



**ICC 2017**  
WASHINGTON



Abridged Scientific Program

# 28TH INTERNATIONAL CARTOGRAPHIC CONFERENCE

JULY 2-7, 2017 / WASHINGTON DC



Full conference program on iOS & Android: **ICC2017**  
Interactive online schedule: [eventscribe.com/2017/ICC](http://eventscribe.com/2017/ICC)

[icc2017.org](http://icc2017.org)

 [@ICC2017DC](https://twitter.com/ICC2017DC) / [#ICC2017DC](https://twitter.com/ICC2017DC)



Conference organized by the U.S. National Committee for the International Cartographic Association (USNC-ICA), a standing committee of the Cartographic and Geographic Information Society (CaGIS), United States member of the International Cartographic Association (ICA)



**Assisted by:**  
Conference Managers (CMP - logistics)  
Cadmium (online tools)  
Yellow Hippo Media (web design)



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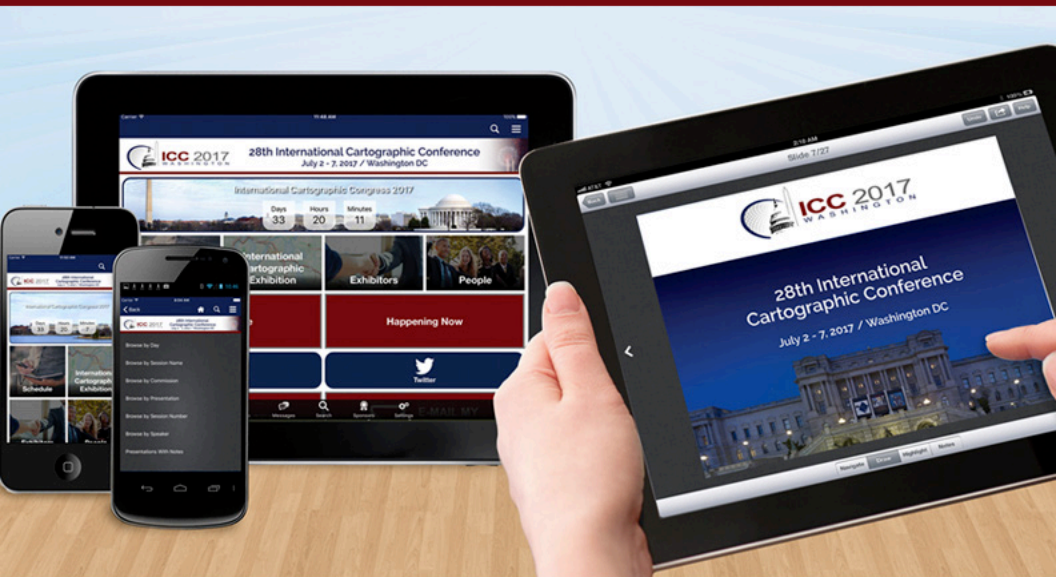
## **LOCAL ORGANIZING COMMITTEE**

- Chair** - E. Lynn Usery, U.S. Geological Survey  
Mamata Akella, CARTO  
David Alvarez, JMT Technology Group  
Eric Anderson, Cartography and Geographic Information Society  
Cary Anderson, Pennsylvania State University  
Linda Baker, Conference Managers (CMP - Logistical Director)  
Dierdre Bevington-Attardi, U.S. Census Bureau  
Kaile Bower, U.S. Census Bureau  
Cynthia A. Brewer, Pennsylvania State University  
Aileen R. Buckley, Esri, Inc.  
Mary Clawson, Esri, Inc.  
Kari J. Craun, U.S. Geological Survey  
Mary Beth Cunha, Humboldt State University  
Imre Josef Demhardt, University of Texas at Arlington  
Bob Denaro, ITS Consulting and Motus Ventures  
Robert Edsall, Idaho National Laboratory  
Sven Fuhrmann, George Mason University  
Ilse Genovese, Geomedia  
Kelsey Hersey, JMT Technology Group  
John C. Kostelnick, Illinois State University  
Lucia Lovison-Golob, Afriterra Foundation  
Rakesh Malhotra, Fayetteville State University  
David B. Miller, Northern Virginia Community College.  
Harold Moellering, Ohio State University  
Margaret Pearce, Studio 1:1  
Michael Peterson, University of Nebraska at Omaha  
Matt Rice, George Mason University  
Rebecca Rice, Digital Globe  
Lee R. Schwartz, U.S. Department of State  
Meghan E. Smith, Salem State University  
Vince Smith, Hexagon Geospatial  
Stephanie M. Spahlinger, U.S. Census Bureau  
Tim Trainor, U.S. Census Bureau  
Doug Vandergraf, Bureau of Ocean Energy Management  
Dalia E. Varanka, U.S. Geological Survey  
Rosemary Wardley, National Geographic  
Andy Woodruff, Axis Maps  
Xiaojun Yang, Florida State University  
Jeffrey M. Young, Celartem Inc. and LizardTech  
Paul M. Young, U.S. Geological Survey

# Need the Presentation? Get the App!



Search for ICC2017 in the Apple App Store or on Google Play



The ICC 2017 app provides the full interactive conference program. The emphasis of this printed program is brief listings of the oral and poster presentation sessions for the scientific program. The listings provide only presentation title and presenter for each talk and session title and sponsoring ICA commission for groups of talks.

Please see the app for additional scientific program information such as:

- Schedule changes and cancellations
- Presenter and co-author affiliations and countries
- Presenter biographical information
- Abstracts and online proceedings papers
- Uploaded presentation files for talks and posters

The conference website and app provide full information on many items not outlined in this printed program (which only outlines the scientific program) such as:

- ICA and ICC 2017 organizers' welcome statements
- Local organizing committees and members
- Registration desk hours
- ICA executive and delegate meetings
- ICA Commission workshops
- Opening and closing ceremony schedule details
- ICA awards and recognitions
- ICC 2017 sponsors
- Exhibitor listing and map of exhibit floor
- International Cartographic Exhibition
- Barbara Bartz Petchenik Children's Map Exhibition
- Technical excursions
- Social Program - partner tours

## INTERNATIONAL SCIENTIFIC PROGRAM COMMITTEE

**Chair** - Cynthia A. Brewer

Mirela Altic

Masatoshi Arikawa

Yifang Ban

Franz-Josef Behr

Dirk Burghardt

Rex Cammack

Sébastien Caquard

Sidonie Christophe

Keith Clarke

Serena Coetzee

Alejandra Coll Escanilla

Jeremy Crampton

Imre Josef Demhardt

Urška Demšar

Cécile Duchene

Sara Fabrikant

David Fairbairn

Ján Feranec

Kenneth Field

Michael Finn

David Forrest

Ron Furness

Georg Gartner

Mátyás Gede

Amy Griffin

Henrik Hargitai

Francis Harvey

Anja Hopfstock

Haosheng Huang

Bin Jiang

Liu Jiping

Markus Jobst

Peter Jordan

Alexander Kent

Pry Kettunen

Milan Konecny

Menno-Jan Kraak

Horst Kremers

Jukka Krisp

Miljenko Lapaine

Jonathan Li

Christophe Lienert

Yaolin Liu

Yuefeng Liu

Evangelos Livieratos

Lucia Lovison-Colob

Paulo Menezes

Harold Moellering

Ian Muehlenhaus

Kristien Ooms

Cosimo Palagiano

Tom Patterson

Ammatzia Peled

Stefan Peters

Dušan Petrovic

Irina Petrovna Karachevtseva

Silvana Philippi Camboim

Nathan Piekielek

José Jesús Reyes Nuñez

Waldirene Ribeiro

Anthony Robinson

Pilar Sánchez-Ortiz Rodríguez

Robert Roth

Peter Schmitz

Carla Sena

Monika Sester

René Sieber

Artemis Skarlatidou

Trudy Suchan

Vladimir Tikunov

Lysandros Tsoulos

Lynn Usery

Laurene Vaughan

Alena Vondráková

Vít Voženílek

Xiaobai Angela Yao

Long Yi

László Zentai



**ICC 2017**  
WASHINGTON

## ICC 2017 SPONSORS

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# CARTOGRAPHICA

The International Journal for Geographic Information and Geovisualization

### Media Sponsor



**PROFESSIONAL SCIENCE  
MASTER'S IN GEOGRAPHIC  
INFORMATION SYSTEMS**



## ICA COMMISSIONS AND WORKING GROUPS

ICA Commissions and Working Groups collaborated on organizing presentations into sessions. Sessions affiliated with each, as well as a few special topics, are highlighted with two-letter designations throughout the scientific program listing of sessions. Session numbers for Commission and Working Group business meetings are also listed below.

Art and Cartography: **Ar** - 4309

Atlases: **At** - 4307

Cartographic Heritage into the Digital: **Hg** - 5811

Cartography and Children: **Ch** - 5305

Cartography in Early Warning and Crisis Management: **Ea** - 4304

Cognitive Issues in Geographic Information Visualization: **Co** - 4408

Education and Training: **Ed** - 5805

Generalisation and Multiple Representation: **Ge** - 6404

Geospatial Analysis and Modeling: **An** - 4306

GI for Sustainability: **Su** - 6408

History of Cartography: **Hs** - 5311

Location Based Services: **Lo** - 4410

Map Design: **De** - 5810

Map Production and Geoinformation Management: **Pd** - 6302

Map Projections: **Pj** - 5307

Maps and Graphics for Blind and Partially Sighted People: **Ac** - 4405

Maps and the Internet: **In** - 5301

Mountain Cartography: **Mt** - 4403

Open Source Geospatial Technologies: **Op** - 6401

Planetary Cartography: **Pl** - 6409

SDI and Standards: **St** - 6306

Sensor-driven Mapping: **Se** - 5409

Topographic Mapping: **Tp** - 5403

Toponymy: **Tm** - 5803

Ubiquitous Mapping: **Ub** - 5410

Use, User and Usability Issues: **Us** - 6305

Visual Analytics: **Vi** - 5402

Marine Cartography Working Group: **Ma** - 6303

### Additional Special Topics for ICC 2017

Semiology and Bertin at 50 years: **Be**

Land Use and Land Cover: **Lu** - ISPRS joint session

Critical Cartography, GIS and Society: **Cr**

## ICC 2017 CONFERENCE THEMES

The conference themes characterize the wide range of topics invited for submission to ICC 2017. Submitters' theme choices assisted the International Scientific Program Committee members in associating presentations with ICA Commission emphases and in grouping presentations into sessions.

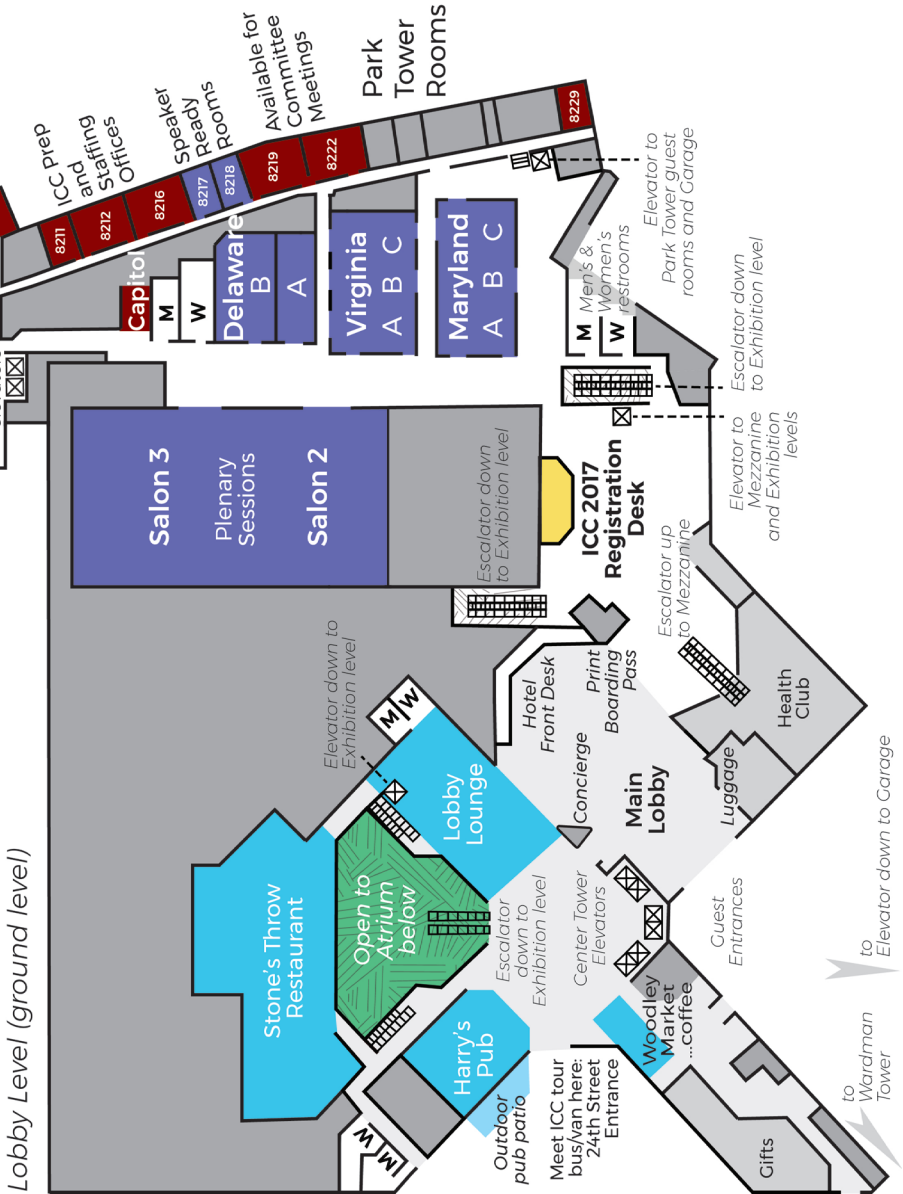
- T01 Visual analytics, geovisualization, and dynamic cartography.
- T02 Spatial analysis, geocomputation, modeling, and data mining.
- T03 Virtual reality, augmented reality, 3D mapping, and Geodesign.
- T04 Generalization, multi-resolution data, and multi-scale representation.
- T05 Thematic cartography and multivariate data mapping.
- T06 Bertin's "Sémiologie Graphique" at 50 years; semiology.
- T07 User studies; user experience and usability; user interface design.
- T08 Cognitive issues in map use and design.
- T09 Children and cartography.
- T10 Accessible cartography for people with disabilities.
- T11 Education and training in cartography and geospatial technologies.
- T12 Outreach, geospatial MOOCs, and sharing mapping methods beyond cartography.
- T13 Design of maps.
- T14 Arts and culture; spatial digital humanities.
- T15 History of cartography and historical cartography.
- T16 Digital issues in cartographic heritage; map and geoinformation curatorship.
- T17 Ubiquitous cartography and theoretical cartography.
- T18 Critical cartography; GIS and society.
- T19 Web cartography; map services and apps; GIS cloud computing.
- T20 Collaborative mapping, volunteered geographic information, and crowdsourcing.
- T21 Open source mapping and open geospatial data.
- T22 Location based services, geospatial prospecting, and privacy issues.
- T23 Intellectual property rights in mapping and geospatial data.
- T24 Management, workflows, and supply chains for map publishing and geospatial products.



- T25 Atlas cartography: advances in structure, design, and technology use.
- T26 Spatial semantics and ontologies; spatial data infrastructures; interoperability.
- T27 Quality of geospatial data, maps/charts; data integration, metadata, and standards.
- T28 Big data; sensor networks and remotely-sensed data for mapping; feature extraction from lidar.
- T29 Projections, coordinate systems, transformations, and conversions.
- T30 Topographic mapping; design and update of national mapping series.
- T31 Toponyms: place names as cultural heritage, place-name conflicts, toponymic field work and documentation.
- T32 Mountain cartography and terrain representations; recreation and orienteering maps.
- T33 Cadastral mapping; mapping for city management.
- T34 Digital Transportation Infrastructure: highly precise and continuously updated road models for autonomous vehicles.
- T35 Marine and aeronautical cartography, navigation charts and data, baselines, and sovereign zones.
- T36 Geospatial intelligence and military cartography.
- T37 Early warning, risk reduction, and crisis management using maps and geospatial information systems.
- T38 Sustainable development; adaptation and resiliency mapping.
- T39 Planetary, extrasolar, and celestial cartography.
- T40 Developments in intensively mapped domains: global change, soils, geology, agriculture, humanitarian programs, crime, facilities management, etc.

