

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21779 - L2 Version 1
Chandra X-Ray Center

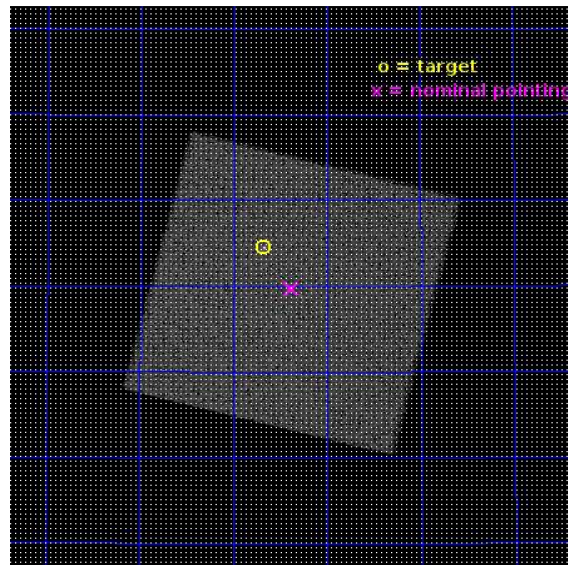
L2 Processing Date : Apr 9 2019

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1 Front

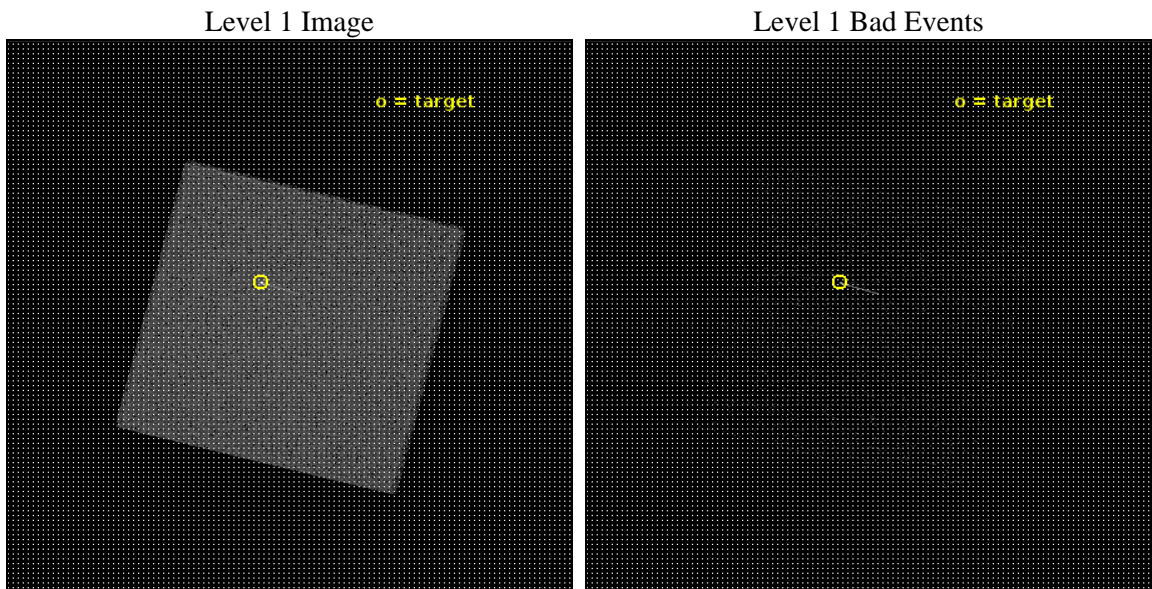
| | | |
|----------|--|---------------------------------------|
| seq_num | 291465 | Sequence number |
| obs_id | 21779 | Observation id |
| title | AO-20 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain | Proposal title |
| observer | CXC Calibration | Principal investigator |
| object | ArLac | Source name |
| ra_targ | 332.169666 | Observer's specified target RA [deg] |
| dec_targ | 45.742509 | Observer's specified target Dec [deg] |
| ra_nom | 332.09574352267 | Nominal RA [deg] |
| dec_nom | 45.662227643667 | Nominal Dec [deg] |
| roll_nom | 59.301972746486 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 1192.075071454 | [s] |
| livetime | 1174.159654252 | Ontime multiplied by DTCOR |
| l2events | 154181 | 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 | 10.7.1 | Processing system revision | ontime | 1192.075071454 | [s] |
| caldbver | 4.8.2 | | l1events | 254430 | Number of level 1 events |
| date | 2019-04-09T03:57:47 | Date and time of file creation | | | |
| revision | 1 | Processing version of data | | | |

2.1.3 Events

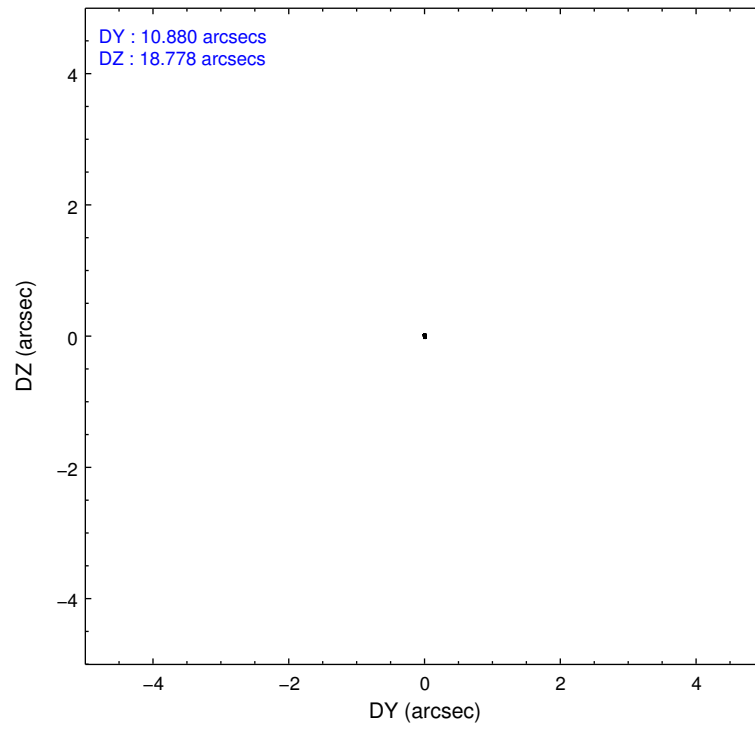
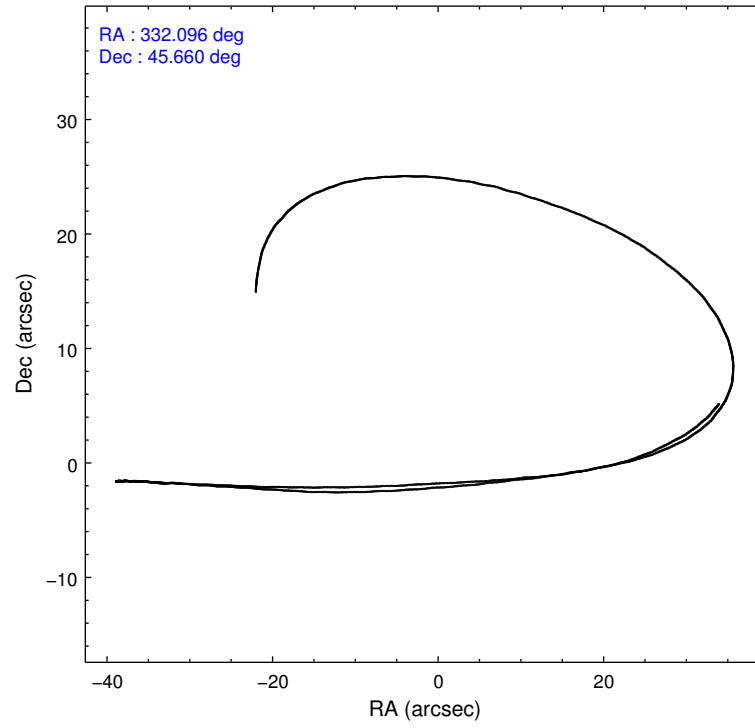
Level 1 Events

