

Background and outline of the workshop and organisational matters



UN-SPIDER

**United Nations Platform for Space-based Information for Disaster Management
and Emergency Response**

Dr. Jörg Szarzynski (UNOOSA / UN-SPIDER)



1.) Background and outline
of the workshop

2.) Organisational Matters



Second United Nations International UN-SPIDER Bonn Workshop: “Disaster Management and Space Technology - Bridging the Gap”



Organised by the
United Nations Office for Outer Space Affairs (UNOOSA)
and the
German Aerospace Center (DLR)

With the support from the
**International Strategy for Disaster Reduction -
Platform for the Promotion of Early Warning (UNISDR-PPEW)**

and the
**United Nations University –
Institute for Environment and Human Security (UNU-EHS)**

Bonn, Germany, 13– 15 October 2008





Source: http://upload.wikimedia.org/wikipedia/commons/0/0a/The_Great_Wave_off_Kanagawa.jpg

The vision from Space...





UN-SPIDER Bonn

United Nations Platform for Space-based Information
For Disaster Management and Emergency Response

United Nations International Workshop: Bonn - Germany, 13 - 15 October 2008



Copyright © Deutscher Aerospace Establishment (DLR)



Tsunami 2004 – Northern Khao Lak Bay, Thailand



...the vision on the ground!

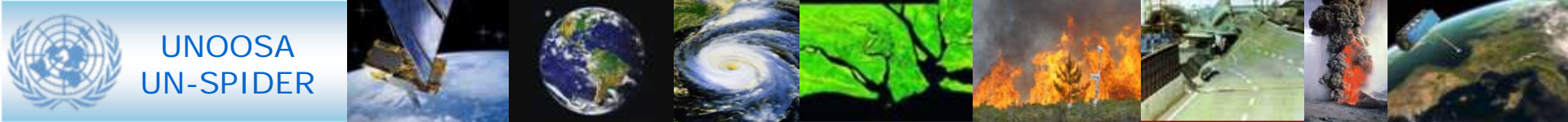






Different point of views
leading to discrepancies
between provider (space
community) and user
(disaster management
community)

Source: Boring, E.G. 1930, in: Metzger, W.: Psychologie. Darmstadt: Steinkopff, 1975



Space-based Information are highly relevant to political decision makers



Talking about „Space-based Information“ from the user perspective



What information exists?

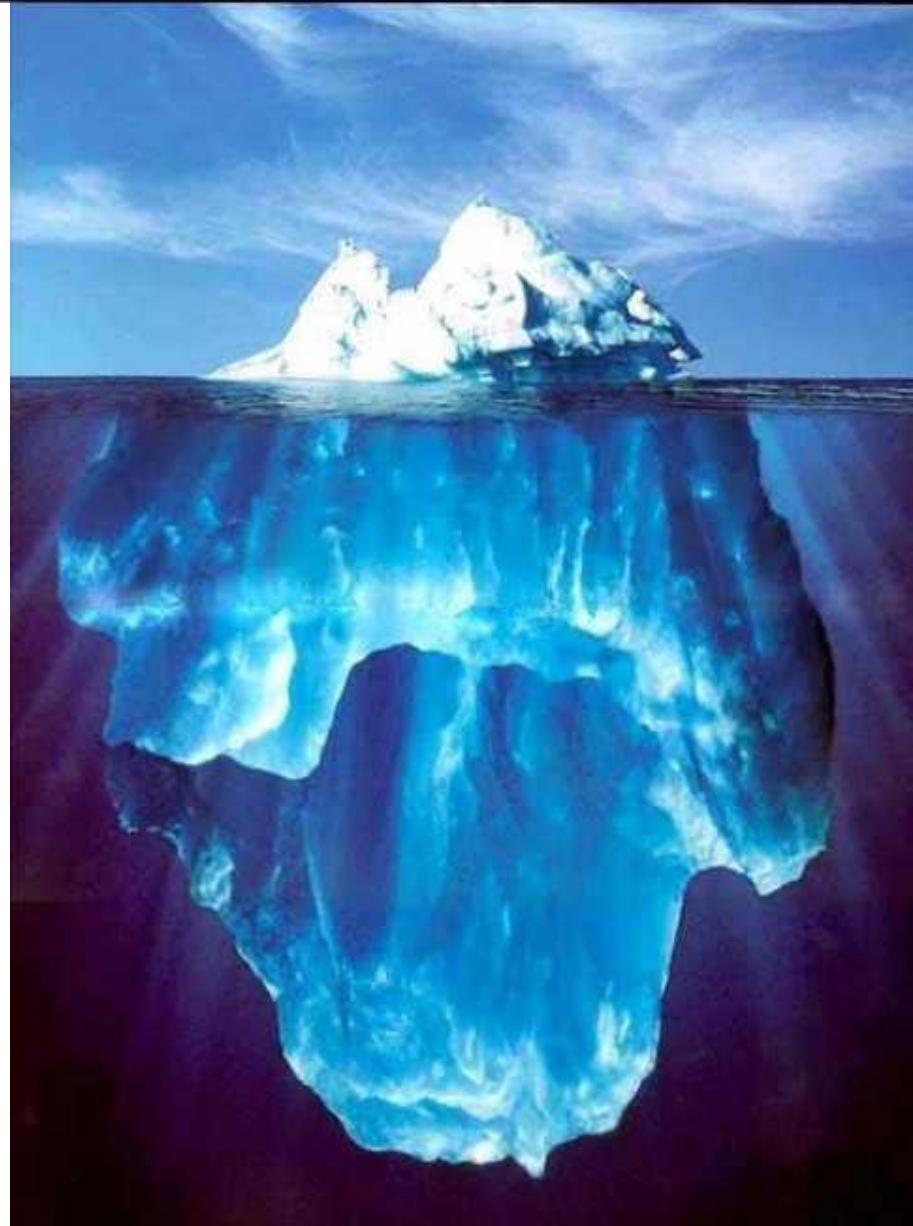
Where to find?

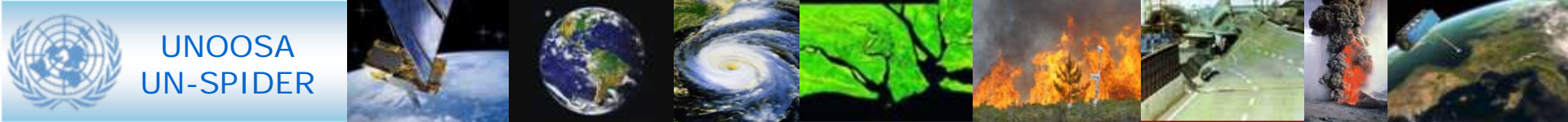
How to access?

What are the costs?

What is the actuality?

