



EXTRACTION OF LANDSLIDE AREAS DUE TO THE 2008 IWATE-MIYAGI-NAIRIKU, JAPAN EARTHQUAKE FROM HIGH-RESOLUTION SAR IMAGE

Saburoh MIDORIKAWA¹ and Hiroyuki MIURA²

¹ Member of JAEE, Professor, Department of Built Environment, Tokyo Institute of Technology, Yokohama, Japan, smidorik@enveng.titech.ac.jp

² Member of JAEE, Assistant Professor, Department of Built Environment, Tokyo Institute of Technology, Yokohama, Japan, hmiura@enveng.titech.ac.jp

ABSTRACT: In this study, the texture analysis of the high-resolution SAR image is conducted in order to extract areas of landslides produced by the 2008 Iwate-Miyagi-Nairiku, Japan earthquake. The variance and skewness of the data for different window sizes are calculated. The result shows that the area with the higher variance for the window size of 100 x 100 pixels or more shows better correlation with the landslide area.

Key Words: Landslide, Remote Sensing, High-Resolution SAR Image, the 2008 Iwate-Miyagi-Nairiku Earthquake