



Report from DMI Greenland Ice Service

Danish Meteorological Institute
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JCOMM ETSI VI 28th February – 03 March 2017

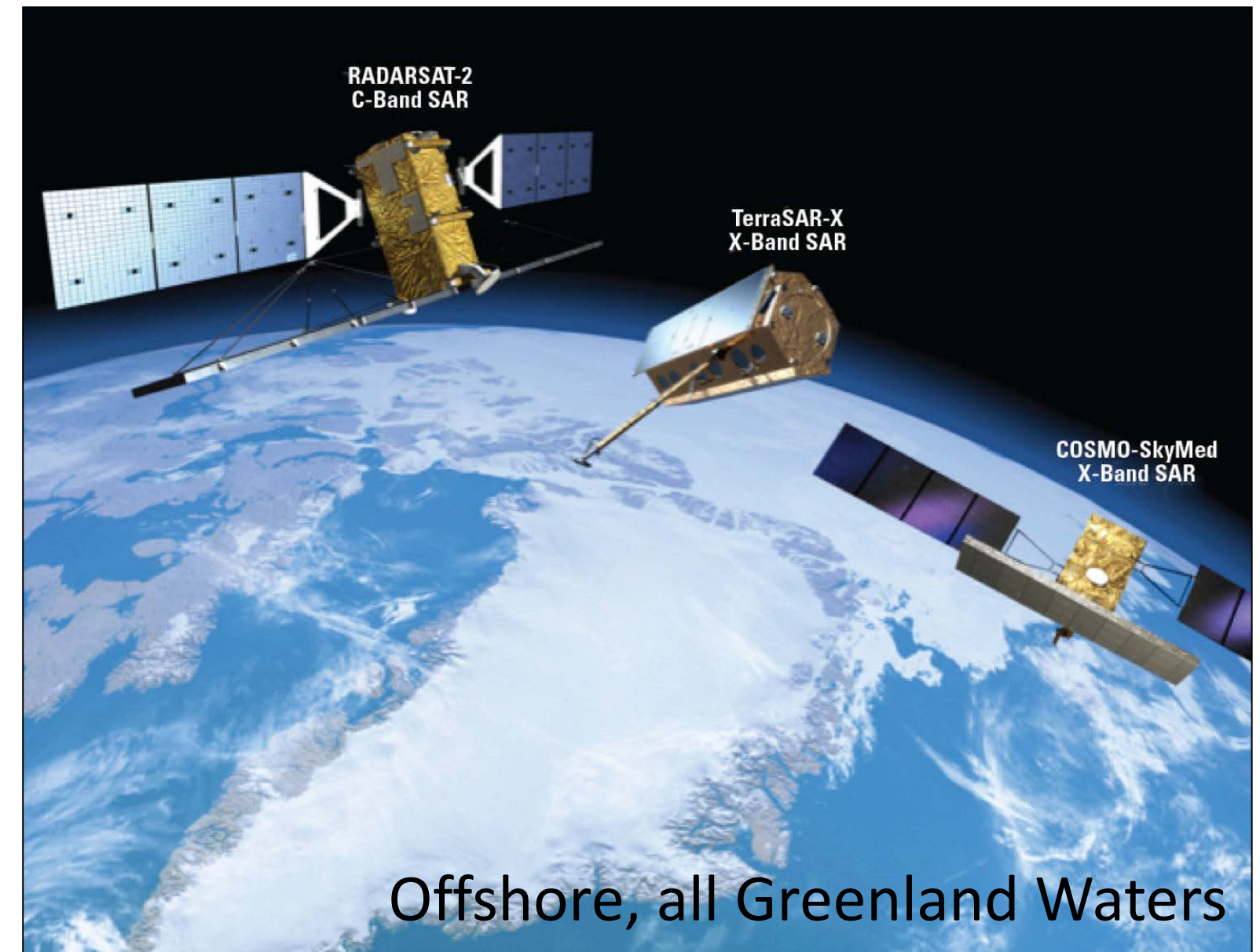


DMI operates two offices: Ice Patrol Narsarsuaq, Ice Operations Copenhagen



Inshore, south

Narsarsuaq office will likely
close by the end of 2017

