The Integrated Global Observing Strategy (IGOS) intends to unite the major satellite and ground-based systems for global environmental observations of the atmosphere, oceans and land, in a framework that delivers maximum benefit and effectiveness in their final use. It is a strategic planning process, involving many partners, and linking research and operational programs as well as data producers and users. IGOS focuses specifically on the observing dimension of the process of providing environmental information for decision-making.

IGOS is based on the recognition that the range of global observations needed to understand and to monitor Earth processes, and to assess human impacts, exceeds the scientific, technical and financial capability of any one country. Hence co-operation is necessary. The need for co-operation between data-provider agencies also arises from the fact that contemporary data products often require the integration of multiple observations from multiple sources.

IGOS will provide the underpinning data sets, which will enable soundly based analysis of a range of issues, such as compliance with Kyoto commitments and targets, climate change, carbon storage and cycling, ozone, desertification assessment, preservation of biological diversity, etc. The issues are global in nature and require global efforts to ensure maximum coverage and cost-effectiveness. Without the range of long-term observations that IGOS will support, the ability to address such issues is seriously restricted. Moreover IGOS, as a collective endeavour at a global level, will also provide data important for national and regional issues

## **IGOS** Partnership

International discussions on the definition, development and implementation of IGOS over the past three to four years led to the formation in 1998 of an IGOS Partnership. The IGOS Partnership currently consists of: the Committee on Earth Observation Satellites (CEOS), which co-ordinates national and regional space based earth observation programmes and data dissemination services; the World Climate Research Programme (WCRP) and the International Geosphere-Biosphere Programme (IGBP), which co-ordinates and integrates research programmes on global change; the International Group of Funding Agencies for Global Change Research (IGFA), which encourages and promotes global change research in national mechanisms; the Food and Agriculture Organisation of the United Nations (FAO), the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organisation (UNESCO-IOC) and UNESCO itself, the International Council for Science (ICSU), the United Nations Environment Programme (UNEP) and the World Meteorological Organisation (WMO), which jointly sponsors the development and implementation of the Global Climate Observing System (GCOS), the Global Ocean Observing System (GOOS) and the Global Terrestrial Observing System (GTOS) to organise global-scale operational observations of the climate, oceans and terrestrial surface.

The Partnership has identified clear terms of reference, and now meets twice yearly. Co-operation between the partners reflect the principles of "best efforts" and "no exchange of funds."

The Way Ahead

IGOS is intended to be one component in a larger strategic framework of information for decision-making such as was identified by the international community as a major crosscutting issue in Agenda 21. It represents a major step forward in promoting the desired co-operation between the many parties with a legitimate interest in global environmental observations. The flexible co-operative structure which has been put in place by the IGOS Partnership should make it easier for decision-makers both to influence and to benefit from the efforts that are being made in the various related programmes around the world.

IGOS Forum during UNISPACE III

21 July 1999

The forum comprises a range of keynote lectures by leading speakers in the morning session followed by lively Panel discussion in the afternoon. The tentative keynote lectures are the following:

- Prof. John R.G. Townshend (University of Maryland, USA): Inauguration of the IGOS Partnership Forum
- Dr. Ghassem Asrar (Associate Administrator for Earth Science, NASA): IGOS as a Way of Living and Working Together
- Dr. Hartmut Grassl (Director, World Climate Research Programme (WCRP)): Climate Research the World Over
- Dr. Arthur Lyon Dahl (Co-ordinator UN System-wide Earthwatch, UNEP Global Observations): Responding to User Needs
- Dr. Krishnawamy Kastirurangan (Chairman, ISRO; Former CEOS Chair): CEOS and the perspective of an IGOS
- Dr. Jean-Francois Stuyk-Taillandier (Executive Director, ICSU): IGOS and the Science Community
- Dr. Kirsten Broch-Mathison (Chair, IGFA): IGOS Perspective of the International Group of Funding Agencies (IGFA)
- Dr. Robert Landis (Director, World Weather Watch Department, WMO): Lessons learned in IGOS through the World Weather Watch

For more detailed information on the IGOS please visit one of the following sites:

http://www.oosa.unvienna.org/ http://www.unep.ch/earthw/unepstr1.htm http://www.fao.org/SD http://www.eumetsat.de