

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2641 - L2 Version 3
Chandra X-Ray Center

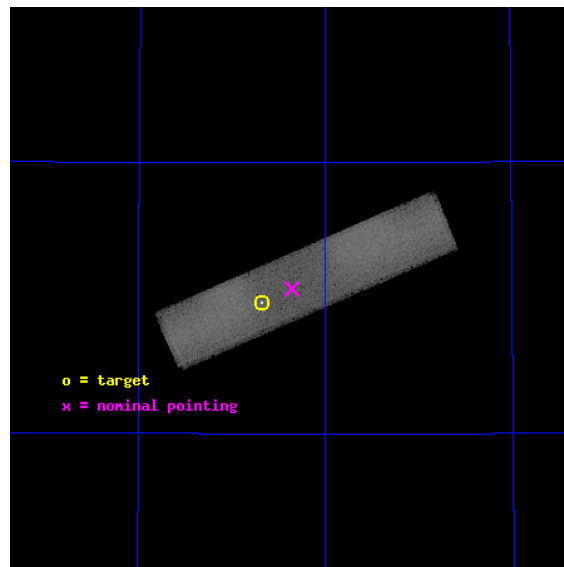
L2 Processing Date : Oct 1 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Parameters | 4 |
| 2.1.3 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

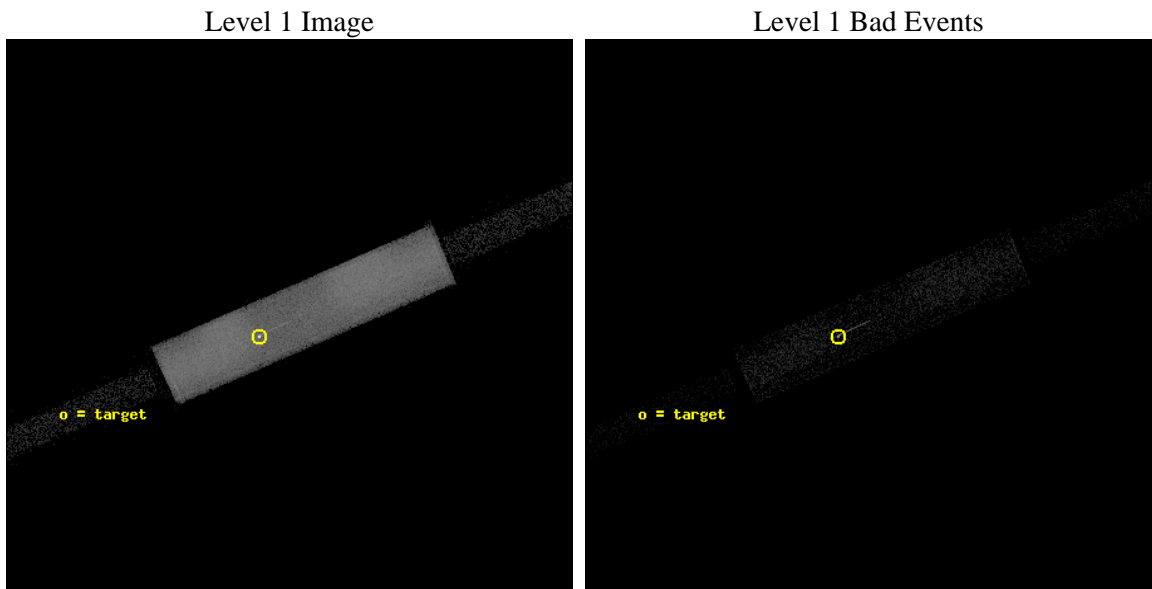
| | | |
|----------|---|--|
| seq_num | 290197 | Sequence number |
| obs_id | 2641 | Observation id |
| title | AO3A HRC-S CALIBRATION OBSERVATION: MINI-SCAN OF ARLAC | Proposal ti |
| observer | Dr. CXC Calibration | Principal investigator |
| object | ARLAC | Source name |
| ra_targ | 332.17 | Observer's specified target RA [deg] |
| dec_targ | 45.742306 | Observer's specified target Dec [deg] |
| ra_nom | 332.08960226404 | Nominal RA [deg] |
| dec_nom | 45.76783469003 | Nominal Dec [deg] |
| roll_nom | 336.52651434092 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 1142.1062960327 | [s] |
| livetime | 1123.9702783585 | Ontime multiplied by DTCOR |
| l2events | 133299 | 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 | 8.4.5 | Processing system revision | ontime | 1142.1062960327 | [s] |
| caldsver | 4.5.2 | | l1events | 190400 | Number of level 1 events |
| date | 2012-10-01T03:04:42 | Date and time of file creation | | | |
| revision | 3 | Processing version of data | | | |

2.1.3 Events

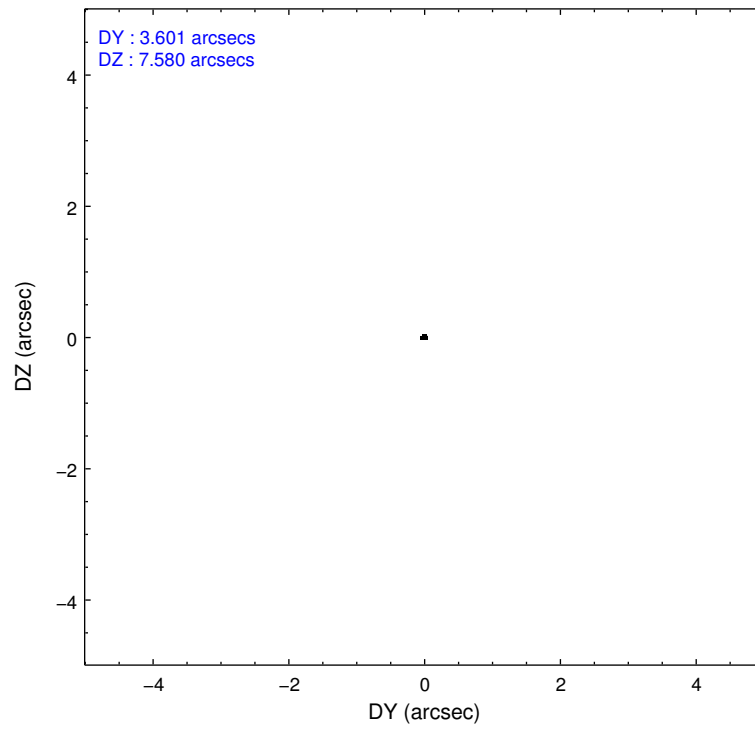
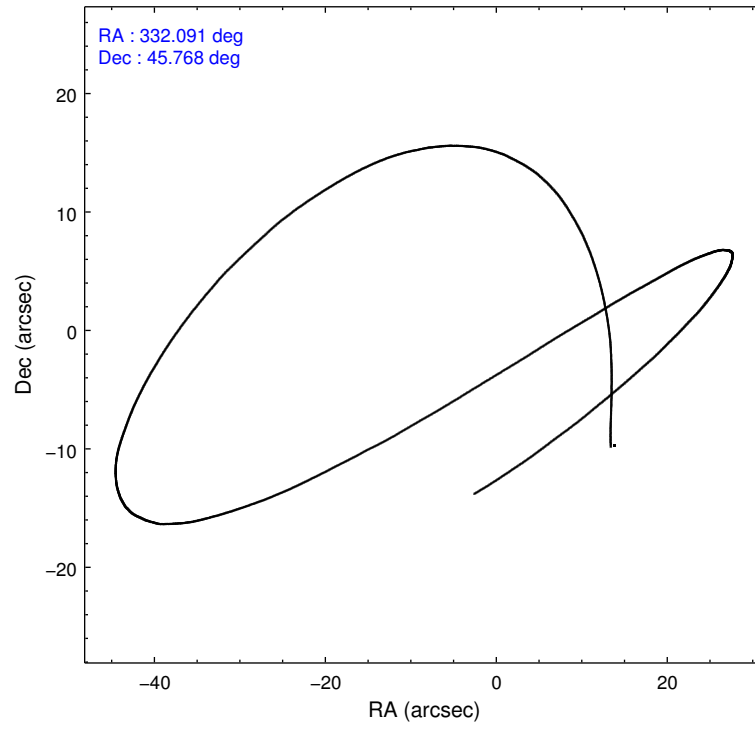
Level 1 Events

