UTC(MIKE) Atomic Bulletin 2018-04

VTT MIKES Metrology monthly Time & Frequency bulletin.
Comments and questions to: time "at" vtt.fi
Date of publication: 2018-04-16
Circular-T issues used for analysis: 361, 362, 363,
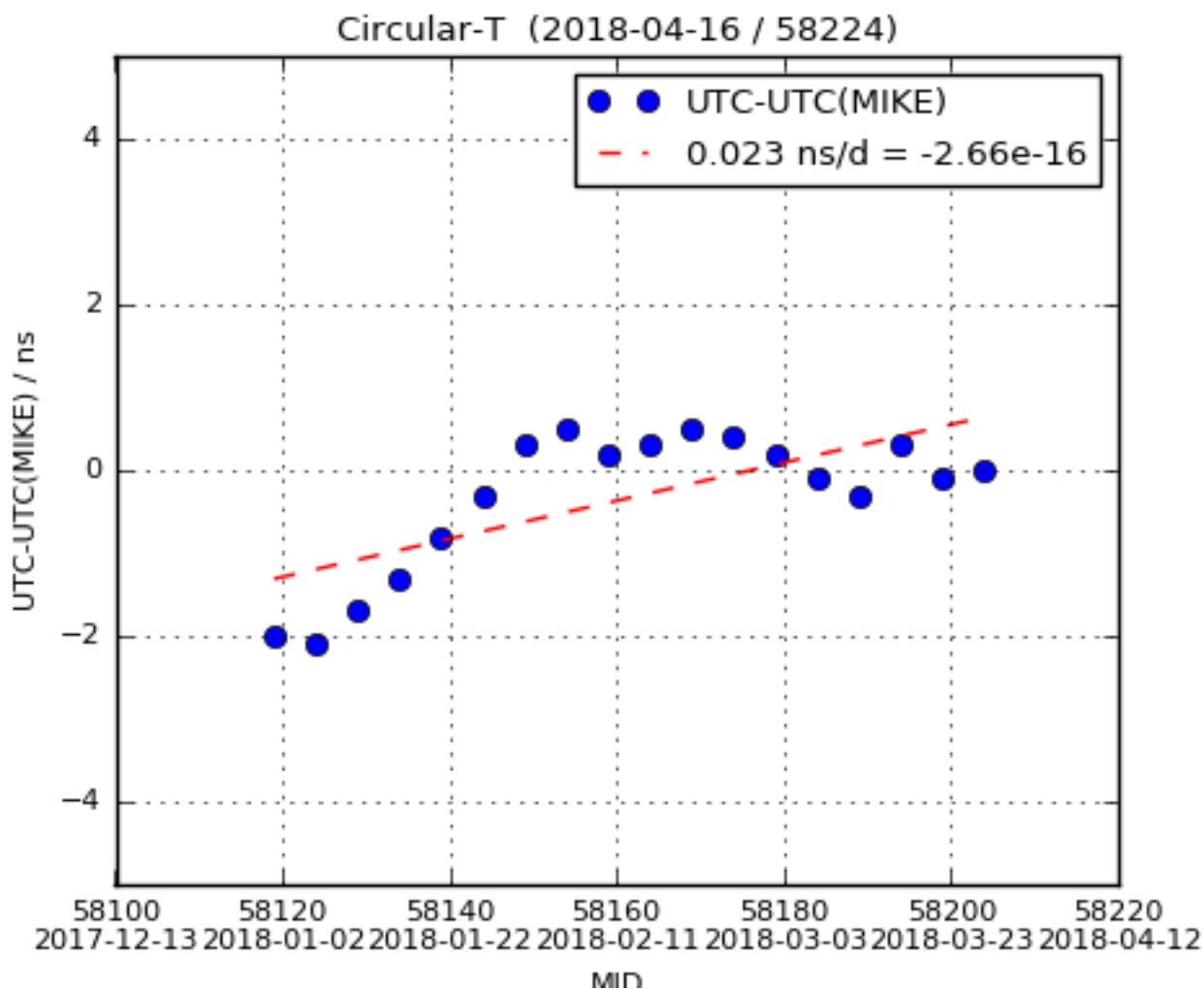First day of analysis interval: 2018-01-01 (58119)
Last day of analysis interval: 2018-03-27 (58204)
ClockData for analysis: CDMI__18.01_, CDMI__18.02_, CDMI__18.03_,
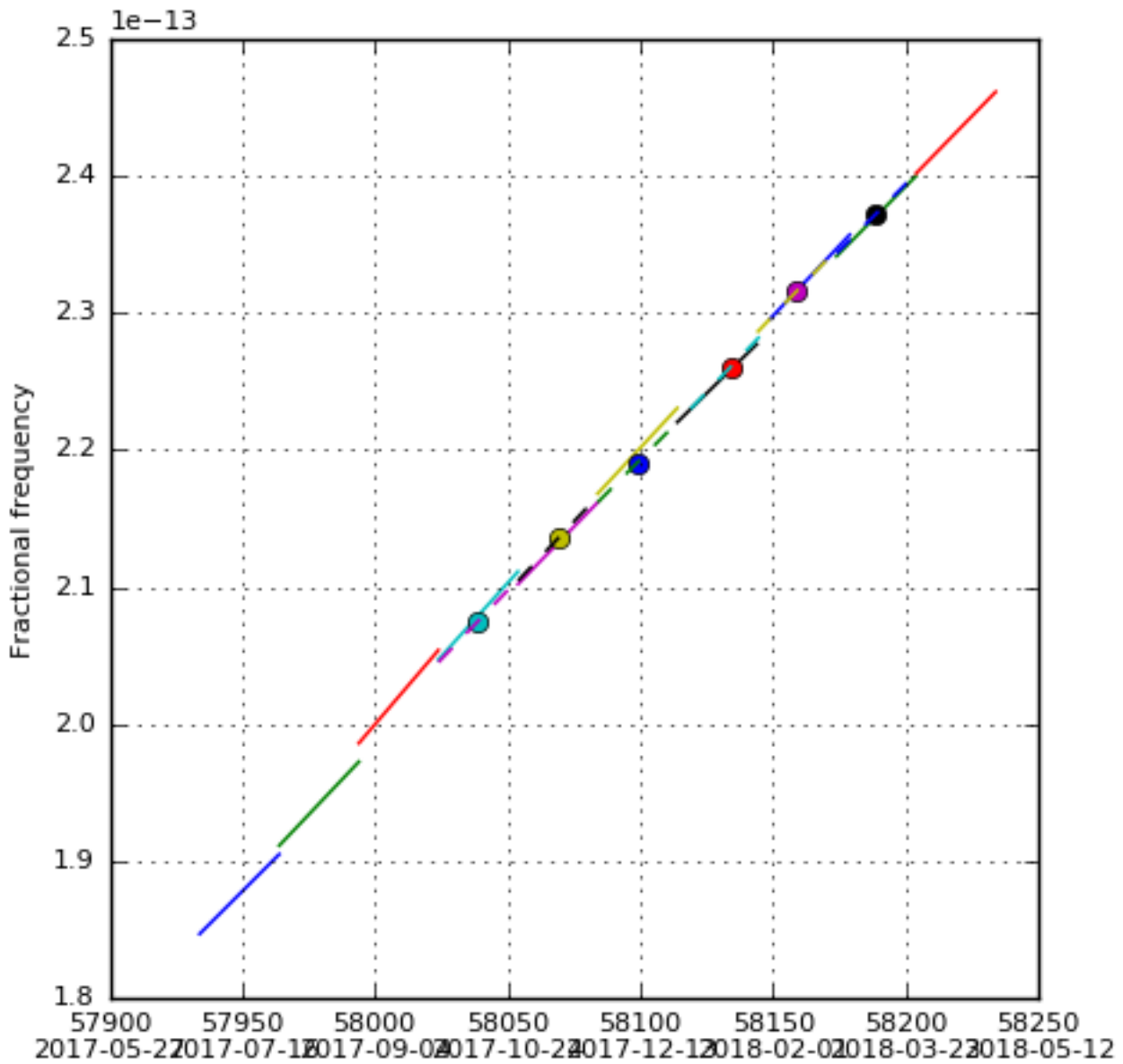
Notes

58189 AHM2 H-source heater turned ON

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.

