



## SEPTEMBER 2013 UPDATES

### UN-SPIDER at a glance

#### **Report launch: The Value of Geo-Information for Disaster and Risk Management (VALID)**

On 3 September 2013, UNOOSA/UN-SPIDER presented a new report which shows the economic, humanitarian and organizational benefits of applying geoinformation to disaster management. The report "The Value of Geo-Information for Disaster and Risk Management (VALID): Benefit Analysis and Stakeholder Assessment" is a joint publication of the International Council for Science-GeoUnions, the Joint Board of Geospatial Information Societies and UNOOSA and was edited by Professor Orhan Altan of the Istanbul Technical University and Member of the Executive Board of the International Council for Science. The publication aims to raise awareness and to help set priorities in research and development.

Read more: [Knowledge Portal](#)

#### **Space Technologies for Climate Change: Conference successfully concluded**

On 4 September 2013, UNOOSA and LAPAN, the Indonesian National Institute of Aeronautics and Space, successfully concluded a three-day conference focusing on integrated Space technology applications to climate change. The Conference brought together around 150 Indonesian and international experts from the space, the environment, academic and the climate change communities as well as decision makers from Member States and from national, regional, and international organizations. The goals of the conference included to discuss ways in which Member States affected by climate change can make better use of space applications to assess the manifestations of and the vulnerability to climate change as well to improve synergies among stakeholders targeting efforts on mitigation and adaptation to climate change.

Read more: [UNOOSA](#)

#### **Indonesia: UN-SPIDER organizes stakeholder meeting**

In parallel to the United Nations/Indonesia International Conference on Integrated Space Technology Applications to Climate Change facilitated by UNOOSA, UN-SPIDER organized a one-day stakeholder meeting in Jakarta, Indonesia on 3 September 2013. The meeting was organized jointly with LAPAN, UN-SPIDER's Regional Support Office in Indonesia. The stakeholder meeting, which was part of UN-SPIDER Technical Advisory Support (TAS) efforts, focused on the utilization of space-based information for disaster risk management. This meeting was attended by over 25 key stakeholders of the disaster management community in Indonesia, including two UN agencies (OCHA and WFP), the ASEAN Humanitarian Agency, the Pacific Disaster Centre, the National Disaster Reduction Centre of China and the German Aerospace Center.

Read more: [Knowledge Portal](#)

#### **UN-SPIDER organizes interactive training session for NDRCC**

From 21 to 22 October 2013, the UN-SPIDER Beijing office will organize an interactive training session in Beijing, China to strengthen the capacity of the National Disaster Reduction Centre of China (NDRCC) to effectively embed Space technologies in their activities. Focusing on disaster risk assessment (especially flood and drought), relief needs assessment, situation analysis, early warning systems, and international standards related to disaster prevention. Mitigation experts from the Delta University (United States), UN OCHA Thailand, University of Twente (Netherlands), International Water Management Institute (Sri Lanka) and Bureau for Crisis Prevention and Recovery (BCPR) of UNDP will share their experience and best practices in using space technology and geospatial information in disaster management.

Read more: [Knowledge Portal](#)



## News from our Regional Support Offices

### **Romania: 2nd IAA Conference on Space Systems as Critical Infrastructure**

UN-SPIDER's Regional Support Office in Romania, the Romanian Space Agency (ROSA), together with the International Academy of Astronautics (IAA) organized between 29 and 30 August the 2nd IAA Conference on Space Systems as Critical Infrastructure in Mamaia, Romania. The first session of the conference was dedicated to presenting the status report of the IAA Study Group on Space Systems as Critical Infrastructure but also the results of the first phase of the national project CRITSYS – Space Systems as Critical Infrastructure, developed by ROSA, METRA and EURISC. The second session was dedicated to technical presentations such as Improving data protection for Earth satellite station networks, the SSA Programme and its impact on Space-critical infrastructure, the development of satellite launch capabilities and the use of space systems for solving specific Romanian issues (floods, agriculture terrain monitoring, protection of Romanian infrastructures).

