

Zimbabwe's CORS Network

Continuously Operating Reference Stations: where the country stands, and what comes next

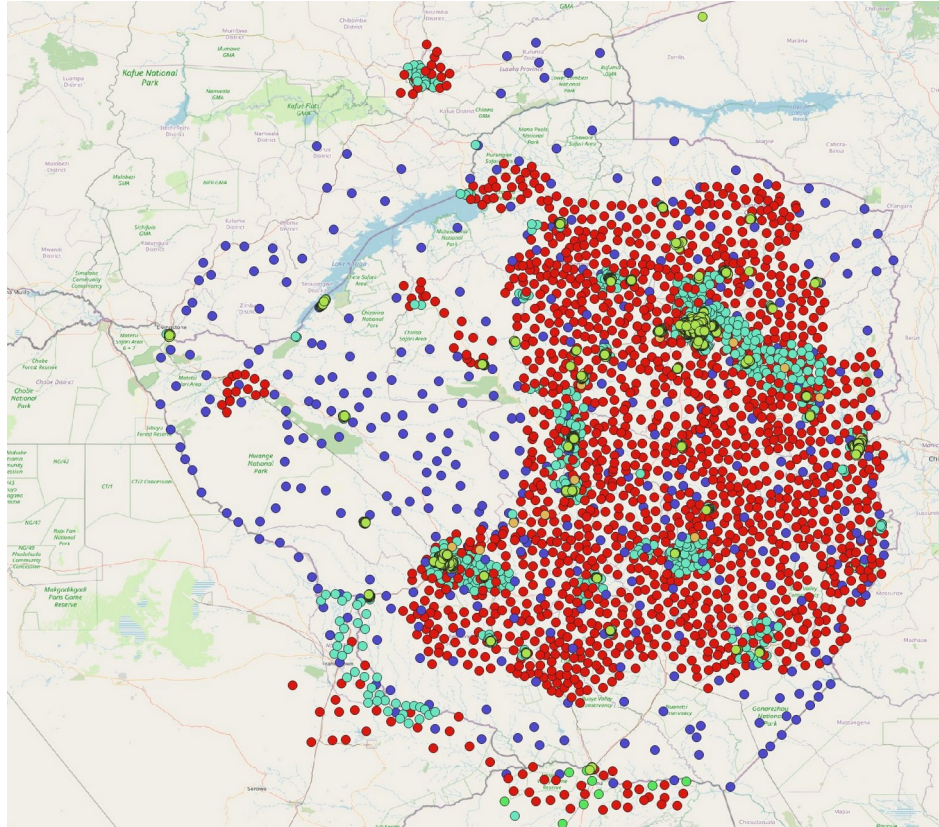
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With information from the Zimbabwe National Geospatial and Space Agency (ZINGSA) and the Department of the Surveyor-General · Nairobi, October 2026

WHERE WE START FROM

The geodetic foundation



National trig control by order: primary, secondary, tertiary, town survey marks

- **A maintained national trig network - 30th Meridian**
Kept by the Department of the Surveyor-General, on the Arc 1950 datum with Gauss (Lo) coordinates
- **Title surveys depend on it**
Land tenure security rests on the trig system and, increasingly, on CORS
- **National priorities need it**
Infrastructure, navigation and disaster risk reduction under the National Development Strategy 2 and Vision 2030
- **A countrywide CORS network is now in place**
The classical network is being joined by continuous GNSS stations

CORS operators in Zimbabwe

24

ZINGSA

National CORS Network stations across all ten provinces (2026)

5

Surveyor-General

Stations operating, **10** more acquired in 2026 - awaiting deployment, with **10** more in process (Oct 2026)

