

**GOFC-GOLD**



Global Observation of Forest  
and Land Cover Dynamics

3rd GOFC-GOLD Land Monitoring Symposium  
Wageningen, The Netherlands  
Fire-IT Session, 15 April 2013

# User Needs Perspectives – Fire Management

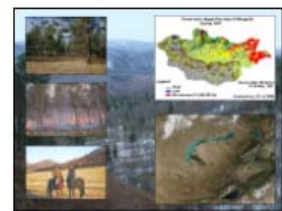
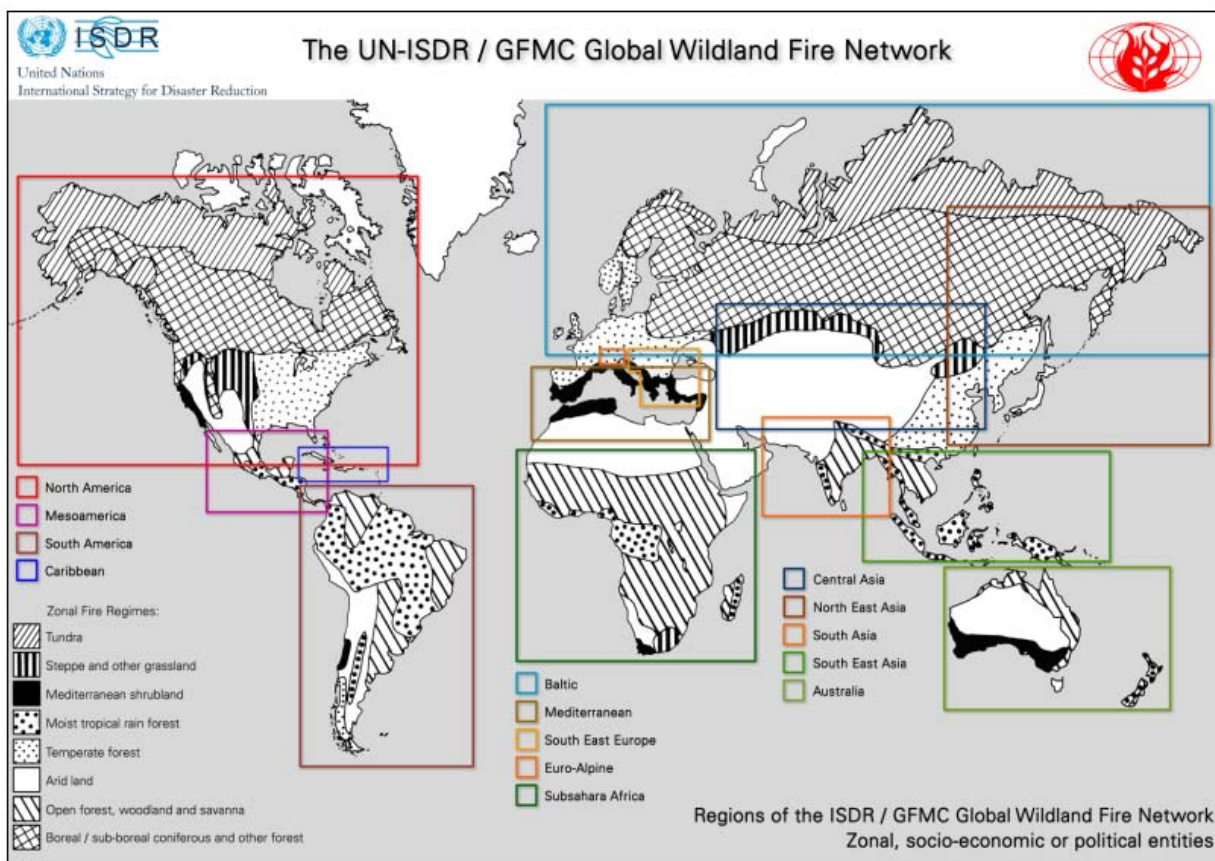
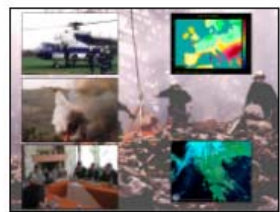
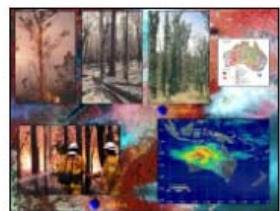
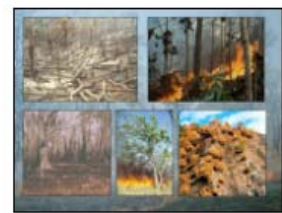
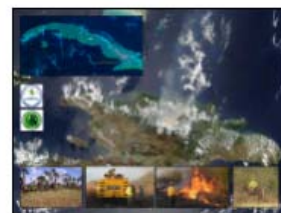
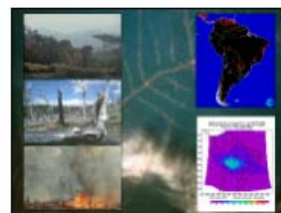
**Johann G. Goldammer**  
Global Fire Monitoring Center (GFMC)



