

V&V Reference Report

L2 ASCDS Version : 10.5.1.1

Observation 18370 - L2 Version 1
Chandra X-Ray Center

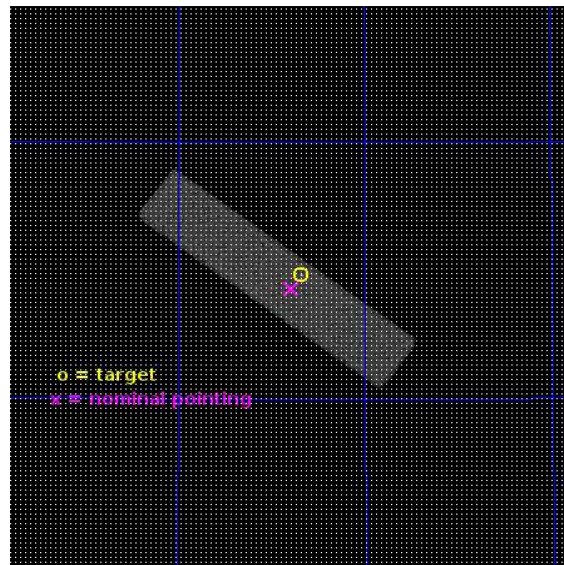
L2 Processing Date : Sep 22 2016

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1 Front

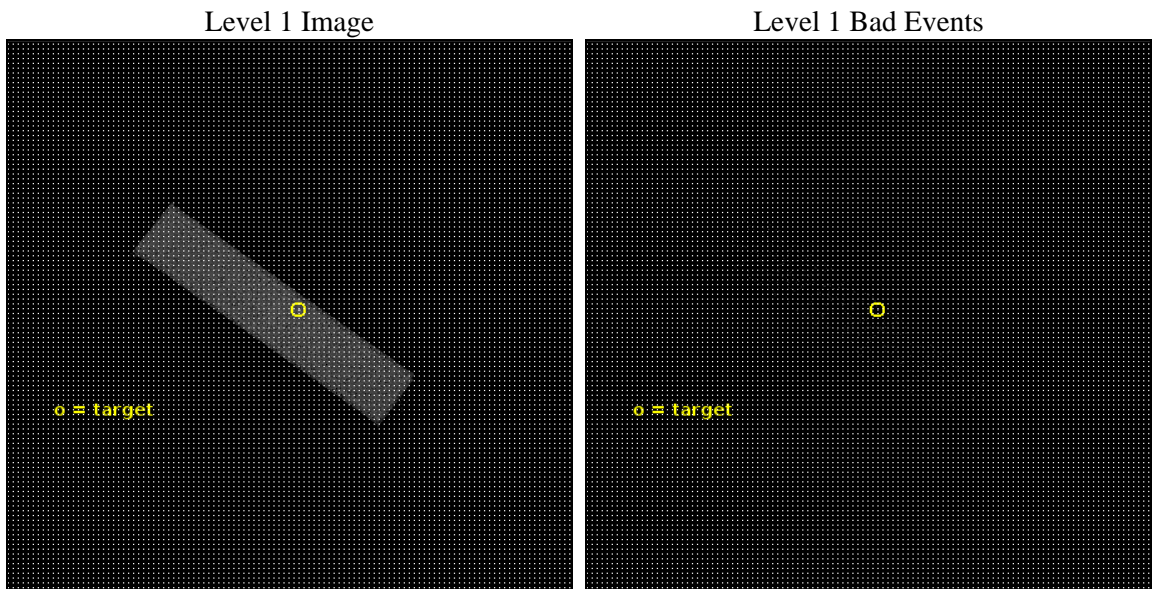
| | | |
|----------|--|---------------------------------------|
| seq_num | 291265 | Sequence number |
| obs_id | 18370 | Observation id |
| title | AO-17 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | ArLac | Source name |
| ra_targ | 332.17 | Observer's specified target RA [deg] |
| dec_targ | 45.742306 | Observer's specified target Dec [deg] |
| ra_nom | 332.19623241754 | Nominal RA [deg] |
| dec_nom | 45.715071927649 | Nominal Dec [deg] |
| roll_nom | 216.25604259268 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 1177.9813178778 | [s] |
| livetime | 1168.9583623673 | Ontime multiplied by DTCOR |
| l2events | 70528 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.5.1.1 | Processing system revision | ontime | 1177.9813178778 | [s] |
| caldsver | 4.7.2 | | l1events | 98401 | Number of level 1 events |
| date | 2016-09-23T01:50:34 | Date and time of file creation | | | |
| revision | 1 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

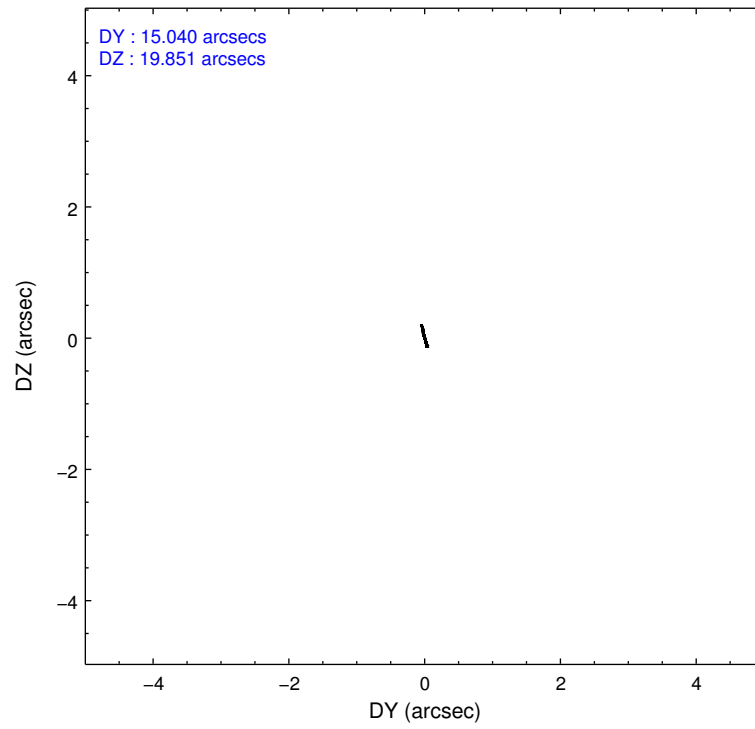
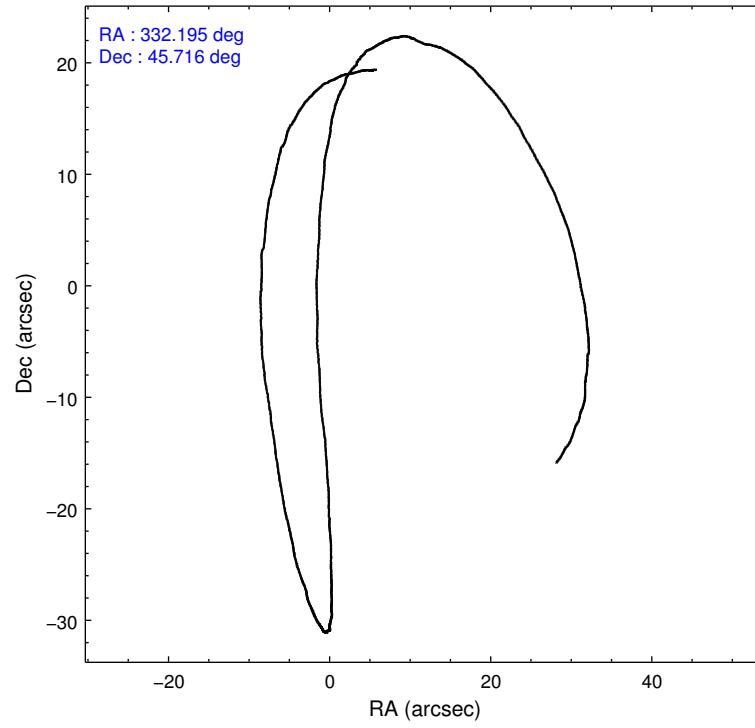
| | segment 1 | segment 2 | segment 3 |
|-----------------|--------------|--------------|--------------|
| level 1 events | 4 | 98395 | 2 |
| rejected events | 4 | 17257 | 2 |
| rejected % | 100% | 17% | 100% |

