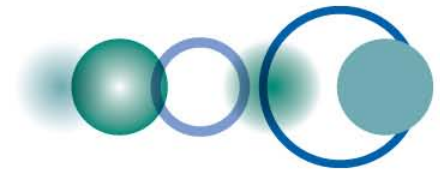


GEO Update and Priorities for 2014

Osamu Ochiai
GEO Secretariat

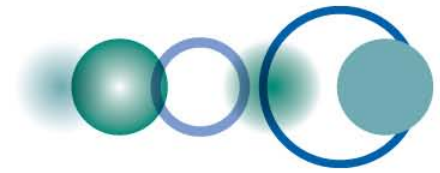
37th CEOS WGCV Plenary
Frascati, 17-20 Feb 2014





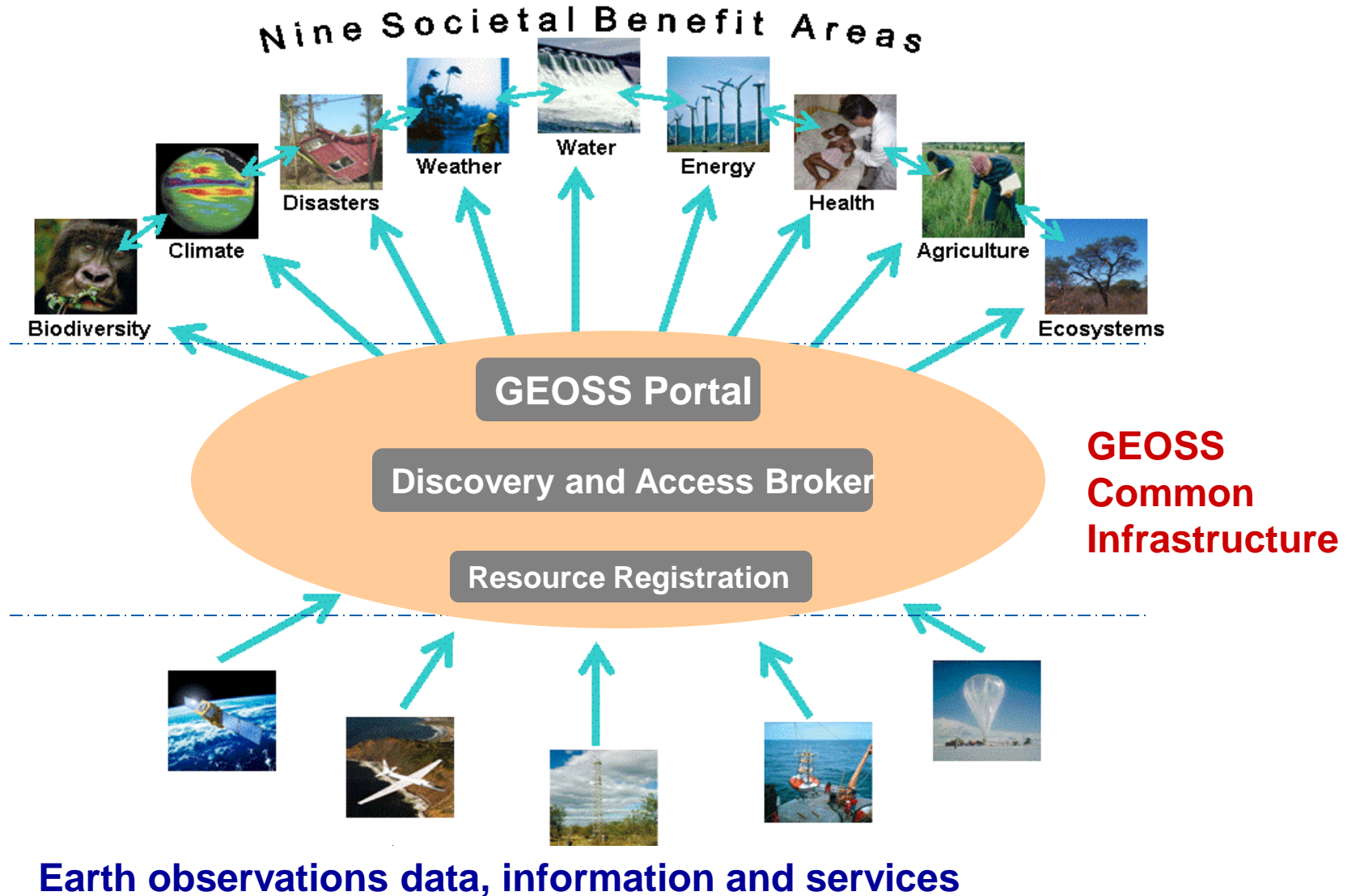
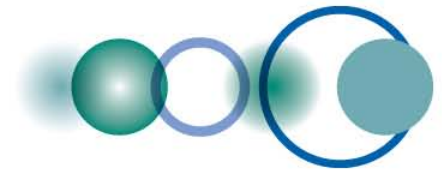
Ministerial Summit, Geneva Jan 17th 2014

