

UN-SPIDER

October 2010 Updates

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UN-SPIDER News

1. Fourth United Nations International UN-SPIDER Bonn Workshop

From 12 to 14 October 2010, the Fourth United Nations International UN-SPIDER Bonn Workshop on Disaster Management and Space Technology: "The 4C – Challenge: Communication – Coordination – Cooperation – Capacity Development" took place at the UN premises in Bonn. This year's workshop brought together around 120 participants from over 40 countries who came to share information and discuss about the 4C-Challenge. The event comprised four thematic sessions titled "International support mechanisms and the SpaceAid Framework", "Satellite communication for disaster management", "Space technology in support of risk and disaster management", and "The UN-SPIDER Network". The presentations delivered in the course of the workshop and the list of participants have been uploaded to the website of the workshop. The full workshop report will be made available there as soon as it is finalized.

For further information >> UN-SPIDER News, Workshop Website

2. SpaceAid supporting disaster response in Benin, Thailand, Philippines, and Myanmar

In October, four countries have been supported by the SpaceAid Framework in their disaster response activities. In the beginning of the month, **Benin** was affected by floods due to heavy rains. UNOOSA/UN-SPIDER requested the activation of the International Charter Space and Major Disasters on behalf of the UN Office for the Coordination of Humanitarian Affairs (OCHA), Regional Office for West and Central Africa (ROWCA). UN-SPIDER worked closely with its network partners in Africa to ensure sharing of data and ground information.

Thailand also experienced severe flooding and requested support from UN-SPIDER.

Both the **Philippines** and **Myanmar** were hit by a Tropical Cyclone. Direct contact to national institutions and international organizations involved in the response facilitated coordination efforts. On its SpaceAid Updates pages UN-SPIDER provided the coordinates of the areas affected by the disasters and constantly updated information available about the satellite imagery that was collected. Available space-based information,

UN-SPIDER on Facebook
UN-SPIDER on Twitter

including a satellite tasking table as well as contact details for each of the events are made available on the respective SpaceAid Updates page.

For further information >> SpaceAid Benin, SpaceAid Thailand, SpaceAid Philippines, SpaceAid Myanmar

3. UN-SPIDER at the 8th International Conference of the African Association of Remote Sensing of the Environment (AARSE) and the GARNET-E workshop

The above conference was organized by AARSE together with the UN Economic Commission for Africa (UNECA) and the Ethiopian Mapping Agency and took place from 25 to 29 October. It brought together more than 400 participants from all over the African continent as well as other international experts. Participation ranged from senior scientists and PhD students to government officials and private company representatives. The meeting covered four major topics from a remote sensing perspective: Food and Water Security, Energy Resources, Marine and Coastal Management as well as Disaster Risk Reduction (DRR). UN-SPIDER actively participated in the conference, especially in the segments on DRR. A presentation was given on the topic of "Space-based solutions for Disaster Management and Emergency Response for Africa" and an exhibition booth was shared with UNECA to provide outreach material to participants and hold numerous discussions on the programme. The event was instrumental to build upon the existing UN-SPIDER network on the continent and also to create more awareness about the UN-SPIDER programme and further involve practitioners and scientists in Africa in our activities.

Following AARSE, a **GARNET-E post-conference workshop** took place on 30 and 31 October. The GARNET-E partners invited UN-SPIDER to participate in this workshop which brought together about 50 persons from the space- as well as the disaster management community from all over Africa. The European Commission Seventh Framework Programme (FP-7) project GARNET-E stands for "GMES and Africa: Regional Network for Information Exchange and Training in Emergencies" and intends to contribute to the partial re-alignment of the "GMES Emergency Response in Africa" Agenda, also by facilitating communication among practitioners and by creating a network of networks on the continent. UN-SPIDER gave a comprehensive presentation on the Programme and recent activities in Africa, focusing on its network, Technical Advisory Support and SpaceAid. Possible areas for cooperation were discussed and specified within and outside of the GARNET-E framework. Other presentations given during the first day of the workshop included the GARNET-E project, the GMES Initiative, including the SAFER Emergency Response arm, and the International Charter Space and Major Disasters.

