

NewsLetter

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ISPRS SC Newsletter

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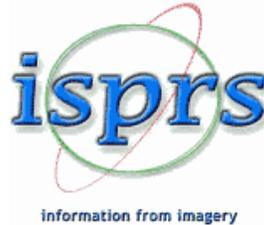
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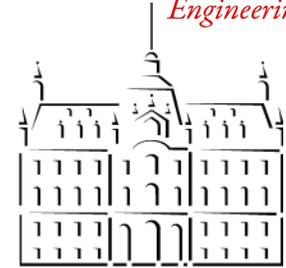
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www.isprs-studentconsortium.org

Frontpage designed by Mitja Krope



University
of Ljubljana
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of Civil and Geodetic
Engineering



I₂⁹O₁₀⁹

sponsored the printing of this special version
of the Newsletter



Would you like to join SC Newsletter team? Do you want to make a difference? Want to learn new skills?

SC Newsletter is at a stage where getting broader and better demands more people to be involved in the process of it's formation. That's why SC Newsletter team is looking for the following volunteers:

- More **people who would be willing to prepare articles** for existing or new rubrics,
- Designers of Newsletter,
- **English native speakers** for proof reading.

If you can help us with any of the above, please let us know!

info@isprs-studentconsortium.org

And also...

If you **would like to publish your research work** in the SC Newsletter send us your abstract on email written above. We will soon contact you for further information.

Table of Contents

Dear Friends,

We are welcoming you to our 7th issue of newsletter, digitally available and also printed for the participants to ISPRS SC 4th International Summer School which is taking place in Warsaw, Poland between 13-19 July.



SC is continuously developing and as we gain more experiences and explores new sights, our organization is becoming more professional. The positive comments from the society and our members, prove that what we have

been doing is right and that's the major motivation for us. Another indication recently is our newsletter received an ISSN number; from now on it will be listed in libraries' catalogues. SC Board is working on some major changes to the look of the website which will come into effect in the next few days. Finally, a lot of interest has been shown by different countries to the 4th Summer School in Warsaw and shows us that the theme and content is geared to its members, I believe it will expand our vision and knowledge of our changing environment. Also summer schools provide unique possibilities to learn more from cultural aspects and meeting new people with similar interests. The first ISPRS Student Consortium Conference right after the summer school will provide a chance for the peer review manuscripts presentation and publication. At last, but not the least SC Board will have the opportunity to meet and discuss with the participants to plan our needs and be prepared for the upcoming years of the SC. We look forward to meeting you in one of our activities and please spread the word with your colleagues.

On Behalf of Student Consortium,
Cemal Özgür KIVILCIM
ISPRS SC Chair

2 SPOTLIGHTS

Interview with Prof. Dr. Christian Heipke

3
4

Warsaw - Story for a Traveler

4th ISPRS SC and WG VI/5 Summer School

4 WEBSITE BULLETIN

4 PAST EVENTS REPORTS

IGSM

5

RSPSoc Annual Student Meeting

5 FUTURE ISPRS RELATED EVENTS

Calendar of Forthcoming Events

6 ESA FOR STUDENTS

GlobCover

7 A COORDINATOR'S EYE

La Selva GIS Laboratory

Turning 30: The Venue of ACRS

8 IT NEWS

INTERESTING LINKS

9 STUDIES AND PRACTICAL WORK

OTHER INFO

ISPRS SC Newsletter is published every three months in digital version available on this page: <http://www.isprs-studentconsortium.org/>. This printed version is a special issue, made to present our wider work.



Let's Come Together
to Make The World
Smaller and Smaller,
While Enlarging
and
Powering Our
Student Consortium
Network!!

JOIN US!!!

Interview

by Urša Kanjir

Prof. Dr. Ing. Christian Heipke



In this issue we were talking with honourable professor at the Leibniz Universität in Hannover (Germany). His professional interests comprise all aspects of digital photogrammetry & remote sensing, image understanding and their connection to GIS. He is actively involved in the ISPRS organization, being chair of WG IV/2 (Automatic Geospatial Data Acquisition and Image-Based Databases) at the moment; he won several prestigious awards on his work and had been involved in many different research projects.

