



SCIENTIFIC PROGRAMME

International Programme Committee

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2020 Scientific Programme

2021 Scientific Programme

2022 Scientific Programme

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2020 SCIENTIFIC PROGRAMME



2020 Digital Edition of the XXIV Congress
31 August - 2 September 2020
Programme

The 2020 on-line digital edition of the XXIV ISPRS Congress was held from August 31 to September 2, 2020. Due to COVID-19, it was impossible to organise and gather a large part of our community for a physical meeting in 2020, due to travelling restrictions, closed frontiers, and public events shutdown.

This 2020 on-line digital edition was limited to the presentation of a subset of papers published in the ISPRS Annals and Archives on a voluntary basis of authors. This on-line edition was made totally open and free of charge.

Only a limited selection of these presentations were presented in live sessions followed with 10 minutes of Questions&Answers from the through the chairs who read the questions in the public chat to authors.

All other paper presentations were pre-recorded and streamed in their session after a live introduction of the session by the chairs of the session and were followed by 10 minutes of Questions&Answers.

Live talk sessions are indicated in the program with (LIVE).

31 August 2020

08:00 - 09:10: MO.1.1.: Mobile Mapping and Location-based Services

Moderators: Naser El-Sheimy (University of Calgary, Canada), Chen Wang (Xiamen University, China)

MO.2.1.: Spatial Applications for Smart Cities

Moderators: Giorgio Agugiaro (Delft University of Technology, The Netherlands), Mila Koeva (University of Twente, The Netherlands)

09:15 - 10:25: MO.1.2.: LiDAR Processing and Evaluation

Moderators: Jan Skaloud (EFPL, Switzerland), Petri Ronnholm (Aalto University, Finland)

MO.2.2.: Simulation, VR and Augmented Reality

Moderators: Arzu Coltekin (FHNW, Switzerland), Sidonie Christophe (Univ. Gustave Eiffel, ENSG, IGN, France)

10:30 - 12:00: MO.1.3.: Multi Sensorial Data Processing (LIVE)

Moderator: Stefan Hinz (KIT, Germany)

MO.2.3.: Spatial Data Management

Moderators: Martin Breunig (KIT, Germany), Mulhim Al Doorri (University of Fujairah, UAE)

12:10 - 13:40: MO.1.4.: UAS: Concepts and Applications

Moderators: Francesco Nex (University of Twente, The Netherlands), Ralf Reulke (DLR, Germany)

MO.2.4.: Advances in Spatial Information Science 1 (LIVE)

Moderators: Sisi Zlatanova (University of New South Wales, Australia), Marguerite Madden (University of Georgia, USA)

13:50 - 15:20: MO.1.5.: High Precision Positioning & Mapping (LIVE)

Moderator: Raul Feitosa (Pontifical Catholic University, Brazil)

MO.2.5.: Indoor/Outdoor Modelling and Geocomputation	
Moderators: Zhizhong Kang (China University of Geosciences, China), Lucia Vilarino (University of Vigo, Spain)	
15:30 - 17:00:	MO.1.6.: Robotics for 3D Mapping and Modelling
Moderator: Jonathan Li (University of Waterloo, Canada)	
MO.2.6.: Advances in Spatial Information Science 2 (LIVE)	
Moderators: George Sithole (GeoVariant, South Africa), Eric Guilbert (University of Laval, Canada)	
17:10 - 18:20:	MO.1.7.: Spaceborne Sensing
Moderators: Timo Balz (Wuhan University, China), Xinming Tang (National Administration of Surveying, Mapping and Geoinformation, China)	
MO.2.7.: Collaborative Crowdsourced Cloud Mapping	
Moderators: Maria Brovelli (Politecnico di Milano, Italy), Cid lia Fonte (University of Coimbra, Portugal)	
18:30 - 19:40:	MO.1.8.: Image Enhancement: Technology and Methods
Moderators: Rupert Miller (DLR, Germany), Rongjun Qin (OSU, USA)	
MO.2.8.: Ontology, Semantics and Spatial Data Analysis	
Moderators: Margarita Kokla (National Technical University of Athens, Greece), Mahmoud R. Delavar (University of Tehran, Iran)	
1 September 2020	
08:00 - 09:10:	TU.1.1.: Cultural Heritage
Moderators: Fulvio Rinaudo (Politecnico di Torino, Italy), Diego Gonzalez-Aguilera (University of Salamanca, Spain)	
TU.2.1.: Advancements in Photogrammetric Processing	
Moderators: Norbert Haala (University of Stuttgart, Germany), Fabio Menna (FBK, Italy)	
09:15 - 10:25:	TU.1.2.: Industrial Photogrammetry
Moderators: Stephen Kyle (UCL, UK), Erica Nocerino (LIS/CNRS, France)	
TU.2.2.: 3D & Semantics	
Moderators: Franz Rottensteiner (Leibniz Universität Hannover, Germany), Bruno Vallet (Univ. Gustave Eiffel, ENSG, IGN, France)	
10:30 - 12:00:	TU.1.3.: Photogrammetry 2020 - 1 (LIVE)
Moderator: Takashi Fuse (Tokyo University, Japan)	
12:10 - 13:40:	TU.1.4.: Geospatial Machine Learning
Moderators: Jan Wegner (ETH Zurich, Switzerland), Ribana Roscher (University of Bonn, Germany)	
TU.2.4.: Education, Outreach & Youth Forum 1 (LIVE)	
Moderators: P.L.N. Raju (North Eastern Space Applications Centre, India), Sheryl Rose Reyes (United Nations University Institute for the Advanced Study of Sustainability, Japan)	
13:50 - 15:20:	TU.1.5.: Photogrammetry 2020 - 2 (LIVE)
Moderator: Isabella Toschi (FBK, Italy)	
TU.2.5.: Education, Outreach & Youth Forum 2	
Moderators: P.L.N. Raju (North Eastern Space Applications Centre, India), Sheryl Rose Reyes (United Nations University Institute for the Advanced Study of Sustainability, Japan)	
15:30 - 17:00:	TU.1.6.: Point Cloud Processing
Moderators: Jan Boehm (UCL, UK), Mathieu Brédif (Univ. Gustave Eiffel, ENSG, IGN, France)	

