RNM-282 Microgeodesy Jaén

Coordinator: Dr. Antonio José Gil Cruz (ajgil [arroba] ujaen [punto] es)

This research group was created in 1997 in the Cartographic, Geodesic and Photogrammetry Engineering Department of Jaén University under the Andalusian Research Plan (Plan Andaluz de Investigación, PAI). It focuses its activities on the sphere of Geodesy (GPS, GALILEO, INSAR, Active Networks, and NRTK) and related sciences.

This research group has precision geodesic instruments and GNSS data and SAR image processing software in place:

- 13 GNSS Leica Geosystems stations, model GR10 with AR10 antennas
- 2 GNSS Leica Viva GS10 receivers with AS10 antennas
- Software for GNSS data: Bernese and Gipsy; and for series processing: Neve and CATS
- Interferometric processing software (DORIS) and PS processing (StaMPS and DePSI)

Website for the group

Website for the Microgeodesy Jaén Research Group

Research lines

- Monitoring of the Earth's Crust by means of GNSS and High-Precision Leveling (HPL)
- Satellite Radar Interferometry (InSAR)
- Controlling deformations of structures in Civil Engineering (dams, viaducts, etc.)
- Positioning and Navigation based on Active GNSS Networks
- Galileo (European Satellite Navigation System) and its integration with other systems
- Precision agriculture Study of erosion in olive grove soils

Related services and products

- Procedure for estimating a receiver's position by means of GNSS satellites
- Technical advice in Geodesy and Topography to sector businesses (GPS, Galileo, InSAR)
- Establishing geodesic networks for controlling structures in Civil Engineering
- Quality analysis of Active GNSS Networks
- Specialization courses in Microgeodesy
- Dissemination courses on GNSS Satellite Navigation Systems and their applications

Spanish website: https://bit.ly/2rPBWo4