

## Anomalies in long-term geomagnetic secular change derived from continuous and repeated survey data

# Ken'ichi Yamazaki[1]; Naoto Oshiman[2]

[1] Science., Kyoto Univ; [2] DPRI, Kyoto Univ.

Regional geomagnetic field changes and their anomalous distribution in Japan during 1965-2003 are estimated based on data from magnetic observatories and repeated survey results. In order to compensate the insufficiency of continuous site distribution, smoothness constraints for temporal changes are imposed to determine model parameters. Local geomagnetic secular change rate at 107 points are obtained, and the results were compared with Curie point depth estimation. Correlation between them strongly suggests the origin of anomalous secular changes lies in the upper crust.