

UTC(MIKE) Atomic Bulletin 2025-08

VTT MIKES Metrology monthly Time & Frequency bulletin.

Comments and questions to: time "at" vtt.fi

Date of publication: 2025-08-11 (60898)

Circular-T issues used for analysis: [446](#), [447](#), [448](#), [449](#), [450](#), [451](#),

First day of analysis interval: 2025-02-03 (60709)

Last day of analysis interval: 2025-07-28 (60884)

ClockData for analysis: [CDMI_25.02](#), [CDMI_25.03](#), [CDMI_25.04](#), [CDMI_25.05](#), [CDMI_25.06](#), [CDMI_25.07](#),

The Atomic Bulletin is archived at: https://monitor.mikes.fi/ftp/atomic_bulletin/

Notes

60139 (2023-07-14) remove AHM1, add AHM2 to analysis.

60321 (2024-01-12) missing ClockData 60304-60309 due to database-issue.

60424 (2024-04-24) AHM3 ion pump failure, phase step -1428.2ns

60433 (2024-05-02) AHM2 to master clock, AHM2 phase step +48759.63 ns

60496 (2024-07-05) AHM3 to master clock.

60502 (2024-07-11) AB2024-07: AHM3 fit to to 60434->. Steering $-7\text{e-}15 = +18\text{ ns/30days}$.

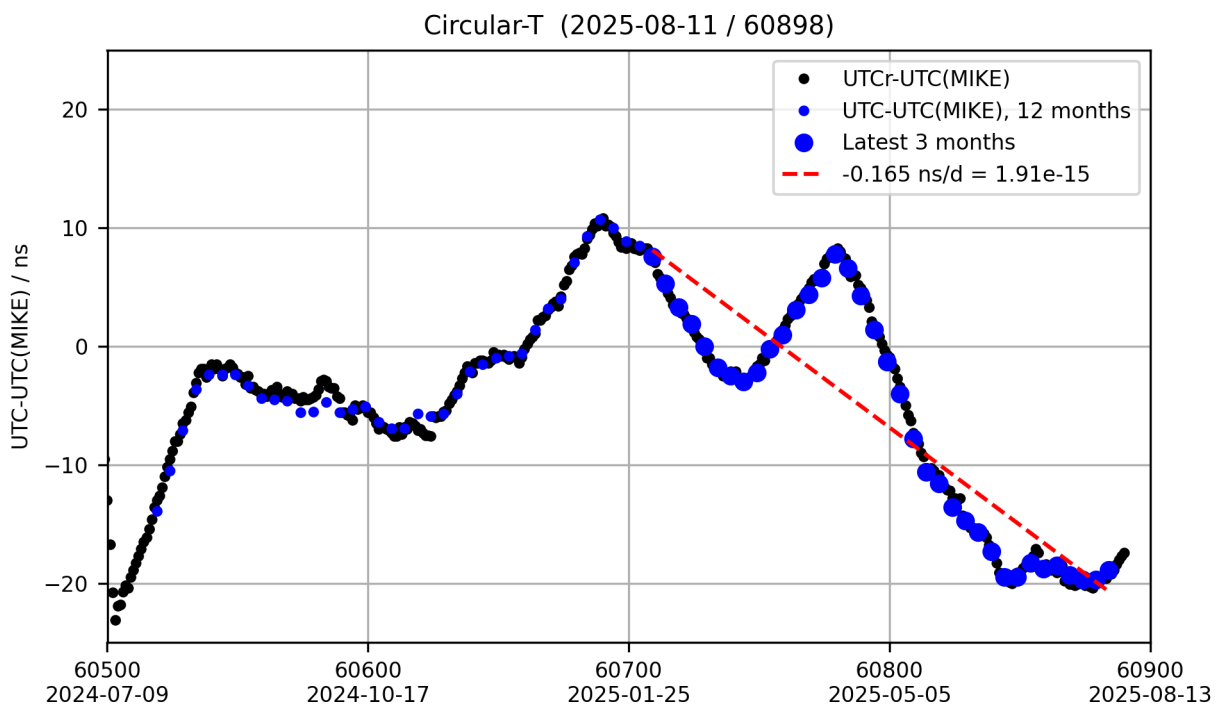
60536 (2024-08-14) AB2024-08: set steering to zero.

60845 (2025-06-19) AB2025-06: fit to 6 months. set steering to $+20\text{ns/60days} = -3.8\text{e-}15$.

