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

Friday, 2022-03-19, 09:00 LT

## Latest METAR and TAF from Longyearbyen airport

#### Svalbard Airport. Longyear

Longyearbyen, Norway

latitude: 78-15N, longitude: 015-28E,

elevation: 2 m

#### Current weather observation

The report was made 22 minutes ago, at 07:20 UTC

Wind 9 kt from the South

Temperature -3°C

Humidity 80%

Pressure 989 hPa

Visibility 10 km or more

Few clouds at a height of 2000 ft Broken clouds at a height of 3400 ft

showers in vicinity

Change units

Time: 08:42 (07:42 UTC)

#### Forecast

Forecast valid from 19 at 06 UTC to 20 at 06 UTC

#### Wind 15 kt from the South/Southeast

Visibility 10 km or more

Few clouds at a height of 1500 ft Broken clouds at a height of 3000 ft

### Temporary from 19 at 06 UTC to 19 at 12 UTC

Wind 10 kt from the South/Southwest with gusts up to 20 kt

## Temporary from 19 at 06 UTC to 20 at 06 UTC

Visibility: 2000 m

at a height of 800 ft

snow showers

Becoming from 19 at 11 UTC to 19 at 14 UTC

Wind 5 kt from variable directions

Temporary from 19 at 12 UTC to 19 at 24 UTC

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

at a height of 800 ft

snow showers

Temporary from 20 at 00 UTC to 20 at 06 UTC

#### Wind 12 kt from the Northwest

TAF: ENSB 1906/2006 15015KT 9999
FEW015 BKN030 TEMPO 1906/1912
20010G20KT TEMPO 1906/2006 2000 SHSN
VV008 BECMG 1911/1914 VRB05KT TEMPO
1912/1924 25015G25KT SHSN VV008
TEMPO 2000/2006 32012KT



