Laser ranging in Main metrological center of the Russian State service of time, frequency and the Earth rotation parameters determination

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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, has the status of the State scientific metrological center and is one of the main Centers of the State standards of Russia. At present, VNIIFTRI supports and improves 38 State standards, 19 secondary standards, 23 rigs of highest accuracy, over 120 working standards and calibration rigs for various fields of measurement.

The report present condition and development of laser ranging measurement in VNIIFTRI. Presented are two new generation stations commissioned in VNIIFTRI. Special attention is paid to metrological aspects. Considered the issues of comparisons with the standarts and rigs of highest accurasy. The means and methods of metrological support of GNSS are also presented in detail.