

National Report of Spain

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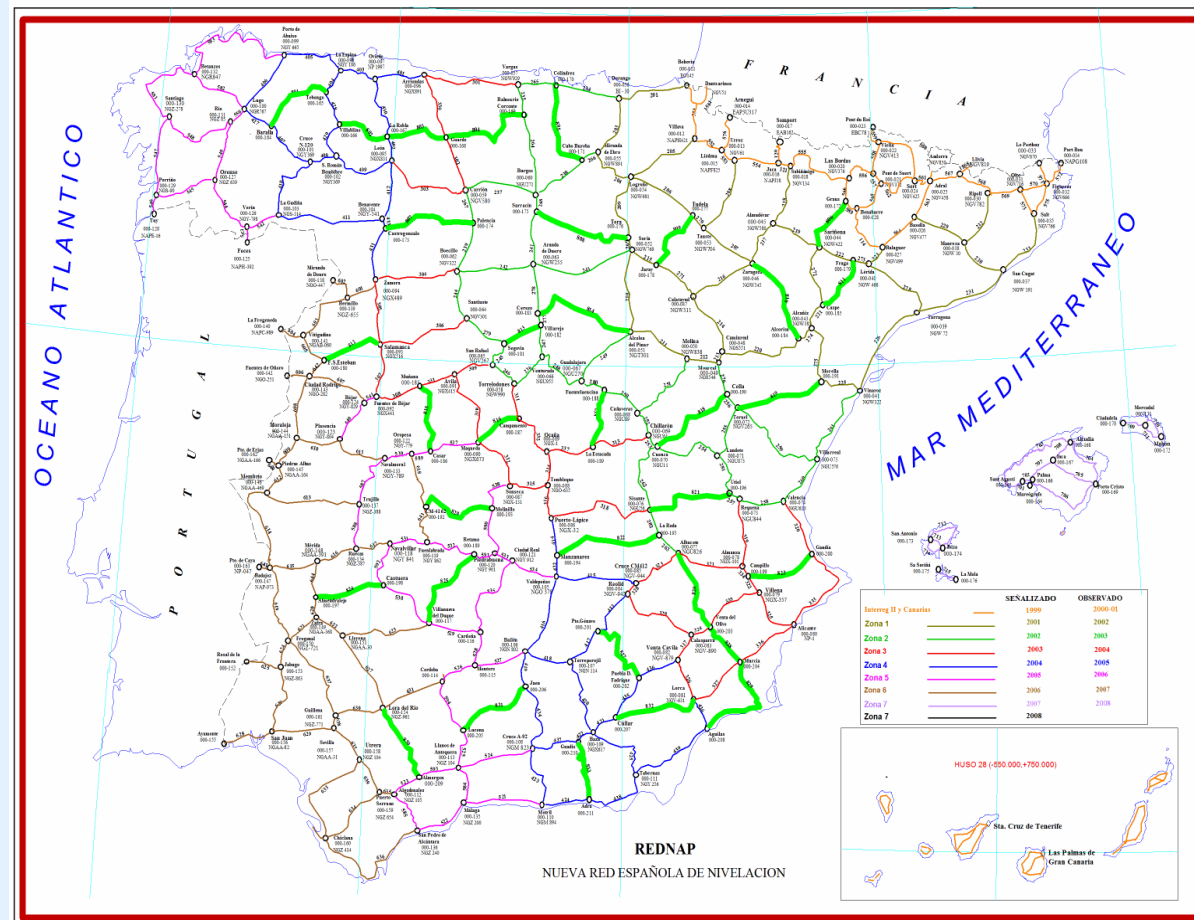
Spanish GNSS Reference Stations Network (ERGNSS)

- 41 permanent stations.
 - 2 IGS
 - 23 EPN
- 1 new stations:
 - IBIZ (Ibiza Island).
 - Co-located with tide gauge.
- Post-processing:
 - <ftp://ftp.geodesia.ign.es>
- Real-Time Caster:
 - <http://ergnss-ip.ign.es>
- 7 EPN stations with:
 - Galileo observations.
 - Sending RINEX3.



