



INTERNATIONAL SYMPOSIUM ON APPLIED GEOINFORMATICS
Technical Program

THURSDAY, 07 NOVEMBER 2019

| Time | Location | Session |
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| 08:00 – 09:30 | Desk | Registration |
| 09:30 – 10:45 | Grand Hall | Opening Ceremony <ul style="list-style-type: none"> • Turkish Folk Music performed by YTU Faculty of Art and Design • Opening Speech by Chair of ISAG2019 - <i>Prof. Dr. Bulent BAYRAM</i> • Opening Speech by Dean of YTU Faculty of Civil Engineering – <i>Prof. Dr. Engin GULAL</i> • Opening Speech by The Ambassador Extraordinary and Plenipotentiary of Latvia – <i>H. E. Mr. Pēteris Kārlis ELFERTS</i> • Opening Speech by Rector of Yildiz Technical University – <i>Prof. Dr. Bahri ŞAHİN</i> |
| 10:45 – 11:00 | Foyer | Coffee Break |
| 11:00 – 12:00 | Grand Hall | Keynote Speakers <ul style="list-style-type: none"> • Global gravity field models and their applications in geodesy and geophysics, <i>Dr. E. Sinem INCE</i>, Department of Geodesy, German Research Centre for Geosciences (GFZ-Potsdam)/Germany • Satellite remote sensing from Arctic to Antarctica, <i>Assoc. Prof. Dr. Burcu OZSOY</i>, Istanbul Technical University (ITU) - Polar Research Center (PolReC)/Turkey |
| 12:00 – 13:00 | Dining Hall | Lunch |
| 13:00 – 15:00 | Grand Hall | Special Session of Satellite Imagery Providers Chair: Yücel Erbay <ul style="list-style-type: none"> • Korean remote sensing satellite programs and industry: Diversifying remote sensing resources, <i>Moongyu KIM</i>, SI Imaging Services • See more detail with 30 cm satellite images acquired by European space imaging, <i>Arnaud DURAND</i>, European Space Imaging • Intelligent city management using satellite remote sensing technology, <i>Dr. Wei SUN</i>, 21AT • Planet – See Change, Change the World, <i>Robert NAGY</i>, Planet Labs • Achievements of the Republic Kazakhstan in Earth Observation Sector, <i>Aibol NSANOV</i>, National Company Kazakhstan Gharysh Sapary • MAXAR – Spaced Derived Earth intelligence for National Mapping, <i>Steven ALLEN</i>, MAXAR |
| 15:00 – 15:15 | Foyer | Coffee Break |
| 15:15 – 16:30 | Blue Hall | Remote Sensing – 1 Co-Chairs: Elif Sertel & Fabiana Calo <ul style="list-style-type: none"> • A comparative analysis of two object-based techniques for shoreline extraction from digital orthophotos: A case study in Riga, Latvia, <i>B. Bayram, I. Varna, P. Petersons, T. Bakirman, M. O. Selbesoglu, A. Jamil, O. C. Bayrak, D. Z. Seker</i> • Comparative analysis of digital surface model extraction approaches for tri-stereo satellite images, <i>U. Alganci, E. Sertel, S. Kaya, B. Besol</i> • Random forest classification and GIS for segmentation and automatic extraction of coastline lines: Application to the region Aquitaine in the south-west of France, <i>B. Abdelkrim, M. Youssouf, N. Rachid, M. Tewfik</i> • Combining symmetry and LM information for citrus tree detection, <i>A. Ö. Ok, A. Ö. Ok</i> • Investigation of multiresolution analysis-based pansharpening methods, <i>V. Yilmaz, Ç. Şerifoğlu Yilmaz, O. Güngör</i> |
| | Green Hall | Photogrammetry / Image Processing – 1 Co-Chairs: Cem Gazioglu & Ozan Arslan <ul style="list-style-type: none"> • Accuracy assessment between UAV photogrammetric methods and geodesic methods, <i>H. B. Makineci, H. Karabörk, A. Durdu</i> |



