

Spatial Data Infrastructure – Africa Newsletter

SDI-Africa Newsletter

January 2005

Vol. 4, No. 1

Spatial Data Infrastructure - Africa (SDI-Africa) is a free electronic newsletter for people interested in GIS, remote sensing, and data management issues in Africa. It aims to raise awareness and provide useful information to strengthen national SDI initiatives and support synchronization of regional activities. The [Executive Working Group of CODI-Geo](#) and [EIS-AFRICA](#) are regional fora that are 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.

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. I'd be happy to include your news in the newsletter.

I encourage you to forward this newsletter onto colleagues who may find the information useful, and ideally they will subscribe themselves.

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

Best regards, Kate Lance, Editor, lancekt@aya.yale.edu

Input to this Issue

Thank you to Wilber Ottichilo, Regional Center for Mapping of Resources for Development (RCMRD) (Kenya); Dr. E.G. Mtalo, Department of Geomatics, University College of Lands and Architectural Studies (UCLAS) (Tanzania); Josef Aschbacher, European Space Agency (France); Jide Kufoniyi, Regional Centre for Training in Aerospace Surveys (RECTAS) (Nigeria); and Calestous Juma, The Kennedy School's Belfer Center for Science and International Affairs (USA) their contributions to this issue of the newsletter.

* Message from the Editor *

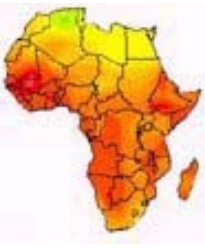
Best wishes to all for 2005. And thank you to everyone who provided news items in 2004.

For 2005 * **please** * I ask that each of you who appreciates the content of the SDI-Africa newsletters to take the time to share news items for upcoming issues. It needn't take more than a few minutes to send a useful URL, workshop summary, or an announcement of an upcoming event.

The GSDI Association, in 2005, looks forward to your active engagement in the [SDI discussion forums](#), [8th International Conference on GSDI and FIG Working Week](#), maintenance of the [SDI Cookbook](#) and [SDI Africa: an implementation guide](#), [2005 GSDI Small Grants Program](#), [Intergraph International Grant Program](#), and [ESRI Global Map/GSDI Grant Program](#). By [joining the GSDI Association](#) (or renewing your membership), you'll provide resources to enable GSDI to continue its activities – *including the production of the SDI-Africa newsletter*. If you can & would like help sponsor SDI-Africa newsletter production directly, please contact sdi-africa@gsdi.org. Thank you.

SDI News, Links, Papers, Presentations

[Land Data On Computer Soon – Kenyan Minister of Lands opens seminar on Spatial Data Framework in Nairobi](#) All information on land will be available at the touch of a button, Lands minister Amos Kimunya has said. Kenyans will in the future know who owns what land, its location and other features from computer data. Mr Kimunya said, once in place, the information infrastructure would revolutionise the social and economic scene. He said that, with GIS technology, land dealings in Nairobi would become simple. The Minister made the remarks at the Jomo



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Kenyatta University of Agriculture and Technology, in Juja after he opened a seminar. The one-day event discussed the results of a study into starting the Spatial Data Framework in Nairobi. The pilot project, undertaken for the Kenya Institute of Survey and Mapping by the Japanese International Corporation Agency, will roll out in other parts of the country, with Mombasa as the next stop. The long-term goal, the minister said, is to make the country's entire map available in digital format. The GIS allows one to input, retrieve, process, analyse and output geographically referenced data that support decision-making to plan and manage natural resources and the environment. Mr. Kimunya described GIS as crucial for development, and added that about 80 per cent of the information would be used in planning and decision-making at all levels. "When information ... is readily accessible, creative problem-solving can lead to sound decisions with a lasting positive impact on people's lives," he said. The minister noted that development required access to data, information, knowledge and understanding of the environment and its natural resources, including social and economic opportunities. Japanese ambassador Saturo Miyamura said that currently, many areas' data on land and population was poorly maintained, maps and statistics outdated, information inaccurate and its' sharing limited. "I hope the Government will then use the study's results ... for better planning and decision-making in Nairobi city. This should subsequently translate into time and cost saving and improve productivity," he said. [Source: allafrica.com, The Nation (Nairobi), December 17, 2004, Posted to the web December 16, 2004]

Start-up workshop for the Botswana IGIS II project at Department of Surveys and Mapping (DSM)

The start-up workshop for the Integrated Geographical Information System II project was held in Gaborone, 6-10 December 2004. The aim with the workshop was to lay the foundation for a three-year implementation plan for the project. Twenty-five participants from DSM representing senior and middle management as well as technical experts attended the workshop. The start-up workshop will be followed by an inception workshop in April 2005 where the three year implementation plan for the project will be agreed upon as well as the detailed first year implementation plan.

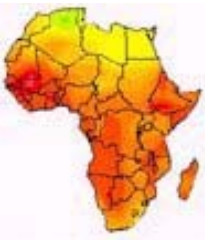
The main project objective is that: "The Department of Surveys and Mapping shall have integrated cadastral, geodetic and topographic databases in place which facilitate the provision of geographic information for cost-effective use in society. At the end of the project, the Department will have established standards and the design for all spatial databases and elaborated efficient systems for data dissemination and data capture". Swedesurvey AB was awarded this project, financed by the Botswana Government. The contract value is approximately 20 million SEK (2.2 million EUR). [Source: Swedesurvey news]

"Nigeria 2005 National Population Census will be fair, balanced"

National Population Commission (NPC) Federal Commissioner for Lagos State, Chief Okanlawon Sabiu, assured Nigerians of a true, fair and balanced head count in the 2005 National Population Census. He added that "going by the strategies and the system the Commission is adopting now, this census would be far better than that of 1991.... modern Geographical Information System (GIS) could be put to use, thereby enhancing the capacity of the Commission for computerized manipulation and analysis of population and other related data." The present enumeration area denomination exercise is an improvement over the 1991 exercise in that enumeration areas would now be geo-referenced, drawn to frame, and aligned to the national grid. A national grid of enumeration areas, properly delineated, will not leave out any land area of the federation. [Source: allafrica.com - This Day (Lagos), December 10, 2004]

Atlas Launched on Arsi - Bale Zones, Ethiopia

An Atlas depicting the natural resources of the Arsi - Bale geographical zones was developed by the Oromia State government with support from the Ethio- Italian Development Cooperation. Geographical coverage includes all the woredas of Arsi (22) and Bale (18); with approximately 4.2 million people or six percent of the total population of the country. The Atlas offers information to planners, policy and decision makers, researchers as well as entrepreneurs keen to invest in Arsi and Bale zones. [Presentation of the Atlas](#) and experience on GIS in Oromiya, studied by the Italian NGO LVIA in collaboration with the Addis Ababa University, were made by Mulugeta Tadesse, GIS specialist and Giorgio Guidi, LVIA project coordinator in Moyale. The Arsi - Bale Rural Development Program (ABRDP) currently is focusing on capacity building, especially for woredas and on poverty alleviation strategies in the food insecure lowlands. This project is in line with the Ethiopian Government's ongoing decentralization process and poverty reduction policies. [Sources: Ethiopian News Agency, Addis Ababa, 12/17/2004; allafrica.com - The Daily Monitor (Addis Ababa), December 19, 2004]



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[African Development Fund supports institutional and socio-economic integration in Western Africa](#)

Tunis, 8 December 2004 – The African Development Fund (ADF) has approved a grant of 1.59 million Units of Account (US\$ 3.8 million) to finance the Integrated Development Authority of the Liptako-Gourma region (ALG) Institutional Support Project. The ALG is a regional cooperation organization including Burkina-Faso, Mali and Niger. The project's global objective is to help put in place development plans and programs in the water resources, energy and transport sectors of the Liptako-Gourma Region with a view to reducing poverty in the region. Its specific objective is to build ALG's human and technical capacity so as to improve its performance in terms of economic decision-making, good economic governance and poverty reduction. The project will ensure the reinforcement of human resources and technical capacity building by providing ALG with technical assistants in the fields of water resources, renewable energy, earth roads, mixed farming and Geographic Information Systems. Probable Start-up Date: March 2005. The full text of the [appraisal report](#) is available in the bank's website, in line with the Bank Group's new policy on disclosure of information. Contact: liptako-gourma@cenatrin.bf. [Note that technical assistance services for the GIS component will be procured through consultancy based on a short list of consulting firms].

[Le Fad soutient l'intégration institutionnelle et socioéconomique en Afrique de l'Ouest](#)

Tunis, le 8 décembre 2004 –Le Fonds africain de développement (FAD) a accordé un don de 1,59 million d'unités de compte (3,8 millions de dollars EU) pour le financement d'un projet institutionnel d'appui à l'Autorité de Développement Intégré de la Région du Liptako-Gourma, dite Autorité du Liptako-Gourma (ALG), une organisation de coopération régionale regroupant le Burkina-Faso, le Mali et le Niger. Le projet vise à favoriser la mise en place des plans et des programmes de développement des secteurs de l'hydraulique, de l'énergie et du transport rural de la Région du Liptako-Gourma. Plus spécifiquement, cette initiative appuiera les capacités humaines et techniques de l'ALG pour lui permettre d'améliorer ses performances en termes de prise de décisions économiques, de promotion de la bonne gouvernance et de réduction de la pauvreté. Le projet favorisera un renforcement des capacités humaines de l'ALG en fournissant une assistance technique avec la mise à la disposition de l'ALG d'experts dans les domaines des ressources en eau, des énergies renouvelables, de l'agropastoral, le transport rural et les systèmes d'information géographique. Date probable de démarrage : mars 2005. Le [rapport d'évaluation](#) complet est disponible sur le site Web de la BAD, conformément à la nouvelle politique de diffusion de l'information du Groupe de la BAD. Contact: liptako-gourma@cenatrin.bf. [Noter: Les services de l'assistance technique pour le component SIG seront acquis par consultation sur la base de listes restreintes des bureaux de consultant].