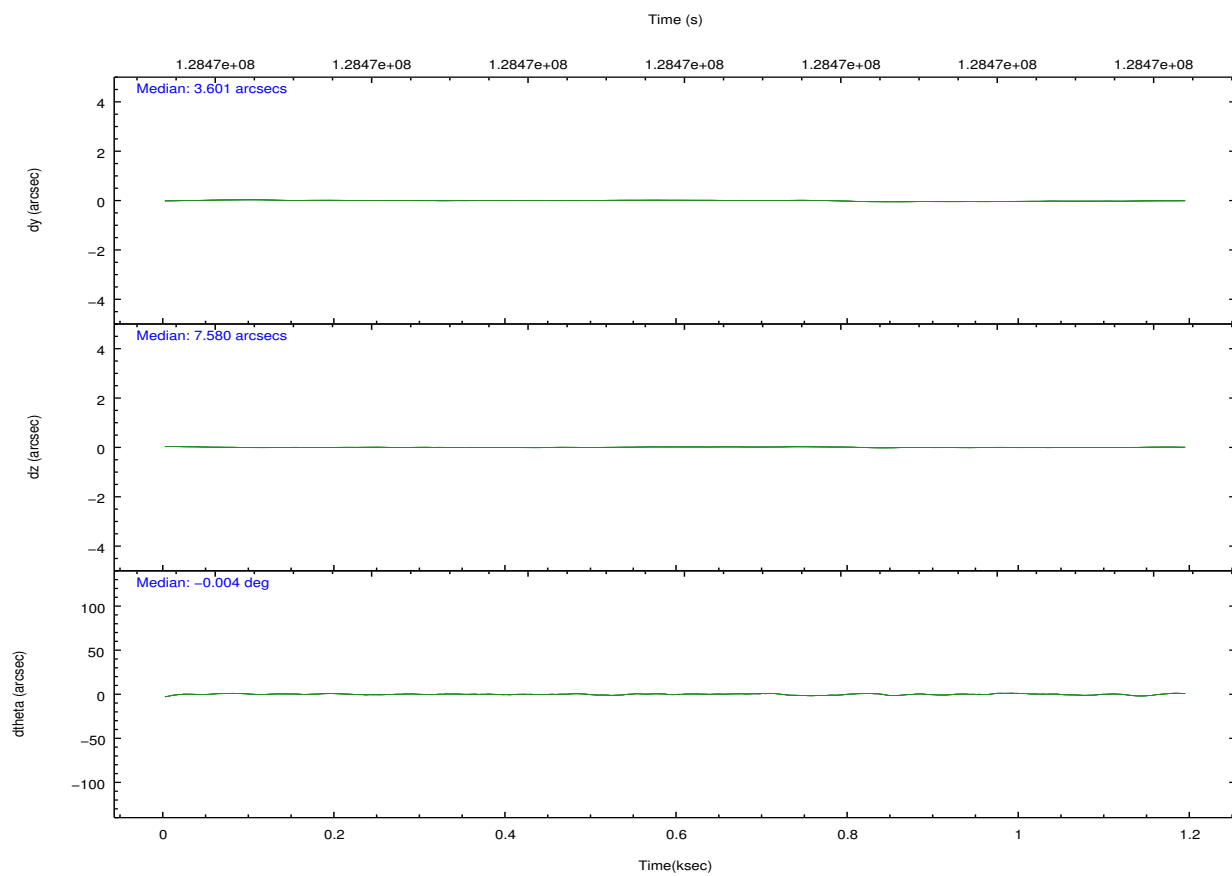
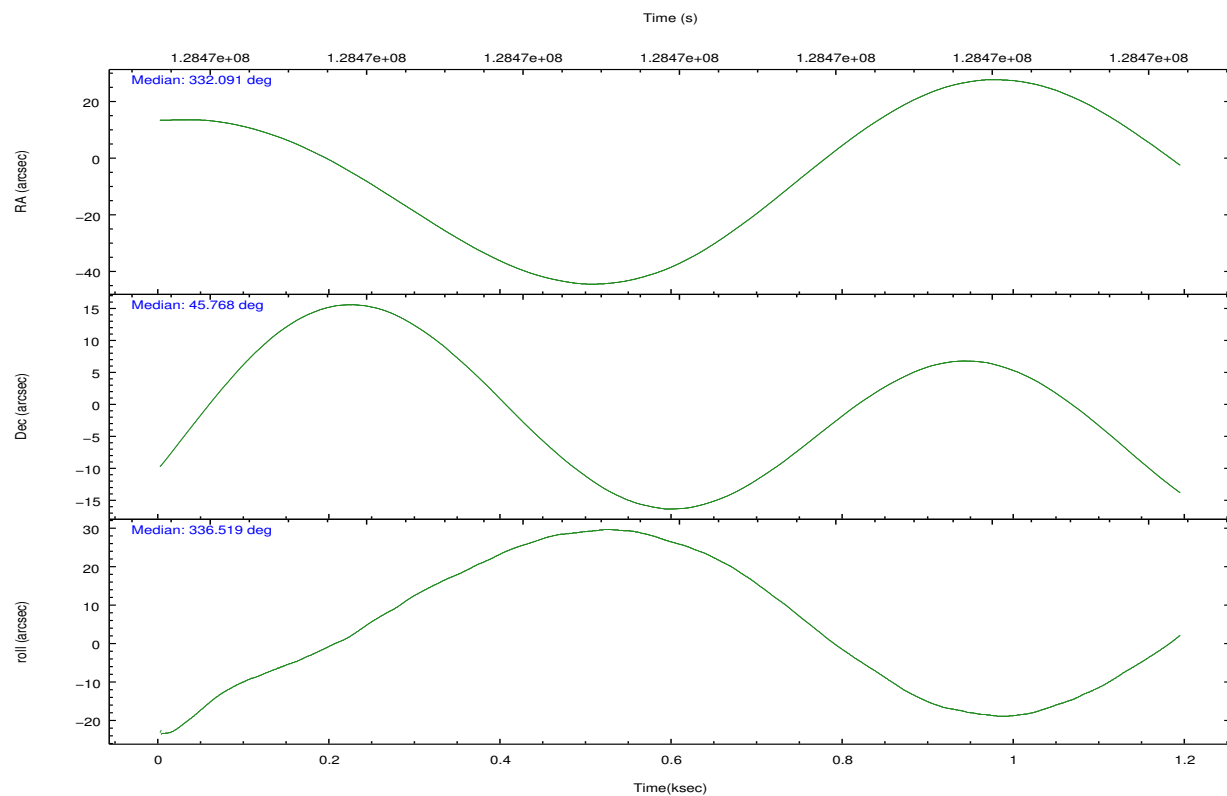
| | segment 1 | segment 2 | segment 3 |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events | 3766 | 183413 | 3221 |
| rejected events | 3766 | 39320 | 3221 |
| rejected % | 100% | 21% | 100% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 7 | 7 |
| Detector | HRC-S | HRC-S | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 332.048043 | 332.0896022640445 | | | |
| [deg] Pointing Dec | 45.762313 | 45.76783469003021 | | | |
| [deg] Pointing Roll | 336.489023 | 336.5265143409238 | | | |
| [mm] SIM focus pos | -1.429586 | -1.428180813131781 | | | |
| [mm] SIM defocus | 0.1037507710433287 | 0.1051558262725154 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 128466187.184000 | 128465810.95177 | | | |
| Observation start date | 2002-01-26T21:02:03 | 2002-01-26T20:56:50 | | | |
| [s] Observation end time (MET) | 128467187.184000 | 128467321.28933 | | | |
| Observation end date | 2002-01-26T21:18:43 | 2002-01-26T21:22:01 | | | |

