



National Center for Earth Resources Observation and Science

Strategic Plan 2005-2010

Vision

EROS is the world's leader in monitoring and assessing the Earth's landscape.

Mission

EROS resources are dedicated to greater understanding of the Earth's land resources through excellence in science, data management, infrastructure, and facilities devoted to evaluation and assessment of land changes and their impact on our society. Key elements of this mission include:

- **Earth Observation:** Observe the Earth at all scales to ensure availability of historical and current observations.
- **Terrestrial Monitoring:** Characterize and quantify land surface status and trends to provide a framework for studies at local to global scales.
- **Vulnerability Assessment:** Study impacts of population, environment, and economy to assess vulnerability to changes in climate, water, carbon cycle, ecosystems, invasive species, and other societal concerns.
- **Emergency Response:** Apply remote sensing technology and geospatial information to enhance the scientific basis for risk assessment and emergency response related to natural and human-induced hazards.
- **Data and Information Management:** Preserve remote sensing and geospatial data and information and provide timely and ready access for a broad range of users and applications.
- **Training and Assistance:** Promote the use of remote sensing technology by government, academia, private sector cooperators, state and local institutions, the international community, and customers through training and assistance to our partners.

To accomplish our mission, EROS will acquire, develop, evaluate, and apply information technology, advanced systems and tools for processing and disseminating remote sensing data and information in partnership with U.S. Geological Survey (USGS) disciplines, other Department of the Interior (DOI) bureaus, other government agencies, international scientists, academia, and industry.

Guiding Principles

1. Advance the goals and strategic directions of the Geography Discipline's 2005-2015 science plan, "Geography for a Changing World," within the context of Bureau Program plans, the USGS Strategic Plan, and the Director's Annual Guidance.
2. Provide expertise, data, and services that enable us, our customers, and our partners to address high priority Earth science issues in natural and human domains that span local to global venues.
3. Seek opportunities to extend EROS services, capabilities, products, and cooperative relationships to all Bureau programs, sponsors, regional applications, science centers, and customers.
4. Exploit the remote sensing data and geospatial archives, engineering and scientific expertise, and infrastructure of EROS for USGS and DOI applications.
5. Embrace interdisciplinary scientific processes in applying remote sensing science and technology to Earth science.
6. Develop innovative methods for integrating remote sensing with various types of geographic data in pursuit of knowledge and understanding of the Earth's landscape.
7. Measure scientific results in terms of operational applications of research results to real world problems, contributions to the scientific literature, and educational opportunities for young scientists.
8. Encourage the emergence of good ideas from all levels of the Center, take full advantage of the talent and skill potentials of its workforce, and embrace science and engineering excellence as the motivator for EROS programs, projects, and practices.
9. Apply best business practices and principles of performance-based service contracting to execute projects and plans within the framework of full cost accounting guidelines.
10. Establish, document, and maintain a government workforce management plan that observes guidelines for inherently government functions, ensures long-term core competencies of the workforce, and recognizes workforce accomplishments.

Strategic Goals

Excerpt from “Geography for a Changing World”

1. Characterize and quantify land surface status and trends to provide a framework for understanding change patterns and processes from local to global scales.
2. Identify local, regional, national, and global drivers of land change to forecast plausible land change scenarios over the next 20-50 years.
3. Understand past, present, and future environmental consequences of land change to support better management of their effect on people, environment, economy, and resources.
4. Improve the scientific basis for vulnerability and risk assessment, mitigation, response, and recovery related to the human and environmental dynamics of land change.
5. Develop credible and accessible geographic research, tools, and methods to support decision-making related to the human and environmental consequences of land change.
6. Develop and test hypotheses about the use of geographic regions to understand the human and environmental dynamics of land change.
7. Observe the Earth at all scales using remote sensing to understand the human and environmental dynamics of land change.
8. Provide timely, intelligent access to new and archived USGS geographic data needed to conduct science and support policy decisions.
9. Develop innovative methods of modeling and information synthesis, fusion, and visualization to improve our ability to explore geographic data and build new knowledge.

Implied by “Geography for a Changing World”

- Develop, document, and distribute annual assessment of civil agency requirements for low, moderate, and high resolution land remote sensing observations.
- Develop, maintain, and execute implementation plans for populating and preserving a basic data set of land remote sensing and geospatial data archives.
- Investigate, design, and implement advanced information systems and technology necessary to manage, preserve, visualize, and disseminate Earth science data archives and products.