



## JULY 2018 UPDATES

### UN-SPIDER at a glance

#### **Applications for UN International Conference on Space-Based Technologies for Disaster Risk Reduction close 31 August**

The United Nations Office for Outer Space Affairs (UNOOSA) and the Ministry of Emergency Management of the People's Republic of China (MEM) will hold this year's International Conference on Space-based Technologies for Disaster Risk Reduction from 24 to 26 October 2018 in Beijing, China. The conference, entitled "Enhancing Disaster Preparedness for Effective Emergency Response", is implemented under the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) through its Beijing Office. The deadline for self-funded applicants to apply for participation in the event is 31 August.

[Read more on the UN-SPIDER Knowledge Portal.](#)

#### **UNOOSA and UNITAR-UNOSAT request activation of International Charter for floods in Lao People's Democratic Republic**

The United Nations Office for Outer Space Affairs (UNOOSA) and the United Nations Institute for Training and Research (UNITAR) Operational Satellite Applications Programme (UNOSAT) jointly activated the International Charter Space and Major Disasters for the recent floods in Lao People's Democratic Republic on 24 July 2018. UNOOSA activated the Charter on behalf of the country's Ministry of Science and Technology and Department of Disaster Management and

Climate, while UNITAR-UNOSAT activated the emergency mechanism on behalf of the World Food Program (WFP). Two UN-SPIDER Regional Support Offices contributed to this Charter activation: the Asia Disaster Preparedness Center (ADPC) and the International Water Management Institute (IWMI) acted as so-called Value Added Providers by assessing satellite imagery of the affected area and developing maps to deliver to the end user on the ground.

[Read more on the UN-SPIDER Knowledge Portal.](#)

#### **UNOOSA organizes side event on Earth observation at Asian Ministerial Conference on Disaster Risk Reduction**

The United Nations Office for Outer Space Affairs (UNOOSA), through its Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER), conducted a side event at the Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) in Ulaanbaatar, Mongolia, on using Earth observation to implement the Sendai Framework. The session aimed to demonstrate the benefits of space-based technologies for the implementation of the Sendai Framework, to provide a forum to share experiences that Asian countries have had in using space technologies for disaster management, and to identify opportunities for collaboration between disaster management authorities in Asia and UN-SPIDER.

[Read more on the UN-SPIDER Knowledge Portal.](#)

## News from the community

#### **Japan to launch new satellite-based system for disaster prediction**

Japan plans to launch a new disaster prediction system using both space-based and in situ data in an effort to accurately forecast the locations of disasters such as floods

and landslides to enable local governments to issue an early warning to residents.

[Read more on the UN-SPIDER Knowledge Portal.](#)



Subscribe to our mailing list



### **Space-based applications drive fire early warning and monitoring systems**

The summer of 2018 has seen several severe wildfires across Europe and the world. A number of space-based applications and data resources from the National Aeronautics and Space Administration (NASA), the European Union's Copernicus programme and the European Forest Fire Information System (EFFIS) are supporting authorities in fighting the fires.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **E-Governance plays critical role in advancing the field of disaster management, report argues**

E-governance plays a critical role in consolidating disaster management, disaster preparedness and emergency relief, a new United Nations report argues. The 2018 E-Government Survey discusses how e-government can facilitate integrated policies and services across the three dimensions of sustainable development. The report, produced every two years by the UN Department of Economic and Social Affairs (UN DESA), is the only global report that assesses the e-government development status of the 193 UN Member States.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **UN Environment and Google partner to facilitate access to environmental information**

UN Environment and Google announced a global partnership on 16 July 2018 that will see the launch of a platform to enable governments, NGOs and the public to monitor and respond to changes to the environment. Given that this Earth observation-based platform can track in timely manner a range of environmental changes, the project may also help to improve disaster resilience and provide early warning for emergencies.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **Atos activates new Earth observation platform Mundi to consolidate disaster preparedness**

Atos activated its new Earth observation platform Mundi Web Services on 21 June 2018. On behalf of the European Commission (EC) and the European Space Agency (ESA), Atos created the Mundi platform to combine real-time geo data from the Copernicus Earth observation programme with data from multiple sources and turn it into an information platform for companies in sectors such as manufacturing,

insurance, utilities, agriculture, forestry, urbanism and emergency services.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **Copernicus launches DIAS services during 20th anniversary celebrations**