60871 (2025-07-15) AB2025-07: keep steering $+20\text{ns/60days} = -3.8\text{e-}15$.

60898 (2025-08-11) AB2025-08: keep steering $+20\text{ns/60days} = -3.8\text{e-}15$.

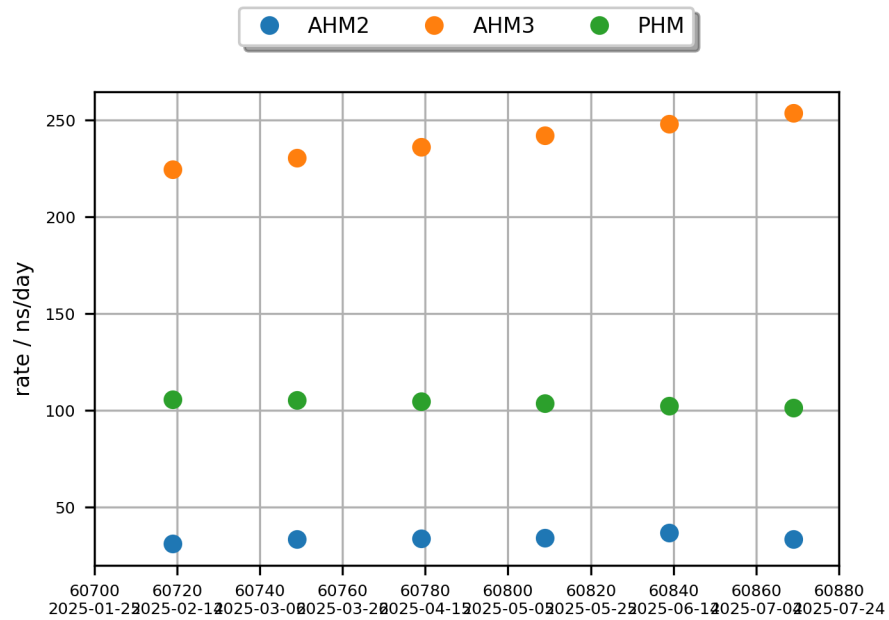
UTC-UTC(MIKE) as reported in Circular-T

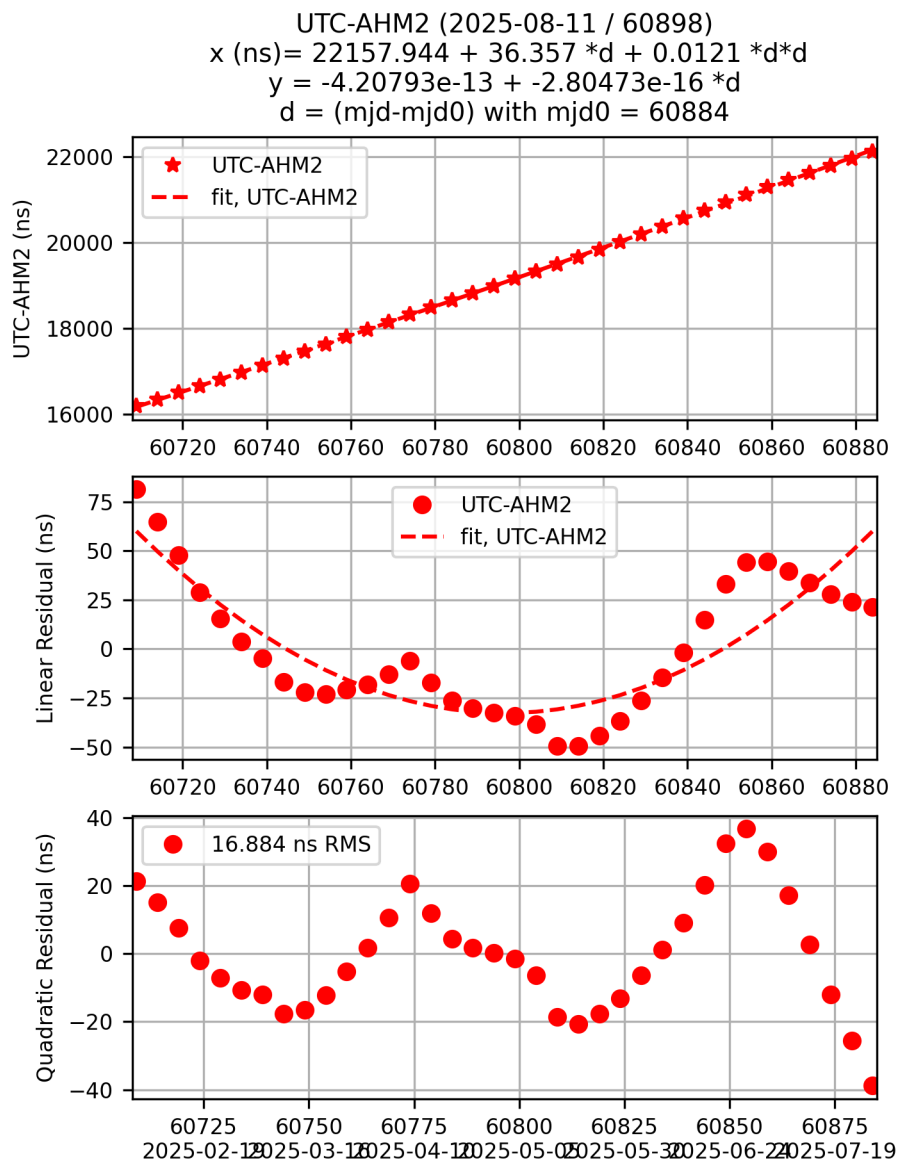


UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

