

Norwegian Meteorological Institute

## **AMV in reanalysis projects**

CARRA – Copernicus Arctic Regional ReAnalysis PRECISE – Production of a regional Reanalysis for Europe within the Copernicus climate change Service

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## **CARRA - Main points in planning**

- Four years project, could turn into continuous service after the end of the project
- Will produce reanalysis from July 1997 to present-day at end of project (24 years)
- Will run the production at ECMWF HPC facility
- Additional task: proof-of-concept pan-Arctic system will be tested



Identical resolutionn(2.5 km) and setup for the two domains. Extended versions of area used for NWP



## PRECISE

- Four years project, could turn into continuous service after the end of the project
- Will produce reanalysis from early 80's to present-day at end of project
- Will run the production at ECMWF HPC facility
- The system will be supporte by an EDA system at lower resolution



Horizontal resolution 5.5 km



## **Atmospheric motion vectors - what do we know?**

- For CARRA a careful set up of polar wind assimilation will be needed. We do have expertise of assimilation of the new polar AMV.

==> Mainly use of winds from IR pictures.

- (Marie) Doutriaux-Boucher et al., 2016, at 13<sup>th</sup> International Winds Workshop reported: The Release 2 of the polar AMV products will be generate from NOAA AVHRR-GAC (Global Area Coverage) imagery data back to 1982 using both EUMETSAT and CIMSS algorithms and will **be delivered to ERA-CLIM2 project** also in 2017.

- PRECISE will use also geo-winds. How is the reprocessing of these data?
- We need to be sure that we have access to these data for both CARRA and PRECISE reanalysis periods

