

Spatial Data Infrastructure – Africa Newsletter



SDI-Africa Newsletter

September 2009

Vol. 8, No. 9

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.

To subscribe to SDI-Africa, please do so online at: <http://www.gsdi.org/newslist/gsdisubscribe.php>

To unsubscribe, or change your email address: <http://www.gsdi.org/newslist/gdisunsubscribe.php>

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.php>
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); Hussein Farah, RCMRD (Kenya); Muya Kamamia, RCMRD (Kenya); Walter T. de Vries, ITC (Netherlands); Mary Louise Stott, Schlumberger Foundation (USA); Ragnvald Larsen (USA); Andy Tatem, University of Florida (USA); Carmelle J. Terborgh, ESRI (USA); Oladipo Victor Oni, GCLME/UNILAG Regional Centre for Environmental Information Management System (Nigeria) for their contributions to this issue of the newsletter.

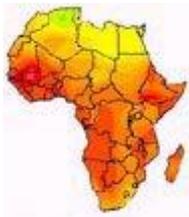
SDI News, Links, Papers, Presentations

[Call for Proposals: GSDI Small Grants Program 2009-10](#)

The GSDI Association, along with partners and participants has allocated resources from the U.S. Federal Geographic Data Committee and the GISCorps of URISA to fund a small grant program to support national or sub-national activities that foster partnerships, develop in-country technical capacity, improve data compatibility and access, and increase political support for spatial data infrastructure and earth observations application development. These resources will be used to offer two types of grants this year.

- Cash up to USD 2,500 to be used on your project, and/or
- Professional services applied to your project

Professional services will be coordinated by the GISCorps, an international initiative that offers GIS services by qualified economies. Support may focus on technical or institutional projects as long as tangible outputs and several institutions collaborate on the effort. A list of typical projects follows but this is not exhaustive:



Spatial Data Infrastructure – Africa Newsletter



- Convening of national or sub-national seminars or workshops related to SDI
- Producing SDI and EO-related training manuals and modules (these materials must not duplicate existing materials)
- Establishing metadata and clearinghouses nodes
- Establishing web mapping services and applications
- Accomplishing Geodata and/or SDI surveys or inventories
- Producing and disseminating newsletters and awareness-raising materials about SDI
- Drafting policy and legislation related to SDI

Priority will be given to projects in developing nations and countries with economies in transition. Grants can be awarded to SDI coordinating bodies (councils, committees) and GIS user groups, but the GSDI Association asks that one institution take responsibility for receiving/depositing the funds. Grants will not cover organization overhead expenses.

Proposals should include: Title of Project/Activity, Focal Point Institution, Contact Person (business street address, phone/fax, email and website), Introduction and Background (include a description of the national or local institution framework and what has been achieved thus far), Project Description, Summary of Deliverables, Period of Performance (time-line for overall project, deadline dates for deliverables, date of final project to be submitted to grants@gdsi.org), Indicate your preference for an award of cash or professional services and Budget. Use the 'New Project' link and additional information at <http://www.giscorpd.org> to complete the request for GISCorps volunteer assistance, Details of additional or in-kind funds to co-finance the activity, List of collaborators (with contact information), Envisaged Follow-up Activities, Appendix.

Funding up to 12 Grants in Cash and up to 4 Grants in Professional Services is anticipated. Proposals should be submitted to Societal Impacts Committee, GSDI Association grants@gdsi.org. Deadline for submission: 1 October 2009.

Winners of Twelve (12) Grants of USD 2,500 each for the 2008 GSDI Program

- Africa – Southern and Eastern Africa Region
 - Comoros
 - Kenya
 - Madagascar
 - Mauritius
 - Mozambique
 - Seychelles
 - Tanzania
- Rwanda – GIS and Remote Sensing Centre of the National University of Rwanda (CGIS-NUR)
- Caribbean – Caribbean Metadata Profile Workshop
- Indonesia – Tailor-made SDI Workshop & Training: Improved Use of Geographic Data Infrastructure Portal for Collaborative Effort in Urban Disaster Reduction in Indonesia
- Kyrgyz Rep – SDI Demonstration for Kyrgyz Republic
- Philippines – Policy and Institutional Requirements for the Development of a National Spatial Data Infrastructure in the Philippines

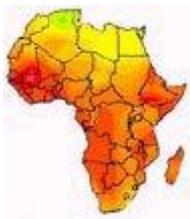
GSDI is still negotiating with some countries for manpower support for their projects. For further information, contact: Alan Stevens, GSDI Secretariat at astevens@gdsi.org.

[Black-tailed godwits en route to Africa with hypermodern satellite transmitters](#)



15 black-tailed godwits in Fryslân (in the north of the Netherlands) have been flying around with tiny transmitters in their abdominal cavities. The transmitters inserted during a minor operation by the American vet Daniel Mulcahy and his Dutch colleague David Tijssen will be able to track the birds for about a year in their breeding grounds in Fryslân as well as during their migration from and to Southern Europe and Africa. "We hope that this unique project will tell us more about the exact migration route of this threatened wader," says research leader Professor Theunis Piersma of the University of Groningen. For a number of years now, several bird species in

the Netherlands have been flying around with small transmitters, including Montagu's Harriers, purple herons and lesser black-backed gulls. "With these species the transmitter is secured onto the birds back with a

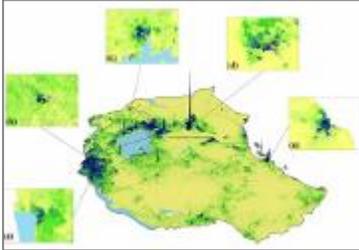


Spatial Data Infrastructure – Africa Newsletter



harness. For a small species like the godwit, which also travels great distances, implantable transmitters have now become so small that they can be used for research into the migration of adult birds, which after the breeding season may migrate in one non-stop flight from the Netherlands to areas south of the Sahara."

AfriPop Project



The AfriPop project was initiated in July 2009 with an aim of producing detailed and freely-available population distribution maps for the whole of Africa. High resolution, contemporary data on human population distributions are a prerequisite for the accurate measurement of the impacts of population growth, for monitoring changes and for planning interventions. Following recent work on high resolution population mapping across East Africa (see [attached paper](#), and featured in an issue of SDIAfrica newsletter last year), funds have been made available to expand the efforts across the remainder of the continent over the next 2 years, in the form of the AfriPop

project. The project website: www.afripop.org provides details on the project and currently has alpha versions of 100m population maps for five east African countries that are freely available to download. More maps will be made freely available when the mapping and validation for each country is completed. For additional information: website: <http://www.clas.ufl.edu/users/atatem/>, Malaria Atlas Project: www.map.ox.ac.uk or contact Andy Tatem at andy.tatem@gmail.com.

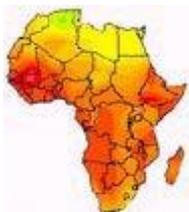
East Africa: Countries to wait 3 months for Seacom cable link

Rwanda and Burundi will have to wait another three months to be connected to the recently launched Seacom fibre-optic undersea cable. In the meantime, the country will be connected to Kampala by micro-wave technology. Seacom is a 1.28 Tbps capacity undersea cable linking South and East Africa to Europe and Asia via the Red Sea, Egypt and the Mediterranean. The cable is delivering open access to capacity and landing infrastructure, which is expected to drive down international backbone prices by 90 per cent.

Rwanda's State Minister for Energy, Albert Butare, recently said that discussions were going on over whether the Kenya government-led Teams (The East African Marine System) or the Seacom cable could take the responsibility of connecting Kigali from Kampala. "In Uganda, it happened very fast because there was a connection from Mombasa to Kampala. There is also a connection by MTN Uganda to some places in Mbarara. "And there is an understanding to connect through MTN Rwanda from Katuna". Teams' fibre optic cable, which is being laid by Alcatel-Lucent, will begin operation in the third quarter of 2009, with another open access policy and prices of \$500-1,000 per MB per sec per month. Seacom is fully privately owned, with a 76.25 per cent African stake. Seacom cable was launched simultaneously in Uganda, Kenya, Tanzania, Mozambique and South Africa. The owners said they would commission the final link to Kigali and Addis Ababa soon. However, officials of Kenya Data Network, who are business partners with the Kigali-based Altech Stream, said Kigali will be connected temporarily by micro-wave technology. This will be from Zain House in Kampala through 13 hops of about 1,200km, to the ICT park in Kigali. Currently, Rwanda depends heavily on VSAT (Very Small Aperture Terminal) satellite connections. Once linked to the fibre cable, there will not be any need to connect through satellite.

South Africa reaching to space to boost economy

South Africa aims to become a regional center for space technology, investing in satellite and telescope projects to support its ailing economy, the science and technology [Minister Naledi Pandor](#) said. "When a country engages in a program as significant globally as space science there are many areas in which the economy is boosted." "First in terms of the products, such as building satellites or establishing a launching pad, that in itself is a major infrastructural investment". Africa's biggest economy is home to the southern hemisphere's largest telescope, SALT, and last year it adopted laws allowing for a national space agency. But it faces its first recession since 1992 and is struggling to find housing for millions of poor blacks still living in townships or squatter camps. Forging ahead on the former apartheid military machine's endeavours, it intends to build its space agency by 2011 amid increasing interest from space pioneers [NASA](#) and the [Russian Federation](#), Pandor said. Beyond a legal and infrastructure base, South Africa is also bidding against [Australia](#) to host the 1.5 billion euro Square Kilometre Array radio telescope - an array of 4,000 antennas spread over several African states scientists hope will unlock the origins of the universe. "Part of economic growth is not just productive activity, it's also intellectual capacity".



Spatial Data Infrastructure – Africa Newsletter



South Africa, [Nigeria](#), [Algeria](#) and [Kenya](#) have committed their national satellites to the continent-wide African Resources Management Constellation project. The initiative aims at giving advance warnings of natural and environmental disasters, such as floods. In 1999 SunSpace, partnering the [University of Stellenbosch](#), helped launch South Africa's first locally-built satellite. A second satellite was sold on the international market, while a third, more sophisticated probe, is expected to be launched on 15 September from the [Baikonur Cosmodrome](#) in [Kazakhstan](#). "How many satellites will follow is totally at the discretion of the South African government, but continued development and significant improvements can only be achieved if two further satellites are launched within the next five years and at least one satellite for years six to eight," Olivier said.

[Kenya National Spatial Data Infrastructure \(KNSDI\) policy approved](#)



The Kenya National Spatial Data Infrastructure (KNSDI) [policy](#) has been adopted by stakeholders. The policy was presented at a recent workshop at the Kenya School of Monetary Studies. A Committee of Experts had been assigned to amend it. The Chairman of the Committee Prof. G.C. Mulaku said in order to realize Kenya's Vision 2030 a policy and a systematically developed infrastructure should be put in place.

The first draft of the policy was formulated in May 2006 through various consultative workshops and seminars. The policy whose purpose is to establish a strategy for the collection, integration, distribution, use and sharing of Geospatial (related to position on earth) Information (GI) applies to all participants in Kenya, including public, private and Civil Society. With spatial information in the public domain KNSDI will enable market development and also ensure transparency and participatory governance. KNSDI is funded by the Government, Public-private partnership, Public investment and donors. It is envisaged that the Government will be on the forefront in providing the mechanisms to generate finances including an annual budget to support operations for KNSDI sustainability. The Director of Survey Mr. Ephantus Murage said "We should look for funds from other sectors to implement this policy". The policy propagates the need for training and capacity building for stakeholders from both the public and private sectors for social-economic development. This is aimed at creating awareness of geospatial information. The curricular of geo information related programmes is also to be reviewed on a regular basis. A clearing internet based electronic house for KNSDI that links all data access services and sites will be launched next month.

