

UTC(MIKE) Atomic Bulletin 2025-06

VTT MIKES Metrology monthly Time & Frequency bulletin.

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

Date of publication: 2025-06-19 (60845)

Circular-T issues used for analysis: [444](#), [445](#), [446](#), [447](#), [448](#), [449](#),

First day of analysis interval: 2024-12-05 (60649)

Last day of analysis interval: 2025-05-29 (60824)

ClockData for analysis: [CDMI 24.12](#), [CDMI 25.01](#), [CDMI 25.02](#), [CDMI 25.03](#), [CDMI 25.04](#), [CDMI 25.05](#),

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

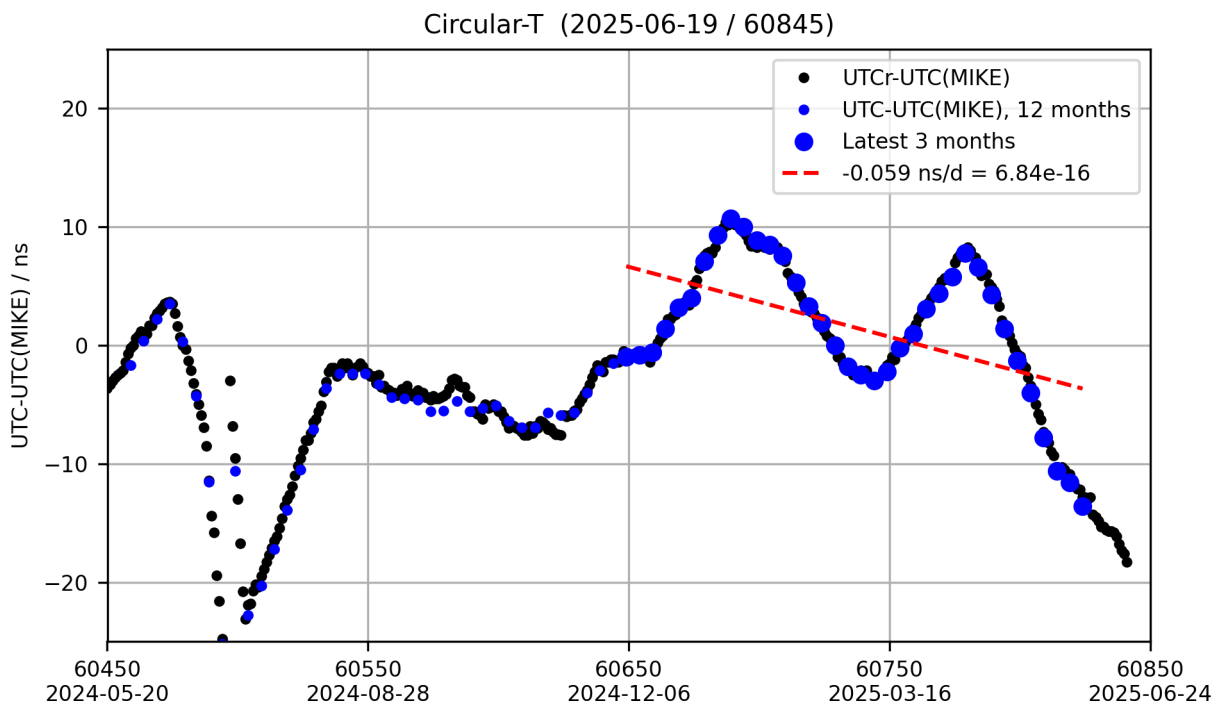
60496 (2024-07-05) AHM3 to master clock.

