

UTC(MIKE) Atomic Bulletin 2019-05

VTT MIKES Metrology monthly Time & Frequency bulletin.

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

Date of publication: 2019-05-13 (58616)

Circular-T issues used for analysis: [374](#), [375](#), [376](#),

First day of analysis interval: 2019-02-05 (58519)

Last day of analysis interval: 2019-04-26 (58599)

ClockData for analysis: [CDMI 19.02](#), [CDMI 19.03](#), [CDMI 19.04](#),

Notes

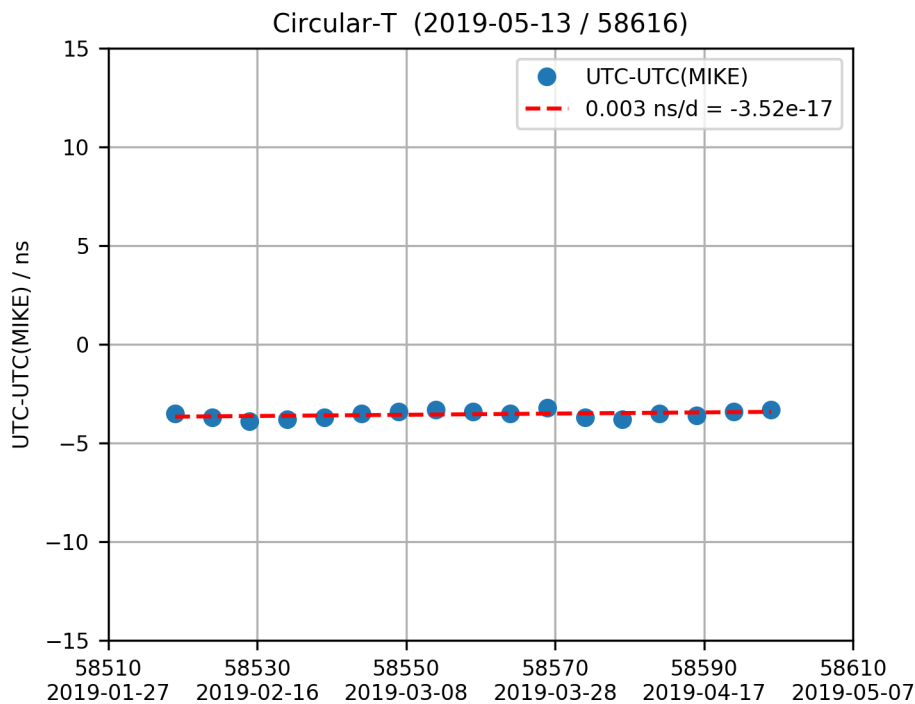
58299 Apparent time step of UTC(MIKE) of +8.2 ns between MJD 58299 and MJD 58304 due to antenna coordinates correction. ClockData before 58299.5 is corrected by -8.2 ns for analysis.

