

Accuracy evaluation of UAV-measured DSM by RTK-GPS on Midori fault scarp of Neodani active fault, Gifu Prefecture, Japan

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Accuracy of UAV (Unmanned Aerial Vehicle) -measured DSM (Digital Surface Model, Uchiyama et al., 2014) was evaluated using RTK (Real-Time Kinematic) GPS survey on Midori fault scarp of Neodani active fault, Gifu Prefecture, Japan. The accuracy was evaluated on the surveyed six control points at the accuracy not more than 8 mm in plane. As a result, 3 cm, -8 - -9 cm, -5 - -7cm in difference were found at three points on the top of the scarp. And ca.40 cm, -3 - -4 cm, -0.6 - -2 cm were at three points on the bottom of the scarp. Apart from 40 cm-difference at the one point, approximately less than 10 cm was revealed as measurement accuracy for the DSM.

Acknowledgement

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Reference

Uchiyama et al., 2014, Mapping active faults by using small unmanned aerial vehicle and structure from motion software: A case study on Midori fault scarp formed by the 1891 Nobi earthquake, Active fault study, 40, 35-41.

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