



# UN-SPIDER

## April 2010 Updates

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<http://www.ungiwg.org/cgi-bin/mailman/listinfo/unspider>

Please note: there is a **NEW DATE** for the UN-SPIDER Regional Workshop *Building upon Regional Space-based Solutions for Disaster Management and Emergency Response for Africa*, **6-9 July 2010**, Addis Ababa, Ethiopia

### UN-SPIDER News

#### 1. CATHALAC becomes new UN-SPIDER Regional Support Office

Panama-based CATHALAC (Water Center for the Humid Tropics of Latin America and the Caribbean) is a new UN-SPIDER Regional Support Office in Latin America and the Caribbean after signing a cooperation agreement with The United Nations Office for Outer Space Affairs (UNOOSA). CATHALAC's participation as a Regional Support Office for UN-SPIDER includes promoting the development and strengthening of national capacities in Latin American and the Caribbean countries, supporting horizontal cooperation and providing technical assistance to the countries and organizations involved in disaster prevention and mitigation, as well as generating and sharing knowledge on the use of valuable space based information in the decision making processes. CATHALAC is an International Organization focusing its work on the humid tropics of Latin America and the Caribbean. Its primary purpose is to promote sustainable development through applied research and development, education and technology transfer, in integrated water resource management, climate change, risk management and environmental modelling and analysis.

For further information >> [UN-SPIDER News](#), [CATHALAC](#)

#### 2. UN-SPIDER at the Second Ministerial Conference on Disaster Risk Reduction in Nairobi

Following the invitation of the organisers, UN-SPIDER participated in the Second Ministerial Conference on Disaster Risk Reduction that took place from 14 to 16 April 2010 at the Kenyatta International Conference Centre in Nairobi, Kenya in parallel to the First Ministerial Conference of Ministers Responsible for Meteorology in Africa. During this important constitutional event African ministers adopted the extended Africa Programme of Action for the Implementation of the Africa Regional Strategy for Disaster Risk Reduction

with UNOOSA being mentioned as an official partner. The ministerial conference was organized by the African Union Commission, the Government of Kenya, and the United Nations International Strategy for Disaster Reduction (UNISDR) in collaboration with the World Bank Global Facility for Disaster Reduction and Recovery (GFDRR). Next to the ministers more than 250 participants from 42 African countries attended this meeting, among them delegates representing the Regional Economic Communities (RECs), National Platforms and focal points for disaster risk reduction, institutions, donors, experts, academia, UN agencies and NGOs.

*For further information >> [UN-SPIDER News](#)*

### **3. UN-SPIDER conducts Special Session during the 2nd Hemispheric Encounter on National Mechanisms and Networks for Risk Reduction in Santa Marta, Colombia: “Space-based Applications for Managing Risk Reduction and Emergency Response in Latin America and the Caribbean”**

Taking advantage of the 2nd Hemispheric Encounter of Santa Marta, the UN-SPIDER Programme organized and conducted a special session during this event to promote the *SPIDER Thematic Partnership for Latin America & Caribbean*. The session allowed UN-SPIDER to bridge the space community represented by the Colombian Space Commission (CSC) and the Argentinean National Commission on Space Activities (CONAE), and the community which focuses its efforts on the topic of disaster-risk management. The session benefited 34 participants from a variety of agencies working at the national, regional, and international levels such as the Civil Defense, the Risk Management Secretariat and Armed Forces of Colombia, the Association of Caribbean States (ACS), the Office for the Coordination of Humanitarian Affairs (UN OCHA) and the Economic Commission for Latin America and the Caribbean (ECLAC) of the United Nations, the Organization of American States (OAS), the International Federation of the Red Cross (IFRC), civil protection agencies from a variety of countries, the University of the West Indies and Florida International University, Thermopylae Sciences and Technology, the International Strategy for Disaster Reduction (ISDR), and the Inter-American Defense Board (IADB) among others.

