



## AUGUST 2017 UPDATES

### UN-SPIDER at a glance

#### **UN-SPIDER carries out Technical Advisory Mission to Nepal**

From 31 July to 4 August 2017, UN-SPIDER carried out a Technical Advisory Mission (TAM) to Nepal to evaluate the current and potential use of space-derived information in all aspects of disaster management and to offer recommendations to strengthen the disaster risk management and emergency response in the country. The mission was conducted upon request from the Ministry of Home Affairs (MoHA) and with the technical support of the International Center for Integrated Mountain Development (ICIMOD). The mission team was comprised of nine experts from different organizations. The team visited key stakeholder agencies contributing to disaster management to take account of current policy and gaps, availability of geospatial information, current use of space-derived information, data sharing practices, applications of geospatial information, challenges and constraints, existing capacity and needs, institutional linkages and coordination and applications to strengthen disaster risk reduction and emergency response.

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

#### **UN-SPIDER joins forces with SENACYT, SE-CONRED and IAA-USAC to conduct a training course in Guatemala**

UN-SPIDER conducted a three-day training course in Guatemala from 31 July to 2 August. With the support of the National Secretariat of the Council of Science and Technology of Guatemala (SENACYT) and the Executive Secretariat of the National Coordinating Agency for Disaster Reduction of Guatemala (SE-CONRED), 25 members of an inter-institutional technical team from 12 government agencies were trained on how to use remote sensing techniques and UN-SPIDER Recommended Practices on droughts and forest fires as a way to generate relevant and timely geospatial information that is useful for disaster risk reduction, preparedness and emergency response efforts.

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#### **UN-SPIDER supports emergency responses for Nepal and Sierra Leone floods and landslides**

UNOOSA/UN-SPIDER requested the activation of the International Charter Space and Major Disasters on 15 August 2017 for the floods in Nepal on behalf of the UN Resident Coordinator's (UNRC) office in Kathmandu, Nepal. The International Centre for Integrated Mountain Development (ICIMOD), a UN-SPIDER Regional Support Office, acted as project manager for the activation. In the case of Sierra Leone, UNOOSA/UN-SPIDER requested the activation on behalf of the Sierra Leone office of the Food and Agriculture Organization of the United Nations (FAO) and of the United Nations Country Team (UNCT) in Sierra Leone. The United Nations Institute for Training and Research (UNITAR) acted as the project manager.

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

#### **UNOOSA/UN-SPIDER supports emergency response for Hurricane Irma in Haiti**

The United Nations Office for Outer Space Affairs (UNOOSA), on behalf of the Office of the Deputy Special Representative of the Secretary-General, Resident and Humanitarian Coordinator in Haiti, successfully requested the activation of the International Charter Space and Major Disasters for Haiti, as Hurricane Irma made landfall on the country's northern coast.

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

#### **UNOOSA/UN-SPIDER request activation of Copernicus EMS - Mapping for Niger floods**

The United Nations Office for Outer Space Affairs (UNOOSA) requested the activation of the Copernicus Emergency Management Service (EMS) - Mapping for floods in Niger. The request has been accepted and the first maps have been delivered under the activation.

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





## News from our RSOs

### **IWMI supports emergency response in Northeast India and Nepal with maps**

Researchers at the International Water Management Institute (IWMI) provided support in the form of rapid-response maps based on high-resolution satellite images for the recent floods in Northeast India and Nepal. Using satellite images from the Indian Space Research Organization's (ISRO) RESOURCESAT-2 satellite, the researchers were able to

map the inundation extent of flooding along the Gandak River in Saran and Muzafarpur districts. Their support helped guide relief efforts by enabling state and district officials to pinpoint vulnerable populations and get an early indication of damage to crops.

[To access the report, please visit the website of the International Water Management Institute](#)

## News from our community

### **Research analyses potential of satellite data in detecting ground movement before landslides**

Researchers are working hard to use satellite data to accurately map the movement of the earth before a landslide in a bid to develop a life-saving early warning system. Based on before and after images of recent landslides in China's Sichuan Province obtained from the European Space Agency's Sentinel-1 satellite radar mission, a team of scientists from the United Kingdom and China was able to detect and map the active landslides, including their sources and boundaries. They also found that in the case of one of the landslides, the ground had been moving for six months before eventually falling and hitting Shidaguan Town in Sichuan Province.

