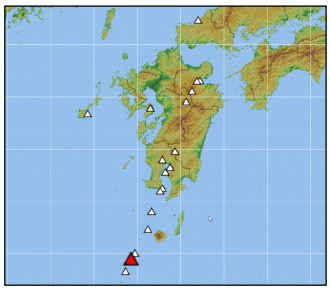
96. Nakanoshima



Latitude: 29°51'33" N, Longitude: 129°51'25" E, Elevation: 979 m (Ontake)
(Triangulation Point - Nakanoshima 2)

Overview of Nakanoshima taken from northwest side on March 2, 2005 by the Japan Meteorological Agency

Summary

Nakanoshima is composed of two adjoining volcanoes. It measures 9 km northwest to southeast, and 5 km northeast to southwest. The historical eruption was only recorded in 1914 at Ontake, on the northwest side. Ontake is an andesite stratovolcano. Fumaroles exist in the summit crater and on the southeast flank.

Photo

Ontake summit crater on March 14, 2006 by the Japan Meteorological Agency

Red Relief Image Map

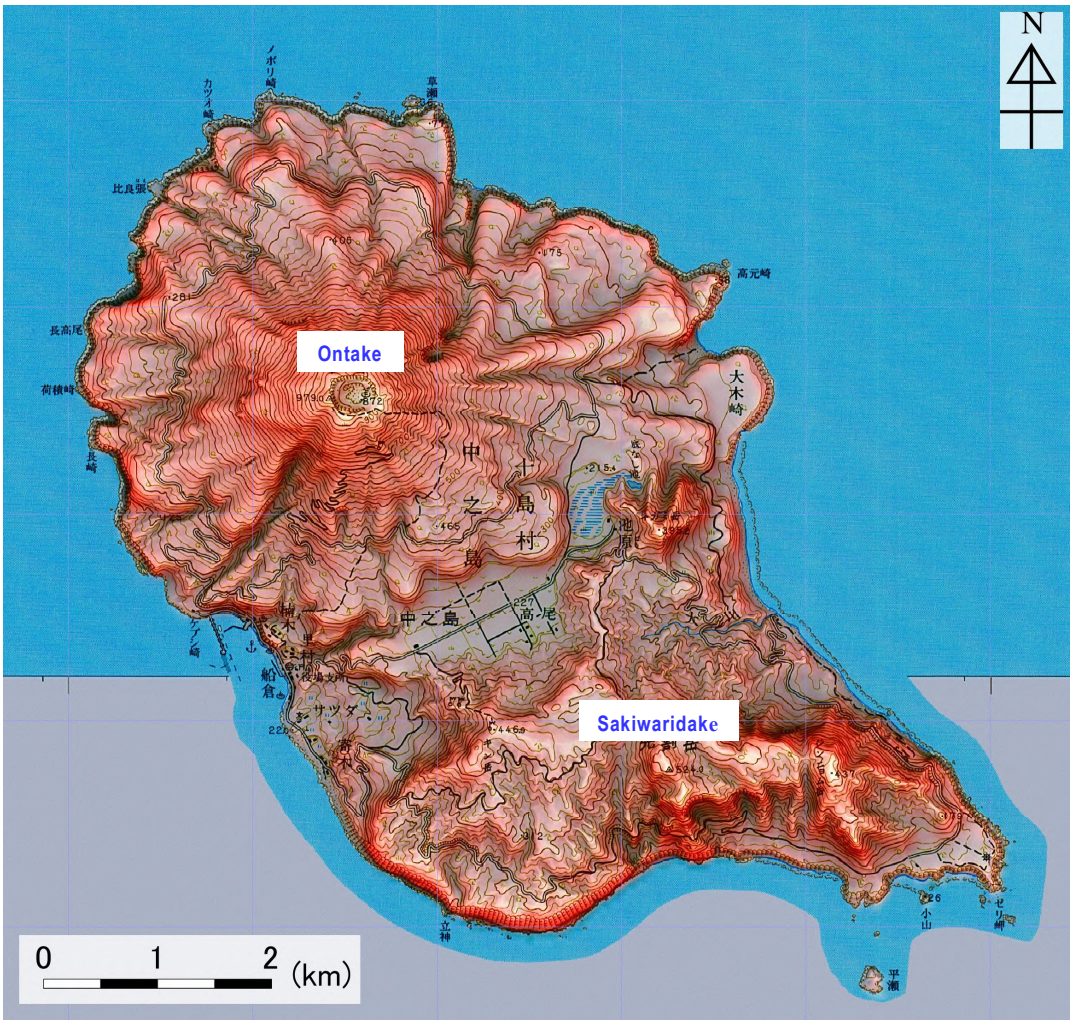


Figure 96-1 Topography of Nakanoshima.

