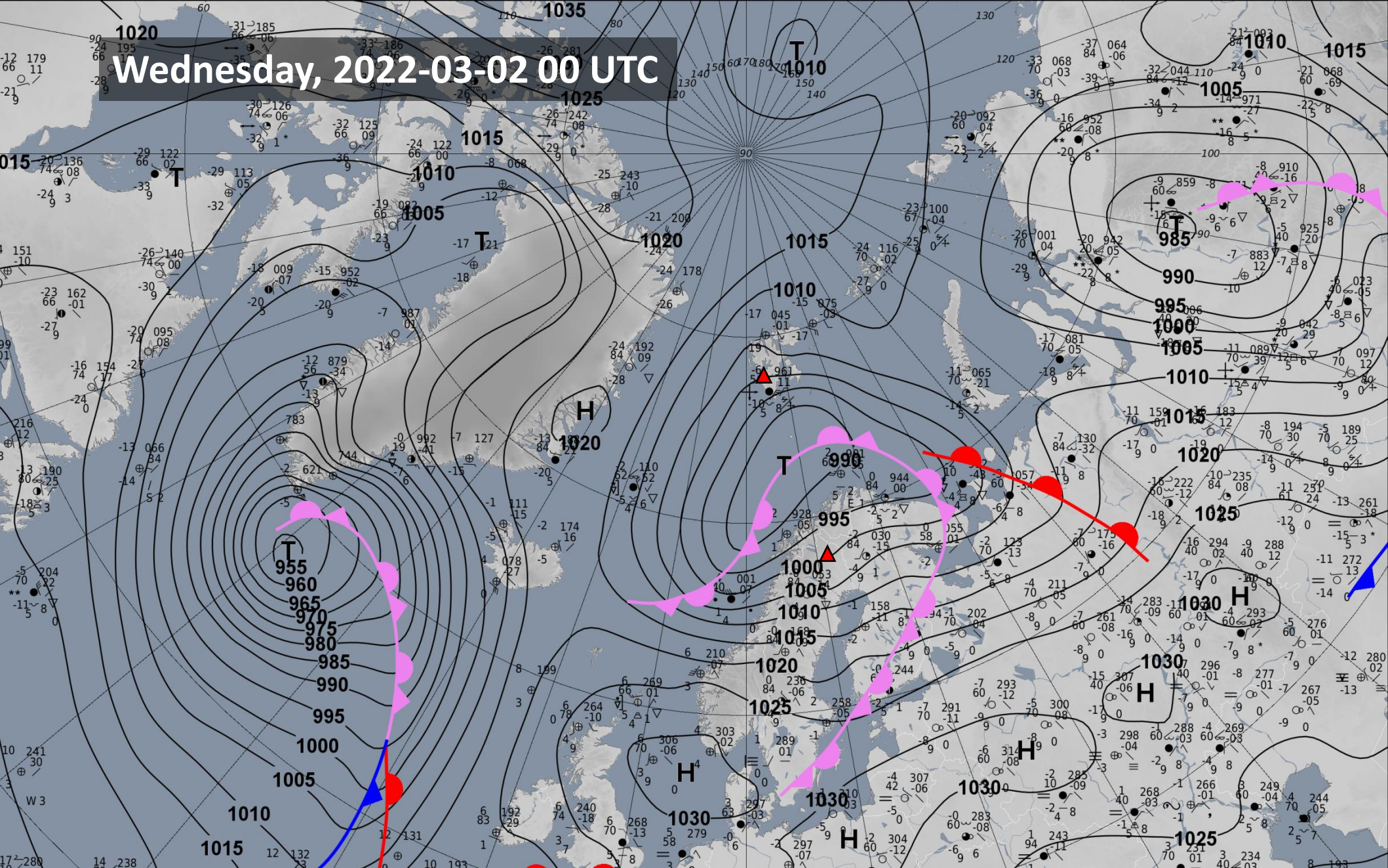
no clouds below 1500 m and no cumulonimbus

TAF: ESNQ 030830Z 0309/0318 29008KT
CAVOK

- LYR: light snow, moderate visibility
- KRN: no precip, good visibility

Surface Analysis
2022-03-02 00 UTC
DWD

Wednesday, 2022-03-02 00 UTC



Circulation pattern development

2022-03-02 00 UTC: 00 – 72h

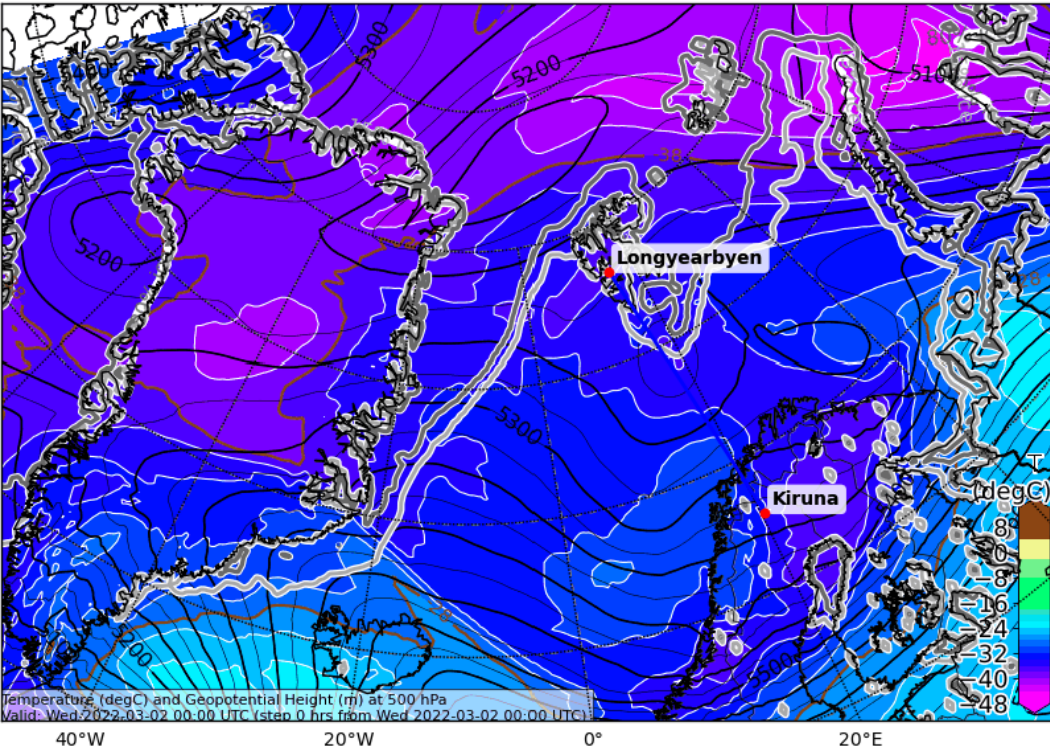
500 hPa Geopot & T

Sea level pressure

Wednesday, 2022-03-02 00 UTC (+00h)

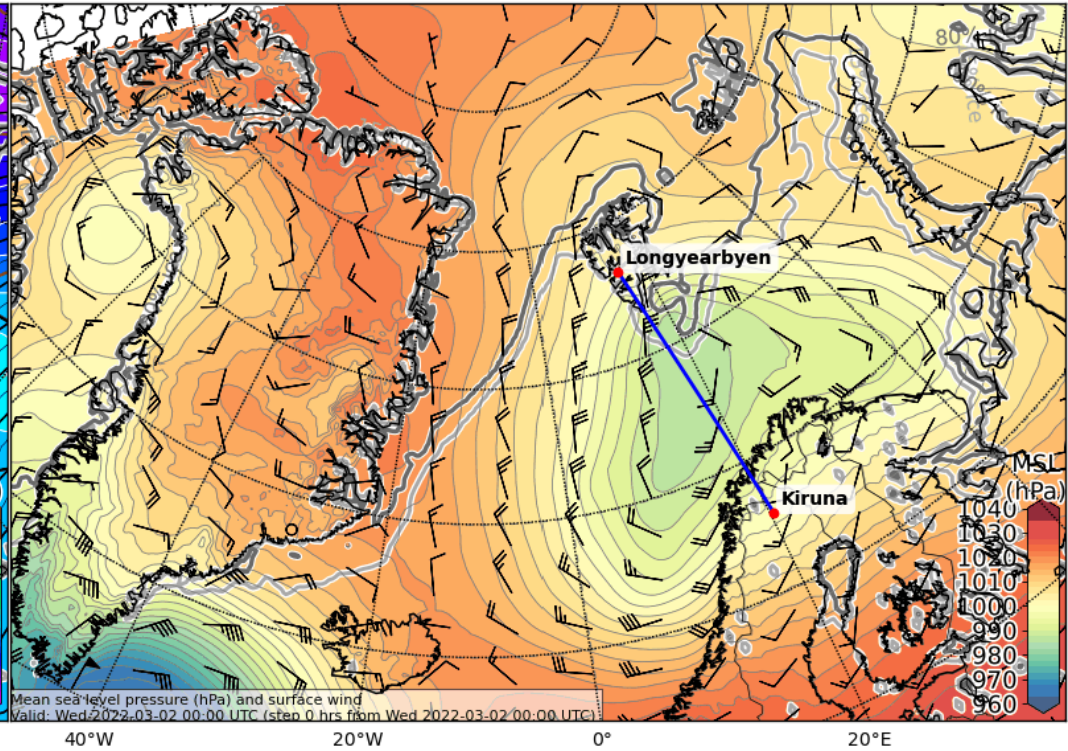
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-02T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

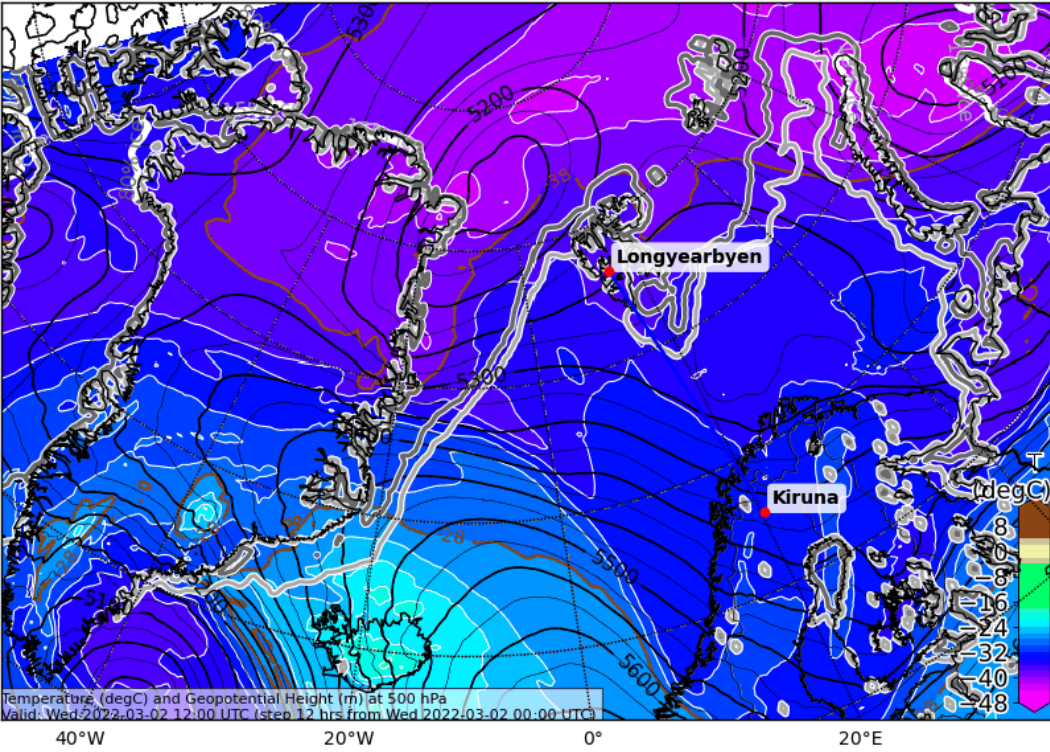
Mean Sea Level Pressure (hPa)
Valid: 2022-03-02T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Wednesday, 2022-03-02 12 UTC (+12h)

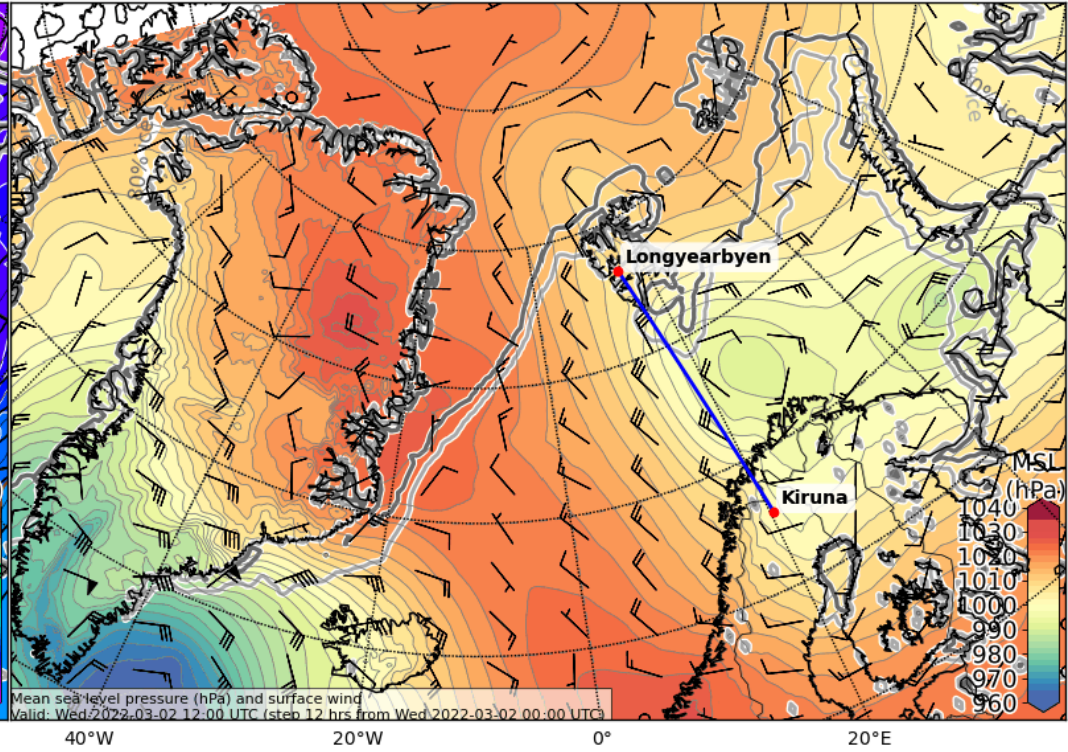
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-02T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

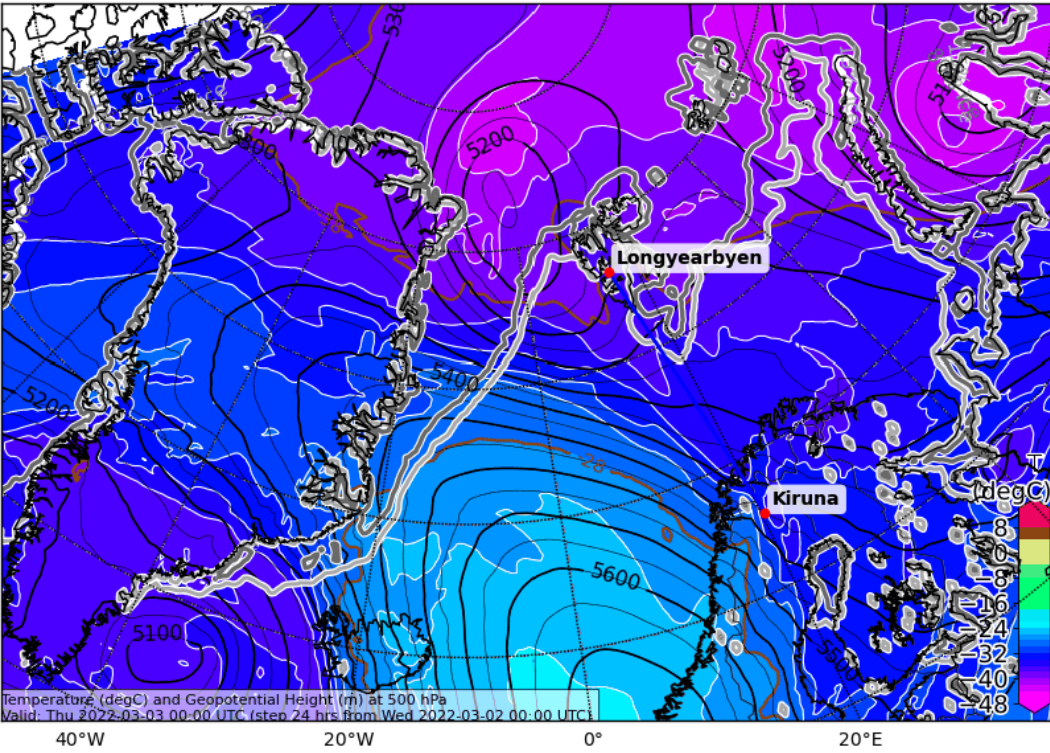
Mean Sea Level Pressure (hPa)
Valid: 2022-03-02T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Thursday, 2022-03-03 00 UTC (+24h)

