

The abrupt changes in water level of the Shin-yu crater lake, Tateyama Caldera since 2014

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1. Tateyama Caldera Sabo Museum

Shin-yu hot spring is a pond that fills the hot water at the bottom of the Tateyama Caldera. It is located about 3.5 km south of Jigoku-dani, the center of the active volcano Midagahara. It is nationally famous as a production area of natural opal Gyokuteki-seki, and it is designated as a national monument in 2013.

This pond is a small crater lake made of phreatic explosion in the fourth stage of Mt. Tateyama volcano. The diameter of the pond is 30 m, the depth of water is 5.6 m, the surface temperature of the surface is 70 °C, and the water temperature at the outlet is the boiling point.

Jigoku-dani has been active in volcanic activity since 2006. Shin-yu suddenly began to cause severe water level fluctuations from early spring 2014. We report the severe water level fluctuation of this pond since 2014.

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