[Kenya's coast physical planning office installs new GIS laboratory](#)



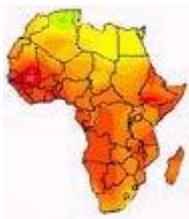
The Kenyan Coast Physical Planning Office has installed a new Geographical Information System (GIS) laboratory at a cost of KShs 3,078,364 million. The new GIS lab which forms a complete work station for physical planners has a server, scanner, PC and a gigantic plotter used for printing physical plans. Provincial Co-ordinator and Mombasa District Physical Planning Officer Mrs. Juliana Mutua said the modern equipment would greatly help in the collection and processing of primary data, which is very expensive in the market. "It costs US\$ 25 to buy just one square centimeter of such data", and physical planning needs in the Coast were massive and required up to date information. We have

in the past relied heavily on annual Departmental reports and statistics and these understandably take time due to the number of districts involved", she said.

The Coastal station has recently received new Physical Planning graduate recruits, most of whom are computer literate and who can now meet job deadlines. It was set up in the 1960s and now expanded to cover the four districts of Mvita, Changamwe, Kisauni and Likoni in a 282 sq. km. area. The district has been faced with serious squatter issues since the early 1970s culminating into some unusual settlement arrangements around Kiningo. Ownership of land is mainly by the Arabs in Kisauni and to a lesser extent in Changamwe while Likoni has a large indigenous Digo presence. Changes are also due at the Mombasa District Lands office, among them the updating of the Coastal Registry in a bid to decentralize the services. The split of the district has created seven new physical planning offices but new officers are yet to be posted.

[African GIS Kenya video: Earthwatch puts clean water on the map in Africa](#)

People in Kenya's semiarid Samburu region face growing water shortages, water quality issues, and conflicts between livestock and wildlife over water. Scientists and volunteers at Earthwatch's Samburu Field Center



Spatial Data Infrastructure – Africa Newsletter



have developed a GIS resource to help the Samburu community cope with water issues and avert public health crises. The Earthwatch Institute has put the following [video](#) on YouTube.

SCGIS Nigeria Chapter Start

SCGIS Nigeria Chapter has started with the inception meeting to take place on 4 September 2009. Some of the issues already pointed out:

- There will be no defined number of members as SCGIS greatly appreciate the idea of committed individuals. For example the idea of SCGIS Cameroon Chapter started with only 5 individuals and went on for some time before they held the first big GA in July 2008.
- The roles of the managing members to be defined on the meeting day through the draft Article of Association which all participants will brainstorm on through a plenary sessions. This will enable the members to define how they want to manage the Chapter. During the first meeting the GA will appoint volunteers persons to help manage and be mandated to come out with a vision for the Chapter. During the second meeting an election will be conducted and elected officers do not earn any salary.
- The activities of the local Chapter will be financed by member's annual dues. SCGIS will come in handy to empowered members through free trainings, software support, books and other materials, annual sponsors for individuals to attend the ESRI Users Conference, SCGIS Conference and two weeks of trainings in the USA where upon their return will replicate it to others members to also empowered them. There is also free imagery supports to members in their project area so far it will not be for commercial purpose.
- SCGIS Nigeria Chapter will be register as a legal entity in Nigeria..

For further information, contact: Carmelle Terborgh: cterborgh@esri.com or John Yembu Ngwembo: yembu@fs.fed.us or Ossai Chuks.A: ossaichuks@yahoo.com.

[Kwara State in Nigeria unveils N200 million GIS](#)

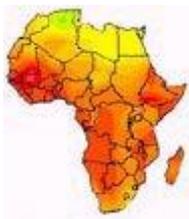
The Kwara State government has commissioned a Geographic Information System (GIS) and survey digital equipments for proper land administration in the state, worth N200 million. Governor Bukola Saraki noted at the commissioning of the project tagged Kwara Geographic Information System (KWAGIS) that the manual operation for land administration has been a source of deep concern for his administration. Saraki declared that the new system will curtail, if not eliminate, the avoidable delays caused largely by undue bureaucracy, enormous human errors, clumsy and untidy processing of land transaction records, inconsistencies in records and information dissemination. According to him, the need to tackle these barriers and challenges inherent in the manual land administration in the state prompted him to embark on the wholesale modernization of land resources administration in the state. [Source: [allafrica.com](#); Daily Trust, 24 July 2009]

[Federal Government of Nigeria to formulate National Land Policy](#)

The Federal Government has commenced moves to formulate a national land policy aimed at reforming the nation's land laws, with a view to accelerating the procedure for obtaining title to land in the country, which had hitherto been slow and inefficient. Minister of Works, Housing and Urban Development, Dr. Hassan Muhammad Lawal, who disclosed this at a workshop on land administration, noted that the move will also help streamline land titling and documentation as an important instrument for land use and development in the country. Lawal recalled the efforts of the housing ministry in pushing for the programme of modernisation and computerisation of land records in the country which led to the establishment of the Federal Land Information System (FELIS). Also speaking at the occasion, Minister of State for Housing, Mrs. Grace Ekpighre, said that the National Technical Development Forum on Land Administration has been working to ensure the harmonisation of land operations as well as establishment of appropriate standards and formats for implementing land administration across the nation. [Source: [allafrica.com](#); Daily Trust, 22 July 2009]

[Transformation of land registration services in Libya](#)

The Land Registry Authority (LRA) has begun a project for the Transformation of the Land Registration Services. The LRA required the design, development, implementation, and handing over of a complete land and property services solution, in addition to full training and capacity building services for the LRA staff. The project is planned to span a period of three years and will be implemented through a series of phases. The proposed solution, using ESRI's Cadastre Suite, provides an open architecture that can be flexibly integrated with any legacy or future systems. [Source: ESRI Northeast Africa Newsletter, No. 1]



Spatial Data Infrastructure – Africa Newsletter



[Land registration to help Rwanda recover from conflict](#)

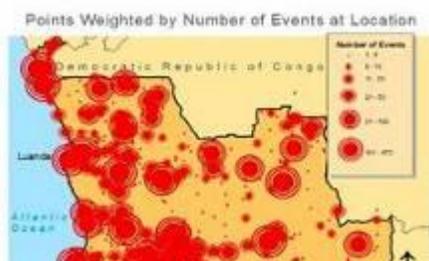
Men and women across Rwanda will be able to officially claim their right to land for the first time through a major new UK-funded project launched today, ending a source of violent conflict and dispute. DFID will provide £20 million to set up a nationwide registration programme to help all Rwandans agree their legal ownership rights. Disputes over land rights contributed to the conflict in Rwanda that sparked the genocide. As well as solving disputes, this project will allow landowners to prove their ownership so they can raise loans to buy cattle and seeds or rebuild their homes. The genocide in 1994 left many widows across the country looking after their families. Following equal inheritance rights for men and women granted in 2005, this project will give Rwandan women their first chance to legally prove their ownership of land. They will now be able to pass it on to their sons and daughters without fear that it will be taken from them. Over the next two years, staff from the Government of Rwanda National Land Centre will travel to every town and village to recruit volunteer committees to investigate local land claims. Using satellite imaging and speaking directly to the landowners themselves, they will draw up comprehensive land tenure maps for the whole country. To avoid any further disputes over claims, maps will be published and local people will have one month to raise any concerns. A public hearing will weigh up conflicting claims. This project follows a three and half year pilot programme funded by DFID that tested the land registration method. During a trial, only five per cent of land rights were disputed. This information will then be collated into the first ever national database of land ownership in Rwanda. The project should be completed by 2014. [Source: [SERVIR-Africa community news](#)]

Development and management model for the National Cadastre in Cape Verde

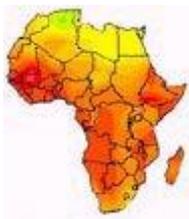
The Government of Cape Verde has received a credit from the International Development Association (IDA), and intends to apply part of the proceeds of this credit to payments under the contract for Technical Assistance for the preparation "Development and Management Model for the National Cadastre". See also [request for expressions of interest](#). The goal is to attain an integrated cadastre management following the definition of a cadastral model valid to the country as a whole, i.e. a cadastral modernization which allows registering, monitoring and keeping updated quantitative and qualitative data on properties located within the municipality for fiscal, statistical and legal purposes. This program must be complemented with a cadastral information process which enables transparency and citizen participation in resource allocation and management monitoring, supported by the use of information and communication technologies (e-Government). The following results are expected:

- Conceptual, Technological and Management Model designed and approved;
- Next National Land Cadastre implementation phases planned and budgeted;
- Strengthening of the public institutions in charge of legal and economic certainty. These actions will target the improvement of mechanisms that guarantee protection and recognition of property rights, chiefly those of the most disadvantaged population groups, such as the notary system and public cadastral registry;
- Enhancement of the knowledge about the territory and strengthening of land control and management;
- Improvement of public resources management - human, financial and taxation - in the preparation of public policies at local and central levels, and improvement of urban and rural land management;
- Strengthening of urban planning, basic housing and sustainable development;
- Improvement of the municipal and island structures that intervene in urban planning and cadastre.
- Upgrading of the development plans for the urban and rural areas. [See also: [Cape Verde adopts land information system of the Canary Islands](#) (in Spanish); [Canaries implant land information system in Cape Verde](#) (in Spanish).

[Crisis mapping in Angola](#)



Jen Ziemke sought to determine why combatants sometimes target civilians while at other times refrain from doing so. She explored this question by looking for both spatial and temporal patterns of conflict during the the Angolan Civil War. Angola was torn apart by a civil war that continued on and off between 1961 and 2002. For her PhD research, Ziemke mapped thousands of spatial and temporal data points and then visualized the results, events, and stories in a way that enabled an understanding of what happened on the ground. More on Ziemke's research: ["From Battles to Massacres: Explaining](#)



Spatial Data Infrastructure – Africa Newsletter

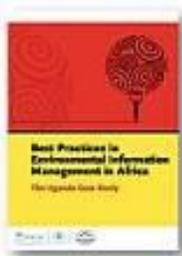


[the patterns of civil war abuse in Angola](#) (1.16 MB PDF). [Source: Servir Community Blog]

[Developing legal tools for citizen empowerment: Increasing local participation and benefit in Mali's mining sector](#)

Given the present discussions about [land-grabbing in Africa](#), this study may be helpful to those helping local people secure land rights. Developing legal tools for citizen empowerment: Increasing local participation and benefit in Mali's mining sector ([IIED](#)). This study identifies legal tools that can be used by local people to better secure their land rights and to participate more effectively in investment decisions and benefits. It assesses the strengths and weaknesses of these tools, and the opportunities and constraints associated with them. It considers ways to increase their effectiveness, and identifies next steps for policy engagement and capacity building work. [Download](#).

[Best Practices in Environmental Information Management in Africa: The Uganda Case Study](#)



NEMA in Uganda has together with GRID Arendal and UNEP published an interesting report: 'Best Practices in Environmental Information Management in Africa: The Uganda Case Study'. In its foreword NEMA executive Director, Henry Aryamanya-Mugisha writes: "The availability of consistent, up-to-date and relevant environmental information is a prerequisite for rational and cost-effective decision making processes. Among the efforts undertaken by the Uganda National Environment Management Authority (NEMA) over the past 10 years has been the effective management of environmental information. As early as 1994 it was realized that most institutions in the country needed to collect, update and transform their data into formats that can be used in environmental analysis. The National Environmental Information Center (NEIC) established during the same year played a

leading role in laying the foundation for capacity building in the use of tools such as Remote Sensing and Geographical Information Systems (GIS) among government institutions. These tools have greatly enhanced the production of the National State of Environment reports and Environmental Atlases in Uganda." The report goes into depth on several central Ugandan tools for national level environmental management:

- EIS - Environmental Information Systems
- EIN - Environmental Information Network
- SOE - State of the Environment

One important part of the report is its straightforward mention of problems related to data ownership. Dataset duplication, metadata handling, mandates, formats, coverage and more are discussed. Examples of the real-life consequences of proper environmental information management and dissemination are also presented.

