

UTC(MIKE) Atomic Bulletin 2019-07

VTT MIKES Metrology monthly Time & Frequency bulletin.

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

Date of publication: 2019-07-12 (58676)

Circular-T issues used for analysis: [376](#), [377](#), [378](#),

First day of analysis interval: 2019-04-01 (58574)

Last day of analysis interval: 2019-06-30 (58664)

ClockData for analysis: [CDMI 19.04](#), [CDMI 19.05](#), [CDMI 19.06](#),

Notes

58305 AHM3 rebooted. Phase step +20.2ns.

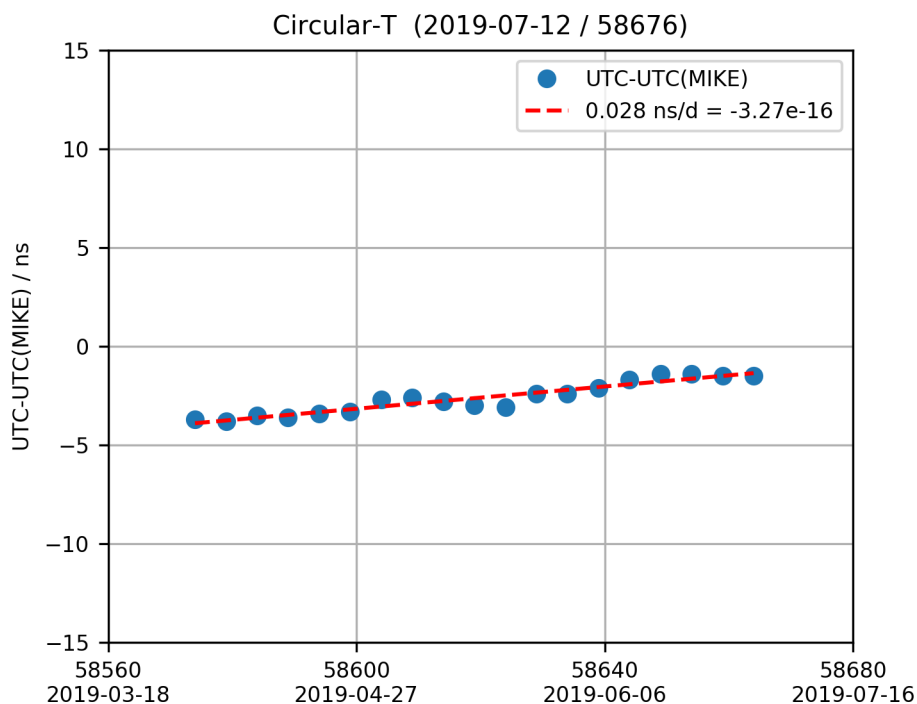
58450 CS1 Hotwire supply regulation failure

58494 Change master-clock to AHM2

M3 clock data missing for 58623, 58624

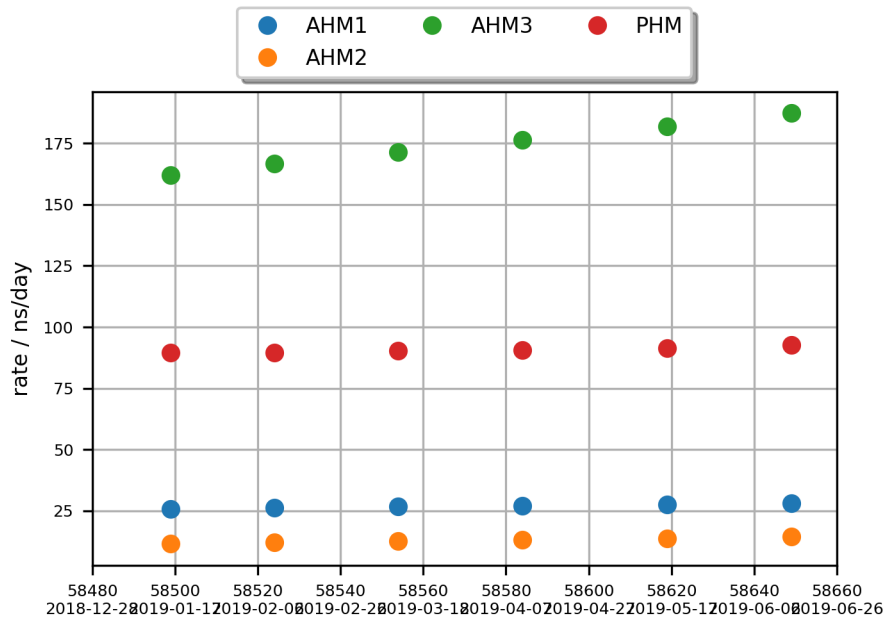
58617 (2019-05-14) Power-outage and temperature fluctuations in MIKES building.

