

**BUREAU INTERNATIONAL DES POIDS ET MESURES**

Key comparison CCTF-K001.UTC - Results  
 Degrees of equivalence  $D_k = [UTC - UTC(k)]$  for November 2019  
 Computed 2019 DECEMBER 09, 10h UTC

Coordinated Universal Time **UTC** and its local realizations **UTC(k)** in National Metrology Institutes and Designated Institutes.

Computed values of  $[UTC - UTC(k)]$  and uncertainties valid for the period of this publication

Date 2019 0h UTC MJD	NOV 2 58789	NOV 7 58794	NOV 12 58799	NOV 17 58804	NOV 22 58809	NOV 27 58814	Uncertainty/ns
Laboratory <i>k</i>	$[UTC - UTC(k)]/ns$						$U_k$
BelGIM	-1.4	-0.7	-0.7	0.0	0.8	0.2	24.6
BEV	-20.3	-21.9	-13.0	-9.4	-5.8	-0.6	6.8
BIM	11802.0	11816.6	11818.5	11841.1	11854.1	11897.0	14.4
BKFH	-	-	-	-	-	178.7	40.2
BMM	-	-	-	-	-	-	-
BOM	-	-2768.5	-2792.5	-2819.7	-2847.5	-2859.6	17.4
CENAM	6.6	-2.2	-2.0	-8.4	0.6	-2.1	23.0
CENAMAP AIP	7.5	20.2	-17.9	-20.1	7.7	-2.1	15.0
DEF-NAT	13922.2	14139.7	14362.1	14583.9	14793.5	15025.6	40.0
DMDM	-3.1	-1.4	5.0	6.9	4.1	4.8	7.0
EIM	1.8	6.8	9.1	4.8	-1.4	-3.4	23.2
EMI	12.1	16.1	13.9	10.6	12.7	11.9	19.4
ESA	0.1	0.7	1.0	1.2	1.7	1.1	6.4
FTMC	998.8	1012.3	1044.6	1040.7	1053.3	1042.5	5.8
GUM	-5.3	-9.0	-14.1	-19.3	-24.0	-29.2	5.8
ILNAS	-3.4	-2.7	-0.6	12.0	14.2	8.3	5.8
IMBIH	-2.0	0.8	5.0	3.3	-1.2	-1.0	5.8
INACAL	120.2	109.9	103.7	102.5	129.5	110.4	41.2
INM	7424.1	7464.7	7514.8	7569.6	7622.2	7659.5	15.0
INM(CO)	-3.0	2.6	12.7	7.3	4.0	1.6	40.2
INMETRO	-	-8.1	-7.0	-4.5	-9.5	-13.4	40.0
INPL	-1.3	0.9	3.8	8.7	6.4	10.3	14.6
INRIM	5.4	6.0	7.3	5.2	2.0	-1.2	3.0
INTI	87.9	99.7	101.3	104.9	91.0	93.0	40.4
IPE/ASCR	32.7	18.5	8.1	7.8	6.8	17.8	8.6
IPQ	203.7	188.9	186.0	186.6	192.5	194.6	40.0

JV	-11.0	-12.0	-11.0	-14.5	-22.8	-25.6	8.4
KRISS	10.3	12.2	12.6	13.6	15.3	16.4	6.4
LACOMET	-61.4	-37.9	-29.6	-1.5	5.6	0.8	41.2
LNE-SYRTE	2.2	2.2	2.0	1.8	1.6	1.4	3.0
MASM	-327.4	-	-	-413.9	-	-	6.0
METAS	9.0	8.3	7.7	5.6	4.3	3.5	4.6
MIKES	0.8	0.8	0.5	-0.1	-1.0	-1.7	9.2
MIRS/SIQ/Metrology	145.8	128.6	120.4	97.5	107.7	107.8	15.2
MSL	440.8	445.5	455.5	458.3	449.4	438.5	40.2
MUSSD	145.8	141.7	142.4	140.6	131.3	-	5.8
NICT	1.7	0.9	1.8	4.9	5.7	4.8	4.0
NIM	1.7	1.6	0.9	0.5	0.4	0.5	4.0
NIMT	-	-	-	-	-	-	-
NIS	-10.8	-12.6	-20.6	-11.5	-5.9	-9.7	40.0
NIST	0.8	-0.3	0.1	0.8	0.7	0.5	3.8
NMC, A*STAR	19.4	18.6	16.5	15.9	18.0	22.0	5.8
NMIA	-362.2	-351.8	-357.2	-363.4	-362.5	-371.4	13.0
NMIJ AIST	0.8	1.7	0.6	1.0	1.3	2.2	7.2
NMIM	-1176.1	-1197.4	-1224.3	-1257.5	-1278.4	-1310.2	8.6
NMISA	-0.6	-3.3	-4.7	-1.7	1.3	1.9	5.8
NPL	1.2	0.9	0.9	0.8	1.1	2.2	6.4
NPLI	-0.5	2.4	6.3	9.8	13.8	16.0	5.6
NRC	-7.8	-9.8	-12.6	-9.0	-6.8	1.0	6.2
NSC IM	-6.8	2.7	11.7	16.0	7.8	-3.9	18.8
ON/DSHO	-7.3	-7.7	-1.6	6.6	0.8	1.4	40.2
PTB	2.9	2.9	2.9	2.6	2.5	2.4	1.2
RISE	3.9	4.3	4.8	5.6	6.5	7.0	3.0
ROA	-2.4	-2.1	-2.0	-2.0	-3.1	-3.2	3.8
SASO	-875.3	-880.3	-894.6	-911.1	-929.2	-945.1	6.0
SCL	-31.1	-28.9	-25.9	-19.5	-9.1	-2.3	6.0
SMD	10.3	9.7	10.2	3.5	-1.1	4.0	6.4
SMU	-60.3	-69.1	-64.2	-	-68.7	-68.1	24.6
SNSU-BSN	1506.9	1509.9	1538.2	1546.7	1552.2	1561.2	6.0
TL	1.2	0.8	0.5	0.3	-0.2	-0.5	4.0
UME	-78.0	-70.7	-62.5	-60.6	-47.9	-42.7	7.0
VMI-STAMEQ	-26.1	-17.5	-12.3	-18.6	-16.5	-17.5	9.0
VNIFTRI	2.1	2.1	2.1	2.0	2.4	2.4	4.2
VSL	4.0	3.0	-3.4	-8.0	-4.8	-5.3	3.4