United Nations  
International Strategy for Disaster Reduction



UNITED NATIONS  
UNIVERSITY

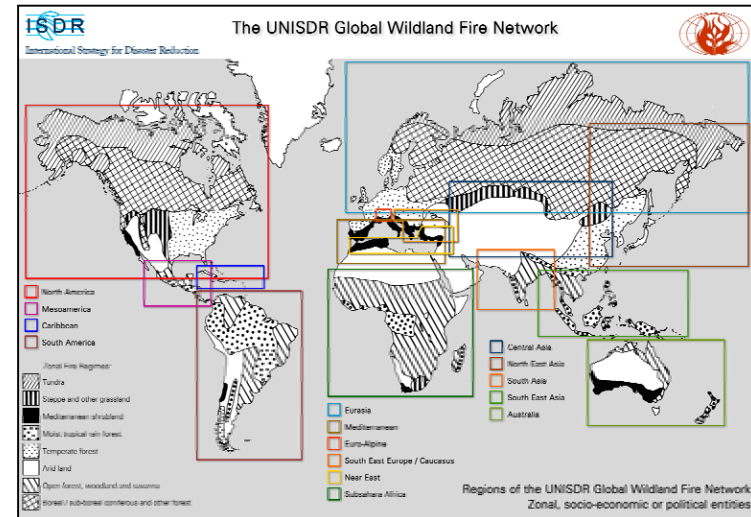


**Regional Wildland Fire Networks within the Global Wildland Fire Network**  
 North America – Mesoamerica – South America – Caribbean – Mediterranean  
 Southeast Europe / Caucasus – Subsahara Africa – South Asia – Southeast Asia  
 Australasia – Northeast Asia – Central Asia – Eurasia – Euro-Alpine

# Partners (I)

## Regional Networks

- Subsahara Africa
- South East Asia
- South Asia
- Central Asia
- North East Asia / Pan Asia Network Cluster
- Australasia
- Eurasia
- South East Europe / Caucasus
- Mediterranean
- Euro-Alpine
- South America
- North America
- Mesoamerica
- Caribbean



## Relevant Network outside GWFN:

- European Union Forest Fire Expert Team / EFFIS

# Partners (III)



## International Organizations

- UN International Strategy for Disaster Reduction (UNISDR)
- Food and Agriculture Organization (FAO)
- UN Specialized agencies: WMO, WHO, UNEP, OCHA, UNESCO
- UN Economic Commission for Europe (UNECE)
- United Nations University (UNU) / GFMC
- International Tropical Timber Organization (ITTO)
- Council of Europe (EUR-OPA)
- Organization for Security and Cooperation in Europe (OSCE)
- Environment and Security (ENVSEC) Initiative
- Green Cross International
- Global Observation of Forest and Land Cover Dynamics (GOFC / GOLD)



## Objectives of Work 2011-2015 (I)

Implement the recommendations of the International Wildland Fire Conferences, notably **the development of:**

- Common international principles or standards in fire management
- A Global and a set of Regional Agreements on Transboundary Cooperation in Fire Management
- Sharing resources in capacity building in fire management, including cooperation in wildfire emergency response
- International policies addressing global change and fire

## Objectives of Work 2011-2015 (III)

### Emphasis to address:

- Impacts of institutional reforms / reorganization on governance in fire management
- International financing schemes for supporting the fire management sector as a contributor in environmental protection
- Increasing impacts of interactions in land use / fire use, wildfires and climate change on natural and human-altered wetlands (peat bogs, mires, marshes), high-altitude fires, and society (human health and security)

## **Objectives of Work 2011-2015 (III)**

### **Strengthen intra-regional and inter-regional cooperation in fire management:**

- Building of Regional Fire Centers
  - Centers of Excellence for operating at the science-management-policy interfaces at regional neighborhood level

## **Main functions of “Regional Fire Centers” (I)**

➤ **A Regional Fire Center (RFC) is serving as a regional open fire information repository:**

**Public provision (online and on request) of all information relevant to vegetation fires, e.g.,**

- Conventional databases, statistics
- Scientific and technical literature, narratives, reports (often / mainly grey literature, which is normally hardly accessible)

➤ **Science-technology interface**

Provision of an instrument in the region that will serve the need bring wildland fire and related sciences into a readable format to policy makers and practitioners.



