

UTC(MIKE) Atomic Bulletin 2018-03

VTT MIKES Metrology monthly Time & Frequency bulletin.

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

Date of publication: 2018-03-12

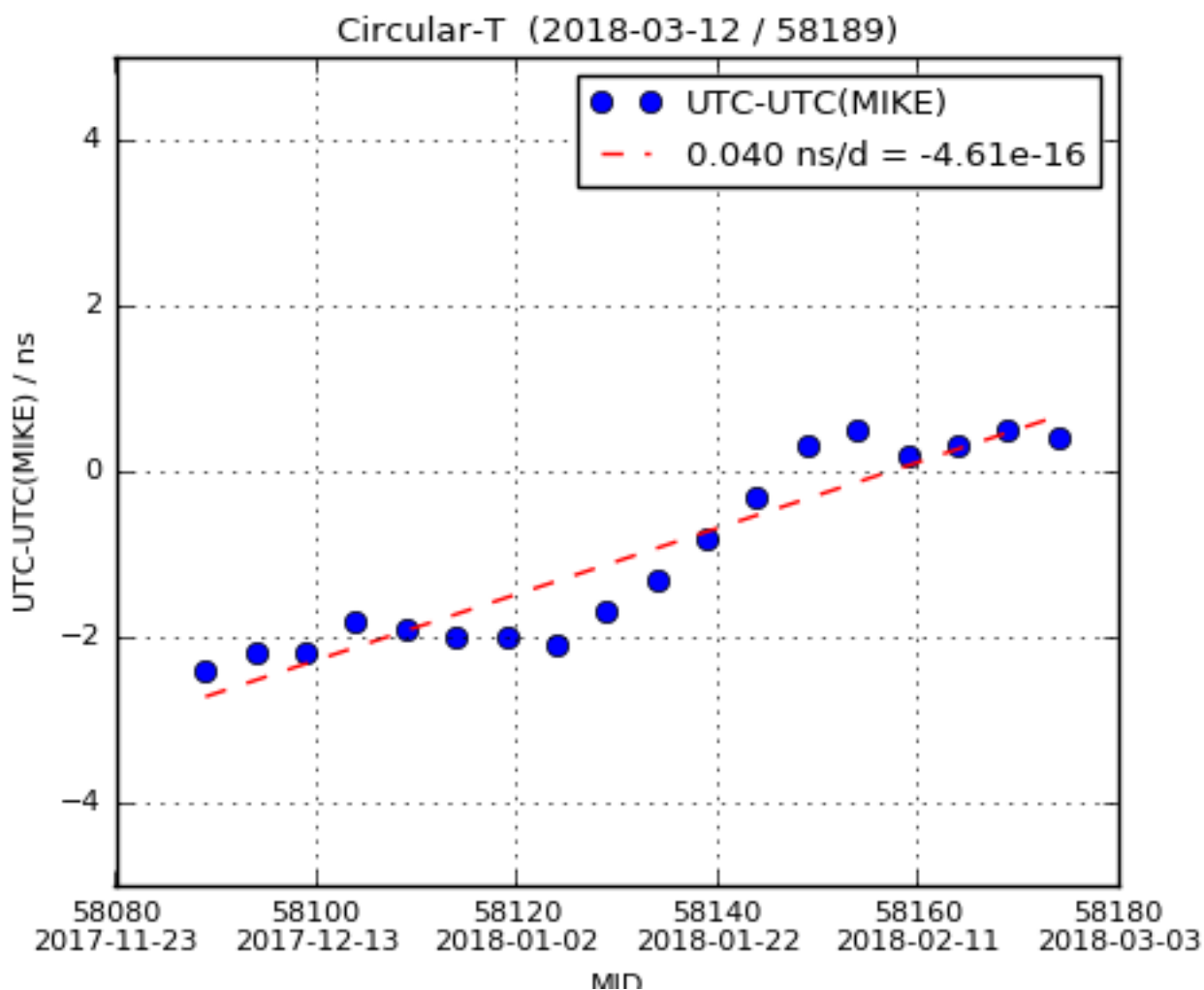
Circular-T issues used for analysis: [360](#), [361](#), [362](#),

First day of analysis interval: 2017-12-02 (58089)

Last day of analysis interval: 2018-02-25 (58174)

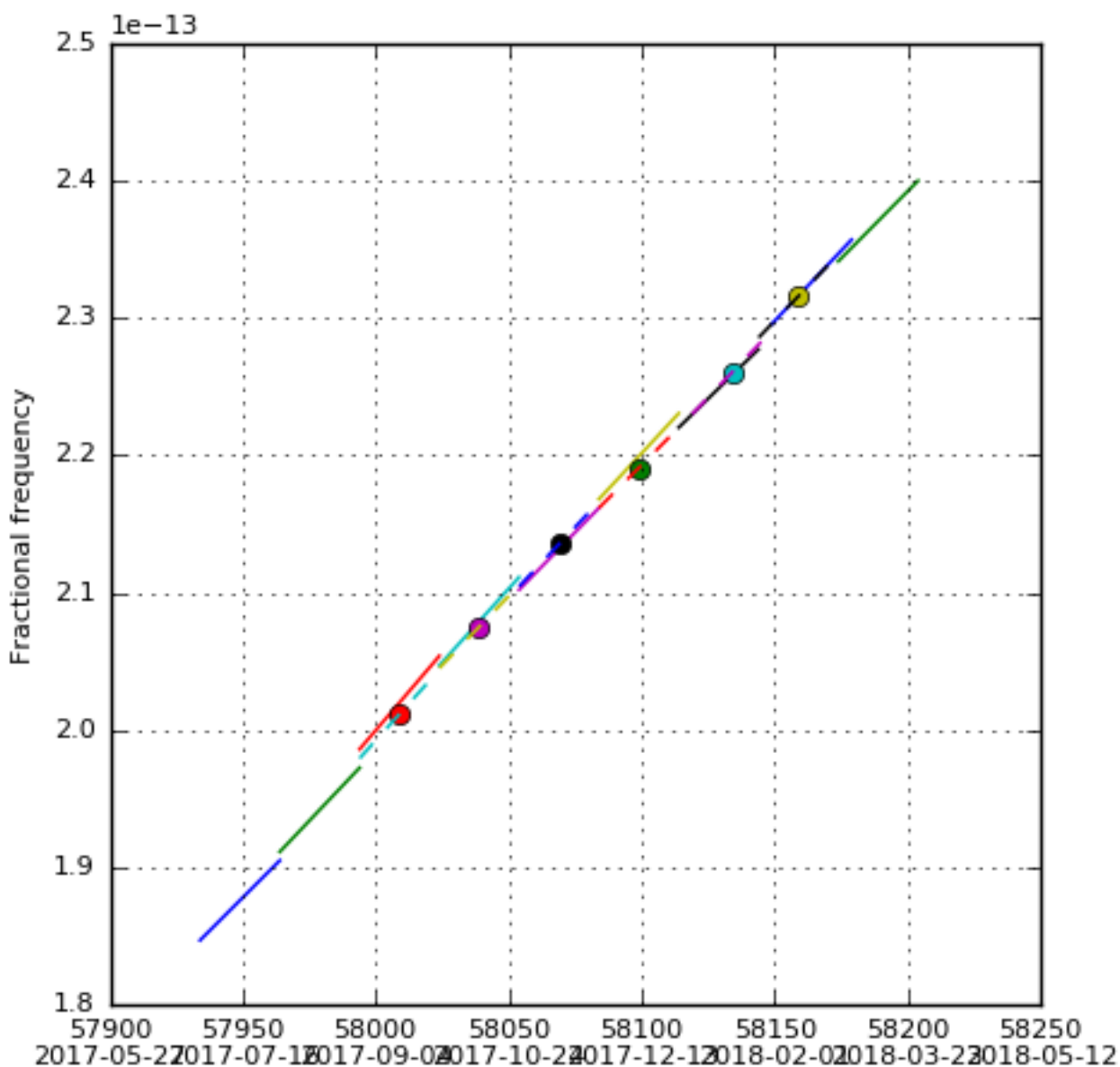
ClockData for analysis: [CDMI 17.12](#), [CDMI 18.01](#), [CDMI 18.02](#),

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.

