UN-SPIDER February 2011 Updates

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

UN-SPIDER News

1. UN-SPIDER side events during COPUOS Scientific and Technical Subcommittee session

During the forty-eighth session of the Scientific and Technical Subcommittee (STSC) of the Committee on the Peaceful Uses of Outer Space (COPUOS) from 7 to 18 February 2011, UN-SPIDER organized three side events, namely the second UN-SPIDER Regional Support Offices meeting, an expert meeting on space-based technologies and emergency response and a stakeholders meeting. On Tuesday, 8 February 2011, the second UN-SPIDER Regional Support Offices (RSOs) meeting was held. After last year's first meeting, the established RSOs were invited to continue discussions on the work of the Network of RSOs and their involvement in the implementation of the UN-SPIDER Programme. On the following day, 9 February 2011, UN-SPIDER invited the representatives of the RSOs and representatives from the major existing and planned service mechanisms (International Charter, Sentinel Asia, SERVIR, GMES SAFER) to an expert meeting on space-based technologies and emergency response. This meeting provided an opportunity for UN-SPIDER to discuss a coordination framework with and between these mechanisms and report back to the Scientific and Technical Subcommittee Meeting of COPUOS. The last meeting organized by UN-SPIDER was a stakeholders meeting and was held on 10 February 2011. It was an open meeting and every Member State and institution interested in the work of UN-SPIDER and the topic of disaster management was invited to attend. *For further information >> UN-SPIDER News*

2. Space solutions can improve the lives of people worldwide

The role of space science and space applications in improving the daily lives of people worldwide was the focus of the 48th session of the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS). Issues of environmental monitoring, management of natural resources, early warning systems to help mitigate potential disasters, satellite navigation and communications, as well as sustainable future use of outer space, including how to minimize the impact of space debris on future space missions to preserve the outer space environment for future generations, were discussed. Stressing the

importance of sustainable space utilization in the service of all humanity, the Director of the Office for Outer Space Affairs (UNOOSA), Mazlan Othman, invited delegations to join UNOOSA in activities celebrating the 50th anniversary of human space flight and the 50th anniversary of COPUOS, that UNOOSA will organize throughout the year, in particular from 1 to 10 June 2011, alongside the 54th session of COPUOS. *For further information >> UN Information Service*

3. Thematic Partnership for Latin America and the Caribbean taking shape: 3D-UDOP Geo-viewer demonstrated in Guatemala

To illustrate the capacity of geo-viewers to enhance situational awareness, the Southern Command and Thermopylae Sciences and Technology of the United States, the National Coordinating Agency for Disaster Reduction (CONRED), Mariano Galvez University, and CIMDEN from Guatemala have joined forces to upload information into the 3D-UDOP geo-viewer. The geo-viewer has been adapted to display information relevant to seismic risk in Guatemala through a dynamic and collaborative environment that visualizes earthquakes' real and potential effects on local areas. The geo-viewer was demonstrated in Guatemala on 1 March 2011. A detailed description of the project and the project partners can be found on the UN-SPIDER Knowledge Portal. *For further information >> UN-SPIDER LAC Thematic Partnership, 3D UDOP*

Community News

4. Sentinel Asia contributed to response to two floods and one earthquake

Sentinel Asia has observed floods in the Philippines and in Sri Lanka at the beginning of February, and the effects of the earthquake in New Zealand later that month. Sentinel Asia provided imagery through its Web GIS service.

For further information >> Sentinel Asia

5. International Charter activated for cyclone, landslides, snow hazard and earthquake

The International Charter Space and Disasters accepted four activations in the month of February, covering the cyclone in Australia, landslides in Turkey, snow hazard in the Republic of Korea, as well as the earthquake in Christchurch, New Zealand. Activation and Project Management (PM) of the Charter calls were spread among the following national and international actors: for Australia the Charter activation was requested by the United States Geological Survey (USGS) on behalf of Emergency Management of Australia, PM was done by Geoscience Australia. For the landslides in Turkey, the Prime Ministry Disaster and Emergency Management, Presidency of Turkey, requested the activation and the UN Institute for Training and Research/Operational Satellite Applications Programme (UNITAR/UNOSAT) took over the PM. The activation for snow hazard in the Rep. of Korea followed a request of the country's National Institute of Disaster Prevention (NIDP)/National Emergency Management Agency (NEMA), PM was done by Korea Aerospace Research Institute (KARI). The earthquake in New Zealand was covered by COGIC (French Civil Protection) with USGS on behalf of the Ministry of Civil Defence and Emergency Management of New Zealand (activation) and by the French National Centre of Space Research (CNES) (PM).