## Main functions of “Regional Fire Centers” (II)

### ➤ **Monitoring and information dissemination**

In the ideal case an RFC would have own capabilities **or a partner institution** delivering information / monitoring

- Fire precursors (fire early warning, fire danger rating)
- Active fires (ongoing fires, current situation)
- Fire impacts (area burned, fire damage / impact assessment)

### ➤ **Capacity building: Training and outreach**

Following the philosophy and the economic needs for sharing resources in the region:

- Conducting national and regional training courses, continuous education, seminars, workshops, conferences on ....

## **Main functions of “Regional Fire Centers” (III)**

### **➤ Advisory support to nations and to the regional entities: Building of national and regional fire management policies**

- The RFCs serve countries and regional bodies on request and will provide advice to governments or governing bodies of regional entities to develop and implement fire management policies
- Support participating countries of the region to develop informal or formal agreements / protocols for cross-boundary cooperation in fire management

### **➤ International nexus: Regional and global networking** RFCs are supporting or serving as Secretariats of Regional Wildland Fire Networks and ensure inputs of regional interests in the Global Wildland Fire Network

# Regional Fire Centers

- South East Europe / Caucasus:  
Based in Skopje, FYROM (since 2009)



New partnership with the Balkan Environment Center (BEC) / Aristotelion University of Thessaloniki and the National Observatory of Forest Fires

See next presentation by Ioannis Gitas and George Zalidis



# Regional Fire Centers

- South East Europe / Caucasus:  
Based in Skopje, FYROM (since 2009)



Enhanced partnership with the Fire Management Training Center (Antalya, Turkey)

- Regional fire management training for SE Europe, South Caucasus, Near East and Middle East



# Use of Competency-based Training Materials for Firefighters: EuroFire Standards

<http://www.euro-fire.eu/>



The screenshot shows the EuroFire website homepage. At the top left is the EuroFire logo. To its right are links for 'site map / contact us / disclaimer / home'. Below the logo is a navigation bar with buttons for 'About us', 'Partners', 'References', and 'Links'. A red banner below the navigation bar reads '+++ 24 January 2013 - NEW LANGUAGE VERSIONS ADDED +++'. On the left side, there is a blue sidebar menu with the following items: 'Training Concepts', 'Competency Standards', 'Training Modules', and 'Training Modules'. The main content area features a 'Welcome to EuroFire' heading. Below this, there are several paragraphs of text describing the project: 'EuroFire A 2 year project from October 2006 to December 2008 funded by the EU Leonardo da Vinci programme. The project brought together partners with international expertise and experience in wildfire and prescribed fire research, management and training to develop, evaluate, produce and distribute new European-wide, multi-lingual on-line training resources.'; 'The EuroFire project researched and reviewed competency based wildfire and prescribed fire training systems, including best practice examples from Europe and around the world. This research informed the production of competency based basic training resources, for use in European countries.'; 'The EuroFire training resources have been specifically developed to support firefighting personnel, the land-based sector, sectoral organisations and education and training institutions.'; 'The EuroFire outputs include: competency standards, training modules, illustrations and general guidance on a competency based training system. Training resources that can be used by industry practitioners to update their knowledge, learn new skills or increase their understanding of basic wildfire and prescribed fire management techniques.'; and 'The EuroFire outputs have been translated partially to Armenian (will be completed soon), Azerbaijanian (will be completed soon), French, Georgian, German and Russian. Please select below'. Below the text are six flags representing the languages: Armenia, Azerbaijan, France, Georgia, Germany, and Russia. At the bottom of the page, there is a search bar with the text 'Google Custom Search' and a 'Search' button. In the bottom right corner, there are logos for the European Union, Leonardo da Vinci Initiative, and CTIF.



