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Magnetic property of the Oshima 1986 lava based on mapping of the coercivity - blocking temperature diagram

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Magnetic properties depend strongly on composition, size and shape. Dunlop and West (1969), they carried out mapping of grain size vs coercivity using pTRM. The problem is that their mapping cannot be applied to the natural rocks including PSD and/or MD grains as well as SD grains, since the grain size data are based on the single domain theory. In addition, thermal alteration due to the laboratory heating cannot be checked in their experiment. In the present study, we use ARM and combine thermal demagnetization and alternating field demagnetization to make ARM spectra against blocking temperature (Tb) and coercivity (Hc). This mapping is applied to Oshima basaltic lavas extruded in 1986. We will report Hc-Tb maps and discuss those characteristic features.