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Dear colleagues from all over the world,

In 2007 Moscow hosted the 23rd International Cartographic Conference (ICC), followed by Santiago de Chile and Paris in 2009 and 2011. In two years the 27th ICC will be held in Rio de Janeiro and subsequently in 2017 in Washington DC. So, big global megacities have been and will be host to these biannual cartographic world congresses. Thus, one may be surprised that in 2013 a comparatively small place like Dresden with merely half a million inhabitants has been selected by the Executive Committee of the International Cartographic Association to organise this year’s ICC.

The reasons for that may be manyfold. To begin with, the setting: Dresden boasts a significant quantity of world-class art treasures and can in this respect cope with places like Venice or Florence but also with cities like Athens, London, Paris, Moscow, Berlin, or Rome. In fact, between Italy and the Electoral Court in Dresden have always been close cultural ties. Giacomo Casanova’s mother was actress at the Court Theatre, his brother Director of the Art Academy, and Casanova himself stayed many months in Dresden, finally concluding his life in a Bohemian castle near Dresden. The most famous panoramic veduta of Dresden e.g. stems from the Italian painter Bernardo Bellotto (1722–1780), called Canaletto. Dresden is also frequently referred to as “Florence of the North”.

Further, Dresden is located at the doorstep of the Saxon Switzerland National Park with its unique sandstone cliff- and-spire landscape, a natural gem that also served as the cradle of modern rock climbing which started its triumphal march from here via Yosemite Valley, California, all over the world. It attracts top rock athletes and tourists from all over the world. Finally, the local organisers also conceive the assignment of the 26th ICC to Dresden also as a recognition of the considerable achievements in both cartographic research and academic education in Dresden. Several developments in our scientific discipline either originate from TU Dresden or have been significantly driven forth here. This is why no less a figure than Ferjan Ormeling Jr. attributed Dresden to the Great Schools of Cartography. During the 2013 ICC you might take the chance to personally verify this either in the fabulous International Congress Center Dresden at the banks of River Elbe or at the Institute for Cartography of Technische Universität Dresden.

For us from the LOC this year’s International Cartographic Conference is one more gemstone in the almost 60-year long history of University Cartography in Dresden.

Welcome in Dresden! Enjoy, professionally and privately. You will be amply rewarded in both respects.

Manfred F. Buchroithner
President of Organising Committee
Dear Colleagues,

the 26th International Cartographic Conference will be held in Dresden in August 2013. This conference returns to Germany again, with ICA conferences being held previously in Germany in Frankfurt in 1962 and Cologne in 1993. The International Cartographic Conferences take place every two years. 2013 sees the conference in the “Florence of the North”.

It will bring together cartographers and GI Science specialists from across the globe to Dresden for the International Cartographic Conference - ICC 2013. The conference will provide a forum for the presentation of scientific papers illustrating the efforts of the research community, professional papers describing the cutting-edge methods employed by mapping organisations, meetings of the ICA Commissions and Working Groups, furthering their international collaborative efforts to advance knowledge and techniques in cartography, map exhibitions and the chance to meet again with colleagues and friends.

Dresden boasts the highest density of art treasures in Europe. And, for cartographers, the possibility to view one of the top international globe collections. Dresden is also the home of educational and research institutions that have progressed the theoretical and practical elements of Cartography and GI Science.

The 26th International Cartographic Conference will be held at Dresden’s state-of-the-art congress centre. The congress centre is in the very middle of Dresden, affording the opportunity for conference delegates and accompanying persons to explore this wonderful city.

We urge you to participate in what will be a wonderful occasion. It provides the opportunity to attend presentations and Commission and Working Group meetings, to visit technical and international mapping exhibitions and to meet socially with colleagues from the international Cartography and GI Science community at a place which, for centuries, has been acting as a hinge between Eastern and Central Europe.

We look forward to seeing you in Dresden in 2013 for the 26th International Cartographic Conference.

Georg Gartner
President of the ICA
Dear colleagues and friends,

on the occasion of the 26th International Cartographic Conference the German Cartographic Society DGfK is pleased to welcome you all in Dresden. After Frankfurt in 1962 and Cologne in 1993 it is the third conference of the International Cartographic Association being held in Germany and the city of Dresden – which has been entitled Florence of the North in order to appreciate its cultural importance – will surely be an excellent host for the participants of ICC 2013.

We decided to celebrate the annual Cartographic Conference of DGfK – 61. Deutscher Kartographentag – in a very close cooperation with ICC 2013 in order to present German cartography to the world and to feature the cartography of the world to our members. Cartography is a cross-disciplinary science with a broad range of methods. In today’s geographic information science community cartography means science, business and of course art of visualization and communication of spatio-temporal information. This definition reflects the high standards of quality in cartography concerning the visual representation of information. Together with our colleagues from Austria and Switzerland we also published a special issue of KN Kartographische Nachrichten for ICC 2013 and dedicated it to Cartography and Geographic Information Science in Germany, Austria and Switzerland to represent the actual state of modern cartography in the German speaking countries. You are cordially invited to visit us at the DGfK booth in the exhibition of ICC 2013 and get your complimentary copy of our KN – Journal of Cartography and geographic Information.

We are very glad to meet you here in Dresden for the 26th International Cartographic Conference and the 61st German Cartographic Conference and we wish you a fruitful conference and a good time in Germany.

Prof. Dr. Manfred Weisensee
President of the German Cartographic Society DGfK
Committees

International Scientific Committee:
- Suchith ANAND
- Gennady ANDRIENKO
- Masatoshi ARIKAWA
- Hartmut ASCHE
- Thierry BADARD
- Temenoujka BANDROVA
- Manfred BUCHROITHNER
- Aileen BUCKLEY
- Dirk BURGHARDT
- Rex G. CAMMACK
- Sébastien CAQUARD
- William CARTWRIGHT
- Xiaoyong CHEN
- Steve CHILTON
- Derek CLARKE
- Peter COLLIER
- Antony COOPER
- Philippe DE MAYER
- Imre Josef DEMHAARDT
- Frank DICKMANN
- Qingyun DU
- Cecile DUCHENE
- Jason DYKES
- Alejandra Coll ESCANILLA
- Sara FABRIKANT
- David FAIRBAIRN
- Kenneth FIELD
- David FORREST
- David FRASER
- Georg GARTNER
- Amy GRIFFIN
- Henrik HARGITAI
- Anja HOPFSTOCK
- Florian H Ruby
- Lorenz HURNI
- Bernhard JENNY
- Bin JIANG
- Markus JOBST
- Peter JORDAN
- Alexander KENT
- Pyry KETTUNEN
- Milan KONECNÝ
- Menno-Jan KRAAK
- Horst KREMERS
- Dia K. KRESNAWATI
- Karel KRIZ
- Miljenko LAPAINÉ
- Jonathan Li
- Rongxing (Ron) Li
- Zhilin Li
- Elri LIEBENBERG
- Christophe LIENERT
- Evangelos LIVIERATOS
- Yuefeng LIU
- William A. MACKANESS
- Sukendra MARTHA
- Paolo MENEZES
- Liqui MENG
- Harald MOELLERING
- Carme MONTANER
- José Jesús Reyes NUÉZ
- Kristien OOMS
- Ferjan ORMELING
- Alastair PEARSON
- Chris PERKINS
- Michael P. PETERSON
- Barbara PIATTI
- Alexander PUCHER
- Qingsen Qi
- Waldirene RIBEIRO
- Bengt RYSTEDT
- Anne RUAS
- Manuela SCHMIDT
- Jörn SEEMAN
- Monika SESTER
- Kira SHINGAREVA
- René SIEBER
- Vladimir TIKUNOV
- Xiaohua TONG
- Tim TRAINOR
- Andrew TURNER
- Necla ULU GTEKIN
- Lynn USEY
- Corné VAN ELZAKKER
- Robert WEIBEL
- Alexander WOLODTSCHENKO
- Xiaojun YANG
- Xiaobai YAO
- Liu YAO LIN
- Long Yi
- László ZENTAI
- Wieslawa ZYSZKOWSKA
- Werner HAUPT / Barbara WOLTERS
- Clara TOPPER
- Tobias KRÜGER
- Dirk BURGHARDT
- Benjamin SCHROTTER
- Karsten PIPPI
- Thomas CHUDY
- Ulf TREBESIUS
- Sylvia NEUMANN

Technical Exhibition Committee:
- Gerd BUZIEW
- Manfred WEISENSEE
- Matthias ALISCH
- Irmi RUNDEL
- Manfred BUCHROITHNER
- Sylvia NEUMANN

Social Programme Committee:
- Sylvia NEUMANN

Technical Tours Committee:
- Thomas CHUDY
- Jana MOSER
- Sylvia NEUMANN

Pre- and Post-Conference Tours Committee:
- Sylvia NEUMANN
- Anja BINNING
- Andreas WITSCHEL

Accompanying Persons Programme Committee:
- INTERCOM / Sylvia NEUMANN

Sub-Committee Map Exhibitions:
- Dirk BURGHARDT
- Alessio BERTONE
- Uta HEIDIG

Local Organising Committee:
- Manfred BUCHROITHNER (President)
- Manfred WEISENSEE
- Hansjörg KUTTERER / Andreas ILLERT

Sub-Committee Orienteering Competition:
- Robert KRÜGER
Conference Venue

International Congress Center Dresden
Ostra-Ufer 2
01067 Dresden
Germany
CONFERENCE LEVEL

TERRACE LEVEL
Coffee breaks and lunches will be served in the exhibition area (Hall 2-5). The breaks are indicated in the programme. The coffee breaks as well as the lunches are included in the conference fee.

The organizers are not liable for damages and/or losses of any kind which may be incurred by the conference or by any other individuals accompanying them, both during the official activities as well as going to/from the conference.

Lost & Found items are handled by the registration desk.

Participants and accompanying persons are required to wear the official conference name badge on all conference occasions. Without name badge no entrance!

The conference language is English.

An underground car park is available at the International Congress Center. Open hours: 24 hours daily

Height limit: 2,10 meters

1,50 € / 1 hour, 14,00 € / 24 hours

Dresden, Germany is in Central European Time.
Registration desk:

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Phone: +49 (0) 351 216 1702

Registration Fee on Site:

- Full participant: 600.00 €
- Senior / Student: 400.00 €
- Attendees from Africa: 400.00 €
- One day Attendee: 250.00 €
- Accompanying person: 180.00 €
- Gala Dinner: 65.00 €

Poster Information:

There will be three poster sessions during ICC 2013. Please visit the conference programme to find out on which day your poster presentation is scheduled. You can use the full text search and enter your abstract ID or author name to get the required information.

**Poster sessions will take place on the following three conference days:**

**Poster Session I:**
Tuesday, August 27, 2013; 12.15 – 12.45
Authors are kindly asked to place their posters on Tuesday, August 27, 2013 from 08.30 to 10.30 and to take it off from 17.45 to 19.00.

**Poster Session II:**
Wednesday, August 28, 2013; 12.15 – 12.45
Authors are kindly asked to place their posters on Wednesday, August 28, 2013 from 08.30 to 10.30 and to take it off from 17.45 to 19.00.

**Poster Session III:**
Thursday, August 29, 2013; 12.15 – 12.45
Authors are kindly asked to place their posters on Thursday, August 29, 2013 from 08.30 to 10.30 and to take it off from 17.45 to 19.00.

The poster exhibition is located at the “Terrassen Foyer” of the conference venue. During the poster session authors are kindly asked to be present in the area of their posters in order to answer questions that interested viewers may have.

The poster boards have a height of 236 cm (=92,91 inches) and a width of 95 cm (=37,4 inches) and are working for DIN A0 size.

Posters can only be fixed on poster boards, using the fixing material provided at the poster desk.

No liability will be assumed for non-removed posters!
Cartographic Exhibition

The official opening of the International Cartographic Exhibition will take place on Monday the 26th of August at 13.00 after the official opening ceremony for the ICC2013.

During the cartographic exhibition countries from all over the world will exhibit most recent cartographic products in digital or paper format. Maps and Cartographic Products are submitted in 5 different categories:

- Paper Maps
- Atlases
- Digital Products
- Educational Cartographic Products
- Other Cartographic Products (including globes and tactile maps)

Organisational Issues

The conference center will be open on Sunday, the 25th between 14.00 and 19.00 for the preparation of the Cartographic Exhibition. This will be the best time to hang the maps on the panels. The conference center opens again on Monday, the 26th at 20.00. Thus there is time until lunch for final preparations.

“Power strips” will be used to stick the maps on the panels. The power strips will be provided by the local organisers, of course it is possible to use your own power strips.

Technical Exhibition – Sponsorship Opportunities

ICA has confirmed a new exhibition period from August 27 – 29, 2013.

Ice Breaker will take place in the exhibition area August 26, 18.00 – 20.00

A 01 Springer-Verlag GmbH
A 02 Saxon State and University Library Dresden (SLUB Dresden)
A 03 Kirschbaum Verlag GmbH
A 04 Sociedade Brasileira de Cartografia (ICC 2015)
A 05 Beuth University for Applied Sciences Berlin
A 06 Jade University of Applied Sciences
A 07 German Cartographic Society e.V. (DGfK)
A 08 AMCAD & Rauch GmbH
A 09 OCAD AG
A 10 Mercator CPS / 1 Spatial
A 11 Leibniz-Institut für Länderkunde
A 12 Plastic Logic GmbH
A 13 Swiss Confederation: Office of Topography - Statistical Office
A 14 GiziMap
A 15 Interactive Minds Dresden GmbH
A 16 Esri
A 17 Główny Urzad Geodezji i Kartografii
A 18 Beak Consultants GmbH
A 19 RIEGL Laser Measurement Systems GmbH
A 20 Maney Publishing
A 21 Neenah Lahnstein GmbH
A 22 Industrieanlagen-Betriebsgesellschaft mbH (IABG)
A23+A24 Arbeitsgemeinschaft der Vermessungsverwaltungen der Länder der Bundesrepublik Deutschland (AdV): Official Surveying and Cartography Germany
A 25 East View Geospatial
A 26 RapidEye AG
A 27 DBx GEOMATICS
SOCIAL PROGRAMS

ICE BREAKER
Monday, August 26, 2013, 18.00-20.00
The Ice Breaker will be a casual Get Together at the first evening with welcome drinks and snacks served. All participants are invited to this social event in the exhibition area at the International Congress Center.

YOUNG CARTOGRAPHER’S SOCIAL MEETING
Wednesday, August 28, 2013, 19:30
The YOUNG CARTOGRAPHER’S SOCIAL MEETING at the ICC 2013 will take place at Wenzel Prager Bierstuben (www.wenzel-bierstuben.de) on August 28, 19:30. The YOUNG CARTOGRAPHER’S SOCIAL MEETING will be the right framework to discuss current research topics, to reflect first impressions of the ICC, or simply to meet other young scientists of the cartographic community in a relaxed atmosphere. Students and PhD students are warmly welcome to attend this meeting.

All those interested are kindly asked to register at the stand of the German Cartographic Society (DGfK, stand no. A07) at the exhibition area on Tuesday (Aug 27) or Wednesday (Aug 28). Please be aware that the number of participants is limited to 80 persons.

GALA DINNER
Thursday, August 29, 2013, 19.30-23.00
Besides the conference, the Gala Dinner is a good opportunity for social contacts of the participants. From the Westin Bellevue Hotel you will be awarded with the famous Canaletto-view.

ACCOMPANYING PARTNERS PROGRAMS

Walking tour through the historical city centre
Monday, August 26, 14.00-16.00
A guided walking tour through the pedestrian area of the historical city centre of Dresden is a “must” for visitors. In a two hours tour you will get an overview of the most famous sights of Dresden, such as the Residence Castle, the Semper Opera House, the Zwinger and the Church of our Lady.

Good walking shoes and an ability to walk on uneven pavement are recommended.

Excursion to Pillnitz
Wednesday, August 28, 09.00-13.00
A ride on the Elbe river is a special experience. Dresden is the home of the largest and oldest steamboat fleet in the world. You will pass by the three Elbe palaces and the famous “Blue Wonder” bridge. Enjoy the beautiful view on your tour to Pillnitz.

Visit the Park of Pillnitz Palace, a former summer residence of the famous Saxon King August the Strong. You will be impressed by the unique location, the gardens and the architecture of the palace built in a Chinese style. The return journey to Dresden will be by motor coach.

Lunch will be by your own. It is possible to purchase refreshments and snacks on the steamer or at the Park.
TECHNICAL EXCURSIONS

Map Department of the Berlin State Library
Wednesday, August 28, 08.00-17.00
With more than 1.1 million maps, 35,000 atlases, 35,000 volumes of scientific literature, and 550 globes, the Map Department of the Berlin State Library represents one of the world’s great collections and is considered to be Germany’s cartographic documentation center. On behalf of the German Research Foundation, the department acquires current topographic maps from all over the world, but also completes its extensive historical collection through specific antiquarian map purchases. The maps are documented in special databases to ensure user friendly handling. The visit will include both an overview of the department and its use, as well as presentations of outstanding pieces of the Map Department’s collection.

Saxon State Library
Monday, August 26, 16.00-18.30
The map collection of the Saxon State Library includes valuable and unique maps of Saxony, Germany and Europe as well as numerous local views from the 17th, 18th and 19th centuries. Altogether it consists of more than 170,000 sheets. Approximately 20,000 of the most important pieces were digitised with ultra-high resolution and are available in the Digital Map Forum which allows viewing, downloading and printing of the digital copies. The treasure room holds the most precious objects of the Library’s collections. Besides the world-famous Maya manuscript (“Codex Dresdensis”) it contains other one-of-a-kind manuscripts, incunabula and autographs.