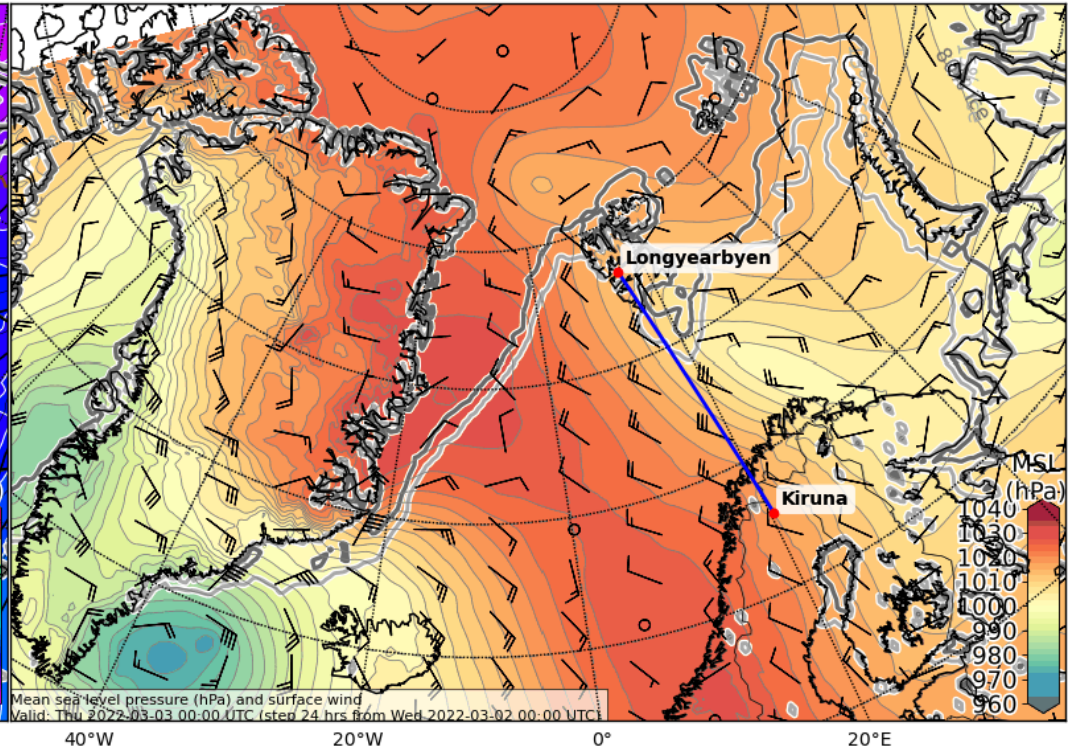
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-03T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

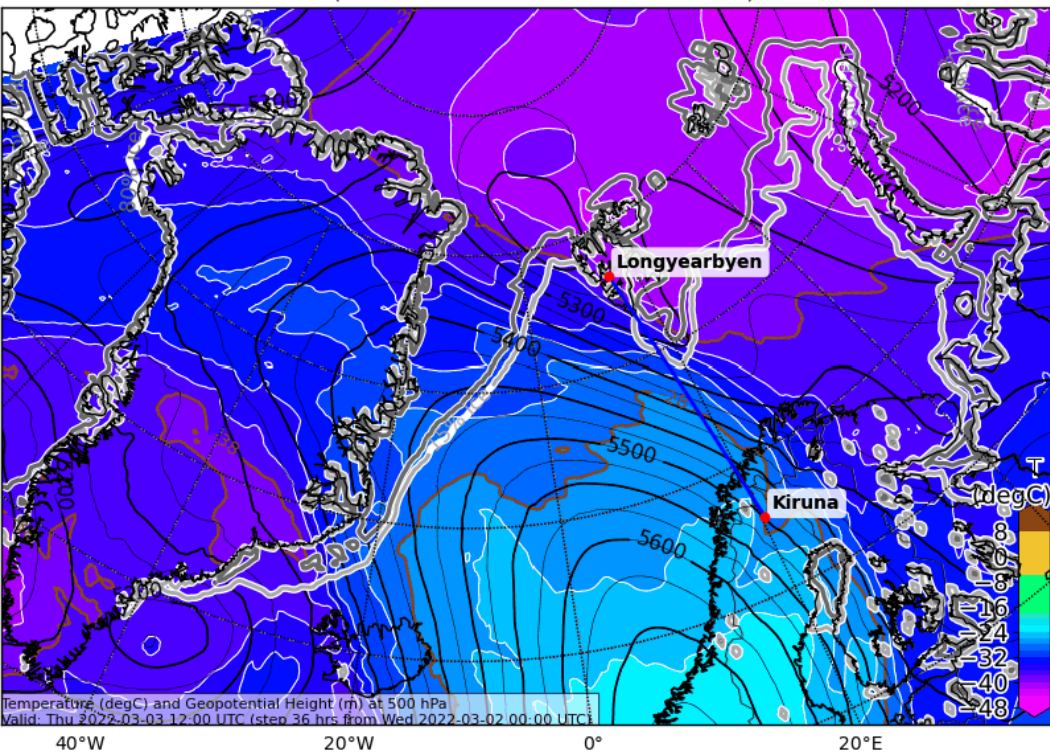
Mean Sea Level Pressure (hPa)
Valid: 2022-03-03T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Thursday, 2022-03-03 12 UTC (+36h)

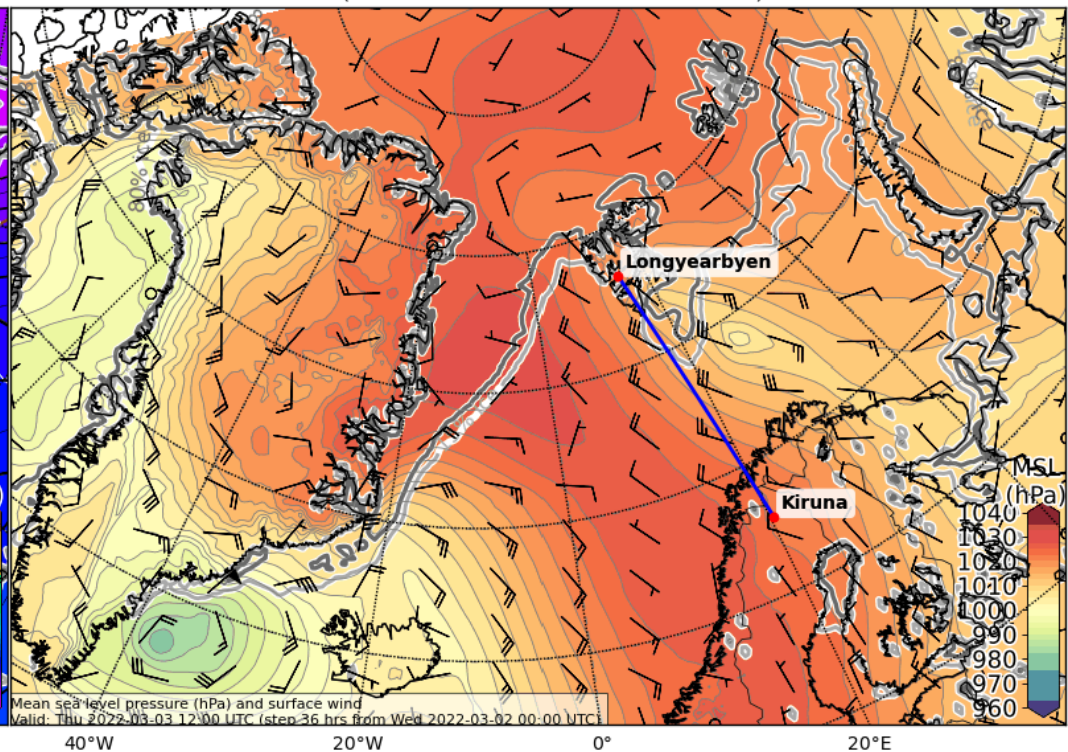
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-03T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

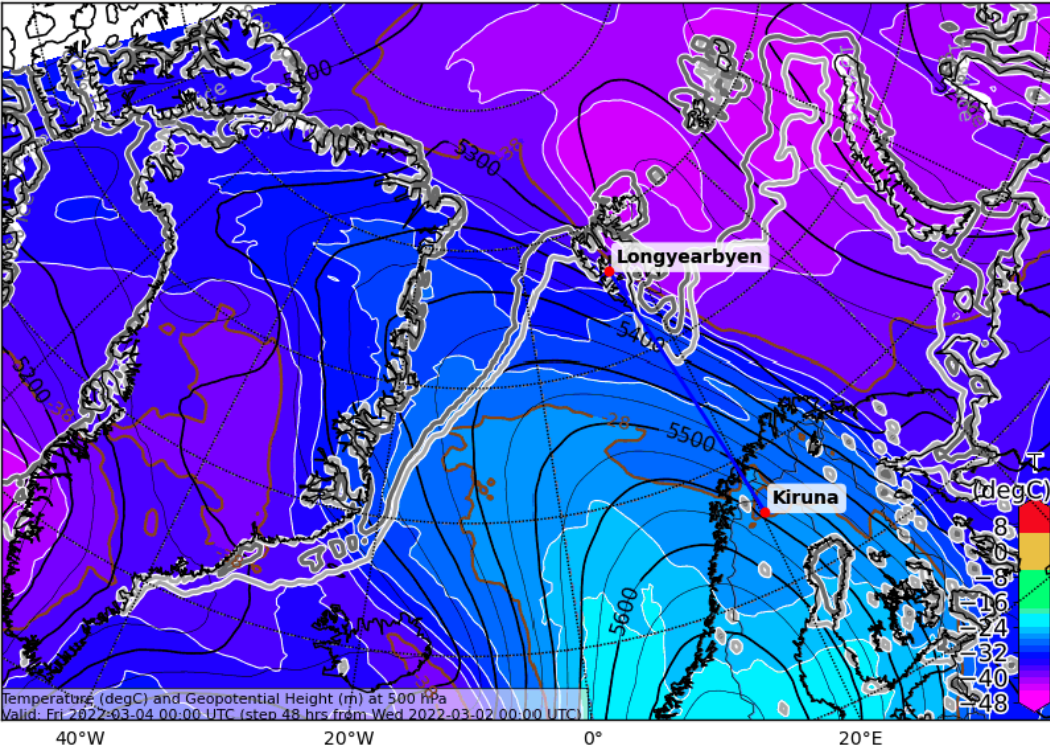
Mean Sea Level Pressure (hPa)
Valid: 2022-03-03T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Friday, 2022-03-04 00 UTC (+48h)

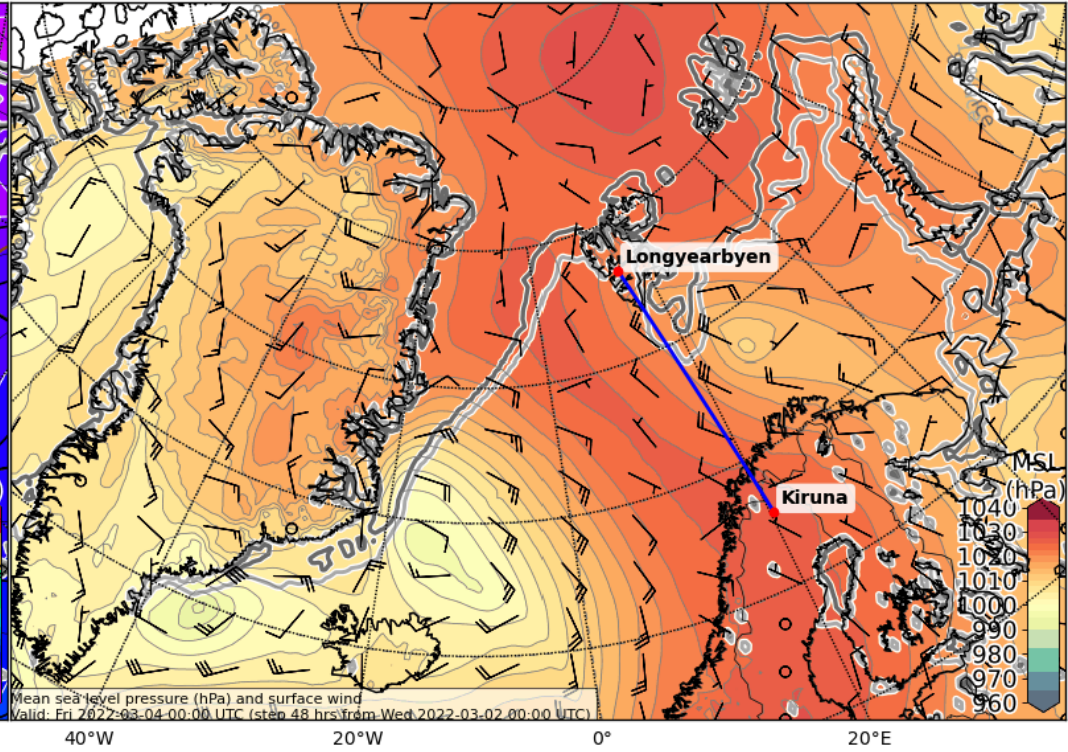
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-04T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

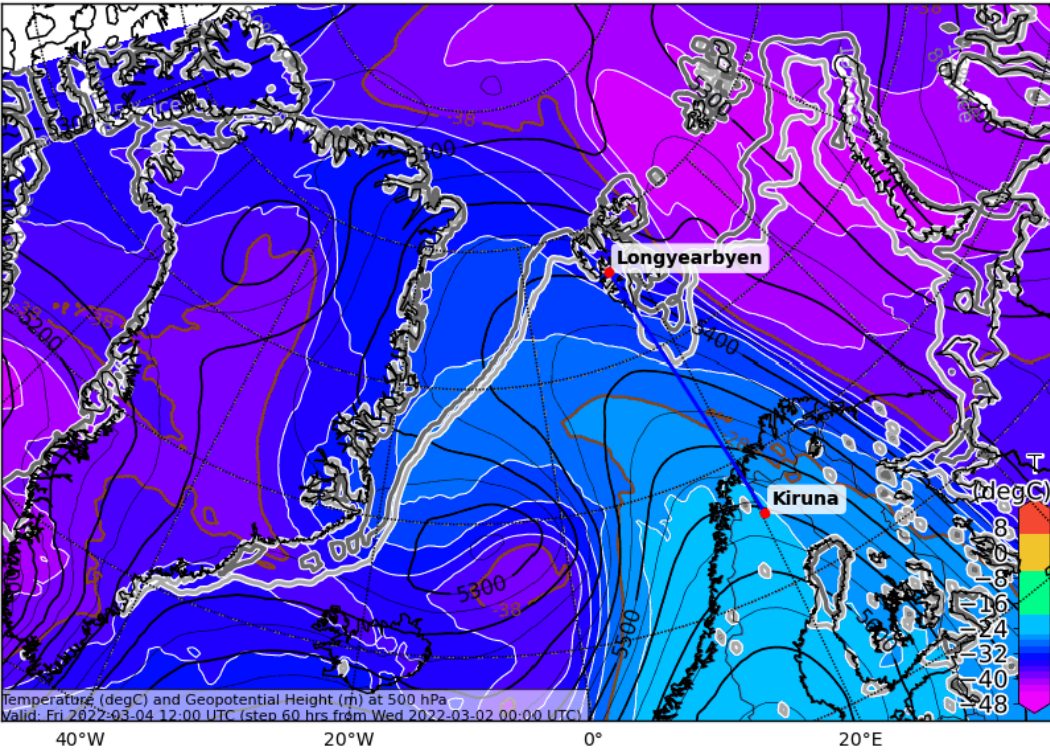
Mean Sea Level Pressure (hPa)
Valid: 2022-03-04T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Friday, 2022-03-04 12 UTC (+60h)

