UNITED NATIONS
Office for Outer Space Affairs

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

UN-SPIDER

August 2011 Updates

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ONLINE REGISTRATION
for the United Nations International Conference on Space-based Technologies for Disaster Risk Management "Best Practices for Risk Reduction and Rapid Response Mapping" in Beijing, China
CLOSING ON 30 SEPTEMBER 2011

UN-SPIDER News

1. Support to Sudan: Follow-up activities after Technical Advisory Mission

As a follow-up to the Technical Advisory Mission (TAM) to Sudan, carried out from 22-26 May, UN-SPIDER in August formally submitted the TAM report to the Government of Sudan which includes all observations and recommendations made by the expert team. UN-SPIDER is now working with the partner institution in Sudan (the National Remote Sensing Authority) to finalise a plan of work with specific action items to implement. Several of these items have already been initiated as part of the overall support provided by the programme to the Horn of Africa Crisis. Drought monitoring maps of Sudan (using HJ1 satellite) and entire Africa (using MODIS) were supplied to the response community and the Government of Sudan. The support was offered through an on-going cooperation between UN-SPIDER and the National Disaster Reduction Centre of China (NDRCC). Additionally, UN-SPIDER will be sponsoring a delegation from Sudan to participate in the upcoming *International Conference organized in Beijing*. During the Beijing conference, UN-SPIDER will be hosting a side meeting bringing together Chinese institutions and African decision makers, including Mozambique, Nigeria and Sudan, aiming at enhancing bilateral and multilateral collaborations.
To read more about the technical advisory mission to Sudan go to ***UN-SPIDER Technical Advisory Missions***.

2. Technical Advisory Mission to Sri Lanka taking shape

At the request of the Government of Sri Lanka, UN-SPIDER is planning a Technical Advisory Mission (TAM) to Sri Lanka to be carried out from 17 to 21 October 2011. A team of experts will meet with key disaster management authorities in the Government, UN agencies, regional and international organizations and initiatives, as well as private entrepreneurs to discuss, make recommendations and develop guidelines to improve the use of space-based information in disaster management. Experts from a wide range of organizations, including SAARC-Disaster Management Centre, the Iranian Space Agency, SUPARCO, CSSTEAP and others will be joining the UN-SPIDER team to participate in the TAM. Both the Iranian Space agency and SUPARCO are UN-SPIDER Regional Support Offices

For further information >> ***UN-SPIDER News***, ***UN-SPIDER Technical Advisory Missions***, or contact *Shirish Ravan*

3. Pacific Platform for Disaster Risk Management 2011

From 1st – 5th August 2011 UN-SPIDER participated and contributed to the main disaster risk reduction meeting for the Pacific region. With the support from the Government of Austria the UN-SPIDER Programme provided travel support to experts from Samoa and Tonga to come to this meeting and also to participate in the special session of the Spider Thematic Partnership for the Pacific Region. During this special session, UN-SPIDER Programme Coordinator, David Stevens, discussed with leaders of disaster management organisations how to ensure a closer cooperation and support to their needs including for the upcoming Samoa Simulation Exercise planned for 30th November 2011 and also the proposed TAM to Tonga. All these activities in the Pacific region are made possible due to the continuous and generous support of the Government of Austria to the work that the UN-SPIDER Programme caries out in support of Small Island developing states (SIDS).

For further information on the Auckland meeting >> ***PacificDisasterNet***

4. NDRCC and UN-SPIDER provide drought monitoring mapping products to support the Horn of Africa Crisis

The National Disaster Reduction Center of China (NDRCC), as a partner of UN-SPIDER, provided mapping products to support drought monitoring in the Horn of Africa. A total of eleven products were prepared using satellite images to monitor crops, water body dynamics, and drought in the Horn of Africa, including Kenya, Djibouti, northern Sudan and Somalia. The mapping products were prepared based on Terra/MODIS and HJ-1A/B. UN-SPIDER closely worked with the end users to disseminate the products to the World Food Programme (WFP) and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). These products were also uploaded to the UN-SPIDER Knowledge Portal for open access. The HJ-1 A/B data was made available for sharing upon specific requests. The cooperation between UN-SPIDER and NDRCC in the Horn of Africa crisis represents an excellent start for further cooperation and the establishment of a long term partnership to support emergencies in the countries working with the UN-SPIDER Programme.

