PETROPHYSICAL CHARACTERISTIC OF NEUSCHWANSTEIN EL-6 CHONDRITE.

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Neuschwanstein meteorite (EL-6) fall occurred on April 6, 2002. Total three meteorite bodies were discovered. Our fragments come from a 1750g body found on July 14, 2002.

Physical properties of Neuschwanstein meteorite were examined using standard petrophysical methods in Solid Earth Geophysics Laboratory, University of Helsinki. First fragment with fusion crust on one side present come from edge part of meteorite body, while the second fragment consists entirely of interior material. Basic petrophysical parameters (density, magnetic susceptibility, NRM, Q-value, magnetic hysteresis parameters) reflect the EL chondrite range determined by meteorite petrophysics database developed by Terho et al.

Neuschwanstein shows quite high anisotropy of susceptibility $(\chi_{max} / \chi_{min} = 1.3 \text{ to } 1.4)$. Hysteresis parameters points on low coercivity in Neuschwanstein samples. Comparison of the magnetic record of edge and interior fragments shows a definite influence of atmospheric heating on magnetic properties of the edge samples which may reflects possible terrestrial remagnetization or contamination. The Neuschwanstein meteorite will be subject of future more detailed studies.