

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19797 - L2 Version 1
Chandra X-Ray Center

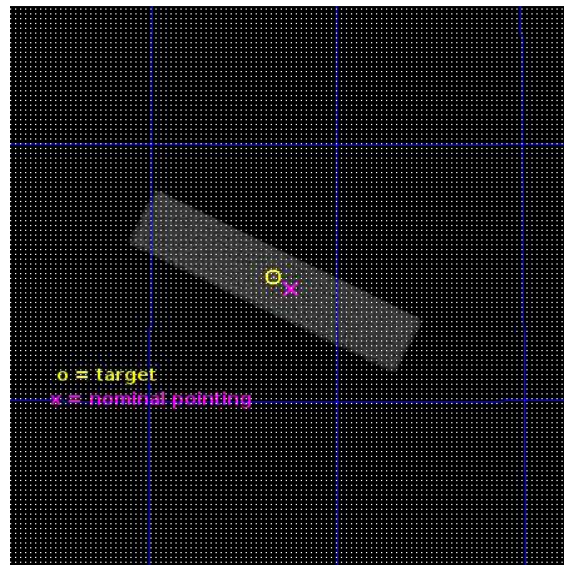
L2 Processing Date : Sep 15 2017

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1 Front

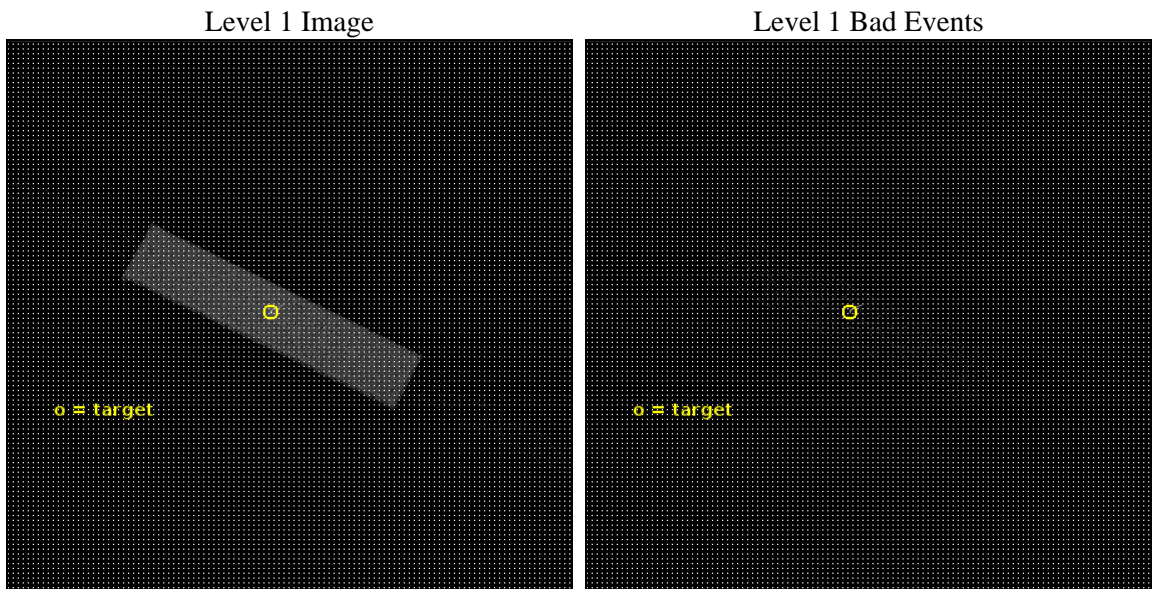
| | | |
|----------|--|---------------------------------------|
| seq_num | 291314 | Sequence number |
| obs_id | 19797 | Observation id |
| title | AO-18 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain | Proposal title |
| observer | CXC Calibration | Principal investigator |
| 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 | 332.12090753068 | Nominal RA [deg] |
| dec_nom | 45.719537035714 | Nominal Dec [deg] |
| roll_nom | 206.87492805668 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 1173.8813186884 | [s] |
| livetime | 1164.4559562676 | Ontime multiplied by DTCOR |
| l2events | 74425 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.6 | Processing system revision | ontime | 1173.8813186884 | [s] |
| caldsver | 4.7.6 | | l1events | 112283 | Number of level 1 events |
| date | 2017-09-15T14:45:21 | Date and time of file creation | | | |
| revision | 1 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

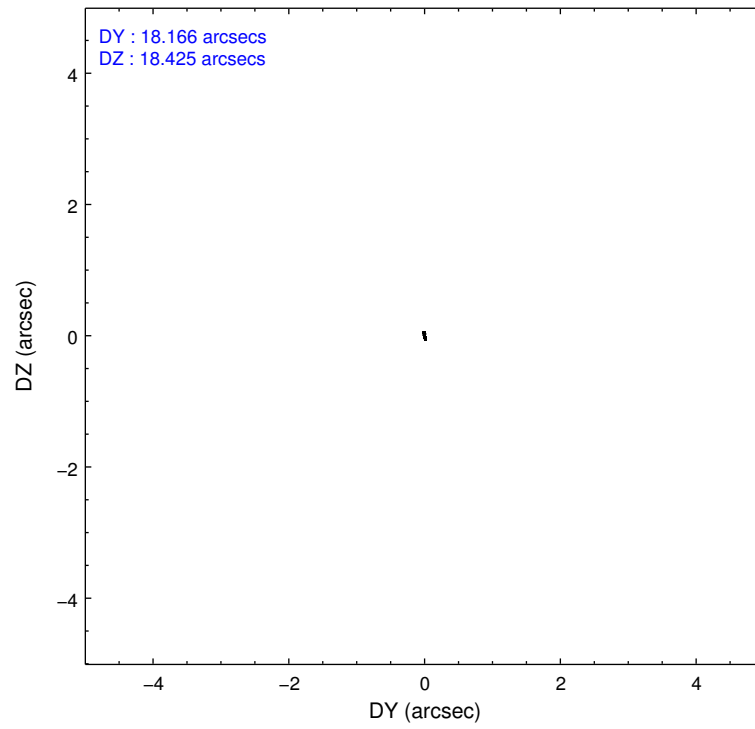
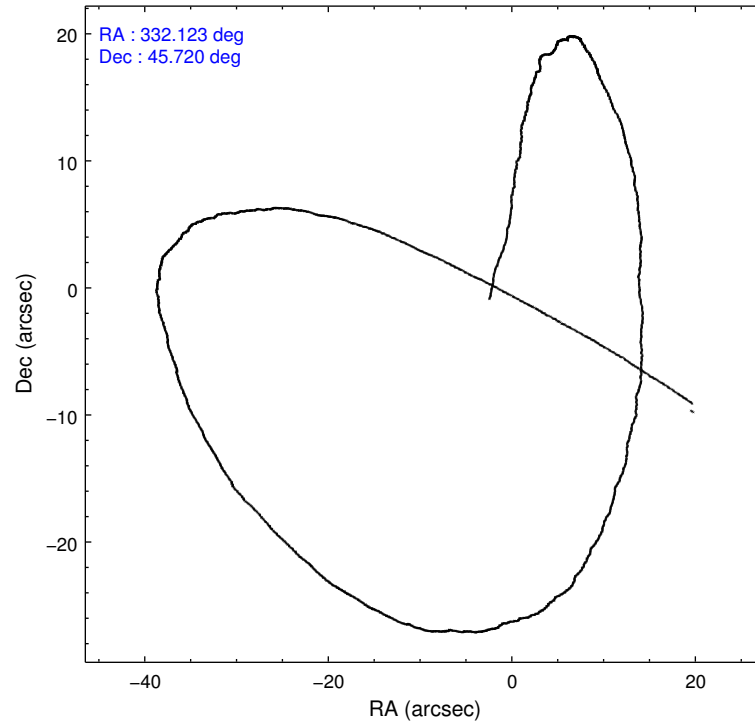
| | segment 1 | segment 2 | segment 3 |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events | 922 | 110431 | 930 |
| rejected events | 922 | 24120 | 930 |
| rejected % | 100% | 21% | 100% |