58305 AHM3 rebooted. Phase step +20.2ns.

58450 CS1 Hotwire supply regulation failure

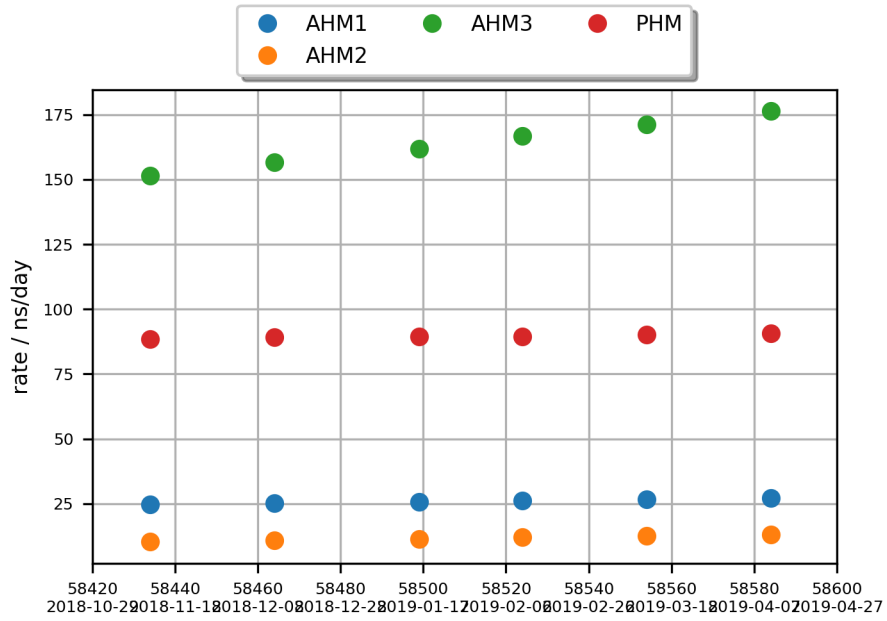
58494 Change master-clock to AHM2

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



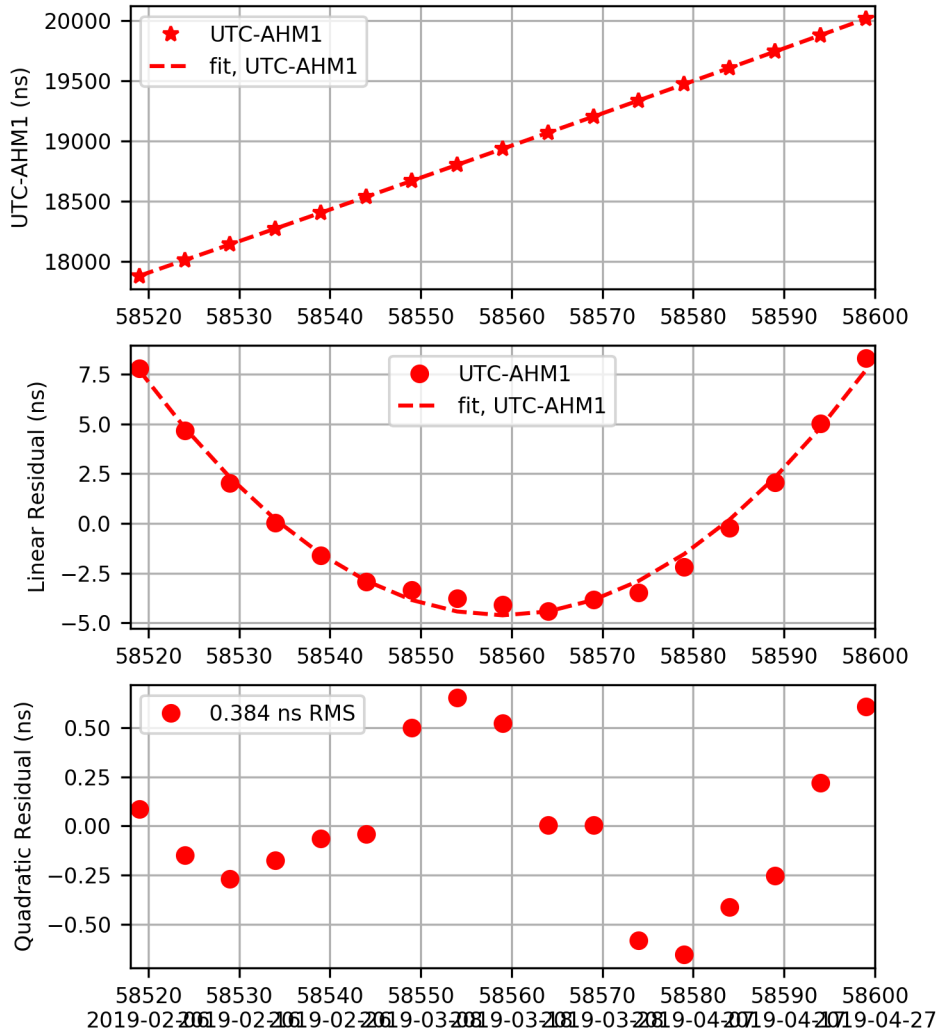
UTC-UTC(MIKE) is available on 5 day intervals on MJD dates ending with 4 or 