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

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

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

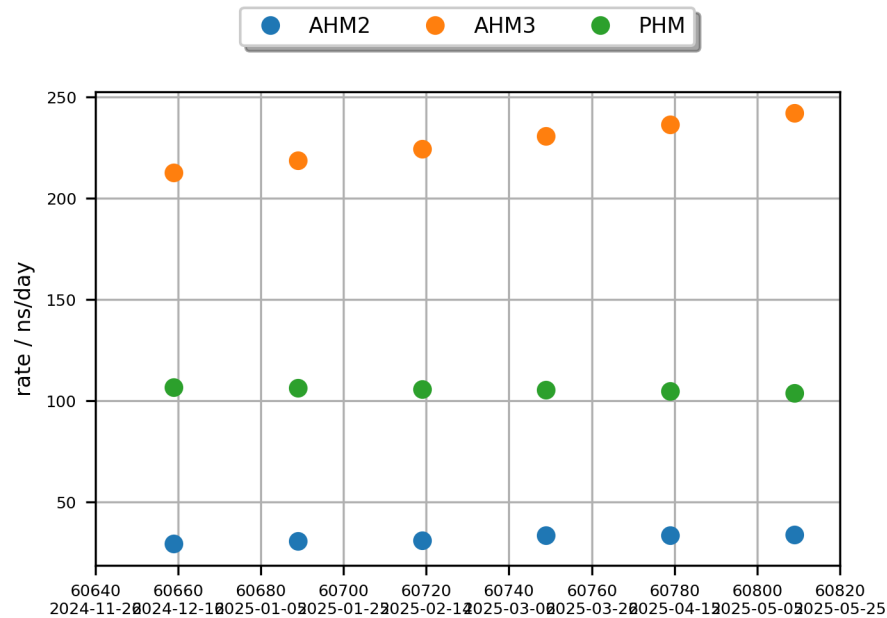
UTC-UTC(MIKE) as reported in Circular-T

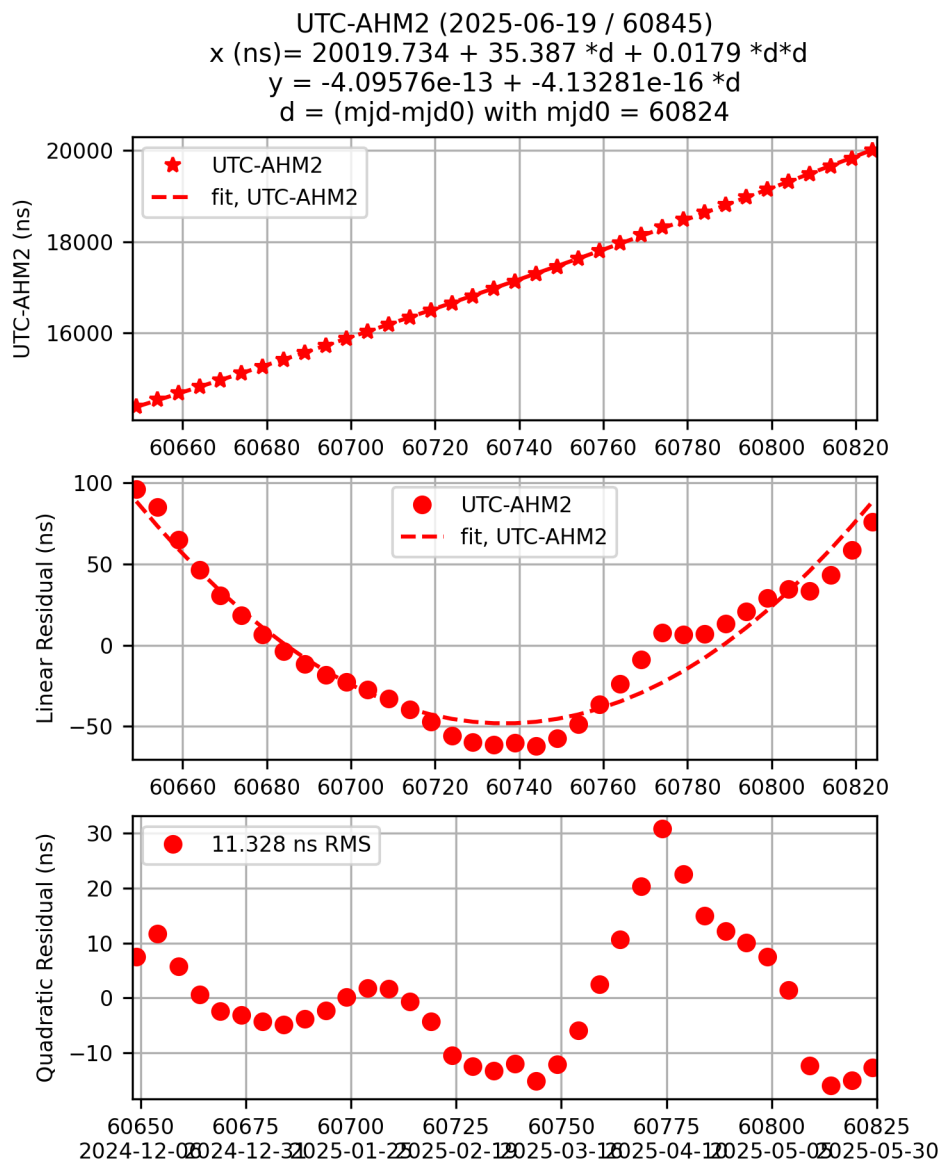


UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

