

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2655 - L2 Version 6
Chandra X-Ray Center

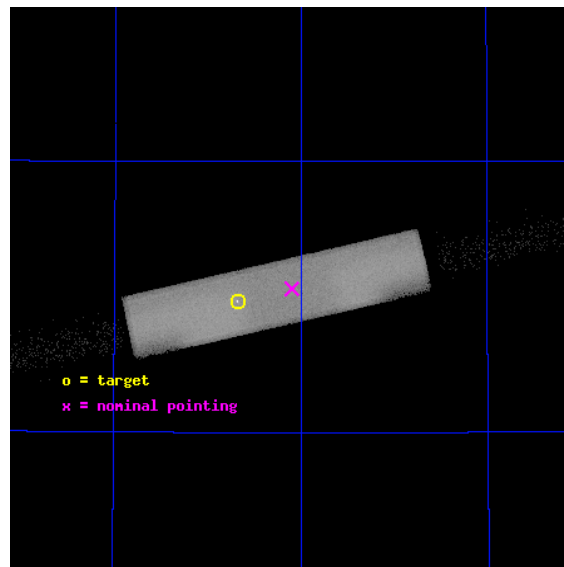
L2 Processing Date : Oct 11 2012

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1 Front

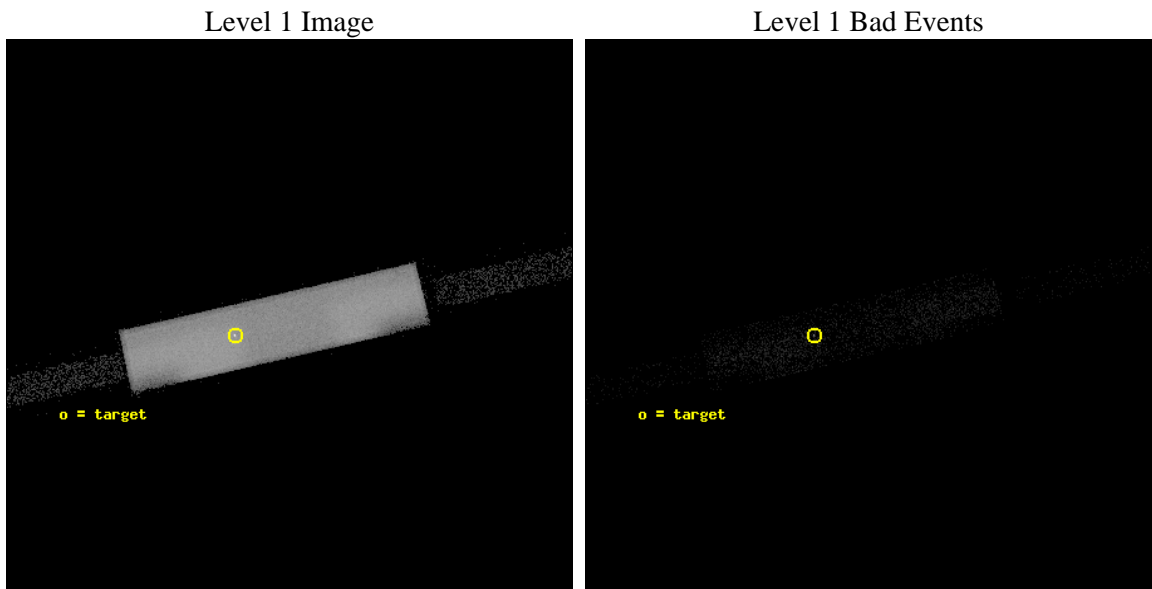
| | | |
|----------|---|---------------------------------------|
| seq_num | 290211 | Sequence number |
| obs_id | 2655 | Observation id |
| title | AO3B HRC-S CALIBRATION OBSERVATION: MINI-SCAN OF ARLAC | Proposal ti |
| observer | Dr. CXC Calibration | Principal investigator |
| object | ARLAC | Source name |
| ra_targ | 332.17 | Observer's specified target RA [deg] |
| dec_targ | 45.742306 | Observer's specified target Dec [deg] |
| ra_nom | 332.02398429563 | Nominal RA [deg] |
| dec_nom | 45.765471560816 | Nominal Dec [deg] |
| roll_nom | 167.035060648 | Nominal Roll [deg] |
| revision | 6 | Processing version of data |
| ontime | 1443.2000594437 | [s] |
| livetime | 249.20281062689 | Ontime multiplied by DTCOR |
| l2events | 257272 | 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 | 933.472000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 1443.2000594437 | [s] |
| caldsver | 4.5.2 | | l1events | 279720 | Number of level 1 events |
| date | 2012-10-11T21:52:21 | Date and time of file creation | | | |
| revision | 6 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

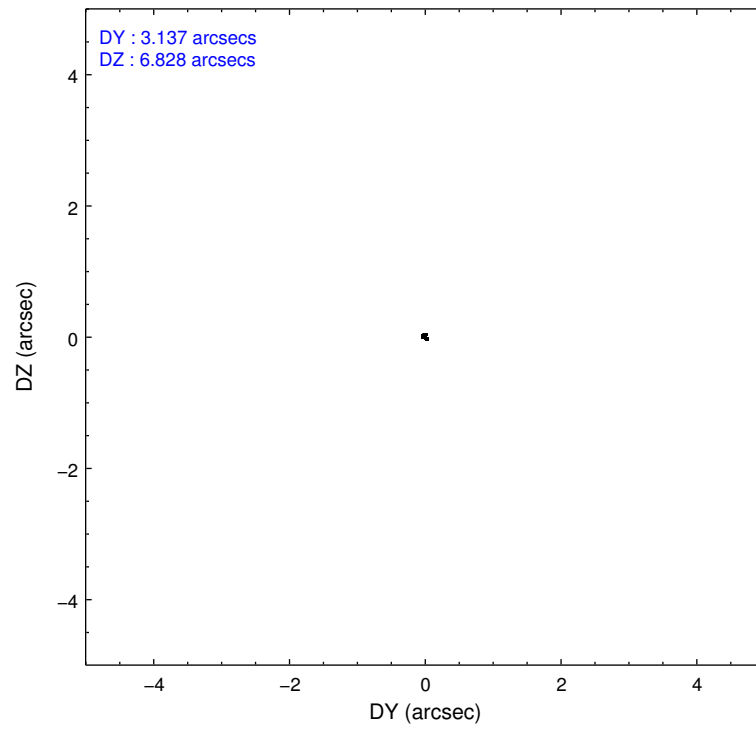
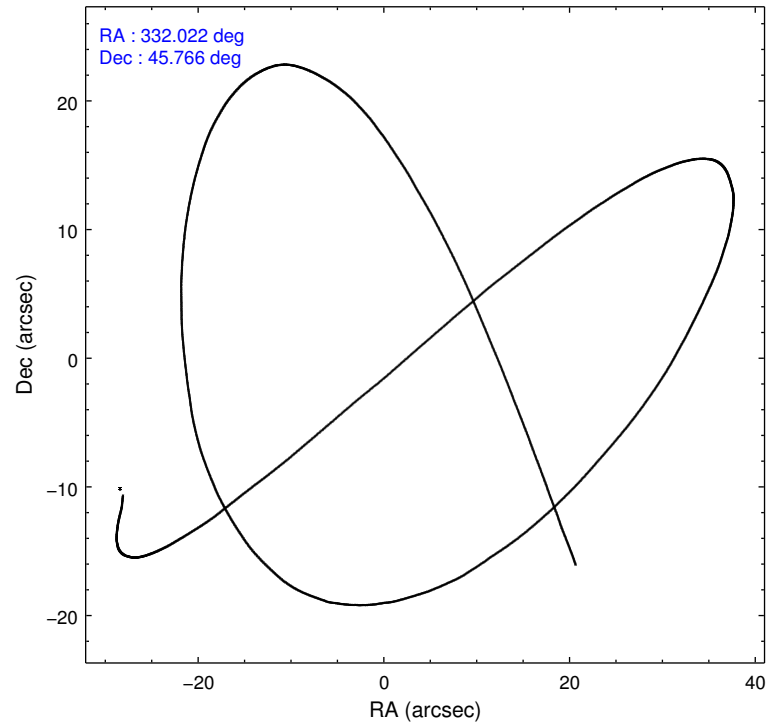
| | segment 1 | segment 2 | segment 3 |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events | 2819 | 274703 | 2198 |
| rejected events | 2017 | 9987 | 1604 |
| rejected % | 71% | 3% | 72% |