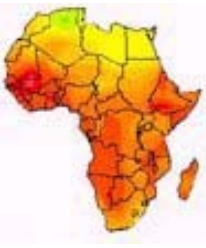
[GLCN land cover mapping training workshop -SADC](#), 13-17 December 2004

This Global Land Cover Network workshop was organized by the Food and Agriculture Organization of the United Nations (FAO) with the financial and technical support of the United Nations Environment Programme (UNEP). It was hosted the Department of Land Affairs, Chief Directorate of Surveys and Mapping, South Africa. The workshop was intended for officials from national institutes involved in land cover mapping from the following countries: Angola, Botswana, Comoros Islands, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Zambia and Zimbabwe.

3rd Global Mapping Seminar held at RCMRD, Nairobi Kenya, 8-11 November 2004

The third Global-mapping seminar was held at the Regional Centre for Mapping of Resources for Development (RCMRD), Nairobi Kenya on 8th – 11th November 2004. The seminar was organised by Ministry of Land, Infrastructure and Transport (MLIT), International Steering Committee for Global Mapping (ISCGM), Japan, and RCMRD, supported by Japan International Cooperation Agency (JICA), Survey of Kenya (SOK) and Kenya Institute of Surveying & Mapping (KISM). Forty (48) participants from African states including Botswana, Chad, Congo, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Seychelles, Sudan, Swaziland, Tanzania, Uganda, Zambia, Zanzibar, and Zimbabwe including Japan (GSI/ISCGM) and USA (ESRI) attended. Global Mapping and SDI concepts, issues and African initiatives for sustainable development activities were discussed. The aim of the seminar was to sensitize and call for active action and participation by participating member states in the implementation of Global Mapping and SDI in their respective countries.

The seminar was officially opened by Mr. Takaki Okatani for Mr. Hiromichi Murayama, Secretary General of ISCGM, Dr. Wilber K. Ottichilo, Director General of RCMRD and Mr. Kombo Mwero, Director of Surveys, Kenya. The following presentations were made during the seminar:



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- Country reports from the African participants on the status and development of Global map and spatial data infrastructure (SDI)
 - Global Map Project, about GM, history and development, contents of GM, Global and African status, and future plans. Participating nationals whose countries have not joined Global Map were encouraged to join and start implementing it.
 - Mapping Africa for Africa Project. A new initiative under UN-ECA-CODI-GEO in collaboration with International Cartographic Association (ICA) aimed at accelerating the pace of Geo Information activities in Africa including GM and SDI
 - Africover and Global Land Cover Network (GLCN), FAO. A land use /land cover mapping project. Participants were exposed concepts, development; products including land cover classifications and status of Africover/GLCN.
 - African perspective for SDI, status of SDI in Africa from UN ECA CODI GEO perspective. SDI initiatives at national level were presented and discussed for example NAFGIM(Ghana), EINMIS(Zambia), PNGIM(Burkina Faso), SISEI (Benin), Kenya, Botswana and Nigeria. Role of ECA-CODI in the coordination and implementation of Geo-Information for sustainable development activities in Africa was highlighted.
 - Applications of Global map and SDI in environmental management (DRSRS), Livestock management (ILRI), Agro forestry (ICRAF)
- Other discussions centred on technical methods and challenges of Global Mapping including mapping using satellite images (GSI, Japan) and geospatial metadata and GIS portal for global mapping (ESRI). Similar seminars on Global mapping were held at RCMRD in 19-23 August 2002 and 25-28 August 2003.

[SISEI Subregional legal workshop for English-speaking countries in Nairobi, Kenya](#), 13 - 17 December 2004

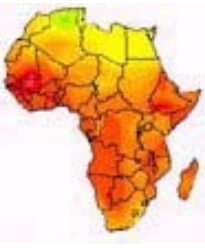
The sub-regional legal workshop of 'Environmental Information Circulation and Monitoring System on the Internet in Africa (SISEI)' for English-speaking countries was held in cooperation with the Kenyan National Environment Management Authority and aimed at:

- informing the participants about the international context relating to the management and the circulation of environmental information;
- presenting and analysing the component of relevant international conventions and/or regional agreements related to information management and dissemination;
- allowing the participants to acquire a basic knowledge and the tools to undertake successfully the required work within the framework of their respective national SISEI network, namely:
 - a) the exhaustive inventory of all the existing national legislation relating to environmental information management and sharing (including international and regional conventions and treaties ratified);
 - b) the analysis of the remaining areas of environmental activities, which have to be covered to ensure the respect of all engagements of the country at the international and national level relating to environmental information management and sharing;
 - c) the organisation and posting of the data and results on the national SISEI Web Portal.

[Atelier SISEI sous régional juridique des pays francophones à Nouakchott, Mauritanie](#), 29 novembre - 3

décembre 2004. Cet atelier de 'Le Système de Circulation d'Information et de Suivi de l'Environnement sur Internet en Afrique (SISEI)' sous régional sur les aspects juridiques s'est tenue du 29 novembre au 3 décembre 2004 à Nouakchott, Mauritanie, en collaboration avec le Ministère du Développement Rural et de l'Environnement et le PNUD Mauritanie, et a visé principalement à :

- informer les participants sur le contexte international relatif à la gestion et à la circulation de l'information environnementale;
- présenter et analyser la composante "gestion et circulation de l'information" des différentes conventions internationales et/ou régionales pertinentes;
- permettre aux participants d'acquérir les connaissances de base et les outils à même de leur permettre d'entreprendre avec succès, le travail requis dans le cadre de leur SISEI national respectif, à savoir:
 - a) l'inventaire exhaustif de toute la législation nationale existante relative à la gestion et à la circulation de l'information environnementale (y compris les conventions et traités internationaux ou régionaux ratifiés);



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- b) l'analyse des domaines d'activité environnementale restants à couvrir pour assurer le respect de tous les engagements pris par le pays, aussi bien sur le plan international que national en matière de gestion et de circulation de l'information environnementale ;
- c) l'organisation et l'affichage des données et résultats sur le Portail SISEI national.

[SDI email discussion lists \(and archives\)](#)

The Global Spatial Data Infrastructure Association (GSDI) has established several email discussion lists so that colleagues may more actively generate and participate in discussions about spatial data infrastructure activities.

- Are you interested in discussing technical issues related to SDI developments? Then, join the [Technical Working Group Discussion List](#).
- Are you interesting in discussing legal, economic, social, institutional and ethical issues related to SDI developments? Then, join the [Legal and Economic Working Group Discussion List](#).
- There are also regional discussion lists: [SDI Africa Discussion List](#) - [SDI Asia and Pacific Discussion List](#) - [SDI Europe Discussion List](#) - [SDI North America Discussion List](#) - [SDI South and Central America and the Caribbean Discussion List](#)

You may subscribe to any of the new lists. All are welcome to subscribe. Initially you must click on and subscribe to each list individually. [Note that subscribing to any of these lists is separate from being on the SDI newsletter mailing list]. Once you are subscribed you will receive a confirmation message by email, to which you must reply. After that, you will receive email messages sent to the list by other subscribed members, and you will be able to send mail to the list from your subscribed email address.

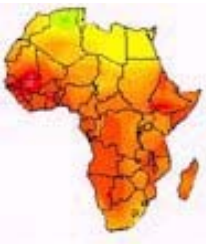
[TIGER – Strategic Plan for Africa 2005-2014](#)

The recently held 2nd TIGER Workshop (TIGER-2) [8-11 November 2004, Pretoria, South Africa] had a large and representative participation (90 from Africa, 30 from Europe, 15 from US and Canada). [Proceedings, Programme and Presentations](#). TIGER-2 has proposed a long-term strategic plan spanning a 10-year period. Further, TIGER has been linked into the Africa Water Vision for 2025, which was adopted by Heads of Governments of the African Union. The 10 Year Strategic Plan is available for your reference and for further comments. TIGER Secretariat would appreciate receiving comments before 15 January 2005, after which the document will be circulated as an endorsed outcome of the meeting. A summary report of the TIGER Workshop as well as further information related to the status of the submitted TIGER projects following the ESA call for proposals earlier this year should be online soon. Activities for 2005 are currently being planned. Suggestions to the coordinator at tiger@esa.int are welcome. For further information, contact Josef Aschbacher (TIGER Secretariat), European Space Agency, josef.aschbacher@esa.int.

[Developing advocacy materials on statistics for development outcomes](#)

PARIS21 is currently developing advocacy materials to show how greater availability and use of good statistics can improve development outcomes. This is a necessary first step in making the case for (1) increased funding of statistics and statistical capacity building in developing countries, and (2) greater use of statistics in policy-making. To do this, PARIS21 needs your help. They are looking for good and bad examples of the availability and use or lack of use of statistics in relation to their impact on development outcomes. [If you have relevant examples from your experiences in your country or institution, please send brief details to \[contact@paris21.org\]\(mailto:contact@paris21.org\)](#). [Note from SDI-LAC Editor: *Here's an opportunity to emphasize the utility of GIS for spatial analysis and visualization of statistical data*]

PARIS21 will follow up with you for more detail if needed and will confirm with you before any examples are published. Anonymity will be maintained. The target audience is senior policy-makers in developing countries and development agencies, including Ministers of Finance and International Development Association deputies. Effective advocacy for statistics, both in terms of promoting evidence-based decision making as well as ensuring that statistical activities are properly financed and resourced, is crucial if the long-term vision of developing national statistical systems is to be achieved. While there may be greater awareness of the need for better data generally as a result of the emphasis on global monitoring including MDGs, and on national poverty reduction strategies, the case for further strengthening of official statistics still needs to be made with policy makers and data users at all levels. PARIS21 is in a unique position, not only to undertake advocacy itself at the international and regional level, but also to provide support and access to advocacy material to the managers of national statistical systems. On this page, users will find materials (e.g., videos, brochures, articles) that they can adapt for their own advocacy efforts.