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



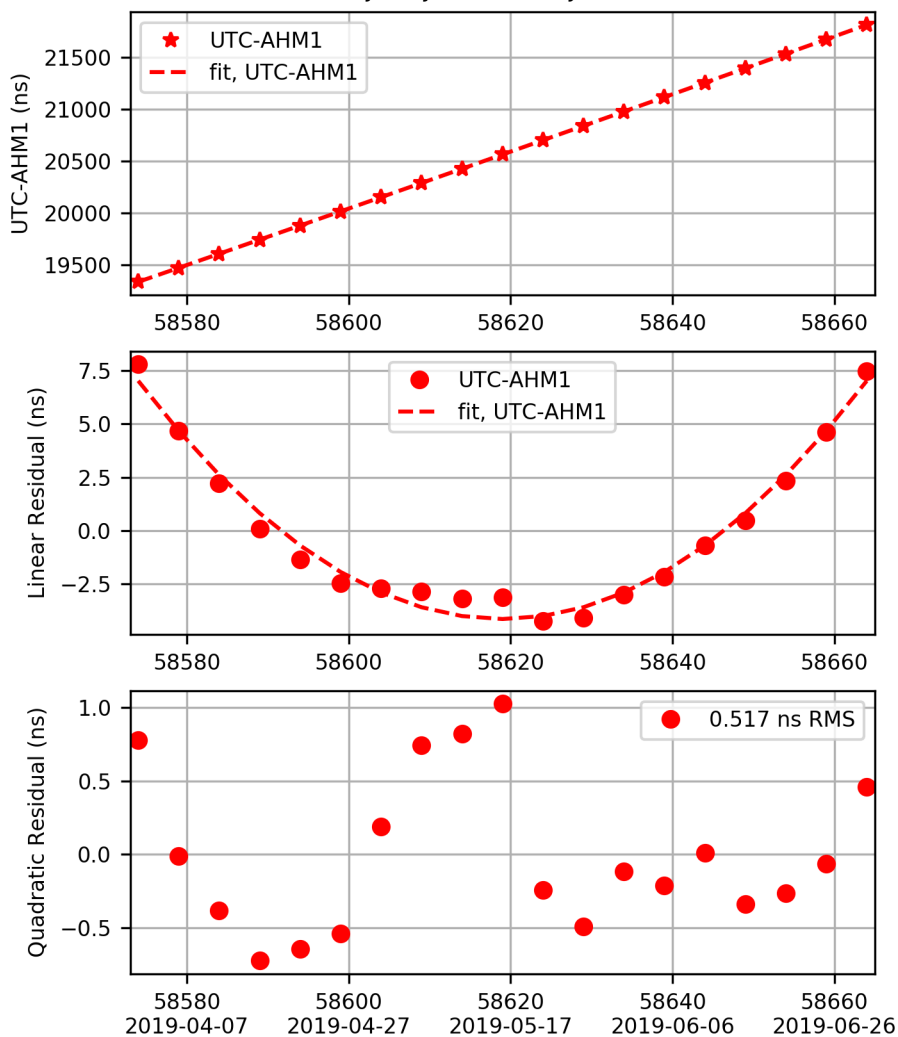
UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

Clock Rates - Summary

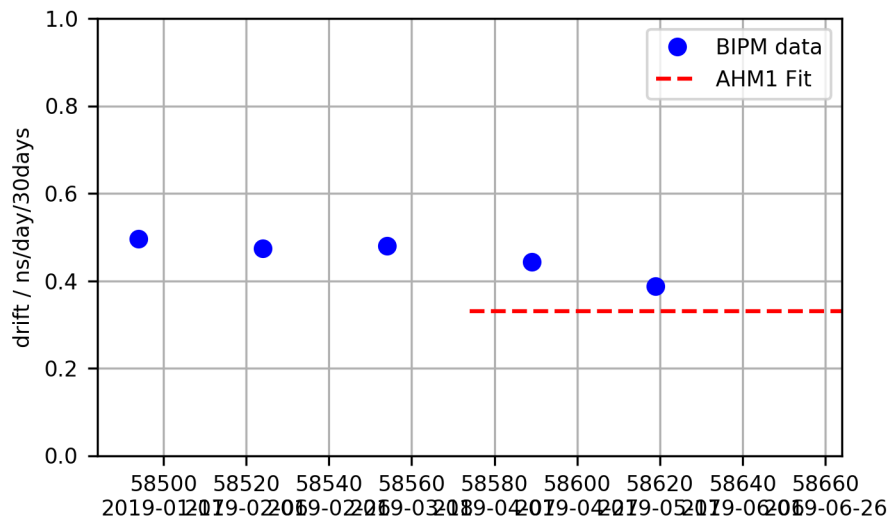
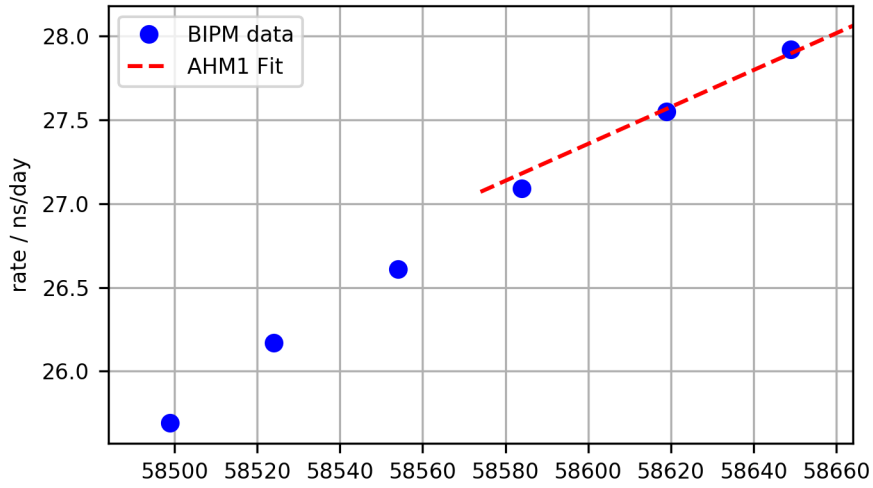


UTC - AHM1 Fit

UTC-AHM1 (2019-07-12 / 58676)
 $x \text{ (ns)} = 21814.540 + 28.063 *d + 0.0055 *d*d$
 $y = -3.248e-13 + -1.27538e-16 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with mjd0} = 58664$

