



GSDI REGIONAL NEWSLETTER

for the Global Geospatial Community

covering



Sub-Saharan Africa, Asia & the Pacific, Europe, Latin America & the Caribbean, North America, and the Middle East & North Africa

March 2015 – Vol. 2, No. 3

The **GSDI Regional Newsletter** is a free, electronic newsletter for people interested in all aspects of implementing national and regional Spatial Data Infrastructure (SDI) around the globe. The newsletter continues the tradition of the GSDI Association’s former separate regional newsletters that covered Africa, Asia-Pacific and Latin America, from 2002 onwards. The purpose of the newsletter is to raise awareness of SDI issues and provide useful information to strengthen SDI implementation efforts and support synchronization of regional activities. The archive of all past copies of the previous regional newsletters can be accessed from the GSDI website by following the link to Newsletter Archive at gsdi.org.



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Announce your news or information!

Feel free to submit any news related to spatial data infrastructure implementation that you would like to highlight, including new tools, policies, application stories, studies or reports from your area, profession, organization, country or region. Send your contributions to the News Editor, Kate Lance, at newseditor@gsdi.org and we will try to include these in our next newsletter. Share this newsletter with anyone who may find the information useful and suggest they subscribe themselves.

Support and Contributions to this Issue

Thanks to the GSDI Association for supporting the News Editor and GSDI listserv moderator Kate Lance; GSDI Communications & Operations Manager, Roger Longhorn; and Karen Levoleger, (Kadaster, Netherlands) for their contributions in creating, producing and disseminating the GSDI Regional Newsletter.

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Sub-Saharan Africa Region SDI News

Gabon: 1st Geomatics in Gabon Day held



On December 4, 2014, the Gabonese Agency for Space Studies and Observations (AGEOS, <http://www.ageos.ga/>) co-organized with the Graphic and Cartography Lab (LAGRAC) of Omar Bongo University (UOB), and World Resources Institute (WRI), the first Gabon Geomatics Day. This first (2014) edition of the Gabon Geomatics Day aimed at conducting an

inventory of national expertise (skills, tools, resources, etc.) which can and should support users and beneficiaries (public, private, civil society) for making decisions. This Day sought to recognize and appreciate the degree of ownership of an advanced technical field by national actors in Gabon.

The event brought together a diverse audience to present current and future geomatics research in Gabon. Presentations focused on the following themes:

- Theme 1: Potential tools and technologies Spatial Information
- Theme 2: Operational capabilities, tools and technological means
- Theme 3: Forests, plant biomass, hydro and mineral resources, energy
- Theme 4: Biodiversity and Conservation
- Theme 5: Land Management you local authorities
- Topic 6: Coastal and Marine Resources Management
- Theme 7: Risk prevention and disaster management.

The Day created a space for Gabonese experts to build and strengthen relationships with one another in their research and application of geomatics in Gabon’s future.

Source: <http://www.ageos.ga/actualites/-/blogs/journee-de-la-geomatique-au-gabon-edition-2014>

Republic of the Congo: preliminary study on updating the country's existing roadways database

A contract was signed in January 2015 between the Congolese Ministry of Roads and Public Works and IGN France International for a preliminary study on updating the country's existing roadways database. Once this database is fully operational, it will be used as a decision-making tool for the Ministry and various institutions in charge of road network maintenance, as well enabling the management of Congo's road heritage. For the study, IGN France International will define in particular:



- expected functionalities of the future database,
- status of reference data (production, update, integration),
- status of various 'trades' (production, update, integration),
- general organization to be implemented for the effective update of the database,
- equipment required for data acquisition, treatment and conservation (roadways data bank), and
- the knowledge transfer to be provided in order that work can be carried out locally.

Source: <http://www.ignfi.com/en/content/ministry-roads-and-public-works-congo-requests-technical-assistance-ign-update-countrys-road>

Burkina Faso: Four-year project has completed updating of national base map



In 2011, IGN France International was awarded the project funded by the European Union in the context of the 10th European Development Fund, to update the national base map of Burkina Faso. Completed between 2011 and 2015, this project consisted in the creation of 34 topographic maps at a scale of 1.200 000 as well as the updating of the national topographic database. The previous base map had not been updated since the 1950's and did not reflect any longer the changes that have occurred in Burkina in the recent years.

The project was divided in 4 main components:

- The acquisition of satellites images and the technical assistance for the launch of tenders that were meant to permit the acquisition of the equipment necessary for the project.
- A capacity building phase consisting in the implementation of the methodology, the identification of local expertise, the recruitment of local teams and extensive training sessions ;
- A production and technical assistance phase. It is important to note that in this project, like in most of the IGN France International projects, 100% of the production is completed locally by local staff. It is also important to underline that a special care was taken to place names as the proper names including the names of villages has been totally checked, completed and updated.
- And the last phase aims to highlight the work being done and the added value of such a project to future users.

Burkina Faso celebrated the end of the project last February, 19th with the organization of an exhibition presenting its main achievements as well as a final seminar and an official ceremony that took place at the recently rehabilitated National Mapping Institute of Burkina (IGB, <http://www.igb.bf/>).

See also (in French): Clôture du projet de mise a jour de la cartographie a l'echelle 1/200000 du Burkina, <http://www.igb.bf/pagehtm/cloturepc200.html>

Source: <http://www.ignfi.com/en/content/burkina-faso-has-updated-its-national-base-map>

Mauritius: New policy framework to govern fair and transparent allocation of State Land, including State Land Register as a component of country's SDI



The Mauritius Government is coming forward with a Policy framework, which will govern the allocation of State Land to ensure accountability, fairness and transparency. During his statement at the National Assembly on 20 February 2015, Vice-Prime Minister, Ministry of Housing and Lands, Mr Showkutally Soodhun, pointed out that the new system also will provide for the establishment of a State Land Register, which will be a component at the country's National Spatial Data Infrastructure.

According to Mr Soodhun, the State Land Register will enable the identification of each parcel of State Land that can be developed for either commercial or tourist purpose. This information will be posted on the web site of the Ministry for the call for expressions of interest whereby promoters should satisfy a pre-determined set of criteria, among others: financial credentials, proven track records, and proof and justification of amount of Foreign Direct Investment to be injected in the project. A certificate from a recognised banking institution would have mandatorily to be produced.

In his statement at the National Assembly, the Vice-Prime Minister, Minister of Housing and Lands, also talked of the need to come up with a revised National Development Strategy. He recalled that the first national level spatial development plans to guide and control development were prepared in the seventies and that successive governments have since reviewed it from time to time. “The Government of the day considers that now is the time to move on and introduce another dimension to the planning function,” he said.

The new National Development Strategy will assess the implications of the amount of land available for development, identify constraints and make proposals for an integrated public/private transport strategy, smart growth principles and address a range of urban planning and development issues.

Source: <http://www.govmu.org/English/News/Pages/New-Policy-Framework-to-govern-fair-and-transparent-allocation-of-State-Land.aspx>

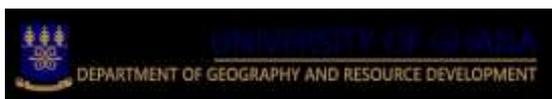
Ghana: new national policy on National Spatial Data Infrastructure (NSDI) developed



A new national policy on National Spatial Data Infrastructure (NSDI) has been developed for Ghana. This was announced by the Minister for Lands and Natural Resources, Hon. Nii Osah Mills, at the opening session of this year’s annual Ghana Geospatial Forum in Accra. Hon. Mills explained that the policy aimed to provide a common platform through a clearing house concept to permit access to geospatial data, improve the quality of data and reduce cost related to the use and generation of geographic information. He stressed the need for a careful consideration of the challenges involved, with a view to ensuring the successful use of geospatial technologies, adding that government recognized the need to provide support, including infrastructure and policy direction to enable Ghana to successfully use geospatial technologies.

Source: <http://allafrica.com/stories/201503041352.html>

Call for abstracts: 2015 Ghana Geographical Association and Ghana Geography Teachers Association Annual Conference 4-8 August 2015, Legon, Ghana



The Ghana Geographical Association (GGA) and the Ghana Geography Teachers Association (GGTA) have been organising conferences every year

on various themes to discuss issues that affects our environment, society and the nation at large. This year the theme is: Geography, Place, and Development. The venue for the Conference is the Department of Geography and Resource Development, University of Ghana, Legon. Submit abstracts (no more than 250 words) to owusuba@yahoo.com, kojokumm@yahoo.com, geowusu@yahoo.com. Deadline for submissions: **May 15, 2015**.



Source: <http://lists.gsd.org/pipermail/sdi-africa/attachments/20150319/44c87c5e/attachment-0001.jpg>

Rwanda: National Land Use Planning Portal launched



Thanks to a new website called the National Land Use Planning Portal (NLUPP, <http://rwandalanduse.rnra.rw>), Rwandans connected

to the Internet now have easy access to land-use plans and other spatial data on the web, decreasing the time it takes to find such maps and documents. Built on Esri's ArcGIS platform by the Rwanda Natural Resources Authority with the support of the United States Agency for International Development (USAID), NLUPP is the first portal of its kind on the continent of Africa.

Over the past several years, Rwanda has embarked on developing land-use plans at the national and district levels as



well as for urban centers. NLUPP now makes this information available and accessible to all Rwandans. The portal is designed to enhance transparency and provide Rwanda's citizens with information on how best to use their land, while also providing professionals with the tools and data they need to plan for sustainable development of the country and conduct land-use analysis.

The portal eases the discovery process even for those without Internet access. Local leaders use the resource to assist residents in obtaining current maps and records, which is still much faster than the previous method of flipping through map books and rummaging through file cabinets for information and then making scans and photocopies.

Source: <http://www.esri.com/esri-news/releases/15-1qtr/rwanda-launches-the-first-ever-landuse-portal-in-africa>

South Africa: Digital Elevation Models and Disaster Applications Workshop



A Digital Elevation Models and Disaster Applications Workshop is being hosted by South African National Space Agency (SANSa) at

SANSa Space Operations at Hartesbeeshoek, Gauteng, South Africa, from March 23 to 27, 2015.

The workshop being co-organized by the Committee on Earth Observation Satellites (CEOS, <http://ceos.org>) Working Group on Capacity Building and Data Democracy (WGCapD, <http://ceos.org/ourwork/workinggroups/wgcapd/>). The primary objective is to take advantage of the 30m SRTM topographic data and develop capacity within SADC to use the elevation model in different applications with a specific emphasis on flood modelling. Course participants will include two course coordinators from the Brazilian Space Agency (INPI) and the University of Colorado in the US, as well as 20 participants from the SADC region.

The CEOS WGCapD was formed at the 25th CEOS Plenary in 2011. The activities of the group are aligned with the four pillars of the Data Democracy Initiative Mission (DDIM) and aims to unify CEOS efforts toward:

- providing wider and easier access to Earth observation data
- increasing the sharing of software tools such as open source software and open systems interface
- increasing data dissemination capabilities and transferring relevant technologies to end users
- providing intensive capacity building, education and training (including awareness and outreach) to end users to gather information and increase their communication of the results.

Draft agenda: http://ceos.org/document_management/Working_Groups/WGCapD/Meetings/WGCAPD_SRTM-Workshop-Africa_Mar2015/WGCapD_SRTM-Workshop-Africa-Agenda-v3_Mar2015.docx

Source: <http://www.sansa.org.za/news/96-newsletter?start=5>

South Africa: User needs survey focuses on NGI export formats



National Geo-Spatial Information (NGI, <http://www.ngi.gov.za/>) clients are requested to participate in a user needs survey for GML and other export formats provided by NGI. The purpose of the survey is to determine the impact of using Geographic Markup Language (GML) as

a primary export format for vector/GIS data for NGI. Currently NGI vector GIS data is disseminated in Esri Shapefile format as a standard product at no cost. Other formats, such as DXF and DWG are charged for at a nominal rate, i.e. DXF and DWG are charged items.

GML is an international approved ISO Standard (ISO/TC211) and vendor independent whereas Shapefile is not, although it has become a de facto standard. The NGI has made a decision to disseminate GIS/vector data in GML and needs to assess the impact and readiness of users for this change.

NGI users are requested to kindly provide feedback by filling in a form provided for the survey on google drive. <http://goo.gl/forms/m7zrZQBDy9>

The feedback will give NGI an indication as to how ready users are for adapting to GML as a primary export format. It will also give an indication as to the suitability of the current dissemination formats provided by the NGI. Users will also have the opportunity to indicate other suitable formats for dissemination. Contact Raoul Duesimi, DRDLR, Tel 021 658-4372, raoul.duesimi@drdlr.gov.za

Zimbabwe: As official data dry up, farmers gauge rainfall themselves

Two months after the first rains fell in Zunzanyika village last autumn, tensions were high. The rains - which mark the start of the planting season - had disappeared as quickly as they had come, and crops planted in October failed to germinate.

But unlike many of the smallholder farmers in his village, Takesure Chikata never panicked. Mr Chikata instead turned to his backyard rain gauge. Once the rain finally returned in mid-December, Mr Chikata knew just when it was the right time to plant his maize crop.

For four years, Mr Chikata and 30 other farmers from Zunzanyika, 170km northeast of the capital, Harare, have compiled detailed records on local rainfall, learning to understand local trends and micro-climates and to cut the risk of crop failure.

The knowledge is helping them to cope not just with drastically changing rainfall patterns, but with severe funding cuts at the government's meteorological department that have left farmers throughout much of the country without reliable local climate and weather data.

Mr Chikata, 38, chairs the Zunzanyika Farmer Field School, a community project that teaches about climate change and conservation agriculture, and which helped local farmers to install and use the rain gauges.

Source: <http://www.trust.org/item/20150311100827-6abji>



Kenya: UON and USAID launch Geographic Information Systems Lab



The College of Agriculture and Veterinary Sciences (CAVS) and with United States Agency International Development (USAID) have launched a Geographic Information (GIS) Lab at the Department of Land Resource Management and Agricultural Technology (LARMAT), University of Nairobi.

USAID Kenya has extended support to the University through UoN-Colorado State University (CSU) partnership amounting to \$656,000 from 2011 to 2014. The support has covered many activities cutting across teaching and training, staff and student exchange, postgraduate and faculty research and community engagement/outreach to dry land communities.

Speaking during the launch, Prof. Mbithi commended the strong partnership between the Universities noting that the establishment of the GIS Lab at the University of Nairobi is a significant step in the use of new technologies to build capacity of students and faculty in addressing emerging issues and challenges facing the Country and Africa as a whole especially in dry lands.

See also: USAID partners with UoN in launching GIS Lab, <http://cavs.uonbi.ac.ke/node/20430>

Source: <http://www.uonbi.ac.ke/node/9009>

LandPKS: a site characterization tool for use by land managers in north-central Kenya and north-eastern Namibia



crisis.

As the threat of food shortages and hunger looms over many families in East Africa and Africa as a whole, there is a need to increase the productivity of agricultural systems to alleviate over-reliance on food aid. According to Byron Okubasu Anangwe, product development officer at the Regional Centre for Mapping of Resources for Development (RCMRD), a new Land Potential Knowledge System (LandPKS, http://www.ars.usda.gov/research/projects/projects.htm?accn_no=425330) hosted under the SERVIR Eastern and Southern Africa project at the Centre could be one solution to this

How does LandPKS help determine land potential? Initial outputs for the pilot version of the LandPKS will provide the user with three data visualizations:

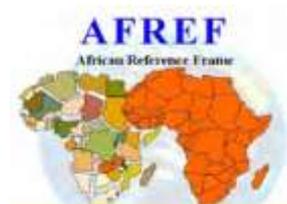
- Map that displays all plot assessments submitted by the user.
- Chart displaying relative production indices based on user and global inputs and analytical modeling.
- Chart displaying relative degradation resistance indices based on user and global inputs and analytical modeling.

Anangwe says that the basic version of the LandPKS was released in February 2015 to serve as a site characterization tool for use by land managers in north-central Kenya and north-eastern Namibia. Design modifications are on-going, and are implemented based on user feedback from field crews.

See also: The global Land-Potential Knowledge System (LandPKS): Supporting evidence-based, site-specific land use and management through cloud computing, mobile applications, and crowdsourcing, at <http://www.jswconline.org/content/68/1/5A.full.pdf>

Source: <http://www.newvision.co.ug/news/665634-new-land-potential-knowledge-system-to-benefit-farmers.html>

Call for participation: AFREF Data Holding and Analysis Centres



The African Geodetic Reference Frame (AFREF) Steering Committee calls for participation to solicit support in the establishment of Data Holding and Data Analysis Centres. AFREF is considered important for the sustainable development of Africa by providing a common reference system for mapping and production of geographic information.

Participation is open to national mapping organizations, government agencies, education and research institutions and other organizations in Africa whose technical resources allow supporting AFREF activities. Participants may take part in one or both areas for which they have the capacity to undertake.

