

National Report of Spain

Marcelino Valdés

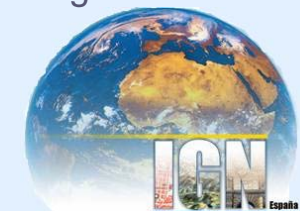
Centro de Observaciones Geodésicas – Instituto Geográfico Nacional

Spanish National GPS Reference Stations Network (ERGPS)

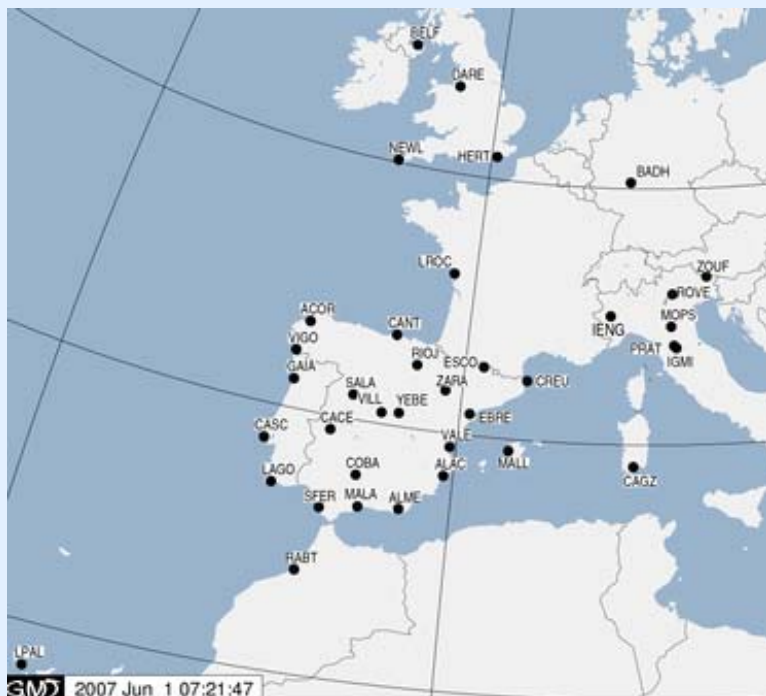


- 22 stations.
 - 1 IGS station
 - 15 EPN stations
- 3 new stations.
 - ZARA (1381 w.)
 - SALA (1401 w.)
 - LEON
- CEUT Decommissioned.
 - CEU1
- FTP server.

<ftp://ftp.geodesia.ign.es>



IGE Analysis Centre.



IGE as a Local Analysis Centre of EUREF

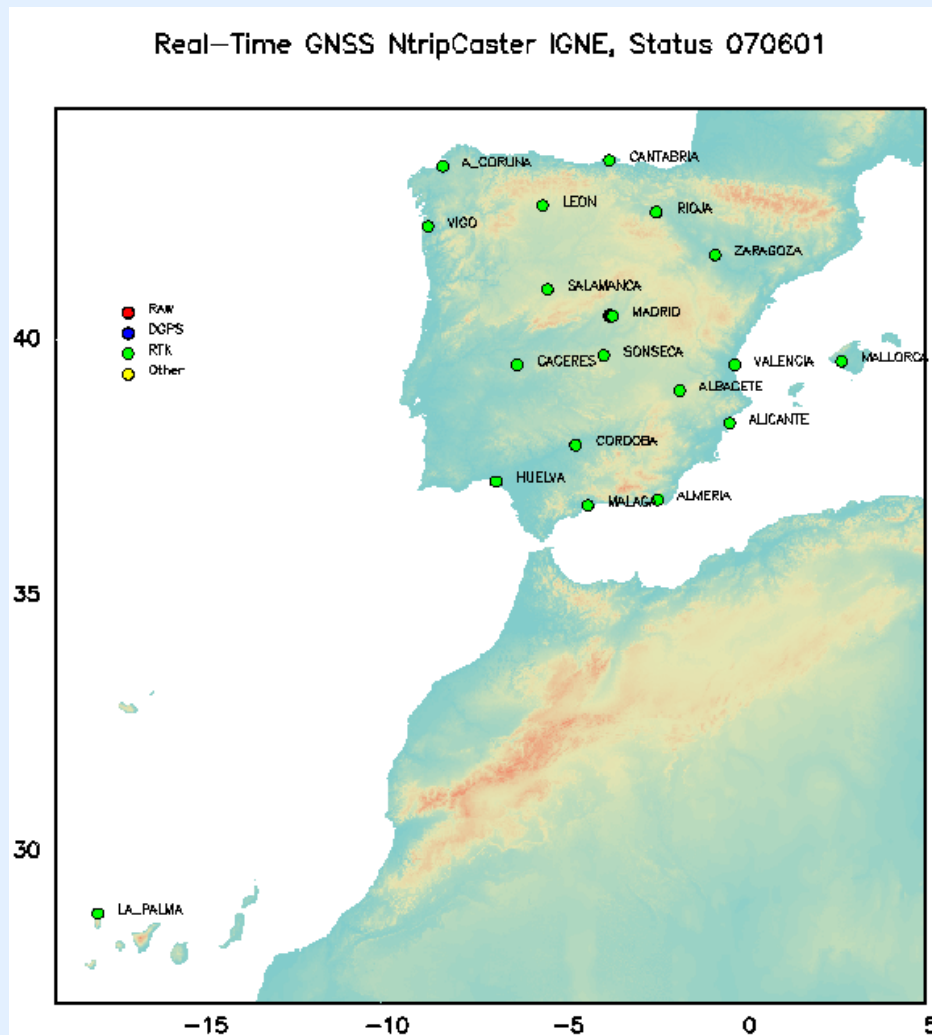
- IGN is an EUREF Local Analysis Center (IGE). From 1130 week
- 39 stations with Bernese 5.0 under LINUX operating system.
- EPN Rapid Analysis project (1418 week)