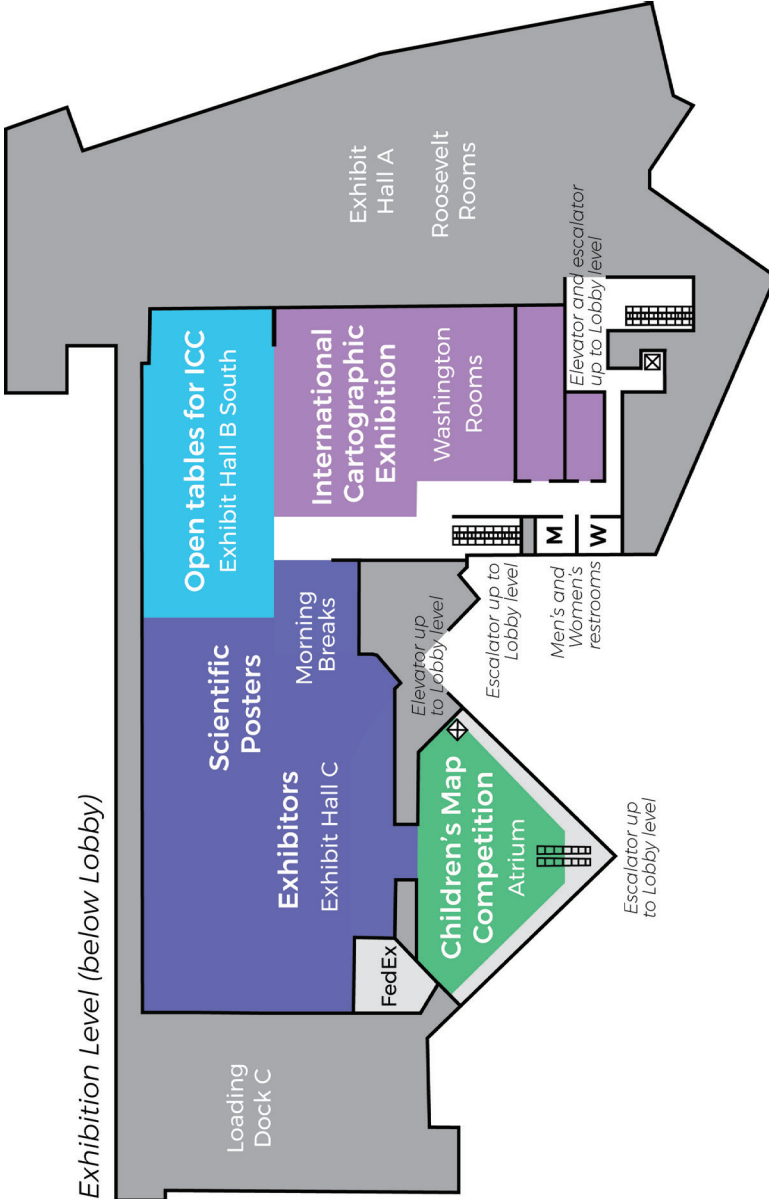


# FLOOR PLAN - LOBBY





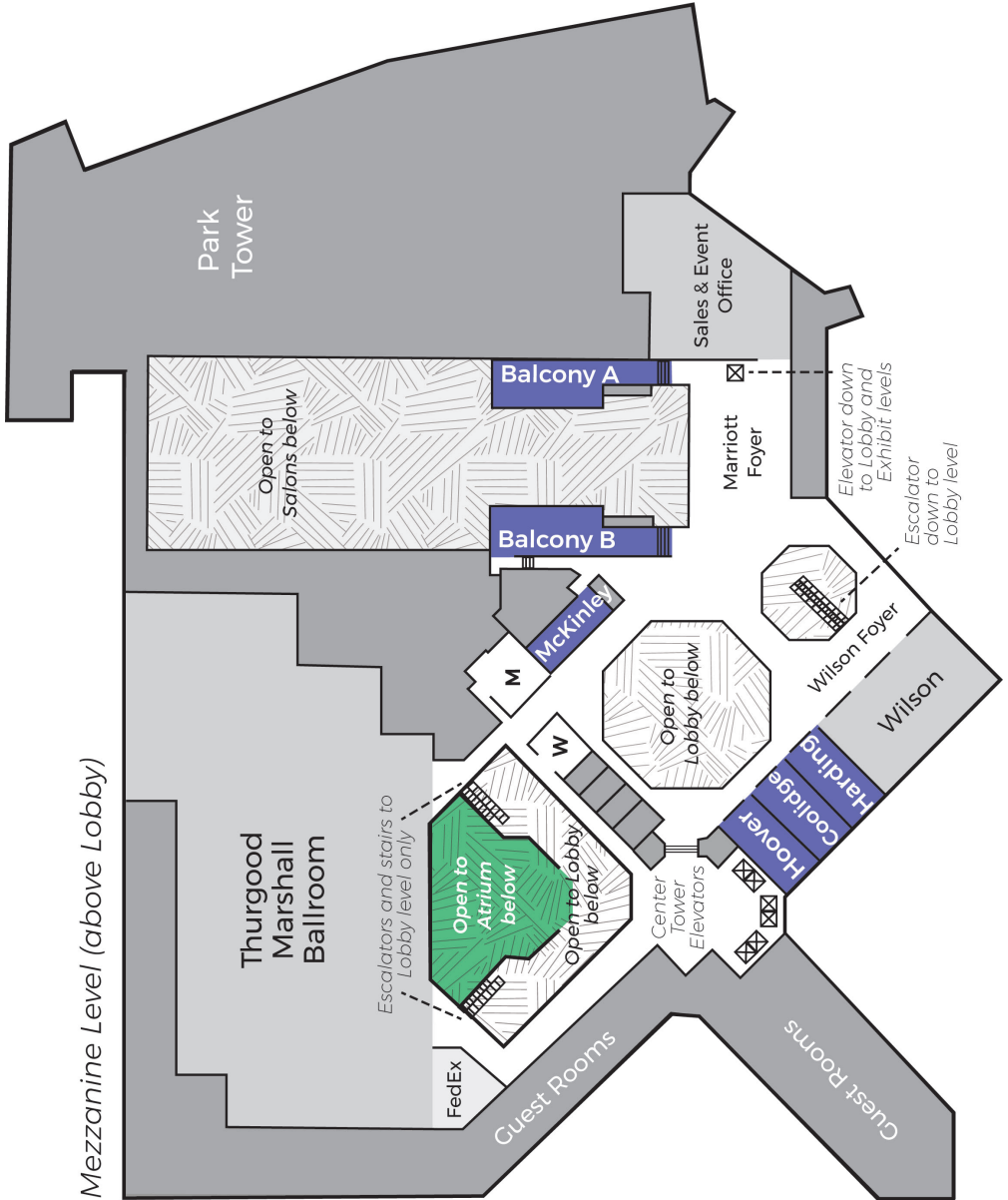
## FLOOR PLAN - EXHIBITION



Hotel maps by Cary Anderson and Cindy Brewer  
Sources: In-hotel walk throughs and detailed floor plans at  
[www.marriott.com/hotels/event-planning/business-meeting/wasdt-washington-marriott-wardman-park/#](http://www.marriott.com/hotels/event-planning/business-meeting/wasdt-washington-marriott-wardman-park/#)



# FLOOR PLAN - MEZZANINE



Mezzanine Level (above Lobby)

TIME	EVENT	MONDAY	ROOM
8:00 AM	<b>ICC 2017 REGISTRATION DESK OPEN</b> Marriott Wardman Park Hotel, Washington D.C.		Lobby Level
9:00 AM - 11:00 AM	<b>ICC 2017 OPENING CEREMONY</b> See online program for detailed schedule		Salon 2/3
	Welcome - ICC local organizers and CaGIS		
	Howard University Gospel Choir		
	Sharing Worldviews through Cartography - <b>Kari Craun</b> , U.S. Geological Survey		
	ICA and Cartography Today: Welcoming Remarks - <b>Menno-Jan Kraak</b> , President of the International Cartographic Association		
	Conference overview and insights		
	Overview of Washington D.C. activities		
11:00 AM	Join us for a big group photo of all ICC 2017 attendees		Salon 2/3
11:30 AM	<b>OPENINGS</b>		
	Exhibitor Booths		Exhibit Hall C
	International Cartographic Exhibition		Washington Rooms
	Barbara Bartz Petchenik Children's Map Competition		Atrium
11:30 AM - 12:30 PM	<b>HOSTED LUNCH</b>		Exhibit Hall C
	Bagged lunch hosted in Exhibit Hall for all ICC 2017 attendees		

TIME	EVENT	MONDAY	ROOM
1:30 PM - 2:30 PM	TECHNICAL SESSIONS – 3500s		
	Only presenting authors are listed - see app or online schedule for full author lists with affiliations		
<b>INTERNET RESOURCES</b>			<b>Delaware A</b>
<b>In</b>	<b>COMMISSION: MAPS AND THE INTERNET</b>		
1:30 PM	3501.1 - Essential and Accidental Functionality of Cartographic Programs on the Web - <b>Florian Ledermann</b>		
1:50 PM	3501.2 - A scientometric analysis of cartographic open access journals - <b>Alexander Wolodtschenko</b>		
<b>GEOVISUAL ANALYTICS FOR SOCIAL MEDIA DATA</b>			<b>Delaware B</b>
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
1:30 PM	3502.1 - Paper, Pen and Funny Doodles - How to Integrate Network Mining into Geovisualization Tools - <b>Alexander Saveljev</b>		
1:50 PM	3502.2 - Using Graphs for the Analysis and Visualization of Communities from Location-Based Social Media Content - <b>Thomas Gründemann</b>		
2:10 PM	3502.3 - Mining Spatio-temporal Dynamics from Tweets: A Case Study on Alaska Travel Patterns - <b>Caixia Wang</b>		
<b>MAPPING LAND RESOURCES</b>			<b>Virginia A</b>
1:30 PM	3503.1 - Sensitivity analysis of ice production model in Ross Ice Shelf Polynya - <b>Xi Zhao</b>		
1:50 PM	3503.2 - Forest Resources Assessment - <b>Ansumana Tamba</b>		
2:10 PM	3503.3 - Cartographic representation of research activities in the Russian Arctic in the period from 1950 up to the present day - <b>Anastasia Gorevalova</b>		
<b>VISUALIZATION FOR ENHANCED EARLY WARNING</b>			<b>Virginia B</b>
<b>Ea</b>	<b>COMMISSION: CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT</b>		
1:30 PM	3504.1 - Mapping Landslides Susceptibility In a Traditional Northern Nigerian City - <b>Olawale Oluwafemi</b>		
1:50 PM	3504.2 - Modeling and representation of spatial uncertainty in risk maps - <b>Jean-François Girres</b>		
2:10 PM	3504.3 - Developing the GEO Client Chilean application for Disasters within the Sendai Framework on disasters risk reduction - <b>Lucia Lovison-Golob</b>		

TIME	EVENT	MONDAY	ROOM
<b>ACCESSIBILITY I</b>			Virginia C
<b>Ac</b>	<b>COMMISSION: MAPS AND GRAPHICS FOR BLIND AND PARTIALLY SIGHTED PEOPLE</b>		
1:30 PM	3505.1 - Mapping Norway – a method to register and survey the status of accessibility - <b>Sven Michaelis</b>		
1:50 PM	3505.2 - Quality Assessment and Accessibility Mapping in an Image-based Geocrowdsourcing Testbed - <b>Matthew Rice</b>		
<b>CLUSTERING AND NETWORKS</b>			Maryland A
1:30 PM	3506.1 - Developing spatial clustogram and co-clustogram as new visual analytics for exploratory spatial data analysis - <b>Sang-Il Lee</b>		
1:50 PM	3506.2 - Significant locations in auxiliary data as seeds for typical use cases of point clustering - <b>Johannes Kröger</b>		
2:10 PM	3506.3 - Mapping and Analysis of the school network of Makkah al-Mukarramah (Saudi Arabia) - <b>Mongi Belarem</b>		
<b>ATLAS AND TIME</b>			Maryland B
<b>At</b>	<b>COMMISSION: ATLASES</b>		
1:30 PM	3507.1 - Turning a school atlas into a history atlas: the Bos-atlas online 1877-1939 - <b>Ferjan Ormeling</b>		
1:50 PM	3507.2 - Czech Historical Atlas (1918–2018) as an Example of Interdisciplinary Project - <b>Pavel Seemann</b>		
2:10 PM	3507.3 - Monitoring Global Urbanization: The Atlas of Urban Expansion - <b>Anthony Flint</b>		
<b>COGNITION AND VIRTUAL ENVIRONMENTS</b>			Maryland C
<b>Co</b>	<b>COMMISSION: COGNITIVE ISSUES IN GEOGRAPHIC INFORMATION VISUALIZATION</b>		
1:30 PM	3508.1 - Remembering what we see: Designing virtual environments to improve visuo-spatial recall for navigation tasks - <b>Ismini-Eleni Lokka</b>		
1:50 PM	3508.2 - The complex tasks with 3D cartographic visualization – the role of immersion and interactivity - <b>Petr Kubiček</b>		
2:10 PM	3508.3 - Crowdsourced mapping in 3d: From sharing to collaborative building 3d models for online mapping - <b>Chengbi Liu</b>		
<b>WORLD CARTOGRAPHIC FORUM</b>			Harding
1:30 PM - 2:30 PM	3509 - Discussion session for leaders of national cartographic societies - <b>Chaired by Alexander Kent</b>		

TIME	EVENT	MONDAY	ROOM
<b>LBS: NAVIGATION SYSTEMS - I</b>			<b>Coolidge</b>
<b>Lo</b>	<b>COMMISSION: LOCATION BASED SERVICES</b>		
1:30 PM	3510.1 - Indoor Semantic Wayfinding - <b>Haosheng Huang</b>		
1:50 PM	3510.2 - Guiding people along more intuitive indoor paths - <b>Nina Vanhaeren</b>		
2:10 PM	3510.3 - A Landmark-based Attractiveness Strength Grid Model for Indoor Wayfinding - <b>Kai Mao</b>		
<b>MAPPING PEOPLES</b>			<b>Hoover</b>
<b>Cr</b>	<b>SPECIAL TOPIC: CRITICAL CARTOGRAPHY</b>		
1:30 PM	3511.1 - Seeing the Unseen: an Indigenous Heritage's Mapping Project - <b>Justine Gagnon</b>		
1:50 PM	3511.2 - HÓHTA'HANÉ: Mapping Genocide & Restorative Justice In Native America - <b>Annita Lucchesi</b>		
2:10 PM	3511.3 - Art and Cartography as a Critique of Borders - <b>Daniel Ribeiro</b>		
2:30 PM - 2:50 PM	<b>BREAK</b>		
	First afternoon break - Meet presenters in Poster Session A: <b>Ar Hs De Ub Cr</b>		



TIME	EVENT	MONDAY	ROOM
POSTER SESSION A:			Exhibit Hall C
2:30 PM - 5:30 PM	<b>Scientific posters on Art, History, Design, Ubiquity, and Critical Cartography Topics</b>		
	Practice of Historical Cartography: An Approach to Trace the Development of Geodesy Education in Indonesia - <b>Ajeng Yarista</b>		
	Analysis of the limit conflict between the municipalities of Catu and Pojuca, Brazil using Cartography - <b>Gessica Araujo</b>		
	Evaluating visual contrast and hierarchy relations of cartographic features across multi-scale map displays - <b>P. William Limpisathian</b>		
	Features of the irregular occupation process in Pituauçu Metropolitan Park, Salvador, Bahia, Brazil - <b>Pablo Cruz</b>		
	Cartography in Ukraine: pragmatic aspect and place of Cartography in Earth Sciences - <b>Oleg Dmytrykov</b>		
	Lay of the Land: Social Structure and the Platting of Industrial Towns - <b>Amy Rock</b>		
	How Deep Must Be Cadastral Information? - <b>Francis Roy</b>		
	Digital Compilation and Publishing of a 16th-Century Copperplate Map - <b>Andrew Taylor</b>		
	Thematic Maps of the Woman Statistics in Turkey - <b>Dogus Guler</b>		
	Cartographic image for Gepark mapping - <b>Mamoru Koarai</b>		
	A New Design for a Map of Historic Buildings in Istanbul, based on the Insurance Maps of Jacques Pervititch - <b>Alper Sen</b>		
	Historical Shipwrecks off the Brazilian Coast: Digital Atlas Project - <b>Ricardo Dos Santos Guimarães</b>		
	QUALIFYING THE CITY FOR THE PEDESTRIAN - a cartographical subject and a current challenge to the public urban planning (São Paulo) - <b>Katia Canova</b>		
	Mistakes in Catalogs Aiding Map Researchers - <b>Janos Jeney</b>		
	Hundred-years-of Land-use Changes in the Region of Shilin, Taipei - <b>Ching Jen Kao</b>		
	Sangkulirang Mangkalihat: The Earliest Rock Art In The World - <b>Dirga Sumantri</b>		
	Design and Visualization of Indoor Maps Based on Spatial Cognition - <b>Zongyi He</b>		
	Historical Cartography of Araxá - MG: Past and Present in the Reconstruction of Araxá Municipality Mapping - <b>Roberta Maria Porfírio Borges</b>		
	Buitenzorg-Soekaboemi-Tjiandjoer Railway Heritage, Designing a Cultural Heritage Route Map - <b>Dicky Soeria Atmadja</b>		

TIME	EVENT	MONDAY	ROOM
	Revelation of 'Hidden' Balinese Geospatial Heritage on A Map - <b>Dicky Soeria Atmadja</b>		
	Sangkulirang Mangkalihat, The Earliest Prehistoric Rock-Art in the World - <b>Dicky Soeria Atmadja</b>		
	A dynamic urban history through maps - the zone case west city and the river janeiro - brazil - <b>Paula Maria Almeida</b>		
	The Role of Paradigmatic Style in Cartographic Design - <b>Mark Denil</b>		
	A case study about a maps embroidery that representing a capital of Brazil - <b>Ana Ortiz</b>		
	Cartographic memory preservation of the Petrópolis city in Brazil: Koeler Map scanning using photographic survey - <b>Manoel Fernandes</b>		
	Linking Historical Maps to the USC Shoah Foundation Visual History Archive - <b>Yao-Yi Chiang</b>		
	Mapping in Middle East : New Eye. Battir, village of Palestine (a Unesco World Heritage Site, since June 2014) - <b>Jasmine Desclaux-Salachas</b>		
	Some Arguments Against the Flat Earth Mith - <b>Carlos Rocha</b>		
	Distribution of the Sengen Shrines and Viewshed from the top of Mount Fuji - <b>Kei Sakamoto</b>		
	25 Years International Correspondence Seminars in Cartosemiotics - <b>Alexander Wolodtschenko</b>		
	The Geological Calendar 2002-2014 as basis for ubiquitous photoatlases - <b>Alexander Wolodtschenko</b>		
	An examination of countries with voluntary political party and institutionalized legislative gender quotas - <b>Courtney Page</b>		
	The use of cartographic tools to demonstrate the uses and meanings of Cajaíba Island, Brazil, by quilombo communities - <b>Michael Heimer</b>		
	The utility of Cartography in the research of the impacts of the Shipyard of Maragogipe/Brazil on quilombo communities - <b>Michael Heimer</b>		
	Political and Administrative zoning of Ukrainian land on maps in the XVI century - <b>Rostyslav Sossa</b>		
	Discussion on Computer Cartography Automation from Perspective of Information Control Theory - <b>Tao Feng</b>		
	A Spatio-Temporal Framework Construction and Service of Nanjing over the Past Hundred Years: Framework and Progress - <b>Di Hu</b>		

TIME	EVENT	MONDAY	ROOM
2:50 PM - 3:50 PM	TECHNICAL SESSIONS – 3600s		
<b>INTERNET MAPPING TOPICS - I</b>			Delaware A
2:50 PM	3601.1 - Magrit: a new thematic cartography tool - <b>Matthieu Viry</b>		
3:10 PM	3601.2 - A new integrated and seamless Map of the Americas - <b>Rodrigo Barriga Vargas</b>		
<b>VISUALIZING FLOWS</b>			Delaware B
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
2:50 PM	3602.1 - Cartography analysis of Bike Sharing Flows as a decision tool for urban planner in Lyon Metropolitan Area - <b>Nicolas Ovtracht</b>		
3:10 PM	3602.2 - Revisiting flow maps: a classification and a 3D alternative to visual clutter - <b>Yuhang Gu</b>		
3:30 PM	3602.3 - Facilitating insights with a user adaptable dashboard, illustrated by airport connectivity data - <b>Ieva Dobraja</b>		
<b>ORIENTEERING MAPS</b>			Virginia A
<b>Mt</b>	<b>COMMISSION: MOUNTAIN CARTOGRAPHY</b>		
2:50 PM	3603.1 - Semi-Automatic Extraction of Near-Ground Vegetation from LiDAR Data as Base for Orienteering Maps - <b>Gianreto Schaad</b>		
3:10 PM	3603.2 - The evolution of printing technologies in the development of orienteering maps - <b>László Zentai</b>		
3:30 PM	3603.3 - Automatically Generated Vegetation Density Maps with LiDAR Survey for Orienteering Purpose - <b>Dušan Petrovič</b>		
<b>SENSOR DATA FOR EARLY WARNING AND DISASTER RISK REDUCTION AND MANAGEMENT - I</b>			Virginia B
<b>Ea</b>	<b>COMMISSION: CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT</b>		
2:50 PM	3604.1 - Quantification, classification and mapping of spatial uncertainties of floods - <b>Nancy Joy Lim</b>		
3:10 PM	3604.2 - New Map Symbol System for Disaster Management - <b>Silvia Marinova</b>		
3:30 PM	3604.3 - Probabilistic determination of a flood area - <b>Rodolfo Méndez</b>		
<b>MAPPING ACCESSIBILITY</b>			Virginia C
<b>Ac</b>	<b>COMMISSION: MAPS AND GRAPHICS FOR BLIND AND PARTIALLY SIGHTED PEOPLE</b>		
2:50 PM	3605.1 - Accessibility in Pedestrian Routing - <b>Amy Lobben</b>		

TIME	EVENT	MONDAY	ROOM
3:10 PM	3605.2 - Teaching/Research Project 'Wheelmap' - <b>Andreas Collenstede</b>		
3:30 PM	3605.3 - A confidence-based approach for the assessment of accessibility of pedestrian networks for manual wheelchair users - <b>Amin Gharebaghi</b>		
<b>SPATIAL ANALYSIS AND MODELING WITH BIG DATA</b>			<b>Maryland A</b>
<b>An</b>	<b>COMMISSION: GEOSPATIAL ANALYSIS AND MODELING</b>		
2:50 PM	3606.1 - Check-in Behavior and Land Spatiotemporal Vibrancy in Urban China - <b>Chao Wu</b>		
3:10 PM	3606.2 - Mapping landscape change using multi-resolution remotely-sensed data, intensity analysis and trend analysis - <b>Zahn Munch</b>		
3:30 PM	3606.3 - Study on Calculating Method of Road Importance Considering Dynamic Attributes - <b>Chenxi Yang</b>		
<b>ATLAS TYPES I</b>			<b>Maryland B</b>
<b>At</b>	<b>COMMISSION: ATLASES</b>		
2:50 PM	3607.1 - Design and Implementation of a Novel Geospatial Search Tool for Atlas Collections - <b>Alexander Boie</b>		
3:10 PM	3607.2 - Design and implementation of the Web Linguistic and Ethnographic Atlas of Colombia - <b>Luz Angela Rocha</b>		
3:30PM	3607.3 - Building Better Marine Maps: The Ecological Atlas of the Bering, Chukchi, and Beaufort Seas - <b>Daniel Huffman</b>		
<b>COGNITION AND WAYFINDING</b>			<b>Maryland C</b>
<b>Co</b>	<b>COMMISSION: COGNITIVE ISSUES IN GEOGRAPHIC INFORMATION VISUALIZATION</b>		
2:50 PM	3608.1 - A Cognitive Approach to 3D Wayfinding in the Mobile Age - <b>Xiaobai Yao</b>		
3:10 PM	3608.2 - An Investigation in to Challenges Experienced When Planning Routes, Navigating and Wayfinding - <b>Erin Koletsis</b>		
3:30 PM	3608.3 - The bounds of distortion: truth, meaning and efficacy in digital geographic representation - <b>Lucas Godfrey</b>		
<b>ARTISTRY</b>			<b>Harding</b>
<b>Ar</b>	<b>COMMISSION: ART AND CARTOGRAPHY</b>		
2:50 PM	3609.1 - The principles of map design and the artistry involved in the first professional drawing the topography of Europe - <b>Beata Medynska-Gulij</b>		
3:10 PM	3609.2 - An interdisciplinary approach to mapping through scientific cartography, design and artistic expression - <b>Joanna Gardener</b>		
3:30 PM	3609.3 - Designing an Experience: Maps and Signs at the Archaeological Site of Troy - <b>Chelsea Nestel</b>		