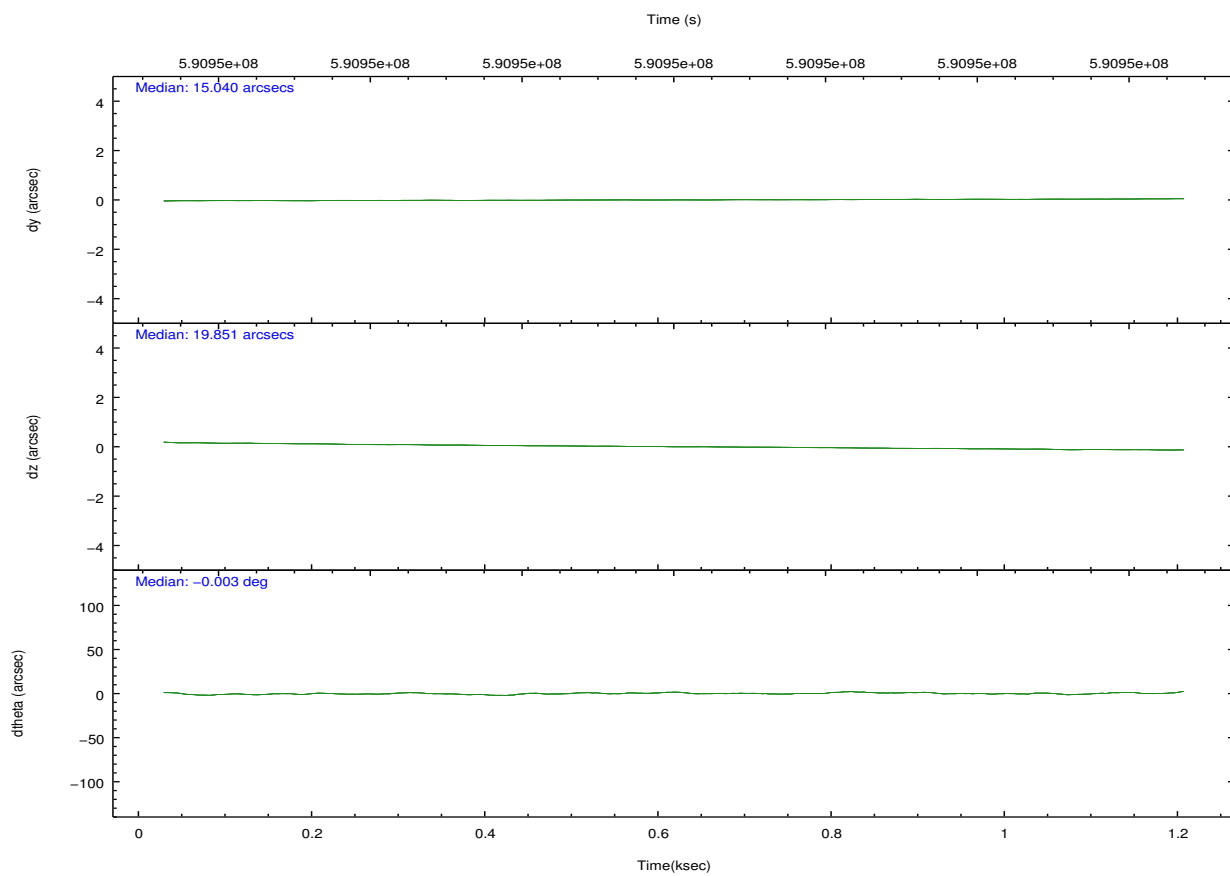
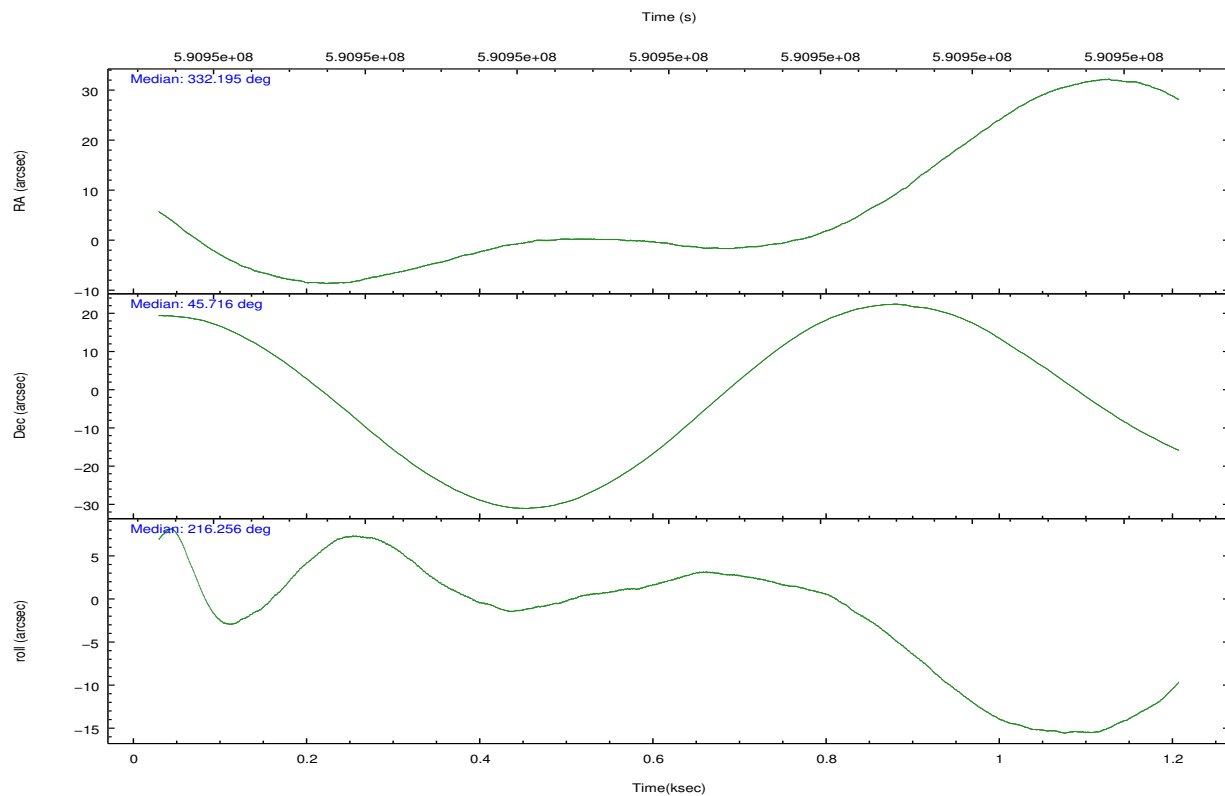
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|-----------------------|----------------------|
| Instrument | HRC | HRC |
| Detector | HRC-S | HRC-S |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 332.211047 | 332.1962324175432 |
| [deg] Pointing Dec | 45.741709 | 45.71507192764901 |
| [deg] Pointing Roll | 216.178098 | 216.2560425926791 |
| [mm] SIM focus pos | -1.533336 | -1.526339935833849 |
| [mm] SIM defocus | 7.710433287538843e-07 | 0.006996703570447904 |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 |
| [s] Observation start time (MET) | 590949200.184000 | 590948824.28815 |
| Observation start date | 2016-09-22T16:32:12 | 2016-09-22T16:27:04 |
| [s] Observation end time (MET) | 590950200.184000 | 590950958.85077 |
| Observation end date | 2016-09-22T16:48:52 | 2016-09-22T17:02:38 |