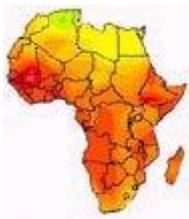
[GIS Best Practices: GIS for Agriculture](#)



Making decisions based on geography is basic to human thinking. Where we go, what will it shall be like, and what shall we do when we get there are applied to the simple event of going to the store or to the major event of launching a bathysphere into the ocean's depths. By understanding geography and people's relationship to location, we can make informed decisions about the way we live on our planet. Balancing the inputs and outputs on a farm is fundamental to its success and profitability. The ability of GIS to analyze and visualize agricultural environments and workflows has proved to be very beneficial to those involved in the farming industry. From

mobile GIS in the field to the scientific analysis of production data at the farm manager's office, GIS is playing an increasing role in agriculture production throughout the world by helping farmers increase production, reduce costs, and manage their land more efficiently. While natural inputs in farming cannot be controlled, they can be better understood and managed with GIS applications such as crop yield estimates, soil amendment analyses, and erosion identification and remediation. The articles compiled by ESRI in this book include:

- Agribusiness Grows with Crop-Specific Maps
- Better Crop Estimates in South Africa
- Cyclone Nargis Leaves Its Mark on the Map
- Purdue University Students Visualize Soils and Landscapes with GIS
- In China, GIS-Based Land Registry Aims to Protect Farming Rights and Enhance Food Security.



Spatial Data Infrastructure – Africa Newsletter



WhereKampala: Free 'unconference' for geographers, 30 October 2009, Kampala, Uganda

WhereCampAfrica is being held in conjunction with the 2009 AfricaGIS Conference. It will take place on 30 October 2009 at the Speke Resort and Conference Center, just outside of Kampala, Uganda. WhereCamp is an opportunity to present on ideas, questions, projects, politics, technical issues that you have and contribute to and get feedback from other people and make new friends with similar interests. WhereCampAfrica is a free 'unconference' for geographers, mobile location experts and social cartographers and all kinds of folks interested in place. This will be the second gathering of its kind to take place in Africa and the first one in Kampala.

This event is community driven and topics may include: Mobile Location, Remote Sensing, Geoinformatics, Mapping and Agriculture, Food Security and Location, Community Mapping, Local Search, Social Cartography, Crisis Mapping, etc. Expect to participate in conversations on the nature of places as described in pixels, with rays, on paper, and by social practice. For further information, contact: Jubal.Harpster@CH2M.com or jharpster@wherecampfrica.org. <http://twitter.com/wherecampfrica>, <http://twitter.com/jharpster>.

GCLME/UNILAG Regional Centre for Environmental Information Management System (EIMS)



The GCLME/UNILAG Regional Centre for Environmental Information Management System (EIMS) is located in the University of Lagos, Nigeria. Some of the information available at the centre includes:

- Maps of Participating Countries in the GCLME Project
 - Hotspots (Pollution, Erosion, degraded habitats, etc) in GCLME Countries
 - Natural and Human Activities/Impacts on the Coastal Environment of the Guinea Current Large Marine Ecosystem Region.
 - Oil and Gas Industry and Biodiversity in the Niger-Delta, Nigeria
- Layers of Maps in the Niger Delta
 - Drainage System of Africa
 - Landsat imageries of the GCLME Region
 - Map Datums used in GCLME Countries
 - Road Maps of the countries of the GCLME Countries Etc.
 - Coastal and Mangroves of Nigeria
 - Industrial Locations and Hotspot in Lagos State
 - Map of all the Industries in Nigeria
 - Map of all the Mangroves in the GCLME Countries

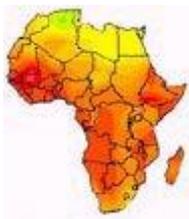
European Commission call for proposals dedicated to research for Africa

This call for proposals is the first one entirely dedicated research initiative for Africa under the EU's Framework Programme for research (FP7). It brings together several funding Themes under FP7: Health (€39 million), Environment (€17.5 million) and Food, Agriculture, Fisheries and Biotechnology (€6.5 million). The projects selected will involve these various scientific and technological research fields and will also take into account broader socio-economic factors such as migration and resettlement, urbanisation, health care systems, variation of food and energy prices, etc. The "Africa Call" is structured around two major issues:

- "Water and Food Security". The projects selected will strive to ensure both safe drinking water and good sanitation and hygiene. They will aim to revitalise agriculture, promote more sustainable production systems and ensure food security. They will also address Africa's vulnerability to the expected climate change impacts by setting up early warning and forecasting systems to address risks such as droughts or vector-borne diseases.
- "Better Health for Africa". The projects selected will focus on reducing the malaria disease burden, improving early diagnosis and treatment of the most frequent infection-related cancers, improving maternal and newborn health, assessing migrant health and addressing the shortage of healthcare personnel.

Deadline: 14 January 2009. For any questions contact: cordis-helpdesk@publications.europa.eu.

Call for Participation: ICT and Development - Research voices from Africa, 22-23 March 2010, Makerere University, Kampala, Uganda



Spatial Data Infrastructure – Africa Newsletter



The International Federation for Information Processing (IFIP), Technical Commission 9, Faculty of Computing and IT, Makerere University and ITC has organized a workshop intended to provide a forum for discussion of ICT research approaches and findings that emerged from and relevant to the African contexts. The organizers are particularly interested in receiving written submissions from African researchers in ICT for development, and from African intellectuals outside the mainstream ICT-based approach to economic growth and social improvements. Explanatory papers aiming at analysis and understanding of ICT in actual African contexts are welcomed. More precisely, the workshop invites short papers in the following focal areas:

- Discontinuities between the African context and dominant ICT paradigm
- Role of information, and ICT, within Africa and between Africa and the rest of the world
- Barriers against Africa's adoption, appropriation and autonomous use of ICT
- Cultural issues that may shape ICT adoption in unexpected ways
- Alternative strategies of ICT implementation and sustainability in Africa
- Uncertainty, unpredictability, risk and serendipity related to ICT initiatives
- Role of ICT in empowerment, illiteracy, poverty eradication, and human development in Africa.

The workshop is intended to be informal and inclusive in order to provide a "bigger picture" of ICT in Africa. Participants from academic institutions engaged in similar research, governmental and non-governmental organizations, public and private sector representatives, entrepreneurs and grass-root movements, civil society and ICT practitioners are welcomed. Submit short papers, in the form of long abstracts (2000 words) to: african-voices@googlegroups.com. For further information contact: Walter De Vries at devries@itc.nl or Gianluca Miscione at miscione@itc.nl or Jude Lubega at jlubega@cit.mak.ac.ug or Walter Brown at walbrown@mail.ngo.za or Deadline for submissions of short papers: 30 November 2009.

Call for Projects: the climate crisis



Planet Action provides satellite imagery, geographic information and technology support to local projects that investigate and assess climate change issues focusing on human issues, drought & desertification, water resources, forestry, biodiversity, oceans, ice, and awareness. This year, Planet Action will support additional projects while following up on current projects and their results on the ground. Planet Action supports projects involved at least in one of the following domains:

- Awareness
- Biodiversity & Conservation
- Drought & Desertification
- Human Issues
- Forest & Deforestation
- Ice & Snow
- Oceans & Coastlines
- Water Resources

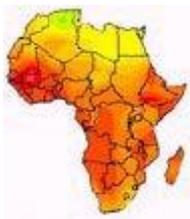
Projects are submitted online at www.planet-action.org, where you will need to create an account, log in and click on "Submit your project!" and complete the online form. Participation to special events organized by Planet Action partners is also kindly requested.

Conference of Vice-Chancellors and Deans of Science, Engineering and Technology (COVIDSET 2009), November 2009, Kampala, Uganda

The third Conference of Vice-Chancellors and Deans of Science, Engineering and Technology (COVIDSET 2009), organised by the African Network of Scientific Institutions, will be held in Kampala, Uganda, in November 2009. The event will be hosted by Makerere University. The theme of COVIDSET 2009 is Revitalizing Science and Technology Research and Deployment for Sustainable Development in Africa: Strategic, Policy and Regulation Challenges and will build on discussions and outcomes of the first two conferences: the State of Science and Technology Training Institutions (COVIDSET 2005) and Science and Engineering Education for Sustainable Development (COVIDSET 2007).

The conference will consider the following questions:

- What is the current status of SET research, development and development and deployment systems in African universities and research centers?
- Are prevailing policies, regulations and strategies conducive to vibrant R&D and deployment?
- What lessons can be drawn from successful R&D and Deployment (R&D&D) cases in Africa?



Spatial Data Infrastructure – Africa Newsletter



- What role can South-South and North-South partnerships play in revitalizing R&D&D? - Policy implications.
- What role can African scientists in the Diaspora play?
- Can African university and research centers design strategies that can make R&D more responsive to priority development needs on the continent?
- What strategies may be considered to increase investment from the public and private sector for R&D&D in Africa?

For more information, visit [COVIDSET 2009](#) or Download the [conference brochure](#).

[ESRI Eastern Africa User Conference](#), 24-25 September 2009, Addis Ababa, Ethiopia



[2009 GIMS User Conference](#), 21-23 October 2009, Alpine Heath, Northern Drakensberg, South Africa

The User Conference (UC) is a three day conference which will reflect GIMS and ESRI's vision for the future, where GIS solutions will play an increasingly vital role on an everyday basis in a myriad of different ways. The UC 2009 agenda will include topics which cover how GIS is impacting across all industries and those making use of the growing technology - GIS Users, GIS Managers, Developers, System Architects and IT Professionals, technical software users and key decision makers. Delegates will represent a wide range of industries including Central Government, Local Government, Defence, Education, Environment, Health, Private Sector, Public Safety and Utilities organisations.



[AfricaGIS 2009 Conference](#), 26-29 October 2009, Kampala, Uganda

The AfricaGIS2009 is a premier, continental conference. The broad sub-themes include:

- Geospatial information for climate change, vulnerability and disaster risk reduction
- Spatial Data Infrastructure in Africa; enhancing science-policy interface
- Geospatial information science for communication and education
- Geospatial information for integrated environment and natural resources mgt

Cross-cutting issues includes poverty, rural development, urbanization, gender, health, land, displacement and refugees, water and energy. Contact: info@afriagis2009.org.



[2009 ESRI Middle East and North Africa User Conference \(MEAUC\)](#), November 9-12, 2009, Manama, Bahrain

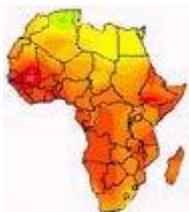
Professionals across industries and at all levels of experience with geographic information system (GIS) technology are encouraged to attend this valuable forum. Join ESRI and your colleagues for the opportunity to explore your biggest project challenges and learn how to achieve more GIS-driven results in your organization or community. Contact meauc2009@esri.com.

