

Getting the most out of the Earth Observation data for marine and coastal science : New satellites, tools and research

When ? 16th of June – 9:00 to 12:30

Why ? The launch and operation of the Copernicus program by the European Union have considerably changed the way Earth Observation (EO) is supporting a large number of environmental studies. Scientists now have access to continuous and sustainable EO data flux that allows the generation of consistent time series (e.g. for climate studies) as well as environmental services deployment. While more and more data become available, its effective use could however be limited, due to the required storage and processing capabilities. Several systems have been put in place to overcome these difficulties. The basic principle is to offer users a virtual environment linked/close to the data, where processing can be done and the results (only) are downloaded on the user's system. This principle allows the data flow to be drastically reduced and offers the user large processing and storage capacity. Under ESA's guidance, ACRI-ST and partners have developed such a system, called the Coastal-Thematic Exploitation Platform (C-TEP) whose objective is to support marine (not only coastal) studies making the widest use of the available EO data. In parallel with these developments, several studies have been undertaken to improve estimations from remote sensing of the components that play a role in the marine carbon cycle (POC, PFT...). The objective of this workshop is twofold: i) to inform attendees of new EO data, new opportunities offered by the space component, and new products specific to the marine carbon cycle, and ii) to present the C-TEP, which is available to the community to develop specific algorithms 'close to the data', to foster scientific exchanges between labs, and to do processing on demand for such products.

Schedule

- 09:00** Welcome, introduction, background and aims of the workshop (Antoine Mangin – ACRI-ST)
- 09:10** Status and evolution of the EO spatial component of marine observations – European perspective (Gordon Campbell - ESA)
- 09:30** New IOPs and Carbon products from ocean colour (Hubert Loisel, Daniel Schaffer - LOG)
- 09:50** OLCI-PFT: A global retrieval algorithm of phytoplankton functional types toward the applications to OLCI and GlobColour Merged Products (Astrid Bracher, Hongyan Xi - AWI)
- 10:10** A global estimate of the marine Primary Production over the GlobColour archive (Marine Bretagnon, Philippe Garnesson – ACRI-ST)
- 10:30** Coffee break
- 10:45** Presentation and demonstration of C-TEP (Antoine Mangin, Christophe Bevy - ACRI-ST)
- 11:45** Discussion with workshop participants / feedback and requirements for future steps
- 12:30** End of Workshop