



# UN-SPIDER

## July 2011 Updates

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### UN-SPIDER News

#### 1. UN-SPIDER SpaceAid Framework supports information flow in crisis at the Horn of Africa

Regions of Somalia, Kenya, Ethiopia and Djibouti are severely affected by extreme drought, forcing large numbers of people to migrate in search of humanitarian assistance. The UN Refugee Agency (UNHCR), the World Food Programme (WFP) and national institutions have approached the GMES Emergency Response Project SAFER (Global Monitoring for Environment and Security, Services and Applications For Emergency Response) and UNITAR's Operational Satellite Applications Programme (UNOSAT) to request the generation of space-based geo-information. This information is to help response teams assess the scope of the crisis and gain an overview of the situation in the different refugee camps and informal settlements in the border regions of Somalia with Ethiopia and Kenya. The maps delivered through SAFER are produced by the Center for Satellite Based Crisis Information of the German Aerospace Center (DLR/ZKI).

In addition, the National Disaster Reduction Center of China (NDRCC) of the Ministry of Civil Affairs has provided data from its HJ-1 satellite to support the assessment of the crisis. The NDRCC, as a partner of UN-SPIDER, has analyzed imagery and prepared crop- and drought monitoring maps for Kenya, Djibouti, Northern Sudan, and Somalia, based on data from Terra/MODIS and HJ-1.

In coordination with WFP and the UN Office for the Coordination of Humanitarian Affairs (OCHA), UNOOSA/UN-SPIDER through its SpaceAid Framework set up a dedicated page on its Knowledge Portal, bringing together information on the data and mapping products that are available. The page is being updated in consultation with the SAFER Focal Point and UNITAR/UNOSAT as well as with the primary users at WFP and OCHA. The page includes an inventory on user requirements and acquired/tasked areas in KML format. The summary of footprints is showing three groups: User needs, required and tasked satellite images, products.

For further information >> [UN-SPIDER Horn of Africa](#). Focal Point at UN-SPIDER: [Yusuf Hascicek](#)



## **2. Online registration now open for United Nations International Conference on Space-based Technologies for Disaster Risk Management “Best Practices for Risk Reduction and Rapid Response Mapping” in Beijing**

One year after the successful opening of the UN-SPIDER office in Beijing in November 2010, the first “United Nations International Conference on Space-based Technologies for Disaster Risk Management”, organized by the United Nations Office for Outer Space Affairs (UNOOSA), will be hosted at the new location. The conference aims at bringing together up to 200 participants including disaster managers, policy makers, and providers of space technology solutions, tools and applications from Government, NGOs, Academia and the corporate sector. The focus of the conference will be to share and discuss “Best Practices for Risk Reduction and Rapid Response Mapping”.

The three major topics will be

- Global datasets and information for risk reduction
- Rapid response mapping: opportunities and challenges
- Networks: building upon and strengthening existing capacities

We are pleased to inform you that we are now accepting applications from professionals, experts and decision-makers. Please visit the Conference webpage to apply for this event. The application deadline is **30 Sept. 2011**.

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

## **3. Upcoming Technical Advisory Missions in Sri Lanka, Chile and Tonga**

One of the core activities of the UN-SPIDER Programme is to provide technical advisory support to requesting Member States, including the accomplishment of Technical Advisory Missions (TAM). Experts who are nominated by international, regional and national institutions that have a relevant interest in supporting the requesting countries have an opportunity to join the mission team and to contribute to the findings, recommendations and the mission report. The team of experts is lead by the UNOOSA staff member that coordinates the mission. UN-SPIDER has just concluded several TAMs, including Sudan, Cameroon, Nigeria and Bangladesh. The next TAMs are planned in Sri Lanka, to be carried out from 17 to 21 October 2011 (for further info contact [Shirish Ravan](#)), Chile, also to be carried out from 17 to 21 October 2011 (for further info contact [Juan Carlos Villagran](#)), and Tonga, date to be decided (for further info contact [David Stevens](#)).

