



UN-SPIDER

April 2012 Updates

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UN-SPIDER at a glance

UN-SPIDER Bonn Workshop successfully concluded

From 24 to 26 April, the UN-SPIDER Programme carried out its Fifth United Nations International UN-SPIDER Bonn Workshop on Disaster Management and Space Technology. The workshop focused on strengthening global synergies through knowledge management, portals and networks bringing together more than fifty experts from Australia, Asia, Europe, Africa and Latin America. It provided the forum for UN-SPIDER to gather elements to update its knowledge management strategy, particularly regarding the UN-SPIDER Knowledge Portal.

The workshop allowed participants to exchange experiences and discuss synergies among online portals dealing with disaster and risk management or space issues. By working closer together, portals can be tailored more tightly around user needs. To that end, the participants not only discussed issues focusing on the structure and content of such portals and networks, but also talked about e-learning environments and the use of social media tools for a more user-driven content compilation.

Learn more: [UN-SPIDER Portal](#)

UN-SPIDER supports space applications workshop in India

UN-SPIDER supported a training workshop on "Space technology applications in disaster management and emergency response" in New Delhi India organized and hosted by the National Institute of Disaster Management (NIDM). The event provided a platform to the state-level disaster management authorities and providers of space based information to discuss the latest systems, tools, technologies, products and best practices.

UN-SPIDER designed the programme with the help of NIDM and National Disaster Management Authority (NDMA). It brought together 25 key participants and experts. These experts provided information on latest trends in disaster risk reduction and space technology interventions. The participants shared best practices and also conducted brainstorm sessions to discuss the existing gap between the end-users and technology providers. The UN-SPIDER and NIDM have hosted such events since 2010. This was the third such workshop in the series based on the recommendations of previous workshops organized by UN-SPIDER and NIDM since 2010.

Learn more: [UN-SPIDER Portal](#)

UN-SPIDER inaugurates international training course in India

On 9 April 2012 UN-SPIDER inaugurated the four-week long international training course "Space technology applications in Disaster Risk Reduction" organised at the Centre for Space Science Technology Education for Asia and the Pacific (CSSTEAP), the UN affiliated regional centre based in Dehradun, India. The overall objective of this course is to strengthen the knowledge of participants regarding how space-based information, services and solutions can be used to reduce disaster risks and losses. During the first two days of the course, UN-SPIDER provided a brief overview on the relevance of space technology in the context of the Hyogo Framework for Action and addressed the effective use of space technology for disaster-risk reduction. UN-SPIDER also conducted interactive sessions with participants to understand the current situations in the countries represented by participants and provided insights about possible support from UN-SPIDER.

The course was jointly conducted by the Indian Institute of Remote Sensing of ISRO, UN-SPIDER, UNESCAP and UNU. UN-SPIDER sponsored 5 officials from Bangladesh, Sri Lanka, Myanmar and Solomon Island. This course is one of the follow-up actions carried out by UN-SPIDER after the recent technical advisory missions to Bangladesh, Sri Lanka and Myanmar. A total of 27 participants from 17 countries benefited from the course.

Learn more: [UN-SPIDER Portal](#)

UN-SPIDER facilitates support for locust outbreak in Northern Africa

UN-SPIDER is facilitating support to the Food and Agricultural Organization of the United Nations (FAO) in response to a locust outbreak that is taking place in southwest Libya along the border of Algeria and rapidly spread into adjacent areas of southeast Algeria. The UN-SPIDER Regional Support Office in Kenya (RCMRD) tasked and downloaded imagery from the US satellite EO-1 and is working together with the Regional Support Office in Algeria (ASAL) to generate useful information. The U.S. Geological Survey (USGS) also tasked Landsat acquisitions of the affected area over the next two months. Other options are also being reviewed.



In February 2012, the desert locust outbreak suddenly developed. Gregarizing adults laid eggs throughout March in both countries. Monitoring and control operations are hampered by the remoteness of the area as well as heightened insecurity due to 2011 events in Libya. A second generation of hatching commenced in late March and early April in southwest Libya and southeast Algeria. FAO observes that hatching was recently seen north of Illizi and groups of adults were copulating north of the outbreak area in northwest Libya near Ghadames and the Al Hamada Al Hamra plateau. This confirms the earlier suspicion that infestations are more widespread than indicated by the ground survey results. The situation is potentially very dangerous because swarms could eventually invade the northern Sahel of West Africa at the beginning of the rainy season when farmers are planting.