Practical SDI implementation materials from within and outside of Africa

[OGC learning resources for geospatial standards](#)

The Open Geospatial Consortium (OGC) has announced an important new set of public resources for learning about, developing and implementing interoperable geospatial capabilities. The OGCNetwork "Learn" page offers links to:

- Courses, journals, and professional papers
- Articles
- Compliance testing information
- Conference presentations by OGC staff and members
- Discussion forums
- Document motions from OGC meetings
- Email discussion lists
- Links to videos
- OGC policy guidance on Lat/Lon axis order
- OGC standards document catalog
- OGC Interoperability Days event information



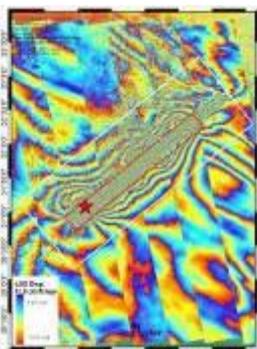
Spatial Data Infrastructure – Africa Newsletter



- Tutorials on developing implementations of OGC standards, such as the OpenGIS Web Map (WMS) Service, Web Coverage Service (WCS), Sensor Observation Service (SOS), and Geography Markup Language (GML) in JPEG 2000 standards.

The OGC Learn page is interactive. Users are encouraged to post updates using the comment feature. The Learn page is part of OGC Network TM, a window onto the dynamic, constantly changing Geospatial Web as described by the [OGC Reference Model](#) (ORM). OGC Network supports multiple communities of interest involved in geospatial interoperability, and it provides examples of working software, services, and information models (GML profiles, SLD examples, etc.). From the OGC Network TM site developers and geodata coordinators can quickly locate OGC-compatible geospatial Web services, the latest XML schema documents, discussion forums, compliance testing resources, and GML profile working areas. It provides the latest information on OGC-compatible software, services, and information models (GML profiles, Style Layer Descriptor (SLD) examples, etc.).

[Faults and earthquakes in China monitored from space](#)



China is in a very seismically active area and has had many catastrophic earthquakes during its history. A joint European-Chinese team is using satellite radar data to monitor ground deformation across major continental faults in China to understand better the seismic cycle and how faults behave.

Using Synthetic Aperture Radar (SAR) satellite data and a technique known as SAR Interferometry (InSAR), along with GPS data, scientists participating in ESA's Dragon 2 Programme have been able to measure the ground deformation that occurred during the Wenchuan earthquake that struck China's Sichuan Province last May. InSAR involves combining two or more radar images of the same ground location in such a way that very precise measurements – down to a scale of a few centimetres or even millimetres in some cases – can be made of any ground motion taking place between image acquisitions. Using the InSAR technique on data acquired before and after the Wenchuan earthquake, Dr Sun Jianbao of the Institute of Geology, China Earthquake Administration (IGCEA), Prof. Shen Zhengkang of IGCEA and Peking University, and collaborators including Dr Cecile Lasserre from France's Laboratoire de Geophysique generated 'interferogram' images, which appear as rainbow-coloured fringe patterns, showing the ground displacement that occurred during and after the earthquake.

GIS Tools, Software, Data

[African Drylands Commodity Atlas now available](#)



The [UNCCD](#) secretariat, the [Common Fund For Commodities](#) (CFC) and the [Food and Agriculture Organization of the United Nations](#) (FAO) have launched the first African Drylands Commodity Atlas. The Atlas highlights the importance of commodities for primary agricultural production in African countries. It enhances the understanding of national policy makers in dry land Least Developed Countries (LDC), development partners and other stakeholders on the possibilities and potential opportunities to achieve [poverty reduction](#) through environmentally sustainable and economically profitable commodity production dry lands. The Atlas is available for free [download](#) (PDF 5.8mb).

[African Water Resource Database \(AWRD\) data archive](#)

The African Water Resource Database (AWRD) data archive represents the most comprehensive water management and base resource mapping data compiled for Africa and available to the public domain. The AWRD data archive includes an extensive collection of datasets covering the African continent including 28 thematic data layers drawn from over 25 data sources, resulting in 156 unique datasets. The core data layers include: various depictions of surface waterbodies; multiple watershed models; aquatic species; rivers; political boundaries; population density; soils; satellite imagery; and many other physiographic and climatological data types. The AWRD archival data have been specifically formatted to allow their direct utilization within any geographic information system (GIS) software package conforming to Open-GIS standards. The data contained within the AWRD archive have been organized to facilitate their retrieval via eight database components. Primary data integral to the function of the AWRD:



Spatial Data Infrastructure – Africa Newsletter



- [Surface Waterbodies](#)
- [Watersheds](#)
- [Rivers](#)
- [Aquatic Species](#)
- [Gazetteer](#)
- [Ancillary Vector](#)
- [Ancillary Raster](#)
- [Ancillary Image](#)

Additional datasets (optional) include: Raster Digital Elevation Model (DEM) and satellite image data for [Volta](#) and Lake [Tanganyika](#) basins, [Continental SRTM 3-arc second DEM baseline and derivate DEM data, 2.5d color-classified DEM and hillshaded SRTM 3-arc seconds data derivatives](#). Documents: [Installation of AWRD data archive](#) and [Detailed description of AWRD data archive](#).

[GOBLET: An open-source geographic overlaying database and query module for spatial targeting in agricultural systems](#)

The article describes the development of an open-source mapping and query utility. The impetus for its development came originally from the need to be able to locate, spatially, target populations of resource-poor livestock keepers in the developing world, and to identify livestock management interventions that may be appropriate for these households. The tool was developed using open-source software, to facilitate its transfer and use. It brings together a considerable amount of spatial data from many sources, and allows users to overlay these geographic areas to identify a “domain” where characteristics like human population, area, and the number of livestock may vary. The tool serves as the core of several applications, including an ex ante impact assessment framework to help answer questions relating to improved targeting of fodder interventions in Kenya, and a communication tool for poverty related information in Africa. [Source: ScienceDirect].

[GISVM desktop GIS workstation & server](#)

GISVM is a bundle of open source geospatial software. It can be used on almost any operating system environment and is intended to be a hassle-free installation option for anyone that needs a ready to use GIS solution. GISVM is now available in two main editions:

- GISVM (Desktop) - a full-feature GIS Desktop Workstation based on free Desktop and Server GIS software: PostgreSQL, PostGIS, GeoServer, Mapserver, FWTools, QGIS, GRASS, gvSIG, uDIG, Kosmo and OpenJump, on Ubuntu Desktop.
- GISVM Server - a full-feature GIS Server based exclusively on free Server GIS software: LAMP, PostgreSQL, PostGIS, GeoServer, Mapserver, Degree and Webmin on Ubuntu Server.

Geospatial Research, Applications, Reference Material

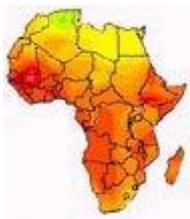
[Evidence-based approach to decision making: the inclusion of GIS as part of Ghana's Health Information Systems](#)



This commentary demonstrates some practical aspects of Health GIS in Ghana. The data from the HealthMapper, a basic mapping and surveillance software developed by WHO's Communicable Disease Surveillance and Response Department, which contains coordinates of most communities together with the respective health centers and hospitals are plotted to show the disparities in health facilities in the country. [Source: Ghana Med J. 2009 March; 43(1): 1-6]

[GenGIS: A geospatial information system for genomic data](#)

The increasing availability of genetic sequence data associated with explicit geographic and ecological information is offering new opportunities to study the processes that shape biodiversity. The generation and testing of hypotheses using these data sets requires effective tools for mathematical and visual analysis which can integrate digital maps, ecological data, and large genetic, genomic or metagenomic data sets. GenGIS is a free and open-source software package that supports the integration of digital map data with genetic sequences and environmental information from multiple sample sites. Essential bioinformatic and



Spatial Data Infrastructure – Africa Newsletter

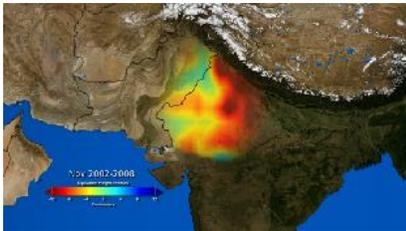


statistical tools are integrated into the software, allowing the user a wide range of analysis options for their sequence data. Data visualizations are combined with the cartographic display to yield a clear view of the relationship between geography and genomic diversity, with a particular focus on the hierarchical clustering of sites based on their similarity or phylogenetic proximity. The features of GenGIS are outlined and its application demonstrated to georeferenced microbial metagenomic, HIV-1, and human mitochondrial DNA data sets.

[Using geospatial information technology in natural resources management: the case of urban land management in West Africa](#)

In the past several decades, Lagos Metropolis emerged as one of the fastest urbanizing cities in the West African Sub-region. In the absence of a regular use of geospatial information management systems, limited effort had been made to keep track of changes in the natural environment in the rapidly growing city for policy making in land administration. The ubiquitous energy radiated by the rapid urbanization rate in the area not only created unprecedented consequences by diminishing the quality of the environment and natural resources but it raises serious implications for land management in the region. The factors fuelling land crisis in the area which are not far fetched consists of socio-economic, ecological and policy elements. To tackle these issues in a mega city, up-to-date knowledge would be required to capture and analyze land information trends. Such an effort will help manage the city's expansion as well as infrastructure development through the right choices in planning and (spatial) designs using the latest tools in geospatial technologies of Geographic Information Systems (GIS) and remote sensing. This study investigates the spatial implications of the rapid expansion of metropolitan Lagos for land management using GIS and Remote sensing technology. The result of the research provides a valuable road map that can enable planners contribute to improved land administration necessary for effective management of natural resources.

[NASA Satellites unlock secret to Northern India's vanishing water](#)

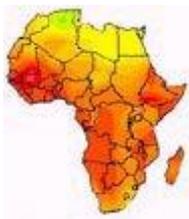


Beneath northern India's irrigated fields of wheat, rice, and barley ... beneath its densely populated cities of Jaipur and New Delhi, the groundwater has been disappearing. Halfway around the world, hydrologists, including Matt Rodell of NASA, have been hunting for it. Where is northern India's underground water supply going? According to Rodell and colleagues, it is being pumped and consumed by human activities principally to irrigate cropland faster than the aquifers can be replenished by natural processes. They based their conclusions --

published in the August 20 issue of *Nature* on observations from NASA's Gravity Recovery and Climate Experiment (GRACE). "If measures are not taken to ensure sustainable groundwater usage, consequences for the 114 million residents of the region may include a collapse of agricultural output and severe shortages of potable water," said Rodell, who is based at NASA's Goddard Space Flight Center in Greenbelt, Md. Groundwater comes from the natural percolation of precipitation and other surface waters down through Earth's soil and rock, accumulating in aquifers cavities and layers of porous rock, gravel, sand, or clay. In some of these subterranean reservoirs, the water may be thousands to millions of years old; in others, water levels decline and rise again naturally each year. Groundwater levels do not respond to changes in weather as rapidly as lakes, streams, and rivers do. So when groundwater is pumped for irrigation or other uses, recharge to the original levels can take months or years.

Changes in underground water masses affect gravity enough to provide a signal, such that changes in gravity can be translated into a measurement of an equivalent change in water. "Water below the surface can hide from the naked eye, but not from GRACE," said Rodell. The twin satellites of GRACE can sense tiny changes in Earth's gravity field and associated mass distribution, including water masses stored above or below Earth's surface. Previous research in the US had proven the accuracy of GRACE in detecting groundwater. "Using GRACE satellite observations, we can observe and monitor water changes in critical areas of the world, from one month to the next, without leaving our desks," said Velicogna. "These satellites provide a window to underground water storage changes."

Training Opportunities



Spatial Data Infrastructure – Africa Newsletter



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.
- 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.

Training Course: Land Management Information System, 19-30 October 2009, RCMRD, Nairobi, Kenya
Regional Centre for Mapping of Resources for Development ([RCMRD](#)), Nairobi has started a training course in Land Management Information System to build capacity in Management of Land Information System for its member countries and Africa at large.