## Surface wind development and precipitation

2022-03-18 12 UTC: 45 - 96h

**ECMWF** 

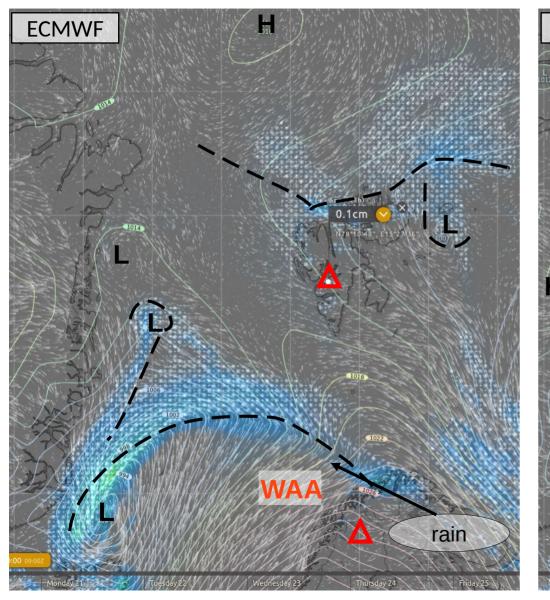
2022-03-19 00 UTC: 33 - 84h

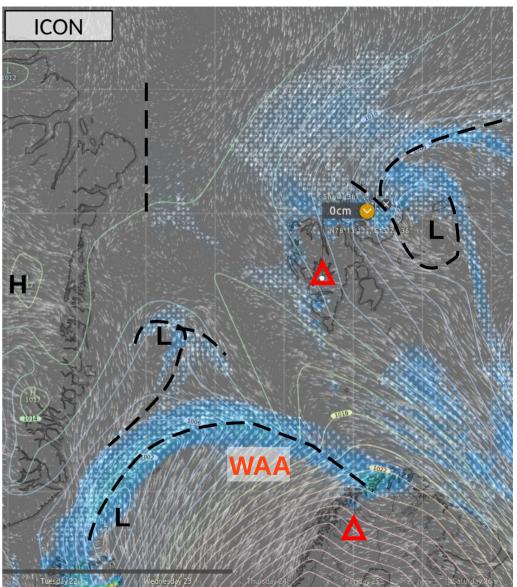
**ICON** 

**CAA: Cold Air Advection** 

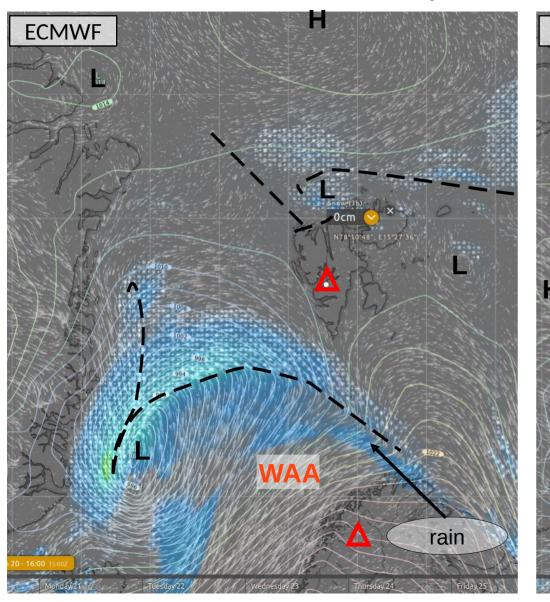
**WAA: Warm Air Advection** 

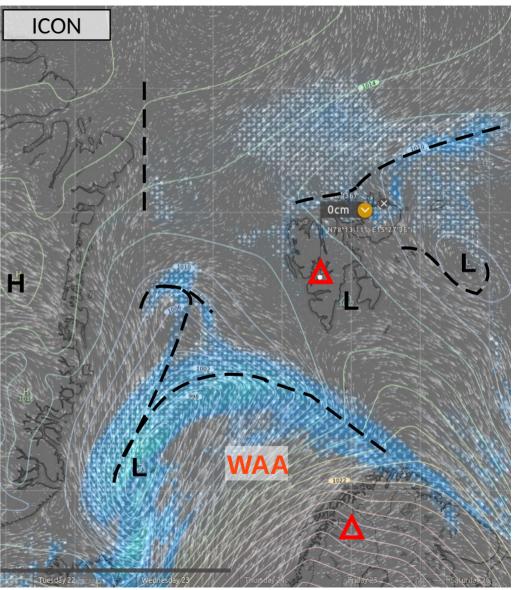
