

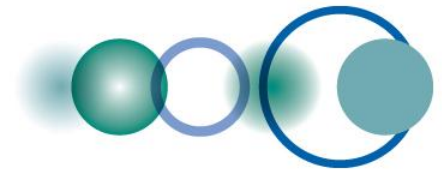
Environmental Monitoring Programs

- Group on Earth Observations (GEO)**
- European Space Agency (ESA)**

Espen Volden
GEO Secretariat
Seconded from ESA

SCERIN-2
Krakow, Poland
9-10 June 2014





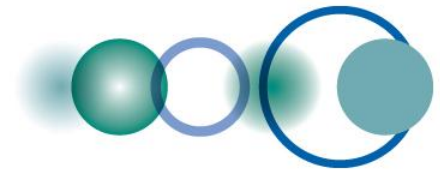
**Created in 2005, to develop a coordinated and sustained
Global Earth Observation System of Systems (GEOSS) to
enhance decision making in nine Societal Benefit Areas
(SBAs)**

GEO today:

90 Members

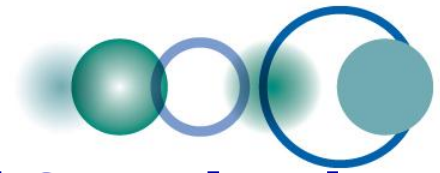
**77 Participating
Organizations**





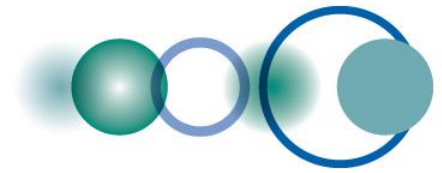
77 Participating Organizations





A Global, Coordinated, Comprehensive and Sustained System of Observing Systems





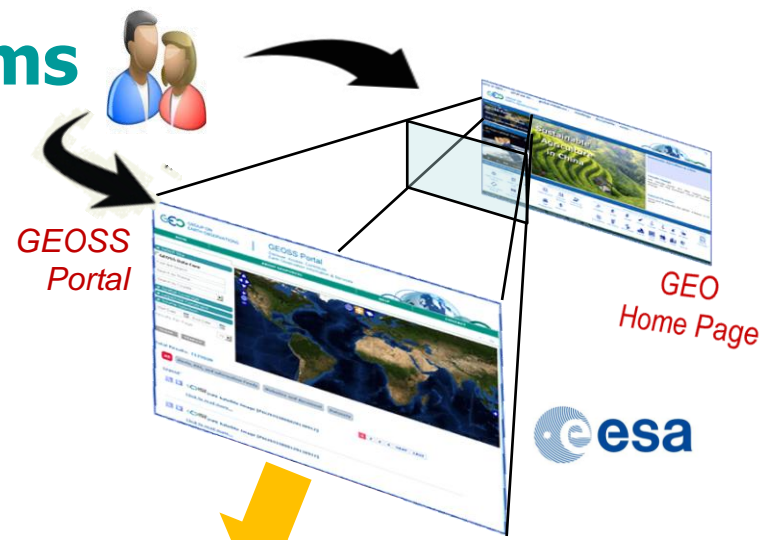
GEO Objectives

- Improve and Coordinate Observation Systems
- Advance Broad Open Data Policies/Practices
- Foster Increased Use of EO Data and Information
- Build Capacity

