

RE-DIGITIZATION OF STRONG MOTION ACCELEROGRAM AT HACHINOHE HARBOR DURING THE1968 TOKACHI-OKI, JAPAN EARTHQUAKE

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ABSTRACT: The strong motion accelerogram observed at Hachinohe harbor during the 1968 Tokachi-oki earthquake is re-digitized and examined because of frequent use of the record in seismic design of high-rise buildings. After the data processing, the digitized data are obtained for 234 seconds. The data indicate that 1) the spectra are almost same as those of the previous digital data, but not at periods longer than 5 seconds, 2) the duration of acceleration is about 70 seconds, but longer for velocity and displacement, and 3) the combination of the S-waves and basin-induced surface waves may produce the larger amplitudes at longer periods.

Key Words: Strong Motion Record, Hachinohe harbor, the 1968 Tokachi-oki Earthquake, Long-period motion