TU.2.6.: Education, Outreach & Youth Forum 3 (LIVE)	
Moderators: Senthil Kumar (Indian Institute of Remote Sensing, India)	
17:10 - 18:20: TU.1.7.: 3D Mapping	
Moderators: Roderik Lindenbergh (Delft University of Technology, Netherlands), Martin Rutzinger (Austrian Academy of Sciences, Austria)	
TU.2.7.: Education, Outreach & Youth Forum	
Moderators: Senthil Kumar (Indian Institute of Remote Sensing, India)	
18:30 - 19:40: TU.1.8.: Image Orientation	
Moderators: Andrea Fusiello (Università degli Studi di Udine, Italy), Ronny Hänsch (DLR, German Aerospace Center, Germany)	
TU.2.8.: Dynamic Scene Analysis	
Moderators: Alper Yilmaz (OSU, USA), Michael Yang (Twente University, The Netherlands)	
2 September 2020	
08:00 - 09:10: WE.1.1.: Hyperspectral Image Processing	
Moderators: Eija Honkavaara (National Land Survey of Finland, Finland), Baoxin Hu (York University, Canada)	
WE.2.1.: Disaster Assessment, Monitoring and Management	
Moderators: Tullio Tanzi (Institut Mines-Telecom - Telecom ParisTech, France), Jana Viessmann (Chemnitz University of Technology, Germany)	
09:15 - 10:25: WE.1.2.: Microwave & Lidar Remote Sensing	
Moderators: Marco Scaioni (Politecnico Milano, Italy), Zhenhong Li (Newcastle University, UK)	
WE.2.2.: Planetary Remote Sensing and Mapping	
Moderators: Jürgen Oberst (DLR, Germany), Irina Karachevtseva (Moscow University of Geodesy and Cartography, Russia)	
10:30 - 12:00: WE.1.3.: Planetary Remote Sensing and Mapping (LIVE)	
Moderators: Bo Wu (The Hong Kong Polytechnic University, Hong Kong), Kaichang Di (Institute of Remote Sensing and Digital Earth, China)	
WE.2.3.: Remote Sensing Data Fusion	
Moderators: Wei Yao (The Hong Kong Polytechnic University, Hong Kong), Shihong Du (Peking University, China)	
12:10 - 13:40: WE.1.4.: Remote Sensing of Atmospheric Environment	
Moderators: Lixin Wu (Central South University, China), Kai Qin (China University of Mining & Technology, China)	
WE.2.4.: Agriculture and Natural Ecosystems Modelling and Monitoring (LIVE)	
Moderator: Mitsunori Yoshimura (The University of Tokyo, Japan)	
13:50 - 15:20: WE.1.5.: Thematic Information Extraction - 1 (LIVE)	
Moderator: Xianlian Liang (National Land Survey of Finland, Finland)	
WE.2.5.: Thematic Information Extraction - 2	
Moderator: Maria Teresa Melis (University of Cagliari, Italy)	
15:30 - 17:00: WE.1.6.: Remote Sensing Data Quality	
Moderators: Hussein M. Abdulmuttalib (Dubai Municipality, U.A.E.), Arpad Barsi (Budapest University of Technology and Economics, Hungary)	
WE.2.6.: Disaster Assessment, Monitoring and Management (LIVE)	
Moderators: Tullio Tanzi (Institut Mines-Telecom - Telecom ParisTech, France), Jana Viessmann (Chemnitz University of Technology, Germany)	

17:10 - 18:20: WE.1.7.: Change Detection & Disaster Management

Moderators: Ammatzia Peled (University of Haifa, Israel), Md. Surabuddin Mondal (Wollega University, Ethiopia)

WE.2.7.: SAR-based Surface Generation and Deformation Monitoring

Moderators: Uwe Soergel (University Stuttgart, Germany), Bahram Salehi (State University of New York, USA)

18:30 - 19:40: WE.1.8.: Landuse and Landcover Change Detection

Moderator: Yongnian Zeng (Central South University, China)

WE.2.8.: Environment and Health

Moderators: Fazlay S. Faruque (University of Mississippi Medical Ctr, USA), John B. Malone (Louisiana State University, USA)

Monday, 5 July 2021**11:00 ESA The ESA Earth Observation Platforms to leverage Open Science and Pioneer Innovative Applications**

Guenther LANDGRAF

16:30 - 17:30 AIRBUS - Introduction of PNeo images and technical specifications. First technical experiments on PNeo Images

Laurent COEURDEVEY, France, Laurent GABET, France, Herve POILVE, France



2021 SCIENTIFIC PROGRAM

**Overview Program
Programme**



2021 Edition of the XXIV Congress 5-9 July 2021 Science and Technology Programme

The 2021 on-line digital edition of the XXIV ISPRS Congress was held from 5-9 July 2021 after being postponed a first time in 2020. In 2021, it was still impossible to organise and gather a large part of our community for a physical meeting due to travelling and public event attendance restrictions.

Although digital, this 2021 edition was organised as a Congress with its various tracks and sessions and a digital exhibition but without the gathering of the General Assembly. Some of the sessions had live presentations with Question and Answers and some others had streamed pre-recorded presentations but with live on-line Questions and Answers with the authors.

The different tracks and sessions were the following:

- 1. The plenary sessions** which hosted the ISPRS awards ceremonies and inspiring keynote presentations. They were scheduled at times facilitating the participation of colleagues in different time zones.
- 2. The scientific track**, which took place from 5-7 July 2021, with both oral or poster sessions. Each presentation in these sessions are associated to a paper published in the in the ISPRS Annals and Archives proceedings of the Congress.
- 3. The forum track**, which took place from July 8 to July 9, 2021, gathered colleagues from academia, agencies (space, mapping, cadaster), and Industry debating on how the Science and the technologies developed in our community and in neighboring ones can be used to address policies and tackle societal challenges.
- 4. The technology track**, which took place from July 5 to July 7, 2021, allowing colleagues from Industry to present their latest technological developments.
- 5. Geospatial tutorial lectures** took place on July 9, 2021 provided by some of the best experts in the field.

A digital exhibition offered the possibility for participants to interact with sponsors and exhibitors in a private video-conference room.

The Plenary and Keynote Speakers Sessions

Monday, 5 July 2021

Time	Session Room	Session Title and Chairs
12:00 - 13:30	Virtual Room 1	Plenary 1 - Opening Ceremony Chair: L. POLIDORI, SFPT, France
		Welcome address Presenters: C. HEIPKE, ISPRS President, Germany, N. PAPARODITIS, ISPRS Congress Director, France
		The Frederick J. Doyle Award Presenters: C. HEIPKE, ISPRS President, Germany, A. GRUEN, ISPRS Honorary Member, Switzerland Recipients: K. SCHINDLER, ETHZ, Switzerland
		Keynote: Pléiades Neo 30cm-resolution satellite constellation : enhanced data access and geospatial applications E. FLORY, Airbus, France
15:15 - 16:15	Virtual Room 1	Plenary 2 Chairs: C. HEIPKE, Leibniz University, Germany
		The Jack Dangermond Award Presenters: L. JORDAN, Esri USA, L. HALOUNOVÁ, Czech Republic, A. KOLOMANSKA Recipients: R. BILLEN, F. POUX
		Keynote: Computer vision for mixed reality with Hololens2 M. POLLEFEYS, ETHZ, Switzerland

Tuesday, 6 July 2021

Time	Session Room	Session Title and Chairs
12:00 - 13:30	Virtual Room 1	Plenary 3 Chair: J. CHEN , NGCC, China
		The U.V. Helava Award Presenters: Klaus NEUMANN, Leica Geosystems, Switzerland, K. BISCHINIOTIS, Elsevier Recipients: D. CUCCI, M. REHAK, J.SKALLOUD
		Keynote: The Indian Space Program, with emphasis on Societal Applications A. KIRAN KUMAR, ISRO, India
15:15 - 16:15	Virtual Room 1	Plenary 4 Chair: N. PAPARODITIS, ISPRS Congress Director, France
		The Karl Kraus Medal Presenters: M. BALTSAVIAS, Swiss Society for Photogrammetry and Remote Sensing, Switzerland, J. ERNST & C. RESSL, Austrian Society for Surveying and Geoinformation, G. BARETH, German Society for Photogrammetry, Remote Sensing and Geoinformation, Germany Recipients: W. FÖRSTNER, University of Bonn, Germany, B. WROBEL, Technical University of Darmstadt, Germany

Keynote: Vegetation monitoring in Brazilian biomes, legacies, challenges and future perspectives
C. ALMEIDA, INPE, Brazil

Wednesday, 7 July 2021

Time	Session Room	Session Title and Chairs
12:00 - 13:30	Virtual Room 1	Plenary 5 Chair: L. HALOUNOVA , ISPRS Secretary General, Czech Republic
		The Willem Schermerhorn Award Presenters: J. CHEN, ISPRS Past President, China, G. VOSELMAN, Geo-Information Netherlands, Netherlands Recipients: M. YANG, University of Twente, Netherlands
		Keynote: The contribution of Geo-spatial technologies against COVID-19 C. ZHOU, Chinese Academy of Sciences, China
15:15 - 16:15	Virtual Room 1	Plenary 6 Chair: C. TOTH, ISPRS Vice-President, USA
		The Schwidefsky Medal Presenters: U. SOERGEL, German Society for Photogrammetry, Remote Sensing and Geoinformation, Germany Recipients: D. LICHTI, University of Calgary, Canada
		Keynote: Automated driving with and without maps C. STILLER, Karlsruhe University, Germany

