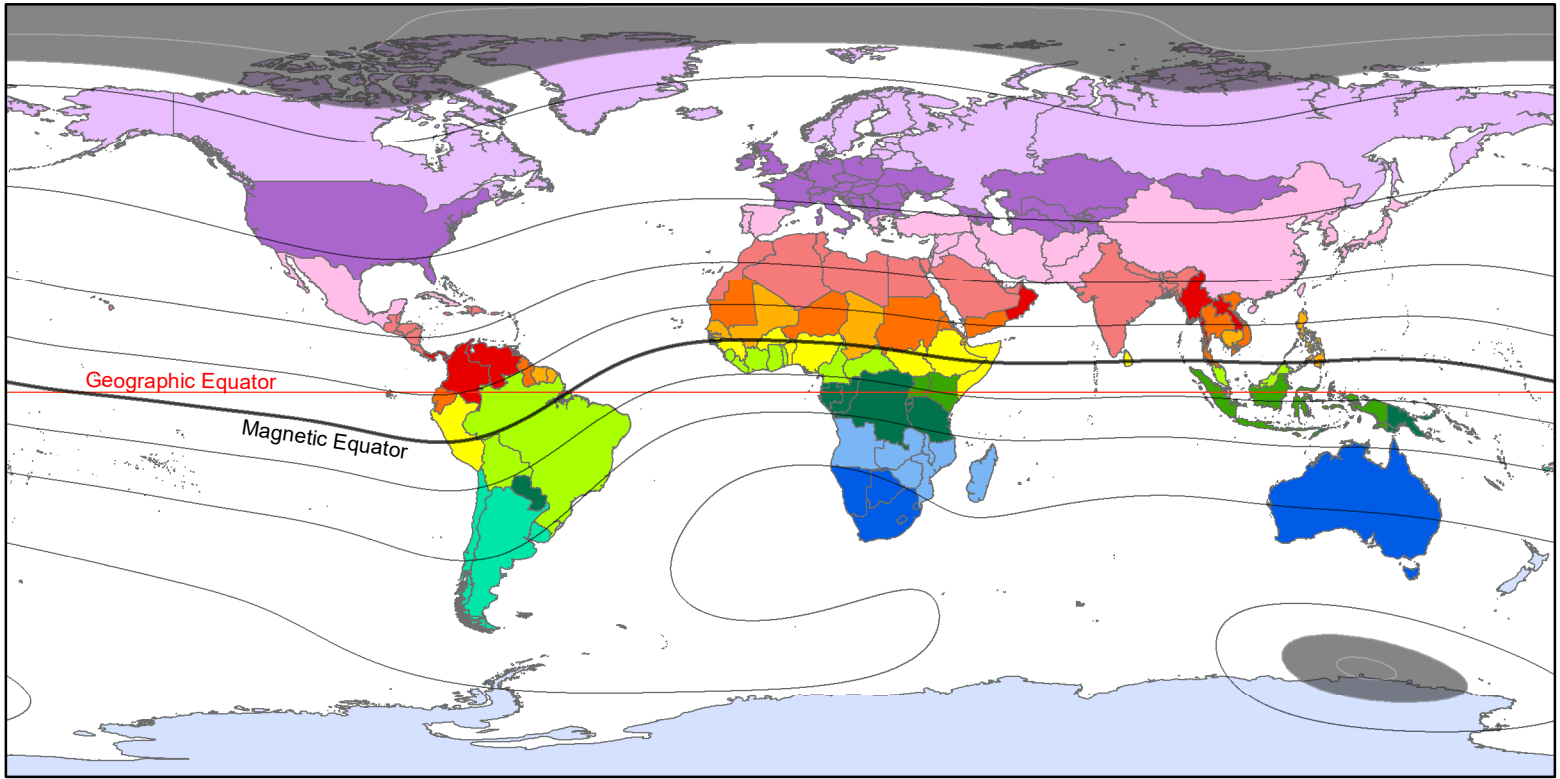


Transit Needle Balance Zones



Contours show WMM 2020 Inclination Model from <https://www.ngdc.noaa.gov/geomag/WMM/DoDWMM.shtml> in 20 degree contours