| Parameter | Planned | Actual |
|------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |

2.3 Aspect



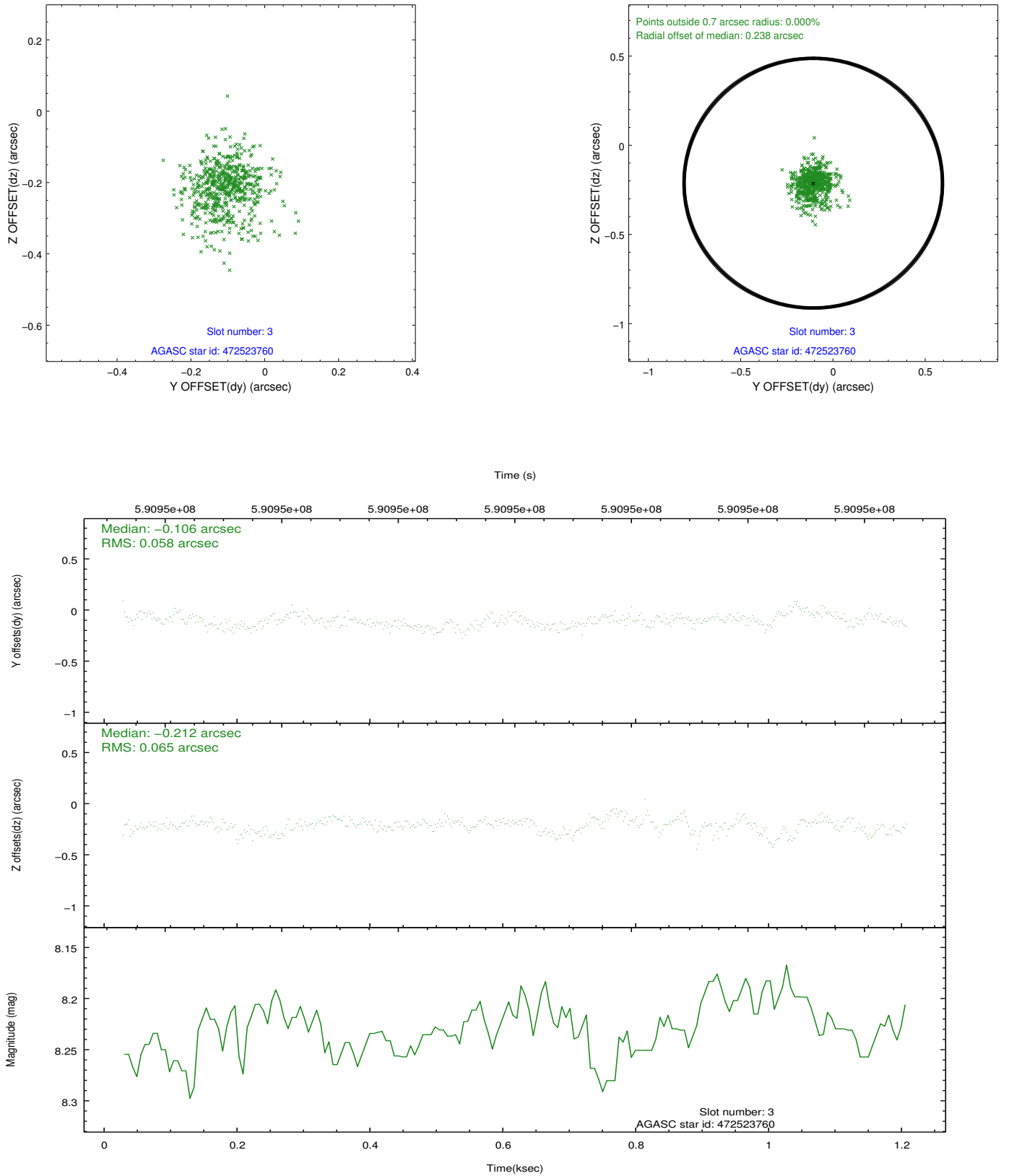


Slot Statistics

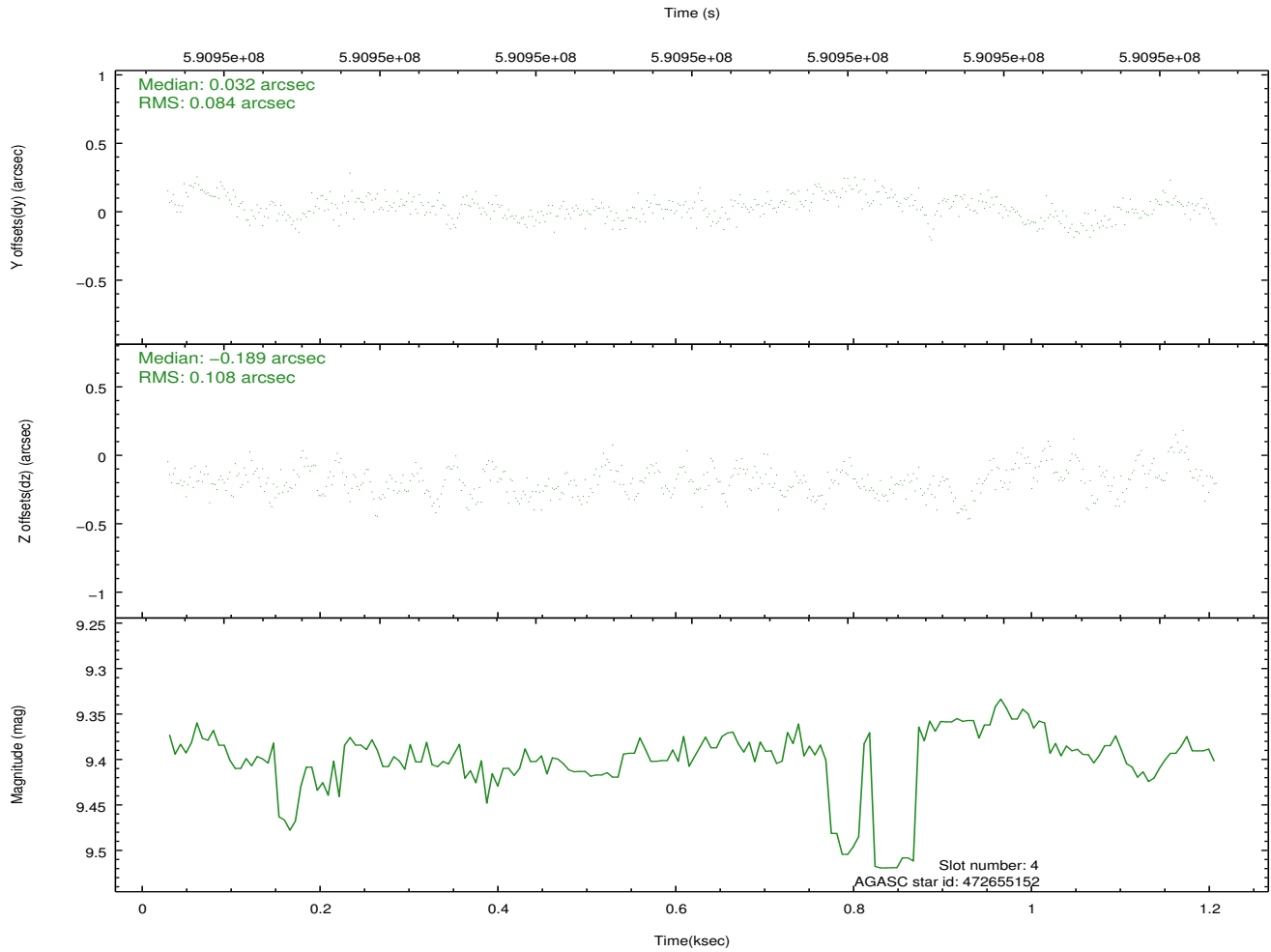
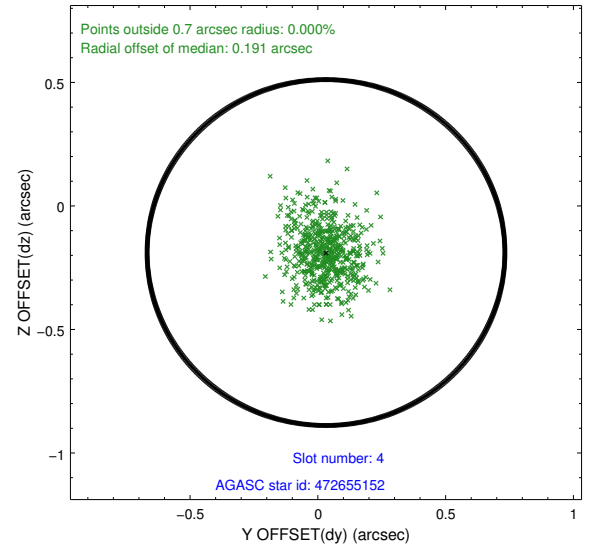
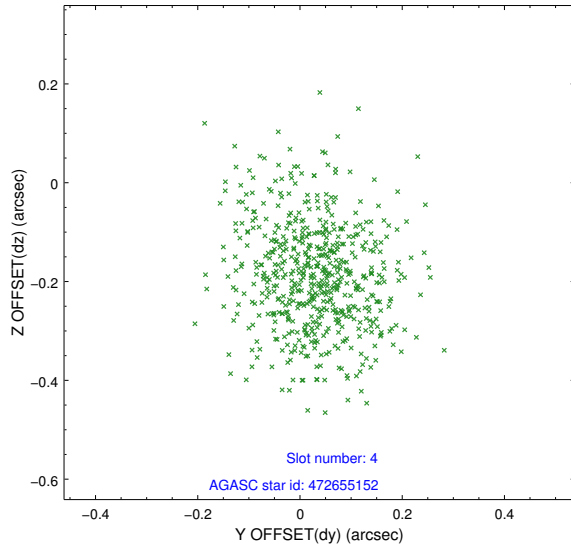
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | | HRC-S-2 | 7.07 | 288 | 0.235 | -0.254 | 0.009 | 0.014 | 0.000000 | 0.000000 | 1230.40 | -461.58 |
| 1 | FID | | HRC-S-3 | 7.08 | 288 | -0.063 | -0.056 | 0.006 | 0.013 | 0.000000 | 0.000000 | -1168.01 | 559.17 |
| 2 | FID | | HRC-S-4 | 7.05 | 288 | 0.233 | 0.015 | 0.008 | 0.015 | 0.000000 | 0.000000 | 1224.92 | 565.35 |
| 3 | GUIDE | used | 472523760 | 8.23 | 576 | -0.106 | -0.212 | 0.091 | 0.157 | 331.645363 | 45.403260 | 1871.54 | 136.39 |
| 4 | GUIDE | used | 472655152 | 9.39 | 576 | 0.032 | -0.189 | 0.146 | 0.237 | 332.504239 | 45.862991 | -847.48 | 81.82 |
| 5 | GUIDE | used | 472665256 | 8.99 | 576 | 0.206 | 0.301 | 0.118 | 0.186 | 332.808125 | 46.195041 | -2167.85 | -441.91 |
| 6 | GUIDE | used | 420754040 | 9.04 | 575 | -0.361 | -0.151 | 0.110 | 0.181 | 331.917939 | 44.882543 | 2423.63 | 2055.22 |
| 7 | GUIDE | used | 472533912 | 9.13 | 575 | 0.231 | 0.263 | 0.141 | 0.234 | 331.791136 | 46.368695 | -486.54 | -2434.82 |

