

GOFC-GOLD

Global Observation of Forest and Land Cover Dynamics



GOFC-GOLD: Past and Future

NASA LCLUC Team Meeting
19 April 2016

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GOFC-GOLD Abbreviated History

- Created originally as a project of CEOs
- Transformed itself into a broader-themed organization to take advantage of both the developing science and policy interest in forest and land-cover related issues
- With an ongoing emphasis on scientific capacity building

Core Functions of GOFC-GOLD

1. Specifying requirements for products
2. Assessing algorithms and data assimilation procedures
3. Ensuring the availability of observations
4. Harmonization and the development of protocols and standards
5. Ensuring that operational products meet accuracy requirements
6. Capacity building and the role of regional networks
7. Creating GOFC-GOLD products and services
8. Providing information to support international assessments
9. Advocacy role, especially in relation to the continuity of observations and validation



Structure

Governmental and Intergovernmental Processes

User Needs

Executive Committee

Land-Cover IT

Biomass Working Group

Fire IT

REDD Sourcebook WG

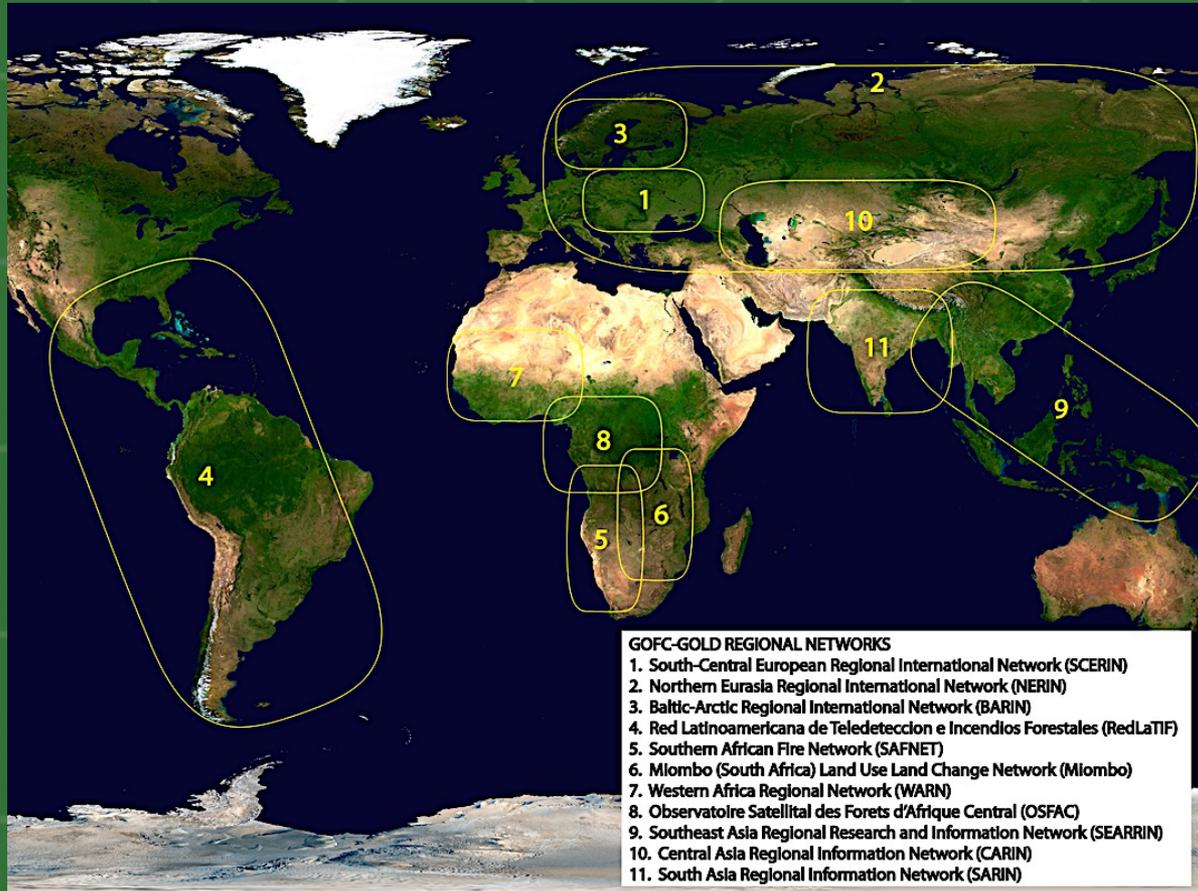
Regional Networks

Project Office



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Extent of Regional Networks



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Samples of Accomplishments

- Land Cover
 - Extensive use of historical archives, global products, emphasis on validation, coordination of international satellite programs
- Fire
 - Regional and global fire risk using satellite data, global and regional fire assessments
- REDD
 - Extensive use of the Sourcebook, incorporation into GEO
- Networks
 - Bringing regional expertise to bear in many parts of the world
- Biomass
 - Prototype regional products



Continued Strategic Thrusts

- Advocacy for free and open access to data
- Continuity of observations and coordination of observing programs
- Importance of validation of products
- Moving towards higher-level products
- Building capacity in regional networks
- Engaging regional experts with important processes and activities

Coordination on Forest and Land Observations

- Working through GEO
 - Clearly the organization of choice for governmental coordination of space agencies
- Support for GEO activities
 - GFOI
 - GEOGLAM
- Methods documentation
- Common software and standards for analysis
- Data for validation

Climate Impacts

- Role of systematic observations of climate impacts
- Development of indicators systems
- Disentangling human-driven changes from climate-driven changes
- Applications for climate adaptation studies

Fallout from COP21

- Intergovernmental processes have changed
- No binding targets or timetables
- Hope of increased ambition among nations, codified in 5 year global stock-taking
- Measurement of the land-use based fluxes of GHG's by far the most difficult
- Strong need for capacity-building across the board

Fallout from COP21

- Climate mitigation and carbon management
 - Change in carbon content of ecosystems
 - Change in extent of ecosystems
- Systematic tracking of forest loss and gain
- Systematic tracking of forest degradation
- Above-ground carbon retrievals
- Other ecosystems in addition to forest
 - Grasslands
 - Fire in all systems, e.g. tropical peatlands
- Links to model development and validation
- Monitoring and verification analyses



IPBES

- Over 150 nations
- Requested by CBD, RAMSAR, CCD, CITES, etc
- Creating quantitative goals for land use conversion and for sustaining ecosystem services
- Measurement of land-cover and land use change, and incorporation into models will be key features



Sustainability

- As important as climate issues have been, they are not the end of the story
- Nations are positioning themselves for long-term sustainability issues
- Scientific community is responding
- We must also respond with observations that document state and progress by developing metrics and indicators

Concluding Thoughts

- There continues to be an important role for extra-governmental scientific organizations like GOFC-GOLD
- We will see a continued evolution of the scientific agendas driven by growing and changing policy background among nations