1

City of Harare

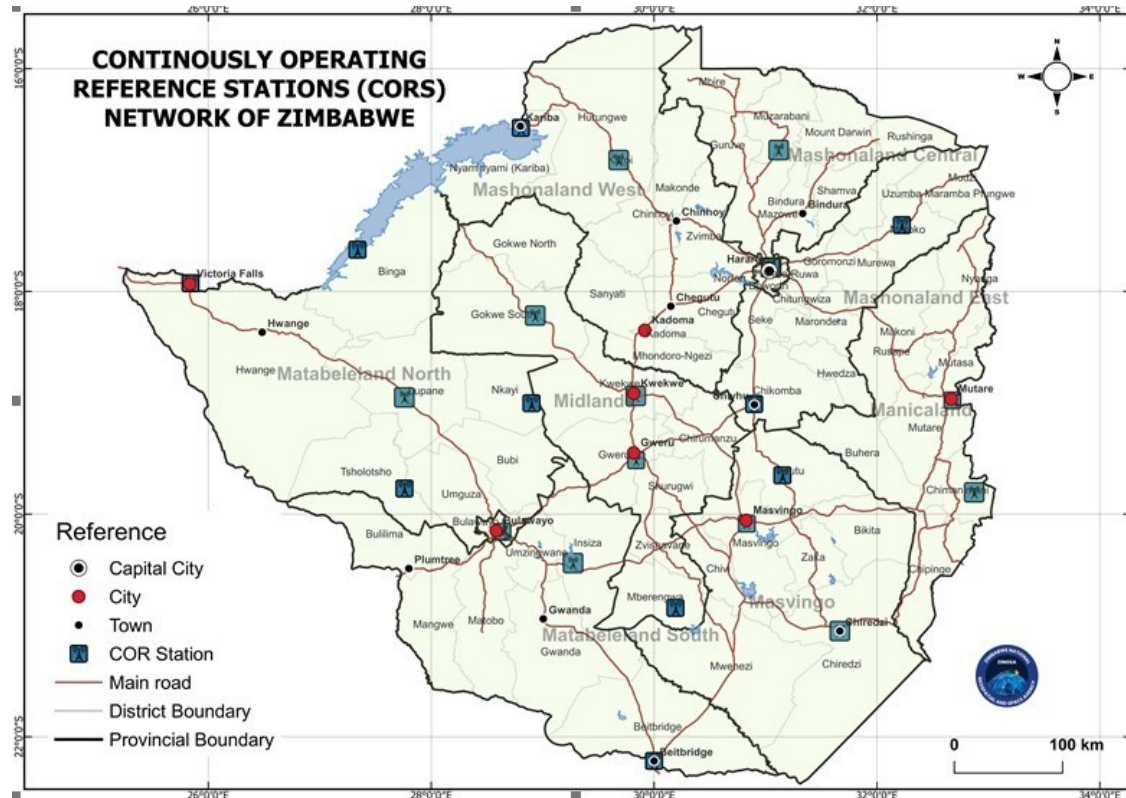
Municipal reference station (May 2025)

Lead institutions: Department of the Surveyor-General and ZINGSA ·

Steering: Council of Land Surveyors, Survey Institute of Zimbabwe, Zimbabwe Institute of Geomatics

Academic: State universities · **Regional link:** RCMRD

ZINGSA's National CORS Network



Map: ZINGSA, as presented in May 2025; the network has since grown to 24 stations

- **Coverage**

24 reference stations across all ten provinces

- **Services**

Real-time kinematic, post-processed kinematic and static positioning, to centimetre level in suitable conditions

