



United Nations Platform for Space-based Information for Disaster Management and Emergency Response

# **UN-SPIDER**

# May 2012 Updates

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

#### Technical Advisory Mission to Cabo Verde: Call for experts

At the invitation of the Serviço Nacional de Proteção Civil (SNPC) of Cabo Verde, the UN-SPIDER Programme will conduct a Technical Advisory Mission (TAM) to this Member State from 30 July - 3 August 2012. The Technical Advisory Mission, to be carried out by a team of experts led by UN-SPIDER, will work together during the whole week in Praia (Cabo Verde). UN-SPI-DER is currently contacting space experts as well as crowdsource mapping experts and expects to have the team defined by the end of June. If your institution, organization, company or university is interested in joining the expert team, please get in touch with us, so that we can provide you with additional information.

TAMs are part of UN-SPIDER's technical advisory support, one of the core activities of the programme. TAM experts meet with key disaster management authorities in the Government, UN agencies, regional and international organizations or initiatives and private entrepreneurs to discuss the topic in depth, make recommendations and develop guidelines to improve the use of space-based information in disaster-risk management and emergency response.

Learn more: markus.woltran@unoosa.org

### Space-based Information for Crowdsource Mapping: Join the Discussion Forum

With the continuous support from the Government of Austria and from Secure World Foundation, UN-SPIDER is taking a leading role in facilitating the use of Crowdsource Mapping being made available by the work of dedicated Virtual and Technical Communities. UN-SPIDER is involving crowdsource mapping experts in UN-SPIDER Technical Advisory Missions (TAM) as it was the case during the recent TAM to Tonga. UN-SPIDER is also planning the "United Nations International Expert Meeting on Crowdsource Mapping for Disaster Risk Management and Emergency Response" from 3 to 5 December 2012 – the second of its kind.

If you are interested in getting involved in UN-SPIDER crowdsorce mapping efforts, we invite you to join our discussion forum which currently has 366 active members. Just follow the link below and join the discussion.

## UN-SPIDER continues to provide support to Pacific Island Countries

The UN-SPIDER Programme has been working with countries in the Pacific since 2008, supported by the long-term commitment from the Government of Austria. In 2012, UN-SPIDER carried out a Technical Advisory Mission to the Kingdom of Tonga and is now ensuring its contribution to two very important meetings which will be held later this year in September and October.

From 17 to 21 September 2012, the Secretariat of the Pacific Community (SPC) and the United Nations International Strategy for Disaster Reduction (UNISDR) will be organizing the 4th Session of the Pacific Platform for Disaster Risk Management in Noumea, New Caledonia. Furthermore, from 22 to 25 October 2012, OCHA Pacific will be organizing the annual Pacific Humanitarian Team meeting in Fiji.

Learn more: Pacific Disaster Net and david.stevens@unoosa.org

### UNOOSA opens Regional Centre for Space Science and Technology Education for Western Asia

The United Nations Office for Outer Space Affairs (UNOOSA) recently opened its fifth Regional Centre for Space Science and Technology Education in Amman, Jordan. The Centre will offer new research and application programmes for university educators and scientists in the fields of space-based remote sensing, satellite communications, satellite meteorology and space sciences.

Ms. Mazlan Othman, Director of UNOOSA, greeted the new centre as "another landmark in the development of the UN Programme on Space Applications that was mandated to promote the use of space technology for peaceful purposes, in support of national, regional and global development".

The Centre was inaugurated under the patronage of His Majesty King Abdullah II at the Royal Jordanian Geographic Centre, where it is located. It will join the existing network of four regional centres located in India for the Asia-Pacific region, in Morocco and Nigeria for French and English communities in Africa respectively, and two campuses of the regional centre for Latin America and the Caribbean, located in Brazil and Mexico.

Learn more: UNOOSA

Learn more: Discussion Forum



# Follow-up training of Technical Advisory Mission in Cameroon

From 7 to 11 May 2012, UN-SPIDER supported a follow-up training activity on remote sensing for disaster management at the request of the UN-SPIDER National Focal Point for Cameroon. The training was conducted jointly with the United Nations University Institute for Environment and Human Security (UNU-EHS). More than 25 participants from the Ministry of Territorial Administration and Decentralization (MINATD) and other Ministries and Universities attended the training. UN-SPIDER and UNU-EHS funded the participation of five representatives from several Central African States.