What is your research field at the moment?

To me the most fascinating research topic in photogrammetry and remote sensing today is image understanding. Inspired by work in areas such as artificial intelligence and computer vision we have done a lot of work in this area in our group of about 25 researchers at Hannover University. We now come to a point where we have embed our object models into a statistical frame-

work, e. g. of Bayesian networks, and we carry out first steps towards machine learning for automatically setting up the needed object models.

Along with some success we have come to understand how brilliant the human mind is. Trying to emulate a little part of human visual perception while at the same time developing something useful for the profession (and this is obviously not only the land surveyor – image understanding can be employed everywhere, where images and video sequences can be found) means to cleverly combine the capabilities of the human and the computer. Along this road there are still major challenges and major breakthroughs to be expected.

Why did you decide on this profession in the first place (tell us more about your first steps)?

I probably had a bit of a head start, since I come from a family of surveyors and engineers. Thus, I knew about theodolites and property boundaries from early age on. My entry into photogrammetry was a little more of a random decision, I simply was attracted by the way of working and the projects which were carried at TU Munich when I was a student there. So the message

probably is: join a group of interesting people showing you challenges on the way ahead, and don't worry too much about future labour opportunities.

Myself, I was then lucky enough to get offered a position between university and industry, where I had two bosses and two desks, and could learn about both worlds in parallel, while doing my PhD. Soon, Prof. Ebner, my PhD supervisor, started to involve me in his international activities and in this way opened up the ISPRS circles to me - something which has significantly shaped my career and helps me until today.

What advice would you give to students and young professionals regarding a successful career?

Obviously, knowing your own field by heart is essential. Especially in research, actively following and understanding the ongoing developments on an international level including the sometimes difficult mathematical formulations is of utmost importance. Besides this obvious requirement, young students, scientists and professionals should start to get into

contact with colleagues interested in similar topics. In order to do so mastering the English language is a must as it is the medium of international communication. Studying abroad is a perfect way to learn the language, at the same time you will be exposed to a different culture and experience that there is more than one way to follow in life. Another aspect worth mentioning is general curiosity and the interest in areas next to your own. In this way you can develop an understanding of

the bigger picture.

Last not least, good programming skills are very helpful, as it is nearly impossible to do research based on software written by others – you simply don't

know the details of what is happening and therefore run the risk of not being able to properly explain and interpret your own results.

In your opinion how important is the participation of young people in international events like summer schools, congresses, workshops, etc.? What do you think are the benefits of such activities to youth and to profession?

The answer really follows from what I mentioned before: the easiest way to create a network of colleagues is to meet them personally, and a scientific meeting is a very good way to do so. At the same time you can discuss and solve any open questions with

the author after having studied his paper, and you come to understand that other groups have not yet solved all problems in the world (sometimes one gets this impression when only reading papers). Finally, presenting your own work at a scientific meeting is a perfect way to get feedback and good ideas for the next steps; at the same time you start to develop some additional soft skills.



Interview

How do you see the future of spatial information sciences (RS, photogrammetry, GIS, etc.)? What do you think are the most challenging fields and research problems in the profession?

We live in visual world. Given that nearly everybody now has a mobile phone equipped with a camera, and any images can end up in web repositories such as flickr. Together with the large and ever increasing amount of earth observation image data, there are plenty of opportunities in our field. Connecting images and information from images (this is where automatic image understanding comes in) to the internet in a viable and sustainable way, e. g. via a geospatial data infrastruc-

ture is a formidable challenge as well, as is the task to keep all the databases up to date and consistent across different levels of detail and across international boundaries. From the application point of view, environmental monitoring, forestry and agriculture, and security are growing and exciting new markets. Of course, there are other communities interested in image exploitation, geospatial data management, visualisation and distribution. However, our background in data handling enables us to play a central role in all these fascinating developments. Thus, I believe that our future is bright; we simply need to see, understand and grasp the opportunities ahead of us.

Famous Quote



To know that we know what we know, and to know that we do not know what we do not know, that is true knowledge.

