

SEOM SY-4SCI Ocean Virtual Laboratory using the synergy amongst Sentinels for Ocean Science.

F. Collard^{a,*}, J.Johannessen^b, A.Korosov^b, B.Chapron^c, N.Reul^c, A.Isar^d, M.Darecky^e, G.Quartly^f

^a OceanDataLab (ODL), Plouzané, France – dr.fab@oceandatalab.com

^b Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway – johnny.johannessen@nersc.no

^c L'Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER), Plouzané, France – bchapron@ifremer.fr

^d Polytechnic University of Timisoara (UPT), Timisoara, Romania – alexandru.isar@upt.ro

^e The Institute of Oceanology of the Polish Academy of Sciences (IOPAN), Sopot, Poland – darecki@iopan.gda.pl

^f Plymouth Marine Laboratory (PML), Plymouth, UK – gqu@pml.ac.uk

THEME: theme DATA. SEOM Session : invited by the ESA session organiser, i.e. Peter REGNER

KEY WORDS: Synergy, Sentinel, Ocean, Virtual, Laboratory.

ABSTRACT:

The main objective of building an Ocean Virtual Laboratory platform is to allow oceanographers and other scientists to discover the existence and then to handle jointly, in a convenient, flexible and intuitive way, the various co-located EO datasets and related model/in-situ datasets over dedicated regions of interest with a different multifacet point of view.

Synergy tools within the OVL are developed to foster the emergence and prototype new methods and products making use of the complementarity between sensors to study ocean related processes. The OVL is developed with a special attention to provide the best possible visibility on the upcoming Sentinel1/2/3 datatakes and to help plan and coordinate field campaign.

The OVL is participating to a long-term effort towards the development of synergy tools that fill the gap between Space agencies data portals that distributes specific EO data on one end, and analysis software like IDL/ENVI or Matlab that are more suitable for in-depth analysis of a specific dataset. A few GIS systems, such as Google Earth or ARCGIS, are able to import several data layers but very little interaction with data is possible.

* Corresponding author. This is useful to know for communication with the appropriate person in cases with more than one author.