

37. Numazawa

Latitude: 37°26'40" N, Longitude: 139°33'58" E, Elevation: 835 m (Maeyama)
(Triangulation Point)



Overview of Numazawa - Photo Taken from the South Side - October, 2003 - Taken by the Japan Meteorological Agency

Summary

Numazawa is a small dacitic caldera volcano located in the west of Fukushima Prefecture, in the mountainous area in the southwest of the Aizu Basin. Numazawako caldera, measuring over 2 km in diameter, is located at its center. The lava domes of Sozan and Maeyama, and a pyroclastic flow plateau, are located around the lake. The volcanic activity of Numazawa began with a plinian eruption approximately 110,000 years ago, followed by stages of plinian eruptions and dacite lava dome formation separated by several tens of thousands of years (Yamamoto, 1995).

Red Relief Image Map

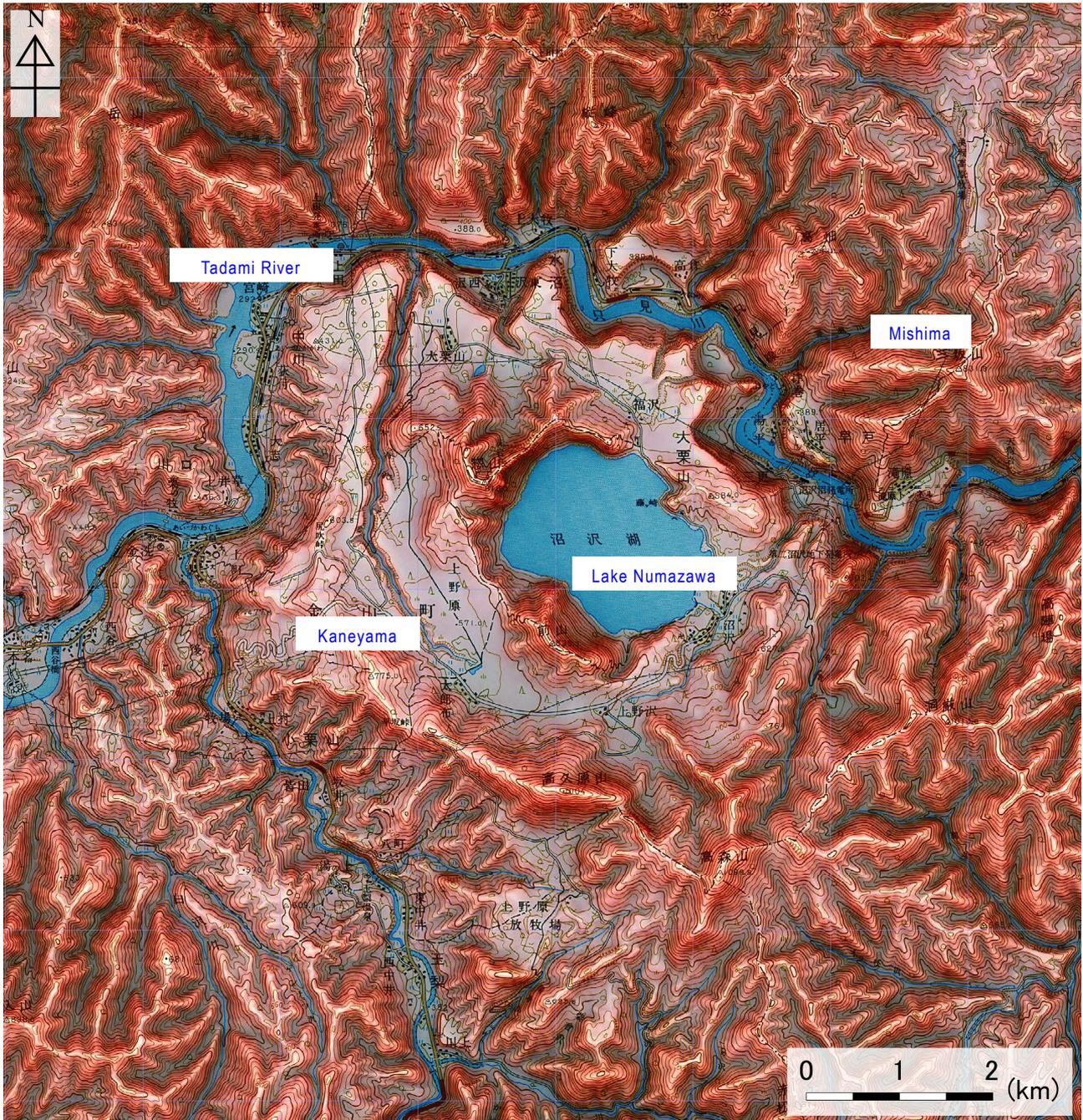


Figure 37-1 Topography of Numazawa.