Currently there are about 70 permanent GNSS stations in Africa that submit data on daily basis to the AFREF Operational Data Centre located at the Chief Directorate of National Geospatial Information, Department of Rural Development and Land Reform of the Republic of South Africa. <http://www.afrefdata.org/>

See link for information on the activities, responsibilities and functional areas in which participation is sought in Data holding and Data Analysis Centres: <http://lists.gsdi.org/pipermail/sdi-africa/attachments/20150319/d6ec64e0/attachment-0003.pdf>. Further details of the standards and other protocols to be followed will be communicated to those organizations who respond to this call of participation

Those organizations interested in participating in the above mentioned AFREF activities should submit a letter of intent to Dr. Hussein Farah, farah@rcmrd.org, by **30th June 2015** expressing their interests.

Source: <http://rcmrd.org/?portfolio=call-for-participation-afref>

Asia & the Pacific Region SDI News

Lao PDR: Decree on Surveying, Aerial Photography, and Mapping (No. 330/GOL, September 18, 2014)



The National Geographic Department of Lao PDR (<http://www.ngdlaos.la>), supported by the Strengthening National Geographic Services in Lao PDR (SNGS-EP, <http://www.finnmap.com/2014/continuation-technical-assistance-laos/>), published in

September 2014 a Decree on Surveying, Aerial Photography and Mapping (No. 330/GOL). The Decree determines principles, regulations and measures on operations and management of surveying, aerial photography and mapping for public administration, promotion of implementation and using advanced techniques, science-technology into those mentioned activities for high effectiveness and to be in harmony in the whole country, aiming to serve the socio-economic development, national defence, public security, and preservation of the natural environment.

Note also: High-Level Seminar on Geospatial Data held, <http://www.brudirect.com/0-southeast-asia/southeast-asia-laos/item/17132-high-level-seminar-on-geospatial-data-held>. Ministers and dignitaries convened to discuss the needs, benefits and financing of geospatial data at a seminar held in Vientiane on 16 January 2015. Minister of Home Affairs Mr. Xaisy Santivong opened the seminar by highlighting the importance of accurate and current geospatial data to inform the Lao government's work and support the country's development. The Ministry of Home Affairs governs the work of the National Geographic Department (NGD), which in turn is responsible for the collection of geospatial data and the regulation framework around it.

Download: http://www.ngdlaos.la/wp-content/uploads/2014/12/02-Decree330GOL_English.pdf

Bhutan: JICA to support Project on the Development of National Geospatial Data



The National Land Commission Secretariat (NLCS, <http://www.nlcs.gov.bt/>) made an official request to the Japan International Cooperation Agency (JICA) for technical cooperation for creating 1:25,000 digital topographic maps to support agricultural planning. In addition, NLCS requested

assistance in establishing a national spatial data infrastructure (NSDI) strategy to formulate efficient and administrative geo-information services. The NSDI strategy is viewed as important to prepare geo-information efficiently and to share with ministries and organizations. Various aspects of NSDI development will be explored with 1:25,000 topographic map as a model case. The planned contract period for a project to be funded by JICA is February 2015 to early-2017 late September.

See: Record of discussions on Project on Development of National Geospatial Data in Bhutan agreed upon between Gross National Happiness Commission and Japan International Cooperation Agency (JICA), 10 November 2014.

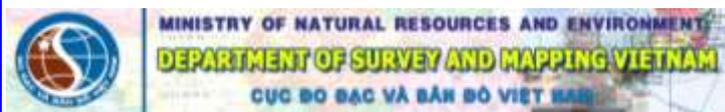
[http://gwweb.jica.go.jp/km/ProjDoc048.nsf/VIEWJCSearchX/2595A5DF2DABF64149257D96001E9365/\\$FILE/%E3%80%90%E7%BD%B2%E5%90%8D%E6%B8%88%E3%80%91RD_%E3%83%96%E3%83%BC%E3%82%BF%E3%83%B3.pdf](http://gwweb.jica.go.jp/km/ProjDoc048.nsf/VIEWJCSearchX/2595A5DF2DABF64149257D96001E9365/$FILE/%E3%80%90%E7%BD%B2%E5%90%8D%E6%B8%88%E3%80%91RD_%E3%83%96%E3%83%BC%E3%82%BF%E3%83%B3.pdf)

See also: Online portal for all geospatial data by 2017, but a data sharing policy will have to be drafted first, <http://www.kuenselonline.com/online-portal-for-all-geospatial-data-by-2017>

[SDI-AsiaPacific] Bhutan: National Committee for GIS Coordination launches geospatial portal (October 14, 2014), <http://lists.gsd.org/pipermail/sdi-asiapacific/2014-October/001181.html>

Source: <https://www.devex.com/projects/tenders/national-geospatial-information-creation-project-in-bhutan/162809>

Vietnam and Japan sign MOU to cooperate on various elements of national spatial data infrastructure



The Vietnam Department of Survey and Mapping (VDSM) and the Geospatial Information Authority of Japan (GSI) exchanged a Memorandum of Understanding (MoU) on March 11, 2015 in

Hanoi to commit to collaborative efforts.

Since 2010, the GSI has been supporting the VDSM in professional training for personnel, enabling Vietnam to take part in the finalisation of Global Map Version 1 and 2 by the United Nations Cartographic Section.

Both sides agreed to focus on establishing a legal framework for cartography and a geospatial database, developing fundamental infrastructures for surveying services and the Global Navigation Satellite System (GNSS), building the National Spatial Data Infrastructure (NSDI) and using geospatial information to reduce the impact of natural disasters.



Source: <http://www.vietnambreakingnews.com/2015/03/vietnam-japan-cooperate-in-cartography/>

Myanmar: National Spatial Data Infrastructure (NSDI) Promotion Seminar held



On February 27, 2015, a National Spatial Data Infrastructure (NSDI) Promotion Seminar was held in Nay Pyi Taw, Myanmar, jointly organized by the Ministry of Science and Technology, and Japan's Ministry of Economy, Trade and Industry. An NSDI Committee will soon be formed in order to oversee the coordination of work by relevant ministries and the drafting of laws, as needed.

A study of geospatial technologies for data exchange, as well as the development of framework data to support interoperability will be pursued to establish the best options for an NSDI system. The system is thought to provide new employment opportunities, support industrial development and urban projects, as well as improve coordination for

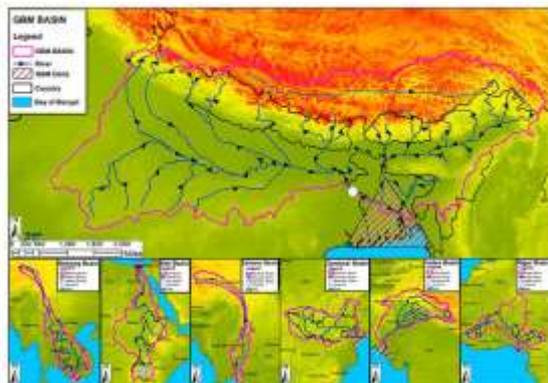
disaster management.

See also: [SDI-AsiaPacific] Myanmar: Spatial Data (GIS) Infrastructure Project Coordinator sought (17 March 2014), <http://lists.gsd.org/pipermail/sdi-asiapacific/2014-March/001119.html> ; Myanmar - Technical Advisory Mission, UN-SPIDER (March 2012), <http://www.un-spider.org/advisory-support/advisory-missions/technical-advisory-missions/myanmar-technical-advisory-mission>

Note also: Software Development Consultant sought, UN-Habitat, Yangon. Deadline: **6 March 2015**. Develop application software to demonstrate improved service delivery, giving confidence to the Settlement and Land Records Department (SLRD) under the Ministry of Agriculture and Irrigation to continue a roll-out of change and new technology throughout the country to strengthen land administration and management in rural and urban project sites. http://themimu.info/sites/themimu.info/files/jobs/UN-Habitat_Software_Development_Consultant_6_Mar_2015.pdf

Source: <http://www.moi.gov.mm/zg/?q=news/27/02/2015/id-4267>

Bangladesh: Nationwide Use of SERVIR Satellite-based Flood Forecasting and Warning System



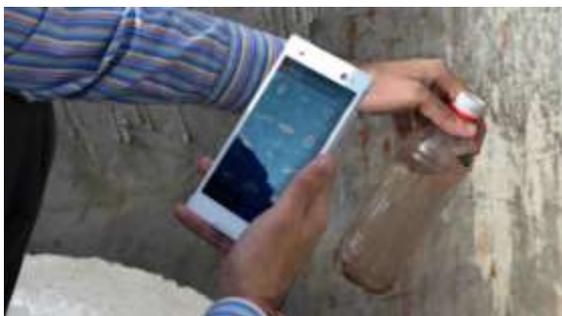
Bangladesh officials have announced plans to expand a Jason-2 satellite-based flood forecasting and warning system nation-wide in Bangladesh for 2015. The system was developed by SERVIR to aid an area where floodwaters inundate from 1/3 to 2/3 of the country annually, killing hundreds of people and affecting millions. The system, which relies on river level data provided by the Jason-2 satellite, last year provided the longest lead time for flood warnings ever produced in Bangladesh.

Jason-2's radar altimeter measures the precise distance between the satellite and the river surface at points where the satellite crosses overhead. The data, available almost immediately, reveals the river's height at the point of crossing, so flood risks

downstream can be assessed.

Source: http://www.nasa.gov/mission_pages/servir/bangladesh-warning-system.html

Pakistan: Defeating dengue the smart way with real-time surveillance / smartphone app



Pakistan's Sindh province is gearing up to launch this month (February) a dengue prediction system based on surveillance data gathered in real time using a smartphone app and fed into a spatial or geographical model.

Currently Karachi, the provincial capital, and other cities in Sindh — a province with a population of 45 million people — depend on blanket fumigation drives and 'fogging' with chemicals to reduce populations of the *Aedes aegypti* mosquito, the primary dengue vector. The dengue surveillance model using spatial technology was designed by the Pakistan Space and

Upper Atmosphere Research Commission (SUPARCO), says Shakil Malik, head of Sindh's dengue control programme.

Malik tells SciDev.Net that spatial mapping using geographical information systems (GIS) helps identify disease hotspots so that possible outbreaks can be pre-empted. "Larvae collected from hotspots can be genotyped to identify virus strains allowing prompt and precise intervention," he says.

Source: <http://www.scidev.net/south-asia/health/news/defeating-dengue-the-smart-way.html>

Sri Lanka: Getting the better of bad weather



New, low-cost and portable weather stations could help countries like Sri Lanka better prepare for floods and landslides. The stations are designed to capture and transmit near real-time data on rainfall, helping raise the alarm when rains reach a certain level of intensity. They are being developed as open-source products, meaning the designs will be freely available online for anyone to use.

Sri Lanka regularly experiences extreme variations in weather – especially rainfall – over short distances. Downpours can be sudden and intense in one

area, while nearby it is bone dry. This makes it very difficult to accurately predict natural hazards like floods and landslides, which cause significant destruction and loss of life in the country each year. Increasing the number of weather stations could help give a clearer idea when and where rainfall is reaching dangerous levels.

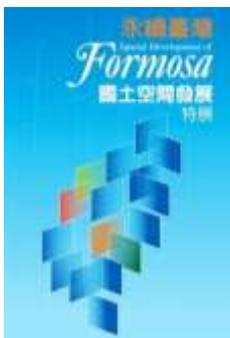


But for this to work effectively, many weather stations are needed. At around USD\$10,000 per station, standard devices certified by the World Meteorological Organization (WMO) can be prohibitively expensive. They also contain precision instruments for measuring additional variables like temperature and solar radiation. These stations can be difficult to maintain, and often have a relatively short lifespan.

The new devices, known simply as Mobile Weather Stations and designed by scientists at the International Water Management Institute (IWMI), are made primarily from locally sourced materials, and cost around USD\$250. While they currently lack the very high level of accuracy required for official WMO certification, they still provide useful information for scientists, farmers and disaster management officials.

Source: <http://www.iwmi.cgiar.org/2015/02/getting-the-better-of-bad-weather/>

Taiwan: National Development Council hosts spatial development exhibition



A National Development Council (NDC)-organized multimedia exhibition highlighting the historical development of Taiwan through land use and spatial planning policymaking was held in Taipei City on February 27, 2015. During the event's opening ceremony, Premier Mao Chi-kuo said sustainable development of land is an underlying precept of organized societies and a foundation for prosperity. "It is important to understand how the government is working to foster economic development and enhance quality of life while preserving the environment."

Echoing Mao's remarks, NDC Minister Duh Tyzz-jiun said land is the lifeblood of economic and social development in Taiwan, and the exhibition will help the public better understand the overarching logic shaping related key measures. Arranged in five themes, the event paid particular attention to efforts promoting homeland conservation and environmental sustainability, as well local government initiatives aimed at spurring regional development.

Source: <http://www.taiwantoday.tw/ct.asp?xitem=227836&CtNode=415>

Korea: Government launches web mapping service targeted towards elders and those with disability



A state-run geography institute launched a web mapping service on March 17th that is particularly targeted towards elders and those with disability who have had trouble reading existing digital maps provided by other IT companies.

The National Geographic Information Institute is operating the mapping service called Baro e-Map (<http://emap.ngii.go.kr>).

What differentiates it from maps by private search engines Google and Naver is that it identifies a wider range of places, including emergency hospitals, shoe repair shops and electric car battery stations.

The map will also pinpoint where wheelchair lifts are installed for the disabled. The service also offers different versions of maps for older people or people unable to see some colors. For the elderly, it will offer maps with double the font size. The ministry said that the map will be updated once a month to reflect changes in property use. It will use information about public and private land from 54 government bodies. The launch of the service is also in line with the government's Government 3.0 initiative, which is aimed at building a large pool of information and data open to the public.

Source: <http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=3002027>

23rd International Conference on Geoinformatics, 19-21 June 2015, Wuhan, China



The 23th International Conference on Geoinformatics (Geoinformatics 2015) will be held on June 19-21, 2015 at the

China University of Geosciences, Wuhan, Hubei (China). The conference is co-organized by International Association

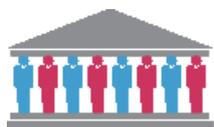
of Chinese Professionals in Geographic Information Sciences (CPGIS <https://cpgis.org/>) and the China University of Geosciences (CUG).

The theme of Geoinformatics 2015 is GIS for Geography, Geosciences, and Environmental Sciences. The conference will provide an excellent opportunity for researchers, professionals and students in Geoinformatics to exchange innovative ideas, demonstrate cutting-edge technologies, and present inspiring applications. The conference program will include plenaries, featured, oral, and poster sessions. Papers are welcomed on all aspects of GIS methodologies, theories and applications in a wide range of fields and research areas, including geosciences, geography, geographical sciences, resource and environmental sciences, public health, urban planning, land use and land cover change, transportation science, demographic studies, regional studies, criminal justice, environmental hazards, and emergency response.

The deadline of abstract/paper submissions been extended to **March 30, 2015**.

Source: <https://cpgis.org/Conferences/ConferenceDefault.aspx?ID=70>

Australia: GovHack 2015, 3-5 July 2015



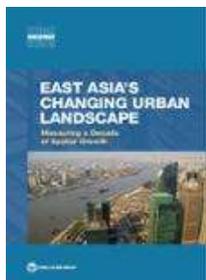
GovHack
empower. enable. connect.

Governments collect and publish enormous amounts of data, but have limited resources to get it into the hands of their citizens in engaging ways. GovHack is an event to draw together people from government, industry, academia and of course, the general public to mashup, reuse, and remix government data. GovHack

is about finding new ways to do great things and encouraging open government and open data. The competition includes both a national and local component. Everyone can compete in the national competition and then each location also has a local competition in which people in that location can compete. To be eligible for prizes, individual entrants must be either an Australian resident or Australian citizen or for team entrants, at least one member of the team must be an Australian resident or Australian citizen. Join the mailing list to get up updates for GovHack 2015 and early registration in May: <http://govhack.us5.list-manage.com/subscribe?u=5d47f285eeb69b1126f0a3c41&id=227cbe7d1c>

Source: <http://www.govhack.org/>

East Asia's Changing Urban Landscape: New report, dataset, and open competition



While there is a growing recognition of the importance of urbanization in East Asia and elsewhere, there is little systematic data on the scale and form of urban expansion. Comparisons between countries are complicated by inconsistent definitions and approaches to measuring urban area and population. National governments and international institutions are trying to form coherent strategies to prepare for urban growth, but they often lack answers to basic questions on the location and rate of urban growth, the impact of population growth on spatial growth, and differences in urbanization trends across countries.

A recent report published in January 2015 by the World Bank 'East Asia's Changing Urban Landscape: Measuring a Decade of Urban Expansion' presents the findings of a study, conducted with support from Australian Aid, which attempts to fill some of these information gaps through empirical observation. The study analyzed the built-up areas throughout the region in 2000 and in 2010 using satellite imagery. The data produced as part of this research allows deeper exploration of issues involving urban expansion, urban population change, and urban density. The dataset, which includes data on all 869 urban areas in the region with populations over 100,000, is a treasure trove of changing patterns of urbanization in recent years. The data also include maps for five cities with more detailed land use classifications, using ~10m resolution satellite imagery. No such dataset existed previously, and it is being provided publicly online so that other institutions and researchers can utilize the data to perform analyses on a range of related subjects.

For more information and to access the data set, go to <http://www.worldbank.org/eap/MeasuringUrbanExpansion>.

