

## Conversion Tool from Geomagnetic Field Model to KML File

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Google Earth produced by Google is a powerful tool for our geoscience community, which enables us to visualize various geoscience data at the same time on a virtual 3-D globe. This simultaneous visualization is possible to give a new insight into the structure and/or activities of the Earth's interior. In order to browse target data on Google Earth, a conversion process from the data to a KML format, which is based on the XML description, is needed, so that a useful conversion tool is expected to be available for everyone.

The data center of IFREE/JAMSTEC adopts Google Earth as a common browser for geoscience data, and has been promoting a project to develop the conversion tools that enables us to obtain KML files from various types of geoscience data such as seismic tomography data and geochemical data (see Yamagishi *et al.*, J161 in this meeting). This conversion tool is now available as a web application software via Pacific 21 website <http://www.jamstec.go.jp/pacific21/TMGonGE/top.html>. As a part of this project, we started to develop a Java-based conversion tool for a geomagnetic field model given in spherical harmonic components. Users can control parameters, through a GUI, such as degrees to be input, a spacing of grids for output, and a color bar for display on Google Earth. It is possible to compare geomagnetic field models released from each institute by using this conversion tool, so that our tool plays an important role when a new geomagnetic field model is constructed. We show, in the presentation, examples of KML conversion such as the cases of the main field model (e.g., IGRF/DGRF) and the geomagnetic field model of the Earth's crust origin (e.g., NGDC-720).