

Spatial Data Infrastructure – Africa Newsletter



SDI-Africa Newsletter

February 2009

Vol. 8, No. 2

Spatial Data Infrastructure - Africa (SDI-Africa) is a free, electronic newsletter for people interested in GIS, remote sensing, and data management in Africa. Published monthly since May 2002, it raises awareness and provides useful information to strengthen SDI efforts and support synchronization of regional activities. [ECA/CODIST-Geo](#), [RCMRD/SERVIR](#), [RECTAS](#), [AARSE](#), [EIS-AFRICA](#), [SDI-EA](#), and [MadMappers](#) are some of the other regional groups promoting SDI development.

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Please mention SDI-Africa as a source of information in correspondence you may have about items in this issue.



The SDI-Africa newsletter is prepared for the GSDI Association by the [Regional Centre for Mapping of Resources for Development \(RCMRD\)](#) in Nairobi, Kenya. RCMRD builds capacity in surveying and mapping, remote sensing, geographic information systems, and natural resources assessment and management. RCMRD has been active in SDI in Africa through its contributions to the [African Geodetic Reference Frame \(AFREF\)](#) and [SERVIR-Africa](#), a regional visualization and monitoring system initiative. RCMRD also implements projects on behalf of its member States and development partners.



If you have news or information related to GIS, remote sensing, and spatial data infrastructure that you would like to highlight (e.g., workshop announcements, publications, reports, websites of interest, etc.), kindly send them in by the 25th of each month. I'd be happy to include your news in the newsletter.

PLEASE share this newsletter with colleagues who may find the information useful and suggest that they subscribe themselves.

Back issues of the newsletter are at the GSDI website: <http://www.gsdi.org/newsletters.asp>
Best regards, Gordon Ojwang, Editor, [SDI-Africa AT gsdi.org](mailto:SDI-Africa_AT_gsdi.org) or sdiafrica@rcmrld.org or gojwang@rcmrld.org



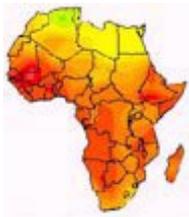
Input to this Issue

Thank you to Kate Lance, USRA/SERVIR-Africa (USA); Jason Arnold, USRA/SERVIR-Africa (USA); Klaus-Detlef Schubert, Geoka (Germany); Mouhaman Arabi, Mandara Mountains Development Authority (Cameroon); David Stevens, UN-SPIDER UNOOSA (Austria); Francis Molua Mwambo, Limbe Botanical Garden (Cameroon); Nathan Heard, Humanitarian Information Unit (USA); Derek Clarke, Surveys and Mapping (South Africa); Steeve Ebener, WHO (Switzerland); Alexander Tango, Consorzio ITA (Italy); and Leah Gordon, MEASURE Evaluation Carolina Population Center (USA) for their contributions to this issue of the newsletter.

SDI News, Links, Papers, Presentations

[11th International Conference on Global Spatial Data Infrastructure \(GSDI 11\)](#), 15-19 June 2009, Rotterdam, The Netherlands

Theme: Spatial Data Infrastructure Convergence: Building SDI Bridges to Address Global Challenges. Partners in organizing this conference include the GSDI Association, Joint Research Center (JRC) of the European Commission, EUROGI, Geonovum, Space for Geoinformation Innovation Program (RGI) and Delft University of Technology. The plenary and paper sessions of three major geospatial conferences are being integrated into a single program and held in the same venue. These combined conferences include the Eleventh GSDI Conference, the Third Inspire Conference and the Dutch National Conference reporting on Dutch SDI Results and Challenges. The organizers have invited presentations covering [suggested](#)



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[conference topics](#) on full range of practice, development and research experiences that advance the practice and theory of spatial data infrastructure development.

GIS database for the Extreme North Region of Cameroon

The Mandara Mountains Development Authority's (MIDIMA) was created in 1982 to ensure a coherent and sustainable development through planned and coordinated interventions, and to monitor the implementation of development projects in the Extreme North Region of Cameroon. This required information on the spatial distribution of natural resources, villages, socioeconomic infrastructures and their characteristics and uses. In order to achieve the objective assigned to the MIDIMA by the government, a GIS unit was created in 2000, whose main aim was to setup a spatial database that will guide the planning and monitoring of development actions in the Extreme North Region. The GIS unit was provided with the necessary personnel and equipment, and after 8 years of activity, the Regional GIS database is now fully operational with geospatial data available in digital format. The main challenge is keeping this database regularly updated and upgrading the spatial analysis from regional to local level databases for all the 47 local councils of the Extreme North Region. This is expected to be achieved through a partnership agreement between the MIDIMA and the various local councils. For further information contact: mouharabi@yahoo.fr. For, additional information on biodiversity resources and evaluation of actions taken within the framework of National Biodiversity Strategy and Action Plan (NBSAP), see the [Third National Report](#).

Nigeria Geospatial Network

The Network integrates all Nigeria's Geo-Experts together and uses the dynamic power of Spatial Technology in sustaining our environment. The Nigeria Geospatial Network discusses present day topics on NGDIs, Metadata, GIScience, GNSS, Satellite Remote Sensing, BusinessGIS, Geomarketing, Geodesy. Members share ideas and creates rooms for Geo-professionals to know one another, integrate together and builds a good Geospatial community in Nigeria. Place a link to The Nigeria Geospatial Network on your Website, send it to mail@eldigitals.ning.com and they will link back to your Website.

Kenya: Digital maps to aid planning of urban areas

Kenyan Government has launched a digital topographic mapping pilot project to improve the planning of towns. The aim of the project is to rectify the improper planning which has caused environmental degradation, economic inefficiency, haphazard developments and poor living conditions for the urban dwellers. The pilot project will involve several local authorities including Bungoma, Kilifi, Eldoret, Othaya, Garissa and Tana River. On completion, the project will then be rolled out to other local authorities faced with haphazard developments. Out of the 175 local councils in the country, only Nairobi, Mombasa and Kisumu have planning departments. "For a long time, lack of planning in local authorities has led to losses in terms of economic, social, environmental and democratic opportunities. Environmental degradation, land use conflicts and inadequate infrastructure are some of the indicators of poor planning" said the Deputy Prime Minister and Minister of Local Government Hon. Musalia Mudavadi during the launch of the pilot project at Mtwapa in Kilifi. [Source: Daily Nation, 27 January 2009]

South Africa gets own space agency

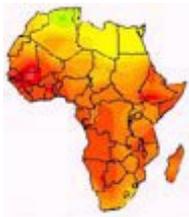


In December 2008, South African President [Kgalema Motlanthe](#) signed a bill into law that will create South Africa's own national space agency ([SANSA](#)) in 2009. [The National Space Agency Act](#) will unify all of the country's space-related activities under one banner. The Act will provide

for the establishment of a national space agency to implement a space program in South Africa. The agency would promote the peaceful use of outer space, foster research in astronomy, earth observation, communications, navigation and space physics, international cooperation in space-related activities, and advance scientific, engineering and technological competencies through human capital development. It will also facilitate the development of space missions and technology platforms, and acquire, assimilate, and disseminate space satellite data for any organ of state, as well as implement the National Space Strategy. [Source: [SERVIR-Africa community blog](#)]

New Land and Water Management Information System and portal (LWMIS) for SADC states

Land and water management issues have been identified by SADC Member States as being of major regional significance for several reasons. Food security is regarded as a national priority and is intimately



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... tied up with water availability for agricultural production. With increasing population pressure and the need for intensification of production to generate food surplus, sustainability of soil and water resources has become a major concern. Land and water management issues, except within the narrow confines of soil conservation have suffered considerable neglect, and soil conservation services in the region have been established outside of the National Agricultural Research Institutions. Research facilities are limited and the ability of trained research and extension staff is generally inadequate. The newly developed Land and Water Management Information System and portal (LWMIS) should facilitate building these capacities by provide information and knowledge sharing fundament on land and water management issues and the associated best practices available and researched with the SADC region. The LWMIS Information System gives access to both spatial as well as non-spatial information and was developed in close collaboration with the SADC L&W stakeholder community. See also the [SADC and AIMS](#) website.

[SumbandilaSat science satellite launch](#)



The date for the launch of the much-anticipated [SumbandilaSat](#) micro satellite has been set for 25 March by the [Department of Science and Technology](#). The Sumbandila, a low-orbit satellite which will collect data to be used to monitor and manage disasters such as floods, oil spills and fires within Southern Africa, will be launched into space from the [Baikonur Cosmodrome](#) aboard a [Soyuz rocket](#) in Kazakhstan. The [Satellite Application Centre](#) of South Africa will be responsible for operations, telemetry, tracking, control as well as data capturing. [Read More!!](#) [The Council for Scientific and Industrial Research](#) (CSIR) will be responsible for its

mission control. It will receive the image data from satellite and will be tasked with the monitoring and controlling of the satellite, include maintaining the satellite and programming it to perform its various functions on orbit. [Source: [SERVIR-Africa community blog](#)]

Launching of AMESD project activities in the Indian Ocean Commission region



The Indian Ocean Commission (IOC) and the Mauritius Oceanography Institute held a workshop 20-21 January 2009 in Mauritius for the launching of the project [African Monitoring of Environment for Sustainable Development \(AMESD\)](#), which included a presentation of the IOC project on Adaptation to climate change. The IOC has the lead for EO-data production and dissemination services for the marine resources thematic area. See [workshop agenda](#) and [participant list](#). [Source: [SERVIR-Africa community blog](#)]

[Launch of African Soil Information Service \(AfSIS\)](#)

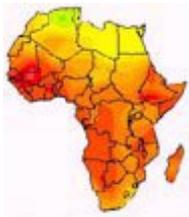


The African Soil Information Service, launched in Nairobi, Kenya, in January 2008, will produce a digital map of 42 African countries revealing soil type and its component nutrients. This information will guide farmers and policymakers on efforts to improve the fertility of Africa's soils, some of which are the most depleted in the world. The project will be coordinated by the International Center for Tropical Agriculture. The project, funded with a US\$18 million grant from the Bill & Melinda Gates Foundation and the Alliance for a Green Revolution in Africa, will gather existing local soil maps and combine them with new measurements to produce the digital map, which will be freely accessible on the web in a user-friendly format. The new measurements will include those derived from remote sensing, which involves analysing the features of satellite images

— such as colour and radiation — to infer the characteristics of the soil. These calculations are then calibrated against actual soil samples from the particular region. The African map is the first stage of an initiative, [GlobalSoilMap.net](#), to map all the globe's soils to help informed decisions not only about agriculture, but also to monitor the effects of climate change, environmental pollution and deforestation. [Source: [SERVIR-Africa community blog](#)] See also: [Soil scientists join efforts to boost food security](#); [Investing in Africa's soil health](#); [New soil map for African farmers](#).

[LEWS - Livestock Early Warning System](#)

LEWS is an early warning system for monitoring nutrition and livestock health for food security of humans in east Africa. LEWS is a sub-project within the [Global Livestock Collaborative Research Support Program \(GL-CRSP\)](#) being implemented by Texas A&M University and funded by USAID. [GL-CRSP Mali Livestock &](#)

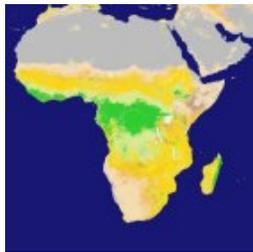


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[Pastoralist Initiative \(MLPI\) Featured in USAID Mali Mission's Newsletter](#) - MLPI is a project developed by the USAID Mission in Mali and the Global Livestock CRSP. With the utilization of LEWS and LINKS technologies and the risk assessment techniques demonstrated through PARIMA projects, the GL-CRSP intends to successfully develop a more efficient means of productivity and increased stability in income for pastoralists in Mali. MLPI plans on developing a Livestock Market Information System (LMIS) and through the collaboration of the MLPI teams with the BENKADY Cooperative, the system will serve as a type of economic advising system for pastoralists by identifying components in livestock sale to create the most beneficial pricing. In addition to the establishment of LMIS, the MLPI project plans on embarking on a number of activities including examining feeding strategies for value-added marketing of livestock, improved methods for burgu (a plant used for animal feed) use and management, and livestock fattening operations in market towns. Contact: Dr. Jerry Stuth, Lead Investigator at jwstuth@cnrit.tamu.edu.

[African development needs good geo-spatial information](#)



Africa must make it easy to access and share geo-spatial information, says head of South Africa's mapping organisation, Derek Clarke. Development has to do with place and space - that is, it takes place in a spatial context. So it needs appropriate information - namely geo-spatial information. Without this, it is impossible to use planning and decision-making tools and technologies, such as geographical information systems (GIS), to analyze needs, plan projects or monitor outcomes. But, so far, African countries use geo-spatial information only sporadically to support development.

Despite the power of geo-spatial information and technologies, few African governments use them. Africa is poorly mapped - as a recent study of geo-spatial datasets confirmed. It's probably because reliable information and technical capacity are both lacking on the continent, and where geo-spatial information does exist, much of it is either out of date or inaccurate. This may be because African countries (and regions) lack a programmatic approach to collecting and maintaining geo-spatial datasets. Many African mapping organisations are poorly staffed and cash-strapped, making it difficult to collect or update geo-spatial data. Private companies usually only collect commercially valuable data to trade with. And even if international and donor organisations collect geo-spatial information for specific projects, they do not plan to either maintain these or hand them over to help grow geo-spatial information as national assets. Knowing what information exists and how to access it is probably the biggest obstacle to using existing geo-spatial information in Africa. Everyone who holds geo-spatial data must make more effort to record and share information about their holdings. It is this metadata (data about the data) that helps people find the data sets they require. This would save time and effort by avoiding duplicating data collection. Africa needs clear policies, adequate resources and visionary leaders determined to make it easy to access and share geo-spatial information. It is time for African governments to recognize that geo-spatial information is a national asset that underpins development. It must be turned into knowledge, using GIS and other geo-spatial technologies, for the betterment of Africa.

