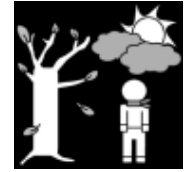




e-NEWSLETTER



<http://www.agile-online.org>

October 2008 - January 2009

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The AGILE-2009 conference is starting now. Co-chairs Monica Sester, Lars Bernard and Volker Paelke are presenting the first call in the next section. This year, the conference is implementing a new experience as it is going to run in parallel to the ISPRS workshop on high resolution optical sensors. This is a long-term aspiration of the organisation, which seeks to link the apparently independent GI and Remote Sensing communities. Good luck with this new venture. Hopefully, this first step will be followed by other initiatives in the future.

In the AGILE initiatives section, we are presenting the workshop on SEIS: Towards the Shared Environmental Information System: Opportunities and Challenges for Integrated Research. This workshop will take place in Wallingford, UK on January 28-29, 2009 and organised by CEH.

A new book from Marinos Kavouros and Margarita Kokla: Theories of geographic concepts: ontological approaches to semantic integration, eSDI-NET+, INSPIRE, VESTA-GIS, Silvilaser 2008 conference and a report from this year's conference in Girona are also presented. At this point, I would like to encourage to AGILE members, from my position as editor of this Newsletter, to send us reports or comments about publications and attendance to events that may contain useful information for our GI community.

Finally, I would like to call your attention to the request to provide feedback to a position paper that the Vespucci Initiative for the Advancement of Geographic Information Science recently published in the International Journal of Spatial Data Infrastructures Research regarding the Next Generation Digital Earth: Next-Generation Digital Earth. Max Craglia and Mike Gould are inviting you to provide your views and contribute to the debate in this highly exciting initiative.

I hope you find useful the information contained in the Newsletter. Please, remember that we keep working for you in this organisation and this information sheet is the outlet as well as the contact point for all your expectations. You make this organisation grow and we are glad to provide the tools for you to achieve your goals.

Word from the Editor

Dear colleagues,



I have got the pleasure of introducing a new issue of the AGILE Newsletter after the summer parenthesis. The Newsletter is with our website a permanent forum for information about the activities of our organisation and a well-informed insight into GI research in Europe.

This issue is presenting changes in the AGILE council. Monica Wachowicz is taking over the council chair, after Mike Gould's departure. Then, two newly elected members are being incorporated: Poulicos Prastacos (IACM, Greece) and David Medyckyj-Scott (EDINA, UK). All of them are well known scientist with a high international profile that can bring a lot of benefits to this organisation. You can find more information about them in the last section of this Newsletter.

Best wishes,

Juan Suárez, Chief Editor

AGILE-2009 in Hannover

12th International Conference on Geographic Information Science

Advances in GIScience

Hannover, Germany, 2-5 June 2009

www.agile2009.de



On behalf of the AGILE council, the programme committee and the local organizing committee, the Institute of Cartography and Geoinformatics of the Leibniz Universität Hannover is pleased to invite you all to the 12th AGILE International Conference on Geographic Information Science. The event will be hosted from 2nd to 5th of June 2009 in the city of Hannover, Germany, under the auspice of the university.

The program will offer parallel paper presentation sessions, keynote sessions, plenary round table debates, poster sessions and pre-conference workshops to share your ideas, explore on-going research, future developments, including state-of-the-art applications, and to network with the professionals from academia, industry, and government who are interested in promoting GI teaching and research activities among GI laboratories at the European level.

This year, for the first time, the conference will be held in parallel with an **ISPRS workshop on high resolution optical systems**. The two events will take place at the same location. There will be selected sessions in common. In this way, we hope to encourage the exchange between researchers of the two societies AGILE and ISPRS for mutual benefit.



Conference Topics

Contributions are invited on all topics within the fields of geo-information, geomatics, geocomputation and

remote sensing and image interpretation, including (but not limited to):

- Geospatial Data Capture, Fusion and Harmonisation
- Discovery and Retrieval of GI
- Semantics of GI
- Spatial Information Infrastructures
- Location Based Services and Mobile Applications
- Demographic and Socioeconomic Modelling
- Environmental/Ecological and Urban/Regional Modelling
- Health and Medical Informatics
- Natural Resources Management and Monitoring
- Disaster and Risk Management
- Spatial Decision Support
- Spatial Data Usability and Data Quality
- Spatiotemporal Modelling and Analysis
- Spatial Cognition
- Geo-sensor Networks
- Visual Analytics and Geo-visualisation
- GI Education and Training
- GI Policy and Society, e-Government

Special topics related to **Remote Sensing and Image Interpretation**:

- Earth Observation Systems - Issues and Applications
- LiDAR Processing - Algorithms and Applications
- Image Interpretation for Topographic Mapping
- Image Analysis for Change Detection

Submissions

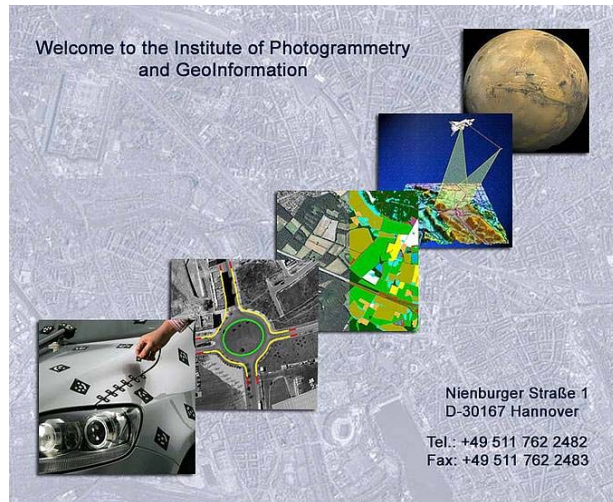
Authors are invited to submit full papers, short papers or posters. The accepted full papers will be published in the Springer series: **Lecture Notes in Geoinformation and Cartography**. Short papers will be published on CD.