- Highest number of participants and ministers
- Geneva Declaration adopted
 - **Renew the mandate of GEO through 2025**, retaining the current nature of the partnership, the general governance structure and the resourcing mechanism **based on voluntary contributions**, while exploring modifications; and **agree to develop the work of GEO through 2025...**
 - *Reconfirm* that GEO's guiding principles of collaboration in leveraging national, regional and global investments, in developing and coordinating strategies to **achieve full and open access to Earth observations data and information** to support timely and knowledge-based decision-making...
 - *Resolve* to improve the effectiveness of GEO's actions, to broaden engagement and collaboration of **stakeholders including decision-makers...**



77 Participating Organizations

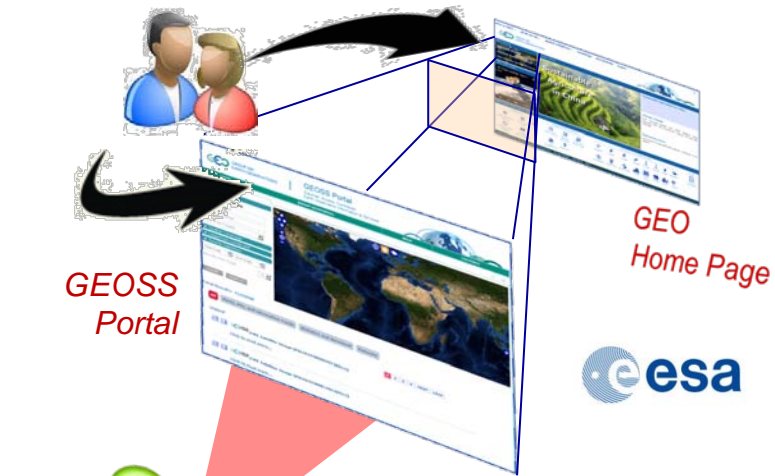




Enabling a System of Systems

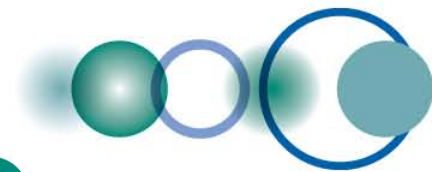


Data Providers Brokered (capacities, systems, networks, etc.)



