



GROUP ON
EARTH OBSERVATIONS

Coastal Zone Community of Practice **CZCP**

The Coastal Zone Community of Practice (CZCP): Review of Current Status and Activities

Hans-Peter Plag

Nevada Bureau of Mines and Geology, University of Nevada, Reno, NV



GROUP ON
EARTH OBSERVATIONS

Coastal Zone Community of Practice **CZCP**

- Brief History
- Vision/Targets
- The Web Page
- Membership/Participation
- CZCP and GEO/GEOSS
- Main Activity: Workshop Series
- Outlook



- Origin: Coastal Theme of the IGOS-P: Report in ...
- 2006: Establishment of the CZCP; chair: Paul Digiacomo
- Since 2006: Regular participation in/reports to GEO Committees
- 2007: Co-chair: Hans-Peter Plag
- Since 2006: Planning and implementing a series of regional workshop:
 - Athens, 2008
 - Cotonou, 2010
- 2008: czcp.org web page established; product web page initiated
- 2006 to 2009: activities mainly carried by a core group
- 2010: initiative to open for a broader membership/participation

CZCP considered a success story of GEO Communities of Practice



The Context:

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/mechanism to help implement these capabilities, and under the auspices of GEO, a **Coastal Zone Community of Practice (CZCP)** was initiated in 2006 by the IGOS Coastal Theme.



Targets/Goals:

- Informing Integrated Coastal Zone Management through Earth observations and related products and services
- reducing degradation/loss of coastal ecosystems
- mitigating risks of coastal disasters caused by natural and anthropogenic hazards
- increasing resilience of coastal populations

Vision:

Enabling a future where decisions in the frame of Integrated Coastal Zone Management are informed by Earth observation-based products, services and information.



The **GEO Coastal Zone Community of Practice (CZCP)** objectives are to:

Engage coastal users (e.g., managers and decision makers) and data providers to collaborate in the **specification of requirements** for *in situ* & remote coastal observations and derived Information products (variables to monitor, time-space resolution, accuracy, rate, forms and delivery methods in which data and derived products are needed);

Evaluate current and projected **observational capabilities** against these requirements, identifying gaps, redundancies and activities that need to be strengthened;

Promote the development of **workshops** and “proof of concept” **pilot projects** that both address these gaps and enable data integration for the provision of new or improved decision support tools;

Promote development or strengthening of **networks** of institutions globally, regionally, and across Communities of Practice (CPs) that contribute to and benefit from GEOSS;

Advise the **GEO User Interface Committee**, other CoPs and GEO on matters relating to coastal zone observations and related societal benefits, and **identify priority** needs as well as areas for linkage, collaboration and support.



*Our mission:
Empowering integrated coastal zone management
through Earth observations ...*

[Disclaimer](#)
[Citation](#)

Coastal zones are areas of particular ecological, social, and economic value where many conflicting interests need to be resolved in order to ensure a sustainable development of this highly complex environment. Humanity has always shown a special interest in the coastal zone and a large fraction of the human population traditionally settles in or close to the coastal zone. Recent increases in coastal urban population and changes in land-use practices have led to rapid and large changes in sediment supplies and increases in nutrient, pollutant and pathogen loadings to coastal waters. Climate-induced changes in sea level are likely to increase the risk of inundation in many parts of the coastal zone. The on-going and anticipated changes pose serious risks to human health and the capacity of ecosystems to support products and services critical to the survival and well being of human populations, in developed and developing nations alike.

The *Coastal Zone Community of Practice (CZCP)* supports the *Group on Earth Observations (GEO)* in its goal to provide observations required for informed decisions concerning the coastal zone. High and immediate priorities for GEOSS are improved forecasts of sea-level rise and associated increases in coastal inundation that may be exacerbated by increases in the frequency of extreme weather.



The *IGOS-P Coastal Zone Theme Report: The Theme Report* provides the basis for the work of the GEO Coastal Zone Community of Practice.

