



A positioning Network for Andalusia (Spain)

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In this paper we present a description of the Andalusian Positioning Network RAP: its objectives, design, development and its present status. This geodetic network consists of 22 permanent stations whose surveying will provide the required data to obtain relative positions of any place in Andalusia after some post-processing techniques and real-time differential corrections. Thus, geodetic coordinates of high precision and referred to the WGS-84 system will be provided for any point of Andalusia. The station in the network can broadcast differential correction via internet. The stations in the eight Andalusian capitals and in Algeciras (Cadiz) can also broadcast the RTK corrections via radio. The network has been designed in order to cover Andalusia and to provide real time differential corrections in all the area.

RAP network is referred to EUREF system and it is the reference frame in Andalusia for many scientific and technological applications, such as precise geoid determination, tropospheric, ionospheric, and climatological studies, among others. It will be also useful to settle photogrammetric points or marks for the georeference of satellite images, to establish control points for reference networks in big civil works, for GIS applications, and for the maritime, terrestrial and air navigation, etc.