

SVERT - Sakhalin Volcanic Eruption Response Team

ACTIVE VOLCANOES OF THE KURILE ISLANDS — A Quick Reference

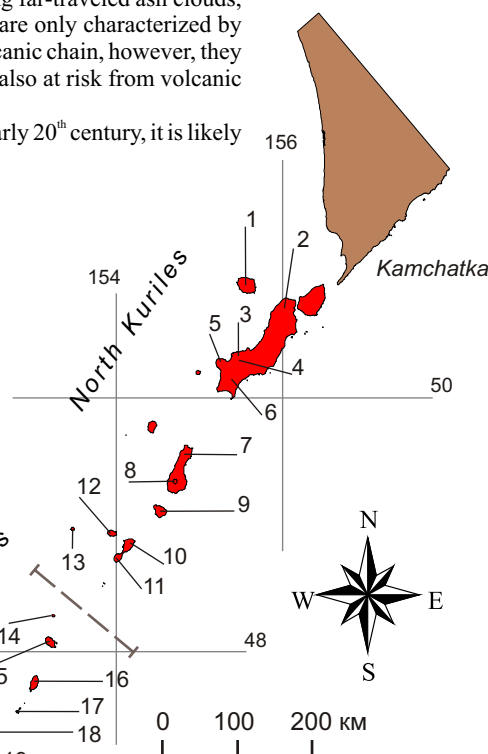
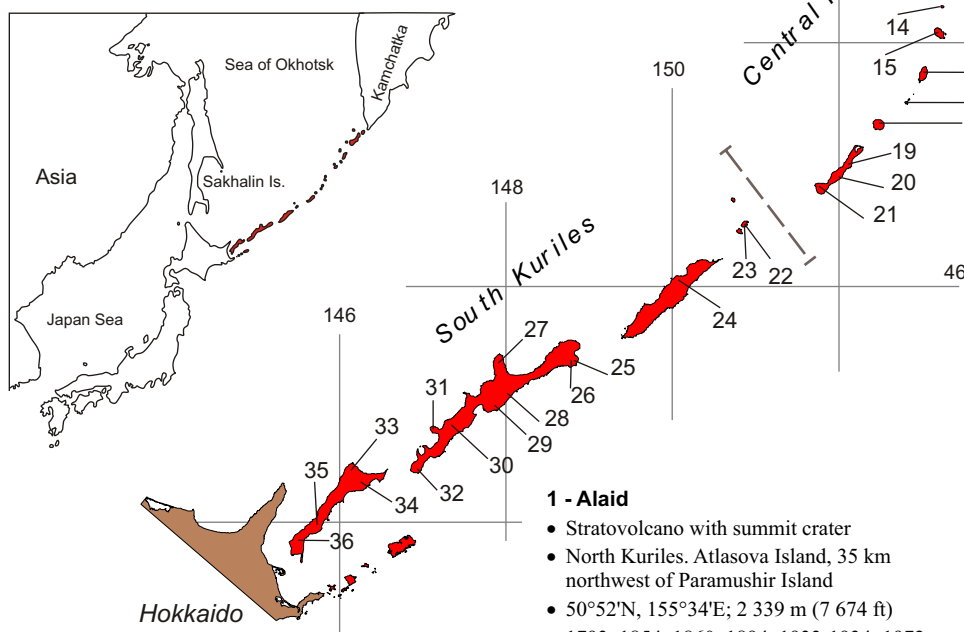
The remote and isolated Kurile Islands stretch 1250 km from the Kamchatka Peninsula to Hokkaido. There are 68 identified volcanic centers above sea level. Among them, 36 are active, capable of producing far-traveled ash clouds, and are especially threatening to aviation. Many have known historical eruptions. Others are only characterized by intense fumarolic activity. As many as 98 submarine volcanoes are also part of the Kurile volcanic chain, however, they are not included on this list. Communities on Kunashir, Iturup, and Paramushir Islands are also at risk from volcanic eruptions.

