

SUNDAY – AUGUST 23th

GENERAL ASSEMBLY PART 1 - 08:30-16:30

PLENARY 1 – GENERAL ASSEMBLY PART 1		
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		
09:30	11:00	Welcome Addresses: ICA’s President, Brazilian Society of Cartography President, General Director UN Representative International Map Year Opening Award ICA Flag – Brazilian Cartographic Merit Award I Brazilian Cartographic Olympiads Travel Awards Brazil Presentation
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

ORAL SESSION1 - 13:30-14:50

ROOM 2 - Geovisualization 1		
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		
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		
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.
ROOM 5 - Geointelligence and Crime Maps		
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		
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		
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 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		
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		
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		
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 Environmental 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		
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		
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		
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

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 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 Caragatatuba SP Bortoletto, K.C.; Freitas, M.I.C.; Oliveira, R.B.N.
Cartographic Theory and Geoinformation Science
From Analog to Digital Cartography: A Literature Review Guttervill Cubas, M.; Moreira Sampaio, T.V.
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.
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 Dietzsch, 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.
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.; Mandarino, F.

<p>Procedures to the Mapping of the Coastal Features da Silva, A.; Alencar Castro, J.W.; Ferreira Dias, F.; Osilieri, P.</p>
<p>Cadaster Mapping and Surveying</p>
<p>Spatio-Temporal Analysis of the Urban Expansion of the City of Encanto-RN/Brazil Souza, R.K.; Costa, F.R.</p>
<p>Urban Cleanliness Perception Index using mobile GIS in the City of Rio de Janeiro Arueira, L.R.; Medeiros, M.</p>
<p>Territorial planning and implementation of full-time education in municipal schools from Rio de Janeiro using GIS Souza, L.</p>
<p>Technical and conceptual perspectives for the integration of public policies and land registers in the brazilian rural sector. Brignol Menke, A.; Zandonadi Moura, L.</p>
<p>Spatial analysis and municipal management of vacant buildings in Rio de Janeiro with GIS Souza, L.</p>
<p>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.</p>

TUESDAY – AUGUST 25th

PLENARY 1

Keynote Speaker 2 – Plenary Keynote		
08:30	09:30	Dr. Eduarda La Rocque – Pereira Passos Institute – Rio de Janeiro City Hall
ICA at a Glance		
09:30	10:00	George Gartner ICA President and László Zentai Secretary General
09:30	09:35	Laudatio for David Fairbairn
09:35	09:37	Laudatio for Elri Liebenberg
09:37	09:39	Laudatio for Wladimir Tikonov
09:39	09:41	Laudatio for Jesus Reyes
09:41	09:43	Laudatio for Fraser Taylor
09:43	09:45	Laudatio for Corné van Elzakker
09:45	09:50	Award Giving
Young Cartographers Meeting		
17:20	18:30	Prof. Dr. Silvana Camboim

PLENARY 2

SDI SESSION - International Cartographic Exhibition		
		SDI SESSION 1
13:30	14:50	Prof. Dr. Luiz Paulo Souto Fortes – IBGE
13:30	13:50	Australia - Australia National Map
13:50	14:10	Brazil - National Spatial Data Infrastructure - INDE
14:10	14:30	China - Globeland30 Service Platform
14:30	14:50	France - French maritime and coastal geographic information of reference
		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)
15:50	16:10	Israel - ArcGIS Online
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

Room 2

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

Room 3

Business Commission Meeting		
17:20	18:30	Commission on Mountain Cartography

Room 4

Business Commission Meeting		
17:20	18:30	Commission on Map Projections

Room 5

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

Room 6

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

Room 7

Business Commission Meeting		
17:20	18:30	Commission on Map Production and Geo-Business

ORAL SESSION 3 - 10:30-12:10

ROOM 2 - Map Use, Users and Usability 1		
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		
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 Muehlenhaus, I.; Jenny, B.; Marston, B.
ROOM 4 - Geospatial Analysis 1		
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		
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		
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		
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

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.
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.

ORAL SESSION 4 - 13:30-14:50**ROOM 2 - Semiotics, Map Perception, Cognition and Knowledge 2**

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.; Šašínska, ; Štěrba, 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

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	Multi-Scale Schematic Representation of Line Networks Zhilin, L.; Peng, T.

ROOM 4 - Education and Training 2

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

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.
14:30	14:50	Cadastral Mapping for Underground Networks: A Preliminary Analysis of User Needs

		Pouliot, J.; Cuissart, R.; Bordin, P.
ROOM 6 – Toponymy 2		
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 Faragó, 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		
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.
PLENARY 3 – Cartographic Heritage 2		
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

ORAL SESSION 5 - 15:30-17:10

ROOM 2 - Geovisualization 2		
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
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		
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		
15:30	15:50	MIGoogle: Map of Ideas with Google Di Maio, A.C.
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	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.
ROOM 5 - Topographical Mapping and Mountain Cartography 1		
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 Morphological 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		
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 Morita, T.
16:50	17:10	Portable Map Signboards Collages on Smartphones using Polyline Georeferences Si, R.; Arikawa, M.
ROOM 7 – Atlases		
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. ; Pietrucieł, 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		
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

