

UTC(MIKE) Atomic Bulletin 2019-06

VTT MIKES Metrology monthly Time & Frequency bulletin.

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

Date of publication: 2019-06-14 (58648)

Circular-T issues used for analysis: [375](#), [376](#), [377](#),

First day of analysis interval: 2019-03-02 (58544)

Last day of analysis interval: 2019-05-31 (58634)

ClockData for analysis: [CDMI 19.03](#), [CDMI 19.04](#), [CDMI 19.05](#),

Notes

58305 AHM3 rebooted. Phase step +20.2ns.

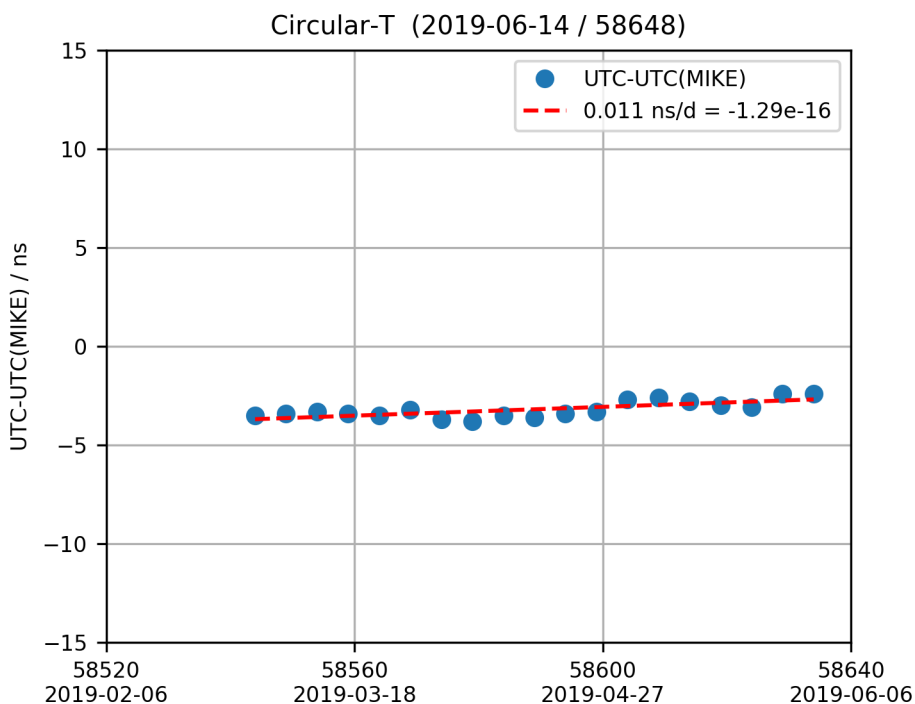
58450 CS1 Hotwire supply regulation failure

58494 Change master-clock to AHM2

M3 clock data missing for 58623, 58624

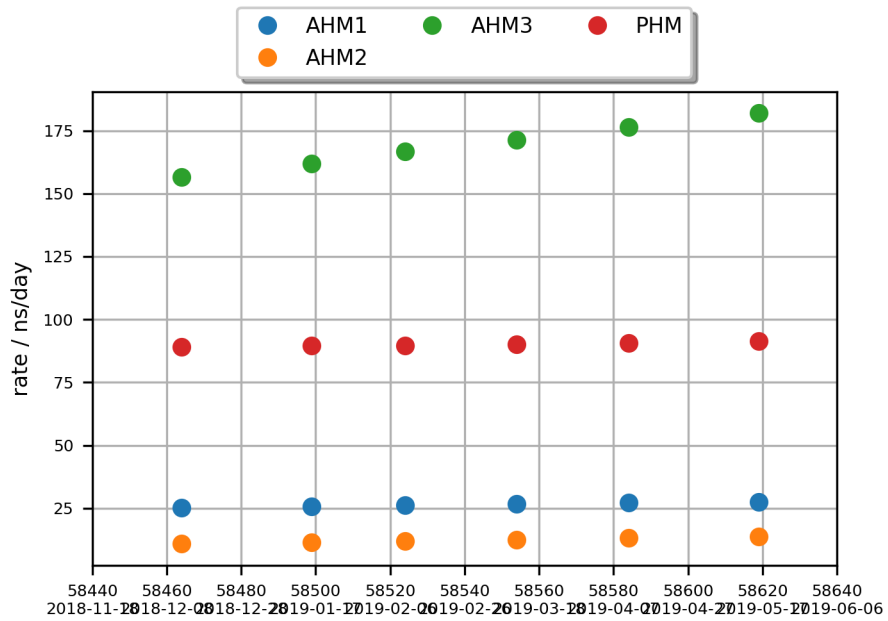
58617 (2019-05-14) Power-outage and temperature fluctuations in MIKES building.