We especially encourage PhD students to submit **full papers** (maximum 6000 word manuscript) of original and unpublished fundamental scientific research. Full paper submissions will be independently reviewed by 3 reviewers from the Programme Committee and will result in one of the following decisions: accepted or rejected. Authors of rejected contributions will be invited to re-submit their manuscripts as short papers, which will be reviewed again for oral presentation and publication in the conference proceedings.

Short paper submission (3000-4000 word manuscript) of original and unpublished high-quality scientific and strategic (industrial and governmental) work are encouraged as well. Finally there is a third track with **poster** submissions (500-1000 word manuscript) of original scientific and strategic research work. Both short paper and poster submissions will be

independently reviewed by 3 reviewers from the Programme Committee and will result in one of the following decisions: accepted, conditionally accepted, or rejected. Abstracts conditionally accepted will have to satisfy the recommendation of the reviewers if the authors want them to be included in the final programme.

At the conference, prizes will be awarded to the best paper and poster, courtesy of a corporate AGILE affiliated member.



Pre-conference workshops

The conference workshops will be held on Tuesday 2nd of June and are a complementary forum to the main conference, encouraging presentation and discussion of work in progress, and facilitating a dialogue on emerging topics in small groups. A call for workshop proposals will be announced soon.

Application for grants

Thanks to our sponsors we can offer grants to participants to the AGILE 2009 conference covering registration fee and accommodation. For further details look at the relevant information on the AGILE 2009 website.

Scientific and Local Committee

Programme Chairs

- ✚ Monika Sester, Leibniz Universität Hannover (Germany)
- ✚ Lars Bernard, Technische Universität Dresden (Germany)
- ✚ Volker Paelke, Leibniz Universität Hannover (Germany)

Local Organizing Committee

- ✚ Tobias Dahinden, Leibniz Universität Hannover (Germany)
- ✚ Birgit Kieler, Leibniz Universität Hannover (Germany)

Important deadlines

30/11/08	Pre-Conference Workshop Proposals
12/12/08	Full Paper Submission
16/01/09	Short Paper and Poster Submissions
23/01/09	Notification of Full Paper Acceptance
10/02/09	Camera-Ready Full Paper Copies due
27/02/09	Deadline for AGILE Grant Applications
06/03/09	Notification of Short Paper Acceptance
06/03/09	Notification of Poster Acceptance
27/03/09	Camera-Ready Short Paper Copies due
15/04/09	Early Registration
2-5/06/09	Workshops and Conference



From the Chair



Dear Agile Members,

AGILE is the home for scientific debate, grounded in empirical research, and shaped by theoretical arguments drawn from diverse perspectives in GIScience. The AGILE conferences are contributing to the re-examination of some of the most fundamental themes in traditional spatially oriented fields such as geography, cartography, and geodesy, while incorporating recent developments in cognitive and information sciences. We have seen an overlap of concepts, principles and processes from specialised research fields such as computer sciences, statistics, geomatics, and psychology in order to support social, public health and environmental studies.

This has led to the initiative of "revisiting" the AGILE research agenda through fruitful discussions during two panel sections of AGILE conferences, and the organisation of an AGILE pre-conference workshop in Girona this year. If you are interested in pursuing this initiative, and would like to engage in the issues that will come alive and lead our discipline, our practices in the field, and our scientific writing, please contact Lars Bernard as soon as possible.

The ESDI-net+ network, partly funded under the e-ContentPlus programme, is another project in which AGILE is involved. The project is promoting a cross border dialogue and exchange of best practices on Spatial Data Infrastructures throughout Europe. Several workshops are being organised and if you are interested in knowing more about them or would like to contribute as an AGILE member to the project, please

look at the AGILE web site for more details and contact Danny Vandenbroucke.

During the conference in Girona, we have also hosted a Pre-Conference Workshop that brought together the AGILE and PEER communities. One of the main outcomes is the joint initiative of a multidisciplinary PEER-AGILE-EEA workshop on "Towards Shared Environmental Information in Europe: Opportunities and Challenges for Integrated Research", which will take place on 28-29 January 2009, at the Centre for Ecology & Hydrology, Wallingford (UK). All AGILE members are welcome to contribute to the workshop. More information is available at the AGILE web site.

We are also looking for new AGILE initiatives. Perhaps more importantly, these initiatives are an opportunity for the AGILE members to organise activities that will allow scholars, students, researchers, and professionals from around Europe to stimulate intellectual engagement of research and education in GIScience. AGILE will provide limited funding from the regular association budget. You as an AGILE member can submit your proposal at any time. More information is available at the AGILE website.

A final reminder from my side is regarding the 12th AGILE conference from the 2nd to the 5th of June 2009, in Hannover. The hosting organisation is the Institute of Cartography and Geoinformatics of the Leibniz Universität, and we all need to send high quality full papers for a Springer monograph, before the December 12th 2008 deadline.

Monica Wachowicz,
AGILE Council Chair



Members on the spot _____

Foundation for Research and Technology – Hellas (FORTH)

The **Foundation for Research and Technology - Hellas (FORTH)**, established in 1983, is one of the largest research centers in Greece with well-organized facilities and highly qualified personnel. It functions under the supervision of the General Secretariat for Research and Technology (GSRT) of the Ministry of Development and consists of seven Research Institutes located throughout Greece: Heraklion, Rethymnon, Patras and Ioannina. The Foundation's headquarters are located in Heraklion,

Crete. The research and technological directions of the Foundation cover major areas of scientific, social, and economic interest, such as: Computer Sciences, Molecular Biology, Lasers, Telecommunications, Medical Engineering, Microelectronics, Robotics, Biotechnology, Materials, Chemical and Biological Engineering, Applied and Computational Mathematics, Biomedical Technologies, Bioinformatics as well as Historical and Cultural Studies.

