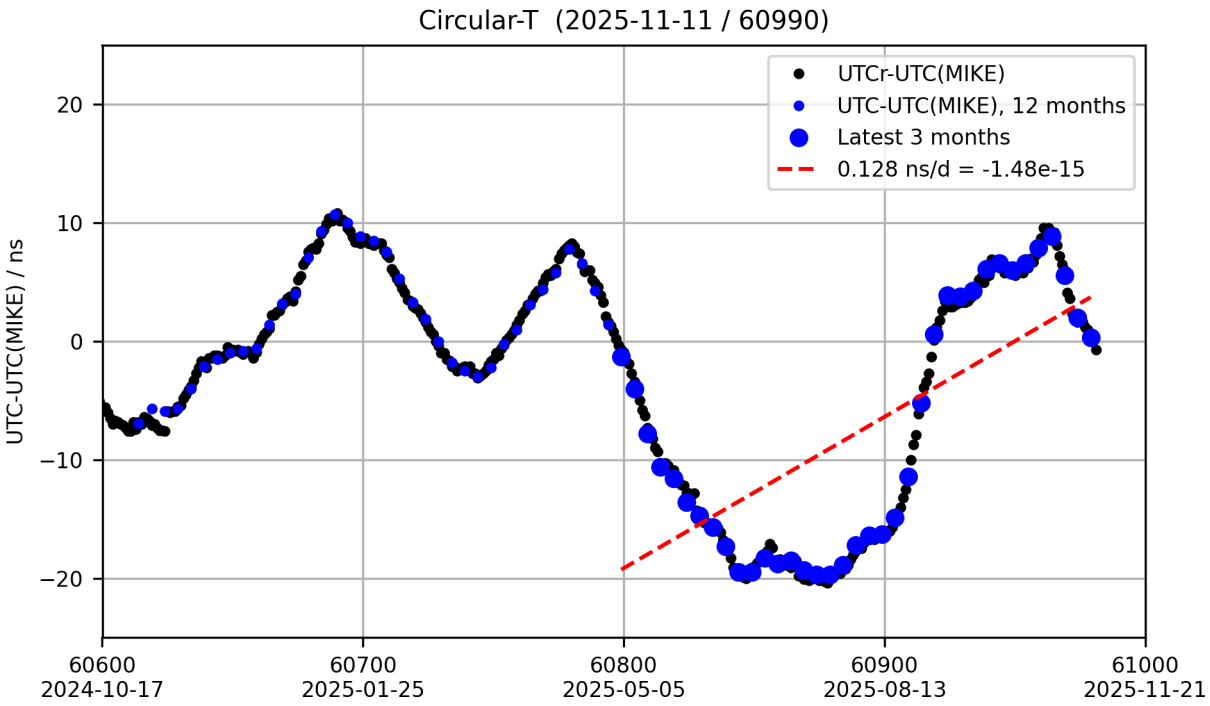
UTC(MIKE) Atomic Bulletin 2025-11

VTT MIKES Metrology monthly Time & Frequency bulletin.
Comments and questions to: time "at" vtt.fi
Date of publication: 2025-11-11 (60990)
Circular-T issues used for analysis: 449, 450, 451, 452, 453, 454,
First day of analysis interval: 2025-05-04 (60799)
Last day of analysis interval: 2025-10-31 (60979)
ClockData for analysis: CDMI__25.05_, CDMI__25.06_, CDMI__25.07_, CDMI__25.08_, CDMI__25.09_, CDMI__25.10_,
The Atomic Bulletin is archived at: https://monitor.mikes.fi/ftp/atomic_bulletin/

Notes

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 -7e-15 = +18 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 +20ns/60days = -3.8e-15.
60871 (2025-07-15) AB2025-07: keep steering +20ns/60days = -3.8e-15.
60898 (2025-08-11) AB2025-08: keep steering +20ns/60days = -3.8e-15.
60919 (2025-09-01) set steering to zero.
60923 (2025-09-05) set steering +8e-15.
60979 (2025-10-31) AHM3 frequency adjustment +4e-12 at 13:52 UTC.
60983 (2025-11-04) High temperature in maser room.

