



## MAY 2013 UPDATES

### UN-SPIDER AT A GLANCE

#### **Sudan: UN-SPIDER Training Course on space-based Technologies for Disaster Risk Management**

A workshop and training course on space-based technologies for disaster risk management were held from 5 to 9 May 2013 in Khartoum, Sudan. Both events were organized jointly by UN-SPIDER and the Remote Sensing Authority, the National Center for Research of Sudan and the Regional Centre for Mapping of Resources for Development (RCMRD – one of UN-SPIDER's Regional Support Offices). The training was kicked off with a one-day awareness-raising workshop on May 5 followed by a four-day training course for selected Government officials and UN staff. As one of the follow-up efforts of the UN-SPIDER Technical Advisory Mission carried out from 22 to 26 May 2011, the training raised awareness of decision-makers and local staff and built local capacity through training for more efficiently using space-based technology for disaster management at the national level for Sudan.

Read more: [Knowledge Portal](#)

#### **Bangladesh: Capacity Building on Space Technologies for Floods**

UN-SPIDER organised a Capacity Building Programme in Bangladesh from 12 to 16 May 2013 on the topic "Space Technology for Flood Hazard Mapping, Flood Forecast and Rapid Mapping in Bangladesh". The programme was a follow-up activity of the UN-SPIDER Technical Advisory Mission conducted in 2011 and was jointly organised with the Ministry of Disaster Management and Relief, Comprehensive Disaster Management Programme (CDMP) and Space Research and Remote Sensing Organisation (SPARSO) of Bangladesh. A total of 20 officials from 17 government departments participated in the programme. The training covered a wide range of topics such as the role of Earth Observation in disaster management, the regional plan of action on promoting Space and GIS applications for disaster risk management and sustainable development or

global and regional flood hotspot assessment.

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#### **Dominican Republic: Training on Space-Based Information for Floods**

As a follow-up activity of the Technical Advisory Mission in 2010, UN-SPIDER and the National Emergency Commission of the Dominican Republic (NEC) as well as its two Regional Support Offices IGAC (Colombia) and CATHALAC (Panama) invited 27 professionals from 15 government entities to participate in a training course on the use of space-based information for floods. The training course took place from 13 to 17 May 2013 in Santo Domingo. The course contributed to the official establishment of the Inter-Institutional Team on Geo-Spatial Information for Disaster-Risk Management and Emergency Response which is being implemented by the NEC as a way to enhance the use of space-based information in efforts including disaster risk management, preparedness and emergency response in case of floods. The training material is freely available online.

Read more: [Knowledge Portal](#)

#### **UNOOSA/UN-SPIDER makes Statement during Global Platform for Disaster Risk Reduction**

The Fourth session of the Global Platform for Disaster Risk Reduction took place in Geneva, Switzerland from 19 to 23 May 2013. UNOOSA/UN-SPIDER participated in the event and had the opportunity to present a statement. Juan Carlos Villagrán de León, Head of the Bonn Office of UN-SPIDER, delivered the statement on behalf of OOSA. He stressed the benefits of space derived and in-situ geographic information and geospatial data during times of emergency response and reconstruction, particularly in large urban areas with a high population density and especially after the occurrence of major events such as earthquakes and floods.

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### **Iraq: UN-SPIDER Network acquires Satellite Imagery for Floods**

On Tuesday, 7 May 2013, the Iraqi government declared a state of maximum alert in all its service agencies to deal with the floods that have affected several cities in southern Iraq since Sunday, 5 May. After UN-SPIDER received a request from Iraq to facilitate the acquisition of satellite imagery to assess the extent of the flood and the damages caused, UN-SPIDER activated its network. The Indian

Space Agency acquired the imagery and UN-SPIDER provided its servers to disseminate the data. The images were processed by UNOSAT by rapid mapping for flood extension. The maps were made available to Iraq free of cost.

Read more: [Knowledge Portal](#)

## NEWS FROM OUR REGIONAL SUPPORT OFFICES

### **Ukraine: Earth Observation Data for Agriculture Monitoring and Forecasting**

The Space Research Institute NASU-SSAU, UN-SPIDER's Regional Support Office in Ukraine, utilizes Earth observation (EO) data to support agricultural monitoring and operational forecasting of crop yield in Ukraine. Every 16 days forecasts of winter wheat yield are provided upon arrival of new EO data and products. Due to the spring dry kill effects, many areas of winter wheat in southern regions of Ukraine were damaged in May 2013. These regions could be identified from EO data.

