

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1351 - L2 Version 4

Chandra X-Ray Center

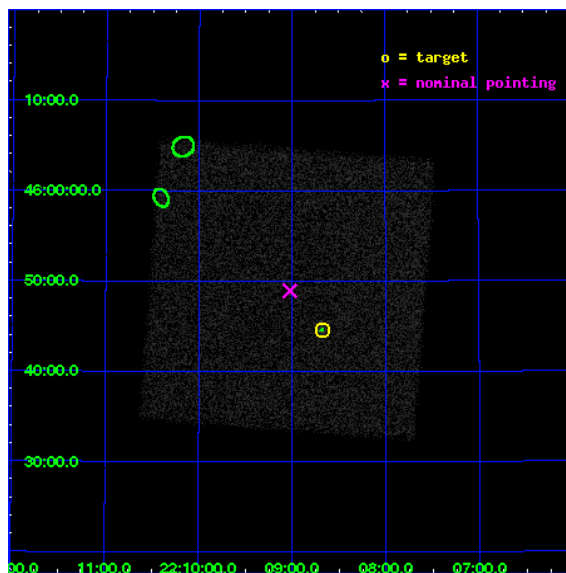
L2 Processing Date : Nov 19 2009

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1 Front

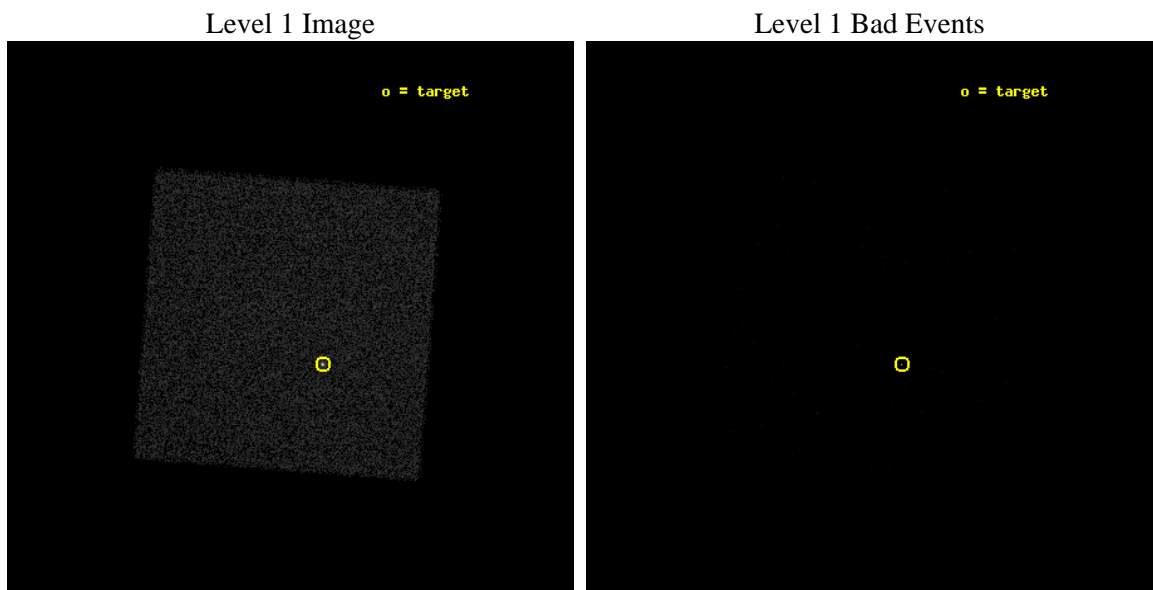
| | | |
|----------|---------------------|---------------------------------|
| seq_num | 280301 | Sequence number |
| obs_id | 1351 | Observation id |
| title | | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | ArLac | Source name |
| ra_targ | 332.1701 | Observer's specified target RA |
| dec_targ | 45.7423 | Observer's specified target Dec |
| ra_nom | 332.25592678721 | Nominal RA |
| dec_nom | 45.81551106481 | Nominal Dec |
| roll_nom | 229.39762761013 | Nominal Roll |
| revision | 4 | Processing version of data |
| ontime | 1274.3312959075 | [s] |
| livetime | 1265.36523809 | Ontime multiplied by DTCOR |
| l2events | 44484 | 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 | Scheduled observation exposure time |
| ascdsver | 8.1.1 | Processing system revision | ontime | 1274.3312959075 | [s] |
| caldbver | 4.1.4 | | l1events | 70395 | Number of level 1 events |
| date | 2009-11-19T05:14:23 | Date and time of file creation | | | |
| revision | 4 | Processing version of data | | | |

2.1.3 Events

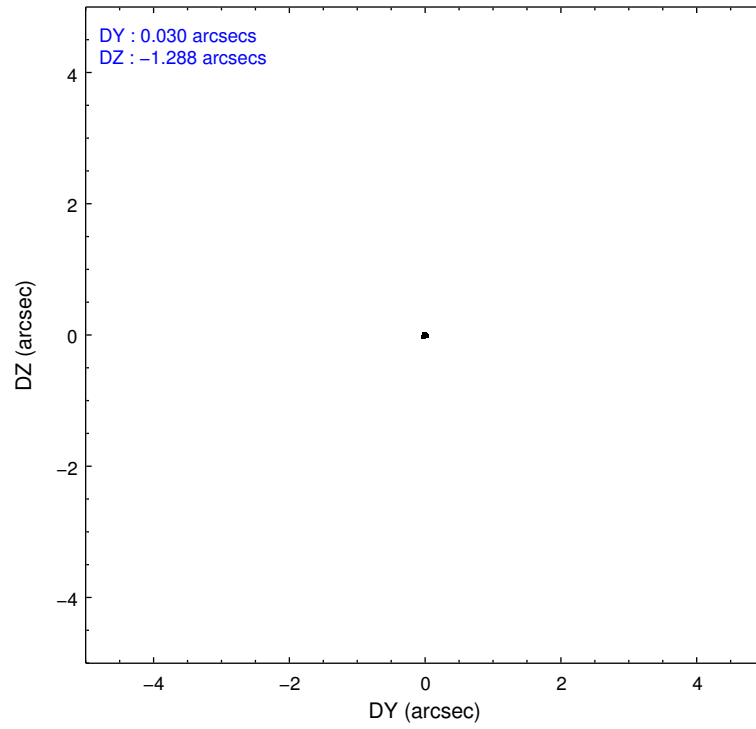
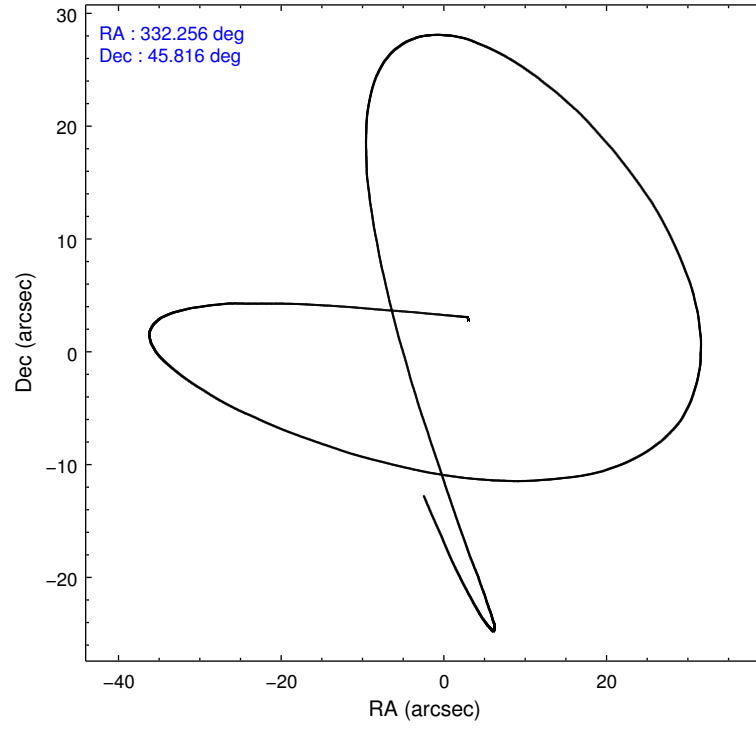
Level 1 Events