Royal Cabinet of Mathematical and Physical Instruments)
Tuesday, August 27, 10.00-12.30
The Mathematisch-Physikalischer Salon is a world-famous collection of historic clocks and scientific instruments. Its holdings include terrestrial and celestial globes, fascinating optical, astronomical and geodetic devices dating back to the 16th century, as well as historic instruments for calculating, drawing and determining length, mass, temperature and air pressure. The objects provide an overview of the development of early precision mechanical devices, globes and clocks, and selected specimens demonstrate their application and their technical construction. In addition, they are works of art of the highest order, reflecting their princely origins. Of exceptional importance are the 13th-century Arab celestial globe and the mechanical calculator constructed by Blaise Pascal which dates to around 1650. Among the other interesting items is a musical automaton with a drumming bear as an alarm clock, and also a burning mirror which was used by Baron von Tschirnhaus to generate the high temperature required for the manufacture of porcelain.

IABG Geodata Factory
Wednesday, August 28, 09.00-12.00
The IABG Geodata Factory is a modern geodata production facility in the Airport Center, directly adjacent to the Dresden airport. As service provider for remote sensing, photogrammetry and geoinformatics we offer solutions in the fields of topographic and thematic mapping, cadastre and land-use planning. During the excursion efficient methods of satellite image analysis, modern photogrammetric applications and current remote sensing projects are demonstrated.
GeoSN

Tuesday, August 27, 10.00-12.30
GeoSN is the Saxon state spatial data and land survey agency. The tour will cover both the topographic-cartographic information system, GDI and INSPIRE activities as well as the print on demand technology. In front of the GeoSN building is the famous national museum of military history designed by the architect Daniel Libeskind.

OTHER ACTIVITIES

Orienteering event

Wednesday, August 28, 17.30
The event will be organised around the conference centre mostly in urban areas (city center). Three courses will be planned:
- long course: for „professional“ orienteers, about 5 km,
- medium course: for beginners and masters, about 3 km,
- beginner course in the urban area, about 1.5 km.
The course lengths are the straight line distances, so the actual length to run will be longer due the urban character of the area.

Please note: The entry fee is to be paid directly to the event organizers at the start.

The ICC Orienteering Event will be organized together with a regional orienteering event. The regional event starts at 16:30. The ICC Orienteering Event will be open from 17:30 up to 18:30 as well. For logical reasons the participants who selected the longest course will start earlier.

There will be a short briefing for the participants on Monday, August 26, 17:45 in the Conference Centre (room C2) where the participants can indicate which course they select, SI numbers can be collected, the organizers may also collect the entry fees in advance. They will have demonstrations for the beginners (control flag, SI punching, control descriptions).
Kontakt
Deutschen Gesellschaft für Kartographie e. V.
Präsident: Prof. Dr.-Ing. Manfred Weisensee
Postfach 11 14, 01686 Weinböhla, Germany
www.dgfk.net

Veranstaltungsort
International Congress Center Dresden
Ostra-Ufer 2
01067 Dresden
Germany

Registrierungsgebühren
Frühregistrierung bis 15.04.2013
Spätregistrierung ab 16.04.2013

Mitglied DGfK, DVW, VDV und DGPF 1,3
200,00 €  250,00 €

Nichtmitglied
300,00 €  350,00 €

Mitglied DGfK, DVW, VDV und DGPF in Ausbildung 2,3
100,00 €  125,00 €

Nichtmitglied in Ausbildung 2
125,00 €  150,00 €

Teilnahme am Deutschen Kartographentag und ICC-Kongress 4
500,00 €  600,00 €

In der Tagungsgebühr sind enthalten:
(1) Teilnahme am wissenschaftlichen Programm des DKT
Tagungsunterlagen
Teilnahme am wissenschaftlichen Programm der ICC 2013 am 29. und 30.08.2013
Zutritt zur ICC-Technical, Cartographic und Children’s drawing exhibition am 29. und 30.08.2013
Kaffeepausen und Mittagessen am 29. und 30.08.2013
Teilnahme an der Eröffnungsveranstaltung am 28.08.2013

(2) Nachweis erforderlich

(3) Mitgliedschaft erforderlich

(4) zusätzlich zu (1):
Teilnahme am kompletten wissenschaftlichen Programm ICC 2013
Zutritt zur ICC-Technical, Cartographic und Children’s drawing exhibition
Tagungsunterlagen ICC 2013
Kaffeepausen, Mittagessen, Ice Breaker ICC 2013

Programm
Mittwoch, 28.08.2013, 14:00 - 17:00  •  Ort: TU Dresden, Hülssebau, Hörsaal S 186
Mitgliederversammlung der DGfK

Mittwoch, 28.08.13, 19:00 - 21:30
Eröffnung des DKT2013:
Festvortrag von Dominique Görlitz „Präkolumbianische Kartenquellen“

Donnerstag, 29.08.13, 09:15 - 10:30
DKT2013: Geodaten heute und morgen
Moderation: Tobias Krüger

Donnerstag, 11:00 - 12:15
DKT2013: Aus der Aus der Arbeit der DGfK-Kommissionen
Moderation: Dietrich Diez

Freitag, 30.08.13, 09:15 - 10:30
DKT2013: Aktuelle Entwicklung in der Atlasskartographie
Moderation: Jana Moser
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<td>09:15-10:30</td>
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<td>Opening Ceremony (Great Hall)</td>
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<td>Break</td>
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<td>12:45-14:00</td>
<td>Plenary Keynote (Great Hall)</td>
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<td>14:00-14:45</td>
<td>Session 1 (Great Hall)</td>
<td>Session 5 (Great Hall)</td>
<td>Session 9 (Great Hall)</td>
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<td>Scientific Awards (Great Hall)</td>
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<td>Session 15 (Great Hall)</td>
<td>Closing Ceremony (Great Hall)</td>
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<td>16:00-16:30</td>
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<td>16:30-17:45</td>
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<td>17:15-18:00</td>
<td>Briefing Orient. Comp.</td>
<td>Internat. Masters of Carto-</td>
<td>Business Meeting CMC C4</td>
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<td>18:00-18:30</td>
<td>Ice Breaker</td>
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<td>18:30-19:00</td>
<td>Young Scientists Speed Pres.</td>
<td>Young Cartogr. Social</td>
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<td>19:00-19:30</td>
<td>Hall level Exhibition area</td>
<td>Meeting Wenzel Prager</td>
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<td>19:30-20:00</td>
<td>Conf. Level C5</td>
<td>Prater Biertuben</td>
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<td>20:00-20:30</td>
<td>ICA Chair Meeting S1</td>
<td>Gala Dinner (up to 23:00)</td>
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<td>20:30-21:00</td>
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<td>Westin Bellevue Hotel</td>
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<td>21:00-21:30</td>
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Programme at a Glance

Geospatial Analysis and Modeling
Map Design
Art and Cartography
Cartography in Early Warning and Crisis Management
Maps and Society
Data Quality
Cognitive Visualization/Theoretical Cartography
Neocartography
Maps and the Internet
Generalisation and Multiple Representation
Map Projections
Atlases
Maps and Security
Geovisualization
Geoinformation Infrastructures and Standards
Cartography and Children
Open Source Geospatial Technologies
Mapping from Remote Sensor Imagery
History of Cartography
Maps and Graphics for Blind and Partially Sighted People
GI for Sustainability
Map Production and Geo-Business
Education and Training
Planetary Cartography
Digital Technologies in Cartographic Heritage
Use and User Issues
Mountain Cartography
Ubiquitous Mapping
Orienteering Maps
Mixed Session
Deutscher Kartographentag
Others

SCIENTIFIC PROGRAMME

Sessions, Poster Sessions and Additional Events

pages 20 – 55
10:00 - 12:45  Opening Ceremony  
Great Hall

Various Welcome Adresses

Official Opening by Saxon State Minister of the Interior Markus Ulbig on behalf of Prime Minister Stanislaw Tillich

Signing MoU between EuroSDR and ICA

Keynote of Georg Gartner: Modern Cartography

Travel Awards

Film Documentary: Germany from Above

13:00  Opening of International Map Exhibition, IHO Map Exhibition and Children's Map Exhibition

14.00  PLENARY KEYNOTE  
Great Hall

KN-1-1 | Web Maps, Story Maps and Trends in Underlying Geospatial Technologies  
Jack Dangermond

14:00  ICA Commissions at a Glance  
Great Hall

Commission on Geovisualization

Commission on Cognitive Visualization

Commission on Generalisation and Multiple Representation

Commission on Art and Cartography

14.45  S1-A - GEOVISUAL ANALYTICS  
Great Hall

Chair: Peters, Stefan

S1-A-1 | Visual Analysis of lightning data using Space-Time-Cube  
Stefan Peters, Hans-Dieter Betz, Liqiu Meng

S1-A-2 | Visual Discovery of Synchronization in Weather Data at Multiple Temporal Resolutions  
Xiaoqing Wu, Raul Zurita-Milla, Menno-Jan Kraak

S1-A-3 | Geovisual Analytics for Maritime Surveillance: Proposing the Most Suitable Methods for the Users  
Gabriel Vatin, Aldo Napoli

S1-A-4 | Detail and Integrated Representation of Spatial Relations  
Changbin Wu, Xia Chen

14.45  S1-B - CARTOGRAPHIC DESIGN PROCESS  
Hall 1

Chair: Jenny, Bernhard

S1-B-1 | Guidelines for Consistently Readable Topographic Vectors and Labels With Toggling Backgrounds  
Paulo Raposo, Cynthia A. Brewer

S1-B-2 | Ordnance Survey’s cartographic design principles: An approach to promoting good map design  
Charley Glynn, Christopher Wesson

S1-B-3 | Visual highlighting of outliers in spatio-temporal data  
Ulla Pyysalo, Juha Oksanen

S1-B-4 | Partial Automation of the Cartographic Design Process  
Richard Smith

14.45  S1-C - CARTOGRAPHY IN ART  
C6

Chair: Piatti, Barbara

S1-C-1 | Paper Maps Go Under the Knife: The Work of Three Contemporary Map Collage Artists  
Janet Mersey

S1-C-2 | Zen and the art of cartography  
Kenneth Field, Damien Demaj

S1-C-3 | A Cinematographic Cartography of the Imaginary Montreal  
Caquard Sébastien, Daniel Naud, Ng-Chan Taien, Yang Mengqian

S1-C-4 | Beck to the Future: time to leave it alone  
William Cartwright, Kenneth Field

14.45  S1-D - EARTHQUAKES AND LANDSLIDES  
C1

Chair: Lienert, Christophe

S1-D-1 | Finding the Way and Obtaining the Route Map Information to Go Back Home during a Natural Disaster: A Case of Greater Tokyo Metropolitan Area at the Time of the Great East Japan Earthquake  
Kaori Ito, Nobuaki Omori, Sadayasu Aono, Yukari Niwa, Mariko Kawama, Chika Kawamata

S1-D-2 | Slope Units-based Landslide Susceptibility Mapping using Support Vector Machine in the Three Gorges, China  
Xueling Wu, Fu Ren, Ruiqing Niu

S1-D-3 | Landslide Susceptibility Mapping along the National Road 32 of Vietnam Using GIS-based J48 Decision Tree Classifier and Its Ensembles  
Dieu Tien Bui, Chung Tien Ho, Inge Revhauig, Biswajeet Pradhan, Duy Nguyen
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<td>Perkins, Chris</td>
<td>Cultural Aspects of Cartographic Creation: Use of Mental Maps in Cross-cultural Research</td>
<td>Jan Daniel Bláha</td>
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<td>Participatory mapping as a tool for community empowerment – a case study of community engagement in Koffiekraal, South Africa.</td>
<td>Jiří Pánek, A. C. Vlok</td>
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<td>Challenges in Mapping Traditional Knowledge in Canada's North</td>
<td>D. R. Fraser Taylor</td>
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<td>14.45</td>
<td>S1-F - AUTOMATED DATA QUALITY ASSESSMENT</td>
<td>Meng, Liqiu</td>
<td>An automated geospatial datafilter to generate optimal geographic information: a novel approach inspatial data mining</td>
<td>Asche Hartmut, Stankute Silvija</td>
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<td>Variability of country names and identifiers in datasets Reconciling practical and cultural perspectives</td>
<td>Laura Kostanski, Sara-Jayne Farmer, Robert Atkinson</td>
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<td>Large Scale Map Data Contents and End User Needs: Do they meet? Case: City of Helsinki</td>
<td>Kari Ingberg</td>
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<td>A Framework for the Automatic Geometric Repair of CityGML Models</td>
<td>Zhao Junqiao, Jantien Stoter, Ledoux Hugo</td>
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<td>S1-G - EYE MOVEMENT ANALYSIS</td>
<td>Fabrikant, Sara</td>
<td>Investigating dynamic variables with eye movement analysis</td>
<td>Vassilios Krasanakis, Alexandra Lelli, Ismini-Eleni Lokka, Vassiliki Filippakopoulou, Byron Nakos</td>
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<td>Commonalities and Differences in Eye Movement Behavior when Exploring Aerial and Ter-restrial Scenes</td>
<td>Sebastian Pannasch, Jens Helmert, Bruce Hansen, Adam Larson, Lester Loschky</td>
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<td>Uncertainty Visualization: An Eye-Tracking study on spatial data quality</td>
<td>Jan Brus, Stanislav Popeika</td>
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<td>Gestalt Aspects for Differentiating the Representation of Landmarks</td>
<td>Marcio Schmidt, Luciene Delazari</td>
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<td>S1-H - EUROSDR/COST/ ICA</td>
<td>Foody, Giles</td>
<td>Mapping and the Citizen Sensor: COST Action TD1202</td>
<td>Silvia Klettner, Haosheng Huang, Manuela Schmidt, Georg Gartner</td>
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<td>Managing and Acquiring Volunteered Geographic Information</td>
<td>Linda See</td>
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<td>Mapping and the Citizen Sensor Understanding and Influencing Contributors</td>
<td>Norman Kerle</td>
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<td>Map Production</td>
<td>Glen Hart</td>
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<td>Map Evaluation</td>
<td>Cidalia Fonte</td>
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<td>S1-I - BUSINESS MEETING OF THE COMMISSIONS ON CARTOGRAPHY AND CHILDREN, MAPS AND GRAPHICS FOR BLIND AND PARTIALLY SIGHTED PEOPLE, EDUCATION AND TRAINING, PLANETARY CARTOGRAPHY</td>
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<td>16.30</td>
<td>S2-A - MAPPING EMOTIONS</td>
<td>Huang, Haosheng</td>
<td>Acquisition and Cartographic Applications of Subjective Geodata</td>
<td>Silvia Klettner, Haosheng Huang, Manuela Schmidt, Georg Gartner</td>
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<td>Detection, Analysis and Visualisation of Georeferenced Emotions</td>
<td>Eva Hauthal, Dirk Burghardt</td>
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<td>Emotions: An undertheorized dimension of map cognition?</td>
<td>Amy Griffin</td>
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<td>Applying Visual Analytics Methods for mapping emotions felt along daily trips</td>
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<td>16.30</td>
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<td>Cammack, Rex G.</td>
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<td>S2-C-2</td>
<td>A process for assessing emergent web mapping technologies</td>
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<td>Scalable Vector GraphicsWeb Standard for Cartography</td>
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<td>Fuzzy Generalization Inference System - the example of selection parameterization for roads and hydrographic network</td>
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<td>JACOBI CONFORMAL PROJECTION OF THE TRIAXIAL ELLIPSOID: MATHEMATICS AND MAPPING</td>
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<td>Rendering Vector Geometry with Adaptive Composite Map Projections</td>
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<td><strong>WEB AND 3D ATLASES</strong></td>
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<td>Evaluating the suitability of Web 2.0 technologies for online atlas access interfaces</td>
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<td>Playful mapping: the potential of a ludic approach to cartography</td>
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<td>16.30</td>
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<td>S2-G-2</td>
<td>The casual turn: politics, play and mapping</td>
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S2-G-3 | You Are Here! Playful Mapping, Haptic Navigation and a Cartography of Layers
Nanna Verhoeff
S2-G-4 | Mapping the city, playing the city: Location-based apps as navigational interfaces.
Clancy Wilmott, Sybille Lammes

16.30  S2-H - EUROSDR/COST/ ICA  C5
Chair: Fritsch, Dieter
S2-H-1 | EuroSDR and Volunteered Geographic Information
Dieter Fritsch
S2-H-2 | The Joint AGILE/EuroSDR Project on Crowd-Sourced Mapping
Peter Mooney, Jeremy Morley
S2-H-3 | The OSM-GB Project: Data Analysis, Data Quality and Web Service
Jeremy Morley
S2-H-4 | Understanding the activity of contributors to VGI projects. How, why, where, and when do they contribute geographic information?
Peter Mooney
S2-H-5 | Conflation of National Mapping and Crowd-Sourced Data: A Comparison of Two Different Approaches
Zihan Liu, Volker Walter, Dieter Fritsch

16.30  S2-I - COMPILATION AND COLLABORATION MODELS  S1
FOR GLOBAL DIGITAL MAPS
Chair: Demaj, Damien

17:45-18:15  Briefing Orienteering Event  C2
18:30 - 20:00  ICE BREAKER  Hall Level - Exhibition Area
08.30  PLENARY KEYNOTE

Great Hall

KN-2-1 | 3D Spatial Monitoring of Marine Animals: Real-time and Archival Systems

Imants G. Priede

08.30  ICA Commissions at a Glance

Great Hall

Commission on Geospatial Analysis and Modeling
Commission on Atlases
Commission on Use and User Issues
Commission on Maps and Society

09.15  S3-A - QUALITY ASSESSMENT AND UNCERTAINTY

Great Hall

Chair: Junqiao, Zhao

S3-A-1 | Map Quality AssessmentGroundwork and Implementation Approach

Lysandros Tsoulos, Natalia Blana

S3-A-2 | Digital elevation model quality assessment with no ground control

Laurent Polidori, Mhamad El Hage, Elisabeth Simonetto

S3-A-3 | The Certainty of Landscape Degradation?