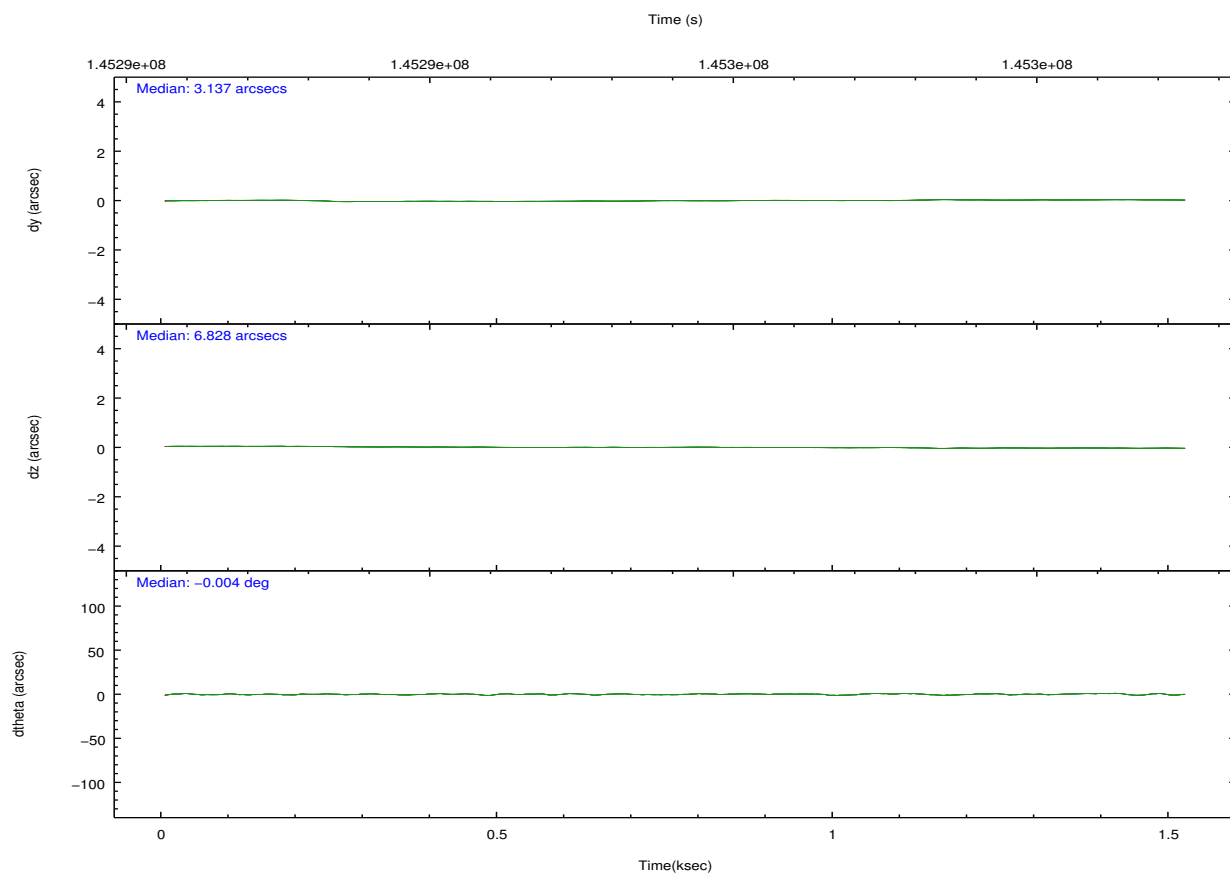
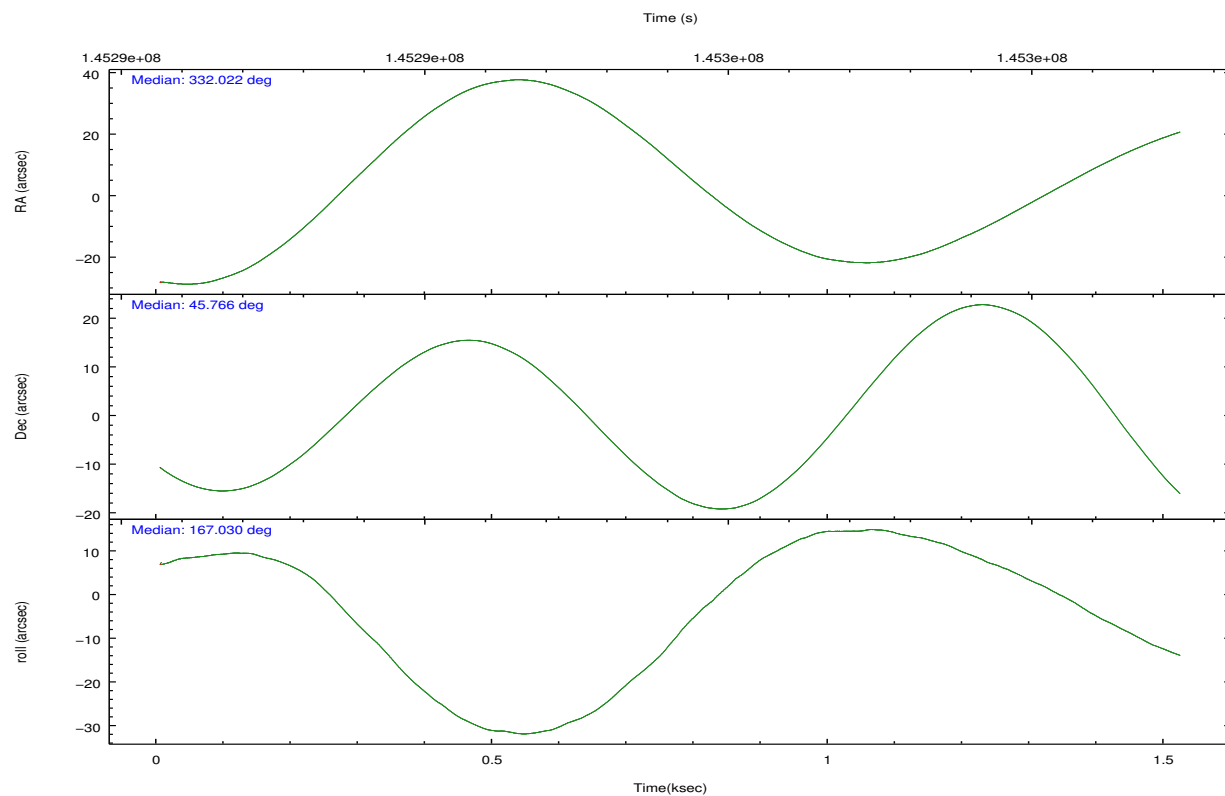
2.2 Compared Parameters

