

SAGWG

South African Geodesy
Working Group

Setting the Scene

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Long History of Geodesy in South Africa

- South Africa has a proud history of geodetic activities dating back over a few centuries.
- Early terrestrial triangulation networks laid the foundation for surveying, mapping, and national development.

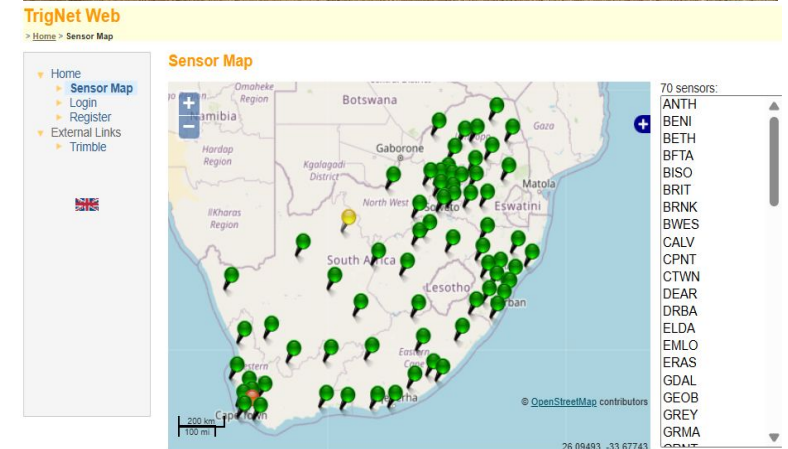
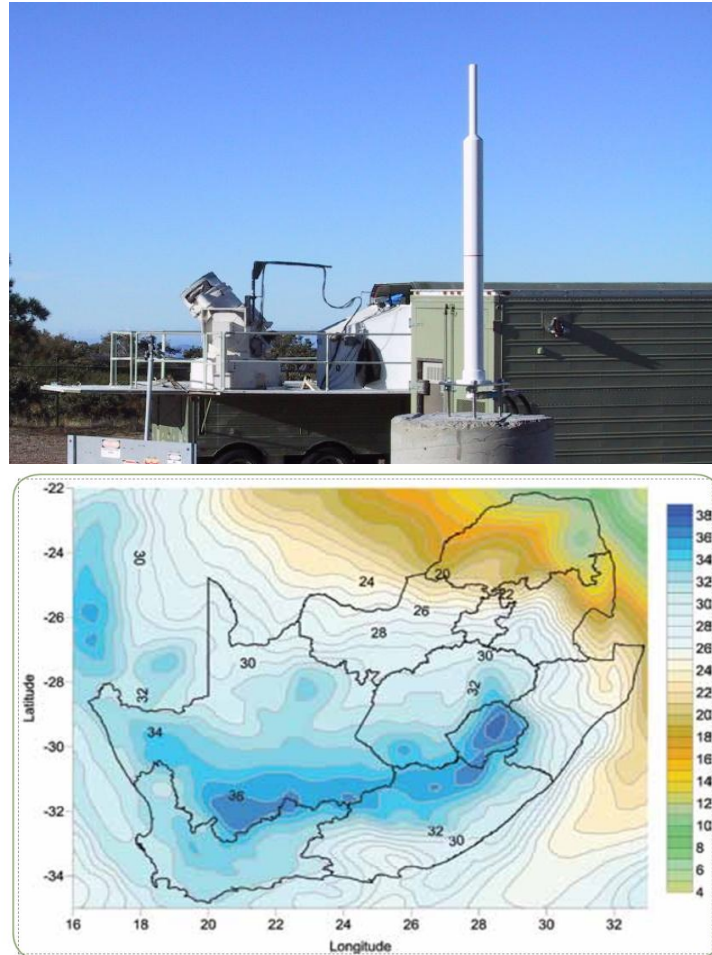
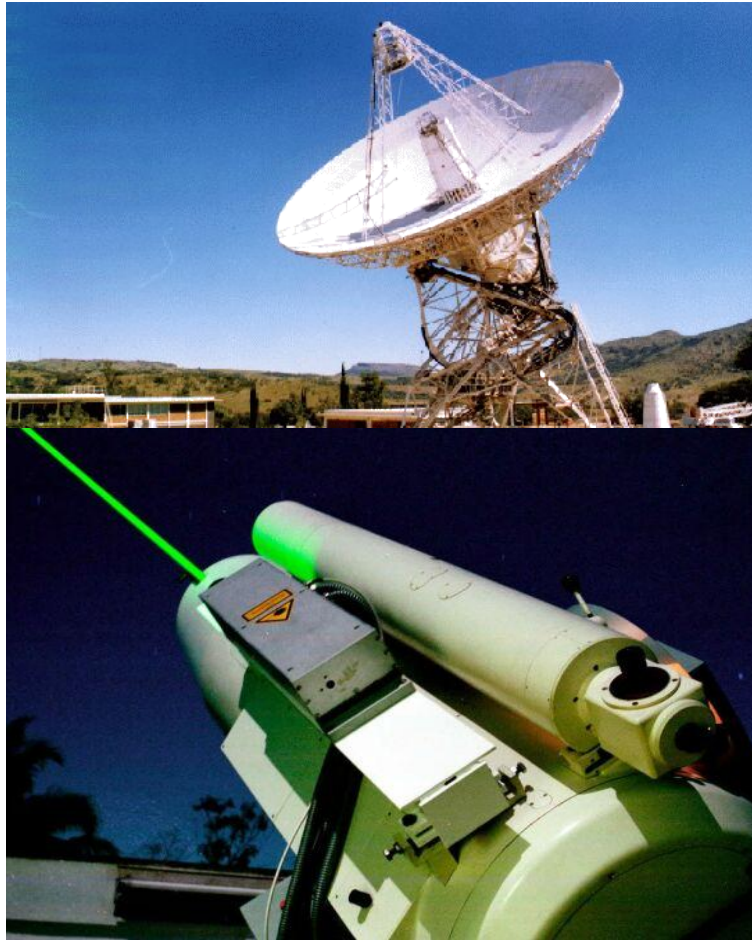


