

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

November 2015 - Vol. 2, No. 10

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 <u>newseditor@gsdi.org</u> 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

Rwanda: National Institute of Statistics of Rwanda now licensing data as open data



Unless otherwise indicated, data and analysis by the National Institute of Statistics of Rwanda (NISR) is licensed under a <u>Creative Commons Attribution 4.0 International License</u>. The National Institute of Statistics of Rwanda (NISR) is committed to disseminate official statistical data and to encourage the public to participate in statistical activities and learn how to use the census and surveys results.

Hence, promoting widespread dissemination, use and sharing, data and analysis from the NISR is released under a Creative Commons Attribution 4.0 International (CC BY 4.0) license. Accordingly, data and analysis from the NISR can be copied, distributed, transmitted and freely adapted, even for commercial purposes, provided that their integrity is respected and the source - "National Institute of Statistics of Rwanda" - is acknowledged appropriately. Some content, however, may be subject to different licensing conditions, which will then be embedded in the content and supersede the Creative Commons licensing conditions.

Data provided on the Internet are free; this includes NISR geodata (i.e., administrative boundaries) from 2012 census mapping, <u>http://statistics.gov.rw/geodata</u>. Some products such as, printed maps on paper are provided at a charge.

Source: Open Data Watch, <u>https://twitter.com/OpenDataWatch/status/653593978206445568; http://statistics.gov.rw/about-us/terms-use</u>

Rwanda: Cell-based land use maps to guide public needs



REPUBLIC OF RWANDA RWANDA NATURAL RESOURCES AUTHORITY Rwanda citizens now are able to access information on land via the Internet or at local government offices, following

the launch of land-use maps at the lowest administrative level, the cell.

Speaking at the launch of the land use maps, the Minister for Natural Resources (MINIRENA, <u>http://www.rnra.rw/</u>), Vincent Biruta, called on land owners to continue using land for what it has been designed for to develop themselves and the country. The launch of the dissemination of Cell-Level Land Use Maps was held under the theme, "Giving Citizens Access to Land Use Maps." Biruta said that although there were master plans at the national and district level, there was need to have master plans at lower levels, adding that the launch at the cell level was an important activity of taking the land use information closer to the people.

The new land-use maps will be aided by the National Land Use Portal (<u>http://rwandalanduse.rnra.rw/</u>), an online platform that enables land plans, other maps and related information to be easily accessible to the public, which was launched last year.

Source: http://www.newtimes.co.rw/section/article/2015-10-13/193450/

Kenya: System for Land-based Emissions Estimation in Kenya (SLEEK)

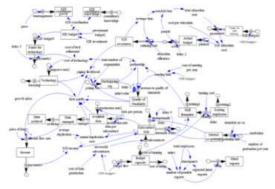
The System for Land-based Emissions Estimation in Kenya (SLEEK) is a program to develop a robust and credible system for estimating land-based emissions in Kenya. The Mullion Group is assisting the Government of Kenya and the Clinton Climate Initiative to develop cutting-edge data tools that draw on land cover, soils and climate data to calculate greenhouse gas emissions associated with land use activities. SLEEK will enable the Ministry of Environment and Natural Resources to report its land sector emissions, engage in carbon markets and evaluate different land use scenarios for sustainable development, including planning for regrowth, protection of forest resources, improved agricultural productivity, and enhanced water availability.



The system is collecting data from five pillars: climate and weather patterns, crops, forests, land-cover maps, and, of course, soil. SLEEK is, at its simplest, a data platform that will bring these multiple varieties of data sets together and allow them to be easily accessed. But it's also a tool that will dramatically expand the possibilities for how critical information reaches the farmers and communities who need it most. Already, the program has digitized 1.7 million climate records.

Source: <u>https://www.clintonfoundation.org/our-work/clinton-climate-initiative/programs/forestry-program;</u> <u>http://africa.clintonfoundation.org/climate/#!/</u>

SDI planning using the system dynamics technique within a community of practice: lessons learnt from Tanzania



Author(s): Ali Mansourian, Alex Lubida, Petter Pilesjö, Ehsan Abdolmajidi & Monica Lassi

Geo-spatial Information Science, published online 12 September 2015

Abstract: There exist major challenges in accelerating the spatial data infrastructure (SDI) planning process in the developing countries as well as advocating for politicians to support the development of SDI, due to the high complexity of SDI, lack of knowledge and experience, and limited insight in the benefits. To address these challenges, a methodology for SDI planning in Tanzania, based on the system dynamics technique and the

communities of practice concept, was adopted and applied within a community consisting of experts from stakeholder organizations. The groups gathered to develop an SDI plan, while they shared their knowledge and discussed their ideas that helped their understanding of SDI. By running the system dynamics model, the development of SDI over time could

be simulated that gave the planning community an insight about the future effects of today's plans and decisions. Finally, an optimum model could be developed by refinements and improvements done with the consensus of the SDI stakeholders. This model included the components and policies that are essential for a successful SDI implementation in Tanzania and can be used as a basis for SDI planning and help to gain political support. Lessons learnt from this research were promising regarding the usability of the methodology for SDI planning in comparable countries.

Keywords: spatial data infrastructure (SDI), planning, system dynamics technique, community of practice

Source: http://www.tandfonline.com/doi/abs/10.1080/10095020.2015.1065048?tab=permissions

Zimbabwe GeoSpatial Data - A collaborative collation of geospatial data of Zimbabwe

Geospatial data on Zimbabwe is largely scattered all over the web and efforts by the national data custodians to implement distribution infrastructure/ initiatives are minimal if existent. One usually finds this data embedded in pdfs, spreadsheets or images. Making any use of the same requires converting to the



appropriate format of which time one may not have. Additionally there is lack of contextual exposure of data resulting in stifled innovative use of this data. The Zim-Geospatial collaborative aims to pool together usable geospatial data on Zimbabwe in a somewhat 'quickly' usable format from whichever source in order to promote innovative use of data.

Source: https://zimgeospatial.github.io/

Zimbabwe: Accessing spatial data to study biodiversity and devise protection strategies

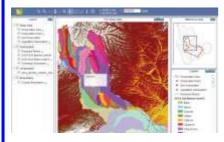


Biodiversity, the diversity of life makes our planet unique and our lives possible. National Biodiversity Strategies and Action Plans (NBSAP) are defined to help prevent biodiversity loss. NBSAPs define set of 20, time-bound, measureable targets aimed to reduce biodiversity loss at the national and global level. Pulse Lab Kampala, in collaboration with the NBSAP Forum (www.nbsapforum.net), UNDP and the Government of Zimbabwe, has created a pilot, web-based tool (http://biodiversity.plk.ug/) to support the formulation of NBSAPs. Representing and analysing spatial data

(data that includes geographical coordinates - latitude and longitude) is crucial to formulate policies to protect ecosystems, such as rainforests, mangroves, coral reefs, wetlands, drylands, and grasslands underpin human life on Earth. While spatial data is available online from a variety of sources, it is not always easily accessed. The tool makes accessible spatial data in a user-friendly way for decision-making. The tool is currently in pilot phase; it will be further refined with user feedback and expanded to support NBSAPs in other countries.

Source: http://www.unglobalpulse.org/spatial-data-biodiversity-tool

Botswana: OBIS - an Open Access Data Center for the Okavango River Basin



Author(s): Kralisch, Sven; Zander, Franziska; Dhliwayo, Masego; Masamba, Wellington; Flügel, Wolfgang-Albert

EGU General Assembly 2015, 12-17 April 2015 in Vienna, Austria

Abstract: Sustainable land and resource management and related interdisciplinary research projects like The Future Okavango (TFO) demand for integrated data management systems to store, describe, analyze and disseminate related information. These systems should not only take account of the possibly large range of varying data types and formats, but also have to consider different

user groups and the demand for collaborative data access and data sharing. Within TFO these requirements are addressed with the development of the Okavango Basin Information System (OBIS, <u>http://www.future-okavango.org/obis</u>). OBIS is designed as a web-based data management and analysis platform with full read/write access to all data, using open software and open standards whenever possible. This paper briefly describes the requirements that guided the OBIS development, its functions and interfaces, and gives an overview of data already stored in the system.

OBIS provides functions to store, visualize and analyze a variety of data types:

- Stations and time series data (measured and simulated data, measurement stations)
- Geodata (raster and vector data)
- Documents (text and office documents, media files)
- Observations (soil, vegetation and other observations)
- Scenario data (development scenarios, indicators, scenario evaluations)
- Metadata (information about data, i.e. who, what, when, where, why, and how)

Source: <u>http://meetingorganizer.copernicus.org/EGU2015/EGU2015-14677.pdf;</u> <u>http://www.future-okavango.org/downloads/Leporello_OBIS.pdf</u>

South Africa: National consultative workshops to support SASDI implementation

South Africa is developing a national legislative framework aimed at providing a framework of standards, policies, data, procedures, and technology to support the effective coordination and sharing of spatial information among a community of stakeholders, known as the Spatial Data Infrastructure. The Spatial Data Infrastructure Act, 2003 (SDI Act



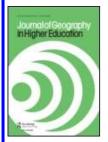
No. 54 of 2003, <u>http://www.sasdi.gov.za/About/SDI%20Act.aspx</u>) was assented on 10 February 2004. The president of the Republic of South Africa recently signed the remaining sections of the SDI Act, 2003 putting the piece of legislation into full operation.

In terms of section 20 (1) of the SDI Act, 2003, there is a need to develop regulations to facilitate the implementation of the South African Spatial Data Infrastructure (SASDI, <u>http://www.sasdi.gov.za/</u>). Furthermore, in terms of section 20 (2) the minister must, before making, amending or repealing any regulation under subsection (1), publish the proposed regulation, amendment or repeal once in the Government Gazette and call for written comments by any interested party to be provided within 30 days after such publication.

The Directorate: National Spatial Information Framework (NSIF), which is responsible for administering the implementation of the SASDI, will be holding the national consultative workshops during October and November 2015. The aim of the workshops is to solicit inputs from stakeholders regarding the development of the SDI Act, 2003 regulations and the adoption of the South African National Standards needed to effectively support the implementation of SASDI. The NSIF will visit all nine provinces.

Source: http://www.ee.co.za/article/national-consultative-workshops-support-sasdi-implementation.html

A qualitative comparison of South Africa's geomatics professional body's academic model against industry's understanding of SDI knowledge and skills requirements



Author(s): Serena Coetzeea, Victoria Rautenbach, and Heindrich du Plessis Journal of Geography in Higher Education, Volume 39, Issue 1 (2015), pages 4-17 [not an open access journal]

The South African Spatial Data Infrastructure (SASDI) was established in 2003.Registration of geographical information science (GISc) practitioners by the South African geomatics professional body followed in 2004 and accreditation of university GISc programmes in 2012. In 2010, the Committee for Spatial Information identified inadequate knowledge and skills of GISc practitioners as a challenge for the implementation and maintenance of SASDI. In response, SDI knowledge and

skills requirements for GISc professionals were specified by GISc industry representatives and the professional body's academic model was qualitatively compared against these requirements. Results are discussed and improvements recommended.

Keywords: spatial data infrastructure, geographical information science education, professional body, registration, accreditation, South Africa

Source: http://www.tandfonline.com/doi/abs/10.1080/03098265.2014.963794

Togo & Benin: an information system for integrated land & water resources mgt in the Kara River Basin

Author(s): Hèou Maléki Badjana, Franziska Zander, Sven Kralisch, Jörg Helmschrot, Wolfgang-Albert Flügel *International Journal of Database Management Systems (IJDMS)*, Vol.7, No.1, February 2015

Abstract: A prerequisite for integrated land and water resources management (ILWRM) is a holistic river basin assessment. The latter requires information and data from different scientific disciplines but also appropriate data management systems to store and manage historical and real time data, set up protocols that facilitate data and information access and sharing among different stakeholders, and triggering further collaboration among different institutions in support of watershed-based assessment, management and planning. In West Africa in general and especially in the transboundary Volta River basin where different environmental data are collected and managed by different agencies in different countries and also where data access and dissemination are very challenging and difficult tasks, comprehensive river basin information systems are required. This paper presents the Oti River Basin Information System (OtiRBIS), a web-based data storage, management and analysis platform that addresses these needs and facilitates ILWRM implementation in the Kara river basin.



Keywords: Integrated land and water resources management (ILWRM); holistic hydrological river basin analysis; webbased information system; River basin information system (RBIS); the Kara river basin

Source: http://arxiv.org/abs/1503.03256

West Africa: ProjetEOF Workshop - SDI training, 26 September – 15 October 2015, Bouaké, Ivory Coast

After two days of travel from France, Niger, Mali, Togo, Benin, Burkina Faso, Senegal and Abidjan, a group of twenty mappers from Francophone Project Space OpenStreetMap (ProjetEOF, <u>http://projeteof.org/</u>) met for five days, 25 September to 15 October 2015, in Bouaké, in the center of the Ivory Coast. The training included an introduction, to OpenStreetMap (OSM) data and other sources of free data using free web tools and spatial data infrastructure technologies.

Projet Espace OSM Francophone



Source: @nicolas_chavent <u>https://twitter.com/nicolas_chavent/status/652449851645526016;</u> http://wiki.openstreetmap.org/wiki/Ateliers_ProjetEOF_-Bouak%C3%A9_26_septembre-15_octobre_2015

GMES & Africa Guidelines for Call for Concept Note



The present Call for Concept Note is undertaken in the context of the second phase of the Formulation Study for the Pan-African Programme Support to the Global Monitoring of Environment and Security in Africa (GMES &

Africa) initiative. It aims at exploring, in particular, the potential options through which the first two GMES & Africa services could be deployed in order to be effective in supporting decision making on key environmental issues in African countries, taking into consideration their regional dimensions. The expected feed-back from this exercise will be used by the African Union Commission to establish the regional implementation structure of the two GMES & Africa Services in consultation with regional stakeholders.

This call is intended to regional consortia of African institutions wishing to participate in the development and operationalization of GMES & Africa services (refer to Key Information on GMES & Africa Annex 3). It is intended for African entities whose mission, or part thereof, is to contribute to the efforts of African countries in managing Water Resources, Natural Resources and Marine & Coastal Resources in Africa and which have a strong background in using and/or developing EO applications to provide services. The entities may be specialised regional agencies/authorities established through regional cooperation agreements, or national public institutions or parastatals or relevant departments of national institutions having a clear regional or national mandate to take an active participation in GMES & Africa or similar initiatives. Entities, including private sector operators, whose mission or usual activities are not related to the thematic areas covered by the two GMES & Africa services (refer to Key Information on GMES & Africa Annex 3), but whose technical know-how and capabilities can potentially contribute to the development of the services may participate in the call, provided that they are associated with other relevant entities as described above for the purpose of the GMES & Africa initiative. Deadline: November 5, 2015.

