



UN-SPIDER

March 2011 Updates

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UN-SPIDER News

1. SpaceAid resource pages set up to help improve information and data-flow related to the Japan earthquake disaster and for floods in Namibia

Earthquake in Japan: The United Nations Office for Outer Space Affairs (UNOOSA) through its UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) set up a SpaceAid resource page in support of relief efforts for the devastating Japan earthquake disaster reachable at www.un-spider.org/japan-pacific. UN-SPIDER is coordinating with its established networks and other agencies to collect relevant pre- and post-disaster space-based information on the devastating event. Through the UN-SPIDER Regional Support Offices, the nominated National Focal Points in the Pacific region and the leading providers of space-based information and social media resources, UN-SPIDER has put together available space-based information that could represent a significant source for the disaster relief efforts in Japan. Major relief and response websites have identified the UN-SPIDER resource page as an important information and data source, and the Programme continues to work with data providers and value-adders to ensure the information flow. UN-SPIDER has also been cooperating with the International Atomic Energy Agency (IAEA) by means of exchanging data and sharing information. In particular, the Programme has been supporting monitoring activities related to the threat of a nuclear fall-out in Japan and its possible effects for neighbouring countries in the Pacific region.

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

Floods in Namibia: The International Charter Space and Major Disasters accepted the activation request by UNOOSA on behalf of UNDP on 1 April 2011. The Project Manager for this event is the Pacific Disaster Center (PDC). UN-SPIDER is updating a dedicated webpage with information about available space-based resources.

For further information >> [UN-SPIDER Namibia](#), [International Charter Space and Major Disasters](#)

2. SPIDER Thematic Partnership LAC: Using the 3D-UDOP geo-viewer to enhance situational awareness concerning seismic risk in Guatemala

To illustrate the capacity of geo-viewers for enhancing situational awareness concerning seismic risk in Guatemala, the United States Southern Command, Thermopylae S+T 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 joined forces to upload the corresponding information into the 3D-UDOP geo-viewer. Once the information was uploaded, the 3D-UDOP was showcased in two activities: the 2nd Session of the Regional Platform for Disaster-Risk Reduction of the Americas organized by ISDR, the Civil Protection System of the Government of Mexico and other partners, and in the Earthquake and Volcanic Eruption Simulation organized by CONRED, the Central American Coordination Center for Natural Disaster Prevention (CEPRENAC) and the US Southern Command. The effort was conducted under the umbrella of the SPIDER Thematic Partnership for Latin America and the Caribbean, and it showcases the added value of such partnerships that include a number of actors bringing together their expertise on a certain topic.

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

3. SPIDER Thematic Partnership LAC: Second Session of the Regional Platform for Disaster Risk Reduction of the Americas

UN-SPIDER participated in the Second Session of the Regional Platform for Disaster-Risk Reduction of the Americas organized by the International Strategy for Disaster Reduction (ISDR), the Civil Protection System of the Government of Mexico, and other international partners. The event gathered more than 300 stakeholders from North, Central and South America and also from the Caribbean region. UN-SPIDER organized a side event in the context of the SPIDER Thematic Partnership for Latin America and the Caribbean (TP-LAC) to showcase activities of the following partners: the Argentinean National Commission on Space Activities (CONAE), Thermopylae S+T, Mexico's National Disaster Prevention Center (CENAPRED), and Centre for Space Science and Technology Education for Latin America and the Caribbean (RECTEALC). The session allowed the SPIDER TP-LAC to present examples of the use of space-based information for disaster-risk management, in particular in case of drought and desertification, in particular geo-viewers, their application and training activities.