Radka Bacova, Jiri Jakubinsky, Eva Svobodova, Petr Kubicek, Vladimir Herber

S3-A-4 | Uncertainty modeling of glacier mapping and mapping estimation, in Arctic

Xi Zhao, Songtao Ai, Xiaoping Pang

09.15  S3-B - MAPS AND SECURITY

Hall 1

Chair: Leitner, Michael

S3-B-1 | Forensic Mapping in South Africa: Four Examples

Peter Schmitz, Corne Eloff, Reynold Talmakkies, Chris Linnen, Rudi Lourens

S3-B-2 | An Anti-compression Fragile Watermark Scheme for Vector Geographical Data

Chang-Qing Zhu, Qi-Sheng Wang, Na Ren, Wei Wu

S3-B-3 | A Digital Watermark Algorithm for Tile Map Stored by Indexing Mechanism

Na Ren, Chang-Qing Zhu, Shu-Jing Ren, Yi-Shu Zhu

09.15  S3-C - AUGMENTED REALITY AND SOUND

C6

Chair: Schiewe, Jochen

S3-C-1 | The perception of information conveyed by graphic variables building point signatures in the Augmented Reality system on mobile devices

Lukasz Halik

S3-C-2 | Maps with sound as the way of elevation representation

Andrey Medvedev

S3-C-3 | «3D geovisualisation of Noise and Visual impact of a proposed wind farm development using a GIS based visual-acoustic 3D simulations»

Papakonstantinou Apostolos, Kontos Themistoklis, Christodoulou Evangelos, Soulakellis Nikolaos

S3-C-4 | Augmented Reality Visualization of archeological data

Daniel Eggert, Dennis Hücke, Volker Paelke

09.15  S3-D - WEB SERVICES AND GIS

C1

Chair: Reznik, Tomáš

S3-D-1 | Development of a web-based system to track airborne and satellite assets to obtain imagery for emergency response

Sarah E. Batterbye, Michael E. Hodgson, Bruce A. Davis, Shufan Liu

S3-D-2 | Geo Web Services for transport crisis management in alpine region

Eszter Gálczic, Md. Imran Hossain, Wolfgang Reinhardt

S3-D-3 | Evaluation of the adequacy of the land use in sub-basin using GIS and Remote Sensing

Julio Cesar Demarchi, Célia Regina Lopes Zimback

S3-D-4 | Assessment of Risk and Hazard of Technological Emergencies with GIS (on the Example Vinnytsia Region)

Viktor Putrenko

09.15  S3-E - SPECIAL ISSUES IN SDI

C2

Chair: Rapant, Petr

S3-E-1 | Advances in Intelligent Processing of Topographic Map Image

Yun Yang, Xiaoya An

S3-E-2 | Imagery Becomes Knowledge - Image Analysis Services in the Enterprise

Thomas Bahr

S3-E-3 | Spatial data discovery using general purpose web search engines

Samy Katumba, Serena Coetzee

S3-E-4 | Exploring the impact of a spatial data infrastructure on value-added resellers and vice versa

Antony K Cooper, Serena Coetzee, Petr Rapant, Dominique Laurent, David M Danko, Adam Iwaniak, Ammatzia Peled, Harold Moellering, Ulrich Düren
Tuesday, August 27, 2013

09.15 S3-F - CARTOGRAPHY FOR CHILDREN  C3
Chair: Beconyté, Giedré
S3-F-1 | Smartphone-based school atlases?
Jose Jesus Reyes Nunez
S3-F-2 | Geospatial learning threshold overpassed with digital maps and mobile serious games on the terrain
Yaïves Ferland
S3-F-3 | Mapping my Mangrove: New Technologies applied to cartography to support environmental education in the teaching of Geography
Iomara Sousa
S3-F-4 | GLOBAL WARMING TEACHING THROUGH MAPS AND DIAGRAMS TOUCH
Waldirene Ribeiro, Aleandra Coll

09.15 S3-G - MAP PROJECTIONS  2  C4
Chair: Usery, Linn
S3-G-1 | Atlas of Map Projections: the technology of creation on the basis of program-analytical complex
Gleb Zagrebin
S3-G-2 | Extending Adaptive Composite Map Projections with Wagner’s Transformation Method
Bojan Šavrič, Bernhard Jenny
S3-G-3 | Developing PAMS – A Paleolocation Mapping Service
Tomislav Urban, Frank Hardisty
S3-G-4 | HEALPix Mapping Technique and Cartographical Application
Omur Esen, Vahit Tongur, Ismail Bulent Gundogdu

09.15 S3-H - BUSINESS MEETING OF THE COMMISSION ON ATLASES  C5
09.15 S3-I - BUSINESS MEETING OF THE COMMISSIONS ON MAP DESIGN, C7/8
NEOCARTOGRAPHY

11.00 S4-A - ENVIRONMENTAL MONITORING  Great Hall
Chair: Govorov, Michael
S4-A-1 | Assessing local variations of deforestation processes in Mexico using geographically weighted regression
Mas Jean-Francois, Cuevas Gabriela, Güiza Frida, Andablo Reyes Araceli
S4-A-2 | GPU-accelerated spatial interpolation rendering for web-based environmental monitoring
Christophe Lienert, Hansruedi Bär, Lorenz Hurni
S4-A-3 | HydroProg: a novel system for hydrological forecasting and flood risk mapping
Tomasz Niedzielski, Bartłomiej Mizioński, Maciej Kryza, Małgorzata Wieczorek, Piotr Migon, Marek Kasprzyk, Paweł Netzel, Mariusz Szymanowski, Wiesław Kosek, Małgorzata Witk, Justyna Jeziorska
S4-A-4 | Exploring Distribution of Uranium in Ukraine: Geovisualization and Spatial Statistics
Michael Govorov, Viktor Putrenko, Gennady Gienko

11.00 S4-B - CARTOGRAPHY AND LITERATURE  Hall 1
Chair: Caquard, Sébastien
S4-B-1 | Dreams, Memories, Longings - Visualising Projected Spaces in Fiction
Barbara Piatti, Anne-Kathrin Reuschel, Lorenz Hurni
S4-B-2 | Mapping Out Patience: Cartography, Cinema, and W.G. Sebald
Taien Ng-Chan
S4-B-3 | Facts in Fiction: Introducing Cartography and Surveying in Martin Suter’s Novel „Die Zeit, die Zeit“
Lorenz Hurni
S4-B-4 | Narrating Place
Matthew Bissen, Paul Ritchard, Laurene Vaughan

11.00 S4-C - ANALYSIS OF RURAL AND URBAN STRUCTURES  C6
Chair: Perkins, Chris
S4-C-1 | Analysis and mapping of rural-urban interactions
Maria Gunko
S4-C-2 | Identifying Residential Land in Rural Areas to Improve Dasymetric Mapping
Stefan Leyk, Barbara Buttenfield, Nicholas Nagle, Alexander Stum
S4-C-3 | Automatic Delineation of Urban Blocks from Topographic Maps
Sebastian Mühs, Gotthard Meinel, Dirk Burghardt
S4-C-4 | Analysis of European Topographic Maps for Automatic Acquisition of Urban Land Use Information
Ulrike Schinke, Hendrik Herold, Gotthard Meinel, Nikolas Prechtel
11.00 S4-D - THEMATIC ATLASES C1
Chair: Jordan, Peter
S4-D-1 | Cartographic Visualization of Phytophenological Characteristics
Vít Voženílek, Alena Vondráková, Aleš Vávra
S4-D-2 | Transportation Data in Maps Special Analysis for Influencing Decision Making
Oren Raz
S4-D-3 | Swiss World Atlas: Development and automated setup of a geographical name index database for cross-media atlas applications
Thomas Koblet, Lorenz Hurni

11.00 S4-E - WEB MAPPING APPLICATIONS C2
Chair: Pettit, Chris
S4-E-1 | Advances in Web-Service Driven Cartography
Ionuș Iosifescu, Cristina Iosifescu, Nadia Panchaud, Remo Eichenberger, René Sieber, Lorenz Hurni
S4-E-2 | Integrating Linked Open Data into Open Source Web Mapping
Wiafo Owusu-Banahene, Serena Coetzee
S4-E-4 | Web Mapping Metro Rail Services in Los Angeles County
Bin Mo

11.00 S4-F - AUTOMATED GENERALISATION C3
Chair: Sester, Monika
S4-F-1 | ScaleMaster2.0: A ScaleMaster Extension to Monitor Automatic Multi-Scales Generalisations
Guillaume Touya, Jean-François Girres
S4-F-2 | MultimapperPrototype System for Designing Multi-Scale Maps
Timofey Samsonov, Anton Podolsky, Nina Yurova
S4-F-3 | New National Maps of Switzerland
Dominik Käuferle
S4-F-4 | Labeling Through Scale Using Hierarchies of Thinned Road Networks for Design of The National Map of the United States
Cynthia A. Brewer, Elaine Guidero, Lawrence V. Stanislawski, Barbara Buttenfield, Paulo Raposo

11.00 S4-G - IMAGE PROCESSING C4
Chair: Yang, Xiaojun
S4-G-1 | An Assessment of Neural Networks Architecture Impacts upon Image Classification Accuracy
Xiaojun Yang, Libin Zhou
S4-G-2 | Comparing Spectral Mixture Analysis and Object Based Image Analysis for Mapping Fractional Cover in Semi-Arid Savanna Systems
Niti Mishra
S4-G-3 | Enhancing the Locational Perception of Soft Classified Satellite Imagery Through Evaluation and Development of the Pixel Swapping Technique
Milad Niroumand Jadidi, Mahmoud Reza Sahebi, Mehdi Mokhtarzade
S4-G-4 | MATHEMATICAL MORPHOLOGY OF REMOTE SENSING IMAGE TO IDENTIFY LOCAL MINIMUM AND AID THEMATIC CARTOGRAPHY
Ana Lúcia Bezerra Candeias, João Rodrigues Tavares Junior

11.00 S4-H - ISPRS/ICA C5
Chair: Veenendaal, Bert
S4-H-1 | Improving evacuation maps by integrating needs and preferences of end-users in GIS
Gaëtan Païla, Kamal Serrhini, Sven Fuchs, Serge Thibault, Emmanuel Neron
S4-H-2 | Mixing, blending, merging or scrambling topographic maps and orthoimagery in geovisualization?
Charlotte Hoarau, Sidonie Christophe, Sébastien Mustière
S4-H-3 | Distribution Patterns of Typified Façade Elements for Virtual Three-Dimensional City Models
Jahnke Mathias, Jukka Krisp, Holger Kumke
S4-H-4 | Eye-tracking Study on Different Perception of 2D and 3D Terrain Visualization
Stanislav Popelka, Alžbeta Brychtová

11.00 S4-I - BUSINESS MEETING OF THE COMMISSIONS ON MAP DESIGN, NEOCARTOGRAPHY C7/8

11.00 S4-J - BUSINESS MEETING OF THE COMMISSION ON GEOSPATIAL ANALYSIS AND MODELING S1
12:15 - 12:45  BEST PRACTICE PRESENTATION  Great Hall
OCAD - A Niche Product Towards a Professional Cartographic Software
Gloor, Thomas (OCAD)

12.15  P1 - POSTER SESSION  Terrace Level
P1-2 | The Cognitive and Opinion-forming Role of Geocomposition as an Independent Semiotic Existence
Zenon Koziel
P1-3 | MENTAL MAPS: THEORETICAL AND METHODOLOGICAL ISSUES AND CONTRIBUTIONS
Pamela Marcia Ferreira Dionísio
P1-4 | IDENTIFICATION OF STYLES IN TOPOGRAPHIC MAPS
Jérémie Ory, Sidonie Christophe, Sara Irina Fabrikant
P1-5 | Evaluation of maps based on the level of figure and background differentiation
Zbyněk Šterba
P1-6 | Quantifying Magnitude of Change for Animated Maps
Eun-Kyeong Kim, Alan MacEachren
P1-7 | Spatial categorization and visual variables: is the spatial regionalization damaged through the change of orientation and landmarks represented on a map?
Gustavo Amaral Marangoni, Ruan De Deus Borracho, João Vitor Meza Bravo, Fernando Luiz De Paula Santill
P1-8 | The influence of cultural and education heritage on the map reading
Malgorzata Wieczorek, Marco Schmidt, Tao Wang
P1-9 | THEMATIC CARTOGRAPHY IN THE SYSTEM OF CARTOSEMIOTICS
Janis Strauhmanis, Janis Strauhmanis, Janis Strauhmanis
P1-10 | Effect of spacing on legend interpretation of maps
Zhe Qin
P1-11 | Visual Communication in Art Design of Maps
Chenyen Ma, Chenyan Ma, Ruiqing Li
P1-12 | Base map layers usability evaluated by eye tracking device
Rostislav Nětek
P1-13 | Does the dynamic cartographic variables have interference on map reading? The case of variables shape and velocity into representations of weather phenomena variations
Elissandro Voigt Beier, João Vitor Meza Bravo, Fernando Luiz De Paula Santill
P1-14 | Perception of landmarks by day and night: case nature trail
Pyry Kettunen, Katja Irvankoski, Christina M. Krause, L. Tiina Sarjakoski
P1-15 | Framework for studying Spatially Ordered Treemaps
Ramathan Ali, Jason Dykes, Jo Wood
P1-16 | CARTOSEMIOTIC ASPECTS OF LITHUANIAN SCHOOL GEOGRAPHICAL ATLASES
Inga Žalaliūnė
P1-17 | Values associated with natureMapping the ombu tree in Uruguayan landscapes
Ana Vallarino Katzenstein
P1-18 | Dotting the Difference – Strategies in finding the best suitable Dot Value
Annette Hey
P1-19 | EVALUATING ANTROPOGENIC IMPACT WITH TOPOGRAPHIC MAPS
Tamara Vereshchaka, Gleb Kachaev, Natalia Bilibina
P1-20 | Cartographic activities of General Command of Mapping / Turkey
Yükrüm Nalcı, Özlem Simav
P1-21 | WEBMAPPING TOOLS FOR VITICULTURAL MANAGEMENT
Carlos Mena Frau, Yomy Ormazabal Rojas, Yohana Morales Hernandez
P1-22 | Thematic Mapping in Poland thematic cartographic elaborations provided by polish geodetic and cartographic service
Karolina Szyszowska, Iwona Leszczyńska
P1-23 | SANDBAR SHORT TERM SEDIMENTATION ANJOS COVE - ARRAIAL DO CABO, RIO DE JANEIRO STATE - BRAZIL
Agenor Cunha da Silva, Raquel Batista Medeiros da Fonseca, João Wagner Alencar Castro, Cicera Neyse de Almeida, Fabio Ferreira Dias
P1-24 | Urban Daytime and Nighttime Population estimation and Spatial-Temporal Dynamics Modeling
Zhang An, Qi Qingwen, Jiang Lili, Zhou Fang
P1-25 | A PROPOSAL FOR EVALUATING RBMC (BRAZILIAN NETWORK FOR CONTINUOUS MONITORING) USING DATA ENVELOPMENT ANALYSIS (DEA)
Sergio Orlando Antoun Netto, Jos Carlos Penna de Vasconcellos, Amauri Ribeiro Destri
P1-26 | 3D-Citymodel: 300 years Karlsruhe: 1715-1834-2015
Detlef Günther-Diringer
P1-27 | Evaluating Web-based Geovisualizations Online: A Case Study with Abstraction-Realism Spectrum in Focus
Aliz Boer, Arzu Coltekin, Keith Clarke

P1-28 | Comparison of intertwined visual and automated methods in the analysis of realistic scenarios
Lisa Clemens, Alessio Bertone, Dirk Burghardt

P1-29 | Testing animated mapping of land cover at Menzel Bouzalfa (Cap Bon_Tunisia)
Monaem Nasr, Walid Chouari, Mohsen Dhib

P1-30 | Essay de cartographie animée de l’occupation du sol à Menzel Bouzalfa (Cap Bon_Tunisie)
Nasr Monaem, Walid Chouari, Dhib Mohsen

P1-31 | Don’t Visualize Big Data
Andrew Turner

P1-32 | Urban Subsidence Surveillance combining PS-InSAR and Visual Analytics
Lianhuan Wei, Jukka Krisp, Timo Balz, Mingsheng Liao, Linfang Ding

P1-33 | Assembling an Authoritative Global Map
Christophe Charpentier, Donald Cooke

P1-34 | Nazca Map Server
Arnost Muller, Karolina Hanzalova

P1-35 | Regional geoportals of first-level administrative units of European Union and European Economic Area countries. A comparative study
Dariusz Dukaczewski, Agata Ciałkosz-Styk, Maciej Sochacki

P1-36 | Development of Electronic Map Resource in Russian State Library
Marina Golyasheva, Liudmila Zinchuk

P1-37 | Web Mapping: a Solution to Nebraska Heritage Arboretum Data Standardization
Spencer Trowbridge, Rex Cammack

P1-38 | A cartographic support for the geodata visual querying
Karel Stanek, Lucie Friedmannova

P1-39 | WEB EXPERT SYSTEM TO PRODUCE THEMATIC MAPS
Luciene Stamato Delazari, André Luiz de Mendonça

P1-40 | Web Driven Dynamic Generative Mechanism of Thematic Map
Fu Ren, Qingyun Du

