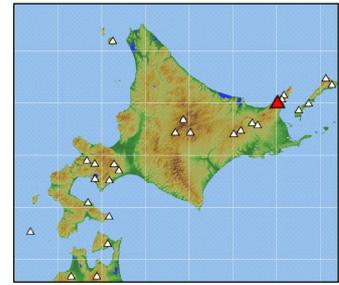


3. Tenchozan

Latitude: 44°02'40" N, Longitude: 145°05'09" E, Elevation: 1,046 m
(Tenchozan)
(Elevation Point - measured by JMA)



Overview of Tenchozan - Aerial Photo Taken from Southwest Side - October 19, 2011 - Taken by the Japan Meteorological Agency

Summary

Tenchozan is located in the interior of the Shiretoko Peninsula, in the east of Hokkaido. It has a relative height of 300 m, and is composed of andesite lava, approximately 4 km east-west, and approximately 2.5 km north-south. It retains fresh surfaces such as lava wrinkles. It is topped by a 1800 m long crater chain stretching from northeast to southwest (Katsui et al., 1985). This chain of craters consists of 15 or more overlapping explosion craters with diameters of 250 m or less, and the shapes of the craters have been clearly retained.

Topography around the Crater

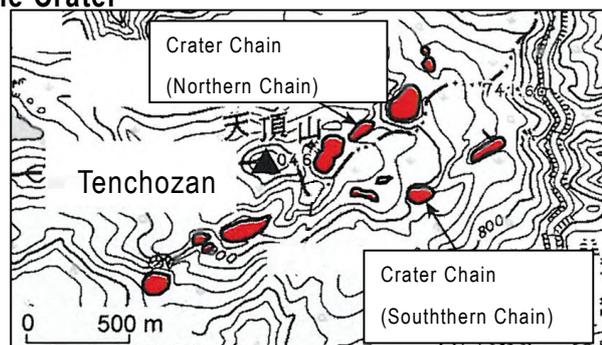


Figure 3-1 Detailed topography of the crater area (Goto, 2011).

Red Relief Image Map

See the Shiretoko-lozan

Chronology of Eruptions

▪ Volcanic Activity in the Past 10,000 Years

The latest eruptions on Tenchozan were phreatic eruptions which occurred approximately 1,900 years ago. It is concluded that towards the end of those eruptions, a phreatomagmatic eruption or a small-scale magma eruption occurred. The chain of explosion craters stretching from the northeast to the southwest, mentioned above, are considered to be a result of this series of eruptions (Goto et al., 2005; Goto, 2011). Currently, no fumarolic activity is observed.

Period	Area of Activity	Eruption Type	Main Phenomena / Volume of Magma
1.9ka	Tenchozan crater chain	Phreatic eruption → phreatomagmatic eruption	Eruptions appeared to have consisted mainly of phreatic eruptions, with the end of the eruption period marked by phreatomagmatic eruptions or small-scale magma eruptions. These formed the many explosion craters near the summit, and resulted in sedimentation of pyroclastic material. Magma eruption volume = 0.008 km ³ DRE. (VEI 3)

* Reference documents have been appended with reference to the catalog of eruptive events during the last 10,000 years in Japan, database of Japanese active volcanoes, and AIST (Kudo and Hoshizumi, 2006) for eruptive period, area of activity and eruption type. All years are noted in calendar years. "ka" within the table indicates "1000 years ago", with the year 2000 set as 0 ka.

▪ Historical Activity

There are no records of volcanic activity.

Major Volcanic Activities

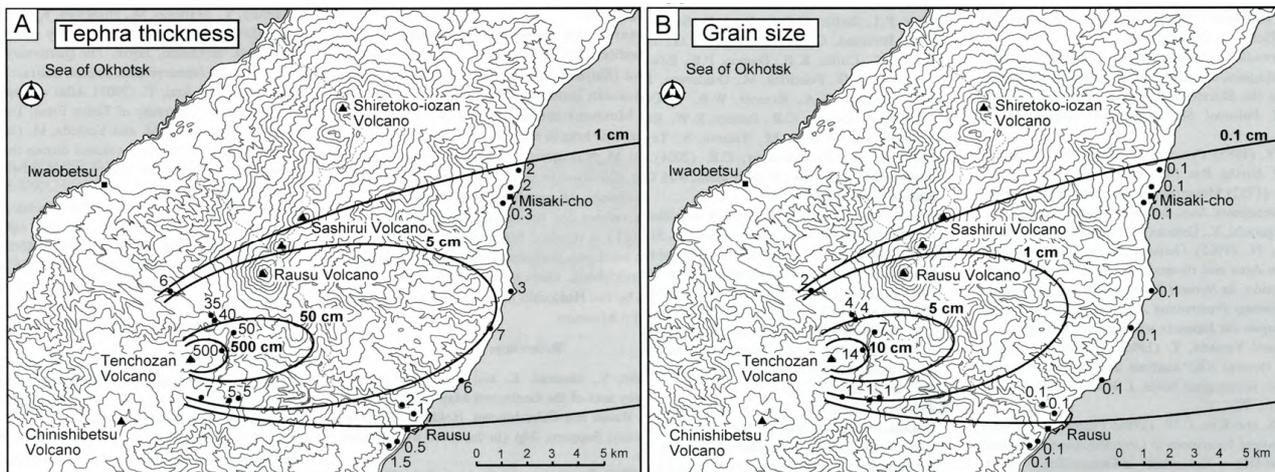


Figure 3-2 Distribution of tephra produced by eruptions approximately 1900 years ago (Left: thickness, Right: maximum grain size) (Goto, 2011).

Recent Volcanic Activity

See the Shiretoko-lozan

Information on Disaster Prevention

① Hazard Map

None

Social Circumstances

① Populations

- Rausu side: Rausu Town population 5,955, 108 of which live in Yunosawa area
(as of November 30, 2011, according to family registers)
- Shari side: Shari Town population 12,600 (as of November 30, 2011, according to basic resident registers)

② National Parks / Quasi-National Parks / Number of Climbers

- Shiretoko National Park
 - Rausu side - Number of sightseers per year: 599,275 (according to 2010 sightseer admission number survey)
 - Shari side - Number of sightseers per year: Approx. 1,200,000 (according to 2010 Commerce, Industry and Tourism Section, Shari Town)
- Tenchozan
 - Number of mountain-climbers per year: Unknown, as there are no mountain climbing trails

③ Facilities

- Rausu Town
 - Rausu Visitor Center
- Shari Town
 - Shiretoko National Park Nature Center
 - Shiretoko World Heritage Conservation Center

Monitoring Network

See the Shiretoko-lozan

Bibliography

Goto, Y. (2011): Bull. Volcanol. Soc. Jap., **56**, 137-145 (in Japanese with English Abstract).
Nakamura, Y. et al. (2008): Quart. Res., **47**, 39-49 (in Japanese with English Abstract).

(Goto, Y., and Nakagawa, M.)