2.4 Star Slots

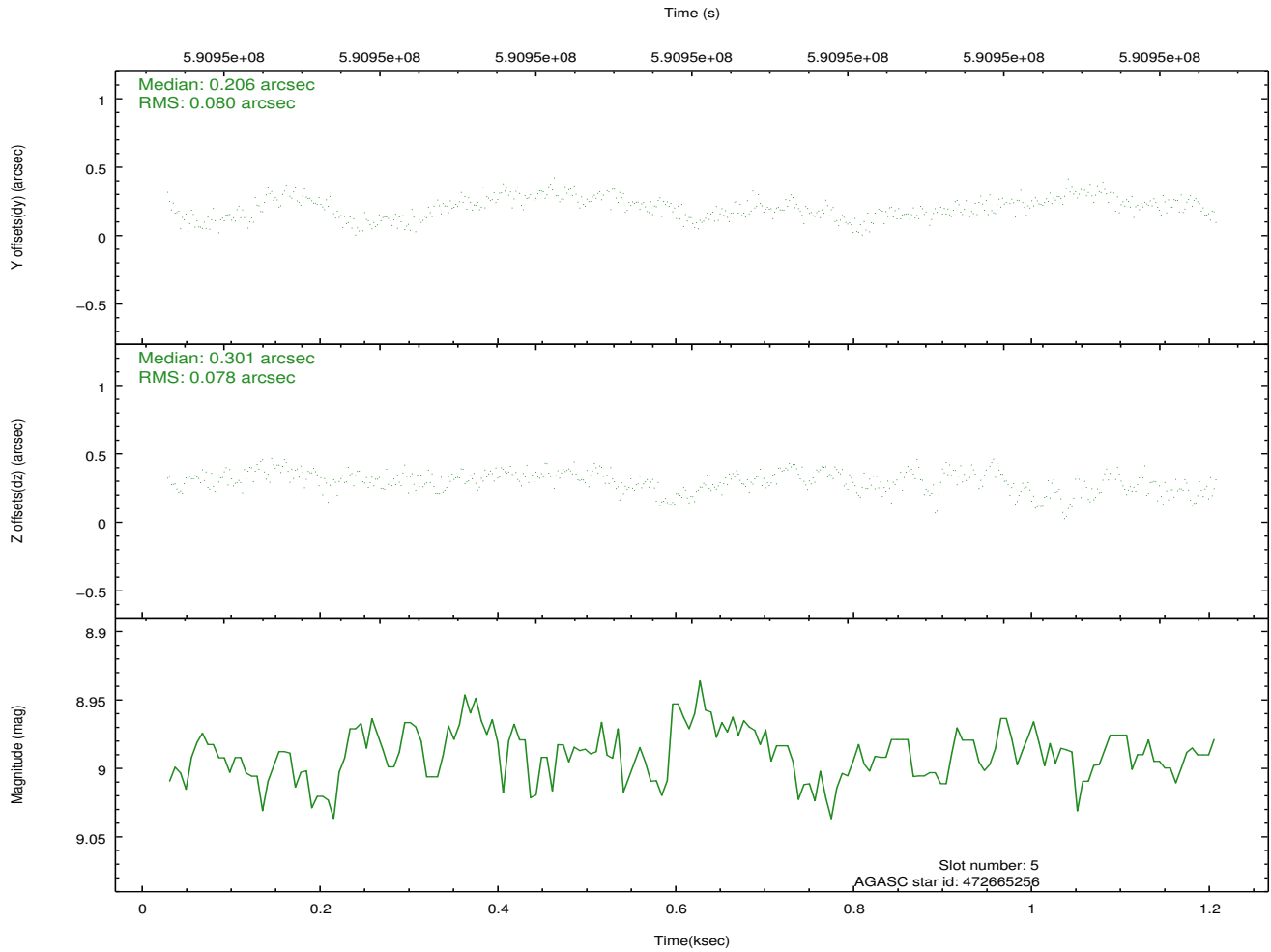
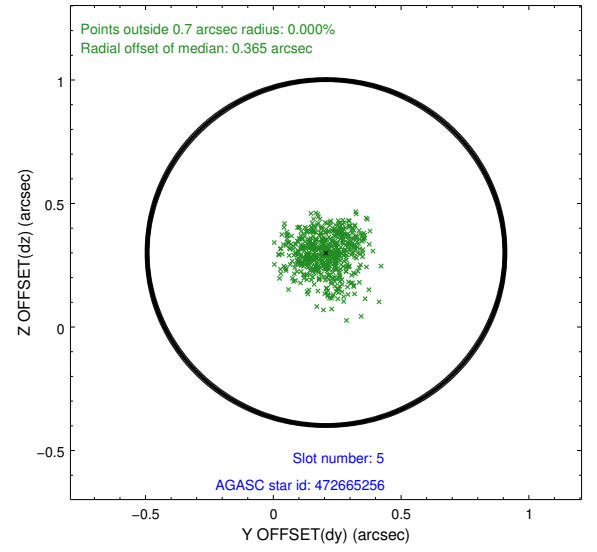
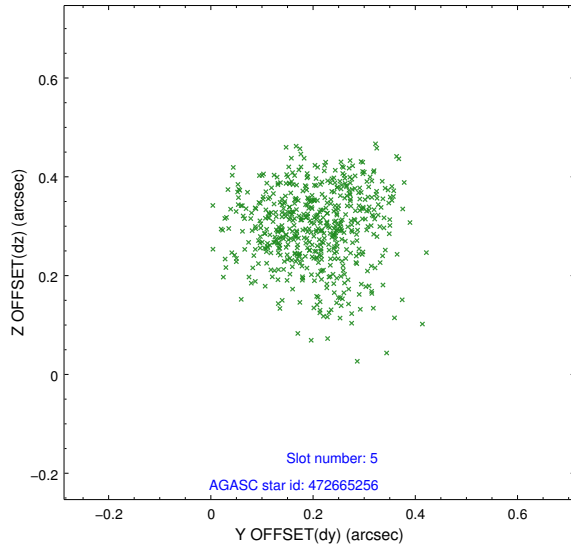
2.4.1 Slot 3



