Results of differential calibration of geodetic-type receivers at the LNE-SYRTE

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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 LNE-SYRTE in Paris.
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 BP0C, 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
OPMT	2001/03	51983-51989	BP0C	310.5 – 322.1	Report2001_LNE-SYRTE.pdf
OPMT	2003/02	52682-52693	BP0C	311.6 – 323.2	Report2003_LNE-SYRTE.pdf
OPMT	2004/06	53164-53170	BP0C	314.4 – 326.4	Report2004_LNE-SYRTE.pdf
OPMT	2006/08	53968-53977	BP0C	312.3 – 324.5	Report2006_LNE-SYRTE.pdf
OPMT	2008/05	54612-54618	BP0C	311.4 – 322.1	Report2008_LNE-SYRTE.pdf
OPM2	2004/06	53164-53170	BP0C	308.7 – 323.3	Report2004_LNE-SYRTE.pdf
OPM2	2006/08	53968-53977	BP0C	307.5 – 322.6	Report2006_LNE-SYRTE.pdf
OPM3	2006/08	53968-53977	BP0C	351.0 – 356.4[1]	Report2006_LNE-SYRTE.pdf

[1] Delay values include antenna cable.