

Spatial Data Infrastructure – Africa Newsletter



SDI-Africa Newsletter

July 2010

Vol. 9, No. 7

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

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



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



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

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

Back issues of the newsletter are at the GSDI website: <http://www.gsdi.org/newsletters.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



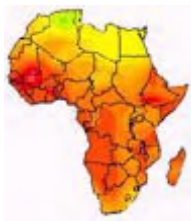
Input to this Issue

Thank you to Kate Lance, NASA/SERVIR-Africa (USA), Hussein Farah, RCMRD (Kenya); Eric Fotsing, IUT FV & Maroua University of Dschang (Cameroon); Tim Magee, Center for Sustainable Development; Alex McNamara, Camco (South Africa); Florent Lasry, AMESD IGAD (Nairobi); Akanksha Tyagi, GISDevelopment (India); Lovisa Selander, Stockholm International Water Institute (Sweden); Richard Heeks & Angelica Ospina, University of Manchester (United Kingdom); Aster Gebremariam, UNECA (Ethiopia); Henok Solomon, University of the Western Cape (South Africa); Clifford Okembo, ESRI Eastern Africa (Kenya); Vanessa Mcleod-Kourie, IIED (UK); Nathaniel Dyer, Rainforest Foundation (UK); Catharien Terwisscha van Scheltinga, Wageningen University (Netherlands) and Anthony Esilaba, KARI (Kenya) for their contributions to this issue of the newsletter.

SDI News, Links, Papers, Presentations

GSDI Small Grants Program Recipients

The 2009-10 GSDI Small Grants call for proposals was issued in August 2009 and resulted in 52 proposals, out of which, 32 were accepted and referred to regional review committees for their evaluation and recommendations. The GSDI has announced the following winners of the 2009-10 GSDI Small Grants in Africa.



Spatial Data Infrastructure – Africa Newsletter



- Africa - Spatial data taxonomy and metadata management for climate change policy development. Primary Contact: Geoinformation Systems Section of the United Nations Economic Commission for Africa.
- Malawi - Addressing the needs in terms of geographic information and GIS capacities to support HIV/AIDS monitoring, evaluation and response in Malawi. Primary Contact: National Spatial Data Centre (NSDC) under the umbrella of the Malawi Geographic Information Council (MAGIC).
- Rwanda - Development of a Spatial Data Sharing Policy Document. Primary Contact: Centre for GIS and Remote Sensing, the National University of Rwanda.
- West Africa - GIS and Spatial Data Infrastructure - Capacity Building for Professionals for Disaster Management in West Africa. Primary Contact: Regional Centre for Training in Aerospace Surveys (RECTAS).
- Botswana - Integrating cultural heritage in the National Spatial Data Infrastructure of Botswana. Primary Contact: Archaeology Unit, History Department, University of Botswana.
- South Africa - The Cape Urban Observatory Geo-Portal. Primary Contact: School of Architecture, Planning and Geomatics, University of Cape Town.
- Tanzania - Assessment of SDI Readiness Index: A Case Study of Dar Es Salaam City. Primary Contact: School of Geospatial Sciences and Technology, Department of Geoinformatics, Ardhi University, Dar Es Salaam, Tanzania.
- The GISCorps of URISA is providing time and services to Nigeria and is continuing to evaluate others for potential support.
- Nigeria - Creation of an Online Geo Information Portal and Clearinghouse Node. Primary Contact: Geographical Resources for Development Centre, Lagos, Nigeria.

The Program appreciates the contributions of the Africa regional review committee and chairs: EIS Africa, Sives Govender, Executive Secretary. For contact Info: astevens@gsdi.org, <http://www.gsdi.org>

[240,000 volunteer cartographers create digital map of the world](#)



The number of volunteer cartographers worldwide in OpenStreetMap has reached 240,000. OpenStreetMap is trying to create an Internet map of every street in every city and village on the planet. It is a kind of grass-roots Wikipedia for maps that is transforming how map data are collected, shared and used - from the desktop to smart phones to car navigation, according to an article published in *Los Angeles Times*.

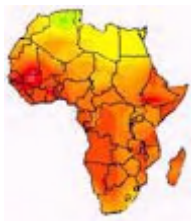
Volunteers have mapped bike paths in Silicon Valley, bear cages in the Berlin Zoo, and even places such as Nairobi slums that are often ignored by commercial cartographers.

In the hours after the devastating earthquake in Haiti, OpenStreetMap produced detailed digital maps of a quake-altered Port-au-Prince that were crucial to relief workers on the ground, a "crisis mapping" template for future disasters.

The nonprofit community collaboration model behind OpenStreetMap, which shares all the cartographic data in its maps free of charge, is changing the business of mapping, just as Wikipedia changed the business of reference material. More and more, the accuracy of searches on Google Maps or directions issued by your car's navigational device are based on data collected by Hall and other volunteer members of OpenStreetMap's do-it-yourself army. It took about three years for OpenStreetMap to hit 10,000 users, but in the last 12 months, the community has swelled from about 110,000 members to 244,000. OpenStreetMap users say that because their data are collected by people who actually live in a place, they are more likely to be accurate. "It's the people's map," said Paul Jarrett, director of mapping for CloudMade. Google has also been surprised by the emotional response people have had to its Map Maker product, which is available in 181 countries from Africa to the Philippines, with some individual users contributing tens of thousands of edits. [Source: Los Angeles Times]

[ECA launches an African technology network to generate value from research and development](#)

The United Nations Economic Commission for Africa (ECA) has launched a network of community of experts and institutions involved in technology development and transfer in Africa, composed of leading African agencies responsible for technology development, adaptation, diffusion and transfer. African Technology Development and Transfer Network aims to "generate economic and social value" from Research and Development (R&D) outputs; facilitate technology adaptation, diffusion and commercialization; and encourage investment in R&D. Its core function will be to provide a platform, supported by ECA, where small



Spatial Data Infrastructure – Africa Newsletter

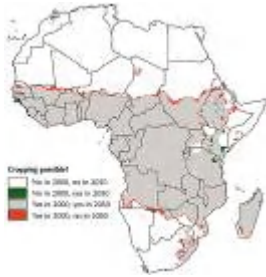


and medium-sized enterprises (SMEs) and institutions in Africa can have their technological and non-technological challenges solved by the collective power of the skills within its membership.

Among its key activities, the Network will embark on training programmes and awareness workshops on intellectual property protection and management, as well as technology commercialization and exhibitions.

In addition, it will offer online platforms, databases and knowledge resources for managers and technology transfer officers, as well as support technology transfer initiatives within firms and SMEs. The Network stems from the recommendations made during the first Science with Africa Conference, held in 2008 as part of the efforts offered by ISTD with a view to support business development in Africa. Additional innovative initiatives are expected to be launched during the Second Science with Africa Conference. These include the African Science to Business Challenge (ASBC), in partnership with Research Triangle Institute-International, and the African Science, Technology and Innovation Endowment Fund (ASTIEF). [Source: ECA Press Release No. 45/2010 - Addis Ababa, 17 June 2010 (ECA). Contact: Aida Opoku-Mensah, Director, ICTs, Science and Technology Division (ISTD), UNECA, Addis Ababa, Ethiopia at aopoku-mensah@uneca.org www.uneca.org/sciencewithafrica.

[Taking geospatial information to the 'last mile': A call made at the 2nd Africa Geospatial Week](#)



The 2nd 'Africa Agriculture Geospatial Week' opened on 9 June 2010 at the International Livestock Research Institute (ILRI) campus in Nairobi. Over 60 organizations, 13 CGIAR partners and 30 students from universities in Kenya gathered to explore how location-specific intelligence can be used to support agricultural production. This year's meeting focused on 'navigating the change: Highlighting the role of spatial information and analysis in transforming livelihoods and landscapes in a time of change'.

While addressing the participants, Kenya's minister for agriculture, Hon Dr Sally Kosgei, challenged researchers to 'discuss steps towards the development of delivery mechanisms for making geospatial information accessible to poor smallholders in the villages across sub-Saharan Africa.' Dr Kosgei noted that geospatial information can help provide 'relevant and timely agricultural information that will assist smallholder farmers in the continent in their bid to improve agricultural production'. Dr Kosgei highlighted the critical role geospatial information plays in enabling good decision-making throughout the agriculture sector by providing essential location-specific information. 'Farmers need early information systems to mitigate the effects of extreme climatic events,' she said. 'They need to know which crops are best suited to their land, how to minimize the threats posed by pests and diseases and where to go to sell their products.' She added that real-time, location-specific (geospatial) information will enable farmers to decide more effectively 'which crops or livestock will perform best on their farms, anticipate and manage disease outbreaks and rainfall shortfalls, as well as decide when to harvest and in which markets to sell their produce'.

In view of the valuable contribution that geospatial information can make to farming systems and practice in Africa, she challenged participants to find ways of moving geospatial technology from a research-based platform to one that takes such technologies to the 'last mile' and makes them accessible to farmers who need this information the most.

[Calling for mapping volunteers for West Africa](#)

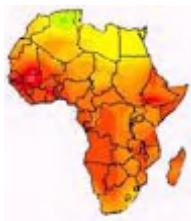


[The MAPA project \(Mapping Africa's Protected Areas\)](#) is ready to tackle West Africa. The MAPA project is recruiting some more mapping volunteers for phase 2, approximately 20 2-person teams to drive MAPA vehicles through West Africa between October 2010 and July 2011. The MAPA Project aims to make Africa's conservation areas more visible, accessible and secure by creating a digital archive of the boundaries, roads and infrastructure for over 1,000 conservation areas.

Mapping volunteers are unpaid but the following expenses are covered:

- budget accommodation (camping unless unavailable), fuel, all vehicle repairs, border fees, ferries, park fees, etc
- Basically everything except personal expenses

The main mapping expedition will consist of two cars working together for 10 months. MAPA has found that most people are not able to sustain more than 4-6 weeks of mapping. Therefore, 20 teams of 2 people (2



Spatial Data Infrastructure – Africa Newsletter



cars for 10 months) are sought. Although some teams will do more than one shift, others may fall out at short notice. Download the [Volunteer's Application Form](#) and [last year's volunteers' handbook](#).

Report Launched: [Realising rights, protecting forests: An alternative vision for reducing deforestation \(Case studies from the Accra Caucus\)](#)

The Accra Caucus on Forests and Climate Change have launched a new report last month - 'Realising Rights, Protecting Forests: An alternative vision for reducing deforestation' features eight case studies written by local NGOs at the UNFCCC talks in Bonn. The Accra Caucus is a network of NGOs from the Global North and South, representing around 100 civil society and indigenous people's organizations from 38 countries formed at the UNFCCC meeting in Accra, Ghana in 2008. In this report the Caucus proposes an alternative vision for achieving the objective of reducing deforestation, arguing for policies and actions that would tackle the drivers of deforestation, rather than focusing exclusively on carbon. Drawing on case studies from organisations with experience of working with forest communities, the report highlights problems linked to the implementation of REDD and suggest ways in which policies to reduce deforestation can actually work on the ground.

Through case studies from selected countries the report highlights three critical components:

- REDD and participation - Indonesia, Ecuador, Democratic Republic of Congo (RRN + DGPA));
- REDD and land rights - Brazil (ISA), Cameroon (CED), Papua New Guinea (EFF-PNG);
- REDD and Community-based forest management - Tanzania (TFCG + MJUMITA), Nepal (FECOFUN).

This report is intended primarily for opinion-formers and decision makers with a role in making and influencing national policy and legislation on REDD. The case studies show that respecting the rights and realities of indigenous peoples and forest-dependent communities is the only way to ensure that the forests remain standing. The report can be downloaded in [English](#), [French](#) and [Spanish](#).

[Federal Government of Nigeria's land reform committee to commence work in states](#)

At the Geographic Information System (GIS) workshop in Abuja, Surveyor-General of the Federation (SGF), Austin Njebuome, told journalists that the funds appropriated in this year's budget has quicken the move on government's plan on land reform. He disclosed that what have been hindering the land reform process is fund, adding: "any new technique is capital investment and in our own environment, people expect government to do everything. We have kick-started geographic information and the government can not do it all alone. We expect some private partnership in fast-tracking the informational activities in Nigeria." "Another major problem is training, he lamented that most of the professionals in Nigeria were trained in analogue processes, most likely because of financing and still practicing in the analogue age."