Source: <u>http://au.int/en/content/gmes-africa-guidelines-call-concept-note</u>

UNDP and Earth Networks to strengthen Africa's national severe weather early warning systems

Earth Networks has been awarded a Long Term Agreement (LTA) by the United Nations Development Programme (UNDP) to provide developing countries in Africa and beyond with goods and services for a National



Meteorological and Hydrological Service Early Warning System to provide severe weather, nowcasting, monitoring and early warning to protect lives and property.

Aiming to strengthen climate resilience, UNDP is assisting African countries to translate economic growth into longlasting, inclusive human development. To support these challenges, Earth Networks, which has the world's largest weather, lightning and greenhouse gas monitoring networks, was competitively selected to deliver a comprehensive Early Warning System that includes reliable and accurate data about current, near medium-term weather conditions via four major subsystems: a current conditions network, a severe weather nowcasting network, a weather forecasting solution and a weather and climate data display system.

Source: <u>http://www.earthnetworks.com/earth-networks-selected-by-undp-to-strengthen-africas-national-severe-weather-early-warning-systems/</u>

GeoSmart Africa 2016, 13-14 April 2016, Cape Town, South Africa



This year, Geospatial Media & Communications brings to you Africa two premier geospatial conferences under one roof. Spatial Data Infrastructure is one of the themes of the Conference.

GeoSmart Africa (Formerly Africa Geospatial Forum): Geospatial technology has the potential to add economic value and can have massive economic and social impact by reducing costs, expanding access to services, delivering more consumer value, and reducing

inefficiencies. As our response to address the evolution, changes and innovation of geospatial technology, Africa Geospatial Forum (AfGF) is now GeoSmart Africa.

GeoIntelligence Africa: The conference will cover Geospatial technology as vital for facilitating multisource information sharing and integration across agencies and organizations dealing with a region's defence and security.

Abstract submission closes on 15 December 2015.

Source: http://geosmartafrica.org/call-for-abstracts.html

Geomatics Indaba 2016 (GI 2016), 2-4 August 2016, Ekurhuleni, Gauteng, South Africa

Geomatics Indaba 2016 is a fully inclusive geomatics sector conference, exhibition and training event, encompassing all levels of interested and relevant persons, organisations, government departments and agencies, municipalities, public and private companies, NGOs, universities and training organisations - from students to professionals; junior staff to executives, officials and leaders; in both the public and private sectors; from South Africa, Africa and abroad.

Source: https://twitter.com/geomaticsindaba

11th Int'l Conference of the African Association of Remote Sensing of the Environment (AARSE 2016) 24-28 October 2016, Kampala, Uganda

11TH INTERNATIONAL CONFERENCE OF THE AFRICAN ASSOCIATION OF REMOTE SENSING OF THE ENVIRONMENT



The11thInternationalConferenceoftheAssociationofRemoteSensingoftheEnvironment

(AARSE2016) will be held in Kampala, Uganda from Monday 24th to Friday 28th October 2016. Makerere University together with other organizations and institutions in Uganda are taking the local lead in organizing the conference. Abstract submission deadline: **31 December 2015**.

Source: http://aarse2016.org/

Job announcement: MaMaSe Project (Kenya) Specialist, Delft, The Netherlands





UNESCO-IHE Institute for Water Education seeks a Project Specialist to work within the Mau Mara Serengeti (MaMaSe) Sustainable Water Initiative (<u>http://www.mamase.org</u>). MaMaSe is aimed at improving water safety and security in the Mara River

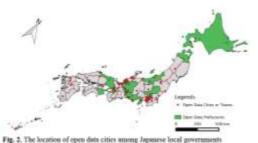
Basin (Kenya) to support structural poverty reduction, sustainable economic growth and conservation of the basin's ecosystems. The successful applicant will be responsible for supporting a range of technical activities:

- Planning and implementation of field activities for data collection, including biophysical and social surveys;
- Data analysis and modelling, including development of a basin water system model and Bayesian network model to be applied in water allocation planning;
- GIS database management and production of maps and other spatial data products for the project; and
- Technical support to the MaMaSe management team in the general coordination of project activities, planning
 of project events, and preparation of annual reports.

Source: http://www.unesco-ihe.org/sites/default/files/15-wse-03_mamase_project_specialist.pdf

Asia & the Pacific Region SDI News

Japan: Comparing distribution of open geospatial information between cities of Japan & other countries



Author(s): Toshikazu Seto and Yoshihide Sekimoto

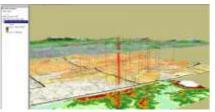
Proceedings of 14th International Conference on Computers in Urban Planning and Urban Management (CUPUM 2015), July 7-10, 2015, Cambridge, MA USA,

http://web.mit.edu/cron/project/CUPUM2015/proceedings/Content/index.html

Abstract: Against the backdrop of recent international trends in open data, this study examined the present situation and quantity of open geospatial data in Japan. In particular, the authors investigated open data trends with respect to the number of datasets and response formats based on a comparison of open data released by local governments in Japan with those released by local governments in the United States and European Union.

Source: http://web.mit.edu/cron/project/CUPUM2015/proceedings/Content/infrastructure/235_seto_h.pdf

Korea: Government to develop GIS engine



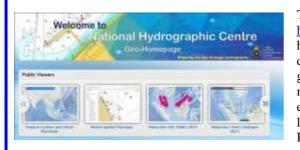
The National Spatial Data Infrastructure Center of the Ministry of Land, Infrastructure and Transport (MOLIT) will embark on research and development of a Geographic Information System (GIS) engine that can compete with the ArcGIS engine by letting local GIS engine developers participate in its efforts, starting this month.

As a tool aimed at managing spatial information on a computer, a GIS engine is

software that allows people to see high-capacity map data. To see map data on V-World or portal sites, it is necessary to install a GIS engine on the server. To manage high-capacity map data, it is also essential to set up a database management system (DBMS) that effectively supports it.

Source: <u>http://www.businesskorea.co.kr/news/sciencetech/12340-geographic-information-system-korean-govt-develop-gis-engine</u>

Malaysia: Towards Marine Spatial Data Infrastructure



The mission of the National Hydrographic Centre (NHC, <u>http://www.hydro.gov.my/</u>) is to provide accurate, timely hydrographic information for use in marine navigation, national development, national defense and other purposes. NHC strives to give information hydrographic, cartographic, oceanographic and meteorological and issue nautical charts, tide tables and reports of environmental quality in order to achieve fault zero and master the latest technology meet customer requirements. See NHC Geo-Homepage <u>http://hidrografi.maps.arcgis.com/home/</u>.

Malaysia: MyGeoTranslator enabling data providers to comply with MaCGDI quality standard



MyGeotranslator is an initiative of the Malaysian Centre for Geospatial Data Infrastructure (MaCGDI) to assist and

facilitate data providers adopt standard geospatial data developed nittee (MSTC) together with the and Industrial Research Institute of



by MaCGDI through the Technical Standard Committee (MSTC) together with the Department of Standards Malaysia (DSM) and Standard and Industrial Research Institute of Malaysia (SIRIM) to facilitate the sharing of data through MyGDI.

Source: <u>http://mygeotranslator.mygeoportal.gov.my/geotranslator/</u>

Malaysia: Lead Agency Meeting for data custodians within hydrography fundamental data category



In September, the National Hydrographic Centre (NHC) chaired a successful Lead Agency Meeting for the fundamental geospatial data category of Hydrography. Meetings held during the second day took place in the Main Conference Room of the Department

of Survey and Mapping Malaysia (JUPEM) Sabah. Meetings were held for the purpose of coordination, updating and identifying the issues that arise in the development and sharing of geospatial data among data producing agencies within the Hydrography category. In addition to the presentations and submission of data by agencies involved, this meeting focused on the discussion of the selection of possible attributes for each feature in the Hydrography category for the purpose of sharing Public Government, per document MS 1759: 2014. A total of 12 government agencies were present at the meeting. The meeting Chairman also expressed his gratitude for the commitment and cooperation shown by the agency in the success of the National Program for the development of Malaysian Geospatial Data Infrastructure (MyGDI, http://www.mygeoportal.gov.my/mygdi) for the purpose of data sharing between geospitial data suppliers and users.

Source: <u>http://www.hydro.gov.my/index.php/en/component/k2/item/350-mesyuarat-agensi-tunjak-dan-custodian-data-geospatial-bagi-kategori-hydrography-bilangan-tahun-1-2015</u>

Malaysia: Royal Malaysian Navy hosts 1st meeting of Crowd Source Bathymetry (CSB) Working Group

The National Hydrographic Centre (NHC) of the Royal Malaysian International Hydrographic Organization Navy (RMN) was entrusted to organize the inaugural meeting of the Organisation Hydrographique Internationale world's Working Group of Crowd Source Bathymetry (CSB, https://www.iho.int/srv1/index.php?option=com_content&view=article&id=635) in Kuala Lumpur. This meeting was held in line with the organization of meetings of the General Bathymetric Chart of the Oceans 2015 or better known as http://www.gebco.net/. GEBCO, See documents from October CSB Working Group meeting, https://www.iho.int/mtg_docs/com_wg/CSBWG/CSBWG1/CSBWG1.htm.

Traditionally GEBCO had focused on waters deeper than about 200m, but that has changed, firstly because of the importance of the coastal zone and secondly because bathymetric grids used by modellers, even on a global scale, have to be complete and consistent up to the coastline. To address the significant lack of bathymetric data available globally, especially in the near shore areas, the CSB Working Group was established to create guidance and standards for CSB collection activities, taking into account lessons learned from the International Hydrographic Organization (IHO) and other commercially and volunteer-based efforts to collect these data. The CSB Working Group also in formulating development platform for other applications from navigation to use the international maritime community, especially the exploration and exploitation, management and conservation of marine resources and the conservation of the ocean environment.

The success and usefulness of these efforts is highly dependent on a robust infrastructure and user interface at the IHO

Data Centre for Digital Bathymetry (DCDB), to accommodate the safe archive and distribution of the resulting data and metadata. The DCDB has laid the groundwork for enhancing its web based interface to allow the public as well as IHO partners to upload, search for, display and download global bathymetric data by developing a CSB data transfer format, coordinating with the IHO to develop a proof of concept DCDB web interface, and creating web based functionalities to support incorporating online metadata generation.

Source: <u>http://www.hydro.gov.my/index.php/en/component/k2/item/358-tldm-menjadi-hos-bagi-mesyuarat-pertama-jawatankuasa-kerja-crowd-source-bathymetry</u>

Indonesia: International Conference of Indonesian Society for Remote Sensing 2015



Spatial Data Infrastructure was one of the themes of the 1st International Conference of Indonesian Society for Remote Sensing (ICOIRS) 2015, which was held 27-28th October 2015 in Surabaya and hosted by Department of Geomatics Engineering, Institut Teknologi Sepuluh Nopember Surabaya and Indonesian Society for Remote Sensing (MAPIN/ISRS). The annual

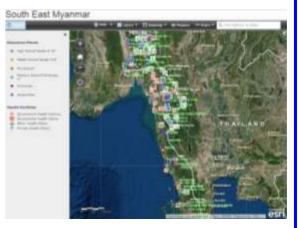
conference aims to be a platform for sharing the knowledge, experiences, and ideas between the researchers, academicians, professionals, and governments for the future research and development of remote sensing technology and its applications. This year, the ICOIRS 2015 explores the theme "Harnessing Earth Information from Space."

Abstracts available at: <u>http://pitmapin.org/index.php/pitXXI/pitXXI/schedConf/presentations</u> See: History, Development and Status of Indonesian SDI, <u>http://pitmapin.org/index.php/pitXXI/pitXXI/paper/view/104</u>

Source: http://pitmapin.org/index.php/pitXXI/pitXXI/schedConf/

Thailand-Myanmar cross border portal - Information Management Common Service (IMCS)

The Information Management Common Service Portal is open to all humanitarian organizations as a way to help disseminate information that will assist refugees - in the nine Temporary Shelters located along Thailand's border with Myanmar - in reaching freely informed decisions concerning their future lives, including the possibility of a voluntary return home. The information will be up-to-date and accurate, of a non-political and impartial nature concerning the socio-economic, human development and humanitarian activities taking place in southeast Myanmar. One of the information services is an interactive web mapping viewer, http://data.unhcr.org/thailand/interactive_map.php



Source: http://data.unhcr.org/thailand/regional.php

Thailand: Preparation of basic geospatial information at one time



Geo-Informatics and Space Technology Development Agency (GISTDA) held a conference entitled "Preparation of basic geospatial information at one time" on September 21, 2015. The Conference aimed to:

- 1. Provide an opportunity for attendees to comment on a document that discusses improvements to the Fundamental Geographic Data Set (FGDS) standard so that data are accurate and can be deployed by the agency responsible for preparing the geospatial data layers. With the FGDS standard, a basic set of geospatial information, across scales of 1: 250,000, 1: 50,000, 1: 25,000, 1: 10,000 and 1: 4000, can be used together.
- 2. Present the status and problems concerning the preparation of geospatial data layers under the terms of the FGDS standard.
- 3. Prepare a development plan and encourage the preparation of data layers to comply with the requirements of the FGDS standard.

Source: <u>http://thaisdi.gistda.or.th/index.php?option=com_content&view=article&id=216:210958&catid=36:latest-news</u>

Bangladesh: 1st Bangladesh Planning Research Conference (BPRC) 2016

Call for abstracts for an international conference "Bangladesh Planning Research Conference (BPRC)" to be held at

Jahangirnagar University, Dhaka, Bangladesh, 5-6 February 2016. <u>http://www.juniv.edu/</u> Theme: Planning and development in developing country perspectives Topics include (but not limited to) the following thematic areas:

- Urban Settlement & Growth Management
- Transportation
- Rural Development & Poverty Alleviation
- Housing and Real Estate
- Urban Design
- ICT in Urban & Regional Planning

- Local Government & Governance
- Environmental Planning & Policy
- Climate Change: Mitigation & Adaptation
- Disaster Management & Planning
- Utility Services Planning
- Gender, Ethnics in Planning & Development

An abstract of 300 to 500 words should include the research problem, methods, results and conclusion/implications. Abstract should have a title, author's name and affiliation. Abstract should be submitted by email to <u>bprc_ju@yahoo.com</u> and/or to <u>urp@juniv.edu</u>. Deadline for abstract submission is: **25 November 2015**.

Eurasian SDI: multilateral memorandum of cooperation signed for creation of Eurasian SDI

A Memorandum was signed between the National Institute of Geographic Information of the Republic of Korea, the Korean Research Institute for Human Settlements, "National Information Technologies" JSC of Kazakhstan, the State Service of Geodesy and Cartography of the Kyrgyz Republic, the Department of cadastre and registration of real estate rights in the State Registration Service of the Kyrgyz Republic, the Office of Land Relations, Geodesy and Cartography of Mongolia and the State Committee on Land Resources, Geodesy, Cartography and State Cadastre of the Republic of Uzbekistan.