At FORTH there are two Labs involved with GIS. The **Regional Analysis Division (RAD)** is part of the Institute of Applied and Computational Mathematics (IACM) of FORTH. The emphasis of the work carried out at RAD is on the development of tools and methods aimed to assist regional, urban and environmental planning. The division concentrates on the application of techniques from the fields of geography, applied informatics, remote sensing, statistics, mathematics, city planning and economics to develop information and decision support systems that can be used by the public or the private sectors. Contact Dr. Poulicos Prastacos:

poulicos@iacm.forth.gr, www.iacm.forth.gr/regional.

The **Laboratory of Geophysical-Satellite Remote Sensing & Archaeo-environment** was established in 1996 as part of the Institute for Mediterranean Studies (IMS)-FORTH which is based at Rethymno, Crete. The research agenda of the Lab is dedicated towards the advances and applications of innovative Geo-information technologies (GIS & Satellite Remote Sensing), Geophysical Exploration and Archaeo-environmental analysis within the cultural and environmental domain. Contact Dr. Apostolos Sarris: asaris@ret.forthnet.gr, www.ims.forth.gr/lab_index.html.

Specifically the researchers of RAD-IACM and the Lab of IMS are involved in:

Spatial decision support systems

SDSS are systems that can be used for supporting complex decision making and have extensive applications in environmental planning, business decision making, resource allocations and other. They bring together GIS databases, mathematical models, impact assessment methodologies and decision rules through an easy to use interface that hides the intricacies of the system from the end-user. Application areas studied in the division include watershed planning, flood protection, management of catastrophic events, urban planning, sustainable tourism planning, noise mapping and others.

Web GIS, Telematics, SDI

Research and development in the area of displaying spatial information on the web started at RAD back in 1995 and the first such application was first developed in 1996 displaying a map of Athens. A Java based application (Gaea map applet) was developed in 2000 and used for displaying in real time traffic information in Athens, and other projects. More recently research has focused on the development of systems using open

source tools and ESRI's ArcGIS for developing applications for tracking moving objects, displaying traffic information and a spatial data infrastructure system for the coastal area of northern Crete. At the IMS Lab a number of web GIS applications have been developed focusing on the presentation and dissemination of information related to the natural and cultural resources of Crete (e.g. EMERIC, Digital Crete) or other archaeological sites (e.g. Akropolis in Athens).

Remote sensing applications

Satellite remote sensing methods and techniques are used for data capture and the study of many environmental problems and phenomena. Earth Observation data from new satellite sensors providing images of very high spatial resolution are used for urban applications. On the other hand, ASTER, Landsat, SPOT, IRS, MODIS and AVHRR data is routinely used in supporting a broad range of environmental applications. More specifically, the two labs are involved in the following application fields:

- Environmental Monitoring and change detection
- Land cover and land use mapping
- DEM development and 3D Visualizations
- Radiative transfer - atmospheric corrections
- Natural and technological disasters analysis
- Thermal infrared sensing - surface temperature estimation
- Urban environment - microclimatic applications
- Geological applications
- Archaeological applications – predictive modelling and recognition of archaeological sites.

Spatial statistical modeling

The goal of spatial statistical modeling is the identification of the underlying patterns that exist among various spatial variables. Space-time models, spatial econometrics and multivariate analyses are some of the techniques studied in the division. Areas of applications explored include geodemography, short-term traffic forecasting, and regional economic modelling, and in the Lab of IMS modeling of archaeological settlement patterns based on GIS analytical tools.

Development of Urban Growth and Land-Use Change Models

Urban growth and the associated land use changes are the result of the actions, of various decision makers and stakeholders. The way they interact within an economic social and demographic framework, result in changes in the urban fabric and eventual expansion of the cities. Researchers at RAD are involved in research in the area of land use change using rule-based modeling, advanced fuzzy inference engines and cellular automata techniques.

Archaeological Geophysical Prospection

The IMS Lab is equipped with the most current and upgraded geophysical instrumentation for shallow

depth exploration and has collaborated with more than 30 university and research institutes around the world as well as, a number of public and private institutions. The Lab specializes in the application of geophysical techniques for the exploration of archaeological sites in the course of systematic or rescue excavations and during large construction works. The continuing activities of the Lab led to the publication of *Archaeo-Telepiskopika Nea* in order to enhance communication with the scientific community and help the dissemination of the results of the research projects.

History

The two labs were among the first research organizations in Greece involved in GIS applications. The GIS laboratory at RAD was established back in 1991. A GPS station was installed in 1998 for performing differential correction of data collected in the field and since 2002 a satellite ground receiving station has been operational receiving data from AVHRR, Fen Yung and SeaWiFAS sensors. The IMS Lab was the first lab in E. Mediterranean offering an integrated and specialized suite of tools dealing at the same time with the ground based-satellite remote sensing prospection and GIS management of cultural heritage monuments and sites.



Projects, Funding

Most of the funding of two Labs is from competitive projects. Since 1990 RAD has participated in about 47 projects, 22 of which were funded by various EU programs such as DOSES, IMPACT II, ORA, ENVIRONMENT, INFO 2000, TELEMATICS, INCO-DC, IST, EUMEDIS and ENVIRONMENT. Bilateral research programs primarily in the area of remote sensing with academic institutions in France, China, Japan, and USA have been funded by the GSRT. Additionally, funding has been obtained from the National Statistical Service of Greece, the Regional Agency of Crete, the Ministries of Health and Culture, the Athens Urban Transport Organization and others. The IMS Lab participated in more than 20 large-scale national and international research programs (e-Content, INTERREG, ARCHIMED, ETPA, PENED, EPEAEK, INSTAP, Region of Crete, 3rd Community Support Framework and Cohesion Fund, a.o.) and had the scientific supervision and partnership of more than 80 projects of applied and basic research that have resulted more than 200 publications. Within this framework about 150 students from Greek and foreign universities have obtained training and about 20 of them have carried out their PhD, graduate and undergraduate dissertations.

