UN-SPIDER

May 2010 Updates

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http://www.ungiwg.org/cgi-bin/mailman/listinfo/unspider

Please note: there is a NEW DATE for the UN-SPIDER Regional Workshop Building upon Regional Spacebased Solutions for Disaster Management and Emergency Response for Africa, 6-9 July 2010, Addis Ababa, Ethiopia

UN-SPIDER News

1. SpaceAid support to Guatemala, Pakistan, Tajikistan, and Kenya

In May 2010 the UN-SPIDER SpaceAid Framework was activated four times to provide support to response efforts to monitor a volcano eruption and flooding in Guatemala, floodings in Kenya, a river blockade caused by a landslide in Pakistan, and to support response efforts to floods and landslides in Tajikistan. For each of these disasters, a SpaceAid Updates Page was set up to collect and disseminate available space-based resources on the UN-SPIDER Knowledge Portal (www.un-spider.org/spaceaid). In addition, UNOOSA requested the activation of the International Charter Space and Major Disasters and of Sentinel Asia to provide space-based information for disaster response on behalf of local UN offices. Major satellite data providers, including the DigitalGlobe Crisis Event Service, were also informed about the coordinates of the affected areas through the SpaceAid framework. UN-SPIDER has been closely coordinating with local end-users as well as regional organizations throughout the process, thereby facilitating the delivery of available contributions to the respective responding communities.

2. Focus on user requirements at CEOS/WGISS-29 Meeting in Bonn

The 29th Plenary of the Working Group on Information Systems and Services (WGISS) of the Committee on Earth Observing Satellites (CEOS) took place from 17 to 21 May 2010 on the UN premises in Bonn, Germany. Representatives of various space agencies and related institutions, such as the Thai Geo-Informatics and Space Technology Development Agency (*GISTDA*), the Brazilian National Institute for Space Research (INPE), the National Space Agency of Ukraine (NSAU), the German Aerospace Center (DLR), Japan Aerospace Exploration

Agency (JAXA), the United States' National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration of the United States (NOAA), and the U.S. Geological Survey (USGS) met to discuss the status of their current tasks and actions. Among the topics were the work of the Global Datasets Interest Group, the CEOS Data Democracy Initiative, the Land Surface Imaging Interest Group, and the proposed Water Portal project in the Applications Subgroup, the Web Services Interest Group, the Grid Technology Interest Group and the Sensor Web Interest Group in the Technology Subgroup, among others. On 20 May a special session on "Supporting Disaster Management from Space: How can WGISS help" was organized by the Disaster Response Interest Group and moderated by UN-SPIDER.

For further information >> UN-SPIDER News

3. UN-SPIDER supporting the establishment of a crop-monitoring project in Guatemala

From 13 to 19 May UN-SPIDER organized and participated in meetings to discuss and elaborate a proposal for a potential project in Guatemala targeting the use of space-based information to assess the impact of drought and climate variability on crops. This project proposal has been submitted to the Guatemalan National Council of Science and Technology (CONCYT) for funding, and targets the establishment of an inter-institutional, multithematic, technical committee of professionals which will focus its attention on the use of space-based information to track impacts caused by drought and climate variability events on crops in the "Dry Corridor" of the country. The project is based on a request made by Dr. Karen Slowing, Director of the National Planning and Programming Secretariat of the Presidency, SEGEPLAN.

For further information >> UN-SPIDER News

4. Fostering the SPIDER Thematic Partnership for Latin America and the Caribbean

From 10 to 12 May UN-SPIDER staff was invited to participate in a meeting organized by Thermopylae Sciences and Technology to review and suggest improvements to the 3D-UDOP geo-viewer, UDOP meaning "User-Defined Operating Picture". UN-SPIDER was invited to this meeting because of its experience in using geospatial information in disaster management. The meeting was attended by experts from several universities of the United States and staff of Thermopylae S&T, and focused on how to improve the 3D-UDOP geo-viewer which has been developed by Thermopylae S&T for the United States Southern Command. The geo-viewer was developed as a tool to assist Southern Command in its response to the earthquake in Haiti, and aims at allowing users involved in humanitarian actions to insert their information in a visually friendly environment for later viewing.

