

Programme of the GNSS Meteorology Workshop 2019

Thursday 19.09.2019

- 9.30 – 10.30 Registration
10.30 – 10.45 Opening
10.45 – 11.30 Invited talk on the GNSS meteorology

Guergana Guerova

Faculty of Physics, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria
Monitoring an atmosphere with GNSS state and challenges

- 11.30 – 12.30 Lunch
12.30 – 14.30 Session 1 – Innovative GNSS processing and GNSS tomography
14.30 – 15.00 Coffee break
15.00 – 17.00 Session 2 – RO missions and applications
20.00 Dinner

Friday 20.09.2019

- 10.00 – 11.00 Practical session
Investigation of severe storms in Poland or Bulgaria using a number of meteorological data and GNSS ground-based observations (ZTD, STD, tomography)
11.00 – 11.30 Coffee break
11.30 – 12.30 Practical session
Continuation
12.30 – 13.30 Lunch
13.30 – 14.30 Discussion on projects

Presentations

Thursday 19.09.2019

Session 1 – Innovative GNSS processing

- 12.30 - 12.45** **Andrea Gatti**
Geomatics Research & Development s.r.l. (GReD), Lomazzo, Italy
goGPS for GNSS CORS stations data processing: an insight on its capabilities for meteorological studies
- 12.45 - 13.00** **Tomasz Hadaś**
Institute of Geodesy and Geoinformatics, Wrocław University of Environmental and Life Sciences, Wrocław, Poland
Developing a low-cost receiver for GNSS meteorology
- 13.00 - 13.15** **Kamil Kaźmierski**
Institute of Geodesy and Geoinformatics, Wrocław University of Environmental and Life Sciences, Wrocław, Poland
A service for the validation of the real-time GNSS orbit and clock quality
- 13.15 - 13.30** **Damian Tondaś**
Institute of Geodesy and Geoinformatics, Wrocław University of Environmental and Life Sciences, Wrocław, Poland
15 minutes rapid NRT solution
- 13.30 - 13.45** **Estera Trzcina**
Institute of Geodesy and Geoinformatics, Wrocław University of Environmental and Life Sciences, Wrocław, Poland
Irregular parametrisation for GNSS tomography
- 13.45 - 14.00** **Zohreh Adavi**
Faculty of Geodesy and Geomatics Engineering, Khaje Nasir Toosi University of Technology, Tehran, Iran
Assessment of constraints and parameterization methods in GNSS Tropospheric Tomography
- 14.00 - 14.15** **Natalia Hanna**
Department of Geodesy and Geoinformation, TU Wien, Vienna, Austria
TOMOREF operator as a new tool in the wet refractivity fields assimilation
- 14.15 - 14.30** **Martin Schneider**
The Institute for Ubiquitous Meteorology (UBIMET), Vienna, Austria
Forecasting system at UBIMET

Session 2 – RO missions and applications

15.00 - 15.15 Tzvetan Simeonov

Meteorological Observatory Lindenberg, Deutscher Wetterdienst, Offenbach, Germany

Monitoring soil moisture and snow height using GNSS reflected signals

15.15 - 15.30 Hwa Chien

Graduate Institute of Hydrological and Oceanic Sciences, National Central University, Taoyuan City, Taiwan

Recent GNSS-R Progress in Taiwan

15.30 - 15.45 Chian-Yi Liu

Center of Space and Remote Sensing Research, National Central University, Taoyuan City, Taiwan

Improving RO sounding by synergistic use of IR/MW radiances and its impact in NWP model

15.45 - 16.00 Lung-Chih Tsai

GPS Science and Application Research Center (GPSARC), National Central University, Taoyuan City, Taiwan

Ionospheric tomography inversion using GPS RO and satellite beacon data

16.00 - 16.15 Pierre-Yves Touringand

Department of Geosciences, University of Padova, Padova, Italy

Volcanic ash plume monitoring using GNSS radio occultation techniques

16.15 – 16:30 Martin Slavchev

Faculty of Physics, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria

Raytracing of the Hail storm on 8 July 2014 in Sofia, Bulgaria

16.30 - 16.45 Elżbieta Lasota

Institute of Geodesy and Geoinformatics, Wrocław University of Environmental and Life Sciences, Wrocław, Poland

A Comparison Between Raytraced GFS/WRF/ERA and GNSS Slant Path Delays in Tropical Cyclone Meranti

16.45 - 17.00 Rafał Marciniak

Institute of Geodesy and Geoinformatics, Wrocław University of Environmental and Life Sciences, Wrocław, Poland

Comparison of tropospheric correction techniques for two-pass DInSAR application in local scale regions