Target group: Professionals working in the Geo-information field and those working in land registries, survey and mapping organizations

Course content:

- Basic concepts of LMIS
- Fundamental elements of LMIS
- Types of cadastral records and land tenure
- LMIS stake holders
- Making a prototype LMIS database
- Spatial and non spatial data entry
- Querying the data base
- Updating the database
- Land transaction procedures

Upon completion of the course, participants should be able to: Understand the concepts and elements of Land Management Information Systems (LMIS), Automate land registration processes, maps and records through scanning, geo-referencing, digitizing, creating parcel based information digital databases, querying and presentation of LMIS data.

Tuition is free but participants are required to meet their travel and accommodation costs. Contact persons: Anne Kinyori: anne@rcmrd.org or Muya Kamamia: muyack@rcmrd.org or rcmrd@rcmrd.org.

International Training Course, Satellite Navigation and Location Based Services, hosted by the African Regional Centre of Space Sciences and Technologies (CRASTE-LF), in collaboration with International Committee (ICG) and United Nations of Office of Outer Space Affairs, 28 September - 24 October 2009, Rabat, Morocco.

Programme

Module 1 - Principes de la navigation

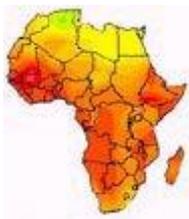
- Notions de géodésie
- Positionnement par satellites
- Le système GPS
- Nouvelle génération de GNSS

Module 2 - Applications GNSS

- Les systèmes d'augmentation GNSS
- Applications GNSS
- Marché des produits GNSS
- Réglementation GNSS

GEONETcast for Natural & Water Resources Management - Pre-conference workshop Africa GIS2009, 22-24 October 2009, Makerere University, Department of Geography, Kampala, Uganda

This workshop will help to bring participants up to speed with recent developments with respect to the GEONETCast data dissemination and ground receiving system, freeware toolbox to import the data, associated (multi-temporal) modeling and GIS applications. Furthermore it will stimulate the applicants to further develop and strengthen educational and research activities and collaboration in these fields.



Spatial Data Infrastructure – Africa Newsletter



The workshop is build on the GEONETCast system and utilizes the various data sources provided which will contribute to a better understanding of the natural processes going on in relation to water and natural resources conditions (e.g. flood and drought phenomena) at a basin and continental scale. The workshop will equip the participants with up-to-date knowledge and skills (through computer practical) using (real-time) image and data disseminated via GEONETCast. Tools used are freeware and are at disposal of participants after termination of the workshop.

[UNESCO-IHE Regular Short Course: GIS and Remote Sensing](#), 2-13 November 2009, UNESCO-IHE Institute for Water Education, Delft, The Netherlands

There has been a rapid growth in the use of digital spatial and temporal data in many aspects of urban water systems management (for example urban planning, pipe-network systems analysis, river basin management, groundwater analysis and water pollution assessment). The aim of this course is to provide both a solid theoretical understanding and a comprehensive practical introduction to the use of geographic information systems and remote sensing technologies for the analysis and solution of different water and environmental problems. Contact: z.vojinovic@unesco-ihe.org.

[Facilitating community managed disaster risk reduction course](#), 19-30 September 2009, Kampala, Uganda. Contact [International Institute of Rural Reconstruction, Africa \(IIRR Africa\)](#) regional office or country offices for details.

[Institute for Meteorological Training and Research \(IMTR\) courses 2009](#), Nairobi, Kenya

- Advanced Forecasting Course (AFC) - start date: 1 October 2009 (3 months)
- Contact: imtr@meteo.go.ke, aura@meteo.go.ke.

[GIMS course schedule for August and September 2009](#), South Africa. GIMS is an ESRI accredited learning centre servicing Southern Africa. Contact:

- Midrand and Port Elizabeth - Queen Mofokeng (011) 238 6300 (011) 238 6310 at qmofokeng@gims.com
- Durban - Patricia van Schalkwyk (031) 303 5356 (031) 303 5376 at pvanschalkwyk@gims.com
- Cape Town Kathi Wöhl (021) 422 4620 (021) 422 4628 at kathi@gims.com



[L'Ecole 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 : 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.

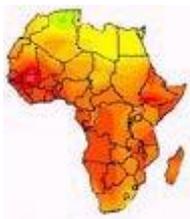
[Short-courses offered by RECTAS in 2009](#), Ile-Ife, Nigeria



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 thontteh@rectas.org.

[LUMA-GIS, Lund University GIS Centre \(Sweden\) Master's program in GIS](#)

Lund University Master's program in GIS is a free, distance-learning, 2-year program for full-time students. The entire program is given in English and is equivalent to 120 European ECTS credits (1.5 ECTS credits are approx. equivalent to 1 week full-time studies). All courses, given as "distance education", means that the



Spatial Data Infrastructure – Africa Newsletter



teaching methods and course examinations are conducted over the Internet. The program is equivalent to a degree of Master in Sweden. It is the responsibility of international students to verify if the program is also recognized as a degree of Master in their country of origin. The entire program is free of charge for all students, meaning that there are no tuition fees. The students will be supplied with all required computer software and licenses, theoretical material (except course literature for some courses), practical exercises, and data. Course literature (books) may be required for some of the more advanced courses. In such cases, students will have to buy these themselves. Applications for program that starts in January 2010 opens in July 2009.

MSc degree or Postgraduate diploma course in Land Administration



ITC's MSc degree (18 months) and Postgraduate diploma (9 months) courses in Geo-information Science and Earth Observation for Land Administration starts on 14 September 2009 and comprises two components:

- Understanding the scientific concepts, models and methods of land administration
- Operational aspects of creating a land administration organisation.

See [fellowships](#) matters and on-line registration: [MSc degree course](#) and [Postgraduate diploma course](#).

[Use of low cost earth observation data in environmental and climate monitoring applications: taking further the African Union - AMESD initiative](#), Rwanda, starting 5 October 2009 (2 weeks). A number of fellowships are available for eligible candidates.

Postgraduate certificate course

[Applications of Earth Observation and GIS in Integrated Water Resources Management](#), 18 January - 7 May 2010 (16 weeks), Nairobi, Kenya

Each module can be taken separately

1. Principles of Earth Observation and GIS - RCMRD (5 weeks)
2. Principles of IWRM – RCMRD (1 week)
3. Advances in computational methods for WRM - Egerton Univ. (2 weeks)
4. GIS-based catchment modeling incl. DEM hydro-processing - Egerton Univ.(3 weeks)
5. Groundwater system analyses and modelling - Egerton Univ. (2 weeks)
6. Application of RS and GIS in Water Resources studies – RCMRD (3 weeks)

Co-funding arrangements can be made through the school for Disaster Geo-Information Management (ITC).

Deadline for applications: 1 October 2009.

For further information contact: Ir. Arno van Lieshout, ITC (lieshout@itc.nl), Dr. Tesfay Korme, RCMRD (korme@rcmr.org), Prof. Japheth O. Onyando, Egerton (jonyando@yahoo.com).

Diploma course

[Geoinformatics, with ARU, Dar es Salaam, Tanzania](#). Specialisation modules: Digital Photogrammetry & Remote Sensing, GIS Operation, Cartography and Geo-Visualisation.

ITC Refresher Courses 2009

Refresher courses, which are certificate of attendance courses (mostly of two-week duration) organised for alumni in their home countries or regions, are meant to increase the impact and prolong the effect on earlier training. In 2009 the following courses are available:

- [Use of low cost earth observation data in environmental and climate monitoring applications: taking further the African Union - AMESD initiative](#) - Butare , Rwanda , October 2009
- [Designing and utilizing geo-information infrastructures for effective electronic governance in Eastern Africa \(GEOGOV - EA\)](#) - Kampala, Uganda, October 2009.

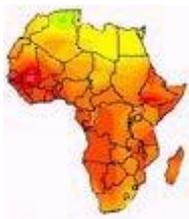
[Impacts of infrastructure and transport](#) - Modelling and mapping for sustainable infrastructure development in an urbanising landscape in West Africa, Kumasi, Ghana, starting 10 August 2009 (2 weeks).

Funding Opportunities, Awards, Support

Call for Applications: the 2010 Faculty for the Future Fellowships



[Faculty for the Future fellowships](#) are awarded to women from developing and emerging economies who are preparing for PhD or postdoctoral study in the physical sciences,



Spatial Data Infrastructure – Africa Newsletter



engineering and related disciplines to pursue advanced graduate study at top universities in their disciplines abroad. Launched by the Schlumberger Foundation in 2004, Faculty for the Future has grown to become a community of 110 women from 35 countries.

Faculty for the Future grants are in the range of USD 25,000 to 50,000 per year, and may be renewed through to completion of studies subject to performance, self-evaluation, and recommendations from supervisors. The amount of the grant depends on the actual costs of study and living in the chosen location. Candidates should be enrolled or applying to their selected graduate schools when submitting their Faculty for the Future grant request. Candidates must have a proven track record of teaching experience, demonstrate active participation in faculty life and outreach to encourage young women into the sciences and hold an excellent academic record.

The online application form will be available as of 5 October, 2009. Sample versions of new forms are now available for consultation so candidates can start preparing their application content: [New Grant Application Process](#), [Renewal Grant Application Process](#). Deadline: 5 November 2009. For further information: www.foundation.slb.com/fftf.

[UNIFEM funding opportunity](#)

UNIFEM (United Nations Development Fund for Women) is seeking proposals from NGOs (and also governmental agencies) in developing countries under its newly established "Fund for Gender Equality" which aims to "accelerate progress toward the goal of gender equality and women's empowerment."

The Fund will be making two types of grants, namely, the Implementation Grants and the Catalytic Grants. The Implementation Grants are for activities such as supporting programs based upon agreed laws and policies promoting gender equality in developing countries at the national-level. These grants will be distributed over a period of 2-4 years and budget allocation is between US \$2-5 million. The Catalytic Grants are limited and will be allocated between US \$200,000-500,000 for a period of 1-2 years in places where gender equality plans and programs are not yet ready for implementation. In such cases, the Fund would support partnerships and coalitions for enhancing consensus on gender equality plans and policies.

Initially, applicant organizations have to submit concept notes to apply for this funding. Online application form for submitting the concept note will be available from 15 September 2009. Deadline for submitting concept notes: 30 September 2009.

[Gates Foundation: Access to Learning Award](#)

The Bill & Melinda Gates Foundation's annual Access to Learning Award recognizes the innovative efforts of public libraries and similar institutions outside the United States to connect people to information and opportunities through free access to computers and the Internet. The award is given by Global Libraries, a special initiative of the foundation's Global Development Program. The recipient of the Access to Learning Award will receive US\$1 million.

The application form is available only in English and must be completed in English to be eligible for consideration. Note that the application process has changed for 2010:

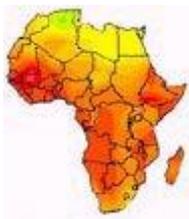
- [Download the application](#) from the link below and save it to your computer.
- Confirm your organization's eligibility. Please read all the information on the form carefully.
- Complete the application in English and follow all of the provided instructions.
- [Submit your completed application online](#).

Download the [2010 ATLA Application Form](#) (15 pages, 146KB, DOC). Completed applications must be submitted by October 31, 2009.

[FIG Foundation Fellowship and Awards for FIG Congress 2010](#)

The FIG Foundation that is an independent body within the FIG family which raises and disburses funds for the development of the surveying profession and surveyors has announced the FIG Foundation Fellowship and Awards for the FIG Congress 2010. The FIG Foundation has decided to make a number of awards in connection with the 2010 FIG Congress in Sydney, Australia. The flagship award will be the 2010 FIG Foundation Fellowship which will provide full funding for the Fellow to travel to and attend the Congress. In addition, the Foundation will award up to six grants which will provide €500 funding and complimentary registration each towards the grantees attending the Congress.