Enabling a System of Systems

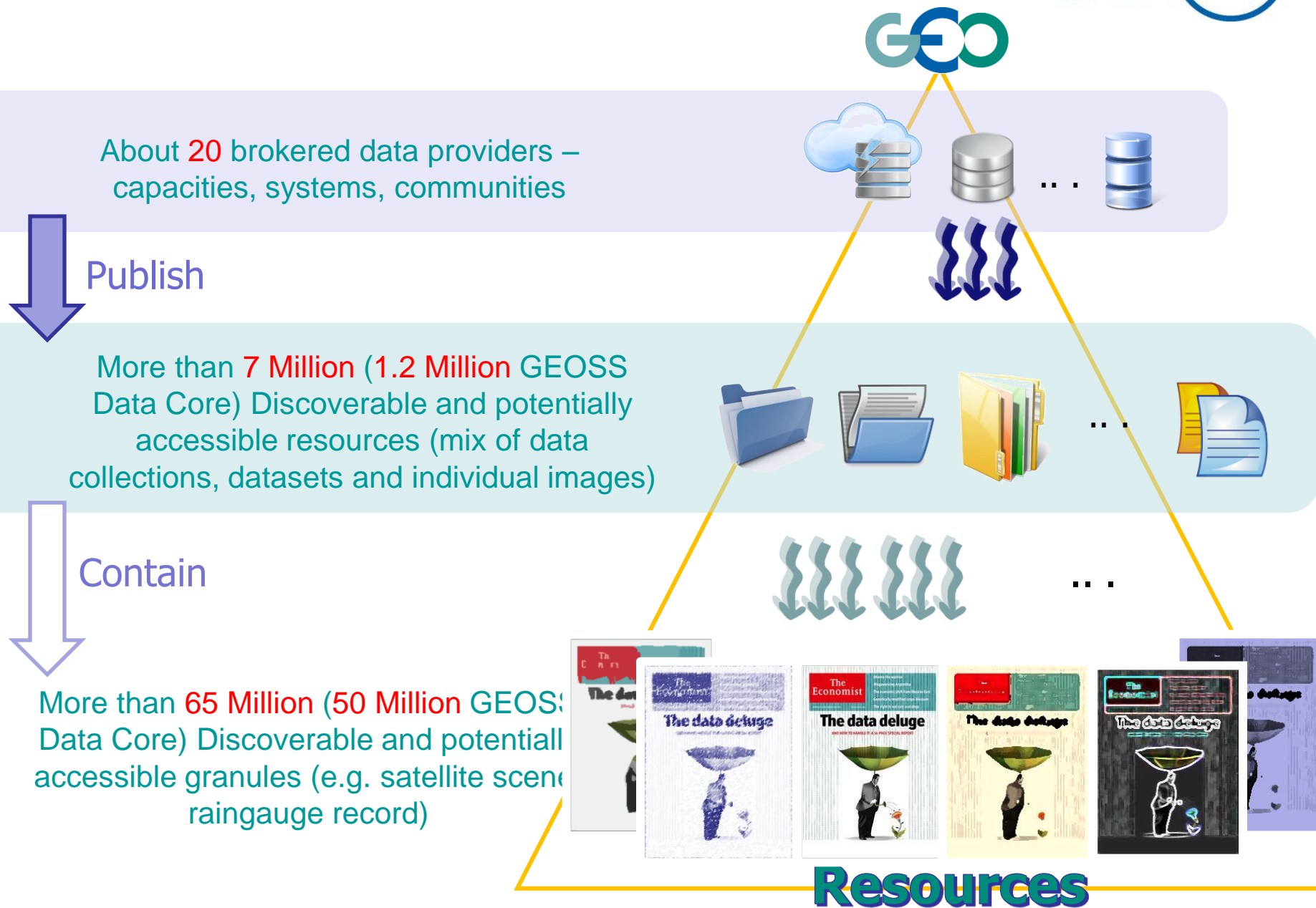


Data Providers Brokered (capacities, systems, networks, etc.)