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



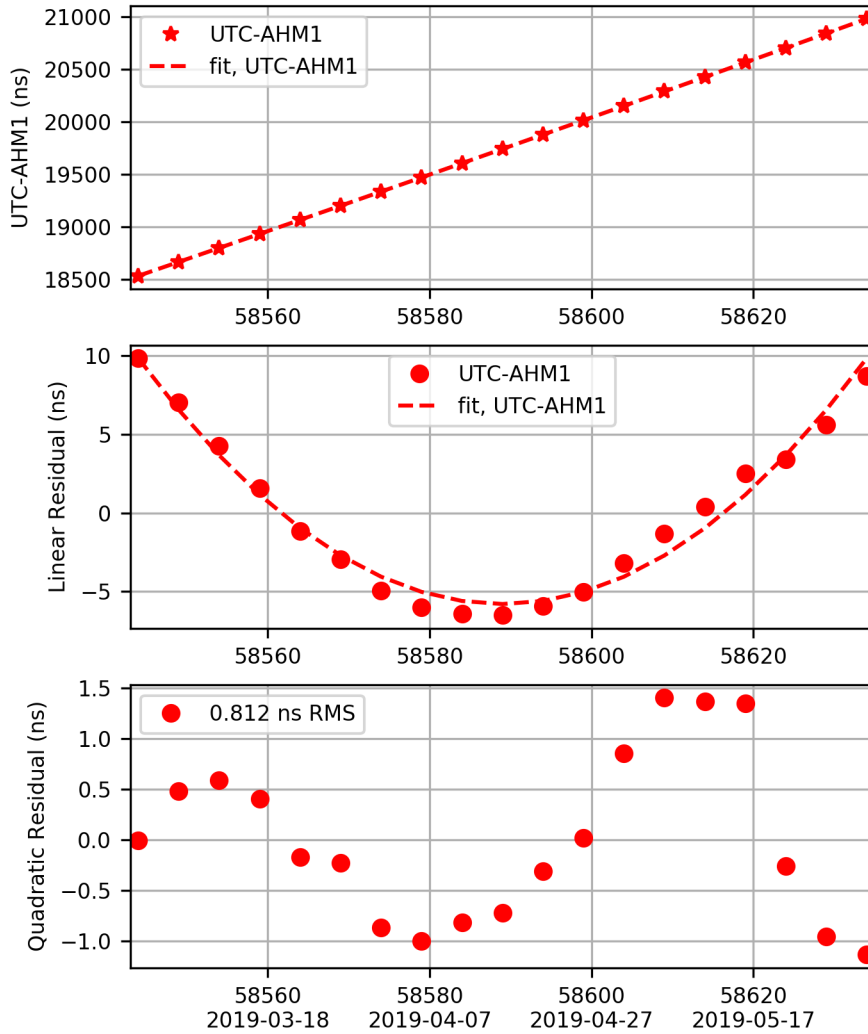
UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

Clock Rates - Summary

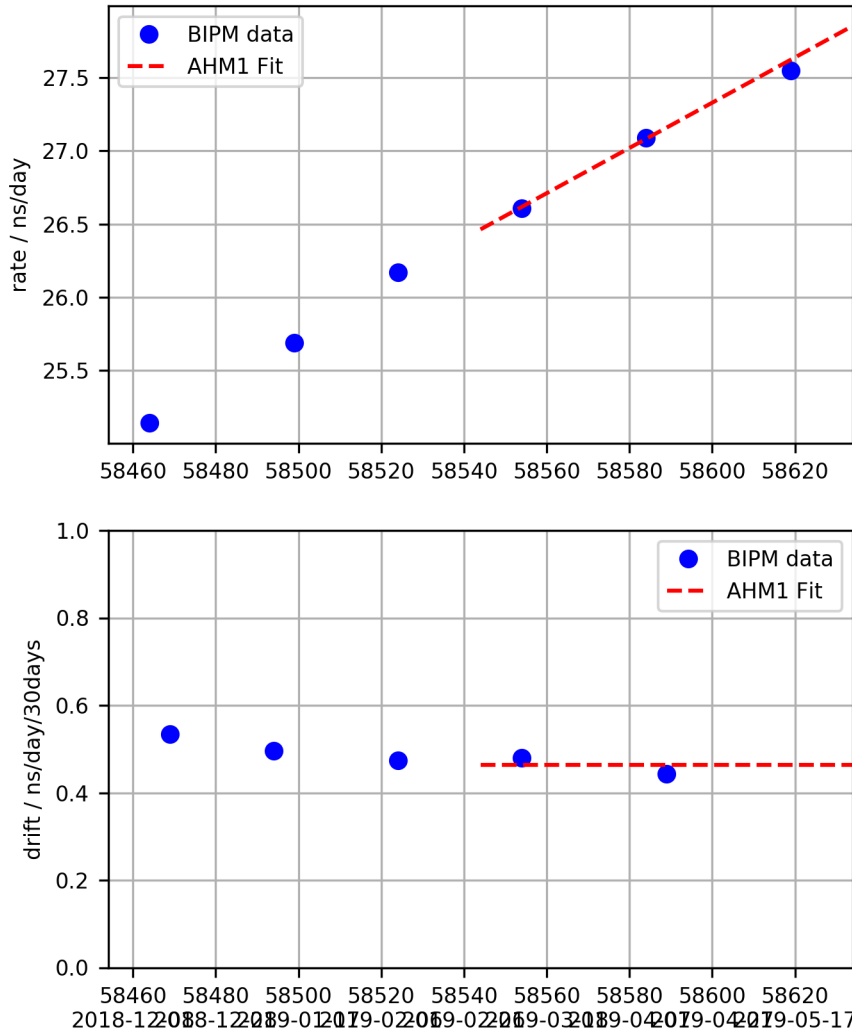


UTC - AHM1 Fit

UTC-AHM1 (2019-06-14 / 58648)
 $x \text{ (ns)} = 20978.636 + 27.855 *d + 0.0077 *d*d$
 $y = -3.22394e-13 + -1.7892e-16 *d$
 $d = (\text{mjd}-\text{mjd0})$ with $\text{mjd0} = 58634$