Read more: [Knowledge Portal](#)

### **Pakistan: SUPARCO generates Earthquake Impact Area Maps**

A strong earthquake measuring 7.8 magnitudes on the Richter scale struck Southern Iran close to the Pakistan-Iran border on April 16, 2013 at 1044 Hours GMT. The earthquake epicenter was 76 km deep and affected south-western bordering areas of Pakistan near the Iranian border. The National Disaster Management Authority (NDMA) of Pakistan requested SUPARCO - the National Space Agency of Pakistan and UN-SPIDER's Regional Support Office - to monitor and assess the damages caused by the earthquake. Within hours of the earthquake, the French SPOT-6 satellite was programmed over the affected area and images were acquired the very next day. Rapid maps based on pre- and post-earthquake (SPOT 5 & SPOT 6) satellite images were generated.

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### **Nepal: Remote Sensing Forest Fire Detection**

In early April 2013, an operational remote sensing forest

fire detection and monitoring system for Nepal was officially launched in Kathmandu, Nepal, as The Himalayan reported. The system, which is the first of its kind of system in the region, is installed on the rooftop of the International Centre for Integrated Mountain Development (ICIMOD), one of UN-SPIDER's Regional Support Office. The information for this monitoring and alert system comes from NASA satellites twice a day and is forwarded by email or SMS to subscribers including District Forest Officers and focal persons of the Federation of Community Forestry Users in all 75 districts of Nepal.

Read more: [Knowledge Portal](#)

### **Algeria: Official inauguration of UN-SPIDER Algeria Regional Support Office**

On 6 May 2013, Mazlan Othman, director of the United Nations Office for Outer Space Affairs, together with Mustapha Lahbiri, General Direction of Civilian Protection (DGPC), and Oussedik Azzedine, Director General of the Algerian Space Agency (ASAL) official inaugurated the UN-SPIDER Regional Support Office hosted by ASAL. DGPC and ASAL work closely together regarding satellite-based remote sensing for disaster response and disaster risk reduction. "The Algerian Regional Support Office has an important role not only in Algeria but also to become a leader and a source of knowledge in the whole region, either defined as Northern Africa, French Africa or African Mediterranean countries", said Othman.

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## NEWS FROM OUR COMMUNITY

### **Nigeria: Mapping Vulnerabilities to Floods**

The Nigerian National Emergency Management Agency (NEMA) has carried out mapping of all the communities likely to be affected by the predicted 2013 flood as part of its preparedness against disaster occurrence in the country. NEMA's Director General, Alhaji Mohammad Sani Sidi, explained that the organisation had also carried out vulnerability capacity assessments of seven communities to determine the existing capacity in each community and its level of resilience.

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### **Philippines: Adoption of Indonesia's Open Source Disaster Mitigation Tool**

The Philippines are planning to improve their disaster mitigation efforts by adopting an Indonesian mapping and planning tool. The Department of Science and Technology revealed plans to adopt InaSAFE, a disaster mitigation technology from Indonesia, to its Nationwide Operational Assessment of Hazard (NOAH) project in a bid to improve disaster planning and preparedness in the country. InaSAFE, or Indonesia Scenario Assessment for Emergency, is an open source software that produces realistic natural hazard impact scenarios to help decision makers in their disaster planning, preparedness and response activities.

Read more: [Knowledge Portal](#)

### **Japan to host World Conference on Disaster Risk Reduction in 2014**

Japan will host the world conference scheduled to be held next year at which countries will adopt the successor to the current global blueprint for disaster risk reduction efforts. This was announced at the Fourth Session of the Global Platform for Disaster Risk Reduction which took place from 19 to 23 May 2013 in Geneva. Delegates at the event called for immediately starting work on developing targets and indicators to monitor the reduction of risk, ahead of next year's conference.

