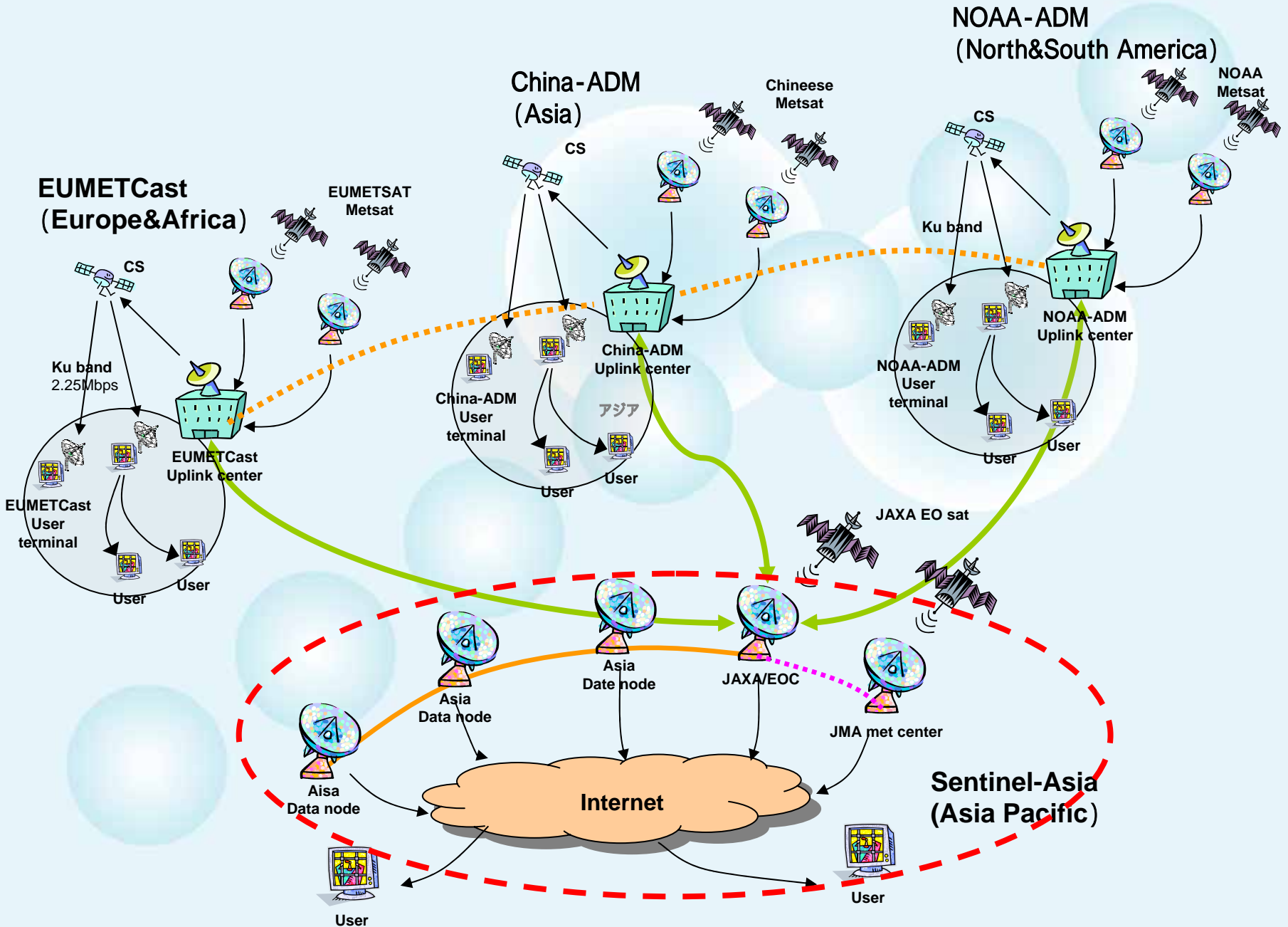


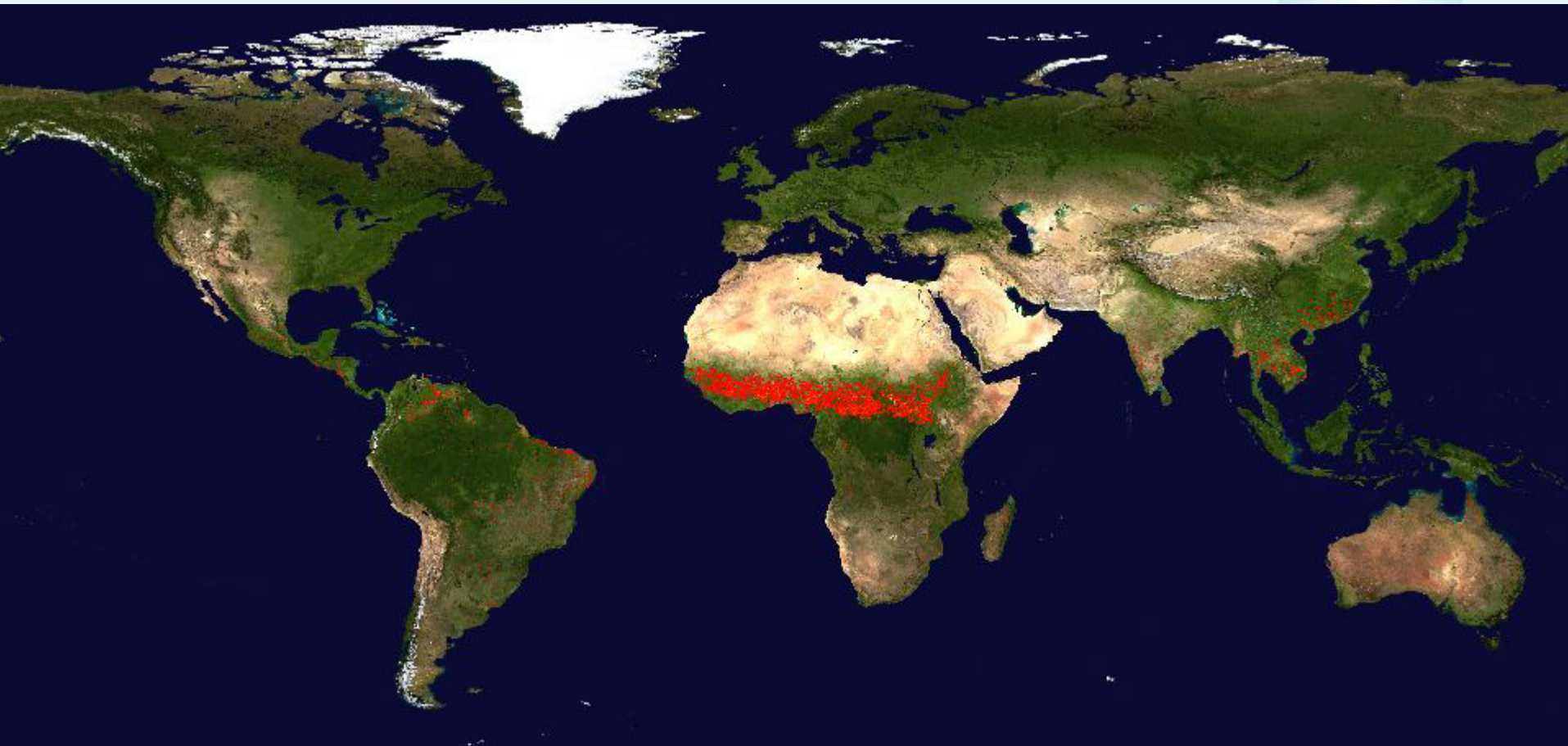
GEOSS Symposium on Integrated Observation for
