

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

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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 NMIA in Sydney.

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, identified in the table of results, 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
SYDN	2010/10	55476-55482	BP0U	-4.0 – +9.7	Report_2010_NMIA.pdf
NMI4	2010/10	55476-55482	BP0U	-2.4 – +1.7	Report_2010_NMIA.pdf
SEP1	2010/10	55476-55482	BP0U	220.9 – 222.0	Report_2010_NMIA.pdf