TIME	EVENT	MONDAY	ROOM
<b>LBS: NAVIGATION SYSTEMS - II</b>			<b>Coolidge</b>
<b>Lo</b>	<b>COMMISSION: LOCATION BASED SERVICES</b>		
2:50 PM	3610.1 - Developing Indoor Navigation and Orientation on Mobile Devices using Tango Technology - <b>Rex Cammack</b>		
3:10 PM	3610.2 - The Indoor Campus Map: challenges and perspectives to mapping the indoors at Federal University of Paraná - <b>Luciene Delazari</b>		
3:30 PM	3610.3 - Estimation of the Exact Floor Information Using Mobile-Embedded Sensors - <b>Semih Dalgın</b>		
<b>IMMERSIVE REALITIES</b>			<b>Hoover</b>
2:50 PM	3611.1 - Immersive Tangible Modelling with Geospatial data - <b>Payam Tabrizian</b>		
3:10 PM	3611.2- Visualizing changes in land use over time in a virtual reality system - <b>Lukasz Halik</b>		
3:30 PM	3611.3 - Geospatial augmented reality for the interactive exploitation of large-scale walkable orthoimage maps in museums - <b>Robert Wüest</b>		
3:50 PM - 4:10 PM	<b>BREAK</b>		
	Second afternoon break - Meet presenters in Poster Session A: <b>Ar Hs De Ub Cr</b>		

TIME	EVENT	MONDAY	ROOM
4:10 PM - 5:30 PM	TECHNICAL SESSIONS – 3700s		
<b>INTERNET MAPPING TOPICS - II</b>			<b>Delaware A</b>
4:10 PM	3701.1 - Vehicle Tracking and Alert System for Mini-Buses on the University of Ghana, Legon Campus- <b>Wiafe Owusu-Banahene</b>		
4:30 PM	3701.2 - Mapping Air Population - <b>Michael Peterson</b>		
4:50 PM	3701.3 - Smart Points of Interest - Development of Linked Open Geo-Data - <b>Otakar Cerba</b>		
5:10 PM	3701.4 - The Internet-of-Things: The state-of-the-art Tool for Mapmakers - <b>Kazimierz Becek</b>		
<b>GEOVISUAL ANALYTICS OF MOVEMENT AND MOBILITY</b>			<b>Delaware B</b>
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
4:10 PM	3702.1 - Interactive visual exploration and analysis of origin-destination data - <b>Linfang Ding</b>		
4:30 PM	3702.2 - Visualization of stable and mobile objects at mass events recorded with UAVs - <b>Lukasz Wielebski</b>		
4:50 PM	3702.3 - Using space-time cube for visualization and analysis of active transportation patterns derived from public webcams - <b>Anna Petrasova</b>		
5:10 PM	3702.4 - Exploration of spatio-temporal patterns of students' movement in field trip by visualizing the log data - <b>Nahye Cho</b>		
<b>TOPOGRAPHIC MAPS</b>			<b>Virginia A</b>
<b>Mt</b>	<b>COMMISSION: MOUNTAIN CARTOGRAPHY</b>		
4:10 PM	3703.1 - Quality Assessment for Open Topographic Maps - some thoughts on sustainable data caption, creation and design - <b>Karel Kriz</b>		
4:30 PM	3703.2 - Comparing terrain partitioning methods for national mapping - <b>Samantha Arundel</b>		
4:50 PM	3703.3 - Interactive map animation of topographic transformation based on geomorphing of historical DEMs - <b>Tao Wang</b>		
<b>SENSOR DATA FOR EARLY WARNING AND DISASTER RISK REDUCTION AND MANAGEMENT - II</b>			<b>Virginia B</b>
<b>Ea</b>	<b>COMMISSION: CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT</b>		
4:10 PM	3704.1 - Flood Impact and Risk Assessment for Urban City Ghent - <b>Samuel Van Ackere</b>		
4:30 PM	3704.2 - Semi-automated landform classification for hazard mapping of soil liquefaction by earthquake - <b>Takayuki Nakano</b>		

TIME	EVENT	MONDAY	ROOM
4:50 PM	3704.3 - Mapping Disaster Risk Reduction and Climate Change Adaptation: progress in South Africa - <b>Judith Storie</b>		
5:10 PM	3704.4 - Temporal Changes of Community Resilience to Drought Hazard in South-Central United States - <b>Volodymyr Mihunov</b>		
<b>MAPPING FOR VISUAL IMPAIRMENTS</b>			<b>Virginia C</b>
<b>Ac</b>	<b>COMMISSION: MAPS AND GRAPHICS FOR BLIND AND PARTIALLY SIGHTED PEOPLE</b>		
4:10 PM	3705.1 - Accessible maps for the color vision deficient observers: past and present knowledge and future possibilities - <b>Anne Kristin Kvitle</b>		
4:30 PM	3705.2 - City Tourist Map design for red-green color blindness - <b>Haihong Zhu</b>		
4:50 PM	3705.3 - Characteristics of Verbal Maps for Visually Impaired People on the Website in Japan - <b>Masahiro Tanaka</b>		
5:10 PM	3705.4 - Analysis of adapted books and the use of Tactile Cartography in the public schools of the State of São Paulo, Brazil - <b>Barbara Jordão</b>		
<b>ANALYSIS AND MODELING OF URBAN DYNAMICS</b>			<b>Maryland A</b>
<b>An</b>	<b>COMMISSION: GEOSPATIAL ANALYSIS AND MODELING</b>		
4:10 PM	3706.1 - Mapping similarities in temporal parking occupancy behavior based on city-wide parking meter data - <b>Fabian Bock</b>		
4:30 PM	3706.2 - Estimating changes in urban land and urban population using refined areal interpolation techniques - <b>Hamidreza Zoraghein</b>		
4:50 PM	3706.3 - Predicting Urban Damage from Tropical Storms and Hurricanes in the Caribbean - <b>Jessica Fayne</b>		
<b>ATLAS TRENDS</b>			<b>Maryland B</b>
<b>At</b>	<b>COMMISSION: ATLASES</b>		
4:10 PM	3707.1 - Futures for Atlases Grounded in the Past - <b>Eric Losang</b>		
4:30 PM	3707.2 - Story Telling in Atlases - The intrinsic way - <b>Nina Bonassi</b>		
4:50 PM	3707.3 - From Physical Campus Space to a Full-view Figure: University Atlas Compiling Based on 'Information Design' Concept - <b>Ge Song</b>		
5:10 PM	3707.4 - Platform Statatlas - A Platform for cross-media Atlases and new dissemination ways in atlas cartography - <b>Olaf König</b>		

TIME	EVENT	MONDAY	ROOM
<b>PERCEPTION AND THEMATIC MAP SYMBOL DESIGN I</b>			<b>Maryland C</b>
<b>Co</b>	<b>COMMISSION: COGNITIVE ISSUES IN GEOGRAPHIC INFORMATION VISUALIZATION</b>		
4:10 PM	3708.1 - An Evaluation of Pictorial Symbols for Tourist Maps based on the Perceptual Laws of Gestalt Theory - <b>Claudia Sluter</b>		
4:30 PM	3708.2 - Distortions and perception of different population density maps of Lithuania - <b>Giedrė Beconytė</b>		
4:50 PM	3708.3 - Creating climate maps of Greece for colorblind users: the Geoclima climate maps case study - <b>Apostolos Papakonstantinou</b>		
5:10 PM	3708.4 - The Method of Minimum Information Loss as a Classification Method for Visualizing Spatial Data - <b>Toshihiro Osaragi</b>		
<b>CULTURE AND ART</b>			<b>Harding</b>
<b>Ar</b>	<b>COMMISSION: ART AND CARTOGRAPHY</b>		
4:10 PM	3709.1 - Fictional Volunteered Geographic Information in Dream Cartography - <b>Cristina Iosifescu Enescu</b>		
4:30 PM	3709.2 - An Assessment of Cartographic Methods for Cultural Mapping - <b>John Kostelnick</b>		
4:50 PM	3709.3 - Mapping language with the Nunaliit Atlas Framework: The languages of Iran and the Inuit language in Canada - <b>Kumiko Murasugi</b>		
<b>LBS: RESEARCH AGENDA DISCUSSION</b>			<b>Coolidge</b>
<b>Lo</b>	<b>COMMISSION: LOCATION BASED SERVICES</b>		
4:10 PM - 5:30 PM	3710 - Open discussion of the draft research agenda for the Commission on Location Based Services - <b>Chaired by Haosheng Huang</b>		
<b>URBAN AND REGIONAL HISTORIC MAPS</b>			<b>Hoover</b>
<b>Hs</b>	<b>COMMISSION: HISTORY OF CARTOGRAPHY</b>		
4:10 PM	3711.1 - The Reshapement of the City of Berlin's Maps - <b>Frederik Kulpi</b>		
4:30 PM	3711.2 - Issues of Georeferencing Iconographic Sources Related to Thirty Years' War in the Czech Lands - <b>Tomas Janata</b>		
4:50 PM	3711.3 - Mapping the capitals Washington D.C., Adelaide and Canberra: the topographical genius of L'Enfant, Light, and the Griffins - <b>Kelly Henderson</b>		
5:10 PM	3711.4 - Santa Cruz State and its evolution under a cartographic approach - Rio de Janeiro - Brasil - <b>Paulo Menezes</b>		
6:00 PM - 7:30 PM	<b>OPENING RECEPTION IN EXHIBIT HALL</b>		<b>Exhibit Hall C</b>



TIME	EVENT	TUESDAY	ROOM
8:30 AM - 9:50 AM	TECHNICAL SESSIONS — 4100s		
<b>NATIONAL MAPPING ON DEMAND</b>			<b>Delaware A</b>
<b>In</b>	<b>COMMISSION: MAPS AND THE INTERNET</b>		
8:30 AM	4101.1 - Visualizing City Models in a Web-Browser. CASE: Piloting 3D-Buildings in the Finnish National Topographic Database- <b>Pekka Latvala</b>		
8:50 AM	4101.2 - Minecraft on Demand : The new IGN service which combines game and 3D cartography - <b>François Lecordix</b>		
9:10 AM	4101.3 - Current and Future USGS 3DEP Elevation Services - <b>Barry Miller</b>		
9:30 AM	4101.4 - The National Map Products, Services, and Applications - <b>Calvin Meyer</b>		
<b>CARTOGRAPHIC REPRESENTATION IN GEOVISUAL ANALYTICS</b>			<b>Delaware B</b>
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
8:30 AM	4102.1 - Circular icons to represent absolute values relating to areal features - <b>Philipp Meyer</b>		
8:50 AM	4102.2 - The Sum of Which Parts? An Approach for Representing Composite Index Maps - <b>Cary Anderson</b>		
9:10 AM	4102.3 - Exploring multivariate representations of indices along linear geographic features - <b>Susanne Bleisch</b>		
9:30 AM	4102.4 - Automated Generation of Symbolic Representation for Buildings - <b>Peng Ti</b>		
<b>RELIEF PRESENTATIONS I</b>			<b>Virginia A</b>
<b>Mt</b>	<b>COMMISSION: MOUNTAIN CARTOGRAPHY</b>		
8:30 AM	4103.1 - A Design of Contour Generation for Topographic Maps by Adaptive DEM-Smoothing - <b>Pyy Kettunen</b>		
8:50 AM	4103.2 - Generalizing Relief Shading with Surface-Normal Vectors - <b>Patrick Kennelly</b>		
9:10 AM	4103.3 - Texture generation for expressive rock drawing - <b>Sidonie Christophe</b>		
<b>INNOVATIVE DATA AND MAPPING METHODS FOR DISASTER RISK REDUCTION</b>			<b>Virginia B</b>
<b>Ea</b>	<b>COMMISSION: CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT</b>		
8:30 AM	4104.1 - Recent innovation of geospatial information technology to support disaster risk management and responses - <b>Hiroshi Une</b>		
8:50 AM	4104.2 - The Role of Cartographic Interface Complexity on Decision-Making: A Preliminary Hazardous Waste Trade Case Study - <b>Kristen Vincent</b>		

TIME	EVENT	TUESDAY	ROOM
9:10 AM	4104.3 - Hazards and accessibility: combining and visualizing threat and open infrastructure data for disaster management - <b>Jordi Tost</b>		
9:30 AM	4104.4 - Building A Geo-targeted Event Observation (Geo) Viewer for Disaster Management and Situation Awareness - <b>Ming-Hsiang Tsou</b>		
<b>CHILDREN'S MENTAL THINKING</b>			Virginia C
<b>Ch</b>	<b>COMMISSION: CARTOGRAPHY AND CHILDREN</b>		
8:30 AM	4105.1 - Cartography teaching and the development of spatial thinking in Brazilian geography textbooks - <b>Ronaldo Duarte</b>		
8:50 AM	4105.2 - Mental map and spatial thinking - <b>Paula Juliasz</b>		
9:10 AM	4105.3 - Teaching Spatial Thinking with the National Atlas of Korea in U.S. Secondary Level Education - <b>Gregory Chu</b>		
9:30 AM	4105.4 - Children and map-reading - <b>Thorsteinn Sigurjonsson</b>		
<b>GEOSPATIAL ANALYSIS FOR TRANSPORTATION RESEARCH</b>			Maryland A
<b>An</b>	<b>COMMISSION: GEOSPATIAL ANALYSIS AND MODELING</b>		
8:30 AM	4106.1 - Towards Traffic Bottleneck Visualization - Combining Traffic Congestion and Complicated Crossings - <b>Andreas Keler</b>		
8:50 AM	4106.2 - A multi-factor GIS method to identify optimal geographic locations for electric vehicle (EV) - <b>Yongqin Zhang</b>		
9:10 AM	4106.3 - From Crowdsourcing Trajectory to Street Center-line Network: A Method Based on Delaunay Triangulation - <b>Tinghua Ai</b>		
9:30 AM	4106.4 - A Weighted Spatio-temple Kernel Approach for Traffic Events Visualization - <b>Jiantong Zhang</b>		
<b>ATLAS TYPES II</b>			Maryland B
<b>At</b>	<b>COMMISSION: ATLASES</b>		
8:30 AM	4107.1 - Does the 21st century still need an atlas classification? - <b>Thomas Schulz</b>		
8:50 AM	4107.2 - Thematic Map Section of the Statistical Abstract of Israel - <b>Oren Raz</b>		
9:10 AM	4107.3 - About the National atlas of Uzbekistan - <b>Risolat Yuldasheva</b>		
9:30 AM	4107.4 - Design of the first national water atlas of China - <b>Chunfeng Hao</b>		
<b>PERCEPTION AND THEMATIC MAP SYMBOL DESIGN II</b>			Maryland C
<b>Co</b>	<b>COMMISSION: COGNITIVE ISSUES IN GEOGRAPHIC INFORMATION VISUALIZATION</b>		

TIME	EVENT	TUESDAY	ROOM
8:30 AM	4108.1 - UK Election Cartography - <b>Kenneth Field</b>		
8:50 AM	4108.2 - How Maps Distort the View of Reality - Mapping the Austrian Presidential Election 2016 - <b>Karel Kriz</b>		
9:10 AM	4108.3 - Cartograms in the Making: An Experiment in Aesthetic Design - <b>Barry Kronenfeld</b>		
9:30 AM	4108.4 - Could the outcome of the 2016 US elections have been predicted from past voting patterns? - <b>Peter Schmitz</b>		
<b>HISTORICAL TOPOGRAPHIC MAPS</b>			<b>Harding</b>
<b>Hs</b>	<b>COMMISSION: HISTORY OF CARTOGRAPHY</b>		
8:30 AM	4109.1 - Mapping the WWII: G.S.M.S./A.M.S. Topographic Map Series of the Balkans (1939-1945) - <b>Mirela Altić</b>		
8:50 AM	4109.2 - Rethinking Cold War Cartography: Destabilising the Ontology of Soviet Military City Plans - <b>Martin Davis</b>		
9:10 AM	4109.3 - Assessing a potential solution for spatially referencing of historical aerial photography in South Africa - <b>Michele Denner</b>		
9:30 AM	4109.4 - The research to the versions of 1:25,000 topographical maps of Taiwan during Japanese rule period - <b>Ching-chi Huang</b>		
<b>LBS: MOBILE CARTOGRAPHY</b>			<b>Coolidge</b>
<b>Lo</b>	<b>COMMISSION: LOCATION BASED SERVICES</b>		
8:30 AM	4110.1 - Location-based applications using analog maps for sustainable local tourism information services - <b>Min Lu</b>		
8:50 AM	4110.2 - Context-Aware POI Recommendation in Location-Based Services - <b>Haosheng Huang</b>		
9:10 AM	4110.3 - Minimizing Discontinuity in Switching Heterogeneous Maps for Mobile Use - <b>Ruo Chen Si</b>		
9:30 AM	4110.4 - Location Spoofing in Location Based Game: A Case Study of Pokémon Go - <b>Bo Zhao</b>		
<b>AFFECTIVE AND MORE-THAN-REPRESENTATIONAL MAPPINGS</b>			<b>Hoover</b>
<b>Cr</b>	<b>SPECIAL TOPIC: CRITICAL CARTOGRAPHY</b>		
8:30 AM	4111.1 - Enfolding: A Geographical Imagination System - <b>Nick Lally</b>		
8:50 AM	4111.2 - Anxious Geographies: Map, Algorithm and Data - <b>Jeremy Crampton</b>		
9:10 AM	4111.3 - Mapping Dark Places - <b>Alexander Kent</b>		
9:50 AM - 10:20 AM	<b>BREAK</b>		<b>Exhibit Hall C</b>
	Morning break hosted in Exhibit Hall Meet presenters in Poster Session B: <b>Us Co Be</b>		

TIME	EVENT	TUESDAY	ROOM
<b>POSTER SESSION B:</b>			<b>Exhibit Hall C</b>
9:00 AM - Noon	<b>Scientific posters on Users, Cognition, and Bertin @ 50 Topics</b>		
	Hydrographic Mapping in Poland in Aspect of Thematic Cartographic Elaborations Provided by Polish Services - <b>Renata Brzozowska</b>		
	Analysis of tourist maps through low cost eye tracking - <b>Nadson de Jesus</b>		
	Mapping and Modeling of the Urban Expansion in the City of Rio de Janeiro - Brazil, with Support from Landsat Images - <b>Elizabeth de souza</b>		
	Methodological Design and Preliminary Application of a Monitoring System of Rural Landscapes in Argentina - <b>Lucila Masera</b>		
	A circle cartogram for the integrated visualization of time oriented data associated with spatial reference - <b>Lina Huang</b>		
	Cartography in textbooks in Brazil: a case of maps production based on "Semiology of Graphics" - <b>Fernanda Fonseca</b>		
	Cartographic rescue of planning tools from urban area of Londrina city-Parana-Brazil - <b>Nathália Rosolém</b>		
	The Effect of Individual Factors on Spatial Cognitive Behavior - <b>Daping Xi</b>		
	On the Way to Create Individualized Cartographic Images for Online Maps Using Free and Open Source Tools - <b>Csaba Szigeti</b>		
	Information availability: The influence of the user interface on spatial awareness in virtual geovisualizations - <b>Vojtěch Juřík</b>		
	Evolutionary Dynamics of the Coastal Spit of the Pirangi River in Ceará, Brazil - <b>Nicolly Leite</b>		
	Visualization of the supply-demand gap in childcare services with GIS - <b>Ryo Koizumi</b>		
	An improved approach with OpenMapSymbol model-based data translation and symbol rendering for point symbol sharing - <b>Taisheng Chen</b>		
	Cartography of impeachment president in Brazil - 2016: spatial representation of the politics process - <b>Rafael Sanzio dos Anjos</b>		
	A Review of Map Interactions and Needs in the Civil Affairs Operations Planning Process - <b>Ryan Mullins</b>		
	Usability Approach for Comparing Cartographic Products That Differs on Media Displayed - <b>Lilliam Sofia Gomez Solorzano</b>		
	Effectiveness and efficiency of using different types of treemap as diagrams in cartography - <b>Mengjie Zhou</b>		