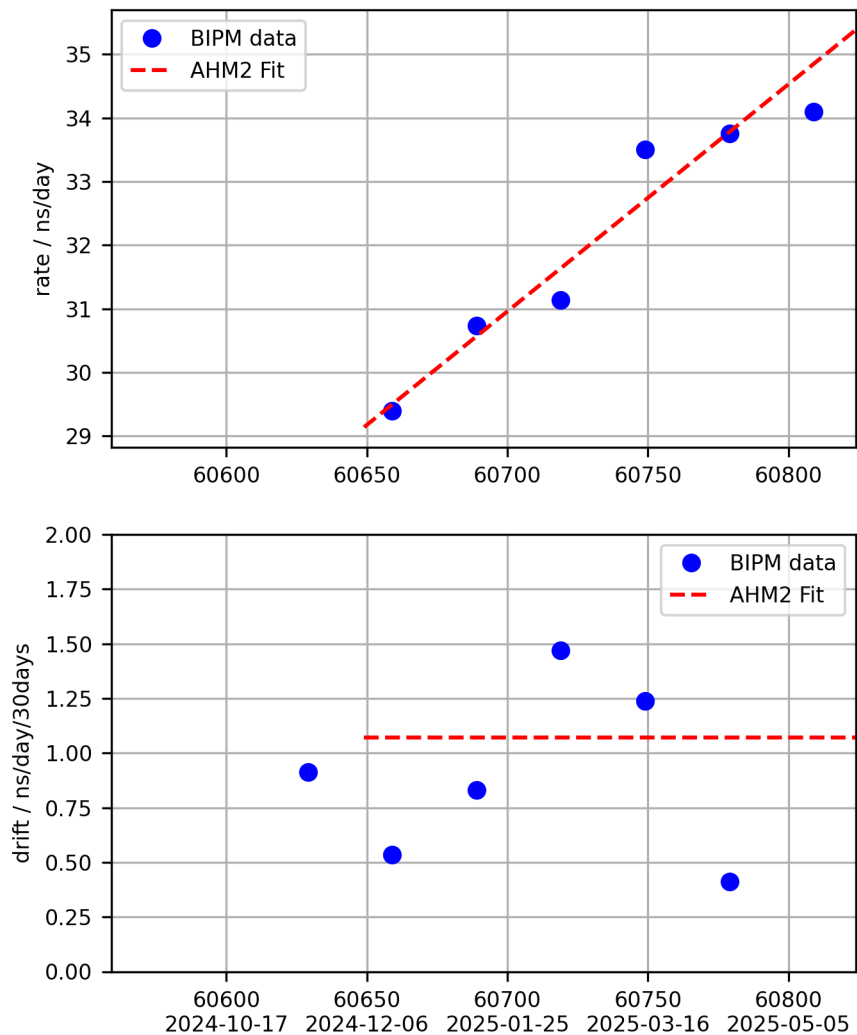
Clock Rates - Summary

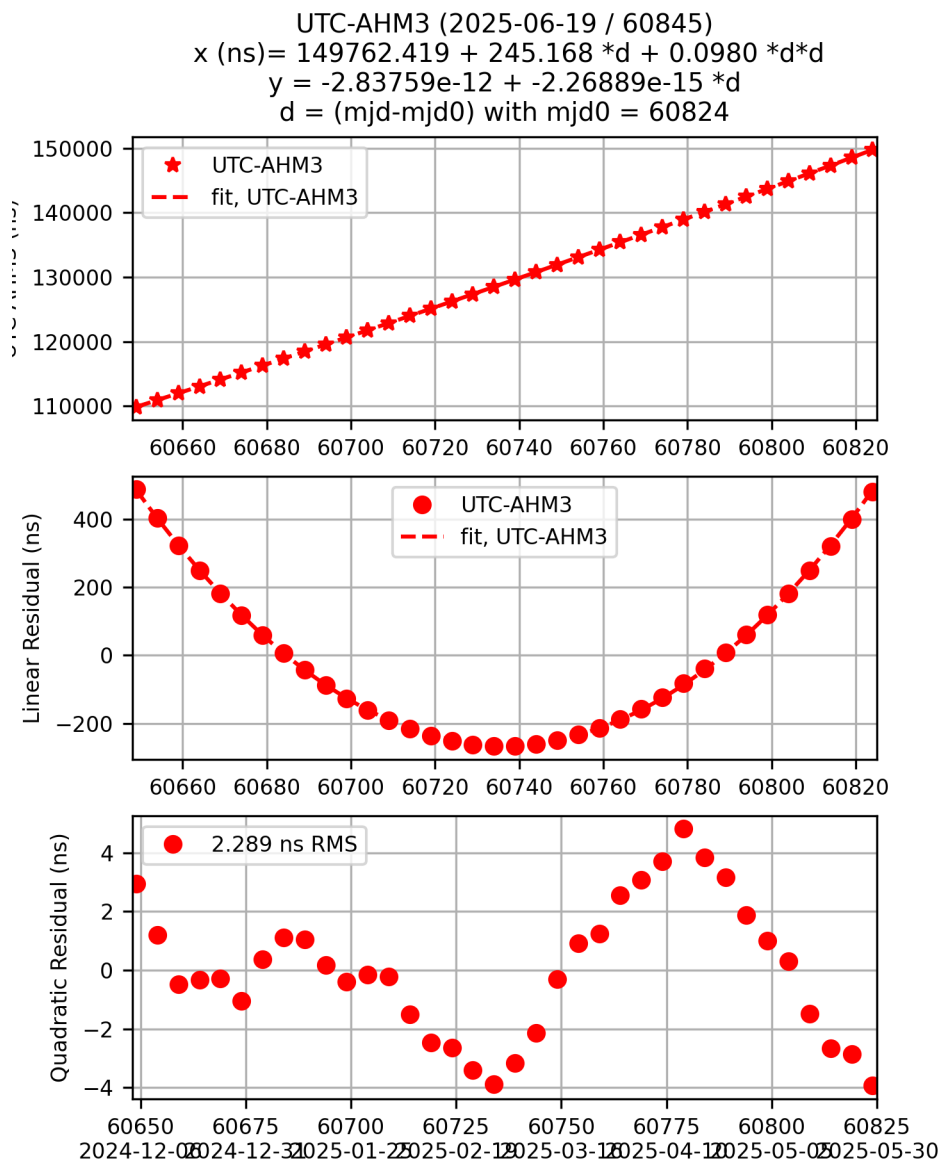
Clock rates as reported by the BIPM in the monthly r-report.



