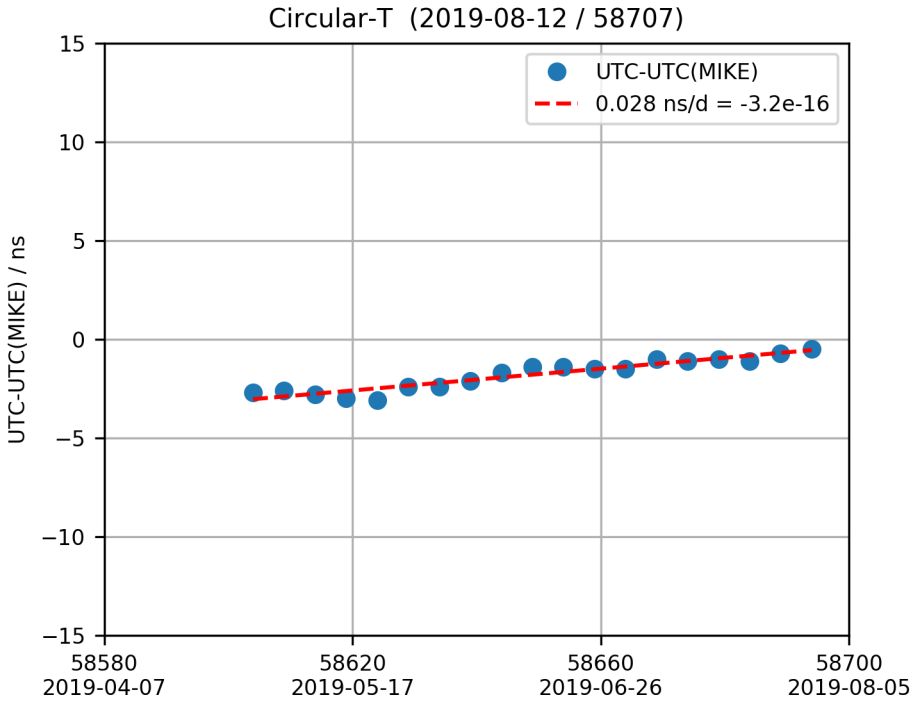
UTC(MIKE) Atomic Bulletin 2019-08

VTT MIKES Metrology monthly Time & Frequency bulletin.
Comments and questions to: time "at" vtt.fi
Date of publication: 2019-08-12 (58707)
Circular-T issues used for analysis: 377, 378, 379,
First day of analysis interval: 2019-05-01 (58604)
Last day of analysis interval: 2019-07-30 (58694)
ClockData for analysis: CDMI__19.05_, CDMI__19.06_, CDMI__19.07_,

Notes

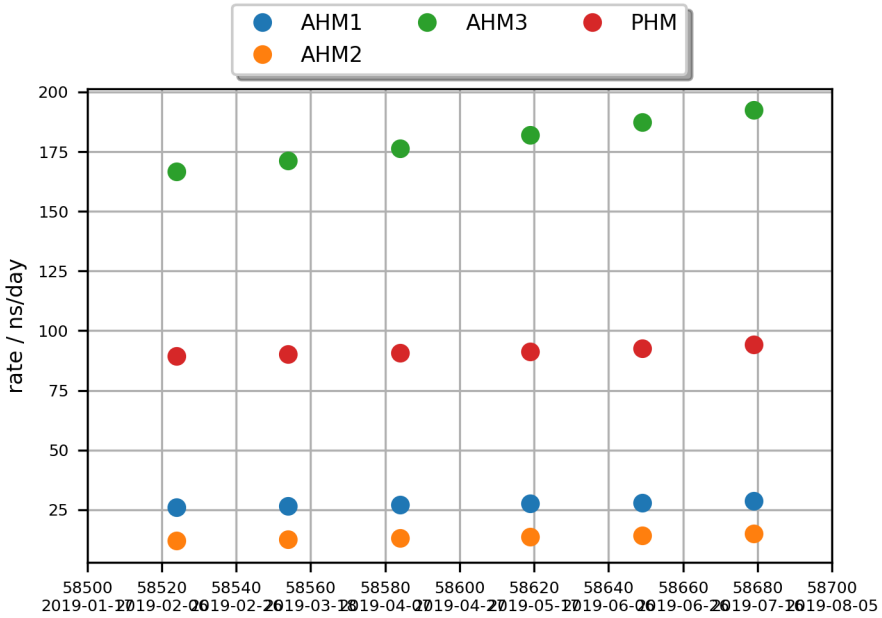
58305 AHM3 rebooted. Phase step +20.2ns.
58450 CS1 Hotwire supply regulation failure
58494 Change master-clock to AHM2
M3 clock data missing for 58623, 58624
58617 (2019-05-14) Power-outage and temperature fluctuations in MIKES building.