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[Darfur aid workers receiving assistance from orbit](#)

An European Space Agency (ESA)-supported consortium called Respond is supplying Earth Observation-derived maps and other geographical information products direct to users in the field including the German Red Cross (DRK), the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) and the German federal disaster relief agency Technisches Hilfswerk (THW). A variety of different topographic and thematic maps have been delivered to users, their scale ranging from 1: 200 000 for reconnaissance and route planning, down to 1: 2000 products that map individual tents within individual camps and clinics.

[Humanitarian Early Warning Service](#)

The IASC Humanitarian Early Warning Service (HEWSweb) is an inter-agency partnership project aimed at establishing a common platform for humanitarian early warnings and forecasts for natural hazards and socio-political developments worldwide. The main objective of HEWSweb is to bring together and make accessible in a simple manner the most credible early warning information available at the global level from multiple specialized institutions.

[African Regional Preparatory Conference for the World Summit on the Information Society \(WSIS\)](#) to be held from 2 to 4 February 2005 in Accra, Ghana. The theme for the conference is: Access, Africa's key to an inclusive Information Society. The conference will be preceded by pre-Conference workshops from 29 January to 1 February 2005. The conference is being coordinated by the Economic Commission for Africa (ECA).

[WSIS Thematic Meeting on Measuring the Information Society](#), Geneva, Switzerland, 7-9 February 2005

The WSIS Thematic Meeting on Measuring the Information Society is being organized under the umbrella of the Partnership on Measuring ICT for Development. It will bring together representatives from all countries involved in the statistical measurement of the information society, with the objective of:

- Agreeing on a common list of ICT core indicators to be collected by all countries and harmonized at the international level, which will constitute the basis for a database on ICT statistics
- Identifying and addressing the needs of national statistical offices (NSOs) in developing countries as regards technical assistance in the compilation of ICT indicators
- Discussing mechanisms to quantify the relevance and contribution of ICT indicators towards improving development and achieving the Millennium Development Goals
- Presenting ongoing work concerning the creation and maintenance of an international database on ICT indicators

The outcome of the meeting will provide practical suggestions on policies and programmes that help countries to measure ICT for policy-making. It will produce concrete recommendations to implement the Geneva Plan of Action in the area of ICT indicators for benchmarking and evaluating ICT access and use, as a practical input to the second phase of WSIS (Tunis, November 2005) and its follow-up. The report of the meeting will be presented at the WSIS PrepCom2, to be held in Geneva from 17 to 25 February 2005. **Potential participants should fill in the attached registration form** and send it to emeasurement@unctad.org as soon as possible, but no later than 2 February 2005.

[The third version of the Draft GEOSS 10-Year Plan Reference Document](#) (GEO 203-1) is now available to be downloaded from the front page of the [GEO website](#), on the upper right under the heading "About GEO." Review the cover note on the document carefully.

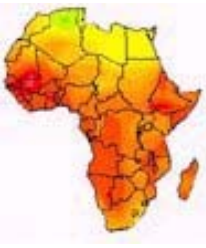
[U.N. Stresses Science and Technology for Economic Growth](#)

[Innovation: applying knowledge in development](#). UN Millennium Project, Task Force on Science, Technology, and Innovation, 2005. This pre-publication report is available online.

'Early bird registration' for the [8th International Conference on Global Spatial Data Infrastructure](#) ends 31 January 2005. Any questions can be directed to: fig@fig.net.

GIS Tools, Software, Data

[Resolutions](#) and [Presentations from the workshop and seminars at the 19th ISO TC211 Plenary meeting](#) in Pallanza, Italy, October 7-8, 2004. [Standards in Action workshop - Geography Markup Language \(GML\) Standard - ISO Metadata and associated Standards - Results of OGC Web Services, Phase 2 Interoperability Testbed](#). Note as



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well a series of [slides on ISO/TC 211](#) that you may download for your convenience and use when presenting the work of ISO/TC 211 (July 2004).

[ISO/TC211 Approves OGC Web Map Service as International Standard](#)

The OGC's WMS Specification (now also ISO 19128) specifies protocols that provide uniform access by HTML clients to maps rendered by WMS enabled map servers on the internet. Software complying to the specification enables automatic overlay, in ordinary web browsers, of map images obtained from multiple map servers, regardless of map scale, projection, earth coordinate system, storage format, or vendor solution.

[IWMI Global Map of Irrigated Area \(1999\) Version b-release](#)

The Remote Sensing and GIS group at IWMI has released the Beta version of a [map of the irrigated area of the world](#). It has been produced using 20 years of data, at 10 day intervals, with 10 km pixel resolution (AVHRR), combined with: global 1km Spot Vegetation data (monthly); JERS 1 radar data (at 100m pixel scale), covering the main forest areas of South America and Central Africa; plus GeoCover 2000 data (nominally 15m, re-sampled to 150m). 628 unique land cover classes have been identified, and various innovative procedures and techniques have been used to classify them. Ground-truth data obtained in India, SE Asia, Africa and South America has been used to refine the classes. The Beta release map shows 53 irrigated classes, derived from the 628 classes in the master file.

This Beta release is being disseminated to obtain feedback on the spatial accuracy and definition of irrigated areas. At the moment, we present only the spatial distribution of irrigated areas. Every irrigated area pixel has different degree (% area) irrigated. In order to establish this, IWMI is currently working on a sub-pixel decomposition technique which will precisely establish what percentage of a pixel is irrigated. The study will establish the precise areas irrigated season by season for the entire globe, taking each irrigated area class at a time. They have 2 unique methods under evaluation and are currently working to establish precise areas in version 1.0

-- In the meantime, IMWI would like your reactions on what they have mapped so far. Can you;

- (i) tell them where there should be irrigated area that is not shown on the map?
- (ii) identify places where the map shows irrigated area, but to your knowledge, none exists?
- (iii) note where there are specific areas, where you can identify irrigated area and its crop pattern in your locality? and
- (iv) say if the class groupings make sense to you, and whether you agree with them in locations that you know well? If they are incorrect, what do you think they should be?

Please note, the emphasis on "version- β " is to attract serious scientific comment, discussion and feedback. IMWI's goal is to have a comprehensive release of products, documents, statistics, and maps before the end of May 2005. See link for further details.

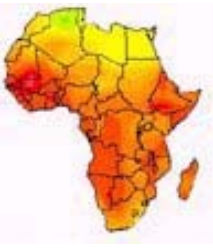
Version 1.2.1 of GeoNetwork OpenSource Released

[GeoNetwork OpenSource](#) is a web based Geographic Metadata Catalog System developed by FAO-UN, WFP-UN and UNEP. The system implements the ISO19115 Geographic Metadata and ISO 23950 (Z39.50) standards. Furthermore it provides an OGC-WMS client application [InterMap OpenSource](#) and integrates the [Deegree](#) OGC Web Map Server in its full installer version, including sample data. The application is available in three different forms:

- As an integrated application combining GeoNetwork metadata catalog, Intermap Web Map Services HTML client/viewer application and the lat/lon Deegree Web Map Server v1 with added time dimension.
- As an integrated application combining GeoNetwork and InterMap.
- InterMap has been released as a standalone WMS client application, running as an HTML webapp on a webserver.

The update fixes and improves a number of features.

- added Spanish language (with credits to Miguel Angel Manso Callejo from EUIT. Topografica UPM in Spain for the extensive translation work!!)
- improved editor (automatic save before modifying of metadata structure)
- fixes for UTF8 encoding in distributed search (fix on external library)
- some statistics functions added
- contact details have been merged back into the metadata record (this requires running a script while performing the upgrade from version 1.2.0. Nothing has to be done on a fresh installation)
- Improvements on the integrated InterMap OGC compliant and ArcIMS compliant map viewer.



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- Improved metadata support, time support and SLD support on InterMap.
- more small fixes and improvements.

Links to operational nodes based on GeoNetwork OpenSource: [FAO GeoNetwork](#), [WFP-VAM SIE](#)

[GeoMedia Transportation Manager Offer for Universities - Are You Maximizing Opportunities to Collaborate with the Transportation Industry?](#)

Universities involved with the transportation industry look for ways to collaborate with their local departments of transportation. Recently, Intergraph Mapping and Geospatial Solutions learned that departments of transportation would be interested in collaborating with universities using GeoMedia technology. Intergraph encourages you to maximize opportunities in your state. Intergraph can help by providing the latest GeoMedia technology and support, and for qualified universities we will offer a GeoMedia Transportation Manager license.

Geospatial Research, Applications, Reference Material

[Proceedings from Land Cover Mapping and Change Assessment workshop: Applications, policies and networks in support of sustainable development](#), Florence 21-23 September 2004

Intergraph Research Grant awarded in support of Web-enabled 3D GIS virtual model of Luxor City (Egypt)

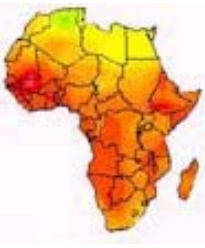
Intergraph, in collaboration with the UCGIS, presented a research grant to [Dr. Tarek Rashed](#), Assistant Professor, Department of Geography, University of Oklahoma (OU). The grant offering, including US\$5,000 cash funding and a \$50,000 software donation in recognition of an exceptional and innovative applied research proposal, provided an opportunity for any UCGIS member using or intending to use Intergraph technology as the foundation for geospatial research to apply. In an effort to promote the architectural heritage of Luxor City, Egypt, the OU Department of Geography plans to use Intergraph's software donation to ultimately create a comprehensive Web-enabled 3D geographic information system virtual model of Luxor City. Contact: rashed@ou.edu.