*For further information >> [UN-SPIDER News](#)*

### **4. SpaceAid supports response to China Earthquake; bridging space data providers with disaster management authorities**

On 14 April 2010 the Southern Qinghai region in the north-west of China experienced a 6.9 magnitude earthquake which left hundreds of people dead and the majority of the population injured. The importance of high resolution satellite imagery was highlighted by the fact that the affected area of Yushu County is located 500 miles from the nearest major airport, which raised logistical challenges for relief operations on the ground. Immediately after the first reports of the earthquake destruction, the UN-SPIDER team activated the SpaceAid framework in order to assist in the response phase by bridging the space data providers with the Chinese disaster management authorities in charge of the response. The EU SAFER mechanism was also activated and triggered its services. The coordinates of the estimated affected area were provided by the UN-SPIDER National Focal Point in China and were then forwarded to the respective space-based imagery providers. All the information, including the status of available satellite imagery, was collected and published on the UN-SPIDER Knowledge Portal SpaceAid Page for the respective earthquake.

*For further information >> [UN-SPIDER SpaceAid](#)*

### **5. UN-SPIDER participates in the ISDR Asia Partnership (IAP) meeting in Bangkok**

The United Nations International Strategy for Disaster Reduction (ISDR) Regional Office for Asia & Pacific organized this meeting, which took place from 24 to 26 March, to focus on the next cycle of the Hyogo Framework for Action (HFA) progress reporting, HFA mid-term review and the preparation for the Fourth Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR). The meeting was attended by 19 countries from the Asia-Pacific region, and by intergovernmental organizations namely the Association of Southeast Asian Nations (ASEAN), Asia-Pacific Economic Cooperation (APEC) and the Pacific Islands Applied Geoscience Commission (SOPAC), UN agencies, donors and other organizations involved in disaster risk reduction.

*For further information >> [UN-SPIDER News](#)*

## 6. UN-SPIDER visits the National Focal Points of Thailand in GISTDA

On 23 March, UN-SPIDER visited the National Focal Points in Thailand. These are the Geo-Informatics and Space Technology Development Agency (GISTDA) and the Department of Disaster Prevention and Mitigation (Ministry of Interior). Dr. Darasri Dowreang and Dr. Chaowalit Silapathong of GISTDA presented their activities focusing on the applications of THEOS satellite imagery in natural resources management and disaster risk reduction. The National Focal Point from the Department of Disaster Prevention and Mitigation, Mr. Adthaporn Singhawichai, provided insight into the use of space-based information in disaster management planning in Thailand. The meeting was an opportunity to strengthen the relationship with UN-SPIDER National Focal Points and to exchange ideas regarding collaboration with those institutions.

## Community News

### 7. Monitoring the Gulf Coast oil spill

On 21 April 2010 there was a catastrophic explosion on the rig Deepwater Horizon in the Gulf of Mexico, 80 km off the coast of the U.S. state of Louisiana. The day after the explosion the rig sank. Every day about 160,000 liters of crude oil flow from two openings of the oil well into the sea and threaten the marine ecosystem in the Gulf of Mexico and the sensitive coastal areas of Louisiana. Satellite imagery is used to monitor the spread of the oil spill.

*For further information >> [DLR/ESA/NASA on UN-SPIDER](#)*

### 8. Using satellite imagery to assess the ash cloud after volcanic eruption

The Icelandic volcano Eyjafjallajökull has ejected large quantities of ash and sulphur dioxide into the atmosphere during its eruptions in March and April. Thousands of planes were grounded across Europe due to the spread of volcanic ash following the eruptions under Iceland's Eyjafjallajökull glacier. Volcanic eruptions eject large amounts of ash and trace gases such as sulphur dioxide into the atmosphere, often reaching the altitudes of scheduled flights. Observations of sulphur dioxide (SO<sub>2</sub>) and aerosols derived from satellite measurements in near-real time can provide useful complementary information to assess, on a global level, possible impacts of volcanic eruptions on air traffic control and public safety. These images give crucial information about the direction and speed at which the ash cloud is spreading.

*For further information >> [DLR/ESA/NASA on UN-SPIDER](#)*

### 9. Ukraine to launch Sich-2 earth observation satellite

The launch of Ukraine's Sich-2 earth observation satellite has been scheduled for October 2010, the press service of the National Space Agency of Ukraine (NSAU) has said. According to the NSAU, Dnipropetrovsk-based Pivdenne Design Bureau, which developed the 350-kilogram satellite, is currently completing the tests of the Sich-2. According to the Kosmotras international consortium, Ukraine's Sich-2 earth observation satellite will be launched into a solar-synchronous orbit in 2010 as part of a cluster launch of Ukrainian-Russian Dnepr rocket from the Yasny airbase (Orenburg region, Russia).

