

SAEON Arid Lands Node overview



Z. Ntshidi

SA IORAG UNIVERSITY ROADSHOW – FREESTATE/NORTHERN CAPE: 19/05/2026

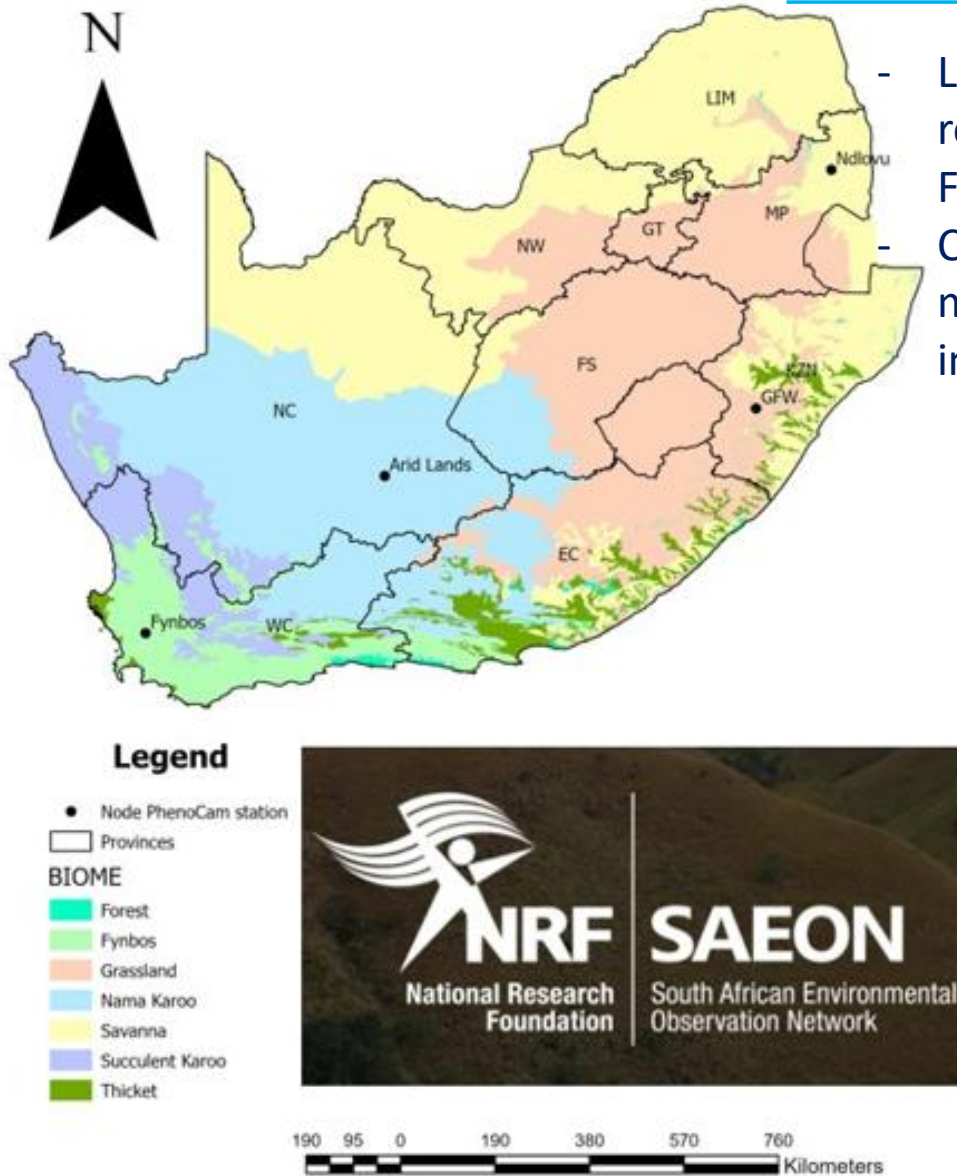


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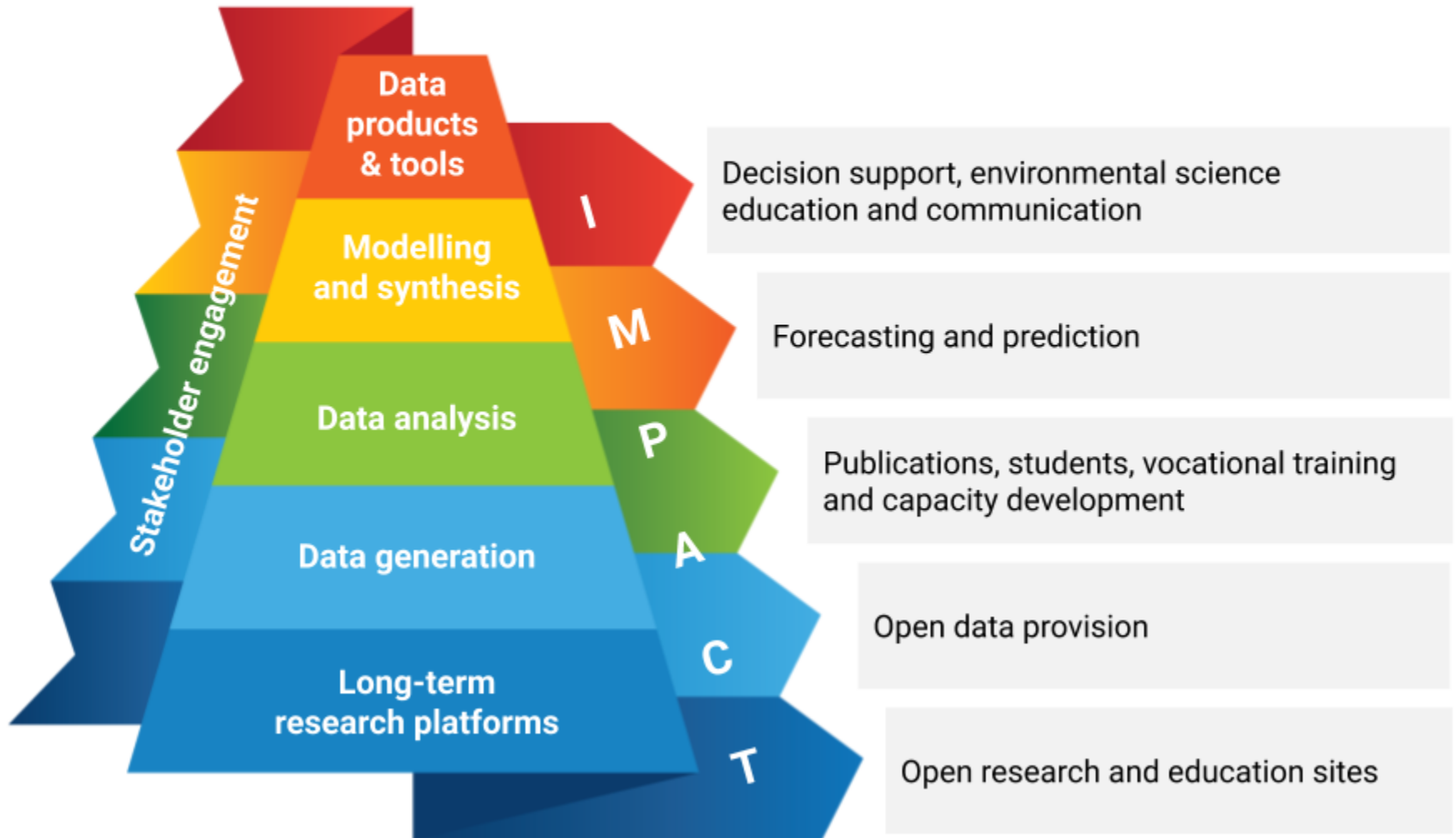


- Long-term environmental observation and research facility of the National Research Foundation (NRF).
- Consists of 1 National office, 1 Data management node, 2 Marine nodes, 3 Research infrastructures, and 4 terrestrial nodes.

