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

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## 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 IFAG in Wettzell. The systems (receiver+antenna) are designated by a 4-letter acronym. The link between acronym and actual hardware references may be found <u>here</u>.

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  $\underline{TM116}$  for the original calibration of the reference receiver).

The calibration operational procedure is available <u>here</u>. 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
WTZA	2003/06	52800-52807	BP0C	<u>292.8 - 307.2</u>	Report2003 IFAG.pdf
WTZA	2006/06	53894-53902	BP0C	<u>315.6 – 330.8</u>	Report2006 IFAG.pdf
WTZS	2006/06	53894-53902	BP0C	<u>228.0 – 236.68</u>	Report2006_IFAG.pdf
WTZU	2006/06	53894-53902	BP0C	<u>210.1 – 222.9</u>	Report2006_IFAG.pdf