Nicolas Copernicus

Warsaw - Story for a Traveler



Warsaw (Polish: Warszawa) is the capital of Poland and the 8th largest city in the European Union with nearly 2 million of population. It is one of the fastest growing cities in Europe; the investment boom is visible everywhere you look.

Warsaw is situated almost in the heart of Poland on the Vistula River roughly 370 kilometres (230 mi) from both the Baltic Sea coast and the Carpathian Mountains. The river divides the city into two parts distinct in character. The more up-market western bank of the Vistula is where the majority of Warsaw’s businesses, banks, theatres and cinemas can be found. The poorer eastern side, known as Praga, is slowly loosing its neglected appearance with a growing number of modern shopping centres, office buildings and blocks of flats.

Warsaw’s mixture of architectural styles reflects the turbulent history of the city and country. The present character of the city is determined by three important factors: World War II, when the city was completely destroyed, over 40 years of communist rule and the present years of transformation with its in-flow of foreign capital and investment. The city’s current urban landscape is one of modern and contemporary architecture.

The best way to learn about a city is sightseeing on foot. Hence, it is recommended taking a walk in the Old Town and its surroundings – the area with the biggest amount of monuments, museums and galleries. In order to reach other quarters it is advisable to use public transport. There is also a growing net of bicycle lanes which lead outside the town - to the Kampinos Primeval Forest or Powsin. Warsaw bar, clubbing and music scene is unmatched in the country, and its yearly calendar is filled with theatre productions, operas and art-house film premieres. If culture is your thing, then Warsaw is your place. Also culinary experiences are rich: When you are in Poland try dumplings, porcini mushroom soup, or żurek (soup made from fermented rye flour). Nowadays, you can go on a culinary expedition around Poland, without leaving Warsaw. Many restaurants offer Polish regional cuisine, including the one specific to the capital city. Also there are milk bars – a phenomenon characteristic of this country. Vegetarians will find something for themselves without difficulty. Where do inhabitants of Warsaw eat? Mostly in Vietnamese bars – the hit of streets and squares of Warsaw.

Photo above is taken from Pole Mokotowskie. Source: Wikipedia

4th ISPRS SC and WG VI/5 Summer School

by Krzysztof Stereńczak

Dear ISPRS SC members,

Our preparation for the 4th ISPRS Summer School and Conference are finished. There are more than 65 participants from more than 20 countries registered for the event.

As you can find on our Summer School website there is a lot of companies involved in supporting the event this year. What is more we did receive a lot of support from ISPRS Council and members of the WG VI/5 for which we are very grateful.

The upcoming event will be next step for ISPRS SC network expansion. We hope we will find new friends and active members for our society. All of you are welcome to visit our webpage <http://isprs-ss.wl.sggw.pl/> and check the schedule for this event.

We will do our best to make this event fruitful and friendly for all participants and hope the network grows stronger for future activities.

New Innovations on ISPRS SC Website

by Mete Ercan Pakdil and Ahmet Şengül

ISPRS SC Web page is getting popular each day with new members from all over the world. Our online database has reached over 210 members from 50 different countries in the last few days. Members of the ISPRS SC website can easily exchange information with other members. As a team of the WEB, we are planning to upgrade our website with several changes. For instance, the message board is going to be public on the new website. Everyone visiting this webpage will be able to read the messages. People who want to write and add some comments, their ideas, useful information...etc should become a member of the site.

Becoming a member of our website is quite easy and free of charge, just follow the link <http://www.isprs-sc.org/members/register>. We will check your request and accept it, if you are up to 35 years of age or student (up to conclusion of their Ph.D.), independently of age. We are planning to have a richer website with lots of news, upcoming events and useful links.

The main idea of networking is to provide a platform for exchanging of information that is interesting for students that brings them into contact with professional bodies through ISPRS. We also organise student-specific events in order to support social cohesion, exchange of ideas and to provide a base for further international cooperation. Come to our network area and get all the benefits.