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

Chronology of Eruptions

▪ Volcanic Activity in the Past 10,000 Years

Approximately 5,000 years ago an eruption ejected several km³ of dacite (and partially andesite) magma, forming the Numazawako caldera. The pyroclastic flow emitted by this eruption had a high degree of fluidity, with a large blast damage area, enabling it to flow over 20km, across several topographical impediments, reaching the Aizu Basin (Yamamoto, 1995).

Period	Area of Activity	Eruption Type	Main Phenomena / Volume of Magma
5.4ka	Numazawako	Magmatic eruption / phreatomagmatic eruption → (lahar)	Numazawako pyroclastic eruption: Pyroclastic flow, tephra fall, pyroclastic surge, lahar.

* 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.

Recent Volcanic Activity

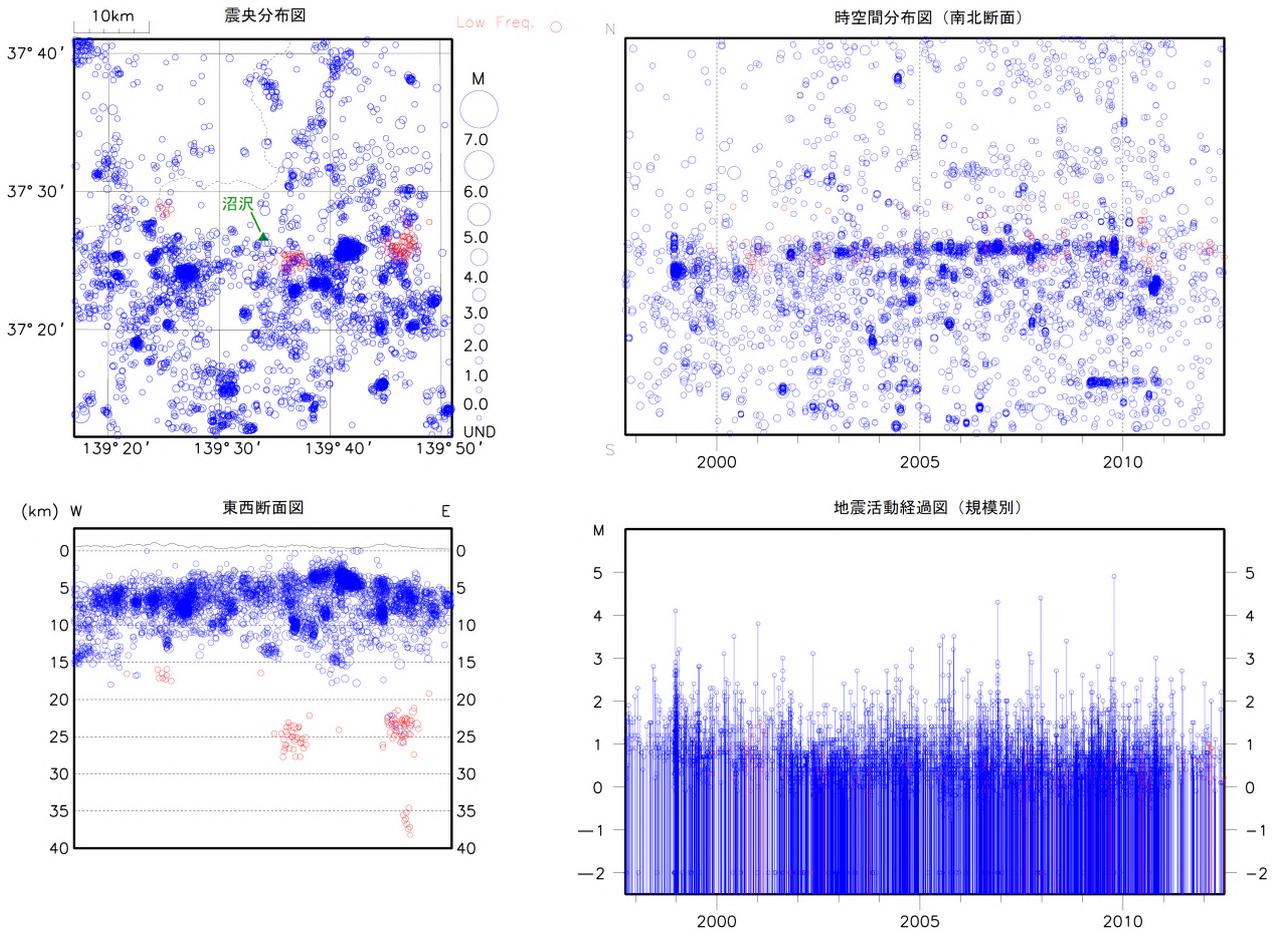


Figure 37-2 Activity of shallow VT earthquakes (blue circles) and deep low-frequency earthquakes (red circles) observed by a regional seismometer network (October 1, 1997, to June 30, 2012). Epicenter distribution (upper left), space-time plot (N-S cross-section) (upper right), E-W cross-section (lower left) and magnitude-time diagram (lower right).