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

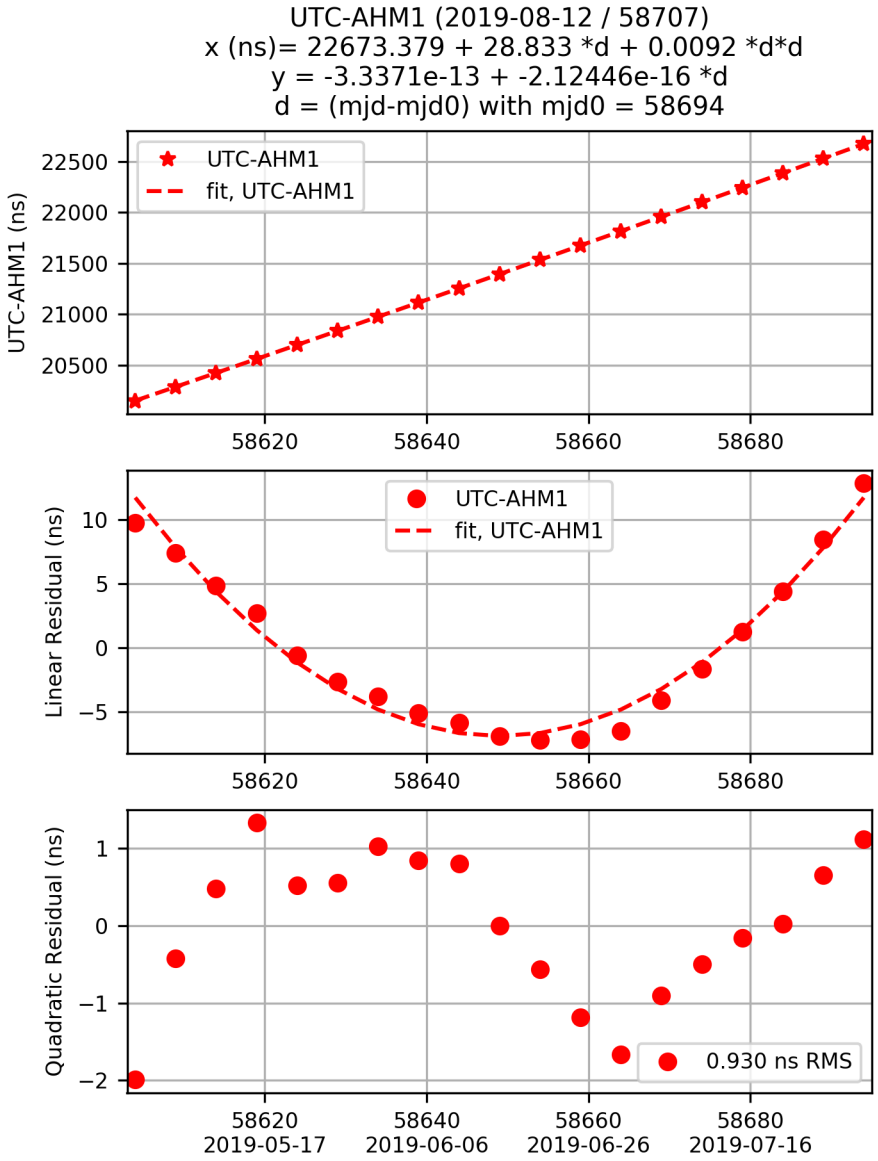


UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

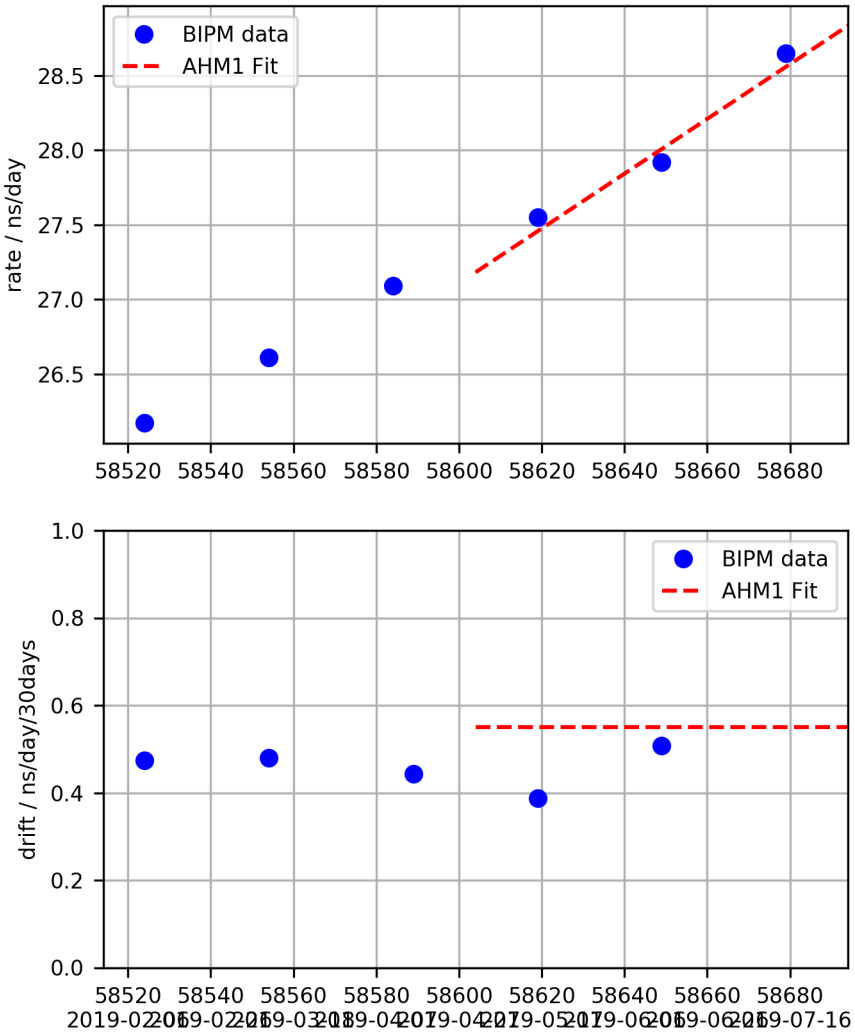
Clock Rates - Summary



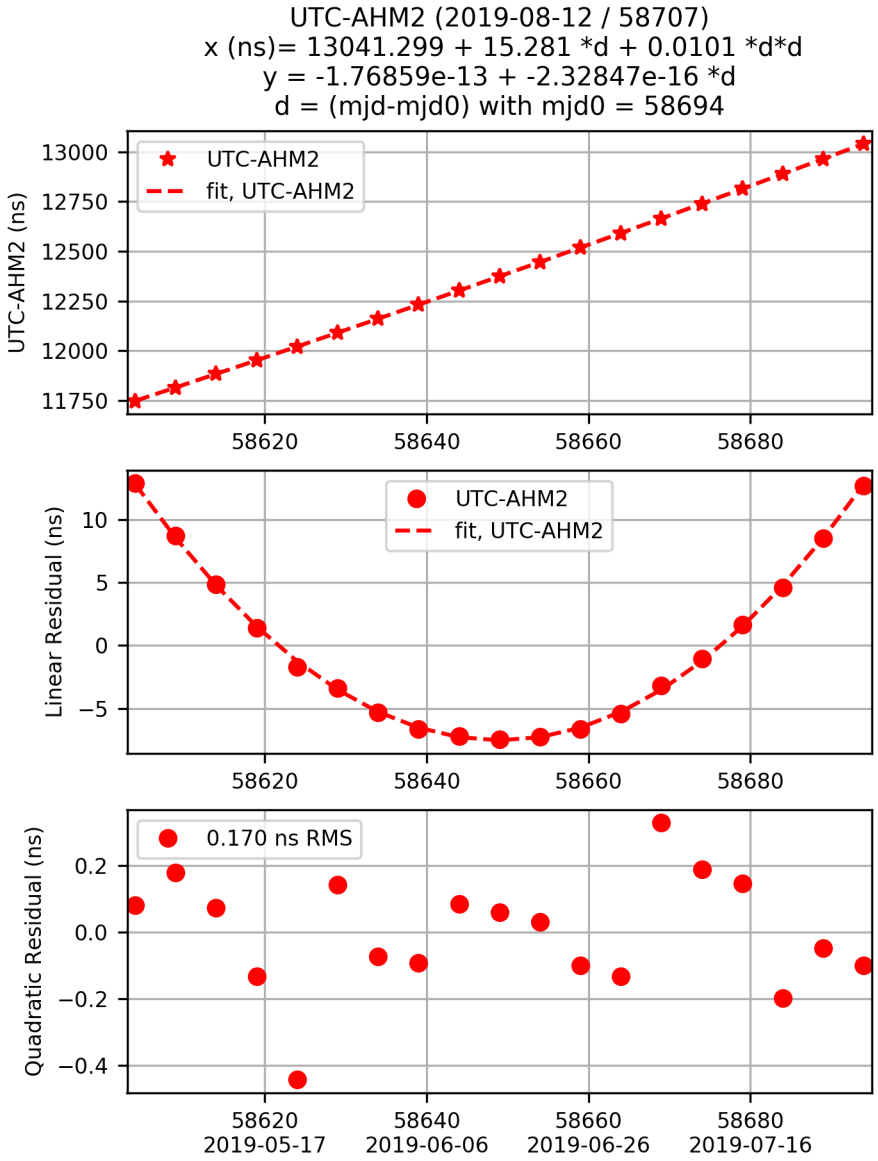
UTC - AHM1 Fit


UTC-AHM1 (2019-08-12 / 58707)
x (ns)= 22673.379 + 28.833 *d + 0.0092 *d*d
y = -3.3371e-13 + -2.12446e-16 *d
d = (mjd-mjd0) with mjd0 = 58694
UTC-AHM1 (ns)
UTC-AHM1
fit, UTC-AHM1
Linear Residual (ns)
Quadratic Residual (ns)
0.930 ns RMS
2019-05-17
2019-06-06
2019-06-26
2019-07-16