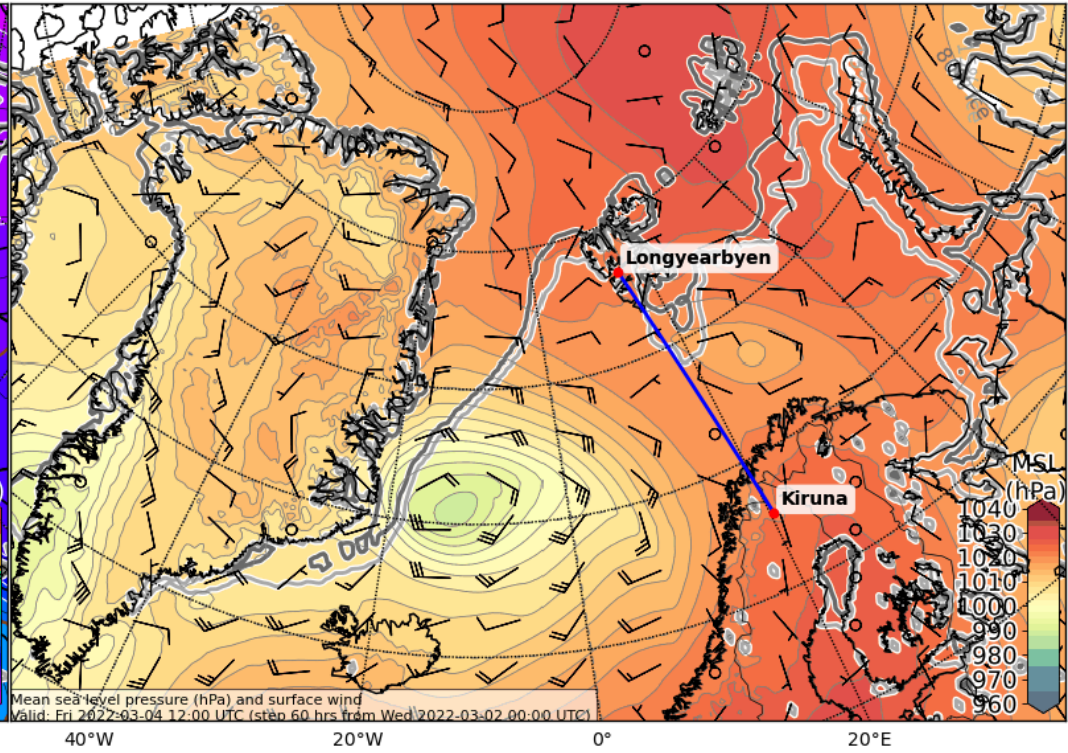
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-04T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

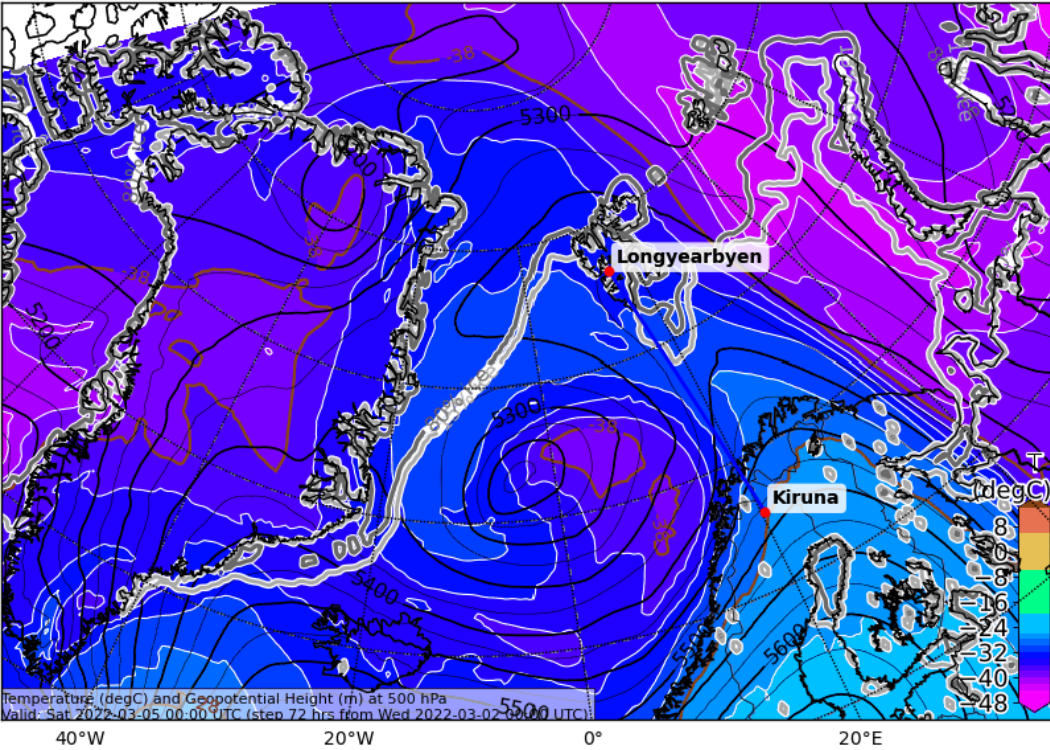
Mean Sea Level Pressure (hPa)
Valid: 2022-03-04T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Saturday, 2022-03-05 00 UTC (+72h)

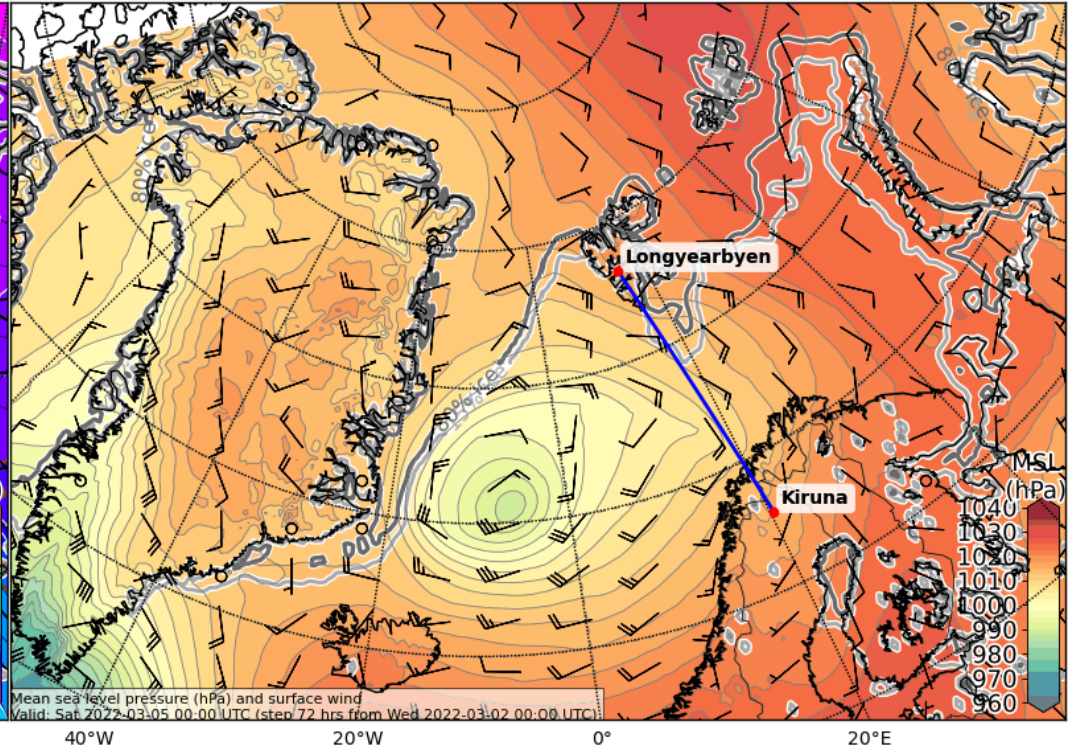
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-05T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

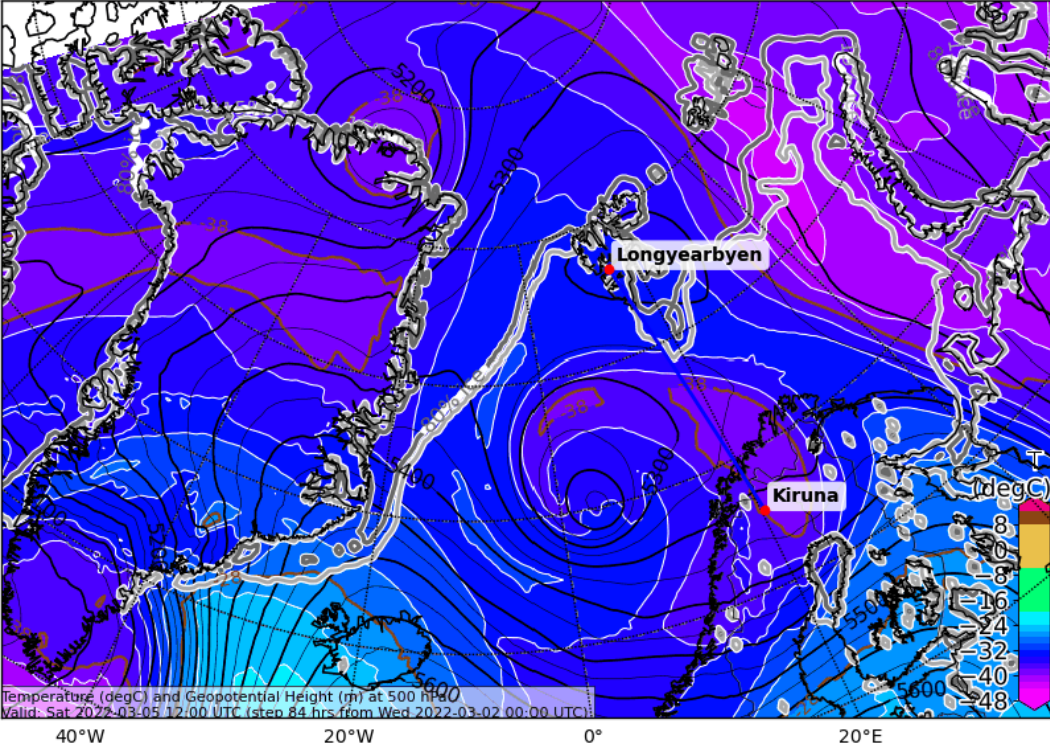
Mean Sea Level Pressure (hPa)
Valid: 2022-03-05T00:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Saturday, 2022-03-05 12 UTC (+84h)

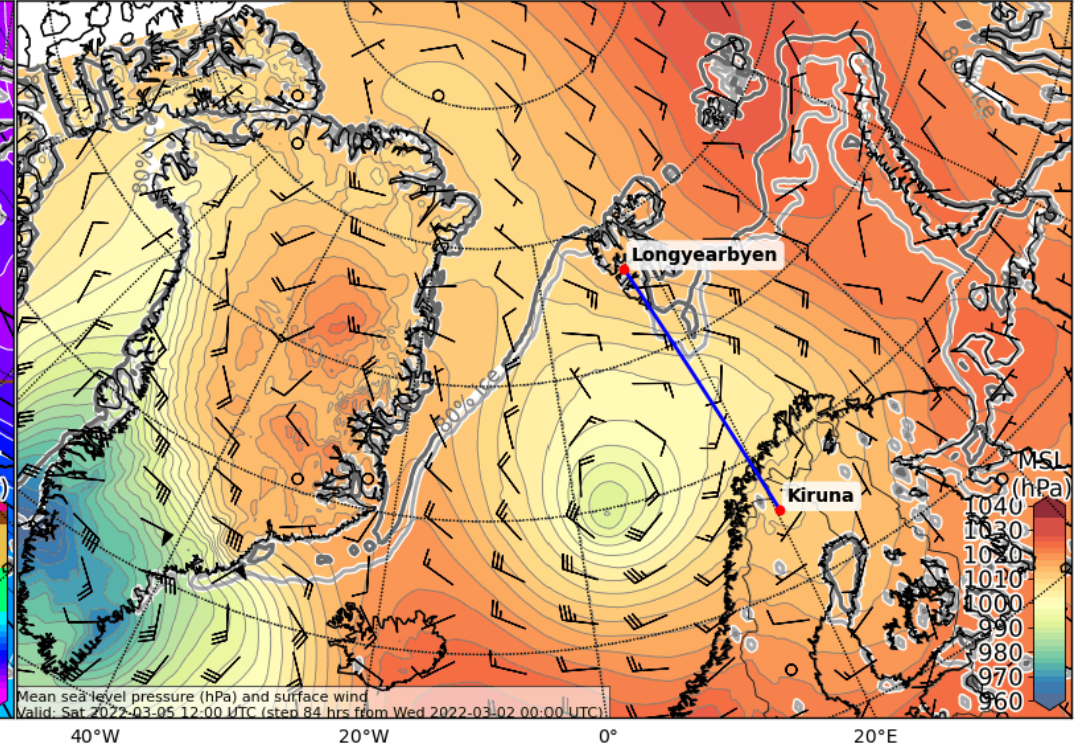
500 hPa Geopot & T

Temperature (degC) and Geopotential Height (m) at 500.0 (hPa)
Valid: 2022-03-05T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Sea level pressure

Mean Sea Level Pressure (hPa)
Valid: 2022-03-05T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Surface wind development
2022-03-02 00 UTC: 00 – 72h
ECMWF