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Fast Forward- SA and Global Geodesy



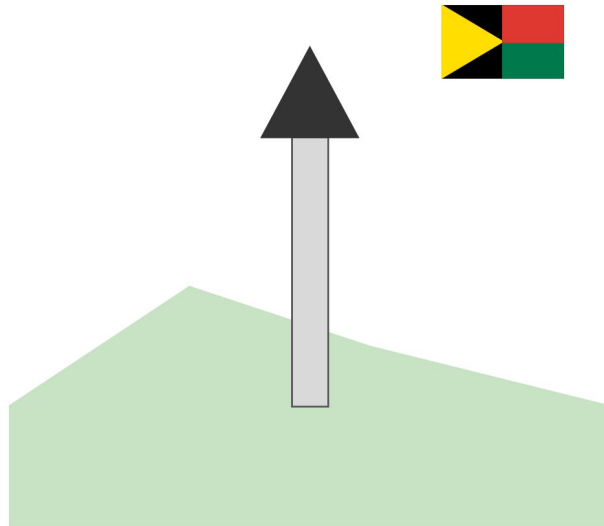
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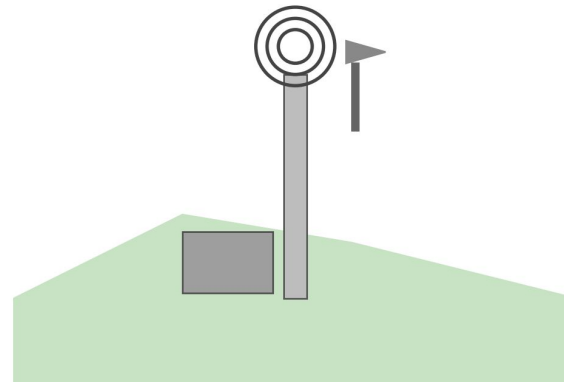