To encourage further research on urbanization, the World Bank has announced a two-track competition based on this report. One offers a \$1,500 prize for the best visualization of the data (<http://visualizing.org/contests/visualize-urban-expansion>, Deadline: **March 12, 2015, 11:59 PM ET**), while the other seeks proposals for papers further analyzing the information (<https://consultations.worldbank.org/consultation/urbanization-east-asia-explore-new-data-set>), with winners invited to World Bank headquarters to present their findings.

To access the full report:

http://www.worldbank.org/content/dam/Worldbank/Publications/Urban%20Development/EAP_Urban_Expansion_full_report_web.pdf

Source: <http://www.worldbank.org/en/topic/urbandevelopment/publication/east-asias-changing-urban-landscape-measuring-a-decade-of-spatial-growth>

ESCAP technical paper: Good Practices for Promoting Regional Cooperation in Space Applications for Sustainable Urban Development, Water Resources Management and Transportation Management



This paper, released in December 2014 by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), sets out to show how space technology and geospatial data, combined with non-space derived data such as socio-economic data, can enhance the understanding and observation of global, and how it can play an important role in providing valuable information such as trends and patterns in climate change, patterns of urbanization, mapping of water resources and GPS in trans-boundary regional transportation. This paper will also show that despite the wide range of benefits associated with the use of space applications, many developing countries in the Asia Pacific region do not have sufficient access to this important technology, thus depriving them of innovative space-based solutions to the current and future issues faced. It is here where regional cooperation can play a vital role in facilitating greater accessibility to space technologies and the applications of GIS.

The paper is prepared with the two objectives in mind: (1) to compile and analyze good practices and lessons learnt in space technology and GIS applications in the areas of sustainable urban development, water resource management, transportation management, as well as regional cooperation on space technology applications; and (2) based on the analysis and findings, to provide policy and technical recommendations on how to optimally use space technology and GIS applications for sustainable development.

PDF: http://www.unescap.org/sites/default/files/Good%20Practices%20SUD%20WRM%20TM%20_new.pdf

Source: <http://www.unescap.org/resources/technical-paper-good-practices-promoting-regional-cooperation-space-applications>

Enhanced regional cooperation key to building resilience to floods and landslides



The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) recently released the 'Natural Disasters in Asia and the Pacific: 2014 Year in Review' report which presents a diagnostic analysis of the region's state of resilience and lessons learnt.

The report notes the integral role of regional cooperation for sharing real-time information of storms, floods and other disasters, and helping to forecast hazards and disseminate early warning information across countries. 2014 saw extensive use of innovative technologies - space applications, geo-spatial tools and techniques, navigation and crowdsourcing - for the monitoring and assessment of major disasters.

From their origin across oceans to their landfall, storms were tracked and monitored continuously by a constellation of weather satellites, radars and a range of monitoring networks across the region.

Leaders and decision-makers across Asia and the Pacific are preparing to finalize a new global framework for disaster risk reduction, which will replace the 2005 Hyogo Framework for Action in March 2015 in Sendai, Japan. The lessons from 2014 demonstrate that space applications, geo-spatial tools and techniques, navigation and crowdsourcing are key components to building resilience.

Access the report: <http://www.unescap.org/resources/disasters-asia-and-pacific-2014-year-review-0>

Source: <http://www.unescap.org/news/enhanced-regional-cooperation-key-building-resilience-floods-and-landslides>

Symposium on Application of Geospatial Technology in Urban Disaster Management, 13 March 2015, Sendai, Miyagi, Japan

ISCGM and the Geospatial Information Authority of Japan (GSI) are jointly organizing a Symposium on Application of Geospatial Technology in Urban Disaster Management in



Sendai, Miyagi, Japan, on March 13, 2015 at the margin of the Third World Conference on Disaster Risk Reduction (WCDRR)

As geospatial professionals, we all share an interest in promoting the use of global mapping information. The production of global maps of various themes requires national efforts and cross-national coordination. We hope our discussion will help provide an effective platform for these initiatives.

Source: <http://www.iscgm.org/sympo2015/>

36th Asian Conference on Remote Sensing (ACRS 2015), 19-23 October 2015, Manila, The Philippines



"Sensing for Resilient and Inclusive Growth in One Dynamic Asia"

The 36th Asian Conference on Remote Sensing (ACRS 2015), which will take place on October 19-23, 2015 in Manila, Philippines. ACRS 2015 will represent a major event in the long series of successful ACRS conferences. The theme of the conference is "Sensing for Resilient and Inclusive Growth in One Dynamic Asia".

ACRS 2015 will bring together students, researchers, scientists, policy makers, professionals and practitioners from developed and developing countries from and around Asia to share insights into the challenges and opportunities of Remote Sensing and related geospatial technologies in building resiliency and encouraging inclusive economic growth in one, dynamic Asia. The conference takes place at a significant moment when disasters and climate change continues to negatively impact our people and the community. The conference, therefore, will provide an outstanding opportunity to learn how Remote Sensing will help us build resiliency to these disturbances, and in strengthening our capability to adapt to stress and change. While addressing this issue, ACRS 2015 will also look into finding ways and opportunities for Remote Sensing to encourage inclusive economic growth in Asian countries. It has been widely proven that Remote Sensing can help us map our natural resources. But how do we use Remote Sensing and related technologies to efficiently manage these resources to ensure productive employment as a means of increasing the incomes of poor and excluded groups and raising their standards of living? These important issues and many others will be discussed thoroughly during the plenary and thematic sessions, poster sessions, workshops, and many side events of ACRS 2015.

ACRS 2015 will be held with the theme "Sensing for Resilient and Inclusive Growth in One Dynamic Asia". In relation to the theme, conference will have two special topics emphasizing the use of Remote Sensing and related geospatial technologies in building resiliency and encouraging inclusive economic growth in Asia:

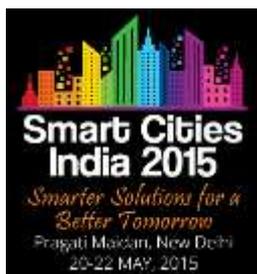
- Building Resiliency with Remote Sensing
- Remote Sensing for Inclusive Economic Growth

Deadline for Abstract Submission: **July 1, 2015.**

Previous ACRS conferences have attracted more than a thousand participants of different disciplines coming from various countries in Asia and the rest of the world. This 2015, the conference is expected to attract a greater number of participants. In the Philippines alone, we anticipate a large number of participants coming from the public and private sectors who can greatly benefit from the use of Remote Sensing and geospatial technologies in their day-to-day operations. They include representatives from key national government agencies, local government units, state colleges and universities, geomatics companies, and the utilities sector (e.g., electricity, gas, water).

Source: <http://www.acrs2015.org/>

Smart Cities India 2015 Conference, 20-22 May 2015, New Delhi, India



The Smart Cities India 2015 conference will provide a common forum to discuss and deliberate some of the most challenging issues, new areas and upcoming technologies with stakeholders who are developing smart cities.

The conference methodology would include plenary sessions, meetings, demos, presentations, projects and solutions. It will also give opportunities for one to one meetings, group discussions and networking.

Source: <http://www.smartcitiesindia.com/>

5th Regional Workshop on Integrated Resource Management in Asian Cities: the Urban Nexus 17-19 June 2015, Chiang Mai, Thailand



The Fifth Regional Workshop will be organized from 17 to 19 June 2015 in Chiang Mai, Thailand in the context of the project “Integrated Resource Management in Asian Cities: the Urban Nexus”, implemented by the German Agency for International Cooperation (GIZ) and ESCAP, and financed by the German Federal Ministry for Economic Cooperation and Development (BMZ). Four Regional Workshops have been organized under the project so far, in June and December 2013 in Bangkok, Thailand; in June 2014 in Da Nang, Viet Nam and in December 2014 in Ulaanbaatar, Mongolia.

Rapidly increasing urban settlements in the developing world are at particular risk due to their high density populations, lack of adequate sewerage systems, high concentration of solid and liquid wastes, lack of building codes and regulations, as disproportionate consumers of regional resources and overall for the continued degradation of ecosystem services through an exploitation model. Increased climate hazards coupled with rapid urbanization are likely to put an additional pressure on the capacity of the local governments. Within this background, the project focuses on the need to enhance the understanding of the region’s key decision-makers on the linkages between integrated resource management and sustainable cities, explore the opportunities and call for actions that should be taken at the city level to close the growing gaps between urban resource use and sustainability, as well as fully utilize the interaction and synergies between critical resources, caused by the region's rapid urban transformation.

Source: <http://www.unescap.org/events/fifth-regional-workshop-integrated-resource-management-asian-cities-urban-nexus>

Europe Region SDI News

Sweden: National Spatial Data Infrastructure

A presentation was given on Sweden’s national SDI initiative (www.geodata.se) by Anders Sandin, Director, Lantmäteriet, the Swedish mapping, cadastral and land registration authority, at the Symposium on Geospatial Technology in Urban Disaster Management, March 13, 2015, Sendai, Japan.



Source: http://www.iscgm.org/sympo2015/panel_anders_sandin.pdf

Germany: Current GDI-DE newsletter available for download

This issue of the GDI-DE newsletter includes:

- Federal, state and local governments started 1 January 2015 public contribution to the National Geographic Information Strategy
- New structures at European and national level to support the implementation of INSPIRE
- Practical use of INSPIRE download services in Rhineland-Palatinate
- Geo license proven in practice
- GeoDialog in Bonn: "Innovations lift together"



PDF:

http://www.geoportal.de/SharedDocs/Newsletter/DE/Newsletter%202015/02_2015_GDI_DE_News.html?nn=9768

Source: <http://www.geoportal.de/DE/GDI-DE/Media-Center/Archiv/Newsletter/newsletter.html?lang=de>

Germany: Public participation in National Geographic Information Strategy



An online participation process for Germany's National Geographic Information Strategy was open from the period of 1 January to 28 February 2015. Specialists from government, business and science, as well as citizens, were invited to get involved in actively preparing the strategy.

The results of the participation process are to be evaluated as they relate to the currently established administrative, economic and scientific spatial data infrastructure (SDI) of Germany, discussed further, and presented as a decision of the Steering Committee GDI-DE of the IT Planning Council [as a professional political body]. The National Geographic Information Strategy then is to be published on the website of the GDI-DE (<http://www.gdi-de.org>).

The current (draft) version 0.6 of the National Geographic Information Strategy can download here (in German)
http://www.geoportal.de/SharedDocs/Downloads/DE/GDI-DE/NGIS_v06.pdf?__blob=publicationFile

Instructions for online participation procedures for the establishment of a National Geographic Information Strategy (NGIS) (in German), at
http://www.geoportal.de/SharedDocs/Downloads/DE/GDI-DE/NGIS_Anleitung_zum_Online_Beteiligungsverfahren.html

Source: http://www.geoportal.de/SharedDocs/Kurzmeldungen/DE/GDI-DE-Aktuelles/2014/NGIS_Online_Umfrage.html

4th International Workshop on Web Mapping, Geoprocessing and Services 1-3 July 2015, University of Cagliari in Sardinia, Italy



This ISPRS WG IV/5 international workshop provides a dedicated scientific forum for researchers, professionals, government decision-makers and students to exchange and discuss current and state-of-the-art advances in web-based mapping, geoprocessing, geospatial information services and applications, particularly in dealing with big geospatial data. The workshop emphasizes a diverse range of topics related to new web-based developments of geospatial theories, technologies and solutions. Researchers will have the opportunity to share knowledge, exchange scientific ideas and results, and develop long term research collaborations.

The theme is focussed on web and cloud based mapping, architectures, services, analytics, ontologies, geovisualisation, collaboration, technologies, semantics and virtual globes, as well as related social and organizational issues. Early registration date: **April 1, 2015.**

Source: <http://convegni.unica.it/webmgs2015/>

Spain: XVI Congress of the Spanish Association of Remote Sensing, 21-23 October 2015, Seville, Spain



From the Laboratory of GIS and Remote Sensing Doñana Biological Station (LAST-EBD), State Agency Council for Scientific Research (CSIC) and on behalf of the Organizing Committee, the XVI Congress of the Spanish Association of Remote

Sensing (AET) will be held in Seville from 21 to 23 October 2015 under the theme: "Remote Sensing. Wetlands and protected areas".

The purpose of this sixteenth edition is to promote the encounter between remote sensing academic and business community and managers of protected areas, with special emphasis on wetlands. We understand that remote sensing is an essential tool to study the spatial and temporal dynamics of natural systems, especially those as dynamic as wetlands, and in the future will become an indispensable ally of management.

Source: <http://congreso2015aet.com/>

The Netherlands: Geoweek 2015, sponsored by Royal Dutch Geographical Society (KNAG), 18-22 May



From 18-22 May 22, 2015, students will get acquainted with the practice of geo in their own environment. Professionals from the soil, water, and geo-information sector organize a company visit, fieldwork, or guest lecture and demonstrate their practice. By self-do 'students discover the fun and technical aspects of the geography course. For students and teachers, this is a unique educational experience in and outside the classroom.

Geoweek is an initiative of the Royal Dutch Geographical Society (KNAG) since 2006. On the last edition (2014), more than 4,000 students participated.

Source: <http://www.geoweek.nl/>

Spain: OGC Iberian and Latin American Forum (ILAF) Interoperability Day, 13 March 2015, Barcelona



The Technical Committee Meeting (TC) of the Open Geospatial Consortium (OGC) is one of the four international, face to-face and annual meetings that stimulate the ongoing work in developing standards. For the next upcoming meeting, the last day (March 13, 2015) is reserved for a "day of interoperability," which means a national or regional event with the aim of encouraging discussion of OGC standards

amongst participants in their own language. In this case, this event is organized by the Forum organized by the OGC Iberian and Latin American Forum (ILAF, http://external.opengeospatial.org/twiki_public/bin/view/ILAFpublic/WebHome) and the Catalan Association of Geospatial Technologies of the Information (ACTIG, <http://www.actig.cat/>) on 13 March 2015 at the Cartographic and Geological Institute of Catalonia in Barcelona.

The ILAF has organized Interoperability Days in the past days, but this time they would like it to be particularly significant, given the coincidence with the TC. Therefore, they have called for proposals for action by a maximum of 20 minutes on the implementation of OGC standards in Catalonia and the rest of the Spanish state.

The language of talks will be in Catalan, Castilian and English (as the speaker) and will take place in the morning. The program for Interoperability Day is available at <http://goo.gl/SJtFRl>. It will highlight:

- The JSON and GeoJSON formats as standard OGC
- Merging tables TJS
- The Geopackage formatting applied to La Rioja
- OGC Standards & Weather

Registration: <http://goo.gl/forms/mcrPtSB7Uo>

Source: http://external.opengeospatial.org/twiki_public/ILAFpublic/DiaInteroperabilidadOGCBarcelona15

Ukraine: Regional workshop on SDI contributing to economic and social development



On 11-12 March 2015, EuroGeographics, together with the Ukrainian National Agency for the registration of land (SALR, <http://land.gov.ua/en/>) organized in Kiev an international workshop entitled; "Spatial Data Infrastructure - contributing to economic and social development and Ukraine." The workshop was attended by 99 participants from 10 countries.

The purpose of the workshop was to inform participants about the activities carried out by EuroGeographics for its members in building spatial information infrastructure in

Europe. At the workshop, topics were presented and discussed relating to the operation of a group of experts under the initiative of the United Nations on global geospatial information management - UNGGIM. In addition, a central theme was the implementation of the INSPIRE Directive and the scope of the European Association of geodetic and cadastral administrations and EuroGeographics implementation of the project on the European Location frame - ELF. Workshop topics also related to data policy and modernization projects in the field of cadastre in the world, trends and visions for the development of the spatial information in the future.

Source: http://www.gu.gov.si/si/medijsko_sredisce/novica/article/4971/5582/88f82cf5e9a472fa64eb9d5fc5819c95/

UK: Earth Observation Applications Conference

23 March 2015, 10:00 to 18:00 (GMT), London, United Kingdom



Defra, together with the NERC National Centre for Earth Observation and the UK Space Agency, invites you to a one day conference on the applications of Earth

Observation technology. The conference - scheduled to be opened by Lord de Mauley TD, Parliamentary Under Secretary of State for Natural Environment and Science - will focus on the EU Copernicus Programme with its strong twin emphases on new environmental information services for the public sector and promoting industrial growth and competitiveness. The conference will also look more widely at the impact of Earth Observation ("EO") in the UK, including a range of national and international initiatives.

The Copernicus programme is one of the EU's space flagship programmes. Over the next 7 years, the EU will invest €3.8Bn in Copernicus, primarily on operational Earth Observation satellites, including €800m on information services targeted at environmental policy makers. On the 3rd April 2014 Copernicus entered its operational phase with the launch of the first satellite called Sentinel -1. Data from Sentinel-1 became publically available in October. Sentinel-2 is due to be launched in May 2015.

The conference on 23rd March 2015 in London brings together the UK public sector, industry including SMEs and academia to network and identify opportunities for EO technology to deliver better environmental policy and to

stimulate the UK EO and other business sectors. The European Commission, European Space Agency and EUMETSAT will articulate their vision for Copernicus, and the Copernicus service providers/operators will show their implementation approaches. The conference will also address related initiatives such as the UK's Space for Smarter Government Programme and international collaborations such as the Group for Earth Observations. A common theme is how best to manage, analyse and interpret large data volumes to get the maximum benefit for the UK across the public, commercial and academic sectors.