Spanish Vertical Reference Network (REDNAP)

- Total: 19.500 Km
- Densification stage.
 - Maximum leveling-rings length from 500 to 400 Km.
 - Total length:
 - 3200 Km (green).
 - Observed:
 - 2800 Km.
 - Levelling lines to ERGNSS / tide gauges.



IGE Analysis Centre

As a Local Analysis Centre of EUREF

- From 1130 gps week.
- EPN Rapid Analysis project (since 1418 gps week).

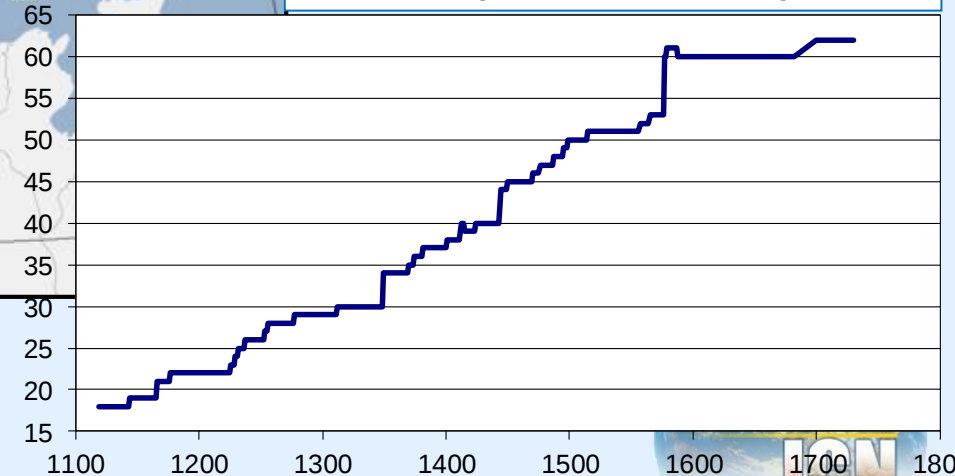
As Analysis Centre

- IBERRED Project (Iberian Region) → About 350 stations.
- E-GVAP Project (Iberian Region) → Same stations.
- Canary Volcanic Monitoring GNSS Network.

Processing with Bernese 5.0 (migrating to 5.2).



