

SUNDAY – AUGUST 23th
GENERAL ASSEMBLY PART 1

PLENARY 1 – GENERAL ASSEMBLY PART 1

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|-------|-------|-------------------------------|
| 08:30 | 10:00 | General Assembly |
| 10:00 | 10:30 | Coffee Break |
| 10:30 | 12:00 | General Assembly |
| 12:00 | 13:30 | Lunch |
| 13:30 | 16:30 | General Assembly |
| 16:30 | 17:30 | ICA General Assembly Cocktail |

MONDAY – AUGUST 24th

PLENARY 1

Opening Ceremony

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| 09:30 | 11:00 | Welcome Addresses: ICA President, Brazilian Society of Cartography President, ICC2015 General Director UN Representative International Map Year Opening ICA Flag Award – Brazilian Cartographic Merit I Brazilian Cartographic Olympiads Award ICA Research Scholarship Brazil Presentation IBGE |
| Keynote Speaker 1 – Plenary Keynote | | |
| 11:00 | 12:00 | Dr. Gregory Scott - UN-GGIM <i>Positioning Geospatial Information to Address Global Challenges</i> |

EXHIBITION AREA

| | | |
|-------|-------|---|
| 12:00 | 12:30 | Opening Technical Exhibition Opening International Cartographic Exhibition Opening Barbara Petchenick Competition |
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Room 2

Business Meeting

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| 12:30 | 13:30 | International Journal of Cartography – Advisory Board Meeting Prof. Dr. William Cartwright |
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ORAL SESSION 1 - 13:30-14:50

ROOM 2 - Geovisualization 1

Chair: Dr. Susanne Bleisch

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|-------|-------|---|
| 13:30 | 13:50 | Distributed Cognition: A Conceptual Framework for Understanding Map-based Reasoning Maceachren, A. |
| 13:50 | 14:10 | Cartographic Experiments by the use of Oculus Rift Henriksen, S.P.; Midtbø, T. |
| 14:10 | 14:30 | Sliding from Imagery Realism to Topographic Abstraction Hoarau, C.; Christophe, S.; Mustière, S. |
| 14:30 | 14:50 | Visualisation of Predicted Inundation Area Based on the HydroProg System Wieczorek, M.; Spallek, W.; Yu, D.; świerczyńska, M.; Niedzielski, T. |
| 14:50 | 15:10 | Presenting A Diorama of Player Movement in Sport Using 3D GIS Saunders, D. |

| ROOM 3 - Collaborative Mapping and Social Cartography 1 | | |
|--|-------|--|
| Chair: Dr. Georg Gartner | | |
| 13:30 | 13:50 | Good Map – Bad Map. Interdisciplinary Analysis of Collaborative Mapmaking by Prosumers Moser, J.; Hoyer, T.; Ipatow, N. |
| 13:50 | 14:10 | Analysis of OpenStreetMap to Support an Official Hybrid Database Borba, R.; Strauch, J.; Souza, J.; Coleman, D. |
| 14:10 | 14:30 | ARAMANI – Decision-Support Tool for Selecting Optimal Participatory Mapping Method Panek, J. |
| 14:30 | 14:50 | Openstreetmap and Official Base Map of Curitiba – Brazil: A Study About Completeness of Streets and Roads Picanco Jr, P.; Bravo, J.V.; Delazari, L.; Sluter, C. R. |
| 14:50 | 15:10 | A Visual analytics approach to examining the moving patterns of asthma incidences from social media X. Angela Yao; Grundstein, A. |
| ROOM 4 - Education and Training 1 | | |
| Chair: Dr. David Fairbairn | | |
| 13:30 | 13:50 | Challenges and Opportunities for Massive Open Online Cartographic Education Robinson, A. |
| 13:50 | 14:10 | 50 years of Cartography teaching at the University of Glasgow: Reflections and future directions. Forrest, D.; Dunlop, A. |
| 14:10 | 14:30 | The Teaching of Cartography in the Context of the New Technologies: Geotechnologies as a Methodological Proposal. Morais, T.; Silva, A.; Viana, B. |
| 14:30 | 14:50 | The Use of Weblectures in GIS-related Course: What do Students Think? Ooms, K.; de Maeyer, P. |
| 14:40 | 15:10 | Integrating problem-solving, computer programming and spatial applications to improve the learning for GIS and surveying students Veenendaal, B.; Mcmeekin, D. |
| ROOM 5 - Geointelligence and Crime Maps | | |
| Chair: Dr. Laszlo Zentai | | |
| 13:30 | 13:50 | Mission Oriented Sensors Arrays for Automatic Generation of Thematic Maps Figueira, N. |
| 13:50 | 14:10 | Circuits, Routes And Networks: Proposal of Spatial Analysis for Theft And Robbery of Vehicle in the State of Rio de Janeiro Gonçalves, L.; Ferreira, M. |
| 14:10 | 14:30 | Thematic Maps in Analysing the Prejudice and Preconception in the Fear of Crime of Citizens of a Typical Hungarian Small Town Pődör, A.; Zentai, L.; Révész, A.; Dobos, M. |
| 14:30 | 14:50 | The Role of Online Services in teaching Geospatial Intelligence (GEOINT) Malhotra, R. |
| ROOM 6 – Toponymy 1 | | |
| Chair: Dr. Peter Jordan | | |
| 13:30 | 13:50 | Back to the Features! Direction, Distance, Disposition, and Orientation in the Evolution of Land and Sea Placenames Ferland, Y. |
| 13:50 | 14:10 | Exploration of Indigenous, Native and Tribal Place Name Preservation in the United States Young, J.M. |
| 14:10 | 14:30 | The Geographical Names and Distinctive Signs Moreira, G.R.; Morgado, M.C.R.; Peralta, P.P.; Chimento, M.R. |
| 14:30 | 14:50 | Building the Tunisian Toponymic Geodatabase Dhieb, M.; Behi, M.; Belarem, M.; Belhaj Ali, A. |
| ROOM 7 - Remote Sensing and Image Processing 1 | | |
| Chair: Dr. Carla Bernadete Madureira Cruz | | |
| 13:30 | 13:50 | The spatiotemporal evolution (1975-2010) of the mobile barchan dune fields in the Jericoacoara National Park, Brazil, derived from Landsat and Quickbird satellite images Jeovah de Andrade Meireles, A.; de Sá Pereira Filho, N.; Gorayeb, A.; de Sousa Mendes, J. |
| 13:50 | 14:10 | Analysis of the Spatiotemporal Evolution (1958-2012) of the Natural Systems of the Rio Guaribas |

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| | | Hydrographic Basin in Northeastern Brazil Otávio Landim Neto, F.; Gorayeb, A.; de Sá Pereira Filho, N.; Farias de Souza, W.; Vicente da Silva, E.; Jeovah de Andrade Meireles, A.; de Sousa Mendes, J. |
| 14:10 | 14:30 | Using Neural Networks and Landscape Metrics to Map Urban Spatial Growth from Satellite Imagery Yang, X.; Libin, Z. |
| 14:30 | 14:50 | Mapping Urban Morphology through Satellite Remote Sensing and Geospatial Analysis: A Comparison of Two American Metropolises LIU, T. |
| 14:50 | 15:10 | Coastal Zone Detection in Istanbul using Landsat 8 OLI Image Bektas Balcik, F.; Balik Sanli, F.; Goksel, C.; Ustuner, M. |

ORAL SESSION 2 - 15:30-17:10

| ROOM 2 - Semiotics, Map Perception, Cognition and Knowledge 1 | | |
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| Chair: Dr. Sara Irina Fabrikant | | |
| 15:30 | 15:50 | Does the Inclusion of Mapped Estimates of Attribute Uncertainty for Demographic Estimates Change Spatial Decisions Made by Urban Planners? Griffin, A.; Spielman, S.; Jurjevich, J.; Merrick, M.; Nagle, N.N.; Folch, D.C. |
| 15:50 | 16:10 | Emotional Mapping and Emotional Maps as Tools for Community Based Decision-Making. Panek, J. |
| 16:10 | 16:30 | Changes in City Space Familiarity and Preferences Among Short-Term Visitors Hirakawa, S.; Ito, K. |
| 16:30 | 16:50 | Automatic Construction Mechanism of Thematic Symbol under the Aspect of Semiotics Fei, Z.; Du, Q.; Ming, M. |
| 16:50 | 17:10 | Understanding Spatial Pattern Cognition from Tactile Maps and Graphics Perdue, N.; Lobben, A. |
| ROOM 3 - Art and Culture 1 | | |
| Chair: Dr. Sébastien Caquard | | |
| 15:30 | 15:50 | Exploring Cartographic Storytelling. Reflections on Mapping Real-Life and Fictional Stories. Cartwright, W.; Field, K. |
| 15:50 | 16:10 | Realism and Naïveté of Geography Represented in Cartoons Of Warfare Moore, A.; Cartwright, W.; Hulbe, C. |
| 16:10 | 16:30 | The Chronotope in Cartography and Montreal Cinema Ng-chan, T. |
| 16:30 | 16:50 | Putting Storytelling back on the Map: A Comparative Analysis of Online Cartographic Applications to Map Life Stories Caquard, S.; Dimitrovas, S. |
| 16:50 | 17:10 | Towards Dream Cartography: Mapping Dream Space and Content Iosifescu Enescu, C.; Montangero, J.; Hurni, L. |
| ROOM 4 - Cartography and Children 1 | | |
| Chair: Dr. Carla Cristina Gimenes de Sena | | |
| 15:30 | 15:50 | Hungarian Survey on the Use of Cartograms in School Cartography Reyes Nunez, J.J.; Juhász, B. |
| 15:50 | 16:10 | The Spatial Thinking in Pre-primary Education: a Relation Between Cartography and Geography Juliasz, P.C.S.; Castellar, S.M.V. |
| 16:10 | 16:30 | Socio Enviromental Perception of the Living Space: Implementing Chernoff Faces Method in the Secondary School Sousa, I.; Di Maio, A. |
| 16:30 | 16:50 | Armazenzinho – Maps and Information of Rio de Janeiro for Children and Teachers Alem, A.; Tobias, L.M.; Mendonça, M.L.; Monteiro, N. |
| 16:50 | 17:10 | The Color Analysis (Visual Variable) In Digital Maps: A Research Based On Tests With Eighth Grade Elementary School Students In Curitiba – Paraná. Guttervill Cubas, M.; Moreira Sampaio, T.V. |

| ROOM 5 - Map Projections Chair: Dr. Henrique Firkowski | | |
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| 15:30 | 15:50 | Multi Standard-Parallel Azimuthal Projections Lapaine, M. |
| 15:50 | 16:10 | Equal-Area Projections of the Triaxial Ellipsoid: First Time Derivation and Implementation of Cylindrical and Azimuthal Projections for Small Solar System Bodies. Nyrtsov, M.; Fleis, M.; Borisov, M.; Stooke, P. |
| 16:10 | 16:30 | Determination of Definitive Standard Parallels of Normal Aspect Conic Projections Equidistant along Meridians on an Old Map Triplat Horvat, M.; Lapaine, M. |
| 16:30 | 16:50 | Geographical Raster Filtering With Variable Kernel Shapes: Treating Map Projection Distortions Across Large Areas Samsonov, T. |
| 16:50 | 17:10 | The State-of-the-art of Aeronautical Cartography in Brazil Dietzsch, G.; Rigaud, R. |
| ROOM 6 - Cartographic Heritage 1 Chair: MSc. Igor Drecki | | |
| 15:30 | 15:50 | Cartographic Heritage Ecosystems: New Challenges and Perspectives in the Digital Environment Livieratos, E. |
| 15:50 | 16:10 | New Approach to Explore and to Study Cartographic Heritage in Dialectology : Application to the Linguistic Atlas of France Davoine P-A; Gally, S; Garat, Ph; Chauvin, C; Copi, O; Cavalliere, C.. |
| 16:10 | 16:30 | Web Mapping of Geo-tagged Shipping Information; Case Study: The LLOYDS Lists Mobasheri, A. |
| 16:30 | 16:50 | Benefits of Vector Mapping to Valorize Cultural Heritage : a Digital Device in Lyon Historical Museum Damien, P. |
| 16:50 | 17:10 | Cartographic heritage on line : Problems, perspectives and proposals through a key study of textual and image structures given by web map-providers Boutoura, C. |
| ROOM 7 - Web Cartography 1 Chair: MSc. Barend Köbben | | |
| 15:30 | 15:50 | Spatial Data from Social Media for Geographic Analysis: Complex Regionalization of Online Communities Cammack, R. |
| 15:50 | 16:10 | Web Map of Buildings of the University of West Bohemia for Disadvantaged Users čerba, O.; Jedlička, K. |
| 16:10 | 16:30 | Web Mapping Using Different Types of Data Integration Sandinska, J.; Bandrova, T. |
| 16:30 | 16:50 | Visualizing large spatial time series data on mobile devices — Combining the Heat Tile system with a progressive loading approach Meier, S. |
| 16:50 | 17:10 | The Development and Application of the Nunaliit Cybercartographic Framework Taylor, D.R.F.; Hayes, A.; Fiset, J. |

POSTER SESSION 1

Session manager: MSc. João Vitor Meza Bravo

Generalization and Multi-scale representation

A genetic algorithm for tributary selection with consideration of different factors
Zhang, L.; Guilbert, E.; Long, Y.

Problems Caused by Generalisation on Ethnic Maps
Jeney, J.