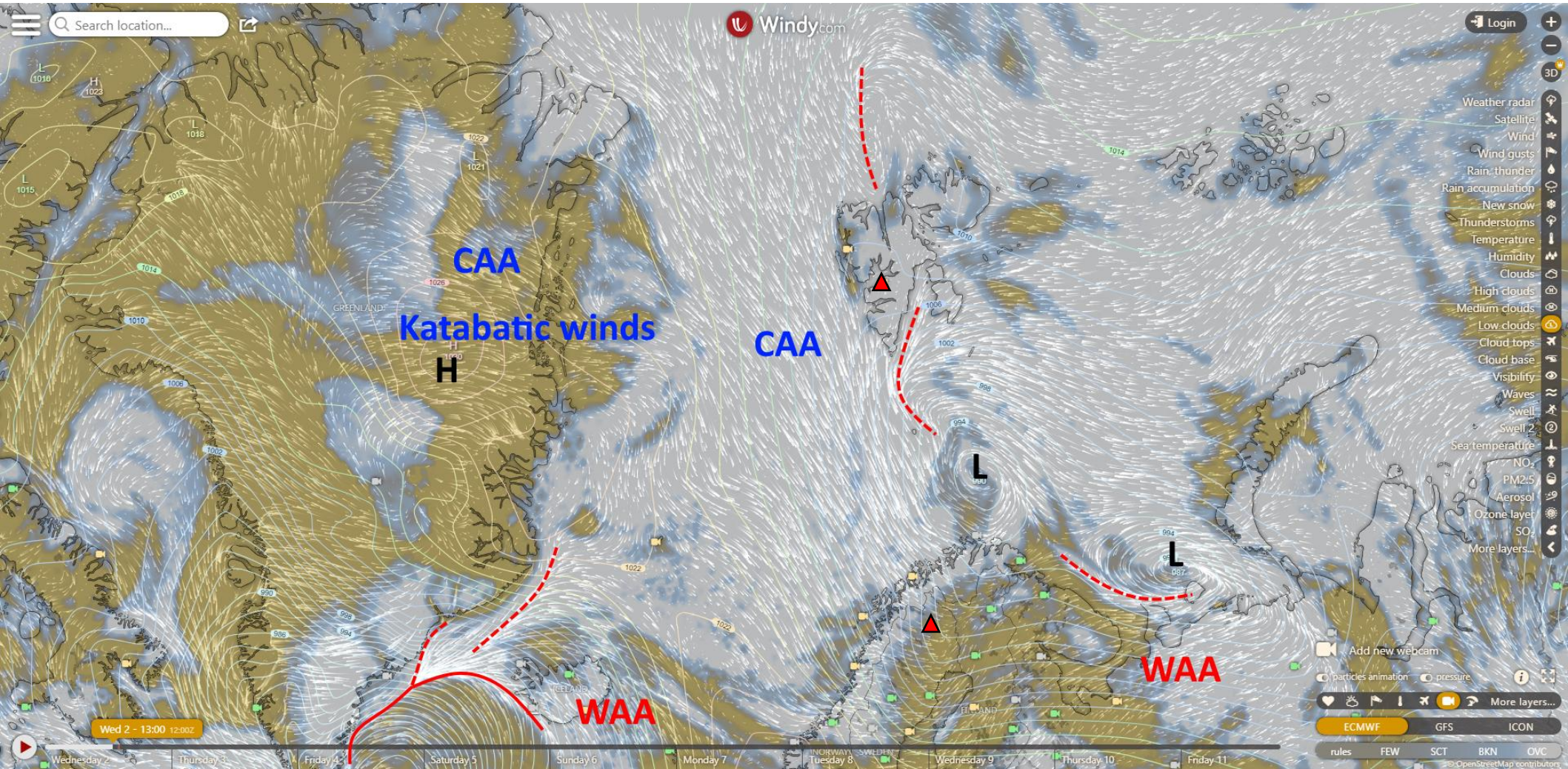
L: Low

H: High

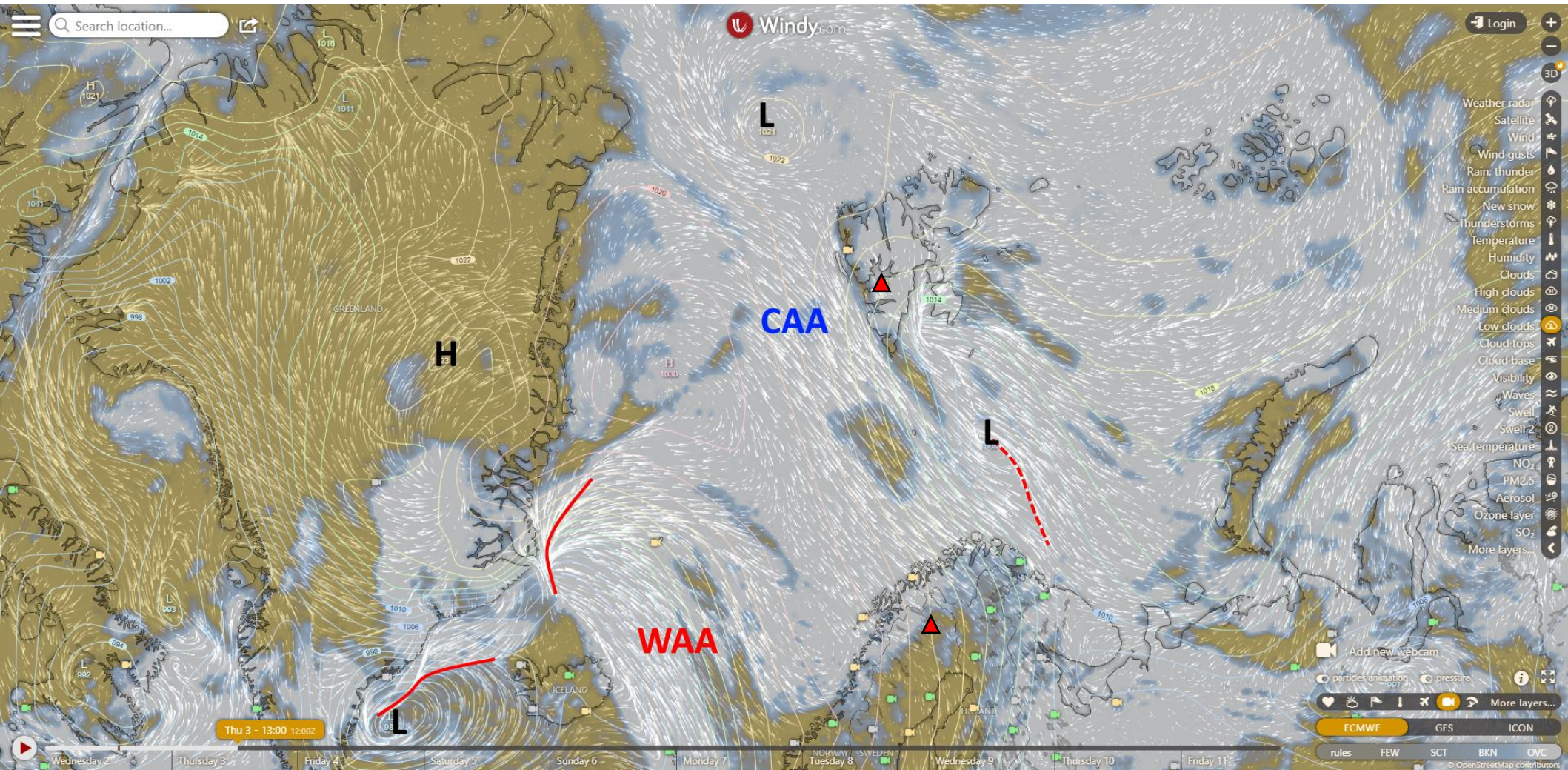
CAA: Cold Air Advection

WAA: Warm Air Advection

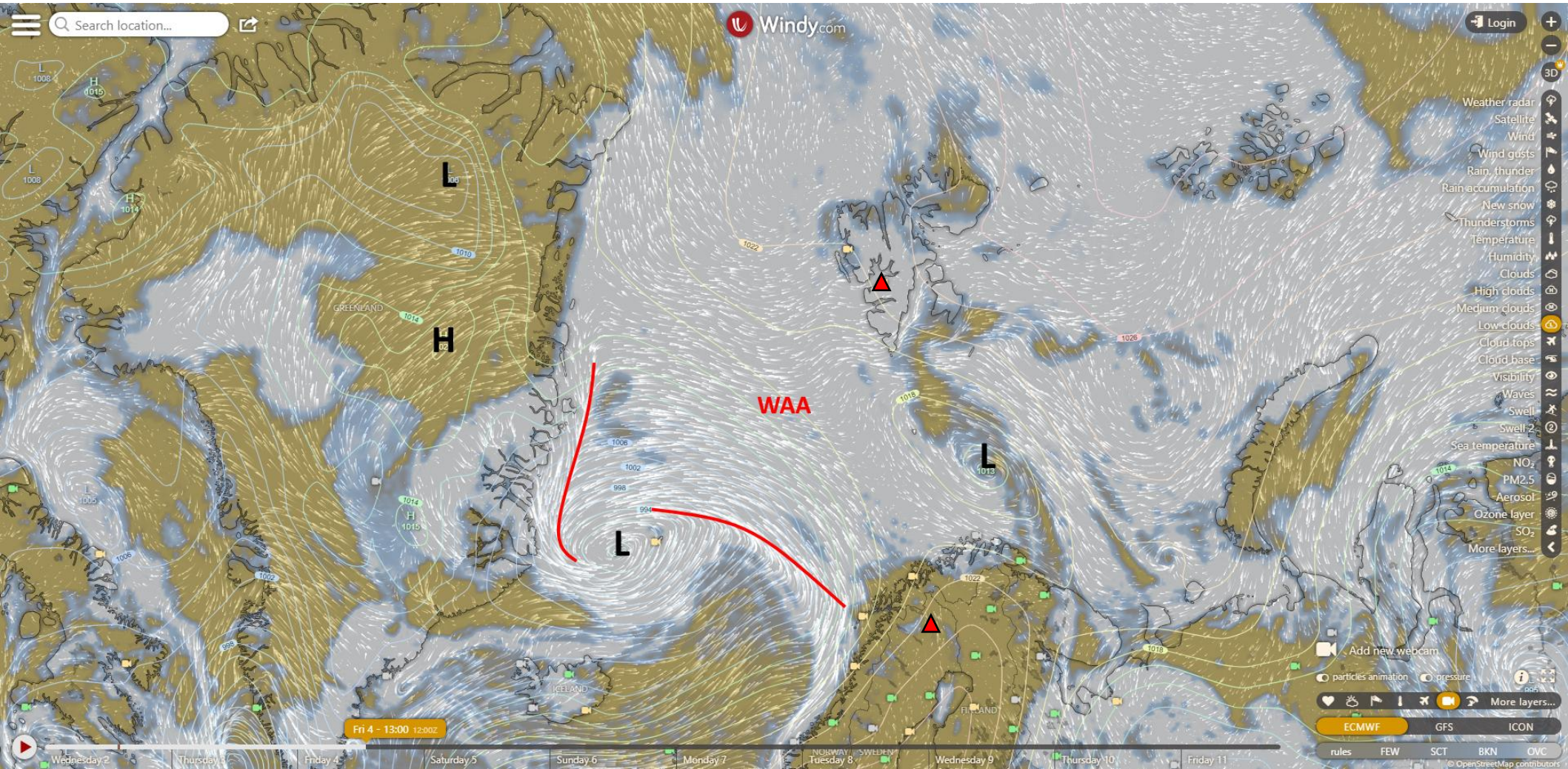
Wednesday, 2022-03-02 12 UTC (+12h)



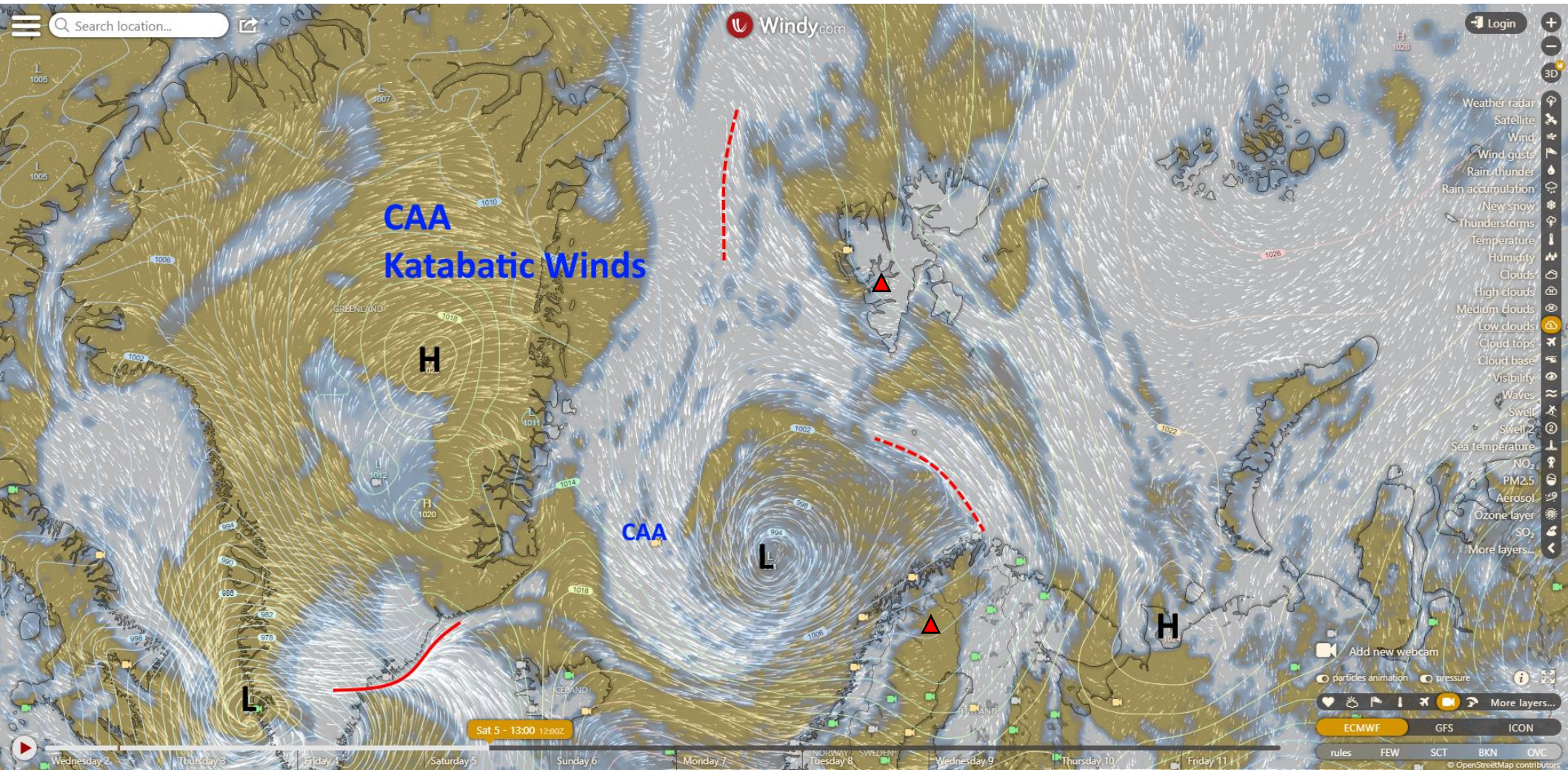
Thursday, 2022-03-03 12 UTC (+36h)



Friday, 2022-03-04 12 UTC (+60h)



Saturday, 2022-03-05 12 UTC (+84h)

