

## Predominant periods of tsunamis observed at Ayukawa tide station

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Spectral analysis was carried out for tsunami tidegauge records observed at Ayukawa tide station. The spectra for 35 tsunamis in the period from 1894 to 1977 were calculated using Goerzel method. In the spectra the four predominant periods of 23, 8.5, 13 and 39 minutes were commonly found. The frequency of appearance is 94, 80, 50 and 14 %, respectively. The amplitudes were plotted as functions of azimuth angle of an epicenter and the earthquake magnitude for each predominant period. As the result the dependencies were accelerated with increase of the predominant periods. This fact is consistent with a local excitation for the predominance of short period. The excitations of 39 and 13 minutes were attributed to the fundamental mode and the higher mode of the shelf oscillation., respectively.