TIME	EVENT	TUESDAY	ROOM
	Cartography and African-Brazilian traditional territories: the expansion of the Maracatu in Brazil and in the world - <b>Cleison Ferreira</b>		
	Brazilian Geopolitical Cartography based on BNDES Financing - <b>Fernanda Goes</b>		
	Georhetoric - <b>Evgeny (Eugene) Eremchenko</b>		
<b>PLENARY</b>			
10:20 AM - 11:30 AM	4200.1 - Mapping the Grand Canyon National Park - <b>Tom Patterson</b> , U.S. National Park Service		Salon 2/3

TIME	EVENT	TUESDAY	ROOM
11:30 AM - 1:30 PM	<b>LUNCH</b> (on your own - gather a group)		
	Meet presenters in Poster Session B: <b>Us Co Be</b>		
	Meet presenters in Poster Session C: <b>Vi An Ge Pj</b>		
11:40 AM - 12:30 PM	<b>ICA COMMISSION BUSINESS MEETINGS – 4300s</b>		
<b>Ea</b>	4304 - Business Meeting of the ICA Commission on Cartography in Early Warning and Crisis Management Chaired by Milan Konecny		Virginia B
<b>An</b>	4306 - Business Meeting of the ICA Commission on Geospatial Analysis and Modeling Chaired by Xiaobai Angela Yao		Maryland A
<b>At</b>	4307 - Business Meeting of the ICA Commission on Atlases Chaired by René Sieber		Maryland B
<b>Ar</b>	4309 - Business Meeting of the ICA Commission on Art and Cartography Chaired by Sébastien Caquard		Harding
12:30 PM - 1:20 PM	<b>ICA COMMISSION BUSINESS MEETINGS – 4400s</b>		
<b>Mt</b>	4403 - Business Meeting of the ICA Commission on Mountain Cartography Chaired by Dušan Petrovic		Virginia A
<b>Ac</b>	4405 - Business Meeting of the ICA Commission on Maps and Graphics for Blind and Partially Sighted People Chaired by Alejandra Coll Escanilla		Virginia C
<b>Co</b>	4408 - Business Meeting of the ICA Commission on Cognitive Issues in Geographic Information Visualization Chaired by Amy Griffin		Maryland C
<b>Lo</b>	4410 - Business Meeting of the ICA Commission on Location Based Services Chaired by Haosheng Huang		Coolidge

TIME	EVENT	TUESDAY	ROOM
POSTER SESSION C:			Exhibit Hall C
12:30PM - 3:30 PM	<b>Scientific posters on Visual Analytics, Analysis, Modeling, Generalization, and Projections Topics</b>		
	Dynamic visualization of the Characteristics of Rurban and their Livability - <b>Sunhui Sim</b>		
	Understanding flows of International tourist arrival in India: A Geo-spatial Approach - <b>Rakesh Kumar</b>		
	From Relative to Absolute Location for Localizing Victims in Mountain Area - A Preliminary Study - <b>Ana-Maria Olteanu Raimond</b>		
	Balanced Allocation of Multi-Criteria Geographic Areas by a Genetic Algorithm - <b>Christian Murphy</b>		
	A robust watermarking algorithm for vector map data - <b>Haowen Yan</b>		
	A geospatial analysis of filariasis transmission risk, and the environment, using remote sensing and GIS - <b>Pagadala Anand</b>		
	An integrated method for network-constrained point pattern analysis - <b>Ke Nie</b>		
	Visualization of Historical Combination Relationships among Municipalities in Japan Based on Surnames - <b>Takashi Kirimura</b>		
	An infographic with temporal insight to re-visualize 30 years lifespan of tropical cyclones as a complement of maps - <b>Feiran Sun</b>		
	Multiscale Structural Fractal Analysis of Road Networks <b>Hong Zhang</b>		
	Assessing different methods of Surface Area calculation in GIS - <b>Gabriel Lousada</b>		
	New 3D Image Products Development based on Stereo Mapping Satellite - <b>Bing Lei</b>		
	Route Alignment Planning for a New Highway between Two Cities using Geoinformatics Techniques - <b>M Surabuddin Mondal</b>		
	Generalization Selection of Hash-style Habitation Based on Voronoi Diagram - <b>Gao Kai</b>		
	Computation of the Boundaries of Linear/Polygonal Groups Based on Constrained Delaunay Triangulation - <b>Xiaomin Lu</b>		
	VR Based Interactive Methods for Exploring 3D Global Environment - <b>Liheng Tan</b>		
	An algorithm for filling depressions on digital elevation models using linear interpolation along "optimal" path - <b>Andrey Entin</b>		

TIME	EVENT	TUESDAY	ROOM
	Influence of topography on the spatial distribution of energy fluxes and actual evapotranspiration estimated by SEBAL model - <b>Ricardo Neves de Souza Lima</b>		
	Implementation framework for Interactive map based Narrative Geovisualization - <b>Hwahwan Kim</b>		
	An objective approach for estimating boundary roughness using publicly available elevation data - <b>Emitt Witt</b>		
	The Research of Multi-mediums Visualized Outputting of Map - <b>Qun Sun</b>		
	Generalization Problems of 3D Models and LoD Concept- <b>Azize UYAR</b>		
	Research on Indoor Virtual Environment Modeling Technology based on Panoramic Images - <b>Zhang Jinming</b>		
	Population-Based Optimized Least Squares Support Vector Machines Model for Flood Susceptible Modeling using GIS - <b>Phuong-Thao Ngo</b>		
	Proposal symbology for three-dimensional representation of poles of a power grid - <b>Suzana e Silva</b>		



TIME	EVENT	TUESDAY	ROOM
1:30 PM - 2:30 PM	TECHNICAL SESSIONS – 4500s		
<b>DATA FRAMEWORKS</b>			Delaware A
1:30 PM	4501.1 - The Dynamic Generative Mechanism of Web Thematic Map for Multi-Dimensions Data - <b>Tianqi Qiu</b>		
1:50 PM	4501.2 - A Big-Data-Oriented Framework for Geological Data Fusion - <b>Yueqin Zhu</b>		
2:10 PM	4501.3 - Research on Integrated Vector and Raster Data Organization Model Design Under the Distributed Environment - <b>DaoZhu Xu</b>		
<b>SCALE AND HIERARCHY IN GEOVISUAL ANALYTICS</b>			Delaware B
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
1:30 PM	4502.1 - Geovisualization applications to examine and explore high-density and hierarchical critical infrastructure data - <b>Robert Edsall</b>		
1:50 PM	4502.2 - A Visualization Tool for Illustrating Scaling Hierarchy of Geographic Features - <b>Ding Ma</b>		
2:10 PM	4502.3 - Micro Diagrams: A Multi-Scale Approach for Mapping Large Categorized Point Datasets - <b>Mathias Gröbe</b>		
<b>RELIEF PRESENTATIONS II</b>			Virginia A
<b>Mt</b>	<b>COMMISSION: MOUNTAIN CARTOGRAPHY</b>		
1:30 PM	4503.1 - It's a hill, get mapping it - <b>Steve Chilton</b>		
1:50 PM	4503.2 - The effectiveness of cartographic visualisations in landscape archaeology - <b>David Fairbairn</b>		
2:10 PM	4503.3 - Usability of an Augmented Reality Sandbox for Teaching Terrain-Based Principles - <b>Antoni Moore</b>		
<b>REMOTE SENSING FOR DISASTER RISK REDUCTION</b>			Virginia B
<b>Ea</b>	<b>COMMISSION: CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT</b>		
1:30 PM	4504.1 - Morphometric Characteristics of River Basin as Factors Controlling Accuracy of Hydrologic Predictions - <b>Małgorzata Wieczorek</b>		
1:50 PM	4504.2 - Mapping Air Pollutant Concentrations in Northern China during 2014-2015 using MODIS Aerosol Optical Depth Products - <b>Jonathan Li</b>		
2:10 PM	4504.3 - Mapping Landslides of Kedarnath (North India) Disaster of June 2013 Using Geospatial Technology - <b>P. K. Garg</b>		

TIME	EVENT	TUESDAY	ROOM
<b>STUDIES FROM THREE CONTINENTS</b>			Virginia C
<b>Ch</b>	<b>COMMISSION: CARTOGRAPHY AND CHILDREN</b>		
1:30 PM	4505.1 - A trial map and GIS class on junior high school with university collaboration in Yokohama, Japan - <b>Toshimitsu Tabe</b>		
1:50 PM	4505.2 - Didactical & Learning Cycle of Geoliteracy for Mobile Serious Game Based on Maps - <b>Yaïves Ferland</b>		
2:10 PM	4505.3 - Students' Cognitive Perception of Landscape Features: Empirical Research Using Cognitive Maps - <b>Jerneja Fridl</b>		
<b>NATIONAL SDI ACTIVITIES</b>			Maryland A
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
1:30 PM	4506.1 - Challenges in sharing of geospatial data by data custodians in South Africa - <b>Sissiel Kay</b>		
1:50 PM	4506.2 - 3D topography, part of the key register Topography in the Netherlands? - <b>Haico van der Vegt</b>		
2:10 PM	4506.3 - The Evolution of IDEE, the Spanish NSDI: good practices, lessons learnt and future perspective - <b>Antonio Rodriguez</b>		
<b>HYDROLOGICAL MAPPING</b>			Maryland B
1:30 PM	4507.1 - High Performance Processing to Enhance the National Hydrography Dataset with Lidar-Derived Drainage Lines - <b>Lawrence Stanislawski</b>		
1:50 PM	4507.2 - Modeling Groundwater Flow System of a Drainage Basin in the Basement Complex Environment of Southwestern Nigeria - <b>Akinola Akinwumiju</b>		
2:10 PM	4507.3 - Unmanned vehicle systems in hydrography survey - new opportunities and challenges - <b>Tea Duplančić Leder</b>		
<b>PERCEPTION OF TOPOGRAPHIC AND BASE MAPS</b>			Maryland C
<b>Co</b>	<b>COMMISSION: COGNITIVE ISSUES IN GEOGRAPHIC INFORMATION VISUALIZATION</b>		
1:30 PM	4508.1 - Does the Basemap Impact the Apprehension of Overlaid information in a Web Map? - <b>Terje Midtbø</b>		
1:50 PM	4508.2 - How to design a cartographic continuum to help users to navigate between two topographic styles? - <b>Guillaume Touya</b>		
2:10 PM	4508.3 - Preliminary Assessment Of The Impact Of Culture On Understanding Cartographic Representations - <b>Marcio Schmidt</b>		
<b>DYNAMIC 3D</b>			Harding
1:30 PM	4509.1 - Animations for 3D Solid Charts in a Virtual Globe - Techniques, Use cases, and Implementation - <b>Raimund Schnürer</b>		

TIME	EVENT	TUESDAY	ROOM
1:50 PM	4509.2 - 3D Models to Identify and to Quantify Obstructions in Airport Protection Zones - <b>Andrea Iescheck</b>		
2:10 PM	4509.3 - Generation and communication of dynamic maps using light projection - <b>Steffen Busch</b>		
<b>HISTORIC MAPS OF AFRICA</b>			<b>Hoover</b>
<b>Hs</b>	<b>COMMISSION: HISTORY OF CARTOGRAPHY</b>		
1:30 PM	4511.1 - Mapping the Suez Canal: Cartographic Heritage of a Nineteenth Century Engineering Behemoth- <b>Imre Demhardt</b>		
1:50 PM	4511.2 - David Livingstone's mapping of south-central Africa, 1849-1873 - <b>Elri Liebenberg</b>		
2:10 PM	4511.3 - A Cartographical History of the Quest for the Source of the Nile - <b>Lucia Lovison-Golob</b>		
2:30 PM - 2:50 PM	<b>BREAK</b>		
	Afternoon break - Meet presenters in Poster Session C: <b>Vi An Ge Pj</b>		

TIME	EVENT	TUESDAY	ROOM
2:50 PM - 3:50 PM	TECHNICAL SESSIONS – 4600s		
<b>THROUGH SCALE AND TIME</b>			Delaware A
<b>In</b>	<b>COMMISSION: MAPS AND THE INTERNET</b>		
2:50 PM	4601.1 - GeoTupl <span>er</span> : an Open Source Multiscale Dynamic Geo-Analytics Service - <b>Roland Hansson</b>		
3:10 PM	4601.2 - An effective approach for synoptical representation of web map services based on entropy and trans-scale similarity - <b>Xiaoqiang Cheng</b>		
<b>SHAPE</b>			Delaware B
2:50 PM	4602.1 - An improved spatial contour tree constructed method - <b>Yi Zheng</b>		
3:10 PM	4602.2 - GIS-analysis of the fractal dimension of the Lac de Gras lake system (Northwest Territories, Canada) - <b>Igor Sergeev</b>		
3:30 PM	4602.3 - An Area Compactness Metric considering Spatial Context and Topology - <b>Shipeng Sun</b>		
<b>TERRAIN MODELS AND GLACIER MAPS</b>			Virginia A
<b>Mt</b>	<b>COMMISSION: MOUNTAIN CARTOGRAPHY</b>		
2:50 PM	4603.1 - HYP <span>SO</span> : High-Quality Raster DEMs for Small-Scale Mapping - <b>Timofey Samsonov</b>		
3:10 PM	4603.2 - Glacier surface development: aspects of data acquisition and visualisation - <b>Lorenz Hurni</b>		
3:30 PM	4603.3 - Adaptive Multi-Scale DEM Smoothing Using Local Entropy - <b>Paulo Raposo</b>		
<b>ENVIRONMENTAL REMOTE SENSING</b>			Virginia B
2:50 PM	4604.1 - Detecting Ash Middens using Remote Sensing techniques: a comparative study in Southern Gauteng, South Africa - <b>Mncedisi Siteleki</b>		
3:10 PM	4604.2 - An automated shoreline extraction approach using RASAT MS and SENTINEL 1A SAR images - <b>Nusret Demir</b>		
<b>MULTIFACETED CARTOGRAPHY FOR CHILDREN</b>			Virginia C
<b>Ch</b>	<b>COMMISSION: CARTOGRAPHY AND CHILDREN</b>		
2:50 PM	4605.1 - Brief retrospection on Hungarian school atlases - <b>José Jesús Reyes Nunez</b>		
3:10 PM	4605.2 - Orienteering activities in Battir, Palestine, Unesco World Heritage Site since June 2014. - <b>Jasmine Desclaux-Salachas</b>		

TIME	EVENT	TUESDAY	ROOM
<b>SPATIAL DATA INFRASTRUCTURE AND MARINE SDI</b>			<b>Maryland A</b>
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
2:50 PM	4606.1 - Integrating Marine (Ocean and Coastal) elements into the South African Spatial Data Infrastructure (SASDI) - <b>Maroale Chauke</b>		
3:10 PM	4606.2 - Common Challenges Faced in Creating Standard Data Products for the 3D Elevation Program - <b>Kimberly Mantey</b>		
3:30 PM	4606.3 - Brazilian Directorate of Hydrography and Navigation engagement in Marine Spatial Data Infrastructures - <b>Julierme Pinheiro</b>		
<b>PROJECTIONS FOR A DIGITAL EARTH</b>			<b>Maryland B</b>
<b>Pj</b>	<b>COMMISSION: MAP PROJECTIONS</b>		
2:50 PM	4607.1 - Geospatial Information Grid - Digital Earth Fundamental Framework - <b>Gang Wan</b>		
3:10 PM	4607.2 - The Thinking about Logical Model of Digital Earth in Global Modeling - <b>Hai Hu</b>		
<b>MENTAL MAPS</b>			<b>Maryland C</b>
<b>Co</b>	<b>COMMISSION: COGNITIVE ISSUES IN GEOGRAPHIC INFORMATION VISUALIZATION</b>		
2:50 PM	4608.1 - Mapping Emotions: Examples of Power Places - <b>Alenka Poplin</b>		
3:10 PM	4608.2 - Psychogeography in the age of the quantified self – Mental map modelling with georeferenced personal activity data - <b>Sebastian Meier</b>		
3:30 PM	4608.3 - Understanding how Brazilian urban planners define and represent public spaces based on their knowledge schemata - <b>Claudia Sluter</b>		
<b>ATLAS CONNECTIONS</b>			<b>Harding</b>
2:50 PM	4609.1 - Paper to Digital: Historical Atlases in the Hybrid Age - <b>Greg Allord</b>		
3:10 PM	4609.2 - The Parallelism between Nation Building and The National Atlas of Korea - <b>Chul Sue Hwang</b>		
<b>DECOLONISING AND PARTICIPATORY CARTOGRAPHIES</b>			<b>Coolidge</b>
<b>Cr</b>	<b>SPECIAL TOPIC: CRITICAL CARTOGRAPHY</b>		
2:50 PM	4610.1 - Participatory Mapping: Evaluating Practice in Climate Change Projects in Caribbean Small Island Developing States - <b>Alison DeGraff Ollivierre</b>		
3:10 PM	4610.2 - Illiterate Citizens Engagement with Volunteered Geographic Information (VGI) and Participatory Mapping - <b>Pericles Picanco</b>		

TIME	EVENT	TUESDAY	ROOM
3:30 PM	4610.3 - Emergence, Reflexivity and Collaboration: The Residential Schools Land Memory Mapping Project - <b>Stephanie Pyne</b>		
3:50 PM	4610.4 - Crowdsourcing Mapping and Participatory Planning Support System: Case Study of Brno, Czech Republic - <b>Jiří Pánek</b>		
<b>PORTOLANS CHARTS AND RENAISSANCE MAPS</b>			<b>Hoover</b>
<b>Hs</b>	<b>COMMISSION: HISTORY OF CARTOGRAPHY</b>		
2:50 PM	4611.1 - Spectral Imaging of Historic Portolan Charts - <b>Fenella France</b>		
3:10 PM	4611.2 - Chinese Mapped America Before 1430 - <b>Siu-Leung Lee</b>		
3:30 PM	4611.3 - Mapa mundi (Catalan Atlas of 1375), Majorcan cartographic school, and 14th century Asia - <b>Vladimír Liščák</b>		
Evening	<b>EVENING CELEBRATIONS OF INDEPENDENCE DAY</b>		
	Young Cartographers Social Gathering		
	<b>U.S. HOLIDAY ON JULY 4th (on your own—gather a group)</b>		