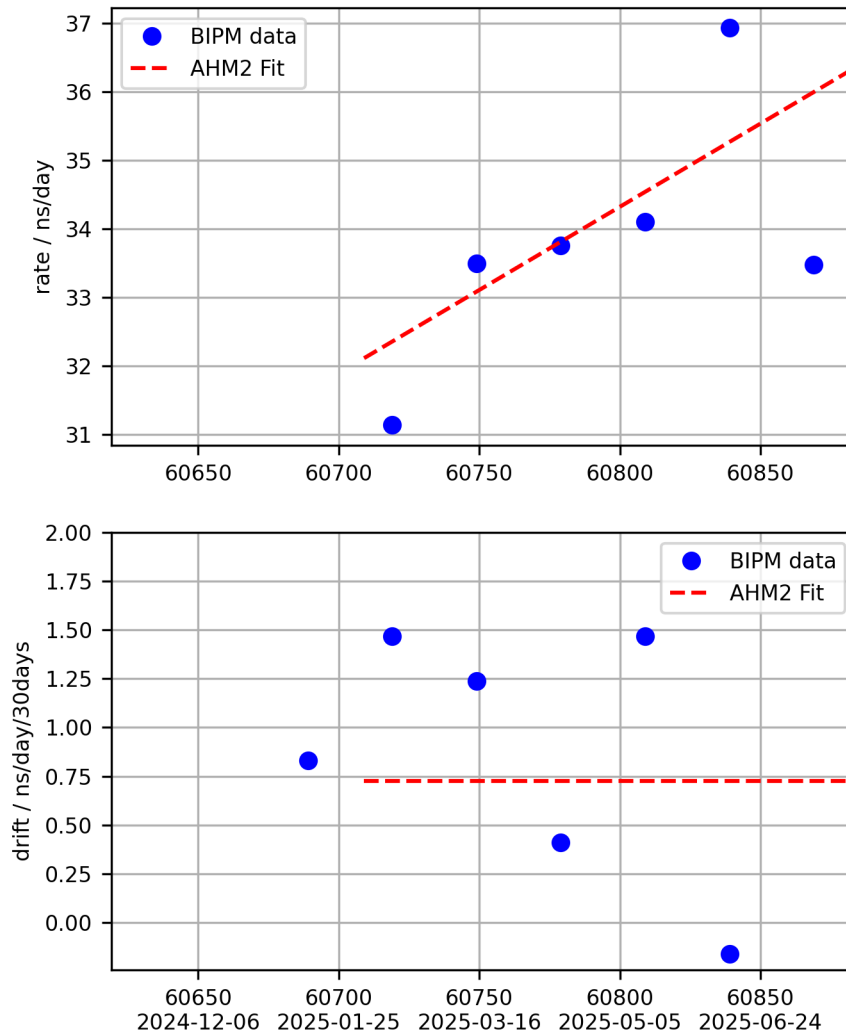
Clock Rates - Summary

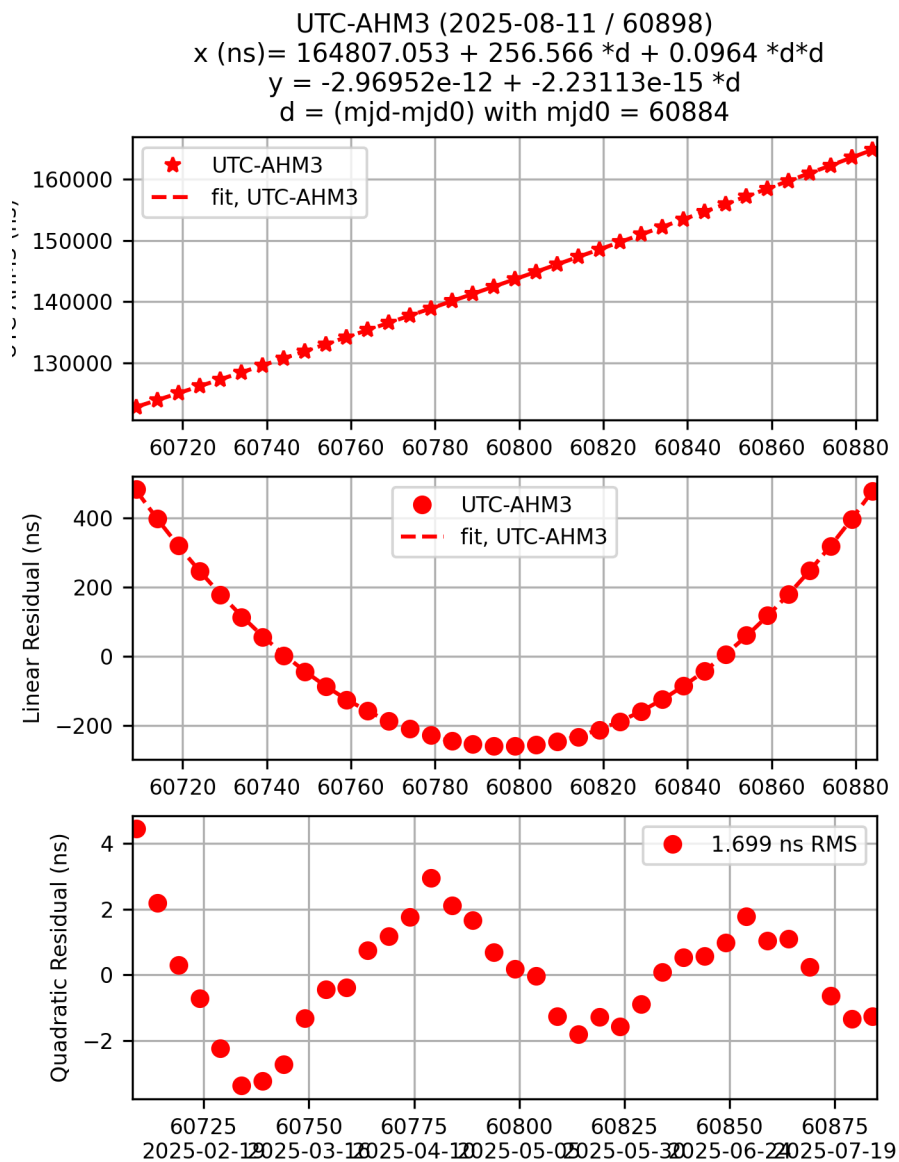
Clock rates as reported by the BIPM in the monthly r-report.