For further information >> UN-SPIDER News

5. UN-SPIDER at the "Workshop on Space-Technology Applications in Disaster Risk Reduction" in Beijing

From 3 to 7 May 2010 UN-SPIDER staff participated in the "Workshop on Space-technology Applications in Disaster Risk Reduction" jointly hosted by the Ministry of Civil Affairs, P.R.C., and the International Civil Defence Organization (ICDO) and organized by the National Disaster Reduction Center of China (NDRCC) in Beijing. The workshop provided an opportunity for UN-SPIDER to contribute a technical presentation and introduce UN-SPIDER to the participants. UN-SPIDER used this opportunity to discuss cooperation opportunities of the prospective UN-SPIDER Beijing office with the Asia Pacific Space Cooperation Organization (APSCO) and the United Nations Development Programme (UNDP).

For further information >> UN-SPIDER News

6. UN-SPIDER Technical Advisory Mission to Maldives

Following the invitation from the Government of the Republic of Maldives, a Technical Advisory Mission to Maldives was carried out from 18 to 22 April 2010. The mission team comprised experts from UN-SPIDER, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), the South Asian Association for Regional Cooperation (SAARC) Disaster Management Centre, and the United Nations International Strategy for Disaster Reduction (UNISDR). The key objectives to visit Maldives were to assess national capacities and to evaluate disaster risk reduction activities, policies and plans with regard to the use of space-based technologies, and to facilitate access of national institutions to space-based information to support the full cycle of disaster management. The mission team held meetings with the key stakeholders within the Government and with UN Offices. *For further information >> UN-SPIDER News*

Community News

7. NOAA updates its GPS system

The U.S. National Oceanic and Atmospheric Administration says it is modernizing its Global Positioning System (GPS) to utilize advances in technology. Scientists at NOAA's National Geodetic Survey - the official U.S. government source for determining precise latitude, longitude and elevation - said the effort is important for activities requiring accurate positioning information, including levee construction projects, the design of evacuation routes in hurricane-prone areas and the forecast of sea level rise in coastal communities. *For further information >> SPACEDAILY*

8. NASA Awards Global Precipitation Measurement Microwave Imager

NASA has awarded a sole source contract to Ball Aerospace and Technology Corp. of Boulder, Colorado, for the Global Precipitation Measurement Microwave Imager instrument Flight Unit 2. The Global Precipitation Measurement, or GPM, mission will use an international constellation of satellites to study global rain, snow and ice to better understand our climate, weather, and hydrometeorological processes. It will contribute to GPM by enhancing monitoring of hurricanes and mid-latitude storms and improving estimates of rainfall accumulation.

For further information >> NASA

9. Measuring the height of volcanic ash

After the volcanic eruption in Iceland, there were many satellites observing the event. Many satellites can provide a bird's-eye view that can identify thick plumes of ash, but few satellites can tell how high the ash is in the atmosphere. The Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO) satellite, however, records a vertical profile of the atmosphere, which reveals the altitude of ash clouds. These observations help modelers in volcanic ash advisory centers improve forecasting models and issue more accurate warnings to pilots and others with aviation interests.

For further information >> <u>NASA</u>

10. Gulf of Mexico oil spill in the Loop Current

Since the oil spilled on 21 April 2010 in the Gulf of Mexico, scientists have monitored the oil spill with ESA's Envisat radar satellite. From the latest news, it has entered the Loop Current, a powerful conveyor belt that flows clockwise around the Gulf of Mexico towards Florida.

For further information >> <u>ESA</u>

11. UN campaign to make cities more resistant to disasters

With the recent wave of natural disasters – from the devastating January earthquake in Haiti to volcanic eruptions in Iceland wreaking havoc with air travel in Europe – exposing the need for cities to implement disaster reduction plans, the United Nations is launching a campaign to boost the resiliency of urban areas. The two-year scheme, called Making Cities Resilient: My City is Getting Ready, calls on leaders and local governments to commit to a 10-point checklist.