## Sunday, 2022-03-20 09 UTC



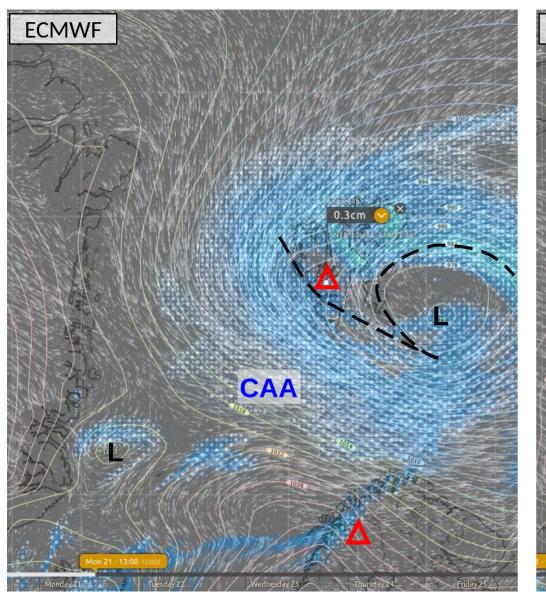


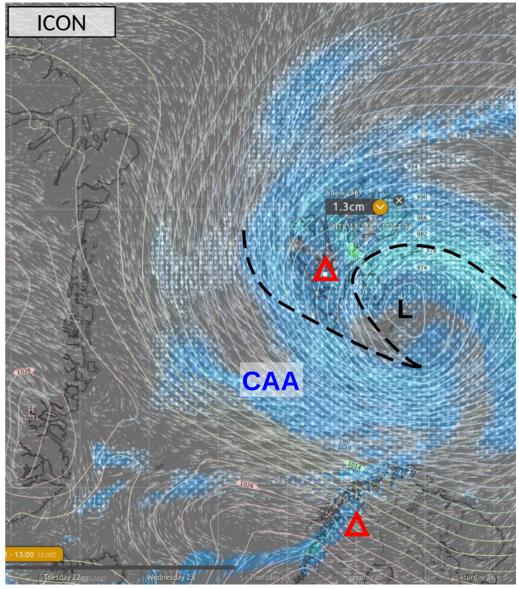
## Sunday, 2022-03-20 15 UTC



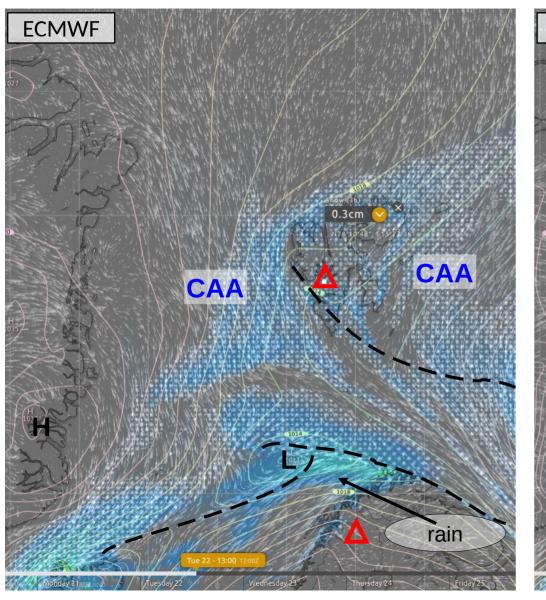


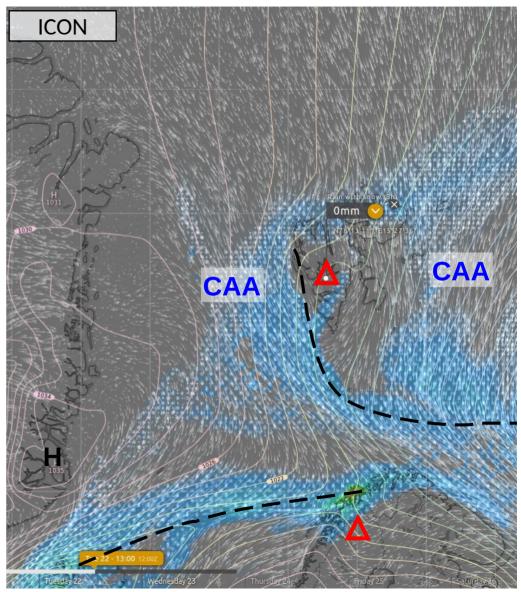
## Monday, 2022-03-21 12 UTC





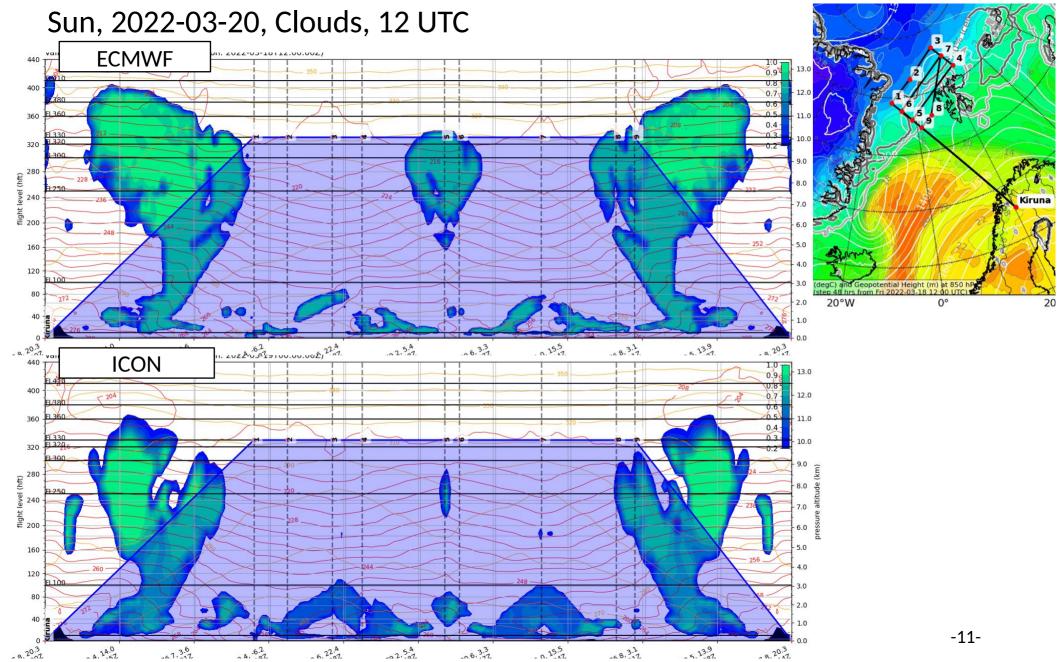