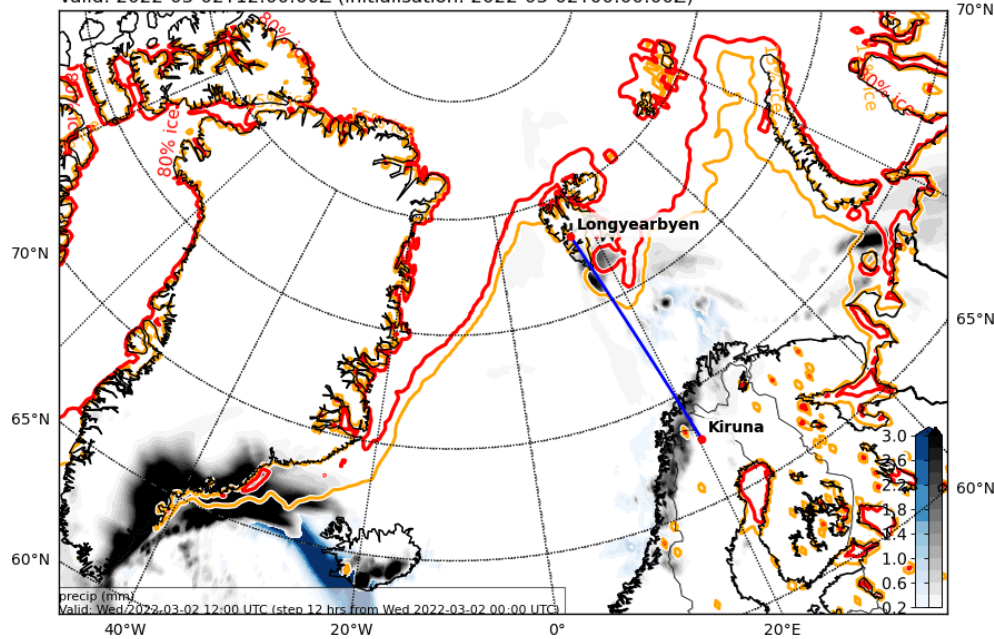


Cloud cover & precip development
2022-03-02 00 UTC: 00 – 84h
ECMWF + ICON

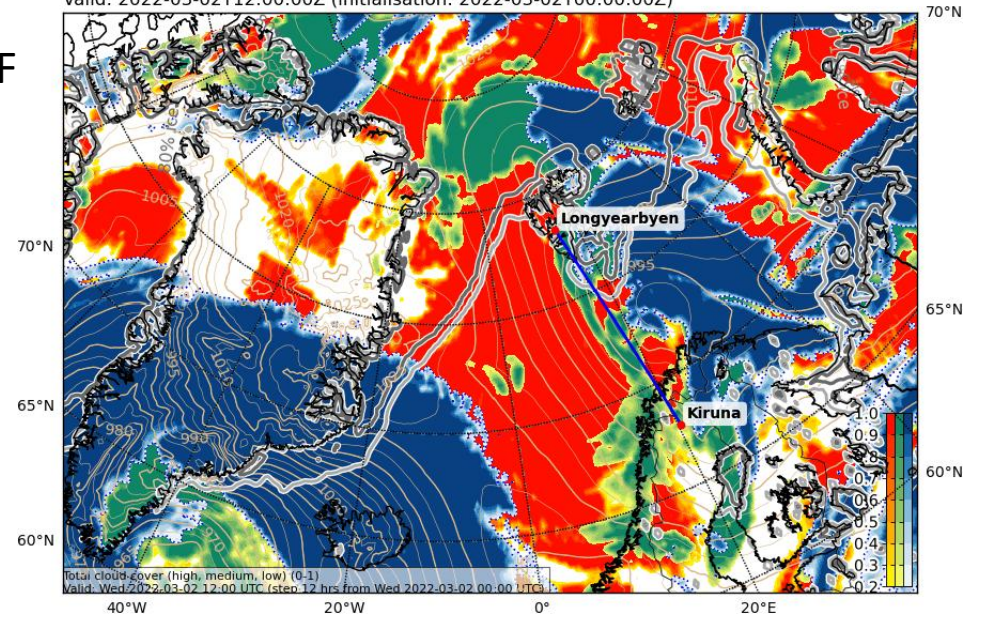
Wed, 2022-03-02 12 UTC (+12h) ECMWF

Cross section; most likely F.S., else: where interesting stuff happens

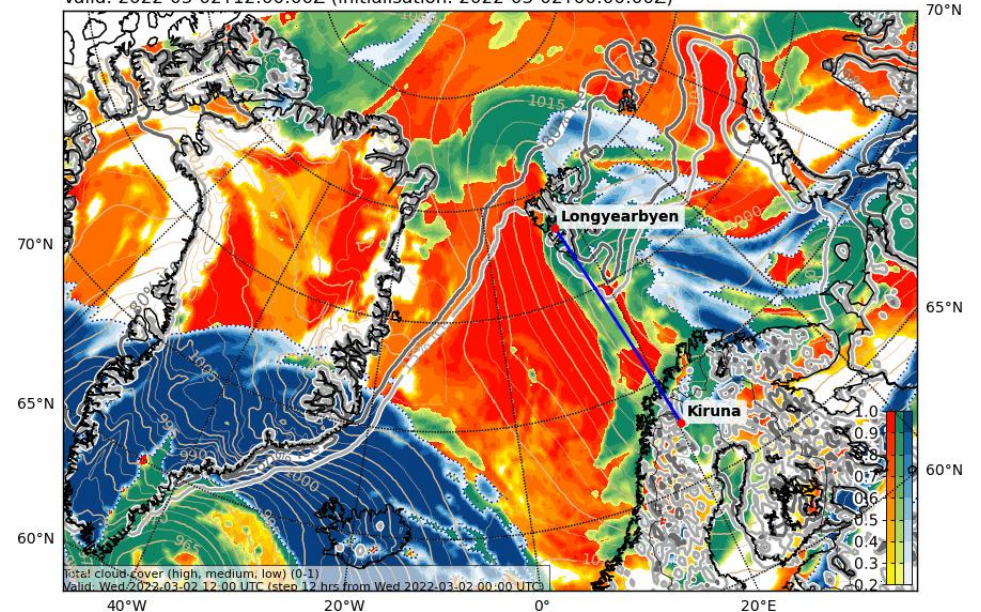
Precipitation, instantaneous (mm water eq.). Rain-blue, snow-black
Valid: 2022-03-02T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (TOT)
Valid: 2022-03-02T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



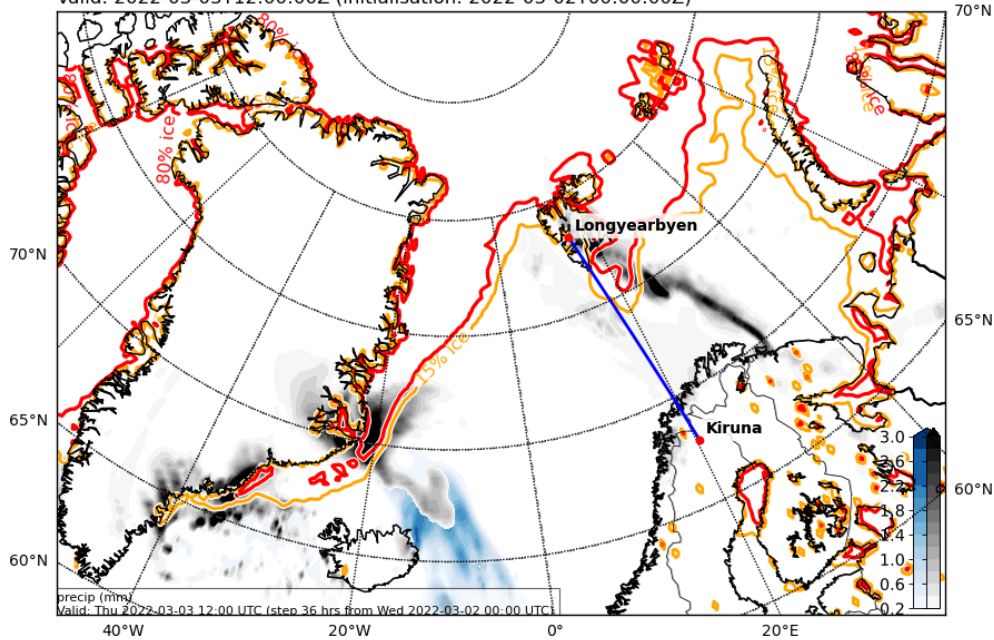
Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (TOT)
Valid: 2022-03-02T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



ICON

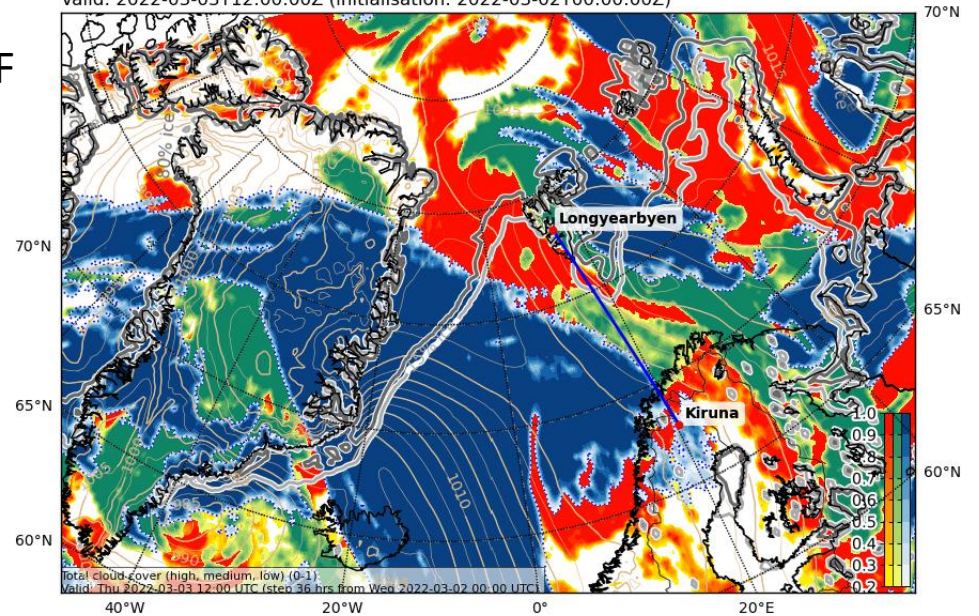
Thu, 2022-03-03 12 UTC (+36h) ECMWF

Precipitation, instantaneous (mm water eq.). Rain-blue, snow-black
Valid: 2022-03-03T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



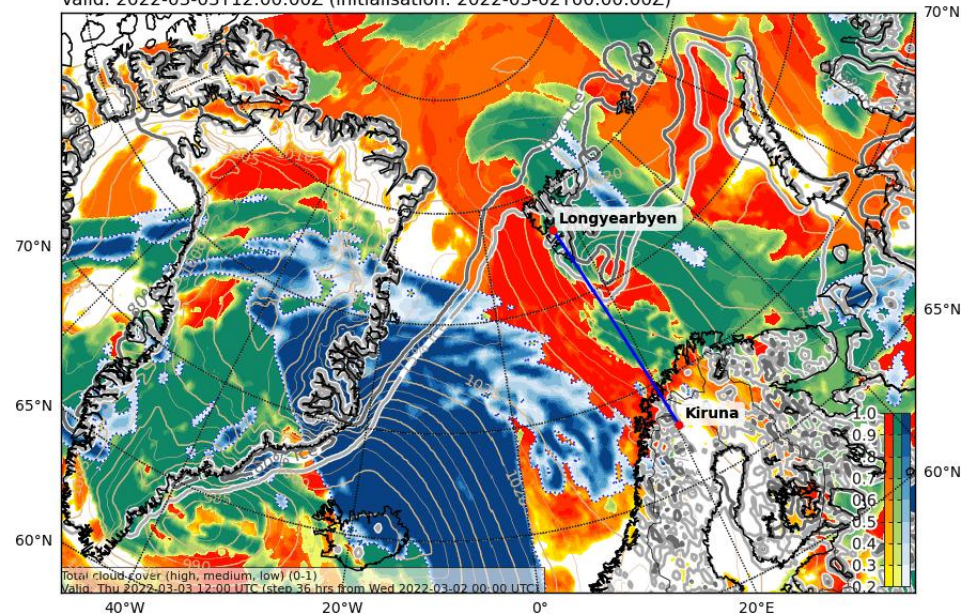
Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (TOT)

Valid: 2022-03-03T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



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

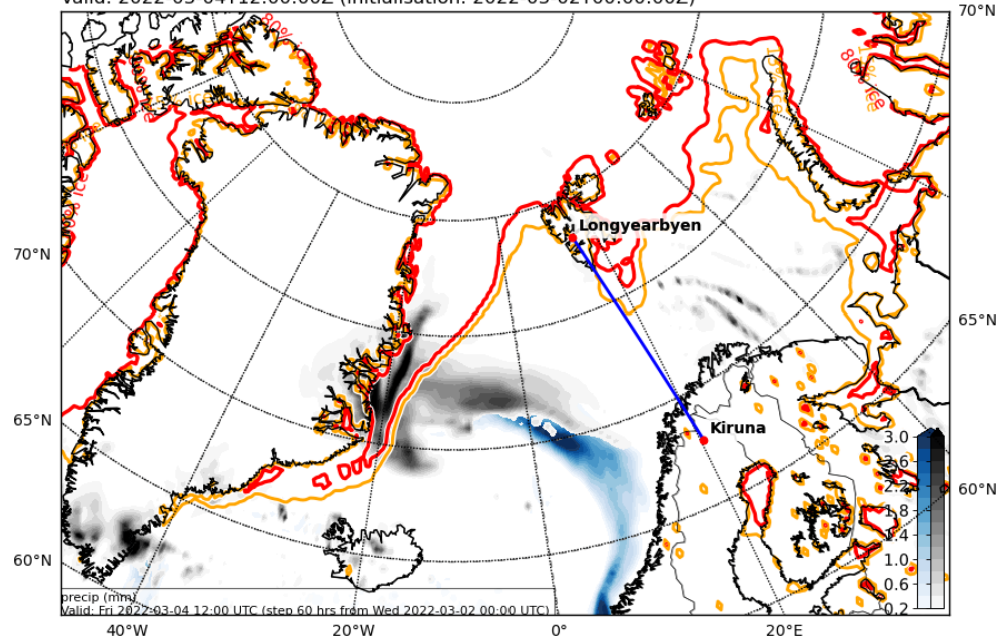
Valid: 2022-03-03T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



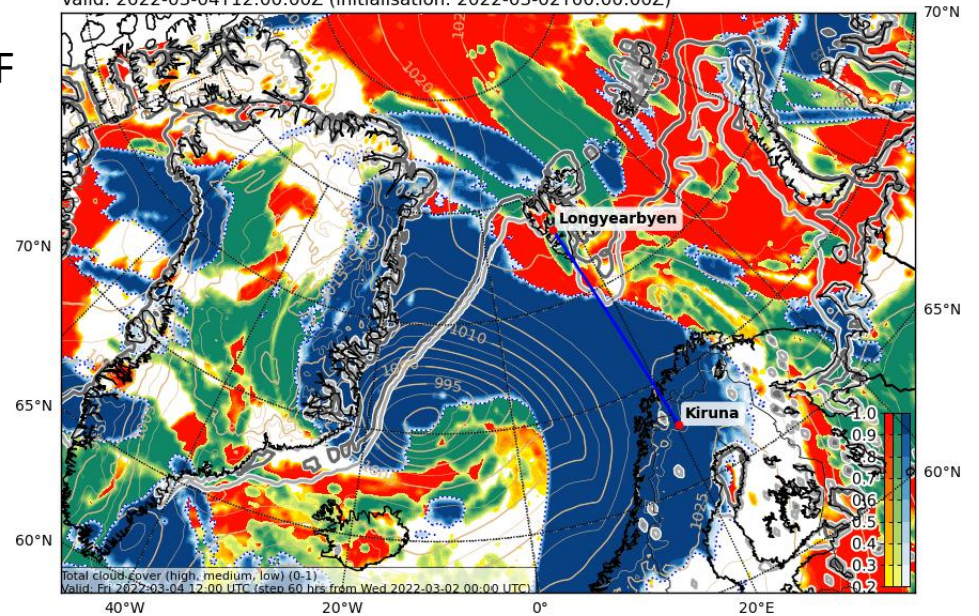
ICON

Fri, 2022-03-04 12 UTC (+60h) ECMWF

Precipitation, instantaneous (mm water eq.). Rain-blue, snow-black
Valid: 2022-03-04T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)

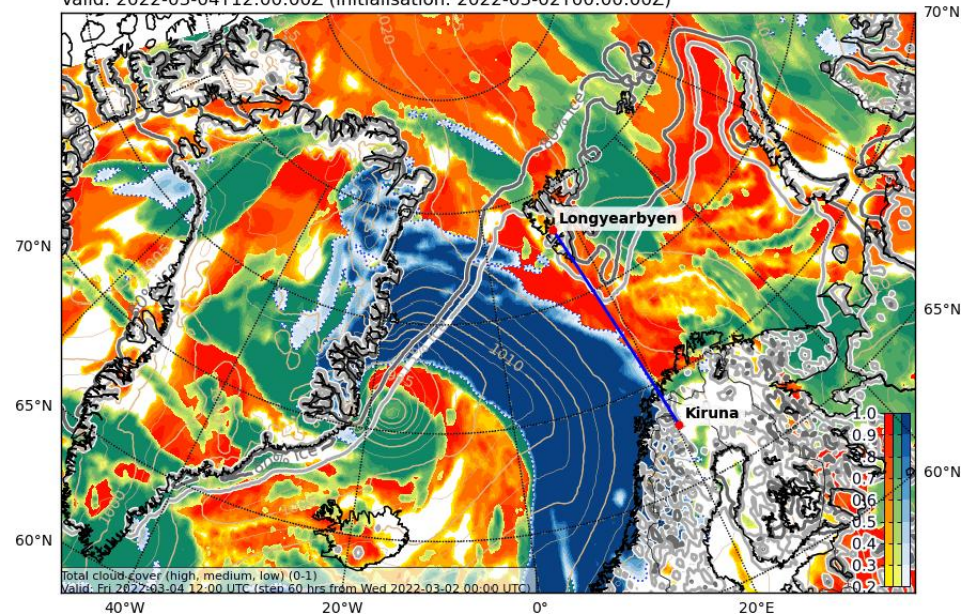


Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (TOT)
Valid: 2022-03-04T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



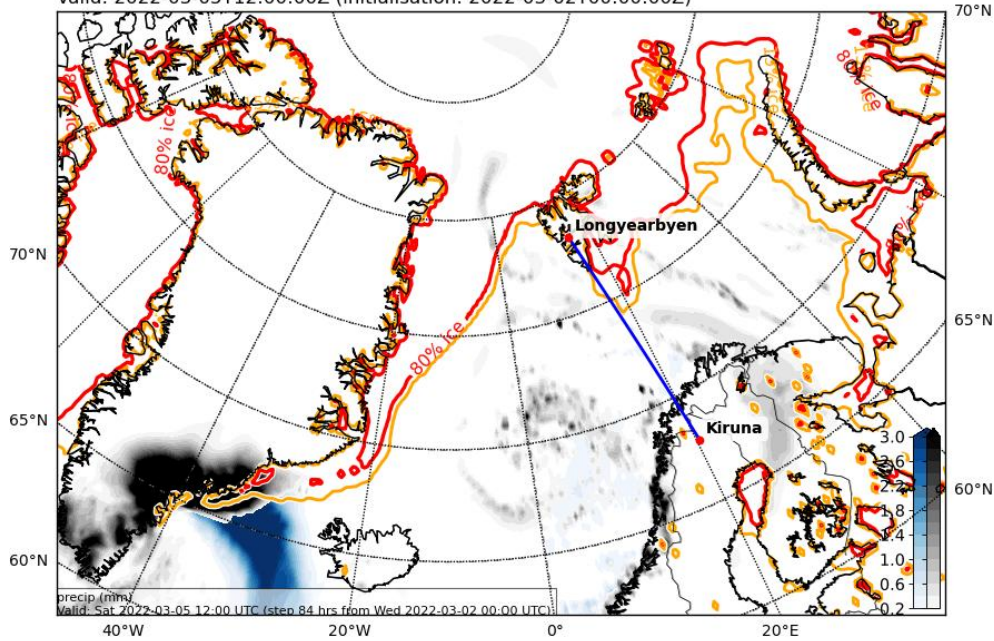
Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (TOT)
Valid: 2022-03-04T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)

