



## SEPTEMBER 2015 UPDATES

### UN-SPIDER at a glance

#### **Fifth UN-SPIDER Beijing conference**

The United Nations International Conference on Space-based Technologies for Disaster Management - “A consolidating role in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030” was successfully conducted in Beijing from 14 to 16 September 2015. The conference was co-organized by the UN-SPIDER Beijing Office and the Ministry of Civil Affairs of the People’s Republic of China (PRC), in collaboration with the Department of Treaty and Law of the Ministry of Foreign Affairs (MoFA) of PRC, the Department of System Engineering of the China National Space Administration (CNSA) of PRC, the Asia Pacific Space Cooperation Organization (APSCO) and with the support of DigitalGlobe.

Read more: [Knowledge Portal](#)

#### **Training: Earth observation technologies for earthquake damage assessment**

From 17 to 22 September 2015, UN-SPIDER organised jointly with the National Disaster Reduction Centre of China (NDRCC) a training course on ‘Earth observation technologies for earthquake damage assessment’, the Asia Pacific Space Cooperation Organisation (APSCO) and the Regional Centre for Space Science and Technology Education in Asia and

the Pacific (China) (affiliated to the United Nations). This training event was conducted back to back with the Fifth UN-SPIDER Beijing conference.

Read more: [Knowledge Portal](#)

#### **UN-SPIDER and UNDP Bhutan Office support efforts to manage landslide risk in Bhutan**

The UN-SPIDER, the UNDP and the Department of Disaster The UN-SPIDER Beijing Office, the UNDP Bhutan Office and the Department of Disaster Management (DDM) of the Ministry of Home and Cultural Affairs of Bhutan conducted a training workshop as a follow-up to the UN-SPIDER Technical Advisory Mission (TAM) to Bhutan, which was carried out in June 2014. The one-week long training activity was conducted at the UN Affiliated Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP) from 17 to 21 August 2015 and 19 officials from Bhutan took part in it. This training workshop facilitated the understanding of the role of space-based information in managing various hazards in Bhutan. The training workshop benefitted from the financial support provided through the UN joint project entitled “Recovery Preparedness and Resilience-building in Bhutan”.

Read more: [Knowledge Portal](#)



## Data application of the month

In this section, the UN-SPIDER team presents every month a specific example of a satellite data application for disaster risk reduction or emergency response.

Access the full list [here](#).

### Free Satellite Data

Satellite data can be applied for monitoring almost any natural hazard across the globe, and is therefore a crucial component for all phases of the disaster management cycle. More and more satellite imagery is available for free, and the image archives are continuously growing. This is a great data treasure, which is still underexploited for operational disaster and risk management. Free satellite

data is obtainable for both optical (passive) and SAR (active) satellite sensors, at various different resolutions. The majority of freely accessible satellite data can be downloaded via Earth Explorer, EO Portal or the Sentinel Scientific Data Hub.

Read more: [Knowledge Portal](#)

## News from our Regional Support Offices

### ISA: Lessons learnt from droughts in Iran

The Iranian Space Agency (ISA), one of UN-SPIDER's Regional Support Offices (RSO), has elaborated a booklet on lessons learnt from droughts in the Islamic Republic of Iran. This is the second booklet in the series of publications on experiences and best practices by UN-SPIDER's RSOs in the application of Space-based information in disaster risk reduction and emergency response. The booklet "Effective use of Space-based information to monitor disasters and its impacts: Lessons Learnt from Drought in Iran" describes ISA's experience in utilizing satellite data during droughts in Iran, generated using sensors in satellites such as NOAA-AVHRR, Aqua/Terra-MODIS, Landsat, SPOT or IRS data. This booklet tackled the use of Earth observation in drought modelling and prediction, drought assessment, vulnerability assessment, and crop damage assessment.

Read more: [Knowledge Portal](#)

### Satellite imagery to compare extreme rainfalls events from the last year in Sri Lanka

The International Water Management Institute (IWMI), which is one of UN SPIDER's RSOs, released some imagery from the satellite rainfall estimates related to the current flood disasters in Sri Lanka. The Global Precipitation Mission (GPM)

and Tropical Rainfall Measuring Mission (TRMM) revealed that the extraordinary flooding in Sri Lanka was caused by unusually strong monsoonal rainfall over the period between 10 September and 30 September 2015. Massive flooding was reported mainly in the Southern, the North Central and Uva provinces of Sri Lanka. The accumulated rainfall almost tripled in comparison to the rainfall in the same period last year.

