UNITED NATIONS
Office for Outer Space Affairs

United Nations Platform for Space-based
Information for Disaster Management and
Emergency Response (UN-SPIDER)

UN-SPIDER

December 2011 Updates

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UN-SPIDER News

1. IGAC from Colombia becomes UN-SPIDER's newest RSO

The Agustin Codazzi Geographic Institute (IGAC) of Colombia and UNOOSA recently signed a cooperation agreement making IGAC the newest UN-SPIDER RSO. IGAC has been promoting the use of space-based information within Colombia for a variety of purposes and has also been supporting UN-SPIDER in activities conducted in Latin America and the Caribbean. As an RSO, IGAC will continue to provide support in terms of experts towards the provision of technical advisory support to countries within the region and will contribute to capacity building efforts in this region. IGAC will be joining the other ten established RSOs for the 3rd Annual UN-SPIDER Regional Support Offices Meeting which will be held in Vienna on 6-7 February 2012 on the side-line of the forty-ninth session of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space (COPUOS).
For further information >> Juan Carlos Villagran

2. UN-SPIDER WORLD

Interested in quickly finding out what UN-SPIDER has been doing worldwide? Then visit the **UN-SPIDER World** site on the Knowledge Portal: http://www.un-spider.org/un-spider-world**. UN-SPIDER World** will allow you to quickly locate information on disasters including those where UN-SPIDER has been active, Technical Advisory Missions, Outreach Activities conducted by UN-SPIDER and other partners and news on relevant issues as reported in the Updates, Newsletters and in the Knowledge Portal. Use the **Filter** function to narrow down your search as a way to pinpoint specific topics such as points of contact including Regional Support Offices and National Focal Points..
For further information >>Robert Backhaus

3. UN-SPIDER Support to the Samoa Simulation Exercise 3-4 December 2011

In order to connect the Volunteer and Technical Communities (V&TCs) with the space industry as well as the disaster management community, the UN-SPIDER Programme is carrying out a one-year project: *"Space-based Information for Crowdsource Mapping"*, with the view to identifying specific actions that could ensure a closer cooperation among the three communities. One of the activities of the project is the Samoa Simulation Exercise which took place on 3-4 December, 2011, and was supported by the CrisisMappers Network, UNOCHA, Stand By Task Force, Humanity Road, The Government of Samoa, GDACS, US State Department, USGS, Digital Globe, Google, Ushahidi, Pinpoint Alerts, Crisis Commons, European Commission Joint Research Center (JRC) and GISCorps. The exercise utilized local public and private actors at the ground level for disaster response training and coordination activities. Meanwhile, the virtual community was responsible for simulating storm surge modelling, providing imaging data, and generating field requests and reports. Reports and datasets were produced for post-processing and analysis of the simulated impact of the storm and effectiveness of the crowdsourcing coordination efforts. The analysis made available can be accessed at *GIS Corps website.*
For further information >> David Stevens

4. UN-SPIDER participation in APRSAF-18 on 6-9 December 2011

The eighteenth session of the Asia-Pacific Regional Space Agency Forum (APRSAF-18), under the main theme entitled "A regional collaboration for tomorrow's environment", successfully concluded its 4-day program on December 9, 2011, in Singapore. Approximately 280 participants from 28 countries and 11 international organizations attended the session. APRSAF-18 consisted of four working group (EO WG, CSA WG, SEA WG, and SEU WG) sessions that were held in parallel and a plenary session. There were also relevant events in conjunction with APRSAF-18 such as the water rocket event, SAFE workshop, poster contest, and the special astronaut event entitled "Asians in Space: Achievements of Human Spaceflight in Asian Countries."   The UN-SPIDER attended and contributed to the EO working group session and the plenary session. http://www.aprsaf.org/annual_meetings/aprsaf18/meeting_details.php aiming at ensuring a coordination of the work carried out by the UN-SPIDER Programme and the work carried out under the auspices of APRSAF.
For further information >>Li Suju

5. Open GIS/GEO data collection by UN-SPIDER

If you know about the availability of open gis/geo datasets, please support UN-SPIDER's effort to populate a standardized database by sharing your knowledge with the community and putting the information into following form: *Open GIS/GEO Data Collection Form*
For further information >> contact *Shirish Ravan*

6. Technical Advisory Mission to Myanmar

The Government of Myanmar, through the Director General of Relief and Resettlement Department, invited UN-SPIDER to conduct a Technical Advisory Mission to this country. The purpose of the mission will be to advise the Government of Myanmar, and the Relief and Resettlement Department (RRD) of the Ministry of Social Welfare in particular, regarding how to enhance their capacity to use space-based information in all phases of the disaster management cycle, aiming also at being better prepared for the 2012 cyclone season. A team of experts will meet with key disaster management authorities from the Government, UN agencies, regional and international organizations/initiatives and private entrepreneurs to discuss, make recommendations and to develop guidelines to improve access to and use of space-based information in disaster management.
For further information >> Shirish Ravan

