

Remote measurements of volcanic gas chemistry in the plume of Miyakejima volcano

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Remote measurements of volcanic gas chemistry in the plume of Miyakejima volcano was carried out on 26 December 2000, using Cassegrainian telescope attached FT-IR spectral radiometer. We detected infrared absorption of SO₂ and HCl in the spectrum, which was observed at Northern part of the Miyakejima Island. Molar HCl/SO₂ ratio in the volcanic plume was 6×10^{-2} (temporary result). Since HCl was preferentially absorbed into water mist in the plume, we assume that the original HCl/SO₂ ratio of the volcanic gas was higher than 6×10^{-2} .