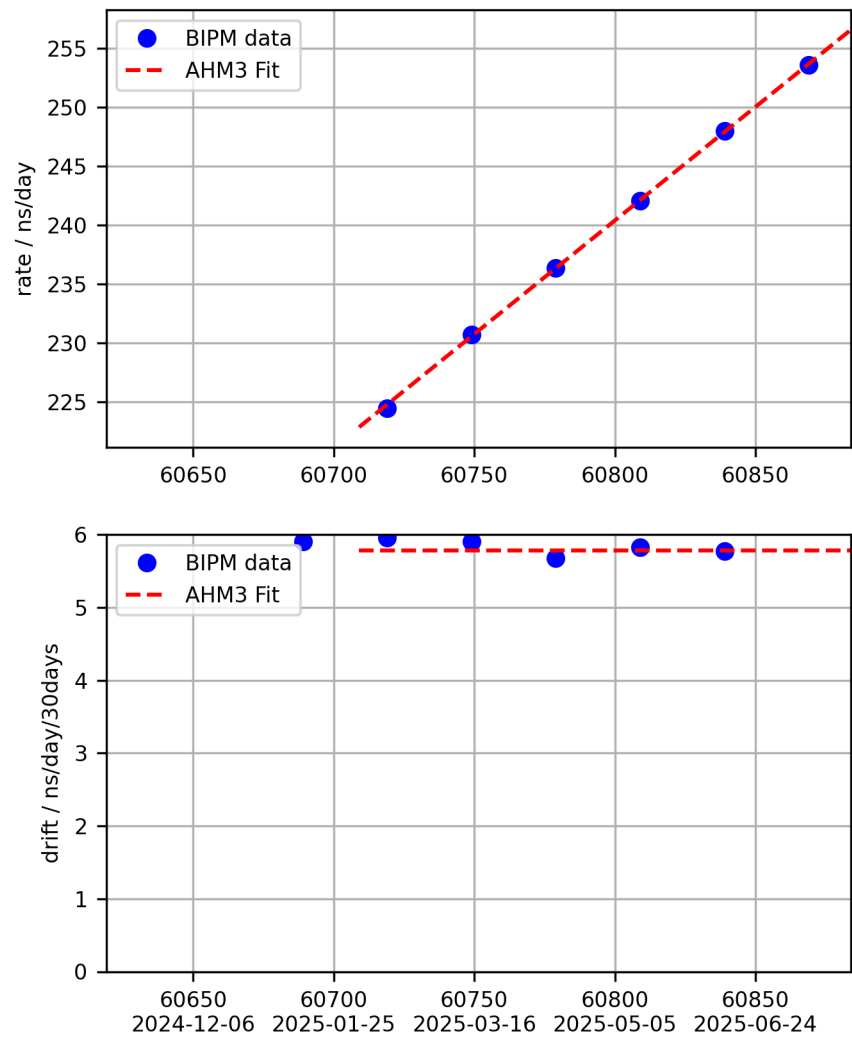
UTC - AHM2 Fit

AHM2 Rate and Drift

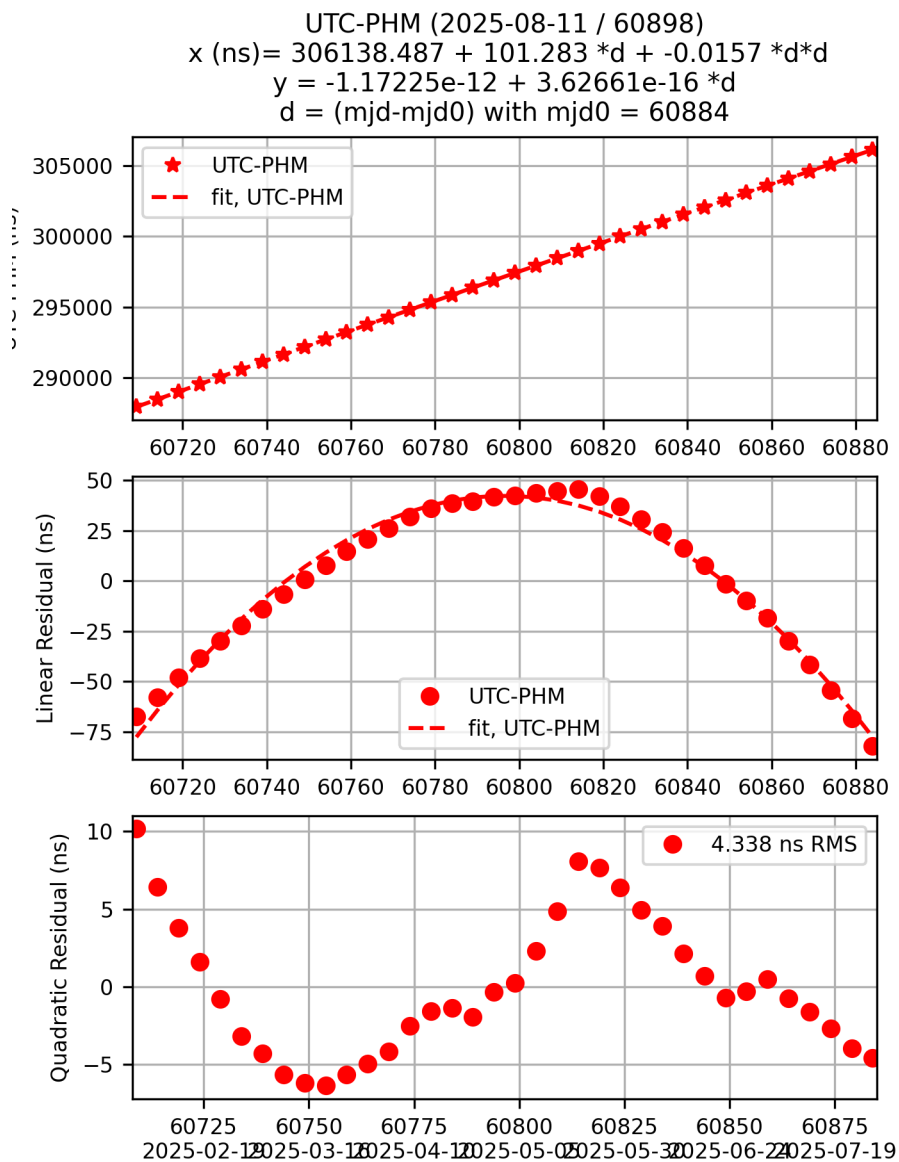


UTC - AHM3 Fit

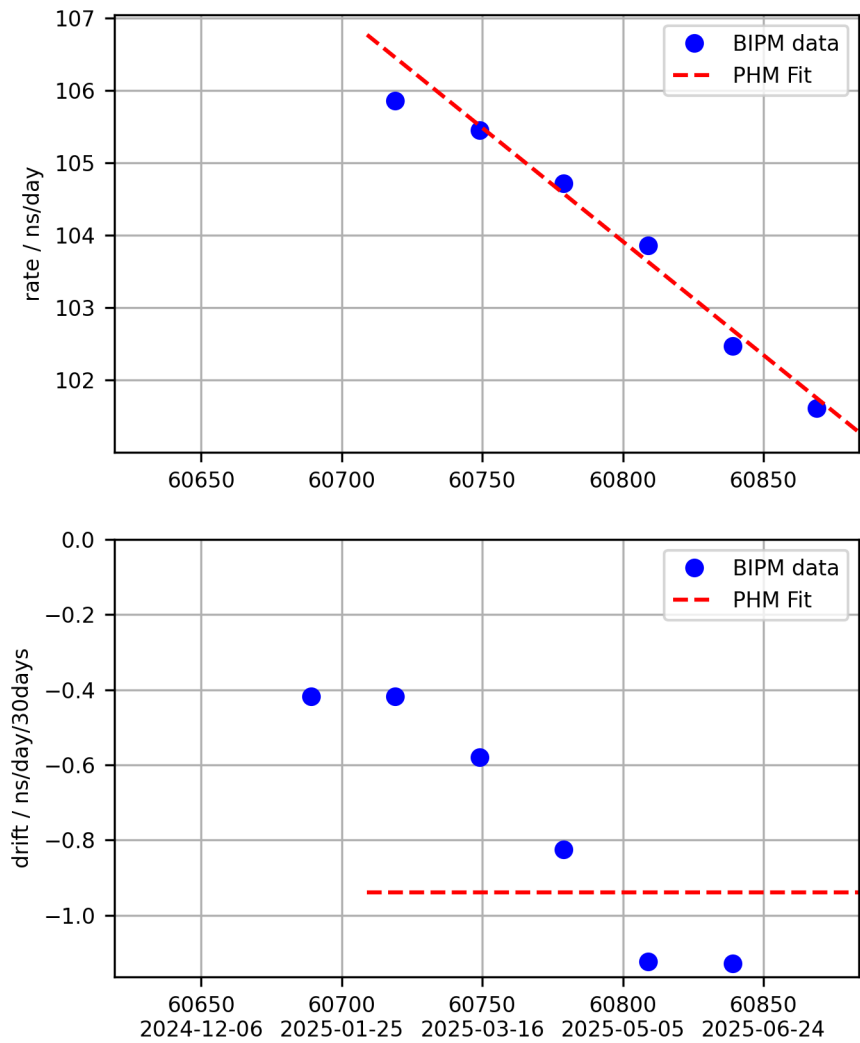
AHM3 Rate and Drift



UTC - PHM Fit

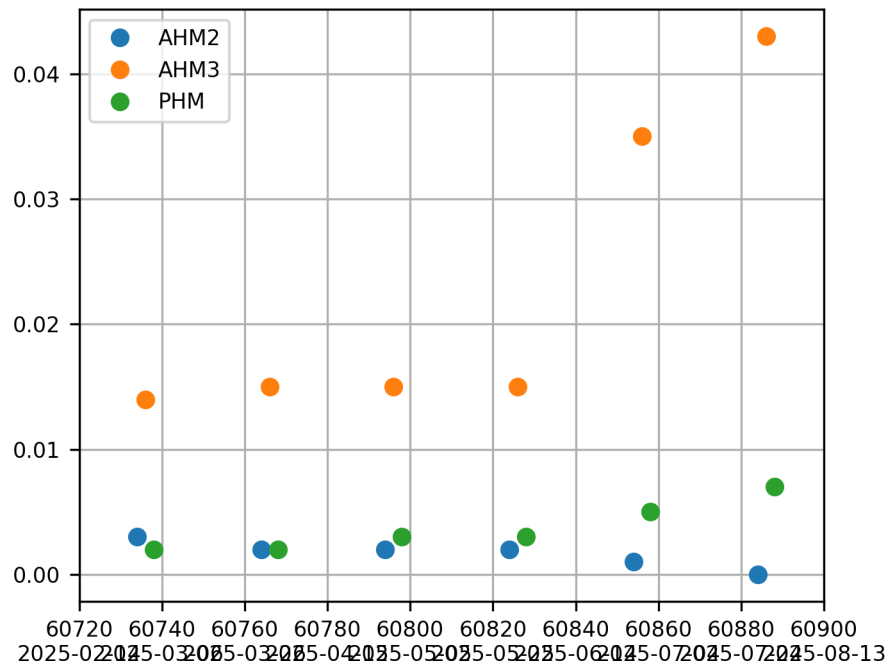


