Hydrological and Seismic Observations at a Gravitationally Deformed Slope

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To reveal the mechanism of deep-seated catastrophic landslides (DCLs) by heavy rainfall and large subduction-zone earthquake in accretionary complexes, we undertook detailed geological mapping, hydrological and seismic observations at a gravitationally deformed slope in the middle of the Kii peninsula. As a result, we found a thrust fault zone with clayey crush zones in the slope. The outstanding deformations have not been observed by the measurements by relatively small rainfall and seismic events, but seismic amplification characteristics were obtained in this slope.

Keywords: deep-seated catastrophic landslide, gravitational slope deformation, hydrological observation, seismic observation