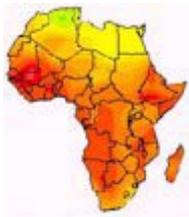
SALB Project: State of Progress for the African Node

[Second Administrative Level Boundaries \(SALB\)](#) is a project, launched in 2001 in the context of the United Nations Geographic Information Working Group (UNGIWG). The objective is to provide the international community with a working platform for the collection, management, analysis, visualization and sharing of sub-national data down to the 2nd sub-national level. The SALB dataset is a global digital maps and codes that can be downloaded on a country by country basis. The database use international border standard developed in the context of the UN Geographic Database and freely downloadable. The digital maps are more adapted for thematic mapping than precise location or modeling due to the difference in the quality of the documents compiled. More information: [project overview](#) page.



Countries for which a full map to be used in the context of the SALB project are still missing (number of units in brackets) include:

- Algeria (1541)
- Central African Republic (78)
- Chad (108)
- Comoros (14)
- Congo (93)
- Lesotho (unknown)
- Ethiopia (82)
- Sudan (117)
- Mauritius (130)
- Sao Tome and Principe (7)
- Tunisia (263)
- Uganda (164)
- United Republic of Tanzania (123)



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The [Historic changes tables](#) for Malawi, Niger, Togo and Zambia have been updated until 2008. Validation for the map of DRC: 2000 - 2003 have received since last July. [Representativity of the maps](#) for Botswana, Burkina Faso, Malawi, Mali, Mozambique, Niger, Togo and Zambia has been extended to 2008, and [Downloadable maps](#) are available for Botswana, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Gabon, Ghana, Guinea, Guinea-Bissau, Madagascar, Malawi, Mali, Mozambique, Namibia, Niger, Rwanda, Senegal, Sierra Leone, South Africa, Togo, Zambia and Zimbabwe. [Source: SALB News, Vol. 8, No 4, Oct. 2008].

[New information posted on the SALB web site](#)

[National Mapping Agencies contact information](#) - The contact information for the following 31 countries has been updated: Algeria, Belarus, Benin, Côte d'Ivoire, Croatia, Cyprus, Egypt, Estonia, Ethiopia, Honduras, Indonesia, Iraq, Jordan, Kenya, Kyrgyzstan, Libyan Arab Jamahiriya, Lithuania, Namibia, Nigeria, Panama, Paraguay, Philippines, Romania, Rwanda, Senegal, Slovakia, South Africa, Sri Lanka, Thailand, United Republic of Tanzania and Yemen.

- [Historic changes tables](#) – tables for Kyrgyzstan has been uploaded and the tables for the following 8 countries updated until 2008: Croatia, Czech Republic, Estonia, Honduras, Latvia, Lithuania, Nigeria, Slovakia.

- [New maps](#) - Since last October, the validation for the map of USA: January 2008 - May 2008 has been received.

- State of progress for the Middle East Node

Contact: SALB co-ordination Office: salb@un.org and [SALB Website](#). [Source: SALB Newsletter, Vol. IX, No 1, January 2009]

[CODIST Pre-Conference Workshop](#), April 27, 2009, Addis Ababa, Ethiopia

The first-ever combined workshop between National Mapping Agencies (NMAs) and national health sector leadership on the African continent will be held in conjunction with the United Nations sponsored Committee on Development Information Science and Technology (CODIST) meeting. The workshop is sponsored by MEASURE Evaluation and the United Nations Economic Commission for Africa. The workshop seeks to enlist National Mapping Agencies in the Fight Against HIV/AIDS in Building Partnerships with Ministries of Health & Social Services and National AIDS Commissions to promote examples of collaborative, effective use of geography and Geographic Information System (GIS) technology that lead to more effective HIV/AIDS interventions and multi-sectoral solutions, as well as a stronger spatial data infrastructure (SDI) in support of the national strategic plan. In addition, the HIV [Spatial Data Repository](#) has been updated. Shapefiles linked to sub-national data from recent Demographic and Health Surveys have been uploaded to the HIV Spatial Data Repository: Central African Republic, 2006; Uganda, 2005; Democratic Republic of Congo, 2007; Benin, 2006; Congo, 2005; Liberia, 2007; Mali, 2006; Swaziland, 2006; and Morocco, 2004. These data sets include many variables of use in the planning of programs for prevention, care and treatment.

- Deadline for submission of abstracts: 14 February 2009,
- Deadline for registration: 15 February 2009,

[UN-SPIDER Regional Workshop “Building Upon Regional Space-based Solutions for Disaster Management and Emergency Response for Africa”](#), Second half of 2009, Addis Ababa, Ethiopia

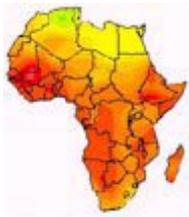
The (UNOOSA) implements the decisions of the General Assembly and of the Committee on the Peaceful Uses of Outer Space and its two Subcommittees, the Scientific and Technical Subcommittee and the Legal Subcommittee. In its resolution 61/110 of 14 December 2006 the United Nations General Assembly agreed to establish the "United Nations Platform for Space-based Information for Disaster Management and Emergency Response - [UN-SPIDER](#)" as a programme within United Nations Office for Outer Space Affairs ([UNOOSA](#)). UNOOSA is responsible for promoting international cooperation in the peaceful uses of outer space, and assisting developing countries in using space science and technology. UN-SPIDER focuses on the need to ensure access to and use of space-based solutions during all phases of the disaster management cycle.

Fine-tuning the UN-SPIDER 2009 Plan of Work

The UN-SPIDER is also fine-tuning the 2009 Plan of Work and would like to be informed of any specific activities your organization or institution will be carrying out in 2009 so that they could coordinate with. Please send this information to Mr. Georg Magerl (georg.magerl@unoosa.org).

Specific information on 2008-09 UN-SPIDER activities and Plan of Work for 2010-11

The Forty-sixth session of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space (<http://www.unoosa.org/oosa/en/COPUOS/stsc/2009/-index.html>) will discuss the 2008-



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2009 UN-SPIDER activities and Plan of Work for 2010-2011 under agenda item 8: Space-system-based disaster management support. If you will be attending this Subcommittee meeting as part of a delegation from your country or organization, contact David Stevens to forward specific information on UN-SPIDER at david.stevens@unoosa.org.

[GEO News Issue #1](#) (January 2009)

The [Group on Earth Observations \(GEO\)](#) plans to distribute a bulletin to the GEO community via e-mail on a regular basis. Many articles will link to further information on the GEO web site, and each issue will be archived there. This new service is meant to increase the flow of information and ideas amongst GEO Members, Participating Organizations, Committees and Task teams.

Practical SDI implementation materials from within and outside of Africa

[Data Against Natural Disasters: Establishing Effective Systems for Relief, Recovery, and Reconstruction \(2008\)](#)

Data against Natural Disasters makes a valuable contribution to our understanding of the conditions and actions necessary for establishing effective disaster management information systems.

The volume's introductory chapters outline the data needs that arise at different stages in disaster response and explore the humanitarian community's efforts to discover more effective mechanisms. These overviews are preceded by an introduction that summarizes some of the key lessons one may derive from the six country case studies that constitute the rest of the volume. These six case



studies (on Guatemala, Haiti, Indonesia, Mozambique, Pakistan, and Sri Lanka) examine country-level efforts to establish information management systems to coordinate disaster response. Not all of the attempts proved successful, but they included important technical and institutional innovations that are worthy of study. Collectively, they yield important lessons both for forward-thinking countries seeking ex ante disaster preparedness and for humanitarian responders hoping to implement good systems quickly after calamities have struck. [Source: [SERVIR-Africa community resource registry](#)].

[ESRI book: GIS for Decision Support and Public Policy Making](#)

Elected officials and department heads are increasingly relying on geographic information system (GIS) technology to make efficient and accurate decisions when and where it counts. This new book from ESRI Press presents twenty-seven case studies and eight exercises that demonstrate the positive impact of incorporating GIS methodology in daily operations of the public sector. Chapters cover topics such as how to use GIS for making budget-related decisions, reaching compromises, allocating resources, supporting policies, making decisions under pressure and on the fly, and involving the public in the decision-making process.

[Seminar Innovations in Official Statistics](#), UNSD, New York, 20 February 2009



This seminar (side event) of the 40th Session of the Statistical Commission is meant to provide a discussion forum for statistical managers to share experiences on how best to address the challenges of the constantly changing demands being placed on National Statistical Offices.

Statistics agencies & online mapping/visualization:

[Innovation in Data Dissemination at the Brazilian Institute of Geography and Statistics](#)

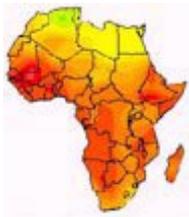
[Innovation in Data Dissemination – the ONS \(UK\) Data Visualisation Centre](#)

[OnTheMap An innovative mapping and reporting tool - United States](#)

[Tagging: Can User-Generated Content Improve Our Services? - Slovenia](#)

[Overview of issues concerning confidentiality and spatial data](#)

The MEASURE GIS working group authored a white paper that presents the current literature on the topic of confidentiality and spatial data. It is intended to provide guidance on the issue. Geographic information systems (GIS) play a vital role within a variety of research settings. However, the use of such spatial data means that confidentiality and privacy issues relevant to these data must be carefully addressed. The document provides an overview of the terms that are important to the discussion, and then presents some



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examples of spatial risks to confidentiality. An overview of approaches that have been proposed for preserving confidentiality is then presented. Related content: [Identifying areas with high HIV prevalence and limited service availability](#).

GIS Tools, Software, Data

[AfricaMap beta now available - new online GIS site](#)

The beta platform of Harvard Center for Geographic Analysis launched AfricaMap. It is a free website that brings together a huge amount of geodata on Africa. It includes a lot of data layers and is a good beginning for bringing together the available data sets of Africa.

- Complete Soviet topographic maps at 1:500,000
- Satellite imagery
- Soil data
- Ethnographic regions
- Languages
- HRAF + ethnologue
- 1:2,000,000 surficial geology layer
- 1,000,000 placenames from Geonames

Additionally many historic maps have been scanned and geo-referenced to overlay such as the data from the Harvard Museum of Comparative Zoology, Transatlantic Slave Trade database and a lot more!!! Metadata is attached to vector rectangles of individual map sheets, which all have been de-collared. Anything not protected by Crown Copyright (or other copyright) will be available for download. It also includes JING application which is a great app for extracting selections from the map and exporting them to include in a publication if you credit and cite properly. Some part of the data is still in the test mode (in the servers) although majority of it is in the public website right now. It runs best on Firefox 2.0, but also runs fairly well on Internet Explorer 7.0. Browse at <http://africamap.harvard.edu>. [Source: WorldFish Geospatial Blog]

[Excel to Google Earth Tool](#)



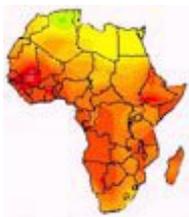
The Excel to Google Earth (E2G) thematic mapping tool has been developed to map administrative region data stored in Excel spreadsheets without the need for a geographic information system (GIS). The current, "public beta" version of the tool, which was created for use in the 15 PEPFAR focus countries and the Democratic Republic of the Congo, will enable decision makers, program planners and analysts at all levels in those countries to display their Excel-based administrative region data on a thematic map. This can help overcome several of the barriers that have limited the use of mapping for decision

support and M&E. The Excel to Google Earth (E2G) tool has been developed for mapping data stored in Excel spreadsheets and easy to install and use. All that is required is an Excel spreadsheet that has geographic identifiers (district, ward, province, etc.) included as part of the data. A wizard walks the user through the steps necessary and provides the opportunity to modify the color selections and classification breakdowns used on the map. Once the user has defined the elements of the map, a Google Earth compatible KML file is created and displayed in [Google Earth](#). Once the KML file is opened in Google Earth, it can be printed out or saved as a .jpg file for inclusion in reports or publications. Related content: [E2G Thematic Mapping Tool Download](#).

[Ghana Geospatial Toolkit \(GsT\)](#)



U.S. National Renewable Energy Laboratory ([NREL](#)) developed the [Geospatial Toolkit \(GsT\)](#) - a map-based software application that integrates resource data and geographic information systems (GIS) — for integrated resource assessment. A variety of agencies within countries and global datasets provided country-specific data. For some countries, NREL has developed a HOMER GsT version of the toolkit, which contains all of the features of the standard GsT and also integrates HOMER, an optimization model for distributed power. For the most recent toolkits (Afghanistan and Pakistan), NREL created versions of the GsT with different data resolution. The "data lite" versions contain lower-resolution data so users can more quickly run exploratory queries; the "full data" versions contain the high-resolution data, which require more analytical processing time. [Downloadable GsT](#)



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[Toolkits](#). In addition to Ghana GsT (13.1 MB), also available for Afghanistan, Bangladesh, Brazil, China, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Pakistan, Sri Lanka. Source: [SERVIR-Africa community resource registry](#)].

[User friendly option to download SRTM elevation data](#)



The CGIAR Consortium for Spatial Information has established a user friendly option to download SRTM elevation data which is originally produced by NASA. There is now a simple and fast way to download the SRTM tiles. Access the [download page](#) and for instance as shown on the image on the left, if you want to download all the tiles for Indonesia, select them and then clicked the *click here to begin search* button. You will get a list of all the tiles you have selected and you can download them easily by clicking on the data download arrow. The SRTM 90m DEM's have a resolution of 90m at the equator, and are provided in mosaiced 5 deg x 5 deg tiles for easy download and use.

