Mount Spurr Volcano

Monitoring, Recent Eruptive History, and Ash Hazards

Mount Spurr is an ice- and snow-covered volcano located about 80 miles (129 km) from Anchorage, Alaska, on the west side of Cook Inlet. The volcano is 11,070 ft (3,374 m) tall and has two main vents–Mount Spurr summit and Crater Peak. On a clear day, Mount Spurr is easily viewed from Anchorage and the Kenai Peninsula.

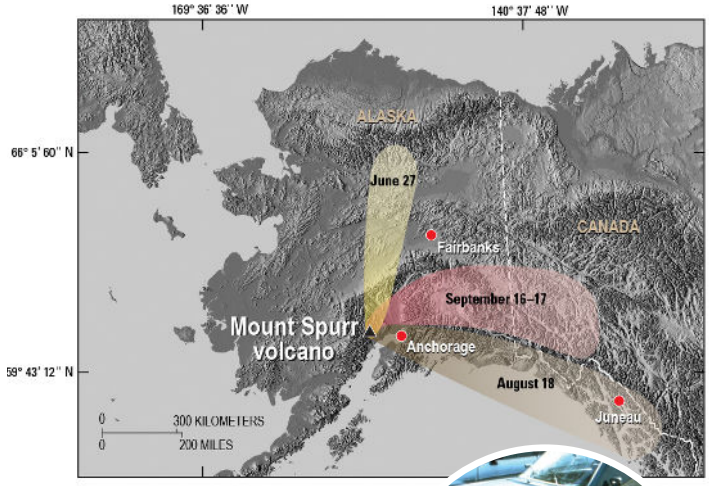
Past Activity & Hazards

The Mount Spurr summit vent has not erupted for several thousand years. The Crater Peak vent has erupted recently–once in 1953, and three times in 1992. The 1953 and 1992 eruptions lasted between 3 and about 7 hours, were explosive, and produced columns of ash that rose more than 50,000 ft (15 km) above sea level. The ash clouds deposited minor ashfall (up to 1/4 inch or about 6 mm) over Southcentral Alaska communities. The ashfall caused temporary closures of airports, offices, and schools, and disrupted daily life. Cleanup costs in 1992 were nearly $2 million.

In 2004–2006 and 2024–2025, Mount Spurr experienced episodes of increased earthquake activity, minor surface uplift, and increased heat flow that melted the summit ice. In 2004–2006, small debris flows were generated on the summit cone, but no eruption occurred. The 2024–2025 activity is ongoing.

Hazards from Mount Spurr include airborne ash clouds and ashfall. Lahar (mudflow) and pyroclastic-flow (hot avalanches) hazards are confined to the main drainages on the volcano and generally pose no significant risk to communities.

See next page for more details about ash hazards.



Map. Extent of ashfall from the 1992 Crater Peak eruptions. **Inset photo.** Ashfall on vehicle in Anchorage from Crater Peak eruption, August 18, 1992.

Volcano Monitoring

Typical monitoring station with Crater Peak and Mount Spurr in the background.

Mount Spurr is one of the best monitored volcanoes in Alaska and has a network of instruments that send data in real time to AVO. Staff use satellite, seismic, deformation, and infrasound data to assess activity levels at all active volcanoes in Alaska, including Mount Spurr. Detailed records of eruptions, pilot reports, and monitoring data help AVO staff provide information before, during, and after a volcanic event.

More Information

avo.alaska.edu/volcano/spurr

The Alaska Volcano Observatory (AVO) is a joint program of the U.S. Geological Survey, the University of Alaska-Fairbanks Geophysical Institute, and the Alaska Division of Geological and Geophysical Surveys (DGGS).

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Ash Hazards and How to Stay Informed

Airborne Ash Clouds

Drifting clouds of volcanic ash are a significant hazard to aircraft, making this the principal volcanic hazard in Alaska. Ash can cause severe damage to engines, windscreens, navigation systems, and other airplane parts. Airport closures, rerouting of flights, delays, and cancellations are all likely impacts of a Spurr eruption. AVO works closely with the Federal Aviation Administration (FAA) and the National Weather Service (NWS), who issue warnings about airborne volcanic ash to pilots.

Official forecasts of airborne ash hazards to aircraft
weather.gov/aawu

Volcanic ash advisories for aircraft
weather.gov/vaac

Column of ash rising from Crater Peak during the eruption on August 18, 1992. **Inset photo.** Anchorage International airport is 80 miles from Mount Spurr, visible here behind a landing airplane.

Ashfall

Up to 1/4 in (6 mm) of ash could fall on communities in Southcentral Alaska, so it is important to know the impacts and how to prepare.

Transportation
Ash is easily remobilized, abrasive, and corrosive, damaging vehicle and airplane engines and windshields. Airports could be shut down.

Health
Breathing ash can harm airways. Wear masks, avoid using contact lenses, and stay inside during ashfall events.

Heating/Ventilation
Air filters and intake systems may become clogged. Have extra air filters on hand for homes, cars, and boats.

Electrical Utilities
May interrupt distribution and generators. Plan for outages.

Remobilized ashfall by vehicles and wind could be a long term hazard after ashfalls. Photo near Nikiski, Alaska, after an eruption of Redoubt Volcano in 2009.

Ash Removal
Wash ash from windshields with water. Ash is abrasive if dry brushed. Mix ash with snow or water during removal to prevent remobilization.

AVO works closely with the National Weather Service (NWS), who issues warnings about ashfall to communities and mariners. Your local emergency management office is the primary resource for information regarding impacts and recommended actions before, during, and after an ashfall event.

More Information

avo.alaska.edu/volcano/spurr

Sign up for volcano notifications:
volcanoes.usgs.gov/vns

If you see it, report it!

To report anomalous volcanic activity, such as unusually strong steaming or sulfur smells, contact AVO: **avo.alaska.edu/contact**

To report ashfall:
avo.alaska.edu/ashfall/report_form

Instructions for collecting ash:
avo.alaska.edu/ashfall/instructions

Official warnings of ashfall on communities & mariners
weather.gov/afc

Ashfall impacts & preparedness
volcanoes.usgs.gov/volcanic_ash

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