"The land tenure system in operation now was not meant for much progress, but the government is planning land reform, which is going to be a costly exercise. Few countries that have taken it up have controlled it. Its benefits on the long run are great and with limited resources available to take off, it can be shown that it is possible to do it. The land reform committee intends to start a pilot exercise involving some parts of the country. The pilot programme is already in the budget for this year and commencement process in already in place."

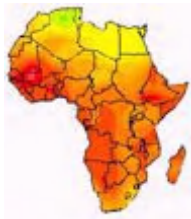
The Chairman Surveyors Council of Nigeria (SURCON), Clement Nwabichie said one of the greatest achievements of the present administration is the inclusion of the land reform in the Seven-Point Agenda of government. The main achievement lies in the elevation to national policy and priority of the fact that Nigeria needs to reform land to convert about 97 percent of untitled land holdings. [Source: Nation]

[Monitoring water levels in Kenya to reduce flood risk](#)



Water radar sensors to monitor levels have been installed on the Nzoia River in western Kenya in an effort to mitigate flood damage. The river perennially bursts its banks, flooding parts of Budalangi region in Bunyala District, with devastating results for thousands of people living in the area. "The sensors are installed at a bridge, and have a General Packet Radio Service [GPRS] modem that is solar-powered," Daniel Maina, the flood management coordinator with the Western Kenya Flood Mitigation Project, told IRIN. "Just the way you send a text message, you just call the modem like a phone, and get feedback on water levels." The water radar sensors have been installed in

the three locations of Webuye, Rwabwa and Sigomre areas in the Nzoia River Basin. They provide alerts about water levels in real-time, helping in disaster preparedness. The eye, underneath the radar sensor,



Spatial Data Infrastructure – Africa Newsletter



records the water level. When dialed, the modems, which are fitted with subscriber identity module cards, relay data in the form of graphs to the flood management centre and the Kenya Meteorological Department. According to Maina, the water takes about eight hours to reach Rwabwa station, which is about 30km downstream from Sigomre station. Data from Sigomre helps in the prediction of expected water level crests at Rwabwa.

Several Hydromet Stations in the Basin also record rainfall levels. Rainfall forecast data from the meteorological department is integrated with water level data to produce models that are circulated to key stakeholders, including government and UN agencies. Initial flood watch bulletins are sent to the Bunyala District Commissioner (DC), who passes the information to the community through a radio with a 25km broadcasting radius. Content is read in the local Kinyala language. For example, if there is a broken dyke, the DC goes on radio to mobilize support to repair it.

Besides water and rainfall monitoring, afforestation and construction of small dams is going on upstream to reduce water speed and siltation. Nzoia's course meanders dangerously close to the dykes and population settlements in some parts of Budalangi. The dykes at Budalangi were constructed between 1977 and 1984 and meant to last 20 years. A multi-purpose dam is being designed to further protect Budalangi, which experienced massive flooding in 2007. Despite the benefits, the project has been affected by vandalism of solar panels at the water radar sensors, high telecommunication network charges and weak signal strength.

[Kenya's International Conference on Biodiversity and Climate Change](#), 15-17 September 2010, Nairobi, Kenya

Towards a Comprehensive Conservation Framework Kenya has a wealth of biodiversity vital to human wellbeing and planetary health. Despite the value of our biodiversity, we have yet to inventory all species or develop a national biodiversity framework that takes into account projected changes in land use and climate. The Kenya Wildlife Service (KWS), African Conservation Centre (ACC), National Museums of Kenya (NMK), Department of Resource Surveys and Remote Sensing (DRSRS), Regional Centre for Mapping of Resources for Development (RCMRD) and Kenya Forest Service (KFS) will host Kenya's International Conference on Biodiversity and Climate Change, 15 - 17 September 2010, as the country's contribution to the International Year of Biodiversity.

The conference will bring together conservation scientists, planners, managers and policy makers to coordinate species inventories and map Kenya's biodiversity. The working sessions will consider how to collate, integrate, analyze and share information using the best available mapping, data storage and analytical tools. Participants will discuss a national framework for conserving Kenya's biodiversity.

The conference will include the following thematic sessions:

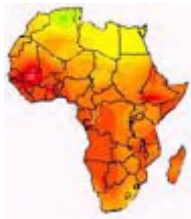
- Biodiversity assessment
- Biodiversity informatics
- Climate change
- Land-use and livelihoods
- Policy implications
- Poster sessions

The national conference will draw on international experience in biodiversity conservation and participants from neighbouring East African states. Broad public participation is invited. More details will follow. Express your interest to: biodiversityconf@kws.go.ke. See also: [ACC co-hosting International Biodiversity & Climate Conference in September](#).

[Access to Satellite Data: Deployment of the AMESD receiving stations](#)

All African countries will be equipped with full AMESD environmental stations: 47 full AMESD stations for the AMESD National Centers (NCs), and 5 partial AMESD stations for the AMESD Regional Implementation Centers (RICs). Each station will be composed by one 2 and 4 meters C-Band receiving antenna; Three PC and associated software which constitute the "e-station" (i.e. 1 for reception, 1 for processing and 1 for display; one UPS and network switches). The aim of the E-station system (developed by the European Commission Joint Research Centre) is to process automatically data disseminated through EUMETCast in order to assist for drafting environmental reports. The basic data processing (formats extractions, formats conversion, re-projection, data combinations, repositories management, data bases feeding, etc.) will then be automated by the e-station.

The E-station is composed of two main components: A processing component (this is an automatic and independent system, which collects Earth Observation data coming from the EUMETCast receiving system,



Spatial Data Infrastructure – Africa Newsletter



ingests them (transforms the original file format into a unique file format) and performs some processing including the computation of environmental indicators); and a web-based component (that will allow visualization of data stored on the e-station and to write an integrated environmental report).

In Kenya, the following stations are already under deployment:

- Department of Resource Survey and Remote Sensing (DRSRS), a department of the Ministry of Environment and Mineral Resources and the official focal point for Kenya - Full AMESD station;
- IGAD Climate Prediction and Applications Centre (ICPAC), the Regional Implementation Centre of the IGAD Thema - Partial AMESD station;
- SWALIM, a focal point for Somalia based in Kenya - Full AMESD station;
- Kenyan Marine and Fisheries Research Institute (KMFRI), a partner of the Indian Ocean Commission Thema - Full AMESD station.

Building capacity of DRC's Ministry of Environment



In an effort to strengthen the capacity of the DRC's Ministry of Environment (MoE), [USAID/ Central African Regional Program for the Environment \(CARPE\)](#), through its partner [Observatoire Satellital des Forêts d'Afrique Centrale \(OSFAC\)](#), transferred hardware and software to the Inventory and Forest Management unit (DIAF) of the DRC MoE. This equipment, software, and the knowledge provided to the DRC MoE will enable the DRC MoE to carry out and finalize the ongoing forest inventory, the zoning process. It will also allow the monitoring for good decision making in the sustainable use of natural resources.

Equipment and software have been provided by OSFAC and World Resources Institute (WRI). The ceremony was held at the DRC MoE in the

presence of the Chief of cabinet of the DRC MoE Désiré Luhahi, Director of OSFAC Landing Mane, OSFAC Chairman of the Board of Directors Raymond Lumbuenamo, the Director of DRC DIAF Sebastien MALELE, WRI Country Coordinator Lyna Bélanger, and USAID-CARPE Program Management Specialist Nicodeme Tchamou.

"The most important thing here is this valuable software installed which is an efficient management tool for policymakers," underscored the Chief of cabinet of MoE, Désiré Luhahi.

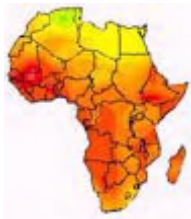
This transfer is linked to a project called Technical Support to the DRC MoE which contains three components: capacity building of staff, distribution of freely available satellite data and products, and provision of equipment to the DRC MoE. USAID/CARPE, through its network of partners, has long-standing experience building MoE capacity for sustainable natural resources management in central Africa.

The goal of the United States Government through CARPE is to work with international, regional, national and local stakeholders to slow down the rate MoE in the presence of the Chief of cabi-Coordinator Lyna Bélanger, and USAID-of forest degradation and wildlife loss. [Source: USAID/DRC News, April 2010].

Climate Change: Risks and Opportunities for the South African Economy - An assessment of mitigation response measures

Climate change has moved from an issue of environmental concern to an issue of commercial significance in the period of a few decades. The potential impacts of climate change on economies, both positive and negative, are now far-ranging in their scope. In addition, the challenge of addressing climate change has only just begun, with local and global mitigation responses expected to amplify and extend their reach as time progresses.

In an attempt to unpack the implications for the South African economy, this document developed by Camco South Africa and Trade & Industrial Policy Strategies (TIPS) assesses the current and potential impacts from climate change for South Africa's major economic sectors, and provides an analysis of the implications of response measures for each sector of the economy. Emphasis is placed not on direct physical impacts from climate change, such as increased temperatures and reduced water availability, but on the secondary impacts of climate change. These secondary impacts relate to local, national, regional and global responses to climate change, and how this range of responses influences trade, investment and economic performance. The analysis contained in the report is focused on providing a framework and overview for evaluating the economic implications of climate change for South Africa. Priority actions and recommendations on the way forward are also provided.



Spatial Data Infrastructure – Africa Newsletter



[Online Document: ICT, climate change and development](#)

These documents are the product of the University of Manchester's "Climate Change, Innovation and ICTs" research project, funded by Canada's [International Development Research Centre](#) and managed by the University's [Centre for Development Informatics](#).

Concept Paper: builds four new conceptual models

- Climate change vulnerability in developing countries;
- Climate change adaptation and adaptive capacity of communities and wider 'livelihood systems';
- Climate change resilience;
- The contribution of ICTs to 'e-resilience' and 'e-adaptation'.

The scoping study charts strands and trends in the literature on ICTs, climate change and development, and develops an overview model of the key ICT application areas (mitigation, strategy, monitoring and adaptation). The scoping study identifies priorities for future research in this field, provides a glossary of field terms, and includes an annotated bibliography of key documents from 1997-2010. Share ideas on ICTs, climate change and development via <http://groups.google.co.uk/group/niccd> and comment on key issues at: <http://niccd.wordpress.com>.

[Voluntary Carbon Standard \(VCS\) methodology elements under development](#)

Under the VCS double approval process methodology elements are posted on the VCS website for public comment followed by two sequential and independent assessments by two VCS validation/verification bodies and a final completeness check and review by the VCSA. For information on methodology elements which have already completed the process, please visit the following page: [VCS methodology element double approval process history](#).

The methodology elements are open for public comment, whilst others have completed their public comment period and are progressing through the double approval process. Send your comment on a methodology element during its public comment period to secretariat@v-c-s.org, stating your name, organization and country. Comments will be posted on the methodology element page at the end of the 30 day public comment period.

[Call for proposals: digital content and software applications](#)



CALL FOR PROPOSALS
DIGITAL CONTENT AND SOFTWARE APPLICATIONS

The Kenya ICT Board has launched a Ksh 300 Million grant to promote the development of local digital content and software applications. The process kicked off with a 'call for proposals'. The main purpose of this grant is to propel the

emergent lucrative but yet underexploited local content industry to growth. The grant which targets the local content developers including software developers, film, animation, advertising, publishing, gaming and education professionals and all content creators, will provide the funding required for the development of quality applications relevant to the Kenya government and private sector.

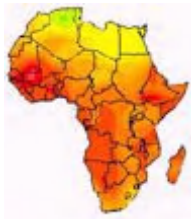
Digital content, a major contributor and driver of economic growth in developed countries, can be broadly categorized as content accessed from electronic devices like personal computers, game consoles, mobile phones and digital TV. The internet offers the most common form of distribution of digital content. Digital content can include anything from internet based marketing, gaming, online education content and services.

The first round of grant allocation will award a maximum of US\$ 50,000 per firms and US\$ 10,000 for individuals. The Kenya ICT Board expects to make at least one call for application per year over the next three years. Download [press release](#) and [content advert](#). Deadline: 19 July, 2010.

