Results of differential calibration of geodetic-type receivers at the NMIJ

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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 NMIJ in Tsukuba.

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 σ).

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 <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
NM0C	2002/04	52365-52372	BP0C	310.2 - 322.0	Report2002 NMIJ.pdf
NM0C	2005/07	53542-53548	BP0C	<u>306.5 − 319.4</u>	Report2005 NMIJ.pdf