

Mt. Shindake and Mt. Furudake

Kuchinoerabujima, the largest volcanic island of the Satsunan archipelago in southwestern Japan, is formed of several volcanoes, of which Mt. Furudake (649 m) and Mt. Shindake (657 m) remain active.

Volcanic Landscape

The active volcanic landscape of Mt. Furudake and Mt. Shindake features vents, craters, and eruptive fissures. The volcanoes are believed to have formed underwater around 500,000 years ago, and two major eruptions are known to have occurred between 15,000 and 11,000 years ago. More recently the volcanoes have erupted intermittently every few years or decades, with the eruptions of 1933 and 1934 large enough to wipe out the village of Nanakama 1.7 kilometers east of the crater. Most of the magma that erupted onto the surface is andesite lava. A plume, mostly of steam, is always rising. Hot water bubbles up from underground where soil is dug away in such places as Mukaehama Beach (closed after the 2015 eruption) and Nishinoyu and Nemachi hot springs on the north coast of the island. Scuba divers report seeing bubbles emerging from the sea floor, accompanied by noticeably warmer water temperatures.

Lessons from the 2015 Eruption

Mt. Shindake erupted for the first time in 34 years on August 3, 2014, and again on May 29, 2015. The 2015 eruption sent a plume of ash some 9,000 meters into the sky, forcing all islanders and their livestock to evacuate to the neighboring island of Yakushima. Islanders were exhausted from their long period of evacuation lasting nearly half a year, and became disinclined to leave the island if there was another large eruption. An evacuation facility and a heliport have since been constructed in Banyagamine so that islanders will not have to evacuate the island in the future. Evacuation drills are held frequently. At schools, teachers park their cars in a prearranged alignment to evacuate students efficiently in the event of an eruption. The evacuation facility and routes are routinely inspected. Personnel from the Japan Meteorological Agency visit regularly to monitor volcanic activity. A video camera to record activity at the volcano has been installed by the local government office, and devices are installed throughout the island to take measurements that are transmitted to the Fukuoka District Meteorological Observatory for analysis.