

GEO Coastal Zone Community of Practice (CZCP)

Description

Global, regional and local trends in natural processes and human demands on coastal ecosystems jeopardize the ability of these ecosystems to support commerce, living resources, recreation and habitation. In this context, improved, integrated and sustained coastal observing capabilities are required to better support user information needs. GEOSS provides a valuable framework and mechanism to help implement these capabilities, and under the auspices of GEO, a Coastal Zone Community of Practice (CZCP) was initiated in 2006. The initiative for a CZCP emerged from the activities of the Coastal Theme of the Integrated Global Observing Strategy Partnership (IGOS-P).

The Coastal Theme goal is to develop and implement a strategy for integrated observations across the land-sea interface that will provide data and information needed to make informed decisions on issues related to the propagation of change and variability as required for use, study, or management of coastal ecosystems or components thereof. The Coastal Theme builds on and integrates the extensive activities of the coastal components of GOOS and GTOS (see the Coastal Theme Report (2006) for further details).

Per collaborative, consensus decisions made during and after the recent IGOS-P-14 Meeting (May 2007, Paris), the IGOS Coastal Theme will now transition and undertake its user-driven coastal activities through the rapidly developing CZCP, in coordination with the Panel for Integrated Coastal Observations (PICO), a technical sub-panel of the GOOS Scientific Steering Committee (GSSC). To further facilitate coordination, a representative of PICO has recently been appointed to the GEO Science and Technology Committee. The CZCP leverages and extends all of these complementary activities under the GEO/GEOSS framework, enabling broader participation, improved linkage to users, coordinated implementation, and enhanced societal benefits.

Added Value

GEO provides a forum for the development of a comprehensive CZCP bringing together relevant user groups and providers of Earth observation data, thus enabling the CZCP to support crucial coastal user needs, in particular through the transition from data to products to information to knowledge. The broad basis of providers represented by the GEO Participating Organizations will help the CZCP to facilitate the necessary integration of satellite with in situ data, aquatic with terrestrial data, environmental with socio-economic data, all coupled within a modelling and data assimilation framework to support improved coastal management and decision-making. The GEO Plenary and Committees are a platform from which the CZCP's common voice can be made heard in support of global implementation of priority coastal observing capabilities.

Relevance to GEO

The CZCP is one of several Communities of Practice (CP) within the framework of the User Interface Committee (UIC) Task US-06-02 (GEO Work Plan 2007-2009). Like the other Communities of Practice, the CZCP is intended as an user-driven community of stakeholders, with broad representation of providers and users of coastal zone data, products and information, all sharing a common interest in realizing the societal benefits to be gained by GEOSS implementation. The CZCP cross-cuts *all* of the GEO societal benefits areas, underscoring the importance of coastal regions globally, regionally and locally – further manifested by the presence and prominence of coastal issues and topics in a significant number of GEO Work Plan tasks.

Participants

Representatives from numerous GEO member nations and participating organizations participate in the CZCP. Specifically, it serves as a mechanism to coordinate, advise and integrate coastal activities of IGOS-P, GOOS, GTOS, IGBP LOICZ, and CEOS member agencies amongst other international partners.

Current Status and next Steps

The CZCP is actively working to significantly expand its user base, building upon considerable interest in GEO Member Countries and Participating Organizations and it looks forward to working with all interested users and partners. In this context it supported the *GEO Inland and Nearshore Coastal Water Quality Remote Sensing Workshop* held March 2007 in Geneva. The CZCP also coordinated submission of three sessions for the upcoming Ocean Sciences Meeting (Orlando, Florida, USA; March 2008), addressing

- coastal inundation,
- coastal and inland water quality assessments via remote sensing,
- coastal phytoplankton dynamics;

all three sessions were accepted and will help identify and address coastal user information needs in support of improved management and decision-making.

Finally, a primary focal point for the coming year is the organization and occurrence of a CZCP-sponsored workshop entitled “Observing System Requirements for Managing and Mitigating the Impacts of Human Activities and Coastal Inundation in the Mediterranean Region”, to be held 9-13 June 2008 at the Hellenic Center for Marine Research in Herakleion, Crete, hosted in conjunction with the Greek GEO Office.

This workshop is part of a broader series of regional workshops being developed by the CZCP; the title of this series is “GEOSS Support for Decision-Making in the Coastal Zone: Managing and Mitigating the Impacts of Human Activities and Natural Hazards in the Coastal Zone”.

A second workshop in this series, this time focusing on the needs of African coastal users, is tentatively planned for late 2008, to be hosted by the African Association of Remote Sensing of the Environment (AARSE), and ideally held in conjunction with AARSE’s 7th International Biennial Conference scheduled for 29 October to 2 November 2008 in Accra, Ghana. Finally, we anticipate subsequent workshops in this series to take place sometime in the 2009 timeframe in support of coastal users in the Americas, as well as in Asia.