Deployment of Small-size X-band MP Radars near Volcanoes in Southern Kyushu and Observation of Eruption Plumes

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Compact X-band dual polarimetric Doppler weather radars (Model: WR-2100 Furuno electric co.) ware installed in August 2017 at six sites near Sakurajima, Kirishima, Satsuma-Iwojima Kuchinoerabujima and Suwanosejima Volcanoes. The X-band radars detected volcanic columns of Shinmoedake eruptions of Kirishima volcano in October 2017 and Minamidake eruptions of Sakurajima volcano since November 2017. We compare between reflectivity images of X-band radars and seismic amplitudes at sites of a volcano.

Keywords: Volcano, Eruption, Radar, X-band, Seismic waveform, Southern Kyushu