## Towards a Geoscience Information Commons: the Electronic Geophysical Year, 2007-2008 and the Global Earth Observing System of Systems

C. Barton<sup>(1)</sup>, Alex Held <sup>(2)</sup>

(1) Research School of Earth Sciences, Australian National University, Canberra, ACT 0200 (charles.barton@anu.edu.au)

## **Abstract**

The bad news is that we are stressing the natural resources of our planet and we need comprehensive, multidisciplinary data and information about the Earth and its space environment for sustainable management and hazard mitigation.

The good news is that modern information and communications technologies (interoperability), combined with comprehensive Earth observation programs and a spirit of cooperation among governments, give us an unprecedented ability to collect and share data and information. Two initiatives that are contributing towards the ideal of a 'Geoscience Information Commons' are eGY and GEOSS.

The Electronic Geophysical Year, 2007-2008 (eGY) is an initiative of the International Union of Geodesy and Geophysics that marks the 50-year anniversary of the International Geophysical Year. eGY provides an international cooperative environment and mandate for addressing issues of ready and open access to data, information, and services, including data discovery, data release, data preservation, data rescue, reducing the digital divide, and education and public outreach. These issues are the formal themes of eGY, and are embodied in the principles set out in the eGY 'Declaration for a Geoscience Information Commons'. Promoting the development of virtual observatories is a central feature of eGY.

Through a series of three Earth Observation Summits, representatives of some 60 leading national governments are committed to establishing a Global Earth Observation System of Systems. GEOSS will build on existing and planned Earth observation programs and data systems. The main objectives are (i) to identify and fill gaps in our observing capability, and (ii) to achieve ready, open, and timely access to shared data and information.

Both initiatives provide opportunities for geoscientists, but they also challenge us to face the practicalities of managing and sharing large, multidisciplinary data sets so as to facilite open, convenient, and timely access.

*Keywords:* eGY, GEOSS; interoperability; Information Commons Websites: www.egy.org

<sup>(2)</sup> CSIRO Office of Space Science and Applications, GPO Box 3023, Canberra, ACT 2601 (alex.held@csiro.au)