Linking climate, water and civilization

A new study aims to provide new insights into the key relationships between climate, water availability and human activities in the semi-arid regions of the Middle East and North Africa (MENA). This study is getting under way at the University of Reading. The research will help shape the perception of the past, present and future of one of the most complex – and often troubled – parts of the world. With a major funding award of nearly £1,240,000 from the Leverhulme Trust, a team of Reading researchers, including meteorologists, hydrologists, geologists, archaeologists and geographers, will work together to assess changes in the hydrological climate in the MENA region and its impact on human communities. The one resource common to past and present activity is water, changing from a natural resource to a cultural commodity, and now having become the center of political tension. For more information, contact Craig Hillsley, University of Reading, c.hillsley@rdg.ac.uk or to learn more about the Leverhulme Trust, visit www.leverhulme.ac.uk.

[GISRME project \(Geographic Information System on the Risk of Malaria Epidemics\) - Madagascar](#)

Conducted from its outset at the Institut Pasteur in Madagascar, this research has already made possible the publication of an **evolutionary malaria atlas**, a "georeferenced database" that consolidates geographical, climatological, epidemiological, parasitological, and entomological results on malaria from the large island. Now they are seeking zones for priority disinfestation in the region of Madagascar's high plateaux in order to reinforce the control programme before epidemics happen. Previous studies have shown that the egg-laying sites of *Anopheles funestus*, the principal vector of the Highlands and target of the disinfestation, were principally rice fields. Unfortunately, the data currently available on the layout of these rice fields date from the 1950s. The GIS and remote sensing unit of the [Institut Pasteur in Madagascar](#) implemented the GISRME project (Geographic Information System on the Risk of Malaria Epidemics), which, due to satellite images in particular, should make it possible to update maps of the rice fields. The goal is to locate "high risk" villages and to issue recommendations to health authorities who want to target their anti-vector efforts at particular villages. This should reduce the cost of the anti-vector effort and as a result respond to the public health demands of the Malagasy government, which, in a cost/benefit assessment, is recommending the optimisation of insecticide spraying. Contact: ipm@pasteur.mg.



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Training Opportunities

[Announcing next intake for Diploma in Geoinformatics jointly offered by UCLAS and ITC in Dar Es Salaam](#)

The next nine-months joint UCLAS-ITC Diploma in Geoinformatics will be offered at [University College of Lands and Architectural Studies \(UCLAS\)](#) starting on 6 September 2005. The diploma in geoinformatics (GFM4), which in the past was offered only at the ITC in the Netherlands, is now also offered jointly with the ITC and the Department of Geomatics at UCLAS since September 6, 2004. This move is designed to bring this very popular course closer to the targeted clientele in East Africa and the SADC region. Bringing the GFM4 diploma course to UCLAS will also enrich the course by bringing in local/regional context and thus making the diploma more responsive to the needs of various development sectors in the East African and the SADC region. Contact the Head, Geomatics Department, uclas@uclas.ac.tz, mtalo@uclas.ac.tz or the Course Coordinator Mr. Eugene Silayo, silayo@uclas.ac.tz, with questions regarding the diploma program, the proposed fee structure and [application forms](#).

[New Online Course in Image Processing for Environmental Studies](#), begins January 10, 2005 and will be open for six months, Fredericton NB, Canada. Covers the use satellite images or aerial photographs for building GIS layers from your desktop. Organized by Prof. Dr. Brigitte Leblon, Faculty of Forestry, University of New Brunswick, bleblon@unb.ca. The image processing software used (Geomatica image processing software by PCI Geomatics Enterprises Inc.) will be available to students during the period of the course. The course is divided in 11 modules to be completed over a period of 6 months. At the end of the course, university certificates will be awarded.

[IIASA Young Scientists Summer Program 2005](#)

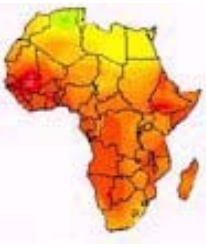
IIASA's annual Young Scientists Summer Program (YSSP) is a three-month (June-August) research program for advanced students whose interests correspond with IIASA's ongoing research. The 2005 program starts on June 1, 2004 and ends on August 31, 2004. Applicants from all over the world are welcome. Students from countries in which IIASA has a National Member Organization (NMO) as well as students from non-NMO countries in both the developed and developing worlds are encouraged to apply. Deadline: 15 January 2005.

[GIS Training & International Scholarship Awards Program - The Society for Conservation](#)

The [Society for Conservation GIS](#) will be offering GIS Training, focusing on the ESRI suite of GIS software, prior to and following the Eighth Annual SCGIS Conference, to be held from July 31 - August 2, 2005 at Monterey, California (USA). The SCGIS Conference, as in previous years, is scheduled to coincide with the ESRI User Conference in San Diego, California (USA) from July 25-29, 2005. The SCGIS conference will provide a venue to discuss and promote local and global conservation of natural and cultural resources through geospatial technologies as well as provide a venue to establish long lasting and productive partnerships with fellow conservationists. Conservation GIS users who require financial assistance to enable them to attend the SCGIS and ESRI User Conferences and GIS trainings can apply for limited, competitive scholarships. Scholarship funds will cover partial airfare, and waivers for SCGIS and ESRI User conference registration fees, as well as tuition for the pre and post conference GIS trainings. This year's training curriculum will be dictated by the skill-level of accepted applicants. All efforts will be made to accommodate the accepted applicants specific training needs. Scholarship application requirements are as follows: 1) Applicants must be affiliated with a non-profit conservation organization or a university conservation project in their region or country. Preference will be given to those who make a sincere effort to supply as much of their own funding for travel to the conferences as possible. Scholarship awardees will be required to present a talk and poster at the SCGIS Conference describing their conservation efforts and projects within their organization, present this talk and poster in the Conservation Booth/Area at the ESRI User Conference, and be available to volunteer to help run the SCGIS conference. Deadline for SCGIS conference scholarship applications is January 31, 2005. If you have any questions, contact: Charles Convis, Chair - SCGIS International Committee at ecp2@esri.com or Prashant Hedao, Co-Chair International Networks Committee at ecp10@esri.com or Alexander Yumakaev at scgis2005@yahoo.com. [Source: PPGIS.net]

[ITC Refresher Courses in 2005](#)

In 2005, ITC will organize ten refresher courses. Refresher Courses are short courses (mostly two weeks) organised for ITC alumni in their home countries or in their region and are meant to increase the impact and prolong the effect of



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earlier training. Colleagues and supervisors of an alumnus are also allowed to participate in (a part of) a Refresher Course. Furthermore, alumni of former DGIS and SAIL projects may participate. The Refresher Courses are mainly funded by the Netherlands Fellowship Programme (NFP). In 2005, the following refresher courses in Africa will be organised:

- Eritrea - Novel approaches in earth observation and geo-information science for earth systems analysis
- Ethiopia - Modern data acquisition and processing tools for integrated water resources management
- Ghana - The use of geo-information as a tool for combating bush fires in West Africa
- Kenya - Spectroscopy and dynamic GIS modeling
- Rwanda - Geo-informatics for hydrological modeling
- Uganda - Geo-information for natural disaster management in Eastern Africa

Funding Opportunities, Awards, Support

[The World Bank Seeks Ideas for Environment Projects](#)

The Bank's Development Marketplace plans to award \$3 million for innovative, local projects that provide unique solutions to environmental challenges. The Development Marketplace 2005, with the theme of "Innovations for Livelihoods in a Sustainable Environment," reflects the Bank's determination to support local ideas that improve the lives of poor people while minimizing environmental degradation. The competition is open to civil society groups, social entrepreneurs, youth organizations, private foundations, academia, private-sector corporations and others. The maximum award will be US\$150,000 per proposal. Proposals will be accepted until January 21, 2005. [Guidelines for DM 2005 Competition](#). [Guidelines \(français\)](#). [Guidelines \(Arabic\)](#).

[Netherlands Fellowship Programme \(NFP\)](#)

The Netherlands Ministry of Foreign Affairs awards a number of fellowships annually under the Netherlands Fellowship Programme (NFP), with the specific intention of assisting participants from developing countries. For detailed information on NFP fellowships, please contact the Netherlands Organization for International Cooperation in Higher Education (NUFFIC), P.O. Box 29777, 2502 LT The Hague, The Netherlands (e-mail: nuffic@nuffic.nl, <http://www.nuffic.nl/nfp/>). Deadline NFP applications ITC degree courses: 31 January 2005.

[AGROPOLIS - International Graduate Research Awards Program in Urban Agriculture](#)

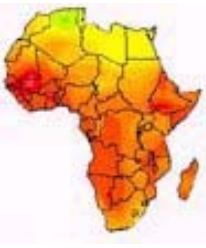
AGROPOLIS is an awards program managed by the International Development Research Centre (IDRC) that supports innovative master's and doctoral level research. It aims to add to the body of knowledge of urban and peri-urban agriculture, and thereby to support interventions that address critical areas in the industry. The award will cover justifiable field research expenses to a maximum of Canadian \$20,000 per year. Award tenure corresponds to the period of field research, normally no less than 3 months and no more than 12 months. Up to 14 awards will be granted annually, with at least five awards supporting field research at the master's level. AGROPOLIS is intended primarily for researchers from developing countries, including those studying in a developed country and returning to the south after their studies. The research must be for a master's or a doctoral thesis. Researchers must be registered at a university — in the South or the North — that has training and supervisory expertise in the field of urban agriculture or fields relevant to urban agriculture. Deadline: 31 January 2005. Contact: AGROPOLIS@idrc.ca.

