

GFZ Helmholtz Centre for Geosciences
Telegrafenberg
14473

Garðabær, wednesday, 27th of August 2025
202508-0062/Á.G.
10.01.01

Subject: Research permit in protected site - Geysir

The Nature Conservation Agency of Iceland has received an application from GFZ Helmholtz Centre for Geosciences, dated 20.8.2025, for measurements on Strokkur's eruption in Geysir Area.

Geysir is protected as natural monument, cf. regulation no. 660/2020. All disturbance of geological monuments is prohibited, incl. any inscriptions and disturbance of the activity and water level of the hot spring area, disturbance of hot springs, hot springs, soils and rocks, without permission. Operating an unmanned aircraft/drone within the protected area is subjected to a permit from the Nature Conservation Agency of Iceland.

Description of the project:

The project is scheduled to take place from September 20 to October 6, 2025. Its objective is to evaluate new monitoring strategies to determine the extent to which increased gas eruptions contribute to ground deformation and electrical discharge.

To achieve this, a high-speed camera mounted on a tripod, along with highly sensitive tiltmeters and seismometers, will be positioned approximately 3–5 meters from Strokkur. An additional high-speed camera will be placed at a distance of 20 meters to capture a broader perspective. Drone will be used to provide infrared pictures of the eruptions.

The experiment will be conducted outside regular tourist visiting hours to minimize disturbance and ensure safety.

A more detailed project description is provided in the application.

Impact assessment:

The proposed research is unlikely to negatively affect the local environment or ecosystem. Rangers at Geysir must be notified at least 24 hours in advance to receive instructions for accessing Strokkur. Breaking the silica at Geysir is strictly prohibited.

Conclusions and conditions:

The Nature Conservation Agency of Iceland hereby grants GFZ Helmholtz Centre for Geosciences permission on its behalf for measurements on Strokkur's eruptions in Geysir Area from September 20 to October 6, 2025 on the following conditions:

- Keep this letter with you on site during the project. The permit conditions should be introduced to the staff of the project before work begins.
- The applicant shall inform rangers in the area about their arrival and departure. This is to be done 24 hours before entering the area and again before leaving it.
- If the project dates or description changes the Nature Conservation Agency shall be notified as soon as possible.
- A ranger will accompany the researchers and decide where to place measuring instruments and safe to go off paths.
- All traces of the work must be removed carefully from the site by the end of the work/project.
- If any complications occur during the project, please contact the ranger or the Nature Conservation Agency of Iceland, tel. +354 556 6800.
- This permit is only valid for research purposes. It does not include permit to utilize the samples for commercial purposes. The samples cannot be signed over to third party for commercial use.
- Every measure should be taken to avoid damage to the sites and unnecessary disturbance while collecting samples.
- All participants in the project must wear high-visibility clothing during field work, labelled with the identity of the researcher or the research institute.
- An unmanned aircraft should never be flown near people. Please take precautions not to disturb people's experience, their safety or personal privacy nor the general peace of the protected areas being filmed.
- According to Icelandic law it is forbidden to fly close to cliffs where birds nest. An unmanned aircraft should never be flown near animals or birds, neither in nesting areas nor during nesting season or any other seasonal time when animals or bird habitats are considered vulnerable.
- Flight time should be kept to a minimum and flight should be avoided during the area's busiest times of the day.
- If the use of unmanned aircraft causes disturbance to wildlife in the area, its use should be ceased at once.
- The conductor of the unmanned aircraft is responsible for the aircraft within the protected area. This includes taking responsibility for any possible risk of harm to people, fauna and nature and leaving no permanent marks on the site in question. Should the aircraft crash, all components from it must be collected and removed from the area.
- For safety reasons, unmanned aircraft are not allowed to fly below 50 m above Strokki.
- For safety reasons, the pilot of an unmanned aerial vehicle must wear marked clothing so that the person can be identified.

If the licensee causes damage to nature, according to art. 87 in the Nature Conservation Act no. 60/2013, the Nature Conservation Agency of Iceland can, according to the Nature Conservation Act, f.e. order the licensee to fix damage to nature and vegetation and/or stop the project.

The Nature Conservation Agency of Iceland can according to art. 89 in the Nature Conservation Act no. 60/2013 change conditions of the permit, add new conditions or withdraw the permit in order to prevent damage to nature if environmental conditions change.

According to art 89. in the Nature Conservation Act no. 60/2013 the Nature Conservation Agency can withdraw the permit if conditions of the permit are not complied to.

Permit from the National Energy Authority is needed for research projects in geothermal areas (<https://orkustofnun.is>).

The Nature Conservation Agency of Iceland requests access to reports and scientific articles of the aforementioned studies, which could be used for educational purposes about the area and/or assist in its management, free of charge.

Supervision:

The Nature Conservation Agency will supervise the project. The supervisor will be a ranger from the Nature Conservation Agency.

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