

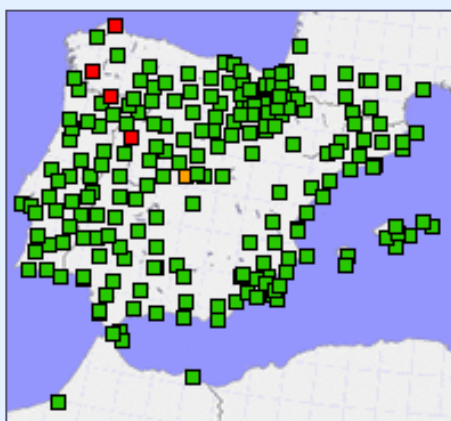
IGE Analysis Centre Report in E-GVAP

Instituto Geográfico Nacional

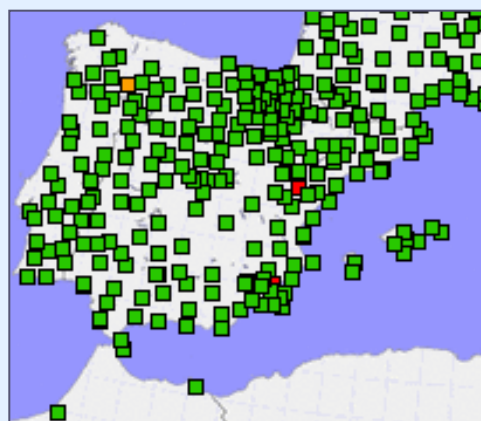
Jose Antonio Sánchez Sobrino
Marcelino Valdés Pérez de Vargas

Introduction

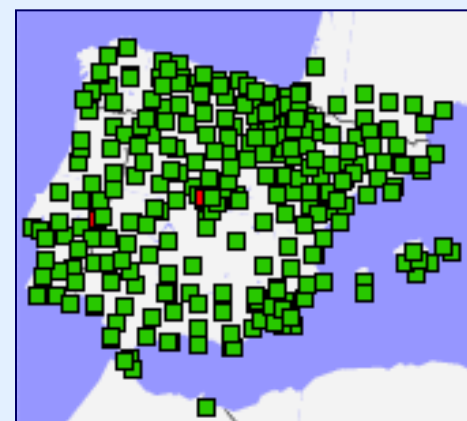
- IGE, E-GVAP Analysis Centre since 2008.
- No relevant changes since the last meeting in IGE_ solution:
 - Number of stations has grown up (from ~ 300 to ~ 330 stations).
 - New regions covered in the N (Galicia, Asturias).
 - There are no more stations in the area, the network is not going to grow.



Nov. 2012



Nov. 2013

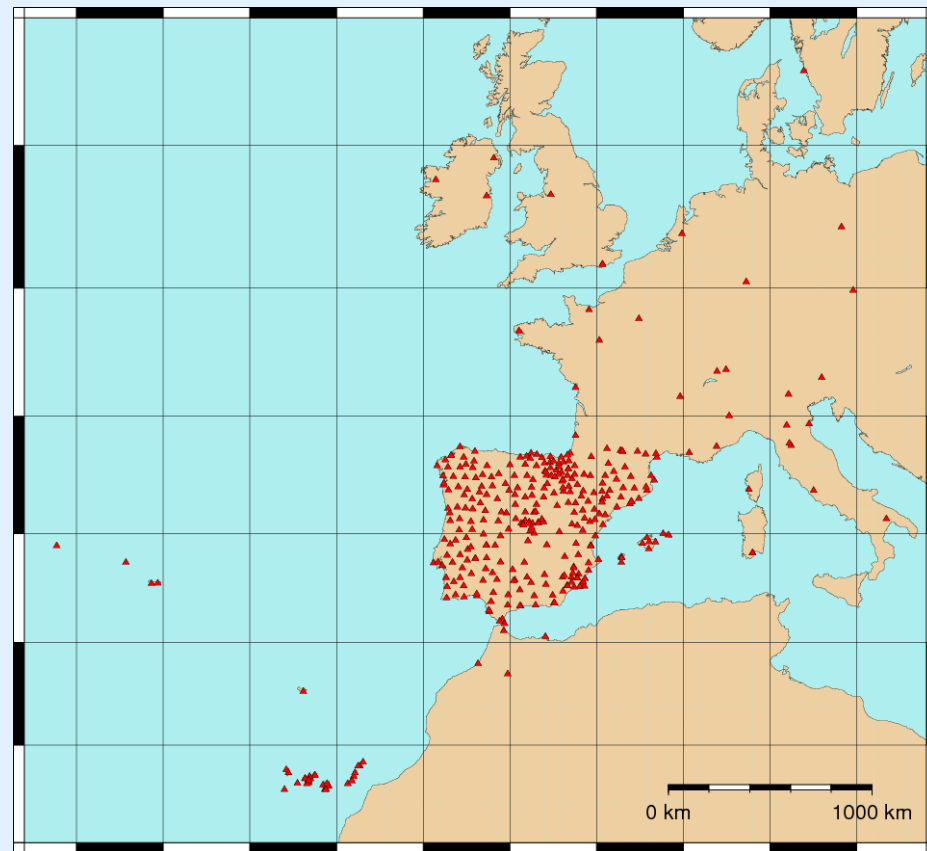


Oct. 2014



Current processed Network

- PP process ~ 360 stations.
 - 72 IGS or EPN.
 - 10 Supersites.
 - 19 IGB08 for Datum fixing.
 - 290 more stations in the area.
 - Spain
 - Public (regional networks).
 - Private.
 - Portugal and France (south).
 - Public stations (IGP & IGN)
- BSW5.0, change to BSW5.2 at the end of 2014.
- IGB08 Datum (min. constraint).
- Solution: weekly coordinates to be used in EGVAP.
- PP process takes 20 hours.



