

A Rapid Update on GEO FCT, GFOI and SilvaCarbon

Douglas M. Muchoney, Ph.D.

USGS Climate and Land-Use
Change

Arlington VA USA

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U.S. Geological Survey
U.S. Department of Interior



Global Forest Observations Initiative

Background

- In 2008, GEO members developed FCT to demonstrate the feasibility of satellite data for national forest monitoring systems
 - Demonstrations and capacity building in 11 National Demonstrator countries
 - International coordination and cooperation to provide data
- GFOI proposed to explore more formal and sustained arrangements
- GFOI Implementation Plan endorsed at the 2011 GEO Plenary

The GEO Forest Carbon Tracking Task

- GEO FCT :
 - a framework for coordination: governments, space and forest agencies, research scientists, intergovernmental and international organisations, and early adopter countries
 - national demonstrators showing the elements and operations of a global system of systems
 - develop institutional arrangements for secure data access and continuity
 - initiate and promote the methods and protocols for comparability, interoperability in observations and integration with ground measurements
 - prepare an Implementation Plan for a Global Forest Observations Initiative

FCT Network of National Demonstrators



11 ND Countries

- Australia (Tasmania)
- Brazil
- Cameroon
- Colombia
- DR Congo
- Guyana
- Indonesia (Sumatra, Kalimantan)
- Mexico
- Nepal
- Peru
- Tanzania.

From 2009

- Brazil
- Guyana
- Mexico
- Indonesia
- Australia
- Cameroon
- Tanzania

From 2010

- Colombia
- DR Congo
- Peru

From 2011

- Nepal



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Countries

-  **Indonesia**
-  **Cameroon**
-  **Colombia**
-  **Democratic Republic of the Congo**
-  **Guyana**
-  **Mexico**
-  **Peru**
-  **Tanzania**
-  **Vietnam**
-  **Gabon**
-  **Tasmania**
-  **Cambodia**
-  **Ecuador**



SilvaCarbon Technical Areas

- Sampling protocols and design
- Data capture, processing, archiving, and distribution
- Collection and analysis of *in situ* data
- Integration of remotely sensed and *in situ* data
- Forest change and degradation
- Classification and mapping of forest cover
- Carbon stock and flow estimation
- Social networking
- New:

Vietnam Coordinator

Southeast Asia Regional Coordinator



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Amazon Rainforest from space
photo credit: NASA

Welcome

SilvaCarbon, named after the Latin word for forest, is a flagship program aimed at promoting a better understanding of changes in land cover and the effectiveness of greenhouse gas emission mitigation efforts resulting from changes in land use. The program is part of the GEO Forest Carbon Tracking task, a component of the [Global Earth Observation System of Systems \(GEOSS\)](#), which provides data and information about a variety of Earth observations to users around the world.

The international project will help promote transparency in national and international carbon mitigation processes in addition to meeting. The program also aligns with U.S. strategy to reduce carbon emissions from deforestation and forest degradation to enhance forest carbon stocks.

The program will combine the support of Australia, Norway, Canada, Japan, the UN Food and Agriculture Organization, in addition to the United States. Support in the U.S. includes members from

Live Twitter Updates



London Protest Highlights Amazon Rainforest Destruction
<http://t.co/dvSCW7w>
35 days ago · reply · retweet · favorite

Global Forests Absorb One-Third of Carbon Emissions Annually
<http://t.co/wMkTunH>
42 days ago · reply · retweet · favorite

Project REDD is now taking root. <http://t.co/FbEKoqW>
48 days ago · reply · retweet · favorite