TIME	EVENT	WEDNESDAY	ROOM
8:30 AM - 9:50 AM	TECHNICAL SESSIONS – 5100s		
<b>CONNECTED AND CROWDSOURCED</b>			<b>Delaware A</b>
<b>In</b>	<b>COMMISSION: MAPS AND THE INTERNET</b>		
8:30 AM	5101.1 - Outbreak of Epidemics in a Connected World: Exhibiting Maps of Contagious Diseases –The Spanish Flu to the Zika Virus- <b>Daniel Cole</b>		
8:50 AM	5101.2 - VGS: Design and Implementation of a Multi-Channel, Multi-Purpose Participatory Mapping Platform - <b>Georg Dilk</b>		
9:10 AM	5101.3 - Implementation of the Fog Computing Approach into Geospatial Web Services - <b>Evgeny Panidi</b>		
9:30 AM	5101.4 - Cartographical visualization of crowdsourcing data in precision agriculture - <b>Tomas Reznik</b>		
<b>GEOVISUAL ANALYTICS FOR UNCERTAINTY</b>			<b>Delaware B</b>
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
8:30 AM	5102.1 - Visualising Uncertainty of Point Phenomena by Redesigned Error Ellipses - <b>Christian Murphy</b>		
8:50 AM	5102.2 - Conveying Uncertainty in Visual Cluster Representations of Soccer Player Trajectories - <b>Halldor Janetzko</b>		
9:10 AM	5102.3 - A Web-based Geo-Temporal Thematic Visualizer with Uncertainty Quantification - <b>Charles Ehlschlaeger</b>		
9:30 AM	5102.4 - How does the visualization of uncertainty influence decision making with hazard prediction maps? - <b>Isabella Kübler</b>		
<b>CONTENT ANALYSIS IN CARTOHERITAGE</b>			<b>Virginia A</b>
<b>Hg</b>	<b>COMMISSION: CARTOGRAPHIC HERITAGE INTO THE DIGITAL</b>		
8:30 AM	5103.1 - Portraying the historical settlement development of Switzerland based on extracted vector data from old maps - <b>Angeliki Tsorlini</b>		
8:50 AM	5103.2 - Launching the David Rumsey Map Center: Large and multi-touch screens for teaching and research - <b>G. Salim Mohammed</b>		
9:10 AM	5103.3 - Visual Knowledge Aggregation: From Static To Dynamic Information Systems in the Humanities - <b>Andrea Nanetti</b>		
9:30 AM	5103.4 - Mapping Historical Landscape Changes with the Use of Space-Time Cube - <b>Mathias Jahnke</b>		

TIME	EVENT	WEDNESDAY	ROOM
<b>USER RESEARCH AND METHODS I</b>			<b>Virginia B</b>
<b>Us</b>	<b>COMMISSION: USE, USER AND USABILITY ISSUES</b>		
8:30 AM	5104.1 - User Testing of Dynamic Geovisualizations: Lessons Learned and Possible Improvements for Cartographic Experiments - <b>Cecile Saint-Marc</b>		
8:50 AM	5104.2 - Identifying Best Practices by Examining Relationships Between Reporting in User Studies and Design of User Studies - <b>Travis White</b>		
9:10 AM	5104.3 - Researching the usability of a GeoVisual Analytics environment for the exploration and analysis of different data - <b>Irma Kveladze</b>		
<b>DIVERSIFIED EXPERIENCES ON CARTOGRAPHY FOR CHILDREN</b>			<b>Virginia C</b>
<b>Ch</b>	<b>COMMISSION: CARTOGRAPHY AND CHILDREN</b>		
8:30 AM	5105.1 - Mapping the United Arab Emirates: A cartographic story for Emirati Children - <b>Naeema Alhosani</b>		
8:50 AM	5105.2 - DIFFERENT WAYS TO STUDY THE MAP: interdisciplinary approach in the discipline School Cartography at the University of Brasilia - <b>Vânia Souza</b>		
9:10 AM	5105.3 - Designing maps for children - <b>Trine Bjerva</b>		
9:30 AM	5105.4 - Issues on Social Cartography: Inclusive and Participatory Mapping in Brazil - <b>Regina Almeida</b>		
<b>SDI / COMMISSION ON SDI AND STANDARDS</b>			<b>Maryland A</b>
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
8:30 AM	5106.1 - The Academic SDI – Towards understanding spatial data infrastructures for research and education - <b>Serena Coetzee</b>		
8:50 AM	5106.2 - Academic SDI - The Construction of a Collaborative Platform - <b>Silvana Camboim</b>		
9:10 AM	5106.3 - Implementing the Concept of Geographic Context for Efficient Recognition from Large-Scale Topographic Map Series - <b>Stefan Leyk</b>		
9:30 AM	5106.4 - Diagnosis of the evaluation of Quality of Geographic Information in Uruguay - <b>Rosario Casanova</b>		
<b>COORDINATE SYSTEMS AND INDOOR CARTOGRAPHY</b>			<b>Maryland B</b>
<b>Pj</b>	<b>COMMISSION: MAP PROJECTIONS</b>		
8:30 AM	5107.1 - Coordinate references for the indoor/outdoor seamless positioning - <b>Ling Ruan</b>		
8:50 AM	5107.2 - Identifying and Allocating Geodetic Systems to historical oil gas wells by using high-resolution satellite imagery - <b>Gabriel Alvarez</b>		



TIME	EVENT	WEDNESDAY	ROOM
9:10 AM	5107.3 - Reflective 2D visualization of 3D objects using cartographic projection - <b>Vit Pászto</b>		
9:30 AM	5107.4 - Semi-automated alignment of building models to 3D point cloud data - <b>Jorge Chen</b>		
<b>TOPOGRAPHIC INITIATIVES</b>			<b>Maryland C</b>
<b>Tp</b>	<b>COMMISSION: TOPOGRAPHIC MAPPING</b>		
8:30 AM	5108.1 - New Swiss National Maps at scale 1:50'000 - <b>Dominik Käuferle</b>		
8:50 AM	5108.2 - The Alaska Mapping Initiative: A Collaborative Approach to Topographic Mapping - <b>David Brostuen</b>		
9:10 AM	5108.3 - Topographic data model and Basic Topographic Database in the Republic of Croatia - <b>Ivan Landek</b>		
9:30 AM	5108.4 - National Topographic Base (BTN25) updating process through Geographic Reference information Databases (GRIs). - <b>Gonzalo Moreno Vergara</b>		
<b>REMOTE SENSING OF BUILT ENVIRONMENTS</b>			<b>Harding</b>
<b>Se</b>	<b>COMMISSION: SENSOR-DRIVEN MAPPING</b>		
8:30 AM	5109.1 - Mapping Urban Settlements in a Latin-American City Using Satellite Imagery and Support Vector Machines - <b>Feilin Lai</b>		
8:50 AM	5109.2 - Extraction of Bridge Information by radar images with high resolution based on the shape and texture characteristics - <b>Hongguo Jia</b>		
9:10 AM	5109.3 - Delineation of Buildings Perimeter using LiDAR - <b>Precious Zara</b>		
<b>THEORETICAL CARTOGRAPHY AND UBIQUITOUS MAPPING</b>			<b>Coolidge</b>
<b>Ub</b>	<b>COMMISSION: UBIQUITOUS MAPPING</b>		
8:30 AM	5110.1 - Relationship between the Ubiquitous Mapping and the Theoretical Cartography in the evolution of ICA commissions - <b>Takashi Morita</b>		
8:50 AM	5110.2 - About the functions of maps - <b>Georg Gartner</b>		
9:10 AM	5110.3 - From conceptual modeling to a map - <b>Robert Olszewski</b>		
9:30 AM	5110.4 - In Search of the Essence of Cartography - <b>Marek Baranowski</b>		
<b>THEMATIC MAPS AND ATLASES</b>			<b>Hoover</b>
<b>Hs</b>	<b>COMMISSION: HISTORY OF CARTOGRAPHY</b>		
8:30 AM	5111.1 - Adventures of a world atlas - History of the publication of the Debes Atlas in Hungary - <b>László Zentai</b>		

TIME	EVENT	WEDNESDAY	ROOM
8:50 AM	5111.2 - Historical cartographic materials as a source for international and cadastral boundary management in rivers - <b>Haim Srebro</b>		
9:10 AM	5111.3 - Navigating Without Road Maps: The Early Business of Automobile Route Guide Publishing in the United States - <b>John Bauer</b>		
9:30 AM	5111.4 - General overview of analog and digital topographic mapping techniques used by the U.S. Geological Survey - <b>Kalen Brady</b>		
9:50 AM - 10:20 AM	<b>BREAK</b>		Exhibit Hall C
	Morning break hosted in Exhibit Hall Meet presenters in Poster Session D: <b>Ch Ac Ed Lo Op In</b>		

TIME	EVENT	WEDNESDAY	ROOM
POSTER SESSION D:			Exhibit Hall C
9:00 AM - NOON	<b>Scientific posters on Children, Access, Education, LBS, Open Source, and Internet Mapping Topics</b>		
	Cartographic and Map Publishing Workflows Using Adobe Creative Products - <b>Nick Burchell</b>		
	Feature Learning from Massive Spatial Trajectories: A Case Study of Map Matching - <b>Jian Yang</b>		
	"Save the Children Life" - Conception for Establishing Educational Center for Disaster Management - <b>Silvia Marinova</b>		
	Indoor and outdoor asthmatic maps based on contextual information - <b>Neda Kaffash Charandabi</b>		
	Cartography and PokemonGo - <b>Jukka Krisp</b>		
	I3GEO - Brazilian interactive map project - <b>Ana Ortiz</b>		
	New Map of the Pluto system for children - <b>Henrik Hargitai</b>		
	Research on Key Technology of the Indoor and Outdoor Information Integration in Location-based Service - <b>Yongjun Wei</b>		
	Using the Power of Data to increase student engagement with geospatial technology and careers - <b>Lori Rubino-Hare</b>		
	The use of the memory game in the teaching of thematic mapping in the classroom - <b>Raiane Florentino</b>		
	A cloud-based service for creating cartograms with incompatible plug-ins - <b>Peichao Gao</b>		
	Design of Population Data Distribution System - <b>Deqin Liu</b>		
	Evolution of Cartographic Disciplines in Romanian Geographical Higher Education - <b>Laura Comanescu</b>		
	Cartographic Encyclopaedia of Relief in Russia - <b>Timofey Samsonov</b>		
	The role of the national geospatial information authority in the promotion of geographic education - <b>Hiroshi Une</b>		
	A complex thematical mapping of Russia with tiflomap - <b>Andrey Medvedev</b>		
	Shapes as building blocks of non-visual cartography: Auditory and haptic interface presentation and interpretation - <b>Dan Jacobson</b>		
	Progress in Standardizing Tactile Symbols: Case Study in Cartography for Tourism - <b>Alejandra Coll</b>		
	Volunteers of The National Map Corps - <b>Erin Korris</b>		
	Increasing Accessibility for Map Readers with Acquired and Inherited Color Vision Deficiencies - <b>Gretchen Culp</b>		

TIME	EVENT	WEDNESDAY	ROOM
	Achieving 3D thematic cartography through open source: synergy of QGIS and Three.js - <b>Tomas Reznik</b>		
	Design and Implementation of Mobile Web for Fused Visualization of Geo-Data and Open Data with Quality Control - <b>Kiwon Lee</b>		
	Accessible cartography for people with disabilities. - <b>Ephraim Kenneth</b>		
	Contour Mapping by using Google Earth Elevation Data and Comparing the Precision with Topographic Maps - <b>Ahmet Şekerci</b>		
	Developing Portable Maps for Blind People - <b>Jinmu Choi</b>		
	Participatory Mapping Impacts Research: the case study of COMPERJ in Itaboraí, Rio de Janeiro state, Brazil - <b>Pamela Marcia Dionisio</b>		
<b>PLENARY</b>			
10:20 AM - 10:35 AM	ICA Awards - <b>Presented by Menno-Jan Kraak</b>		Salon 2/3
10:35 AM - 11:30 AM	5200.1 - State of Mapping in the NGA - <b>Robert Cardillo</b> , U.S. National Geospatial-Intelligence Agency		Salon 2/3

TIME	EVENT	WEDNESDAY	ROOM
11:30 AM - 1:30 PM	LUNCH (on your own—gather a group)		
	Meet presenters in Poster Session D: <b>Ch Ac Ed Lo Op In</b>		
	Meet presenters in Poster Session E: <b>Se Ea Su Lu</b>		
11:40 AM - 12:30 PM	DISCUSSION SESSION BY UN-GGIM		Maryland C
	5308 - Discussion on European Space Agency/World Bank Perspective on Earth Observation and Geospatial Analytics for Sustainable Development - <b>Chaired by Christoph Aubrecht</b>		
11:40 AM - 12:30 PM	ICA COMMISSION BUSINESS MEETINGS – 5300s		
<b>In</b>	5803 - Business Meeting of the ICA Commission on Maps and the Internet Chaired by Rex Cammack		Delaware A
<b>Ch</b>	5305 - Business Meeting of the ICA Commission on Cartography and Children Chaired by Carla Sena		Virginia C
<b>Pj</b>	5307 - Business Meeting of the ICA Commission on Map Projections Chaired by Miljenko Lapaine		Maryland B
<b>Hs</b>	5311 - Business Meeting of the ICA Commission on History of Cartography Chaired by Imre Josef Demhardt		Hoover
12:30 PM - 1:20 PM	ICA COMMISSION BUSINESS MEETINGS – 5400s		
<b>Vi</b>	5402 - Business Meeting of the ICA Commission on Visual Analytics Chaired by Anthony Robinson		Delaware B
<b>Tp</b>	5403 - Business Meeting of the ICA Commission on Topographic Mapping Chaired by Alexander Kent		Virginia A
<b>Se</b>	5409 - Business Meeting of the ICA Commission on Sensor-driven Mapping Chaired by Jonathan Li		Harding
<b>Ub</b>	5410 - Business Meeting of the ICA Commission on Ubiquitous Mapping Chaired by Masatoshi Arikawa		Coolidge

TIME	EVENT	WEDNESDAY	ROOM
1:30 PM - 2:30 PM	TECHNICAL SESSIONS – 5500s		
<b>LAND INFORMATION</b>			Delaware A
<b>In</b>	<b>COMMISSION: MAPS AND THE INTERNET</b>		
1:30 PM	5501.1 - LINZ Data Service: Building Our Nation - <b>Ian Reese</b>		
1:50 PM	5501.2 - Interactive and uncertainty-aware delineation of catchment areas within an IAAS-infrastructure - <b>Janne Kovanen</b>		
2:10 PM	5501.3 - Visualization on the Web of 20 Years of Crop Rotation and Wildlife Co-Evolutions - <b>Christine Plumejeaud-Perreau</b>		
<b>SPATIO-TEMPORAL GEOVISUAL ANALYTICS</b>			Delaware B
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
1:30 PM	5502.1 - Visual search of cyclic spatio-temporal events - <b>Jacques Gautier</b>		
1:50 PM	5502.2 - Big Data in a New Era of Web Cartography: A Dashboard Approach to Visualizing Urban Dynamics in Spatial-Temporal Data - <b>Shaun Fontanella</b>		
2:10 PM	5502.3 - Visualizing Modeled Spatiotemporal Landscape Processes Using Google Earth - <b>Anna Klimaszewski-Patterson</b>		
<b>TOPOGRAPHIC CARTOGRAPHY</b>			Virginia A
<b>Tp</b>	<b>COMMISSION: TOPOGRAPHIC MAPPING</b>		
1:30 PM	5503.1 - Proposal for standard symbolization for topographic maps of urban areas in Brazil - <b>Mônica Castro</b>		
1:50 PM	5503.2 - Cartographically Enabling The National Map Vector Data - <b>Andrew Stauffer</b>		
2:10 PM	5503.3 - Challenges and Considerations of Automated Text Labeling on Topographic Maps - <b>Sara Boyer</b>		
<b>USER RESEARCH AND METHODS II</b>			Virginia B
<b>Us</b>	<b>COMMISSION: USE, USER AND USABILITY ISSUES</b>		
1:30 PM	5504.1 - Introducing MapStudy: An Open-Source Cartographic Research Tool - <b>Carl Sack</b>		
1:50 PM	5504.2 - Atlas Design Through a Usability Perspective: Digital and Printed Products Differences - <b>Lilliam Sofia Gomez Solorzano</b>		
2:10 PM	5504.3 - Interaction problems found through usability testing on interactive maps - <b>Elaine Jesus</b>		

TIME	EVENT	WEDNESDAY	ROOM
<b>CURRICULUM INITIATIVES</b>			Virginia C
<b>Ed</b>	COMMISSION: EDUCATION AND TRAINING		
1:30 PM	5505.1 - International Map Year: Results and Implications - <b>Bengt Rystedt</b>		
1:50 PM	5505.2 - From Cartography to Geospatial Information Management: Implications on Geodetic Engineering Education & Practice - <b>Randolf Vicente</b>		
2:10 PM	5505.3 - ICA Contribution to the Development of International Standards of Competence for Nautical Cartographers - <b>Ron Furness</b>		
<b>GEOGRAPHIC INFORMATION REPRESENTATION USING STANDARDS</b>			Maryland A
<b>St</b>	COMMISSION: SDI AND STANDARDS		
1:30 PM	5506.1 - Use of Spatial Relations in English and Portuguese: Syntax and Semantics - <b>Luciene Delazari</b>		
1:50 PM	5506.2 - Some Issues in Mapping Traditional Knowledge - <b>D. R. Fraser Taylor</b>		
2:10 PM	5506.3 - Towards an Anti-Reductionist Geography of Objects: An End to 'Animal Farm Holism' and 20th-Century Constructivism - <b>Charles Jackson</b>		
<b>MAP PROJECTIONS IN THE HISTORY OF CARTOGRAPHY</b>			Maryland B
<b>Pj</b>	COMMISSION: MAP PROJECTIONS		
1:30 PM	5507.1 - Ptolemy's Britain and Ireland: A New Digital Reconstruction - <b>Dmitri Gusev</b>		
1:50 PM	5507.2 - Educating a General Readership on Map Projections in Twentieth Century Thematic World Atlases: A Survey - <b>Fritz Kessler</b>		
<b>GI &amp; SUSTAINABILITY I</b>			Maryland C
<b>Su</b>	COMMISSION: GI FOR SUSTAINABILITY		
1:30 PM	5508.1 - A Spatial Analysis of Climate Change Effects on Maize Productivity in Kenya - <b>Dan Wanyama</b>		
1:50 PM	5508.2 - Mapping community vulnerability to poaching: A whole-of-society approach - <b>Peter Schmitz</b>		
2:10 PM	5508.3 - Developing a spatial method for locating wind turbines using gis - <b>Rita Pournourbakhsh</b>		
<b>LULC EVALUATION</b>			Harding
<b>Se</b>	COMMISSION: SENSOR-DRIVEN MAPPING		
1:30 PM	5509.1 - Performance Analysis of Landsat 8 OLI Images to Determine Land Use/Cover Using TCT and Pansharping Methods - <b>Fusun Balik Sanli</b>		
1:50 PM	5509.2 - LULC Change Detection toward autonomous updating of large core spatial databases - <b>Ammatzia Peled</b>		

TIME	EVENT	WEDNESDAY	ROOM
2:10 PM	5509.3 - CA Markov modeling of land use land cover dynamics and sensitivity analysis to identify sensitive parameter(s) - <b>Surabuddin Mondal</b>		
<b>GEOSPATIAL INFORMATION TECHNOLOGY</b>			<b>Coolidge</b>
<b>Ub</b>	<b>COMMISSION: UBIQUITOUS MAPPING</b>		
1:30 PM	5510.1 - Framework to Add Temporal Characteristics in Geographic Schemata and Instances - <b>Morishige Ota</b>		
1:50 PM	5510.2 - Graph construction for routes that summarize a geographical area by using location-direction-enabled photographs - <b>Hideyuki Fujita</b>		
2:10 PM	5510.3 - Ubiquitous GIS based Mobile Banking System - <b>Maryam Shakeri</b>		
<b>MAPPING PLACE</b>			<b>Hoover</b>
1:30 PM	5511.1 - The First Special Military Map Printed in Serbia - <b>Jelena Glisovic</b>		
1:50 PM	5511.2 - Usage of Published Maps in Turkish Newspapers - <b>Pinar Sarin</b>		
2:10 PM	5511.3 - Classical Geopolitics and Cartography - <b>Bertil Haggman</b>		