9. Values are published monthly by the BIPM in Circular-T.

Clock Rates - Summary

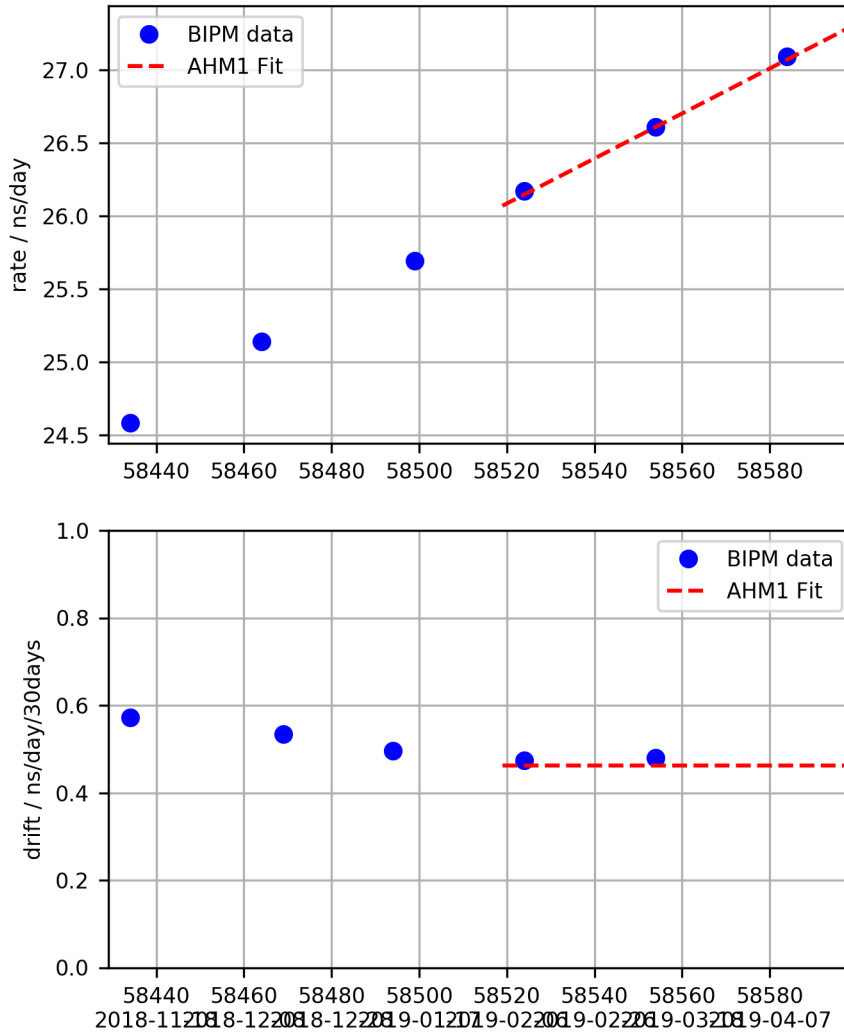


UTC - AHM1 Fit

UTC-AHM1 (2019-05-13 / 58616)
 $x \text{ (ns)} = 20012.593 + 27.301 *d + 0.0077 *d*d$
 $y = -3.15984e-13 + -1.78317e-16 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with mjd0} = 58599$

