

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

Last updated 31 January 2009

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 NRC in Ottawa.

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
NR1C	2003/10	52913-52935	BP0C	311.5 – 324.4	Report2003_NRC.pdf