

NEW ARCHEOINTENSITY RESULTS ON A BAKED-CLAY TILES COLLECTION FROM NEW JERUSALEM MONASTERY

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References

- Biggin A.J., Peterson G.A., A new set of qualitative criteria to aid inferences on palaeomagnetic dipole moment variations through geological time, *Earth science*, 2014, vol. 2, art. 24. doi: 10.3389/feart.2014.00024
- Brown M.C., Donadini F., Korte M., Nilsson A., Korhonen K., Lodge A., Lengyel S.N. and Constable C.G., GEOMAGIA50.v3: 1. General structure and modifications to the archeological and volcanic database, *Earth Planets Space*, 2015, vol. 67, pp. 1-31, doi: 10.1186/s40623-015-0232-0.
- Burlatskaya S.P., Change in geomagnetic field intensity in the last 8500 years, according to global archeomagnetic data, *Geomagn. Aeron., Engl. Transl.*, 1970, no. 10, pp. 544-548.
- Burlatskaya S.P., Nachasova I.E., Didenko E.J. and Shelestun N.K., Archeomagnetic determinations of geomagnetic field elements of the USSR Academy of Sciences, *Soviet Geophysical Committee of the USSR Academy of Sciences*, 1986, pp.168.
- Coe R.S., Paleointensities of the Earth's magnetic field determined from tertiary and quaternary rocks. *J. Geophys. Res.*, 1967, vol. 72, pp. 3247-3262.
- Constable C. and Korte M., Is Earth's magnetic field reversing? *Earth Planet. Sci. Lett.*, 2006, vol. 246, pp. 1-6.
- Donadini F., Kovacheva M., Kostadinova M., Casas L., and Pesonen L.J., New archaeointensity results from Scandinavia and Bulgaria Rock-magnetic studies inference and geophysical application, *Phys. Earth Planet. Inter.*, 2007, vol. 165, pp. 229-247.
- Finlay C.C., Historical variation of the geomagnetic axial dipole, *Phys. Earth Planet. Inter.*, 2008, vol. 170, pp. 1-14.
- Gallet Y., Le Goff M., High-temperature archaeointensity measurements from Mesopotamia, *Earth and Planetary Science Letters*, 2006, vol. 241, pp. 159-173.
- Genevey A., Gallet Y., Constable C.G., Korte M., Hulot G., ArcheoInt: An upgraded compilation of geomagnetic field intensity data for the past ten millennia and its application to the recovery of the past dipole moment, *Geochemistry, Geophysics, Geosystems*, 2008, vol. 9, no. 4, pp. 1-23.
- Genevey A., Gallet Y., Rosen J., and Le Goff M., Evidence for rapid geomagnetic field intensity variations in Western Europe over the past 800 years from new French archaeointensity data, *Earth Planet. Sci. Lett.*, 2009, vol. 284, pp. 132-143.
- Genevey A., Gallet Y., Thébault E., Jesset S., and Le Goff M., Geomagnetic field intensity variations in Western Europe over the past millennium, *Geochemistry, Geophysics, Geosystems*, 2013, vol. 14, no. 8, pp. 2858-2872.
- Le Goff M., Gallet Y., A new three-axis vibrating sample magnetometer for continuous high-temperature magnetization measurements: applications to paleo- and archeo-intensity determinations. *Earth Planet. Sci. Lett.*, 2004, vol. 229, pp. 31-43.
- Gubbins D., Jones A.L., and Finlay C.C., Fall in Earth's Magnetic Field Is Erratic, *Science*, 2006, vol. 312, pp. 900-902.
- Hartmann G., Genevey A., Gallet Y., Trindade R., Etchevarne C., Le Goff M., Afonso M.C., Archeointensity in Northeast Brazil over the past five centuries, *Earth and Planetary Science Letters*, 2010, vol. 296, pp. 340-352.
- Jackson A., Jonkers A., and Walker M., Four centuries of geomagnetic secular variation from historical records, *Philos. Trans. R. Soc. Lond. Ser. A*, 2000, vol. 358, pp. 957-990.
- Kovacheva M., Boyadziev Y., Kostadinova-Avramova M., Jordanova N., Donadini F., Updated archeomagnetic data set of the past eight millenia from the Sofia laboratory, Bulgaria, *Geochem. Geophys. Geosyst.*, 2009, vol. 10, pp. 1-6. Q05002, doi: 10.1029/2008GC002347.

- Korte M., Constable C., Donadini F., Holme R. Reconstructing the Holocene geomagnetic field, *Earth and Planetary Science Letters*, 2011, vol. 312, pp. 497-505.
- Nachasova Y.E., Magnetic field in the Moscow area from 1480 to 1840, *Geomagn. Aeron., Engl. Transl.*, 1972, no. 12, pp. 277-280.
- Pesonen L.J., Leino M.A.H., Nevanlinna H., Archaeomagnetic intensity in Finland during the last 6400 years: Evidence for a latitude-dependent nondipole field at approximately AD 500, *J. Geomagn. Geoelectr.*, 1995, vol. 47, pp. 19-40.
- Thellier E., and Thellier O., Sur l'intensité du champ magnétique terrestre dans le passé historique et géologique, *Ann. Geophys.*, 1959, vol. 15, pp. 285-378.