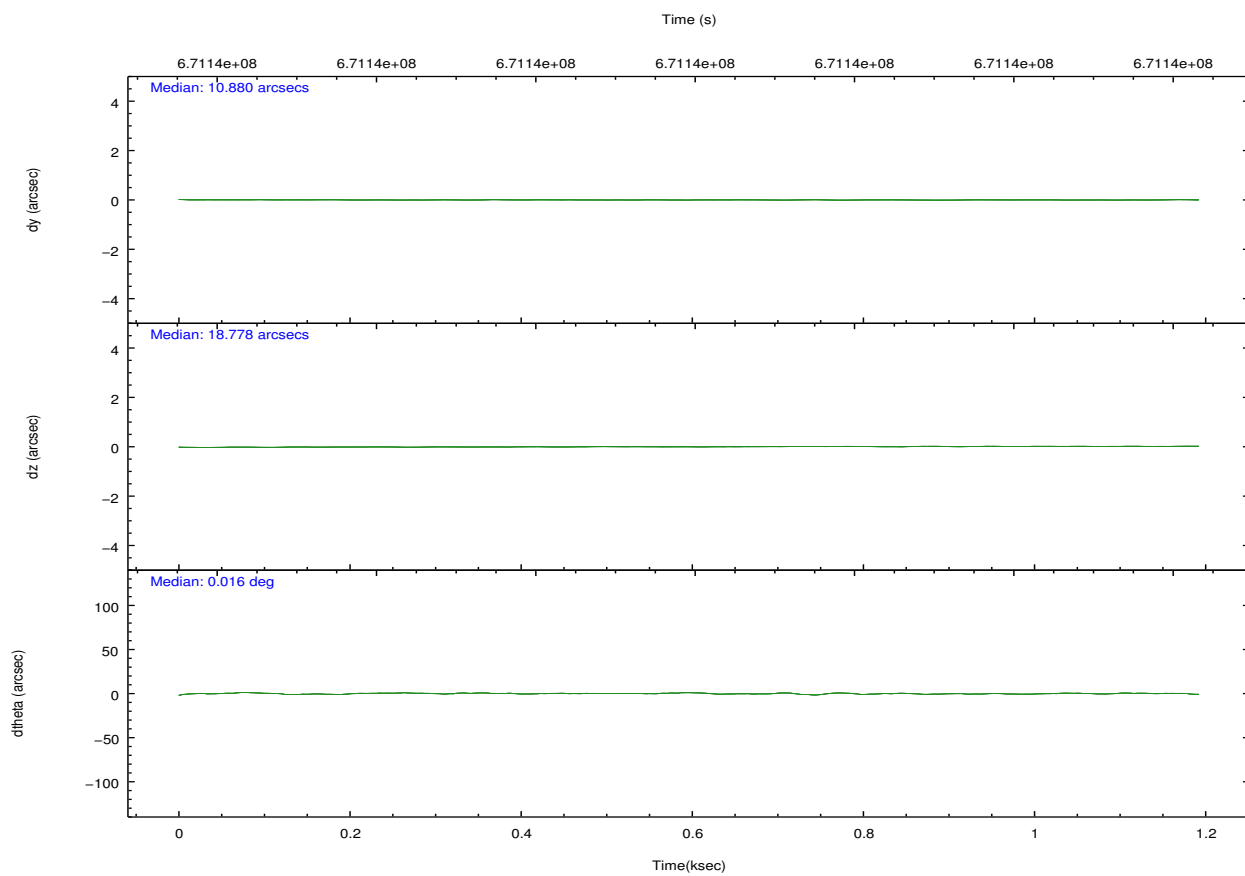
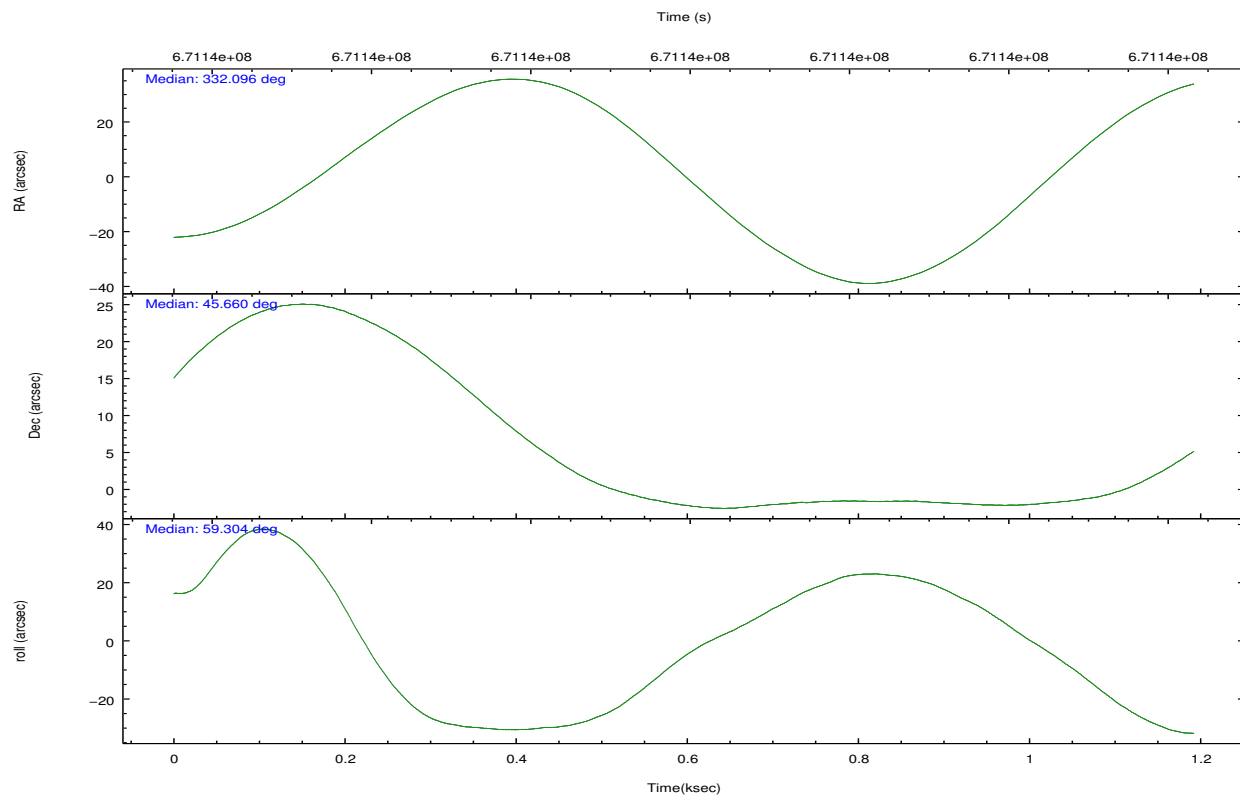
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 254430 |
| rejected events | 53279 |
| rejected % | 20% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 7 | 7 |
| Detector | HRC-I | HRC-I | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 332.096315 | 332.0957435226706 | | | |
| [deg] Pointing Dec | 45.634667 | 45.6622276436667 | | | |
| [deg] Pointing Roll | 59.397056 | 59.30197274648587 | | | |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 | | | |
| [mm] SIM defocus | 0 | 0.001426264420575141 | | | |
| [mm] SIM translation stage pos | 126.985494 | 126.9829799899862 | | | |
| [mm] SIM translation stage offset | 0 | 0.002508901615314585 | | | |
| [s] Observation start time (MET) | 671140574.184000 | 671140197.61727 | | | |
| Observation start date | 2019-04-08T19:55:05 | 2019-04-08T19:49:57 | | | |
| [s] Observation end time (MET) | 671141574.184000 | 671141707.95486 | | | |
| Observation end date | 2019-04-08T20:11:45 | 2019-04-08T20:15:07 | | | |