A comparison of the results of using ArcGIS and QGIS tools for the generalization of urban base maps

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| Castro, M.C.; Sarot, R.V.; Sluter, C.R.; Delazari, L.S. |
| Finding Groups in Cartographic Design Solution Spaces: A Connected Component Labeling Approach Papakonstantinou, A.; Soulakellis, N.; Kyriakidis, P.; Kyriakidis, P. |
| The Solution of Issue the Quality Selection of Settlements for Automated Small-Scale Mapping Zagrebin, G.; Afanasyev, A. |
| Geospatial Analysis |
| Land use for inferences about the quality of life in the city of Marilia/SP Silva de Araujo, A.; Luchiari, A. |
| Research on improving the efficiency of ICCP algorithm by using angle information from initial navigation system Liu, R.; Jiang, N.; Zhang, J. |
| Evaluation of Landscape Metrics on Forest Fragmentation – Analysis based on Modeled Observations - Petropolis, Rio de Janeiro, Brazil. Santos Miceli, B.; do Couto Fernandes, M.; Temponi de Oliveira, L.M. |
| A Geographic Analysis of Urban Context for a New Representation of Soundscape Gomez, S.; Domingues, C.; Delaitre, P.; Lavandier, C. |
| Use of Open street map to population estimation for small areas in urban center França, V.; Strauch, J.; Ajara, C. |
| Estimation of the real elevation values on flood basins and lowlands based on SRTM and CORINE data Ungvári, Z.; Gede, M. |
| The creation of informational documents on the basis of the cartographic database Krylov, S.; Fokin, I. |
| Convex Polygons relations applied in point distributions importance detection Firkowski, H.; Chiarani, E.; Farias, P.P.S. |
| Special analysis of urban growth in the state of Rio de Janeiro during 1970 to 2010 using the geotechnology. Oliveira, A.P.; Silva de Queiroz Lourenço2, J.; Santos Duarte, G.; Maria Moura, P.; Maria Feitosa da Rocha de Souza, E. |
| Temporal Variation of Urban Areas and Natural Vegetation – Rio Turvo Watershed Fonseca Neto, F.; Castro de Oliveira, G.; Lopes Braga Fonseca, A.; Fernandes Filho, E.I.; Gripp Junior, J.; Alves Nascimento, L. |
| Application of Spatial Analysis Functions for Automatic Creation of a Vulnerability Map of Brazilians Soils to 137Cs. Picanco Jr, P.; Wasserman, M.A.; Araujo, J. |
| Analysis of the relationship between the real surface area and the planimetric surface area on the legal reserve index in the Tijuca massif/RJ Laeta, T.; Coutinho Ferreira da Silva, L.F.; do Couto Fernandes, M. |
| Socio-Environmental Vulnerability of the Municipality of Caraguatatuba SP Bortoletto, K.C.; Freitas, M.I.C.; Oliveira, R.B.N. |
| Cellular automata approach for analysis of land use cover in the vicinity of the Unified Center of Education of Paz, São Paulo, between 2002 and 2010 Campos, P.B.R.; Queiroz Filho, A.P.; Pedro, A.A. |
| ProZeit: An Automated Workflow of Optimizing the Geometric Design of Railway Alignment for Travel Time Saving Yang, J.; Nottbeck, A.; Murphy, C.; Jahnke, M.; Meng, L.; Freudenstein, S. |
| Cartographic Theory and Geoinformation Science |
| From Analog to Digital Cartography: A Literature Review Gutierrez Cubas, M.; Moreira Sampaio, T.V. |
| Planetary Cartography, Topographical Mapping and Mountain Cartography 2 |
| Methods of automated definition of elements for mathematical basis of maps Zagrebin, G. |
| Selected analyzation of quality of OSM data in alpine space Krammer, R.; Gartner, G.; Schmidt, M. |
| Detailed Geomorphological Mapping in Coastal Areas: The case of Whale Coast Region (Bahia - Brazil) Souza, S.; Mato Góes, L.; Célia de Oliveira, R. |
| Assessment of the Ecological Status of a Territory from Topographic Maps: Methodology and Results Vereshchaka, T.; Kachaev, G. |
| Map of Moon and Mercury roughness Kokhanov, A.; Karachevtseva, I.; Kreslavsky, M. |

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| A NEW PHOBOS ATLAS Karachevtseva, I.; Kokhanov, A.; Rodionova, Z.; Konopikhin, A.; Zubarev, A.; Nadezhdina, I.; Kozlova, N.; Oberst, J. |
| Geodetic and Photogrammetric Aspects of Planetary Mapping Kozlova, N.; Nadezhdina, I.; Zubarev, A.; Patraty, V.; Kokhanov, A.; Matveev, E.; Karachevtseva, I.; Oberst, J. |
| Evaluation of aerial survey using ADS-80 camera with post-processing by using Precise Point Positioning and Kinematic Relative Positioning methods for the location Cuiabá: a case study Dietsch, G.; Mendes, J.; Rigaud, R. |
| Map of ancient tectonic forces on Mars - Visualization of a global stress-field model based on the new geologic map of the Red Planet Albert, G.; Ungvári, Z.; Merk, Z.; Gede, M. |
| Mapping of the terrestrial planets satellites: the Moon and Phobos Rodionova, Z.; Karachevtseva, I.; Lazarev, E.; Kokhanov, A. |
| Botswana's Mapping Achievements Since Independence in 1966 Phalaagae, L.M. |
| Geointelligence and Crime Maps |
| Mpar-Cluster: Applied Algorithm of Geo-Selection for Otimization of the Credit Recovery of Electricity Supply Rodrigues, M.P.; Copque, A. |
| Hydrographic Mapping |
| How a Marine Spatial Data Infrastructure will help The Directorate of Hydrography and Navigation of the Brazilian Navy in mapping Brazilian waters. Carballini, J.; Mandarin, F. |
| Procedures to the Mapping of the Coastal Features da Silva, A.; Alencar Castro, J.W.; Ferreira Dias, F.; Osilieri, P. |
| Cadaster Mapping and Surveying |
| Spatio-Temporal Analysis of the Urban Expansion of the City of Encanto-RN/Brazil Souza, R.K.; Costa, F.R. |
| Urban Cleanliness Perception Index using mobile GIS in the City of Rio de Janeiro Arueira, L.R.; Medeiros, M. |
| Territorial planning and implementation of full-time education in municipal schools from Rio de Janeiro using GIS Souza, L. |
| Technical and conceptual perspectives for the integration of public policies and land registers in the brazilian rural sector. Brignol Menke, A.; Zandonadi Moura, L. |
| Spatial analysis and municipal management of vacant buildings in Rio de Janeiro with GIS Souza, L. |
| Methodology For Executing Survey Of Real Estate Units Using The Cybertracker App Fernandez, S.S.; Oliveira, F.H.; Araújo, A.L.; Ferreira, B.; Laueremann, P.E. |
| ATLASES |
| Electoral Atlas of Romania 1990-2009 Iatu, C.; Alupului, C. |

EXHIBITION AREA

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| 17:30 | 19:00 | Ice Breaker |
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TUESDAY – AUGUST 25th

PLENARY 1

| Keynote Speaker 2 – Plenary Keynote | | |
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| 08:30 | 09:30 | Dr. Eduarda La Rocque – Pereira Passos Institute – Rio de Janeiro City Hall |
| ICA Awards | | |
| 09:30 | 10:00 | Georg Gartner ICA President and László Zentai General Secretary |
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| International Journal of Cartography Launch Session (by invitation) | | |
| 12:30 | 13:30 | Prof. Dr. William Cartwright |
| Young Cartographers Meeting | | |
| 17:20 | 18:30 | Prof. Dr. Silvana Camboim |
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PLENARY 2

| SDI SESSION - International Cartographic Exhibition | | |
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| | | SDI SESSION 1 |
| 13:30 | 14:50 | Prof. Dr. Luiz Paulo Souto Fortes – IBGE |
| 13:30 | 13:50 | Australia - Australia National Map – Peter Leihn |
| 13:50 | 14:10 | Brazil - National Spatial Data Infrastructure – INDE - João Bosco de Azevedo |
| 14:10 | 14:30 | China - GlobeLand30 Service Platform - HU Junhong |
| 14:30 | 14:50 | France - French maritime and coastal geographic information of reference - François Lecordix |
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| | | SDI SESSION 2 |
| 15:30 | 16:50 | Prof. Dr. Luiz Paulo Souto Fortes – IBGE |
| 15:30 | 15:50 | France - IGN Carte à la carte (Map on demand) - François Lecordix |
| 15:50 | 16:10 | Israel - ArcGIS Online - Oren Raz |
| 16:10 | 16:30 | Netherlands - PDOK (Public Geo Datasets at your Service) - |
| 16:30 | 16:50 | Sweden - Open geospatial data from the municipality of Örebro as a service |
| Business Commission Meeting | | |
| 17:20 | 18:30 | Commission on Atlases |
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Room 2

| Business Commission Meeting | | |
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| 12:30 | 13:30 | Commission on Map Design |
| 17:20 | 18:30 | Commission on Cartography and Children |
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Room 3

| Business Commission Meeting | | |
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| 17:20 | 18:30 | Commission on Mountain Cartography |
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Room 4

| Business Commission Meeting | | |
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| 17:20 | 18:30 | Commission on Map Projections |
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Room 5

| Business Commission Meeting | | |
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| 17:20 | 18:30 | Commission on Art and Cartography |
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Room 6

| Business Commission Meeting | | |
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| 17:20 | 18:30 | Joint ICA WG and IGU Commission on Toponymy |
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Room 7

| Business Commission Meeting | | |
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| 17:20 | 18:30 | Commission on Map Production and Geo-Business |
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ORAL SESSION 3 - 10:30-12:10

| ROOM 2 - Map Use, Users and Usability 1 | | |
|---|-------|--|
| Chair: MSc. Sarah Maggi | | |
| 10:30 | 10:50 | Georeferencing eye tracking data on interactive cartographic products Ooms, K.; de Maeyer, P. |
| 10:50 | 11:10 | Testing the Usability of OpenStreetMap's iD Tool Behrens, J.; Van Elzakker, C.; Schmidt, M. |
| 11:10 | 11:30 | Evaluation of schematic maps and "You-are-here" maps for indoor navigation tasks Delazari, L.; Sarot, R.; Anand, S.; Morley, J. |
| 11:30 | 11:50 | Discriminating Sequential and Qualitative Colour Schemes on Choropleth Maps Brychtova, A.; Coltekin, A. |
| 11:50 | 12:10 | Inclusive Cartographic Design: Overcoming Ocular-Centric Cartographies Lobben, A.; Megen, B.; Perdue, N. |
| ROOM 3 - Thematic Cartography 1 | | |
| Chair: Dr. Vit Vozenilek | | |
| 10:30 | 10:50 | Generation of thematic maps with wizards based on cartographic principles. The case study of OCAD Thematic Mapper. Tsorlini, A.; Hurni, L.; Sieber, R.; Gloor, T.; Klauser, H. |
| 10:50 | 11:10 | Introduction to the Method and First Results of the Urban Rapid Participatory Appraisal in Rio de Janeiro's Pacified 'Favelas' – Urban MRP Vial, A.; Reichenheim, G.; Guerreiro, M.; Hingel, R.; Silveira, L. |
| 11:10 | 11:30 | Spatial patterns and quality characteristics mapping of solid household waste disposal sites in Russia Medvedev, A.; Gunko, M. |
| 11:30 | 11:50 | Experiments with new and modified thematic map types Field, K. |
| 11:50 | 12:10 | Flow Map Design and Aesthetics: A Systematic Inquiry into Best Practices |

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| | | Muehlenhaus, I.; Jenny, B.; Marston, B. |
| ROOM 4 - Geospatial Analysis 1 Chair: Dr. Timothy Trainor | | |
| 10:30 | 10:50 | Towards an effective accuracy assessment of population estimation within a dasymetric mapping context Cockx, K.; Canters, F. |
| 10:50 | 11:10 | Semi-Automated Visualization of Spatial Context in Unstructured Text Chiang, Y.; Gehring, S. |
| 11:10 | 11:30 | Using Cartographic Modelling and Regression Trees for Assessing Spatial Distribution of Cadastral Parcels and Agricultural Holdings on Rural Areas Gaşiorowski, J. |
| 11:30 | 11:50 | Improving Cross-border Data Reliability Through Edge-matching Lee, D.; Yang, W.; Nobbir, A. |
| ROOM 5 – Geoservices Chair: Dr. Silvana Philippi Camboim | | |
| 10:30 | 10:50 | Mind the Gap: Maintaining Service Oriented Map Production Infrastructures Jobst, M.; Gartner, G. |
| 10:50 | 11:10 | Geospatial Web Processing Services for Client-Side Computations Panidi, E.; Kazakov, E.; Kapralov, E.; Terekhov, A. |
| 11:10 | 11:30 | A Geospatial Metadata Catalog Service (MCS) For Transmission Pipeline Operators Gharibi, A.; Huisman, O.; Morales, J. |
| 11:30 | 11:50 | Towards a general evaluation procedure for Geo Web Services Schmid, S.; Reinhardt, W. |
| 11:50 | 12:10 | Cascading Geospatial Services for Integration of Authoritative National Datasets – CASE: European Location Framework Lehto, L.; Latvala, P.; Kähkönen, J. |
| ROOM 6 - History of Cartography and Historical Cartography 1 Chair: Dr. Elri Liebenberg | | |
| 10:30 | 10:50 | Re-Discovering the Greater Egypt: The Cartographic Treasure Trove of Rare Nineteenth Century German Geographic Journals Demhardt, I. |
| 10:50 | 11:10 | Ethnic Maps in the Workers Atlas by Alexander Radó Jeney, J. |
| 11:10 | 11:30 | Historical-Toponymic Analysis of the 1823 Carta Geographica of the Rio de Janeiro Province Menezes, P.M.L.; Fernandes, M.C.; Santos, K.S.; Sardella, A.B. |
| 11:30 | 11:50 | GEOIMAGINARIES.org: Historic Maps and their perception - a critical analysis Losang, E. |
| 11:50 | 12:10 | Research on the Reliability of Mercator's Map Sclavonia, Croatia, Bosnia cum Dalmatiae parte Vilicic, M.; Lapaine, M. |
| ROOM 7 - Web Cartography 2 Chair: Dr. Michael Peterson | | |
| 10:30 | 10:50 | Towards better WMS Maps through the use of the Styled Layer Descriptor and Cartographic Conflict Resolution for Linear Features Iosifescu Enescu, I.; Panchaud, N.H.; Heitzler, M.; Iosifescu Enescu, C.; Hurni, L. |
| 10:50 | 11:10 | A basemap for Austria Gartner, G. |
| 11:10 | 11:30 | Web Map Service Architecture for Topographic Data in Finland Sipilä, T. |
| 11:30 | 11:50 | Mapmap.js: A Data-Driven Web Mapping API for Thematic Cartography Ledermann, F.; Gartner, G. |
| 11:50 | 12:10 | Personalized Custom Map Service for Travel Planning Chen, Y.; Li, M.; Ye, H. |
| PLENARY 3 - Generalization and Multi-scale Representation 1 Chair: Dr. Jean-François Girres | | |
| 10:30 | 10:50 | Automated production of national topographic map in IGN-Spain Maldonado, A.; Vaquero, P.A.; de Las Cuevas, A.; Garcia, J.; Gonzalez Matesanz, J. |

