

## Earthquakes in Kuril Islands on 2006.11.15 and 2007.1.13

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Two big earthquakes occurred in Kuril Islands on 2006.11.15 (Mjma 7.9, Mw by USGS 8.3) and 2007.1.13 (Mjma 8.2, Mw by USGS 8.2). Two clusters across the trench are seen in USGS catalogue. Harvard CMT mechanisms show earthquakes with reverse faults occurred in the western cluster and normal faults in the eastern cluster. We calculated delta CFF and found out the earthquake 2006.11.15 occurred in the western cluster had driven the earthquake 2007.1.13 in the eastern cluster. Calculated stress drop shows the earthquakes would have been an interplate earthquake and an intra-plate earthquake, respectively. Tsunami simulation also suggests there is possibility that both earthquakes occurred different places which had different modulus of rigidity. The earthquake 2007.1.13 would have higher modulus of rigidity. Height of Tsunamis of the earthquake 2007.1.13 was lower than that of 2006.11.15. Spectrum analysis of data of strain meters gives some clues on it. The analysis revealed that the earthquake 2007.1.13 had smaller energy than that in 2006.11.15 in low frequency band which can excite Tsunami effectively.