If you are new to the CZCP and are considering to join, start by reading the Theme Report ...

More about the CZCP, who we are, what we do, and why we do it, is available [here](#).

If you have questions, want to express your interest, become a member/contributor, or have relevant information, please go to "[You & the CZCP](#)" or contact the [Co-Chairs](#).

Latest News:

[28 April 2010] **Workshop report published in GEO Newsletter:** A report on the [Second Regional Workshop](#) of the CZCP has been published in the [GEO Newsletter](#). Read the [full article](#) ...

[21 April 2010] **CZCP Work Plan meeting scheduled for June 9, 2010:** The CZCP members will meet on June 9, 2010 to work out details of a Work Plan for the next two to three years. This one-day meeting will take place in the broader U.S. East Coast area, with the exact location still thd. More information will be made available on the



Acronym CZCP has two meanings:

- broad group of individuals, organizations, and agencies involved in coastal zone management, including observations, research, policy making, decisions
- the GEO-related core group of people developing the GEO CZCP and carrying the main load of the activities.

Recent development:

- opening of the core group to a broader participation through a web page “You and the CZCP” ...



*Our mission:
Empowering integrated coastal zone management
through Earth observations ...*

[Copyright](#)
[Disclaimer](#)
[Citation](#)

Overview

You and the CZCP

Introduction

Express your Interest:
[doc](#), [html](#)

Join the CZCP: [doc](#),
[html](#)

Questions to the
CZCP: [doc](#), [html](#)

Comments on the
CZCP: [doc](#), [html](#)

Alerting the CZCP:
[doc](#), [html](#)

The CZCP depends on interaction with a wide range of people, and you might be one of them. This web page allows you to interact with the CZCP.

If you are interested in linking in one way or another to the CZCP, download the "[Expression of Interest Form](#)" and submit the completed document by e-mail to the CZCP Co-Chairs [Paul DiGiacomo](#) and [Hans-Peter Plag](#). In this form, we ask for some information about the background of your interest so that we can provide a qualified response. If you already decided that you would like to contribute or become a member, then download the "[Join the CZCP Form](#)" and send the completed document to the Co-Chairs. If your browser is set up to send e-mails, you may also fill in the on-line "[Expression of Interest](#)" or "[Join the CZCP](#)" form, respectively.

If you have general questions about the CZCP, Integrated Coastal Zone Management, or other issues related to the coastal zone, download the "[Question to the CZCP Form](#)" and submit the completed form to the Co-Chairs. Here, too, we ask for some information about the background for your question in order to serve you in the best possible way. You may also use the on-line version of the "[Questions to the CZCP](#)" form.

If you have comments on the work of the CZCP, the web page or other issues concerning the CZCP, please, use the [Comments on the CZCP Form](#). If you have information about relevant meetings, programs, datasets, services that you cannot find on our web page, please, use the "[Alerting the CZCP Form](#)" to bring these events to our attention. Based on the input from many, the CZCP web site will improve over time and become an ever more valuable resources for all those having interest in the coastal zone, including you. On-line versions of these forms are available as "[Comments on the CZCP](#)" form and "[Alerting the CZCP](#)" form, respectively.



Current membership:

- Canada
- Egypt
- Germany
- Japan
- Malta
- Puerto Rico
- Spain
- USA
- UNESCO



Six Work Plan Tasks are supported by the CZCP in:

- Architecture (GOOS)*
- Disasters (Tsunami Early Warning)*
- Water (Pilot projects and global water quality)*
- Ecosystems (regional networks)*
- Agriculture (Fishery)*



*Our mission:
Empowering integrated coastal zone management
through Earth observations ...*

Copyright
Disclaimer
Citation

[Back to Workshop Series Page ...](#)

Africa Workshop:

[Scope and Objectives](#)

[Workshop format](#)

[Anticipated Output](#)

[Participation](#)

[Committees](#)

[Sponsors](#)

[Venue](#)

[Dates and Deadlines](#)

[Registration, Hotel reservation, and Abstracts](#)

