

Total magnetic field observation at Kusatsu-shinare volcano

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Kakioka magnetic observatory, JMA, has implemented total magnetic field observation at Kusatsu-shirane volcano for the monitoring of volcanic activities. This observation includes two methods, one with repeated observation since 1976 and the other with continuous observation at three stations since around 1991. Since then, some interesting observation results were obtained such as;

- Changes of total magnetic field differences of increase north of Yugama crater and of decrease south of the crater through 1989 to 1991, which can be interpreted by thermal demagnetization underneath Yugama crater. And this demagnetization area is well correspond to that of volcanic earthquake swarm.

This report discusses observation and analysis result from 2000 to 2006, along with introduction of total magnetic field observation network at Kusatsu-shirane volcano.