



## JANUARY 2015 UPDATES

### **UN-SPIDER** at a glance

#### **UN-SPIDER Beijing activities in 2015**

UN-SPIDER, through its UN-SPIDER Beijing office, is planning several activities in Asia in 2015. These include a Technical Advisory Mission to Lao PDR, workshops and the Fifth United Nations International conference on Space based Technologies for Disaster Management in Beijing, China. The exact dates are available on the UN-SPIDER Knowledge Portal and experts who might be interested in participating or contributing to these activities are kindly asked to save the dates. More information and specific calls for participation in the individual activities will be announced.

Read more: Knowledge Portal

#### Call for expressions of interest: UN-SPIDER capacity building programme in USA

In partnership with Delta State University and Geospatial Information Technology Association (GITA), UN-SPIDER is planning a capacity building programme for developing countries from 27 July to 7 August 2015 in the United States of America and is calling potential participants for expressions of interest. The programme will include a symposium on the use of space-based technologies for international crisis response giving an overview of disaster response on the local, state and

national levels as well as a visit to the Mississippi Emergency Management Agency to learn about infrastructure, systems, coordination mechanism, data resources and operational programmes. These activities will be coupled with technical training sessions on data discovery techniques, remote sensing, and mapping for crisis and disaster.

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#### UNOOSA/UN-SPIDER strengthens cooperation with **United Arab Emirates**

UN-SPIDER/UNOOSA representatives visited the Ministry of Interior of the United Arab Emirates on 12 and 13 January 2015 to increase cooperation on technical capacity building on the use of space technologies for disaster risk reduction. Ms. Di Pippo discussed with Major General Dr. Ahmed Nasser Al Raisi, General Director of E-Services & Telecommunications of the UAE Ministry of Interior how the Emirates have been an invaluable partner for UNOOSA in promoting the use of space technologies for disaster risk reduction and emergency response. The visit helped explore options for an increased collaboration on technical capacity building and advisory services.

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# 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.

#### Vegetation Indices

Vegetation indices derived from Earth observation satellites are important for a wide range of applications such as vegetation monitoring, drought studies, agricultural activities, climate and hydrologic modeling. Vegetation monitoring plays an important role in drought early warning systems, which help to anticipate the risk of food crises at the local and global scale. Find out how vegetation indices are measured from Space, how they are used and where they can be accessed.

Read more: Knowledge Portal

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## News from our Regional Support Offices

#### **ADRC: Regional Support Office activities in 2015**

The Asian Disaster Reduction Center (ADRC) will continue to promote and support the use of space-based information for disaster risk reduction in its role as a UN-SPIDER Regional Support Office (RSO) throughout 2015. In doing do, ADRC will continue to participate in the Sentinel Asia project and

will be involved in the 3rd World Conference on Disaster Risk Reduction (WCDRR2015). ADRC will also continue to provide information on the latest disasters, and other relevant information, as well as on other ADRC activities as the UN-SPIDER RSO through its website.

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## News from our Community

#### Madagascar: International Charter activated for widespread floods

On 18 January 2015, the International Charter: Space and Major Disasters was activated in Madagascar in response to heavy rainfall resulting in widespread flooding. The strong rainfall is due to the devastating storms that had hit Madagascar previously. Namely, Tropical Cyclone Bansi and Tropical Cyclone Chedza affected the south-western part of the island on 9 January and 16 January, respectively.

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#### Four satellites will complete the constellation of the **Indian Regional Navigation Satellite System in 2015**

The Indian Space Research Organization is preparing the launch of four navigation satellites to complete the constellation of navigation satellites that provides accurate position information services. The IRNSS satellites will be put into orbit in 2015 to complete the constellation of navigation satellites that provides accurate position information service to users in India as well as the region extending up to 1500 km from its borders. IRNSS-1D will be the first satellite to be launched during the year. The launch date is foreseen for March.

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#### Six Galileo navigation satellites to be launched in 2015

The European Space Agency announced that six navigation satellites will be put into orbit in 2015, as additional elements of the navigation satellite system Galileo. Galileo will provide location-based services, emergency, security and humanitarian services, as well as applications for science, environment, weather and agriculture.

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#### Malaysia: New Flood Mitigation Research Centre

Malaysia's Deputy Prime Minister Tan Sri Muhyiddin Yassin announced the establishment of a new Centre of Excellence for Research on disaster management. Due to the high number of floods affecting the country, the Centre aims at advancing research in the fields of disaster management and flood mitigation. Muhyiddin emphasized: "Landslides, haze and floods often occur in our country, and there needs to be a comprehensive and effective approach to disaster management."

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#### **New Latin America Geospatial Portal launched**

Geospatial Media and Communication announced the launch of its new Latin America Geospatial Portal, where users can access a wide variety of information related to geospatial products and issues. The Portal is divided into five main sections: news, articles and case studies, interviews, magazine and conferences. The Portal is currently available in Spanish, Portuguese and English, in order to provide information to users coming from all Latin American countries as well as to other individuals and organisations operating in the field.

