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Paleomagnetic study on Holocene sediments from Upper Toporowy Lake in Tatra Mts, Poland

Hakan Ucar[1,2], Gunther Kletetschka[1,2,3], Daniel Vondrak[1], and Eva Svecova[1]
[1]Faculty of Science, Charles University, Prague, Czech Republic (ucarh@natur.cuni.cz)
[2]Institute of Geology, The Czech Academy of Sciences, Prague, Czech Republic
[3]Geophysical Institute, University of Alaska Fairbanks, AK, USA

Here we present paleomagnetic investigations on sediments from Upper Toporowy Lake (local name: Toporowy Staw Wyżni), an infilled lake located on the Polish side of the Tatra Mountains. The sampling was done using a peat corer. A total of 49 paleomagnetic samples were acquired in two parallel sediment cores (~50 cm each). Characteristic remanent magnetizations of the samples from the first core have shallower inclinations while the second have values near the expected geocentric axial dipole model. We note correlation of our inclination data with published records from Southern Europe records of an Early Holocene age sediment. Since a Holocene paleomagnetic master curve is absent for Central Europe, the data of this study represent a first step in constructing a master curve that will contribute to global magnetic models and dating of sediments.

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