Northern Magnetic Hemisphere:
N-seeking needle points down into surface
Southern Magnetic Hemisphere:
N-seeking needle points up away from surface

Map Datum: WGS_84
Map Created in February 2021
by Lauren Heerschap

Balance Zones: Part Number, Needle Adjustment, and Hemisphere

Black Out Zones	D -020, 2°, N	H -060, 6°, S	L -100, 10°, S
A +010, 1.0° up, N	E -030, 3°, N	I -070, 7°, S	M -110, 11°, S
B -000, 0°, N	F -040, 4°, N	J -080, 8°, S	N -120, 12°, S
C -010, 1°, N	G -050, 5°, N	K -090, 9°, S	O -130, 13°, S

NORTHERN NEEDLE

- A +010**
Belarus, Canada, Denmark, Estonia, Finland, Greenland, Iceland, Latvia, Lithuania, Norway, Russia, Sweden, US State: Alaska
- B -000**
Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia & Herz., Bulgaria, Croatia, Czech Republic, England (UK), France, Georgia, Germany, Great Britain (UK), Hungary, Ireland, Italy, Kazakhstan, Kyrgyzstan, Liechtenstein, Luxembourg, Macedonia, Moldova, Monaco, Mongolia, Montenegro, Netherlands, N. Ireland, Poland, Romania, San Marino, Scotland (UK), Serbia, Slovakia, Slovenia, Switzerland, Tajikistan, Turkmenistan, Ukraine, United Kingdom, United States, Uzbekistan, Wales (UK)
- C -010**
Afghanistan, Bahamas, Cayman Islands, China, Cuba, Cyprus, Greece, Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Malta, Mexico, North Korea, Pakistan, Palestinian Terr., Portugal, South Korea, Spain, Syria, Taiwan, Turkey, Turks & Caicos Islands

- D -020**
Antigua & Barbuda, Algeria, Bahrain, Belize, Bhutan, British Virgin Islands, Costa Rica, Dominican Republic, Egypt, El Salvador, Guatemala, Haiti, Honduras, India, Jamaica, Libya, Martinique, Morocco, Nepal, Nicaragua, Qatar, Saudi Arabia, St. Kitts & Nevis, St. Martin, Tunisia, United Arab Emirates, Western Sahara
- E -030**
Bangladesh, Barbados, Colombia, Dominica, Grenada, Laos, Oman, Panama, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, Venezuela
- F -040**
Burma, Ecuador, Eritrea, Guyana, Mauritania, Myanmar, Niger, Sudan, Vietnam, Yemen
- G -050**
Cambodia, Cape Verde, Chad, Djibouti, French Guiana, Guam, Mali, Marshall Islands, Philippines, Senegal, Suriname, Thailand

- H -060**
Brunei Darussalam, Burkina Faso, Ethiopia, Gambia, Guinea, Guinea-Bissau, Micronesia, Nigeria, Palau, Peru, Somalia, Sri Lanka
- I -070**
Benin, Bolivia, Brazil, Cameroon, Central African Republic, Cote d'Ivoire (Ivory Coast), Ghana, Kiribati, Liberia, Malaysia, Maldives, Nauru, Sierra Leone, Singapore, South Sudan, Togo
- J -080**
Indonesia, Kenya, Tuvalu, Uganda
- K -090**
Burundi, Congo, Dem. Rep. Congo, East Timor, Equatorial Guinea, French Polynesia, Gabon, Papua New Guinea, Paraguay, Rwanda, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tanzania, Zaire

SOUTHERN NEEDLE

- L -100**
Argentina, Chile, Comoros, Fiji, Tonga, Uruguay, Vanatu
- M -110**
Angola, Madagascar, Malawi, Mauritius, Mozambique, New Caledonia, Zambia, Zimbabwe
- N -120**
Australia, Botswana, Lesotho, Namibia, South Africa, Swaziland
- O -130**
Antarctica, New Zealand