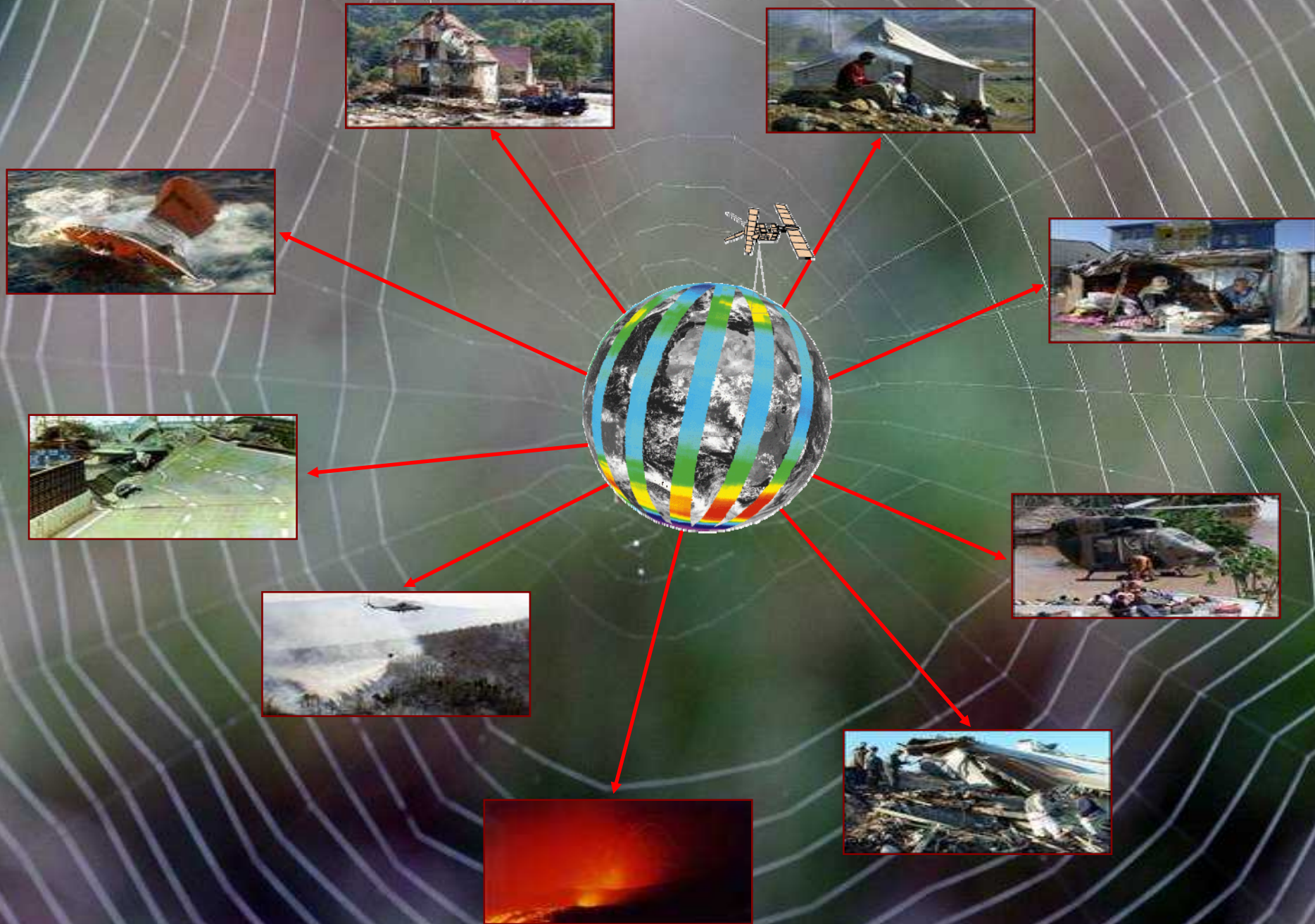
What is the quality?





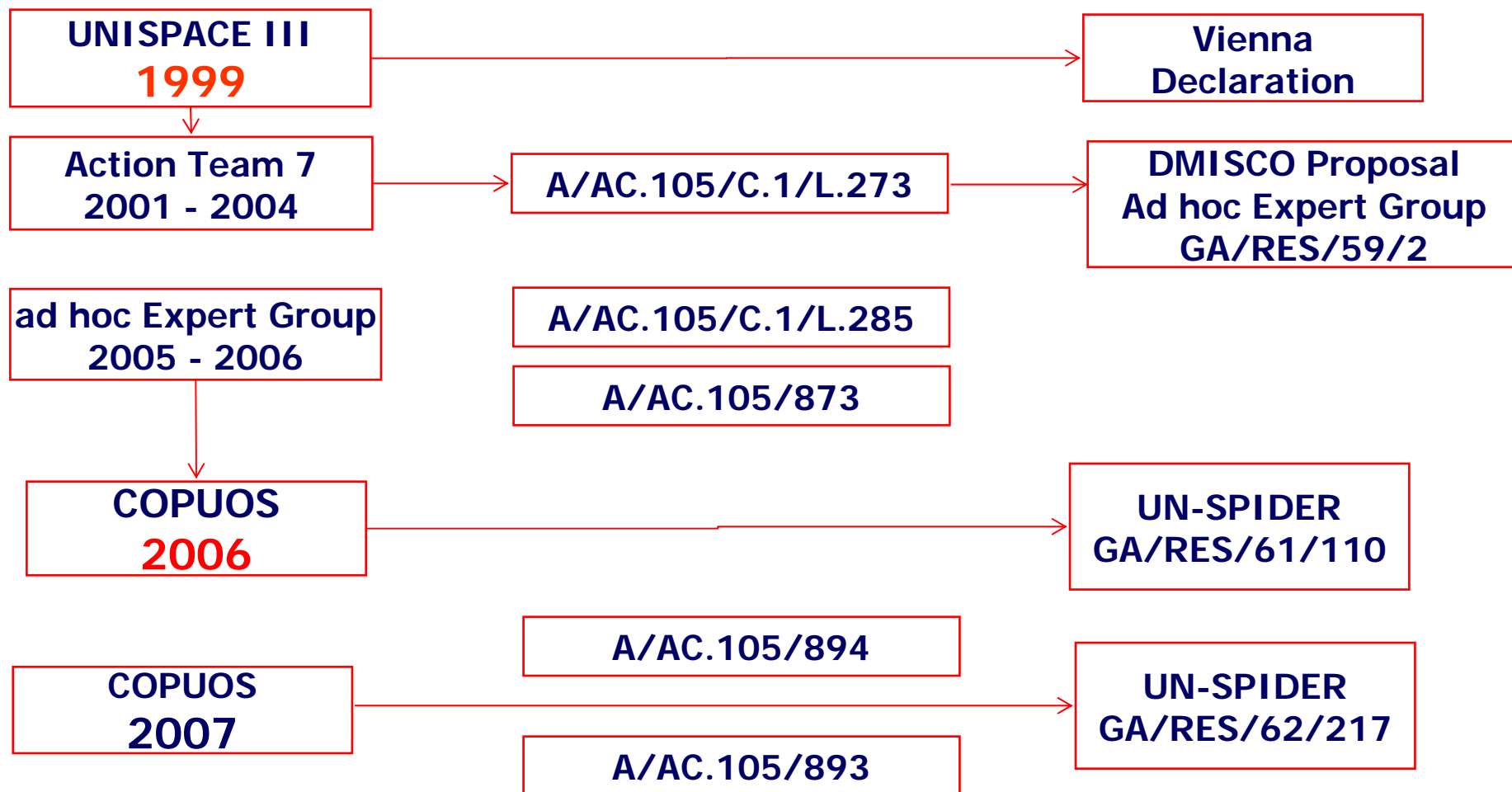
Need of an Information Gateway to Space-based Information for Disaster Management Support

Integrative Information Web For Disaster Management Support





The History of UN-SPIDER





Global dialogue in Bonn: EWC III – March 2006





UN-SPIDER Bonn Office
UN-Campus
Hermann-Ehlers-Str. 10
53113 Bonn
Germany

Tel: (+49) 228 815 0677

Fax: (+49) 228 815 0699

www.unspider.org



Federal Ministry
of Economics
and Technology



United Nations International UN-SPIDER Workshop: Space-based Information and Solutions for Disaster Management and Emergency Response

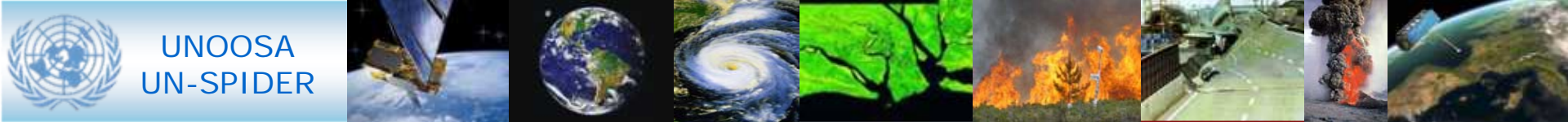
Organized by

the United Nations Office for Outer Space Affairs (UNOOSA)
and the German Aerospace Center (DLR)

with the support of
The Federal Government of Germany

Bonn, Germany, 29 – 31 October 2007





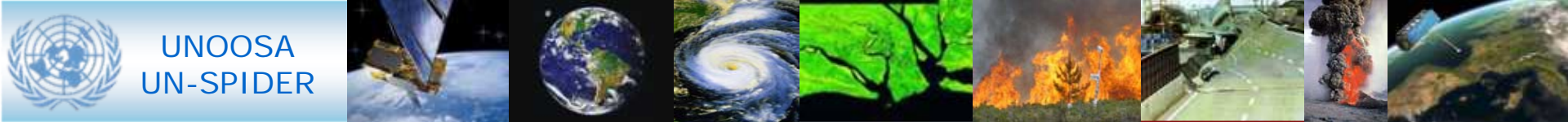


UN-SPIDER Knowledge Portal:

