

Fieldwork in Krasheninnikov Bay and the Karpinsky Ridge (Paramushir Island, Northern Kuril Islands) in 2025

^{1,2} Samarkina, Nastasia K. (<https://orcid.org/0009-0008-7545-7247>), nastasya.samarkina@bk.ru

² Ermolinskiy, Andrey B. (<https://orcid.org/0009-0009-5566-1221>), ermolinskiyab@my.msu.ru

³ Zvereva, Maria L., mlz17@mail.ru

¹ Butris, Veronika, veronikabutris@gmail.com

¹ Nuzhdaev, Anton A. (<https://orcid.org/0000-0002-8973-1015>), nuzhdaev@gmail.com

⁴ Grigorieva, Sofia B. (<https://orcid.org/0009-0009-5947-3594>), s.grigr1902@gmail.com

¹ Kuznetsov, Ruslan A. (<https://orcid.org/0009-0006-1817-8036>), ruslanalexeevich@yandex.ru

⁵ Titov, Yuriy A. (<https://orcid.org/0000-0002-6970-0916>), topl@mail.ru

¹ *Institute of Volcanology and Seismology of the Far Eastern Branch of RAS,
Petropavlovsk-Kamchatsky, Russia*

² *M.V. Lomonosov Moscow State University, Moscow, Russia*

³ *Saint Petersburg State University, Saint Petersburg, Russia*

⁴ *Empress Catherine II Saint Petersburg Mining University, Saint Petersburg, Russia*

⁵ *Institute of Analytical Instrumentation of the Russian Academy of Sciences, Saint Petersburg, Russia*

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Abstract. This paper presents a description of the fieldwork conducted in Krasheninnikov Bay on Paramushir Island in July–August 2025 by researchers from the Institute of Volcanology and Seismology, Far Eastern Branch of the Russian Academy of Sciences. The fieldwork was carried out during the Russian Geographical Society's expedition “Eastern Bastion – Kuril Ridge.” To study volcanic and hydrothermal activity in the area, rock samples were collected from formations composing the unified Pleistocene basement of the Chikurachki, Tatarinov, and Lomonosov volcanoes, as well as samples of lava from these volcanoes. At the summit of Tatarinov volcano, aerial and surface temperature surveys of the crater were performed using an unmanned aerial vehicle equipped with a thermal imaging camera. Mineralogical sampling of fumarolic fields on the volcano was also carried out. To determine the geochemical characteristics of geobiocenoses near active volcanoes, soil sampling and hydrochemical testing of major watercourses in Krasheninnikov Bay were conducted. The collected field material (samples of rocks, waters, and products of fumarolic activity) provides the basis for further mineralogical and geochemical studies.

Keywords:

Expedition of the Russian Geographical Society, Kuril Islands, Tatarinov volcano, Krasheninnikov Bay, Karpinsky Ridge

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