Looking for contour lines? - You can use these images to create them.

Download the open source software [MapWindow GIS](#). Open MapWindow GIS and click on *Plugins > GIS Tools*. Click on *GIS Tools* in the top menu and then go to *raster> generate a contour Shapefile*. Then specify the contour interval and directory and click *Generate*.

[Image data for the geospatial community](#)



The [USGS Global Visualization Viewer](#) is the tool for some satellite images. Once you scroll to the image you need, right click and choose "add to list". On the bottom left hand side, click the Download button to retrieve the image. Note that most images are downloadable but some are not. Tweak the date in the image to find a downloadable file. You can also choose the collection of images on the top "Collection" menu. The Landsat Archive - "L7SLC off (2003+)" are your best choice for up to date images. However, they have some annoying lines running through them, but still they are useful for a lot of scientific work. If you just need a nice backdrop image choose Landsat Decadal and "ETM+ Pan (1999-2003)". All images have a resolution of 30m or 15m (per pixel) if pan sharpened. For a groovy display of recent or temporal data use the L7SLC images and digitize interesting features as Shapefiles, then display them on the older ETM+Pan backdrop image.

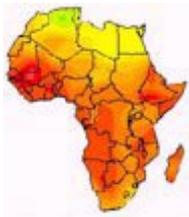
- If you are working in a country with a *bad internet connection* make sure you install [download manager](#) before you start the download. This will help as it resumes downloads even if the connection has been interrupted or the computer has been shutdown. Since you will get all image bands, use the open source software [OSSIM](#) for stacking and pan sharpening. Link to the [PDF Tutorial](#).
- To unzip the images use [IZArc](#) as Winzip will not do the trick and to explore other remote sensing data options such as radar etc. use NASA's [EOS Data Gateway](#).

[GRIP global roads data available in Google Earth and WMS service](#)

The Global Roads Inventory Project ([GRIP](#)) database through the OpenSource Flamingo viewer a KML file has been prepared so that you can check out (and validate?) GRIP against Google Earth. GRIP version 1 is a new (public domain) global roads database classified along the UNSDI-T data model domain. The data is aimed at a 250k-1mln scale, which will be used in [PBL's global environmental assessment](#) models. Commercial data was mainly used for Western Europe and India, the rest was collected from other publicly available sources. Investigations are underway on the options to make this part available under a BY-SA Creative Commons license to anyone who contributes to the GRIP database. The KML is based on available [WMS](#), which can be used after installing [Google Earth](#). The GRIP network link refreshes "4 seconds after the camera stops". Newer versions of Google Earth seem to have some issues with this when starting up or refreshing and to solve this just open the GRIP layer properties and click "OK", zoom in or out or pan.

[Conservation GeoPortal](#)

This is free and shared resource for the conservation commons that allows one to find and publish conservation GIS data and maps. The Conservation GeoPortal website provides solutions to the



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conservation GIS community, who quite often look for specific geodata for their conservation projects, or they have data or maps they would like to publish for others to use.

[ESA starts to make data available for GMES](#)

ESA, as coordinator of the Global Monitoring for Environment and Security (GMES) Space Component, has launched a new website through which data for GMES Services can be obtained. The [GMES Space Component Data Access web portal](#) is now providing data from ESA satellites and ESA Third Party Missions. In the next months, data from more than 25 other European and non-European satellites contributing to GMES will be made available. This event marks the start of pre-operations for the GMES Space Component.

[FAOs geopolitical ontology - new way to manage and exchange geopolitical information](#)

FAO has recently launched a geopolitical ontology, providing a new mechanism to describe, manage and exchange geopolitical information. The major goals of the geopolitical ontology are to provide a master reference for the FAO Country Profiles and Mapping Information System (FCPMIS), and to offer users with the most validated and updated geopolitical information. When working with geopolitical information, people want to find the most up-to-date information as quickly as possible. This is not an easy task and researchers end up spending a considerable amount of time searching through websites and documents to find the required information, and checking its validity and accuracy. The new geopolitical ontology provides mechanisms to satisfy these needs.

The current version of FAOs geopolitical ontology provides validated geopolitical information up to the current year. It provides names in FAO languages for all territories and groups as well as mappings among all available coding systems: ISO2, ISO3, AGROVOC, FAOSTAT, FAOTERM, GAUL, UN, and UNDP codes. In addition the ontology tracks historical changes from 1985 up until today; provides geo-locations (geographical coordinates); implements relationships among countries or countries and groups including has border with, is predecessor of, is successor of, is administered by, has member, and is in Group.

[UN Statistical Databases: Bringing information to the world](#)

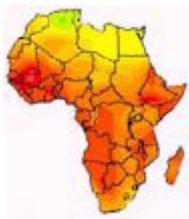


The United Nations Statistics Division of the Department of Economic and social affairs (DESA) has launched a new internet-based data service for the global user community. It brings UN statistical databases within easy reach of users through a single entry point. Users can search and download a variety of statistical resources of the UN system. The website offer subscriber and unrestricted access to a variety of databases.

Free remote sensing software

Links to some interesting and useful free remote sensing software packages for download from the Internet. The packages may not have all the capabilities of the big commercial packages, but might help you out.

- [FreeLook](#) - Free version of ENVI's image viewer provided by Research Systems, Inc., the developer of ENVI. It's good for looking at a variety of image file types and has some image manipulation capabilities like various image enhancements. It also allows you to view the image coordinates and digital counts for pixels in the image.
- [FreeView](#) - Free image viewer provided by PCI Geomatics, Inc., the developer of PCI image analysis software,. It's good for looking at a wide variety of image file types and has a few image manipulation capabilities. It also allows you to view the image coordinates and digital counts for pixels in the image.
- [Briv32](#) - Free software package provided by Tetracam, Inc., the developer of various multispectral imagers, and primarily aimed at analyzing airborne remote sensing imagery (although it can handle three-band composites of portions of Landsat scenes). It has a surprising variety of functions, including generating NDVI and other vegetation index maps. It also allows pseudocoloring of images and constructs two-band scatter plots.
- [MultiSpec](#) - Free software package (Mac version) provided by the Laboratory for Applications of Remote Sensing (LARS) at Purdue University and designed for analyzing multispectral and hyperspectral remote sensing imagery. It has a wide variety of functions, and actually represents quite an impressive software package. A Windows version is also available, but most of the analysis functions are not yet implemented.
- [SPRING](#) - Free software package (Linux version) provided by the Brazilian National Institute for Space Research (INPE) and designed primarily for analyzing multispectral remote sensing imagery and performing GIS functions. It can input image data from a number of satellite systems and various standard image file



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formats, and has a wide variety of image analysis functions. A RISC version is also available for machines running the Solaris 2.5 OS.

[GeoEye-1 Earth Imaging Satellite captures inaugural celebration from space](#)

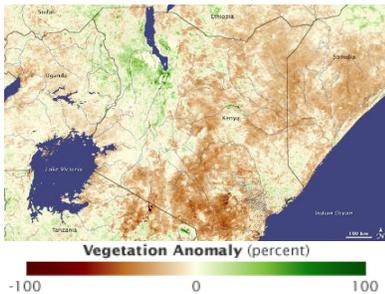


GeoEye-1, the world's highest resolution commercial Earth-imaging satellite, collected an image over the United States Capitol and the Inauguration of President Barack Obama on 20 January 2009. The [image](#), taken from 423 miles in space, is the world's highest resolution, color satellite image of the Inaugural celebration. The image, taken through high, wispy white clouds over Washington D.C., shows the monuments along the National Mall and masses of people between the Capitol and the Lincoln Memorial.

Among the many interesting features in the image are the clusters of people gathered around large jumbotron screens. The image was taken by GeoEye's newest satellite, GeoEye-1, as it moved from north to south along the eastern seaboard of the United States traveling at 17,000 mph or about four miles per second. GeoEye-1 imaging satellite is able to discern objects on the ground as small as 0.41-meter or about 16 inches in size, which represents an object about the size of home plate on a baseball diamond. However, due to current U.S. licensing restrictions the imagery is re-sampled to half-meter ground resolution. The satellite is currently in its final stages of check-out and calibration. The 4,300-pound satellite was launched from Vandenberg Air Force Base, Calif. on Sept. 6, 2008. GeoEye is making the imagery available at no cost. It is downloadable at www.geoeye.com under Featured Images. It may be used as long as there is a clear and distinct photo credit of "GeoEye Satellite Image."

Geospatial Research, Applications, Reference Material

[Kenyan Drought Affects Crops](#)

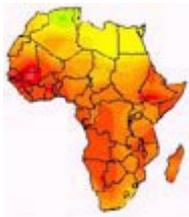


Earth Observatory has a vegetation anomaly map that reveals drought conditions in Kenya during early January. The drought has caused crop failures and the government has since declared a state of emergency. This image, which shows vegetation conditions on 1-10 January 2009, shows part of the reason for the failed crops. Developing drought settled over eastern Kenya, slowing plant growth. Areas in which plants were growing less vigorously than average are brown, while areas in which plants were growing well are green. Rainfall during the "short rains" season, which typically runs from September or October through November or December, did not provide the moisture maturing crops required in eastern Kenya, and as a result, the end-of-year harvest was

poor. By January, shortly after most crops were harvested, the remaining vegetation was clearly in bad shape compared to normal. In western Kenya, the country's grain basket, plants were doing well. The region is white and green in this image, indicating that vegetation was either average or healthier and denser than normal. The poor harvest in this region had nothing to do with weather. Corn, the primary crop, is typically planted when the long-season rains start between mid-February and mid-April. But in late 2007 and early 2008, post-election violence tore through Kenya, affecting much of the grain basket region. In many areas, farmers evacuated to camps and did not return until late April. By then, it was too late to plant a successful crop, said the Foreign Agricultural Service. Some farmers planted a late corn crop, and others planted wheat instead of corn because wheat has a shorter growing season. Altogether, the season shortened by violence resulted in a smaller harvest in the east, while drought reduced the harvest in the west.

[South Africa to publish carbon-storage atlas](#)

Several carbon-heavy South African corporates have thrown their collective weight behind a R2-million initiative to develop a so-called 'South African Carbon Dioxide (CO₂) Storage Atlas'. The project, which is backed by Sasol, Eskom, PetroSA, Anglo American and the South African National Energy Research Institute (Saneri), will use existing geological information to identify potential sites for the possible future storage of CO₂. The Council for Geoscience and the Petroleum Agency South Africa plan to publish the

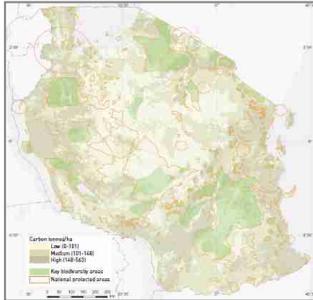


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initial assessment of storage potential by April 2010. Site identification is viewed as particularly crucial to prepare the way for the deployment of carbon capture and storage (CCS) as a mitigation measure for the lowering of greenhouse gas emissions from the country. CCS has itself been identified as a priority technology for South Africa, given the carbon intensive nature of its economy. In fact, South Africa is one of the world's most "emissions intensive" economies, emitting about 400-million tons of CO₂ yearly, which is about 1% of total global emissions. Saneri estimates that about 60%, or 249-million tons, of these emissions to be nearly immediately "sequestrable", with the main challenge now being the identification of suitable storage sites, such as deep saline aquifers. [Read More](#). [Source: [SERVIR-Africa community blog](#)]

[UNEP-WCMC launches new Carbon and Biodiversity Atlas](#)



Launched at the 14th Conference of the Parties to the United Nations Framework Convention on Climate Change, the 24 page demonstration atlas shows that areas high in both carbon and biodiversity do exist and can be identified by relatively simple mapping tools. Prioritizing such areas could give the 'double benefit' of reducing emissions from land use change whilst conserving biodiversity. Three regional maps along with six national maps are shown for the tropics, derived from global-scale data. The atlas have particular input to discussions on reducing emissions from deforestation in developing countries (REDD) by demonstrating the potential of identifying such opportunity areas. The maps are a first step towards demonstrating how combining different types of data can help to identify areas where opportunities and benefits overlap

for storing carbon and protecting biodiversity.