# Use of Competency-based Training Materials for Firefighters: EuroFire Standards



<http://www.euro-fire.eu/>



# Regional Fire Centers

- Regional Eastern Europe Fire Monitoring Center (REEFMC)  
Регіонального Східноєвропейського  
Центру моніторингу пожеж:  
Based in Ukraine



  
Національний університет  
біоресурсів  
і природокористування України

  
Глобальний центр  
моніторингу пожеж  
(GFMC)

  
Державне агентство  
лісових ресурсів  
України

  
Державна служба України  
з надзвичайних ситуацій

**"Природні пожежі в регіоні Східної Європи:  
наука, політика і управління"**  
та  
**відкриття Регіонального Східноєвропейського Центру  
моніторингу пожеж (REEFMC)**

Національний університет біоресурсів і природокористування України,  
Навчально-науковий інститут лісового і садово-паркового господарства  
**Відкриття центру 10:00 - 10:15 — навчальний корпус № 1, поверх 2, кімната 67 А**  
**Семинар 10:15 - 18:00 — навчальний корпус № 1, поверх 3, кімната 102**

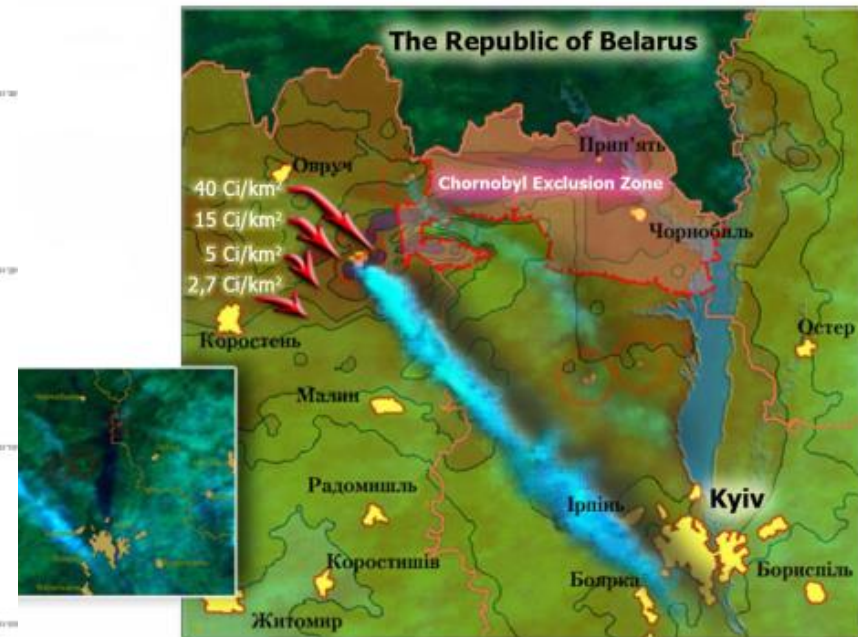
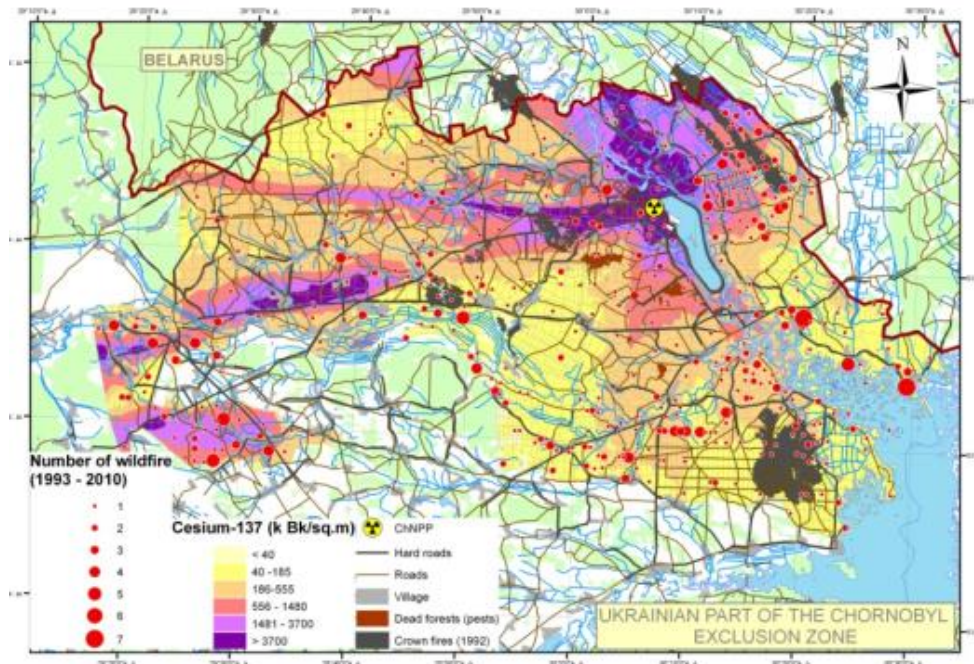
   