The European Commission launched an initiative to facilitate access to Copernicus data and information services. DIAS is designed to improve users' ability to access as well as process Copernicus data and information by standardizing access to data through five cloud-based platforms: CREODIAS, MUNDI, ONDA, SOBLOO and WEKEO.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **Pakistan launches Earth observation satellite to monitor disasters**

Pakistan launched a new Earth observation satellite into space on 9 July, which will assist the country to monitor natural disasters. The Pakistan Remote Sensing Satellite-1 (PRSS-1) is equipped with two panchromatic/multispectral cameras with a resolution of up to one metre and a coverage range of 60 kilometres. This high-resolution optical payload will enable Pakistan to monitor natural disasters in near real-time.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **International Charter activated for major flooding disaster in Japan**

The International Charter Space and Major Disasters was activated on 7 July for major flooding in Japan. The floods are the worst the country has experienced in 36 years.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **New Sentinel-5P data boosts quality of air pollution monitoring**

The first air quality data captured by the Copernicus Sentinel-5P satellite launched last year was released on 11 July. Presenting an improvement in accuracy for monitoring air pollutants, these maps show the presence of trace gases such as ozone, nitrogen dioxide and carbon monoxide. Additional data products, such as the Aerosol Index, can provide information on atmospheric volcanic ash for aviation safety and on high levels of UV radiation.

[Read more on the UN-SPIDER Knowledge Portal.](#)





### **DLR Earth Sensing Imaging Spectrometer to monitor natural disasters sent to ISS**

An Earth sensing imaging spectrometer that can monitor natural disasters such as wildfires, floods, and droughts through the scan of multiple bands of light, was launched into space on 29 June. The DLR Earth Sensing Imaging Spectrometer (DESI) was developed by the German Aerospace Centre (DLR) in partnership with La Trobe University in Melbourne, Australia, and Teledyne Brown Engineering. DESI is designed to provide hyperspectral data in order to monitor the environment and resources on Earth.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **India's Government teams up with Google to improve flood management**

India's Central Water Commission (CWC) signed a Collaboration Agreement with Google that will help crisis management agencies deal with extreme hydrological events, such as floods, more effectively. The agreement allows CWC to make use of Google's artificial intelligence, machine learning and geospatial mapping expertise for effective water management and flood forecasting.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **European Commission's Joint Research Centre releases new World Atlas to tackle land degradation and desertification**

The European Commission's Joint Research Centre (JRC) published a new edition of its World Atlas of Desertification (WAD3). The publication and related website show that population growth and changes in consumption patterns put unprecedented pressure on the planet's natural resources. As a result, the WAD3 highlights the urgency to adopt corrective measures such as greater commitment and more effective cooperation at the local level to limit two of the main causes of land degradation: the consumption of animal proteins from unsustainable sources and agricultural expansion.

[Read more on the UN-SPIDER Knowledge Portal.](#)

### **Satellite data used to detect and monitor forest fires in Nepal**

In Nepal, SERVIR-Hindu Kush Himalaya at the International Centre for Integrated Mountain Development (ICIMOD) worked in close collaboration with the Department of Forests of Nepal to develop a satellite-based forest fire detection and monitoring system. The system uses Earth observation data, with large-area repetitive coverage to facilitate near real-time forest fire detection, monitoring, and area assessments. ICIMOD is a UN-SPIDER Regional Support Office (RSO).

[Read more on the UN-SPIDER Knowledge Portal.](#)



The United Nations Office for Outer Space Affairs (UNOOSA) implements the decisions of the General Assembly and of the Committee on the Peaceful Uses of Outer Space and its two Subcommittees, the Scientific and Technical Subcommittee and the Legal Subcommittee. The Office is responsible for promoting international cooperation in the peaceful uses of outer space, and assisting developing countries in using space science and technology. In its resolution 61/110 of 14 December 2006 the United Nations General Assembly agreed to establish the "United Nations Platform for Space-based Information for Disaster Management and Emergency Response - UN-SPIDER" as a programme within UNOOSA. UN-SPIDER focuses on the need to ensure access to and use of spacebased solutions during all phases of the disaster management cycle.