Learn more: [UN-SPIDER Portal](#) and [FAO](#)

Enhancing links with BGR in Hannover, Germany

The Federal Institute for Geo-Sciences and Natural Resources of Germany (BGR) has a long tradition in the area of geological hazards (earthquakes, volcanic eruptions, mass movements, subsidence). In recent decades, BGR has provided technical advisory support to many countries in Asia, Africa and Latin America regarding risks related to such geological hazards. Recognizing this expertise UN-SPIDER conducted a visit to BGR to explore opportunities for cooperation.

The visit allowed UN-SPIDER to present its activities to staff of BGR, and to become aware of on-going and planned activities by BGR scientists in Pakistan, Indonesia and Latin America; as well as to become aware of examples regarding the use of remote sensing techniques in a variety of applications including geo-risks in Germany and elsewhere. In Pakistan, where the Space Agency of Pakistan SUPARCO serves as a Regional Support Office for UN-SPIDER (RSO), BGR has been supporting government agencies in the assessment of risks related to landslides. In Indonesia, where UN-SPIDER is in the process of completing an agreement with LAPAN for it to host an RSO as well, BGR has also been active in risks associated with volcanic eruptions, it supported efforts to establish the Indonesian Tsunami Warning System, and supported the government regarding new disaster risk reduction and emergency response agency.

During the last decade BGR supported Central American countries, where UN-SPIDER is providing technical advisory support, through the elaboration of maps containing information focusing on geo-risks associated with landslides, volcanic eruptions and earthquakes that are allowing government agencies in these countries to design strategies to adapt their societies to such hazards.

Learn more: [UN-SPIDER Portal](#)

News from our Regional Support Offices

New look for UN-SPIDER's Regional Support Offices

In line with its 2012 Bonn Workshop targeting global synergies through portals, UN-SPIDER launched a new section in the Knowledge Portal to enhance the visibility of the Regional Support Offices (RSO). Each of UN-SPIDER's 12 RSOs around the world is now presented on its own profile page. The structure and content have been developed in a cooperative process at and in the aftermath of the February RSO Meeting. Providing information about recent activities, available expertise, trainings and contact information these new profiles allow users and visitors to quickly get an overview of the expertise provided in their region and to get in touch with the RSOs.

Stressing its interactive and user-driven approach to knowledge management, over time UN-SPIDER will grant editing rights to the RSOs enabling them to

UN-SPIDER participates in meeting of UN Committee of Experts on Global Geospatial Information Management

More than 50 global geospatial experts got together in Amsterdam on 24th April 2012, including David Stevens representing UN-SPIDER, to discuss the "Future trends in geospatial information management: the five to ten year vision". The invited experts and visionaries came from across a wide range of aspects of the geospatial community – from data collection experts, academics and major users of geospatial information to leading figures from the private sector and the Volunteer and Technical Community.

Participants were invited to contribute their views on the emerging trends in the geospatial world. Discussions carried out during the meeting will enable the leaders of this Visionary Group to develop further iterations on a document to be presented to the United Nations Committee of Experts on Global Geospatial Information Management for review at the second formal meeting in New York in August (13-15 August 2012). Final editing will take place based on the content of the discussions at this meeting and a final paper will be presented at the Second High-Level Forum on GGIM in Qatar in 2013.

Learn more: [GGIM](#) and david.stevens@unoosa.org

International Working Group on satellite based emergency mapping formally established

Some 20 representatives from EU-JRC, USGS, GEO, UNOOSA, SERVIR, DLR, CSA/Athena Global, SERTIT, ITHACA and Sentinel Asia gathered in Ispra, Italy to formally establish the International Working Group on satellite based emergency mapping (IWG-SEM). This was a follow-up to the first meeting hosted by DLR in Hohenkammer in September 2011. The vision of IWG-SEM was defined as "Supporting disaster response by improving international cooperation in satellite based emergency mapping". The mission statement that the participants agreed upon refers to establishing best-practices between emergency-mapping programmes to enable better collaboration and capacity coordination, with a view to also define jointly a set of professional standards for emergency mapping and data use.

A content management system and online forum will be set up by the European Joint Research Centre (JRC) for document sharing and collaboration, and monthly teleconferences will be also held. It was proposed that the group should meet twice a year during one plenary meeting and one technical meeting, with the next meeting suggested to be held 9-10 October 2012 in Washington.

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keep their profiles up to date and to tailor content more closely to the region's end-user needs.

