



## APRIL 2013 UPDATES

### UN-SPIDER AT A GLANCE

#### **12 April: International Day of Human Space Flight**

12 April is the International Day of Human Space Flight. It was declared by the General Assembly to commemorate one of the greatest triumphs of human progress: the first space flight by cosmonaut Yuri Gagarin. In 1961, it paved the way for worldwide human space flight endeavour and exploration. To pay tribute to the extraordinary journey of the men and women who have flown into space, the United Nations Office for Outer Space Affairs (UNOOSA) is launching its newest edition of an on-line autograph album entitled "Messages from Space Explorers to future generations" that contains copies of the signed sheets with messages from Space Explorers in all of the official languages of the United Nations.

Read more: [UNOOSA](#)

#### **Advisory Support: Mission Profile for Vietnam now online**

The mission profile for the Technical Advisory Mission to Vietnam carried out in late March 2013 is now available on the UN-SPIDER Knowledge Portal. It contains key facts such as the mission experts, visited institutions and key findings and recommendations. UN-SPIDER, on request of Member States, carries out Advisory Missions to evaluate the current and potential use of space-based information in all the aspects of disaster management in requesting countries and to strengthen disaster risk management by providing better access to space-based information for disaster risk reduction as well as response. By publishing some general key recommendations on its Knowledge Portal, UN-SPIDER enables decision makers, disaster responders or disaster risk managers in other countries as well to learn about first steps to better benefit from space-based information for disaster and disaster risk management.

Read more: [Knowledge Portal](#)

#### **Three UN-SPIDER trainings coming up in May**

In May 2013, UN-SPIDER will carry out trainings in Sudan, Bangladesh and the Dominican Republic to build capacities on the effective use of space-based information for disaster and disaster risk management in these countries. From 5 to 9 May 2013, UN-SPIDER, the Remote Sensing Authority of Sudan and the Regional Centre for Mapping of Resources for Development are organizing the training course "Space-based Technology for Disaster Risk Management Awareness and Training Course in Sudan". From 12 to 16 May, 2013, a follow-up training on the 2011 UN-SPIDER Technical Advisory Mission will be carried out in Bangladesh. Finally, from 13 to 17 May 2013, UN-SPIDER and its Regional Support Offices IGAC and CATHALAC will organize a training on the use of satellite data for flood mapping in the Dominican Republic.

Read more: [Knowledge Portal](#)

#### **4th Meeting of the International Working Group on Satellite-based Emergency Mapping**

On 22 and 23 April 2013, UN-SPIDER participated in the 4th Meeting of the International Working Group on Satellite-based Emergency Mapping (IWG-SEM), hosted by ITHACA. The aim was to present UN-SPIDER's work and contribute to discussions of the working group. The working group had been established after the 2010 Haiti earthquake which had demonstrated the need to cooperate among mapping entities. The vision of IWG-SEM was defined as "Supporting disaster response by improving international cooperation in satellite based emergency mapping".

Read more: [Knowledge Portal](#)





## NEWS FROM OUR REGIONAL SUPPORT OFFICES

### **IGAC: Using Remote Sensing to map land degradation**

UN-SPIDER's Regional Support Office in Colombia IGAC (Agustin Codazzi Geographic Institute) is currently working on elaborating approaches of using remote sensing and GIS for monitoring soil erosion. Erosion is the main cause for the degradation of soils and rocks in Colombia. Experts estimate that approximately 60% of the country are affected. In consequence, the Ministry of the Environment and Sustainable Development of Colombia (MAVDT) created the "following and monitoring for the land degradation programme". One of the main goals of the programme consists in mapping the erosion grade (light, moderate, severe and strong) in Colombia on a scale of 1:100.000. This map is being built with RapidEye satellite images through visual interpretation.