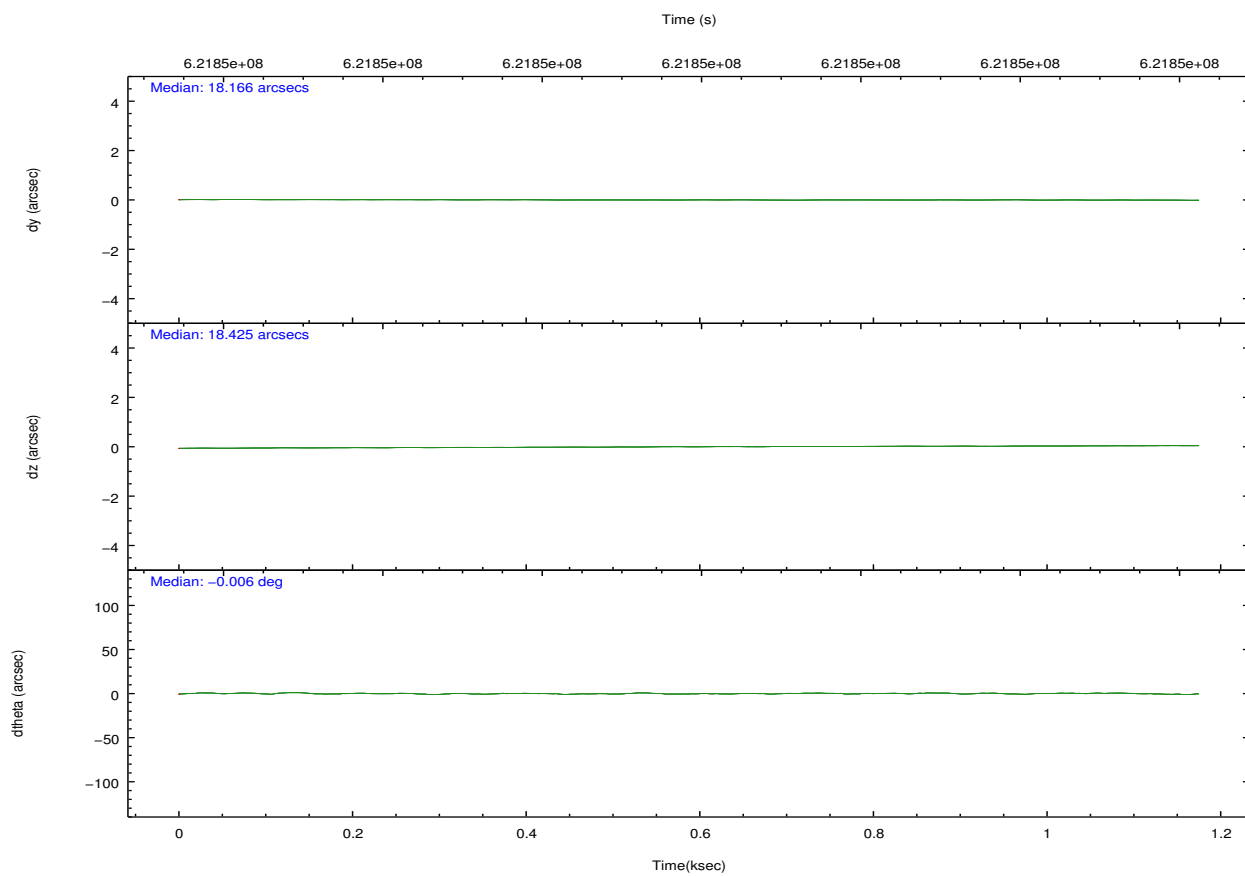
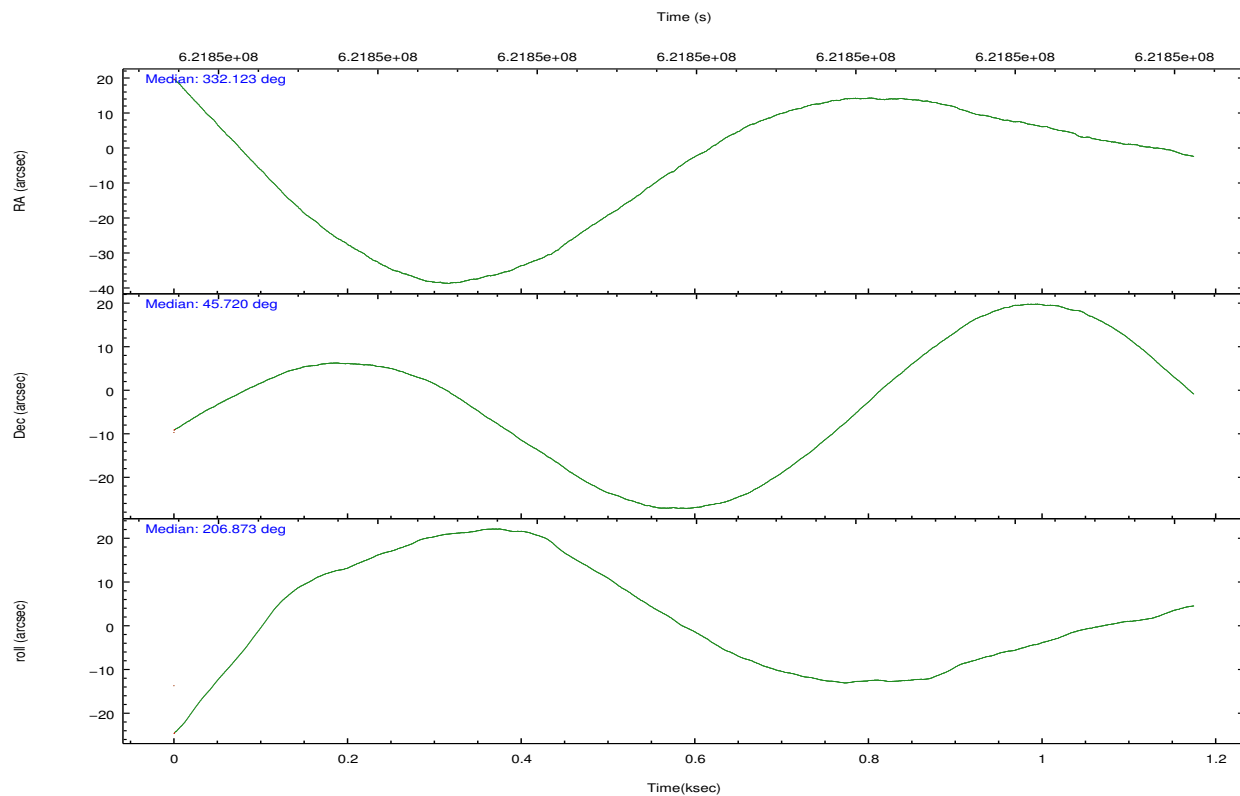
2.2 Compared Parameters

| 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 | 332.142179 | 332.1209075306798 |
| [deg] Pointing Dec | 45.743490 | 45.71953703571425 |
| [deg] Pointing Roll | 206.792318 | 206.8749280566843 |
| [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) | 621846392.184000 | 621846016.08117 |
| Observation start date | 2017-09-15T07:05:23 | 2017-09-15T07:00:16 |
| [s] Observation end time (MET) | 621847392.184000 | 621847526.4187599 |
| Observation end date | 2017-09-15T07:22:03 | 2017-09-15T07:25:26 |