For further information >> ***UN-SPIDER SpaceAid, Horn of Africa***

5. UN-SPIDER Knowledge Portal: meet new team members and tour the Space Application Matrix reloaded

The UN-SPIDER team has grown in the past months with the opening of the Beijing office. We are happy to welcome our new Senior Experts Li Suju and Zhifeng Guo and our Programme Assistant Liu Jing. Please feel free to go to the Staff page on our Knowledge Portal to see who is now part of the team and contributing their knowledge and experience to the Programme. Additionally, the Space Application Matrix (SAM) on the UN-SPIDER Knowledge Portal has been given a new look-and-feel. After re-working the graphics and adding functionality it is now easier to use. Users will find a preview of the search results which increases clarity and saves time when navigating through the Matrix. While the new version already brought some enhancements, further developments for the navigation and for guiding the user through the Matrix are planned for the coming months. Furthermore, the knowledge management team is compiling and reviewing additional scientific papers to increase the content of the database and render more search results. These improvements of the UN-SPIDER Knowledge Portal are made possible by the generous funding support the UN-SPIDER Programme has received from the Government of Germany.

*For further information >> **UN-SPIDER Staff**, **UN-SPIDER SAM***

6. UN-SPIDER / CRECTEALC Training Course in Mexico

In an effort to contribute to the institutionalization and strengthening of disaster management organisations in Mexico and Central America, UN-SPIDER and the Mexican Campus of the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean (CRECTEALC) are joining forces to conduct a training course on the use of radar imagery to assess the impacts of floods, as this region is particularly prone to suffer the impacts of floods triggered by hurricanes and tropical storms. The course will be conducted in the campus of CRECTEALC in Puebla, Mexico, by experts from CRECTEALC and from UN-SPIDER Regional Support Offices, specifically CATHALAC, as well as other leading experts. The course, to take place on 24 to 28 October 2011, will bring together representatives of government institutions from Mexico, Guatemala, El Salvador, and Belize.

For further information >> Juan Carlos Villagran

7. UN-SPIDER Technical Advisory Mission (TAM) to be conducted in Chile

The TAM is scheduled to take place from 7 to 11 November 2011 and will allow an expert team to assess current capacities of Chilean institutions on the use of space based information to support activities conducted in the context of disaster risk management and disaster response. It will be conducted with the support of experts from a number of institutions including the Argentinean National Commission on Space Activities (CONAE), the National Institute for Research on Space Activities (INPE), the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean (CRECTEALC), the Organization of American States (OAS), and the International Strategy for Disaster Reduction (ISDR). The TAM will be conducted with the financial support provided by the Government of Austria and will allow UN-SPIDER to provide the Government of Chile a report that will include an assessment of existing capacities, as well as recommendations on how to improve such capacities via a holistic approach including policies, strategies, and activities.

*For further information >> **UN-SPIDER Technical Advisory Missions*** or contact Juan Carlos Villagran

8. Support to Burkina Faso: Follow-up activities after Technical Advisory Mission

As a follow-up activity to the various UN-SPIDER Technical Advisory Missions (TAM) carried out in Western Africa (Burkina Faso, Cameroon, Nigeria and Togo), and at the request of the Government of Burkina Faso, a capacity building event is being organized in Ouagadougou between the 26th and 30th of September by the Ministry of Environment and Sustainable Development of Burkina Faso and with funding support being provided by the Government of Austria. Main objectives of this regional event are to promote the use of space-based information for disaster risk reduction and emergency response 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 countries where UN-SPIDER is already supporting. The course will be conducted by RECTAS, a leading regional Centre of Excellence, in French language, and will also make use of ESRI software kindly donated for this purpose by the local distributor.

