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Erg Chech 002 and the (Trachy-) Andesite Meteorite Clan: Compilation of Magnetic Susceptibility Data

V.H. Hoffmann¹, K. Wimmer², P. Schmitt-Kopplin³,
M. Kaliwoda^{1,4}, W. Schmahl^{1,4}. ¹Faculty of Geosciences, Univ. Munich; ²Nördlingen; ³Helmholtz-Center, Munich; ⁴Mineralogical State Collection Munich, SNSB, Germany.

Erg Chech 002 is the newest find of a unique clan of achondrites with a (trachy-) andesitic composition. As a first step of investigating the magnetic signature and record of these meteorites we have started to compile the magnetic susceptibility (MS) which is a measure of the concentration of ferri(o)magnetic and Fe-bearing paramagnetic mineral phases. We also compared the obtained MS data with typical terrestrial equivalents. We found the following preliminary MS values (pilot study) (average Log MS in [10⁻⁹ m³/kg] (no of samples):

Erg Chech 002 (3)	3,06 – 3,28
NWA 11119 (3)	2,35 – 2,40
NWA 7325/8409 (2)	2,17 – 2,19
AS MS-MU 011/035 (6)	2,97 – 3,66
Terrestrial acidic rocks	1,10 – 4,50

[1] Meteoritical Bulletin Database (10/2021): Erg Chech 002. [2] Barrat J.A., et al., 2021. PNAS 118/11. [3] Mikouchi T., Zolensky M.F., 2021. LPSC, #2457. [4] Nicklas R.W., et al., 2021. LPSC, #1074. [5] Carpenter P.K., et al., 2021. LPSC, #2205.

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