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

### **International Charter activations**

The International Charter Space and Major Disasters was activated several times in the month of August 2017. It was activated for the floods in Venezuela on 6 August 2017, at the request of the Bolivarian Agency for Space Activities (ABAE); on 7 August 2017 for the floods in Vietnam, at the request of the Asian Disaster Reduction Center (ADRC); and on 9 August 2017 for two earthquakes in China, at the request of the National Disaster Reduction Center of China (NDRCC). There were three Charter activations on 15 August 2017: for floods in Nepal at the request of UNOOSA on behalf of the UN Resident Coordinator's (UNRC) office in Kathmandu, Nepal; for floods and mudslides in Sierra Leone at the request of UNOOSA on behalf of the Sierra Leone Office of the Food and Agriculture Organization of the United Nations (FAO) and of the UN Country Team; and for floods

in Bangladesh at the request of the Operational Satellite Applications Programme (UNOSAT) of the United Nations Institute for Training and Research (UNITAR). On 24 August 2017, the Charter was activated for Hurricane Harvey in the United States, at the request of United States Geological Survey (USGS).

For more details, please visit the website of the Charter.

### **Satellite products support Afghanistan early warning system**

Leveraging a new meteorological satellite data reception, visualization and processing station, the Afghanistan Meteorological Department (AMD) has issued its first-ever flood early warning. Meteorological satellite images confirmed the accuracy of AMD's forecast, which is expected to contribute to reducing the loss of life and property as a result of floods and other extreme weather events in the country. The station was installed in the context of a joint project between the World Meteorological Organization (WMO) and the United States Agency for International Development/Office of U.S. Foreign Disaster Assistance (USAID/OFDA), which aims to build AMD's capacity in providing severe weather forecasts and early warnings.

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

### **New UN-GGIM strategic framework provides guidance for use of geospatial information and services in disaster risk management**

The Working Group on Geospatial Information and Services for Disasters (WG-GISD) of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) has published a "Strategic Framework on Geospatial Information and Services for Disaster" to



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guide all stakeholders and partners in the management of geospatial information and services in all phases of disaster risk management. The framework emphasizes sustainability, accessibility, complementarity and interoperability of geospatial information and aims to achieve that "human, socioeconomic and environmental risks and impacts of disasters are prevented or reduced through the use of geospatial information and services". UN-GGIM seeks to play a leading role in setting the agenda for the development of global geospatial information and to promote its use to address key global challenges.

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

### **6th International Training Course on Small Satellite Missions at Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP)**

The Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP) will organize the 6th International Training Course on Small Satellite Missions from 20 November to 1 December at the Indian Institute of Remote Sensing (IIRS) in Dehradun, a unit of the Indian Space Research Organisation (ISRO). The course will be conducted by the Indian Space Research Organisation Satellite Centre (ISAC) in Bengaluru and IIRS, and is aimed at decision makers, senior space technologists, managers, researchers and professionals in the field of space technology. It will discuss topics such as the technology involved in making small satellites and the management of small satellites.

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## Upcoming events

### **United Nations/Germany International Conference on International Cooperation Towards Low-emission and Resilient Societies**

The United Nations Office for Outer Space Affairs and the German Aerospace Centre (DLR), in cooperation with the German Federal Ministry for Economic Affairs and Energy (BMWi), will host the International Conference on International Cooperation Towards Low-Emission and Resilient Societies from 22 to 24 November 2017 at the UN Campus in Bonn. The conference will bring together decision-makers from government agencies, high ranking officials from regional and international agencies, representatives and experts

from UN agencies, UNOOSA/UN-SPIDER National/Regional Focal Points and experts, and experts from the space and remote sensing communities working on disaster risk management or disaster response efforts. The International Conference will be used to discuss ways to incorporate satellite technologies to achieve a better system-wide understanding of disaster risk and the manifestations and effects of climate change. Registration for the conference is open until Sunday, October 29, 2017.

[For more information on the event and how to register, please see the event page.](#)



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.