P1-41 | Research on Measuring Similarity of Spatial Topological Relations based on Topological Predication
Xiaoya An, Yun Yang

P1-43 | Museum and tactile mapping: introduction to heritage education to the visually impaired
Tatiana Mayumi Tamura, Fernando Luiz De Paula Santil, Antonio Oliveira, João Batista Da Silva Silva

P1-44 | Combining digital technologies and traditional artistic procedures for the compilation of cartographic panoramas
Chrysoval Boutoura, Angeliki Tsofouli, Vasoula Nikolaidou

P1-45 | Academic SDI: concept, methods, data
Andrey Medvedev

P1-46 | SemGeo - a bridge between GIS and Semantic Web based solutions
Marek Strzelecki, Tomasz Kubik

P1-47 | Geospatial Semantics for Topographic Data
E. Lynn Usery

P1-48 | PRELIMINARY RESULTS FOR THE INSPIRE GEOSPATIAL DATA MODEL BASED ON USER REQUIREMENTS IN THE NMA OF SPAIN (IGN-E)
Eduardo Maderal, Julián Delgado Hernández, Celia Sevillia, Nuria Valcarcel Sanz, Alicia González, Noelia Aguilar, Javier Garcia Garcia

P1-49 | Retrieving information from spatial planning documents with the use of context analysis
Adam Iwaniak, Iwona Kaczmarek, Jaromar Lukowicz, Marek Strzelecki

P1-50 | Comparison of methods based on Geographic Information Systems and methods based on ontologies using Description Logic (DL) for modelling and spatial analysis
Jaromar Lukowicz, Adam Iwaniak

P1-51 | Spatial data licensing under “Open Data Strategy”
Tomislav Ciceli, Željko Hecimovic

P1-52 | Support analyzes delimitation of Geographical Indications in Brazil and local clusters of minority communities
Claudio João Barreto Dos Santos, Alex Da Silva Santos, Lucia Fernandes, Alessandra Luisa Gouveia

P1-53 | Taxonomies of Building Objects Towards Topographic and Thematic Geo-Ontologies
Melih Basaraner

P1-54 | Research Agenda for Managing Roads and Address Geospatial Data
Timothy Trainor
P1-55 | Integrity constraints in spatial databases: study of the administrative network of Tunisia
Hedi Zneti, Mohsen Dhieb, Thierry Saint Gerand

P1-56 | Quality Control Costs in Brazilian Spatial Data Production
Simone Sayuri Sato, André Luiz Sá Oliveira, Alex Jaiisson Barbosa Andrade, Renisson Neponuceno De Araújo Filho, Alex da Penha

P1-57 | Quality Assessment of Geospatial Data (Logical consistency, topological accuracy)
Meguenni Bouhadjar

P1-58 | Extracting Co-referential Objects Automatically from Multi-source POI Datasets Based on Position-correction and Semantic Matching
Jiping Liu, Yong Wang, Fuhao Zhang, An Luo, Chun Dong

P1-59 | Extracting Co-referential Geo-Entities Automatically from Multi-source POI Datasets Based on Position-correction and Semantic Matching
Jiping Liu, Yong Wang, An Luo, Chun Dong

P1-60 | Barriers for contributing to VGI projects
Manuela Schmidt, Silvia Klettner, Renate Steinnmann

P1-61 | Interpretative Mapping of Attributive Information of Dokuchaev's Soil Map of European Russia
Vasilsa Kirilova, Irina Alyabina, Dmitriy Kotrov

P1-63 | Adaptive Cartography in the Context of Neogeography and Ubiquitous Computing: Research Issues
Xiang Zhang, Tinghui Ai, Xiaoqiang Cheng

P1-64 | Spatio-Temporal Activity Recognition of Crowdsourced GPS-Traceytor Data
Lijian Zhang, Sagi Dalyot, Monika Sester

P1-65 | The research of ancient road in Czech republic - presentation of results on the map server Vectormap
Jan Martinek, Aleš Létal, Jakub Mirijovský, Pavel Štůzar

P1-66 | Coordinating Views within Interactive Web Geovisualization
Frank Hardisty, Alexander Savelyev

P1-67 | Soil Map 1:200,000 (BUEK 200) The Distribution of Soils in Germany
Dietmar Krug, Ulrich Stegger, Einar Eberhardt, Stefanie Richter

P1-68 | Research and Practice of Electric Map Multi-pattern Display
Nan Jiang, Yi-Xin Hua, Ya-Jun Zhang, Xiao-Nan Zhang

P1-69 | TEXTURE MAPS What they are; How to create them; Why and where you should use them.
Roger Smith

P1-70 | Knowledge Transfer via Maps Explanation of a Complex Process by Means of Communication Models
Andrea Rau, Jana Moser

P1-71 | The Development of a Census Address Ontology to Enable Successful Spatial Data Sharing between Partners
Kaile Bower

P1-72 | GPS-based Crowd Sourced Intelligent Traffic Information Hub
Rui Zhu

P1-73 | How to Use a Timeline to Understand Spatio-temporal Data Better?
Peng Wang, Menno-Jan Kraak

P1-74 | Criteria for the production of continental physical maps
Fernando Garcia-Soria

P1-75 | Overcoming heterogeneity in Spatial Data Infrastructures (SDIs) Importance, elements, solutions and progress
Mohammad Abusohyon

P1-76 | A Framework for the Automatic Geometric Repair of CityGML Models
Zhao Junqiao, Jantien Sloter, Ledoux Hugo

P1-77 | Viewpoints the world in perspective www.worldmapgenerator.com
Julia Mia Stirnemann

P1-78 | U-Spatial: Supporting the Spatial Sciences at the University of Minnesota
Francis Harvey, Len Kne

P1-79 | Augmented Reality Visualization of Archeological Data
Daniel Hücker

P1-80 | Photorealistic Rendering of Atmospheric Effects in Interactive 3D Geovirtual Environments
Daniel Limberger

P1-81 | Development and Evaluation of an Augmented Reality Tourist Map Application - Case Study: Berlin
Yasmin Dadas
14.00 KN-3 - VIRTUAL CENTIMETER WORLD MODEL?  
Great Hall
KN-3-1 | The virtual centimeter world model?
Franz Leberl, Wolfgang Walcher

14.00 ICA Commissions at a Glance  
Great Hall
Commission on Open Source Geospatial Technologies
Commission on Neocartography
Commission on Map Projections
Commission on Maps and the Internet
Working Group on International Map Year

14.45 S5-A - VGI: DATA QUALITY AND SOFTWARE  
Great Hall
Chair: Chilton, Steve
S5-A-1 | Assessing the Completeness of Building Footprints in OpenStreetMap: An Example from Germany
Carola Kunze, Robert Hecht, Stefan Hahmann
S5-A-2 | Detecting Level of Detail Inconsistencies in VGI Datasets
Guillaume Touya, Carmen Brando
S5-A-3 | Cartographic Representation of Spatial Data Quality Parameters in Volunteered Geographic Information Systems
Farid Karimipour, Roya Esmaily, Gerhard Navratil

14.45 S5-B - TACTILE CARTOGRAPHY FOR CHILDREN  
Hall 1
Chair: Castreghini de Freitas, Maria Isabel
S5-B-1 | TACTILE CARTOGRAPHY: THE ADAPTED GLOBE EXPERIENCE ON SOCIAL INCLUSION
Barbara Jordão
S5-B-2 | School Tactile Cartography in Brazil: the challenge of training teachers
Waldirene Ribeiro Do Carmo
S5-B-3 | Children’s spatial representations: comparative research in France and Poland.
Katarzyna Bogacz

14.45 S5-C - HISTORICAL EXPEDITIONS AND MAPS  
C6
Chair: Andrienko, Natalia
S5-C-1 | “The most practicable and economical route for a railroad”: U.S. Army Corps of Topographical Engineers and the Railroad Reconnaissance of the American West
Imre Demhardt
S5-C-2 | The Pole is Impracticable but There is a Land Northward: Austro-Hungarian Polar Expedition and Mapping of the Franz Josef Land
Mirela Altic
Christopher Board
S5-C-4 | Streams, irrigations, and the environment change: negotiating the land use in northern Taiwan (1870-1895)
Sen-Hao Yang, Jinn-Guey Lay

14.45 S5-D - NATIONAL ATLASES  
C1
Chair: Jordan, Peter
S5-D-1 | Towards a National Atlas of the Netherlands as part of the National Spatial Data Infrastructure
Barend Köbben
S5-D-2 | Designing Maps for a New Thematic Atlas of the Czech History
Tomas Janata, Pavel Seemann, Jiri Cajthaml, Ruzena Zimova
S5-D-3 | Summary and Achievements of City Atlases in P.R. China
Qingwen Qi, Lili Jiang, An Zhang
S5-D-4 | THE NEW ATLAS OF ISRAEL - THE NATIONAL ATLAS
Haim Srebro

14.45 S5-E - 4D CARTOGRAPHY  
C2
Chair: Liebenberg, Elri
S5-E-1 | Towards 4D Cartography - Four-dimensional Dynamic Maps for Understanding Spatio-temporal Correlations in Lightning Events
Bernd Resch, Florian Hillen, Andreas Reimer, Wolfgang Spitzer
S5-E-2 | Visual Analysis of Large Amounts of 4-D Building Deformation Data
Linfang Ding, Liqi Meng
S5-E-3 | Geovisualizing spatio-temporal patterns in tennis: An alternative approach to post-match analysis
 Damien Demaj
S5-E-4 | Visualization of Trajectory Attributes in Space-Time Cube and Trajectory Wall
Gemady Andrienko, Natalia Andrienko, Heidrun Schumann, Christian Tominski
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<td>CARTOGRAPHY FOR PEOPLE WITH DISABILITIES</td>
<td>Tauscher, Sarah</td>
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**S6-A-1** | Users Characteristic Influence on the Efficiency of Typographic Design | Rasha Deeb |
**S6-A-2** | Silhouette-Based Label Placement in Interactive 3D Maps | Christine Lehmann, Jürgen Döllner |
**S6-A-3** | A Tag Cloud-based Visualization for Geotagged Text Information | Yi-Xin Hua, Xiang Li, Jun-Xi Zhao, Li-Na Wang |
**S6-A-4** | Typography in the US Topo redesign | Elaine Guidero |

**S6-B-1** | Geographic Space in Museums Evaluation and Representation of Geographic Space within a Numismatic Exhibition | Alexander Pucher, Karel Kriz |
**S6-B-2** | Mapping the unreal: the story of Mythical Creatures in Europe | Giedre Beconyte |
**S6-B-3** | Smellmap: Glasgow | Kate McLean |
**S6-B-4** | The artistic approach of modern Greek Urban Cartography [1840-1940] | Myron Myridis, Eleni Aga, Anastasia Christodoulou, Nikolaos Dalakis, Bessy Filippakopoulou, Pery Laflazari, Leda Stamou |

**S6-C-1** | The Cognitive and Opinion-Forming Role of Geocompositions as Multimedia Presentations | Zenon Kozieł |
**S6-C-2** | Influence of graphic design of cartographic symbols on perception structure | Zdenek Stachon, Carek Sasinka, Zbyněk Sterba, Jirí Zboril, Sarka Brezinova, Jiri Svancara |
**S6-C-3** | Advanced image processing for maps graphical complexity estimation | Agata Ciołkosz-Styk, Adam Styk |
**S6-C-4** | Symbol Considerations for Bivariate Thematic Maps | Martin Elmer |

**S6-D-1** | Sharing and Coordinating SDIs in the Age of Crowdsourcing and Mobile Technologies | Serena Coetzee, Francis Harvey, Adam Iwaniak, Antony K Cooper |
**S6-D-2** | Towards a Knowledge Reference System for the Domain of Geographic Information Science and Technology | André Skupin, Marilyn Stowell, Fangming Du, Brandon Plewe, Michael Demers, Sean Ahearn |
**S6-D-3** | Spatial Identifier Reference Framework (SIRF): Realising the potential of SDI Using Spatial Identifiers to Link Multiple Information Systems | Paul Box, Robert Atkinson, Laura Kostanski |

**S6-E-1** | Crowdsourcing Techniques for Augmenting Traditional Accessibility Maps with Transitory Obstacle Information | Matthew Rice, R. Daniel Jacobson, Scott McDermott, Ahmad Aburizaiza, Fabiana Paez |
**S6-E-2** | An Information Model for Pedestrian Routing and Navigation Databases Supporting Universal Accessibility | Mari Laakso, Tapani Sarjakoski, Lassi Lehlo, L. Tiina Sarjakoski |
16.30 S6-F - MOBILE TASKS AND APPLICATIONS C3
Chair: Cerba, Otakar
S6-F-1 | Learning from location history for context-aware location recommendation in LBS
Haosheng Huang, Georg Gartner
S6-F-2 | Location-Based Illustration Mapping Applications and Editing Tools
Min Lu, Masatoshi Arikawa
S6-F-3 | Developing Interactive Cross-Platform Mobile Applications for Apple iOS (iPhone/iPad/iPod) and Google Android (Phone and Tablets) with Adobe Flash Builder and CartoVista Mobile
Dany Bouchard
S6-F-4 | Web-based Real-time Mapping of Fine Particulate Matter Pollution
Xiaoyan Liu, Hong Zhang

16.30 S6-G - HISTORY ON MAPS C4
Chair: Altic, Mirela
S6-G-1 | PARADIGMATIC TENDENCIES IN CARTOGRAPHY AND MAPPING DURING THE SCIENTIFIC AND POSTMODERN PERIODS
Dr. Pablo Azócar Fernández
S6-G-2 | Visualizing in historical context: the study of the Dresden map of Hungary from the 1570s
Zsolt Török
S6-G-3 | Atlas of Fortresses of the Russian Empire in the Map Collection of the Russian State Library
Liudmila Zinchuk, Liudmila Zinchuk, Liudmila Zinchuk
S6-G-4 | The contentious border between Padua territory and Venice as represented by the cartography of 16th-18th century
Silvia Piovan, Franco Benucci

16.30 S6-H - MIXED SESSION C5
Chair: Hecht, Robert
S6-H-1 | Geospatial Service Web: Sharing More Than Geospatial Data for Education and Collaborative Research
Jianya Gong, Huayi Wu
S6-H-2 | Structural Analysis of Urban Areas in Germany from the Perspective of Sustainable Compactness - Representation in a Map Series
Ulrich Schumacher, Anne Bräuer, Martin Behnisch
S6-H-3 | HOLOGRAM : THE FUTURE OF THE CARTOGRAPHIC PUBLISHING
Polat Dalkirak, Seounghyun Lee, Sung Chul Park
S6-H-4 | BTN100/BCN200: Collaborative framework for cost optimization
Jose Antonio Merino Martín, Javier González-Matesanz, Tania Gullón Muñoz-Reposo, Ángela Del Carmen Ruiz Ramírez, José Luis Sánchez Tello

17:45 - 22:00 ICA Chair Meeting Seminar level - S1
ICA Executive Committee meeting with commission chairs (not a public event)

18:30 - 20:30 Young Scientists Speed Presentation Conference level - C5
08.30  KN-4 - TRANSFORMATION OF NATIONAL MAPPING APPROACHES IN THE CONTEXT OF GEOMATICS DEMOCRATIZATION

**KN-4-1 | Transformation of National Mapping Approaches in the Context of Geomatics Democratization**

**Éric Loubier**

08.30  ICA Commissions at a Glance

Commission on Education and Training
Commission on Planetary Cartography
Commission on GI for Sustainability
Commission on Geoinformation Infrastructures and Standards

09.15  S7-A - GEOSPATIAL ANALYTICS 1

**S7-A-1 | Land use monitoring by topographical data analysis**

**Tobias Krüger, Gotthard Meinel, Ulrich Schumacher**

**S7-A-2 | CAN ANALYTICAL CARTOGRAPHY SERVE AS A LINK BETWEEN CARTOGRAPHY AND GISCIENCE?**

**Harold Moellering**

**S7-A-3 | Maps as Research Tools Within a Virtual Research Environment.**

**Christian Hanewinkel, Sebastian Specht**

**S7-A-4 | Designing Origin-Destination flow matrices from individual mobile phone paths - The effect of spatial filters on flow measurement**

**Françoise Bahoken, Ana-Maria Olteanu-Raimond**

09.15  S7-B - ENVIRONMENTAL MONITORING

**Chair: Jiang, Bin**

**S7-B-1 | Activities for developing Global Map Version 3 data**

**Yoshikazu Fukushima, Mamoru Koarai**

**S7-B-2 | Spatial representation of natural and anthropogenic factors influencing chimpanzee repartition in Sebitoli (Kibale National Park, Uganda): conservation and research applications.**

**Sarah Bortolamiol, Marianne Cohen, Sabrina Krief**

**S7-B-3 | Cartographic challenges in Antarctica: Mapping in support of environmental management in the US Antarctic Program**

**Katharina Lorenz, Colin Harris**

**S7-B-4 | Geoinformation landscape-geochemical mapping of city territories (the case study of Eastern District of Moscow)**

**Elena Nikiforova, Natalia Kosheleva, Irina Labutina, Timur Khaybrakhmanov**

09.15  S7-C - CHANGE DETECTION

**Chair: Vatseva, Rumiana**

**S7-C-1 | Urban Areas Change Mapping of the Black Sea coastal zone in Bulgaria for the Period 1990 - 2006 Based on Remote Sensing Data**

**Rumiana Vatseva**

**S7-C-2 | Urban Expansion and Population Growth in Ras Sudr city Using Remotely Sensed Imagery Urban Expansion and Population Growth in Ras Sudr city Using Remotely Sensed Imagery**