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

2.3 Aspect



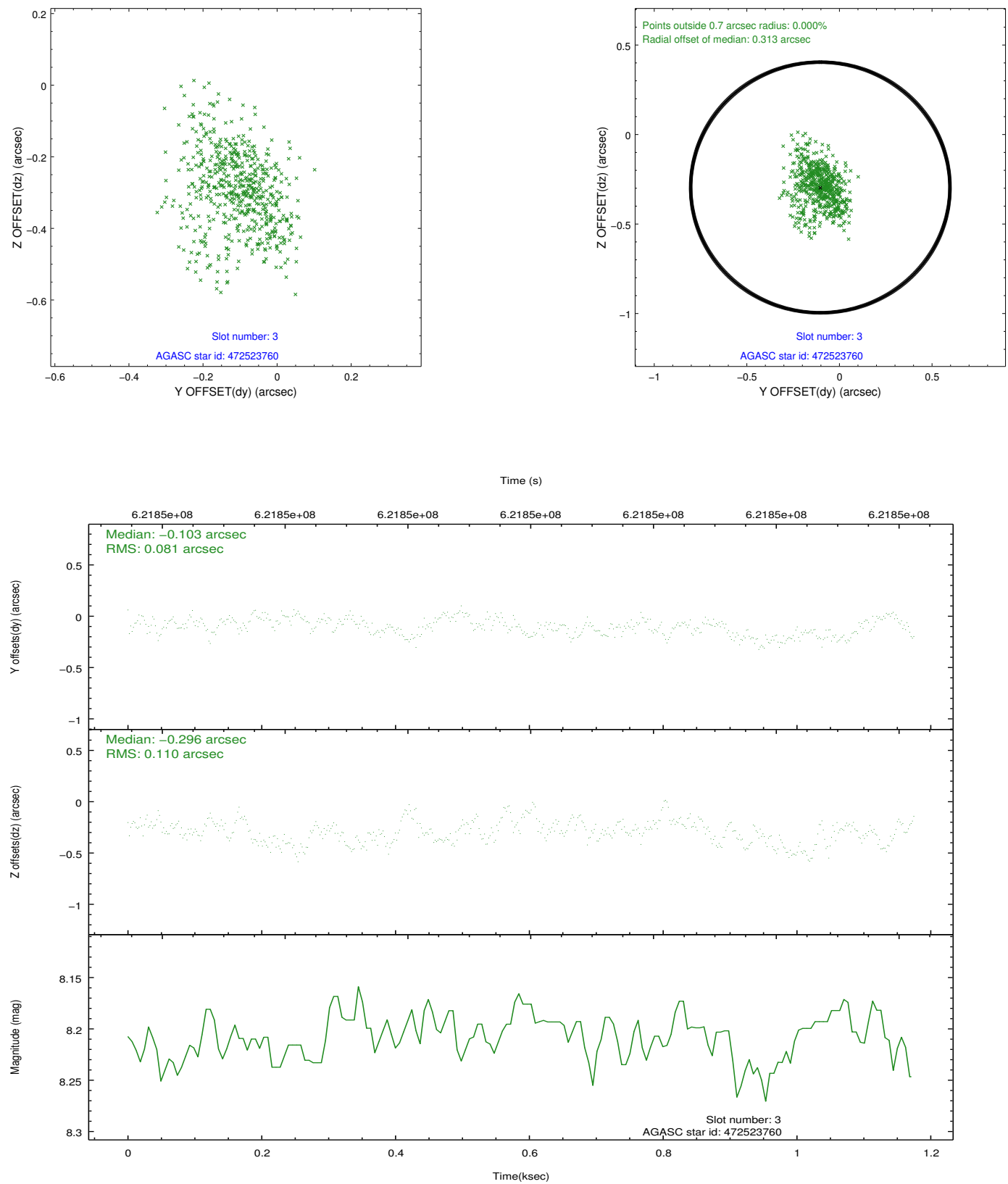


Slot Statistics

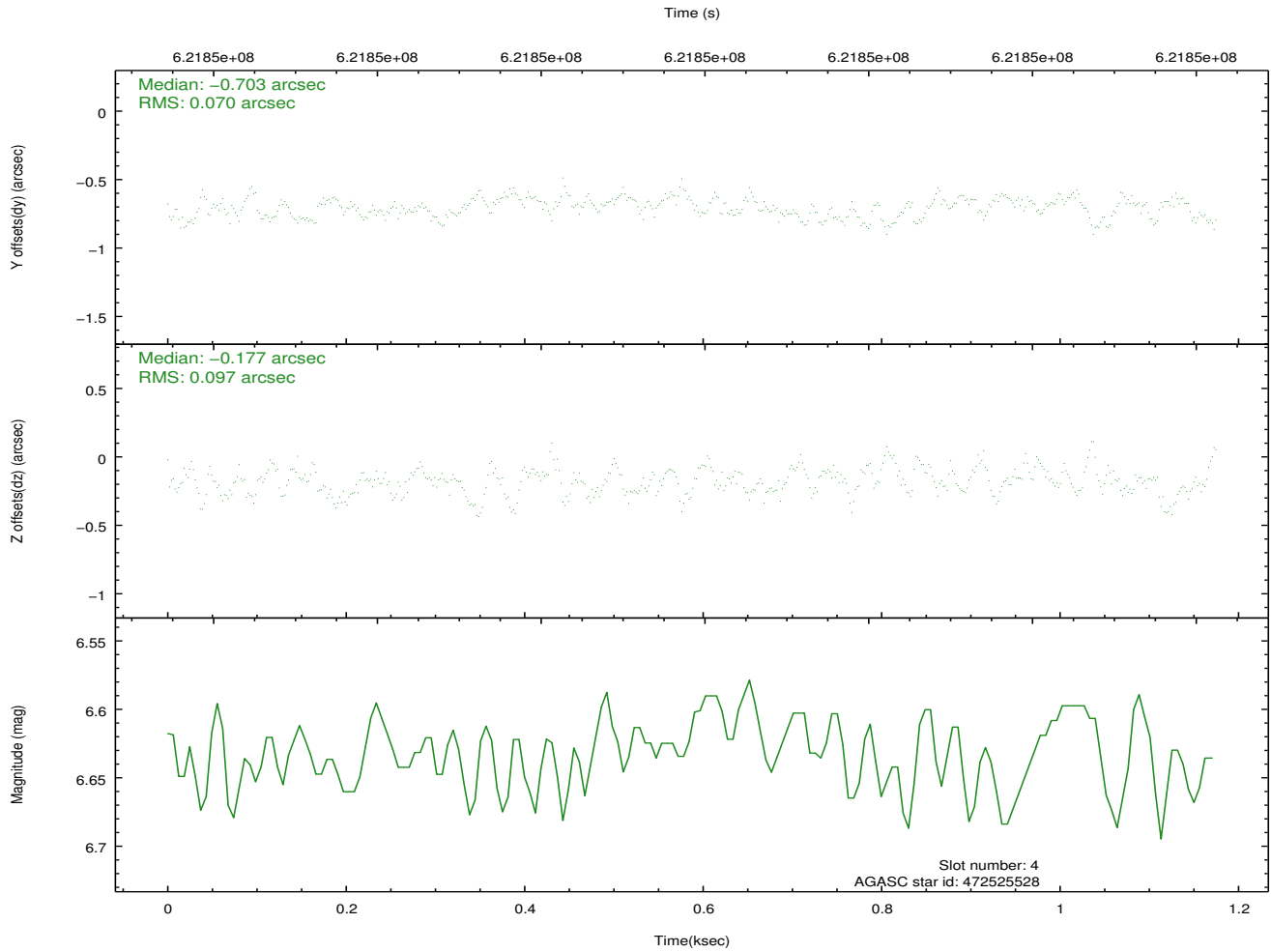
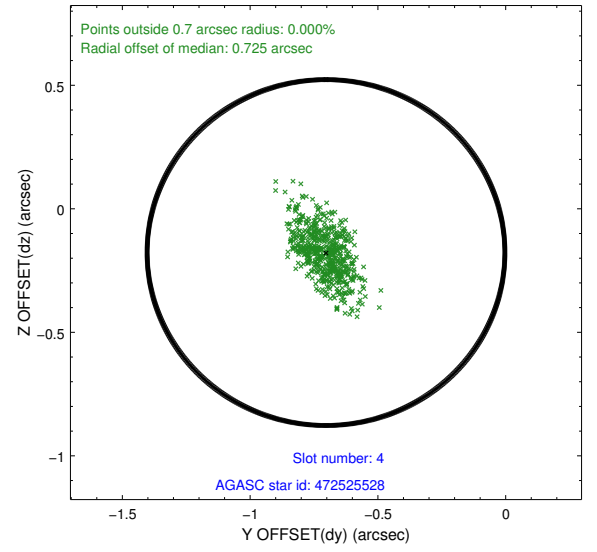
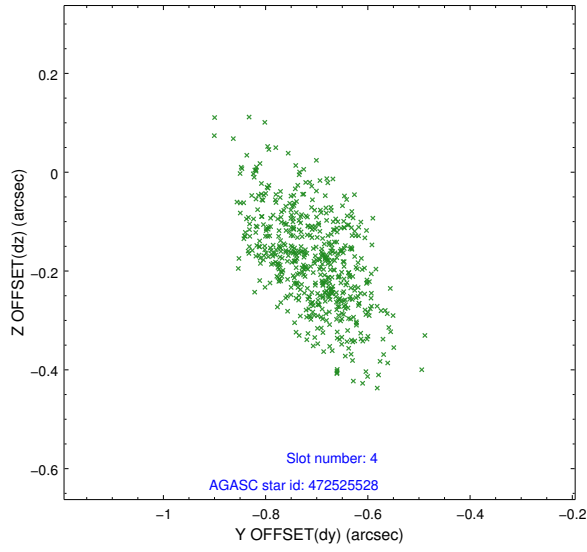
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | | HRC-S-1 | 7.03 | 287 | -0.056 | -0.236 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1172.74 | -467.52 |
| 1 | FID | | HRC-S-2 | 6.99 | 287 | 0.356 | -0.117 | 0.005 | 0.008 | 0.000000 | 0.000000 | 1223.24 | -461.54 |
| 2 | FID | | HRC-S-3 | 7.02 | 287 | 0.089 | 0.051 | 0.007 | 0.013 | 0.000000 | 0.000000 | -1171.11 | 560.68 |
| 3 | GUIDE | used | 472523760 | 8.21 | 574 | -0.103 | -0.296 | 0.145 | 0.242 | 331.645363 | 45.403260 | 1672.31 | 527.35 |
