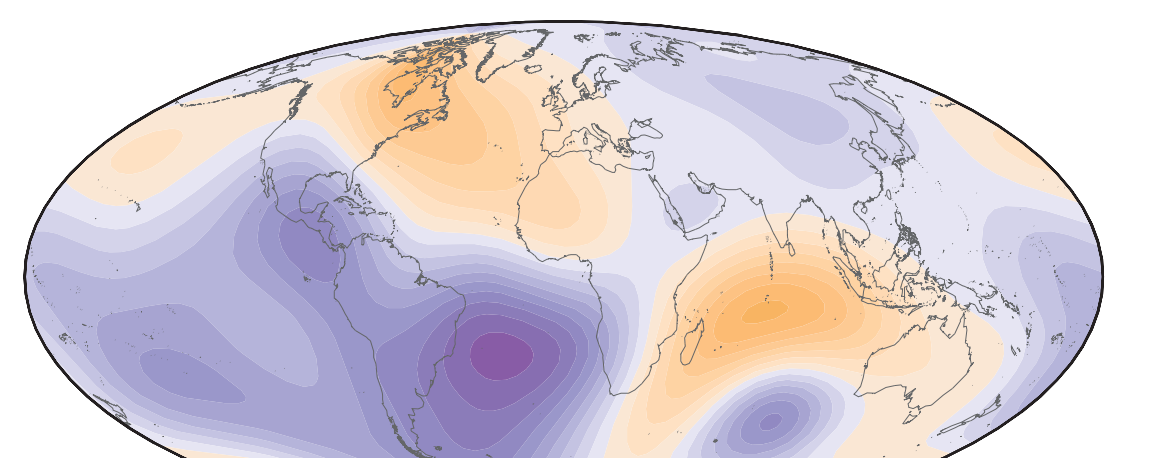
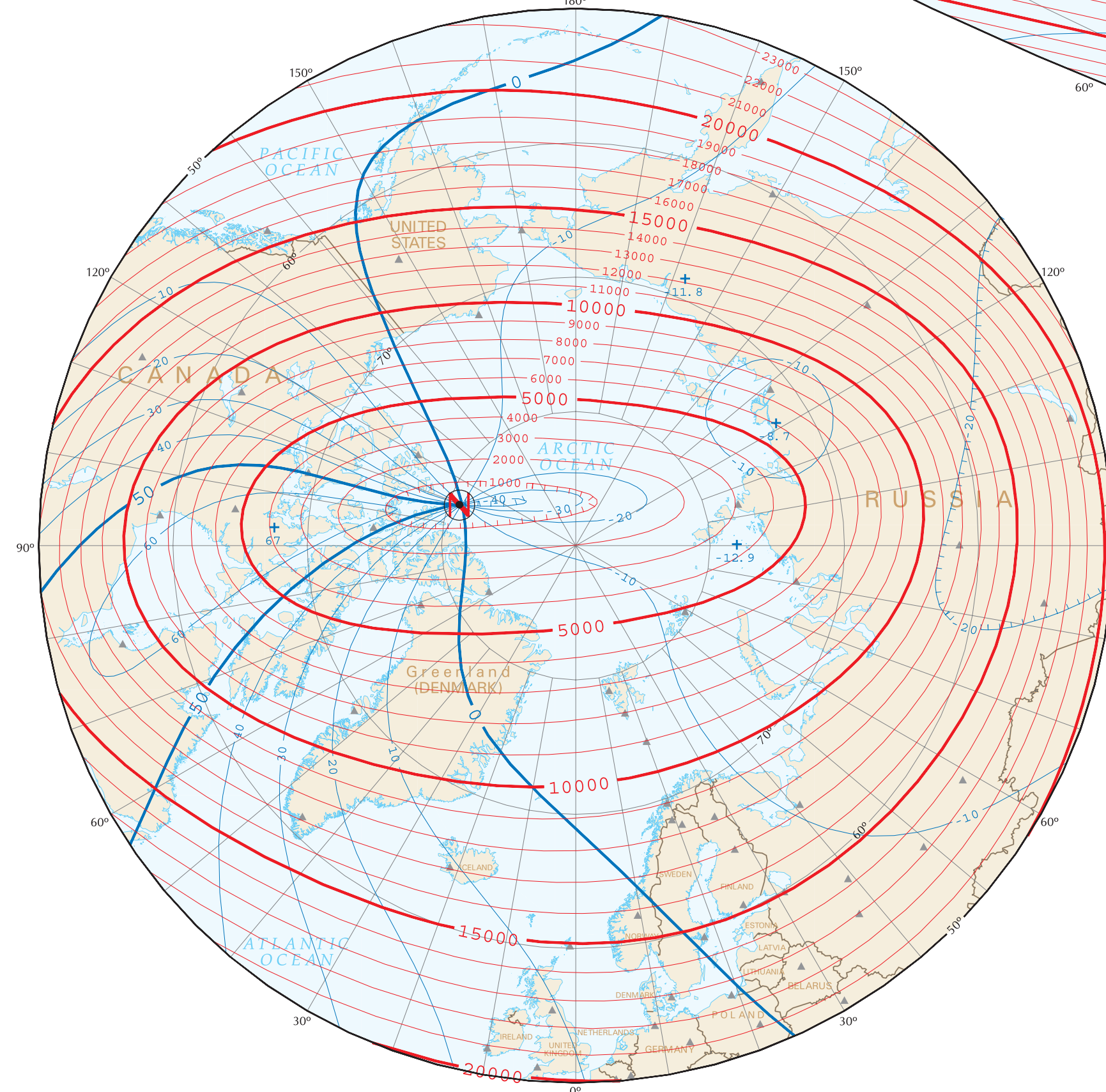