Thursday, 8 July 2021

Time	Session Room	Session Title and Chairs
15:15 - 16:15	Virtual Room 1	Awards Ceremony, Keynote presentation Chair: S. LI, ISPRS Treasurer, Canada
		The Samuel Gamble Award Presenters: U. SOERGEL, German Society for Photogrammetry, Remote Sensing and Geoinformation, Germany Recipients: D. LICHTI, University of Calgary, Canada
		Keynote: Space-Based Earth Observations: Challenges and New Opportunities S. GALLAGHER, Canada

The Scientific Track and Sessions

Monday, 5 July 2021

Time	Session Room	Session Title and Chairs
08:00 - 08:50	Virtual Room 1	TC IV Session : Spatial Analysis Chairs: M. DELAVAR, Iran, Islamic Republic of, H. WU, China
09:00 - 09:50	Virtual Room 1	TC IV Session : Advanced applications for Smart Cities Chairs: M. KOKLA, Greece, G. AGUGIARO, Netherlands
10:00 - 10:50	Virtual Room 1	TC III Session : Thematic Information Extraction Chair: X. LIANG, Finland
11:00 - 11:50	Virtual Room 1	TC III Session : Active remote sensing Chairs: B. OSMANOGLU, United States, S. ABDIKAN, Turkey
16:30 - 17:20	Virtual Room 1	TC I Session : Sensor Calibration Chairs: J. SKALLOUD, Switzerland, F. NEX, Netherlands
17:30 - 18:20	Virtual Room 1	TC I Session : Object Monitoring in Remote Sensing Chairs: M. SCHMITT, Germany, R. MULLER, Germany
18:30 - 19:20	Virtual Room 1	TC I Session : Mobile Mapping Chairs: N. EL-SHEIMY, Canada, S. NEBIKER, Switzerland

Tuesday, 6 July 2021

Time	Session Room	Session Title and Chairs
08:00 - 08:50	Virtual Room 1	TC IV Session : Data integration Chairs: Z. KANG, China, A. COLTEKIN, Switzerland
09:00 - 09:50	Virtual Room 1	TC IV Session : Data processing and simulation Chairs: M-A. BROVELLI, Italy, M. BREUNIG, Germany
10:00 - 10:50	Virtual Room 1	TC III Session : Surface Modelling Chairs: U. SOERGEL, Germany, K. DI, China
11:00 - 11:50	Virtual Room 1	TC III Session : Hyperspectral Image Processing and Data Fusion Chairs: E. HONKAVAARA, Finland, B. HU, Canada
16:30 - 17:20	Virtual Room 1	TC II Session : 3D Change Detection Chairs: B. RIVEIRO, Spain
17:30 - 18:20	Virtual Room 1	TC II Session : 3D Instance Detection Chair: M. YANG, Netherlands
18:30 - 19:20	Virtual Room 1	TC II Session : 3D Semantic Segmentation Chair: N. HAALA, Germany

Wednesday, 7 July 2021

Time	Session Room	Session Title and Chairs
08:00 - 08:50	Virtual Room 1	TC V Session : Education and Outreach Chairs: S. R. REYES, Japan, S. KUMAR, India
09:00 - 09:50	Virtual Room 1	TC III Session : Landuse and Landcover Change Detection Chair: A. PELED, Israel
10:00 - 10:50	Virtual Room 1	TC III Session : Application of Remote Sensing Data Chairs: M. YOSHIMURA, Japan, F. S. FARUQUE, United States

11:00 - 12:00	Virtual Room 1	Best Paper session
		Chair: C. HEIPKE, Germany
16:30 - 17:20	Virtual Room 1	TC II Session : 2D Segmentation and Classification
		Chair: R. ROSCHER, Germany
17:30 - 18:20	Virtual Room 1	TC II Session : 3D Registration
		Chair: F. ROTTENSTEINER, Germany
18:30 - 19:20	Virtual Room 1	TC II Session : Stereo Matching
		Chair: E. RUPNIK, France

Thursday, 8 July 2021		
Time	Session Room	Session Title and Chairs
08:00 - 08:50	Virtual Room 1	Thematic Session: Digital Twins
		Chairs: A. COLTEKIN, Switzerland, S. CHRISTOPHE, France
09:00 - 09:50	Virtual Room 1	Thematic Session: Unconventional applications for geospatial deep learning
		Chairs: D. TUIA, Switzerland, M. MOLINIER, Finland
10:00 - 10:50	Virtual Room 1	Thematic Session: AI for Knowledge Discovery in Geosciences
		Chairs: A. ANGHELEA, Italy, D. FERNANDEZ-PRIETO, Italy
11:00 - 11:50	Virtual Room 1	Thematic Session: Towards resilient & ubiquitous navigation
		Chair: C. TOTH, United States
16:30 - 17:20	Virtual Room 1	Thematic Session : ISPRS Scientific Initiatives & Education and Capacity Building Initiatives (I)
		Chair: S. LI, Canada
17:30 - 18:20	Virtual Room 1	Thematic Session : ISPRS Scientific Initiatives & Education and Capacity Building Initiatives (II)
		Chair: S. LI, Canada
18:30 - 19:20	Virtual Room 1	Thematic Session : Cultural Heritage
		Chairs: M. YOUNAN, Palestine, State Of, F. RINAUDO, Italy

Policy Forum Track and Sessions

Thursday, 8 July 2021

Time	Session Room	Session Title and Chairs
13:00 - 15:00	Virtual Room 2	Towards Transformational Change: Potential Contributions of ISPRS and Chairs: S. R. REYES, Japan, A. ROCCATO
		About the UNEP GEO-6 for Youth Report A. AL-KHATLAN, Kuwait, S. R. REYES, Japan
		Roles of Remote Sensing, Photogrammetry and Spatial Information Science in Sustainable Development C. HEIPKE, ISPRS, Germany
		Panel discussion M.-A. BROVELLI, Italy, P. BOILEAU, United States, K. MASHFIQ, L. MUGEHA, T. LE TOAN, France

Friday, 9 July 2021

08:00 - 11:30	Virtual Room 1	Geo for Pandemics Chairs: F. S. FARUQUE, United States, S. ZLATANOVA, Australia
		Welcome C. HEIPKE, ISPRS, Germany
		Introduction to the forum F. S. FARUQUE, United States
		WHO Health Emergencies Program and potential roles for geospatial experts M. MCLAWS, Australia, O. GUDS, Australia
		Nexus of Earth observations, natural hazard studies and disaster risk assessments to impact policymaking A. ISMAIL-ZADEH, France
		Linking Earth observations and health activities to global policy agendas S. RAMAGE
		Preparing for the future: The ISC's Covid-19 Global Outcome Scenarios Project I. HASSAN
		Joint ESA/JAXA/ NASA EO Dashboard in support of COVID-- 19 S. SOBUE, Japan, S. CHELI, Italy
		COVID-19 risk assessment driven by spatiotemporal Big Data -- a case study of Shenzhen city Xia JIZHE, China
		Discussions
15:00 - 18:15	Virtual Room 1	Geo for Pandemics Chairs: H. CHAPMAN, United States, F. S. FARUQUE, United States,
		Welcome C. HEIPKE, ISPRS, Germany
		Introduction to the forum F. S. FARUQUE, United States

Geoanalytics, public health, and pandemics: Do what you can with what you have
L. WALLER, United States
Indian Geo-initiatives for COVID and Post COVID management
D. DUTTA, India
An Overview of NASA Health and Air Quality Applications and Activities during the Pandemic
J. HAYNES, United States
Do 'Pre-Existing' Conditions Make Pandemics and Infectious Disease Outbreaks Worse? Using Geospatial Data to Identify Hotspots and Reservoirs
J. G. ACKER , United States
Using Earth Observations to Enhance One Health Collaborations during the COVID-19 Pandemic
H. CHAPMAN, United States
When EO Satellite Meets Health
M. PAULIN , France
In Search of the Lost Time - How the Earth Observation (EO) & Geo Communities can help Bridging the Gap between Research and Services in Public Health Operational Programs?
M. MONTEIRO, Brazil
Q/A and Discussions