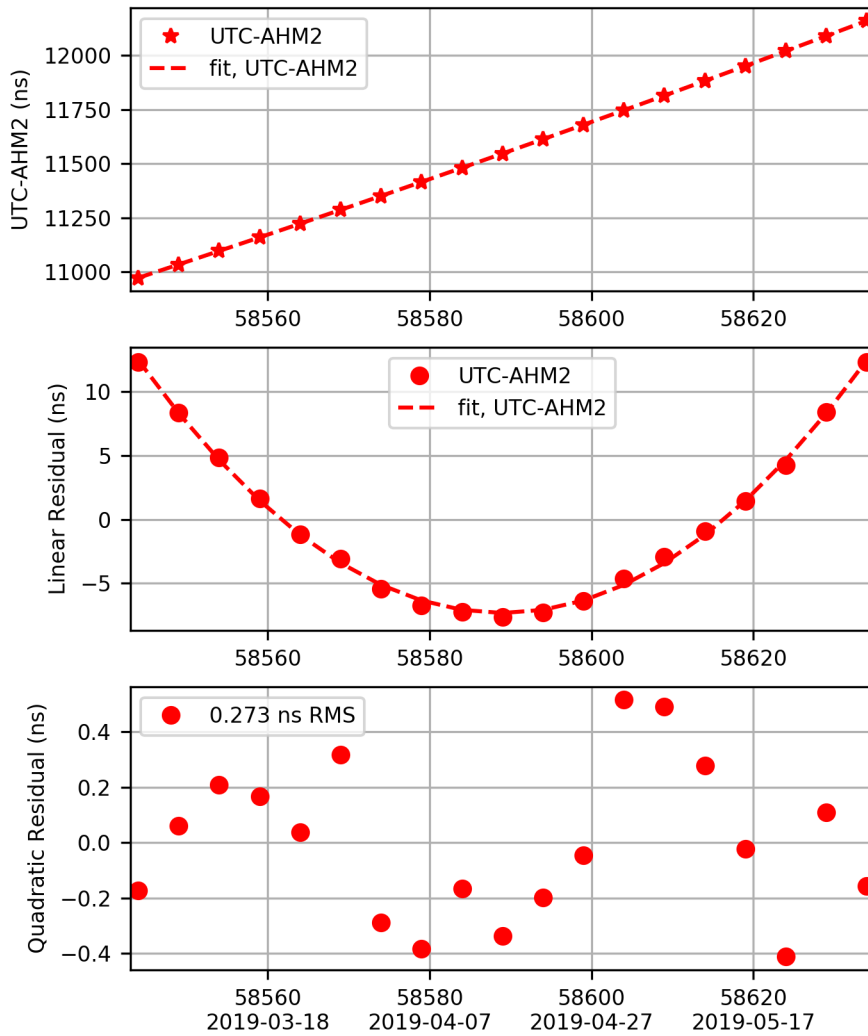


AHM1 Rate and Drift

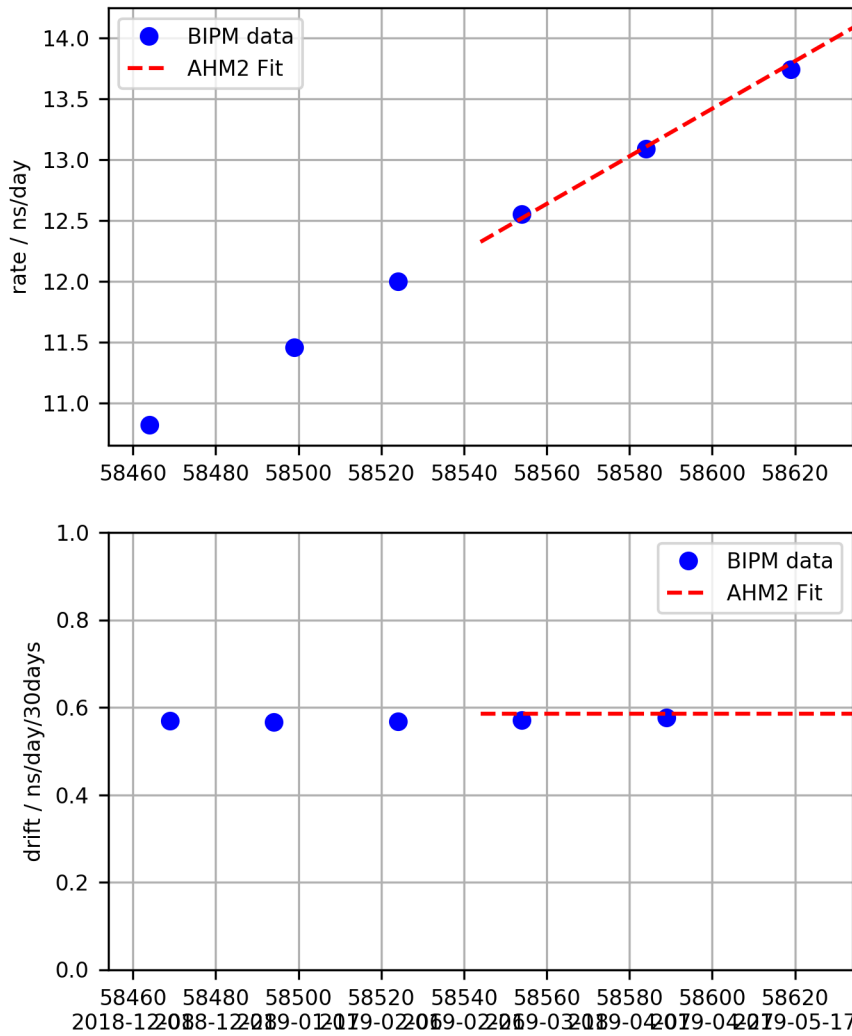


UTC - AHM2 Fit

UTC-AHM2 (2019-06-14 / 58648)
 $x \text{ (ns)} = 12160.758 + 14.082 *d + 0.0098 *d*d$
 $y = -1.62988e-13 + -2.26083e-16 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with mjd0} = 58634$

