



## UN-SPIDER September 2009 Updates

Please forward this **UN-SPIDER Updates** to colleagues who might benefit from receiving the information.

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

### 1. UN-SPIDER's SpaceAid Framework operational

September unfortunately was a record month in terms of major disasters. It did, however, provide the opportunity to build upon UN-SPIDER's established **SpaceAid Framework** to ensure the coordination of information to support the emergency response activities. The United Nations requested support from the International Charter Space and Major Disasters a record seven times. UNICEF, OCHA, WFP and UNDP all requested post-disaster imagery and maps to support the response efforts in Senegal, Mauritania, Burkina Faso, the Philippines, Vietnam, Samoa and Indonesia. Sentinel Asia was also actively involved contributing to the disasters in the Philippines, Vietnam and Indonesia. *For more information* >> [Sentinel Asia](#), [International Charter](#), [SpaceAid](#)

### 2. Bonn to host two key UN Meetings – 10<sup>th</sup> UNGIWG Plenary and UN-SPIDER Workshop

The UN-SPIDER Bonn Office will be hosting in October two key UN meetings. The first is the 10th Plenary of the **United Nations Geographic Information Working Group**, which will meet from 19-21 October 2009. The whole UN geospatial community will be converging to this meeting to discuss various relevant topics including the establishment of the United Nations Spatial Data Infrastructure (UNSDI). The second is the Third United Nations International UN-SPIDER Bonn Workshop: "From Concepts to Application", which will be held from 21 - 23 October 2009. This international workshop will bring together leading experts to discuss the use of space-based information to support disaster risk management *For more information* >> [UNGIWG](#), [UN-SPIDER Bonn Workshop](#)

### 3. UN-SPIDER Keynote Presentation at the International Symposium in Saudi Arabia

Organized by the Saudi Arabian Ministry of Interior through the General Directorate of Civil Defense, the International Symposium on Disaster Management is to be held in Riyadh from 3-6 October 2009, aiming at bringing together all the local and international skills and experiences in the field of disasters management and to reach recommendations that would lead to efficient disasters management. It will also be concerned with disaster prevention and mitigation measures as well as the proper procedures that should be taken to face their negative impacts. Mr. Shirish Ravan, Head of the soon to be inaugurated UN-SPIDER Beijing Office, will be attending and making a keynote presentation. For those that will be attending please do get in touch with us so we can make sure we meet during the symposium (send e-mail to shirish.ravan (at) unoosa.org). *For more information* >> [ISDM](#)

### 4. UN-SPIDER fortifies Capacity Building Strategy at UNU-ITC Seminar

From 23 – 25 September, the UNU-ITC School for Disaster Geo-Information Management (UNU-ITC DGIM) invited Mr. Juan Carlos Villagran and 40 other experts from partner organisations to discuss future requirements for capacity building in DGIM, at ITC in the Netherlands. The agenda of the seminar looked into the importance of assessing capacity needs of organizations related to DRM, defining optimal modes for capacity building, as well as improving collaboration amongst international organizations involved in capacity building for DGIM. UN-SPIDER seized the opportunity of the

presence of several members of the UN-SPIDER Expert Group on Capacity Building to present and discuss its recently elaborated Capacity Building Strategy, as well as issues concerning efforts in this component of the programme. Further information e-mail Mr. Juan Carlos Villagran (e-mail [juan-carlos.villagran \(at\) unoosa.org](mailto:juan-carlos.villagran@unoosa.org)) and [ITC](#).

#### **5. UN-SPIDER staff members put heads together in first programme building retreat**

From 15 - 17 September, UN-SPIDER conducted its first annual retreat in Regensburg, Germany, joining the Bonn and Vienna team under one roof, to discuss the current and future status of the programme, specifically the planned activities included in the Biennium Work Programme. Emphasis was placed on developing an understanding of and a target for the core elements of the UN-SPIDER Programme (Knowledge Portal, Network, National-level Engagement and Resources). Energy was also invested in highlighting specific activities in the UN-SPIDER Plan of Work, where activity leaders each presented their respective expected outputs, status of implementation for 2008-2009, what is planned for 2010-2011 and how it will be achieved. It is worth noting that amidst the brainstorming and deliberation frenzy, team spirit was constantly prevalent and was further strengthened by the end of the retreat. Colleagues had the opportunity to come together to plan, converse and work on UN-SPIDER activities, topics and events, building further the existing consensus regarding the conduction of tasks, identifying areas of synergies, as well as gaps which require attention on behalf of the team. For the team photo have a look on the last page.