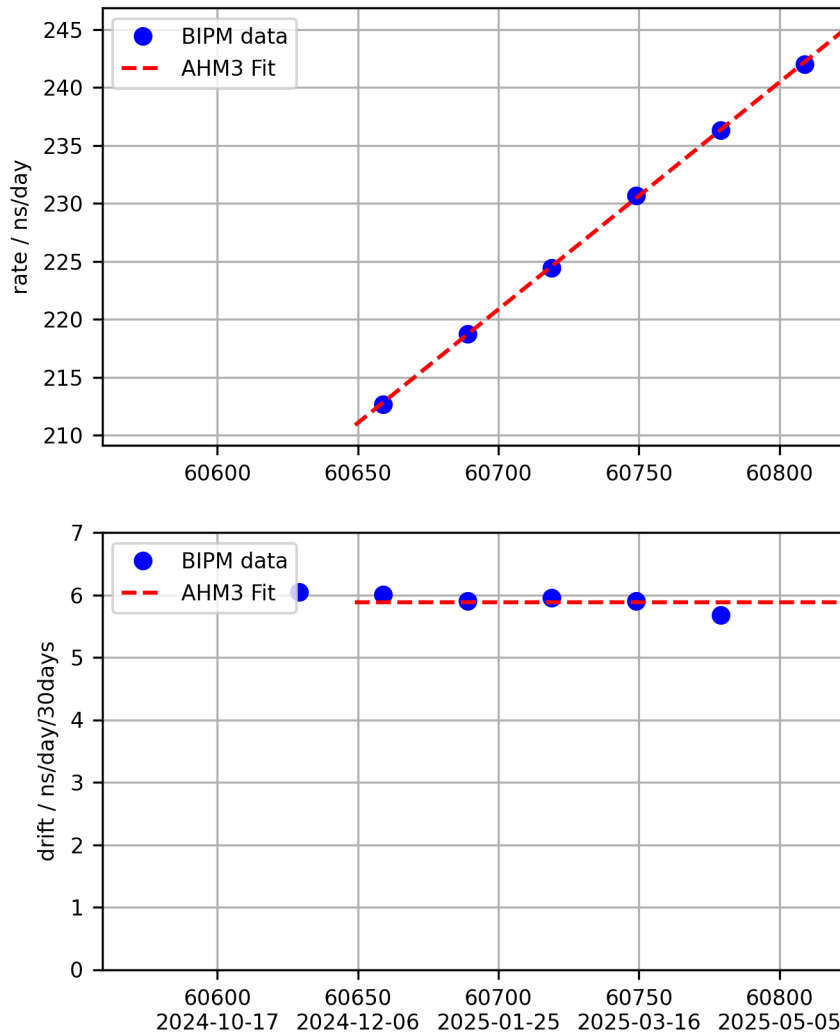
UTC - AHM2 Fit

AHM2 Rate and Drift

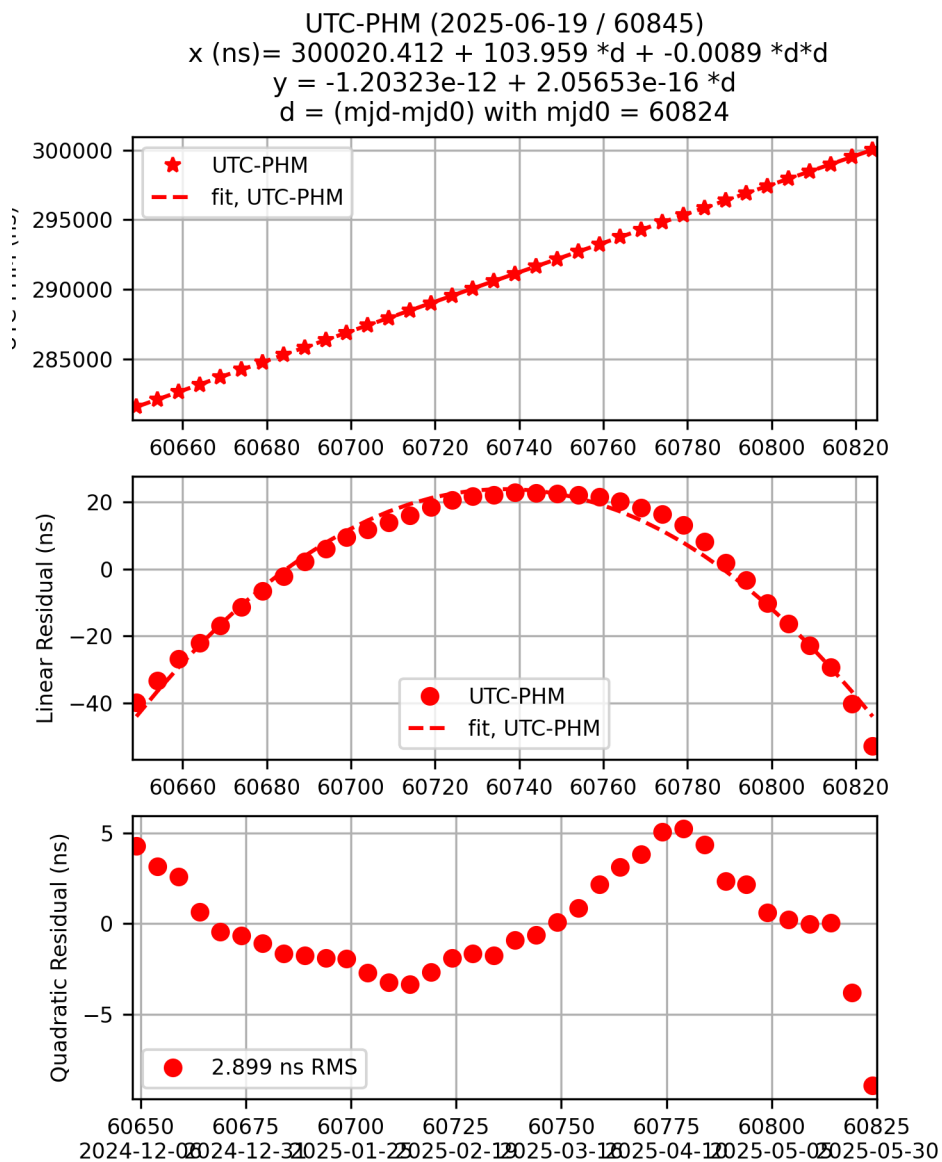


UTC - AHM3 Fit

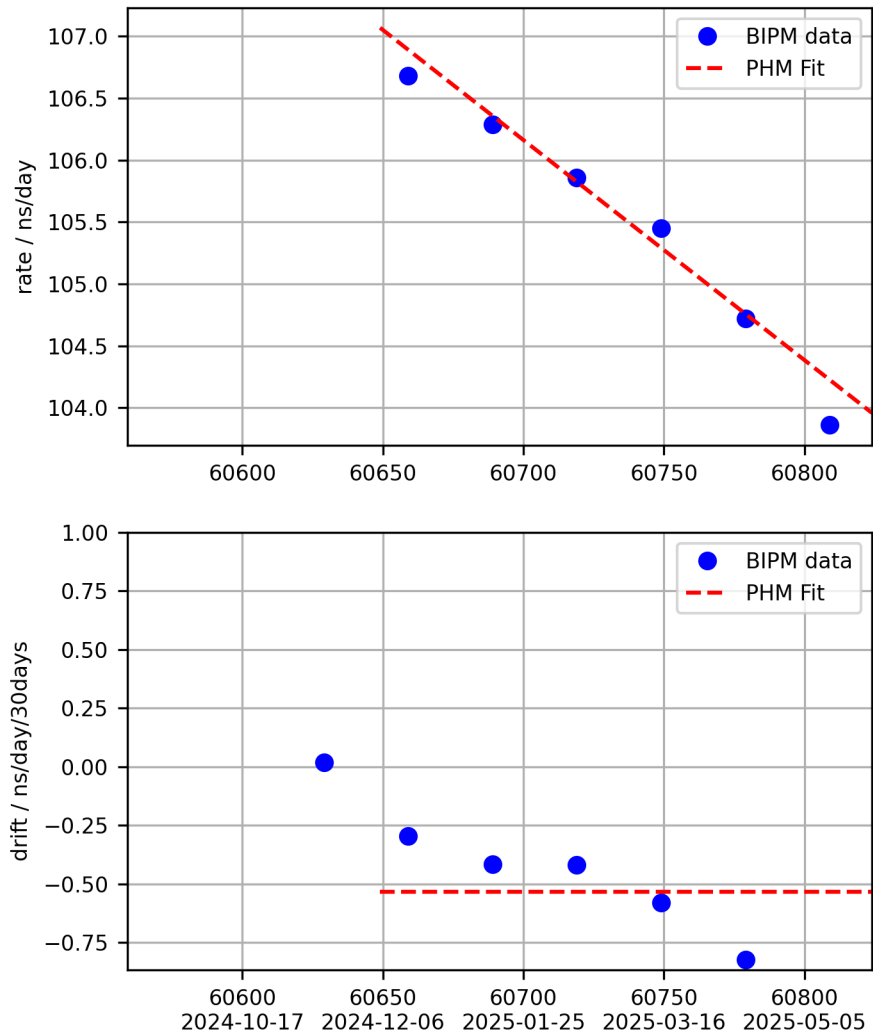
AHM3 Rate and Drift