Sustainable Development in the Asia-Pacific Region
(GEOSS AP Symposium)

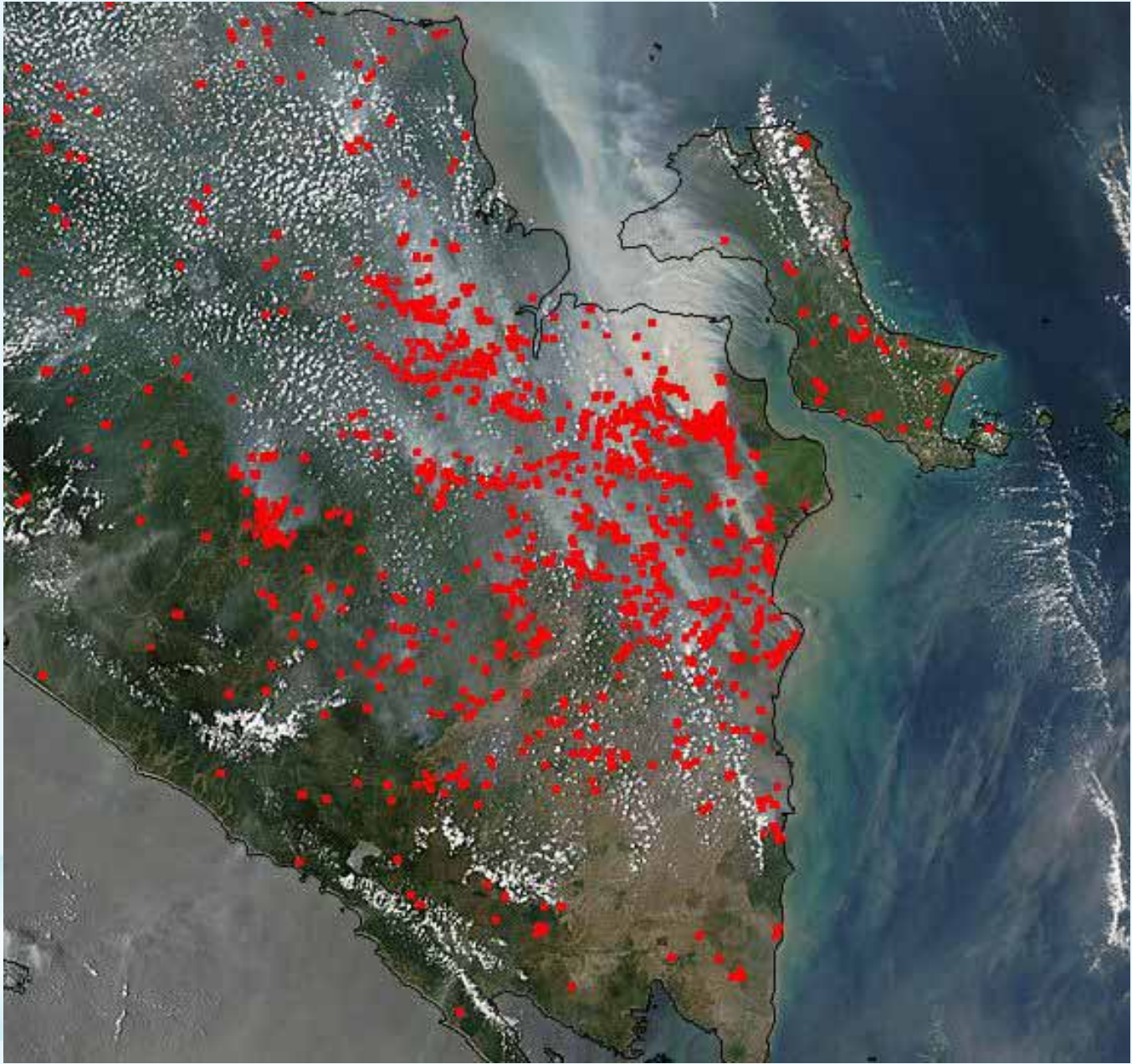
Monitoring Wild Fire Session
Scope and Objectives