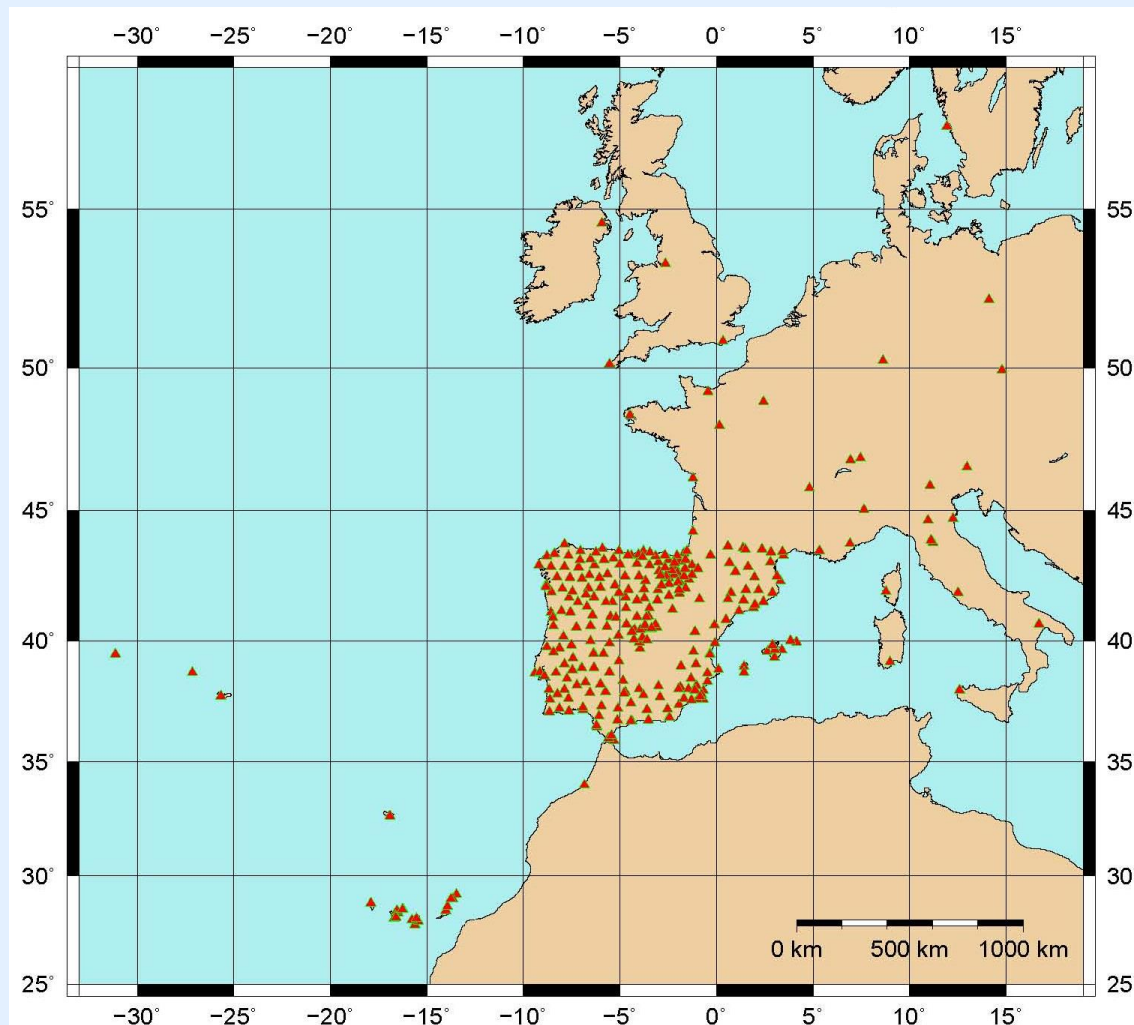
- ### Number of processed stations per week