[Co-financing water and sanitation actions with the ACP-EU Water Facility in African, Caribbean and Pacific \(ACP\) Countries](#)

Note: originally the closing date was 17 January 2005. This was extended to 31 January 2005. http://earth.esa.int/tiger/docs/EU_ACP_Water_Facility_guidelines.doc ([français - lignes directrices](#))
http://earth.esa.int/tiger/docs/EC_ACP_Water_Fac_Annex.doc

[Changemakers Innovation Award](#)

The Changemakers.net has a contest underway now to find the best ways citizen sector organizations in any field have found to generate a "citizen base" for their successful and sustainable social change work. Five winners will each win a \$1,000 cash prize. Entries have already come in from Benin, Canada, Congo, India, Kenya, Malawi, Nepal, The Netherlands, Nigeria, Tanzanis, Tibet, the United States, and Vietnam. There you'll find articles of interest, citizen-based models of social change, along with contest submissions, guidelines, and an online form for contest submissions, which must be in English. The deadline for applications, comments, and rating contest entries is 14 January 2005.



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[IITA-Lukas Brader Scholarship Fund \(LBSF\) for PhD in Agriculture and Related Sciences](#)

International Institute of Tropical Agriculture (IITA), in collaboration with WU through the IITA-LBSF Scholarship Program, provides graduate training for outstanding students from sub-Saharan Africa to conduct research towards a PhD program in agriculture and related sciences. The scholarship is offered once in every two years. The scholarship covers three phases: six months of preparatory work at WU, followed by approximately three years of research at IITA and finally a period of six months at WU, completing the thesis. The successful recipient will conduct research in areas pertinent to his/her country's agricultural development interest and IITA's research priorities—crop improvement (cassava, maize, plantain and banana, yam, cowpea, and soybean), plant health, and resource and crop management. The scholarship provides financial support at WU and at IITA to cover costs of living, study, research, and transportation to and from WU and IITA. The deadline for the submission to IITA is 28 February 2005. Contact: : e.oyewole@cgiar.org.

[Bill & Melinda Gates Foundation Access to Learning Award](#)

Each year an award of up to US \$1 million is given to a public library or similar organization outside the United States that has an innovative program offering the public free access to information technology. Deadline: February 28, 2005.

Chaque année, un prix pouvant atteindre un million de dollars U.S. est décerné à une bibliothèque publique, ou à toute autre organisation comparable, en dehors des États-Unis qui possède un programme novateur offrant un accès public gratuit aux technologies de l'information. Date limite: le 28 février 2005.

Employment Opportunities

[Expressions of Interest - Framework Agreement for Advisory Services to Support Government of Ghana's Land Administration Project](#)

In support of Government of Ghana's (GoG) Land Administration Project, DFID is providing funding to GoG for the Strengthening Customary Land Administration component. DFID now wishes to establish a Framework arrangement specifying call down services, an anticipated maximum of 100 days per year, for a consultancy team of mixed skills and experience to provide advisory services in support of GoG's Land Administration Project. Services required over the life of the arrangement will include visits to Ghana for participation in Implementation Support Missions and other advisory, supervision and monitoring missions, facilitation and coordination of study visits, as well as desk studies reviews in home country (see [draft Terms of Reference](#) for further details of required services). DFID is inviting Expressions of Interest from suitably qualified consultants and consultancy organisations. Expressions of Interest should be submitted to k-duffy@dfid.gov.uk using the [Application Form](#) by 11 January 2005.

[Tender Notice - Okavango Delta Management Plan \(ODMP\) Project](#), Botswana

Sustainable Tourism and the Community based Natural Resource Management (CBNRM) Component. Deadline: January 28, 2005.

[Anglophone Lecturers in Photogrammetry, GIS, and Cartography](#), Ile-Ife, Osun State, Nigeria

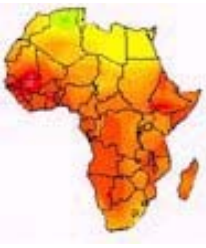
[Francophone Lecturers in Photogrammetry, GIS, and Cartography](#), Ile-Ife, Osun State, Nigeria

Regional Centre for Training in Aerospace Surveys (RECTAS) seeks Lecturers with M.Sc degree or its equivalent in Geoinformatics or related discipline preferably with at least three (3) years post qualification cognate experience in a tertiary institution of University standing or other comparable institutions. A Ph.D and published articles in reputed scientific magazines or journals is an advantage. Evidence of creative work and/or specialization in the relevant discipline is required. Ability to conceive and execute course programmes and consultancy projects is desirable. Deadline: 28 February 2005.

Postdoctoral Associate/Research Staff - Conservation planning in Madagascar, Princeton, NJ, USA

Princeton University Dept. of Ecology & Evolutionary Biology has open a unique two-year post-doctoral position joining university/NGO team to:

1. design a networked biodiversity database for Madagascar,
2. develop new tools for conservation planning,



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3. model species distributions and design reserve networks to improve regional/national protected area networks,
4. build local capacity in conservation planning.

Position is based at Princeton, NJ, USA with travel to Madagascar. Must have experience in (1) GIS, modeling of species distributions and/or reserve design algorithms; (2) working in 3rd World country (> 1 yr); (3) training or capacity-building. Additional desirable qualities: French; programming; database management. Salary level commensurate with experience. See [further information](#). Submit cover letter, resume and 3 letters of recommendation before January 7, 2004; applications will be reviewed as received. Send application to Marilyn McMullen, Dept. of Ecology & Evolutionary Biology, Princeton University, Princeton, NJ 08544-1003 USA or by email to marilynm@princeton.edu. Princeton University is an equal opportunity/affirmative action employer. For information about applying to Princeton, link to <http://web.princeton.edu/sites/dof/ApplicantsInfo.htm>.

Short and Long-Term Positions - Innovative Resources Management, Worldwide

Innovative Resources Management, a Washington D.C. based non-profit specializing in economic development and natural resource management (NRM) projects, seeks to complement our database of consultants and candidates for potential short and long-term positions worldwide. They are looking for individuals with demonstrated skills and 5 or more years experience in the following fields: community-based NRM, landscape-level biodiversity conservation, stakeholder coalition building, rural economic development, sustainable agriculture, community forestry, institutional capacity building, natural product development, [geographic information systems \(GIS\)](#) and conflict mediation and training. Field experience, local languages and French or Spanish fluency desirable. Visit www.irmgt.com to learn about IRM's mission and work. Send CV and cover letter to Ms. Rachna Sundararajan at rachna@irmgt.com or fax to 202-293-8386. No phone inquiries accepted. Deadline: January 10, 2005.

[GeoMedia International Internships](#)

Real-world work experience is increasingly important in helping students take those critical first steps from the world of academia into the worlds of business and government. Intergraph is addressing this need with the GeoMedia International Internship program. Students are given the opportunity to undertake an internship within Intergraph's worldwide network of offices. The program is aimed at 'GIS application savvy' students interested in a 20-week internship at a leading global mapping and GIS organization. Students from Intergraph Registered Research Laboratories will receive priority consideration for positions.

[Software Development Internship](#), Hoofddorp, The Netherlands

Position available for undergraduate or postgraduate student at Intergraph European Headquarters. Start date: Flexible; Duration: Six-month minimum. A [software development internship](#) position is open for an undergraduate or postgraduate student at Intergraph's European Headquarters in Hoofddorp, Netherlands. The intern will work in a multinational, dynamic environment and report to the senior software developer in Europe. The position requires working closely with the central development team at corporate headquarters in Huntsville, Alabama, USA. Requirements: fluent in spoken and written English; experienced in Microsoft Windows environment; good knowledge of Microsoft Visual Basic; Visual C++ is an advantage; good knowledge of RDBMS, DAO, SQL, and UML; ability to work in a flexible, multidiscipline and international environment. If you are a software development student looking for substantial work experience in a leading global organization and meet all of the above requirements, please contact Marek Vaculciak at marek.vaculciak@intergraph.com.

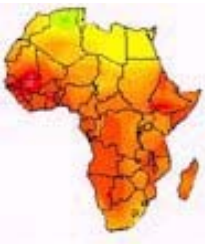
See also & [Marketing Research Internship](#) with Intergraphc European Headquarters, Hoofddorp, The Netherlands

[Ecologist \(specialised in vertebrate wildlife\)](#), Congo Basin (Gabon)

[CIRAD](#) is seeking to recruit a specialist in wildlife ecology in order to strengthen its research team. The post holder will conduct research into the ecology of animal species, exploited on a large scale in the forest ecosystems of the Congo Basin. The candidate will have a PhD in the field of conservation biology and be fully familiar with statistical tools applied to population monitoring. Ideally he or she will also possess complementary skills in geographical information systems and computer modelling. Fluent English is essential. Deadline: January 4, 2005.

[Capacity-building Officer - CGIAR – Challenge Program on Water and Food](#)

The CGIAR – Challenge Program on Water and Food (CPWF) wishes to appoint a Capacity-building Officer (CBO) to run the CPWF Capacity-building Office and be responsible for the design and implementation of the CPWF Capacity-



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building Strategy. The successful candidate will be based at the CPWF Secretariat, located at the [International Water Management Institute \(IWMI\)](#), Colombo, Sri Lanka, or with one of the partner institutions of the CPWF. CPWF is particularly interested in receiving proposals for placement through secondment of highly-qualified professionals, including an indication of institutional and logistical support that would accompany the secondment. Deadline: 31 January 2005 or until the position is filled.