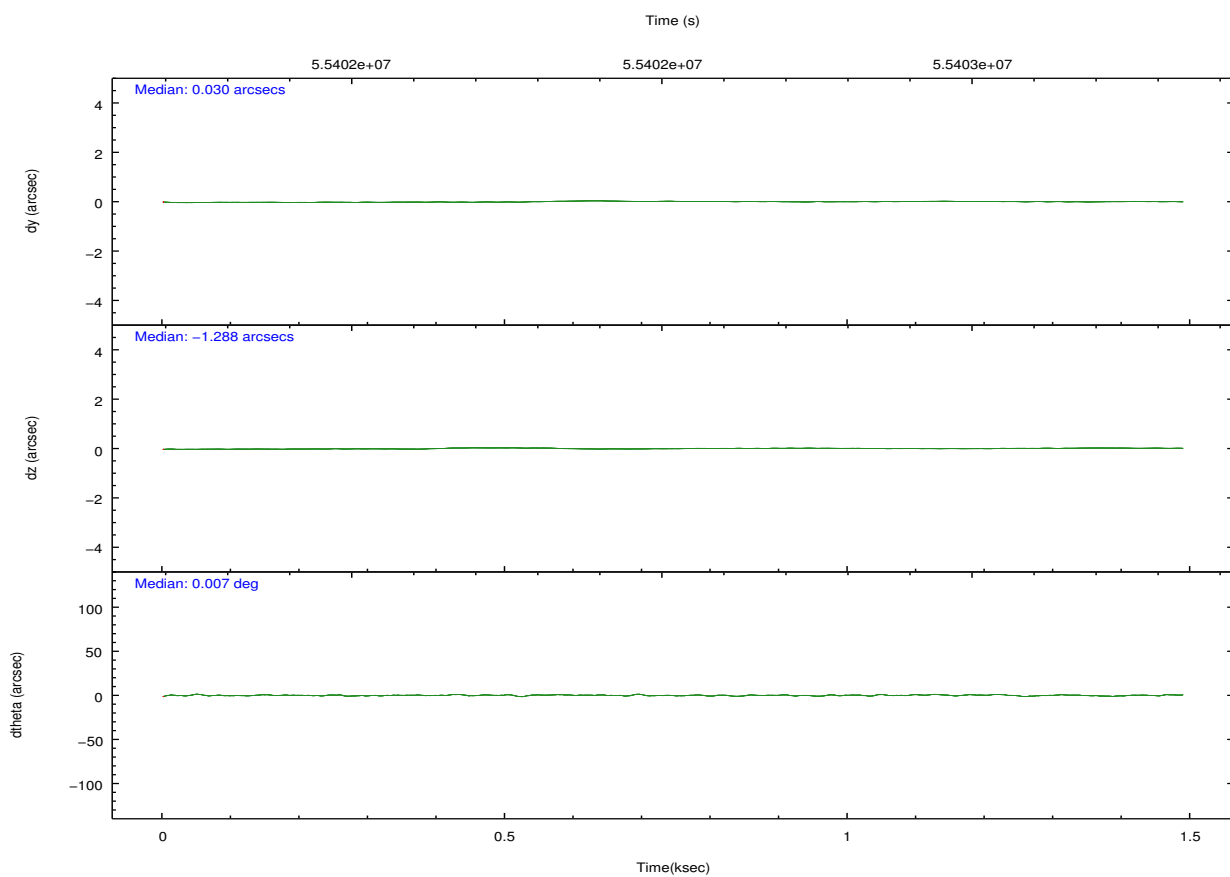
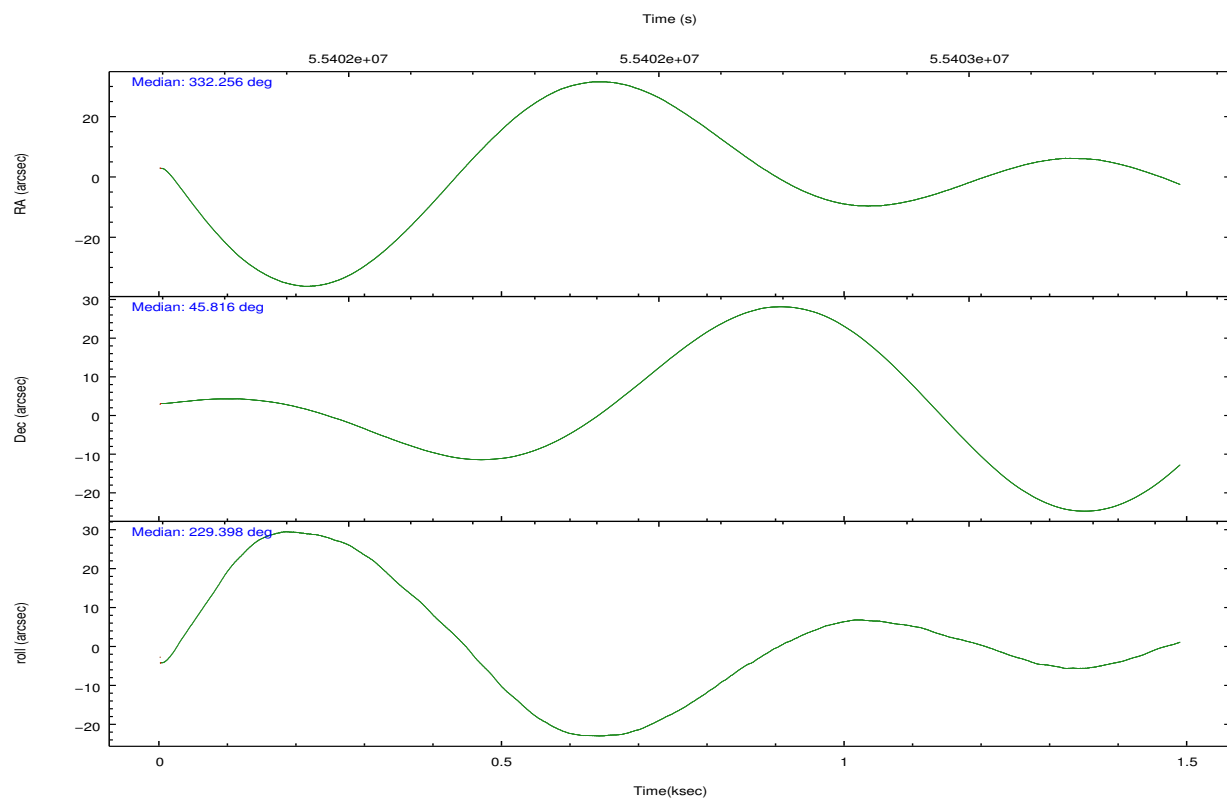
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 70395 |
| rejected events | 2720 |
| rejected % | 3% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|------------------------|------------------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar format version number | 6 | 6 |
| 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 | | | |
| Pointing RA | 332.264114 | 332.2559267872136 | | | |
| Pointing Dec | 45.843233 | 45.8155110648098 | | | |
| Pointing Roll | 229.487227 | 229.3976276101293 | | | |
| SIM focus pos (mm) | -0.040293 | -0.2342646132009995 | | | |
| SIM defocus (mm) | 1 | 0.806028007457875 | | | |
| SIM translation stage pos (mm) | 126.985494 | 126.9854943052878 | | | |
| SIM translation stage offset (mm) | 0 | -5.413686238853188e-06 | | | |
| Observation start time | 55402264.184000 | 55401597.708289 | | | |
| Observation start date | 1999-10-04T05:30:00 | 1999-10-04T05:19:57 | | | |
| Observation end time | 55403264.184000 | 55403397.608354 | | | |
| Observation end date | 1999-10-04T05:46:40 | 1999-10-04T05:49:57 | | | |

