

# Lifting the veil on CORS Map. A first for Africa

Published on April 3, 2018



**Derrick Koome** | [Following](#)  
Survey Engineering Consultant at Cheswick  
[25 articles](#)

22 10 3

Geospatial professionals do not need an introduction to CORS. It is an acronym that stands for Continuously Operating Reference Stations. These are geodetic receivers that log GNSS observables continuously which when transmitted to users with survey grade receivers, help them achieve centimeter accuracy measurements.

CORS stations have a range of about 70 kilometers which necessitates the existence of a network of the same to offer maximum benefit to users regardless of their location. This network enables a user to connect to a CORS station nearest to them. A wide spectrum of

professionals benefit from a CORS network. The professionals include but are not limited to Surveyors, Geodesists, Meteorologists, Geographers, Civil Engineers, Machine controllers etc.

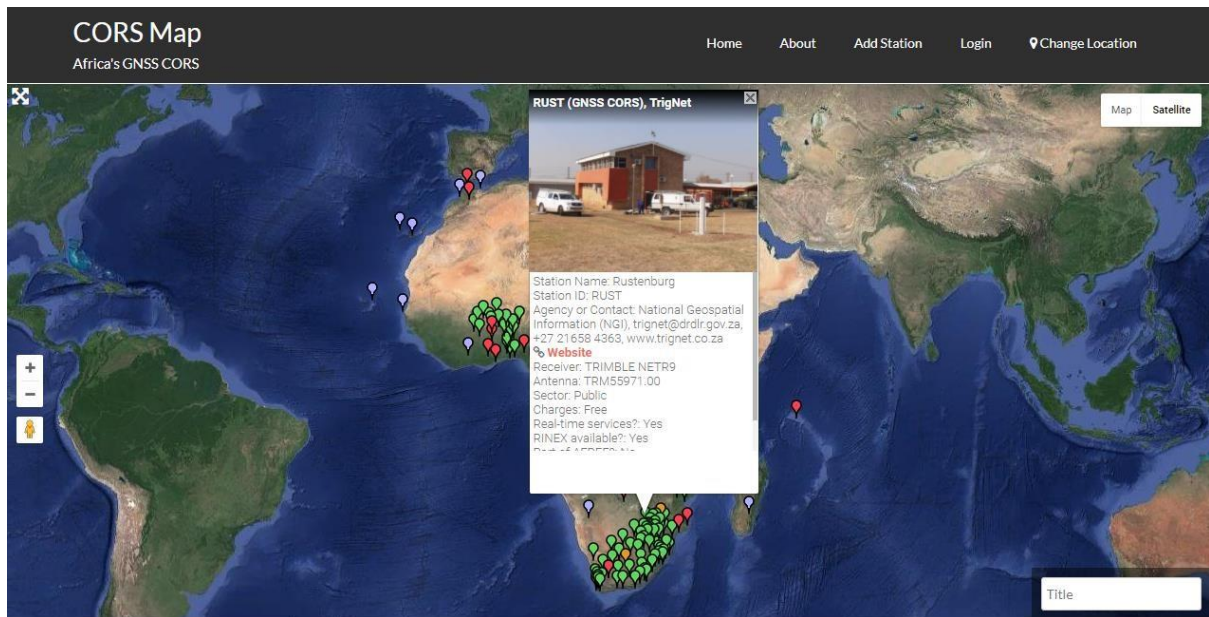
In order for a professional to connect to the nearest CORS station, he must be aware of its existence, the agency running it and what charges apply. In some countries, the government of the day sets up and maintains the CORS stations and subsequently offers the logged data free of charge. In other countries, private individuals set up their own stations and offer the logged data to users at a fee.

In each of the two cases a potential user must log into a platform that informs them of the distribution of the CORS so that he can connect to the one nearest to them. So a question begs, which platform would one visit to access this information? In the US, for instance, one would visit the National Geodetic Survey website and all the CORS stations, both public and private, would be clearly spelled out on a map on the platform.

If you wanted to access a CORS station in Africa, where would you start? It is this conundrum that led to the birth of CORS Map, a platform that provides searchable map information about all the CORS stations in Africa (their location, status, receiver type, antenna type, agency etc.) Founded by a team of three geospatial professionals cut across three continents, CORS Map seeks to put Africa in the CORS network conversation.

To access CORS Map, a user needs to visit [www.corsmap.com](http://www.corsmap.com). It is however a work in progress. Getting CORS information from all the 54 countries that make up Africa is an uphill task. That is why the professionals want to form a community around their platform that will enable them reach out to all the countries in Africa.

The countries covered so far by CORS Map are South Africa, Uganda, Rwanda, Mozambique, Angola, Nigeria, Benin, Burkina Faso and Kenya. A user can search the 4 digit code of a CORS station and results are displayed on the map. There is also some background information about the station, a picture of the CORS site and the agency running the station so that a potential user can follow the link and get connected. CORS Map thus acts as a liaison between CORS providers and users.



The team has also tried to distinguish between which stations are streaming or non-streaming, form part of AFREF (African Geodetic Reference Frame) or IGS (International GNSS Service) as well as which stations offer data in RINEX format.

Since CORS Map is a work in progress, the team is doing painstaking data mining to ensure the map is a true representation of all the CORS stations in Africa. Therefore, if you operate a CORS station in Africa which is not presented on CORS Map, give them team a shout so that it can be well captured. Also, if a country is not represented, chances are either there no CORS stations in that country or the team has not succeeded in obtaining data for the particular country.

To form part of the CORS Map community, one only needs to register with a username and password. Once part of the community, a user can add a station, post something interesting and get loads of information about CORS in Africa. A visitor can reach the team via [info@corsmap.com](mailto:info@corsmap.com). Join the CORS Map community today and become part of the CORS network conversation in Africa!

*Thanks for reading!*

The online version of the article can be found here:

<https://www.linkedin.com/pulse/lifting-veil-cors-map-first-africa-derrick-koome>