

201CC
20GIS

8th
International
Conference on
Cartography & GIS

20-25 June 2022

Nessebar, Bulgaria



PROGRAMME

Dedicated to the 80th Anniversary of University of Architecture, Civil Engineering and Geodesy
and 10th Anniversary of Bulgarian Cartographic Association



INTERNATIONAL CARTOGRAPHIC ASSOCIATION
BULGARIAN CARTOGRAPHIC ASSOCIATION
UNIVERSITY OF ARCHITECTURE, CIVIL ENGINEERING AND GEODESY



MEDIA PARTNERS



The event is organized with the support of the Military Geographic Service
and Bulgarian Science Fund, Contract № KFI-06-MH0/48, 16.12.2019

Bulgarian Cartographic Association
International Cartographic Association
University of Architecture, Civil Engineering and Geodesy

8th INTERNATIONAL CONFERENCE ON CARTOGRAPHY AND GIS

20-25 June 2022
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FINAL PROGRAMME

*Dedicated to
the 80th Anniversary of University of Architecture, Civil Engineering and Geodesy
and 10th Anniversary of Bulgarian Cartographic Association*

Editors: Temenoujka Bandrova, Milan Konečný, Silvia Marinova

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José Jesús Reyes Nunez, Lyubka Pashova, Carla Sena, Necla Ulugtekin,
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National Institute of Geophysics, Geodesy and Geography,
Bulgarian Academy of Sciences

SUNDAY, June 19, 2022

2:00 PM – 5:00 PM Artium Center
Registration

MONDAY, June 20, 2022

8:30 AM – 9:30 AM Artium Center
Registration

MONDAY, June 20, 2022 PLENARY SESSIONS

June 20 9:30 AM – 10:45 AM

LIBRARY HALL

PLENARY SESSION L1		
Cartographic Visualization - part 1		
CHAIR	Lyubka Pashova	Bulgaria
Georgi Zhelezov and Velimira Stoyanova	SPATIAL MODELING OF THE LANDSCAPE DIVERSITY AND TRANSFORMATIONS IN THE RIVER LOM CATCHMENTS, NORTHWESTERN BULGARIA	Bulgaria
Hajdú Edina and Pál Márton	INSPECTING GEOTOURIST MAPS TO ENHANCE VISUAL GEOSCIENTIFIC COMMUNICATION	Hungary
Dariusz Dukaczewski and Anna Markowska	APPLICATION OF ENTITIES METHODOLOGY AND RULES FOR DESIGNING OF ANIMATED CARTOGRAPHIC ANAMORPHOSES	Poland
 Guclu Senyurdusev and Ahmet Ozgur Dogru	AN ALTERNATIVE APPROACH FOR CREATING 3D CITY MODEL USING PROCEDURAL MODELING	Turkey
Čeněk Šašinka, Zdeněk Stachoň, Alžběta Šašinková, Pavel Ugwitz, Daniela Halámková, Jiří Čeněk, Vojtěch Juřík and Stanislav Popelka	COMPARISON OF EXTRINSIC AND INTRINSIC VISUALIZATION METHODS: EXPLORATIVE EYETRACKING DATA ANALYSIS	Czech Republic



COFFEE BREAK 10:45 AM – 11:15 AM

PLENARY SESSION L2		
Cartographic Visualization - part 2		
CHAIR	Dariusz Dukaczewski	Poland
Jasmine Desclaux-Salachas	CIVILIAN CARTOGRAPHY, BETWEEN GEODESY AND ART: BATTIR, AN UNPRECEDENTED CARTOGRAPHIC CITIZEN PATRIMONY, A VALUABLE COMMON GOOD ENDLESSLY RESTORED (THE CARTOGRAPHIC CITIZEN UNIVERSITY)	France
Barbara Prus and Stanisław Bacior	AUTOMATED MODELLING DATA RETRIEVAL FOR LINEAR PROJECT IMPACT ASSESSMENT ON AGRICULTURAL LAND	Poland
Iga Ajdacka and Izabela Karsznia	VERIFYING AND IMPROVING MAP SPECIFICATIONS OF RIVER NETWORK SELECTION FOR AUTOMATIC GENERALIZATION OF SMALL-SCALE MAPS	Poland
Nikola Yonov and Dobrin Petkov	AUGMENTED REALITY NAVIGATION MAP OF MOUNTAIN AREA	Bulgaria
Denitsa Savova-Georgieva	LATEST TRENDS IN CARTOGRAPHY AND WEB GIS	ESRI-Bulgaria



