

CEOS Capacity Building Activities

CEOP/IGWCO Joint Meeting

Feb 28-March 4, 2005

Tokyo, Japan

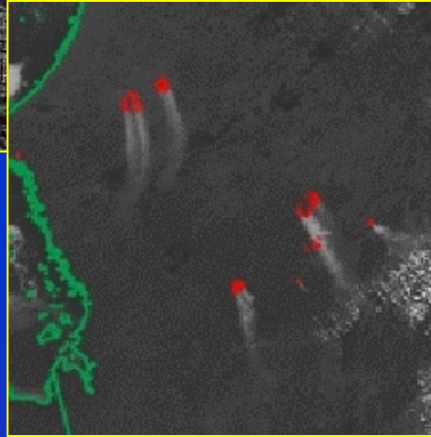
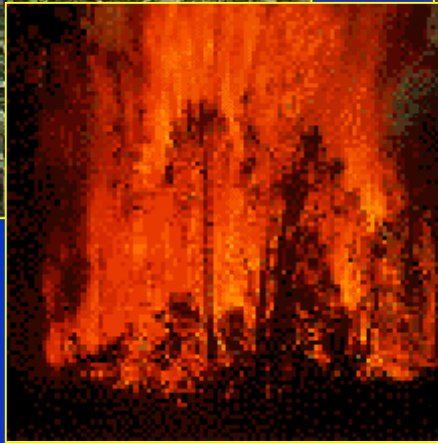
Capacity Building?

We are trying to identify and mobilize existing local capacities, and especially mobilize untapped resources:

- Intellectual capacity
- Institutional capacity
- Resource capacity



Fire Monitoring

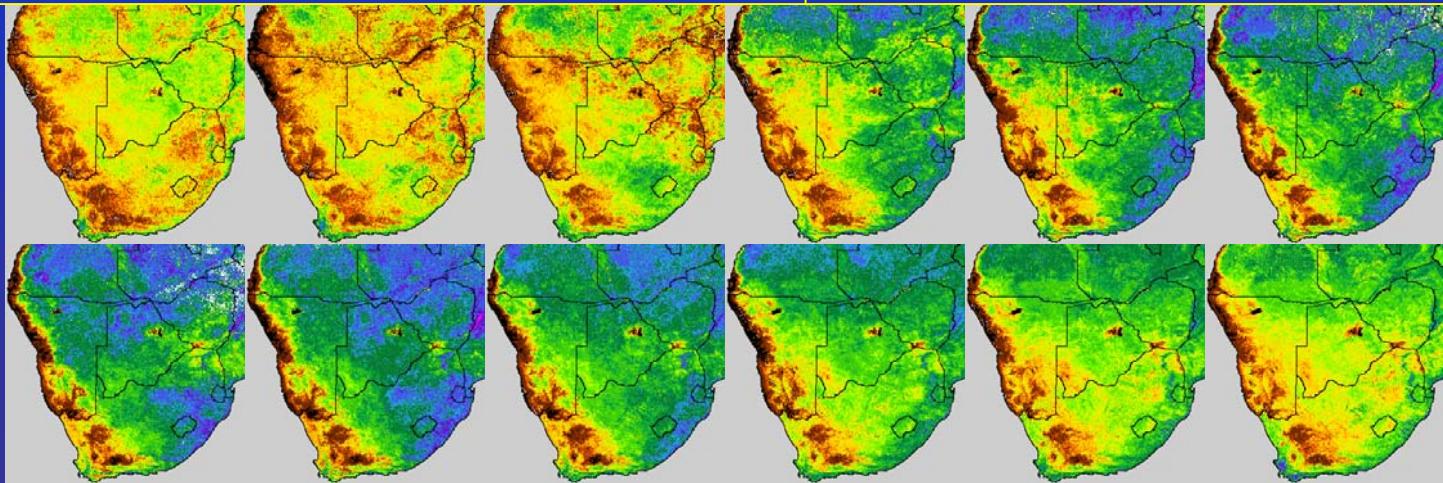


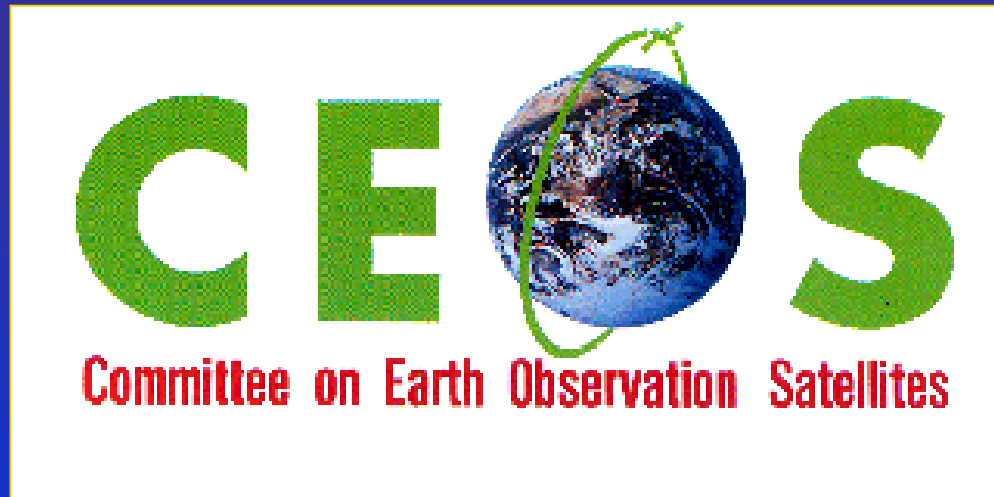
Natural Resource Management



Capacity Building

Drought Prediction





CEOS capacity building activities include;

1. CEOS WSSD Follow-up Program
2. CEOS Working Group on Education, Training and Capacity Building

CEOS WSSD Follow-up Program Modules

- 1) Education, Training and Capacity Building;**
- 2) Water Resource Management;**
- 3) Disaster Management and Conflicts;**
- 4) Climate Change; and**
- 5) Global Mapping, Land-use Monitoring and Geographic Information Systems**



CEOS WSSD Module 1

Education, Training and
Capacity Building



Stellenbosch Workshop



Stellenbosch Outcomes

- 8 General Capacity Building Principles for CEOs
 - 13 Specific Recommendations for application of these Principles in Africa
 - An Africa Advisory Group
-

A Clear Understanding of What We Need to Do



Module 2

Water Resource Management





Module 2 – Water Resources Management

Co-leaders

- ESA
 - launched TIGER initiative
- JAXA
 - supported IFNet, GPM and CEOP
- Agencies contributing to TIGER
 - CSA
 - UNESCO
 - CSIR
 - UNOOSA
 - Others

CEOS Working Group on Education, Training and Capacity Building (WGEdu)



Education, Training and Capacity Building Milestones

- CEOS 13th Plenary Meeting (1999) made a landmark decision regarding its commitment to education and training.
- The 13th Plenary agreed that an ad hoc Working Group should develop a strategy for CEOS future activities in education and training, in particular for developing countries

Working Group on Education, Training and Capacity Building

- To develop the strategy, in 2000 and 2001, the ad hoc Working Group on Education and Training (WGEdu):
 - Conducted a comprehensive survey (space agencies, international organizations and others) on Earth observation (EO) education and training activities
 - Conducted a survey of EO educational institutions
 - Conducted two international workshops (India , Italy) on EO education and training
 - Held two meetings of the WGEdu
 - Consulted with UN and its specialized agencies

Working Group on Education, Training and Capacity Building

- **Broad assessment by the WGEdu of the needs of developing countries:**
- Satellite data for ETC purposes is not easily accessible
- Faculty and experts are not available in sufficient numbers
 - Teaching materials and aids – books, self-learning exercises, case studies
 - Curriculum development
 - Laboratory facilities and equipment, software
 - Fellowships for training abroad

