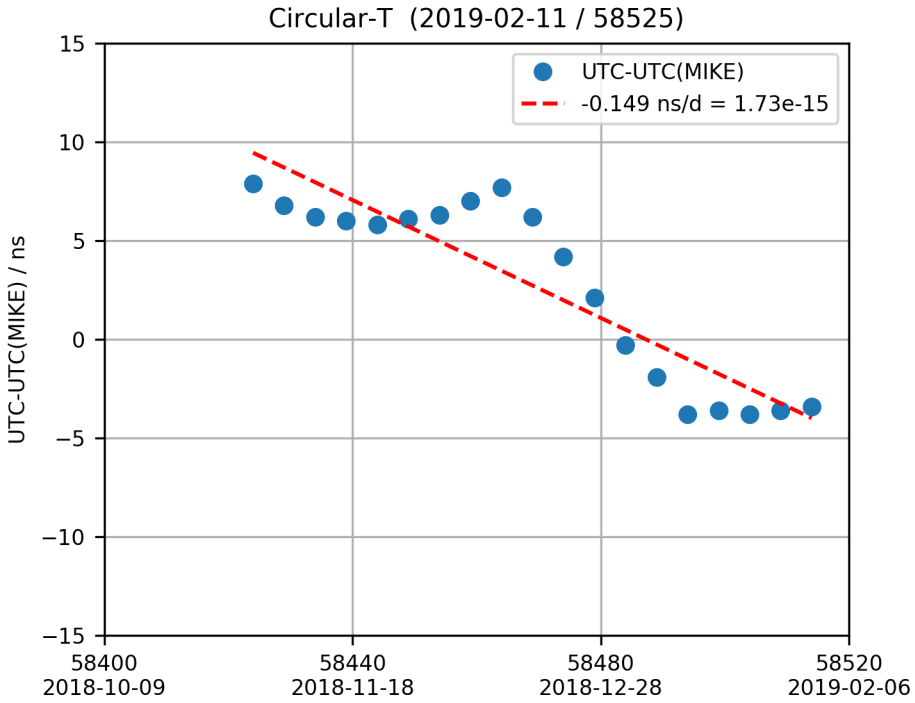
UTC(MIKE) Atomic Bulletin 2019-02

VTT MIKES Metrology monthly Time & Frequency bulletin.
Comments and questions to: time "at" vtt.fi
Date of publication: 2019-02-11 (58525)
Circular-T issues used for analysis: 371, 372, 373,
First day of analysis interval: 2018-11-02 (58424)
Last day of analysis interval: 2019-01-31 (58514)
ClockData for analysis: CDMI__18.11_, CDMI__18.12_, CDMI__19.01_,

Notes

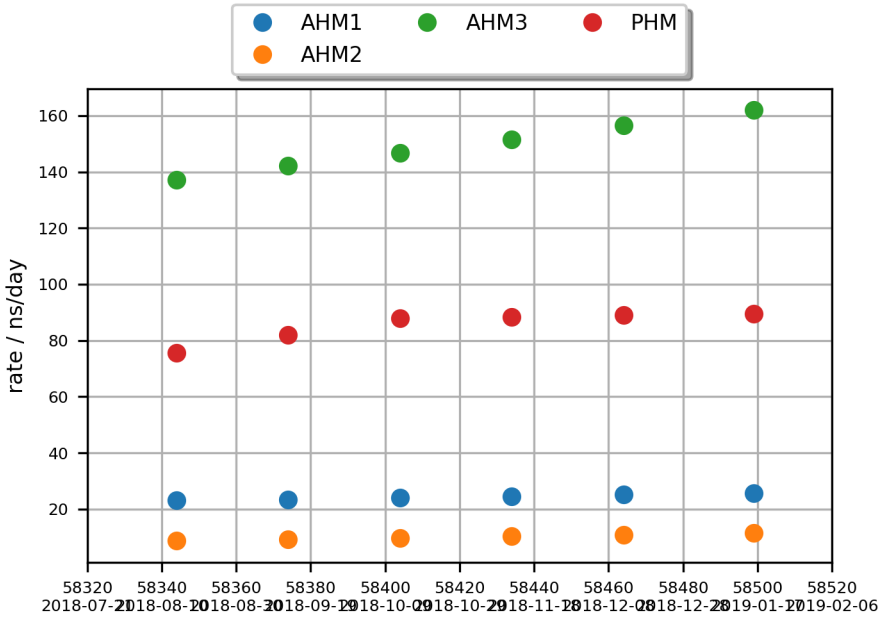
58299 Apparent time step of UTC(MIKE) of +8.2 ns between MJD 58299 and MJD 58304 due to antenna coordinates correction. ClockData before 58299.5 is corrected by -8.2 ns for analysis.
58305 AHM3 rebooted. Phase step +20.2ns.
58450 CS1 Hotwire supply regulation failure
58494 Change master-clock to AHM2

