



NOVEMBER 2012 UPDATES

UN-SPIDER AT A GLANCE

Myanmar: Training the use of Geo-informatics for Disaster Risk Management

UN-SPIDER and International Centre for Integrated Mountain Development (ICIMOD), prospective Regional Support Office of UN-SPIDER, jointly organized a national training course on Geo-informatics for Disaster Risk Management in Nay Pyi Taw, Myanmar, from 26 to 30 November 2012. The programme is supported by the Relief and Resettlement Department (RRD) of the Ministry of Social Welfare, Relief and Resettlement and the UN OCHA Myanmar Office. The participants were introduced to the concepts of hazard and vulnerability, earth observation satellites for disaster management, geographic information systems as well as visualization of GIS data and satellite images, among other topics. Before the kick-off of the training, a half day workshop was held for dissemination of the report of the UN-SPIDER Technical Advisory Mission conducted in March 2012.

Read more: [Knowledge Portal](#)

UN-SPIDER facilitates activation of Charter for Guatemala

On 7 November 2012, the southwestern region of Guatemala was impacted by a strong earthquake that provoked fatalities and losses. The 7.4 magnitude earthquake had its epicenter 35 kilometers south of the Port of Champerico in the Retalhuleu Department. The state of Public Calamity was declared for San Marcos, Quetzaltenango, Quiche and Huehuetenango. In order to obtain satellite imagery and maps of the affected area, the National Coordinating Agency for Disaster Reduction of Guatemala (CONRED) contacted UN-SPIDER to request the activation of the International Charter "Space and Major Disasters", which was subsequently activated by the Argentina Civil Protection Agency (SIFEM) on behalf of CONRED on 8 November 2012.

Read more: [Knowledge Portal](#)

UN-SPIDER Conference on Space Technology for Climate Change

The United Nations International Conference on Space-based Technologies for Disaster Management - "Risk Assessment in the Context of Global Climate Change" was successfully inaugurated on 7 November 2012 in Beijing, China. This Conference taking place from 7 to 9 November 2012 was the second conference of its kind organized in Beijing following a successful first conference in 2011. The aim of the conference was to offer a forum for disaster management communities and experts to strengthen their capabilities in using space-based information to assess, monitor and respond to climate change related disaster risks and integrate space technology into long-term disaster risk reduction efforts. All conference presentations are available on the UN-SPIDER Knowledge Portal.

Read more: [Knowledge Portal](#)

UNOOSA holds workshop on Space Applications for Socio-Economic Benefits

From 12 to 16 November 2012, UNOOSA organized the Workshop "Space Technology Applications for Socio-Economic Benefits" in Santiago de Chile, Chile. The overall objective of the workshop was to increase awareness among policy makers and planners on the socio-economic benefits of utilizing space technology. The workshop contributed to international cooperation by providing opportunities to exchange in-depth information on Space Technology Applications for Socio-Economic Benefits. The Workshop was attended by approximately 140 policymakers, decision makers and senior experts from international, regional and national institutions.

Read more: [Knowledge Portal](#)





NEWS FROM OUR REGIONAL SUPPORT OFFICES

IGAC researches automatic Flood Area Extraction

UN-SPIDER's Regional Support Office in Colombia, the Agustin Codazzi Geographic Institute (IGAC), is currently researching automatic flooded area extraction. The experts are implementing the Adaboost algorithm, which is a change detection procedure. This algorithm consists in creating a strong classifier that is built from a small group of weak classifiers. IGAC's approach uses the medium, mean and variance filters, each of these calculated using three different windows sizes: 3x3, 5x5, and 7x7. Then the experts calculate the difference-image between the filtered after-flood image and the filtered before-flood image.

Read more: [Knowledge Portal](#)

IGAC: Using LiDAR for flood risk mapping

UN-SPIDER's Regional Support Office in Colombia, the Agustin Codazzi Geographic Institute (IGAC) is doing a research project about LiDAR (Light Detection and Ranging Laser). Most software used to process LiDAR data has expensive licenses; therefore their use is restricted to some specific users. IGAC's expert have developed two methodologies to generate DTMs and DEMs using freeware: The first methodology filters the impulses based on radiometric characteristics and interpolates the filtered pulses using the Kriging analysis. The second methodology filters the impulses based on geometric characteristics and generates DTMs and DEMs using an iterative TIN (triangulated irregular network) algorithm. In addition IGAC developed a tool for ArcToolBox of ArcGIS to get directly files .LAS. This tool allows to visualize the files .LAS, filter pulses, and generate DTMs and DEMs.