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| | | <ul style="list-style-type: none"> • OSTSA: An open source toolbox for segmentation accuracy analysis, <i>F. Z. Kaya, U. Aydar, E. Ö. Avşar, Ö. Akçay</i> • Vehicle detection with different deep learning methods from video, <i>S. Cepni, M. E. Atik, Z. Duran</i> • Use of unmanned aerial vehicles (UAV) and marine environment simulator in oil pollution investigations, <i>İ. Bayirhan, C. Gaziöğlü</i> |
| | Red Hall | <p>Terrestrial Laser Scanning – 1 Co-Chairs: Murat Yakar & Tarvo Mill</p> <ul style="list-style-type: none"> • Estimation of accuracy and reliability of terrestrial laser scanning results during object feature recognition, <i>T. Mill</i> • Modelling of a sea cliff with terrestrial laser scanning, <i>A. Alptekin, M. Özgür Çelik, M. Yakar</i> • Detection of individual trees in urban areas using raw LIDAR data, <i>N. Yastikli, Z. Cetin</i> • The challenges of GNSS/IMU based georeferencing of mobile LIDAR point cloud generation, <i>V. İlçi, C. Toth</i> • A comparison of feature selections in ALS point cloud classification using 3D neural network, <i>E. Sevgen, M. Ö. Efe</i> |
| 16:30 – 16:45 | Foyer | Coffee Break |
| 16:45 – 18:00 | Blue Hall | <p>Remote Sensing – 2 Co-Chairs: Arjun G. Koppad & Şinasi Kaya</p> <ul style="list-style-type: none"> • Discrimination and identification of iron deposits on remote sensing data using feature oriented principal component selection and band ratio methods: Eastern Taurus /Turkey, <i>M. Trore, T. Çan, S. Tekin</i> • Integration of optical and radar data for characterization and mapping of land cover in the national park of Chapada dos Veadeiros/GO, <i>G. Boggione, P. Silva, B. Carvalho, E. Lima, R. Carneiro</i> • Evaluation of satellite AOD observations for monitoring air quality, <i>P. Ettehadi Osgouei, S. Kaya, E. Sertel</i> • Investigation of the relationship between water quality parameters and reflection values, <i>D. Haslak, E. Ö. Avşar, Ö. Akçay, Ş. Kaya</i> • Object-based image classification of poplar tree with ensemble learning methods using Sentinel-2 Imagery, <i>İ. Çölkesen, H. Tonbul, T. Kavzoğlu</i> |
| | Green Hall | <p>Photogrammetry / Image Processing – 2 Co-Chairs: Wolfgang Sulzer & Serkan Ural</p> <ul style="list-style-type: none"> • A semi-automatic approach to collect training datasets for point cloud classification, <i>Ç. Şerifoğlu Yilmaz, V. Yilmaz, O. Güngör</i> • Extraction of highway geometry parameters from airborne LIDAR data and imagery, <i>B. Süleymanoğlu, M. Soycan</i> • Investigating the Rolling Shutter Effect of Low-Cost UAV cameras on photogrammetric mapping accuracy, <i>A. H. İncekara, D. Z. Şeker</i> • Investigations on the combined use of bathymetric LIDAR and photogrammetry for coral reef mapping, <i>S. Ural, E. Nocerino, A. Gruen</i> |
| | Red Hall | <p>GNSS / Height Systems – 1 Co-Chairs: Gunars Silabiedis & Uğur Doğan</p> <ul style="list-style-type: none"> • Systematic bias of selected estimates applied in displacement analysis, <i>P. Wyszowska, R. Duchnowski</i> |



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| | | <ul style="list-style-type: none">• Accuracy assessment of GNSS-R Method for snow depth detection, <i>M. O. Selbesoglu , B. Akpinar , H. H. Yavasoglu , M. F. Karabulut , N. O. Aykut, V. E. Gulal</i>• Research activities at the Institute of Geodesy and Geoinformatics, <i>G. Silabriedisi, I. Värna , A. Zariņš, J. Balodis, K. Morozova , I. Mitrofanovs, D. Haritonova, M. Cekule, A. Rubans</i>• Noise characteristics in GRACE-Mascon solutions, <i>Ö. Güneş, C. Aydın</i> |
| 18:15 - 20:00 | Foyer | Icebreaker |