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| 10:50 | 11:10 | Automated Extraction of Natural Drainage Density Patterns for the Conterminous United States through High Performance Computing Stanislowski, L.; Falgout, J.; Buttenfield, B. |
| 11:10 | 11:30 | Quantitative Definition of Spatial Similarity Relation in Multi-scale Map Spaces Yan, H.; Li, J.; Shen, Y.; Yang, W.; Zhang, L. |
| 11:30 | 11:50 | Updating in Multiple Representation Databases: Model Generalization and Object Matching Stage Çobankaya, O.N. |
| 11:50 | 12:10 | Multi-scale schematic representation of line networks Zhilin, L.; Peng, T. |

ORAL SESSION 4 - 13:30-14:50

| ROOM 2 - Semiotics, Map Perception, Cognition and Knowledge 2 | | |
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| Chair: Dr. Anthony Robinson | | |
| 13:30 | 13:50 | Visualization of risk and uncertainty to communicate avalanche hazard: An Empirical Study Fabrikant, S.I.; Streit, A.; Purves, R.S. |
| 13:50 | 14:10 | Visualizing Noise – An Outline of Experiences and Challenges Weninger, B. |
| 14:10 | 14:30 | Man-machine Interaction in Real 3D and Pseudo -3D Cartographic Visualization: A Comparative Study Juřík, V.; Špriňarová, K.; Herman, L.; šařinka, ; šřerba, Z.; Stachoň, Z.; Chmelík, J.; Kozlíková, B. |
| 14:30 | 14:50 | Mapping perspectives and some uses of Cognitive Maps in Brazil Pessôa, L.A.M.; Estellita Lins, M.P.; Mandarino, F. |
| ROOM 3 - Art and Culture 2 | | |
| Chair: Dr. William Cartwright | | |
| 13:30 | 13:50 | Custom Cartography for Frank Lloyd Wright Sites for UNESCO World Heritage Nomination Brewer, C.A.; Limpisathian, B.P.; Perkins, S. |
| 13:50 | 14:10 | Maps and Nomadism: Using Cartography to Discuss Space and Identities Ribeiro, D. |
| 14:10 | 14:30 | The Role of Soviet Maps in Formation the Spatial Background in Contemporary Russians Gavrilova, S. |
| 14:30 | 14:50 | Visualizing Land Reclamation in Hong Kong: A Web Application Ngo, V.; Chiang, Y.; Swift, J. |
| 14:50 | 15:10 | Constituency and Polling Districts Maps in Botswana Tlhabano, L. |
| ROOM 4 - Education and Training 2 | | |
| Chair: Dr. Necla Ulugtekin | | |
| 13:30 | 13:50 | What is to be done? Syllabus Content for Cartographic Education Fairbairn, D. |
| 13:50 | 14:10 | Mapping Student Engagement in a Massive Open Online Course (MOOC) Quinn, S.; Robinson, A. |
| 14:10 | 14:30 | Assessment Of Google+ Hangout As Interactive Technology Enhanced Learning Media for Geospatial Technology Behr, F.; Mathews, D.; Jaishanker, R. |
| 14:30 | 14:50 | A Web Mapping Pattern Library: Design Patterns for Web Cartography Education Donohue, R. |
| ROOM 5 - Cadaster Mapping and Surveying 1 | | |
| Chair: Dr. Yaives Ferland | | |
| 13:30 | 13:50 | Symbolization and Generalization to Map Water Pipe Data Flow and Water Quality at Different Scales Ruas, A.; Pham, H. |
| 13:50 | 14:10 | A Proposal for Recovering Abandoned Grounds in Urban Areas - Case Study of Historic Railway Installations in the City of Los Angeles (Chile) Arias, J.; Staub, G. |
| 14:10 | 14:30 | Mapping Farmland Preservation Zone with a Multi-Level Simulation Model: A Case Study of Hubei Province, China He, J.; Liu, Y.; Liu, Y.; Jiao, L.; Liu, D. |

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|--|-------|---|
| 14:30 | 14:50 | Cadastral Mapping for Underground Networks: A Preliminary Analysis of User Needs Pouliot, J.; Cuissart, R.; Bordin, P. |
| 14:50 | 15:10 | Evaluation and standardization of the favela basemap in Sao Paulo city. Aguiar Pedro, A.; Fartos Terlizzi, M.M.; Otani Kitamura, C. |
| ROOM 6 – Toponymy 2 Chair: Dr. Qingyun Du | | |
| 13:30 | 13:50 | A Formal Approach to the Automated Labelling of Groups of Features Reimer, A.; Van Goethem, A.; Rylov, M.; Van Kreveld, M.; Speckmann, B. |
| 13:50 | 14:10 | Landscape Systems in Cartography Fragó, I.; Jeney, J. |
| 14:10 | 14:30 | Toponym recognition in custom-made map titles Domingues, C.; Eshkol-taravella, I. |
| 14:30 | 14:50 | A Data Repository for Named Places and Their Standardised Names Integrated With the Production of National Map Series Leskinen, T. |
| ROOM 7 - Environmental Risks and Disasters Mapping 1 Chair: Dr. Christophe Lienert | | |
| 13:30 | 13:50 | Towards Cartographic Support for Risk Assessments of Civil Infrastructures Heitzler, M.; Iosifescu-encescu, I.; Adey, B.T.; Hackl, J.; Hurni, L. |
| 13:50 | 14:10 | Risk Mapping in Urban Areas: Methodological Essay for Sample Area of Santos, São Paulo – Brazil Freitas, M.I.; Rossetti, L.; Oliveira, R. |
| 14:10 | 14:30 | Real-Time Multi-Scale Mapping for Emergency Management Fayne, J.V.; Fuhrmann, S.; Rice, M.T.; Bolten, J.D. |
| 14:30 | 14:50 | Spatio-temporal Structures of Geotagged Twitter Posts After Sudden Catastrophic Events Ye, H.; Clarke, K. |
| 14:50 | 15:10 | How to manage Emergency Situations with the GIS SIIE Iturriaga, C. |
| PLENARY 3 – Cartographic Heritage 2 Chair: Dr. Milan Talich | | |
| 13:30 | 13:50 | Exploring the Planimetric Accuracy of a Korean Historical Map, Daedongyeojido ('The Great Map of Korea') Lee, S.; Cho, D. |
| 13:50 | 14:10 | Geoinformatics methods for preservation of culture and historical heritage in areas affected by human activities Pacina, J.; Cajthaml, J. |
| 14:10 | 14:30 | Geoportal as a Cartographic Storage Basis Dvornikov, A.; Zagrebin, G.; Zinchuk, L.; Golyasheva, M |
| 14:30 | 14:50 | Mapping the Areas of Archaeological Interest in Porto Alegre, Brazil Bugs, G.; Isolan, F.B. |

ORAL SESSION 5 - 15:30-17:10

| | | |
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| ROOM 2 - Geovisualization 2 Chair: Dr. Cynthia Brewer | | |
| 15:30 | 15:50 | A Cartographic Approach to Spatio-temporal Data Visualization of Events in Visual Analytics Applications Rühl, A.; Gartner, G.; Peuquet, D. |
| 15:50 | 16:10 | Dynamic Visualization of Volume of Traffic Jedlička, K.; Ježek, J.; Kepka, M.; Hájek, P.; Mildorf, T.; Kolovský, F.; Beran, D. |
| 16:10 | 16:30 | Dynamic Cartographic Network Visualisation Methods for Limited Viewports Gollenstede, A.; Weisensee, M. |
| 16:30 | 16:50 | Visual Representations of the Dynamics of Territories: Retrospective and Input of New Computing Environments Davoine P-A; Mathian H; Saint-Marc C; Blaise J-Y; Kadouri L |

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| 16:50 | 17:10 | Visual Analytics for Understanding Traffic Flows of Transport Hubs from Movement Data Ding, L.; Yang, J.; Meng, L. |
| ROOM 3 - Collaborative Mapping and Social Cartography 2 Chair: Dr. Franz-Josef Behr | | |
| 15:30 | 15:50 | Using Social Media Data to Study People's Perception and Knowledge of Environments Huang, H. |
| 15:50 | 16:10 | From Landscape to Territory: the art of colored sand bottles and experiences of social mapping in Majorlândia/CE, Brazil. de Sá Freire Ferreira, T.; Lima Daou, A.M.; Leal de Menezes, P.M. |
| 16:10 | 16:30 | Complementary Methods for Citizen Mapping of Ecosystem Services: Comparing Digital and Analog Representations Edsall, R.M.; Barbour, L.; Hoffman, J. |
| 16:30 | 16:50 | The CEDEUS Data Centre: Using open source mapping and communication tools to support research on sustainable urban planning Steiniger, S. |
| 16:50 | 17:10 | Mapping the Residential Schools Narrative in Canada Taylor, D.R.F.; Pyne, S. |
| ROOM 4 - Cartography and Children 2 Chair: Dr. José Jesús Reyes Nuñez | | |
| 15:30 | 15:50 | Multilingual narrative planetary maps for children Hargitai, H.; Gede, M.; Zimbelman, J.; Kőszeghy, C.; Sirály, D.; Marinangeli, L.; Barata, T.; López, I.; Szakács, A.; Dębniak, K.; Feuillet, T |
| 15:50 | 16:10 | Geoliteracy, Geospatial Cognitive Development and Cartology: Using Digital Maps and Mobile Serious Games on the Terrain Ferland, Y.; Kaszap, M. |
| 16:10 | 16:30 | Evaluating the Use of Geotechnology and Multimedia Resources in Cartography Lessons for Environmental Studies Sousa, I.; Di Maio, A.C. |
| 16:30 | 16:50 | Children's mental maps: comparative research in France and Poland Bogacz, K. |
| 16:50 | 17:10 | MIGoogle: Map of Ideas with Google Di Maio, A.C. |
| ROOM 5 - Topographical Mapping and Mountain Cartography 1 Chair: Dr. Manfred Buchroithner | | |
| 15:30 | 15:50 | Automatic rock depiction via relief shading Geisthövel, R. |
| 15:50 | 16:10 | Sine wave, Clustering and Watershed Analysis to Implement Adaptive Illumination and Generalization in Shaded Relief Representations Serebryakova, M.; Veronesi, F.; Hurni, L. |
| 16:10 | 16:30 | Representing Terrain Entities using Lidar Data Usery, E.L. |
| 16:30 | 16:50 | Terrain mapping beyond the defaults Field, K.; Kennelly, P. |
| 16:50 | 17:10 | Topography Based Surface Analysis and Mor-phological Correlation at the Northern Plains of Mars Kereszturi, ; Madarász, B.; örsi, A.; Hargitai, H. |
| 17:10 | 17:30 | Time-Lapse Camera Images for Observation and Visualization of Snow Lines on Glaciers in High Asia Schröter, B.; Buchroithner, M. |
| ROOM 6 - Location Based Services and Ubiquitous Cartography Chair: Dr. Masatoshi Arikawa | | |
| 15:30 | 15:50 | Encrypted Cartographic Masking for Geospatial Privacy Protection in Location Based Services Clarke, K. |
| 15:50 | 16:10 | Creating Geo-enabled Hand-drawn Maps: An Experiment of User-generated Mobile Mapping Lu, M.; Arikawa, M. |
| 16:10 | 16:30 | The Relevance of a Cartographer in a Data-centric Marketplace Wesson, C. |
| 16:30 | 16:50 | Evolution of Concepts in Ubiquitous Mapping |

