



Call for Papers

Ecosystems

Improving our understanding of terrestrial, coastal and marine ecosystems for the management and protection of these valuable resources

2010 Quarterly Theme September 23-December 20, 2010

www.Earthzine.org is an informative scientific online journal dedicated to promoting the societal benefits of Earth Observations and the utilization of Earth information in planning and policy. Sponsored by the [IEEE](#) (Institute of Electrical and Electronic Engineers), Earthzine supports the [Group on Earth Observation](#) in establishing the Global Earth Observation System of Systems. **Earthzine seeks to explore the application of scientific and technological research as well as policy and its implementation for the benefit of society.**

We invite you to submit an article and become part of a growing, professionally diverse community and global readership network working to build the Global Earth Observation System of Systems ([GEOSS](#)).

www.Earthzine.org is soliciting articles from all regions of the globe for its theme issue on **Ecosystems**. The interdependence of the biological and physical realms of ecosystems maintains a flow of energy and cycling of nutrients. The complexity of ecosystems is captured by interdisciplinary research and monitoring. We seek articles that utilize *in situ*, airborne, and spaceborne observations that contribute to our understanding of ecosystem structure and function, biodiversity, ecosystems at risk from anthropogenic and/or environmental threats, including climate change, and pristine ecosystems of special interest.

Specific topics of interest focus on, but are not limited to the following:

- Observations on the area, condition, and natural-resource stock levels of forest, rangeland, coastal, ocean, and aquatic ecosystems to inform management decisions and protection of resources
- Advancing observations for characterization and monitoring of terrestrial (forest, urban agriculture, woodlands, grasslands, and deserts), freshwater, ice and marine ecosystems – especially in terms of acquisition and use of satellite/aerial/in-situ observations
- Use of remote observations to assess ecosystem vulnerability to climate change and urban development
- Observations of ecosystem variability and responses to global environmental change and affects on carbon cycle dynamics
- Observations supporting assessment of impact extent of extreme events and disasters on ecosystems and ecosystem response



- Remote sensing methodologies for assessment of ecosystem biodiversity and degradation
- Tools and methods that are available for integrating existing observing systems
- Identifying gaps and additional requirements that are there in observations
 - Descriptions of specific Earth information systems as well as their application for studying key environmental issues
 - Methodological and technical issues related to Earth information systems development, deployment, operation, and maintenance
 - Common challenges and “best practices” related to infrastructure and capacity development and maintenance for Earth observation purposes
 - Issues related to data collection and sharing for environmental applications
 - Success stories and “lessons learned” about how infrastructure, capacity, and partnerships may be developed and maintained successfully for Earth observation purposes by countries or organizations

We welcome articles about programs, projects, organizations, examples of interdisciplinary and/or cross-regional research latest discoveries, and unusual findings. We also publish opinion essays, book and art reviews. Submissions must be in English. Submit to Guest Editor, Liane Guild, PhD (liane.s.guild@nasa.gov).

Please consult the [Writer’s Guidelines](#) for further information.

Important dates: Queries to the editors may be sent at any time (liane.s.guild@nasa.gov). Submission of original articles, letters, opinions, book and art for review begins **September 1, 2010**.

Publication: All accepted contributions will be published on-line at www.Earthzine.org in the fourth quarter of 2010 and will be freely accessible to the public.

Information: Earthzine website: <http://www.earthzine.org>
Writer’s Guidelines: <http://www.earthzine.org/about-2/writers-guidelines>
GEO/GEOSS website: <http://www.earthobservations.org>

Editor-in-Chief
Paul E. Racette, DSc
editor@earthzine.org

Managing Editor
Maeve Hickok, MA
mhickok@earthzine.org

Guest Editor for Ecosystems
Dr. Liane S. Guild
NASA Ames Research Center
Biospheric Sciences Branch (Ecosystem Science and Technology)
P.O. Box 1, M.S. 242-4
Bldg. 242, Rm. 209
Moffett Field, CA 94035