

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11763 - L2 Version 2
Chandra X-Ray Center

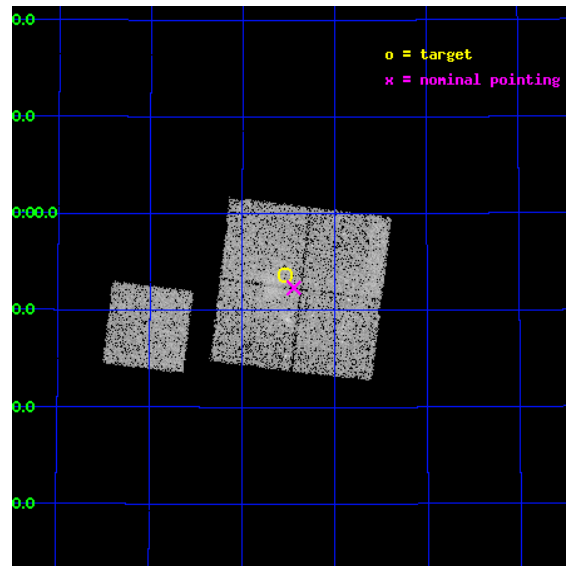
L2 Processing Date : Jul 1 2012

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1 Front

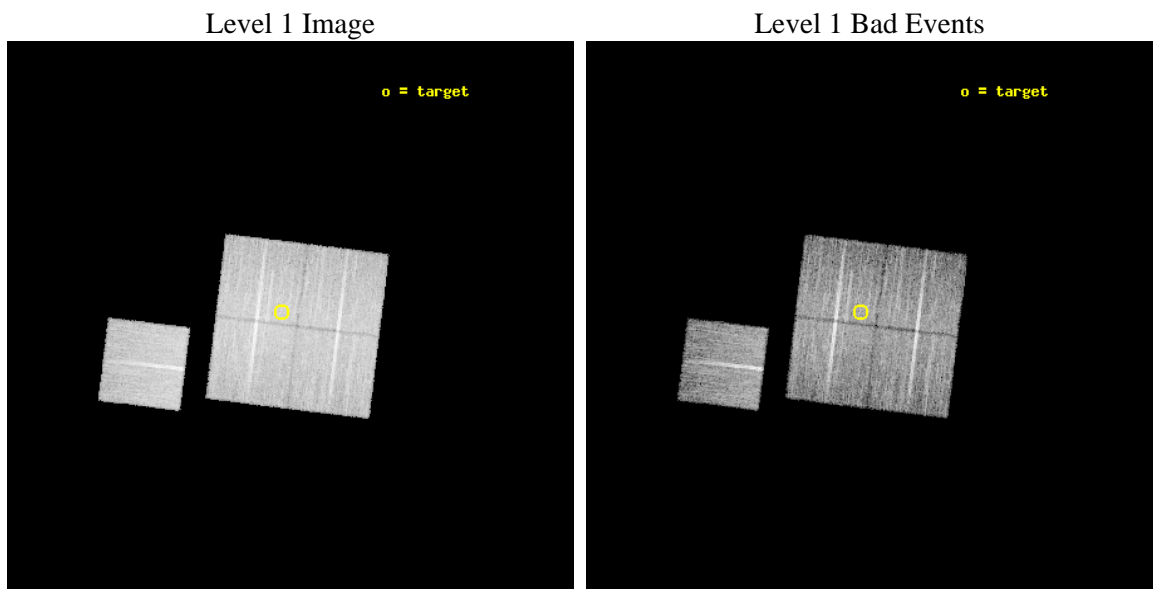
| | | |
|----------|---|---|
| seq_num | 800903 | Sequence number |
| obs_id | 11763 | Observation id |
| title | The X-Ray, SZ, and Optical Scaling Relations of Massive Galaxy Clusters | Proposal title |
| observer | Dr. Eli Rykoff | Principal investigator |
| object | A1622 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 192.385 | Observer's specified target RA [deg] |
