

# IVS2016



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## **New generation VLBI: Intraday UT1 estimations**

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### **Content :**

IAA finished work on creation of new generation radio interferometer with two VGOS antennas at the Badary and Zelenchukskaya co-location stations. The series of 48 one base 1 hour VLBI sessions (up to four sessions per day) were performed from 04 Nov to 18 Nov 2015. Observations were carried out using wideband S/X receivers, 3 X-band and 1 S-band 512 MHz channels at one or two circular polarizations. Sessions consisted of about 60 scans with 22 seconds minimum scan duration. Stations broadband acquisition systems generate 1.5-3 TB data per session which are transferred via Internet to the IAA FX correlator. Accuracy of group delay in single channel was 10-20 ps what allows to use every single channel observations for geodetic analysis without synthesis. 156 single channel NGS-cards were obtained in total. UT1-UTC estimations give 19  $\mu$ s RMS of differences when comparing with the IERS finals.

**Primary authors :** Prof. IPATOV, Alexander (Institute of Applied Astronomy RAS)

**Co-authors :** Dr. IVANOV, Dmitriy (Institute of Applied Astronomy RAS) ; Dr. ILIN, Gennadiy (Institute of Applied Astronomy RAS) ; Dr. SMOLENTSEV, Sergei (Institute of Applied Astronomy RAS) ; Dr. GAYAZOV, Iskander (Institute of Applied Astronomy RAS) ; Dr. KURDUBOV, Sergei (Institute of Applied Astronomy RAS) ; Dr. MARDYSHKIN, Vyacheslav (Institute of Applied Astronomy RAS) ; Dr. FEDOTOV, Leonid (Institute of Applied Astronomy RAS) ; Dr. STEMPKOVSKI, Victor (Institute of Applied Astronomy RAS) ; VYTNOV, Alexander (Institute of Applied Astronomy RAS) ; Dr. SALNIKOV, Alexander (Institute of Applied Astronomy RAS) ; Dr. SURKIS, Igor (Institute of Applied Astronomy RAS) ; Dr. MIKHAILOV, Andrey (Institute of Applied Astronomy RAS) ; Mr. MELNIKOV, Alexey (IAA RAS)

**Presenter :** Prof. IPATOV, Alexander (Institute of Applied Astronomy RAS)

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