[Call for papers: Map Africa 2010 – 5th Annual African Conference on Geospatial Technologies and Applications](#), 23-25 November in Cape Town, South Africa

The African geospatial community is invited to participate in and showcase their work at Map Africa 2010, the 5th Annual African Conference on Geospatial Technologies and Applications, organized in partnership with the [Department of Rural Development](#), South Africa; the Regional Centre for Mapping of Resources for Development ([RCMRD](#)), Kenya; and UN Economic Commission for Africa ([UNECA](#)), Ethiopia. The theme of the conference is "Geospatial Readiness for Building Africa" which aims to highlight the significant role of geospatial technologies in the areas which are considered as the building blocks of a nation and contribute to its growth and development. The proposed technical sessions of the conference include:

- Infrastructure & Utilities
- Land Management



Spatial Data Infrastructure – Africa Newsletter



- Mining and Exploration
- Climate Change & Emergency Management
- Poverty and Food Security
- Natural Resource Management
- Marine and Coastal Resources
- Agriculture & Precision Farming
- Education & Health
- Urban and Rural Planning
- Emerging Technology Trends
- Photogrammetry & LiDAR

The abstract (not exceed 250 words) should summarize and indicate the key research/points to be further presented and discussed in the Sessions of Map Africa. For queries related to paper submission, contact Akanksha Tyagi at papers.mapafrica@gisdevelopment.net or akanksha.tyagi@gisdevelopment.net.

[Call for registration: 2010 World Water Week](#), 5 - 11 September in Stockholm, Sweden

The [World Water Week in Stockholm](#) is the annual meeting place for the planet's most urgent water-related issues. Organized by the [Stockholm International Water Institute \(SIWI\)](#), it brings together 2500 experts, practitioners, decision makers and leaders from around the globe to exchange ideas, foster new thinking and develop solutions. The theme for 2010 is "Responding to global challenges: The water quality challenge - prevention, wise use and abatement". This year's program and [Registration online](#) can be explored through the interactive event finder on the World Water Week web.

[Call for Papers and Workshop Proposals: 18th ACM SIGSPATIAL International Conference on advances in Geographic Information Systems \(ACM SIGSPATIAL GIS 2010\)](#), November 2-5, 2010, San Jose, CA, USA

The ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems 2010 (ACM SIGSPATIAL GIS 2010) conference provides a forum for original research contributions covering all conceptual, design, and implementation aspects of GIS ranging from applications, user interfaces, and visualization to storage management and indexing issues. This conference is the premier annual event of the ACM Special Interest Group on Spatial Information (ACM SIGSPATIAL). Researchers, students, and practitioners are invited to submit their contributions to ACM SIGSPATIAL GIS 2010.

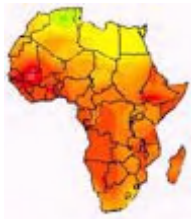
Suggested topics include but are not limited to: Cartography and Geodesy, Computational Geometry, Computer Vision Applications in GIS, Distributed and Parallel algorithms for GIS, Earth Observation, Geographic Information Retrieval, etc.

Authors to submit full, original, unpublished research papers that are not being considered for publication in any other forum. Manuscripts should be submitted in PDF format and formatted using the ACM [camera-ready templates](#). Submission length is limited to 10 pages. Accepted papers will be considered for "Best Paper Award". Uploaded submissions at: <https://cmt.research.microsoft.com/GIS2010/Default.aspx>. Abstract deadline is June 24, 2010 but has been extended without a definite date.

[Call for women scientists to participate in training and networking on climate change Assessment, information dissemination and policy advocacy](#), August 2010 - August 2012

The International Foundation for Science (IFS) Eastern Africa Hub together with the Regional Universities Forum for Capacity building in Agriculture (RUFORUM), the Regional Center for Mapping of Resources for Development ([RCMRD](#)) and the IGAD Climate Prediction and Application Center (ICPAC) with support from NORAD have the pleasure to announce a training and networking project on "*enhancing the participation of African Women Scientists in Climate Change Assessment, Information Dissemination and Policy Advocacy*". The program will run from August 2010 - August 2012 and aim to promote the implementation of climate change adaptation and mitigation measures in Eastern Africa through enhancing the capacities of women scientists. For better impact the selected participants will participate in all the trainings and workshops during the project period, the trainings and workshops will take duration of 5 - 14 days every May and August of each year of implementation. The overall goal is to build the capacity to adapt to, and mitigate climate change in order to contribute to environmental sustainability and poverty reduction in Eastern Africa countries. The project will include:

- Training of women scientists in climate change and variability concepts, introduction to data and tools;
- Training in GIS and remote sensing for climate change studies;



Spatial Data Infrastructure – Africa Newsletter



- Training on climate change social impact assessment: gendered approach; and
- Training in advanced climate change modeling.

Applications are invited from women scientists in Universities and research institutions within the Eastern Africa countries (Eritrea, Ethiopia, Sudan, Tanzania, Kenya, Uganda, Burundi and Rwanda). The candidates must have at least a MSc. degree or equivalent in Environmental Science or Meteorology or any other discipline related to climate change. Application to be submitted to: bemigisha@ifs.se with a copy to w.ekaya@rforum.org or ekaya@africaonline.co.ke. Applicants should use the [application forms](#).

The training in climate change and participation in the Regional Forum on Climate Change will take place at the IGAD Climate Prediction and Applications Centre (ICPAC), Nairobi, Kenya. The Regional Center for Mapping of Resources for Development (RCMRD) will host the training in GIS and remote sensing. Deadline for applications: 23 July 2010.

[Announcement and Call for Papers: 5th ESRI Eastern Africa User Conference](#), 13-15 October 2010, Nairobi, Kenya

The 5th ESRI Eastern Africa User Conference will be held from 13 -15 October 2010 at the Safari Park Hotel in Nairobi. The User Conference which brings together ESRI software users from across Eastern Africa to share their experiences and learn more about ESRI's technology has now been extended to a 3-day event. Conference audience primarily consists of ESRI software users from Kenya, Tanzania, Uganda and Ethiopia, but international participation gives the conference a global outlook.

Abstracts are invited for submission on any of the sub-themes:

- *Sub-themes:* Land Records, Public Works, Retail Business, Real Estate, Solid Waste, Surveying, Urban Planning.
- *Sub-themes:* Cadastre, Economic Development, Election Services, National Census & Statistics, National Mapping & Charting.
- *Sub-themes:* Agriculture, Conservation, Forestry, Environmental Management, Fisheries, Mining, Petroleum, Water Resources, Wildlife.
- *Sub-themes:* GIS Technology, Schools and Higher Education, Spatial Data Infrastructure.
- *Sub-themes:* Electric, Fleet Management, Pipeline, Public Transportation, Road Construction & Maintenance, Telecommunications, Water/ Waste Water.
- *Sub-themes:* Defence & Intelligence, Disaster Management, Health & Human Services, Humanitarian Relief, Homeland Security, Law Enforcement.

Abstract submission deadline: 15 July 2010; selection of abstract notification deadline: 15 August 2010; and full paper deadline: 15 September 2010.

[UN-SPIDER Regional Workshop: Building Upon Regional Space-Based Solutions for Disaster management and Emergency Response](#), rescheduled to 6-9 July 2010, Addis Ababa, Ethiopia

The Organizing Committee of the UN-SPIDER Regional Workshop: Building Upon Regional Space-Based Solutions for Disaster management and Emergency Response for Africa postponed the workshop initially planned to be held from 25 - 28 May 2010, to 6 - 9 July 2010 at the premises of the Economic Commission of Africa (ECA) in Addis Ababa, Ethiopia.

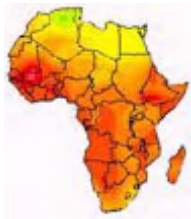
This workshop being organised together with the United Nations Economic Commission for Africa, with financial support of the Government of Austria and in cooperation with Secure World Foundation, will be the major outreach event organised by UN-SPIDER on space-based information for disaster risk reduction and emergency management in the African continent in 2010.

This regional workshop will ensure that participants become aware of the full potential that space-based information offers for disaster risk management and emergency response and how to take advantage of the existing regional and international opportunities in this regard. It will also gather elements to define the strategy to support UN-SPIDER in Africa, which will eventually contribute to a reduction in loss of lives and property due to disasters in the African continent in the future.

Practical SDI implementation materials from within and outside of Africa

[Technical solutions and standards - How ISO can support a forum for global geographic information management](#)

The Conference, ... Requests that, by 1 November 2010, the Secretary-General and the United Nations Secretariat initiate discussions and prepare a report, for a future session of the Economic and Social Council,



Spatial Data Infrastructure – Africa Newsletter



on global coordination of geographic information management, including consideration of the possible creation of a United Nations global forum for the exchange of information between countries and other interested parties, and in particular for sharing best practices in legal and policy instruments, institutional management models, technical solutions and standards, interoperability of systems and data, and sharing mechanisms that guarantee easy and timely accessibility of geographic information and services. *Resolution VII: Global geographic information management, Eighteenth United Nations Regional Cartographic Conference for Asia and the Pacific*

ISO/TC 211 was established in 1994 and has currently published nearly 40 standards and other deliverables within the field of geographic information and geomatics. Another set of around 20 is under development or revision. The work of the committee has provided a very solid state-of-the-art fundament for establishing, documenting, integrating, archiving, disseminating and interpreting geographic information. Unambiguous data description, including the semantic aspects, is of course essential for making assertions and reasoning about our environment. The ISO 19100-family of standards includes standards for describing data content and services to access the content. Metadata, i.e. data about data, has been a main focus to allow discovery of which data that actually exist, information allowing user communities to assess their fitness for use, and information on where to retrieve and possible conditions for the use of the data. Information about our earth can be reasonably static, like the basic topography, or very dynamic, like weather conditions. The ISO 19100-family allows all such spatial and temporal aspects to be described together with precise content including quality information that is essential for making decisions based on the collected information.

[Human migration maps reveal global flow of malaria](#)



The first study to quantify the effects of human migration on malaria incidence on a global scale has been published and could lead to more effective strategies for eliminating the disease, say scientists.

Prompted by evidence that eliminating malaria in a single country is not possible if there is a steady influx of infected people from neighbouring countries, researchers mapped rates of migration and malaria transmission within and between global regions. Their work is published in *Proceedings of the National Academy of Sciences* (PNAS) on 21 June 2010.

Using migration data, transmission maps for the malaria parasite *Plasmodium falciparum* and global population databases the researchers identified groups of countries that were more strongly affected than others by high levels of population, and therefore infection, movement.

These groupings include countries in western and north-central Africa; central American countries where *P. falciparum* malaria is endemic; and countries in West and East Asia.

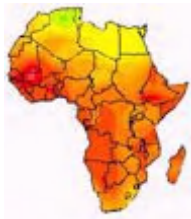
The researchers found that some countries, such as Ethiopia, Myanmar, China, Iran and Afghanistan, are more isolated. In these cases a nationally focused control or elimination programme stands a better chance of success. In Africa, Mali, Burkina Faso and Niger are net migrant exporters, principally to West Africa, whereas low-transmission countries, such as Mauritania and Senegal, are receiving more malaria-infected migrants than they release.

Andrew Tatem, a researcher at the Emerging Pathogens Institute at the US-based University of Florida, and a co-author of the study, said that this is the first attempt to quantify the effects of human migration on malaria infection on a global scale. Carlos Guerra, from the Ecuadorian Biotechnology Corporation and the Malaria Atlas Project of the UK's University of Oxford, said that the study enabled evidence-based guidelines for the design of more effective malaria-control strategies.

[Predictive modeling warns drivers one hour before jams occur](#)



IBM is developing a new traffic analysis system that can [predict where traffic jams will occur](#) before the driver finds him or herself stuck in one. The system uses predictive modeling, incorporating data from road sensors, weather conditions, historical traffic data, and real-time GPS data from taxis. Road tested in Singapore, Finland, and New Jersey, the system has been able to accurately predict traffic volume 85% to 93% and travel speeds 87% to 95% of the time. The modeling system can predict occurrence of a traffic jam one hour before it occurs.



Spatial Data Infrastructure – Africa Newsletter



[GPS - Tool for crowd management and medical follow-up](#)

Michal Isaacson, a doctoral student working with Dr. Noam Shoval of the Geography Department at the Hebrew University, has been involved in developing new approaches to the use of advanced tracking technologies in order to provide valuable data collection and analysis for later study and application or even for on-the-spot, real-time application.