PHM Rate and Drift



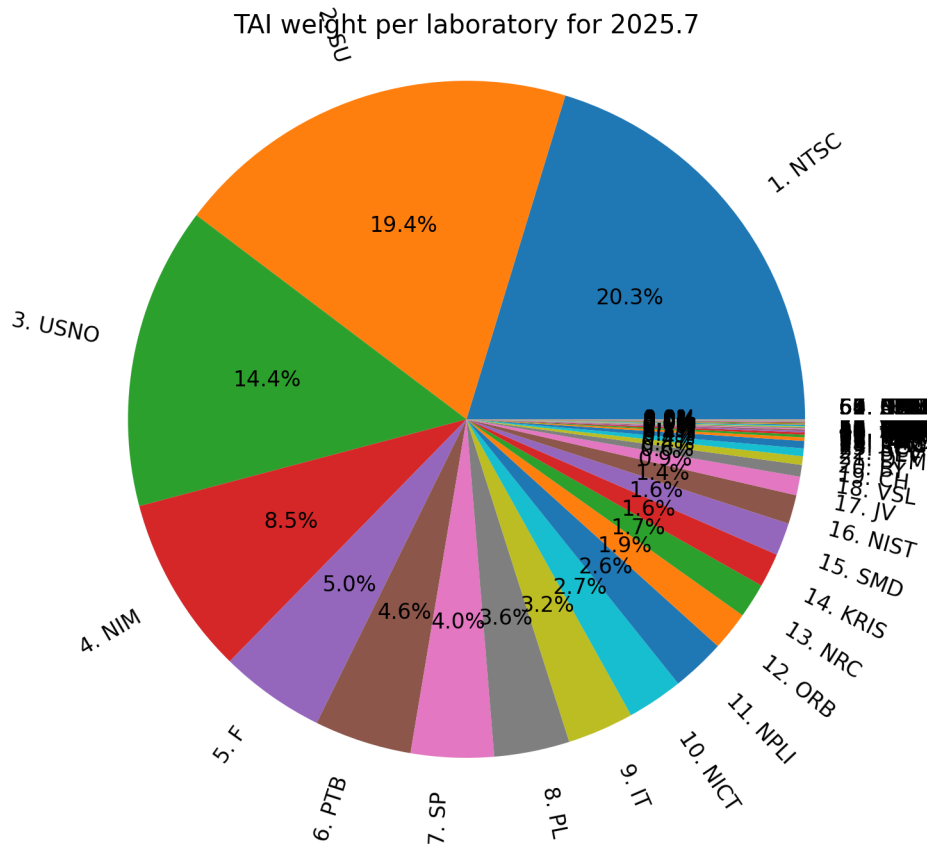
VTT MIKES Clock Weights

RELATIVE WEIGHTS (IN PERCENT) OF THE CLOCKS FOR INTERVALS OF ONE MONTH ENDING AT THE GIVEN DATES



Clock Weights per Laboratory

Relative TAI Weight per laboratory



Weight-file for 2025.07

Number of clocks 402

Number of labs 66

Number of clock types 13

Sum of weights per lab 100.003, Sum of weights per clock type 100.003

Weight Clock Type

0.701 35 MICROSEMI 5071A HIGH PERFORMANCE TUBE.