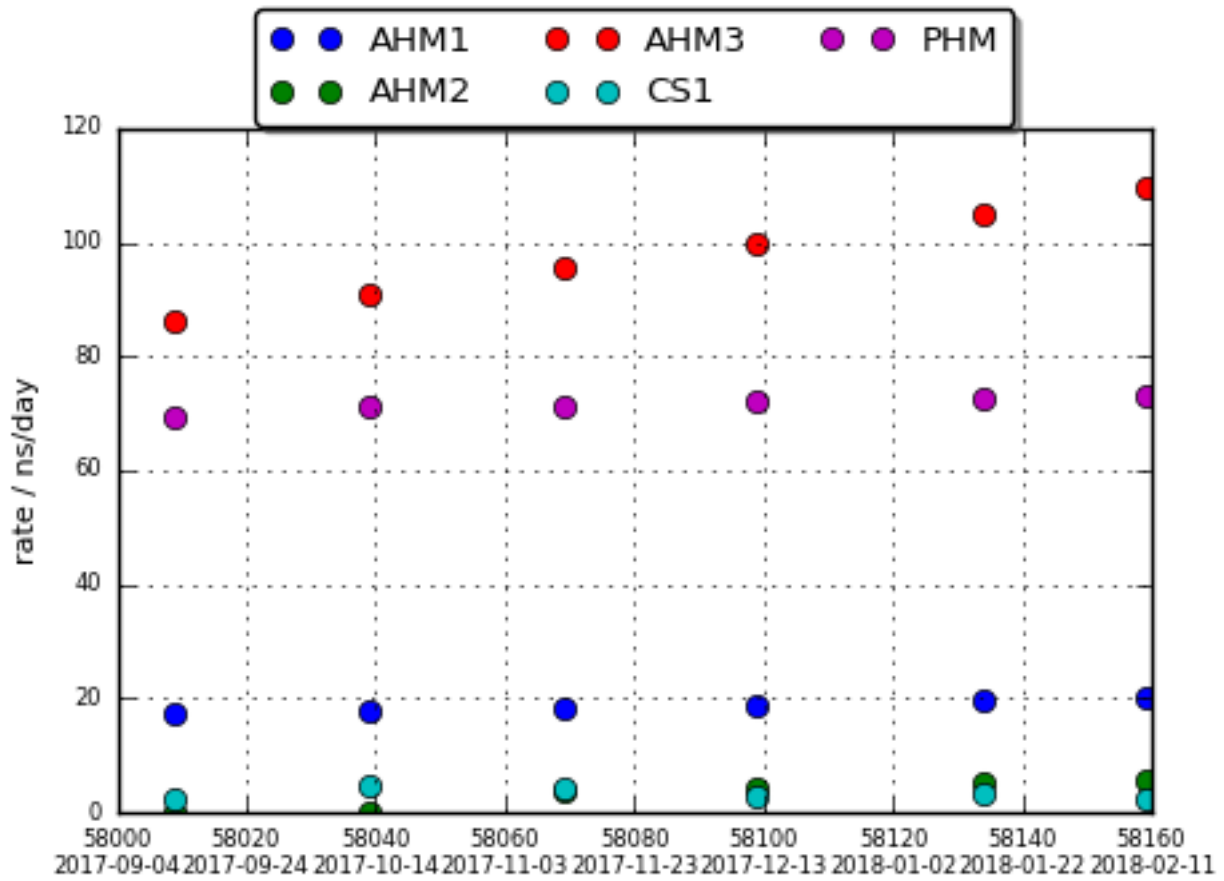
The latest steering parameters are:

$$y = 2.34141e-13 + 1.95684e-16 * d + y_steer$$

with $d = (mjd - mjd_0)$ and $mjd_0 = 58174$

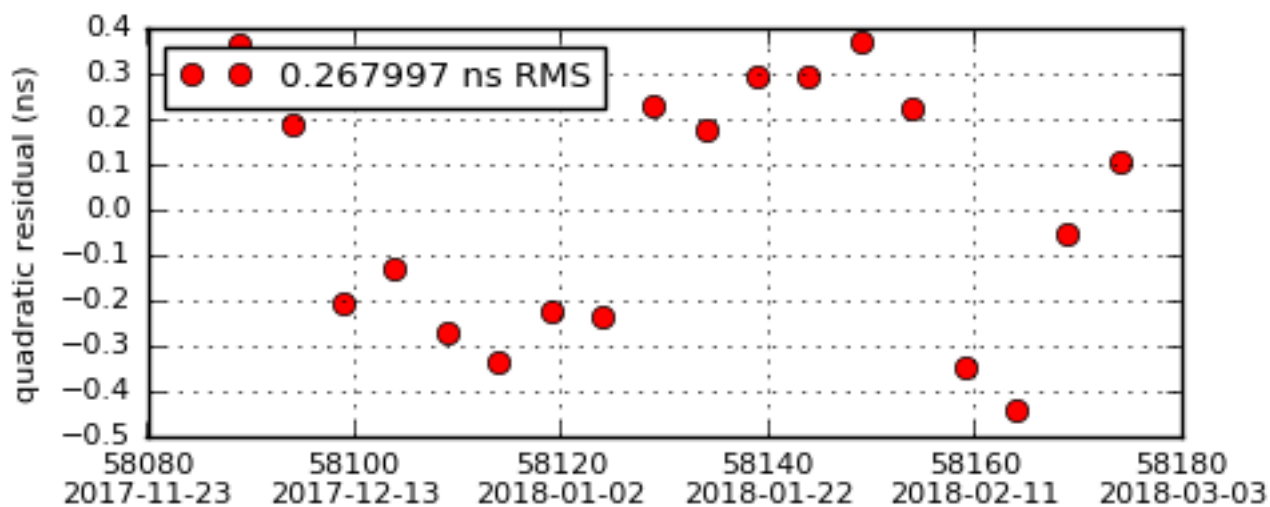
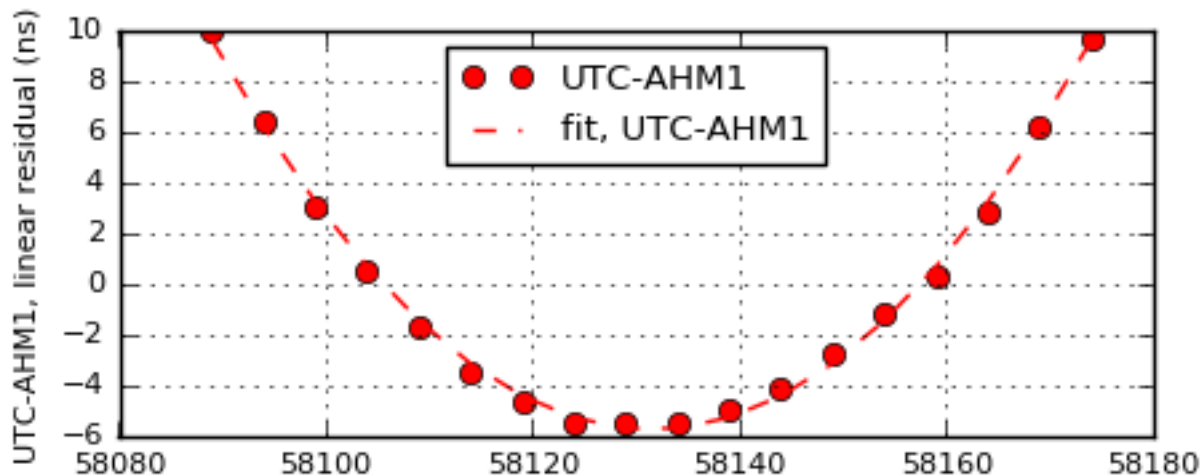
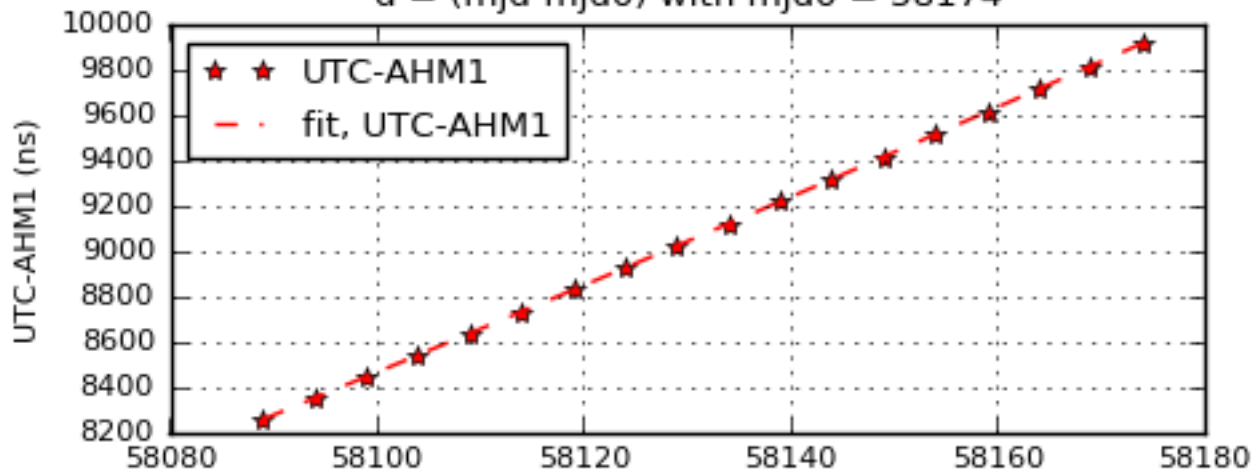
$y_steer = 0$ since 58150