UTC(MIKE) frequency steering parameters

UTC(MIKE) Master Clock is AHM1 since 2017-07-15.
Solid lines indicate UTC(MIKE) steering parameters derived from UTC-ClockData fits.
Symbols and dashed lines indicate MasterClock rates and drifts as published by BIPM.
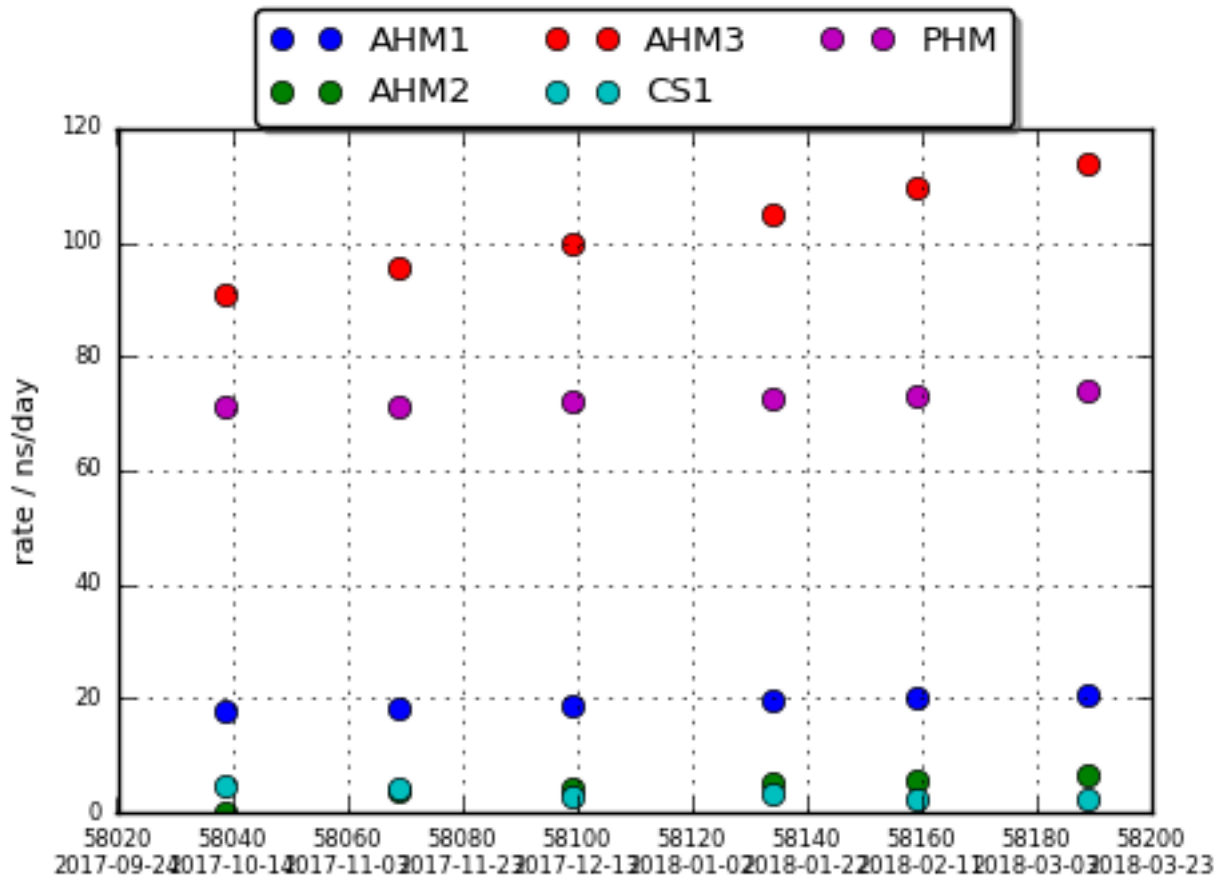The latest steering parameters are:
