



Fact Sheet: EPA’s Advanced Monitoring Initiative Supports GEOSS

The Earth is an integrated system. The Global Earth Observation System of Systems (GEOSS) is an international effort to achieve comprehensive, coordinated, and sustained observations of the Earth system in an integrated manner.

“I am thrilled with the promise of GEOSS. It can provide us with better information to use in decision-making, producing better decisions that are better informed with more data points. I hope to help make the promise of GEOSS a reality.”

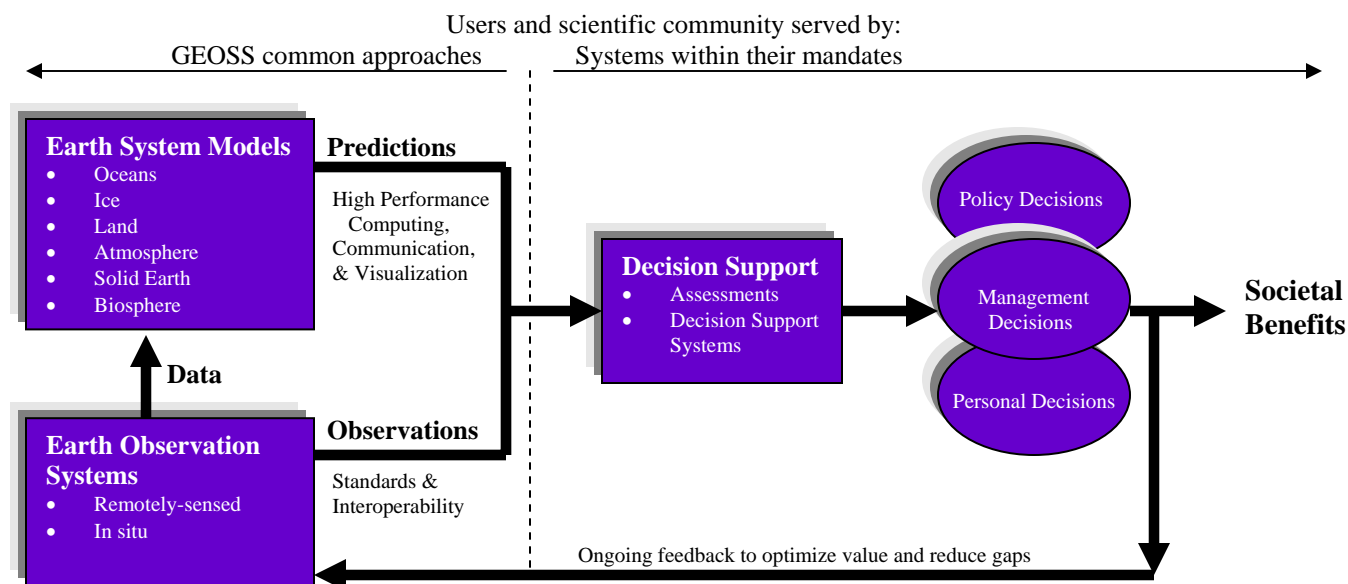
- EPA Administrator Steve Johnson

A Vision for the Future: How GEOSS Can Affect Us All

The GEOSS vision reflects a global scientific and political consensus that assessing the state of the Earth will assist in making informed environmental and public health decisions on personal and global levels. The end result will be access to an unprecedented amount of environmental information, integrated into new data products and decision support tools that benefit societies and economies worldwide.

Through the Advanced Monitoring Initiative (AMI), EPA is improving our understanding of how environmental factors affect human health and ecological well being. The AMI projects will enable a better understanding of how to provide improved data to support and enhance environmental policy, management, and decision making.

Figure: Linking Earth Observations to Societal Benefits



EPA's Dedication to Global GEOSS Efforts

The United States is a member of the Group on Earth Observations (GEO), which is comprised of 65 member countries, the European Commission and 43 participating international organizations. In support of GEO and its 10-Year GEOSS Implementation Plan, the U.S. Group on Earth Observations (US GEO), represented by 17 federal agencies and offices, developed a *Strategic Plan for the U.S. Integrated Earth Observation System (IEOS)*. This strategy provides the United States with a framework for participating in the international effort and a pathway towards the development of the integrated system. The U.S. Environmental Protection Agency (EPA) formed an internal agency wide GEOSS Coordinating Committee (EPA GEO) to support IEOS and US GEO.

AMI: Supporting the Goals of GEOSS

EPA GEO launched the Advanced Monitoring Initiative (AMI) in fiscal year (FY) 2006 to assist in implementing IEOS. Work conducted under the initiative is performed in collaboration with EPA programmatic and regional offices, as well as other federal and state agencies, and non-governmental entities.

EPA recognizes that comprehensive Earth system knowledge and gaps in that knowledge can affect decision making and our understanding of the environment and human health. FY06 AMI projects are intended as test beds to improve environmental health decision making in specific contexts (e.g., geographic locations, demographic groups, and economic sectors) by advancing scientific understanding and showcasing approaches and outcomes suitable for broad environmental application (e.g., assessments, regulatory actions, guidance, characterizing uncertainty, environmental indicators, accountability, etc.).

Creating a "system of systems" by combining existing and future data at various temporal and spatial scales in a meaningful way will improve the current framework for environmental monitoring and accountability, which at EPA exists largely in support of programmatic decisions. The development of new data products, models and tools will assist decision makers and the public in understanding today's complex environmental issues, as well as support opportunities for environmental stewardship.

For additional information regarding GEOSS please refer to the following web sites:

International GEO: <http://earthobservations.org>

US GEO: <http://usgeo.gov>

EPA GEO: <http://epa.gov/GEOSS>

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