UTC - PHM Fit

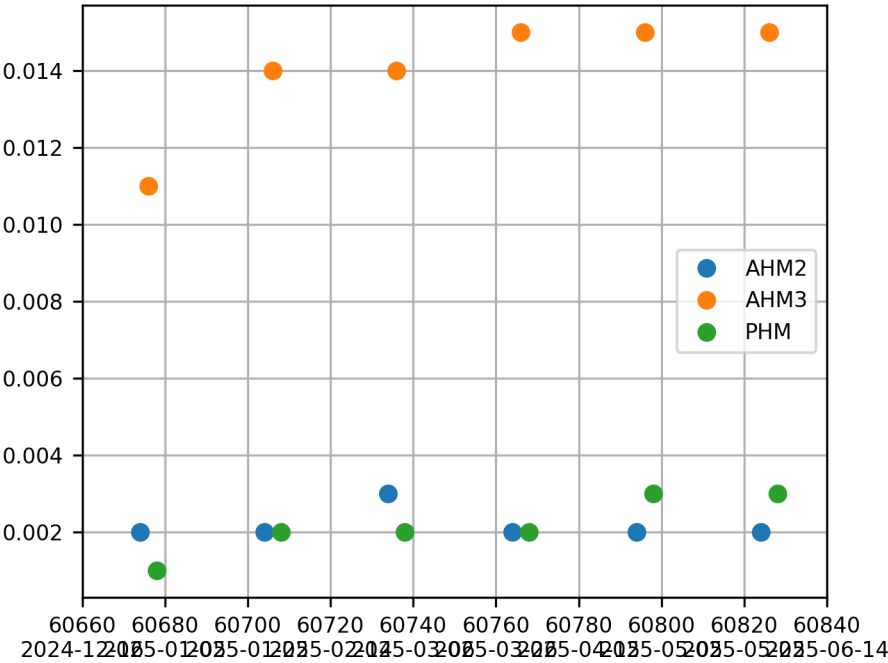


PHM Rate and Drift



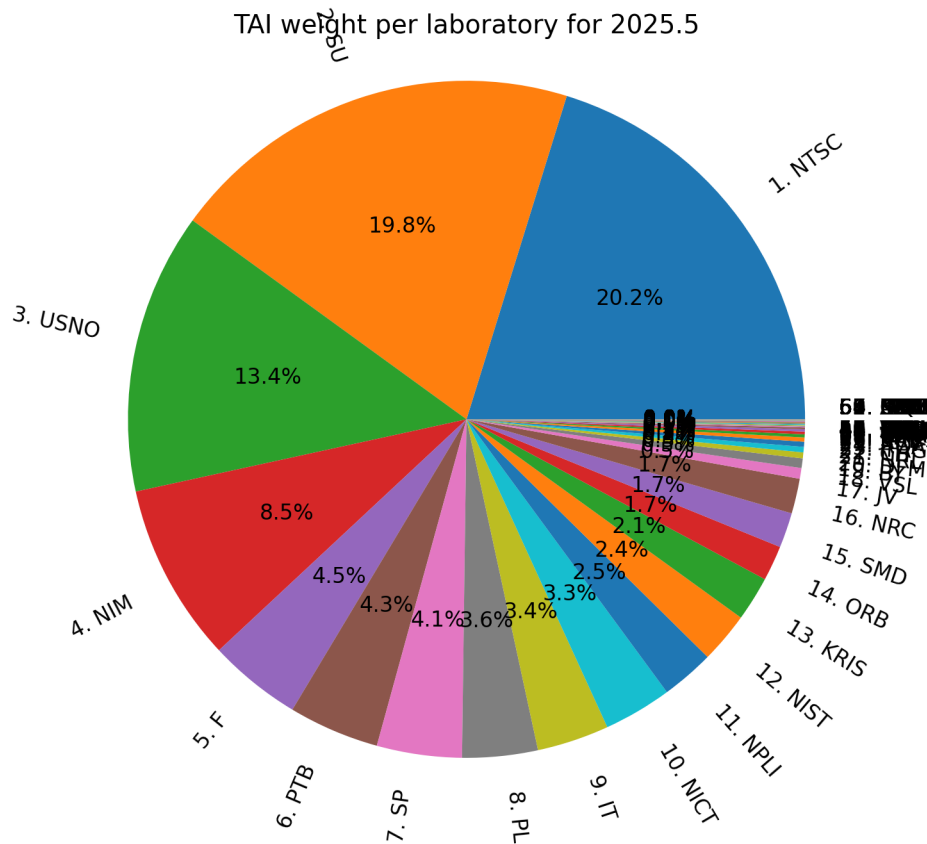
VTT MIKES Clock Weights

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 2025.05

Number of clocks 420

Number of labs 69

Number of clock types 13

Sum of weights per lab 99.986, Sum of weights per clock type 99.986

Weight Clock Type

0.616 35 MICROSEMI 5071A HIGH PERFORMANCE TUBE.

