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Preliminary report for magnetic property of the pyroclastic deposits of the Tenmei eruption, Asama volcano.

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Magnetic property and mineral chemistry of pyroclastic deposits of the Tenmei eruption of Asama volcano are investigated. Magnetic susceptibility of the pumice fall deposits erupted during climatic phase of the eruption are slightly lower than those erupted during initial phase. IRM aquisition and thermal demagnetization of 3-axes IRMs experiments for the both deposits indicate that titanomagnetite is the most abundant magnetic carrier. According to EPMA analyses, opaque minerals included in these deposits are titanomagnetite with about 35% ulvospinel molecule and titanohematite with about 80% ilmenite molecule. A Correlationship between magnetic properties of pyroclastic deposits and eruptive/emplacement style will be discussed in this presentation.

Keywords: Asama volcano, Tenmei eruption, magnetic property, IRM, magnetic susceptibility, rock magnetics