M.FUKUDA (Hokkaido Univ.)

GEO-Netcast and Sentinel-Asia



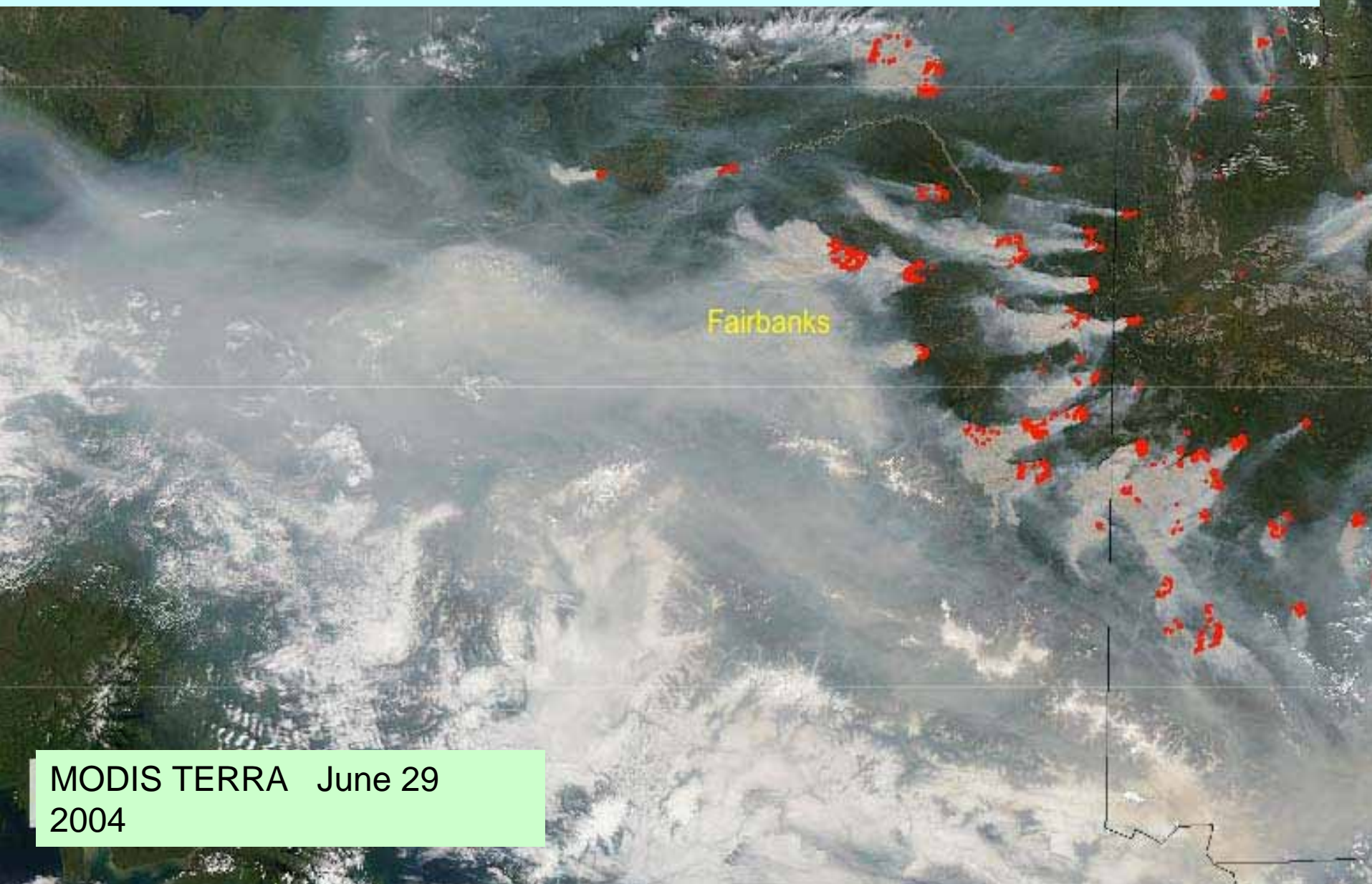






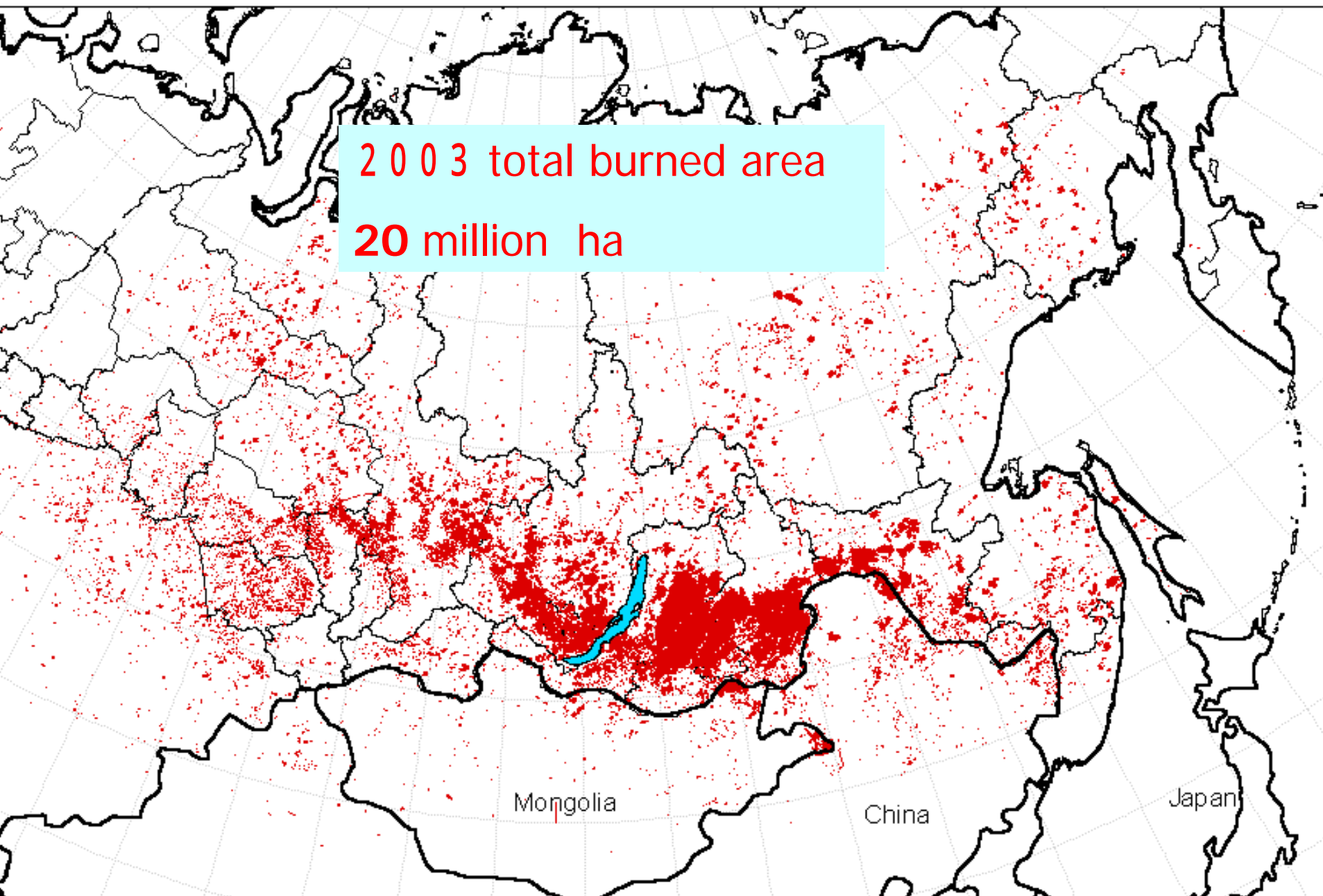
