

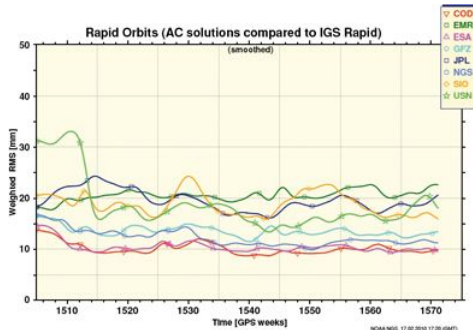


# PosiTIm

## High Accuracy GNSS Solutions and Services

### NAPEOS: High Accuracy GNSS Software

PosiTIm high accuracy GNSS solutions are based on the NAPEOS software. NAPEOS is developed and maintained by the European Space Operations Centre (ESOC) of the European Space Agency (ESA). Since 2008 ESOC uses the NAPEOS software for all its activities in the scope of the International GNSS Service (IGS). Within the IGS the products of ESOC are amongst the best. This means that the NAPEOS software is at least as good as well established software packages like the Bernese software and the Gipsy software from JPL. PosiTIm employees have been key in



the development of the NAPEOS software at ESOC.

### PosiTIm GNSS Services

Contrary to other high accuracy GNSS software providers PosiTIm offers a unique full service portfolio that will help you to get started with the software ASAP. The service portfolio includes:

- NAPEOS training course
- Software installation
- Configuration and set-up of the processing
- On-site support and training
- ... and more on request!



### High Accuracy Applications

PosiTIm focus is on high accuracy GNSS solutions. The applications in this area are numerous. As high accuracy GNSS solution provider PosiTIm can support you to obtain the results you want efficiently and accurately.

Some interesting applications where PosiTIm can support you with the GNSS analysis are:

- Seismic deformation monitoring
- Volcano activity monitoring
- Tsunami early warning system
- Weather predictions
- Climate monitoring
- Low Earth Orbiting Satellites
- Ionosphere monitoring; space weather

The PosiTIm support can be many fold. We can supply the required software, make software adaptations, supply training, configure and set-up your processing, or even take care of the processing for you.

### Real-Time Solutions

An important area in GNSS processing are real-time solutions. PosiTIm is very active in this area and together with our partner company, GPS-Solutions, we are capable of providing any kind of real-time solution you might be interested in with unsurpassed quality.

The PosiTIm real-time solutions provide unsurpassed accuracies at the level of a few centimetres. The key elements which allow us to achieve these unsurpassed real-time accuracies are:

- Very efficient, fast, and robust software
- High accuracy software; "best in class"
- Team with many years of high accuracy experience

PosiTIm is capable of deriving GNSS real-time orbits with an unsurpassed accuracy at the 10 to 20 mm level. Real-time clocks are derived with similar accuracies. Together the orbits and clocks allow for global real-time precise point positioning (PPP) solutions at the 1-10 mm level. Depending on the density of the reference station network also WARTK and RKT like solutions can be offered.

Software for "rover" receivers can also be provided in cooperation with the receiver manufacturer(s).



### Numerical Weather Predictions and Climate

A not so obvious application area of GNSS is numerical weather predictions and climate. The GNSS microwave signals are disturbed by the water vapour in the Earth's atmosphere. For GNSS analysts this is a nasty thing, but this disturbance makes GNSS one of the very few sensors that is capable of measuring the water vapour content. Consequently GNSS water vapour estimates are used to improve the weather predictions.

The long term development of the water vapour content is an important parameter for the study of climate change. Global temperature rise should be reflected in a rise of the amount of water vapour in the Earth atmosphere.

Processing the GNSS data does however constitute a significant challenge and effort for the atmospheric scientist. PosiTIm can offer several solutions in this area like:

- Configuration of the analysis
- On-site support
- Remote support
- Hosted solutions

### NAPEOS Training Course

PosiTIm is planning the first NAPEOS training course. The course will be held on the Canary Islands in close cooperation with our local partner Soluciones Avanzadas Canarias. The 5-day NAPEOS introduction course is scheduled to take place from October 25 to October 29, 2010.



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### Our partner for the NAPEOS courses:



canaryadvancedsolutions.com

Our partner for real-time and weather:  
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