Working Group on Education, Training and Capacity Building

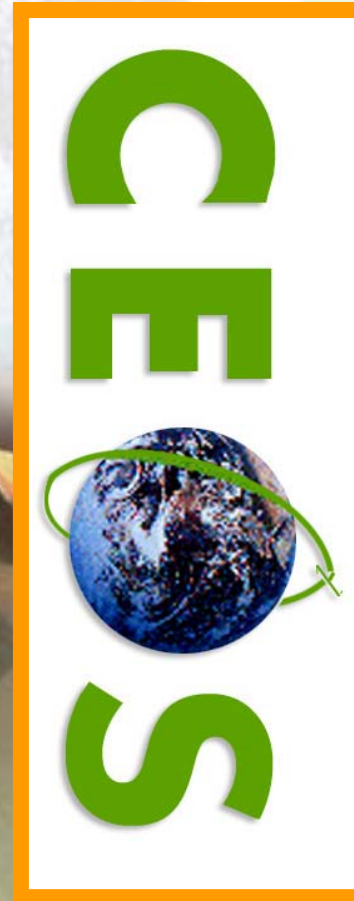
- **Broad assessment by the WGEdu of the needs of developing countries:**
- Most space agencies carried out education, training and capacity building (ETC) activities
 - Mainly within national programmes
 - Many CEOS agencies also supported international ETC efforts (e.g. UN-OOSA, WMO, FAO, UNEP, ESCAP, ISPRS)
- There existed institutional frameworks that supports EO education and training activities within most CEOS Members and Associates
- There were many on-going programmes for ETC that could be built upon

"The Coming Together....."

NEEDS

EO DATA
MATERIALS
EXPERTS
CURR. DEV.
FACILITIES
PROJECTS
FUNDS
RESEARCH

RESOURCES



- EO DATA
- E/T MATERIALS
- APPLICATIONS
- EXPERTS
- FUNDS

Education & Training

"..... IS ESSENTIAL!!!"

CEOS Strategy for Earth Observation Education and Training

- Based on its findings, WGEdu developed and proposed to 15th Plenary (2001) a CEOS Strategy for Earth Observation Training and Education and a Plan of Action to implement it.
- The 15th Plenary of CEOS endorsed the Strategy and Plan of Action

CEOS Strategy for Earth Observation Education and Training

- In 2002 and 2003, the ad hoc WGEdu worked on:
- An Education Portal - “one-stop shopping” references to courses, case studies, satellite data, links to education sites of various institutions through the Internet
- Draft “Principles of Satellite Data Provision in Support of Earth Observation Training and Education”
- The 17th Plenary adopted the principles
- These two items respond to many of the needs of developing countries that had been identified

Web Portal

CEOS

Working Group on Training and Education (WGEdu)

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The CEOS strategy for Earth observation education and training is to establish an effective coordination and partnership mechanism among CEOS agencies and institutions offering education and training around the world. The CEOS Working Group on Education and Training (WGEdu) was established by the 13th CEOS Plenary in November 1999 and tasked to develop a strategy for future CEOS activities in education and training particularly in developing countries. The strategy established a coordination and partnership mechanism between CEOS agencies. The goal of the WGEdu is to facilitate activities that enhance international education and training in Earth Observation (EO) techniques data analysis interpretation and applications.

CEOS Commitment to Education, Training and Capacity Building

- The 17th CEOS Plenary (2003) changed the status of the WGEdu to that of a standing Working Group on Education, Training and Capacity Building
 - Recognition of the importance of EO-ETC for developing countries to achieve their development goals
 - Recognition of the need for EO-ETC for developing countries to benefit from an eventual GEOSS
 - Recognition of CEOS long-term Commitment to EO-ETC

Looking at the future

- Populate the CEOS Education Portal to increase its value
- Implement the Principles of Satellite Data Provision and Support of Earth Observation Training and Education
- **Challenges that remain:**
- Identify which of the development goals can best be supported by EO
- Identify what specific ETC is needed by the developing countries
- Work with other ETC activities, particularly in the framework of the GEO process



Thank You

