

## Global earthquakes in the 2021 second half according to the GS RAS

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**Abstract** An analysis of the seismicity of the Earth in the 2021 second half at the level of strong earthquakes with magnitudes  $m_b \geq 6.0$  according to the Alert Service of the Geophysical Survey RAS are given. Also added information about 59 earthquakes in Russia and adjacent territories, felt in the settlements of the Russian Federation. For 26 strong earthquakes within one or two days after their occurrence, information messages were publishing; information about the focal mechanisms was calculated and presented. During the period under review, there were two strongest earthquakes on the globe with  $MS=8.0$  ( $M_w=8.2$ ) and with  $MS=7.8$  ( $M_w=8.3$ ) occurred, respectively, on July 29 off the coast of Alaska and on August 12 in the area of the South Sandwich Islands. The largest loss of life and material damage during the study period was caused by a catastrophic earthquake with  $MS=7.3$  ( $M_w=7.2$ ) that occurred on August 14 in the southwest of Haiti. As a result of the earthquake, 2248 people were killed, more than 12 thousand people were injured, 329 people were missing. The strongest earthquake in Russia was on September 20 with  $MS=5.9$  ( $M_w=6.2$ ) east of the Kuril Islands. The highest intensity of shaking in Russia (5 points) was caused by earthquakes with  $m_b=4.9$  that occurred on October 20 in the Chechen Republic and on December 15 in the water area of Lake Baikal. The global seismic energy released in the 2021 second half remains, as in the previous two years, at a reduced level, relative to the average for the last 11.5 years, which indicates a continuing seismic calm.

**Keywords** Earthquake Early Alert Service, seismic stations, strong earthquakes, magnitude, seismic energy, focal mechanism, macroseismic effect.

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