

GPS calibration of JV receiver at the ROA (1101-2017)

Summary

In December 2017, GNSS equipment owned by the Justervesenet (UTC acronym JV) was installed at the ROA and calibrated against the Group1 reference station RO_5. The method of calibration is the “golden system calibration” which comprises just one period of data taking at the ROA.

The operations and report of measurements at the ROA are described in the [report by the ROA](#).

- **Final results for the calibrated systems**

The INTDLY values of the JV02 receiver given in Table 1 have been computed by the ROA based on the results of the [1001-2016](#) Group 1 trip for RO_5 and should not be updated to reflect later changes in the conventional INTDLY values of RO_5.

The uncertainty for a P3/PPP link or a C1 link involving JV02 is $U_{CAL0} = 4.0$ ns at the time of calibration, as given conventionally to “golden system calibrations”.

Changes in the set-up of the receivers after the calibration must be accounted for as described in section A.3.6 of the most recent Calibration guidelines in <ftp://ftp2.bipm.org/pub/tai/publication/gnss-calibration/guidelines/>.

Table 1. Final P1/P2/C1 INTDLY values from the 1101-2017 trip. Values of REFDLY and CABDLY during the calibration are also indicated for reference, see note 1 (all values in ns). “Meas. Date” refers to the first day of the differential calibration, to which the calibration results can be applied. “Impl. Date” is the MJD when the results should be implemented in the receiver.

System	BIPM	Meas. date	INTDLY P1	INTDLY P2	INTDLY C1	REFDLY	CABDLY	Note	Impl. date
JV02	JV02	2017/12/02	29.2	28.2	31.8	156.7	196.4	(1)	58271

Notes:

(1) The REFDLY and CABDLY values represent the set-up during the measurements at the ROA.

Version history

V1.0 2018/05/04: Publication of results from v2 of the ROA calibration report, to be implemented in JV02 receiver.