| dec_targ | 49.8955 | Observer's specified target Dec [deg] |
| ra_nom | 192.3605215683 | Nominal RA [deg] |
| dec_nom | 49.872459562647 | Nominal Dec [deg] |
| roll_nom | 276.97313351443 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 13053.288089514 | Sum of GTIs [s] |
| livetime | 12882.737270933 | Livetime [s] |
| ontime0 | 13050.024009168 | Sum of GTIs [s] |
| ontime1 | 13053.206009507 | Sum of GTIs [s] |
| ontime2 | 13053.24704951 | Sum of GTIs [s] |
| ontime3 | 13053.288089514 | Sum of GTIs [s] |
| ontime6 | 13053.123929501 | Sum of GTIs [s] |
| l2events | 46627 | Number of level 2 events |



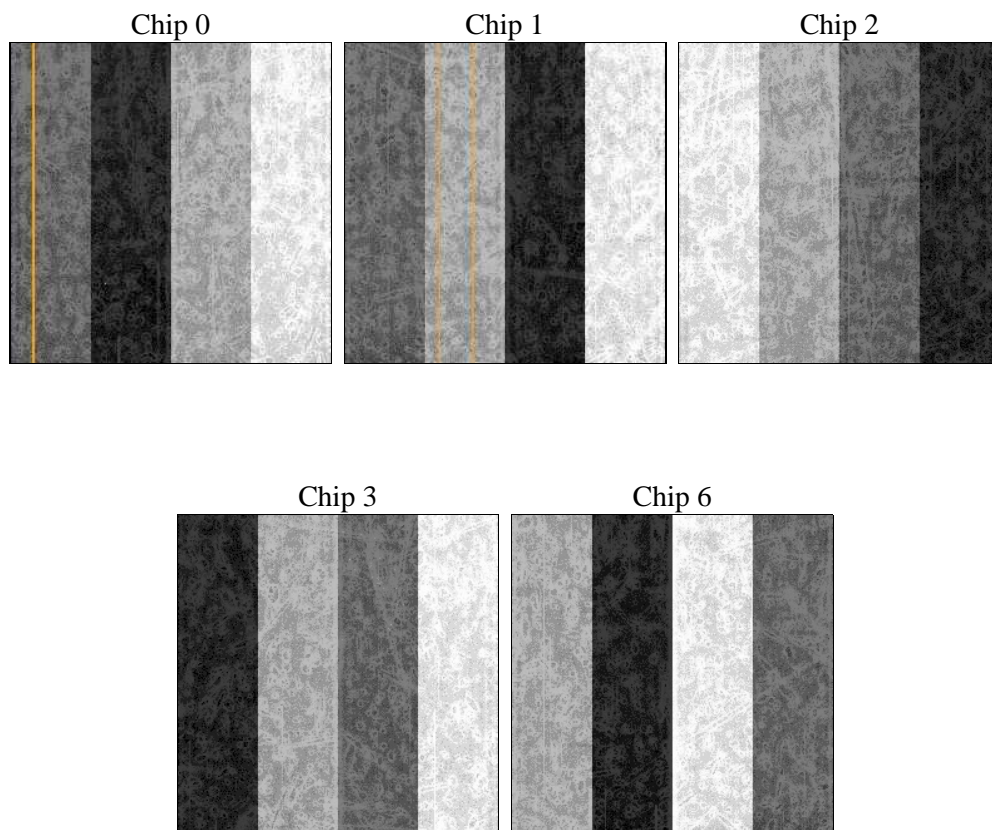
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 13000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 13053.288089514 | Sum of GTIs [s] |
| caldbver | 4.5.0 | | ontime0 | 13050.024009168 | Sum of GTIs [s] |
| date | 2012-07-01T02:13:26 | Date and time of file creation | ontime1 | 13053.206009507 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 13053.24704951 | Sum of GTIs [s] |
| | | | ontime3 | 13053.288089514 | Sum of GTIs [s] |
| | | | ontime6 | 13053.123929501 | Sum of GTIs [s] |
| | | | l1events | 473601 | Number of level 1 events |

2.1.4 Events

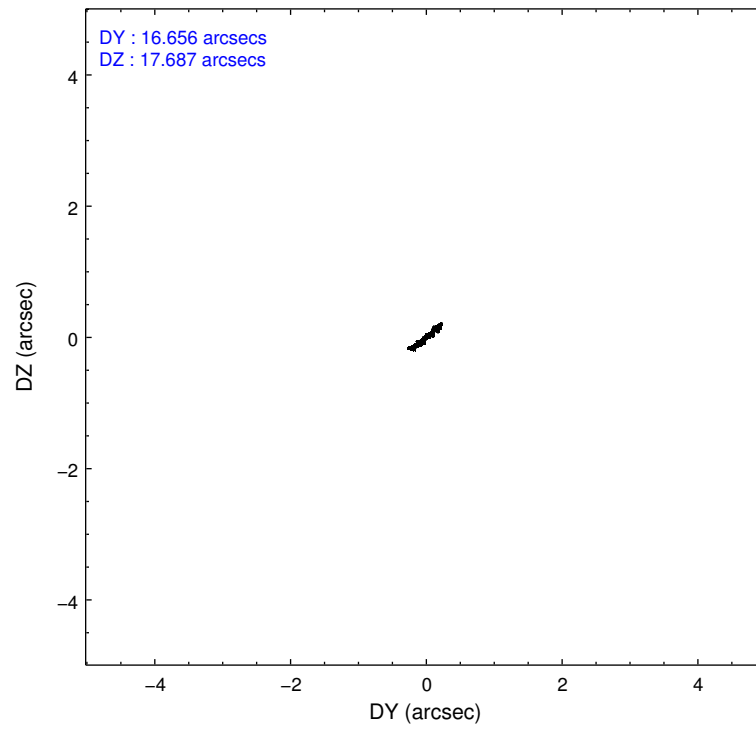