ICON

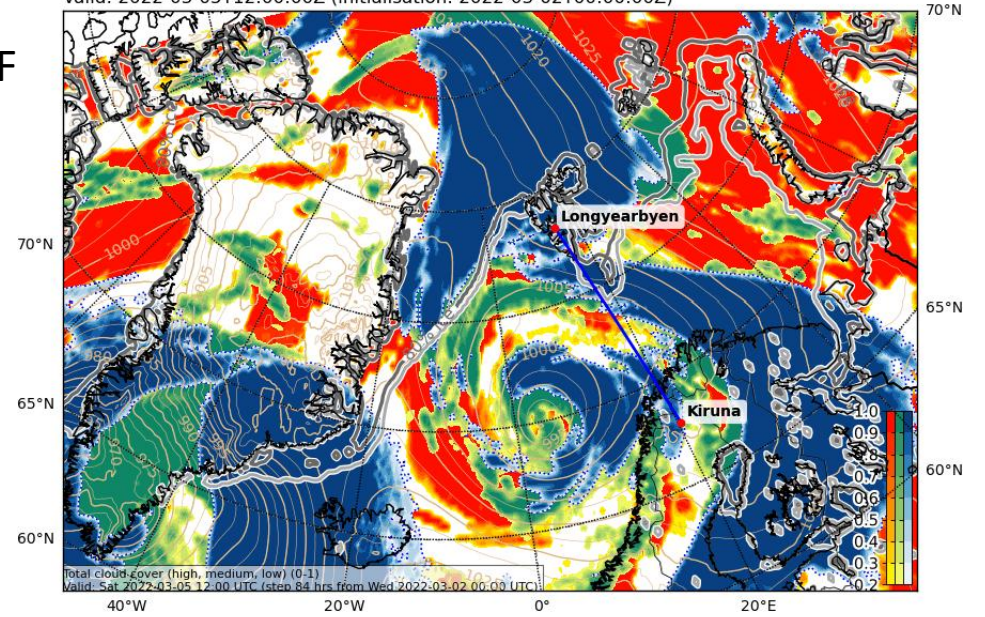


Sat, 2022-03-05 12 UTC (+84h) ECMWF

Precipitation, instantaneous (mm water eq.). Rain-blue, snow-black
Valid: 2022-03-05T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (TOT)
Valid: 2022-03-05T12:00:00Z (initialisation: 2022-03-02T00:00:00Z)



not available

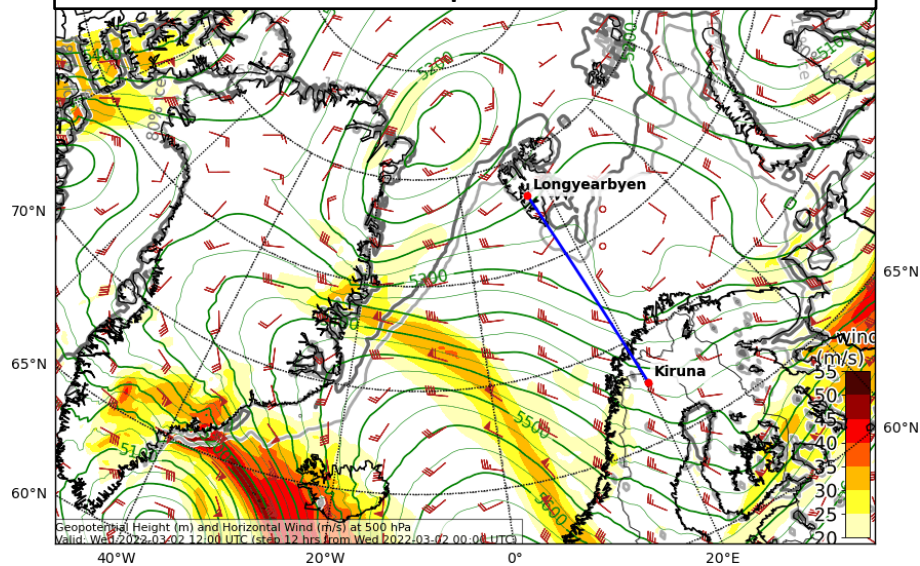
ICON

Extra variables

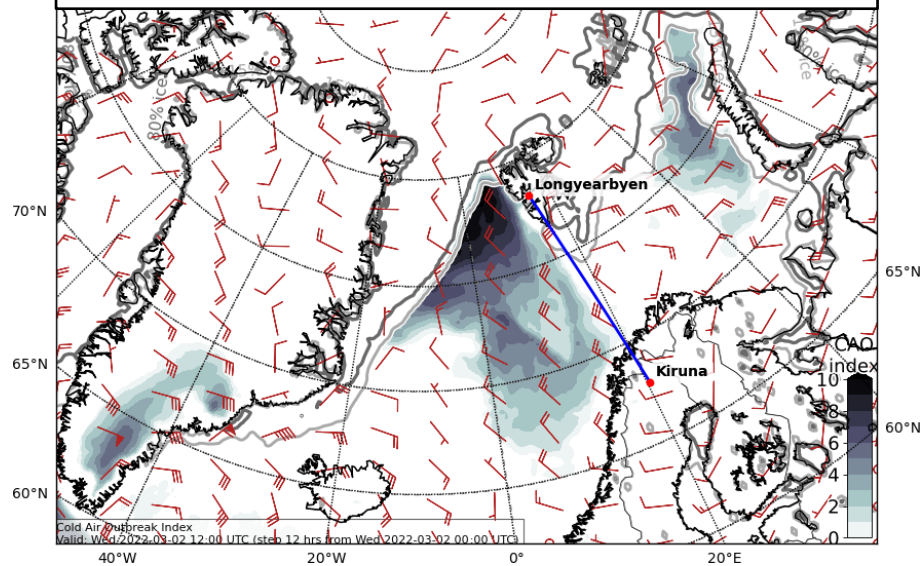
2022-03-02 00 UTC: 00 – 84h
500 hPa wind & 850hPa θ_e & CAO & IVT

Wed, 2022-03-02 12 UTC (+12h)

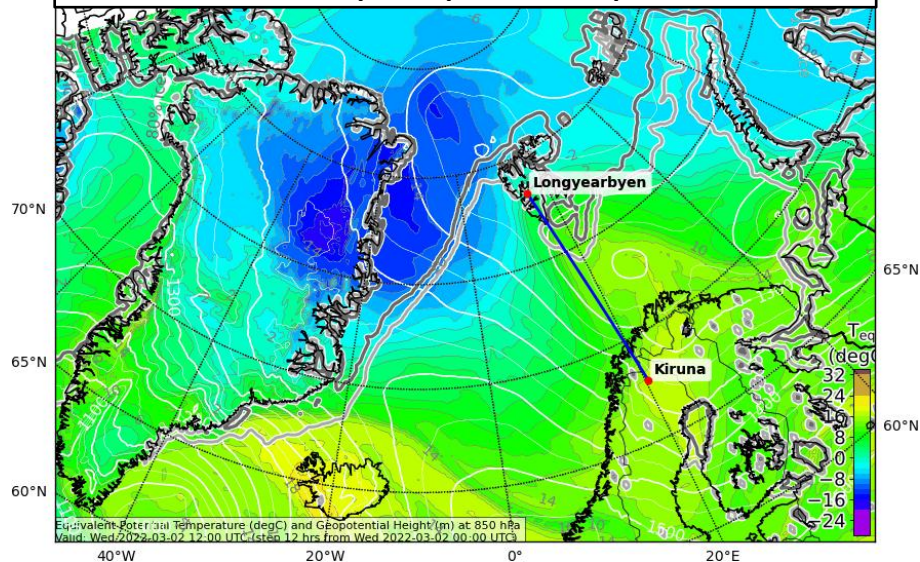
500 hPa Geopot. and Wind



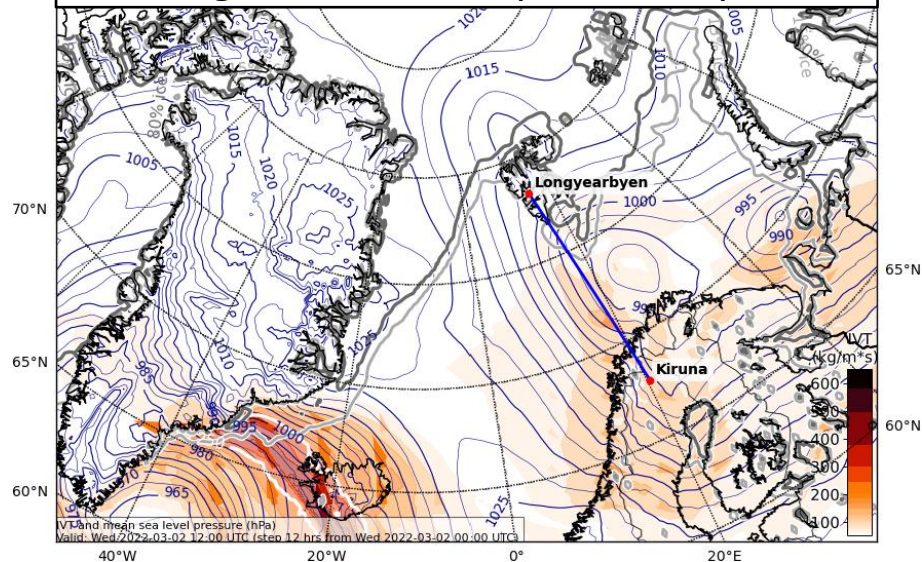
CAO Index



850 hPa Equiv. pot. temperature

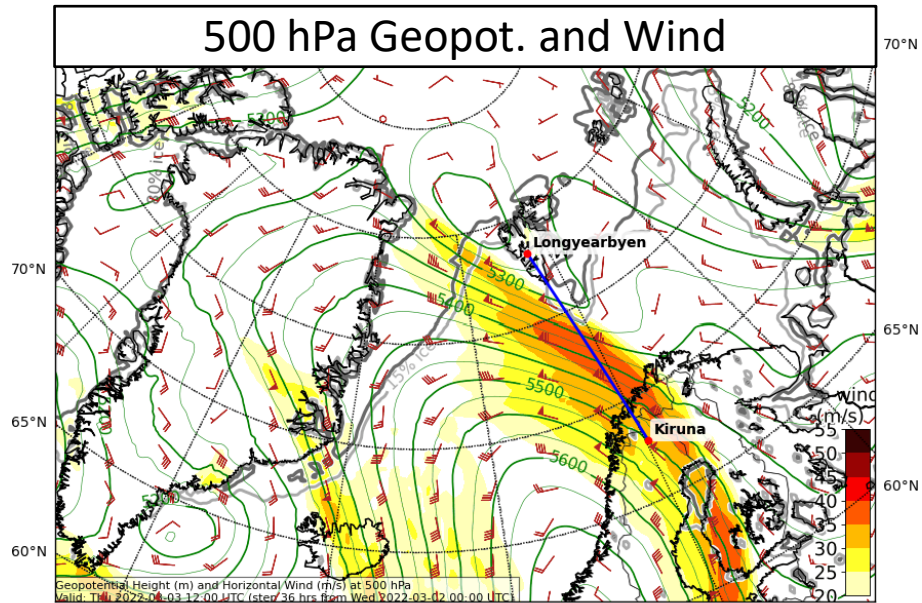


Integrated water vapour transport

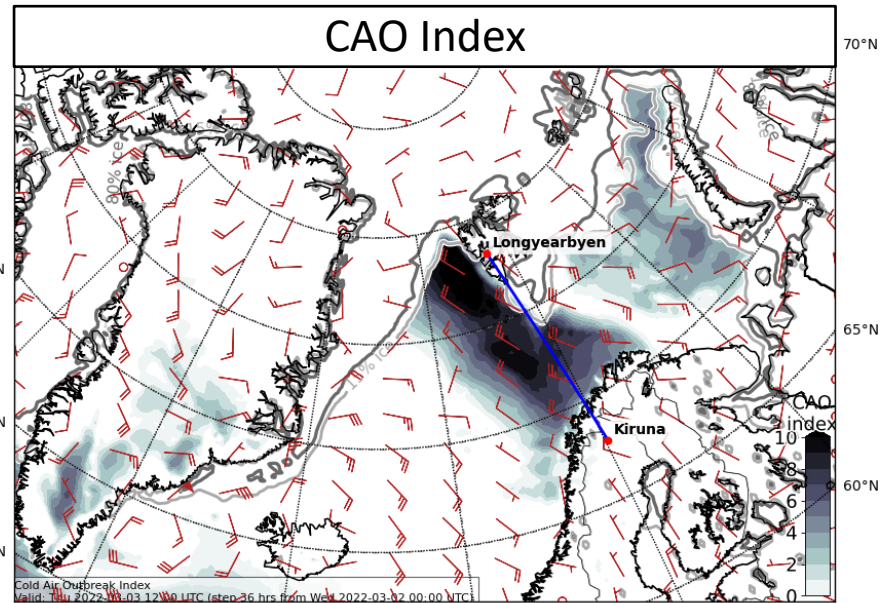


Thu, 2022-03-03 12 UTC (+36h)

