

NOVEMBER 2014 UPDATES

UN-SPIDER at a glance

UN-SPIDER attended Second PrepCom for WCDRR

Two representatives of UN-SPIDER attended the second Preparatory Committee meeting (PrepCom2) related to the Third United Nations World Conference on Disaster Risk Reduction (WCDRR), scheduled to take place in March 2015 in Sendai, Japan. PrepCom2 took place on 17 and 18 November in Geneva and served to approve the Conference programme of work and to continue developing the draft post-2015 framework for disaster risk reduction. UN-SPIDER has attended both PrepComs in order to raise awareness on the importance of incorporating Earth observations and satellite-based information in this post-2015 framework for disaster risk reduction and to liaise with partners.

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UN-SPIDER participates **Earth** in Group **Observations Plenary held in Geneva**

Members of the multinational Group on Earth Observations (GEO) met in Geneva, Switzerland, on 13 and 14 November 2014 for their eleventh plenary meeting. The session was chaired by South Africa. Issues discussed included the Strategic Plan 2016-2025 and efforts to increase the international collaboration to promote the use of Earth Observation tools and applications in a range of sectors, including disaster management, environment, climate change, and health. UN-SPIDER's Coordinator, Luc St-Pierre, participated in the meeting and was invited to make a statement. Mr. St-Pierre highlighted that UNOOSA/UN-SPIDER has increased its coordination with the Secretariat of GEO and is looking forward to become an even more active participating organization to the Group.

Read more: Knowledge Portal

Viet Nam: UN-SPIDER Workshop on geospatial information concluded

From 10 to 15 November 2014, UN-SPIDER carried out a workshop and a simulation exercise targeting about

100 participants from national institutions, NGOs, and international organizations in Viet Nam. The event was jointly organised with the Geospatial Information and Technology Association (GITA). The Pacific Disaster Centre (PDC), UNDP Viet Nam, OCHA, DigitalGlobe and ESRI also offered considerable support to the workshop. The activity was following up on the Technical Advisory Mission to Viet Nam in 2013. The event served two purposes: First, to empower the government to use space-based and geospatial information at the local and regional levels during a crisis. Second, to foster personal relationships and knowledge exchange required at the local and regional levels for successful collaboration during a disaster.

Read more: Knowledge Portal

Sri Lanka: UN-SPIDER workshop on Earth Observations and Floods

As a follow up to the UN-SPIDER Technical Advisory Mission to Sri Lanka in 2011, a national workshop and a training programme on "Earth Observation Technologies for Flood Risk Mapping, Modelling and Management" was held from 17 to 21 November 2014. The activity was jointly realised by UN-SPIDER, the International Water Management Institute (IWMI), the Disaster Management Centre (DMC) of the Ministry of Disaster Management (MoDM), and the Postgraduate Institute of Science of the University of Peradeniya. The objective of the workshop and the training was to familiarise the participants with a broad array of methodologies and tools for flood hazard data collection, analysis and management, flood inundation modelling and rapid flood damage assessment in the broader context of integrated flood management, multi-hazard risk assessment and flood risk management.

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UN-SPIDER participates in IWG-SEM autumn meeting

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UN-SPIDER NOVEMBER 2014 UPDATES

the International Working Group on Satellite-based Emergency Mapping (IWG-SEM). The group convened in Oberpfaffenhofen, Germany, on the premises of the German Aerospace Center (DLR) on 25 and 26 November 2014. DLR is the current chair of the Working Group. The participants exchanged views and heard presentations about real-time mapping cooperation, including the joint elaboration of a GeoRSS feed as well as about post disaster damage, loss and needs assessments. Another item on the agenda were the Emergency Mapping Guidelines that the group had previously created as a joint effort. They are available for download on the working group's webpage which is now hosted on the UN-SPIDER Knowledge Portal at www.unspider.org/network/iwg-sem.

Read more: Knowledge Portal

UN-SPIDER UN/China/APSCO participates in Workshop on Space Law

From 17 to 21 November 2014, the United Nations Office for Outer Space Affairs (UNOOSA) organised jointly with the China National Space Administration (CNSA) and the Asia-Pacific Space Cooperation Organization (APSCO) a workshop on space law in Beijing, China. More specifically, the workshop shed light on "the role of national space legislation in strengthening the rule of law". UN-SPIDER participated in the workshop and Dr. Shirish Ravan of the UN-SPIDER Beijing Office chaired the session on "Regulatory and Institutional Aspects on the Use of Space-Derived Data and Information".

Read more: Knowledge Portal

New UN-SPIDER Newsletter available

The autumn edition of the UN-SPIDER Newsletter is here. This issue focuses on UN-SPIDER's global network of Regional Support Offices. It informs on the critical support that the network of RSOs provides to UN-SPIDER's programme of work. It describes how the members of the network contribute their experience, knowledge and resources to UN-SPIDER's various activities all over the world.

