



Coastal ecosystems vulnerability to global change and extreme events

At the crossroads of knowledge to the benefit of coastal and marine ecosystem services

Biarritz (France)

18 – 21 October 2011





Where



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2011 Cnes/Spot Image
Image © 2011 TerraMetrics
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42°19'49.93"N 7°40'50.88"E élév. -1929 m

Google
Altitude 3219.71 km



Main Issues

Scientific Symposium BiarritzOcean 2011

- Understanding ecosystem functioning and processes
- Assessment of system response
- Management tools and strategies
- Integrated Coastal and Ocean Management

AND

Technical Exhibition OceaNovation 2011

To Strengthen the Link between Research and Technological Development : Ocean Observation, Prediction of natural and anthropogenic Effects, Mitigation of Impacts, sustainable use of Good and Services of the Environment.



Scientific Symposium: Main Sessions

Session 1 : Understanding Ecosystem Functioning and Processes

To highlight the ecological and physical functions which play a key role in the response of ecosystems to pressures and extreme events for a wide range of issues related to the goods and services provided by the coastal zone.

Key words: *Scientific surveys; sampling and observation design; technology / instrumentation; long term monitoring system; data bases; physical effects (tsunami, waves, sea level rise, temperature increase, coastal erosion, meteo-climatic extremes,...); chemical effects (eutrophication, contaminants, acidification, bioaccumulation,...); biological effects (bacteriological, fisheries and aquaculture, invasive species,...); social and economical effects (market, user conflicts, energy costs, ...); modelling of processes and interactions: biophysical, biochemical or bioeconomical; biological cycle; trophic chain; habitats.*



Session 2: Assessment of system response

will focus on assessment of coastal ecosystem response to global change or extreme events, including human factors which can sometimes turn a natural hazard into a disaster, and their impact on society.

Key words: *Forecast of pollution extents, river plume; evolutions of physical, biological and economical traits at different scales; forecast of population abundances; risk assessment; indicators of sustainability and acceptability from social, economical or ecological point of view, modification of ecosystem functioning, scenarios of changes, system trajectories.*



Session 3: Management tools and strategies

That session is concerned with the improvement of coastal ecosystems resilience through the reduction of human activities pressures leading to the current degradation of habitats and living communities (including human communities).

Key words: *GIS and network of knowledge; biodiversity conservation (including definition of reference/pristine states); ecosystem resilience; effects reversibility; integration of scientific knowledge into public policies (especially with reference to WFD and MSFD); minimization of ecological prints of aquaculture and fisheries and energy production on ecosystems; impacts of Marine Protected Areas; artificial Reefs.*



Session 4: Integrated Coastal and Ocean Management

That focuses on ecosystem links to preserve the structural integrity, healthy functioning, and resilient processes of marine ecosystems and strives to upscale to transboundary considerations and regional cooperation in their management.

The ecosystem approach for integrated coastal and ocean management is an holistic approach that considers the entire socio-ecosystem to sustain vital services to humans.

Key words: *Integrated coastal and ocean management; Ecosystem-based management; adaptive management; nested governance; multi-scale approach; institutional arrangement; ecosystem approach to fisheries; upscaling; partnership and participatory approach; scientific uncertainty, socio-ecosystem complexity, ecosystem services; costs/benefit analysis, marine protected areas; traditional ecological knowledge; historically based restoration.*



Preliminary Calendar

15th of February 2011 : Scientific Web site opened at the following address :

http://wwz.ifremer.fr/biarritz_2011

15th of February 2011: Call for communication : extended summary of 4 pages

End of May 2011: End of call

End of July 2011: End of the evaluation procedure

End of September 2011: Edition of Proceedings according sessions and subsessions defined by the scientific committee .



Special Issue published in Continental Shelf Research





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