The document was signed at the first International Conference on Eurasian SDI, held within the 20th Cartographic Conference of the United Nations for the Asia-Pacific region (UNRCC-AP) and the 4th UN Conference on Global Geospatial Information Management for Asia and the Pacific (UN-GGIM -AP).

Source: http://strategy2050.kz/en/news/27158/

Australia: Spatial maturity in health - How mature is your organisation?



Australian researchers Dr Ori Gudes, Narelle Mullan and Professor Tarun Weeramanthri delved into spatial maturity in Western Australian health organisations to determine the uptake of spatial information. This pilot study – Spatial Maturity in a Health Agency (http://www.crcsi.com.au/assets/Resources/CRCSI-Spatial-Maturity-in-a-Health-Agency-Report-June2015.pdf) – developed a framework and tool to evaluate the use of spatial technology at an organisational level.

Determining spatial maturity within an organisation – this is its capability to use spatial data to support operational and strategic functions – meant developing a four-stage framework; survey, group discussions, analysis and recommendations. See Figure 1.

Although this pilot study focused on health, the framework is generic so that it can be used to benchmark, provide baseline and monitor progress of organisational spatial health.

"We hope this report will reinforce to readers that there is more to technology adoption than 'cool tools', that a generic framework is available to look at 'capacity to use', that mixed methods analysis can lead to critical organisational insights, and that we can thereby better realise the potential of spatial technology to contribute to better organisational performance", said research team members, Dr Ori Gudes, Narelle Mullan and Professor Tarun Weeramanthri.

Understanding organisational spatial maturity is relevant to businesses operating across a broad spectrum of sectors; from roads, transport, education, mining and energy, communications (mobile, internet), disaster relief and food security. This insight will provide valuable learnings into the cohesion of which its people are using spatial Spatial maturity item To what extent do your workplace's broad strategic plans line up with the use of upstial technologies, and use spatial .1 technologies as part of their workdicw processes? To what extent is the State Government influential in encouraging, supporting, or setting standards for using spatial 2 technologies? 3 To what extent do the executive managers in your organisation support and encourage the use of spatial technologies? To what extent is there an adequate sum of money/resources to support the establishment and/or development of spatial technologies and GIS in your workplace? To what extent is the infrastructure integrated with IT mechanisms and processes to encourage the use of scattal 5 technologies/GIS7 6 To what extent are the PHCSD operational workflows driven by GIS/spatial technology processes and tasks? 7 To what extent are employees engaged in specialised spatial technologies in their day-to-day roles at your workplace? To what extent are the skills needed to accomplish a specified task or perform a given function that uses spatial 8 technologies/GIS available in your workplace? To what extent is the data set in your workplace fit for its intended use, managed by an authoritative source, and 0 routinely updated? 10 To what extent are spatial facilities and tools available to users in your workplace? 11 To what extent can unskilled people employ or engage with GS tools or use spatial technologies in your workplace? 12 To what extent do GIS and spatial training exist in the PHCSD (beginner level or advanced level)? 13 Overall, how would you rate your satisfaction with the use of spatial technologies in your workplace?

information to make more strategic decisions and respond to operational activities.

Source: <u>http://www.crcsi.com.au/news/spatial-maturity-in-health/</u>

Effective practices for interagency data sharing: insights from collaborative research in a regional intervention



Pauline M. McGuirk, Phillip M. O'Neill and Kathleen J. Mee Australian Journal of Public Administration, Volume 74, Issue 2, pages 199–211, June 2015 [not an open access journal]

Abstract: Data sharing adds considerable value to interagency programs that seek to tackle complex social problems. Yet data sharing is not easily enacted either technically or as a governance practice, especially considering the multiple forms of risk involved. This article presents insights from a successful data sharing project in a major region in east coast Australia involving a federally funded research partnership between two universities and a number of human services agencies. The Spatial

Data Analysis Project sought to establish a community of practice for devising data sharing protocols and embedding data sharing into agency practices. Close dialogue between the project partners and mobilizing the authority of extant regulatory and legal frameworks proved effective in confronting risks and barriers. The article reveals effective practices for data sharing and derives lessons for other policy and governance contexts.

Keywords: data sharing; whole-of-government working; communities of practice; risk

Source: <u>http://onlinelibrary.wiley.com/doi/10.1111/1467-8500.12098/abstract</u>; <u>https://www.researchgate.net/publication/271227338 Effective Practices for Interagency Data Sharing Insights from Collabora</u> tive Research in a Regional Intervention Effective Practices for Interagency Data Sharing

Australia: New South Wales (NSW) Location Intelligence Plan



Location + Information where it needs to be

NSW Location Intelligence Strategy Update 2016 - 2017 The NSW Land and Property Information (<u>http://www.lpi.nsw.gov.au/</u>) released Location+ 2016-2017 for public consultation via web service 'Have Your Say' for a period of two weeks from 18 September 2015 to 2 October 2015, <u>http://www.haveyoursay.nsw.gov.au/assets/Uploads/Location-+-2016-2017-</u> <u>DRAFT-v0-27-PUBLIC-CONSULTATION.pdf</u>. Government, industry and the community were encouraged to make a formal submission to ensure Location+ delivers what is required to achieve a digital future with NSW as the leading jurisdiction for location intelligence.

The NSW Location Intelligence Strategy 2013-2015 outlined the NSW Government's vision to maximise the value of location intelligence in decision making and service delivery. Over the past three years the NSW Location Intelligence Strategy 2013-2015 has delivered an updated NSW Foundation Spatial Data Framework (FSDF) available openly under creative commons, released numerous State Government spatial web services and datasets and delivered the NSW Globe for the visualisation of data. It has contributed to the spatial component of the NSW Information Management Framework in form of custodianship and standards for spatially enabling information.

The Location+ 2016-2017 strategy update builds upon the foundation of the NSW Location Intelligence Strategy 2013-2015, and supports the NSW Government ICT Strategy Digital+ to ensure a coordinated Government approach to operating within a digital world.

Source: <u>http://www.spatialsource.com.au/2015/09/22/nsw-seeks-feedback-on-location-intelligence-plan/</u>

Accessing Queensland's soil information - an open data revolution!

Author(s): Kelly Bryant, Lauren O'Brien and Daniel Brough IOP Conference Series: Earth and Environmental Science, Volume 25, conference 1

Abstract: The Queensland government is the custodian of soil and land resource information with an estimated value of \$75 million. The Soil and Land Information (SALI) system houses this data from over 600 distinct studies with some 96,000 soil observations dating back to the 1940s. This data is now not only used by government but by universities, councils, landowners, consultants and schools. Providing this information to the public in an easy and accessible way, with a focus towards online delivery is crucial. Previous issues with distribution of online soils information in Queensland have stemmed not only from limits to technology but also, changing departmental structures and multiple websites. The department which manages soils information in Queensland has undergone nine name changes in the last 12 years due to Machinery of Government (MoG) restructures. This constantly changing web presence and branding is as confusing for people sourcing soils information as it is for those providing it.

The Queensland government has now moved to a whole of government online environment. This is a single website with no reference to the convoluted structures within government or department names. The aim is to prevent impacts from future MoG changes on the provision of data and information to the public. Queensland government soils now has a single dedicated website (<u>http://qld.gov.au/environment/land/soil</u>) which has allowed us to start to build a repository for soils information and is a single portal for people to access soils data. It has been demonstrated that this consistent approach to websites improves trust and confidence of users [1] and from this, confidence in using Queensland soils information and data and ultimately better land management decisions.

Source: <u>http://iopscience.iop.org/article/10.1088/1755-</u> 1315/25/1/012022/meta;jsessionid=E7F901F27E2F0C1DAD93CFA2CF455946.c1#artAbst

New Zealand: Improved bathymetry to grow NZ's marine economy



Improving bathymetric data - information about the depth of the ocean floor - could have benefits for New Zealand's marine economy, a Land Information New Zeland (LINZ) investigation has revealed. "A number of industries depend on bathymetric data, such as shipping and fishing. It's used to show safe passage for ships in nautical charts, and areas that are likely to hold fish stocks," says LINZ Technical Leader Ed Griffin. "We've done a stocktake of the data held and looked at whether there's opportunity for greater sharing and coordination between all the organisations that produce this data. "We've found that while there's a lot of data being gathered by a range of organisations such as regional councils and lines companies, there are still some gaps in the areas covered and there's duplication as different organisations collect data for the same regions. "There's an opportunity for groups to work together to coordinate who gathers what to prevent double ups and to save costs. There's also potential for data collected by government organisations to be made publicly available so others can get the benefits from it."

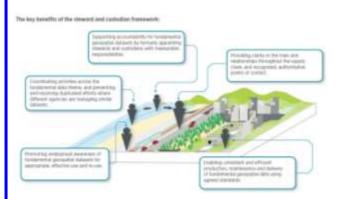
LINZ will now be working with others involved in bathymetry to further investigate the potential for coordination. LINZ will also look at the steps it can take to make this



information more accessible to industry and the public. "Taking these steps can mean a significant return on investment in bathymetric data. We hope these results will also encourage others to look at how they can improve the way they gather and share bathymetric data." Read the report on the LINZ website. New Zealand Bathymetry Investigation October 2015 http://www.linz.govt.nz/about-linz/what-were-doing/projects/new-zealand-bathymetry-investigation

Source: http://www.linz.govt.nz/news/2015-10/improved-bathymetry-grow-nz%E2%80%99s-marine-economy

New Zealand: Geospatial steward and custodian framework for fundamental geospatial datasets



The New Zealand Geospatial Office (NZGO) has established the steward and custodian framework to help New Zealand gain the greatest benefits from its valuable fundamental geospatial data. The framework establishes the different roles and responsibilities as a way to ensure that data is managed effectively and that governance structures are in place.

Delivering high quality, easily discoverable, accessible, and readily available fundamental geospatial datasets requires a governance framework that clearly defines roles and responsibilities.

Fundamental Data Guidance Series #02 Spatial Data Infrastructure: Steward and custodian framework for New Zealand fundamental geospatial themes and datasets: <u>http://www.linz.govt.nz/system/files_force/media/pages-attachments/Steward%20and%20custodian%20framework_0.pdf?download=1&download=1</u>

Source: <u>http://www.linz.govt.nz/about-linz/our-location-strategy/geospatial-steward-and-custodian-framework</u>

Pacific: Updated Agenda on GIS & RS Conference website, 16-19 November 2015, Suva, Fiji



An updated agenda is available at the Pacific GIS & RS User Conference website, <u>http://gsd.spc.int/gisconference/index.php/agenda-2015</u>. Last year, over 300 GIS & Remote Sensing professionals attended from across the globe, and this year the conference expected to be bigger and better. The conference is being held 16-19 November 2015 in Suva, Fiji.

Source: GIS-PacNet, http://mailman.apnic.net/mailman/listinfo/gis-pacnet

Documents available from 20th UNRCC-AP & 4th UN-GGIM-AP held in October in Korea



The 20th United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP, <u>http://www.unrcc-ap2015.org/</u>) and the 4th United

Nations Global Geospatial Information Management for Asia and the Pacific(UN-GGIM-AP) was held from 5 to 10 October 2015 in Jeju, the Republic of Korea. Documents & presentations from the event are available, including :

- Canterbury SDI: lessons learned from post-earthquake recovery
- Upgrade the Datasets in NSDI for Smarter Services with the Cases of China
- Renovation of the National Geospatial Dataset in Republic of Korea
- Mongolian NSDI development
- The Australia New Zealand Foundation Spatial Data Framework: an SDI for the 21st Century
- Plan on establishment of National Committee Geographical Name and Spatial Data Infrastructure in Viet Nam

Source: http://unstats.un.org/unsd/geoinfo/RCC/unrccap20.html

Europe Region SDI News

France: Climate Change Challenge (C3), 6-8 November 2015





C3, the Tour de France of open innovation challenges, is designed to mobilize open data and the collective intelligence of citizens, public and private stakeholders, experts, and students to imagine solutions to the awareness, prevention, combating and adapting to climate change. C3 aims to encourage and structure cooperation between producers of

information and expertise and data users. One of the C3 challenge themes (<u>http://c3challenge.com/challenges/</u>) is *Access to Information*:

- How to encourage the provision of personal data to create a database?
- How to characterize and qualify the reliability of available data?
- How to facilitate the transmission and understanding data?

See guidelines (in French): <u>http://c3challenge.com/wp-</u> content/uploads/2015/10/C3-Dossier-DEFIS.pdf

Source: http://c3challenge.com/



COMMENT INCITER & LA MINE & DISPOSITION DE DOSMÉES PERSONNELLES POUR CREEK UNE BASE DE DEINNÉES COMMUNE ? COMMENT CARACTERISER EVIDALIFIER CA FLABILITE DES DONMETS DISPONIBLES ? ALLALA, UNIONNATION COMMENT FACILITER LA TRANSMISSION ET LA COMPRÉNENSION DES DOMRÉEET LUISE ECONTRANSMISS

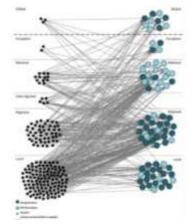
France: Spatial data infrastructures: what contribution to French integrated management of coastal areas?

Author(s): Jade Georis-Creuseveau, Françoise Gourmelon and Christophe Claramunt Infrastructures de données géographiques : quelle contribution à la Gestion intégrée des zones côtières françaises? *VertigO*, Volume 15, Number 1 (May 2015)

Abstract: Spatial Data Infrastructures (SDI) have been implemented over the last twenty years in particular to contribute to environmental policy by improving geographical information access and sharing processes. This article focuses on French SDI and their contribution to Integrated Coastal Zone Management (ICZM), a complex form of territorial

governance for which the collection and sharing of geographic information have been identified, since the 2000s, as a major component on which to found coastal and marine public policies. Based on an online survey and on statistical, structural and thematic analyses of qualitative data, the study gathers the various points of view of public users and producers of geographical information. Public bodies working for coastal zone (government service, local authority, public institution...) are specially targeted. The analyses of responses provide three types of results: the profile of the respondents, the SDIs involved in the management of French coastal zones, and their contribution to ICZM. A user's typology of French coastal SDIs is also proposed.

Keywords :Spatial Data Infrastructure (SDI), Integrated Coastal Zones Management (ICZM), usage, online survey, qualitative data, statistical analysis, structural analysis, thematic analysis



Source: <u>https://vertigo.revues.org/15857</u>

UK: Wales LIDAR data will be free to download



feel free to contribute constructive feedback.