For further information please contact Lorant Czaran.

9. UN-SPIDER and EMERCOM working together to ensure support to Central Asia

The Russian Federation, through EMERCOM (Russian Ministry of Emergency Situations), played a central role in the setting up of the UN-SPIDER Programme having participated and contributed to the *ad hoc* Expert Team that worked on the proposal that led to the establishment of the Programme by the United Nations General Assembly in December 2006. The support continues now with the organisation of the International workshop on Space-based Information for Disaster Management in Central Asia, Krasnoyarsk, 7-8 September 2011, which 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, as well as at exploring ways to improve collaboration among disaster management agencies regarding the access to and use of space-based information in the region. 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. This workshop will solidify the leading international role the Russian Federation has in emergency response and ensure a closer cooperation with the UN-SPIDER Programme.
For further information >> David Stevens

10.Volcano Hotspot mapping in Mount Cameroon
During the Technical Advisory Mission to Cameroon, that took place last June, a technical field visit was organized by the UN-SPIDER National Focal Point, the Civil Protection Directorate of the Ministry of Territorial Planning and Decentralization, to the Geological and Seismological Monitoring Station (ARGV) of the National Institute for Geological and Mining Research (IRGV) located at the foothills of Mount Cameroon, at Ekona, situated in the town of Buea. The team of experts met with the Director and staff of the Station, as well as with representatives of the Provincial Governor. The operations and equipment of the Station were presented, and several needs identified, including access to satellite imagery to try and develop better monitoring processes. Satellite-based communication was also considered for establishing a real-time data transmission network for the sensors placed around the mountain, and also the need for more sensors to be deployed. UN-SPIDER is now working with the National Focal Point in Cameroon as well as with the UN-SPIDER Regional Support Office in Nigeria to establish a mechanism that would enable the provision of regular coverage of the mountain with satellite imagery, for monitoring purposes, as well as identification of relevant best practices and case studies on hot-spot mapping and volcano monitoring using satellite imagery, that could be shared with the Cameroon researchers and experts at the Station.
For further information please contact Lorant Czaran.

11.Update from the VALID project
The VALID editorial group, chaired by Professor Orhan Altan of Istanbul Technical University, met in Munich on 18 August for its 3rd planning meeting this year. VALID (The Value of Geo-Information for Disaster and Risk Management) is planned as another joint publication of the JBGIS (Joint Board of Geospatial Information Societies) and UNOOSA. Orhan Altan highlighted the interest of the JBGIS member societies, and of IUGG (International Union of Geodesy and Geophysics) and URSI (Union Radio-Scientifique Internationale) in active contribution and support to VALID. Robert Backhaus, UN-SPIDER Senior Expert, reported on first project results, gained through an open poll on the UN-SPIDER Knowledge Portal where the global stakeholder community was invited to prioritize specific geoinformation products and services according to their importance for disaster management. The top 12 products and services are related to flood, drought, earthquake, tsunami and fire management. They will be described in more technical detail, and published on the UN-SPIDER portal for a comprehensive evaluation by the global user community, with emphasis on assessing their impact on operational, administrative and political issues, and the criticality of specific product features.
*For further information >> **VALID**, or contact Robert Backhaus.*

12. United Nations Committee of Experts on Global Geospatial Information Management – GGIM
Last July the Economic and Social Council (ECOSOC) agreed to establish the United Nations Committee of Experts on Global Geospatial Information Management (GGIM) and also agreed that it would hold its inaugural administrative meeting at the margin of the upcoming High-Level Forum on Global Geospatial Information Management which will be held in Seoul from 24 to 26 October 2011. UNOOSA has been invited to attend and contribute to this landmark forum and also to the first meeting of this Committee of Experts, as

well as to contribute to the Exchange Forum which will be held on Sunday 23 October 2011. The UN-SPIDER Programme Coordinator, David Stevens, will be representing the Office. If you plan to attend please let us know so we can meet.
*For further information >> David Stevens.**UN-SPIDER News***