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| | | Morita, T. |
| 16:50 | 17:10 | Portable Map Signboards Collages on Smartphones using Polyline Georeferences Si, R.; Arikawa, M. |
| ROOM 7 – Atlases Chair: Dr. René Sieber | | |
| 15:30 | 15:50 | Integrated Map Authoring and Production Processes in Complex Cartographic Cross-media Projects: The SWISS WORLD ATLAS as an Example Hurni, L.; Schenkel, R.; Häberling, C.; Grötsch, A. |
| 15:50 | 16:10 | The Digital Glaciological Atlas as a basis for a glaciological data management. Khromova, T.; Medvedev, A.; Muraviev, A.; Zvercova, N. |
| 16:10 | 16:30 | The Idea and the Concept of a Web Application Entitled „Geographic and Statistical Atlas of Kuyavian and Pomeranian Province” - Poland Kozieł, Z.; Obermüller, Bartosz. ; Pietrucieñ, R. |
| 16:30 | 16:50 | Statistical Mapping of National Geographic Conditions Survey in China Liu, Y.; Liu, Y.; Cheng, X. |
| 16:50 | 17:10 | Intelligibility of Map Symbology in Student Atlases Vozenilek, V.; Morkesova, P. |
| 17:10 | 17:30 | Designing a Graphical User Interface for 3D Atlases Sieber, R.; Schnürer, R.; Eichenberger, R.; Hurni, L. |
| PLENARY 3 - Geospatial Analysis 2 Chair: Dr. Julia Celia Mercedes Strauch | | |
| 15:30 | 15:50 | Modelling soil sealing in Flanders and the Brussels Capital Region: relating residential soil sealing density to spatial context and urban morphology Canters, F.; Vanderhaegen, S. |
| 15:50 | 16:10 | Territorial analysis of census data from 1980-2010 in the city of Rio de Janeiro Souza, L.; Alem, A |
| 16:10 | 16:30 | Sustainability signatures of coastal municipalities of Rio de Janeiro, Brazil Dezidério Souto, R.; Márcio Leal de Menezes, P. |
| 16:30 | 16:50 | GIS-Based Football Game Analysis - A Brief Introduction to the Applied Data Base and a Guideline on How to Utilise It Kotzbek, G.; Kainz, W. |

POSTER SESSION 2

Session Manager: MSC. Rogério Borba

| Cartography for Sustainable Development | |
|---|--|
| Spatial Distribution of Impacts of the Shipping Industry on a Hydrographic Basin in Northeastern Brazil: Analysis of Environmental Indices and Production of Thematic Maps Otávio Landim Neto, F.; Gorayeb, A.; de Sá Pereira Filho, N.; Vicente da Silva, E.; de Sousa Mendes, J. | |
| The influence of the shopping center's expansion in the Urban Engineering: a case study of the north zone of the Rio de Janeiro Sardella, A.B.; Menezes, P.M.L.M. | |
| Ecological landscape units mapping from land use data for Foz do Iguaçu/PR region - evidences of landscape fragmentation Adami, S.F.; Vogliotti, A.; Olegário, P.T.; Oliveira, P.A. | |
| Understanding Map Design for Renewable Energy Policy, Planning, and Technology Implementation Fish, C.; Stephens, P.; Calvert, K. | |
| Environmental Risks and Disasters mapping | |
| Construction of Real-time Inference System for Key Hazard Extent Distribution on the Ground caused by Earthquakes (RISKHEDGE) Kamiya, I.; Nakano, T.; Otoi, K.; Nakajima, H. | |
| Map Design Tools for Crisis Mapping Kostelnick, J. | |

Comparison of different flow direction methods for the preliminary estimation of saturated zones in the Luis Alves river basin – Santa Catarina, Brazil.

Gerente, J.; Luiz, E.L.; Gomes, R.A.T.; de Oliveira, F.H.; Alves Dal Santo, M.

Integration between SHALSTAB model and Multi Criteria Evaluation (MCE) for mapping landslide susceptibility areas in São Bartolomeu Stream basin, municipality of Viçosa (MG)

Miranda Nunes, D.; Dias Coelho, C.; Bezerra de Souza, A.; Lúcia Calijuri, M.; de Paula dos Santos, A.; das Graças Medeiros, N.

The Use of Geo-Spatial Technology in Wilderness Search and Rescue

Rose, C.

Remote Sensing and Image Processing

ChinaCover2010: An object-based approach to national land cover mapping using HJ satellite imagery

Zhang, L.

Evaluation of the Positional Accuracy of Rapideye Orthoimagery Based on Georeferenced Rural Properties in Brazil

Ferreira, R.; Soares, R.; Maranhao, M.; Oliveira, L.

Comparison of methods for topographic correction in Landsat-8/OLI image over a topographically complex region

Neves de Souza Lima, R.; Damiaty Ferreira, R.

LiDAR Altimetry Data Evaluation According to the Brazilian Map Accuracy Standards

Ferreira, F.R.; Cintra, J.P.

Land cover mapping of Itatiaia National Park with OLI/LANDSAT 8 and InterIMAGE System

Sousa, G.M.; Maia, L.H.; Fernandes, M.C.; Costa, G.A.O.P.

Studying the spatial evolution of the mining activity and its environmental impacts in Gafsa (Tunisia)

Salhi, B.; Djellouli, Y.; Dhieb, M.; Messner, F.

Atmospheric correction methods that will be applied to a WorldView-2 image

Santos, T.; Antunes, M.; Keidel, G.; Sousa, G.; Seoane, J.

Geolocation evaluation of RapidEye 3A and 1B orthorectified: case study in São Sebastião/SP/Brazil

Rafael, B.; Alexandre, T.; Carla Madureira, C.; Lis, R.; Fabio, F.

Evaluation of semiautomatic geometric correction of the Landsat 7 image using as base Landsat 8 geometry for temporal analyses

Duarte, G.S.; Costa, G.E.; Oliveira, A.P.; Barros, R.S.; Cruz, C.B.M.

Automatic Detection of “Palmeira da Macaúba”(Acrocomia Aculeata) in digital images using Mathematical Morphology

Lopes Braga Fonseca, A.; Miranda Nunes, D.; Fonseca Neto, F.; de Assis de Carvalho Pinto, F.; Gripp Junior, J.; Botelho, M.F.

Analysis of orthorectification process in a Worldview II image

Colman, T.; Ferreira dos Santos, D.; Cintra, D.P.; Fernandes, M.C.

Landscape structure analysis of basin Cuiabá, Petrópolis, Rio de Janeiro, Brazil

Cintra, D.; Colman, T.; Uchôa, D.; Fernandes, M.

Geographic object-based image analysis (GEOBIA) and data mining for urban land use classification by blocks using WorldView-2 images

Carvalho, M.; Kux, H.; Florenzano, T.; Gabriella, S.

Preparing a new set of Data Using Synergy of PoSAR and Optical Derived Products for Map Updating

Nasr, A.; Helmy, A.

Evaluation of Anatolian Part of Istanbul around the Second Airport

Gulnerman, A.G.; Sahinkaya, C.; Bektas Balcik, F.; Goksel, C.

Atmospheric Correction of Landsat 8 and RapidEye imagery

Rubin, I.; Richter, M.; Brasileiro, R.; Keidel, G.

Education and Training

Course on Geovisualization at the Paulista State University, Rio Claro (Brazil)

Castreghini de Freitas, M.I.; Reyes Nunez, J.J.

Visualizing Time in Education: Evaluation of the Triangular Model

Ooms, K.; de Maeyer, P.; Van de Weghe, N.

International Map Year

Ormeling, F.; Hillier, D.; Rystedt, B.; Berces, A.

Update Experiences for ArcGIS-based Cartography Teaching at Penn State

Lenze, M.; Cynthia, B.; Retchless, D.

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| Geotechnology as subsidy to teaching Geography and Environment for students with low vision Freitas Junior, R.; Costa, V. |
| Learning to Teach Open Web Mapping Technologies Sack, C.M.; Roth, R.; Donohue, R.G. |
| A proposition of using Teaching Guiding Activity with the instrument Google Earth to teaching and learning process of the notion of spatial orientation. Passos, F. |
| Cartography and Children |
| The geographic school atlas of the city of Sorocaba, SP, Brazil: the methodological proposal Martinelli, M. |
| "Teacher, this is my first map!": cartographic experiences of Middle School students in interdisciplinary project in Brasília Souza, V.; D'almeida, M. |
| Dutch contribution to the International Map Year event Heere, E. |
| Mapping and Spatial Awareness for Disabled People |
| Experience With Tactile Maps: Towards a Standardization of Tactile Symbols Coll, A.; Ribeiro Do Carmo, W. |
| The Development of a theoretical Basis of Location Mobile Services for low mobility individuals. Cardoso, R.S.C.P.; Menezes, P.M.L. |
| Dynamics of Cotton Farming Agroindustrial Complex in the State of Bahia , Brazil. Matos Góes, L.; Oliveira Souza, S.; de Oliveira Fontes, E.; Perez Filho, A. |
| Visualizing Sidewalk Information for People with Limited Mobilities; Cartographic Challenges and Requirements Mobasheri, A.; Bakillah, M.; Zipf, A. |
| Korea and world maps for people with color vision deficiency Jeong, J.J.; Kang, Y.; Shin, H.S. |
| New Proposals on the Construction of Maps Tactile: Specialized Materials Institute Benjamin Constant Rosa, P.; Silva, R.; Arruda, L. |
| Cartography Applied to Geosciences |
| Investigating the Influence of Training Set Size for Crop Type Classification using RapidEye Balik Sanli, F.; Ustuner, M.; Bektas Balcik, F.; Goksel, C. |
| Retrieving 3D Subsurface Structures with Geoelectric for Archaeological Decision Support in Nemi, Italy Peters, S.; Papakosta, P.; Diosono, F.; Murphy, C. |

WEDNESDAY – AUGUST 26th

PLENARY 1

| Keynote Speaker 3 – Plenary Keynote | | |
|--|-------|---|
| 08:30 | 09:30 | Prof. Dr. Benno Werlen – Friedrich-Schiller- University of Jena (Germany) Global understanding: an essential human condition |
| ICA at a Glance | | |
| 09:30 | 10:00 | ICA Commissions' speed presentations |
| Special Session | | |
| 12:30 | 13:30 | Unmappable Documentary about one of the most famous and controversial contemporary cartographer: Denis Wood - Several awards in film festivals Prof. Dr. Sebastien Caquard |
| | | |

PLENARY 2

| PETROBRAS SESSION | | |
|--------------------------|-------|--|
| 10:30 | 10:40 | PETROBRAS SESSION 1 Dr. Cristina Benz – CENPES/ PETROBRAS |
| 10:40 | 11:20 | Keynote lecture 1 (30 min +10 min Q&A) |
| 11:20 | 12:00 | Keynote lecture 2 (30 min +10 min Q&A) |
| | | |
| | | Lunch Time |
| | | |
| | | PETROBRAS SESSION 1 Dr. Cristina Benz – CENPES/ PETROBRAS |
| 13:30 | 14:00 | - E&P Data Management - PETROBRAS (20 min+10 min Q&A) |
| 14:00 | 14:30 | - Natural Gas Demand Forecasting by Neural Space –Time Model – PETROBRAS |
| 14:30 | 15:00 | - Hyperspectral Remote Sensing for hydrocarbon detection – PETROBRAS |
| 15:00 | 15:30 | - Spatial Cognition for Sea surface monitoring – PETROBRAS R&D Center |
| 15:30 | 16:00 | - TBD |
| 16:00 | 16:30 | - TBD |
| 16:30 | 17:00 | Closing remarks |

Room 2

| Business Commission Meeting | | |
|------------------------------------|-------|--|
| 12:30 | 13:30 | Commission on Geovisualization |
| 17:20 | 18:30 | Commission on Planetary Cartography |
| | | |

Room 3

| Business Commission Meeting | | |
|------------------------------------|-------|---|
| 12:30 | 13:30 | Commission on Generalisation and Multiple Representation |
| 17:20 | 18:30 | Commission on Geoinformation Infrastructures and Standards |
| | | |

Room 4

| Business Commission Meeting | | |
|-----------------------------|-------|--|
| 12:30 | 13:30 | Commission on Maps and Society |
| 17:20 | 18:30 | Commission on Cartography in Early Warning and Crisis Management |
| | | |

Room 5

| Business Commission Meeting | | |
|-----------------------------|-------|-------------------------------------|
| 12:30 | 13:30 | Commission on Maps and the Internet |
| 17:20 | 18:30 | Commission on Data Quality |
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Room 6

| Business Commission Meeting | | |
|-----------------------------|-------|--------------------------------------|
| 12:30 | 13:30 | Commission on Neocartography |
| 17:20 | 18:30 | Commission on Education and Training |
| | | |

Room 7

| Business Commission Meeting | | |
|-----------------------------|-------|---------------------------------------|
| 12:30 | 13:30 | Commission on Theoretical Cartography |
| 17:20 | 18:30 | Commission on GI for Sustainability |
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ORAL SESSION 6 - 10:30-12:10

| ROOM 2 - Geovisualization 3 | | |
|---------------------------------|-------|--|
| Chair: Dr. Amy Griffin | | |
| 10:30 | 10:50 | A Conceptual Framework for Exploring Movement Using a Visual Problem-Solving Approach Zhang, Q.; Kraak, M.; Blok, C.A. |
| 10:50 | 11:10 | Deriving visualisations from data cubes to support structured visual exploration of spatiotemporal data Bleisch, S.; Zwick, M. |
| 11:10 | 11:30 | Space-time visualization for investigative and forensic purposes Schmitz, P.; Cooper, A.; Kruger, T.; Speed, K.; Barkhuizen, M.; Lochner, H.; Linnen, C. |
| 11:30 | 11:50 | Modification of Procedural Methods of Designing of Simple and Complex Animated Maps for Users from Different Age Groups dedicated to Electronic Paper Visualization Devices Dukaczewski, D. |
| 11:50 | 12:10 | GIS in the Wolfram Language Zimmermann, B.; Martin-garcia, J.; Rodriguez Arias, F.; Champion, B.; Trott, M. |
| ROOM 3 - Thematic Cartography 2 | | |
| Chair: Dr. Kenneth Field | | |
| 10:30 | 10:50 | Depicting Settlement Development – Extraction and Visualization Workflow Chesnokova, O.; Buffat, R.; Sieber, R.; Hurni, L. |
| 10:50 | 11:10 | The Cartography of the Administrative Regions of the Federal District, from 1960 to 1994 Barbo, L.; Costa, G. |
| 11:10 | 11:30 | Mapping of Social-Economic Statistics- Print vs. Internet. The Preparation of a Map Compendium for the "Society in Israel Report"; Raz, O. |
| 11:30 | 11:50 | Space-Time Visualization of Unemployment: Open Source and Implementation |

