Geomagnetic reversals occurred during the last 4.5 million years recorded on the Plio-Pleistocene marine successions distributed in the Boso Peninsula and its surrounding region, central Japan

\*Makoto Okada<sup>1</sup>

1. Department of Earth Sciences, College of Science, Ibaraki University

In the Boso Peninsula and its surrounding region, well studied Plio-Pleistocene marine successions are distributed. In this talk, I will review the past and some on-going studies for the magnetostratigraphy of those successions, mainly focusing on the records of the geomagnetic reversals that occurred during the last 4.5 million years.

Niitsuma (1976) has established the magnetostratigraphy of the Plio-Pleistocene marine succession in the Boso Peninsula, which has provided a framework for later studies. A high-resolution paleomagnetic record for the Matuyama-Brunhes boundary, which is from the upper part of the Kazusa Group distributed in the middle part of the Boso Peninsula, has been well documented in recent years (e.g., Simon et al., 2019; Okada et al., 2017). In the middle part of the Kazusa Group, geomagnetic reversal records at both of the top and bottom boundaries of the Jaramillo subchronozone were reported using an on-land boring core (Tsuji et al., 2005). A continuous paleomagnetic record for the upper Olduvai boundary was taken using an on-land boring core from the Kazusa Group distributed in the Yokohama City (Kusu et al., 2016). In the Chikura Group distributed in the southernmost part of the Boso Peninsula, paleomagnetic records for the lower Olduvai boundary and the upper and lower boundaries of the Réunion subchronozone (Konishi and Okada, in review), and for the Gauss-Matuyama boundary, the upper and lower boundaries of the Kaena subchronozone (Okada et al., 2012) have been reported. In the uppermost part of the Awa Group distributed in the southern middle part of the Boso Peninsula, a paleomagnetic record was published (Haneda and Okada, 2019). That record includes the upper and lower boundaries of the Mammoth subchronozone, the Gilbert-Gauss boundary, the upper and lower boundaries of the Cochiti subchronozone, and the upper boundary of the Nunivak subchronozone.

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