Read more: [Knowledge Portal](#)

NEWS FROM OUR COMMUNITY

International Charter activated for Hurricane Sandy

The International Charter "Space and Major Disasters" was activated twice in the context of Hurricane Sandy - the largest Atlantic tropical storm system on record. UNITAR/UNOSAT on behalf of UNOCHA activated the mechanism on 29 October 2012 for Haiti. Hurricane Sandy tore through the Caribbean between 26 and 28 October, leaving a reported 51 dead in Haiti and another 15 missing. USGS on behalf of Federal Emergency Management Agency (FEMA) activated the Charter for the States of New York and New Jersey, USA on 1 November 2012. Hurricane Sandy made landfall just south of Atlantic City, New Jersey, bringing winds up to 90 mph (150 kmh), and pushing a massive storm surge onto beaches and shorelines. At least 50 deaths have been reported.

Read more: [International Charter](#)

Somerset levels, Oxford, Tewkesbury, Darlington to York, Nene Washlands, and Nottingham. Approximately 1,800 properties have been flooded since, while flood defences have protected more than 54,000 homes. Over 106,000 properties have been sent a flood warning.

Read more: [International Charter](#)

International Charter activated for floods in England

The International Charter "Space and Major Disasters" was activated on 27 November 2012 by the Environment Agency of England and Wales, after widespread floods had hit a number of regions. Among the affected areas are:

CongoSat1: Chinese company will launch DR Congo's first satellite

China Great Wall Industry Corp will launch the Democratic Republic of the Congo's first satellite, which will also be developed by China, before the end of 2015, according to a contract signed on 17 November 2012. CongoSat 1 is a communications satellite to be developed and manufactured by the China Academy of Space Technology for the National Network of Satellite Telecommunications of the African country. The satellite's design will be based on the DFH 4 satellite platform, capable of covering the Democratic Republic of the Congo and all the central and southern parts of the African continent.

Read more: [Knowledge Portal](#)





ESA: European Ministers allocate 10 billion EUR for European space activities

On 21 November 2012, ESA concluded a successful two-day Council meeting at ministerial level in Naples, Italy. Ministers from ESA's 20 member states and Canada allocated 10 billion EUR for ESA's space activities and programmes for the years to come. Ministers focused the investments on fields with high growth potential or with a direct and immediate impact on the economy such as telecommunications and meteorology. They approved ESA's level of resources for 2013-17, the proposals for the domain of Earth Observation and confirmed Europe's commitment to the exploitation of the International Space Station (ISS).

Read more: [Knowledge Portal](#)

Disaster Risk Reduction: UN to develop action plan

A major initiative to develop a UN strategic plan of action for disaster risk reduction and resilience got underway on 19 November 2012 at UNESCO's Headquarters as representatives from 20 UN agencies and programmes convened for a two-day UN High Level Retreat. The goal is to produce a plan of action in four months and identify key milestones for the finalization, ownership and implementation. In her opening remarks, UNESCO Director General, Irina Bokova, said the meeting was an opportunity for creative thinking on how to strengthen the coherence of the UN system and to focus on strengthening resilience and disaster risk reduction as the first line of defense against climate change.

Read more: [UNISDR](#)

UPCOMING EVENTS

8th International Conference on Geo-information for Disaster Management (Gi4DM)

From 13 to 15 of December 2012, the Public Safety Districts of the Netherlands will host the annual Gi4DM Conference that will gather a worldwide group of researchers and experts. It will take place in the city of Enschede and will aim at exchanging experiences and ideas in order to shape up relevant and appropriate solutions to crisis response issues. The Conference will include the conduction of test scenarios, exercises, presentations and discussion sessions.

Read more: [Gi4DM](#)

USGS: New GLS Visualization Interface

USGS released a new Visualization Interface for Global Land Survey (GLS) data in the context of Earth Resources Observation Systems (EROS). The new interface allows users to immediately download GLS 2010 and GLS 2005 Surface Reflectance Products. GLS 2000 surface reflectance products will be available soon as well. In addition, Landsat Thematic Mapper (TM) and Enhanced Thematic Mapper Plus (ETM+) scenes from 1984 to April 14, 2012 can also be processed to surface reflectance for scientific evaluation through the ESPA Ordering Interface. Moreover, The USGS EROS Center recently released a revised and updated version of their Earthshots website. Each Earthshots page features a different location from around the world and explains the changes that the satellite images reveal.

Read more: [Knowledge Portal](#)

Central America: New Portal for Disaster Risk Management launched

The Coordination Centre for Natural Disaster Prevention in Central America (CEPREDENAC) in Guatemala launched on 19 November 2012 an online Platform for Information and Communication for Integrated Risk Management: www.info-gir.org. The website offers a range of information and applications that help strengthen mechanisms for coordination and institutional and sectoral communication between the Central American countries. The tool will also provide decision makers with critical information how to minimize the vulnerability of the population at risk and provide relief in emergency situations.

Read more: [Knowledge Portal](#)