Terrestrial & Space Geodesy: South African Context

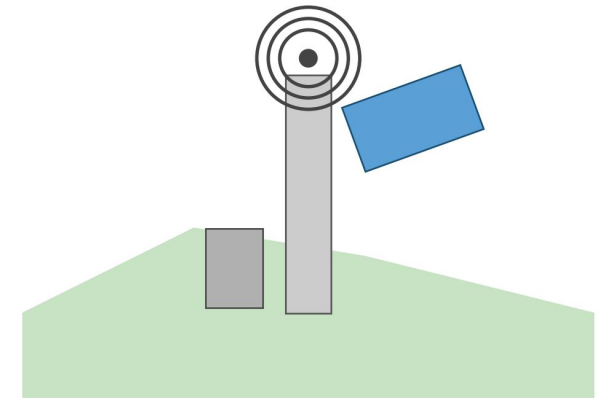
Trigonometrical Beacon



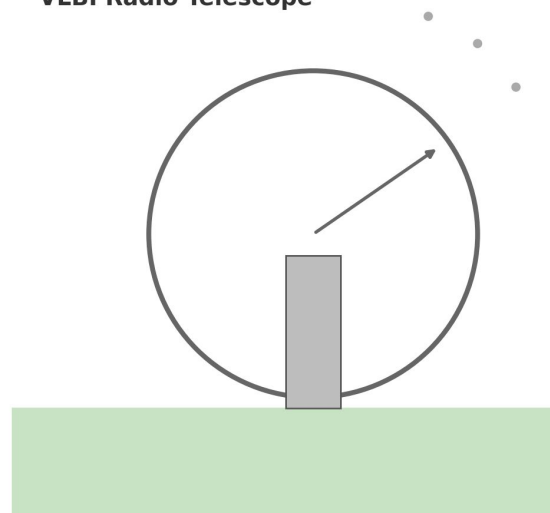
IGS GNSS Station (with met sensor)



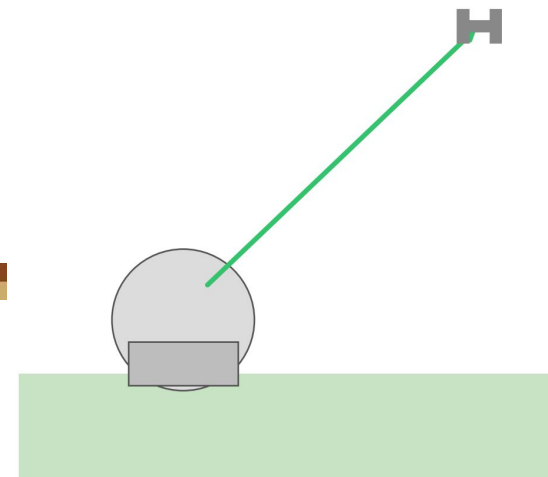
TrigNet GNSS Reference Station



VLBI Radio Telescope



Satellite Laser Ranging (SLR) Station



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Importance of Geodesy

- In 2015, the United Nations General Assembly adopted Resolution A/RES/69/266 on the Global Geodetic Reference Frame (GGRF) for Sustainable Development, which set the global agenda.
- The resolution recognizes geodesy as a global public good and calls for improved international cooperation, coordination, capacity building, and sustainability of geodetic infrastructure.
- South Africa, as a UN member state, has a responsibility to align its national efforts with this global agenda.



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Geodesy is currently uncoordinated

- Despite South Africa's long geodetic history and active participation in global initiatives, national efforts on geodesy remain fragmented.



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Purpose of Workshop




- Strengthen national coordination of geodetic infrastructure, data, skills, and services.
- Raise awareness of the UN-GGRF resolution and align South Africa's strategies with global best practice.
- Identify national priorities and gaps in geodetic capacity, governance, and investment.
- Establish a National Working Group on Geodesy as a formal mechanism for coordination and collaboration.
- The South African Geodesy Working Group (SAGWG)



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Importance of the SAGWG

- Strengthens South Africa's leadership in continental and global geodesy
- Ensures sustainable geodetic infrastructure
- Supports land administration, climate monitoring, and disaster management, earth observation, location-based services, etc.
- Integrates terrestrial surveying with satellite geodesy
- Enhances South Africa's voice in UN-GGIM and Subcommittee on Geodesy
- Provides national coordination, capacity building, and innovation