TIME	EVENT	WEDNESDAY	ROOM
<b>POSTER SESSION E:</b>			<b>Exhibit Hall C</b>
12:30PM - 3:30 PM	<b>Scientific posters on Sensors, Early Warning and Crises, Sustainability, and LULC Topics</b>		
	Auckland LiDAR - <b>Ian Reese</b>		
	A Strategic Spatial Vision of Natural Hazards Prevention: Geoinfographic Design for Synthetic Concept Expression - <b>Xi Tang</b>		
	Indicative Mapping of Soil Runoff and Soil Radioactivity on a Large Scale - <b>Evgeny Panidi</b>		
	Mapping of Spatial and Interannual Differences in Calendar Dates of Growing Seasons for the Russian Subarctic - <b>Evgeny Panidi</b>		
	Flood Risk and Hazard Mapping from the Perspective of the Present Legislation. Case Study: Bârlad Basin (Romania) - <b>Laura Comanescu</b>		
	Research on the daily dynamic population within the urban residential area - <b>Weijun Ma</b>		
	Illustrating the Story of Recent Crop Migration and Change in the North Central U.S. - <b>Lee Ebinger</b>		
	Cartography and GIS for the sustainable management of the Nkong Zem pipe-borne water, West Cameroon - <b>Kah Fang</b>		
	Appraisal of Sited Boreholes in Oyo East LGA Using Geoinformatics Techniques for Sustainable Water Supply - <b>Christopher Onosemuode</b>		
	Research on Feature and Spatial Relation of Geo-entity - <b>Zhang Jing</b>		
	Weighted iterative closest point algorithm for 3D mapping of indoor environments - <b>Daniel rodriguez Dos santos</b>		
	Fluctuations of water bodies from landsat-8 oli images, in the cienaga de zapata national park - <b>Idalmis Almeida Martinez</b>		
	Methodolgy for distribution of reef crests using satellite images - <b>Yudelsy Carrillo</b>		
	Visualization of urban heat islands in selected cities in Slovakia: Introduction of project - <b>Monika Kopecka</b>		
	Comparison of Burning Area Detection Capacity Between Standardized Index of Burns and Spectral Mixing Landscape Model - <b>Nicole Morely</b>		
	Using Unmanned Aerial Systems to Map Macrophyte Assemblages in Lake Seminole, Georgia - <b>Philip Ashford</b>		
	Mapping the types of public health and its changes as one of the key parameters of sustainable development - <b>Olga Chershnia</b>		
	Integrating spatial information technologies in an emergency response system for air pollution accidents - <b>Yikang Rui</b>		

TIME	EVENT	WEDNESDAY	ROOM
	Positional refinement of the historical set of landslide risk points of the Civil Defense of Salvador, Brazil - <b>Elias Elias</b>		
	Mapping of landslide susceptibility of the city of Salvador, Brazil, using the model of infinite slope - <b>Luciana Silva</b>		
	A Comprehensive Cartographic Approach and Application in Ocean Thematic Mapping - <b>Miao Fan</b>		
	Soil Moisture Prediction Using Time-Series Data of Wireless Geo-Sensor Networks - <b>Min Ji</b>		
	Apalachicola: America's Next National Park - <b>Simon Bevis</b>		
	Non-photorealistic Visualization Framework of 3D City Models for Energy Simulation - <b>Bo Mao</b>		
	Wildfire Susceptibility Methodology with Knowledge Model in Itatiaia National Park, Brazil - <b>Gustavo Sousa</b>		
	Aerial photography to Drone: the potential for mapping the evolution of Gtaïas Ghar El Melh (North East Tunisia). - <b>Hamouda Samaali</b>		
	GIS (Quantum GIS and ArcGIS) Analysis of the Population Distribution in ERITREA. - <b>Temesghen Sereke</b>		
	Impacts de l'élévation du niveau de la mer sur l'évolution future d'une côte basse à lagune de la péninsule du Cap Bon (Nord-Est de la Tunisie): approche cartographique - <b>BRAHMI Noura</b>		
	Chilean GEO client application for Disasters - <b>Rodrigo Suarez</b>		
	Using SPOT 5 satellite data to map the spatial distribution of Seriphium Plumosum plant in Msukaligwa Municipality - <b>Humbelani Mutswari</b>		
	Evaluation of uncertainty on quantification of vegetated areas from sub-pixel classification - <b>João Marques</b>		
	Analysis of Models effectiveness for Change Detection in Atlantic Forest through GEOBIA, Rio de Janeiro, Brazil - <b>Felipe Amaral</b>		
	Research on Feature Extraction of Quadratic Surface Automatically based on Point Image Data - <b>Ming Guo</b>		
	Geoinformation support of the strategic program 'Economic Belt of the Silk Road' - <b>Irina Rotanova</b>		
	Geoinformation-cartographic method in research of the Ob` river water&basin system - <b>Irina Rotanova</b>		
	Urban territorial expansion and reduction of green areas around the Avenida Paralela in the city of Salvador, Brazil - <b>Thiago Vale</b>		
	Mapping climate, permafrost and vegetation under climate change of the 21st century in central Siberia - <b>Elena Parfenova</b>		

TIME	EVENT	WEDNESDAY	ROOM
2:30 PM - 2:50 PM	BREAK		
	First afternoon break - Meet presenters in Poster Session E: <b>Se Ea Su Lu</b>		
2:50 PM - 3:50 PM	TECHNICAL SESSIONS – 5600s		
OPEN DATA MAPPING			Delaware A
<b>Op</b>	COMMISSION: OPEN SOURCE GEOSPATIAL TECHNOLOGIES		
2:50 PM	5601.1 - Towards Seamless Uncertainty Validation of GlobeLand30 - <b>Ekaterina Chuprikova</b>		
3:10 PM	5601.2 - Open Data Mapping in the Cloud with MongoDB - <b>Paul Hunt</b>		
3:30 PM	5601.3 - Mapping urban landscapes along streets using Google Street View - <b>Xiaojiang Li</b>		
ANALYSIS TOPICS			Delaware B
2:50 PM	5602.1 - Visualising and Analysing the Impact of Geographic Factors on Linguistic Variation in Dialects - <b>Péter Jeszenszky</b>		
3:10 PM	5602.2 - A Novel Method for Reconstructing Broken Contour Lines Extracted from Scanned Topographic Maps - <b>Feng Wang</b>		
3:30 PM	5602.3 - Crater identification using the contours derived from DEM data - <b>Lingli Mu</b>		
NATIONAL MAPPING			Virginia A
<b>Tp</b>	COMMISSION: TOPOGRAPHIC MAPPING		
2:50 PM	5603.1 - Changes in the national Mapping program in Sweden - <b>Inger Persson</b>		
3:10 PM	5603.2 - Application Of IFSAR Technology In Topographic Mapping : JUPEM's Experience - <b>Ahamad Zakaria</b>		
3:30 PM	5603.3 - U.S. Geological Survey: US Topo Map and Historical Topographic Map Collections - <b>Kristin Fishburn</b>		
EDUCATION AND USERS			Virginia B
<b>Us</b>	COMMISSION: USE, USER AND USABILITY ISSUES		
2:50 PM	5604.1 - Usability of visual educational media on the example of economic maps in school atlases - <b>Jan Bláha</b>		
3:10 PM	5604.2 - GeoFARA: design, development and evaluation of a mobile human geography fieldwork application - <b>Xiaoling Wang</b>		
3:30 PM	5604.3 - Questions Concerning URUT Applied to Cartographic Interfaces - <b>Andre Mendonça</b>		

TIME	EVENT	WEDNESDAY	ROOM
<b>UNIVERSITY EDUCATIONAL PROGRAMS</b>			Virginia C
<b>Ed</b>	<b>COMMISSION: EDUCATION AND TRAINING</b>		
2:50 PM	5605.1 - Review of GIS Syllabuses in China and Poland: A Case Study of Two Universities - <b>Tao Wang</b>		
3:10 PM	5605.2 - Incorporating Geographic Information Science in the BSc Environmental Science Program in Botswana - <b>Felicia Akinyemi</b>		
3:30 PM	5605.3 - Educational aspects of crowdsourced noise mapping - <b>Andrea Pödör</b>		
<b>QUALITY OF GEOGRAPHIC INFORMATION</b>			Maryland A
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
2:50 PM	5606.1 - Multi-Scale Effects and Sensitivities in Built-up Land Data Accuracy Assessments - <b>Johannes Uhl</b>		
3:10 PM	5606.2 - Sample design for manual revision in the quality control of the National Topographic Base (BTN25) - <b>Ana De las Cuevas Suárez</b>		
3:30 PM	5606.3 - Data limitations and challenges in analysing the impact of infrastructure investment on real estate dynamics - <b>Alize Le Roux</b>		
<b>MAP PROJECTIONS FOR WEB MAPPING</b>			Maryland B
<b>Pj</b>	<b>COMMISSION: MAP PROJECTIONS</b>		
2:50 PM	5607.1 - Selecting map projections for world maps - <b>Bojan Šavrič</b>		
3:10 PM	5607.2 - The influence of the Web Mercator projection on the global-scale cognitive map of web map users - <b>Lieselot Lapon</b>		
<b>GI &amp; SUSTAINABILITY II</b>			Maryland C
<b>Su</b>	<b>COMMISSION: GI FOR SUSTAINABILITY</b>		
2:50 PM	5608.1 - Recent vegetation phenology variability and wild reindeer migration in Hardangervidda plateau (Norway) - <b>Romain Courault</b>		
3:10 PM	5608.2 - Assessing the Dynamics of Resilience using a Bayesian Network in the Lower Mississippi River Basin - <b>Heng Cai</b>		
<b>SENSOR-DRIVEN ASSESSMENT</b>			Harding
<b>Se</b>	<b>COMMISSION: SENSOR-DRIVEN MAPPING</b>		
2:50 PM	5609.1 - The generation of Ecosystem Health Assessment Map for Chongming Dongtan with Sequence Satellite Imagery - <b>Yi Lin</b>		

TIME	EVENT	WEDNESDAY	ROOM
3:10 PM	5609.2 - Earth Observation Big Data for Mapping Urban Indicators of the UN Sustainable Development Goals - <b>Yifang Ban</b>		
<b>MAP DESIGN</b>			Coolidge
<b>De</b>	<b>COMMISSION: MAP DESIGN</b>		
2:50 PM	5610.1 - Fashionable maps are coming to town. Beep-beep - <b>Kenneth Field</b>		
3:10 PM	5610.2 - Impressionist Landscape Cartography - <b>Stella Todd</b>		
3:30 PM	5610.3 - Using cartograms to make space for dense data - <b>Antoni Moore</b>		
<b>CARTOHERITAGE AND TOPOGRAPHIC MAPPING</b>			Hoover
<b>Hg</b>	<b>COMMISSION: CARTOGRAPHIC HERITAGE INTO THE DIGITAL</b>		
2:50 PM	5611.1 - Geo-Knowledge for an Ever Changing Society - The New Swiss National Map 1:10'000 and its strategic relevance - <b>Olaf Forte</b>		
3:10 PM	5611.2 - Minding the Gap: Cultural Resources and The National Map - <b>Elisabeth Orr</b>		
3:30 PM	5611.3 - Digital Transformation In Topographic Mapping: "The Power of Where" - <b>Roger Carman</b>		

TIME	EVENT	WEDNESDAY	ROOM
<b>POSTER SESSION F:</b>			<b>Exhibit Hall C</b>
3:50 PM - 6:50 PM	<b>Scientific posters on Topographic, Toponymy, Mountain, Marine, Planetary, Standards, Atlases, Production, and Heritage Topics</b>		
	The Atlas of Design - <b>Daniel Huffman</b>		
	Quality and accuracy of positional data from different source for mapping - <b>Vivian Fernandes</b>		
	Detection of Building Features in Interferometric Synthetic Aperture Radar Datasets - <b>Ahmad Sanusi Che Cob</b>		
	Interdisciplinary Atlas of Great Altai for sustainable development in the international region of Asia - <b>Irina Rotanova</b>		
	Map of Mawrth Vallis for the Manned Missions to Mars - <b>Sujit Lakshmikanth</b>		
	Analysis of the parcel geometry of territorial multipurpose cadastre for small Brazilian municipalities - <b>Artur Brandão</b>		
	Use of GIS tools for the analysis of the evolution of coastlines: applications in Icapuí, Ceará, Northeastern Brazil - <b>Wallason de Souza</b>		
	The chrono-spatial evolution of person names and methods of names mapping - <b>Ionel Boamfă</b>		
	Quality and accuracy of positional data from different source for mapping - <b>Mauro Alixandrini</b>		
	Methodology for automating the decisions in the cartographic generalization process of urban topographic maps - <b>Mônica Castro</b>		
	The Studying of the National General Atlas of China - <b>Guizhi Wang</b>		
	Back to the Feature! Direction, Distance, Disposition, and Orientation in the Ontology of some Place Names - <b>Yaïves Ferland</b>		
	Automatic Program for Cartographic City Map Paper Prints. Changing from Manual Editing to Automatic Production Maps. - <b>Shirly Goldner</b>		
	Assessing the value of spatial-semantic association for a geospatial knowledge retrieval system using social media - <b>Doo-Ri Oh</b>		
	Features of Spatial Similarity Relations in Map Spaces - <b>Haowen Yan</b>		
	Decommunization of Ukrainian toponyms - <b>Iryna Drohushevska</b>		
	Construction of a Detection Indicator of cartographic features from satellite images - <b>Alexandre Teixeira</b>		

TIME	EVENT	WEDNESDAY	ROOM
	A Universal Geospatial Data Model based on the characteristics of Press and Geographical Entity - <b>Wen Jianlong</b>		
	New results of GIS-Mapping of terrestrial Planets and its Satellites - <b>Alexander Kokhanov</b>		
	Creative Solution for Charting a Constantly Changing Port - <b>Stanislav Karpenko</b>		
	Identifying Geographic Features through Map Interpretation: A Case Study of Craters Using Controlling Variables - <b>Yuchen Zhang</b>		
	Study on the Semantic Similarity Model Based on Combination Method - <b>Xiong Shun</b>		
	Comprehensive Atlas of Kyiv - <b>Sergii Bortnyk</b>		
	The Atlas of Jeddah and the implementation of new principles of graphic semiology. - <b>Mohsen Dhieb</b>		
	Web-based Decision Support System for Choosing the Appropriate Map Projection - <b>Mátyás Gede</b>		
	Verification of the Cross-Country Movement Model - case study - <b>Vaclav Talhofer</b>		
	Geospatial information services at the United Nations - <b>Ayako Kagawa</b>		
	Reconstruction of land-use development with old maps - <b>Robert Hecht</b>		
	Geologic mapping of the Navua Valles - <b>Henrik Hargitai</b>		
	Mars Exploration Zone Map Design Competition - <b>Henrik Hargitai</b>		
	The ENC Cells production-Port of Kaohsiung in Taiwan - <b>Jen-Chih Wen</b>		
	Bridging the Gap Between Water and Elevation- A US Geological Survey Pilot Project - <b>Christy-Ann Archuleta</b>		
	A Subwatershed-Based Approach to Parallel Computing for Hydrologic Terrain Processing - <b>Ling Jiang</b>		
	Extraction of ridge lines from grid DEMs with the steepest ascent method based on constrained direction - <b>Wenping Jiang</b>		
	Integration of multifunctional cadastre data in a GIS dedicated to the planning - Application on Oran city (Algeria) - <b>Seddiki Mohamed Akram</b>		
	The application of 19th-century topographic maps in studying the geographic space of the past - <b>Dariusz Lorek</b>		
	Evaluating Lidar-derived Hydrography as a Source for National Hydrography Dataset Flowlines - <b>Cynthia Miller-Corbett</b>		

TIME	EVENT	WEDNESDAY	ROOM
	Ifsar: facilitating high resolution, cost effective mapping of Alaska - <b>Robert Haselwander</b>		
	Raster catalogs for cartographic production at Brazilian Institute of Geography and Statistics - IBGE - <b>Rafael Damiani Ferreira</b>		
	Recovering historical aerial photos at Brazilian Institute of Geography and Statistics - IBGE - <b>Rafael Damiani Ferreira</b>		
	Digital approach to western modern cartographic heritage of Tunisia (from the XVIth to the XVIIIth century) - <b>Saada Afef</b>		
	Toponymic memory of Petrópolis in the nineteenth century - <b>Tainá Laeta</b>		
3:50 PM - 4:10 PM	<b>BREAK</b>		
	Second afternoon break - Meet presenters in Poster Session F: <b>Tp Tm Mt Ma Pl St At Pd Hg</b>		
4:10 PM - 5:30 PM	<b>TECHNICAL SESSIONS – 5700s</b>		
<b>OPEN SOURCE I</b>			<b>Delaware A</b>
<b>Op</b>	<b>COMMISSION: OPEN SOURCE GEOSPATIAL TECHNOLOGIES</b>		
4:10 PM	5701.1 - Visualizing and Mining Social Media Data for Improved Understanding of Disaster Resilience - <b>Lei Zou</b>		
4:30 PM	5701.2 - American Panorama: A New Atlas of American History - <b>Justin Madron</b>		
4:50 PM	5701.3 - A Framework for Enhancing Real-time Social Media Data to Improve Disaster Management Process - <b>Syed Attique Shah</b>		
5:10 PM	5701.4 - Crowd-sourced data collection to support automatic classification of building footprint data - <b>Robert Hecht</b>		
<b>RESEARCH AGENDA IN VISUAL ANALYTICS</b>			<b>Delaware B</b>
<b>Vi</b>	<b>COMMISSION: VISUAL ANALYTICS</b>		
4:10 PM	5702.1 - Research Challenges for Cartography in the Era of Big Data - <b>Anthony Robinson</b>		
4:25 PM	5702.2 - User Studies in Cartography: A Collaborative Research Agenda - <b>Robert Roth</b>		
4:40 PM	5702.3 - Long-standing research challenges in geographic visualization - <b>Arzu Çöltekin</b>		
4:55 PM	5702.4 - Maps, Cartography, and the International Cartographic Association - <b>Menno-Jan Kraak</b>		
5:10PM	5702.5 - Designing across map use contexts: A research agenda - <b>Amy Griffin</b>		



TIME	EVENT	WEDNESDAY	ROOM
<b>PLACE-NAME CHANGES, FIELDWORK, AND METAPHORIC USE</b>			Virginia A
<b>Tp</b>	<b>COMMISSION: TOPONOMY</b>		
4:10 PM	5703.1 - Prototypical peripheral toponym pairs expressing the concept 'all over the country' as a part of the mental map - <b>Riemer Reinsma</b>		
4:30 PM	5703.2 - When places change their names on maps. Cases study from the Arab world - <b>Mohsen Dhieb</b>		
4:50 PM	5703.3 - Disappearance and survival of geographical place names in new address system in Cheongju, South Korea - <b>Younghoon Kim</b>		
<b>GENERALISATION QUALITY AND CONFLICT DETECTION</b>			Virginia B
<b>Ge</b>	<b>COMMISSION: GENERALISATION AND MULTIPLE REPRESENTATION</b>		
4:10 PM	5704.1 - Cartographic Conflict Detection for Linear Features in Vector-based Maps for the Web Browser - <b>Ionut Iosifescu Enescu</b>		
4:30 PM	5704.2 - Towards assessing generalization quality with visual complexity measures - <b>Alzbeta Brychtova</b>		
4:50 PM	5704.3 - Detecting changes in Openstreetmap building footprints with combined shape analysis - <b>Xiang Zhang</b>		
5:10 PM	5704.4 - Features extraction and generalization of buildings using Deep Learning - <b>Lei Ma</b>		
<b>EDUCATIONAL CONCEPTS AND CONTENT</b>			Virginia C
<b>Ed</b>	<b>COMMISSION: EDUCATION AND TRAINING</b>		
4:10 PM	5705.1 - The triangle of competences as elementary part of modern cartographic education - <b>Georg Gartner</b>		
4:30 PM	5705.2 - Theoretical Foundations of Study of Cartography - <b>Vaclav Talhofer</b>		
4:50 PM	5705.3 - Creating a Body of Knowledge for cartography - <b>David Fairbairn</b>		
5:10 PM	5705.4 - Cartography, new technologies and geographic education: theoretical approaches to research the field - <b>Tânia Canto</b>		
<b>AVAILABILITY AND ACCESS TO GEOGRAPHIC INFORMATION</b>			Maryland A
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
4:10 PM	5706.1 - The significance of spatial information administration to support the urban planning process in Bogotá - <b>Luz angela Rocha</b>		
4:30 PM	5706.2 - Evaluation of using digital gravity field models for zoning map creation - <b>Dmitriy Loginov</b>		