A Web Portal for Information,
Communication, and Process Support



Meta-Information and Guidance,
not Data Provision



Technical cooperation with the University of Applied Sciences, Potsdam, Department of Interface Design & Computer Science

FHP Fachhochschule Potsdam
University of Applied Sciences

IDL
INTERACTION DESIGN LAB





Major UN-SPIDER contributions

- Web-based Knowledge Portal
- E-Newsletter and Updates
- International and regional Workshops
- Conference contributions
- Charter support
- Technical Advisory Missions
- Capacity Building



SPIDER workshop Barbados,
July 2008

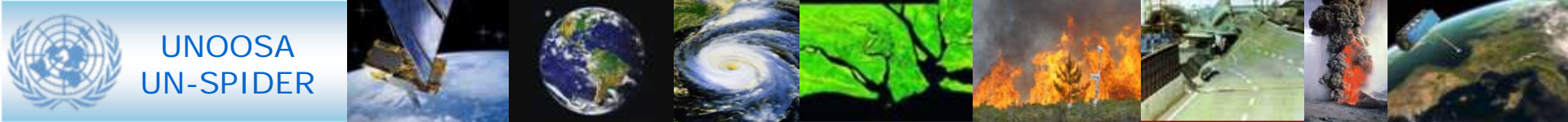
COP9 - Biodiversity,
Bonn, May 2008





SPIDER staff member participated as observer at Joint MIC/AMC – GMES/LIMES Collaboration and Demonstration Activity – June 2008





UN-SPIDER activities within Charter Calls 2008:

<i>Date</i>	<i>Place</i>	<i>Type</i>	<i>Phase</i>	<i>Requester</i>	<i>Activity</i>
March 2008	Namibia	Flood	Response	UNDP (Windhuk)	<ul style="list-style-type: none"> - Charter activation by UNOOSA - Support of Namibian water authority
May 2008	Myanmar	Typhoon	Response	UNOCHA	<ul style="list-style-type: none"> - Charter activation by UNOOSA - establishment of cooperation between World Food Programme (WFP, authorized Charter user) and Center for Satellite Based Crisis Information (ZKI)
May 2008	China	Earthquake	Response	NDRCC	<ul style="list-style-type: none"> - Support in multiple levels - several persons from NDRCC already engaged for UN-SPIDER Beijing office
July 2008	Montserrat	Volcano	Warning	Montserrat Volcano Observatory	<ul style="list-style-type: none"> - Supported mapping product - UN-SPIDER Workshop provided initial awareness of Charter Mechanism
August 2008	Togo	Flood	Response	UNOCHA-ROWA	<ul style="list-style-type: none"> - Charter activation by UNOOSA/UNOCHA



MYANMAR - May 2008

Tropical Cyclone Nargis (cat. four), 2 / 3 May

- Cyclone and severe rain devastated Irrawaddy Delta & Yangon (90% of housing/infrastructure, 2.4 million in need of humanitarian aid)

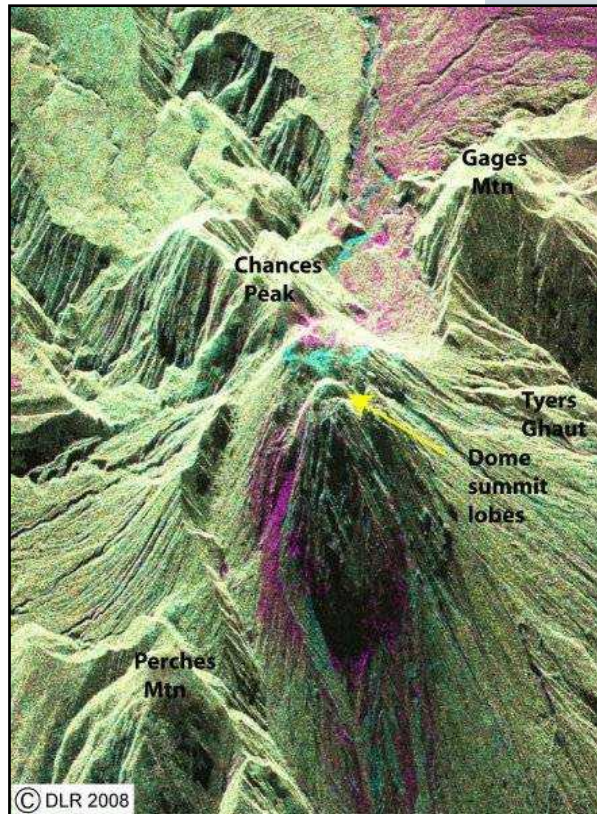
- UNOOSA triggered *CHARTER*
- UN-SPIDER initiated cooperation between ZKI, WFP and ITHACA to support relief organizations
- immediate high resolution crisis mapping of the flooding extent
 - TerraSAR X + ALOS/PALSAR for field teams
 - map production by ZKI within the RESPOND framework and in collaboration with ITHACA



Credits: AFP



MONTSERRAT - July 2008



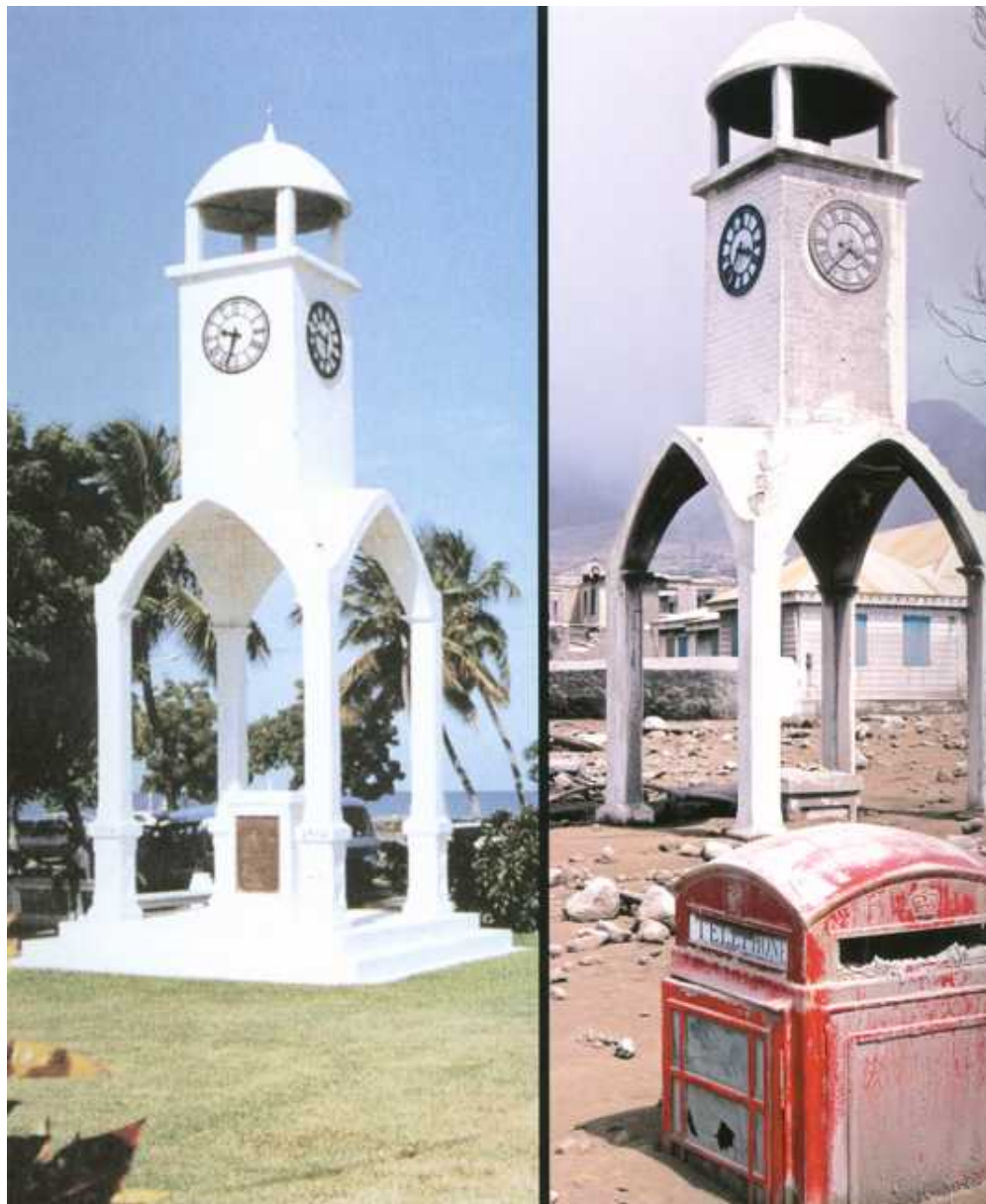
Seismic activity of Soufriere Hills Volcano, 28 July