Her work has implications for understanding the activity of people in different settings, such as urban areas, shopping malls, theme parks, national parks and other tourist attractions. It has already been tested to evaluate crowd activity and flow at the Port Aventura theme park in Spain. The system they developed uses GPS technology to record the location of people for a designated period of time. The tracking data is analyzed, using a computerized, time/space analysis engine, to derive maps that indicate the volumes of activity throughout the location and charts that indicate how different types of populations spent their time in the location. The data obtained using tracking technologies can also be analyzed in real time, creating virtual "radar" of the activity of visitors throughout a destination. Real time analysis can lead to dynamic management of attractions in a more efficient way. The technology also has far-reaching medical applications. In collaboration with Dr. Yair Barzilay of the Hebrew University-Hadassah Medical School and the Orthopedic Surgery Unit at Hadassah University Hospital, a method was developed for detecting the mobility of patients after surgery as an objective measure for their follow-up recovery and well-being. The patients carry a GPS unit with them after the operation, tracking their movements, which are then analyzed. Future development will integrate additional sensors that will allow the combination of GPS data with physiological data, such as heart rate and blood pressure.

[Beyond cost-benefit: developing a complete toolkit for adaptation decisions](#)



The International Institute for Environment and Development has published a new briefing. Cost-benefit analysis has important uses and crucial blind spots. It represents only one of several economic tools that can be used to assess options for adapting to climate change in developing countries. The Nairobi Work Programme would best serve governments by considering not just cost-benefit approaches, but the entire range of tools. By developing a 'toolkit' that helps users choose from a variety of evaluation methods, we can support adaptation decisions that promote equity, put local people in control and allow for dynamic responses to climate change as it unfolds. All policy briefs are available to download free from our on-line database www.iied.org/pubs

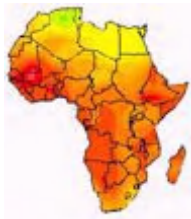
[New version of the MAPA layer now available](#)

The MAPA Project will make Africa's conservation areas more visible, accessible and secure by creating a digital archive of the boundaries, roads and infrastructure for over 1,000 conservation areas. Thanks to enormous assistance from [Google Earth Outreach](#), a new version of the [MAPA layer](#) can now be loaded on your computer. The changes should reflect on the layer the next time you open Google Earth.

Geospatial Research, Applications, Reference Material

[Satellite Images of Remote African Lands to be Used to Insure Herders from Devastating Droughts](#)

ILRI, Equity Bank and UAP Insurance launched the first-ever project to insure cows, camels and goats in Kenya's arid north. Thousands of herders in arid areas of northern Kenya will be able to purchase insurance policies for their livestock, based on a first-of-its-kind program in Africa that uses satellite images of grass and other vegetation that indicate whether drought will put their camels, cows, goats and sheep at risk of starvation. The [index-based livestock insurance program](#) will use satellite imagery to determine potential losses of livestock forage and issue payouts to participating herders when incidences of drought are expected to occur. If successful in the Marsabit District - where few of the 86,000 cattle and two million sheep and goat populations, valued at \$67 million for milk and other products, are rarely slaughtered—the program would be offered to millions of semi-nomadic pastoralists and livestock keepers in other parts of the east African region. "Agents began selling insurance policies backed by UAP that for the first time will provide pastoral families in Kenya's remote Marsabit District with a simple way to reduce their drought risk - the biggest threat to their cherished herds of cattle, sheep, goats, and camels—from devastating lives and livelihoods," said Equity Bank Managing Director James Mwangi. "Livestock is the key asset for families in this region and securing this asset is critical to their ability to obtain credit and investments that can allow



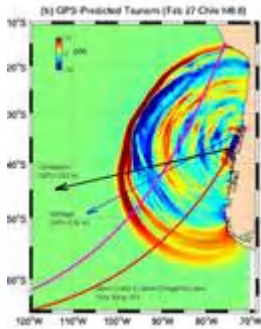
Spatial Data Infrastructure – Africa Newsletter



them to grow and prosper.” ILRI, which is part of the Consultative Group on International Agricultural Research (CGIAR), developed the project with partners at the Ministry of Development of Northern Kenya, Cornell University, Syracuse University, the BASIS program at University of Wisconsin, and the Index Insurance Innovation Initiative (I4). The project is funded by UK’s Department for International Development (UKaid), United States Agency for International Development (USAID), the World Bank and Financial Sector Deepening Trust (FSD Kenya).

Insuring livestock of pastoral families has long had been considered impossible due to the formidable challenges of verifying deaths of animals that regularly are moved over vast tracts of land in search of food. ILRI and its partners have overcome this impediment by combining satellite images of vegetation in the Marsabit District with monthly surveys of livestock deaths to pinpoint the level of forage reduction that will cause animals to die. This program is different from all others because it does not pay clients based on the actual loss of their livestock assets, but rather on indicators that the animals are at risk of death. Droughts are frequent in the region -there have been 28 in the last 100 years and four in the past decade alone - and the losses they inflict on herders can quickly push pastoralist families into poverty. For further background information on project details: [IBLI website](#) and [associates ILRI stories](#).

[NASA’s Global Differential GPS Network: Demonstration of tsunami prediction system](#)



A NASA-led research team has successfully demonstrated for the first time elements of a prototype tsunami prediction system that quickly and accurately assesses large earthquakes and estimates the size of resulting tsunamis.

After the magnitude 8.8 Chilean earthquake on Feb. 27, a team led by Y. Tony Song of NASA's Jet Propulsion Laboratory in Pasadena, Calif., used real-time data from the agency's Global Differential GPS (GDGPS) network to successfully predict the size of the resulting tsunami. The network, managed by JPL, combines global and regional real-time data from hundreds of GPS sites and estimates their positions every second. It can detect ground motions as small as a few centimeters. "This successful test demonstrates that coastal GPS systems can effectively be used to predict the size of tsunamis," said Song. "This could allow responsible agencies to issue better warnings that can save lives and reduce false alarms that

can unnecessarily disturb the lives of coastal residents."

Song's team concluded that the Chilean earthquake, the fifth largest ever recorded by instruments, would generate a moderate, or local, tsunami unlikely to cause significant destruction in the Pacific. The tsunami's effect was relatively small outside of Chile. Song's GPS-based prediction was later confirmed using sea surface height measurements from the joint NASA/French Space Agency Jason-1 and Jason-2 altimetry satellites. This work was partially carried out by researchers at Ohio State University, Columbus.

Conventional tsunami warning systems rely on estimates of an earthquake's location, depth and magnitude to determine whether a large tsunami may be generated. However, history has shown earthquake magnitude is not a reliable indicator of tsunami size. Previous tsunami models presume a tsunami's power is determined by how much the seafloor is displaced vertically. Song's theory says horizontal motions of a faulting continental slope also contribute to a tsunami's power by transferring kinetic energy to the ocean. When the Feb. 27 earthquake struck, its ground motion was captured by the NASA GDGPS network's station in Santiago, Chile, about 146 miles from the earthquake's epicenter. These data were made available to Song within minutes of the earthquake, enabling him to derive the seafloor motions.

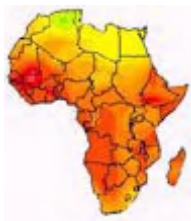
[NOAA’s new online application for real-time mapping of deepwater horizon BP oil spill](#)



The mapping application not only offers online viewing of critical data but contains links within the legends to printable PDFs and JPEGs of radar images of the oil spill footprint, nearshore estimated spill trajectory, fishery closures. The mapping application contains a significant amount geographic data covering climatology, impact on habitats and wildlife, environmental impact, and baseline data.

The site integrates the latest data on the oil spill's trajectory, wildlife data and place-based Gulf Coast resources (pinpointed locations of oiled shoreline and daily position of research ships). The interactive map also includes data from Homeland Security, the Coast Guard, the Fish and Wildlife Service, EPA, NASA, US Geological Survey and the Gulf states.

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: Climate change adaptation in agriculture and natural resources management](#), 28 February - 11 March 2011, in East Africa

The course is designed for mid-career professionals who are engaged at higher levels and deal with policy making either from the research side (as advisor), government side, or from civil society who aim to have a full understanding of climate change adaptation concepts, be able to effectively and meaningfully contribute to the debate on climate change adaptation, either in the policy process and/or in providing knowledge to the policy process.

The Netherlands government (NFP) fellowships are available for this course. Applications should be submitted to Wageningen UR Centre for Development Innovation before 1 September 2010.

For details, contact: Terwisscha van Scheltinga (Catharien), Wageningen University at Catharien.Terwisscha@wur.nl or www.ess.wur.nl/UK/People/Catharien+Terwisscha+van+Scheltinga/, <http://portals.wi.wur.nl/climatechange>, www.genderandwater.org.

African Reference Frame (AFREF) and GNSS Data Processing Training Course, 24 August - 3 September 2010, RCMRD, Nairobi, Kenya

Since 2006, the RCMRD in conjunction with the Center of Geophysics of the University of Lisbon, Portugal and HARTRAO South Africa have been conducting an annual course on African Reference Frame (AFREF) and Global Navigation Satellite System (GNSS) Data Processing at RCMRD offices in Nairobi, Kenya. This year, the course will be held on 24 August - 3 September 2010. The content includes:

- Introduction to Global Navigation Satellite System (GNSS)
- Reference systems, datum, datum transformations and coordinate systems
- IGS data and products
- AFREF concepts and progress
- Establishment of Continuously Operating Reference GNSS Stations
- Practical field works on Static GNSS surveys
- GNSS data post processing
- On line GNSS Data processing

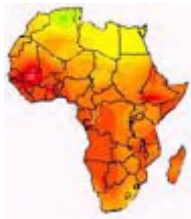
Application deadline: 23 July 2010. For further information contact: Muya Kamamia at muyack@rcmrd.org or rcmrd.@rcmrd.org. Website: <http://www.rcmrd.org>.

[Appel a candidatures : Outils informatiques appliques a la gestion des ressources renouvelables](#), 16 au 28 août 2010, à Yaoundé, Cameroun

L'Unité Opérationnelle du Cameroun de L'Institut pour les Ressources Naturelles en Afrique de l'Université des Nations unies (UNU-INRA-OU/CM (United Nations University Institute for Natural Resources of Africa Operating Unit of Cameroon, en anglais)) a pour objectif principale l'application des outils informatiques dans la gestion des ressources naturelles et humaines et de l'environnement. Annonce l'organisation du cours d'été IT2010 de formation de formateurs, (train the trainers en anglais) qui aura lieu du 16 au 28 août 2010 à Yaoundé, Cameroun.

Le cours est composé de trois modules:

- Module Outils de base : ce module comporte deux unités :
 - a. Outils de gestion des données
 - b. Concepts de traitement d'images
- Module SIG et Télédétection : Ce module comporte trois unités :
 - a. SIG ou Système d'Information Géographique



Spatial Data Infrastructure – Africa Newsletter



- b. GPS ou Global Positioning System
- c. Télédétection
- Module Cartographie et Analyse spatiale : Ce module a deux unités
 - a. Cartographie
 - b. Analyse Spatial

IT2010 s'adressent aux enseignants d'université et aux chercheurs scientifiques des instituts nationaux de recherche des pays de l'Afrique francophone spécialistes d'un des domaines suivants: Cartographie, Géographie, Géologie, Hydrogéologie, Hydrologie, Climatologie, Ecologie, Agriculture, Planification Urbaine, Topographie, Foresterie ou tout autre domaine lié à l'analyse et la gestion de ressources naturelles, humaines ou de l'environnement. Une bonne connaissance de Statistique descriptive et du gestionnaire de base de données ACCESS sera un atout. Les candidats intéressés doivent remplir le formulaire d'inscription ci-joint et le renvoyer en fichier attaché au coordonnateur l'UNU-INRA-OU/CM avant le 25 juillet 2010. [Formulaire d'inscription](#). Pour de plus amples renseignements, veuillez communiquer avec: Pr. Laure Pauline FOTSO, Département d'Informatique, Faculté des Sciences Université de Yaoundé I, B.P. 812 Yaoundé Cameroun, Téléphone: (237) 96 29 93 33/99 85 35 71, E-mail: laurepfitso@yahoo.com or nefotsing@yahoo.fr or efotsing@gmail.com.