2.3 Aspect



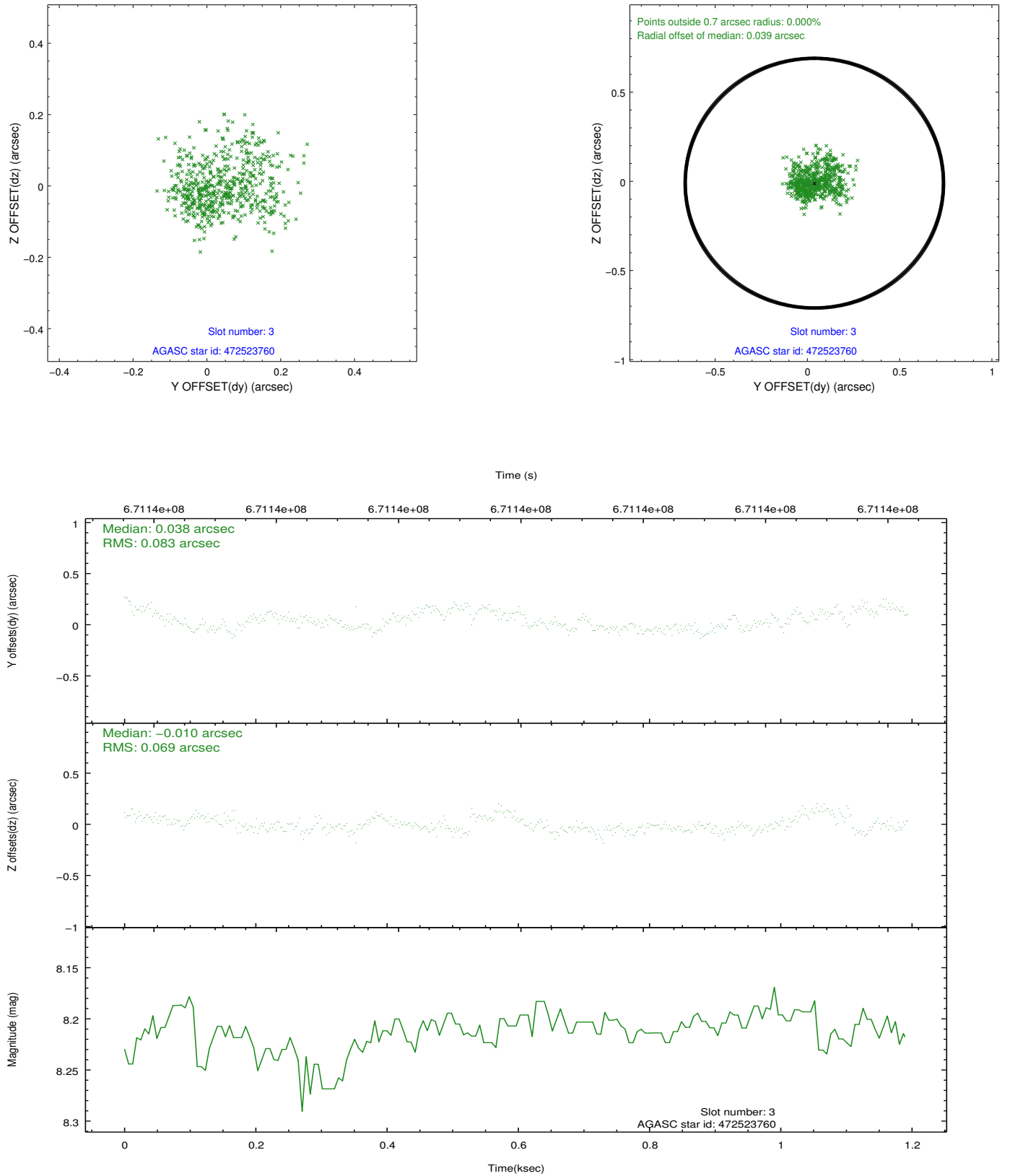


Slot Statistics

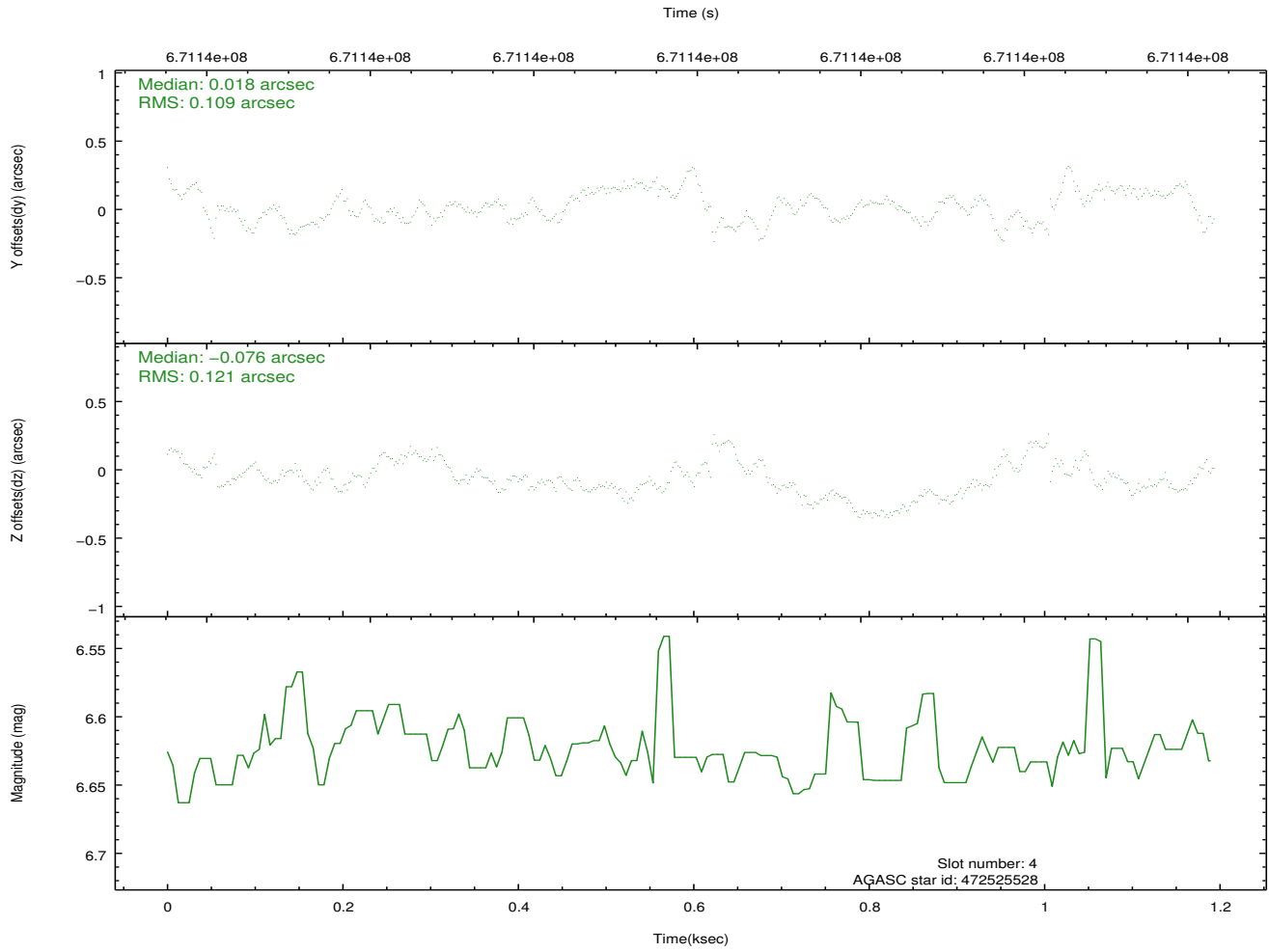
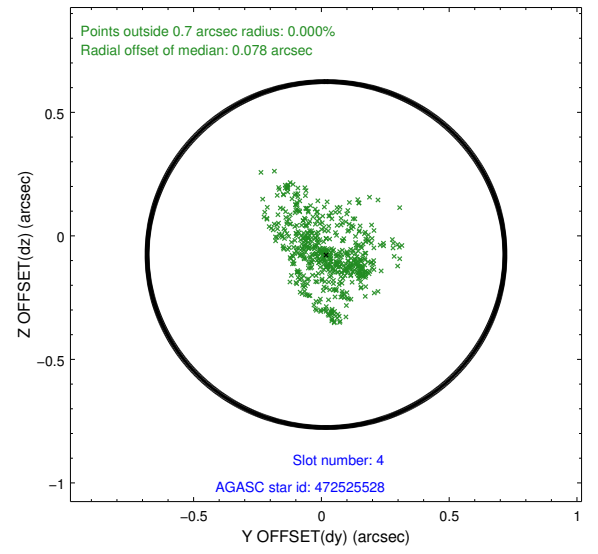
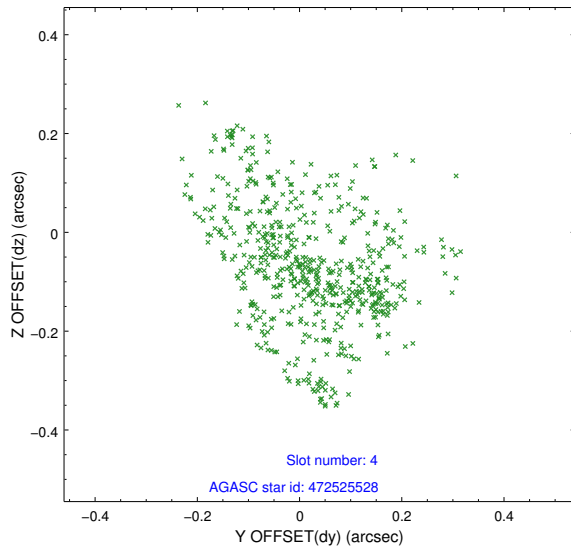
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|-------|
| 0 | FID | | HRC-I-1 | 7.02 | 291 | 1.000 | -0.361 | -0.238 | 0.006 | 0.009 | 0.000000 | 0.000000 | -767.10 | -1307 |
| 1 | FID | | HRC-I-2 | 7.04 | 291 | 1.000 | 0.264 | -0.002 | 0.007 | 0.011 | 0.000000 | 0.000000 | 843.52 | -1313 |
| 2 | FID | | HRC-I-4 | 7.03 | 291 | 1.000 | 0.214 | 0.147 | 0.006 | 0.011 | 0.000000 | 0.000000 | 1279.46 | 990 |
| 3 | GUIDE | used | 472523760 | 8.21 | 583 | 1.000 | 0.038 | -0.010 | 0.119 | 0.181 | 331.645363 | 45.403260 | -1295.22 | 558 |