LUNCH TIME 12:30 PM – 2:30 PM



- Video presentation

PLENARY SESSION L3		
Cartography and GIS in Education		
CHAIR	Georgi Zhelezov	Bulgaria
José Jesús Reyes Nunez	SOME REFLECTIONS ON SCHOOL CARTOGRAPHY	Hungary
 Nusret Demir, Maria Tsakiri, George Vergos, Öznur Özdemir-Akyıldırım and George Hloupis	CAPACITY BUILDING IN EARTH OBSERVATION EDUCATION FOR DIGITAL ECONOMY ADAPTATION IN JORDAN AND ALGERIA	Turkey
Naeema Alhosani	INTEGRATING POETRY INTO THE GEOGRAPHY CURRICULUM: A CASE STUDY IN THE UNITED ARAB EMIRATES	United Arab Emirates
Jasmine Desclaux-Salachas	THE METICULOUS WORK DONE BY THE SECOND-YEAR KINDERGARTEN PUPILS. WHERE EVERYTHING BEGINS: OPENING A CITIZEN'S EYE	France
Naeema Alhosani	THE SKILL AND ART OF MAP-MAKING: A STUDENTS' GUIDE TO SELF-DEVELOPMENT	United Arab Emirates
Alžběta Šašinková , Čeněk Šašinka, Zdeněk Stachoň, Pavel Ugwitz and Petr Kubiček	POSSIBILITIES OF QUANTITATIVE ANALYSIS OF HYPSONOGRAPHY EDUCATION PROCESS IN COLLABORATIVE IMMERSIVE VIRTUAL REALITY	Czech Republic

COMMISSION MEETING		
COMMISSION ON CARTOGRAPHY AND CHILDREN		
CHAIR	José Jesús Reyes Nunez	Hungary

TUESDAY, June 21, 2022 PLENARY SESSIONS

June 21 9:30 AM – 11:00 AM

LIBRARY HALL

PLENARY SESSION L4 Geospatial Analysis and Data Mining		
CHAIR	José Jesús Reyes Nunez	Hungary
László Zentai	DOES CARTOMETRY STILL MATTER?	Hungary
 Anna Michalik and Agnieszka Zwirowicz-Rutkowska	GEOPORTAL SUPPORTING SPATIAL PLANNING IN POLAND: GENERAL ASSUMPTIONS AND REQUIREMENTS	Poland
Katerina Bortlova	GIS IN REAL ESTATE INVESTMENT	Czech Republic
Elzbieta Bielecka, Beata Calka and Dariusz Dukaczewski	TOWARDS INCLUSIVE AND SUSTAINABLE URBANIZATION. CASE STUDY OF LAND USE EFFICIENCY IN POLAND	Poland
 Elizabeta Babić Sever, Ilija Grgić, Martina Triplat Horvat, Mladen Zrinjski and Damir Šantek	HISTORICAL MAPS IN THE FUNCTION OF IDENTIFYING THE BORDER LINE	Croatia
Edon Maliqi, Bashkim Idrizi and Petar Penev	GEOSPATIAL ANALYSIS AND GEOVISUALIZATION OF WATER POLLUTION IN THE ARTIFICIAL LAKE IN MITROVICA, KOSOVO	Kosovo, North Macedonia, Bulgaria



