

Geomagnetic excursion and abrupt sea level change

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Are there any geomagnetic excursion corresponding to the last deglaciation? Gothenburg magnetic flip at 12.4 ka was reported from Sweden by Moerner et al. (1971), however, it was rejected by the later study. Another excursion record was also reported from Lake Erie at 14 ka by Creer et al. (1976), but it was also rejected. Geomagnetic excursion records of 14 ka were reported from four trench sites at Beijing, China by Zhu et al. (1998). Oda et al. (2002) and Zhenxia et al. (2001) reported possible geomagnetic excursions at 14 and 15-14.3 ka from Okinawa Trough. These evidence may suggest an existence of geomagnetic excursion at 14 ka around Beijing - Okinawa Trough area. This may be associated with the differential rotation at the core-mantle boundary induced by the high rate of sea level rise at the termination of last glacial period.