The Electronic Geophysical Year, 2007-2008

Declarations for an Earth and Space Science Information Commons

“Knowledge is the common wealth of humanity” ¹

Preamble

The Electronic Geophysical Year (eGY) joins with the International Council for Science, the World Summit on the Information Society, and many other bodies in recognizing that knowledge is the common wealth of humanity. We have a shared responsibility to create and implement strategies to realize the full potential of digital information for present and future generations. In the 21st century and beyond, access to digital information and new technologies for information integration and knowledge discovery will influence the free and productive development of societies around the world. Providing ready and open access to the vast and growing collections of cross-disciplinary digital information is the key to understanding and responding to complex Earth system phenomena that influence human survival. In the Earth and space sciences, as elsewhere, the issues of concern are as follows.

Article 1: Data access
Earth system data and information should be made available electronically with interoperable approaches that facilitate open access.

Article 2: Data release
Owners, custodians, and creators of Earth system data should work together to share their digital information with the world community, though in a manner that respects intellectual property rights and security constraints.

Article 3: Data description
Providers and users of Earth system data and information should share descriptions of structure, content, and contexts to facilitate interoperability and the discovery of relationships within and between information resources.

Article 4: Data persistence
Data and information about the Earth system should be preserved and sustained in forms that are both software and hardware independent so as to be openly accessible today and in the future.

Article 5: Data rescue
Effort should be made to identify and rescue critical Earth system data and ensure persistent access to them.

Article 6: Common standards and cooperation
Standards for interoperability should be identified, created, and implemented through international collaboration.

Article 7: Capability building
Communities with advanced information technology and communications capabilities should contribute to developing such capabilities elsewhere to reduce the digital divide.

Article 8: Education and public outreach
Students, scientists, decision-makers, and the public should be informed about and be enabled to contribute to our understanding and management of Earth system phenomena that impact human survival.

¹ Adama Samassekou, President of the Preparatory Committee for phase I of the UN World Summit on the Information Society.