[Climate Change and IWRM Short Course](#), 11 - 13 August 2010, Cape Town, South Africa

The UNESCO Chair in Hydrogeology in collaboration with the Water Research Commission (UWC) is presenting a short course on Climate Change and IWRM at the University of the Western Cape, South Africa from the 11 - 13 August 2010. The short course is designed for water professionals, public servants, non-government stakeholders, researchers and students who aspire to better understand the subject of climate change in the water management environment and who can contribute to the practical implementation of adaptation measures. The focus area is southern Africa.

The course will impart knowledge, information and adequate references in three broad fields:

- Climate change impact on water resources and water-related development
- The IWRM framework in which climate change adaptation has to be addressed
- Practical climate change adaptation strategies and measures.

Early registration ([Form](#)) is essential in securing a place in this course.

[Online Courses: Community-centered adaptation to climate change](#)

The Center for Sustainable Development (CSDi) specializes in providing sound, evidence-based information, tools and training for humanitarian development professionals worldwide. The Center announces a pair of online field courses on community-centered adaptation to climate change. Participants work with real communities to develop projects ready to present to donors. Urban participants can partner with participants in developing nations to gain community contact.

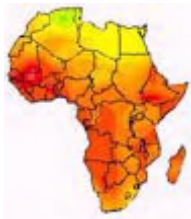
- Adapting to Climate Change 1: The Community Focus, July 13 - August 30 (Six Weeks).
- Adapting to Climate Change 2: Sustainable Implementation, September 7 - October 18 (Six Weeks).

Visit the adaptation professional group at CSDi's [Development Community](#) and join colleagues in sharing resources & collaborating online. Contact: Tim Magee at tim.magee@csd-i.org or Online.Learning@csd-i.org for further information.

[GIS course in sustainable land use \(Sustainable Land Use 723\)](#), 9-14 August 2010, University of Stellenbosch, South Africa

The course will present an integrated approach to planning the use and management of land resources. It will consider the involvement of all stakeholders in the process of decision making on the future of the land, and the identification and evaluation of all biophysical and socio-economic attributes of land units. This requires the identification and establishment of a use or non-use of each land unit that is technically appropriate, economically viable, socially acceptable and environmentally non-degrading. The course will expose students to:

- The theory of integrated land use planning.
- Land use planning techniques.
- Participatory techniques for gathering socioeconomic data.
- The geo-informatics tools available to land managers and decision makers.



Spatial Data Infrastructure – Africa Newsletter



- Use of an open source GIS, MapWindow, to demonstrate the practical application of spatial software tools and GIS data to land use planning and management. Contact: Jos Liebenberg, University of Stellenbosch, crses@sun.ac.za.

Training Workshops for PCSWMM/SWMM5, South Africa

Every year Computational Hydraulics Int. (CHI) hosts a number of SWMM5 and PCSWMM Modeling Workshops in South Africa. At these professional workshops, attendees are trained in the use of both the latest US EPA Stormwater Management Model (SWMM), and the new PCSWMM 2009 graphical decision support system. By attending a workshop, participants become proficient in the use of the software and learn how its application can enrich stormwater drainage and sanitary system modeling and design.

- Cape Town, October 12, 2010
- Kimberley, October 19, 2010
- Kruger National Park, October 26, 2010
- Durban, November 02, 2010
- Gauteng, November 09, 2010

Free ESRI Courses

Free online course modules from ESRI's Virtual Campus site. Learn the basics of many of their software packages and extensions or take some concept courses such as a review of projections.

ESRI Eastern Africa Hands-on Training for GIS Professionals



The following courses are offered at the ESRI Authorized Learning Centre in Upper Hill, Nairobi, Kenya.

Fundamentals of ArcGIS Desktop

- ArcGIS Desktop 1: Getting Started with GIS
- ArcGIS Desktop 2: Tools and Functionality
- ArcGIS Desktop 3: Workflows and Analysis
- **Data Production and Editing with ArcGIS**
- Field Data Collection Using ArcPad and ArcGIS Desktop
- Building Geodatabases
- Data Production and Editing Techniques

Duration (Days)

3
4
3
3
4
4

Analysis with ArcGIS

- Performing Analysis with ArcGIS Desktop

4

Cartography with ArcGIS

- Creating and Publishing Maps with ArcGIS

4

Enterprise GIS

- Introduction to ArcGIS Server
- Introduction to the Multiuser Geodatabase
- Managing Editing Workflows in a Multiuser Geodatabase

3
3
4

Programming with ArcGIS

- Introduction to Programming ArcObjects using .NET
- Introduction to Geo-processing using Python

4
3

Added new courses focusing on ENVI: the Image Processing Software for processing and analyzing geospatial imagery.

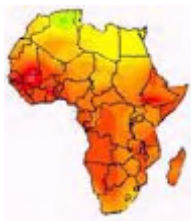
- Introduction to Remote Sensing with ENVI
- ENVI for GIS
- Exploring ENVI
- ENVI for Defense and Intelligence

3
3
5
4

Contact: ESRI Eastern Africa at: training@esri.co.ke, telephone: +254 20 2713630/1/2 or fax: +254 20 2713633.

ESRI South Africa course schedule for July 2010

Contact: Midrand: Queen Mofokeng, qmofokeng@esri-southafrica.com; Durban: Patricia van Schalkwyk, pvanschalkwyk@esri-southafrica.com; Port Elizabeth: Queen Mofokeng, qmofokeng@esri-southafrica.com; Cape Town: Kathi Wöhl, kwohl@esri-southafrica.com.



Spatial Data Infrastructure – Africa Newsletter



L'École Régionale post-universitaire d'Aménagement et de gestion Intégrés des Forêts et Territoires tropicaux (ERAIFT) [Regional School on Integrated Management of Tropical Forests and Territories] –



Promotion : 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 dispos 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 2010, 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 interested organisations. These could be either advanced or other certificate programs. Contact: info@rectas.org or thontteh@rectas.org.

ITC Distance Learning - Certificate

- [Environmental Impact Assessment and Strategic Environmental Assessment using spatial decision support tools](#) (6 weeks). Starting date: 7 June 2010. Deadline for application: 17 May 2010. [Register](#).
- [Principles of Geographical Information Systems](#) (7 weeks). Starting date: 6 September 2010. Deadline for application: 16 August 2010. [Register](#).
- [Spatial Decision Support Systems](#) (8 weeks). Starting date: 11 October 2010. Deadline for application: 20 September 2010. [Register](#).
- [Learning IDL for Building Expert Applications in ENVI](#). Starting date: 25 Oct 2010. Deadline for application: 4 October 2010.
- [Digital Terrain Model extraction, processing and parameterization for Hydrology](#) (3 + 3 weeks). Starting date: 29 November 2010. Deadline for application: 8 November 2010. [Register](#).
- [Principles and Applications of Remote Sensing and GIS in Natural Resources Management at KNUST, Kumasi, Ghana](#) (12 weeks). Starting date: 20 September 2010. [Register](#).
- [Principles of Geographical Information Systems](#)
- [Modern Techniques for Environmental and Sustainable Development of Earth Resources](#), Ethiopia, 2 weeks
- [Geoinformatics, with ARU, Dar es Salaam, Tanzania](#) With specialisation modules: Digital Photogrammetry and Remote Sensing, GIS Operation, Cartography and Geo-Visualisation, Tanzania, 9 months
- [Geoinformatics with GSSM, Accra, Ghana](#) With specializations: GIS Operations and Cartography and Visualization, Ghana, 9 months
- [The Application of GIS and Remote Sensing to Geologic Mapping and Mineral Resources Exploration](#), Tanzania, 2 weeks
- [Participatory Approaches to Slum Upgrading and Management](#), Kenya, 2 weeks
- [Digital Terrain Model extraction, processing and parameterization for Hydrology](#), 3+3 weeks

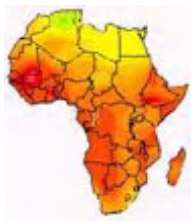
MSc and PG Diploma

- [Water Resources and Environmental Management](#) (Mc degree -18 months), Netherlands. Starting date: 13 Sep 2010. Deadline for application: 1 July 2010. [Register](#).
- [Water Resources and Environmental Management](#) (PG Diploma - 9 months), Netherlands. Starting date: 13 September 2010. Deadline for application: 1 July 2010. [Register](#).

ITC Refresher Courses 2010

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 of earlier training. In 2010, ITC will co-organise the following refresher courses:

- Participatory Approaches to Slum Upgrading and Management (Kenya)



Spatial Data Infrastructure – Africa Newsletter



- [Modern Techniques for Environmental and Sustainable Development of Earth Resources](#) (Ethiopia)
- [GEONETCast-Toolbox for natural and water Resource Management](#) (Ethiopia)
- [Preparing for Adaptations to Climate Change in West Africa](#) (Burkina Faso)
- [Strengthening Local Land Governance](#) (Tanzania)
- The Application of GIS and Remote Sensing to Geologic Mapping and Mineral Resources Exploration (Tanzania)

More information will be available soon at www.itc.nl/Pub/Study/CourseFinder

[Programme de Formation au CRTS 2010](#), Maroc

Le Centre Royal de Teledetection Spatiale est l'Institution Nationale responsable de l'utilisation, de la promotion et du developpement de la teledetection spatiale au Maroc. Il est charge de coordonner et de gerer les programmes nationaux de teledetection spatiale en partenariat avec les ministr`res, les universites et les operateurs privées.

[Geoinformatics \(GFM.4\) joint education diploma course of ITC and ARU](#), September 2010 - June 2011 (9 months), Dar es Salaam, Tanzania

The course is run at [Ardhi University](#) (former UCLAS) campus in Dar es Salaam, Tanzania. The aim of the course is to provide participants with the theoretical education and practical training needed to contribute to the digital production of maps and geoinformation using appropriate, state-of-the-art technology with in-depth knowledge in one of the specific aspects of the production process. GFM4 Course [Application Form](#), Contact: Head Geomatics Department, Ardhi University at geomatics@aru.ac.tz.

[Short course: Introduction to GIS Standards](#), September 6-7, 2010, University of Pretoria, South Africa

The course provides an introduction to geographic information standards such as those developed by the ISO/TC 211, Geographic information/Geomatics and Open Geospatial Consortium (OGC). Course content shows where to find these standards, how to read, interpret and implement them.

Funding Opportunities, Awards, Support

[3rd round of UNFCCC fellowship program](#)



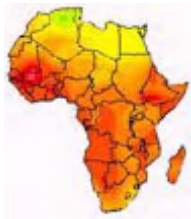
The objective of the fellowship programme is to contribute to building capacity for addressing climate change in non-Annex I Parties, in particular Small Island Developing States (SIDS) and least developed countries (LDCs) Parties, through the development of local professional expertise by:

- Supporting innovative analytical work on climate change in the context of sustainable development;
- Promoting a network of experts who can bring creative and innovative options to bear on questions of climate change;
- Encouraging the leadership potential of young and promising professionals in their fields.

The programme target group consists of mid-career professionals who are already in a government's employment and who are nationals of and working in a developing country, particularly a SIDS and LDC Party. While fellowships are awarded to individuals, the need for training must occur within the context of the institution for which an applicant works. The training must help the institution to develop its capacity. This programme is not intended for students, and does not provide financial support for an advanced degree, such as fieldwork for a PhD degree. The fellowship programme is open to individuals working in a broad range of governmental organizations, ranging from educational institutions, research institutes and ministries. Candidates must meet the following criteria:

- Be a national of, and work in an organization located in pre-selected countries/regions;
- Normally be no more than 40 years of age on the closing date of application;
- Have preferably completed a Master degree, or equivalent, at the time of application, and a minimum of 3 years of work experience. Candidates with a first degree and a minimum of five years work experience may also be considered;
- Have good communication skills in English
- Priority will be accorded to candidates from SIDS and LDC countries.

The deadline for application: 31 July 2010.



Spatial Data Infrastructure – Africa Newsletter



[ACM SIGSPATIAL GIS 2010 Google travel grants for female students](#)

As part of Google's ongoing commitment to support women in computing, we are pleased to announce the 2010 ACM SIGSPATIAL GIS Google Female Student Grants to encourage more female computer science students to attend and participate in the ACM SIGSPATIAL GIS 2010 Conference, November 2-5 2010, San Jose, California, USA. The winners will receive \$500 USD towards conference travel-related costs.

