



## MAY 2018 UPDATES

### UN-SPIDER at a glance

#### **Applications open for United Nations International Conference on Space-based Technologies for Disaster Risk Reduction**

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.

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

#### **UNOOSA and Jaxa deploy first KiboCUBE satellite as part of capacity-building initiative**

The United Nations Office of Outer Space Affairs (UNOOSA) and the Japan Aerospace Exploration Agency (JAXA) deployed its first cube satellite on 11 May 2018 as part of a joint cooperation programme called KiboCUBE. The KiboCUBE programme is a capacity-building initiative which enables educational or research institutions from developing countries to deploy cube satellites (CubeSats) from the

Japanese Experiment Module (Kibo) of the International Space Station (ISS). It has been designed to support United Nations Member States that do not have sufficient funding available for such activities.

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

#### **EvIDENz project conducts second stakeholder workshop in Ukraine**

Experts from UN-SPIDER, the United Nations University Institute for Environment and Human Security (UNU-EHS), the Centre for Remote Sensing of Land Surfaces (ZFL) of the University of Bonn, and the Space Research Institute of the National Academy of Sciences of Ukraine and of the National Space Agency of Ukraine (SRI NASU-SSAU) have convened in Kiev for a stakeholder workshop in the context of their joint project named "Earth-observation-based Information Products for Drought Risk on a National Basis" (EvIDENz). The event, which took place from 14 to 16 May, brought together key decision-makers, operational technical audiences from the agricultural sector, the economic and the disaster risk reduction communities, space agencies, and research and technology entities.

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

## News from the community

#### **Crisis Connectivity Charter to aid disaster relief enters into full operation**

Members of the satellite community signed contribution agreements in Luxembourg on 17 May 2018 with the United Nations World Food Programme (WFP) on behalf of the Emergency Telecommunications Cluster (ETC) to step-up their commitments to support global disaster relief. The agreements represent the final steps in operationalizing the Crisis Connectivity Charter signed in 2015.

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

#### **New monitoring system strengthens forest conservation in India**

The National Remote Sensing Centre (NRSC), a programme under the auspices of the Indian Space Research Organization (ISRO), has engineered a new monitoring system to observe forest cover change and to combat deforestation. By combining optical remote sensing, geographic information system, artificial intelligence and automation, the new system allows experts to detect small-scale deforestation.

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



Subscribe to our mailing list



### **China offers satellite data to Belt and Road countries to tackle disasters**

China has established an emergency mechanism using its meteorological satellites to help countries involved in the Belt and Road Initiative to combat extreme weather and disasters, the China Meteorological Administration (CMA) announced on 2 May.

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

### **International Charter activated for floods in Djibouti and Sri Lanka**

The International Charter Space and Major Disasters was activated for flooding in Djibouti on 20 May and Sri Lanka on 21 May 2018.

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

### **IGAC develops innovative risk assessment system in Villavicencio, Colombia**

The Research and Development Center of Geographic Information (CIAF), an arm of the Geographic Institute Agustin Codazzi (IGAC), is developing a risk assessment system for the city of Villavicencio in Colombia. IGAC is a Regional Support Office of UN-SPIDER and responsible for advancing geographic investigations for the development of Colombia, and for educating and training professionals in geographic information technologies.

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

### **Satellites monitor Russian volcanoes to identify hazards to aviation, populations**

Significant activity from volcanoes in the Russian Federation have been observed from space in recent months. The Kamchatka and Kuril Islands volcanoes, located in the far east of the country, are being monitored by satellites in order to avert the hazards caused by their regular eruptions to air travel and to local populations.

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

### **GPS sensors used to aid the forecasting of monsoon flash floods**

The forecasting of torrential monsoon downpours in the United States of America has become more accurate due to improved GPS and geodetic sensors. The system, which was developed by meteorologists at the National Oceanic and Atmospheric Administration (NOAA) Weather Forecast Offices, has been in use since 2012. It features

next-generation, real-time geodetic modules that have been added to existing GPS stations across California, enabling more accurate rain and weather forecasting.

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

### **Unrecorded Himalayan floods discovered though satellite data**

Researchers at the University of Potsdam in Germany have analyzed satellite data of nearly 30 years to retrace glacial lake outburst floods across Bhutan, China, India and Nepal. As a result of the survey, the scientists were able to reveal 10 previously undocumented floods in Bhutan, China and Nepal which had been caused by glacial runoff water suddenly breaking through moraine dams.

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

### **Satellite communication strengthens disaster response in Philippines**

Disaster responders in the Philippines now have access to mobile satellite equipment that is more powerful and easier to deploy than ever before. Since 2017, emergency responders have been working with communications company Inmarsat, the UK Space Agency and a consortium of NGO partners to institutionalize satellite communications into disaster response mechanisms in the country, which is regularly hit by natural disasters.

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

### **NASA monitors Hawaii's Kilauea volcano amid threat to local population**

NASA satellites closely monitored the Kilauea volcano in Hawaii, United States of America, amid fears that the ongoing eruption could cause further evacuation of the local population. Kilauea is the youngest and south-eastern-most volcano on the island of Hawaii. Eruptive activity along the East Rift Zone has been continuous since 1983. Kilauea is one of the world's most active volcanoes.

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

### **International Charter activation for flood in Somalia**

The International Charter Space and Major Disasters has been activated for flooding in Somalia on 7 May, caused by weeks of heavy rainfall.

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



Subscribe to our mailing list



### International Charter activations in May

The International Charter "Space and Major Disaster" was activated four times in May. It was activated on 7 May for floods in Somalia at the request of the UNITAR-UNOSAT on behalf of the United Nations Office for the Coordination of Humanitarian Affairs; on 8 May for an earthquake and

eruption of K lauea Volcano in the United States of America at the request of the US Geological Survey; on 20 May for floods in Djibouti at the request of UNITAR-UNOSAT on behalf of UNOCHA; and on 21 May for floods in Sri Lanka at the request of the Disaster Management Centre of Sri Lanka.

[Read more on the website of the International Charter.](#)



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.