Alaskan Forest Fire in 2004.

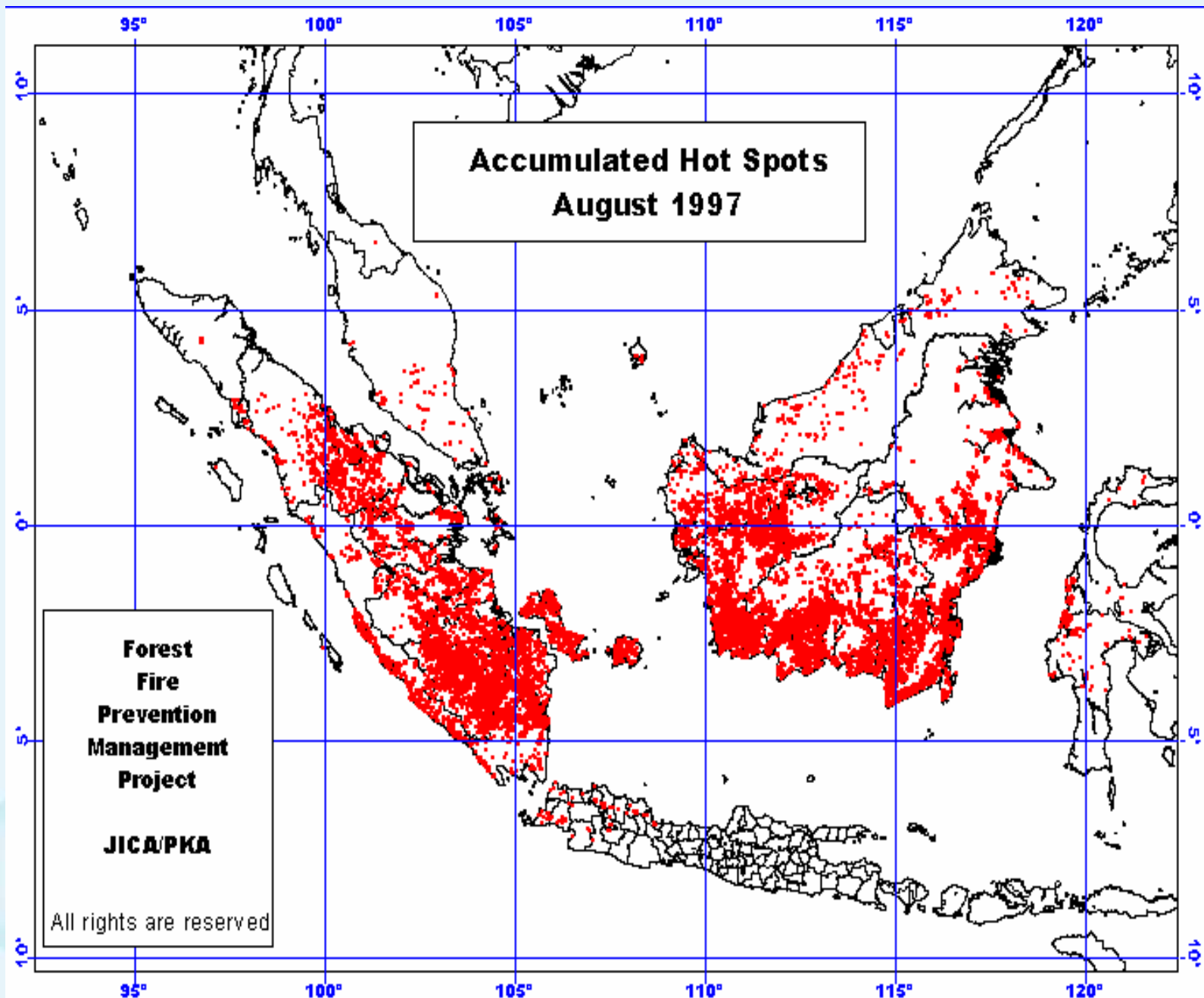
Total burned area was 2,500,000ha.