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FRIDAY, 08 NOVEMBER 2019

| Time | Location | Session |
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| 09:00 – 10:15 | Blue Hall | <p>Remote Sensing – 3 Co-Chairs: Naci Yastıklı & Yan Yang</p> <ul style="list-style-type: none"> • Integration of SAR and optical data for land investigations in Konya - Karapınar area, central Turkey, <i>F. Calò, O. Orhan, D. Notti, S. Abdikan, H. B. Makineci, A. Pepe, F. Balık Sanlı</i> • Relationship of urban development with the heat islands, Trabzon case study, <i>B. Kazancı, F. B. Sariyılmaz</i> • Digital terrain model generation from high resolution digital surface model by using conditional adversarial networks, <i>Y. Koçan, A. Çınar</i> • Assessment of machine learning methods for seagrass classification in the Mediterranean, <i>T. Bakirman, M.U. Gümüşay</i> |
| | Green Hall | <p>GIS / Smart Cities – 1 Co-Chairs: Alias Abdul Rahman & Hüseyin Bayraktar</p> <ul style="list-style-type: none"> • Eco-driving robot assistant usage efficiency assessment in Latvia, <i>A. Celms, V. Pukite, A. Ratkevics, A. Kolcovs</i> • Integrating of spatial and non-spatial 3D strata objects based on indoor GML, <i>M. İ. Hassan, K. İdris, A. A. Rahman</i> • A parallel version of indicator kriging for windows laptops, <i>E. Hodgess</i> • Planning support systems and smart cities: an evaluation for Turkey, <i>N. S. Partigöç, Ç. Tarhan</i> • Use of semantic web technologies for integrating multiple representations of spatial features: a preliminary study on buildings, <i>A. Memduhoglu, M. Basaraner</i> |
| | Red Hall | <p>Remote Sensing – 4 Co-Chairs: Taşkın Kavzoğlu & Marco Polcari</p> <ul style="list-style-type: none"> • SAR based sea surface currents estimation: application to the gulf of Trieste, <i>V. Zamparelli, G. Fornaro</i> • Research of possible contribution for using ontology in object oriented classification, <i>Z. Şener, M. Uzar, N. Musaoğlu, M. Başaraner</i> • Monitoring olive trees by using spectral indices with multi-temporal Sentinel-2 satellite images, <i>H. M. Akçay, Ş. Kaya, E. Sertel, U. Algancı</i> • Employing neural networks machine learning algorithm for LULC mapping, <i>S. K. M. Abujayyab, İ. R. Karas</i> • Spatio-temporal glacier change detection using deep learning: A case study of Shishper Glacier in Hunza, <i>A. Jamil, A. A. Khan, B. Bayram, J. Iqbal, G. Amin, M. Yesiltepe</i> |
| 10:15 – 10:30 | Foyer | Coffee Break |
| 10:30 – 11:45 | Blue Hall | <p>Remote Sensing – 5 Co-Chairs: Füsün Balık Şanlı & Nebiye Musaoğlu</p> <ul style="list-style-type: none"> • Morphometric analysis of the Sakarya Basin stream network using linear morphometric indices and fractal analysis, <i>A. Uyar, D. Öztürk</i> • Satellite support during Turkish Antarctic expedition, <i>S. Yirmibeşoğlu, S. Kern, B. Özsoy</i> • Volumetric variations of inland water body: a case study of Manchar Lake, <i>R. Muzaffer</i> • A new approach to determination of artificial surface areas from satellite images; normalized difference artificial surface index, |



