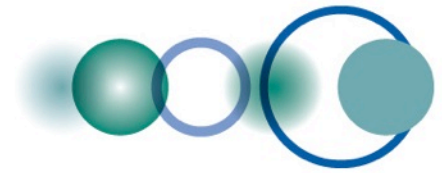


GEO/GEOSS Progress and post-2015

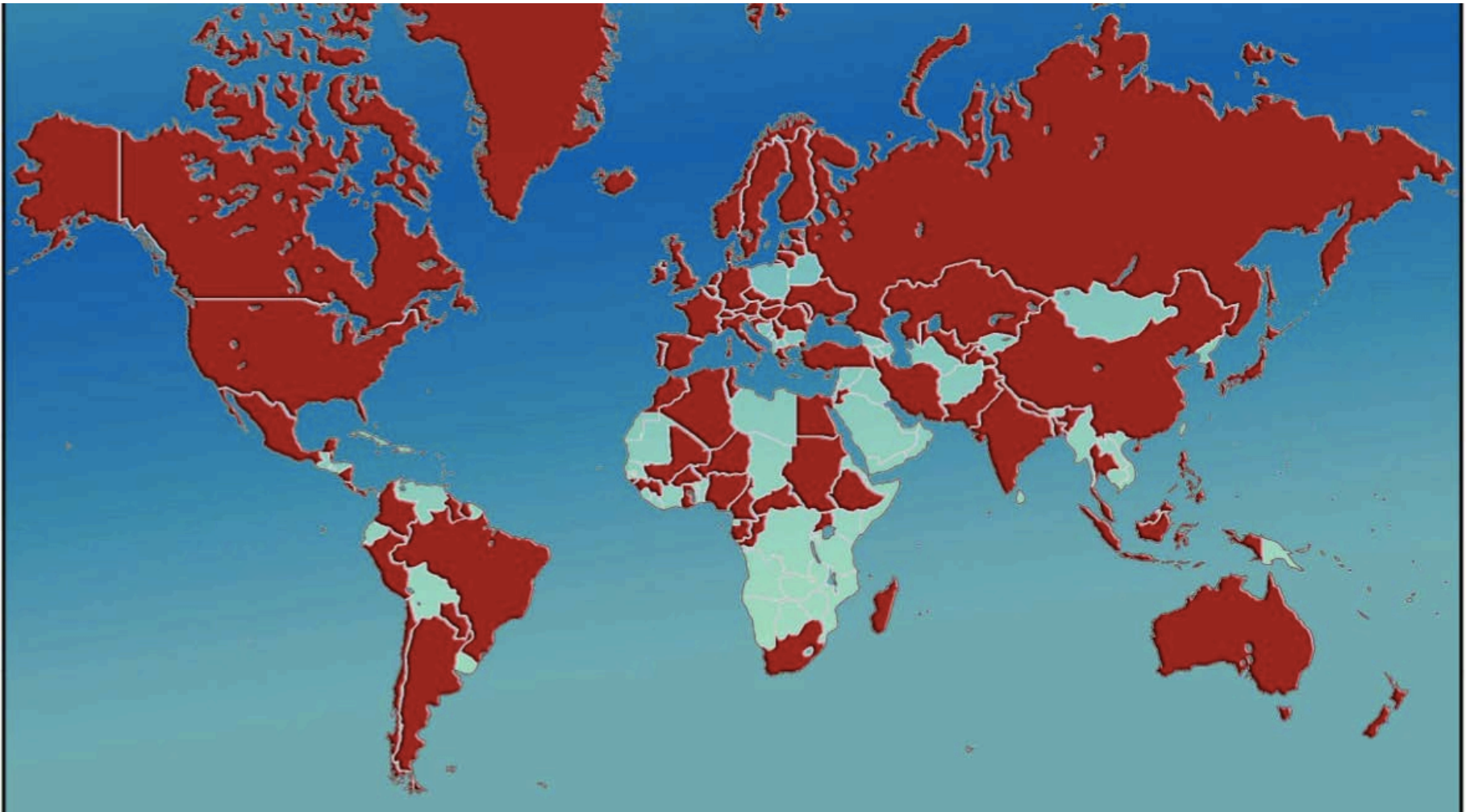
Osamu Ochiai
GEO Secretariat

CGMS-42
Guangzhou, 19-23 May 2014





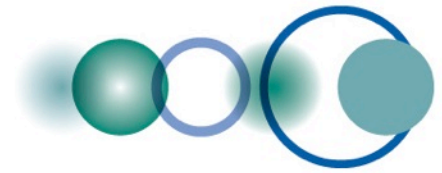
90 Members





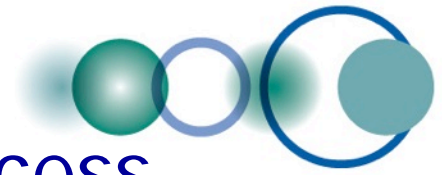
77 Participating Organizations





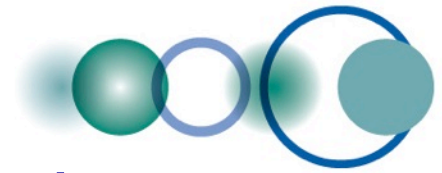
Ministerial Guidance

- Continue improving Earth observations worldwide
- Urge the adoption and implementation of data sharing principles globally
- Advance the GEOSS information system
- Develop a comprehensive interdisciplinary knowledge base
- Cultivate global initiatives



Post 2015 GEO planning process

- Implementation Plan Working Group (IPWG) formed
 - **15 experts and 10 writing members nominated by each GEO regional caucus**
 - **First meeting, April 10-11**
 - **Agreed two phases:**
 - **1st phase by July: Brain storming as “fresh perspectives” exercise**
 - **2nd phase after July : synthesis and formulation**
 - **External and Internal consultations started (questionnaire)**
 - Second meeting, June 10-11 in Athens
 - GEO Executive Committee 31st, July 8-9: discussion 1st phase report
 - 2nd phase: synthesis and formulation
 - GEO-XI Plenary, Nov 13-14: initial review and guidance
 - More work and review...
 - GEO-XII and Ministerial Summit, late 2015: endorsement of new 10 Year Implementation Plan



Topics currently working together

Common areas:

- WIGOS for more visible in post 2015 GEO
- Radio Frequency Protection
- WIS-GCI interoperability
- GEONETCast
- Data Management Principles Task Force

Thematic areas:

- AfriGEOSS
- Cold Region
- Joint CEOS-CGMS WG for Climate
- More...



Final report of third WIGOS ICG

- 5.1.5. ICG-WIGOS agreed that no additional formal structure is needed in order to facilitate the collaboration between GEOSS and WIGOS, given the existing recognition of WMO as a Participating Organization of GEO;
 - It was agreed that RA-I should invite an AfriGEOSS representative to the remaining sub-regional WIGOS workshops to explore how the collaboration could be managed.
 - It was noted that WMO and GEO are collaborating to support the protection of important parts of the radio-frequency spectrum for Earth observations.
 - It was noted that WIGOS is not adequately represented in the current GEO Work Plan, but that it may be better to focus at this time on the Post 2015 GEO Implementation Plan. (Action: Chair, ICG-WIGOS to provide input to the Post-2015 GEO Implementation Plan prior to next GEO Plenary in Gabon; deadline Sep 2014).