$y = 2.40192e{-}13 + 1.98587e{-}16 *d + y\_steer$
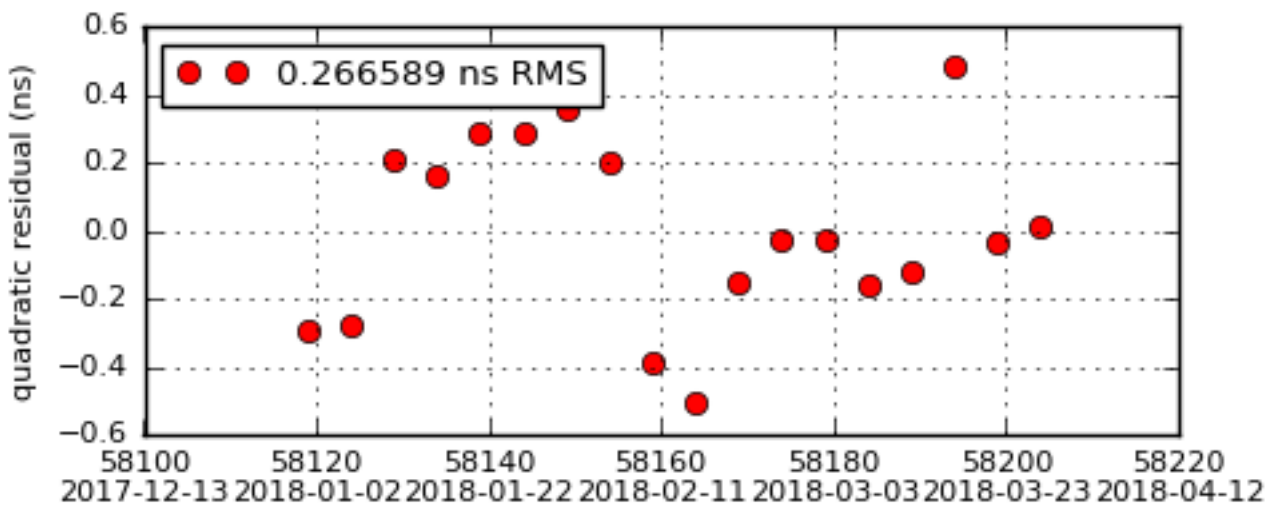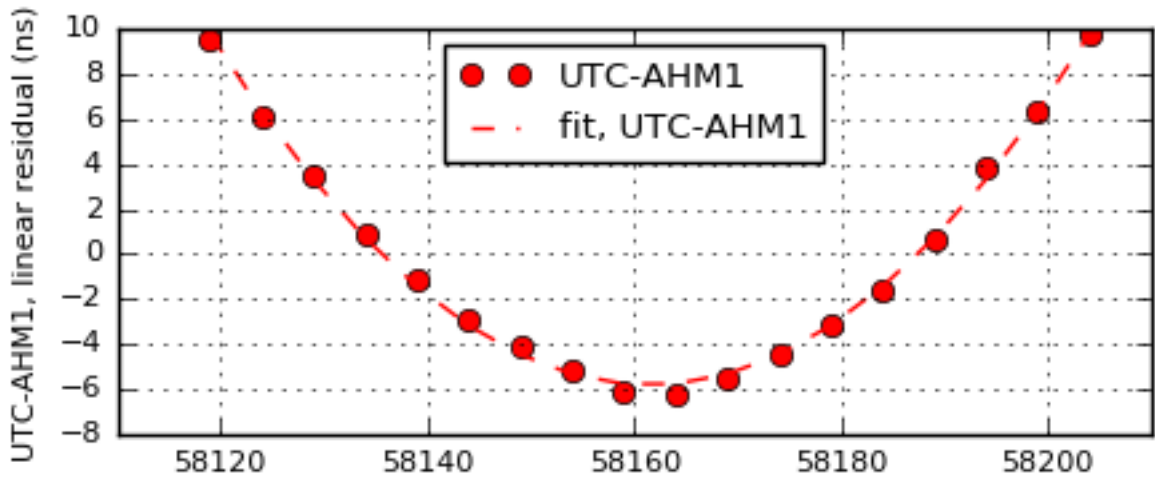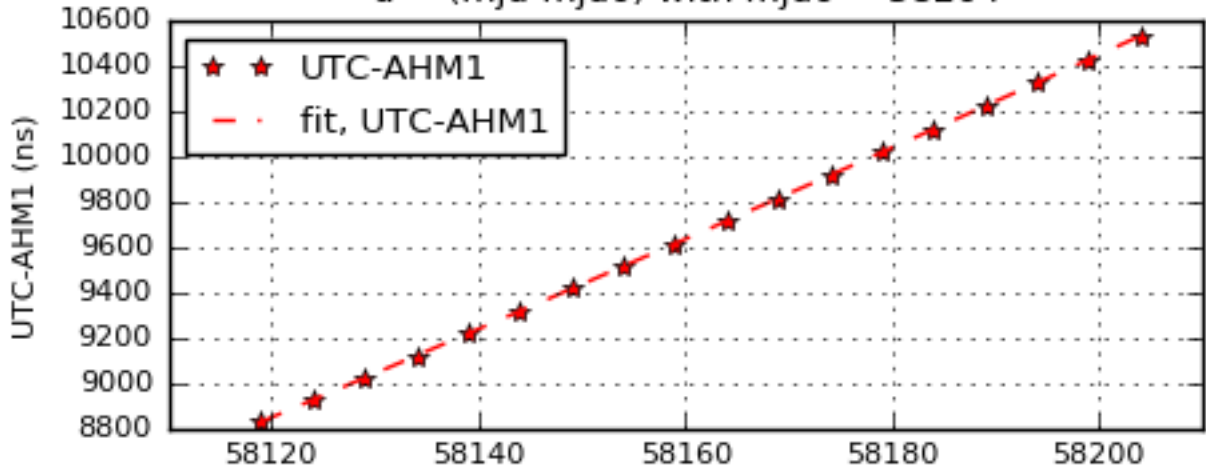with $d = (mjd{-}mjd)$ and $mjd0 = 58204$
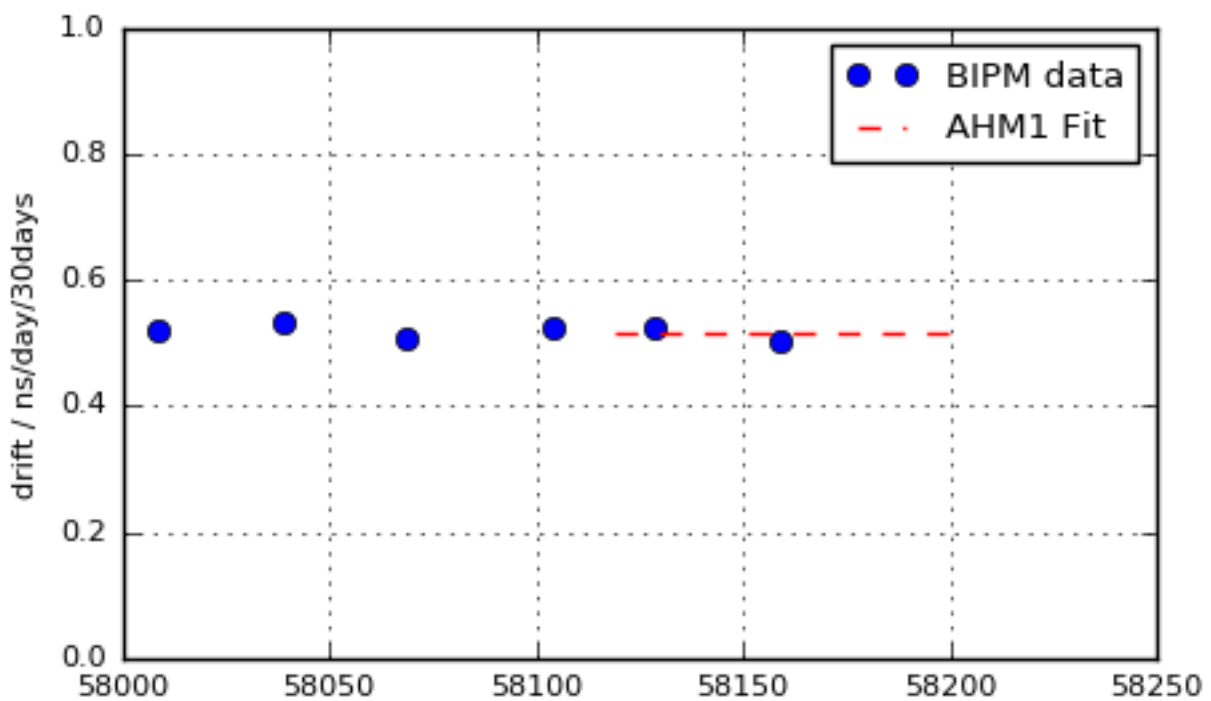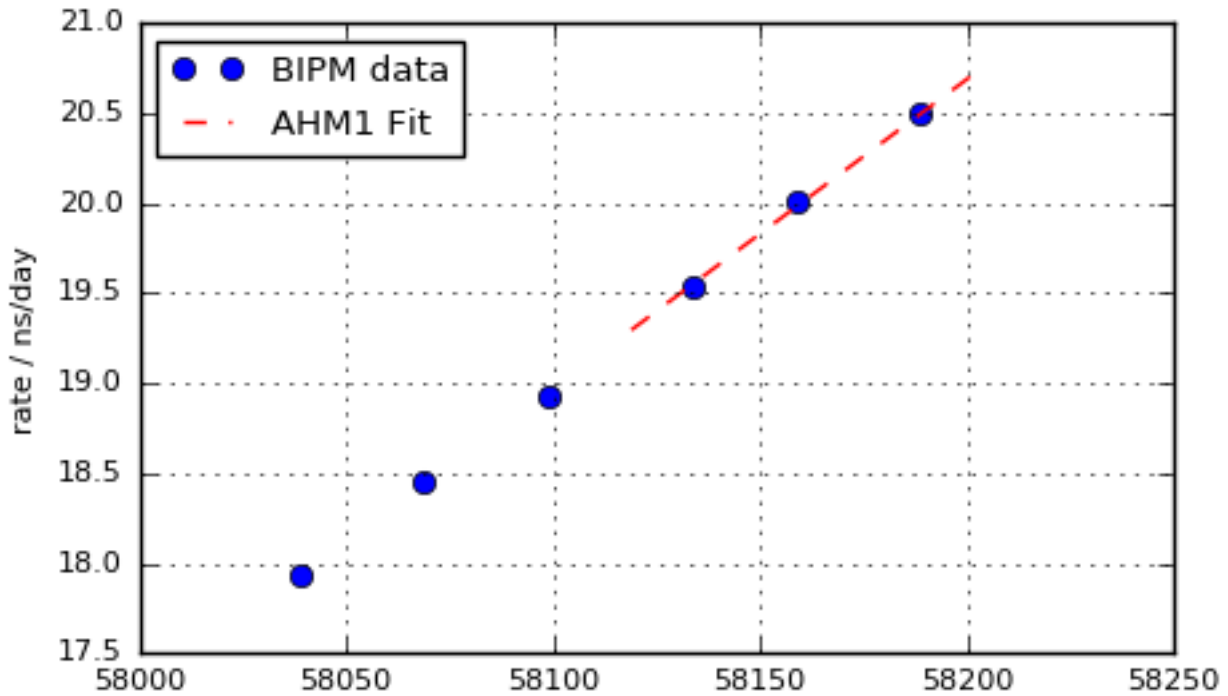$y\_steer = 0$ since 58150

