

GEOSS Workshop XXXI – Using Earth Observation for Health; a workshop of the GEO Health and the Environment Community of Practice; November 12 – 13 2009

Hamilton Crowne Plaza Hotel, Washington DC, USA

Summary

This workshop is a follow-on to GEOSS workshop XXVIII – Health and the Environment, conducted in Geneva on July 7 through 9, 2009. This first workshop initiated discussions on how GEOSS can support the collection & distribution of earth observation information to meet the diverse needs of the health community. GEOSS workshop XXXI will expand upon prior findings. This workshop will address user perspectives on applying Earth observations to improve health decision-making at the international, regional, country and district levels. To move in these directions, the workshop will provide a forum to review existing and emerging systems, tools and best practices, identify collaborative operational pilot projects that can address high priority health needs, and explore the funding mechanisms for enabling the long term success of such projects. Particular focus will be given to enhancing systems to model, collect and distribute coordinated epidemiological and environmental information to meet the diverse needs of the health community for predicting, monitoring, constructing risk maps and targeting interventions. A plan for implementation of pilot projects will be refined. This workshop will also provide an opportunity for consolidating the "Health and the Environment Community of Practice" launched in Geneva in July 2009. This new community of practice addresses the user perspective of issues involving environment and health with an emphasis on using environmental observations to improve health decision-making.

Workshop Objectives

- Confirm approaches for integrating remotely sensed and in-situ earth observations with environment and health information systems
- Consolidate the “GEOSS Health and Environment Community of Practice”
- Launch an action Plan for collection of environmental health-related information, including a call for contribution to the GEOSS Common Infrastructure
- Confirm recommendations for Pilot Programs to assess environment-health integrated Information Systems
- Establish opportunities for showcasing of pilot project initial results at 2010 Ministerial meeting

To establish a framework for discussions, the two day workshop will include invited presentations by decision makers, user communities’ representatives, providers of health and environmental information, and observation system developers. Break out sessions will allow the audience to further explore key topics in small interactive groups. A concluding session will summarize the workshop outcomes and way forward.

Co-organizers: Joan Aron – EPA; Amy Budge – ISPRS; Pietro Ceccato – IRI; Emily Firth - WHO, Gary Foley - EPA, George Jungbluth – NOAA; Luis Kun – EMBS; Murielle Lafaye – CNES; George Percivall - OGC, Françoise Pearlman – IEEE; Jay Pearlman – IEEE; Masami Onoda – GEO secretariat; Juli Trtanj – NOAA. For more information see <http://www.ieee-earth.org/Conferences/GEOSSWorkshops>, and scroll down to GEOSS Workshop XXXI.

Background

The Global Earth Observation System of Systems (GEOSS) is envisioned to cover all aspects of Earth observations and by this will introduce a new capability for monitoring environmental processes. GEOSS is a complex “system of systems,” including sensors, communication systems, spatio-temporal data infrastructures and other components essential for understanding the Earth and its impact on a host of important societal benefits. In addition, GEOSS includes models and data fusion processes to create information from the observation data that is essential for decision making

The GEOSS 10-year Implementation Plan states that GEOSS will provide the overall conceptual and organizational framework for integrated global Earth observations to meet user needs. GEOSS will be a system of systems consisting of existing and future Earth observation systems, supplementing but not supplanting their own mandates and governance arrangements. It will provide the institutional mechanisms for ensuring the necessary level of coordination, for strengthening and supplementing existing Earth observation systems, and for reinforcing and supporting component systems in carrying out their mandates.

The emphasis of GEOSS is on societal benefits, initially in nine key areas. Sound management of the Earth system, in both its natural and human aspects, requires information that is timely, of known quality, long-term, and global. Interpretation and use of Earth observations requires information on drivers and consequences of change, including geo-referenced socio-economic data and indicators. The nine areas addressed in the GEOSS Implementation Plan are: Disasters; Health; Energy; Climate; Water; Weather; Ecosystems; Agriculture; Biodiversity.

Although all of the above societal benefit areas (SBAs) of the Implementation Plan are important for GEOSS, this workshop will focus specifically on Health.

The GEO Work Plan

The GEO 2009-2011 work plan takes the GEOSS 10-year Implementation Plan through its midway point, and has an increasing focus on putting the components of GEOSS into place. This phase of the plan will enable connections to be realized between diverse observing, processing, data-assimilation, modeling and information-dissemination systems. The new work plan will also enhance the role of users and Communities of Practice within GEO. The work plan has several tasks associated with Health. GEO is addressing the use of environmental information for predicting and responding to disease and health issues. The GEO work plan includes 3 overarching tasks: HE-09-01 – Information systems for health; HE-09-02 – Monitoring; and HE-09-03 – End-to-end projects for health. For more information see the work plan at http://www.earthobservations.org/documents/work%20plan/geo_wp0911_rev1_090113.pdf.

