



UN-SPIDER

June 2011 Updates

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UN-SPIDER News

1. SPIDER Thematic Partnership for the Pacific Region

During the upcoming Pacific Platform for Disaster Risk Management 2011, which will be held in Auckland, New Zealand from 1 to 5 August 2011, UN-SPIDER will organize a side event bringing together all those who are interested in improving the coordination of access and use of space-based information and technologies to support disaster risk management in the Pacific region. We invite all those interested in contributing to helping the Pacific countries to access and use space-based information to consider joining us for this event. With the support of the Government of Austria UN-SPIDER will be able to extend travel support to selected experts from the Pacific Region nominated by their respective national institutions. Please forward these nominations to [David Stevens](#) as soon as possible. Deadline for registration for the meeting is 11th July 2011.

For further information >> [PACIFIC DISASTER NET](#), david.stevens@unoosa.org

2. Expert Meeting on Crowdsourcing Mapping for Preparedness and Emergency Response in Vienna will produce input for report of Secretary General

More than 60 experts from the crowdsourcing mapping-, the space technology- and the emergency response communities will be coming together for a 2-day expert meeting to discuss how to ensure a closer cooperation between these three distinct communities, and more specifically how to take advantage of existing mechanisms that make space-based information available to support response efforts to disasters. The outcome of this expert meeting will be included in a report of the Secretary General of the United Nations which will be considered by the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space (STSC/COPUOS) when it meets in early 2012. It will also be included as an input to the second expert meeting which is planned to be held in Geneva on 16 November 2011 back-to-back with the next International Conference on Crisis Mapping (ICCM 2011). For those interested in contributing to the discussions on this topic please consider joining the [Google Group on space-based information for crowdsourcing mapping](#).

For further information >> [UN-SPIDER Expert Meeting on Crowdsourcing Mapping, ICCM2011](#)



3. Technical Advisory Mission to Cameroon

The Government of Cameroon, represented by the Ministry of Territorial Administration and Decentralization, Department of Civil Protection, officially requested a UN-SPIDER Technical Advisory Mission to assess the use of space-based technology and information for disaster management and emergency response in Cameroon, identify potential areas where space-based technology and information could play a greater role, and propose recommendations on how to improve Cameroon's access to and use of space-based technology and information. A team of eleven international experts was fielded to Cameroon from 6 to 10 June 2011. The team included representatives of UN Offices as well as national Space Agencies, training centers, disaster management agencies and commercial partners from the region and beyond. This broad range of expertise and in-depth knowledge guaranteed a high quality of technical advice and an excellent base for south-south cooperation and technology transfer at the same time. The mission has bridged various organizations involved in disaster management within the country, and the presence of the Regional Center for Training in Aerospace Surveys (RECTAS), Nigeria, the National Space Research and Development Agency (NASRDA), Nigeria, and the Algerian Space Agency (ASAL) (the latter two being Regional Support Offices of UN-SPIDER), strengthened the links of Cameroon within the region.

For further information >> [UN-SPIDER News](#)

4. UN-SPIDER co-organizes PAIGH/USGS Crisis Workshop in Panama

The Pan American Institute of Geography and History (PAIGH) and the United States Geological Survey (USGS) organized a Crisis Workshop during the annual meeting of the Commissions of PAIGH. The workshop took place on 13 and 14 June 2011 in Panama. UN-SPIDER was a member of the organizing committee of this workshop and gave a presentation on its activities in general and in the region in particular. Participants from different countries attended, and UN-SPIDER took the opportunity to discuss with representatives from the regional office of the UN International Strategy for Disaster Reduction (ISDR) in Panama how to advance the coordination of regional activities in the Caribbean, Central America, and South America. This included in particular capacity building activities by the UN-SPIDER Regional Support Office, the Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC) to take place in Mexico and the Dominican Republic. Meetings were also held with representatives of CATHALAC and with representatives of the Agustin Codazzi Geographic Institute (IGAC) to continue discussions about the establishment of a similar office in Colombia through the IGAC.