LIDAR will change from licensed data to open data on Monday 2 November 2015. It will be free to download from Lle (Goeportal for Wales), <u>http://naturalresources.wales/lidar?lang=en</u>

The Lle Geo-Portal has been developed as a partnership between Welsh Government and Natural Resources Wales. Lle serves as a hub for data and information covering a wide spectrum of topics, but primarily around the environment. The site and supporting services having been developed over the past few months and are currently in beta. Take a look at the current roadmap for the site and Source: http://lle.wales.gov.uk/home

UK: Mapping policies and programmes: the use of GIS to communicate spatial relationships in England



Author(s): Cecilia Wong, Mark Baker, Brian Webb, Stephen Hincks, Andreas Schulze-Baing

Environment and Planning B: Planning and Design, advance online publication

Abstract: It has long been acknowledged that there is a gap between the advancement of GIS in the research field and its application in planning practice. This paper demonstrates the potential for employing simple GIS mapping overlays as a way of communicating complex planning issues in a 'language' that is easily understandable and effective at stimulating policy debate, critical thinking, and learning. The analysis focuses on capturing the synergies and conflicts in two key planning challenges in England, progrowth and housing delivery agendas. In a political context where spatial evidencebased policy making has been eroded in recent years, the analysis demonstrates the need for policy makers to 'think spatially, act spatially' when developing different policies and programmes. The paper concludes that only by making spatial relationships of policies and programmes explicit in a manner that is easily understood by a range of actors, can different spatial scenarios and metaphors of future opportunities and challenges be developed to inform long-range development and planning.

Keywords: spatial planning, policy coordination, monitoring, GIS mapping

Source: http://www.envplan.com/abstract.cgi?id=b130099p

Quality evaluation of OSM with authoritative data — a study of land use in southern Germany

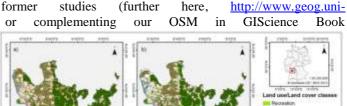
Dorn H., Törnros T., Zipf A. (2015): Quality Evaluation of VGI Using Authoritative Data—A Comparison with Land Use Data in Southern Germany. ISPRS International Journal of Geo-Information 4(3):1657-1671 (2015)

Volunteered Geographic Information (VGI) such as data derived from the OpenStreetMap (OSM) project is a popular data source for freely available geographic data. There is frequently a cause of concern regarding the quality and usability

former

addition such data. In of to our heidelberg.de/gis/publikationen conference en.html) (http://www.springer.com/us/book/9783319142791) in a new study (http://www.mdpi.com/2220-9964/4/3/1657/htm), the quality of OSM land use and land cover (LULC) data is investigated for an area in southern Germany in comparison to an authorative data set.

Two spatial data quality elements, thematic accuracy and completeness are addressed by comparing the OSM data with an authoritative German reference dataset. The results show that the kappa value indicates a substantial agreement between the OSM



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and the authoritative dataset. Nonetheless, for our study region, there are clear variations between the LULC classes. Forest covers a large area and shows both a high OSM completeness (97.6%) and correctness (95.1%). In contrast, farmland also covers a large area, but for this class OSM shows a low completeness value (45.9%) due to unmapped areas. Additionally, the results indicate that a high population density, as present in urbanized areas, seems to denote a higher strength of agreement between OSM and the DLM (Digital Landscape Model). However, a low population density does not necessarily imply a low strength of agreement.

Source: http://k1z.blog.uni-heidelberg.de/2015/09/04/quality-evaluation-of-osm-with-authoritative-data-%E2%80%94-a-study-ofland-use-in-southern-germany/

Netherlands: Presentations from Geo Users Festival available at Geonovum website

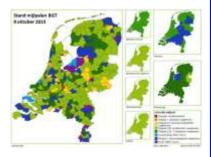


In recent years, a lot of geo-government information became available. The information is common to all free to make use of it. But how do you do that and what you do with it? And what can be done and where can you find it? These are questions that were central to the first **GEONOVUM** Geo Users Festival, which took place in October. Participants from industry and government came together in this inspiring place to study and meet. Presentations from the Festival are available online.

Source: http://www.geonovum.nl/onderwerpen/bgt-imgeo-standaarden/nieuws/een-festival-voor-gebruik

Netherlands: Large Scale Topography (BGT) Registry

On January 1, 2016 the Large Scale Topography (BGT) Act comes into force. The Large Scale Topography Registry will become the most detailed large-scale digital map of the Netherlands. All physical objects such as buildings, roads, water and green are captured here in unambiguous. With the BGT, the Netherlands will soon speak with one geographic language. More information about the BGT, the law and the introduction BGT can be found on the website of the Programme Office of the Ministry of Infrastructure and Environment.



Source: https://bgtweb.pleio.nl/

Participation in flood risk management and the potential of citizen observatories: A governance analysis (comparative analysis of the UK, the Netherlands and Italy)



Author(s): Uta Wehn, Maria Rusca, Jaap Evers, Vitavesca Lanfranchi Environmental Science & Policy, Volume 48, April 2015, Pages 225–236

Abstract: The implementation of the European Flood Directive 2007/60/EC requires the establishment of public participation mechanisms to ensure citizens' involvement in the flood management cycle. This raises questions on how to achieve this goal and successfully translate the directive into meaningful and effective participation. Innovative means, such as citizen observatories enabled by information and communication technologies, have the potential to provide citizens with a substantially new role in decision-making. In this paper, we present a framework developed for analysing the potential for participation via ICT-enabled citizen

observatories and undertake a comparative analysis of the UK, the Netherlands and Italy. Expository and qualitative research was undertaken in the three case study areas, with the aim of identifying and comparing the transposition of the EU Flood directive and the mechanisms in place for citizens' participation during different phases of the disaster cycle (prevention, preparedness, response, and recovery). Our analysis of the transposition of legal obligations for citizen participation shows that implementation is limited when examining both the respective roles and types of interactions between citizen and authorities and the impact of citizen participation on decision-making. Different authorities have differing perceptions of citizen participation in flood risk management in terms of their roles and influence. Our results also indicate that these perceptions are related to the importance that the authorities place on the different stages of the disaster cycle. This understanding is crucial for identifying the potential of citizen observatories to foster greater citizen engagement and participation.

Keywords: Flood risk management; Participation; Innovation; Decision-making; Citizen observatory; Water governance

Source: http://www.sciencedirect.com/science/article/pii/S1462901114002457

Armenia: An interoperable cloud-based scientific Gateway for NDVI time series analysis



Author(s): Hrachya Astsatryan, Andranik Hayrapetyan, Wahi Narsisian, Shushanik Asmaryan, Armen Saghatelyan, Vahagn Muradyan, Gregory Giuliani, Yaniss Guigoz, Nicolas Ray *Computer Standards & Interfaces* 41 (September 2015): 79–84 [not an open access journal]

Abstract: Processing of high-resolution time series satellite images typically requires a large amount of computational resources and time. We introduce here a scientific gateway for computing the Normalized Difference Vegetation Index (NDVI) time series data. Based on a distributed workflow using the Web Processing Service (WPS) standard, the gateway aims to be completely interoperable with other standardized tools. The availability of this gateway may help researchers to acquire knowledge of land cover changes more efficiently over very large spatial

and temporal extents, which is especially important in the context of Armenia for which timely decision-making is needed.

Keywords: NDVI; Cloud; Geoprocessing; PyWPS; GRASS GIS

Source: <u>https://www.researchgate.net/publication/272748111_An_Interoperable_Cloud-</u> based_Scientific_Gateway_for_NDVI_Time_Series_Analysis; <u>http://www.sciencedirect.com/science/article/pii/S0920548915000173</u>

Ukraine: SDI pilot launched with support of \$3 million grant from Japan



The State Agency for Land Resources of Likraine

Japan International Cooperation Agency (JICA) will provide \$3 million to realize a pilot project as part of the creation of the national infrastructure for geospatial data in Ukraine. During a joint seminar held in October in Kyiv by JICA and the State

Service of Ukraine for Geodesy, Cartography and Cadastre (<u>http://land.gov.ua/en/the-state-agensy-for-land-resources-of-ukraine.html</u>), Deputy Head of Diplomatic Mission and Advisor to Embassy of Japan to Ukraine Hiromi Nakano said that the pilot project which was launched by JICA in September 2015 will be finished in August 2017. Head of the State Service of Ukraine for Geodesy, Cartography and Cadastre Maksym Martyniuk said that the pilot project is considered as a preparatory stage to create the database for processing geospatial information in Ukraine. The project will cover geospatial data of territories of around 900 square meters.

Source: http://en.interfax.com.ua/news/economic/295525.html; http://www.jica.go.jp/project/ukraine/001/outline/index.html

Ukraine: Cabinet of Ministers open access to information about land owners & property of civil servants

On September 30, the Ukrainian Government adopted certain decisions with respect to providing access to land and property registries. In particular, a directive was approved to enable citizens of Ukraine to freely surf, copy and print information about the subjects of proprietary rights listed in the State Service of Ukraine for Geodesy, Cartography and Cadastre (SSGCC, <u>http://land.gov.ua/en/the-state-agensy-for-land-resources-of-ukraine.html</u>). This decision, government officials assure, should ensure the legitimate rights and interests of citizens to obtain information.

In addition, the Ministry of Justice is to expand access to the registries it operates. Ukrainian citizens will have an ability to get information concerning relevant property by person's name and this initiative is particularly aimed at disclosing data about the property in possession of public servants. "Each citizen will have a chance to find out about the property in ownership of civil servants. It is a good anti-corruption control. At the same time, it is a sign of transparency and openness of the current government and the fact that we are open to dialogue with civil society", the Government officials emphasize.

Source: http://www.kmu.gov.ua/control/en/publish/article?art_id=248521430&cat_id=244314975

OpenGIS Conference, Moscow, Russia, 21-22 November, 2015



The OpenGIS Conference in Russia is grassroots and organized by members of Russian GIS-Lab and OpenStreetMap communities. Attendance and workshops are free. The first OpenGIS conference took place in 2012 and brought together a diverse crowd of 250 people from 150 organizations. This year, the same numbers or more are expected. Registration: <u>http://gisconf.ru/profile</u> (in Russian, if you don't speak it, simply send short information about yourself to <u>info@gisconf.ru</u>).

Source: http://www.osgeo.org/node/1634

Spain: Detailed program available for JIIDE2015, 4-6 November 2015, Seville



Ya está disponible el programa detallado de las VI Jornadas Ibéricas de Infraestructuras de Datos Espaciales (JIIDE 2015, <u>http://www.jiide.org</u>).

Fuente: http://www.jiide.org/c/document_library/get_file?uuid=650d1107-9d44-4a3b-8c63-77b5d904ac4e&groupId=10157

4th International Open Data Conference (IODC 2016), 6-7 October 2016, Madrid, Spain

IODC 2016

The proactive approach adopted by the Spanish Government regarding open data has placed Spain in an international advanced position and we will be honoured to contribute to the global open data community organizing the 4th International Open Data Conference in

Madrid, on the 6th and 7th of October 2016. We will be willing to highlight the value and potential benefits of open data for the citizens, the civil society organizations and all the economies, putting this particularly in connection with relevant initiatives like the "Open/Smart cities".

Source: http://www.iodc2016.es/

XI International Congress of Geomatics and Earth Sciences 2016 (TOPCART 2016) 26-30 October 2016, Toledo, Spain



The XI International Congress of Geomatics and Earth Sciences 2016 will take place 26-30 October 2016.

The main objective of the event is to present scientific and technical progress in surveying, mapping and other related sciences. The event will bring together many personalities from Latin America and Spain in all areas related to Earth Sciences. Ample room for technological and trade show, where the advantages and disadvantages of the application of the new procedures will be discussed through proven techniques and active coexistence among different business and professional sectors opens. In addition, you can enjoy sharing experiences with presentations by leading experts of Congress attendee countries.

In collaboration with the National Geographic Institute (IGN), Iberian Day Data Infrastructures will be held (JIIDE); the organizers also seek to match the event with a General Assembly of CLGE (Council of European Geodetic Surveyors) and an Assembly of the APPA (Pan American Association of Professional Land Surveying).

Source: <u>http://www.topcart2016.com/</u>; <u>http://www.coit-topografia.es/VerNoticias.aspx?Cod=1604</u>

International Workshop on Risk Information Management, Risk Models, and Applications 27-29 June 2016, Berlin, Germany

Organized by CODATA-Germany, the German National Committee for the ICSU Committee on Data for Science and Technology

Source: <u>http://rimma2016.net/index.shtml</u>

GEOValue Workshop, 10-11 March 2016, OECD, Paris, France Data to Decisions: Valuing the Societal Benefit of Geospatial Information

The workshop "Data to Decisions: Valuing the Societal Benefit of Geospatial information", organized by the GEOValue community (formerly socioeconomic benefits community) in collaboration with OECD, NASA and USGS, is scheduled for March 10 and 11, 2016 at OECD in Paris. The workshop objectives center on defining case studies and use cases that assess value by tracing the information flow end-to-end from geospatial data acquisition system to decisions by end users. The goal is to demonstrate and compare approaches to valuation of geospatial information and forge a path forward for research. Selected societal impact focus areas include disasters (focusing on resilience to natural disasters, and extreme events), and ecosystems (highlighting the land-water-energy nexus). Workshop outcomes are, in part, focused on establishing standard practices in the field. Abstract submittal for the workshop is open until November 15, 2015. Announcement: http://www.socioeconomicbenefits.org/wp-content/uploads/2015/08/2016-Workshop-Announcement-GEOValue.pptx.pdf

Call for abstracts: <u>http://www.socioeconomicbenefits.org/wp-content/uploads/2015/08/Call-for-Abstracts-GEOValue.pdf</u>

Source: <u>http://www.socioeconomicbenefits.org</u>

Latin America & the Caribbean Region SDI News

Haiti: Strengthening Hydro-Meteorological Services Project

The objective of the project is to strengthen the Haiti's institutional capacity to provide hydro-meteorological and climate information services

Over the past decade externally-funded projects have supported a proliferation of different hydro-meteorological observation networks in Haiti. These investments were often carried out in a piecemeal rather than an integrated fashion but lacked long-term institutional development and a focus on service delivery to end-users. A recently published World Bank report, which evaluated hydromet projects carried out over the past 30 years, highlighted that in order to be fully transformational, investments must weave these three components together.

The recently approved "Strengthening Hydro-meteorological Services" project builds on lessons learned in previous projects and adapts them to the Haitian context. Financed by the Climate Investment Funds, a \$5 million investment has been made to focus on supporting the institutional reform of hydromet services. By creating a national open-data platform, the project aims to give decision makers and the public access to information services. In addition, improvement on the



delivery of weather information and early warning systems will focus on farmers and civil protection committees. These parties are crucial to the development of innovative data-based applications for modelling and improved anticipation of the impact of hydro-meteorological events and climate change.

Source: <u>http://www.worldbank.org/projects/P148259?lang=en;</u> <u>https://www.gfdrr.org/reducing-disaster-risk-through-hydromet-technology-haiti</u>

Caribbean: 23rd Meeting of the Special Committee for Disaster Risk Reduction



The Association of Caribbean States (ACS) through its Directorate of Disaster Risk Reduction convened the 23rd Meeting of the Special Committee for Disaster Risk Reduction on 9th October 2015 at the ACS Secretariat in Port of Spain. The Meeting included a presentation on the report "Strengthening Hydrometeorological Operations and Services in the Caribbean Small Island Developing States Phase II (SHOCS II, http://www.acs-aec.org/sites/default/files/shocs ii 4.pdf)," as well as a report on the advances made regarding the United Nations Committee of Experts on Global Geospatial

Information Management Initiative (UN-GGIM Initiative, <u>http://www.cp-idea.org/</u>). The former is aimed at enhancing the role and strengthening the capacity of National Meteorological and Hydrological Institutions and Disaster Management Agencies in ACS Member States in the provision of early warning services and preparedness to mitigate impacts of natural hazards. The latter seeks to promote the development of Spatial Data Infrastructure in eleven countries in the Caribbean, to strengthen the generation, use and sharing of geospatial information.