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| | | <p><i>A. Z. Mutlu, F. B. Sariyilmaz</i></p> <ul style="list-style-type: none"> A Phenology-Based Method for operational crop type mapping through a combined use of Landsat-8 and Sentinel-2A data and Random Forest, <i>A. Htitiou, T. Benabdelouahab, A. Boudhar, Y. Lebrini</i> |
| | Green Hall | <p>GIS / Smart Cities – 2 Co-Chairs: Josef Gspurning & Ümit Işıklıdağ</p> <ul style="list-style-type: none"> Climate classification analysis: Mersin case, <i>L. Kuşak, F. B. Ünel, H. Doğan, A. Şahin, M. Yakar</i> Modelling urban growth for Bangkok and assessing linkages with road density and socio-economic indicators, <i>S. A. Kamarajugedda, E. Y. M. Lo</i> Mapping the processes of information transformation from BIM to GIS, <i>U. Işıklıdağ</i> Open source gis design for Amykles ancient site of Greece, <i>C. S. Boyoğlu, V. Pouginiş, M. Tsakiri, N. Demir</i> |
| | Red Hall | <p>GNSS / Height Systems – 2 Co-Chairs: Cüneyt Aydın & Inese Varna</p> <ul style="list-style-type: none"> Establishment of the relationships between the methods of map production and quality function deployment (QFD) systematic for highway projects, <i>G. Kalak, H. Erbiyik, E. Can</i> Digital Zenith Camera VESTA and its observations' application for the improvement of Latvian Quasi-geoid model, <i>K. Morozova, A. Zarins, G. Silabriedis, A. Rubans</i> Design criteria of the geometric components for the rail transport routes related to urban public rail transport modes and some examples from the world, <i>E. Can, H. Erbiyik</i> Analysis of seasonal cycle of sea level variations in the Black Sea, <i>N. B. Avşar, Ş. H. Kutoğlu</i> |
| 11:45 – 11:50 | Foyer | Short Break |
| 11:50 – 12:30 | Grand Hall | Sponsors' Session Chair: Nedim Onur Aykut |
| 12:30 – 13:30 | Dining Hall | Lunch |
| 13:30 – 14:30 | Grand Hall | <p>Keynote Speakers</p> <ul style="list-style-type: none"> Use of multi-source Earth observation data to estimate agriculture production from local to national scale, <i>Prof. Dr. Jadu DASH</i>, Faculty Director of Enterprise, Director of Research, Geography and Environment University of Southampton/UK Recent Advances in National Mapping Activities, <i>Dr. Veysel Okan ATAK</i>, Engineer Colonel, Photogrammetry Department - General Directorate of Mapping, Ankara/Turkey |
| 14:30 – 14:45 | Foyer | Coffee Break |
| 14:45 – 16:00 | Blue Hall | <p>Remote Sensing – 6 Co-Chairs: Akhtar Jamil & Mustafa Ümit Gümüşay</p> <ul style="list-style-type: none"> Evaluation of the effects of ground pavings on heat island formation in urban design by remote sensing method, <i>B. Değerli, E. E. Maraş</i> Investigation of spatial and temporal variations of cryosphere dynamics over the Asian water tower using GIS and remote sensing, <i>J. İqbal, M. Ali, A. Jamil, M. Yesiltepe, A. Ali, C. Su, F. Bashir</i> Investigation of probability of probable ionospheric changes in lower ionosphere layer using very low frequency (VLF) radio signals, <i>M. Ulukavak, İ. Demiryeye, Y. Arpai</i> Comparison of different U-Net models for building extraction from high-resolution aerial imagery, <i>F. Erdem, U. Avdan</i> |



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| | | <ul style="list-style-type: none"> Remote sensing of evapotranspiration using SEBAL and Landsat-8 imageries over lower part of Kunduz catchment, Afghanistan, <i>A. S. Frahmand, D. E. Akyuz, F. Balik Sanli, F. Bektas Balcik</i> |
| Green Hall | GIS / Smart Cities – 3 Co-Chairs: Ali Özgün Ok & Mehmet Alkan | <ul style="list-style-type: none"> Study of the impact of climate change on the siltation of the Bin El Ouidane dam, <i>A. Chaaou, M. Chikhaoui, M.a Naimi, A. Maoukil</i> An automated GIS-based rapid screening method for seismic vulnerability assessment of the buildings, <i>A. E. Özsoy Özbay, I. S. Karapinar, H. C. Ünen</i> Modelling of solar energy potential with geographical information system and remote sensing integration: A case study for Bergama, Turkey, <i>M. Yalçın, M. A. Dereli, N. Polat, M. A. Uğur, Ö. G. Narin, A. Çapadış</i> Predictive geoinformatics based modelling and simulation to assess the potential risk of Passu Glof along cpec route in Hunza Basin, Pakistan, <i>İ. Atif, J. Iqbal, M. A. Mahboob</i> The role of spatial data in building information modelling, <i>O. Eroğlu, H. Demirel</i> |
| Red Hall | GNSS / Height Systems – 3 Co-Chairs: Kataryzyna Pajak & Metin Soycan | <ul style="list-style-type: none"> The importance of atmospheric corrections on Sentinel-1 Insar time series to better quantify tectonic ground motion: the case study of Bodrum-Kos earthquake, <i>F. Doğru, F. Albino, J. Biggs, O. Pamukçu</i> Interaction between atmospheric conditions and GPS Accuracy: A case study from Istanbul, <i>A. Eraslan</i> On the application of nature-inspired grey wolf optimizer algorithm in geodesy, <i>M. Yetkin, Ö. Bilginer</i> Reliability of noise analysis using variance component estimation in geodetic time series, <i>H. Duman, Ö. Güneş, C. Aydin, D. U. Şanlı</i> |
| Grand Hall | Rapid-Fire Presentations – 1 Co-Chairs: Dursun Zafer Şeker & Zaide Duran | <ul style="list-style-type: none"> Assessment of land use land cover classification and water resource impact on forest productivity and carbon sequestration in Yellapur and Haliyal taluka of Uttara Kannada district, Karnataka, India through Geo-informatics approach, <i>A. G. Koppad, P. J. Malini</i> Fusion of AZERSKY and Sentinel-2B images for agricultural crop monitoring, <i>S. Guliyeva, A. Badalova</i> Change detection analysis using multi-temporal Sentinel dataset: A case study in Konya-Karaman Ayranci dam, <i>S. Avci, F. Sunar</i> Qualitative and quantitative performance evaluation of the different pansharpening algorithms using Landsat-8 imagery, <i>G. Senel, F. Bektaş Balçık, Ç. Goksel,</i> A conceptual model for geo-object matching, <i>M. Hacı, T. Gökgöz</i> Determination of landuse change using support vector machines: a case study of Arnavutkoy, Istanbul, <i>H. Catal Reis, G. Yilanci</i> Building extraction from satellite image with deep learning algorithms, <i>Y. Turan, C. Çavdar, O. Güngör</i> Comparison of FCN and U-Net for Image Segmentation using High Resolution Images and Aerial Orthophoto Maps, <i>O. O. Öztürk, B. Saritürk, D. Z. Seker</i> |