Read more: [Knowledge Portal](#)

### **IGAC: Opening of GIS Specialization Programme**

On 22 April 2013, the Agustin Codazzi Geographic Institute (IGAC), in agreement with the Distrital University (Francisco Jose de Caldas), welcomed new students specializing in Geographic Information Systems (GIS) at the auditorium of the Research and Investigation Centre (CIAF). IGAC's Director General stressed the importance of the agreement between the two entities under which about 448 national

and foreign professionals have graduated between 1994 and 2012. For the current year, another 30 students are expected to graduate from the GIS Specialization Programme who will attend this course on the premises of CIAF.

Read more: [Knowledge Portal](#)

### **Nigeria: Project Managers Training for the International Charter**

The UN-SPIDER Regional Support Office in Nigeria participated in a Project Managers training for the International Charter: "Space and Major Disasters" in Abuja, Nigeria. The Project Managers training was conducted from 8th to 10th April 2013. The training was facilitated by Miss Adina Gillespie from DMC International Imaging (DMCii) Limited of the UK with support from the National Emergency Management Agency of Nigeria (UN-SPIDER's National Focal Point in Nigeria). Six officers from the UN-SPIDER Regional Support Office in Nigeria, the National Space Research and Development Agency (NASRDA), participated in the intensive training programme. At the end of the training, participants were able to manage mock charter activations and demonstrated their competence.

Read more: [Knowledge Portal](#)

## NEWS FROM OUR COMMUNITY

### **COCONet: Measuring Atmosphere and Earth for Disaster Risk Reduction**

The Continuously Operating Caribbean Observational Network (COCONet) is a project funded by the National Science Foundation (NSF) with the aim of developing a large-scale geodetic and atmospheric infrastructure in the Caribbean. It will form the backbone for a broad range of geoscience and atmospheric investigations and enable research on process-oriented science questions with direct relevance to geohazards. Want to learn more about COCONet and how it collects GPS and weather data for disaster management and disaster risk management? In a new article on our UN-SPIDER Knowledge Portal, we present this network and its efforts to reduce disaster risks in the Caribbean by monitoring the environment via GPS and weather stations.

Read more: [Knowledge Portal](#)

### **USA: New strategy for civil earth observation**

On 19 April 2013, the US government's National Science and Technology Council released a National Strategy for Civil Earth Observations—a framework for increasing the efficiency and effectiveness of using Earth Observation data for civil use. A press release by the White House points out: "Currently, 11 Federal departments and agencies engage in Earth observation activities, collecting volumes of important data about the Earth on an ongoing basis, using an array of sophisticated tools and systems. The new Strategy outlines a process for evaluating and prioritizing Earth-observation investments according to their value to society in critical areas such as agriculture, global change, disasters, water resources, and weather."

Read more: [Knowledge Portal](#)





### **Satellite Images for Emergencies: DLR chairs International Charter**

Bureaucracy-free assistance in the event of an emergency – this is the aim of the 15 space agencies united within the International Charter “Space and Major Disasters”. The German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt/DLR) has been a member of this network since October 2010, and, on 16 April 2013, took over as chair of the Charter for six months. DLR provides the Charter with Earth Observation data from the two German radar satellites TerraSAR-X and TanDEM-X. These satellites are able to quickly acquire very detailed images, regardless of cloud cover or availability of daylight. “Radar images are ideally suited to mapping flood disasters, as they clearly distinguish between expanses of water and land. But the information from TerraSAR-X can also be very helpful in other disasters, such as earthquakes,” says Jens Danzeglocke, DLR Charter Secretary.

Read more: [Knowledge Portal](#)

### **India: Launch of indigenous satellite navigation system in June**

India will soon establish its own GPS-like satellite navigation system. According to the newspaper Times of India the first of seven satellites of the Indian Regional Navigation Satellite System (IRNSS) will be launched in June 2013. This system will provide India with its own data for location and time in all weather conditions. Times of India cites K Radhakrishnan, chief of the Indian Space Research Organisation ISRO: “The satellite constellation, IRNSS, aims to increase position accuracy and provide standard positioning service for common users and restricted service for authorized users.”

