



**First colloquium
“GNSS applications in the BalkanMed region”**

January 30-31, 2020
Sofia University “St. Kliment Ohridski”, Sofia, Bulgaria
Rectorat/Aula, bul. "Tsar Osvoboditel" 15, 1504 Sofia

Programme

Thursday, 30 January, 2020

GNSS applications

09:00 - 09:10	Registration
09:10 - 09:15	Welcome <i>Prof. Petko Nedialkov, Sofia University “St. Kliment Ohridski”</i>
09:15 - 09:30	GNSS applications: state-of-the-art <i>Prof. Guergana Guerova, Sofia University “St. Kliment Ohridski”</i>
09:30 – 10:00	How GNSS Radio Occultation can improve our understanding of extreme atmospheric events? (invited speaker) <i>Prof. Riccardo Biondi, University of Padua</i>
Session 1: Remote sensing of the atmosphere with GNSS Chair: N. Penov	
10:00 - 10:30	BalkanMed real time severe weather service <i>Dr. Haris Haralambous, Frederick Research Center</i>
10:30 - 10:50	Examples of severe weather events as seen from GNSS tomography <i>Prof. Witold Rohm, Wrocław University of Environmental and Life Sciences</i>
10:50 – 11:10	Coffee Break
11:10 – 11:30	Bulgarian Integrated NowCasting tool <i>Tsvetelina Dimitrova, Hail Suppression Agency</i>
11:30 – 11:50	Short presentations <i>Martin Slavchev, Sofia University “St. Kliment Ohridski”</i> <i>Krasimir Stoev, Sofia University “St. Kliment Ohridski”</i>
11:50 – 12:20	Panel discussion: GNSS tropospheric products for nowcasting. <i>Panel: Prof. Biondi, Prof. Haralambous, Prof. Rohm, T. Dimitrova, M. Slavchev, K. Stoev</i>
12:20 – 13:30	Break
Session 2: Solid Earth monitoring with GNSS Chair: M. Slavchev	
13:30 – 13:50	Earth movements on the Balkan Peninsula from GPS observations <i>Prof. Keranka Vassileva, Sofia University “St. Kliment Ohridski”</i>



- 13:50 – 14:10** GNSS and SAR application in landslide processes on the Black Sea coast of Bulgaria
Prof. Mila Atanasova, National Institute of Geophysics, Geodesy Geography, BAS
Dr. Hristo Nikolov, Space Research and Technology Institute, BAS
- 14:10 – 14:30** GNSS data to supplement InSAR surface deformation studies
Prof. Maya Ilieva, Wrocław University of Environmental and Life Sciences
- 14:30 – 15:00** Panel discussion:
Panel: Prof. Vassileva, Prof. Atanasova, Prof. Ilieva
- 15:00 – 15:20** **Coffee Break**

Session 3: Other GNSS applications
Chair: T. Simeonov

- 15:20 – 15:40** Global empirical TEC models for long-and short-term prediction based on GNSS
Prof. Dora Pancheva, National Institute of Geophysics, Geodesy Geography, BAS
- 15:40 – 16:00** GNSS & GRACE
Biliana Mircheva, Sofia University & Bulatsa
- 16:00 – 16:20** GNSS instruments in Bulgaria from GeoVara Ltd.
Eng. Nikola Dimitrov, Geovara
- 16:20 – 17:00** Panel discussion:
Panel: Prof. Pancheva. B. Mircheva, N. Dimitrov

Friday, 31 January, 2020

GNSS synergy and case studies
Chair: G. Guerova

- 09:00 – 09:30** GNSS technologies and services from Solitech
Eng. Rosen Petkov, Solitech
- 09:30 – 09:50** Fog monitoring with GNSS and NWP
Nikolay Penov, Sofia University & Bulatsa
- 09:50 – 10:10** Thunderstorm Classification Functions Based on Instability Indices and GNSS IWV for the Sofia Plain
Stefan Georgiev, Hail Suppression Agency
- 10:10 – 10:30** Cool GNSS measurements
Tzvetan Simeonov, German Weather Service
- 10:30 – 10:50** **Coffee Break**
- 10:50 – 11:30** Panel discussion
Panel: R. Petkov, N. Penov, S. Georgiev, T. Simeonov
- 11:30 – 12:00** **Closure of the colloquium - Group photo**