| 4 | GUIDE | used | 472525528 | 6.63 | 583 | 1.000 | 0.018 | -0.076 | 0.175 | 0.284 | 331.551102 | 45.248694 | -1897.91 | 484 |
| 5 | GUIDE | used | 472533912 | 9.10 | 581 | 1.000 | -0.093 | -0.449 | 0.181 | 0.288 | 331.791136 | 46.368695 | 1885.88 | 1998 |
| 6 | GUIDE | used | 472649352 | 9.70 | 575 | 1.000 | 0.670 | 0.472 | 0.266 | 0.401 | 332.034169 | 45.325407 | -1034.90 | -427 |
| 7 | GUIDE | used | 472661712 | 9.94 | 581 | 1.000 | -0.589 | 0.068 | 0.335 | 0.587 | 331.914954 | 46.059715 | 1084.00 | 1167 |

2.4 Star Slots

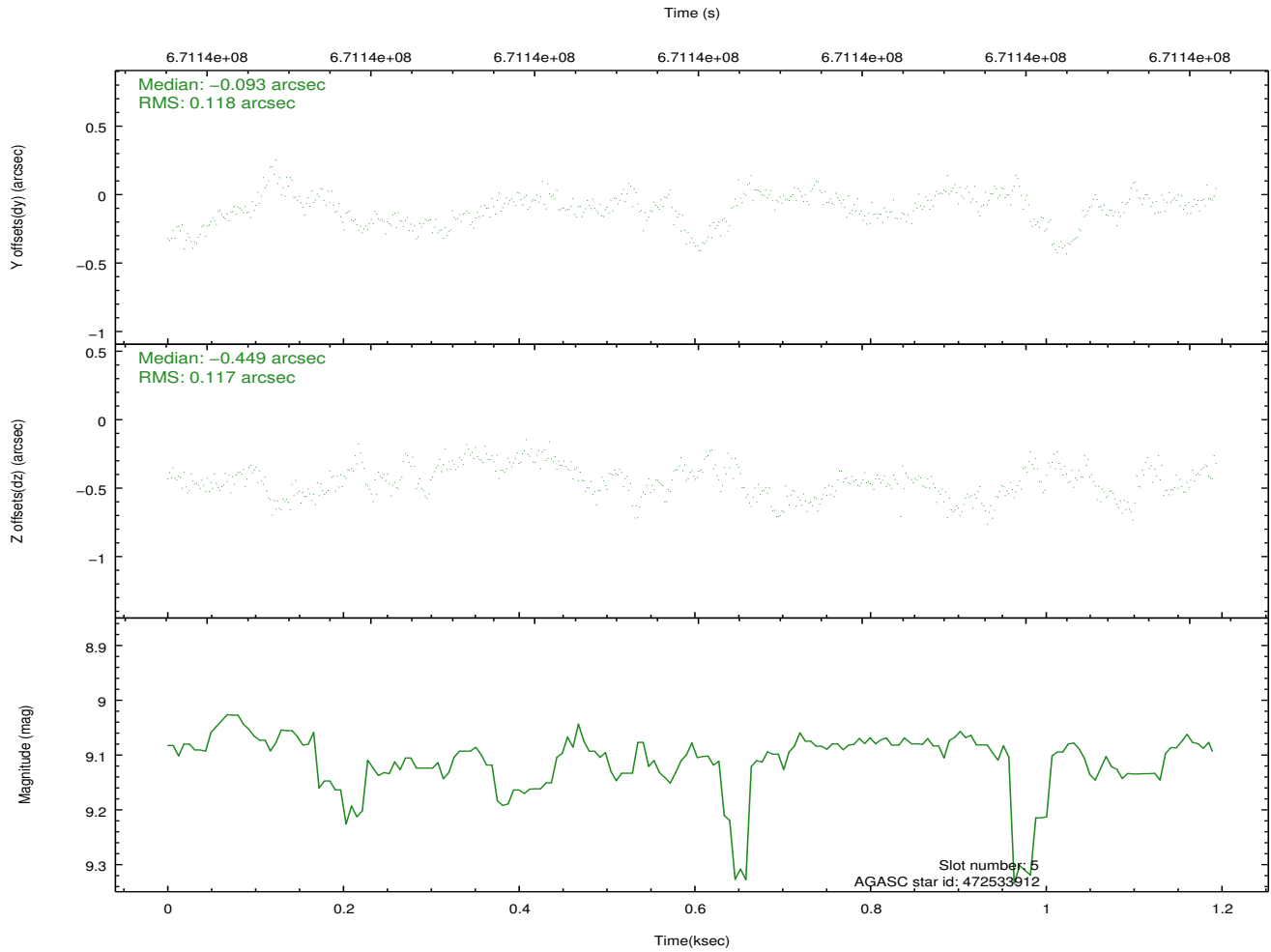
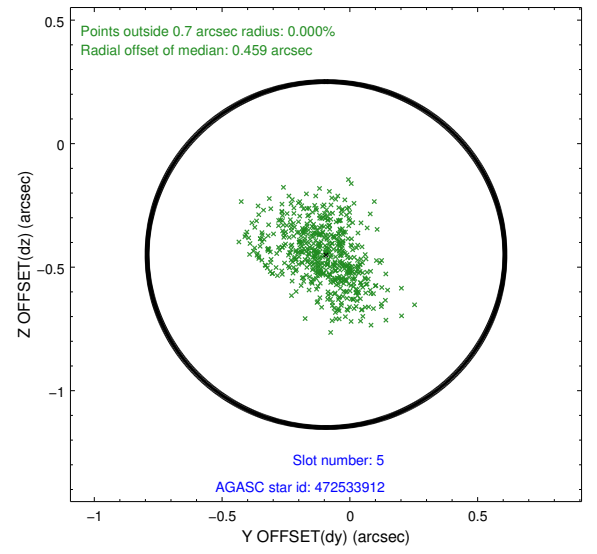
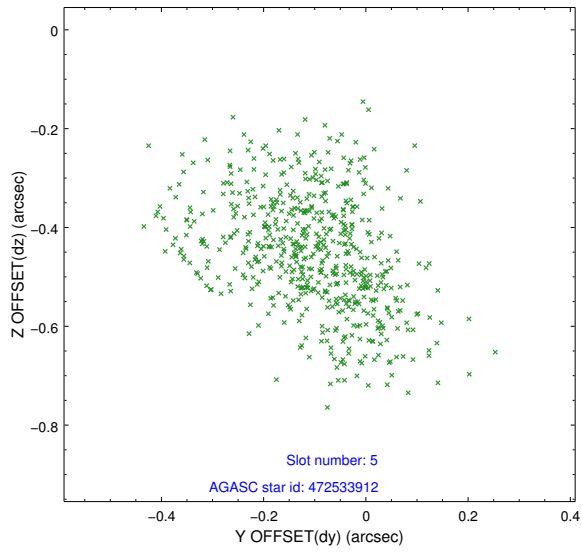
2.4.1 Slot 3



