



DECLINATION
Contours of declination expressed in degrees. Declination is the horizontal angle between true north and the direction in which a magnetic compass points. It is considered positive or negative depending upon whether the end of a balanced compass needle points east or west of true north, respectively. Hatchures point in direction of decreasing values.

SECULAR VARIATION OF DECLINATION
Contours of the estimated rate of change of declination (secular variation) expressed in minutes of arc per year. To apply change, add algebraically. Hatchures point in direction of decreasing values.

EXPLANATION

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DECLINATION CHART THE INTERNATIONAL GEOMAGNETIC REFERENCE FIELD, 2005

By
Kenneth S. Rukstales and Jeffrey J. Love
2007

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 2005. The charts are based on the International Geomagnetic Reference Field (IGRF) main model for 2005 and secular change model for 2005-2010. The IGRF is referenced to the World Geodetic System 1984 ellipsoid. Additional information about the USGS geomagnetism program is available at: <http://geomag.usgs.gov/>.

ACKNOWLEDGMENTS
The IGRF is produced by the International Association of Geomagnetism and Aeronomy (IAGA) Division V, Working Group V-8. Analysis of the Global and Regional Geomagnetic Field and Its Secular Variation. Production of the IGRF depends on the worldwide efforts of the magnetic field modelers and the staff of magnetic observatory programs and satellite programs which produce the data from which the models are derived.

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