Read more: [Knowledge Portal](#)

### Indonesia RSO activities in September 2015

LAPAN, one of UN-SPIDER's RSOs, performed the following activities in September 2015:

1. LAPAN provided quick emergency support to combat and control the land fires in Sumatera and Kalimantan.
2. LAPAN conducted a Focus Group Discussion on space-based information tools which can be used to explain and share knowledge and information related to for land/forest fire monitoring.
3. LAPAN participated in the Workshop on the Use of Remote Sensing and GIS for Landslide Risk Management (SENTINEL ASIA MINI-PROJECT PHASE 1).

Read more: [Knowledge Portal](#)



## News from our Community

### **Geo-DRM, ESCAP's innovative alternative against disasters in Asia-Pacific**

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) launched the portal called Geo-referenced information Systems for Disaster Risk Management (Geo-DRM) to enhance the capacities of the world's most disaster prone countries to recover from natural disasters. Geographic Information System (GIS) applications for early warning and multi-hazard risk assessment are some of the applications included in this portal. The online Geo-DRM platform is part of ESCAP's efforts to contribute to the implementation of the recently adopted Sendai Framework for Disaster Risk Reduction 2015-2030.

Read more: [Knowledge Portal](#)

### **Himawari 8 satellite to improve forecast accuracy**

The Bureau of Meteorology informed that the new satellite, called Himawari 8, will provide updated images every ten minutes. The satellite, developed by the Japanese Meteorological Agency, is able to generate full color and improved resolution imagery that will lead to more accurate forecasts which will be used to issue weather warnings. The head of the weather bureau, Dr. Andrew Tupper, explained that Himawari 8 will allow a closer monitoring and better understanding of weather events. "Just about everything we do in terms of real time weather we'll be able to see better with this satellite: thunderstorms, cold fronts, cool changes, fires and it will be really useful for hot spot monitoring.

Read more: [Knowledge Portal](#)

### **International Charter activated for floods in Bangladesh**

The International Charter Space and Major Disasters has been activated to provide satellite-based emergency maps in response to floods and landslides triggered by heavy rains in

the north and central regions of Bangladesh. The mechanism was activated on 7 September 2015 by the Asia Disaster Reduction Centre (ADRC) on behalf of Bangladesh Space Research and Remote Sensing Organization (SPARRSO). The Asian Institute of Technology (AIT) is responsible for the project management. The torrential rains affected more than twenty districts of the country.

Read more: [Knowledge Portal](#)

### **International Charter activated for earthquake in Chile**

The International Charter Space and Major Disasters has been activated to provide satellite-based emergency maps in response to a powerful 8.3 magnitude earthquake in Chile that triggered a tsunami which affected some coastal communities. The mechanism was activated on 17 September 2015 at the request of Chile's National Emergency Management Office of the Ministry of Interior (ONEMI). The International Charter indicated: "The epicentre of the earthquake was just off the coast of the Coquimbo Province and lasted for approximately three minutes. Dozens of aftershocks followed, as well as a tsunami which brought waves recorded as high as 4.7m to the coastal areas closest to the epicentre. It is reportedly the most powerful earthquake worldwide this year".

Read more: [Knowledge Portal](#)

### **International Charter activated twice in September**

The International Charter Space and Major Disasters was activated on 07 September at 09:13:20 (UTC+02:00) due to floods in the north and central regions of Bangladesh, affecting more than twenty of the country's districts. The second time when the Charter was activated this month was on 17 September, because of the 8.3 magnitude earthquake in Chile.

Read more: [International Charter](#)



### Upcoming events

#### **12-16 October 2015, Pyeongchang, Korea: 6th International Wildland Fire Conference (IWFC-2015)**

The Korea Forest Service will join forces with the government of the Gangwon province to hold the 6th International Wildland Fire Conference in from 12 to 16 October 2015. The conference will be conducted in Pyeongchang, Korea, and will contribute to exchange views on wildland-fire related issues. The Conference will bring together policy makers, researchers and practitioners, international organizations and NGOs from 80 countries to discuss global efforts to prevent damage due to forest fires and to forge a concerted response to them. Korea has made its utmost effort to undertake greening works and prevent wildland fire damage for the last four decades. The Conference will provide a platform for the nation to share its know-how regarding wildland fire prevention and cutting edge technologies, including the real time wildland fire control system that has been recently constructed with the international society.

Read more: [Knowledge Portal](#)

#### **19 to 23 October, Quezon City, Philippines: The 36thAsian Conference on Remote Sensing**

ACRS 2015, to be conducted in Quezon City in the Philippines from 19 to 23 October, will bring together students, researchers, scientists, engineers, policy makers, professionals and practitioners from developed and developing countries from and around Asia to share insights regarding the challenges and opportunities of remote sensing and related geospatial technologies to enhance resiliency and encourage economic growth and development. The conference will specifically focus on how remote sensing applications can contribute to increase resiliency to natural disasters and to strengthen capabilities to adapt to stress and change.

Read more: [Knowledge Portal](#)