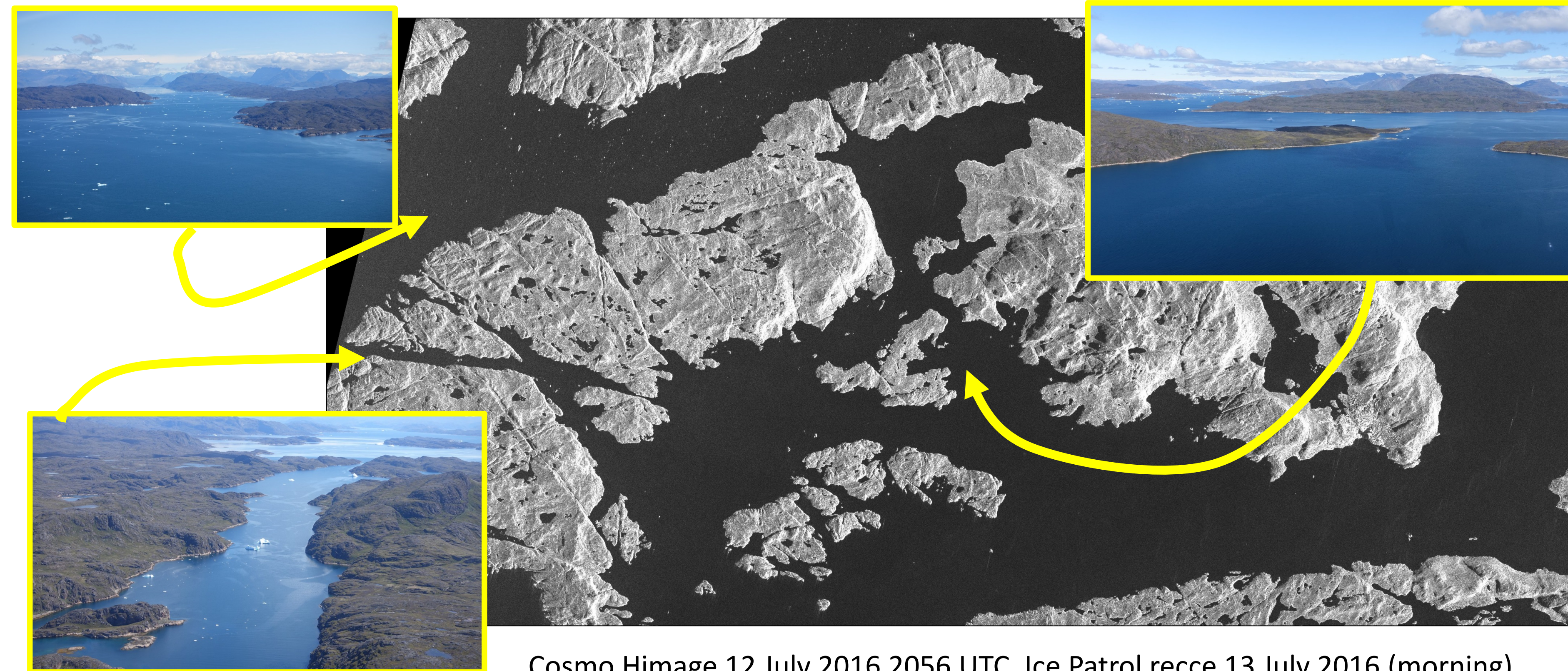


Offshore, all Greenland Waters

Automated processing of Radarsat-2, Sentinel
1A&B, CosmoSkyMed for ice analysis
(North Atlantic Coverage 43°N – Arctic Ocean)



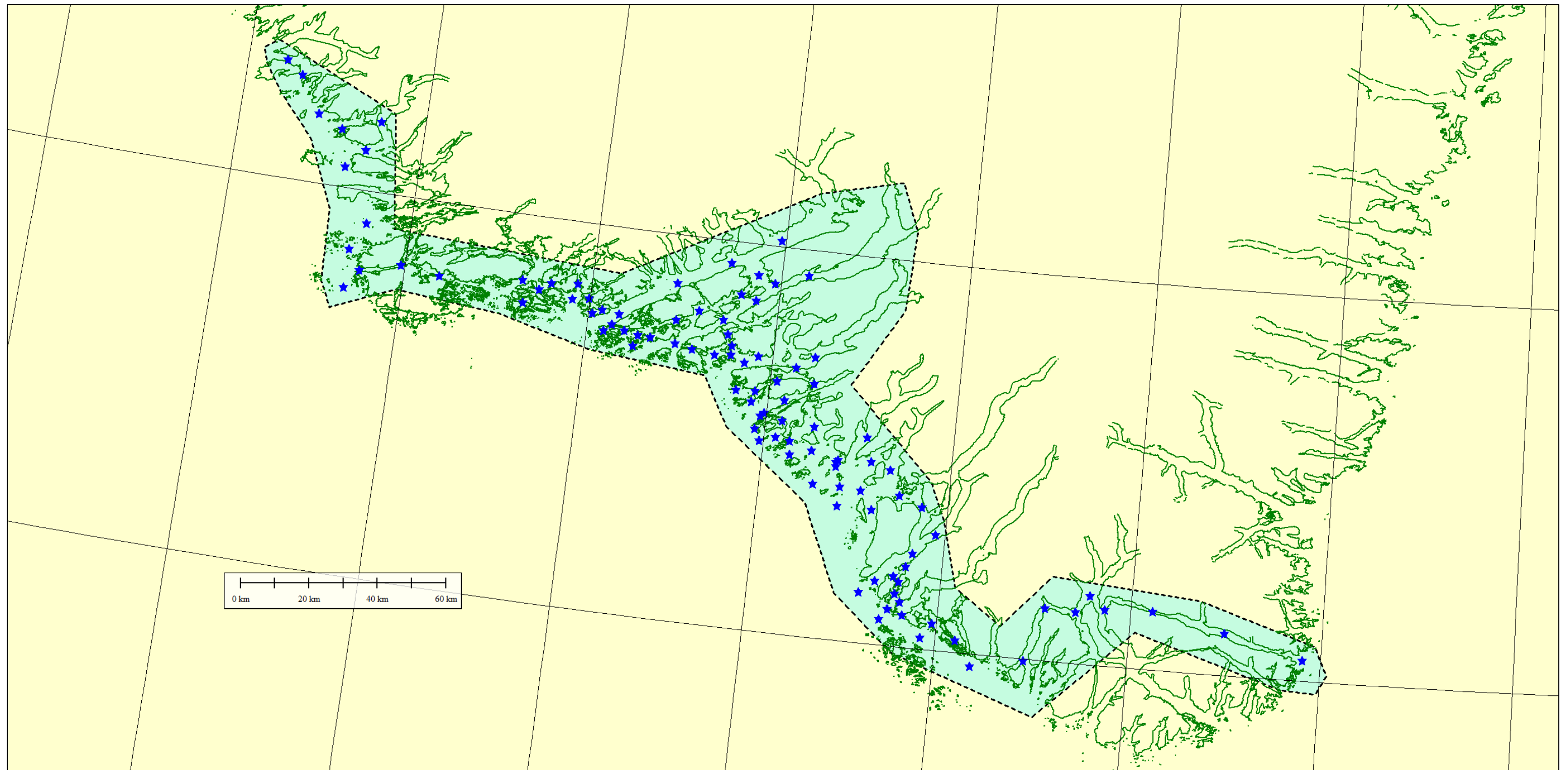
By the end of 2017 satellites will likely take over in South Greenland



Cosmo Himage 12 July 2016 2056 UTC, Ice Patrol recce 13 July 2016 (morning)