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| | | <ul style="list-style-type: none"> Multi-temporal SAR Classification of urban areas using extremely randomized trees, <i>M. Üstüner, F. Balık Sanlı</i> Detecting surface water changes via Landsat and Sentinel data, <i>N. Yagmur, N. Musaoglu, A. Tanik</i> Multiple Sclerosis (MS) lesion detection using deep learning based segmentation network, <i>B. Sarica, D. Z. Şeker, B. Bayram</i> |
| 16:00 – 17:00 | Foyer | Poster Session |
| 17:00 – 18:30 | Blue Hall | <p>Remote Sensing – 7 Co-Chairs: İsmail Ragıp Karaş & Virginia Zamparelli</p> <ul style="list-style-type: none"> Determination of land use / cover and water turbidity of wetlands by using high resolution satellite image, <i>A. Tuzcu, N. Musaoğlu</i> Assessment of forest degradation and deforestation in different watersheds of Sirsi Taluk through remote sensing and GIS technique, <i>P. Banavasi, A. G. Koppad</i> Mapping soil salinity by using Landsat-8 OLI imagery and regression analysis over Bonab County of East Azerbaijan Province in Iran, <i>T. Gorji, A. Yildirim, N. Hamzhepour, E. Sertel, A. Tanik</i> Sunflower growth monitoring using multi-temporal Sentinel-2 images, <i>Ö. G. Narin, S. Abdikan, A. Şekertekin, A. Delen, F. Balık Şanlı</i> Assessment of land suitability for tea cultivation using geoinformatics in the Mansehra and Abbottabad District, Pakistan, <i>N. Ashraf, A. Ahmad</i> Land use mapping of Bergama test area using Headwall Hyperspec VNIR images, <i>E. Tunç Görmüş, Ö. Akar</i> |
| | Green Hall | <p>Photogrammetry / Image Processing – 3 Co-Chairs: Bülent Bayram & Wioleta Blaszcak-Bak</p> <ul style="list-style-type: none"> Accuracy evaluation of UAV-derived products based on different flying altitudes, <i>S. S. Akay, O. Özcan, F. Balık Şanlı, B. Bayram, T. Görüm</i> Detection and monitoring of alpine natural hazards by means of UAV's, <i>W. Sulzer, G. Seier, M. Wecht, V. Kaufmann</i> Visibility analysis of forest fire lookout towers by using LIDAR data, <i>U. Önder, S. Piltan, F. Karsli</i> Automatic water body extraction from point clouds and hydro-flattening, <i>S. Özdemir, Z. Akbulut, H. Acar, A. Yilmaz, O. Firat, F. Karsli</i> Building extraction from high-resolution images using deep learning approach, <i>B. Saritürk, O. O. Öztürk, D. Z. Şeker, B. Bayram</i> |
| | Red Hall | <p>GIS / Smart Cities – 4 Co-Chairs: Ahmet Özgür Doğru & Türkay Gökğöz</p> <ul style="list-style-type: none"> Analysis of marine accidents in the Marmara Sea and Dardanelis via web based GIS, <i>Ö. Önal, Ö. Göller, M. Ü. Gümüşay</i> Selection of hydrographic objects in topo50 and topo100 databases from topo25 database using drainage networks derived from digital elevation models, <i>T. Gökğöz, M. Hacı</i> Geospatial modelling of potential snow avalanche hazard to gemstones mines in Himalayan region of Pakistan, <i>M. A. Mahboob, B. Genc, I. Atif</i> A research on extraction of single 3D building model from oblique photography data assisted by remote sensing images, <i>T. Wang</i> Mapping emotion based on the monitoring of GSR, <i>J. Gspurning</i> High definition corridor mapping from images sequences, <i>M. Gürtürk, Y. Yilmaz, B. Süleymanoğlu, A. Soyacan, M. Soyacan</i> |