For further information >> [UN-SPIDER News](#)

5. Technical Advisory Mission to Nigeria

The Government of Nigeria through its National Emergency Management Agency (NEMA) requested UN-SPIDER to conduct a Technical Advisory Mission (TAM) to assess the use of space-based information in disaster management in Nigeria and to identify areas of improvement in the access to such information and in the capacities of working with it. This mission took place from 13 to 17 June 2011. The mission team consisted of seven experts representing the Regional Center for Training in Aerospace Surveys (RECTAS), the World Meteorological Organization (WMO), the UN Country Team Nigeria and UN-SPIDER, as well as staff from the two hosting institutions, namely the National Emergency Management Agency (NEMA) and the National Space Research and Development Agency (NASRDA). The latter hosts the UN-SPIDER Regional Support Office in Nigeria. After a mission team meeting, the experts visited NEMA and NASRDA, including visits to the COSPAS-SARSAT mission control center and the satellite ground control facilities of the Nigerian Space Agency. In the course of the TAM, a stakeholder workshop was organized that brought together more than 100 experts of the Nigerian disaster management community. Furthermore, a technical workshop took place at the premises of NEMA, focusing on the 2010 floods in Sokoto State as a case study with the aim of analyzing the institutional capacities and cooperation of the stakeholders.

For further information >> [UN-SPIDER News](#)



6. Technical Advisory Mission to Bangladesh

In March 2011 the Government of Bangladesh, through the Disaster Management & Relief Division, invited the United Nations Office for Outer Space Affairs to conduct a Technical Advisory Mission in the framework of the UN-SPIDER Programme. UN-SPIDER organized the Technical Advisory Mission to Bangladesh from 19 to 23 June 2011. The mission team comprised eight experts from different regional and international institutions and organizations. Besides meetings with representatives of twelve national institutions that work with space-based- and geo-information and/or disaster management, a one day workshop was organized as a part of this Technical Advisory Mission by the Bangladesh Meteorological Department (BMD) and the Comprehensive Disaster Management Programme (CDMP). The workshop was inaugurated by the Minister of Food and Disaster Management. Over 50 persons participated in the workshop. The workshop and meetings with the stakeholder departments provided insight into the current practices of disaster management and the state of usage of space technology for disaster management.

For further information >> [UN-SPIDER News](#)

7. UN-SPIDER at the OGC Plenary week

At the invitation of Feng Chia University GIS Centre (FCU GIS), a UN-SPIDER representative participated at the Open Geospatial Consortium (OGC) Plenary week in Taiwan and at the related International Geospatial Interoperability Day. A field trip to witness the use of advanced real-time monitoring technologies and geospatial data for disaster management was organized, as well as a visit to the Space Agency NSPO, and to the National Central University GIS Labs. Having better and faster access to Formosat satellite imagery for disaster management purposes was discussed extensively, given the proven value of that data. A number of custom GIS and Remote Sensing capacity building and training opportunities that are relevant for disaster management work and organized regularly at the visited local Universities were also identified.

For further information >> [OGC Event](#)

8. Sustainable Future of Outer Space Activities discussed at the Outer Space Committee

VIENNA, 12 June (UN Information Service): The United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) concluded its fifty-fourth session and its deliberations over ways and means to maintain outer space for peaceful purposes and to ensure that space technology and its applications continue to benefit many areas critical to all humanity. The Committee dedicated its first day to the commemorations of two remarkable anniversaries: 50 years of human space flight and the 50th anniversary of the first session of the Committee, adopting a Declaration that reaffirmed the importance of the use of outer space for peaceful purposes and common efforts to use space science and technology and their applications to preserve planet Earth and its space environment for future generations. Ministers, heads of space agencies, astronauts and cosmonauts, including Alexey Leonov, the first person to perform a spacewalk, and other dignitaries addressed the pivotal role of the Committee over the course of 50 years in enhancing international cooperation in space activities for the benefit of all countries and the achievements of the 50 years of human space flight, which began on 12 April 1961, when Yuri Gagarin became the first human to orbit the Earth. The crew of the International Space Station paid tribute to Yuri Gagarin and to all those who have followed him.