MODIS TERRA June 29
2004

April - November of 2003 year. The total hot spots distribution in Siberia and Far East . NOAA/AVHRR 12,15,16
Center of Remote Sensing. Institute of solar-terrestrial physics SB RAS.





**Accumulated Hot Spots
August 1997**

**Forest
Fire
Prevention
Management
Project**

JICA/PKA

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Requirements for Disaster Monitoring

JAXA investigated requirements for disaster monitoring using satellite data in 2002

- Thailand
 - Flood, Wildfire, Drought, Typhoon, Landslide
- Indonesia
 - Wildfire, Flood, Oil spill, Marine peril
- Philippine
 - Typhoon, Flood, Drought, Volcanic eruption, Earthquake
- Malaysia
 - Wildfire, Water pollution
- Vietnam
 - Wildfire, Typhoon, Landslide, Drought, Flood



Thick Peat Layer

Central Kalimantan



Forest Fire

Wild Fire

Kalimantan 1997

Alaska 2004



**Impact to future global
warming**

Carbon Cycle

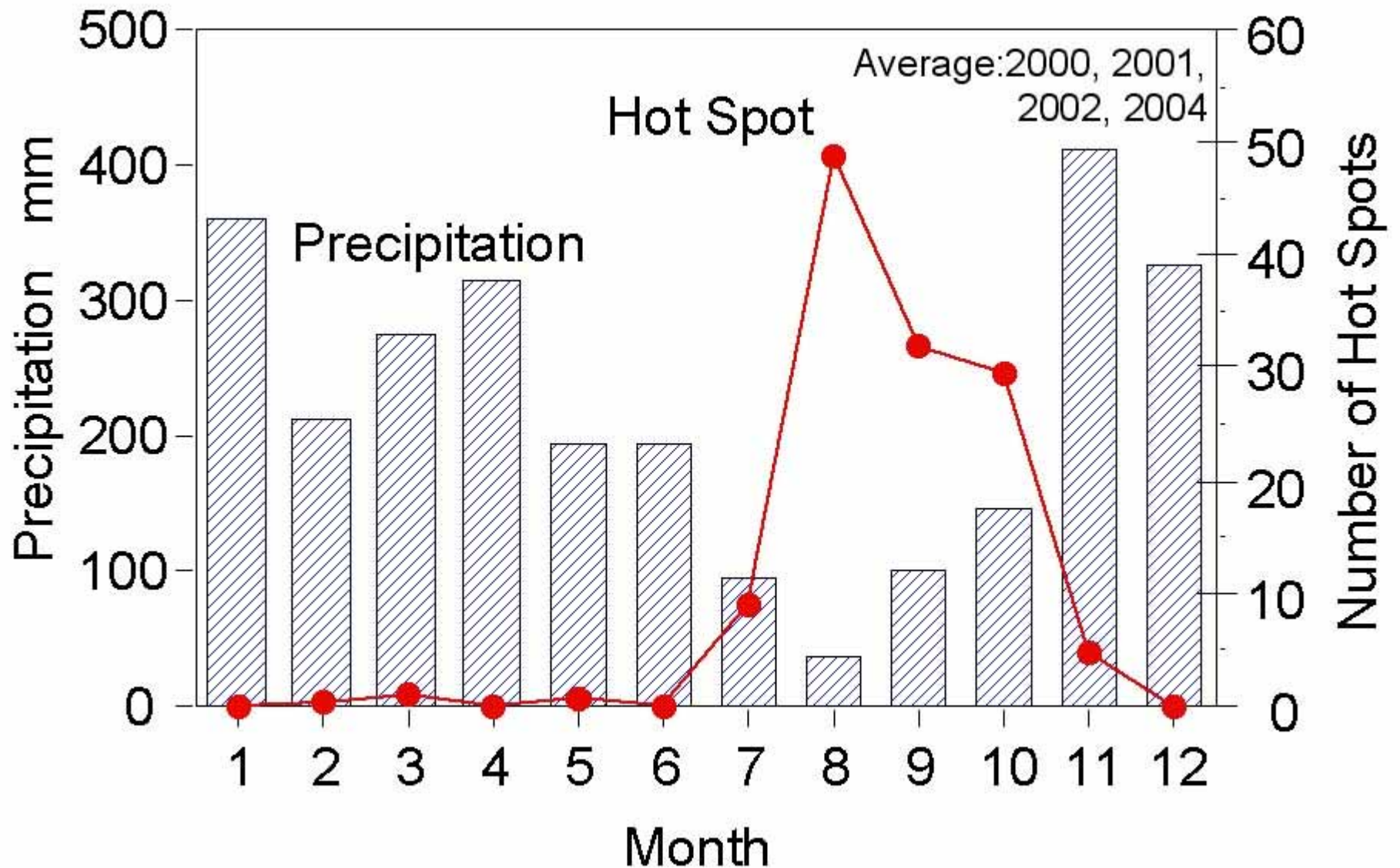
Sink