Poulicos Prastacos

Major AGILE initiative: workshop on SEIS



WORKSHOP Towards the Shared Environmental Information System: Opportunities and Challenges for Integrated Research

January 28-29, 2009

Centre for Ecology & Hydrology

Wallingford, UK

The recent Communication from the European Commission "Towards a Shared Environmental Information System (SEIS)" (COM(2008) 46 final) as well as the INSPIRE Directive (2007/2/EC) do not only provide for the first time ever a genuine European policy driver for environmental informatics, but represent also a considerable challenge for research organisations involved in environmental monitoring, data provision and modelling. The implementation of INSPIRE is well underway, but the development of SEIS is still at the beginning.

While discussions at the moment are primarily focused on building SEIS for the mandatory data flows in Europe, this workshop will address the question how the research community can support the development of the Shared Environmental Information System, considering that research organisations hold considerable amounts of environmental data themselves and, at the same time, can support the development of SEIS by carrying out accompanying research. The aim of the workshop is to give a major push to the SEIS concept at large, by connecting the research community, sharing experiences and best practices and discussing the development of new tools and methodologies. In so doing, the workshop will complement ongoing activities related to SEIS and extend these to include experts from environmental research centres and geographic information laboratories.

The Organisers

The Partnership for European Environmental Research (PEER) unites some of the largest environmental research centres in Europe, all of which host major environmental data holdings at the national and international level (see <http://www.peer-environment.eu>).

As one of the main custodians of environmental data in Europe, the European Environment Agency has the task of developing and co-ordinating the Shared Environmental Information System (see <http://www.eea.europa.eu/>).

The Association of Geographic Information Laboratories in Europe (AGILE) is the network of Europe's main research organisations engaged in GI science, promoting teaching and research on Geographic Information Systems in Europe (<http://www.agile-online.org/>).

Objectives

1. To discuss the opportunities and challenges, which the Shared Environmental Information System (SEIS) offers to the research community, both in its role as data holder and science provider.
2. To share best practice, facilitate networking and open new integrated research avenues with the aim of supporting the development of SEIS.
3. To agree on joint activities to support SEIS from a research perspective, leading to an Action Plan agreed with stakeholders.



Centre of Ecology and Hydrology, Wallingford, UK

Target Group

The target attendees are primarily (but not exclusively) scientists from the PEER and AGILE member organisations and EEA staff members dealing with environmental monitoring, informatics, and modelling. Furthermore, the workshop is aimed at practitioners within national and European organisations dealing with SEIS development and implementation.

The workshop will be held as a 2-day event on 28-29 January 2009 at the CEH headquarters in Wallingford (UK). Space is limited to 100 participants.

Call for papers

Presentations are invited that share experiences from a variety of perspectives including practitioners with informatics expertise, direct involvement in carrying out environmental research or insight into policy development and reporting needs. Presentations should relate to opportunities and challenges for integrated research that could come from the SEIS initiative or, vice versa, where the research community could enrich SEIS by developing fit-for-purpose tools. Presentations could include case studies or examples of novel approaches which illustrate the benefits of SEIS principles or problems encountered, identify opportunities for integrated research and challenges that could be taken forward jointly, or present innovative tools developed for the use of scientists, policy makers and practitioners.

Each presentation should be 15 minutes long, and a further five minutes will be available for questions. Each 2 hour session of presentations will be followed by a 90 minute discussion session from which the aim is to produce an Action Plan for joint delivery by PEER partners and beyond. Therefore, presentations will be selected which are thought likely to stimulate discussion and help development of ideas for an Action Plan. A call for papers will be published on a dedicated workshop website. Applicants should specify the session they are applying for.

A poster session will be organised in parallel. Participants can directly apply for a poster or may be offered a poster slot if their proposal is not selected for presentation.

CEH will publish a book of proceedings in late spring 2009.

Chairman: Jan Marco Müller (CEH, UK)
Members: Monica Wachowicz (Alterra, The Netherlands)
Sylvain Labbé (Cemagref, France)
Steve Peedell (JRC-IES, European Commission)
Lars M. Svendsen (NERI, Denmark)
Yrjö Sucksdorff (SYKE, Finland)
Sigfús Bjarnason (European Environment Agency)

Timetable

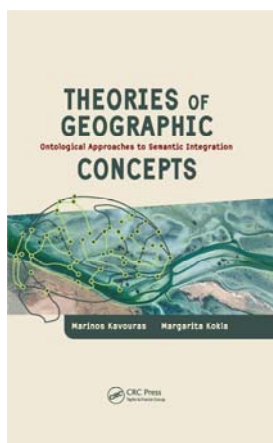
15/08/08	Workshop website up and running, Registration open
15/08/08	Call for papers out
15/08/08	Key note speakers fixed
15/10/08	Deadline call for papers
15/11/08	Papers selected, speakers confirmed
15/12/08	Close of registrations
28-29/01/09	Workshop

New book

Theories of geographic concepts: ontological approaches to semantic integration

Marinos Kavouros

Margarita Kokla



Theories of geographic concepts are essential in the process of forming geographic knowledge and developing representations. Concepts are partitions of reality embodying the knowledge that describes the meaning of categories. Concept semantics are usually encapsulated, elucidated, and formalized by ontologies. Reuse and exchange of heterogeneous knowledge depend on the ability to integrate partial,

imprecise, often conflicting representations of reality – a central problem of semantic interoperability. In this context, *Theories of Geographic Concepts: Ontological Approaches to Semantic Integration* focuses on geographic concepts, semantics, ontologies, and eventually integration.

Part 1 sets the context and the different perspectives on the semantics of geographic concepts and interoperability. Part 2 unfolds important theoretical issues related to the book theme. In Part 3 the authors introduce the formalisms and conceptual structures required for integration approaches. Part 4 covers ontology integration from a pragmatic perspective, presenting approaches, guidelines, and examples. The epilogue concludes with a retrospection of the key issues and identifies open research questions.