**Ahmed Ramzi Ibrahim**

**S7-C-3 | The Image Map: from Broad Practical Use towards Cartographic Concept**

**Bělka Luboš, Vít Voženílek**

**S7-C-4 | Methodology to analyse multi-temporal planimetric changes of river channels**

**Antonio Mozas-Calvache, Manuel Antonio Ureña-Câmara, Francisco Javier Ariza-López**

09.15  S7-D - VISUALISING TIME (ANIMATIONS)

**Chair: Andrienko, Gennady**

**S7-D-1 | Guidelines for the effective design of spatio-temporal maps**

**Aileen Buckley**

**S7-D-2 | Presenting Complex Environmental Information Online: A Comparative Empirical Evaluation of Animation versus Text**

**Patrizia Russo, Chris Petitt, Mark Imhof, Matthew Cox, Arzu Coltekin, Christopher Bayliss**

**S7-D-3 | Enhancing Cartographic Time-series Animation**

**Helen Jenny, Johannes Liem, Robert Scheller, Melissa Lucash**

09.15  S7-E - NSDI 1

**Chair: Coetzee, Serena**

**S7-E-2 | Facilitating the exchange of marine spatial data through a Marine Data Infrastructure for Germany (MDI-DE)**

**Tilmann Lübker, Peter Hübnner, Christian Rüh, Peter Korduan**

**S7-E-3 | BRAZILIAN NATIONAL SPATIAL DATA INFRASTRUCTURE (INDE): applicability for large scale data**

**Andrea Lopes Iescheck, Marco Aurélio Dornelles**
S7-E-4 | Lithuanian spatial information portal for national mapping
Giedre Beconyte, Andrius Balciunas, Lina Papsiene, Kestutis Papsys, Jurgita Spuraite, Tomas Ladukas

09.15
S7-F-1 | Backend architectures for modern cartography
Markus Jobst
S7-F-2 | Map Folding Techniques in the Digital Age
Stephan Angssüsser
S7-F-3 | A Propagating Update Method of Multi-represented Vector Map Data Based on Spatial Objective Similarity and Unified Geographic Entity Code
Yanxia Wang, Qingyun Du, Fu Ren, Zhiyuan Zhao

09.15
S7-G-1 | Organisation and Strategy of the Official Surveying and Mapping Authorities of Germany
Ulrich Püß
S7-G-2 | The WebAtlasDE - An Example of the Collaboration in Official Surveying and Mapping in Germany
Marcus Wandinger
S7-G-3 | Digital Land Cover Model for Germany Next update cycle for the Year 2012
Friederike Emig, Michael Hovenbitter, Christine Wende

11.00
S8-A-1 | Exploring the Influence of the Color Distance on the Map Legibility
Alžběta Brychtová, Stanislav Popelka
Beate Weninger
S8-A-3 | Analysis and improvement of the OpenStreetMap street color scheme for users with color vision deficiencies
Johannes Kröger, Jochen Schiewe, Beate Weninger

11.00
S8-B-1 | A systematic comparison of map design for print and web-based technologies
Kenneth Field
S8-B-2 | Web Map-based POI Visualization for Spatial Decision Support
Changbin Yu, Fu Ren, Qingyun Du, Zhiyuan Zhao, Ke Nie
S8-B-3 | Integrated Cartographic and Programmatic Access to Spatial Data using Object-Oriented Databases in an online Web GIS
Ionu? Iosifescu, Lorenz Hurni
S8-B-4 | Challenges in creating web base maps from distributed datasets
Manuela Schmidt, Wolfgang Jürg, Georg Gartner

11.00
S8-C-1 | Opinions on the development of theoretical mapping
Pal Nikoli, Ferim Gashi, Bashkim Idrizi
S8-C-2 | Understanding Mental Categorization on VGI Systems to Improve Data Management
João Vitor Meza Bravo, Claudia Robbi Sluter, Fernando Luiz De Paula Santil, Luciene Stamato Delazari, Mônica Cristina Castro
S8-C-3 | Map classification according to their visual global properties
Catherine Domingués, Tahar Kharchi
S8-C-4 | Developing a framework for describing and comparing indoor maps
Alexander Nossum
11.00  S8-D - LEARNING TO MAP  
Chair: Fairbairn, David  
S8-D-1 | Traditional map design vs. info graphics: motivating students to reveal their talents  
Examples from a student assignment collection depicting 47 distinct topics  
Gertrud Schaab  
S8-D-2 | Open learning platform for the Open Geospatial Community  
Amir Pourabdollah, Suchith Anand, Jeremy Morley, Mike Jackson  
S8-D-3 | How much instructions are needed for a good GIS map?  
Makram Murad-Al-Shaikh  
S8-D-4 | GIS-based land-use suitability mapping: cognitive processes and instructions that leads to expertise.  
Raffaella Balzarini, Muriel Ney, Paule-Annick Davoine  

11.00  S8-E - NATURAL DISASTERS  
Chair: Stanek, Karel  
S8-E-1 | Cartographic Visualization of Vulnerability to Natural Disasters  
Tomasz Opach, Jan Ketil Red  
S8-E-2 | The Impact of Hurricanes on Crime Using a Data Mining and Visual Analytics Approach  
Michael Leitner, Diansheng Guo  
S8-E-3 | Exploratory Spatial-Temporal Visualization of Hurricane Impacts on Crime Events in Miami, Florida  
Sunhui Sim, William Walker, Regan Doyle, Lisa Keys-Mathews  

11.00  S8-F - PLANETARY MAPPING  
Chair: Lazarev, Evgeniy  
S8-F-1 | Kartographical aspects of Martian moons modelling  
Ekaterina Grishakina, Evgeniy Lazarev, Maria Lazareva  
S8-F-2 | On the Concept and Integration of Geologic Time in Planetary Mapping  
Stephan van Gasselt, Andrea Nass  
S8-F-3 | A Framework for Planetary Geologic Mapping  
Andrea Nass, Stephan van Gasselt  
S8-F-4 | Exploring Martian Climatologic Data using Geovisualization: MARSIG, a Spatiotemporal Information System for Planetary Science  
Paule-Annick Davoine, Marlene Villanova-Oliver, Christine Plumejeaud, Isaac Baretto, Jerome Gensel, Pierre Beck, Bernard Schmitt  

11.00  S8-G - NMCA - NEIGHBOUR COUNTRIES AND CROSS-BORDER ACTIVITIES  
Chair: Hopfstock, Anja  
S8-G-1 | Topographic databases on the border states  
Jerzy Zielinski, Julia Kamińska  
S8-G-2 | Cross-border cartography for new French base map at 1:25 000 scale  
Francois Lecordix, Paul-Emmanuel Gautreau, Yann Sciardis  
S8-G-3 | The new civil-military topographic maps of Austria  
Robert Ditz, Andreas Stummvoll, Helmut Zierhut  
S8-G-4 | Swiss Maps from Paper to Geo Services  
Reto Künzler  

11.00  S8-H - INTERNATIONAL MAP YEAR  
Chair: Rystedt, Bengt  

11.00  S8-I - BUSINESS MEETING OF THE COMMISSION ON MAP PRODUCTION AND GEO-BUSINESS  

12:15 - 12:45  BEST PRACTICE PRESENTATION  
Flexible displays for robust cartographic applications  
Sebastian Kühne (Plastic Logic)  

12:15 - 12:45  MOVIE-CARTOGRAPHY AND NARRATIVES  

12:15  P2 - POSTER SESSION  
P2-1 | River Classification and River Network Structuration in River Auto-selection  
Lili Jiang, Qingwen Qi, Fang Zhou, An Zhang  
P2-2 | Automated Cartographic Generalisation: Can we learned from the Classical Maps?  
Vaclav Talhofer, Libuse Sokolova  
P2-3 | Some aspects of the generalization of small-scale digital elevation models  
Zsuzsanna Ungrárt, Renáta Szabó  
P2-4 | Calculating the number of settlements on the basis of the relationship of population density and density of settlements.  
Anton Dvornikov, Olga Shirokova, Varvara Nikeeva
P2-5 | Research and Application of Two-peak Changing Law of Electronic Map Load
Nan Jiang, Qinghui Sun, Yani Cao, Hao Zhang, Yuhang Gu
P2-6 | Cartographic generalization and specifics of geographical space in Algeria
Kaddour Djebbar Abdelghani
P2-7 | The automation of technological processes for creating small-scale digital cartographic bases for general geographic and thematic mapping
Sergey Krylov, Anton Dvornikov, Gleb Zagrebin, Valentin Petrov, Iliya Plotnikov
P2-8 | BASEMAP EVOLUTION IN MULTI-SCALE CARTOGRAPHY
Sergey Zaychenko, Marina Voronina, Timur Khabrakhmanov, Katerina Żyka, Andrey Isakov
P2-9 | Automation of generalization operators of the building class for MRDB
Krystian Kozioł, Tadeusz Chrobak, Artur Krawczyk, Michał Lupa
P2-10 | Multi-scale Representation: Modelling and Updating
Osman Nuri Çobankaya, Necla Uluðtekin
P2-11 | The integrated cartographic generalization of water system and geomorphology using 3D Douglas-Peucker algorithm
Fei Lifan, Huang Lina, He Jing
P2-12 | Formalizing rules for automatic symbol translation in representation of city structure and road network on multiscale maps
Anton Podolsky, Timofey Samsonov
P2-13 | Automatic selection of symbols for pie charts and cartograms in multiscale thematic mapping
Nina Yurova, Timofey Samsonov
P2-14 | Way finding and needs of map users from Indigenous to ICT Knowledge applications: a comparative analysis of rural and urban societies of Serowe in Botswana and London in the United Kingdom (UK)
Joyce Gosata Maphanyane, Joyce Gosata Maphanyane
P2-15 | Perception of urban sustainability and environmental risk: the use of color schemes
Tatiana S. Da Silva, Andrea L. Iescheck, Liesbeth Olaerts, Ricardo Roberto Ayup-Zouain
P2-16 | Customized Multilingual Topographic Maps of the Canadian Arctic
Eva Siekierska, Peter Williams, Del Carré, Éric Loubier
P2-17 | Multiple representations thematic and spatial reading-level and higher-level question: An experience in basic education in Brazil
Bruno Zucherato, Maria Isabel Freitas
P2-18 | Designing maps from texts
Geoffrey Brun, Catherine Domingues
P2-19 | Tactile Mapping and tourism for disabled people: study in two touristic cities in Brazil
Mariane Ravagio Catelli, Carla Cristina Reinaldo Gimenes de Sena
P2-20 | Tactile Thematic Quantitative Maps
Cristiano Gimenez, Carla Cristina Reinaldo Gimenes de Sena
P2-21 | Solutions of cartographic presentation used in „Atlas of the World for the blind and visually impaired“
Katarzyna Przyszewska
P2-22 | Artificial Neural Networks in Geosciences Possibilities for Predictive Mapping
Andreas Knobloch, S. Noack, S. Etzold, A. Barth
P2-23 | Three-dimensional observations for spatial analysis of landscape dynamics
Manoel Fernandes, Tata L C Santos, Pedro H F Coura, Paulo Menezes, Alan J S Graça
P2-24 | Point pattern analysis of star dunes in Ar Rub” al Khali desert, Saudi Arabia: The application of spatial statistics to the understanding of dune field self-organization
Saad Alsharrah
P2-25 | Research on Spatial Trend Surface Simulation of Cities in China Based on Spatial Interpolation Model
Chun Dong, Jiping Liu, Yu Zhang
P2-26 | Spatial Interpolation of Airborne Laser Scanning Data with Variable Data Density
Jaroslav Hofferka, Michal Galiay, Ján Kaňuk
P2-27 | Research on vertical distribution of cities in China based on spatial statistical models
Jiping Liu, Chun Dong, Jing Chen, Yu Zhang
P2-28 | Dynamics and Entropy of Land Use Changes of Metropolitan Areas in Poland (abstract)
Piotr Werner, Piotr Korcelli, Elżbieta Kozubek
P2-29 | Dynamics and Entropy of Land Use Changes of Metropolitan Areas in Poland
Piotr Werner, Piotr Korcelli, Elżbieta Kozubek
P2-30 | Use of cartographic modelling for the assessment of rural areas development
Jarosław Gasiorek, Zenon Polawski
P2-31 | Automatic classification as a tool for regionalization according to example of Polish part of the Sudety Mountains
Malgorzata Wieczorek, Malgorzata Kosmalska

Carlos Arredondo

P2-33 | Monitoring of Coastal Erosion - Study from Beaches of Rio Doce and Casa Caída/Olinda/PE Brazil
Marcia Carneiro, Lucilene Sá, Simone Sato

P2-34 | Geodata integration for the researches in Russian sector of Arctic region
Andrey Medvedev

Seyed Kazem Alavi Panah, Hossein Nasiri, Ali Hosseini, Ali Azizi

Carlos Arredondo

P2-36 | Application of the GIS technology to groundwater vulnerability assessment in the context of sustainable development. Case study: Iasi City, Romania
Ana Maria Oiste

P2-37 | Transenergysurface geological map and 3D model horizons
Zsuzsanna Vikor, Vera Maigut, Gábor Turczi

P2-38 | Wadden Sea Regional Planning PortalA trilateral interactive online map
Anne Hiller

P2-39 | Assessment of Anthropogenic Transformation of an Area Based on Soil Mapping and Current Statistical Information
Olga Chernova, Irina Ryzhova

P2-40 | Estimating-prognostic mapping of soil transformation, pollution and functioning at gas-bearing territories
Nadezda Mozhkova, Svetlana Kulachkova

P2-41 | Croatian State Geodetic Administration's official data usage in Croatian Mountain Rescue Service
Igor Vilus, Ivan Landek, Manjan Marjanović

P2-42 | “Flood Risk in Arid System Lluta River - Chile”Hydrogeomorphological Chart
Roberto Richardson, Manuel Muñoz

P2-43 | Liquefaction damage by the 2011 Off the Pacific Coast of Tohoku Earthquake in Japan and land condition of damaged area detected by time serial geospatial information
Mamoru Koarai, Takayuki Nakano, Takaki Okatani, Kosei Otoi, Hiroshi Une

P2-44 | Support of Disaster management by SDI and Cartography
Bence Toronyi, Gyula Iván

P2-45 | Mapping flood vulnerability. Case study: Tecuci Town (Romania)
Alexandru Nedelea, Liliana Zaharia, Laura Comanescu

P2-46 | Mapping of natural hazards in Cameroon
Mesmin Tchindjang

P2-47 | The Impact of Multidimensional Process of Society Pauperisation on the Global Disease Diffusion - an Analysis of the Problem with the Use of a Cartographic Method of the Research
Agnieszka Pilarska, Zenon Koziel

P2-48 | Administrative planning of territory of the Republic of Kazakhstan by means of cartographic method and Geographic Information System
Ivan Plachinta, Yevgeniya Bentya

P2-49 | Cartographical support of socio-economical development in Arctic region of Russia
Stanislav Belousov

P2-50 | Provision of Web-based Childcare Support Maps by Local Governments in Japan
Mikoto Kukimoto, Yoshiki Wakabayashi

P2-51 | Map 2-1: Archaeological, Iron Age, Pre-historic and Historic Sites in Botswana MapGIS Database -Compiled from Botswana Museum Database and from the archaeological and historical sites list of Botswana
Joyce Gosata Mahanyane

P2-52 | Cartographic visualisation of the spatial location of external hydrants for the fire brigade purposes
Łukasz Wielebski

P2-53 | Assessment the Use of Satellite Imagery for Mapping
Merve Keskin, Ahmet Ozgur Dogru, Necla Uludékin

P2-54 | Analyzing patterns of land cover change in southern part of the Ganges delta region in India
Gargi Chaudhuri
2-55 | Earth Observation Capacity for Environmental Mapping in Bulgaria
Petar Penev, Rumiana Vatseva

2-56 | APPLICATION OF GEOMATICS FOR MONITORING THE ENVIRONMENTAL DYNAMICS AROUND THE DAM OF CAP BON (Tunisia - North East)
Walid Chouari, Monaem Nasr, Mohsen Dhiab

2-57 | Land cover map of Europe at scale 1:5 000 000
Jan Feranec, Tomas Soukup, Jozef Cizmar, Jozef Safar, Pavol Kontra

2-58 | Spectro-temporal analysis of physical indices and classifiers of remote sensing images around Olho D’ Água Lagoon (Jaboatão Guararapes-PE, Brazil)
Júlio César Cotrim Moreira Filho, João Rodrigues Tavares Junior

2-59 | A METHODOLOGY FOR EDGE DETECTION OF SOBRADINHO RESERVOIR - BA, BRAZIL WITH SRTM AND ASTER IMAGES
Jonathan Gomes Dos Santos, João Rodrigues Tavares Junior

2-60 | DINSAR TECHNICAL PROPOSAL FOR STUDY OF SOIL SUBSIDENCE THE NEIGHBORHOOD OF BOA VIAGEM, RECIFE - PE, BRAZIL
João Rodrigues Tavares Junior, Ana Lúcia Bezerra Candeias, Jaime Joaquim da Silva Pereira Cabral

2-61 | MAPPING AREAS OF ENVIRONMENTAL PROTECTION IN LAGOON OLHO D’ÁGUA (JABOTÃO DOS GUARARAPES, BRAZIL) USING SUBMETRIC IMAGE
João Rodrigues Tavares Junior, Olindina Gomes de Macedo, Ana Lúcia Bezerra Candeias

2-62 | Object-oriented and Decision tree classifications for LULC using Cosmo-SkyMed, QuickBird and LandSat 7 satellite data: An Example of Erbil/Iraq
Amjed Al-Hameedawi, Manfred Buchroithner, Nikolaes Prechtel