Clock Rates - Summary

UTC - AHM1 Fit

UTC-AHM1 (2018-04-16 / 58224)
x (ns)= 10532.284 + 20.753 *d + 0.0086 *d*d
y = -2.40192e-13 + -1.98587e-16 *d
d = (mjd-mjd0) with mjd0 = 58204

AHM1 Rate and Drift

UTC - AHM2 Fit
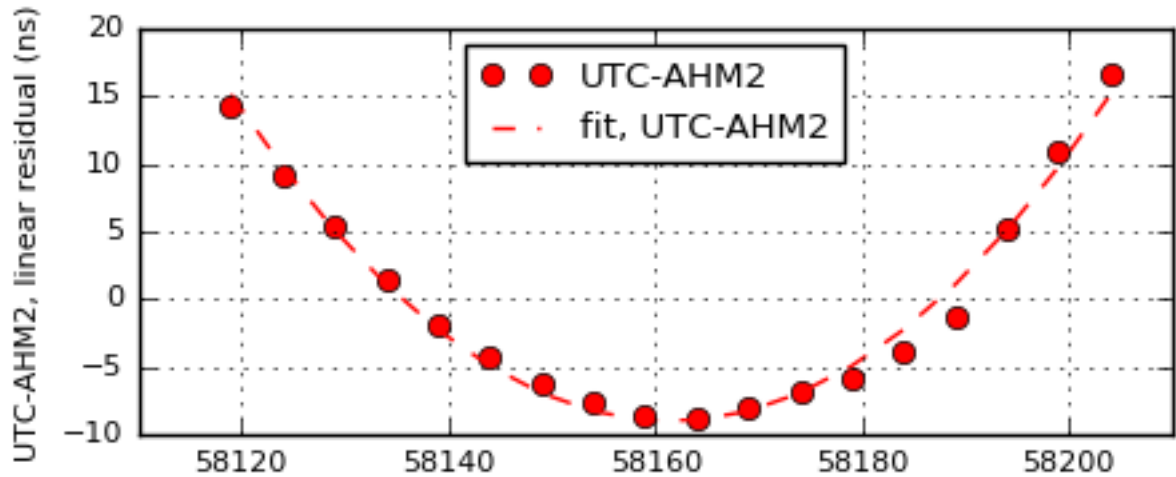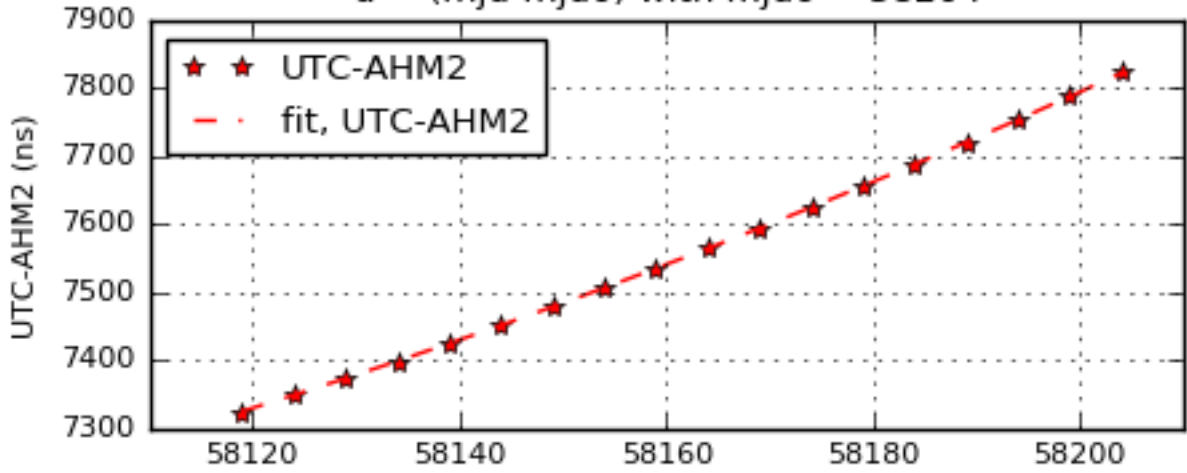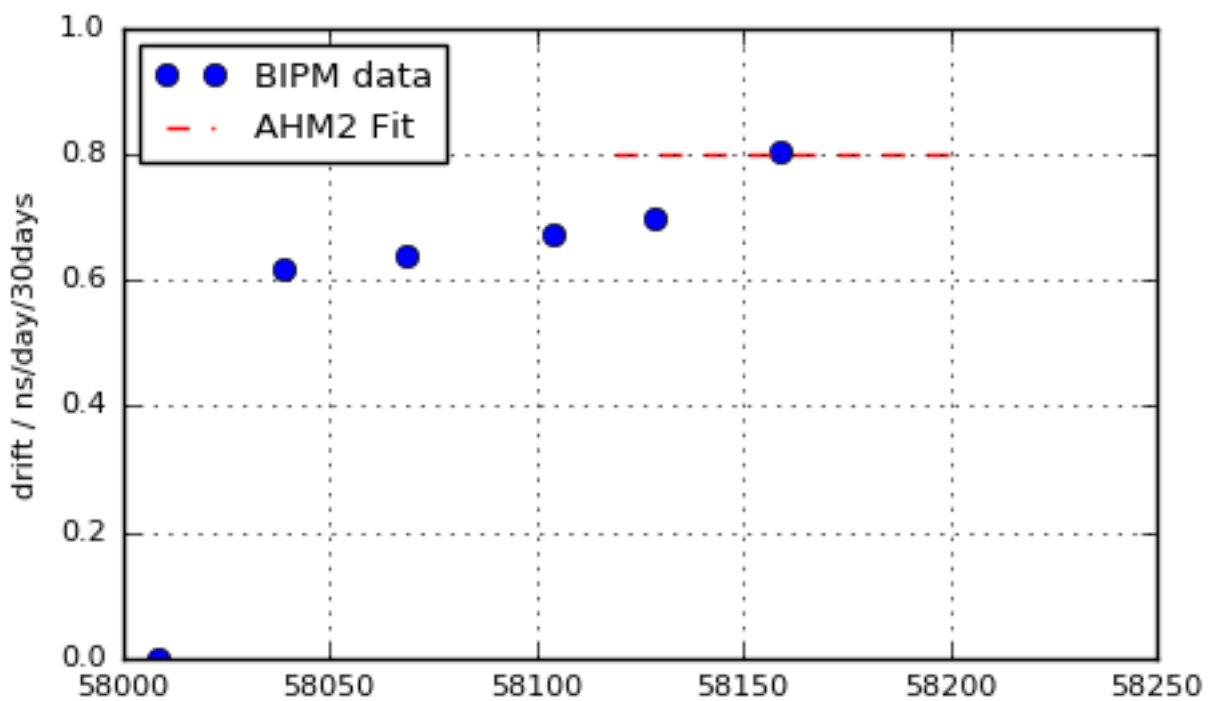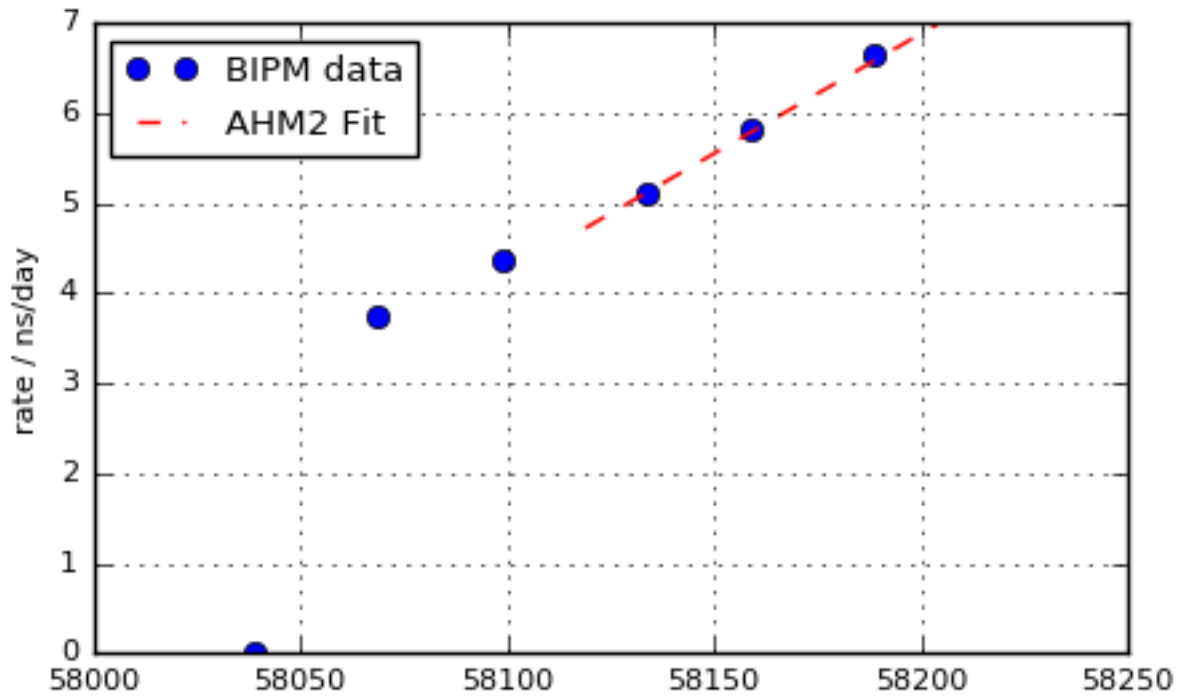