2.3 Aspect



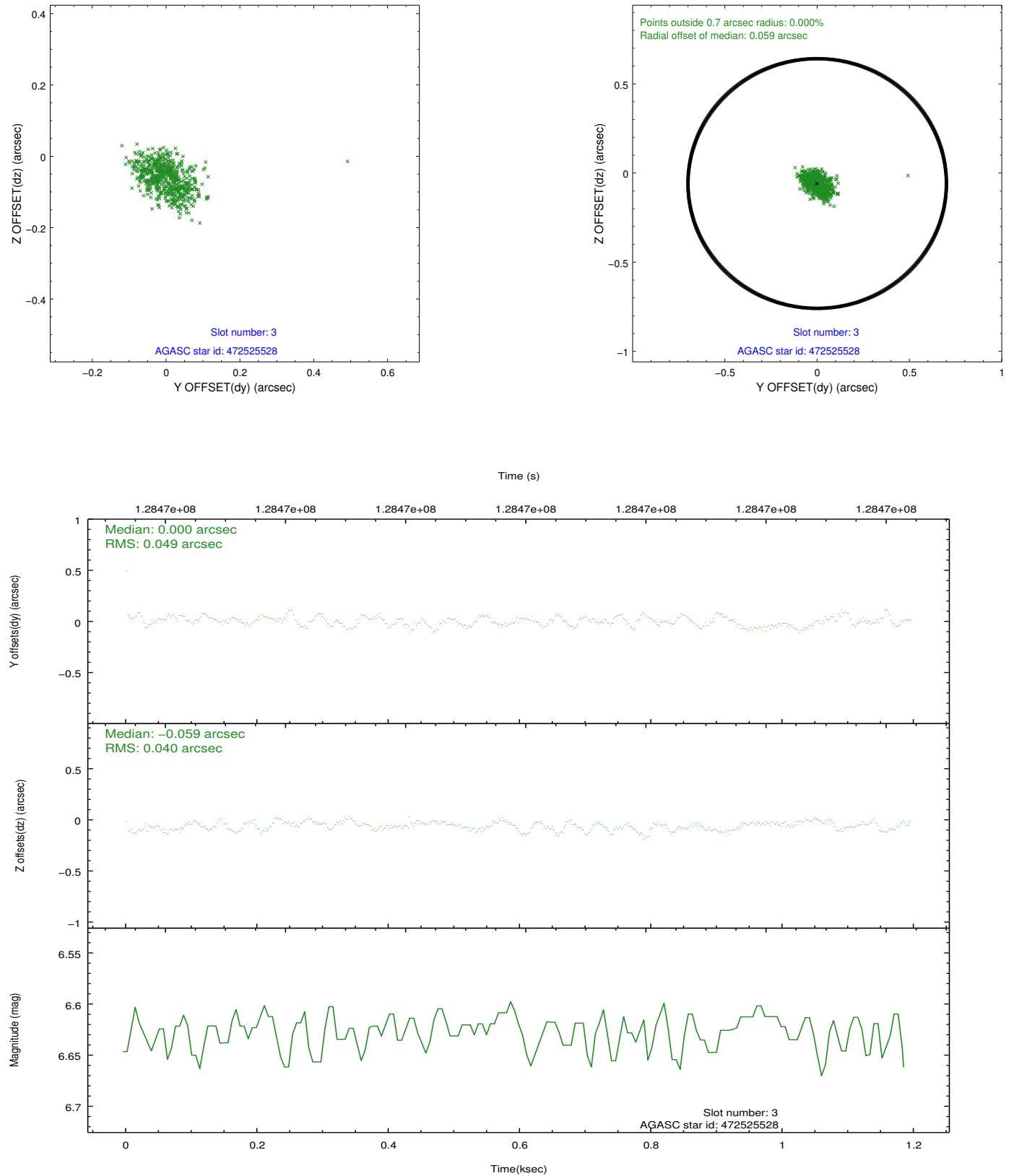


Slot Statistics

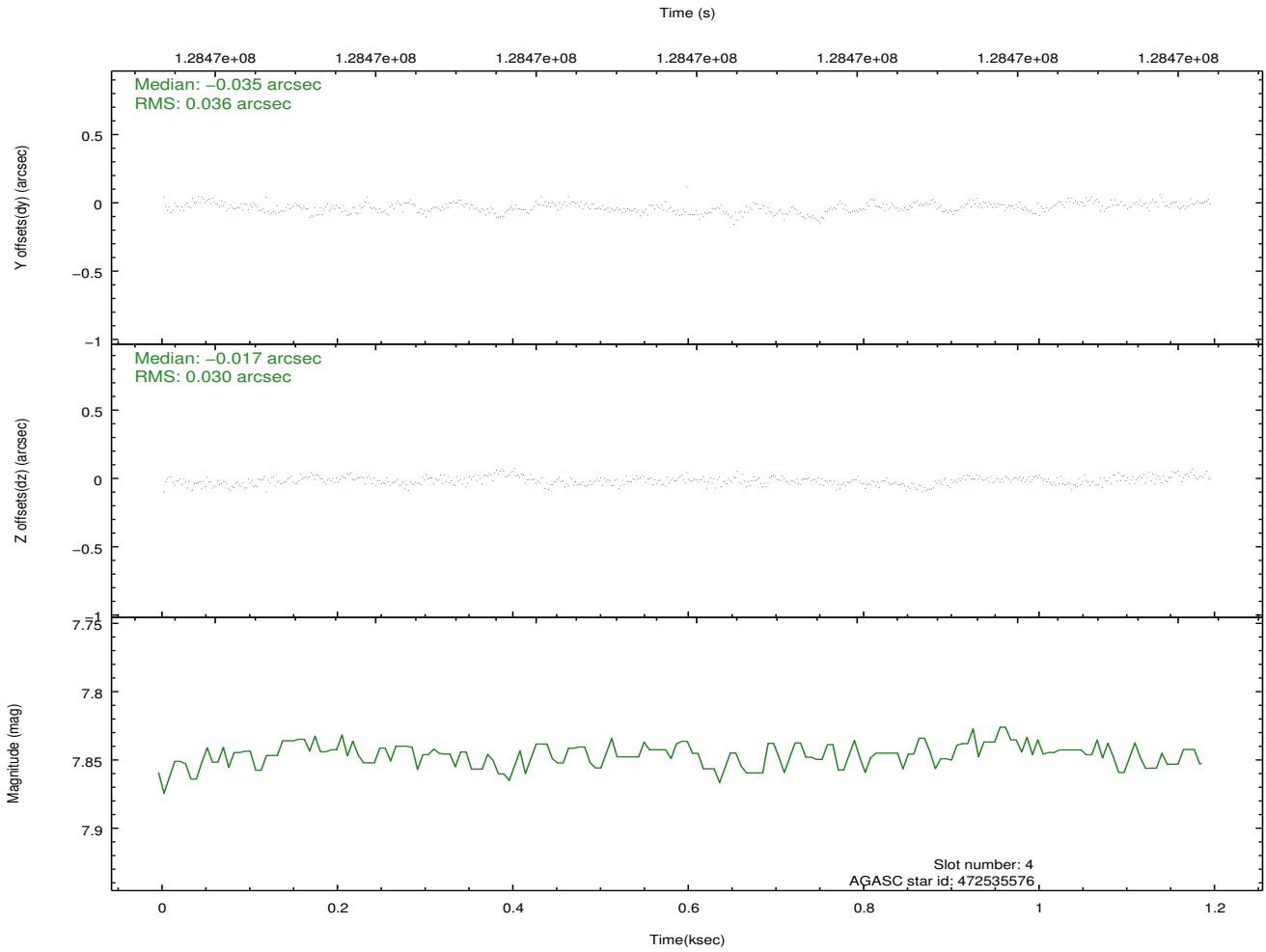
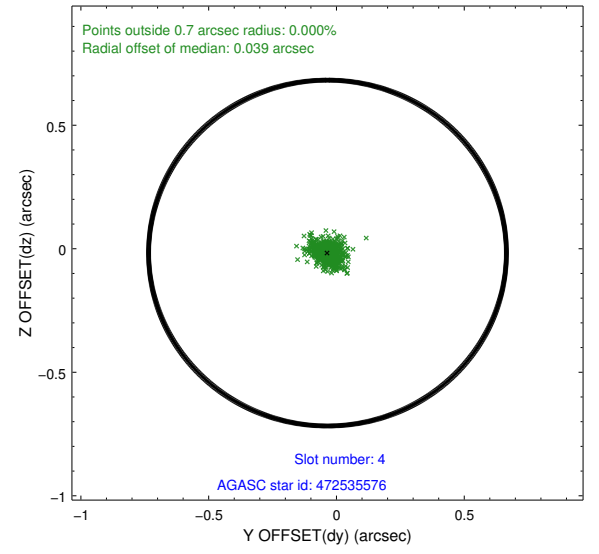
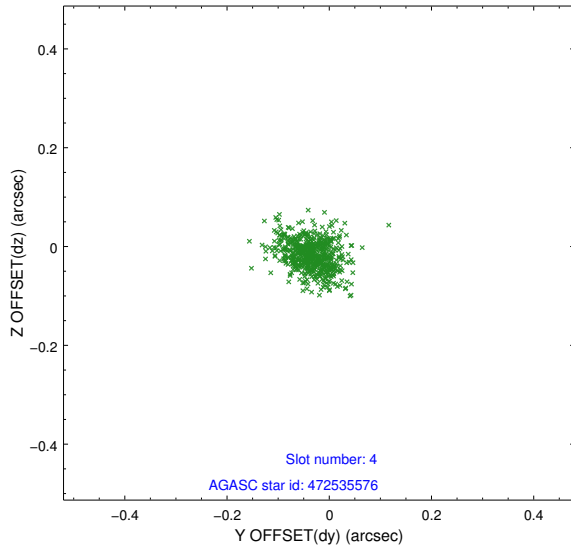
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-S-1 | 6.98 | 291 | 0.153 | -0.084 | 0.008 | 0.018 | 0.000000 | 0.000000 | -1157.62 | -456.13 |
| 1 | FID | HRC-S-2 | 6.99 | 291 | 0.077 | -0.088 | 0.005 | 0.010 | 0.000000 | 0.000000 | 1238.00 | -450.31 |
| 2 | FID | HRC-S-3 | 7.01 | 291 | 0.160 | -0.129 | 0.008 | 0.015 | 0.000000 | 0.000000 | -1156.10 | 571.81 |
| 3 | GUIDE | 472525528 | 6.63 | 583 | 0.000 | -0.059 | 0.066 | 0.102 | 331.551102 | 45.248694 | -420.29 | -2198.93 |
| 4 | GUIDE | 472535576 | 7.85 | 583 | -0.035 | -0.017 | 0.048 | 0.083 | 331.438373 | 46.291802 | -2155.98 | 1139.81 |
| 5 | GUIDE | 472536328 | 8.13 | 583 | -0.079 | 0.071 | 0.058 | 0.094 | 331.496671 | 46.454831 | -2256.10 | 1742.33 |
| 6 | GUIDE | 472659832 | 9.47 | 583 | 0.092 | 0.050 | 0.099 | 0.153 | 332.780399 | 46.098139 | 1185.16 | 1844.40 |
| 7 | GUIDE | 472654568 | 9.43 | 582 | 0.033 | -0.037 | 0.106 | 0.168 | 332.194449 | 45.063576 | 1345.46 | -2158.97 |

