

Cause of seismic activity in Wilkes Land, East Antarctica

Atsuki Kubo [1]

[1] ERI, Univ. Tokyo

<http://www.eri.u-tokyo.ac.jp/kubo>

Aseismic nature in Antarctica and Greenland compared with other continents have been revealed by instrumental seismic observation. This nature was interpreted by suppression due to ice load. Recently we can discuss seismic activity within Antarctica. Wilkes Land is seismically most active region in Antarctica. Ice sheet of this region is thicker than average. Suppression of earthquake due to ice load should be strongest in this region. Significant deformation is required to cause the seismicity in spite of significant suppression due to ice load. Deglaciation, tectonic deformation, and impact of huge meteorite are possible candidates.