Read more: [Knowledge Portal](#)

### **Pakistan: SUPARCO generates inundation maps for ongoing floods**

In late August and early September, Pakistan was facing medium to high level flooding in all the major rivers of the country. The flooding was mainly due to heavy monsoon rains combined with hill torrents from North-Western mountain ranges and heavy inflow of water in Eastern Rivers. According to the National Disaster Management Authority (NDMA), heavy monsoon rains starting in the beginning of August 2013 caused widespread losses and damages across the country. About 139 lives are lost and one million people are affected across Pakistan. To monitor the situation, UN-SPIDER's Regional Support Office in Pakistan, SUPARCO, started generating daily flood inundation maps based on MODIS sensors of Aqua/Terra satellites. The maps focused on the identification of affected districts, inundated areas, river flow monitoring and rapid damage assessment.

Read more: [Knowledge Portal](#)

### **Chernobyl and Fukushima: Joint satellite project to track radiation**

On 26 August 2013, Ukraine and Japan agreed to launch a joint satellite project with the aim of monitoring the regions surrounding Chernobyl and Fukushima, sites of the world's

greatest nuclear disasters. Japan's Foreign Minister Fumio Kishida declared that it will be a joint project of Tokyo University and the Ukrainian state Space agency NASU-SSAU (host to a UN-SPIDER Regional Support Office) with launches of Japanese-developed satellites by Ukrainian carrier rockets. The joint project aims to put into orbit by 2014 eight miniature satellites able to track and collect information on the effects of radioactive fallout on the areas adjacent to the plants, for which they will take satellite images every two hours from an altitude of about 600 kilometres (372 miles). Moreover, the satellites will also receive signals from areas where radiation levels exceed the norm through sensors installed on the ground, in order to gather sensitive information.

Read more: [Knowledge Portal](#)

### **SUPARCO and ISA hold joint workshop on space applications for disasters**

The UN-SPIDER Regional Support Offices in Iran (ISA) and Pakistan (SUPARCO) through the Inter-Islamic Network on Space Sciences and Technology (ISNET) jointly held a two week Workshop on Space Applications for Disaster Risk Reduction and Management from 7 to 19 September 2013 at Iranian Space Agency (ISA) in Tehran, Iran. The workshop was attended by 28 scientists and researchers from ISNET member states who work in matters related to applications of space technology for disaster risk reduction and management, particularly on early warning, prevention, response and mitigation. The participants represented space agencies, disaster management authorities and other space-related organizations from Iran, Pakistan, Iraq, Bangladesh, Senegal, Libya, Malaysia and Sudan. The workshop was aimed at imparting hands-on training on six major disaster hazards, namely: floods, earthquakes, landslides, cyclones, tsunamis and avalanches.

Read more: [Knowledge Portal](#)

### **COSPAS-SARSAT: 4th National Coordination Committee Meeting held in Pakistan**

UN-SPIDER's Regional Support Office in Pakistan, SUPARCO, has been participating in the international humanitarian satellite-aided search and rescue COSPAS-SARSAT Programme since 1990 as a ground segment provider. The programme provides global distress alert and location data free of charge and on a non-discriminatory basis. In this context, the 4th National Coordination





Committee (NCC) Meeting was held on 12 September 2013 at SUPARCO's headquarters in Karachi under the COSPAS-SARSAT Programme. The committee decided to inform the concerned agencies on beacon registration and to prevent the generation of unauthorized distress signal. The committee also decided to review the National Search and Rescue (SAR) plan.

Read more: [Knowledge Portal](#)

### **Pakistan: SUPARCO supports response to Balochistan earthquake**

An earthquake measuring 7.7 Richter scale struck Pakistan's South Western region in Balochistan province at 16:30 hours on 24 September 2013. The epicenter of earthquake was 10

km deep and 120 kilometers south-west of Khuzdar district. SUPARCO, host of UN-SPIDER's Regional Support Office in Pakistan, immediately requested for tasking the Pléiades satellite to capture images of the affected areas. This effort made available very high resolution images within just two days after the earthquake which greatly helped in identifying the most affected areas and estimating the extent of damages to the building structures. The affected villages and towns were in remote areas and population spread at distant location with difficult road access, therefore ground information was not immediately available. Space-based information greatly helped the disaster management authorities in planning the rescue and relief work.