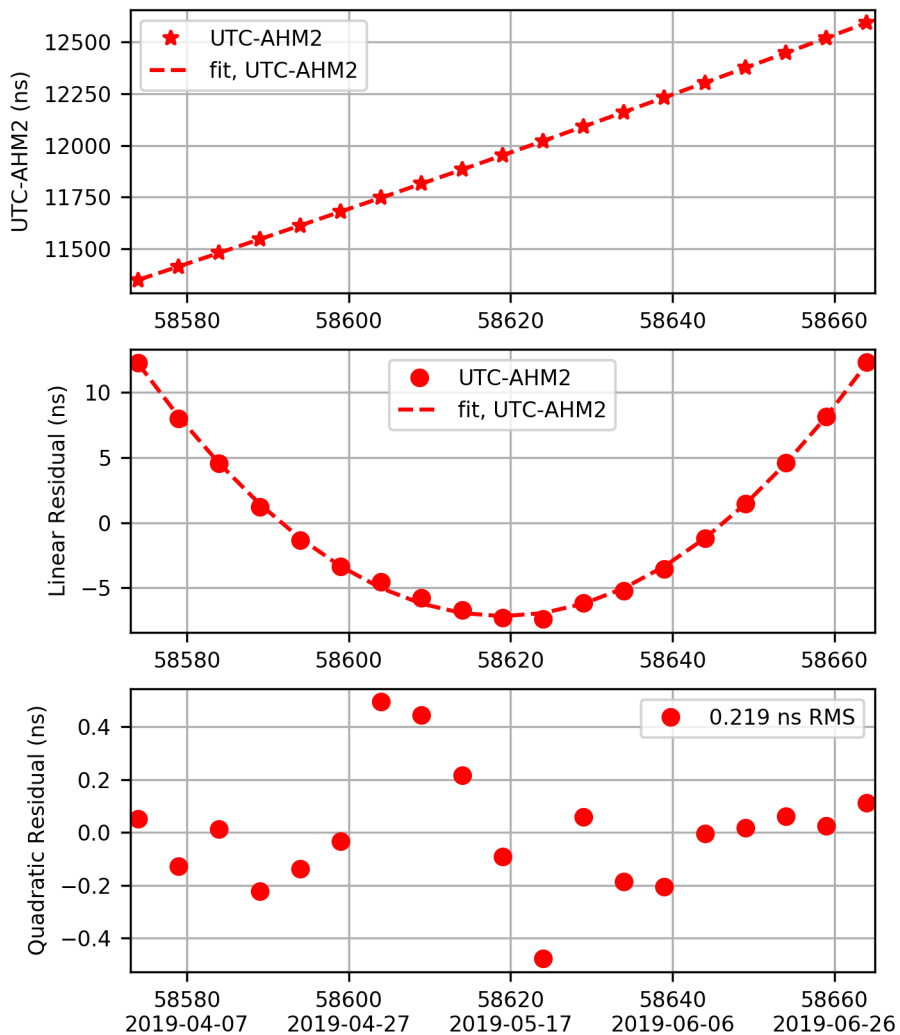


AHM1 Rate and Drift

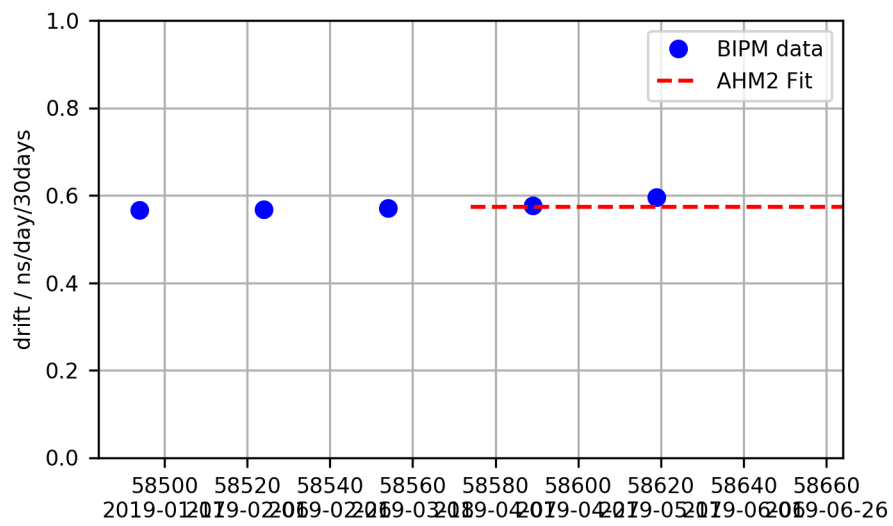
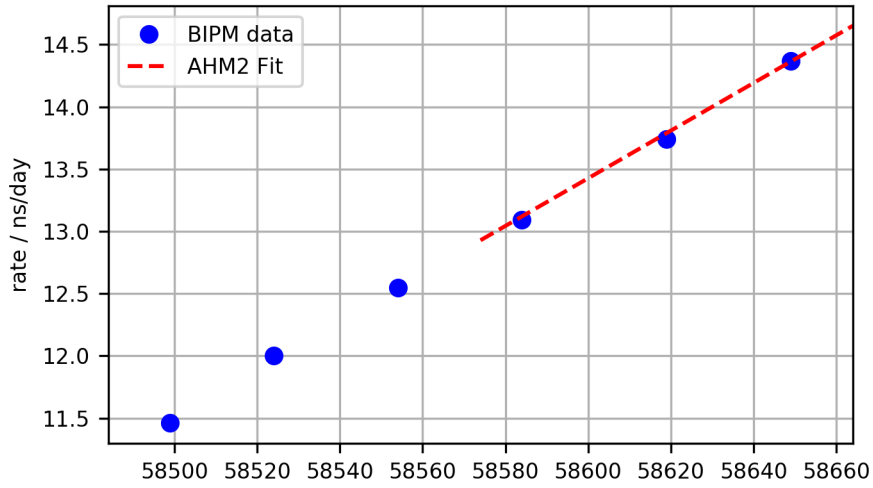