[Program](#)

[Invitation to GEO Principals](#)

[IOC Circular Letter No 2319](#)

[IHP Circular Letter No 382](#)

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 workshop series organized by the GEO Coastal Zone Community of Practice

AFRICA WORKSHOP Decision-Making Support For Coastal Zone Management, Water Resources & Climate Change In Africa

Sub-Theme 1: Strengthening Observing Systems Capacity for Managing and Mitigating the Impacts of Human Activities and Coastal Inundation in the African Region
Sub-Theme 2: Mitigating the Impacts of Climate Change on Water Resources in Africa

February 15-18, 2010, Cotonou, Benin

The CZCP Regional Workshop in West Africa is integrated into a broader Workshop jointly organized by UNESCO-IOC-GOOS-Africa-IHP, AARSE, GEO, and the Coastal Zone Community of Practice. The program of Sub-Theme 1 of the Workshop is organized by the CZCP.

The Second Regional Workshop in the Workshop Series of the GEO Coastal Zone Community of Practice (CZCP) will take place as a part of a broader workshop organized by UNESCO's International Hydrological Program (IHP) and the Intergovernmental Oceanographic Commission (IOC)/GOOS. This workshop will address decision support through Earth observations for coastal zone management, water resource management and understanding and adaptation to climate change in Africa. The workshop is organized in partnership with UNEP, GTOS, the African Association for Remote Sensing of the Environment (AARSE), Guinea Current Large Marine Ecosystem (GCLME), Benguela Current Commission (BCC), and the Agulhas and Somali Current Large Marine Ecosystem (ASCLME).

The workshop will focus on two sub-themes: (1) Strengthening Observing Systems Capacity for Managing and Mitigating the Impacts of Human Activities and Coastal Inundation in the African Region; and (2) Mitigating the Impacts of Climate Change on Water Resources in Africa. Although there are significant difference in the issues to be addressed in these sub-themes, it will also be a goal to identify data and capacity building needs common to both sub-themes.



1st REGIONAL CZCP WORKSHOP, ATHENS, GREECE:



First Regional Workshop

June 9-13, 2008, Athens, Greece

Observing System Requirements for Managing and Mitigating the Impacts of Human Activities and Coastal Inundation in the Mediterranean Region

Draft Workshop Plan

[Scope](#)

[Specific Objectives of Workshop](#)

[Goals](#)



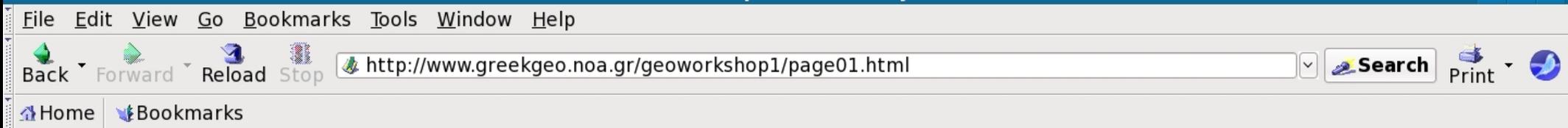
[Deliverables](#)

[Format and Outcome](#)

[Workshop Documents](#)



1st REGIONAL CZCP WORKSHOP, ATHENS, GREECE:





1st REGIONAL CZCP WORKSHOP, ATHENS, GREECE:

Workshop Report available at <http://www.czcp.org>.