| 4 | GUIDE | used | 472525528 | 6.63 | 574 | -0.703 | -0.177 | 0.120 | 0.223 | 331.551102 | 45.248694 | 2140.83 | 914.41 |
| 5 | GUIDE | used | 472651904 | 6.12 | 574 | -0.048 | -0.407 | 0.133 | 0.229 | 332.170077 | 45.742257 | -55.53 | 39.31 |
| 6 | GUIDE | used | 472533912 | 9.12 | 574 | 0.448 | 0.381 | 0.177 | 0.289 | 331.791136 | 46.368695 | -235.69 | -2399.69 |
| 7 | GUIDE | used | 472665256 | 8.96 | 573 | 0.404 | 0.500 | 0.147 | 0.282 | 332.808125 | 46.195041 | -2216.28 | -709.20 |

2.4 Star Slots

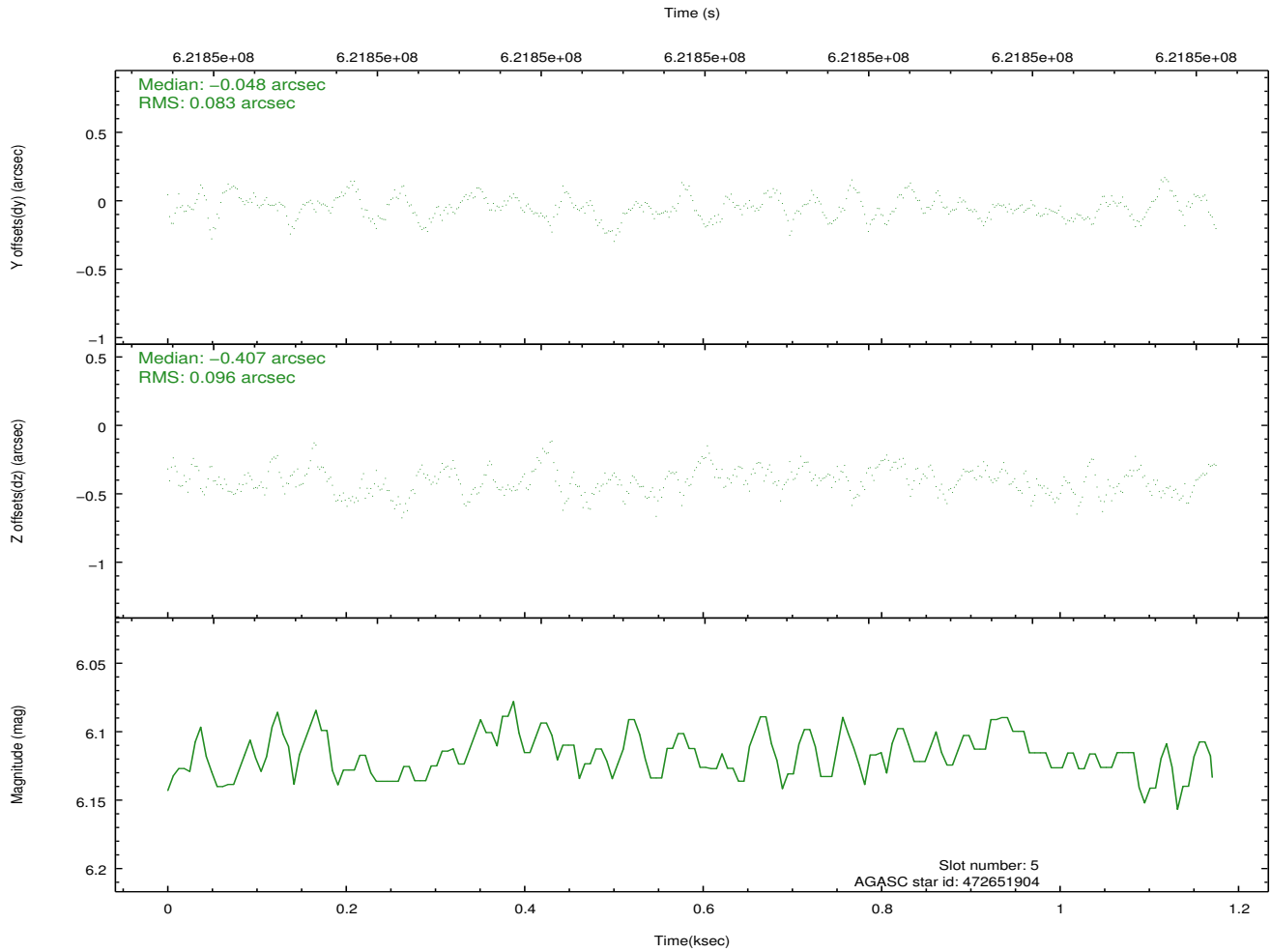
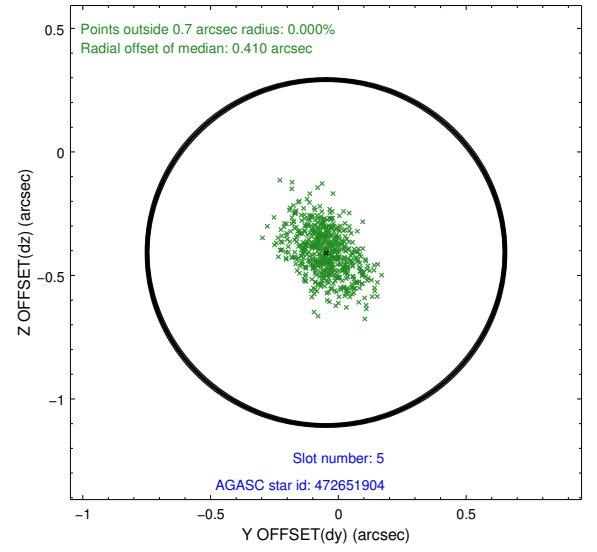
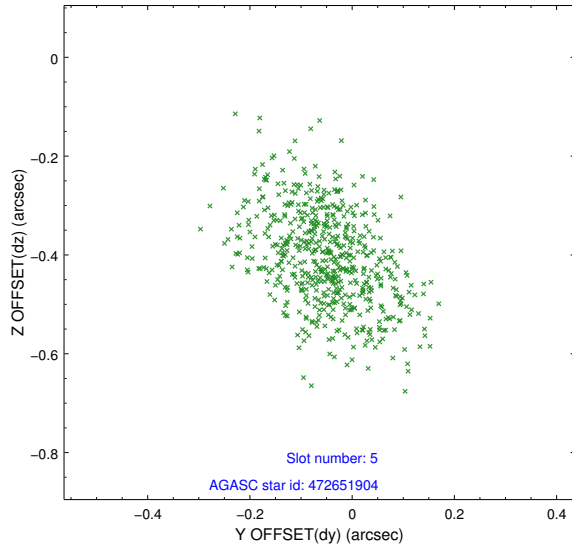
2.4.1 Slot 3