2.3 Aspect



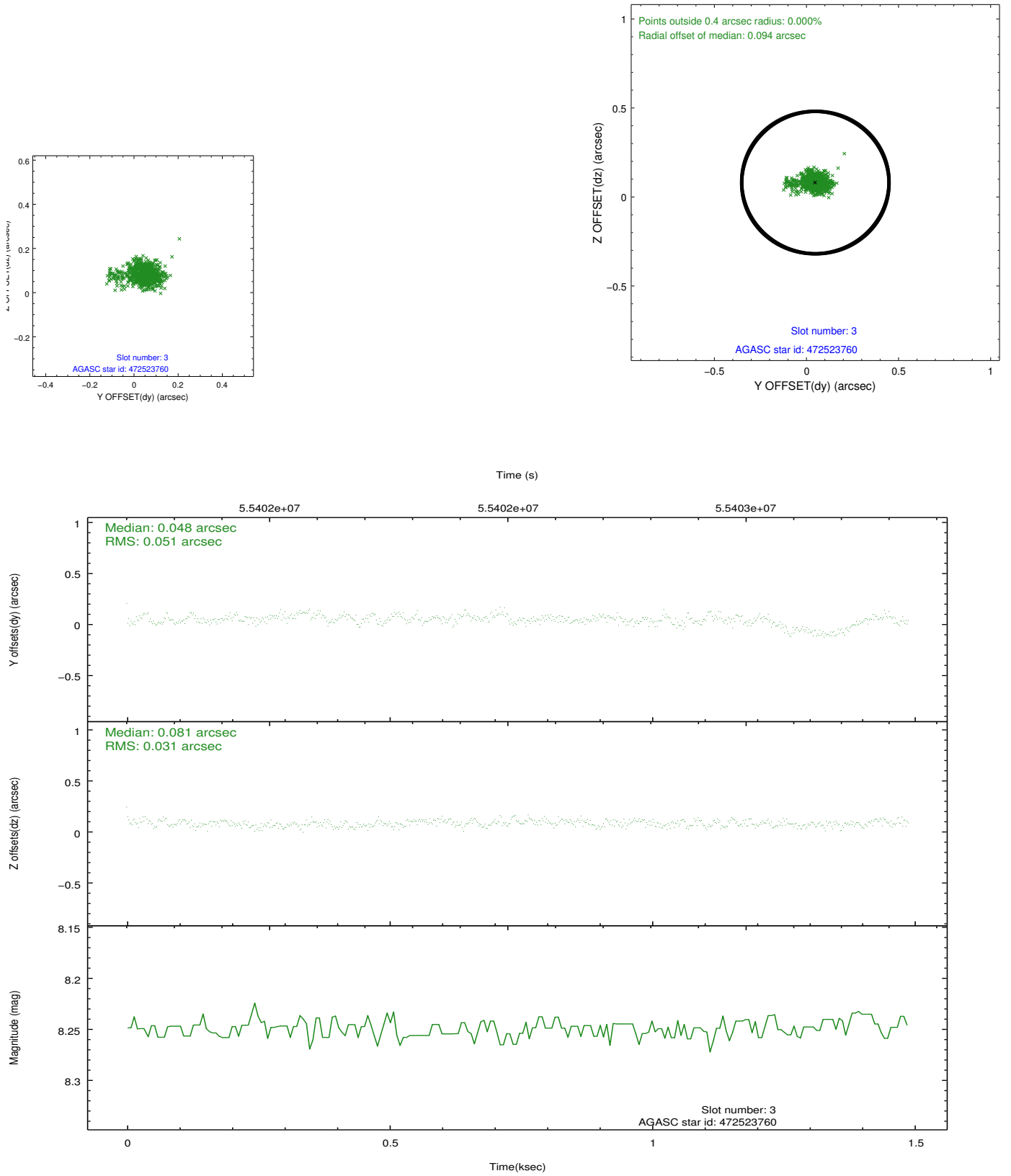


Slot Statistics

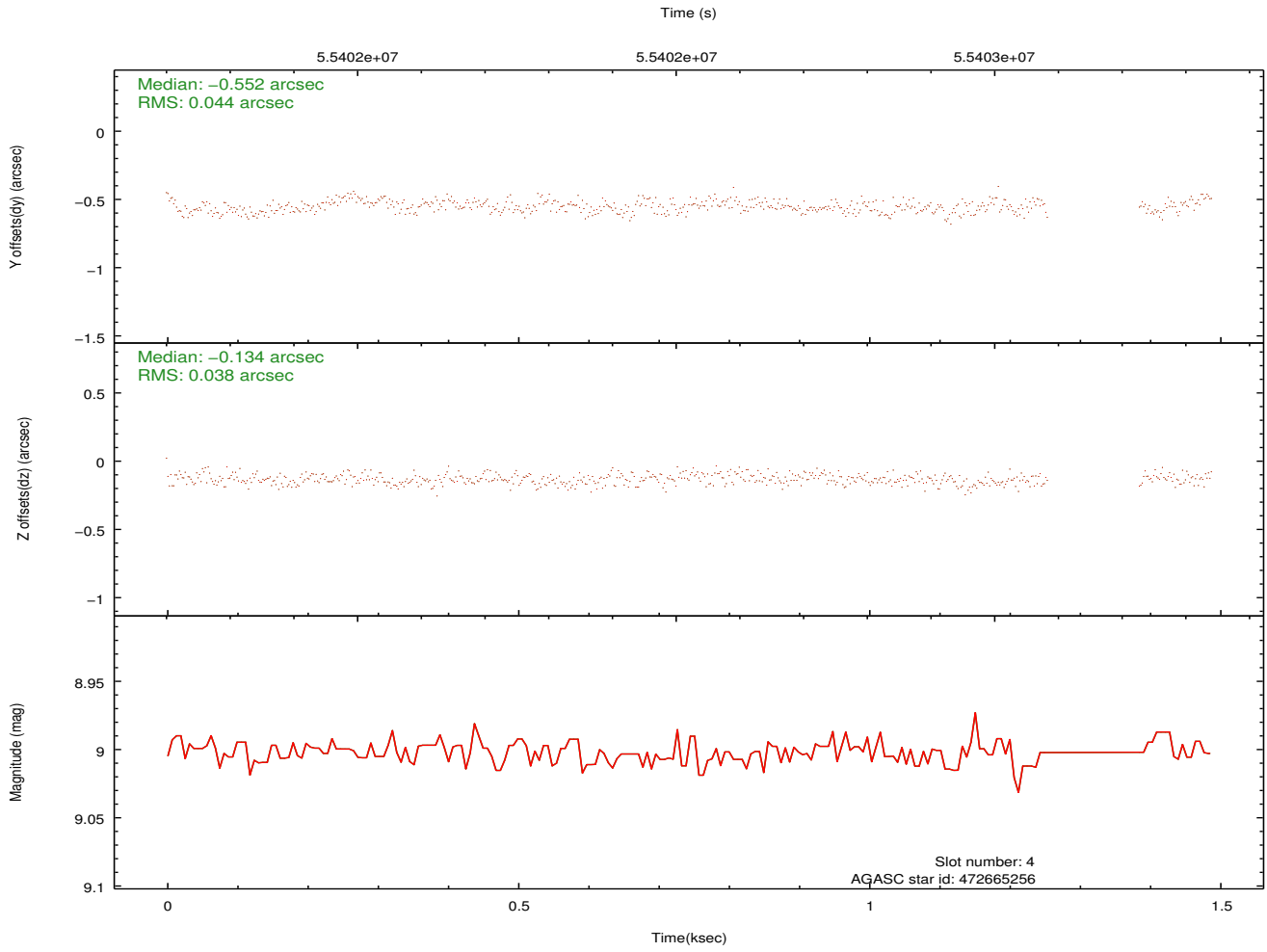
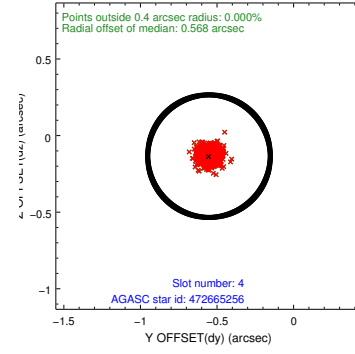
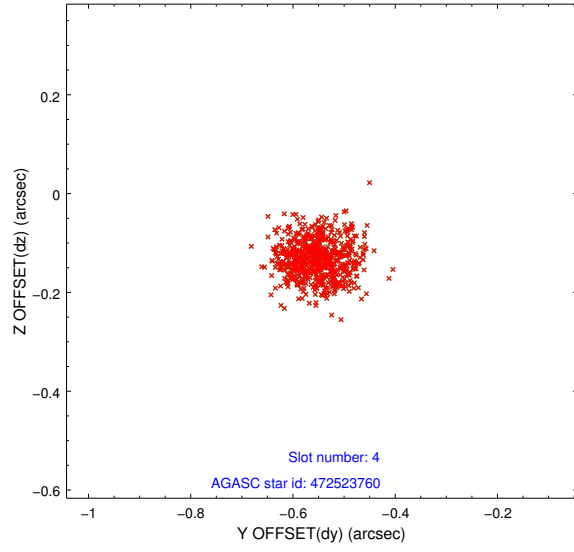
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | HRC-I-1 | 6.96 | 727 | 0.058 | -0.005 | 0.006 | 0.011 | 0.000000 | 0.000000 | -755.40 | -1286.50 |
| 1 | FID | HRC-I-3 | 7.04 | 727 | 0.058 | -0.030 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1185.01 | 1016.44 |
| 2 | FID | HRC-I-4 | 6.98 | 727 | -0.002 | -0.054 | 0.005 | 0.008 | 0.000000 | 0.000000 | 1285.81 | 1017.25 |
| 3 | GUIDE | 472523760 | 8.25 | 726 | 0.048 | 0.081 | 0.055 | 0.120 | 331.645363 | 45.403260 | 2212.10 | -163.79 |
| 4 | BAD | 472665256 | 9.00 | 664 | -0.552 | -0.134 | 0.063 | 0.096 | 332.808125 | 46.195041 | -1845.68 | 206.58 |
| 5 | GUIDE | 472659832 | 9.46 | 727 | 0.106 | 0.076 | 0.088 | 0.159 | 332.780399 | 46.098139 | -1544.01 | 381.53 |
| 6 | GUIDE | 472655152 | 9.43 | 726 | 0.158 | 0.004 | 0.094 | 0.150 | 332.504239 | 45.862991 | -451.32 | 411.56 |
| 7 | GUIDE | 472655704 | 9.49 | 723 | 0.202 | -0.046 | 0.091 | 0.154 | 332.167195 | 45.285228 | 1682.61 | 1118.92 |

