



Monitoring of Coastal Areas with the Coastal Thematic Exploitation Platform

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The Coastal Thematic Exploitation Platform started a pre-operation phase in mid 2017. This platform allows users to perform on-line processing using pre-installed or user-provided software and data sets. The available data is targeting the needs of coastal monitoring. It includes EO data sets (Sentinel-2 imagery on coastal areas, GlobColour ocean colour products, CTOH Coastal altimetry products, etc.) as well as in-situ data (bathymetry, tide gauge data...). Similarly the available services try to address the needs of coastal monitoring: bathymetry retrieval, change detection, coastline monitoring, and comparison between EO data and in-situ measurements.

One of the major objectives of the pre-operation phase was to test the process allowing users to integrate their own software. The platform interface has been designed to allow an easy integration of existing software with minor modifications. Return of experience from the first months of operation is therefore critical to validate the design choices and propose evolutions for the future.

We report on three main projects developed during the pre-operation phase:

- * the integration of a tool to compare satellite coastal altimetry and tide gauge measurements
- * the development of change detection service to monitor protected coastal areas
- * the integration of an algorithm to retrieve shallow water bathymetry from satellite optical images

Each project will be described and the lessons learnt presented.