Source

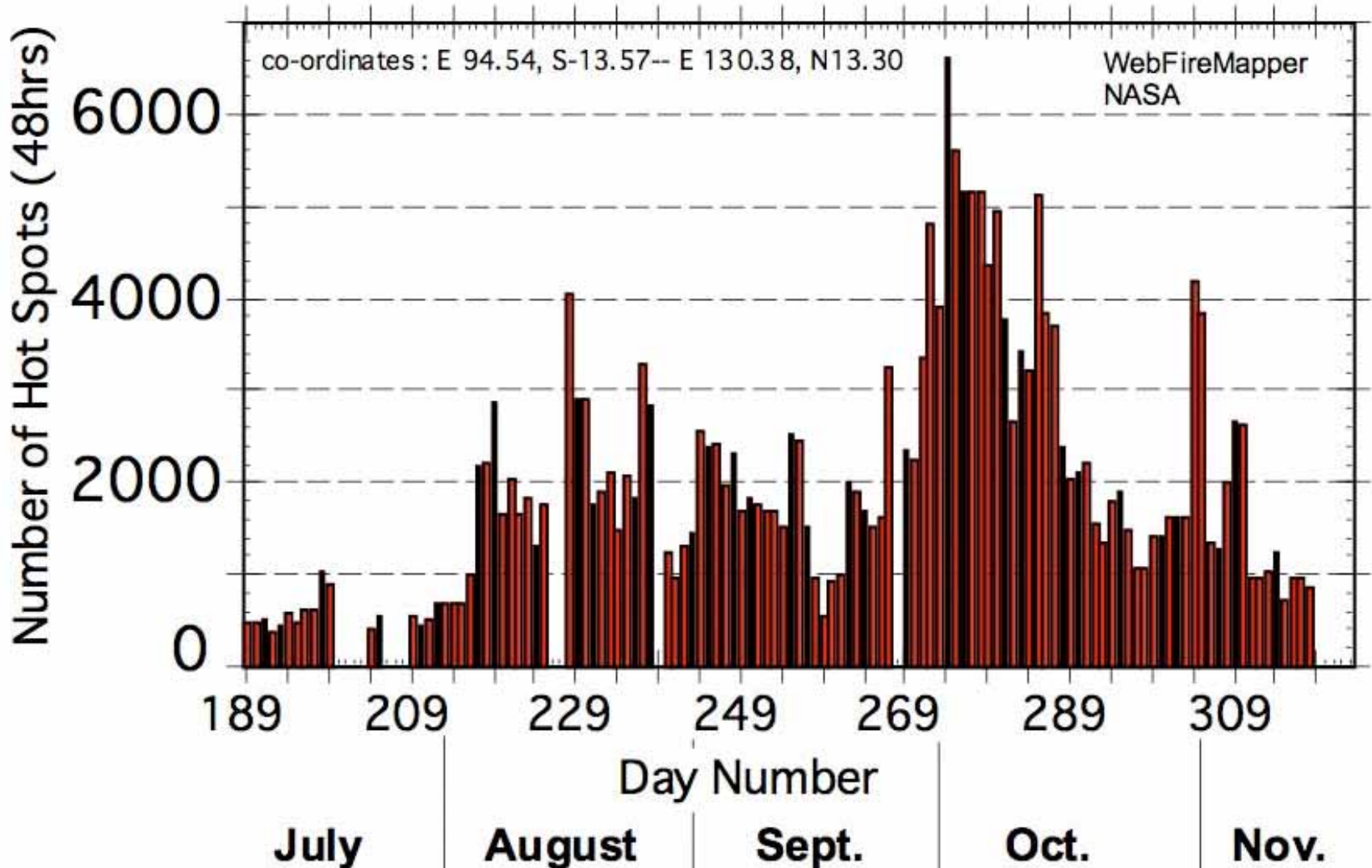
**Contribution to Kyoto
Protocol**

**Sustainable Forest
Management**

Central Kalimantan

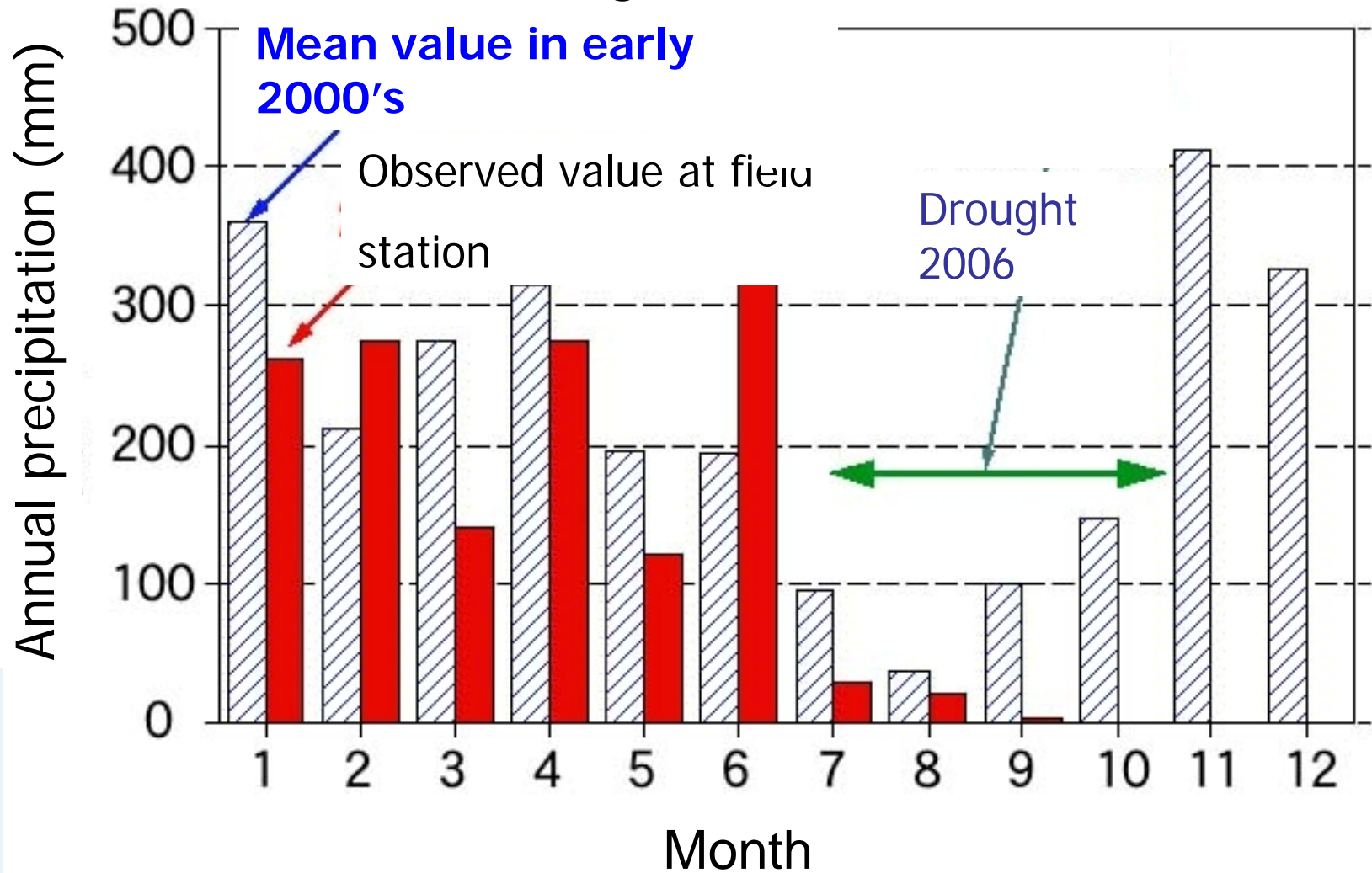


2006 Hot Spots in Mid-West Indonesia



Central Kalimantan 2006

Severe Drought occurred





**Sentinel Asia
Wild Fire Working Group**

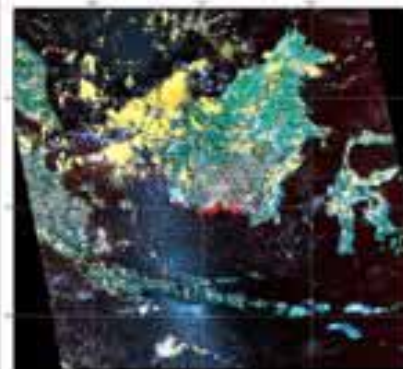
**Validation Experiment in
Oct. 2006**

Sentinel Asia Wild Fire Working Group Hot Spot Detection Algorithm Validation Campaign

