

Geodynamics and Geospatial Research 2026

08:30 – 08:50 Arrival and registration (Jelgavas str. 3 – 301)
08:50 – 09:00 Conference opening and technical information Director of the Institute of Geodesy and Geoinformatics Dr. Ingus Mitrofanovs
09:00 – 09:15 Leveraging Radar and GNSS Satellites for Land Motion Surveillance in Taiwan (TWN) K-H. Tseng
09:15 – 09:30 <i>On-Line</i> Dynamic Displacement Monitoring with Centimeter-Level Accuracy Using Single-Frequency Smartphone GNSS (POL, EGY) A. Abazeed, K. Maciuk
09:30 – 09:45 Global analysis of annual and semi-annual changes in GNSS reference station coordinates (POL) Ł. Borowski, K. Maciuk
09:45 – 10:00 <i>On-Line</i> Comparative Analysis of CORS GNSS Networks for Precision Agriculture in Ukraine, Poland, and Hungary (POL) I. Brusak, K. Maciuk, L. Babiy, M. Veróné Wojtaszek
10:00 – 10:15 <i>On-Line</i> Time-Frequency Analysis of Atomic Clocks using PPP (POL) M. Tryniecki, J. Nawrocki, W. Kosek
10:15 – 10:30 Implementation and Evaluation of the Redesigned Ambiguity Function (RAF) and the new SAPOS.GEPOS State Space Representation Messages SSRZ for a High Potential Realtime PPP (GER) R. Jäger, K. Kamm, F. Vortisch, L. Wiegang
10:30 – 11:00 Coffee break (Jelgavas str. 3 – 2nd floor)
11:00 – 11:15 <i>On-Line</i> Assessment of Geodetic and Smartphone GNSS Receivers for GNSS-IR Monitoring in a Parking Garage Environment (POL, EGY) M. Abdelhamid, K. Maciuk, B. Mitka, H. Małyszczek, A. Podzorska
11:15 – 11:30 Development of a Positioning Algorithm Based on Magnetic-Field and Inertial Navigation Measurements (LAT) M. Brants, V. Zandersons, J. Karušs, I. Krastiņš, R. Lazda, A. Mozers
11:45 – 12:00 Assessing atmospheric anomalous refraction effect on astrogeodetic deflection of vertical measurements (LAT) I. Vārna, A. Zariņš, G. Silabriedis, A. Rubans, D. Kleins, I. Bergmanis
11:30 – 11:45 On impact of atmospheric anomalous refraction on astrogeodetic vertical deflection measurements (LAT) A. Zariņš, I. Vārna, A. Rubans
12:00 – 12:15 <i>On-Line</i> On the Error Sources in GNSS and Digital Zenith Camera Measurements for Quasi-Geoid Model (LAT) J. Balodis, K. Balodis
12:15 – 12:30 Network RTK developments in Estonia (EST) H. Jürgenson

12:30 – 13:00 Technical Break
<p>13:00 – 13:15 Hybrid Regional Gravity Field Determination Using Gravimetric and Vertical Direction Observations Based on Adjusted Spherical Cap Harmonic (ASCH) Modeling (LAT, GER) K. Runde, R. Jäger, J. Kaminskis</p>
<p>13:15 – 13:30 Geospatial Modelling of Risk Situations in Wastewater Treatment Plants (LAT) A. Celms, I. Bergmanis, J. Celms, U. Egle</p>
<p>13:30 – 13:45 <i>On-Line</i> Satellite-Derived Climate Hazard Characterization for Vulnerable Populations: Linking Earth Observation Systems to Health Outcomes in Sub-Saharan Africa (ZIM, GBR) Z. Chinwadzimba, R. Sibanda, P. T. Makanga</p>
<p>13:45 – 14:00 <i>On-Line</i> Analysis of the Conditions for Digital Representation of Historical Topography Using Modern Geodetic and Geomatic Methods: The Case of Tarnowskie Góry (POL) A. Banaczkowska</p>
<p>14:00 – 14:15 Preliminary Assessment of the Stress-Strain State of the Geological Environment in the Radon Field Area in Sigulda, Latvia (LAT, UKR) V. Ņikuļins, D. Malytsky</p>
<p>14:15 – 14:30 <i>On-Line</i> GNSS-Derived Zenith Tropospheric Delay for Numerical Weather Prediction Assimilation over Nigeria (NGR) J. A. Folaranmi, Y. D. Opaluwa, T. Y. Zhiri</p>
14:30 – 15:00 Coffee break (Jelgavas str. 3 – 2nd floor)
15:00 – 16:30 Plenary session (Jelgavas str. 3 – 110/Alfa)
16:30 – 17:00 Technical Break
<p>17:00 – 17:15 Ionosphere observation using radio telescopes (LAT) J. Šteinbergs</p>
<p>17:15 – 17:30 Hourly ionospheric risk classification for RTK surveying using CORS network indicators (LAT) A. Vallis, J. Vallis</p>
<p>17:30 – 17:40 Performance characterization of the GGI optical tracking system for space object surveillance (LAT) D. Haritonova, A. Zariņš</p>
<p>17:40 – 17:50 Riga Satellite Laser Ranging Station: 2025 Overview (LAT) K. Salmiņš, J. Kauliņš, S. Melkov</p>
<p>17:50 – 18:00 Analysis of the meteorological data recorded at Satellite Laser Ranging Station Riga in 1998-2004 (LAT) J. Vorona, K. Salmiņš</p>
<p>18:00 – 18:10 Real-Time Segmentation for Precise Navigation in Outdoor Environments (LAT) K. Čabs, M. Cekule, I. Mitrofanovs</p>
<p>18:10 – 18:20 GNSS analytical research at the Institute of the Geodesy and Geoinformatics (LAT) I. Mitrofanovs</p>

Discussions

Invitation to the next conference

Closing