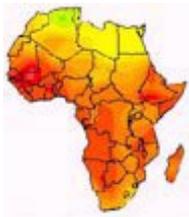
The map of carbon storage in terrestrial ecosystems was produced by combining the best available globally consistent datasets on carbon in live biomass (Ruesch and Gibbs, in review), estimated using the Intergovernmental Panel on Climate Change (IPCC) Tier-1 approach (IPCC 2006, Gibbs et al. 2007), and a dataset on soil carbon to 1m depth (IGBP-DIS 2000: this is likely to underestimate the carbon stored in peat soil). These data form the basis of maps presented in this atlas, which focuses on tropical regions. The global scale data provide a globally consistent picture of carbon storage, which is suitable for the illustrative purposes intended, however these are likely to be less accurate than those produced at national or regional scales. For the latter sub-level demonstration maps, the carbon stocks are divided into 'high' 'medium' and 'low' carbon density categories. As decisions about priorities and actions for reducing emissions from deforestation will be made by countries, it may be helpful if the data are scaled appropriately for their own national contexts. [Source: [SERVIR-Africa community resource registry](#)]

A new detailed and web-based atlas is expected in 2009, which will cover a larger number of countries with more accurate, national data on carbon and biodiversity where available, and examine options to include ecosystem services and impacts on local livelihoods. For further information, contact barney.dickson@unep-wcmc.org or alison.campbell@unep-wcmc.org. [Source: [SERVIR-Africa community resource registry](#)]

[Changing face of the Sebkhah El Melah flat plain in Tunisia](#)

Along Tunisia's southeastern coast is a flat plain of about 150 square kilometers (58 square miles) that lies below sea level. Known as Sebkhah El-Melah (or Sebkhah El Melah), it is in an *evaporite* basin. Occasionally, seawater infiltrates the coastal basin, carrying dissolved minerals that are later left behind when the water evaporates. NASA's Landsat 7 satellite captured the top image of Sebkhah El Melah on December 13, 1999. Almost 13 years earlier, Landsat 5 captured an image of the same area on January 2, 1987. In these true-colors, photo-like images, the most obvious difference between early 1987 and late 1999 is the dramatic lightening of the basin's color. Dark water fills the basin in the earlier image. In the later image, the basin appears largely dry, with remnant moisture tingeing the basin's edges turquoise. Evidence of human activity also appears in the 1999 image. Rectangular shapes at the eastern edge of the basin are likely part of a salt mining operation in the area. Over the years, people have drilled numerous boreholes into the Sebkhah El Melah to acquire potash, which is used to make soap, fertilizer, and even glass. These same boreholes have provided insights into the geologic history of the area. Although scientists are still debating the findings, the borehole data suggest that in the past, this basin held a perennial lake where minerals, including carbonate, gypsum, and halite were deposited.





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[Remote sensing signatures for African tropical forest species](#)

Tropical rain forests are treasure houses of biodiversity, but there has been no effective way to inventory and monitor their plant species over large areas. As a result, we have limited understanding of how climate change, clearing, invasive plants, and other threats are affecting these delicate ecosystems. A major advance in improving this situation is in the works, however. Gregory Asner of the Carnegie Institution's Department of Global Ecology was just awarded a \$1.8 million grant from the John D. and Catherine T. MacArthur Foundation to create a database of plant chemical and remote sensing signatures for tropical forest species. This large ground-based "Spectranomics Project" will expand Carnegie's unique aerial mapping and remote-sensing capabilities to inventory and track rain forest vegetation around the globe, and it will enhance the value of satellite observations over tropical forest regions. Read: [Carnegie Institution For Science](#). The database will be available on the web for researchers to use as well as video and other educational materials for public outreach. For more information about the spectranomics database and Carnegie Airborne Observatory: <http://spectranomics.stanford.edu/>. [Source: [SERVIR-Africa community blog](#)]

[Satellite data to help Geodisaster Monitoring and Crisis Management on Mount Cameroon](#)



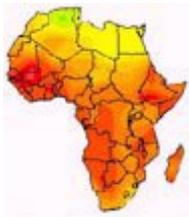
Despite the volcanic activities of Mount Cameroon and related phenomena such as landslides triggered by seismic activities, the study of geodisasters in the region have seldom attracted sophisticated remote sensing techniques that implore satellite imagery for monitoring and crisis management in order to develop early warning system. Satellite data may reveal invaluable information about the region's seismic activities and help in geodisaster management and mitigation. Satellite remote sensing is indispensable for regional risk mapping and sound decision making for the promotion of sustainable infrastructure development and safety of people.

Volcanic activity on the peak of Mt. Cameroon span the 18th, 19th and 20th centuries with recent episodes dating: 1835, 1838, 1852, 1868, 1909, 1922, 1925, 1954, 1959, 1982, 1999 and 2000. The eruption history of Mount Cameroon is quite colourful, voluminous perhaps twinning with the myths, beliefs and culture of the *Bakwerians*, the aborigines of the region. The total environmental damage recorded included over the years include the destruction of bridges, over running of a few kilometres of railway line, destruction of homes and sweeping of plantations. On other occasions, the flow had terminated onto the sea with a resultant bubbling activity that affected marine life adversely. Wind blown tephra choked the atmosphere causing poor visibility by day and glowed bright red at night. The basalts formed have also been porphyritic with olivine as the phenocryst, while yellow colouration evident on the vegetation suggested a potential sulphur mineralisation at least in the geologic future. Landslides are not localized but spread throughout the region, however one of the most captivating occurred in June, 2001 at the Mabeta New layout Quarters in Limbe, South West Province of Cameroon. Besides damage and loss of property, a death toll of over 50 people was reported and others were rendered homeless. The possibility of the trigger emanating from the mountain may not be ruled out as it is the major geological feature responsible for seismicity in the region.

It is envisaged that the monitoring of Mt. Cameroon and related geodisasters may now receive a better surveillance given the satellite attention to the African Continent and creation of the University of Buea Remote Sensing Centre (a partnership project with the University of Gent; Belgium). The geochronological dating and aerial extend of past lava flows may now be retraced and paths of future lava flows modeled and predicted. Risk maps and early warning systems could therefore be developed to provide the basis for infrastructural development and settlements encouraged around the Mountain to promote adequate utilization of resources in the region.

[Guide to night-time light remote sensing and its applications](#)

Night-time light imagery from remote sensing data sources offers a uniquely "human" view of the Earth's surface, as it is due almost entirely to some form of human activity. This illustrated guide introduces users to the types of night-time light data available, the characteristics, and the limitations. The second part of the guide examines how the data source has been and may be used to derive useful information about human presence and activities on Earth. Topics range from population and light pollution to economic activity, greenhouse gas emissions, and using night-time lights to help with disaster management. The ecological



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ramifications of night-time lighting are also considered. The final section of the guide explores other potential sources of night-time light data and how future systems may enhance existing capabilities for understanding the human environment through the observation of lights at night. The Guide was developed by former Earth Institute Fellow Christopher Doll, with support from the NASA Socioeconomic Data and Applications Center (SEDAC) operated by CIESIN. [Source: [SERVIR-Africa community resource registry](#)]

GeoSPIRS - A new way to view the Earth's surface



The GeoSPIRS-Algorithm is a completely new view to the earth's surface by analysing the digital elevation model (DEM: SRTM, LIDAR, terrestrial surveying) of the investigated area with a whole new approach. In practice it is an extension on top of a GIS system and uses raster algorithms. With GeoSPIRS it is possible to identify the whole natural processes of all terrains (also in the plain). In addition to it, it detects until now unknown natural processes and gives information about their causes. The procedure analyses the earth-surface and shares the surface in red (strong), orange (increased) and white (secured) areas. Movements and processes are taking place if the resistance against the

effect of the gravitation is insufficient.

Other scopes for GeoSPIRS include:

- Exploration process regarding minerals, particularly for minerals, which are deposited in ancient river systems or which were transported by water.
- Verifying of water wells in Africa: it is possible to visualize the whole runoff characteristics and in combination with hydro-geological measures, the drilling points for wells with their depth and embankment can be determined.
- There is no fieldwork necessary. The GeoSPIRS is sustainable and future oriented, it is able to make the future events more predictable.
- The possibility to find sustainable drinking water, showing unknown water regimes and drilling costs can be saved considerably.

A test project in West Africa with a German engineering firm revealed that the new approach verifies more than 85% of the successful and non-successful wells. In addition, many new potential for usable water was visible. Example for opening in Google Earth regarding [fatal avalanches in Switzerland](#) clearly shows the foreseeable avalanche paths. For the verification of the new geomorphological investigation procedure, a GeoSPIRS analysis of these areas (actuality Dec. 2008) was made by using the well known SRTM elevation dataset as the basic dataset. Contact: kontakt@geoka.com, ladwein@geoka.com or schubert@geoka.com. Geoka News - January 2009. Website: www.geoka.com.

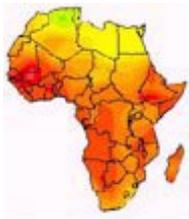
Satellites help locate water in Niger



Like most sub-Saharan African countries, Niger faces problems meeting its water needs. As part of ESA's TIGER initiative, satellite data are being used to identify surface and underground water resources in the drought-prone country. Due to the rainfall variability in time and in space, during recent years the rain-fed agriculture struggles to meet the requirements of food security in the Sahel area. ESA's WADE (Water resources Assessment using SAR in Desert and arid lands in West African Ecosystems) project, funded by the Data User Element (DUE), uses ERS and Envisat Synthetic Aperture Radar (SAR) imagery to map and monitor the location and extent of surface water bodies and to identify potential areas for water infiltration. Having access to these maps will help local water authorities to better manage their water resources, lead livestock to water and

improve their water storage capacity. The Advanced Computer Systems (ACS spa) in Rome, Italy, developed the WADE processing system in conjunction with local users, represented by AGRHYMET (the Regional Centre of the Permanent Interstate Committee for Drought Control in the Sahel).

To demonstrate the technology, ERS and Envisat SAR data from 1993 to 2007 were integrated with in-situ data over an area of about 100 000 km² in the west part of Niger. Based on these data, a water body classification map was generated for each year. Results have been validated against 90 sampling points collected in the field by AGRHYMET during summer 2007 and showed an overall accuracy of 100% for permanent water bodies and above 75% for semi-permanent water bodies. In November 2008, WADE



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software and data were installed in AGRHYMET's facilities in Niamey, Niger's capital city. Following extensive training sessions, AGRHYMET employees are now using the system to carry out their monitoring.

[URISA 3rd Annual Student Paper Competition](#)

The Urban and Regional Information Systems Association (URISA) is sponsoring its third annual student paper competition. The objective of the competition is to challenge undergraduate and postgraduate students to demonstrate development and effective use of information systems in both their field of study and the community. The competition is open to all eligible students but particularly those interested in careers using geographic information systems, information technology, geospatial technology, planning, and/or community development. Deadline: May 1, 2009.

[Call for Papers: National Social Maps](#)

Contributions are invited to a special edition of the Journal of Maps devoted to National Social Maps. The broad theme is mapping of value added social data covering a whole country. Maps should show clear and distinct socio-geographic patterns, and especially:

- The mapping of previously unmapped data and indices
- Non-standard representations of space such as cartograms
- New and non-standard geographies
- New and innovative ways of mapping social data

Authors should:

- 1) Submit a short draft (500 word limit) outlining the key themes and scope of the paper, where possible including example mapping, by 30 April 2009.
- 2) Submit a completed paper (2500 word limit) to the Journal of Maps by 31 July 2009.
- 3) The special edition will be published in March 2010.

Reviewers will discuss ideas for papers and their suitability with potential contributors prior to the short draft submission stage. Contact: Dan Vickers at d.vickers@sheffield.ac.uk.

[Call for Papers: Cognitive Mapping and Participatory Research](#)

Contributions are invited to a special edition of the Journal of Maps devoted to cognitive (mental) maps and their application. The broad theme is participatory mapping and more specifically:

- How cognitive maps have developed as a research method;
- Application areas of cognitive maps;
- Wider development of participatory mapping.

Authors should:

- 1) Submit a short draft (500 word limit) outlining the key themes and scope of the paper, where possible including example mapping, by 28 February 2009.
- 2) Submit a completed paper (2500 word limit) by 31 May 2009.
- 3) The special edition will be published in January 2010.

Reviewers will discuss ideas for papers and their suitability with potential contributors prior to the short draft submission stage. Contact: Dan Jacobson at dan.jacobson@ucalgary.ca.

[Call for Papers: IJGIS Special Issue on Information Semantics](#)

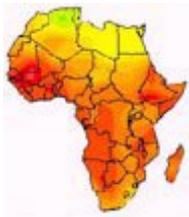
The IJGIS is publishing a post-workshop Special Issue on "Information Semantics and its Implications for Geographical Analysis". They are looking for original work regarding the integration of geospatial semantics and geographical analysis with an emphasis on geoprocessing and geospatial applications. Deadline: March 31, 2009.

Training Opportunities

Have you signed up to receive [SDI-Africa Newsletter](#) notices? It only takes a minute, and then the GSDI Association can notify you when a new issue of the SDI-Africa newsletter is available, plus alert you to particular GSDI announcements (like a call for GSDI grants, or a call for papers for a GSDI conference).

The GSDI Association also hosts an [SDI-Africa E-mail Discussion List](#) with intermittent news and announcements of opportunities (this discussion list is separate from the SDI-Africa Newsletter list).

- The [SDI-Africa E-mail Discussion List](#) is open and available to anyone to read on the web. To submit messages or to receive submitted comments or notices by e-mail, one first must register.



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- To see the collection of prior postings to the list, visit the [SDI-Africa E-mail Discussion List Archives](#).
- To post a message to the list, send an email to sdi-africa@lists.gsdi.org.

LEAD Training 2009

LEAD offers training in 'Leadership for Sustainable Development' all over the world, and four of the Member Programmes are now open for applications. LEAD has implemented capacity building programmes in the last 15 years, through its 14 offices globally, three of which are in Africa.

- LEAD Anglophone West Africa:

From 2009, LEAD-Nigeria is extending the LEAD Associateship Program to other English speaking West African countries – Ghana, S/Leone, Liberia, and The Gambia. The cohort training program is of one year duration. From each country, 15-20 emerging leaders from different walks of life will be recruited for the training and will be trained for 20 days spread over a 12 month duration. The training program will focus on developing a sound knowledge base on the most pressing environmentally issues and their causes and work to develop skills for sound environmental governance processes. It consists of a careful selection of conceptual inputs and field-based learning. The skill building process will consist of developing expertise in Team Building, Leadership Development, Cross-cultural Communication, Systems Thinking, Negotiation & Problem Solving Skills, Stakeholder Engagement and Consensus Building all of which promote sustainable development. Application deadline: 28 February 2009.