For further information >> [UN-SPIDER Technical Advisory Missions](#)

## **4. 3rd Session of the Pacific Platform for Disaster Risk Management in Auckland**

UN-SPIDER attended and contributed to the main annual Pacific regional meeting that brings together the various National Disaster Management Organizations of the Pacific region. A plenary presentation focused on the work being carried out in the region, supporting the Small Island States, particularly Fiji, Samoa and Tonga. A side session provided an opportunity to consolidate further the established SPIDER Thematic Partnership for the Pacific region and the upcoming Samoa Simulation Exercise. Thanks to a special contribution by the Government of Austria, UNOOSA/UN-SPIDER was able to support the travel of experts from Samoa and Tonga to attend the meeting. This also provided an opportunity to follow-up on the recommendations put forward for Samoa during the Technical Advisory Mission carried out in that country in December 2009, and also to plan the proposed upcoming Technical Advisory Mission to Tonga in October 2011. Click [here](#) to access the UN-SPIDER presentation of the event. To obtain further information on getting involved in the Samoa Simulation Exercise and participating in the SPIDER Thematic Partnership for the Pacific region contact [David Stevens](#).

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

## **5. Expert Working Group meeting at ESCAP, Bangkok**

The Expert Group Meeting on Regional Knowledge and Cooperation for Comprehensive Multi-Hazard Risk Management in Asia and the Pacific was organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) from 27 to 29 June 2011 at the United Nations Conference Centre in Bangkok, Thailand. The Expert Group Meeting was attended by national experts as well as experts from



intergovernmental and international organizations, including those from the United Nations system. The objectives of the Expert Group Meeting were to review and discuss a number of topics, including the recent developments of disaster risk reduction initiatives towards building regional knowledge and capacity through cooperation in the Asia-Pacific region, in particular the development of the Asia-Pacific Gateway on Disaster Risk Reduction and Development, and the needs for data for disaster risk reduction and assessment. UNOOSA took the opportunity to present the UN-SPIDER Knowledge Portal as part of the first topic. ESCAP recognised the potential of the Knowledge Portal, and ways to integrate the UN-SPIDER Knowledge Portal and the Asia Pacific Gateway were discussed.

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

## **6. Committee on Disaster Risk Reduction (CDRR)**

The second session of the Committee on Disaster Risk Reduction was held from 29 June to 1 July 2011 at the United Nations Conference Centre in Bangkok, Thailand. The Committee is organized by the Information and Communications Technology and Disaster Risk Reduction Division (IDD) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). The topics that were discussed included recent trends in disasters and their socio-economic and environment aspects, the implementation of the Hyogo Framework for Action, enhancing regional cooperation on disaster risk reduction in Asia and the Pacific, and mainstreaming innovative information- and communication technology in disaster risk reduction. UNOOSA/UN-SPIDER contributed particularly in the discussion on mainstreaming innovative information- and communication technology, specifically urging Member States of ESCAP to take advantage of the UN-SPIDER office in Beijing, which strengthens the Programme's focus on Asia and the Pacific Region.

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

## **7. 4th Joint Project Team Meeting of Sentinel Asia**

The 4th Joint Project Team Meeting for Sentinel Asia STEP-2 (JPTM2011) was held from 12 to 14 July 2011 in Putrajaya, Malaysia, co-organized by the Malaysian National Space Agency (ANGKASA), Malaysian National Security Council (MKN), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and Japan Aerospace Exploration Agency (JAXA). The objectives of the JPTM2011 were to introduce the progress for STEP-2 and discuss the STEP-2 implementation and a new program. UNOOSA/UN-SPIDER attended this meeting in its capacity of member of the JPTM. UNOOSA/UN-SPIDER presented the Programme with a focus on the activities carried out in Asia and the Pacific and highlighted the cooperation with Sentinel Asia and the Asian Disaster Reduction Center (ADRC). The current and future cooperation between Sentinel Asia and UN-SPIDER were discussed.

