



Borowiec, 22. 12. 2013

## CALIBRATION CERTIFICATE 9/2012

**Astrogeodynamical Observatory Space Research Centre (SRC) certifies that:**

- From November 14<sup>th</sup> 2012, 18:14 UTC, till November 29<sup>th</sup> 2012, 06:22 UTC the following set of instruments supplied by:

*Piktime Systems Ltd*  
*company having its registered office at:*  
*Cytrynowa 22, 62-002 Poznań, Poland*

was calibrated by a **Common View** method at the Time and Frequency Laboratory of the Observatory:

- TTS-4 receiver, s.n. 135,
  - RingAnt-G3T antenna, s.n.: 0634,
  - Antenna cable assembly (TTS4-135),
- The calibration was carried with respect to the main GPS/GLONASS s.n. 112 TTS-4 receiver at the Observatory.
  - The s.n.112 receiver was several times calibrated against traveling receivers from BIPM Time Section.

**The calibration yielded the following results:**

Differential delay of the calibrated receiver:

GPS, L1C: -23.20, RMS: 0.5 ns

GLONASS, L1C: -228.61, RMS: 1.0 ns

Antenna cable assembly: 139.96 ns, RMS: 0.3 ns

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Dr Jerzy Nawrocki  
Head, Time and Frequency Department  
Astrogeodynamical Observatory, Space Research Centre, Polish Academy of Sciences  
Ul. Drapałka 4  
62-035 Kornik  
Borowiec, Poland  
Phone: +48 61 8170-187, fax: +48 61 8179-219, E-mail:nawrocki@cbk.poznan.pl