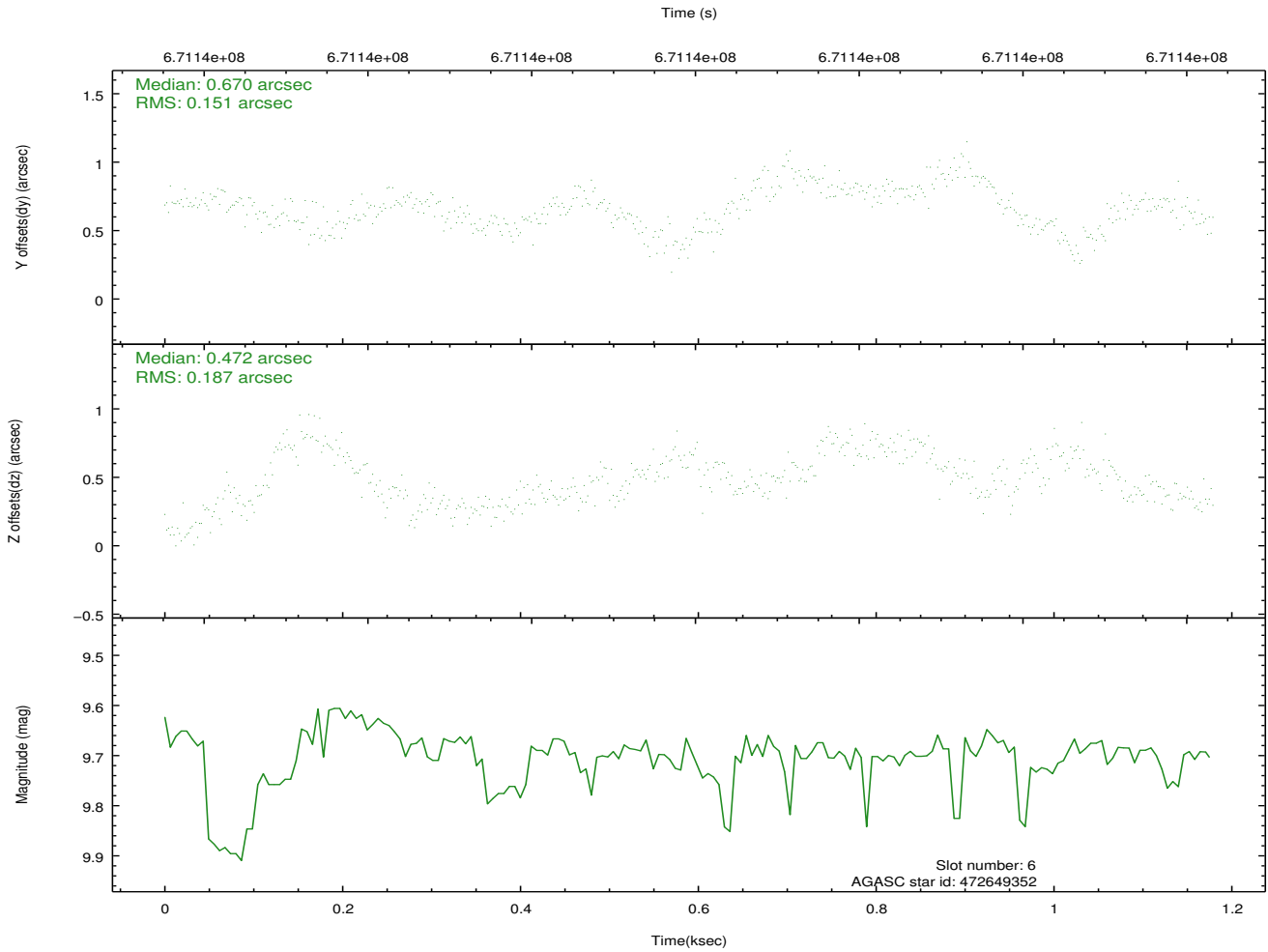
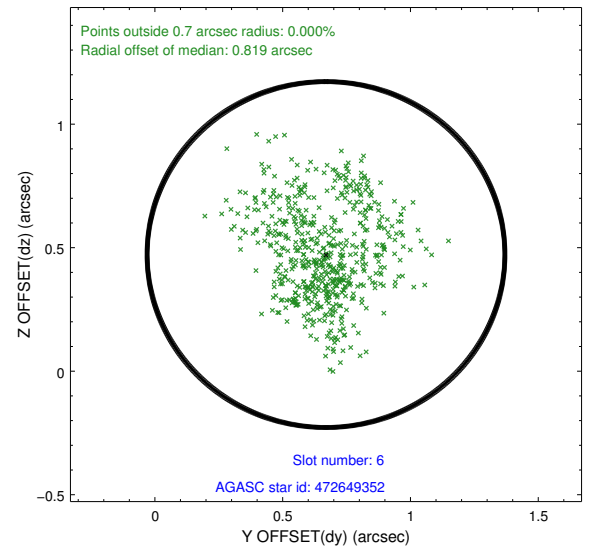
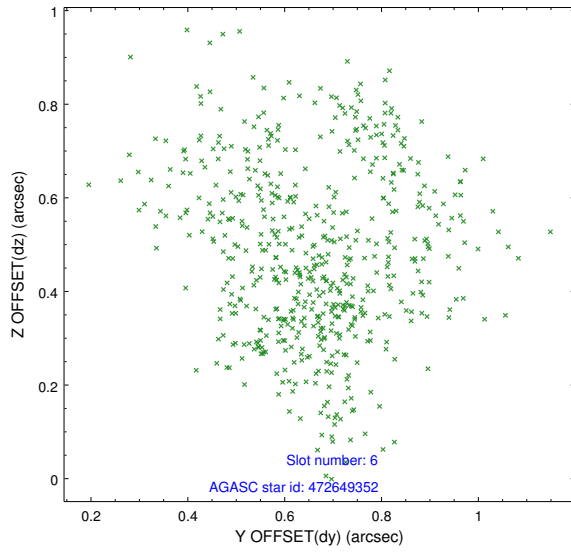
2.4.2 Slot 4