A representative from the National Centre for Disaster Prevention (CENAPRED) presented on the achievements and progress made thus far on the "Caribbean Platform of Territorial Information for Disaster Prevention (PITCA) project which intends to establish a platform to provide territorial geospatial information, from national as well as regional sources, with the aim of reducing vulnerability in the region through the analysis of risks, strengthening decision-making for the development of planning policies, design and infrastructure construction, housing, reduction of agriculture vulnerability, among other strategic sectors.

Source: <u>http://sxmislandtime.com/component/k2/34411-23rd-meeting-of-the-special-committee-for-disaster-risk-reduction.html</u>

Colombia: Noti-IDECA - Ultimas noticias en la gestión de información geográfica en Bogotá



Noti-IDECA is a dissemination channel, to communicate actions of the Distrito Capital's SDI effort to realize best practices regarding the management of spatial information disseminated and also report on related projects that are conducted in benefit of the City.

Source: <u>http://www.ideca.gov.co/index.php?q=es/content/noti-ideca-ultimas-</u> noticias-en-la-gesti%C3%B3n-de-informaci%C3%B3n-geogr%C3%A1fica-enbogot%C3%A1

Colombia: Updated Bogota web mapping portal

PortaldeMapas invites all users to provide input on features or services they would like to find in the Portal. Currently, this web mapping tool, built day by day to meet the geographic information needs of citizens, has seven essential information features. Access to the website of Bogota maps is done through Internet at http://mapas.bogota.gov.co. This is aimed at all types of users: ordinary citizens, businesses, government agencies, private organizations, curators, notaries,



developers, investors, researchers, tourists, etc. Through the new portal, various levels of information are arranged, provided by the National Police (Security Quadrants) District Institute for Recreation and Sport (parks, bicycle paths and Recreovías), Department of Environment (Water Quality), District Department of Health (health institutions, Basic Care Units, Primary Care Units and Hospitals First and Second Order) and District Department of Education (Basic Education, Primary and Secondary official and private).

Source: <u>http://www.ideca.gov.co/index.php?q=es/content/7-datos-que-debe-saber-del-portaldemapas-de-bogot%C3%A1</u>

Colombia: El geoportal del Servicio Geológico Colombiano

El geoportal del Servicio Geológico (<u>http://geoportal.sgc.gov.co</u>) tiene como finalidad presentar a los usuarios la información generada por las Direcciones de Geociencias Básicas, Recursos Minerales, Geoamenazas, Asuntos

Nucleares, Laboratorios y Gestión de Información Geo científica, en cumplimiento a la Ley 1712 de 2014 "Ley de transparencia y el derecho de acceso a la información Pública" y de acuerdo a los artículos 10 literal J y K, artículo 12, artículo 13 y artículo 14.

Es una herramienta clave en el fortalecimiento de la Infraestructura de Datos Espaciales del Sector Minero Energético y de la Infraestructura Colombiana de Datos Espaciales ICDE, también comparte sus servicios web en el Portal Geográfico Nacional; dentro de la información dispuesta hay temáticas como la geológica, geofísica, geoquímica, geomorfodinámica y de amenazas, también se pueden observar los servicios del nuevo Atlas y Mapa Geológico de Colombia Versiones 2015.

La información está almacenada en una geodatabase corporativa gestionada por el motor de base de datos Oracle, herramientas de la Suite de ESRI y aplicaciones web personalizadas utilizando Geoportal Server de ESRI (Software Open Source). Mediante esta plataforma se administra la información de manera dinámica, y está dispuesta al usuario en línea. Así mismo, se cumple con estándares de código abierto (open source) como WMS (Web Map Service), WFS (Web Feature Service), WCS (Web Coverage Service) y servicios REST (Representational State Transfer).

English summary: Colombian Geological Survey geoportal

The Geological Survey geoportal (http://geoportal.sgc.gov.co) aims to present users with the information generated by the addresses: Basic Geoscience, Mineral Resources, Geohazard, Nuclear Affairs, laboratories and scientific Geo Information Management, in compliance with Law 1712 of 2014 "Law on transparency and the right of access to public information" and in accordance with Articles 10 literal J and K, Article 12, Article 13 and Article 14.

It is a key tool in strengthening Spatial Data Infrastructure Energy and Mining Sector of the Colombian Spatial Data Infrastructure ICDE also shares its web services on the National Geographic Portal; within the information provided there issues such as geological, geophysical,



geochemical, geomorpholocal and threats, you can also see the new Atlas services and Geological Map of Colombia Versions 2015.

The information is stored in an enterprise geodatabase managed by the database engine Oracle tools ESRI suite and web applications customized using ESRI Geoportal Server (Open Source Software). Through this platform information dynamically administered and is willing to online user. Likewise, it complies with open standards (open source) and WMS (Web Map Service) and WFS (Web Feature Service), WCS (Web Coverage Service) services and REST (Representational State Transfer).

Source: http://www.ideca.gov.co/index.php?q=es/content/conozca-el-geoportal-del-servicio-geol%C3%B3gico-colombiano-0

Ecuador: Jornadas en Infraestructura de Datos Espaciales – JIDEC



CEDIA, en conjunto con la Universidad de Cuenca, Escuela Politécnica del Chimborazo, Escuela Politécnica del Litoral, Universidad Autónoma de los Andes, Escuela Politécnica del Ejercito y Universidad Técnica Particular de Loja organizan las primeras Jornadas de Infraestructura de Datos Espaciales JIDEC 2015, las mismas que se desarrollarán en la

ciudad de Loja - Ecuador, el 3 de diciembre de 2015.

Objectivos: Este importante evento internacional será un espacio para la presentación de artículos, tutoriales y una exposición de posters, creando un ambiente propicio entre investigadores, docentes, profesionales y estudiantes con el fin de socializar y compartir experiencias e investigaciones en temáticas relacionadas a las Infraestructuras de Datos Espaciales. El prestigioso Comité del Evento le invita a formar parte del grupo de autores selectos y presentar trabajos originales que aporten a la investigación y experiencia a nivel nacional e internacional dentro de esta temática.

Areas Temáticas: De acuerdo a la siguiente lista, podrán ser incluidos los tópicos relacionados a la Infraestructura de Datos Espaciales que los autores consideren relevantes para las Jornadas Nacionales.

- Normativas y Políticas aplicadas al IDE
- Buenas Prácticas en IDE
- Innovación, utilidad y servicios de IDEs

- Casos de éxito de IDEs. en el gobierno
- Investigación, desarrollo e inovación en IDE

Curso previo a las Jornadas: Infraestructura de Datos Espaciales, 'Integración y accesso estándar a datos espaciotemporales' <u>http://ticec.cedia.org.ec/curso-ide</u> - Adicional a las Jornadas de Infraestructura de datos espaciales, quien se inscriba a las jornadas podrá asistir al Curso de IDE. El mismo que se desarrollará como una actividad adicional a las jornadas. El curso se desarrollará en la Facultad de Ingeniería - Universidad de Cuenca, en las fechas del 23 al 27 de noviembre.

English summary: Conference on Spatial Data Infrastructure - JIDEC

CEDIA, in conjunction with the University of Cuenca, Chimborazo Polytechnic School, Polytechnic School of the Coast, University of the Andes, Army Polytechnic School and Private Technical University of Loja organized the first conference on Spatial Data Infrastructure JIDEC 2015, the same to be held in the city of Loja - Ecuador, December 3, 2015.

Goals: This major international event will be a forum for the presentation of articles, tutorials and an exhibition of posters, creating an enabling environment between researchers, teachers, professionals and students in order to socialize and share experiences and research on topics related to Data Infrastructures Space. The prestigious event committee invites you to join the select group of authors and present original works that contribute to the research and experience at national and international level in this field.

Thematic areas: Topics related to spatial data infrastructure that the authors deem relevant to the National Conference they may be included:

- Regulations and policies applied to IDE
- IDE best practices
- Innovation, utility and services IDEs
- IDE success stories in government
- IDE Research, development and innovation

Pre-event course: Spatial Data Infrastructure, 'Integration and standard access to spatial-temporal information' <u>http://ticec.cedia.org.ec/curso-ide</u> - In addition to the Days of spatial data infrastructure, those who can register can attend the conference IDE course. The course is being developed as an additional activity to the conference. The course will be held at the Faculty of Engineering - University of Cuenca, in the dates from 23 to 27 November.

Fuente: <u>http://ticec.cedia.org.ec/jidec</u>

Ecuador: Análisis e implementación de una Infraestructura de Datos Espaciales (IDE) Caso de estudio: Gobierno autónomo descentralizado municipal del cantón Guachapala



Autoro(s): Jaime Veintimilla-Reyes, Franklin Avila Larrea *Revista Techologica Escuela Superior Politecnica del Litoral (ESPOL)*, Vol. 28, núm. 2, 79-99 (Septiembre 2015)

Resumen: Este artículo pretende constituirse en herramienta para todas aquellas personas que desean incursionar en el campo de las infraestructuras de datos espaciales (IDE) ya que en él se indica paso a paso todos los componentes necesarios para la instalación y puesta en marcha de una IDE, así como también las diferentes formas con las que se puede realizar una correcta configuración de cada una de sus partes.

El equipo técnico de la Municipalidad de Guachapala

ha trabajado sistem´aticamente en la generación de información geoespacial representado en los diferentes mapas que conforman el Plan de Desarrollo y Ordenamiento Territorial; la misma que se constituye en información muy importante que no puede terminar almacenada en una PC al alcance de pocos, por el contrario la intención de este proyecto es ponerla a disposición de toda la ciudadanía y la mejor forma de hacerlo es a través de una IDE respetando las normas y



estándares a nivel internacional vigentes para la información geográfica, la misma que proporciona al usuario una amplia gama de herramientas principalmente para la visualización, consulta y descarga de Información Geográfica de una manera

más rápida, efectiva y en el momento que lo requiera.

Para el desarrollo del presente caso de estudio se utilizó en su totalidad software libre, ya que se tiene libertad para usarlo para cualquier propósito y sin restricciones; cada día las tecnologías libres juegan un papel fundamental en la construcción de las IDE, superando en implantación en muchos casos a tecnologías privativas. Si en las IDE se habla de compartir datos, con todas las ventajas que ello conlleva, con el software libre se habla de compartir tecnología.

Palabras clave: IDE, SIG, GIS

Fuente: http://learningobjects2006.espol.edu.ec/index.php/tecnologica/article/view/353

Peru: Gobiernos regionales amazónicos acuerdan garantizar la sostenibilidad de la Infraestructura de Datos Espaciales de las Regiones



En histórico acto llevado a cabo en el auditorio de la Marina de Guerra Perú, los representantes de las regiones de Amazonas, Madre de Dios, Ucayali, Huánuco y Loreto, se dieron cita con la finalidad de elaborar la hoja de ruta de construcción de la Infraestructura de Datos Espaciales de las Regiones Amazónicas, como corolario del primer evento internacional sobre la materia, llevada a cabo en la víspera en la sede del Colegio de Ingenieros de Loreto.

En esta actividad, participó el presidente de la región Loreto, Lic. Fernando Meléndez Celis, en su calidad de titular del Consejo Interregional Amazónico (CIAM). Con su presencia respaldó personalmente los acuerdos tomados en

este cónclave internacional y firmó el Acta de Acuerdos, donde se especifica que se trabajará en tres objetivos: Garantizar la sostenibilidad de la Infraestructura de Datos Espaciales de las Regiones Amazónicas; Mejorar la toma de decisiones y Democratizar la información.

El Gobierno Regional de Ucayali cuenta con un Geoportal de mapas interactivos www.regionucayali.gob.pe donde los ciudadanos puede ingresar, explorar y descargar información geográfica regional como centros poblados, carreteras, límites, que interactúa con imágenes satélite, entre otros. Asimismo, la IDE del GOREU tiene el debido marco institucional implementado, documentos técnicos de estándares de datos geográficos, mapas y otras informaciones que son libremente descargadas a través de nuestro Geoportal IDE.

English summary: Amazon regional governments agree to ensure the sustainability of the Spatial Data Infrastructure of the Regions

Representatives of the regions of Amazonas, Madre de Dios, Ucayali, Huanuco and Loreto, gathered in order to develop the roadmap building Spatial Data Infrastructure of the Amazon region. They signed an Agreement Act which specifies that work on three objectives: Ensuring the sustainability of the Spatial Data Infrastructure of the Amazon regions; Improve decision-making; and democratize information.

The Regional Government of Ucayali has a portal to interactive maps (<u>http://www.regionucayali.gob.pe</u>) where citizens can access, browse and download information such as geographic regional population centers, roads limits, which interacts with satellite images, among others. Also, the IDE GOREU have due implemented institutional framework, technical standards documents geographic data, maps and other information that are freely downloaded through our Geoportal IDE.

Fuente: <u>http://diariolaregion.com/web/gobiernos-regionales-amazonicos-acuerdan-garantizar-la-sostenibilidad-de-la-infraestructura-de-datos-espaciales-de-las-regiones/; <u>http://www.regionucayali.gob.pe/prensa/</u></u>

Bolivia: Scope of the 9th meeting of the Interagency Committee on IDE-EPB



On Friday 23 October the ninth meeting of the Interagency Committee was held Spatial Data Infrastructure if the Plurinational State of Bolivia (IDE-EPB, <u>http://ideepb.geo.gob.bo/</u>) in the hall of the Vice President, in which representatives of more than 60 state institutions met. The

Committee began with the presentation of the progress of the Inter-Agency Committee (CIIDEEPB), working groups then presented the work done and the motions were evaluated, approving two resolutions by consensus of the corresponding Committee: Structure of Geographic Objects Catalogue IDE-EPB and technical services for web display geographic information requirements. In Part 3 presentations were made from different institutions, the first conducted by the Ministry of Lands who presented their node called GeoSUNIT, available at: http://geosunit.vicetierras.gob.bo/. Then the Food Production Program and Restitution of Forests - PPARB made a presentation on its experience in the use of unmanned equipment. Finally the Military Geographical Institute, made the presentation of the new version 1.0 of

Bolivia Map Scale 1: 1,000,000, which will be free downloads to users.