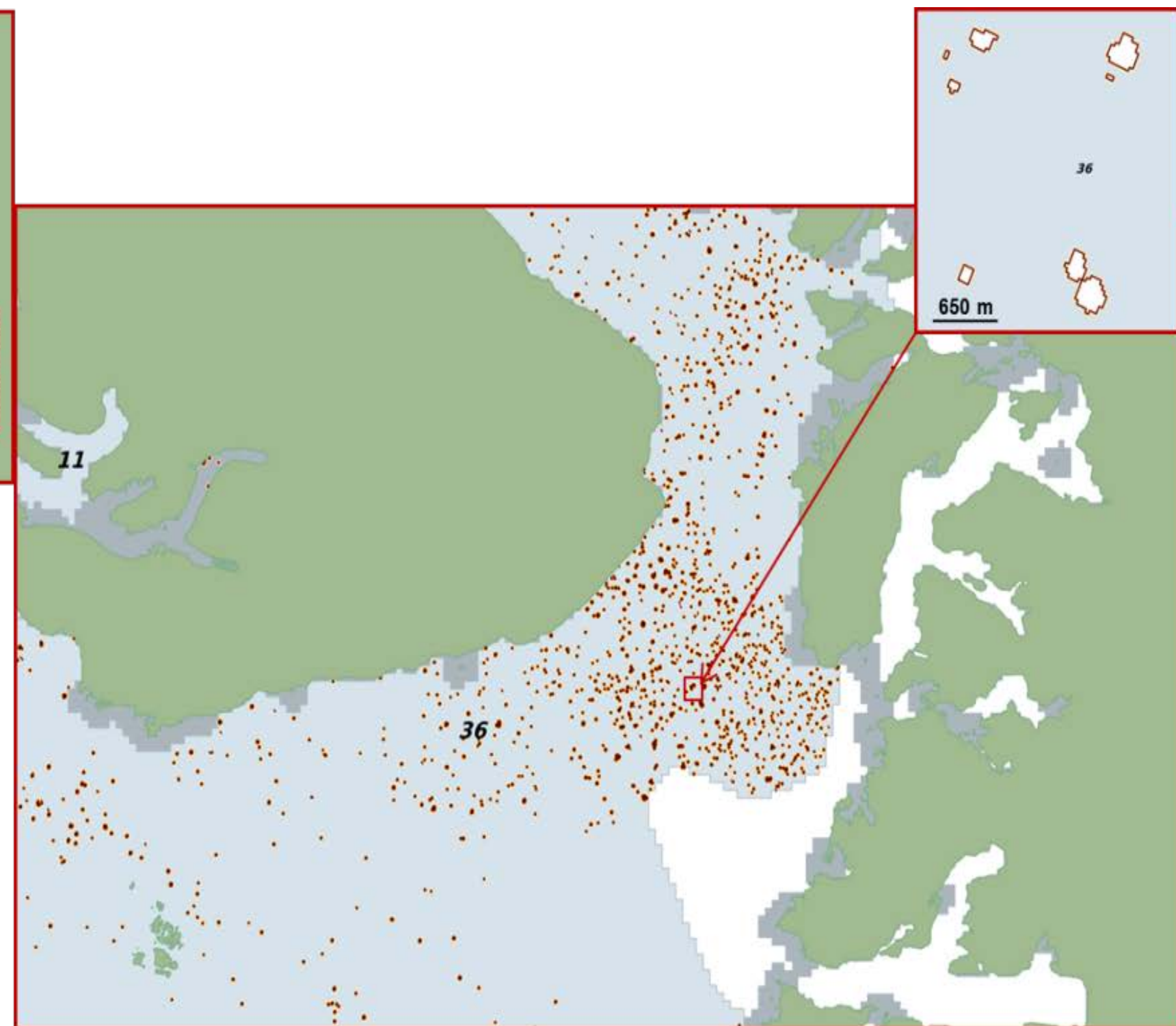
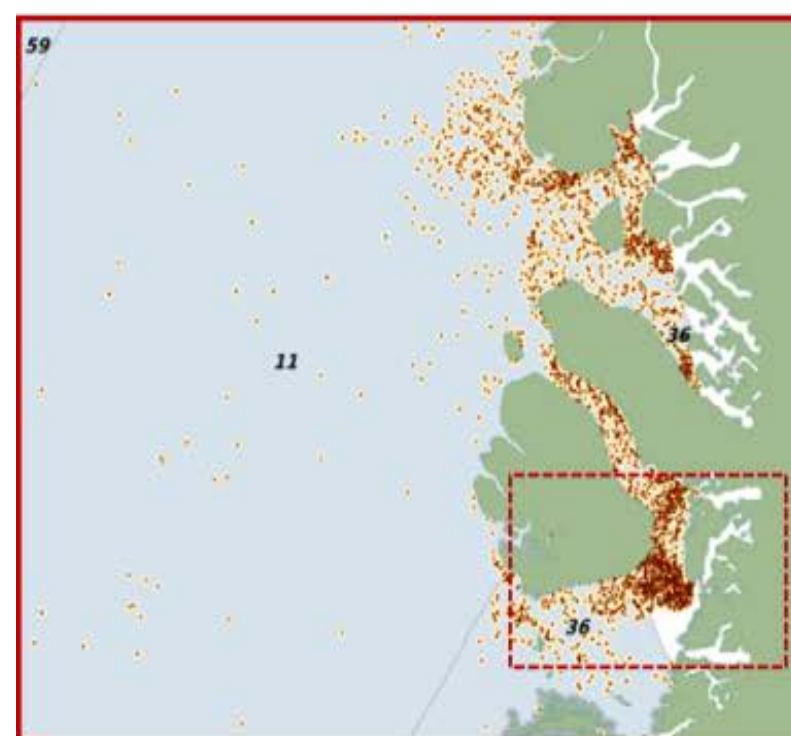
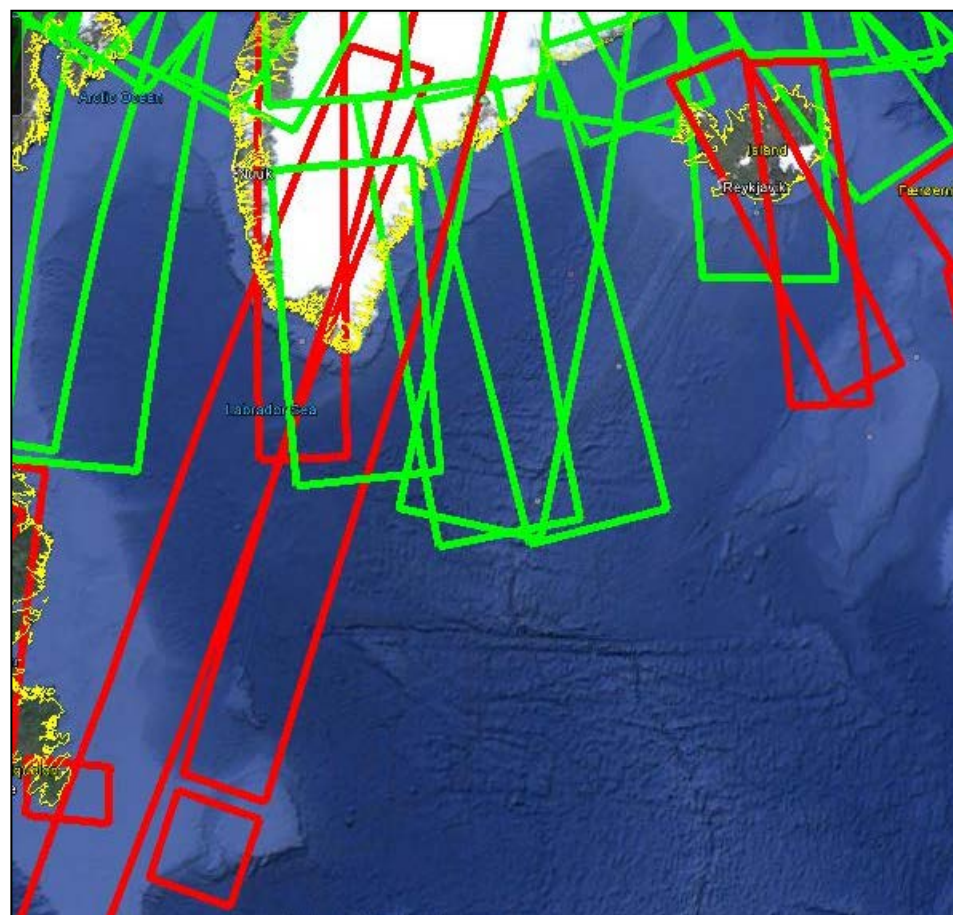