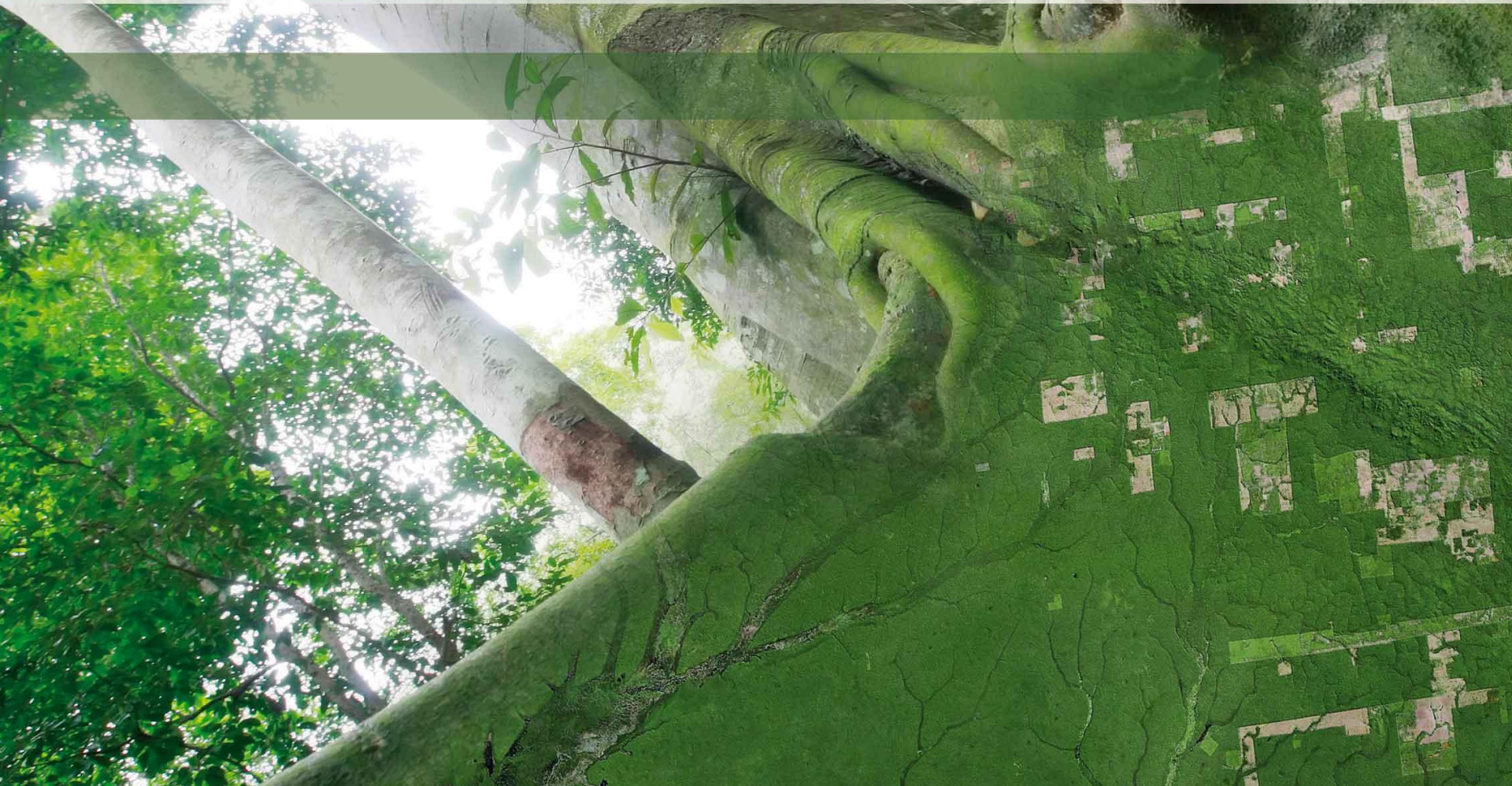


GEO Discovery & Access Broker





The Global Forest Observations Initiative



Australian Government

Department of the Environment





GFOI ensures the acquisition of core satellite data for 11 countries in 2013 rising to global coverage in 2016

GFOI reviews and promotes research and development needed to implement national forest monitoring

Review of Priority Research & Development Topics

R&D related to the use of Remote Sensing as National Forest Monitoring

Version 1.0
December 2013



GFOI provides capacity building in coordination with others such as UN-REDD. It supports the use of satellite and ground data to monitor forests, estimate carbon stocks and greenhouse gas emissions



Integrating remote-sensing and ground-based observations for estimation of emissions and removals of greenhouse gases in forests

Methods and Guidance from the Global Forest Observation Initiative

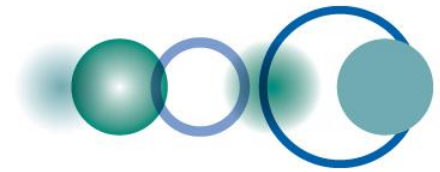
Edition 1.0
January 2014



GFOI Methods and Guidance report:

Use of Satellite and Ground data for national forest monitoring and estimation of carbon stocks and greenhouse gas emissions