For further information >> UN

Conferences and Workshops

We maintain a Calendar of Events with upcoming Conferences, Meetings and Events relevant to the area of space-based solutions for disaster management and emergency response. The Calendar can be viewed at:

www.un-spider.org/events

20th World Conference on Disaster Management, 6-9 June 2010, Toronto, Canada

The World Conference on Disaster Management (WCDM) will be celebrating 20 years and is proud to be the premier annual event for disaster management professionals, providing a global perspective on current issues and concerns in the industry. The 20th WCDM will bring delegates from over 40 countries within the fields of Emergency Planning/Management, Business Continuity, Emergency Response, Risk Management, IT Disaster Recovery, Disaster Management Research, Emergency Communications, Emergency Health, Security, HR, Environmental, Community Planning, as well as for the organizations which supply and service these professions. In 2010 we will take an in-depth look at how our professions have evolved over the past twenty years, the lessons we have (or not) learned as well as looking into future trends and threats to the safety and well-being of our communities.

For more information and registration: WCDM

TIEMS 17th Annual Conference 2010, 8-12 June 2010, Beijing, China

TIEMS 17th Annual Conference will devote itself to continual improvement of our ability, both nationally and internationally to avoid, mitigate, respond to, and recover from emergencies and disasters. TIEMS is an international network of users, planners, researchers, industry, managers, response personnel, practitioners, social scientists, and other interested parties within emergency and disaster management. Within this network TIEMS stimulates the exchange of information on the use of innovative methods and technologies within emergency and disaster management to improve our ability to avoid, mitigate, respond to, and recover from natural and technological disasters.

For more information: TIEMS2010

Digital Earth Summit 2010, 12-14 June 2010, Nessebar, Bulgaria

The conference topics are:

- The societal context of Digital Earth: benefits, costs, policies, and regulations
- Digital Earth at local, regional, and global levels: from strategy to realization
- Digital Earth in sustainable development at local and regional levels
- · Digital Cities: technology and applications
- · Access to Digital Earth: privacy, security, and trust
- The citizen as contributor to Digital Earth.

A special exhibition of maps, cartographic products, GIS, hardware and software will be held in the framework of the Summit.

For more information and registration: CARTOGRAPHY-GIS

Symposium: 100 Years ISPRS - Advancing Remote Sensing Science, 5-7 July 2010, Vienna, Austria

The symposium will take place at the Vienna University of Technology. To celebrate the centenary of the International Society for Photogrammetry and Remote Sensing (ISPRS) the Symposium will discuss advances in remote sensing science. The scope is to provide a comprehensive overview of the major research areas in remote sensing, highlighting past achievements and identifying challenges for the future. Therefore, we seek in particular contributions proving critical reviews of major remote sensing topics, but also original research contributions are welcome. The Symposium will bring together scientists, professionals and decision makers to

discuss the issues and latest trends and developments in remote sensing science. It is an important event for ISPRS Commission VII that deals with the "Thematic Processing, Modeling and Analysis of Remotely Sensed Data". Each of the working groups of Commission VII will organise sessions, with keynote speakers and presenters from around the world.

For more information and registration: ISPRS

Benefiting from Earth Observation - Bridging the Data Gap for Adaptation to Climate Change in the Hindu Kush-Himalayan Region, 4-6 October 2010, Kathmandu, Nepal

The main objective of the international symposium is to foster regional and international cooperation to promote the use and access to earth observation for improved scientific knowledge and understanding for adaptation to climate change in the Hindu Kush-Himalayan region. Besides inaugural and valedictory sessions by prominent speakers, there will be six session themes from scientists, researchers, development practitioners, policy makers and donors from the Hindu Kush-Himalayan region and beyond. The themes are:

- Remote sensing of cryosphere
- · Spatial decision support systems for ecosystem management
- · Space-based information for disaster management
- Land cover change and Reducing Emissions from Deforestation and Forest Degradation (REDD)
- Transboundary air pollution monitoring
- Spatial data infrastructure for climate change adaptation

For more information and registration: Mountain GeoPortal

Upcoming UN-SPIDER Outreach Activities

Information on upcoming UN-SPIDER outreach activities can be obtained from the events section of the UN-SPIDER Knowledge Portal:

www.un-spider.org/events

Upcoming UN-SPIDER events

UN-SPIDER Regional Workshop *Building upon Regional Space-based Solutions for Disaster Management and Emergency Response for Africa*, --NEW DATE: 6-9 July 2010--, Addis Ababa, Ethiopia

Recognizing the fact that the African continent is particularly prone to devastating natural disasters and susceptible to the negative effects of climate change, UN-SPIDER is organising this continental wide workshop aiming at bringing together experts from both the disaster management and the geospatial communities. The regional workshop is intended to further strengthen capacities in Africa to better respond to future disasters by taking advantage of space-based information.