- LEAD Southern and Eastern Africa:

LEAD Southern and Eastern Africa is one of the three LEAD offices in Africa with activities covering all countries in Southern and Eastern Africa. Application deadline: 28 February 2009.

Workshop in Geospatial Analysis for Attaining the Millennium Development Goals, 20-24 April 2009, Bonn, Germany

The Center for International Earth Science Information Network (CIESIN) of The Earth Institute at Columbia University is now accepting applications for participation in a five-day training workshop in geospatial data analysis techniques for population and demographic research focused on attaining the Millennium Development Goals and sustainable development. Up to ten participants will be selected to attend the workshop. All workshop fees, travel, lodging will be covered for the selected participants along with a small per diem to cover meals. The potential applicant pool is global. For consideration, complete the [application form](#), attaching all application materials, and send to the address listed on the application. Please note: email submissions are preferred. Deadline: February 23, 2009. Decisions will be announced on March 2, 2009. This Workshop is made possible from a grant from the International Union for the Scientific Study of the Population (IUSSP).

CETRAD GIS Training Course, 23 February - 13 March 2009, Nanyuki, Kenya

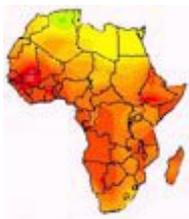
This three-weeks GIS Training Course is offered every year. The overall goal of the Course is to enable the participants to acquire a sound theoretical, but more so practical basis in the use of the most common GIS operations. Particular attention is given to unequivocal definition of quality standards and to the broadening of each participant's palette of concrete implementation possibilities. The course is facilitated by a GIS expert from the Centre for Development and Environment, University of Berne, Switzerland (Dr. Albrecht Ehrensperger) and our local GIS Team. Tuition fee (Ksh) 70,000/=. Course Modules:

- Module 1: GIS principles
- Module 2: Pragmatic use of GIS software
- Module 3: Data generation
- Module 4: Map layouts
- Module 5: Topographic analysis
- Module 6: Combining topography and hydrology
- Module 7: Introduction to satellite image analysis
- Module 8: Introduction to remote sensing
- Module 9: Setting up a GIS facility

There will also be a course on Environmental Impact Assessment, 2-20 March 2009. Tuition fee (Ksh) 65,000/=.

Decision Support Systems, Experimental Design and Analysis of Data, 20-24 April 2009, Bamako, Mali

This training program will enable those engaged in agricultural research and extension services to improve their ability to use geographic information systems (GIS) and modeling tools to collect, analyze, and employ soil, weather, and market information in systems that generate site and crop specific soil nutrient recommendations. The course will improve participant skills in integrating field data with decision support tools (DST) and in disseminating and applying results that lead to better yields through Integrated Soil



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Fertility Management (ISFM). The course will cover all facets of fertilizer recommendation systems and an introduction to ISFM. The program fee for the 5-day training workshop is \$1,200. Program fee due by March 20, 2009. [Source: [SERVIR-Africa community blog](#)]

[2nd Toponymy training course for Eastern Africa](#), Nairobi, Kenya

Held prior to and organized in conjunction with the [25th United Nations Group of Experts on Geographical Names \(UNGEGN\)](#) session in Nairobi, May 5-12, 2009. Contact: toponymy@geo.uu.nl.

[Advanced Seminar – Use of GIS for Fisheries and Aquaculture Planning and Management](#), 8-19 June 2009, Zaragoza, Spain

The seminar addresses the use of spatial tools, specifically GIS, remote sensing and mapping for fisheries and aquaculture planning and management. The seminar provides the foundation for understanding what GIS is, what it can do, and how others are using it. The basic functions of a GIS are addressed, as well as the reasons why a GIS database is powerful, what coordinate systems and map projections are and why they are important. Spatial information management is discussed with regards to data sources, geo-processing and map making. The seminar also provides guidance on how to select GIS software, and an overview on how to design and plan a GIS project. The seminar also examines some basic modelling techniques used in spatial analysis and introduces processes and tools that can be used to perform a variety of GIS analysis tasks. The final part of the seminar focuses on applications of GIS in fisheries and aquaculture in the Mediterranean in which participants are challenged to implement many of the tools taught throughout the seminar. North African countries (Algeria, Egypt, Mauritania, Morocco and Tunisia) and Senegal may apply for scholarships covering registration fees, and for scholarships covering the cost of travel, full board accommodation during the seminar and medical insurance. Deadline for the submission of applications: 16 March 2009. [Source: [SERVIR-Africa community blog](#)]

[Nippon Foundation/General Bathymetric Chart of the Oceans \(GEBCO\) Training Project – Postgraduate certificate in ocean bathymetry at the University of New Hampshire, USA \(2008-2009\)](#)

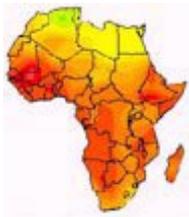
The success of [GEBCO](#) depends on a relatively small number of active individuals. In order to broaden the GEBCO community and to encourage more younger scientists and hydrographers to become involved in mapping the ocean floor, GEBCO proposed, and the Nippon Foundation accepted, the training of a new generation of younger scientists and hydrographers, mostly from less developed countries, in a Postgraduate Certificate in Ocean Bathymetry (PCOB) at the University of New Hampshire (UNH), USA. Once trained, some of the PCOB holders will then have the opportunity to work on Bathymetric Capacity Building Projects designed to provide tangible products with which the returnees can demonstrate the value of bathymetry, with support to organize and convert data within their area, and with basic resources to help them become established. This scheme will ensure that the training is immediately put to good use and that the trained personnel are helped to take the first step in their new careers. The selection process will aim at choosing candidates from a wide geographic distribution of coastal developing countries. Preliminary applications should be emailed to the Project Director as soon as possible ([click here to download the application form as a Word document](#)) and not later than 25 February 2009. Contact for further information: nfg_project_manager@ccom.unh.edu.

[Urban Transport 2009: Sida-Sponsored International Training Programme](#), 17 August - 10 September 2009, Lund, Sweden

The overall objective of the programme is to provide participants with knowledge of how to analyse traffic and transport problems in urban areas, how to formulate goals for the transport system, develop strategies and plans for solving problems and to evaluate proposed strategies. Applications are aimed at individuals working in certain countries for organisations such as: City Councils, Departments of Highway Ministry of Communications, Departments of Public Works and Highways, Departments of Publics Works and Town & Country Planning, Institutes of Transport Technology, Local Government Transport Units, Metros System Companies, Ministries of Road and Transportation, Ministry of Works & Urban Development, Road Development Agencies, Transport Companies, Urban Development Authorities. Deadline for application: 1 April 2009.

[ESRI East Africa training schedule for January-June 2009](#)

Modules include:



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- ArcGIS Desktop I, II and II
- Mobile Mapping using ArcPad & GPS
- Building Geodatabases
- Working with ArcGIS 3D Analyst
- Advanced Analysis using ArcGIS
- Introduction to ArcGIS Server
- Introduction to the Multi-user Geodatabase
- Working with ArcGIS Spatial Analyst
- Working with ArcGIS Network Analyst
- Working with ArcGIS 3D Analyst
- Advanced Analysis Using ArcGIS



[Advanced Application for GIS in Oil & Gas](#), 28 March - 1 April 2009, Manama, Bahrain



Advanced Applications
for GIS in Oil & Gas
28 March - 1 April 2009
Crowne Plaza Hotel, Manama, Bahrain

This five day conference offers an intensive and dynamic opportunity to refine your knowledge, catch up with key industry players and share best practice lessons with your peers on the latest technologies within GIS. The various topics aim to offer

informative debate and higher learning experience:

- Making the business case for the Enterprise-wide implementation of GIS
- Overcoming interoperability challenges by finding suitable data integration techniques
- Enhancing existing SOA's and web-enabled technology
- Integrating your existing / legacy IT infrastructure with new GIS software to interoperate with other stakeholders across the entire production and supply food-chain
- Effective Geospatial data acquisition and data management
- Using GIS applications for managing your risk, pipeline integrity, downstream distribution and your other assets
- Maximizing the potential of GIS technology through education, training and change management
- Overcoming challenges that prevent data application and portability

[Technician diploma \(18 months\) and Technologist diploma \(18 months\)](#), both run in English and French

and starting first Monday in March 2009, Ile-Ife, Nigeria

[Short-courses offered by RECTAS in 2008/2009](#), Ile-Ife, Nigeria

The [Regional Centre for Training in Aerospace Surveys \(RECTAS\)](#) is offering a number of three-week courses. Also note that RECTAS is able to package and deliver customised training for intrested organisations. These could be either advanced or other certificate programs. Contact: info@rectas.org or thonteh@rectas.org.



[Southern and East African Mineral Centre \(SEAMIC\) 2009 courses](#), [Geoinformation Department](#), Dar Es Salaam, Tanzania. The Geo-information department's main function is to promote the standardisation of all geo-science information available in the sub-region and its conversion into an accessible format for dissemination, with a view to improving accessibility to geo-science data to the public. Mr. Mesfin W. Gebremichael, mesfin@seamic.org, seamic@seamic.org.

- February 16-27, 2009: Geological Map Making Using GIS
- March 16-20, 2009: GIS Database Development
- April 27-May 8, 2009: Principles and Applications of Remote Sensing
- May 18-29, 2009: GIS Principles and Applications
- June 8-19, 2009: Geophysical and Geochemical Data Processing

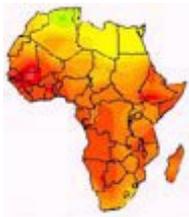


[GIMS course schedule for December 2008 and January 2009](#) - GIMS is an ESRI accredited learning centre servicing Southern Africa.



[Introduction to ArcGIS Server Mobile ADF](#), 27 February 2009, 09:00 – 11:00am. Midrand, South Africa

Hosted by GIMS, this seminar will provide an Introduction to ArcGIS Server Mobile ADF, also known as ArcGIS Mobile, specifically looking at the out-of-the-box functionalities and additional customisation options.



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L'École Régionale post-universitaire d'Aménagement et de gestion Intégrés des Forêts et Territoires tropicaux (ERAIFT) [Regional School on Integrated Management of Tropical Forests and Territories] - **Promotion V (2008/2009) : inscriptions ouvertes**, Kinshasa, République Démocratique du Congo. Le **cursus de l'ERAIFT** aboutit à l'obtention d'un Diplôme d'Etudes Supérieures Spécialisées (DESS). Ce diplôme est l'équivalent d'un Master du système « LMD » (Licence, Master, Doctorat) des Accords de Bologne. Il est reconnu par le Conseil Africain et Malgache pour l'Enseignement Supérieur (le CAMES). Le programme du DESS comprend 16 chaires dont l'enseignement s'étend sur une période de 12 mois. L'étudiant dispose ensuite de 6 mois pour rédiger son mémoire. Le contenu de ce dernier repose sur l'approche systémique, et s'inscrit dans le cadre de l'aménagement intégré du territoire, du développement humain, durable et écologiquement viable, de la lutte contre la pauvreté et de la gestion rationnelle de l'environnement. L'autre grade décerné par l'ERAIFT est le Diplôme de Philosophiae Doctor (Ph.D.) en Aménagement et gestion intégrés des forêts et territoires tropicaux. Bourses disponibles, mais limitées en nombre. Contact: info@eraift.org.



CGIS-NUR Training Program 2009, Rwanda

- Introduction to GIS
- Cartography & Mapping with ARCGIS (Basic)
- Cartography & Mapping with ARCGIS (Advanced)
- Geoprocessing using Model Builder and Python

CGIS-NUR Post Graduate Diploma Programme (PGD) in Geoinformation science launched

The National University of Rwanda (NUR) through its Centre for Geo-Information Science (CGIS) and in partnership with International Institute for Geo-Information Science and Earth Observation (ITC), the Netherlands launched the Post Graduate Diploma Programme (PGD) in Geo-information Science as part of Education program at NUR. The **launching ceremony** took place the 27th January 2009 at the School of Public Health, Kicukiro, Kigali. The programme is expected to produce candidates qualified to independently plan, develop and execute GIS and to advise public as well as private institutions and individuals in planning and management for the sustainable development both in the country and across the region. The first intake which kicked off for the academic year 2009 will have 33 students. The programme consists of 16 courses featuring a total of 164 credits, and it is offered in two options which are post graduate diploma of 120 credits equivalent to 30 weeks and a certificate programme of 60 credits equivalent to 15 weeks of study. NUR plans to introduce two more Masters programmes in the field of Geosciences which are expected to start early next year.

ESRI Online Seminar - Introduction to ArcLogistics Navigator, February 12, 2009 (12 PM, 2 PM, & 6 PM - New York time)

ESRI Online Seminar - ArcGIS Server Image Services at 9.3, March 26, 2009 (12 PM, 2 PM, & 6 PM - New York time)

ESRI live training seminars are designed for those who want GIS training on a focused topic presented live by an ESRI technical expert. The Live Training Seminars are free - no purchase is necessary. If you miss the live training seminar, typically ESRI records the seminars, so you can **download** and view it at a later time, at your convenience.



Upcoming ITC distance education courses

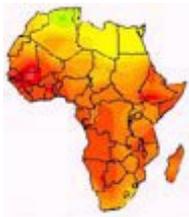
- Principles of Remote Sensing, starting 18 May 2009 (6 weeks). Registration deadline: **April 20, 2009**.
- Environmental Impact Assessment and Strategic Environmental Assessment with spatial decision support tools, starting 8 June 2009 (6 weeks). Registration deadline: **May 11, 2009**.

Upcoming ITC certificate courses

- **Digital Photogrammetry and Remote Sensing** starting on 20 April 2009. Registration deadline: **15 March 2009**.
- **GIS Operations** starting on 20 April 2009. Registration deadline: **15 March 2009**.
- **Cartography and Geo-Visualisation** starting on 20 April 2009. Registration deadline: **15 March 2009**.