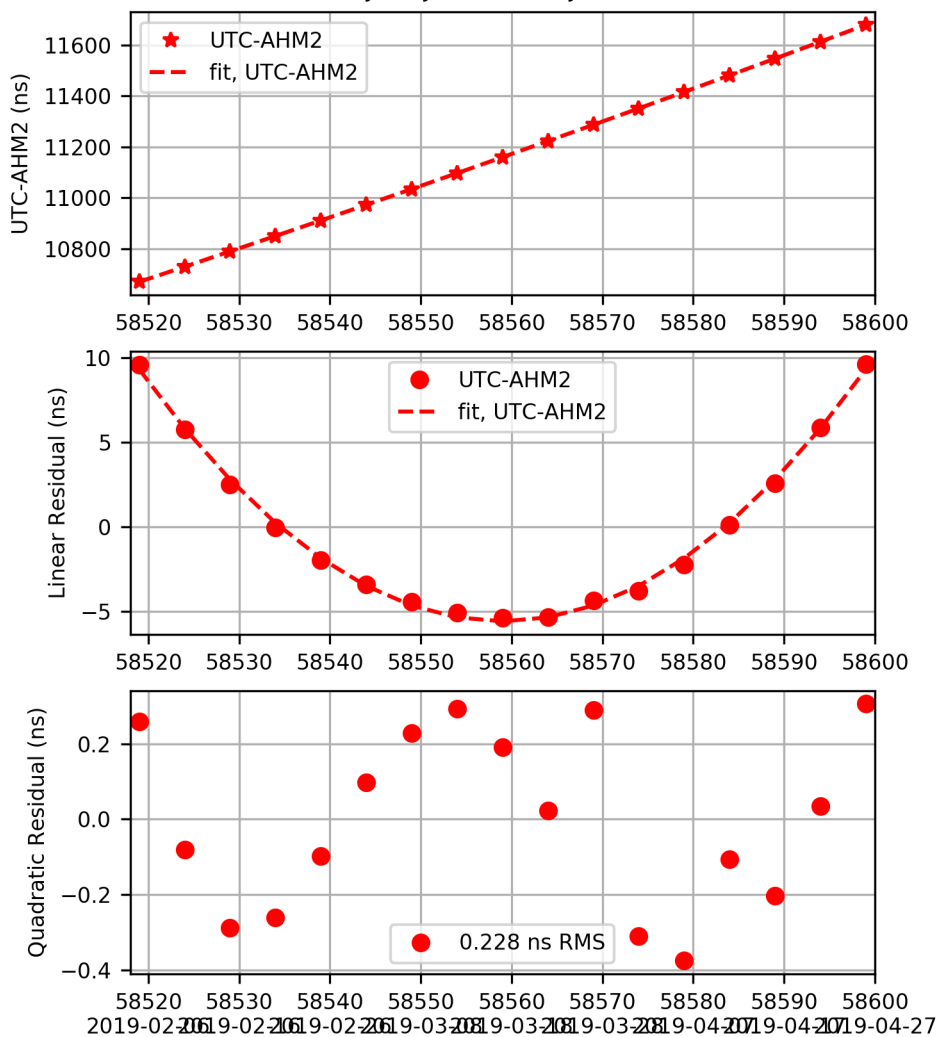


AHM1 Rate and Drift

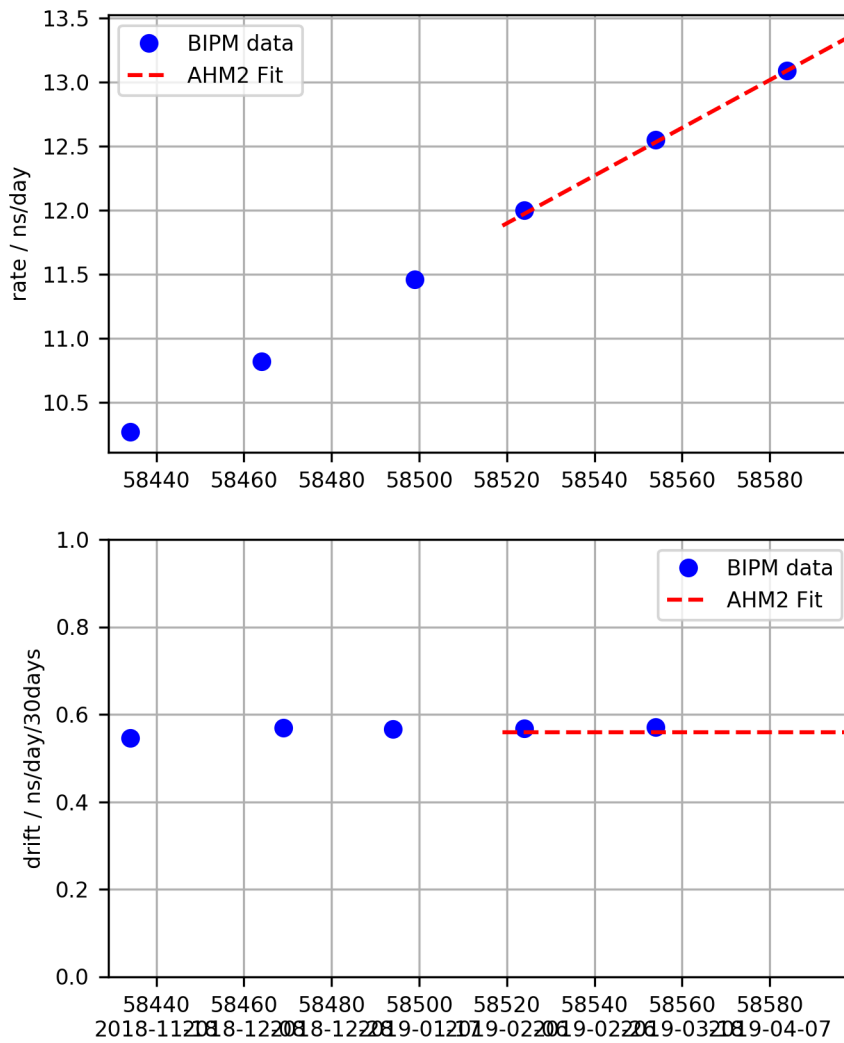


UTC - AHM2 Fit

UTC-AHM2 (2019-05-13 / 58616)
 $x \text{ (ns)} = 11679.494 + 13.372 *d + 0.0093 *d*d$
 $y = -1.54772e-13 + -2.15679e-16 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with mjd0} = 58599$