The training covered basic elements of remote sensing, GIS basics, simple data extraction and geo-referencing techniques, and included various presentations and visual material on the use of remote sensing for disaster management. The training also aimed at raising awareness for existing mechanisms to access space-based information such as the International Charter: Space and Major Disasters and GMES.

Learn more: Knowledge Portal

## UNDP Africa Human Development Report Acknowledges UN-SPIDER

On 15 May 2012, the United Nations Development Programme released the 2012 Africa Human Development Report: Towards a Food Secure Future. Despite recent economic growth and plentiful natural resources, sub-Saharan Africa remains the world's most food-insecure region. UNDP's first Africa Human Development Report shows that food security and human development reinforce each other. The report stresses that, in order to achieve food security, vulnerability analysis is vital. It specifically mentions the role of UN-SPIDER in lessening sub-Saharan Africa's vulnerability to natural disasters by using space-based technologies (page 105).

Learn more: UNDP

#### **UN-SPIDER** participates in development fair

On 25 May 2012, UN-SPIDER took part in an event entitled "Engagement fairbindet" ("Engagement connects") that was organized by the German Federal Ministry for Economic Cooperation and Development (BMZ). The fair aimed to engage civil society more effectively into development activities.

Individuals could obtain advice on donations, volunteering, projects, and other ways of contributing to the development of poor regions of the world. The event took place on the BMZ premises in Bonn, in the park of the former Federal Chancellery. Besides UN agencies in Bonn and German Government agencies, some 50 NGOs, organizations, associations and private companies took part in the fair.

Learn more (in German): Engagement Fairbindet

## UN-SPIDER participates in Workshop on Use of Space Applications in Humanitarian Operations

On 16 to 18 May 2012, the Space Research Centre of the Polish Academy of Sciences (CBK), the Main School of Fire Service (SGSP) and Secure World Foundation (SWF) organized the "Workshop on the Use of Space Applications in Humanitarian Operations" in Warsaw, Poland. It focused on a simulation of the response to a flood of a very large extent that demanded the support of the international community. The workshop was conducted within the framework of the GEO Network for Capacity Building (Geonetcab).

The simulation was designed to make use of a geo-viewer capable of displaying not only typical cartographic maps, but also information gathered from space applications (GNSS and satellite imagery), such as the location of particular infrastructure (hospitals, government buildings), collapsed bridges, fire brigades on site and temporary shelters; as well as layers, depicting the geographical extent of floods.

The simulation displayed the strengths of geo-viewers when applied in the context of a multi-lingual environment; their capacity to combine information gathered using different types of space applications (GNSS, satellite telecommunications and Earth Observations) on a single screen; and their usefulness in linking a variety of actors at different levels (local, regional, national and international). However, the simulation also manifested the need for users to be properly trained in their use prior to real events.

Learn more: Knowledge Portal

#### New section on the Knowledge Portal

The UN-SPIDER Knowledge Portal has a new section focusing on specific projects. In the framework of its mandate, UN-SPIDER supports and conducts projects that look at specific elements of the use of space-based information for risk and disaster management. Two projects are currently highlighted in this section. The RIVAF project "Understanding Poverty Assessment through Disaster Impacts" analyses the impact of the 2008 global economic crisis on the relationships between livelihood, poverty, and vulnerability to natural disasters. The VALID project looks at the economic, humanitarian and organizational benefits which can be achieved by applying geo-information to disaster management.

Learn more: Knowledge Portal

### News from our Regional Support Offices

### IGAC and Colombian Calamities National Fund sign agreement

The Agustin Codazzi Geographic Institute (IGAC) and the National Fund for Calamities (NFC) of Colombia signed an agreement to promote the use of remote sensing data. The aim is to acquire satellite imagery to generate, map and monitor regions affected by floods through the use of geospatial techniques. The agreement is part of the framework of the "Colombia Humanitaria" initiative targeting flood management. From December 2011 to June 2012, IGAC obtained optical images with a spatial resolution of 22 meters daily to monitor floods provided by DMC International Imaging (DMCii). It also obtained Radar images of the COSMO-SkyMedsatellite at 5 meters resolution in Stripmap mode and 30 meters resolution in ScanSAR provided by Telespazio.