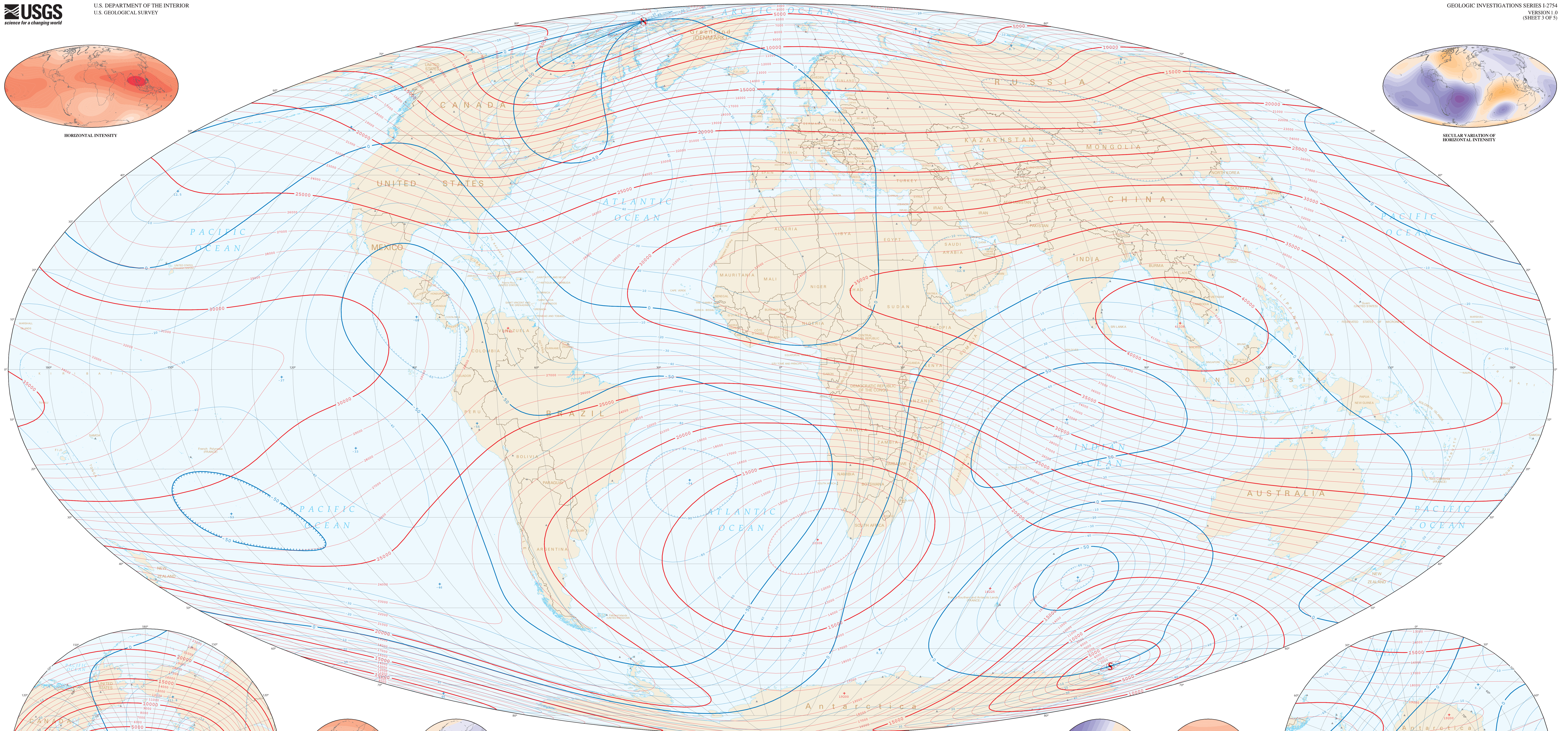