13. ISDR Asia Partnership (IAP) – UN-SPIDER to meet with leading Asian disaster management organisations
Shirish Ravan will be participating and contributing to the upcoming IAP meeting to be held in Pattaya, Thailand from 6-8 September 2011. The ISDR Asia Partnership (IAP) is an informal multi-stakeholder forum with the role to facilitate the implementation of Disaster Risk Reduction (DRR) activities and the Hyogo Framework for Action (HFA) in the Asia region. The fundamental role of the IAP has been a) to support the political leadership of the regional platform through the Asia Ministerial Conferences (AMCDRR) and set up a joint regional DRR strategy and action plan, b) to support the biennial HFA progress review that includes national and regional progress monitoring and monitoring the implementation of the joint regional action plans and recommendations from AMCDRR, c) to improve regional coordination and coherence through regional mapping and stock taking exercises. UN-SPIDER systematically participates in all IAP and AMCDRR events as part of its commitment to strengthen the SPIDER Thematic Partnership in the Asia Region. The participation and contribution of UN-SPIDER ensures that the SPIDER Thematic Partnership for Asia works as a network to support National Platforms for Risk Reduction which have been set up by countries as a way to reach the goals proposed in the Hyogo Framework for Action.
For further information >> Shirish Ravan.

14.Review article on using Satellite Communication for Disaster Management will be published soon
UN-SPIDER staff, under the guidance of Senior Expert Yusuf Hascicek, has completed a review article on The Use of Satellite Communications for Disaster Management and Emergency Response, which has been submitted to the International Journal of Emergency Management for publication. This paper is an overview of the use of satellite communications for the disaster management and emergency response and is intended to be a general resource and capacity building for the disaster managers and responders.
*For further information >> **UN-SPIDER News***

15.Regional Center for Mapping of Resources for Development (RCMRD) and South Sudan
South Sudan is the 193rd Member State of the United Nations having being admitted on 14th July 2011. UN-SPIDER is coordinating with Nairobi-based RCMRD, one of the leading Centres of Excellence in Africa and also a UN-SPIDER Regional Support Office, to ensure support to this new country. On 7th September 2011 RCMRD will be participating and contributing to the 3rd South Sudan Community Mapping Event in Juba, South Sudan, which is being co-organised by the Southern Sudan Centre for Census, Statistics and Evaluation (SSCCSE) and others. During the daylong event participants will be able to learn of Google Map Maker directly with Google experts who are also co-hosting the event.
For further information >>RCMRD

16. UN-SPIDER contributing to ITU's work
Recognising the leading role that the UN-SPIDER Programme has in the area of disaster risk reduction and disaster management, the ITU Development Sector Study Group called for closer cooperation, more specifically in the ITU-D Study Group Question 22-1/2, which relates to the "Utilization of telecommunications/information and communications technologies for disaster preparedness, mitigation and response." This is a revised study question that was adopted by the ITU World Telecommunication Development Conference held in Hyderabad, India in 2010. One of the key elements to this Question is the use and benefits drawn from the use of active and passive space-based sensing systems as they apply to disaster and emergency relief situations. UN-SPIDER Senior Expert, Yusuf Hascicek, will be attending and contributing to the upcoming meeting of the ITU-D Study Group 2, which deals with information and communication infrastructure and technology development,

emergency telecommunications and climate-change adaptation, and will be held 12-16 September 2011, in Geneva, Switzerland.
Information on these meetings is available at >> http://www.itu.int/ITU-D/study_groups/

17.UN-SPIDER participates in DLR-hosted Workshop "Enhancing technical and procedural cooperation in satellite-based emergency mapping on a global scale"