For further information >> AARSE, GARNET-E

4. UN-SPIDER and ADRC organize side event at the 4th Asian Ministerial Conference on Disaster Risk Reduction

This high profile ministerial conference was organized by the Government of Korea and the International Strategy for Disaster Reduction (ISDR) and took place from 25 to 29 October 2010 in Incheon, Korea. The participants were ministers from Asia and Pacific countries and delegations from governments that included decision makers from the ministries responsible for disaster risk reduction in the respective countries. Technologists, scientists and academic institutions were also represented. The conference aimed at finalizing the Incheon Regional Roadmap on DRR through CCA [Climate Change Adaptation] in Asia and the Pacific (Incheon REMAP) and an action plan for its implementation. The Incheon Declaration on Disaster Risk Reduction in Asia and the Pacific 2010 was the final outcome of the conference. UN-SPIDER and the Asian Disaster Reduction Centre (ADRC) jointly organized the side event "Incorporating space-based information and technology into DRR and CCA" on 26 October 2010. Four panelists delivered presentations related to theme of the side event: Shirish Ravan, UNOOSA/UN-SPIDER, Masaru Arakida, ADRC, Chu Ishida, JAXA (Japan Aerospace Exploration Agency), and Hyo-Suk Lim, KARI (Korea Aerospace Research Institute). Through this side event, the organizers were able to highlight the role of space technology in the overall context of AMCDRR. The presence of stakeholders like JAXA and UNOOSA/UN-SPIDER was instrumental in bringing a statement about the use of

space technology into the Incheon REMAP and in the action plan. Both the Ministerial Declaration and the road map can be downloaded at the event's website.

For further information >> AMCDRR Korea

5. UN-SPIDER moderates thematic session at GMES User Forum

The GMES User Forum was organized by the German Federal Ministry of Transport, Building and Urban Development (BMVBS) together with the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and in close cooperation with the German Aerospace Center (DLR). It brought together about 120 participants from a large number of German institutions, national agencies, and leading private companies for discussions with high-level representatives from the European Commission and the German Government. The main intention of this meeting was to inform potential users about the already existing and upcoming GMES core- and downstream services and to better integrate national needs and networks into the further planning. After the opening session and the introductory presentations held by the head of the GMES office in Brussels, Ms. Christine BERG, and delegates from the organizing ministries, the group of participants was divided into four different thematic groups according to the four GMES core services land - ocean - atmosphere - and emergency. Senior Expert Joerg Szarzynski was officially invited by the Ministry of Transport to moderate the session on emergency on behalf of UNOOSA/UN-SPIDER. The break-out group succeeded in developing a portfolio of evaluative statements and detailed recommendations which will be summarized within the final report and subsequently delivered to the German Government. The statements address three major discussion areas, namely 1. national requirements concerning the GMES data, services, and infrastructure, 2. the general framework and data policy, and 3. the integration of user needs and recommendations into the further development of the GMES policy.

For further information >> GMES/European Commission, GMES/National User Forum

6. New UN-SPIDER Regional Support Office established at the Disaster Risk Reduction Centre of the University of the West Indies

On 8 October 2010 the University of the West Indies (UWI) and the UN Office of Outer Space Affairs signed the cooperation agreement that established the tenth UN-SPIDER Regional Support Office (RSO). UWI is the first university to host an RSO and to contribute its experience and capabilities to the UN-SPIDER programme by doing so. The Disaster Risk Reduction Centre at the University of the West Indies, which hosts the UN-SPIDER RSO, reports to the Department of Geomatics Engineering and Land. It is a multi disciplinary Centre of Excellence in the field of disaster risk reduction and disaster management in the Caribbean and globally, especially in Small Island States. The particular strength of the Centre and its new role as an RSO lies in its capacity-building facilities, namely its GIS and photogrammetry laboratory and its short-courses in all areas of geoinformatics. The university also offers a BSc in Geomatics and an MSc in Geoinformatics. It has faculty members and technical staff specialized in remote sensing, GIS, and GPS technolgy, and disposes of the respective soft- and hardware infrastructure, and of base data, such as Digital Elevation Models (DEM) and Landsat imagery of most of the Caribbean countries.