UTC - AHM2 Fit

UTC-AHM2 (2019-07-12 / 58676)
 $x \text{ (ns)} = 12591.688 + 14.650 *d + 0.0096 *d*d$
 $y = -1.69565e-13 + -2.21482e-16 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with mjd0} = 58664$

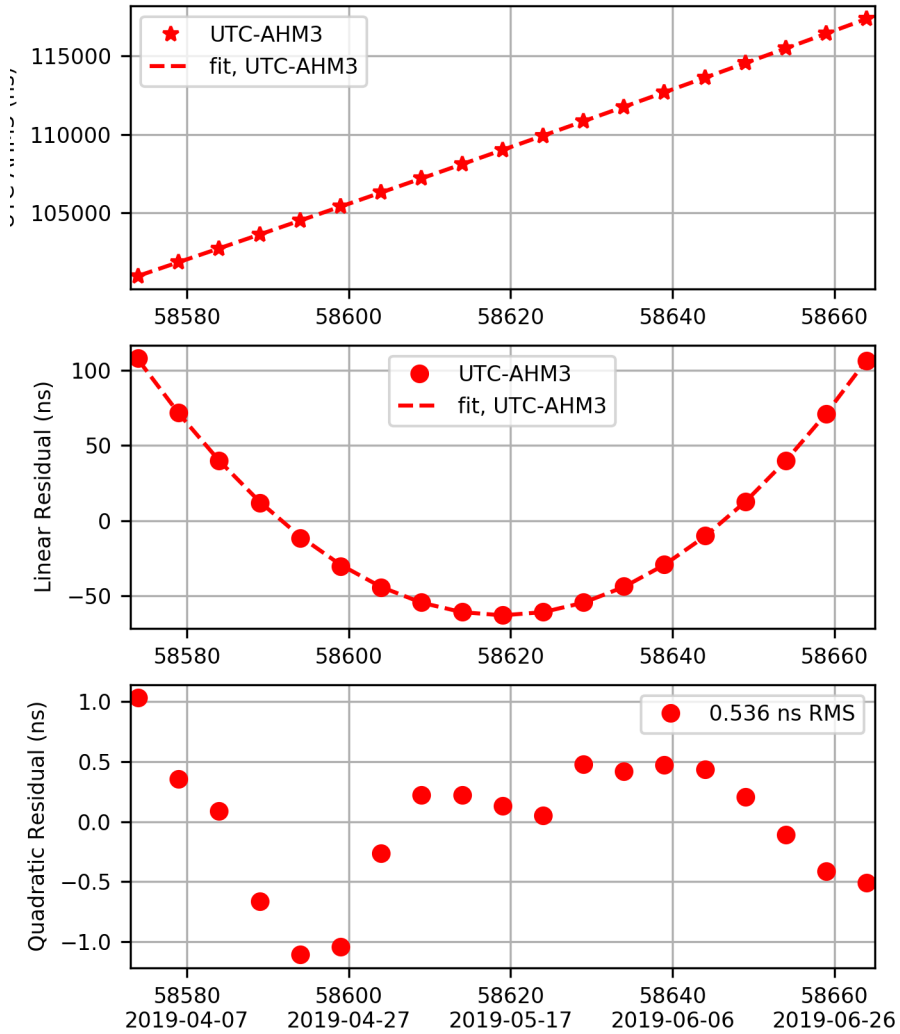


AHM2 Rate and Drift

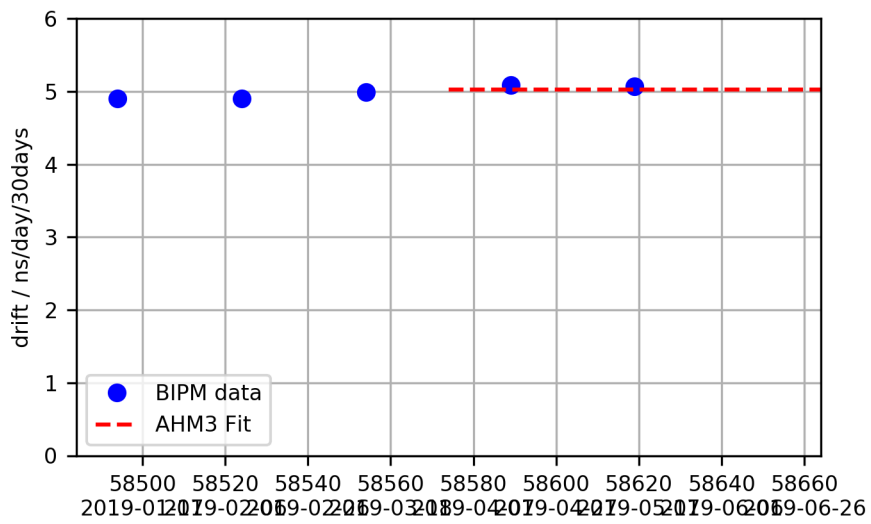
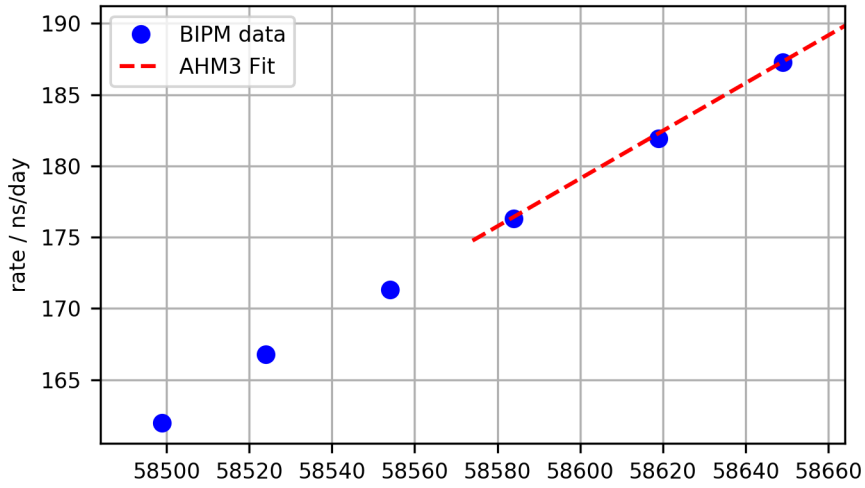