❖ Other IGE Analysis Centre projects

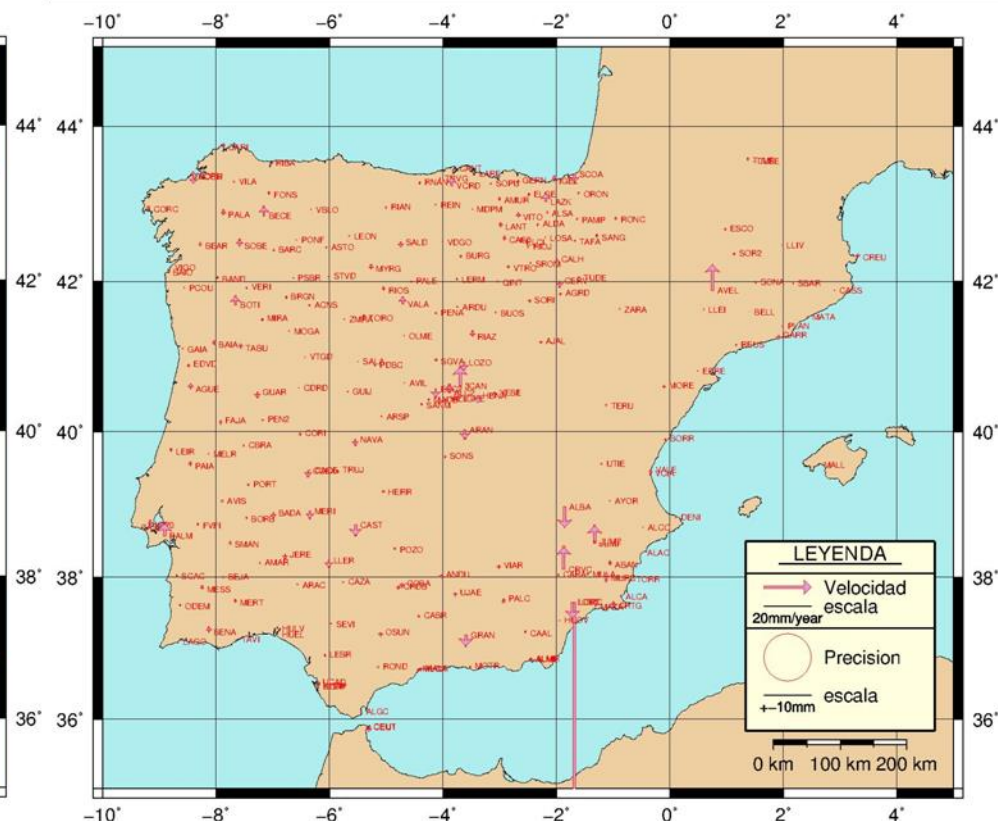
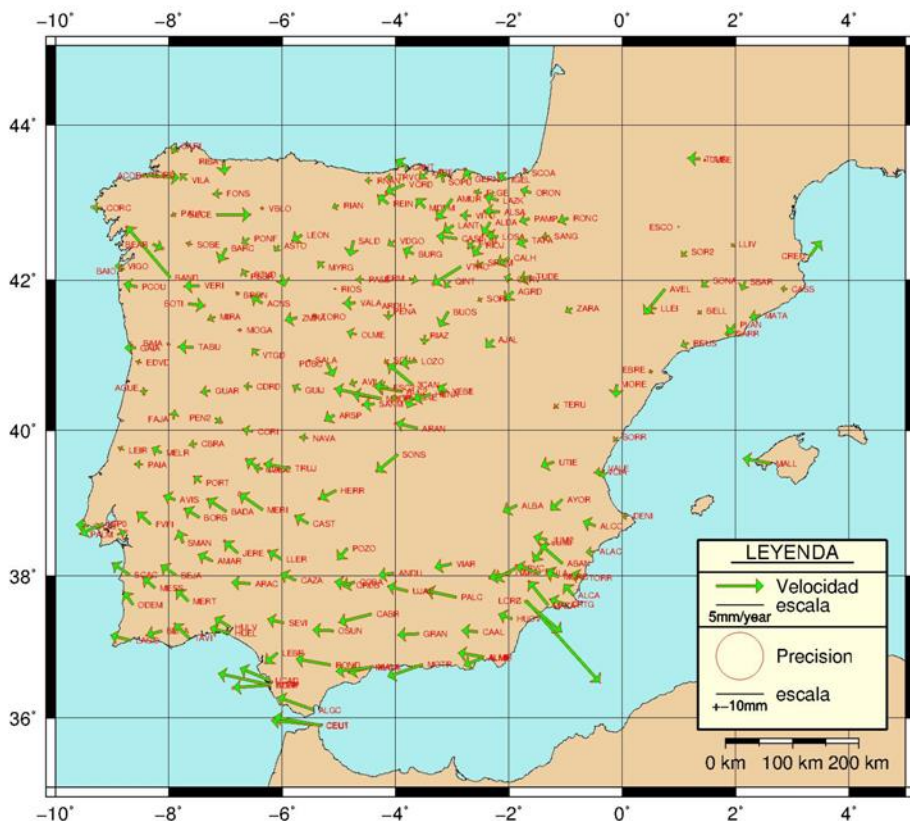
IBERRED

- About 350 stations.
Objectives →
 - Positions requested by GNSS active networks.
 - Coordinates to EGVAP hourly processing.
 - Monitoring of reference systems.
 - Atmosphere products.
 - Time series.
- Weekly processing.
- Almost the same strategy as EPN LAC.
 - Clustering strategy.
 - Double differences.
 - Final IGS products.