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| | | Ye, X. |
| 11:50 | 12:10 | Visualization of Overall Urban and Rural Development – Atlas of Chengdu land resources Zhang, H.; Ren, F.; Du, Q. |
| ROOM 4 - Education and Training 3 Chair: Dr. David Forrest | | |
| 10:30 | 10:50 | Geographic Information Science Education at African and Latin American Universities – A Comparative Review Eksteen, S.; Coetzee, S.; Lyew, M.; Solis, P.; Olivares, M. |
| 10:50 | 11:10 | Geospatial Virtual Field Trips for New Zealand Schools O'malley, G. |
| 11:10 | 11:30 | Working with mental maps and youth in Rio de Janeiro – Mapping local knowledge for social change Nobrega, L. |
| 11:30 | 11:50 | Georeferencing old maps by first year students Heere, E.; Van Egmond, M. |
| 11:50 | 12:10 | School mapping and initiates the formation of teachers in Geography: reflections on research experience. Cabral, M.P.; Freitas, M.I.C. |
| ROOM 5 - Data Quality Chair: Dr. Harold Moellering | | |
| 10:30 | 10:50 | How Good is Good Enough? Data and Methodology for Assessing the Quality of Geospatial Data Kaile, B. |
| 10:50 | 11:10 | Development of a Methodology for Map Quality Assessment Blana, N.; Tsoulos, L. |
| 11:10 | 11:30 | Interoperability of Geospatial Data Iescheck, A.; Paolazzi, C. |
| 11:30 | 11:50 | Study on Rapid Parallel Algorithm based on MPI and OpenMPI for Multi-source POI Location Correction Wang, Y.; Yang, Y.; Zhang, F.; Luo, A.; Agen, Q. |
| 11:50 | 12:10 | A PSO-Neural Network-based Feature Matching Approach in Data Integration Wang, Y.; Lv, H.; Chen, X.; Du, Q. |
| ROOM 6 - Cartographic Heritage 3 Chair: Dr. Evangelos Livieratos | | |
| 10:30 | 10:50 | Standardization in Archeology for Territorial Cadaster Purposes Scofano, G.B.; Oliveira, F.H.; Rampazzo, S.E.; Dal Santo, M.A. |
| 10:50 | 11:10 | New Zealand Cartographic Heritage: Focusing on spatial dimension Drecki, I. |
| 11:10 | 11:30 | Remote sensing of the Neolithic artifacts in the Russian North Medvedev, A.; Martinov, A.; Kudikov, A. |
| 11:30 | 11:50 | Building Maps For “The Phenomenological Walk”: Three-Dimensional Digital Cartographic Representation of Archaeological Landscapes Using Deformed Perspective. Koussoulakou, A.; Tsioukas, V.; Efkleidou, K. |
| ROOM 7 - Environmental Risks and Disasters mapping 2 Chair: Dr. Rafael Barros | | |
| 10:30 | 10:50 | Hypercube-based Visualization Architecture for Web-based Environmental Geospatial Information Systems Iosifescu Enescu, I.; Vescoukis, V.; Iosifescu Enescu, C.; Müller, F.; Panchaud, N.H.; Hurni, L. |
| 10:50 | 11:10 | Cartographical approaches to visualize successions of major historical floods on territories Saint-marc, C.; Davoine, P.; Lang, M.; Villanova-oliver, M.; Coeur, D. |
| 11:10 | 11:30 | Spatialized Water Climatological Balance and droughts in Rio do Peixe Basin - West of Santa Catarina State Linheira, G.; Oliveira, F.H.; Rampazzo, S.E.; Gerente, J.; Dal Santo, M.; Pandolfo, C.; Ricce, W.S. |
| 11:30 | 11:50 | Cartographic and Hydraulic Modelling Based on Terrestrial Laser Scanning Data of Kuzlovec Torrent Grigillo, D.; Rusjan, S.; Vrečko, A.; Džebo, E.; Kozmus Trajkovski, K.; Urbančič, T.; Kosmatin Fras, M.; Mikoš, M.; Petrovič, D. |
| 11:50 | 12:10 | Federated Databases and Data Interoperability Web-Services to Enhance Real-Time Cartography Lienert, C. |

ORAL SESSION 7 - 13:30-14:50

| ROOM 2 - Map Use, Users and Usability 2 | | |
|---|-------|--|
| Chair: Dr. Claudia Robbi Sluter | | |
| 13:30 | 13:50 | Evaluation of the Cartographic Design Aspects for the Space-Time Cube Data Content Irma Kveladze, Menno-Jan Kraak, Corné P.J.M. van Elzakker |
| 13:50 | 14:10 | Enhancing Spatial Patterns Representations by Functional Semantic Simplification – An Interactive Tool for European Stakeholders Commenges, H.; Giraud, T.; Lambert, N. |
| 14:10 | 14:30 | Publicly available map types and their utilization by non-experts – A choice experiment Coltekin, A.; Lokka, I.E.F.; Boer, A. |
| 14:30 | 14:50 | Evaluation of map use on Multi-touch screen devices Alencar de Mendonça, A.L.; Stamato Delazari, L. |
| 14:50 | 15:10 | Usability Evaluation of Tactile Map Symbols across Three Production Technologies Brittell, M.; Lobben, A.; Lawrence, M. |
| ROOM 3 - Orienteering Mapping | | |
| Chair: Dr. Laszlo Zentai | | |
| 13:30 | 13:50 | The Possibilities of Using Airborne Laser Scanning Data for the Creation of Orienteering Maps Glaner, M.F.; Gartner, G. |
| 13:50 | 14:10 | Generalization Problems of Orienteering Maps Zentai, L. |
| 14:10 | 14:30 | The Use of Laser Altimetric Data for Orienteering Mapping in the Central-European Area Janata, T. |
| 14:30 | 14:50 | |
| ROOM 4 - Generalization and Multi-scale Representation 2 | | |
| Chair: Dr. Anne Ruas | | |
| 13:30 | 13:50 | Towards a multi published student atlas: an evaluation of design operators Molyneux, C.; Cartwright, W. |
| 13:50 | 14:10 | A framework to formalize multi-scales land-use generalization in the ScaleMaster 2.0 Girres, J.; Touya, G. |
| 14:10 | 14:30 | Automatic Structure Detection and Generalization of Railway Networks Savino, S.; Touya, G. |
| 14:30 | 14:50 | The changing role of a mapping agency: from data collector to data integrator Van Der Vegt, H.; Te Winkel, D.; Witmer, R. |
| ROOM 5 - Topographical Mapping and Mountain Cartography 2 | | |
| Chair: Dr. Lorenz Hurni | | |
| 13:30 | 13:50 | Laser-scanning of Complex Cave Systems and Animated Cave Visualisation Buchroithner, M.F. |
| 13:50 | 14:10 | Re-mapping the Cliffs of Mount Everest: Deriving a Synoptic Map from Large-Scale Mountain Map Data Hurni, L.; Tzorlini, A.; Patrick, L.; Schenkel, R.; Geisthövel, R. |
| 14:10 | 14:30 | Physical 3D Map of the Nordic Center Planica – Cartographic Principles and Techniques Used With 3D Printing Kete, P. |
| 14:30 | 14:50 | Cartographic Visualizing of Attractive Proposed Road Connection Crossing Mountain Ridge Lavrič, E.; Rijavec, R.; Petrovič, D. |
| ROOM 6 - History of Cartography and Historical Cartography 2 | | |
| Chair: Dr. Imre Josef Demhardt | | |
| 13:30 | 13:50 | Ethnic Map of Hungary by Jenő Cholnoky Jeney, J. |
| 13:50 | 14:10 | The Croatian Contribution to the Exploration and Mapping of the States of Mato Grosso and Paraná Altic, M. |
| 14:10 | 14:30 | Representation of the Goiás Captaincy in the 18th Century Cartography Barbo, L.; Ribeiro, R. |

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| 14:30 | 14:50 | Missionary Instruments, Techniques, and the Cartographic Construction of Western Amazonia Chauca, R. |
| ROOM 7 - Web Cartography 3 Chair: Dr. Rex G. Cammack | | |
| 13:30 | 13:50 | Maps and the Meaning of the Cloud Peterson, M. |
| 13:50 | 14:10 | An interactive Carto Dashboard for Distributed Statistical Data in an SDI Köbben, B. |
| 14:10 | 14:30 | Leveraging the HTML5 Canvas/Javascript for web and mobile maps with CartoVista Bouchard, D. |
| 14:30 | 14:50 | Information Extraction from Twitter Considering Spatial Structure Fujita, H. |
| 14:50 | 15:10 | Bringing map collections to life in interactive web applications Buckley, A.; Allord, G. |

ORAL SESSION 8 - 15:30-17:10

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| ROOM 2 - Semiotics, Map Perception, Cognition and Knowledge 3 Chair: Dr. Edmur Pugliese | | |
| 15:30 | 15:50 | Elements of Geospatial Images to Support Cognitive Tasks in Wayfinding Kettunen, P.; Sarjakoski, T.; Sarjakoski, L.T. |
| 15:50 | 16:10 | The Map as a Transitional Object Denis, M. |
| 16:10 | 16:30 | Clutter and Map Legibility in Automated Cartography: A Research Agenda Touya, G.; Christophe, S.; Hoarau, C. |
| 16:30 | 16:50 | The Representation of Places and the Mental Maps: a Vision on the Tijuca's District Dionisio, P.; Menezes, P.M. |
| 16:50 | 17:10 | Choropleth color scales for modifiable areal units Samsonov, T. |
| ROOM 3 - Art and Culture 3 Chair: Dr. Cristina M. Iosifescu Enescu | | |
| 15:30 | 15:50 | From Monolingual to Multilingual Mapping: What is users' preference? Deeb, R.; Kurban, A.; de Maeyer, P. |
| 15:50 | 16:10 | Semi-automated derivation of digital embroid styled maps Dong, L.; Burghardt, D. |
| 16:10 | 16:30 | Effect of Cultural Differences and Referent Characteristics on the Design of Pictographic Map Symbols Korpi, J.; Ahonen-rainio, P. |
| 16:30 | 16:50 | Visual Narratives for Conveying Routing Information Jahnke, M.; Cron, J. |
| 16:50 | 17:10 | New Cartographies, New Aesthetics Chilton, S.; Kent, A. |
| ROOM 4 - Geospatial Analysis 3 Chair: Dr. E. Lynn Usery | | |
| 15:30 | 15:50 | Automatic Change Detection in Multitemporal SAR Orthoimages Rosa, R.; Fernandes, D.; Nogueira Júnior, J. |
| 15:50 | 16:10 | Remotely-Sensed Urban Environmental Indices and their Economic Implications Jiao, L.; Jin, J.; Liu, Y.; Liu, Y. |
| 16:10 | 16:30 | Seeking to improve spatial justice - the case of rationalising the district court areas in South Africa - utilising several spatial analysis methods. Maritz, J.; Moagi, M. |
| 16:30 | 16:50 | Weight Optimized Fusion in Frequency Domain of Multi-DEM by Wavelet Analysis Liu, P.; Sun, L.; Yan, W.; Hou, S.; Zhang, W. |
| 16:50 | 17:10 | Real-time Mapping: Contemporary Challenges and the Internet of Things as the Way Forward Becek, K. |

ROOM 5 - Cadaster Mapping and Surveying 2

Chair: Dr. Andrea Lopes Iescheck

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|-------|-------|---|
| 15:30 | 15:50 | Technological solutions for citizens' participation into cadastral mapping Fairbairn, D.; Moreri, K.; James, P. |
| 15:50 | 16:10 | Assessing the Quality of Cadastral Geodata Administrated by the Municipality of the City of Los Angeles, Chile Staub, G.; Almendras, F. |
| 16:10 | 16:30 | Accurate Geographical Distance Field Generation on the Ellipsoidal Earth and Its Application Hai, H.; Huiping, J.; Yanlan, W.; Hui, Y. |
| 16:30 | 16:50 | Identification and checking of streets and pathways in informal settlements ("favelas") with pacifying police units Adriana, V.; Leandro, S.; Bruna, P.; Isis, M.; Andréa, S.; Fellipe, F. |
| 16:50 | 17:10 | Mapping of the Sampling to Evaluate the Positional Accuracy in a Large Urban Area Sato, S.S.; Santos, C. |

ROOM 6 - 3D Cartography 1

Chair: Dr. Arzu Çoltekin

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| 15:30 | 15:50 | An Assessment of Visual Variables for the Cartographic Design of 3D Informal Settlement Models Rautenbach, V.; Coetzee, S.; Schiewe, J.; Coltekin, A. |
| 15:50 | 16:10 | Elevating Streets in Urban Topographic Maps Improves the Speed of Map-Reading Edler, D.; Dickmann, F. |
| 16:10 | 16:30 | Smooth Transformations between Generalized 3D Building Models for Visualization Purposes Kada, M.; Wichmann, A.; Hermes, T. |
| 16:30 | 16:50 | A system to apply cartographic practices on 3D renderings Brasebin, M.; Christophe, S.; Buard, ; Pelloie, F. |
| 16:50 | 17:10 | Automatic identification of building types based on topographic databases – A comparison of different data sources Hecht, R.; Meinel, G.; Buchroithner, M. |

ROOM 7 - Remote Sensing and Image Processing 2

Chair: Dr. Yifang Ban

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| 15:30 | 15:50 | Exploiting Online Gazetteer for Fully Automatic Extraction of Cartographic Symbols Chiang, Y.; Leyk, S. |
| 15:50 | 16:10 | Salient Target Shape Adaptive Neighbor for High Resolution RS Imagery Classification Yan, L.; Yufang, D.; Guobin, C. |
| 16:10 | 16:30 | The Impact of Graphical Quality on Automatic Text Recognition in Digital Maps Chiang, Y.; Leyk, S.; Honarvar Nazari, N.; Moghaddam, S. |
| 16:30 | 16:50 | Water Quality Researches: Spectral Variability of the Water Body Analysis to define a Sampling Scheme Castreghini de Freitas Pereira, A. |
| 16:50 | 17:10 | Ground Control Points Selection and Collection for Image Orthorectification and for Orthoimages Accuracy Validation Coelho, A.; Melo, M.; Pina, W.; Silveira, J. |

POSTER SESSION 3

Session Manager: MSc. Mônica Cristina de Castro

Semiotics, Map Perception, Cognition and Knowledge

Assessment of Map Users' Search Strategies Using Multi-Package Softwares for Scanpath Analysis
Deeb, R.; Ooms, K.; Popelka, S.; Van Eetvelde, V.; de Maeyer, P.

