

Landslides caused by the 2018 Hokkaido Iburi-tobu earthquake - Shallow slides of tephra deposits and deep-sheeted bedrock slides -

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The 2018 Hokkaido Iburi-tobu earthquake (M 6.7) caused several thousands of the shallow slides and more than two hundreds of the deep-seated landslides. The shallow slides are attributed to the surface tephra, which was deposited in the late Pleistocene and Holocene, on the hilly slopes in the low-relief mountainous area. In the area there are several damaged locations, especially the residential site of Yoshino where is located on debris and/or alluvial cones in front of the undercut slopes. One of the largest deep-sheeted landslides lying on the Karumai Formation of Miocene deposits showed a spread-type movement and made the landslide dam blocking the Hidakahoronai River. So many landslides of spread-type were reported as earthquake induced ones in recent and ancient times in Japanese Islands that we consider those landslides of this type to be useful for the archive bodies of the old earthquakes.

Keywords: earthquake-induced-landslide,, tephra, undercut slope, housing location, spread, earthquake-archive body