60.300 40 UNSPECIFIED HYDROGEN MASER

33.682 41 HYDROGEN MASER

0.043 36 MICROSEMI 5071A LOW/STANDARD PERFORMANCE TUBE

0.000 18 MICROSEMI Cs 4000

0.009 37 OSCILLOQUARTZ OSA 3300

0.000 22 OSCILLOQUARTZ OSA 3230B/3235B

0.009 32 OSCILLOQUARTZ OSA 3300-SHP

0.000 44 Other clocks

0.055 42 Commercial Rubidium clock

0.014 38 Chengdu Spaceon Electronics Company TA1000

5.244 93 GROUND-STATE HYPERFINETransition OF 87 Rb

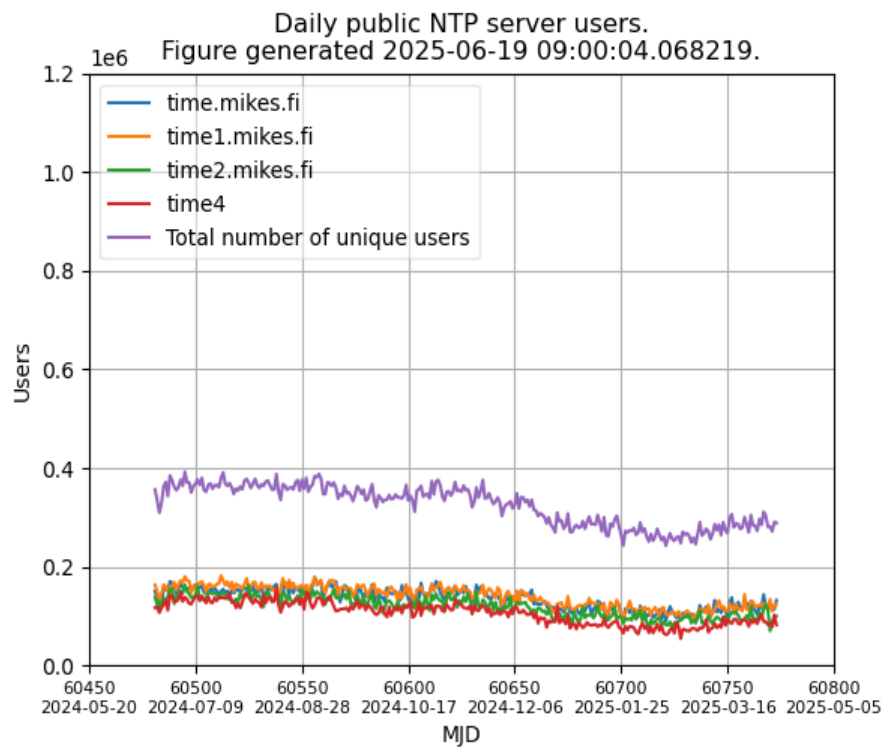
0.014 92 GROUND-STATE HYPERFINE TRANSITION OF 133 Cs

Rank Weight Lab

1 20.211 NTSC
2 19.788 SU
3 13.419 USNO
4 8.522 NIM
5 4.453 F
6 4.328 PTB
7 4.058 SP
8 3.600 PL
9 3.438 IT
10 3.255 NICT
11 2.529 NPLI
12 2.426 NIST
13 2.129 KRIS
14 1.676 ORB
15 1.674 SMD
16 1.668 NRC
17 0.511 JV
18 0.457 VSL
19 0.283 BY
20 0.262 DFM
21 0.243 NRL
22 0.201 CH
23 0.148 IFAG
24 0.125 ROA
25 0.116 BEV
26 0.083 SCL
27 0.041 JATC
28 0.036 TP
29 0.035 BIRM
30 0.034 TL
31 0.031 ONRJ
32 0.027 NAO
33 0.024 NPL
34 0.021 ESA
35 0.021 CAO
36 0.020 MIKE
37 0.011 ZA
38 0.009 CNMP
39 0.009 INPL
40 0.008 NIMT
41 0.007 AGGO

NTP Usage Statistics

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



End of Bulletin.