

National Report France

**Operational contribution to the national and global
geodetic infrastructure**

EUREF 2017 Symposium, Wrocław, 17 – 19 May 2017
National Report of France

National geodetic infrastructure

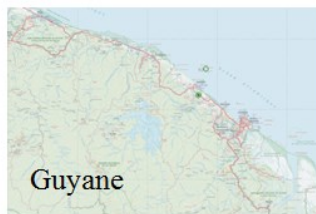
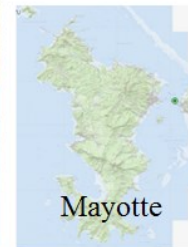
GNSS permanent network

NETWORK :

- 467 stations (392 GPS+Glonass, 53 GPS+Glonass+Galileo)
- 27 EPN , 12 IGS
- 25 stations owned by IGN, all others included via partnership

REAL TIME :

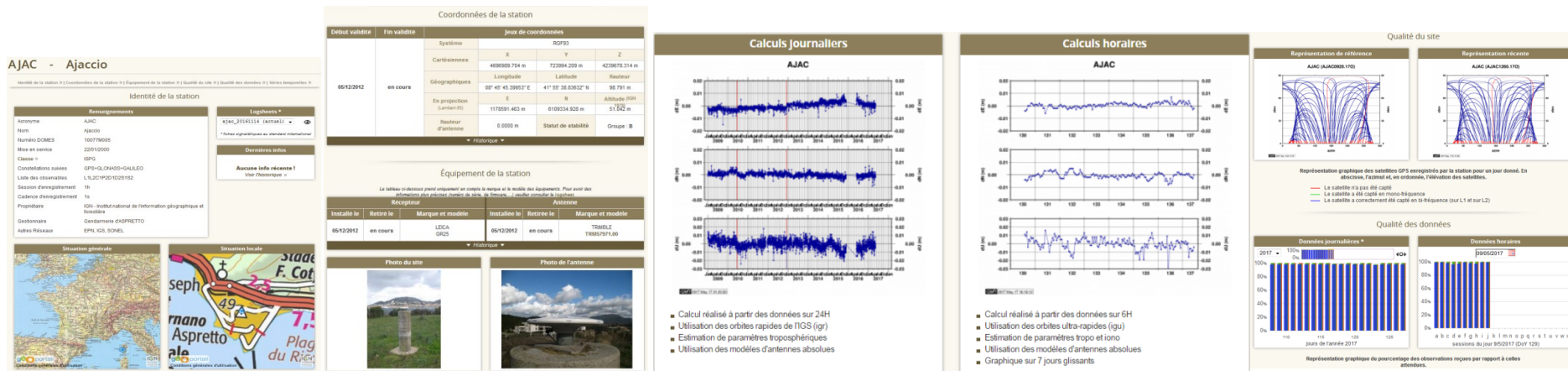
- caster (ign-ip.ign.fr) with 56 stations
- 10 stations EUREF-IP, 11 stations IGS-IP
- Streams used by IGN and real time network partners; also provided on request for non commercial applications.



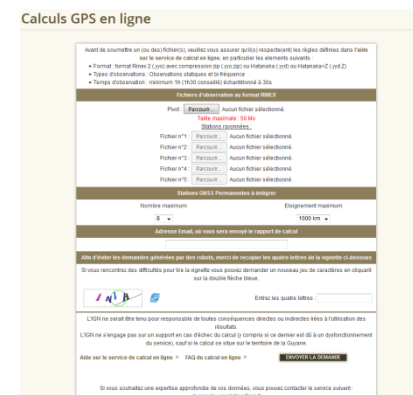
National geodetic infrastructure GNSS permanent network

Services:

- Determination of station coordinates in the National Geodetic Reference System
- Diffusion of station coordinates, metadata and the quality metadata through web site : <http://rgpdata.ign.fr>