For questions about UK Earth Observation Applications Conference, contact Professor John Remedios, on behalf of Defra, NERC NCEO, and UKSA: info@nceo.ac.uk

Source: http://www.nceo.ac.uk/meeting_detail.php?id=38; <http://www.eventbrite.co.uk/e/uk-earth-observation-applications-conference-tickets-15516887428?aff=esli>

EuroGeographics and EuroSDR sign agreement to work together on spatial data research framework



EuroGeographics (<http://www.eurogeographics.org>) and EuroSDR (<http://www.eurosd.net>) signed an agreement on March 6, 2015, to work together to provide a framework for European spatial data research and development.

The cooperation agreement will further the development of the EuroSDR Research Plan and the activities of the EuroGeographics Knowledge Exchange Networks. As a result, members of both not-for-profit organisations will benefit from greater opportunities for professional development. They will also be able to take part in joint projects and hand over tasks more appropriate to the other organisation's expertise.

EuroGeographics and EuroSDR are both committed to supporting wide range of initiatives that will benefit people across Europe. These include the European Spatial Data Infrastructure, Copernicus, Galileo, Horizon2020, European Location Framework and the European Digital Single Market.

Source: <http://www.eurogeographics.org/news/eurogeographics-and-eurosd-announce-closer-working-relationship>

25th EUREF Symposium (EUREF 2015), 3-5 June 2015, Leipzig, Germany



EUREF annual symposia are of the utmost importance for the National Mapping and Cadastre Agencies. On the one hand, they serve as a platform for information about the national reference systems and networks. On the other hand, they are a forum for discussion about common European references systems and their realization. The presentations and results of the EUREF symposia are available on the EUREF web page (<http://www.euref.eu/>) including the presented scientific papers as well as national reports, resolutions and documentation. EUREF symposia have been organized since the first symposium in Florence, Italy in 1990. Last year the symposium in Lithuania has been attended by more than 100 participants coming from member countries all over Europe. Abstract deadline: **May 1, 2015**.

Source: <http://igs.bkg.bund.de/eurefsym2015>

EuroSDR Workshop: NMCAs getting actively involved in linked data, 10 April 2015, Paris, France



Linked Data is a development which seems to connect to the field of interesting of EuroSDR members in two ways:

First, it's another way to address similar issues (distributing and sharing information on the web). It is worthwhile studying if these technologies perform better than the state of the art techniques used by NMA for some issues like multiple representation, schema transformation and cataloguing;

Second, it yields new needs for location framework –different contents from INSPIRE contents- and it is important to have a uniform location framework across INSPIRE and the web of data. In this context, EuroSDR strength relates to: our competence in data integration based on spatial criteria, our competence in heterogeneties encountered while modelling reality Europe-wide.

The objective of the working group is to bring structure in what's happening and what should be happening in Europe concerning this topic for 2015 and 2016. Topics which will be part of this roadmap are:

- a) Scope of Linked data research and experiments;

- b) potentials of Linked data technologies for NMCAs, incl. in terms of new usages for authoritative location framework brought up by these technologies;
- c) ongoing initiatives that operate on the border of geo-ICT and Linked data;

The working group comes together at the 10th of April at IGN France and is organized by EuroSDR. This session contains of active break-out sessions which concern discussions and the sharing of information about Linked Data. The result is the official EuroSDR-roadmap for upcoming linked data research.

Do you want to be part of the EuroSDR-working group and be frontrunner of linked data in Europe? The count of registers is limited to 15, so register soon at <http://www.kadaster.nl/web/formulier/Algemene-formulieren/EuroSDR-application.htm>. For more information please mail martijn.rijdsdijk@kadaster.nl

Source: <http://www.eurosd.net/workshops/workshop-%E2%80%99Cnmcas-getting-actively-involved-linked-data%E2%80%9D-workingsession-ign-paris-april-10th>

Workshop: INSPIRING National Spatial Data Infrastructures Development in Eastern Europe 16-17 April 2015, Chisinau, Moldova



JRC and the Agency for Land Relations and Cadastre of the Republic of Moldova are organizing an Enlargement and Integration workshop on 16 and 17 April 2015 in Chisinau, Moldova. The event is entitled “INSPIRING National Spatial Data Infrastructures Development in Eastern Europe”. It will focus on the topics of how to roll-out successful data infrastructures in Eastern Europe and raise the awareness on legal, technological and organizational aspects, related to the establishment of the pan-European data infrastructure as a result of the implementation of the INSPIRE Directive. It will be combined with a half day training on 17 April on INSPIRE.

Contact: Anatolie Babin, anatolie.babin@ince.md.

Source: <http://www.h2020.md/en/inspiring-national-spatial-data-infrastructures-development-eastern-europe>

Spatineo webinar: Shedding Light on INSPIRE Conformity, 26 March 2015

“INSPIRE compliant” has become a mantra in EU spatial data project plans if you want to get any funding or sales in the public sector. But what does this elusive term really mean for data providers and businesses willing to get the best out of the European Spatial Data Infrastructure now and in the future?

This webinar (at 10:00-11:00AM CET), presented by Mr. Ilkka Rinne, Founder and CTO of Spatineo (<http://www.spatineo.com>), will bring you quickly up-to-date on what is INSPIRE conformity for metadata, services and datasets, and give you practical tips for checking your services for interoperability. Rinne also will brief you on Spatineo’s ongoing work under the INSPIRE Maintenance and Implementation Framework for making the validators yield more coherent results, and on the interesting possibilities Open Source development brings to defining and maintaining INSPIRE conformity tests. Link to the registration: <http://bit.ly/spatineo-mar-15>

Mr. Ilkka Rinne has been involved in OGC Web Services and INSPIRE implementation related projects since 2008, and has been an active member in several INSPIRE expert groups. His most recent work in this field was facilitation of an expert group for harmonizing INSPIRE validation & conformity testing in early 2015.

Call for papers: Open access International Scientific Journal: Micro Macro & Mezzo Geo Information



The deadline for submissions for Journal No. 4 (2015) is **March 15, 2015**. The issue will be published on June 20, 2015. The Journal is published by the South-East European Research Institute on Geo Sciences (Geo-SEE Institute, <http://geo-see.org/>), a nongovernmental, non-political, non-profit, and secular organization, which deals with research, science, education, training and promotion of Geo sciences in the region of South-East Europe (SEE).

Source: <http://mmm-gi.blogspot.com/>

Precision agriculture: the added value of geo-information and LBS 21 April 2015, Vienna, Austria



Information on soil parameters (humidity, fertilizer content, crop maturity or disease) derived from Earth Observation satellites has already been used successfully by farmers to reduce water consumption and fertilizer use, with no reduction in yield.

Furthermore, using satellite navigation systems to guide farming machinery has become almost standard practice in some countries (Denmark, Germany, Netherlands).

However, while the technology has been proved to work, the innovative services related to the technology are currently emerging, and not yet in use on a sufficiently large scale, given their added value. The development of GNSS applications relative to EO applications is often treated separately, even though the technologies have more impact together than separately, when applied to the same problems.

This workshop will make an inventory of the current precision agriculture solutions that have been proven to work, and of the needs and constraints of their users, in order to pave the way for a more extensive use of effective satellite services, whether based on EO or GNSS.

Source: http://www.eurisy.org/event-precision-agriculture-the-added-value-of-geoinformation-and-lbs_32/about

4th International Conference on Agro-Geoinformatics, 20-24 July 2015, Istanbul, Turkey



The Fourth International Conference on Agro-Geoinformatics (Agro-Geoinformatics 2015) will be held in Istanbul, Turkey, on July 20-24, 2015. This conference is organized and hosted by TARBIL Agro-informatics Research and Application Center

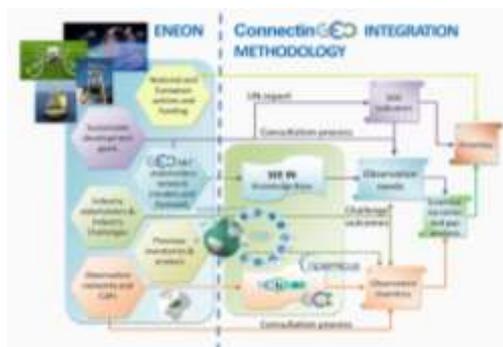
of Turkey and Istanbul Technical University (ITU), with technical and financial sponsorships from Republic of Turkey Ministry of Food, Agriculture and Live stock, Institute of Agricultural Resources and Regional Planning of CAAS, USDS NASS, OGC and many other organizations. The Center for Spatial Information Science and Systems (CSISS) of George Mason University is the co-organizer.

Agro-geoinformation is critical for the agricultural sustainability, food security, environmental research, bioenergy, natural resource conservation, land use management, carbon accounting, global climate change, health research, agricultural industry, commodity trading, economy research, education, agricultural decision making and policy formulation, etc. The Agro-Geoinformatics 2015 conference will cover recent advances in the life cycle of Agro-geoinformatics, from data collection (including field surveys and remote sensing), processing, storing, archiving, preservation, retrieving, transmitting, accessing, visualization, analyzing, synthesizing, presenting, disseminating to decision making. For further information regarding Agro-Geoinformatics 2015, please contact: info@agro-geoinformatics.org. Deadline for abstracts: **April 1, 2015**.

Source: <http://agro-geoinformatics.org/index.html>

Europe: ConnectinGEO, new Earth Observation data project, launched in Barcelona

The kickoff meeting of a new European Horizon2020 project, ConnectinGEO (<http://www.connectingeo.net/>), was held in Barcelona February 18-19, 2015. Funded by the European Union and coordinated by Center for Ecological Research and Forestry Applications (CREAF) (Spain), ConnectinGEO aims to help develop a European Network of Earth Observation Networks (ENEON) and to fill in key data gaps within the overall framework of the Global Earth Observing System of Systems (GEOSS, <http://www.earthobservations.org/geoss.php>).



The goal is to facilitate a broader and more accessible knowledge base to support the needs of the GEO Societal Benefit Areas (SBAs) and their users. A broad range of subjects from climate, natural resources and raw materials, to the emerging UN Sustainable Development Goals (SDGs) will be addressed.

A tangible outcome of the project is a prioritized list of critical gaps within the European Union in observations and the models that translate observations into practice relevant knowledge. The prioritized list also includes the research activities required to address these gaps. All this has to increase coherency in European observation networks, increase the use of Earth observations for assessments and

forecasts and inform the planning for future observation systems.

See Press Release: <http://www.connectingeo.net/Docs/ConnectinGEOPressRelease.pdf>

Note also: EU survey on Earth observation in a global context, <https://ec.europa.eu/eusurvey/runner/ConsultGEO>. A public consultation on possible EU actions in relation to global coordination of Earth observations via the Group on

Earth Observations (GEO). Contributions are expected until **April 20, 2015**.

INSPIRE Empowers Re-Use of Public Sector Information

Figure 2: Position of the PSI and INSPIRE Directive in the Re-Use Requirements Model



Author(s): Bastiaan van Loenen, Michel Grothe
International Journal of Spatial Data Infrastructures Research (IJSDIR), Vol 9 (2014), 86-106.

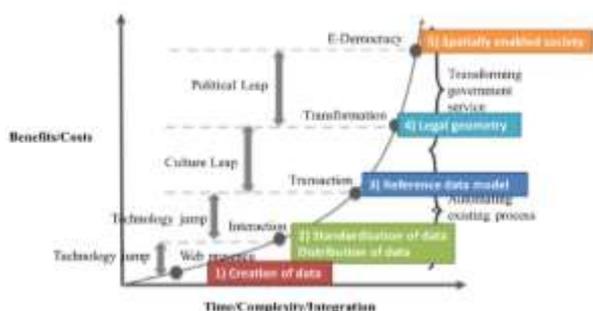
Abstract: Ready access to public sector information offers unprecedented opportunities for the development of new products and applications and to make existing processes more efficient and effective. These developments have perhaps the greatest opportunities in the field of geographic information. Although the

Directive on the re-use of public sector information (PSI Directive) was specifically drafted to address the needs of re-users, the Directive establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) is equally important for re-use of public sector information regarding the physical environment. INSPIRE requirements promote that geographic information, concerning 34 spatial reference and various environmental themes, can be found and is physically attainable on the Internet. With the requirement to provide datasets and service metadata, the obligation to conform to INSPIRE data specifications, and the requirement to do this through discovery, view, and download services, INSPIRE makes a significant contribution to the re-usability of public sector information.

Keywords: Public sector information (PSI), re-use, INSPIRE
 Source: <http://ijmdir.jrc.ec.europa.eu/index.php/ijmdir/article/view/353>

Mature e-Government based on spatial data - legal implications

Figure 2: The Maturity Stages of Spatial Data, Compared to the Maturity of e-Government



Author(s): Line Hvingel, Lasse Baaner, Lise Schrøder
International Journal of Spatial Data Infrastructures Research (IJSDIR), Vol 9 (2014), 131-149.

Abstract: The relation of spatial data and e-Government is important, but not always acknowledged in the development and implementation of e-Government. The implementation of the INSPIRE directive pushed this agenda towards a growing awareness of the role of spatial data and the need for a spatial data infrastructure to support e-Government. With technology, policies, data and infrastructure in place, new iterations of this relationship are needed, in order to reach a

higher level of maturity. This paper analyses and discusses the need for the differentiated roles of spatial data as an important step towards more mature e-Government. As part of this understanding, the paper focuses on a subset of data, so-called 'spatio-legal data'. Spatio-legal data are created within the regulated legal environment of public administration, and used for rulings within a given legal area. Sometimes, the legal status of these data is the wording of the law and the spatial data are just visualisation thereof. Under other circumstances, the spatial data themselves represent the legal status. Compliance between spatial data and the legal administrative framework is necessary, to obtain a mature e-Government. A preliminary test of the hypothesis on a small scale, using Denmark as a case study, supports the need for discussion and awareness of the role of spatial data in e-Government with emphasis on the use of spatio-legal data.

Keywords: Legislation, e-Government, public administration, spatial information, Spatial Data Infrastructure
 Source: http://curis.ku.dk/ws/files/13169772/361_1828_2_PB.pdf;
<http://ijmdir.jrc.ec.europa.eu/index.php/ijmdir/article/view/361/367>

Latin America & the Caribbean Region SDI News

Brazil: 25 February 2015 marked the end of the transition period for SIRGAS2000



On February 25, 2015, the 10-year transition period ended for the adoption of the new geodetic reference system SIRGAS2000 in its realization 2000.4, the Brazilian Geodetic System (SGB) and the National Cartographic System (SCN). The formalization of this change is through the IBGE President of Resolution No. 1/2015, which sets the end date of the transitional period defined in RPR 01/2005 and other measures on the transformation between geodetic benchmarks adopted in Brazil. Thus, from this date forward, all users in Brazil should adopt exclusively SIRGAS2000 in production activities and / or

manipulation of geospatial information.

More information about these changes, including procedures for migration of geodetic coordinates and map products referenced to systems Alegre Stream, SAD 69, WGS 84 to SIRGAS2000, can be obtained through the Technical Note "End of Transition Period for the adoption in Brazil Geocentric Reference System for the Americas (SIRGAS), in its realization 2000.4 (SIRGAS2000)": available in:

ftp://geoftp.ibge.gov.br/documentos/geodesia/pdf/rpr_01_2015_sirgas2000.pdf. There is also a page with answers to frequently asked questions (FAQ): <http://www.ibge.gov.br/home/geociencias/geodesia/pmrg/faq.shtm>.

Source: <http://www.inde.gov.br/noticias-inde/8276-estabelecido-em-25-de-fevereiro-de-2015-o-termino-do-periodo-de-transicao-para-o-sirgas2000>

Argentina: El Boletín Nro 17 y 16 de IDERA están disponible



Está disponible el Boletín Nro 17 de IDERA correspondiente al mes de Febrero de 2015

(http://www.idera.gob.ar/images/stories/downloads/boletines/Boletin_IDERA_017.pdf).

En este boletín se destaca el nuevo diseño del sitio oficial de IDERA con muchas mejoras. También contiene información sobre las Jornadas de capacitación en SIG e IDE a realizarse en Santa Fe los días 12 y 13 de marzo, y en Mendoza los días 9 y 10 de abril próximos. Estas jornadas de capacitación son gratuitas y están destinadas a organismos gubernamentales, instituciones, universidades, sector privado y público interesado en la implementación de SIG e IDE.

También está disponible online el Boletín Nro 16 correspondiente al mes de diciembre de 2014 (http://www.idera.gob.ar/index.php?option=com_content&view=article&id=262:jornadas-ix-idera-y-asamblea&catid=127&Itemid=342). En este boletín aparecen artículos relacionados a visores de mapas de diferentes provincias y nacionales; IDERA móvil, aplicación web que permite visualizar capas base de IDERA; capacitaciones brindadas durante el año 2014; proyectos de ámbito local; y muchas otras novedades de gran interés.