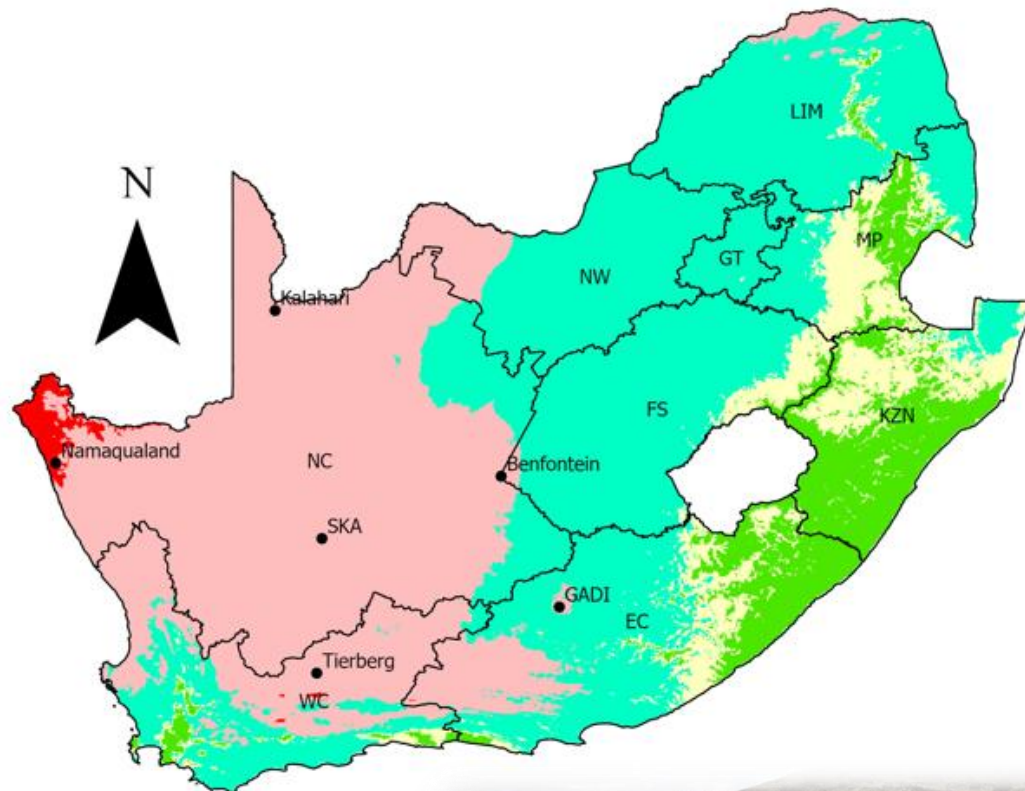


SAEON's knowledge ecosystem

SAEON's value chain of research to sustain South African ecosystems that support humanity

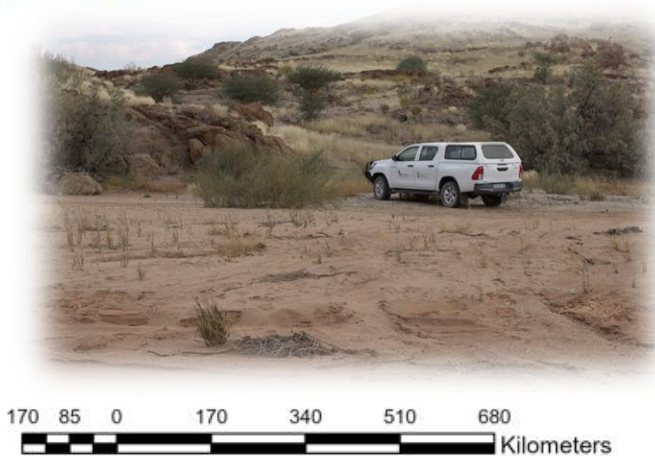


SAEON Arid Lands Node



Legend

- ALN focal sites
- Provinces
- Aridity zones**
- SA Aridity index**
- Arid Zone
- Dry-Subhumid Zone
- Humid Zone
- Hyper-Arid Zone
- Semi-Arid Zone



