

## BUREAU INTERNATIONAL DES POIDS ET MESURES

Key comparison CCTF-K001.UTC - Results  
 Degrees of equivalence  $D_k = [UTC - UTC(k)]$  for December 2019  
 Computed 2020 JANUARY 09, 15h 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 2019/20 0h UTC	DEC 2	DEC 7	DEC 12	DEC 17	DEC 22	DEC 27	Uncertainty/ns
MJD	58819	58824	58829	58834	58839	58844	
Laboratory <i>k</i>	$[UTC - UTC(k)]/ns$						$U_k$
BelGIM	-0.7	-0.9	-0.7	-0.6	-0.7	0.1	24.6
BEV	-1.7	3.2	8.1	9.9	7.3	5.8	7.0
BIM	11893.8	11914.7	11948.3	11973.1	12025.6	12063.0	14.4
BKFH	183.5	199.4	209.6	224.0	232.8	241.1	40.2
BMM	-	32.0	59.9	69.0	99.8	116.4	40.0
BOM	-2875.5	-2891.3	-2933.5	-2962.4	-2981.6	-2995.5	17.4
CENAM	-9.8	-2.8	-4.4	-3.6	-5.8	-3.8	23.0
CENAMAP AIP	-96.3	-14.0	-9.3	-4.0	16.9	14.4	15.0
DEF-NAT	15236.7	15469.1	15670.3	15888.4	16094.6	16312.7	40.0
DMDM	9.2	5.0	6.4	12.9	11.4	10.6	7.0
EIM	6.5	-1.7	6.6	-1.5	3.6	4.1	23.2
EMI	8.4	8.8	10.0	19.2	14.3	4.7	19.4
ESA	0.5	-0.3	-1.0	-1.4	-1.1	-0.3	6.4
FTMC	1032.2	1016.8	1018.5	1005.6	1011.9	986.8	5.8
GUM	-35.2	-40.8	-43.0	-38.7	-34.1	-29.3	6.4
ILNAS	6.3	7.4	12.6	16.4	18.6	13.0	6.0
IMBIH	4.9	4.4	2.7	0.3	1.0	-4.1	5.8
INACAL	127.6	118.3	99.8	107.7	112.9	-75.2	41.2
INM	7712.3	7764.7	7811.2	7860.4	7911.2	7958.6	15.0
INM(CO)	-	-	-	-	-	-	40.2
INMETRO	-5.1	8.8	50.4	-5.0	-4.2	-6.0	40.0
INPL	10.6	11.9	3.6	5.0	16.9	23.9	14.6
INRIM	-2.1	-2.3	-0.9	0.1	1.2	2.5	2.4
INTI	-	50.5	48.8	45.8	43.5	41.2	40.4
IPE/ASCR	22.2	37.1	64.3	41.5	18.4	14.9	5.8
IPQ	190.8	196.5	197.8	200.3	198.6	188.9	40.0

JV	-21.1	-29.6	-26.5	-23.0	-22.6	-19.2	8.6
KRISS	17.3	18.9	20.0	19.7	19.3	17.9	6.4
LACOMET	10.1	15.4	22.5	12.3	11.0	9.7	41.2
LNE-SYRTE	1.1	1.2	1.1	1.2	1.3	1.2	2.4
MASM	-508.3	-527.3	-52.0	-85.7	-115.1	-142.0	6.0
METAS	2.7	3.2	4.2	3.1	2.9	3.1	4.6
MIKES	-2.7	-3.8	-4.9	-5.2	-5.2	-5.3	9.2
MIRS/SIQ/Metrology	85.6	100.6	90.4	130.0	169.0	180.4	15.2
MSL	405.4	376.3	356.6	318.3	290.9	255.7	40.2
MUSSD	131.4	128.4	123.3	125.8	121.1	108.8	5.8
NICT	7.1	8.8	7.9	5.4	4.3	3.7	4.0
NIM	0.4	0.1	0.2	0.0	-0.4	0.4	4.0
NIMT	-	-	-	-	-	-	-
NIS	-10.6	-18.1	-23.3	-21.0	-27.1	-24.2	40.0
NIST	0.4	0.8	1.2	2.5	2.8	1.5	3.8
NMC, A*STAR	26.8	29.2	25.5	11.2	-2.1	-14.1	5.8
NMIA	-372.7	-369.4	-381.2	-378.4	-391.5	-382.5	13.2
NMIJ AIST	2.9	3.2	3.8	3.5	2.7	1.9	7.2
NMIM	-1340.9	-1371.6	-1400.9	-1435.5	-1472.5	-1506.6	8.8
NMISA	1.4	1.0	0.6	-1.1	-1.2	0.2	5.8
NPL	-0.2	-0.1	-1.3	-0.2	0.3	2.3	5.8
NPLI	15.7	14.2	13.9	12.5	12.0	11.3	5.6
NRC	-2.8	3.6	2.7	3.9	1.1	-3.1	6.2
NSC IM	-4.7	-3.2	-4.6	-8.5	-14.9	-27.3	18.8
ON/DSHO	4.4	7.8	11.2	4.7	-4.0	1.3	40.0
PTB	2.1	2.4	2.3	2.3	2.3	2.4	1.2
RISE	7.5	7.0	6.7	5.1	3.8	2.9	2.4
ROA	-4.0	-4.6	-3.6	-3.0	-3.1	-3.3	2.4
SASO	-950.8	-957.0	-966.1	-985.7	-996.8	-1014.4	6.0
SCL	2.2	3.0	6.0	0.3	2.1	9.4	6.0
SMD	1.6	-1.6	-0.7	-3.1	-6.3	-6.3	6.4
SMU	-90.7	-95.4	-104.5	-103.5	-109.0	-109.5	24.6
SNSU-BSN	1562.8	1572.8	1593.6	1643.1	1646.7	1663.3	6.0
TL	-0.5	-0.1	0.6	1.1	1.8	2.7	4.0
UME	-30.4	-5.9	13.5	32.0	44.6	47.2	7.0
VMI-STAMEQ	-12.2	-7.9	-5.2	-5.4	-	-	9.0
VNIFTRI	2.6	2.6	2.4	2.6	2.0	2.0	4.0
VSL	-0.6	-3.9	-10.7	-1.5	2.3	-1.1	3.4