LUNCH TIME 11:00 AM – 1:30 PM

TUESDAY, June 21, 2022 PLENARY SESSIONS

June 21 9:30 AM – 11:00 AM

CONFERENCE HALL

PLENARY SESSION C1		GIS for Geology, Natural Sciences and Ecosystems	
CHAIR	Georg Gartner		Austria
Hristo Dechev, Lyubka Pashova, Borislav Alexandrov and Stiliana Lyubenova	DEVELOPMENT OF A WEB-BASED INFORMATION SYSTEM FOR POLAR RESEARCH CONDUCTED IN THE REGION OF THE BULGARIAN ANTARCTIC BASE "ST. KLIMENT OHRIDSKI", LIVINGSTON ISLAND		Bulgaria
Pál Márton, Albert Gáspár	GEODIVERSITY ASSESSMENT OF THE EASTERN STYRIAN PREALPS AND ITS SURROUNDINGS (AUSTRIA-HUNGARY)		Hungary
 Nusret Demir, Bunyamin Akgül	SUSTAINABLE MONITORING OF SEA-VESSELS OVER BOSPORUS WITH USE OF GOOGLE EARTH ENGINE PLATFORM		Turkey
Rumiana Vatsheva, Severina Bordzhukova and Kristina Gartsianova	LAND COVER AND LAND USE ASSESSMENT IN RELATION TO TOURISM DEVELOPMENT IN THE MUNICIPALITY OF TROYAN IN BULGARIA		Bulgaria
Karel Jedlička and Pavel Hájek	DOES 3D GIS PROVIDE A DIFFERENT INSIGHT THEN 2D?		Czech Republic
Asparuh Kamburov and Valentina Nikolova	3D MODELLING IN GIS ENVIRONMENT FOR THE PURPOSE OF DEBRIS FLOWS ANALYSIS – A CASE STUDY OF THE EASTERN RHODOPES (BULGARIA)		Bulgaria



LUNCH TIME 11:00 AM – 1:30 PM

OPENING CEREMONY

8th International Conference on Cartography and GIS

Greetings

- Prof. Dr. Temenoujka Bandrova - President of Bulgarian Cartographic Association, Vice-President of International Cartographic Association
- Mr. Nikolay Dimitrov - Mayor of Nessebar Municipality
- Prof. Dr. Slaveyko Gospodinov - Vice-rector of University of Architecture, Civil Engineering and Geodesy
- **Prof. Dr. Milan Konečný** - President of International Organizing Committee of 8ICCGIS, Czech Republic
- Mr. Tim Trainor - President of International Cartographic Association, USA
- Dr. Alessandro Annoni - President of International Society for Digital Earth, Italy
- Mr. Nick Land - ESRI Europe, UK

3 minutes each

Greetings to all participants by

Folklore Dance Group "Nezabravka" led by Andiopa Tsvetkova and choreographer Desislava Chervenкова. The greeting is dedicated to the 140th anniversary of their school "Lyuben Karavelov" - Nessebar. The children will present authentic folk costumes from all over Bulgaria.



June 21 2:30 PM – 3:30 PM

CONCERT HALL ARTIUM

KEYNOTE SESSION 1		
CHAIR	Temenoujka Bandrova	Bulgaria
Tim Trainor	BEYOND THE SDI, THE NEW UN INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK AND THE ROLE OF CARTOGRAPHY	USA/ICA President
Alessandro Annoni	DIGITAL EARTH: YESTERDAY, TODAY AND TOMORROW	Italy/ISDE President



COFFEE BREAK 3:30 PM – 4:00 PM

June 21 4:00 PM – 5:00 PM

CONCERT HALL ARTIUM

KEYNOTE SESSION 2		
CHAIR	Milan Konečný	Czech Republic
Georg Gartner	LOCATION-BASED SERVICES: EVOLUTION AND DEVELOPMENT	Austria
Nick Land	GEOSPATIAL INFRASTRUCTURE FOR AN INTERDEPENDENT WORLD	United Kingdom/ ESRI

June 21 5:15 PM

Group Photo of all participants in front of Artium Center

June 21 6:00 PM Artium Center

WELCOME RECEPTION
sponsored by ESRI



WEDNESDAY, June 22, 2022 PLENARY SESSIONS

June 22 9:00 AM – 10:30 AM

LIBRARY HALL

PLENARY SESSION L5		
Map Design and Production - part 1		
CHAIR	László Zentai	Hungary
Bashkim Idrizi	INTERNATIONAL EPSG CODING OF THE STATE COORDINATE REFERENCE SYSTEM OF THE REPUBLIC OF KOSOVA	North Macedonia
Márton Pál and Gáspár Albert	DIFFERENT PRACTICES OF MAP USE IN EARTH SCIENCES	Hungary
Jiří Nemeškal, Adam Klisák and Bohumil Ptáček	PRAGUE SUBURBS MAPPING: DIGITALIZATION OF 150 YEARS OF SOCIAL-SPATIAL DEVELOPMENT	Czech Republic
Denitsa Siteva and Silvia Marinova	DISSEMINATING INFORMATION ON NATURAL DISASTERS THROUGH ATLASES	Bulgaria
 Guclu Senyurdusev, Ahmet Ozgur Dogru and N. Necla Ulugtekin	EXPLORING THE OPPORTUNITIES OF OPEN SOURCE DATA USE IN CREATION 3D PROCEDURAL CITY MODELS	Turkey
Zdeněk Stachoň, Čeněk Šašinka, Milan Konečný, Stanislav Popelka and David Lacko	AN EYE-TRACKING ANALYSIS OF VISUAL SEARCH TASK ON CARTOGRAPHIC STIMULI	Czech Republic