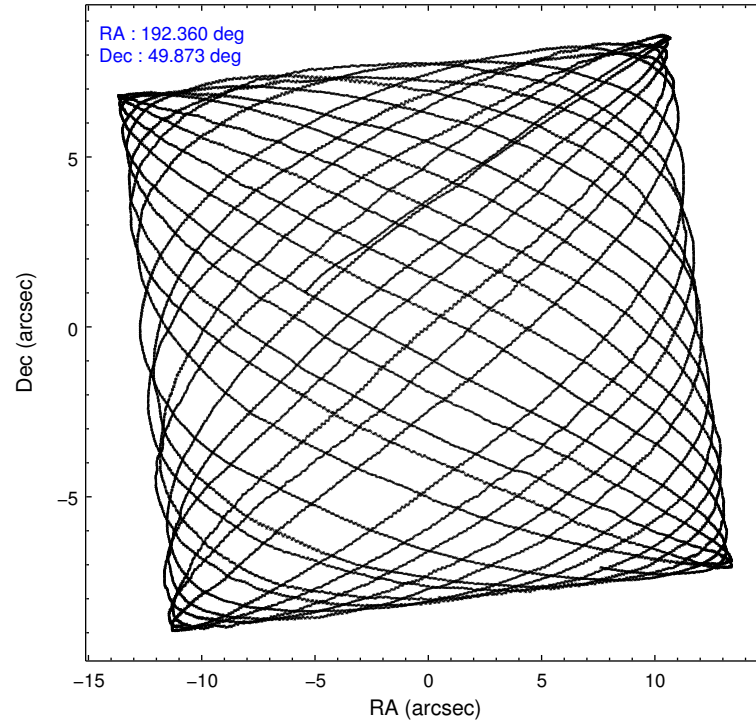
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 92562 | 90202 | 98799 | 94900 | 97138 |
| rejected events | 81636 | 78400 | 87013 | 84530 | 86543 |
| rejected % | 88% | 86% | 88% | 89% | 89% |

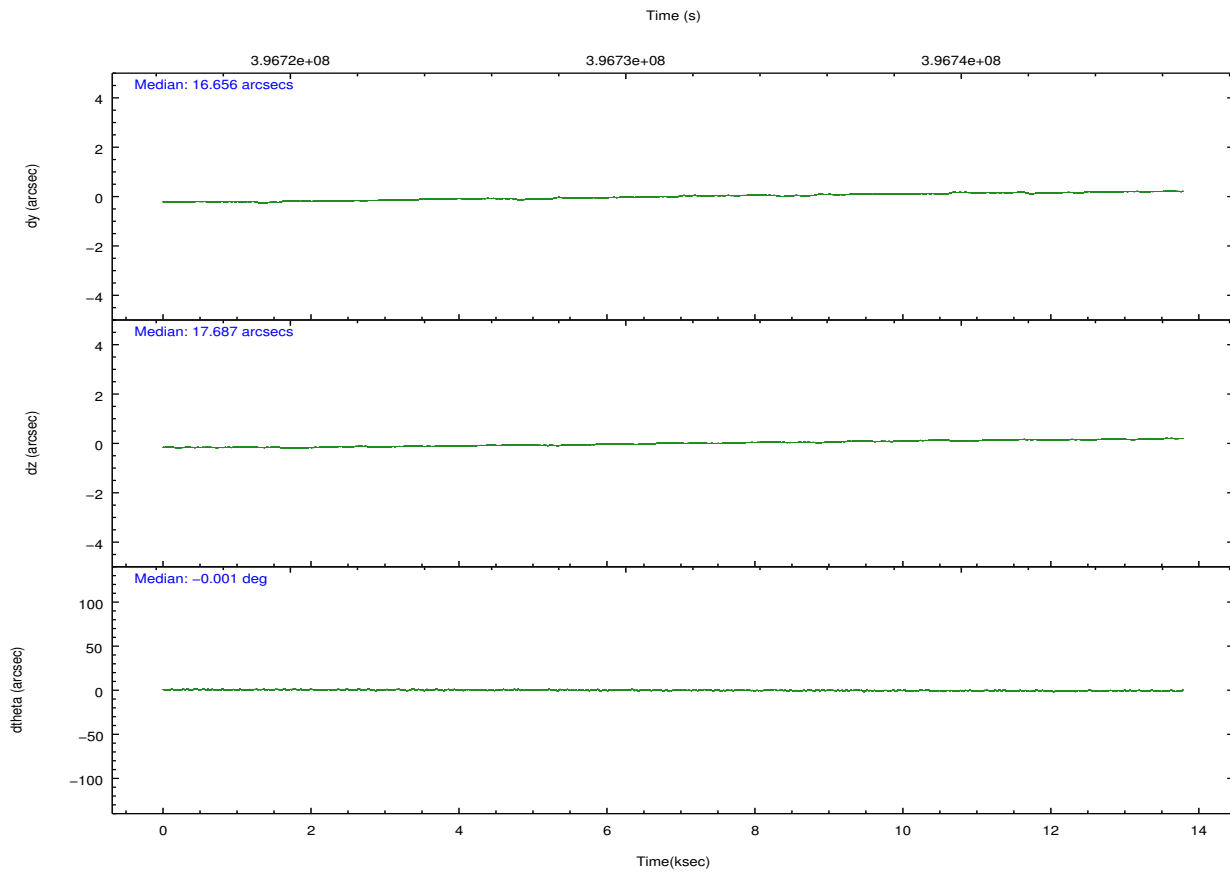
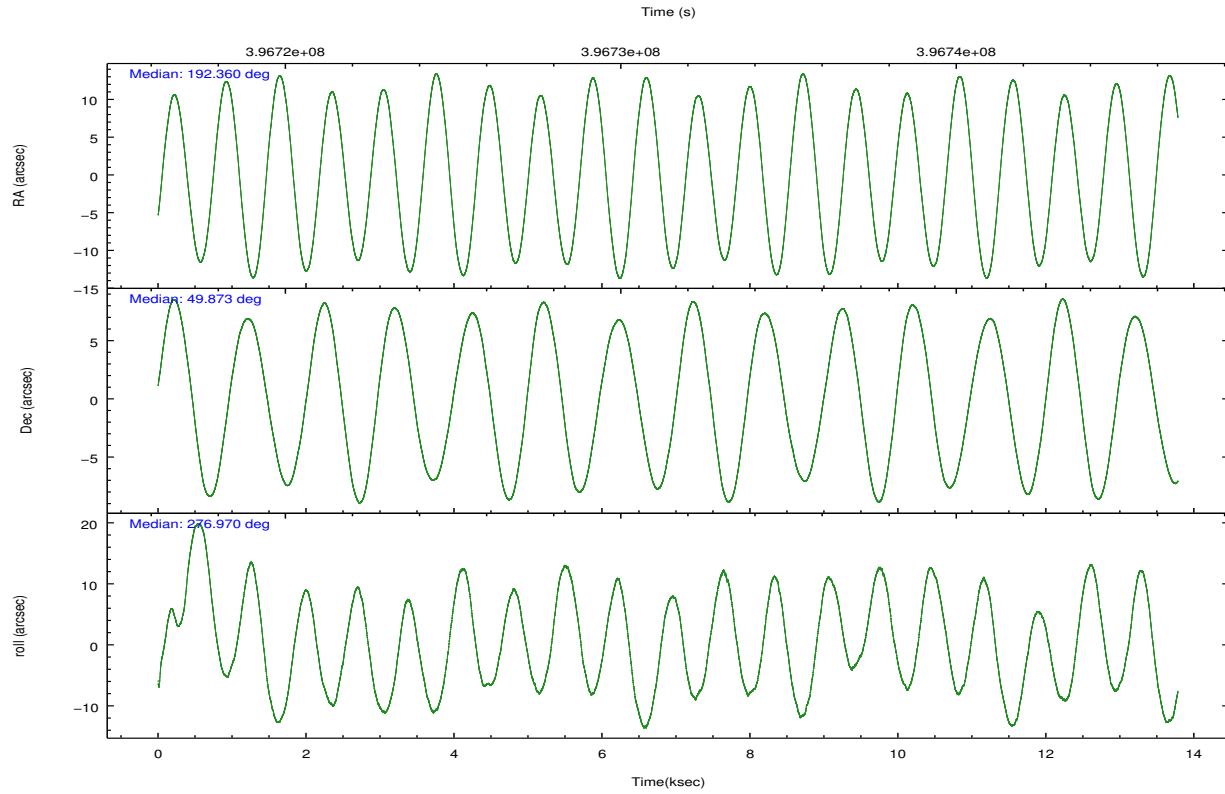
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 3908 | 4156 | 4877 | 3971 | 3666 |
| | 4% | 4% | 4% | 4% | 3% |
| grade 1 events | 48 | 54 | 62 | 55 | 51 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2681 | 2758 | 2615 | 2164 | 2383 |
| | 2% | 3% | 2% | 2% | 2% |