Information on Disaster Prevention

① Hazard Map

None

Social Circumstances

① Populations

Kaneyama Town: 2,633 (as of January 1, 2010)

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

No national or quasi-national parks (Tadamiyanaizu Prefectural Natural Park)

Number of sightseers per year: 73,920 (Numazawa Lake: According to Fukushima Prefecture sightseeing figures (2010))

Number of mountain-climbers per year: Unknown

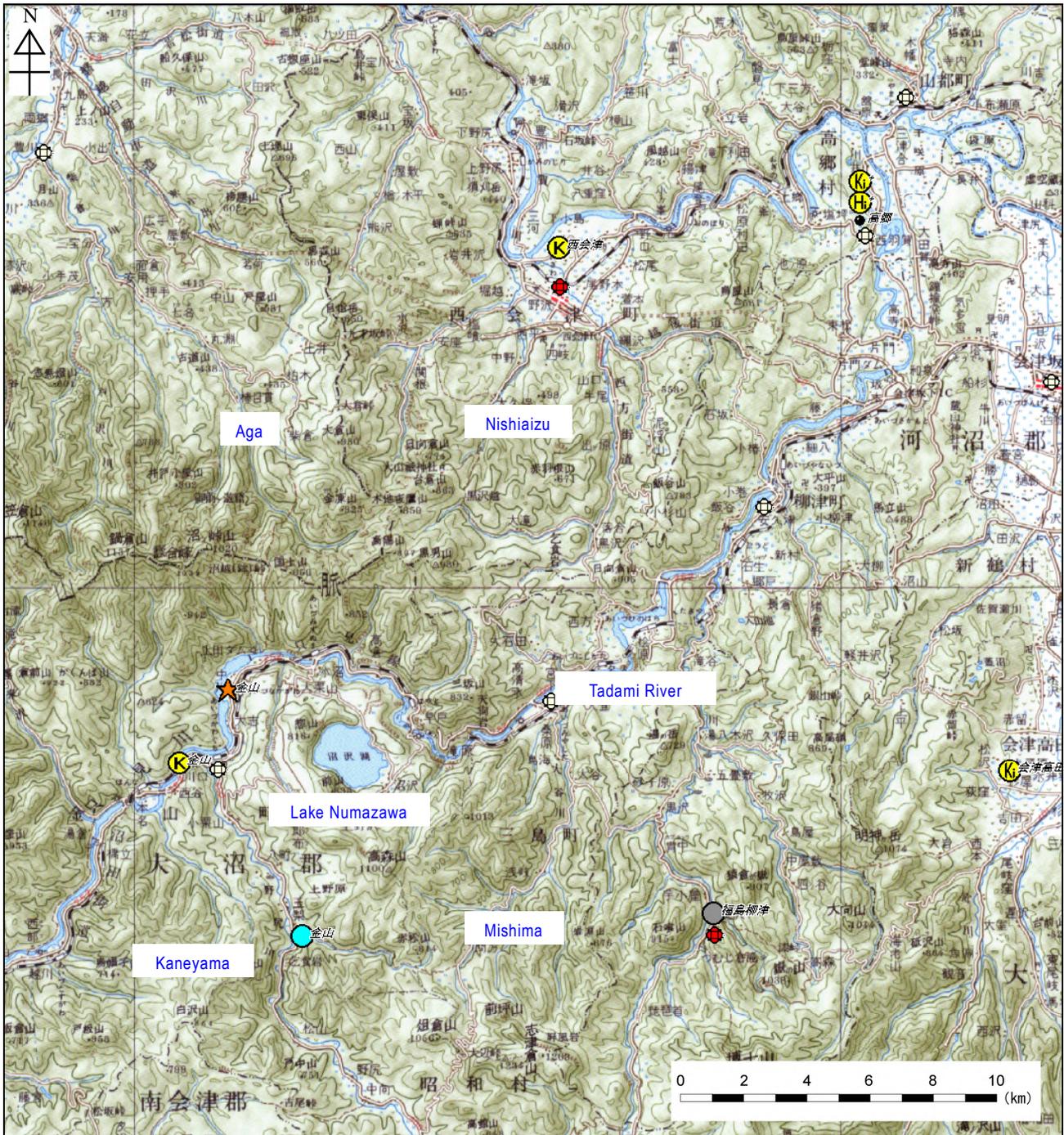
③ Facilities

None

Monitoring Network

Wide Area

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



1:200,000 scale regional map (Niigata) published by the Geospatial Information Authority of Japan was used.

Legend				
(JMA)	(GSI)	(NIED)	(Tohoku Univ.)	(Municipalities)
● seismic intensity meter	★ GPS	⊕ Hi-net	● seismometer(SP)	⊗ seismic intensity meter
● seismometer(SP)		⊙ K-NET		
(For earthquakes and tsunamis)		⊙ KiK-net		

Figure 37-3 Regional monitoring network.

Bibliography

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