Copiously illustrated, the book contains more than 80 illustrations and several examples to various approaches that provide a better understanding of the complexity of ontology integration tasks. The authors provide guidance on selecting the most appropriate approach and details on its application to indicative integration problems.

Theories of geographic concepts: ontological approaches to semantic integration – Marinos Kavouros and Margarita Kokla.

Hardcover: 352 pages

Publisher: CRC Press, Taylor and Francis Group, Boca Raton, FL, US; 1 edition (December 20, 2007)

ISBN-10: 0849330890

ISBN-13: 978-0849330896

Conference reports

AGILE-2008: report from Girona



The 11th AGILE International Conference edition was held in Girona from the 5th to the 8th of May and it was hosted by The University of Girona's Geographical Information Systems and Remote Sensing Service (SIGTE), a member of AGILE and of its council.

Once again, the Conference exceeded all expectations, both organizers and attendance (about 200 people), proving the importance to Geographic Information Science and taking Geoinformation Science one step further.



Panel debate with Ed Parsons, Stuart Marsh, Monica Sester and Julio Cesar Lopez

The conference included a preliminary day of workshops and three days of conferences and paper presentations. The Girona edition included the participation of Ed. Parsons (Geospatial Technologist of Google) dealing with the role of GI Science in solving mass-market problems, Kurt Brassel (a distinguished prestigious geographer currently at the University of Rwanda) sharing his Rwanda experience in GI Science for the developing world and Julio Cesar López (Project Manager at *DEIMOS Imaging*) dealing with New Generations of Earth Observation satellites.

In addition to the Conference Programme, attendees enjoyed a great Social Programme that included a cultural walk or an evening run around the city during the first day. The gala dinner was held in a superb location: the Nummun restaurant, which was managed by the same owners of the world reputed chefs the Roca brothers (2 Michelin stars). The reception outside the restaurant allowed people to admire a fantastic view of the city while tasting a glass of Cava.



It's not always science!



An electronic copy of the proceedings and a selection of photographs can be downloaded from the AGILE web site.

Nuria Pérez

SIGTE

Silvilaser-2008: report from Edinburgh



The **Silvilaser 2008** held in Edinburgh (UK) on the 17-19 of September attracted more than 170 participants from all over the world. This event provided an informed view about the state-of-the-art in laser applications in forestry that attracted scientists, industry and system developers.

A one-day **pre-conference workshop** was conducted at the Forest Research Northern Research Station in Roslin around the use of Terrestrial Laser Scanning (TLS). This event was limited to 35 participants although a similar number of requests had to be left out due to space restrictions. The workshop discussed the threats and opportunities of this disruptive technology for forest inventory. System developers representing FARO, Leica and Riegl presented the latest scanners and software, with a life demo in the woodlands outside the station. TreeMetrics Ltd from Ireland presented a

semi-automated application to rapidly process cloud points and convert data into valuable information for forest management. Finally, Prof. Richard Lucas (Aberystwyth University, UK), Prof. Mark Danson (Salford University) and Dr. John Fonweban (Forest Research), introduced the theoretical and the most relevant research issues in this area.

The **conclusions from this workshop** were that TLS offers a new and perhaps one of the most interesting methods in recent years to capture data in the field with enormous potential in vegetation modelling, forest inventory and monitoring. Issues like visualisation, processing capabilities of new software and progressive penetration of the new techniques in forestry are still under review. However, this technique is opening many opportunities for researchers and forest practitioners alike, which is going to expand into new working practices.

The **Silvilaser conference** that followed this workshop was celebrated in the James Watt II centre at the Heriot Watt University. This two days event presented a selection of papers (45% of the total number of submissions) focussing on applications of laser systems for forest assessment and inventory. Sessions were grouped in six thematic areas:

- forestry applications & inventory;
- data fusion;
- ecological applications & habitat mapping;
- waveform LiDAR;
- algorithm and techniques development;
- terrestrial laser scanning and laser cameras.

SilviLaser 2008 discussed the latest developments in laser systems and data processing techniques in order to meet a range of information needs. The conference encouraged new and stronger linkages between LiDAR practitioners, and in particular between researchers, data providers and end-users of derived products. All of the papers in the proceedings were double-blind peer reviewed by at least two experts in the field. The standard of submission was extremely high, and competition for oral presentations was strong. The result was an improved the quality of the papers and a good selection of high quality presentations.

The keynote speakers at SilviLaser 2008 were Professor Richard Lucas (Aberystwyth University), Dr Wesley Newton (U.S. Geological Survey) and Professor Ralph Dubayah (University of Maryland).

The **conclusions of this conference** were that:

- Laser applications are expanding worldwide. The sheer number of participants in this event, which really exceeded the best expectations of the organisers, proved the large interest that this technology is developing worldwide.
- Data fusion between LiDAR and other datasets such as radar and optical systems provide the most powerful source of information in recent times for understanding and monitoring fundamental

processes in vegetated systems at a variety of scales.

- Laser scanning is not just a measuring tool but also an important source of information for testing and implementing operationally a variety of models and tools that need spatial information. The combination of LiDAR, other sensors and models can expand the range of cartographic products that can be generated.
- Participants were also informing about different national programmes in countries like USA, Norway, Sweden, Finland, Austria or Switzerland, were the next generation of forest inventory are going to be mainly based on airborne LiDAR. In parallel, global monitoring of vegetation is going to benefit from the launch of a new large footprint waveform sensor on board of the ICESat II satellite and the NASA DESdynl initiative for combining sensors.
- GIS companies are looking at the mapping capabilities of laser to derive cartographic products. Therefore, it is anticipated that most of them will start to incorporate new tools in future releases of their software. It looks like this disruptive technology is now becoming a main stream tool for the spatial data industry.

The complete proceedings can be downloaded soon from the conference official website at Forest Research in: www.forestresearch.gov.uk/silvilaser2008.

