



Reduction of country wide aeromagnetic surveys for temporal variation

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Normal procedure to reduce magnetic total field measurements at Nordic Geological Surveys is similar as given in a formula of the GTK since 1972 (Korhonen 2005). The method has been successfully applied to multinational magnetic compilation projects, like Magnetic Anomaly map of the Fennoscandian Shield (Korhonen 2002).

Reduction formulas for magnetic temporal variation, applied by one base station, can be used to tie surveys together with an accuracy of 5 per cent, provided that secular variation is defined by geomagnetic observatory network of density 1 observatory/1,000,000 sq km. Further reduction of temporal, lateral regional changes can be done either by a base station network during survey or a long tie line survey afterwards.

References:

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