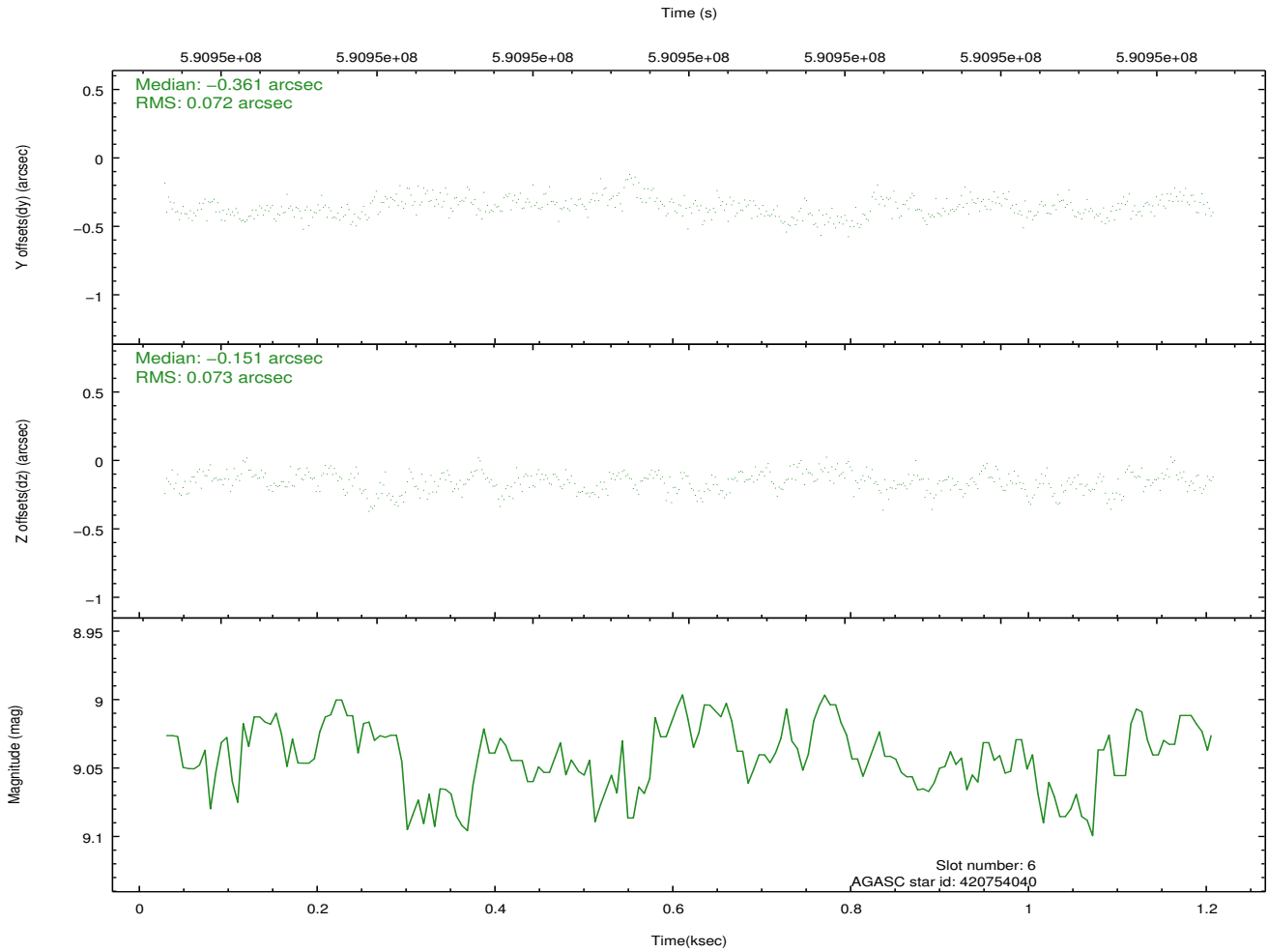
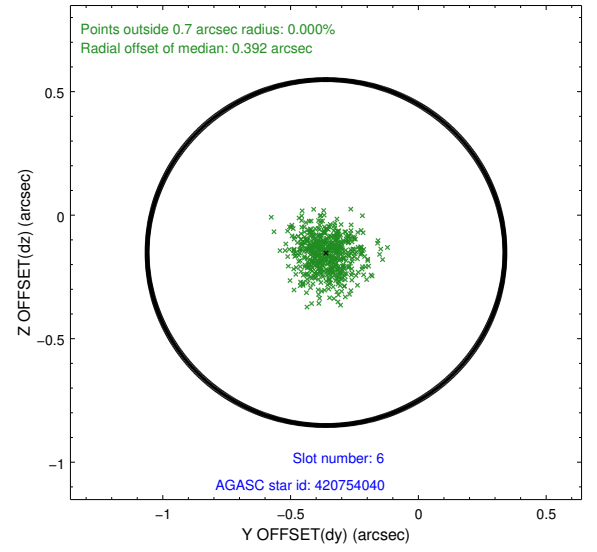
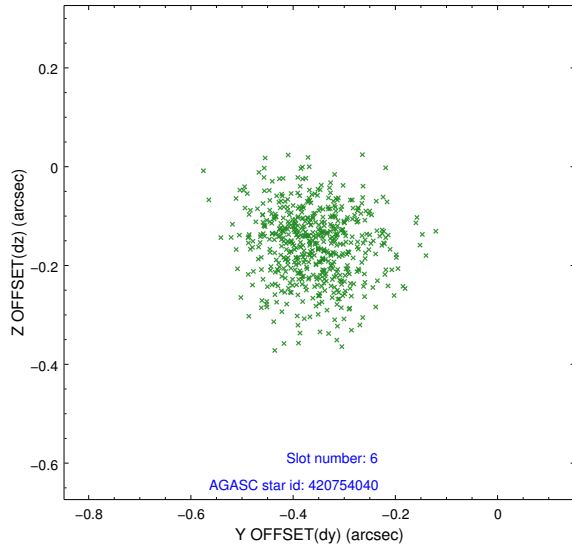
2.4.2 Slot 4