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

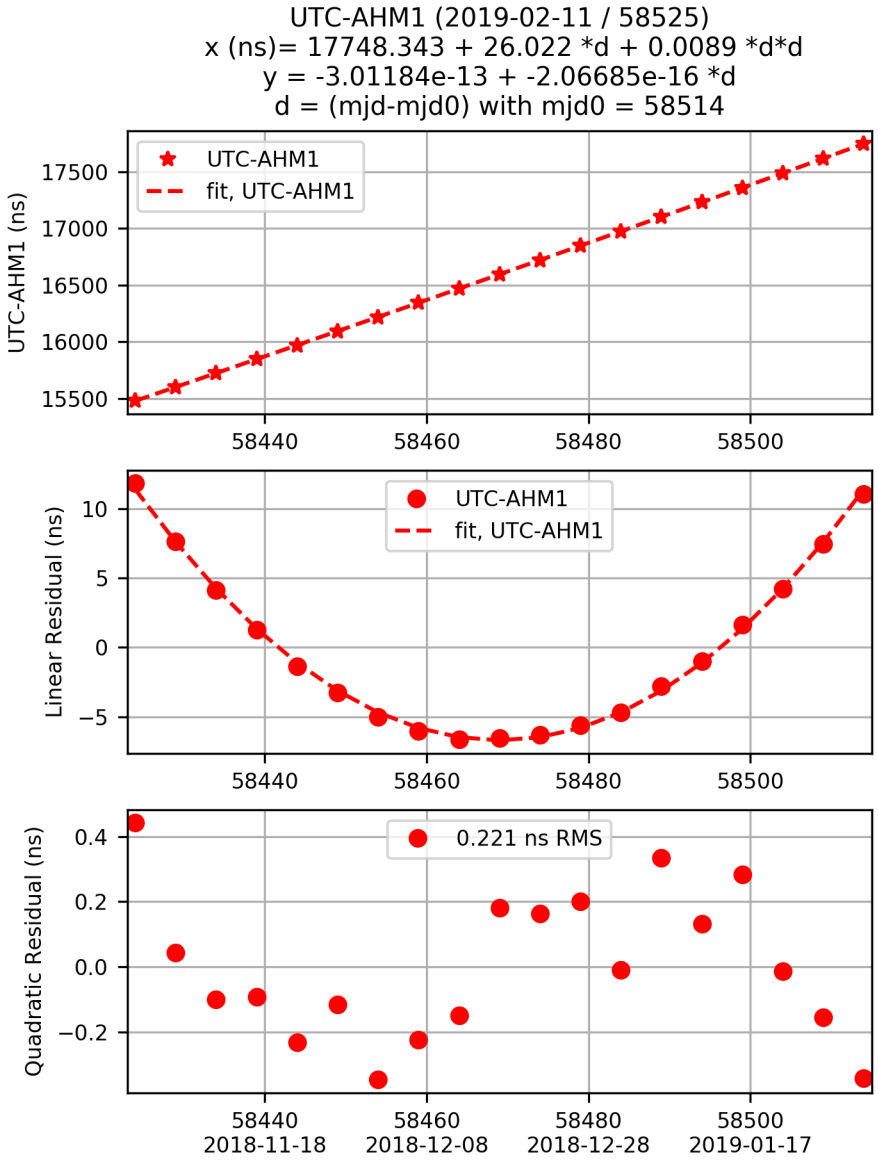


UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

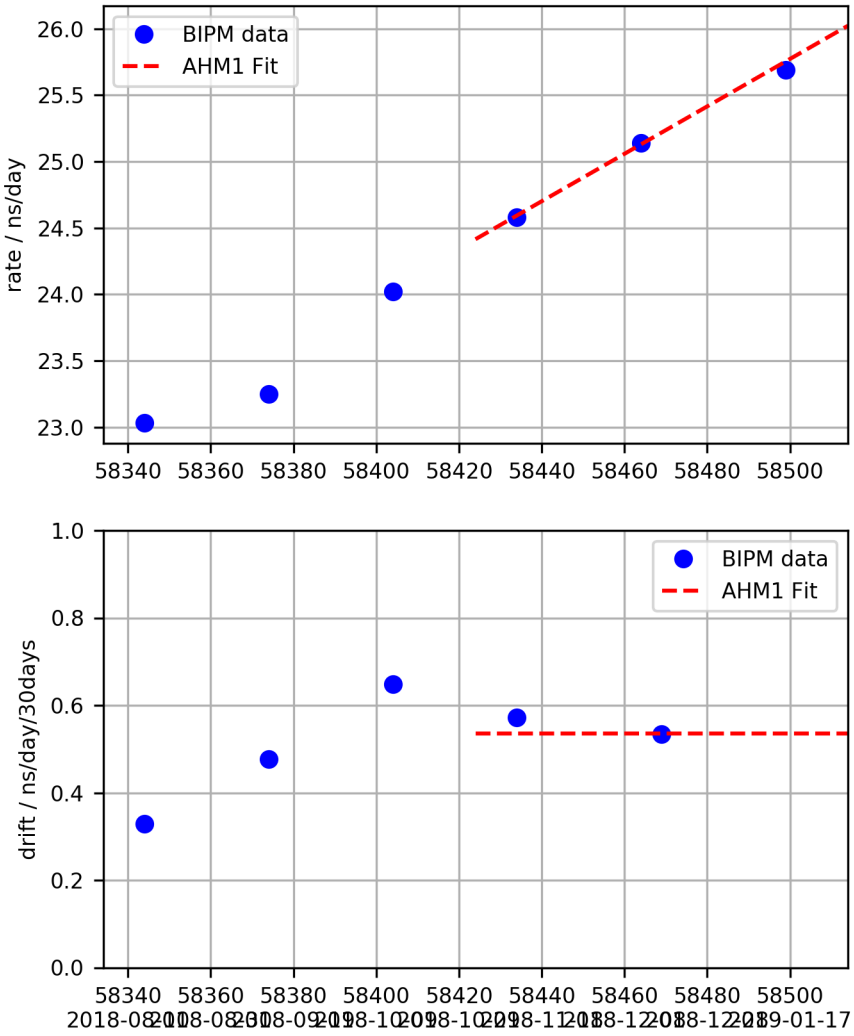
Clock Rates - Summary



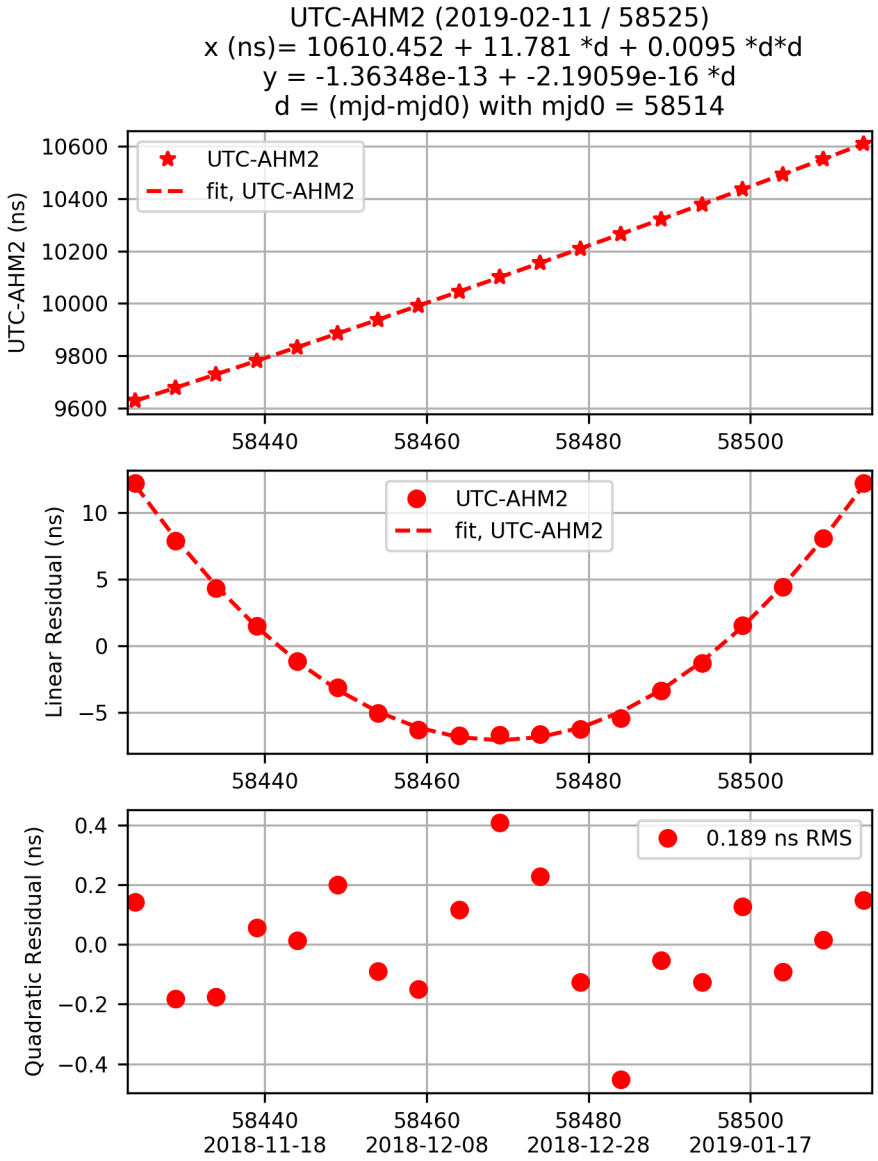
UTC - AHM1 Fit


UTC-AHM1 (2019-02-11 / 58525)
x (ns)= 17748.343 + 26.022 *d + 0.0089 *d*d
y = -3.01184e-13 + -2.06685e-16 *d
d = (mjd-mjd0) with mjd0 = 58514
UTC-AHM1
fit, UTC-AHM1
UTC-AHM1 (ns)
17500
17000
16500
16000
15500
58440
58460
58480
58500
Linear Residual (ns)
10
5
0
−5
Quadratic Residual (ns)
0.221 ns RMS
0.4
0.2
0.0
−0.2
2018-11-18
2018-12-08
2018-12-28
2019-01-17

