



## AUGUST 2014 UPDATES

### UN-SPIDER at a glance

#### **Mongolia: UN-SPIDER Technical Advisory Mission**

From 11 to 15 August 2014, a UN-SPIDER expert team visited Mongolia to evaluate the current and potential use of space-based information in all the aspects of disaster management and to provide recommendations to strengthen the disaster risk management efforts in the country by providing better access to space-based information for disaster risk reduction as well as for response. This Technical Advisory Mission (TAM) had been requested by the National Emergency Management Agency (NEMA) of Mongolia. The team, comprising eight experts from centers of excellence from different parts of the World, visited NEMA and its key stakeholder organisations in the capital city as well as in two provinces of Mongolia. In addition, the TAM included a half day workshop held on the premises of NEMA, which was attended by over 40 participants from the academia, ministries, emergency services and international organisations. These meetings and the workshop provided insight in the role of each organisation in the use of space-based and geospatial information in support of disaster management and disaster risk reduction.

Read more: [Knowledge Portal](#)

#### **New on the Knowledge Portal: Risks and Disasters**

It is UN-SPIDER's mandate to bridge the gap between the various communities that are stakeholders in the use of space technologies for disaster risk reduction and disaster response. In order to make sure that those

involved understand the language and vocabulary of the respective other communities, UN-SPIDER has elaborated a new thematic section on its online Knowledge Portal. The section "Risks and Disasters" contains information on the basic definitions and processes related to disaster-risk management as well as of emergency and disaster response. Another focus area is the role of the UN in these areas. The section furthermore describes the road towards a post-2015 global framework for disaster risk reduction (following up on the Hyogo Framework for Action) and UN-SPIDER's contributions to this process.

Read more: [Knowledge Portal](#)

#### **Two new UN-SPIDER publications**

In August, UN-SPIDER has contributed two guest articles about the programme and its priority areas to external magazines. In the GRF Davos e-journal Planet@Risk, UN-SPIDER provided an overview of the outcomes of the programme's recent Expert Meeting on the Use of Space Technologies for Flood and Drought Risk Reduction, held in June in Bonn, Germany. In the tenth anniversary edition of the Crisis Response Journal, UN-SPIDER explains why space technologies are so important for disaster risk reduction and what the potential of these technologies is. These and more articles by UN-SPIDER published in third party magazines are available in the "In the Press"-section of the UN-SPIDER Knowledge Portal

Read more: [Knowledge Portal](#)

### News from our Regional Support Offices

#### **New on the Knowledge Portal: Recommended Practices**

When using Space technologies for disaster risk management and emergency response, it is not only important to have

access to the right data and software, it is also crucial to be aware of methods that have proven to be good practices in a certain context. UN-SPIDER's Regional Support Offices and other partners are currently working on the development of



Recommended Practices on the use of space technologies for various hazards. We are proud to present the first two Practices elaborated by the UN-SPIDER Regional Support Office in Ukraine NASU-SSAU and by Purdue University on Flood Mapping and Flood Hazard Mapping, respectively. More practices will be published as soon as they become available.

Read more: [Knowledge Portal](#)

### **IGAC: Agro-climatic Drought Risk Management using NDVI**

Continuing progress in studies and advances in the area of drought monitoring in agricultural areas, the Remote Sensing Group of the Center for Research and Development in Geographic Information of IGAC (CIAF) in Colombia, has been analyzing time series of the Normalized Differenced Vegetation Index (NDVI) based on MODIS data obtained by NASA's Terra satellite. Specifically, the researchers used MOD13Q images to obtain historical data on the severity

and duration of droughts in different regions of Colombia. To automatically determine the maximum and minimum NDVI values, and also to identify the start and the end of the seasonal periods of pastures, CIAF uses the freely available software TIMESAT.

Read more: [Knowledge Portal](#)

### **ICIMOD: Closer collaboration with Nepal Ministry of Science, Technology and Environment**

The International Centre for Integrated Mountain Development (ICIMOD) in Nepal, host of one of UN-SPIDER's Regional Support Offices, has signed a Memorandum of Understanding with the Ministry of Science, Technology and environment (MoSTE) of Nepal. The background of this closer collaboration are the joint efforts towards meeting the objectives of the United Nations Framework Convention on Climate Change (UNFCCC) in Nepal and the rest of the Hindu Kush Himalayan region.