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

## **8. Preliminary results of the UNOOSA RIVAF project presented to Global Pulse team**

From 14 to 15 July 2011, Global Pulse hosted the two-day conference titled: "Towards a Real-Time Understanding of Emerging Vulnerability" to discuss preliminary findings of the RIVAF projects. UN-SPIDER is conducting a project to assess the use of the Visual Analytics approach to detect changes in vulnerability due to the Global Economic Crisis, which would worsen the capacity of countries like Burkina Faso and Guatemala to cope with disasters. Preliminary results were presented by the Rochester Institute of Technology (RIT) consultant who is working with UN-SPIDER on this project and were very well received. The examination of a combined crisis (natural crisis, financial crisis) was considered an interesting perspective. Furthermore, brainstorming and discussion sessions were held on how "new data" streams such as Facebook, Twitter, mobile phone activity, citizen reporting and "big data" such as internet searching trends can potentially fill data gaps for better understanding changing behavior patterns due to global shocks. The Global Pulse team was particularly interested in how new forms of data could complement and support the activities of UN agencies involved in the RIVAF projects. The way forward for disseminating RIVAF project findings via a Global Pulse



summary report was also discussed, as this report is to be presented to the UN General Assembly in September 2011.

For further information >> [UN Global Pulse](#), [UNOOSA RIVAF Project](#)

### **9. UN-SPIDER successfully conducted International Expert Meeting on “Crowdsource Mapping for Preparedness and Emergency Response”**

From 5 to 6 July 2011 UN-SPIDER successfully conducted an International Expert Meeting on “Crowdsource Mapping for Preparedness and Emergency Response”. The meeting was organized with the support and cooperation of the Government of Austria and Secure World Foundation. The expert meeting brought together 64 experts and practitioners from 27 countries representing space and remote sensing agencies, national, regional and international disaster management and civil protection agencies as well as various actors from the crowdsource communities, representing voluntary networks, NGOs, expert groups as well as universities, research institutions and the private sector. The Organizing Committee was overwhelmed by the enormous interest and the vast number of applications reflecting the perceived importance of the topic and the need to facilitate interaction among those groups.

For further information >> [UN-SPIDER News](#), [Expert Meeting webpage](#)

## **Community News**

### **10. International Charter activated for floods in Republic of Korea and in Japan**

In July, the International Charter Space and Major Disasters accepted activation in support of the response to the landslide and floods in the Republic of Korea upon request of the National Institute for Disaster Prevention (NIDP) and to floods in Japan by the Asian Disaster Reduction Center (ADRC) on behalf of Niigata Prefecture. Mapping products are available on the Charter website.

For further information >> [International Charter](#)

### **11. Sentinel Asia supports disaster response to floods and earthquake in Asia**

Sentinel Asia is a voluntary-basis initiative led by the Asia-Pacific Regional Space Agency Forum (APRSF) to support disaster management activities in the Asia-Pacific region by providing Earth Observation satellite data, also through web technologies. In response to the floods that recently affected Nepal, India, Philippines and Japan, and the earthquake in Kyrgyzstan, Sentinel Asia contributed its resources by providing imagery through its Web GIS service.

For further information >> [Sentinel Asia](#)

### **12. SAFER supporting response to four disasters in July**

Europe’s GMES mechanism Services and Applications for Emergency Response (SAFER) was activated four times in the month of July. The service delivered rapid mapping products covering the conflict in Yemen, fires in Portugal, an industrial explosion in Cyprus and the ongoing humanitarian crisis in the Horn of Africa.

For further information >> [SAFER](#)

### **13. ADRC Conference on Disaster Reduction 2011 draws to successful conclusion**

The Asian Conference on Disaster Reduction (ACDR) 2011 was held in Colombo, Sri Lanka, from 13 to 15 June 2011. Jointly organized by the governments of Sri Lanka and Japan, the Asian Disaster Reduction Center (ADRC), and the United Nations International Strategy for Disaster Reduction (UNISDR), ACDR 2011 brought



together over 120 delegates. These delegates affirmed their commitment to further support the integration of disaster risk reduction (DRR) and climate change adaptation efforts, to increase investments in DRR, and to engage in discussions on how to strengthen local DRR capacity.