- Stability concerns after partial dome collapse
- risk of further dome collapses and impact on inhabited areas led to *CHARTER* activation
- based on the data, stability risk judged improbable, planned evacuation could be skipped

"If I hadn't been at the UN-SPIDER meeting in Barbados, none of this would have happened."

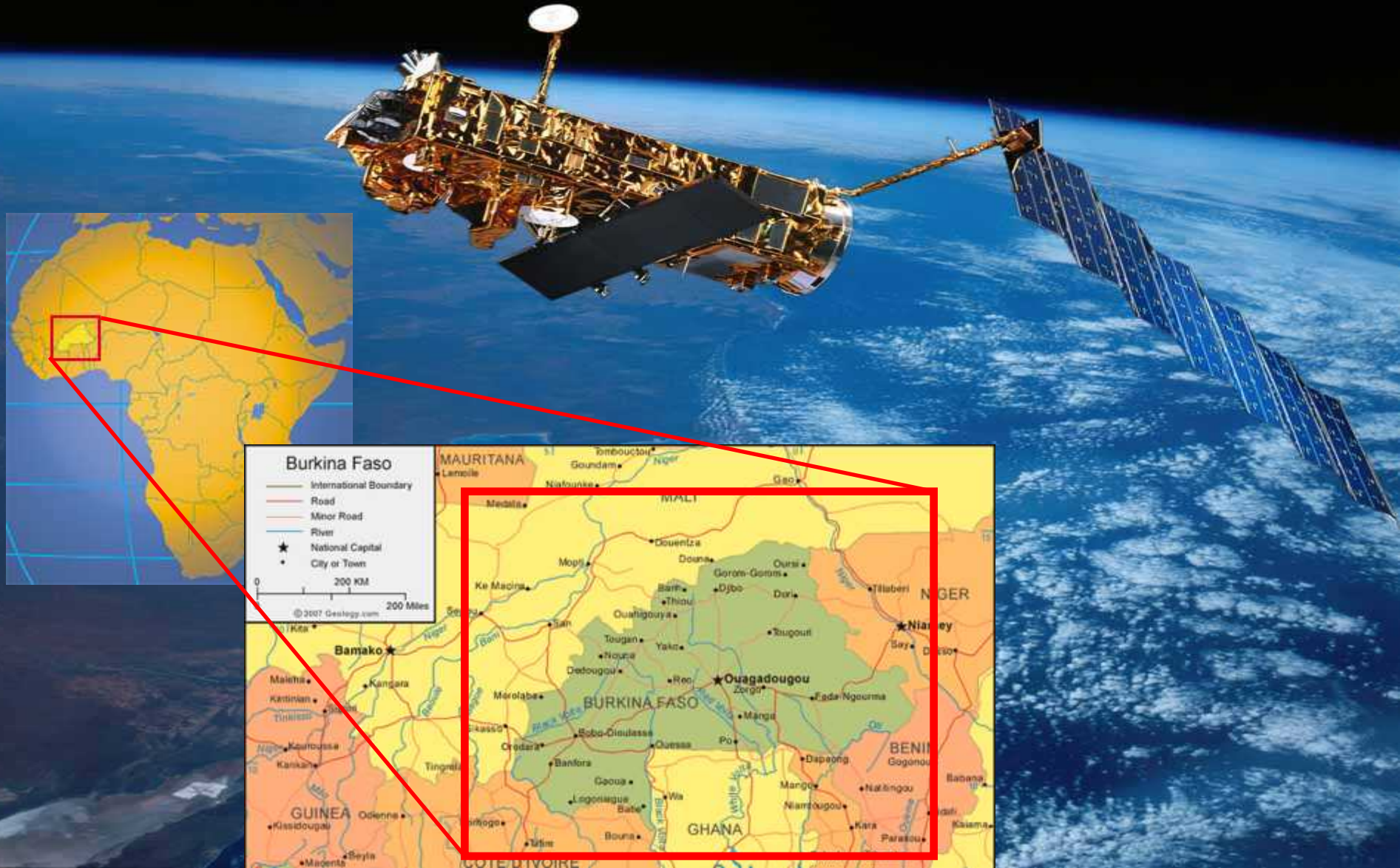
Roderick Steward
Acting Director, Montserrat Volcano Observatory

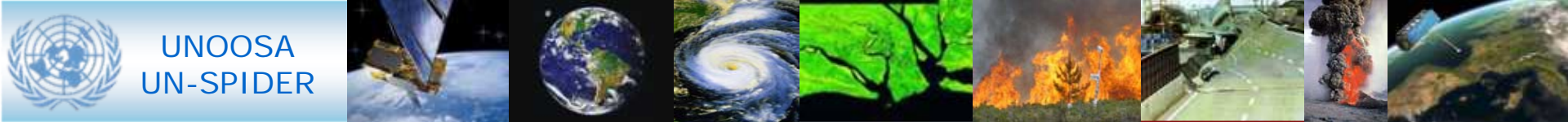
Credits: National Geographic



© National Geographic:
Plymouth, Montserrat, 1997

Technical Advisory Mission on official request of the government of Burkina Faso





Global Change Impact

Drought



Sebastian Salgado



Flood

- Decrease of precipitation in dry areas
- Increase in temperature

Health impact – Vector diseases

Changes in climate & land cover may alter the distribution of important vector species (e.g. mosquitoes) and may increase the spread of disease to new areas which lack a strong public health infrastructure.





Locust Plague (2003+)





Thursday, August 28, 2008

08:30 – 09:30: **Plenary presentations**

- IWRM Projects in Africa funded by BMBF

09:30 – 10:00: Coffee break

10:00 – 12:00: Poster exhibition and conference fair

12:00 – 13:30: Lunch

13:30 – 15:00: Poster and fair assessment

15:00 – 15:30: Coffee break

15:30 – 17:00: **Panel discussion on**

- Global Change and Water Resources in Africa: From science to action

17:00 – 18:00: **Closing ceremony**

followed by: Cocktail

The poster exhibition and conference fair can be visited throughout the whole conference.

Conference Venue

Complex of the International Center of Conferences of Ouaga 2000

Avenue Pascal ZAGRE

Ouagadougou, Burkina Faso

Organizing institutions



Zentrum für Entwicklungsforschung
Center for Development Research
University of Bonn



Contact

Conference Secretariat:

Center for Development Research (ZEF)

Walter-Flex-Str. 3, 53113 Bonn / Germany

Phone: # 49-228-734927

Fax: # 49-228-731889

E-mail: Glowa.conference2008@uni-bonn.de

<http://africaconference.glowa.org>

Volta Basin Authority (VBA)

Ouaga 2000, 11 BP 1437

Ouagadougou 11, Burkina Faso

Phone: # 226-50376067

Fax: # 226-50376485

Registration for the Conference

From March 1 2008 until August 15, 2008 (registration deadline).

