Geophysical Research Abstracts,
Vol. 10, EGU2008-A-09882, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-09882
EGU General Assembly 2008

Spectral analysis of the World Digital Magnetic Anomaly Map

A. Chambodut (1), M. Hamoudi (2), **E. Thebault** (2) and V. Lesur (3)

(1) EOST/CNRS, 5 Rue Rene Descartes, F67084 Strasbourg France, (2) IPGP/CNRS, 4 place Jussieu, 75252 Paris Cedex 05 France, (3) GFZ, Haus F 14473, Telegrafenberg Potsdam Germany

Several candidate grids of different resolutions were used to derive the final grid of the World Digital Magnetic Anomaly Map (WDMAM) project. The original data and grids used for the WDMAM were also of heterogeneous qualities and resolutions. Due to the lack of information on the raw data, the consistency and the resolution of the final magnetic anomaly grid is difficult to assess. In this paper, we study the global magnetic spectrum of the final WDMAM grid. The results are compared to local wavelet spectral analysis in order to find out the effective spectral content of the WDMAM. This extra information will be necessary for robust geological interpretations (source depths, Curie isotherm determination,...) based on the WDMAM grid.