2.4 Star Slots

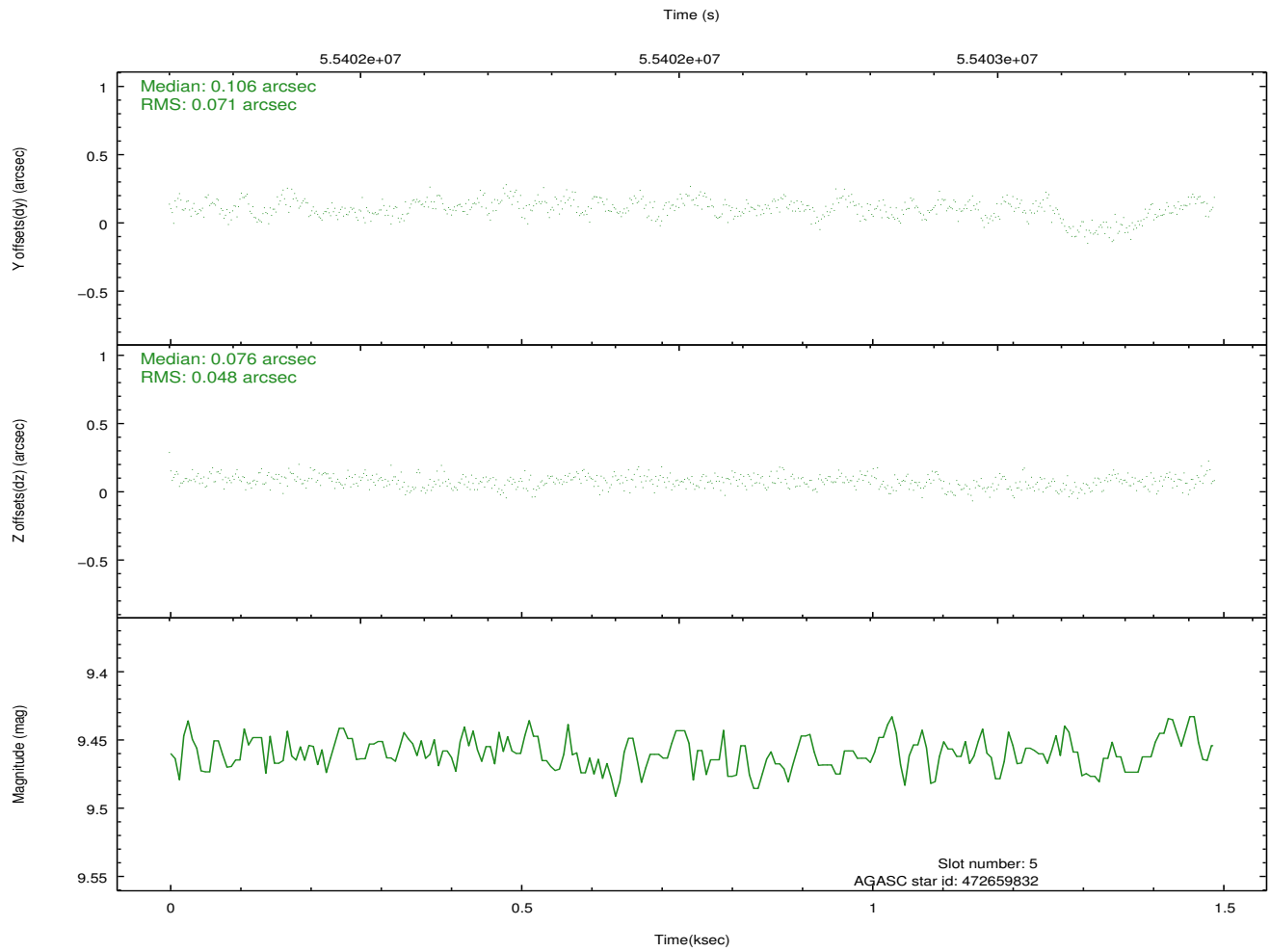
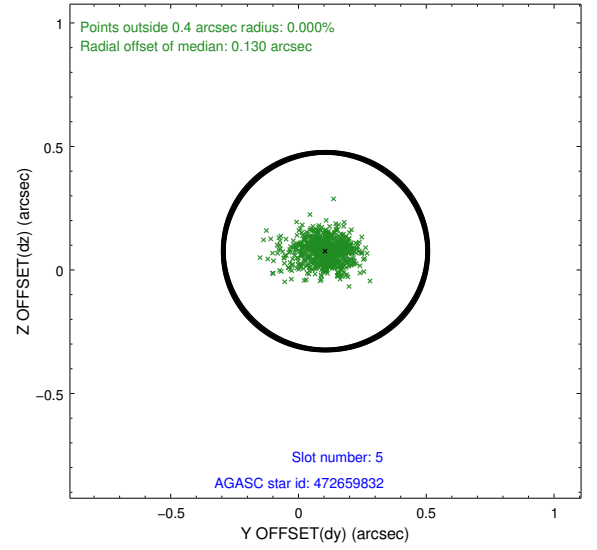
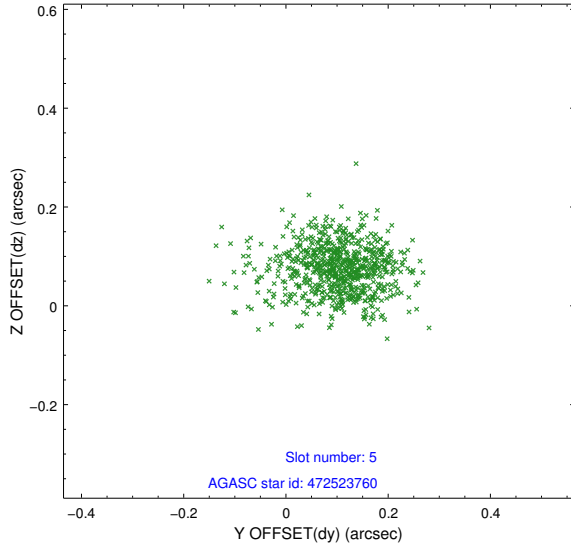
2.4.1 Slot 3