Formalizing Content and Form in Maps
Stirnemann, J.M.; Fabrikant, S.I.; Klingemann, H.; Dittelbach, T.

Research on the pricing principles and pricing trends in public Geospatial information
Xv, J.; Li, G.; Xia, Y.; Wu, H.

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| Enhancing the Connection of Stakeholders to Flood Risk: An End-User Centred Approach to Adapt Flood Evacuation Maps Palka, G.; Serrhini, K.; Thibault, S.; Néron, E. |
| Communication Effects of Choropleth Map Displayed on the Screen Kao, C.J. |
| The Effects of Established Grid Line Colours in Topographic Maps on Cognitive Representations of Map Information Edler, D.; Bestgen, A.; Kuchinke, L.; Dickmann, F. |
| Estimate the Population Spatial Distribution of Rio de Janeiro for 2014 Strauch, J.; Costa, P.; Ajara, C. |
| The Propositional Schemata of Urban Planners When They Define Urban Public Spaces Yamada, M.M.; Sluter, C.R.; Silva, M.N. |
| Pictorial Symbols Design based on the Gestalt Theory Robbi Sluter, C.; Faria Andrade, A. |
| Recognition of topographic map information: The influence of map complexity and grids as artificial structuring elements on recognition memory performance Bestgen, A.; Edler, D.; Dickmann, F.; Kuchinke, L. |
| Comparing In-Car Route Guidance Information between Map Sketch and Verbal Note Techniques by Gender and Type of Color Vision Rego, M.; Pugliesi, E.; Ramos, A.P.; Tachibana, V. |
| Geovisualization |
| Modeling and Realization of Three-Dimensional Sky View Factor Based on Urban DEM Yang, X.; Li, M.; He, W.; Liu, X. |
| Audiovisual Communication of Short Geographic Names in Topographic Maps Increases Recall Memory Performance Lammert-siepmann, N.; Edler, D.; Dickmann, F. |
| 3D laser mapping and dynamic visualisation of the Domica cave, Slovakia Hofierka, J.; Gallay, M.; Kanuk, J. |
| A Conceptual Framework for Geovisualization of Literary Historical Data: Application to Biblical and Patristic Data in the Context of Biblindex Project Leysens T.; Davoine P-A; Mellerin L. |
| A Comparison of Space-Time 2D and 3D Geovisualization Keskin, M.; Bahadir, C.; Dogru, A.O.; Pakdil, M.E. |
| Map Use, Users and Usability |
| The City of Steel from the 11th Century Gets Benefit of OpenSource GIS! Ringmar, H. |
| The characteristics of Navigation by Foot Irmischer, I. |
| Landsat 8 image Classification Through Segmentation in Free Software to Analyze the Land Use/Land Cover Surrounding the Raso da Catarina Ecological Station, Bahia/Brazil Rios Oliveira, U.; Lustosa Brito, P.; César Pedrassoli, J.; Antunes Zaloti, F.; Mara Hadlich, G. |
| How Well does the Dasymetric Method Apply to Urban Spaces Dhieb, M. |
| Creating an Intuitive and Effective User Interface for Map Processing in a Geographic Information System Fernandes, R.; Chiang, Y. |
| Use Case Diagrams for the Representation of Users Requirements for a Geoinformation Solution Silveira Camara, G.; Fernanda da Costa, C.; Robbi Sluter, C. |
| A Preliminary Study about Preferences for 2D and 3D Maps for Car Navigation Systems Diegoli de Souza, R.; Azevedo Pugliesi, E.; Marques Ramos, A.P. |
| Design and Implementation of Online Atlas based on spatial cognition Liu, Y.; Ai, T.; Tian, J.; Zhou, M.; Zhao, R |
| Collaborative Mapping and Social Cartography |
| The Landscape and Their Meanings Identified Through the Use of Social Cartography: A Case Study in the City of Igarassu, Pernambuco State, Brazil Vieira da Silva, C.A. |

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| Possibilities for and Limitations of Creating Childcare Support Maps through the Voluntary Sector using Participatory Mapping Kukimoto, M.; Wakabayashi, Y. |
| Making Alternative Maps by Visually Impaired People as Volunteered Geographic Information Tanaka, M. |
| Participatory Map of Rio de Janeiro Arueira, L.R.; Medeiros, M.; Souza, L. |
| Participatory Mapping: A New Method of Mapping Through the Use of Free Software Silva Leal Coelho, P.; Guimarães Fonseca, T. |
| The use of Social Cartography To Think Housing Policies for Cities: An Experience With the Community of Viçoso Jardim (Niterói - RJ) Alves, S.L.P.; Ferreira, T.S.F.; Menezes, P.M.L. |
| The Use of Participatory GIS Innovation Methods in the Landscape Architecture Research in Olsztyn (POLAND) Walenciak, K.; Koziel, Z. |
| Thematic Cartography |
| Historical and Biographical Atlas of Taras Shevchenko Sossa, R. |
| “UNITED COUNTRY”; - A Series of Educational Maps of Ukraine Sossa, R.; Rudenko, I. |
| Twisting Brazil through cartography Rodrigues Monteiro, R. |
| Geographic distribution of Geography courses in Public Institutions in Brazil Rosolém, N.P. |
| Hierarchy class application with raster calculator tool from ArcGIS software Bergmann, D.; Oliveira, F.H.; Dal Santo, M.A. |
| Mapping of the stress expressions which are extracted from Tweet data Kang, A.; Kang, Y. |
| Mapping of Social-Economic Statistics- Tel Aviv-Yafo as a Case Study Raz, O. |
| Thematic representation of geomorphological cartography: case study of Brazilian Geomorphological Units Map of Instituto Brasileiro de Geografia e Estatística (IBGE) Sarti, T.; Nunes, B.; Pimenta, M.L.; Pelech, A. |
| Study of Curitiba's Cycling Structure Damas Antonio, N.; Kovaslki de Melo, G.; S. Delazari, L. |
| True, Pretty, and Fast: a Case Study of Deadline Cartography Applegate, E. |
| Taxonomy Validation for Chorematic Diagrams Reimer, A.; Mackaness, W. |
| Investigating the food environment in Hatfield and Hillcrest, Tshwane Lubisi, S.X.; Cooper, A.K. |
| Towards a New way of measuring Service Delivery in Gauteng: Calculating a Fortunate Index Schmitz, P.; Eksteen, S.; de Bruin, S. |
| Automated matching of basic and thematic elements of the map Krylov, S.; Zagrebin, G. |
| History of Cartography and Historical Cartography |
| History of Making the World Map and Discovery of the Far East: Focusing on the islands in the sea east of Korea Yi, S. |

THURSDAY – AUGUST 27th

PLENARY 1

| Keynote Speaker 4 – Plenary Keynote | | |
|-------------------------------------|-------|--|
| 08:30 | 09:30 | Dr. Rodrigo Barriga Vargas – General Secretary of PAIGH <i>The PAIGH Pan American Agenda and its perspective for geospatial development in the Region</i> |
| ICA at a Glance | | |
| 09:30 | 10:00 | ICA Commissions' speed presentations |
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PLENARY 3

| Special Meeting | | |
|-----------------|-------|--------------------------------|
| 17:20 | 18:30 | CAGIS Meeting Eric Anderson |
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Room 2

| Business Commission Meeting | | |
|-----------------------------|-------|---|
| 12:30 | 13:30 | Commission on Open Source Geospatial Technologies |
| 17:20 | 18:30 | Commission on Geospatial Analysis and Modeling |
| | | |

Room 3

| Business Commission Meeting | | |
|-----------------------------|-------|---------------------------------------|
| 12:30 | 13:30 | Commission on Cognitive Visualization |
| 17:20 | 18:30 | Commission on Use and User Issues |
| | | |

Room 4

| Business Commission Meeting | | |
|-----------------------------|-------|--|
| 12:30 | 13:30 | Commission on Ubiquitous Mapping |
| 17:20 | 18:30 | Commission on the History of Cartography |
| | | |

Room 5

| Business Commission Meeting | | |
|-----------------------------|-------|---|
| 12:30 | 13:30 | International Cartographic Exhibition Jury Meeting |
| 17:20 | 18:30 | Commission on Digital Technologies in Cartographic Heritage |
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Room 6

| Business Commission Meeting | | |
|-----------------------------|-------|---|
| 12:30 | 13:30 | Barbara Petchenick Jury Meeting |
| 17:20 | 18:30 | Commission on Mapping from Remote Sensor Imagery |
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Room 7

| Business Commission Meeting | | |
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| 12:30 | 13:30 | |
| 17:20 | 18:30 | Commission on Maps and Graphics for Blind and Partially Sighted People |
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ORAL SESSION 9 - 10:30-12:10

| ROOM 2 - Map Use, Users and Usability 3 | | |
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| Chair: Dr. Corné Van Elzakker | | |
| 10:30 | 10:50 | Investigations into the use of cartographic visualizations in geography fieldwork Wang, X.; Ekpenyong, E.; Van Elzakker, C.P.; Kraak, M. |
| 10:50 | 11:10 | Global Madison: User evaluation of an Adaptive Mobile Map Supporting Situated Learning of Globalization Roth, R.; Young, S.; Nestel, C.; Sack, C.; Davison, B.; Janicki, J.; Knoppke-wetzell, V.; Ma, F.; Mead, R.; Rose, C.; Zhang, G. |
| 11:10 | 11:30 | Patterns and Determinants of Variation in the use of Maps on the Web Wakabayashi, Y. |
| 11:30 | 11:50 | Investigation of Map Orientation by the use of low Cost Virtual Reality Equipment Henriksen, S.P.; Midtbø, T. |
| 11:50 | 12:10 | Sensitizing for the Kakamega-Nandi Forests Ecosystem, Western Kenya, by Means of Environmental Education Tools Based on Geodata Paul, L.; Schaab, G. |
| ROOM 3 - Map Design | | |
| Chair: Dr. Steve Chilton | | |
| 10:30 | 10:50 | Causes and Consequences of Scale Change in Schematic Maps Forrest, D. |
| 10:50 | 11:10 | Seeking Best Map Design Practices Koletsis, E.; Cartwright, W.; Arrowsmith, C.; Field, K.; Yuille, J. |
| 11:10 | 11:30 | Understanding Map Design in the Context of a Massive Open Online Course in Cartography Nelson, J.; Robinson, A. |
| 11:30 | 11:50 | Intellectual Highlighting of Remote Sensing Imagery for Better Image Map Design Murphy, C.E. |
| 11:50 | 12:10 | Automatic Rendering of a Cassini Style Christophe, S.; Hoarau, C.; Boulanger, L.; Turbet, J.; Vanderhaeghe, D. |
| ROOM 4 - Education and Training 4 | | |
| Chair: Dr. Angelica di Maio | | |
| 10:30 | 10:50 | The international Master of Science in Cartography – New perspectives due to Erasmus+ Peters, S.; Meng, L.; Gartner, G.; Burghardt, D.; Buchroithner, M.; Van Elzakker, C. |
| 10:50 | 11:10 | Young People's Map Reading Skills in Flanders: What is the Status? Ooms, K.; de Maeyer, P. |
| 11:10 | 11:30 | Teaching Unit in Geotechnologies for Mapping Changes of the Built and Natural Environment Gillieron, P.; Zufferey, J.; Vincent, G.; Feihl, O. |
| 11:30 | 11:50 | Brazilian Cartographic Olympiad Project Carvalho Di Maio, A.; Koenig Veiga, L. A. |