Read more: [Knowledge Portal](#)

### **International Charter: Satellite imagery for China earthquake**

On Saturday, 20 April 2013, a 7.0 magnitude earthquake struck Lushan County of Sichuan province, South-West China, at 08:02am (UTC). Multiple aftershocks were felt in the area increasing fears of landslides. On the same day, the International Charter: “Space and Major Disasters” was activated to provide up-to-date satellite imagery and maps for the area affected by the earthquake. Some of the areas are extremely remote and relief supplies are reaching these

areas slowly. Satellite images can give a clearer picture of the extent of destruction in these remote areas as well as of the state of roads. The activation of the mechanism was requested by the National Disaster Reduction Center of China / China Meteorological Administration.

Read more: [Knowledge Portal](#)

### **China: Successful launch of Earth Observation satellite Gaofen-1**

On Friday, 26 April 2013, China’s latest high-definition Earth Observation satellite Gaofen-1 was successfully launched into space on a Long March-2D carrier rocket. Gaofen-1 was launched alongside three other satellites from Ecuador, Argentina and Turkey at the Jiuquan Satellite Launch Center in Jiuquan, northwest China’s Gansu Province. Developed by the China Academy of Space Technology, Gaofen-1 will be followed into space by another four of five satellites before the end of 2016 to form the high-definition earth observation system (HDEOS).

Read more: [Knowledge Portal](#)

### **ESA: Mapping land deformation with satellite radar data**

The European Space Agency ESA has developed a new Wide Area Processor, or WAP. The data processor can create maps of land deformation from satellite radar data over larger areas and with higher precision than ever before. These maps can be used to detect and monitor geological hazards. Factors like mining, earthquakes or volcanoes can make the ground sink or rise. In order to measure these changes, radars on satellites can map the changes on a global scale and with millimetre-precision. On their website, ESA explains how the new processor works: “WAP has been developed to process the full radar data over a specific area automatically and then mosaic adjacent datastacks with uniform quality, yielding country-sized maps of land deformation with unprecedented accuracy.”

Read more: [Knowledge Portal](#)







## UPCOMING EVENTS

### **15-17 May 2013: Linking Humanitarian Organizations with Mobile Data Collection Tool Providers**

The event is organized by NOMAD, a project that links charities and aid agencies with the latest in mobile data collection solutions using a free online wizard. Participants will learn all about NOMAD and its services and experience hands-on sessions conducted by mobile data collection solution providers. Participants will hear more about specific solutions and how they can test them out before deciding which one might be best for their organization and situation. At the end of the workshop, after trying and testing various data collection tools, participants will be able to select and decide on the best tool for their survey.

Read more: [NOMAD](#)

### **19-23 May 2013: Global Platform for Disaster Risk Reduction**

The Global Platform for Disaster Risk Reduction is a biennial forum for information exchange, discussion of latest development and knowledge and partnership building across sectors, with the goal to improve implementation of disaster risk reduction through better communication and coordination amongst stakeholders. It is for government representatives, NGOs, scientists, practitioners, and UN organizations. The Fourth Session will take place 19-23 May 2013 in Geneva, Switzerland.

Read more: [UNISDR](#)

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

The provisional agenda for the Expert Meeting on space-based Information for early warning, jointly organized by UNOOSA/UN-SPIDER and the Government of Germany, is now available online. Applications will still be accepted until **15 May 2013**. The expert meeting will take place in Bonn, Germany, from 25 to 26 June 2013 and will bring together 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.

Read more and apply online: [Knowledge Portal](#)

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

The application for the United Nations/Indonesia International Conference on Integrated Space Technology Applications to Climate Change is still possible until **31 May 2013**. The Conference will take place in Jakarta, Indonesia, from 2 to 4 September in 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. A limited number of applicants from developing countries will be supported financially.

Read more and apply online: [Knowledge Portal](#)

