

SIRGAS Operations and the Regional LOCAL CORS Network Scene

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SUMMARY

SIRGAS is the geocentric reference system for the Americas. Its definition corresponds to the IERS International Terrestrial Reference System (ITRS) and it is realized by a regional densification of the IERS International Terrestrial Reference Frame (ITRF). One of SIRGAS tasks is to establish and maintain a continental-wide geocentric reference frame within the ITRF. This objective was initially accomplished through two continental GPS campaigns in 1995 (SIRGAS95) and 2000 (SIRGAS2000), including 58 and 184 stations, respectively. Today, it is realized by around 130 continuously operating GNSS sites (SIRGAS-CON network), which are processed weekly by the IGS Regional Network Associate Analysis Centre for SIRGAS (IGS-RNAAC-SIR). The operational performance of SIRGAS-CON is based on the contribution of more than 30 institutions and universities, which install and operate the permanent stations and voluntarily provide the tracking data for the weekly processing of the network.

One recent activity was the establishment of five Analysis Centers (AC) and two Intra-Technique Combination Centers (ITCC) hosted by Latin American institutions. Another initiative was a pilot project dedicated to the computation of regional ionosphere maps based on the observational infrastructure of SIRGAS-CON. The main task of SIRGAS is the adoption of a unified geocentric reference system by all countries in Latin America.

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