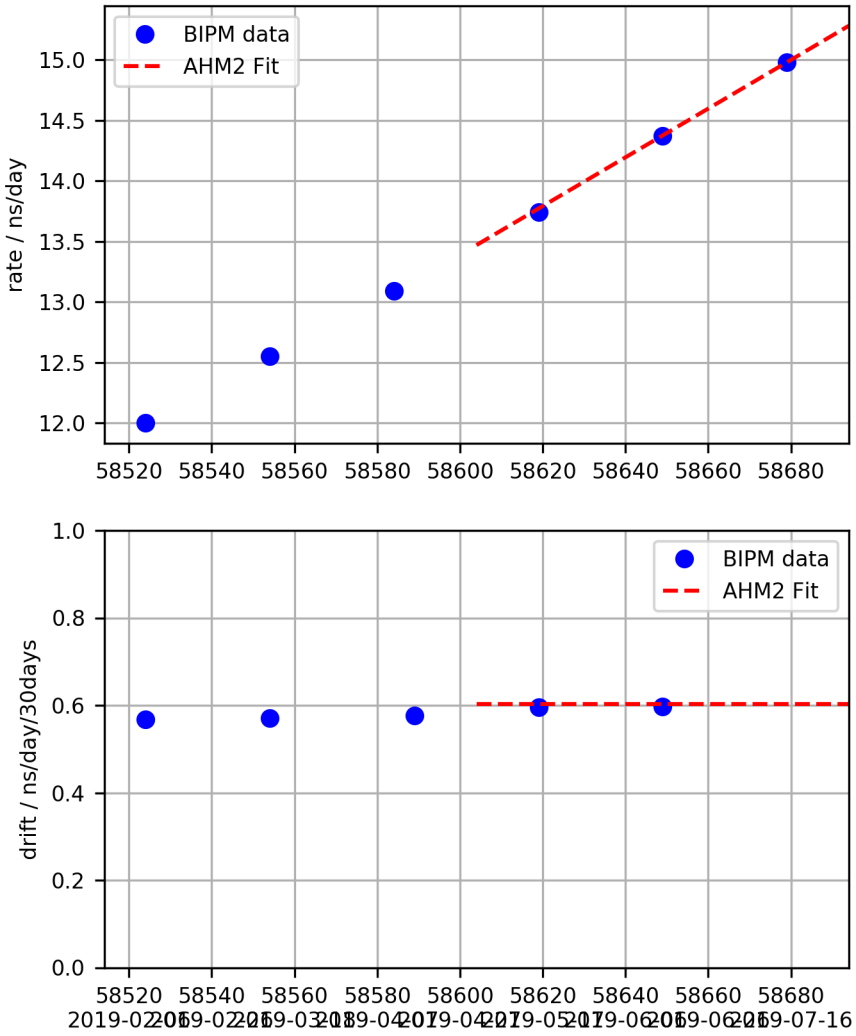
AHM1 Rate and Drift



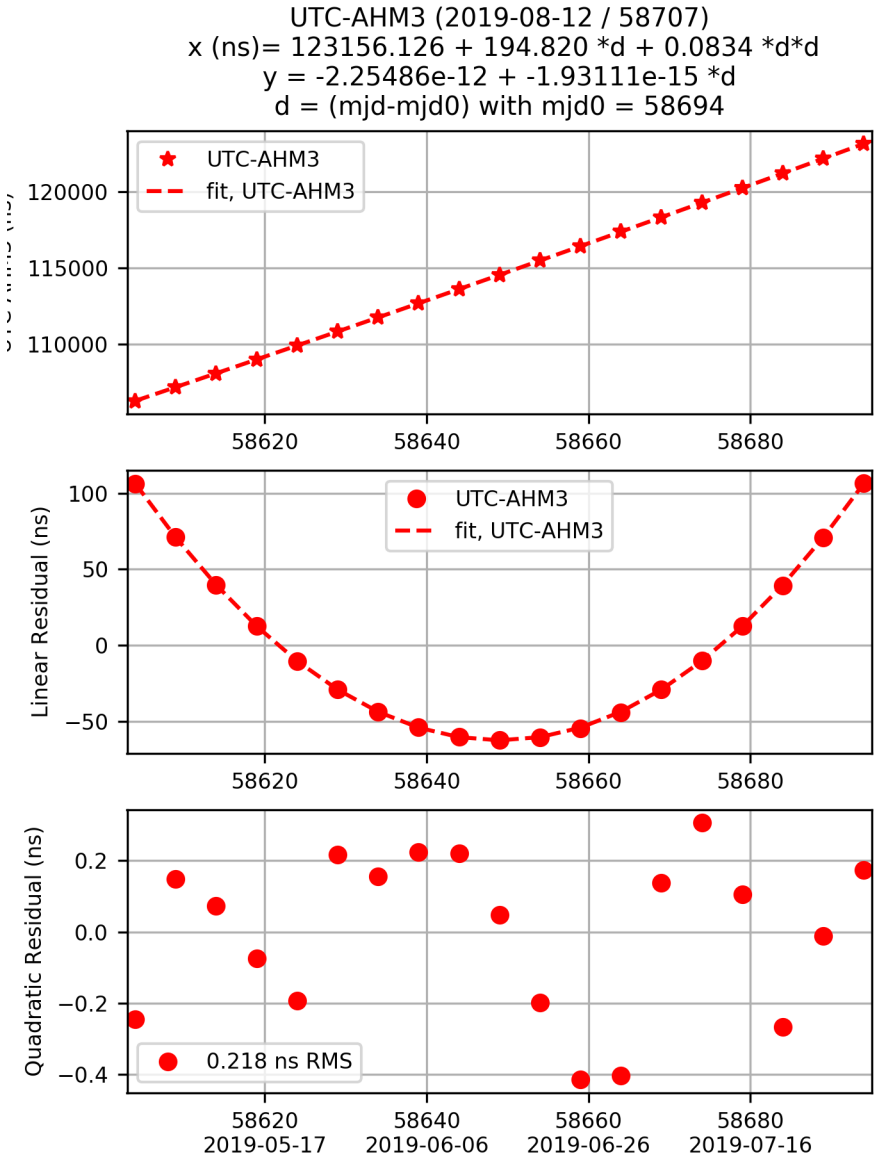
UTC - AHM2 Fit


UTC-AHM2 (2019-08-12 / 58707)
x (ns)= 13041.299 + 15.281 *d + 0.0101 *d*d
y = -1.76859e-13 + -2.32847e-16 *d
d = (mjd-mjd0) with mjd0 = 58694
UTC-AHM2
fit, UTC-AHM2
UTC-AHM2 (ns)
13000
12750
12500
12250
12000
11750
58620
58640
58660
58680
Linear Residual (ns)
10
5
0
−5
Quadratic Residual (ns)
0.170 ns RMS
0.2
0.0
−0.2
−0.4
2019-05-17
2019-06-06
2019-06-26
2019-07-16