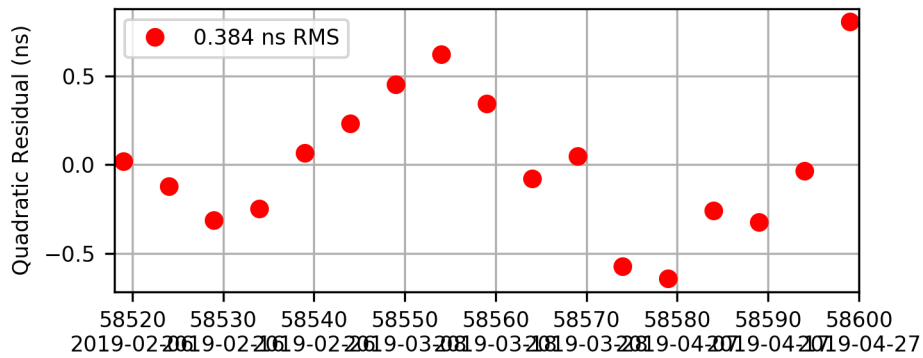
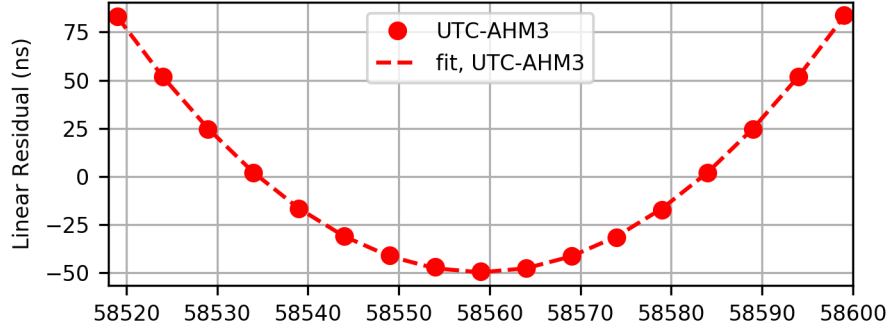
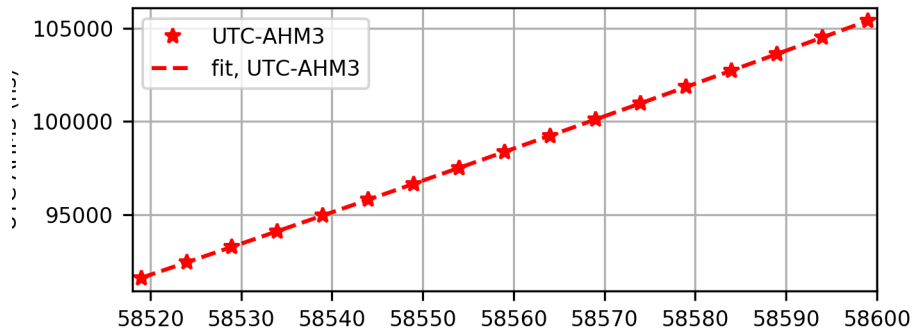


AHM2 Rate and Drift

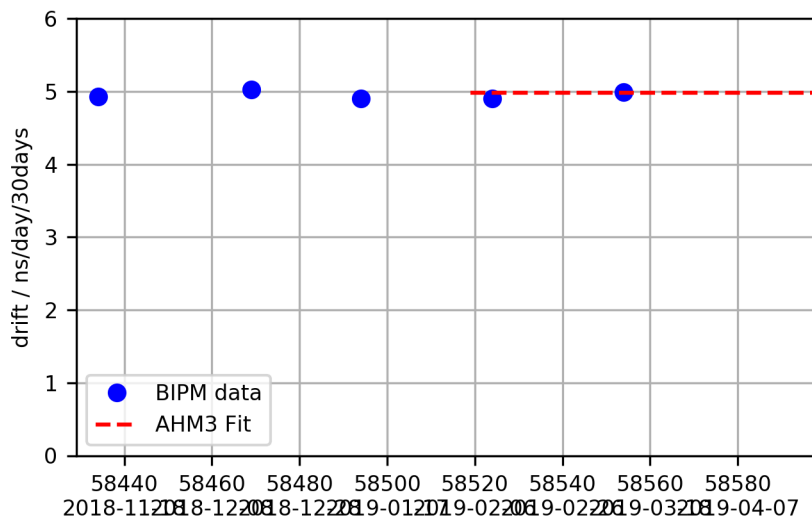
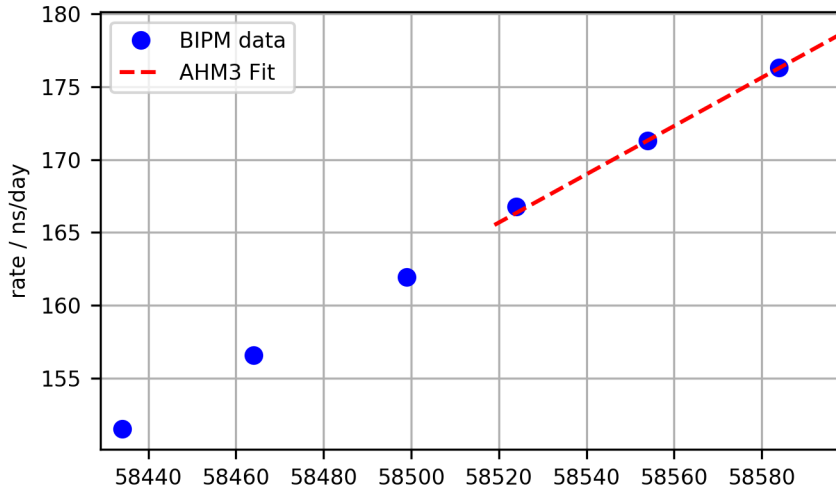