PAST EVENTS REPORTS**XXII IGSM 2009 – ETH Zurich, Switzerland**

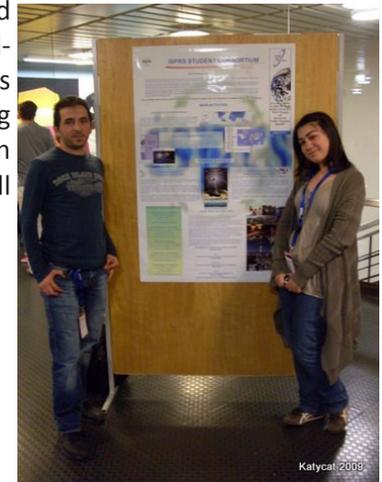
by Ahmet Şengül

Every year the International Geodetic Student Organization (IGSO) organizes the International Geodetic Student Meetings (IGSM). These meetings are not only a good chance to exchange ideas from the geomatics field but also a unique opportunity to get to know other countries' culture, because every year these meetings take place in a different country. This year the meeting was held from 4th to 19th of April 2009 at the ETH University in Zurich, Switzerland. The meeting was very well organized by the student's committee from ETH University with several effective workshops, different excursions, a surprise lake trip, poster and oral presentations. Around 150 students attended the meeting mainly from European countries, not only getting knowledge from the workshop and presentations but also having social activities such as a barbeque, dinner, excursions and parties.



In order to advertise and inform our network two board members of the ISPRS Student Consortium (SC) also attended the meeting. IGSM local organization team let us distribute the SC leaflet. Hence all participants were made aware of the ISPRS SC. Also, we had a poster presentation during the Poster Session in which participants could receive more information and had opportunities to ask their questions. Within two hours several students were interested in our ISPRS SC poster. Also, beside the poster presentation we presented two different oral presentations,

first of all giving general information about the ISPRS organization the other giving more detailed information about the Student Consortium just before the IGSO General Assembly. We would like to extend thanks for all the feedback and we would welcome members who are willing to contribute in what ever small way.



Relations with Local Organizations:

RSPSoc Annual Student Meeting, Lake District, United Kingdom

by Cemal Özgür Kivilcim

ISPRS Student Consortium aims to establish and develop relations with different local and regional organizations with similar interests in anywhere in the world. We are willing to introduce about our society and aware them with the benefits of Student Consortium for their members and organizations. More, SC is always open to new experiences where we can gain from local knowledge.

This year Student Consortium had an active participation to Annual Student Meeting of Remote Sensing and Photogrammetry Society (RSPSoc). RSPSoc is a charity and registered in UK. The main organization is formed of individual membership including students with special opportunities and grants for them. More, students organize their own meeting once a year. The Annual Student meeting of 2009 was organized at a cottage in the country side of Lake District in England between 14th and 16th of April. The event was based on technical and social activities where students were able to present their researches and works in oral and poster sessions as well as a few keynote speakers were invited. During the meeting leaflets and posters of SC were distributed to all participants and ISPRS and Student Consortium were introduced with an oral presentation, also with questions-answers participants during the whole event. At the end of the organization boxes of Turkish Delights were presented as a complimentary from



ISPRS SC to audience and especially to the best selected oral presentation and poster by the participants. ISPRS Student Consortium would like to thank to members and RSPSoc for their support to start the link, ISPRS Council for their encouragement and support.



Geoinformatics Forum Salzburg

Salzburg, Austria, 7 - 10 July 2009

For more info visit: <http://www.gi-forum.org/>

HealthGIS

Hyderabad, India, 24 - 26 July 2009

For more info visit: <http://www.e-geoinfo.net/healthgis2009/>

10th South East Asian Survey Congress (SEASC2009)

Bali, Indonesia, 4 - 7 August 2009

For more info visit: <http://www.seasc2009.org>

17th international Conference on Geo-Informatics

Fairfax, USA, 12 - 14 August 2009

For more info visit: <http://www.geoinformatics2009.org/>

5th Ankara International Aerospace Conference (AIAC'2009)

Ankara, Turkey, 17 - 19 August 2009

For more info visit: <http://aiac.ae.metu.edu.tr/>

3rd Central Asia GIS Conference (GISCA'09)