Fragmentary data exist regarding the record of volcanic activity since 1712. Until the early 20th century, it is likely that many eruptions went undocumented.

The Sakhalin Volcanic Eruption Response Team (SVERT) is responsible for tracking activity and issuing eruption notifications for activity in the Kurile Island volcanic arc. SVERT is part of the Institute of Marine Geology and Geophysics, Russian Academy of Sciences in Yuzhno-Sakhalinsk.

Our sources of information include daily MODIS satellite imagery provided by colleagues at the Far East Department of the Rosgeofond, ground-based observations of several volcanoes on the southern Kurile Islands, and time-delayed seismic data from Iturup and Kunashir Islands provided by colleagues at the Sakhalin Department of the Geophysical Survey of the Russian Academy of Sciences.

Our ability to detect activity at the many remote, uninhabited islands of the Kuriles is limited due to frequent poor weather and the lack of geophysical instrumentation. SVERT is seeking additional funding to improve its operational capabilities and to develop communication plans with partners in the aviation and meteorological sectors to address the hazards to aviation in the Kurile region.



4 - Tatarinova Group

- Cluster of cones in Karpinsky range
- North Kuriles. West coast of the southern Paramushir Island
- 50°18'N, 155°27'E; 1 530 m (5 020 ft).
- Thermal activity

5 - Fuss Peak

- Composite stratovolcano with summit crater
- North Kuriles. Fuss Peninsula on the west coast of southern Paramushir Island.
- 50°16'N, 155°15'E; 1 772 m (5 814 ft)
- 1854

6 - Karpinsky Group

- Cluster of cones in Karpinsky range
- North Kuriles. Southern Paramushir Island
- 50°08'N, 155°22'E; 1 345 m (4 413 ft)
- 1952. Fumarolic and thermal activity

7 - Nemo Peak

- Composite stratovolcano in Nemo caldera
- North Kuriles. Northern Onkotan Island
- 49°34'N, 154°48'E; 1 019 m (3 342 ft)
- Early 18th century, 1906. Fumarolic and thermal activity

8 - Krenitzyn Peak

- Stratovolcano in Tao-Rusyr caldera
- North Kuriles. Southern part of Onkotan Island
- 49°21'N, 154°42'E; 1 324 m (4 344 ft)
- 1952. Fumarolic and thermal activity

KEY

Number on map - VOLCANO
(1 - 6 - monitored by KVERT,
7 - 36 - monitored by SVERT)

- Type of volcano
- Location
- Latitude, longitude; highest elevation; vents
- Historical activity

1 - Alaid

- Stratovolcano with summit crater
- North Kuriles. Atlasova Island, 35 km northwest of Paramushir Island
- 50°52'N, 155°34'E; 2 339 m (7 674 ft)
- 1793, 1854, 1860, 1894, 1933-1934, 1972, 1981, 1986. Weak fumarolic activity

2 - Ebeko

- Composite stratovolcano with multiple summit craters
- North Kuriles. Northern Paramushir Island
- 50°41'N, 156°01'E; 1 156 m (3 793 ft)
- 1793, 1859, 1934-1935, 1963, 1967, 1987-1990, 1998, 2005- phreatic explosions and increased fumarolic activity

3 - Chikurachki

- Composite stratovolcano with summit crater
- North Kuriles. West coast of the southern Paramushir Island
- 50°19'N, 155°28'E; 1 816 m (5 956 ft)
- 1853, 1853-1859, 1958, 1961, 1964, 1973, 1986, 2002, 2003, 2004, 2005

This list below is considered the official list of active and potentially active Kurile volcanoes according to SVERT. Volcanoes are presented from north to south along the volcanic chain. Location and elevation information has been extracted from Russian sea navigational (1987) and topographic (1994) maps.