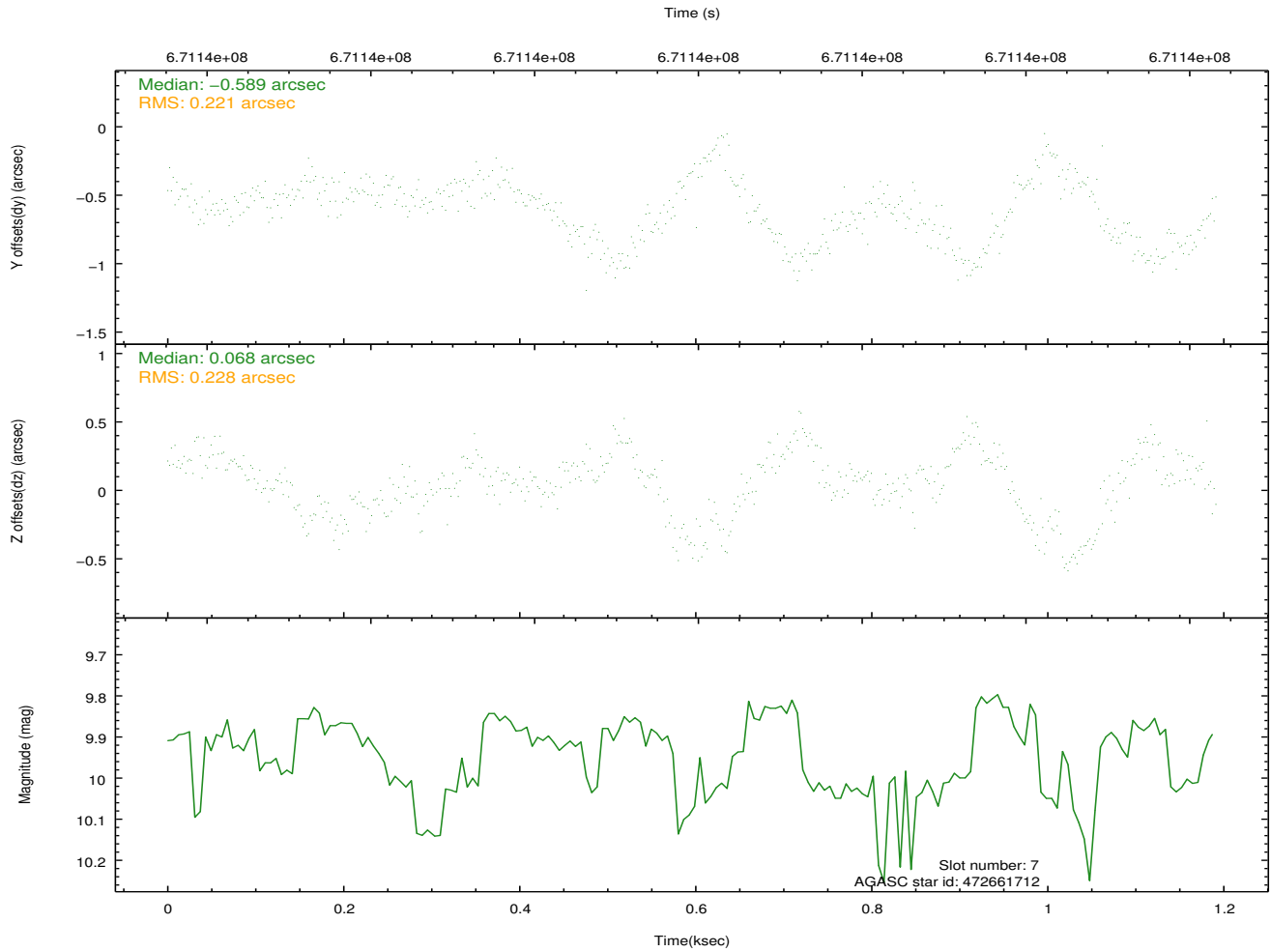
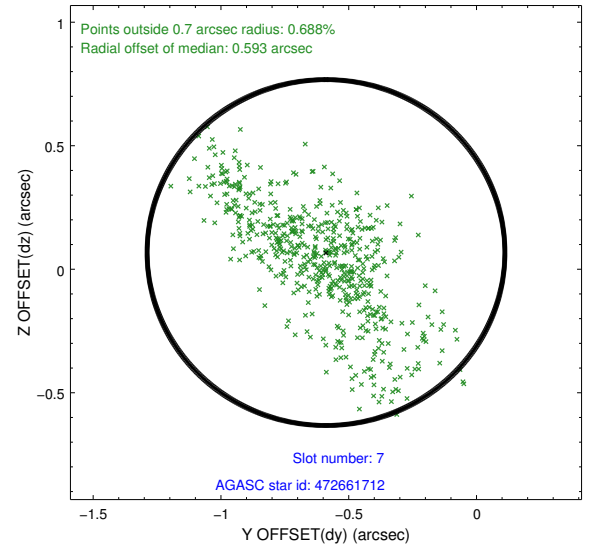
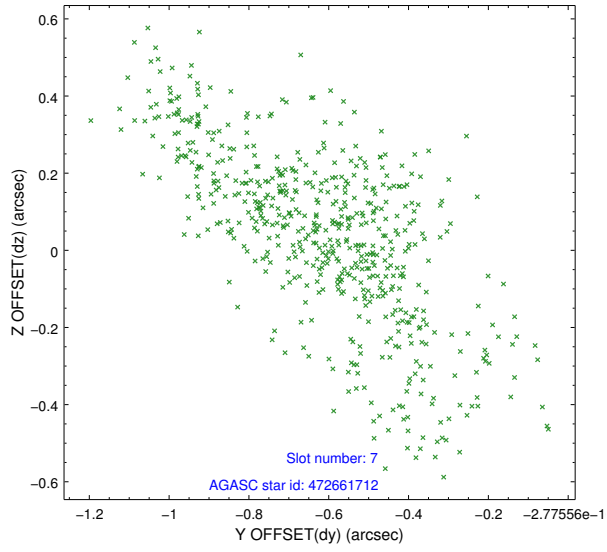
2.4.3 Slot 5



