

## **Large scale Sea Level variation in the Arctic Ocean from Cryosat-2 SAR altimetry**

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Cryosat-2 SAR altimetry is becoming routinely processed at DTU using a suite of empirical retracers that can handle the presence of sea ice within the radar echo.

We have processed 3 years of Cryosat-2 data quantified as either Lead or Ocean data within the Cryosat-2 SAR mask in the Arctic Ocean.

One of the problems encountered in the use of Cryosat-2 for oceanographic purposes in the Arctic is the fact that the mask discriminating SAR from other type of data and the quantification of the various data types changes with time so there are only very sparse regions with continuous data of the same type. Furthermore the orbit configuration is such that the repeat is around 1 year. Consequently we applied binning of the data in order to increase the temporal resolution for the analysis of temporal changes in the Arctic Ocean from Cryosat-2.

This contribution is the outcome of work related to the international ESA CP40 project.