| 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 | 332.0239842956333 | 332.0239842956333 |
| [deg] Pointing Dec | 45.76547156081648 | 45.76547156081648 |
| [deg] Pointing Roll | 167.0350606480037 | 167.0350606480037 |
| [mm] SIM focus pos | -1.4281808131 | -1.4281808131 |
| [mm] SIM defocus | 0.1051557500557434 | 0.1051557500557434 |
| [mm] SIM translation stage pos | 250.4660330802 | 250.4660330802 |
| [mm] SIM translation stage offset | -0.01005726120527584 | -0.01005726120527584 |
| [s] Observation start time (MET) | 145294149.399723 | 145294149.399723 |
| Observation start date | 2002-08-09T15:31:14 | 2002-08-09T15:29:09 |
| [s] Observation end time (MET) | 145295670.86 | 145295670.86 |
| Observation end date | 2002-08-09T15:46:47 | 2002-08-09T15:54:30 |

| Parameter | Planned | Actual |
|------------------------------|-----------|----------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | OVERRIDE | OVERRIDE |

2.3 Aspect



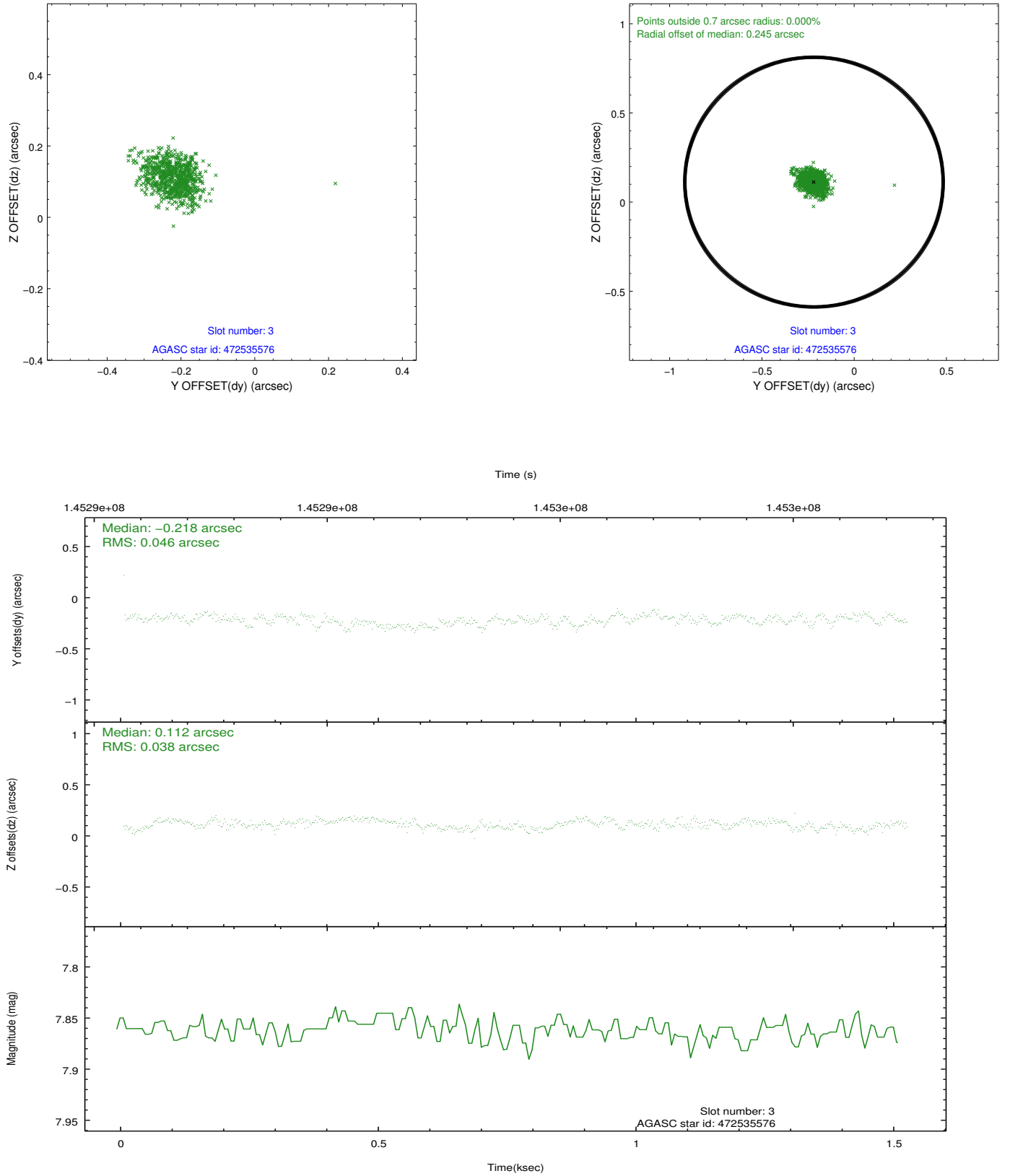


Slot Statistics

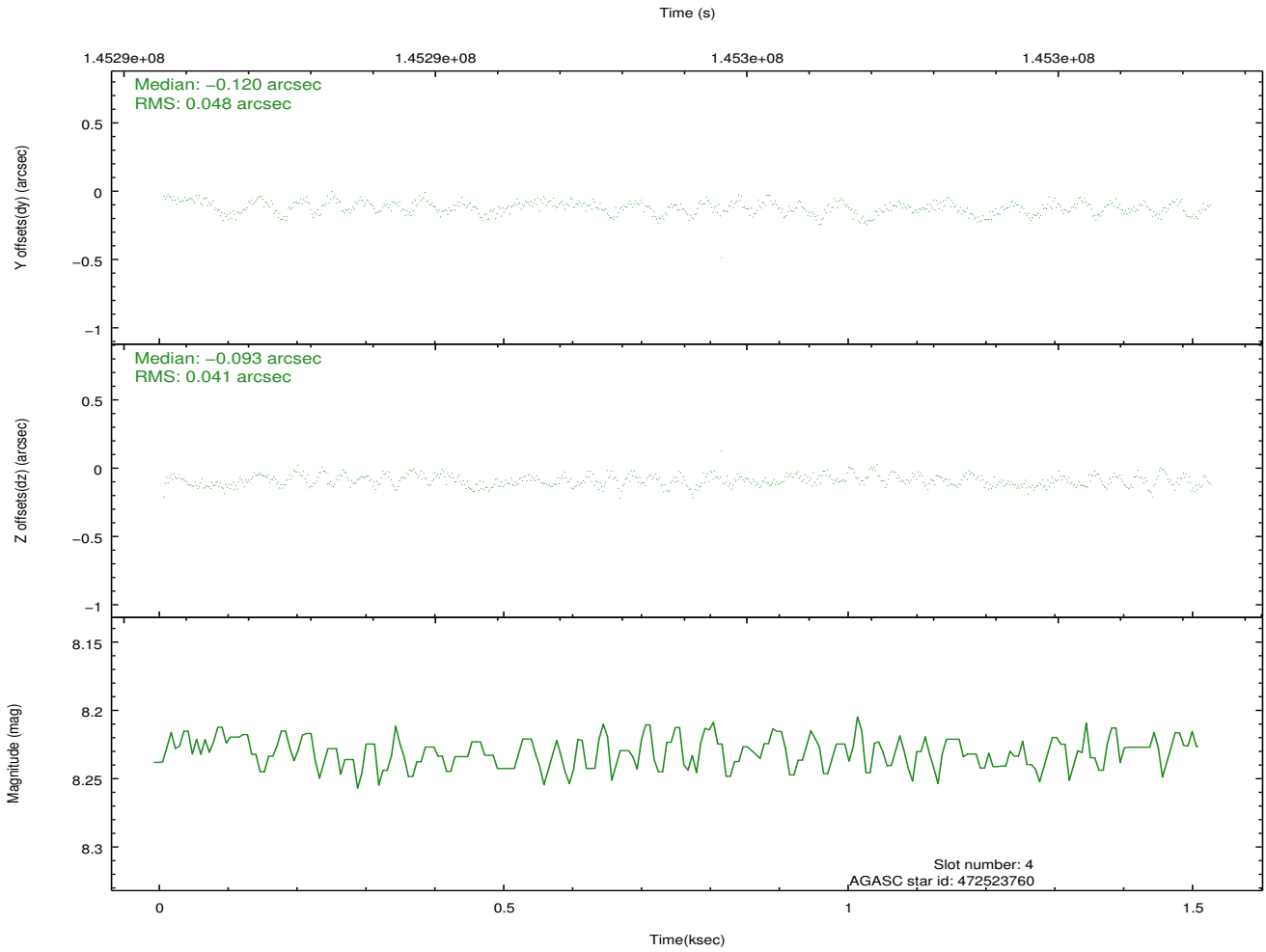