Learn more: IGAC



#### Károly Róbert College and Hungarian National Directorate General for Disaster Management strengthen cooperation

On 15 May 2012, the Hungarian RSO, hosted by Károly Róbert College, and the National Directorate General for Disaster Management (NDGDM), which is a UN-SPIDER National Focal Point, signed a cooperation agreement to strengthen Hungarian capacities in disaster management.

According to the agreement, the RSO staff will hold a series of lectures for management and co-workers of NDGDM. The first training course was held on the RSO premises in Gyöngyös, bringing together more than 70 participants from the regional offices of NDGDM.

Learn more: Károly Róbert College

#### **CATHALAC: First National SMIT Workshop**

On 2 May 2012, a protocol ceremony was held in the Dominican Republic with the aim of delivering specialized computer equipment as part of the Phase II activities in the Mesoamerican Land Information System (SMIT) in order to strengthen the capacity of institutions in disaster risk management. Just after the official ceremony, the First National SMIT Workshop, facilitated by CATHALAC, was conducted. It was open to all national representatives from the offices of meteorology, water resources, cartography and geography, statistics or environment. The workshop aimed to present the achievements of the SMIT in its first stage, as well as to visualize goals, processes and institutional mechanisms to be developed in SMIT Phase II for Dominican Republic in order to enhance its capacity to jointly manage relevant geospatial national information with agencies responsible for civil protection, risk reduction and planning.

CATHALAC is the SMIT Central Executive Unit leveraging its technological capacity and expertise in geospatial information for decision-making. The first phase of SMIT involved a close collaboration with national civil protection agencies in each country of Meso-America (Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Belize and the Dominican Republic) and the effective communication with the Presidential Commissioners for Proyecto Mesoamérica, the national mapping agencies and national institutions dedicated to monitoring (Met Services, Hydrological and Geological Services).

Learn more: CATHALAC

### News from our Community

#### Envisat: ESA declares end of its mission

On 8 April 2012, the ESA satellite Envisat stopped sending signals back to Earth, just weeks after celebrating its tenth year in orbit. Over the past weeks, ESA staff had attempted to reestablish communication and regain control of this satellite. However, all efforts seem to have been in vain - ESA officially declared the end of the mission on 9 May 2012. Envisat had already served twice as long as originally planned for.

Learn more: ESA

## International Charter activated for volcano eruption in Guatemala

On Saturday evening 19 May 2012, the "Fuego" volcano in Guatemala experienced a strong eruption, which led to the evacuation of some communities located on its foothills. The National Coordinating Agency for Disaster Reduction (CONRED) subsequently requested UN-SPIDER's support and requested the activation of the International Charter Space and Major Disasters. The Charter was activated by the Argentina Civil Protection Agency (SIFEM) on behalf of CONRED on 21 May 2012.

The eruption of the 3,700 meters high volcano was one of its largest in recent years. Eruptions began at 2:45 a.m. with explosions and lava fountains up to 400 meters high. Authorities declared an "orange" level alert after the volcano entered the phase of effusive eruption, throwing lava over 300 meters and ejecting ash columns nearly 5,000 meters high. Learn more: International Charter

#### International Charter activated for floods in China

The International Charter Space and Major Disasters was activated on 12 May 2012 by the China National Committee for Disaster Reduction due to major floods in the Gansu Province. The storms affected towns and villages, leading to widespread evacuations and destruction of homes and the loss of crops. It is estimated that 404,900 people were affect. The most seriously affected areas are Chabu town, Puma town, and Lvjing town in Minxian county. Over 23.000 hectares of crops have been affected by the floods and hail, with more than

2,300 hectares of arable land destroyed. 212 national highways have been damaged and some have been destroyed. 28,000 houses have suffered damage or destruction.

Digital Globe Firstlook, an online service provider for fast web-based access to pre- and post-event imagery, was also tasked to acquire imagery in the affected area.