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| 11:50 | 12:10 | Spatial Thinking and Cartography in Brazilian Middle School Duarte, R. |
| ROOM 5 - Open Data, Source and Standards Chair: Dr. Trevor Taylor | | |
| 10:30 | 10:50 | United States National Hydrography Dataset Linked Open Data Varanka, D.; Mattli, D.M.; Usery, E.L. |
| 10:50 | 11:10 | Open Source Solution for Boundaries Management Integrated With Brazilian NSDI Camboim, S.; Lessa, G.; Schlottag, W.; Silverio, E. |
| 11:10 | 11:30 | Assessment and Visualization of OSM Building Footprint Quality Müller, F.; Iosifescu Enescu, I.; Hurni, L. |
| 11:30 | 11:50 | Incremental Update in Web Service Environment – CASE: Use of the OGC’s GeoSynchronization Service to Integrate Hydrographic Datasets Latvala, P.; Hietanen, E. |
| 11:50 | 12:10 | The position of PDOK in the Dutch Environmental Planning Act Van Der Vegt, H. |
| ROOM 6 - History of Cartography and Historical Cartography 3 Chair: Dr. Jana Moser | | |
| 10:30 | 10:50 | Attempting to set a style for the future: The role of South Africa’s “Central Mapping Office, 1934-36”. Liebenberg, E. |
| 10:50 | 11:10 | Selected Examples of Potential Early Cartographic Data Sources for the Carpathian Basin Harkányiné Székely, Z.; Waltner, I.; Vekerdy, Z.; Zentai, L. |
| 11:10 | 11:30 | Development of an Infrastructure for Spatio-Temporal Research in Early Modern Flanders and Brabant de Maeyer, P.; de Coene, K.; de Wit, B.; Kruk, R.; Ooms, K.; Van Den Berghe, M.; Vrielinck, S.; Wiedemann, T.; Winter, A.; Devos, I. |
| 11:30 | 11:50 | Beyond Technology: Japanese Colonial Mapping of Water Estates in Taiwan from 1901 – 1921 Wu, C.; Lay, J. |
| 11:50 | 12:10 | The Amazon Fortifications in the Interdisciplinarity Context Costa, G. |
| ROOM 7 - Cartography for Sustainable Development Chair: Dr. Vladimir Tikunov | | |
| 10:30 | 10:50 | Application of geo-ecological and thematic mapping to the analysis of estuarine environments in northeastern Brazil Sousa Mendes, J.; Gorayeb, A.; Vicente da Silva, E.; Jeovah de Andrade Meireles, A.; de Sousa Pinheiro, L. |
| 10:50 | 11:10 | Multiple data available to analyze the urbanization phenomenon in temporal and spatial scales. Moura de Lacerda Teixeira, V. |
| 11:10 | 11:30 | Global health and cartography: French and Brazilian perspectives Chasles, V.; de Biaggi, E.; Vizeu Barrozo, L. |
| 11:30 | 11:50 | Cartographic Assessment Methods of the Waters Ecological Status based on Satellite Data Vereshchaka, T.; Andreeva, Z. |
| 11:50 | 12:10 | A Boundary Delineation System for the Bureau of Ocean Energy Management Vandegraaf, D. |

ORAL SESSION 10 - 13:30-14:50

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| ROOM 2 - Geovisualization 4 Chair: Dr. Alexander Kent | | |
| 13:30 | 13:50 | Adaptive Relative Motion Representation of Space-Time Trajectories Moore, A.B.; Rodda, J. |
| 13:50 | 14:10 | Animated Points: Storing and Retrieving Time-Dependent Information Nass, A.; Van Gasselt, S. |
| 14:10 | 14:30 | Automated Generation of Schematic Network Maps Adaptive to Display Sizes Ti, P.; Li, Z.; Xu, Z.; Jia, H. |
| 14:30 | 14:50 | Space-Time Visualization of Unemployment: Open Source and Implementation Ye, X. |

ROOM 3 - Collaborative Mapping and Social Cartography 3

Chair: Dr. Haosheng Huang

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| 13:30 | 13:50 | Crowdsourcing emotional responses to space for adaptive Location-based Services Gartner, G. |
| 13:50 | 14:10 | Looking for Human Footprint in Nature: Collaborative Mapping for Monitoring of Self-organized Patterns in Human Trail Systems Vahidi, H.; Mobasheri, A.; Wanglin, Y. |
| 14:10 | 14:30 | OpenEventMap; A Volunteered Location Based Service Polous, K.; Krisp, J.; Meng, L.; Xiao, J.; Shrestha, B. |
| 14:30 | 14:50 | Sharing Cartographic Knowledge with the Crowd: on the Complexity of Cartographic Rules Panchaud, N.H.; Iosifescu Enescu, I.; Hurni, L. |
| 14:50 | 15:10 | The Geographical Regionalization Using Mental Maps of Individuals from Selected European Countries: Example from Central Europe Bláha, J.D.; Paus, J. |

ROOM 4 - Generalization and Multi-scale Representation 3

Chair: Dr. Dirk Burghardt

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| 13:30 | 13:50 | The Automatic Generalisation of Building Polygons: A Case Study Based on the 1:50.000 Swiss National Map Series Vetter, A.; Wigley, M.; Käuferle, D.; Gartner, G. |
| 13:50 | 14:10 | Schematization Plugin for QGIS Maheshwari, N.; Pociask, P.; Delazari, L.; Ware, M.; Anand, S. |
| 14:10 | 14:30 | A Skeleton-based Density Partition Method for Evaluation of Road Network Selection Xiong, F.; Ren, C.; Wang, R.; Tian, J. |
| 14:30 | 14:50 | A Cadastral-Based Disaggregated Data Model For Census Representation Strode, G.; Mesev, V. |

ROOM 5 - Mapping and Spatial Awareness for Disabled People

Chair: Dr. Waldirene Ribeiro do Carmo/Dr. Edwin Hunt

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| 13:30 | 13:50 | Position Validation in Crowdsourced Accessibility Mapping Rice, R.M.; Aburizaiza, A.O.; Rice, M.T.; Qin, H. |
| 13:50 | 14:10 | Disability and accessibility: how to integrate the interactions between pedestrians and urban environment through a GIS? Nadja, V.; Olivier, K.; Thierry, J. |
| 14:10 | 14:30 | Tactile geographical atlas of Moscow Medvedev, A.; Alekseenko, N. |
| 14:30 | 14:50 | Simulating and Visualizing Sidewalks Accessibility for Wayfinding of People with Disabilities Tajgardoon, M.; Karimi, H.A. |

ROOM 6 - Cartographic Heritage 4

Chair: Dr. Mátyás Gede

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| 13:30 | 13:50 | Using of Old Maps within Landscape Changes Analysis Cajthaml, J.; Pacina, J. |
| 13:50 | 14:10 | Chateaux and Castles On Old Maps And Photographs in the Czech Republic Krejci, J.; Muller, A.; Cajthaml, J. |
| 14:10 | 14:30 | Assessment of Positional Accuracy on Historical Review of Topographic Maps and Plans of Banjaluka Region (Bosnia And Herzegovina) of Different Editions Amovic, M.; Vasiljevic, S.; Sekulovic, D. |
| 14:30 | 14:50 | Positioning and Spatial Search of Maps with undeterminable Projections Irás, K.; Nguyen Thai, B. |
| 14:50 | 15:10 | Digitization of Old Globes by Photogrammetric Method Talich, M.; Ambrožová, K.; Havrlant, J.; Böhm, O. |

ROOM 7 - Environmental Risks and Disasters mapping 3

Chair: Dr. Maria Isabel C. Freitas

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| 13:30 | 13:50 | Mapping And Assessing Coastal Resilience In The Caribbean Region Lam, N.S.N.; Qiang, Y.; Arenas, H.; Brito, P.; Liu, K. |
| 13:50 | 14:10 | Environmental Vulnerability Of The Caravelas (Ba) Plain – Whale Coast Region as Subsidy to Environmental Planning Oliveira Souza, S.; Câmara Do Vale, C. |

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| 14:10 | 14:30 | Attributing Disaster landscapes: wildfire surveillance and hazard mapping Jones Simon D.; Reinke Karin; Gupta Vaibhav; Soto-Berelov Mariela; Holden Lucas; Held Alex; Mitchel Simon; Eckhardt Andreas; Lehmann Frank; Skidmore Andrew; Grant Ian |
| 14:30 | 14:50 | Creating a high resolution social vulnerability map in support of national decision makers in South Africa Le Roux, A.; Khuluse, S.; Naude, A. |
| 14:50 | 15:10 | The Use of Cartography to the Application of the Dpsir Model to the Diagnosis of the Hydrographic Basin of the Guaribas River in Northeastern Brazil: Guidelines for Local Environmental Management Otávio Landim Neto, F.; Gorayeb, A.; de Sá Pereira Filho, N.; Vicente da Silva, E.; Oliveira da Costa, N.; de Sousa Mendes, J. |

ORAL SESSION 11 - 15:30-17:10

| ROOM 2 - Semiotics, Map Perception, Cognition and Knowledge 4 Chair: Dr. Jirka Panek | | |
|--|-------|--|
| 15:30 | 15:50 | How do Map Readers Recognize a Topographic Mapping Style? Ory, J.; Christophe, S.; Fabrikant, S.; Bucher, B. |
| 15:50 | 16:10 | Investigating Cognitive Maps of Drivers with Color Vision Deficiency to Support Cartographic Design of Car Navigation Systems Pugliesi, E.; Moretti, A.; Ramos, A.P.; Vilma, T. |
| 16:10 | 16:30 | Audio Enhanced Map Animation – Testing Perception of Spatial and Temporal Relations Hall, A.; Multimäki, S.; Ahonen-rainio, P. |
| 16:30 | 16:50 | How Do Display Design and User Characteristics Matter in Animated Visualizations of Movement Data? Maggi, S.; Fabrikant, S.; Imbert, J.; Hurter, C. |
| 16:50 | 17:10 | Hybrid Classification Method for Multi-source POIs Based on Semantic Analysis Liu, J.; Luo, A.; Zhang, F.; Wang, Y. |
| ROOM 3 - Geodesign - Special Session Chair: Dr. Ana Clara Mourão | | |
| 15:30 | 15:50 | Crowdsourcing for Geodesign: Opportunities and Challenges for Stakeholder Input in Urban Planning Borges, J.; Jankowski, P.; Davis Jr, C. |
| 15:50 | 16:10 | Geodesign and Parametric Modeling of Urban Landscape Moura, A.C.; Turkienicz, B. |
| 16:10 | 16:30 | Geodesign for Landscape Connectivity Planning Pinheiro Ribas, R.; Clara Mourão Moura, A.; Machado Gontijo, B. |
| 16:30 | 16:50 | Using Geotechnologies and the Logic of Geodesign in Urban Planning Learning Processes Araujo, R.; Fiuza, F.; Bernardino, J.; Lourenço, K.; de Paula, P. |
| 16:50 | 17:10 | Geodesign Process Model: the Role of Visualisation in Feasibility Study of Urban Parameters Zyngier, C.M.; Masala, E.; Pensa, S.; Lucas, M.; Borges, K. |
| 17:10 | 17:30 | Applying Geodesign in Urban Planning Case Study of Pampulha, Belo Horizonte, Brazil Cocco, C.; Fonseca, B.M.; Campagna, M. |
| ROOM 4 - Geospatial Analysis 4 Chair: Dr. Monika Sester | | |
| 15:30 | 15:50 | Integration and Visualization of Tourism Data čerba, O.; Jedlička, K.; Janečka, K.; Mildorf, T.; Fryml, J.; Vlach, P.; Kozuch, D.; Charvát, K. |
| 15:50 | 16:10 | Unsupervised Machine Learning for Regionalization of Environmental Data: Distribution of Uranium in Groundwater in Ukraine Govorov, M.; Gienko, G.; Putrenko, V. |
| 16:10 | 16:30 | Bitemporal Map Registrations Højholt, P.; Hansen, L.D. |
| 16:30 | 16:50 | Geospatial data, technology and cartographic applications for the 2020 round of censuses Trainor, T. |
| ROOM 5 - Cartographic Theory and Geoinformation Science Chair: Dr. Menno-Jan Kraak | | |
| 15:30 | 15:50 | Contributions of Analytical Cartography to GISCIENCE Moellering, H. |
| 15:50 | 16:10 | An algebraic notation for Bertin's semiology with an extension for cartographic usage of the plane Reimer, A.; Van Goethem, A.; Speckmann, B.; Wood, J. |

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| 16:10 | 16:30 | Cartographical (Atlas) Patterns as the Means of Big Data Handling Dyshlyk, O.; Chabanyuk, V. |
| 16:30 | 16:50 | From Measurement to Multi-Dimensional Objectivity: A Re-Birth of Cartographic Expression Frye, C.; Sayre, R.; Dangermond, J.; Vaughan, R.; Aniello, P. |
| 16:50 | 17:10 | Approach to Calculating Spatial Similarity Degrees of Road Networks in Multi-scale Map Spaces Yan, H.; Li, J.; Shen, Y.; Yang, W.; Zhang, L. |
| ROOM 6 - 3D Cartography 2 Chair: Dr. Serena Coetzee | | |
| 15:30 | 15:50 | Cartography-Oriented Design of 3D Geospatial Information Visualization - Overview and Techniques Semmo, A.; Trapp, M.; Jobst, M.; Döllner, J. |
| 15:50 | 16:10 | Automatic extraction of drainage network in Digital Elevation Models of high spatial resolution Silva, L.; Francisco, C. |
| 16:10 | 16:30 | 3D Charts – Taxonomy and Implementation in a Virtual Globe Schnürer, R.; Eichenberger, R.; Sieber, R.; Hurni, L. |
| 16:30 | 16:50 | Thematic Maps on Virtual Globes Gede, M. |
| 16:50 | 17:10 | Modified Helix Structures for Visualizing Maximum Daily Temperature Data Kennelly, P.; League, C. |
| ROOM 7 - Remote Sensing and Image Processing 3 Chair: Dr. Xiaojun Yang | | |
| 15:30 | 15:50 | Attributing Woody Landscapes Using Remote Sensing Jones, S.; Suarez, L.; Soto-Berelov, M.; Wilkes, P.; Woodgate, W.; Haywood, A.; Mellor, A. |
| 15:50 | 16:10 | Developing a method to process satellite images for mapping coconut agrosystems Prune Christobelle, K.M.; Geo, C.D.; Frederic, B.; Sébastien, G.; Gaëlle, V. |
| 16:10 | 16:30 | Sentinel-1A SAR Data for Updating Global Urban Land Cover Maps Ban, Y.; Jacob, A. |
| 16:30 | 16:50 | Permanent Program Update of Continuous Cartographic Base from Brazil, the millionth (BCIM). Reis, R.B.; Gouveia, A.L.; Xavier, L.A.; Krumbiegel, M. |
| 16:50 | 17:10 | Automatic Generation of Generalized Population Density Maps from Raster Data Grötsch, A.; Schenkel, R.; Hurni, L. |

POSTER SESSION 4

Session Manager: MSc. Péricles Luiz Picanço Jr.