## Tuesday, 2022-03-22 12 UTC



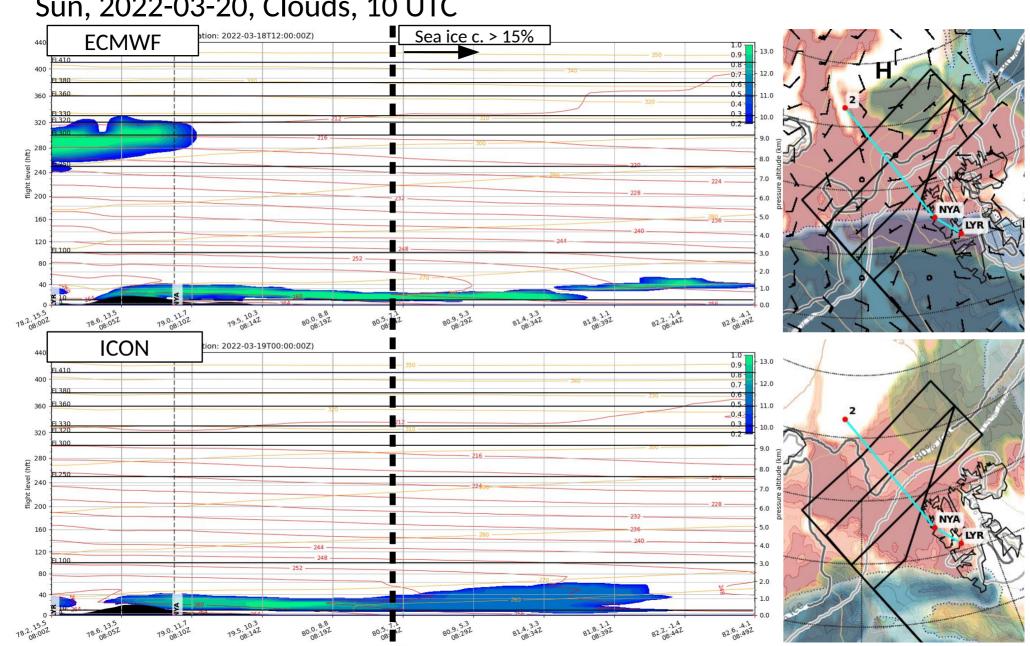


ECMWF: 500hPa Geop. & T Tuesday, 2022-03-22 12 UTC **ICON** KIR CAA CAA CAA rain

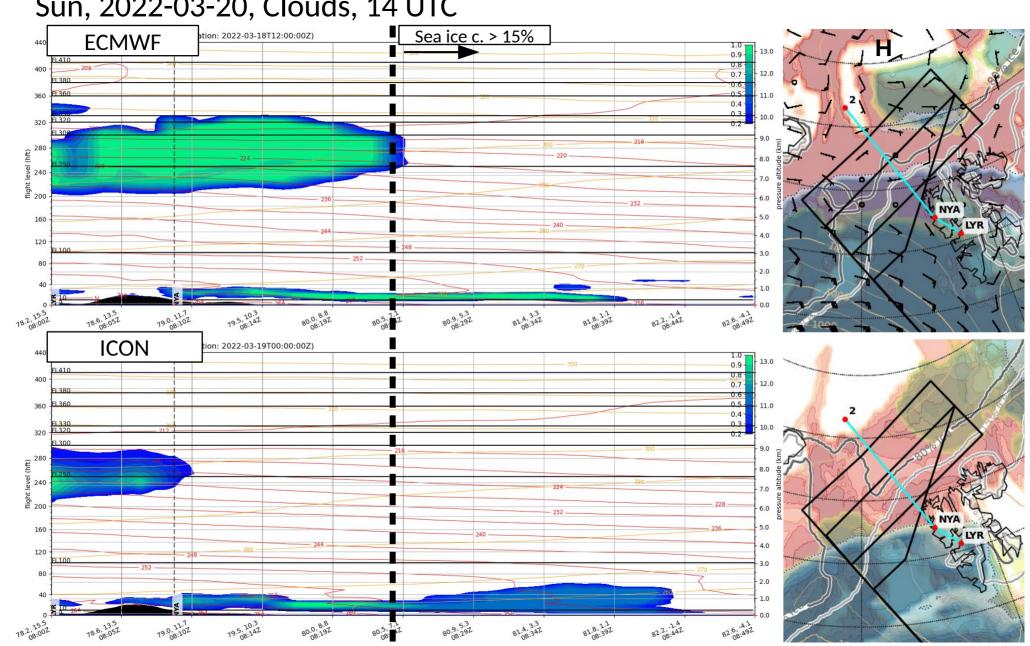
Clouds & cloud cross-sections for Sunday, 2022-03-20 2022-03-18 12 UTC, 2022-03-19 00 UTC, 2022-03-18 00 UTC ECMWF, ICON & NWP