For more information and registration: UN-SPIDER Events

Fourth United Nations International UN-SPIDER Bonn Workshop on Disaster Management and Space Technology: "The 4C – Challenge: Communication – Coordination – Cooperation – Capacity Development", 12-14 October 2010, Bonn, Germany

As a general framework, the workshop will contribute to coordination of the various initiatives that contribute to helping developing countries access and use space-based technologies for disaster management and risk reduction, and explore possibilities of capacity development and institutional strengthening. The main topics of the fourth workshop will include: 1. Space technology in support of risk and disaster management, 2. Satellite communications technology, 3. International support mechanisms and SpaceAid, 4. The UN-SPIDER network. *For more information and registration: <u>UN-SPIDER Events</u>*

Upcoming events supported by UN-SPIDER

Second Ukrainian conference *Earth Observations for Sustainable Development and Security* (GEO/GMES – Ukraine), 14-17 June 2010, Kyiv, Ukraine

The Conference represents the perfect opportunity to demonstrate the latest innovations, achievements and practical results in the area of space information technologies. Goal of the Conference is to discuss the prospects of aero- and space-born data utilization for natural resources management, sustainable development and security in course of GEOSS, GMES, INSPIRE activities and establishment of the Ukrainian segment of GEOSS (GEO-UA system).

International researchers and experts interested in Earth observation data application will have the opportunity to present and discuss results and ideas with focus on the following areas:

- Disaster reduction: flooding, forest and field fires, water, air and soil pollution;
- Understanding and adapting to climate variability and change;
- · Management and protection of ecosystems;
- Sustainable agriculture;
- Sea and ocean problems.

A UN-SPIDER related Special Session will be held during the conference. For more information and registration: <u>Kyiv Conference</u>

8th International Conference of the African Association of Remote Sensing and the Environment (AARSE), 25-29 October 2010, Addis Ababa, Ethiopia

The four major Scientific Sub-Themes of the conference are:

- Food and water security (Mapping production zones, yield forecast, agricultural and pastoral systems, assessing quality and quantity of water resources in Africa, surface water body monitoring, seasonal hydrological characteristics assessment, flood forecasting)
- Energy resources (Mapping, monitoring and management of energy resources, power infrastructure management, etc.)
- Disaster risk reduction (Risk assessment for sustainable development, provision of geo-information on hazards and risks, disaster risk reduction in national policy, strengthening community level capacities to reduce disaster risk at the local level, disaster mitigation, vulnerability to compounded disasters, predicting vulnerability to urbanization and to climate change)
- Marine and costal management (Resources & sustainable development; marine ecosystem; coastal, marine, and oceanography resources management; assimilation, modelling and forecasting: towards ocean and coastal products and services in Africa; quantitative indicators of risk and resilience of coastal populations; impacts of coastal inundation on coastal ecosystems; monitoring and modelling coastal lagoons).

For more information and registration: <u>AARSE</u>

The **United Nations Office for Outer Space Affairs (UNOOSA)** implements the decisions of the General Assembly and of the Committee on the Peaceful Uses of Outer Space and its two Subcommittees, the Scientific and Technical Subcommittee and the Legal Subcommittee. The Office is responsible for promoting international cooperation in the peaceful uses of outer space, and assisting developing countries in using space science and technology. Headquartered in Vienna, Austria, UNOOSA maintains a website at <u>http://www.unoosa.org</u>.

In its resolution 61/110 of 14 December 2006 the United Nations General Assembly agreed to establish the "United Nations Platform for Space-based Information for Disaster Management and Emergency Response - UN-SPIDER" as a programme within UNOOSA. UN-SPIDER focuses on the need to ensure access to and use of space-based solutions during all phases of the disaster management cycle.