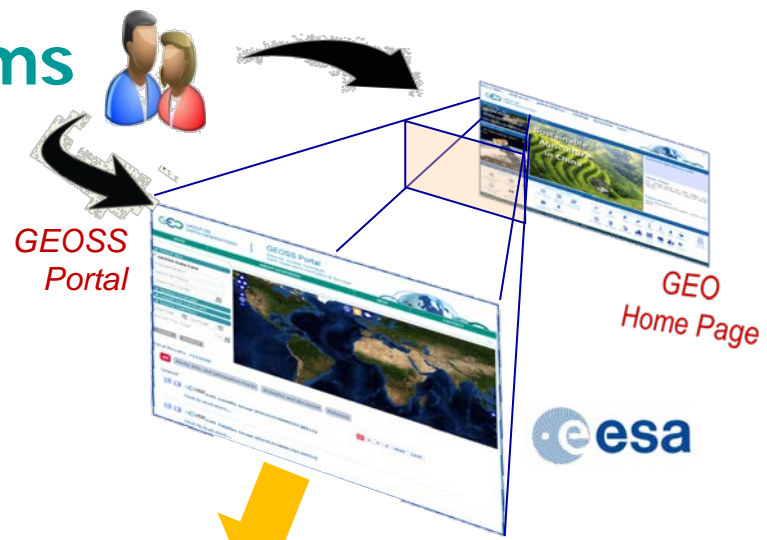
Radio Frequency Protection

- A letter issued asking support GEO Principals in March 4th
 - Since a new allocation request from RLAN, a risk of being lost of Earth observation bands (5350-5470 MHz) which would have strong impacts on several missions, and most urgently on the Sentinel-1 mission of the Copernicus Program.
 - The WMO SG-RFC provides an existing coordination opportunity for the Earth observation community, including support to the GEOSS Task on RFC. Following the SG-RFC meeting 11-13 March 2014 in Boulder, Colorado, a WMO position paper has been developed including 5GHz RLAN issue.
 - The WMO position paper will be shared with all GEO Principals soliciting their active involvement with their national telecommunication administrations in order to both protect this frequency range, as well as resolve any issues well in advance of WRC-15.
- In parallel, seeking the possibility of GEO representation to the ITU JTG 4-5-6-7 meeting by WMO cooperation.

