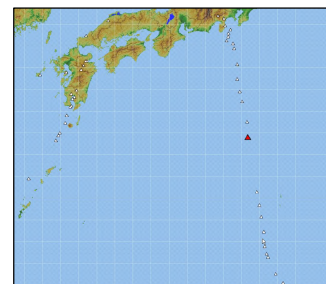


## 69. Sofugan

Latitude: 29°47'39" N, Longitude: 140°20'31" E, Elevation: 99 m (Elevation Point - Measured by JMA)



Overview of Sofugan taken from west side on September 5, 2002. Courtesy of the Maritime Safety Agency.

### Summary

Sofugan is an isolated rock (100 m high, 84 m east-west, 56 m north-south) made of black olivine-clinopyroxene basalt located approximately 660 km south of Tokyo and approximately 76 km south of Izu-Torishima. The volcano with Sofugan as its summit is composed of 2 volcanic edifices, arranged from east to west, with relative heights of 1,500 to 2,000m and separated by approximately 10km. The summit of the east volcanic edifice includes the prominence which contains Sofugan. It is an oval truncated cone, with its long axis running from the northeast to the southwest. The Sofugan is surrounded by a flat island shelf at a depth of approximately 140 m. 2.6 km to the southwest of Sofugan is located a crater at a depth of 240 m, with a relative height of 120 m compared to the land around it. The prominence which includes Sofugan covers the area to the northeast of this crater. The SiO<sub>2</sub> content of the rock of Sofugan is between 49.9 and 55.9 wt %.

Submarine Topographic Map

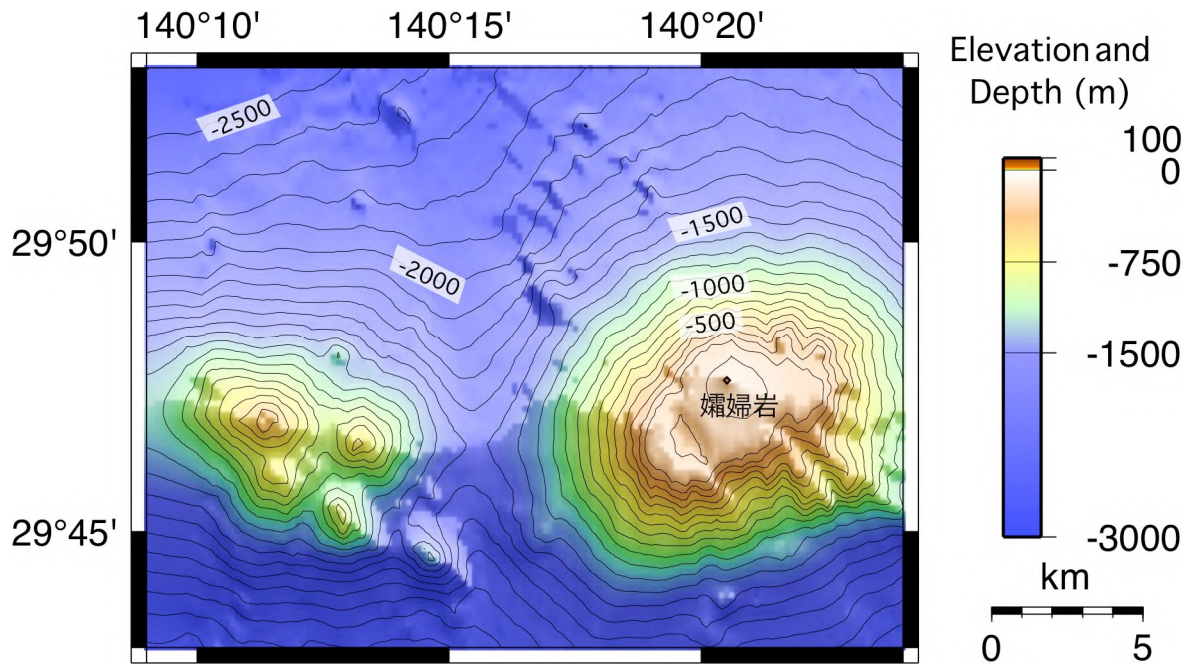


Figure 69-1 Submarine topographic map of the Sofugan area (Japan Coast Guard).