The Fellowship and Awards are open to all nationals of countries designated by the World Bank as low or lower middle income economies who must live in (and, if a student, study in) one of these countries. See the [World Bank list](#). Deadline for applications: 22 September 2009.



Spatial Data Infrastructure – Africa Newsletter



[TWAS-AAS-Microsoft Grant for Scientific Meetings](#)

The TWAS-AAS-Microsoft Grant for Scientific Meetings aims to encourage the organization of international and regional scientific conferences and workshops in Africa. Microsoft will provide support in the form of travel grants for some principal speakers from abroad and/or participants from developing countries other than the country in which the event is held. Applicants, who may be of any nationality, must be involved in the organization of international or regional scientific meetings to be held in Africa in the field of computer science. Deadlines for receiving applications are: 1 April each year for meetings to be held during July to December of the same year, and 1 October each year for meetings to be held during January to June of the following year.

[TWAS Fellowships for Research and Advanced Training](#)

For young scientists in developing countries to spend time at a research institution in a developing country other than their own. The purpose of the programme is to enhance the research capacity of promising scientists, especially those at the beginning of their research career, helping them to foster linkages for further collaboration. The fellowship includes travel support and a contribution towards subsistence costs. Living expenses are borne by local sources. Deadline: October 1, 2009.

[Earth Journalism Award 2009](#) - Open for submission

Internews, the Global Media Assistance Organisation, opened the Earth Journalism Awards on World Environment Day (5 June 2009) with a call to professional and citizen journalists around the world to enter their best reporting on climate change. Winners will be flown to the United Nations Climate Change Conference (COP15) in Copenhagen this December, where they will cover these pivotal negotiations and be honored at a high-profile awards ceremony. A total of 14 awards are now open for entry:

- Seven Regional Awards on current affairs and news reporting on climate change: Eurasia, South Asia, East Asia, Sub-Saharan Africa, Middle East & North Africa, Latin America & the Caribbean, and North America, Europe & Australia.
- Six Thematic Awards: The Negotiations Award, The Human Voices Award, The Energy Award, The Forests Award, The Climate Change and Nature Award, and The Climate Change Adaptation Award.
- The 14th award – the Global Public Award – will be chosen by the public, which will be invited to vote online for the best story drawn from the winning regional and thematic awards through a social networking campaign on platforms such as Facebook and Twitter.
- A 7th thematic award - The MTV Positive Change Award - will be open for entry from June 22 2009.

Details of the awards are [available](#) where journalists can register and upload their entries. Deadline for entries: 7 September 2009.

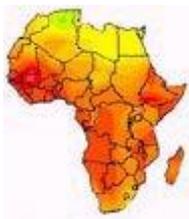
[Carl Pulfrich Award - 2nd Announcement](#)

Z/Imaging, an Intergraph company, welcomes nominations for the 2009 Carl Pulfrich Award. The award recognizes outstanding accomplishments in the field of photogrammetry and remote sensing. The Carl Pulfrich Award was established to promote outstanding scientific, application-oriented design and/or manufacturing activities in the field of photogrammetry and remote sensing, including earth imaging applications. The biennial award and donation honors the memory of Dr. Carl Pulfrich, a member of the scientific staff at Carl Zeiss from 1890 to 1927, during which time he directed the design of the first stereo photogrammetric and surveying instruments from Zeiss. Photogrammetry, remote sensing, and earth imaging professionals may nominate candidates for the Carl Pulfrich Award.

Application Criterion:

- A one- to three-page statement that justifies the nomination of the Carl Pulfrich Award candidate
- A curriculum vitae that includes the candidate's date of birth, significant work experience, academic degrees, copies of papers, research reports, or other items produced by the candidate that may support the candidate's capabilities in this field
- One or more independent letters of recommendation from fellow practitioners having knowledge of the candidate's capabilities (demonstrated or potential) as a technical leader in this field.

The award recipient(s) will receive a monetary gift of \$7,500 (U.S.) or an amount deemed suitable by the award council and will be presented the distinguished 2009 Carl Pulfrich Award plaque during the 52nd annual [Photogrammetric Week](#), Sept. 7-11, 2009, in Stuttgart, Germany. For additional information, contact Dr. Mostafa Madani at mostafa.madani@intergraph.com or phone: 1.256.730.1814.



Spatial Data Infrastructure – Africa Newsletter



[Right Sharing of World Resources \(RSWR\) Grant Program](#)

Right Sharing of World Resources (RSWR) is a Quaker-organization, which primarily works with newly established and small organizations in the developing world. RSWR's grants support for innovative income-generating projects and environmental regeneration (reforestation, agro-forestry, alternative energy sources). Project grants may be used for: revolving loan for seed money, start-up supplies and equipment essential for the project, training, and salary for persons needed to oversee the project, travel expenses, administrative expenses such as the cost of preparing and mailing reports to RSWR. RSWR has two funding cycles. Deadline: December 31. For more information contact: Right Sharing of World Resources at: rswr@rswr.org.

[African Union Scientific Awards](#)

The [African Union Scientific Awards](#) will be awarded to African scientists who have remarkable achievements, demonstrated by number of publications, number of research graduate students, applicability of the scientific work to Africa's challenges, and its patentability. Only nationals of the African Union (AU) Member States are eligible for this Award. The remaining award category is:

- African Union Scientific Award targeting outstanding African Scientists in the African Union and valued each at USD 100,000. The awards are for African Union Scientific Award Life and Earth Sciences and the African Union Scientific Award for Basic Science, Technology and Innovation.

Application deadline: 9 September 2009.

[International Foundation for Science \(IFS\) - "Green Water" Grants](#)

The International Foundation for Science (IFS) invites young scientists to submit research proposals that address: Good management, conservation and use of green water for increased food and biological production through:

- Land management and soil water conservation
- Soil practices to reduce soil erosion and impact on rain water infiltration
- Increase of infiltration through agriculture, rain harvesting or water conservation practices
- Soil fertility management and efficiency of water use for increased production
- Plant management impact on efficiency of rain water use, effects of plant density on rain water use efficiency, relationship between intercropping and run off
- Use and development of drought resistant plants
- Socio-economic aspects of green water use and management

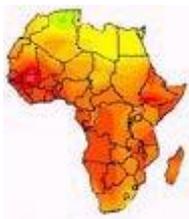
Candidates must be under the age of 40, hold at least an MSc degree, be citizens of developing countries and be carrying out their research in a developing country. Researchers in Sub-Saharan Africa up to 45 years of age may apply, providing they obtained their last higher degree within the last 5 years. Deadline: 31 December 2009.

[International Foundation for Science \(IFS\) Grants](#)

The International Foundation for Science (IFS) is currently accepting research grant proposals from young researchers from developing countries. Each year IFS awards around 250 research grants with a value of up to USD 12000 for research projects that will be carried out in developing countries. Eligible research proposals will address issues that fit within the broad topic of sustainable management, use or conservation of biological or water resources. Researchers with IFS support usually have a Masters degree or a PhD, or they are currently enrolled in a PhD programme. See [IFS website](#) for application forms and detailed eligibility criteria. Application deadline: 31 December 2009.

[Wildlife Conservation Society: Research Fellowship Program](#)

The [Research Fellowship Program \(RFP\)](#) is administered by WCS-Global Conservation's Training & Capacity Building Program and jointly funded by the Conservation Leadership Programme (CLP). The RFP is a small grants program (grants of up to \$25,000, the average grants is \$10,500) designed to build capacity for the next generation of conservationists through supporting individual field research projects that have a clear application to the conservation of threatened wildlife and wildlife habitat. The RFP supports marine or terrestrial field research in Africa, Asia, and Latin America regardless of the nationality of the applicant. CLP funding is restricted to nationals from Algeria, Angola, Argentina, Azerbaijan, Bolivia, Brazil, China, Colombia, Egypt, Georgia, India, Indonesia, Libya, Malaysia, Mexico, Pakistan, Russia, Trinidad & Tobago,



Spatial Data Infrastructure – Africa Newsletter



Turkey and Venezuela. The RFP supports projects for only one year, so preference is given to discrete, short-term projects. Deadline: September 15.

Employment Opportunities

[Project Manager, Congo Basin Forests and Climate](#), Washington, DC, USA (with extended stays in Central Africa)

The People & Ecosystems Program at the World Resources Institute (WRI) seeks a results-oriented project manager to lead WRI activities at the nexus of forests and climate in the Congo Basin. To begin, the successful candidate will lead a three-year project to improve detection (via remote sensing) and quantification of deforestation, forest degradation, and the associated carbon emissions in the forests of Cameroon and the Republic of Congo. In addition, the project will build the capacity of local institutions and government agencies to conduct this measurement and monitoring on an ongoing, consistent basis.

Candidates should have an advanced degree (Masters or Doctorate) in geography, remote sensing, GIS, forestry or other relevant field, ideally with a focus on tropical forests; minimum seven years relevant work experience in remote sensing, GIS, and monitoring of tropical forests or in sustainable forest management. Experience with monitoring and measuring forest-related carbon emissions (and sinks) or related forest/climate experience is a plus; familiarity with the United Nations Framework Convention on Climate Change (UNFCCC) mechanism for Reduced Emissions from Deforestation and Forest Degradation in Developing countries (REDD).

The position will be based in Washington, DC but will involve extended stays in Central Africa (particularly Kinshasa, Brazzaville and Yaounde). Alternative arrangements (e.g., position being based in Kinshasa) may be considered. Contact: sthompson@wri.org. Deadline: 11 September 2009.

[Science Officer](#), DIVERSITAS International Headquarters, Paris, France

[DIVERSITAS](#) the international biodiversity science programme seeks to recruit a Science Officer for its International Secretariat located in Paris, to lead the implementation of its bioDISCOVERY core project on "[Assessing, monitoring and predicting biodiversity change](#)". The incumbent should be highly motivated individual committed to an inter-disciplinary approach to biodiversity science. The position is ideal for a person interested in science, policy and scientific administration.

Required: Ph.D. and experience in a biodiversity related field, Excellent interpersonal abilities. Excellent English skills are required; French language skills are a plus.

Duties include: Synthetic scientific activities such as writing overview articles, editing books; Management activities such as organising and leading workshops; liaising with international conventions; fund raising.

Employers are CNRS (French National Centre for Scientific Research) and DIVERSITAS. This position is exclusively reserved to non-French citizens.

Position starts late 2009. Appointment is for one year, renewable. Applications (cover letter, CV and contact details of three references) should be submitted before or on 15 September 2009. For inquiries: Julie Dardanelli at julie@diversitas-international.org.

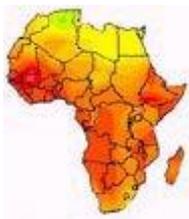
[Ramsar Intern/Assistant Advisor for Africa](#), Gland, Switzerland

The Ramsar Secretariat welcomes applications for the position of Intern/Assistant Advisor for the Africa region, a 12-month posting (possibly extendable up to 18 months) in the Ramsar Secretariat in Switzerland to begin in mid-January 2010. IUCN, the International Union for Conservation of Nature, provides administrative services for the Ramsar Convention, and more information and online application for this post is available on the [IUCN](http://www.iucn.org) website. Here is a checklist of Ramsar's requirements for this position:

- Are you under 30 years old?
- Do you have a university degree (preferably a post-graduate qualification) in a subject relevant to wetland conservation and sustainable use, such as, biology, hydrology, marine sciences, natural resources management, land use planning, geography or anthropology/sociology?
- Are you a national of an African country, and have you lived most of your life in the region?
- Do you have perfect fluency in both French and English?

The deadline for applications is 30 September 2009. Applications should be submitted online and no other method will be considered.