UTC - AHM3 Fit

UTC-AHM3 (2019-07-12 / 58676)
 $x \text{ (ns)} = 117386.708 + 189.838 *d + 0.0838 *d*d$
 $y = -2.1972e-12 + -1.93949e-15 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with } \text{mjd0} = 58664$

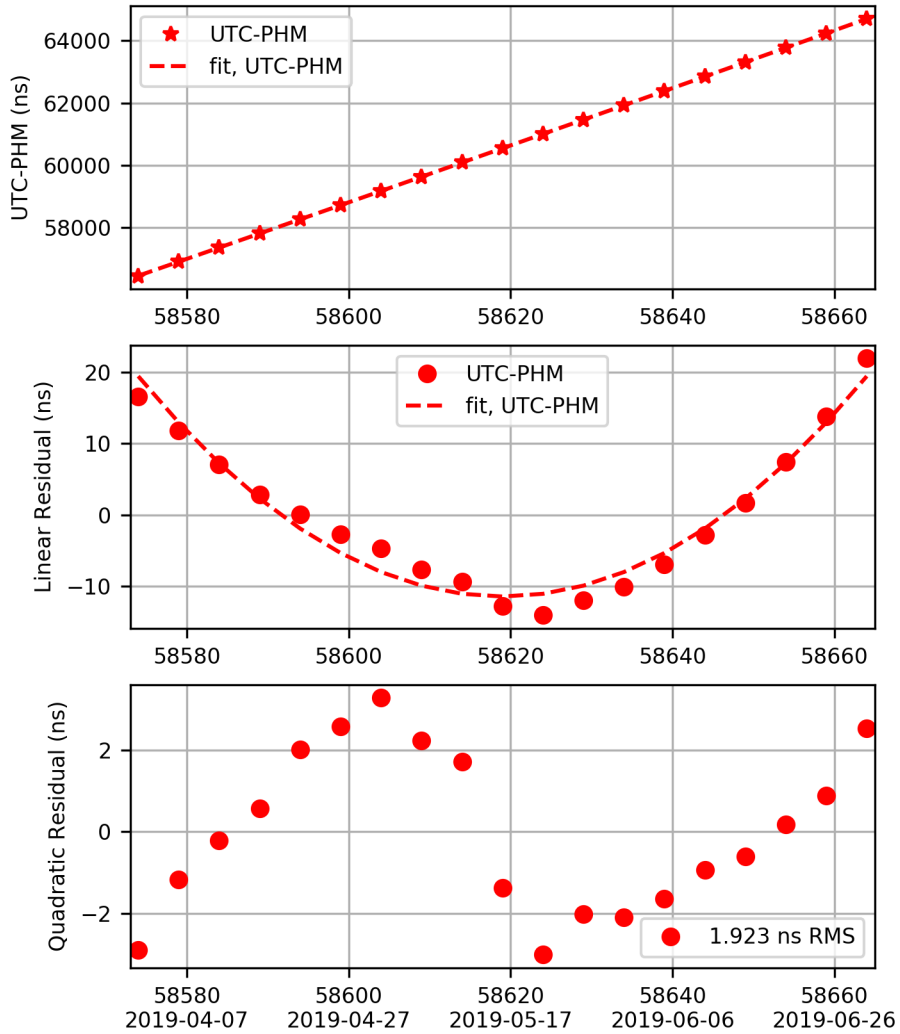


AHM3 Rate and Drift

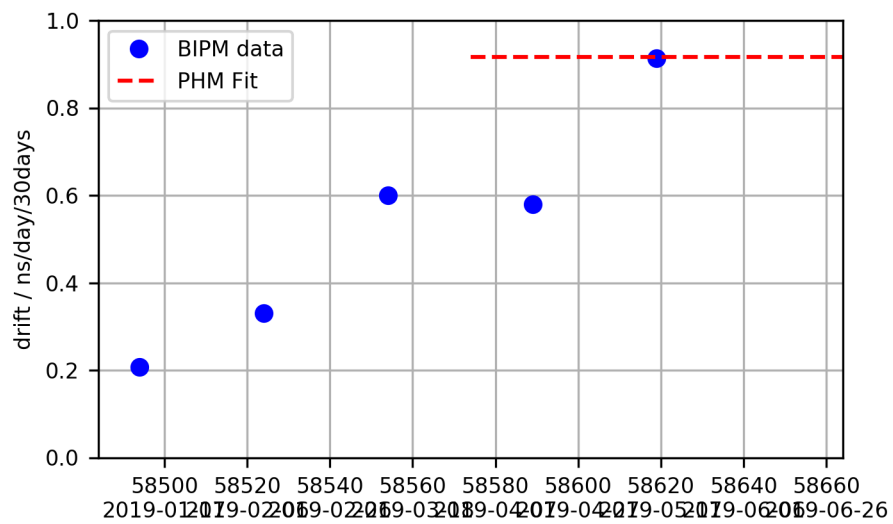
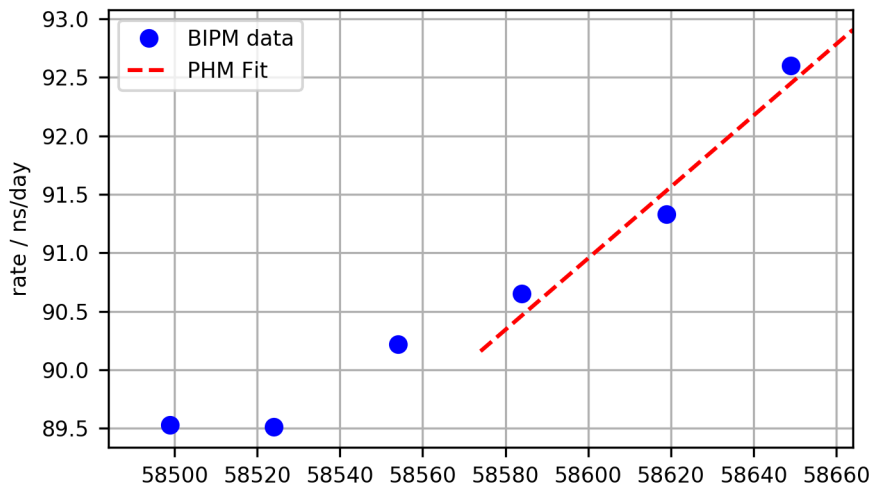


UTC - PHM Fit

UTC-PHM (2019-07-12 / 58676)
 $x \text{ (ns)} = 64698.471 + 92.907 *d + 0.0153 *d*d$
 $y = -1.07531e-12 + -3.53403e-16 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with mjd0} = 58664$