A selection of the best papers has been earmarked for a special issue in the International Journal of Remote Sensing that will appear early next year.

Juan Suárez and Ross Hill,
co-chairs

EUGISES 2008

Royal Agricultural College
Cirencester, U.K.

From September 11-14, the 6th European seminar on GIS education took place at the Royal Agricultural College in Cirencester, U.K. The classic U.K. style academic environment proved to be a stimulating setting to discuss current GI education matters, such as new technologies, didactic approaches and the use of the GI S&T Body of Knowledge (BoK). Julian Swindell, the local host, took the group also to Oxford where they enjoyed a tour and a dinner at the Ashmolean Museum.

As said, one of the issues discussed was the GI S&T BoK. Ann Johnson from ESRI and one of the BoK editors presented the status. During a workshop, chaired by Wolfgang Reinhardt and Fred Toppen, participants discussed issues such as the completeness, the "core" of the BoK, the "deepness" factor and the EU perspective. Wolfgang Reinhardt

presented the results of this workshop at the GI Science conference in September in Park City (Utah), USA. Coming BoK initiatives and the role of AGILE will be discussed during the council meeting early October.

Fred Toppen,
Universiteit van Utrecht

Upcoming Events



GSDI-11, INSPIRE-2009, Dutch NSDI

GSDI, JRC, EUROGI, RGI, Geonovum T.U.Delft
Rotterdam, the Netherlands

June 15-19, 2009

<http://www.gsdi.org/gsdi11/>

The theme for this GSDI conference is Spatial Data Infrastructure Convergence: Building SDI Bridges to Address Global Challenges.

Geographic information technologies and spatial data infrastructure play critical roles in allowing governments, local communities, non-government organizations, the commercial sector, the academic community and common people to make progress in addressing many of the worlds' most pressing problems. The approaches in building spatial data infrastructure within and among nations are in many respects converging. This conference will explore the convergence towards best standards, practices and processes among nations while at the same time explore ever evolving and exciting new approaches to the offering of geographic data and services in meeting real world needs.

Partners in organizing this conference include the GSDI Association, Geonovum, Joint Research Center (JRC) of the European Commission, EUROGI, Space for Geoinformation Innovation Program (RGI) and Delft University of Technology.

Three major components of this conference include:

- Dutch SDI Results and Challenges,
- Third INSPIRE Conference, and
- Eleventh International Conference of the GSDI Association.

While some conference sessions and tracks are being organized by the separate associations, the call for papers applies to all interested parties from any disciplinary sector and the vast majority of workshops, paper sessions, social events and business meetings

offered throughout the week are open to all conference registrants.



Geomatica 2009

CYDERC

Havana, Cuba

February 8-13, 2009

<http://www.informaticahabana.com>

The Organizing Committee of the VI International Congress "GEOMATICA 2009" is pleased to invite the Geomatics community to attend this event in Havana, Cuba. This congress organized into the framework of the International Convention INFORMATICA 2009 will take place at the Palace of Conventions in Havana from February 9 to 13, 2009. The main theme is "Geomatics and its impact in Latin-America and the Caribbean".

Call for papers should (maximum 10 pages) with abstract (up to 250 words). Papers should include the methods applied, the results and conclusions. All of the lectures, research papers and other Convention-related materials will be published in a CD with ISBN register.

Submission of the abstracts and papers: until September 30, 2008. Announcement of the abstracts and papers accepted: until December 1, 2008.

The working languages of the Congress will be Spanish and English. Simultaneous interpretation will be provided for the main sessions of the event.



Geospatial Technology for Sustainable Planet Earth

GIS Development

Hyderabad, India

February 10-13, 2009

<http://www.mapworldforum.org/>

After the tremendous success of the first Map World Forum held in Hyderabad in January 2007, GIS Development is pleased to announce the dates of the second Map World Forum, scheduled to be held from February 10-13, 2009 at Hyderabad International Convention Centre, Hyderabad, India. The Forum promises to be a Global Congregation for thought and

discussion between experts from various fields like Environment, Finance, Management, Technology and Governance with Geospatial specialists striving to make our planet a sustainable one. It aims to bring the geospatial community into limelight with regards to mainstream development organizations at a global level.

Abstracts of intended full papers for various sessions of Map World Forum 2009 are invited. The abstract submitted should not exceed 250 words (15th September, 2008). Upon evaluation of abstracts, selected authors will be invited to send in their full papers (15th November, 2008).



Aber Wrac'h
North West France,
21-25 September 2009
<http://www.cosit.info>

Christophe Claramunt and Michel Denis, inform about the next CONference on Spatial Information Theory (COSIT'09) will be held at the Aber Wrac'h, in North West France, 21-25 September 2009.

The COSIT series of conference is often considered as a leading event in the field of spatial information theory and GI science.

For more information go to the COSIT Web page available at:

Agenda	
28-29/01/2009	Workshop Towards the Shared Environmental Information System: Opportunities and Challenges for Integrated Research, PEER, EEA and AGILE, Centre for Ecology & Hydrology, Wallingford, UK
09-13/02/2009	GEOMATICA 2009, 6 th International Conference, Havana, Cuba http://www.informaticahabana.com
10-13/02/2009	Map World Forum: Theme: Geospatial Technology for Sustainable Planet Earth, Hyderabad, India http://www.mapworldforum.org/
March 2009	AGILE Council Meeting, Hannover, Germany
02-05/06/2009	12 th AGILE Conference in collaboration with ISPRS Workshop, Hannover, Germany http://www.agile2009.de
15-19/06/2009	Joint GSDI-11, INSPIRE and Dutch SDI Conference, Rotterdam, The Netherlands http://www.gsdi.org/gsdi11/
21-25/09/2009	Conference on Spatial Information Theory, COSIT'09, Aber Wrac'h, France http://www.cosit.info

Ongoing activities

New developments within INSPIRE



<http://www.ec-gis.org/INSPIRE>

The Guidelines for the encoding of spatial data (D2.7) published

The Guidelines for the encoding of spatial data (D 2.7) of the INSPIRE Drafting Team "Data Specifications" is now available for public view and for comments from SDICs and LMOs. Comments are restricted to registered SDICs and LMOs only, through their contact person and should be provided on the established way through the INSPIRE web site. AGILE is a SDIC and encourages our members to take part in this process.