2.4.4 Slot 6

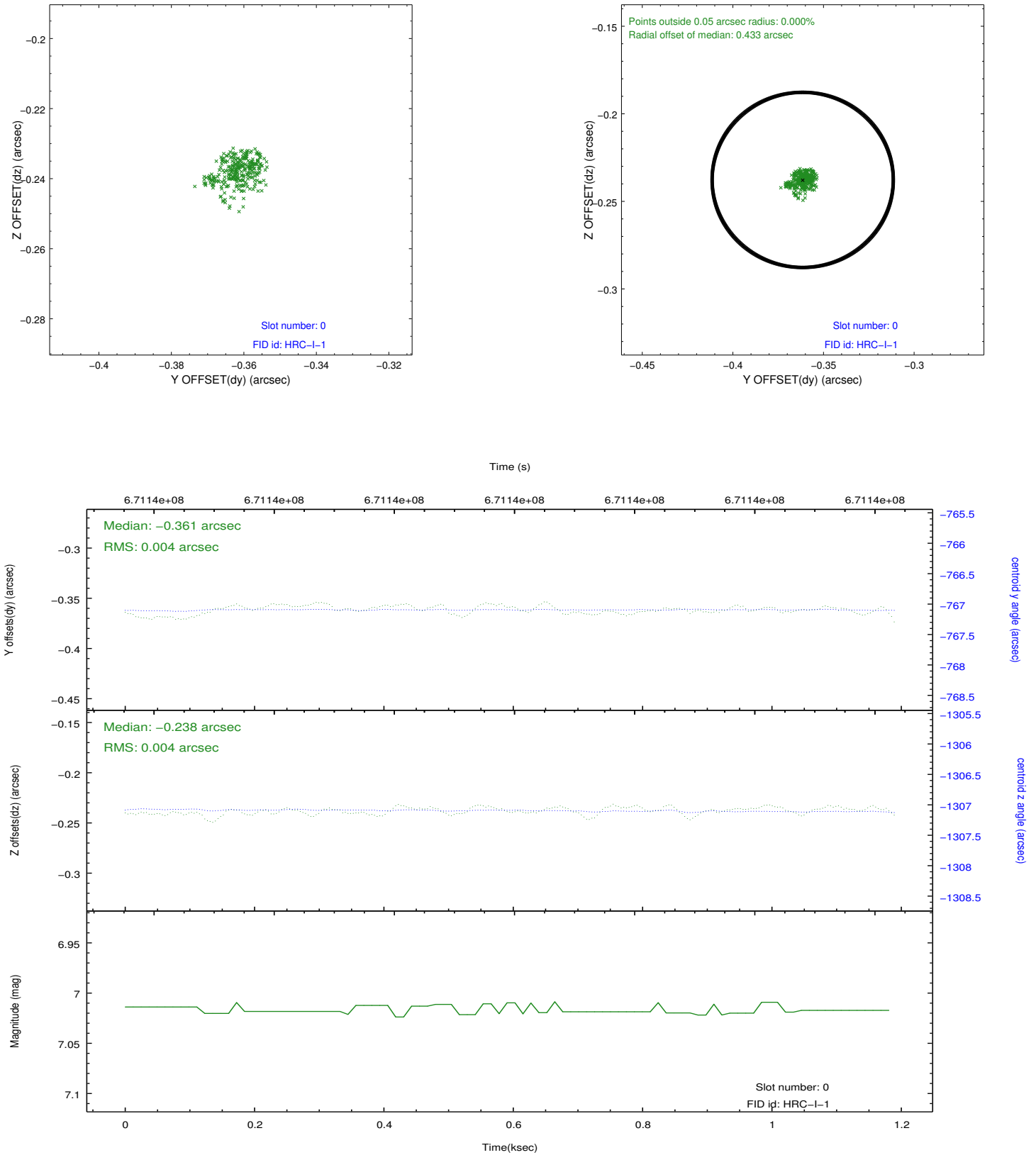


2.4.5 Slot 7

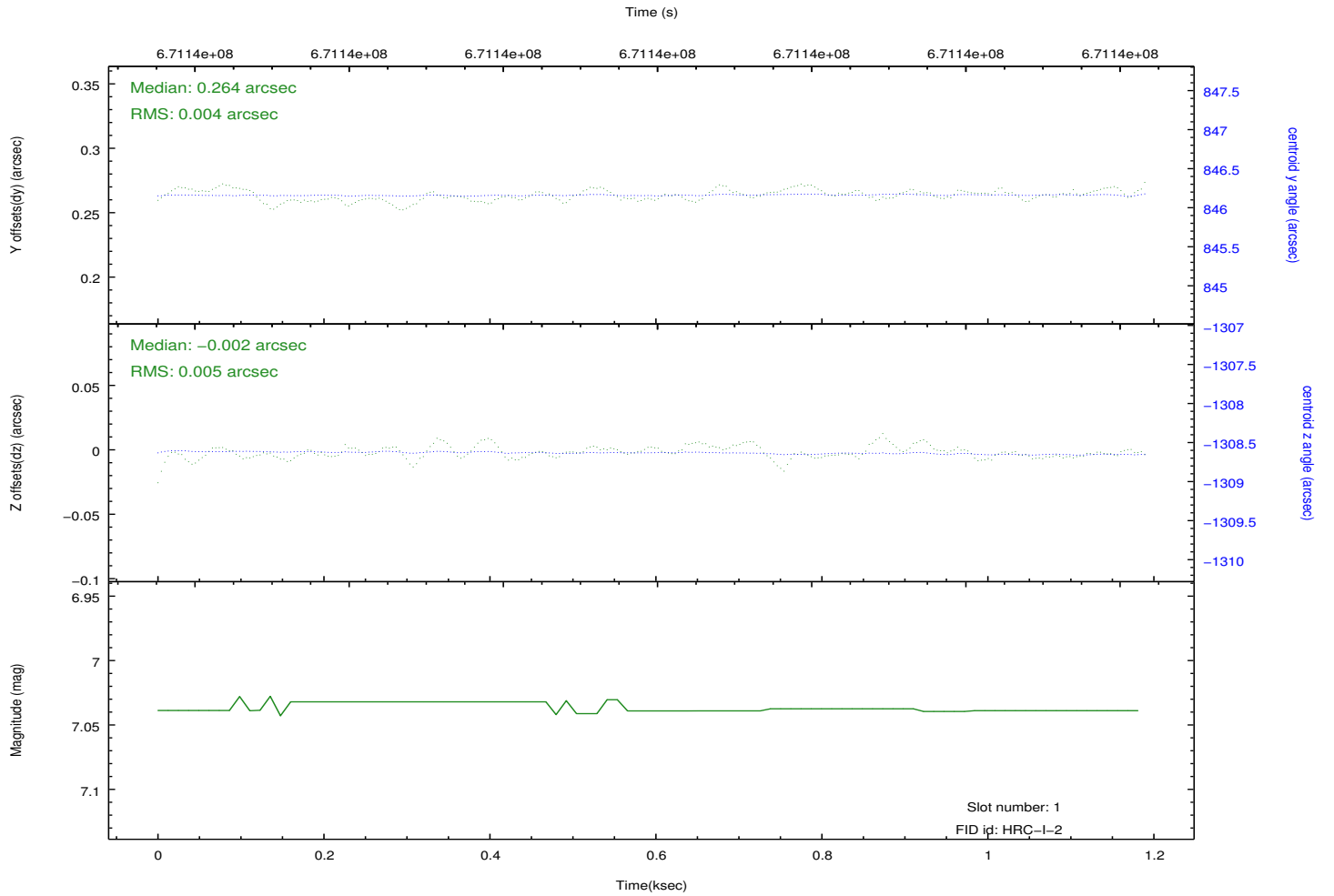
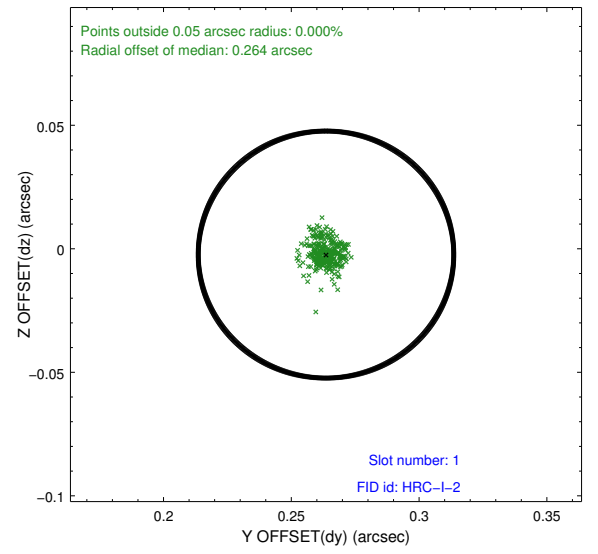
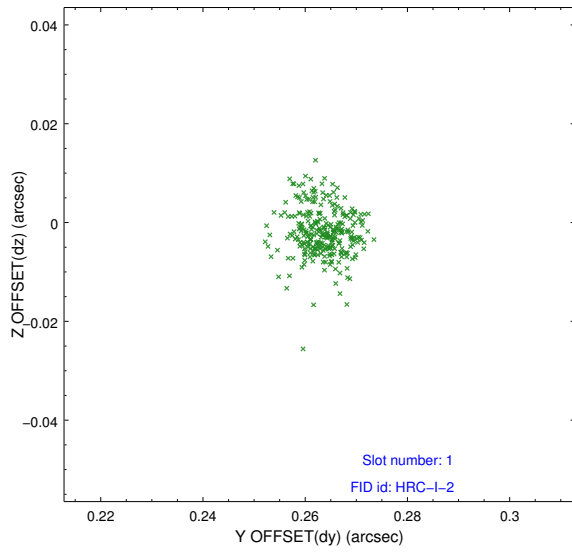