IGE as Analysis Centre

- Iberian Network.



EUREF-IP Project in ERGPS Network



- Started on February 2004.
- Data availability is the next:
 - Total of 21 Real-Time Streams.
 - 20 stations broadcasting RTK.
 - 15 belonging to EPN Network.
 - 1 station broadcasting DGPS.



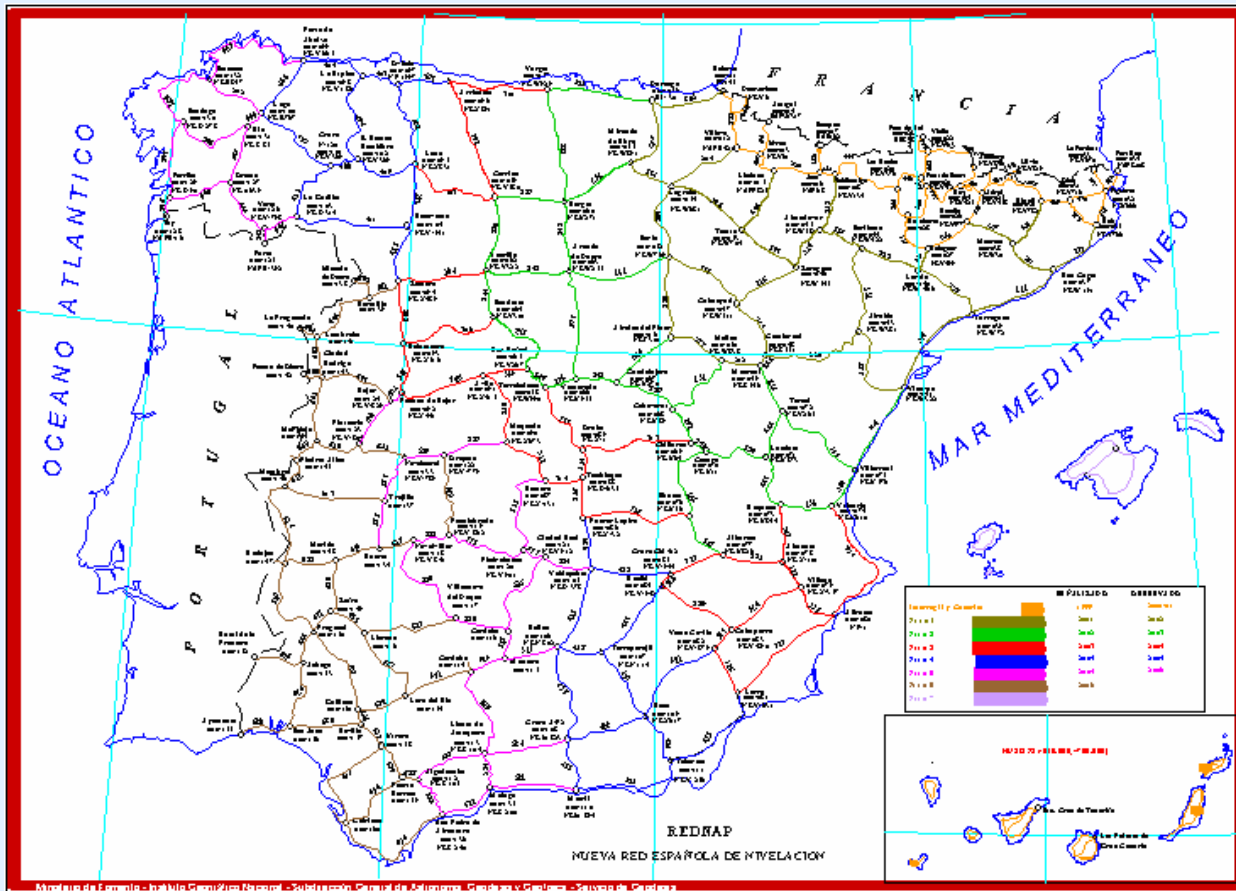
Stations of the Spanish Autonomous Regions.



