



# UN-SPIDER

## January 2011 Updates

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

### UN-SPIDER News

#### 1. Version 1.0 of the UN-SPIDER Knowledge Portal released

With a number of new features and an overhaul of the layout the UN-SPIDER Knowledge Portal has dropped its "beta" status and is now online with Version 1.0. The most prominent among the new features is the functioning **Space Application Matrix**, an animated information retrieval tool at the center of UN-SPIDER's knowledge management efforts. The tool allows the user to combine disaster type, disaster management cycle phase, and satellite technology to render relevant search results from a database of case studies. Furthermore, a **filtered search** has been implemented, through which the user can browse the Portal content and combine several search criteria to refine the results. A prototype of the Visual Globe is also available, offering a platform for displaying geo-referenced content of the Knowledge Portal. Another new section that should be of interest is a page for UN-SPIDER **publications**, where visitors to the Portal find publications by UN-SPIDER in different media, such as PDF versions of printed papers, links to articles published in magazines, and press releases related to the work of the Programme. A compilation of **training opportunities** is also online and its content will be integrated into the calendar soon, allowing the creation of an online database of such offers. In general, **technical and layout improvements** lead to a better navigation and usability of the Portal, and we invite all our users to browse through the site and explore these innovations!

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

#### 2. Meeting at the Permanent Mission of Germany to the UN in Vienna: Enhancing global cooperation in satellite-based emergency mapping

Building on a first successful meeting at the Permanent Mission of Germany and organized together with the German Aerospace Center (DLR) on 3 November 2010 with the title: "Benefits of space-based support to disaster management", a second event was organized to discuss the topic of: "Enhancing global cooperation in satellite-based emergency mapping". Around 25 persons attended the meeting, representing, among others, the Permanent Missions from Ecuador, Colombia, Venezuela, Iran, Italy, Spain, and the Russian Federation. On

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behalf of UNOOSA/UN-SPIDER Mr. Shirish Ravan and Mr. Jörg Szarzynski attended the meeting which was officially opened by the German Ambassador, H.E. Rüdiger Lüdeking. An introductory presentation was held by Dr. Stefan Voigt, Head of the Center for Satellite-based Crisis Information (ZKI) of DLR. It was concluded by a number of Member State representatives that there is a growing need for improved coordination with regard to satellite-based emergency mapping and standardized, quality assured products on the international level.

### **3. UN-SPIDER at ENHANS International Workshop “Extreme Natural Hazards and Disaster Risk in Africa”**

The Extreme Natural Hazards And Societal Implications (ENHANS) International Workshop on Extreme Natural Hazards and Disaster Risk in Africa was held in Pretoria, South Africa, from 17 to 20 January 2011. The Workshop was hosted by the Aon Benfield Natural Hazard Centre, University of Pretoria, and sponsored by ENHANS/International Council for Science (ICSU), Global Ocean Observing System (GOOS), and the United Nations Educational, Scientific and Cultural Organization (UNESCO). Important goals of the ENHANS project are to improve the understanding of critical phenomena associated with extreme natural events and to analyze impacts of the natural hazards on sustainable development of society. Furthermore the project aims at establishing links and networks with the international organizations involved in research on extreme natural hazards and their societal implications. UN-SPIDER supported the workshop programme committee, and Senior Expert Robert Backhaus gave an invited lecture on the UN-SPIDER Programme, highlighting the Programme’s activities in Africa. As an outcome of the final discussion, a working group was established and mandated to prepare a formal recommendations document.

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

### **4. 3D-UDOP Geo-viewer to enhance situational awareness concerning seismic risk in Guatemala**

In an effort to showcase the capacity of geo-viewers to enhance situational awareness concerning risks associated with earthquakes and volcanic eruptions, Thermopylae Sciences and Technology of the United States, the National Coordinating Agency for Disaster Reduction (CONRED), Mariano Galvez University, and the Center for Natural Disaster Research and Mitigation (CIMDEN) from Guatemala are joining forces to demonstrate the capacities of the 3D-UDOP (for User Defined Operating Picture) geo-viewer. The viewer was developed by Thermopylae S&T to display information about these risks in Guatemala and to facilitate the visualization of potential impacts in case of earthquakes in particular areas of the country. This activity is conducted in the context of the *SPIDER Thematic Partnership for Latin America and the Caribbean*, which has been established by the UN-SPIDER Programme to support National Platforms for Disaster Reduction that have been set up according to the guidelines proposed by ISDR as vehicles to reach the goals proposed in the Hyogo Framework for Action.

*For further information >> [UN-SPIDER News](#), [3D UDOP](#), [UN-SPIDER LAC Thematic Partnership](#)*

### **5. UN-SPIDER contributes to the 17th GEO UIC Meeting**

UN-SPIDER participated and contributed to the 17th Group on Earth Observations/User Interface Committee (GEO/UIC) Meeting which was held in Vienna from 25 to 28 January 2011. UIC participants discussed work to be done by the Committee in 2011 and to move forward on user engagement strategies of particular relevance to GEO. UN-SPIDER Programme Coordinator David Stevens delivered a presentation on the first day of the meeting, highlighting the work of the United Nations Office for Outer Space Affairs (UNOOSA), the current topics being discussed by the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), and more specifically on the need to ensure that GEO builds upon the established network of end users already working with the UN-SPIDER Programme. On the last day of the meeting the participants had the opportunity of visiting the United Nations Offices in Vienna including the offices of UNOOSA.

