

## **New opportunities of SLR service of Main Metrological Center of State Service of Time, Frequency and EOP evaluation**

Ignatenko Igor (1), Emelyanov Valery (2), Tsyba Efim (1), Ivanov Vyacheslav (1), Pasyuk Sergey (1) (1) VNIIFTRI, Mendeleevo, Moscow reg., Russian Federation; (2) East-Siberian Branch of VNIIFTRI, Irkutsk, Russian Federation

Federal State Unitary Enterprise (FSUE) "National Research Institute for Physical-Technical and Radio Engineering Measurements" (VNIIFTRI) is subordinated to Federal Agency on technical regulation and metrology of Russia. It has the status of the State scientific metrological center and is one of the main centers of the State standards of Russia. The VNIIFTRI plays role of the Main Metrological Center (MMC) of State service of time, frequency and EOP evaluation (SSTF).

The satellite laser ranging (SLR) observations had been provided in VNIIFTRI from seventies of the previous century to the now days for purpose of Earth's orientation parameter (EOP) evaluation and maintenance of the terrestrial reference frame ITRF. The equipments, methods and metrological maintenance has been improving permanently together. Now, the two SLR instruments of the new generation of the type "Tochka" are started work in Mendeleevo (VNIIFTRI) and Irkutsk city (East-Siberian Branch of VNIIFTRI). It has the instrumental error not exceeding units of millimeters at single measurement.

The results of the last SLR experiments are considered. It has showed that VNIIFTRI's SLR instruments of new generation are confirming the declared high characteristics.