*For further information and registration >> [ADRC](#)*

#### **14.RCMRD collaborates in KeNMaTT training on GIS, RS and GPS applications in support of Tsetse mapping**

The Regional Centre for Mapping of Resources for Development (RCMRD) was established in Nairobi, Kenya in 1975 under the auspices of the United Nations Economic Commission for Africa (UNECA) and the African Union. The Kenya Network for Mapping Tsetse and Trypanosomiasis (KeNMaTT), an umbrella body for organizations involved in Tsetse eradication initiatives, had staff trained at RCMRD in the area of Tsetse- and Trypanosomiasis (T&T) mapping which included Remote Sensing, Geographic Information System (GIS) and Global Positioning Systems (GPS).

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

#### **15.Korean satellite to aid disaster efforts**

The space agency of the Republic of Korea has joined its international counterparts in putting satellite data at the disposal of rescue authorities following major disasters such as earthquakes and tsunamis. The Korea Aerospace Research Institute (KARI), under the Ministry of Education, Science and Technology, formally became the newest member of the International Charter Space and Major Disasters on 7 July. As the Charter's newest member, KARI will contribute free images from its Kompsat-2 satellite. Launched in 2006, Kompsat-2 is equipped with a multispectral camera able to acquire 1 m-resolution panchromatic images and 4 m-resolution colour images. KARI has now established collaboration with Korea's National Institute for Disaster Prevention (NIDP) under the National Emergency Management Agency to respond to disasters based on satellite information.

*For further information >> [International Charter](#)*

#### **16.ESA protests Earth Observation program's removal from multiyear budget proposal**

The European Space Agency (ESA) has sent letters to its member governments asking them to protest a decision by the European Commission to remove Europe's flagship environmental program from the Commission's proposed multiyear financial envelope, ESA's director of Earth Observation said. The 19-nation ESA also will be taking its case to the European Parliament in an effort to find a place in the Commission's seven-year budget for the multibillion-dollar Global Monitoring for Environment and Security (GMES) program, he said. Volker Liebig, whose directorate has already spent more than 1.6 billion euros (\$2.2 billion) preparing GMES and its fleet of Sentinel satellites, specifically denied a commission allegation that GMES is, or threatens soon to be, over budget.

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

#### **17.Namibia's satellite centre to warn of disaster threats**

A new satellite data centre in Namibia will help farmers prepare for droughts, floods, bushfires and pests. The Earth Observation and Satellite Applications Research and Training Centre (EOSA-RTC), was launched this month (6 July) in collaboration with the African Monitoring of the Environment for Sustainable Development program (AMESD). It is located at the Polytechnic of Namibia and comprises a satellite data receiving station and data centre, which will provide data useful for agriculture. The data, which will be provided free to farmers' associations and government departments, will include water indices, rainfall estimates, and maps of soil moisture content. Reliable data is essential to preparing for natural disasters. Earlier this year Namibia was hit by record floods, although rainfall is generally scarce. Wildfires are expected to wreak havoc in the current dry season.

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



### **18. Conference on data sharing: Muslim States asked to harness their potential**

From 12 to 15 July, a conference titled “Development of Data Sharing Platform for National Satellite Earth Stations of Islamic Countries” was held in Islamabad, Pakistan. It was jointly organized by the Ministerial Standing Committee on Scientific and Technological Cooperation of the Organization of Islamic Cooperation (OIC COMSTECH), the Inter-Islamic Network on Space Sciences and Technology, and the Islamic Educational, Scientific and Cultural Organization (ISESCO). The conference’s aim was to bring together satellite experts from the members of the (OIC), and to develop a mechanism for satellite data sharing for better disaster management in case of floods and earthquakes.

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

### **19. NASA AIRS movies show evolution of US 2011 heat wave**

The continuing heat wave in the United States in July 2011 has broken temperature records in many locations, killed dozens and seen nearly half of all Americans under heat advisories at its peak. Four movies, created from data from NASA's Atmospheric Infrared Sounder (AIRS) instrument on NASA's Aqua spacecraft for the period from 16 to 24 July, show the movement of a dome of heat across the eastern two-thirds of the country. They highlight two familiar temperatures: surface air temperature and surface skin temperature, during both daytime and nighttime conditions. The four movies illustrate the extraordinarily high temperatures in the US heat wave. Both types of temperature, for daytime and nighttime, are shown as a difference (anomaly) from the average over the previous eight years of AIRS data. Over the Northeast and northern Midwest, temperatures are 20 degrees Fahrenheit warmer than normal. These high temperatures, along with high humidity (also observed by AIRS but not shown in the movies), make the central and eastern US one of the hottest regions on the planet in late July 2011.

