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HDS021-10

Room: Exhibition hall 7 subroom 3

Time: May 24 11:30-11:45

## Geological and geomorphological factors of the landslides caused by the Iwate-Miyagi Nairiku Earthquake in 2008

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Landslides with relatively long travel intensively occurred in the area of pyroclastic flow deposits which had buried an old caldera in the central part of the Oh-u Backbone Range due to the Iwate-Miyagi Nairiku Earthquake in 2008. They are mostly located along the rivers incising the low-relief terrain. The result of soil tests indicates that the pumice tuff layer with high water content underlain by less permeable siltstone layer seems to have collapsed because of its low plasticity and liquid limits. Several water springs reflect rich groundwater condition in this layer. Landslides were concentrated at the river segment where stream incision had reached to this layer. They also occurred on the step type slopes possibly formed by former landslides, and thus displaced for long distance.

Keywords: Landslide, the Iwate-Miyagi Nairiku Earthquake in 2008, Pyroclastic flow, Mt. Kurikoma, Undergroundwater