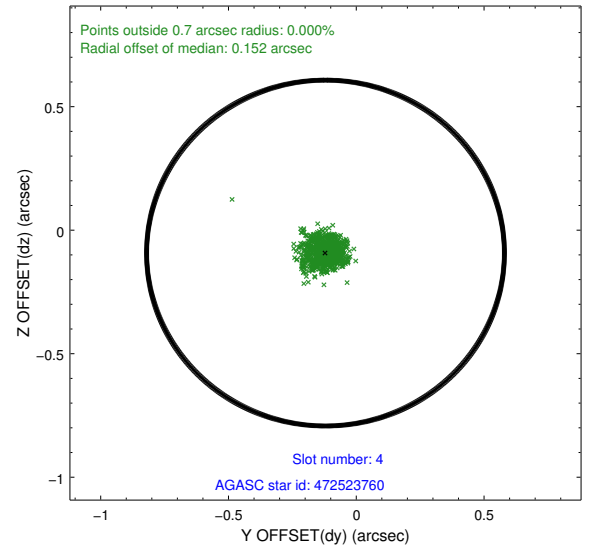
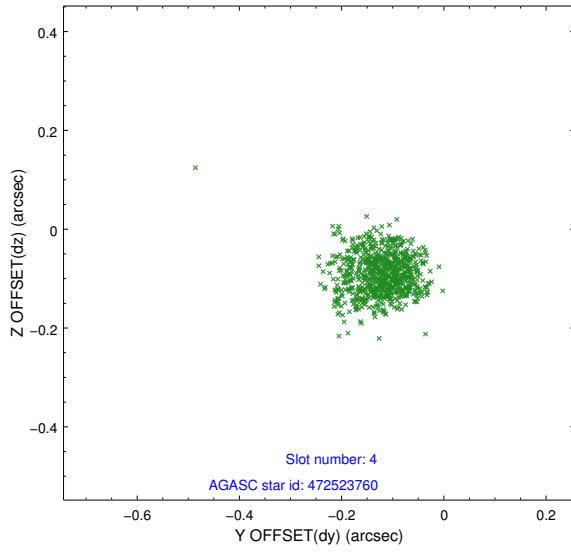
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-S-1 | 7.01 | 371 | 0.153 | -0.106 | 0.007 | 0.013 | 0.000000 | 0.000000 | -1157.16 | -455.37 |
| 1 | FID | HRC-S-2 | 7.01 | 371 | 0.091 | -0.094 | 0.005 | 0.009 | 0.000000 | 0.000000 | 1239.34 | -449.20 |
| 2 | FID | HRC-S-3 | 7.03 | 371 | 0.146 | -0.103 | 0.008 | 0.014 | 0.000000 | 0.000000 | -1156.55 | 572.96 |
| 3 | GUIDE | 472535576 | 7.86 | 742 | -0.218 | 0.112 | 0.061 | 0.096 | 331.438373 | 46.291802 | 1930.71 | -1464.39 |
| 4 | GUIDE | 472523760 | 8.23 | 742 | -0.120 | -0.093 | 0.068 | 0.103 | 331.645363 | 45.403260 | 724.16 | 1540.04 |
| 5 | GUIDE | 472665256 | 9.02 | 742 | 0.154 | 0.068 | 0.074 | 0.121 | 332.808125 | 46.195041 | -1468.46 | -1896.67 |
| 6 | GUIDE | 472527656 | 9.17 | 739 | 0.101 | -0.071 | 0.080 | 0.131 | 331.004689 | 45.273362 | 2200.93 | 2347.97 |
| 7 | GUIDE | 472659832 | 9.46 | 741 | 0.105 | -0.017 | 0.081 | 0.137 | 332.780399 | 46.098139 | -1481.30 | -1540.30 |

