



MARITIME FORUM

"Observation and forecasting in the ocean. Critical aspects. From observation to information" (3.2)

Event date:

19/05/2010 - 09:00 to 10:45

"Observation and forecasting in the ocean. Critical aspects. From observation to information"

(3.2), Wednesday, 19 May 2010, 9:00 – 10:45

Chair:

Dr **Gregorio Parrilla-Barrera**, Head of Marine Environment Area (retired); Spanish Institute of Oceanography (IEO)

Speakers:

Dr Keith Alverson,

Head of Section, Ocean Observations and Services IOC-UNESCO

Director of Global Ocean Observing System (GOOS) program office

Dr Pierre-Yves Letraon,

Program Director for Operational Oceanography at Ifremer

EuroArgo Coordinator

Dr Alicia Lavín,

Researcher of the IEO in its Lab in Santander

Spanish delegate in ICES

Ms Zdenka S. Willis,

Director Integrated Ocean Observing System; National Oceanic and Atmospheric Administration (NOAA).

Dr Peter M. Haugan,

Director; Geophysical Institute, University of Bergen

1. Three key messages

- Results in organizing and implementing a permanent global system for observations, modelling and analysis of marine and ocean variables to support operational ocean services worldwide have been mixed. In spite of the success of many of the field programmes, efforts have covered about 60% of the actual necessities
- It has not been achieved, at least at the national EC members) or European level, an independent and consolidated funding and political support as they have in Australia and USA. It looks like that the EC contribution to the global implementation has not been as wholehearted as should be.
- It seems that the oceanographic community approach to the diverse users has not been as effective as hoped for.

1. Summary of the interventions from the panel

Dr Keith Alverson,

An integrated, operational global ocean observing system.

There have been great advances in establishing a world ocean observing system in recent decades. About 60% of what would be the needed system is completed. Most have been developed under the auspices of GOOS and regional alliances. An impressive example is the Australian system IMOS. It is sustained by the government with about 35M€/yr and operates national mooring and HF radars network while Australia also contributes to the Indian Ocean GOOS. Cost of GOOS is estimated in \$2billion and right now about half is covered. All regional conventions urge to contribute to a sustained observing system (OSPAR, HELCOM, BARCELONA). The system should be supported by the end-user need and there are some high profile social interests in having such a system (tsunamis, global change, oil spill, storm surges). The challenge for 2010-2015 is to consolidate and increase the system *so European Commission should increase support.*

Dr Pierre-Yves Letraon,

The Euro-Argo research infrastructure: towards a sustained European contribution to a Global Ocean Observing System.

The present challenge is to sustain the system. It was explained in detail why we need Argo and Euro-Argo. It constitutes the first in situ observation system to provide accurate monitoring of ocean heat content and also helps in climate weather issues. Routine products are now included in the GMES Marine Core Service

(MyOcean project). Euro-Argo research Infrastructure belongs to ESFRI RoadMap and 12 countries contribute. It is needed 250 floats per year to sustain the system. There is an agreement for long-term operation and governance, countries are members or observers. IFREMER is the coordinator for the first 5 years.

Dr Alicia Lavín,

Observing Systems at Spain

It was provided a view of the observing systems in Spain and of the different institutions contributing to the national system. There are standard sections, buoy, tidegauges networks and recently gliders, radars etc. It is based on regional (autonomous authorities and central government) alliances and also international alliances as INTERREG (RAIA) and IBI-ROOS as regional alliance under GOOS. New activities are taken place in Spain addressed to the establishing of the so-called large scientific facilities (ICTS), 5 of them are marine being, for the moment, one in the Canaries and other in the Balearics quite advanced.

Dr Zdenka S. Willis,

The United States Integrated Ocean Observing System (IOOS)

This is a collaborative framework for an integrated and sustained system. 17 Federal agencies plus 11 regional associations (state and federal authorities, institutions, industry and Academia) participate for the coastal component. There is also a global component mainly coordinates by national agencies. Examples were shown of the products that can provide, being the most important, presently, those related to the role in the present oil-spill crises. A lot of resources (Radars, gliders) can be quickly mobilized, so they could respond in few days to the white house queries (where the oil is going, etc.). The global component includes safety+economy+environment+energy sector and examples were provided on the usefulness of a global network of observing systems, also including water quality and R&D. component

Dr Peter M. Haugan,

Development and use of observatories in European systems for ocean information and forecasting.

It was presented the role of oceanic Eulerian observatories and time series. The main alliance is under EuroSites which is actually an FP7 project. It is tightly related to other initiatives (Eulerian Observatories, ENSO, OCEANSITES ...). It was showed the Norway infrastructure for observing the NAC as an example. The station M in the Nordic seas is almost 60 years old. There are new systems as cabled observatories (Neptune). The key issues are: making them cost-effective, take advantage of the synergies and "to produce data once and using it as many times as possible". There is a meeting under the Marine Boards Forum that would deal with these issues (European Network of long-term Marine observatories).

1. Discussion: Key questions and messages from the floor, as well as responses given by the panellists. If possible please indicate names and organisations of persons intervening in the discussion.

Some of the main points raised in the discussion after the presentations were:

Gilles Ollier, head of the Earth Observation Sector at the European Commission. He pointed out that until

now the support is coming from the science sector and the budget for research is not going to increase in the future, so the system should be optimized to run at a constant budget. He stressed the need of coordination and re-allocation of necessary resources towards existing systems.

Keith Alverson pointed out the need of using all research-based observations as part of the observing system.

Pierre_Yves Le Traon stated that long term high quality global ocean observations are needed to observe, understand and forecast the role of the ocean on the earth climate and for a wide range of ocean services. This should be organized at European level as a contribution to an international effort. Socio-economic impacts are high for Europe and costs are much smaller than the expected benefits: climate change and mitigation, seasonal and decadal forecasting, operational oceanography and ocean services. The European Commission is leading the development of EMODNET (European Marine Observation Data Network) and has set up a major and outstanding initiative to develop ocean and climate services with GMES. These services rely on the global satellite and in-situ ocean observing system. There are major gaps in the global in-situ ocean observing system. We are lacking key global observations and most existing systems are not sustained on the long term. Sustaining and improving the global in-situ ocean observing system should thus be a top priority for Europe. The EC through GMES and EMODNET should lead the effort and this global endeavour cannot rely only on member states effort. A reference to the Oceanobs09 conference statement would also be useful.

1. Links to presentations and speeches by speakers, and other documentation relevant for the workshop

Attached file with presentations and Chair picture.

Contact person:

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