UTC - AHM3 Fit

UTC-AHM3 (2019-05-13 / 58616)
 $x \text{ (ns)} = 105399.395 + 178.787 * d + 0.0830 * d * d$
 $y = -2.06929e-12 + -1.92032e-15 * d$
 $d = (\text{mjd} - \text{mjd0}) \text{ with mjd0} = 58599$

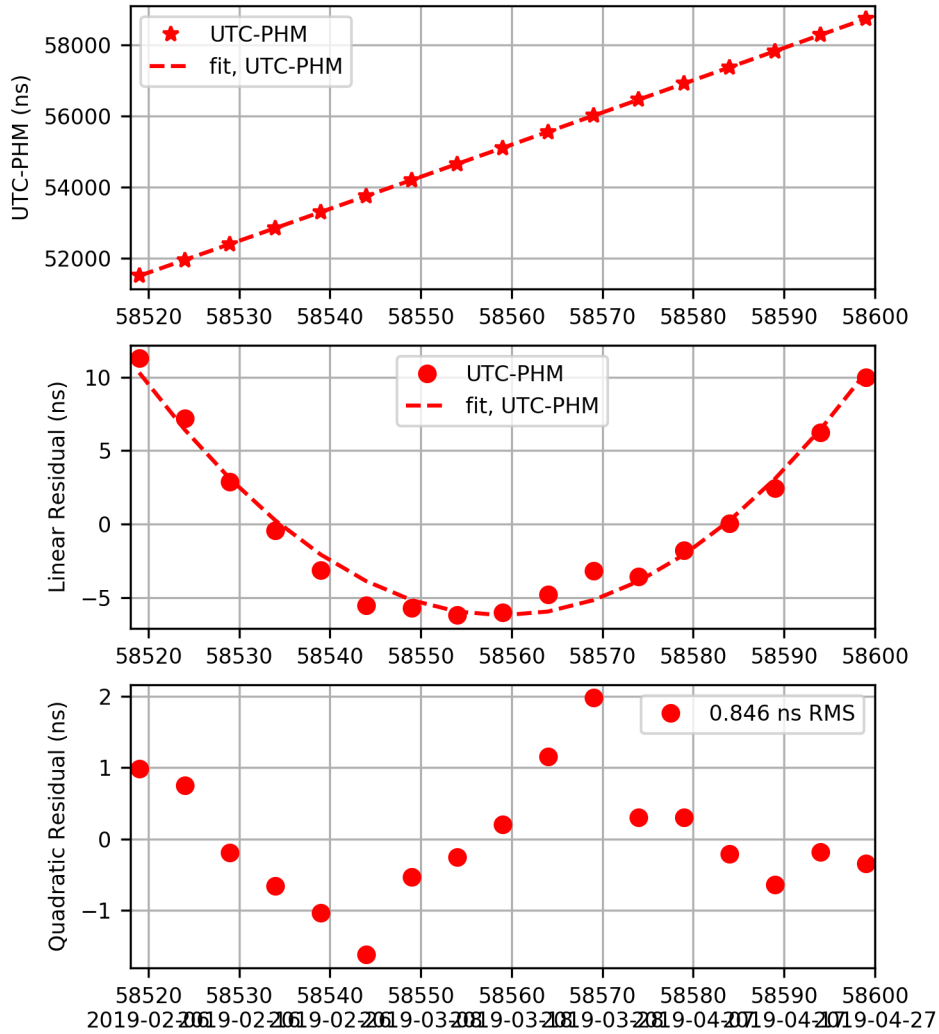


AHM3 Rate and Drift

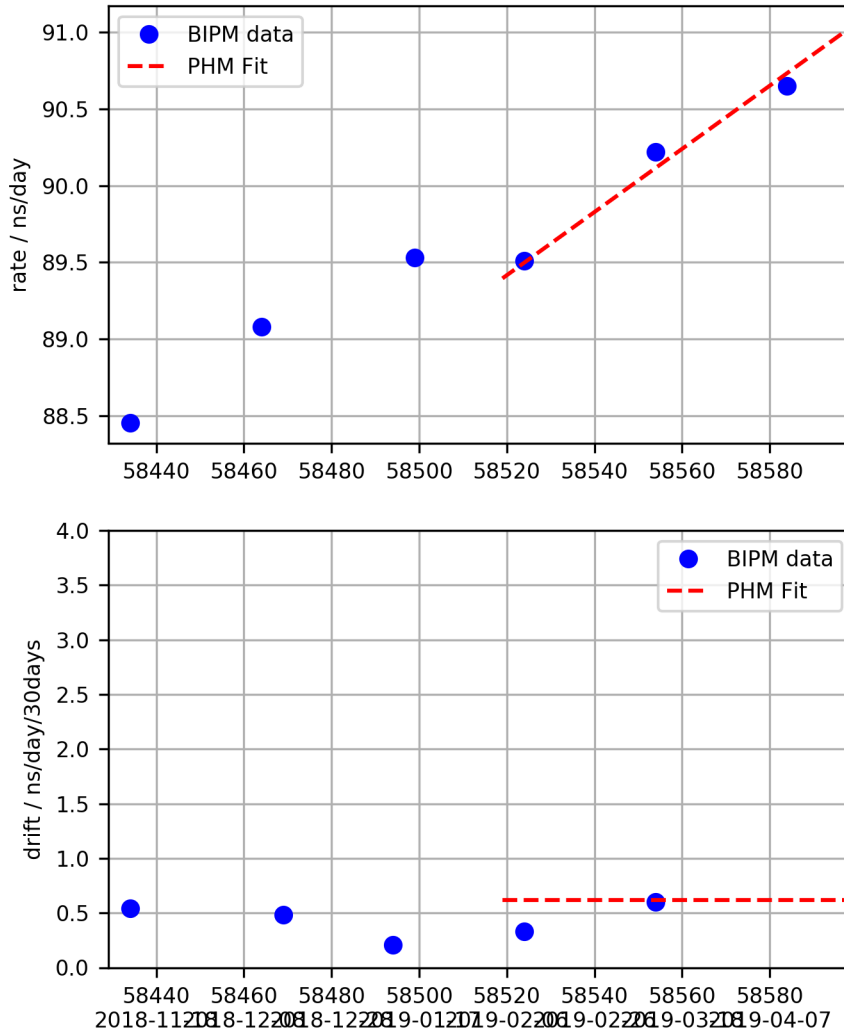


UTC - PHM Fit

UTC-PHM (2019-05-13 / 58616)
 $x \text{ (ns)} = 58726.943 + 91.043 *d + 0.0103 *d*d$
 $y = -1.05374e-12 + -2.38517e-16 *d$
 $d = (\text{mjd}-\text{mjd0}) \text{ with mjd0} = 58599$