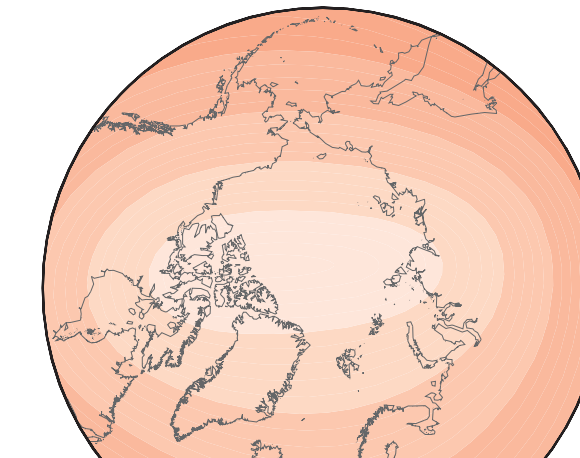
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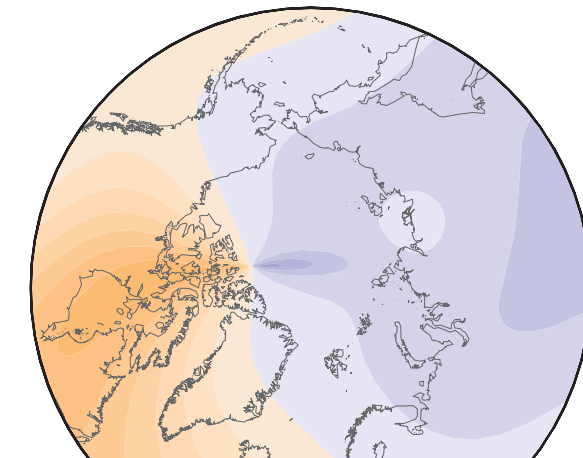
SECULAR VARIATION OF HORIZONTAL INTENSITY