Geospatial Tutorial Lectures

Friday, 9 July 2021

Time	Session Room	Session Title and Chairs
8:30 - 10:50	Virtual Room 1	ISPRS Geospatial Lecture Day 2021 - Part 1 Chair: U. SOERGEL, Germany PS-InSAR for surface motion estimation Timo BALZ, China State and Trends in Airborne LiDAR Gottfried MANDLBURGER, Austria Discussion
11:00 - 13:20	Virtual Room 1	ISPRS Geospatial Lecture Day 2021 - Part 2 Chair: R. ROSCHER, Germany Deep learning for 3D Point Cloud Analysis L. LANDRIEU, France Deep Learning for time series classification C. PELLETIER, France M. RUSWURM, Germany Discussion
14:00 - 16:20	Virtual Room 1	ISPRS Geospatial Lecture Day 2021 - Part 3 Chair: E. NOCERINO, France High-precision mapping with UAVs E. RUPNIK, France, M. DAAKIR, Switzerland, M. PIERROT-DESEILLIGNY, Y. ZHOU, France Dynamic networks D. CUCCI, Switzerland Discussion chats
16:30 - 19:00	Virtual Room 1	ISPRS Geospatial Lecture Day 2021 - Part 4 Chair: M. KOKLA, Greece Geospatial Tools for Collaborative Humanitarian Mapping M-A. BROVELLI, Italy, S. COETZEE, South Africa Federated Earth Datacubes: Concepts, Standards, Services P. BAUMAN, Germany Discussion chats



2022 SCIENTIFIC PROGRAM

Overview Program

Scientific and Technology Programme

Overview Program

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2022 Edition of the XXIV Congress
6-11 June 2022
Science and Technology Programme

For the 2022 in-person edition of the XXIV ISPRS Congress, which took place in Nice from June 6 to 11 June after being postponed twice, in 2020 and 2021, and replaced by digital events, it was still impossible for many scientists to attend due to COVID-19.

This 2022 Congress was composed of various tracks (and sessions within these tracks) :

1. The plenary sessions which host the ISPRS awards ceremonies and inspiring keynote presentations.
2. The scientific track with sessions either oral or poster. Each Presentation in these sessions is associated to a paper published in the ISPRS Annals or Archives proceedings of the Congress.
3. The forum track gathers colleagues from academia, agencies (space, mapping, cadaster), and industry debating on how the Science and the technologies developed in our community and in neighboring ones can be used to address policies and tackle societal challenges.
4. The technology track, allowing colleagues from industry to present their latest technological developments.
5. The Geospatial tutorial lectures, which took place on the day before the Congress opening.

This 2022 Congress edition also hosted :

- the ISPRS General Assembly that is not detailed in this section but in a further section of this Archives volume. The General Assembly is the supreme governance authority of the Society for all decisions and it determines the general policy of the Society. The General Assembly consists of Delegates and Representatives of the Ordinary, Associate and Regional Member organizations plus Council, Financial Commission and Honorary Members of the Society. In 2022, it convened in a hybrid mode (in-person in Nice and on-line for colleagues that were still not able to travel).
- a large industry exhibition which was held from Monday, 6 (after the opening ceremony) to Thursday, 9 June 2022. This exhibition is not detailed in this section but in a further section of this Archives volume.
- a summer school which took place the week after the Congress on the Campus of Saint Jean d'Angely of the University of Sophia Antipolis. This summer school will be detailed in another section.

The Plenary and Keynote Speakers Sessions

Plenary - Day 1 - Monday, 6 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
17:00 - 19:30	APOLLON	Oral Presentation	Opening Ceremony Chair : N. PAPARODITIS (IGN, France)
			Welcome from the ISPRS Congress Director Presenter: N. PAPARODITIS (IGN, France)
			Welcome from the ISPRS President Presenter: C. HEIPKE (Leibniz University, Germany)
			Welcome message from SFPT, the French ordinary member Presenter: A. SANDES (SFPT President, CNES, France)
			Welcome message from IGN, the French mapping and forest inventory agency Presenter: M. STOLL (Deputy General Director, IGN, France)
			Welcome message from CNES, the French space agency Presenter: C. LAURENT (Director of space observation systems, CNES, France)
			Keynote - Pléiades Neo, the most advanced optical constellation for sophisticated applications Presenter: F. LOMBARD (AIRBUS, France)
			Honorary Membership Recipient: C. JUN (National Geomatics Center, China)
			The Brock Gold Medal Recipient: L. DEREN (Wuhan University, China)
			Keynote - Exploring Human Heritage Presenter: Y. UBELMANN (ICONEM, France)

Plenary - Day 2 - Tuesday, 7 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
14:00 - 15:30	APOLLON	Oral Presentation	Chair : L. HALOUNOVA (ISPRS Secretary General, Czech Technical University, Czech Republic)
			The U.V. Helava Award Presentation
			The Jack Dangermond Award Presentation
			Keynote - Geospatial Information for Sustainable Development Goals (SDGs) Presenter: C. JUN (National Geomatics Center, China)
			Keynote - ESA Earth Observation Programmes - the next challenges Presenter: I. PETITEVILLE (ESA)

Plenary - Day 3 - Wednesday, 8 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
14:00 - 15:30	APOLLON	Oral Presentation	Chair : C. TOTH (ISPRS 2nd Vice-President, The Ohio State University, USA)
			The Otto von Gruber Award Presentation
			The Samuel Gamble Award Presentation
			Keynote - Autonomous, Agile, Vision-controlled Drones: from Frame-based to Event-based Vision Presenter: D. Scaramuzza
			Keynote - GeoSpatial technology to provide health care and to mitigate health crisis Presenter: F.-S. Faruque (University of Mississippi Medical Center, USA)

Plenary - Day 4 - Thursday, 9 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
14:00 - 15:30	APOLLON	Oral Presentation	Chair : S. LI (ISPRS Treasurer, Ryerson University, Canada)
			The Frederick J. Doyle Award Presentation
			The Giuseppe Inghilleri Award Presentation
			Keynote - Geometry Processing and Learning for 3D Modeling of Complex Scenes Presenter: P. ALLIEZ (INRIA, France)
			Keynote - Advancing integrated geospatial information frameworks in Africa : Challenges and Opportunities for the spatial enablement of the societies Presenter: A. NONGUIERMA (United Nations Economic Commission for Africa)

Plenary - Day 5 - Friday, 10 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
14:00 - 15:30	APOLLON	Oral Presentation	Chair : C. HEIPKE (ISPRS President, Leibniz University, Germany)
			The Wang Zhizhuo Award Presentation
			The Karl Kraus Medal Presentation
			Keynote - A serious game: the Netherlands in 3D Minecraft Presenter: W. SIMON VAN LEEUWEN (Geofort, Netherlands)
			Keynote - Mind the space: 3D modelling for future Smart Cities Presenter: S. ZLATANOVA (University of New South Wales, Australia)

Plenary - Day 6 - Saturday, 11 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
12:30 - 13:30	APOLLON	Oral Presentation	Closing Ceremony Chair : N. PAPARODITIS (ISPRS Congress Director, IGN, France) ISPRS Best Posters Award 2022 Presentations The ISPRS CATCON Award Presentations The President's Honorary Citation Presentations Closing Remarks, Presidency and ISPRS Flag Handover