Enabling a System of Systems



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

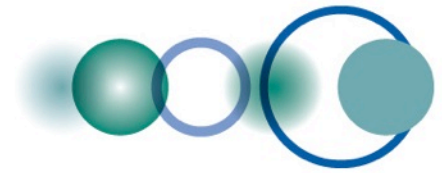


GEO Discovery & Access Broker

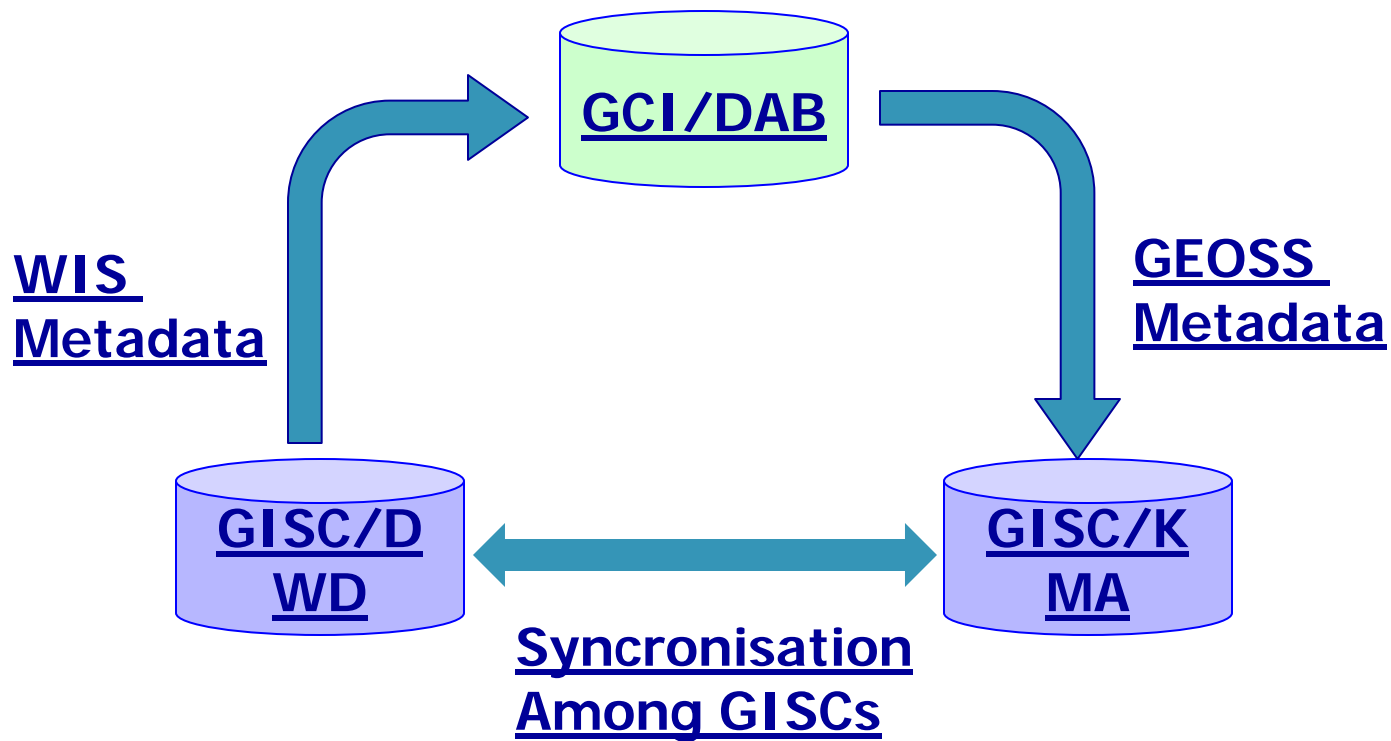
The GEOSS Discovery and Access Broker

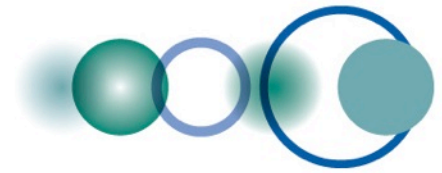


Private Sector (data, services, Apps, etc.)