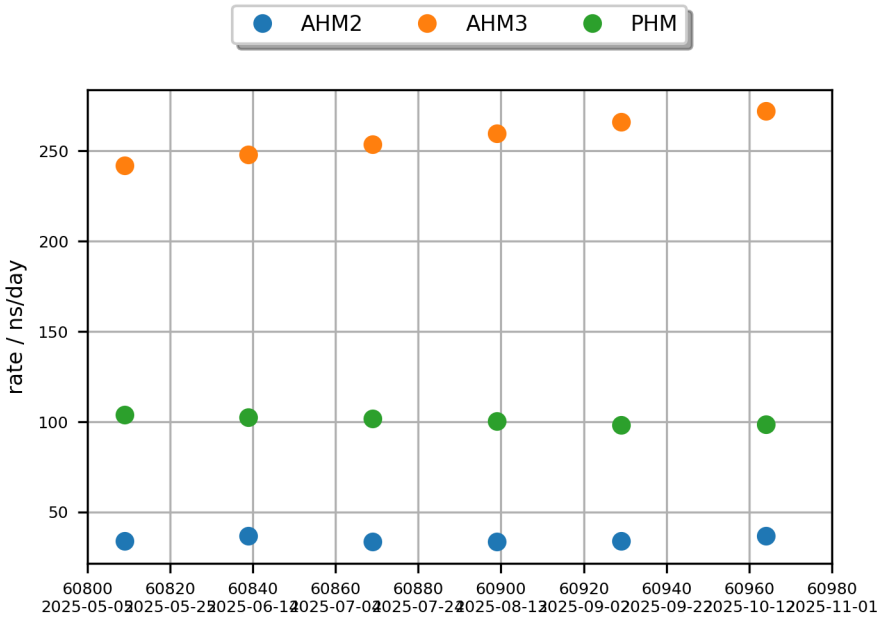
UTC-UTC(MIKE) as reported in Circular-T



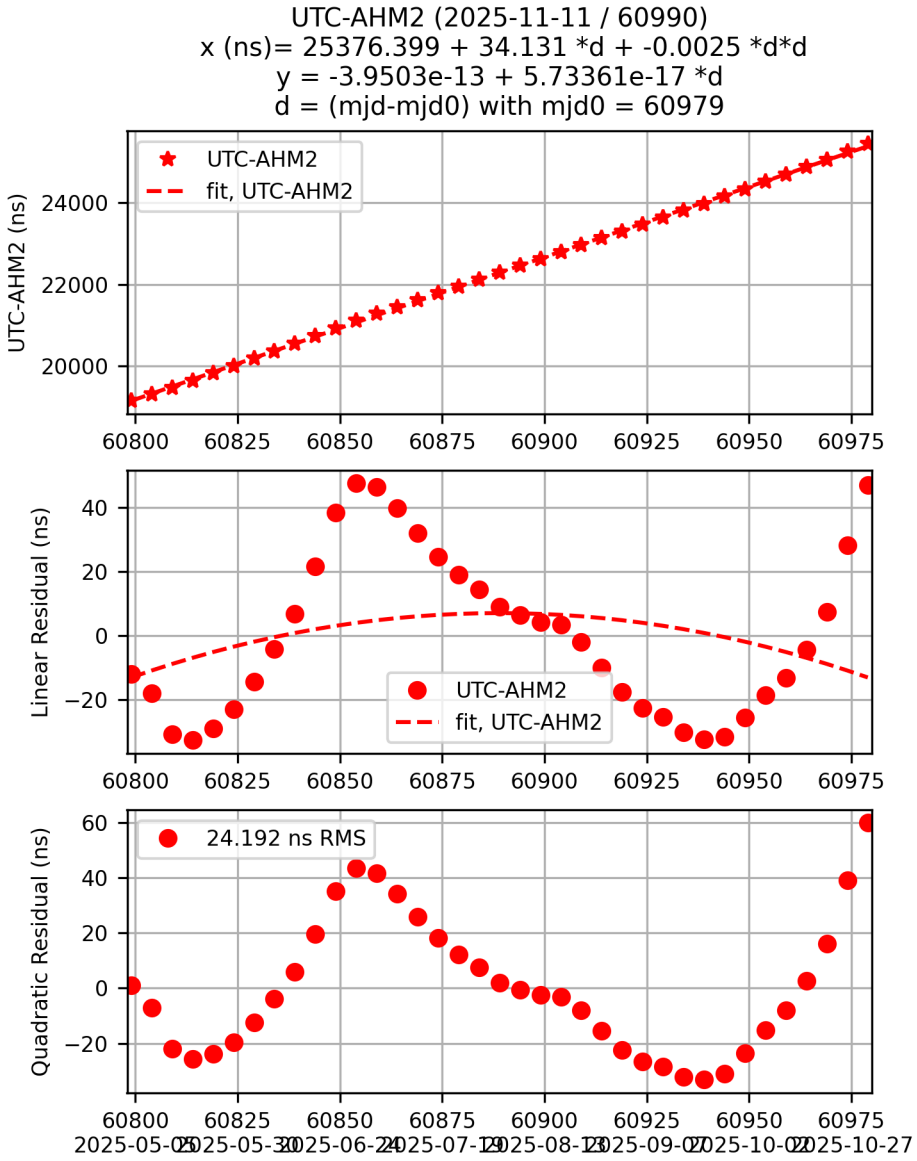
UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