UTC-AHM2 (2018-04-16 / 58224)
x (ns)= 7822.718 + 6.980 *d + 0.0133 *d*d
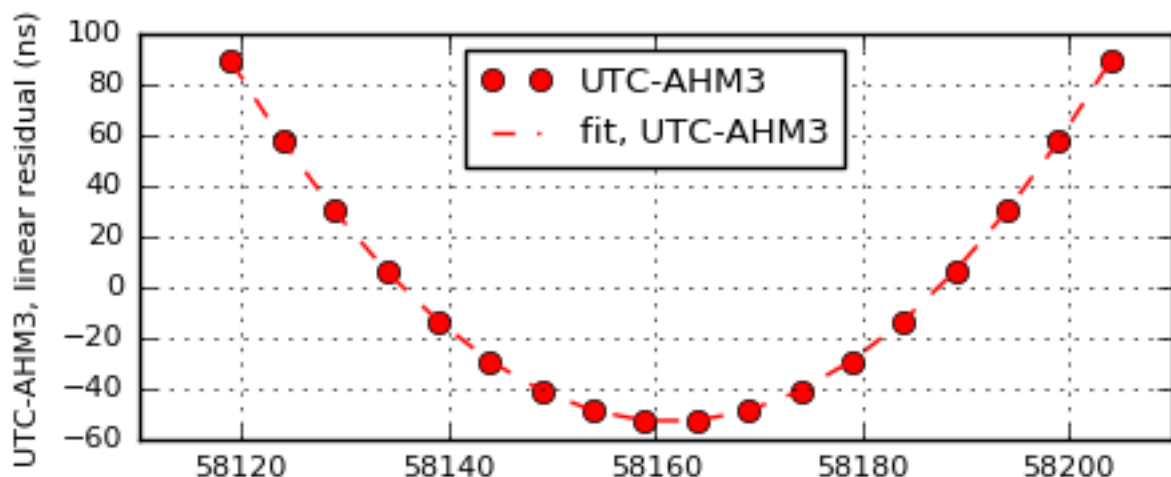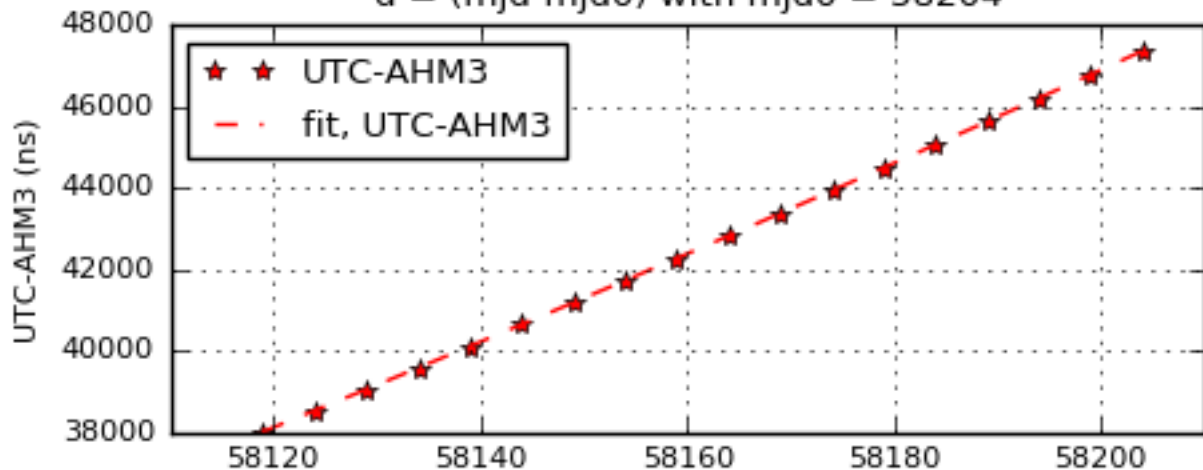y = -8.07854e-14 + -3.07895e-16 *d
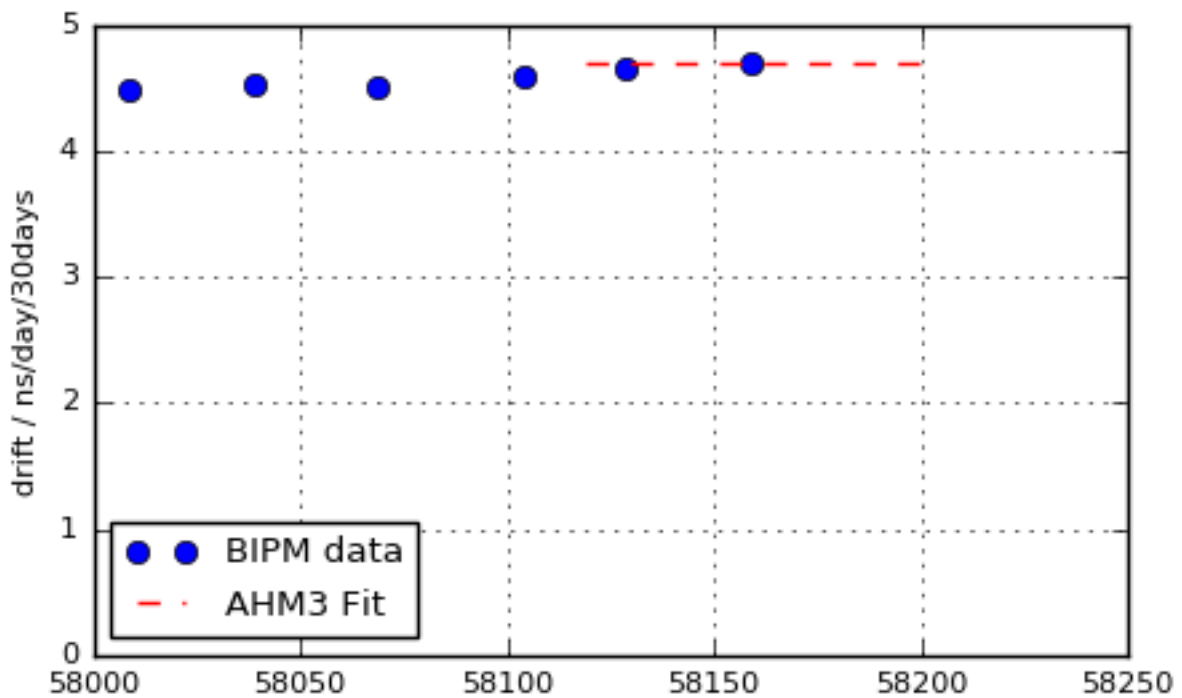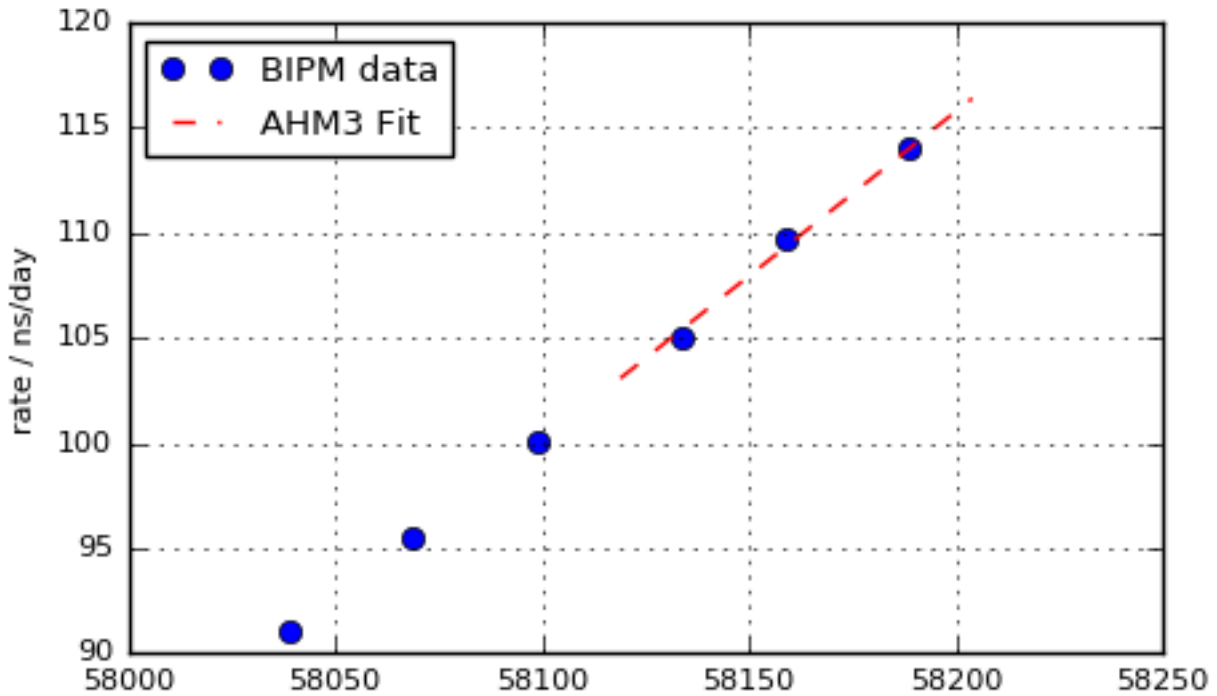d = (mjd-mjd0) with mjd0 = 58204