COFFEE BREAK 10:30 AM – 11:00 AM

WEDNESDAY, June 22, 2022 PLENARY SESSIONS

June 22 9:00 AM – 10:30 AM

CONFERENCE HALL

PLENARY SESSION C2		UAV Applications and New Trends
CHAIR	Rumiana Vatseva	Bulgaria
Davis Dinkov and Lyubka Pashova	COMBINATION OF GNSS AND UAV OBSERVATIONS FOR STUDYING LANDSLIDE PROCESSES – A CASE STUDY OF THE BOTANICAL GARDEN IN SOFIA	Bulgaria
Hédi Katreiner, Ákos Horváth, Fanni Vörös, Márton Pál, Szabolcs Tóth, András Várhegyi and Béla Kovács	MAPPING GAMMA DOSE RATES OF AN AREA WITH ELEVATED NATURAL RADIOACTIVITY USING A DRONE-MOUNTED SAFECAST SENSOR	Hungary
Marzieh Bodaghi, József Kránitz and András Jung	UAV LIDAR IMAGING-BASED FOREST MAPPING	Hungary
Maria Asenova and Milena Danailova	APPLICATION OF NDVI INDICES IN STUDYING FORESTS AFFECTED BY BIOTIC FACTORS USING UAV DATA	Bulgaria
 Hristo Nikolov and Mila Atanasova-Zlatareva	CREATING A LOCAL GEODATABASE FOR INVENTORY MAPPING AND RISK MONITORING THE LANDSLIDE PROCESSES OF THE LANDSLIDE “FISH-FISH”	Bulgaria
Zsóé Jedlicska, Gábor Rozman and Fanni Vörös	INVESTIGATION OF THE IDEAL GROUND CONTROL POINT QUANTITY AND DISTRIBUTION WITH UAV IN BAJNA (HUNGARY) SAMPLE AREA	Hungary



COFFEE BREAK 10:30 AM – 11:00 AM

PLENARY SESSION L6		Map Design and Production - part 2
CHAIR	Bashkim Idrizi	North Macedonia
Albina Mościcka , Jakub Wabiński, Andrzej Araszkiewicz, Damian Kiliszek and Beata Calka	TACTILE MAPS OF HISTORICAL GARDENS - CONTENT PROPOSAL	Poland
Ashna Abdulrahman Kareem Zada	MAPS FOR VISUALLY IMPAIRED AND BLIND STUDENTS IN IRAQI KURDISTAN REGION	Hungary
Jakub Wabiński , Albina Mościcka and Emilia Śmiechowska-Petrovskij	THE IMPORTANCE OF APPROPRIATE DESIGN OF SYMBOLS ON TACTILE MAPS	Poland
Shi Tingsheng, Ian K. Duncan, Yen-Ning Nini Chang and Michael T. Gastner	MOTIVATING GOOD PRACTICES FOR THE CREATION OF CONTIGUOUS AREA CARTOGRAMS	Singapore
Eva Dodsworth, Markus Wieland and Aidan de Villa-Choi	CREATING A SEARCHABLE DIGITAL ATLAS FROM 100 YEARS OF VERNON CITY DIRECTORIES (1900 TO 2000)	Canada
Ferim Gashi	APPLYING GIS TO ASSESS POPULATION ACCESS TO HEALTH FACILITIES IN THE REPUBLIC OF KOSOVO	Kosovo