170 85 0 170 340 510 680
Kilometers

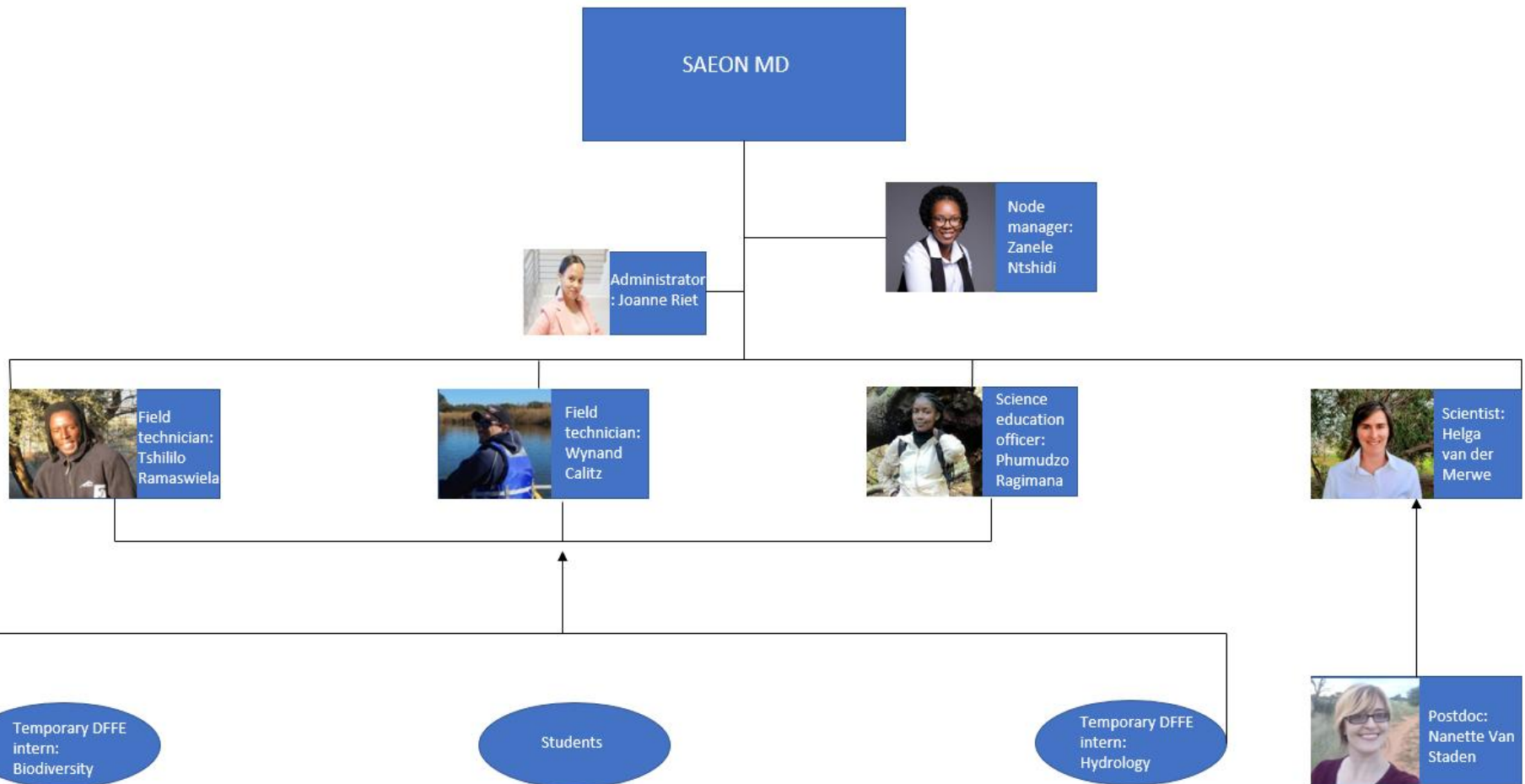
Long term environmental
observations in Arid SA

Data Management

Science Engagement



Node organogram



Biodiversity



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Hydrology



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HydroGeology



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Data management

SAEON terrestrial observations monitor

Available data entries: 103,158,778 | Full dataset size: 220,975,605

Data last synced: 2026/02/24, 21:46:30

Last data availability sync: 2026/02/24, 23:32:02

Logged in as: zntshidi (Logout)

[Home](#) [Data](#) [API Reference](#) [Issues](#) [About](#)

Bambanani AWS

Benfontein AWS

Benfontein Karoo Eddy Covariance

Benfontein Savanna Eddy Covariance

Besemfontein AWS

[illegible]

Data products and tools

<https://saeon-app.streamlit.app/>

SAEON Water Management APP



Last updated:
18 May 2026 18:32:51 hrs

Credits:
Dr Prince Dangare
Dr Zanele Ntshidi

Model Inputs

Leaf Area Index (m^2/m^2)

0.10

Solar Radiation (W/m^2)

600.00

Air Temperature ($^{\circ}\text{C}$)

25.00

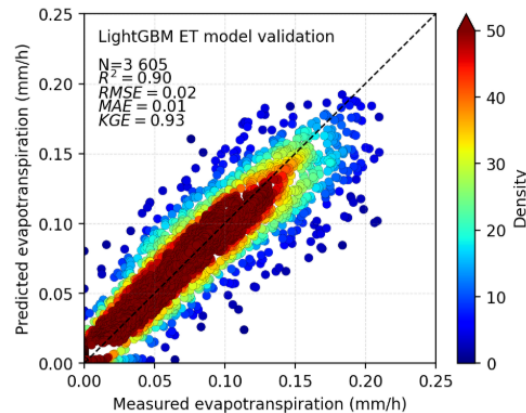
Relative Humidity (%)

50.00

Average Windspeed (m/s)

2.00

Savannah Evapotranspiration (ET)



Predicted Savannah ET

Predict

Savannah Evapotranspiration:

0.095 (mm/h)

Science Engagement (learners)



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Community engagement





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Thank you!



RISA
Research and Innovation
Support and Advancement



SARAO
South African Radio
Astronomy Observatory



**iThemba
LABS**
Laboratory for Accelerator
Based Sciences



SAIAB
South African Institute
for Aquatic Biodiversity



SAAO
South African
Astronomical Observatory



SAASTA
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