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| Grand Hall | <p>Rapid-Fire Presentations – 2 Co-Chairs: Nüket Sivri & Uğur Algancı</p> <ul style="list-style-type: none">• Edge effects between the borders of two adjacent digital elevation models, <i>İ. M. Ozulu, T. Gökgöz</i>• Visualization of metal concentrations in water and sediment samples with GIS at Küçükçekmece Lagoon connection area, <i>M. Zorağa, E. E. Gökmen, M. A. Demirbağ, N. Sivri</i>• GIS-Based multi-criteria decision analysis of site selection for photovoltaic power plants in northwest Turkey, <i>C. Kocabaldir, M. A. Yücel</i>• Land suitability analysis using analytical hierarchy process and Geographic Information System for <i>Coffea arabica</i> Linn. in Benguet Province, Philippines, <i>R. D. Alvarez, J. Maglinao, E. Lucas, J. C. Pabustan, C. E. Concepcion, M. Pabillaran, A. Ramirez</i>• GIS based industry 4.0 context in smart cities, <i>V. Tecim</i>• Digitalisation of surveying and project management: a sample laser scanning project, <i>H. B. Yavuz</i>• Method for determining the negative effects of natural and man-made factors on pipelines based on modern technologies, <i>G. Sachli, S. Muttalibova</i>• An open source spatial software for transportation infrastructure performance metrics, <i>O. Akin, H. Demirel</i>• Indoor navigation system of Faculty of Civil Engineering, ITU: A BIM approach, <i>B. Tarihmen, M. O. Kambur, B. Diyarbakirli, H. Demirel</i>• Data standards for indoor spaces in the context of navigation, <i>E. Ascioğlu, H. Demirel</i>• Design and Development LADM for the treasury real estate, <i>M. Alkan, E. T. Arslan</i>• The solutions of GNSS real-time corrections in the precise processing of agricultural land in Latvia, <i>A. Celms, A. Ratkevics, V. Pukite, I. Reke</i>• Determination of velocities of GNSS stations in Kırıkkale and its surroundings <i>A. Türkü Güçlü, O. Oktar, H. Erdoğan, E. Gürbüz</i>• Investigation of seismic ionospheric anomalies occurred in Turkey during first half of 2019, <i>M. Ulukavak, M. A. Tariq</i>• Defining surface deformations by InSAR time series, <i>B. Gündoğdu, O. Oktar, H. Erdoğan</i> |
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SATURDAY, 09 NOVEMBER 2019