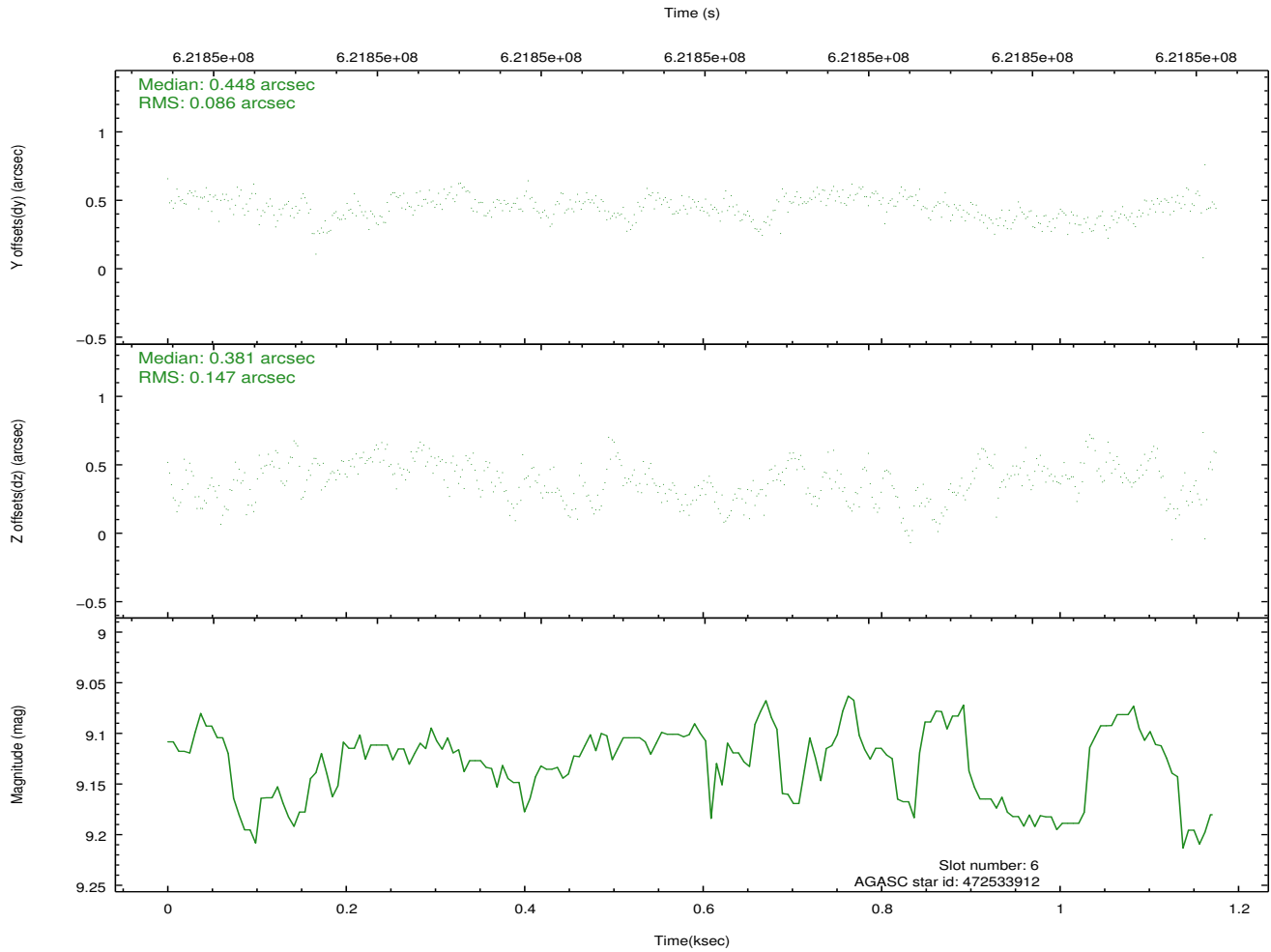
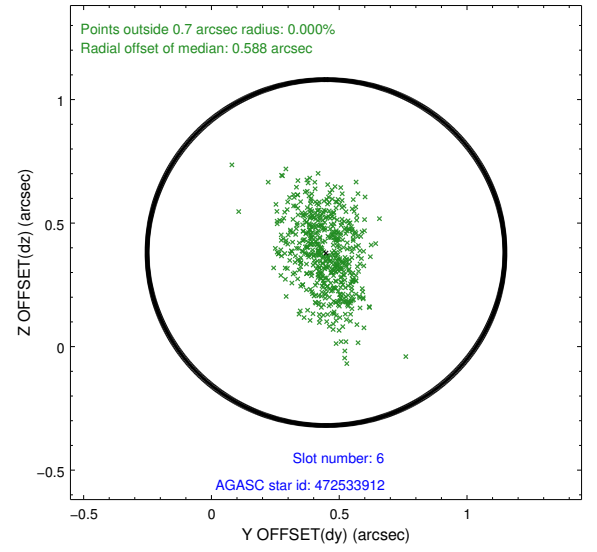
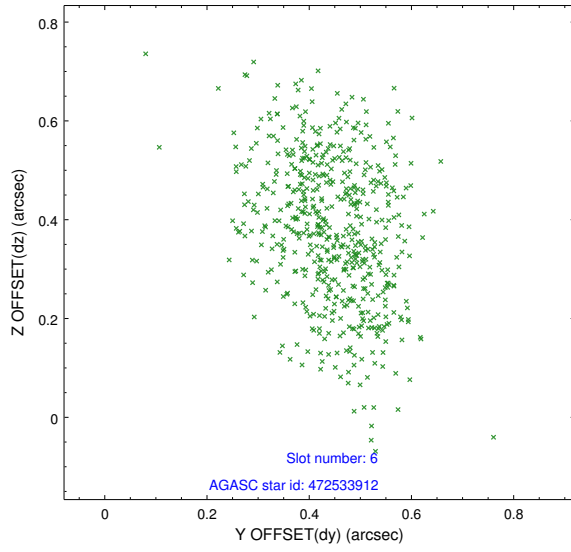
2.4.2 Slot 4