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

4. Training for use of Disaster Management Tool at German Aerospace Center (DLR)

The Disaster Management Tool (DMT) is a mobile field system that allows field workers and control center officers to interactively enter and retrieve information about the areas of interest. It uses sensors such as GPS receivers for automatic data collection. It allows for an easy and fast flow of the situation information, also across organizational and jurisdictional boundaries. And finally, it provides dynamic and interactive situation maps and reliable data storage. The basic idea of the DMT training, which was attended by one UN-SPIDER expert, was to explore opportunities for a follow-up pilot project together with the Institute for Communication and Navigation (IKN) at DLR and the Italian NGO Cooperazione Internazionale – COOPI, UN-SPIDER's partner within the Disaster Preparedness programme in the South East African and South West Indian Ocean (DIPECHO), a project funded by the European Commission - Humanitarian Aid & Civil Protection (ECHO). The envisaged content of a pilot project within the DIPECHO framework could be to initiate a disaster management exercise by using the DMT system against the background of a disaster scenario in Malawi.

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

5. ENHANS Pretoria workshop recommendations

Fulfilling a mandate from the ENHANS International Workshop on Extreme Natural Hazards and Disaster Risk in Africa which was held in Pretoria, South Africa, in January 2011, a comprehensive recommendations document was prepared by a working group. Based on a summary of specific needs, challenges and achievements regarding natural hazards on the African continent, detailed recommendations are given in order to promote interdisciplinary science and education and to improve monitoring and prediction of extreme natural hazards for the benefit of society. In particular, it is proposed to set up the African Centre for Natural Hazards, Disaster

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Risk Analysis and Management (ACHADEME) as a network of existing research and educational centers, in cooperation with International Council of Scientific Unions (ICSU) bodies, United Nations agencies and other international organizations.

For further information >> [Recommendations Document, ENHANS 2011](#)

6. Closer collaboration with Arab countries: UN-SPIDER gives training course in Riyadh and attends meetings in Jeddah

UN-SPIDER staff visited the Training College of the Naif Arab University for Security Sciences to give a half-day lecture. The goal was to give an overview about the UN-SPIDER Programme and its activities, which met a high interest from the participants. The event was attended by about 40 civil defense managers from eleven Arab countries. In Jeddah, a presentation about the UN-SPIDER Programme was delivered to the Business Continuity Committee of the Islamic Development Bank (IDB) upon invitation of the Bank's Vice President. Furthermore, similar introductions were given to the Secretary General of the Organization of Islamic Conference (OIC) as well as the OIC's Assistant Secretary General, Humanitarian Affairs, and the Director General of the Department of Science and Technology, to the Deputy President for Environmental Affairs of the Presidency of Meteorology and Environment of the Ministry of Defense and Aviation, and to representatives of the Engineering School of the King Abdul Aziz University (KAU). The aim of these introductions was to raise awareness of the UN-SPIDER Programme and to assess potential for future support and cooperation on various activities.

7. Second NIDM/UN-SPIDER workshop in New Delhi

The second NIDM/UN-SPIDER workshop on 'Space Technology Application in Disaster Management and Emergency Response' took place at the National Institute of Disaster Management (NIDM), New Delhi, from 28 to 30 March 2011. The aim of the workshop was to impart Disaster Managers with the knowledge on applications of space technology for disaster management and to help in bridging the gap between the geospatial and disaster management functionaries at various levels, both within States of India and of the South Asian Association for Regional Cooperation (SAARC). It was a continuation of the first workshop that took place in January 2011 at NIDM. During the Workshop, the participants shared their experiences of using of space based information in their respective countries and Indian states. The methodology used for this workshop emphasized on panel discussions and deliberations by participants. As an outcome of the workshop, participants provided recommendations, based on the discussions and exercises on the following topics:

- 1) Lessons learned from recent earthquake and tsunami in Japan,
- 2) Self assessment of geographic information preparedness for disaster management.

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

8. Establishment of a UNGIWG Task Group on Geospatial Information for Humanitarian and Emergency Response

During the 11th Plenary Meeting of the United Nations Geographic Information Working Group (UNGIWG) hosted in Geneva by the World Meteorological Organization (WMO) from 14 to 16 March 2011, the co-chairmanship was handed over from the Office of Outer Space Affairs (UNOOSA) and the United Nations Economic Commission for Africa (UNECA) to the Office of Information and Communications Technology (OICT) and the Comprehensive Test Ban Treaty Organization (CTBTO). Meeting participants congratulated UNOOSA and UNECA for a job well done during their 2-year tenure particularly regarding the successful establishment of the Centre of Excellence for a United Nations Spatial Data Infrastructure (UNSDI). At the suggestion of UNOOSA an ad hoc Task Group focusing on Geospatial Information for Humanitarian and Emergency Response was established. This ad hoc Task Group will be led by UNOOSA and the World Food Programme (WFP) and will be open to all UNGIWG members and partners. Anyone interested in contributing to the work of this Task Group should contact David Stevens, Programme Coordinator of UN-SPIDER: david.stevens@unoosa.org