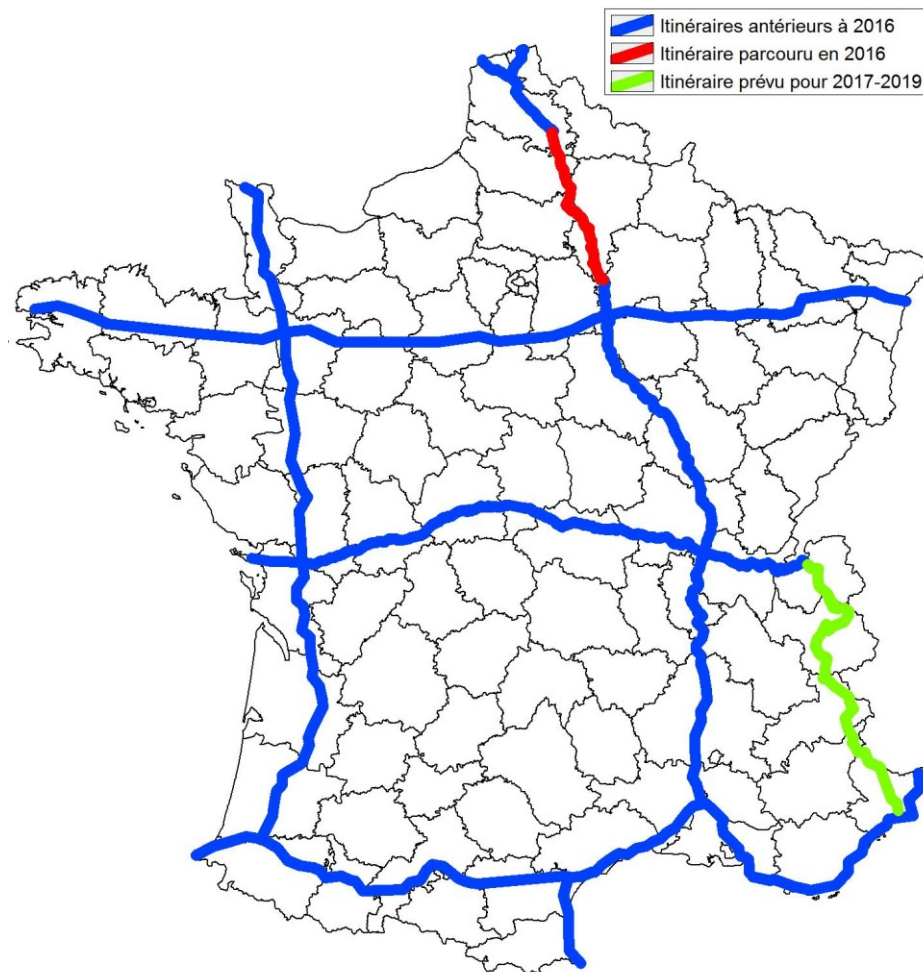


- Diffusion of Rinex Observations for post-processing : <http://rgp.ign.fr/DONNEES/diffusion/> , <ftp://rgpdata.ign.fr>
- Online Processing service : http://rgp.ign.fr/SERVICES/calcul_online.php



National geodetic infrastructure

Scientific leveling network (NIREF)



National geodetic infrastructure

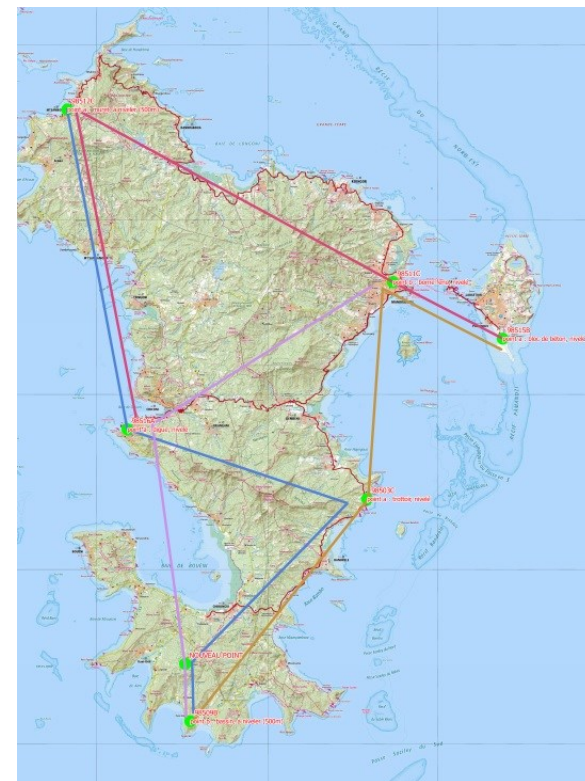
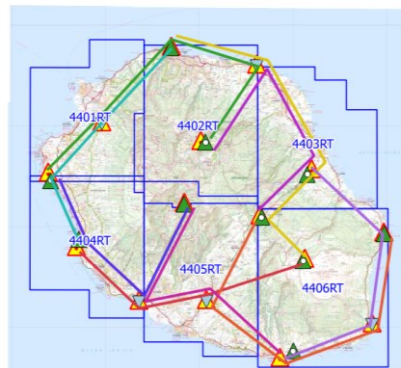
Gravimetric reference network

➤ Maintenance of the existing network :

- 29 relative remeasures

➤ New networks

- 2014 : Guadeloupe
- 2015 : Martinique
- 2016 : Guyane
- 2017 :
 - Ile de la Réunion (10 absolute, 5 relative)
 - Mayotte (7 absolute)
- 2018 : Saint Pierre et Miquelon



- IGS (International GPS-GNSS Service)
 - IGS reference frame combination center (coordinates & ERPs) and Global Data Center
 - IGS14 (released early 2017), Igsworkshop2017 (3-7 july, Paris)

- EUREF :
 - Analysis center
 - Local data center

- **Other developments**
 - Gravimetric quasigeoid and altimetric conversion grid : to be released in 2017
 - UltraRapid orbits and clocks (available 2 hours after observations)
 - GPS/GLONASS, using Bernese5.2 : soon to be released
 - GPS/GLONASS/GALILEO using Napeos : soon to be released
 - ITRF14 : All our process are now using the new realisation, including PSD to propagate coordinates