2.4 Star Slots

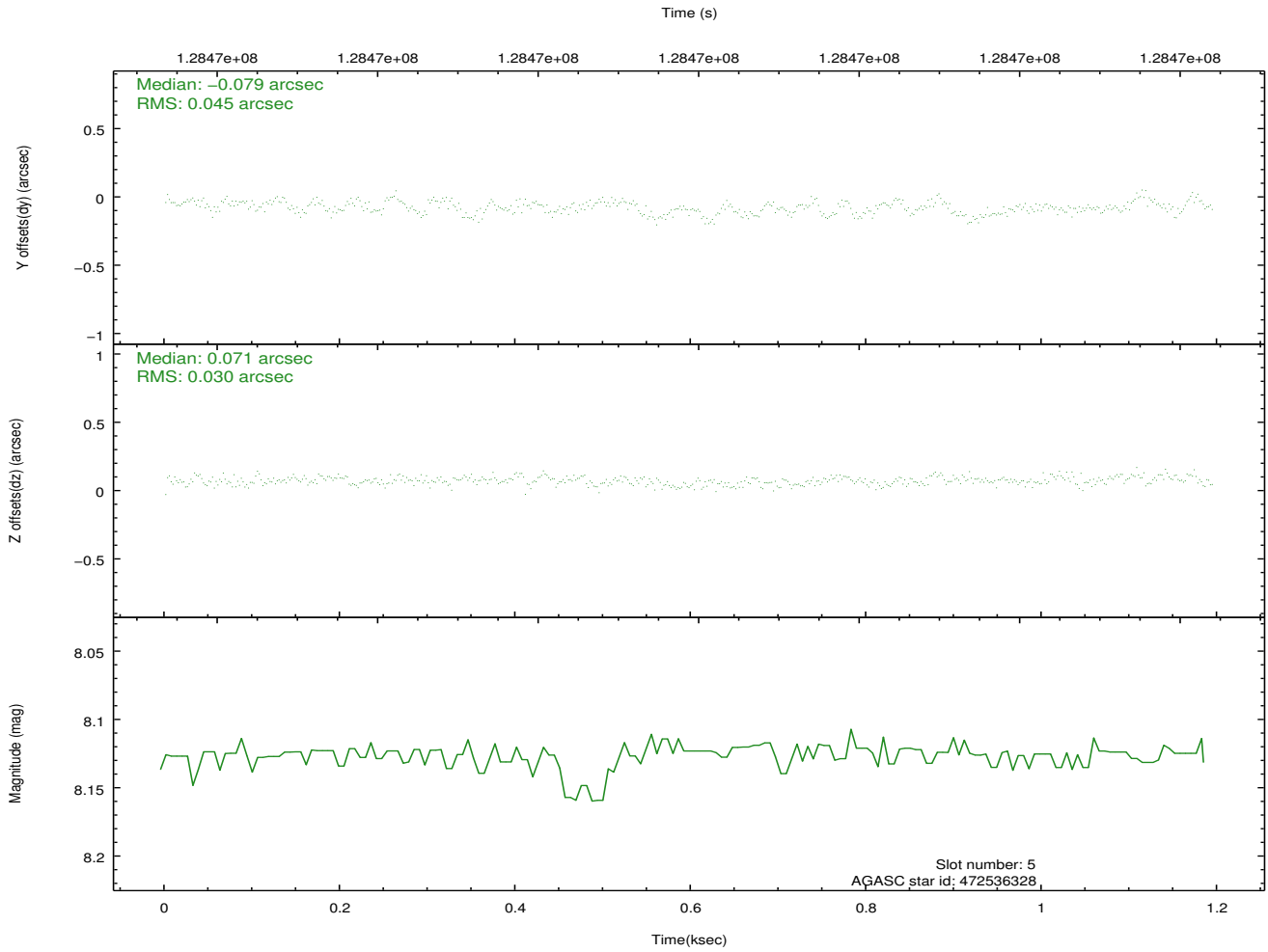
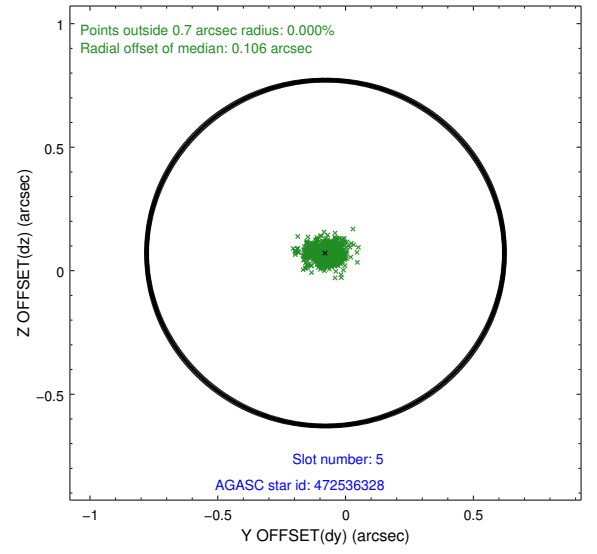
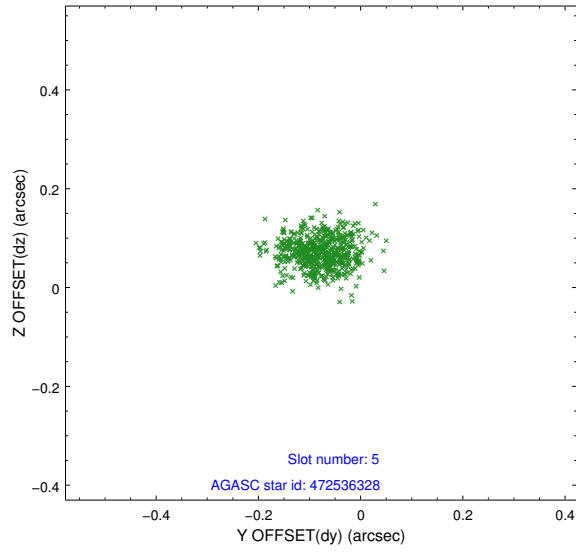
2.4.1 Slot 3



