

## Regional Centre for Mapping of Resources for Development (RCMRD)<sup>1</sup> Nairobi Kenya



## African Reference Frame(AFREF) and Global Navigation Satellite Systems(GNSS) Data Processing

RCMRD is an intergovernmental organization established in 1975 under the auspices of the United Nations, economic commission of Africa (UNECA) and the African Union (AU). It draws its membership from eastern and southern African countries and currently has 20 contracting members. It promotes and builds capacities on land and land related disciplines using current Geo Information technologies to her member states. For info, please visit <a href="https://www.rcmrd.org">www.rcmrd.org</a>.

African Geodetic Reference Frame (AFREF) is a modern and uniform geodetic reference frame for Africa, fully consistent with the International Terrestrial Reference Frame (ITRF) and global coordinate systems to support national, regional and global applications in Africa including civil aviation, regional infrastructural development, Land administration and management, precision & commercial farming, weather forecast, and other earth science studies. AFREF is composed of a network of Continuously Operating Reference Stations(CORS) using Global Navigation Satellite Systems (GNSSS) technologies. AFREF data and products are freely available and are being used in various positioning applications with positioning accuracy of sub meter to millimeter levels.

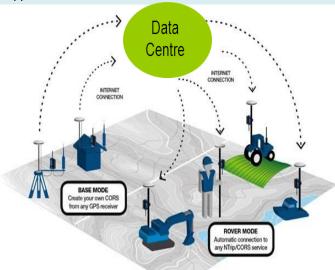
Millimeter levels.

AFREF is endorsed for implementation and supported by International Association of Geodesy (IAG) International Global Navigation Satellite System Service (IGS), Federation of International Surveyors (FIG), United Nations Office of Outer Space Affairs (UNOOSA) and United Nations committee of expert on Global Geospatial Information Management (UN-GGIM)



10th to 14th September 2018

<u>Course Objectives:</u> The purpose of the course is to provide knowledge and skills on the establishment of real time geodetic networks using real time control points/monuments inform of CORS using GNSS technologies to support various positioning applications



USD350 per head, tuition only

<u>Target Group:</u> The qualifying participants shall be Land surveyors, Geodesist, Engineers, Earth Research Scientists, Cartographers from African countries with experience in Global Navigation Satellite System (GNSS) technologies.

## Content

- Global Navigation Satellite System (GNSS) Technologies & Applications
- GNSS Augmentation Systems and Availability in Africa
- AFREF Concepts, Applications and Progress
- Continuously Operating GNSS Reference Stations(CORS), and Real Time GNSS Geodetic Networks(RGTN) concepts and needs to implement
- GNSS Augmentation Systems and Availability in Africa
- Reference systems, AFREF, datum and Coordinate systems
- Practical field works on Static GNSS surveys, RTK using Base/Rover, RTK using CORS
- Practical GNSS data post processing and reporting using open source software

Accommodation can be arranged from USD 40 bed & breakfast

For applications and more information contact, Muya Kamamia, muyack@rcmrd.org



MEMBER STATES:

Botswana, Burundi, Comoros, Ethiopia, Kenya, Lesotho, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Somali, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Uganda, Zambia & Zimbabwe.