

Transformation of the coastline of Raikoke Island after the explosive eruption on June 21–25, 2019 (Central Kuril Islands)

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Abstract [Резюме RUS](#)

The report based on the analysis of satellite images considers the features of the changes in the configuration of the coastline of Raikoke island volcano (Middle Kuril Islands) caused by a strong explosive eruption on June 21–25, 2019. As a result of the accumulation of a significant amount of material from pyroclastic flows and tephra along the periphery of the volcanic edifice ejected during the active phase of the eruption, the area of Raikoke Island has sharply increased by 0.53 km² (12.7 % of the original area). Immediately after the end of the eruption, under the influence of wave processes and alongshore currents, the destruction process of newly formed land areas has begun. Such cyclic processes are shown to be typical for the volcanic islands of the region and determine the coastline development and the appearance of the coastal zone as a whole.

Keywords

Kuril Islands, eruption, Raikoke, volcano, pyroclastic material,
coastal zone, coastline

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