South Greenland inshore ice report (AOI)





Copernicus data for Manual Ice Analysis and Automated Target Detection



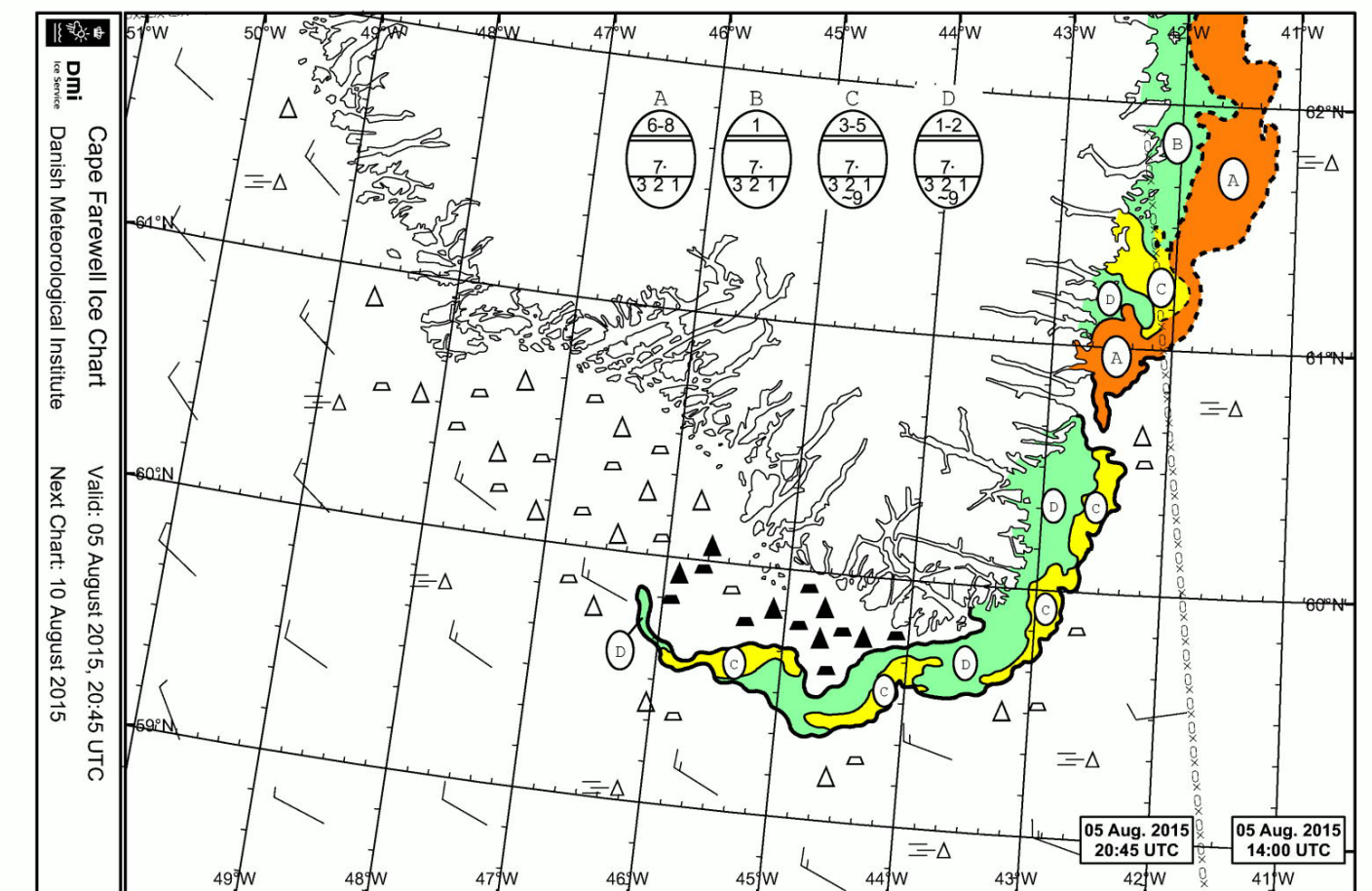
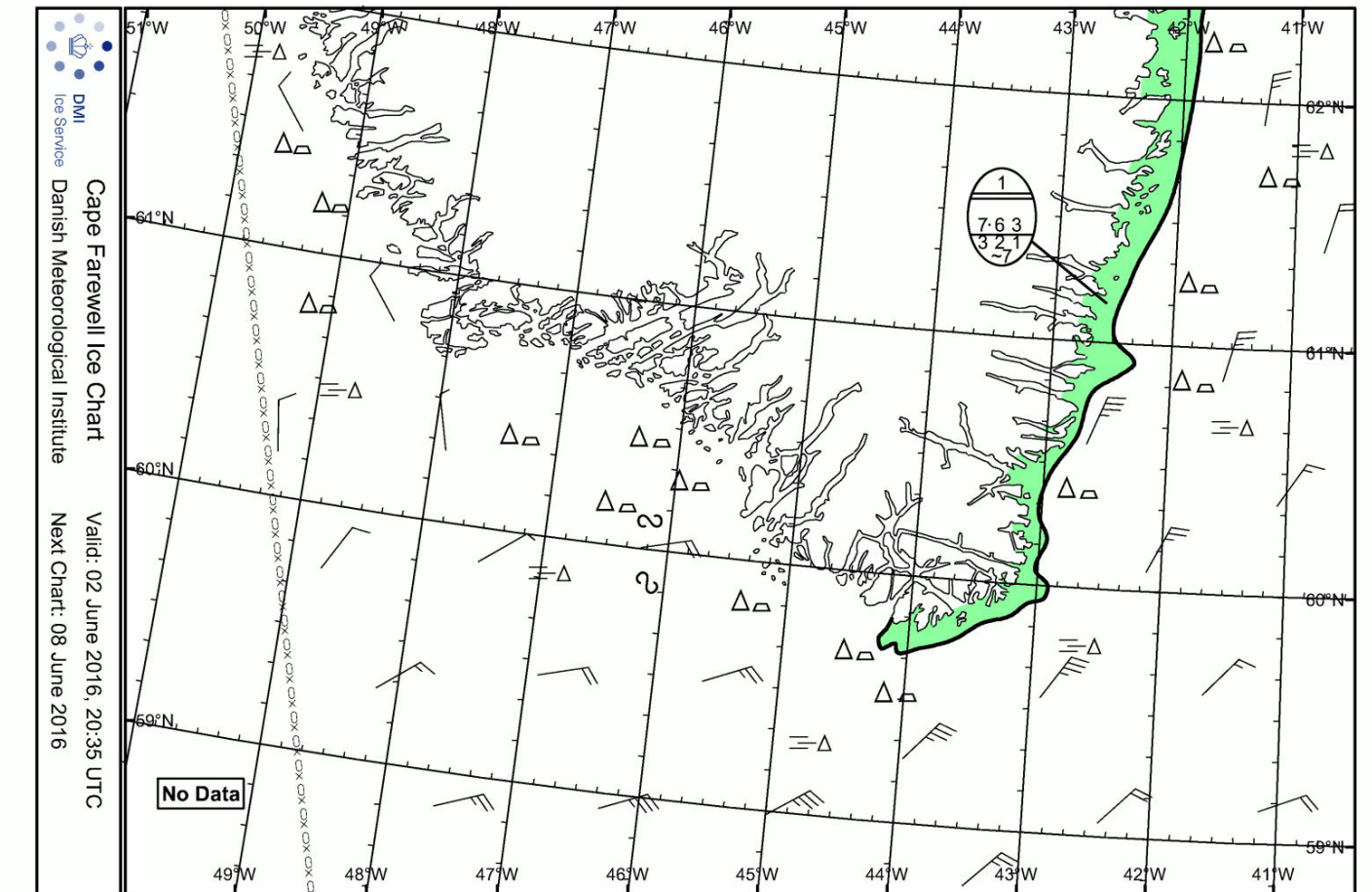