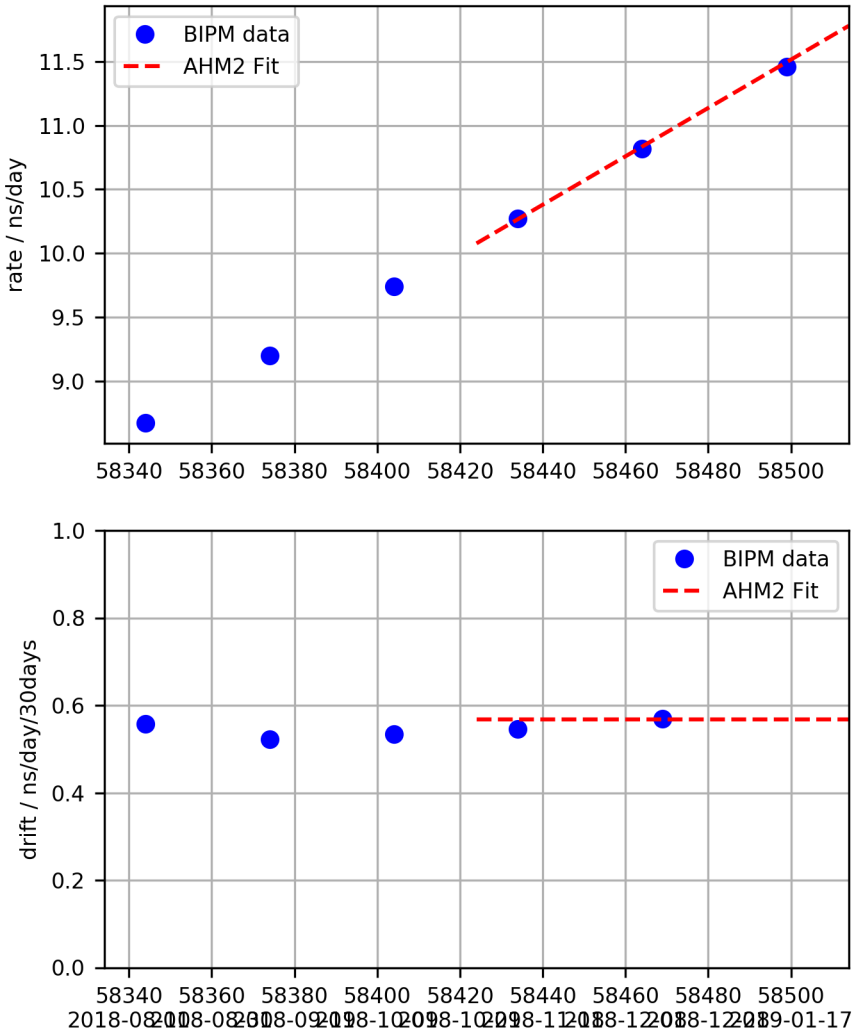
AHM1 Rate and Drift



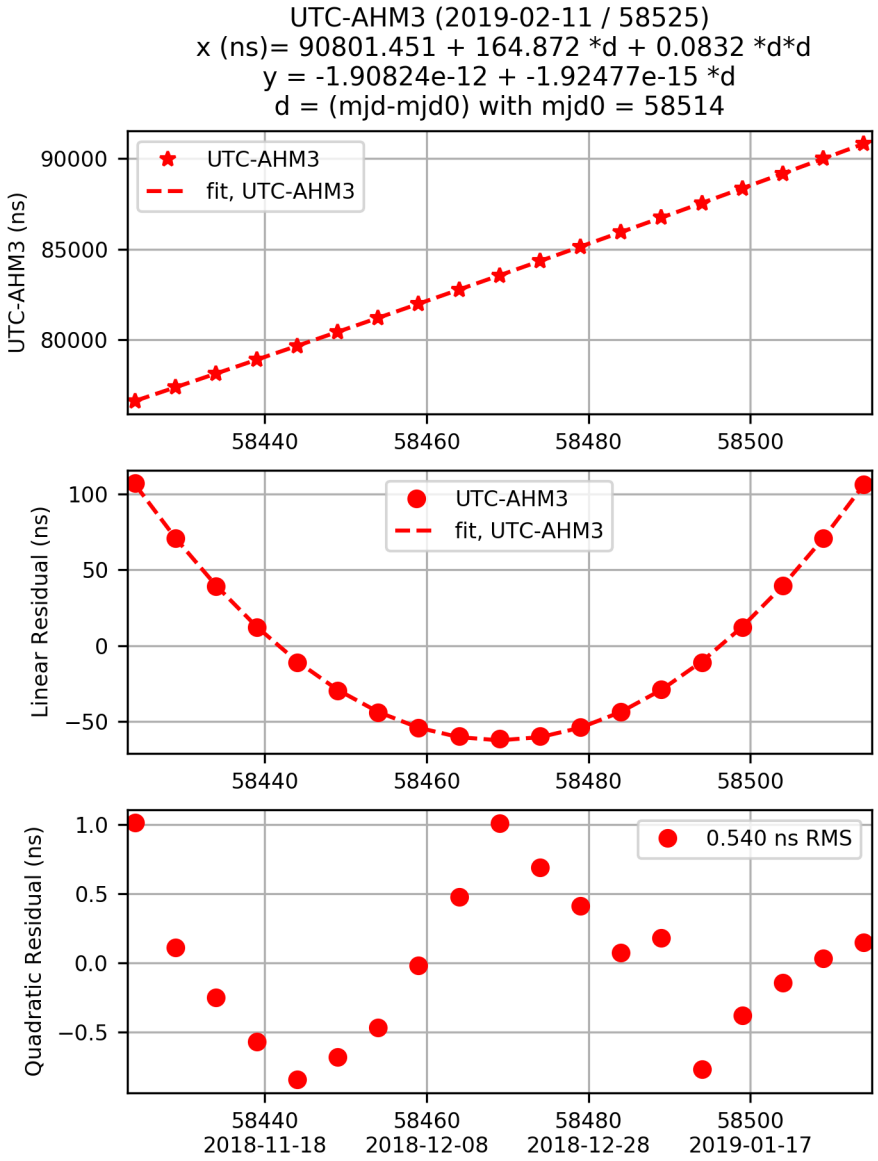
UTC - AHM2 Fit


UTC-AHM2 (2019-02-11 / 58525)
x (ns)= 10610.452 + 11.781 *d + 0.0095 *d*d
y = -1.36348e-13 + -2.19059e-16 *d
d = (mjd-mjd0) with mjd0 = 58514
UTC-AHM2 (ns)
UTC-AHM2
fit, UTC-AHM2
Linear Residual (ns)
Quadratic Residual (ns)
0.189 ns RMS
2018-11-18
2018-12-08
2018-12-28
2019-01-17