2.5 FID Slots

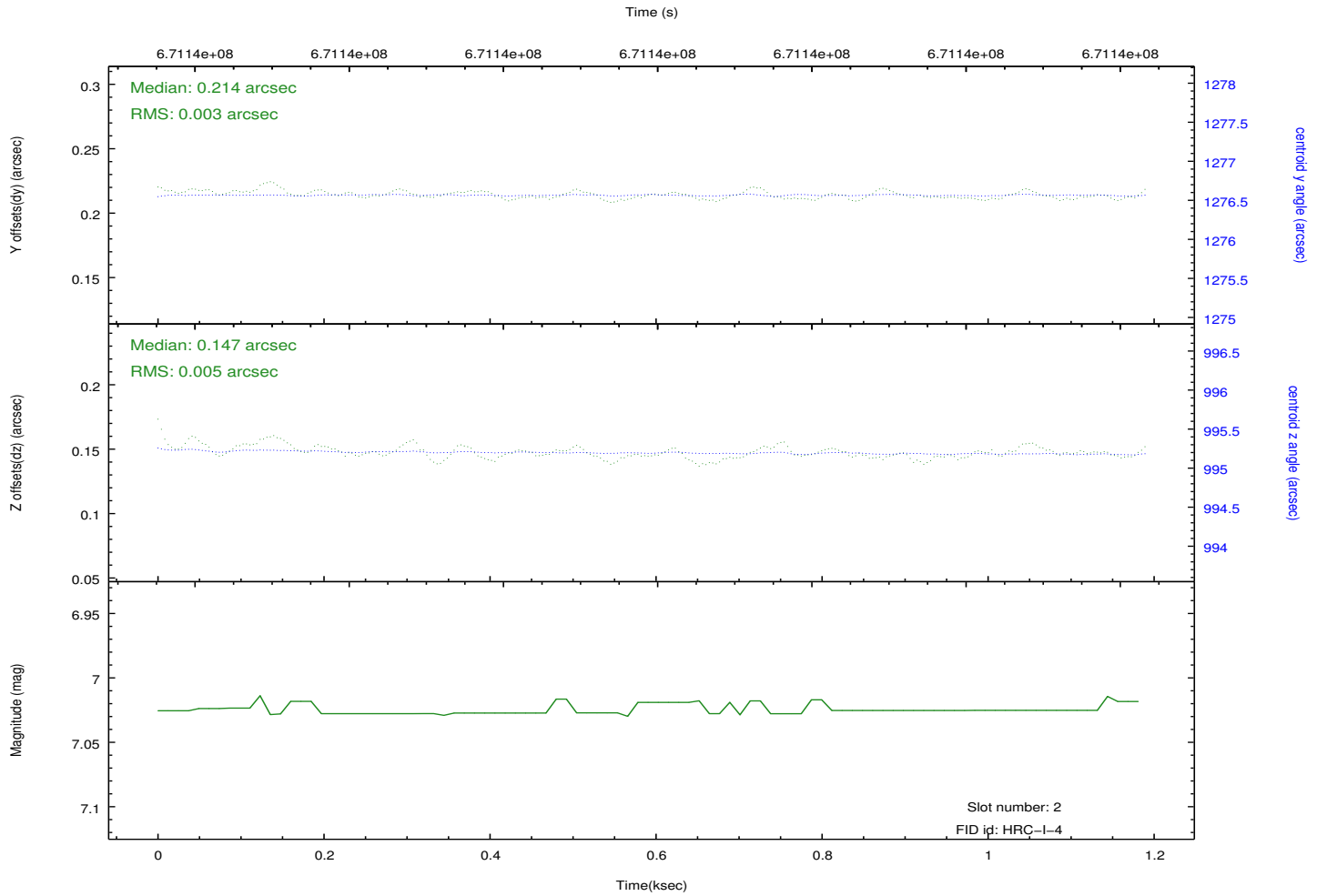
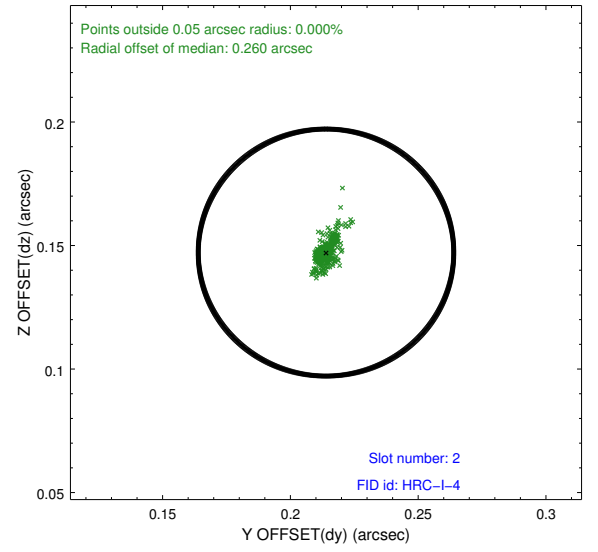
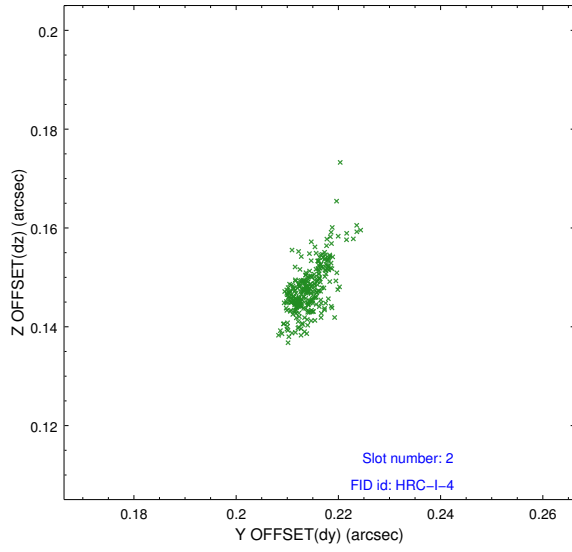
2.5.1 Slot 0



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) | 2019.04.09 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.192075071454 |

A.2 Comments