Geological Map

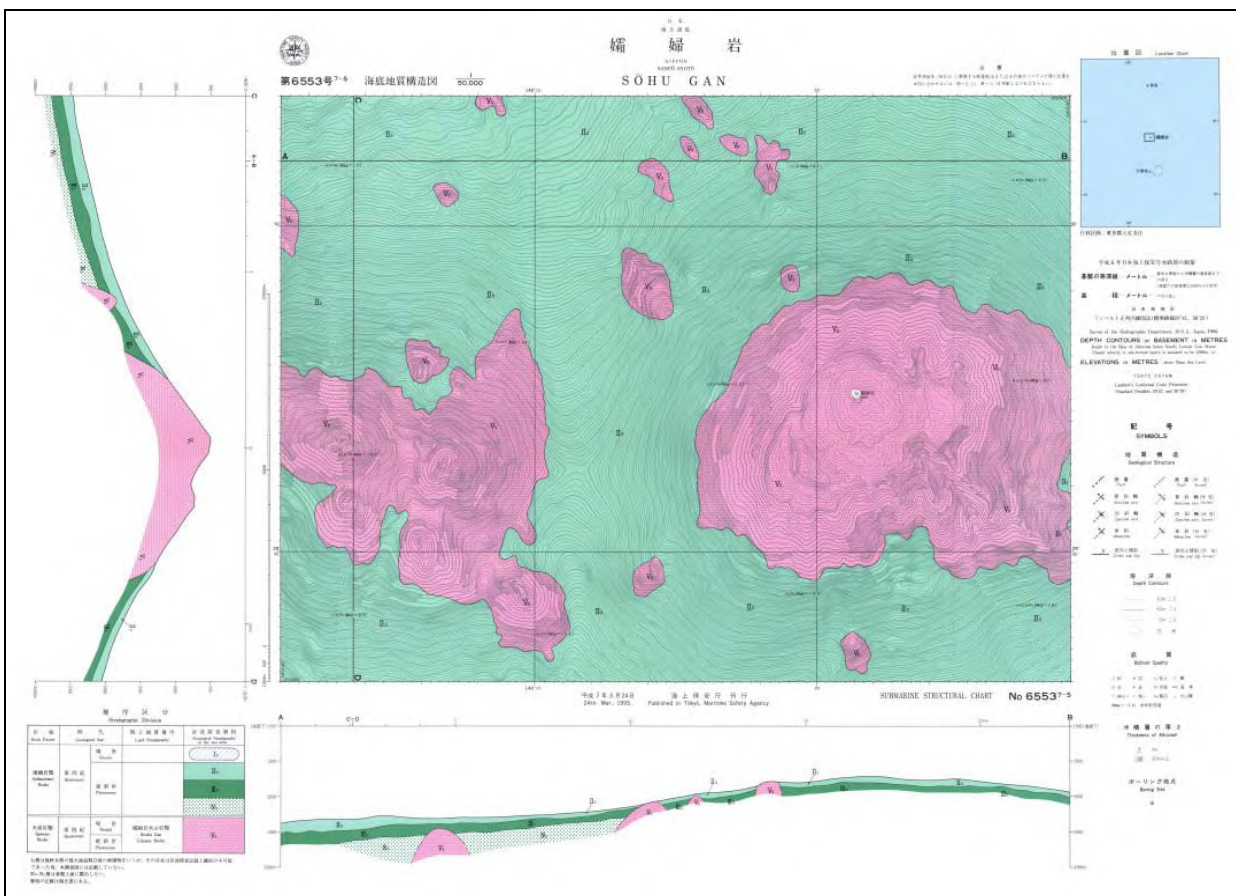


Figure 69-2 Geological map of Sofugan (Maritime Safety Agency, 1995).

## Chronology of Eruptions

### ▪ Historical Activity

Year	Phenomenon	Activity Sequence, Damages, etc.
1975 (Showa 50)	(Discolored water)	The area of activity was approximately 500 m north of Sofugan. Green discolored water.

\* Volcanic periods, areas of activity, and eruption types taken from the Active Volcano Database of Japan, AIST (Kudo and Hoshizumi, 2006 onwards) and the Database of the Maritime and Submarine Volcanoes in Japan (Japan Coast Guard, 2006).

## Bibliography

Maritime Safety Agency (1995): Basic Map of the Sea in Coastal Waters, 6553<sup>7-8</sup>, Maritime Safety Agency (in Japanese with English Abstract).

(Ito, K.)