Read more: [Knowledge Portal](#)

## News from our Community

### **ROSCOSMOS: International Charter welcomes newest member**

On 31 August 2013, the Russian Federal Space Agency ROSCOSMOS formally joined the International Charter: Space and Major Disasters, an international mechanism to provide space-based information for disaster response. The International Charter reported: "On the occasion of the International Aviation & Space Salon (MAKS) in Moscow a signature ceremony took place with representatives of ROSCOSMOS and several other Charter member agencies. Prof Wörner, chairman of the current Charter lead agency DLR, congratulated ROSCOSMOS and emphasized that a further important contributor to the Charter had been won."

Read more: [Knowledge Portal](#)

### **UNOCHA: Philippines increasingly using technologies for disasters**

"Along with other countries in the region, the Philippines is increasingly relying on technology in its preparedness and response as a key programmatic tool in reducing the impact of disasters while saving as many lives as possible", stated David Carden, Head of OCHA Philippines, in the course of an event bringing together Filipino mobile operators with humanitarian partners to improve their ability to prepare for and respond to disasters in Legazpi City, Philippines. Mobile operators have established and continued to develop emergency preparedness and disaster response programs. These include a range of wireless connectivity solutions,

such as internet access to disaster affected communities and responding agencies, free text messaging, access to phone credit and satellite communications.

Read more: [Knowledge Portal](#)

### **Togo: Development of new topographic map**

Togo has developed a new topographic map. The database will be used for disaster risk reduction and emergency response as well as climate change effects, as the website Icilome reported. The map was created by the Ministry of Planning and Housing with support of the Japanese Government between March 2011 to July 2013. The experts had worked for two years to build, restore and organise the various data collected throughout the territory. Recurrent floods had required the updating of the old database dating from 1960.

Read more: [Knowledge Portal](#)

### **New Landsat data released for free access**

Thousands of never-before-seen data products from the US Landsat satellites acquired over 30 years have been released for online access, as ESA reported. In addition, the newest data over Europe from the latest satellite in the series, Landsat 8, are now accessible in near-real time through a new portal hosted by ESA. ESA elaborates: "About 150 000 new products from the Landsat-5 satellite are available for direct download, free of charge. The products from the satellite's Thematic Mapper instrument were acquired by the Kiruna ground station in northern Sweden between 1983 and 2011."

Read more: [Knowledge Portal](#)





### **International Charter activated four times in September**

The International Charter: Space and Major Disasters was activated four times in the month of September to provide space-based information for disaster response. In early September, wildfires have struck the Cordoba province of Argentina, causing CONAE to trigger the mechanism. On 13 September, USGS activated the Charter due to the heavy floods in Colorado, USA. Nine explosions of the Ubinas Volcano in Moquegua, Peru have been reported since the start of September, causing CONIDA to trigger the mechanism. Finally, UNITAR/UNOSAT activated the Charter in the context of the powerful earthquake that struck Balochistan region, Pakistan, on 24 September 2013.

Read more: [International Charter](#)

### **Germany: TerraSAR-X now in new wide-angle mode**

The German TerraSAR-X radar satellite, operated by the German Aerospace Center (DLR) and Astrium, has been switched into a new wide-angle view mode allowing the satellite to record image strips over 200 kilometres wide. "The satellite does so by sweeping this large area in multiple stages, very quickly pivoting the radar beam numerous times across the direction of flight," explains DLR mission manager Stefan Buckreuss. This new 'wide-angle' mode is of particular interest to oceanographers, who will be able to use it to investigate the tidal range, changes to mudflats, shipping movements, wave patterns, ice floes and wind levels.

Read more: [Knowledge Portal](#)

### **Astrium to provide imagery for Google Maps and Google Earth**

The satellite imagery provider Astrium has announced on its website that they have entered into an agreement with Google to provide high-resolution imagery from its satellites for Google Maps, Google Earth and other Google products and services. The imagery products stem from Astrium's Pléiades as well as from the SPOT 6 and SPOT 7 satellite constellation, offering updated imagery products at a resolution of up to 50cm.

Read more: [Knowledge Portal](#)

### **Disaster Risk in Cities: Swiss Re publishes Report**

"Mind the Risk: A global ranking of cities under threat from natural disasters" is the title of a recent report published by the reinsurance company Swiss Re. Looking at both human and economic risks faced by urban communities, the study puts Asia's megacities (Tokyo, Manila, Hong Kong-Guangzhou)

on the top of the list for population-at-risk while European and US cities (Amsterdam-Rotterdam, Los Angeles, New York) lead the ranking for the highest loss potential.