Read more: Knowledge Portal

#### NASA: New instrument to better understand climate change

On 10 January 2015, NASA's Cloud-Aerosol Transport System instrument was launched to help researchers model and predict climate changes on Earth. Scientists will gain an improved understanding of the structure and evolution of Earth's atmosphere and researchers may enhance their understanding of climate changes on Earth. CATS's data will be collected employing a powerful laser technology - the Light Detection and Ranging Instrument (LIDAR) - which

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is capable of measuring the location, composition and distribution of atmospheric particles.

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#### Azerbaijan to use satellite data for seismic monitoring

Azerbaijan's first telecommunication satellite Azerspace-1, launched in February 2013, will be used to monitor the seismologic situation of the country, which is located in a highly seismically active zone. Resources of the satellite will be used to exchange data between different stations of the monitoring system for the diagnosis and management of Robust Noise Monitoring, designed for seismic research, as the Control Systems Institute of the Azerbaijani National Academy of Sciences reported. This new monitoring system is capable of warning about the possibility of an earthquake within a radius of 300-400 kilometers in 5-20 hours.

Read more: Knowledge Portal

#### **NASA launches Soil Moisture Mapping Satellite**

On Saturday 31 January 2015 at 6:22 a.m. PST, NASA successfully launched its new Earth observation satellite SMAP from Vandenberg Air Force Base, California, USA, designed to collect global observations of the vital soil moisture. The Soil Moisture Active Passive (SMAP) satellite will collect data for the next three years. SMAP's combined radar and radiometer instruments will peer into the top fives centimeters of soil, through clouds and moderate vegetation cover, day and night, to produce the highest-resolution, most accurate soil moisture maps ever obtained from space.

Read more: Knowledge Portal

#### Ghana: First Earth observation satellite to be developed and launched

Ghana has announced its intention to launch its first Earth observation satellite, the Ghana Satellite One (GHANASAT 1). The project will be led by the Ghana Space Science and Technology (GSSTI), under the Ghana Atomic Energy Commission (GAEC), and with technical support from MENASAT Gulf Group PLC. The satellite will provide the country with information to address issues of security, risk management, maritime, forest depletion, and water problems.

Read more: Knowledge Portal

#### China: Meteorological satellite Fengyun-II 08 successfully launched

China's meteorological satellite Fengyun-II 08 was successfully launched from Xichang Satellite Centre, located in Sichuan Province, South-West China, on 31 December 2014. The purpose of the satellite will be to collect meteorological, maritime and hydrological data. These data will be used for weather forecasting and environment monitoring. In January 2012, China has already put in orbit another satellite of the same type, the Fengyun-II 07.

Read more: Knowledge Portal

## Upcoming events

#### Apply now! United Nations/Germany International Conference on Earth Observation on 26-28 May 2015, **Bonn, Germany**

2015 will be a decisive year for the international community paving the way for sustainable development worldwide. Three important processes led by the United Nations are underway resulting in three agreements expected for 2015: the Post 2015 Framework on Disaster Risk Reduction (HFA2, March 2015), the Sustainable Development Goals (September 2015), and the new climate change Agreement (December 2015). The United Nations/Germany International Conference on Earth Observation - Global solutions for the challenges of sustainable development in societies at risk aims at bridging the gap between Earth Observation experts and decision makers to find Earth observation solutions that match the

challenges of governments in societies at risk. The event is now open for applications. The deadline for applications for those requesting financial assistance is 13 March 2015.

Read more and apply online: Knowledge Portal

#### 2-13 February 2015, Vienna, Austria: 52nd session of the Scientific and Technical Subcommittee of COPUOS

The fifty-first session of the Scientific and Technical Subcommittee (STSC) of the Committee on the Peaceful Uses of Outer Space (COPUOS) will be held from 2 to 13 February 2015 at the United Nations Office at Vienna. COPUOS STSC meets annually to consider scientific and technical questions, reports on national activities and issues raised by the Member States.

Read more: UNOOSA



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## 14-18 March 2015, Sendai, Japan: UN World Conference on Disaster Risk Reduction

The Third UN World Conference on Disaster Risk Reduction will be held from 14 to 18 March 2015 in Sendai City, Miyagi Prefecture, Japan. Several thousand participants are expected, including at related events linked to the World Conference under the umbrella of building the resilience of nations and communities to disasters. Among the most important objectives of the conferences are the completion of the assessment and review of the implementation of the Hyogo Framework for Action and the adoption of a post-2015 framework for disaster risk reduction. UN-SPIDER and its partners will be involved in the form of a side event to highlight the potential of space-based information for disaster risk reduction.

Read more: WCDRR