Inaugurated  
6 March 2013



# Regional Fire Centers

- Regional Eastern Europe Fire Monitoring Center (REEFMC)  
Регіонального Східноєвропейського Центру моніторингу пожеж:  
Based in Ukraine



## Regional Fire Centers

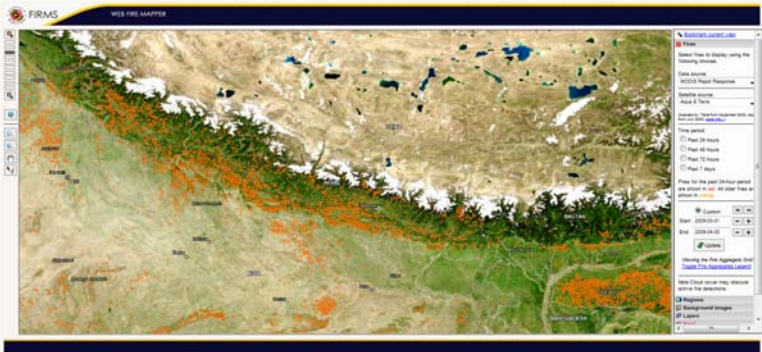
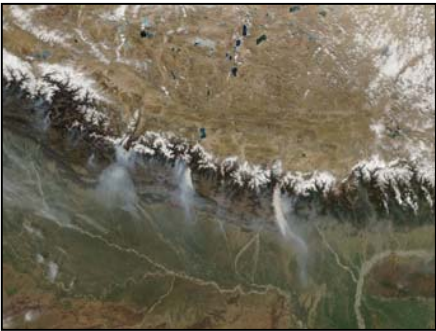
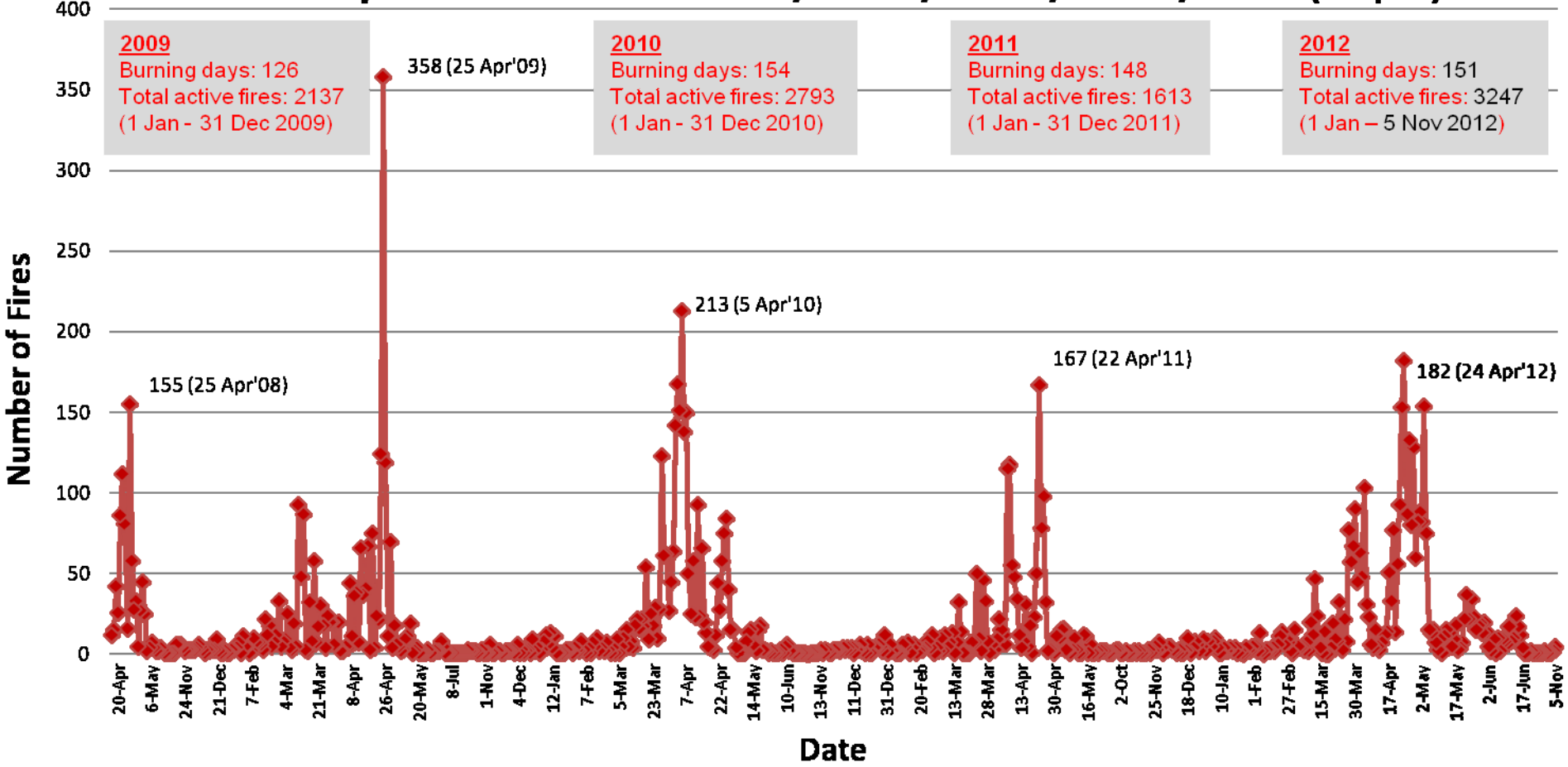
- South Asia: Based in Nepal (under construction)

