

ICDC10 Abstracts

Poster Presentation

Theme 1.1: The Contemporary Carbon Cycle - Trends, Variability and Time of Emergence of Human Impacts

Keywords: Mediterranean Sea, CO₂ data, Data product and synthesis**The CARIMED (CARbon IN the MEDiterranean Sea) data synthesis initiative: overview and quality control procedures****Sanleon-Bartolome, Henar (1); Álvarez, Marta* (1); Velo, Anton (2); Tanhua, Toste (3); Fajar, Noelia Maria (1)**

1: Instituto Español de Oceanografía (IEO), Spain; 2: Instituto de Investigaciones Marinas (IIM), Spain; 3: GEOMAR, Kiel, Germany

In this work we present the data synthesis project CARIMED (CARbon in the MEDiterranean Sea), we aim to create a uniformly formatted consistent quality controlled public database for carbon relevant variables from hydrographic cruises covering the whole water column and the different basins in the MedSea. Both primary and secondary quality control (QC) of the data has been performed following the experience gathered in CARINA and GLODAPv2. The motivation for this initiative stemmed from two CIESM (Mediterranean Science Commission) workshops, the first one in Menton (France) October 2008 (CIESM, 2008) focused on the impact of OA on biological, chemical and physical systems in the MedSea, and the second one in Supetar (Croatia) May 2011 (CIESM, 2012) focused on designing the Mediterranean Sea repeat hydrography program (MED-SHIP). The unresolved issues regarding the CO₂ system in the MedSea were summarized in Malanotte-Rizzoli et al. (Oc Sc, 2014), one of them the temporal and spatial variability of the interior CO₂ system, clearly justifies the need for CARIMED. Independently two projects focused on compiling CO₂ water column data in the MedSea, an initiative within the EU MedSeA project (Gemayel et al., ESD 2015) called MEDICA (T. Lovato personal communication) and the one here presented lead by the Spanish IEO and partially funded by SanLeón-Bartolomé 's PhD project. We hope a product like this will be much welcome by the oceanographic community, both observationist and modellers, as it was the release of the Meteor cruise M84/3 data in CDIAC used in several publications (Palmieri et al., BG 2015; Cossarini et al., BG 2015; Hassoun et al., DSR 2015 & JWROS 2015; Lovato & Vichi, DSR 2015; Gemayel et al., ESD 2015).

Poster Session (see poster session schedule)