You can register online at: <http://africaconference.glowa.org>

Participation Fees

For registration from March 1 until July 31, 2008: 20 Euro per day

For registration from August 1 until August 15, 2008: 25 Euro per day

Published by

Bundesministerium für Bildung und Forschung /
Federal Ministry of Education and Research (BMBF)

Division 723 Global Change

53170 Bonn

Layout: Katharina Moraht

Bonn, Berlin 2008

Printed on recycled paper

Photo credits: all photos by ZEF, IMPETUS, GWSP



Federal Ministry
of Education
and Research



GLOWA

Global Change and Water Resources in West Africa – The German-African GLOWA Projects

**International Conference in Ouagadougou,
Burkina Faso, August 25 – August 28 2008**



RESEARCH

Igniting ideas!







2.) Organisational Matters



UN-Campus Bonn:

"Tall Eugene – Langer Eugen"

Cafeteria 29th floor

UN-SPIDER offices 23rd floor

Conference room 19th floor





Outbreak groups:

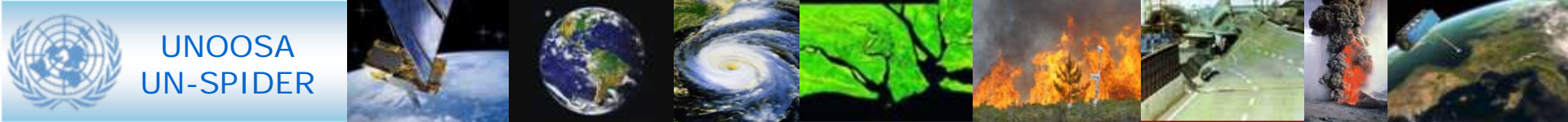
1. Plenary room (**Room 1916**)

2. (**Room 2112**)

3. (**Room 2705**)

4. (**Room 130**)

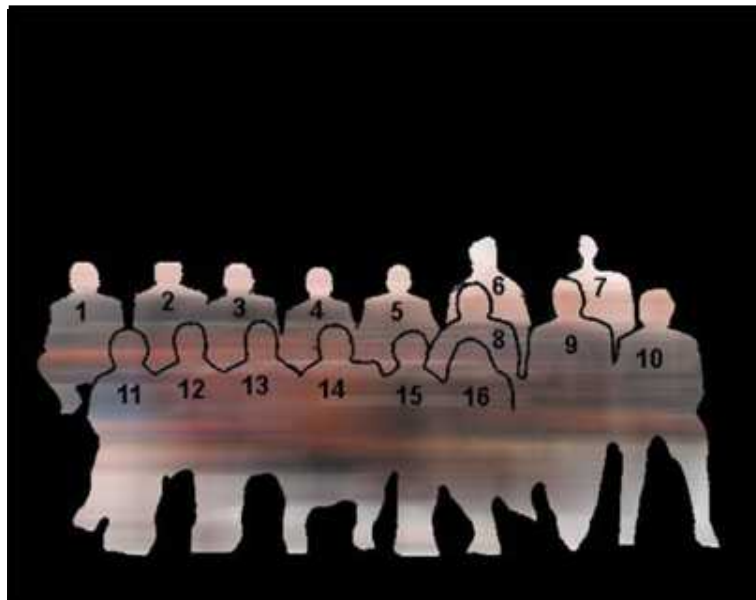
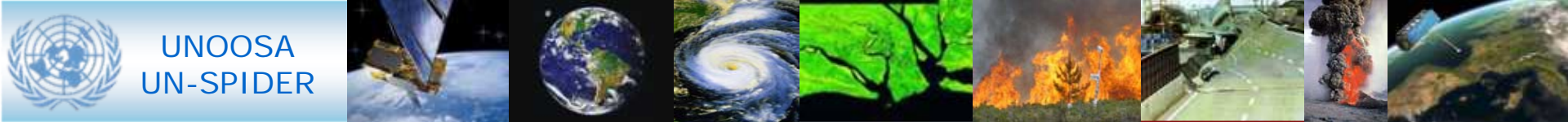




Participant



Organiser / Technical Support Team



NAME	INSTITUTION	E-MAIL	TEL-NUMBER	PHOTO
Dr. Hery Harsono	LPI – Deputy Chairman for Earth Sciences (Depart. Bidang Ilmu Pengetahuan Kebumahan)	hery_harsono@yahoo.co.id hharsono@pusketek.lpi.go.id	+62-21-5251850 +62-811-1214304	
Dr. Heriyat Z. Anas	LPI – Researcher in Disaster Risk Management – Engineering Geology	heriyat@yahoo.co.id	+62-22-250-7771 +62-812-148-9040	
Irena Rulfiana	LPI Communication & Education	irna@cominfo.or.id irna_rulfiana@yahoo.com	+62-813-10332262	

Who is Who?



SPIDER Conference Ticket:

Allows free utilisation of buses and subway
in the region Bonn city from 13th to 15th October.





Receptions during the workshop:

Monday, 15th, 19:00 – 22:00

Conference Dinner Reception hosted by DLR

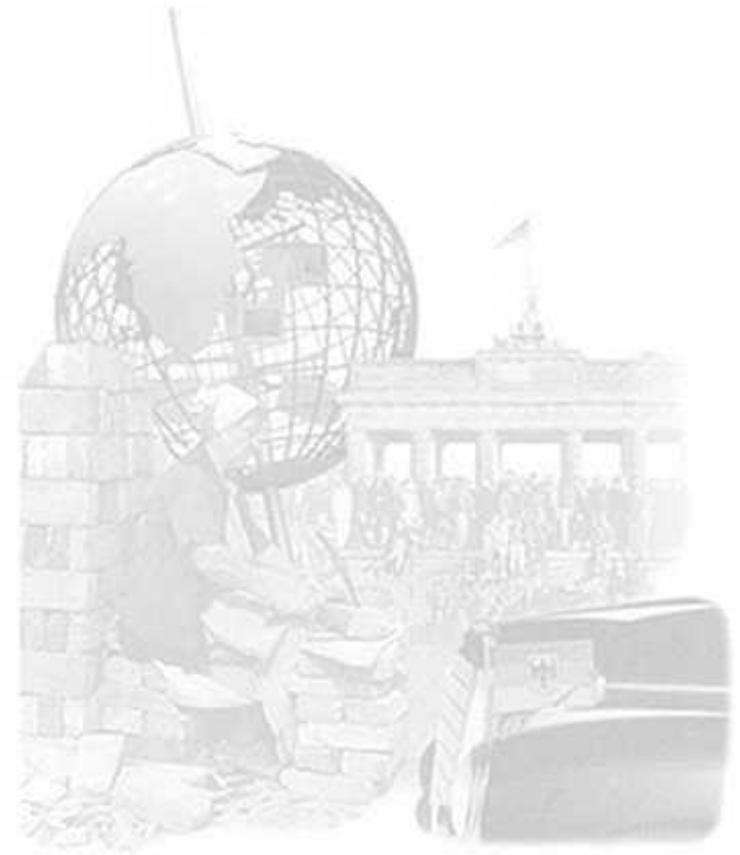
Haus der Geschichte, Bonn

Tuesday, 14th, 19:30 – 22:00

Conference Reception hosted by DLR

River Rhine Tour with *MS Godesia*





Monday, 13th, 19:30 – 22:00
Conference Dinner Reception
Haus der Geschichte, Bonn




Tuesday, 14th, 19:30 – 22:00
Conference Reception
River Rhine Tour with *MS Godesia*