2.4 Star Slots

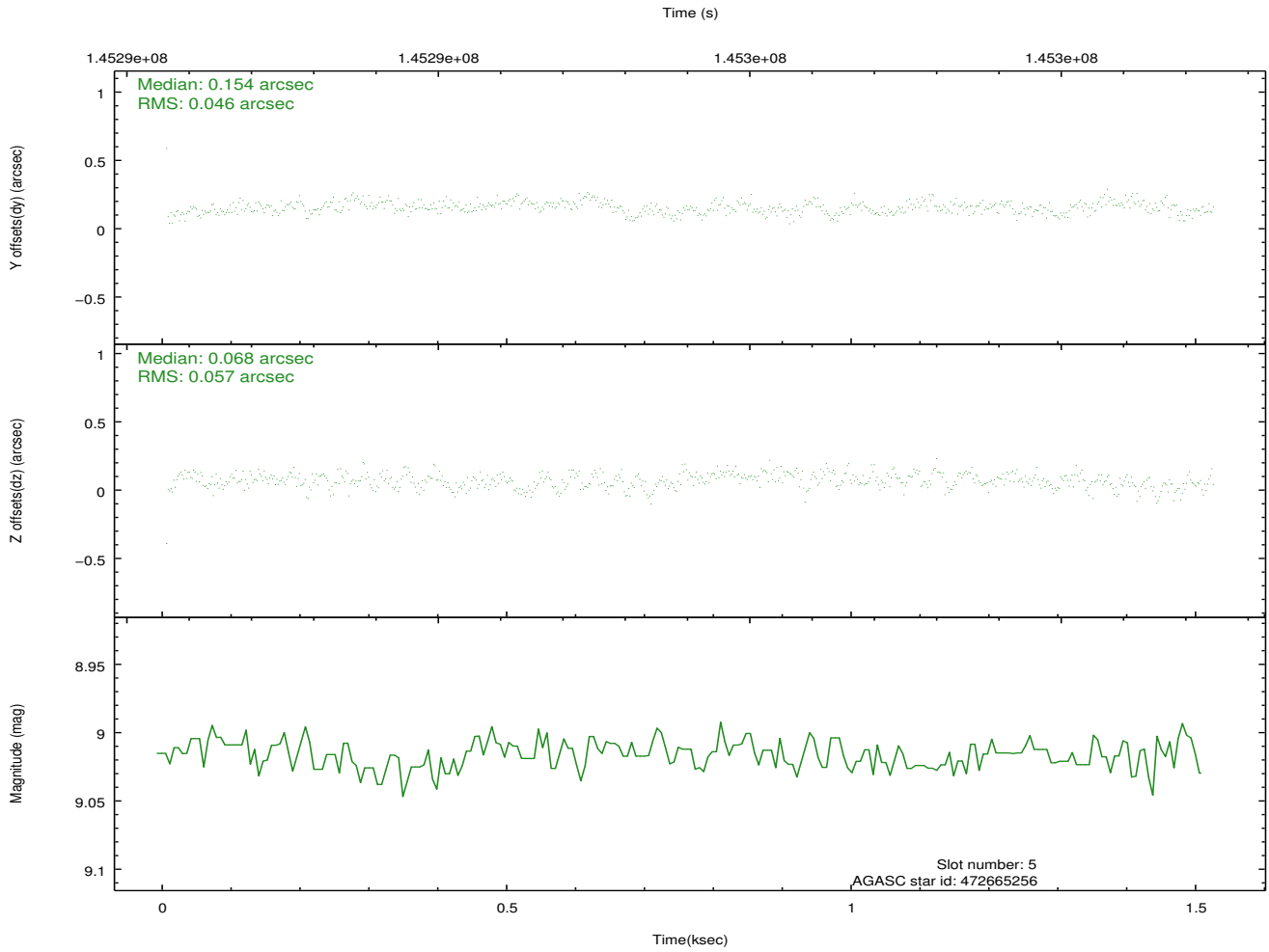
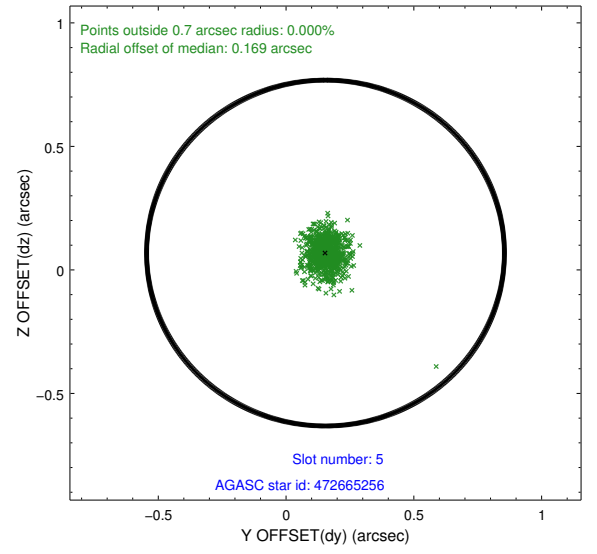
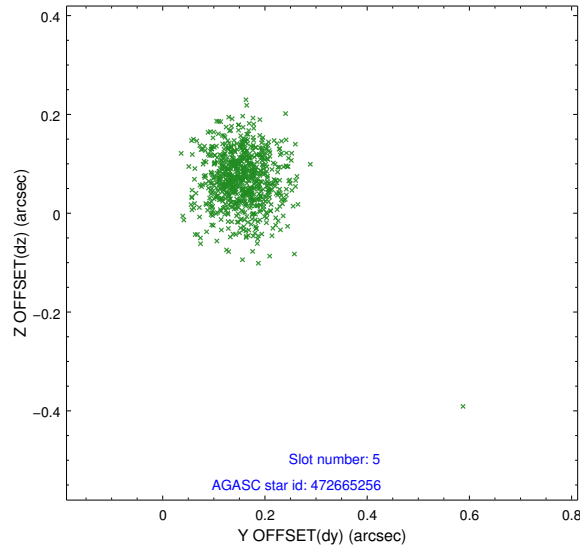
2.4.1 Slot 3



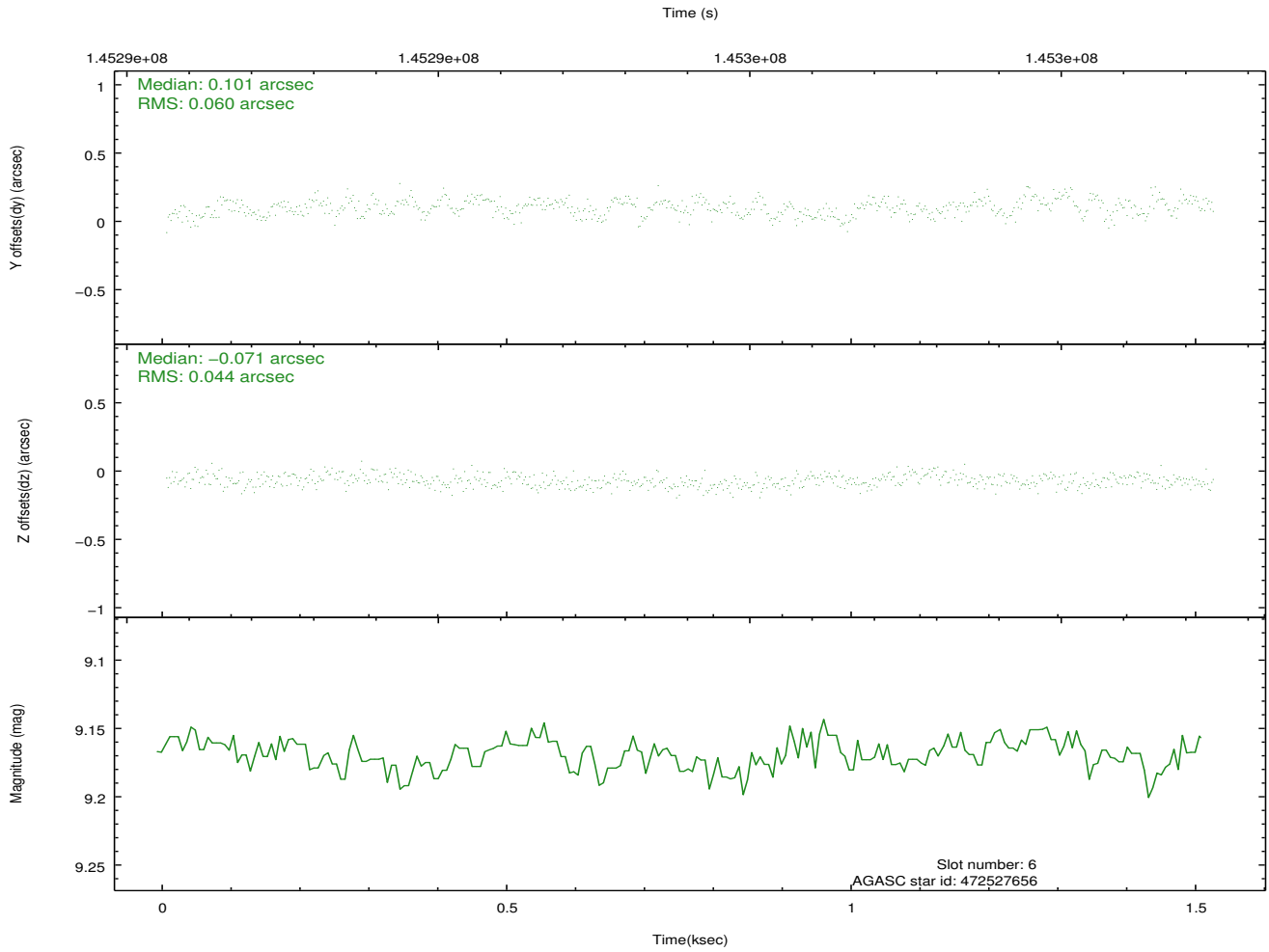
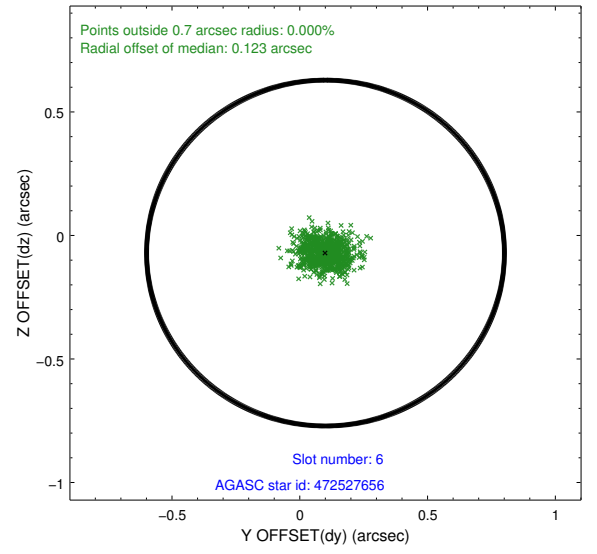
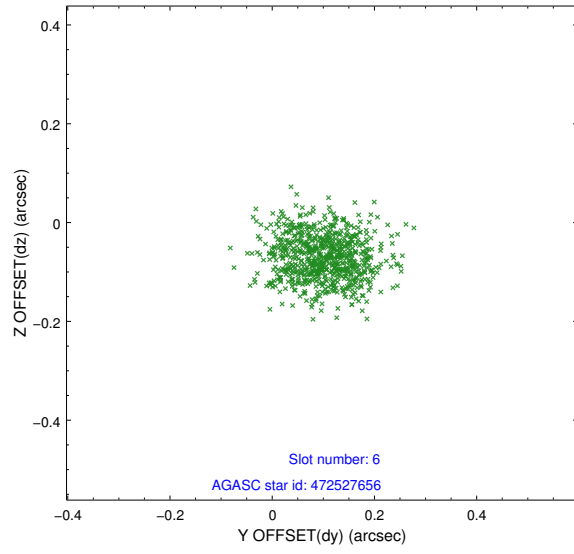
2.4.2 Slot 4