[Coordinator for the Sub Saharan Africa Challenge Program \(SSA CP\)](#), Accra, Ghana

The [Forum for Agricultural Research in Africa](#) is seeking to employ a Coordinator for the Sub Saharan Africa Challenge Program (SSA CP). The overall responsibility of the Coordinator is the successful implementation of the SSA CP following the IAR4D principles. The Programme Coordinator is responsible for the facilitation and mentoring service and providing cross-team linkages for sharing experiences through methodology analysis and dissemination and information and knowledge management. Applications are accepted until 30 January 2005 or until a suitable candidate is identified.

[Professor in the Department of Population Studies](#), Gaborone, Botswana

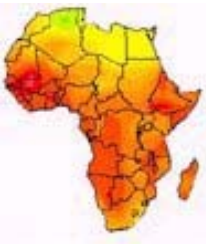
The successful candidate is expected to (i) teach technical as well as substantive aspects of Population Studies at graduate and undergraduate levels at the University of Botswana (ii) initiate, develop and conduct research independently and jointly, and (iii) provide academic leadership. Candidates must have (i) a PhD in Population Studies or related discipline; (ii) at least three years of teaching experience at the rank of Associate Professor or equivalent post at a University or comparable institution; (iii) a cumulative and substantive record of research and publications in reputed refereed journals (iv) evidence of academic and research leadership. Preference shall be given to candidates who have demonstrated knowledge of teaching and research in demographic modelling and mathematical demography. The University offers competitive salary and benefits commensurate with experience and qualifications. Applicants are to address the stated qualifications and provide other information to assist the University to determine their suitability for the position. They should also quote the vacancy number of the post applied for, provide current CV (including telephone, telefax and e-mail), certified true copies of educational certificates, transcripts, names and addresses of three referees, and send complete documentation to: The Manager, Appointments and Administration (Academic), University of Botswana, Private Bag 0022, Gaborone, Botswana; Telephone (+267) 355 2027). On-line application form may be accessed from www.ub.bw under “Jobs” section. Applicants should ask their referees to submit their references directly to the above address before the stipulated closing date. Please note that applications with incomplete information shall not be acknowledged. Deadline: 7 January 2005.

[Associate Professor \(Terrestrial global hydrology and climatology\)](#), Montreal, Canada

McGill University Faculty of Science/[Department of Geography](#) is searching for an individual whose teaching and research will focus on modeling large basin, continental or global-scale movement of freshwater. We are particularly interested in someone whose research couples hydrology with changes in climate, land cover/use, and/or water utilization, and their effect on the freshwater hydrological cycle. The emphasis should be on geophysical controls, biogeochemical transfers, links with climate, and/or integration across scales in hydrological systems. In teaching, resolving the global water cycle and determining how human activity is altering this cycle is recognized as a “grand challenge” in the new inter-departmental undergraduate program in Earth System Science (ESS). The anticipated start date for the position is July 1, 2005. Review of the applications will begin in February 2005 and continue until the position is filled.

[Full Professor \(Land use and land cover change\)](#), Montreal, Canada

McGill University Faculty of Science/[Department of Geography](#) is searching for an individual whose teaching and research will focus on building a cross-scale understanding of the drivers and consequences of land use and land cover change. The ideal candidate will have a strong interdisciplinary approach to Earth System Science, integrating biophysical, ecological, economic, political and social processes in a manner that is consistent with the goals of programs such as the International Geosphere-Biosphere Programme (IGBP) and the International Human Dimensions Programme on Global Environmental Change (IHDP), which address the critical role of land use/cover change in Earth system functions through the Land Use and Land Cover Change Project (LUCC) and the new Global Land Project (GLP). Given the influence of land use/cover on climate change, the appointee’s expertise would be an



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obvious asset to McGill's Global Environmental and Climate Change Centre. The anticipated start date for the position is July 1, 2005. Review of the applications will begin in February 2005 and continue until the position is filled.

Country and Regional Representatives, FEWS, Worldwide

ARD is preparing a bid for the USAID-funded Famine Early Warning Systems Project and is currently requesting expressions of interest from specialists for potential assignments as Country and/or Regional Representatives in Afghanistan, Angola, Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Greater Horn of Africa Region, Guatemala, Honduras, Haiti Regional, Kenya, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Rwanda, Sahel Region, Senegal, Somalia, South Africa, Southern Africa Region, Southern Sudan, Tanzania, Uganda, Zambia, and/or Zimbabwe. General responsibilities include:

- Information gathering and data analysis for food security and early warning. Develop well defined annual work plans.
- Develop close working relationships with USAID Missions, US and foreign government agencies, private donor agencies, and NGOs; work closely with mission personnel involved in food security, agriculture, and the PL 480 program.
- Ensure early warning, vulnerability analysis and response planning needs of USAID Missions are properly identified and signaled to Chief of Party.
- Implement FEWSNET activities for local capacity-building to provide food security/famine early warning/response planning information in a sustainable manner.

Deadline: open until filled.

UN Volunteer Burundi / Geographical Information System Engineer [Source: Portail Geomatique]

United Nations Operation in Burundi (ONUB) - Under the direct supervision of the Chief, GIS Unit or his/her designated officer, the incumbent will be responsible for operating & managing GIS units, collecting GIS Data and monitoring & manipulating Data integrity within the systems of ONUB. Specifically he will: He will be responsible for the following:

- To provide geographic/terrain analysis using GIS technology (including remote sensing);
- To produce terrain studies and predicts effects of weather on the terrain and situations;
- To compile textual, graphic products from text and electronic format of geographic data (vector, Raster, air photography, satellite imagery etc...)
- To manage, reproduce, and archive data into the GIS database and maintain it, and provide internet/intranet based GIS service.

The incumbent must possess at least a Bachelor Degree or equivalent in the field of GIS, and subsequent specialization in the Topographic Engineering or Information Technology (IT) for practical operations and have a minimum of two (2) years in the GIS (GIS software, geographic/terrain analysis, remote sensing, survey, GIS data collection, etc...) works. Knowledge and practical experience of GIS software listed below is required. Candidate should indicate clearly with proof on his/her level of knowledge/practical experience:

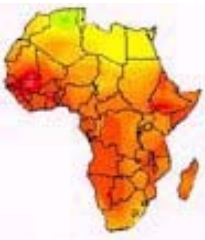
- ArcGIS (ArcInfo, ArcEditor, Arcview, and other ESRI extensions);
- ArcIMS, ArcSED and ArcPAD;
- ERDAS Imagine Advantage and other ERDAS extensions;
- RDBMS (Oracle, MS SQL Server, ACCESS ,etc.)

and other relevant GIS and/or IT knowledge.

Must be familiar with Information Technology (IT), web technology, Networking and IT Security, Software program languages, and GIS tools such as, Digitizing, Vectorizing, Rasterizing tools; GIS data (VPF, VMAP, DTED/ DEM, ADRG,DCW, LANDSAT,SPOT,IKONOS, RADARSAT, etc.) and information office software; Experience in a multinational working environment; Direct experience in military Terrain Analysis and in UN Operations would be an advantage; Cartographic skills. Required Language(s): English essential, French would be an asset ; Duration: 6 months with possible extension. Contact: bourgault@un.org.

Full Professor (Spatial Analysis and Decision Support), Amsterdam, the Netherlands

The Institute for Environmental Studies (IVM) of the Faculty of Earth and Life Sciences has a vacancy for the head of the Department of Spatial Analysis and Decision Support (SPACE) of IVM. The department head is expected to play a leadership role in the department and in the institute, to coordinate research, to supervise PhD students and to



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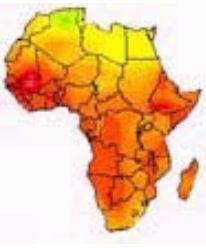
contribute to masters-level teaching. We are looking for a leading scholar with academic qualities of the highest level, evidenced in a PhD and internationally-refereed publications. Various disciplinary backgrounds would be considered, including physical geography, spatial planning, economics, policy sciences, information science and environmental sciences. The candidate should have a good reputation in national and international research networks, with a track-record in initiating and carrying out research projects and programmes. Candidates should be open to and motivated by cooperation with other disciplines. Management experience is preferred. Further information can be obtained from Prof. Frans Berkhout, tel. +31 (0)20 444 9525, e-mail: frans.berkhout@ivm.falw.vu.nl. Applications including a CV and a statement regarding the candidate's vision of the role should be sent before February 10, 2005 to Dr. J.M.R.M. Neutelings, Faculty of Earth and Life Sciences, Vrije Universiteit, De Boelelaan 1085, 1081 HV Amsterdam, e-mail: rob.neutelings@falw.vu.nl.

5 Senior Scientist/Research Professor Positions, Brookings (near Sioux Falls), South Dakota, USA
Geographic Information Science Center of Excellence (GIScCE) at South Dakota State University seeks five tenure-track positions at a rank appropriate to the candidate's qualifications to conduct research on the application of geographic information science/remote sensing in one of the following areas: Satellite Sensor Characterization and Calibration, Water Resources, Geostatistics and Geospatial Analysis, Quantitative Remote Sensing, Ecosystem Ecology. Required: earned PhD in appropriate field with a background in GISc/Remote Sensing and a demonstrated record of successful externally funded applied scientific research in area of specialty. The GIScCE is a new research collaboration between SDSU and the USGS EROS Data Center focusing on earth observation and monitoring. Screening of applicants begins February 1, 2005, and continue until the position is filled.