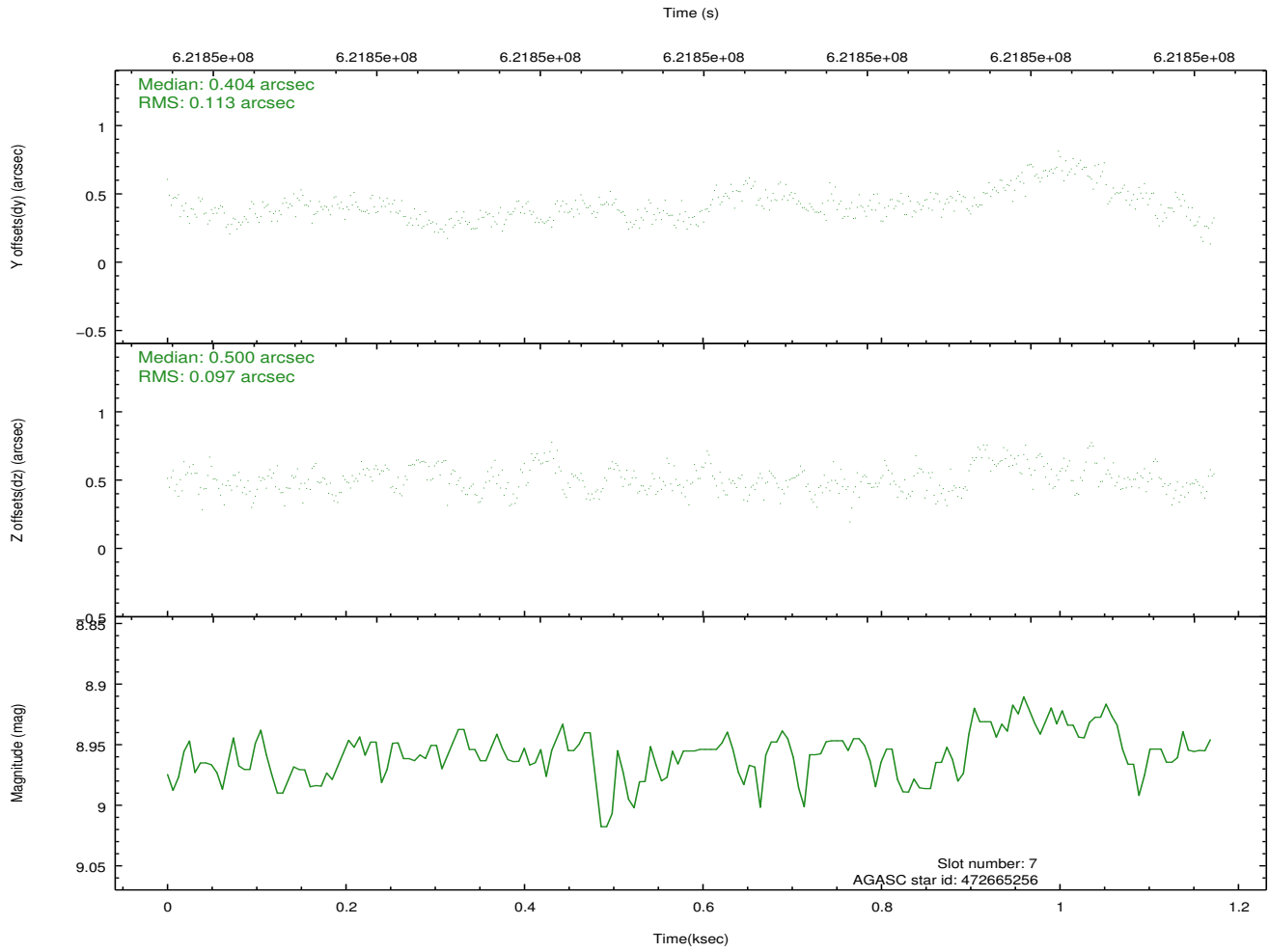
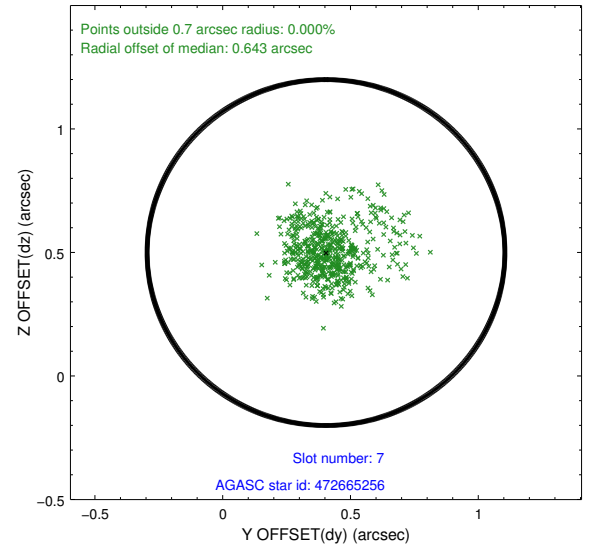
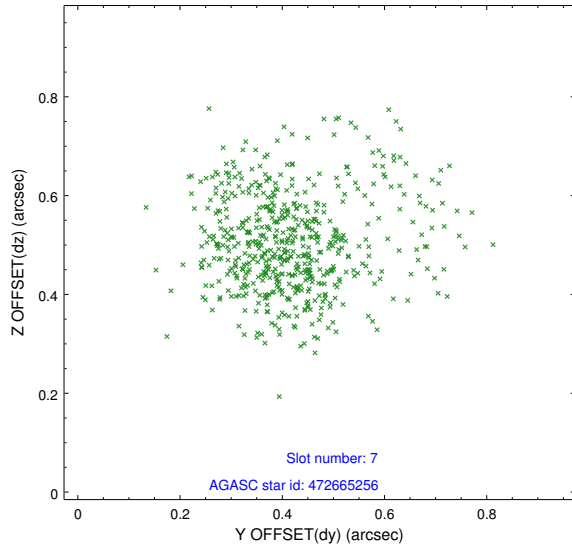
2.4.3 Slot 5



