本州北部の笹岡層（鮮新-更新統）の古地磁気と岩石磁気：その地質学的意味

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Paleomagnetic and rock magnetic results from Plio-Pleistocene Sasaoka Formation in northern Honshu: geologic implications

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Felsic tuffs and fine clastic sediments of the Plio-Pleistocene Sasaoka Formation in northern Honshu were sampled for a paleomagnetic and rock magnetic study. Site-mean remanent magnetization directions were determined for 23 sites, which cover an interval from ca. 2.7 Ma to 1.7 Ma on the basis of correlation of the magnetostratigraphy with the standard geomagnetic chronostratigraphy. Recognizable tuffs mostly have stable remanent magnetization carried by magnetite. Despite the possible presence of magnetic iron-sulfides in fine sandstones, pre-folding remanent magnetization is confirmed by a bootstrap fold test and reversals test. The study area is located within a concentrated deformation zone that has developed along the eastern margin of the Japan Sea within a Quaternary compressional stress field, but a northerly overall mean direction is indistinguishable from the geocentric axial dipole field direction, suggesting no significant vertical-axis rotation. Comparison of the Sasaoka mean direction with Plio-Pleistocene ones reported from other areas indicates little or no rotation in and adjacent to the deformation zone, except for local rotations along strike-slip faults.