La Infraestructura de Datos Espaciales de la República Argentina (IDERA, <http://www.idera.gob.ar>) es una comunidad de información geoespacial que tiene como objetivo propiciar la publicación de datos, productos y servicios, de manera eficiente y oportuna como un aporte fundamental a la democratización del acceso de la información producida por el Estado y diversos actores, y al apoyo en la toma de decisiones en las diferentes actividades de los ámbitos público, privado, académico, no gubernamental y sociedad civil. A través de su representación, IDERA busca mantener un carácter nacional y federal.

English summary: Spatial Data Infrastructure of the Republic of Argentina (IDERA) Bulletin No. 17 (February 2015) and No. 16 (December 2014) are available (in Spanish). IDERA is a geospatial information community that aims to encourage the publication of data, products and services in an efficient and timely manner as a fundamental contribution to the democratization of access to information produced by the State and various actors, and support in the decision-making in the different activities of the public areas, private, academic, non-governmental and civil society. Bulletin No. 17 highlights the new design of IDERA's official site, with many improvements. The bulletin also contains information about GIS and SDI training workshops in Santa Fe (12-13 March 13) and Mendoza (9-10 April). Bulletin No. 16 has articles related to different national and provincial map viewers; IDERA mobile, a web application that allows you to view database layers; IDERA training offered in 2014; projects at the local level; and many other developments of interest.

Mexico: XXI Reunión Nacional del Capítulo SELPER-México-UACJ 2015



La Sociedad Latinoamericana de Percepción Remota y Sistemas de Información Espacial (SELPER), es una sociedad internacional conformada por capítulos nacionales pertenecientes a distintos países de América

Latina y capítulos especiales conformados por países de alto desarrollo tecnológico. En el presente año, se llevará a cabo la XXI Reunión Nacional del capítulo SELPER-México (<http://www.selper.org.mx/>), del 12 al 16 de Octubre de 2015. Fecha límite: **1 de Agosto de 2015**.

English summary: **XXI National Meeting of SELPER-Mexico Chapter.** The Latin American Society of Remote Sensing and Spatial Information Systems (SELPER) is an international organization formed by national chapters from different countries of Latin America and special chapters made up of countries with high technological development. This year, the XXI National Meeting of SELPER-Mexico Chapter will be held from 12 to 16 October 2015.



Fuente: <http://www.uacj.mx/SC/Paginas/SELPER-Mexico-UACJ-2015.aspx>

1st IEEE International Smart Cities Conference (ISC2-2015), 25-28 October 2015, Guadalajara, Mexico

Smart Cities are innovative, conceptual, and city-wide technology-human-infrastructure integration platforms. Attend ISC2 and learn more about the cities that promote and prioritize the use of information and sensing technology, citizen engagement, quality of life, manufacturing efficiency, economic development, and environmental sustainability.

Special Session proposal submission deadline: **March 31, 2015**

Full-paper submission deadline: **May 11, 2015**

Workshop/Tutorial proposal submission deadline: **June 1, 2015**



Source: <http://sites.ieee.org/isc2/>

Caribbean soil fertility mapping project begins

On February 9, 2015, Dominica, Antigua and Barbuda, St. Lucia, Grenada, St. Vincent & The Grenadines and St. Kitts & Nevis began the process of conducting a Soil Fertility Mapping Project for the region. This project will be carried out with the expertise of the Moroccan Agency for International Cooperation (AMCI).

Since 2012, the Kingdom of Morocco and the Ministry of Agriculture signed a scientific and technical cooperation agreement that gives 240,000 tonnes of fertilizer to farmers to improve productivity and build capacity in the agriculture sector. The composition of the soil in Dominica and other countries represented have not yet been analysed to determine what nutrients are needed. The main purpose of the Caribbean Soil Fertility Mapping Project, therefore, is to establish a database with updated information regarding the availability of fertile soil on the islands.

See also: Agreement signed for soil mapping project, <http://www.caribbeannewsnow.com/topstory-Agreement-signed-for-soil-mapping-project-for-Dominica-and-the-OECS--24827.html> ; Soil fertility mapping project gets 'on' the ground, <http://dominicanewsonline.com/news/homepage/news/agriculture/soil-fertility-mapping-project-gets-on-the-ground/> <http://www.dominicavibes.dm/news-160282/>

Source: <http://news.gov.dm/index.php/news/2212-caribbean-soil-fertility-mapping-project-begins>

Call for Expressions of Interest to receive assistance with Caribbean Data Mgt Workshops/Trainings

Deadline: **10 April 2015**

The Biodiversity and Protected Areas Management (BIOPAMA) Programme is offering funding opportunities to organisations actively involved in managing protected areas at the national level seeking to conduct data management workshops/trainings. Eligible organisations should be from one of the 15 Caribbean member nations of the Africa, Caribbean, and Pacific Group (ACP) that are involved in the BIOPAMA programme: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St Kitts and Nevis, St Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

BIOPAMA is a collaborative program that aims to improve the long-term conservation of biodiversity in the Caribbean by promoting the use of the best available science and knowledge and building capacity to strengthen policy and decision-making on biodiversity conservation and protected areas management (terrestrial and marine). Towards this aim, the BIOPAMA programme proposes to establish in each ACP region, a series of interlinked, but regionally centred, Observatories for Biodiversity and Protected Areas Management. Each Observatory hosts a node for a Regional Reference Information System (RRIS), which works as a platform to facilitate exchange of data/information and implement relevant capacity building initiatives for the region among decision makers and managers of protected areas.

The data and information platform (RRIS) is seen as the link to integrate a diverse range of relevant protected area and biodiversity data and information across the region. The data and the tools to be developed span several themes, including marine and terrestrial ecosystems, species and habitats, ecosystem services, pressures and threats, sustainable livelihoods and management and governance, as well as providing information on training opportunities, and a forum for discussions. The biodiversity and conservation communities will be encouraged to use and be part of the further development of these tools.

The objective of this call for Expressions of Interest (EoI) is to assist organisations in the region that have an interest in conducting data management workshops/training. It is the intention that the workshops/trainings to be funded will generate data and/or information that can feed into the RRIS to be shared with relevant authorities across the region.

The Caribbean Observatory team, in collaboration with IUCN, will assess all compliant applications against selection criteria. Information and guidelines on responding to the call for EoIs are attached and can be found on the BIOPAMA website: http://www.biopama.org/learn_more/?19033/Cal-for-Expressions-of-Interest--Data-Management-Training
PDF: http://cmsdata.iucn.org/downloads/eoi_for_data_management_trainings_biopama_tco.pdf

Expressions of Interest should be submitted no later than **Friday, 10th April 2015**. If you have any questions, please contact Jason Williams (jason.williams@iucn.org) and Hyacinth Armstrong-Vaughn (hyacinth.armstrongvaughn@iucn.org).

Inter-American Development Bank (IDB) Regional Collective Action in Latin America and the Caribbean Deadline: **9 April 2015**



The Inter-American Development Bank calls for innovations in South-South cooperation to address important regional public goods. The program promotes regional public goods in any area in which the Bank is active, including the priority area of climate change and renewable energy. Proposals are accepted from public institutions, private nonprofit entities, and regional and sub-regional institutions with legal capacity

to enter into agreements with the IDB. Each proposal should include participation from three or more countries (exceptionally two). Most grants will range from US\$0.6 million to US\$ 1.2 million for projects of two to three years.

Source: <http://www.iadb.org/en/topics/regional-integration/call-for-proposals-from-regional-public-goods/south-south-cooperation-rpg-initiative.5845.html>

PAIGH Cartography Commission Prize for Outstanding Master's Thesis



The Pan-American Institute of Geography and History (PAIGH) has announced the Call for Applications to the first edition of the "Prize for the Outstanding Master's thesis in Cartography, Geodesy and/or Geographic Information". The call will open 1st May and will close **29th May 2015**.

Master's level students graduated after 1st-January 2010 can apply. In addition, they should satisfy one of two conditions: a) be a citizen of any PAIGH member state, irrespective of the granting university or b) have a degree granted by an accredited university in any PAIGH member state, irrespective of the student's citizenship.

The candidates must write a scientific paper summarizing their work, which is why the Call for Applications is being announced early, well before May.

Call for applications (Spanish):

http://comisiones.ipgh.org/CARTOGRAFIA/Premio/Convocatoria_Premio_Tesis_Cartografia.pdf

Call for applications (English):

http://comisiones.ipgh.org/CARTOGRAFIA/Premio/Convocatoria_Premio_Tesis_Cartografia_EN.pdf

Source: <http://comisiones.ipgh.org/CARTOGRAFIA/Premio.html>

XV Convención Internacional de Ordenamiento Territorial y Urbanismo: Asentamientos humanos, un desafío para el Siglo XXI, 9-13 November 2015, La Habana, Cuba



El Instituto de Planificación Física le convoca a participar en la XV Convención de Ordenamiento Territorial y Urbanismo, que se celebrará del 9 al 13 de noviembre de 2015 en el Palacio de Convenciones de La Habana.

La Convención estará dirigida a urbanistas, planificadores regionales, diseñadores, ambientalistas y paisajistas, académicos e investigadores, así como a especialistas en patrimonio construido y natural, sistemas de información geográfica, legislación urbana y territorial, economía, cartografía, catastro e información, sociología y otras actividades afines. Se convoca también a autoridades de diversos niveles, líderes formales e informales, y a aquellos que compartan inquietudes sobre asentamientos humanos y territorios.

English summary: XV Convention Regional Planning and Urban Development: Human Settlements, a

challenge for the XXI Century. The Convention is aimed at developers, planners regional, designers, environmentalists and landscapers, academics and researchers and specialists in built and natural heritage, GIS, urban and territorial legislation, economics, mapping, surveying and information, sociology and other related activities. It also calls authorities from various levels, formal and informal leaders, and those who share concerns about human settlements and territories.

Fuente: www.convencion-otu-cuba.com

La Convención Agrimensura 2015, 23 al 26 de septiembre, Havana, Cuba



La Unión Nacional de Arquitectos e Ingenieros de la Construcción de Cuba (UNAICC), la Sociedad Latinoamericana de Especialistas en Percepción Remota y Sistemas de Información Espacial (SELPER), la Sociedad de Geociencias y la

Química, la Comisión de Hidrografía, Geodesia y Teledetección y la Comisión Nacional de Topografía del frente de Proyectos, organizan la Convención Agrimensura 2015, del 23 al 26 de septiembre en el Hotel TRYP Habana Libre. Fecha de limite - Entrega de los resúmenes: 20 de abril de 2015

En el marco de la convención se desarrollarán varios congresos, reuniones y la sesión conmemorativa por el 35 aniversario del vuelo espacial conjunto Cuba-URSS.

- VII Congreso Agrimensura
- VII Congreso de Cartografía e Infraestructura de Datos Espaciales
- VII Jornada de Educación para Centroamérica y el Caribe
- III Congreso de Percepción Remota y Sistemas de Información Espacial
- II Congreso Internacional de Avalúos y Catastro
- II Encuentro Iberoamericano de Topógrafos y Agrimensores

English summary: Surveying Convention 2015. The National Union of Architects and Construction Engineers of Cuba (UNAICC), the Latin American Society of Specialists in Remote Sensing and Spatial Information Systems (SELPER), the Society for Geosciences and Chemistry, Hydrographic Commission, Geodesy and Remote Sensing and the National Commission of Surveying Front Project, organized Surveying Convention 2015, from 23 to 26 September at the Tryp Habana Libre Hotel.

Under the convention, several conferences, meetings and a commemorative session for the 35th anniversary of joint Cuba-USSR spaceflight, have been organized.

- VII Congress Surveying
- VII Congress of Cartography and Spatial Data Infrastructure
- VII Workshop on Education for Central America and the Caribbean
- III Congress of Remote Sensing and Spatial Information Systems
- II International Congress of Appraisers and Cadastre
- II Iberoamerican Meeting of Surveyors and Land Surveyors

Fuente: <http://www.agrimensuracuba.com/>

Publication of January/February 2015 edition of the GeoSUR newsletter



The GeoSUR Newsletter is a digital publication on geospatial topics of interest to the Latin American community; it is

published in 3 languages: Spanish, English and Portuguese. Inside this issue:

- The interview of this month is with leaders and technical assistants to the first workshop of the MIAN project (Integrated North Andean Map).
- Santiago Borrero, from the coordination of GeoSUR Program (<http://www.geosur.info/>), comments on spatial databases in The Cloud and the GeoSUR Program.
- The General Secretariat of PAIGH grants a GeoSUR Award 2014-Honorable Mention to National Renewable Energy Inventory of Mexico (INERE), and announces the Third Joint Technical Meeting of the Commissions of the Institute.

Spanish: http://www.ipgh.org/GeoSUR/boletin/GeoSURv2n1_esp.pdf

English: http://www.ipgh.org/GeoSUR/newsletter/GeoSURv2n1_eng.pdf

Portuguese: http://www.ipgh.org/GeoSUR/boletim/GeoSURv2n1_por.pdf

Un libro digital gratuito: Introducción a las Infraestructuras de Datos Espaciales



English summary: Spain's National Center for Geographic Information published in December 2014 a free digital book (in Spanish) titled "Introduction to Spatial Data Infrastructures", licensed under CC-BY 4.0. The authors participated as members of the Forum on Geomatics and Surveying Engineering of the Working Group of the Spanish SDI. The aim of this work is to serve as a college textbook for a first course of introduction to SDI.

En diciembre 2014, el Instituto Geográfico Nacional de España (CNIG) ha publicado el libro titulado "Introducción a las Infraestructuras de Datos Espaciales." Se trata de un libro digital gratuito (publicado bajo una licencia CC-BY 4.0.) que ha sido elaborado por el Foro en Geodesia y Cartografía del Grupo de Trabajo de la Infraestructura de Datos Espaciales de España (IDEE, <http://www.idee.es/>).

El Foro de Ingeniería en Geomática y Topografía del Grupo de Trabajo de la IDEE, que agrupa a los Centros Universitarios españoles en los que se imparte esa titulación, ha elaborado este texto con la intención de que se sirva de ayuda y apoyo a la docencia a nivel universitario de una asignatura de introducción a las principales tecnologías y estándares relacionados con las Infraestructuras de Datos Espaciales.

En la publicación se incluyen ejercicios prácticos y está prevista publicar una edición actualizada cada año, dado el vertiginoso ritmo de novedades y nuevas versiones que se producen en este campo. El resultado es un tratado introductorio que creemos puede servir para cualquiera interesado en internarse en el mundo de las IDE desde un punto de vista técnico y práctico.

Descargar: <http://www.ign.es/ign/layoutIn/libDigitalesPublicaciones.do>;
http://www.ign.es/ign/resources/acercaDe/libDigPub/Libro_IntroduccionIDE.zip (zip);
<http://www.snep.gob.pe/pdf/LibroIntroducci%C3%B3nalasIDE%202015.pdf> (PDF)

El índice del libro es el siguiente:

Prólogo

Capítulo 1. El nuevo paradigma IDE. Concepto, componentes, actores y razón de ser de una IDE

Capítulo 2. Plataformas tecnológicas

Capítulo 3. El marco ISO 19100

Capítulo 4. El marco de referencia del OGC

Capítulo 5. Especificaciones de datos

Capítulo 6. Calidad de servicio

Capítulo 7. Servicio de Mapas en Web (WMS)

Capítulo 8. Web Feature Service (WFS)

Capítulo 9. Servicio Web de Coberturas (WCS)

Capítulo 10. Catalogue Service for the Web (CSW)

Capítulo 11. Clientes de catálogo

Capítulo 12. Servicio de Procesamiento en la Web (Web Processing Service, WPS)

Capítulo 13. Metadatos

Capítulo 14. Visualizadores para IDE

Capítulo 15. Aspectos legales

Glosario

Bibliografía

Para el desarrollo de los ejercicios prácticos se incluye el uso de herramientas como gvSIG, OpenLayers 2 o Google Earth. Los clientes de catálogo ArcGIS Viewer for Flex, GeoNetwork, eXcat, Degree, MDweb o Plan4all.

Además se practica con los servicios disponibles en el Directorio de la IDEE, el IGN, Cartociudad, la Infraestructura de Datos Espaciales de Cataluña (IDEC), y un largo etcétera.

El libro complementa a otros publicados en español como:

Pasado, presente y futuro de las Infraestructuras de Datos Espaciales (2008) de Javier Valencia Mtz. de Antoñana,

<http://ww2.pcypositna.navarra.es/Aprende/Documents/PASADO-PRESENTE-Y-FUTURO-DE-LAS-INFRAESTRUCTURAS-DE-DATOS-ESPACIALES.pdf.pdf>

<http://www.bubok.es/libros/210512/PASADO-PRESENTE-Y-FUTURO-DE-LAS-INFRAESTRUCTURAS-DE-DATOS-ESPACIALES>)

Fundamentos de las Infraestructuras de Datos Espaciales (2012)” de Miguel Ángel Bernabé
http://redgeomatica.rediris.es/Libro_Fundamento_IDE_con_pastas.pdf

Fuente: <http://www.blog-idee.blogspot.com.es/2015/01/introduccion-las-ide.html>

Thesis: Diseño metodológico para crear IDE a escala Ciudad-Región en Colombia



Auturo(s): Rojas Guerrero, Martha Nubia
Maestría thesis, Universidad Nacional de Colombia, Facultad de Ciencias Agrarias,
Bogotá (2014)

Resumen: Este trabajo de investigación presenta los principales lineamientos que se deben tener en cuenta para poder construir Infraestructuras de Datos Espaciales (IDE) a escala ciudadregión en Colombia, teniendo en cuenta los conceptos de ciudad y de región que se aplican para nuestro país, con base en la información geográfica producida y en los estándares geoespaciales necesarios para la construcción de iniciativas IDE.