Clock Rates - Summary

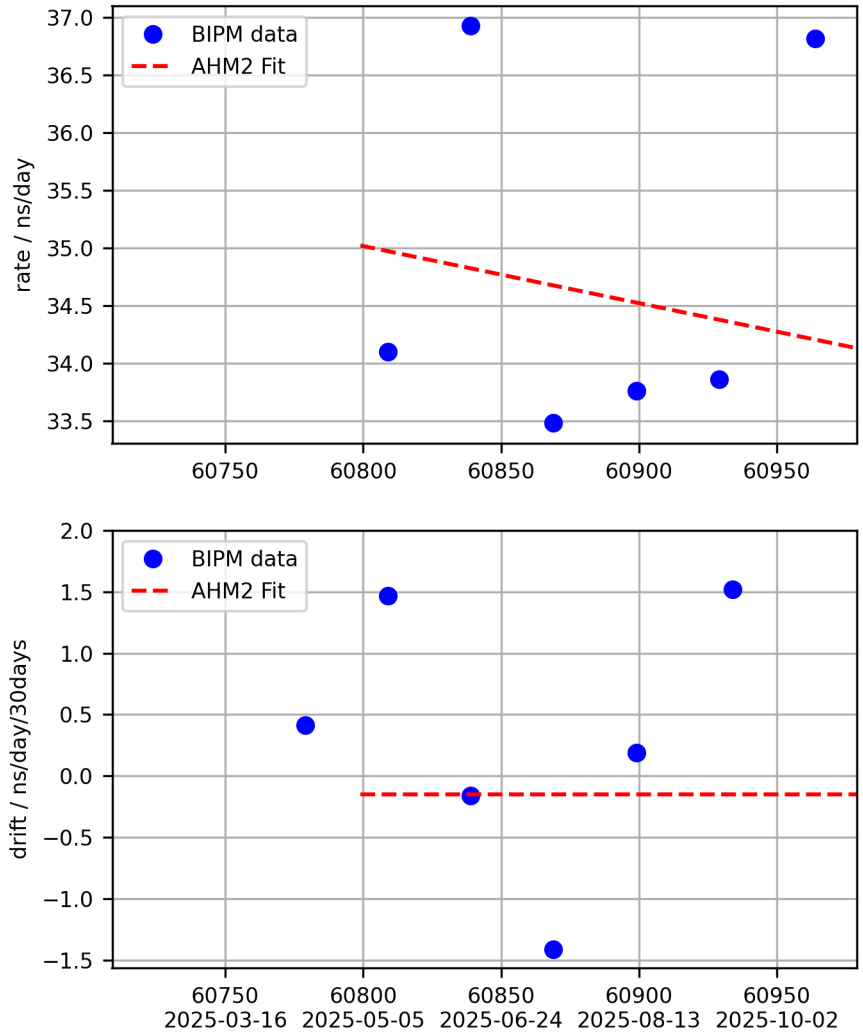
Clock rates as reported by the BIPM in the monthly r-report.