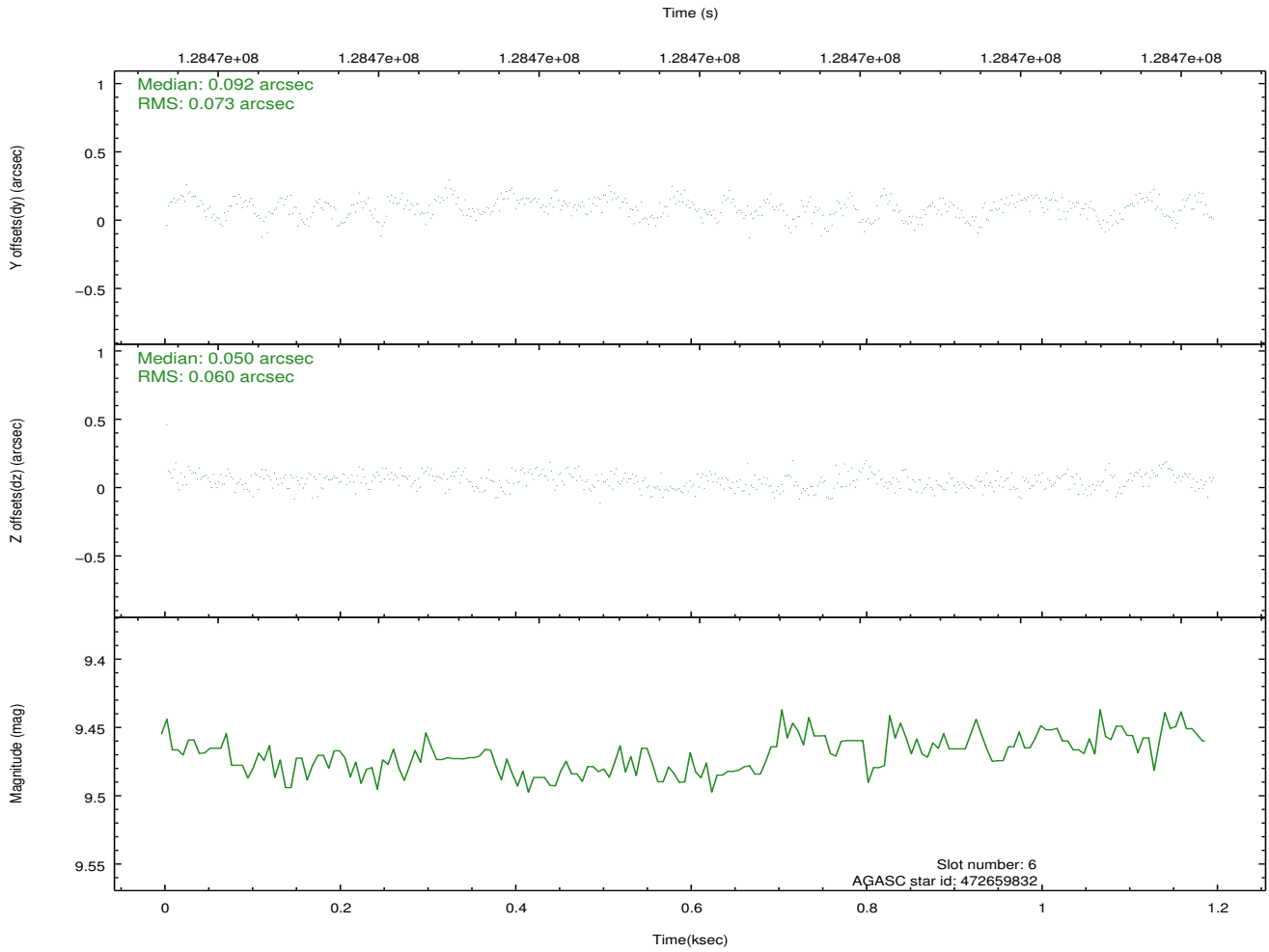
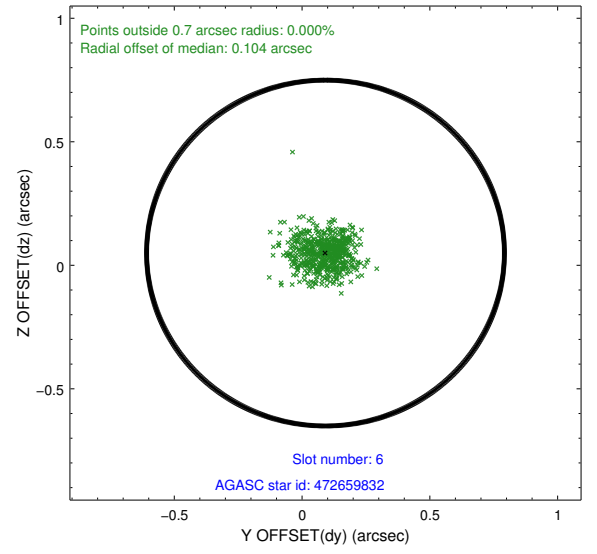
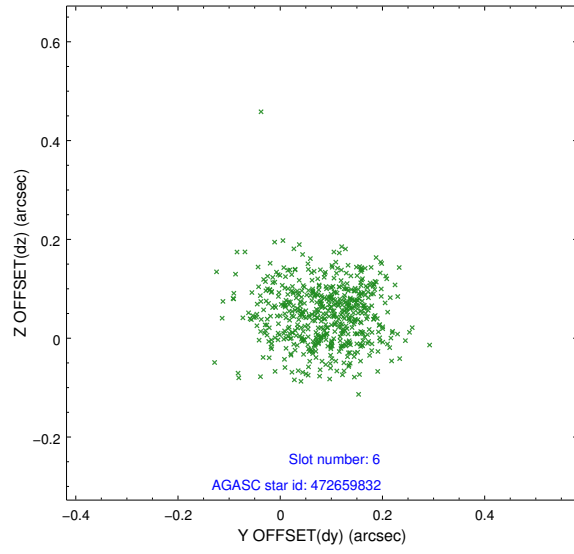
2.4.2 Slot 4