Clock Rates - Summary

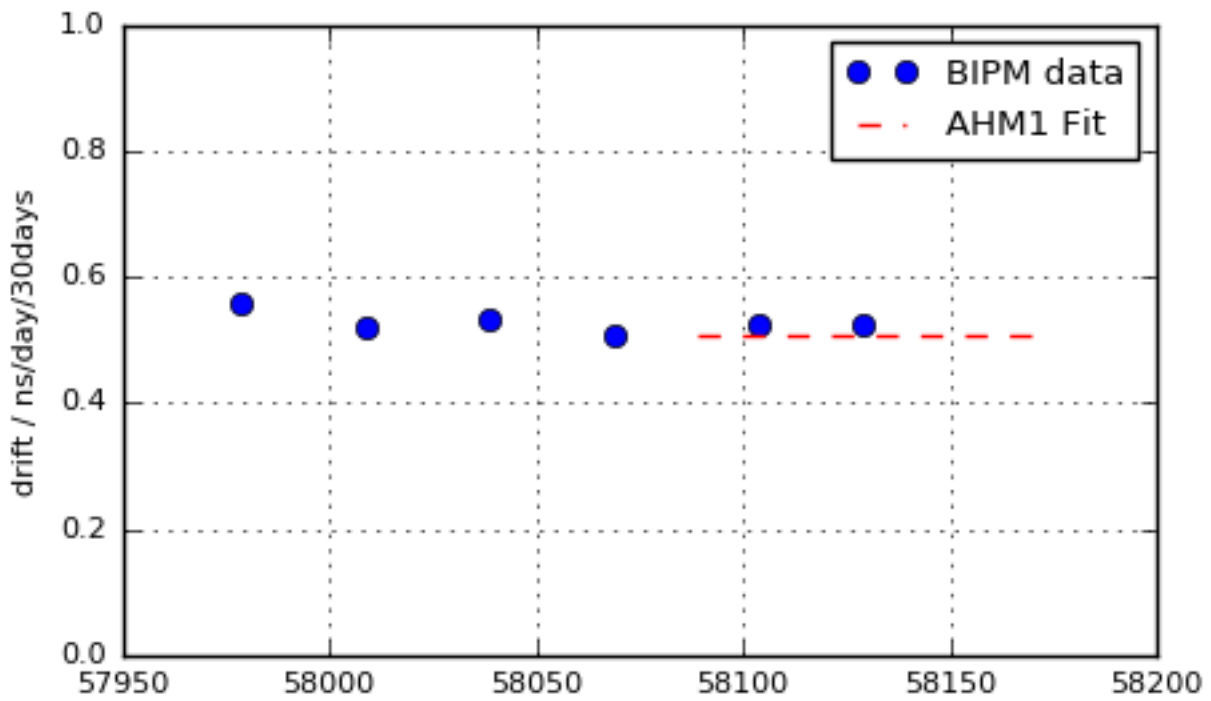
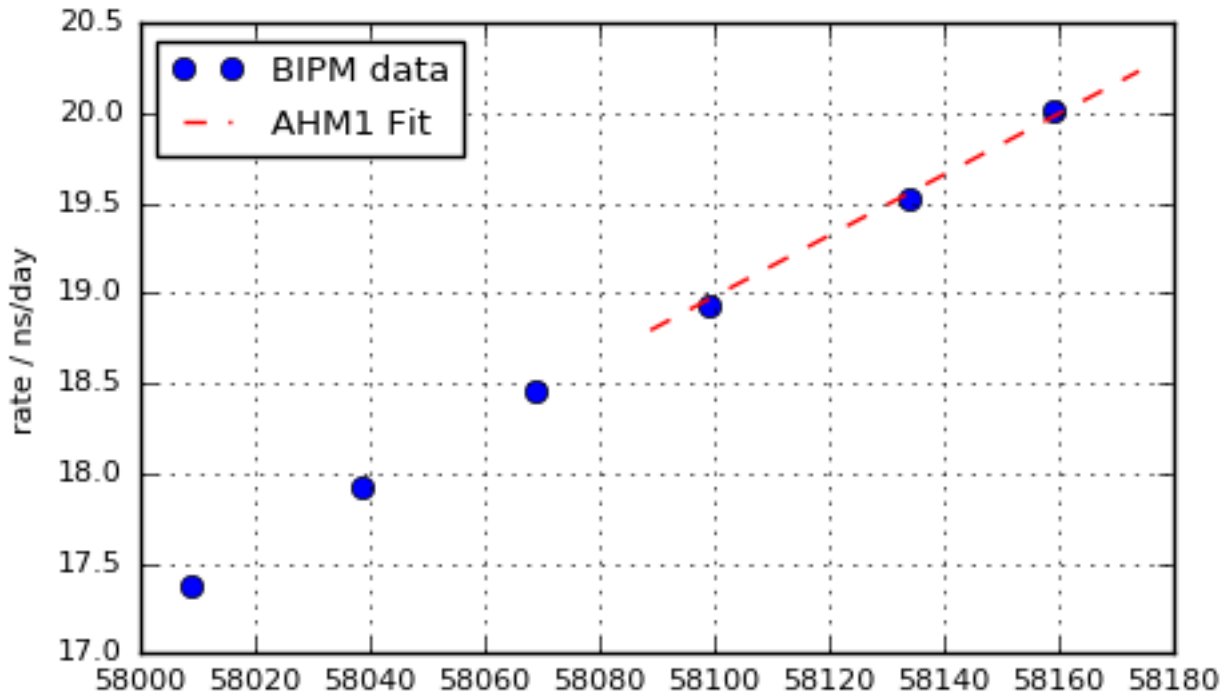


UTC - AHM1 Fit

UTC-AHM1 (2018-03-12 / 58189)
 $x \text{ (ns)} = 9917.293 + 20.230 * d + 0.0085 * d * d$
 $y = -2.34141e-13 + -1.95684e-16 * d$
 $d = (\text{mjd} - \text{mjd0}) \text{ with mjd0} = 58174$

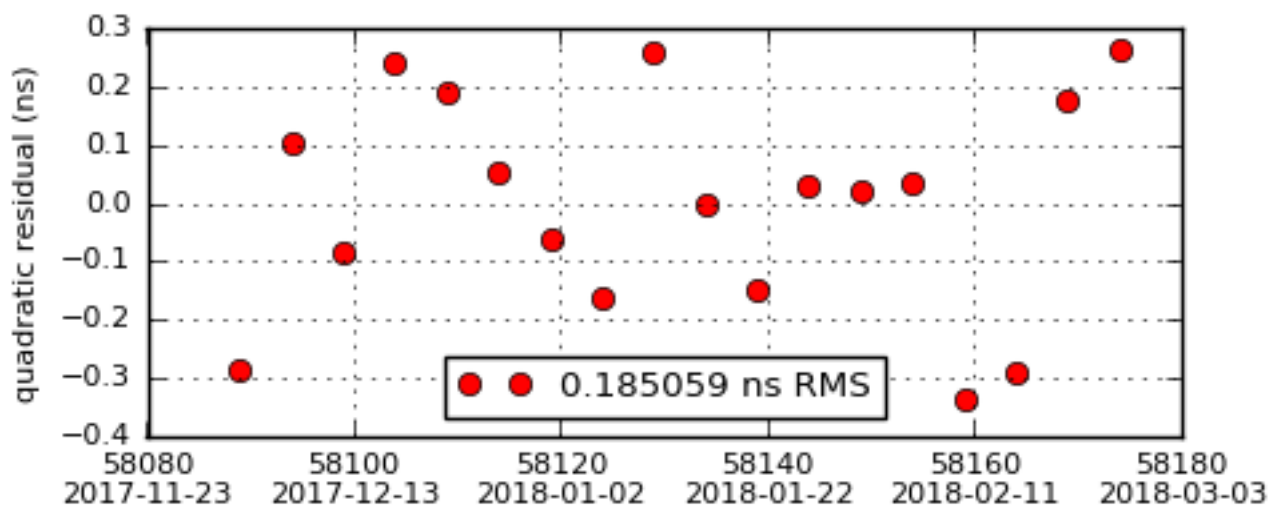
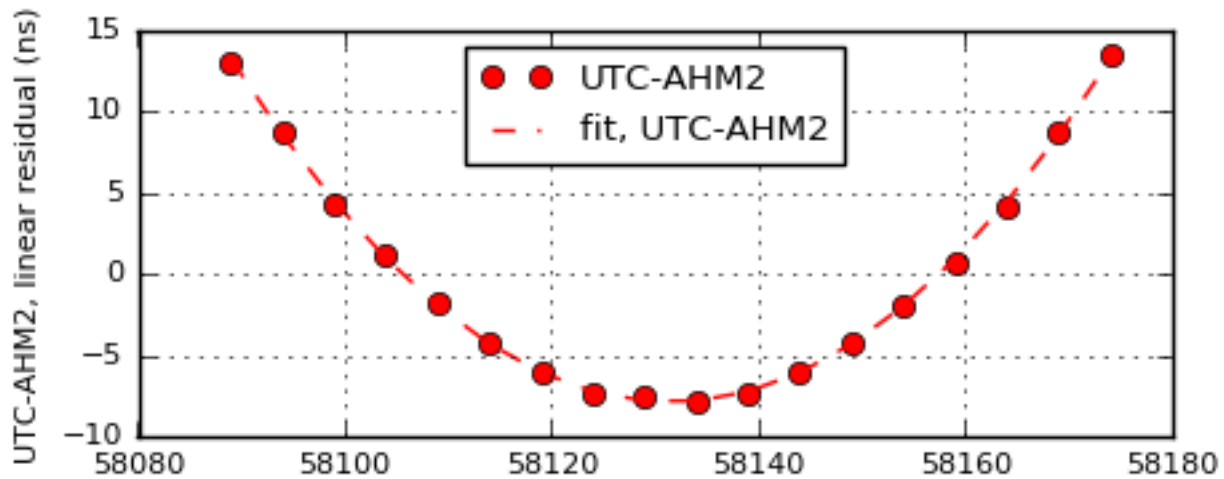
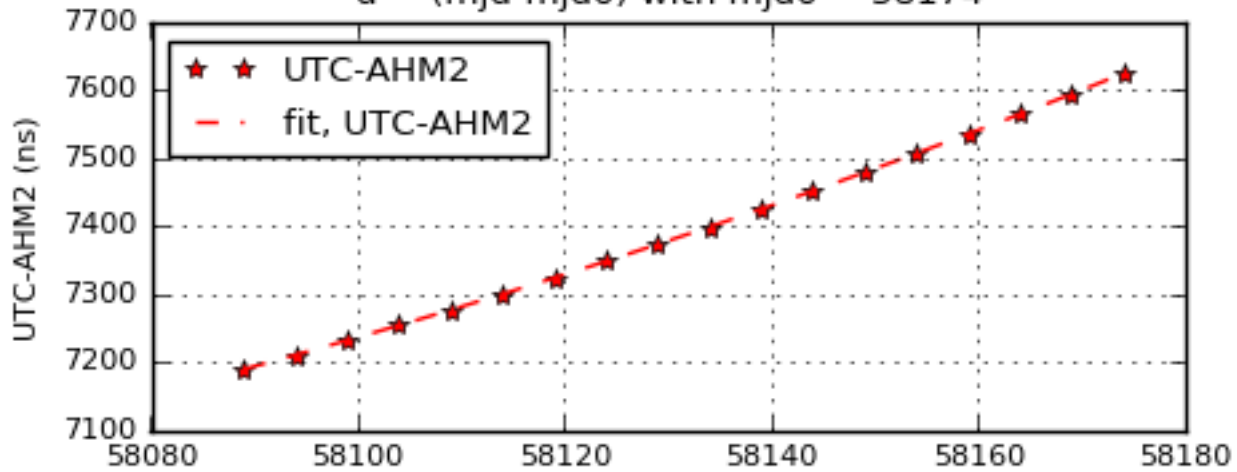