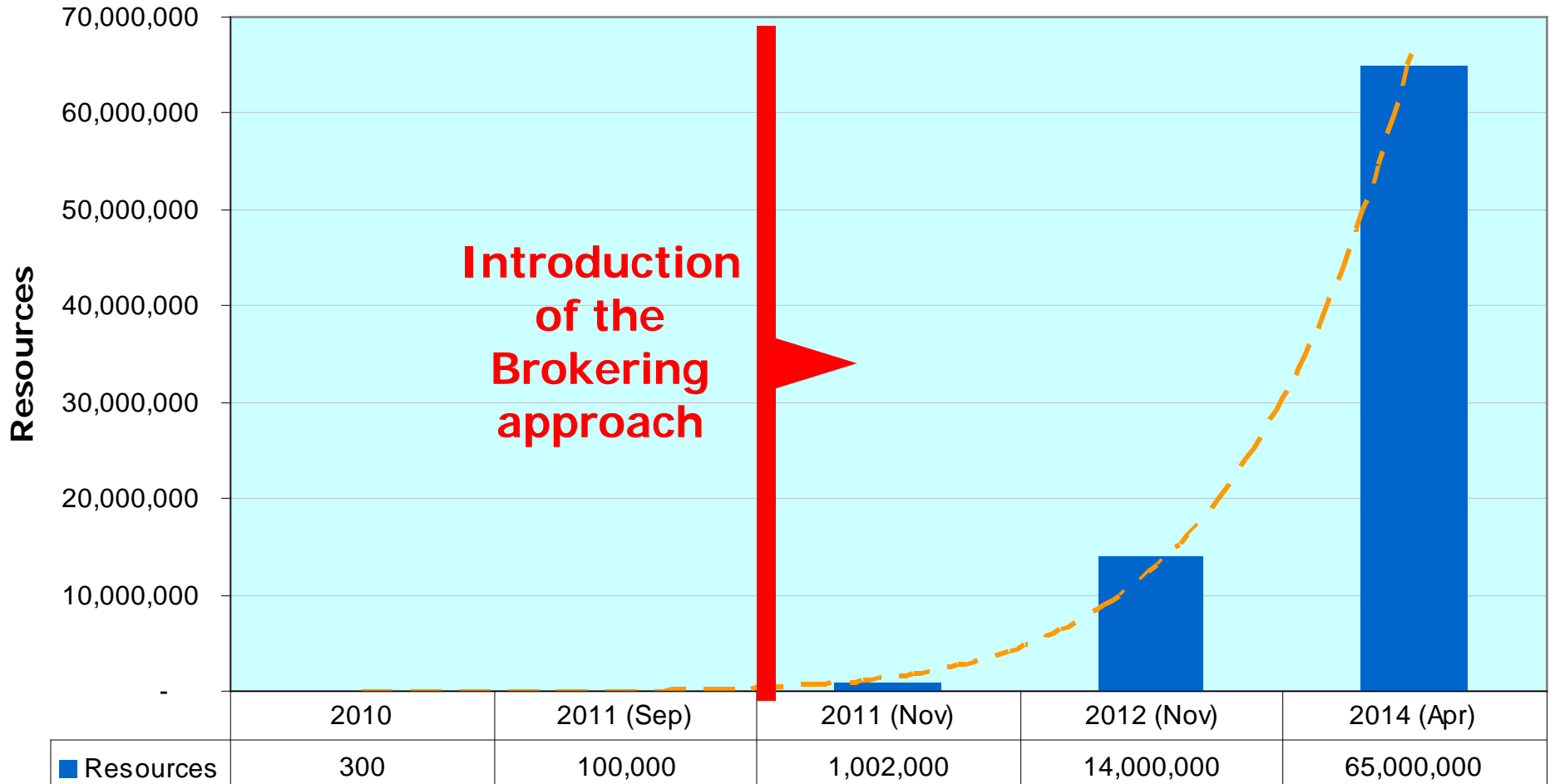


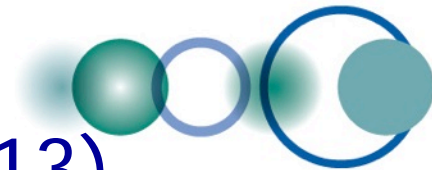
WIS-GCI interoperability





GEOSS 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 []

POPULAR TAGS
Precipitation Land Surface
Temperature Land Cover
Urbanization Sea Surface
TemperatureRiver Flow
ObservationSurface
Atmospheric Condition
Elevation Soil Moisture

COMMUNITY PORTALS

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

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.

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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: 108

All | Datasets | Websites and documents

Legend

GEO **ESA** A global landslide catalog for hazard applications: A systematic inventory of landslide events over the globe is valuable for...

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...

Showing list of Metadata's WMSs

ndh:ndh-cyclone-hazard-frequency-distribution
DAB Complex [] Load on Map

ndh:ndh-cyclone-hazard-frequency-distribution
DAB Simple
Download



Appathon 2014

UNLEASHING THE POWER OF EARTH OBSERVATION DATA

[Home](#) [Inspiration](#) [Register](#) [The Tool Kit](#) [Info & Contacts](#) [Our Partners](#) [What is GEO?](#) [Forum](#)

GEO Appathon

Unleash the power of Earth Observation data to allow us all to make smarter decisions.

The GEO Appathon is a global App development **competition** open to any non-commercial individual, team or entity (students, scientists and developers) with a passion for **unleashing the power of Earth Observations (EO)** to allow us all to make smarter decisions about the planet.

The GEO Appathon 2014 started Wednesday, 7 May 2014, and ends Friday, August 31 2014.
Registration closes 31 July!

[Participate](#)



Using the [GEOSS](#) data portal and GEOs [APIs](#), discover, research and apply any and all types of Earth observation data to unleash the amazing potential of EO data in the form of an App. **Compete to make the best App and win cash prizes (\$20,000) and GEO endorsement.**



Search

[Go](#)

Twitter Feed

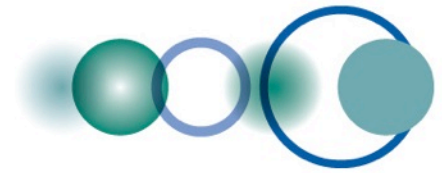
Tags

[Africa](#) [disasters](#) [risk reduction](#) [energy](#)
[food security](#) [GEO](#) [GEOSS](#)
[TEDx](#) [UNISDR](#) [water management](#)



GEONETCast

1. Interoperability among all regional GNCs needs to be facilitated.
2. EUMETCast and GEONETCast-Americas evolved to support national disaster management activities. These systems have been approved for **operational use by the International Charter 'Space and Major Disasters'**. In the event of an activation of the Charter, GEONETCast can be chosen by Charter Project Managers and Authorized Users as an alternative delivery mechanism for the **reception of high-volume, high-resolution satellite data** and value-added products to **support disaster mitigation**.
3. More seamless GEONETCast system for users, including an official Website. And interoperability with GCI.