Learn more: [UN-SPIDER Portal](#)

CATHALAC tracks hotspots in Central America

Between March and May of every year, farmers in Central America use slash and burn techniques to prepare soils for maize, beans, and other crops. Unfortunately, such practices can lead to forest fires which degrade the natural environment in this region. Recognizing the usefulness of space-based imagery to track hotspots related to such fires, CATHALAC, serving as a UN-SPIDER Regional Support Office (RSO), elaborated the most recent map of such hotspots for Central America.



The analysis was carried out in the context of SERVIR - a Regional Visualization and Monitoring System created by NASA, USAID, CATHALAC and other partners. The analysis observed hotspots across Central America for the dry season 2012 using satellite imagery obtained from MODIS. For the period January till March 2012 5,533 hotspots have been identified caused by agricultural fires, forest fires and volcanic activities representing possible hazards for loss of forest or threatening vulnerable areas.

Through such efforts, CATHALAC exemplifies access to space-based data that is used to generate space-based information which is then sent to decision makers throughout Central America and the Caribbean to support disaster-risk reduction and emergency response operations.

Learn more (Spanish): [SERVIR](#) and [Prensalibre](#)

ADRC: Cooperative project for the Hyogo Framework for Action

The Asian Disaster Reduction Center (ADRC) Cooperative Project for Promoting the implementation of the Hyogo Framework for Action (HFA) was conducted to provide support to the governments of ADRC member countries to help them strengthen their commitment, expand resources, and to make further progress toward the expected goals of the HFA. The Hyogo Framework for Action is the first plan to explain, describe and detail the work that is required from all different sectors and actors to reduce disaster losses. It was developed and agreed on with the many partners needed to reduce disaster risk - governments, international agencies, disaster experts and many others - bringing them into a common system of coordination.

ADRC called for project proposals from the member countries, then select-

ing the proposal from Tajikistan. To ensure the effective implementation of the project, it was decided that a peer review should be conducted over the course of the project's implementation. The project's objective was to enhance disaster-risk-assessment capacity (focusing on landslides) in the Khuroson district of Khatlon province. The project team conducted field surveys in the area affected by the massive 2009 landslide disaster in the Khuroson district, and reported on the survey results.

Learn more: [ADRC](#)

Károly Róbert College wins national competition and enhances networking with Romania

UN-SPIDER's Hungarian RSO, the Károly Róbert College, was the winner of the Hungarian national competition „Digital Hungarian Maps 2011”. Their winning database was set up to monitor the impacts of catastrophes on the environment, such as the 2010 Kolontar red mud catastrophe, the biggest environmental disaster in Hungary in recent years. The database contains laser scanned data and hyperspectral values for different objects.

Furthermore, delegates of the Károly Róbert College held a series of presentations at the University of Baia Mare in Romania. Prof. Tomor was talking about the applied scientific methods used for the management of catastrophes in Hungary in the last few years. His presentation showed how to take advantage of GIS and remote sensing technologies in the case of natural disasters. His presentation was very welcomed by the Romanian experts, as they face similar tasks in and after cases of emergency.

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News from our Community

International Charter activated for floods in Paraguay

Heavy rain, which began in March, has caused the Pilcomayo river in Paraguay to overflow; resulting in floods throughout the country. An estimated 13,000 families have been isolated due to the floods. The main affected areas are: Puerto Casedo, Pinasco (North of the Country), Villa Choferes del Chaco, Tte. Manuel Irala Fernandez, Cruce Pioneros (Central area of the country) and Teniente Esteban Martinez, Cacique Sapo (South of the country).

The International Charter Space and Major Disasters was activated by Sistema Federal de Emergencias (SIFEM) on 30 April 2012.

Learn more: [International Charter](#)

India successfully launches Radar Imaging Satellite

On 26 April 2012, the Indian Space Research Organisation (ISRO) successfully launched their first indigenously built all-weather Radar Imaging Satellite, RISAT-1. RISAT-1, weighing 1,858 kg and being the heaviest satellite launched yet by the carrier PSLV, is an active microwave remote sensing satellite carrying a synthetic aperture radar (SAR) that will operate in the C-band. This means that RISAT-1 can send imagery of the earth's surface at day and night and under any weather conditions. Orbiting the earth at a height of 536 km in a daily routine of 14 orbits with a repetitive cycle of 25 days, the satellite is a very valuable resource for space-based information for disaster response and disaster risk management. RISAT-1 has an expected mission life of five years. ISRO Chairman K. Radhakrishnan called the launch a "grand success".