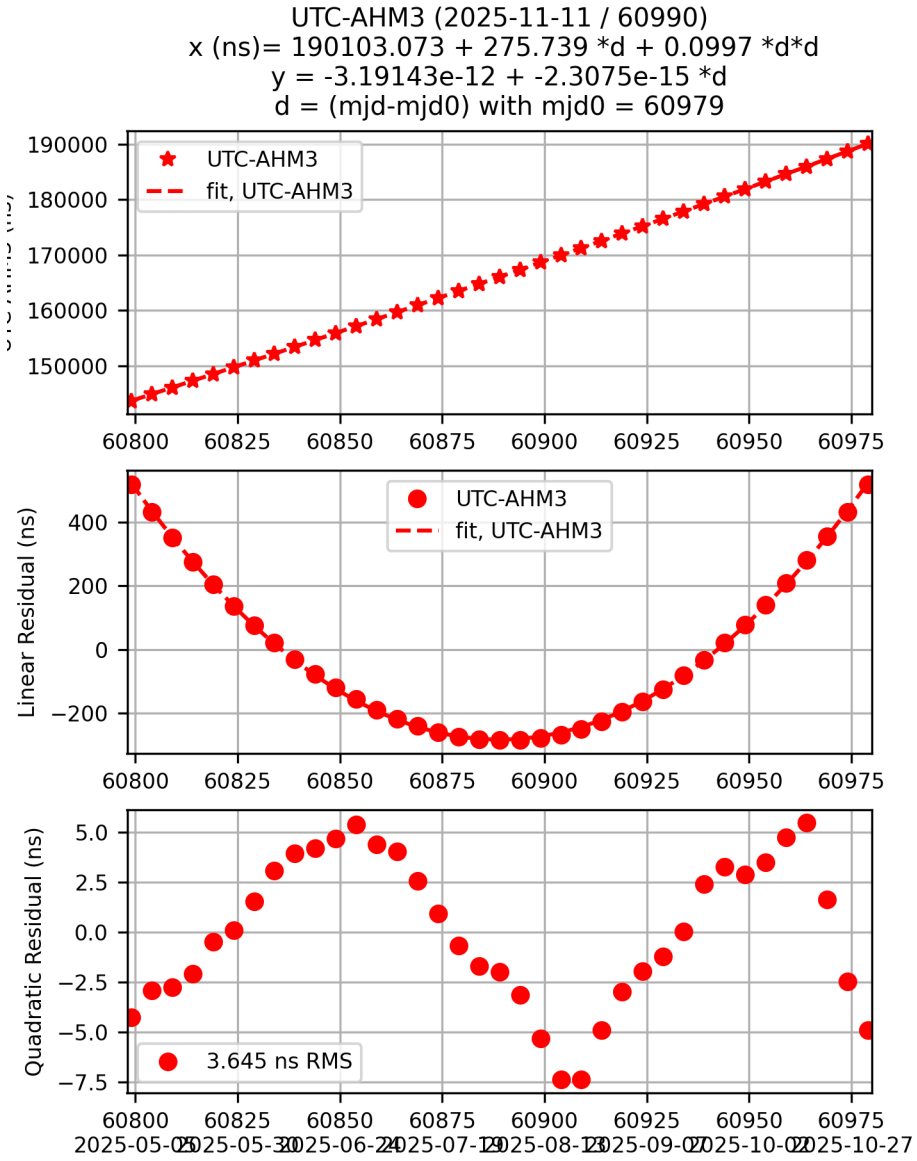
UTC - AHM2 Fit


UTC-AHM2 (2025-11-11 / 60990)
x (ns)= 25376.399 + 34.131 *d + -0.0025 *d*d
y = -3.9503e-13 + 5.73361e-17 *d
d = (mjd-mjd0) with mjd0 = 60979
UTC-AHM2
fit, UTC-AHM2
UTC-AHM2 (ns)
Linear Residual (ns)
24.192 ns RMS
Quadratic Residual (ns)
60800
60825
60850
60875
60900
60925
60950
60975
2025-05-25
2025-05-30
2025-06-24
2025-07-19
2025-08-13
2025-09-07
2025-10-02
2025-10-27