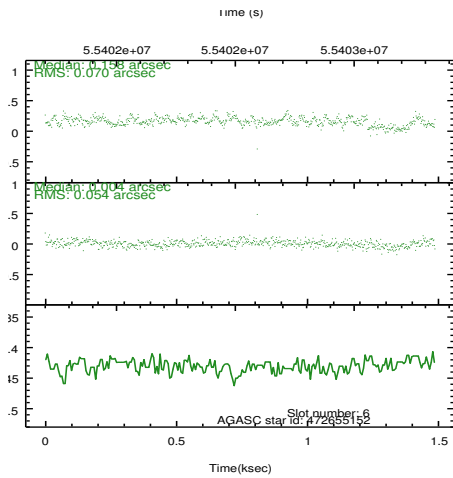
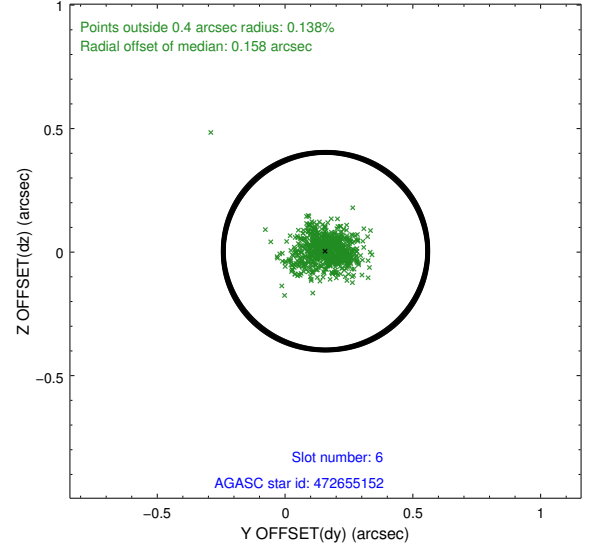
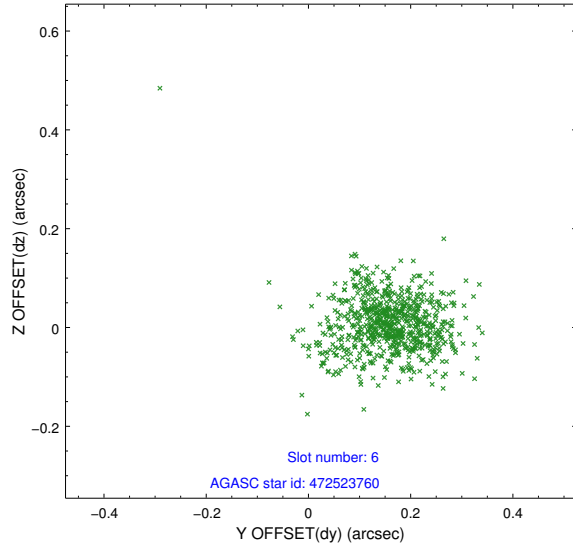
2.4.2 Slot 4



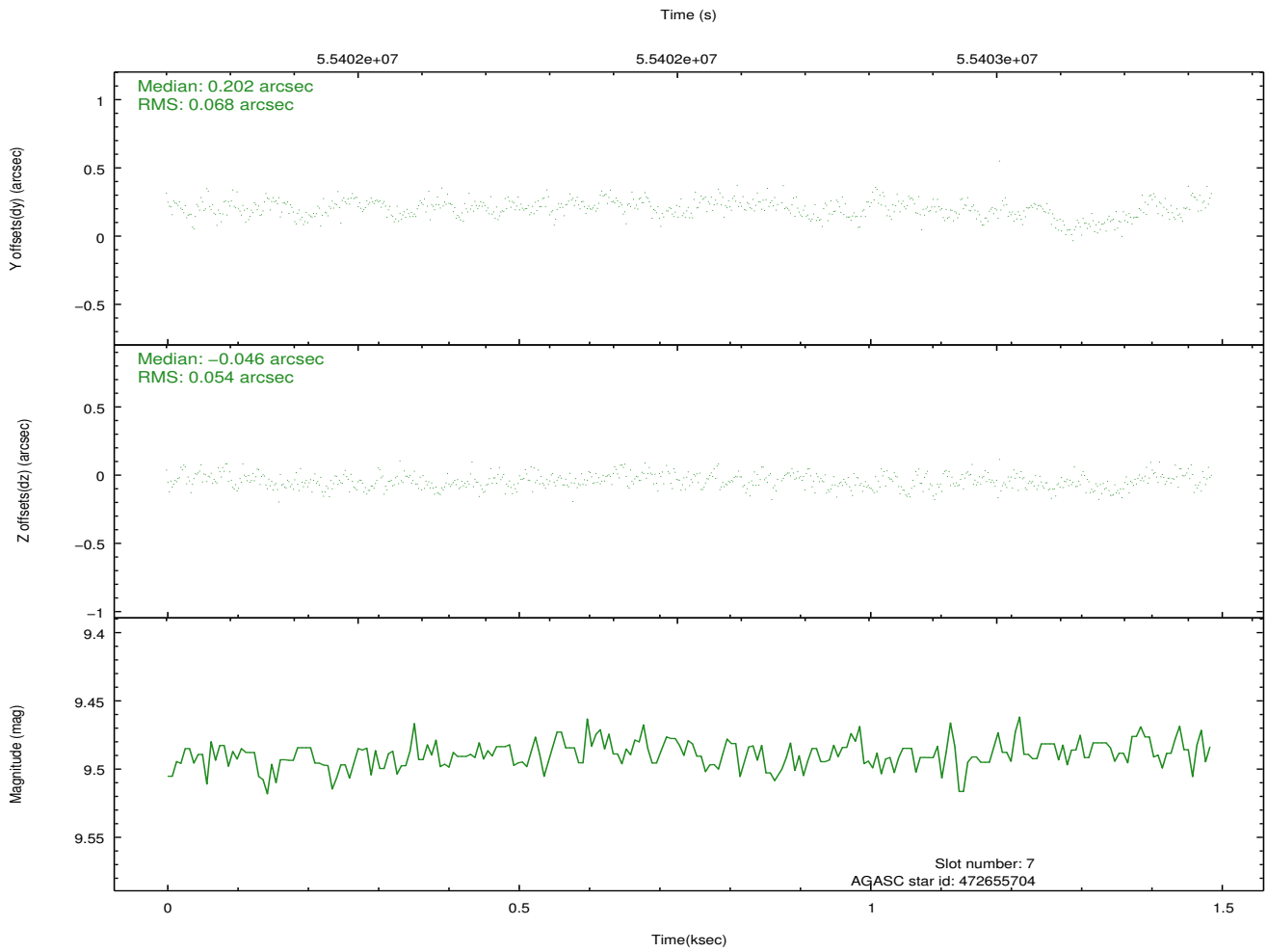
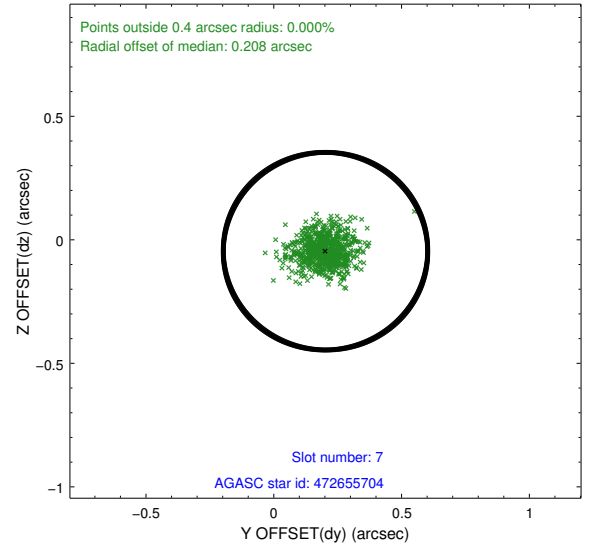
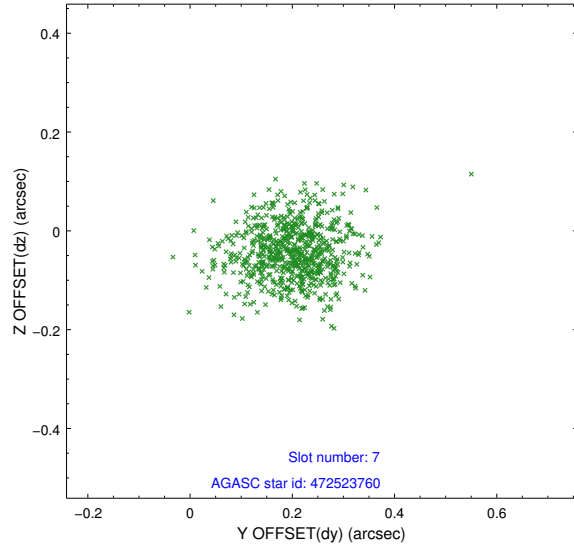
2.4.3 Slot 5



