VSB TECHNICAL UNIVERSITY OF OSTRAVA | FACULTY OF MINING AND GEOLOGY | DEPARTMENT OF GEOINFORMATICS

GIS Ostrava 2022

GIS Ostrava 2022 - Earth Observation for Smart City and Smart Region

Participation in workshops is free for anyone.

Wednesday 16. 3.			
Start	End	Name	Presenter/moderator
13:00	13:15	Welcome	M. Kačmařík (VŠB-TUO, CZ)
13:15		Section: Applications of Satellite Imaging Radar	
13:15	13:35	Revising Czech system for InSAR monitoring using Sentinel-1 data	M. Lazecký (University of Leeds, UK)
13:35	13:55	A Machine Learning Detection of Outliers in InSAR Displacement Time Series	L. Kubica, J. Papčo, R. Czikhardt, M. Bakoň, J. Barlak, M. Rovnak (STUBA, SK)
13:55	14:15	3D visualisation of periodic spatial time series from radar interferometry measurements over underground gas storage	J. Struhar, P. Rapant (VŠB-TUO, CZ)
14:15	14:35	Automatic detection of new building construction from Sentinel-1 multi-temporal imagery	M. Kačmařík, I. Hlaváčová, M. Lazecký, J. Struhár, P. Rapant (VŠB-TUO, CZ)
14:35	15:00		
15:00	17:00	Workshop 1: Satellite radar interferometry. An effective technique for infrastructure monitoring, A. M. Ruiz Armenteros (University of Jaén, ES) https://gisostrava.clickmeeting.com/workshop-1-satellite-radar-interferometry-an-effective-technique-for-infrastructure-monitoring	
Thursday 17. 3.			
9:00		Section: Natural hazards and environmental monitoring	
9:00	9:20	Gluszynskie lake water quality assessment using Sentinel-2 data	W. Cieżkowski, M. Frąk, J. Chormański, J. Popielarski (Warsaw University of Life Science, PL)
9:20	9:40	Identification of the factors conditioning the susceptibility of natural and man-made hazards in an urban context	A. Vavassori, A. Viloria, M.A. Brovelli (Politecnico di Milano, IT)
9:40	10:00	Monitoring landslide displacements through maximum cross-correlation of Sentinel-2 satellite images	L. Amici, V. Yordanov, D. Oxoli, M. A. Brovelli (Politecnico di Milano, IT)
10:00	10:30		
10:30	12:30	Workshop 2: Citizen Science and Smart Communities, M. A. Brovelli (Politecnico di Milano, IT) https://gisostrava.clickmeeting.com/workshop-2-citizen-science-and-smart-communities	

12:30	13:30		
13:30	15:30	Workshop 3: Introduction into the ARTMO toolbox for converting optical remote sensing data into biophysical variables, J. Verrelst (University of Valencia, ES) https://gisostrava.clickmeeting.com/ws-3-introduction-into-the-artmo-for-converting-optic-rem-sens-data-into-biophysical-variables	
15:30	15:45		
15:45		Section: Urban greenery and forestry	
15:45	16:05	Mapping urban green space dynamics: a semantic Earth observation data cube approach	D. Tiede, M. Sudmanns, H. Augustin, L. Paulescu, A. Baraldi (University of Salzburg, AT)
16:05	16:25	Simulating solar radiation under canopy using point clouds and an hemispherical photography simulator	M. Piragnolo, F. Pirotti, R. Cavalli (TESAF, IT)
16:25	16:45	Mapping canopy-level crop traits using top-of-atmosphere Sentinel-2 data on Google Earth Engine	J. Estevez, K. Berger, M. Salinero-Delgado, L. Pipia, J. Vicent, J. P. Rivera-Caicedo, M. Wocher, P. Reyes-Muñoz, S. Tagliabue, M. Boschetti, J. Verrelst (University of Valencia, ES)
16:45	17:05	Using multispectral imagery from UAV to derive selected forest inventory parameters	J. Seidl, T. Čenčíková, O. Renner, J. Bojko, T. Vantuch (StoraEnso, CZ)
Friday 18. 3.			
9:00		Session: Land use and thermal mapping	
9:00	9:20	Combination of OpenLandUse database and analysed Sentinel-2 and Sentinel-1 data for agriculture purposes	P. Hájek, M. Kepka, H. Šnevajs, D. Kozhukh, K. Charvát, F. Zadražil (Plan4All, CZ)
9:20	9:40	A modified deep learning approach for reconstruction of MODIST LST product	A. Sekertekin, S. Kartal, Q. Liu, S. Bonafoni (Cukurova University, TR)
9:40	10:00	Long term monitoring of land use/land cover change and its effect on surface temperature by use of Landsat images and Google Earth Engine platform: a case study of Instanbul, Turkey	E. Sengun, U. Alganci, S. Aksoy (Istanbul Technical University, TR)
10:00	10:15		
10:15		Session: Traffic monitoring, urbanization	
10:15	10:35	Comparison of vehicle detection using very high-resolution satellite images	P. Golej, J. Horak (VŠB-TUO, CZ)
10:35	10:55	Perception of the impact of heavy vehicle movement on walkability in Krishnanagar municipality, India	S. Biswas, K. Roychowdhury (Presidency University, IN)

10:55	11:15	Effects of transport corridor advancement on agglomeration and industrial relocation – a case study of District 3 in Dallas	S. Kharel, P. Singh (UT Arlington, TX)