Precursor activities:

Regional South Asia Wildland Fire Network with emphasis on  
Community-Based Fire Management and self-generated satellite intelligence



# Daily Fire Incidence in 2008 / 2009 / 2010 / 2011 / 2012 (Nepal)



## Regional Fire Centers

- South Asia: Based in Nepal (under construction)



### ***ICIMOD and Ministry of Forestry and Soil Conservation launch near real-time forest fire alert system***

Kathmandu, 12 April 2013



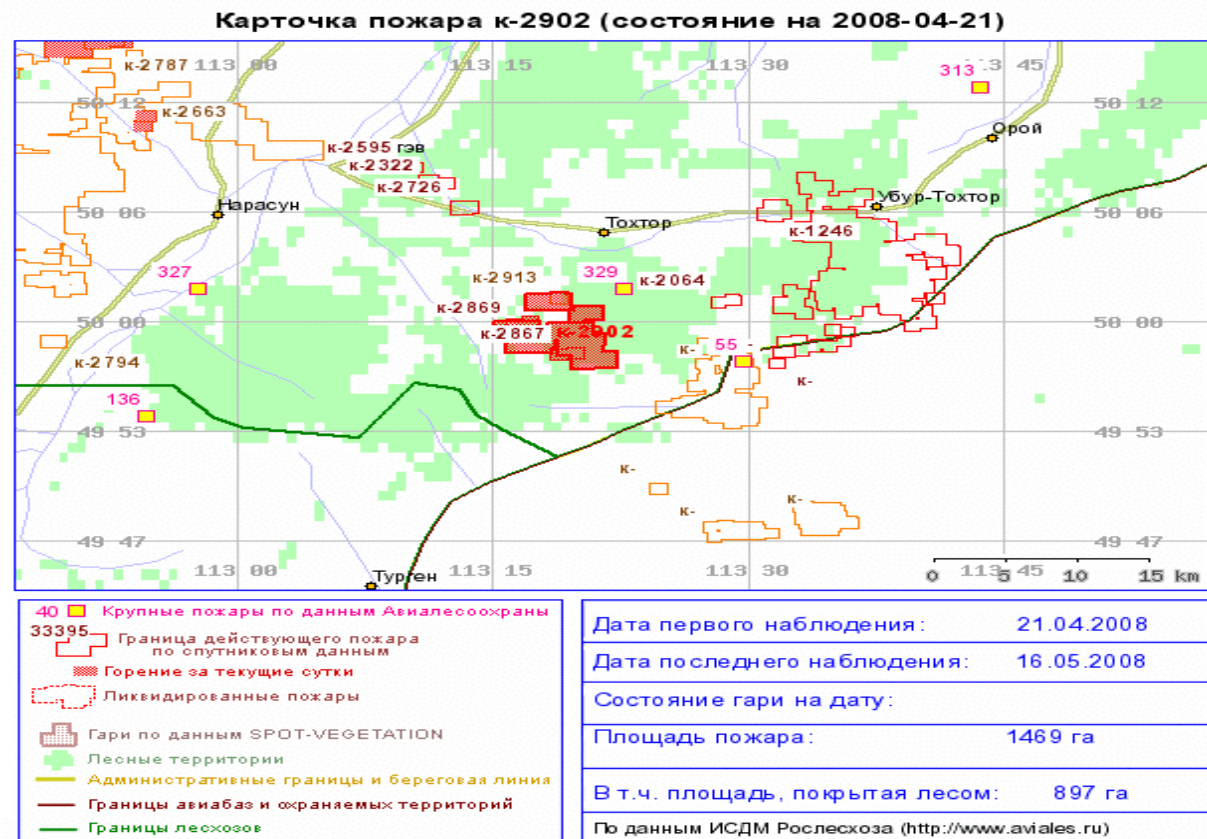
Officials from Bangladesh, Bhutan, India, Myanmar, Nepal, and Pakistan received training from USFS, NASA, and SERVIR-Himalaya (an initiative at ICIMOD supported USAID and NASA) - on operational forest fire detection and monitoring systems equipped with SMS and email alerts

