



## **Canary GNSS Centre : Space Geodetic Data and Analysis for Macaronesia and Africa**

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Space Geodetic techniques are of great importance for the study of The Macaronesia and Western Africa. Composed of 5 archipelagos (Azores, Madeira, Savage Islands, Canary Islands, and Cape Verde) and sitting less than 60 miles from the African coast at its closest point. The Macaronesia groups of islands undergo so far understudied loading effects, relative movements, volcanic 'hot spot' deformations, etc which using GNSS techniques it could be possible to study and uncover.

The recently established Canary GNSS Center (CGC) is an open association between individuals, universities, institutions and companies to promote the installation, maintenance, data dissemination and quality control of GNSS stations in the Macaronesia and Western Africa. An initial study of the baselines for the GPS stations in our region has been carried out and is presented, which points out certain effects, this study articulates the needs for more Continuous Operating Reference Stations (CORS) in our region. The CGC promotes the free publication of data from all operating regional stations that may already exist and which have been kept private up to now.

The CGC are involved in contacting the owners of regional GNSS stations in the Macaronesia and Africa-at-large to make as much past and present data as possible available through our ftp server and website. The center makes available a free centralized site for the dissemination of all our region's current data and monitors relevant quality and statistical information about all the stored data.

The CGC will be promoting a set of regional station position solutions to investigate the extension of the EUREF regional reference frame into the Atlantic with greater density using all available stations. This would support mapping activities and topography, future differential correction networks, in-depth scientific studies, and to promote precursors activities for the AFREF project, which is an essential development for our continent.  
<http://www.canarygnsscenter.org>