Read more: [Knowledge Portal](#)

## News from our Community

### **International Charter activated five times in August**

The International Charter: Space and Major Disasters was activated five times in August to provide satellite-based mapping products for disaster response. The international mechanism was triggered for a 6.1 magnitude earthquake in Yunnan Province, China, as well as for four major flood events in different parts of the world, namely Sudan, Panama, India, and Bangladesh. The satellite products and maps are available on the International Charter's website.

Read more: [International Charter](#)

### **Turkey set to launch national satellite programme**

Following the successful launch of the 4B satellite earlier in the year, Turkey opened a satellite manufacturing and testing centre later this month at the Akinci Air Force Base in Ankara. Turkey will then become the twelfth country worldwide capable to produce, test and launch its own satellites. The Satellite Assembly and Integration Test Center UMET operated by the Turkish Aerospace Industries TAI opened in August with a grand ceremony and began manufacture and testing of the TÜRKSAT 5A, 5B, and 5C using only national resources. Launches are scheduled for 2015.

Read more: [Knowledge Portal](#)

### **UN-GGIM endorses Global Geodetic Reference Frame**

From 6 to 8 August 2014 the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) met in New York. A draft resolution on the Global Geodetic Reference Frame (GGRF) was endorsed by the Committee and will now pass to the United Nations' Economic and Social Council (ECOSOC), with the intent of referring the Resolution to the General Assembly later this year. The UN-GGIM recognised that there is a growing requirement for more accurate measuring of the changing planet, with a potential of enormous economic benefits on countries' economies and environments. As no single country can maintain the GGRF alone, the Committee of Experts is considering how to enhance intergovernmental co-operation leading to geospatial data interoperability.

Read more: [Knowledge Portal](#)

### **WorldView-3 Satellite launched by DigitalGlobe**

On 13 August 2014, the satellite technology company DigitalGlobe successfully launched its commercial high resolution, multispectral Earth observation satellite WorldView-3. The satellite was launched from Vandenberg Air Force Base in California, USA into low Earth orbit completing ten of the fifteen launched campaigns planned by the company





for this year. WorldView-3 will be able to provide enhanced 31 centimeters resolution images and larger to government and commercial clients throughout its designed life span of 7.5 years. On 26 August, DigitalGlobe published the first images on their website capturing Madrid, Spain.

Read more: [Knowledge Portal](#)

### **Nigeria: Launch of National Digital Flood Model**

The Federal Government of Nigeria has launched a National digital Flood model. The development of the model was a consequence of the severe flooding in 2012, which caused tremendous economic damages. According to the Nigerian Tribune, the Minister of Environment, Laurentia Mallam, said the National Digital Flood Model was specifically developed for improved monitoring and forecasting nationwide, to ensure effective environmental governance and prompt response to impending flood disasters.

Read more: [Knowledge Portal](#)

### **RADARSAT-2: Contract extended for India**

On 12 August 2014, the company MDA's Information Systems group signed a contract to continue to provide RADARSAT satellite data to the National Remote Sensing Centre (NRSC) of India. This agreement, valid until June 2015, represents for MDA the continuation of a long-term relationship with NRSC, as well as with the Indian Space Research Organisation ISRO and the Government of India, as India has been using RADARSAT data since 1998.

Read more: [Knowledge Portal](#)

### **Japanese microsattellites begin transmission**

Two Japanese microsattellites, developed by the University of Tokyo, have begun transmitting Earth Observation images. The images are freely available via Facebook and YouTube. Produced at comparatively low costs and within little time, Hodoyoshi-3 and Hodoyoshi-4 are a "proof of concept in innovative satellite development" as the website AsianScientist states. "By reducing the cost per satellite to less than three million US dollars and development time below two years, researchers expect that novel space utilizations and new space users will appear, creating an industry of space development and novel applications."

Read more: [Knowledge Portal](#)

### **NASA: TRMM satellite moving towards end of mission**

On 8 July 2014, pressure sensors on board the Tropical Rainfall Measuring Mission's (TRMM) satellite indicated that

the on board fuel tank was near the end of its fuel supply. The TRMM satellite is a joint mission between NASA and the Japan Aerospace Exploration Agency (JAXA). Launched in 1997, TRMM made history carrying the world's first precipitation radar payload into space with a planned 3 year mission to measure precipitation over the tropics. 17 years later TRMM has provided researchers with unprecedented high quality data sets combining radiometer measurements with 3 dimensional radar scans and revisiting locations at different times of day.