Workshop in Advanced Spatial Analysis

The Population Research Institute (The Pennsylvania State University) and the Center for Spatially Integrated Social Science (University of California, Santa Barbara) are offering workshops in the NICHD-



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funded training program in Advanced Spatial Analysis. These five-day-long workshops focus on advanced methods for research in the population sciences. Deadline: March 31, 2009.

Funding Opportunities, Awards, Support

[SaveEarthGame Contest](#)

This worldwide computer game competition is designed to raise global public awareness of Earth observations, particularly amongst students. Participants are invited to either generate a concept for a computer game or, for those with programming skills, to actually create a playable game design. The entry deadline for the game concept contest is 10 April 2009, and the judging will take place in May. The competition is being organized by the IEEE Committee on Earth Observations and other partners as a contribution to GEO.

[2009 URISA Exemplary Systems in Government \(ESIG\) Awards](#)

The Urban and Regional Information Systems Association (URISA) recently posted the application materials for its [Exemplary Systems in Government \(ESIG\) Awards](#), which recognize exceptional achievements in the application of geospatial information technology that have improved the delivery and quality of government services. Applications may be submitted in the categories of Single Process and Enterprise Systems.

- Systems in the Single Process category are examples of applying information system technology to automate a specific single process or operation involving one department or subunit of an agency. The system application results in extended and/or improved government services that are more efficient and/or save money.
- Systems in the Enterprise category are examples of using information systems technology in a multi-department environment as part of an integrated process. These systems exemplify effective use of technology yielding widespread improvements in the processes; services involved, or cost savings to the organization.

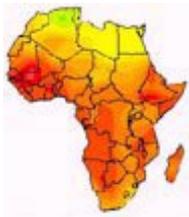
Applications are available for download and must be submitted by May 11, 2009.

[International Tropical Timber Organisation \(ITTO\) Fellowship Program](#)

ITTO offers fellowships through the Freezailah Fellowship Fund to promote human resource development and to strengthen professional expertise in member countries in tropical forestry and related disciplines. The Programme supports mainly short-term activities, such as participation in international conferences, training internships at industries, research and educational institutions, study tours and lecture/demonstration tours, but also help people to prepare technical documents, publication and dissemination such as manuals and monographs, and provide small grants for post-graduate study. The maximum amount for a fellowship grant is US\$10,000. ITTO Fellowship Award provides tuition/training/conference fees, transportation fees, daily subsistence allowance, book allowance and other allowances. For post-graduate studies, only a partial tuition fee or a small research grant can be provided. Only nationals of [ITTO member countries](#) are eligible to apply, and fellowships are awarded mainly to nationals of developing member countries. Application deadline: 2 March 2009 for fellowship activities that will start after 1 August 2009.

[2009 CTA Participatory Mapping Photo Competition](#)

The [Technical Centre for Agricultural and Rural Cooperation ACP-EU \(CTA\)](#) and partners are creating a [multimedia multilingual training kit](#) to support the spread of good participatory mapping practice. The training kit will promote examples of participatory mapping from around the world. CTA would like to include photos in the training kit, to provide wide variety of examples and applications, and to allow the PGIS community to share photos of their experiences with other practitioners. To make this fun, CTA decided to hold a photo competition. Winning prizes will be awarded up to a maximum of EUR 900. Donated photos to be used in the training kit will be entered into contest in [15 different categories](#). To learn more about the competition, read the [legal conditions](#) and the [guidelines for submission and the procedures of selection and awarding](#). To enter the competition you have to be a registered user. During the registration process, you will receive an activation e-mail. If you cannot find it in your Inbox, please check your Spam folder. After login the Photo Competition Menu will appear on the left navigation bar. You may submit your photographs and additional data the latest on February 25, 2009.



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National Geographic Society Conservation Trust

The objective of the Conservation Trust is to support conservation activities around the world as they fit within the mission of the National Geographic Society. The trust will fund projects that contribute significantly to the preservation and sustainable use of the Earth's biological, cultural, and historical resources. While grant amounts vary greatly, most range from U.S. \$15,000 to \$20,000. No deadline.

No-profit supply of computers to Developing Countries

Computer Aid International has already shipped over 50,000 PCs to more than 90 developing countries. Out of the 50,000 computers shipped, over 35,000 have gone to educational institutions and the remaining to community organisations working in fields as diverse as HIV/Aids, environment, human rights, and primary healthcare. Computer Aid International aims to:

- Increase the number of refurbished computers being re-used overseas;
- Increase the number of UK organisations donating their used IT equipment for re-use overseas;
- Identify and work with those organisations in recipient countries able to derive maximum value from refurbished computers;
- Provide training and work experience in computer repair to people from socially excluded communities.

Royal Geographic Society Grants

The Society provides funding for geographical research, fieldwork and teaching. The grants are wide-ranging and offer support to desk and field-based researchers, research teams and school teachers. Grants are for work in both the UK and overseas and range in value from £350 to £15,000.

Tech Awards

The purpose of the Tech Awards programme is to inspire future scientists, technologists, and dreamers to harness the power and "promise of technology to solve the challenges that confront us at the dawn of the 21st Century". Awards are available for innovators from around the world who use technology to benefit humanity. Individuals and non-profit organisations are eligible to apply. The Tech Awards accepts nominations year-round. Nominations received after March 27, 2009 will be considered for 2010 Awards.

Ramsar Small Grants Fund for Wetland Conservation and Wise Use (SGF)

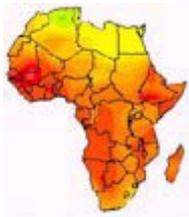
Suitable project proposals are those which contribute to the implementation of the Convention's Strategic Plan 2003-2008 for the conservation and wise use of wetlands; provide emergency assistance for Ramsar sites; or provide 'preparatory assistance' to allow non-Contracting Parties to progress toward accession. Eligibility is restricted to developing countries and countries with economies in transition. Projects may be proposed and implemented by any agency, NGO, or individual, but proposals MUST be endorsed and monitored by the Administrative Authority (the Ramsar implementing agency) in the Party's government, and seldom is more than one proposal approved from the same Party in any year. Deadline: 30 June 2009. The current edition of the "SGF Operational Guidelines", which includes complete information and the required forms, is now available on the Ramsar Web site. The deadline for submissions of draft proposals for the SGF advisory service is 30 April 2009.

British Council Education Partnerships in Africa Travel Grants

EPA recognises that many UK Further and Higher Education institutions may have a limited awareness of appropriate partner institutions in sub-Saharan Africa. In order to assist institutions to develop new links, the British Council is offering up to 40 travel grants of up to £1,500 each to support discussions between English institutions and potential partner institution(s) in sub-Saharan Africa. These grants should help institutions in England and sub-Saharan Africa lay the foundations of partnerships for institutional capacity building, employability and entrepreneurship in sub-Saharan Africa. The grants will be given to UK institutions. Travel grants are still available to scope partnerships in time for Round Three of the [Education Partnerships in Africa](#). Awards up to £1500 per partnership. Deadline: February 28, 2009. All travel must be completed by 31 March 2009.

IDRC Doctoral Research Awards

Applications will be accepted for research at the doctoral level in areas corresponding to IDRC's research priorities. IDRC's research activities focus on four program areas: 1) Social and Economic Policy, 2) Environment and Natural Resource Management, 3) Information and Communication Technologies (ICTs) for



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Development, and 4) Innovation, Policy and Science. Applicants must hold Canadian citizenship or permanent residency status in Canada, or hold a citizenship of a developing country and be enrolled in a doctoral program at a Canadian university. Deadline: April 1, 2009.

[Bourses d'études supérieures Russell E. Train Pour la République Démocratique du Congo et le Gabon Formulaire de candidature 2008 - 2009](#)

Le programme EFN (Education pour la nature) est dédié à Russell E. Train, fondateur administrateur, ancien président, ancien président du Conseil d'administration et actuellement président émérite. Qu'il s'agisse du College of African Wildlife Management qu'il a créé en Tanzanie ou de son parrainage de nombreux promoteurs de la protection de la nature dans le monde, la carrière de M. Train représente le véritable esprit du programme Education for Nature. La date limite du dépôt des formulaires pour la bourse Russell E. Train est fixée au 28 Février 2009 le cachet de la poste faisant foi. Les formulaires de demande remplis devront être envoyés par courriel à Judith.Mashinya@wwfus.org. Par la poste à: EFN, World Wildlife Fund, 1250 Twenty-Fourth Street, NW, Washington, DC 20037, USA.

[Commonwealth Shared Scholarship Scheme 2009](#)

The Shared Scholarship Scheme is a joint initiative between the UK Department for International Development (DFID) and UK universities, to support scholarships for students from developing Commonwealth countries who would not otherwise be able to study in the United Kingdom. Awards are for taught postgraduate courses only. All candidates' home country and a list of the eligible courses at each institution is available in the [booklet](#) (pdf) for the 2009 Scheme. Individual universities will handle advertising and recruitment directly and applications should therefore be addressed to the participating university direct.

Employment Opportunities

[Lake Victoria Basin Commission \(LVBC\) vacancies](#), Kisumu, Kenya

Lake Victoria Basin Commission (LVBC) Secretariat is coordinating the implementation of the 2nd Phase of the Lake Victoria Environmental Management Project (LVEMP II) which is implemented in all the five EAC Partner States (Burundi, Kenya, Rwanda, Tanzania and Uganda) for a period of eight years.

- Regional Project Coordinator (P4), Ref No: EAC/LVBC/LVEMP II PCT/ 09- 01)
- Senior Operations Officer (P3), Ref No: EAC/LVBC/LVEMP II SOO/ 09- 02)
- Water Resources Management Officer (P2), Ref No: EAC/LVBC/LVEMP II WRMO/ 09- 03)
- Economist/Planning Officer (P2), Ref No: EAC/LVBC/LVEMP II E-PO/ 09- 04)
- Environment and NRM Officer/CIS (P2), Ref No: EAC/LVBC/LVEMP II ENRMO/ 09- 05)
- Communications/Development Awareness Officer (P2), REF: EAC/LVBC/LVEMP II C/DAO/ 09- 06)

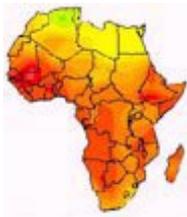
Deadline: February 20, 2009.

[Consultant, Kenya Land Information Management Systems \(LIMS\)](#), Nairobi, Kenya

The Ministry of Lands in Kenya wishes to procure consulting services of a Technical Assistant to its land reform programme, specifically the Strategic Land Information Management Systems (LIMS). Charles Kendall & Partners Ltd acting for and on behalf of the Swedish International Development Cooperation Agency (Sida), Nairobi and the Ministry is calling for tenders from Corporate Service Providers to provide the services to support the Ministry's Land Reform Transformation Unit, (LRTU) based at the Ministry headquarters in Nairobi. The main objective of the strategic LIMS Technical Assistance is to provide strategic and programme level support to the development and implementation of a LIMS, an ongoing programme that has been conceptualised in the land policy framework with adherent LIMS reports. Deadline: February 16, 2009. [Terms of Reference](#).

[Technical Assistance for Land Tenure Regularisation Programme in Rwanda](#)

DFID Rwanda is seeking to contract a consultant (Service Provider - SP) to lead and facilitate a [technical support](#) to the Government of Rwanda (GoR) to carry out a one-off process of registering all landholdings in Rwanda, in accordance with its 2005 Land Law and 2008 Strategic Road Map for Land Tenure Reform. The SP is required to assist MINIRENA (Ministry of National Resources) through the NLC (National Land Centre) and District Land Bureaux in technical and logistical organisation and management; training of central and local government officials and community members who will carry out most of the fieldwork; quality assurance, and monitoring and evaluation of the programme, generally in accordance with already



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established systems and procedures, including coordinating with other complementary projects. The contract will be for a period of 3 years starting from 1 June 2009 with a possible extension of up to 2 years (maximum). Deadline: February 10, 2009.

Postdoctoral Position: Large-Scale Ecosystem Functioning, South Africa

Understanding the effects of climate change and land use on ecosystem functioning is a challenging question that all environmental and biological scientists attempt to address. This is exactly one of the most important aims of the BIOTA-AFRICA project (www.biota-africa.org). Designed as part of the BIOTA-Southern Africa (Phase III) project, this post-doctoral fellowship will entail analyzing the long-term data collated over the past 8 years from 35 observatories and 800 sub-sites across the southern African transect (from Cape Point, South Africa, to Caprivi, Namibia).

The specific questions involved in the project include:

- Relationships between abiotic factors (e.g. soil nutrient content and habitat heterogeneity) with ecosystem structure and community composition (e.g. woody cover and species turnover);
- Influence of land use on soil respiration and therefore ecosystem productivity;
- Spatial and scaling patterns of species and soil type distributions;
- Spatiotemporal modelling of the plant-soil interactions under the current climate change regime.

Preference will be given to candidates with strong skills in large-scale data analysis using GIS and statistical multivariate methods. The candidates will also be able to publish the output in peer-reviewed journals. This post-doctoral project is part of the Phase III of the Biodiversity Monitoring Transect Analysis in Africa (BIOTA). The German Federal Ministry of Education and Research is offering a commencing fellowship of R120, 000 for 2009, and the position will be based in Stellenbosch University, South Africa. In addition to the fellowship, the successful candidate will also be provided with a laptop computer and other research equipment. Subsistence and transport costs during research expeditions will be covered. Submit a detailed CV, project outline (one-page maximum) and one/two publication reprints, together with contact details of two references to chui@sun.ac.za and mills@sun.ac.za. Deadline: 28 February 2009.