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| Spatial Data Infrastructure | |
| New Zealand's SDI and Geospatial Capability O'malley, G. | |
| Quality control in cartographic products of IBGE Santos, A.S.; Nagatomi, R.C.M.E.; Arraya, K.C.; Gottardo, T.V.; Medeiros, N.G.; Santos, G.R.; Lisboa Filho, J. | |
| Definition of Users Profile on a Regional SDI: Case Study of the Metropolitan Region of Curitiba Alexandria Machado, A.; Ramos, G.; Robbi, C.; Camboim, S.; Delazari, L. | |
| Approaching a Model for Context-Aware Applications based on the Semantic Sensor Network Cangrejo Aljure, L.D.; Delgado Fernandez, T. | |
| Investigation UAV Parameters for Mapping Sato, S.S.S.; Silva, D.C.; Machado, K.M.C.; Traversari, E. | |
| Web cartography | |
| Research on a Method of Geographical Information Service Load Balancing Heyuan, L.; Gang, C. | |
| An Assessment of the Solar Potential of Roofs within a Web-based Solar Cadastre Chuprikova, E.; Gartner, G.; Innerebner, M. | |
| Digital Map of Rio de Janeiro - Web GIS for information dissemination and management Arueira, L.R.; Medeiros, M.; Souza, L. | |
| Web GIS tool for population estimate in the city of Rio de Janeiro Arueira, L.R.; Souza, L.; Mandarin, F. | |

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| Evaluation Of Cartographic Mapping Perception From Different Types Of Communication Documents Static And Dynamic Vieira Vargas Colares, I.; da Costa Castro, M.; Henrique Ferreira Coura, P.; do Couto Fernandes, M. |
| InterIMAGE Cloud Platform: Towards the Architecture of an Open-Source, Distributed Platform for Automatic, Knowledge-Based Image Interpretation Ferreira, R.; Oliveira, D.; Happ, P.; Costa, G.; Feitosa, R.; Bentes, C. |
| LBS |
| Geomarketing and Geographic Information Systems as a Support for the Tourism Management of Rio de Janeiro's Downtown Administrative Area Pinto, F.; Painho, M.; Menezes, P.; Fernandes, M. |
| Accuracy Assessment of Mobile Sensors for the Use of Height Determination Dalgin, S.; Dogru, A.O. |
| Art and Culture |
| Creativity in cartography – practical examples of map design in the publication entitled Prehistory of the genus Homo Bláha, J.D. |
| Literature History and Cartography – Kazinczy's Correspondence and Its Cartographical Demonstration Kis, R.; Czifra, M.; Gede, M. |
| Overcoming barriers to climate dialogue through cartography: An example from Maasai land Pearce, M. |
| Cartographic Heritage |
| 2-Dimension Spatial Data Integration of Field Archaeology Based on GIS Yang, L.; Pei, A.; Zhang, H. |
| TAMBORA - A Virtual Mapping Environment Hanewinkel, C.; Harvey, F.; Koslitz, S.; Specht, S.; Steller, H. |
| Lyon and São Paulo: analyzing urban dynamics on the first half of the XXth century with historical GIS de Biaggi, E.; Padovesi Fonseca, F. |
| Multimedia Atlas of the Historical Centre of Tegucigalpa. Phase 3. Multimedia Cartography Applied to Cultural Heritage Gomez Solorzano, L.S. |
| History of Cartography and Historical Cartography |
| Historical Atlas of Lviv: Implementation Means of the European Mapping Project in Ukraine Sossa, R.; Kapral, M.; Rovenchak, I. |
| Center of Rio de Janeiro under a Cartographic Perspective: Historical and Geographic Evolution Santos Miceli, B.; Leal de Menezes, P.M. |
| Political-Administrative Evolution of Rio de Janeiro State, Brazil Uchôa, D.; Menezes, P. |
| Historical Cartography and Teaching: A critical analysis on the didactic material used in the state of São Paulo, Brasil Jordão, B.; Sena, C. |
| ATLASES |
| genderATlas - An online atlas for visualizing gender-relevant data for Austria Schmidt, M.; Ledermann, F.; Gartner, G. |
| Toponymy |
| The Standardization of Geographical Names in Brazil: some challenges Rocha Bérenger Resende, A.C.; Pereira de Souza, B.C.; Barreto dos Santos, C.J.; Rainha Moreira, G.; Almeida Mathias, M.; Oliveira Nagem, V. |
| Geographical Names and Traditional Knowledge Rainha Moreira, G.; Salgueiro Lage, C.L.; Rangel de Moraes Valente Fernandes, L.R.; Oliveira Nagem, V. |
| Analyzing the toponymy of historical Petrópolis-RJ/Brazil Maps: A discussion about the German colonization Boruchovitch Fonseca, T.; V.g. Didier, I.; Pereira de Souza, B.C.; do Couto Fernandes, M. |
| The Brazilian Geographical Names Beyond Bibliographic References Mathias, M. |
| Toponymic analysis of locations at Realengo district Santos, K.S.; Menezes, P.M.L. |

The Geographical Names of Petrópolis/RJ (Brazil) in the mid-nineteenth century: cultural origins and toponymic motivation
Menezes, P.M.L.; Souza, B.C.P.

The Geospatial Data Infrastructure of Brazil (INDE) making some invisible visible - the case of some Brazilian Geographical Indications.

Santos, C.J.B.; Fernandes, L.R.R.; Gouveia, A.L.; Nagem, V.O.

3D Cartography

Creating a 3D landscape with GIS software
Wesson, C.

Project EIGER : 3D Map on Demand
Francois, L.; Yannick, M.; Luc, M.

Behavior Of Morphometric Indices In Planimetric Surface Projections And Patterned In The Cuiabá River Basin - Petrópolis (RJ).

Vieira Vargas Colares, I.; Felipe Barreto de Oliviera, L.; Sá de Araujo, R.; do Couto Fernandes, M

Analyses of Orienteering Runs on 3D maps
Petrovič, D.

3D cartography: thinking beyond visual impact
Field, K.

Mapping LIDAR Analysis to Urban Landscape
Carneiro, M.; Mario, L.; Gregorio, M.

Map Use, Users and Usability 4

Availability and Access to geospatial data by Academic Researchers – Case study: Federal University of Bahia (UFBA)
Gomes Vieira de Jesus, E.; de Oliveira Fernandes, V.; Lustosa Brito, P.; Alixandrini, M.

Mapping and Spatial Awareness for Disabled People

Tactile symbols built from rapid prototyping in wayfinding systems
Alixandrini, M.J.; Moulin Fosse, J.; Lima Filho, D.; de Oliveira Fernandes, V.

Thematic Cartography

Creating a University Campus Map based on Cartographic Communication
de Oliveira Fernandes, V.; Alixandrini, M.; Aquino da Cunha, A.; Carvalho, I.; Gomes Vieira de Jesus, E.

Conference Dinner

20:30

23:00

Club Piraquê (Naval Club) – Av. Borges de Medeiros 2364, Lagoa

FRIDAY – AUGUST 28th

PLENARY 1

| GENERAL ASSEMBLY PART 2 | | |
|--|-------|--|
| 08:30 | 10:30 | General Assembly |
| 10:00 | 10:30 | Coffee Break |
| EC and Commission Chair Meeting | | |
| 11:00 | 12:00 | Meeting with the new Board and Commission Chairs |

PLENARY 2

| Keynote Speaker 5 – Plenary Keynote | | |
|--|-------|--|
| 09:00 | 10:00 | Dr. Ivan Márcio Barbosa - INPE International Charter Space and Major Disasters |
| Closing Ceremony | | |
| 13:30 | 15:00 | |

ORAL SESSION 12 - 10:30-12:10

| ROOM 2 - Map Use, Users and Usability 4 Chair: Dr. Luciene Delazari | | |
|--|-------|---|
| 10:30 | 10:50 | Representation-based Knowledge Elicitation: Describing the Image Interpretation Process of Experts Bianchetti, R. |
| 10:50 | 11:10 | The Use of Usability Heuristics to Evaluate VGI Systems Interfaces Picanco Jr, P.; Delazari, L. |
| 11:10 | 11:30 | The usability of INDE Geoportal Araújo, V.; Augusto, M.; Py, H.; Oliveira, R. |
| 11:30 | 11:50 | Proposal for a Tourist Web-Map of the South Area of Rio: Cartographic Communication and the Act of Representing the Landscape in Different Scales and Levels of Abstraction Salomão Graça, A.J.; Fiori, S.R. |
| ROOM 3 - Hydrographic Mapping Chair: Dr. Leandro Andrei Besser de Deus | | |
| 10:30 | 10:50 | Fuzzy application in support of the Folk's marine sediment classification Monteiro Pessôa, L.A.; Estellita Lins, M.P.; Cosenza, C.A.N.; Mandarino, F. |
| 10:50 | 11:10 | Facing the Limits of Mapping in Spatial and Territorial Forecast: Block Diagrams of hydrological systems Chery, J.; Planchat, C. |
| 11:10 | 11:30 | New Approach to Hydrographic Mapping in Poland in Aspect of Thematic Cartographic Elaborations Provided by Polish Geodetic and Cartographic Service Bujakowski, K.; Zielinski, J.; Szyzkowska, K.; Kasjaniuk, T. |
| 11:30 | 11:50 | Dynamic Programming Applied to Oceanographic Campaign Planning Pessôa, L.A.M.; Collazo, R.A.; Estellita Lins, M.P.; Bahiense, L.; de Arruda, E.F. |
| ROOM 4 - Cartography Applied to Geosciences Chair: Dr. Luiz Henrique Castiglione | | |
| 10:30 | 10:50 | Interactive WebGIS for Archaeological Settlement Pattern Analysis – A Requirement Analysis Von Groote-bidlingmaier, C.; Hilbert, K.; Schwer, J.; Timpf, S. |
| 10:50 | 11:10 | Problems, ways to solution and prospects of geophysical mapping |

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| | | Loginov, D.; Krylov, S. |
| 11:10 | 11:30 | Delimitation of physiographic units using remote sensing data and GIS for territorial planning in the São José dos Campos region, São Paulo State, Brazil Santos Corrêa, C.V.; Gomes Vieira dos Reis, F.A.; Carrascosa do Amaral, A.M.; Carmo Giordano, L.; Jardineti Chaves, C.; Dias Brito, H. |
| 11:30 | 11:50 | Proposal of an Image Interpretability Index – Analysis of Vegetation Mapping Teixeira, A.; Barros, R.; Madureira, C.; Rangel, R. |
| ROOM 5 - Spatial Data Infrastructure Chair: Dr. Antony Cooper | | |
| 10:30 | 10:50 | A Review of SDI Literature: Searching for Signs of Inverse Infrastructures Coetzee, S.; Wolff-piggott, B. |
| 10:50 | 11:10 | The Role of Standards in Geospatial Information Management for the World; Essential Standards for Developing Spatial Data Infrastructures Trevor Taylor and Lance McKee |
| 11:10 | 11:30 | Why and how to extend the INSPIRE data specifications? Hopfstock, A.; Borrebæk, M.; Vanparys, H. |
| 11:30 | 11:50 | Are the Data Sharing Problems with SDIs Problems of Zombies? Harvey, F.; Coetzee, S.; Cooper, A.; Iwaniak, A. |
| 11:50 | 12:10 | Review of Data Models for Indoor Mapping and Modeling Chen, J.; Clarke, K.C. |
| ROOM 6 - Cartographic Heritage 5 Chair: Dr. Manoel do Couto Fernandes | | |
| 10:30 | 10:50 | Maps as Knowledge Aggregators: from Renaissance Italy Fra Mauro to Web Search Engines Nanetti, A.; Cattaneo, A.; Cheong, S.A.; Lin, C. |
| 10:50 | 11:10 | The Habsburg mapping of Moldavia and Walachia Bartos-elekes, Z. |
| 11:10 | 11:30 | Mapping the Inka Road System for Museum Exhibit Display Cole, D. |
| 11:30 | 11:50 | imagineRio: A Diachronic Atlas of Rio de Janeiro's Social and Architectural Evolution Aroom, J.; El-dahdah, F.; Heyman, D.; Metcalf, A. |
| 11:50 | 12:10 | 3D Reconstruction and Uncertainty Modelling using Fuzzy Logic of Archeological Structures – applied to the Temple of Diana in Nemi, Italy Danielova, M.; Peters, S.; Diosono, F.; Kumke, H. |