Community News

9. SUPARCO: Workshop on “Developing Capacity for Resilience to Water-related Disasters in Pakistan through Space Applications and Flood Risk Management”

A Workshop on “Developing Capacity for Resilience to Water-related Disasters in Pakistan through Space Applications and Flood Risk Management” was held from 1 to 4 March 2011 at the Institute of Space Technology (IST) in Islamabad, Pakistan. The Workshop was jointly organized by the Space and Upper Space Atmosphere Research Commission (SUPARCO), Pakistan Meteorological Department (PMD), IST and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The Workshop was organized as a follow-up to the High-level Expert Group Meeting “Towards Developing a Roadmap to Reduce Flood Disaster Risks in Pakistan”, held in Islamabad on 9 and 10 November 2010, and was expected to contribute to developing the capacity of the relevant government agencies, including SUPARCO, PMD, the National Disaster Management Authority (NDMA), the Federal Flood Commission (FFC) and the Water and Power Development Authority (WAPDA) to build better resilience to water-related disasters through the application of space technology and flood risk management techniques in Pakistan.

10. Pakistan: Upgrading the National Monsoon Contingency Plan together with the UN

The National Disaster Management Authority (NDMA) in collaboration with United Nations Offices in Pakistan is in the process of upgrading the existing National Monsoon Contingency Plan developed in 2009. To spearhead the process of contingency planning, NDMA constituted a Technical Working Group consisting of representatives of various organizations, including officials working at SUPARCO, UN-SPIDER’s Regional Support Office in Pakistan. NDMA, with support from the humanitarian community, is overseeing a flood risk analysis and hazard mapping exercise for Khyber Pakhtunkhwa, Sindh, Punjab and Balochistan, with Gilgit- Baltistan and Pakistan-administered Kashmir to follow. The analysis will inform scenarios and planning assumptions at a series of preparedness workshops to be convened at the provincial level.

For further information >> [OCHA Pakistan Humanitarian Bulletin](#)

11. Sentinel Asia contributed to response to earthquakes in Japan and Myanmar and to floods in Thailand

Sentinel Asia contributed with its resources to the response to the mega-earthquake and tsunami in Japan on 11 March, as well as to the earthquake in Myanmar later that month. It also observed the floods in Thailand. Sentinel Asia provided imagery through its Web GIS service.

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

12. International Charter activated for earthquake in Japan

The International Charter Space and Disasters accepted activation in support of the response to the earthquake in Japan on 11 March. The activation was requested by the Japan Aerospace Exploration Agency (JAXA), one of the Charter members. The Asian Institute of Technology (AIT) took over the Project Management. Numerous mapping products have been produced by a range of value adders based on different satellite data.

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

13. Call for papers at the 3rd International Conference on Advances in Space Technologies (ICAST)

This conference will take place from 6 to 8 July 2011 at the National University of Science and Technology (NUST) in Islamabad, Pakistan. It focuses on the use of space technologies for hydrologic disasters and climate change research. ICAST will raise awareness on the applications of space-borne sensors for hydro-meteorological extremes, water resources management and climate change studies. This conference will improve international collaboration on scientific and technical research on emerging issues of the region.