#### **6. UN-SPIDER helps develop guidelines for establishing ACPC Climate Activities Database**

UNOOSA/ UN-SPIDER partook of a consultation group composed of African regional co-operators (OSS, ACMAD, ICPAC) and various international players (NASA/SERVIR, UNEP) during the Economic Commission for Africa's Consultative Meeting on Climate Activities Database, held in Addis Ababa, from 1-2 September 2009. Recent developments have seen the African Union Commission, the Economic Commission for Africa and the African Development Bank initiating the ClimDev programme, under which was established the African Climate Policy Centre (ACPC) to coordinate and strengthen policy response to climate change. Among ACPC's pressing needs was a dedicated Climate Activities Database (CADb) to support the work of ACPC's scientists and discipline specialists. Hence, the main aim of the meeting was to provide a forum to learn from selected institutions and individuals who have had experience in managing similar databases. During the work sessions, discussions tapped into the need for a coherent seamless and up-to-date spatially enabled information system. Immediate actions included maintaining communications within the group through an online forum, and secondly, given the low bandwidth available at ECA, exploring the possibility of hosting CADb's feature services at the UNOOSA/UN-SPIDER facilities in Bonn.

#### **7. South Africa's Sumbandilasat successfully in orbit, awaiting full activation**

South Africa's R26-million Sumbandilasat microsatellite, which was launched on 17 September 2009, is in its correct spin, its solar panels are facing the sun, and its batteries are now fully charged. It will orbit about 500 km to 600 km above the earth, and with the help of its high resolution cameras, it will produce images to be used for agriculture, mapping of infrastructure and land use, population measurement and the monitoring of dam levels. Among the many benefits Sumbandilasat will offer South Africa once operational are information that will assist in the effective management of disasters, food security, health, safety and security. *For more information >> [Defenceweb](#)*

#### **8. Micro-satellites MicroGEM offer improved earth monitoring**

Microsatellites for GNSS Earth Monitoring (MicroGEM) are a combination of small satellites, with a mass of approximately 100 kilograms, which are capable of joining innovative methods, and use the signals of the navigation satellite systems GPS and Galileo to significantly improve remote sensing of the Earth. Such small satellites represent a relatively cost effective platform for scientific instruments, bringing together proven technique with innovation in a way which allows for new scientific results to be obtained at minimum technological risk. *For more information>> [Helmholtz](#)*

### **9. India launches Oceansat-2 for ocean study**

On 23 September 2009, India launched a second satellite to study oceans, the cube-shaped Oceansat 2, meant to monitor the interaction between oceans and the atmosphere, as part of climate studies. According to the Indian Space Research Organization (ISRO), the satellite carries six nanosatellites from European universities as auxiliary payloads and is also equipped with two solar panels projecting from its sides, for generating power and charging batteries. The Oceansat-2 is claimed to be one of the 16 Indian remote sensing satellites whose images are used for agriculture, rural development, water resources, forestry and disaster management purposes. *For more information*>> [CNN](#)

### **10. Amid widespread droughts and crop failures, satellites could help prevent famines**

The Normalized Difference Vegetation Index (NDVI) is an innovative combination of two satellite measurements that allows scientists to analyze changes in the "greenness" of Earth as viewed from space. The system itself goes back to the 1980's, however, its association with new satellite-based technology nowadays is proving to be particularly useful in some of the world's most contentious hotspots. In 2008, the U.S. Agency for International Development's Famine Early Warning Systems Network (FEWS NET) and a number of other partners used NDVI to monitor wheat yields in Iraq and Afghanistan through a persistent drought that led to the worst yields in a decade. Satellite data alone cannot cure the world of famine, Brown notes, but systems like FEWS NET can buy critical time for governments and relief organizations to react when droughts, wars, and infestations strike the food supply. *For more information* >> [NASA](#)