AHM2 Rate and Drift

UTC - AHM3 Fit

UTC-AHM3 (2018-04-16 / 58224)
$$x\ (ns) = 47352.646 + 116.385 *d + 0.0783 *d*d$$
$$y = -1.34705e{-}12 + -1.81151e{-}15 *d$$
$$d = (mjd-mjd0) \text{ with } mjd0 = 58204$$

AHM3 Rate and Drift
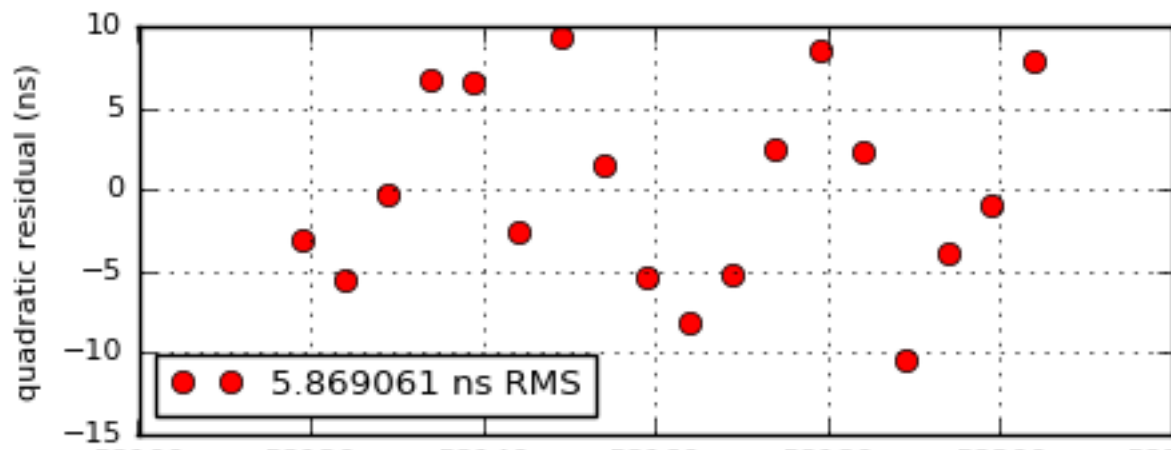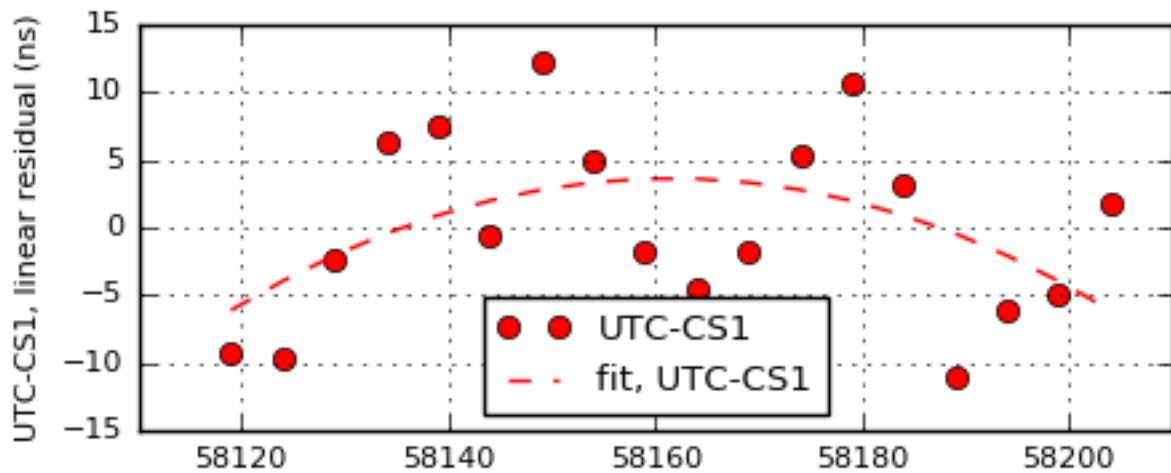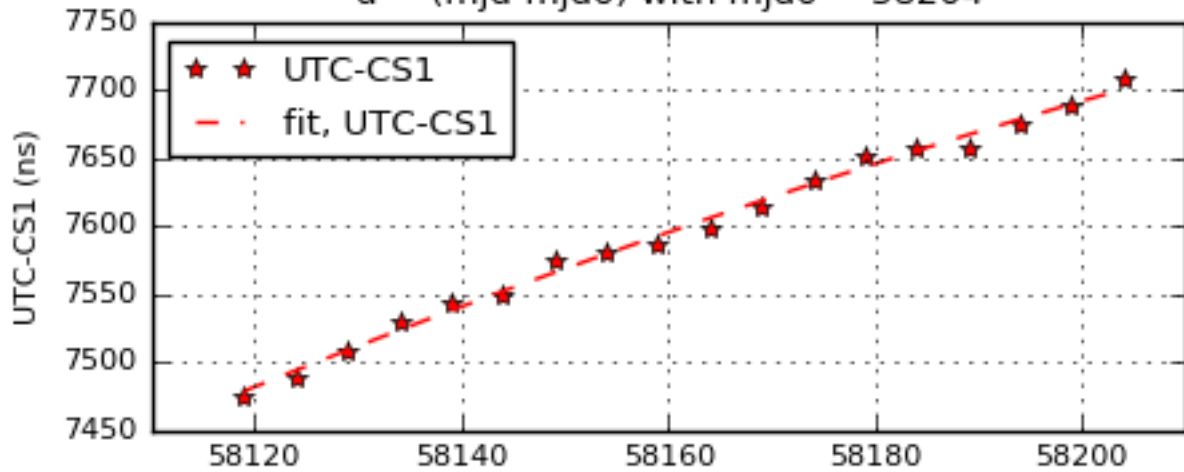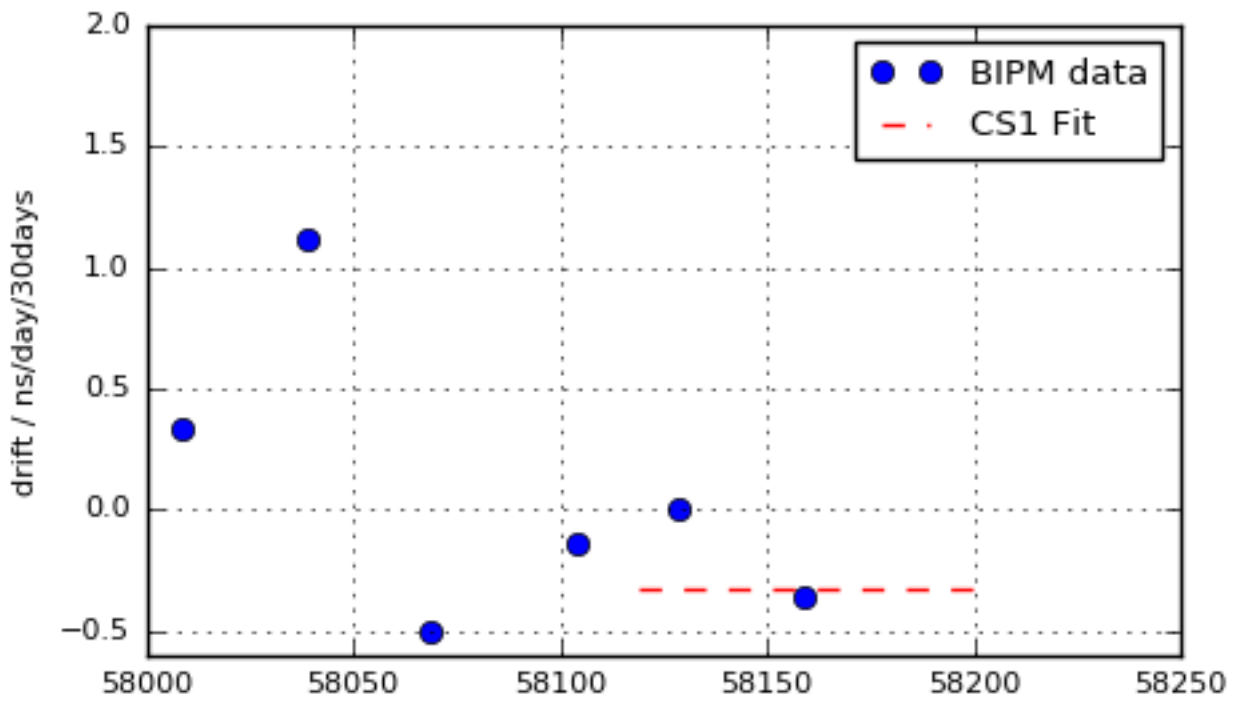
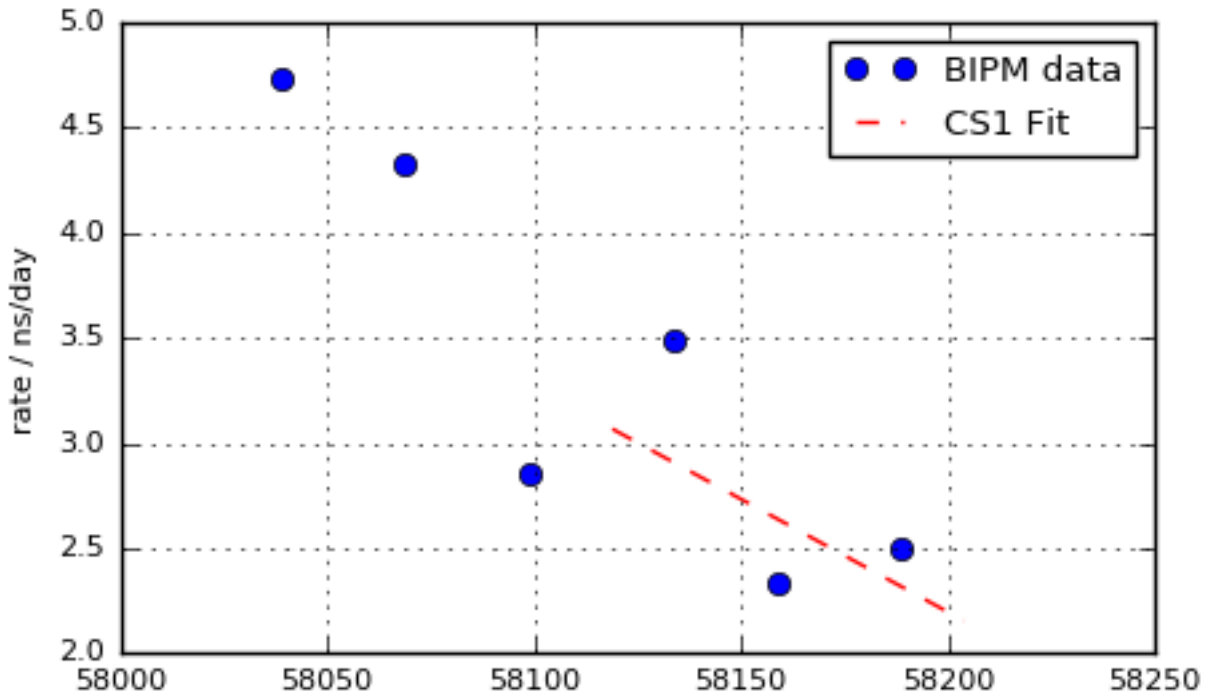## UTC - CS1 Fit