**Comparison between results of
detections by three MODIS Receiving
Stations**

**Comparison between ground truth data
and hot spot data**

**Comparison between NASA Algorithm
(MOD14) and New Algorithm**



LAPAN Indonesia

AIT Thailand

CRISP Singapore

Fire Detection Data

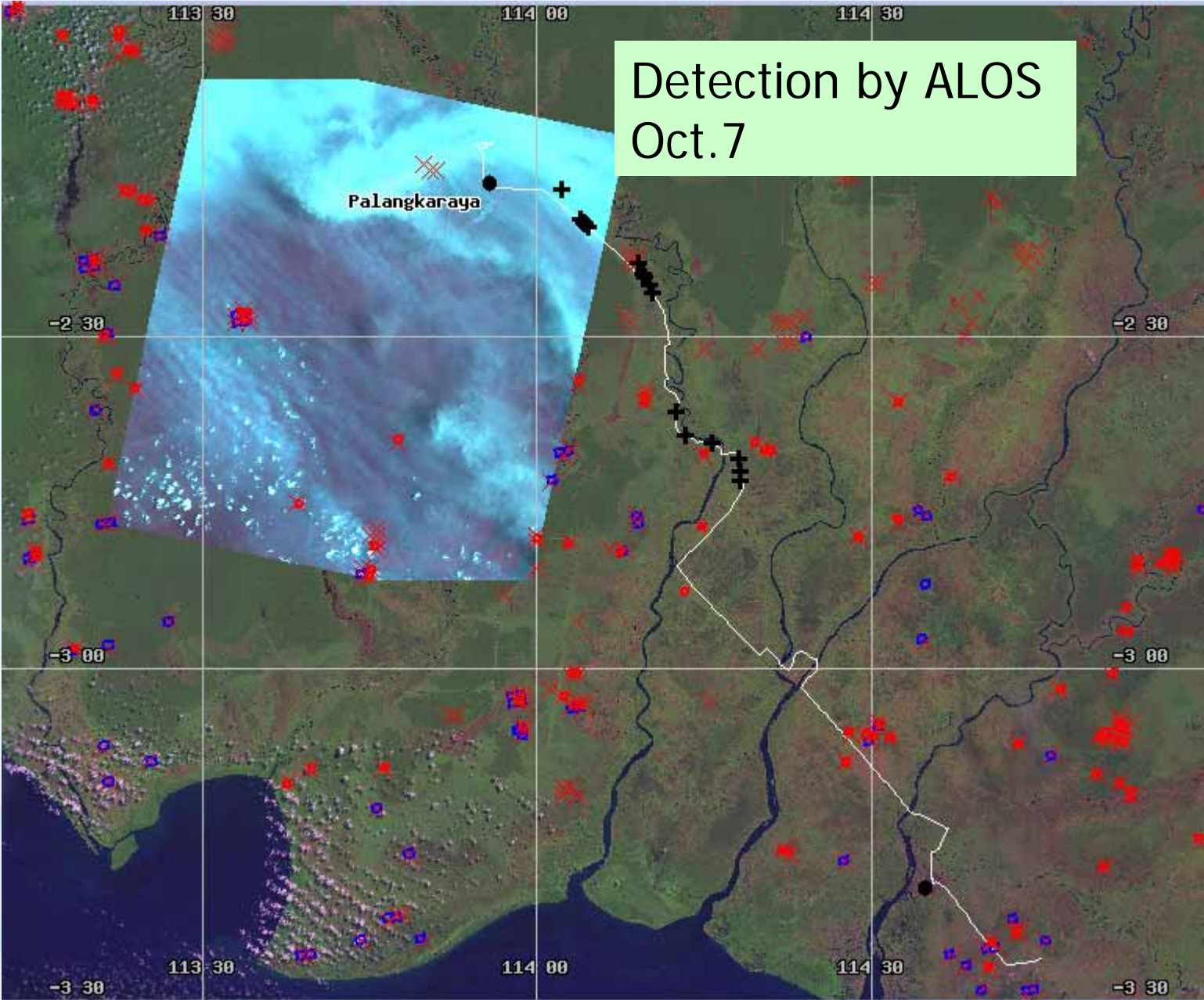
Hokkaido University

Fire Detection on Ground

Palangka Raya University
Fire Patrol Team



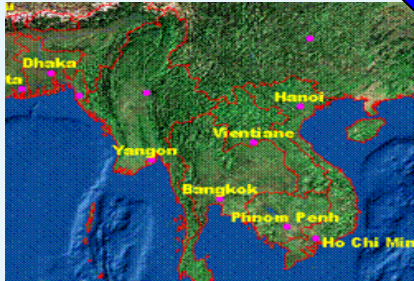
Detection by ALOS
Oct.7



Sentinel Asia (MODIS Wildfire Monitoring)



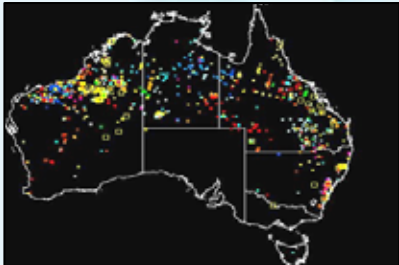
Hokkaido Univ.



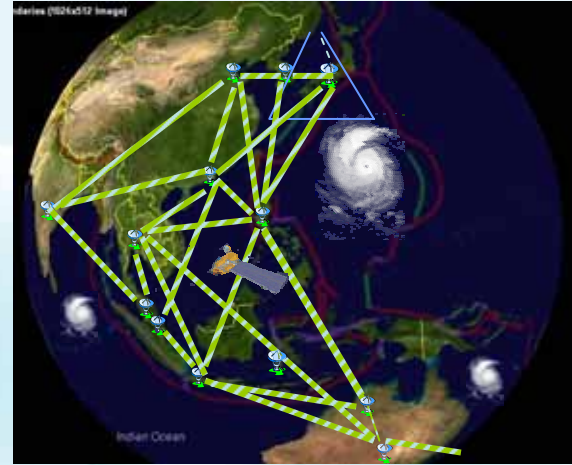
AIT/Tokyo Univ (Thailand)



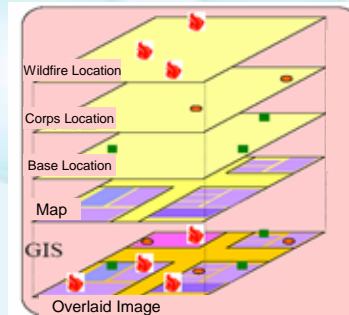
CRISP (Singapore)



CSIRO (Australia)



Satellite observation network



Integration by Digital Asia
Web-GIS interface

(Keio Univ.)



Wildfire map of Asia