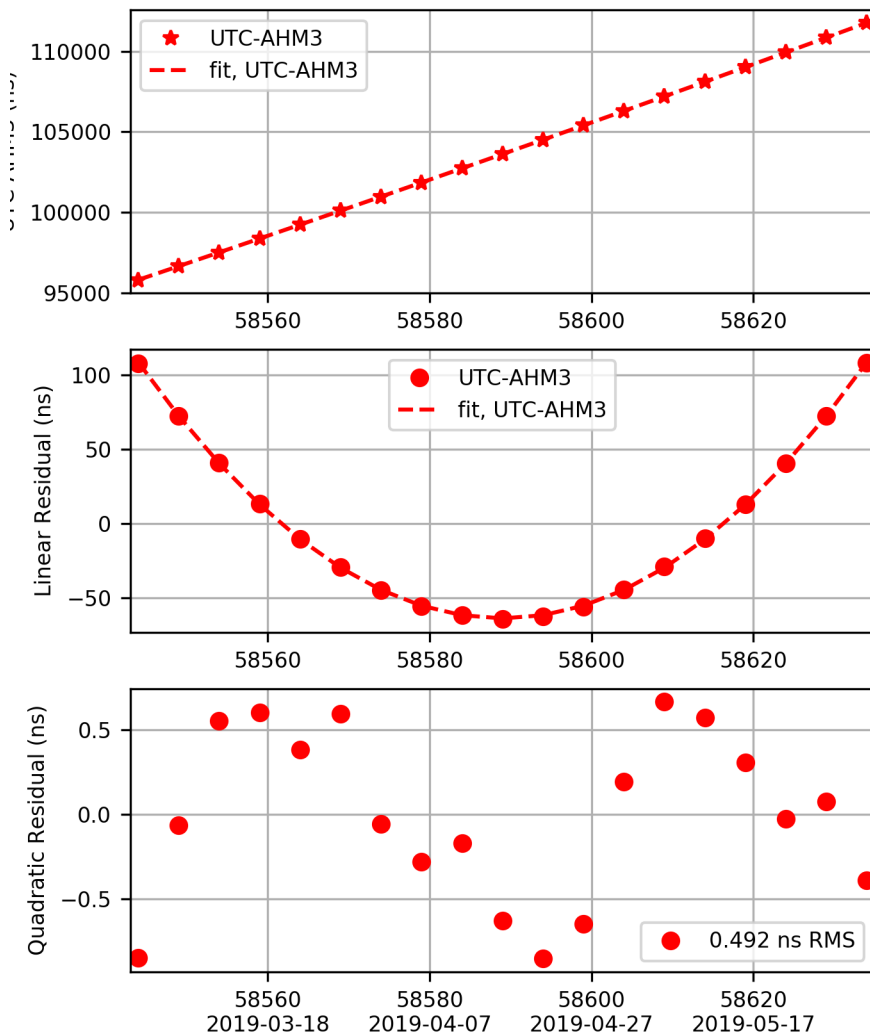


AHM2 Rate and Drift

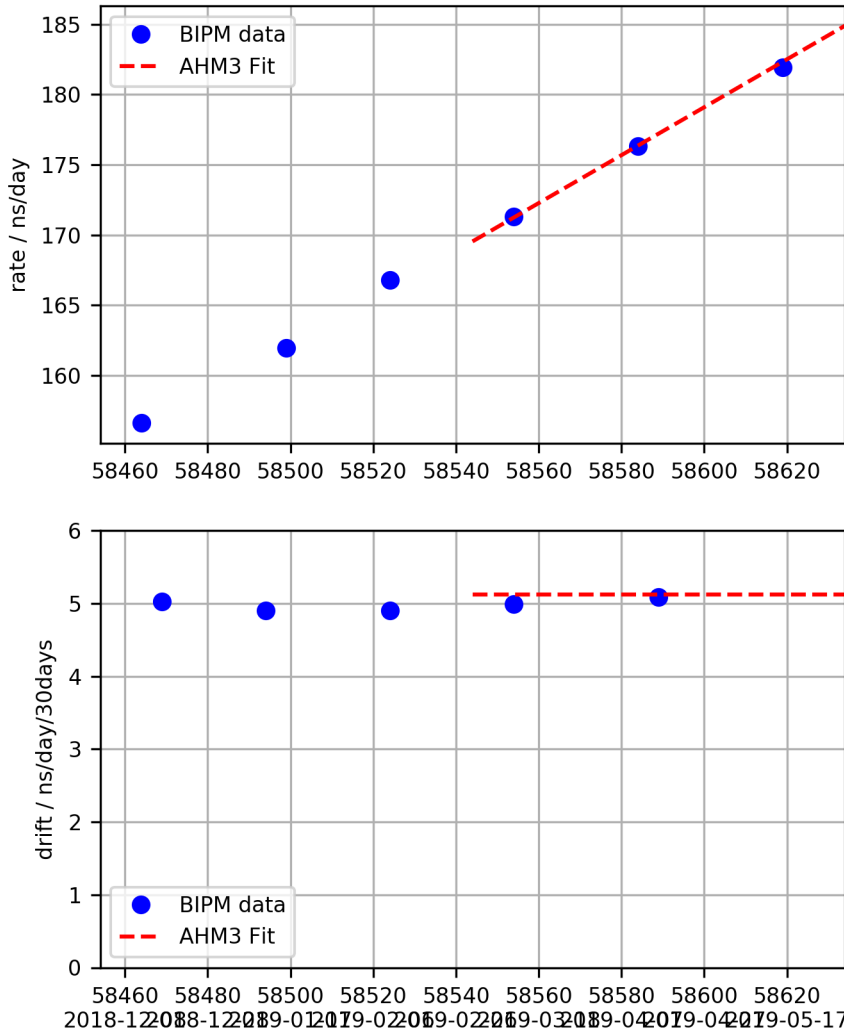


UTC - AHM3 Fit

UTC-AHM3 (2019-06-14 / 58648)
 $x \text{ (ns)} = 111767.789 + 184.900 * d + 0.0854 * d * d$
 $y = -2.14005e-12 + -1.97579e-15 * d$
 $d = (\text{mjd} - \text{mjd0}) \text{ with } \text{mjd0} = 58634$