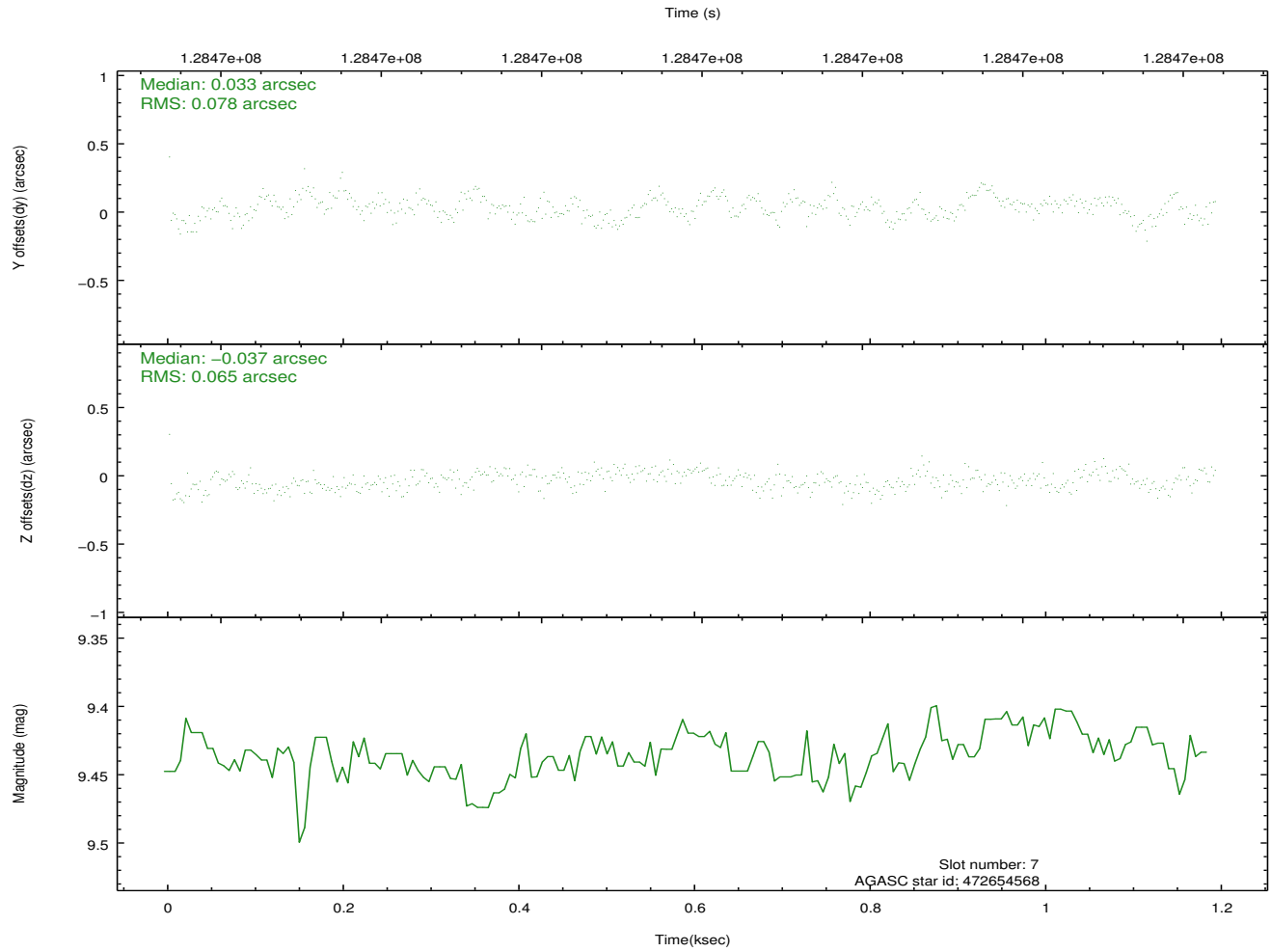
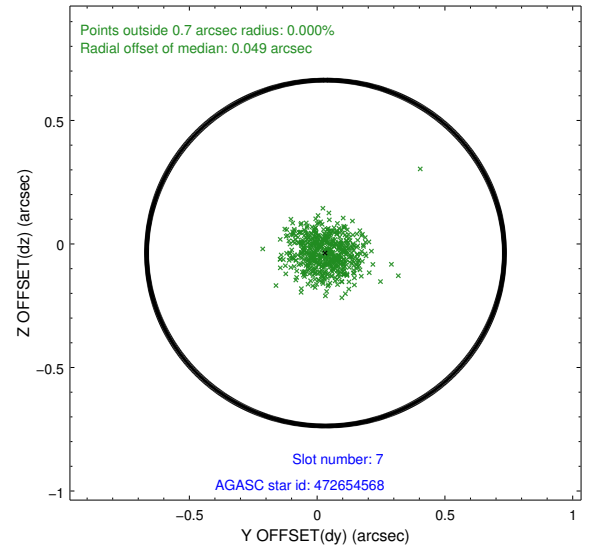
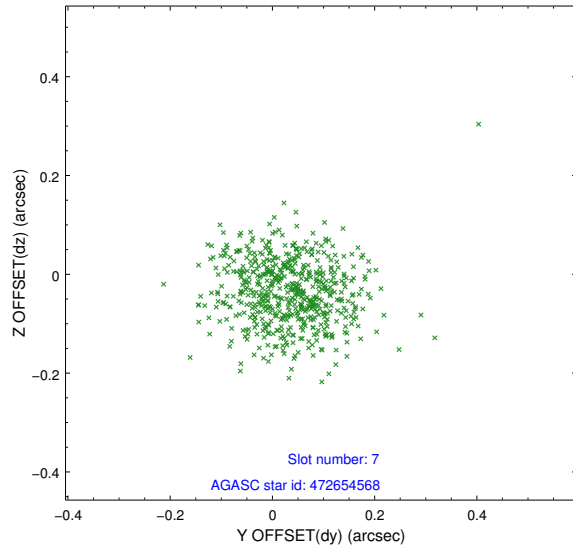
2.4.3 Slot 5