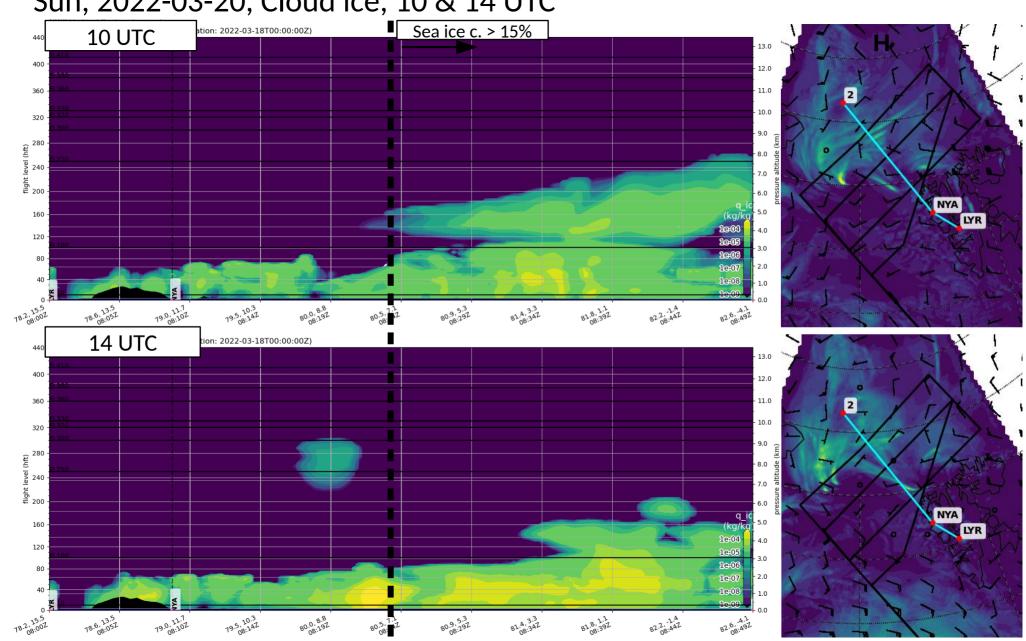
Sun, 2022-03-20, Clouds, 10 UTC



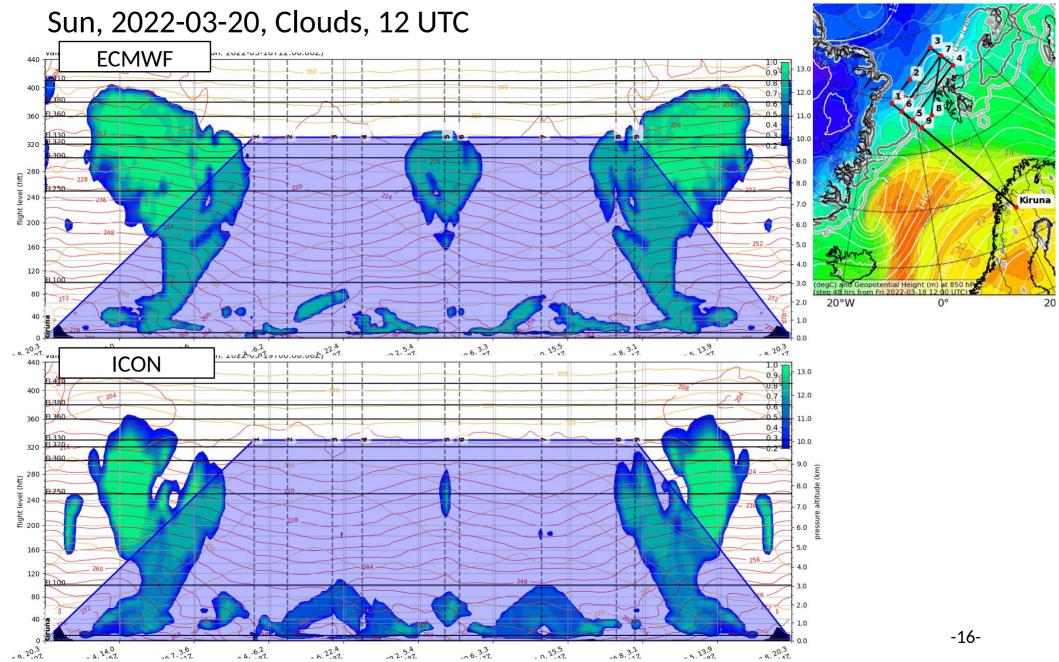
Sun, 2022-03-20, Clouds, 14 UTC

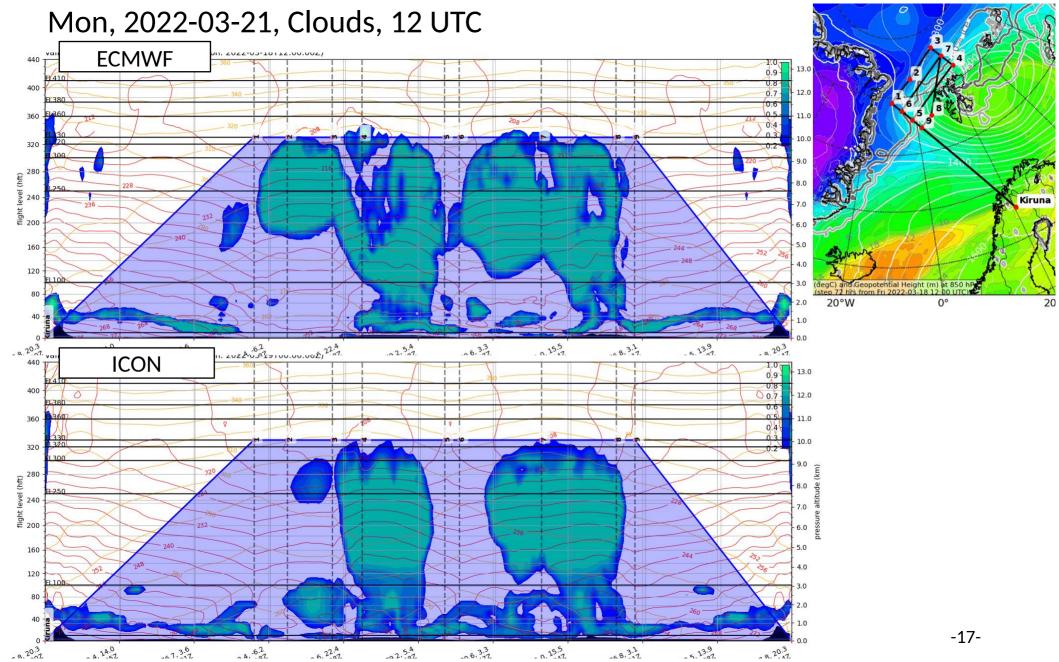


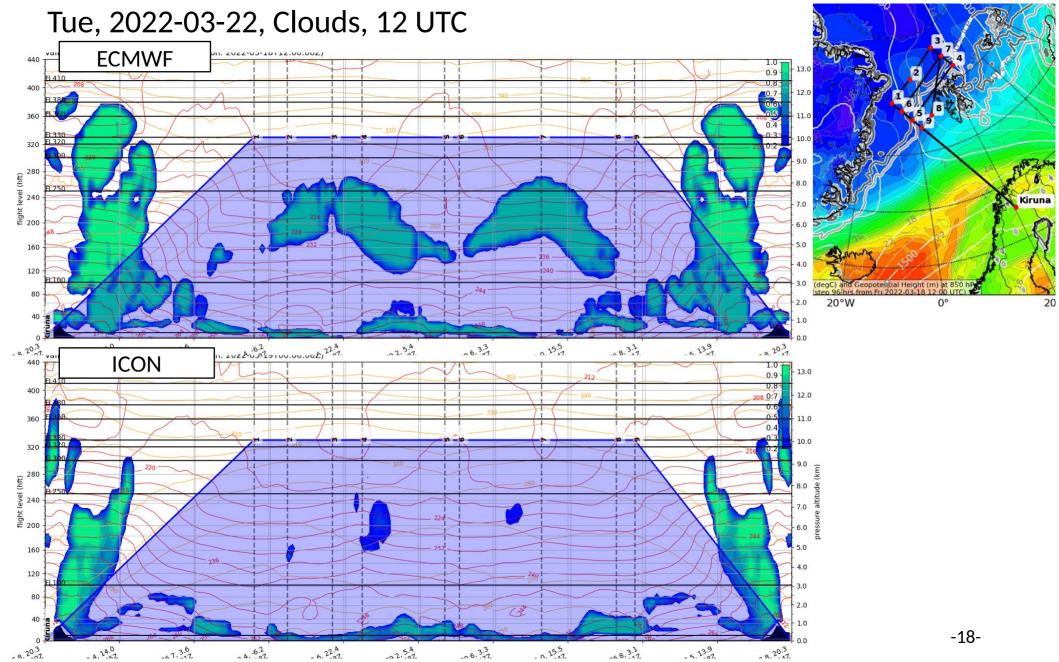
Sun, 2022-03-20, Cloud ice, 10 & 14 UTC



## Cloud cross-sections for flight track HALO RF07, Sun - Tue 2022-03-18 12 UTC & 2022-03-19 00 UTC ECMWF & ICON



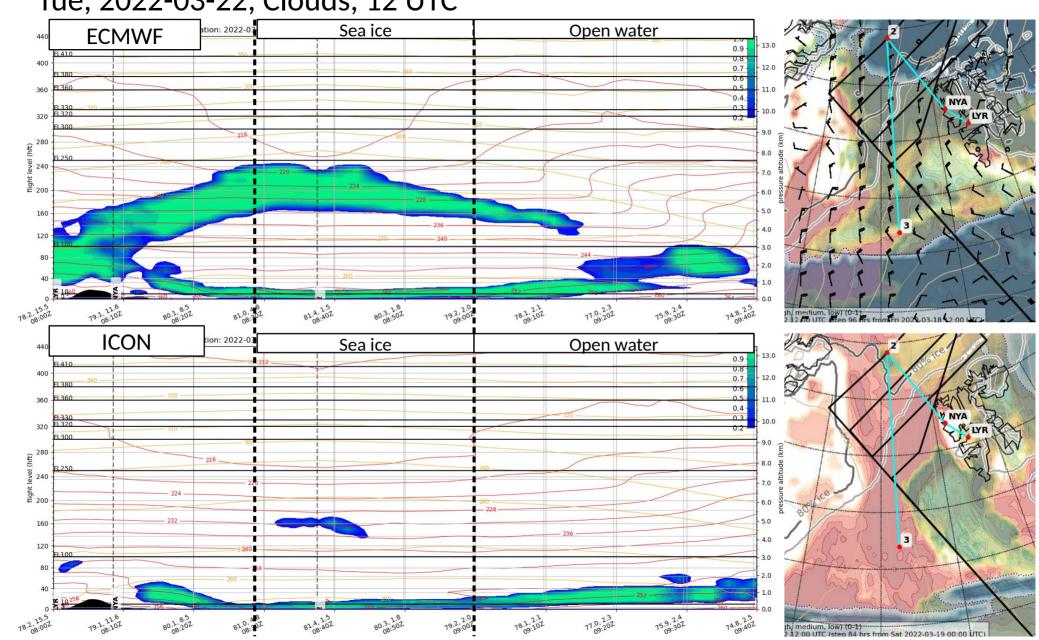