# Regional Fire Centers

- Central Asia: Based in Mongolia (under construction)

**Fire escaped from  
RUSSIA to MONGOLIA,  
21 April 2008**

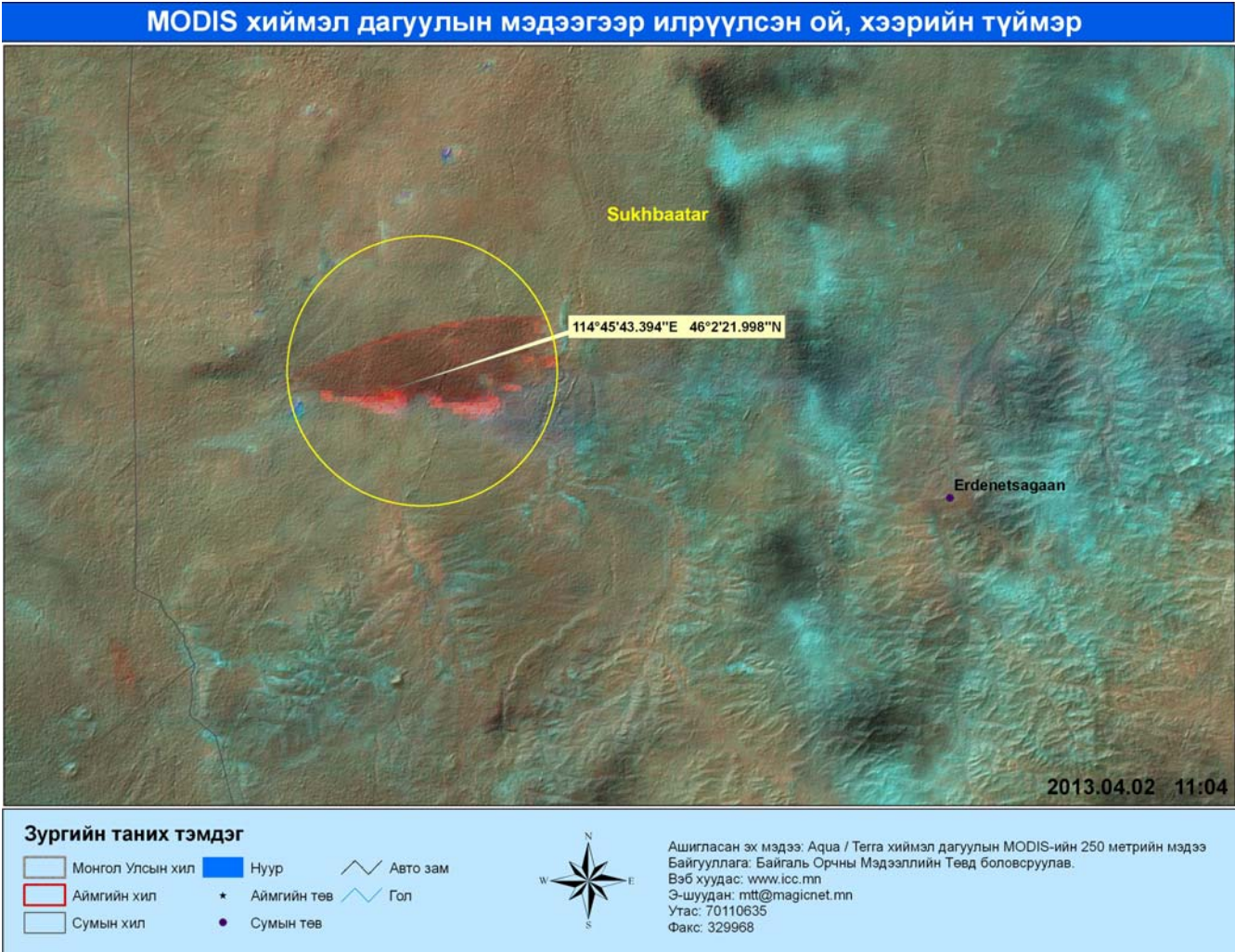
*Переход пожара из  
России в Монголию, 21  
апреля 2008*