AHM1 Rate and Drift

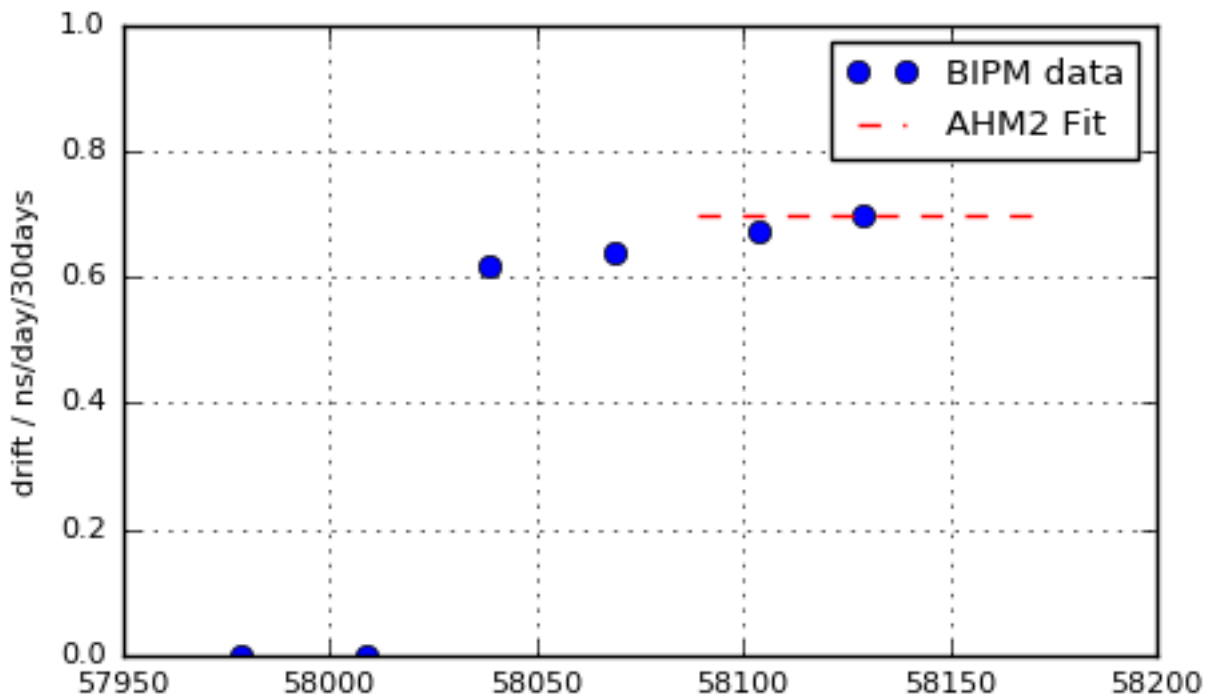
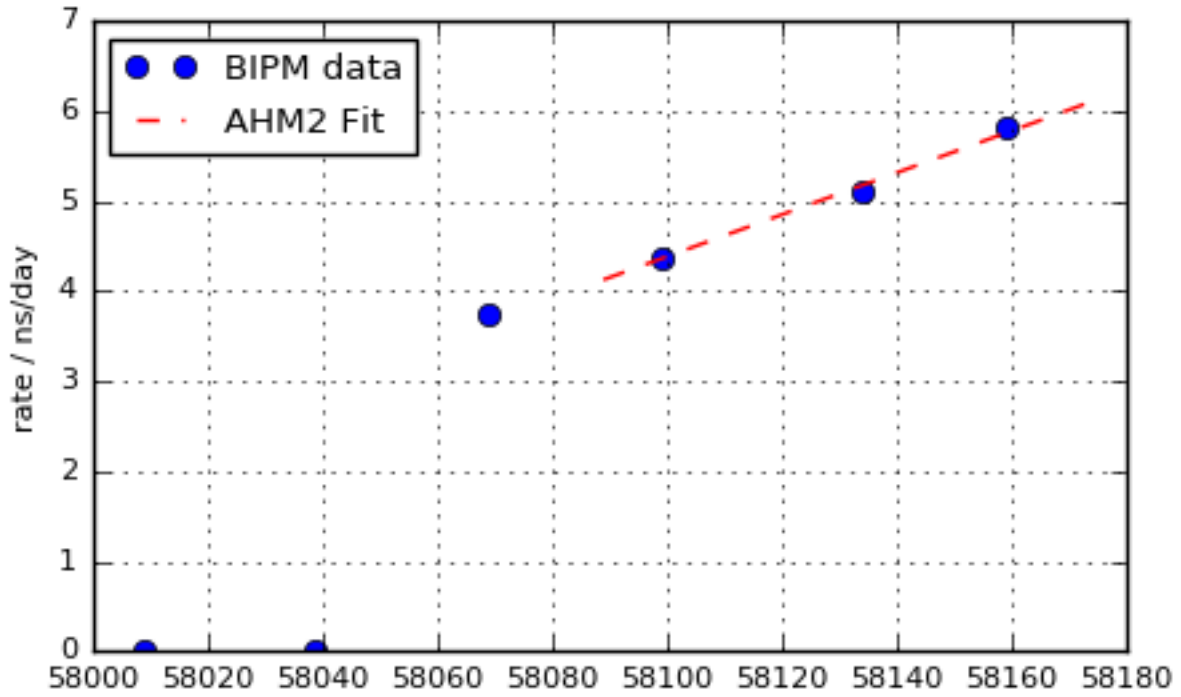


UTC - AHM2 Fit

UTC-AHM2 (2018-03-12 / 58189)
 $x \text{ (ns)} = 7625.038 + 6.101 * d + 0.0116 * d * d$
 $y = -7.06158e-14 + -2.69291e-16 * d$
 $d = (\text{mjd} - \text{mjd0}) \text{ with mjd0} = 58174$

