



National Report of France

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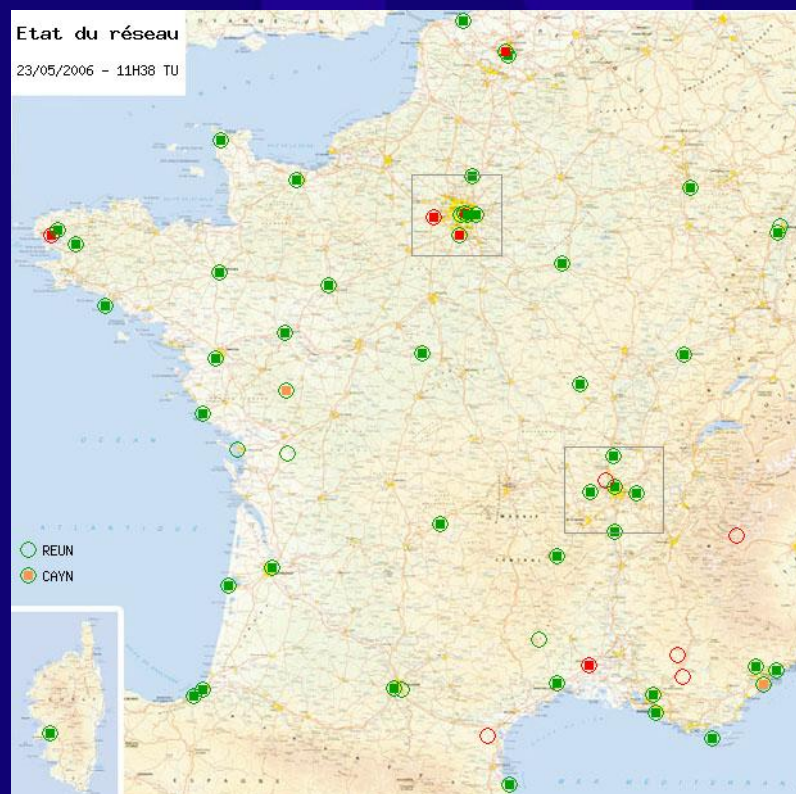
LATVIA

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France

GPS permanent network : RGP



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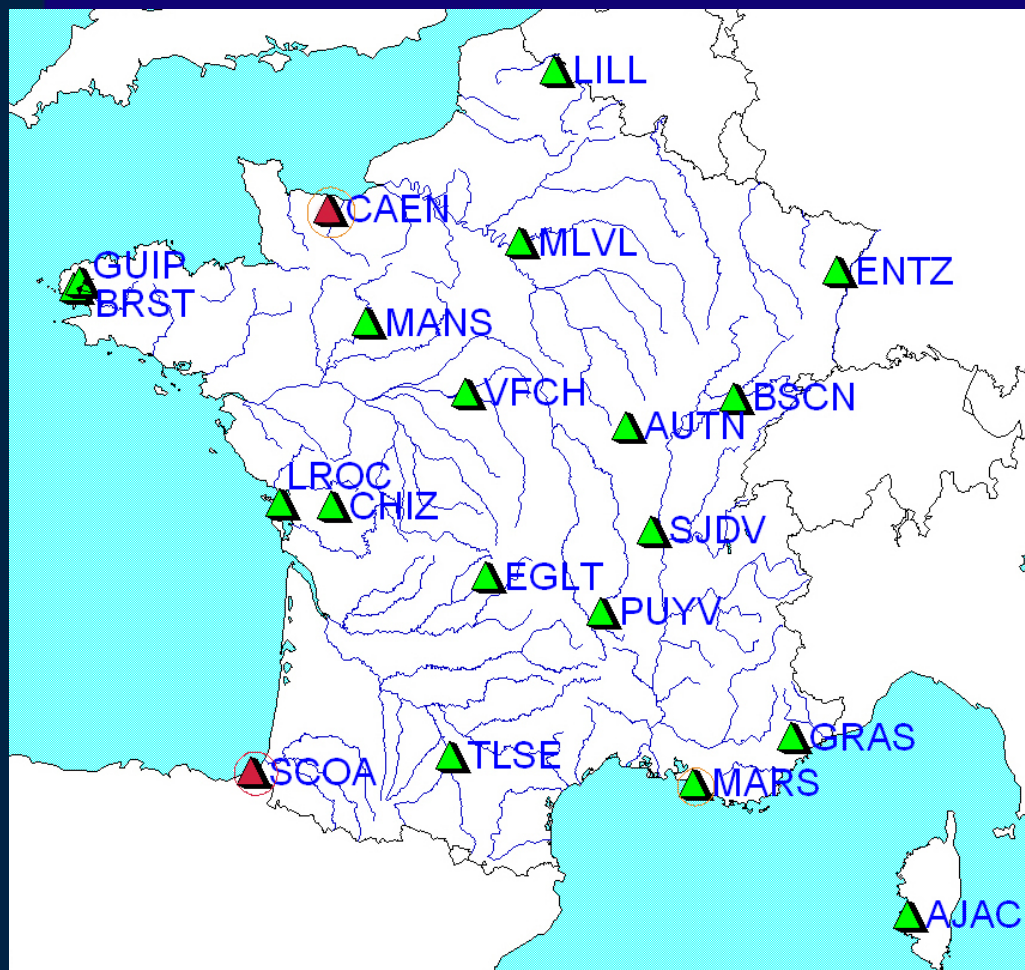
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- Developed in partnership with
 - . Public institutes (universities, research laboratories, .cities..)
 - . Private partners recently
- 53 stations (22 IGN, 31 partners): observations files 1h/1s
- 10 stations (1 IGN, 9 partners): observations files 24 h/30s

RGP participation to EPN



EPN

-17

- 2 proposed

-NTRIP: 4

IGS: 8

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A real time network project : TERIA

- OGE (ordre des géomètres experts)
- About 100 stations
- Real time : a service with an admission charge
- Differed time:
stations integrated in RGP
free of charge
- may 2006 :
15 installed stations (green)
- December 2006....