The INSPIRE Metadata Editor has been made available

The INSPIRE Metadata Editor is currently a prototype allowing users to create metadata that are compliant with the INSPIRE Implementing Rules, as approved by the INSPIRE Regulatory Committee and the European Parliament. Users of the Editor can moreover validate the metadata created and save the metadata record as an .xml file on a local machine.

Metadata Implementing Rules

On May 14th, the INSPIRE Regulatory Committee unanimously expressed its favorable opinion on the INSPIRE Implementing Rules on Metadata proposed by the Commission. The proposal has been uploaded on the Comitology Register. The proposal is still subject to comments from the European Parliament, formal adoption procedure, and publication in the Official Journal (expected some time in August).

Non-binding guidelines allowing the implementation of the proposed Implementing Rules on Metadata using EN ISO 19115/19119 have been prepared by the INSPIRE Drafting Team for Metadata and are available here. A note summarizing the process that has led to the formulation of the proposal for Implementing Rules on Metadata is available here. A document summarizing the state of progress in developing guidelines to express the INSPIRE metadata elements using ISO 15836 (Dublin Core) is also available.



The eSDI-Net+ consortium is currently working on a thematic workshop concept for the assessment of SDI Best Practice. The objective is to initiate a dialogue between the SDI stakeholders at the local, regional and national levels and foster exchange of best practices. In the course of these workshops relevant thematic/regional SDI initiatives will be reviewed in order to identify best-practice solutions at sub-national or thematic level that exist throughout Europe.

After the the kick-off meeting of the eSDI-Net+ project in September 2007, three meetings took place: Lisbon, Utrecht and Rome. Prime focus of these meetings was to discuss and decide on the methodology to identify and compare existing SDI initiatives. In the Fall of 2008 a number of thematic workshops will take place that should present and discuss the results of the questionnaires that will be used for this SDI identification and comparison. The objective is to initiate a dialogue between the SDI stakeholders at the local, regional and national levels and foster exchange of best practices. Also, best-practice solutions at sub-national or thematic level that exist throughout Europe will be identified.

In some regions, workshops already took place during the summer and the early fall (Italy, Hungary, CZ / Slovakia). Please see if any of the coming workshops take place in your region. If you are interested to join one of these meetings, please contact the local organizer and Fred Toppen for possible funding. AGILE will organize two workshops, one in Belgium and one in The Netherlands.

Fred Toppen (toppen@geo.uu.nl)

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VESTA-GIS - Vocational Education and Sectoral Training network on GIS & GI Application domains – is supported by the Leonardo Da Vinci programme of the EU. The project is the follow-up of the GI-Indeed project in which AGILE was directly involved. The network is led by GISIG, Genoa, and consists of 7 core partners (of which 4 AGILE members) and 65 associated partners of which 31 universities (many of them being AGILE members as well).

The overall aim of VESTA-GIS is to pool knowledge in the GIS domain (technology, applications), to share experience and foster innovation (new approaches) in vocational training by bringing together experts, organisations and users of GI and its application domains, as well as to identify the trends and skills requirements in this area and to improve the anticipated benefit of vocational training initiatives.

The project is centred on the following main components:

- ✚ The VESTA-GIS Training Framework, intended as the working tool to support GIS training and transfer of knowledge within the network and towards the external audience of GI and User Communities.
- ✚ The VESTA-GIS Mobility Framework, intended as a tool to promote people mobility within the Network.
- ✚ The VESTA-GIS training framework is planned to lead to “VESTA-GIS Curricula” with a VESTA-GIS “Certification” compliant with ECVET.

Next-Generation Digital Earth: feedback requested

All AGILE members are kindly invited to give their feedback on the Position Paper that the Vespucci Initiative for the Advancement of Geographic Information Science recently published in the International Journal of Spatial Data Infrastructures Research regarding the Next Generation Digital Earth.

You can find the paper on the IJSDIR site at <http://ijmdir.jrc.it/index.php/ijmdir/article/viewFile/119/99>

Abstract

This position paper is the outcome of a joint reflection by a group of international geographic and environmental scientists from government, industry, and academia brought together by the Vespucci Initiative for the Advancement of Geographic Information Science, and the Joint Research Centre of

the European Commission. It argues that the vision of Digital Earth put forward by Vice-President Al Gore 10 years ago needs to be re-evaluated in the light of the many developments in the fields of information technology, data infrastructures, and earth observation that have taken place since. It focuses the vision on the next-generation Digital Earth and identifies priority research areas to support this vision. The paper is offered as input for discussion among different stakeholder communities with the aim to shape research and policy over the next 5-10 years.

Keywords: Digital Earth, spatial data infrastructures, Earth Observation, GEOSS, geobrowsers, voluntary geographic information.

Please send feedback to one of the authors listed below:

Max Craglia (Massimo.craglia@jrc.it)

Mike Gould (gould@uji.es)

Corporate news

So far, AGILE has signed Memorandum of Understandings (MoU) with some corporate AGILE members. When signing a Memorandum of Understanding, the parties involved agree to cooperate in a group of activities that are of mutual benefit. See www.agile-online.org for detailed information. In the course of the last year, several of these agreements were renewed.



ESRI offers bursaries for SilviLaser '08

ESRI have kindly offered five student bursaries worth £275 each to cover the costs of conference registration and three nights accommodation at Heriot-Watt University for attendance of SilviLaser 2008 (September 17-19, 2008, Heriot-Watt University, Edinburgh). SilviLaser 2008 was the 8th international conference in a series focussing on applications of laser systems for forest assessment and inventory.