# Regional Fire Centers



➤ Central Asia: Based in Mongolia



Delivery of operational fire maps

02 April 2013

# Regional Fire Centers

- Central Asia: Based in Mongolia

## Regional Dialogue in Cross-Boundary Fire Management



# Regional Fire Centers

- Central Asia: Based in Mongolia

**Regional Dialogue in  
Cross-Boundary Fire  
Management**

**International Multi-  
Lingual Fire  
Management Glossary:  
Russian and Mongolian  
added**

**International Multi-Lingual Fire Management Terminology**  
English Russian Mongolian German

Presented to the countries participating in the  
International Conference on Cross-Border Forest Fires  
Irkutsk, Russian Federation  
16-18 June 2010

**Международная многоязыковая лесопожарная терминология**  
Английский Русский Монгольский Немецкий

Для вручения странам участникам  
Международной конференции по трансграничным лесным пожарам  
Иркутск, Россия  
16-18 июня 2010

**Ойн түймрийн менежментийн олон улсын нэр томъёоны  
тайлбар толь бичиг**  
Англи Орос Монгол Герман

Хил дамнан ойн түймрийн олон улсын хурал  
оролцсон орнууд танилцуулав  
ОХУ, Иркутск хот  
2010 оны 6-р сарын 16-18

UNECE / FAO Team of Specialists on Forest Fire

Global Fire Monitoring Center (GFMC)

United Nations International Strategy for Disaster Reduction (UNISDR)  
Global Wildland Fire Network /  
Regional Central Asia Wildland Fire Network



# Regional Fire Centers



- Southern Africa: Component 1 of SADC Regional Fire Management Programme (evolving with SAFNet support)
- Encourage Philip Frost (SAFNet) and Anja Hoffman (GOFC-GOLD Regional Fire Networks Coordinator) to comment



# Recent experiences of inter-regional exchange (I)

## Inter-regional Network Cooperation

➤ South America / Africa:

Transcontinental dialogue started in 2012



# Recent experiences of inter-regional exchange (III)

## Inter-regional Network Cooperation

- Pan-Asia: 4 Regional Networks interacting (NE Asia, SE Asia, South Asia and Central Asia) with participation of the Eurasia Network



## Major recent international / UN activities (I)

### WMO / IGAC / ILEAPS



Definition of a new activity

“Interdisciplinary Biomass Burning Initiative” (IBBI)

- Scientific consultation at the UN  
(5-6 July 2012, Geneva, Switzerland)
- See presentation by Johannes Kaiser

**IGAC:** International Global Atmospheric Chemistry Project

**ILEAPS:** Integrated Land Ecosystem Atmosphere Processes Study (ILEAPS)

## Major recent international / UN activities (III)



### UN Inter-Agency Coordination

Consultation on “Global Wildland Fire”, led by UNISDR and UNECE, facilitated by GFMC (29 June 2012)

- Participation: UNEP, OCHA, FAO, WHO, World Bank, OSCE
- The meeting discussed in an informal open setting issues related to UN coherence, role and responsibilities related to wildland fires

## Upcoming Activities (I)



**UNECE / FAO Regional Conference on Cross-boundary Fire Management** to be hosted by the United Nations, Geneva, (27) 28-29 November 2013

### Objectives – Regional and Global

- Elaboration of a proposal for the development of an UNECE-wide agreement on “Cross-boundary Fire Management”
- Receiving advisory inputs from other regions (e.g., ASEAN, SADC, EU, APEC ...)
- Resulting in mutual benefits for UNECE and other regions for enhancing transboundary cooperation in fire management

## Upcoming Activities (III)

### 6<sup>th</sup> International Wildland Fire Conference

Korea Forest Service and the Korea Forest Research  
Research Institute will host the the Conference

Date: 12-16 October 2015

<http://www.wildfire2015.kr>



2015

The 6th International  
Wildland Fire Conference

**Fire of the Past**  
**Fire in Future**