All female computer science students enrolled and pursuing a PhD degree in Computer Science, Computer Engineering, or technical field related to conference subjects are invited to apply by submitting a CV and 1-page statement (no more than 600 words) about why you wish to attend the conference and why attending it is important to your research, work, and/or future career. Application to be submitted to: ltoma@bowdoin.edu with subject heading "Google ACMGIS 2010 travel grant" and containing a single pdf document. Deadline: 17 September 2010.

[Call for Proposals: IPCC Scholarship Programme](#)

The Intergovernmental Panel on Climate Change (IPCC) Scholarship Programme, which was established with the funds received from the 2007 Nobel Peace Prize, has issued its first call for proposals. The goal of the Scholarship Programme is to help strengthen the scientific and technical capability in developing countries to contribute to climate science and research, and to develop and implement climate change policies and measures at the domestic and international levels. Proposals for this round of scholarships should focus on the following fields of study:

- Underlying science of climate change; impacts of climate change on aquatic ecosystems, water availability, health and agriculture;
- Climate-related disaster management, including institutional and organizational issues;
- Climate modelling and assessment of impacts of climate change; and adaptation and mitigation options for different sectors and assessment of socioeconomic implications.

The IPCC Scholarship Programme encourages applications from candidates from developing countries, especially those from the Least Developed Countries (LDCs), Small Island Developing States (SIDS), and the regions worst hit by droughts, floods, famine and changed patterns of precipitation (such as Sub-Saharan Africa). For this initial round of scholarships, applicants should complete the application file which comprises the application form and corresponding attachments by 31 July 2010, and the selection process is expected to be completed by the fourth quarter of 2010.

[International Fellowships in USA for Women 2010](#)

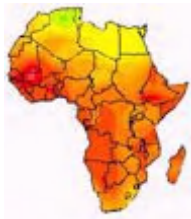
AAUW (formerly known as the American Association of University Women) has a long and distinguished history of advancing educational and professional opportunities for women in the United States and around the globe. One of the world's largest sources of funding for graduate women, AAUW is providing more than \$3 million in funding. AAUW supports women who are not United States citizens or permanent residents, women breaking through educational and economic barriers as aspiring scholars around the globe, teachers and activists in local communities, women at critical stages of their careers, and those pursuing professions where women are underrepresented. Scholarship value/inclusions:

- Master's/Professional Fellowship: \$18,000
- Doctorate Fellowship: \$20,000
- Postdoctoral Fellowship: \$30,000

Recipients are selected for academic achievement and demonstrated commitment to women and girls. Questions about applications must be directed to the Iowa City office. Do not contact the AAUW office in Washington, D.C., or local branches for application information. Please call 319/337-1716 ext. 60, e-mail aauw@act.org, or write to the customer service center at AAUW, Dept. 60, 301 ACT Drive, Iowa City, IA 52243-4030. Application Deadline: 1 December 2010.

[African Union Science Awards](#)

- **The African Union Regional Award for Women Scientists** - these Regional Scientific Awards seeks to promote participation of African women in science, technology and innovation. The African Commission endeavours to ensure that African women in science achieve their full potential by breaking down barriers and increasing opportunities. These awards are expected to raise the profile of women researchers in the population as a whole and thereby to inspire young women and girls to aim for a career in research. The awards will be offered in each of the five African Union regional blocks to successful candidates in the two fields of Life and Earth Sciences and Basic Sciences, Technology and



Spatial Data Infrastructure – Africa Newsletter



Innovation. A cash prize of US\$20000 will be awarded to the winners. Application forms for the African Union Women Scientist Regional should be received by the RECs not later than 15 July 2010.

- **The African Union Continental Scientific Award** - this award is open to both outstanding male and female researchers. The African Union realizes the importance of science, technology and innovation as an indispensable tool for driving socio-economic progress. It is thus essential to strengthen the capacities of African researchers and scientists by facilitating the integration of their efforts and competencies for the sustainable development of the African continent. In this programme a prize of 100,000 USD will be given to the outstanding African scientist as a mark of recognition of the African Union to acknowledge Africa's children who have had the merit to incontestably emerge in science and technology. Application forms for the African Union Continental Scientific Award should be received by the Commission not later than 9 September 2010, African Union Day.

Call for Nomination: ILO decent work research prize, 2010

This prize will be awarded during the next ILO Governing Body (to be held in November 2010 in Geneva, Switzerland) before a global audience of government, employer and worker delegates and media representatives. The winner will be invited to give a social policy lecture. There will be a financial award of USD 10,000, and the winner will be made Honorary Fellow of the [International Institute for Labour Studies](#) for 2010-11.

The prize can be awarded for:

- Major specific contributions to the understanding of socio-economic relationships and policy instruments for the advancement of decent work as defined by the ILO (see <http://www.ilo.org/public/english/bureau/inf/download/ecosoc/decentwork.pdf>). The jury will look for new and original ideas; OR
- A lifetime contribution to knowledge on the central concerns of the ILO and its constituents (i.e. Governments, Workers and Employers) which reflects and advances understanding of the different dimensions of decent work (creating jobs; guaranteeing rights at work; extending social protection; promoting dialogue and conflict resolution; with gender equality as a cross-cutting objective).

Both the excellence of the work and its practical relevance for policy purposes will be taken into account. This being a research prize, the jury will examine scholarly publications of the candidates. Unpublished or forthcoming works will not be considered.

Individuals and institutions (e.g. members of the ILO's tripartite constituency) can nominate candidates. Neither the International Labour Office nor current ILO staff members can nominate candidates. Only individuals qualify as candidates; the prize cannot go to an institution. ILO staff members and former ILO staff members are not eligible.

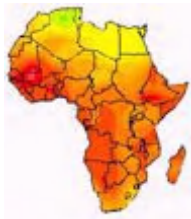
Each nominee must have the support of at least one organization from the ILO's tripartite constituency (i.e. a government, a workers' or an employers' organization) and one leading academic (in the area of labour and social policy), coming from different regions of the world. Where all support comes from the same country or region, the candidature will not be retained. Deadline for nomination submission: 31 July 2010.

TWAS-USM Fellowships for Visiting Scholars, Malaysia

For scientists from developing countries (other than Malaysia) who wish to pursue advanced research in natural sciences. TWAS-USM Visiting Scholar Fellowships in natural sciences are tenable for a minimum period of one month to a maximum of three months at a school/department of the Universiti Sains Malaysia (USM). Applicants for these Fellowships must meet the following criteria:

- Be a maximum age of 55 years on 31 December of the application year.
- Be nationals of a developing country (other than Malaysia).
- Hold a PhD degree in a field of the natural sciences and a regular research assignment with at least five years of postdoctoral research experience.
- Provide an official Acceptance Letter from a department, laboratory or institute at USM. Requests for acceptance must be directed to the Dean, Institute of Graduate Studies, USM (Prof. R. Hashim: by e-mail roshada@usm.my) who will facilitate assignment of a host supervisor. In contacting Prof. Hashim applicants must accompany their request for a preliminary acceptance letter with copy of their CV and a research proposal outline.
- Provide evidence of proficiency in English.

Download [VS Application Form](#), [VS Application Guidelines](#). The deadline for receipt of applications: 15 September of each year.



Spatial Data Infrastructure – Africa Newsletter



[TWAS-USM Postgraduate Fellowship Programme, Malaysia](#)

For young scientists from developing countries (other than Malaysia) who wish to pursue studies leading to a PhD degree in natural sciences at the Universiti Sains Malaysia. Applicants for these fellowships must meet the following criteria:

- Be a maximum age of 35 years on 31 December of the application year.
- Be nationals of a developing country (other than Malaysia).
- Hold a Master's degree in a field of natural sciences.
- Provide an official Acceptance Letter from a department, laboratory or institute at USM (see sample Acceptance Letter included in the Application Form). Requests for acceptance must be directed to the Dean, Institute of Graduate Studies, USM (Prof. Roshada Hashim, e-mail roshada@usm.my) who will facilitate assignment of a host supervisor.
- Provide evidence of proficiency in English.

[PG Application Form](#), [PG Application Guidelines](#). The deadline for receipt of applications is 15 September of each year.

[Harold and Margaret Sprout Award](#)

The award is given annually to the best book in the field – one that makes a contribution to theory and interdisciplinarity, shows rigor and coherence in research and writing, and offers accessibility and practical relevance. Nominated books should address some aspect of one or more environmental, pollution or resource issues from a broadly international or transnational perspective, including works in (for example) global, interstate, transboundary, North-South, foreign policy, comparative or area studies. Environmental subjects of books can include (for example) environmental law, diplomacy, transnational activism, natural resource use, global change, sustainable development, biodiversity, transboundary pollution control, and the like. Nominated works must be published during the two years prior to the year they are nominated for. Books with a copyright date of the award year are welcome provided that they are released by the previous year's end. Each publisher may nominate more than one book, and books nominated for the prior year can be re-nominated.

Publishers wishing to nominate books should send one copy of each book to each member of the Sprout Award Committee. The [names and addresses](#) of committee members are listed on the "officers" page. Deadline for nominations and receipt of copies of nominated books: 1 August 2010.

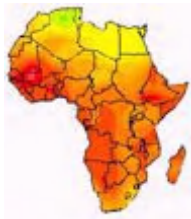
[FGEF Grants for Biodiversity Protection and Climate Change Projects in Africa](#)

The French Global Environment Facility (FGEF) has grant available to support projects related to biodiversity protection and climate change in Africa. Under its second phase of Small-Scale Initiatives Program (SSIP) for 2009-2010, it is aiming to strengthen civil society contribution for the conservation of the environment in Central and Western African countries, Madagascar and Mozambique. The eligible countries are Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Chad, Togo, Cameroon, Central African Republic, Republic of The Congo, Democratic Republic of the Congo, Gabon, Equatorial Guinea, Sao Tome-and-Principe, Rwanda, Burundi, Mozambique and Madagascar.

Priority will be given to French speaking countries. About 50 projects are expected to be funded during the 2 years of the program, 8 of which could be implemented in non French-speaking countries. The eligible themes concern biodiversity protection and fight against climate change, along with improvement of local populations living standards. NGOs, professional bodies, women and youth groups or associations and also private companies and INGOs with local partnerships can apply. The maximum grants available for each project is Euros 50,000. Deadline for proposal submission: 15 September 2010.

[William T. Grant Scholars Program: Opportunity for Young Researchers in NGOs](#)

The William T. Grant Foundation has announced that it is now accepting applications for its William T. Grant Scholars Program. Young researchers or professionals pursuing research and employed in a nonprofit organization within or outside United States can apply for this opportunity. As William T. Grant Scholars, the selected candidates will each receive a grant of \$350,000 distributed over a period of five years. Early-career researchers in social, behavioral or health sciences can apply. The program prefers to support "applicants who already have a promising track record, but seek a qualitative shift in their trajectory as researchers."



Spatial Data Infrastructure – Africa Newsletter



Grants will be made available to organizations where the selected young researchers are working. Only tax-exempt nonprofit organizations or NGOs are eligible to receive these grants.

- Applicants must have received their terminal degree within seven years of submitting their application.
- Employed in career-ladder positions at nonprofit institutions. The award may not be used as a post-doctoral fellowship.
- Applicants outside the U.S. are eligible, but as with U.S. applicants, they must be pursuing research that has clear, compelling theory and either policy or practice implications for the settings of young people ages 8 to 25 in the United States.
- Applicants of any discipline are eligible.

Deadline to apply: 7 July 2010.

[Humboldt Research Fellowships for Experienced Researchers](#)

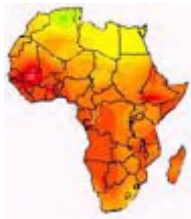
Humboldt Research Fellowships for experienced researchers are the instrument with which the Alexander von Humboldt Foundation enables highly qualified scientists and scholars from abroad who completed their doctorates less than 12 years ago to spend extended periods of research (6 to 18 months; may be divided up into a maximum of three blocks) in Germany. Candidates are expected to have their own clearly defined research profile. This means they should usually be working at least at the level of assistant professor or junior research group leader, or be able to document independent research work over a number of years. Scientists and scholars from all disciplines and countries may apply. Research projects are carried out in cooperation with academic hosts at research institutions in Germany. Candidates choose research projects, and the host in Germany is required to prepare a research plan. Details of the research project and the time schedule must be agreed upon with the prospective host in advance. The duration of the research fellowship (6 to 18 months) may be divided up into a maximum of three visits lasting a minimum of 3 months each. No more than 36 months may elapse between the beginning of the first stay and the end of the last stay. Short-term visits for study and training purposes or for attending conferences are not eligible for sponsorship. The fellowship is worth EUR2450 per month. This includes a mobility lump sum and a contribution toward health and liability insurance. Deadline for application: 31 December 2010.