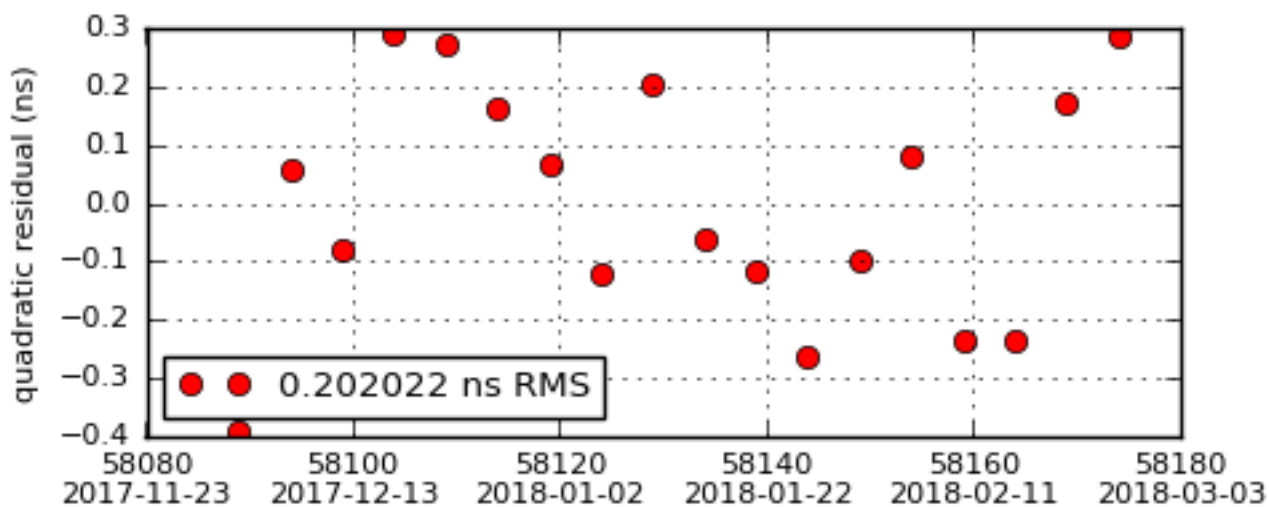
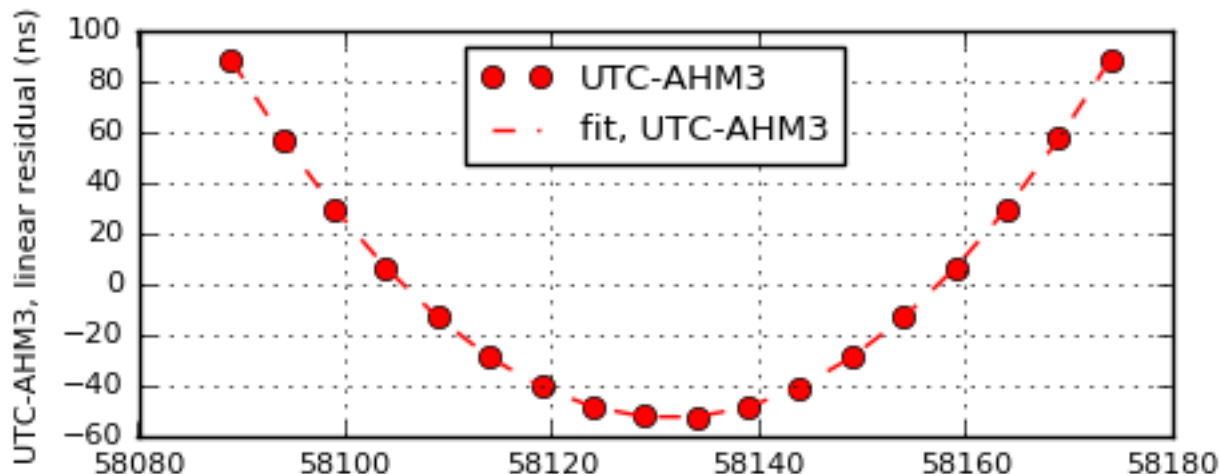
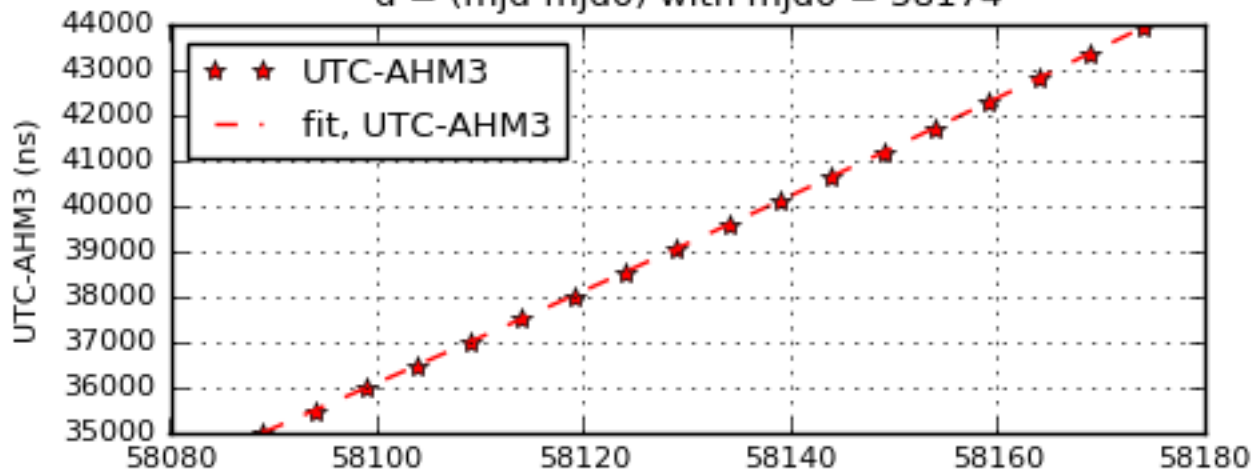


AHM2 Rate and Drift

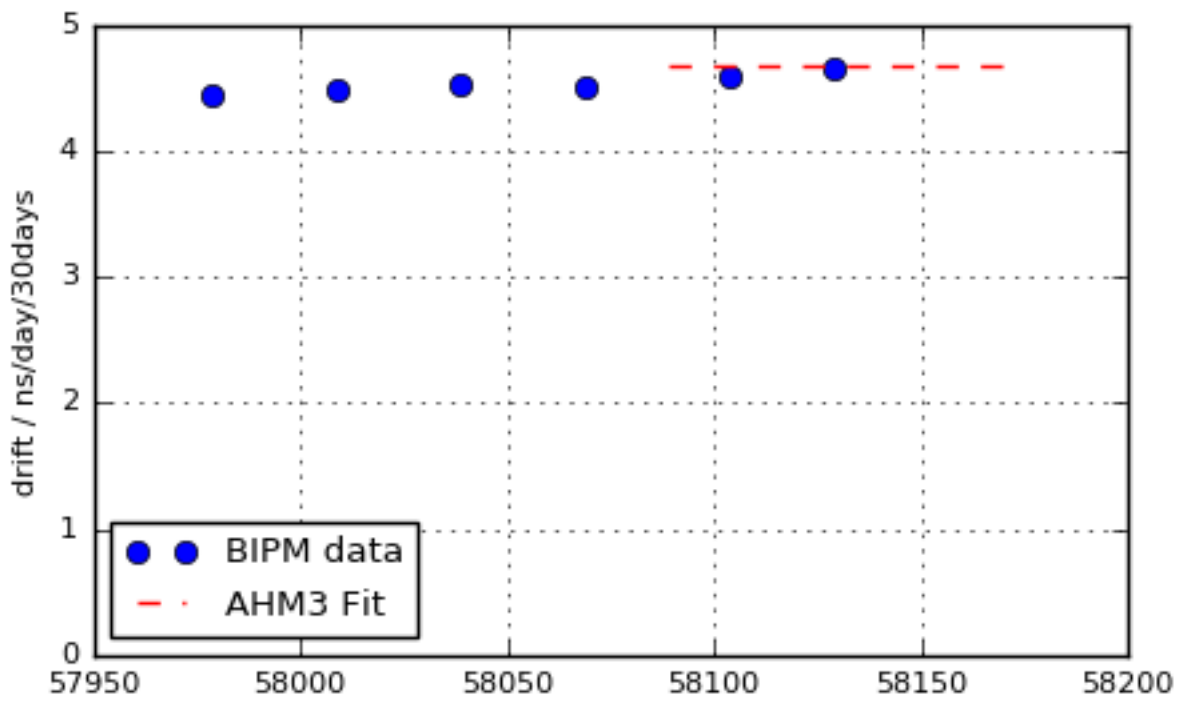
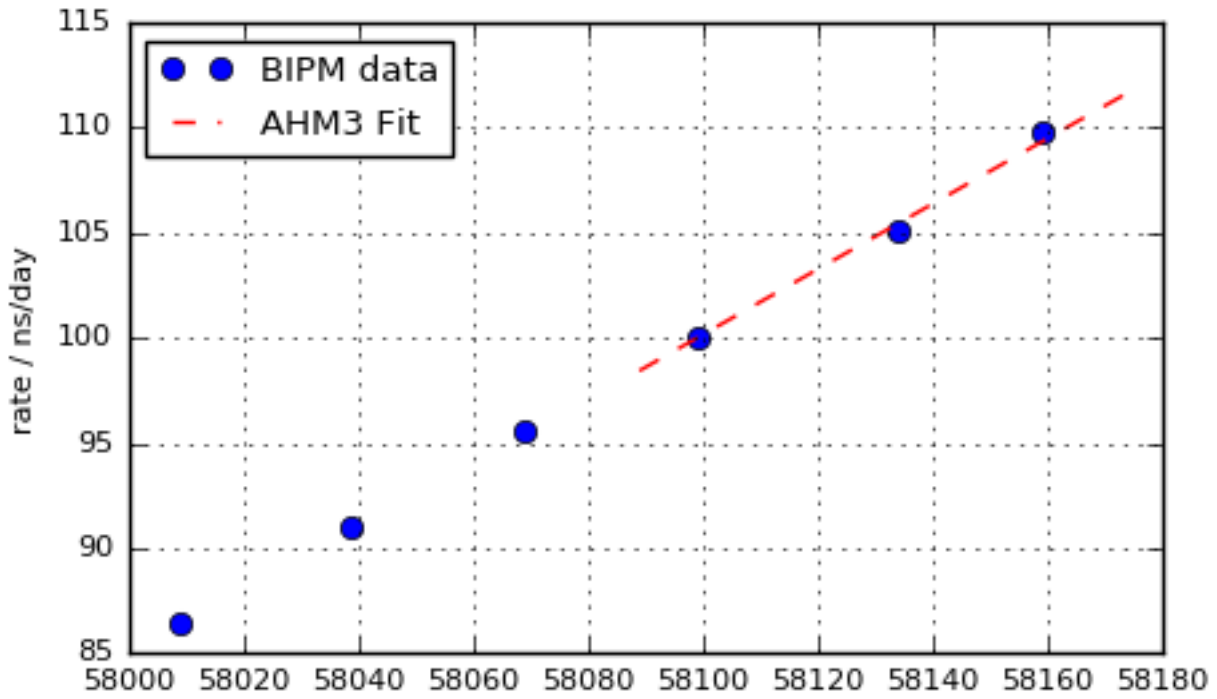