For further information >> UWI DRRC

Community News

7. Sentinel Asia covering ten disasters in seven countries

The Asia-Pacific region has suffered from several natural disasters like tropical cyclones, heavy rains, tsunami and volcanic eruption especially in mid and late October. Sentinel Asia, a regional initiative led by the Asia-Pacific Regional Space Agency Forum (APRSAF) is using space-based technology in support of emergency observations. Within two weeks, Sentinel Asia has observed ten disasters in seven countries, covering the floods in South Central Vietnam, in Indonesia, and in Japan, the volcanic eruption of Mount Merapi on Java Island, Indonesia, the tsunami on the Western coast of Sumatra, Indonesia, the storm in Isabela, Philippines, and the flash floods in Taiwan Province of China, in the northeast of Thailand, and in Pursat City, Cambodia. For further information >> Sentinel Asia

8. International Charter Space and Major Disasters: delivering products for six countries

The International Charter Space and Major Disasters accepted six activations in the month of October, covering disasters in Vietnam, Benin, Philippines, Myanmar, Indonesia, and Thailand. The Charter was activated twice by each UNOOSA/UN-SPIDER, UNITAR/UNOSAT, and the Asian Disaster Reduction Center (ADRC) on behalf of local UN offices and national institutions. Again, the majority of disasters covered by the Charter were floods, with the exception of Typhoon Megi in the Philippines and a tsunami in Indonesia, which also caused inundations. Images and products delivered following the Charter activations are available on the respective pages on the Charter homepage.

For further information >> International Charter Space and Major Disasters

9. First call for papers for the GI_Forum 2011

The Geoinformatics Forum Salzburg (GI_Forum) is scheduled for July 5-8, 2011, at the University of Salzburg, Austria. Audience: GI_Forum focuses on an international audience that shares an interest in GI Science and Technology. This call for papers aims at researchers who design, develop and apply advanced methods and techniques of Geoinformatics to a broad range of application domains. Themes and Application Fields: GI_Forum solicits contributions on emerging topics and research outcomes related to GI Science and Technology. Advanced visualization and cartography, geospatial data acquisition, advanced spatial analysis and knowledge extraction, distributed and mobile services, Spatial Data Infrastructure (SDI), and dynamic modelling and simulation comprise by no means an exhaustive list of conference topics. For details please contact office@gi-forum.org or visit the conference website.

For further information >> Gl_ Forum

10.GSDI12 World Conference "Realising Spatially Enabled Societies"

The theme for GSDI 12 was "Realizing Spatially Enabled Societies." The conference organizers set out to encourage collaboration to help create an enabling environment that enhances outcomes in societies, economies and the global environment. A peer-reviewed book on this topic was launched during the conference. It focuses on research, emerging trends and critical assessment and it showcases examples of spatial enablement serving societal needs. More than 100 countries are actively developing Spatial Data Infrastructures (SDI), and over 650 attendees shared knowledge, attended workshops, traded experiences and listened to experts speak on a wide range of topics including technology, standards, and spatial law and policy. The UN Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) held its 16th regional meeting and the International Geospatial Society, the new arm of the GSDI Association for individual members, held its inaugural meeting.

For further information >> GSDI

11. Philippines support use of space technology to address climate change

The Philippines has expressed its support for the use of outer space technologies to help deal with disasters and calamities. In a statement delivered at the United Nations Headquarters in New York, Permanent Representative to the United Nations Libran Cabactulan shared the Philippine's experience in the aftermath of tropical storm Ketsana and typhoon Parma last year. According to Cabactulan, the country benefited from space-based technology through the UN Platform for Space-Based Information for Disaster Management and Emergency Response (UN-SPIDER). "We witnessed how useful and effective satellite imagery can be in monitoring the movement of typhoons, especially if such data are sent to vulnerable communities in a timely manner," Cabactulan told members of the Special Political and Decolonization Committee.

For further information >> GMA News

12. Sentinel-3: a new pair of glasses to view Earth

Our view of Earth is set to become even sharper with new instruments to be carried on ESA's Sentinel-3 satellites. In many ways, it will be like looking at Earth through a new pair of glasses. Sentinel-3 is one of the five missions that ESA is developing for Europe's Global Monitoring for Environment and Security (GMES) initiative. Primarily, Sentinel-3 will deliver data for GMES services related to the marine environment, such as ocean-current forecasting services that need surface-temperature information, sea-water quality and pollution-monitoring services requiring ocean-color products and surface-wave information for maritime safety.