Employment Opportunities

[Programme officer \(Africa\)](#), Nairobi, Kenya

This position is located in the United Nations International Strategy for Disaster Reduction secretariat (UNISDR) Regional Office for Africa based in Nairobi, Kenya reporting to the Regional Coordinator - Head of Office for Africa. Within delegated authority, the Programme Officer will be responsible for the following duties:

- Develop, implement and evaluate assigned programmes/projects; monitor and analyze programme/project development and implementation progress (i.e. sub-regional deliverables of the Global Facility for Disaster Reduction and Recovery (GFDRR));
- Review relevant documents and reports; identify problems and issues to be addressed, initiate corrective actions, bring relevant updates to the World Bank electronic database; liaise with relevant parties; ensure follow-up actions;
- Research, analyze and present information gathered from diverse sources.
- Facilitate capacity building of key sub-regional organizations such as ECCAS, ECOWAS and SADC as well as national resource centers and academic institutions for the collection and analysis of regional data on hazards, vulnerabilities and disaster risk reduction measures including progress in implementing HFA.
- Provide technical assistance on DRR as well as DRR for climate change adaptation to ECCAS, ECOWAS and SADC regions, including policy proposals development on disaster risk reduction for African Ministerial Conferences' consideration;
- Support development of activity proposals for the implementation of the Common Policy of francophone Africa for Disaster risk reduction. - Support Central Africa to develop a common strategy for disaster risk reduction and AU's Programme of Action's implementation;
- Promote mainstreaming of disaster risk reduction into relevant development programmes of West Africa and Central Africa;
- Support West Africa in resource mobilization for implementation of its common policy on Disaster Risk Reduction;



Spatial Data Infrastructure – Africa Newsletter



- Coordinate activities related to budget funding (programme/project preparation and submissions, progress reports, financial statements, etc.) and prepare related documents/reports (pledging, work programme, programme budget, etc);

Professionalism

Knowledge and understanding of theories, concepts and approaches relevant to disaster risk reduction (in the field of political affairs, sustainable development policy and humanitarian action); Practical experience in programme management; good research, analytical and problem-solving skills, including ability to identify and participate in the resolution of issues/problems; Familiarity with and experience in the use of various research methodologies and sources; Ability to apply good judgment in the context of assignments given; ability to plan own work and manage conflicting priorities.

Advanced university degree (Master's degree or equivalent) in business administration, development, environment, political affairs, international or public relations or related field. A first-level university degree in combination with qualifying experience may be accepted in lieu of the advanced university degree. Closing date: 10 July 2010.

ILRI: Policy analyst, Nairobi, Kenya

ILRI seeks to recruit a research and policy analyst to join a small team of professionals working on the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) program for Eastern and Central Africa (ECA). The objective of ReSAKSS is to provide analysis, data, and tools to promote evidence-based decision making, improve awareness of the role of agriculture for development in Africa, fill knowledge gaps, promote dialogue, and facilitate the implementation of the Comprehensive Africa Agriculture Development Programme of the New Partnership for Africa's Development and the African Union Commission and other regional agricultural development initiatives in Africa. The successful candidate will work with the ReSAKSS node based at ILRI-Nairobi which is set up to serve the COMESA region.

Preferred Skills:

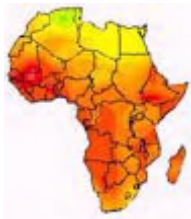
- A Ph.D. in Agricultural Economics, Economics or any other related field.
- At least three years post-Ph.D. working experience in research and policy analysis in developing countries, preferably in Africa.
- Familiarity with and deep understanding of agricultural and rural development issues in Africa, particularly in the COMESA region.
- A good understanding of policy processes in the COMESA region.
- Proven analytical and research skills through a track record of scientific publications.
- Strong English language skills, both written and spoken, with a demonstrated record of publications in professional outlets. Knowledge of French will be an added advantage.
- Ability and willingness to work in multi-disciplinary and multi-cultural teams in a developing country setting. Experience with projects that bridge different approaches and disciplines will be an added advantage.
- Experience in making presentations to large audiences at national and regional levels.

Applicants should send a cover letter, curriculum vitae and names of three referees who are knowledgeable about the candidate's professional qualifications and work experience to: recruit-ilri-Ken@cgiar.org. Screening of applications will commence on 7 July 2010 until the position is filled.

Extended Term Consultant, Lilongwe, Malawi

The Natural Resource Management Specialist's primary duties are to assist the Environment and Water Resources team of the World Bank in Malawi in the implementation of World Bank operations and analytical work in the environment and natural resources management. Requirement:

- Advanced degree in environmental science / management, natural resource management, economics, engineering (with experience in natural resource management) or other discipline relevant to the assignment;
- At least five years of relevant experience in the areas related to of technical, institutional and socio-economic aspects of natural resource management; experience with multi-stakeholder dialogue will be an advantage
- Field experience in natural resources management in the region will be an advantage.
- Familiarity with organizations working on these areas internationally, familiarity with Bank operational rules and procedures would be an advantage.



Spatial Data Infrastructure – Africa Newsletter



- Knowledge of advances in applied research and development, and their applicability to range of ecosystems and country circumstances;
- Ability to work flexibly on a range of assignments, and adjust to and prioritize a variety of complex evolving tasks;
- An ability to work successfully in a multicultural setting, with efficiency, competence and integrity across disciplinary boundaries and in a team-based work environment;
- Strong communications skills, in addition to excellent writing and communications ability in • English;
- Proven ability to maintain professional relations with Government officials, development partners and implementing agencies
- Sound understanding of information technology, including as a minimum text editing skills. Basic knowledge on GIS and related applications is an advantage.

Closing date: Monday, 5 July 2010.

[Great Lakes Project Coordinator](#), Kampala, Uganda

International Refugee Rights Initiative (IRRI) is seeking a Programme Coordinator to serve as an anchor for its Great Lakes Programme. The programme, which is being carried out jointly with the Danish Refugee Council, will work in partnership with local non-governmental organisations (NGOs) in six countries in the Great Lakes Region (Kenya, Uganda, Burundi, the Democratic Republic of Congo, South Sudan and the Central African Republic) to explore means of leveraging regional processes such as the International Conference on the Great Lakes Region (ICGLR) in order to improve the protection of refugees and internally displaced persons (IDPs) and contribute to enhancing peace and security. Requirement:

- Sound understanding and knowledge of regional and national legal frameworks and institutions pertaining to refugee/IDP protection in the Great Lakes region (ICGLR Pact and Protocols, AU Charter, EAC etc.).
- Proven track record in research, policy analysis and advocacy on refugee/IDP protection issues, preferably from a civil society perspective.
- Excellent drafting and communication skills.
- Academic background in law, international relations, conflict or refugee studies.
- Fluency in written and spoken English.
- Willingness to travel in the region as needed.
- At least 3 years' professional experience in a project coordination role.
- Experience working in one or more of the 6 programme countries (Uganda, Kenya, Burundi, DRC, South Sudan, CAR).
- Fluency in at least one other regional language, preferably French or Kiswahili.

Submit CV, cover letter, writing sample and three references to info (at) refugee-rights.org, Reference Code: RW_86FG4S-34.

[Technical Adviser on Population and Development](#), Africa Subregional Office, Johannesburg

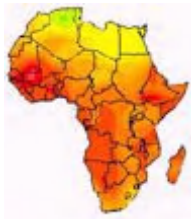
The Technical Adviser manages the delivery of strategic technical and programmatic support in the region, in close collaboration with the programme staff, to ensure that the SROs and COs remain abreast of the Fund's policy and programme policies as well as current thinking and academic advance in a given substantive areas affecting the ICPD Programme of Action, and that the ICPD Programme of Action in the substantive area is firmly placed within national development frameworks and programmes, including the achievement of the MDGs.

Main Activities/Expected Results:

- Management of Strategic Technical Support
- Capacity development
- Evidence and knowledge development and dissemination
- Policy Dialogue and Technical Representation
- Carry out any other duties as may be requested by the Head of the Sub-regional Office or the Regional Director and Deputy Director.

Requirements:

Post-graduate University Degree or equivalent (preferably Ph. D.) in demography, statistics, population studies, economics, or other field directly related to the substantive area identified in the title of the post, 10 years of increasingly responsible professional experience in the substantive area, of which seven years at the international level; Population Research, Census DHS and civil registration experience is essential,



Spatial Data Infrastructure – Africa Newsletter



Experience of linkages between population and poverty and experience in population related policy development, Understanding of Direct Budget Support Experience of PRSPs and MTEF analysis, Understanding of Human Rights dimensions of Population and Development, Demonstrated expertise in the substantive area of work; the incumbent is expected to be an expert in the field and recognized authority in the area of assignment; Experience in programming; Familiarity with management and monitoring tools is desirable; Familiarity with ICT/ERP; Fluency in English and French is required. Portuguese is an asset. Download the Step by Step Guide to Applying in the E-Recruit System of UNFPA at <http://www.unfpa.org/employment/vacancy.htm>. Closing date: 12 July 2010.

Science Officer, International Council for Science (ICSU), Paris, France

The Science Officer will assist with the planning and implementation of ICSU's initiatives, with a focus on sustainability research including global environmental change. Examples of work tasks include support to ICSU committees, interaction with ICSU partners and members, and coordination of international research programmes. The ICSU Secretariat, located in Paris, France, is a small international team of 16 people and the ability to work in close cooperation with others is important. ICSU is seeking candidates with the following:

- An advanced scientific degree (preferably Doctorate) in a relevant natural or social science discipline and a further 5 years research or science management experience; and a broad interest in science.
- Demonstrated experience in science project/programme development and coordination.
- Excellent knowledge of English and preferably some knowledge of French and/or other languages.
- Good working knowledge of MS Office systems, and of electronic databases and Web sites.

Applicants are requested to address the above description and qualifications in a cover letter and attach curriculum vitae with the name and contact details of three referees. They are invited to indicate how serving in this position would support their own future science career objectives. Applications, with 'Science Officer' in the subject line, should be sent via email to recruitment@icsu.org and addressed to Professor Deliang Chen, Executive Director, International Council for Science (ICSU). Closing date: 16 August 2010.

Other

Hard times delay MDGs in Lesotho

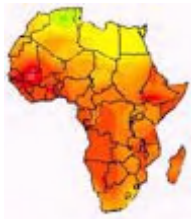


Life is mostly hard in the mountainous kingdom of Lesotho, but the chronic droughts that seem to signal the unfolding impact of climate change are projected to become more severe, and could squeeze cultivable land from an already slim 10 percent to a mere three percent in 25 years. "While other factors contribute to droughts and the shrinking of cultivable land, climate change exacerbates the situation," said a new UN Development Programme (UNDP) assessment of countries' progress towards achieving the eight UN Millennium Development Goals (MDGs), which range from halving extreme poverty to halting the spread of HIV/AIDS and providing universal primary education by 2015. Erratic weather, lack of access to agriculture inputs, soil erosion and high HIV/AIDS prevalence have all contributed to shrinking cereal production. In 1980 Lesotho produced grain enough to meet 80 percent of its requirement; by 2004 it could barely cover 30 percent of its needs, and output has been steadily dropping, according to the UN World Food Programme.

The UNDP report noted that adapting to climate change, which will affect food production, was urgently required to ensure all the MDGs are met, but this would take more money.

The extra costs will arise from rapid interventions, like beefing up social protection and improving the capacity of any particular programme aimed at achieving the UN goals to adapt to capricious weather patterns. The report cited studies that tried putting a cost on making the MDGs "climate resilient" globally. "Estimates set the cost of 'climate resilient' MDGs to be about a third higher than the conventional cost of meeting the MDGs - around US\$100 billion a year for the next decade."

