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Paleomagnetic records of Iceland Basin Excursion from Lake Baikal: Detailed morphology of VGP paths and relative paleointensity

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Lake Baikal is situated in the central part of the Eurasian continent and the sediments deposited serve as a valuable archive of paleoenvironment. Several paleomagnetic records were reported from the Lake including geomagnetic excursions. In this study, we report a high resolution paleomagnetic record of Iceland Basin excursion for a sediment core (Ver96-2, St.7) taken from Academician Ridge, Lake Baikal. The record is combined with the other records of Iceland Basin excursion previously reported from Lake Baikal. These include Ver98-1, St.6 (Oda et al., 2002) and CON01-603-2 (Demory et al., 2005) from Academician Ridge and BDP93-2 (Kravchinsky et al., 2007) from Selenga Delta. VGP paths of the records from these sediment cores agree well with each other. In addition, relative paleointensity records will be compared with each other and evolution of geomagnetic field during Iceland Basin excursion will be investigated in the context of global feature. Finally, age model will be investigated based on paleomagnetic records itself and climate proxies (rock magnetic properties, X-ray CT values etc.). Although the record of Iceland Basin excursion by Oda et al. (2002) was excluded from the compilation by Lanci et al. (2008), the combined analysis will make it possible to contribute to the modelling of Iceland Basin excursion in the future.