For further information >> ESA

13. Geospatial databases and the evolving role of the surveyor

With maturation of Geographic Information Systems (GIS) technology, the consumer community as well as decision- and policy makers have quickly realized the importance of making sound decisions based on information derived from properly designed geospatial databases. Organizations have created proprietary geospatial databases and governments are rethinking the contents of the National Spatial Data Infrastructures (NSDI). Extensive geographic data acquisition programs including satellite imagery, digital aerial photographs and Light Detection and Ranging (LiDAR) systems at varying ground resolutions, as well as land parcel data are currently in progress around the world. Enabling technologies such as Global Positioning Systems (GPS) and digital image processing software have also facilitated the data processing aspects of these projects. The consuming public has also become more aware of the benefits of geospatial information, and is compelling service providers to provide it. Web-based applications are leading to data accessing and processing techniques such as "mash-ups" and cloud computing services through hosted content and virtual machines which process data from disparate locations.

For further information >> Coordinates

14.DRR Project Portal for Asia and the Pacific

The ISDR Asia Partnership is running the comprehensive online portal "Disaster Risk Reduction Project Portal for Asia and the Pacific". The goal of this portal is to share information about the implementation of DRR projects in the region and to collectively identify gaps, improve planning and programming, and identify areas for cooperation. It aims at informing national governments, donor agencies, and organizations implementing DRR projects. The portal provides a list of DRR projects, including completed, ongoing, and planned or proposed projects. The user can generate customized maps, learn about implementing organizations, and search an archive of meetings on the topic, among other things.

For further information >> DRR Project Portal

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 events supported by UN-SPIDER

34th International Symposium on Remote Sensing of Environment: "The GEOSS Era: Towards Operational Environmental Monitoring", Sydney, 10-15 April 2011

The Organizing Committee of the 34th International Symposium for Remote Sensing of the Environment (ISRSE) cordially invites you to visit Sydney and participate in what promises to be an excellent high quality Symposium on Remote Sensing of the Environment. ISRSE has become one of the main forums for programmatic discussions on remote sensing components of the 'Global Earth Observation system of Systems-GEOSS", currently being implemented through the Group on Earth Observation GEO, which (at the time of preparation) is composed of 80 member countries, 58 participating organizations and 5 observers. The Symposium will provide a platform for countries with established and emerging earth observation programs to report on their progress, as well as new initiatives in the remote sensing arena. As well, the 10-year Implementation Plan of the Group on Earth Observation (GEO) is well underway and therefore the Symposium provides an important opportunity for GEO members and task teams to present details of progress of their work.

UNOOSA/UN-SPIDER will be attending and plans to organize a joint session with Sentinel Asia. *For more information and registration: ISRSE34*

Gi4DM 2011 – GeoInformation for Disaster Management, Antalya, 3-8 May 2011

Geomatics technologies are able to support management and recovery in the aftermath of manmade and natural disasters. However, disaster management also poses big challenges in all aspects of the geo-information cycle, from data acquisition, processing, management and delivery. For the seventh time, the International Symposium on Geo-information for Disaster Management (Gi4DM) brings together researchers, developers, data providers and users from all over the world to discuss these challenges. The Gi4DM is coordinated by the ISPRS Ad hoc Committee on Risk and Disaster Management, Working Group 1 (Disaster) of the ISPRS Commission VIII (Remote Sensing and Policies) and Working Group 8 (3D Spatial Data Integration for Disaster Management and Environmental Monitoring) of the ISPRS Commission IV (Geodatabases and Digital Mapping). The indicative topics of interest will at least cover the fields of enterprise crisis management, public security and crisis management in city development, geo-information systems for disaster management, industrial crisis management, incident management systems, etc. The following themes are for reference:

- User Requirements
- Monitoring and processing
- Early Warning systems
- Early Impact systems
- Spatial Data Infrastructures

For more information and registration: Gi4DM

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

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 http://www.unoosa.org.

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.