The general availability of satellite imagery for large scale crisis- and disaster events and the increased global capacity to turn satellite data into mapping products has raised the demand for global cooperation in the domain of satellite-based emergency mapping. This workshop will gather key experts and organizations in the domain of emergency mapping to foster the international cooperation during large scale disaster situations. This workshop will bring together representatives from organizations involved in satellite-based rapid mapping activities, to identify basic common ideas and understanding on how collaboration procedures and rules of engagement may be set up. It will be supported by resources of the EUGENE project, a EU FP7 Support Action.
The UN-SPIDER participation is also important in light of the fact that a Working Group on Emergency Mechanisms has been set up in the framework of the COPUOS Scientific and Technical Subcommittee earlier this year, and its work closely relates to the objectives of this workshop, providing an opportunity for UN-SPIDER staff to contribute to the discussions and ensure that any conclusions or actions identified align or support the efforts in the UN and COPUOS context as well.
More information on EUGENE can be found at http://www.eugene-fp7.eu/

Community News

18.Sentinel Asia supports Taiwanese disaster response to Typhoon Nanmadol

At the end of August the south-eastern part of Taiwan experienced torrential rains and fierce wind caused by the Tropical Storm Nanmadol. Five thousand people had to be evacuated. Sentinel Asia supported the local authorities with Satellite Imagery.
For further information >> **Sentinel Asia**

19.International Charter activated for Hurricane Irene and Flood in Nigeria

In August the International Charter was activated twice. First for Hurricane Irene, a North Atlantic tropical cyclone that caused extensive damage in the Caribbean, and then the Eastern and North-eastern Coast of the United States. USGS requested the activation on behalf of FEMA while the delivery of value-added maps was managed by the Center for Geospatial Information Technology. The second activation was requested by the National Emergency Management Agency for Nigeria, a UN-SPIDER National Focal Point, in support of a devastating flood at the end of August resulting from an over spill from Lake Eleyele that swept over communities in Ibadan, Nigeria.
For further information >> **International Charter Space and Major Disasters**

20.SAFER activated for Fires in Greece and Italy and for an update of the situation in the African Horn

Greece declared a state of emergency 25 August 2011 as fires became uncontrollable in the Evros region, North-eastern Greece. SAFER was activated for Greece fires as well as fires in Italy. SAFER was also activated in support of the African Horn Crisis in August 2011.The combination of conflict and drought has exacerbated the vulnerability of people in Somalia and according to the United Nations, more than 135,000 people have fled the country since the beginning of the year.
For further information >> **SAFER, *UN-SPIDER SpaceAid, Horn of Africa***

21.UN-SPIDER Regional Support Office in Nigeria responds to flood disaster in Nigeria

A six-hour torrential rain which started on 26 August 2011 resulted in severe flooding in Ibadan, Oyo State capital in south western Nigeria with many dead and several millions of dollars' worth of properties destroyed in the process. The most affected communities include Onipepeye section of Old Ife Rd, Oke Ayo, Yemetu, Bodija Estate, Olomi, Eleyele, Apete and Odo Ona-Elewe. Following the flooding disaster, the Nigerian National Emergency Management Agency (NEMA) activated the International Charter Space and Major Disaster on the 29th of August 2011. A member of the RSO in Nigeria was nominated as the Project Manager for the Charter activation. The RSO is currently using its resources to process all available satellite images of the areas affected by the flood. The output of the processed satellite images will be forwarded to NEMA for effective response and mitigation.

22.Satellites in the developing world

A number of developing countries are taking steps to build their own national satellite programs, seeking to ensure access to remote-sensing data to map and forecast disasters, monitor crop yields and track environmentally driven diseases such as malaria. Danielle Wood and Annalisa Weigel from MIT examine countries including Nigeria, Malaysia and Thailand where nascent satellite programs have cropped up, thanks to a relatively recent philosophical change within the space industry. The change took place during the 1980s and '90s, when small companies and university-based groups started to explore the idea of building smaller, cheaper satellites from everyday electronics, and the idea of specialized, and therefore expensive, space technology was abandoned. This change in philosophy made it possible for developing countries to get involved in the space industry. "These countries are not just getting a new technology toy," Wood says. "They're also creating a new, first generation of experts that can help inform the country's use of space technology to address local challenges."

