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ESTIMATION OF SEISMIC INTENSITY FOR JMA SEISMIC INTENSITY OBSERVATION STATIONS WITHOUT STRONG GROUND MOTION RECORDS

Kensuke ARAI[1], Yuki SAKAI[2]

[1] Student Member, Graduate Student, University of Tsukuba, Graduate School of Systems and Information Eng.
e0511266@edu.esys.tsukuba.ac.jp
[2] Member, Professor, University of Tsukuba, Graduate School of Systems and Information Eng., Dr. Eng.
sakai@kz.tsukuba.ac.jp

ABSTRACT: We developed a method of estimating 1-1.5sec. average response velocity which had correlation with structural damage, from JMA seismic intensity and PGA focused on JMA seismic intensity observation stations where strong ground motion records were lost. We showed that JMA seismic intensity and PGA has high correlation with 0-1.5 sec. and 0-1sec.average response velocity, respectively. Based on the result, we proposed the equation to estimate 1-1.5 sec. average response. Finally, we estimated 1-1.5 sec. average response of JMA seismic intensity observation stations where strong ground motion records were lost and confirmed that estimated 1-1.5 sec. average response has high correlation with structural damage.

Key Words: Seismic Intensity Measure, JMA Seismic Intensity Observation Stations, JMA Seismic Intensity, PGA