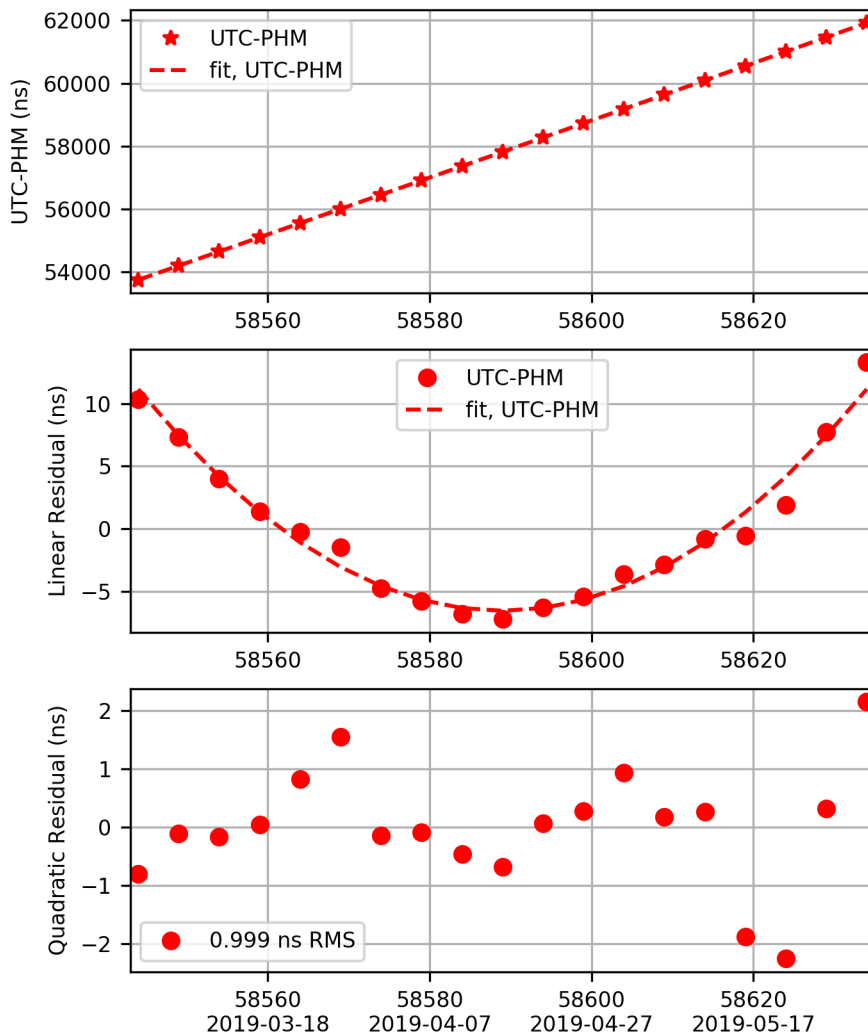


AHM3 Rate and Drift

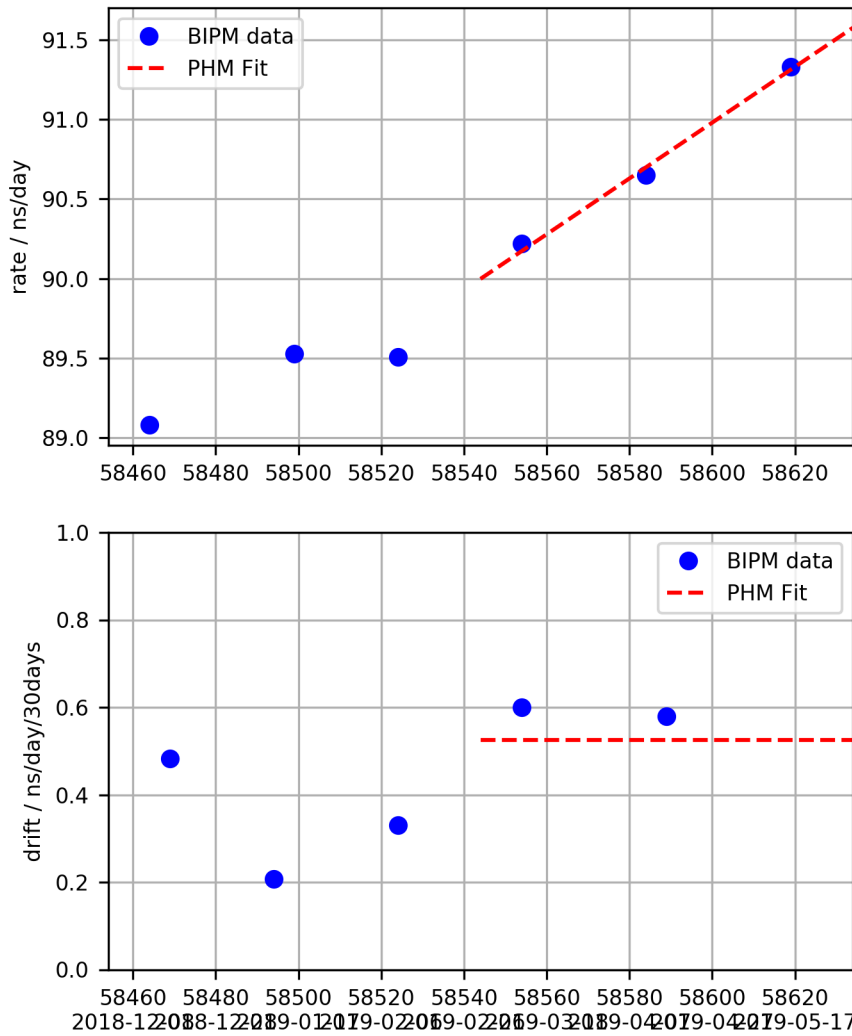


UTC - PHM Fit

UTC-PHM (2019-06-14 / 58648)
 $x \text{ (ns)} = 61920.743 + 91.576 *d + 0.0088 *d*d$
 $y = -1.0599e-12 + -2.02788e-16 *d$
 $d = (\text{mjd}-\text{mjd0})$ with $\text{mjd0} = 58634$