Read more: Knowledge Portal

UN-SPIDER efforts en route to Sendai

In addition to taking part in the Preparatory Committee sessions related to the upcoming World Conference on Disaster Risk Reduction (WCDRR), to take place in Sendai, Japan, in March 2015, UN-SPIDER will strengthen its presence in WCDRR through its participation in three working sessions and in a side event in the Public Forum. The three working sessions focus on the themes of innovation and high technology, early warning, and the use of science and technology in disaster risk reduction. The side event in the public forum will have a more scientific approach and will also address the use of space-based applications. The theme of Earth observations and spacebased applications is the cornerstone of these efforts and is bringing together more than 18 partners from the UN, international and regional organizations, as well as national government agencies from the disaster risk reduction and the space communities. Furthermore, UN-SPIDER has been active working with specific government agencies as a way to promote the incorporation of specific texts in the post-2015 framework for disaster risk reduction, highlighting the use of Earth observations and space-based technologies.

Read more: Knowledge Portal

UN-SPIDER and the UNESCO-IOC TRATE Project

Under the umbrella of the TRATE project, Dr. Juan Carlos Villagran de Leon of the UN-SPIDER Bonn Office has been contributing with other experts to update UNESCO-IOC guidelines on "Tsunami Risk Assessment and Mitigation for the Indian Ocean". These guidelines have been elaborated and published in 2009. In this updated version, the guidelines take into consideration recent experiences from tsunamis that have affected Japan, Chile, Samoa and Indonesia, and will address the use of space-based applications to contribute to risk assessment. The guidelines will benefit from contributions from the German Aerospace Center (DLR). These guidelines will be used to conduct a regional training workshop targeting representatives of institutions from countries exposed to tsunamis in the Indian Ocean. The training is expected to be held in the beginning of 2015.

Read more: UNESCO-IOC



Data application of the month

In this section, the UN-SPIDER team presents every month a specific example of satellite data application for disaster risk reduction and emergency response. Access the full list here.

Mapping land cover

What are land cover maps used for? How is land cover mapped from space? And where can land cover maps be accessed? The UN-SPIDER data application of the month answers all question on satellite-based land cover mapping. Land cover information is important for many applications like flood modelling, observation of agricultural drought, climate change modelling,

and monitoring of environmental changes including vegetation phenology, flooding, fire occurrence, and monitoring of carbon emission due to deforestation and forest degradation.

Read more about how land cover maps are created and used: Knowledge Portal

News from our Regional Support Offices

NASA supplies high-resolution topographical data of the African continent

NASA Administrator Charles Bolden, US Ambassador to Ethiopia Patricia Haslach, and US Ambassador to the African Union (AU) Reuben Brigety convened in Addis Ababa, Ethiopia, to debate over the means available to lessen the consequences of global climate change in Africa. In this context, the NASA administration provided high-resolution

topographical imagery for the African continent, which was collected by the Shuttle Radar Topography Mission. The data were delivered to the technical committee of the Governing Council of the Regional Center for Mapping of Resources for Development (RCMRD), which hosts the SERVIR Eastern and Southern Africa Hub and is a UN-SPIDER Regional Support Office.

Read more: Knowledge Portal

News from our Community

Australia: Satellite imagery project to identify and track algae blooms

A new satellite-based early detection project for blue-green algae identification was initiated in Australia. This new algae detection scheme, valued at \$1.3 million, will be developed over a period of two years. The programme will use optical remote sensing techniques to identify algae blooms with the primary goal of decreasing the harmful impact of blooms on human health, the environment and regional economies.

Read more: Knowledge Portal

Bangladesh: E-Library on Disaster Management

In Bangladesh, the Comprehensive Disaster Management Programme (CDMP II) has established an online library

including more than 200 documents and other knowledge material on disaster management and climate change adaptation. CDMP II is a programme under the Department of Disaster Management of the Ministry of Disaster Management and Relief in Bangladesh. The e-library stores and shares materials useful to disaster management practitioners, Government Agencies, development partners, academicians, researchers and students, media, individuals and organizations involved in disaster management. The content is grouped into different thematic areas such as disaster risk management, climate change, vulnerability & adaptation, seismic & earthquake risk, rural and urban risk reduction and different tools and approaches.

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UN-SPIDER NOVEMBER 2014 UPDATES



ESA's SMOS satellite has covered more than one billion kilometres orbiting Earth to improve our understanding of our planet's water cycle. Marking its fifth birthday, all the data collected over land and ocean have been drawn together to show how soil moisture and ocean salinity change over the year. Carrying a novel sensor, SMOS captures images of "brightness temperature". These images correspond to microwave radiation emitted from Earth's surface and can be related to soil moisture and ocean salinity, which are two key variables in Earth's water cycle.