Special Topics include:

- Hydro-meteorological extremes (monitoring and forecasting)
- Climate change impacts on glaciers and mountain environments

- Climate variability and droughts & water resources management
- Geo-hazards (earthquake and landslide) mapping, prediction, and mitigation

You are invited to participate in ICAST 2011 as an author/speaker. Your active participation will be highly appreciated as this conference will serve as a platform to share your professional expertise, extensive research and country experiences with other colleagues, researchers and policy makers. If interested, please submit an abstract (<250 words) by **15 April 2011** to ukhattak@igis.nust.edu.pk

For further information >> [ICAST](#)

14. Disaster Management – Special issue of Earthzine

Articles published for Earthzine's Disaster Management theme (21 December 2010 to 20 March 2011) address efforts to improve the understanding and management of natural and human-induced disasters, from the factors at inception to the process of recovery and rehabilitation. The number and impact of disasters has been rising in recent decades. It is anticipated that this trend will continue in the future. At the same time, there has been greater attention and investment to expand human, institutional, and Earth Observation capabilities to better manage and minimize effects of disasters on life and living conditions. These articles incorporate in-situ, airborne, and space-based observations that contribute to our understanding of disasters across all scales, from their causes to their consequences. The information is of value for use in the planning, mitigation, preparedness, response, and recovery stages of disaster management.

For further information >> [Earthzine](#)

15. International ICT - disaster response agreement

Just days before the devastating earthquake and tsunami hit Japan, the United Nations and the Global VSAT Forum (GVF), the non-profit association of the global satellite industry, signed a Memorandum of Understanding to facilitate more effective use of Information and Communication Technologies (ICTs) to support the humanitarian community before, during, and after disasters. During a meeting held in New York City on 15 March, the Secretary General of GVF and the United Nations Secretariat, acting through the Technical Coordination and Partnerships Unit (TCPU) of the Office for the Coordination of Humanitarian Affairs (OCHA), reached a landmark agreement to co-ordinate satellite-based support for humanitarian organizations. Central to the agreement is the implementation of the "GVF Disaster Preparedness Registry", an online platform that will facilitate humanitarian organizations' efforts to sustainably leverage satellite-based systems, services, and personnel for relief efforts, as well as for medium- and long-term development programs that are implemented following disasters.

For further information >> [ScreenAfrica](#)

16. Information technology opens new routes for emergency disaster relief – UN report

The vital role of new information technology in responding rapidly to sudden onset emergencies is highlighted in a new United Nations study released on 28 March, identifying best practice and lessons learned from last year's devastating Haitian earthquake. "The challenge is to improve coordination between the structured humanitarian system and the relatively loosely organized volunteer and technical communities," UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator Valerie Amos said at the report's launch in Dubai, United Arab Emirates (UAE).

For further information >> [UN News Centre](#)

17. Satellite system could provide earlier earthquake warnings

British and Russian scientists are planning a satellite system that will monitor seismic activity from space in the hope of one day predicting the occurrence of earthquakes and volcanic eruptions. The TwinSat project will put one micro-sized and one nano-sized satellite into low earth orbit some 400 kilometers apart, which will work in unison to collect and interpret electromagnetic signatures from the ground. Geologists have known for some time that as stress builds up in the earth prior to an earthquake, subtle electromagnetic signals are released.

For further information >> [the engineer](#)

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18. Satellite applications: E-health

Satellites are playing an increasing role in the support of health and welfare on Earth. In the first of a series of bulletins looking at the range of satellite applications, this brief note summarizes how satellite technology can assist in the provision of efficient health care and touches on some relevant legal issues. There has been a limited awareness of space capabilities by the medical/health profession and an equally limited understanding of users' needs by the satellite industry. However, due to factors such as an ageing-population and a reduction in the number of health practitioners, particularly in rural areas, medical support involving a satellite element is being looked upon as an increasingly feasible solution. It also provides a cost-effective and accessible solution in developing countries where populations lack even basic levels of health care due to remoteness, poverty and lack of availability of local skills.