The report also looked at how and to what extent the 2006-08 food price crisis, the global recession, and rapid urbanization had affected the ability of countries to achieve the MDGs. The report noted that "Progress towards the MDGs is expected to improve, as growth is recovering in many countries, but achievement of the MDG goals will be delayed." Read the report: [What will it take to achieve the Millennium Development Goals?](#)



Spatial Data Infrastructure – Africa Newsletter

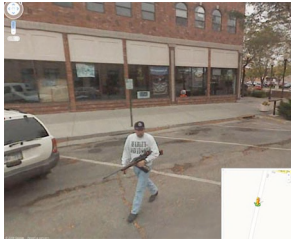


[World climate change survey results](#)

One of the findings of the "World Climate Change Survey" indicates that universities all over the world are not doing enough in order to help society to cope with the challenges posed by climate change. The research initiative undertaken by the Hamburg University of Applied Sciences in Germany as part of the [International Climate Change Information Programme \(ICCIIP\)](#) aimed at identifying the general level of awareness of and needs of university students about climate change in university programmes worldwide. The survey targeted to university students so that first-hand information on current practice could be gathered and reality-based suggestions could be made to address any identified problems or needs.

The results of the survey are presented as the first chapter of the newly-launched book "Universities and Climate Change" published by Springer. The survey also points out a number of information and communication needs that exist and that should be met in order to allow a better integration of climate-related issues in the university curriculum across the world.

[Making mapping an accessory to a crime](#)



Using any type of online mapping to help to commit a crime will result in a longer prison sentence. The [Louisiana Senate approved Senate Bill 151](#) with [a vote of 89-0](#). As stated in the bill, the purpose is to prohibit the use of an Internet, virtual, street-level map in the commission of a crime; to prohibit the use of an Internet, virtual, street-level map in the commission or attempted commission of an act of terrorism; to provide for enhanced penalties; to provide for definitions; and to provide for related matters. The bill further goes on to define "an Internet, virtual, street-level map" as: "Internet, virtual, street-level map" means any map or image that contains the picture or pictures of homes, buildings, or people that are taken

and dispensed, electronically, over the Internet or by a computer network, where the picture can be accessed by entering the address of the home, building, or person. Those caught using such defined maps to burglarize will have an additional year added on to their sentence. Those caught using it for terrorism would be handed an additional ten years. (Related information: [Techdirt](#)).

[Thailand Government invests in GIS to end land dispute rows](#)

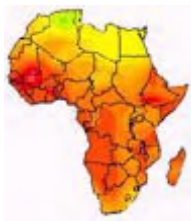
The Natural Resources and Environment Ministry has invested over 2.3 billion baht in the digital Geographic Information System as a major tool to settle land disputes between locals living in forests and the authorities. The use of the GIS to settle forest boundaries countrywide is scheduled for completion in 2012. It will be a key tool in proving the legal rights to forest land for about 600,000 people living in forest reserves and national park areas, who are now waiting for their land rights to be clarified.

Suwit Khunkitti, environment minister, said he was confident that land disputes will be resolved easily using the digital survey, which will be able to identify the owner of occupied land. "If they lived there before the forest reserve or national park's announcement, they will get the land right documents. If not, they should leave the areas," said Mr Suwit. He added that 198 hot spots where there had been serious land encroachment in 30 provinces were the first priority of the survey. The GIS procedure has collected 400,000 aerial photographs taken between the first such aerial photography in 1952 and the latest in 2002. That information will be transferred into digital mapping, which is user-friendly for state officials or ordinary people, and similar to the Google Earth system.

[Atlas of Living Australia in September 2010](#)

The Atlas of Living Australia goes live in September, opening the door to a rich collection of information about Australia's plants, animals and micro-organisms. Across Australia, people will be able to contribute sightings of plants, animals and micro-organisms; download tools and more... In the lead up to September, the Atlas is bringing together a huge amount of biodiversity information from research, literature, records and Australia's natural history collections and making it freely accessible online. As it develops, the Atlas will deliver the most comprehensive information available on Australia's biodiversity, including images, occurrence and distribution data, maps, literature, genetic sequences and taxonomic information.

By integrating this previously dispersed information, the Atlas can support research, education and decision making on issues such as biosecurity, food security, climate change, sustainable farming, global change management and conservation. The Atlas will also offer a range of analytical tools to assist in the study,



Spatial Data Infrastructure – Africa Newsletter

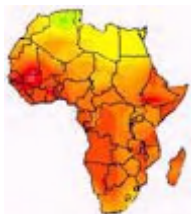


identification and management of our native plants, animals and micro-organisms. Follow the updates via Atlas of Living Australia [website](#).

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

Conferences, Events

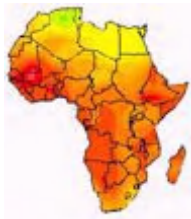
Date	Location	Event
July 2010		
5-7 July 2010	Vienna, Austria	ISPRS TC VII Symposium, "100 Years ISPRS - Advancing Remote Sensing Science"
6-9 July 2010	Addis Ababa, Ethiopia	UN-SPIDER Regional Workshop: Building Upon Regional Space-Based Solutions for Disaster management and Emergency Response,
6-9 July 2010	Salzburg, Austria	Applied Geoinformatics Forum Symposium and Exhibition Salzburg (GI Forum 2009)- Advancing the GI Dialogue
10-13 July 2010	San Diego, CA, USA	ESRI Survey & Engineering GIS Summit
12-16 July 2010	San Diego, CA, USA	2010 ESRI International User Conference
18-20 July 2010 * NEW *	Durban, Kwazulu, Natal, South Africa	The Fifth Built Environment Conference
19-24 July 2010	Ouagadougou, Burkina Faso	5th African Agricultural Science Week and FARA General Assembly
20-23 July 2010	Leicester, U.K.	Accuracy 2010
25-30 July 2010	Honolulu, HI, USA	IEEE International Geoscience & Remote Sensing Symposium "IGARSS 2010" Contact: publicity@igarss2010.org .
26-27 July 2010 * NEW *	Johannesburg, South Africa	Africa Gas and LNG Summit 2010
26-28 July 2010 * NEW *	Johannesburg, South Africa	Africa Mining Congress 2010
August 2010		
17-18 August 2010 * NEW *	Johannesburg, South Africa	Leadership Development for Women in Aviation Africa
26-27 August, 2010	Como, Italy	WebMGS 2010 . 1st International Workshop on Pervasive Web Mapping, Geoprocessing and Services
30 August 30 - 3 September 2010	Bilbao, Spain	International Conference on Electronic Government and the Information Systems Perspective (EGOVIS 2010) In conjunction with 21st International Conference on Database and Expert, Systems Applications (DEXA 2010)
September 2010		
6-8 September 2010	Gaborone, Botswana	3rd IASTED African Conference on Water Resource Management (AfricaWRM 2010) Theme: Science and Technology Applications for Health and Sustainable Development
10-12 September 2010 * NEW *	Singapore, Singapore	2010 International Conference on Environmental Science and Applications
13-15 September 2010	Ghent, Belgium	8th International Conference on Geostatistics for Environmental Applications (GeoENV 2010)
14-17 September 2010	Zurich, Switzerland	GIScience 2010



Spatial Data Infrastructure – Africa Newsletter



15-17 September 2010	Skopje, Republic of Macedonia	International Conference on Spatial Data Infrastructures 2010
22 September - 2 October 2010	Rotterdam, The Netherlands	International Conference on "Deltas in Times of Climate Change" Contact: o.van.steenis@programmabureauklimaat.nl .
27-29 September 2010	Johannesburg, South Africa	Africa FOSSGIS 2010
27 September – 1 October 2010	Ouagadougou, Burkina Faso	9th EUMETSAT User Forum in Africa
30 September -1 October 2010 * NEW *	Cape Town, South Africa	6th International Conference on E-Government - ICEG 2010
October 2010		
13-15 October 2010 * NEW *	Nairobi, Kenya	East African Project Management Conference - 'EAPMC 2010' , Deadline for abstracts/proposals: 15 September 2010 .
13 - 15 October 2010	Nairobi, Kenya	Announcement and Call for Papers: 5th ESRI Eastern Africa user conference , Abstract submission deadline: 15 July 2010 .
12-14 October 2010	Cape Town, South Africa	International Conference on Information and Communication Technology for Development (ICT4D 2010)
19-22 October 2010	Singapore	GSDI-12 World Conference , Theme: Realizing Spatially Enabled Societies. In conjunction with the 16th PCGIAP Annual Meeting.
24-27 October 2010	Cape Town, South Africa	22nd International CODATA Conference Theme: Scientific Information for Society: Scientific Data and Sustainable Development
25-29 October 2010	Fez, Morocco	6th World FRIEND Conference (Flow Regimes from International Experimental and Network Data) Theme: Global Change: Facing Risks and Threats to Water Resources. Contact: friend2010@msem.univ-montp2.fr .
25-29 October 2010	Addis Ababa, Ethiopia	8th International Conference of the African Association of Remote Sensing of the Environment (AARSE2010) . Contact: dozie@ezigbalike.com , info@aarse-africa.org .
November 2010		
1-7 November 2010	Hamburg University	3rd worldwide online climate conference CLIMATE 2010/KLIMA 2010 Contact: info@klima2010.net .
3-5 November 2010 * NEW *	Cape Town, South Africa	4th International Development Informatics Association Conference: IDIA 2010
8-11 November 2010	Sede Boqer Campus, Israel	3rd International Conference on Drylands, Deserts and Desertification Contact: Dorit Korine, desertification@bgu.ac.il .
19-21 November 2010	Munyonyo, Kampala Uganda	2010 Pilot International Conference on Global Sustainable Development . Theme: Climate Change, A challenge to Businesses in the 21 st Century. Abstract deadline: 30 May 2010 .
23-25 November 2010	Cape Town, South Africa	Map Africa 2010
24 November 2010 * NEW *	Venice, Italy	ICGSE 2010: International Conference on Geological Sciences and Engineering
24-26 November 2010	London, UK,	Invitation: expressions of interest to attend the "Commonwealth Climate Change Communication Conference" (C5) ,
29 November - 3 December 2010	Tunis, Tunisia	5th Session of the International Conference Geotunis 2010 Theme: The use of GIS and remote sensing for sustainable development. Contact: atigeo_num@yahoo.fr .



Spatial Data Infrastructure – Africa Newsletter



22-24 November 2010 * NEW *	Cape Town, South Africa	Leadership & Management Studies in Sub-Sahara Africa 2010 Conference
December 2010		
13-16 December 2010	Abu Dhabi	Eye on Earth Summit
14-16 December 2010	Benghazi, Libya	International Arab Conference on Information Technology (ACIT 2000) , Deadline for paper submission: 30 June 2010.
2011		
8-14 January 2011 * NEW *	Johannesburg, South Africa	23rd Colloquium of African Geology
1 January - 31 December 2011	Worldwide	International Year of Forests 2011
18-21 January 2011	Hyderabad, India	Map World Forum 2011
21-25 February 2011	Nairobi, Kenya	26th Session of the UNEP Governing Council/Global Ministerial Environment Forum
26- 28 February 2011 * NEW *	Singapore, Singapore	2010 3rd IEEE International Conference on Signal Acquisition and Processing (ICSAP 2011)
6- 8 April 2011 * NEW *	Stellenbosch, South Africa	4th IUPAP International Conference on Women in Physics
10-15 April 2011	Sydney, Australia	34th International Symposium on Remote Sensing of Environment (ISRSE2011) Contact: Ian Dowman, idowman@cege.ucl.ac.uk .
9-13 May 2011	Sun City, South Africa	5th International Wildland Fire Conference (WildFire 2011) Contact: info@wildfire2011.org .
18-22 May 2011	Marrakech, Morocco	FIG Working Week & XXXIV General Assembly Contact: FIG Office, fig@fig.net .
20- 25 March 2011 * NEW *	Cape Town, South Africa	2011 African Conference on Software Engineering and Applied Computing
22- 26 May 2011 * NEW *	California, United States	World Environmental and Water Resources Congress , Deadline for abstracts/proposals: 7 September 2010.
October 2011	Cairo, Egypt	AfricaGIS2011 Conference
28 November - 9 December 2011	South Africa	17th Conference of the Parties to the UNFCCC and 7th Meeting of the Parties to the Kyoto Protocol Contact: UNFCCC Secretariat, secretariat@unfccc.int .
8-12 July 2012	San Diego, California USA	ESRI User Conference
8-12 July 2013	San Diego, USA	ESRI International User Conference

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

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