La metodología de investigación empleada se desarrolló a partir de una serie de etapas que se describen a continuación:

- Etapa 1 “Revisión Documental”: en la cual se consideraron los principales conceptos de Infraestructuras de Datos Espaciales y su jerarquía, se exploró a cerca de las iniciativas IDE a nivel mundial, se establecen las diferencias con un Sistema de Información Geográfica (SIG) y se profundiza en la definición de Ciudad-Región.
- Etapa 2 “Elaboración de Encuestas”: se diseña un instrumento que permite diagnosticar la situación de la información geográfica en cuanto a datos geográficos producidos por entidades distritales y nacionales, productoras de información geográfica, implementación de estándares geoespaciales, disposición y acceso de la información espacial; posteriormente, se tabularon y analizaron los resultados obtenidos.
- Etapa 3 “Importancia de los Estándares Geoespaciales”: con el fin de garantizar la interoperabilidad de los datos, se proponen los estándares geográficos que debe tener una IDE Ciudad-Región.
- Etapa 4 “Diseño Metodológico”: Se definen los componentes que debe tener la IDE Ciudad-Región, estableciendo cómo consolidar cada uno de ellos y es en esta etapa donde se propone un nuevo componente de los datos fundamentales para la IDE Ciudad-Región.

La investigación permitió tener un diagnóstico de la situación actual en cuanto a la producción de datos geográficos, implementación de estándares geoespaciales, disponibilidad, acceso y uso de la información, aplicación de tecnología relacionada con los servicios web geográficos, y así tener una evidencia muy real de la problemática existente en cuanto a Gestión de la Información Geográfica, que llevaría al diseño de la presente metodología con el fin de crear e implementar Infraestructuras de Datos Espaciales a escala Ciudad-Región en Colombia, siendo una de las primeras iniciativas que integre la información geoespacial de la Ciudad con la Región.

Palabras clave: IDE, Información, Estándares Geográficos, Metadatos, Políticas, Datos fundamentales, SDI, Information, Geographic Standards, Metadata, Policy, Fundamental Data

English abstract. This research project presents guidelines that should be taken into account to build city-region scale SDI in Colombia, based on the concepts of city and region applying in our country, framed on the produced spatial data and geospatial standards required for the construction of SDI initiatives.

The research used methodology was developed from a series of steps described below:

- Stage 1 "Documentation Review" investigation about the main concepts of spatial data infrastructures and their hierarchy also were considered. Exploration about the worldwide IDE initiatives, differences with Geographic Information System (GIS) and revision in the definition and full of meaning of City-Region concept.
- Stage 2 "Development Survey": a tool to identify the situation of geographic information about geographic data produced by The District of Bogotá and national institutions, spatial data producers, geospatial standards implementation, and access and sharing of spatial information; subsequently, the resulting data were tabulated and analyzed.
- Stage 3 "Geospatial Standards": In order to guarantee the interoperability of data, geographic standards should be implemented at the proposed City-Region SDI.
- Stage 4 "Proposed Methodology" relates to the definition of the main components of a CityRegion SDI, establishing how to consolidate each component, and it is in this stage where a new component is proposed for the City-Region SDI.

The research provides a state of the current situation regarding the production of geographic data, geospatial standards implementation, accessibility and use of information technology application related to the geo web services, and thus shows very real evidence of the problems in terms of Geographic Information Management. This led to the design a methodology to help create and implement spatial data infrastructure to the City-Region scale in Colombia, which is one of the first initiatives to integrate city level and regional level data.

Keywords: SDI, Information, Geographic Standards, Metadata, Policy, Fundamental Data

PDF: <http://www.bdigital.unal.edu.co/46823/1/795060.2014.pdf>

Fuente: <http://www.bdigital.unal.edu.co/46823/>

North America Region SDI News

USA: Progress needed on identifying geospatial data expenditures

GAO-15-193: Published: February 12, 2015. Publicly released: March 16, 2015. Progress needed on identifying geospatial data expenditures, building and utilizing a data infrastructure, and reducing duplicative efforts



Federal agencies and state governments use a variety of geospatial datasets to support their missions. For example, after Hurricane Sandy in 2012, the Federal Emergency Management Agency

used geospatial data to identify 44,000 households that were damaged and inaccessible and reported that, as a result, it was able to provide expedited assistance to area residents. Federal agencies report spending billions of dollars on geospatial investments; however, the estimates are understated because agencies do not always track geospatial investments. For example, these estimates do not include billions of dollars spent on earth-observing satellites that produce volumes of geospatial data. The Federal Geographic Data Committee (FGDC) and the Office of Management and Budget (OMB) have started an initiative to have agencies identify and report annually on geospatial-related investments as part of the fiscal year 2017 budget process.

FGDC and selected federal agencies have made progress in implementing their responsibilities for the National Spatial Data Infrastructure as outlined in OMB guidance; however, critical items remain incomplete. For example, the committee established a clearinghouse for records on geospatial data, but the clearinghouse lacks an effective search capability and performance monitoring. FGDC also initiated plans and activities for coordinating with state governments on the collection of geospatial data; however, state officials GAO contacted are generally not satisfied with the committee's efforts to coordinate with them. Among other reasons, they feel that the committee is focused on a federal perspective rather than a national one, and that state recommendations are often ignored. In addition, selected agencies have made limited progress in their own strategic planning efforts and in using the clearinghouse to register their data to ensure they do not invest in duplicative data. For example, 8 of the committee's 32 member agencies have begun to register their data on the clearinghouse, and they have registered 59 percent of the geospatial data they deemed critical. Part of the reason that agencies are not fulfilling their responsibilities is that OMB has not made it a priority to oversee these efforts. Until OMB ensures that FGDC and federal agencies fully implement their responsibilities, the vision of improving the coordination of geospatial information and reducing duplicative investments will not be fully realized.

OMB guidance calls for agencies to eliminate duplication, avoid redundant expenditures, and improve the efficiency and effectiveness of the sharing and dissemination of geospatial data. However, some data are collected multiple times by federal, state, and local entities, resulting in duplication in effort and resources. A new initiative to create a national address database could potentially result in significant savings for federal, state, and local governments. However, agencies face challenges in effectively coordinating address data collection efforts, including statutory restrictions on sharing certain federal address data. Until there is effective coordination across the National Spatial Data Infrastructure, there will continue to be duplicative efforts to obtain and maintain these data at every level of government.

Access full report: <http://www.gao.gov/assets/670/668494.pdf>

See prior GAO reports on geospatial information:

- Geospatial Information: OMB and Agencies Can Reduce Duplication by Making Coordination a Priority, GAO-14-226T (Dec 5, 2013), <http://www.gao.gov/products/GAO-14-226T>
- Geospatial Information: OMB and Agencies Need to Make Coordination a Priority to Reduce Duplication, GAO-13-94 (Nov. 26, 2012), Geospatial Information: <http://gao.gov/products/GAO-13-94>
- Geospatial Information: Better Coordination and Oversight Could Help Reduce Duplicative Investments, GAO-04-824T (Jun 23, 2004), <http://gao.gov/products/GAO-04-824T>

Source: <http://www.gao.gov/products/GAO-15-193>

USA: Senators Warner and Hatch introduce Bipartisan Geospatial Data Act



U.S. Sens. Mark R. Warner (D-VA) and Orrin Hatch (R-UT) introduced on 17 March 2015 the bipartisan Geospatial Data Reform Act to improve oversight and reduce duplication in the management of geospatial data. The federal government is the largest buyer of geospatial data, but according to the Government Accountability Office (GAO), federal agencies do not consistently track or report geospatial investments, which results in duplicative efforts and expense by various entities, including federal, state and local governments as well as private companies.

The federal government is the largest purchaser of geospatial data but some very basic questions about how and where agencies are already investing in this data can't be answered," Sen. Warner said. "Our bill would bring transparency and accountability to the

collection of this data and ensure that taxpayer dollars are not being wasted on duplicative efforts."

The Geospatial Data Reform Act would require federal agencies to report, as part of their annual budget submission to the President, how much they spend on geospatial data and what geospatial information they collect. It would also designate the Office of Management and Budget (OMB) as the chair of the Federal Geographic Data Committee (FGDC), an interagency committee established by OMB in 1990 to organize and coordinate the collection and management of geospatial data, and require the FGDC to report every two years on each agency's performance when it comes to geospatial data management.

Additionally, the bill will provide a clear definition for geospatial data and metadata, and will improve government transparency and availability to public information.

The legislation's full text is available here: <http://www.scribd.com/doc/259032993/Geospatial-Data-Reform-Act>

Source: <http://www.warner.senate.gov/public/index.cfm/2015/3/warner-hatch-introduce-bipartisan-geospatial-data-act>

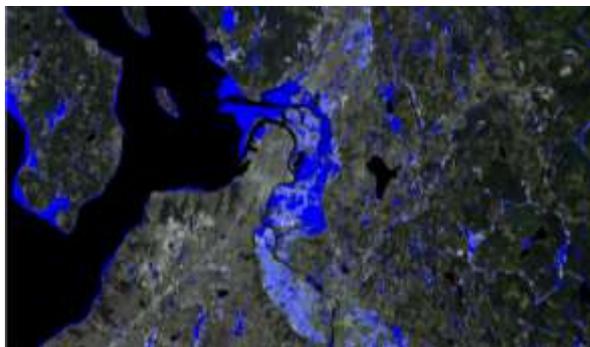
USA: 4th anniversary of FGDC standards update



The Federal Geographic Data Committee has posted the February 2015 standards update on the FGDC web site. February 2015 marks the 4th anniversary of the standards update, which covers FGDC, INCITS L1/ISO TC 211, GWG, OGC, and other standardization activities for January 2015. There are nearly 240 standards listed in the standards update log. The log has been maintained continuously since February 2011.

Source: <http://www.fgdc.gov/standards/monthlyStandardsUpdate/2015-02>

USA: Partnering to develop high quality land cover products in Washington state



Issue: The Washington Department of Ecology required up-to-date land cover information and more accurate wetland maps to explore trends in wetland loss and find strategies to avoid future losses. Producing and developing land cover data is expensive and requires technical expertise and time that many agencies don't always have.

Process: Two programs—the Washington Department of Ecology and NOAA Coastal Change Analysis Program (C-CAP)—worked together on their shared goals of updating regional land cover data and improving wetland mapping accuracy. The team was able to expedite the C-CAP 2010 land

cover update and develop a longer period of trend analysis with historic 1992 data from the coastal portion of Washington State.

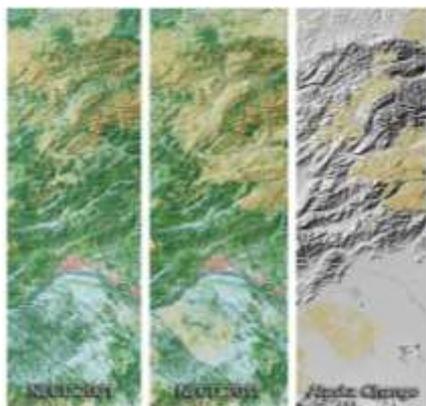
The partners worked to improve wetland mapping accuracy for the state. They also used a new method for modeling potential wetlands by combined several data layers, including the National Wetland Inventory, Soil Survey Geographic (SSURGO) data, National Hydrography Dataset, C-CAP, National Elevation Dataset, and Landsat Satellite imagery and

modeling. This approach provided a more robust representation of potential wetland features than any single data set could provide alone and addressed areas with gaps in coverage or dates.

Impact: Because of this partnership, the Washington Department of Ecology was able to obtain 2010 regional land cover data quickly, 1992 data at a lower cost, and wetland maps that were more accurate. The wetland potential product may be useful for wetland mitigation, restoration site evaluation, and assessing areas as past or current wetlands. The wetland potential methods were later applied to the entire C-CAP national mapping area and used to improve the wetlands categories mapped within all the regional land cover products produced by NOAA.

Source: http://coast.noaa.gov/digitalcoast/stories/wa?utm_source=MailChimp&utm_medium=email&utm_campaign=DCC_Mar15

USA: USGS releases new land cover data for Alaska



The latest edition of the National Land Cover Dataset (NLCD 2011, <http://www.mrlc.gov/nlcd2011.php>) for Alaska is now publicly available. The extensive NLCD database continues to add to our understanding of where land cover change has occurred across the Nation over time. Derived from carefully calibrated, long-term observations of Landsat satellites, NLCD data are used for thousands of applications such as best practices in land management, indications of climate change, determining ecosystem status and health, and assessing spatial patterns of biodiversity.

For Alaska, this database is designed to provide ten-year cyclical updating of the state's land cover and associated changes. Based on Landsat satellite imagery taken in 2011, the data describe the land cover of each 30-meter cell of land in Alaska and identifies which ones have changed since the year 2001. With a decade of change information available, resource managers,

researchers, planners in government and industry — anyone who wishes to investigate the topic — can better understand the trajectory of land cover change patterns and gain insight about land cover change processes.

NLCD is constructed by the 10-member federal interagency Multi-Resolution Land Characteristics Consortium (MRLC). This on-going 20 year collaboration of MRLC demonstrates an exemplary model of cooperation among government entities that combine resources to efficiently provide digital land cover for the Nation. Their teamwork in producing the NLCD not only significantly advances land cover science and data, but saves taxpayer money.

NLCD 2011 products were released for the conterminous U.S. last year; products for Hawaii and Puerto Rico will be released later this year. NLCD data can be downloaded free of charge at the MRLC website (<http://www.mrlc.gov/>).

Source: <http://www.usgs.gov/newsroom/article.asp?ID=4131>

New ASPRS positional accuracy standards for digital geospatial data released



The American Society for Photogrammetry and Remote Sensing (ASPRS) has released a new Positional Accuracy Standards for Digital Geospatial Data. The new standards are available at: [http://www.asprs.org/PAD-Division/ASPRS-](http://www.asprs.org/PAD-Division/ASPRS-POSITIONAL-ACCURACY-STANDARDS-FOR-DIGITAL-GEOSPATIAL-DATA.html)

[POSITIONAL-ACCURACY-STANDARDS-FOR-DIGITAL-GEOSPATIAL-DATA.html](http://www.asprs.org/PAD-Division/ASPRS-POSITIONAL-ACCURACY-STANDARDS-FOR-DIGITAL-GEOSPATIAL-DATA.html)

The new ASPRS accuracy standards fill a critical need for map users and map makers alike. For centuries, map scale and contour interval have been used as an indication of map accuracy. Users want to know how accurately they can measure different things on a map, and map makers want to know how accurate maps need to be in order to satisfy user requirements. Those contracting for new maps depend on some form of map accuracy standard to evaluate the trade-off between the accuracy required vs. how much time and expense are justified in achieving it, and then to describe the accuracy of the result in a uniform way that is reliable, defensible, and repeatable.

The new ASPRS standards address recent innovations in digital imaging and non-imaging sensors, airborne GPS, inertial measurement units (IMU) and aerial triangulation (AT) technologies. Unlike prior standards, the new standards are independent of scale and contour interval, they address higher levels of accuracies achievable by the latest technologies (e.g. unmanned aerial systems and LiDAR mobile mapping systems), and they provide enough flexibility to be applicable to future technologies as they are developed. Finally, the new standards provide cross references to older standards, as well as detailed guidance for a wide range of potential applications.

No prior U.S. accuracy standard comprehensively addresses the current state of mapping technology, which is why the new ASPRS standards were developed. The National Map Accuracy Standards (NMAS), developed in 1947, are still used because they are simple, but there is no scientific correlation between those standards and current mapping methodologies. The ASPRS 1990 Standards were an improvement over NMAS; however, they did not do well in representing the capabilities of Lidar, orthoimagery, digital mapping cameras or other current technologies in widespread use today. The National Standard for Spatial Data Accuracy (NSSDA) is a reporting standard that references the old ASPRS 1990 standards and is cross-referenced in the new ASPRS standards. NSSDA provides no accuracy thresholds and does not by itself provide any new or updated guidance on how to select or specify an appropriate accuracy for intended applications.

The new ASPRS standards were developed by the ASPRS Map Accuracy Standards Working Group, a joint committee under the Photogrammetric Applications Division, Primary Data Acquisition Division and Lidar Division, which was formed for the purpose of reviewing and updating ASPRS map accuracy standards to reflect current technologies. A subcommittee of this group, consisting of Dr. Qassim Abdullah, Dr. David Maune, Doug Smith, and Hans Karl Heidemann, was responsible for drafting the document. Draft versions of the standard underwent extensive review, both within ASPRS as well as through public review by other key geospatial mapping organizations, prior to final approval by the ASPRS Board of Directors on November 17, 2014.

