

3D modeling using UAV-SfM and mobile LiDAR of landslides caused by 2024 Noto Peninsula earthquake -Preliminary report on topographic and geological characteristics-

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The 2024 Noto Peninsula earthquake caused a large number of landslides to occur over a wide area of the Noto Peninsula. According to the immediate analysis of aerial photographs by GSI (2024), the total number of slope failures exceeded 2,300. Abe et al. (2024) reported that most of the slope failures occurred on dacite, rhyolite lava, and pyroclastic slopes according to GIS analysis. However, on the basis of our field observations, Neogene mudstones and siltstones underlain by pyroclastic rocks were probably involved in the collapse over a wide area in the northern Noto Peninsula, and the mudstones and siltstones would be involved in the large landslides in Ichinose and Wakayama. In this report, based on field observations and the results of 3D modeling using UAV and mobile LiDAR of the collapsed slopes, we present an urgent report on the overall picture of the slope failures that occurred in a wide area of the Noto Peninsula and the mechanism of their occurrence.

References:

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