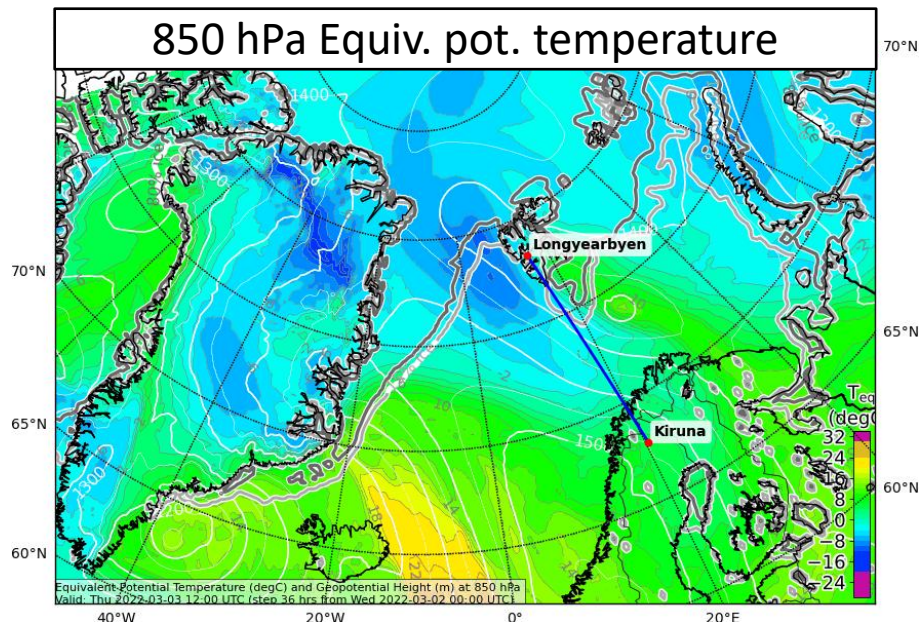
500 hPa Geopot. and Wind



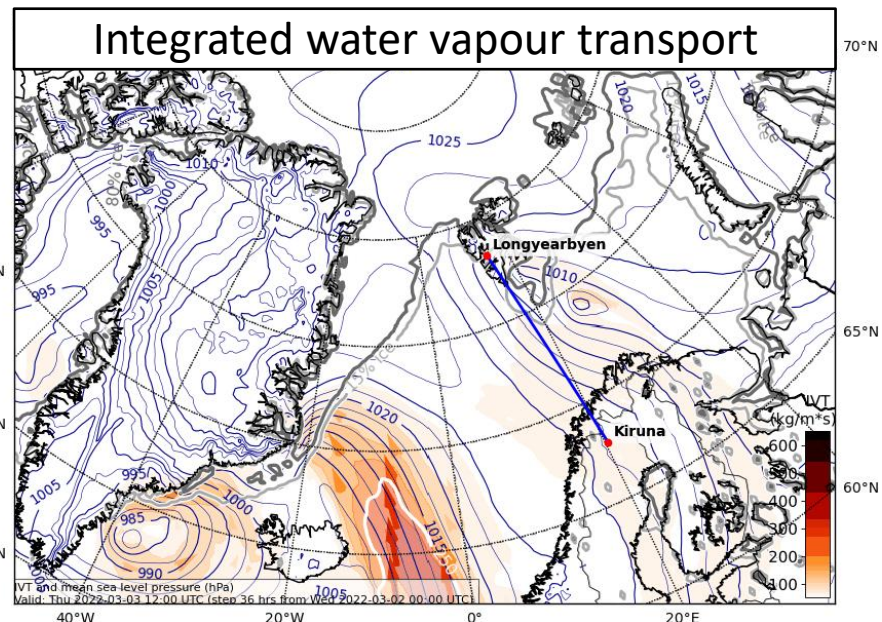
CAO Index



850 hPa Equiv. pot. temperature

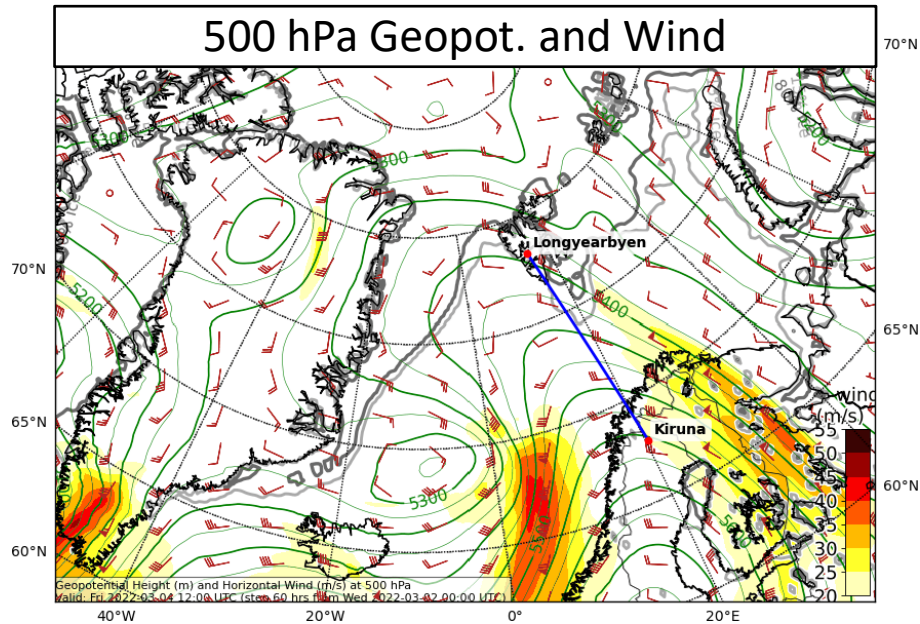


Integrated water vapour transport

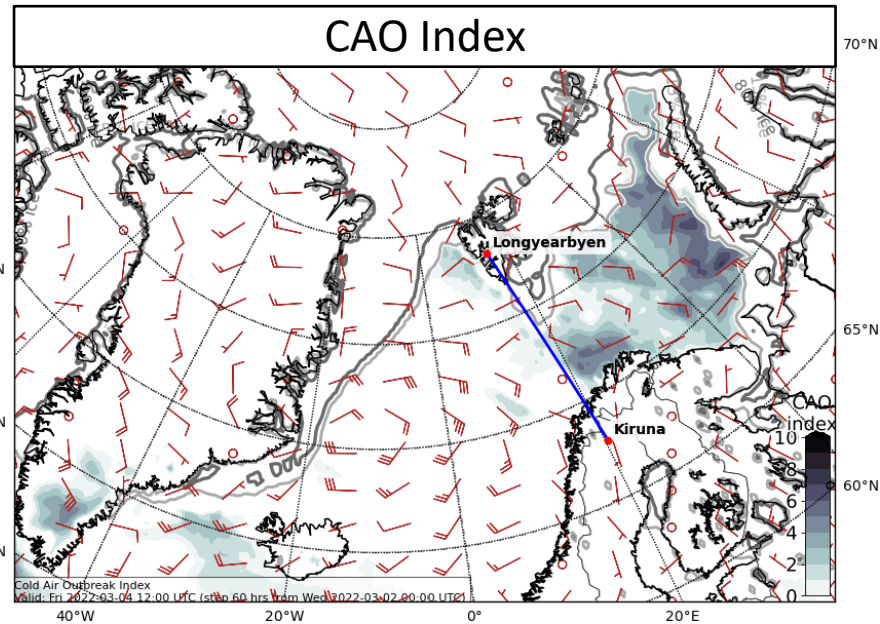


Fri, 2022-03-04 12 UTC (+60h)

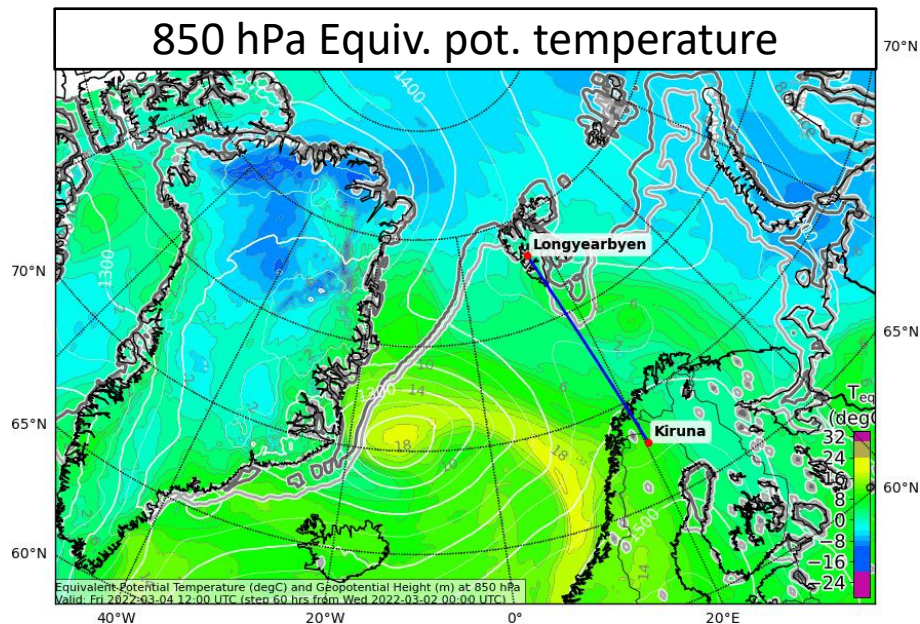
500 hPa Geopot. and Wind



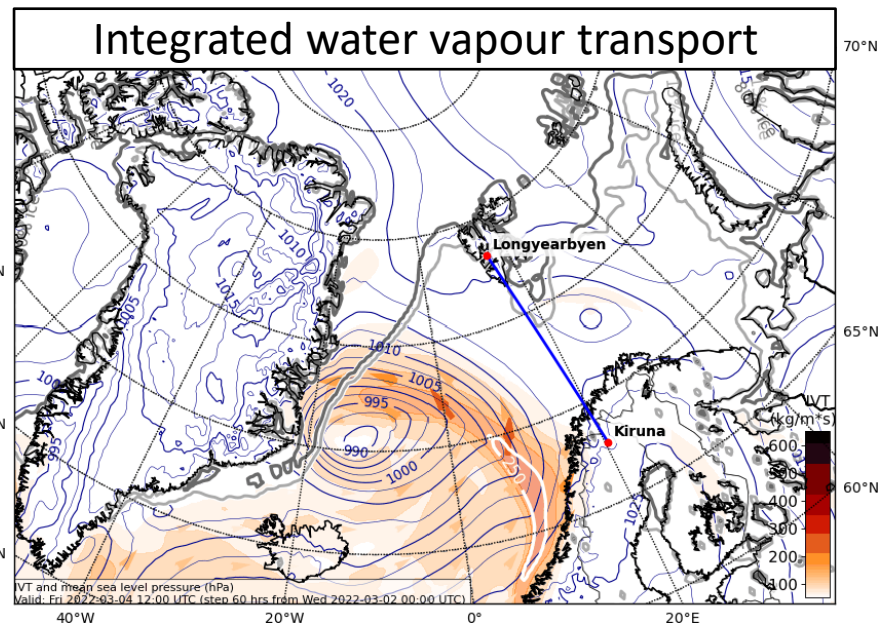
CAO Index



850 hPa Equiv. pot. temperature

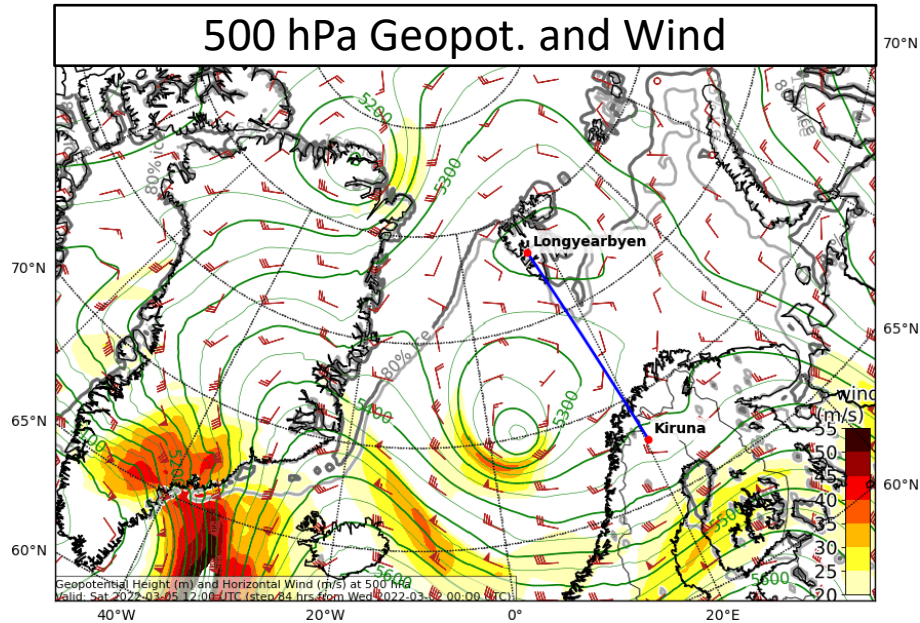


Integrated water vapour transport

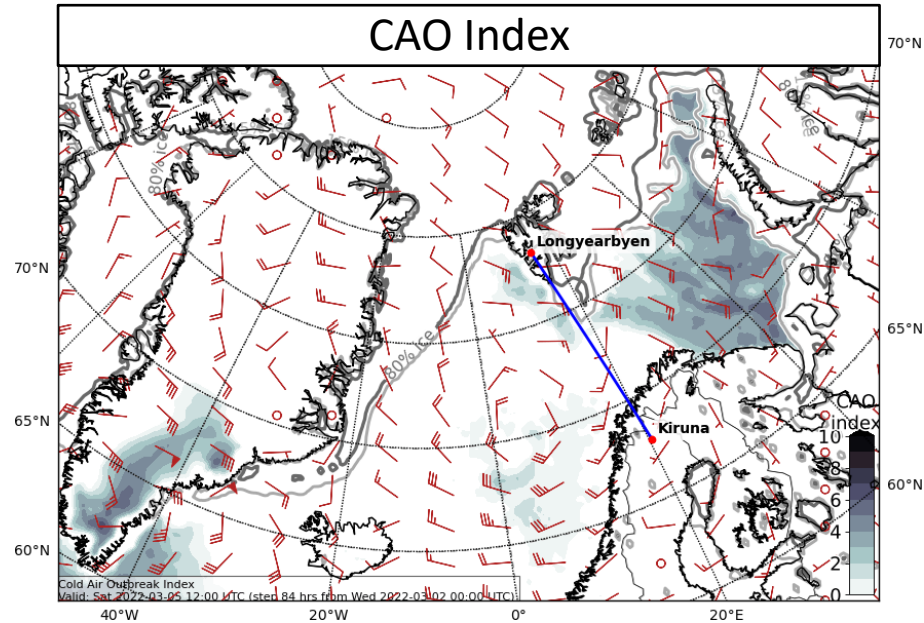


Sat, 2022-03-05 12 UTC (+84h)