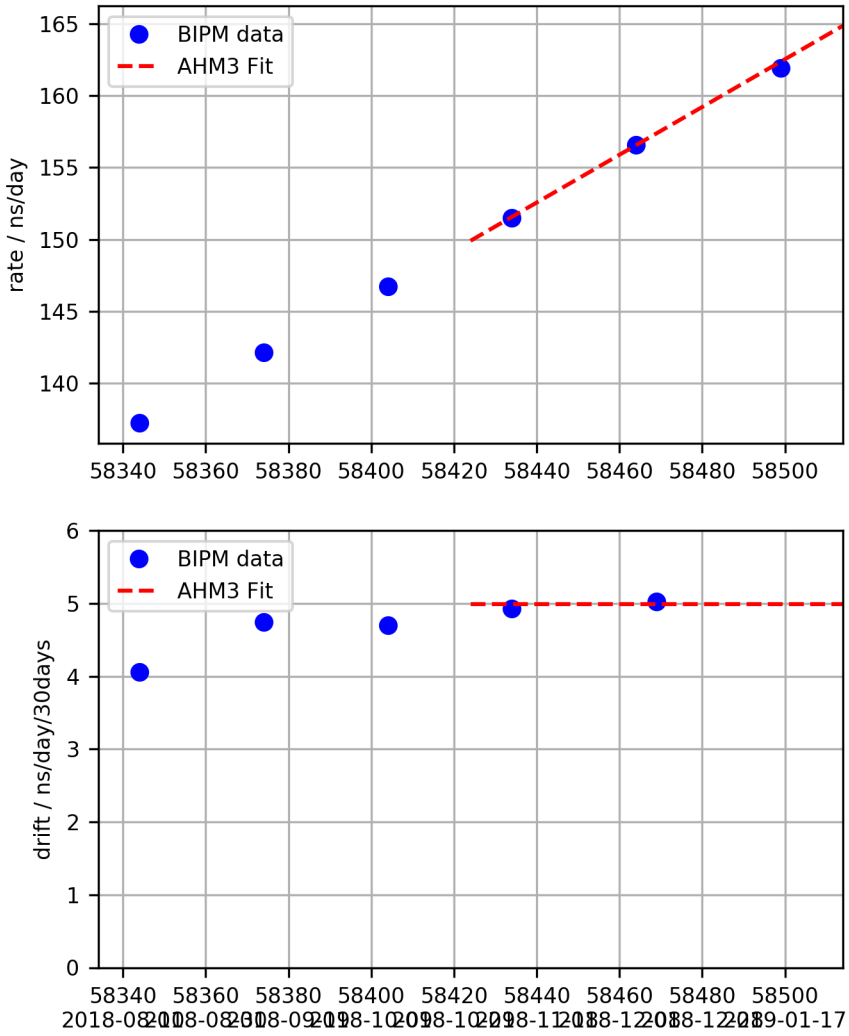
AHM2 Rate and Drift



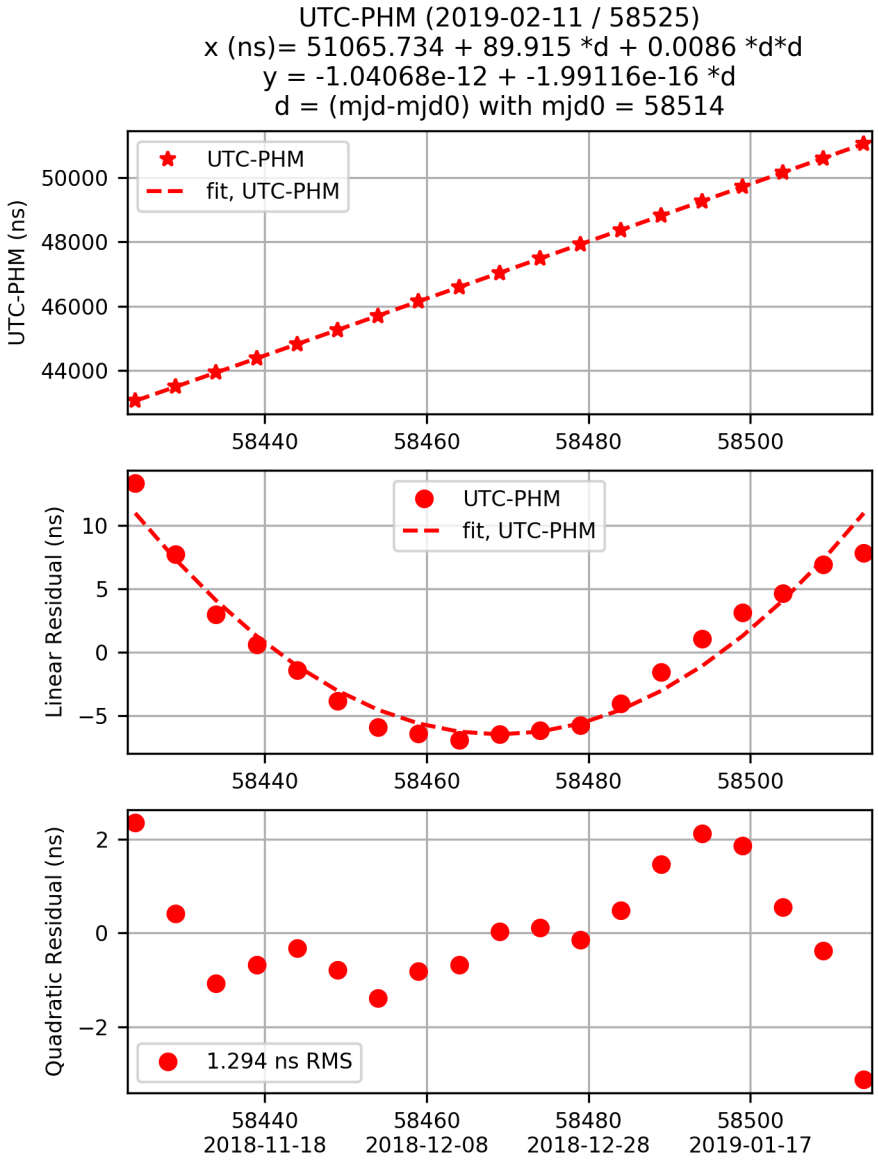
UTC - AHM3 Fit


UTC-AHM3 (2019-02-11 / 58525)
x (ns)= 90801.451 + 164.872 *d + 0.0832 *d*d
y = -1.90824e-12 + -1.92477e-15 *d
d = (mjd-mjd0) with mjd0 = 58514
UTC-AHM3
fit, UTC-AHM3
UTC-AHM3 (ns)
90000
85000
80000
58440
58460
58480
58500
Linear Residual (ns)
100
50
0
−50
Quadratic Residual (ns)
1.0
0.5
0.0
−0.5
0.540 ns RMS
2018-11-18
2018-12-08
2018-12-28
2019-01-17