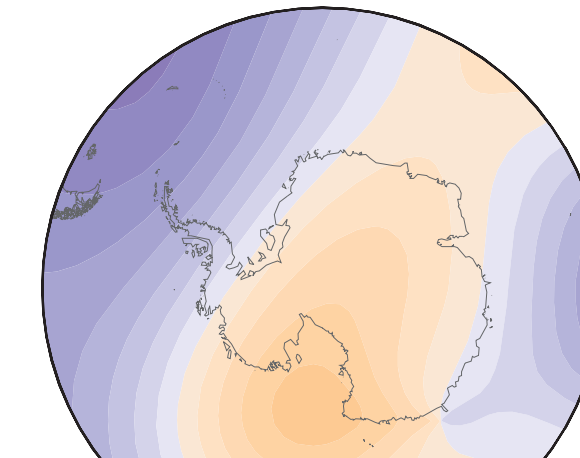
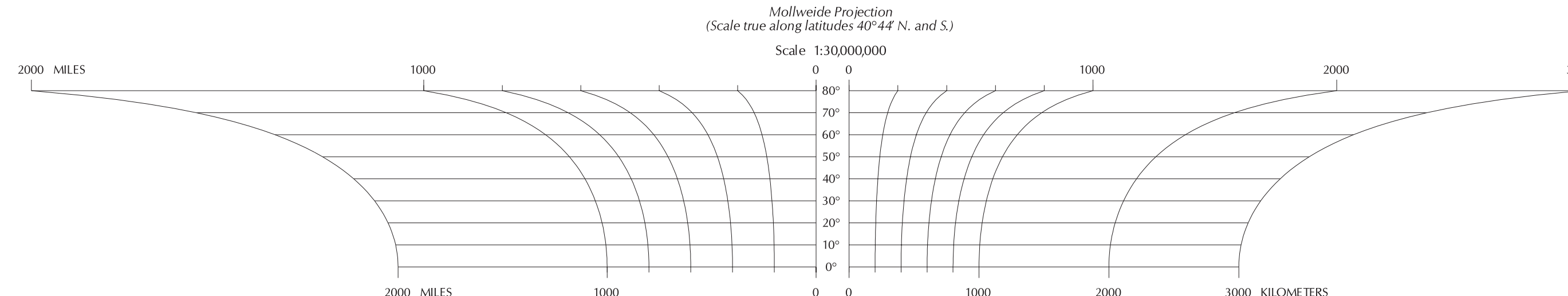
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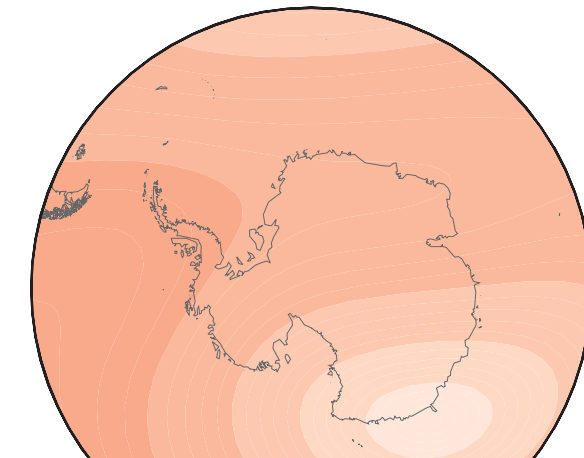
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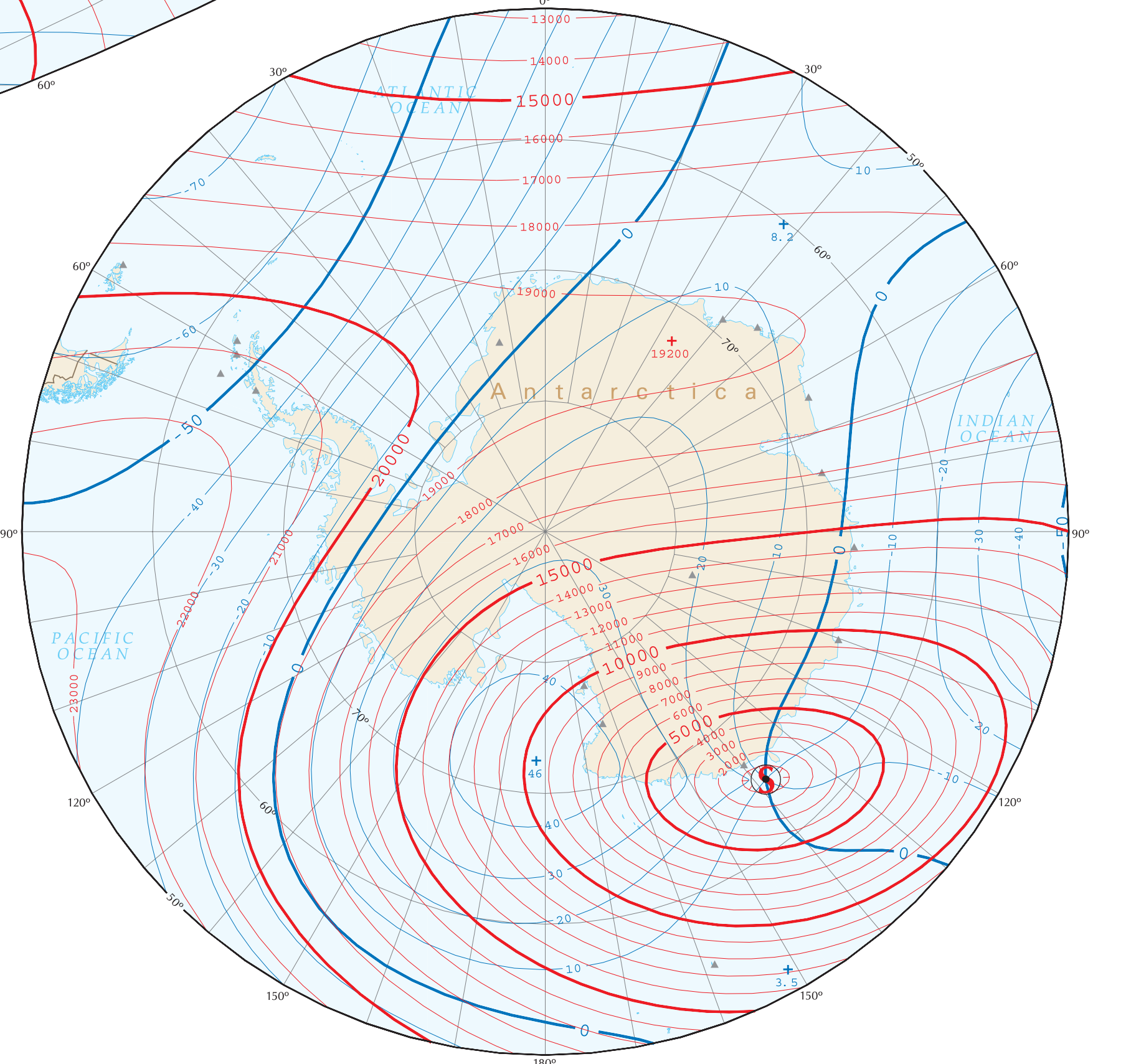
SECULAR VARIATION OF HORIZONTAL INTENSITY