Bishkek, Kyrgyzstan, 27 - 28 August 2009

For more info visit: <http://www.aca-giscience.org/gisca09>

6th International Symposium on Digital Earth

Beijing, China, 9 - 12 September 2009

For more info visit: <http://www.isde6.org/>

XIX Congress of the Carpathian Balkan Geological Association

Thessaloniki, Greece, 23 - 26 September 2009

For more info visit: <http://www.cbga2010.org/>

GlobCover: When a Classical EO Application Becomes a Service

by Vasileios Kalogirou (RSAC c/o ESA)

It's been more than 3 years from the day that I came across an interesting article, while reading the Remote Sensing & Photogrammetry Society (RSPSoc) Newsletter of January 2006. An article written by Dr. Robin Vaughan, which is actually based on a keynote talk that Dr. Vaughan gave in 2004 in Aberdeen during the Annual Conference of the RSPSoc (UK Remote Sensing Society then). His brilliant lecture investigated the question: Remote Sensing - A success or a disappointing failure? (R. Vaughan, Remote sensing - a success or a disappointing failure? In: A. Cracknell, Editor, Proceedings of RSPSoc2004)

The fairly logical argument of the article was based on the fact that after so many years of remote sensing research 'we still cannot do what was promised' and that still remote sensing is facing its maturity stage towards the provision of operational services. In a few words, there are a bunch of interesting and impressive applications that use remote sensing techniques, but how do you turn those into services?

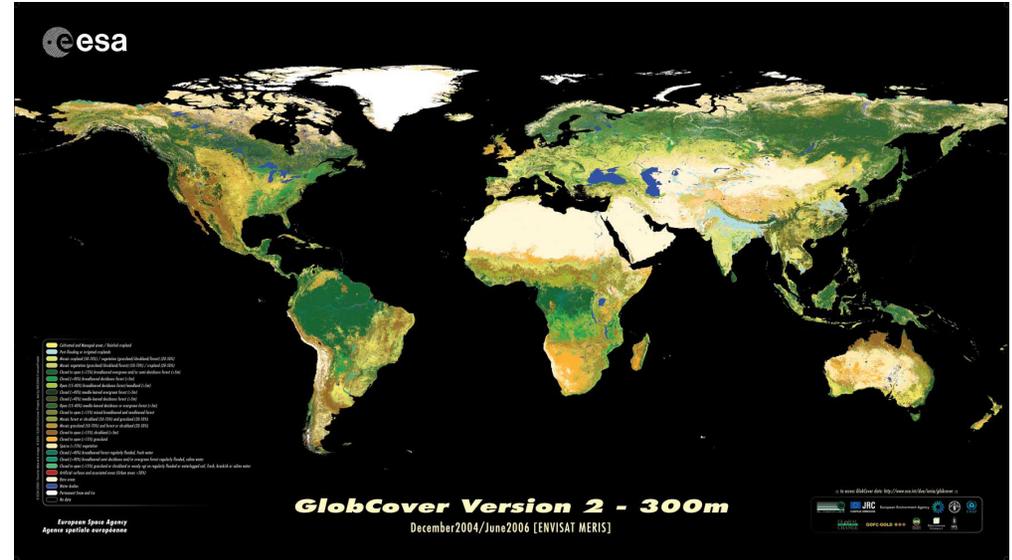
The introduction above is quite relevant to what the GlobCover project is. It is an ESA's initiative in partnership with JRC, FAO, EEA, UNEP, GOCF - GOLD and IGBP ¹. Some people might think that it is simply a global land cover map which have been created using MERIS Full Resolution data. At the moment, it is regarded as the most precise (300m spatial resolution) global land cover map, whose legend is compatible with the UN Land Cover Classification System. Being part of the ESA's Data User Element programme, GlobCover is a demonstration project whose output is more than a map; it is a system. A system that implements a semi-automatic processing chain for a global land cover service. Under this perspective, it is an important step not only for ESA and its partners but also for the almost 7200 scientists, officers, students, conservationists and others who freely downloaded it and used it.

Land cover mapping is a classical application of Earth Observation for many years. It is also very important information which serves as an input to a large variety of other applications and studies. GlobCover system represents a great step forward in our capacity to automatically produce new global land cover products with finer resolution (global scale) and a more detailed thematic content than ever achieved in the past. The GlobCover map is freely available to the public with the extended validation report, through ESA's Ionia server ².