Noteworthy is the initiative of the Vice Ministry of Water Resources, who made an invitation to the *I^a Conferencia Nacional de Especialistas en SIG y Teledetection aplicado a cuencas y hydricos*, 18-20 Noviembre 2015; inscriptions are available at: <u>http://geosirh.riegobolivia.org/</u>

Source: <u>http://geo.gob.bo/?Alcances-de-la-9na-reunion-del-Comite-Interinstitucional-de-la-IDE-EPB</u>

Chile: Seminario Internacional "Información Territorial para la Gestión Pública y el Acceso Ciudadano"



Se encuentran disponibles para la descarga las presentaciones efectuadas por expertos nacionales y extranjeros en el Seminario Internacional "Información Territorial para la Gestión Pública y el Acceso Ciudadano". Este evento, organizado por el Ministerio de

Bienes Nacionales a través de la Secretaría Ejecutiva del SNIT se realizó el 08 y 09 de septiembre de 2015, para compartir experiencias en el uso de la información geoespacial en diversos ámbitos, con énfasis en la gestión de desastres naturales.

Fuente: http://www.ide.cl/descarga/presentaciones-de-seminarios.html

IPGH Boletín GeoSUR volumen 2, número 9, Septiembre de 2015





Se encuentra disponible para su descarga el Boletín GeoSUR número 9 en español. El boletín tiene noticias de interés para la comunidad geoespacial de las Américas en

español, ingles, y portugués. Todos los boletines estan en http://www.ipgh.org/GeoSUR/boletin.html.

En este número:

• La entrevista del mes con Louis Reymondin, desarrollador y coordinador del proyecto Terra-i. Terra-i: un sistema de alerta temprana para monitorear los cambios del hábitat en América Latina, detecta la pérdida de vegetación natural en tiempo casi real en los diferentes ecosistemas, por lo que se actualiza con nuevos datos de forma continua cada 16 días (http://www.terra-i.org/terra-i/data/data- statistics.html).

• Santiago Borrero, desde la coordinación del Programa GeoSUR, habla sobre el tema de metadatos en el contexto institucional.

• La Secretaría General del Instituto Panamericano de Geografía e Historia (IPGH, <u>http://www.ipgh.org</u>) destaca la estrategia diseñada para la creación de un mapa integrado continental.

Fuente: http://www.ipgh.org/GeoSUR/boletin/GeoSURv2n9_esp.pdf

North America Region SDI News

USA: Government commits to open mapping



The U.S. federal government made a huge commitment to Open Mapping, taking the lead in creative government partnerships with the OpenStreetMap community. The Administration will expand interagency collaboration and coordination with the open mapping community to promote the use of open mapping data in both domestic and international applications.

Specifically, the State Department will continue and expand its public diplomacy program for open mapping, MapGive. Additionally, the Peace Corps will train volunteers to collaborate with their host communities on using and contributing to open mapping platforms. The U.S. Agency for International Development will promote the use of open mapping platforms in its programs and through data creation and youth engagement initiatives like Mapping for Resilience. The Department of the Interior will continue to promote the use of open mapping technologies to manage and share data in interactive map capabilities, including in production of the National Park Service's digital map program's web and mobile products. The U.S. Geological Survey

will also continue crowdsourcing mapping efforts.

Source: <u>https://www.mapbox.com/blog/usg-open-mapping/;</u> <u>https://www.whitehouse.gov/blog/2015/10/27/advancing-open-and-</u> citizen-centered-government

USA: Mapping the country's threatened waterways



A non-profit called the Freshwater Trust has partnered with Google to more efficiently survey the waterways in the United States to support conservation efforts. Freshwater Trust is using Google Trekker, a raft-mounted version of technology used by Google Street View cars, to take photographs of waterways. In addition, it is using sensors to measure oxygen and phosphorous levels, as well as water temperature. The organization analyzes the data it collects along with climate data, land rights information, and soil tests, to recommend where the government should focus its conservation efforts.

Source: Center for Data Innovation, <u>http://www.bloomberg.com/news/articles/2015-10-15/mapping-america-s-disgusting-waterways</u>

USA: An introduction to the Geospatial Interoperability Reference Architecture (GIRA) ISE Blog post by Ivan DeLoatch & David Alexander

Ivan DeLoatch, FGDC Executive Director and David J. Alexander, Director, Geospatial Management Office, DHS and also an FGDC Executive Member authored a guest blog post on the Information Sharing Environment (ISE) website introducing the Geospatial Interoperability Reference Architecture (GIRA).

The Geospatial Interoperability Reference Architecture (GIRA) is a reference architecture aligned with current Federal policy, principles, and practices for Enterprise Architecture and further adds to the authoritative body of knowledge of geospatial architecture documentation. The GIRA is intended to make it easier to share the vast amounts of available geospatial information of potentially great value to national security, public safety, and other programs. It is an unclassified document aimed at audiences of Executive Leaders, Program Managers, and Solution Architects across Federal, State, Local and Territorial governments, and private sector stakeholders and international partners.

Source: <u>https://www.ise.gov/blog/ivan-b-deloatch-and-david-alexander/introduction-geospatial-interoperability-reference</u>

USA: FGDC ISO Implementation Forum/Metadata Working Group webinar: ISO North American Profile Implementation in Canada, 18 November 2015



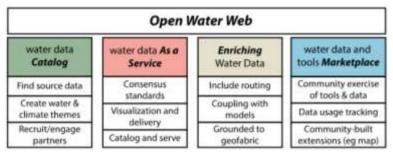
ISO North American Profile implementation is required by Canadian Federal agencies. Learn about efforts and activities underway in webinar scheduled for 18 November 2015.

Implementation of ISO North American Profile in Canada. Presenter: Cindy Mitchell, Natural Resources Canada Date/time: November 18, 2015, 3:00 PM - 4:30 PM (EST) Phone: 703.648.4848 / Toll Free: 855.547.8255; Code: 26246184# Webex: <u>http://usgs.webex.com</u>; Select "(50) FGDC ISO Implementation Forum/Metadata Working Group"

The ISO Metadata Implementation Forum series is intended for the community to share experiences, strategies, topics, and resources related to ISO metadata implementation. The general format will be a webinar that includes a 60 minute presentation by various members of the community, followed by a 30 minute facilitated discussion.

Source: http://www.fgdc.gov/metadata/events/iso-geospatial-metadata-implementation-forum/index_html

USA: Spatial Water Data Subcommittee and the Open Water Data Initiative (OWDI)



Committee Water The Advisory on Information (ACWI) and the Federal Geographic Data Committee (FGDC) created the Subcommittee on Spatial Water Data (SSWD, http://acwi.gov/spatial/) to assist coordination of Federal and non-Federal interests in spatial water data, including (1) facilitating the exchange of information and transfer of data; (2) establishing and implementing standards for quality, content,

and transferability; and (3) coordinating the identification of requirements and the collection of spatial data to minimize duplication of effort where practicable and economical.

The Subcommittee on Spatial Water Data has been leading efforts to engage the community and to design and scope the Open Water Data Initiative (OWDI, <u>http://acwi.gov/spatial/owdi/</u>). The OWDI was launched by the FGDC and the ACWI in the summer of 2014. The goal of the OWDI is to bring currently fragmented water information into a connected, national water data framework by leveraging existing systems, infrastructure and tools to underpin innovation, modeling, data sharing, and solution development.

The Open Water Data Initiative can be envisioned as four primary types of activities contributing to development of an "Open Water Web:" (1) Development of a water data catalog; (2) Serving water data via the Internet in machine-readable formats; (3) Enriching water data through spatial analysis and modeling; and (4) Fostering a community or "marketplace" through which tools, best practices, and data are shared.

The subcommittee is exploring three initial use cases, which help to identify critical data needs, then facilitating and making the needed datasets openly available as web services and downloads. The initial use cases were chosen to cover important societal needs and to address several diverse facets of the water information infrastructure. Additional use cases may be explored in the future.

Source: USGS National Hydrography Dataset Newsletter, Vol. 14, No. 10, August 2015, <u>http://nhd.usgs.gov/newsletters/News_14_10_August.pdf</u>

USA: Daily satellite tracking of harmful algae blooms for the Great Lakes now online

EOMAP launches free, daily monitoring program for harmful algae blooms for the Great Lakes region. Harmful algae blooms threaten drinking water, aquaculture industries and the public welfare. EOMAP also tracks the vast number of

smaller lakes and coastal waters globally using its multi-satellite monitoring system and displays this data on the eoApp® web application. Aside from single, daily products, EOMAP's eoApp®-US also provides spatially and temporally aggregated data: daily means (D'mean) and moving, weekly means (M'mean).

The eoapp monitoring system allows for tracking blue algae blooms and relevant water quality parameters such as chlorophyll and turbidity. Various US and European satellite sensors are imbedded into this first globally



harmonized monitoring system, supporting daily monitoring at continental scales, historical reviews up to 30 years back in time and highest spatial resolutions for ponds, small lakes and rivers.

Source: <u>http://www.eomap.com/daily-satellite-tracking-of-harmful-algae-blooms-for-the-great-lakes-now-online/</u>

Canada: Alberta Data Partnerships: A Public-Private Partnership Approach to SDI



A new brand and long-term agreement with the Provincial Government of Alberta, Canada, will provide more opportunities for Spatial Data Warehouse Ltd. (SDW), AltaLIS, Alberta's geospatial community and all Albertans. Economic, regulatory, legislative and technological changes have presented SDW with new opportunities, and the organisation has recently rebranded itself as 'Alberta Data Partnerships' (ADP,

<u>http://www.abdatapartnerships.ca</u>). ADP's tagline is 'Sustainable Spatial Data for Responsible Development' and a big part of that is its commitment to open data, exploring new business models and stakeholder engagement. 'Responsible development' means regulating, building and operating in Alberta as transparently and efficiently as possible to meet the needs of all stakeholders. Having accurate, affordable and accessible data to support Alberta's industry, government and the public is important to ensure that Albertans achieve the best possible outcomes from the development of the land base.

On 1 November 2014, ADP signed a new long-term mapping data agreement with the Government of Alberta allowing ADP to undertake greater investment in technology with AltaLIS as part of the joint venture. It will also enable ADP to more fully explore other business opportunities with government and private industry.

Source: <u>http://www.gim-international.com/content/article/alberta-data-partnerships-a-public-private-partnership-approach-to-sdi</u>

Canada (Alberta): ADP engages MMM Group Ltd. to conduct International Mapping Review

Spatial Data Warehouse has changed its name to Alberta Data Partnerships to reflect its evolving vision of making Alberta's spatial data more comprehensive and accessible. Following an RFP process, Alberta Data Partnerships Ltd. (ADP) has engaged MMM Group Ltd. to conduct a review of mapping systems, funding models and selected specifications of provinces across Canada and selected international jurisdictions. This will allow ADP to:

- identify gaps in service delivery, our stakeholder engagement process, governance structure and data product specifications;
- identify areas for growth;
- improve our current business practices; and
- provide guidance and benchmarks in certain areas to meet national and international best practices.

The project is expected to conclude in early 2016 and results will be shared with our stakeholders and the public.

Source: <u>http://abdatapartnerships.ca/?page_id=38#collapse151</u>

Canada: Ocean Data Management Expert Forum, 18-19 November 2015, Montreal

This international Ocean Data Management Expert Forum will bring together organizations that collect and manage ocean observation data with the aim of sharing best practices, identifying research gaps in Canada, and exploring a way forward for data management with a coordinated Canadian ocean observing system.



Source: http://meopar.ca/calendar/event/856/

Building a multi-scaled geospatial temporal ecology database from disparate data sources: fostering open science and data reuse

Author(s): Patricia A. Soranno et. al. *GigaScience* 4:28, Published online July 2015

Abstract: Although there are considerable site-based data for individual or groups of ecosystems, these datasets are widely scattered, have different data formats and conventions, and often have limited accessibility. At the broader scale, national datasets exist for a large number of geospatial features of land, water, and air that are needed to fully understand variation among these ecosystems. However, such datasets originate from different sources and have different spatial and temporal resolutions. By taking an open-science perspective and by combining site-based ecosystem datasets and national geospatial datasets, science gains the ability to ask important research questions related to grand environmental challenges that operate at broad scales. Documentation of such complicated database integration efforts, through peer-reviewed papers, is recommended to foster reproducibility and future use of the integrated database. Here, we describe the major steps, challenges, and considerations in building an integrated database of lake ecosystems, called LAGOS (LAke multiscaled GeOSpatial and temporal database), that was developed at the sub-continental study extent of 17 US states (1,800,000 km2). LAGOS includes two modules: LAGOSGEO, with geospatial data on every lake with surface area larger than 4 ha in the study extent (~50,000 lakes), including climate, atmospheric deposition, land use/cover, hydrology, geology, and topography measured across a range of spatial and temporal extents; and LAGOSLIMNO, with lake water quality data compiled from ~100 individual datasets for a subset of lakes in the study extent (~10,000 lakes). Procedures for the integration of datasets included: creating a flexible database design; authoring and integrating metadata; documenting data provenance; quantifying spatial measures of geographic data; quality-controlling integrated and derived data; and extensively documenting the database. Our procedures make a large, complex, and integrated database reproducible and extensible, allowing users to ask new research questions with the existing database or through the addition of new data. The largest challenge of this task was the heterogeneity of the data, formats, and metadata. Many steps of data integration need manual input from experts in diverse fields, requiring close collaboration.

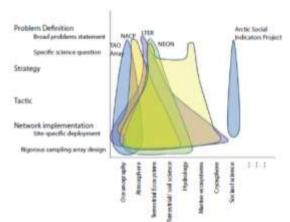
Keywords: LAGOS; Integrated database; Data harmonization; Database documentation; Data reuse; Data sharing; Ecoinformatics; Macrosystems ecology; Landscape limnology; Water quality

Source: http://link.springer.com/article/10.1186/s13742-015-0067-4; http://csilimno.cse.msu.edu/lagos_overview.php

A Framework for Prioritization, Design and Coordination of Arctic Long-term Observing Networks: A Perspective from the U.S. SEARCH Program

Author(s): Olivia Lee, Hajo Eicken, George Kling, Craig Lee *Arctic Journal*, Vol 68, No 5 (2015)

Abstract: Arctic observing networks exist in many countries and often cross international boundaries. We review their status and the development of networked long-term observations as part of a U.S. Arctic Observing System, highlighting major challenges and opportunities for prioritizing observations, designing a network, and increasing coordination. Most Arctic observing activities focus on specific themes and ecosystem services, resulting in a relatively narrow scope of observations for each network. Across all networks there is a need to improve national and international coordination to (1) reduce potential mismatch between identified science needs and outcomes desired by society, (2) link current observing networks to emerging agency and private-sector observing programs across disciplines, and (3) present a stable set of goals and priorities to increase network



utility in view of the limited funding resources. We survey the landscape of observing activities and efforts to coordinate them internationally and present a framework for prioritization and coordination based on the activities of the U.S. Study of Environmental Arctic Change (SEARCH). This framework includes a hierarchy of interconnected activities involved in the design and implementation of observing networks. Across the hierarchy, definition of "actionable" science questions helps drive network design, with priorities set by the breadth and depth of the societal applications or policy requirements that these questions can inform. We present an example of applying this design hierarchy to observations that support policy and management decisions about offshore resource development in the Chukchi Sea.