GEO DAB





About **20** brokered data providers –
capacities, systems, Communities



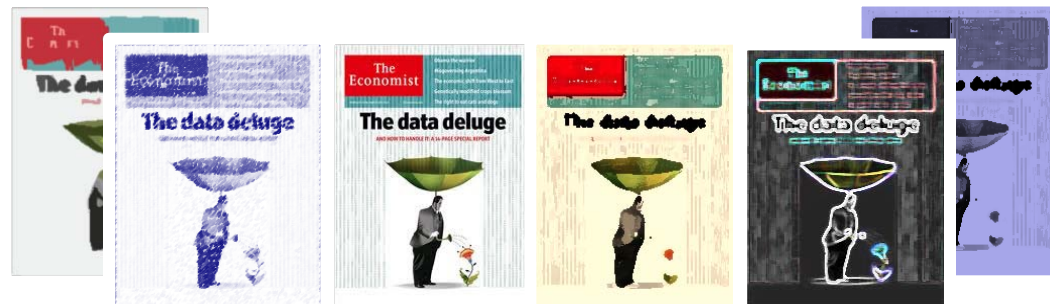
Publish

More than **7 Million** (**1.2 Million** GEOSS
Data Core) potentially Discoverable and
Accessible resources (mix of data
collections, datasets and individual images)

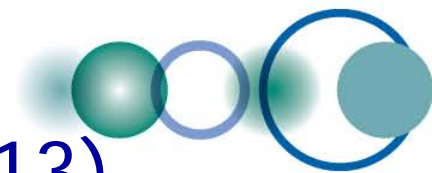


Contain [source: data providers]

More than **65 Million** (**50 Million** GEOSS
Data Core) potentially Discoverable and
Accessible resources (e.g. satellite scene
raingauge record)



Resources



New GEOSS Portal (Dec 2013)

www.geoportal.org

GEO GROUP ON EARTH OBSERVATIONS | **GEOSS Portal**
Discover, Access, Contribute Earth Observation Information & Services

HOME | VIDEO TUTORIAL | SEND FEEDBACK

SEARCH
Enter search word
Related Topics
+ Themes
+ Country/Geography
+ Data Access Conditions
+ Earth Observation Catalogs
Start Date | End Date

WHAT IS GEOPORTAL
The GEO Portal is your main entry point to Earth Observation data from all over the world. Search our data or Contribute to our resources and data discovery tools. We also link world-wide community of practice in nine SOCIETAL BENEFIT AREA.

POPULAR TAGS
Precipitation Land Surface Temperature Land Cover Urbanization Sea Surface Temperature River Flow Observation Surface Atmospheric Condition Elevation Soil Moisture

COMMUNITY PORTALS

- DISASTERS Geohazard Supersites
- HEALTH WHO
- ENERGY SODA ENERGEO
- CLIMATE GAW
- WATER GOOS
- WEATHER TIGGE
- ECOSYSTEMS ChloroGIN
- AGRICULTURE JECAM
- BIODIVERSITY GEO BON

EO NEWS
End of the beginning for Swarm trio
Reaching a significant milestone for ESA's magnetic field mission, the Swarm satellites have completed the critical first phase of their new mission.

GEO GROUP ON EARTH OBSERVATIONS | **GEOSS Portal**
Discover, Access, Contribute Earth Observation Information & Services

HOME | SEARCH GEOSS | ABOUT GEOSS PORTAL | HELP | CONTACT

Focus on: Precipitation (DAB)

SEARCH
hazard
Related Topics
+ Theme
+ Country/Geography
+ Data Access Conditions
+ Earth Observation Catalog
Start Date | End Date

Total Results: 100

Showing list of Metadata's WMSs

Legend

- ndt:ndt-cyclone-hazard-frequency-distribution DAB Complex**
Load on Map
- ndt:ndt-cyclone-hazard-frequency-distribution DAB Simple**
Download

Cyclone Hazard Frequency Distribution
Global Cyclone Hazard Frequency and Distribution is a 2.5 minute grid based on more than 1,600 storm tracks for the period 1 January 1980 thru



Progress on GEOSS Data Sharing Implementation (1/2)

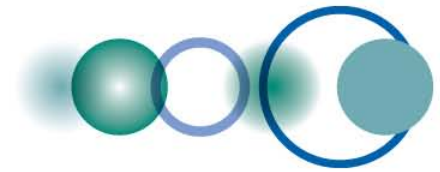
Overall the implementation of the GEOSS Data Sharing Action Plan is making progress through the Data Sharing Working Group (DSWG).