LUNCH TIME 12:30 PM – 2:00 PM

PLENARY SESSION C3 Remote Sensing Technologies for Cartographic Purposes		
CHAIR	Karel Jedlička	Czech Republic
Maria Asenova and Milena Danailova	AUTOMATED MAPPING OF FOREST TREE CROWNS VIA UAV IMAGERY	Bulgaria
 Pavel Hájek, Hana Kubičková, Karel Jedlička and Karel Bobek	ACCURACY OF AN ECONOMICALLY AVAILABLE METHOD OF 3D DOCUMENTATION OF MOVABLE CULTURAL PROPERTY	Czech Republic
Gergana Antova and Ivan Peev	RESEARCH AND COMPARISON OF SOFTWARE PACKAGES FOR POINT CLOUDS PROCESSING	Bulgaria
 Mila Atanasova-Zlatareva and Hristo Nikolov	CREATION OF GLACIERS VELOCITY MAPS IN LIVINGSTON ISLAND USING SENTINEL-1 DATA	Bulgaria
 Gizem Senel, Mehmet Eroglu, Filiz Bektas Balcik and Cigdem Goksel	ANALYSING FLOOD AFFECTED REGION IN MERİÇ RIVER BASIN USING SENTINEL-1 AND SENTINEL-2 DATA	Turkey
Stanisław Bacior and Barbara Prus	ASSESSMENT OF MOTORWAY IMPACT ON AGRICULTURAL LAND WITH A SIMPLIFIED METHOD AND GIS DATA ACQUISITION AS A TOOL FOR SELECTING THE OPTIMAL ROUTE	Poland



LUNCH TIME 12:30 PM – 2:00 PM

SEMINAR ON DISASTER RISK REDUCTION – SOLUTIONS AND INNOVATIONS

Organized in cooperation with ICA Commission on Cartography in Early Warning and Crisis Management and Department of Geography, Masaryk University, Brno, Czech Republic

June 22 2:00 PM – 3:15 PM

LIBRARY HALL

SEMINAR	Seminar on Disaster Risk Reduction – Solutions and Innovations	
CHAIR	Milan Konečný	Czech Republic
Milan Konečný, Temenoujka Bandrova, Petr Kubiček, Zdeněk Stachoň, Radim Štampach, Jie Shen, Irina Rotanova, Jan Brodský and Pavel Špulák	STRATEGIES OF DISASTER RISK REDUCTION ON THE BACKGROUND OF U.N. GGIM AND DIGITAL BELT AND ROAD EFFORTS	Czech Republic, Bulgaria, China, Russian Federation
Krzysztof Pokonieczny	METHODOLOGY OF DEVELOPING THE DYNAMIC MAPS OF PASSABILITY	Poland
 Milaim Sylka	GIS, BIG DATA AND MAPPING IN DISASTER MANAGEMENT	Kosovo
Pavel Špulák, Bohuslav Ježek and Zdeněk Červenka	CHARTS AND MAPS FOR STATISTICAL YEARBOOKS OF FIRE AND RESCUE SERVICE OF THE CZECH REPUBLIC	Czech Republic
 Ekaterina Podolskaia, Anastasia Nekrasova, Tatiana Prokhorova, Aleksey Trubenkov and Olga Selyutskaya	WEB-GIS PROJECTS AT THE INSTITUTE OF EARTHQUAKE PREDICTION THEORY AND MATHEMATICAL GEOPHYSICS, RUSSIAN ACADEMY OF SCIENCES	Russian Federation

June 22 3:15 PM – 4:15 PM

LIBRARY HALL

COMMISSION MEETING	COMMISSION ON CARTOGRAPHY IN EARLY WARNING AND CRISIS MANAGEMENT	
CHAIR	Milan Konečný	Czech Republic

THURSDAY, June 23, 2022 PLENARY SESSIONS

June 23 9:00 AM – 10:15 AM

LIBRARY HALL

ISDE SPECIAL SESSION L7			Digital Earth for Smart Solutions		
CHAIR		Alessandro Annoni		Italy ISDE President	
David Wortley		GIS, COVID-19 AND THE METAVERSE		United Kingdom	
Temenoujka Bandrova and Lyubka Pashova		A CONCEPTUAL FRAMEWORK FOR USING GEOSPATIAL BIG DATA FOR WEB MAPPING		Bulgaria	
Karel Jedlička , Daniel Beran, Jan Martolos, František Kolovský, Michal Kepka, Tomáš Mildorf and Jan Sháněl		TRAFFIC MODELING FOR THE SMART CITY OF PILSEN		Czech Republic	
Hatice Atalay, N. Necla Ulugtekin and Filiz Bektas Balcik		SMART CITY SERVICES AND RELATIONS WITH GIS		Turkey	
Pavel Ugwitz, Zdeněk Stachoň and Pavel Pospíšil		RENDERING A SERIES OF 3D DYNAMIC VISUALIZATIONS IN (GEOGRAPHIC) EXPERIMENTAL TASKS		Czech Republic	