Karte Satellit Hybrid

Venue: UN Campus
Langer Eugen

Haus der Geschichte

 Heussallee





Thank you for your attention!
Please prepare for the conference photo 2008





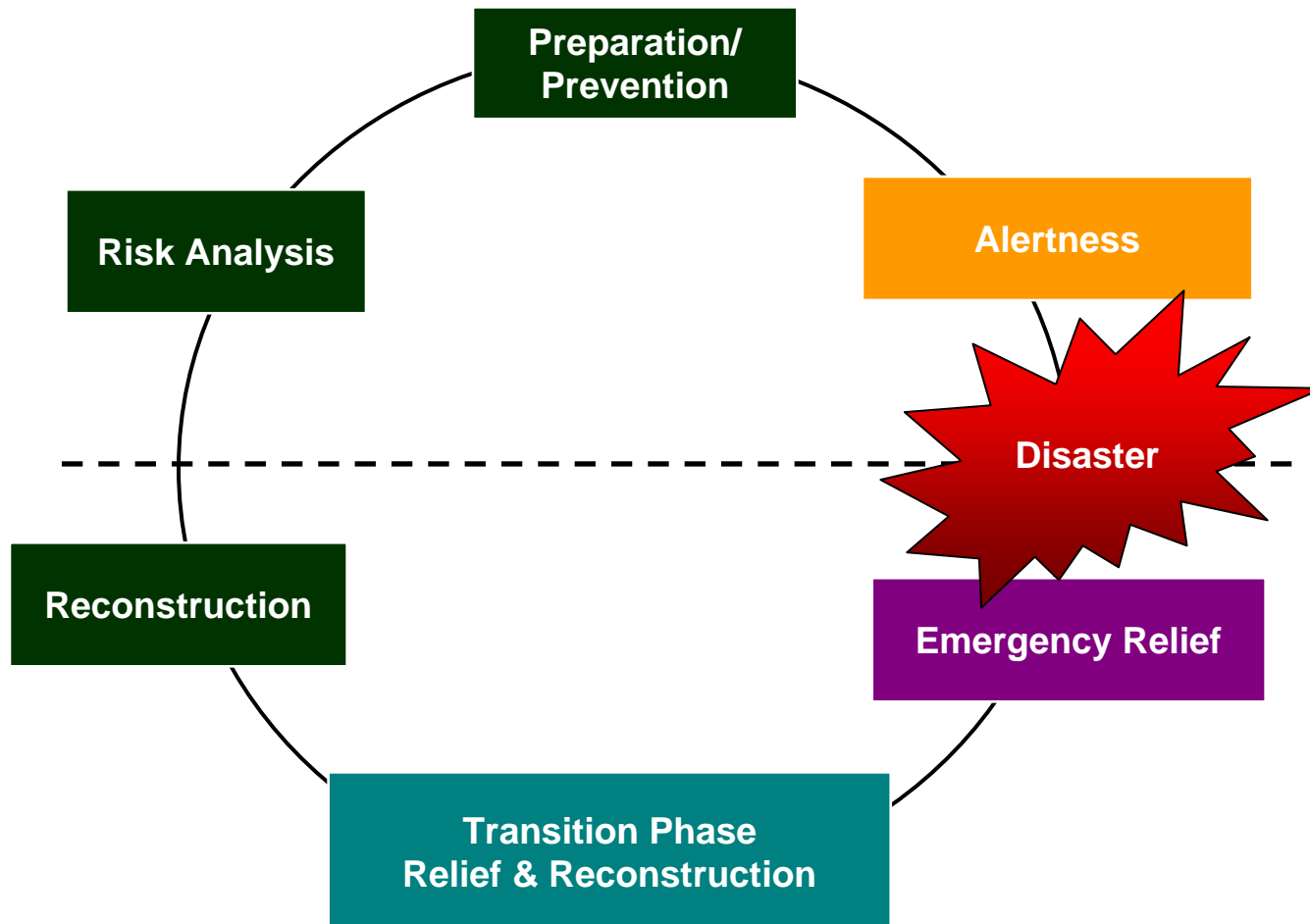
*Thank you for your
attention!*

*"There are no passengers on Spaceship Earth.
We are all crew!"*

Marshall McLuhan



The Disaster Cycle

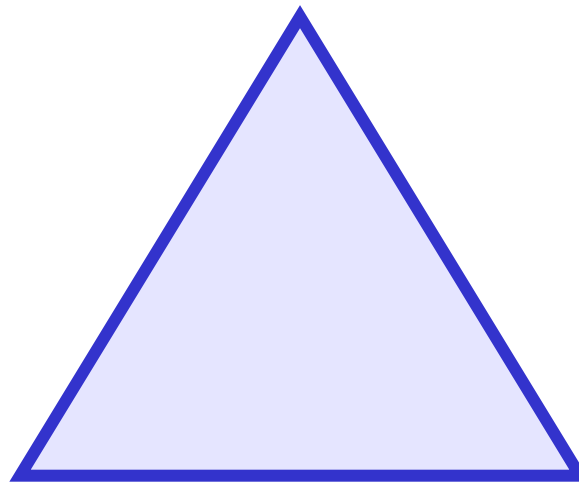




UN-SPIDER Cornerstones

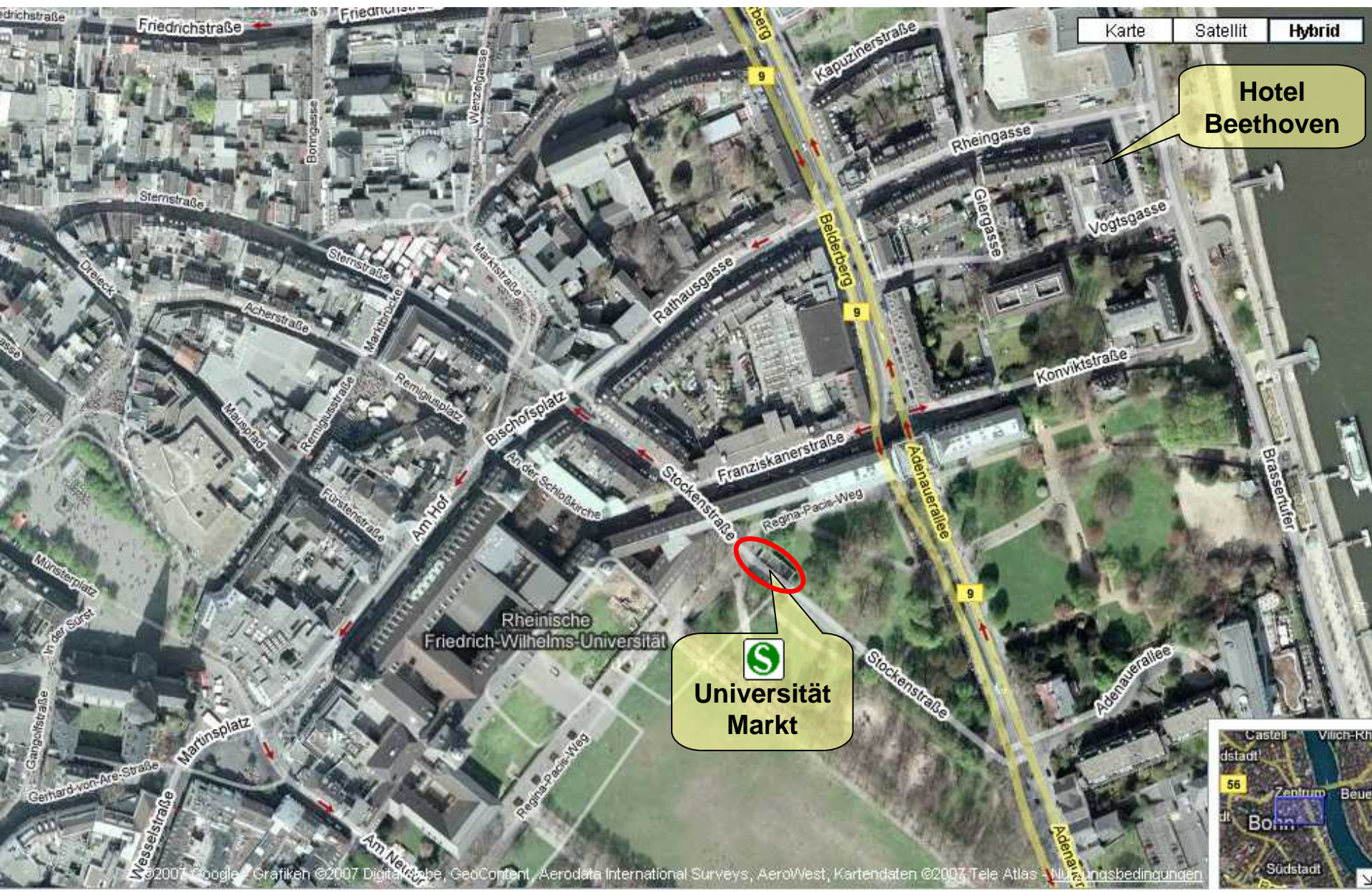
UNOOSA Vienna
Bonn Office
Beijing Office
Geneva Liaison Office