Open Tender - Project Manager and Information and Communication Expert, Zambezi River Authority, Zambia
The Zambezi River Authority (ZRA), headquartered in Lusaka, Zambia, is implementing a Southern Africa Development Community (SADC) project, the ZACPRO 6, Phase II Project whose overall objective is to improve water availability and protection against floods, droughts, water resources pollution and environmental degradation in the Zambezi River Basin, through the development of an integrated water resources management strategy and the establishment of a river basin institution involving all the Riparian States. ZRA as the Project Implementing Agency, invites tenders (Portuguese) for Project Manager and Information and Communication Expert both to be based at the ZRA Head Office in Lusaka, Zambia, but with extensive travel throughout the eight Zambezi Riparian States in particular, and the SADC region as a whole. The contracts for both positions will initially be for one year but with a possible renewal for a further two years. Project Manager application requirements. Information and Communication Expert application requirements. Deadline for Submission of Tenders is January 21, 2005.

Open Tender - Establishment & Management of a National Computing Centre, Kigali, Rwanda
The establishment of the National Computing Centre (NCC) in Rwanda was proposed in the National Plan for Information and Communication Infrastructure as a way to facilitate ICT business planning, shared infrastructure and skills and leverage for new technology opportunities. The NCC is expected to focus on high level cross-ministry technical and operational facilitation, in order to allow individual ministries to develop their own ICT to suit local needs while relying on the NCC for technical support. The NCCs services include networking, data security, ICT training, web services, customer support, installation and maintenance of ICT infrastructure, policies and procedures, software licensing and distribution, application development and support for the e-Government programs. A feasibility study for the NCC is available. The successful tenderer shall design, implement and manage the NCC on behalf of RITA for a period of five years or other agreed period. Using the feasibility study as a basis, it shall inter alia validate the business plan, recommend funding models, design the NCC, procure and install startup systems, hire suitable staff and provide management support for an agreed period. Deadline for Submission of Tenders is 8 February 2005. The assignment is planned to commence around mid March, 2005.

Open Tender - Development of e-Government Technical Standards & Guidelines, Kigali, Rwanda
The overall objective of the assignment is to establish and disseminate sound and consistent ICT management practices across government in Rwanda. The Standards and Guidelines will serve as a common reference point for facilitating efficient and effective coordination of ICT investments across the public sector and provide the basis for operational support of the Governments ICT requirement. The successful tenderer should be able to perform the following activities:



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(a) Develop ICT Technical Standards for the acquisition, development, management, support, and use of information systems and technology infrastructure.

(b) Develop ICT policy Guidelines to promote interoperability, open systems, end user satisfaction, security and prudent technology capital investment best practices.

(c) Develop ICT security standards and privacy policies

The budget for the services amounts to SEK 150,000. Deadline for Submission of Tenders is 8 February 2005. The assignment is planned to commence around mid March, 2005.

[International Senior Technical Advisor](#), Kigali, Rwanda

Terms of Reference for an International Senior Technical Advisor to support the Rwanda Environment Management Authority. Duration: 12 Months (renewable); proposed starting date: February 2005.

[Project Manager](#), Kigali, Rwanda

Terms of Reference for a Project Manager to support the Rwanda Environment Management Authority. Duration: 12 Months (renewable); proposed starting date: February 2005.

The thrust of the Decentralization and Environment Management Project (DEMP) is capacity building for sustainable management of environmental and natural resources, using decentralization as a developmental tool. It does so by supporting capacity development of the Ministry of Lands, Environment, Forestry, Water and Mines (MINITERE) and the Rwanda Environment Management Authority (REMA) to implement environment policies and enable it to support the devolution of power for environmental management to the districts. The three-year project will support the integration of environment and natural resources issues into district development planning and budgeting. To reinforce this, information, education and training support will be provided to the local authorities in the districts to enable them favourably influence the attitudes and behaviours of the population towards the management of environmental and natural resources. Population pressure on the environment will be reduced through the promotion of innovative environmental practices at the community level. Deadline: 15 January 2005.

Other

[Green miniAtlas - a quick reference for monitoring environmental performance across countries](#)

With the goal of creating awareness of important development issues in students and youth, the World Bank has launched a new book, Green miniAtlas. The atlas contains easy-to-read maps, tables, and graphs highlighting key environmental data for over 200 of the world's economies. The information in the Green miniAtlas is a quick reference for monitoring environmental performance across countries. It links the environment to the broader development challenges of improving health, raising productivity, and fighting poverty. It is available in English, French, and Spanish.

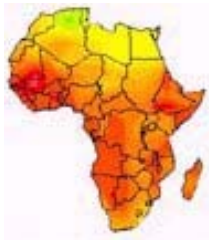
[UN Global E-government Readiness Report 2004 - available online](#)

This year's report comprises two parts. Part I presents the UN Global E-Government Readiness Survey 2004 while Part II presents a special focus on what constitutes disparity in access to ICT. It delves into the issues of what constitutes a lack of access-for-opportunity or the 'access- opportunity divide', what defines it, what governs it and where the countries of the world are placed in terms of their access to ICTs. The Report proposes a taxonomy of countries according to their access opportunities. In doing so it posits the Access-for-Opportunity Framework: a structured re-thinking about accelerating 'real access' for all.

[Reducing poverty or repeating mistakes? – a civil society critique of Poverty Reduction Strategy Papers](#)

The report outlines the perspectives, positions and recommendations of PPPR partners in relation to PRSP process, PRSP policy contents, and implementation and monitoring of PRSPs. The detailed and wide-ranging critique given and the recommendations made are directed towards national governments, donors and civil society itself. The report is the result of a desk research study involving partner NGOs linked to the PPPR project in the following countries: Burkina Faso, Zambia, Mozambique, Cambodia, Vietnam, Bangladesh, Honduras, Bolivia and Nicaragua as well as AFRODAD, an organisation working at the continental level.

[Launch of a new refereed e-journal: International Journal of Education and Development using Information and Communication Technology \(IJEDICT\)](#)



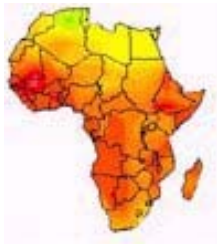
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A new refereed e-journal: International Journal of Education and Development using Information and Communication Technology (IJEDICT) has been launched. Articles in the first issue will be published early in 2005. The journal is published on the WWW as an open resource journal, i.e., with free and open access to all, but it has the status of commercially published journals by having an International Editorial Board and academic peer-reviewed articles. The journal concentrates on ICT in education and development in hitherto less developed parts of the world, e.g., developing countries (especially small states), and rural and remote regions of developed countries. It has a research section for academic, peer-reviewed articles, and a "studies from the field" section for edited (but not peer reviewed) case studies /reports. **Call for Papers** – IJEDICT is now calling for research papers, case studies, reports from the field, book reviews and other submissions you may wish to offer to this community. There is no set deadline - articles are published as soon as they have been reviewed and copyedited. For further details on how to submit your article, please visit the IJEDICT website. [Source: www.ppgis.net]

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

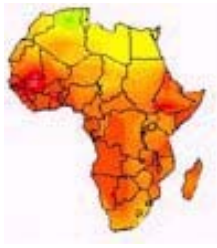
Conferences, Events

Date	Location	Event
January 2005		
10-14 January	Port Louis, Mauritius	International Meeting for the 10-year Review of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States (BPoA +10). Contact: mauritius2004@sidsnet.org
14 January	Athens, Greece	ePSINet Policy Conference on re-use of Public Sector Information in Europe The aim of the conference is to provide a forum for policy makers, public content providers, re-users and international experts to discuss the prospects for adding value through commercial exploitation of public sector information.
18-21 January	Brussels, Belgium	6th Meeting of the Group on Earth Observations and the 3rd Meeting of the Earth Observation Summit
24-28 January	Paris, France	International Conference on Biodiversity Sponsored by UNESCO, this conference is organized by the French Ministry of Research and New Technologies. Contact: biodiv2005paris@recherche.gouv.fr
27-28 January * NEW *	Accra, Ghana	3rd ICT for Government Conference
February 2005		
2-5 February * NEW *	Accra, Ghana	2nd African Regional Preparatory Conference for the World Summit on the Information Society (WSIS) - "Access - Africa's key to an inclusive Information Society"
9-11 February	Toro, Bauchi State, Nigeria	1st International Workshop on Geodesy and Geodynamics and Commissioning of the Centre for Geodesy and Geodynamics Office Complex Directions ; Call for Papers
11-12 February * NEW *	Islington, London, U.K.	International Map Trade Association (IMTA) Europe, Africa and the Middle East (EAME) Conference and Trade Show
21-23 February	Paris, France	New Space Services for Maritime Users: The Impact of Satellite Technology on Maritime Legislation
22-24 February * NEW *	Abuja, Nigeria	4th Africa Internet Summit (Afrinet 2005) - "Sustaining the Growth of ICT Access in Africa". Contact: cpr@ncc.gov.ng or afrinet2k4@ncc.gov.ng