*For further information >> [NSAU](#)*

### 10. RapidEye collects one billion km<sup>2</sup> of satellite imagery in just over a year

RapidEye announced that it has imaged one billion square kilometers of the surface of the Earth since it became commercially operational on February 4, 2009. All of the data collected over the last 14 months is available in the RapidEye Library which contains multiple datasets including the freshest images imaged just a few minutes or hours earlier. The library is continuously growing as new images are downloaded from RapidEye's satellite constellation daily. The newest coverage of the Somalian-Ethiopian border was acquired by RapidEye 1 (Tachys) on April 7, 2010 at 8 A.M. UTC and made the collection of one billion square kilometers complete. One billion square kilometers represents approximately seven times the Earth's landmass.

*For further information >> [RapidEye](#)*

## 11. NASA enters into partnership with JAXA

In a unique collaboration between national space agencies, the United States and Japan began combining elements of their satellite resources to increase a critical type of Earth observation data. The partnership will more than double the quantity of this data that is used to explore earthquake hazards, forest declines, and changing water resources in the Americas. This new partnership between NASA and the Japan Aerospace Exploration Agency, JAXA, uses NASA's Tracking and Data Relay Satellite System to download observations over North and South America taken by instruments on JAXA's Advanced Land Observing Satellite, or ALOS. By combining NASA and JAXA data-relay satellite resources, coverage of North and South America nearly doubles. Observations will be made about twice as often. Under the new agreement with JAXA, NASA will have access to all the ALOS data acquired over the Americas and can make it available to scientists affiliated with U.S. government agencies for peaceful scientific purposes.

For further information >> [NASA](#)

## 12. ESA has purchased a second Sentinel-2

The European Space Agency (ESA) has purchased a second Sentinel-2 for Europe's Global Monitoring for Environment and Security (GMES) network. Worth \$140 million, the spacecraft will provide continuity with Sentinel-2A, ordered in 2008. The two 1.1 metric-ton units - to be launched in 2013 and 2015, respectively, to provide imagery of the Earth's land mass - are each designed to operate for a minimum 7.25 years, with a further five-year extension if required, ensuring a steady stream of land monitoring data for at least 15 years. Long term provision of data is a major concern for GMES, which will be entrusting with providing operational information of use to government organizations, companies and other entities.

For further information >> [ESA](#)

## Conferences and Workshops

We maintain a Calendar of Events with upcoming Conferences, Meetings and Events relevant to the area of space-based solutions for disaster management and emergency response. The Calendar can be viewed at:

[www.un-spider.org/events](http://www.un-spider.org/events)

### **International Training Course on *Application of Space Technology for Disaster Management Support with Emphasis on Geological Risk Management*, 12 April – 07 May 2010, Dehradun, India**

The course will take place from 12 April until 07 May, the venue is the Indian Institute for Remote Sensing, Dehradun, India, and is organized by the UN-affiliated CSSTEAP, the Indian Institute of Remote Sensing, and ITC.

### **3<sup>rd</sup> International Disaster and Risk Conference IDRC, 30 May - 03 June 2010, Davos, Switzerland**

As recent mega-disasters and crises have shown, risk management from a single perspective is no longer adequate to address the complex threats to today's society. The conference will address different kinds of risks, disasters and crises. A truly integrated and participative approach is planned to ensure that the valuable lessons learned about risk reduction from a wide spectrum are applied correctly to create safer, more resilient and thus sustainable societies for the benefit of communities, countries and regions.

For more information and registration: [Global Risk Forum](#)

### **RapidEye Fusion Workshop, 19 May 2010, Berlin, Germany**

The FUSION user workshop is scheduled on May 19, 2010 in Berlin, Germany. FUSION will be the first satellite constellation combining high resolution satellite imagery as known from the RapidEye satellites with MIR/TIR

data similar to what the BIRD infrared payload produces. Combining 6.5 m GSD VIS/NIR images with 100 m GSD infrared images, FUSION will provide new data products and worldwide daily revisit capability for fields such as precision agriculture, food security, irrigation water management, inland water resource management, terrestrial ecosystem mapping, volcanology, and high resolution wildfire monitoring.

