**Table 1: Geographic location of the GNSS and magnetometer stations**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Station name / Country** | **Station code** | **Geographic** | | **Magnetic** | |
| **Latitude** | **Longitude** | **Latitude** | **Longitude** |
|  |  | **GNSS** | | | |
| Mitzpe Ramon | ramo | 30.61°N | 34.80°E | 23.38°N | 106.30°E |
| Halat Ammar, Saudi Arabia | haly | 29.16°N | 36.07°E | 21.87°N | 107.53oE |
| Al Wajh, Saudi Arabia | alwj | 26.46oN | 36.38oE | 18.73oN | 107.79oE |
| Sola Village, Saudi Arabia | sola | 24.91oN | 46.40oE | 18.43oN | 118.05oE |
| Nama, Saudi Arabia | nama | 19.21 oN | 42.05oE | 11.49oN | 113.61oE |
| Sheb, Eritrea | sheb | 15.85oN | 39.05oE | 7.36oN | 110.60oE |
| Asab, Eritrea | asab | 13.06oN | 42.65oE | 4.91oN | 114.34oE |
| Addis Ababa, Ethiopia | adis | 9.03 oN | 38.77oE | 0.16oN | 110.47oE |
| Nazret, Ethiopia | nazr | 8.57°N | 39.29°E | 0.25°S | 111.01oE |
| Negele, Ethiopia | nege | 5.33oN | 39.59oE | 3.60oS | 111.36oE |
| Entebbe, Uganda | ebbe | 0.04oN | 32.44oE | 9.53oS | 104.10 |
| Eldoret, Kenya | moiu | 0.29oN | 35.29oE | 9.17oS | 107.00oE |
| Mbarara, Uganda | mbar | 0.60oS | 30.74oE | 10.22oS | 102.38oE |
| Kigali, Rwanda | nurk | 1.94oS | 30.09oE | 11.62oS | 101.66oE |
| Malindi, Kenya | mal2 | 2.99oS | 40.19oE | 12.42oS | 111.86oE |
| Dodoma, Tanzania | dodm | 6.17°S | 35.75°E | 16.08°S | 107.22oE |
| Tanzania CGPS, Tanzania | tanz | 6.77oS | 39.21oE | 16.59oS | 110.65oE |
| Tukuyu, Tanzania | tukc | 9.33oS | 33.75oE | 19.59oS | 104.91oE |
| Dar es Salaam, Tanzania | tanz | 6.76oS | 39.21oE | 16.58oS | 110.65oE |
| Mzuzu, Malawi | mzuz | 11.43°S | 34.00°E | 21.88°S | 104.91oE |
| Lusaka, Zambia | zamb | 15.42oS | 28.31oE | 26.26oS | 98.40oE |
| Ngamiland, Botswana | maua | 19.19°S | 23.85°E | 30.11°S | 92.86oE |
| Hartebeesthoek, South Africa | hrao | 25.89°S | 27.68°E | 36.32oS | 94.68oE |
| Sutherland, South Africa | suth | 32.38oS | 20.81oE | 41.09oS | 84.76oE |
|  |  | **Magnetometer** | | | |
| Addis Ababa, Ethiopia | AAE | 9.0oN | 38.8oE | 0.14oN | 110.50oE |
| Adigrat, Ethiopia | ETHI | 14.3oN | 39.5oE | 6.01oN | 111.09oE |