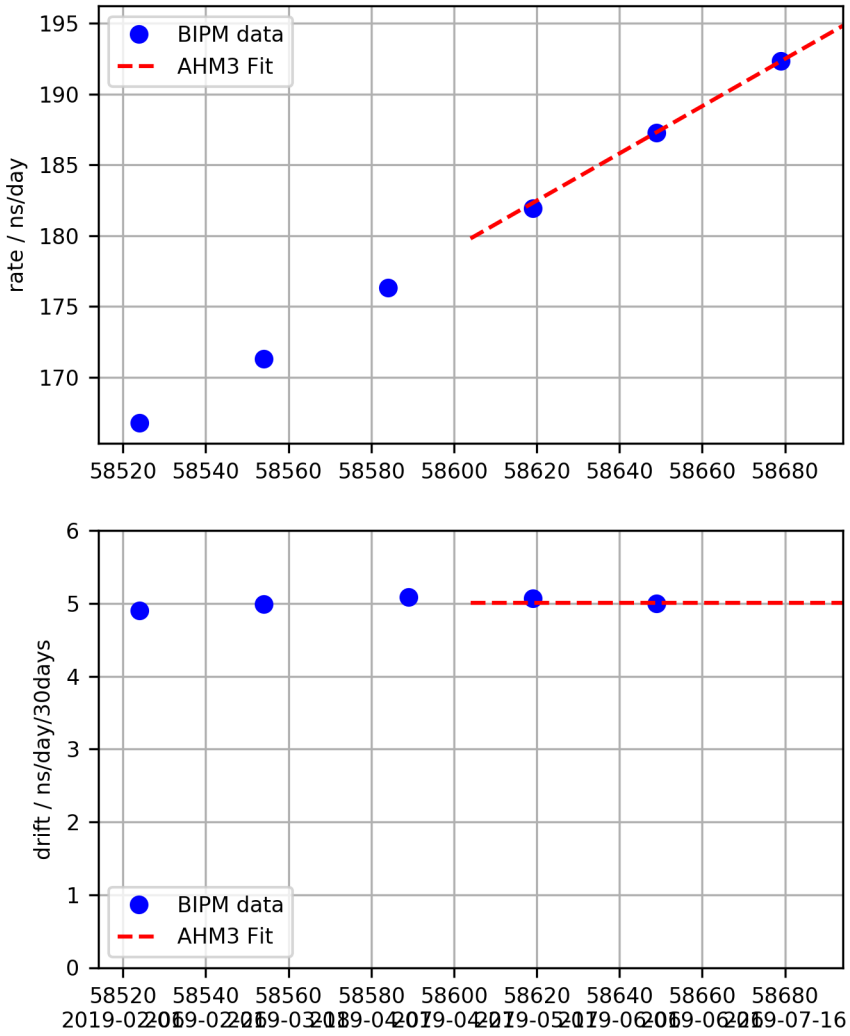
AHM2 Rate and Drift



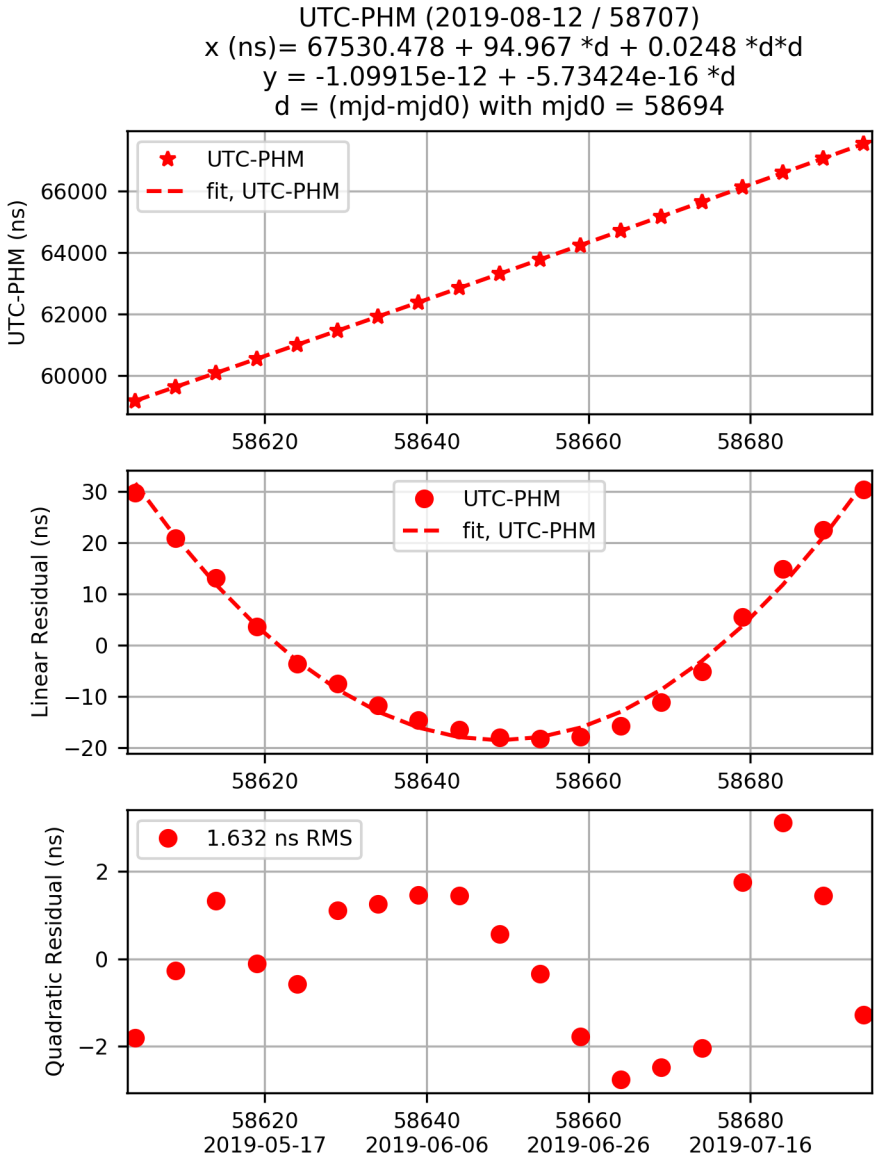
UTC - AHM3 Fit


UTC-AHM3 (2019-08-12 / 58707)
x (ns)= 123156.126 + 194.820 *d + 0.0834 *d*d
y = -2.25486e-12 + -1.93111e-15 *d
d = (mjd-mjd0) with mjd0 = 58694
UTC-AHM3
fit, UTC-AHM3
120000
115000
110000
58620
58640
58660
58680
Linear Residual (ns)
100
50
0
−50
Quadratic Residual (ns)
0.2
0.0
−0.2
−0.4
0.218 ns RMS
2019-05-17
2019-06-06
2019-06-26
2019-07-16

