Leonid Petrov (co-I)

Present position:

Principal Scientist of ADNET Systems Inc.

Professional experience:

Leonid Petrov has been working on data analysis of space geodesy and remote sensing data, and development of data processing algorithms with the highest accuracy. He has developed the infrastructure for handling the outputs of numerical weather models for advanced modeling propagation effects through neutral atmosphere. This infrastructure is intensively used in a number of projects funded by NASA. Among them are

- 2012–2016 Novel approaches for computing atmosphere path delay using numerical weather models.

- 2014–2018 Fully automatic service of Earth's orientation parameter prediction based on numerical weather models for real-time applications.

- 2016–2018 Calibration of corrections for atmosphere path delay using GPS radio occultation data over Greenland and Antarctica for ICESat-1 and ICESat-2 missions.

He also worked on development and maintenance of the International Mass Loading Service, the International Path Delay Service, the Atmospheric Angular Momentum On-line Service, and the Network Earth Rotation Service that use the output of numerical weather models 24/7 on hourly basis.

Education:

Ph.D. of Russian Academy of Sciences, 1995, Astronomy
M.S. of Leningrad National University, 1988, Astronomy

Selected peer reviewed publications:

1. **L. Petrov**, (2016), "The International Mass Loading Service", International Association of Geodesy Symposia, Springer, vol 146, 79–83. doi: 10.1007/1345_2015_218

2. **L. Petrov**, D. Gordon, J. Gipson, D. MacMillan, C. Ma, E. Fomalont, R. C. Walker, C. Carabajal, (2009) "Precise geodesy with the Very Long Baseline Array", Journal of Geodesy, vol. 83(9), 859.

3. **L. Petrov**, J.-P. Boy, (2004) "Study of the atmospheric pressure loading signal in VLBI observations", Journal of Geophysical Research, 10.1029/2003JB002500, vol. 109, No. B03405.

4. **L. Petrov**, C. Ma, (2003) "Study of harmonic site position variations determined by VLBI", Journal of Geophysical Research, vol. 108, No. B4, 2190.

There are 48 peer reviewed works with a total of 2171 citations. Hirsch index 19.