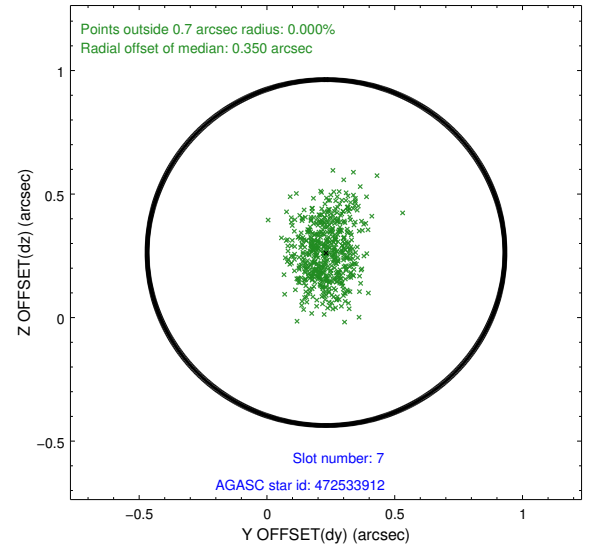
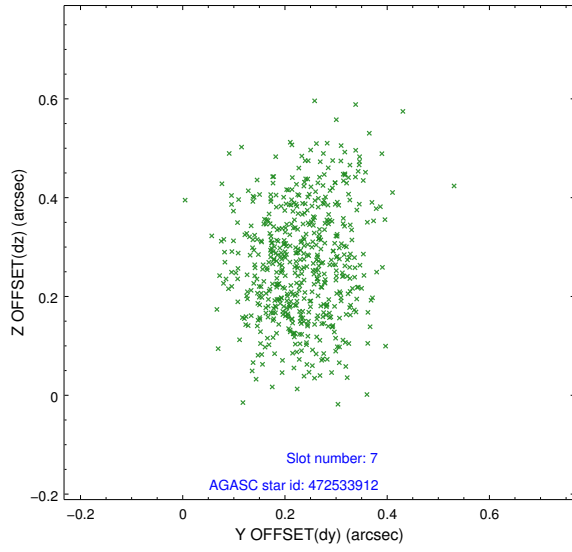
2.4.3 Slot 5