- More than **40 organisations, initiatives and projects** contacted to consolidate and expand the GEOSS Data-CORE. Now **over 50 million GEOSS Data-CORE resources** potentially and easily discoverable and accessible via the GCI and the GEOSS portal.
- Advance drafting of a paper "**Interpretation of the full and open (free and unrestricted) access to and use of geographic data: existing approaches**" for submission to GEO Plenary 2014, to be accompanied by a longer peer reviewed paper.
- Released the **GEOSS Data Quality Guidelines** in 19/06/2013 to foster understanding and the importance of data quality.



Progress on GEOSS Data Sharing Implementation (2/2)

- The DSWG has established an ad-hoc working group to **propose an updated formulation of the GEOSS Data Sharing Principles** for the next phase of GEOSS, taking on board latest advances of open data initiatives observed in many countries and regions. Several options are being developed.
- Need to ensure **adequate representation** on the Data Sharing Working Group from the **Middle East, South America, and Asia-Pacific regions**
- Submission of the strategic paper by the DSWG to post 2015 Working Group in 18/12/2013.
 - Restatement of data sharing principles
 - Evaluation and monitoring of GEOSS DataCORE
 - Reference datasets
 - New observation systems
 - Data sharing and education Programs



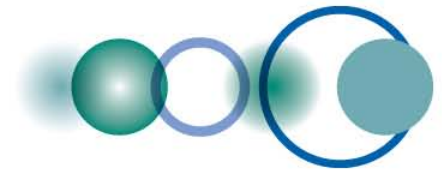
Pathway for the Vision for GEO 2025

1. Advocate for the value of Earth observations and the need to continue improving our capacity to observe the Earth
2. Urge the adoption and implementation of data sharing principles globally
3. Advance GEOSS architecture as an intelligent information system to allow for integration and visualization of Earth observation data in more meaningful and significant ways
4. Develop a comprehensive, interdisciplinary EO knowledge base [...] to define clearly the observations needed for all disciplines, and facilitate that data providers worldwide acquire these observations and make them accessible and available to all users
5. Cultivate global initiatives for specific end-use applications to address the multitude of societal challenges



GEO Priorities for CEOS Support (2014)

1. Coordinated data acquisitions, data access and R&D support for:
 - GFOI
 - GEOGLAM
 - Disasters & Supersites
2. Coordinate/support updating and consolidation of observation requirements across SBAs
3. Help increase developing countries benefits from GEOSS, in line with AfriGEOSS
4. Easier access to satellite data and derived products (incl. ECV data records)
5. Develop physical architecture for Climate Monitoring from Space
6. Implement CEOS Strategy for Carbon Observations from Space
7. Support implementation of GEO Water Strategy (once released)

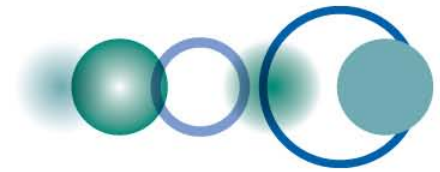


GEO Priorities for CEOS Support (cont.)

8. Support Blue Planet, GEO BON . . .

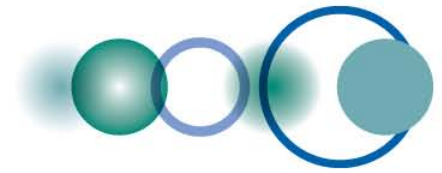
9. Respond to new observation requirements for polar and mountain areas (2015)
(Cold Regions and Mountain Ecosystems)

- Supporting efforts for:
 - WP management (TCs & PoCs)
 - Implementation Boards
 - Data Sharing Working Group
 - The processes for developing the new GEOSS Implementation Plan and the new Work Plan
 - GEO Secretariat with secondments



