

Call for Papers --- Earth Science Informatics Challenges

2014 Quarterly Theme Issue 1
Dec. 21, 2013-March 21, 2014

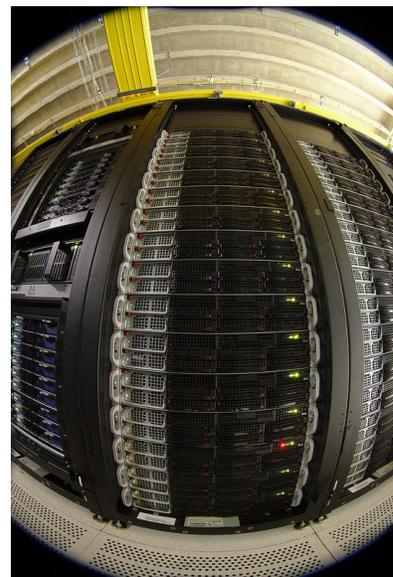
Earthzine.org, an IEEE-sponsored online scientific journal, is soliciting articles of 800-3,000 words for its first quarter 2014 theme on **Earth Science Informatics Challenges**. We seek contributions from all regions of the globe, addressing programs and research related to accessing, analyzing, and visualizing very large Earth Science data stores.

This theme specifically focuses on the challenge of performing analysis with voluminous Earth science data products that are becoming increasingly difficult to migrate to high-productivity computing platforms. The era of “Big Data” has exposed inefficiencies in science research ecosystems in which investigators are attempting to make use of a growing amount of real-time and archived observations, improved computing power that can now be dynamically provisioned, and better tools for cross-disciplinary research.

In many instances, researchers limit their analyses to the computing resources at hand. We seek articles from those investigators who have made innovative use of cloud resources, social networking tools, and community workflows in order to transcend such limitations.

Specific topics of interest include:

- Discussions of tools to enhance collaboration to enable true Earth system science research, and the role scientific social networks can play in sharing knowledge throughout the research community
- Case studies that discuss how cloud computing resources, particularly high-end systems, have been successfully provisioned to researchers who would not otherwise have had access to such resources



Part of the Dutch petascale national supercomputer Cartesius. Image Credit: Dennis van Zijlekom.

- Techniques to address barriers in discovering new data products along with tools, services, and workflows, with particular reference to Web services and data mining techniques
- Examples of new visualization techniques targeted at very large repositories.

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](#)). 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, and book and art reviews.

Young Professionals (YPs) are the next generation of leaders who are at the front lines of applied research. We welcome profile and opinion articles of YPs and their mentors active in applying Earth observations and their use in decision-making.

Important dates: Queries to the editors may be sent at any time. Submission of original articles and other content will be accepted until **March 1, 2014**. Submissions must be in English. Submit inquiries and articles to Managing Editor Jeff Kart at jkart@earthzine.org.

Publication: All accepted contributions will [undergo review](#) by subject-matter experts, be published online from **Dec. 21 (Solstice), 2013-March. 21, 2014**, at [Earthzine.org](#), and be freely accessible to the public. Earthzine does not charge authors for publishing.

Please consult our [Writer Guidelines](#) for further information: earthzine.org/writers-guidelines/

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