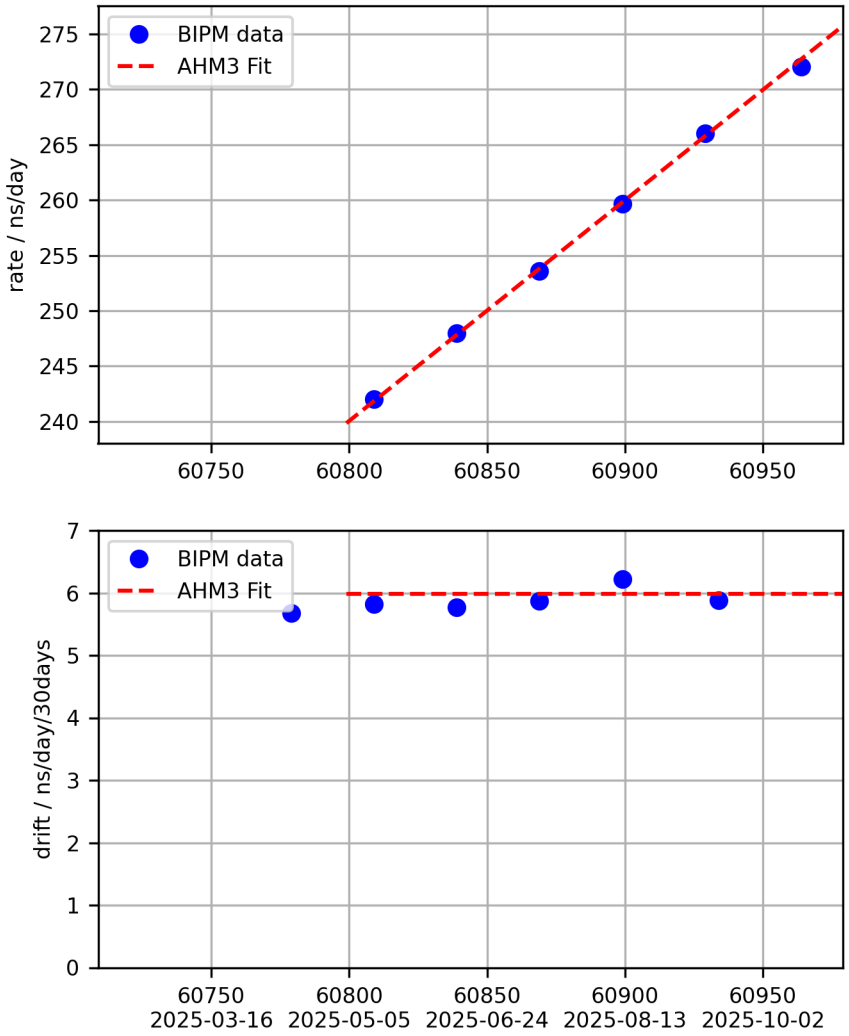
AHM2 Rate and Drift



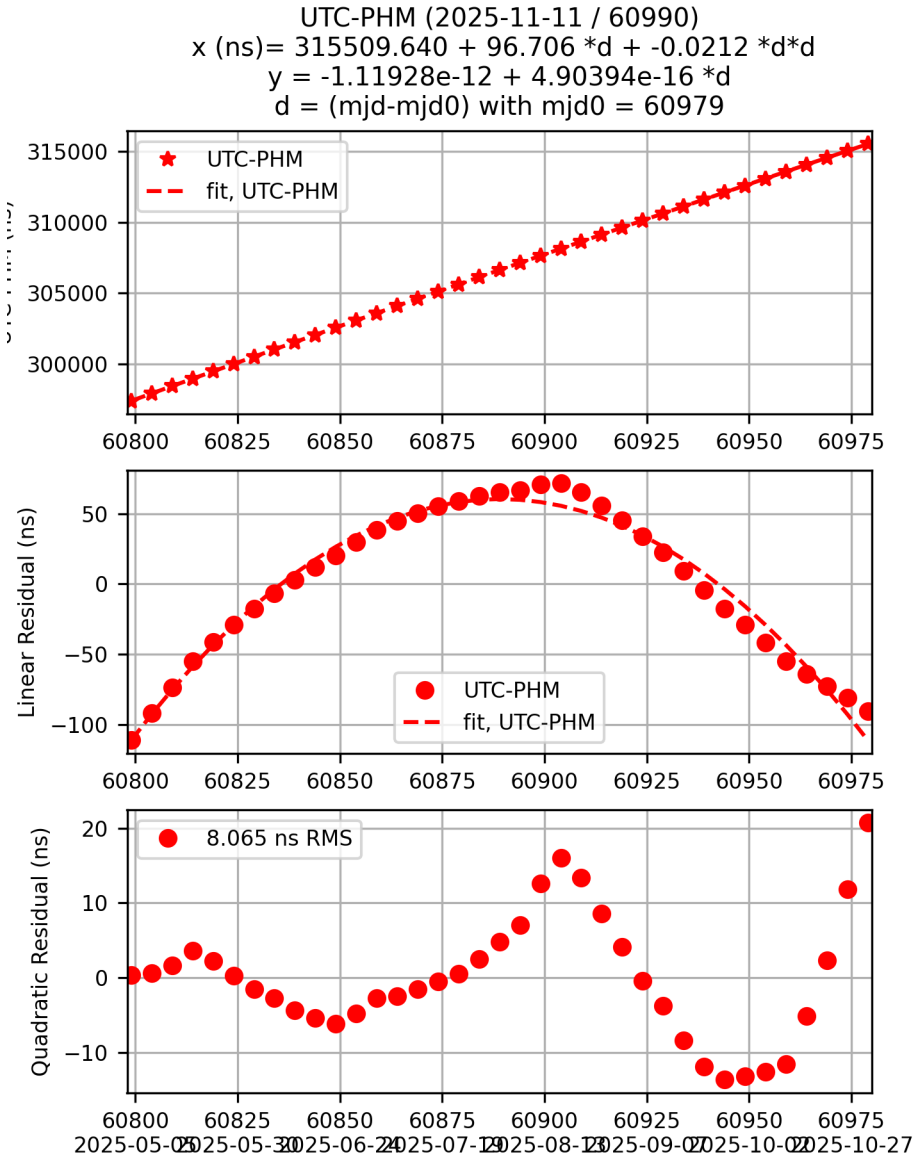
UTC - AHM3 Fit


UTC-AHM3 (2025-11-11 / 60990)
x (ns)= 190103.073 + 275.739 *d + 0.0997 *d*d
y = -3.19143e-12 + -2.3075e-15 *d
d = (mjd-mjd0) with mjd0 = 60979
UTC-AHM3
fit, UTC-AHM3
Linear Residual (ns)
Quadratic Residual (ns)
3.645 ns RMS
60800
60825
60850
60875
60900
60925
60950
60975
2025-05-25
2025-05-30
2025-06-24
2025-07-19
2025-08-13
2025-09-07
2025-10-02
2025-10-27