2-63 | Building up an Archeological GIS based on the excavation of the Diana sanctuary in Nemi, Italy
Stefan Peters, Panagiota Papakosta, Andreas Donaubauer, Wolfgang Filser

2-64 | Focus on Rescue and Emergency Services in Sweden
Peter Wasström

2-65 | An Algorithm to Extract Building Patterns from Topographic Databases
Sinan Cetinkaya, Melih Basaraner

2-66 | GLOBAL WARMING TEACHING THROUGH MAPS AND DIAGRAMS TOUCH
Waldirene Ribeiro, Alejandra Coll

2-67 | Compilation of 7 map sheets of the geological map of Morocco at 1:50,000 / 1:100,000
Anja Hempel, A. Fekkak, E. Dickmayer

2-67 | Cartonirvana: smells like map spirit
Kenneth Field

2-68 | Assessment of the Topographic Effects on Climate Data
Ahmet Ozgur Dogru, Merve Keskin

2-69 | A method for high-level road network extraction of OpenStreetMap data
Falko Schmid, Hannes Janetzek

2-70 | The National Land Survey of Finland opened its topographic data
Teija Tarvainen

2-71 | An exploratory visual analysis of twitter data relating to public attractors
Chris Pettit

2-72 | SIGNA Geoportal: Taking advantage of GIS ans SDI possibilities in an integrated environment
Celia Sevilla, Miguel Villalón, Antonio Rodríguez-Pascual, Alicia González

2-73 | CartoCiudad Web Services: Standard Web Services for the location, routing and navigation on official geographic data in Spain
Alicia González, Antonio Rodríguez-Pascual, Celia Sevilla, Miguel Villalón

2-74 | SPATIAL ANALYSIS OF AFFECTED AREAS BY EXTREME HYDROLOGICAL EVENTS IN RIO DE JANEIRO (THE HOST CITY FOR THE 2016 OLYMPIC GAMES) - BRAZIL
Leandro Andrei Beser de Deus, Camilla Silva Motta Santos, Marcos Aurélio Vasconcelos Freitas, Paulo Menezes

2-75 | Proposed Additions to the Cartographic Database of Mars
Thomas Gangale, Marilyn Dudley-Flores

2-76 | Multidimensional Geological Map of Mt. Everest in KML for Google Earth
Gerhard Bax, Michael P. Searle

2-77 | CENSUS/CARTOGRAPHIC ACTIVITIES
Habibullah Khan

2-78 | A competitive analysis of open web mapping technologies
Richard Donohue, Carl Sack, Timothy Wallace, Robert Roth, Tanya Buckingham

2-79 | 3D representations in the service of historical
Mary Constantoglou

2-80 | Mapping of Local Construction Materials in the North West Region of Cameroon
Kah Elvis Fang, Ndifor Divine
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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>14.00</td>
<td><strong>KN-5 - MY DISCOVERY OF CARTOGRAPHY</strong></td>
<td>Great Hall</td>
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<td>KN-5-1</td>
<td>My Discovery of Cartography</td>
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<td><em>Christopher Board</em></td>
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<td>14.00</td>
<td><strong>ICA Commissions at a Glance</strong></td>
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<td>Commission on Map Production and Geo-Business</td>
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<td>14.45</td>
<td><strong>S9-A - UNCERTAINTY VISUALISATION</strong></td>
<td>Great Hall</td>
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<td>Chair: Bertone, Alessio</td>
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<td>S9-A-1</td>
<td>Beyond the Surface: Current Issues and Future Directions in Uncertainty</td>
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<td>Visualization Research</td>
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<td><em>Jennifer Smith</em>, David Retchless, Christoph Kinkeldey, Alexander Klippel</td>
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<td>Visualization: Noise Annotation Lines for the Visual Representation of</td>
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<td>Attribute Uncertainty in Maps</td>
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<td><em>Christoph Kinkeldey</em>, Jennifer Smith, Alexander Klippel, Jochen Schiewe</td>
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<td>S9-A-3</td>
<td>Evaluation of Uncertainty Visualization Techniques for Decision-making</td>
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<td>in a Bushfire Scenario</td>
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<td><em>Lisa Cheong</em>, Susanne Bleisch, Matt Duckham, Allison Kealy, Kevin</td>
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<td>Tolhurst, Tom Wilkening</td>
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<td>14.45</td>
<td><strong>S9-B - VGI: EFFECTS</strong></td>
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<td>Chair: Turner, Andrew</td>
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<td>S9-B-1</td>
<td>On the Influence of Geospatial Context on Mobile Microblogging Content</td>
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<td><em>Stefan Hahmann</em>, Dirk Burghardt</td>
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<td>S9-B-2</td>
<td>Mapping Sense of Place: Online Participatory Mapping for Indicating</td>
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<td>Landscape Values</td>
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<td><em>Carl Sack</em></td>
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<td>S9-B-3</td>
<td>Where Do Tourists Go? Visualizing and Analyzing the Spatial Distribution</td>
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<td>of Geotagged Photography</td>
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<td><em>Bálint Kádár</em>, Mátéyás Gede</td>
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<td>S9-B-4</td>
<td>Cartograms of self-organizing maps to explore user-generated content</td>
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<td><em>André Bruggmann</em>, Marco Michele Salvini, Sara Irina Fabrikant</td>
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<td>14.45</td>
<td><strong>S9-C - MAPS IN DECISION MAKING</strong></td>
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<td>Chair: Battersby, Sarah</td>
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<td>S9-C-1</td>
<td>Maps in Decision Making: Why Almost Every Negotiation Starts and Ends</td>
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<td><em>Felipe Rufino Atkocius</em></td>
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<td>S9-C-2</td>
<td>How to measure and visualize emotion when using maps</td>
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<td><em>Sara Irina Fabrikant</em></td>
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<td>S9-C-3</td>
<td>Maps as Decision Support Tool in Political Decision Processes</td>
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<td><em>Anja Reinermann-Matatko</em></td>
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<td>14.45</td>
<td><strong>S9-D - MAP PROJECTION RECONSTRUCTION</strong></td>
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<td>Chair: Boutoura, Chrysoula</td>
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<td>S9-D-1</td>
<td>Estimation of an Unknown Map Projection and its Parameters from the Map</td>
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<td><em>Tomas Bayer</em></td>
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<td>S9-D-2</td>
<td>Old Maps Georeferencing Overview and a New Method for Map Series</td>
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<td><em>Jiri Cajthaml</em></td>
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<td>S9-D-3</td>
<td>Map Projection Reconstruction of a Mercator's Map</td>
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<td><em>Marina Rajaković</em>, Ivka Kljajić, Miljenko Lapaine</td>
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<td>S9-D-4</td>
<td>DATA GENERALIZATION IN THE CARTOGRAPHIC MATERIALS OF GENERAL LAND</td>
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<td><em>Aleksy Golubinsky</em>, Olga Shalashova, Irina Alyabina</td>
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<td><strong>S9-E - IMAGE CLASSIFICATION</strong></td>
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<td>Chair: Krätzschmar, Elke</td>
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<td>S9-E-1</td>
<td>Modular classification and change analysis of vegetation encroachment</td>
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<td>using object-based image analysis</td>
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<td><em>Elke Krätzschmar</em>, Johann Sehner, Horst Klemm, Albert Böhm, John R.</td>
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<td>S9-E-2</td>
<td>Rice Yield Estimation by using Objective Yield Survey (OYS) and Remote</td>
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<td>Sensing (RS) methods; Case study in Singburi and Angthong Province.</td>
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<td><em>Jatuporn Nontasiri</em></td>
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<td>S9-E-3</td>
<td>Image Classification towards Mapping of Vegetation Structure: A practical</td>
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<td><em>Erika Pretorius</em></td>
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14.45  S9-F - ORIENTEERING MAPS  
Chair: Zentai, László

S9-F-1 | Implementation of Cartographic and Digital Techniques in Orienteering Maps  
László Zentai

S9-F-2 | Automation in orienteering map production – fiction or reality  
Dušan Petrovič

S9-F-3 | Vegetation height maps derived from digital elevation models: the next innovation in the production of orienteering maps?  
Thomas Gloor

S9-F-4 | Orienteering moves indoor  
Terje Midtbø

14.45  S9-G - NMCA - EUROPEAN AUTHORITIES INTRODUCE WEB SERVICES  
Chair: Illert, Andreas

S9-G-1 | Standardization as a vehicle towards e-government  
Flemming Nissen, Jan Hjelmager

S9-G-2 | Automation of Data Quality Validation based on Common Rules for Pan-European Geoinformation Production  
Matt Beare, Anja Hopfstock, Antti Jakobsson

S9-G-3 | European Location Framework - One Reference Geo-Information Service for Europe  
Antti Jakobsson, Anja Hopfstock, Roy Hellesjø Mellum, Dorus Kruse, Clemens Portele, Saulius Urbanas, Jorgen Hartnør, Andy Bray, Laila Aslesen, Olaf Ostensen, Dave Lovell

S9-G-4 | PDOK Kaart, the Dutch mapping API  
Haico van der Vegt

14.45  S9-H - TECHNOLOGIES IN CARTOGRAPHIC EDUCATION  
Chair: Akinyemi, Felicia

S9-H-1 | The State of GISc Education and SDI Implementation in the SADC Countries: A Comparative Study  
Sanet Eksteen, Serena Coetzee

S9-H-2 | NEW TECHNOLOGIES AS EDUCATIONAL RESOURCES FOR TEACHING CARTOGRAPHY: A CASE STUDY IN GUINEA-BISSAU  
Inês Maria Nosoline, Angelica Carvalho de Maio, Datto Domingos Rodrigues

S9-H-3 | A Survey of Books for Potential Use in SDI Education and Training in South Africa  
Victoria Rautenbach, Serena Coetzee

14.45  S9-I - BUSINESS MEETING OF THE COMMISSION ON MAPS AND SOCIETY  

14.45  S9-J - BUSINESS MEETING OF THE COMMISSION ON OPEN SOURCE GEOSPATIAL TECHNOLOGIES  

16.30  S10-A - SYMBOLS IN MAP DESIGN  
Great Hall

Chair: Kent, Alexander

S10-A-1 | Sharing and Discovering Map Symbols with SymbolStore.org  
Anthony Robinson, Scott Pezsanowski, Joshua Stevens, Ryan Mullins, Justine Blanford, Raechel Blanchett, Alan MacEachren

Joshua Stevens, Anthony Robinson, Alan MacEachren

S10-A-3 | 3D Symbolization and Multi-Scale Representation on Geo-Information  
Wei Yongjun, Ji Guojie, Chen Yingdong, Han Peng

S10-A-4 | Semiological aspects of urban maps: A case study from the Holy city of Mecca  
Dhieb Mohsen

16.30  S10-B - APPLICATIONS IN SUSTAINABLE DEVELOPMENT  
Hall 1

Chair: Bax, Gerhard

S10-B-1 | Automatic Derivation of Urban Structure Types from Topographic Maps by Means of Image Analysis and Machine Learning  
Robert Hecht, Hendrik Herold, Gotthard Meinel, Manfred Buchroithner

S10-B-2 | From sensor data to the perception of phenomena: Software architecture for online access and offline analysis  
Nader Cheaib, Anne Ruas, Olivier Gaborit

S10-B-3 | Mapping Potential Metro Rail Ridership in Los Angeles County  
Bin Mo

S10-B-4 | MOSART: A DECISION MAKING TOOL FOR MODELLING SUSTAINABLE DEVELOPMENT WITH SPATIAL ACCESSIBILITY ANALYSIS  
Nicolas Ovtracht, Gerald Folliot, Dany Bouchard, Yves Crozet, Aurélie Mercier
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<td>Burghardt, Dirk</td>
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<td>TileGen - An open source software for applying cartographic generalisation to tile-based mapping</td>
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<td>Investigations into partitioning of generalization processes in a distributed processing framework</td>
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<td>Clutter Reduction Methods for Point Symbols in Map Mashups</td>
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<td>Preservation and transformation of relations between thematic and topographic data throughout theme</td>
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<td>S10-D - USER ISSUES IN MAP PRODUCTION</td>
<td>Jobst, Markus</td>
<td>S10-D-1</td>
<td>Designing a map using Open Data coming from different sources.</td>
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<td>Legal Issues in Czech Cartography in Relation to the International Cooperation</td>
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<td>Formalization of cartographic edition rules to automate topographic maps quality control</td>
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<td>S10-E - GLOBES</td>
<td>Koussoulakou, Alexandra</td>
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<td>Maps vs. Globes - Distance Estimation on Flat and Spherical Displays</td>
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<td>Hypsometric Globe of Mars3D Model of the Planet</td>
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<td>Virtual Globes Museum 2.0 Adding the Power of Community</td>
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<td>S10-F - MAPS AND SOCIETY</td>
<td>Perkins, Chris</td>
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<td>Telling stories with web maps</td>
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<td>POLITICAL CONSIDERATIONS IN CARTOGRAPHIC MAPS</td>
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<td>Analysis of street names regarding the designation of cities</td>
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<td>S10-G - MIXED SESSION</td>
<td>Christophe, Sidonie</td>
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<td>A DL-based Approach for Detecting Semantic Relations in Geo-Ontology Matching</td>
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<td>USING ELECTION REGISTRATION DATA AS PROXY FOR MEASURING POPULATION MIGRATION IN SOUTH AFRICA</td>
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Wednesday, August 28, 2013
16.30  |  S10-H - BUSINESS MEETING OF THE COMMISSION ON COGNITIVE VISUALISATION  |  C5
16.30  |  S10-I - BUSINESS MEETING OF THE COMMISSION ON MAPPING FROM REMOTE SENSOR IMAGERY  |  C7/8
17:30 - 18.30  |  Orienteering Competition
19:00 - 20:30  |  DKT Eröffnung  |  Conference level - C6
               |  Präkolumbianische Kartenquellen  |  Dominique Görlitz
19:30  |  Young Cartographer’s Social Meeting  |  Wenzel Prager Bierstuben
08.30  KN-6 - THE WALDSEEMÜLLER MAP: A PRESENT OF GERMANY TO THE WORLD

Great Hall

Great Hall

08.30  ICA Commissions at a Glance

Commission on the History of Cartography
Commission on Digital Technologies in Cartographic Heritage
Commission on Mapping from Remote Sensor Imagery
Commission on Data Quality

ICA News

09.15  S11-A - STATISTICAL MAPPING

Chair: Hopfstock, Anja

S11-A-1 | Cadastral-based expert dasymetric system (CEDS) using census and parcel data

Georgianna Strode, Victor Mesev


Ionel Boamfa, Alina Munteanu

S11-A-3 | Dasymetric Mapping of Saskatchewan’s (Canada) Population

Julia Siemer. Anne Krahnen

09.15  S11-B - USABILITY 1

Chair: van Elzakker, Corné

S11-B-1 | Map design aspects, route complexity, or social background: Factors influencing user satisfaction with indoor navigation maps

Alexandra Lorenz, Cornelia Thierbach, Nina Baur, Thomas H. Kolbe

S11-B-2 | Moving Maps: The Relationship Between Mobile Maps and Scale

Rex Cammack

S11-B-3 | Schematic Maps Based on User-generated Data Applied on Mobile Devices for Tourist Navigation Tasks

Karsten Pippig, Dirk Burghardt

S11-B-4 | Introducing Usability Heuristics for Mobile Map Applications

Liisa Kuparinen, Johanna Silverstinen, Hannakaisa Isomäki

09.15  S11-C - GENERALISATION OF NETWORKS 2

Chair: Touya, Guillaume

S11-C-1 | A practical experience on road network generalisation for production device

Jérémy Renard, Silvio Rousic

S11-C-2 | Automatic Enrichment of Stream Networks with Primary Paths for Use in the United States National Atlas

Barbara Buttenfield, Lawrence V. Stanislawski, Christopher Anderson-Tarver, Michael J. Gleason

S11-C-3 | A novel approach of selecting arterial road network for route planning purpose

Hongchao Fan, Hongbo Gong, Qing Fu

S11-C-4 | DETERMINING WEIGHTS OF PARAMETERS IN GENERALISATION OF RIVER NETWORK

Alper Sen, Turkay Gokgoz

09.15  S11-D - HISTORICAL CARTOGRAPHERS AND THEIR WORK

Chair: Board, Christopher

S11-D-1 | J.G. Lehmann’s system of slope hachures - an investigation on the quality of relief representation at the beginning of the 19th Century

Wolf Günther Koch

S11-D-2 | Covert Mapping the Ottoman Empire: the Career of Francis Maunsell

Peter Collier

S11-D-3 | Prague Atlas of João Teixeira AlbernazCommented Comparasion maps from Guanabara Bay

Paulo Menezes

S11-D-4 | Ptolemy’s World Map and Eratosthenes’s Circumference of the Earth

Irina Tupikova

09.15  S11-E - ROCK DEPICTION AND RELIEF REPRESENTATION

Chair: Kriz, Karel

S11-E-1 | Solid Landscape Models in the 21st CenturyA Balanced Approach

Jeff Welter

S11-E-2 | Towards automating Swiss style rock depiction

Roman Geisthövel

S11-E-3 | Digital Rock Drawing on Czech Topographic Maps: Present and Future Development