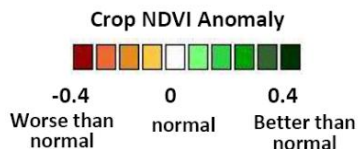
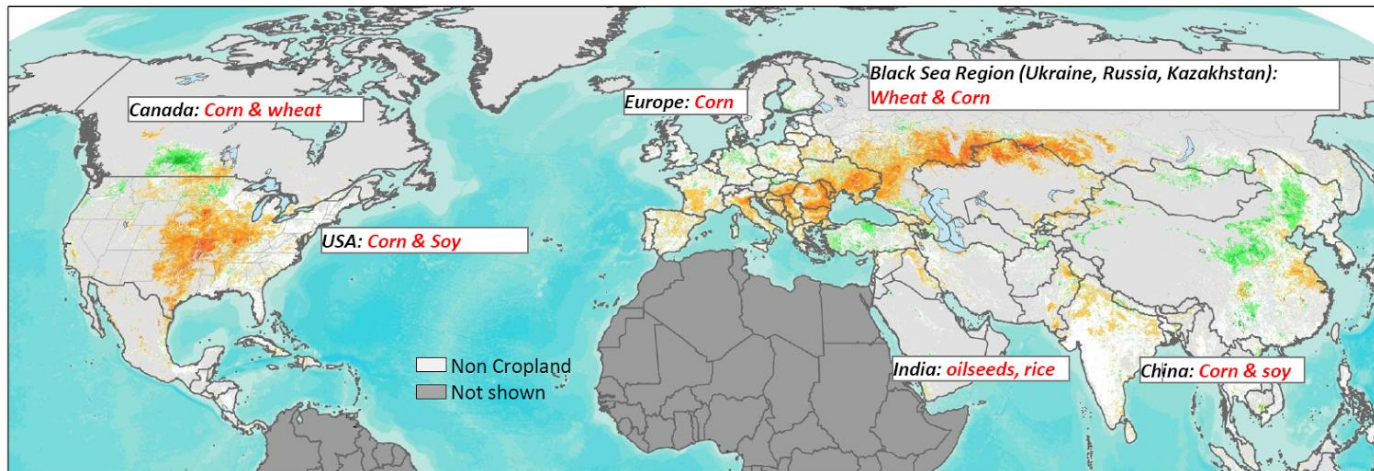
Consistent with IPCC Guidelines and UNFCCC requirements as agreed in November 2013 in Warsaw.



Crop Information for Decision-Making (Canada, China, EC, France, Japan, Kazakhstan, India, Mexico, Russia, USA, CEOS, FAO)



Northern Hemisphere NDVI Crop Anomaly, August 13th, 2012



Observed highlights:

- Drought conditions persist in US, south eastern Ukraine, Russia, and Kazakhstan, with slight improvement in some areas in northern Kazakhstan
- Rains in India mitigate dry conditions

GEOGLAM part
of G20 Action
Plan on Food
Price Volatility

Draft space
strategy

GEO X Plenary & Ministerial Geneva 13 -17 January 2014



We, the Ministers and Participants assembled at the GEO Ministerial Summit in Geneva, Switzerland, on 17 January 2014:

...

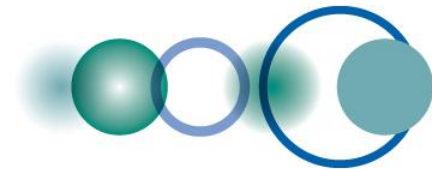
4. Renew the mandate of GEO through 2025 ... and agree to develop the work of GEO through 2025 in line with the recommendations put forward by the GEO-X Plenary as the foundation for shaping GEO through 2025.

...