Read more: Knowledge Portal

Airbus Defence and Space adds DMCii data to its portfolio

Airbus Defence and Space announced that the data and application services of DMC International Imaging Ltd. (DMCii), UK, will now be available through its Geo-Intelligence programme line, thus further enhancing its Earth observation-based products and services portfolio. Airbus Defence and Space is significantly strengthening its Earth observation portfolio with the two DMC satellites capable of acquiring imagery of more than 10,000,000 km² per day, delivering 22m-resolution, 650km-swath Earth imagery.

Read more: Knowledge Portal

Japan: ASNARO Earth Observation satellite launched

On 6 November 2014, five Japanese satellites were sent into orbit from the Dombarovsky launch site in Russia. One of the satellites launched was ASNARO-1, an Earth observation mission funded by the Government of Japan in 2008. The Advanced Satellite with New system Architecture for Observation (ASNARO) mission will be used in the fields of environmental observation, disaster monitoring and security enhancement. ASNARO-1 has an expected life span of 3 years and a swath width of 10 km.

Read more: Knowledge Portal

Missing Maps Project: Mapping the most vulnerable places in the world

On 4 November 2014 the Humanitarian OpenStreetMap Team (HOT) in collaboration with Doctors Without Borders UK and the American and British Red Cross announced the Missing Maps Project. The initiative seeks to map the most vulnerable places in the world in order to enable international and local NGOs and individuals to ensure timely responses to humanitarian crises and disasters triggered by natural hazards. Acknowledging that a big number of the

world's most vulnerable human settlements have remained unmapped, HOT's project addresses the necessity of mapping geographical areas vulnerable to crisis and disasters.

Read more: Knowledge Portal

China plans to launch about 70 remote sensing satellites

China will launch about 70 remote sensing satellites to detect the near-Earth space environment and predict extreme events, according to Yang Baohua, deputy general manager of China Aerospace Science and Technology Corporation. The remote sensing satellites will be part of a broader programme encompassing a total of 120 satellites that are planned to be launched. Among these satellites will be about 20 communication satellites and 30 navigation satellites.

Read more: Knowledge Portal

Ethiopian Mapping Agency re-established with a more holistic mandate

A recently enacted law in Ethiopia re-establishes the Ethiopian Mapping Agency (EMA) under the jurisdiction of the Office of the Prime Minister. The EMA has been largely responsible for the publication and distribution of valuable geo-information data under the supervision of the Ministry of Finance and Economic Development (MoFED). Among the agency's responsibilities are geodesy measurements of the Earth's surface, aerial photography, satellite imagery, topographic and hydrographic maps.

Read more: Knowledge Portal

World Humanitarian Summit 2016 tackle humanitarian needs

The UN Secretary-General is organising the first largescale global humanitarian summit. The World Humanitarian Summit will be held in Istanbul in 2016 and aims to identify new ways to tackle humanitarian needs in our fast-changing world. It is embedded in a three-year initiative managed by the UN Office for the Coordination of Humanitarian Affairs (OCHA). Among the themes highlighted for the summit are humanitarian effectiveness, transformation through innovation, serving the needs of people in conflict as well as reducing vulnerability and managing risk.

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Franco-Haitian convention satellite-based on environmental monitoring signed

On 17 November 2014, the Convention on Satellite-based Environmental Monitoring in Haiti (SEAS-Haiti) was signed by representatives of France and of Haiti. At the agreement's



UN-SPIDER NOVEMBER 2014 UPDATES

core is the implementation of a technological platform for sustainable environmental management in Haiti and the Caribbean, using satellite imagery for research, training, innovation and sustainable development. Part of the agreement is the establishment of a Remote Sensing Centre on the Henri Christophe of Limonade campus of the State University of Haiti (UEH), which will collect data from various

satellites in order to assist a wide range of activities, such as monitoring deforestation, weather forecasting, creating epidemiological real-time maps and vulnerability mapping. The data collected will be accessible freely for researchers and public institutions.

Read more: Knowledge Portal

Upcoming events

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

12-16 October 2015, Pyeongchang, Republic of Korea: 6th International Wildland Fire Conference

The Korea Forest Service jointly with Gangwon province will hold the 6th International Wildland Fire Conference in October 2015, in Pyeongchang, Republic of Korea. The conference will bring together policy makers, researchers and practitioners as well as international organisations and NGOs from 80 countries to discuss about the global efforts to prevent fire-related damages and forge a concerted response to them. The conference will provide a platform for the nation to share its know-how for wildland fire prevention and cutting edge technologies including a real time wildland fire control system using ICT that has been recently constructed with the international society.

Read more: IWFC 2015