2.4.4 Slot 6

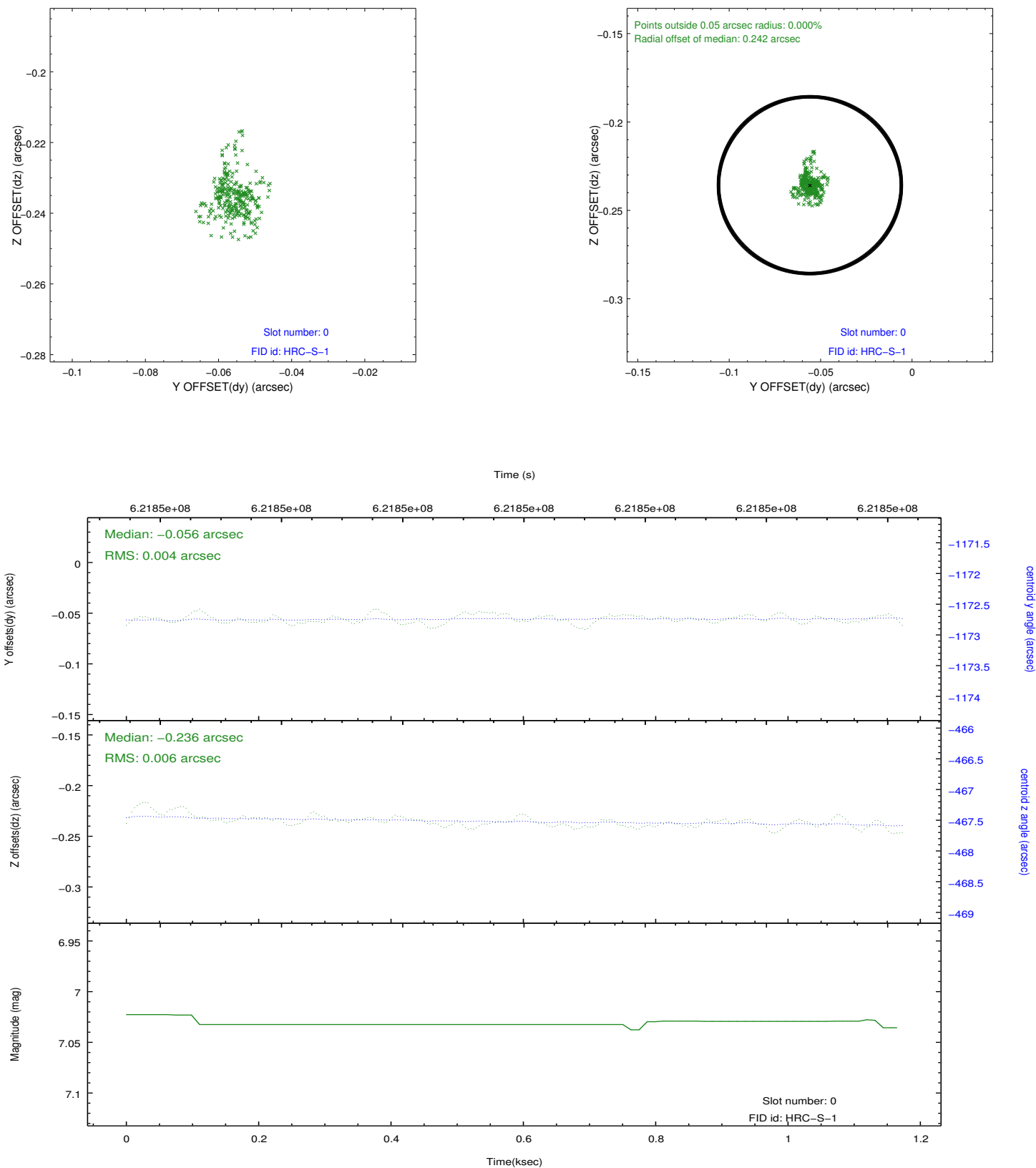


2.4.5 Slot 7

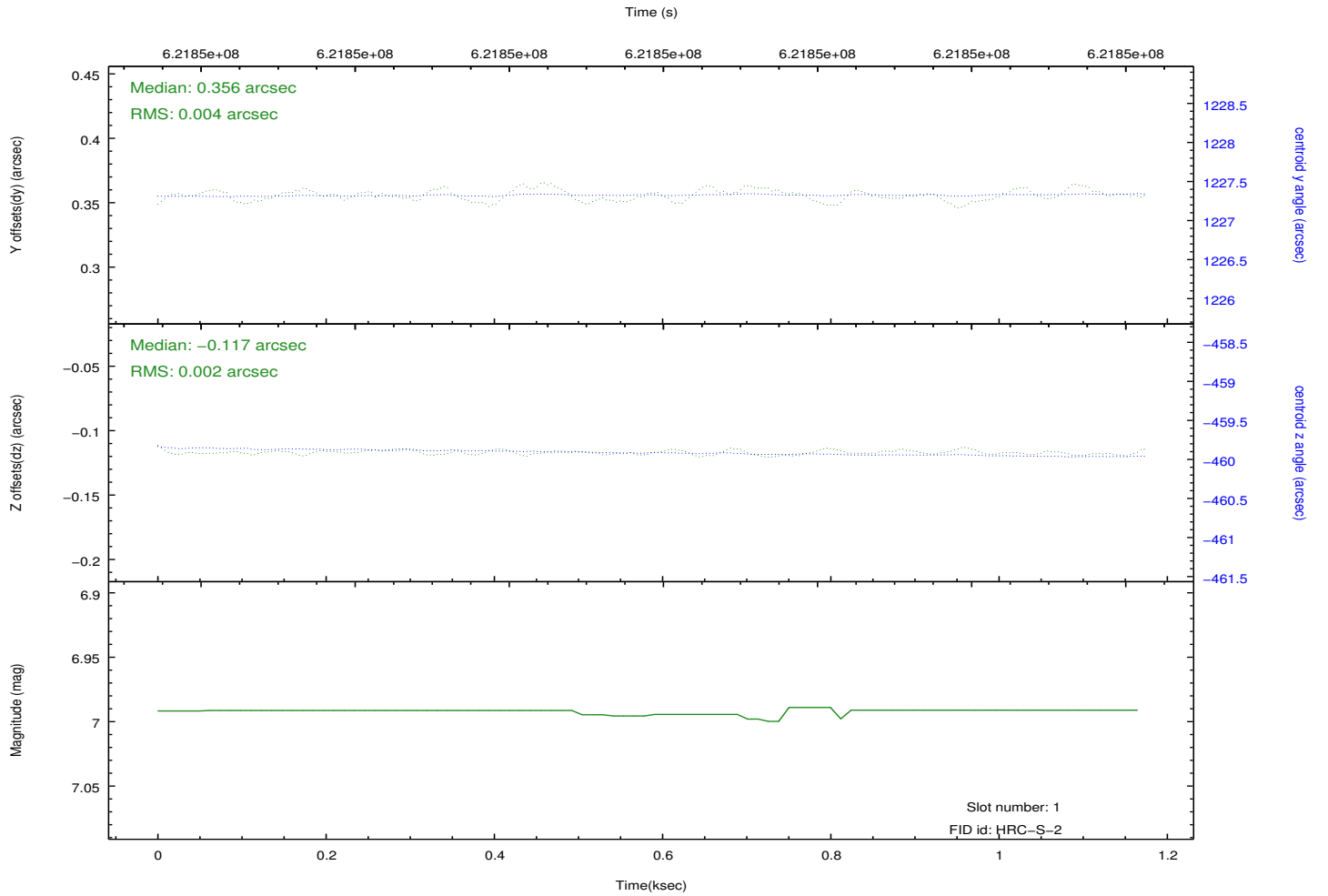
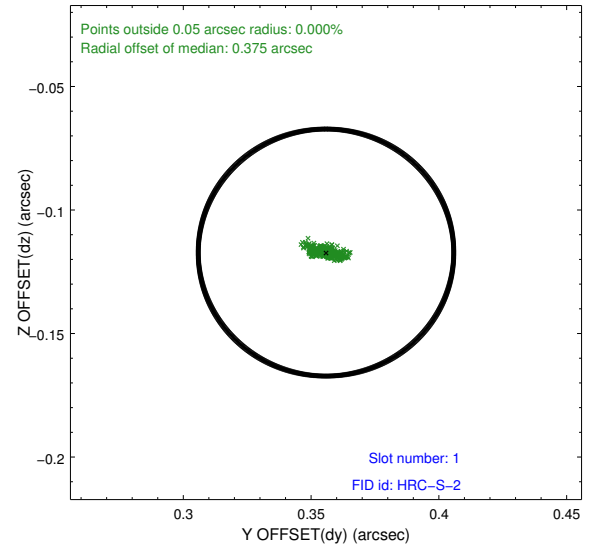
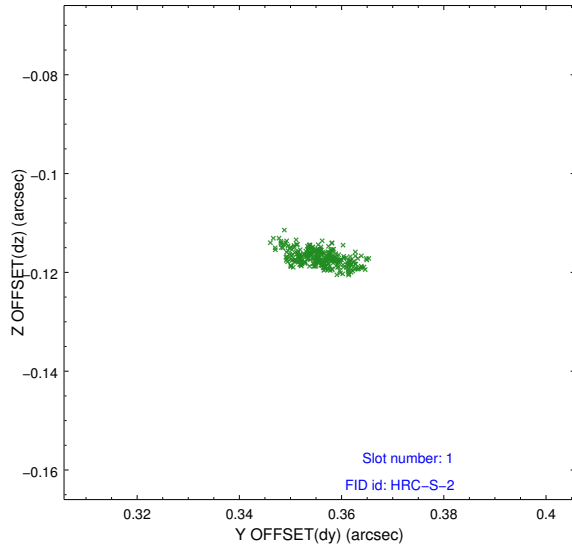