2.4.4 Slot 6

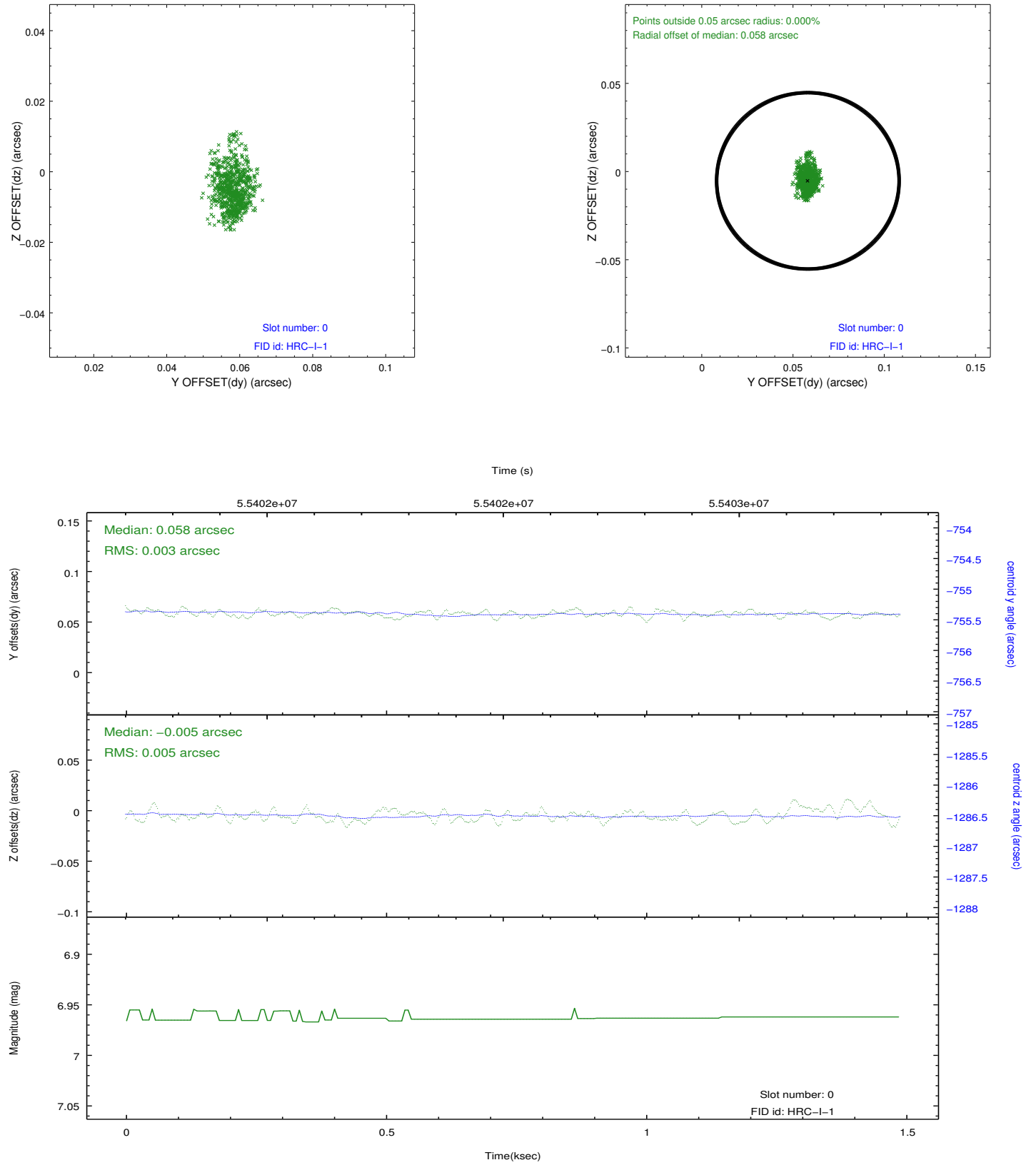


2.4.5 Slot 7

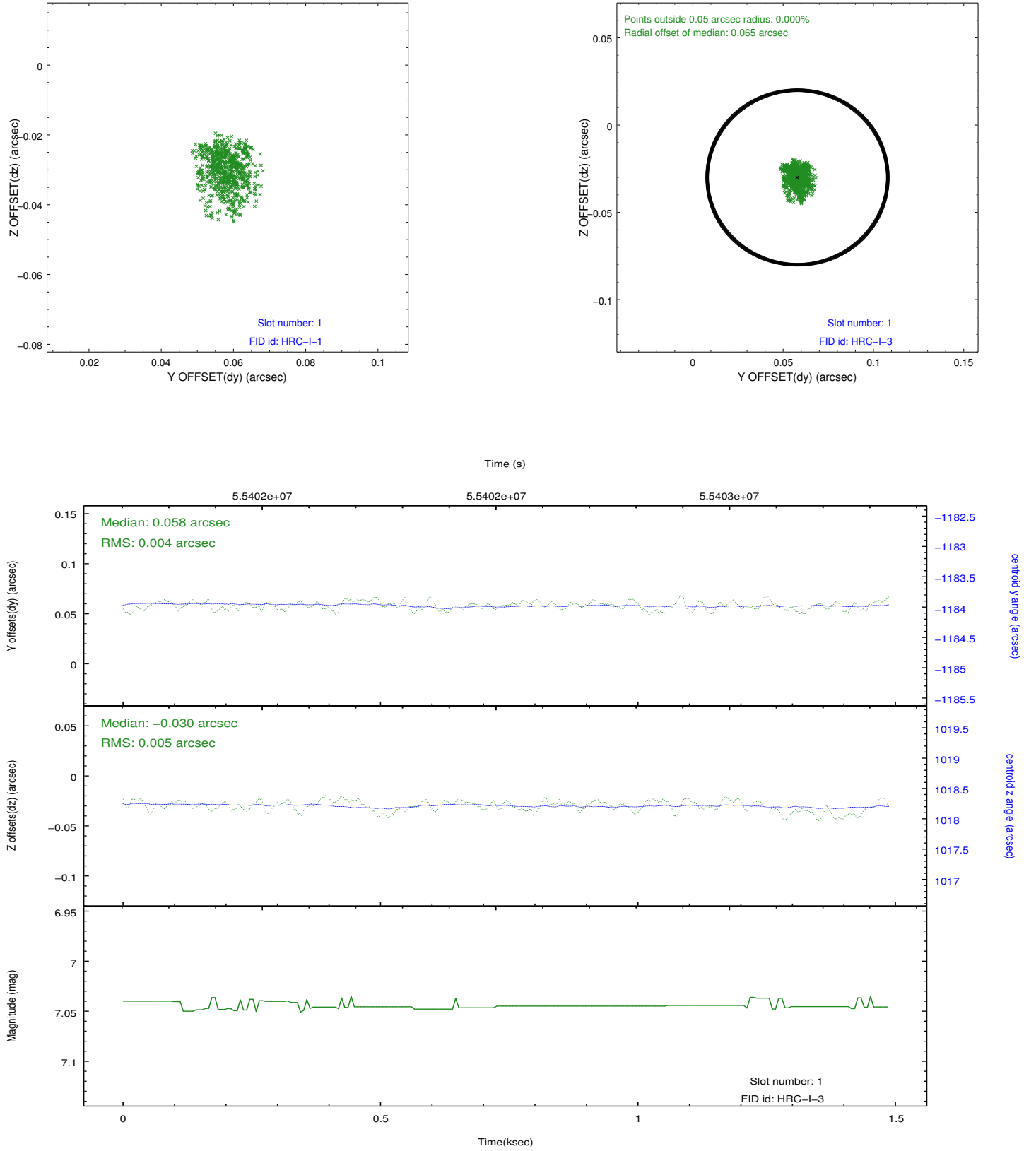


2.5 FID Slots

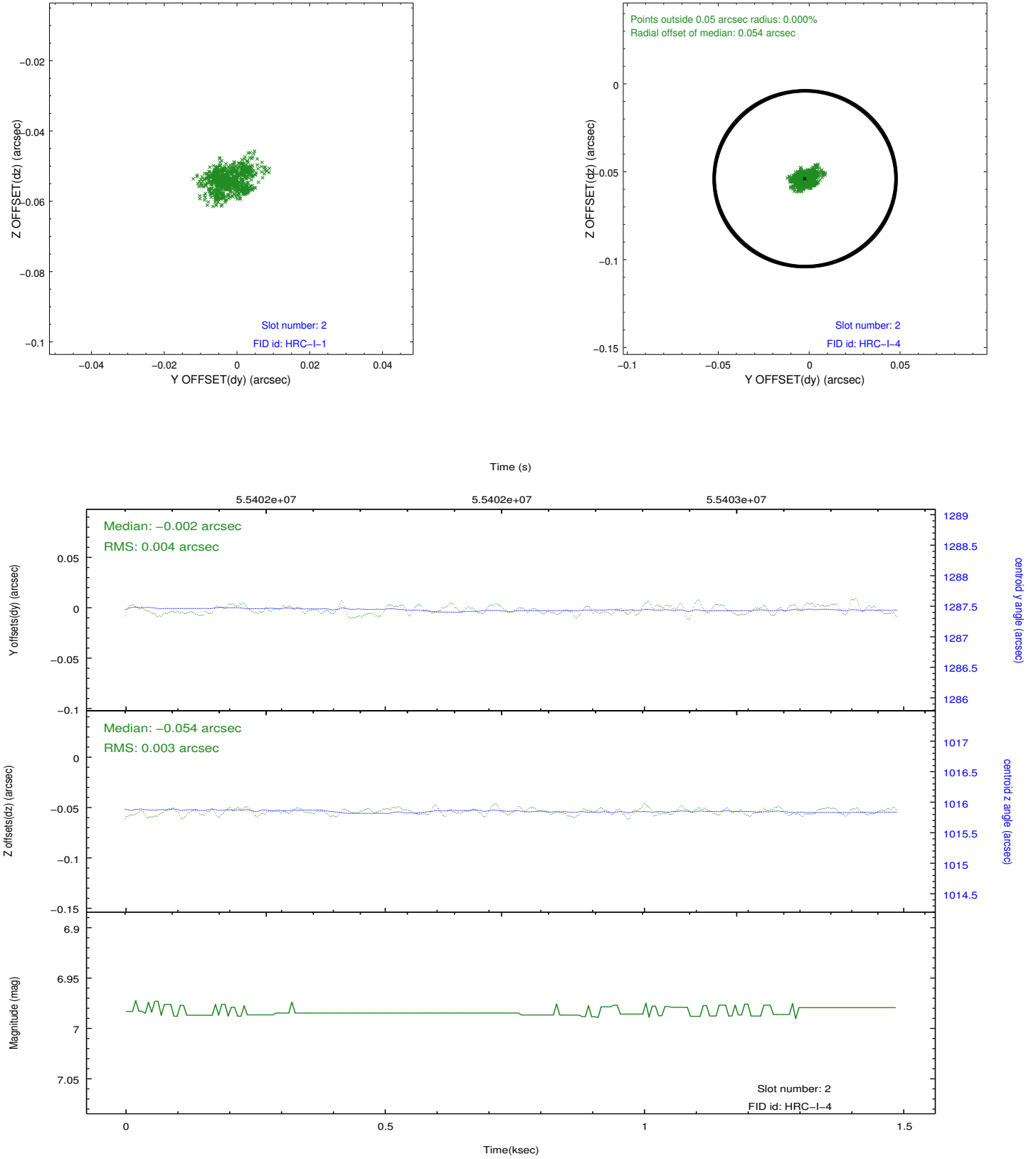
2.5.1 Slot 0



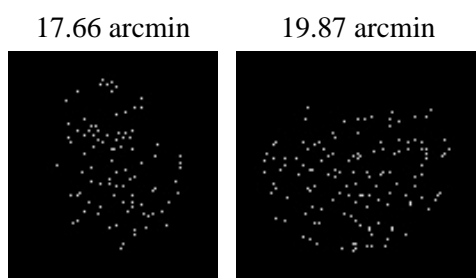
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2009.11.20 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.274 |

A.2 Comments

The ObsID series 1319-1382 were intended to access the HRC-I gain variation across the detector as a function of MCP HV. They were performed as triples (3 different HV settings at each Y-/Z-offset). The best HRC-I focus was not determined at the time the observations were performed (the data to determine that were being analyzed during this series).

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The guide star in slot 4 was automatically removed from the aspect solution due to lack of data. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.