Read more: [Knowledge Portal](#)

### **Discussing Disaster Risk: 5th International Disaster Risk Conference in Davos**

From 24 to 28 August 2014, over 1.000 participants gathered in Davos, Switzerland for the 5th International Disaster and Risk Conference IDRC 2014. This year's topic was "Integrative Risk Management - The role of science, technology & practice". Business leaders, decision makers, practitioners, UN-, IO- & NGO-agents and scientists from more than 100 countries attended ICRD 2014 to share and discuss new findings and experiences about the broad spectrum of risks societies are facing today.

Read more: [Knowledge Portal](#)

### **Africa Geospatial Forum postponed due to Ebola outbreak**

The Africa Geospatial Forum, scheduled to have taken place in Lagos, Nigeria on 19 and 20 August 2014, had to be postponed due to the Ebola outbreak in the region, as the organizers announced: "Considering the wellbeing of our participants, exhibitors and sponsors, Geospatial Media and Communications and Lagos State Government are re-scheduling Africa Geospatial Forum to 9 - 10 December, 2014 at the same venue, when organising such a gathering will yield maximum benefits for all stakeholders involved."

Read more: [Knowledge Portal](#)

### **Sweden: Wildfires captured by satellite**

Sweden is not a country typically known for its summer wildfires. Fires occur regularly, but not in the intensity of this year's blaze affected the region of Västmanland throughout the month of August. The fire grew to the largest one in 40 years. It has affected more than 150 square kilometers, killed one person and forced thousands to evacuate. NASA's Operational Land Imager (OLI) onboard the Landsat 8 satellite captured an image of the fires from Space.

Read more: [Knowledge Portal](#)





## Upcoming events

### **8-12 September 2014: High Impact Weather - Event Week 2014**

EUMeTrain is going to organise an event week with presentations related to “High Impact Weather” from 8 to 12 September 2014. During this event week, experts from European, American and Near-East National Weather Services will provide an insight into the challenges of forecasting critical weather events such as storms, avalanches and floods. This event week offers online presentations from meteorologists involved in the prediction of extreme weather situations.

Read more: [EUMETRAIN](#)

### **15-17 September 2014, Beijing, China: United Nations International Conference on Space-based Technologies for Disaster Management “Multi-hazard Disaster Risk Assessment”**

The UN-SPIDER Beijing Office is set to host the “United Nations International Conference on Space-based Technologies for Disaster Management - Multi-hazard Disaster Risk Assessment” from 15 to 17 September 2014 in Beijing, China. It will bring together 120 disaster managers, policy makers, providers of space technology solutions/tools/applications from governments, and representatives of academia, research institutions, NGOs and the corporate sector. A total of 35 plenary presentations and three working groups are planned. The participants will also visit technical facilities of the China National Space Administration and the National Disaster Reduction Centre of China. The conference is jointly organized by UN-SPIDER and the Ministry of Civil Affairs of the People’s Republic of China.

Read more: [Knowledge Portal](#)

### **18-22 September 2014, Beijing, China: International training course on Drought Monitoring and Assessment using Space-based Information**

The UN-SPIDER Beijing Office and the National Disaster Reduction Centre of China are jointly organising the “International training course on Drought Monitoring and Assessment using Space-based Information” from 18 to 22 September 2014 (back to back with the fourth UN-SPIDER Conference in Beijing, see above). The training is organised for the benefit of the countries supported by UN-SPIDER through its technical advisory support services. By the end of the one-week training, it is expected that participants are fully

conversant with the concept of disaster risk management and drought assessment, and are able to understand multi-drought feature parameters, extraction methods, as well as the methodology of drought risk assessment using space technology. The interaction of experts and participants is expected to foster networks, exchange of knowledge and the exploration of new research frontiers in drought risk assessment. Overall, this training is expected to contribute to the capacity building of national partners to use space technology for disaster risk reduction and in the development process.

Read more: [Knowledge Portal](#)

### **8-9 January 2015, Uttar Pradesh, India: Second International Space Conference 2015**

Along with providing a common platform for academics, industry, researchers and government, to share knowledge and ideas for development in the space sector (science & technology, space law & policy and life science issues), the International Space Conference ISC 2015 in Uttar Pradesh will focus on promoting Space Applications in Climate Change. This international event will gather experts from across the globe to discuss and explore opportunities for new co-operations, research projects or joint ventures.

Read more: [ISC 2015](#)

