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Poster

The scope of this study is a regional analysis and inter-calibration of the current and legacy altimeter products in the German Bight against in-situ data and model results both in open sea and in coastal zone (i.e. at distances larger/smaller than 10 Kilometers). The geophysical parameters to be validated are the sea surface height above the ellipsoid (SSH), the significant sea wave height (SWH) and wind speed (U10).

The in-situ data are from a network of tide gauges and platforms which are also GNSS stations.

The wave model data are from two models, namely the Wave Watch III model run within the IOWAGA project and the LSM model that is run operational at DWD/BSH. Beside resolution, the main difference is the physical description of the wind input and dissipation that is used in the wave models and the fact that the LSM model is nested in a global model which is assimilating altimeter wave height measurements.

In order to carry out this task and validate the results, special metrics will be applied.

The ultimate work objective is to monitoring the accuracy of the long-term sea level change in the German Bight area. Intermediate objective the discussion the quality of models analysed through dedicated model-data intercomparison studies.

The network and analysis method has been used successfully for the validation of the Cryosat data and now be extended for other missions.

OSTS session

Regional and Global CAL/VAL for Assembling a Climate Data Record

Meeting name

Ocean Surface Topography Science Team (OSTST) Meeting

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