TIME	EVENT	WEDNESDAY	ROOM
<b>MAP PROJECTION RESEARCH</b>			<b>Maryland B</b>
<b>Pj</b>	<b>COMMISSION: MAP PROJECTIONS</b>		
4:10 PM	5707.1 - Conic projections of the triaxial ellipsoid: The projections for regional mapping of celestial bodies - <b>Maxim Nyrtsov</b>		
4:30 PM	5707.2 - A Loxodrome in the Web-Mercator Projection - <b>Miljenko Lapaine</b>		
4:50 PM	5707.3 - Development in understanding of Gauss-Krüger projection and its outcomes - <b>Hiroshi Masaharu</b>		
5:10 PM	5707.4 - Minimizing error for spatial binning in a projected world - <b>Sarah Battersby</b>		
<b>GI &amp; SUSTAINABILITY III</b>			<b>Maryland C</b>
<b>Su</b>	<b>COMMISSION: GI FOR SUSTAINABILITY</b>		
4:10 PM	5708.1 - Quantum Leap in Cartography as a requirement of Sustainable Development of the World - <b>Evgeny (Eugene) Eremchenko</b>		
4:30 PM	5708.2 - SOMAP supporting the sustainable development : fundamental aspects that are hardly considered - <b>Markus Jobst</b>		
4:50 PM	5708.3 - BigQuery: Parallel Query Analytics of Big Climate Data - <b>Zhenlong Li</b>		
5:10 PM	5708.4 - Determination of air quality in Ukraine based on remote sensing data for sustainability - <b>Nataliia Pashynska</b>		
<b>FROM TEMPLATES TO NOVELTY</b>			<b>Harding</b>
4:10 PM	5709.1 - For the Essentially Subjective Elements of Cartography, 1953-1995 - <b>Amber Bosse</b>		
4:30 PM	5709.2 - Map templates in European research program: emerging consensus, without compromising cartographic innovation - <b>Ronan Ysebaert</b>		
4:50 PM	5709.3 - A Electronic Map Data Model Based on PDF - <b>Zhou Xiaodong</b>		
5:10 PM	5709.4 - A Novel Generation of Small-Scale Economic Maps for the Swiss World Atlas - <b>Roland Schenkel</b>		
<b>DESIGN VARIETY</b>			<b>Coolidge</b>
<b>De</b>	<b>COMMISSION: MAP DESIGN</b>		
4:10 PM	5710.1 - Beck Exportation: London to Sydney - <b>William Cartwright</b>		
4:30 PM	5710.2 - Origin-destination flow maps - <b>Bernhard Jenny</b>		
4:50 PM	5710.3 - XY Domain: A sound map artwork for communicating Big Data characteristics - <b>Antoni Moore</b>		

TIME	EVENT	WEDNESDAY	ROOM
5:10 PM	5710.4 - Characterizing maps from visual properties - <b>Catherine Dominguès</b>		
<b>CARTOHERITAGE ON THE WEB</b>			Hoover
<b>Hg</b>	<b>COMMISSION: CARTOGRAPHIC HERITAGE INTO THE DIGITAL</b>		
4:10 PM	5711.1 - Old Maps, Photographs, Ancestral Trees and 3D Models of Czech Castles, Chateaux and Manors within Web Map Application - <b>Jiri Cajthaml</b>		
4:30 PM	5711.2 - Old maps into digital: the example of 'Geographic, Military and Statistical Map of Greater Poland' (1807-1812) - <b>Tomasz Panecki</b>		
4:50 PM	5711.3 - Two Web-GIS Projects on Russian Historical Sources of the 15-19th Centuries - <b>Aleksei Frolov</b>		
5:10 PM	5711.4 - The Second Life of the General map of the Russian Empire - <b>Liudmila Zinchuk</b>		
<b>WEDNESDAY EVENING</b>			
	Visit the International Cartographic Exhibition and meet presenters in Poster Session F: <b>Tp Tm Mt Ma Pl St At Pd Hg</b>		
5:40 PM - 6:30 PM	<b>ICA COMMISSION BUSINESS MEETINGS – 5800s</b>		
<b>Tm</b>	5301 - Business Meeting of the ICA Commission on Toponymy Chaired by Paulo Menezes		Virginia A
<b>Ed</b>	5805 - Business Meeting of the ICA Commission on Education and Training Chaired by David Fairbairn		Virginia C
<b>De</b>	5810 - Business Meeting of the ICA Commission on Map Design Chaired by Kenneth Field		Coolidge
<b>Hg</b>	5811 - Business Meeting of the ICA Commission on Cartographic Heritage into the Digital Chaired by Evangelos Livieratos		Hoover
<b>CLOSINGS</b>			
	EXHIBIT HALL and scientific poster sessions finish on Wednesday evening. There are no exhibit booths open or posters on Thursday and Friday.		
	INTERNATIONAL CARTOGRAPHIC EXHIBITION, in Washington rooms of Exhibition Level, stays open until Thursday afternoon at 2:00 PM (closed on Friday).		

TIME	EVENT	THURSDAY	ROOM
8:30 AM - 9:50 AM	TECHNICAL SESSIONS – 6100s		
<b>OPEN SOURCE STANDARDS</b>			<b>Delaware A</b>
<b>Op</b>	<b>COMMISSION: OPEN SOURCE GEOSPATIAL TECHNOLOGIES</b>		
8:30 AM	6101.1 - Rethinking of the Buffering Approach for Assessing the Positional Accuracy of OpenStreetMap data - <b>Qi Zhou</b>		
8:50 AM	6101.2 - Guidelines for a Comprehensive Design of Geoportals based on Open Geospatial Software - <b>Ionut Iosifescu Enescu</b>		
9:10 AM	6101.3 - A Virtual Hub Solution for the Geospatial Open Data Distribution - <b>Marek Baranowski</b>		
9:30 AM	6101.4 - A framework for measuring the fitness for purpose of OpenStreetMap data based on intrinsic quality indicators - <b>Hongchao Fan</b>		
<b>IMPROVING PRODUCTION</b>			<b>Delaware B</b>
<b>Pd</b>	<b>COMMISSION: MAP PRODUCTION AND GEOINFORMATION MANAGEMENT</b>		
8:30 AM	6102.1 - MapFactory – Towards a mapping design pattern for big geospatial data - <b>Victoria Rautenbach</b>		
8:50 AM	6102.2 - Geospatial Image Asset Handling for the National Security Community of Practice - <b>Jeffrey Young</b>		
9:10 AM	6102.3 - Developing a Personnel Capacity Indicator for a high turnover Cartographic Production Sector - <b>Flávia Mandarino</b>		
9:30 AM	6102.4 - Modernization of photogrammetric processes orthoimage production of EVISMAR for basic cartography INEGI 1:20 000 - <b>Mario angel Jahuey</b>		
<b>MARINE CARTOGRAPHY</b>			<b>Virginia A</b>
<b>Ma</b>	<b>WORKING GROUP: MARINE CARTOGRAPHY</b>		
8:30 AM	6103.1 - Maritime Zones Delimitation – Problems and Solutions - <b>Lysandros Tsoulos</b>		
8:50 AM	6103.2 - NOAA's National Charting Plan – A Strategy to Transform Nautical Charting - <b>John Nyberg</b>		
9:10 AM	6103.3 - Rescheming plan for NOAA's Electronic Navigational Chart Coverage - <b>Shachak Pe'eri</b>		
<b>GENERALISATION MODELS AND PROCESSES</b>			<b>Virginia B</b>
<b>Ge</b>	<b>COMMISSION: GENERALISATION AND MULTIPLE REPRESENTATION</b>		
8:30 AM	6104.1 - Experiments to Distribute Map Generalization Processes - <b>Guillaume Touya</b>		
8:50 AM	6104.2 - Using the A* Algorithm to Find Optimal Sequences for Area Aggregation - <b>Dongliang Peng</b>		
9:10 AM	6104.3 - DIOGEN, a multi-level oriented model for cartographic generalisation - <b>Adrien Maudet</b>		

TIME	EVENT	THURSDAY	ROOM
9:30 AM	6104.4 - A Generalization Strategy for Discrete Area Feature by Using Stroke Grouping and Polarization Transportation Selection - <b>Xiao Wang</b>		
<b>DESIGN AND USERS</b>			Virginia C
<b>Us</b>	<b>COMMISSION: USE, USER AND USABILITY ISSUES</b>		
8:30 AM	6105.1 - Evaluating the Effect of Display Realism on Natural Resource Decision Making - <b>Steven Chong</b>		
8:50 AM	6105.2 - Expert opinions on using the third dimension to visualise wind speed uncertainty for wind farm planning - <b>Yvette Bevis</b>		
9:10 AM	6105.3 - How do Prosumers Use Graphical Variables to Communicate on Maps? - <b>Natalia Ipatow</b>		
9:30 AM	6105.4 - Efficiency and effectiveness in case of disaster: a visual damage assessment tests - <b>Kristien Ooms</b>		
<b>TAKING GEOGRAPHIC INFORMATION INTO THE FUTURE</b>			Maryland A
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
8:30 AM	6106.1 - From BIM to GIS at the Smithsonian Institution - <b>Detlef Günther-Diringer</b>		
8:50 AM	6106.2 - Use of the term 'Cartography' in the Linked Data Cloud - <b>Otakar Čerba</b>		
9:10 AM	6106.3 - A Map as a Knowledge Base - <b>Dalia Varanka</b>		
<b>LAND USE AND LAND COVER I</b>			Maryland B
<b>Lu</b>	<b>SPECIAL TOPIC: LAND USE AND LAND COVER</b>		
8:30 AM	6107.1 - Local generalization method for updating land-use maps across multi-scales: A Case of China - <b>Xiongfeng Yan</b>		
8:50 AM	6107.2 - Synergy between Sentinel-1 radar time series and Sentinel-2 optical for the mapping of restored areas in Danube delta - <b>Niculescu Simona</b>		
9:10 AM	6107.3 - An object-based approach for tree species extraction from digital orthophoto maps - <b>Akhtar Jamil</b>		
9:30 AM	6107.4 - Urban Green Space Monitoring using Remote Sensing and GIS Techniques - <b>Nartan Rajpriya</b>		
<b>GI &amp; SUSTAINABILITY 4</b>			Maryland C
<b>Su</b>	<b>COMMISSION: GI FOR SUSTAINABILITY</b>		
8:30 AM	6108.1 - DEM Application in Sustainable Landscape design for long term resilience against flood risk in Narok town, Kenya - <b>Susan Kotikot</b>		
8:50 AM	6108.2 - Tackling Vexing Land Use Challenges: How Geodesign Brings GIScience to Life - <b>Kelleann Foster</b>		

TIME	EVENT	THURSDAY	ROOM
9:10 AM	6108.3 - Supervised Machine Learning for Regionalization of Environmental Data: Distribution of Uranium in Groundwater in Ukraine - <b>Michael Govorov</b>		
9:30 AM	6108.4 - Implementation of Geotechnology tools in natural disaster risk management of the Civil Defense of Salvador City - <b>Pablo Santos</b>		
<b>PLACE NAMES AS CULTURAL HERITAGE; INDIGENOUS AND MINORITY NAMES</b>			<b>Harding</b>
<b>Tp</b>	<b>COMMISSION: TOPONOMY</b>		
8:30 AM	6109.1 - Toponymic Contributions in the area of Santa Cruz Farm - Rio de Janeiro Capitancy - Brazil - <b>Paulo Menezes</b>		
8:50 AM	6109.2 - Cultural displacement of aboriginal toponymy in the province of Tierra del Fuego - <b>Pedro Parica</b>		
<b>DESIGN OVERVIEWS</b>			<b>Coolidge</b>
<b>De</b>	<b>COMMISSION: MAP DESIGN</b>		
8:30 AM	6110.1 - A Practical Framework for Cartographic Design - <b>Mark Denil</b>		
8:50 AM	6110.2 - Evaluating Map interactivity design process - <b>Luciene Delazari</b>		
9:10 AM	6110.3 - Cartographic Expertise for User Maps in Online Geoportals - <b>Nadia Panchaud</b>		
<b>GEOREFERENCING AND CARTOHERITAGE ON THE WEB</b>			<b>Hoover</b>
<b>Hg</b>	<b>COMMISSION: CARTOGRAPHIC HERITAGE INTO THE DIGITAL</b>		
8:30 AM	6111.1 - Displaying annotations for digitised globes - <b>Mátyás Gede</b>		
8:50 AM	6111.2 - Accuracy Assessment and Georeferencing Historic Sanborn Fire Insurance Maps - <b>Nathan Piekielek</b>		
9:10 AM	6111.3 - Georeferencing historical mine plans for the Witwatersrand mining basin, South Africa - <b>Hermína Roos</b>		
9:30 AM	6111.4 - Detailed Geological Map of Poland on the Web - Achievements and Challenges Ahead - <b>Katarzyna Jóźwik</b>		
9:50 AM - 10:20 AM	<b>BREAK</b>		<b>ICC Registration Area</b>
	Morning break hosted near ICC registration - visit the International Cartographic Exhibition in the Washington Rooms.		

TIME	EVENT	THURSDAY	ROOM
10:30 AM - 11:30 AM	TECHNICAL SESSIONS – 6200s		
<b>OPEN SOURCE II</b>			Delaware A
<b>Op</b>	<b>COMMISSION: OPEN SOURCE GEOSPATIAL TECHNOLOGIES</b>		
10:30 AM	6201.1 - Using Cesium for 3D Thematic Visualisations on the Web - <b>Mátyás Gede</b>		
10:50 AM	6201.2 - Volunteered geographical information, crowdsourcing, citizen science and neogeography are not the same - <b>Anthony Cooper</b>		
11:10 AM	6201.3 - The World-Wide Human Geography Data Working Group - <b>Elizabeth Lyon</b>		
<b>PRODUCTION SYSTEMS</b>			Delaware B
<b>Pd</b>	<b>COMMISSION: MAP PRODUCTION AND GEOINFORMATION MANAGEMENT</b>		
10:30 AM	6202.1 - A Boundary Delineation System for the Bureau of Ocean Energy Management - <b>Douglas Vandegraft</b>		
10:50 AM	6202.2 - Improving topographic maps production workflows using lean management and six sigma statistical techniques - <b>Benahmed daho Ali</b>		
11:10 AM	6102.3 - Use of Agile Development Methodology to Enable the 3D Elevation Program; 'The Process Behind the Process' - <b>Brian Fox</b>		
<b>MARINE DATA ACQUISITION</b>			Virginia A
<b>Ma</b>	<b>WORKING GROUP: MARINE CARTOGRAPHY</b>		
10:30 AM	6203.1 - Tracking of the LAZIO region shoreline from orthophotos AGEA 2014 and implementation of the layer database - <b>Erik Biscotti</b>		
10:50 AM	6203.2 - Satellite Derived Bathymetry - methods and possibilities - <b>Tea Duplančić Leder</b>		
11:10 AM	6203.3 - Working Towards a Marine Spatial Data Infrastructure (MSDI) in the Arctic - <b>Sebastian Carisio</b>		
<b>TRAJECTORIES AND LINE GENERALISATION</b>			Virginia B
<b>Ge</b>	<b>COMMISSION: GENERALISATION AND MULTIPLE REPRESENTATION</b>		
10:30 AM	6204.1 - A three-steps aggregation method for mobility data analysis and visualization - <b>Emilie Lerond</b>		
10:50 AM	6204.2 - Semantically Enriched Line Simplification through Mnemonic Rasterization - <b>Emmanuel Stefanakis</b>		
11:10 AM	6204.3 - Shape-Adaptive Geometric Simplification of Heterogeneous Line Datasets - <b>Timofey Samsonov</b>		

TIME	EVENT	THURSDAY	ROOM
<b>USERS</b>			<b>Virginia C</b>
<b>Us</b>	<b>COMMISSION: USE, USER AND USABILITY ISSUES</b>		
10:30 AM	6205.1 - Exploring the possibilities of eye tracking and EEG integration for cartographic context - <b>Merve Keskin</b>		
10:50 AM	6205.2 - How hard is it to design maps for beginners, intermediates and experts? - <b>Gáspár Albert</b>		
11:10 AM	6205.3 - An Empirical Study for Measuring the Visual Guidance Using Eye Tracking - <b>Weihua Dong</b>		
<b>WEB SERVICES</b>			<b>Maryland A</b>
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
10:30 AM	6206.1 - Systematic Error Reduction in Geometric Measurements based on Altimetric Enrichment of Geographical Features - <b>Jean-François Girres</b>		
10:50 AM	6206.2 - (Structuring) side-effects when combining spatial data for service-oriented mapping - <b>Markus Jobst</b>		
11:10 AM	6206.3 - Research on a Method of Geographical Information Service Load Balancing - <b>Heyuan Li</b>		
<b>LAND USE AND LAND COVER II</b>			<b>Maryland B</b>
<b>Lu</b>	<b>SPECIAL TOPIC: LAND USE AND LAND COVER</b>		
10:30 AM	6207.1 - New global map of land cover pattern types based on the ESA CCI-LC data using a segmentation-classification technique - <b>Jakub Nowosad</b>		
10:50 AM	6207.2 - Machine learning based unmixing of urban land cover from Sentinel-2 using synthetically mixed training data - <b>Frank Canters</b>		
11:10 AM	6207.3 - Geovisualization of land use/land cover using bivariate statistical legends and visual analytics - <b>Georgianna Strode</b>		
<b>GI &amp; SUSTAINABILITY 5</b>			<b>Maryland C</b>
<b>Su</b>	<b>COMMISSION: GI FOR SUSTAINABILITY</b>		
10:30 AM	6208.1 - URBANCOST a GIS Server to the conservation of urban wetlands - <b>Carolina Rojas</b>		
10:50 AM	6208.2 - Cartography of the Urban Growth of Brasilia: Expansion Vectors, Spatial Densities and Environmental Impacts - <b>Rodrigo Vilela</b>		
11:10 AM	6208.3 - Mapping and Spatial Analysis of Socio-Economic and Environmental Indicators for Sustainable Development, Tunisia - <b>Noamen Rebai</b>		



TIME	EVENT	THURSDAY	ROOM
<b>PLACE NAMES ON MAPS</b>			<b>Harding</b>
<b>Tp</b>	<b>COMMISSION: TOPOLOGY</b>		
10:30 AM	6209.1 - The place names of the Middle East before and after the discovery of Americas Some examples from ancient maps - <b>Cosimo Palagiano</b>		
10:50 AM	6209.2 - Designing typefaces for maps. A protocol of tests - <b>Sébastien Biniek</b>		
11:10 AM	6209.3 - RJMCMC based Text Placement to Optimize Label Placement and Quantity - <b>Guillaume Touya</b>		
<b>DIVERSE DESIGNS</b>			<b>Coolidge</b>
<b>De</b>	<b>COMMISSION: MAP DESIGN</b>		
10:30 AM	6210.1 - A content analysis of climate change maps in the United States news media - <b>Carolyn Fish</b>		
10:50 AM	6210.2 - Classifying the Diversity of Bus Mapping Systems - <b>Mohd Shahmy Mohd Said</b>		
11:10 AM	6210.3 - Expressive map design: OGC SLD/SE++ extension for expressive map styles - <b>Sidonie Christophe</b>		
<b>INNOVATIVE METHODS IN EDUCATION</b>			<b>Hoover</b>
<b>Ed</b>	<b>COMMISSION: EDUCATION AND TRAINING</b>		
10:30 AM	6211.1 - Analyzing the integration of residential students in the context of a Massive Open Online Course in cartography - <b>Charalampos Gkonos</b>		
10:50 AM	6211.2 - Linkages that Built Modern Cartography: A Citation and Contents Analysis of Elements of Cartography - <b>Jenny Marie Johnson</b>		
11:10 AM	6211.3 - How to learn Thematic Cartography in the context of Geosciences and Engineering? Towards a new pedagogical proposal - <b>German Giovanni Vargas Velasquez</b>		