[Theme Leaders \(6\): Climate Change, Agriculture and Food Security](#)



Spatial Data Infrastructure – Africa Newsletter



The CGIAR Challenge Program on "Climate Change, Agriculture and Food Security" is a major collaborative endeavour between the international agricultural (CGIAR) and global environmental change (ESSP) research communities (<http://www.cgiar.org/impact/challenge/ccafs.html> or www.essp.org/index.php?id=76). Research will be aimed at overcoming the threats posed by a changing climate to achieving food security, enhancing livelihoods and improving environmental management in the developing world. The program seeks Theme Leaders for the following six themes:

- Diagnosing vulnerability and analysing opportunities
- Unlocking the potential of macro-level policies
- Enhancing engagement and communication for decision-making
- Adaptation pathways based on managing current climate risk
- Adaptation pathways under progressive climate change
- Poverty alleviation through climate change mitigation

Essential qualifications and competencies:

- PhD or equivalent academic qualifications in agricultural and / or environmental sciences and demonstrated international standing in issues related to climate change, agriculture and food security.
- Demonstrated competency in communication and interpersonal skills, including extensive ability to motivate, inspire and promote team-work through negotiation and consensus-building.
- Interest and experience in ensuring that science outputs lead to outcomes and impact.
- Familiarity with the respective research agendas of the CGIAR and ESSP communities.
- Fluency in English, both written and spoken; and good working knowledge of other major international languages would be a considerable advantage.

Theme Leaders can be appointed on a part-time or full-time basis for a three year renewable term, and in general will remain attached to their home institution. Each will be assisted by a full time science officer. Theme Leaders are expected to show inspired scientific leadership and would be responsible for developing and implementing the theme research. For further details on the positions and application procedures, contact the Challenge Program Chair, Professor Thomas Rosswall, thomas.rosswall@gmail.com. Application deadline: 10 September 2009.

[International Technical Advisor - Climate Change](#), Lilongwe, Malawi

The Climate Change International Technical Advisor will provide advisory and management support to the measuring of potential climate change impacts on Malawi's development priorities and the design of a co-ordinated cross-government and cost effective response. Required is an expert with the following:

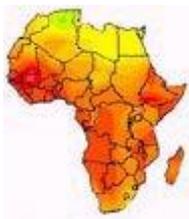
- Strong experience in development processes, climate change, broader environmental mainstreaming and experience of sub-Saharan Africa (ideally in Southern Africa).
- Knowledge and working experience in Sub-Saharan Africa and ideally Southern Africa;
- Strong background in planning and budgeting; knowledge of UNDP project management systems is an advantage;
- Strong interpersonal skills with ability to work under pressure and to establish and maintain effective work relationships with people of different national and cultural backgrounds;
- Strong team working skills and willingness to travel;
- Excellent communication skills with ability to express ideas clearly, logically and effectively, both orally and in writing;
- Computer literacy and ability to use Word Processing and office technology equipment.

Deadline for submission of application: 11 September 2009.

[Programme Specialist \(Earth Sciences\)](#), Nairobi, Kenya

Under the overall authority of the Assistant Director-General for Natural Sciences, under the direct supervision of the Director, UNESCO Nairobi office, and in close collaboration with the Division of Ecological and Earth Sciences, the incumbent shall be responsible for the programming, planning, implementation, evaluation and coordination of all activities in the field of Earth Sciences within the Africa region. The incumbent shall undertake the following tasks:

- Promote the UNESCO Geoscience education programme in Africa to increase the human resource capacity in the fields of geology, geophysics, mineral resources and energy development, environmental geology, geohazards mitigation, engineering geology, environmental sustainability, and medical geology (geomedecine) with an emphasis on activities supporting women geoscientists and mainstream women in all capacity building activities.



Spatial Data Infrastructure – Africa Newsletter



- Identify and promote applied research themes of interest to the international scientific community with a view of fostering regional collaboration. Work within the framework of the UNESCO's International Geoscience Programme (IGCP) and in collaboration with International Union of Geological Sciences (IUGS) and other international geoscientific programmes for the production of thematic geological maps, post-graduate training in the Earth Sciences, in remote sensing and geodata handling, climate change and industrial pollution.
- Participate in local and international geo-conservation schemes in Sub-Saharan Africa, including nomination of the most significant geoscientific monuments in this region to preserve their natural and cultural heritage.
- Develop the activities of the Pan-African Geological Information systems (PANGIS) to modernise bibliographical and factual geodata handling in African geoscience institutes;
- Design resource mobilization strategy in support of programme activities in Earth Sciences and Natural Disaster management in Africa;
- Develop and maintain regular contacts with United Nations Agencies, Multilateral and Bilateral Development Agencies, regional funds and development banks (African Development Bank), the European Commission, Private Sectors, IGOs, NGOs in view of the development and implementation of joint activities in the area of Earth Sciences and Natural Disaster management for the sub-region within the context of the United Nations "Delivering as One" approach and CCA/UNDAF processes.

Requirement: Advanced university degree (preferably at PhD level) in Geology; At least 7 years of progressively responsible experience in the field of geosciences, of which preferably 3-5 years acquired at the international level.; Relevant professional experience in geosciences issues related to Africa; Experience in planning, implementation and evaluation of programme activities in the field of geosciences; Experience in fund-raising and resource mobilization. .

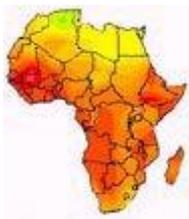
Use the on-line recruitment system at www.unesco.org/employment. Candidates without access to internet may send a paper application by completing the official UNESCO CV form (available at Headquarters, UNESCO Offices, National Commissions in Member States, or any office of a United Nations Resident Representative) in English or French to *Chief, HRM/RCR, UNESCO, 7 place de Fontenoy, 75352 Paris 07 SP, France*, before 24 September 2009, quoting the post number: AF/RP/KEN/SC/0003.

IUCN Forest Projects Officer, Liberia

The Forest Projects Officer will be responsible for providing technical and administrative support to the implementation activities of IUCN's REDD and LLS projects as well as other activities in Liberia. Active engagement in LLS and REDD field activities and with a focus on implementation and learning, including working with the PC to develop policy-relevant lessons to help inform policy decisions, as well as enhancing the learning networks on community forest management and REDD learning. This includes, among other approaches, contributions to learning from the landscapes including participation in the design and implementation of field surveys/studies, the preparation of technical reports, the design and development of project proposals and other tasks to ensure effective delivery.

- A minimum of a B.Sc. A postgraduate qualification will be an advantage
- 7 to 10 years' experience, preferably with some field experience in community forestry and livelihood schemes, design of studies and report writing
- An understanding of the linkages between rural communities and forest/natural resources, forest land tenure issues as well as the possibilities of and limitations in using forest resources for improving the livelihoods of forest-dependent and forest-dwelling communities
- A working experience of forests and climate change issues
- Good project management experience (development and implementation of work plans, budgets, technical and financial reporting, contract supervision, liaison with relevant stakeholders, etc.)
- Ability to work independently and deliver quality products and review their technical adequacy within agreed tight deadlines
- A strong aptitude and ability to communicate both informally (interpersonal skills and networking) and formally (presentations)

Applications by email are preferred and should be sent to jobs.paco@iucn.org or the Head of Human Resources, IUCN central and West Africa, 01 BP 1618 Ouagadougou 01, Burkina Faso. Deadline: September 19, 2009.



Spatial Data Infrastructure – Africa Newsletter



[Procurement Officer - United Nations Economic Commission for Africa \(UNECA\)](#), Addis Ababa, Ethiopia

The United Nations Economic Commission for Africa is seeking a qualified and professional Procurement Officer. The incumbent should have an advanced University degree (Master's degree or equivalent) in Law, Business Administration, Public Administration or other related field required. A first level university degree with a relevant combination of academic qualifications and experience may be accepted in lieu of the advanced University degree. A recognized qualification in legal practice or procurement is desirable. A minimum of five years of progressively responsible experience in complex procurement, contract administration or legal practice in public or private sector of which at least two years should be directly related to experience in procurement and contracting activities such as review, drafting and negotiation of contractual terms and conditions, dispute resolution and settlement of claims. Highly desirable if a portion of that experience has been gained in the United Nations, developing countries or peacekeeping missions. Experience in conducting due diligence review of commercial entities is required.

Interested candidates should log into the UN Jobs advertisement website, at www.jobs.un.org to create their profile (at www.Myun.un.org) and apply to the vacancy announcement or through the UNECA website www.uneca.un.org. Applications must be received by 13 September 2009.

[Deputy Director: Human Resources and Administration](#), Nairobi, Kenya

Kenya Forest Service is a State Corporation established by an Act of Parliament for management and conservation of all types of forests. The Service seeks to recruit self motivated, dynamic and results oriented persons to fill the above vacancy. Suitable candidates must have the following minimum qualifications:

- A Masters of Business Administration degree with a specialization in Human Resources Management
- A minimum of 5 years in Human Resource Management at an equivalent level, 3 of which should be in a large organization with a national cover
- Membership to a professional body
- Evidence and thorough knowledge of labour laws
- Proficiency in MS Office computer applications
- Proven excellent communication and interpersonal relations
- A team player and good people management skills, with proven leadership skills

Suitably qualified candidates should send their detailed CV with daytime contacts and copies of academic and professional certificates to the Human Resource Manager, Kenya Forest Service, P.O. Box 30513-00100 Nairobi on or before 23 September 2009.

[Chief Officer: Survey and Mapping](#), Nairobi, Kenya.

Kenya Forest Service is a State Corporation established by an Act of Parliament for management and conservation of all types of forests. The Service seeks to recruit self motivated, dynamic and results oriented persons to fill the above vacancy. Overall Responsibilities:

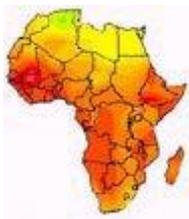
- Planning, developing, coordinating and implementing survey and mapping programmes and policies
- Coordinating surveys, boundary demarcations and mapping of forest reserves and ensuring that all boundary records for the Forest Reserves are held in safe custody
- Provision of expert witness on litigation matters concerning boundary disputes.
- Overseeing compilation of documents leading to the drawing up of boundary plans, titles, leases and sub-leases issued to Kenya Forest Service.

Suitable candidates must have the following minimum qualifications:

- A Bachelors degree in Land Survey
- Be registered with a relevant professional body
- 5 years progressive work experience in a senior level 3 of which should be in an appropriate environment and institution
- Should be able to use chains, transits, theodolites and plum lines to carry out survey work
- Must be able to use modern survey equipments that include GPS, Laptops, and Robotic Total Stations and be conversant with GIS Software and applications.

Suitably qualified candidates should send their detailed CV with daytime contacts and copies of academic and professional certificates to the Human Resource Manager, Kenya Forest Service, P.O. Box 30513-00100 Nairobi on or before 23 September 2009.

Other



Spatial Data Infrastructure – Africa Newsletter



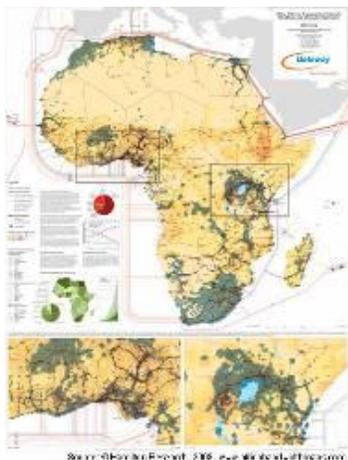
[African Union endorses Framework and Guidelines on Land Policy in Africa](#)

Heads of States and Government of the African Union, in their 13th Ordinary Session in Sirte Libya, from 1-3 July 2009, committed to ensure that land laws provide for equitable access to land especially by the landless, women, youth, displaced persons and other vulnerable groups, through the adoption of the Framework and Guidelines on Land Policy in Africa.