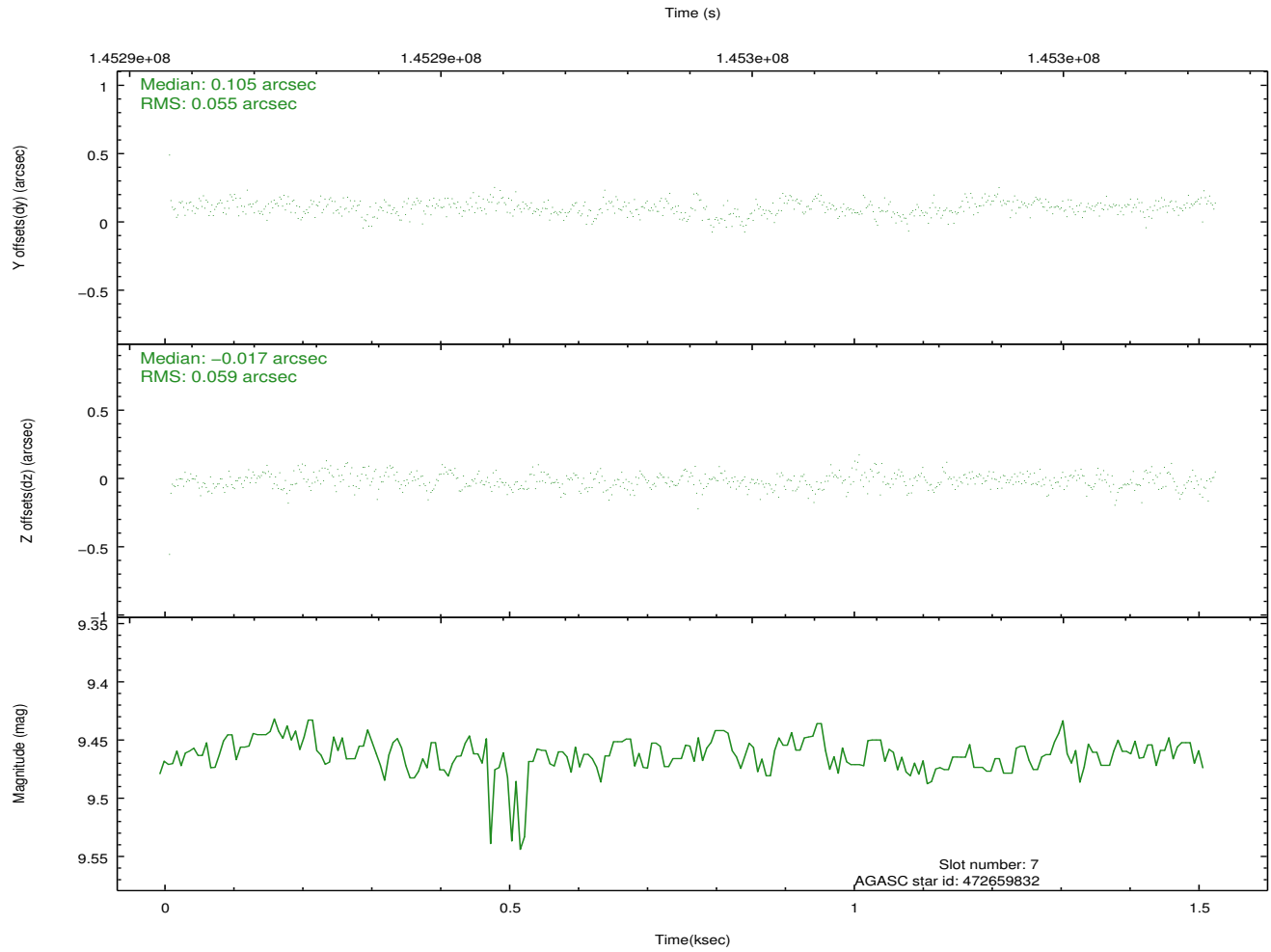
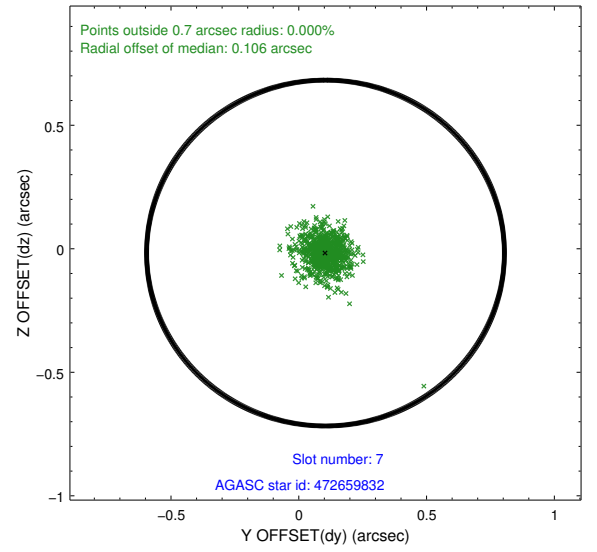
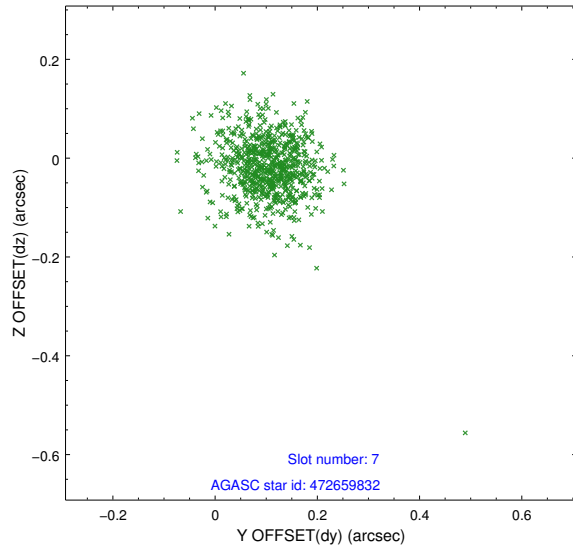
2.4.3 Slot 5