Conveying all the above with Dr. Vaughan's article, it seems that remote sensing is slowly moving forward to shape 'promises' into public -and not only scientific- services. GlobCover is an example of a demonstration project, which can become easily operational.

As our technical capabilities continue to grow, the need for operational services will

become more critical and as research provides us with more solutions and improvements, the market's interest will become stronger. After all, I do not know if Earth Observation will be able to save the world, but I certainly know that it has already changed the way we think about our world.



ESA / ESA GlobCover Project, led by MEDIAS-France

¹JRC = Joint Research Centre, FAO = Food and Agriculture Organisation, EEA = European Environment Agency, UNEP = UN Environment Programme, GOCF - GOLD = Global Observation of Forest and Land Cover Dynamics, IGBP = International Geosphere-Biosphere Programme.

² See <http://ionia1.esrin.esa.int/index.asp>

For more information about GlobCover see:

<http://dup.esrin.esa.it/projects/summary68.asp>

http://www.esa.int/esapub/bulletin/bulletin136/bul136d_arino.pdf

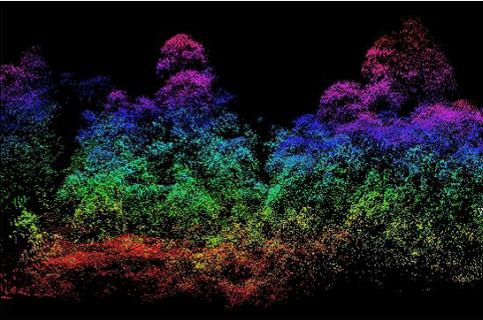
LA SELVA GIS LAB: A Suitable Place for Remote Sensing Research in the Costa Rican Tropical Rainforest

by Carlomagno Soto and Elena Lobo.

La Selva's Geographic Information System laboratory was established in 1991 with the principal mission of providing data and geographic information for supporting the learning and researching process of the Organization of Tropical Studies (OTS) <http://www.ots.ac.cr/> and their users.

Since then, several surveys, geographical coverage and spatial research are underway, supported by a 50 x 100 m grid system established in the forest as well as data from cutting edge sensors, like aerial photography, satellite images and many airborne optical (multispectral, hyperspectral) and active sensors (RADAR, LiDAR).

The GIS Lab has the equipment needed to carry out a high performance geospatial

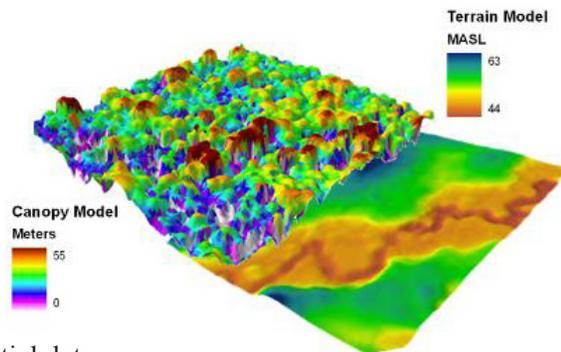


processing and data analysis of high quality, which allow us to receive many interdisciplinary researchers interested on the tropical forest knowledge.

One of the most relevant projects currently developed are techniques for the study of tree regeneration and mortality to know about the spatial patterns and ecological processes of the forest dynam-

ics through segmentation of satellite images and several field variables. This study was presented on the **33th ISRSE** symposium (<http://isrse-33.jrc.ec.europa.eu/>) attended in Italy by Elena Lobo.