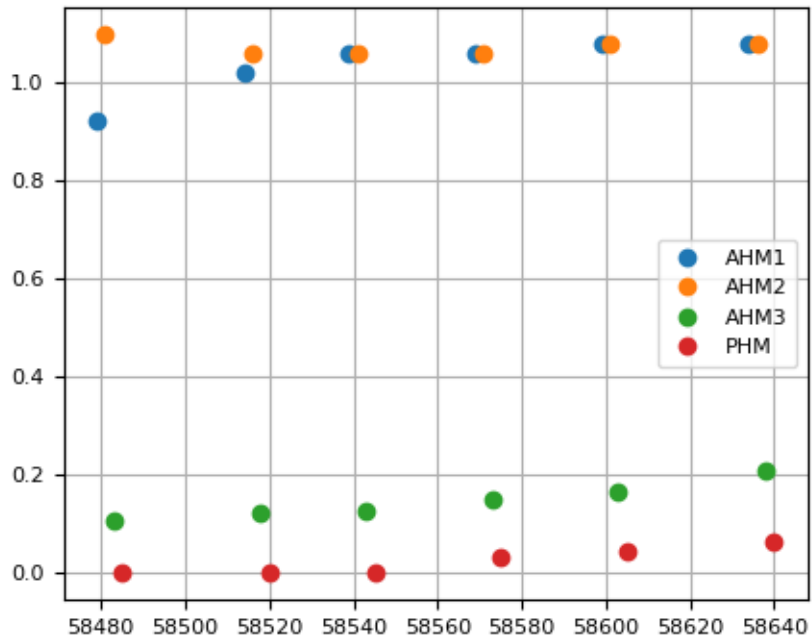


PHM Rate and Drift



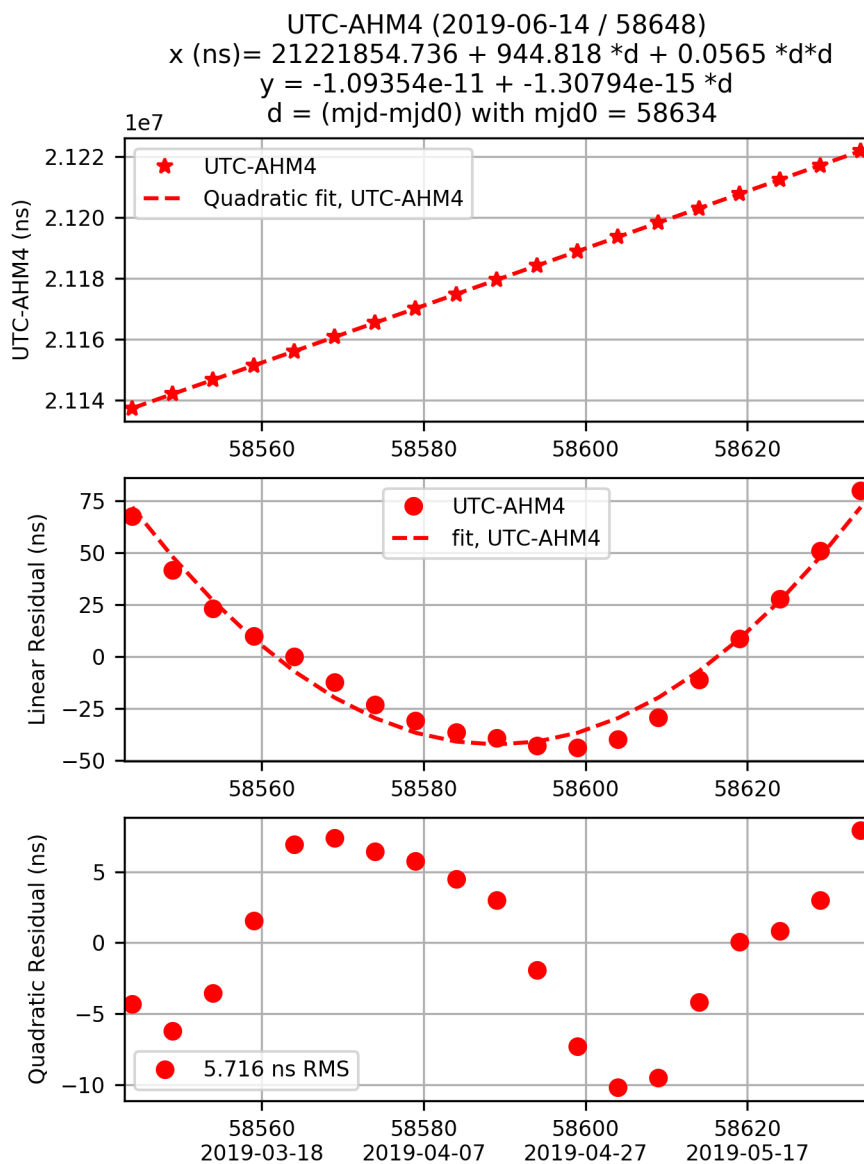
Clock Weights

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