UTC - AHM3 Fit

UTC-AHM3 (2018-03-12 / 58189)
 $x \text{ (ns)} = 43931.411 + 111.665 * d + 0.0778 * d * d$
 $y = -1.29242e-12 + -1.80071e-15 * d$
 $d = (\text{mjd} - \text{mjd0}) \text{ with mjd0} = 58174$

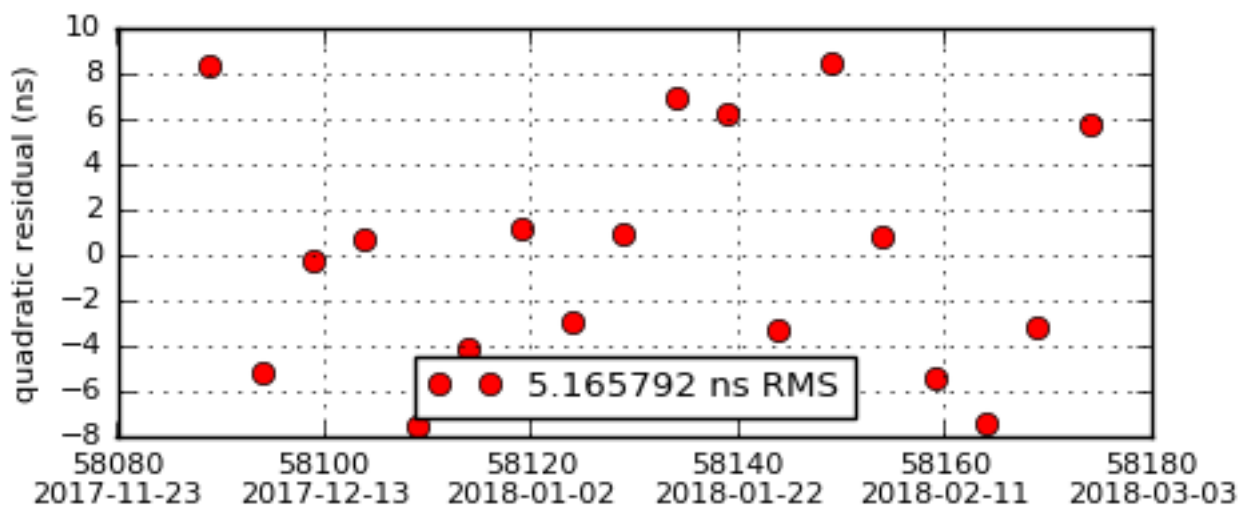
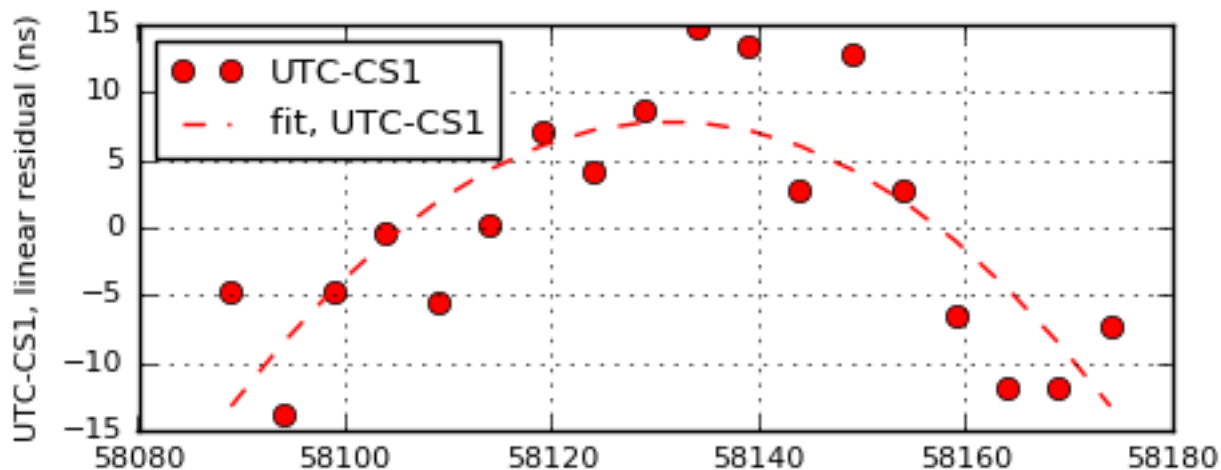
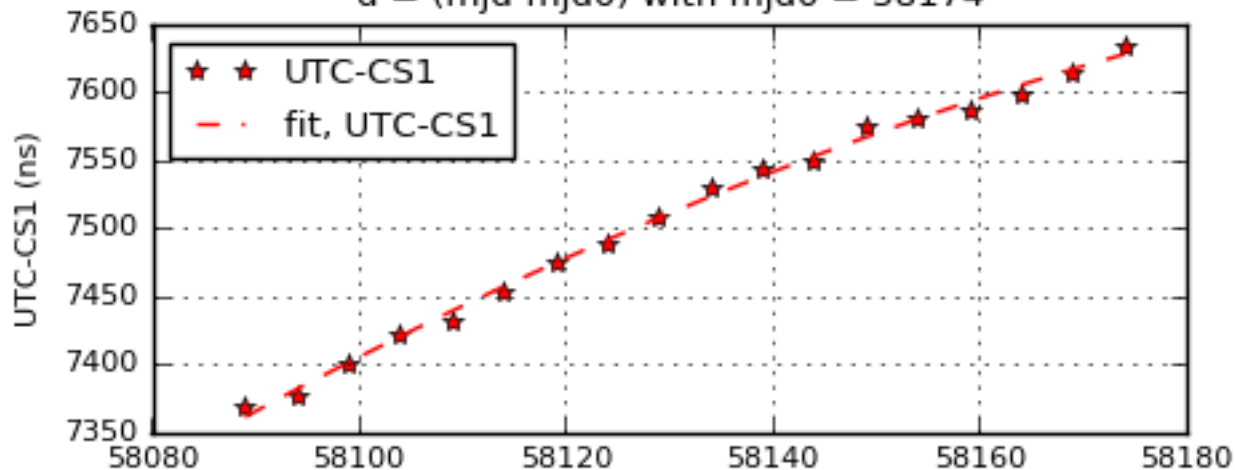