Learn more: International Charter

#### Publication: Ecosystem Approach to Disaster Risk Reduction

The National Institute of Disaster Management (NIDM) of India published the ebook "Ecosystem Approach to Disaster Risk Reduction", which can be accessed through the NIDM Website. The publication focuses on the importance of protecting and improving ecosystems to reduce disaster risk. It gives a general introduction to the topic of Eco-Disaster Risk Reduction and showcases specific issues such as coastal hazard mitigation, landslide risk, urban flood risk and fire management. Furthermore, it indicates practical strategies and tools to better include ecological approaches into disaster risk reduction.

NIDM is one of UN-SPIDER's partners in conducting its Capacity Building activities. UN-SPIDER and NIDM have jointly supported the training workshop on "Space technology applications in disaster management and emergency response" in New Delhi, India in March 2012.

Learn more: NIDM Books

#### International Charter: New issue of newsletter available

The second issue of the Charter's Newsletter takes a glance at types and frequency of Charter activations in 2011, which, as it says, has been a busy year for the Charter Member Agencies. The Newsletter also commemorates the 10th ENVISAT and 40th LANDSAT satellite Program anniversaries and addresses a recent Pleiades satellite launch which took place in December 2011 in French Guiana.

Learn more: International Charter



### **Upcoming events**

#### Postponed: United Nations International Expert Meeting on Crowdsource Mapping

UN-SPIDER's "United Nations International Expert Meeting on Crowdsource Mapping for Disaster Risk Management and Emergency Response", foreseen to take place in Vienna on 17 - 19 July, has been postponed. It will now take place on 3-5 December 2012.

The application deadline has also been extended to 19 October 2012. This Expert Meeting will bring together leading experts representing crowdsourcing communities, space agencies, disaster management and civil protection agencies, NGOs, private companies, regional and international organizations. Experts currently working in any of the relevant areas (disasters, crowd-source mapping, space-based information) are invited to apply. Please note that attendance will be strictly limited to 110 experts. UN-SPIDER will be providing a number of selected experts with financial support to attend this expert meeting.

Learn more: Knowledge Portal

#### 55th session of COPUOS

The 55th session of the Committee on the Peaceful Uses of Outer Space (COPUOS) will take place from 6 to 15 June 2012 in the premises of the United Nations Office in Vienna (UNOV). The Committee on the Peaceful Uses of Outer Space was set up by the General Assembly in 1959 (resolution 1472 (XIV)) to review the scope of international cooperation in peaceful uses of outer space, to devise programmes in this field to be undertaken under the auspices of the United Nations, to encourage continued research and the dissemination of information on outer space matters, and to study legal problems arising from the exploration of outer space.

The 55th session will continue discussions on ways and means of maintaining outer space for peaceful purposes, as well as on a variety of topics including spin-offs of space technology, space and society, space and water, space and climate change, and the use of space technology in the United Nations system. The session will also address the reports of the Legal and Scientific and Technical Sub-Committees of COPUOS.

Learn more: UNOOSA

#### UNOOSA organizes Rio+20 side event "Space for Sustainable Development"

On 20-22 June 2012, world leaders, along with thousands of participants from governments, the private sector, NGOs and other groups, will come together at the Rio+20 Conference in Rio de Janeiro, Brazil to shape how to reduce poverty, advance social equity and ensure environmental protection on an ever more crowded planet.

Under the title "Space for Sustainable Development" UNOOSA will organize a side-event that focuses on the contribution of Space-based Information and Technologies to Support the Implementation of Rio+20 Outcomes and Actions. The proposed side event will focus on space and its contributions to a convergence on the use of space-based technologies for sustainable development. It will also assist in identifying the next actions that would embrace Rio+20 outcomes. The UNOOSA side event will take place on 19 June 2012, 3:30 p.m.

Learn more: Rio+20 Side Events and david.stevens@unoosa.org

#### About UNOOSA/UN-SPIDER

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 co-operation in the peaceful uses of outer space, and assisting developing countries in using space science and technology. Headquartered in Vienna, Austria, UNOOSA maintains a website at http://www.unoosa.org.

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 space-based solutions during all phases of the disaster management cycle.