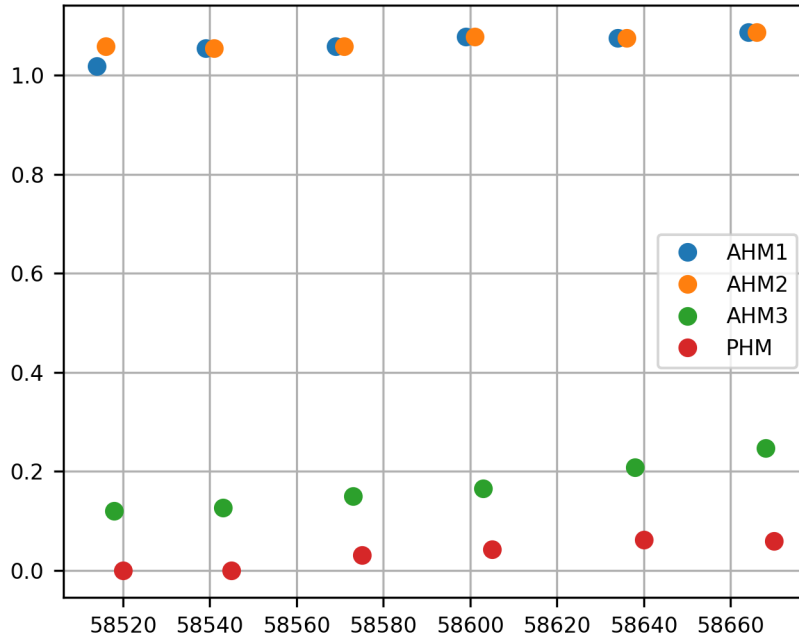


PHM Rate and Drift



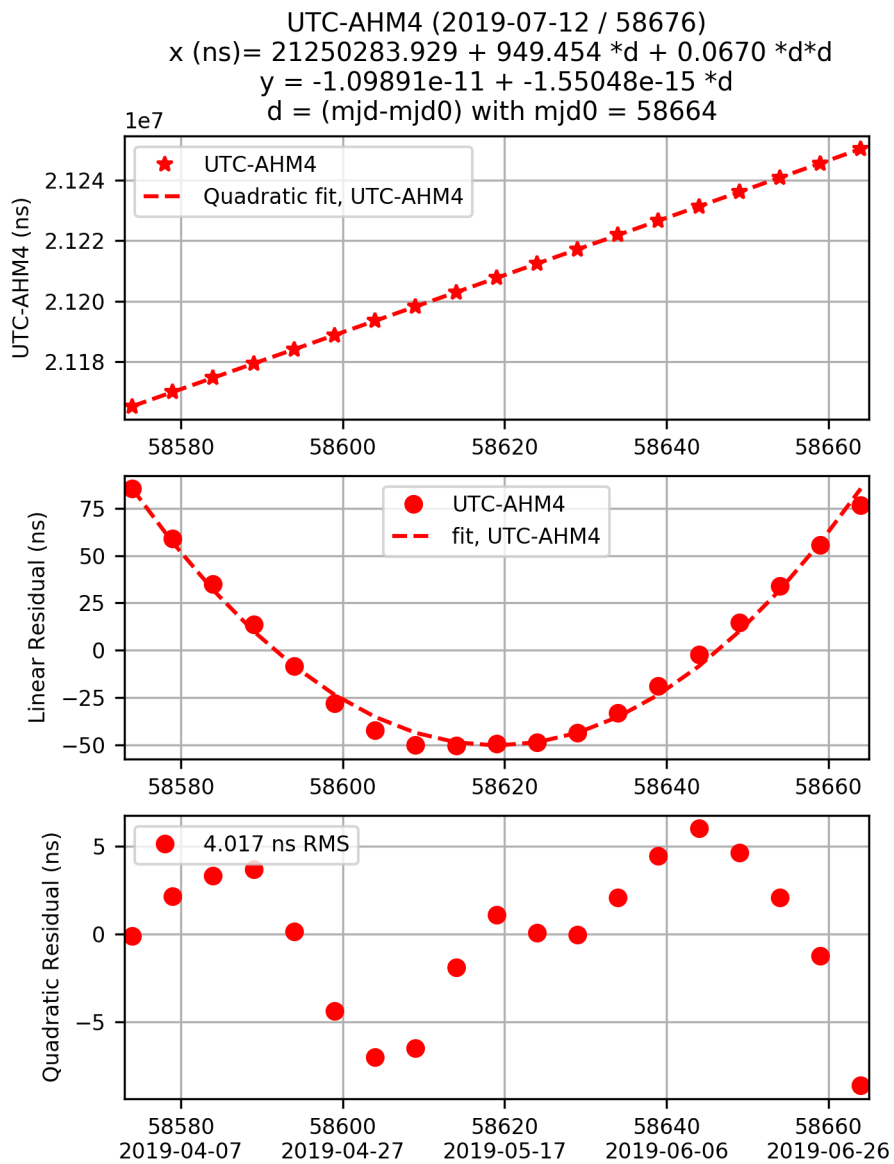
Clock Weights

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



