

CHALLENGES OF THE MODERNISATION OF RUSSIAN GEOMAGNETIC OBSERVATORIES – THE GFZ POTSDAM EXPERIENCES

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Observatory data are the basement for the international scientific research. Valuable results can be achieved only from a suitable network of observatories and if the data are precise and faultless. The Helmholtz Centre Potsdam – German Research Centre for Geosciences contributes by modernizing of existing observatories or by the establishment of new ones to the improvement of the international observatory network. In the frame of this activity the Russian observatories of Yakutsk, Magadan and Paratunka were equipped with modern magnetometers and data loggers.

Besides the increasing of the number of observatories it is necessary to emphasise issues of data quality, which is based on modern and excellent instruments and a careful data processing. Observatory data quality is not an implicitness, but it is a challenge.

The observatory data base, which is the basement of the international research can be improved by the combination of quantity and quality. Quantity stands for the increase of the number of observatories, considering regions of special interest. Quality stands for the improvement of the methods of data quality validation.

The paper presents the GFZ Potsdam contributions on the modernization and management of 3 Russian observatories and data quality validation. Special challenges are shown.