The Scientific Track and Sessions

Monday, 6 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
13:00 - 14:30	ATHENA	Oral Presentation	Disaster Assessment, Monitoring and Management (ICWG III/IVa-2) Chairs: O. ALTAN (Istanbul Technical University, Turkey), J. TANZI (Telecom Paris, France)
13:00 - 14:30	RISSO 6	Oral Presentation	Image Orientation, Point Cloud Generation/Processing Chairs: T. LUHMANN (Jade University of Applied Sciences Oldenburg, Germany), F. FASSI (Politecnico di Milano, Italy)
13:00 - 14:30	RISSO 7	Oral Presentation	Deep Learning For Satellite Image Time Series Analysis Chairs: Z. ZHANG (University of Wisconsin-Madison, USA), C. PELLETIER (Univ. Bretagne Sud, France)
13:00 - 14:30	RISSO 8	Oral Presentation	Best papers of editions 2020 and 2021 Chairs: E. RUPNIK (IGN, ENSG, Université Gustave Eiffel, France), M. PIERROT-DESEILLIGNY (IGN, ENSG, Université Gustave Eiffel, France)
15:00 - 16:30	ATHENA	Oral Presentation	Remote Sensing Data Quality (ICWG III/IVb-2) Chairs: C. MALLET (IGN, ENSG, Université Gustave Eiffel, France), T. BLASCHKE (University of Salzburg, Austria)
15:00 - 16:30	RISSO 6	Oral Presentation	Towards Resilient and Ubiquitous Navigation Chairs: C. TOTH (ISPRS 2nd Vice-President, The Ohio State University, USA)
15:00 - 16:30	RISSO 7	Oral Presentation	Cultural Heritage Documentation Chairs: F. RINAUDO (Politecnico di Torino, Italy), A. GEORGOPOULOS (Technical University of Athens, Greece)
15:00 - 16:30	RISSO 8	Oral Presentation	Best papers of editions 2020/2021 Chair: L. LANDRIEU (IGN, ENSG, Université Gustave Eiffel, France)

Tuesday, 7 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
09:00 - 10:30	APOLLON	Oral Presentation	Thematic Information Extraction from RS images (WG III/1-1) Chairs: M. MELIS (University of Cagliari, Italy), B. LEBLON (University of New Brunswick, Canada)
09:00 - 10:30	ATHENA	Oral Presentation	Point cloud processing_7 Chairs: F. MENNA (Fondazione Bruno Kessler, Italy), E. NOCERINO (Università degli Studi di Sassari, Italy)
09:00 - 10:30	RISSO 6	Oral Presentation	Active Sensing with LIDAR and RADAR Chairs: M. SCHMITT (Bundeswehr University Munich, Germany), J. GONÇALVES (University of Porto, Portugal)
09:00 - 10:30	RISSO 7	Oral Presentation	Remote Sensing and the Geosciences – A Premier Field Of Data Science – A Session In Cooperation Between IEEE GRSS and ISPRS Chairs: C. HEIPKE (ISPRS President, Leibniz University, Germany), D. KUNKEE (IEEE-GRSS President, The Aerospace Corp., USA)
11:00 - 12:30	APOLLON	Oral Presentation	Best Young Author Paper Award Session Chairs: C. HEIPKE (Leibniz University, Germany), N. PAPARODITIS (IGN, ENSG, University Gustave Eiffel, France)
11:00 - 12:30	ATHENA	Oral Presentation	3D mapping for infrastructure monitoring Chairs: M. RUTZINGER (University of Innsbruck, Austria), R. LINDENBERGH (Delft University of Technology, Netherlands)
11:00 - 12:30	RISSO 6	Oral Presentation	Environment and Health (ICWG III/IVc) Chair: F. FARUQUE (University of Mississippi Medical Center, USA)
11:00 - 12:30	RISSO 7	Oral Presentation	Geovisualization and extended reality Chairs: A. CÖLTEKIN (University of Applied Sciences and Arts Northwestern Switzerland, Switzerland), M. BRÉDIF (IGN, ENSG, University Gustave Eiffel, France)
16:00 - 17:30	BALCONY - AGORA 2 - ZONE A	Poster Session	TCIII-Remote Sensing
16:00 - 17:30	BALCONY - AGORA 2 - ZONE B	Poster Session	TCII-Photogrammetry
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS-LULC Change Detection and Updating
17:30 - 19:00	APOLLON	Oral Presentation	Capacity development for geoinformation science Chair : S. KUMAR (CSSTEAP, India)
17:30 - 19:00	ATHENA	Oral Presentation	Cryosphere and Hydrosphere (WG III/9) Chairs: H. Fan (Norwegian University of Science and Technology, Norway)
17:30 - 19:00	RISSO 6	Oral Presentation	ML/Data Analysis Chair : M. YING YANG (University of Twente, Netherlands), C. MALLET (IGN, ENSG, Université Gustave Eiffel, France)

17:30 - 19:00	RISSO 7	Oral Presentation	Semantic approaches for processing data and SDSS Chairs: M. MADDEN (University of Georgia, USA), N. SPANO (Politecnico di Torino, Italy)
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Wednesday, 8 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
09:00 - 10:30	APOLLON	Oral Presentation	Landuse and Landcover Change Detection (WG III/7-1) Chairs: E. RUPNIK (IGN, ENSG, Université Gustave Eiffel, France), L. LANDRIEU (IGN, ENSG, Université Gustave Eiffel, France)
09:00 - 10:30	ATHENA	Oral Presentation	Point cloud processing Chairs: M. BRÉDIF (IGN, ENSG, Université Gustave Eiffel, France), P. D'ANGELO (German Aerospace Center, Germany)
09:00 - 10:30	RISSO 6	Oral Presentation	Planetary Remote Sensing and Mapping (ICWG III/II) Chairs: J-P. MULLER (University College London, UK), I. KARACHEVTSEVA (Moscow State University of Geodesy and Cartography, Russia)
09:00 - 10:30	RISSO 7	Oral Presentation	Digital twins I: Vision papers Chairs: A. CÖLTEKIN (University of Applied Sciences and Arts Northwestern Switzerland, Switzerland), V. TOURRE (Ecole centrale Nantes, France)
11:00 - 12:30	APOLLON	Oral Presentation	Point cloud processing Chairs: F. ROTTENSTEINER (Leibniz University, Germany), E. NOCERINO (Università degli Studi di Sassari, Italy)
11:00 - 12:30	ATHENA	Oral Presentation	Hyperspectral Image Processing (WG III/4) Chairs: E. HONKAVAARA (Finnish Geospatial Research Institute, Finland), K. KARANTZALOS (National Technical University of Athens, Greece)
11:00 - 12:30	RISSO 6	Oral Presentation	Spaceborne Optical Sensing Chairs: R. MÜLLER (DLR, Germany), R. QIN (The Ohio State University, USA)
11:00 - 12:30	RISSO 7	Oral Presentation	Open data and crowd sourcing Chairs: M. BROVELLI (Politecnico di Milano, Italy), M. MINGHINI (European Commission)
16:00 - 17:30	BALCONY - AGORA 2 - ZONE A	Poster Session	Posters of 2020/2021
16:00 - 17:30	BALCONY - AGORA 2 - ZONE B	Poster Session	Invited Posters
16:00 - 17:30	BALCONY - AGORA 3 - ZONE C	Poster Session	TCIV - Spatial Information Science
16:00 - 17:30	BALCONY - AGORA 3 - ZONE D	Poster Session	TCI-Sensor Systems
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TCV-Education and Outreach