For further information >> [UNIS Vienna](#)

Community News

9. Sentinel Asia supports disaster response to floods in Tajikistan

In June 2011, flash floods were caused by heavy rain falls, causing severe damage to infrastructure in Asht, Ganjin Regions and Penjikent city in northern Tajikistan. Sentinel Asia supported the response to the floods through its Web GIS service. Sentinel Asia is a voluntary-basis initiative led by the Asia-Pacific Regional Space Agency Forum (APRSAP) to support disaster management activities in the Asia-Pacific region by applying web GIS technology and space-based technology such as Earth Observation satellite data.

For further information >> [Sentinel Asia](#)

10. International Charter activated for volcano eruption affecting Chile and Argentina

In June, the International Charter Space and Major Disasters supported Chile and Argentina when the Puyehue-Cordon-Callue volcano erupted about 800km (500 miles) south of Santiago. The activation was requested by SIFEM (Argentina Civil Protection) on behalf of ONEMI (Chile Civil Protection), and by UNOSAT on behalf of UNEP/OCHA. Mapping products and image products are available on the Charter website.

For further information >> [International Charter Space and Major Disasters](#)

11. RCMRD collaborates with ECHO/UNISDR on Regional Training Workshop

The workshop from 30 May to 2 June 2011 sought to provide support towards the development of national disaster databases in the Horn of Africa and the active usage of GIS and Remote Sensing for disaster management and early warning. The development of national disaster databases represents a low-cost, high impact strategy for visualizing risk patterns and trends and their relationship to development indices such as poverty. It aimed at developing national institutional capacities in managing risk information systems to inform decision-making processes in respect to risk reduction and climate change adaptation measures as well as early warning and preparedness in particular to drought risk. The Regional Centre for Mapping of Resources for Development (RCMRD) was established in Nairobi, Kenya in 1975 under the auspices of the United Nations Economic Commission for Africa and African Union, and is one of UN-SPIDER's Regional Support Offices.

For further information and registration >> [RCMRD](#)

12. ADRC conducted an expert group meeting in response to the Japan Earthquake

The Asian Disaster Reduction Center (ADRC) conducted an expert group meeting entitled "Toward Creative Reconstruction from the Great East Japan Earthquake" with the International Recovery Platform (IRP), the United Nations International Strategy for Disaster Reduction (ISDR), the UN Economic and Social Commission for Asia and the Pacific (ESCAP), the UN Human Settlements Programme (UN-HABITAT). Approximately 70 experts and observers attended this meeting to provide valuable advice to Japanese experts working on recovery and reconstruction in Japan and to identify the hard-learned lessons from this painful disaster experience in Japan so that they can be put to use in disaster risk reduction efforts in other countries.

For further information >> [ADRC](#)

13. Nigeria prepares to launch two earth observation satellites

Nigeria has concluded plans to launch into orbit two satellites, NigeriaSat-2 and NigeriaSat-X on 7 July 2011. The intended usage of imageries from NigeriaSat-2 and Nigeria Sat-X is for broad area coverage inclusive of land use, geospatial analysis and environmental change monitoring. It will also be used for mapping, accurate geo-location and resale. NigeriaSat-2 is expected to provide a maximum of 250 images per day, while imagery volume from NigeriaSat-X has been established to be a handful of images per day, sharing many of the same storage and processing capabilities from the NigeriaSat-2 system.

