

TILTMETER OBSERVATIONS IN KAMCHATKA REGION. KLUCHEVSKOY VOLCANO MONITORING BY TILTMETERS NETWORK. RUSSIA.

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In 2010, after the long interruption, was started the tiltmeter observations in Kamchatka region. The modern tiltmeter systems are seriously expands a spectrum of geodynamic observations. Development of the tiltmeter station network allows receiving the additional information on geodynamic processes in the region, to specify the earth surface deformations caused by seismic and volcanic activity.

The results of tiltmeter monitoring in active volcano areas are the unique data reflecting processes of preparation of eruption, eruption phase and post-eruption processes. On the data analysis is probably simulation of pressurizing sources under volcanic constructions, the searching the forecast parameters of volcanic process development and realization of the volcanic activity forecast.

For today in Kamchatka region is present the tiltmeters network of 8 stations in 2 groups. 1st group is concentrated in Petropavlovsk-Kamchatsky city area and is used for registration of deformation processes caused by seismic activity. 2nd group is concentrated in Kluchevskoy volcano area and realizes deformation monitoring volcanic activity Klyuchevskoy group of volcanoes. The tiltmeter monitoring of Kluchevskoy volcanoes group are provided in collaboration between Hokkaido University, Japan, and Institute of Volcanology and Seismology (IVS), Russia, by international project: Geological and geophysical investigation of Kluchevskoy volcano, Kamchatka.

During 3 years of continuous observations is accepted the significant archive of data reflecting regional and local deformation processes caused by seismic and volcanic activity.