TIME	EVENT	THURSDAY	ROOM
11:30 AM - 1:30 PM	LUNCH (on your own - gather a group)		
	Last chance to visit the International Cartographic Exhibition in the Washington Rooms		
11:40 AM - 12:30 PM	ICA COMMISSION BUSINESS MEETINGS – 6300s		
<b>Pd</b>	6302 - Business Meeting of the ICA Commission on Map Production and Geoinformation Management Chaired by Peter Schmitz		Delaware B
<b>Ma</b>	6303 - Business Meeting of the ICA Commission on Marine Cartography Working Group Chaired by Ron Furness		Virginia A
<b>Us</b>	6305 - Business Meeting of the ICA Commission on Use, User and Usability Issues Chaired by Kristien Ooms		Virginia C
<b>St</b>	6306 - Business Meeting of the ICA Commission on SDI and Standards Chaired by Serena Coetzee		Maryland A
12:30 PM - 1:20 PM	ICA COMMISSION BUSINESS MEETINGS – 6400s		
<b>Op</b>	6401 - Business Meeting of the ICA Commission on Open Source Geospatial Technologies Chaired by Silvana Philippi Camboim		Delaware A
<b>Ge</b>	6404 - Business Meeting of the ICA Commission on Generalisation and Multiple Representation Chaired by Dirk Burghardt		Virginia B
<b>Su</b>	6408 - Business Meeting of the ICA Commission on GI for Sustainability Chaired by Vladimir Tikunov		Maryland C
<b>PI</b>	6409 - Business Meeting of the ICA Commission on Planetary Cartography Chaired by Henrik Hargitai		Harding
<b>PLENARY</b>			
1:30 PM - 2:30 PM	6500.1 - Maps in support of US Foreign Policy - Perspectives from The U.S. Geographer - <b>Lee Schwartz</b> , U.S. Department of State		Salon 2/3
2:30 PM - 2:50 PM	BREAK		

TIME	EVENT	THURSDAY	ROOM
2:50 PM - 3:50 PM	TECHNICAL SESSIONS – 6600s		
<b>VOLUNTEERED GEOGRAPHIC INFORMATION</b>			Delaware A
<b>Op</b>	<b>COMMISSION: OPEN SOURCE GEOSPATIAL TECHNOLOGIES</b>		
2:50 PM	6601.1 - Official reference maps and VGI – the challenge of integration in developing countries - <b>Silvana Camboim</b>		
3:10 PM	6601.2 - Creating a Concept for the Use of Volunteered Geographic Information in National Mapping Agency - <b>Mari Laakso</b>		
3:30 PM	6601.3 - Crowd and community sourced data quality assessment - <b>Ana-Maria Olteanu Raimond</b>		
<b>VARIED PRODUCTION APPROACHES</b>			Delaware B
<b>Pd</b>	<b>COMMISSION: MAP PRODUCTION AND GEOINFORMATION MANAGEMENT</b>		
2:50 PM	6602.1 - Maps and Models - The Art of automated Map Production using flexible Tools and Workflows - <b>Barbara Greiner</b>		
3:10 PM	6602.2 - U.S. Geological Survey 3D Elevation Program: Past, Present and Future - <b>Amanda Lowe</b>		
3:30 PM	6602.3 - Reproducible Cartography: An Extension of the R Software for Thematic Mapping - <b>Timothée Giraud</b>		
<b>BERTIN'S SÉMIOLOGIE GRAPHIQUE @ 50 - I</b>			Virginia A
<b>Be</b>	<b>SPECIAL TOPIC: SEMIOLOGY AND BERTIN AT 50 YEARS</b>		
2:50 PM	6603.1 - Multivariate Label-based Thematic Maps - <b>Richard Brath</b>		
3:10 PM	6603.2 - Mapping the world - <b>Ayako Kagawa</b>		
3:30 PM	6603.3 - The design of cartographic symbol system without dependency on GIS platform - <b>Zhao Li</b>		
<b>MULTI-SCALE MAPS</b>			Virginia B
<b>Ge</b>	<b>COMMISSION: GENERALISATION AND MULTIPLE REPRESENTATION</b>		
2:50 PM	6604.1 - Alternative Transitions Between Existing Representations in Multi-Scale Maps - <b>Marion Dumont</b>		
3:10 PM	6604.2 - Introducing Leader Lines into Scale-Aware Consistent Labeling - <b>Hsiang-Yun Wu</b>		
3:30 PM	6604.3 - Variable-scale maps in real-time generalisation using a quadtree data structure and space deforming algorithms - <b>Pia Bereuter</b>		

TIME	EVENT	THURSDAY	ROOM
<b>INTERACTIVE/DYNAMIC/AUGMENTED REALITY</b>			Virginia C
<b>Us</b>	<b>COMMISSION: USE, USER AND USABILITY ISSUES</b>		
2:50 PM	6605.1 - Highlighting the spatio-temporal information on maps with dynamic variables - <b>Paweł Cybulski</b>		
3:10 PM	6605.2 - Augmented Reality and Maps – new possibilities for understanding and interacting with geographic data - <b>Gabriel De Almeida Pereira</b>		
3:30 PM	6605.3 - Visualization of the Map-related Information in Augmented Reality: Analysis of Users' Needs - <b>Kateřina Chmelařov</b>		
<b>SPECIAL SDI PANEL SESSION</b>			Maryland A
<b>St</b>	<b>COMMISSION: SDI AND STANDARDS</b>		
2:50 PM - 3:50 PM	6606 - Collaborative Reflections on Dr. Harold Moellering's Contributions to Cartography and GIScience - <b>Chaired by Timothy Nyerges, with Keith Clarke, Robin Fegeas, Antony Cooper, Jon Kimerling, and Bengt Rystedt on Panel</b>		
<b>LAND USE AND LAND COVER III</b>			Maryland B
<b>Lu</b>	<b>SPECIAL TOPIC: LAND USE AND LAND COVER</b>		
2:50 PM	6607.1 - Land Use/Cover Mapping in an Urban Area from Satellite Imagery Using Random Forests: A Comparative Evaluation - <b>Xiaojun Yang</b>		
3:10 PM	6607.2 - Mapping Land Degradation Based on the Composite Land Degradation Index for Palapye, Eastern Botswana - <b>Felicia Akinyemi</b>		
3:30 PM	6607.3 - A clustering-based segmentation method for mobile laser scanning data - <b>You Li</b>		
<b>GI &amp; SUSTAINABILITY 6</b>			Maryland C
<b>Su</b>	<b>COMMISSION: GI FOR SUSTAINABILITY</b>		
2:50 PM	6608.1 - Data integration on anthropogenic pollution for ecological mapping - <b>Andrey Medvedev</b>		
3:10 PM	6608.2 - Cartography of the conflict: Brazilian Quilombo and Conservation Unit Use of Territory and Biodiversity Protection - <b>Rodrigo Vilela</b>		
3:30 PM	6608.3 - Spatial analysis to mapping homogeous units for environmental planning. Border of Tabasco-Chiapas states, Mexico - <b>Aristides Saavedra Guerrero</b>		
<b>CRATERS AND PROJECTIONS</b>			Harding
<b>PI</b>	<b>COMMISSION: PLANETARY CARTOGRAPHY</b>		
2:50 PM	6609.1 - Conventions of designating unnamed planetary surface features- <b>Henrik Hargitai</b>		

TIME	EVENT	THURSDAY	ROOM
3:10 PM	6609.2 - An Online Planetary Exploration Tool: "Country Movers" - <b>Mátyás Gede</b>		
3:30 PM	6609.3 - The Huygens Crater of Mars: A Case Study using GIS and Video Game Engines - <b>Joseph Moran</b>		
<b>MINING</b>			<b>Coolidge</b>
2:50 PM	6610.1 - Effect of Sediment-Hosted Disseminated Gold Deposit Mining on the Landscape of Itangunmodi-Igun Basin, SW. Nigeria - <b>Olawale Oluwafemi</b>		
3:10 PM	6610.2 - The visualization service of geosensor networks in monitoring and early warning of the geohazard in mines - <b>Zhang Jin</b>		
3:30 PM	6610.3 - Mapping of the dilemma of Mining against forests and conservation in the Lom and Djérem Division-Cameroon - <b>Tchindjang Mesmin</b>		
<b>EDUCATIONAL ACTIVITY</b>			<b>Hoover</b>
<b>Ed</b>	<b>COMMISSION: EDUCATION AND TRAINING</b>		
2:50 PM	6611.1 - Geomatics & Participation Summer School 2016 – Developing mobile mapping apps to encourage citizen participation in nature conservation - <b>Gertrud Schaab</b>		
3:10 PM	6611.2 - Playing with maps – using geogames in geography field-courses - <b>Jiří Pánek</b>		
3:30 PM	6611.3 - Mapping for Planning: A Supervised Field Experience of BS Human Ecology Students in Banaue, Ifugao, Philippines - <b>Joan Pauline Talubo</b>		
3:50 PM - 4:10 PM	<b>BREAK</b>		
4:10 PM - 5:30 PM	<b>TECHNICAL SESSIONS – 6700s</b>		
<b>USING OPEN SOURCE CONTENT</b>			<b>Delaware A</b>
<b>Op</b>	<b>COMMISSION: OPEN SOURCE GEOSPATIAL TECHNOLOGIES</b>		
4:10 PM	6701.1 - Translation from the collaborative OSM database to cartography - <b>Flora Hayat</b>		
4:30 PM	6701.2 - Volunteered Geographic Information: Interpretation, Visualisation and Social Computing (VGIscience) - <b>Dirk Burghardt</b>		
4:50 PM	6701.3 - Utilising User Generated Content in the Creation of Land Ownership Boundaries for the Crofters of Scotland - <b>William Mackness</b>		
5:10 PM	6701.4 - Rapid deployment of the US Geological Survey's National Map Corps to assist FEMA's emergency response - <b>Elizabeth McCartney</b>		

TIME	EVENT	THURSDAY	ROOM
<b>URBAN ISSUES I</b>			<b>Delaware B</b>
4:10 PM	6702.1 - Dynamic Optimization of Phenomena Mapping Application to Urban Heat Wave- <b>Ha Pham</b>		
4:30 PM	6702.2 - Mapping Urban Settlement Patterns through Satellite Remote Sensing and Geospatial Analysis - <b>Ting Liu</b>		
4:50 PM	6702.3 - Analysis and visualization of Urban Residents' Income-Related Happiness Index in China - <b>Yanfang Liu</b>		
5:10 PM	6702.4 - Mapping Regional Analysis of Domestic Tourist Outflow in India : Based on two rounds of large scale household data sets - <b>William Joe</b>		
<b>BERTIN'S SÉMIOLOGIE GRAPHIQUE @ 50 - II</b>			<b>Virginia A</b>
<b>Be</b>	<b>SPECIAL TOPIC: SEMIOLOGY AND BERTIN AT 50 YEARS</b>		
4:10 PM	6703.1 - (re) Considering Bertin in the Age of Big Data and Visual Analytics - <b>Alan MacEachren</b>		
4:30 PM	6703.2 - Jacques Bertin's Matrix Theory for Cartographic Information Communication. Semantics and Semiotics Joined for Geographic Representation - <b>Francis Harvey</b>		
4:50 PM	6703.3 - What Color is Your Brain? - <b>Sara Irina Fabrikant</b>		
<b>PRODUCTION, GENERALIZATION, AND CONFLATION</b>			<b>Virginia B</b>
<b>Ge</b>	<b>COMMISSION: GENERALISATION AND MULTIPLE REPRESENTATION</b>		
4:10 PM	6704.1 - Automatic map generalisation from research to production - <b>Rose Nyberg</b>		
4:30 PM	6704.2 - Road data conflation – the key step to geospatial data enhancement - <b>Dan Lee</b>		
4:50 PM	6704.3 - A New Use of Automated Generalization as the Basis for Automated, Incremental Updating of Maps and Map Data - <b>Mary Lou von Wyl</b>		
5:10 PM	6704.4 - Producing maps from multiple sources using automated data conflation, generalisation and advanced styling - <b>Nicolas Regnaud</b>		
<b>DIGITAL HUMANITIES</b>			<b>Virginia C</b>
4:10 PM	6705.1 - Narratives as Geographic Database: A Methodological Guide to Map (Life) Stories - <b>Sébastien Caquard</b>		
4:30 PM	6705.2 - Collectively Mapping Syria's Borders - <b>Meghan Kelly</b>		
4:50 PM	6705.3 - A Japanese Old Maps Online: Toward an Open Platform for Collaborative Research in the Digital Humanities - <b>Keiji Yano</b>		
5:10 PM	6705.4 - Digitising Patterns of Power – Cartographic Communication for Digital Humanities - <b>Alexander Pucher</b>		

TIME	EVENT	THURSDAY	ROOM
<b>SPECIAL SDI RECEPTION</b>			Maryland A
<b>St</b>	COMMISSION: SDI AND STANDARDS		
4:10 PM - 5:30 PM	6706 - Collaborative Reflections on Dr. Harold Moellering's Contributions to Cartography and GIScience - <b>Reception organized by Timothy Nyerges and Elizabeth Wentz</b>		
<b>THEMATIC CARTOGRAPHY AND COGNITION</b>			Maryland B
4:10 PM	6707.1 - Psychophysics: The Foundation of Cartography - <b>George McCleary</b>		
4:30 PM	6707.2 - Research on Automatic Generation of Map Symbols based on Cognitive Semantics Analysis - <b>Jiangpeng Tian</b>		
4:50 PM	6707.3 - Exploring visual cognition efficiency in map handling ability based on the eye movement experiment - <b>Shulei Zheng</b>		
<b>GI &amp; SUSTAINABILITY 7</b>			Maryland C
<b>Su</b>	COMMISSION: GI FOR SUSTAINABILITY		
4:10 PM	6708.1 - Where in the Rural? Exploring Human Settlement Patterns in Rural Landscapes - <b>Alexander Stum</b>		
4:30 PM	6708.2 - Application of GIScience in Micro-level Development - A Case Study from the Himalayan Region of Bhutan - <b>Pankaj Thapa</b>		
4:50 PM	6708.3 - Mapping Local Development and Tourism in Central CHILE - <b>Fernando Pino</b>		
5:10 PM	6708.4 - Oil Palm and evolution of land use in the Sanaga Maritime Division from 1975 to 2013 - <b>Tchindjang Mesmin</b>		
<b>EXPLORATION AND EDUCATION</b>			Harding
<b>PI</b>	COMMISSION: PLANETARY CARTOGRAPHY		
4:10 PM	6709.1 - Planetary Cartography - Activities and Current Challenges - <b>Andrea Nass</b>		
4:30 PM	6709.2 - The cognitive role of planetary toponyms in the interpretation of surface geology - <b>Henrik Hargitai</b>		
4:50 PM	6709.3 - Hebrus Valles - The Mars Exploration Zone Map - <b>Mateusz Pitura</b>		
5:10 PM	6709.4 - Development of a Planet Tool for an interactive School Atlas as eBook - <b>Stephan Wondrak</b>		
<b>DIGITAL SERVICES SHOWCASE</b>			Coolidge
4:10 PM - 5:30 PM	6710 - Digital Services Showcase for International Cartographic Exhibition Entries - <b>Chaired by Margaret Pearce</b>		
7:30 PM - 11:00 PM	<b>GALA DINNER</b>		Hill Country Restaurant
	Texas-style barbecue dinner, drinks and dancing in downtown Washington DC - please register		

TIME	EVENT	FRIDAY	ROOM
8:30 AM - 9:50 AM	TECHNICAL SESSIONS – 7100s		
<b>URBAN ISSUES II</b>			<b>Harding</b>
8:30 AM	7109.1 - Mapping Urban Areas for Educational Purposes – Concept and Redesign of City Maps in the «Swiss World Atlas» - <b>Wenke Zimmermann</b>		
8:50 AM	7109.2 - NATO Urbanisation Project. The 2035 imaginary city of Archaria - <b>Walter David</b>		
9:10 AM	7109.3 - Proposal of data integration of the Registration Real Estate and Urban Cadaster for Brazilian municipalities - <b>Caio Paiva</b>		
<b>MAPPING LANDSCAPES</b>			<b>Coolidge</b>
8:30 AM	7110.1 - Scale Matters: Identifying the Effects of Landscape Fragmentation on Land Loss - <b>Nina Lam</b>		
8:50 AM	7110.2 - Cross-Scale Analysis of Sub-Pixel Variations in Digital Elevation Models - <b>Mehran Ghandehari</b>		
9:10 AM	7110.3 - Patterns of terrain feature extraction from variable terrain using multiple methods - <b>Boleslo Romero</b>		
9:30 AM	7110.4 - MAUP Sensitivity Analysis on Population Density - <b>Cuilin Liu</b>		
<b>SCHOOL/UNIVERSITY COLLABORATION</b>			<b>Hoover</b>
<b>Ed</b>	<b>COMMISSION: EDUCATION AND TRAINING</b>		
8:30 AM	7111.1 - E-materials for school course in cartography at the Moscow Lomonosov State University - <b>Andrey Medvedev</b>		
8:50 AM	7111.2 - Finding solutions to problems when teaching with GIS in the classroom: Three case studies in Soweto, South Africa - <b>Sanet Carow</b>		
9:10 AM	7111.3 - Assessment of Cartography and GIS in EDucation Development: case study of Joint Admissions and Matriculation Board - <b>Justin Nyamson</b>		
<b>BERTIN'S SÉMIOLOGIE GRAPHIQUE @ 50 – III</b>			<b>Balcony B</b>
<b>Be</b>	<b>SPECIAL TOPIC: SEMIOLOGY AND BERTIN AT 50 YEARS</b>		
8:30 AM	7113.1 - Reflection on the development of tool kits of Bertin's methods through the documents at the National Archives in Paris - <b>Takashi Morita</b>		
8:50 AM	7113.2 - Recognition of Risk Information --- Adaptation of J. Bertin's Orderable Matrix for social communication - <b>Ishida Keiichi</b>		
9:10 AM	7113.3 - Traduire encore Bertin aujourd'hui : pourquoi faire ? Les nouvelles faces cachées de la Sémiologie Graphique - <b>Mohsen Dhieb</b>		
9:30 AM	7113.4 - La sémiologie typo-graphique - <b>Francis Dhee</b>		



TIME	EVENT	FRIDAY	ROOM
<b>ANALYSIS FOR THEMATIC MAPPING</b>			Balcony A
8:30 AM	7114.1 - Data Classification for Highlighting Polygons with Local Extreme Values in Choropleth Maps - <b>Jochen Schiewe</b>		
8:50 AM	7114.2 - Geovisualization for Geospatial Intelligence Analysis - <b>Vincent Caillard</b>		
9:10 AM	7114.3 - Displaying voter gains and losses: Local government elections of 2011 vs 2016 - <b>Peter Schmitz</b>		
<b>SENSING HUMAN EFFECTS ON THE ENVIRONMENT</b>			McKinley
8:30 AM	7115.1 - Technical and Environmental Assessment of Forest Road Network based on ZEB1 LiDAR Data - <b>Georgios Arseniou</b>		
8:50 AM	7115.2 - Spectral feature based tea-field extraction from digital orthophoto maps - <b>Vincent Caillard</b>		
9:10 AM	7115.3 - Mapping an emerging marine litter problem using UAS: the case of refugee litters in the eastern coast of Lesvos - <b>Apostolos Papakonstantinou</b>		
9:50 AM - 10:20 AM	<b>BREAK</b>		ICC Registration Area
	Morning break hosted in ICC registration area		
<b>PLENARY</b>			
10:20 AM - 11:30 AM	7200.1 - 7 Billion Cartographers Need You - <b>Mikel Maron</b> , Mapbox		Salon 2/3
11:30 AM - 1:30 PM	<b>LUNCH (on your own—gather a group)</b>		
1:30 PM - 3:30 PM	<b>ICC 2017 CLOSING CEREMONY</b> See online program for detailed schedule		Salon 2/3
	ICC 2017 Local Organizing Committee's closing statements		
	ICA Awards		
	Recognition of ICC 2017 organizers		
	Presentation - ICC student volunteers		
	Presentation - ICC 2019: Tokyo, Japan		
	Conveyance of the ICA flag		
	ICA and Cartography Tomorrow: Concluding Remarks - <b>Menno-Jan Kraak</b> , President of the ICA		











## LOCAL RESTAURANTS



Map by Paul Yost and Cindy Brewer, Penn State Geography  
Sources: OpenStreetMap, local hotel concierge restaurant guides, Google Maps, and field checking