- **Access**

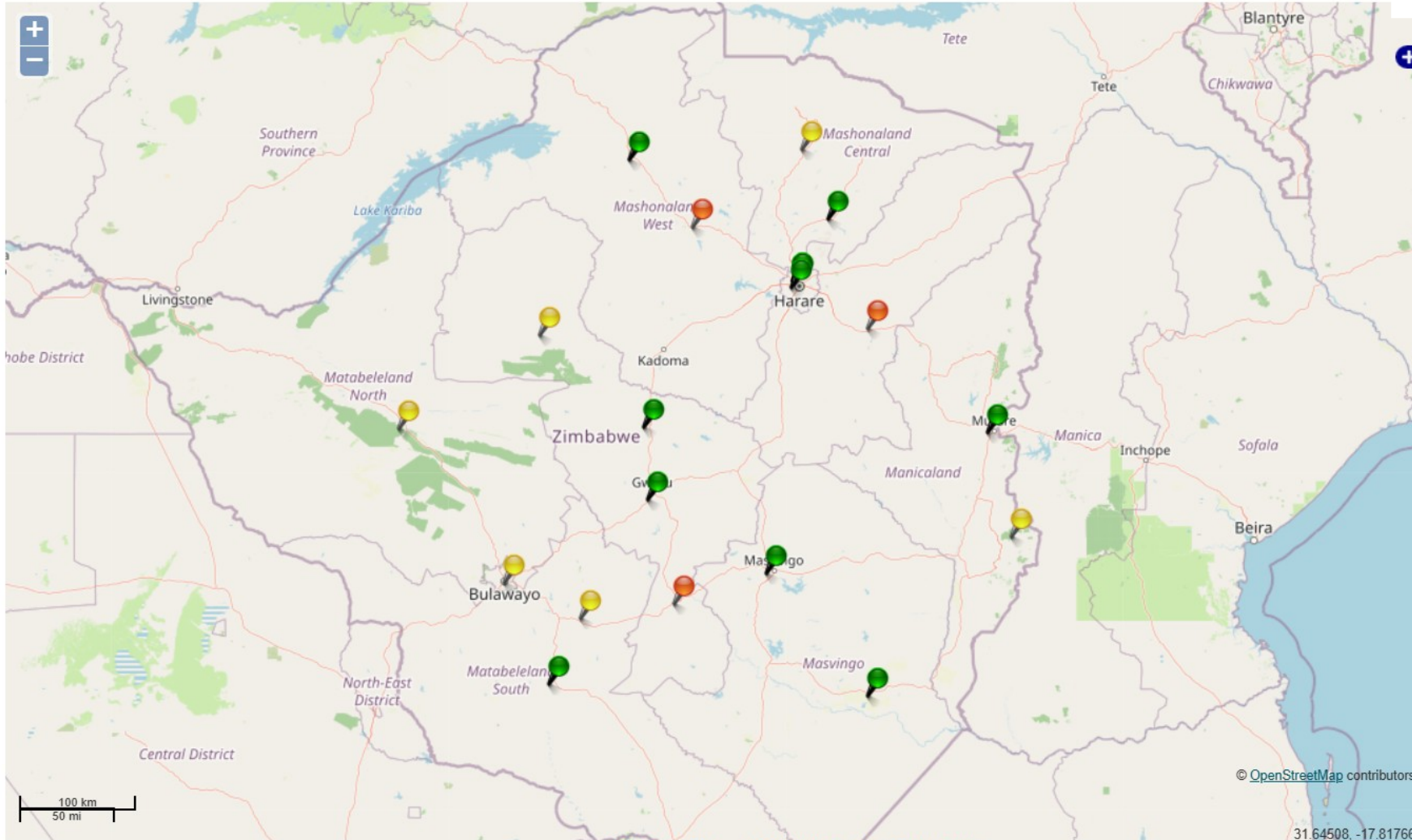
Corrections over the internet by NTRIP; users register on ZINGSA's Spider Business Center portal

- **Free trial, 20 July to 31 December 2026**

Open to surveyors, engineers, GIS professionals, mining houses and academic institutions

Sensor Map

- Home
- Sensor Map**
- Login
- Register
- External Links
- Trimble

BINDURA
BULAWAYO
CENTENA
CHIMANI
CHINHOYI
CHIREDZI
GOKWE
GSU
GWANDA
GWERU
HARARE
HARARE CITY
KAROI
KWEKWEI
LUPANE
MARONDERA
MASVINGO
MUTARE
ZINGSA_HQ
ZVISHAVANE

The gaps to close

1

No national geoid

GNSS gives ellipsoidal heights; there is no national model yet to turn them into the heights engineers use

2

Data migration

Decades of survey records sit on the Arc 1950 trig system and must be carried into a modern reference frame

3

Three operators, one frame

ZINGSA, Surveyor-General and City of Harare stations need to work as one national reference, tied to AFREF

4

Too few geodesists

Geodesy is not yet a specialisation in our universities, and users are still building CORS skills

WHAT COMES NEXT

The way forward

What Zimbabwe will do

- Secure stronger government support for geodesy
- Strengthen academic institutions and open a geodesy specialisation
- Use the ZINGSA trial to test accuracy and reliability with real users

What we ask of GGOS Africa

- Technical partnership on a national geoid
- Help linking our stations to AFREF and the global frame
- A Pan-African Geodetic Research Consortium to train geodesists, with Zimbabwe as a node

Ndatenda · Thank you · Asante sana