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 PolSAR 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.
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
Mobasher, 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	09:32	Commission on Cognitive Visualization
09:32	09:34	Commission on Use and User Issues
09:34	09:36	Commission on Geovisualization
09:36	09:38	Commission on Cartography and Children
09:38	09:40	Commission on Atlas
09:40	09:42	Commission on Education and Training
09:42	09:44	Commission on Map Design
09:44	09:46	Commission on Map Projections
09:46	09:48	Commission on Generalisation and Multiple Representations
09:48	09:50	Commission on the History of Cartography
09:50	09:52	Commission on Planetary Cartography
09:52	09:54	Commission on Maps and Graphics for Blind and Partially Sighted People
09:54	09:56	Commission on Art and Cartography
09:56	09:58	Commission on Maps and Society
09:58	10:00	Commission on Theoretical Cartography
Special Session		
		Unmappable Documentary about one of the most famous and controversial contemporary cartographer: Denis Wood - Several awards in film festivals Prof. Dr. Sebastien Caquard
12:30	13:30	

PLENARY 2

PETROBRAS SESSION		
		PETROBRAS SESSION 1 Dr. Cristina Benz – CENPES/ PETROBRAS
10:30	10:40	
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

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

ORAL SESSION 6 - 10:30-12:10

ROOM 2 - Geovisualization 3		
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		
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 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		
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		
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 Ieschek, 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		
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	Mapping the Areas of Archaeological Interest in Porto Alegre, Brazil Bugs, G.; Isolan, F.B.
11:10	11:30	New Zealand Cartographic Heritage: Focusing on spatial dimension Drecki, I.
11:30	11:50	Remote sensing of the Neolithic artifacts in the Russian North Medvedev, A.; Martinov, A.; Kudikov, A.
11:50	12:10	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

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**

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 Brittall, M.; Lobben, A.; Lawrence, M.

ROOM 3 - Orienteering Mapping

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

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

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.; Tsorlini, 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		
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.
14:30	14:50	Missionary Instruments, Techniques, and the Cartographic Construction of Western Amazonia Chauca, R.
ROOM 7 - Web Cartography 3		
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.

ORAL SESSION 8 - 15:30-17:10

ROOM 2 - Semiotics, Map Perception, Cognition and Knowledge 3		
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		
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		
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	Cartographic Modelling of Climate Change Using Long-term Meteorological Observations Affected by Land Cover Alternations Becek, K.
ROOM 5 - Cadaster Mapping and Surveying 2		
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 Posi-tional Accuracy in a Large Urban Area Sato, S.S.; Santos, C.
ROOM 6 - 3D Cartography 1		
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		
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

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.
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.
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.; Kozieł, 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.

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	09:32	Commission on Mountain Cartography
09:32	09:34	Commission on Cartography in Early Warning and Crisis Management
09:34	09:36	Commission on Maps and the Internet
09:36	09:38	Commission on Ubiquitous Mapping
09:38	09:40	Commission on Mapping from Remote Sensor Imagery
09:40	09:42	Commission on Geospatial Analysis and Modeling
09:42	09:44	Commission on Geoinformation Infrastructures and Standards
09:44	09:46	Commission on Map Production and Geo-business
09:46	09:48	Commission on Data Quality
09:48	09:50	Commission on Neocartography
09:50	09:52	Commission on GI for Sustainability
09:52	09:54	Commission on Open Source Geospatial Technologies
09:54	09:56	Commission on Digital Technologies in Cartographic Heritage

PLENARY 3

Special Meeting		
17:20	18:30	CAGIS Meeting Eric Anderson

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

Room 6

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

Room 7

Business Commission Meeting		
12:30	13:30	
17:20	18:30	Commission on Maps and Graphics for Blind and Partially Sighted People

ORAL SESSION 9 - 10:30-12:10

ROOM 2 - Map Use, Users and Usability 3		
10:30	10:50	Investigations into the use of cartographic visualizations in geography fieldwork Wang, X.; Ekpenyong, E.; Van Elzaker, 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		
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		
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.
11:50	12:10	Spatial Thinking and Cartography in Brazilian Middle School Duarte, R.
ROOM 5 - Open Data, Source and Standards		
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		
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	GEOIMAGINARIES.org: Historic Maps and their perception - a critical analysis Losang, E.
ROOM 7 - Cartography for Sustainable Development		
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

ROOM 2 - Geovisualization 4		
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		
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		
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		
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		
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		
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.
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		
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		
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		
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		
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.
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		
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		
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

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.; Mandarino, F.
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.
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
Electoral Atlas of Romania 1990-2009 Iatu, C.; Alupului, C.
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.

FRIDAY – AUGUST 28th

PLENARY 1

GENERAL ASSEMBLY PART 2		
08:30	10:00	General Assembly
10:00	10:30	Coffee Break
10:30	12:00	General Assembly
12:00	13:30	Lunch
ICA Meeting		
13:00	14:00	Meeting with the new Board and Commission Chairs

PLENARY 2

Keynote Speaker 5 – Plenary Keynote		
08:30	09:30	Dr. Ivan Márcio Barbosa - INPE <i>Positioning Geospatial Information to Address Global Challenges</i>
Closing Ceremony		
14:00	15:30	Closing Ceremony

ORAL SESSION 12 - 10:30-12:10

ROOM 2 - Map Use, Users and Usability 4		
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		
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.; Szyszkowska, 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		
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 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.; Jardimetti 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		
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		
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.