For further information >> **http://web.mit.edu/**

23.Connecting Environmental Observations with Cholera Outbreaks in Bangladesh

Research has demonstrated that cholera epidemics occur seasonally in Bangladesh, with peak outbreaks happening twice a year. This bimodal outbreak pattern follows the times when large monsoon events are frequent. While these patterns are known, this knowledge alone cannot predict the severity and location of cholera outbreaks until a monsoon event occurs, or an outbreak is reported. Therefore, there can only be reactive responses to cholera outbreaks. A better understanding of the link between environmental factors and outbreak occurrence would enhance disease management capabilities. A predictive tool capable of giving better advanced warning of potential outbreaks would allow for proactive, preventative responses and minimize negative effects. Remote sensing products can be used to better understand the correlation between outbreak occurrence, sea surface temperature (SST), sea surface height (SSH), salinity, and chlorophyll-a estimates. Using data gathered by NASA SeaWiFS and MODIS sensors, a gridded global image will be developed which will allow for a better understanding of the relationship between the data observed within the context of geographically diverse locations.

For further information >> **http://www.earthzine.org/**

24.Remote sensing based technology being introduced to forecast floods

An advanced level remote sensing based climate and flood warning technology is being introduced to upgrade flood management of Pakistan. UNESCO, with the financial assistance of Japan, is introducing the system at a cost of 3.5 million dollar which is expected to be completed by 2013. The official said the project will be completed in two years, which will enable the institutional capacity of Pakistan, to predict floods as early as 1 to 14 days by tracking weather and flood waves. This would be major milestone in having better capacity to deal with extreme floods like the 2010 floods in Pakistan, he added. The project will not only bring state of the art technology but will also harness linkages between Pakistani institutions such as the Pakistan Meteorological Department (PMD), SUPARCO (a UN-SPIDER Regional Support Office), Federal Flood Commission (FFC), NDMA

and Japanese institutions such as International Centre for Water Hazards and Risk Management (ICHARM) which is also a UNESCO Category II Centre and Japan Aerospace Exploration Agency (JAXA). A team led by UNESCO Headquarters Science Bureau will work closely with these institutions.
For further information >> **http://www.thenews.com.pk/**

25.CDEMA publishes situation report on the Matthieu Dam's collapse
In the early morning of 28 July 2011 Dominica's Matthieu Dam was breached, damaging infrastructure downstream in the Layou River valley. In the context of the on-going Caribbean Satellite Disaster Pilot, an initiative involving a host of entities including the Caribbean Disaster & Emergency Management Agency, CATHALAC, NASA, UN-SPIDER, and others, recently completed an assessment of the Matthieu Dam collapse. That assessment indicates that the collapse of the Matthieu Dam reduced the Miracle Lake's surface by some 8.25 hectares, and as evident in the 31 July 2011 imagery, the banks of the Layou River below the Dam were also breached, putting an additional 4.58 hectares of land under water. Please follow the link for a situation report on the Matthieu Dam's collapse.
For further information >> **http://www.cdema.org/**

26.Dnepr rocket boosts seven satellites into Earth orbit
On August 17th, seven small satellites for Nigeria, Ukraine, Turkey, Italy and the United States were launched from Russia on top of a Dnepr rocket. "NigeriaSat 2 will significantly boost African capabilities for remote sensing applications, specifically for natural resource management. This high resolution satellite will also greatly enhance image data available to the Disaster Monitoring Constellation," said S.O. Mohammed, head of NASRDA. Ukraine's Sich 2 remote sensing, built by Yuzhnoye, a leading Ukrainian aerospace contractor, will obtain medium-resolution images of Earth. Such imaging products will be useful in monitoring the environment and land use planning. The Dnepr rocket also hauled into orbit RASAT, the first Earth observation satellite designed and built in Turkey. Its primary objectives are to advance Turkish space technology and know-how and observe natural and manmade disasters, monitor coastline changes and pollution, detect illegal settlements and urban land changes, and update existing maps. The University of Rome's EduSat microsatellite and two U.S.-built AprizeSat asset tracking satellites also rode the Dnepr launcher into space Wednesday.
For further information >> **UN-SPIDER News**

