

# Results of differential calibration of geodetic-type receivers at the TL

Last updated 24 September 2010

## 1. General description of the calibration

This report concerns the calibration of the hardware delays incurred by time signals for different geodetic-type GPS systems operated at the TL in Chung-Li.

The systems (receiver+antenna) are designated by a 4-letter acronym.

The link between acronym and actual hardware references may be found [here](#).

The results presented in Section 3 should be used for time transfer with other equipment calibrated using the same procedure. The standard uncertainty on such a link calibration is taken to be 5 ns (1  $\sigma$ ).

## 2. Calibration procedure

The calibration is a differential calibration with respect to a travelling receiver provided by the BIPM. The travelling receiver is referenced to the BIPM reference receiver, presently BPOC, an Ashtech Z12-T (see [TM116](#) for the original calibration of the reference receiver).

The calibration operational procedure is available [here](#). Note that different versions of the document were used, depending on the epoch of calibration; see the annex “Revision history” in the most recent version.

## 3. Calibration results

System	Period	Calib. dates	Travel	Results P1-P2/ns	Operations report
TWTF	2001/12	52263-52271	BPOC	<a href="#">307.5 – 317.7</a>	<a href="#">Report2001_TL.pdf</a>
TWTF	2005/04	53489-53495	BPOC	<a href="#">304.3 – 315.6</a>	<a href="#">Report2005_TL.pdf</a>