Read more: [Knowledge Portal](#)

### **Malaysia: Launch of geospatial services portal**

The Malaysian Centre for Geospatial Data Infrastructure (MacGDI) has launched the Malaysia Geospatial Online Service (MyGOS). This portal will host crucial geospatial services and information. The website futuregov.asia reported that the portal "allows users to create groups and invite others to work together on projects, and to share maps, data, and other content. Furthermore, users can also create public groups so that they can share data outside of their organisation."

Read more: [Knowledge Portal](#)

### **European Telecommunications Standards Institute issues call for experts**

ETSI (European Telecommunications Standards Institute) is recruiting experts for two Specialist Task Forces which will support the standardization work of the working group emergency communication via satellite (SatEC). One task force will work on the definition of reference scenarios for emergency satellite-assisted telecommunication services. The other task force will develop a generic encapsulation approach of alert messages. Deadline for application to [STFcand@etsi.org](mailto:STFcand@etsi.org) is **7 November 2013**.

Read more: [Knowledge Portal](#)





## Upcoming events

### **23-25 October 2013, Beijing, China: United Nations International Conference on Space-based Technologies for Disaster Management - “Disaster risk identification, assessment and monitoring”**

The UN-SPIDER Beijing Office and the Ministry of Civil Affairs of the People’s Republic of China will organize the “United Nations International Conference on Space-based Technologies for Disaster Management - Disaster risk identification and response” from 23 to 25 October 2013. The conference is an opportunity to share information on latest methods, approaches and models used for identifying, assessing and reducing disaster risks. The conference will also focus on how to operationalize technological developments to address challenges at the national level by the national disaster management authorities. The purpose of this conference is to bring together the technologists and end-users on a single platform to ensure that space-based information is effectively employed in decision making that saves life and prevents economic losses.

Additionally, an international training programme “Space Technology for Flood and Drought Risk Mapping and Assessment” is organised back-to-back with the conference and will strengthen the capacity of 25 selected participants of the conference to assess disaster risk using the latest advances in satellite remote sensing technology.

Read more: [Knowledge Portal](#)

### **30-31 October 2013, Denpasar, Indonesia: Application of Satellite Technologies for Emergencies Preparedness, Management and Response (EPMR) in Asia-Pacific Region**

UN-SPIDER’s Regional Support Office in the Russian Federation, EMERCOM, jointly with the Asia-Pacific Economic Cooperation (APEC), the Russian Federal Space Agency (Roscosmos) and the Research & Development Center SCANEX will conduct a workshop on Application of Satellite Technologies for Emergencies Preparedness, Management and Response (EPMR) in Asia-Pacific Region. The event is aimed at increasing APEC economies emergency preparedness, proper application of innovative satellite and communication technologies as well as better awareness and faster timely satellite data delivery and international cooperation for Emergencies Preparedness, Management and Response (EPMR) development.

Read more: [Knowledge Portal](#)

### **11-22 November 2013, Sanya, China: Training Workshop on Space Technology for Disaster Mitigation**

In response to the needs of developing countries in disaster risk reduction, the CAS-TWAS Centre of Excellence on Space Technology for Disaster Mitigation (STDM) in collaboration with the International Centre on Space Technologies for Natural and Cultural Heritage (HIST) under the auspices of UNESCO will organize this training workshop to enhance the capacity building for developing countries to tackle disaster issues using advanced Space technologies. The workshop collects information on international best practices with applications to a variety of events, especially for floods, droughts, earthquakes, tropical cyclones and storms. It stretches over a two-week period, covering both theoretical and practical aspects on the use of Space technologies for disaster mitigation.

Read more: [CAS](#)

### **9-11 December 2013, Hanoi, Vietnam: 9th International Conference on Geoinformation for Disaster Management (Gi4DM)**

Geo-information for Disaster management (Gi4DM) is an annual conference devoted to the use and application of geo-information technology in disaster management. Gi4DM 2013 will take place from 9 to 11 December 2013 in Hanoi, Vietnam. The fundamental goal of the conference is to provide a forum where disaster/disaster-risk managers, stakeholders, researchers, data providers and system developers can discuss challenges, share experience, discuss new ideas, demonstrate technology and analyse future research toward better support of risk and disaster management activities.

Read more: [Gi4DM](#)