16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS - Digital Twins
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS - Scientific and Educational & Capacity Building Initiatives
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS - Innovative Applications Of Satellite Data For Risk Management And Disasters
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS - Deep Learning For Satellite Image Time Series Analysis
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS - Unsupervised And Weakly Supervised Deep Learning For EO
17:30 - 19:00	APOLLON	Oral Presentation	Agriculture and Natural Ecosystems Modelling and Monitoring (WG III/10-1) Chairs: M. YOSHIMURA (The University of Tokyo, Japan), F. PIROTTI (University of Padova, Italy)
17:30 - 19:00	ATHENA	Oral Presentation	Point cloud generation Chairs: N. HAALA (University of Stuttgart, Germany), M. WEINMANN (Karlsruhe Institute of Technology, Germany)
17:30 - 19:00	RISSO 6	Oral Presentation	Unsupervised And Weakly Supervised Deep Learning For Earth Observation Chairs: D. TUIA (EPFL), M. MOLINIER (VTT Technical Research Centre of Finland Ltd, Finland)
17:30 - 19:00	RISSO 7	Oral Presentation	Indoor Applications and Mobility Chairs: L. DÍAZ VILARIÑO (Universidade de Vigo, Spain), M. WANG (University of Glasgow, UK)

Thursday, 9 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
09:00 - 10:30	APOLLON	Oral Presentation	Mobile Mapping (Technology, Methods, Applications) Chairs: N. EL-SHEIMY (University of Calgary, Canada), K-W. CHENG (National Cheng Kung University, Taiwan)
09:00 - 10:30	ATHENA	Oral Presentation	SAR-based Surface Generation and Deformation Monitoring (WG III/3) Chairs: U. SOERGEL (University of Stuttgart), M. CRESPI (La Sapienza University of Rome)
09:00 - 10:30	RISSO 6	Oral Presentation	Digital twins II: Case studies Chairs: A. CÖLTEKIN (University of Applied Sciences and Arts Northwestern Switzerland, Switzerland), V. TOURRE (Ecole Centrale Nantes, Nantes)
09:00 - 11:00	RISSO 7	Oral Presentation	EuroSDR theme session for National Mapping and Cadastral Agencies Chairs: J. MILLS (Newcastle University, UK), F. REMONDINO (FBK Trento, Italy)

11:00 - 12:30	APOLLON	Oral Presentation	Integrated Sensor Orientation, Navigation and Mapping Chairs: I. COLOMINA (GeoNumerics, Spain), M. CRAMER (University of Stuttgart, Germany)
11:00 - 12:30	ATHENA	Oral Presentation	Surface reconstruction, SFM Chairs: M. GERKE (Technische Universität Braunschweig, Germany), B. VALLET (IGN, ENSG, Université Gustave Eiffel, France)
11:00 - 12:30	RISSO 6	Oral Presentation	Remote Sensing Data Fusion (WG III/6) Chairs: W. YAO (The Polytechnic University, Hong Kong), A. BROOK (University of Haifa, Israel)
11:00 - 12:30	RISSO 7	Oral Presentation	Spatial applications based on urban and regional Digital Twins Chairs: M. KOEVA (University of Twente, Netherlands), P. KUPER (Karlsruhe Institute of Technology, Germany)
16:00 - 17:30	BALCONY - AGORA 2 - ZONE A	Poster Session	TCIII - Remote Sensing
16:00 - 17:30	BALCONY - AGORA 2 - ZONE B	Poster Session	Invited Posters
16:00 - 17:30	BALCONY - AGORA 3 - ZONE C	Poster Session	TCIV - Spatial Information Science
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS - Cultural Heritage Documentation
17:30 - 19:00	APOLLON	Oral Presentation	Orientation and Calibration, Surface reconstruction and buildings Chairs: J. WEGNER (University of Zurich, Switzerland), R. ROSCHER (University of Bonn, Germany)
17:30 - 19:00	ATHENA	Oral Presentation	Landuse and Landcover Change Detection (WG III/7-2) Chairs: M. WEINMANN (Karlsruhe Institute of Technology, Germany)
17:30 - 19:00	RISSO 6	Oral Presentation	Microwave Remote Sensing (WG III/2 + III/5) Chairs: B. OSMANOGLU (NASA, USA), M. SCAIONI (Politecnico di Milano, Italy)
17:30 - 19:00	RISSO 7	Oral Presentation	ISPRS Scientific and Educational & Capacity Building Initiatives Chairs: S. LI (ISPRS Treasurer, Ryerson University, Canada), S. KUMAR (CSSTEAP, India)

Friday, 10 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
09:00 - 10:30	APOLLON	Oral Presentation	Spatial applications based on urban and regional Digital Twins Chairs: G. AGUGIARO (TU Delft, Netherlands), P. BOGUSLAWSKI (Wroclaw University of Environmental and Life Sciences, Poland)
09:00 - 10:30	ATHENA	Oral Presentation	Thematic Information Extraction from RS images (WG III/1-2) Chairs: S. URAL (Politecnico di Milano, Italy), C. PELLETIER (Université Bretagne Sud, France)
09:00 - 10:30	RISSO 6	Oral Presentation	Orientation and Calibration, Surface reconstruction and buildings Chairs: D. SKARLATOS (Cyprus University of Technology, Cyprus), F. FASSI (Politecnico di Milano, Italy)
09:00 - 11:00	RISSO 7	Oral Presentation	News Approaches in Radio Sciences for Disaster Management and Remote Sensing Chairs: T. TANZI (Telecom Paris, France), M. CHANDRA (Chemnitz University of Technology, Germany)
11:00 - 12:30	APOLLON	Oral Presentation	Uncertainty and spatial analysis Chairs: M. DELAVAR (University of Tehran, Iran), M. MOSTAFAVI (Université Laval, Canada)
11:00 - 12:30	ATHENA	Oral Presentation	Agriculture and Natural Ecosystems Modelling and Monitoring (WG III/10-2) Chairs: F. PIROTTI (University of Padova, Italy), M. YOSHIMURA (The University of Tokyo, Japan)
11:00 - 12:30	RISSO 6	Oral Presentation	Reality Capture And Quality Inspection In Digital Construction Chairs: M. MABOUDI (Technical University of Brunswick, Germany), M. GERKE (Technical University of Brunswick, Germany)
11:00 - 12:30	RISSO 7	Oral Presentation	LULC Change Detection And Updating Chair: S. OUDE ELBERINK (University of Twente), Y. ZENG (Central South University)
16:00 - 17:30	BALCONY - AGORA 2 - ZONE A	Poster Session	Posters of editions 2020 and 2021
16:00 - 17:30	BALCONY - AGORA 2 - ZONE B	Poster Session	TCII - Photogrammetry
16:00 - 17:30	BALCONY - AGORA 3 - ZONE D	Poster Session	TCI - Sensor Systems
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	Student posters
16:00 - 17:30	BALCONY - AGORA 3 - ZONE E	Poster Session	TS - News Approaches in Radio Sciences for Disaster Management and Remote Sensing
17:30 - 19:00	APOLLON	Oral Presentation	Semantic information extraction, deep learning Chairs: R. ROSCHER (University of Bonn, Germany), R. QIN (The Ohio State University, USA)

17:30 - 19:00	ATHENA	Oral Presentation	Remote Sensing of Atmospheric Environment (WG III/8) Chair: F. PIROTTI (University of Padova, Italy)
17:30 - 19:00	RISSO 7	Oral Presentation	Innovative Applications Of Satellite Data For Risk Management And Disasters Chairs: H. DE BOISSEZON (CNES, France), A. EDDY (Athena Global)