Source: <http://www.asprs.org/Press-Releases/New-ASPRS-Positional-Accuracy-Standards-for-Digital-Geospatial-Data-Released.html>

Call for applications: Summer of Maps (three month student fellowships)



Summer of Maps is an opportunity for students to apply their skills in geospatial analysis to help a non-profit organization. Students are set up with a mentor from the field to guide them on two different projects in a diverse selection of sectors. What makes the fellowships different from many internships or student job experiences is that students are trained and allowed to essentially be their own project manager. From writing to proposals to presenting to clients, this experience will undoubtedly give students a well-rounded feel of what it is like to work as a geospatial professional. Plus, this is a paid experience! The fellowship will last for three months.

The deadline for student applications is **March 15, 2015**. Fellowships begin on June 1, 2015. Eligible students are individuals accepted into or enrolled in an accredited post-secondary institution located in the United States, including community colleges, universities, masters, PhD and undergraduate programs. If you are accepted into or enrolled in a college or university program as of April 2015, you are eligible to participate in the program, even if you will graduate during the program. <https://screendoor.dobt.co/azavea/2015-summer-of-maps-student-application>

See the selected nonprofit projects here:

http://summerofmaps.wordpress.azavea.com/wp-content/uploads/sites/6/2015/02/2015_02_26_SummerOfMaps_OrganizationDescriptions_Final.pdf

Experience professionals can also apply to be a mentor here: <http://www.summerofmaps.com/get-involved/>

Source: <http://www.summerofmaps.com/>

A Shared Geospatial Metadata Repository for Ontario University Libraries: Collaborative Approaches



Author(s): Erin Forward, Amber Leahey & Leanne Trimble
New Review of Academic Librarianship, posted online 2 March 2015

Abstract: Successfully providing access to special collections of digital geospatial data in academic libraries relies upon complete and accurate metadata. Creating and maintaining metadata using specialized standards is a formidable challenge for libraries. The Ontario Council of University Libraries' Scholars GeoPortal project, which created a shared geospatial data infrastructure, involved centrally curating metadata for shared geospatial data collections, using a collaborative and cost-effective consortial model. This paper presents the background and findings of the Scholars GeoPortal project. Through the development of advanced library systems and expertise, libraries in Ontario have improved discovery and access to geospatial data for researchers.

Keywords: metadata standards, geospatial data, GIS librarianship, consortial approaches

Source: <http://www.tandfonline.com/doi/abs/10.1080/13614533.2015.1022662>

**Call for abstracts and special sessions: 9th Symposium of the International Society for Digital Earth
5-9 October 2015, Halifax, Nova Scotia, Canada**



Digital Earth 2015 seeks abstracts describing the state of the art and practice relating to the five conference themes:

- Digital Earth Theory and Technology
- Earth Observation
- Applications to Science and Policy
- Digital Earth and Citizen Well-Being, and
- Digital Earth Education and Outreach

Digital Earth concerns the integrated use of digital technologies to monitor, map, model, and manage our planet's environments. At Digital Earth 2015 up to 1,000 scientists, engineers, technologists, and environmental managers from around the world will meet to share concepts, research findings, technologies, and practical applications relating to the Digital Earth vision. Interested contributors should submit their abstract or proposal for a special session by **April 17, 2015**. Submission details can be found under the Program menu tab at <http://digitalearth2015.ca>. Abstracts and proposals will be promptly considered by the Scientific Program Committee.

Middle East & North Africa Region SDI News

Egypt: Cooperation protocol on the use of techniques of remote sensing and GIS

A cooperation protocol between Egypt's Ministry of Planning and the Ministry of Scientific Research was established in October 2014. The protocol focuses on the use of remote sensing techniques and dimensions of geographic information systems in Egypt's development strategy.

Source: <http://www.narss.sci.eg/>



Egypt: NARSS has signed two agreements to cooperate with China in space technology industry



In December 2014, Egypt's National Authority for Remote Sensing and Space Sciences (NARSS) signed a cooperation deal with the China National Space Administration (CNSA) to serve sustainable development projects and space technology industry. The agreement will bolster cooperation in satellite manufacturing, construction of ground stations, data processing and improving the infrastructure that could serve the sustainable development projects, Head of NARSS Medhat Mokhtar said in a statement. Mokhtar hailed the Chinese potential in the fields of remote sensing and space sciences. He asserted that

Egypt is seriously going ahead with satellite and space science and is capable of developing such a technology.

NARSS also signed a co-operation agreement with the China Center for Resources Satellite Data and Application (CRESDA) on China-Brazil Earth Resources Satellite (CBERS)-4 remote sensing data sharing and applications. CBERS-4 was jointly developed by China and Brazil and successfully launched in December 2014. The CBERS-4 satellite is equipped with four cameras that will monitor the Earth's surface, particularly deforestation, water and land use.

Source: <http://www.narss.sci.eg/news/view/2/NARSS%20co-operation%20agreements%20in%20Dec.%202014> ;
<http://en.almalnews.com/mobile/Pages/StoryDetails.aspx?ID=1453>

Lebanon: Sustainable Natural Resources management platform and early warning system (SUNAR)



An intensive training on Early Warning System for flood and forest fire was held at CIMA headquarters, in the week from 9 to 13 February 2015. The training was carried out in the framework of the Lebanese Project "CAPWATER", which is a part of a WB/GEF funded regional project aiming at capacity building for the sustainable management of natural risks and water resources. The Lebanese National Council for Scientific Research (CNRS, <http://www.cnrs.edu.lb/>) and CIMA Research Foundation (Centro Internazionale in Monitoraggio Ambientale) have signed a consulting agreement on "Establishment of Sustainable Natural Resources Management Platform and Early warning system". The intervention of CIMA Research Foundation focuses on setting up the operational platform for Early Warning System, strengthening technical and operational capacities on flood and forest fires forecast, including the use of Earth Observation.

See also: Establishment of Natural Resources Management Platform and Early Warning System under the Patronage of His Excellency Mr. Akram Chehayeb, Minister of Agriculture in Lebanon (September 30, 2014), <http://www.cimafoundation.org/en/establishment-of-natural-resources-management-platform-and-early-warning-system-under-the-patronage-of-his-excellency-mr-akram-chehayeb-minister-of-agriculture/>
PDF: http://www.cimafoundation.org/wp-content/uploads/News/Report_SuNaR_Kickoff_meeting_30_9_2014_EN.pdf

Source: <http://www.cimafoundation.org/en/a-lebanese-delegation-trained-at-cima-hq-on-probabilistic-flood-forecast-and-dynamic-risk-forecast-for-forest-fire/>

10th National GIS Symposium in Saudi Arabia, 11-14 May 2015, Dammam



The 10th National GIS Symposium in Saudi Arabia will feature a state-of-the-art exhibit, plenary, keynote, and technical sessions. The Symposium will bring together stakeholders from across the geospatial domain - academia,

researchers, students, and the industry - to one place for interaction, sharing and discussion on various topics such as collaboration on technologies and experiences gained. The symposium is intended to encourage the exchange of knowledge and experience in geospatial sciences among researchers, practitioners, and professionals within the country and abroad. Those who cannot participate directly can watch symposium activities via Live Broadcast.

Source: <http://www.saudigis.org/cms.aspx?cid=37>

Summary of Regional Workshop on the Integration of Statistical and Geospatial Information



More than thirty researchers, experts, delegates and heads of various statistical agencies in the Arab world, representing 13 countries, participated in the Regional Workshop on

Integration of Statistical and Geospatial Information, which was held February 16-19, 2015, in Amman, Jordan. The workshop was organized by the Arab Institute for Training and Research in Statistics (AITRS), in collaboration with the Royal Jordanian Geographic Centre (RJGC, <http://www.rjgc.gov.jo/>), and convened in accordance with UN Statistics Division and UN-GGIM.



Brigadier Gen. Dr. Eng Awni AL-Kasawneh, Director General of RJGC, stressed the importance of geospatial information in raising the efficiency of workers in Statistical Departments and for its role in improving the quality of statistical work by supporting the accuracy of results. Dr. Al-Kasawneh explained the role of RJGC in providing all national institutions with the necessary geographic information, aerial and satellite images that contributes in sustainable development. He pointed to the role played by the RJGC to provide necessary data and information to the Department of Statistics, which currently is tackling the use of electronic devices for data collection for the Census 2015. He also referred to the establishment the SDI Jordan portal that contains a huge amount of geographic information, aerial maps and satellite images available to users in policy and decision-making.

Dr. Abdul Aziz Moalemi, Director General of the Arab Institute for Training and Research in Statistics, pointed to the importance of participatory action and cooperation with the RJGC due to its great experience in the field of geospatial data as well as its technological possibilities.

The RJGC and the Arab Institute signed a memorandum of understanding aimed at cooperation and exchange of experiences. Dr. Al-Kasawneh said the RJGC will provide human, training and scientific expertise to ensure rapid availability of data and statistical information to do research and scientific studies that will help decision makers by providing geographic data and information prepared in accordance with international standards, praising the work of the Statistical Institute, which is considered an example of the joint Arab work in making policies, plans, training and offering technical consultancy that accompanies international developments. The MOU will be rolled out to various Arab statistical agencies to allow participation in courses related to geographic information that helps to link data because of its importance in reducing the cost and increasing the speed and accuracy.

The MOU stated: Cooperation in organizing statistical and geographic information training workshops, conducting scientific applied studies and researches, organizing scientific conferences and symposia, exchanging of information and publications in addition to offering advice on issues of common interest, and preparing training programs in the relevant fields for three years.

See: Draft agenda of the meeting, http://ggim.un.org/docs/meetings/Regional%20Workshop_Jordan/Draft%20Agenda-9-01-2015.pdf. Report of the Meeting and Technical Presentations are forthcoming, http://ggim.un.org/Workshop_Amman_Jordan.html.

Source: <http://www.rjgc.gov.jo/NewsDetails.aspx?NID=373&lang=en>

**UN/Islamic Republic of Iran Workshop on the Use of Space Technology for Dust Storm and Drought Monitoring in Middle East Region
26-30 September 2015, Tehran, Islamic Republic of Iran**



This workshop is being organized to address topics related to the use of space technologies in drought monitoring as well as for dust storm tracking and monitoring. A particular focus will be on the Central Asia area, often affected by such environmental phenomena. Also, in collaboration with UNEP, the Caspian convention Secretariat and other stakeholders, a session will consider specific benefits of space tools in the wider environmental monitoring of the Caspian Sea basin. Knowledge will be exchanged on various applications in these domains and applicability of existing drought monitoring systems to the region as well, addressing specific concerns of the host Government and neighbouring countries. Contact: ooosa@unoosa.org.

Source: <http://www.unoosa.org/ooosa/SAP/sched/index.html>

**UN/International Astronautical Federation Workshop on Space Technology for Socio-Economic Benefits
9-11 October 2015, Jerusalem, Israel**



This workshop is being organized to discuss space technologies, applications, information and services that contribute to sustainable economic and social development programmes, with a primary focus on the use of space technology for water resources management; increase awareness among decision makers and representatives of the research and academic community of space technology applications for addressing economic development; examine low-cost space-related technologies and information resources in the above thematic areas available for addressing economic development needs in developing countries; promote educational and public awareness initiatives as well as contribute to the capacity-building process in these areas; and strengthen international and regional cooperation on the subjects. Contact: ooosa@unoosa.org.

Source: <http://www.unoosa.org/ooosa/SAP/sched/index.html>

**United Nations/United Arab Emirates High Level Forum: Space as a Driver for Socio-Economic Sustainable Development
15-17 November 2015, Dubai, United Arab Emirates**



This workshop is being organized to provide updates and recommendations on the potential of space innovations and to address the cross-cutting impact of integrating the economic, environmental, and social policy and regulatory dimensions of space in pursuit of global sustainable development. The main objectives include the presentation of lessons learned in the four thematic areas of space economy, space society, space accessibility and space diplomacy as well as all their interactions and inter-linkages. It will also aim to produce a declaration with a set of recommendations to shape the positioning of space activities as a driver for innovation, socio-economic development and diplomacy for a sustainable future. Contact: ooosa@unoosa.org.

Source: <http://www.unoosa.org/ooosa/SAP/sched/index.html>

Call for applications: L'Oréal-UNESCO "For Women in Science" Fellowships



L'Oréal has launched the 2nd edition of the regional L'Oréal-UNESCO "For Women in Science" Levant and Egypt Fellowships (<http://www.fwis.fr>) in order to promote and encourage the role of women in the fields of Life and Physical Sciences. Five fellowships of 10,000 Euros each will be awarded in 2015 to five exceptional women scientists coming from Egypt, Iraq, Jordan, Lebanon, State of Palestine, and Syria. Deadline: **June 7, 2015**.

Source: http://www.cnrs.edu.lb/index.php?option=com_content&view=article&id=355:call-for-application-fwis-levant-and-egypt&catid=2:news&Itemid=10

Global SDI News

Invitation to tender: Experienced researcher for work on research report on the potential impacts of open data on global agriculture and nutrition



The objective of this work is to contribute targeted research and discrete written content to inform a high-level White Paper Report on the opportunities and application of open data in the global agriculture and nutrition sector. The researcher will support a team at the Open Data Institute (ODI, <https://theodi.org>) who will provide guidance and overall editorial oversight. The ODI is leading this research initiative as part of the Global Open Data for Agriculture and Nutrition Initiative (GODAN, <http://www.godan.info/>).

The purpose of the report is to consolidate the growing evidence base on the potential and impact of open data in agriculture - especially to address development and sustainability issues. The report will also provide a key advocacy and communication resource for GODAN, as GODAN seeks to shape global policy and debate. Costed proposals due by: 09.00 GMT, **7 April 2015**.

Source: <http://www.godan.info/call-for-tenders-by-the-open-data-institute/>

Joint 'Young Scientist from Developing Country' Travel Award to 9th ISDE Symposium



To encourage active participation in the 9th International Symposium on Digital Earth (<http://digitalearth2015.ca/>) and promote the Digital Earth (<http://www.digitalearth-isde.org/>) vision worldwide, the Young Scientist Committee of ISDE and CAS-TWAS SDIM are offering a travel award to a young scientist from a developing country to attend ISDE9 in Halifax, Canada, 5-9 October, 2015 and also to a candidate for the SDIM training workshop organized in China in the year following. The developing countries include all countries in Africa, South and Central America (including the Caribbean), most countries of southern Asia, and Oceania (ISDE uses the United Nations interpretation of 'developing country', refer to the United Nations website: <http://unstats.un.org/unsd/methods/m49/m49regin.htm#developed>). The winners of the paper competition must be giving a presentation at the 9th Symposium of the ISDE, and be younger than 35 years. They must submit a full copy of the paper through the Call for Papers on the conference website and simultaneously to the ISDE Secretariat before **17 April 2015**.

Source: <http://www.digitalearth-isde.org/news/746>

International Society for Digital Earth (ISDE) Video Competition



ISDE wishes to involve more young people (under 35 years of age) in Digital Earth activities, as well as publicize and promote the vision and capabilities of Digital Earth. ISDE has launched a competition for videos that promote the creative representation of the Digital Earth in virtual form by young people. The best videos will be distributed by electronic media to everybody interested in the development of the ISDE. The 3 min video should present the author's CV (30 sec.) and her/his research or ideas about Digital Earth (DE) development (2 min. and 30 sec.). Submission deadline for videos: **August 1, 2015**.

The Finalists will be promoted during the 9th ISDE Symposium (Digital Earth 2015) in Halifax, Canada, and uploaded to the official ISDE ScienceStage Channel. The top 5 will receive ISDE diplomas and gifts, and will be publicized on the ISDE website (<http://www.digitalearth-isde.org>). The top 1 will get a one year free personal online subscription to the International Journal of Digital Earth.

Source: <http://digitalearth-isde.org/news/744>

International Workshop on Supporting Future Earth with Geo-information 9-10 June 2015, Beijing, China



This joint workshop will present the latest development of global spatial data production and sharing, exchange successful application experiences of global geo-information, examine up-to-date user requirements and key gaps, and identify major challenges. It aims at promoting the multi-disciplinary collaboration towards

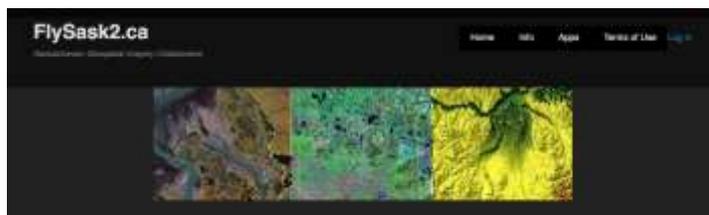
providing reliable global geo-information to support Future Earth.

Future Earth (<http://www.futureearth.org/>) is a global research platform aiming to provide knowledge and supporting to accelerate our transformations to a sustainable world. Dynamic Planet, Global Development and Transformations towards Sustainability are its three research themes. These depend critically on the availability and utilization of reliable information at both local and global scale. With the advancement of remote sensing, spatial information technology and modern cartography technologies, more and more spatial data sets at both global and local scales have been produced in the past and will be generated continuously in the future. Supporting Future Earth with reliable global geo-information is becoming a key challenge for assuring a successful global understanding, environmental change analysis, transformational development and dynamic modeling.

