



NOVEMBER 2015 UPDATES

Upcoming events

United Nations/India Workshop is open for registration

The United Nations Office for Outer Space Affairs (UNOOSA), through its Programme on Space Applications and the UN-SPIDER platform, and the Indian Space Research Organization (ISRO) are jointly organizing the “United Nations/India Workshop on the Use of Earth Observation Data in Disaster Management and Risk Reduction: Sharing the Asian Experience”. The workshop will facilitate the sharing of experiences from Asia and other regions of the World on the use of Earth observation for disaster management. The UN/India workshop will be held in Hyderabad, India, from 8 to 11 March 2016. The objectives of the workshop are: I) to demonstrate operational programmes and tools that make use of Earth observation data to address the disaster management cycle, including understanding disaster risks, responding to emergencies, assessing damage and loss and providing inputs to mitigate disasters; II) to synthesize experiences and lessons learnt by Asian countries, the most vulnerable region, in using Earth observation in disaster management; III) to promote the use of Earth observation in disaster prone areas in order to prepare, mitigate and respond to natural disasters, plan and build more resilient infrastructure and allow for a more sustained, inclusive and sustainable growth, in line with the 2030 Agenda for Sustainable Development; and IV) to discuss the way forward in international cooperation on space technologies and disaster management in preparation for UNISPACE+50.

Read more: [Knowledge Portal](#)

DLR Conference on Climate Change 2016

The German Aerospace Center (DLR) will be conducting the “DLR Conference on Climate Change – Challenges for Atmospheric Research” from 5 to 7 April 2016 in cooperation with the United Nations Office for Outer Space Affairs (UNOOSA). The DLR Conference aims to facilitate the discussion on the use of space-based platforms such as the International Space Station (ISS) and space-based applications to support the requirements of climate protection and to identify tools and methods for a continuous monitoring process to ensure adherence to climate change agreements. The DLR Conference will bring together experts from space agencies, experts with UN entities such as UNOOSA, UNSPIDER, UNFCCC, and WMO; as well as scientists from international and regional organizations such as the Global Climate Observing System (GCOS). These experts and scientists will address the considerable challenges in atmospheric climate research, and identify ways in which space-based platforms such as the ISS can contribute to the provision of long-term data to be used in atmospheric models that can be used to model changes in the climate worldwide.

Read more: [DLR Conference on Climate Change](#)



UN-SPIDER at a glance

VII Space Conference of the Americas in Managua, Nicaragua

The VII Space Conference of the Americas was conducted in Managua, Nicaragua from 17 to 19 November 2015. The conference brought together representatives of the space community, government institutions, academia and other regional and international organizations. The conference was organized by the Superior Coordinating Council, which includes the Nicaraguan Science and Technology Council, the National Council of Universities and the Ministry of the Presidency for Public Policies. The conference addressed the use of space technologies in applications related to education, science and technology, natural resources and the environment, as well as international cooperation on space-related issues. Mr. Luc St Pierre, Senior Programme Officer with the United Nations Office for Outer Space Affairs (UNOOSA) and Coordinator of the UN-SPIDER programme, attended the conference representing both UNOOSA and UN-SPIDER.

Read more: [Knowledge Portal](#)

UN-SPIDER hosted the autumn IWG-SEM meeting 2015

On 9 and 10 November 2015, UN-SPIDER hosted the autumn meeting of the International Working Group on Satellite-based Emergency Mapping (IWG-SEM). The meeting included representatives of the German Aerospace Center (DLR); the European Commission's Joint Research Centre (JRC); the UN Cartographic Section; the Service Régional de Traitement d'Image et de Télédétection (SERTIT); the Information Technology for Humanitarian Assistance, Cooperation and Action (ITHACA); the Human Rights Watch (HRW) organization; the Humanitarian OpenStreetMap Team (HOT); the University of Bonn; the Pacific Disaster Center (PDC); the Bonn International Center for Conversion (BICC) and the United States Geological Survey (USGS). In their biannual meeting, the group discussed several topics including map metadata standardization, GeoRSS services, clarifications and procedures related to the acceptance of private entities into the Working Group, and the editorial aspects of the specific chapter on Earthquake Mapping.