Saturday, 11 June 2022

Time Session	Session Room	Presentation Mode	Session Title and Chairs
09:00 - 10:30	APOLLON	Oral Presentation	Disaster Assessment, Monitoring and Management (ICWG III/IVa-1) Chairs: J. TANZI (Telecom Paris), M. CHANDRA (Chemnitz University of Technology)
09:00 - 10:30	ATHENA	Oral Presentation	Semantic information extraction, deep learning Chairs: F. RINAUDO (Politecnico di Torino, Italy), D. GONZALEZ-AGUILERA (University of Salamanca, Spain)
09:00 - 10:30	RISSO 6	Oral Presentation	New sensor technologies, benchmarking and validation Chairs: D. IWASZCZUK (Technical University of Darmstadt, Germany), C. WANG (Xiamen University, China)
09:00 - 10:30	RISSO 7	Oral Presentation	Spatial analysis and data management Chairs: M. DELAVAR (University of Tehran, Iran), M. BROVELLI (Politecnico di Milano, Italy)
11:00 - 12:30	APOLLON	Oral Presentation	Remote Sensing Data Quality (ICWG III/IVb-1) Chairs: T. BLASCHKE (University of Salzburg, Austria), Á. BARSÍ (Budapest University of Technology and Economics, Hungary)
11:00 - 12:30	ATHENA	Oral Presentation	Semantic information extraction, deep learning Chairs: D. TUIA (EPFL, Switzerland), L. HOEGNER (Technical University of Munich, Germany)
11:00 - 12:30	RISSO 6	Oral Presentation	UAS Applications and Robotics Chairs: S. NEBIKER (University of Applied Sciences and Arts Northwestern Switzerland), F. NEX (University of Twente, Netherlands)
11:00 - 12:30	RISSO 7	Oral Presentation	Agriculture and Natural Ecosystems Modelling and Monitoring (WG III/10-3) Chairs: M. YOSHIMURA (The University of Tokyo, Japan), F. PIROTTI (University of Padova, Italy)

Policy Forum Track and Sessions

Monday 6 June 2022		Tuesday 7 June 2022		Wednesday 8 June 2022		Thursday 9 June 2022		Friday 10 June 2022	
09h00-12h30		09h00-12h30	Geospatial Information-enabled SDGs Monitoring	09h00-12h30	Earth observation	09h00-12h30	Openness and Innovation in Geomatics and Earth Observation	09h00-12h30	Intelligent data for Smart Cities
14h00-17h00	Women in remote sensing	16h00-19h00	Cultural heritage forum	16h00-19h00	Earth observation	16h00-19h00	Geospatial education towards digital transformation	16h00-19h00	Multi-source data collection for national/regional-wide mapping

Monday, 6 June 2022

14:00 - 17:00	HERMES	Oral Presentation	Women in remote sensing Chairs: M. MADDEN (University of Georgia, USA), M. CROWLEY (McGill University, Canada), S. REYES (United Nations University, Philippines), L. THAPA (Ministry of Land Management, Cooperatives and Poverty Alleviation, Nepal), C. CRUZ (Trinity College Dublin, Ireland) Presenters: M. MADDEN (University of Georgia, USA), M. CROWLEY (McGill University, Canada), S. REYES (United Nations University, Philippines), L. THAPA (Ministry of Land Management, Cooperatives and Poverty Alleviation, Nepal), C. CRUZ (Trinity College Dublin, Ireland), L. HALOUNOVA (ISPRS President, Czech Technical University, Czech Republic)
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Tuesday, 7 June 2022

09:00 - 12:30	HERMES	Oral Presentation	Geospatial Information-enabled SDGs Monitoring Chairs: C. JUN (NGCC, China), A. SAND (CNES, France), S. REYES (United Nations University, Philippines), J. MILLS (Newcastle University, UK), S. LI (Ryerson University, Canada) Presenters: L. DURIEUX (GEO, IRD, France), M-J. KRAAK (University of Twente, Netherlands), P. PATIAS (Aristotle University of Thessaloniki, Greece), Y. BAN, F. BRETAR (CNES, France), J. MILLS (Newcastle University, UK), S. PENG (NGCC, China), D. OXOLI (Politecnico di Milano, Italy)
16:00 - 19:00	HERMES	Oral Presentation	Cultural Heritage Chairs: A. GEORGOPOULOS (Technical University of Athens, Greece), M. SILVER (University of Oulu, Finland) Presenters: C. COUGHENOUR (Google, UK), F. RINAUDO (Polytechnic University of Turin, Italy), P. GRUSSENMEYER (INSA Strasbourg, France), G. TUCCI (University of Florence, Italy), F. FASSI (Polytechnic University of Milan, Italy)

Wednesday, 8 June 2022

09:00 - 12:30	HERMES	Oral Presentation	Earth Observation (Part I) Chairs: G. SCHREIER (DLR, Germany), I. DOWMAN (Honorary member, UK) Presenters: I. BENITO (Planet), S. CHELI (ESA), S. CHERCHALI (CNES, France), J. GAY PEREZ (Philippine Space Agency, Philippines), M. LANGER (Ororatech, Germany), Y. NAKANISHI (Axelspace Corporation, Japan), A. PAREKH (PIXXEL, India), J-F. SEGRESTAA (Airbus Defense & Space Intelligence, France)
16:00 - 19:00	HERMES	Oral Presentation	Earth Observation (Part II) Chairs: G. SCHREIER (DLR, Germany), I. DOWMAN (Honorary member, UK) Panelists: S. CHELI (ESA), I. BENITO (Planet,) , S. CHERCHALI (CNES, France), L. DURIEUX (GEO, IRD, France), J. GAY PEREZ (Philippine Space Agency, Philippines), M. LANGER (Ororatech, Germany), Y. NAKANISHI (Axelspace Corporation, Japan), A. PAREKH (PIXXEL, India), J-F. SEGRESTAA (Airbus Defense & Space Intelligence, France)

Thursday, 9 June 2022

09:00 - 12:30	HERMES	Oral Presentation	Openness and Innovation in Geomatics and Earth Observation Chairs: M. BROVELLI (Politecnico di Milano, Italy), S. COETZEE (University of Pretoria, South Africa) Presenters: M. BERNASOCCHI (OPENGIS.ch LLC, Switzerland) Panelists: M. MINGHINI (JRC, Italy), S. ZLATANOVA (University of New South Wales, Australia), A. MDELENI (University of Pretoria, South Africa), M. GONZALEZ (UP42, Germany), S. REYES (United Nations University, Philippines), T. OBUKHOV (United Nations, USA), F. NOARDO (OGC, Netherlands), B. SIBOLLA (Council for Scientific and Industrial Research, South Africa), A. ANGHELEA (ESA, Italy), Venkatesh Raghavan (Osaka City University, Japan)
16:00 - 19:00	HERMES	Oral Presentation	Geospatial education towards digital transformation Chair: R. SHULTS (Research Institute of Geodesy, Topography, and Cartography, Czech Republic) Presenters: M. GARRAMONE (Politecnico di Milano, Italy), C. BOLOGNESI (Politecnico di Milano, Italy), J. NECHYBA (Czech Republic), R. SHULTS (Research Institute of Geodesy, Topography, and Cartography, Czech Republic)

Friday, 10 June 2022			
09:00 - 12:30	HERMES	Oral Presentation	Intelligent data for Smart Cities Chairs: V. TOURRE (Ecole Centrale Nantes, France), S. ZLATANOVA (University of New South Wales, Australia) Presenters: V. COORS (HFT Stuttgart, Germany), I. BASTRAKOVA (Geoscience Australia, Australia), G. GESQUIERE (University Lumière Lyon 2, France), Y. YUE (Shenzhen University, China), V. SIGNORELLI (UCL, UK) Panelists: V. COORS (HFT Stuttgart, Germany), I. BASTRAKOVA (Geoscience Australia, Australia), G. GESQUIERE (University Lumière Lyon 2, France), Y. YUE (Shenzhen University, China), V. SIGNORELLI (UCL, UK)
16:00 - 19:00	HERMES	Oral Presentation	Multi-source data collection for national/regional-wide mapping Chairs: R. HENO (IGN, France), A. CRISTOFOL (IGN, France) Presenters: O. BANASZAK (Ville et Eurométropole de Strasbourg, France), A. TOMMASELLI (UNESP, Brazil), M. TONON (Airbus, France), M. MARTINEZ (European Association of Aerial Surveying Industries), F. NEX (University of Twente, Netherlands)
18:00 - 18:20	RISSO 8	Oral Presentation	Youth Forum Chairs: S. REYES (United Nations University, Philippines)

Technology Track and Sessions

In parallel with the scientific sessions, the forum track addresses the interactions between science, public organizations, industry and decision-makers on hot topics facing our geospatial community. The forum will not be a place to make research presentations (which is the scope of the scientific/technical sessions organized by the ISPRS commissions), but a proper place to address the impact of technologies and innovations and the role that our community could play in this changing context for «building a better future together» by providing shared visions and/or roadmaps.

