Outline agenda for initial panel meeting for the Coastal Module of GTOS Joyner Library, second floor conference room, East Carolina University 15-18 October 2002

Objective

The expert meeting will develop the elements of an implementation plan for coastal activities within the UN sponsored Global Terrestrial Observing System (GTOS). This is the first of potentially 3 workshops to accomplish that goal. The focus will be on current and emerging observational requirements and the availability of terrestrial / coastal data for global studies, including issues related to data access and harmonization, data management and the use of key datasets.

Expected results

The panel meeting will address and report on findings concerning three specific objectives. The specific objectives of the workshop are the following:

- 1. To identify key issues and drivers of global change in which the terrestrial coastal interface plays a significant role, especially in relation to climate change and loss of biodiversity.
- 2. To develop a strategic approach, based on these issues and drivers, whereby GTOS activities contribute to ongoing or planned research or resource management initiatives being undertaken at the global or large regional scales.
- 3. To identify a core set of coastal variables, both *in situ* and remotely sensed, which will aid assessment of change. Steps would then be taken to identify organizations and agencies that make regular observations of the variables and to register the organizations in the Terrestrial Ecosystem Monitoring Sites database (TEMS).

As this is the first workshop, we will also include the following:

- 1. Background and goals of observing systems, especially GTOS and Coastal GOOS
- 2. Describe meaning of user driven program.
- 3. Identify scales of interest.
- 4. Identify limitations and boundary conditions.
- 5. Use a "strawman" example to work through the objectives.

Discussion points at the meeting

There are a wide array of aspects of the key issues and the program in general that could be discussed at the meeting. After presentations and consideration of the key issues, driving forces and priorities relevant to GTOS, the meeting may consider the following discussion points. These points provide options to focus activities, based on Objective 1. By addressing these, we begin to meet Objective 2.

Discussion points I:

Adequacy of coastal observation sites and networks

Observation methods, data protocols and transmission standards Data management (meta-data, data archiving, data quality)

Discussion points II:

Collaboration with user groups, data providers, data centers Development of an outreach process

Discussion points III: Access to data, data centers and networks Data policy

Discussion points IV:

Product definition for science and resource management applications Historic and near real-time (from terrestrial networks and space-born platforms) Generation of products and priorities.

Information resources

For reference, additional information can be found at the following limited list of addresses. :

GTOS

http://www.fao.org/gtos/

LOICZ

http://www.nioz.nl/loicz/

Coastal Ocean Observations Panel (COOP)

http://ioc.unesco.org/goos/COOP-4/coop4.htm

This web site has the current draft of strategic design plan for the coastal module of GOOS. It is an excellent reference of what has been done on coastal observation system development by IOC.

NOAA

http://www.noaa.gov/

Ramsar Convention on Wetlands

http://www.ramsar.org/

Global Programme of Action (GPA) for the Protection of the Marine Environment from Landbased Activites

http://www.gpa.unep.org/about/default.htm

Agenda Second floor Conference Room, Joyner Library

Day 1 (Tuesday, Oct. 15): Morning (0830)

- 1. Welcoming remarks by Christian, Dr. Tom Feldbush (Vice Chancellor for Research), Lauriston King (Director of Coastal Resources Management PhD program at East Carolina University), and Tschirley. Dr. Swart, Porvost of ECU will welcome the panel later in the day.
- 2. Introduction of participants, provide background.
 - a) Participants introduce themselves (providing no more than 5 minutes of background on their expertise and interests.)
 - b) Christian and Tschirley provide introduction and overview (15 min. each)
 - i) In the perfect world what kind of program would we want to have.
 - ii) What would it tell us.
 - iii) Bowen presents summary of COOP activities, status and protocol for relating components of observing system (30 min.)

BREAK

- 3. Establishment of goals for workshop, panel and programme.
 - a) What are the general focal issues.
 - b) What is the product of the workshop.
 - c) How does the workshop fit into the broader context of implementing a programme.
- 4. Describe user driven program.
 - a) Describe the vision of OS, the gap perceived to be filled by this initiative.
- 5. Identify scales of interest.
 - a) What is "global change"
 - b) What is the nature of global and regional issues and products.
- 6. Identify limitations and boundary conditions.
 - a) What is too small or too large (?) to consider.
 - b) What are the inherent limitations of the programme's design.

Afternoon (1330)

Begin addressing Objective 1.

To identify key issues and drivers of global change in which the terrestrial coastal interface plays a significant role, especially in relation to climate change and loss of biodiversity.

- 1. Brief presentations and discussion on issues addressed by other programmes Discussion should focus on issues that are appropriate for coastal GTOS (15 min. each).
 - a. GPA
 - b. IAEA (de Mora)
 - c. COOP (Bowen)
 - d. NOAA (Clark, Kineman)
 - e. LOICZ (Talaue McManus)
 - f. Ramsar (Jiménez)
 - g. Other GTOS programmes

BREAK

- 2. Summary and discussion of straw man document.
- 3. Goal by the end of the day is to have an initial list of issues.

Day 2, Wednesday, Oct. 16: Morning (0830)

- 1. A general discussion of the list of issues will be used to determine if the list is appropriate and complete.
- 2. Bowen presents modified DPSIR model of environmental and socio-economic interrelationships. (30 min.)

BREAK

- 3. The group will be subdivided into smaller groups identified with 1 or more issues. Each subgroup will be asked to determine likely drivers of global change for those issues and begin consideration of the discussion points associated with Objective 2.
- 4. General group discussion of findings on issues and drivers.

Afternoon (1200)

Trip to North Carolina coast, including opportunities to see and discuss practices involving agriculture, wetlands, shipping, tourism and research.

Day 2, Thursday, Oct. 17: Morning (0830)

- 1. Brief recap of Objective 1 based on observations of previous afternoon.
- 2. General discussion of Global Hierarchical Observing Strategy (GHOST) and related strategies for observations.
- 3. Discussion of Objective 2 based on
 - a) To develop a strategic approach, based on these issues and drivers, whereby GTOS activities contribute to ongoing or planned research or resource management initiatives being undertaken at the global or large regional scales.
 - i) In these discussions, identified issues and drivers will be used as test cases to address the various issue groups (given above agenda). This will be done through a combination general discussion and group discussions. Discussion points I and II will be highlighted.

Afternoon (1330)

Continuation of discussions of Objective 2.

 In these discussions, identified issues and drivers will be used as test cases to address the various issue groups (given above agenda). This will be done through a combination general discussion and group discussions. Discussion points III and IV will be highlighted.

Friday, Oct. 18: Morning (0830)

Begin to address Objective 3. This discussion will involve a more detailed exploration of specific variables than done for Objective 2.

To identify a core set of coastal **variables**, both in situ and remotely sensed, which will aid assessment of change. Steps would then be taken to identify organizations and agencies that

make regular observations of the variables and to register the organizations in the Terrestrial Ecosystem Monitoring Sites database (TEMS).

1. General group discussion of findings on variables

BREAK

Logistical issues:

- 1. Establish duties for report
- 2. Establish next steps
- 3. Evaluate participant list and revise participation as necessary
- 4. Establish next venue.

Bob Christian October 4, 2002