2.5 FID Slots

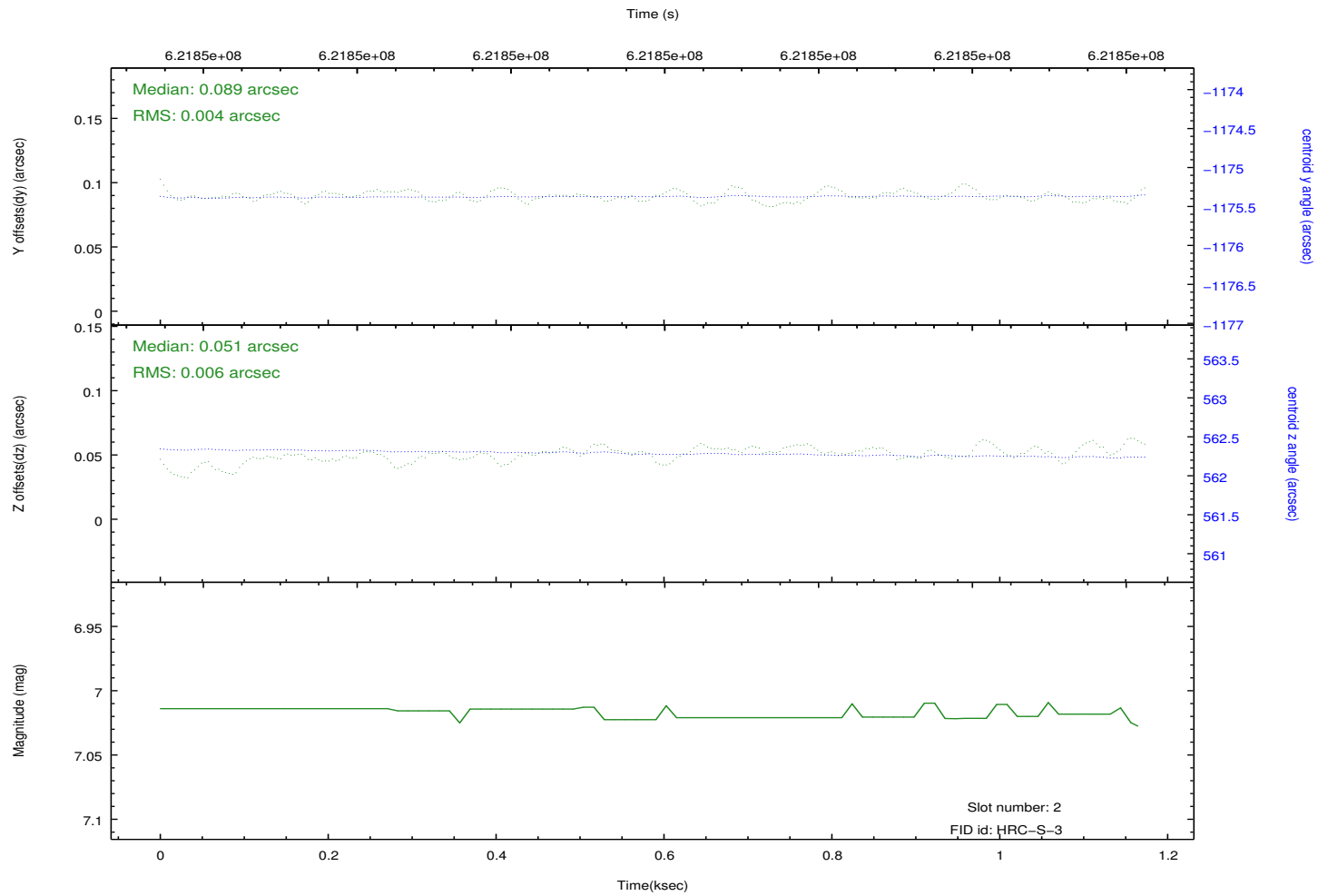
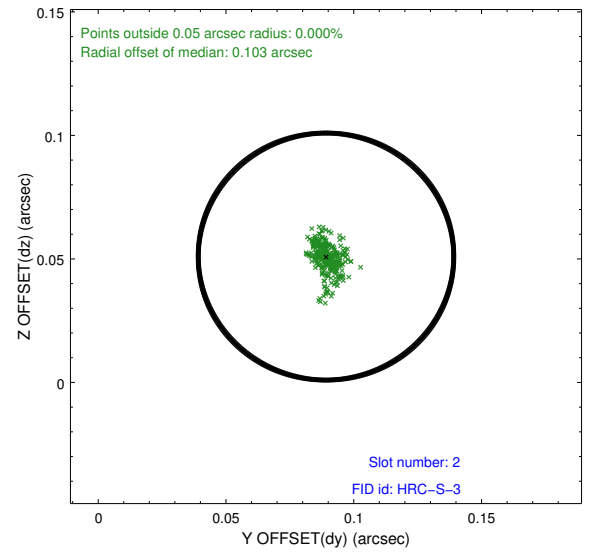
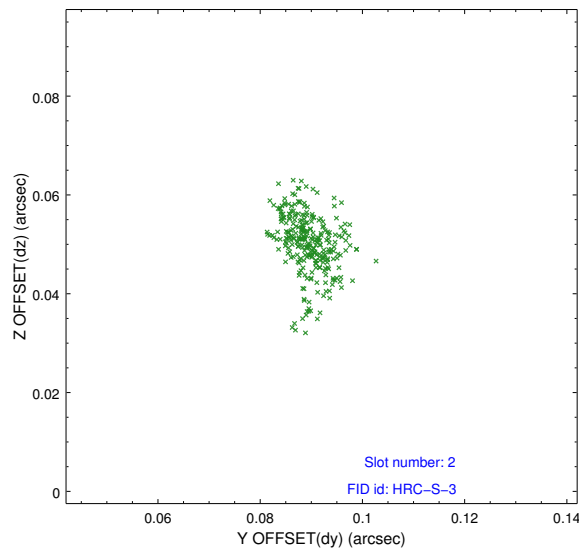
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2017.09.15 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.1738813186884 |

A.2 Comments