



Global Forest
Observations Initiative

GFOI FOR GEOSS-AP COUNTRIES

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January 2017, GEOSS-AP*



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What is GFOI?



“Through collaborative action, GFOI seeks to foster forest monitoring & assessment that is robust, reliable, and achievable at reasonable cost and supports planning for national development priorities including, climate change mitigation and adaptation.”



GFOI: what is it?



GFOI Open Forum @ ESA in Frascati Italy, Feb 2016



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GFOI: why is it needed?



- Founded under Group on Earth Observations (GEO) in 2011
 - First work plan was 2012-13.
 - Operational ever since.

- Lead partners: currently Australia, Norway, USA, FAO & CEOS.

- Experts from UNFCCC, IPCC, World Bank FCPF, universities, technical and policy experts and other

- Open to new partners.

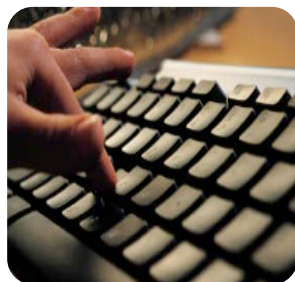


GFOI Components



Capacity Building

Works directly with countries, through the US SilvaCarbon and UNREDD-FAO programmes, to help develop national forest monitoring systems and associated capacities. This includes providing training in GFOI products and tools.



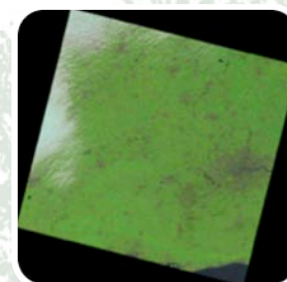
Methods and Guidance

Systematic workflow approach to forest monitoring and MRV. Provides direct links between UNFCCC decisions and the IPCC good practice and other guidance materials.



Space Data Coordination

Works with the world's civil space agencies, through CEOS, to ensure the long-term and worldwide acquisition of the core satellite datasets needed by countries to monitor their forests on an ongoing basis.



R&D Coordination

Coordinating the development of new technologies, datasets and methods for forest monitoring in a manner that best meets REDD+ countries' needs and priorities.



GFOI Leads and Office

The GFOI Leads provide overall oversight of the Initiative. The Office provides overall coordination and administrative support to the Leads Group, GFOI components, activities and partners.

- Interface of GFOI with implementing countries
- Jointly implemented by US SilvaCarbon & UNREDD
- Builds upon their existing work programmes and country partnerships
- Intended to use MGD as core syllabus
- Workshops, one-on-one training, in-country experts, training trainers, webinars and open sources tools
- Component Managers: Sylvia Wilson and Inge Jonckheere.





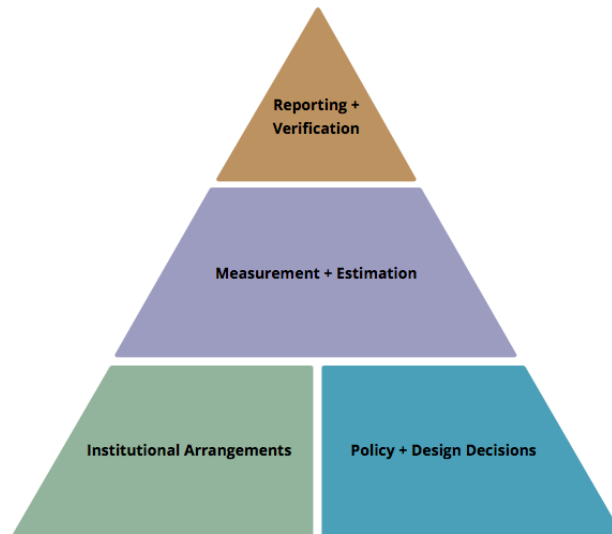
- Colombia CB workshop led by SilvaCarbon

- Intended to form the backbone of GFOI
- Logical and systematic guide for countries to follow in developing their forest monitoring systems
- Improve accessibility of technical data: link to IPCC GPG, UNFCCC requirements and other technical docs
- V1 published in January 2014, V2 in August 2016
- New web application REDDcompass available
 - www.gfoi.org/reddcompass
- Component Manager: Carly Green.