| Time | Location | Session |
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| 09:00 – 10:15 | Blue Hall | <p>Remote Sensing – 8 Co-Chairs: İbrahim Öztüğ Bildirici & Saygın Abdikan</p> <ul style="list-style-type: none"> • Accuracy Assessment of SRTM and ASTER DEM within Turkey by using Local DEM, <i>I. O. Bildirici, R. A. Abbak</i> • Intelligent mapping of irrigated areas using transfer learning and semantic segmentation, <i>Z. Benbahria, İ. Sebari, H. Hajji, M. F. Smiej</i> • Forest fire and burn severity analysis in Cefalu region of Italy using Sentinel-2 imagery, <i>H. Tonbul, İ. Çölkesen, T. Kavzoğlu</i> • Comparison of different soil salinity indices derived from Sentinel-2 images, <i>A. Yildirim, T. Gorji, N. Hamzehpour, E. Sertel, A. Tanik</i> • Improved urban Land Cover/Use mapping Using Sentinel-2A imagery, <i>P. E. Osgouei, S. Kaya, E. Sertel, U. Alganci</i> |
| | Green Hall | <p>GIS / Smart Cities – 5 Co-Chairs: Ayşegül Tanik & Şenol Hakan Kutoğlu</p> <ul style="list-style-type: none"> • Building the roadmap for OpenStreetMap in Turkey, <i>H. C. Ünen, O. M. Yılmaz</i> • Determining parking demand by the integration of GIS and AHP, <i>A. S. İqbal, A. Ç. Aydinoğlu</i> • Temporal and spatial analysis of flooding and landslide disasters in Turkey for period 1960-2018, <i>H. Karaman, G. M. Perihanoğlu</i> • 2D + scale dimension modelling concept for vector and raster GIS dataset, <i>W. M. H. W. Ab Karim, A. A. Rahman</i> • Geothermal potential characterization using integrated geophysical techniques of Ikogosi warm spring, Ekiti, Southwest Nigeria, <i>A. Ojoawo, S. Sedara, Ol. Alabi</i> |
| | Red Hall | <p>Land Management and Cadastre – 1 Co-Chairs: Çiğdem Göksel & Dursun Zafer Şeker</p> <ul style="list-style-type: none"> • Spatial assessment of arable land fragmentation/land consolidation trends and their impact on local development in Romania within the framework of EU common agriculture policy (CAP), <i>O. Copacenaru, C. Flueraru, C. Braghina, I. Ianos</i> • Towards to 3D Cadastre and LADM in Turkey, <i>H. Gürsoy Sürmeneli, M. Alkan</i> • Design and determine Turkey cadastral country profile based on LADM, <i>M. Alkan, Z. A. Polat</i> • Open source cloud GIS framework for real estate valuation, <i>M. O. Mete, T. Yomralioğlu</i> |
| 10:15 – 10:30 | Foyer | Coffee Break |
| 10:30 – 12:15 | Grand Hall | <p>PhD / MSc. Student Session Co-Chairs: Hande Demirel & Tolga Bakırman</p> <ul style="list-style-type: none"> • Automating site selection of wind power plant with GIS based multi criteria decision making, <i>G. Şimşek, A. Ö. Doğru</i> • A mineralogical appraisal of basaltic units of the Schluter crater using contemporary lunar datasets, <i>S. Patel</i> • Integrated computational intelligent model for long-term runoff prediction, <i>B. M. Yahya, D. Z. Şeker</i> |



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| | | <ul style="list-style-type: none">• The comparison of SVM and MLH classification methods to distinguish urban pattern types, <i>O. Dođan, . Kuşçu Şimşek</i>• Composing an accurate digital bathymetric model by using single beam data, <i>S. B. Kaya, U. Dođan, N. O. Aykut</i>• Evaluation of deep learning algorithms for 3D semantic segmentation in outdoor scenes, <i>M. E. Atik, Z. Duran</i>• Investigation of open source geo-information integration impact on object-based classification accuracy: A case study in Istanbul with Sentinel-2 images, <i>B. Varol, R. H. Topaloglu, E. Sertel</i> |
| 12:15 – 12:45 | Grand Hall | <p>Closing Ceremony & Awards</p> <ul style="list-style-type: none">• Best Presentation Award• Best Poster Award• PhD / MSc Award• Closing Speech by Chair of ISAG2019 - <i>Prof. Dr. Bülent BAYRAM</i>• Announcement of ISAG2021 |



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Poster Session | Co-Chairs: Fatmagül Kılıç Gül & Melis Uzar