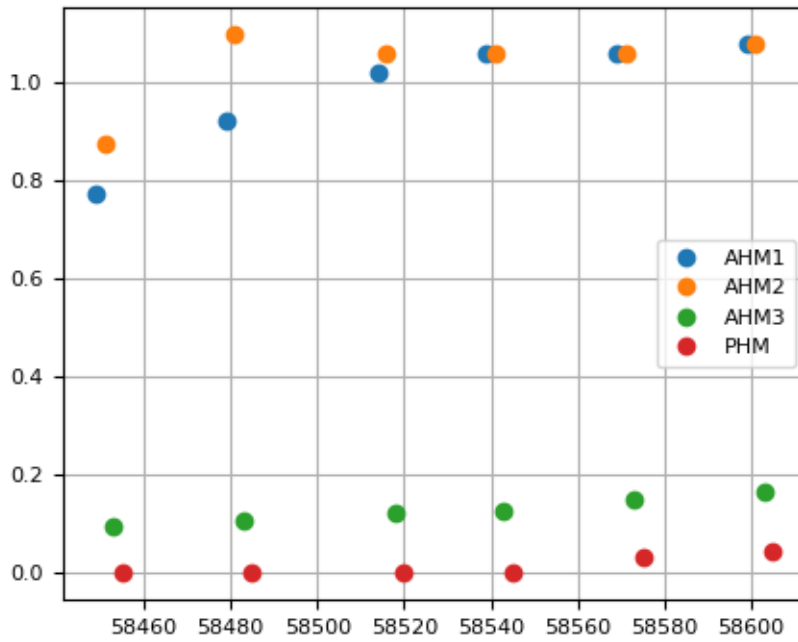


PHM Rate and Drift



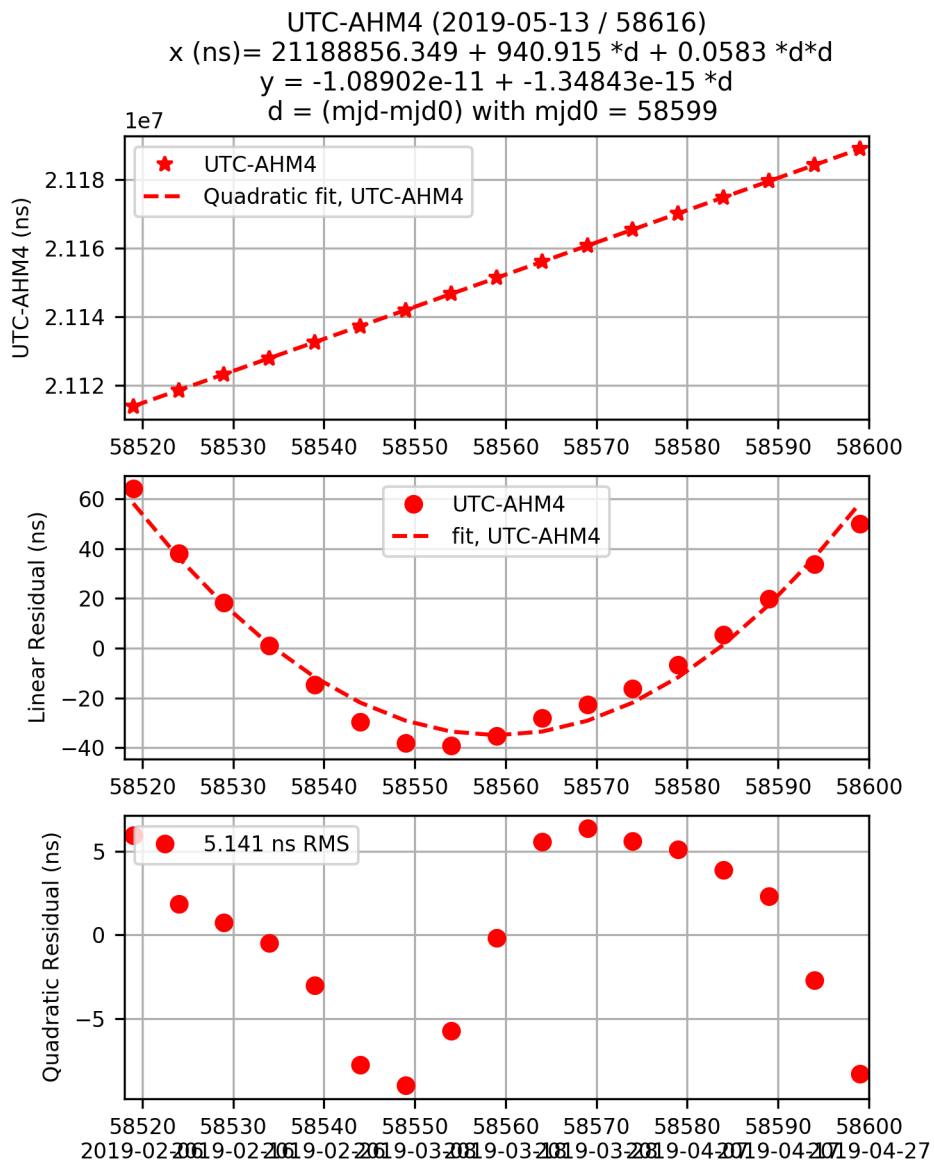
Clock Weights

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



Remote Clocks

Remote Clock: AHM4

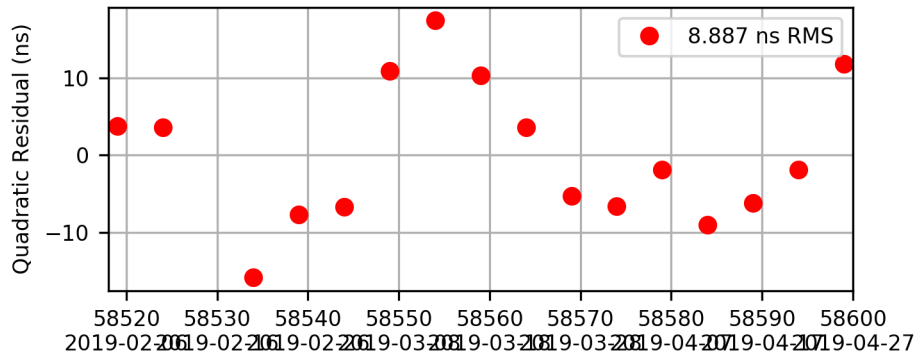
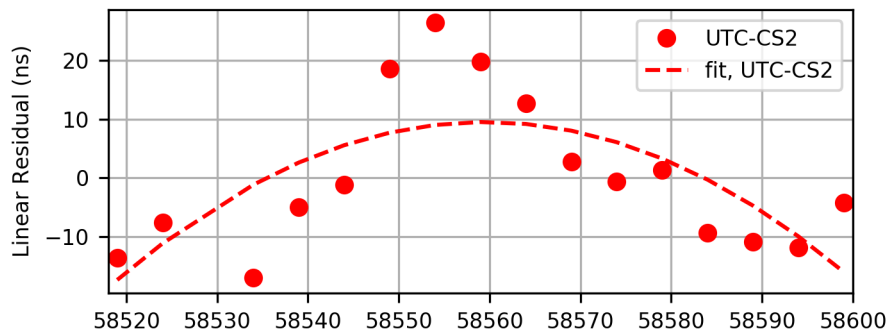
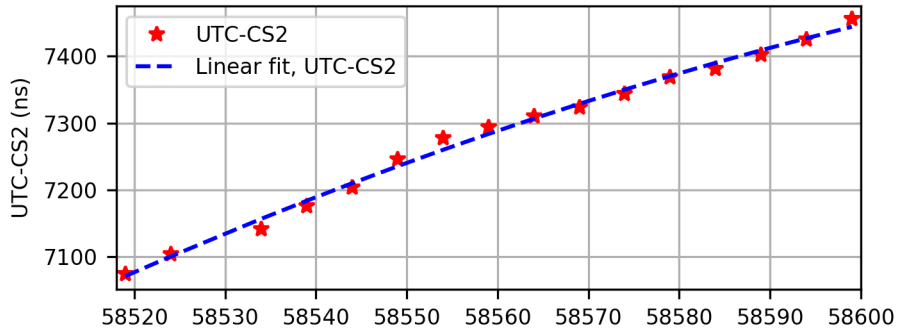


