

CIESM Congress Session : Oceanographic networks

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Moderator's Synthesis

Objective: the main objective of these sessions was to present the recent findings and to discuss the changes in the approach to understanding the oceans in the last ten years, today focusing on the links between projects and initiatives that allow focusing on the complexity and on the scales and multi-disciplinary approaches in the ocean, interactions, physical and biological examples of features and processes.

The session: we reviewed the evolution from studying single pieces of the puzzle, the ocean-atmosphere system, single process and single scientist approach to now being able to address the problem in its whole complexity, from the nearshore to the open ocean, from episodic water masses formation events to decadal variability. Examples were presented from key international initiatives such as Med-SHIP, Argo, Euro-Argo and Med-Argo, BIOS, HydroChanges 2002-2016, FixO3 (the RT ones...), the ongoing JERICO-NEXT projects, etc.... and therefore concluding that the combination of networks is the key.

The importance of the present time in Mediterranean oceanography was discussed: we are now starting to be able to connect the pieces of the n-dimensional Ocean Planet puzzle, linking water mass changes to dynamical effects at seasonal, annual and inter-annual to decadal time scale, ecosystem variability at the different scales... etc... And the reason for this.... is the paradigm change in ocean observation and data availability.

Data: the importance of data harmonization among the different observatories. The interesting EU Trans National Agreements for platforms use (TNA), and new tools such as Service Activity (you can ask the data from different places, but you can also request specific services related for example with deep water formation...). The EMODnet leadership in Europe on free and open data, examples. MedSea Checkpoint project is also a key example.

EOOS: the relevant EOOS initiative providing a common framework in line with UN agenda for SDG's, COP21 which did not ignore the role of the oceans in climate change, the G7 communiqué on the role of ocean observations, and the need of free and open data. EOOS is a concept. Concept plus action become a Reality. The key: leadership and coordination. The Mediterranean leadership is recognised at EU and international level.