Jakub Lysák, Michal Traurig
09.15 S11-F - CARTOGRAPHIC EDUCATION 1 C3
Chair: Zentai, Laszlo
S11-F-1 | Intelligent Solutions Sustaining Urban EconomiesMaster Classes casestudy
Agata Ciełkowska-Styk, Eric Goodyer, Alan Wells, Steve Dibnah, Clare Edwards, Suchith Anand, Mike Jackson, David Conyers, Marek Baranowski, Pawel Kwiatkowski, Jacques Bouffer, Gherardo Chirici, Bruno Lasserre, Michela Corvino, Fabrizio Spallone, Teresa Raventos, Marta Gruziel, Hanna-Kaisa Saari, Andrew Groom
S11-F-2 | 3D Cartographic Modeling in Educational Process
Temenoujka Bandrova, Silvia Tsyvyatkova
S11-F-3 | Analyses of Visualization Methods of the Earthquake Catalog Mapping for Educational Purposes
Andrea Pödör
S11-F-4 | Perspectives on developing critical GI human capacity in a developing country context.
Felicia O. Akinyemi

09.15 S11-G - PLANETARY C4
Chair: Karachevtseva, Irina
S11-G-1 | Interactive Visualization of Planet Movements for Highschool Education
Stephan Wondrak, Lorenz Hurni
S11-G-2 | “Blind Mouse” on Mars and Moona Map Game for Disseminating Planetary Topographic Knowledge
Máté Gede, Henrik Hargitai, Eszter Simonné-Dombóvári
S11-G-3 | A New Mapping Method for the Moon With the Chang’E-1 Data
Lingli Mu, Chunli Li, Jianjun Liu, Xin Ren, Xiaoduan Zou

09.15 S11-H - GEODATEN HEUTE UND MORGEN C5
Chair: Krüger, Tobias
S11-H-2 | Kartografie im Zeitalter der Apps
Martina Forster
S11-H-3 | Generalisierung sehr großer Datenbestände mittels Partitionierung
Monika Sester
S11-H-4 | Urbanes WebMapping
Matthias Möller

09.15 S11-I - MIXED SESSION S1
Chair: Wang, Tao
S11-I-1 | A New Algorithm for Extracting Drainage Networks from Gridded DEMs
Tao Wang
S11-I-2 | A New spatial Framework for digital Earth: Sphere Shell Space 3D Grid
Gang Wan, Xuefeng Cao, Feng Li, Ke Li
S11-I-3 | Living on Fumes: What “small data” interviews can tell us about Location-based Services and Big Data's increasing role in what we know and where we are.
Jim Thatcher
S11-I-4 | Mapping sea ice coverage from Canadian RADARSAT images
Jonathan Li

09.15 S11-J - BUSINESS MEETING OF THE COMMISSION ON DATA QUALITY C7/8

11.00 S12-A - GEOANALYTICS IN URBAN MANAGEMENT Great Hall
Chair: Liu, Gang-Jun
S12-A-1 | A GID-BASED INVESTIGATION OF SPATIAL ACCESSIBILITY TO HEALTH CARE FACILITIES WITHIN AN URBAN FRINGE AREA OF MELBOURNE, AUSTRALIA.
Gang-Jun Liu, Ahmad Salahuddin, Benno Engels
S12-A-2 | GPS-based Crowd Sourced Intelligent Traffic Information Hub
Rui Zhu
S12-A-3 | Including a social perspective into urban planning using visualisations based on self-organising maps
Hans-Jörg Stark, Susanne Bleisch, Tanja Klöti
S12-A-4 | Accessibility to Public High Schools and School Performance in Metropolitan Baton Rouge, Louisiana 1990-2010
Shaun Williams

11.00 S12-B - THE RHETORIC OF MAPS Hall 1
Chair: Morita, Takashi
S12-B-1 | Why Maps Are Silent When Texts Can Speak. Detecting Media Differences through Conceptual Modelling
Oyvind Eide
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<td>Rafika Hajji</td>
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<td>David Fairbairn</td>
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<td>DISASTER MANAGEMENT</td>
<td>Penev, Petar</td>
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<td>Stefan Peters, Liqiu Meng, Lukka Krisp, Georg Gartner, Felix Ortig, Manfred Buchroithner, Dirk Burghardt, Nikolaos Prechtel</td>
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Thursday, August 29, 2013
11.00  S12-H - AUS DER ARBEIT DER DGFK-KOMMISSIONEN  C5
Chair: Diez, Dietrich
S12-H-1 | Urheberrecht und Open Government Data - passt das zusammen?  
Dietrich Diez
S12-H-2 | Die Stadt in 3D - Modellierung und Präsentation  
Ingrid Jaquemotte
S12-H-3 | Kartographie und Geoinformation für das Management von Desastern  
Horst Kremers
S12-H-4 | Karten versus GlobenEntfernungen auf ebenen und sphärischen Displays  
Florian Hruby

11.00  S12-I - BUSINESS MEETING OF THE COMMISSION ON UBIQUITOUS MAPPING  S1

12:15 - 12:45  BEST PRACTICE PRESENTATION  Great Hall

12.15  P3 - POSTER SESSION  Terrace Level
P3-1 | The Spanish Provincial Maps: A new way of mapping from geospatial databases  
Laura Sanz Bueno
P3-2 | Applying cartography to semi-automated map creation  
Christopher Wesson
P3-3 | A Geospatial Reference Framework for Student Training Survey Camps  
Samyar Sepehr, David Fraser, Emmanuel Stefanakis
P3-4 | THE GEOLOGY OF POLISH TATRA MOUNTAINSDETAIL DIGITAL CARTOGRAPHIC SERIES OF MAP AT SCALE 1:10 000 BASED ON GIS TECHNOLOGY  
Ewa Piotrowska
P3-5 | Geological-Tourist Maps of Poland National ParkImportant tool for popularization and promotion of Geotourism  
Anna Tekielska, Joanna Przasnyska
P3-6 | Integration of APRS Network with SDI  
Tomasz Kubik, Wojciech Penar
P3-7 | A Semantic Matching Method of Heterogeneous Geospatial Service Classification Based on the Concept Lattice  
An Luo
P3-8 | A Service- and Cloud-oriented Solution for Thematic Maps  
Rostislav Nétek, Alena Vondráková, Zdena Dobesova
P3-9 | Web enabled open source GIS based tourist information system for hue city  
Duy Nguyen
P3-10 | The use of OpenSource technologies for distributing historic maps and creating search engines for searching though the catalogues  
János Jeney, Manfred Buchroithner
P3-12 | The interactive gazetteer of a 150-year-old globe  
Zsusanna Ungvári, Tibor Tokai
P3-13 | Advances and Recent Challenges in Cartographic Pattern Recognition  
Hendrik Harold
P3-14 | 3-D DIGITIZING AND REPRESENTATION OF HISTORICAL BOUND ATLASES AND MAPS USING LOW COST SOLUTIONS  
Vassileios Tsioukas, Alexandra Koussoulakou, Miltiadis Danili, Evangelos Livieratos
P3-15 | Georeference and Old Maps Online: How to turn scanned maps into attractive discoverable resource  
Petr Pridal
P3-16 | Time animations from early maps of the 19th century  
Martin Mikloš, Vít Voženílek
P3-17 | Map Archive on Institute of Geography, Masaryk UniversityNew Possibilities  
Zdenek Stachon, Milan Konečný
P3-18 | Visualizations of the river Danube based on László Vörös’ 1833 hydrographic map  
Zsolt Török, Domonkos Hillier
P3-19 | Finding the sources of data used for making ethnic maps  
János Jeney, Manfred Buchroithner
P3-20 | Semiotics, Syntactic and Cartometric Analysis of Müller’s Manuscript Maps of the Czech Regions  
Vaclav Cada, Martina Vichrová
P3-21 | Ethnic maps of the Hungarian settlement areas from around the world  
János Jeney, Manfred Buchroithner
P3-23 | The variable radius cartography - History and perspectives  
Giancarlo Scalera
P3-24 | The Ortelius Map of Tunisia: an historical and cartographical systematic study.  
Saada Afef, Dhieb Mohsen

71x222 Thursday, August 29, 2013
P3-25 | Analysis of the Historic Development of Maps of Istria
Aldo Sošić, Branko Janez Rojc, Dušan Petrović

P3-26 | Historic Towns Atlases of Poland – A State of Today’s Advanced
Zenon Koztiel

P3-27 | The development of an interactive forest atlas using an open source
webmapping solution, case study of the wilaya of Mascara (west of Algeria)
Fekir Youcef, Mederbal Khalladi, Hamadouche Mohamed Amine, Antoine Djamel

P3-28 | Summary and Achievements of City Atlases in China
Qingwen Qi, Lili Jiang, An Zhang

P3-29 | COMPLEX ATLAS OF LVIV CITY
Rostyslav Sossa, Oleh Shablyy, Oleksandra Vistik

P3-30 | Consistency Matching in the Integration of Contour and River Data by Spatial
Knowledge
Tinghua Ai

P3-31 | New approaches to cartographic relief representation with morphometric
variables
Sergey Koshel, Oleg Mikhailov

P3-32 | Mapping geomorphodiversity. Case study Bucegi Mountains (The Southern
Carpathians, Romania)
Laura Comascescu, Alexandru Nedelea, Robert Dobre

P3-33 | Geobrowsers vs. Cartographic Artworks: Virtual Planetary Globes Designed for
K12 Education
Henrik Hargitai, Mátyás Gede, Zsófia Merk

P3-34 | HIGH RESOLUTION VESTA LAMO ATLAS DERIVED FROM DAWN FC IMAGES
Thomas Roatsch, Elke Kersten, Klaus-Dieter Matz, Frank Preusker, Frank Scholten, Ralf Jaumann, Carol
Raymond, Chris Russell

P3-35 | Cartographic Mapping of the Icy Satellites using Cassini ISS images.
Elke Kersten, Thomas Roatsch, Angelika Hoffmeister, Carolyn Porco

P3-36 | Main Characteristics of Coordinate and Cartographic Support of Luna-Glob
Mission
Anatoly Zubarev, Natalia Kozlova, Irina Nadezhdina, Alexander Kokhanov, Irina Karachevtseva

P3-37 | Choosing a Suitable Projection for Navigation in the Arctic
Andrianis Skopelli, Lysandros Tsoulos

P3-38 | Considerations about the worldwide and Brazilian experiences for the adoption
of Geocentric Datum
Vivian de Oliveira Fernandes, Ruth Nogueira, Günter Schmitt

P3-40 | Renewing Cahill’s Equal-Area Butterfly Projection
Krisztian Kerkovits, János Gyorffy, Mátyás Gede

P3-41 | Methodology for Generating a Low Cost Tourist Mapping applied to Small
Brazilian Municipalities
Simone Sayuri Sato, Katarine Maria Campbell Machado, Lucilene A. Correa Marques de Sá, Marcia
Carmen

P3-42 | The scholar cartography in brazilian universities: an experience in
Ourinhos/Sao Paulo
Carla Cristina Reinaldo Gimenes De Sena

P3-43 | TRAINING OF STUDENTS FOR WORK IN THE FIELD OF CARTOGRAPHY
Janis Strauhmanis, Janis Strauhmanis, Janis Strauhmanis, Janis Strauhmanis

P3-44 | CARTOGRAPHIC EDUCATION OF SURVEYORS WITHIN THE UNIVERSITY OF
PRISHTINA
Bashkim Idrizi

P3-45 | PHYSICAL MAPS WITH TACTILE AND VISUAL INFORMATION ACCESSIBLE
ALSO TO BLIND AND VISUALLY IMPAIRED PERSONS
Pedro Ruiz-Prieto, Fernando Garcia-Soria, Maria Jesus Vicente-Mosquete, Maria Del Mar Diez-ALvarez,
Juan Sanchez-Abiatar, Jose Maria Duran-Velez, Marta Baldrich-Caselles

P3-46 | AUSTRIAN-HUNGARIAN SURVEY ON CHERNOFF FACES: AN ALTERNATIVE
METHOD OF REPRESENTATION IN SCHOOL CARTOGRAPHY
Ezsart Simonné-Dombóvari, Jose Jesus Reyes Nunez, Georg Gartner, Manuela Schmidt, Anita Rohoncz

P3-48 | Historic Town Atlases of Poland - the Progress up of Today
Zenon Koztiel, Roman Czaja, Radoslaw Golba, Anna Mateusz, Agnieszka Piarska

P3-49 | Using Chorems to Create Visual Summaries of the Recurring Places Appearing in
Human Movements
Tiiu Kelviste, Raivo Aunap, Menno-Jan Kraak

P3-50 | The production of orienteering maps in Austria
Robert Ditz

P3-51 | Quo Vadis, Geo-Scientific Mapping of States?
Eberhard Sandner

P3-52 | The Theory of Geographical Dimensions
Eberhard Sandner
P3-53 | Location in Granular Multimedia Digital Cultural Heritage
Kremers Horst

P3-55 | Mapping the Olympic Park
Paul Naylor, Christopher Wesson

P3-57 | Application of a Simple Method for Coordinates Conversion
Josias Paulo Dos Santos

P3-58 | Raster editing and map production in a National Mapping Agency using ArcGIS
Ray Patrucco, Derek Bigwood

P3-59 | ANALYSIS OF SATELLITE DATA AIMED AT ENVIRONMENTAL RISK MONITORING
Mauro Caprioli

P3-60 | Soil Map 1:200,000 (BUEK 200) The Distribution of Soils in Germany
Dietmar Krug, Ulrich Stegger, Einar Eberhardt, Stefanie Richter

P3-61 | PARADIGMATIC TENDENCIES IN CARTOGRAPHY AND MAPPING DURING THE SCIENTIFIC AND POSTMODERN PERIODS
Dr. Pablo Azócar Fernández

P3-62 | Contextual mapping - the importance of the right base map
Christopher Wesson

P3-63 | The latest research about Fernando Consag (1703-1759), On the occasion of 310th anniversary of his birth
Mirko Husak

P3-64 | The development of an interactive forest atlas using an open source webmapping solution, case study of the wilaya of Mascara (west of Algeria)
Fekir Youcef, Mederbal Khalladi, Hamadouche Mohamed Amine, Anteur Djamel

P3-65 | Atlas of Quality of Life and Sustainable Development in the Region Cienega, the state of Jalisco, Mexico: premise for an operational approach to the concept of Quality of Life."
Armando Antonio Domech González

P3-66 | Visualization of trends and tendencies based on a spatial analysis as a demonstrator for a Local Information System (LIS) based on a sample region
Linxueyang Zhao

P3-67 | Smart Campus Map
Shayan Nikoohemat

P3-68 | 3D-modelling and visualization of archeological data - Investigation in Lost-Cost Methods for 3D Reconstruction
Pei Zhang

P3-69 | Web mapping and online analysis of lightning cell tracks
Mohammad Abusohyon

P3-70 | Users and Uses of OpenStreetMap
Jan Behrens

P3-71 | Modeling individual’s familiarity of places using social media
Wangshu Wang

P3-72 | Persistent Physical Patterns of a Mountain Landscape Detection and Map Representation
Carlos Vázquez Arias

P3-73 | A web mapping application for operative fire & water services
Mostafa Elfouly

P3-74 | 3D Mapping of Volumetric Changes of Selected East Alpine Glaciers
Katharina Zöphel

P3-75 | Cross-Media 3D Cartography of 'Europe at the Last Ice Age' Based on Initial Data Compilations
Mara Jaunsproge

P3-76 | A Comparison of Hybrid Autostereoscopic 3D Methods for Depicting High Relief Topography: Case Study - Dachstein, Austria
Jeff Welter

P3-77 | Derivation of continuous zoomable road network maps through utilisation of Space-Scale-Cube
Meysam Aliakbarian

P3-78 | Categorization and visualization of Twitter data
Raluca Nicola

P3-79 | The Evolution of Modern Cartography Visualised through Ordnance Survey’s midscale mapping
Charley Glynn, Christopher Wesson
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<th>Title</th>
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<tbody>
<tr>
<td>14:00</td>
<td>SCIENTIFIC AWARDS</td>
<td>Great Hall</td>
<td><strong>Great Hall</strong></td>
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<tr>
<td>14:45</td>
<td>S13-A - MAP DESIGN 5</td>
<td>Great Hall</td>
<td>**S13-A-1</td>
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<tr>
<td>14:45</td>
<td>S13-B - USABILITY 2</td>
<td>Hall 1</td>
<td>**S13-B-1</td>
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<tr>
<td>14:45</td>
<td>S13-C - USER NEEDS IN MAP READING</td>
<td>C6</td>
<td>**S13-C-1</td>
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<td>**S13-C-3</td>
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<tr>
<td>14:45</td>
<td>S13-D - ONTOLOGIES AND STANDARDS IN SDI</td>
<td>C1</td>
<td>**S13-D-1</td>
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<td>**S13-D-3</td>
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<tr>
<td>14:45</td>
<td>S13-E - APPLIED ISSUES IN MOUNTAIN CARTOGRAPHY</td>
<td>C2</td>
<td>**S13-E-1</td>
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<td>**S13-E-4</td>
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<tr>
<td>14:45</td>
<td>S13-F - HISTORICAL MAPS</td>
<td>C3</td>
<td>**S13-F-1</td>
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<td></td>
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<td>**S13-F-2</td>
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</table>
S13-F-3 | Unveiling historical maps - the interdisciplinary Atlas of Geopolitical Imaginaries of East Central Europe  
Eric Losang

S13-F-4 | Comparative analysis of historical maps from Canton of Zurich - Switzerland in an interactive online platform  
Angeliki Tsorlini, Ionu? Iosifescu, Lorenz Hurni

14.45 S13-G - MIXED SESSION  
Chair: Brewer, Cynthia A.

S13-G-1 | Mapping Of Candidate Russian Landing Sites On The Moon  
Alexander Kokhanov, Irina Karachevtseva, Anatoliy Zubarev, Jürgen Oberst

S13-G-2 | Municipal School Atlas of Ourinhos/SP: a way from abstract to concrete; from uncertainty to reality  
Andréa Aparecida Zacharias, Carla Cristina Reinaldo Gimenes De Sena, Elisabete De Fátima Farias Da Silva, Tadeu Jussani Martins, Ana Paula Mateucci Milena

