



International Institute for Space Geodesy and Earth Observation (IISGEO)

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Vision

An international, multi-disciplinary, world-class space science institute, facilitating research, student capacity building and earth observations.

Objectives

- Satellite Laser Ranging
- Lunar Laser Ranging
- Geodetic VLBI
- GPS/Galileo
- Earth Observations
- Training and Capacity Building
- Generating Scientific Products for the Benefit of the People

Ensuring the participation of Africa and its people in global scientific projects through international collaboration



Internationalisation

- Global partners
- SADC partners
- Local and foreign universities
- Combined resources
- International standing



Proposed Site

Elevation 3300 m

The Roof of Africa

Kingdom of Lesotho



**Proposed site
of IISGEO**

Structure

- Distributed network of scientific instrumentation throughout Africa (GPS network for African Reference Frame)
- Headquarters based in South Africa (kwaZulu-Natal)
- Main observing site in Lesotho (SLR/LLR/GPS/VLBI)
- Satellite offices throughout the world



Benefit to SKA

- International standing in Scientific community
- Scientific products to enhance radio astronomical observations (ionospheric, tropospheric and meteorological products)
- Setting up communications infrastructure throughout southern Africa, groundwork for nodes of the SKA



Summary

- IISGEO provides opportunity to ensure presence of Space Geodesy in Africa and southern hemisphere throughout SLR2000, VLBI2010 etc.
- Provides opportunity for all role players, rich and poor, large and small to participate in a meaningful way.
- Creates framework for new participants to join global scientific projects.
- IISGEO is essential to maintain high quality and quantity of data as well as research output from Africa.
- Provides ideal platform for multi-disciplinary projects, student training and capacity building in many disciplines and will facilitate multitude collaborative ventures between countries and institutions.