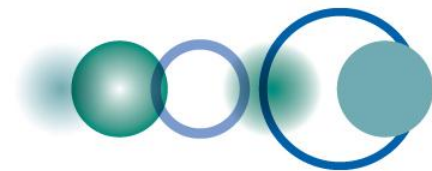
Espen Volden
evolden@geosec.org

<http://www.earthobservations.org>





Backup Slides

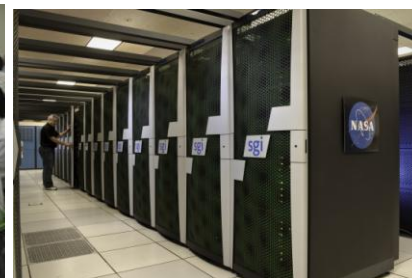


The GEO community spans the entire information value chain

Data providers

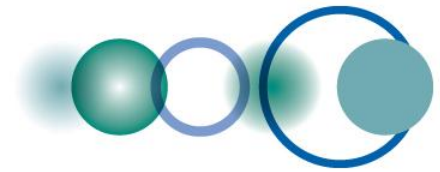


Value-Added providers

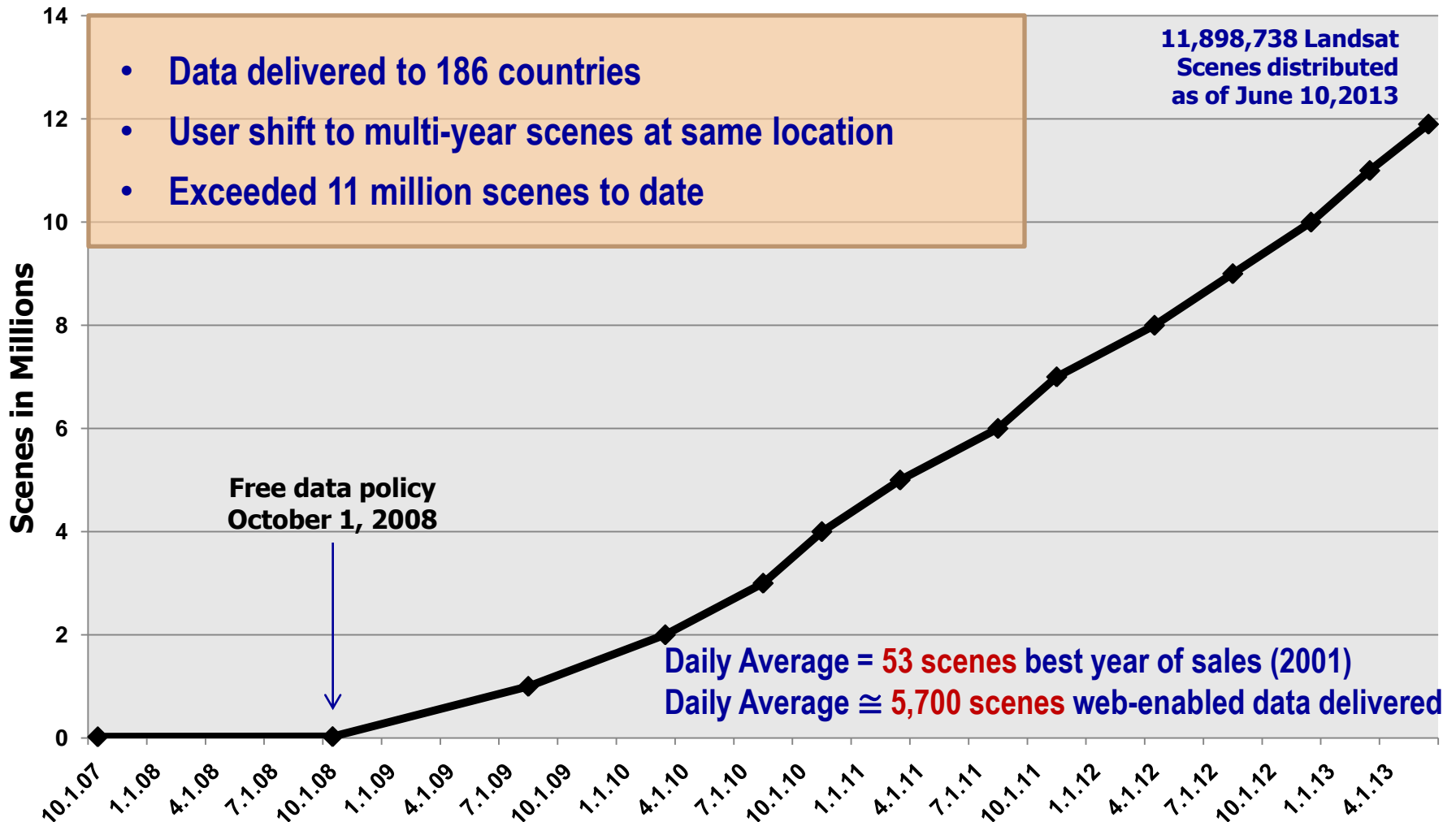


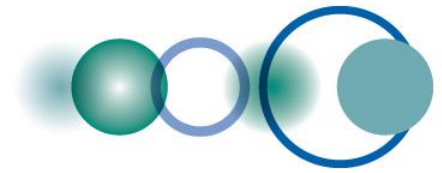
Downstream users





Increasing Demand for Landsat Data





Summary

- Broad open data policies/practices essential for publically funded collections
- Economic value in downstream elements – value-added products and services
- Broader stakeholder engagement needed – particularly from the private sector for development of products and services
- National, Regional and International collaboration is essential