2016 in the DMI Greenland Ice Service

- 290 regional ice charts issued
- 103 Greenland Ice chart issued
- 86 inshore ice reports issued
- Ice in daily marine forecasts
- Users served in joint operations by Ice Patrol Narsarsuaq and DMI Copenhagen
- User Meeting in Nuuk 07th September 2016

Misc.

- Shortest MY ice season in the south since 2005
- Disko Bay open most of the winter
- Early clearance, late freeze up
- Ice charting system upgraded to ArcGIS 10.3





Ice included in marine forecast for Greenland

Example, navigational forecast

Tuesday the 12. July 2016, 07:20 UTC.

Synopsis 06.00 UTC.

Forecast, valid to Wednesday the 13. July, 06 UTC.

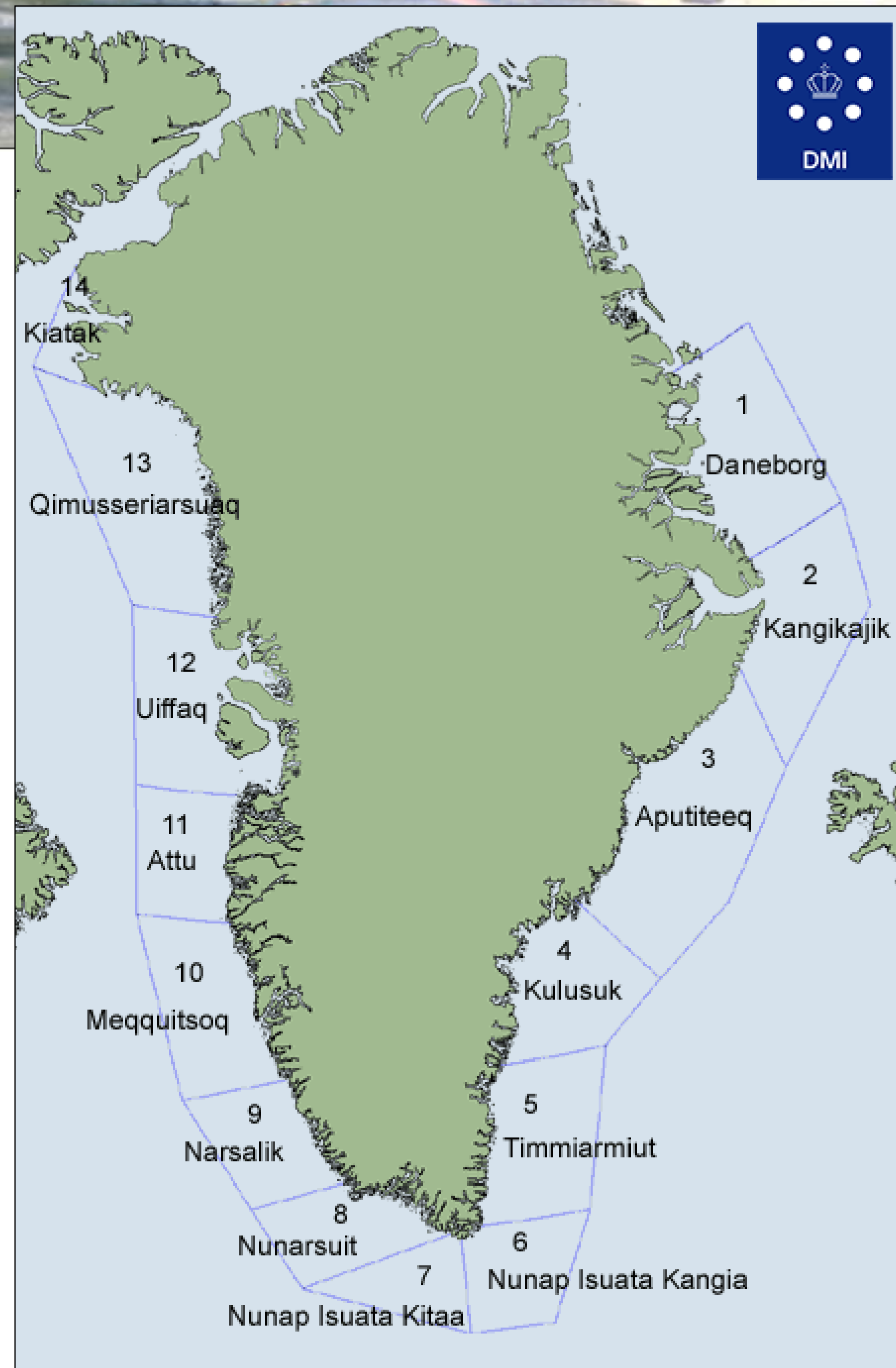
A high, 1024 hPa, over northwestern Greenland, is almost stationary. A minor low, 1018 hPa, just south of Cape Farewell, is moving a little towards east.

Forecast for Daneborg

Around north, 3 to 10 m/s, strongest in eastern part, from this evening in eastern part north and northwest, 5 to 10 m/s, otherwise variable, below 6 m/s. Good visibility.

Significant wave height: 2 m. Swells: 2 m.

Few areas with old ice and first-year ice in the western and northern part. Few icebergs and growlers in the eastern part.