### **11. Satellite Images from MODIS Sensor Cover Southern California Forest Fires**

Triple-digit temperatures, extremely low relative humidity and dense vegetation that have not burned in decades with years of extended drought all contributed to the explosive growth of wildfires throughout Southern California. The Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) instrument on NASA's Terra satellite captured this simulated natural color image of the Station fire, burning in the San Gabriel Mountains north of Los Angeles. Computer modeling has been the effort of many scientists using high resolution satellite imagery and GIS. In order to model a forest fire, the techniques for obtaining, analyzing and displaying spatial information in a timely and cost-effective manner are needed which has proven not only to be possible, but incredibly efficient and effective. *For more information*>> [Satimagingcorp](#)

### **12. Satellites show ozone layer depletion levelling off**

Scientists merged monthly total ozone data derived from the vertically downward-looking measurements of the GOME instrument on ESA's ERS-2 satellite, SCIAMACHY on ESA's Envisat and GOME-2 on the European Meteorological Satellite Organization's MetOp-A. The result was a global slightly positive trend of ozone increase of almost 1% per decade in the total ozone from the last 14 years: a result that was confirmed by comparisons with ground-based measurements. Having access to these atmospheric satellite data over long periods is important for scientists to identify and analyse long-term trends and changes. In addition to monitoring ozone trends, scientists will continue to monitor ozone-depleting substances that were phased out under the Montreal Protocol but continue to linger in the atmosphere. *For more 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:

<http://www.google.com/calendar/embed?src=h1a93vb3rk6ud1tvrequisfk8s%40group.calendar.google.com>

### **AfricaGIS 2009: "Geo-spatial Information and Sustainable Development in Africa" in Kampala, Uganda, 26-30 October 2009**

The "AfricaGIS 2009" International Conference is one of the leading geospatial conferences in Africa and provides a platform where geo-information professionals from Africa and around the world come together to learn and interact about geo-information technology and its applications. Mr. Shirish Ravan, Head of the soon to be inaugurated UN-SPIDER Beijing Office, will be attending and making a keynote presentation. To arrange a meeting with him please send e-mail to shirish.ravan (at) unoosa.org. Please also visit the UN booth.

*For more information >> [Conference website](#)*

### **The Third MERIT Technical Meeting, Niger, 9-11 November 2009**

This meeting is being organized to advance the collaborative activities between the public health and environmental communities to support epidemic meningitis preparedness and control strategies in Africa's 'Meningitis Belt'. The key objectives of the meeting will be to progress development of a predictive tool for testing in the next epidemic season; to share information on latest research projects and findings; and to update the MERIT community on progress of country-specific activities since the last MERIT meeting held in December 2008.

*For more information >> [HC-Foundation](#)*

### **Pacific Islands GIS&RS User Conference 2009, in Suva, Fiji, 1- 4 December 2009**

The above conference will take place from 1 - 4 December 2009 at the University of South Pacific, Lower Campus, Faculty of Islands and Oceans, University of the South Pacific, Suva, Fiji. UN-SPIDER will be supporting this event and encourages all experts interested in joining the leading geospatial conference in the Pacific region to attend and contribute.

*For more information >> [PACINET](#)*

### **The Third African Leadership Conference on Space Science and Technology for Sustainable Development ALC-2009 - Algiers, Algeria 7 - 9 December 2009**

The purpose of this Conference, organised by the Algerian Space Agency and the United Nations Office for Outer Space Affairs, is to sensitise the African leaders on the importance of science and space technology for the sustainable socio-economic development of Africa. It will provide a regular forum for the information exchange and will promote the inter-African co-operation in the development and the application of space technology.

*For more information >> [ASAL](#)*

### **The Fourth Caribbean Conference on Comprehensive Disaster Management Montego Bay, Jamaica 7 - 11 December 2009**

This Conference, organized by The Caribbean Disaster Emergency Management Agency (CDEMA) in association with its Partners, provides the platform for reflection and dialogue on initiatives and issues to advance the CDM Agenda and measuring progress in the region within the context of the Enhanced CDM Strategy and Programming Framework 2007-2012.

*For more information >> [Conference website](#)*

## Upcoming UN-SPIDER Outreach Activities:

Information on upcoming UN-SPIDER planned can be obtained from the outreach activities section of the UN-SPIDER webpage:

<http://www.unoosa.org/oosa/en/unspider/workshops.html>

### UN-SPIDER TEAM RETREAT – September 2009 - Regensburg, Germany



*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.*