COFFEE BREAK 10:15 PM – 10:45 AM

June 23 10:45 AM – 12:00 PM

LIBRARY HALL

PLENARY SESSION L8		
Web Cartography and Digital Atlases		
CHAIR	Otakar Čerba	Czech Republic
Bashkim Idrizi	NECESSITY FOR GEOMETRIC CORRECTIONS OF DISTANCES IN WEB AND MOBILE MAPS	North Macedonia
Agnieszka Zwirowicz-Rutkowska, Joanna Nowak da Costa and Waldemar Izdebski	OPEN SPATIAL DATA INFRASTRUCTURE IN POLAND: STATE OF PLAY AND CHALLENGES	Poland
 Burak Beyhan, Sevim Pelin Özkan, Ezgi Seyfioğlu and Volkan Kapucu	WEB-GIS BASED CAMPUS SPATIAL INFORMATION SYSTEM FOR A UNIVERSITY	Turkey
Tomas Janata, Jiri Krejci and Petra Jilkova	FROM A PRINTED ATLAS TO A WEB MAP PORTAL – REFLECTIONS ON HISTORIOGRAPHICAL WEB MAPS PREPARATION	Czech Republic
Aleksandar Todorov and Georgi Zhelezov	GEOINFORMATION TECHNOLOGIES POSSIBILITIES FOR WEB-BASED MAPS AND NAVIGATION APPLICATIONS DEVELOPMENT	Bulgaria

June 23 12:00 PM – 1:00 PM

LIBRARY HALL

COMMISSION MEETING		
COMMISSION ON MAPS AND THE INTERNET		
CHAIR	Otakar Čerba	Czech Republic



LUNCH TIME 1:00 PM – 2:00 PM

WORKSHOP: SPATIAL INFORMATION FOR VIRTUAL ENVIRONMENTS

UX – ICA Commission on User eXperience

Zdeněk Stachoň

Lesson 01

The platform eDive: the use of Collaborative Immersive Virtual Environments in Geography - altitude education in VR

15 min speech and 30 min of first-hand experience

Speaker: Čeněk Šašinka

Break

Lesson 02

Principles of education in Collaborative Immersive Virtual Environments - Villa Stastnie cultural heritage

15 min speech and 30 min of first-hand experience

Speaker: Alžběta Šašinková

Break

Lesson 03

How to design application for VR - VR-pilots paragliding simulator

15 min speech and 30 min of first-hand experience

Speaker: Pavel Ugwitz

The workshop is free. Registration is necessary.

June 23 6:00 PM



GALA DINNER

Dress code: Smart casual

Location: Gerana village ethnographic complex
(located in Orizare village)

Meeting point: Artium Center, 6:00 PM

Ticket price: 50€

The Gala Evening is the grand finale of the Conference and the perfect opportunity to make new contacts, get to know the local cuisine and traditions through the rich entertainment program and to celebrate the accomplished work.



Customs and traditions

Experience the fascinating variety of settings and events inspired by Bulgaria's history. Get to know national costumes from the different ethnographic regions along with everyday items from The Bulgarian Way of Life. There is an authentic watermill, a historic house museum and workshops exhibiting Bulgarian workmanship. Unique machinery for agriculture and crafts are at display together with a colourful collection of original carts.

Showtime

The evening spectacle at Gerana village is an insight into Bulgarian cultural heritage. The programme will take you on an unforgettable journey through genuine acts including a diverse selection of national dance and a variety show. Pay special attention to the breathtaking nestinari performance of people dancing on glowing embers.