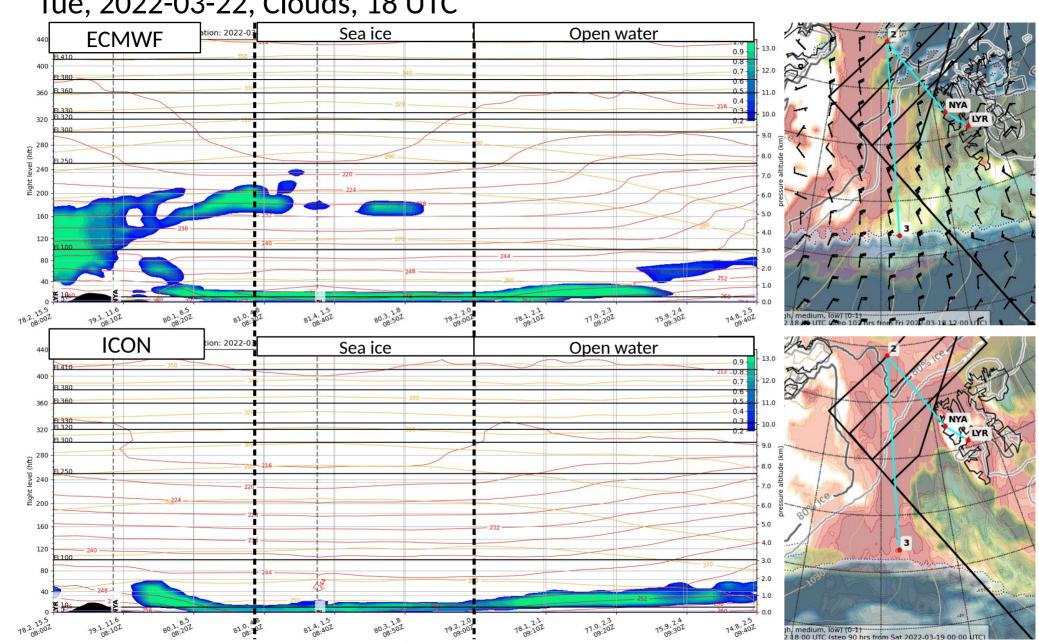
## **Cloud cross-sections for CAO situation on Tuesday**

2022-03-18 12 UTC & 2022-03-19 00 UTC ECMWF & ICON

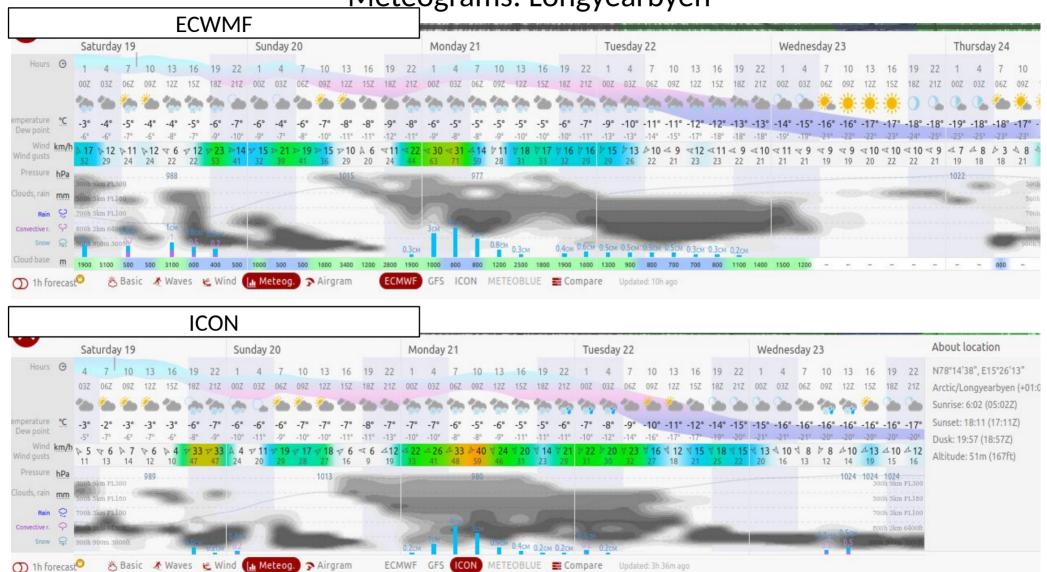
Tue, 2022-03-22, Clouds, 12 UTC



Tue, 2022-03-22, Clouds, 18 UTC



Meteograms: Longyearbyen



## **Summary**

## Summary: Weather Update 2022-03-19, 09:00 LT

#### • Saturday, 2022-03-19:

 TAF: Snow fall, snow pellets or small hail together with wind more and more from SW to be expected

#### • Sunday, 2022-03-20:

- Overall, good conditions at LYR airport with only few or scattered low clouds, but snowfall might be present until morning
- NW of Svalbard over sea ice: area with only low clouds and also small cloud free area (but cloud ice indicated there in NWP model run)
- Cloud situation at HALO pattern not changed considerably

#### • Monday, 2022-03-21:

- Cold air outbreak over southern Fram Strait
- Low pressure close to Svalbard will cause a lot of precipitation over the island

#### • Tuesday, 2022-03-22:

- Cold-air now advected also over Svalbard and rest of Fram Strait
- Development of low-level cloud streets possible, but higher level clouds might be still there
- Low from day before moves further to SE, but some snowfall might remain due to low-level trough over Svalbard that might get "support" from upper-level flow