UTC-CS1 (2018-04-16 / 58224)
x (ns)= 7701.025 + 2.155 *d + -0.0054 *d*d
y = -2.49417e-14 + 1.24233e-16 *d
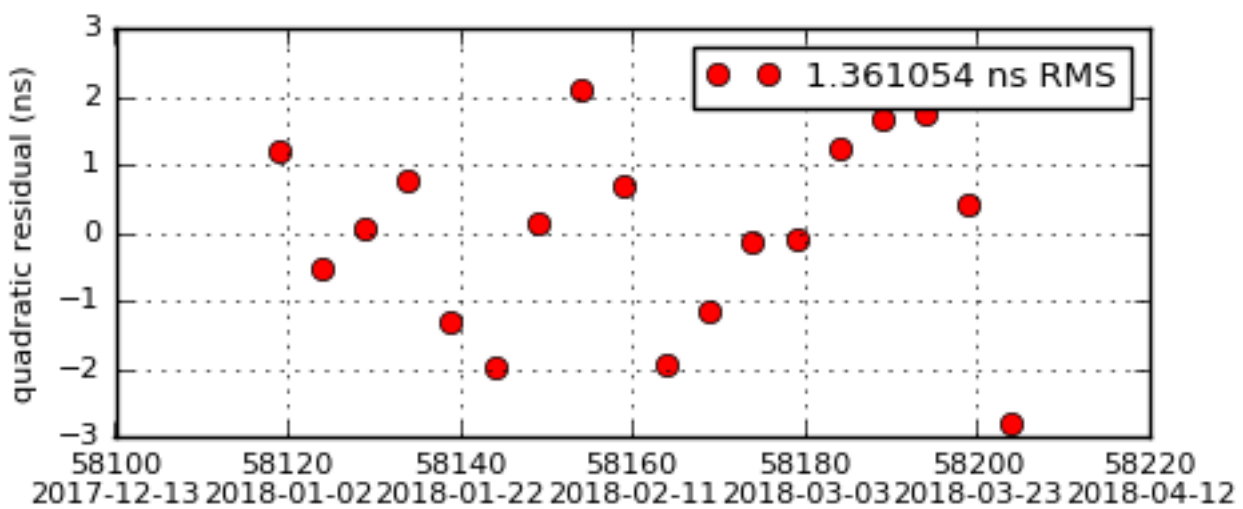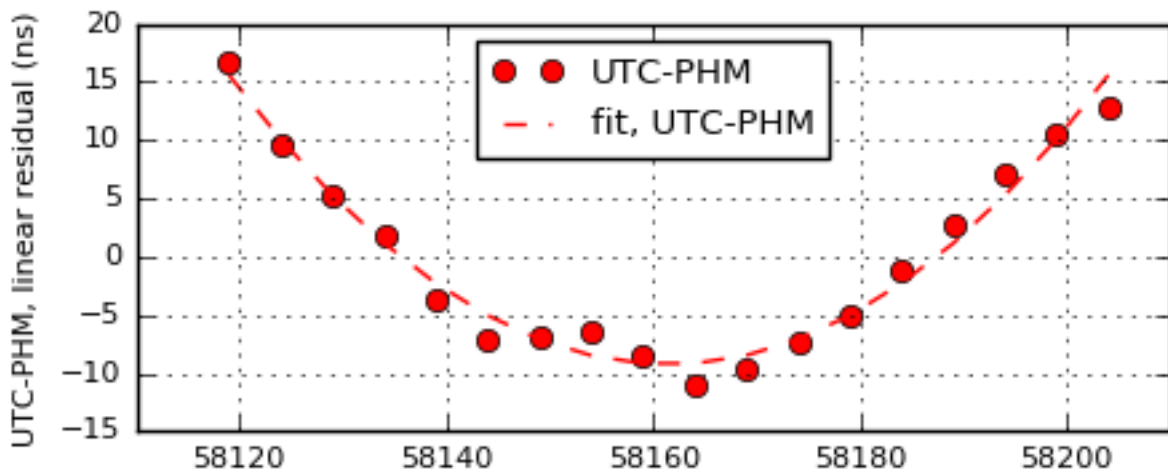d = (mjd-mjd0) with mjd0 = 58204
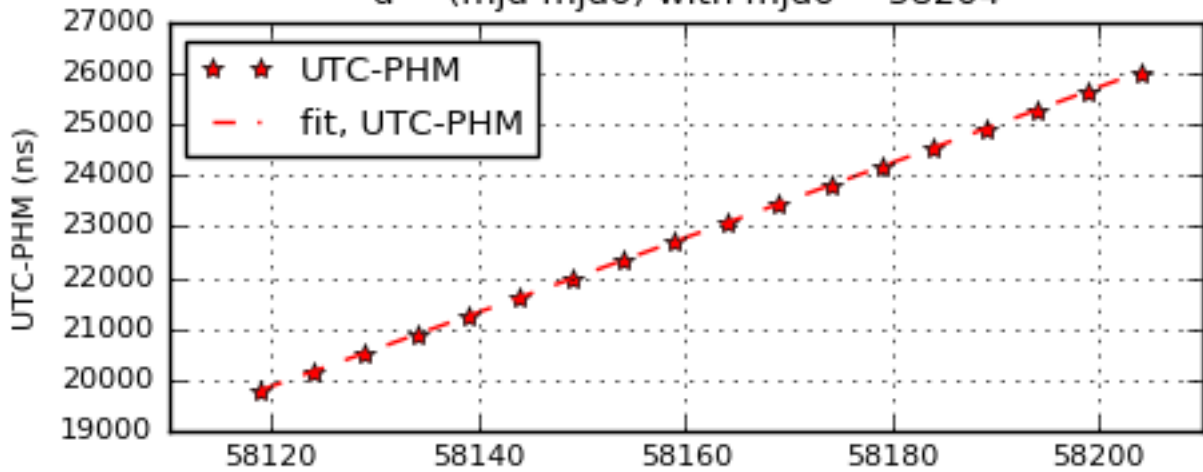
CS1 Rate and Drift
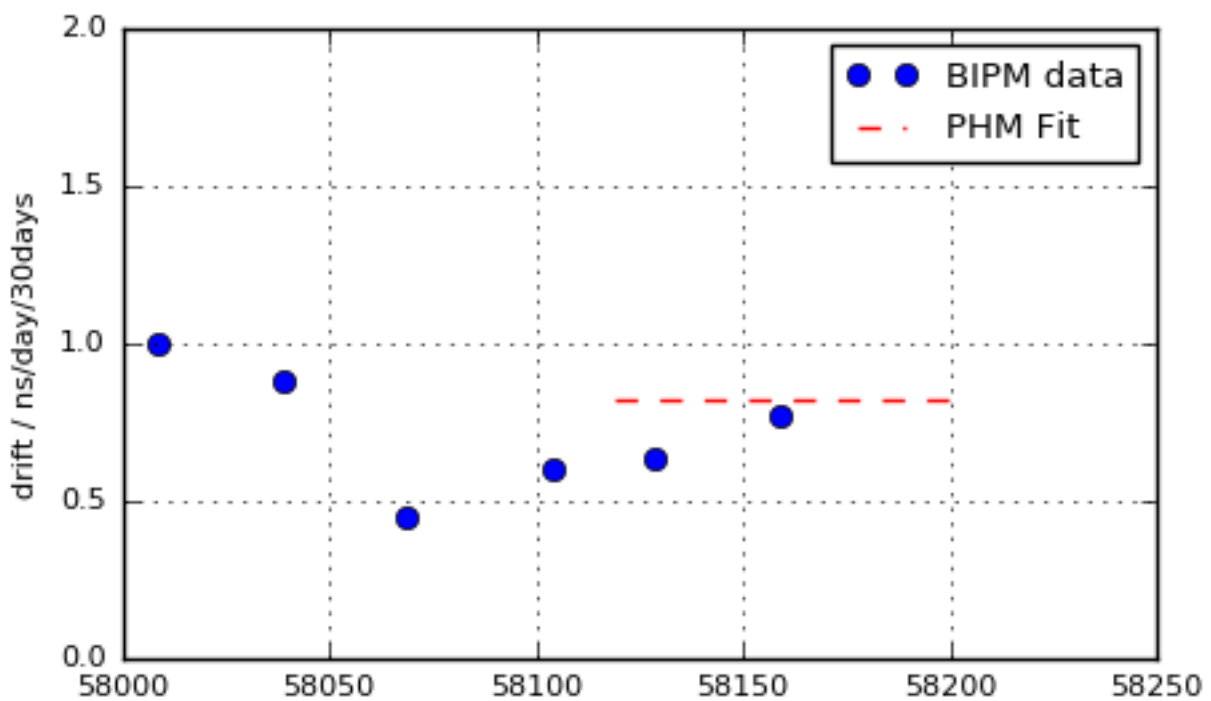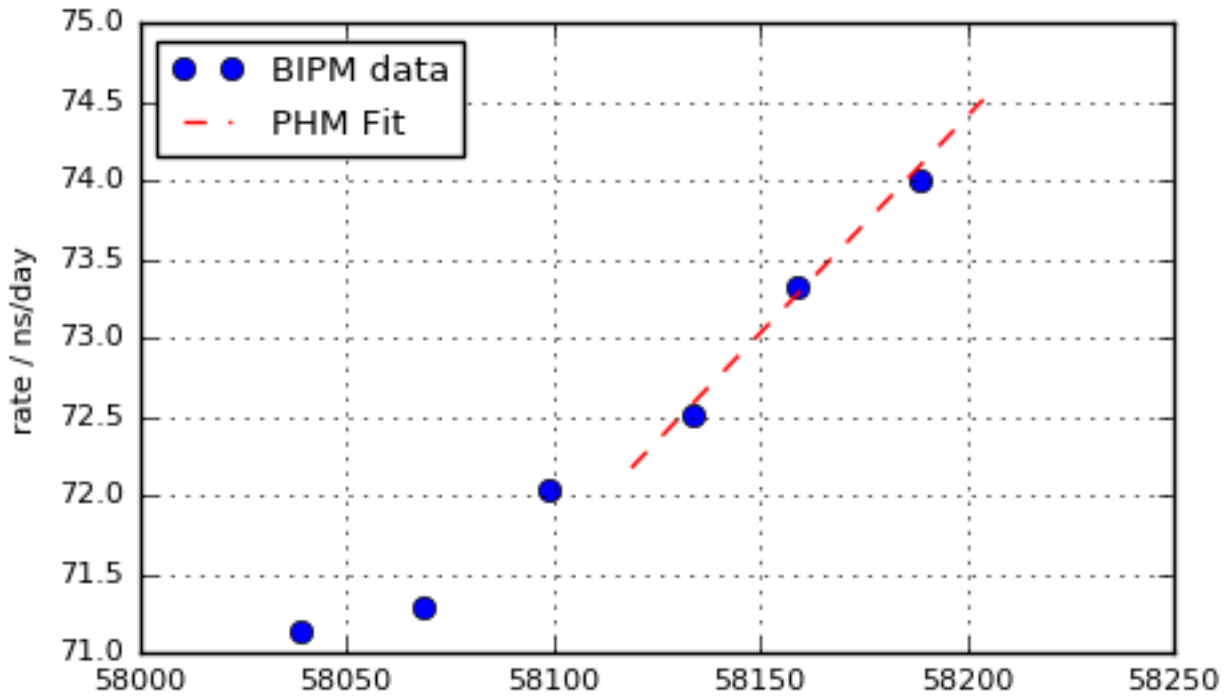
UTC - PHM Fit

