

## A geomagnetic excursion found at around 2.3Ma from a marine sequence in the southernmost part of the Boso Peninsula

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The Chikura Group is distributed in the southernmost part of Boso Peninsula corresponding to the lower Pleistocene and the upper Pliocene. Since those intensities of magnetization are quite strong and stable, reliable paleomagnetic records can be obtained in the Chikura Group. We conducted a paleomagnetic study on the middle part of the Chikura group to recover a reliable record of geomagnetic excursions and/or short polarity events such as the period of the sub-normal polarity Reunion, during the Matuyama reversed polarity chron.

After detailed route map and a geologic column section were made for this study, we took 107 mini-cores for paleomagnetic measurements from 46 sites along the studied route.

As the results of thermomagnetic analysis, major magnetic carrier was estimated to be magnetite. The result of AMS (Anisotropy of magnetic susceptibility) measurements showed that the grains of those specimens were slightly rotated by the influence of a fold whose axis is just beside on the sampling route. But we decided to leave this result out of consideration, because this angle of rotation does not have much influence on identification for polarity events and excursions.

As the result of Paleomagnetic studies, VGP (Virtual Geomagnetic Pole) latitude indicated an excursion at the bottom part of the studied section.

According to an age model created in this study section, the excursion is calculate to have a duration for 8000 years centered at around 2.31Ma. There are no polarity reversal and excursion observed above that at this section.

Keywords: paleomagnetism, Reunion, excursion, Boso Peninsula