

Seismogravity processes observed in the course of development of the 2011 Tohoku earthquake

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Abstract The analysis of the seismogravity processes accompanying the process of development of the tsunamigenic Great East Japan (Tohoku) Earthquake is carried out. Original data and most of the scientific results were obtained at the Geophysical Observatory in Northern Caucasus operated by the Schmidt Institute of Physics of the Earth, Russian Academy of Sciences in collaboration with the Federal Research for Geophysical Service of the Russian Academy of Sciences. Specific attention is focused on the analysis of the structure of the registered seismic processes and the accompanying gravitomagnetic disturbances observed immediately prior to the main seismic event.

Keywords gravitational waves, tsunamigenic 2011 Tohoku earthquake, dilatation and compaction domains, tiltmeter, Geophysical Observatory in Northern Caucasus.

For citation Sobisevich, L.E., Sobisevich, A.L., & Kanonidi, K.Kh. (2020). [Seismogravity processes observed in the course of development of the 2011 Tohoku earthquake], *Rossiiskii seismologicheskii zhurnal* [Russian Journal of Seismology], 2(2), 39-47. (In Russ.). DOI: <https://doi.org/10.35540/2686-7907.2020.2.03>

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- Electronic resource: https://www.researchgate.net/publication/258490206_Tsunami_source_of_the_2011_off_the_Pacific_coast_of_Tohoku_Earthquake

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