ESRI also offered sponsorship to cover different costs involved in the organisation of this event. The company sent Peter Eredics who organised an ESRI exhibit where he was presenting the latest developments in the Forester extension to ArcGIS, which helps foresters to organise the spatial information needed to manage their resources, and the LiDAR analyst. Peter also took part in the plenary session, where he presented the perspective of industry and his own company in the area of laser applications in forestry. He mentioned that the company is following with great expectations developments in LiDAR processing. In fact, the version

10 of ArcGIS, scheduled for early 2010, will incorporate more tools to visualise and process large cloud points.

ESRI Virtual campus

The AGILE Council would like to draw your attention to the MOU with ESRI that gives access to the ESRI Virtual Campus. The MOU allows (paying) members of AGILE to use the Virtual Campus for an equivalent of up to \$10,000 (credits). More information about this opportunity can be found on the AGILE website (<http://www.agile-online.org>) in the ESRI-AGILE MOU document (under the item Cooperation).

In order to use this offer, we need the name of a representative of your lab that will be responsible for the usernames, passwords, etc. which are needed to get access to this resource.

So, inform Fred Toppen if your lab is interested and if so, make sure to send him the name of the contact person for this matter.

News from AGILE

Invoice AGILE fee 2008

All AGILE members should have received by the end of September the invoice for the 2008 fee. Please make sure to follow the directions as indicated in the accompanying email and to transfer the amount due (EURO 200) before October 31st.

Your contribution is essential to keep the organisation up and running.

The new Council and External Officers

Starting in May, during the last AGILE Conference, two new people entered the Council: Poulicos Prastacos from the Foundation for Research and Technology (FORT), Greece and David Medyckyj-Scott, from the National Data Centre (EDINA), Scotland. We will present the two new Council members briefly.



Dr. **Poulicos Prastacos** is since 1995 Research Director at the Institute of Applied and Computational Mathematics (IACM) at FORTH, a Research Center in Heraklion Greece, heading the Regional Analysis Division (RAD). RAD is a multidisciplinary group

concentrating on the development of tools and methodologies for handling spatial problems. He received his Ph.D. from the University of Illinois at Urbana-Champaign in Transportation Systems in 1981 and for several years he was associated with the Association of Bay Area Governments in Oakland, California designing land use models for the Bay Area.

His areas of expertise include spatial decision support systems and the application of these in the fields of environmental systems, urban planning, transportation planning and business GIS. He has participated in numerous EU and national research projects related to GIS applications for real estate, statistics, environmental monitoring, river floods, traffic forecasting etc. Presently he also is involved with InfoTraffic SA a start-up company developing traveller information systems.



Dr. **David Medyckyj-Scott** leads the Research and Geo-Data Services team at the EDINA National Data Centre (University of Edinburgh, UK) where he has been since 1997. His team of GIS specialists, software engineers and project staff provide on-line geo-services for researchers and students in the UK, undertake cutting edge R&D projects and engage in standards and strategic

policy activities. EDINA's geo-services, such as Digimap, provide some 50,000 researchers and students in the UK with access to digital map data from national agencies such as the Ordnance Survey and British Geological Survey. The services are core resources for research and teaching in the UK tertiary education sector.

David's background is varied, taking in cartography, psychology, human factors, spatial data management and software engineering. He has a PhD from the London School of Economics. While working in New Zealand in the '90s, David co-developed one of the first web-based GIS services. His current academic interests include Spatial Data Infrastructures, interoperability (involved in OGC activities), automated cartography and the geospatial web. David is a member of the Scottish Government's Geography Steering Group and active on a number of other committees and boards.

We are also very happy that Monica Wachowicz, from Wageningen University, was re-elected for the Council. She took over the position of Chair, previously held by Michael Gould. The position of Secretary is now taken by Danny Vandenbroucke, from SADL/K.U.Leuven R&D.



The AGILE Council is supported by three External Officers now. Ludo Engelen (SADL/K.U.Leuven R&D) is a new Officer and will support the Secretariat from this summer onwards.

Fred Toppen (University of Utrecht, the Netherlands) will be in charge of supporting the Treasurer, while Barend Köbben (ITC, the Netherlands) is our webmaster. In the next issue, we will explain in more detail the work of these three people and how they help sustaining our Association.

Call for hosting conference 2010-2011

The AGILE 2009 Conference will take place in Hannover from 2-5 June, in conjunction with "ISPRS Hannover Workshop 2009 - High Resolution Earth Imaging for Geospatial Information".

AGILE is seeking statements of interest for hosting future AGILE conferences. AGILE members are invited to prepare their candidature for 2010, 2011 or beyond, by preparing a formal offer using the forms that can be obtained through our Secretariat.

AGILE Council

- Monica Wachowicz - Chairperson, Wageningen University and Research Centre, Centre for Geo-Information, The Netherlands
- Danny Vandenbroucke - Secretary, Spatial Applications Division of the Katholieke Universiteit Leuven, Belgium
- Wolfgang Reinhardt - Treasurer, UniBw Munchen, AGIS GIS Lab, Neubiberg, Germany
- Lars Bernard, Technical University of Dresden, Faculty of Forest, Geo and Hydro Sciences, Germany
- Irene Compte, University of Girona, SIGTE, Spain
- Poulicos Prastacos, Foundation for Research and Technology, Greece
- David Medyckyj-Scott, EDINA National Data Centre, Edingburgh, UK
- Juan Suárez, Forest Research, UK

External Officers

- Ludo Engelen (in support of Secretary), Spatial Applications Division of the Katholieke Universiteit Leuven, Belgium ludo.engelen@SADL.kuleuven.be
- Fred Toppen (in support of treasurer), University of Utrecht, The Netherlands, f.toppen@geog.uu.nl
- Barend Köbben (webmaster), ITC, Enschede, The Netherlands, kobben@itc.nl

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