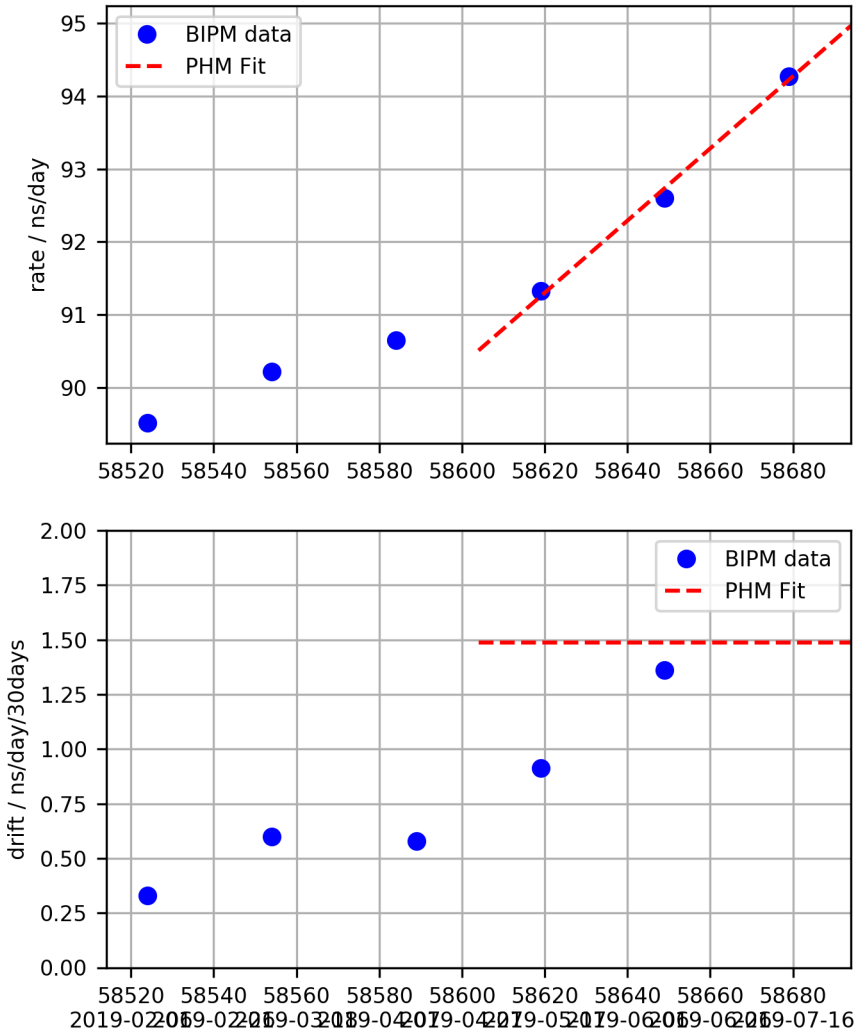
AHM3 Rate and Drift



UTC - PHM Fit

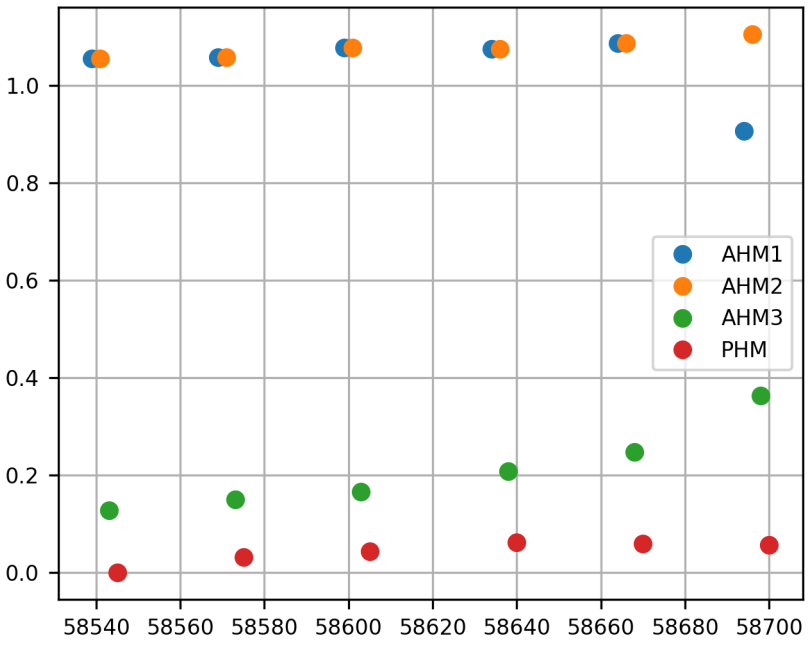

UTC-PHM (2019-08-12 / 58707)
x (ns)= 67530.478 + 94.967 *d + 0.0248 *d*d
y = -1.09915e-12 + -5.73424e-16 *d
d = (mjd-mjd0) with mjd0 = 58694
UTC-PHM
fit, UTC-PHM
UTC-PHM (ns)
66000
64000
62000
60000
58620
58640
58660
58680
UTC-PHM
fit, UTC-PHM
Linear Residual (ns)
30
20
10
0
−10
−20
1.632 ns RMS
Quadratic Residual (ns)
2
0
−2
2019-05-17
2019-06-06
2019-06-26
2019-07-16