TECHNOLOGY TRACK (previsional schedule May 2022)					
Tuesday 7 June 2022		Wednesday 8 June 2022		Thursday 9 June 2022	
09h00-12h00	TT1 - Esri *	09h00-12h00	TT5 - AIRBUS *	09h00-09h20	TT11 - PIESAT Information Technology *
16h00-16h20	TT2 - Riegl *	16h00-16h20	TT6 - Pix4D*	09h40-10h00	TT12 - YellowScan
16h40-17h00	TT3 - ESA *	16h40-17h00	TT7 - Aerometrex *	11h00-11h20	TT13 - Vexcel *
17h20-18h00	TT4 - Hexagon*	17h20-17h40	TT8 - Trimble *	11h40-12h20	TT14 - MOMRA
		18h00-18h20	TT9 - Space Data Marketplace*	16h00-18h00	TT15 - THALES ALENIA SPACE*
		18h30-18h50	TT10 - Racurs	18h20-18h40	TT16 - Agisoft

(*) Programme available

Tuesday, 7 June 2022

09:00 - 12:00	RISSO 8	Oral Presentation	Esri <i>ArcGIS as a comprehensive Imagery System</i> <i>Shifting to modern remote sensing and image analysis for teaching and research using ArcGIS</i> Presenters: P. BECKER, G. DOERFFEL, K. WENZEL, C. KURNIA
16:00 - 16:20	RISSO 8	Oral Presentation	Riegl <i>High-resolution Lidar Bathymetry from different platforms</i> Presenter: U. RIEGL
16:40 - 17:00	RISSO 8	Oral Presentation	ESA <i>Platform Services for Open Innovation in EO</i> Presenter: A. ANGHELEA
17:20 - 18:00	RISSO 8	Oral Presentation	Hexagon <i>Smart Digital Realities - Enabling A more Sustainable and Autonomous Future</i> Presenter: K. NEUMANN

Wednesday, 8 June 2022

09:00 - 12:00	RISSO 8	Oral Presentation	AIRBUS <i>Pléiades Neo: The best of very high-resolution optical imagery for an unprecedented level of geospatial services</i> <i>Pléiades Neo: Highest resolution and accuracy available on the market</i> <i>Pléiades Neo: 2 new spectral bands to answer many more needs</i> <i>Always one step ahead: introducing Pléiades Neo intensified. Joint super-resolution and image restoration for Pléiades Neo imagery</i> <i>OneAtlas: the platform to access Pléiades Neo</i> <i>Some real Pléiades Neo use cases by our partners</i> <i>An advanced processing tool: Pixel Factory Neo</i> <i>Do you want to be part of the club? Call for projects for the user group Pléiades Neo</i> Presenters: V. CASALS, M. TONON, H. POILVÉ, L. GABET, F. CHOUTEAU, L. LEONETTI, N. JAUNARD, L. PAVET
16:00 - 16:20	RISSO 8	Oral Presentation	Pix4D <i>Leveraging LIDAR and photogrammetry for next-level mapping</i> Presenter: P. ROTHENBÜHLER
16:40 - 17:00	RISSO 8	Oral Presentation	Aerometrex <i>High Resolution Multiscale 3D City Modelling</i> Presenter: F. MARRE
17:20 - 17:40	RISSO 8	Oral Presentation	Trimble <i>From Accurate Big Data Acquisition to a High-Quality Digital Twin</i> Presenter: M. MIRI
18:00 - 18:20	RISSO 8	Oral Presentation	Space Data Marketplace <i>Space Data Marketplace, the one-stop-shop for earth observation data</i> Presenter: D. NAVEZ

Thursday, 9 June 2022

09:00 - 09:20	RISSO 8	Oral Presentation	PIESAT Information Technology <i>PIE-Engine and related PaaS</i> Presenter: T. GUO
09:40 - 10:00	RISSO 8	Oral Presentation	YellowScan <i>When high end LIDAR solution meets versatility</i> Presenter: T. ALLOUIS
10:15 - 10:45	RISSO 8	Oral Presentation	MOMRAH <i>Digital Transformation as Part of Saudi Vision 2030</i> Presenter: A. BINSAEED
11:00 - 11:20	RISSO 8	Oral Presentation	Vexcel <i>UltraCam Generation 4.1- Details and Insights</i> Presenter: M. GRUBER
11:40 - 12:20	RISSO 8	Oral Presentation	Applanix <i>SAM: Simultaneous Adjustment And Mapping Using SLAM & ISO</i> Presenter: M. MOSTAFA

16:00 - 18:30	RISSO 8	Oral Presentation	Thales Alenia Space <i>Earth Observation & Remote sensing at Thales Alenia Space</i> <i>Smart Space telescope : From Heritage to efficiency</i> <i>Meteosat Third Generation Infrared sounder, qualification results</i> <i>Flexible and configurable satellites Solutions</i> <i>Artificial intelligence on-board observation satellites : use-cases, in-orbit results and perspectives</i> Presenters: F. PISTONE, R. AURIBAUT, S. ABDON, F. ARBUSTI, T. GOUEMANT
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Geospatial Tutorial Lectures

The tutorials took place on the Campus of St. Jean d'Angely, of the University of Nice Sophia Antipolis.

XXIV ISPRS CONGRESS - Tutorials - Sunday 5 June 2022 University Côte d'Azur - Campus Saint Jean d'Angely (Update 9 May 2022)					
TIME	Room 1	Room 2	Room 3	Room 4	TIME
09h00-10h30	#1 - 3D DEEP LEARNING FOR REMOTE SENSING	#3 - MULTI-STEREO SATELLITE IMAGES DATA PROCESSING FOR DIGITAL SURFACE MODELING	#7 - DEEP LEARNING FOR TIME-SERIES CLASSIFICATION	#13 - DYNAMIC NETWORKS: A HANDS-ON COURSE	09h00-10h30
Coffee break					Coffee break
11h00-12h30					11h00-12h30
Lunch Break					Lunch Break
14h00-15h30	#1 - 3D DEEP LEARNING FOR REMOTE SENSING	#6 - MULTI-EPOCH HISTORICAL IMAGE PROCESSING IN MICMAC		#8 - UNDERWATER PHOTOGRAMMETRY: METHODS AND CHALLENGES FOR MAPPING AND MONITORING	14h00-15h30
Coffee break					Coffee break
16h00-17h30					16h00-17h30

Sunday, 5 June 2022

09:00 - 12:30	Room 1	Oral	Deep Learning For Remote Sensing
14:00 - 17:30		Presentation	Presenters: L. LANDRIEU, R. LOISEAU, D. ROBERT, France
09:00 - 12:30	Room 2	Oral	Multi-stereo Satellite Images data processing for Digital Surface Modeling
		Presentation	Presenter: R. QIN, China
14:00 - 17:30	Room 2	Oral	Multi-epoch historical image processing in MicMac
		Presentation	Presenter: E. RUPNIK, L. ZHANG, France
09:00 - 12:30	Room 3	Oral	Deep Learning For Time Series Classification
		Presentation	Presenters: Z. ZHANG, United States, M. RUSSWURM, Germany, C. PELLETIER, France
09:00 - 12:30	Room 4	Oral	Dynamic Networks: a hands-on course
		Presentation	Presenters: I. COLOMINA, Spain, J. SKALOUD, D. CUCCI, Switzerland
14:00 - 17:30	Room 4	Oral	Underwater photogrammetry: methods and challenges for mapping and monitoring
		Presentation	Presenters: D. SKARLATOS, Cyprus, F. MENNA, E. NOCERINO, Italy