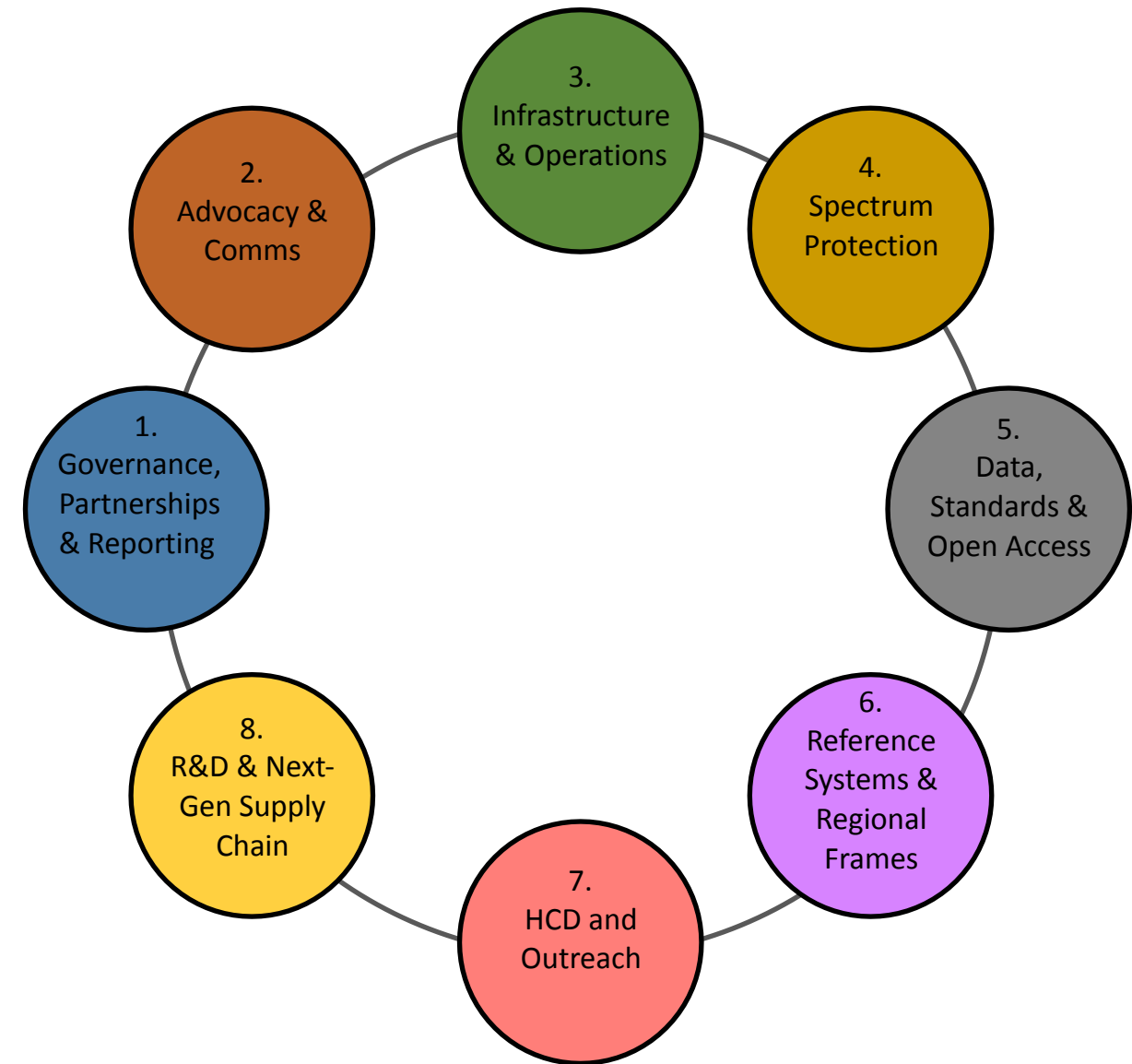


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Towards a National Strategy for Geodesy in South Africa, through a development plan



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THANK YOU



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