Learn more: [The Hindu](#)

Envisat: Services interrupted

After just having celebrated its 10th anniversary of service on 1 March 2012, ESA's Envisat stopped sending data to earth. The last contact between the satellite and the ground station in Kiruna, Sweden was established on Sunday, ever since no data has been received. ESA's mission control is working to re-establish contact with the satellite. Launched in 2002, Envisat has orbited Earth more than 50 000 times delivering thousands of images and other data used for example for climate change studies or natural disaster mitigation supporting more than 4000 projects in over 70 countries.

Originally Envisat was supposed to send imagery and data until 2007 having thus served twice as long as it was designed for. ESA had counted on the satellite to transmit data until 2014, before its successor satellite mission Sentinel would take up service. Volker Liebig, ESA's Director of Earth Observation Programmes, said: "The interruption of the Envisat service shows that the launch of the GMES Sentinel satellites, which are planned to replace Envisat, becomes urgent."

Learn more: [ESA](#)



Upcoming events

UN-SPIDER Expert Meeting on Crowdsourcing Mapping: Now open for applications

The UN-SPIDER "Expert Meeting on Crowdsourcing Mapping for Disaster Risk Management and Emergency Response" to take place in Vienna on 17-19 July is now open for applications. This Expert Meeting will bring together leading experts representing crowd-sourcing communities, space agencies, disaster management and civil protection agencies, NGOs, private companies, and regional and international organizations. Experts currently working in any of the relevant areas (disasters, crowd-source mapping, space-based information) are invited to apply until 8 June 2012 on the Knowledge Portal. Please note that attendance will be strictly limited to 70 experts. We are looking forward to your application!

Learn more: [Knowledge Portal](#)

Secure World Foundation: Workshop on Use of Space Applications in Humanitarian Operations

From 16 to 18 May, Secure World Foundation together with its partners Space Research Centre PAS, The Main School of Fire Service (SGSP), GEONETCAB and the Seventh Framework Programme is organizing a Workshop on the Use of Space Applications in Humanitarian Operations. The workshop will take place in Warsaw and focus on presenting and discussing optimal utilization of space applications in support of humanitarian efforts during large-scale crises.

The core parts of the workshop are a full-day simulation of humanitarian operation (with the active involvement of all participants) and a half-day evaluation and discussions. The simulation is designed as an interactive game and it will foster a large number of topics through a realistic exercise.

Learn more: [Secure World Foundation](#)

The 8th International Conference on Geo-information for Disaster Management

Anticipating the importance of geo-information for disaster and risk management, a group of researchers, professionals and vendors began a worldwide discussion and cooperation on Geo-information for Disaster Management (Gi4DM) in 2005. Since then Gi4DM is organised on an annual basis. From 13 to 15 December 2012, the Public Safety Districts of the Netherlands will host the 8th Gi4DM Conference that will gather a worldwide group of researchers and experts. It takes place in the city of Enschede and aims at exchanging experiences and ideas in order to shape up relevant and appropriate solutions to crisis response issues.

The Conference will include the conduction of test scenarios, exercises, presentations and discussion sessions. Gi4DM is coordinated by the JB GIS since 2008. The Gi4DM 2012 Advisory Scientific Committee represents the Joint Board of Geospatial Information Societies (JB GIS) ad hoc Committee on Risk and Disaster Management and the international organisations supporting the VALID project, in which UN-SPIDER is involved.

Learn more: [Gi4DM](#)

UNOOSA co-organises Rio+20 side event: Space for Sustainable Development

Space for Sustainable Development: This side event of the Rio+20 Conference is being organized by the United Nations Office for Outer Space Affairs (UNOOSA), together with the Governments of Austria and Brazil and will be held on the 19th June 2012 from 15:30 – 17:00hrs just before the planned United Nations Conference on Sustainable Development (UNCSD), also known as Rio+20. The proposed side event will focus on space and its contributions leading to a convergence on the use of space-based technologies for sustainable development. The event will assist in identifying the next actions that would embrace Rio+20 outcomes. The 90-minute side event will consist of contributions from invited panellists, followed by a discussion. The Minister for Science, Technology and Innovation of Brazil, H.E. Dr. Marco Raupp, will open the side event and will be followed by the invited experts covering the main Rio+20 issues including Health, Food, Water, Oceans and Disasters. The importance of space-derived geospatial data will also be addressed. Participants of the Rio for the Summit are invited to join and to contribute to this side event as well.

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About UNOOSA/UN-SPIDER

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.