Thus, La Selva represents a reference's frame for remote sensing studies, being a regional data producer and database steward of great relevance for the management of landscape in the area. We are looking forward to receive students, researchers and several users for developing a systematic way to share and exchange geospatial data.



by Kyaw Sann Oo

30 years ago geoinformation researchers didn't have many opportunities to present their research works in Asia. In 1980, researchers from Asia participated in ERIM Symposium in San Jose, Costa Rica; and their gathering made a decision to hold this type of symposium with Asian styles in one of Asian cities. However, they faced many challenges in organizing the ACRS conference; but their dream was realized in Thailand at the first ACRS conference in Asia in 1980, the same year of the assembly in Costa Rica. The conference is held annually in one Asian city. In the beginning of 21st century, the participation of students is increasing and student sessions initiated. Everyone can participate by submitting research papers; even though, the conference is held in one of AARS member countries. Over 30 years, the location of the ACRS conference has spread widely within Asia. The figure showed the location of ACRS venue cities and those are favorably distributed in the Asia region. This year, ACRS 2009, will be held on Beijing, the capital of China with the theme of 'Asia Onward Space Age'. All useful information for the conference can be found in the ACRS2009 website (<http://www.cncrs.org/>). The first day (18 Oct 2009) of the conference will be occupied by student sessions. The local organizing committee invites all young students who are registered in undergraduate and postgraduate courses. Believing that, the student session "New Tech of Remote Sensing, New Youth in Asia" will bring the youths to the new era of the Asian Remote Sensing by participating in the conference. There are two types of awards up for grabs as the conference one for best speaker and one for best paper.

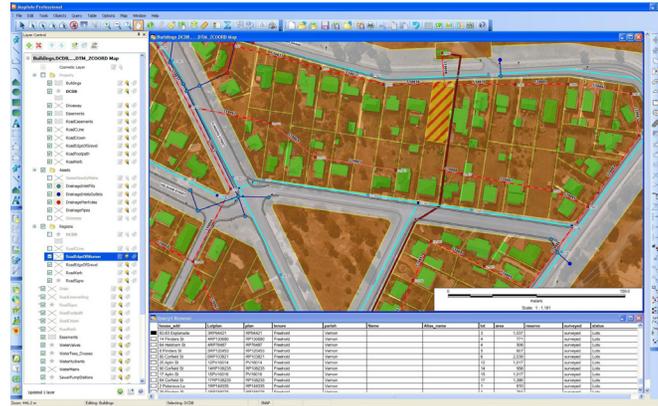
MapInfo Professional 10

MapInfo Professional is a powerful Microsoft Windows-based mapping and geographic analysis application from the experts in location intelligence. Designed to easily visualize the relationships between data and geography, MapInfo Professional® helps business analysts, planners, GIS professionals – even non-GIS users – gain new insights into their markets, share information-rich maps and graphs and improve strategic decision-making.

Pitney Bowes Business Insight, the leading global provider of location and communication intelligence solutions, unveiled MapInfo Professional v10.0, the latest version of the company's flagship application for business mapping and analysis. With more than 80 percent of corporate data including a location component, MapInfo Professional provides organizations with the ability to visualize and analyze information to secure valuable insights and tremendous advantages over their competitors, which is critical in today's economic environment.

A powerful and user-friendly mapping and location analysis application, MapInfo Professional 10.0 now includes redesigned intuitive user interface, access to PostGIS, an open source database, and a built-in support for Layered PDF generation. The end result is a cost-effective solution that enables organizations to gain optimal value from their data when making decisions about managing inventory, allocating resources and communicating with customers.

For more information visit: <http://li.pbbiblogs.com>.



Leica GeoMoS - The Leica Automatic Deformation Monitoring System

Each monitoring project has specific measurement and accuracy requirements. The Leica GeoMoS software provides a highly flexible automatic deformation monitoring system that is able to combine geodetic, geotechnical and meteorological sensors to match the needs of your monitoring project, whether it is large or small, temporary or permanent.



Leica Geosystems has upgraded GeoMoS to version 5.0 to increase productivity and accuracy when detecting, analyzing and visualizing structural movements. Leica GeoMoS 5.0 now supports the new Leica TM30 sensor especially designed for monitoring applications. Furthermore the new 'Adjustment' add-on and the new 'Slope Monitoring' feature contribute to accuracy and productivity.

Leica GeoMoS Adjustment supports all combinations of geodetic measurements from multiple total stations, levels and/or GPS/GNSS. The detected movements are quantified by their statistical significance allowing for more informed decision-making.