1st Meeting
(October 2006)



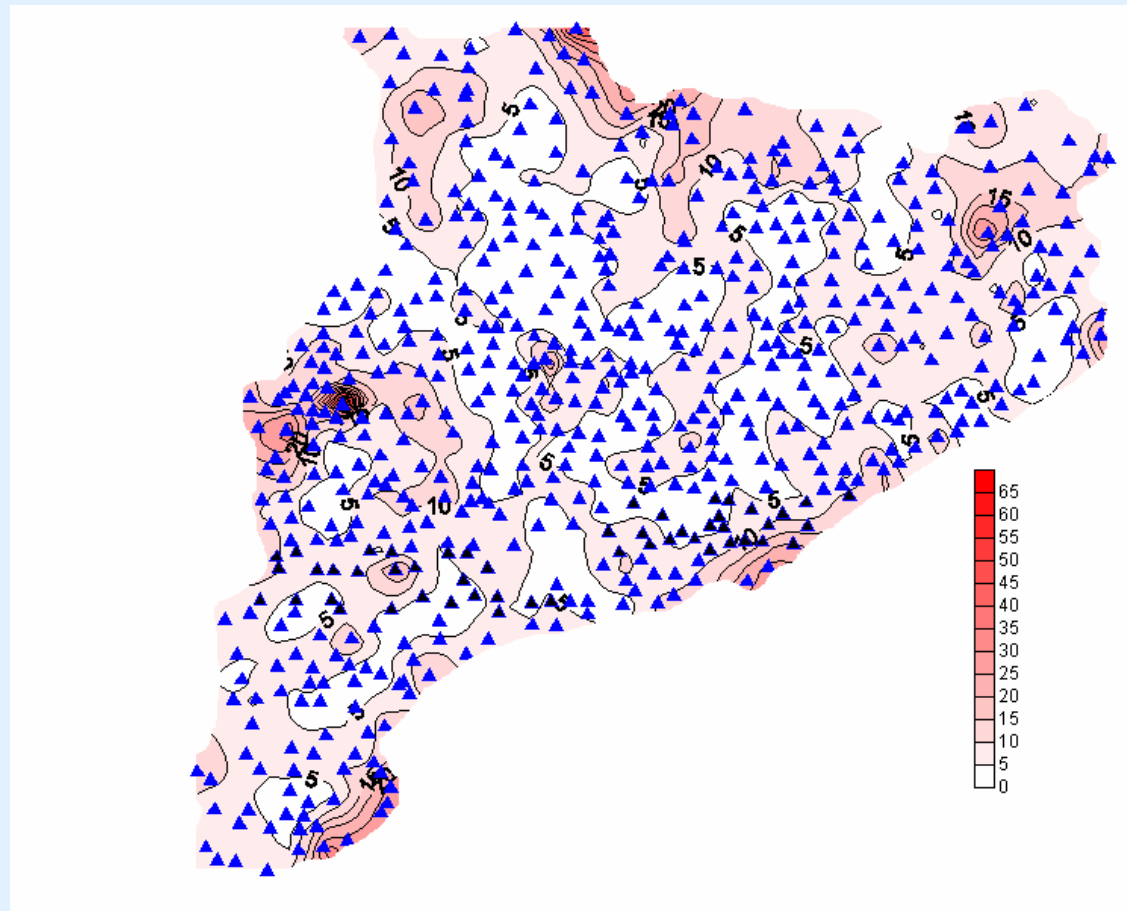
REDNAP Project



- Since 2001
- Until 2006,
 - about 20.000 bench-marks
 - along 16.500 kilometres
- REDNAP Project will be ended in 2008 for the whole of Spain.



R.O.I. in ETRS89

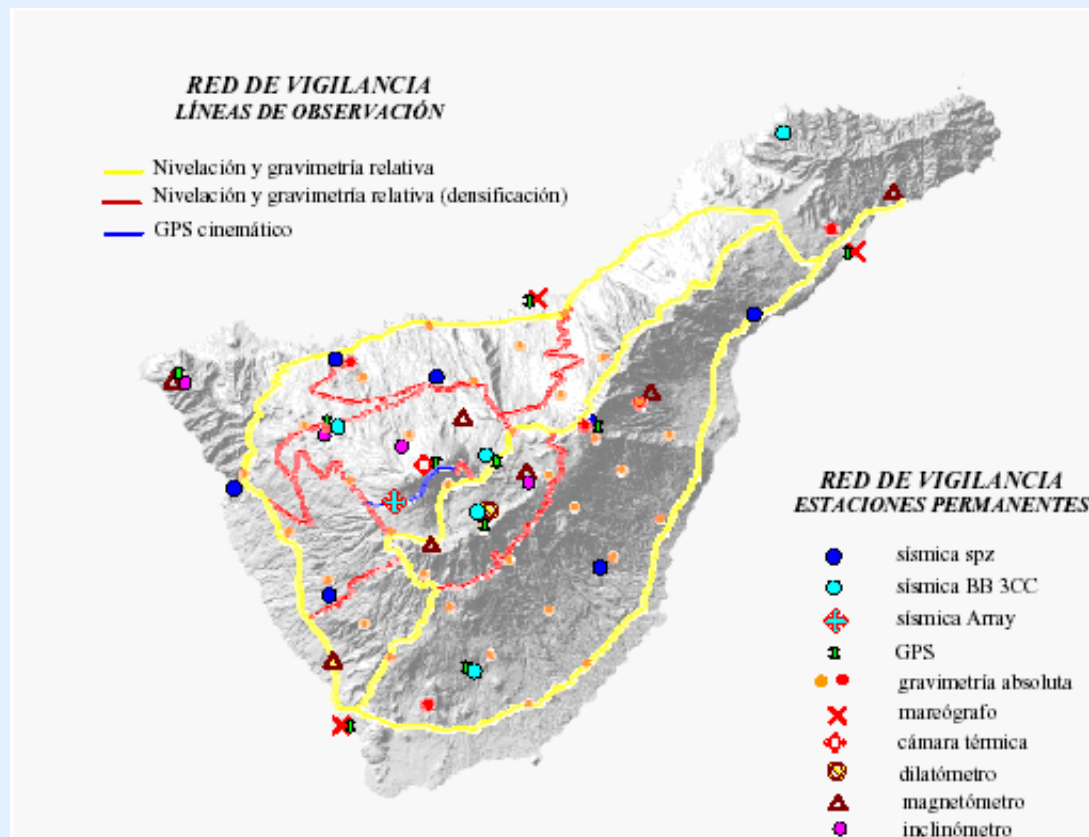


Classical and GPS Observations Differences in Catalonia

- R.O.I. (ED50)
 - 11000 points
 - Observed with
 - Classical.
 - or
 - GPS.(Some Regions)
- Fixing in REGENTE Network (ETRS 89)
 - 1100 points
- Geolab Soft.



Tenerife Volcanic Monitoring System Project



Planned.

- 3 Tide gauges
- 10 GPS Permanent stations.
- 450 Km of High Precision levelling Network.
- Absolute and relative Gravity Network.
- 4 Tiltmeters.
- New GPS campaigns.
 - About 28 points.
- Etc ...

Installed.

- 3 Tide gauges
- 3 GPS Permanent stations.

