ОБВАЛ НА ДЕЙСТВУЮЩЕМ ВУЛКАНЕ

LANDSLIDE ON ACTIVE ZHELTOVSKY VOLCANO (SOUTHERN KAMCHATKA)

E.A. Zelenin[1], V.V. Ponomareva[2], P.G. Mikhaylyukova[3], D.V. Melnikov[2]

[1]Geological Institute of RAS, Moscow, 119017. e-mail: egorzelenin@mail.ru
[2]Institute of Volcanology and Seismology FEB RAS, Petropavlovsk-Kamchatsky, 683006
[3]Lomonosov Moscow State University, Moscow, 11999.

This paper describes a large landslide that occurred on Zheltovsky Volcano in summer 2012. The article describes main features of the volcanic edifice and considers parameters of the landslide. The landslide was likely caused by the altered rocks in the summit area as well as water infiltration during snow melting. No significant seismic or meteorological events had been registered immediately prior to the landslide. This example shows that large landslides at the volcanic edifices may occur without catastrophic precursors, which makes the hazard assessment more difficult. The paper is based exclusively on the remote sensing data most of which are available online from open sources.

Keywords: Kamchatka, landslide, active volcano, remote sensing.