FRIDAY, June 24, 2022 PLENARY SESSIONS

June 24 10:00 AM – 11:45 AM

LIBRARY HALL

PLENARY SESSION L9		
GIS Technologies and Related Disciplines		
CHAIR		
	Necla Ulugtekin	Turkey
Gáspár Albert and Dávid Gerzsenyi	SLOPE TYPE CLASSIFICATION WITH RANDOM FOREST METHOD IN THE GERECESE HILLS, HUNGARY	Hungary
 Milot Lubishtani, Bashkim Idrizi, Fitore Bajrami Lubishtani and Subija Izeiroski	DEVELOPING OF THE ALBANIAN GLOBAL MAP DATASET; CASE STUDY: RASTER LAYERS	Kosovo, North Macedonia
Pavel Špulák and Jan Brothánek	HOW TO MANAGE NECESSARY AND BORING EVIL OF PYTHON APPLICATIONS SETTINGS FILES	Czech Republic
Penjani Hopkins Nyimbili, Lucy Meleki and Turan Erden	TOWARDS THE TRANSFORMATION OF A MORE SUSTAINABLE CITY THROUGH URBAN GREEN SPACES: A CASE STUDY OF LUSAKA	Turkey
Otakar Cerba	NUTS GEO-ONTOLOGY	Czech Republic
 Fitore Bajrami Lubishtani, Bashkim Idrizi, Perparim Ameti and Milot Lubishtani	DEVELOPING MULTIBAND RASTER DATASETS FOR UTILIZATION OF GLOBAL EARTH GRAVIMETRICAL MODELS FOR THE REPUBLIC OF KOSOVO	Kosovo, North Macedonia
Karolina Sielicka and Izabela Karsznia	SETTLEMENT AND ROAD NETWORK RELATIONSHIP IN AUTOMATED GENERALIZATION FOR SMALL-SCALE MAPS	Poland

June 24 12:00 PM Library hall

CLOSING CEREMONY

Ancient Nessebar

Immerse yourself in the history of Nessebar by visiting the main objects of the Museum "Ancient Nessebar" - the Archaeological Museum, Church "Saint Stephen", Church "Saint Spass", Church "Christ Pantokrator", Church "Saint Paraskeva", Church "Saint John the Baptist", Ethnographic Museum.

www.ancient-nessebar.com



POSTER SESSIONS

MONDAY, June 20 9:00 AM – 1:00 PM

Emilia Tcherkezova	MAPPING WATER BODIES FROM SENTINEL-2A IMAGERY ON EXAMPLE OF OGOSTA RESERVOIR AND DANUBE RIVER (ARCHARO-ORSOYSKA LOWLAND, NW BULGARIA)	Bulgaria
Katarzyna Jóźwik , Piotr Gałkowski and Józef Mikołajków	REINVENTING GEOLOGICAL MAPS: THE POLISH GEOLOGICAL CARTOGRAPHY PLATFORM	Poland

TUESDAY, June 21 9:00 AM – 1:00 PM

Sylvia Borkowska and Krzysztof Pokonieczny	ASSESSMENT OF OPENSTREET MAP DATA QUALITY IN SELECTED POLISH COUNTIES	Poland
Maria Glushkova, Miglena Zhiyanski, Mariam Bozhilova and Rositsa Yaneva	MAPPING ECONOMIC VALUATION OF SELECTED ECOSYSTEM SERVICE PROVIDED BY A PROTECTED AREA IN RHODOPES MOUNTAIN	Bulgaria
Małgorzata Frosik , Agnieszka Bitner and Piotr Bożek	USING GIS FOR THE ANALYSIS OF THE REAL ESTATE MARKET IN KRAKOW	Poland

POSTER SESSIONS

WEDNESDAY, June 22 9:00 AM – 1:00 PM

Stanislav Vasilev	CREATING CARTOGRAPHICAL SIGNS WITH DOUBLE ARTICULATION	Bulgaria
Jiří Bureš , Radomír Havlíček, Ondřej Vystavěl and Otakar Švábenský	DIGITAL TECHNICAL MAP AND BIM IN THE TRANSPORT CONSTRUCTION SPHERE IN THE CZECH REPUBLIC	Czech Republic
Severina Bordzhukova and Rumiana Vatsева	MAPPING TOURISM INFRASTRUCTURE IN TROYAN MUNICIPALITY (BULGARIA) USING GIS TECHNOLOGIES	Bulgaria

THURSDAY, June 23 9:00 AM – 1:00 PM

Dalibor Bartoněk , Jiří Bureš, Otakar Švábenský and Jiří Ježek	DESIGN OF THE SYSTEM FOR INTEGRATION OF SPATIAL DATA IN E-GOVERNMENT OF THE CZECH REPUBLIC	Czech Republic
Maria Glushkova, Miglena Zhiyanski and Rositsa Yaneva	ASSESSMENT AND MAPPING OF MOUNTAIN FOREST ECOSYSTEM SERVICES: THE CASE STUDY OF PIRIN NATIONAL PARK	Bulgaria