Read more: [Knowledge Portal](#)

News from our Community

This year El Niño: one of the three strongest reported in 65 years

During a news conference in Geneva on 16 November 2015, the Secretary-General of the United Nations World Meteorological Organization (WMO), Mr. Michel Jarraud, commented that the "Severe droughts and devastating flooding being experienced throughout the tropics and subtropical zones bear the hallmarks of this El Niño, which is the strongest for more than 15 years." He further emphasized that "We are better prepared for this event than we have

ever been in the past." During the next months, El Niño is expected to strengthen to become one of the three strongest reported El Niño events within the last 65 years. Most affected countries are already undertaking national efforts in agriculture, fisheries, water and health, as well as disaster management, to make the population aware of this event, and to reduce the risk of economic damage, based on advice from National Meteorological and Hydrological Services.

Read more: [Knowledge Portal](#)



DLR's Earth Sensing Imaging Spectrometer to be sent to the ISS at the end of 2016

Recently the German Aerospace Centre (DLR) installed its Earth Sensing Imaging Spectrometer (DESI) at the International Space Station (ISS). The spectrometer will be used to monitor natural hazards such as fires, floods, and droughts through the scan of multiple bands of light. DESI was developed in a partnership with La Trobe University in Melbourne, Australia. After three months of testing, the spectrometer will eventually become part of the ISS imaging system called the "Multi-User System for Earth Sensing" (MUSES). The observation system already combines devices which can monitor the Earth from the visible to near infrared wavelengths of the spectrum. The new DESI device will complement MUSES through the incorporation of the use of hyper-spectral imaging, combining adaptive optics techniques and advanced hardware and software.

Read more: [Knowledge Portal](#)

NASA develops new FireSat system to detect wildfires

The NASA Jet Propulsion Laboratory, based in Pasadena, California is developing a new network of space-based sensors called FireSat in collaboration with the private company Quadra Pi R2E, which is based in San Francisco, California. The new sensors are designed to improve the detection of wildfires. FireSat is expected to be launched by June 2018. FireSat will consist of a network of more than 200 thermal infrared imaging sensors loaded in a network of satellites. The satellite network will contribute to identify wildfires around the world. Once completed, FireSat will provide the greatest coverage of wildfires from space. Robert Staehle, lead designer of FireSat at the NASA Jet Propulsion Laboratory, indicated that "While many wildfires are reported by 9-1-1 calls soon after ignition, some are not, and delays in detection can lead to rapid escalation, and a dramatic growth of the cost of suppression. The system we envision will work day and night for fires anywhere in the world."

Read more: [Knowledge Portal](#)

Natural disasters affect 13 million people in Latin America and the Caribbean in 2015

According to the September – October 2015 edition of the "Humanitarian Bulletin Latin America and Caribbean" which has been published by the United Nations Office

for the Coordination of Humanitarian Affairs (OCHA); 13.2 million people have been affected by disasters from January to October 2015 in Latin America and the Caribbean. This figure is considerably larger than the one reported by OCHA for this region in 2014 (11.4 million people). The publication identifies drought as a major disaster, affecting roughly 6.6 million people in Latin America and the Caribbean. Epidemics like dengue, chikungunya and cholera affected more than 3.5 million people, almost twice as much as what was reported by OCHA a year ago. Other frequent hazards that affected people in these regions included excessive rains, floods, cold waves and other environmental phenomena. Read more: [Knowledge Portal](#)

German research cooperation looking behind Indonesia's haze

In recent months more than two million hectares of Indonesian forest area have been lost due to the forest fires that broke out on 21 June 2015. The National Space and Aviation Agency of Indonesia (LAPAN) expects losses to grow, as large forest areas and peat lands, especially in Kalimantan and Sumatra, are still affected by fires. Parwati Sofan, a senior official in LAPAN, stated at a press conference which was held at the Natural Disaster Mitigation Agency headquarters in Central Jakarta on 30 October 2015 that "Even though the satellite has helped us [collect the data], bear in mind that it cannot scan the forest areas that are covered in thick haze and clouds (...). We expect the size of burnt area to increase as the data collection is still underway. We will update the data on the burnt area every ten days."

Read more: [Knowledge Portal](#)

International Charter activated three times in November

The International Charter Space and Major Disasters was activated three times in this month. On 03 November, because of the Cyclone Chapala in Yemen, on 06 November due a Dam collapse in Brazil and on the same day in Iraq, because of a flood.

Read more: [International Charter](#)