❖ Other IGE Analysis Centre projects

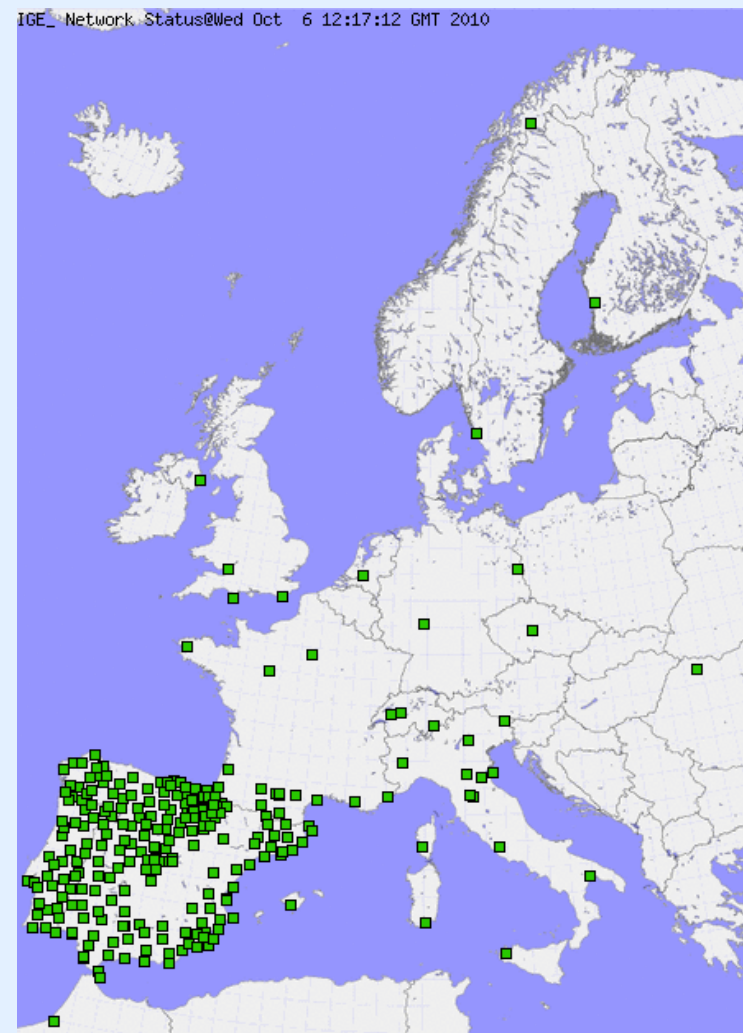
- Preliminary velocity maps in Iberian Peninsula (ETRF2000):
 - Horizontal (left side) & vertical (right side).