GEO Data Management Principles Task Force

- The TF will support the GEO in the definition and endorsement of common GEOSS Data Management Principles in the next GEO-XI Plenary.
- The following principles have been initially drafted and the TF will review the principles, assess feasibility and eventually propose a new formulation:
 - Ensure long time data preservation and distribution
 - Ensure the quality information of EO data
 - Answer the EO user need
- 19 members with good regional balance (incl. WMO/WIS Dr. Peiliang Shi)
- Two co-chairs identified (Prof. David Halpern/COSPAR, Dr. Alessandro Annoni/EC-JRC)



**Interoperability
Principles**
→ **GCI**

**Towards a robust GEOSS
Information System?**

***Data Management
Principles***
→ **?????**

**Data Sharing
Principles**
→ **GEOSS Data
CORE**

- Regional/National approaches: US National Strategy for Civil Earth Observation, EC H2020 OpenPilot,..
- Various initiatives at Regional/International level: RDA, Belmont Forum, CODATA, ESFRI, UNGGIM, WMO ...

- Some work already done by GEO Tasks: Data Sharing Working Group, Q4EO, GEOViqua, ...



GEOSS Tiers & Successes

**DATA
DISCOVERY**

**DATA
SHARING**

**COMMUNITY
BUILDING**

GEO BON



GEOGLAM
Global Agricultural Monitoring



Convention on
Biological Diversity



UN-REDD
PROGRAMME

EO SYSTEMS

EARTH DATA

GEOSS CI

COM NETWORKS

INTEROPERAB

DATA SHARING

CAPACITIES

SCIENCE TECH

USER DRIVEN

RESOURCES

BLUE PLANET

LAND COVER

FORESTS

URBAN

IMPACTS

AGRICULTURE

BIODIVERSITY

CLIMATE

DISASTERS

ECOSYSTEMS

ENERGY

HEALTH

WATER

WEATHER

INFRASTRUCTURE

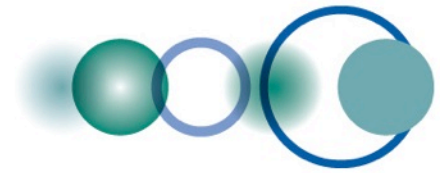
INSTITUTIONS

SOCIETAL BENEFIT AREAS

AfriGEOSS

Implementing GEOSS in Africa





Africa GEO Members and Participating Organisations

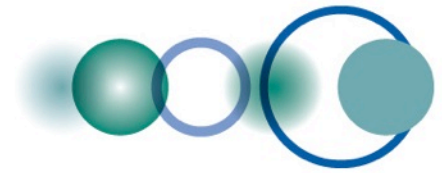
Africa Member States

- Algeria
- Burkina Faso
- Cameroon
- Central African Republic
- Congo, Republic of the
- Côte d'Ivoire
- Egypt
- Ethiopia
- Gabon
- Ghana
- Guinea-Bissau
- Guinea, Republic of
- Madagascar
- Mali
- Mauritius
- Morocco
- Niger
- Nigeria
- South Africa
- Sudan
- Tunisia
- Uganda

Africa Participating Organisations

- African Association of Remote Sensing for the Environment (AARSE)
- African Centre of Meteorological Applications for Development (ACMAD)
- EIS-Africa
- Regional Center for Mapping of Resources for Development (RCMRD)
- United Nations Economic Commission for Africa (UNECA)





Policy Linkages

Earth observations contribute to:

- G20 (GEO-GLAM)
- UNFCCC (GFOI)
- GFCS (Climate)
- CBD (GEO BON)

- HFA/HFA-2
 - World Conference on Disaster Risk Reduction (WCDRR)

- Sustainable Development Goals (SDGs)
- Future Earth (ICSU) / Belmont Forum
- ...



A broad Commercial Sector spans the entire information value chain

Data
providers

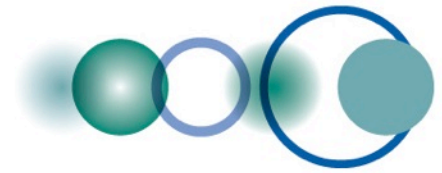


Value-Added
providers



Downstream
users





Summary

- Broad open data policies/practices essential for publically funded collections & must be strengthened
- Economic value in downstream elements – value-added products and services
- Broaden stakeholder engagement needed, including the private sector
- Strengthen policy linkages/mandates
- National, Regional and International collaboration is essential
- **More closely work together with WMO towards post 2015**

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

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

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