9 - Severgin

- Composite stratovolcano with summit crater
- North Kuriles. Harimkotan Island
- 49°07'N, 154°30'E; 1 157 m (3 796 ft)
- 1713, 1846, 1848?, 1883, 1931, 1933; Weak fumarolic activity

10 - Sinarka

- Composite stratovolcano with extrusive dome in the summit crater
- North Kuriles. Northern part of Shiashkotan Island
- 48°52'N, 154°11'E; 934 m (3 064 ft)
- 1730?, 1846, 1855, 1872, 1878. Fumarolic and thermal activity

11 - Kuntomintar

- Composite stratovolcano in Grotovaya caldera
- North Kuriles. Southern part of Shiashkotan Island
- 48°45'N, 154°01'E; 828 m (2 717 ft)
- 1872, 1924. Fumarolic and thermal activity

12 - Ekarma

- Stratovolcano with central extrusive dome
- North Kuriles. Ekarma Island, 15 km northwest of Shiashkotan Island
- 48°57'N, 153°56'E; 1 171 m (3 842 ft)
- 1767-1769, 1980. Thermal activity

13 - Chirinkotan

- Stratovolcano with summit crater
- North Kuriles. Chirinkotan Island 50 km northwest of Shiashkotan Island
- 48°59'N, 153°28'E; 724 m (2 375 ft)
- 1760, 1878-1889, 1955?, 1980, 2004. Intense fumarolic activity in central crater

14 - Raikoke

- Stratovolcano with summit crater
- Central Kuriles. Raikoke Island
- 48°17'N, 153°15'E; 551 m (1 808 ft)
- 1760, 1778, 1924

15 - Sarychev Peak

- Stratovolcano with summit crater
- Central Kuriles. Matua Island
- 48°06'N, 153°12'E; 1 446 m (4 744 ft)
- 1760, 1878-1879, 1923, 1928, 1930, 1946, 1954, 1960, 1965, 1976. Intense fumarolic activity in central crater

16 - Rasshua

- Composite stratovolcano in Serp caldera
- Central Kuriles. Rasshua Island
- 47°45'N, 153°01'E; 949 m (3 113 ft)
- 1846, 1957?; Fumarolic and thermal activity

17 - Ushishir

- Caldera
- Central Kuriles. Yankich Island
- 47°31'N, 152°48'E; 389 m (1 276 ft)
- Intense fumarolic and thermal activity

18 - Pallas Peak/Ketoi

- Composite stratovolcano with summit crater in Ketoi caldera
- Central Kuriles. Ketoi Island
- 47°20'N, 152°29'E; 990 m (3 248 ft)
- 1843-1846, 1924, 1960. Intense fumarolic and thermal activity

19 - Prevo Peak

- Stratovolcano with summit crater
- Central Kuriles. Central part of Simushir Island.
- 47°01'N, 152°07'E; 1360 m (4 462 ft)
- 1760? 1820? Fumarolic activity reported in 1914

20 - Zavaritzkii

- Caldera
- Central Kuriles. Central part of Simushir Island
- 46°55'N, 151°57'E; 625 m (2 050 ft)
- 1920? 1957. Fumarolic and thermal activity

21 - Goryachaya sopka

- Parasitic lava cone of Milna volcano
- Central Kuriles. North part of Simushir Island, 4 km northwest of extinct Milna volcano
- 46°50'N, 151°45'E; 891 m (2 923 ft)
- 1842, 1849, 1881, 1883, 1881, 1883, 1914? 1944? Fumarolic activity

22 - Cherny

- Stratovolcano with summit crater
- South Kuriles. Central part of Chirpoi Island
- 46°31'N, 150°52'E; 624 m (2 047 ft)
- 1712, 1854? 1857. Intense fumarolic activity in crater and on western slope of volcano

23 - Snow

- Stratovolcano, formed mainly by lava flows
- South Kuriles. Southern part of Chirpoi Island
- 46°31'N, 150°52'E; 395 m (1 296 ft)
- 1811, 1854?, 1879, 1960, 1982. Weak fumarolic activity