- Anthropogenic subsidence monitoring from Sentinel-1 InSAR and GPS data integration: preliminary outcomes and future perspectives,
M. Polcari, L. Anderlini, M. Albano, G. Pezzo, V. Secreti, E. Serpelloni, S. Stramondo, E. Trasatti
- GPS satellite coordinates determination with use of IGS SSR Products – evaluation and analysis,
R. Pelc-Mieczkowska, J. Janicka, D. Tomaszewski
- Testing normality of chosen R-estimates used in deformation analysis,
R. Duchnowski, P. Wyszowska
- Some considerations about precise positioning based on the Modified Ambiguity Function Method,
S. Cellmer
- Improved indoor positioning based on range-free RSSI fingerprint method,
M. Uradzinski, H. Guo, M. Yu
- Precise Positioning using the Modified Ambiguity Function Approach using BeiDou System and GPS observations,
D. Kwaśniak, S. Cellmer
- A geodetic model specification by Bayesian information criterion,
K. Nowel
- Velocity analysis of the Latvian CORS time series,
I. Vārna
- An Investigation on Geospatial Functionalities of MongoDB,
E. Ergin, A. Ö. Dođru
- Study on assessment method of earthquake disaster based on spatial reasoning of similarly historical cases,
T. Zeng, A. Gong, Y. Chen, J. Wang, Y. Yang
- Development of national measurement system for structural health monitoring,
B. Akpınar, K. Gürkan, A. A. Dindar, N. O. Aykut, E. Güral
- System for EGNSS receivers antennas calibration - current status of the project,
K. Dawidowicz, J. Rapiński, P. Wielgosz, M. Śmieja, K. Brzostowski, T. Grzegory, F. Grec
- Baltic sea level rise from satellite altimetry and tide gauge,
K. Pajak, K. Kowalczyk, W. Błaszczak-Bak
- TLS point cloud classification after the OptD method,
W. Błaszczak-Bak, J. Janicka
- Assessment of land use land cover and depletion of tree biodiversity in a watershed of Sirsi taluka, Karnataka, India using remote sensing and GIS technique,
P. Banavasi, A. G. Koppad



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- Contribution of landscape architecture in smart urban planning: green information and communication technologies (GICT),
B.Değerli, E. E. Maraş
- QGIS free GIS software: an opportunity for the management of municipalities in Algeria. Case of Biskra municipality,
S. C. Benarieb
- Modern Remote Sensing techniques applied to landfill site monitoring,
I. Daugėla, J. Suziedelyte-Visockiene
- Assessment of the benefit of a single Sentinel-2 satellite image to small crop parcels mapping,
J. El Hachimi, A. El Harti, J. Ouzemou, R. Lhissou, E. Bachaoui , A. El Ghmari
- Temporal analysis for the monitoring of the Araguaia River floodplain,
G. Boggione , L. Lima, G. Lacerda, B. Silva , R. Carneiro
- Cross Calibration of CBERS-4 PAN Cameras,
G. Boggione, G. Batista, A. Moreira, R. Carneiro
- Route Planning of Turkish Antarctic Expedition via QGIS,
S. Yirmibeşoğlu, Ö. Oktar, B. Özsoy
- Noise pollution evaluation of GhanatKosar district in Tehran by Geographic Information System,
M. Davoudkhani
- Cartographic and geodetic usage of LEAFLET API,
O. Bildirici
- Comparison of C-band and L-band SAR data in lineaments mapping over a semi-arid region (Jebilet Centrales, Morocco),
M. Chakouri, El H. Abderrazak, B. Mustapha, El G. Abderrahmene
- Spatiotemporal changes in land use pattern: A case study from Denizli city,
S. Kirikoğlu , N. S. Partigöç
- Six-way aggregations in the network structure of the area,
M. Kowalczyk, T. Bajerowski
- Satellite views of three mountains important for the ancients,
K. Zbigniew, W. Rkadiusz, S. Tomasz
- Edge detection methods used on the aerial images in order to estimate changes of the small lake dimensions localizes near the town Lodz in Poland,
Ł. Buczak
- Using GIS for the solar power plant location: Case of Karaman, Turkey,
T. Salihoğlu
- Fast flood model as a result of local and global data integration,
B. Wieczorek



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- GYROSCAN - hyperspectral imaging for precision agriculture,
K. Bielinska
- GIS-based landslide vulnerability modelling using data-driven bivariate statistical approach and geostatistical techniques,
A. Aleshzadeh, E. V. Yavuz
- 3D database for 3d city models applications: a review,
M. H. Rashidan
- Machine-learning-as-a-services for big LIDAR data processing,
S. S. Teri