7. Report of the first session of the UN Committee of Experts on GGIM

As reported in the October Updates UN-SPIDER Programme Coordinator, David Stevens, participated and contributed to the inaugural meeting of the recently established United Nations Committee of Experts on Global Geospatial Information Management (UNCE-GGIM). The main objectives of the UN Committee are to provide a forum for coordination and dialogue among Member States, and between Member States and relevant international organizations, and to propose work-plans and guidelines with a view to promoting common principles, policies, methods, mechanisms and standards for the interoperability and inter-changeability of geospatial data and services. The report of the first session is now available: http://ggim.un.org/. UN-SPIDER will continue supporting the work of GGIM in 2012 having being invited to contribute to the established Visioning Group which will review global trends and prepare a report to support the work of the Committee of Experts at its next meeting, specifically regarding the use of space-based information to support disaster risk management and humanitarian assistance.

For further information >> David Stevens

8. Reassignment of responsibilities within UN-SPIDER

In the beginning of December 2011 Mr. Lorant Czárán took over the post of Programme Officer in Vienna, where he will be serving as Region Desk Officer for Africa and also supporting UN-SPIDER Outreach Activities and the Network of Regional Support Offices. In addition, he will support the Office for Outer Space Affairs on the topic of geospatial data, inter-agency system wide coordination, and also supporting the Programme on Space Applications on other activities including Environment and Natural Resources. Mr. Juan Carlos Villagran de Leon took over the post of Programme Officer (Head of UN-SPIDER Bonn Office) where he will oversee activities related to Knowledge Management, including the Knowledge Portal and Capacity Building. He will continue to serve as Region Desk Officer for Latin America and the Caribbean. In addition, he will coordinate activities related to climate change on behalf of the Office for Outer Space Affairs with UNFCCC and other organizations focusing on this topic which are located in Bonn. For an updated list of UN-SPIDER staff check out: http://www.un-spider.org/story/un-spider-staff.

For further information >>David Stevens

9. The UN-SPIDER RSO In Nigeria participates in the Post Charter Activation (Charter Call 370) Review Meeting

On Friday 26th of August 2011, torrential rainfall triggered severe flooding in Ibadan, the State capital of the Oyo province in South Western Nigeria. The flood caused 30 deaths and displaced nearly 2000 people. As a way to contribute to the response operations, the Nigerian National Emergency Management Agency (NEMA) activated the International Charter: Space and Major Disaster on the 29th of August 2011 (Charter Call 370). Taking into consideration the fact that this was the second time the Charter was activated in Nigeria regarding floods, a **Post-Charter activation Review Meeting** was hosted by NEMA in collaboration with the UN-SPIDER Regional Support Office in Nigeria on 9 December 2011. The review meeting included major actors which were active during the Charter activation. Participants concluded that the Charter activation was better coordinated in this second case when compared to the previous case. For example, improved internet service made it possible for rapid download of the data provided by the Charter. As a result, the processing of satellite images was swift and timely. However, participants also identified critical constraints. For example, poor internet connectivity in the area affected by floods inhibited a rapid transmission of the final products to the end users in the field during the response phase of the disaster. It was therefore agreed that such final products should be prepared in PDF format and that a database of value adders should be compiled. Such actions will reduce the time lag between the finished products and the application by end users.

For further information >> James Godstime

Community News

10.TURKSAT supports Somalia's Emergency Telecommunications Infrastructure

Turksat AS, the Turkish public satellite telecommunications company which is an active supporter of UN-SPIDER activities, provided emergency communication services to the Turkish Red Crescent in Somalia. Turksat sent technical personnel to the capital city Mogadishu to set up a satellite 2.4-meter wide antenna and deployed VSAT infrastructure in the Red Crescent Operations Center. Turksat was also able to mobilize Intelsat IS-17 to provide service for 20 days during the famine response. Turksat has also provided all voice and data communication needs for the six field hospitals which were promised by the Turkish Prime Minister Recep Tayyip Erdogan in Somalia.

*For further information > **Yusuf Hascicek***

11. Geospatial initiative shows the way

GeoSUR, a Latin American and Caribbean (LAC) open-access and web-based initiative for geospatial data-sharing, has received a boost at the Eye on Earth Summit in Abu Dhabi (12-15 December). The conference "Networks of Networks" working group accepted GeoSUR – one of the first such regional networks in the developing world – as a "case model". As stated by Eric Van Praag, coordinator of GeoSUR: "This could help to use the lessons we learned as a starting point to build similar networks in other developing regions.

