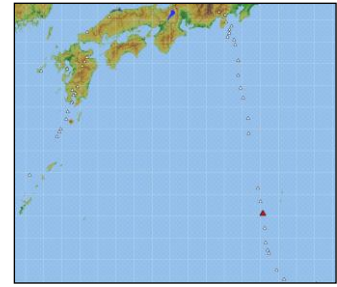


## 72. Kaitoku Seamount

Latitude: 26°07.6' N, Longitude: 141°06.1' E, Depth: -95 m  
(Shallowest Point of Southeast Peak)



Aerial Photo of Discolored Water - March 17, 1984 - Courtesy of the Maritime Safety Agency

### Summary

A submarine eruption occurred in March, 1984 (Showa 59) in the ocean to the north-northwest of Kita-Iojima (26° 07.3' N, 141° 06.1' E). The shallow area around the eruption site was named the Kaitoku Seamount. Also, a submarine eruption near 26° 00' N, 140° 46' E was reported in 1543 (Tenbun 12), which may have been the Kaitoku Seamount, but details are not known. The SiO<sub>2</sub> content of the rock of the Kaitoku Seamount is between 47.7 and 62.4 wt %. The area, together with Funka Asane, is also called the "Kita-Iojima area submarine volcanoes".

## Submarine Topographic Map

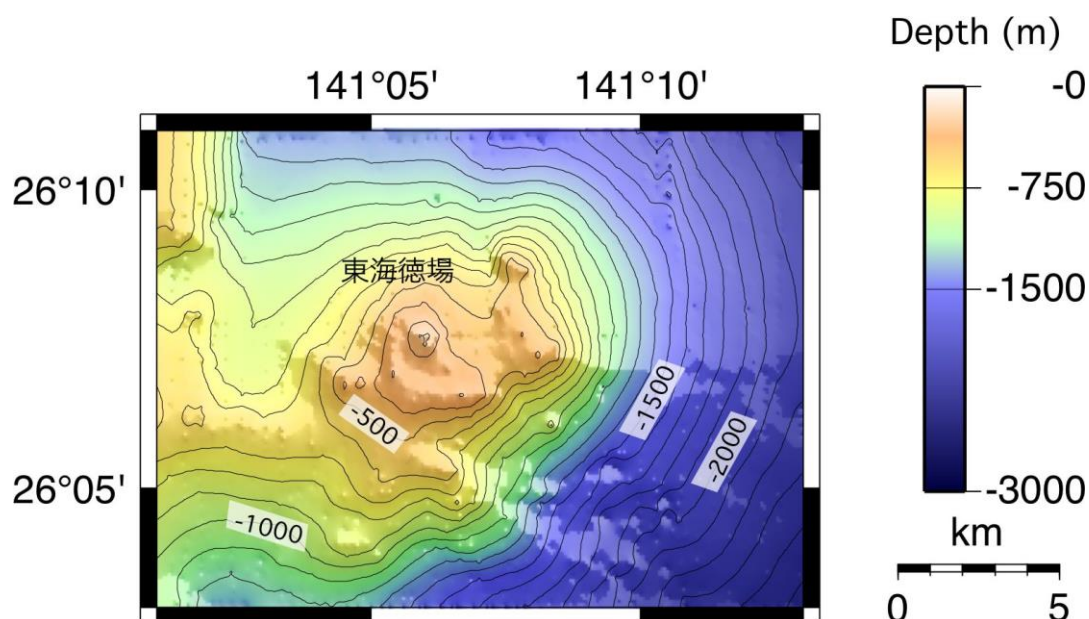


Figure 72-1 Submarine topographic map of the Kaitoku Seamount area (Japan Coast Guard).

## Chronology of Eruptions

### ▪ Historical Activity

Year	Phenomenon	Activity Sequence, Damages, etc.
1543 (Tenbun 12)	Submarine eruption?	Area of activity: west Kaitoku Seamount?
1984 (Showa 59)	Moderate: Magmatic eruption or phreatomagmatic eruption? (Discolored water)	March 7 to June. Area of activity: east Kaitoku Seamount. Discolored water (approximately 10 km in width and approximately 50 km or more in length), sea surface upwelling, volcanic plume, discharge of pumice, etc. Magma eruption volume = 0.001 km <sup>3</sup> DRE. (VEI 2)
1984 (Showa 59)	(Discolored water)	December 23. Area of activity: east Kaitoku Seamount.
1986 (Showa 61)	(Discolored water)	June 18.
2001 (Heisei 13)	(Bubbling)	July 20. Area of activity: near east Kaitoku Seamount. Bubbling from the bottom of the ocean.

\* 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

- Ito, K. et al. (2012): Report of Hydrographic and Oceanographic Researches., **48**, 41-73 (in Japanese with English Abstract).  
 Japan Meteorological Agency (2005): National Catalogue of the Active Volcanoes in Japan (3<sup>rd</sup> editions), 447-448 (in Japanese).  
 Japan Coast Guard (2006): the Database of the Maritime and Submarine Volcanoes in Japan (<http://www1.kaiho.mlit.go.jp/GI/JUTSUKOKUSAI/kaiikiDB/list-2.htm>)(in Japanese with English Abstract).  
 Tsuchide, M. et al. (1985): Report of Hydrographic Researches., **20**, 47-82 (in Japanese with English Abstract).

(Ito, K.)