

GOFC-GOLD Fire IT meeting, 18th -19th October, 2011, Stresa, Italy Anja A. Hoffmann

GOFC –GOLD Regional Networks Networks with Fire Focus

- ➤ GOFC-GOLD Fire Implementation team works with GOFC-GOLD Regional Networks to execute and design projects, develop consensus algorithms and methodologies for product generation and validation,
- Particular focus on fire mapping and monitoring:
 - SAFNet,
 - RedLaTIF,
 - CARIN and
 - SEARRIN.
- Networks like WARN and OSFAC have recently started to have specific activities and/or projects on fire mapping and monitoring.



GOFC –GOLD Regional Networks Networks with Fire Focus

- ➤ The main updates of WARN are: organization of validation workshops on the FRA FAO land use and land cover map validation (all west african countries, 2010 and 2011) Preparation of a repport on REDD prospects in Africa (participation of Senegal, ghana, soudan, congo basin countries, kenya). This report is for the START programme for Durban meeting and Rio +20. PHD course at Ouagadougou on validation of remote sensing data, funded by DANIDA (Wansec project), with participation of Senegal, mali, ghana, Burkina Faso and niger Participation in the leading team for the world atlas of desertification (coordinated by the JRC-EU) some funded project from the last START call: one is on agroforest performance in the context of climate change (ghana and senegal)
- > OSFAC: Three study site on fire: Maringa-Lopori-Wamba Landscape (African Wildfire Foundation), Virunga National Park, DRC, Fire in the Bateke Plateau, Gabon

1st GOFC-GOLD Fire Inter-Regional Network &1st Joint GOFC-GOLD and GWF Network meeting

Side Event at the

5th International Wildland Fire Conference 'Wildfire 2011' Sun City, South Africa, 9 May 2011



1st GOFC-GOLD Fire Inter-Regional Network & 1st Joint GOFC-GOLD and GWFN Network meeting

Objectives

- ➤ 1st GOFC-GOLD Fire Inter-Regional Network meeting: to facilitate inter-regional network cooperation amongst GOFC-GOLD Fire network members around the globe and the exchange of knowledge, experiences and solutions in accessing and using satellite data for fire science and applications.
- Joint GOFC-GOLD and GWF Network Meeting: to facilitate cooperation and collaboration amongst GOFC-GOLD and UNISDR Regional Wildland Fire Networks in order to enhance the efficient and targeted application of Earth Observation data for applied integrated fire management.

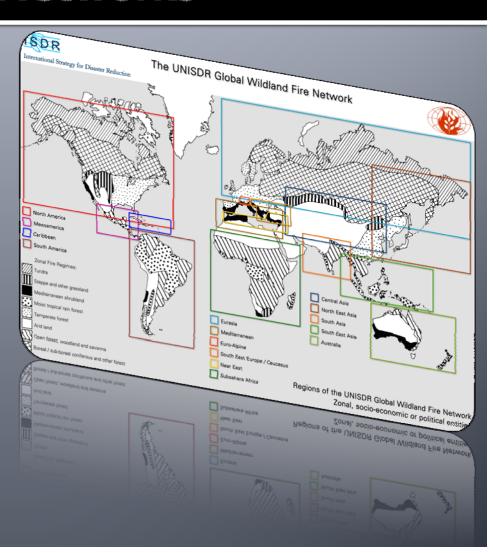




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GWF Networks

- The Wildland Fire Advisory Group (WFAG) of the UN International Strategy for Disaster Reduction (UNISDR) operates through the Global Wildland Fire Network (GWFN)
- Consists of 15 regional networks and national focal points with the aim to support the development of integrated fire management approaches around the world assisted by the use and application of satellite based fire information.



1st Joint GOFC-GOLD and GWFN Network meeting

GOFC-GOLF Fire Recommendations for the Final Wildfire 2011 Statement

➤ Need for capacity building in the use of fire satellite products, specifically the need for:

- 1. Case studies and practical examples illustrating how to use of satellite products and data for fire management.
- 2. Product documentation that is written in a way that is meaningful to the needs of fire managers and not just remote sensing experts, including explanations of the proper use of Quality Assessment labels.
- 3. Development of a comprehensive and standardised University fire information curriculum modules and support for its dissemination and adoption within developing countries.