For further information >> [xinhuanet](#)



14. NASA flights seek to improve view of air pollution from space

To fulfil its larger research missions, NASA started the campaign called DISCOVER-AQ, which stands for Deriving Information on Surface conditions from Column and Vertically Resolved Observations Relevant to Air Quality. It is one of the five Earth Venture classes of investigations selected last year as part of NASA's Earth System Science Pathfinder program. Two NASA research airplanes will fly over the Baltimore-Washington region and northeast Maryland this summer as part of a mission to enhance the capability of satellites to measure ground-level air quality from space. A fundamental challenge for spaceborne instruments monitoring air quality is to distinguish between pollution high in the atmosphere and pollution near the surface, where people live. The new NASA field campaign will make measurements from aircraft in combination with ground-based observation sites to help scientists better understand how to observe ground-level pollution from space in the future.

For further information >> [NASA](#)

15. Satellite programs aid emergency crews battling wildfires

Multiple fire fighting agencies are using imagery provided by Landsat 5 and 7, Aqua, and Terra satellites to combat wildfires that continue to blaze across Arizona, United States. When the location of a wildfire is found, emergency managers can evacuate people in the path of the fire and pinpoint where water and fire fighters need to go. In addition to providing information used to map the susceptibility of the forests to wildfires, the satellites can also provide emergency management agencies with data to gauge the extent of damage that was done over burnt areas. For further application, once a satellite has taken an image of the land after the wildfire has been contained, emergency managers can distinguish areas of land that have suffered extensive burning from those that remain intact. From this, officials can work to determine the cause of the wildfire and towards preventing another one from happening.

For further information >> [USA TODAY](#)

16. RapidEye reveals full archive through EyeFind

RapidEye is a German geospatial information provider focused on assisting in decision-making through services based on their own Earth Observation imagery. The company announced recently their new tool that allows users to browse its entire archive, called EyeFind. EyeFind allows customers to browse the entire RapidEye Library, its rapidly growing archive, based on date, cloud cover and product type. Advanced options allow for parameters to be entered on a map or for a shape file to be uploaded outlining an area of interest. Once the customer has located their needed images, an inquiry can be sent to RapidEye through EyeFind for a quote on price and an estimated delivery time.

For further information >> [EARSC](#)

17. CEOS and ISU to use Earth Observation satellites to detect bugs

Space assets, like telecommunication-, location-, navigation- and remote sensing satellites can play a significant role in preventive and therapeutic medicine on a global scale. Earth Observation satellites are not able to map diseases directly but can monitor the indicators that are associated with disease outbreaks. This information can be processed using mathematical models and augmented by data from ground-based, seaborne and airborne observation systems. The project Space for a Health Information Network on Earth (SHINE) provides links between some 29 diseases, the indicators influencing their outbreak or distribution and the space-borne Earth Observation systems which could be used to monitor these indicators. A continual goal of SHINE is to integrate multiple data systems in order to provide better health care solution. CEOS, the international Committee on Earth Observation Satellites is supporting applications of Earth Observations to benefit society in various ways, and expressed high interest in this project.

For further information >> [SatNews](#)



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 International Expert Meeting: Crowdsourcing Mapping for Preparedness and Emergency Response Vienna, 5-6 July 2011

In recent years, advancements in technologies have made it possible for virtual communities such as OpenStreetMap, Ushahidi, Sahana, CrisisMappers, Virtual Disaster Viewer, Google MapMaker and INSTEDD to provide increasing support to disaster preparedness and emergency response efforts. Important cornerstones of this virtual effort are the possibility to access and take advantage of post-disaster satellite imagery as well as the use of other space-based technologies such as telecommunications satellites and global navigation satellite systems. Taking note of the need to connect these pioneering communities with the space industry as well as the disaster management community, the UN-SPIDER Programme is carrying out a one-year project (“Space-based information for Crowdsourcing Mapping”) aiming at identifying specific actions that could ensure a closer cooperation among the three communities. The first activity of this project will be an Expert Meeting to be held in Vienna to discuss strategies that will contribute to supporting civil protection and emergency management agencies to make use of products generated by such groups in areas of preparedness and emergency response and provide a better understanding to these groups on the specific needs of the disaster management community.