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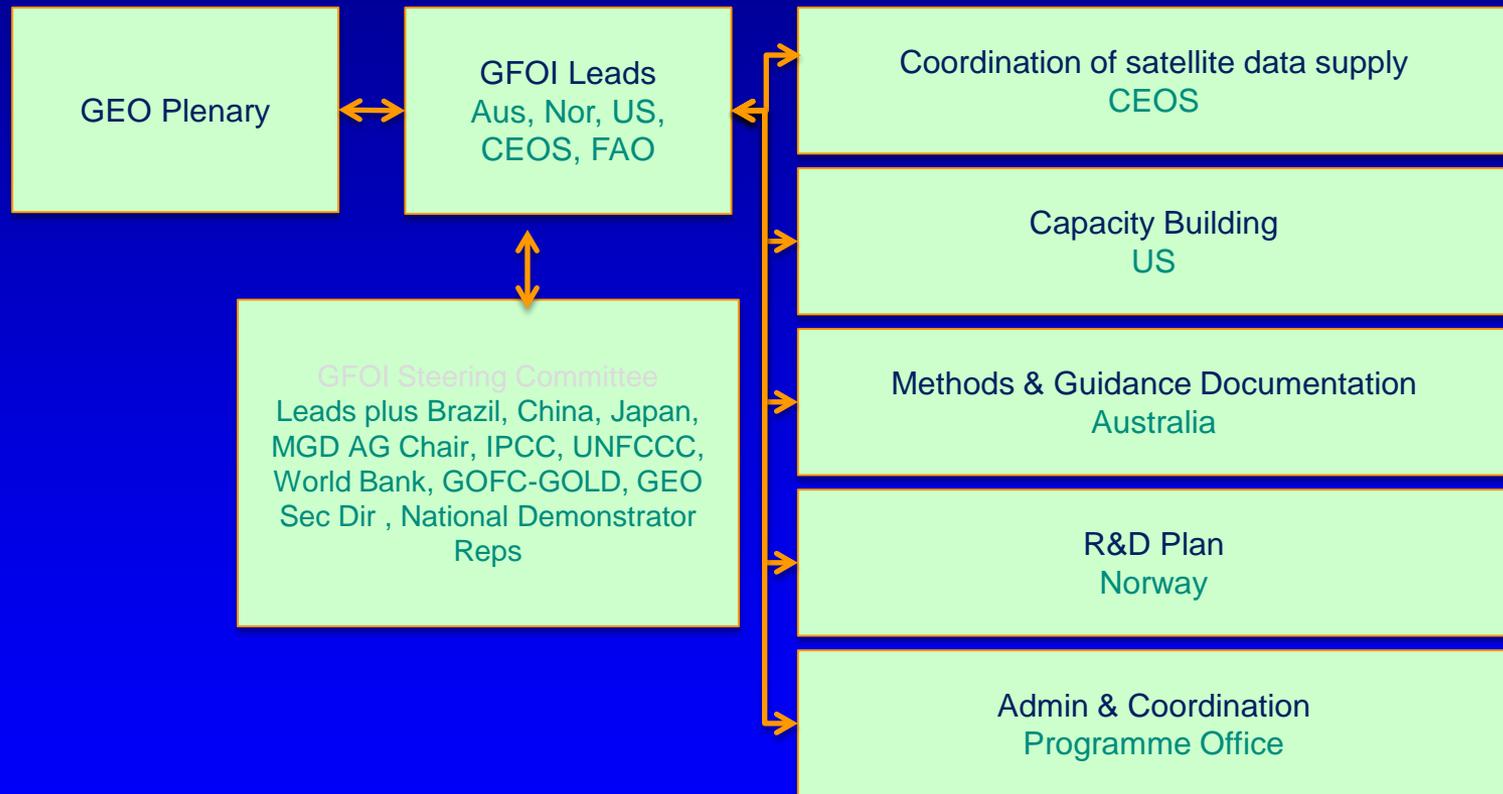
Visualize