Source: <http://ngcc.cn/article/en/GLC2015/>

Blog: OGC standards enable a new collaborative business model for providing imagery and imaging services

Guest Post by Edric Keighan, President & CEO, CubeWerx and Glen Stowe, Product Manager, Cubewerx (March 11, 2015)



The combined pressures of organizations facing small budgets and big publishing problems have caused the emergence of an interesting business model: the Imagery Collaborative (IC). These collaboratives are groups of small to medium-sized organizations, governmental and non-governmental, getting together and cooperating to share the costs of collecting, maintaining, and

publishing the data their customers require. Structured this way, the IC can afford the resources necessary to hire planes, task satellites and host the acquired imagery. Collaboratives may be global in scope or they may be focused around the needs of a single state, province, country, or even specific market segments. Research communities who share common goals are also excellent candidates for the formation of imagery collaboratives. All that is required is a will to cooperate and share content. This implies a large enough overlap in requirements so that collaboration makes sense.

The Saskatchewan Geospatial Imagery Collaborative (SGIC) (FlySask2.ca), is one example of a growing number of geospatial data and services collaboratives in Canada. As their web page explains:

“SGIC is a partnership of organizations sharing knowledge and costs relating to acquisition and use of remotely sensed satellite and aerial photographic imagery for mutual and public benefit. SGIC provides free public viewing access to its basic imagery sets through a Public Web Mapping Client and OGC-Standard Web Map Services (WMTS, WMS). SGIC members receive access to additional functions and high-resolution imagery through the Members-Only access point.”

Source: <http://www.opengeospatial.org/blog/2190>

OGC White Paper on smart cities spatial information framework



The Open Geospatial Consortium (OGC®) membership has approved the OGC® Smart Cities Spatial Information Framework white paper.

A Smart City uses location as an organizing principal to benefit residents, visitors, and businesses of all types. When organized using the concepts of space and time, information about cities can be the basis for

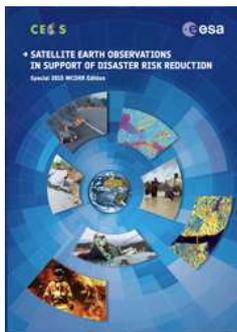
many powerful services, analytics and decision-making. Realizing these benefits depends on effective communication of location information. That communication happens when platform, system and application developers agree on location data encodings and spatial software interfaces. Even simple point location queries and responses require agreement on the naming and ordering of many parameters.

This OGC White Paper provides the beginnings of a spatial information framework for urban spatial intelligence based on open standards such as OGC CityGML, IndoorGML, Moving Features, and Augmented Reality Markup Language 2.0 (ARML 2.0). A spatial information framework provides the basis to integrate GIS features, imagery, sensor observations and social media in support of city governance and services. This essential document for Smart City systems planning is available free at:

https://portal.opengeospatial.org/files/?artifact_id=61188.

Source: <http://www.opengeospatial.org/pressroom/pressreleases/2181>

CEOS Earth Observation (EO) Handbook 2015 Special Edition on Disasters



The CEOS Earth Observation (EO) Handbook presents the main capabilities of satellite Earth observations, their applications, and a systematic overview of present and planned CEOS Agency Earth observation satellite missions and their instruments.

The 2014 Edition (<http://eohandbook.com/index14.html>) focused on the ways that satellite data help address global sustainable development challenges and, in particular, the information we need to define and implement well-informed environmental policies and the conventions that support them.

This new 2015 Edition (<http://www.eohandbook.com/eohb2015/>) explores how satellite EO contribute to disaster risk reduction in countries with varying capacity and infrastructure. It also highlights the main capabilities of satellite EO, their applications, and the challenges in converting satellite data into useful information and knowledge for disaster risk reduction. Both editions are available on the EO Handbook website, as is the annually updated CEOS Missions, Instruments, and Measurements Database — your go-to-resource for current satellite Earth observation information and plans.

Source: <http://ceos.org/home-2/eohandbook2015/>

Near Real-Time AMSR2 data being released



Meteorologists, oceanographers, climatologists, scientists, and researchers needing near real-time environmental and atmospheric data have a new resource at their disposal. Starting early this year, data from the Advanced Microwave Scanning Radiometer 2 (AMSR2) instrument aboard the Global Change Observation Mission – Water (GCOM-W) satellite will be available generally within three hours of an AMSR2 instrument observation.

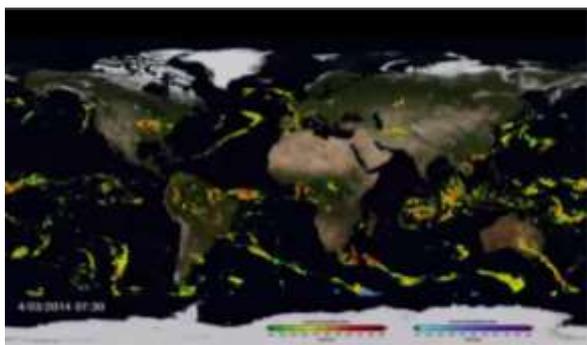
The near real-time data from AMSR2 that is being released is a combined rain-ocean product, which includes surface precipitation, wind speed over the ocean, water vapor over the ocean, and cloud liquid water over the ocean, and will be provided through NASA's Land, Atmosphere Near real-time Capability for EOS, or LANCE, system (<https://earthdata.nasa.gov/data/near-real-time-data/about-lance>). Other near real-time products based on AMSR2 data, such as snow, sea ice, and soil moisture, are expected to be released later in 2015.

LANCE provides access to data collected by sensors on Earth observing satellites generally within three hours of a sensor observation. While LANCE products are not intended to take the place of standard data products (that is, science-quality products created using the best available ancillary, calibration, and ephemeris information), they are an invaluable resource for users needing the most current satellite data possible to make decisions about natural events as they are occurring, such as wildland fires, hurricanes, ice conditions, or dust storms.

See also: Getting petabytes to people: How the EOSDIS facilitates Earth observing data discovery and use <https://earthdata.nasa.gov/about-eosdis/news/getting-petabytes-people-how-eosdis-facilitates-earth-observing-data-discovery-and-use>

Source: <https://earthdata.nasa.gov/about-eosdis/news/near-real-time-amr2-data-being-released>

NASA releases first global rainfall and snowfall map



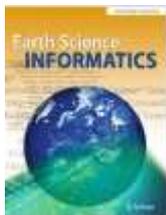
NASA's Global Precipitation Measurement (GPM) mission has produced its first global map of rainfall and snowfall. The GPM Core Observatory – launched one year ago on 27 February 2014, as a collaboration between NASA and the Japan Aerospace Exploration Agency – acts as the standard to unify precipitation measurements from a network of 12 satellites. The result is NASA's Integrated Multi-satellite Retrievals for GPM data product, called IMERG, which combines all of these data from 12 satellites into a single, seamless map.

The map covers more of the globe than any previous NASA precipitation data set and has repeat coverage every three hours, allowing scientists to see how rain and snow storms

move around nearly the entire planet. As scientists work to understand all the elements of Earth's climate and weather systems, and how they could change in the future, GPM provides a major step forward in providing the scientific community comprehensive and consistent measurements of precipitation.

Source: <http://www.nasa.gov/press/goddard/2015/february/nasa-releases-first-global-rainfall-and-snowfall-map-from-new-mission>

Facilitating open exchange of data and information



Author(s): James Gallagher, John Orcutt, Pauline Simpson, Dawn Wright, Jay Pearlman, Lisa Raymond
Earth Science Informatics, January 2015 [not an open access journal]

Abstract: By broad consensus, Open Data presents great value. However, beyond that simple statement, there are a number of complex, and sometimes contentious, issues that the science community must address. In this review, we examine the current state of the core issues of Open Data with the unique perspective and use cases of the ocean science community: interoperability; discovery and access; quality and fitness for purpose; and sustainability. The topics of Governance and Data Publication are also examined in detail. Each of the areas covered are, by themselves, complex and the approaches to the issues under consideration are often at odds with each other. Any comprehensive policy on Open Data will require compromises that are best resolved by broad community input. In the final section of the review, we provide recommendations that serve as a starting point for these discussions.

See also: <http://rcn.iode.org/about/facilitating-open-exchange-of-data-and-information> ; Report of the Research Coordination Network RCN:OceanObsNetwork: Facilitating Open Exchange of Data and Information, http://www.nsf.gov/geo/oce/pubs/rcn_open_data_report_final-may-30-2013-update.pdf

Keywords: Open data, Interoperability, Governance, Data publication

Source: <http://link.springer.com/article/10.1007%2Fs12145-014-0202-2>

GBIF and EU to improve biodiversity information for developing countries



The European Union (EU) and the Global Biodiversity Information Facility (GBIF <http://www.gbif.org/>) have launched a four-year €3.9 million project aimed at increasing the amount of biodiversity

information available for developing countries.

GBIF's Biodiversity Information for Development (BID) will focus on enhancing capacity and mobilizing data from countries in Africa, the Caribbean and the Pacific. By gathering information relevant for policymakers, BID will enable those countries to meet key policy needs and commitments under intergovernmental processes like the Convention on Biological Diversity (CBD) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). BID will also help the European Union fulfil the commitments made to avert global biodiversity loss.

BID's objective is to improve the management of natural capital in these regions, enabling biodiversity information to be used as evidence for decisions and thus support human well-being.

The funding will support two specific areas of activity. First, GBIF will identify needs and priorities for biodiversity information for each target region through studies, workshops and assessment of existing capacity. Second, BID's individual projects will expand on existing biodiversity information networks and implement best practices in gathering and sharing policy-relevant biodiversity information in decision-making.

BID will initially focus on Africa, and the project's kick-off meeting is planned as part of a regional event in Cape Town in May. 'Africa Rising: Mobilising Biodiversity Data for Sustainable Development' (<http://www.sanbi.org/news/sanbi-host-africa-rising-mobilising-biodiversity-data-sustainable-development-conference>) will bring together policy makers and a range of experts from across Africa to accelerate regional understanding of the value of biodiversity data in decision making, and the opportunities that exist to strengthen capacity in mobilizing such data for universal access and use. BID will subsequently work with partners in the Caribbean and Pacific regions to develop priorities for biodiversity information and will issue calls for proposals at a later stage of the project.

Source: <http://www.gbif.org/page/80492>

UN General Assembly adopts resolution on Global Geodetic Reference Frame

Delegates in the United Nations General Assembly adopted on 26 February 2015 a consensus resolution which addressed global geodetic infrastructure. By its terms, the resolution urged States to voluntarily implement open sharing of geodetic data, standards and conventions, inviting them to improve national geodetic infrastructure and engage in multilateral cooperation that addressed infrastructure gaps and duplications, towards the development of a more sustainable geodetic reference frame.



Co-sponsored by 52 Member States, the resolution was originally put forward by Fiji. Introducing the text, entitled “A global geodetic reference frame for sustainable development (document A/69/L.53, <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N15/045/27/PDF/N1504527.pdf?OpenElement>),” Fiji’s representative said the text broadly dealt with global geospatial information management. Its implementation would enable the sharing of geospatial data, capacity-building and the integration of international standards and conventions. Information derived from such work would be important for the development community, in terms of tracking changes in populations, ice caps and the atmosphere. Such a common framework would provide a sound basis for multilateral cooperation.

See video: Global Geodetic Reference Frame for Sustainable Development, <http://www.unggrf.org/>; UN-GGIM Global Geodetic Reference Frame for Sustainable Development from Kartverket on Vimeo, <https://vimeo.com/89695290>

Source: <http://www.un.org/press/en/2015/ga11623.doc.htm>

UN, DigitalGlobe sign agreement to collaborate on high-resolution satellite imagery and geospatial solutions



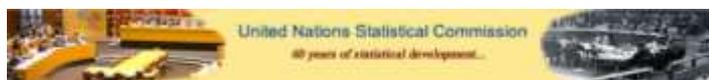
DigitalGlobe (<https://www.digitalglobe.com/>) announced the signing of a Memorandum of Understanding (MOU) with the United Nations. Under

the MOU, DigitalGlobe and the United Nations Office for Outer Space Affairs (UNOOSA, <http://www.unoosa.org/>) will take stock of their combined expertise in the use of earth observation technologies for economic, social, and scientific development and improved decision-making, particularly in developing countries.

UNOOSA and DigitalGlobe will work to develop an online platform to provide easy access to imagery catalogues as well as data and analytical services specifically tailored for the needs of the United Nations. Under the agreement, DigitalGlobe will provide advisory services on remote sensing imagery and geospatial analytics, working with UNOOSA to advance and accelerate adoption of geospatial and satellite imagery-based analytics across the entire United Nations System. The cooperation will also extend to DigitalGlobe’s participation in relevant UNOOSA-supported events and activities, including those of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER, <http://www.un-spider.org/>) and of the United Nations Geographic Information Working Group (UNGIWG, <http://www.ungiwg.org/>).

Source: <http://investor.digitalglobe.com/phoenix.zhtml?c=70788&p=RssLanding&cat=news&id=2020491>

Using Earth Observations in developing sustainable development indicators



The potential integration of earth observation data into the emerging set of sustainable development indicators under consideration as part of the post-

2015 development agenda was the focus of a dialogue held February 27, 2015, at United Nations (UN) headquarters in New York City. Moderated by CIESIN director Robert Chen, the side event included three case studies illustrating the current use of earth observations and other geospatial data in national statistical systems, water sector monitoring, and other environmental and resource applications. To help set the context, introductory remarks were given by Tatjana von Steiger Weber, minister, the Permanent Mission of Switzerland to the UN; Barbara Ryan, executive director of the Group on Earth Observations (GEO); Stefan Schweinfest, director of the UN Statistics Division (UNSD) and the UN Global Geospatial Information Management (UN-GGIM) Secretariat; and Chen. More than 80 individuals attended the event, which was co-organized by Switzerland, GEO, the UN-GGIM Secretariat, and the Japan Aerospace Exploration Agency (JAXA). The event is one of a series of activities preceding the start of the 46th Session of the UN Statistical Commission on March 3rd.

See: Side Event, 46th session of the Statistical Commission: The Role of Earth Observations in Developing Indicators for the Post-2015 Development Agenda: Starting a Dialogue, 27 February 2015, United Nations, New York, NY, http://unstats.un.org/unsd/statcom/statcom_2015/seminars/earth_observ/default.html

Source: <http://sedac.ciesin.columbia.edu/news/browse>

Looking forward again: Four thoughts on the future of GIS in 2015 and beyond

ArcWatch: GIS News, Views, and Insights (February 2015)



In 2011, Esri's ArcWatch publication asked Michael F. Goodchild, Emeritus Professor of Geography, University of California, Santa Barbara, to briefly speculate on the future of GIS. He offered five thoughts: GIS will be adapted to the indoor environment, we will have the ability to know where everything is, GIS will benefit enormously from the emerging Internet of Things, GIS will be increasingly real time, and the GIS of the future will express multiple views of geography. Four years later, all five are developing rapidly, with new research and new products emerging all the time. But the pace of change in GIS is faster than ever before, and today several exciting new developments are on the horizon. So by way of an update, this article, again penned by Goodchild, highlights four GIS-related topics that are very much on his mind at the start of 2015. These topics include: personal data and privacy, big data and spatial prediction, technology development with spatial reasoning functionality, and the expansion of the geospatial field.

Source: <http://www.esri.com/esri-news/arcwatch/0215/four-thoughts-on-the-future-of-gis-in-2015-and-beyond>

GSDI ONLINE CALENDAR

GSDI's calendar of upcoming international events at <http://www.gsdi.org/upcnf> is a unique summary of global and regional conferences, symposiums, workshops, and other related gatherings that pertain to spatial data infrastructure, such as spatial data handling, data visualization, open data policy, research cyberinfrastructure, and RS/GIS applications. GSDI is always on the lookout to include appropriate events, so if you know about one which is not already included, feel free to submit it.

GSDI DISCUSSION FORUMS

To see the latest news from the e-mail Forums maintained by the GSDI Committees and the regional SDI news, visit the website at <http://www.gsdi.org/discussionlists>, choose the Forum of interest and select the 'Archives' option. All discussion lists are open to anyone who is interested in participating, and joining instructions are at the web site above. You do not have to be a member of the GSDI Association in order to join a Forum.



The GSDI Association

Our Vision ... is of a world where everyone can readily discover, access and apply geographic information to improve their daily lives.

Our Purpose ... is to encourage international cooperation that stimulates the implementation and development of national, regional and local spatial data infrastructures.

Our Mission ... is to advance geo-information best practices, knowledge sharing and capacity building for the improved sharing and application of geographic information.

For more information, visit the GSDI Association website at <http://www.gsdi.org>

The GSDI Regional Newsletter is edited by Kate Lance, GSDI News Editor, and published by the GSDI Association. The Editor may be contacted at newseditor@gsdi.org. Please feel free to submit your news to the Editor, relevant to SDI initiatives at any level, or send e-mail announcement to news@gsdi.org.

"Advancing a Location Enabled World"