❖ Other IGE Analysis Centre projects

E-GVAP

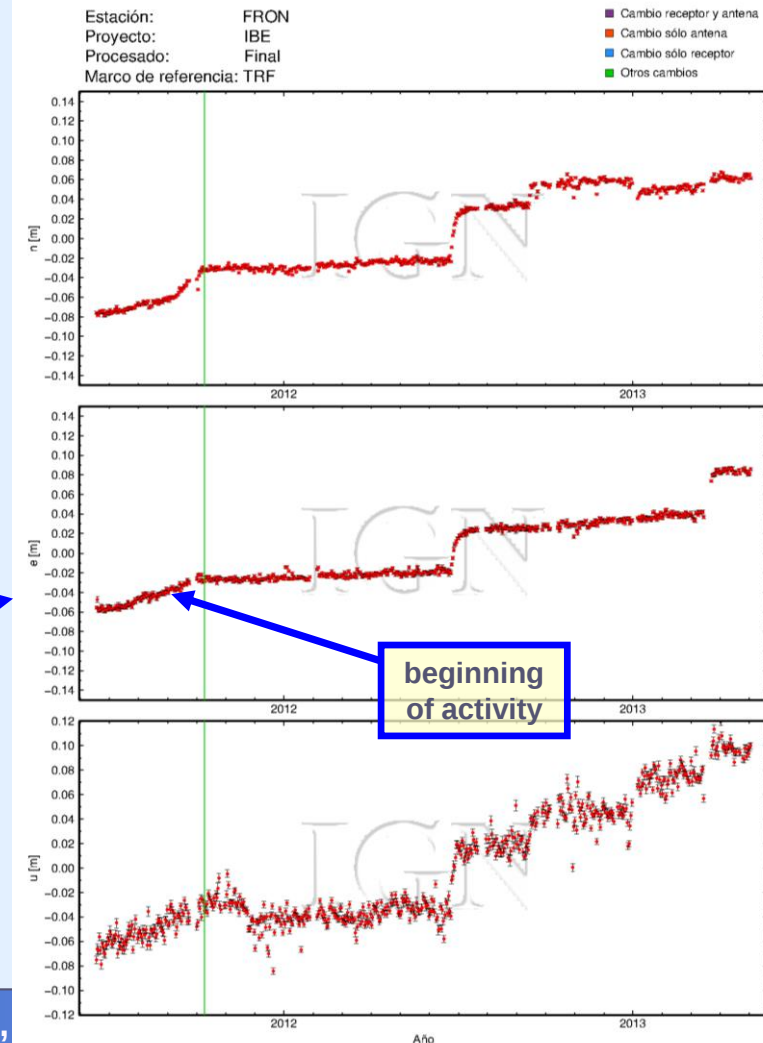
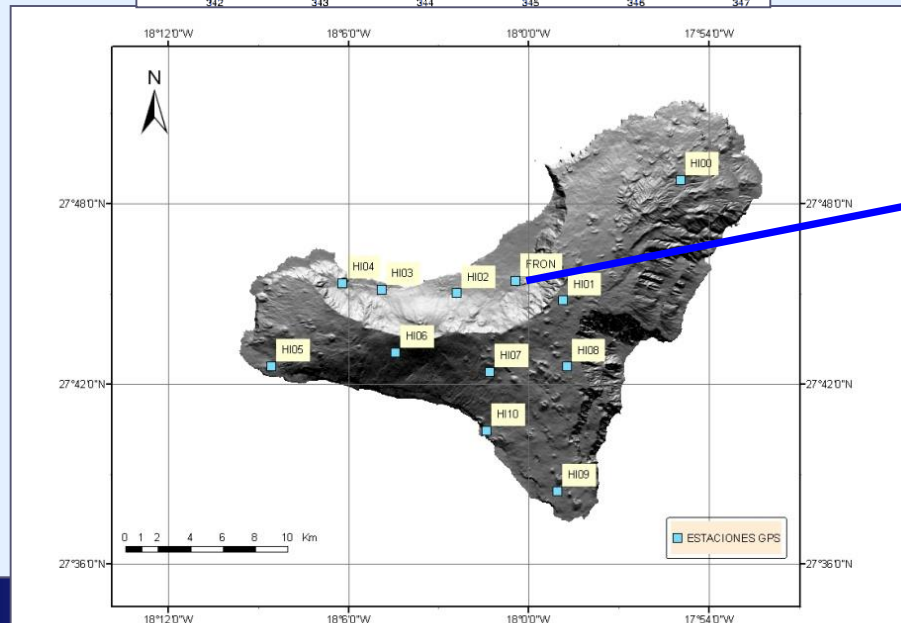
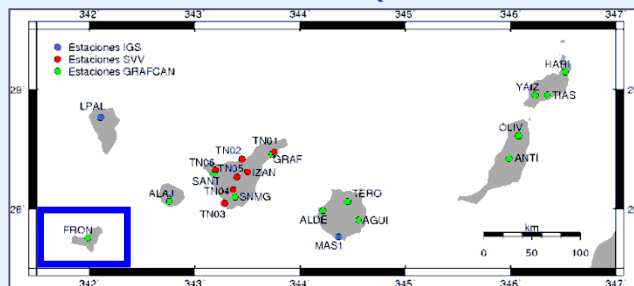
- Intention to get the same IBERRED stations.
- Hourly NRT processing
(using coord. from IBERRED process).
 - Objective → ZTD
 - Double differences.
 - Ultra rapid IGS orbits.
 - Finally → last 12 h combined.



❖ Other IGE Analysis Centre projects

Permanent GNSS Network for Volcano Monitoring in the Canarian Islands

- Volcanic activity in El Hierro Island since Oct. 2011.(→ 12 stations).



Thank you for your attention

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