2.4.4 Slot 6

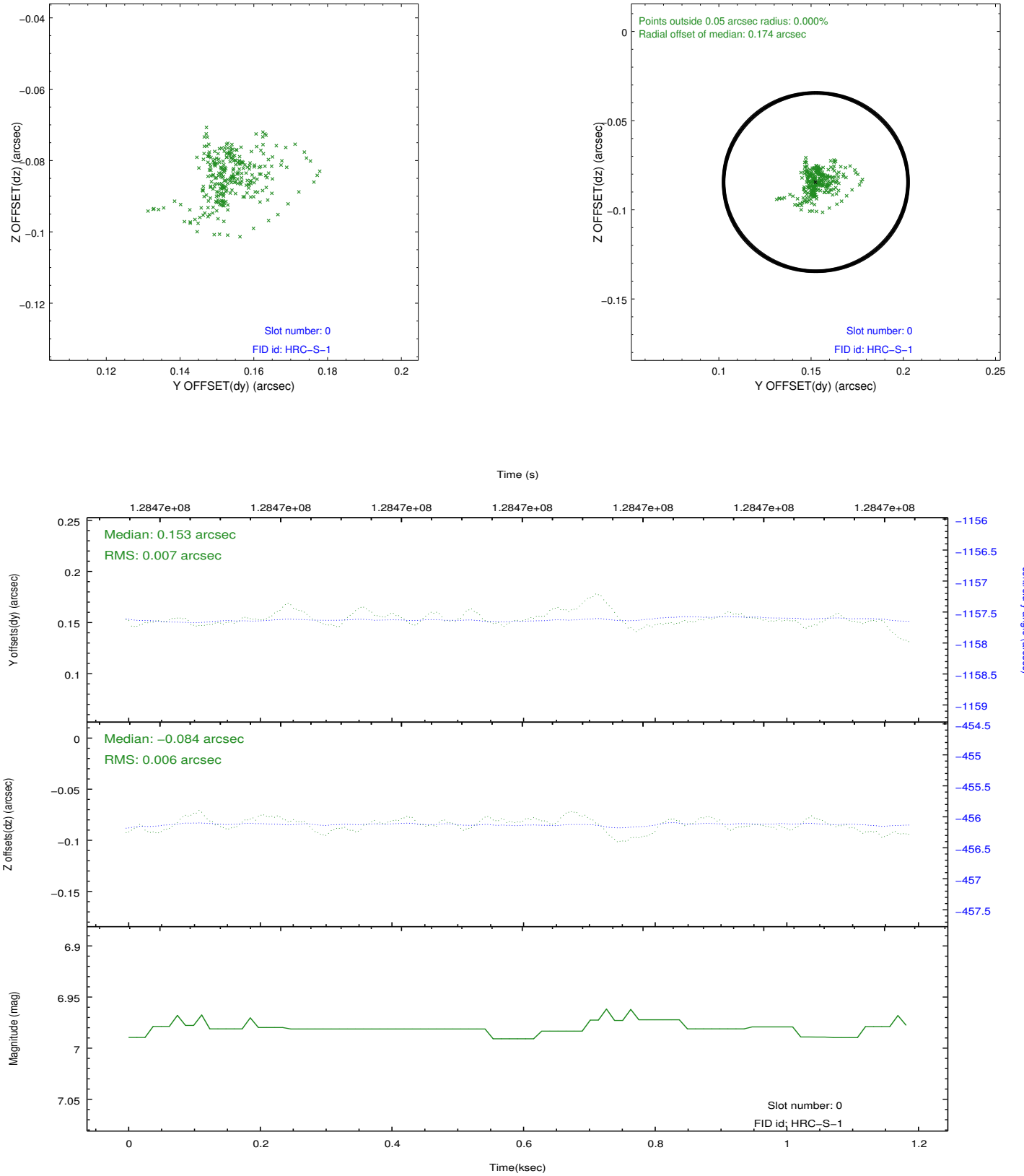


2.4.5 Slot 7

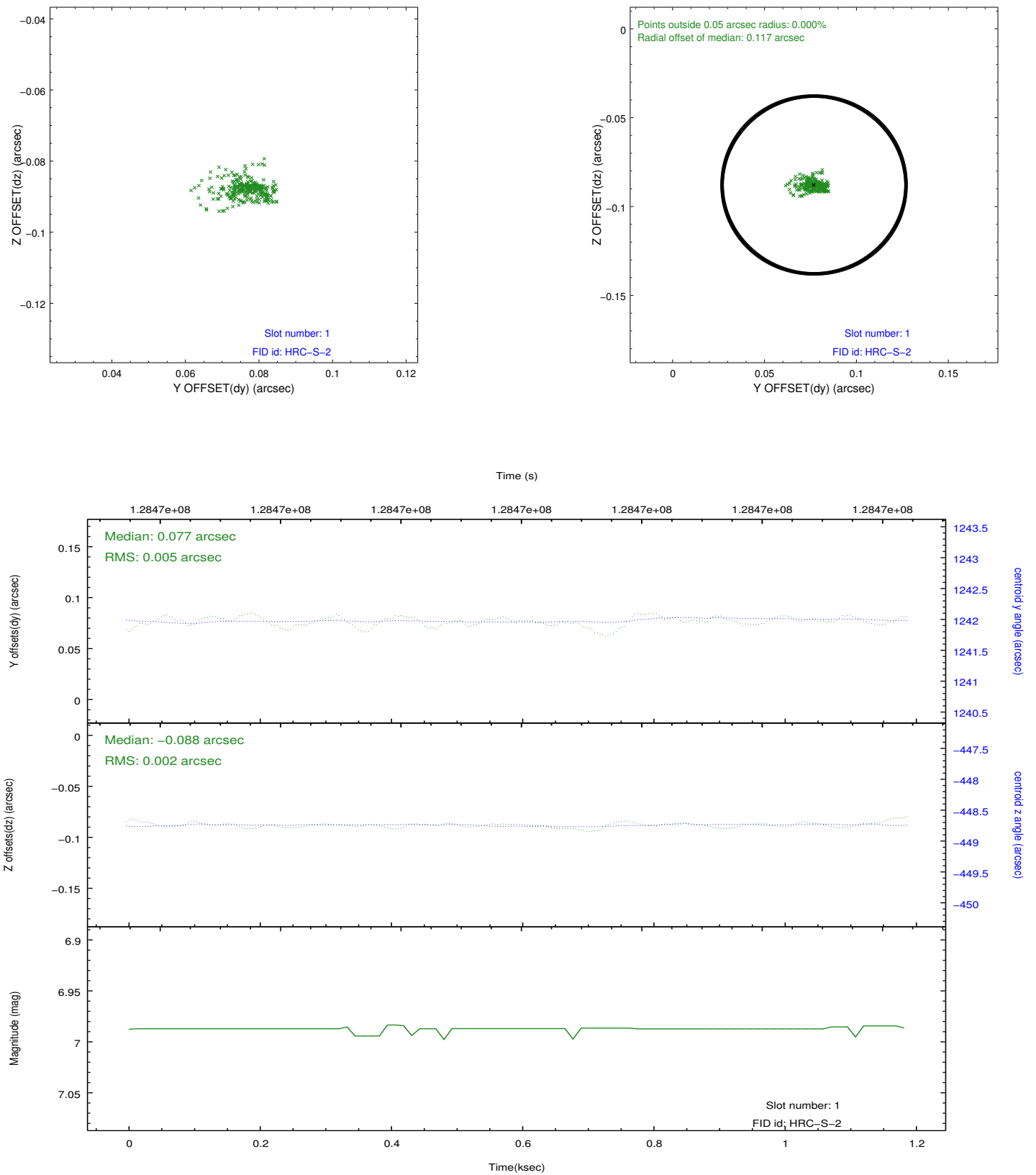


2.5 FID Slots

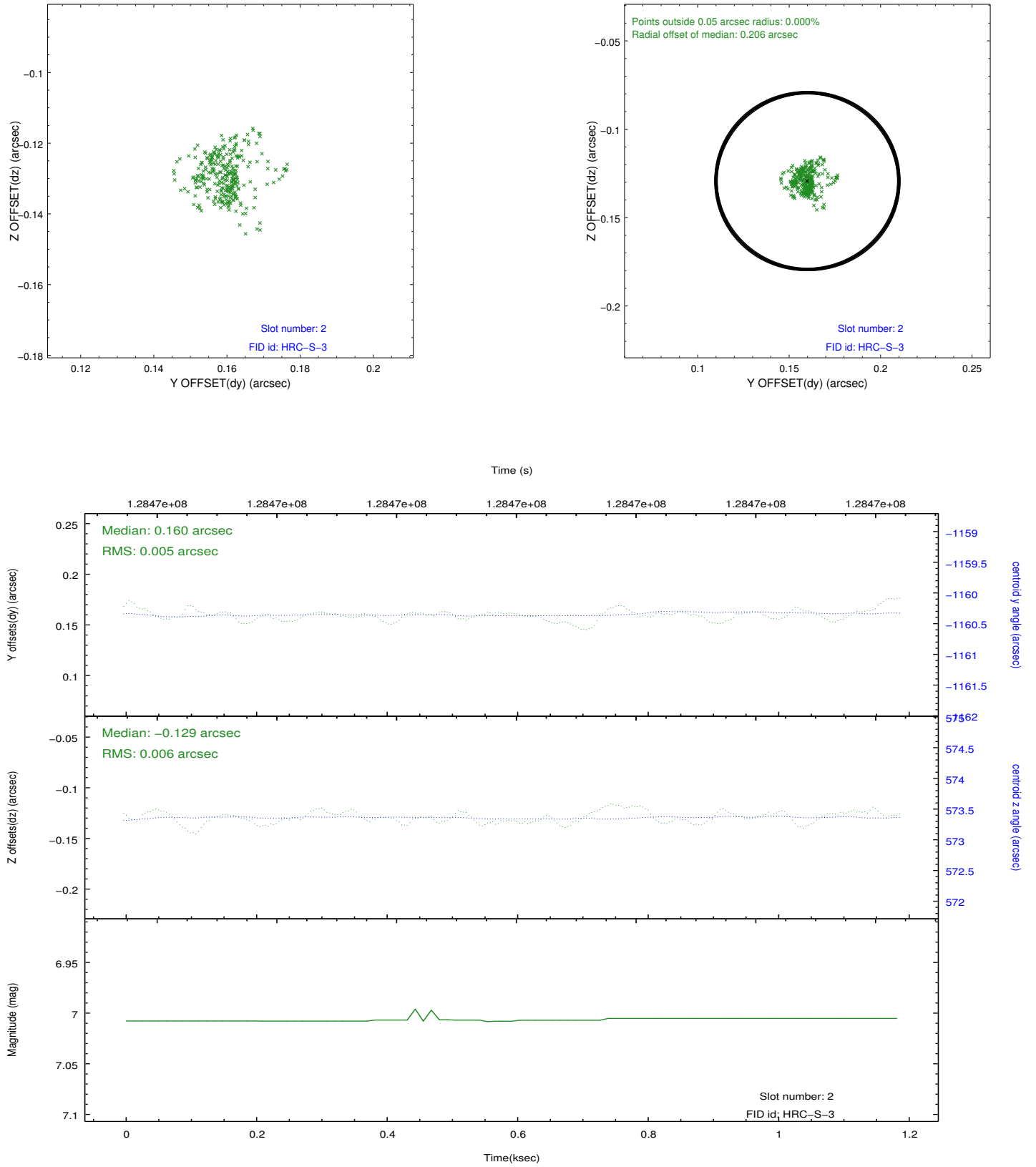
2.5.1 Slot 0



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) | 2012.10.03 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.19 |

A.2 Comments

Charge time for this ObsId remains at previous value of 1.19 ks although with the current processing the charge time would have been 1.14 ksec. Monitor constraint met.