24 - Berga (Kolokol group)

- Composite stratovolcano with central lava dome
- South Kuriles. Western coast of central Urup Island, 3 km southwest of extinct volcano Kolokol (1 328 m or 4 357 ft)
- 46°03'N, 150°04'E; 980 m (3 215 ft)
- 1946, 1951-1952, 1970, 2005. Fumarolic and thermal activity

25 - Kudryavy

- Composite stratovolcano
- South Kuriles. North part of Iturup Island, Medvezhii Range, 3 km northeast of extinct Medvezhii volcano (1124 m or 3 678 ft)
- 45°23'N, 148°50'E; 986 m (3 235 ft)
- 1779?, 1883. Phreatic explosion 1946, 1999 Intense fumarolic activity

26 - Men'shiy Brat

- Extrusive dome with three craters
- South Kuriles. North part of Iturup Island, Medvezhii Range, 4 km northeast of extinct Medvezhii volcano
- 45°23'N 148°47'E; 563 m (1 847 ft)
- Thermal activity

27 - Chirip cluster - Bogdan Khmel'nitsky

- Cluster of composite stratovolcanoes
- South Kuriles. West coast, central part of Iturup Island. Chirip peninsula, west coast
- 45°23'N, 147°55'E; 1 564 m (5 131 ft)
- 1860? Fumarolic and thermal activity

28 - Baransky

- Composite stratovolcano with central extrusive dome
- South Kuriles. East coast, central part of Iturup Island
- 45°06'N, 148°01'E; 1 133 m (3 717 ft)
- 1951. Intense fumarolic and thermal activity

29 - Ivan Grozny

- Composite stratovolcano
- South Kuriles. East coast, central part of Iturup Island.
- 45°01'N, 147°52'E; 1 159 m (3 802 ft)
- Rare ash outbursts 1951, 1968, 1970, 1973 Eruption from summit crater 1989. Fumarolic and thermal activity

30 - Stokap

- Composite stratovolcano with two clusters of young volcanic cones
- South Kuriles. Southern part of Iturup Island, Bogatyr Range
- 44°50'N, 147°20'E; 1 634 m (5 361 ft)
- Weak thermal activity on eastern slope.

31 - Atsonupuri

- Stratovolcano of Somma-Vesuvius type
- South Kuriles. Atsonupuri Peninsula, west coast, southern part of Iturup Island
- 44°48'N, 147°08'E; 1 205 m (3 953 ft)
- 1812? 1932

32 - Berutarube

- Composite stratovolcano with summit crater
- South Kuriles. Southern end of Iturup Island
- 44°27'N, 146°56'E, 1 220 m (4 003 ft)
- Intense fumarolic and thermal activity on western slope

33 - Ruruy

- Composite stratovolcano
- South Kuriles. North part of Kunashir Island
- 44°27'N, 146°08'E, 1 485 m (4 872 ft)
- Fumarolic and thermal activity on northwestern slope

34 - Tyatya

- Stratovolcano of Somma-Vesuvius type
- South Kuriles. North part of Kunashir Island
- 44°27'N, 146°15'E; 1 819 m (5 968 ft)
- 1812, 1973. Weak fumarolic and thermal activity in central crater

35 - Mendeleev

- Composite stratovolcano with central extrusive dome
- South Kuriles. Central part of Kunashir Island
- 43°59'N, 145°44'E; 887 m (2 910 ft)
- Steam-gas outbursts and increased fumarolic activity 1880, 1901, 1946, 1977. Intense fumarolic and thermal activity

36 - Golovnin

- Caldera
- South Kuriles. Southern part of Kunashir Island
- 43°51'N, 145°30'E; 541 m (1 775 ft)
- Intense fumarolic and thermal activity

The list of active volcanoes is based on volcanic activity reports summarized in Gorshkov (1967), Gushchenko (1979), Markhinin and Abdurakhmanov (1990), and unpublished SVERT and KVERT reports.

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