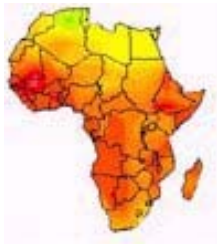
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23-25 February	Bonn, Germany	International Conference on Integrated Assessment and Management of Water Resources: A North-South Analysis The main objective of the conference is to analyze the challenges that are encountered in the integrated assessment and management of water resources in large river basins. By bringing together scientists and managers from North and South, it is expected that the present international research efforts concerning water related issues can be translated into practical methods and coherent approaches. The following themes will be addressed explicitly: data, stakeholders, scaling, integration, and policy. Contact: Nick van de Giesen, nick@uni-bonn.de
26 February – 1 March	Cairo, Egypt	1st International Conference Exhibition on Geo-Resources in the Middle East and North Africa The three main themes being considered are Oil and Gas Resources, Water Resources, and Mineral Resources
March 2005		
2-4 March	Johannesburg, South Africa	First Annual Southern African NGO Network (SANGONeT) "ICTs and Civil Society" Conference The conference will focus on ICT challenges facing the Civil Society Organization (CSO) sector, highlighting and promoting practical benefits, opportunities and lessons learned to date. It will provide an opportunity to both CSOs that are ICT-enabled, as well as those organizations which are considering introducing ICT solutions to their work, to discuss critical issues of common concern and learn from one another's experiences. This conference is aimed at leadership staff and technical employees in CSOs, and individuals who work with these organizations, including donor agencies, the private sector and the government. Contact Refilwe Rakhibane at SANGONeT: mtintern@sangonet.org.za
2-4 March * NEW *	Windhoek, Namibia	Infotech2005 Conference Contact: valiant@iway.na
6-9 March	Denver, CO, USA	Geospatial Information & Technology Association (GITA)'s 2005 Annual Conference and Exhibition . This prestigious event will present an exciting technical program, including one-and-a-half days of in-depth seminars followed by two-and-a-half days of educational sessions. This year's conference theme, Crossing Boundaries, is designed to address the boundless opportunities that geospatial information technology presents to organizations.
7-9 March	Morogoro, Tanzania	East African Integrated River Basin Management Conference - to bring together river basin professionals and researchers to critically discuss the tools of IWRM applied at the basin level.
14-16 March	Phoenix, Arizona, USA	Joint Conferences on Urban Remote Sensing – 3rd International Symposium on Remote Sensing and Data Fusion over Urban Areas (URBAN 2005) and 5th International Symposium on Remote Sensing of Urban Areas (URS 2005)
21-23 March	Delft, the Netherlands	First Symposium on Geo-Information for Disaster Management http://www.gdmc.nl/gi4dm
28-31 March	Minato-ku, Tokyo region, Japan	4th International Symposium on Digital Earth
April 2005		



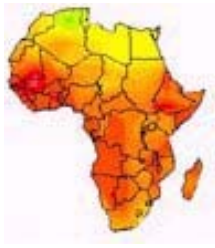
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3-7 April	Yaounde, Cameroon	<u>"Building Civil Society Through Community Development" Conference</u> Organized by International Association for Community Development (IACD); Government of Cameroon. The conference will be highly relevant to all those concerned with the role that community development can play in building or rebuilding the structures and processes of civil society. Contact: Jean Marie Minkoulou, minjm@camnet.cm
4-6 April * NEW *	Frascati, Italy	OGC Technical and Planning Committee Meetings - http://www.opengeospatial.org/events/?page=events
13-14 April * NEW *	Tunis, Tunisia	Séminaire Maghrébin sur l'Analyse de l'Information Statistique pour le Développement (see http://www.paris21.org/pages/events/all-events/list/)
16-21 April	Cairo, Egypt	<u>FIG Working Week & 8th International Conference on Global Spatial Data Infrastructure</u>
17 & 21 April	Cairo, Egypt	<u>12th International Steering Committee for Global Mapping Meeting</u>
23-28 April * NEW *	Addis Ababa, Ethiopia	CODI IV - "Information as an Economic Resource" Sub themes include e-Commerce, Open Source Software, Poverty Reduction, Intellectual Property Rights, Statistics and NEPAD, Systems of National Accounting, Knowledge Sharing, Information Access and Information Dissemination.
26-28 April	San Francisco, CA, USA	<u>GeoSpatial World 2005</u>
28-29 April * NEW *	Zanzibar, Tanzania	AfRES 6th International Conference - Real Estate and Globalisation in Africa. Conference of the African Grouping of Real Estate Societies. Contact: Organizing Committee tivea@uclas.ac.tz ; Deadline for papers: <u>11 January 2005</u> .
May 2005		
22-26 May	Alger, Algeria	<u>Séminaire International Nations Unies/Algérie/Agence Spatiale Européenne sur l'utilisation de la technologie spatiale pour la gestion des catastrophes : Prévention et gestion des catastrophes naturelles / United Nations - Algeria - European Space Agency Seminar on the Use of Space Technology for Disaster Management: Prevention and Management of Natural Disasters</u> Contact: Mme Raechelle Newman, Bureau des Affaires Spatiales des Nations Unies (BAS): raechelle.newman@unvienna.org .
24-27 May	Sesimbra, Portugal	<u>ISESS 2005 (International Symposium on Environmental Software Systems)</u> ISESS 2005 is the latest in a series of conferences and workshops that, since 1995, have provided a forum for presenting and discussing effective information processing techniques for environmental prediction and monitoring.
30 May – 2 June	Estoril, Portugal	<u>GIS Planet 2005</u> Contact: planet@gisplanet.org
June 2005		
6-8 June * NEW *	Porto, Portugal	<u>25th EARSeL Symposium - Global Developments in Environmental Earth Observation from Space</u> Followed by workshops on Remote Sensing of the Coastal Zone and 3D Remote Sensing
6-10 June * NEW *	Stockholm, Sweden	<u>ISO/TC 211 20th Plenary</u> Contact: Jörgen Wyke, Swedish Standards Institute, jorgen.wyke@sis.se
20-24 June	St. Petersburg, Russia	<u>31st International Symposium on Remote Sensing of Environment</u> "Global Monitoring for Sustainability and Security"
July 2005		



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3-6 July	Southampton, UK	Cambridge Conference: The Exchange – to be held at Ordnance Survey's head office in Southampton, UK. With a greater emphasis on networking and round-table discussions, CC:The Exchange is designed to strengthen relationships between national mapping organization senior representatives and to complement the 2007 Cambridge Conference. Contact: nmonetwork@ordnancesurvey.co.uk
9-16 July	La Coruña, España	XXII ICA International Cartographic Conference . Call for abstracts . Abstracts due <u>1 November 2004</u> . A limited number of travel awards will be made to young cartographers who are nationals from developing countries.
18-23 July	Tours, France	International Union for the Scientific Study of Population - XXV International Population Conference
19-23 July	Elmina, Ghana	1st Regional Biannual Conference of Africa Chapter of International Association of Landscape Ecology (Africa-IALE) Changing Landscapes of Africa: A Common Approach to Diverse Challenges (Paysages Changeants de l'Afrique: Une Approche Commune aux Défis Divers). Contact: hbulley@calmit.unl.edu ; http://calmit.unl.edu/africa-iale/cd/ ; http://calmit.unl.edu/africa-iale/index.html ; Africa-iale mailing list
24-29 July	San Diego, CA, USA	ESRI International User Conference
August 2005		
29 August – 2 September	Sandton, Joburg, South Africa	AFRICAGIS '05 7th bi-annual Africa GIS Conference. Theme: Beyond Talk: Geo-information working for Africa. This conference aims to take people beyond talking about what can be done with geo-information, to sharing information and experiences about what is being done on the continent and to showcase examples of where geo-information has made an impact on people's lives, particularly through local development and partnerships. Deadline for submission of abstracts: <u>31 December 2004</u> .
September 2005		
6-8 September	Bologna, Italy	River Basin Management 2005 River Basin Management 2005 is the third conference in the series which marks the growing international interest in the planning, design and management of river basin systems -- including all aspects of hydrology, ecology, environmental management, flood plains and wetlands.
7-9 September	Brno, Czech Republic	EnviroInfo 2005 - Informatics for Environmental Protection - Networking Environmental Information Deadline for abstracts: <u>February 1, 2005</u> .
12-14 September	Bologna, Italy	2nd International Conference on Sustainable Planning and Development (Sustainable Planning 2005) The papers presented at Sustainable Planning 2005 will be published in volume 83 of <i>WIT Transactions on Ecology & the Environment</i>
13-15 September * NEW *	Tanta, Egypt	Water, Health and Environment 2005 Contact: Dr Bakenaz A. Zeydan, Conference General Secretary, Head of Water Engineering Department, Faculty of Engineering, Tanta University, bakenaz@dec1.tanta.edu.eg
25-27 September	Magdeburg, Germany	Second International ICSC Symposium on Information Technologies in Environmental Engineering (ITEE'2005) The deadline for submission of papers is: <u>February 28, 2005</u> .
October 2005		
9-13 October	Bonn, Germany	6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community
25-29 October	Kusadasi, Turkey	MEDCOAST 2005 – 7th International Conference on the Mediterranean Coastal Environment Deadline for abstracts: <u>January 31, 2005</u> .
November 2005		
16-18 November	Tunis, Tunisia	World Summit on the Information Society – 2 nd phase



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December 2005		
16-21 December	Cairo, Egypt	<u>13th International Conference of the Geological Society of Africa on Geology and Development</u> . Local lead organisation, the Egyptian National Authority for Remote Sensing and Space Sciences (NARSS). Contact: Dr Mahmoud Abdeen, GSAf Vice-President (North Africa), <u>m_m_abdeen@hotmail.com</u>
2006		
16-22 March 2006 * NEW *	Mexico	<u>4th World Water Forum</u> The main theme of the Forum will be "Local actions for a global challenge". A series of regional meetings will be held throughout the preparatory phase in order to identify good practices and learn lessons from shared experiences, as well as to support and encourage local commitments. Guiding principles, main objectives, framework themes and topic sessions available for comments in the <u>concept paper</u> .
9-15 July 2006	Philadelphia, PA, USA	<u>IUSS 18th World Congress of Soil Science</u>
13-17 July 2006	Wollongong and Sydney, Australia	<u>COAST - GIS 06 - 7th International Symposium on GIS and Computer Cartography for Coastal Zone Management</u> . GIS for the coastal zone: Spatial Data, Modelling and Management; Extending the Spatial Data Infrastructure. Collaboration between the International Cartographic Association's Commission on Marine Cartography and the International Geographical Union's Commission on Coastal Systems
9-13 October 2006	Santiago, Chile	9th International Conference on Global Spatial Data Infrastructure organized by <u>GSDI Association</u> & <u>Instituto Geográfico Militar</u> Contact: <u>gdi9@igm.cl</u>

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