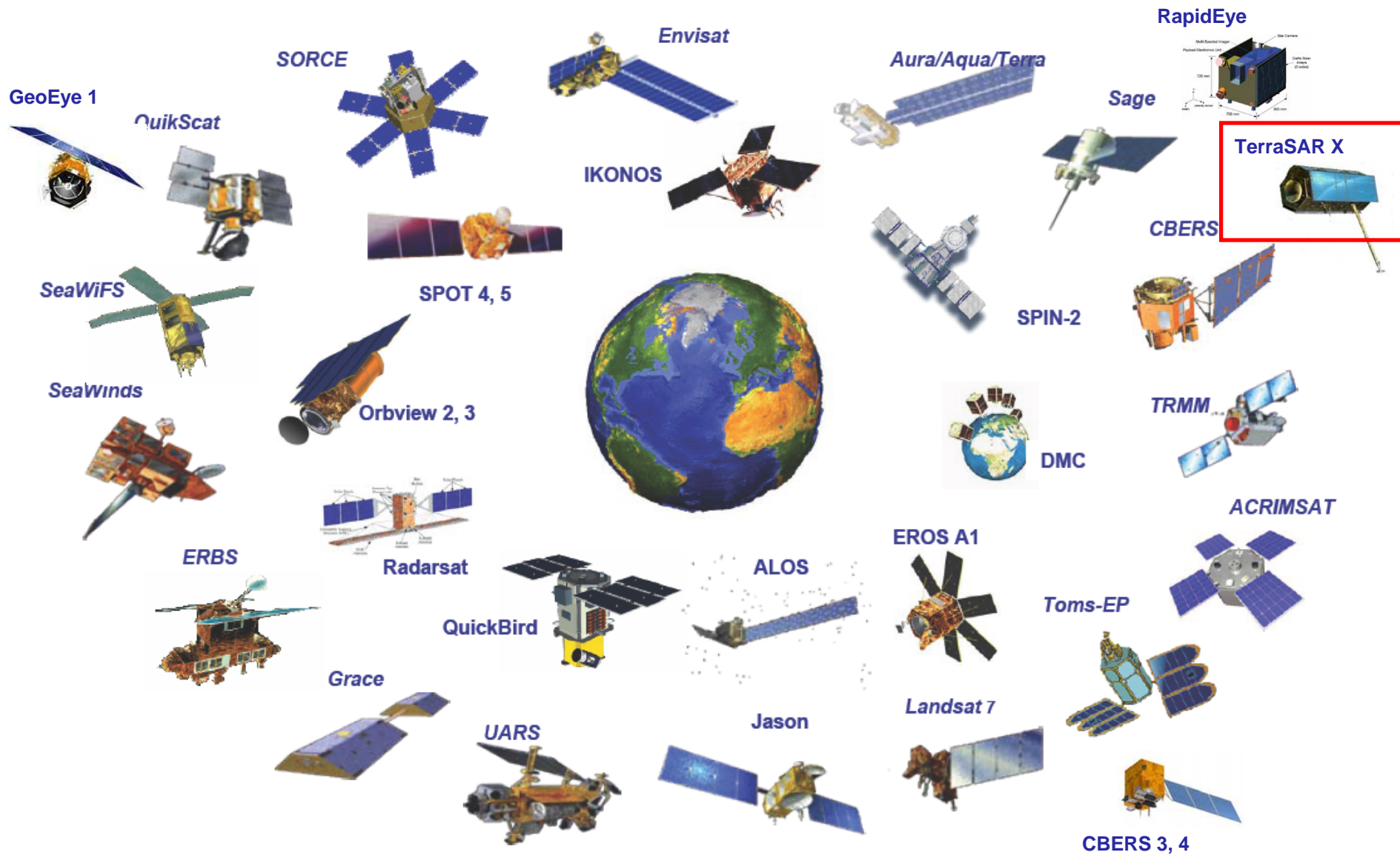
UN-SPIDER Team



**Network of Regional
Support Offices**

National Focal Points



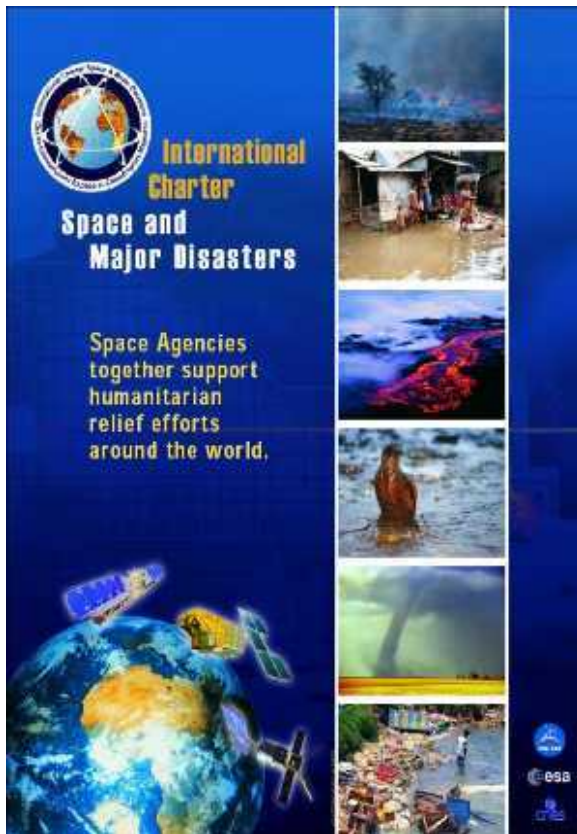






International Charter “Space & Major Disasters”

- An International agreement among Space Agencies to support with space-based data and information relief efforts in the event of emergencies caused by major disasters. The Charter was initiated on **October 20, 2000**.



European Space Agency (ESA): ERS, ENVISAT

Centre national d'études spatiales (CNES): SPOT

Canadian Space Agency (CSA): RADARSAT

Indian Space Research Organisation (ISRO): IRS

National Oceanic and Atmospheric Administration (NOAA)

POES, GOES

Argentina's Comisión Nacional de

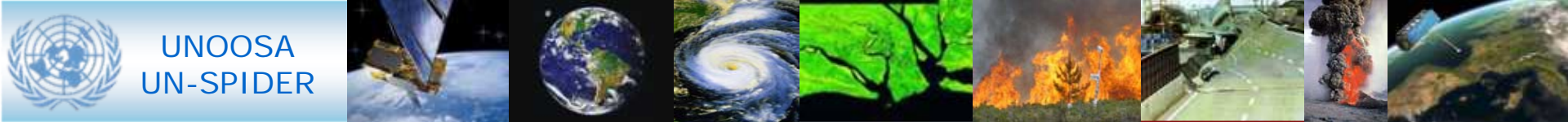
Actividades Espaciales (CONAE): SAC -C

Japan Aerospace Exploration Agency (JAXA): ALOS

United States Geological Survey (USGS): LANDSAT

Disaster Monitoring Constellation (DMC): UK, Nigeria, Algeria, Turkey

China National Space Agency (CNSA): FY, SJ, ZY satellite series



International Charter “Space & Major Disasters”

Members:

- Space Agencies
- Satellite Operators

Authorized User:

- Civil Protection & Relief Organisations
- Defence & Security Institutions

Objectives:

- Provision of a unified system of space data acquisition and delivery to those affected by natural or man-made disasters through Authorized Users





Activations of the International Charter



International Charter
Space and Major Disasters

Contact us | English | Français | Español | 日本語

Search: go

Advanced

Home

About the Charter

Charter Activations

Activation Map

News

Press Releases

Text of the Charter

Activating the Charter

Charter Members

Charter for Schools

Links

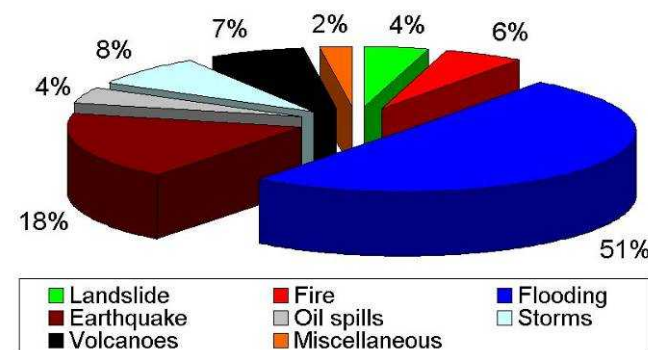
Recent Activations

[XML](#) [RSS](#)