Ice products distribution

→ pdf, SIGRID3

→ Email

→ National broadcast

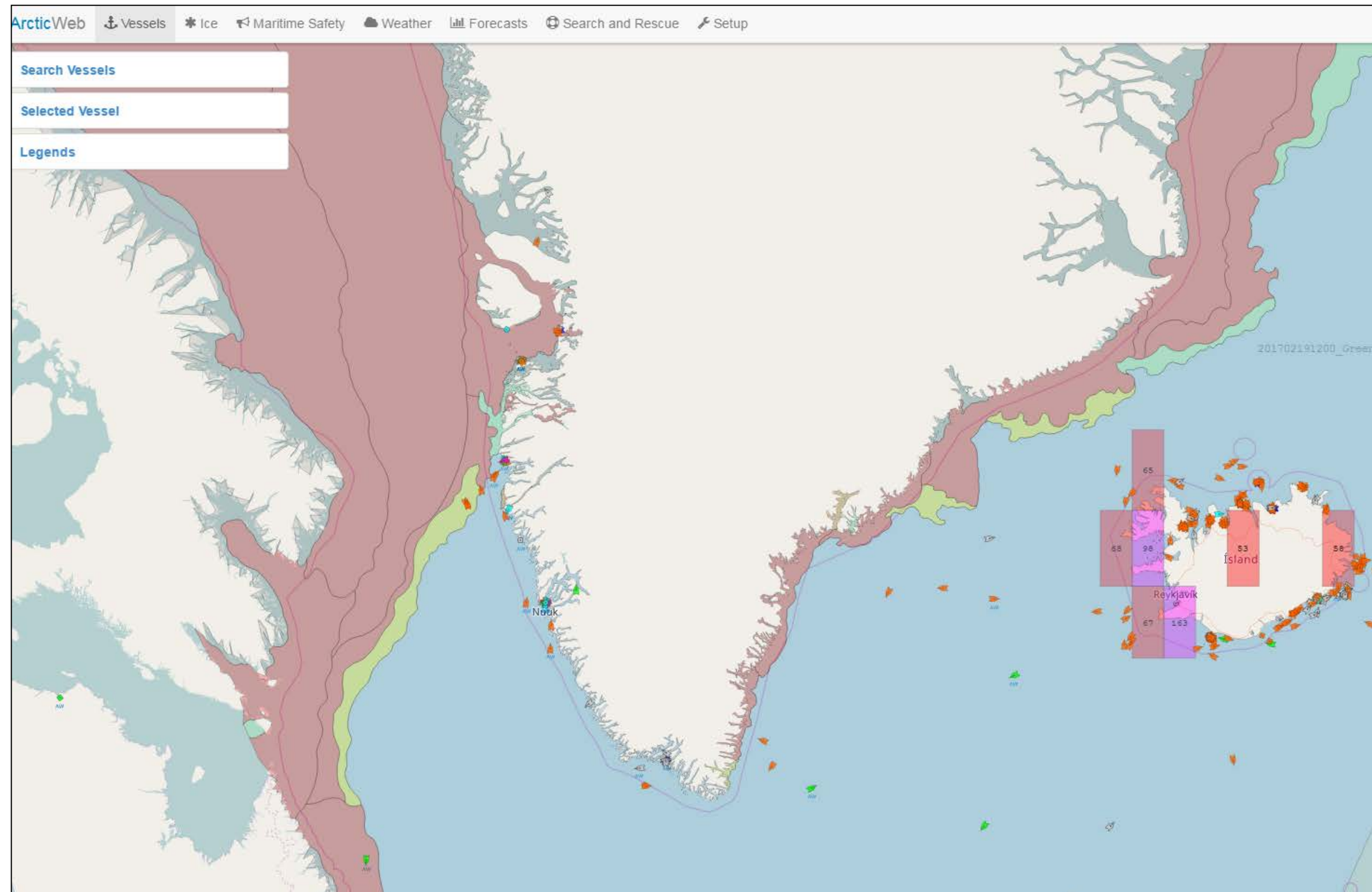
→ NAVTEX

→ dmi.dk

→ ArcticWeb