For more information: [RapidEye](#)

### **UN/Turkey/ESA Workshop on Space Technology Applications for Socio-Economic Benefits, 14-17 September 2010, Istanbul, Turkey**

The last three decades of the 20th century has witnessed space technology finding increasing application and relevance in daily life, to the point where, nowadays, space applications are an indispensable part of the modern information society. Space-based systems deliver information and services that protect lives and the environment, enhance prosperity and security, and stimulate industrial and economic development. Education, Capacity building and space and society initiatives will be pursued to ensure that Turkey develops the requisite human capital to support national space activities, including the development of space application products and services.

For more information and registration: [UNOOSA](#)

## **Upcoming UN-SPIDER Outreach Activities**

Information on upcoming UN-SPIDER outreach activities can be obtained from the events section of the UN-SPIDER Knowledge Portal:

[www.un-spider.org/events](http://www.un-spider.org/events)

## **Upcoming UN-SPIDER events**

### **CEOS/WGISS-29 Meeting, 17-21 May 2010, Bonn, Germany**

UNOOSA/UN-SPIDER in Bonn is hosting the 29<sup>th</sup> meeting of the Working Group on Information Systems and Services (WGISS), which is one of three subgroups supporting the Committee on Earth Observing Satellites (CEOS). CEOS addresses coordination of the satellite Earth Observation (EO) programs of the world's government agencies, along with agencies that receive and process data acquired remotely from space. WGISS promotes collaboration in the development of systems and services that manage and supply EO data to users world-wide.

For more information and registration: [UN-SPIDER Events](#)

### **UN-SPIDER Regional Workshop *Building upon Regional Space-based Solutions for Disaster Management and Emergency Response for Africa*, --NEW DATE: 6-9 July 2010--, Addis Ababa, Ethiopia**

Recognizing the fact that the African continent is particularly prone to devastating natural disasters and susceptible to the negative effects of climate change, UN-SPIDER is organising this continental wide workshop aiming at bringing together experts from both the disaster management and the geospatial communities. The regional workshop is intended to further strengthen capacities in Africa to better respond to future disasters by taking advantage of space-based information.

For more information and registration: [UN-SPIDER Events](#)

## Upcoming events supported by UN-SPIDER

### **Fourth Central Asia GIS Conference - GISCA 2010 *Water: Life, Risk, Energy and Landuse*, 27-28 May 2010, Bishkek, Kyrgyzstan**

The Austria-Central Asia Centre for GIScience at the Kyrgyz State University of Construction, Transportation and Architecture, and the Centre for Geoinformatics (Z\_GIS), University of Salzburg, Austria are proud to announce the 4th GIS-in-Central-Asia Conference - GISCA 2010. The main objectives of this conference are to bring together GIS academics, researchers and practitioners in the Central Asian countries and encourage international cooperation and knowledge exchange in GIS education.

In 2010, GISCA is focused on the main theme of WATER:

- Life: WATER for drinking and agriculture
- Risk: WATER posing a threat to settlements
- Energy: WATER for renewable hydropower
- Landuse: WATER controlling regional landuse

For more information and registration: [gisca10](http://gisca10.org)

### **Second Ukrainian conference *Earth Observations for Sustainable Development and Security (GEO/GMES – Ukraine)*, 14-17 June 2010, Kyiv, Ukraine**

The Conference represents the perfect opportunity to demonstrate the latest innovations, achievements and practical results in the area of space information technologies. Goal of the Conference is to discuss the prospects of aero- and space-born data utilization for natural resources management, sustainable development and security in course of GEOSS, GMES, INSPIRE activities and establishment of the Ukrainian segment of GEOSS (GEO-UA system).

International researchers and experts interested in Earth observation data application will have the opportunity to present and discuss results and ideas with focus on the following areas:

- Disaster reduction: flooding, forest and field fires, water, air and soil pollution;
- Understanding and adapting to climate variability and change;
- Management and protection of ecosystems;
- Sustainable agriculture;
- Sea and ocean problems.

A UN-SPIDER related Special Session will be held during the conference.

For more information and registration: [Kyiv Conference](http://www.kyivconference.org)

*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 cooperation 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.*