S13-G-3 | Low Cost Road Condition Data Capture System for Sustainable Road Maintenance in Uganda  
Gerhard Bax, Lydia Mazzi KayondoNdandiko, Sandy Tickodri-Togboa

S13-G-4 | Empowering Brazilian Unprivileged Communities with High Geotechnological Tools  
Patricia Lustosa Brito, Daniel Nadier Cavalcanti Reis, Ricardo Lustosa Brito, Ivana Silva de Jesus

14.45 S13-H - SISTER CITIES  
Chair: Dora, Marcus

S13-H-1 | Cartographic use of geodata within the Geo Data Infrastructure Dresden (GDI-DD)  
Marcus Dora

S13-H-2 | Cartography and GIS in Columbus, Ohio, USA  
Harold Moellering, Ola Ahlqvist

S13-H-3 | Hamburg  
Ekkehard Matthias

14.45 S13-I - BUSINESS MEETING OF THE COMMISSION ON THE HISTORY OF CARTOGRAPHY  
Chair: Yao, Xiaobai

S14-A-1 | Identification of Peak Type Based on DEM  
De Zhang, Yuepeng Zhang, Liming Huang, Yan Zhou

S14-A-2 | Strabo: A Complete System for Label Recognition in Maps  
Yao-Yi Chiang

S14-A-3 | Budapest 3D underground map  
Katalin Zsoldi

16.30 S14-A - GEOSPATIAL ANALYTICS 2  
Great Hall  
Chair: Yao, Xiaobai

S14-B-1 | Prosumers and Webmapping-Applications in Web 2.0  
Karsten Hoffmann

S14-B-2 | Customizable Map Content and 3D Visualization in the Online Platform GeoVITe  
Cristina Iosifescu, Ionu? Iosifescu, Lorenz Hurni

S14-B-3 | Geo Twitter Data Collection and Visualization System  
Hideyuki Fujita

S14-B-4 | Designing a Web Service to Geo-Locate Subjects of Volunteered, Textual Geographic Information  
Ryan Mullins, Frank Hardisty, Scott Pezanowski, Sujatha Das, Alexander Savelyev, Alan MacEachren, Prasenjit Mitra, Anuj Jaiswal

16.30 S14-C - DATA ENRICHMENT  
Chair: Lu, Min

S14-C-1 | Urban building usage labeling by geometric and context analyses of the footprint data  
Hai Huang, Birgit Kieler, Monika Sester

S14-C-3 | Multi-Scale Data Organization and Management of 3D Moving Objects Based on GIS  
Xu Shenghua

S14-C-4 | Grammar Supported Indoor Mapping  
Michael Peter, Susanne Becker, Dieter Fritsch
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<th>Title</th>
<th>Presenters</th>
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<td>16.30</td>
<td>S14-D - GENERALISATION 4</td>
<td>Buttenfield, Barbara</td>
<td>Towards Cartographic Constraint Formalization for Quality Evaluation</td>
<td>Xiang Zhang, Tinghua Ai, Jantien Stoter</td>
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<td>Topologically Safe Curved Schematization</td>
<td>Arthur van Goethem, Wouter Meulemans, Andreas Reimer, Herman Haverkort, Bettina Speckmann</td>
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<td>New method of creation data for natural objects in MRDB based on new simplification algorithm</td>
<td>Krystian Kosiol, Stanislaw Szombara</td>
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<td>Measuring locations of critical points along cartographic lines with eye movements</td>
<td>Theodora Bargiota, Vassilios Mitropoulos, Vassilios Krassanakis, Byron Nakos</td>
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<tr>
<td>16.30</td>
<td>S14-E - HYDROLOGICAL EXTREME EVENTS</td>
<td>Bandrova, Temenoujka Lubenova</td>
<td>Monitoring hydrological extreme events and their effects using lightweight unmanned aircraft to remote sensing</td>
<td>Justyna Jeziorska, Tomasz Niedzielski, Matylda Witkowicz</td>
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<td>Proposed interactive maps for informing the population of flood risks: experiment in the City of Saint-Etienne, France</td>
<td>Elisabeth Chesneau, Eric Lieghio</td>
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<tr>
<td>16.30</td>
<td>S14-F - ACCESSING HISTORICAL MAPS</td>
<td>Collier, Peter</td>
<td>GI Science versus Cartography? Consequences of separating data and visualisation expertise in 21st century mapping processes.</td>
<td>Bennet Schulte</td>
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<td>Journeys through time with the Swiss national map series</td>
<td>Martin Rickenbacher</td>
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<td>Publishing Old Maps as Dynamic Map Services</td>
<td>Jakub Havlicek, Arnost Muller, Tomas Janata</td>
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<td>GeoVisualisation and Spatio-Temporal Modelling from Satellite Imagery: A Study of Million+ City, Ghaziabad, NCR Region, India.</td>
<td>Mohan Mohan</td>
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<td>3D capabilities of SPOT 6</td>
<td>Philippe Nonin, Marc Bernard</td>
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<td>Implementation of an automated generalisation workflow to generalise a 1:50k map from 1:10k data</td>
<td>Vincent van Altena, Ron Nijhuis, Mark Post, Ben Bruns, Jantien Stoter</td>
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<td>16.30</td>
<td>S14-H - SISTER CITIES</td>
<td>Dora, Marcus</td>
<td>Wroclaw</td>
<td>Tomasz Niedzielski</td>
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<td></td>
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<td>Cartography and Geoinformatics in Salzburg, Austria</td>
<td>Barbara Hofer</td>
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<td>Strasbourg</td>
<td>Henri Giraud</td>
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<td>16.30</td>
<td>S14-I - BUSINESS MEETING OF THE COMMISSIONS ON USE AND USER ISSUES, GEOVISUALIZATION, THEORETICAL CARTOGRAPHY</td>
<td></td>
<td>INTERNATIONAL MASTERS OF CARTOGRAPHY CEREMONY</td>
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<tr>
<td>17:30</td>
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<td>BUSINESS MEETING OF THE COMMISSION ON MOUNTAIN CARTOGRAPHY</td>
<td>(not a public event)</td>
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<td>19:30</td>
<td>Gala Dinner</td>
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<td>Gala Dinner</td>
<td>Westin Bellevue Hotel</td>
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</table>
KN-7 - DIGITAL MAPS FOR HIGHLY AUTOMATED DRIVING

Martin Haueis

ICA Commissions at a Glance

Commission on Ubiquitous Mapping
Commission on Cartography in Early Warning and Crisis Management
Commission on Maps and Graphics for Blind and Partially Sighted People
Commission on Cartography and Children
Joint ICA Working Group and IGU Commission on Toponymy

S15-A - DISCUSSION FORUM: CARTOGRAPHY 2013

Chair: Gartner, Georg; Buckley, Aileen

S15-B - USER NEEDS

Chair: Pucher, Alexander

S15-C - TOPOYNMS 1

Chair: Schlichtmann, Hans

S15-D - RENEWABLE ENERGIES

Chair: Prechtel, Nicolas

S15-E - RECONSTRUCTION OF HISTORICAL DATA

Chair: Mokre, Jan

S15-A | The State of the Art in Cartography in 2013
Aileen Buckley, Georg Gartner

S15-B | Maps versus its users in the digital era: interpretation, cognition, and memory
Kristien Ooms, Philippe de Maeyer, Veerle Fack

S15-C | Geonames
de the Database of Geographical Names of the Czech Republic
Tomáš Marek, Ondřej Závodský

S15-D | EnerGeoPlanGrid-aware Planning of Renewable Energies
Jürgen Knies, Steffen Schütte

S15-E | The Way is the Goal - Modelling of historical roads
Markus Breier

S15-F | GéoPeuple: The creation and the analysis of topographic and demographic data over 200 years
Anne Rua, Christine Plumejeaud, Lucie Nahassia, Eric Grosso, Marie-Christine Vouloir, Claude Motte

S15-C | Towards a Spatial Analysis of Toponym Endings
Tobias Dahinden

S15-D | ThermoMapAn Open Source Web Mapping Solution for Displaying Superficial Geothermic Resources
Lucia Morper-Busch, László Orosz, Benedek Simó, Christian Bialas, David Bertermann

S15-E | Cartographic Reconstruction of Historic Settlement Development by Means of Modern Geodata
Lorenz Hurni, Christian Lorenz, Lorenzo Oleggini

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Aileen Buckley, Georg Gartner

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09.15  S15-F - REMOTE SENSING
Chair: Shupe, Scott
S15-F-1 | Land cover trends in Metro Vancouver, Canada over 45 years: mapping, analysis, and visualization
Scott Shupe
S15-F-2 | Reservoir Water Transparence calculated through Multispectral Ikonos Imagery and Field Spectroradiometry
Adriana Castreghini de Freitas Pereira
S15-F-3 | Qualification of Pleiades stereo pairs for updating IGN-France’s BD Topo® data base
Jean-Philippe Cantou
S15-F-4 | Laser Scanning Survey in the Pál-völgy Cave, Budapest
Mátyás Gede, Christin Petters, Gábor Nagy, Attila Nagy, János Mészáros, Bélá Kovács, Csaba Egri

09.15  S15-G - MARINE AND ARCTIC DATA INFRASTRUCTURE
Chair: Huet, Michel
S15-G-1 | Representation of coastal and marine environment in spatial data infrastructures to the integrated coastal zone management
Raquel Dezidério Souto, Paulo Menezes
S15-G-2 | Gaining better geospatial knowledge about the marine biodiversity by using harmonized data models, adequate cartographic visualizations and by providing easy access
Tillmann Lübker, Peter Hübnner, Mirko Hauswirth, Jochen Krause
S15-G-3 | Cooperative Mapping of the Arctic: The Creation of the Arctic Spatial Data Infrastructure
D. R. Fraser Taylor

09.15  S15-H - AKTUELLE ENTWICKLUNG IN DER ATLASKARTOGRAPHIE
Chair: Moser, Jana
S15-H-1 | Digitale AtlaskartographieHerausforderungen, Chancen und Lösungen
René Sieber
S15-H-2 | Der "Island Auto Atlas" - ein plattformübergreifender Reiseführer
Andreas Gollenstede
S15-H-3 | Europe-in-Maps von der Vollständigkeit zur Vielfalt
Eric Losang, Christian Hanewinkel
Alexander Wolodtschenko

09.15  S15-I - BUSINESS MEETING OF THE COMMISSION ON CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT
Chair: Konecny, Milan
S15-I-1 | GLOFs - Glacier Lake Outburst Floods, a Worldwide Threat for Alpine Areas
Manfred Buchroithner, Juliane Peters, Tobias Bolch
S15-I-2 | Mapping for Crises Management Standards
Temenoujka Bandrova, Milan Konečný
S15-I-3 | Cartography in the Communication of Stakeholders in Risk Situations, Disasters and in Civil Protection
Horst Kremers
S15-I-4 | Cartographic and Geoinformatics Strategies for Early Warning and Crises Management
Milan Konečný
S15-I-5 | The Emergency Support System: story of one project
Tomáš Rezník

11.00  S16-A - GEOSPATIAL ANALYTICS 3
Chair: Zhao, Xi
S16-A-1 | The Use of GIS Technology for Planning of GNSS Measurement
Dalibor Bartoněk, Irena Opatřilová
S16-A-2 | Site selection for the next Chinese Antarctic research station
Xiaoping Pang, Xi Zhao, Haoyan Liu
S16-A-3 | Cave Volumetric Studies Based on Archive Maps of the Pál-völgy Cave (Hungary)
Gáspár Albert, Zsuzsanna Ungvári
11.00  S16-B - TOPONYMS 2  
Chair: Du, Qingyun  
Hall 1  
S16-B-1 | Geographic names as a cultural expression: an analysis of the city of Petrópolis R J  
Beatriz de Souza, Paulo de Menezes, Bruna Miceli, Alessa Duque Estrada  
S16-B-2 | Enhancing the reading and understanding the toponymic map features by using TIS: a case study from Tunisia  
Dhib Mohsen  
S16-B-3 | Toponyms Placement on Web Maps  
Robert Župan, Stanislav Frangeš  
S16-B-4 | Toponymy Evolution of Rio de Janeiro State, Brazil  
Paulo Menezes, Santos Kairo, Pamela Dionisio, Beatriz Souza  

11.00  S16-C - NATIONAL THEMATIC DATA BASES  
Chair: Ooms, Kristien  
C6  
S16-C-1 | The Informa of the State Map Series in the Czech Republic  
Michal Traurig, Jan Langr  
S16-C-2 | New elevation models of the Czech Republic  
Karel Brázdil, Iveta Skalická  
S16-C-3 | Fundamental Base of Topographic Data of Czech Land Survey Office as a source for database cartography and other applications.  
Pavel Šidlichovsky  
S16-C-4 | The Detailed Geological Map of Poland - 60 years of a project, from a traditional cartography to a digital processing  
Katarzyna Jóźwik  

11.00  S16-D - GLACIERS IN MOUNTAIN CARTOGRAPHY  
Chair: Petrovic, Du?an  
C1  
S16-D-1 | GEOVISUALISATION OF ALPINE GLACIER ELEVATION CHANGES IN WESTERN CANADA  
Roger Wheate  
S16-D-2 | Interactive 3D-Visualisation of Glacier Changes Based on the Swiss World Atlas Interactive  
Aline Bruengger, Wiesmann Samuel, Lorenz Humi  
S16-D-3 | Documentation of the glacier retreat in the eastern part of the Granatspitz Mountains (Austrian Alps) using aerial photographs for the time period 2003-2009  
Viktor Kaufmann  
S16-D-4 | The suitability of historical satellite imagery for investigations of the cryosphere  
Tino Pieczonka, Nicolai Holzer, Juliane Peters, Tobias Bolch, Manfred Buchroithner  

11.00  S16-E - HISTORICAL SURVEY AND MAPPING  
Chair: Demhardt, Imre  
C2  
S16-E-1 | "Residentiekaarten", contents and usability of the 19th century topographical maps of Java  
Ferjan Ormeling  
S16-E-2 | A less known topographic survey: a 1: 50 000 Scale Military Survey of Hungary (1940-1944)  
László Zentai  
S16-E-3 | 1:1 Million scale mapping of India and the International Map of the World  
David Forrest, Alastair Pearson  
S16-E-4 | The Springboks in East Africa: The role of the SA Survey Company (SAEC) in the East African Campaign of World War II, 1939-1941  
Elri Liebenberg  

11.00  S16-F - CARTOGRAPHIC LEARNING ENVIRONMENTS  
Chair: Ulugtekin, Necla  
C3  
S16-F-1 | The Web-Based "Swiss World Atlas Interactive": First Evaluation of User Experiences in Modern Geography Education  
Christian Haeberling, Lorenz Humi  
S16-F-2 | Virtual GIS laboratory for educational needs  
Andrey Medvedev  
S16-F-3 | PaikkaOppi - a virtual learning environment on geographic information for upper secondary school  
Jaakko Kähkönen, Lassi Lehto, Juha Riihelä  
S16-F-4 | THE ROLE OF UNIVERSITIES IN THE BRAZILIAN NSDI CAPACITY BUILDING PLAN THE CASE OF THE OPEN GEOSPATIAL LABORATORY AT UFPR  
Silvana Camboim, Maria Cecilia Bonato Brandalize
11.00  S16-G - MIXED SESSION  C4
Chair: Stevens, Joshua
S16-G-1 | Impact of Spot6/7 data in the constitution and update of Spatial Data Infrastructures over Africa
Karine Guerin, Thierry Rousselin, Marc Bernard
S16-G-2 | GIS Data within a Seamlessly Integrated 3D Environment
Robert Gammon, Vince Smith, Bruce Westcott
S16-G-3 | Research and Application of Two-peak Changing Law of Electronic Map Load
Nan Jiang, Qinghui Sun, Yani Cao, Hao Zhang, Yuhang Gu

11.00  S16-H - BUSINESS MEETING OF THE COMMISSION ON DIGITAL TECHNOLOGIES IN CARTOGRAPHIC HERITAGE  C5

11.00  S16-I - BUSINESS MEETING OF THE COMMISSION ON CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT  C7/8
Chair: Konecny, Milan

14:00 - 16:00  CLOSING CEREMONY  Great Hall
ICA Best Map Awards
ICA Petchenik Award
Winners of Orienteering Competition
Presentation of next ICC Events

Business Meetings

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<td>Cartography and Children</td>
<td>1F</td>
<td>Monday</td>
<td>14:45 - 16:00</td>
<td>C7 / C8</td>
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<td>Atlases</td>
<td>3H</td>
<td>Tuesday</td>
<td>09:15 - 10:30</td>
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<td>Map Design/Neocartography</td>
<td>3I/4I</td>
<td>Tuesday</td>
<td>09:15 - 12:15</td>
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<td>Geospatial Analysis and Modeling</td>
<td>4J</td>
<td>Tuesday</td>
<td>11:00 - 12:15</td>
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<td>Geoinformation Infrastructures and Standards</td>
<td>5G</td>
<td>Tuesday</td>
<td>14:45 - 16:00</td>
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<tr>
<td>Art and Cartography</td>
<td>5H</td>
<td>Tuesday</td>
<td>14:45 - 16:00</td>
<td>C5</td>
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<tr>
<td>GI for Sustainability</td>
<td>5I</td>
<td>Tuesday</td>
<td>14:45 - 16:00</td>
<td>C7 / C8</td>
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<tr>
<td>Education and Training</td>
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<td>Maps and the Internet</td>
<td>7H</td>
<td>Wednesday</td>
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<td>Generalisation and Multiple Representation</td>
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