AHM3 Rate and Drift

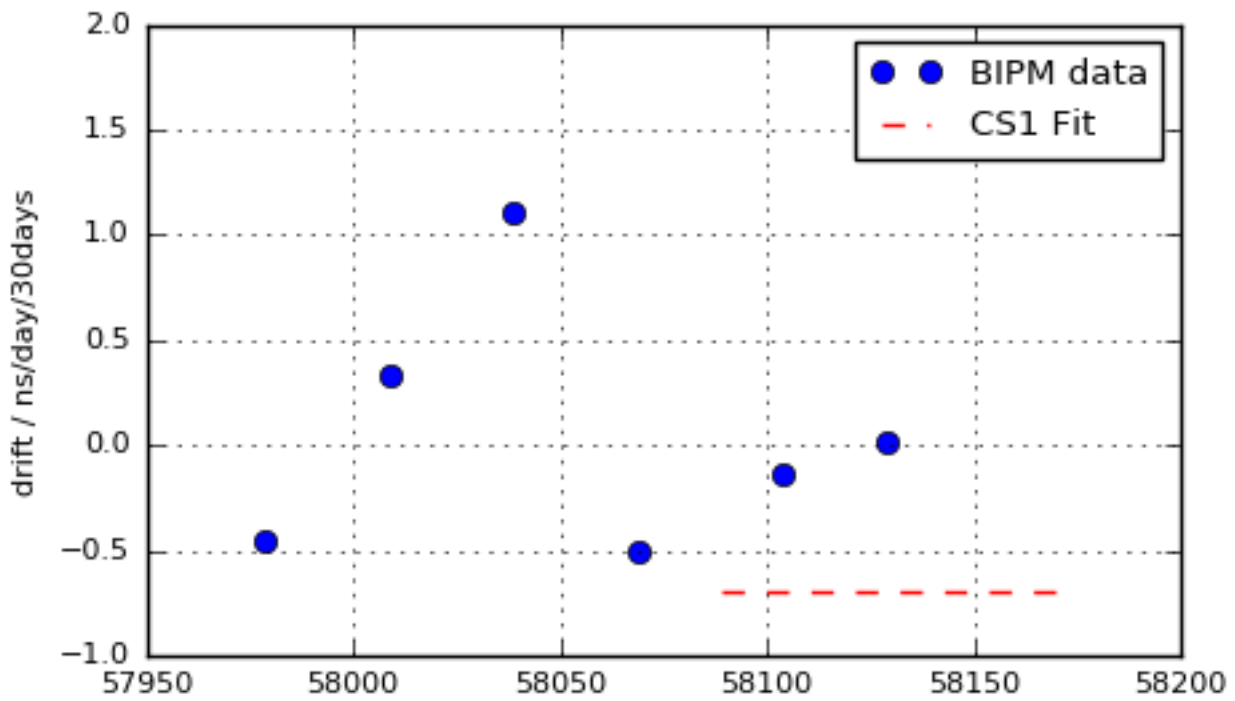
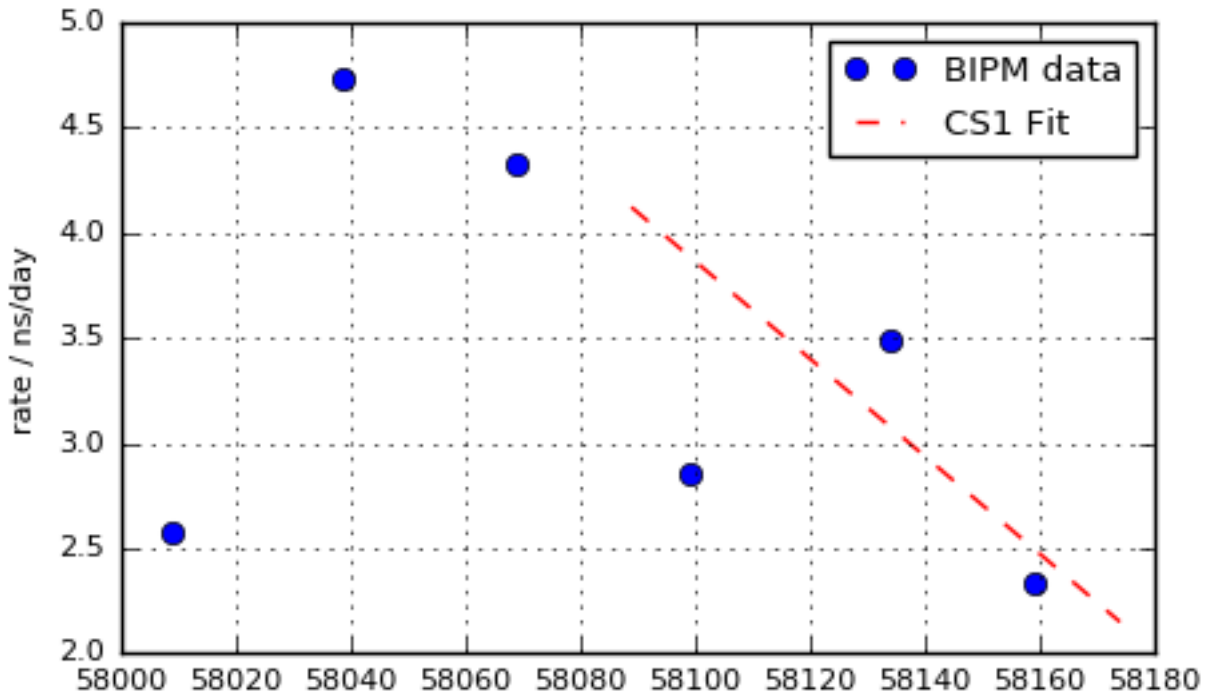


UTC - CS1 Fit

UTC-CS1 (2018-03-12 / 58189)
 $x \text{ (ns)} = 7628.172 + 2.150 * d + -0.0116 * d*d$
 $y = -2.48819e-14 + 2.68545e-16 * d$
 $d = (\text{mjd} - \text{mjd0}) \text{ with mjd0} = 58174$

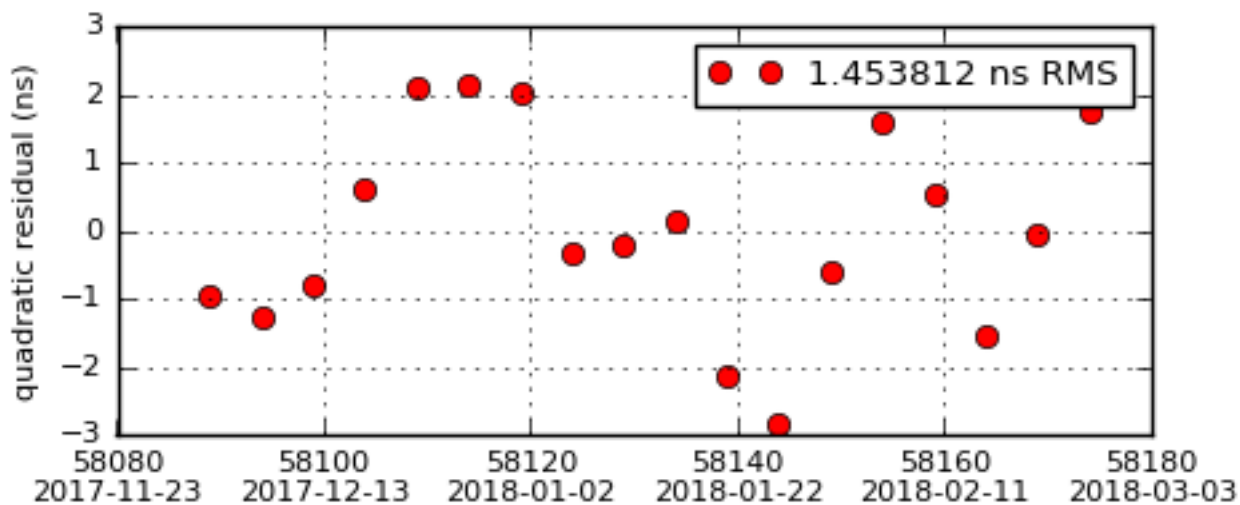
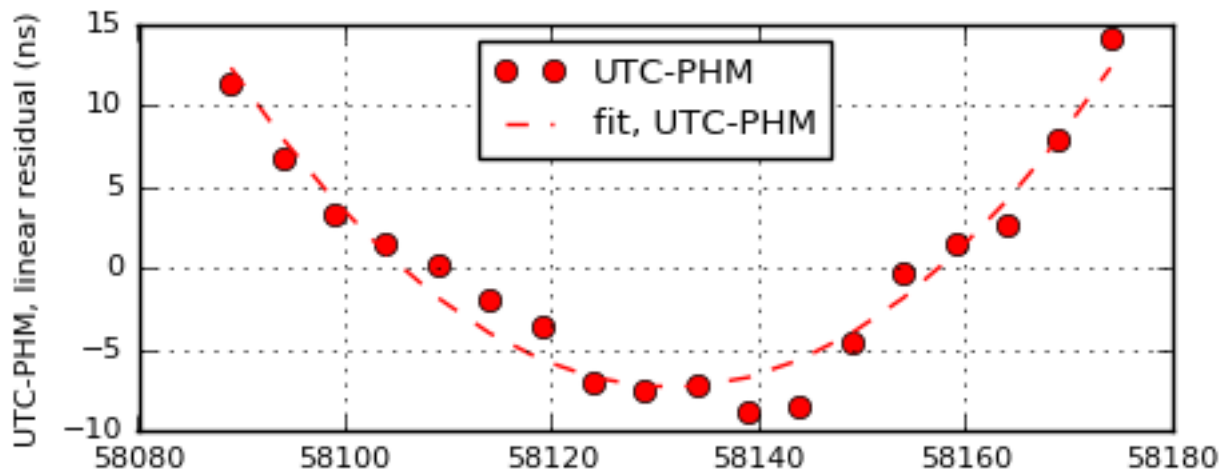
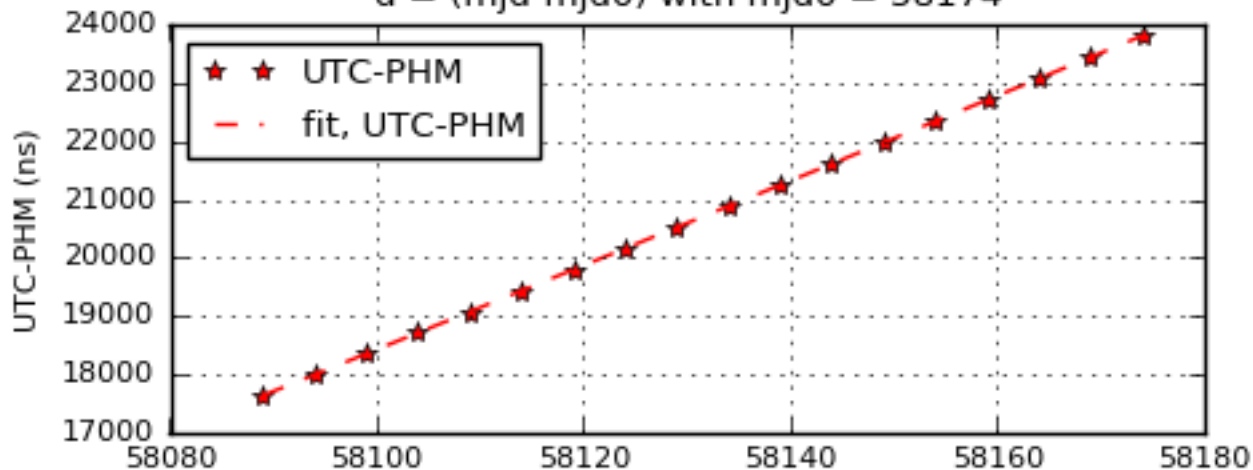