1:50,000 scale topographic map (Nakanoshima) and digital map 50 m grid (elevation) published by the Geospatial Information Authority of Japan were used.

Submarine Topographic Map

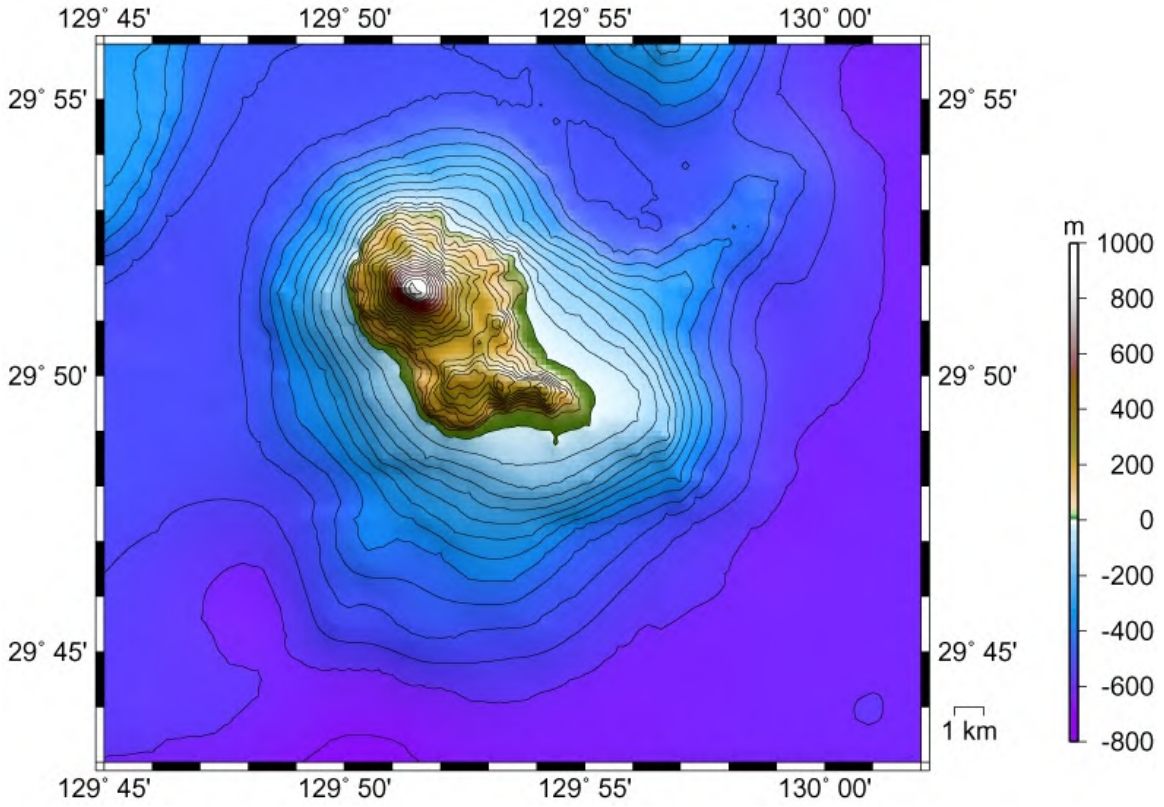


Figure 96-2 Submarine topographic map of the Nakanoshima area (Japan Coast Guard).

