

The present state of Miyakejima SO₂ Gas Emissions and its Influence to Local Communities

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We will present an overview on the present state of volcanic gas emissions from Miyakejima volcano, Japan and its influences to the surrounding local communities. Miyakejima volcano has been emitting volcanic gas including poisonous sulfur dioxide from the summit caldera since the eruptions in 2000. The peak value of the SO₂ emissions exceeded 70,000 tons per day in November 2000 and the SO₂ concentrations more than 5ppm were often observed in the residential area in Miyakejima island at that time. This forced all of the 3800 residents to leave the island during September 2000 and February 2005. The SO₂ emissions are gradually decreasing and now they seldom exceed 1,000 tons per day. The concentrations more than 2ppm is observed only 9 times at observation sites in the residential area in 2012. At present, approximately 2800 people live in the island with careful monitoring of their health conditions as well as the observations of environmental SO₂ concentrations.