Remote Clocks

Remote Clock: AHM4

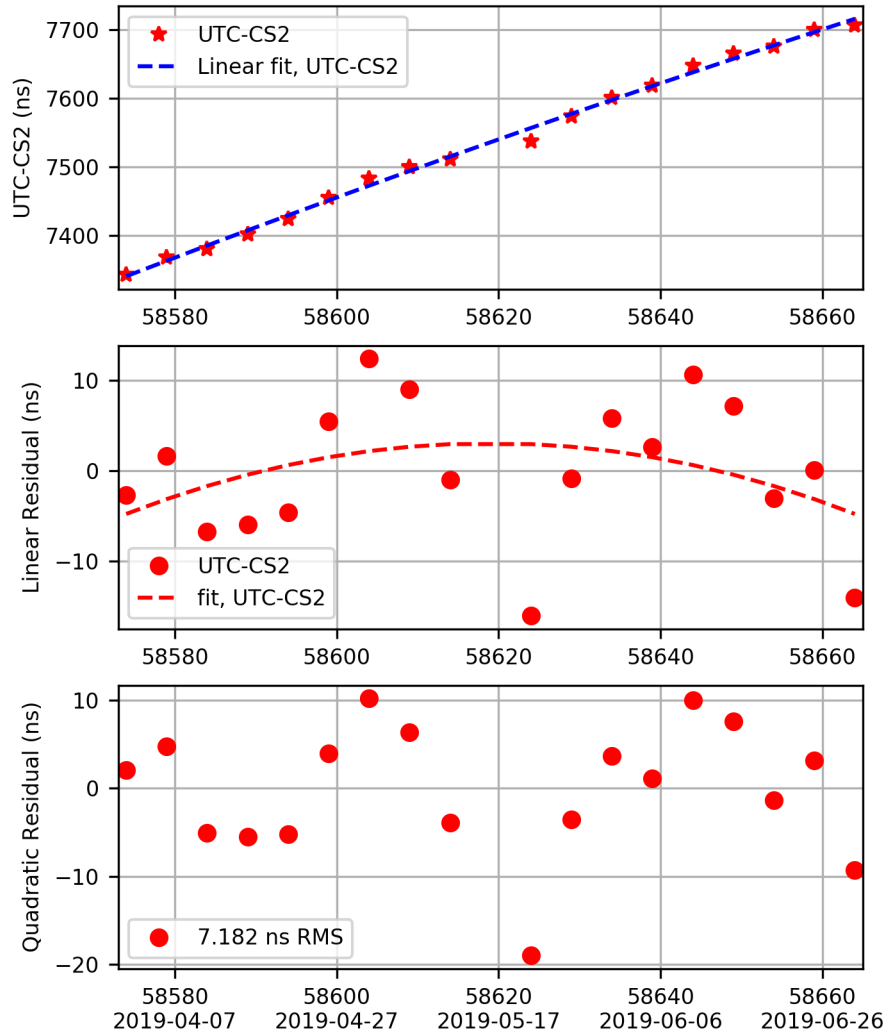


Remote Clock: CS2

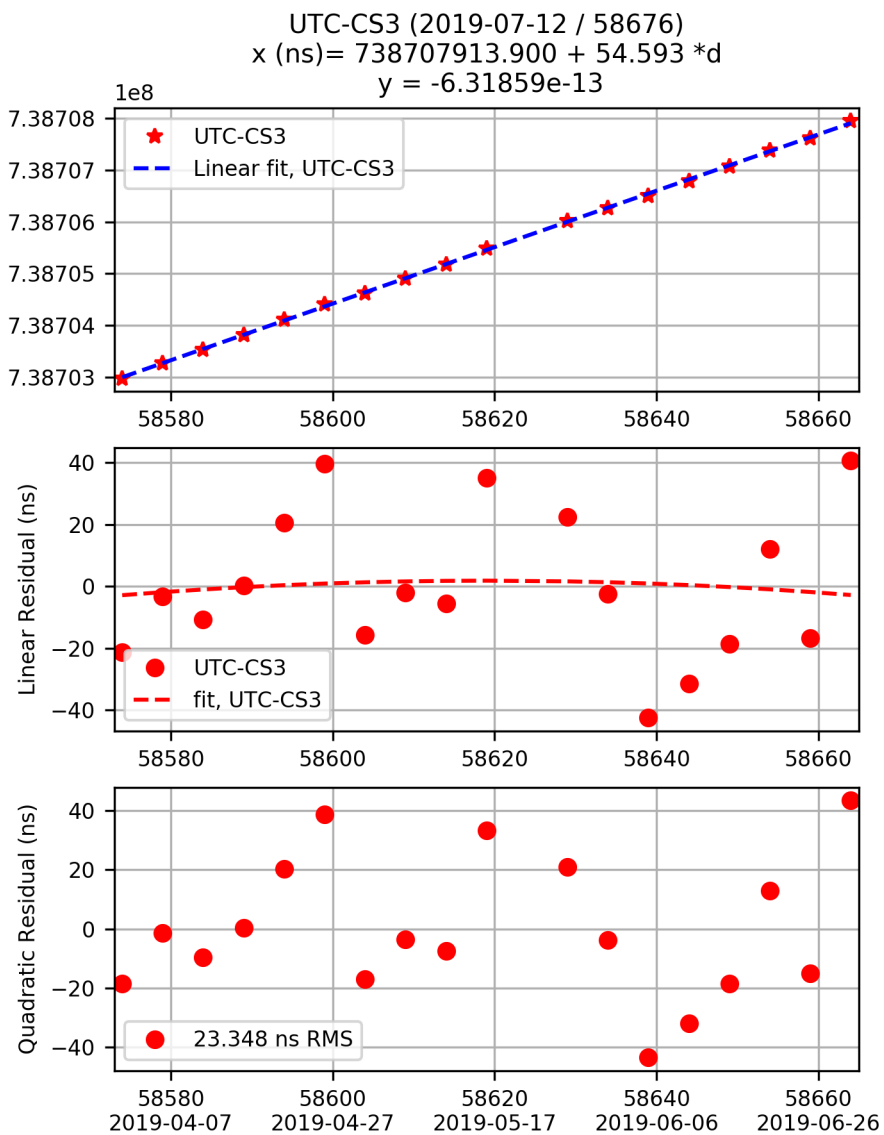
UTC-CS2 (2019-07-12 / 58676)

