



ESA Sea level CCI

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1. Statement of overall progress of project

The project is on schedule: Thematic investigations (WP2) are in progress. The database and the processing chain are being prepared for the production of the 2011-13 ECV extension. The Phase I PVIR has been updated after ESA's review and some Phase II deliverables have also been updated (PMP, PSD, DARD).

2. Data Gathering and Quality for Phase 2

No problem is detected concerning the required input and validation data for phase II. For the improvement of the atmospheric correction (WP2420), the acquisition of the Japanese atmospheric reanalysis is in progress.

3. Evolution in product specification

The Climate Research Group provides a feedback mainly on the scientific content of the Sea Level ECV products (performances at various scales and associated errors). It also recommends, for instance, extending the time series as often as possible. No recommendation has been received on the product specification (definition, nomenclature, format...).

4. Round Robin (Algorithms evolution)

Algorithm development is expected to finish in June 2015. To date, external corrections to the project have been evaluated (ocean tide model, orbit solution). For phase II, several tasks have been completed or are being performed including an update of atmospheric corrections for the next ECV extension, sensitivity of the MSL calculation to the orbit of the reference mission, GFZ orbit solution development, and sea level improvement in the Arctic seas.

5. International Scientific Cooperation

The SL_cci ECV has been compared with other sea level datasets produced by international teams (University of Colorado, NOAA, GSFC, CSIRO). In addition, comparisons with the sum of climatic contributions estimated independently (e.g., Argo-based steric and GRACE-based ocean mass components) are in progress. This is part of the activity of the Climate Research Group (LEGOS). In addition, the SL_cci project's team has been interviewed by the QA4ECV project dealing with the errors in the data processing and with the management of the databases.

6. Future Activities

Future activities will include technical developments carried out by the Earth observation team (evaluation and development of new orbit solutions and improved Arctic sea level calculation) and improved error characterization of the products. The 2011-2013 extension of the V1.1 ECV time series is expected by the time of the AGU Fall Meeting, together with the 6th newsletter. The project website hosting is planned to be transferred to another member of the team.

7. User impact with Phase 1 products and feedback

Close to 30 external users have required access to the data: this number will increase with the extension of the SL_cci time series. Some questions are related to the content of the altimeter corrections and the associated errors.



8. Project outreach / promotion of data sets

The project results were represented at the COSPAR meeting in Moscow in August 2014. Presentations are planned at the EumetSat conference in Geneva in September, the ESA/Eumetsat Climate symposium in Darmstadt in October 2014 and the OSTST meeting also in October. The Ablain et al. publication presenting the SL_cci project and phase 1 results is under review in the "Ocean Science" journal.