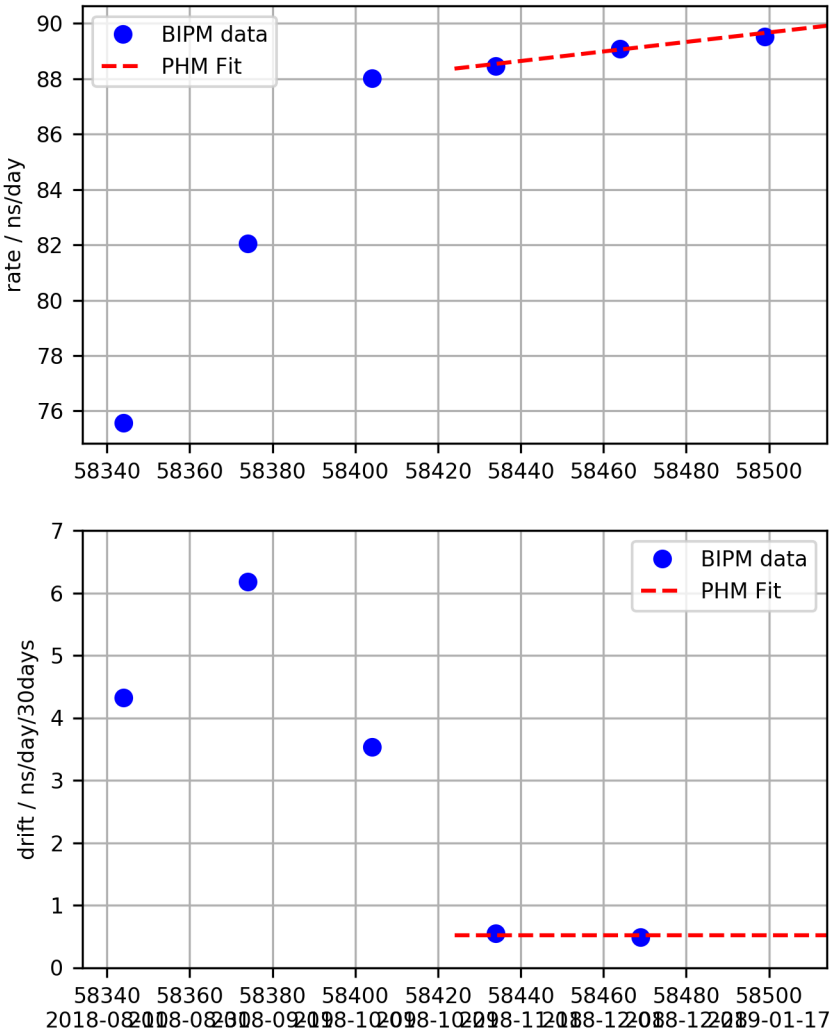
AHM3 Rate and Drift



UTC - PHM Fit

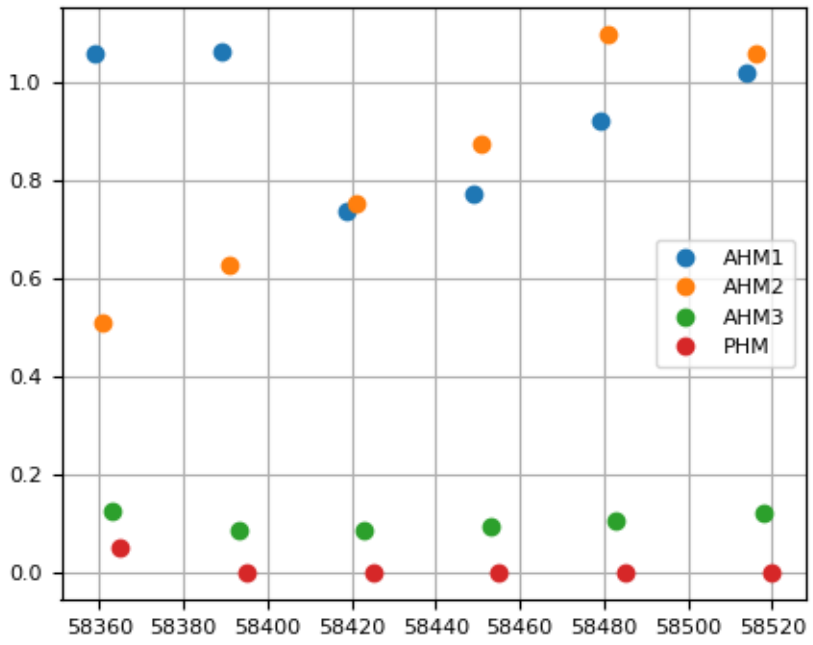

UTC-PHM (2019-02-11 / 58525)
x (ns)= 51065.734 + 89.915 *d + 0.0086 *d*d
y = -1.04068e-12 + -1.99116e-16 *d
d = (mjd-mjd0) with mjd0 = 58514
UTC-PHM
fit, UTC-PHM
UTC-PHM (ns)
50000
48000
46000
44000
58440
58460
58480
58500
Linear Residual (ns)
10
5
0
−5
Quadratic Residual (ns)
2
0
−2
1.294 ns RMS
2018-11-18
2018-12-08
2018-12-28
2019-01-17