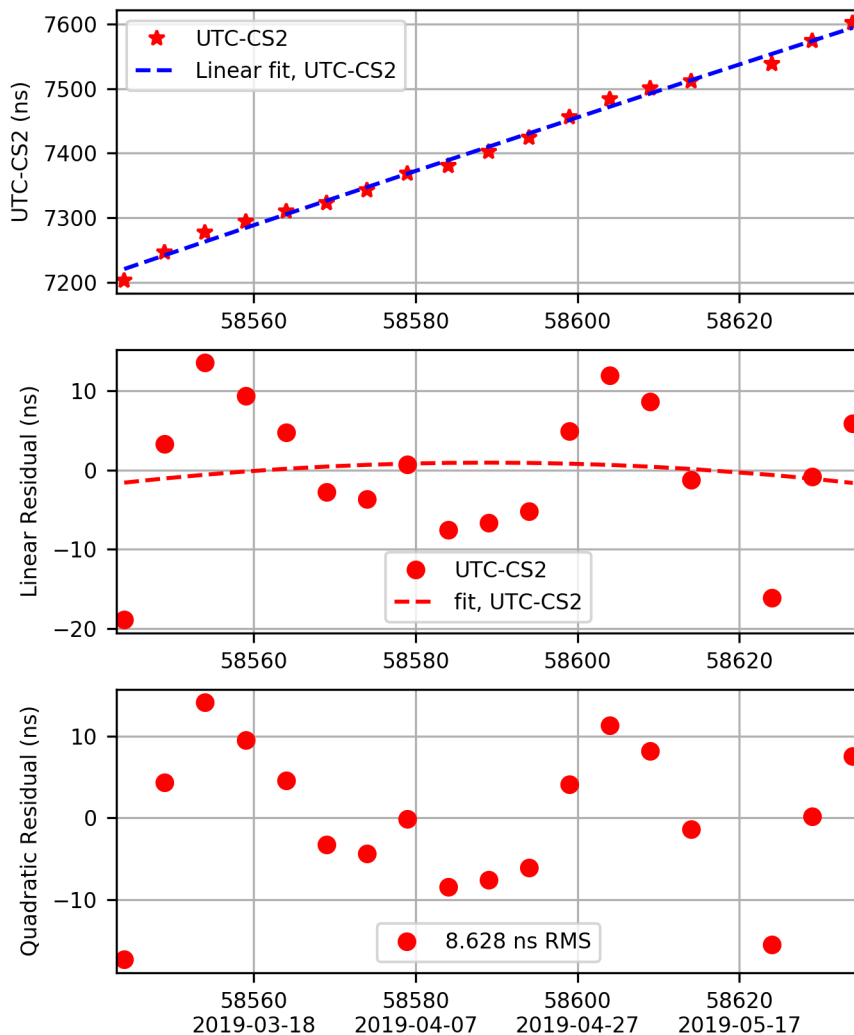
Remote Clocks

Remote Clock: AHM4

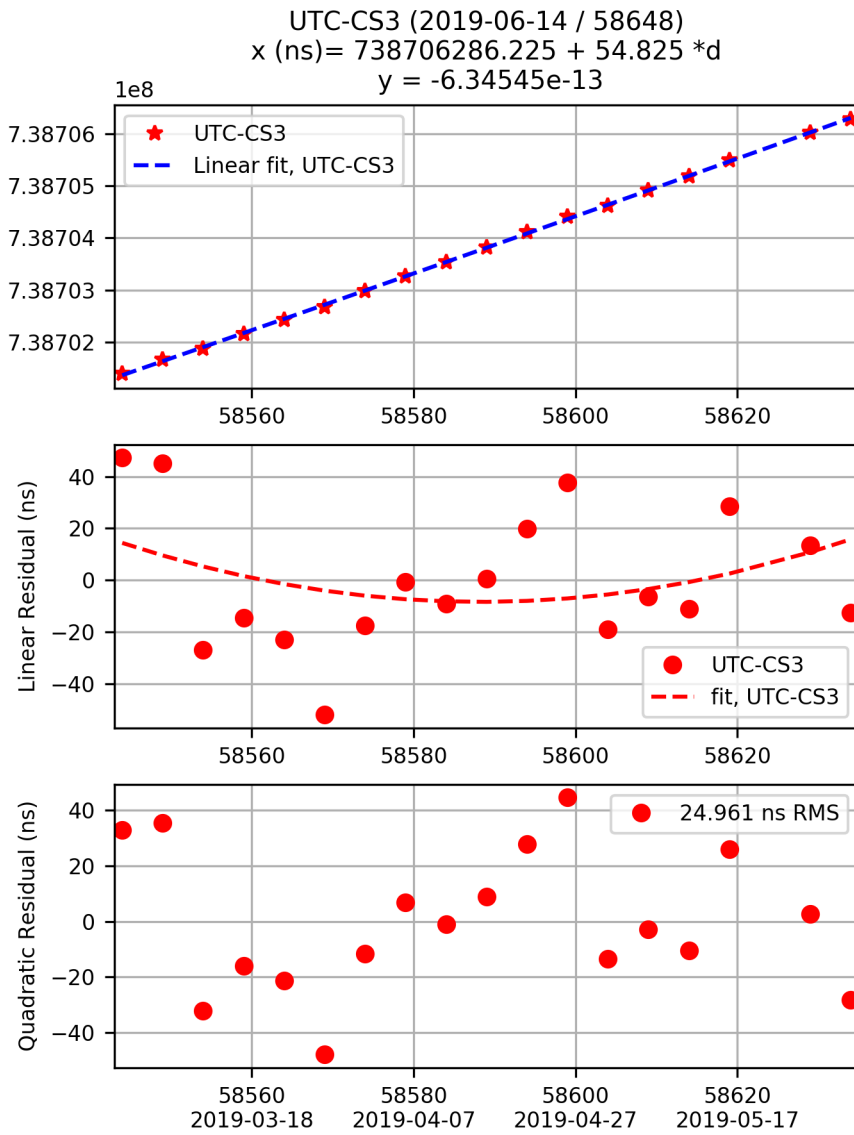


Remote Clock: CS2

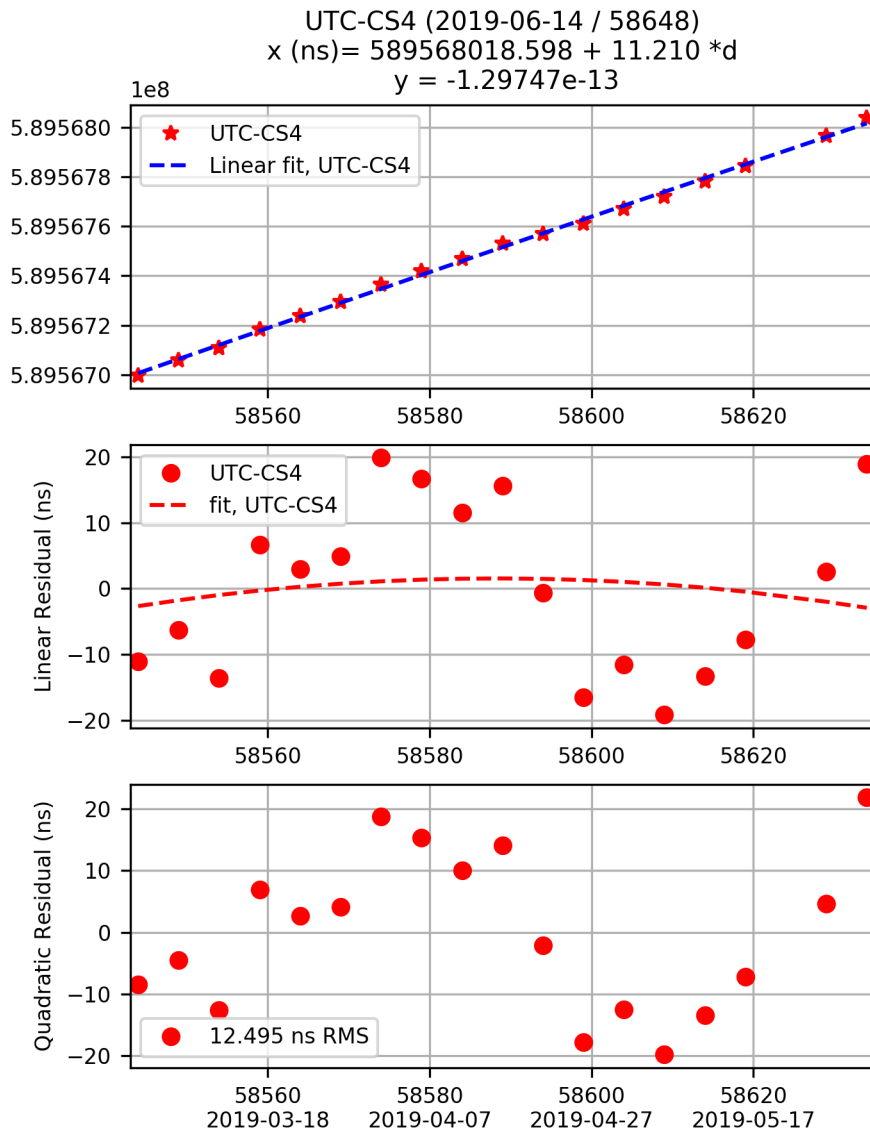
UTC-CS2 (2019-06-14 / 58648)
 $x \text{ (ns)} = 7595.817 + 4.149 * d$
 $y = -4.80255e-14$



Remote Clock: CS3



Remote Clock: CS4



End of Bulletin.