REKKS/GIS Coordinator, Addis Ababa, Ethiopia

Working for the International Food Policy Research Institute (IFPRI), the Rural Economic Knowledge Support System (REKSS)/GIS coordinator will work under the Ethiopia Strategy Support Program II (ESSP-II) for a two-year, fixed-term, renewable appointment. The program has a focus on strategy and policy issues in relation to agriculture, the food system, rural change, and poverty reduction. No deadline indicated.

Postdoctoral/Research Fellow, Addis Ababa, Ethiopia

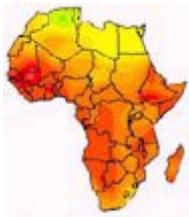
Working for the International Food Policy Research Institute (IFPRI) in the International Service for National Agricultural Research (ISNAR) Division, the Postdoctoral/Research Fellow will provide innovative approaches, methods and tools for strengthening agricultural research for development (AR4D) systems in order to bring science to the service of the poor in developing countries. No deadline indicated.

Postdoctoral/Research Fellow, Addis Ababa, Ethiopia

Working for the International Food Policy Research Institute (IFPRI) in the International Service for National Agricultural Research (ISNAR) Division, the Postdoctoral/Research Fellow will work with other senior researchers to meet the division's research, capacity strengthening and communications objectives, and will engage in activities related to changing the ways institutions (including linkages, networks, and partnerships) support the innovation process. No deadline indicated.

Project Manager, Nigeria

Project Manager required with Protected Area management experience to work with the Nigerian Conservation Foundation (NCF) on UK private sector company funded project for two years minimum full time in moist tropical forest with Elephant, Chimpanzee, endemic primates etc. The job will involve participation and supervision of field surveys; development of partnerships with State governments and other stakeholders; development of the Management Plan for the Forest reserves, etc. The incumbent should have at least 2 years relevant experience in protected area management, management of project finance, senior management of at team of at least 10 staff, managing/coordinating the inputs of various consultants and partner organizations (NGOs, government and the private sector). Submit a C.V. and application letter to Tunde Morakinyo at irokofoundation@yahoo.com. Deadline: 15 February 2009.



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Regional Vulnerability Assessment and Analysis Expert, Gaborone, Botswana

The Regional Vulnerability Assessment and Analysis Expert is responsible for the coordination of technical advisory services from Regional Vulnerability Assessment Committee members to National Vulnerability Assessment Committees in the 15 SADC countries. Candidates must have a high degree of computer literacy in spreadsheets, SPSS, mapping and word processing, and be a citizen of a SADC Member State. Deadline: 13 February 2009. Contact: Human Resources Unit, htonde@sadc.int.

Director - Capacity Strengthening Networking Support, Accra, Ghana

Working for the Forum for Agricultural Research in Africa, the selected candidate, amongst other activities, will assure the appropriate use of data and other forms of evidence that can inform strategy and ongoing decision-making. Deadline: 13 February 2009.

Natural Resource Management Specialist (incumbent to be based in Africa, possible locations include Addis Ababa, Nairobi, Kinshasa, Gaborone or Niamey)

The Consorzio ITA (Italian Consortium for Remote Sensing of the Environment and Agriculture) is looking for specialists in Natural Resource Management (with at least eight years experience in the field) to join a large EU funded project in sub-Saharan Africa. Applications and areas of expertise should include:

- Soil degradation & remediation
- Water resource management for cropland and rangeland management
- Use of low spatial resolution satellite imagery for temporal analysis of vegetation cover

Candidates must be nationals of the European Union or the ACP Group of States (Africa, Caribbean and Pacific). Salary is commensurate with experience and ranging between € 6,500 and € 9,000 per month. To apply, e-mail your CV with a letter of interest detailing when and for how long you are available for, to Alexander Tango at: a.tango@italeco.it. Open until filled.

Project Manager - transboundary Peace Park, Kenema, Sierra Leone (with frequent travel to Liberia)

BirdLife International is seeking an experienced Project Manager to lead the implementation of a groundbreaking trans-boundary project entitled 'Across the River – A transboundary Peace Park for Sierra Leone and Liberia'. The position will entail management of field and advocacy work in Sierra Leone and Liberia in collaboration with the national BirdLife Partners (the Conservation Society of Sierra Leone & the Society for the Conservation of Nature in Liberia), the Gola Forest Programme and the Government Forestry authorities in both countries to achieve project objectives. The BirdLife Project Manager will be based in Kenema, Sierra Leone and lead a team of several staff there whilst supervising a Deputy Project Manager in Liberia. Deadline: 16 February 2009.

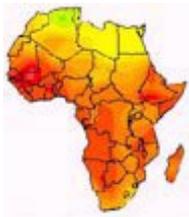
African Capacity Building Foundation Program - Program Expert, Addis Ababa, Ethiopia

The African Union is charged with spearheading Africa's rapid integration and sustainable development by promoting unity, solidarity, cohesion and cooperation among the peoples of Africa and African States as well as developing a New Partnership worldwide. Through direct contact with focal persons, the incumbent shall follow the ACBF support program; assist those directly involved in implementation of projects by ensuring that procurements and short-term personnel recruitments follow, respectively, AU Procurement and Staff Rules as well as relevant ACBF conditions; consult and advise on due procedures. Candidates must have at least a Masters Degree in a development related field and preferably be between 35 and 50 years old. Contact: au-recruitsnafrica@union.org. Deadline: 22 February 2009.

Director, Rural Economy and Agriculture, Addis Ababa, Ethiopia

The African Union Commission (AUC) Department of Rural economy and Agriculture is responsible for Pan African strategies, policies and programmes of cooperation, development and integration in the fields of Rural Development, Natural Resources, Environment, Agriculture and Food Security. Candidates must have at least a Post-Graduate (Masters) degree in agricultural sciences and/or agricultural economics, rural development and natural resource management. A PhD is an added advantage. Candidates must preferably be between 35 and 50 years old. Contact: the Director of Administration and Human Resource Development at au-recruits@africa-union.org. Deadline: 17 February 2009.

Coordinator, Safer Cities Programme, Nairobi, Kenya



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The Safer Cities Coordinator will be responsible for the overall implementation of the Safer Cities Strategic Plan 2008-2013. The incumbent should have ten years progressive professional experience in the field of crime prevention and/or urban planning and management, or in alternative justice development, of which at least five years at international level. Interested applicants are requested to complete a United Nations Personal History form (P.11), available at UN Offices or www.jobs.un.org and submit their application including covering letter in electronic format to antonina.madara@unhabitat.org before 8 February 2008.

Assistant Director-General/Regional Representative for Africa, Accra, Ghana

The Regional Representative for Africa reports to the Director-General of FAO with whom s/he generally communicates through the Office of Coordination and Decentralization, inter alia, through inception, annual and terminal reports. S/he receives advice from heads of FAO's headquarters Departments and Independent Offices as well as from Subregional Coordinators and FAO Country Representatives.

- Post graduate qualifications or equivalent experience in a field related to the work of the Organization;
- Demonstrated professional competence and Management/strategic leadership of a high order;
- Ability to lead and work effectively with a diverse team of people of different national and cultural backgrounds in an international setting;
- Fluency in English, French or Spanish and a limited knowledge of one of the other two.

Applications, including a full curriculum vitae and Personal History Form (available in MS Word ([A4](#) and [letter](#) formats), should be submitted by 26 February 2009 to the Director, Human Resources Management Division (AFH), FAO, Viale delle Terme di Caracalla, 00153, Rome, Italy or sent by e-mail to: senior-vacancies@fao.org or faxed to Italy 06-5705 5131.

Project Officer (Drylands), Hamilton, Ontario, Canada

The selected candidates will contribute to activities of the drylands program of the [International Network on Water, Environment and Health \(UNU-INWEH\)](#), a unit of the United Nations University based in Canada. Candidate should hold a Ph.D. degree in environmental sciences, engineering, or a related discipline. Demonstrated ability desirable for performing effectively in team-based scientific research, incorporating both social and natural science disciplines. Candidates from developing countries are particularly encouraged to [apply](#). Deadline: 28 February 2009. Contact: contact@inweh.unu.edu.

PhD Studentship, Rift Valley Fever (Senegal): A Mathematical and Spatial Statistical Modelling Approach to Understanding Disease Dynamics, Hertfordshire, U.K.

The successful applicant requires good aptitude for methodological research and specially for mathematical and spatial modelling. Some experience with participatory methods will be an advantage. Deadline: 25 February 2009.

Forestry Information Systems Officer, P-2, Rome, Italy

The selected candidate will assist in the development, implementation and maintenance of the Forestry Information Systems (FORIS). Deadline: February 25, 2009.

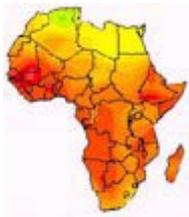
Head of Participation – Global Biodiversity Information Facility Secretariat, Copenhagen, Denmark

The Head of Participation (HoP) post encompasses both growing the awareness of, and participation in [GBIF](#), amongst countries, organisations and others and coordinating ongoing Secretariat-Participant interactions, particularly needs analyses and provision of services to GBIF Participants as GBIF moves to a more distributed network model dependent on fully functional Participants. Secretariat priorities include developing protocols and standards to ensure scientific integrity and interoperability, building a global informatics and metadata architecture to allow the interlinking of diverse data types from disparate sources, providing training and promoting capacity building and catalyzing development of the analytical tools for improved decision-making. This is a senior-level post reporting to the Director. Deadline: 16 February 2009.

Other

British team discovers lost Eden amid forgotten forest of Africa (Mozambique)

Until a few years ago this giant forest in the mountainous north of Mozambique was known only to local villagers; it did not feature on maps nor, it is believed, in scientific collections or literature. But after "finding" the forest on a Google Earth internet map, a British-led team of scientists has returned from what is thought



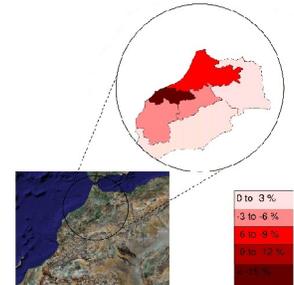
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to be the first full-scale expedition into the canopy. Below the trees, which rise 45m above the ground, they discovered land filled with astonishingly rich biodiversity. The scientists found what they believe are three new species of butterfly, a previously undiscovered adder snake and new populations of rare birds. They also expect to find new plants among the hundreds of specimens they have brought back with them. See also: [The lost forest of Mount Mabu](#); [NASA Earth Observatory – Mount Mabu](#).

Morocco: Impact of Climate Change on Agriculture

A study conducted by FAO together with the World Bank, the Morocco Ministry of Agriculture and Maritime Fisheries and several other national institutions, assessed the impact of climate change on Moroccan agriculture toward the end of the 21st century. The detailed study covers fifty crops, major agroecological zones, and several climate change scenarios. The first results of the study on the projected future agricultural production focus on: Agricultural adaptation capacity, Uncertainties related to methodology, Future availability of crop varieties with higher water use efficiencies. For more information, contact: René Gommès, NRC, rene.gommès@fao.org. [Source: EMWIS website]



Ethiopia: Urban Local Government Development Project

The World Bank and the Government of Ethiopia have launched a US\$150 million Urban Local Government Development Project. The project aims to support improved performance in the planning, delivery and sustained provision of priority municipal services and infrastructure. Through the provision of Performance Grants, the project will provide incentives to cities to improve their performance in key areas related to planning, citizens' participation in the planning process, financial management and service delivery, while at the same time enabling cities to invest in critical municipal infrastructure such as roads, drainage, sewerage, market places, etc. For participating cities, the expected outcomes of the project are: (i) that cities will plan capital investments based on service delivery priorities identified by citizens; (ii) cities will improve the management of their finances, increase their revenues, and more effectively operate and maintain their infrastructure assets; (iii) cities will be more transparent and disseminate relevant information to the public regarding budgets and investments; and (iv) cities will effectively implement capital investments.

Horn Food Price Crisis Response for Kenya and Uganda (USAID)

The global food crisis has affected households around the world, but has had a particularly harsh impact on the most vulnerable families in developing nations. Vulnerable populations in the Horn of Africa region can be described in three types: pastoral, agro-pastoral, and marginal farming households. Historically in the Horn region, all of these groups suffer the same repetitive scenario of humanitarian decline due to asset depletion resulting from the continuous man-made and climatic shocks. In general, this decline scenario includes a shock followed by households adopting negative coping mechanisms, such as selling productive assets to meet basic food needs and loss of assets to the effects of drought/flood/disease. USAID/OFDA's mandate is to save lives, alleviate human suffering, and reduce the social and economic impact of humanitarian emergencies worldwide. In order to achieve this goal, USAID/DCHA/OFDA's strategy for the HFPCR is to improve local livelihoods as a means to increase household's resilience to shocks reducing the need for future relief based activities. The broad goals of this APS are to:

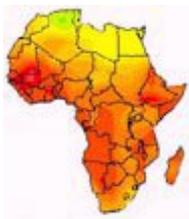
- 1) Stabilize humanitarian indicators in food insecure households through both the provision of humanitarian assistance and activities designed to protect existing household assets;
- 2) Strengthen existing developmental programming designed to rebuild livelihoods and household resiliency to shocks through the diversification and creation of household assets; and,
- 3) Improve economic opportunities and livelihoods through improved market linkages in support of the agricultural and livestock sectors.

USAID/OFDA anticipates awarding two cooperative agreements as a result of this APS, one targeting interventions in Kenya and one targeting interventions in Uganda. Deadline: April 8, 2009.