Keywords: Arctic observing; stakeholders; observing network design

Source: http://arctic.journalhosting.ucalgary.ca/arctic/index.php/arctic/article/view/4450

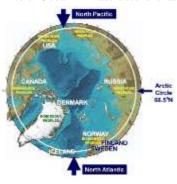
Institutional Dimensions of Sustaining Arctic Observing Networks (SAON)

Arctic Institute of North America

Author(s): Paul Arthur Berkman Arctic Journal, Vol 68, No 5 (2015)

Abstract: Sustaining Arctic Observing Networks (SAON) implies a system of different sensors that are generating data to be preserved, interpreted, and applied in a continuous manner over a long period on a pan-Arctic scale. This note summarizes the current institutional framework that relates to data generation and use, as well as decision making and operational responses, around the Arctic Ocean. Sustainable solutions will necessarily involve those institutions that have the financial, logistic, policy, and legal capacity to support infrastructure in the Arctic Ocean region into the future. Three options are introduced for supporting SAON as a key element of the sustainable Arctic Ocean infrastructure that

governments and Indigenous peoples hope to develop. Option 1 would be for the Arctic coastal states to mandate that a portion of leasehold payments from energy companies be earmarked for general-purpose infrastructure development in the Arctic Ocean region, with specific inclusion of SAON. Option 2 would be for the Arctic Council, as the high-level forum for international cooperation in the Arctic, to spread the burden of supporting SAON among the Arctic states, non-Arctic states, and Indigenous peoples. Option 3 would be to support SAON through coordinated public-private partnerships among diverse organizations and institutions with Arctic remits. Compelling justification for supporting SAON is that it is needed to inform decision making about both sustainable infrastructure development and maritime domain awareness for commercial operations in the Arctic Ocean.



Keywords: holistic; infrastructure; institutions; options; pan-Arctic; sustainability

Source: http://arctic.journalhosting.ucalgary.ca/arctic/index.php/arctic/article/view/4499

The U.S. Arctic Observing Viewer: A Web-Mapping Application for Enhancing Environmental Observation of the Changing Arctic

Author(s): William F. Manley, Allison G. Gaylord, Ari Kassin, Ryan Cody, Walter A. Copenhaver, Mike Dover, Stephen M. Escarzaga, Ryan Font, Alan E. Garcia, Ted Haberman, David H. Lin, Roberta Score, Sandra Villarreal, Craig E. Tweedie

Arctic Journal, Vol 68, No 5 (2015)

Abstract: Although much progress has been made with various Arctic Observing efforts, assessing that progress can be difficult. What data collection efforts are established or underway? Where? By whom? To help meet the strategic needs

of programs such as the U.S. Study of Environmental Arctic Change (SEARCH), the Arctic Observing Network (AON), Sustaining Arctic Observing Networks (SAON) and related initiatives, an update has been released for the Arctic Observing Viewer (AOV; <u>http://ArcticObservingViewer.org</u>). This web mapping application and information system has begun to compile the who, what, where, and when for thousands of data collection sites (such as boreholes, ship tracks, buoys, towers, sampling stations, sensor networks, vegetation sites, stream gauges, and observatories) wherever marine, terrestrial, or atmospheric data are collected. Contributing partners for this collaborative resource include the U.S. NSF, ACADIS, ADIwg, AOOS, a2dc, AON, ARMAP, BAID, CAFF, IASOA, INTERACT, and others. While focusing on U.S. activities, the AOV welcomes



information exchange with international groups for mutual benefit. Users can visualize, navigate, select, search, draw, print, and more. AOV is founded on principles of interoperability, with open metadata and web service standards, so that agencies and organizations can use AOV tools and services for their own purposes. In this way, AOV will reinforce and complement other distributed yet interoperable cyber-resources and will help science planners, funding agencies, researchers, data specialists, and others to assess status, identify overlap, fill gaps, optimize sampling design, refine network performance, clarify directions, access data, coordinate logistics, collaborate, and more in order to meet Arctic Observing goals.

Keywords: Arctic research; Arctic Observing networks; GIS; web mapping application; science management; cyberinfrastructure

Source: http://arctic.journalhosting.ucalgary.ca/arctic/index.php/arctic/article/view/4477

Middle East & North Africa Region SDI News

UAE: Abu Dhabi's ambitious habitat mapping database ready for use



Abu Dhabi has completed an ambitious habitat mapping project that will help improve biodiversity, urban planning, crisis management and food security. The database of the multi-million dollar project, freely available at <u>http://www.enviroportal.ead.ae</u>, will help academics, developers, town planners and crisis managers. The data can be accessed on iPad and Android phones through the 'Beatty' app, which can be downloaded from Apple's Appstore now and on other platforms shortly.

The satellite-based mapping project completed in 18 months has mapped terrestrial and marine habitats, land use and land cover for the emirate. It has accurately documented the flora and fauna in the entire emirate in

59,640 square kilometres of terrestrial environment and 28,220 square kilometres of marine environment. The data will be updated every two years.

See also:

Citizen scientists help map out Abu Dhabi <u>http://www.thenational.ae/uae/citizen-scientists-help-map-out-abu-dhabi</u> Marine and Terrestrial Habitat Delineation from Satellite Data: an Environment Agency Abu Dhabi (EAD) Baseline Project. A Proteus White Paper (October 2013)

http://global.digitalglobe.com/sites/default/files/Proteus%20White%20Paper.pdf

Source: <u>http://gulfnews.com/news/uae/environment/abu-dhabi-s-ambitious-habitat-mapping-database-ready-for-use-1.1535554</u>

UAE: UAE Space Agency outlines commitments to earth observation and environmental monitoring

UAE Space Agency Director General H.E Dr. Mohammed Al Ahbabi, speaking at the Eye on Earth Summit, explained that the UAE Space Agency will support international collaboration through space agency cooperation to promote the use of space assets that facilitate joint environmental research projects. The UAE Space Agency will support and harmonize access to Earth observation monitoring resources from international organizations and locally generated data from MBRSC's DubaiSat.

Source: <u>http://www.arabianaerospace.aero/uae-space-agency-outlines-commitments-to-earth-observation-and-environmental-monitoring.html</u>

Qatar: Qatar Environment and Energy Research Institute (QEERI) Geospatial Science GIS Lab

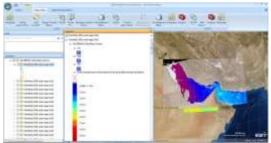


معهد قطر ليدوت البيئة والطاقة Qata Environment & Energy Research Institute عضو في مؤسسة قطر Member of Qatar Foundation

The QEERI GSS Lab provides Geospatial Information Systems (GIS) and remote sensing processing and computing capabilities for high-end geospatial science research and education. The main focus is on integrating state-of-of-the-art spatial technology and methods (geographic information systems, global positioning systems, remote sensing, and spatial modeling/statistics)

within and interdisciplinary research

framework to foster cross-domain cooperation in the application of these tools. In order to advance this purpose, the GSS Lab is dedicated to promoting diversity in the research enterprise by promoting knowledge of spatial science methods and innovations in the local research community. GSS Lab activities and capabilities include: GeoSpatial tool development, GeoSpatial databases, GeoSpatial web services, Geovisualization, Advanced GeoSpatial modelling, and GeoSpatial training.



See: Advanced GeoSpatial Integration in Solar Energy & Water Resources: Ontology-Based Service Oriented Architecture, <u>http://www.seasc2015.org.sg/download/Technical%20Session/Session%20E/Day%203/Day%203%20-%20Track%20E5%20-%20Paper%20120.pdf</u>

Source: http://www.qeeri.org.qa/en/research-facilities/the-research-and-development-complex/geospatial-science-gss-laboratory

Jordan: MEGA-Jordan, state-of-the-art web-based system for country's archaeological sites



Middle Eastern Geodatabase for Antiquities (MEGA)-Jordan is a purpose-built geographic information system (GIS) to inventory and manage archaeology sites at a national level. It has been developed using state-of-theart technology and requires no more than basic computer skills to enter site and site element boundaries and buffer zones; site details such as condition, threats, and other monitoring updates; and to print out detailed, up-to-date reports on Jordan's vast number of archaeological sites. The system, in both Arabic and English, is web-based and will standardize and centralize data throughout the

Kingdom. It serves as the primary tool for the Department of Antiquities (DoA) in its work to inventory, monitor, and manage Jordan's vast number of archaeological sites.

Source: <u>http://megajordan.org/</u>; <u>http://www.getty.edu/conservation/our_projects/field_projects/jordan/</u>

Tunisia: OSS holds Water Observation Information System (WOIS) Workshop, 5-9 October 2015, Tunis



The workshop was organized by the European Space Agency's Tiger Capacity Building

Facility / ITC in Sahara and Sahel (Water Observation



collaboration with the Observatory (OSS). WOIS Information System,

<u>http://www.tiger.esa.int/page_eoservices_wois.php</u>) is an open source software suite developed by ESA (European Space Agency) under the framework of TIGER initiative. WOIS contains workflows for processing satellite imagery and derived products to evaluate, track and quantify some aspects related to water resources management.

Source: https://www.facebook.com/OSSCommunity/posts/909209832448368

Open MENA



Open MENA is for people who want to deepen their knowledge, experience and professional networks in the open movement, both online and offline, within their local community and the wider international community.

Source: http://openmena.net/en/get-involved

Marine Data Infrastructure GCC 2016 conference, 15-16 February, Dubai, UAE



As hydrographic data gains more importance in marine exploitation activities and ocean protection initiatives, the importance of integrating existing technical capabilities and information into a framework for GCC marine data infrastructure rises. GCC governments are investing significantly in advanced technology for data integration, management and access.

Organized by Advanced Conferences & Meetings (ACM), the first of

25 - 27 JANUARY, 2016

Hotel Al Bussan Botana Dubai, UAI

its kind in the region, Marine Data Infrastructure GCC conference (<u>http://www.marinedatainfrastructuregcc.com/</u>) will bring together marine data management experts, regulators, maritime sector stakeholders and technology providers to discuss ocean monitoring and data collection techniques, best practices and the latest technological advancements. The conference will be held on 15-16 February 2016 in Dubai.

Source: http://ifpinfo.com/Top-MiddleEast-NewsArticle-6868

GIS and Remote Sensing Annual Scientific Forum (GRASF) & Middle East Geospatial Forum (MEGF) 25-27 January 2016, Dubai, UAE

MIDDLE EAST



With its theme as Smart Technologies, Smart Cities, Smarter Lives, the 2016 Middle East Geospatial Forum will talk about the tremendous usage of geospatial technology to create smart cities, smart citizen services and, thus, smarter lives. One of the proposed themes for the Forum is Spatial

Data Infrastructure. Abstract submission deadline: 10 November 2015.

Source: http://www.megf.org/

1st International Remote Sensing Conference, 17-20 January 2016, Riyadh, Saudi Arabia



The International Remote Sensing Conference in Saudi Arabia is where global technology leaders in remote sensing will gather to share their latest technical expertise with Saudi specialists, engineers, and technical staff. The conference will provide a forum for professionals and practitioners from different sectors to access the most recent satellite-based and non-satellite-

based imaging systems along with a wide-range of data acquisition systems. The forum will facilitate knowledge and information sharing between peers and industries, allowing for a broad impact. Deadline for abstracts extended to **November 5, 2015**.

Source: <u>https://irsc-sa.org/</u>

Global SDI News

2016 Echoing Green Fellowship



The Global Fellowship (<u>http://www.echoinggreen.org/fellowship/</u>) is a program for smart leaders who are deeply connected to the needs and potential solutions that may work best for their communities. Any emerging social entrepreneur from any part of the world working to disrupt the status quo may apply. Application Closes: Tuesday, **November 17, 2015** at 2:00 p.m. (14:00) ET

Source: <u>http://echoinggreen.org/apply</u>

Call for Papers: Journal of Spatial Information Science (JoSIS): Special Feature on "Provenance and Credibility in Spatial and Platial Data Submission deadline: November 30, 2015



As the amount of data contributed through social media applications, mobile devices, and other user-generated sources continues to increase, so does our need to investigate the trustworthiness of the information and the expertise of the people contributing it. Not only does provenance improve accountability but it also allows scientists, policy makers, and the public to ask bigger questions about the content. Through provenance we can begin to ask questions surrounding the credibility of the content, sources, and methods used in collecting and contributing the data.

The geospatial sciences offer a unique perspective to the discussion of credibility and provenance. As all data are generated with some level of location information, space and place are subjects on which questions of credibility can be asked. What components are important for assessing credibility in spatial information? Is assessing platial information

credibility any different than investigating other forms of information credibility? Does the location at which data is generated, collected, organized or processed impact its trustworthiness? Do the terms used to describe these data imply the same thing to different users and communities?

Source: <u>http://stko.geog.ucsb.edu/provcred/</u>

Drones and Aerial Observation: New technologies for property rights, human rights, and global development



Unmanned Aerial Vehicles (UAVs), also known as drones, are able to gather large amounts of information cheaply and efficiently by virtue of their aerial perspective, as can unpowered platforms like kites and balloons. That information, in the form of images, maps, and other data, can be used by communities to improve the quality and character of their property rights. These same tools are also useful in other, related aspects of global development. Drone surveillance can help conservationists protect endangered wildlife and aid scientists in understanding the changing climate; drone imagery can be used by advocates and analysts to document and deter human rights violations; UAVs can be used by first responders to search for lost people or to evaluate the extent of damage after natural disasters like earthquakes or hurricanes.

This primer discusses the capabilities and limitations of unmanned aerial vehicles in advancing property rights, human rights and development more broadly. It contains both nuts-and-bolts advice to drone operators and policy guidance.

Source: http://drones.newamerica.org/primer/

SRTM data available worldwide, prior gaps now filled

The digital elevation dataset resulting from the SRT Mission in the year 2000 is probably the most widely used digital elevation dataset in the world. It was first released with a 90 at ground resolution in a more or less global level (56° S to 60° N). In 2014, the White House announced the release of the 30 m original



global coverage of the SRTM 1 dataset

solution dataset. Parts of the dataset were released one-by-one. The schedule was like this:

- November 2014: Mexico, South America
- January 2015: Australia, Southeast Asia
- April 2015: North America, Europe
- July 2015: China, Japan
- September 2015: Northeast Africa

By looking on the calendar, the gaps of the dataset are now filled and can be downloaded for free.

Source: <u>http://www.digital-geography.com/short-announcement-srtm-1-data-worldwide</u>

Air pollution data from around the world in real time



The World Air Quality Index, a new interactive map that broadcasts air-quality measurements from around the globe in real time, is helping us see where in the world we need to clear the air.