CS1 Rate and Drift

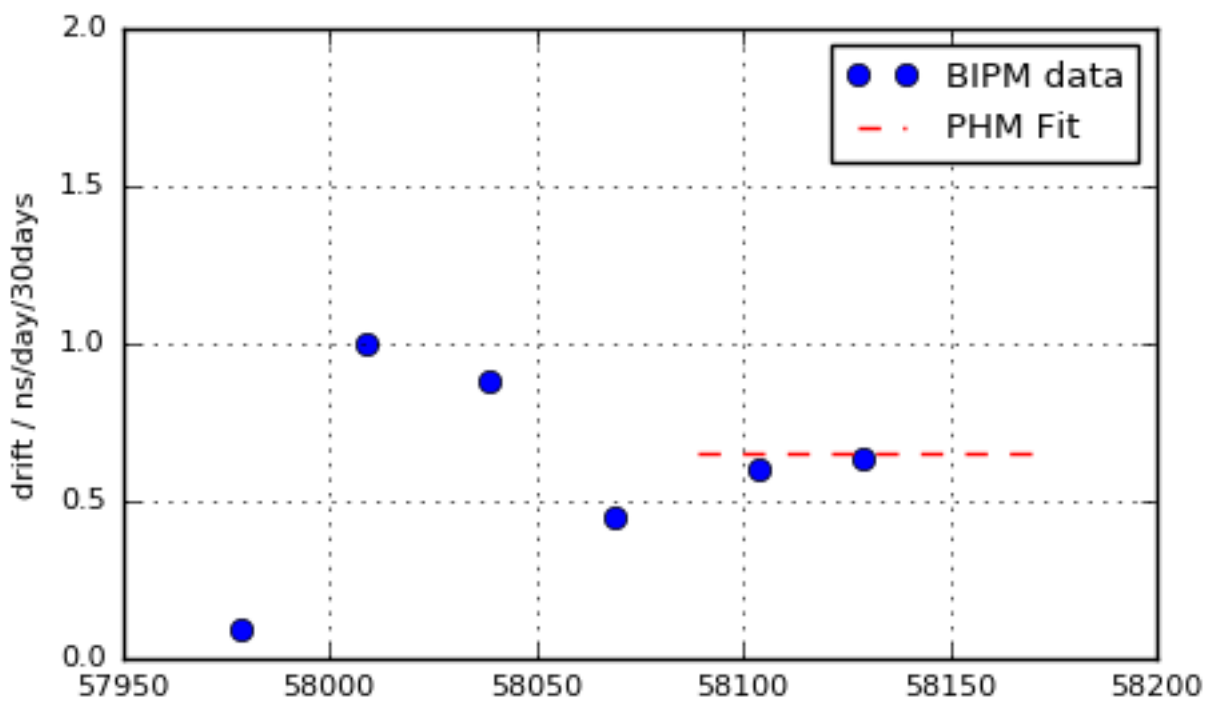
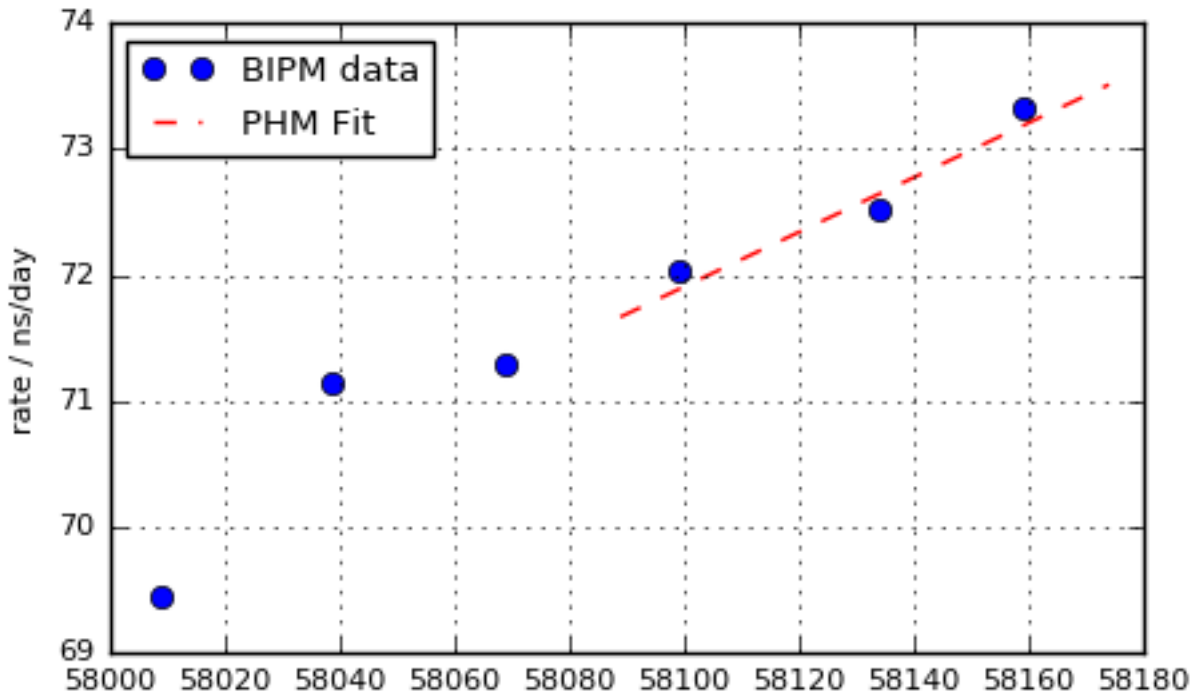


UTC - PHM Fit

UTC-PHM (2018-03-12 / 58189)
 $x \text{ (ns)} = 23807.744 + 73.508 * d + 0.0108 * d * d$
 $y = -8.50784e-13 + -2.50772e-16 * d$
 $d = (\text{mjd} - \text{mjd0}) \text{ with mjd0} = 58174$

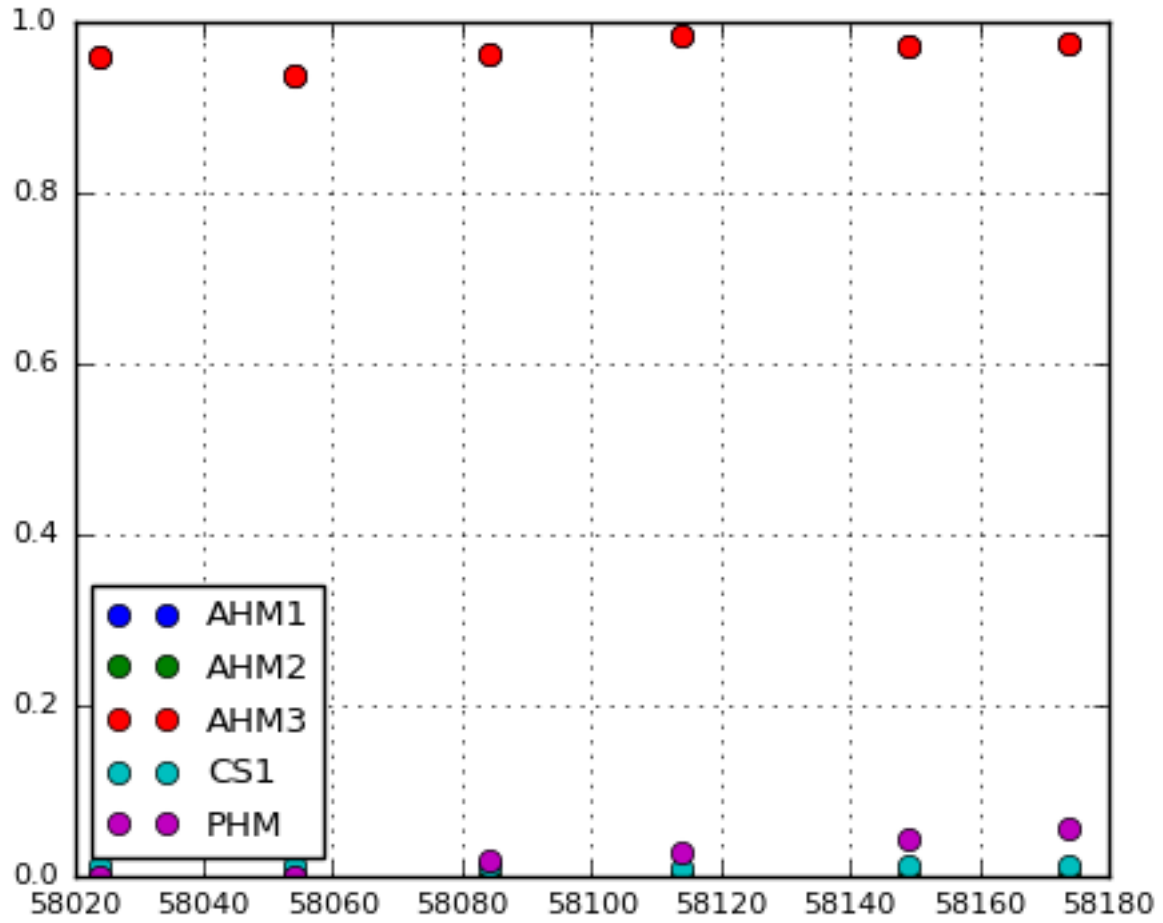


PHM Rate and Drift



Clock Weights

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



End of Bulletin.