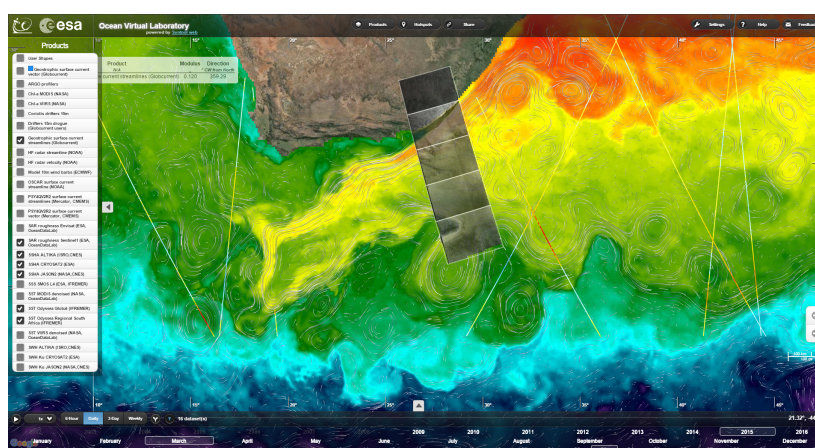


SY4SCI SYNERGY STUDY: OCEAN VIRTUAL LABORATORY

Goal of the project

The project allows oceanography experts to discover the existence and then to handle jointly, in a convenient, flexible and intuitive way, the various co-located Earth Observed (EO) datasets and related model/in-situ datasets over dedicated regions of interest with a different multi facet point of view. The developed tools shall foster the emergence and prototype of new methods and products making use of the complementarity between sensors to study ocean related processes.



Short description of the project

The project aims to implement new software putting together two types of tools: a mathematical programming environment and a geographical programming environment.

The principal tasks are the following.

- Implementation the SY-4Sci OVL novel synergy algorithms and the OVL platform, perform validation of new synergy products and access Sentinel1 and Sentinel3 products suitability for synergy studies.
- Write recommendation for further scientific research exploiting the synergy between ocean satellite sensors with a special focus on Sentinel1 and Sentinel3.

Implementation period

October, 24, 2014 – October, 27, 2016.

Project implemented by

- OceanDataLab, Brest, France – Contractor
- Institut Francais de Recherche pour l'Exploitation de la MER (IFREMER), Brest, France – Subcontractor
- Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway – Subcontractor
- Politehnica University of Timișoara (UPT), Romania – Subcontractor
- Institute of Oceanology of the Polish Academy of Sciences (IO PAN), Sopot, Poland – Subcontractor
- Plymouth Marine Laboratory (PML), Plymouth, UK – Subcontractor

Main activities

- Review of existing synergy methods and consolidation of requirements
- Define new methods and algorithms
- Selection and preparation of EO products database
- Specification and implementation of the prototype platform and processing modules
- Validation of the developed tools and products
- Recommendations for further scientific research.

Results

Deliverables

- Requirements Baseline,
- Algorithm Theoretical Basis document,
- Product Specification document,
- Product Validation Report,
- Software User Manual.

Dissemination

- Publications,
- Presentations,
- Training Courses.



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Applicability and transferability of the results

The subject is evaluated today at technology maturity level 1 and it is aimed to conclude the project at technology readiness level 3.

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Research centre

Research Centre for Intelligent Signal Processing (ISPRC)

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