How to get the most from REDDcompass

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REDDcompass guides users through core Themes, Concepts and Actions involved in the development of National Forest Monitoring Systems (NFMS) for Measurement, Reporting and Verification (MRV). It provides contextual links to GFOI methods and guidance, space data resources, references and tools, training materials and advances in research and development as users work through the pyramid framework.



Quick Start

The overarching colour coded Themes displayed in the pyramid opposite are consistent with the headings of the GFOI Methods and Guidance Document (MGD) and suggest a bottom to top hierarchical progression through MRV Themes.

Selecting a Theme reveals a second layer pyramid which represents a MRV Concept (or second level heading) to be considered, again with a suggested progression being from the bottom to the top.

REDDcompass presents suggested reading from the GFOI MGD related to each Concept. Additionally each Concept has a range of possible Actions for consideration listed below the pyramid. Within this Action worksheet are a range of relevant links to various guidance, references, training material and tools which can be explored further at this level.

To get started take the following steps:

- 1: Click on the Theme of interest and explore the related Concept pyramid.
- 2: Click on the Concept of interest to reveal relevant Actions and supporting guidance, references, training and tools.
- 3: Click to add detail to an Action and register and create an MRV profile.
- 4: Add and store relevant information on progress and training requirements against Action items.
- 5: Run reports to track progress of your MRV development against the Action items.

- REDDCompass aims to make GFOI MGD accessible and usable by all countries at all capacities

- Coordinates civil space agencies to influence satellite acquisition in support of forest monitoring needs
- Aims to ensure coverage and continuity for countries
- Focus on acquisition and accessibility of free data
- Also supports R&D component, inc. strategising for Analysis Ready Data.
- Led by Committee on Earth Observation Satellites (CEOS) – Space Data Coordination Group
- Component Manager: Stephen Ward

GFOI SPACE DATA PORTAL

National Forest Monitoring Systems must consistently measure change over large areas at repeated intervals. The only practical solution is to employ remotely-sensed Earth observations.

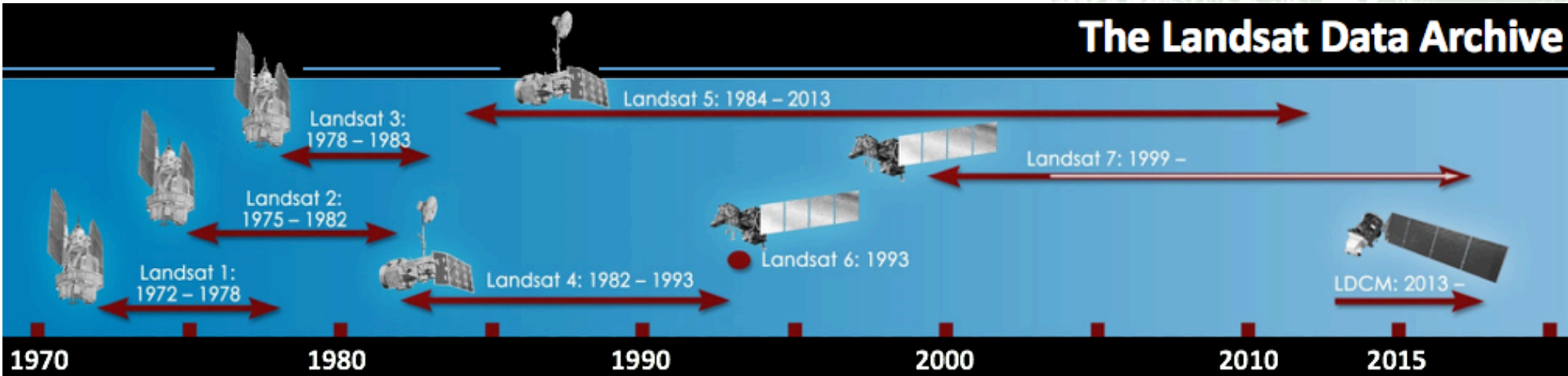
This page presents resources that will help prospective users get started with **Understanding, Accessing and Applying** space-based Earth observations.

