

Ocean Colour 2009 Africa, 12 - 23 October 2009, Zanzibar, Tanzania

Following a successful 1st training event in Mombasa (Kenya, 2007), the **Global Environment Monitoring Unit (GEM) of the Institute for Environment and Sustainability (JRC-IES)** organized in Zanzibar (Tanzania) another 2-weeks training course on:

"Methods and Applications of Ocean Colour Remote Sensing in African Coastal and Regional Seas",

in collaboration with the **Institute of Marine Sciences, University of Dar-es-Salaam.**



This course represented an important achievement in the frame of the international **Chlorophyll Global Integrated Network (ChloroGIN)** and contributed to the **EC-Joint Research Centre "Observatory for Sustainable Development"** which has been established to provide scientific information, diagnostics and scenario building to the service of development policies (EC, Member States, beneficiary countries and regions, donors community) for information sharing, increased co-operation and co-ordination of response strategies.

Additional partnership from international and regional environmental organizations / programmes (see below) ensured fellowships to most of the course participants.

- International Ocean Colour Coordinating Group (IOCCG)
- Group on Earth Observation (GEO)
- African Monitoring of the Environment for Sustainable Development (AMESD) and the Mauritius Oceanography Institute (MOI)
- Regional Coastal Management Programme of the Indian Ocean Countries (ReCoMap)
- Council for Scientific and Industrial Research (CSIR) and the University of Cape Town (UCT)
- Land-Ocean Interactions in the Coastal Zone project and the Institute for Coastal Research (GKSS)
- Agulhas and Somali Current Large marine Ecosystems project (ASCLME)

Course Structure

The training was designed to provide the theoretical basis of ocean colour satellite measurements, as well as key applications in monitoring and managing the coastal zone, in protecting the marine ecosystems and their resources. It included a series of lecture sessions (see course synopsis) chaired by international experts from Europe and Africa, covering a large range of topics, from the physical principles of ocean colour radiometry, atmospheric corrections, in-water optics and algorithms, to specific applications addressing important environmental issues in coastal and marine waters such as the carbon cycle, fisheries and coastal habitats.

The course also contained practical sessions during which the participants were trained on various image processing and applications software, such as Envisat-BEAM, BILKO, and SeaDAS. Practical sessions continued in the form of 'mini-projects' or case studies during which each of the participants had the opportunity to apply knowledge recently gained during the lectures and software demonstrations.



Course Highlights

A total of 18 participants (see list of participants) from 10 different African countries were selected out of 85 applications on the basis of academic background and motivation to apply Earth Observation for either scientific purposes or operational management of the marine environment. Represented Nations were Ivory Coast (1), Kenya (2), Madagascar (2), Mauritius (3), Mozambique (2), Nigeria (1), Seychelles (1), South Africa (3), Tanzania (2), and Togo (1).

The Course event started with an opening address by **Dr. Margareth S. Kyewalyanga**, Director of the Institute of Marine Sciences, University of Dar-es-Salaam, in Zanzibar. The Institute provided 11 new computers that we configured with relevant software required for the practical sessions.

The Training Course has achieved his objectives and was a very successful event. The participants always showed great enthusiasm and motivation to attend both the lecture and practical sessions, thanks to the quality of the demonstrations and the effort of the training staff to assist them in doing the application exercises.

The high quality of 'mini-projects' conducted by the participants during the 2nd week of the course and presented on the last day reflected the outstanding work they achieved during the practical sessions.

Acknowledgement

Many thanks are addressed to all participants, trainees and trainers, for their excellent contributions and for their enthusiasm in sharing their knowledge and their time during the course.

We are also deeply grateful to all of the sponsorship organizations for supporting the students and giving them the possibility to attend. We very much look forward to further opportunities of collaboration.

Ocean Colour Training Course, Zanzibar, Tanzania, Oct.12-23, 2009

List of Participants

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