UTC-PHM (2018-04-16 / 58224)
$x \text{ (ns)}= 26032.605 + 74.511 * d + 0.0137 * d * d$
$y = -8.62396e\text{-}13 + -3.17959e\text{-}16 * d$
$d = (mjd - mjd0) \text{ with } mjd0 = 58204$

PHM Rate and Drift

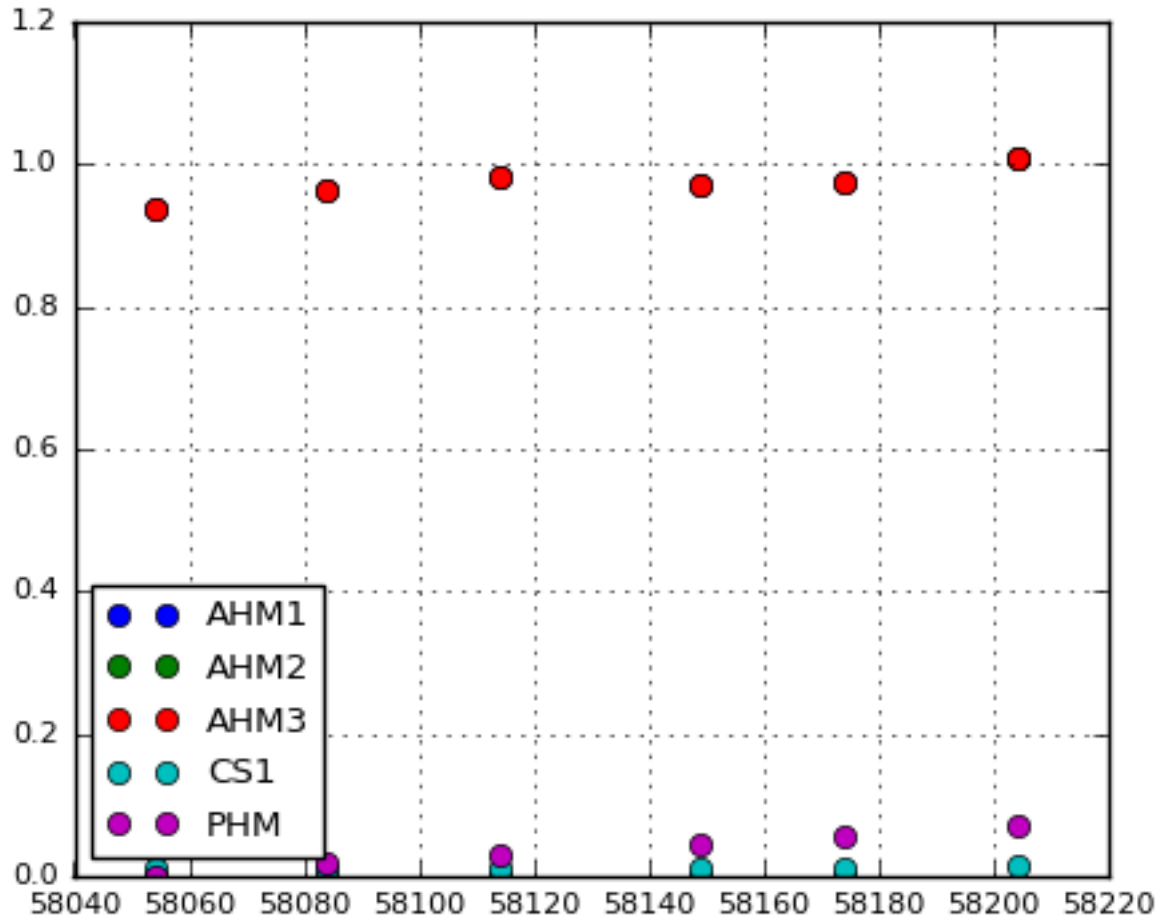## Clock Weights

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

End of Bulletin.