Features of the medium resolution satellite image in the 2015 Nepal earthquake

SAKUNO, Yuji\textsuperscript{1} ; ITO, Akihiko\textsuperscript{2} ; KUWAHARA, Yuji\textsuperscript{3}

\textsuperscript{1}Hiroshima University, \textsuperscript{2}SPACE ENGINEERING DEVELOPMENT Co., Ltd, \textsuperscript{3}Ibaraki University

A powerful earthquake struck Nepal on April 25, 2015. A satellite image of multiple resolutions that all countries use is immediately observed during such large-scale disasters. This earthquake was not an exception. The resolution is frequently analyzed using a sample of more than several meters of high-resolution satellite data relatively already. Therefore, an analysis sample using during approximately 10 m resolution satellite data is introduced. The resolution of a medium-resolution satellite is usually inferior to that of a high-resolution satellite. However, the observation width is relatively large. Therefore, the site distribution of the large-scale disaster relatively over a wide area can be grasped with a few images. The price of the resolution picture was also high during such times until several years ago. In recent years, the availability of inexpensive satellite data from ASTER and Landsat-8 has been increasing. Therefore, the use of such data is expected to increase hereafter.

Keywords: remote sensing, Nepal, disaster, satellite