For more information visit:

http://www.gim-international.com/news/id3740-GeoMoS_Update.html

OpenTopography Portal

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

Planet Action, the non profit initiative launched by Spot Image

<http://www.planet-action.org/>

TUTORIALS

Virtual Lab for GIS and Remote Sensing

More info [here](#)

EDUCATION

The ISPRS Educational Directory

Education, Training, Research and Fellowship Opportunities in the Remote Sensing, GIS

More info [here](#)

JOURNALS

GeoInformatics

More info [here](#)

Survey Review

More info [here](#)

FREE SOFTWARE

Geodetic Software, by National Geodetic Software of US

More info [here](#)

RELATED ORGANIZATIONS

The international Group on Earth Observations (GEO)

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

International Astronautical Federation

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

This column serves as a guide for the students who are thinking or are willing to go studying or doing practical work abroad. We have searched for new opportunities in different faculties, schools and other learning programs all over the world in order to encourage as many students as possible to take new steps towards new horizons.

Fresnel Institute from **Marseille** (France) has an open **post Doc position** in hyperspectral imagery (analysis of hyperspectral data in coastal environment for defense applications) with the duration of 12 months. The aim of this research is to develop detection algorithms and unmixing algorithms for immersed objects at shallow water. The date to commence is flexible, between October 2009 and January 2010. More information can be found [here](#)

Indian Institute of remote sensing (IIRS) have started an International course in geo-information science and earth observation (for **Master of Science and Post Graduate Diploma**), with specialization in Geo-hazards. The postgraduate diploma course is focused on learning how to apply Geoinformatics for the assessment of various hazards and risk assessment, while the Master's of Science course is directed towards critical understanding of geoinformation tools in hazard and risk assessment, in a research environment. For more information click [here](#)

Kayser-Threde GmbH (KT) is offering a **job opportunity** in hyperspectral sensor calibration algorithms. Applications are invited for an Early Stage Researcher (ESR) position within the framework of the European Marie Curie Research and training Network HYPER-I-NET. Place of work is in Munich, Germany and it lasts for 12 months (with the start date between October 2009 and February 2010). More info can be found [here](#)

Once per year **ITC** organizes a **distance learning course** in principles of Geographical Information Systems. This year the course is scheduled for the 9th of September and it lasts for six weeks. The participants will be introduced to the basic concepts, data manipulation and analysis, and the production of interpretable output. The course is useful to novices, as well as to those experienced in some aspects of GIS but lacking a complete overview of the state of the art and/or the conceptual foundation.

For more info check [here](#)

TanDEM-X radar satellite ready

The primary goal of the TanDEM-X mission is to generate a global digital elevation model. To achieve this, two satellites – TanDEM-X and TerraSAR-X, a satellite which has been in orbit since 2007 – will form the first configurable SAR interferometer in space with a separation of only a few hundred metres.

[Read more...](#)

Japan, India plan joint space research project

Tokyo: Japan and India plan to launch their first joint space research project this year, an experiment in growing plants in zero gravity.

[Read more...](#)

3D Lidar Hyperspectral Imaging

Southern Mapping Company (South Africa) has invested in hyperspectral Lidar imaging equipment able to produce a three-dimensional digital terrain model on which the images are superimposed. With the addition of the hyperspectral remote sensing technology, Southern Mapping will now be able to identify individual species of plants and trees, noxious gases and aerosols, minerals and soil types. This data can be useful for both public and private agricultural, forestry, water and air quality and mining sectors.

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100 Days of Imaging

RapidEye has collected more than 69 million square kilometres of at least 80% cloud-free images during its first 100 days of operation. The imaging campaigns were concentrated in Europe, the US, Brazil and China.

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3D Road Geometry Available for Germany

Intermap Technologies has completed production of the first dataset of 3D road vectors for Germany. Covering all classes of roads, the dataset features more than one million kilometres of road-centerline position and elevation data for the entire country. Derived from the database of uniformly accurate digital elevation models (DEMs) for the whole of Western Europe, these geometries can be used by the automotive industry to support advanced driver assistance systems (ADAS) safety and energy management applications that rely on accurate road vector geometry.

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Invitation to join ISPRS SC society

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Our previous Newsletter issues