PHM Rate and Drift



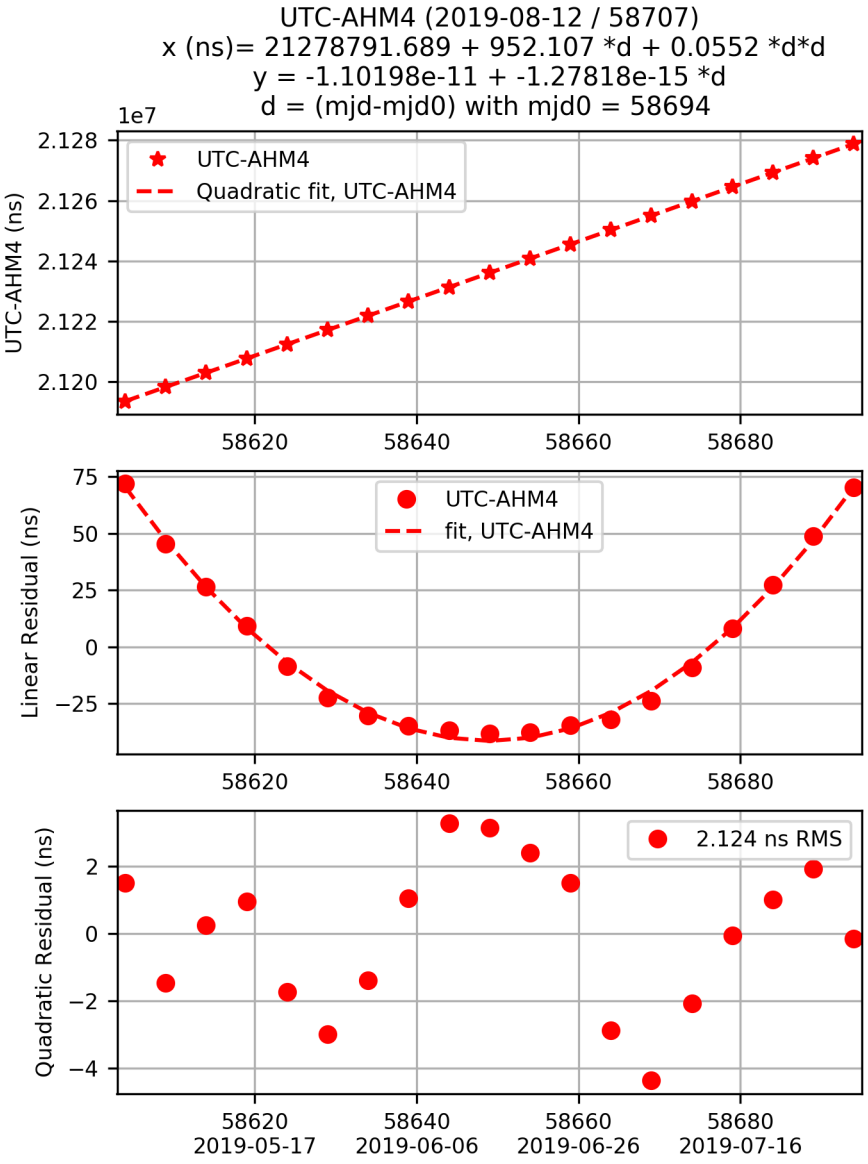
Clock Weights

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

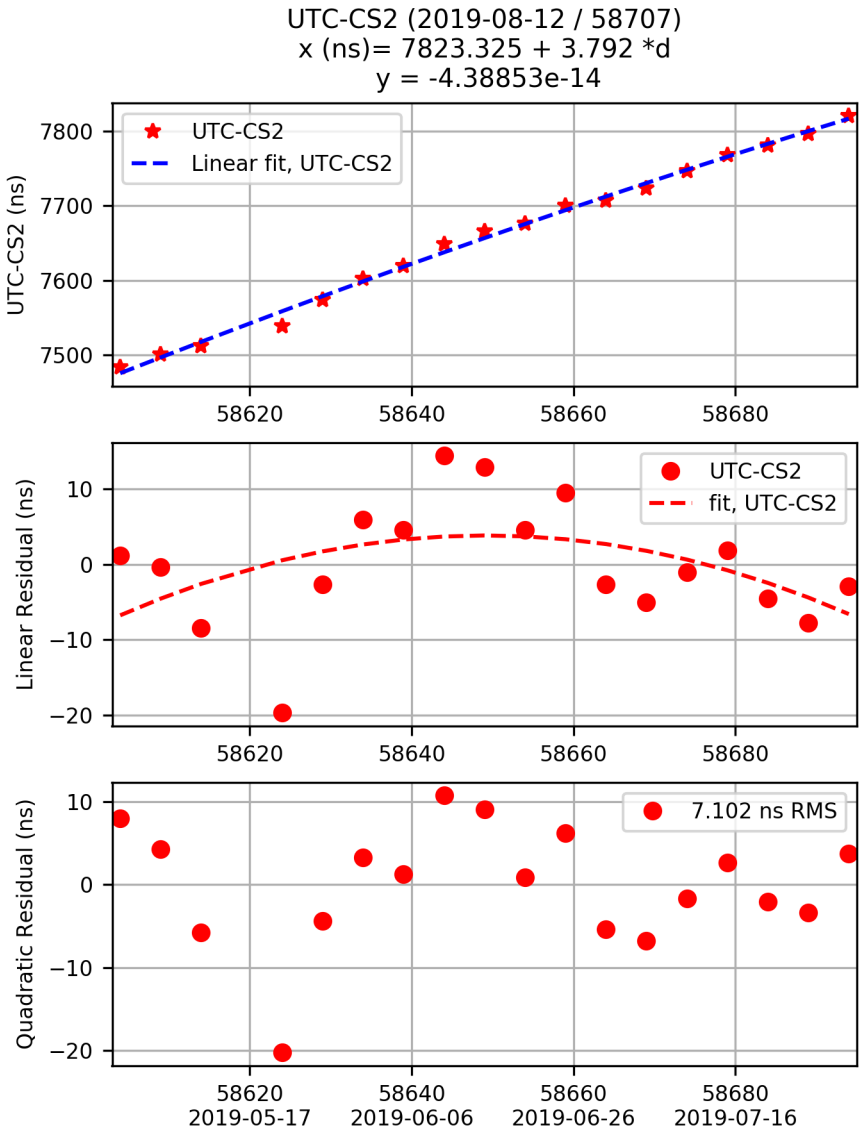


Remote Clocks

