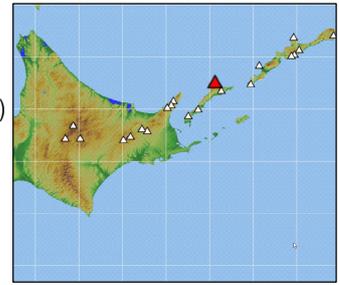


107. Ruruidake (Kunashir Island)

Latitude: 44°27'16" N, Longitude: 146°08'22" E, Elevation: 1,486 m (Measured by JMA)



Ruruidake, taken from the summit of Chachadake to southeast on August 1, 1999.

Courtesy of Yoshimoto, M.

Summary

This volcano is located at the northern tip of the Dokuchaev Ridge. Its northwest base reaches the Sea of Okhotsk, while tertiary basement rock is exposed on its northeastern and southeastern sides. On the south side, it touches the Smilnov (Iwayama) volcano.

The topography created during the first ice age can be seen in its current volcanic edifice (1486m). 3 wide, shallow valleys leading up to the summit have resulted in the complete destruction of its crater. There has also been an extremely great amount of erosion in parts of the volcano base. The three valleys, which grow narrower as the elevation decreases, have clearly been transformed by a cirque during the next ice age. The valley walls expose a typical volcanic body structure.

Near the summit, whitish rock, altered by fumarolic activity, is exposed, but the volcanic activity has continued just on the west flank of the volcanic edifice (between 150 and 350m above sea level, over a 1km² area) (Gorshkov, 1970). Volcanic rocks of this volcano are mainly composed of 58.1 to 67.1 wt % SiO₂.

Topographical Map



Figure 107-1 Topography of Ruruidake
1:200,000 scale regional map (Atoiyamisaki) published by the Geospatial Information Authority of Japan was used.

Chronology of Eruptions

There are no records of volcanic activity. There is fumarolic activity at the northwest base of the volcano.

Recent Volcanic Activity

▪ Seismic Activity

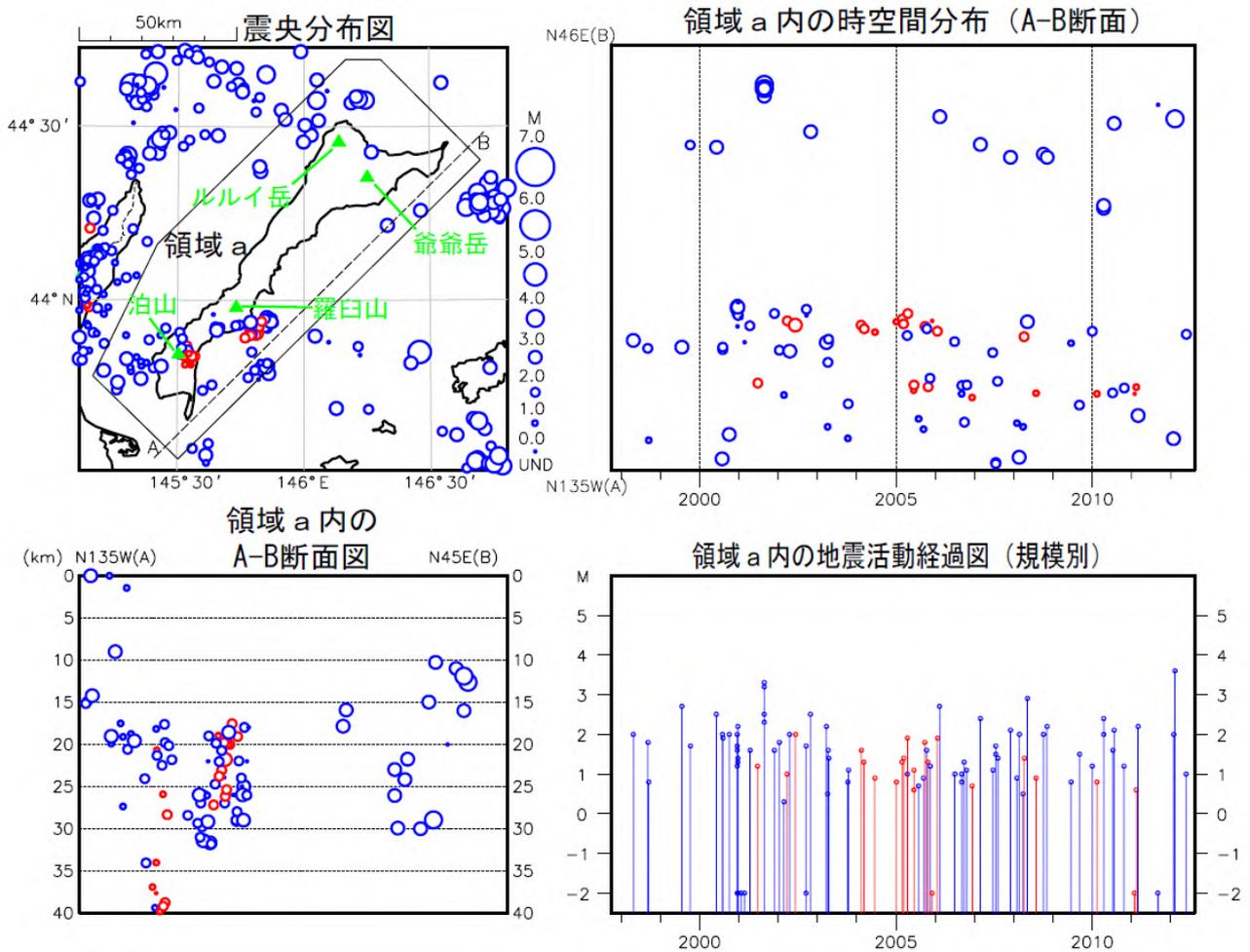


Figure 107-2 Activity of shallow VT earthquakes (blue circles) and deep low-frequency earthquakes (red circles) observed by a regional seismometer network (October 1, 1997, to June 30, 2012). Epicenter distribution (upper left), space-time plot (A-B cross-section) of "a" region (upper right), A-B cross-section of "a" region (lower left) and magnitude-time diagram of "a" region (lower right).

Information on Disaster Prevention

- ① Hazard Map
None

Bibliography

Gorshkov, G. S. (1970) Volcanism and the upper mantle: investigations in the Kurile Island Arc. Plenum Press New York-London, 385p.

(Nakagawa, M.)