Geological Map

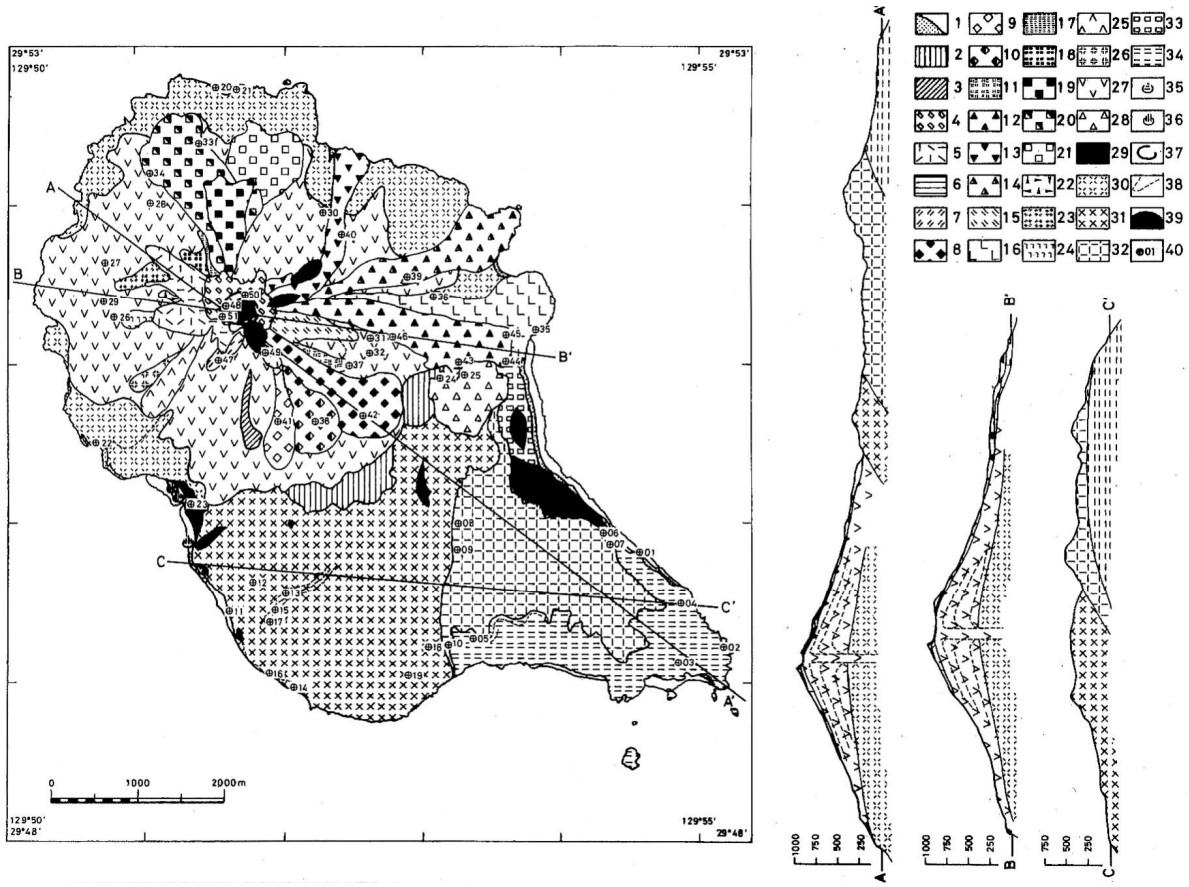


Figure 96-3 Geologic map of Nakanoshima (Daishi, 1989).

1. Coastal gravel with sand and coral reef, 2. Alluvium, 3. Volcanic fan deposits, 4. T2 pyroclastic rocks, 5. T1 pyroclastic rocks, 6. Rised coral shelf, 7. S5 lava, 8. S4 lava, 9. S3 lava, 10. S2 lava, 11. S1 lava, 12. E5 lava, 13. E4 lava, 14. E3 lava, 15. E2 lava, 16. E1 lava, 17. N5 lava, 18. N4 lava, 19. N3 lava, 20. N2 lava, 21. N1 lava, 22. W5 lava, 23. W4 lava, 24. W3 lava, 25. W2 lava, 26. W1 lava, 27. Younger Ontake volcano, 28. Negamidake andesites, 29. Nigoriura andesites, 30. Older Ontake volcano, 31. Shiizaki andesites, 32. Sakiwaridake andesites, 33. Nanatsuyama andesites, 34. Serizaki andesites, 35. Fumarole, 36. Hot spring, 37. Crater, 38. Flow-unit boundary, 39. Alteration zone, 40. Locality number for analysis (omitted from this pamphlet)

Chronology of Eruptions

・Volcanic Activity in the Past 10,000 Years

The following pyroclastic materials are all older than the Kikai-Akahoya (K-Ah) ash (7,300 years ago) (Moriwaki et al., 2009), but the latest lava was erupted after that (Daishi, 1989; Nakano et al., 2008).

