

Calibrations between USNO and OP

d are differential time corrections to be added to [*UTC*(USNO) – *UTC*(OP)],
and *u*(*d*) are estimated uncertainties for the periods of comparisons.

Date	<i>d</i> /ns	<i>u</i> (<i>d</i>)/ns	Reference	Note
December 1984	32.0	10.0	[1]	
October 1986	25.3	2.0	[2]	
April 1987	15.6	5.0	[3]	(1)
1991	–14.0	-	[4]	(1)
June 1994	–13.0	2.0	Rapport BIPM-1994/11	(2)
September 1994	–9.0	1.0	[5]	(3)
December 1994	–7.6	1.0	[6]	(3)
March 1995	–20.0	2.0	Rapport BIPM-1995/10	(2)(4)
July 1995 - June 1996	–14.0	2.0	Rapport BIPM-1996/10	(2)
February 1997	-	-	-	(5)
April 2002	9.0	3.0	BIPM Report-2002/02	(6)
December 2003	2.4	3.0	BIPM Report-2004/06	(6)
January 2006	–4.5	3.0	BIPM Report-2008/04	(6)
March 2007	–2.3	3.0	BIPM Report-2010/03	(6)

The uncertainties given in this table are conservative. They are mainly driven by the uncertainty due to the ‘round-trip’ reproducibility at the OP.

References

- [1] Buisson
- [2] W. Lewandowski, M.A. Weiss
- [3] Oaks
- [4] NRL (inf. from Miranian)
- [5] M.A. Weiss
- [6] M.A. Weiss

Notes

- (1) In fact absolut calibration of USNO STel 502 receiver by NRL; we derived from it correction for *UTC*(USNO)-*UTC*(OP) by assuming that OP receiver has correct absolut delay.
- (2) STel 502 receiver (s/n: 011) at USNO
- (3) In fact original calibration was *UTC*(USNO)-*UTC*(NIST); we derived from it correction for *UTC*(USNO)-*UTC*(OP) by assuming that correction for *UTC*(NIST)-*UTC*(OP) is zero.
- (4) This calibration was performed at USNO with a set of cables which delays might be erroneous.
- (5) USNO receiver corrected by +14 ns.
- (6) TTS-2 receiver (s/n: 014) at USNO