Operational network



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Re-process RGP data 1998 to 2006

- Bernese software 5.0

- State of progress of process

1998-2001

avril 2005- may 2006

In 2006 : 105 stations are simultaneously processed

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Re-process RGP data 1998 to 2006

The processing strategy adopted is
Measurement models

- DE200 planetary ephemeris model
- Earth potential model : JGM3
- **Ground and satellites antenna:**
IGS elevation-dependent absolute phase center model
(DOME specific model)
- Ocean loading model : GOT00
- Orbits and ERPs : IGS final products

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Re-process RGP data 1998 to 2006

The processing strategy adopted is

Processing parameters

- Elevation dependant weighting
- Elevation angle cutoff : 10 degrees
- Troposphere :

Niell a priori model with Niell mapping function
zenith delays estimated once per hour for each station
Wett-Niell mapping function used for the estimation

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Re-process RGP data 1998 to 2006

The processing strategy adopted is

Estimated parameters

- Adjustment : Weighted least-squares algorithms
- Ambiguity resolution : QIF strategy. Solved ambiguities introduced to final solution
- **Free solutions (no stations constrained) : the 7 daily solutions are combined to produce a weekly solution**
- Troposphere : zenith delays estimated once per hour for each station

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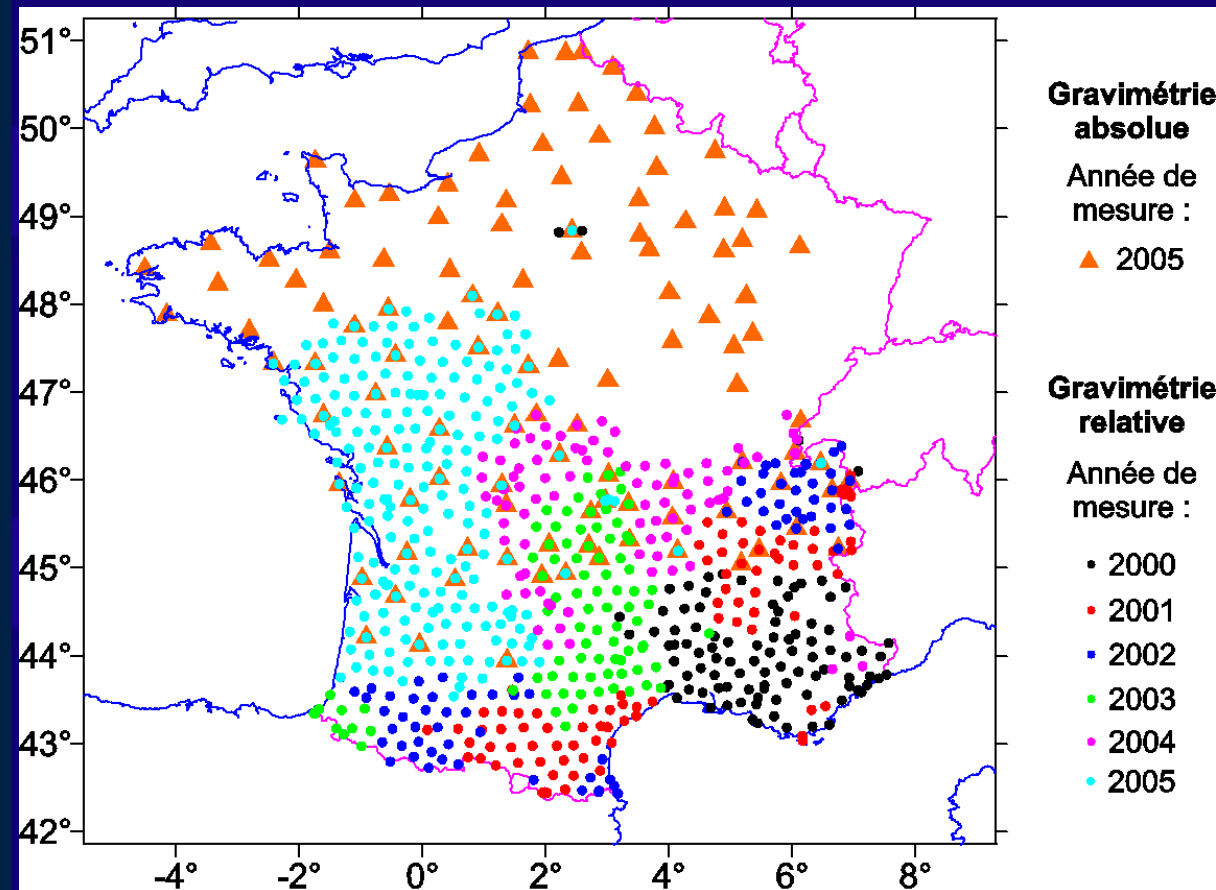
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The gravity measurements on geodetic network RBF (1032 Sites)



**A10 absolute
gravimeter**



**CG3 relative
gravimeter**

Accuracy beetwen 10 and 15 μgal

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