2.4.4 Slot 6

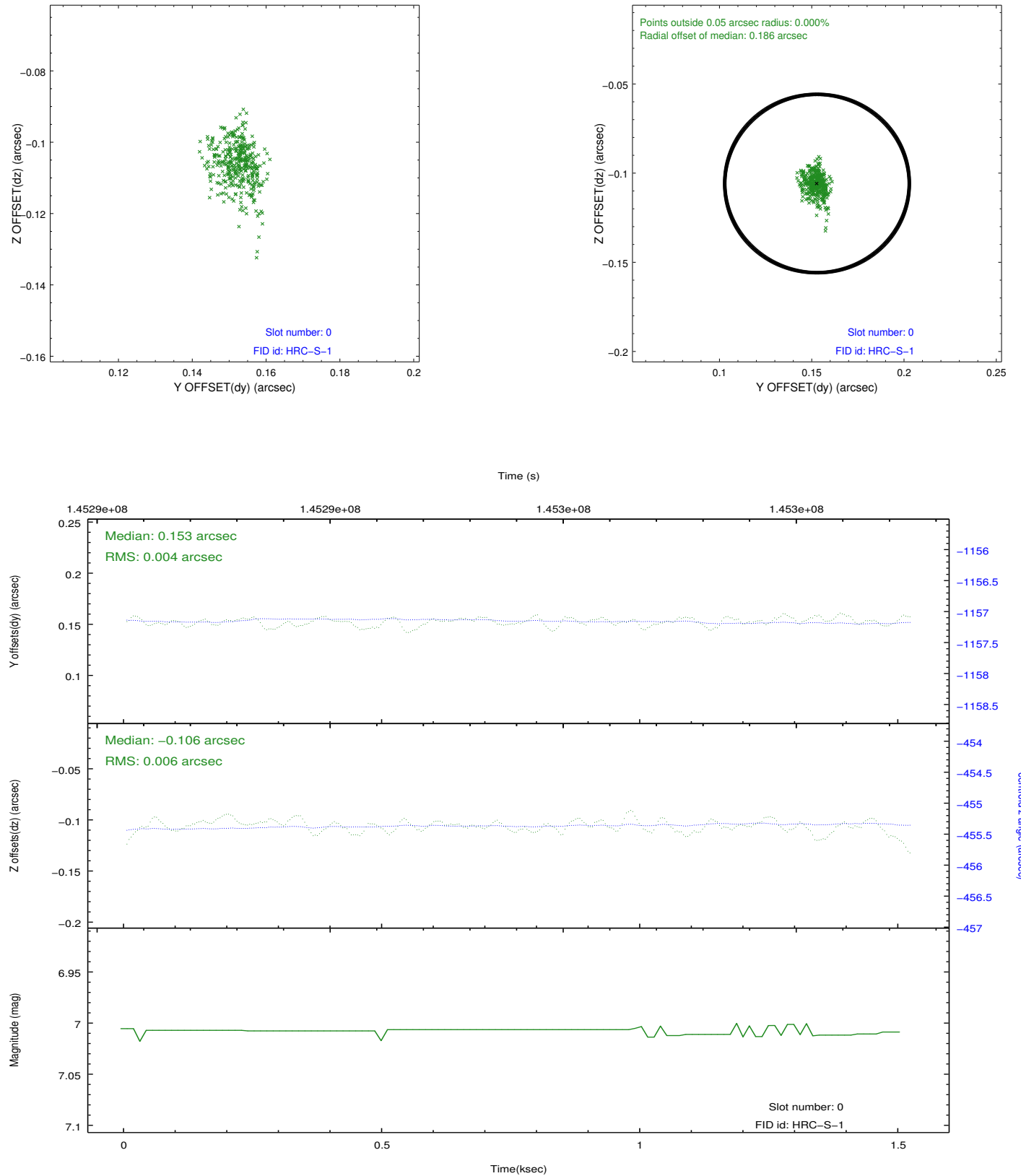


2.4.5 Slot 7

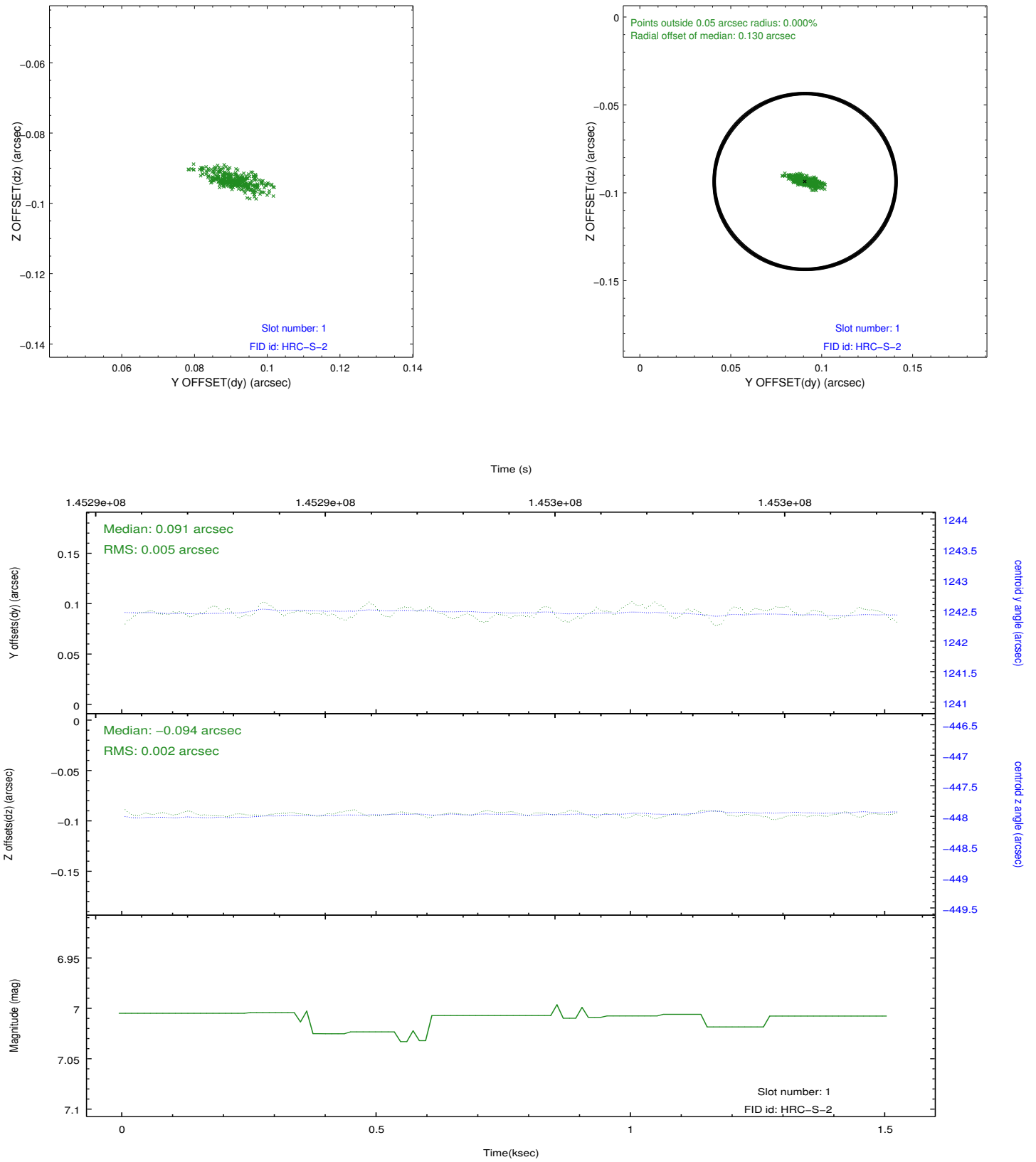


2.5 FID Slots

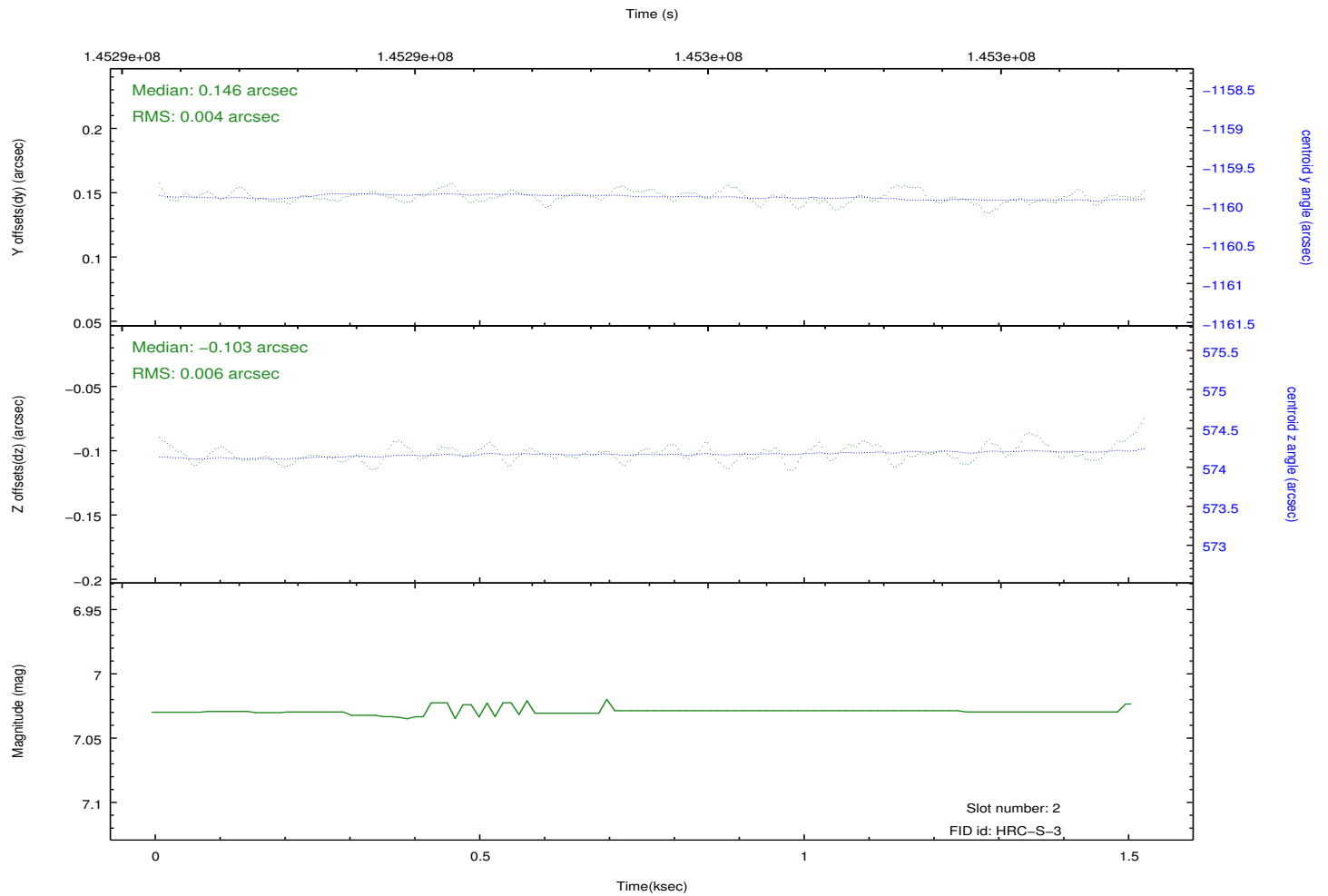
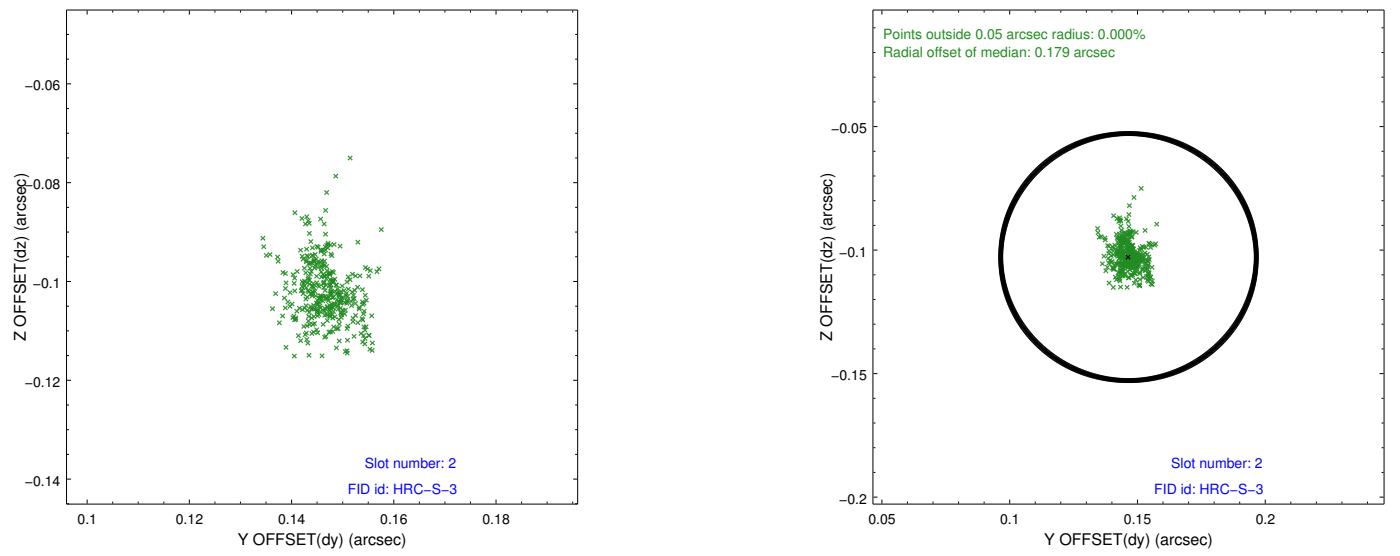
2.5.1 Slot 0



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) | 2012.10.22 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.515 |

A.2 Comments

Charge time for this ObsId remains at previous value of 1.515 ksec, although with the current processing the charge time would have been 1.44 ksec. Monitor constraint satisfied. Observation stop time was forced to be tstop=145295670.86 in order to prevent all three fidlights from being declared BAD and the evt2 file from losing all events.