$$x \text{ (ns)} = 7720.926 + 4.167 * d$$

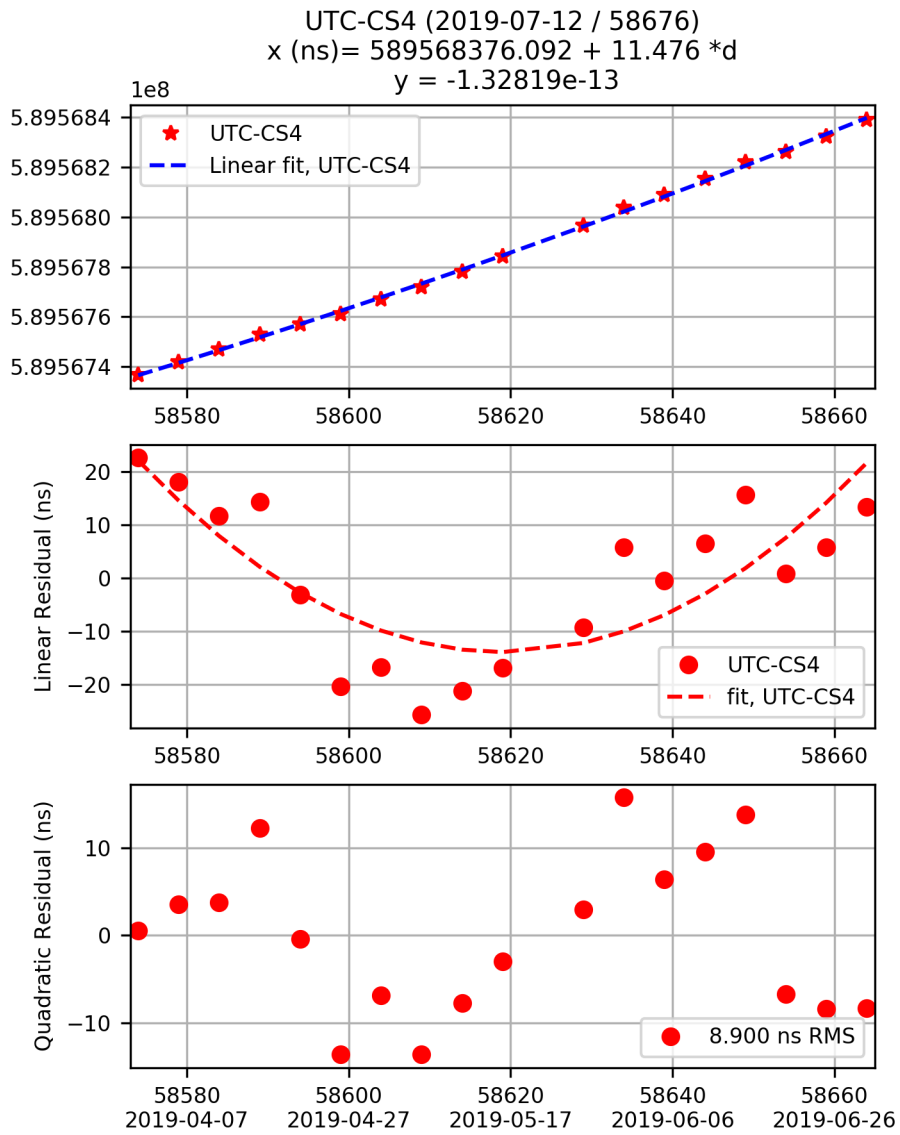
$$y = -4.82347e-14$$



Remote Clock: CS3



Remote Clock: CS4



End of Bulletin.