2.4.4 Slot 6

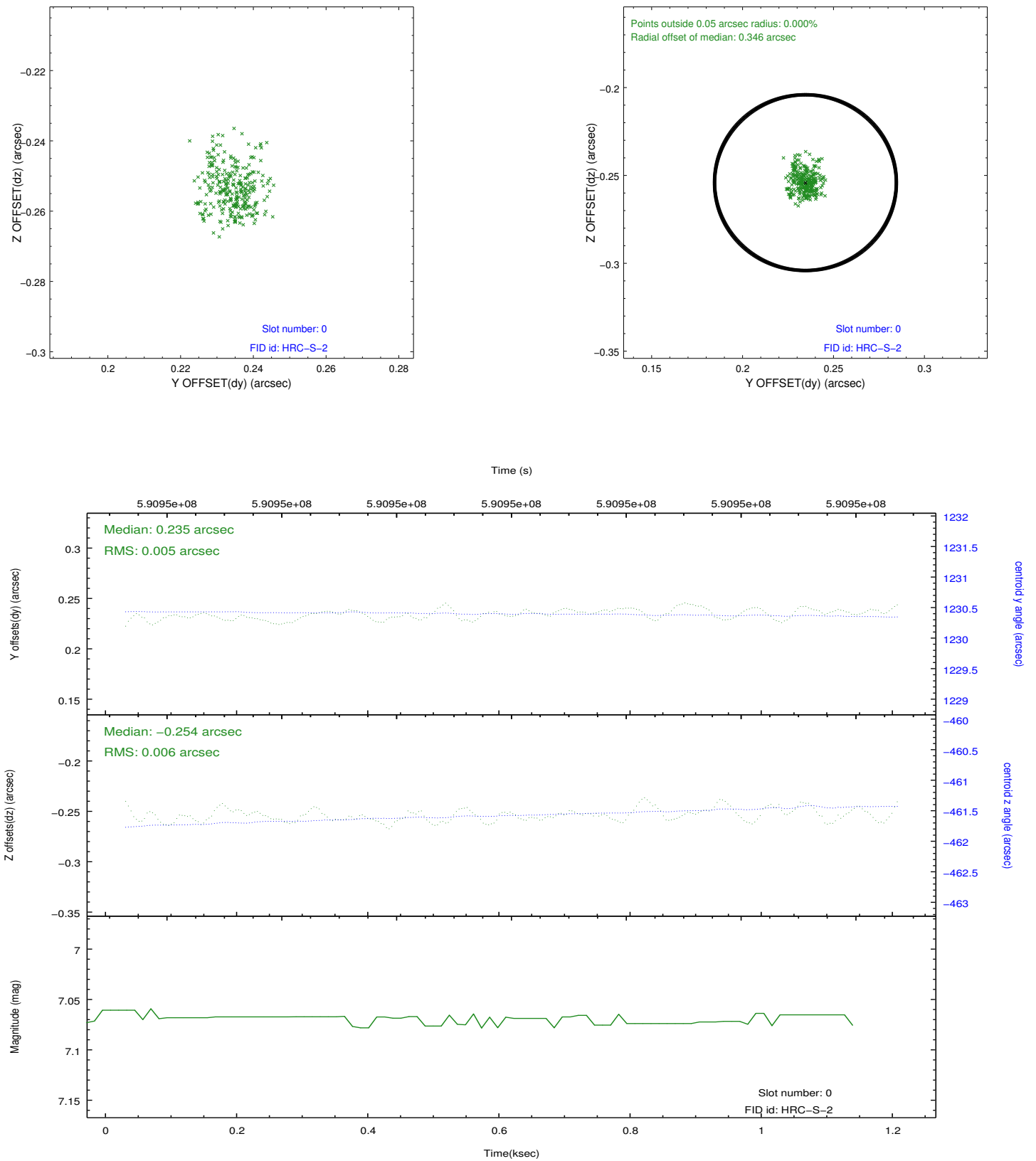


2.4.5 Slot 7

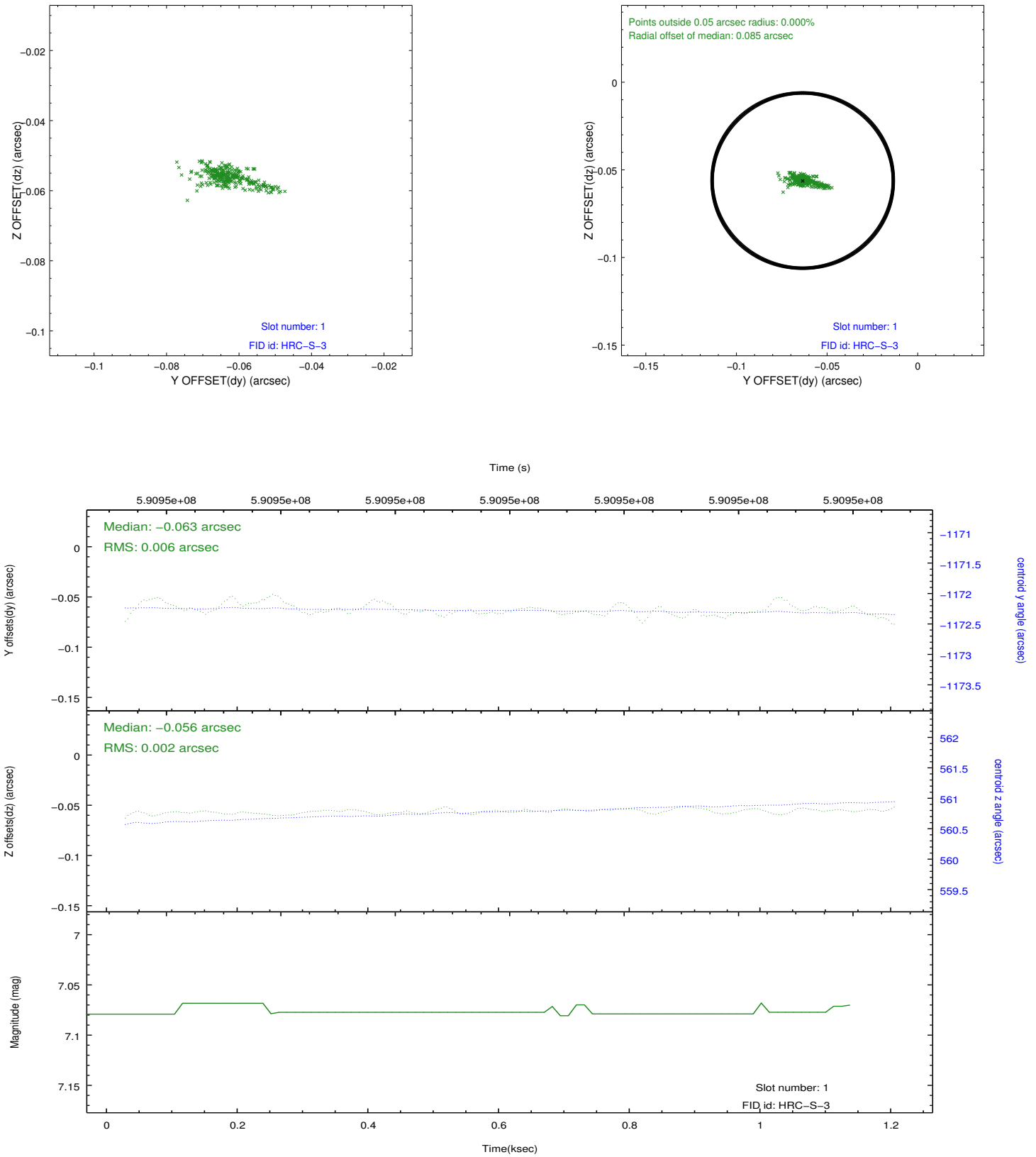


2.5 FID Slots

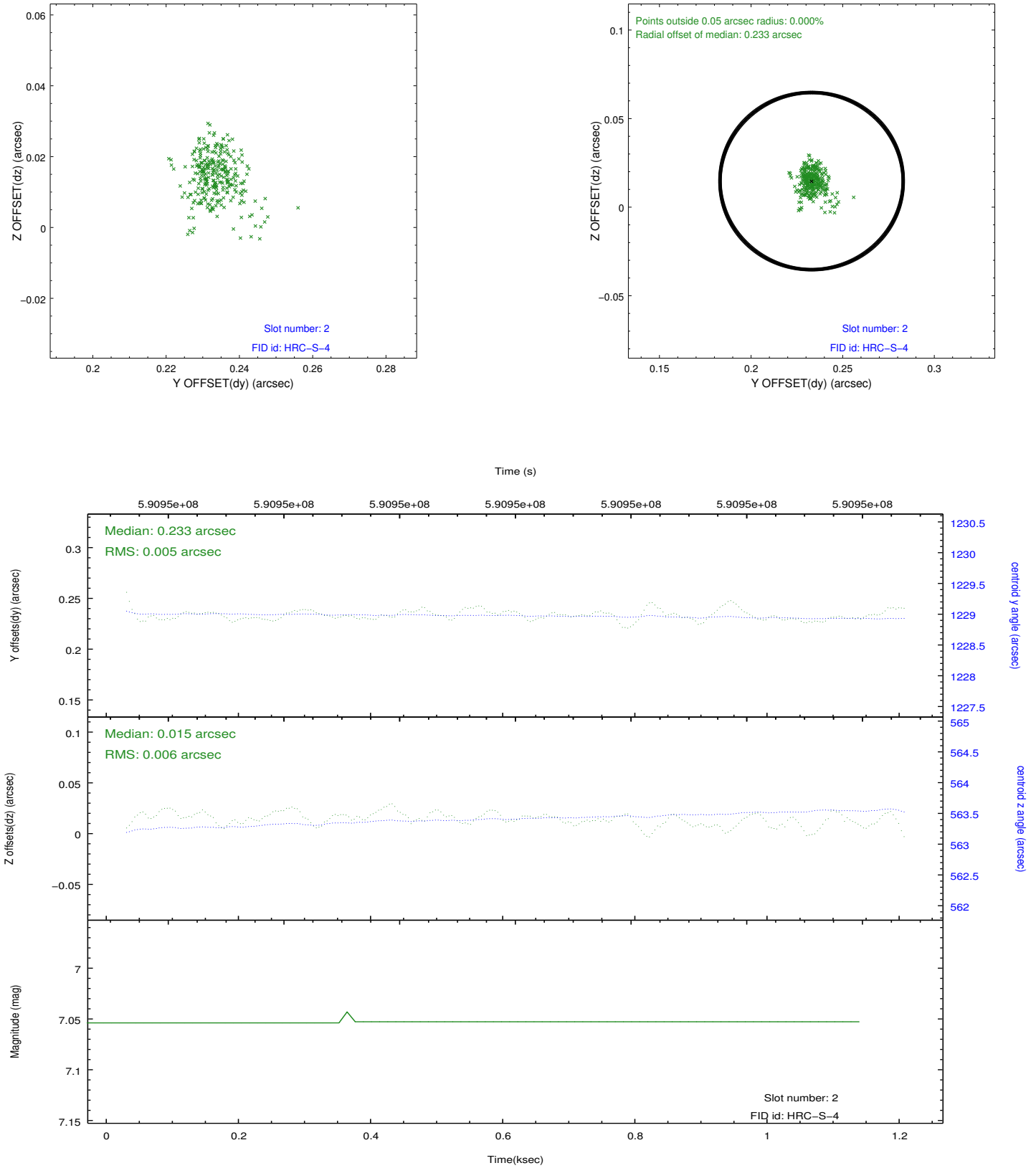
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2016.09.23 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.1779813178778 |

A.2 Comments