

Ocean loading tides observed by a superconducting gravity meter at Bandung

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Routine observations of gravity changes have been performed at Volcanological Survey of Indonesia in Bandung by employing a superconducting gravity meter Model TT-70 #8 that was installed in December, 1997. Bandung in the western Java is surrounded by the Pacific Ocean and the Indian Ocean. Gravity changes due to ocean loading are expected to be large at Bandung. Ocean loading tides at Bandung have following characteristics; 1) Amplitude of semi-diurnal tides is a few times larger than that of diurnal tides. 2) Amplitude of long term tides is several microgals. 3) Phase lags of diurnal tides are about 10 degrees. We will investigate causes of discrepancies between the observed ocean loading tides and the ones calculated using an oceanic tidal model.