[Land grab or development opportunity? Agricultural investment and international land deals in Africa](#)

This report published collaboratively by the FAO, IIED and IFAD analyzes the recent trend in large scale acquisition of land in sub-Saharan Africa by international investors. The report draws on a literature review, on qualitative interviews with key informants internationally, on national inventories of approved and proposed land acquisitions since 2004 in five African countries (Ethiopia, Ghana, Madagascar, Mali and Sudan), as well as qualitative case studies in Mozambique and Tanzania, and on legal analysis of applicable law and of a small sample of land deals. The authors identify food security concerns, increasing use of biofuels, agricultural rates of return and policy reforms that have improved attractiveness of investments as drivers in this trend. They point out the risks and conditions that accompany these land transfers and recommend improved mechanisms to ensure transparency and better understanding of contracting processes.

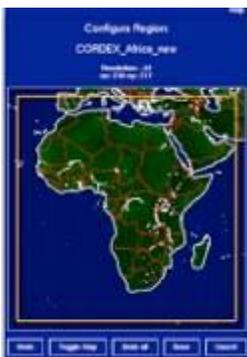
[Africa telecom transmission map 2009](#)



The first edition of the Africa Telecom Transmission Map published by Hamilton Research is now available as an AO-sized poster wall map. It shows in a detail never seen before Africa's terrestrial, satellite and submarine cable transmission networks as at July 2009. The map features:

- Exploded view for clearest mapping
- Extent of transmission networks
- Cross-border routes
- Routing of submarine cables
- Landing points for submarine cables
- Backhaul routes to submarine cables
- Pie chart showing deployment of terrestrial fibre and microwave network in route-kms by status
- Line chart showing per cent of population within reach of satellite, GSM and fixed line transmission networks
- Charts of international bandwidth and [more](#).

[CORDEX: A COordinated Regional climate Downscaling Experiment](#)

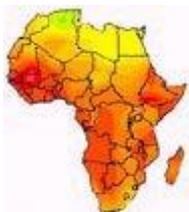


Regional climate downscaling (RCD) techniques, including both dynamical and statistical methods, are increasingly being utilized to produce regional climate information for impact and adaptation studies. It is thus critical that the potentials and limitations of RCD-based information, along with the related uncertainties, are well understood by the modeling and user communities.

Recognizing this need, the World Climate Research Program (WCRP) recently formed a task Force on Regional Climate Downscaling (TFRCD) whose mandate is to:

- Develop a framework to evaluate and possibly improve RCD techniques for use in downscaling global climate projections.
 - Foster an international coordinated effort to produce improved multi-model RCD-based high resolution climate change information over regions worldwide for input to impact/adaptation work and to the IPCC 5th Assessment Report (AR5).
- Promote greater interaction and communication between global climate modelers, the downscaling community and end-users to better support impact/adaptation activities.

As a result of the first activities of the TFRCD, and in consultation with the broader scientific community, a framework was initiated called the COordinated Regional climate Downscaling Experiment (CORDEX) aimed



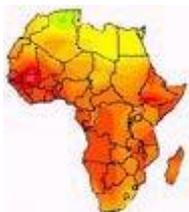
Spatial Data Infrastructure – Africa Newsletter



at improving coordination of international efforts in RCD research. The main goals of CORDEX can be summarized as follows:

- Provide a quality-controlled data set of RCD-based information for the recent historical past and 21st century projections, covering the majority of populated land regions on the globe. The RCD information will sample uncertainties in Regional Climate Change associated with (i) varying Global Climate Model (GCM) simulations; (ii) varying greenhouse gas (GHG) concentration scenarios; (iii) natural climate variability; and (iv) different downscaling methods. The CORDEX downscaling activities will be based on the latest set of GCM climate scenarios and predictions produced within the 5th Coupled Model Intercomparison Project (CMIP5)
- Define a common set of Regional Climate Model (RCM) domains for dynamical downscaling and define a standard set of variables, frequency and format for output and archival at a number of CORDEX data centres.
- Coordinate a range of RCM simulations for the defined domains, forced by analyses of observations (currently ERA-Interim) to provide a benchmark framework for model evaluation and assessment. This exercise should include also statistical downscaling (SD) methods.
- Encourage and coordinate the development of Regional Analysis and Evaluation Teams to; (i) Evaluate the ensemble of RCD simulations, (ii) Develop a suitable set of regionally-specific metrics for RCD evaluation, (iii) Collect suitable observational data to evaluate high-resolution RCD simulations and (iv) Design experiments to investigate the added-value of RCDs and target future priorities in RCD research.
- Engage the broad RCD community in its activities and discussions.
- Provide support and information to climate impact assessment and adaptation groups interested in utilizing CORDEX RCD material in their research.

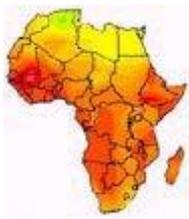
Conferences, Events		
Date	Location	Event
Items newly added to this listing of events since the last SDI-Africa issue are marked * NEW *		
September 2009		
2-4 September 2009	Nottingham, UK	6th International Symposium on LBS & TeleCartography
3-4 September 2009	Paris, France	WG III/4+5 Workshop on Object 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 .
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 .
9-12 September 2009	Beijing, China	6th International Symposium on Digital Earth (ISDE6)
10-11 September 2009	Cape Town, South Africa	Royal Institution of Chartered Surveyors' (RICS) International Legal Research Symposium 2009 Contact: p.chynoweth@salford.ac.uk .
16-18 September	Johannesburg, South Africa	MapAfrica 2009 Contact: info.mapafrica@gisdevelopment.net
21-25 September 2009	Brittany, France	The Ninth International Conference on Spatial Information Theory (COSIT 2009)
21-25 September 2009	Bath, UK	2009 EUMETSAT Meteorological Satellite Conference
23-25 September 2009	Nairobi, Kenya	IEEE Africon 2009
24-25 September 2009	Addis Ababa, Ethiopia	ESRI Eastern Africa User Conference



Spatial Data Infrastructure – Africa Newsletter



27 September-2 October 2009	Marrakech, Morocco	XXVI IUSSP International Population Conference Application deadline: 15 September 2008.
30 September - 1 October 2009 * NEW *	Versailles, France	SIG 2009 - Conférence Francophone ESRI
30 September-2 October 2009	Itajai, Santa Catarina, Brazil	9th International Symposium on GIS and Computer Mapping for Coastal Management (CoastGIS'09) Website: http://www.coastgis.com.br .
October 2009		
4-10 October 2009		World Space Week
9-11 October 2009	Singapore, Singapore	2009 IACSIT Autumn Conference
11-17 October 2009 * NEW *	Abuja, Nigeria	3rd International Commission on Irrigation and Drainage (ICID) African Regional Conference Conference theme: Role of Irrigation and Drainage in Food Security: towards attaining the millennium development goals in Africa. Contact: D. B. Madu; nincid@icid2009.org ; nincid@yahoo.co.uk or dbmadu@icid.org .
13-16 October 2009	Cape Town, South Africa	2nd DIVERSITAS Open Science Conference: Biodiversity and society: understanding connections, adapting to change
18-23 October 2009 * NEW *	Nairobi, Kenya	8th International Conference on Urban Health
18-25 October 2009	Buenos Aires, Argentina	XIII World Forestry Congress
20-23 October 2009	Sydney, Australia	FOSS4G 2009 Conference
20-23 October 2009	Drakensberg, South Africa	2009 GIMS User Conference
23-24 October 2009 * NEW *	Barcelona, Spain	Conference on Development and Information Technologies. Mobile Phones and Internet in Latin America and Africa Contact: jornadesitd2009.in3@uoc.edu .
24-29 October 2009 * NEW *	Assuit, Egypt	6th International Conference on the Geology of Africa Contact: africacon2009@geology-assiut.com .
26-29 October 2009	Kampala, Uganda	AfricaGIS 2009 Conference . Theme: Geo-spatial information and sustainable development in Africa: Facing challenges of global change. Contact: Shuaib Lwasa, S.Lwasa@cgiar.org .
28-30 October 2009 * NEW *	Entebbe, Uganda	10th Waternet / WARFSA / GWP Symposium Theme: IWRM: Environmental Sustainability, Climate Change and Livelihoods. Abstract deadline: March 22, 2009.
November 2009		
4-6 November 2009	Seattle, WA, USA	17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM GIS 2009)
9-12 November 2009	Manama, Bahrain	2009 ESRI Middle East and North Africa User Conference (MEAUC) Contact meauc2009@esri.com .
11-12 November 2009	Tanta, Gharbia Governorate, Egypt	Sixth International Symposium on Geophysics Contact: Prof. Abdelaziz L. Abdeldayem. Deadline for abstracts/proposals: 30 September 2009.
12-24 November 2009	Adama University, Ethiopia	5th International Conference on Ethiopian Development Studies



Spatial Data Infrastructure – Africa Newsletter



15-22 November 2009	Santiago, Chile	XXVI International Cartographic Conference Contact: Conference Secretariat at info@icc2009.cl . See also The World's Geospatial Solutions
17- 21 November 2009	Sydney, Australia	FOSS4G Annual Conference
22-28 November 2009	Yaoundé, Cameroon	Africa Soil Science Society (ASSS) 5th International Conferences
24-25 November 2009	Abuja, Nigeria	2nd International Academy of Astronautics (IAA) Regional Conference Space for Africa
24-26 November 2009	Abuja, Nigeria	3rd IAA Regional Conference Space for Africa . Contact: jajayi@nasrda.net or jakinyede@yahoo.com .
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 .
15-17 December 2009	Cape Town, South Africa	2nd International Conference on Management of Natural Resources, Sustainable Development and Ecological Hazards
16-20 December 2009	Tunis, Tunisia	The Fourth Session of the International Congress Geo Tunisia 2009 Contact: atigeo_num@yahoo.fr
2010		
1-5 February 2010	Maun, Botswana	International symposium: Wetlands in a flood pulsing environment - effects on biodiversity, ecosystem function and human society Deadline for abstracts: <u>1 October 2009</u>
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 .
April 2010	Addis Ababa, Ethiopia	UN-SPIDER Regional Workshop "Building Upon Regional Space-based Solutions for Disaster Management and Emergency Response for Africa"
9-16 April 2010	Sydney, Australia	International Federation of Surveyors (FIG) 2010
11-16 April 2010	Sydney, Australia	XXIV FIG International Congress 2010 Abstract deadline: <u>22 September 2009</u> .
5-7 July 2010	Vienna, Austria	ISPRS TC VII Symposium, "100 Years ISPRS - Advancing Remote Sensing Science"
25-29 October 2010	Fez, Morocco	6th World FRIEND Conference (Flow Regimes from International Experimental and Network Data) Abstract deadline: <u>September 30, 2009</u> . Contact: friend2010@msem.univ-montp2.fr This e-mail address is being protected from spam bots, you need JavaScript enabled to view it .

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

To subscribe to SDI-Africa, please do so online at:

<http://www.gsdi.org/newslist/gsdisubscribe.php>

To unsubscribe, or change your email address, contact:

<http://www.gsdi.org/newslist/gsdisubscribe.php#existingsubscriber>

Gordon Ojwang', Editor, SDI-Africa AT gsdi.org or sdiafrica@rcmrd.org or gojwang@rcmrd.org

Global Spatial Data Infrastructure Association

<http://www.gsdi.org>

Copyright © 2009. All rights reserved.

DISCLAIMER:
The Editor, GSDI, and Web Host will not be held liable for any errors, mistakes, misprints or incorrect information.