

Denise

Dettmering

Deutsches Geodätisches Forschungsinstitut (DGFI)

Wolfgang Bosch, Deutsches Geodätisches Forschungsinstitut (DGFI)

Oral

A rigorous inter-mission calibration is mandatory in order to use multi-mission altimeter data for sea surface monitoring with high spatial and temporal resolution and to enable a seamless connection between time series of different missions, mainly between TOPEX, Jason-1, Jason-2, and its successors.

The multi-mission cross-calibration (MMXO) developed and routinely executed by DGFI provides time series of radial errors for each mission included in the investigation with respect to a reference mission. These time series are used for correcting each altimeter measurement and to derive one consistent long-term altimeter data set with high spatial and temporal resolution.

By analyzing the calibration results detailed information on the quality and deficiencies of the different altimeter missions and on their consistency are revealed. In addition to relative range errors, stochastic properties of the time series as well as geographically correlated errors and information on the realization of the center-of-origin can be computed.

This presentation will show the latest results of DGFI's multi-mission cross-calibration (MMXO14) which is based on most recent data sets, correction products, and orbits. Special focus will be given to reprocessed Jason-2 GDR-D data, on Jason-1 measurements from geodetic mission phase, and on the new missions Saral and HY-2A.

OSTS session

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

[Download to PDF](#)