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



## 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

#### **-ONLINE REGISTRATION NOW OPEN-**

#### **United Nations International Conference on Space-based Technologies for Disaster Risk Management “Best Practices for Risk Reduction and Rapid Response Mapping”, Beijing, 22-25 November 2011**

One year after the successful opening of the UN-SPIDER office in Beijing in November 2010, the first “United Nations International Conference on Space-based Technologies for Disaster Risk Management” will be hosted at the new location. The conference aims at bringing together up to 200 participants including disaster managers, policy makers, and providers of space technology solutions, tools and applications from Government, NGOs, Academia and the corporate sector. The focus of the conference will be to share and discuss “Best Practices for Risk Reduction and Rapid Response Mapping”.

The three major topics will be

- Global datasets and information for risk reduction
- Rapid response mapping: opportunities and challenges
- Networks: building upon and strengthening existing capacities

Expected outcomes of this conference are to strengthen the use of space-based information for disaster risk reduction by building the SPIDER Thematic Partnership to reach the goals of the Hyogo Framework for Action, and to enhance the utility of rapid mapping products and services to serve precise needs during the emergency response. Furthermore, an appraisal of the recent technology trends and programmes contributing to the space technology use in disaster risk management and an updated map of institutions and efforts focusing on the use of space-based applications for DRR and ER are expected outcomes of this conference.

*For more information and registration: [UN International Conference in Beijing](#)*

### Upcoming events supported by UN-SPIDER

#### **International workshop on Space-based Information for Disaster Management in Central Asia, Krasnoyarsk, 7-8 September 2011**

This international workshop organized by the Russian Ministry of Emergency Situations, EMERCOM, will focus on sharing knowledge and discussing aspects regarding the access to and use of space-based information for disaster risk management and emergency response with a focus on the Central Asian region. The workshop aims at building greater awareness of the use of these technologies for disaster risk reduction and response activities in the region, as well as at exploring ways to improve collaboration among disaster management agencies regarding the access to and use of space-based information. The audience will include representatives from the space community as well as from the emergency management community from the Russian Federation and Central Asian countries. Several planned visits to institutions and relevant facilities will complement the technical discussions of the workshop. UN-SPIDER will actively participate and support the conference and will use the opportunity to explore ways to further cooperate with the organizers and represented institutions from the Central Asia region.



### **Training Seminar in Ouagadougou, Burkina Faso**

The Ministry of Environment and Sustainable Development with the support of the UN Office for Outer Space Affairs (UNOOSA) and the Regional Centre for Training in Aerospace Surveys (RECTAS) is organizing a training seminar in Ouagadougou planned for the end of September 2011. The training is a follow-up activity to the Technical Advisory Missions that UNOOSA/UN-SPIDER has completed in West African countries such as Burkina Faso, Togo, Cameroon and Nigeria. Decision-makers and high-level stakeholders from national, regional and international institutions for the awareness-raising segment, as well as about 20 experts in the field of disaster risk management and emergency response from the West and Central African region are expected to participate in this specialized training seminar.

The Seminar will be divided into a one-day high-level awareness-raising segment and a specialized training seminar for experts. Its main objectives are to promote the use of space-based information and to raise decision-makers' awareness of the necessity to proceed with its institutionalization, as well as to provide a technical training to a group of experts from concerned countries. Among others, the four-day training session will cover topics such as principles of remote sensing, spatial data acquisition, image processing, spatial data analysis and case studies displaying the utilization of those techniques in the frame of risk management and emergency response. The training will include theoretical lectures and practical hands-on exercises on spatial data applications. The course will be conducted in French language. Expected outcomes of the Training Seminar are:

- Further awareness-raising and institutionalization of space-based information for disaster risk reduction and emergency response,
- Technical training on flood risk management and emergency response provided to a group of experts representing government institutions in the region,
- Improved collaboration and coordination among national and regional agencies in West and Central Africa.

For further information please contact [Lorant Czarán](#).

## **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)

*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.*