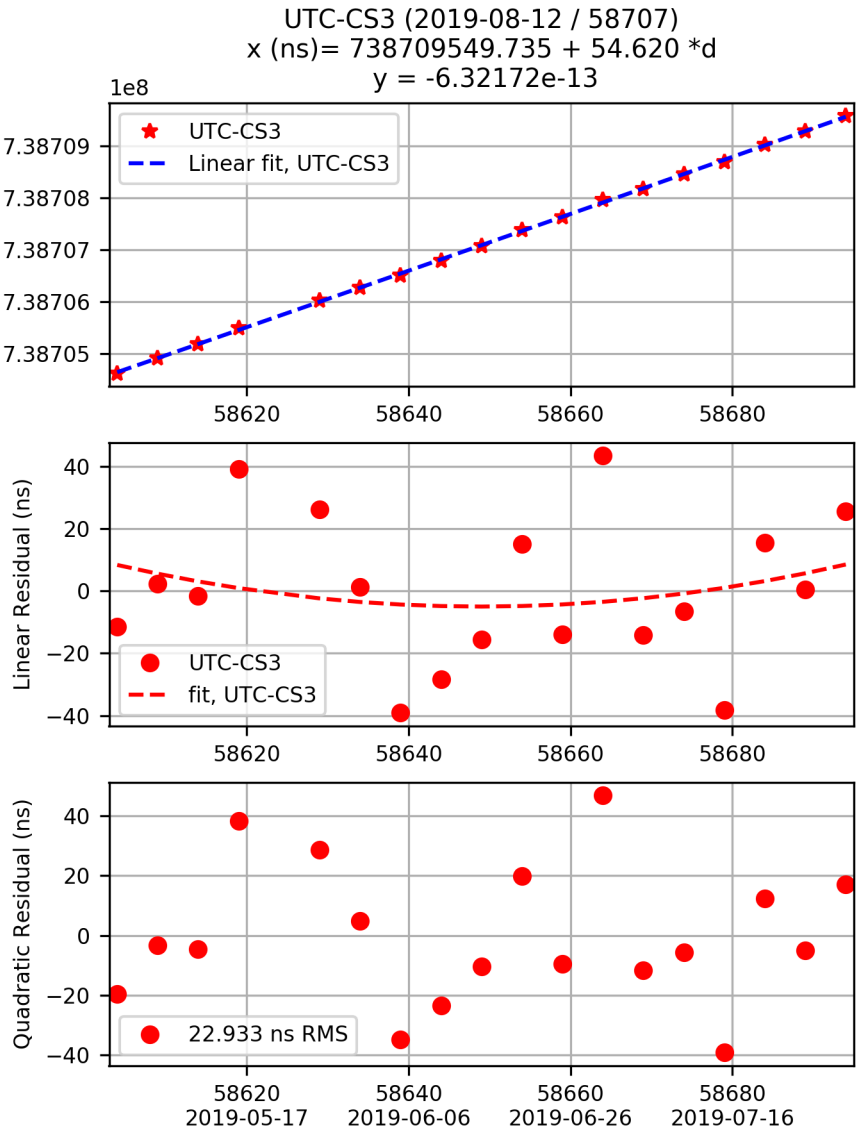
Remote Clock: AHM4



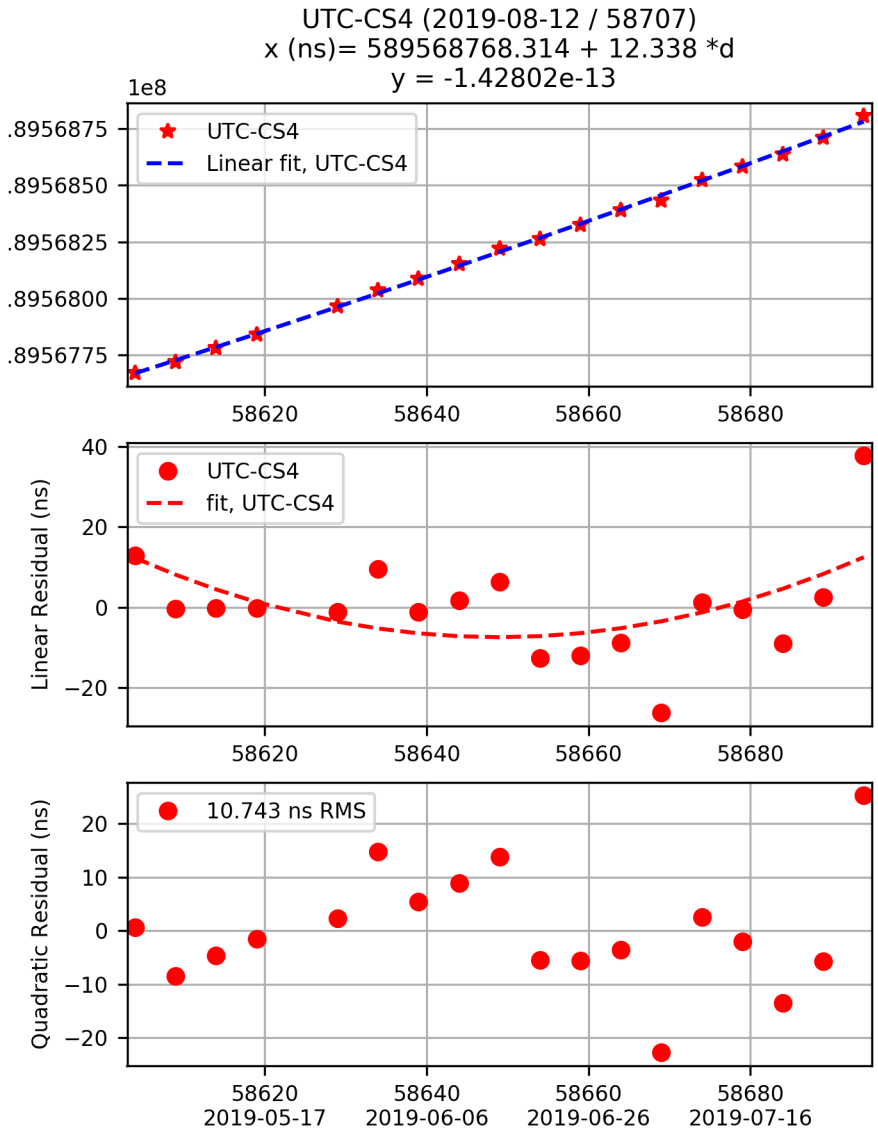
Remote Clock: CS2



Remote Clock: CS3



Remote Clock: CS4



End of Bulletin.