



EVALUATION OF FOURIER AND RESPONSE SPECTRA AT ICHIHASAMA AND KOROMOGAWA SEISMIC INTENSITY OBSERVATION SITES DURING THE IWATE-MIYAGI NAIRIKU EARTHQUAKE IN 2008

NISHIKAWA Hayato ¹⁾ and MIYAJIMA Masakatsu ²⁾

¹ Member of JAEE, Maizuru National College of Technology,
Maizuru, Japan, nisikawa@g.maizuru-ct.ac.jp

² Member of JAEE, Professor, Kanazawa University,
Kanazawa, Japan, miyajima@t.kanazawa-u.ac.jp

ABSTRACT: In this study, we evaluate an acceleration Fourier and response spectra at Ichihasama and Koromogawa seismic intensity observation sites which observed JMA seismic intensity of 6 upper but seismic waveform records don't exist during the Iwate-Miyagi Nairiku earthquake in 2008. Firstly, formula to evaluate acceleration Fourier and response spectra are developed using peak ground acceleration, JMA seismic intensity and predominant period of earthquake spectra based on records obtained from crustal earthquakes with Magnitude of 6 to 7. Acceleration Fourier and response spectra are evaluated for another local government site which are not chosen for development of the formula. The evaluated values mostly agree with the observed ones. Finally, acceleration Fourier and response spectra are evaluated for Ichihasama and Koromogawa observation sites. It is clarified that short period below 1 second was predominated in the evaluated spectra.

Key Words: The Iwate-Miyagi Nairiku Earthquake in 2008, Local Government Sites, Peak Acceleration Ratio, Predominant Period, Fourier Spectra, Response Spectra