

ON THE USE OF MAGNETIC INDICES FOR GEOPHYSICS STUDIES

AMORY-MAZAUDIER CHRISTINE

Laboratoire de Physique des Plasmas, Centre National de la Recherche Scientifique, Université Pierre et Marie Curie, 4 avenue de Neptune 94107 Saint-Maur-des-Fossés, France

e-mail : christine.amory@lpp.polytechnique.fr

The Earth's magnetic field is known since more than 2 millenaries and currently recorded at ground level in magnetic observatories since more than one century and a half.

Since more than 7 decades, pioneers in magnetic indices as Bartels, Mayaud and Sugiura proposed to use magnetic indices in order to qualify and quantify variations of the Earth's magnetic field observed in various latitude and longitude sectors.

In this paper we proposed to review the current use of several magnetic indices in external geophysics studies concerning the regular ionospheric dynamo, the prompt penetration of magnetospheric electric field convection or the ionospheric disturbance dynamo etc...

Magnetic indices, electric currents in the earth's environment

Christine Amory-Mazaudier, LPP/CBRS/UPMC,
4 avenue de Neptune, 94107 Saint-Maur-des-Fossés, FRANCE,
Christine.amory@lpp.polytechnique.fr