2014: submitting new E-GVAP solution (IGE2)

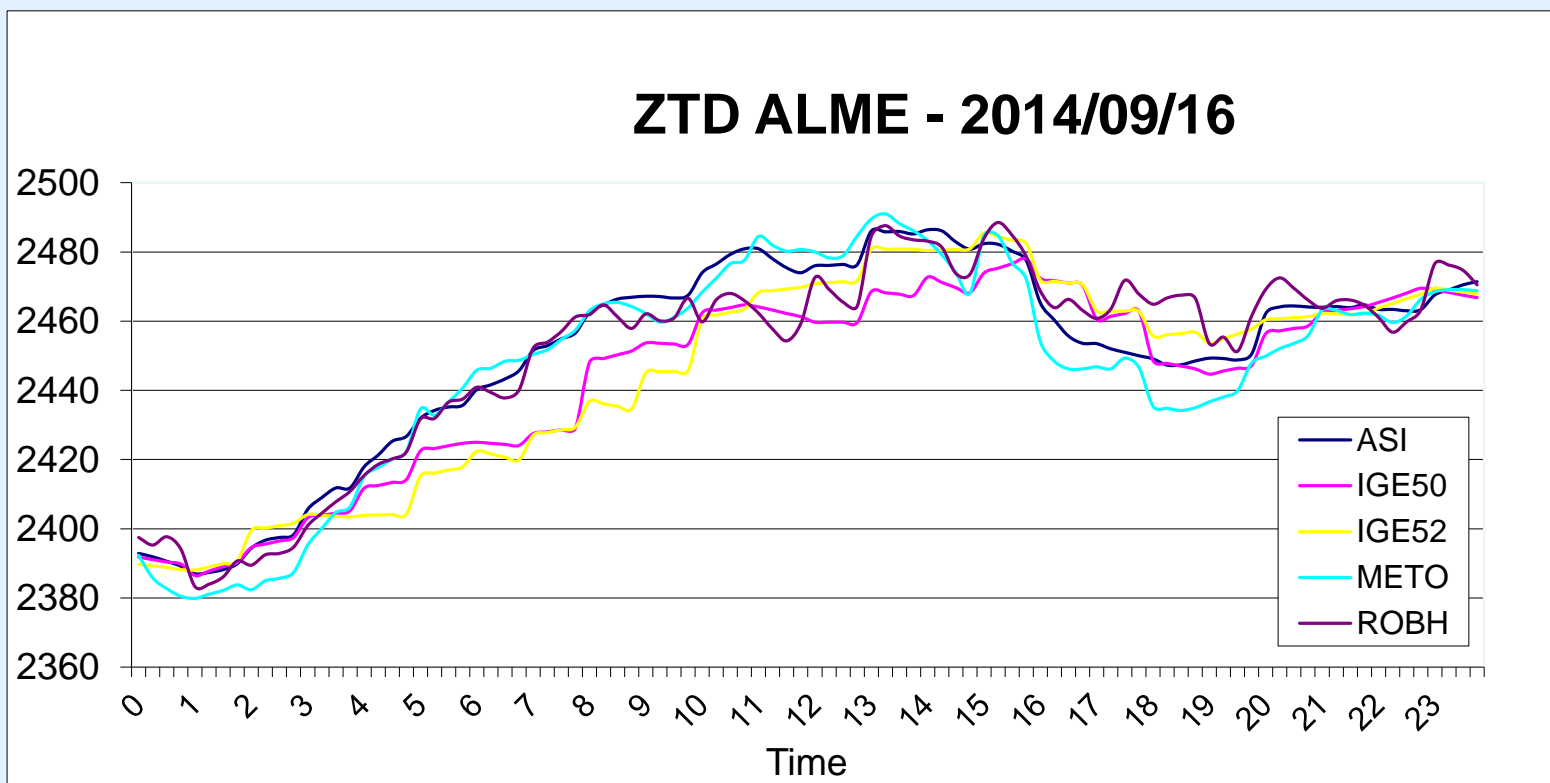
- From April, IGE migrates to BSW 5.2.
- Currently sending both solutions: BSW5.0 and BSW5.2.
- Main processing differences:

BSW 5.2	BSW 5.0
2010 IERS standards	Former IERS standards.
Dry GMF a priori / wet GMF estimation	Niell MF
Atmospheric Tidal Loading (ATL) applied	No ATL applied.
GPS + GLONASS	GPS
Small changes in FES2004 ocean loading coefficients	Former FES2004 model
CODE ultrarapid orbits and ERPs	IGS ultrarapid orbits (only for GPS)
6 hours NEQ combination	12 hours NEQ combination
It lasts 14 minutes processing	25 minutes processing
Files in new COST 2.2 format	COST 2.0 files



New solution (IGE2)

- Currently: evaluation of differences in EPN stations: both solutions, other ACs and EUREF final combination ZTDs.
- Global mean difference IGE50 – IGE52: 3,2 mm.



Future plans

- Evaluation of impact of different parameters in ZTD estimation in BSW5.2.
- November: new public RTK service and possibility of obtaining ZTD in real time.
- Currently reprocessing all the network with BSW52 for geodetic purposes: obtaining more precise and homogeneous ZTD time series in a long term.