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### **Oklahoma Tornado: Satellites see Storm from Space**

On May 20, 2013, central Oklahoma, USA, was hit by a

supercell thunderstorm resulting in a destructive tornado passing over the state. The Moderate Resolution Imaging Spectroradiometer (MODIS) on NASA's Aqua satellite acquired a natural-color image of the storm system at 2:40 p.m. Central Daylight Time (19:40 Universal Time), just minutes before the devastating twister began. The GOES-13 satellite of the US National Oceanic and Atmospheric Association (NOAA) also spotted the developing storm from space. Acquired at 2:55 CT on May 20, 2013, the satellite image shows the storms developing directly over central Oklahoma. One minute later an incredibly destructive tornado touched down in the city of Moore, killing dozens and leaving the town utterly destroyed.

Read more: [Knowledge Portal](#)

### **WMO: 2012 Survey on the Use of Satellite data published**

The World Meteorological Organization (WMO) published the results of their 2012 Survey on the Use of Satellite Data. The publication is available online. 95 Member States provided 227 responses on their status of satellite use, current and planned utilization of satellite data and products for weather, climate, water and related environmental applications. The report informs on key challenges faced by national meteorological services, other operational users of satellite data, as well as research and academia in the use of satellite data.

Read more: [Knowledge Portal](#)

### **ESA Study: The economic benefits of free satellite data**

A recent study commissioned by the European Space Agency (ESA) brings forward the idea that data from the upcoming Sentinel series of satellites should be regarded as Public Sector Information, increasing their value for money. In the study "About GMES and data: Geese and golden eggs - A study on the Economic Benefits of a Free and Open Data Policy for Sentinel Satellite data" the authors outline how re-using the data could potentially generate new businesses and jobs, and provide consumers with more choice and more value for money.

Read more: [Knowledge Portal](#)





### **UAE announce DubaiSat-3 satellite mission**

The Emirates Institution for Advanced Science and Technology (EIAST) has announced the launch of its new DubaiSat-3 project – the first satellite build to be completed in the UAE, as the Arabian Aerospace Online News Service reported. A core team of 45 UAE experts and engineers will lead the development of DubaiSat-3, the third satellite programme to be undertaken by EIAST in collaboration with its South Korean partner Satrec Initiative (SI). DubaiSat-3 will initially be developed in South Korea and later transferred to EIAST's satellite manufacturing facilities in the UAE, midway through the project.

Read more: [Knowledge Portal](#)

### **International Charter activated for Cyclone Mahasen in Bangladesh and Myanmar**

On 15 May, 2013, UNITAR/UNOSAT, on behalf of UNOCHA, activated the International Charter Space and Major Disasters to obtain satellite-derived image products for the impact of tropical Cyclone Mahasen. Cyclone Mahasen struck the southern coast of Bangladesh on 16 May 2013. Hundreds of thousands of people had been ordered to evacuate in advance of the oncoming storm in Bangladesh and neighbouring Myanmar.

Read more: [Knowledge Portal](#)

## UPCOMING EVENTS

### **26-27 June 2013: United Nations/Germany Bonn Expert Meeting on Early Warning**

The expert meeting will take place in Bonn, Germany, from 25 to 26 June 2013 and will bring together the space technology and disaster management communities representing national, regional and international organizations as well as internationally active private companies to share experiences and lessons learned regarding the use of space-based information in early warning systems. The goal is to identify needs and to discuss knowledge management strategies to improve existing early warning systems through the incorporation of recent advances in space-based applications. The draft agenda and other documents are available on the Knowledge Portal.

Read more: [Knowledge Portal](#)

### **2-4 September 2013: United Nations/Indonesia International Conference on Integrated Space Technology Applications to Climate Change**

The Conference will take place in Jakarta, Indonesia, from 2 to 4 September 2013, hosted by the National Institute of Aeronautics and Space (LAPAN). This International Conference will bring together experts from the space and the climate change community as well as decision makers to discuss methods to use space-based applications to support the identification and implementation of adaptation measures. It also serves to share experiences and lessons

learned on the use of such applications in the context of climate change mitigation.

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### **23-25 October 2013: United Nations International Conference on Disaster Risk Identification, Assessment and Monitoring**

The UN-SPIDER Beijing Office is pleased to announce the “United Nations International Conference on Space-based Technologies for Disaster Management - Disaster risk identification and response” which will take place from 23 to 25 October 2013 in Beijing, China. Additionally, an international training programme “Flood Risk Mapping, Modelling and Assessment using Space technology” will be organised for 25 participants of the conference. 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. The application is only possible online. The application form will be online soon on the website linked below.

Read more: [Knowledge Portal](#)