58.892 40 UNSPECIFIED HYDROGEN MASER

34.718 41 HYDROGEN MASER

0.058 36 MICROSEMI 5071A LOW/STANDARD PERFORMANCE TUBE

0.007 18 MICROSEMI Cs 4000

0.013 37 OSCILLOQUARTZ OSA 3300

0.001 22 OSCILLOQUARTZ OSA 3230B/3235B

0.013 32 OSCILLOQUARTZ OSA 3300-SHP

0.003 44 Other clocks

0.054 42 Commercial Rubidium clock

0.023 38 Chengdu Spaceon Electronics Company TA1000

5.503 93 GROUND-STATE HYPERFINETRANSITION OF 87 Rb

0.017 92 GROUND-STATE HYPERFINE TRANSITION OF 133 Cs

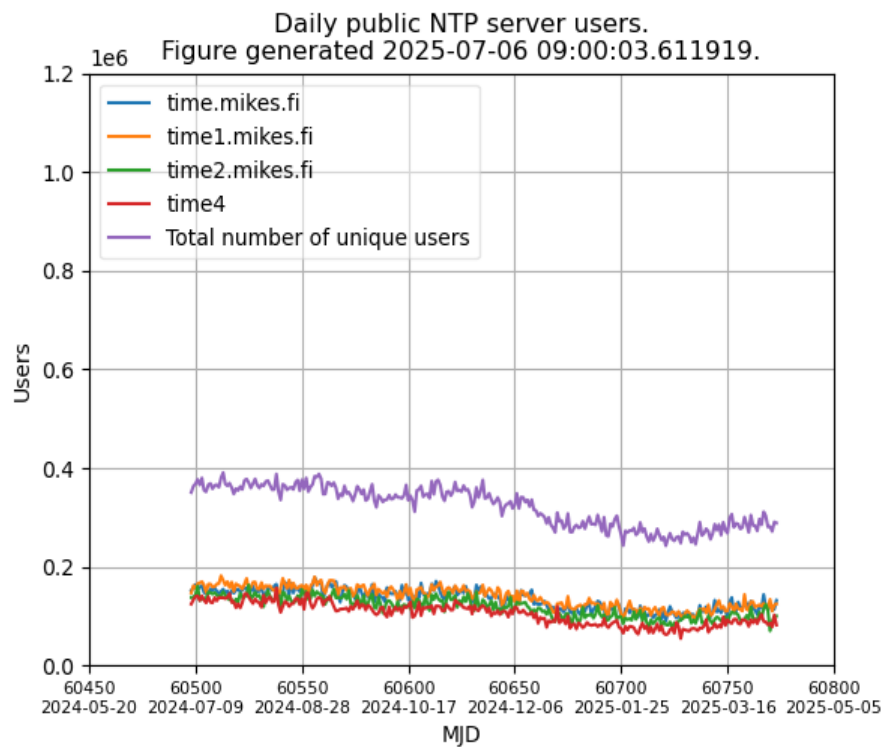
UTC(MIKE) Atomic Bulletin 2025-08

Rank Weight Lab

1 20.283 NTSC
2 19.419 SU
3 14.426 USNO
4 8.549 NIM
5 5.032 F
6 4.645 PTB
7 3.955 SP
8 3.601 PL
9 3.171 IT
10 2.671 NICT
11 2.564 NPLI
12 1.858 ORB
13 1.658 NRC
14 1.626 KRIS
15 1.558 SMD
16 1.383 NIST
17 0.887 JV
18 0.564 VSL
19 0.407 CH
20 0.372 BY
21 0.355 DFM
22 0.166 BEV
23 0.127 SCL
24 0.108 ROA
25 0.081 IFAG
26 0.056 JATC
27 0.050 MIKE
28 0.049 BIRM
29 0.047 KZ
30 0.047 TL
31 0.040 ONRJ
32 0.038 TP
33 0.037 NAO
34 0.026 NPL
35 0.021 ESA
36 0.018 CAO
37 0.015 NIMT
38 0.012 HKO
39 0.009 AUS
40 0.009 INPL
41 0.008 MSL

NTP Usage Statistics

Number of unique IPv4 addresses using our public NTP-servers.



End of Bulletin.