Recommendations resulting from the First CZCP Workshop:

- Develop a **Pilot Project** to address and promote the minimization of the North-South differences in observational capabilities in the Mediterranean.
- Develop and facilitate improved **basin-wide observation capabilities** to help enable the capability for dynamics-based **inundation forecasting** for both short-term events and long-term water level changes.
- Develop and facilitate improved basin-wide observation capabilities to provide improved **ecological/habitat assessments and forecasting capabilities** as well as trans-boundary (e.g., watershed-ocean) assessments and integrated modeling efforts.
- Existing **Land Cover/Land Use maps** should be updated and standardized for more effective use by the Integrated Coastal Area Management (ICAM) community.
- Develop **climatologies and forcing scenarios** for future (up to year 2100) conditions, including winds, atmospheric pressure, precipitation at scales from local to basin-wide.
- Develop proposal to **initiate more effective use of information analyses** to support risk & vulnerability assessments in the Mediterranean
- **Form a CZCP Mediterranean**
- Develop basin-wide capability to perform **ecological and water quality Assessments, Forecasts and Scenarios** (e.g., biodiversity, water quality, and fisheries) under conditions provided by IPCC (and other) predictions in forms useful for use in ICAM.



2nd REGIONAL CZCP WORKSHOP, COTONOU, BENIN:

- Workshop was organized in cooperation with UNESCO (IOC/GOOS and IHP);
- Good participation both in quantity and quality;





2nd REGIONAL CZCP WORKSHOP, COTONOU, BENIN:

- Workshop was organized in cooperation with UNESCO (IOC/GOOS and IHP);
- Good participation both in quantity and quality;





2nd REGIONAL CZCP WORKSHOP, COTONOU, BENIN:

Workshop Goals : Provide a Forum for African Scientists/Scholars of Africa & Policy Makers to:

- ISSUE 1: Highlight & Focus Attention on Coastal/Water Resource Issues/Phenomena of Interest & Impact of Climate Change on these.
- ISSUE 2: Identify Success Stories
- ISSUE 3: Identify Gaps in Product(s) and Application(s)
- ISSUE 4: Clarify User(s) & User Needs
- ISSUE 5: Discuss Observation Needs, Requirements and Gaps
- ISSUE 6: Discuss Modeling and Analysis Needs, Requirements and Gaps
- ISSUE 7: Build Resilience to Mitigate and/or Adapt to Climate Change
- ISSUE 8: Address Regional Capacity Empowerment Needs and Opportunities
- ISSUE 9: Highlight Socio-economic Importance and Benefits
- ISSUE 10: Strengthen Regional Coordination Efforts
- ISSUE 11: Fundraising.
- ISSUE 12: Dissemination to grass roots.
- ISSUE 13: Perception
- ISSUE 14: Strategize on the Way Forward



GROUP ON
EARTH OBSERVATIONS

Coastal Zone Community of Practice CZCP

Main Activity: Workshop Series

2nd REGIONAL CZCP WORKSHOP, COTONOU, BENIN:

Notes, Douglas Cripe:

- Capacity building:

- increasing dissatisfaction with term and limited success; better to speak of:
 - Capacity retention
 - Capacity sustainability
 - Capacity empowerment
- need to capitalize on existing capacity

- Information flow:

- great need to connect politicians with information;

- Governance:

- issue of governance is critical;
- there is a gap between science and governance that need to be bridged;
- Until such time as there is a mechanism for interplay between science, policy, and governance, we are very far away from the reality we propose.



2nd REGIONAL CZCP WORKSHOP, COTONOU, BENIN:

Notes, Douglas Cripe:

- Other issues:

- lack of coordination platforms;
- need for improved monitoring systems for key climate indicators;
- funds are needed, but receiving funds raises the question of independence;
- focus on regional processes and solutions;
- participation in Communities of Practice essential for communicating user needs/requirements;
- coordination efforts of existing hydrological projects in Africa are under way with the African Water Cycle Coordination Initiative (AWCCI) - CZCP could consider initiating a similar coordination effort;
- Dr. George Wiafe, University of Ghana, spoke highly of GEONetcast (a success story), and consequently interest was expressed by several participants to join the network.



- Work Plan meeting: June 9, 2010: Draft Work Plan/Roadmap
- Broadening of participation in the GEO CZCP
- Autumn 2010: Further development of Roadmap
- Spring 2010: Puerto Rico Workshop
- Summer 2010: Cairo
- From 2011: Implementation of the Roadmap
 - Support for GEO Tasks
 - Assessment report
 - Pilot projects