> Product / data access (internet access and awareness issues) recommendations:

- 1. Standard products should be distributed by agencies in a variety of formats recognizing the needs of the different user communities including the fire management community.
- 2. Standard products should be validated, and product accuracy information should be documented with accuracy metrics relevant to the different user communities (e.g. atmospheric modelers and fire managers)
- 3. Access to raw satellite data should be facilitated to derive regionally specific fire products, which are encouraged if they are validated following agreed protocols.

1st Joint GOFC-GOLD and GWFN Network meeting

GOFC-GOLF Fire Recommendations for the Final Wildfire 2011 Statement

- > Strengthen involvement of regional networks in validation and quality assessment leading to product refinement/reprocessing) of satellite fire products.
 - 1. Validation both of existing products as well as "next generation" fire products such as fire danger indices and fire characterizations (ground vs. surface fire; fuel type and condition; fire intensity and severity)

➤ Fire Early Warning Systems

- 1. Through collaboration between the UNISDR Regional Wildland Fire Networks and the GOFC-GOLD Fire Regional Networks, calibrate Fire Weather Index System parameters for different global regions using EO data, including:
 - Ignition Potential indicator using for example correlations between hot spot frequency and Fine Fuel Moisture Code (FFMC), and possibly other fine fuel moisture indicators;
 - 'Fire Danger' indicators for example comparing area burned data, long-term drying (Drought Code, Buildup Index) and fire behaviour (Initial Spread Index, Fire Weather Index) indicators;
- 2. Through the UNISDR Regional Wildland Fire Networks, support regional to local implementation of the Fire Early Warning System and Community Based Fire Management by facilitating:
 - the development of locally (or regionally) derived fire management decision-aids/guidelines based on the calibrated indices of the Fire Early Warning System;
 - local capacity building through technology transfer and training in operating a Fire Early Warning System at the regional to local levels;

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➤ Need for a consistent Global Fire assessment that is endorsed by the network community and that is updated on a regular (annual or more frequently than decadal) basis. This is needed:

- 1. To support reporting of area burned and emissions at national and other scales
- 2. For assessment of global fire regimes

➤ To assist the GOFC regions in quantifying pyrogenic emissions defining protocols and standards to use in a regionally appropriate manner:

- 1. Guide on how to quantify the additional variables needed to compute emissions from burned area data such as fuel consumption and fuel density
- 2. Integrate, publicize, and make available existing ancillary data sets and current scientific knowledge for emission inventories, including ground- and satellite-based land cover and land use data sets, fuels mapping and models, fire weather models/indices, combustion completeness, vegetation health/dryness, emission factors.

1st Joint GOFC-GOLD and GWFN Network meeting

Recommendations from participants & Actions after the conference

- Capacity building and training for member of network
- ➤ GOFC Fire could intensify communication among individual members and regional networks
- Improve cooperation between networks both between GOFC-GOLD and GOFC-GWFN
- Better facilitate Earth observation data access to GOFC-GOLD fire network
- A web based portal to tially increase the knowledge sharing among members of regional networks
- Reviving the Miombo network Meeting planned next year
- Reviving the SEARRIN Fire Network Meting planned next year

1st Joint GOFC-GOLD and GWFN Network meeting

Challenges & Discussion topics

- Funding for the regional networks issue of funding on individual agencies basis affecting the activities/projects of the regional networks
- Possibility of a more structural integration of regional networks expertise/projects into "GOFC IT projects".
- ➤ How are the regional network recommendation fed into GOFC-GOLD (link between users and satellite operators)
- Demonstration projects involving the whole chain from the skies to the ground (end-user /community level).
- Increase visibility of Regional networks e.g. Renew homepage appearance on GOFC site

GOFC Fire IT New Priority areas and Goals

(as identified by the participants at the Frascati Workshop)

Regional Networks

3.	Regional network	Organize training programs for building	Improve visibility of the regional networks
	issues, capacity	regional expertise and provide project-based	to national end-users and policy decision
	building,	training on data validation and application.	makers.
	accessibility, etc	Improve data availability and product	Prepare training and education materials.
		dissemination.	Promote training in developing countries on
		Provide SPOT archive data to African regional	fire data from new missions
		networks.	