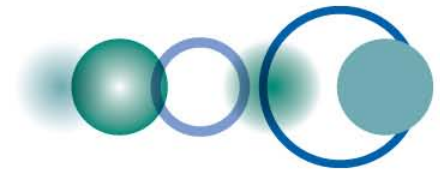
GEOSS Data Management Principles

- GEO-X agreed to develop GEOSS Data Management Principles to be submitted to GEO-XI
- A new Task Force to be formed – a call for nomination
- Data Management Principles cover the entire data life cycle from planning, to acquisition, quality assurance, documentation, access, archiving and preservation
- Encourage CEOS in particular WGCV to participate the TF



Task IN-02

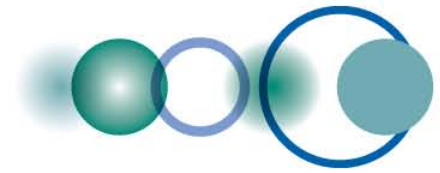
Earth Datasets



Main activities in 2014

1. GEO Strategy for data quality assurance (QA4EO)
 - Case studies repository to be expanded to address a larger segment of the science and data product provider community (i.e. level 1, atmosphere, terrestrial, and ocean).

2. Produce ongoing and new datasets
 - US - near-global high spatial resolution **land-water boundary map**, based on the new version of the SRTM topographic dataset.
 - Discussions are ongoing to identify an organization to create the **mineral maps on a global scale**.
 - ASTER GDEM
 - Global Map (ISCGM 1km->500m resolution)
 - OneGeology - a dynamic digital geological map of the world
 - ISRIC Global Soil Information (Harmonized world SOIL DATABASE)
 - gROADS & AGURAM (ICSU/CIESIN/AIST), etc

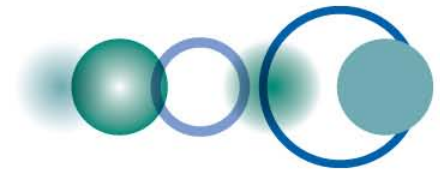


Critical Issues and challenges

1. Most of the data/projects existed without GEO
 - How to encourage new dataset development under the framework of GEO?

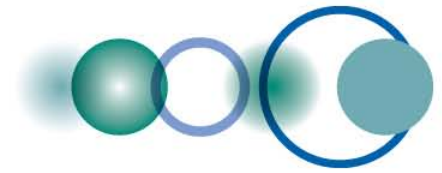
2. Essential socio-economic information...
 - Missing socio-economic information (Free and Open)

3. Whether Essential SB valuables are already accessible via GCI?



What support is needed from the space community?

- Promoting and Outreaching the QA4EO activities including collaboration with other frameworks (e.g., WMO-GSICS)
 - How to promote QA4EO to GEO audience effectively? (e.g., link QA4EO and Cal/Val Portals to GCI, Common Maturity Index and showcases to register GEOSS Best Practice?)
- Support to develop datasets under the GEO framework and make them available through GCI
 - Some demonstration pilots – e.g., DEM, Integration space and in-situ data (NORS), QA4ECV?
- Possible more joint work with in-situ community?
 - Cal/Val Infrastructure might be a good opportunity...



Task SB-02

Global Land Cover



A call for nomination at GEO-X

- GEO Member and Participating Organizations nominate participants to a special task force established under the GEO SB-02 Task to:
 - Design, develop (within a one-year timeframe) and implement a validation framework for high spatial resolution land cover map products; and
 - Foster synergies among GEO Members and POs, recognizing the importance of delivering validated land cover information based on the most appropriate standards and best practices
- GOFC-GOLD, ISPRS and EEA proposed and CEOS/WGCV LPV and CODATA have expressed interests

[**http://www.earthobservations.org**](http://www.earthobservations.org)

[**oochiai@geosec.org**](mailto:oochiai@geosec.org)

[**GEO-XI Plenary, Gabon, Nov. 13-14 2014**](#)