Discussions will include: Feedback from experts from the disaster management community on how information has to be generated and/or tailored to ensure that it can be used effectively, novel potential applications and products which could be elaborated by the crowd-sourcing communities that can support preparedness and emergency response, and how to build upon existing solutions to facilitate the sharing of information to the emergency management community. Additionally, we will also be discussing strategies on how to adequately address intellectual property and copyright concerns. The first Expert Meeting will bring together 60 leading experts representing crowd-sourcing communities, space agencies, disaster management and civil protection agencies, NGOs, private companies, and regional and international organizations.

A second expert meeting on this topic is planned for 16 November 2011 in Geneva.

For more information: [UN-SPIDER Expert Meeting on Crowdsourcing Mapping](#)

FIRST ANNOUNCEMENT: United Nations International Conference on Space-based Technologies for Disaster Risk Management “Best Practices for Risk Reduction and Rapid Response Mapping”, Beijing, 22-25 November 2011

One year after the successful opening of the UN-SPIDER office in Beijing in November 2010, the first “United Nations International Conference on Space-based Technologies for Disaster Risk Management” will be hosted at the new location. The conference aims at bringing together up to 200 participants including disaster managers, policy makers, and providers of space technology solutions, tools and applications from Government, NGOs, Academia and the corporate sector. The focus of the conference will be to share and discuss “Best Practices for Risk Reduction and Rapid Response Mapping”.

The three major topics will be

- Global datasets and information for risk reduction



- Rapid response mapping: opportunities and challenges
- Networks: building upon and strengthening existing capacities

Expected outcomes of this conference are to strengthen the use of space-based information for disaster risk reduction by building the SPIDER Thematic Partnership to reach the goals of the Hyogo Framework for Action, and to enhance the utility of rapid mapping products and services to serve precise needs during the emergency response. Furthermore, an appraisal of the recent technology trends and programmes contributing to the space technology use in disaster risk management and an updated map of institutions and efforts focusing on the use of space-based applications for DRR and ER are expected outcomes of this conference.

For more information: [UN International Conference in Beijing](#)

Upcoming events supported by UN-SPIDER

Pacific Platform for Disaster Risk Management 2011 “Working together to protect Pacific communities from the risks posed by natural and climate related hazards”, Auckland, 1-5 August 2011

The Pacific Platform for Disaster Risk Management (DRM) 2011 is an opportunity for the sharing of experiences and knowledge in relation to initiatives that are being implemented by Pacific island countries and territories to strengthen resilience to disasters. The Platform will bring together disaster managers of 22 Pacific island countries and territories, chief executive officers of Ministries of Finance/Planning and Disaster Management, and representatives of national, regional and international development partner organizations, donors, civil society and the private sector. The functions of the Platform as per its establishment in 2008 are to:

1. Strengthen coherence and coordination of regional disaster risk management support through joint initiatives and joint work programming, especially in relation to National Action Plans.
2. Exchange information and lessons learned in key thematic and technical areas that have formed for DRM such as Climate Change Adaptation, education, safer hospitals and early warning.
3. Influence and establish policy through advocacy and informed dialogue by recognizing and realizing the essential links between science and technical levels to the political and policy level. This will contribute to the setting of regional DRM priorities and policy and, establishing linkages between it and National Platforms, various regional meetings, inter-governmental processes, and the Global Platform for Disaster Risk Reduction.
4. Improve reporting and monitoring and evaluation of progress in DRM at regional and national levels. This will ensure that implementation of the Pacific Disaster Risk
5. Reduction and Disaster Management Framework for Action 2005 – 2015 and the Hyogo Framework for Action follow a minimum set of indicators and benchmarks and will allow an accurate gauge of progress against the objectives set under the regional and global frameworks, respectively.

UN-SPIDER will organize a side event bringing together all those who are interested in improving the coordination of access and use of space-based information and technologies to support disaster risk management in the Pacific region. Deadline for registration for the meeting is 11th July 2011.

For further information >> [PACIFIC DISASTER NET](#)



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.*