For further information >> [mondag](#)

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

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 to 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](#)

Space for Civil Protection Workshop, Vienna, 5-6 May 2011

This workshop will reflect preliminary activities as well as the results of the European Space Agency (ESA) short term action plan for the European Civil Protection. It offers a great possibility for operational people from the Civil Protection community to present key examples of lessons learnt from past disasters. Furthermore, it will

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reflect the strategies and perspectives of several countries and Civil Protection agencies. The workshop aims at identifying the way forward and setting up a roadmap for further activities, together with the Civil Protection community. It is held under the auspices of the Austrian Ministry of the Interior. It will have a special focus on the needs of Central and Eastern European countries. Expected outcomes include:

- Preliminary identification of key focal areas as follow-on of previous ESA Integrated Applications Promotion (IAP) activities, in improving the overall operational capabilities of European civil protection agencies through the use of satellite communication based services.
- Preparation of the elements to set up a roadmap for generating space-based user driven activities of direct benefit for the European Civil Protection.
- ESPI Report which contains an inventory of the current situation and users' needs. The report will analyze problems with currently used services and the demand for new innovative services for civil protection as well as the need to provide an adequate regulatory framework in this field.

UN-SPIDER was invited to participate in the discussions and will hold a presentation.

For more information: [UN-SPIDER Calendar](#)

Global Platform for Disaster Risk Reduction, Geneva, 8-13 May 2011

The Global Platform for Disaster Reduction was established with the goal to improve implementation of disaster risk reduction through better communication and coordination amongst stakeholders. The Global Platform is managed by the UN International Strategy for Disaster Reduction (UN ISDR). The Global Platform for Disaster Risk Reduction is now the world's foremost gathering of stakeholders committed to reducing disaster risk and building the resilience of communities and nations. The Third Session of the Global Platform convening 8 to 13 May 2011 will bring together disaster risk reduction, recovery and reconstruction experts. Over 2,000 policy makers and practitioners from government, international organizations, NGOs, academia, and the private sector from both developing and developed countries will gather to assess and share information as well as set new directions for the disaster risk reduction imperative, with emphasis on local initiatives and activities. A core function of the Global Platform is to support the implementation of the Hyogo Framework of Action. The proposed overall theme for the Global Platform will be: Invest Today for a Safer Tomorrow – Increased Investment in Local Action. A key feature of the Third Session will be the inclusion of the World Reconstruction Conference.

UN-SPIDER is co-organizing a side event that will take place on 12 May at 13:30. This session by UN-SPIDER, the German Aerospace Center (DLR), the Asian Disaster Reduction Center (ADRC), ESRI and the International Society for Photogrammetry and Remote Sensing (ISPRS) will showcase examples of space applications in the context of disaster-risk reduction, adaptation to climate change, and recovery. The session aims to demonstrate that investing today *in the use of space-based information* will lead to a safer tomorrow.

For more information: [PreventionWeb](#), [UN-SPIDER Calendar](#)

GISCA 2011. Geoinformatics: Managing Environment, Resources and Risk, Almaty, 19-20 May 2011

The Austria – Central Asia Centre for GIScience, together with the Kazakh National University and the Centre for Geoinformatics (Z_GIS), University of Salzburg, Austria are proud to announce the 5th GIS-in-Central-Asia Conference - GISCA 2011.

Geographic Information Science and Technologies have evolved into a key instrument for managing our societies, environments and infrastructures, as well as individuals' daily lives. Continued success of this development depends on cooperation across disciplines, open information policies and a highly educated workforce. The GISCA series of conferences aims at building a Central Asian network of GIS professionals supporting the sustained development of this region into an environmentally friendly, secure and prosperous society. The main objectives of this English language conference are to bring together GIS academics, researchers and practitioners in the Central Asian countries and encourage international cooperation and knowledge exchange in GIS education.

In 2011, GISCA is focused on the theme of managing environment, resources and risk. GIScience as a conceptual foundation, Geoinformatics as a methodology, and GIS as a software are powerful instruments for

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linking information from different sources by location. This is exactly what is needed to manage our environments and natural resources, and to assess risks arising from natural, technical and social factors. Additional key themes of the conference are: GIS for Environmental Management, GIS for Disaster and Emergency Management in Central Asia, Health GIS, Educational programmes in Geoinformatics, Development of Spatial Data Infrastructures, New trends and technologies in GIS&T, International networking in teaching and use of GIS technologies for Environment and Emergencies.

For more information and registration: [GISCA 2011](#)

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.*