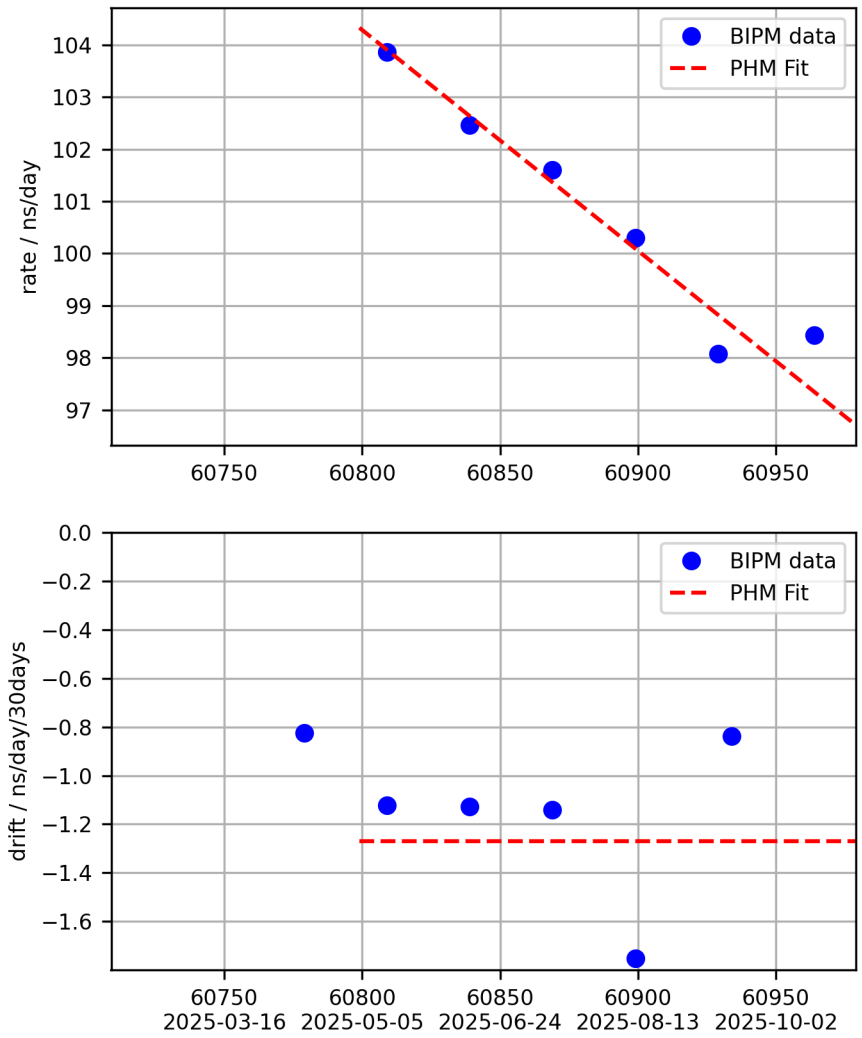
AHM3 Rate and Drift



UTC - PHM Fit

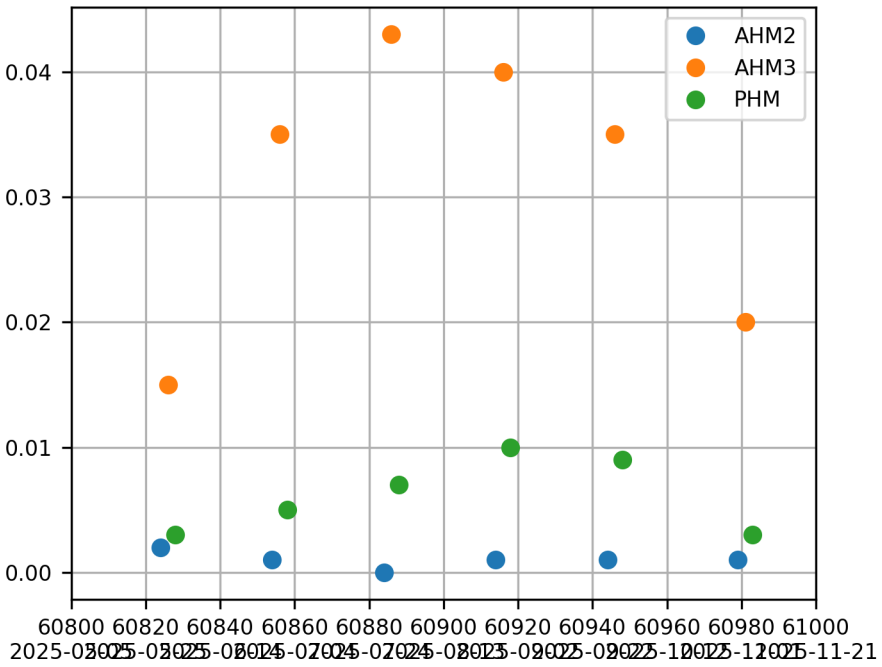

UTC-PHM (2025-11-11 / 60990)
x (ns)= 315509.640 + 96.706 *d + -0.0212 *d*d
y = -1.11928e-12 + 4.90394e-16 *d
d = (mjd-mjd0) with mjd0 = 60979
UTC-PHM
fit, UTC-PHM
315000
310000
305000
300000
60800
60825
60850
60875
60900
60925
60950
60975
Linear Residual (ns)
50
0
−50
−100
UTC-PHM
fit, UTC-PHM
Quadratic Residual (ns)
8.065 ns RMS
20
10
0
−10
2025-05-25
2025-05-30
2025-06-24
2025-07-19
2025-08-13
2025-09-07
2025-10-02
2025-10-27