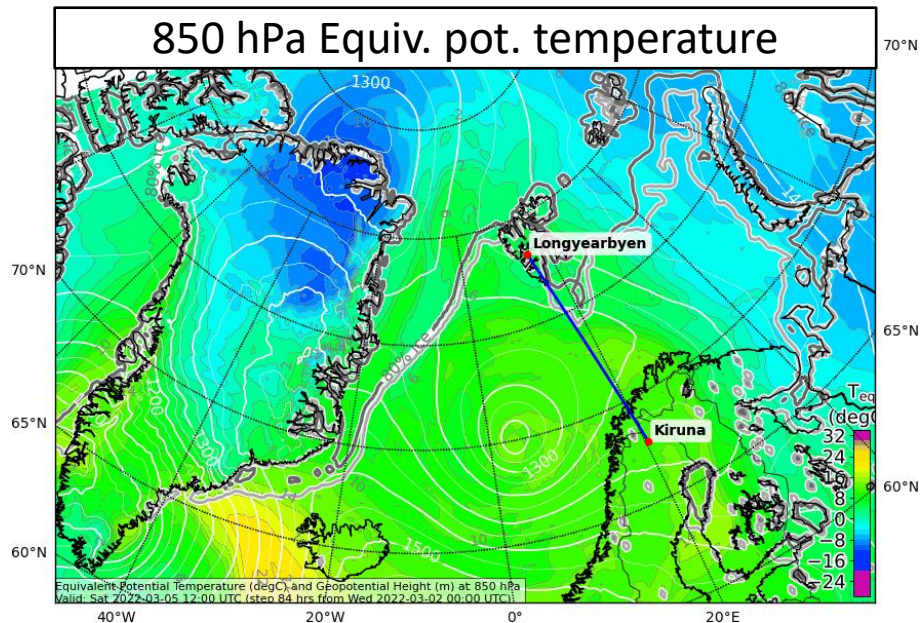
500 hPa Geopot. and Wind



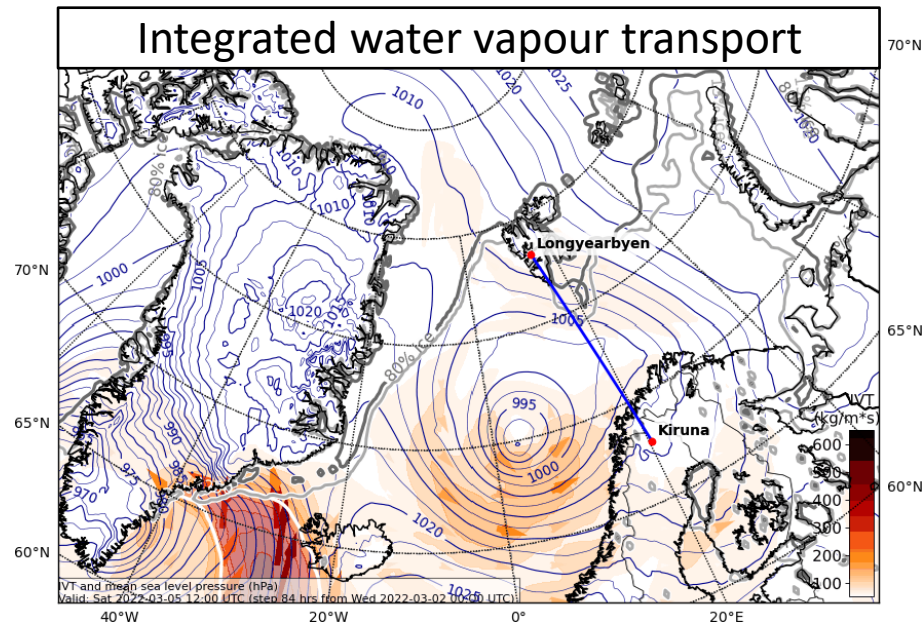
CAO Index



850 hPa Equiv. pot. temperature



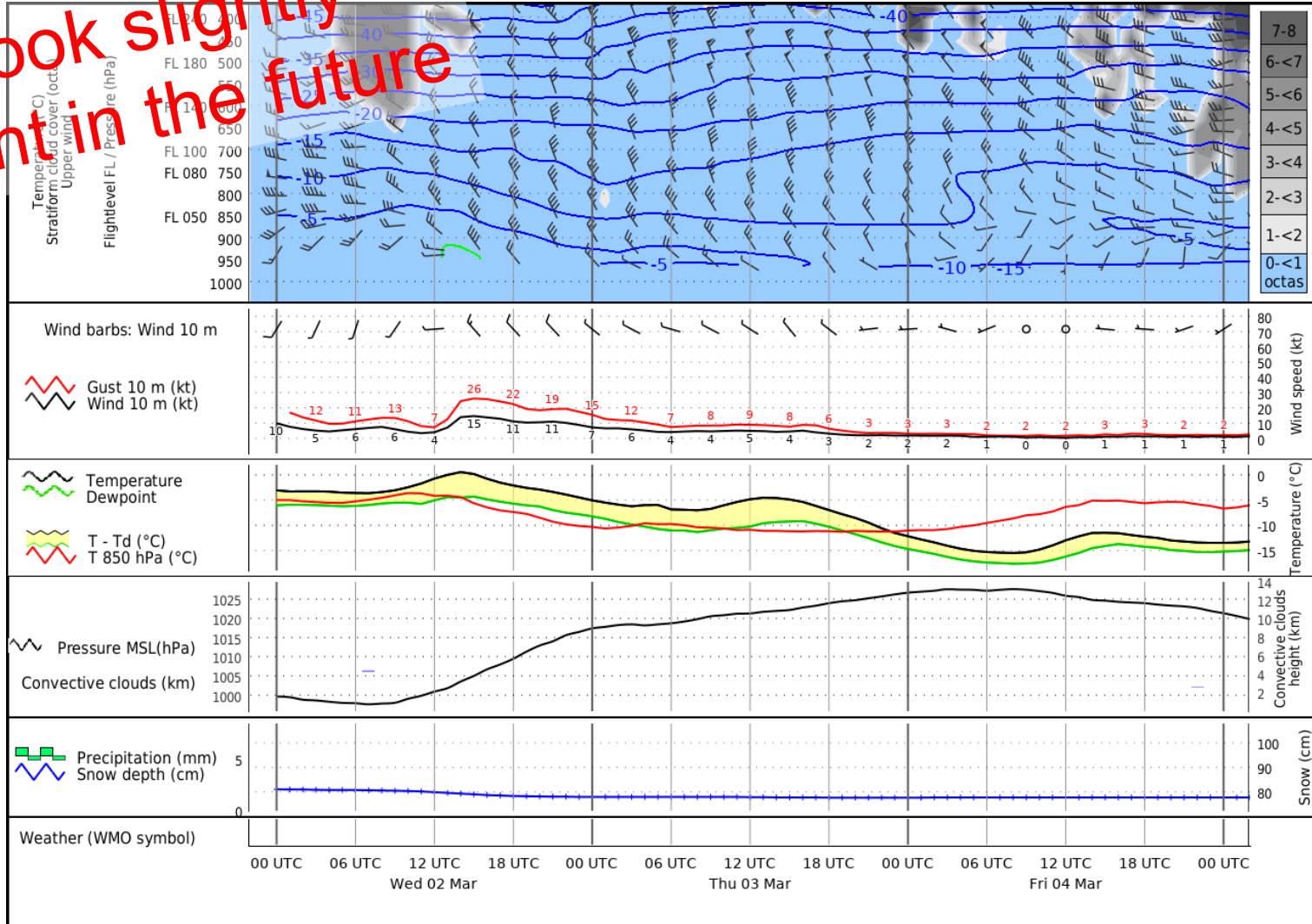
Integrated water vapour transport



Airport meteograms
2022-03-02 00 UTC: 00 – 72h

Kiruna:

might look slightly different in the future



Meteorgram Kiruna (ESNQ), 460 m, LAT/LON: N 67°49' E 20°20'
 ICON-EU 2022-03-02 00 UTC, model height: 460 m

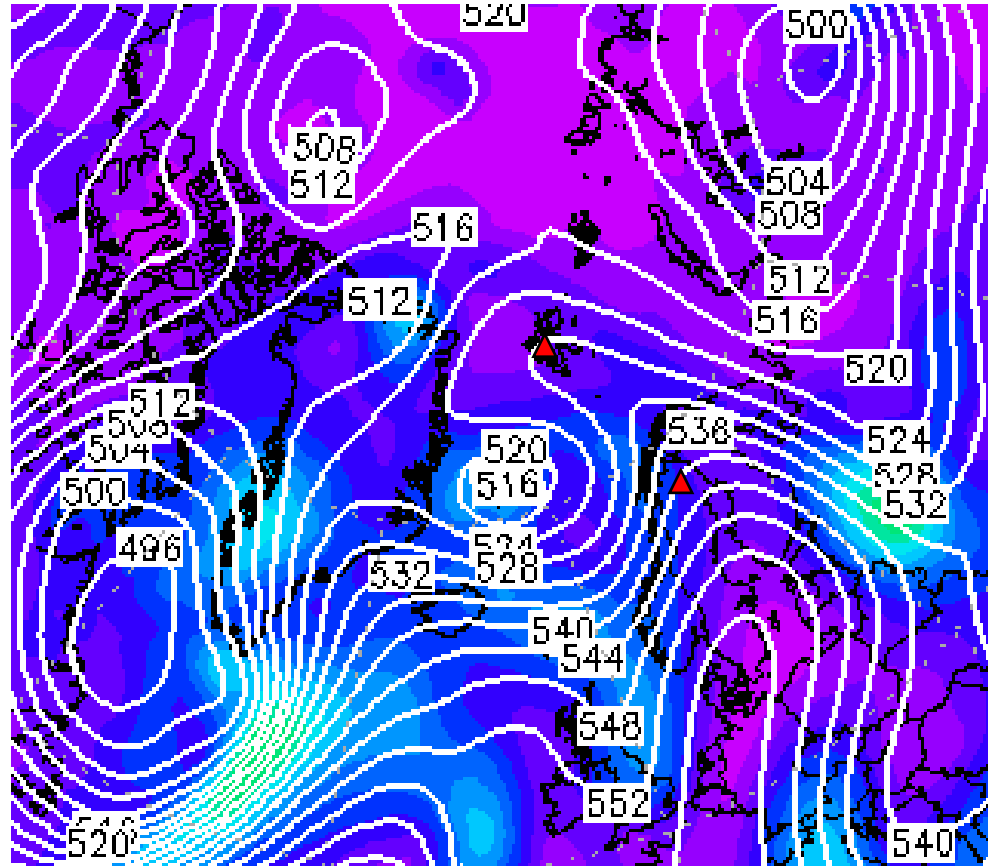
Longyearbyen:

will be available soon

Forecast uncertainty
2022-03-02 00 UTC: 72 – 96h

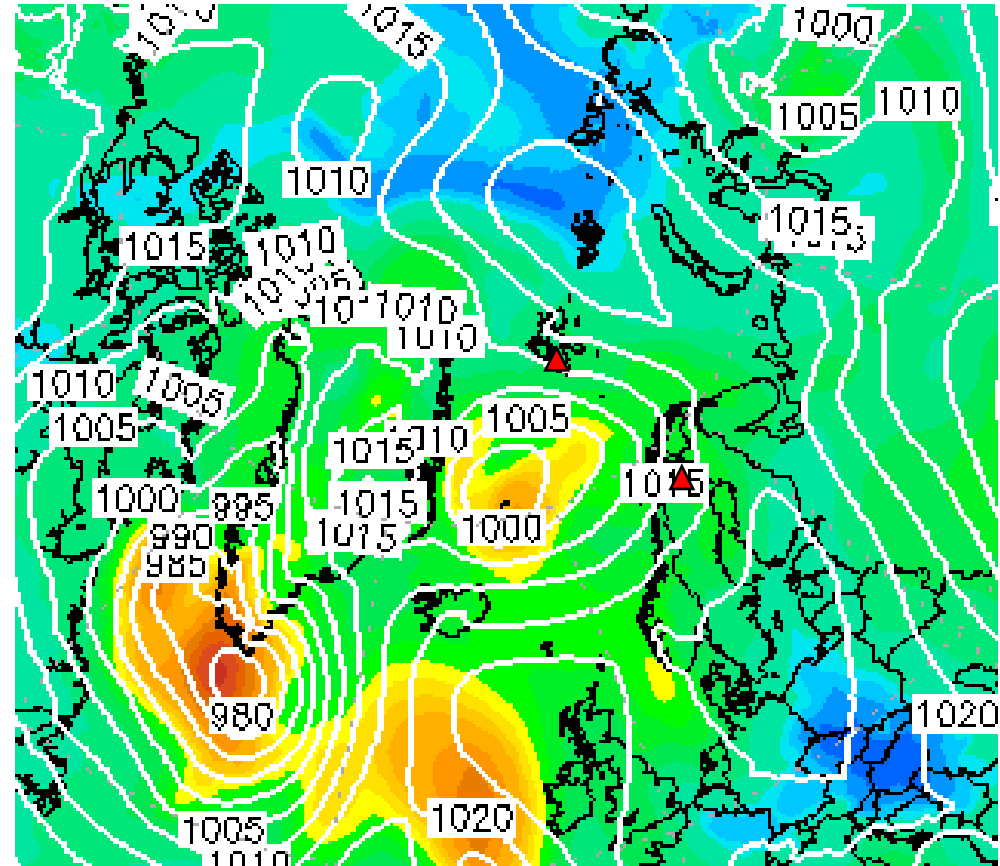
Saturday, 2022-03-05 00 UTC (+72h)

500 hPa Geopot



gpdam

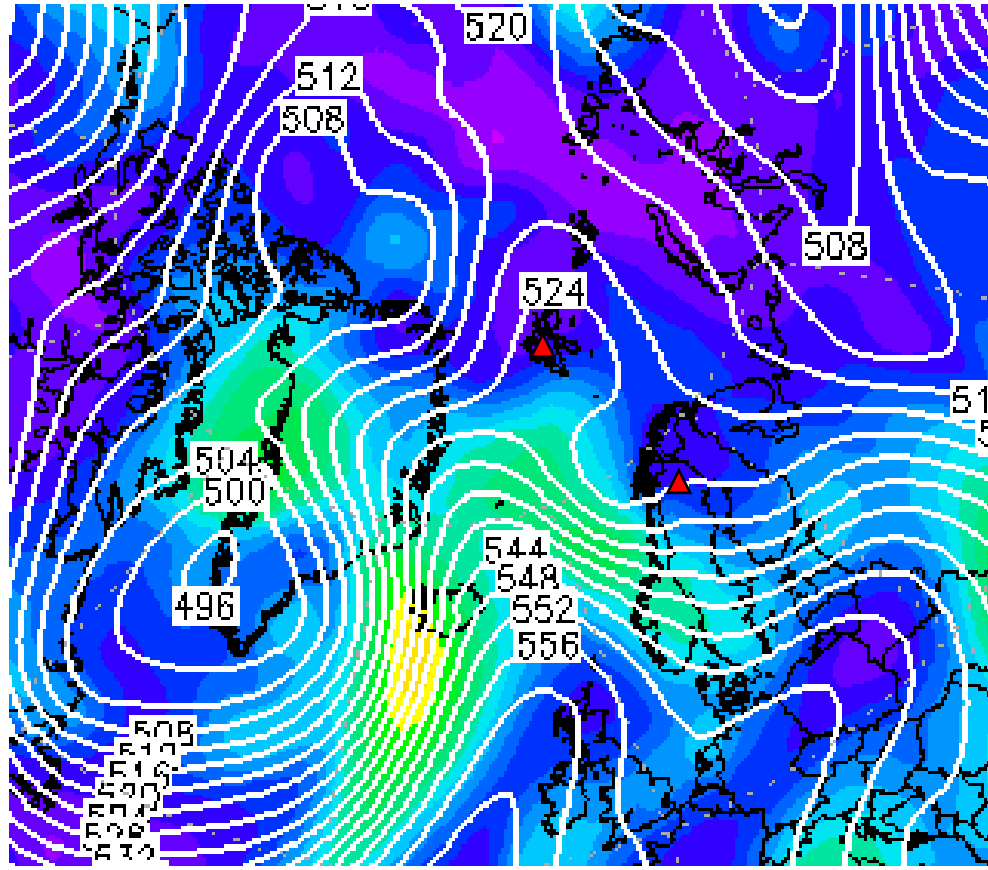
Sfc pressure



hPa

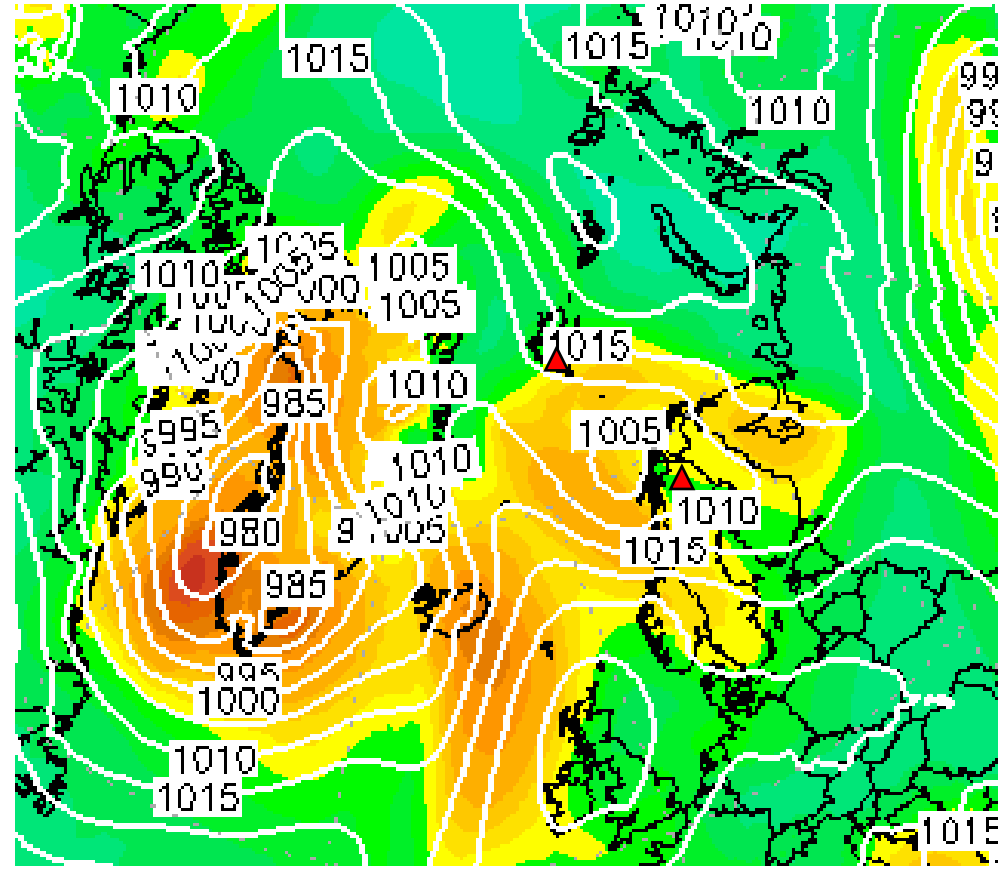
Sunday, 2022-03-06 00 UTC (+96h)

500 hPa Geopot



gpdam

Sfc pressure



hPa

Summary

Summary: Weather Briefing 2022-03-02

- **Wednesday, 2022-03-02:**
 - Cold Air Outbreak in Fram Strait
 - Katabatic winds from Greenland Ice sheet
- **Thursday, 2022-03-03:**
 - Cold Air Outbreak in Fram Strait but its driver weakens
- **Friday, 2022-03-04:**
 - Warm air (although a bit cooled) arrives in southern part of Fram Strait
 - Moderate moist air intrusion
 - Rather easterlies instead of southerlies
- **Saturday, 2022-03-05:**
 - Dissolving low south of Svalbard
 - Slight cold air advection to its west