PHM Rate and Drift



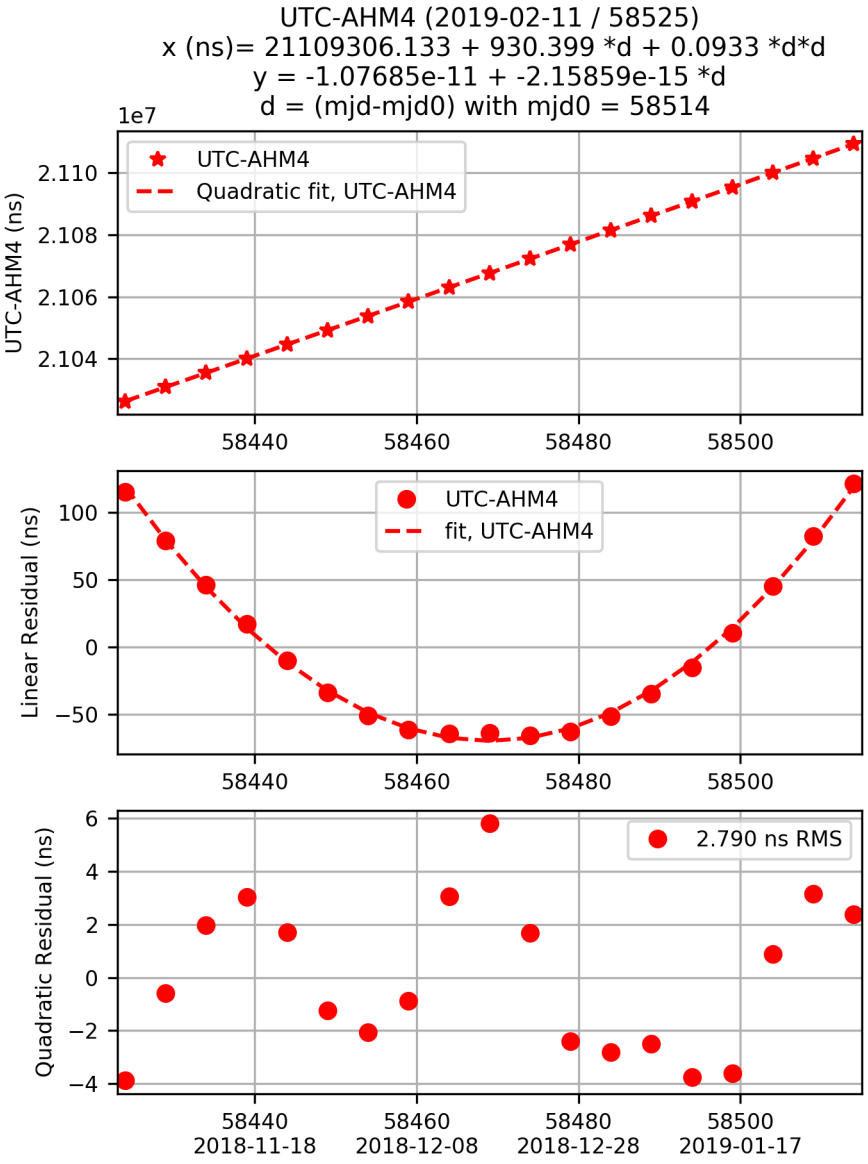
Clock Weights

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

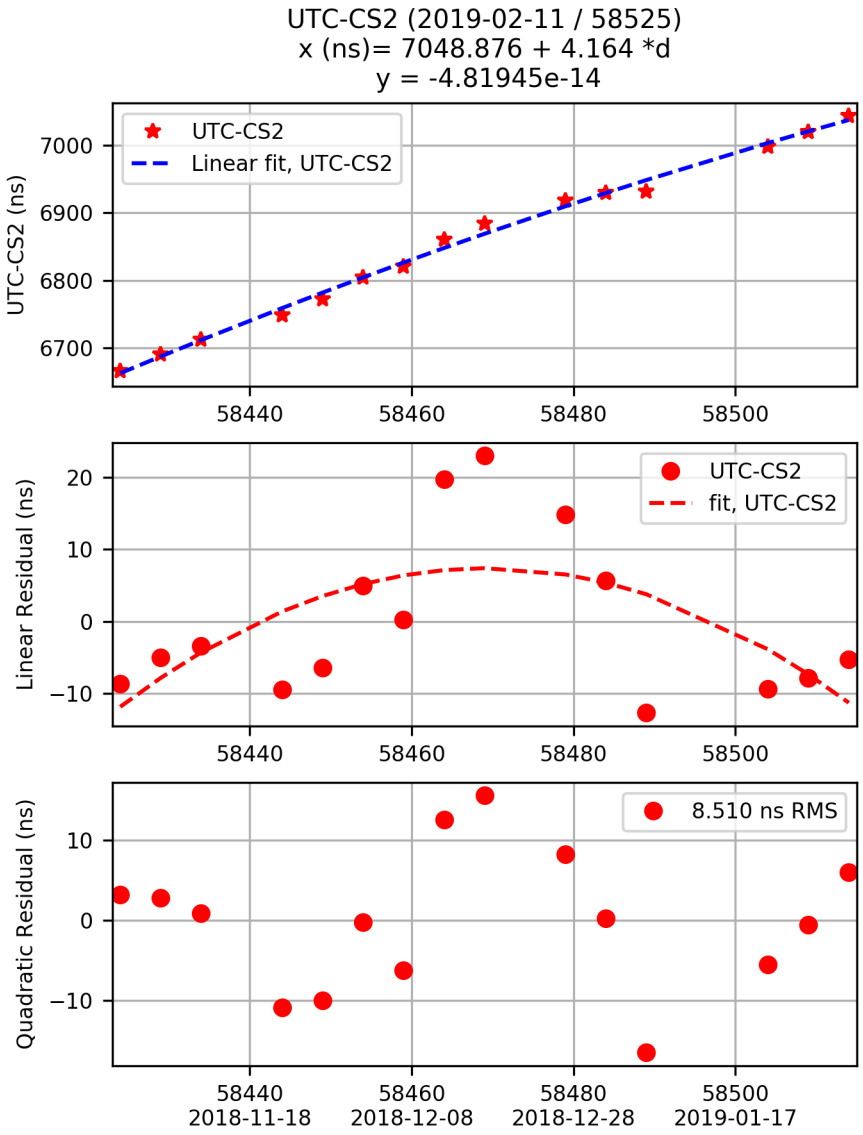


Remote Clocks