27.New satellites battle pollution 'ghosts'
A new generation of orbiting sensors capable of mapping emissions at city level is being built in a laboratory in central England, a development that will give scientists a new tool in the fight to cut pollution. Roland Leigh, a climate change technology scientist at the University of Leicester, says his team is midway through what is potentially a 15-year project to launch the sensitive satellite equipment of the future. These small spacecraft will eventually provide an additional dimension to data collected on the planet's atmosphere by Envisat, a truck-sized Earth-observing satellite launched into twice-daily orbit in 2002. "From 800 kilometers away we can produce maps of London or any major city and we can say where the air quality is good and bad," Leigh says of his team's high-tech creations.
For further information >> **http://edition.cnn.com/**

28.Extreme 2010 Russian Fires and Pakistan Floods Linked Meteorologically
Two of the most destructive natural disasters of 2010 were closely linked by a single meteorological event, even though they occurred 1,500 miles (2,414 km) apart and were of completely different natures, a new NASA study suggests. The research finds that the same large-scale meteorological event - an abnormal Rossby wave - sparked extreme heat and persistent wildfires in Russia as well as unusual downstream wind patterns that shifted rainfall in the Indian monsoon region and fuelled heavy flooding in Pakistan. Although the heat wave started before the floods, both events attained maximum strength at approximately the same time, the

researchers found by analysing satellite data generated by NASA instruments capable of measuring the land surface temperature, precipitation intensity and wildfire activity.
For further information >> **http://www.spacedaily.com/**

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 UN-SPIDER events

Second UN-SPIDER International Expert Meeting: Crowdsource Mapping for Preparedness and Emergency Response, Geneva, 16 November 2011
In July 2011 the UN-SPIDER Programme successfully conducted the First International Expert Meeting on "Crowdsource Mapping for Preparedness and Emergency Response". The second activity of this project will be this Expert Meeting to be held in Geneva, back-to-back with the *International Conference on Crisis Mapping (ICCM 2011)*. The meeting will focus on exploring possible ways of contributing to better coordination of the crowdsource communities with the space technology community and on overall improvement of its involvement to facilitate the preparation and processing of space-based products used by the disaster risk reduction and emergency response community. The discussions will target opportunities that make space-based information available for disaster risk reduction and emergency response, including their access and use, as well as the further involvement of existing mechanisms to ensure increased coordination and cooperation of all three communities. We are pleased to inform you that we are now accepting applications from professionals, experts and decision-makers from respective areas. Please visit the *meeting webpage* to apply for this event. The application deadline is **30 September 2011**. For those interested in contributing to the discussion on this topic, please consider joining the *Google Group on Space-based Information for Crowdsource Mapping*.
For more information and registration: ***Second UN-SPIDER Meeting on Crowdsource Mapping***, ***ICCM2011***

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 120 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". Please note that the online registration will be closed on **30 September.**
For more information and registration: ***UN International Conference in Beijing***

Upcoming events supported by UN-SPIDER

Pacific Island Countries GIS/RS User Conference, Suva, 28 November – 2 December 2011
This series of conferences which began in 1999 will hold its 2011 edition in Suva, Fiji from 28 November to 2 December 2011. "Data Sharing, Better Mapping" will be the main theme of this leading geospatial event for the Pacific region. As in previous years the UN-SPIDER Programme is pleased to be able to extend travel support to a selected expert from a Pacific country to enable the expert to attend the conference and deliver a presentation on a specific case-study that should focus on the use of space-based information for disaster risk management.
For further information: **picisoc**. *For information on the travel support please contact Ahmed Osman .*

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 **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.*