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.