*For further information >>**SciDev.Net***

12. ITU and Luxembourg to cooperate in telecommunications for disaster response

ITU and the Government of the Grand-Duchy of Luxembourg have agreed to cooperate on the strengthening of emergency telecommunications and rapid response in the event of natural disasters. ITU and Luxembourg are members of the Emergency Telecommunications Cluster (ETC), which is comprised of UN agencies and other humanitarian partners. The Government of Luxembourg has developed a nomadic satellite-based telecommunication system – 'emergency.lu' – aimed at assisting humanitarian agencies which have to respond to communities affected by natural disasters, conflicts or protracted crises. This platform will be available as a global public good to the international humanitarian community as of 1 January 2012, with Luxembourg funding its development, implementation, operation and maintenance to the tune of € 17.2 million.

*For further information >>**ITU***

13. Global Navigation Satellite System (GNSS) data could speed up tsunami warnings

Faster tsunami warnings could be issued through the use of Global Navigation Satellite Systems alongside existing earthquake detection technology, scientists have found. GNSS data — provided by a satellite navigation system — could help cut the time lag from 20 minutes to around three minutes, according to results presented at the American Geophysical Union meeting in the United States earlier this month. Seismic instruments — on which current warning systems are based — can take a long time to assess accurately an earthquake's characteristics, because readings from several locations need to be analysed. However, GNSS stations can measure large vertical drops in ground elevation — the factor responsible for tsunamis — in real time. This information, when added to preliminary seismic data from the same location, can determine the size — and likely effects — of the earthquake in a matter of minutes.

*For further information >>**SciDev.Net***

14. Night-Time Images Help Track Disease From The Sky

Normally used to spot where people live, satellite images of night-time lights can help keep tabs on the diseases festering among them, too, according to new research. Princeton University-led researchers report in the journal Science Dec. 9 that night-time-lights imagery presents a new tool for pinpointing disease hotspots in developing nations by revealing the population boom that typically coincides with seasonal epidemics. In

urban areas with migratory populations, the images can indicate where people are clustering by capturing the expansion and increasing brightness of lighted areas. The researchers found the technique accurately indicates fluctuations in population density — and thus the risk of epidemic — that can elude current methods of monitoring outbreaks.
For further information >>Space Newsfeed

15. The International Charter is activated for Chile, Philippines and Ghana
On 30 December 2011 the Charter was activated at the request of Chile when a massive forest fire raged through the Torres del Paine National Park in Patagonia, Chile. The fire had been caused by high fanned winds and dry vegetation and spread across the area very quickly. Four hundred tourists had to be evacuated from the national park as fire fighters tried to control the fire. Officials confirmed that more than 85 sq.km (21,000 acres) of land had been destroyed in the event. The Charter was also activated at the request of the Philippines when Typhoon Washi hit Iligan City, Philippines, on 16 December 2011. The typhoon triggered flash floods and landslides, killing more than 650 people and leaving roughly 800 persons missing. The Charter was also activated to support emergency response efforts in Accra, Ghana, due to torrential rains that caused flooding in this capital city. Government officials confirmed 9 fatalities.
For further information >>The International Charter

16. Sentinel Asia is activated for Philippines and Indonesia
Sentinel Asia was activated on 17 December when Typhoon Washi hit Iligan City, Philippines, on 16 December 2011. The typhoon triggered flash floods and landslides, killing more than 650 people and leaving roughly 800 persons missing. Sentinel Asia was also activated as a consequence of the recent eruption of Mount Lokon, one of Indonesia's most active volcanoes. Two villages with about 10,000 people were affected by the ash, which emanated from the volcano.
For further information >>Sentinel Asia

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

Upcoming events supported by UN-SPIDER

17. UN-SPIDER support to the International Training Course on "Applications of Space Technology for Disaster Risk Reduction" at the Centre for Space Science Technology Education for Asia and the Pacific (CSSTEAP), affiliated to the United Nations, Dehradun, India
In order to access and use the space technology-based information, services and solutions for DRR, there is an urgent need to build human capacity especially in developing countries. With this in view, this International Training Course on "Application of Space Technology for Disaster Risk Reduction" is conceptualized within the framework of education & training programmes of the Centre for Space Science & Technology Education in Asia and the Pacific (CSSTEAP), affiliated to the United Nations. The overall objective of this course is to strengthen the capacity of participants understanding how space-based information, services and solutions

can be used to reduce disaster risks and losses. The course brochure and application form can be downloaded from: http://www.cssteap.org/upcoming_courses_12_1.html. The last day to submit application is 30 January 2012. UN-SPIDER will be providing travel support to selected participants from the countries closely working with UN-SPIDER, whereas CSSTEAP will provide rest of the support.

For further information >> *Shirish Ravan*

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