Conferences, Events

Date	Location	Event
February 2009		

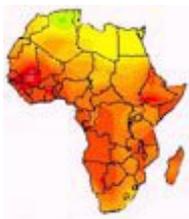
Items newly added to this listing of events since the last SDI-Africa issue are marked *** NEW ***



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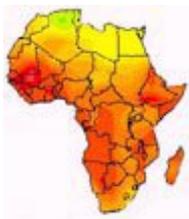
1-6 February 2009	Cancun, Mexico	The International Conference on Advanced Geographic Information Systems & Web Services GEOWS 2009 Contact: petre@iaria.org .
9-11 February 2009	Pretoria, South Africa	International Workshop of Experts on Global Environmental Change (including Climate Change and Adaptation) in sub-Saharan Africa Abstract deadline: 19 December 2008.
9-10 February 2009 * NEW *	Windhoek, Namibia	High-Level Meeting - African Agriculture in the 21st Century: Meeting Challenges, Making a Sustainable Green Revolution
9-12 February 2009	Trieste, Italy	Workshop on High-Impact Weather Predictability and Information System for Africa
9-13 February 2009 * NEW *	Luanda, Angola	4th Africa Symposium on Statistical Development (agenda) Includes a session on Integrated Fieldwork Using Geospatial Technology, plus demonstrations on use of GIS.
10-13 February 2009	Hyderabad, India	Geospatial Science Forum 2009 Held in conjunction with Map World Forum 2009. Paper submission deadline: 15 August 2008.
10-13 February 2009	Hyderabad, India	Map World Forum 2009 Contact: info@mapworldforum.org Abstract deadline extended to 15 September 2008.
11-13 February 2009	Hyderabad, India	1st Global Summit on positioning and Navigation – Location Summit 2.0 Contact: anamika.das@GISdevelopment.net , Website: http://location.net.in .
11-13 February 2009	New York, NY, USA	5th Web for Development (W4D) Conference Contact: Ms. Marina Krawczyk, mkrawczyk@unog.ch .
14-20 February 2009 * NEW *	Nairobi, Kenya	25th Session of the Governing Council/Global Ministerial Environment Forum Theme: "Globalization and the Environment" and "International Environmental Governance"
16-20 February 2009	Bissau, Guinea-Bissau	IV^{ème} Forum Régional Côtier et Marin en Afrique de l'Ouest Contact: prcm@iucn.org . For Programme or Fiche d'inscription .
16 February - 6 March 2009	Trieste, Italy	Workshop on wireless ICT in developing countries and 2nd awareness workshop on the relevance of wireless ICT solutions (Application Form) . Contact: smr2020@ictp.it . Deadline: 3 November 2008.
17-19 February 2009 * NEW *	Addis Ababa, Ethiopia	E-government Development in Africa: Progress Made and Challenges Ahead
18-21 February 2009	Gauteng, South Africa	2nd African Science Communication Conference: Shaping Africa's future
23-26 February 2009	Port Elizabeth, South Africa	International Conference on Implementing Environmental Water Allocations
25-27 February 2009	Mombasa, Kenya	23rd Greater Horn of Africa Climate Outlook Forum (GHACOF 23)
March 2009		
March 2009	Addis Ababa, Ethiopia	UN-SPIDER Regional Workshop Building Upon Regional Space-based Solutions for Disaster Management & Emergency Response for Africa Contact: ooosa@unvienna.org .
3-5 March 2009 * NEW *	Kigali, Rwanda	Developing an Equitable Information Society in Africa: The role of African Parliaments
12-15 March 2009 * NEW *	Hurghada, Egypt	13th International Water Technology Conference
15-18 March 2009 * NEW *	Hurghada, Egypt	11th International Conference on Energy and Environment Contact: asharkawy@eecaipro.com .
16-22 March 2009 * NEW *	Istanbul, Turkey	5th World Water Forum : Preparatory process is ongoing
22-27 March 2009	Las Vegas, NV, USA	Association of American Geographers Annual Meeting Abstract deadline: October 16, 2008.



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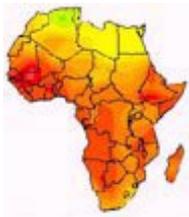
23 March - 9 April 2009	Trieste, Italy	Satellite Navigation Science and Technology for Africa Contact: smr2025@ictp.it .
27-29 March 2009	University of Texas, Austin	2009 Africa Conference - Science, Technology, and the Environment in Africa Contact: Dr. Toyin Falola or Emily Brownell . Deadline for paper submission: <u>November 1, 2008</u> .
April 2009		
1-2 April 2009 * NEW *	Maputo, Mozambique	Digital World Forum Workshop: Role of Mobile Technologies for Development Deadline for expressions of interest: <u>February 12, 2009</u> .
1-3 April 2009	Accra, Ghana	WATER AFRICA 2009 , International Exhibition & Seminar Contact: ACE Event Management, info@ace-events.com .
14-16 April 2009	Dubai, UAE	Map Middle East 2009 Contact: info@mapmiddleeast.org .
27 April - 8 May 2009	Trieste, Italy	Water Resources in Developing Countries: Planning and Management in a Climate Change Scenario Contact: smr2029@ictp.it .
27 April 2009 * NEW *	Addis Ababa, Ethiopia	CODIST Pre-Conference Workshop
28 April - 1 May 2009 * NEW *	Addis Ababa, Ethiopia	1st Session of the Committee on Development Information, Science and Technology (CODIST-I)
May 2009		
3-8 May 2009	Eilat, Israel	FIG XXXII General Assembly and Working Week Theme: New Horizons across the Red Sea - Surveyors Key Role in Accelerated Development. Contact: fig@fig.net .
4-5 May 2009	Berlin, Germany	7th IAA Symposium on Small Satellites for Earth Observation Abstract deadline: <u>31 October 2008</u> .
4-8 May 2009	Stresa, Italy	33rd International Symposium on Remote Sensing of Environment "Sustaining the Millenium Development Goals" (ISRSE33) Contact: ISRSE33, isrse33@symposia.org .
4-8 May 2009	Berlin, Germany	7th IAA Symposium on Small Satellites for Earth Observation Contact: Ute Dombrowski, Ute.Dombrowski@dlr.de .
5-12 May 2009	Nairobi, Kenya	25th Session of the United Nations Group of Experts on Geographical Names (UNGEGN)
6-8 May 2009	Kampala, Uganda	IST-Africa 2009 Conference & Exhibition Online submission deadline for full paper or workshop proposal: <u>9 November 2008</u> .
23-29 May 2009	Accra, Ghana	IAIA09: Impact Assessment and Human Well Being Abstract deadline: <u>15 January 2009</u> .
25-29 May 2009	Molde, Norway	ISO/TC 211 28th Plenary – with WGs and ECs prior to plenary.
25-29 May 2009	Chengdu, China	2nd International Conference on Earth Observation for Global Changes (EOGC2009) Contact: Conference Secretariat, xfzhang@pku.edu.cn .
June 2009		
5-9 June 2009	Providence, RI, USA	Conference on putting health in place with GIS Abstract submission deadline: <u>31 October 2008</u> .
15-18 June 2009	Washington D.C, USA	Intergraph 2009
15-19 June 2009	Rotterdam, The Netherlands	11th International Conference on Global Spatial Data Infrastructure (GSDI 11) Theme: Spatial Data Infrastructure Convergence: Building SDI Bridges to Address Global Challenges.
22 June 2009 * NEW *	Nottingham, UK	1st Open Source Gis UK Conference 2009 Abstract submission deadline: <u>15 February 2009</u> .
24-26 June 2009 * NEW *	Paris, France	ICGIS 2009: "International Conference on Geographic Information Systems" Paper deadline: <u>February 28, 2009</u> .
24-26 June 2009	Ljubljana, Slovenija	27th Urban Data Management Symposium Full paper submission deadline: <u>September 29, 2008</u> .



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3-6 July 2009 * NEW *	Perm, Russia	INTERCARTO-INTERGIS 15 Abstract deadline: February 2, 2009 .
July 2009		
Second half of 2009 * NEW *	Addis Ababa, Ethiopia	UN-SPIDER Regional Workshop “Building Upon Regional Space-based Solutions for Disaster Management and Emergency Response for Africa”
3-6 July 2009 * NEW *	Ghent, Belgium	INTERCARTO-INTERGIS 15 Abstract deadline: February 2, 2009 .
5-8 July 2009	Newfoundland, Canada	6th International Symposium on Spatial Data Quality (ISSDQ 2009) “Quality: From Process to Decisions” Contact: Rodolphe Devillers, issdq2009@mun.ca .
7-9 July 2009 * NEW *	South Africa	Geospatial Africa 2009
7-10 July 2009	Salzburg, Austria	Geoinformatics Forum Salzburg (GI Forum2009) Contact: GI_Forum Team, office@gi-forum.org .
11-14 July 2009	San Diego, California	ESRI Survey & Engineering GIS Summit Contact: segsummit@esri.com .
13-14 July 2009 * NEW *	Oxford, United Kingdom	The 3rd International Conference on Geosensor Networks Deadline for paper submission: April 3, 2009 .
13-17 July 2009	Cape Town, South Africa	IEEE IGARSS'09 Abstract deadline: 4 January 2009 . Contact: Dr. Harold Annegarn, han@rau.ac.za . On the conference and exhibitions, contact Bryan Stewart, bstewart@cmsworldwide.com .
13-17 July 2009	San Diego, USA	29th ESRI International User Conference Abstract deadline: 14 November 2008 .
13-17 July 2009	Accra, Ghana	2nd International Association of Agriculture Information Specialists (IAALD) Africa Chapter Conference
13-17 July 2009	Big Bear Lake, California	Society for Conservation GIS (SCGIS) Annual Conference
August 2009		
10-14 August 2009	Trieste, Italy	Conference on high resolution climate modeling: The impact of SST changes and the MJO on tropical cyclones Contact: smr2051@ictp.it .
12-14 August 2009	Fairfax, VA, USA	17th International Conference on Geoinformatics Theme: The ways to advance GIScience researches and applications. Abstract deadline: February 15, 2009 . Contact: Liping Di at ldi@gmu.edu . Updates: http://www.geoinformatics2009.org .
16-22 August 2009	Durban, South Africa	57th Session of the International Statistical Institute (ISI 2009) See also: Baton of international leadership passes to Africa .
17-28 August 2009	Trieste, Italy	Advanced Workshop on Evaluating, Monitoring and Communicating Volcanic and Seismic Hazards in East Africa Application deadline: April 30, 2009 . Contact: msmr2048@ictp.it .
23-28 August 2009	Nairobi, Kenya	2nd World Congress on Agroforestry - The Future of Global Land Use Contact: WCA2009 Organizing Committee, wca2009@cgiar.org .
24-28 August 2009	Dresden, Germany	1st International Conference on 3D Maps: ICA Symposium “True-3D in Cartography” Contact: Mrs. Steffi Sharma, info@conwerk.net .
September 2009		
September 2009	Johannesburg, South Africa	Map Africa 2009
3-4 September 2009	Paris, France	WG III/4+5 Workshop on Object Extraction for 3D City Models, Road Databases & Traffic Monitoring - Concepts, Algorithms & Evaluation (CMRT09) Contact: Franz Rottensteiner: rottensteiner@ipi.uni-hannover.de or Uwe Stilla: stilla@bv.tum.de .



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6-12 September 2009	Hyderabad, India	8th IAHS Scientific Assembly and 37th IAH Congress APFM will organise a special session on Integrated Flood Management.
7-25 September 2009	Trieste, Italy	Open Source and Internet Technology for Scientific Environment Contact: smr2057@ictp.it .
10-11 September 2009 * NEW *	Cape Town, South Africa	Royal Institution of Chartered Surveyors' (RICS) International Legal Research Symposium 2009 Abstract deadline: <u>3 April 2009</u> . Contact: p.chynoweth@salford.ac.uk .
21-25 September 2009 * NEW *	Brittany, France	The Ninth International Conference on Spatial Information Theory (COSIT 2009)
21-25 September 2009	Bath, UK	2009 EUMETSAT Meteorological Satellite Conference
27 September - 2 October 2009	Marrakech, Morocco	XXVI IUSSP International Population Conference Application deadline: <u>15 September 2008</u> .
October 2009		
13-16 October 2009	Cape Town, South Africa	2nd DIVERSITAS Open Science Conference: Biodiversity and society: understanding connections, adapting to change Abstract deadline: Deadline <u>31 March 2009</u> .
20-23 October 2009	Sydney, Australia	FOSS4G 2009 Conference
26-29 October 2009	Kampala, Uganda	AfricaGIS 2009 Conference . Theme: Geo-spatial information and sustainable development in Africa: Facing challenges of global change. Abstract deadline: <u>30 April 2009</u> . Contact: info@africagis2009.org or Shuaib Lwasa, S.Lwasa@cgiar.org .
November 2009		
15-22 November 2009 *UPDATED*	Santiago, Chile	XXVI International Cartographic Conference Contact: Conference Secretariat at info@icc2009.cl . See also The World's Geospatial Solutions
17- 21 November 2009 * NEW *	Sydney, Australia	FOSS4G, Annual Conference
December 2009		
14-16 December 2009	Accra, Ghana	2nd IEEE International Conference on Adaptive Science & Technology Abstract deadline: <u>14 May 2009</u> . Contact: icast@edicttech.com .
2010		
6-10 March 2010	Alexandria, Egypt	International Conference on Coastal Zone Management of River Deltas and Low Land Coastlines . Abstract deadline: <u>31 October 2008</u> . Contact: Professor Nabil Ismail, nicoastmarine@gmail.com .

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