→ Several external ftp sites

→ Filtering of target products

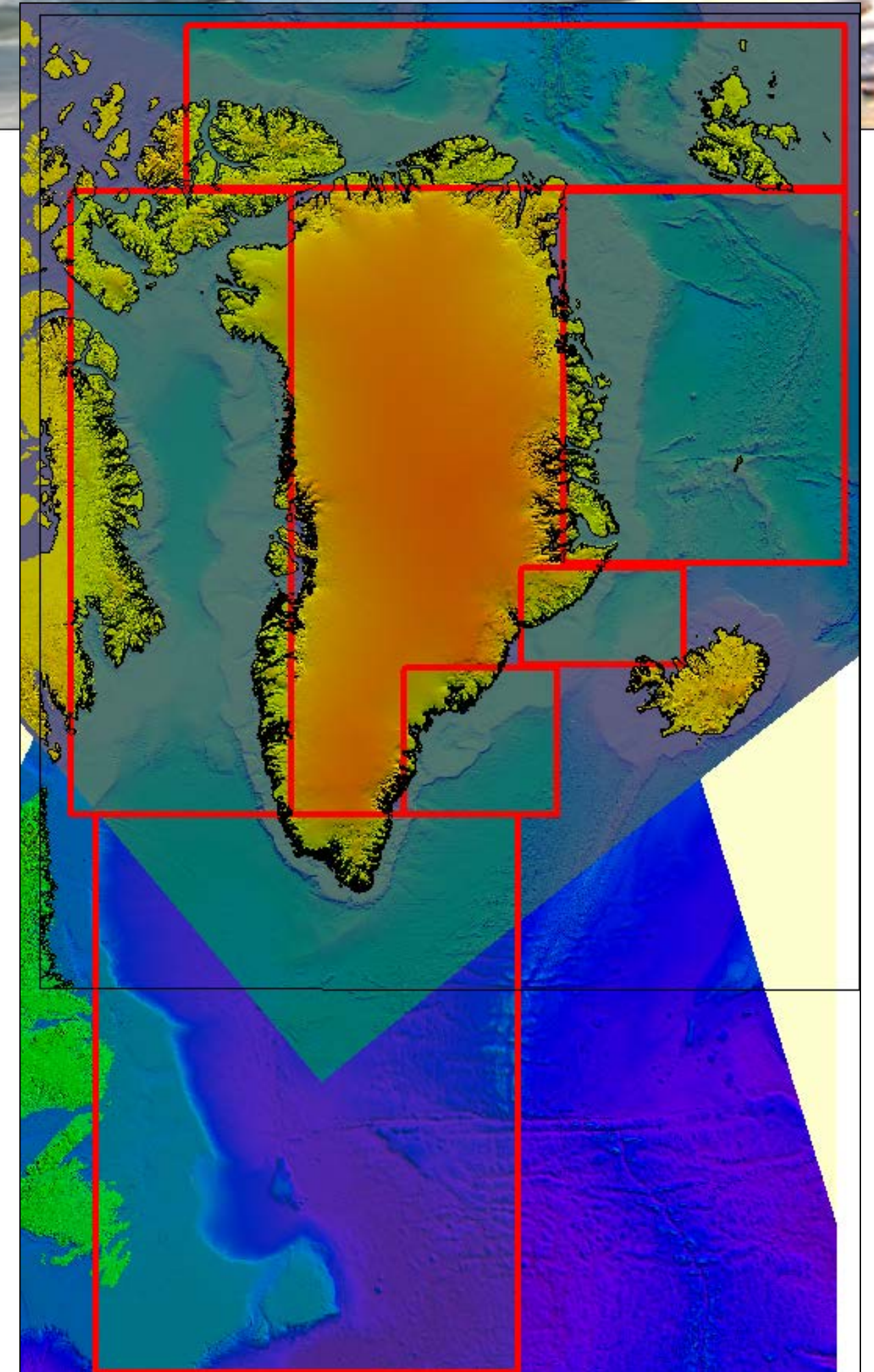
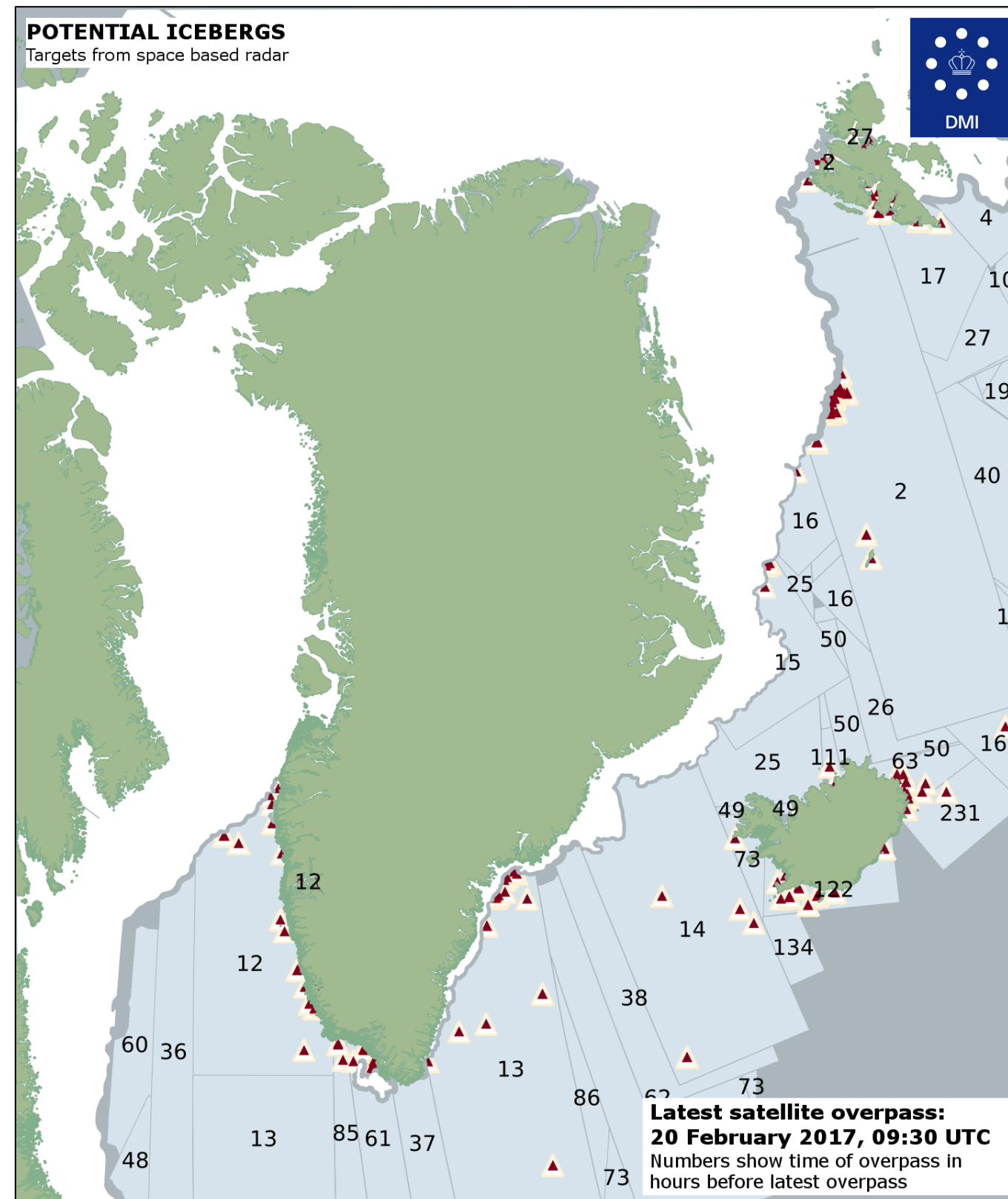