For further information >> International Charter Space and Major Disasters

6. SAFER supporting response to floods, oil spill, earthquake and civil unrest

In February, Europe's Services and Applications for Emergency Response (SAFER) delivered mapping products in support of the response to floods in Madagascar and an oil spill in Norway. SAFER also supported the response to the earthquake in Christchurch, New Zealand. On 24 February, SAFER was activated by the Monitoring and Information Centre (MIC) of the European Commission due to the ongoing civil unrest in Libya. *For further information >> SAFER*

7. UN General Assembly stresses need to invest in disaster mitigation measures

With earthquakes, heat waves, floods and snowstorms affecting 208 million people, killing nearly 300,000, and costing \$110 billion in losses last year alone, the General Assembly debated mitigation steps such as building safer schools, hospitals and cities to reduce the terrible toll. "We need to take lessons from cities and countries that have shown how to reduce risk – as well as from those less fortunate, whose examples of calamity should give us all pause for thought," Secretary-General Ban Ki-moon said in opening the session, which brought together senior United Nations officials, civil society partners and city mayors. "Experience and common sense agree: we must invest today for a better tomorrow."

For further information >> <u>ReliefWeb</u>

8. Call for papers for the 3rd International Conference on Advances in Space Technologies (ICAST)

The 3rd International Conference on Advances in Space Technologies will take place from 6 to 8 July 2011 in Islamabad, Pakistan. This conference will focus on the use of space technologies for hydrologic disasters and climate change research. ICAST will raise awareness on the applications of space-borne sensors for hydrometeorological extremes, water resources management and climate change studies. This conference will improve international collaboration on scientific and technical research on emerging issues of the region. Special Topics:

- Hydro-meteorological Extremes (Monitoring and Forecasting)
- Climate Change Impacts on Glaciers and Mountain Environments
- Climate Variability and Droughts & Water Resources Management
- Geo-hazards (Earthquake and Landslide) Mapping, Prediction, and Mitigation

You are invited to participate in ICAST 2011 as an author/speaker. Your active participation will be highly appreciated as this conference will serve as a platform to share your professional expertise, extensive research and country experiences with other colleagues, researchers and policy makers. If interested to participate, please submit your abstract by 4th April 2011.

For further information >> <u>ICAST</u>

9. DMCii signs exclusive NigeriaSat-2 satellite imaging deal with NASRDA

Remote sensing solutions provider DMCii has signed an exclusive agreement with the Nigerian Space Agency (NASRDA) to distribute imagery from the two new earth observation satellites NigeriaSat-2 & NigeriaSat-X that are awaiting launch. The two satellites introduce high quality 2.5m Pan and 5m multispectral (4 band) imagery to DMCii's product range with strip, with wide area and stereo pair options available. These very high resolution imagery products will prove ideal for use by professionals in mapping and cartography, business intelligence, urban/transport planning, land cover mapping, forestry and demanding agriculture applications. *For further information >> EARSC*

10. Transatlantic research collaboration

The US National Oceanic and Atmospheric Administration (NOAA) and the European Commission's Joint Research Centre (JRC) have agreed to formally explore strengthening their cooperation in areas of common interest. JRC Director-General expressed the organization's interest to further explore and propose cooperative activities in the following fields, among others: Earth Observation data collection, quality control and sharing, environmental contaminants and effects in the marine environment, development of a common global/regional modelling and analysis tool for coastal hazards and extreme events, and space weather, disaster monitoring, and crisis management.