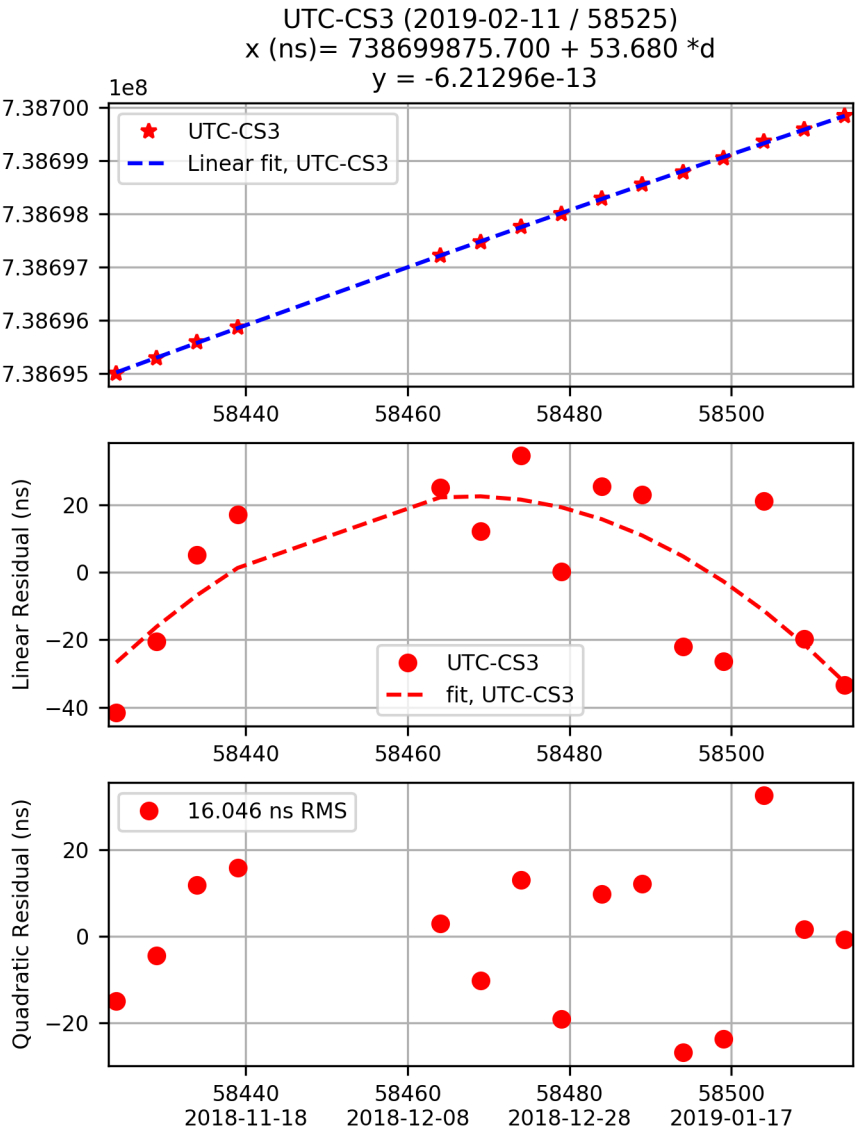
Remote Clock: AHM4



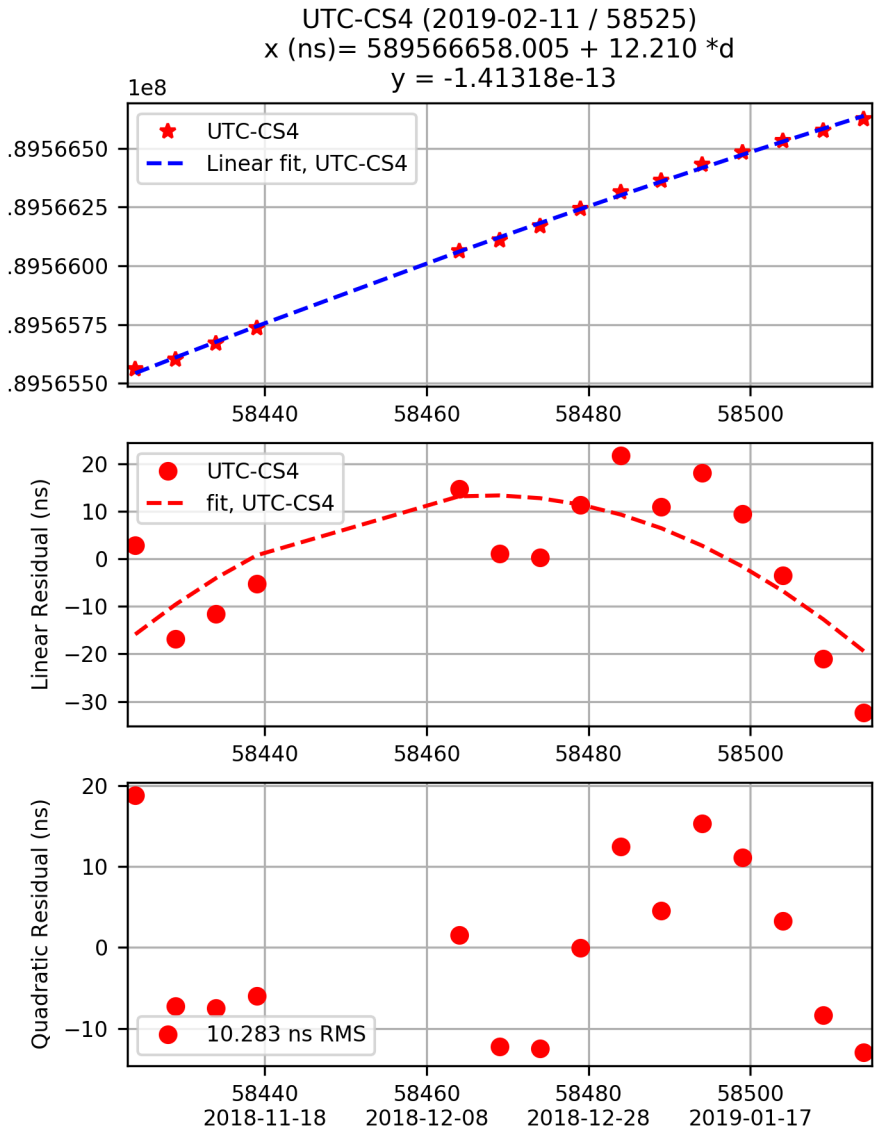
Remote Clock: CS2



Remote Clock: CS3



Remote Clock: CS4



End of Bulletin.