- KML
- In Situ
- Future ND
- IMAGE
- SHP



Global Forest Observations Initiative

Development of a governance structure around the 5 components



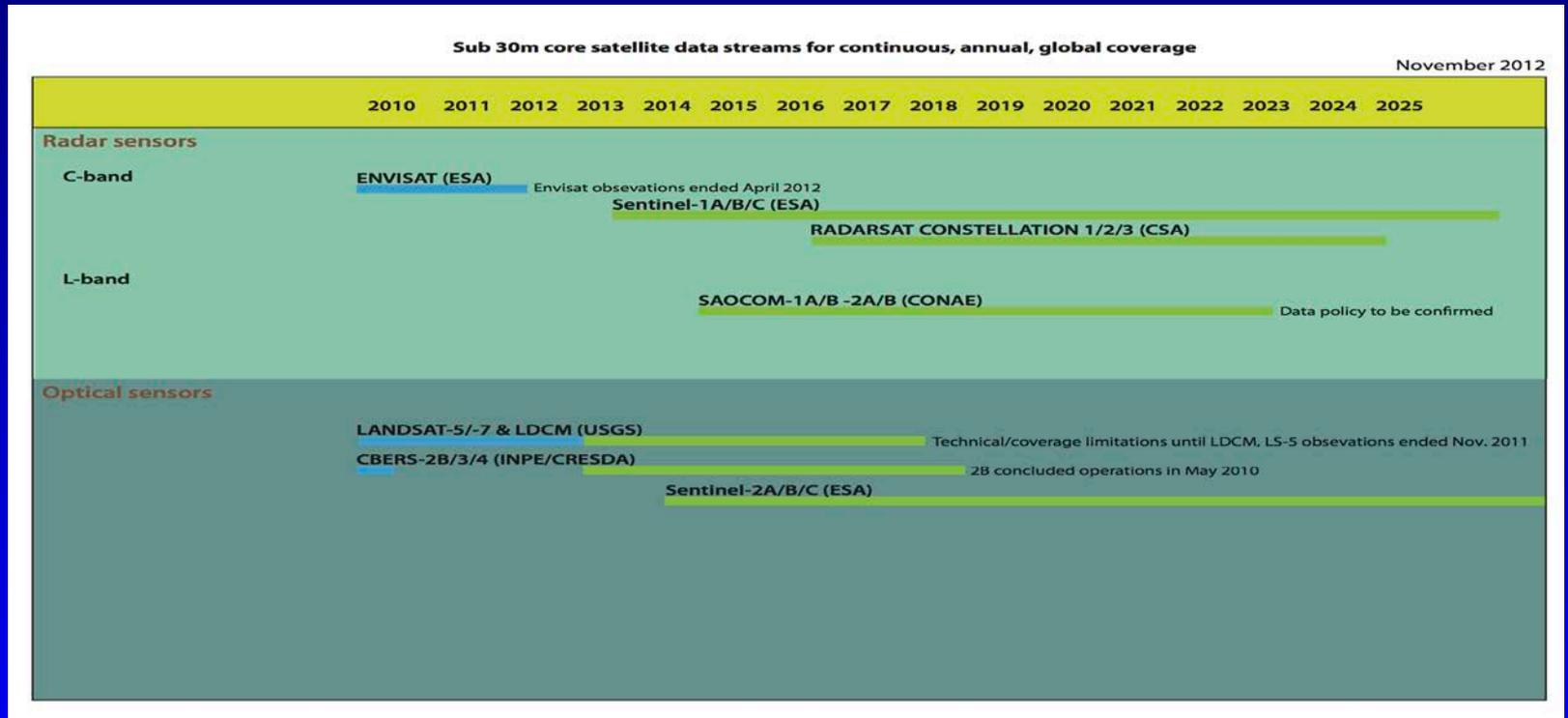
GFOI and FCT elements in all components

Coordination of satellite data supply

- Fundamental to GFOI objectives
- Supports all countries participation in reporting
- Ad-hoc SDCG established by CEOS in support of GFOI needs with good participation from necessary agencies
- Good progress towards baseline global strategy
- Anticipate the report before SIT-28
- SDCG seen as an important new capability for CEOS/GEO



Coordination of satellite data supply via CEOS



Capacity Enhancement

Help nations develop capacity to utilise Earth Observation data in credible national forest monitoring systems

- 9 workshops in the Americas and Asia in 2011 and 2012
- Ongoing bilateral collaboration
 - Aus-Indonesia's International Forest Carbon Initiative
 - Norway-Tanzania
- US SilvaCarbon plans geographic broadening in 2013/14

Methods & Guidance Documentation

A user-friendly reference for the use of remotely-sensed data and methodologies and ground observations in the establishment of countries' National Forest Monitoring and Carbon Tracking systems, compatible with eventual funding through REDD+

- Advisory Group and Authors Team assembled
- Draft document in development
- Review and field testing 2012-2013
- Endorsement at GEO-X, November 2013

Research & Development Plan

*Areas where research is needed in support of GFOI objectives
(new sensors, capabilities, methodologies...)*

- E.g. Forest Degradation, mapping of particular forest types (mangrove, peat forests, etc), comparison of forest biomass and allometrics estimation methodologies, data-model integration.
- RFP issued to address forest degradation characterisations
- Exploring complementary interests with research-funding organisations.

Administration & Coordination

Coordination and communication across the range of stakeholders including advisory, and leadership bodies, the participating science and technology community, the forest countries GFOI wishes to serve, the UN bodies intended as recipients of forest country reports, potential donors, etc.

- The GFOI Lead Team released a detailed work plan for 2012 and 2013
- Vacancy announcement for a GEO Secretariat-based GFOI Office Manager released in October; hire in November
- Co-Leads will continue their significant efforts in supporting GFOI and its actions.
- A goal for 2013 is to identify candidate host organisations for a longer term venue for the GFOI Office.



Thank you!

Douglas Muchoney (USGS): dmuchoney@usgs.gov

www.silvacarbon.org