Period	Area of Activity	Eruption Type	Main Phenomena / Volume of Magma
7.3 ka<	Near Ontake	Magmatic eruption	Air-fall pyroclastic material (NK-1).
7.3 ka<	Near Ontake	Magmatic eruption	Air-fall pyroclastic material (NK-2).

* 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 Year, 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.
A<: Eruption event before year A.

・Historical Activity

Year	Phenomenon	Activity Sequence, Damages, etc.
1914 (Taisho 3)	Phreatic eruption?	In January a small mud eruption occurred from the bottom of the summit fumarole. The eruption occurred at the Ontake summit crater.
1949 (Showa 24)	Volcanic plume	Large amount volcanic plume in October.
1973 (Showa 48)	Volcanic plume	Large volcanic plume.

* 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 Year, area of activity and eruption type..

Recent Volcanic Activity

* See Kuchinoshima for details regarding shallow seismic activity observed by the regional seismometer network.

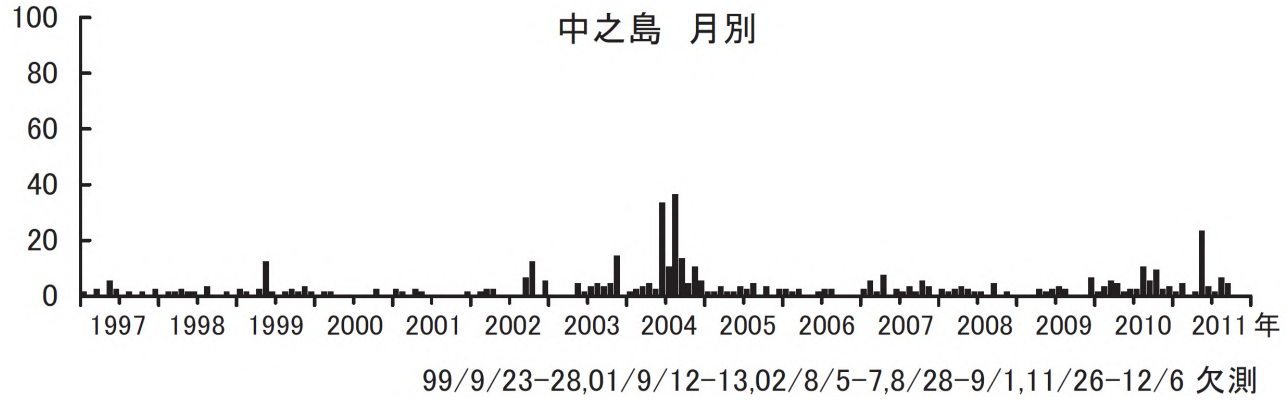


Figure 96-4 Seismic activity by month (1997 to June 10, 2012) (Kyoto University, 2012).

Since the 2011 off the Pacific coast of Tohoku Earthquake (March 11, 2012) seismic activity increased temporarily, returning to normal from April.

Information on Disaster Prevention

①Hazard Map

- "Nakanoshima Volcano Disaster Danger Area Forecast Map"
- "Nakanoshima Disaster Prevention Information Map"
- Both created by Kagoshima Prefecture in 1996

URL:http://www.pref.kagoshima.jp/aj01/bosai/sonae/keikaku/h23/documents/24696_20120419165819-1.pdf

Social Circumstances

①Populations

Toshima Village:　607 (Nakanoshima: 134) (Toshima Village: as of October 31, 2011)

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

- National Parks, Quasi-National Parks: None designated. However, a Kagoshima Prefecture nature park exists.
- Number of sightseers per year: 1,891 (according to 2010 Toshima survey)
- Number of mountain-climbers per year: -

③Facilities

None

Monitoring Network

Wide Area

See Suwanosejima

In and Around the Summit

* Monitoring sites with multiple observation instruments are indicated by small black dots, and other symbols indicate types of monitoring.

1:50,000 scale topographic map (Nakanoshima) published by the Geospatial Information Authority of Japan was used.

Legend

(JMA)
visual camera
seismic intensity meter
seismometer(SP)
(For earthquakes and t

(DPRI)
seismometer(SP)
GPS

(Municipalities)
seismic intensity meter

Figure 96-5 Monitoring network.

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