

Detailed Geoid Model for Africa

The IUGG support will help in the acquisition of gravity data for Africa needed for computing the geoid as well as in attending the geodetic international conferences to disseminate the project results. This will allow the determination of a precise geoid for Africa as well as it will foster cooperation between African geodesists and will help in providing high-level training in geoid computation to African geodesists.

The overall objective of the project is to realize an African geoid (AFRGEO). The specific aims include:

1. Establishing an African geoid (AFRGEO) in the year 2014 that will help to unify all the height systems within the African continent. Such a geoid will govern all the global navigation satellite systems' (GNSS) height measurements.
2. Train experts who will spearhead the realization of future versions of AFRGEO as more data become available. This will be achieved through enabling participation of younger scholars from African developing countries.
3. Enhance the corporation between the African scientists working in the field of geoid determination.
4. Utilization of the fast-improving GNSS technology, which is so far lacking in Africa due to the non-existence of the African geoid.
5. Supporting global applications, e.g., geodynamics applications (such as monitoring crustal movements and plate tectonics).