Based in Beijing, the AQICN (<u>http://aqicn.org/</u>) project works with international environmental agencies to glean information from more than 8,000 government monitoring stations across 1,000 cities. The map color-codes the data according to the U.S. Environmental Protection Agency's Air Quality Index scale (green = good; maroon = hazardous) and refreshes every 15 minutes to relay the latest breathing conditions.

It's still a work in progress, so you'll notice some fairly substantial bald spots (e.g. Africa), but the index is off to an impressive start.

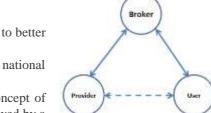
Source: <u>http://www.onearth.org/earthwire/world-air-quality-index-interactive-map</u>; <u>http://www.dailymail.co.uk/sciencetech/article-3239920/How-polluted-city-Map-shows-minute-harmful-smog-levels-world-reveal-health-risk.html</u>

Geospatial information broker. A new role of national mapping agencies



Author(s): Crompvoets J., Broucker B.

Micro, Macro & Mezzo Geoinformation, South-East European Research Institute on Geo Sciences, Vol, 4 , pp. 1-10 (2015)



Abstract: The purpose of this paper is understand the meaning of the role of geospatial information broker for mapping agencies and to stimulate discussion about the changing role of geospatial information broker is compilation of existing geospatial per ends with a shortlist of issues for

the national mapping agencies. The concept of introduced, defined and explained followed by a

information broker examples and applications facilitating the broker role. The paper ends with a shortlist of issues for discussion on the way to move forward.

Source: <u>http://mmm-gi.blogspot.com/p/number4year2015.html;</u> <u>https://www.researchgate.net/publication/280035457_GEOSPATIAL_INFORMATION_BROKER._A_NEW_ROLE_OF_NATIONAL_MAPPING_AGENCIES</u>

Innovation in OGC: The Interoperability Program



Author(s): George Percivall, Terry Idol, Nadine Alameh, and Jeff Harrison

ISPRS Int. J. Geo-Inf. 2015, 4(4), 2362-2378

Abstract: The OGC Interoperability Program is a source of innovation in the development of open standards. The approach to innovation is based on hands-on; collaborative engineering leading to more mature standards and implementations. The process of the Interoperability Program engages a community of sponsors and participants based on an economic model that benefits all involved. Each initiative begins

with an innovative approach to identify interoperability needs followed by agile software development to advance the state of technology to the benefit of society. Over eighty initiatives have been conducted in the Interoperability Program since the breakthrough Web Mapping Testbed began the program in 1999. OGC standards that were initiated in Interoperability Program are the basis of two thirds of the certified compliant products.

Keywords: Open Geospatial Consortium (OGC); interoperability; standards; innovation; geospatial

Source: http://www.mdpi.com/2220-9964/4/4/2362

Desirable characteristics of an online data commons for spatially referenced, locally generated data from disparate contributors



Author(s): Campbell, James; Onsrud, Harlan

Journal of the Urban & Regional Information Systems Association, Vol. 26 Issue 1 (2015), p35-43 <u>http://www.urisa.org/resources/urisa-journal</u>

Abstract: A significant body of spatially referenced, locally produced data in small isolated collections exists on the hard drives and backup systems of individual researchers, nonprofit groups, private associations, small companies, universities, and nongovernmental organizations across the United States. From a practical perspective, that data currently is unavailable to professional scientists and to the general public. If there were an online environment where that data could be deposited or registered and readily found, what infrastructure characteristics might

potential users find desirable for them to be willing and interested in finding, consulting, and using such data? While there are major national and international initiatives such as the Global Earth Observation System of Systems (GEOSS) that are providing a gateway for access to millions of spatially referenced datasets, primarily from national government data sources, a similar gateway to access spatially referenced, locally produced datasets from disparate private and nonprofit sources has yet to emerge. If one or more were to emerge, what characteristics should be incorporated into the design to make it useful to users of the portal or gateway? Based on data-preservation literature, this study posits three potential characteristics as desirable: make conditions of use of data files clear to potential users; provide a variety of ways to search for data; and enable users to access comments and feedback from prior users, and add comments of their own. These three characteristics were examined because they often are not provided or inadequately provided in general-purpose portals for finding geographic data and services. A combination of qualitative and quantitative methods was used and the results of the analysis using both methods support the hypothesis.

See also: Potential contributor perspectives on desirable characteristics of an online data environment for spatially referenced data, First Monday, Volume 20, Number 2 - 2 February 2015 http://firstmonday.org/ojs/index.php/fm/article/view/4722/4206

Source: http://www.urisa.org/clientuploads/directory/Documents/Journal/Vol26No1.pdf

Humanitarian Data Exchange (HDX)



The Humanitarian Data Exchange (HDX) is an open platform for sharing data. The goal of HDX is to make humanitarian data easy to find and use for analysis. Launched in July 2014, HDX has been accessed by users in over 200 countries and territories.

HDX defines humanitarian data as: 1) data about the context in which a humanitarian crisis is occurring (e.g., baseline/development data, damage assessments, geospatial data); 2) data about the people affected by the crisis and their needs; and 3) data about the response by organisations and people seeking to help those who need assistance.

HDX promotes the use of licenses developed by the Creative Commons Foundation and the Open Data Foundation. The main difference between the two classes of licences is that the Creative Commons licences were developed for sharing creative works in general, while the Open Data Commons licences were developed more specifically for sharing databases. See the full list of licences here: https://data.hdx.rwlabs.org/about/license

Source: <u>https://data.hdx.rwlabs.org</u>

Evaluation of data and tools from CGIAR Research Program on Climate Change, Agriculture & Food Security

Author(s): Nelson, S, Brown, V, Cuellar, E, Fox, K Research Program on Climate Change, Agriculture, and Food Security (CCAFS), Copenhagen, Denmark



Abstract: This report assesses nine CCAFS tools/datasets in terms of who is using them and for what

purposes, and explores whether and how the use of CCAFS data and tools has contributed to outcomes, in particular to changes in knowledge, attitude or skills, as well as potential changes in behaviour and practice among different user groups, where possible.

Access the report: <u>https://cgspace.cgiar.org/bitstream/handle/10568/61898/TANGO-CCAFS%20Evaluation.pdf?sequence=1</u>

Source: https://cgspace.cgiar.org/handle/10568/61898

Ecological data sharing



Author(s): William K. Michener *Ecological Informatics*, Volume 29, Part 1, September 2015, Pages 33–44

Abstract: A review of several of the large international and national ecological research programs that have emerged since the mid-1900s highlights the initial failures and more recent successes as well as the underlying causes—from a near absence of effective policies to the emergence of community and data sharing policies coupled with the development and adoption of data and metadata standards and enabling tools. Sociocultural change and the move towards more open science have evolved more rapidly over the past two decades in response to new requirements set forth by governmental organizations, publishers and professional societies. As the scientific

culture has changed so has the cyberinfrastructure landscape. The introduction of community-based data repositories, data and metadata standards, software tools, persistent identifiers, and federated search and discovery have all helped promulgate data sharing. Nevertheless, there are many challenges and opportunities especially as we move towards more open science. Cyberinfrastructure challenges include a paucity of easy-to-use metadata management systems, significant difficulties in assessing data quality and provenance, and an absence of analytical and visualization approaches that facilitate data integration and harmonization. Challenges and opportunities abound in the sociocultural arena where funders, researchers, and publishers all have a stake in clarifying policies, roles and responsibilities, as well as in incentivizing data sharing. A set of best practices and examples of software tools are presented that can enable research transparency, reproducibility and new knowledge by facilitating idea generation, research planning, data management and the dissemination of data and results.

Highlights

- Data sharing has evolved slowly and unevenly due to incentives and disincentives.
- "Big ecology" policies have pioneered the initial movement to open data.
- Research sponsors, publishers and scientific societies drive sociocultural change.
- Information technologies like metadata tools and repositories promulgate sharing.
- Emerging best practices support data openness and sharing in ecology.

Keywords: Data publication; Data sharing; Information technology; Metadata; Open access; Policy

Source: http://www.sciencedirect.com/science/article/pii/S1574954115001004

Social scientists' data sharing behaviors: Investigating the roles of individual motivations, institutional pressures, and data repositories



Author(s): Youngseek Kim, Melissa Adler

International Journal of Information Management 35(4): 408-418 (August 2015) [not an open journal]

Abstract: The purpose of this study is to locate individual, institutional, and resource factors that influence data sharing behaviors among social scientists. Given the benefits to the social science disciplines in the advancement of scholarship, and the recent data sharing policy changes of funding agencies, it is necessary to determine the factors that support and impede data sharing behaviors. A research model was developed and validated based on the results of a survey of 361 social scientists. The model is informed by theory of planned behavior and institutional theory to

map underlying individual motivations, institutional pressures, and availability of resources facilitating social scientists' data sharing. It was found that social scientists' data sharing behaviors are mainly driven by personal motivations (i.e., perceived career benefit and risk, perceived effort, and attitude toward data sharing) and perceived normative pressure. Funding agencies' pressure, journals' pressure, and availability of data repository were not found to be significant factors in influencing social scientists' data sharing. This research suggests that personal motivations and norm of data sharing currently support social scientists' data sharing; however, institutional pressures by funding agencies and journals and data repository need to be further encouraged to better facilitate social scientists' data sharing behaviors.

Keywords: Data sharing; Social scientist; Individual motivation; Institutional pressure; Data repository

Source: http://www.sciencedirect.com/science/article/pii/S0268401215000432

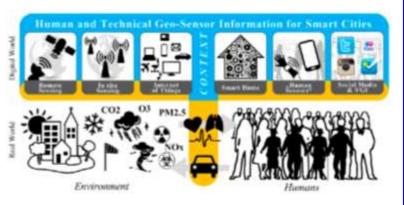
Contextual sensing: integrating contextual information with human and technical geo-sensor information for smart cities

Author(s): Günther Sagl, Bernd Resch, and Thomas Blaschke Sensors 2015, 15, 17013-17035

ISSN 1424-8220

Abstract: In this article we critically discuss the challenge of integrating contextual www.mdpi.com/journal/sensors information, in particular spatiotemporal contextual information, with human and technical sensor information, which we approach from a geospatial perspective. We start by highlighting the significance of context in general and spatiotemporal context in particular and introduce a smart city model of interactions between humans, the environment, and technology, with context at the common interface. We then focus on both the intentional and the unintentional sensing capabilities of today's technologies and discuss current technological trends that we consider have the ability to enrich human and technical geo-sensor information with contextual detail. The different types of sensors used to collect contextual information are analyzed and sorted into three groups on the basis of names considering

frequently used related terms, and characteristic contextual parameters. These three groups, namely technical in situ sensors, technical remote sensors, and human sensors are analyzed and linked to three dimensions involved in sensing (data generation, geographic phenomena, and type of sensing). In contrast to other scientific publications, we found a large number of technologies and applications using in situ and mobile technical sensors within the context of smart cities, and surprisingly limited use of remote sensing approaches.

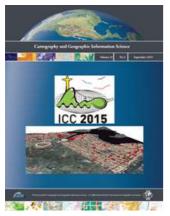


In this article we further provide a critical discussion of possible impacts and influences of both technical and human sensing approaches on society, pointing out that a larger number of sensors, increased fusion of information, and the use of standardized data formats and interfaces will not necessarily result in any improvement in the quality of life of the citizens of a smart city. This article seeks to improve our understanding of technical and human geo-sensing capabilities, and to demonstrate that the use of such sensors can facilitate the integration of different types of contextual information, thus providing an additional, namely the geo-spatial perspective on the future development of smart cities.

Keywords: sensing; sensors; urban environments; urban dynamics; human-environment interaction; quality of life; geographic information science

Source: http://www.mdpi.com/1424-8220/15/7/17013/pdf

How user-friendly are online interactive maps? Survey based on experiments with heterogeneous users



Author(s): Alenka Poplin

Cartography and Geographic Information Science, Volume 42, Issue 4, 2015, Special Issue: Selected Papers from ICC 2015 Rio de Janiero, pages 358-376 [not an open access journal]

Abstract: Many users of online interactive maps have substantial problems interacting with these maps. The main goal of this paper is to explore the issues related to the interaction with GIS-based interactive online maps. An example is taken from a Public Participation Geographic Information System (PPGIS) created for the inhabitants in Wilhelmsburg, a city district of Hamburg, Germany. The application was developed within a European project and tested in two phases: first with the inhabitants of Wilhelmsburg and second with a group of students of urban planning with some basic GIS skills. In this article, we present the results of testing with both groups and discuss open research and practical issues related to the interaction with online interactive maps.

We conclude the article with a list of relevant research topics which address this interaction and the consequences the design of online maps can have on the ability of the user to use them efficiently.

Keywords: online interactive maps, Public Participation GIS, interaction with maps, usability

Source: <u>http://www.tandfonline.com/doi/full/10.1080/15230406.2014.991427#abstract;</u> <u>http://www.design.iastate.edu/imgFolder/files/Poplin2015_CaGISjournal.pdf</u>

Geospatial Big Data: Challenges and Opportunities



Author(s): Jae-Gil Lee, Minseo Kang

Big Data Research, Volume 2, Issue 2, June 2015, Pages 74–81 [not an open access journal]

Abstract: Geospatial big data refers to spatial data sets exceeding capacity of current computing systems. A significant portion of big data is actually geospatial data, and the size of such data is growing rapidly at least by 20% every year. In this paper, we explore the challenges and opportunities which geospatial big data brought us. Several case studies are introduced to show the importance and benefits of the analytics of geospatial big data, including fuel and time saving, revenue increase, urban planning, and health care. Then, we introduce new emerging platforms for sharing the collected geospatial big data and for tracking human mobility via mobile devices. The researchers in academia and industry have spent a lot of efforts to improve the value of

geospatial big data as well as take advantage of its value. Along the same line, we present our current research activities toward the analytics of geospatial big data, especially on interactive analytics of real-time or dynamic data.

Keywords: Geospatial big data; Spatial big data; Complex event processing; Spatial online analytical processing

Source: http://www.sciencedirect.com/science/article/pii/S2214579615000040

State of the Map 2016, Brussels, Belgium

State of the Map 2016, the annual conference of OpenStreetMap, will be held in Brussels, Belgium. The conference will be in the third quarter (Jul-Aug-Sep) of 2016.

Source: <u>https://2016.stateofthemap.org/</u>

When data does not belong in OSM: the land tenure use case



Cadasta (<u>http://cadasta.org/</u>) is building an innovative platform that will provide an alternative crowdsourcing model for the collection and management of ownership, lease, occupancy, and use data as well as associated geospatial data, initially targeting the estimated 1.2 billion people living in urban slums who do not have secure rights to where

they live. See: When Data Doesn't Belong in OSM: The Land Tenure Use Case, which you can view here, <u>https://www.youtube.com/watch?v=Yazjz3D7Bkk</u>

Source: <u>https://www.omidyar.com/blog/how-map-can-change-world-state-map-us-2015-conference-emphasizes-role-geospatial-data-property</u>



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://gsdiassociation.org

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