Automated target detection for the NW Atlantic

New setup soon:

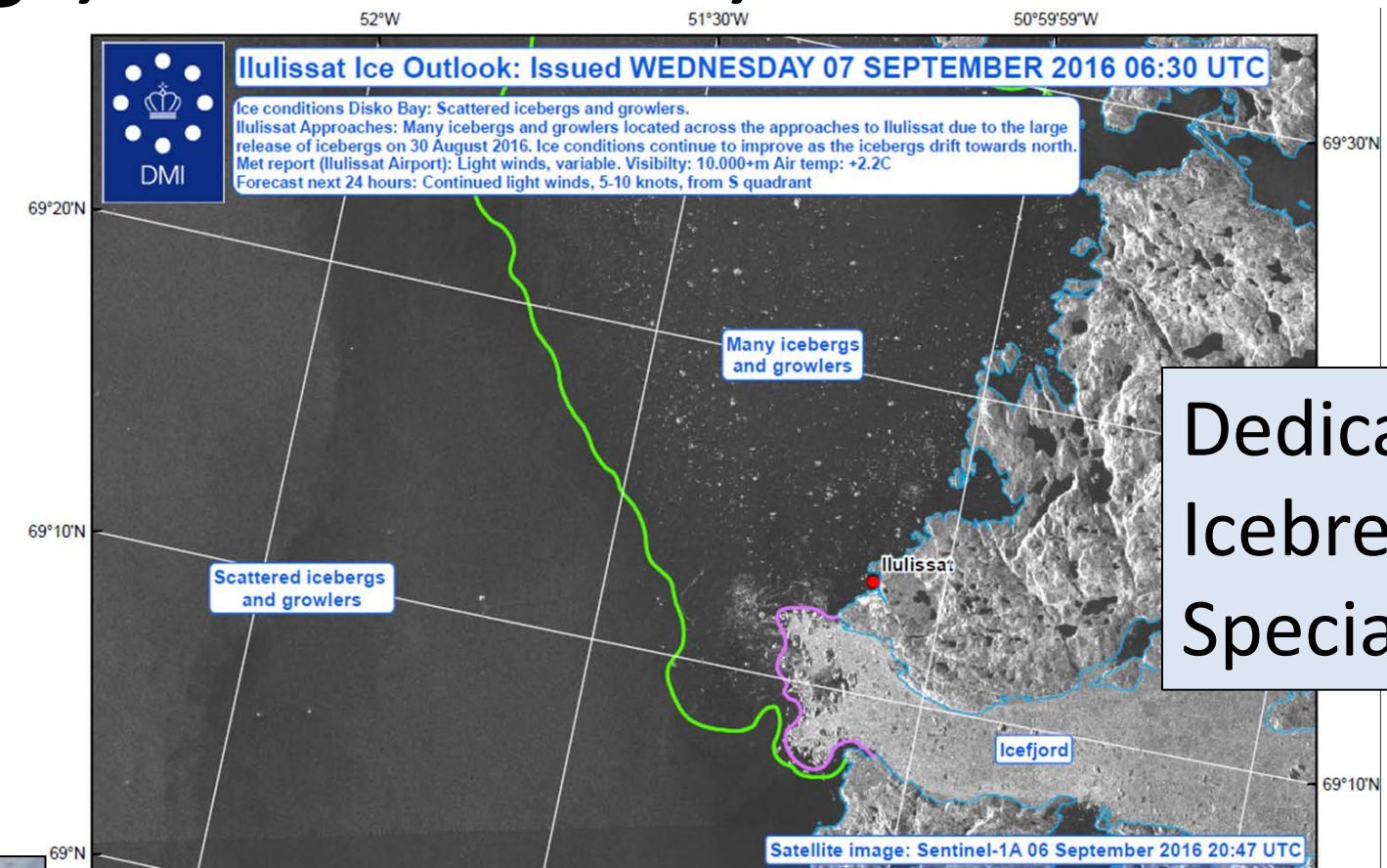
Sentinel EW/IW modes





Crystal Serenity journey through NW Passage, via Greenland, to New York.

Crystal Serenity in Nuuk 09 September 2016



Dedicated pilots
Icebreaker
Special services

