Second Workshop of DAAD Thematic Network "Modern Geodetic Space Techniques for Global Change Monitoring"

24–28 July 2018

Meeting venue

University of Luxembourg, Campus Kirchberg
6 Rue Richard Coudenhove-Kalergi, L-1359 Luxembourg

Tuesday, July 24th 2018, Locations: BC1-BC13, Campus Kirchberg

9:00–17:00	Arrival and Registration

Wednesday, July 25th 2018, Location: BC1-BC13, Campus Kirchberg

9:30–10:30	**Welcome and introduction** **Greeting from University of Luxembourg** **Greeting from University of Stuttgart** **"Network News"** *N. Sneeuw & J. Cai* - **Achievements** - **Extension**
10:30–12:30	**Satellite Altimetry, Gravimetry & Enabling technologies** *Chair: Tonie van Dam* The significance of seismic signal recorded by gravimeter *Hongbo Tan, Olivier Francis, C. Shen, W. Fan, L. Zhou (UL)* Determination of potential using precise clocks *Wenbin Shen (WHU)* Ocean Tide Alias Spectrum Estimation for Satellite Gravity Missions *Wei Liu, N. Sneeuw (US-GIS)* Analysis of waveforms in the satellite altimetry by using neural networks *Dennis Mattes (US-GIS)*
12:30–13:30	Lunch break
13:30–15:00	**Positioning, Navigation & Reference Systems** *Chairs: Weiping Jiang and Jianqing Cai* Challenges and Opportunities of GNSS Continuously operating Reference Station Network *Weiping Jiang (WHU)* Origins of Seasonal Signal in GPS Position Time Series Based on Short-baselines *Kaihua Wang, Weiping Jiang, Xiangdong An, Hua Chen (WHU)* Ionosphere Parameter Optimization Using GNSS Data Ingestion during

	Geomagnetic Storm in China *Ling Han (Tongji)*
15:00–15:30	Coffee break
15:30–17:00	Precise Point Positioning and its application in Geoscience *Fei Guo (WHU)* Monitoring of Rock Fall at the Yangtze River with Low Cost GNSS receiver *Li Zhang (US-IIGS)* CTLS and Gauss-Helmert Model with applications to 3-D coordinate transformations *Jianqing Cai, D. Dong, N. Sneeuw and Y. Yao (US-GIS)*
18:00	Joint dinner

Thursday, July 26th 2018, Location: BC1-BC13, Campus Kirchberg

9:00–10:30	**Remote Sensing and Photogrammetry** *Chair: Nico Sneeuw* Monitoring land subsidence over large area with time series InSAR technique *Hongan Wu (CASM)* Tunnel Monitoring and Disease Screening Based on Mobile Laser *Jin Bao (Tongji)* Effect of Antenna Pointing Errors on Spotlight SAR Imaging Considering the Target Location *Xin Zhang (Tongji)*
10:30–11:00	Coffee break
11:00–12:00	The Application of ELM based on Gaussian Kernel in Image Classification *Weijie Li, Yi Lin (Tongji)* The optimal regularization and its application in Extreme Learning Machine for regression and multiclass classification *Kun Qian, J. Cai, N. Sneeuw and Y. Lin (US-GIS & Tongji)*
12:00–13:00	Lunch break
13:00–15:00	**Applications for Global Change Monitoring** *Chairs: Olivier Francis and Wenbin Shen* Research on the ionospheric responses to Typhoon event *Yibin Yao (WHU)* A new index for assessing the influence of the Three Gorges Dam on hydrological drought using GRACE data *Zhengtao Wang (WHU)* Estimation of Water Volume Variations for large-scale Lake Based on Multi-source Satellite Data *Jie Yu, Yi Lin (Tongji)* Can we tell what is going on in the Yellowstone National Park combining absolute gravity and GPS observations? *Olivier Francis (UL)*

15:00–15:30	Coffee break
15:30–17:00	Spatio-temporal influence of ENSO on terrestrial water storage change in the Yangtze River basin *Taoyong Jin (WHU)* Complex Singular Spectrum Analysis of Earth Orientation Time Series *Yang Li (US-GIS)* Can GRACE observe the total drainable water storage of a river basin? A first estimate over the Amazon basin *Nico Sneeuw, M. J. Tourian, J. T. Reager (US-GIS)*

Friday, July 27th 2018, Location: BC1-BC13, Campus Kirchberg

09:00–11:00	**Gravity field modelling and Height System** *Chairs: Nico Sneeuw and Hanjiang Wen* The change of terrestrial water storage in north China observed by GRACE *Hanjiang Wen (CASM)* The determination of earth's gravity field model by torus approach with GOCE data *Huanling Liu (CASM)* Static gravity field modeling using the GOCE hl-SST data in individual accelerometer mode" *Xiancai Zou (WHU)* An ultra-high gravity field model based on the GOCE data, Altimetry data and EGM2008 derived gravity anomalies *Xinyu Xu (WHU)*
11:00–11:30	Coffee break
11:30–13:30	Solving Earth Gravity Field from GOCE Data by Tensor Spherical Harmonic Analysis *Yongqi Zhao, Xinyu Xu (WHU)* Validation of the EGSIEM GRACE gravity fields using GNSS and OBP records *Qiang Chen, Lea Poropat, Matthias Weigelt, Henryk Dobslaw, Tonie van Dam (UL)* Mass Balance Computation in the Space Domain Using GRACE Data *Jinyuan Wang (US-GIS)* Implementation of the Sea-Level Equation *Laura Balangé (US-GIS)*

Instruction for oral presentations:

- *A Workshop notebook will be used for all presentations.*
  *Please, copy your presentation (**PowerPoint** or **PDF**) on USB stick and upload it in time before the session starts;*
- *The following software will be available: Adobe Acrobat Reader, Microsoft PowerPoint;*
- *The time slots for presentations are: presentation: **25 min + 5 min for Q&A.***

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