On the absolute paleointensities during the Brunhes Chron

Hidefumi Tanaka[1]

[1] Education, Kochi Univ

Absolute paleointensities from volcanic rocks during the Brunhes Chron were retrieved from Pint03 database with selection criteria; (1) the age should be either radiometric or well confined estimated age, (2) the data should be from the Thellier's method with pTRM checks or the Shaw method with double heating methodology, (3) the minimum number of samples per flow is 2, and (4) the maximum standard deviation of the flow mean is 25%. For 522 data remained plus ten new data since 2003, mean and standard deviation for three periods of 0-0.1, 0.1-0.4, and 0.4-0.8 Ma are 7.7+/-3.0 (N=295), 8.7+/-2.7 (N=156), and 6.8+/-2.2 (N=81), respectively (10°22 Am°2). Although this might indicate smaller paleointensities during the lower half of the Brunhes Chron, the difference becomes less conspicuous when those associated with excursions or unknown inclinations are eliminated. Temporal variation comparable to those of relative paleointensity is still too early to delineate except for the last 0.1 m.y. Nevertheless, there were possible maxima of the global paleointensity around 0.7 and 0.35 Ma with following gradual decrease.