

BUREAU INTERNATIONAL DES POIDS ET MESURES

Key comparison CCTF-K001.UTC - Results
 Degrees of equivalence $D_k = [UTC - UTC(k)]$ for July 2023
 Computed 2023 AUGUST 09, 09h 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 2023 0h UTC | JUL 4 | JUL 9 | JUL 14 | JUL 19 | JUL 24 | JUL 29 | Uncertainty/ns |
|---------------------|---------------------|---------|---------|---------|---------|---------|----------------|
| MJD | 60129 | 60134 | 60139 | 60144 | 60149 | 60154 | |
| Laboratory <i>k</i> | $[UTC - UTC(k)]/ns$ | | | | | | U_k |
| BelGIM | -0.9 | -0.7 | -0.6 | -0.5 | -1.4 | -1.2 | 6.6 |
| BEV | -23.5 | -7.7 | 4.2 | 16.7 | 26.4 | 28.6 | 5.6 |
| BFKH | 7824.1 | 7862.6 | 7907.0 | 7942.9 | 7982.0 | 8036.7 | 40.2 |
| BIM | 18200.6 | 18216.1 | 18249.9 | 18270.5 | 18287.1 | 18301.3 | 14.6 |
| BMM | 2927.4 | 2944.5 | 3035.1 | 3057.4 | 3081.9 | 3117.1 | 40.0 |
| CENAM | 3.5 | -1.2 | 0.6 | 0.4 | 0.4 | -1.5 | 8.8 |
| CENAMAP AIP | 10.3 | 5.7 | 2.6 | 4.1 | 10.6 | -0.1 | 10.8 |
| DEF-NAT | 10749.2 | 10848.0 | - | 298.2 | 401.3 | 496.6 | 40.0 |
| DFM | -2.6 | -3.6 | -3.5 | -2.3 | -2.8 | -3.0 | 5.6 |
| DMDM | -27.7 | -16.9 | -5.1 | 9.7 | - | -16.3 | 7.6 |
| EMI | 11.6 | 23.1 | 25.9 | 28.7 | 26.8 | 20.5 | 22.0 |
| ESA | -0.2 | -0.4 | -0.6 | 0.4 | 1.6 | 1.5 | 5.6 |
| FTMC | - | - | - | - | - | - | |
| GUM | 1.1 | 0.3 | 0.1 | 0.2 | 0.0 | 0.0 | 5.8 |
| IBMETRO | 116.7 | 111.6 | 111.4 | 119.4 | 98.5 | 110.4 | 17.0 |
| ILNAS | 22.1 | 22.3 | 13.7 | 11.5 | 3.3 | -4.5 | 5.6 |
| IMBIH | -0.9 | -0.1 | -0.4 | 0.3 | 0.0 | 0.0 | 5.6 |
| INACAL | - | - | 2238.3 | 2095.7 | - | 1835.0 | 41.2 |
| INM | 118.0 | 116.6 | 117.8 | 118.5 | 120.4 | 122.5 | 15.6 |
| INM(CO) | -152.6 | -153.1 | -148.3 | -141.1 | -133.5 | -123.5 | 40.4 |
| INMETRO | -9.2 | -8.5 | -1.6 | 6.5 | 4.3 | 6.0 | 6.0 |
| INPL | -3.8 | -5.2 | 0.2 | 0.0 | 1.2 | 4.2 | 15.0 |
| INRIM | -1.1 | -1.3 | -0.2 | 1.1 | 2.0 | 2.0 | 3.8 |
| INTI | 260.7 | 263.5 | 279.6 | 285.2 | 272.2 | 274.1 | 6.4 |
| IPE/ASCR | 12.5 | 13.0 | 13.6 | 15.2 | 29.4 | 24.7 | 5.6 |
| IPQ | 839.6 | - | - | 857.5 | 858.6 | - | 5.6 |

| | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|------|
| JV | 2.2 | 2.0 | 1.7 | 1.2 | 1.1 | 1.9 | 9.2 |
| KazStandart | -0.1 | 0.0 | -0.1 | 4.9 | 6.5 | 7.4 | 8.6 |
| KRISS | 5.7 | 6.1 | 6.5 | 6.1 | 5.9 | 5.0 | 5.6 |
| LAMETRO-ICE | 174.4 | 151.8 | 123.5 | 123.0 | 127.9 | 77.5 | 16.2 |
| LNE-SYRTE | 0.9 | 0.3 | -0.5 | -1.3 | -2.2 | -2.7 | 3.2 |
| MASM | -1923.8 | -1963.6 | -2007.2 | -2056.7 | -2107.0 | -2153.6 | 6.6 |
| METAS | 0.6 | 0.2 | 0.9 | 1.7 | 1.4 | 1.6 | 3.6 |
| MIKES | -1.4 | -0.4 | 0.9 | 1.7 | 2.6 | 3.3 | 6.2 |
| MIRS/SIQ/Metrology | 31.2 | 28.6 | 23.9 | 18.0 | 14.6 | 24.1 | 7.8 |
| MSL | 35.9 | 39.7 | 56.2 | 62.9 | 58.3 | 64.0 | 5.8 |
| MUSSD | - | - | - | - | - | - | - |
| NICT | 0.1 | 0.4 | 0.8 | -0.6 | -0.6 | -0.8 | 4.0 |
| NIM | -1.6 | -1.4 | -1.0 | -1.3 | -1.2 | -1.5 | 4.2 |
| NIMT | 13.2 | 13.1 | 12.2 | 14.5 | 7.1 | 9.7 | 5.6 |
| NIS | -0.3 | -6.6 | -2.8 | 1.3 | 0.2 | 7.7 | 14.2 |
| NIST | -0.2 | 0.2 | 0.8 | 0.8 | 0.8 | 0.6 | 5.4 |
| NMC, A*STAR | -4.7 | -2.0 | 5.1 | 11.2 | 11.7 | 10.9 | 6.6 |
| NMIA | -434.2 | -441.4 | -449.1 | -441.5 | -445.0 | -439.3 | 5.6 |
| NMIJ AIST | 18.0 | 14.2 | 10.6 | 7.1 | 4.0 | 1.6 | 5.6 |
| NMIM | -810.1 | -820.7 | -830.2 | -835.9 | -846.1 | -849.6 | 4.0 |
| NMISA | -6.0 | -0.1 | -1.3 | -2.1 | -1.9 | -1.9 | 6.8 |
| NPL | -0.4 | -0.6 | -1.1 | 0.0 | 0.2 | 0.2 | 3.6 |
| NPLI | 0.7 | 1.2 | 1.2 | 1.6 | 1.9 | 2.1 | 6.4 |
| NRC | 3.5 | 4.3 | 4.5 | 2.5 | 1.6 | 1.7 | 6.8 |
| NSAI NML | 47.8 | 47.3 | 49.7 | 51.9 | 45.1 | 36.5 | 14.4 |
| NSC IM | 9.5 | -13.4 | - | -4.4 | -10.4 | -3.8 | 15.0 |
| ON/DSHO | 5.6 | 3.8 | 2.7 | 4.7 | 4.7 | 2.4 | 6.2 |
| PTB | -0.1 | -0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 1.4 |
| RISE | 1.4 | 1.0 | 0.7 | 0.3 | -0.1 | -0.5 | 3.6 |
| ROA | -1.5 | -1.8 | -2.1 | -2.2 | -2.0 | -0.4 | 3.6 |
| SASO-NMCC | -238.4 | -213.8 | -195.4 | -181.7 | -165.5 | -145.2 | 7.0 |
| SCL | 32.8 | 39.7 | 48.1 | 51.1 | 53.2 | 59.2 | 6.8 |
| SMD | -1.7 | -1.9 | -1.8 | -1.8 | -1.0 | -0.7 | 7.4 |
| SMU | 155.6 | 180.6 | 145.0 | 129.6 | 190.6 | 244.5 | 27.2 |
| SNSU-BSN | 1555.3 | 1571.3 | 1605.1 | 1639.6 | 1668.7 | 1682.1 | 6.6 |
| TL | 2.1 | 2.3 | 2.3 | 1.5 | 1.4 | 0.7 | 4.2 |
| UME | -0.2 | 1.2 | -0.6 | -0.6 | -0.7 | -0.2 | 7.4 |
| UTE | 2.8 | 2.9 | -6.0 | 0.5 | 3.6 | 3.7 | 16.4 |
| VMI-STAMEQ | -6.8 | -5.8 | 4.5 | 1.2 | 8.9 | 21.5 | 6.2 |
| VNIIFTRI | -2.0 | -2.2 | -2.0 | -1.9 | -2.0 | -2.0 | 3.4 |
| VSL | 13.2 | 10.1 | 7.0 | 2.1 | 1.5 | 6.1 | 3.6 |