For further information >> EARSC

11. Monitoring killer mice from space

The risk of deadly hantavirus outbreaks in people can be predicted months ahead of time by using satellite images to monitor surges in vegetation that boost mouse populations, a University of Utah study says. The

method also might forecast outbreaks of other rodent-borne illnesses worldwide. While the study focused on hantavirus in deer mice, its findings could help health officials fight other rodent-borne diseases such as ratbite fever, Lyme disease, bubonic plague, Lassa fever, salmonella infection and various hemorrhagic fevers. The study combined satellite imagery with data from thousands of mice captured over three years in central Utah. The total number of trapped mice and the number of mice with the disease, a strain of hantavirus known as Sin Nombre virus, both climbed after peaks in greenery.

For further information >> <u>SPACE MART</u>

12. Insurance company ranks 2010 among worst years ever for climate disasters

Climate change is a culprit in the long list of catastrophic natural disasters in 2010, according to insurance company Munich Re, adding to trends pointing to more frequent and riskier events. In its report, Munich Re found that the 960 natural disasters that resulted in financial losses in 2010 "far exceeded" the number of disasters in recent years. Last year had the second-highest number of "loss-related natural catastrophes" since the insurance company began keeping track in 1980, and natural disasters racked up \$2.5 trillion in losses in the past 30 years. At the top of the heap is Hurricane Katrina in 2005, which racked up \$145 billion in losses along the Gulf Coast, about half of which had been insured.

For further information >> <u>scientificamerican</u>, <u>ReliefWeb</u>

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

2nd NIDM - Space Technology Application in Disaster Risk Reduction and Emergency Response, New Delhi, 28-30 March 2011

This training programme particularly aims at capacity-building for Disaster Managers on the application of space technology for disaster management. This will help in bridging the gap between the geo-spatial and disaster management experts at various levels. The workshop should also aim at defining long-term needs with regard to capacity-building to ensure that the use of space-based information is promoted at all levels of administration. The main objectives are as follows:

- To review the various international, regional and national initiatives on geo-spatial technologies and applications relevant to disaster management
- To sensitize participants about the potential and scope of Remote Sensing and GIS for holistic Disaster Risk Reduction and Management i.e. at various stages of Disaster Management, data sources and National Initiatives
- Identify various tools, techniques, datasets and methodologies for geospatial information management with case studies related to application in all phases of disaster management cycle and for various hazards
- To enable the participants to understand the institutional mechanism for Geoinformation and policy framework on Spatial Data Management relevant to Disaster Management.
- Review the status, implementation challenges in existing approaches, tools, techniques and methodologies to suggest better strategies.

The target groups for this programme are members of State Disaster Management Authorities, senior and middle level administrators of the Departments of Disaster Management and faculty members of administrative training institutes. Since the course is targeting the user community, prior knowledge on Geoinformatics is not mandatory. However it is advisable to have basic knowledge and aptitudes towards the subject of Geoinformatics and its applications.

For more information: <u>UN-SPIDER Events</u>

Gi4DM 2011 – GeoInformation for Disaster Management, Antalya, 3-8 May 2011

Geomatics technologies are able to support management and recovery in the aftermath of manmade and natural disasters. However, disaster management also poses big challenges in all aspects of the geoinformation cycle, from data acquisition, processing, management to delivery. For the seventh time, the International Symposium on Geo-information for Disaster Management (Gi4DM) brings together researchers, developers, data providers and users from all over the world to discuss these challenges. The Gi4DM is coordinated by the ISPRS Ad hoc Committee on Risk and Disaster Management, Working Group 1 (Disaster) of the ISPRS Commission VIII (Remote Sensing and Policies) and Working Group 8 (3D Spatial Data Integration for Disaster Management and Environmental Monitoring) of the ISPRS Commission IV (Geodatabases and Digital Mapping). The indicative topics of interest will at least cover the fields of enterprise crisis management, public security and crisis management in city development, geo-information systems for disaster management, incident management systems, etc. The following themes are for reference:

- User Requirements
- Monitoring and processing
- Early Warning systems
- Early Impact systems
- Spatial Data Infrastructures

For more information and registration: Gi4DM

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

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 <u>http://www.unoosa.org</u>.

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.