Remote Clock: CS2

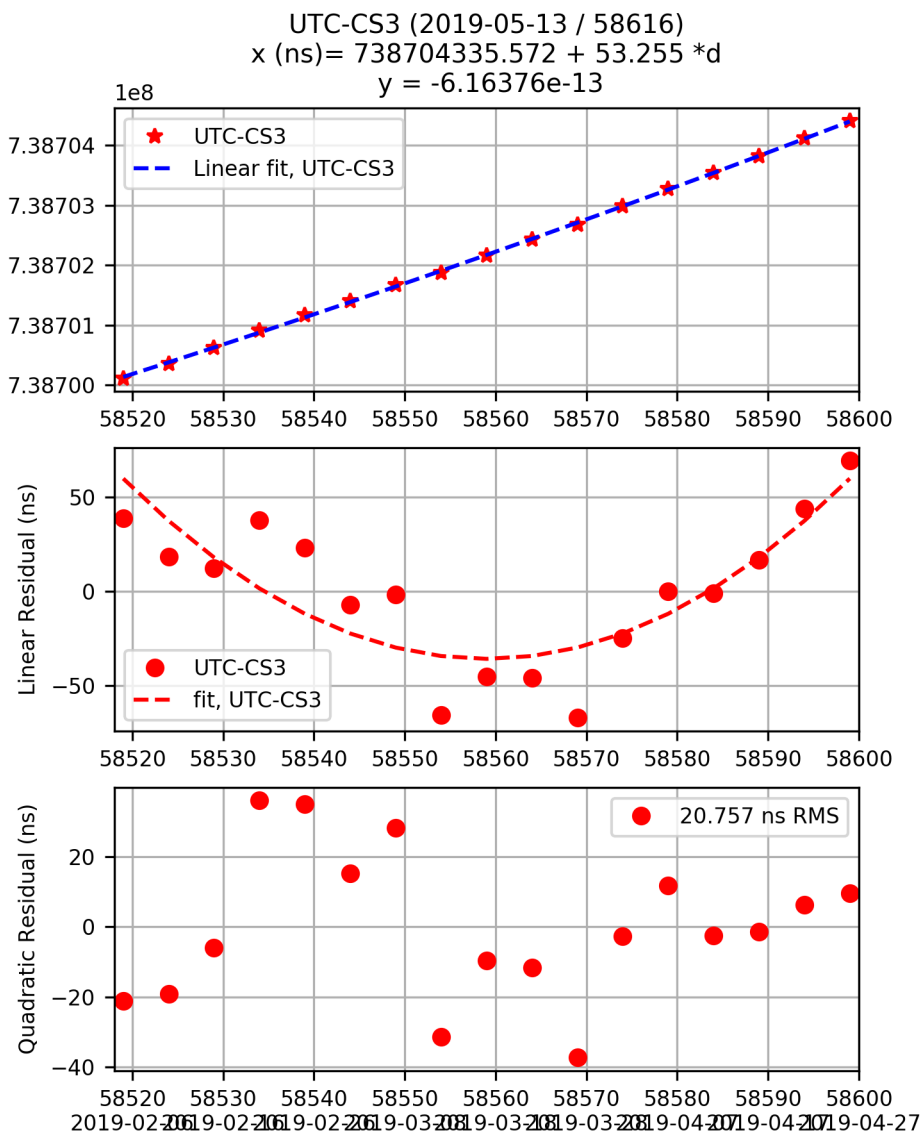
UTC-CS2 (2019-05-13 / 58616)

$$x \text{ (ns)} = 7459.751 + 4.639 * d$$

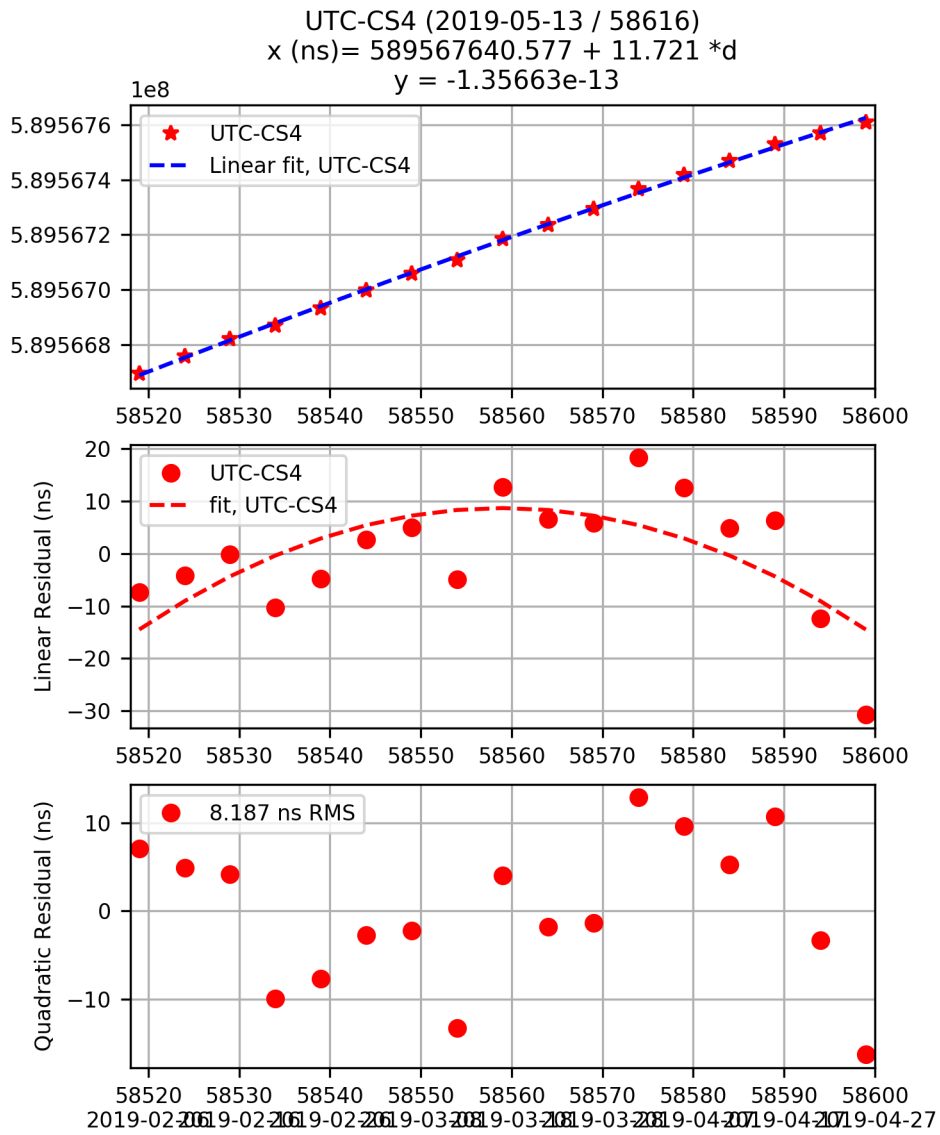
$$y = -5.36938e-14$$



Remote Clock: CS3



Remote Clock: CS4



End of Bulletin.