Year	Disaster
2008	Earthquake in China
2008	Cyclone in Myanmar
2008	Volcano in Southern Chile
2008	Flooding in Canada
2008	Fires in Argentina
2008	Flooding in the United States
2008	Flooding in Namibia
2008	Forest fires in Chile
2008	Flooding in Ecuador
2008	Tornadoes in the southeastern United States
2008	Earthquake in Rwanda
2008	Flooding in Bolivia
2008	Volcanic eruption in Ecuador
2008	Floods in southern Africa
2007	Oil spill in the North Sea
2007	Earthquake in Chile
2007	Floods and cyclone in Bangladesh
2007	Flooding in Vietnam
2007	Flooding in Mexico

Top

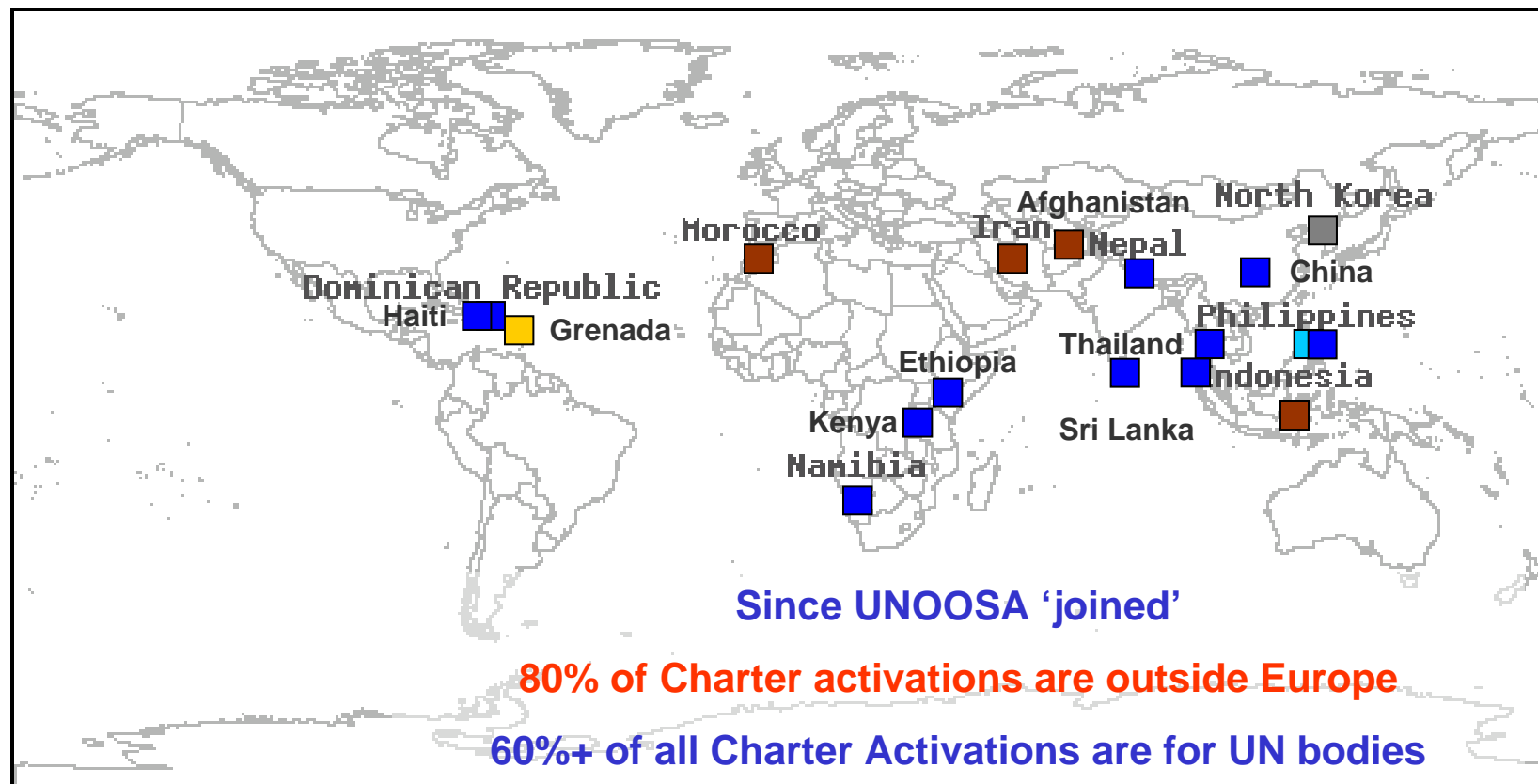
Since 2000 the Charter has been activated more than 200 times!



www.disasterscharter.org



UN Activations of the Charter



LEGEND: ■ Earthquake, ■ Forest fire, ■ Flood, ■ Hurricane, ■ Landslide, ■ Oil spill/Accident, ■ Volcanic eruption.



Who is involved?





Initiative to share disaster information (satellite/in-situ) in the Asia-Pacific region on the Digital Asia (Web-GIS) platform, used by member countries



Non-profit organization, implementing programs&projects to reduce the impact of disasters upon countries and communities in Asia and the Pacific



Aims at enhancing disaster resilience of the member countries, build safe communities, creating a society where sustainable development is possible



- Joint venture between CATHALAC, NASA, U.S. Ag. for Int. Develop., World Bank
- High-Tech weather station + program to pinpoint USGS data on danger-zones etc.
- Visualization and monitoring system (processing of geospatial & satellite data) for environmental decision making in Mesoamerica

IKONOS Image Ulee Lhe Port, Banda Aceh

Before Tsunami



After Tsunami





NAMIBIA - March 2008

NAMIBIA - Omusati, Oshana, Ohangwena Region - Flood Extent March 22, 2008 - Sheet 1: Odimbwa 1:50,000

Severe flooding, starting in January

- peak floods in March throughout central and northern regions, affecting and displacing thousands of people
- emergency state declaration by the Namibian government, facing a crisis with unprecedented proportions
- UNOOSA activated the *CHARTER*
- assistance to the Hydrological Services through UNDP and UN-SPIDER:
 - requesting satellite data of flooded areas
 - guidance of assistance received from ZKI

Photo Credit: Guido Van Lingenhove





CHINA - May 2008

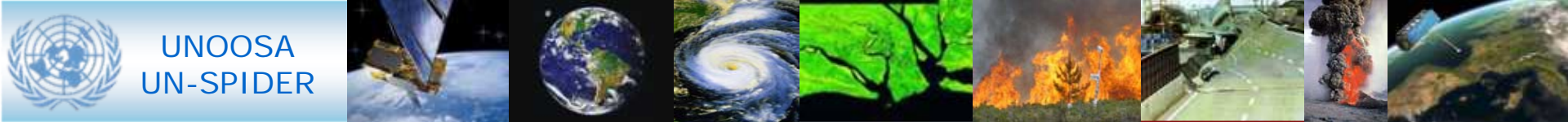
Wenchuan earthquake (mag. 7.9), 12 May

- severe impact on infrastructure and population (70.000 killed, 17.000 missing, 370.000 injured)
- *CHARTER* activated after 3 hours by NDRCC, also leading the use of space-based information
- SPIDER Support Team active in multiple levels of the response efforts:
 - coordination of ~40 (voluntary) analysts
 - channeling contributions from e.g. space agencies
 - expert advise to strengthen NDRCC structure (vast amounts of data)
 - ensure that lessons learned will be available to other countries



Credits: AP

Source: LeMonde



UN-SPIDER - Distribution of Activities

OOSA	A. Gateway	B. Bridge	C. Facilitator
Vienna	Outreach Activities		Capacity Building
Beijing Office	Awareness Raising Regional and Country Profiles		National Activities Planning and Policies
Bonn Office	Knowledge Portal Compilation of Information Dissemination of Information	Platform for Fostering Alliances Networking Communities of Practice	
Liaison Office in Geneva	Interface with the disaster reduction and humanitarian response communities in Geneva.		