*For further information >> [Group on Earth Observations](#)*

## Community News

### 6. Pakistan's SUPARCO preparing maps in the aftermath of the January earthquake

A 7.2 magnitude earthquake occurred in south-western Pakistan on 19 January. The Space and Upper Atmosphere Research Commission (SUPARCO) of Pakistan, which is one of UN-SPIDER's Regional Support Offices, provided pre- and post-disaster satellite imagery and maps produced in a rapid mapping exercise. These maps were provided to the National Disaster Management Authority (NDMA) to support their relief and rescue operations.

*For further information >> [SUPARCO](#)*

### 7. Sentinel Asia contributed to relief efforts in four regions affected by floods

During the month of January, Sentinel Asia has observed four disasters. They included flash floods Sri Lanka, floods in Brunei Darusaalam as well as in Mozambique and Australia. Most of these floods were linked to heavy rainfall and affected hundreds of people. Sentinel Asia provided imagery through its Web GIS service.

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

### 8. International Charter activated for floods in Australia, Brazil and Mozambique, and earthquake in Pakistan

The International Charter Space and Disasters accepted four activations in the month of January, covering the floods in Australia, Brazil and Mozambique, as well as the earthquake in Dalbandin, Pakistan. The Charter was activated by the United States Geological Survey (USGS) on behalf of Emergency Management of Australia, by the Brazilian National Institute for Space Research (INPE), and by the UN Institute for Training and Research/Operational Satellite Applications Programme (UNITAR/UNOSAT) on behalf of the UN Children's Fund (UNICEF). Project Management was taken over by Geoscience Australia, INPE, the European Space Agency (ESA), and UNITAR.

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

### 9. SAFER supporting response to floods in Belgium and Germany

In January, Europe's Services and Applications for Emergency Response (SAFER) delivered mapping products in support of the response to floods in Belgium and Germany. Belgium experienced rising water levels in the Walloon region at the beginning of the month, while Germany received support on several occasions throughout the month and covering several rivers, including Elbe River.

*For further information >> [SAFER](#)*

### 10. TerraLook Version 2.0 (Beta) software released

TerraLook provides easy access to new and historical satellite images for users that lack experience with satellite images, or for anyone looking for a convenient way to obtain and work with these images. Formerly known as the Protected Area Archive, TerraLook combines collections of georeferenced JPEG images with simple visualization and analysis tools to help users explore and utilize the data, and all data are free. The US Agency for International Development (USAID) funded this latest TerraLook upgrade through the Regional Visualization and Monitoring System (SERVIR), an initiative representing a partnership between USAID, the US National Aeronautics and Space Administration (NASA), and numerous other organizations. You are invited to test the newest beta version of TerraLook software, Version 2.0 (beta), and to report on your experiences.

*For further information >> [USGS](#)*

### 11. Satellite data to improve flood forecasting

As the residents of Queensland, Australia, turn to the mammoth task of cleaning up after the devastating floods over the last weeks, data from ESA's Earth observation satellites are showing potential for delivering more timely warnings. The floods in Queensland have been the worst in decades – and with high waters now

reaching parts of the southern state of Victoria, this disaster is not over yet. Although the heavy rains in Australia have been triggered by La Niña, it is thought that climate change may result in more frequent flood events. Clearly, it is becoming increasingly important to improve flood warning and monitoring systems. Through a project funded by ESA's Data User Element, observations from the Advanced Synthetic Aperture Radar (ASAR) on Envisat are now used to increase the reliability of information that is fed into models for monitoring and forecasting floods.

*For further information >> [ESA](#)*

## **12. Developing disaster management capacity with Earth Observation**

The Group on Earth Observations (GEO) has chosen to address the challenge of hurricane and more generally disaster management in the Caribbean through its regional end-to-end pilots. The Caribbean Satellite Disaster Pilot (CSDP) is a regional project under GEO Task DI-09-02b. It was established in 2009 in close cooperation with the Committee on Earth Observation Satellites (CEOS) and regional institutions such as the Caribbean Disaster and Emergency Management Agency (CDEMA), the Caribbean Institute for Meteorology and Hydrology and the University of the West Indies (UWI). The objectives of the pilot are threefold: (i) to demonstrate the effectiveness of satellite imagery to strengthen regional, national and community level capacity for mitigation, management and coordinated response to natural hazards; (ii) to identify specific satellite-based products that can be used for disaster mitigation and response on a regional level; (iii) to identify capacity building activities that will increase the ability of the region to integrate satellite-based information into disaster management initiatives.

*For further information >> [earthzine](#)*

## **13. European Centre of Excellence in Earth Observation research training**

The University of Leicester (UK) is launching a "Centre of Excellence in Earth Observation Research Training" with the aim of teaching and training young researchers to use the latest satellite technologies to tackle environmental issues. The centre is supported by the "Initial Operations Network for Earth Observation Research Training" (GIONET) project and funded by the European Commission within the Seventh Framework Programme (FP7) and the Marie Curie Programme.

*For further information >> [The Engineer](#)*

## **14. UN: Mobile tech, web services to aid in disaster relief**

Traditional helpers in disaster relief, such as the U.N. and World governments, provided aid after a massive earthquake devastated Haiti in January 2010, leveled Port-au-Prince, claimed 230,000 lives and caused US\$14 billion in damages. Technology also played a role in humanitarian efforts as Haitians buried under rubble sent text messages with their locations and open-source mapping communities mapped the island. To further research technology's role in disaster relief, the United Nations Foundation and its partners commissioned a study from the Harvard Humanitarian Initiative (HHI) on the topic. While the final study is due out in March, the report's initial findings were released last week to coincide with the one-year anniversary of the earthquake. These early results indicate that mobile technology, the open-source community and Web services each have roles in future humanitarian relief missions.

*For further information >> [PCWorld](#)*

## 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](http://www.un-spider.org/events)

## Upcoming events supported by UN-SPIDER

### 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](http://www.gi4dm.org)

## 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](http://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.*