PHM Rate and Drift



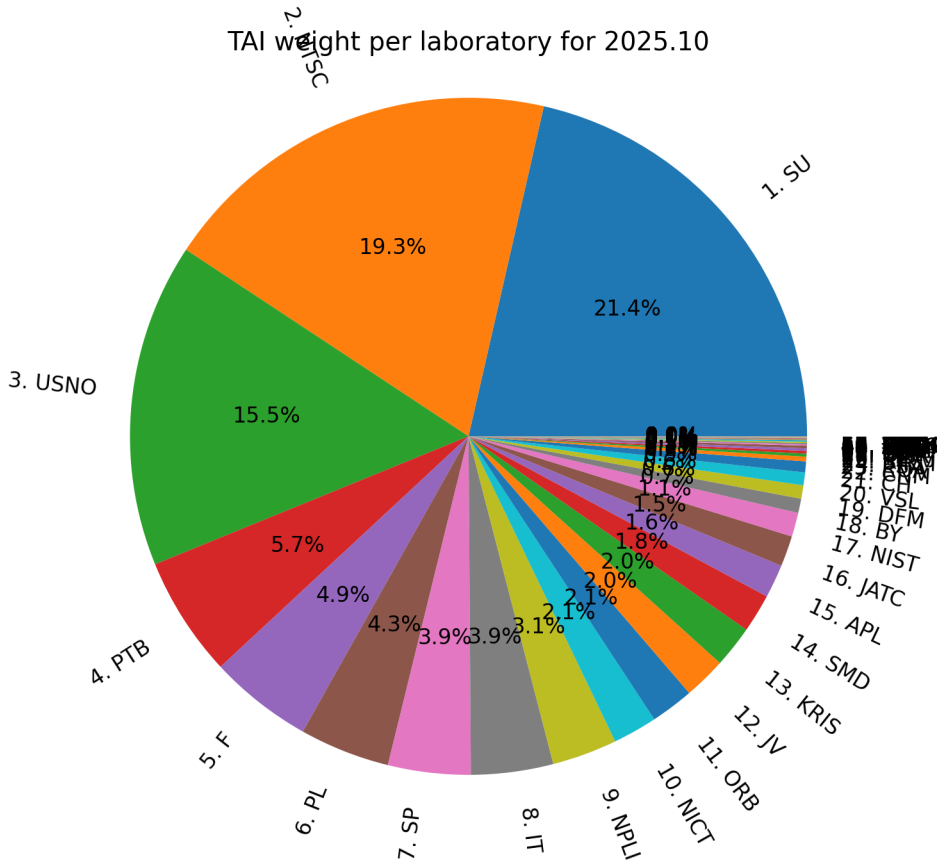
VTT MIKES Clock Weights

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

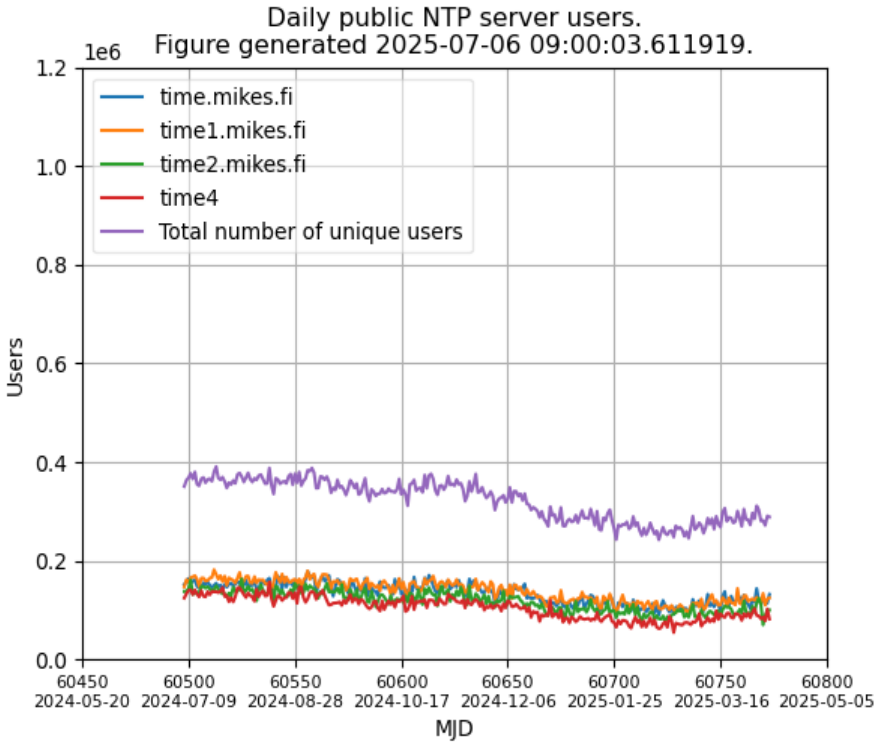


Weight-file for 2025.10
Number of clocks 406
Number of labs 61
Number of clock types 12
Sum of weights per lab 100.011, Sum of weights per clock type 100.011
Weight Clock Type
0.858 35 MICROSEMI 5071A HIGH PERFORMANCE TUBE.
57.638 40 UNSPECIFIED HYDROGEN MASER
34.179 41 HYDROGEN MASER
0.048 36 MICROSEMI 5071A LOW/STANDARD PERFORMANCE TUBE
0.013 18 MICROSEMI Cs 4000
0.001 22 OSCILLOQUARTZ OSA 3230B/3235B
0.049 32 OSCILLOQUARTZ OSA 3300-SHP
0.000 44 Other clocks
0.081 42 Commercial Rubidium clock
0.011 38 Chengdu Spaceon Electronics Company TA1000
7.112 93 GROUND-STATE HYPERFINETRANSITION OF 87 Rb
0.021 92 GROUND-STATE HYPERFINE TRANSITION OF 133 Cs

Rank	Weight	Lab
1	21.428	SU
2	19.287	NTSC
3	15.463	USNO
4	5.747	PTB
5	4.946	F
6	4.306	PL
7	3.941	SP
8	3.922	IT
9	3.103	NPLI
10	2.113	NICT
11	2.055	ORB
12	2.022	JV
13	2.001	KRIS
14	1.836	SMD
15	1.598	APL
16	1.462	JATC
17	1.145	NIST
18	0.682	BY
19	0.638	DFM
20	0.613	VSL
21	0.520	CH
22	0.223	CNM
23	0.144	ROA
24	0.126	ESA
25	0.125	BIRM
26	0.122	KZ
27	0.066	TL
28	0.059	ONRJ
29	0.059	SCL
30	0.053	TP
31	0.027	BEV
32	0.024	MIKE
33	0.023	NIMT
34	0.020	NPL
35	0.017	NAO
36	0.014	HKO
37	0.013	BIM
38	0.012	MSL
39	0.011	AUS
40	0.011	CNMP
41	0.009	IMBH

NTP Usage Statistics

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



End of Bulletin.