- Space Data Portal helps understanding and access to space data for countries
- <http://www.gfoi.org/space-data/space-data-portal/>

Space Data Coordination



The Landsat Data Archive

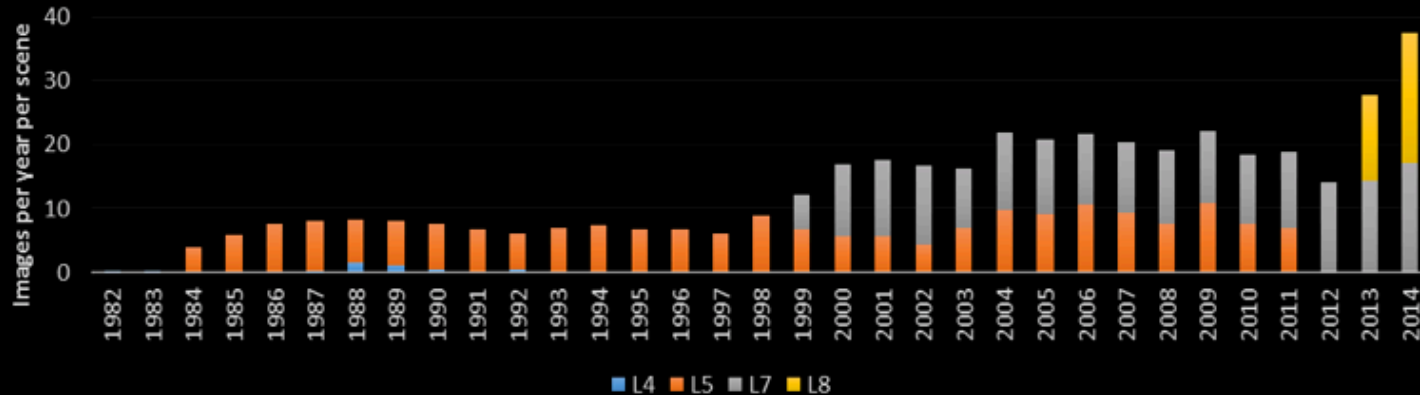


MSS data

30-m TM/ETM+/OLI data

Data is free since 2008

- Systematic global acquisitions
- Free of charge
- Easy access
- Minimal pre-processing required



Total archive of 30-m observations, average number of images per year per scene



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- Coordinate global R&D activities on forest monitoring to help meet country needs
- Prioritizing RS research topics for the use in NFMS
- Priorities topics include: forest degradation, mapping forest types, interoperability, uncertainty, data and model integration etc.
- Country focus through development of MGD modules
- Component Managers: Brice Mora and Martin Herold.



Representation from all major contributing organisations.
Overall responsibility for GFOI.

- Australia: Anthony Bennie
- CEOS: Shimada Masanobu (Stephen Ward)
- FAO: Anssi Pekkarinen
- Norway: Henrik Fliflet
- USA: Evan Notman & Sylvia Wilson

****Open to new members with additional contributions****



- GFOI Plenary in Ho Chi Minh, Vietnam in week of 10th April, 2017 – all countries with forest monitoring interests invited to actively participate
- Exploring with Vietnam the potential of the CEOS Data Cube for GFOI purposes
- Substantial SE Asia workshop activity by SilvaCarbon and FAO to promote the GFOI MGD and REDDCompass
- Space Data support always available from SDCG
- Please get in touch if interested in GFOI

- Mekong region countries have not been able to continuously map and monitor land cover changes due to methodological difference and inconsistencies (with IPCC) of past mapping efforts.
- SilvaCarbon will facilitate U Maryland support for partners on enhancing land cover and forest monitoring.
- Development of forest extent and change maps from 2000 to present and training on product derivation and iteration.
- Continue the process in 2018 to include monitoring change across the 6 IPCC classes.
- Timeline: January 2017 – December 2017 (Proposed countries: Lao PDR, and Cambodia or Thailand)
- Implementing Partner: UMD and EROS USGS will provide direct technical assistance to the three countries.

- **One regional GFOI workshop** to address common technical issues identified during the country work on annual forest cover change maps. **September 2017** – (*Laos, Cambodia, Bangladesh, Nepal, and Thailand*)
- **National training in MRV design and implementation.** Training to reporting officials in the use of the REDD+Compass. February 2017
- **National training: Using the ALU tool for compiling and analyzing data from the land use sector.** April – October 2017
- **Study tour to Indonesia: Sharing lessons from the One Map development process** SERVIR-Mekong and One Map Myanmar team are planning a study tour to Indonesia to learn from the One Map development process, **January 2017**

More information

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