SECULAR VARIATION OF HORIZONTAL INTENSITY



HORIZONTAL INTENSITY



HORIZONTAL INTENSITY

EXPLANATION

Horizontal Intensity

- Contours of horizontal intensity expressed in nanoteslas.
- The horizontal component is the projection of the geomagnetic field vector onto the tangent plane attached to a point on the Earth's surface. The horizontal intensity is the field strength (magnitude) of the horizontal component and is always positive. Hatchures point in direction of decreasing values.
- Point value of horizontal intensity expressed in nanoteslas. Point values enclosed by a single contour are local maxima or minima.

Secular Variation of Horizontal Intensity

- Contours of the estimated rate of change of horizontal intensity (secular variation) expressed in nanoteslas per year. To apply change, add algebraically. Hatchures point in direction of decreasing values.
- Point value of the estimated rate of change of horizontal intensity (secular variation) expressed in nanoteslas per year. To apply change, add algebraically. Point values enclosed by a single contour are local maxima or minima.

North and south magnetic poles. Magnetic poles are defined as the locations at which the horizontal magnetic intensity, computed from the degree and order ten spherical harmonic, International Geomagnetic Reference Field 2000 model, is effectively zero at 2000 CE.

Geomagnetic observatory recording data since 1990

HORIZONTAL INTENSITY CHART THE INTERNATIONAL GEOMAGNETIC REFERENCE FIELD, 2000

By Kenneth S. Rukstales and John M. Quinn

2001

DISCUSSION

This is one of five world charts showing the declination, inclination, horizontal intensity, vertical component, and total intensity of the Earth's magnetic field at mean sea level at the beginning of 2000. The charts are based on the International Geomagnetic Reference Field (IGRF) main model for 2000 and secular change model for 2000-2010. The IGRF is referenced to the World Geodetic System 1984 ellipsoid. Additional information about the USGS geomagnetic program is available at <http://geomag.usgs.gov/>. This and other USGS publications are available on-line at <http://geology.cr.usgs.gov/>.

ACKNOWLEDGMENTS

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