| grade 3 events | 1128 | 1233 | 1129 | 1089 | 1115 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 1154 | 1216 | 1162 | 1067 | 1126 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 3922 | 4195 | 3710 | 4393 | 4141 |
| | 4% | 4% | 3% | 4% | 4% |
| grade 6 events | 2058 | 2440 | 2005 | 2081 | 2307 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 7 events | 77663 | 74150 | 83239 | 80080 | 82349 |
| | 83% | 82% | 84% | 84% | 84% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01236 | ACIS-01236 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 192.334661 | 192.360521568299 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 49.894336 | 49.87245956264697 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 276.784222 | 276.9731335144288 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | | | |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | | | |
| [s] Observation start time (MET) | 396724593.184000 | 396723364.5034 | | | |
| Observation start date | 2010-07-28T17:15:27 | 2010-07-28T16:56:04 | | | |
| [s] Observation end time (MET) | 396737593.184000 | 396737817.51664 | | | |
| Observation end date | 2010-07-28T20:52:07 | 2010-07-28T20:56:57 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



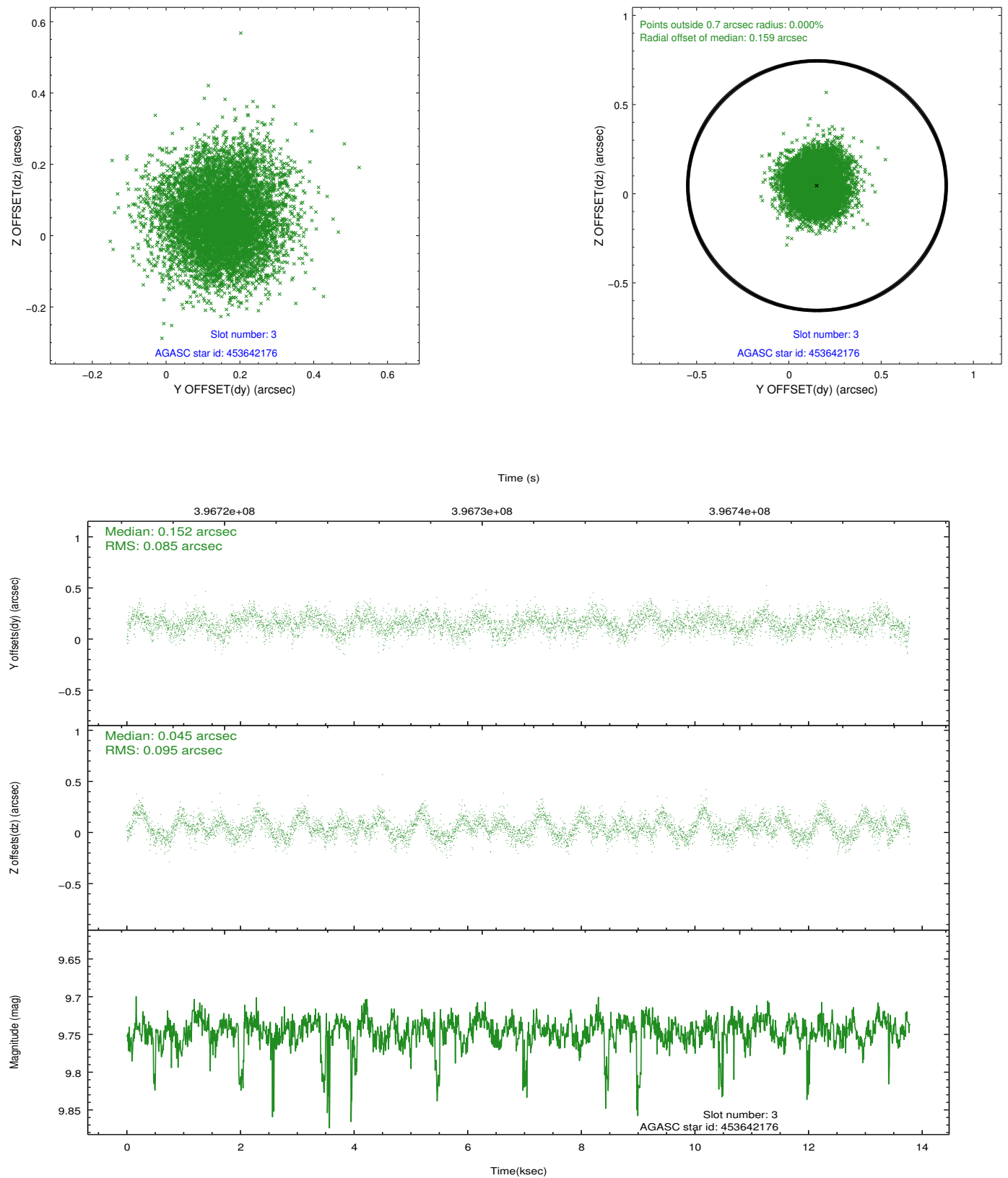


Slot Statistics

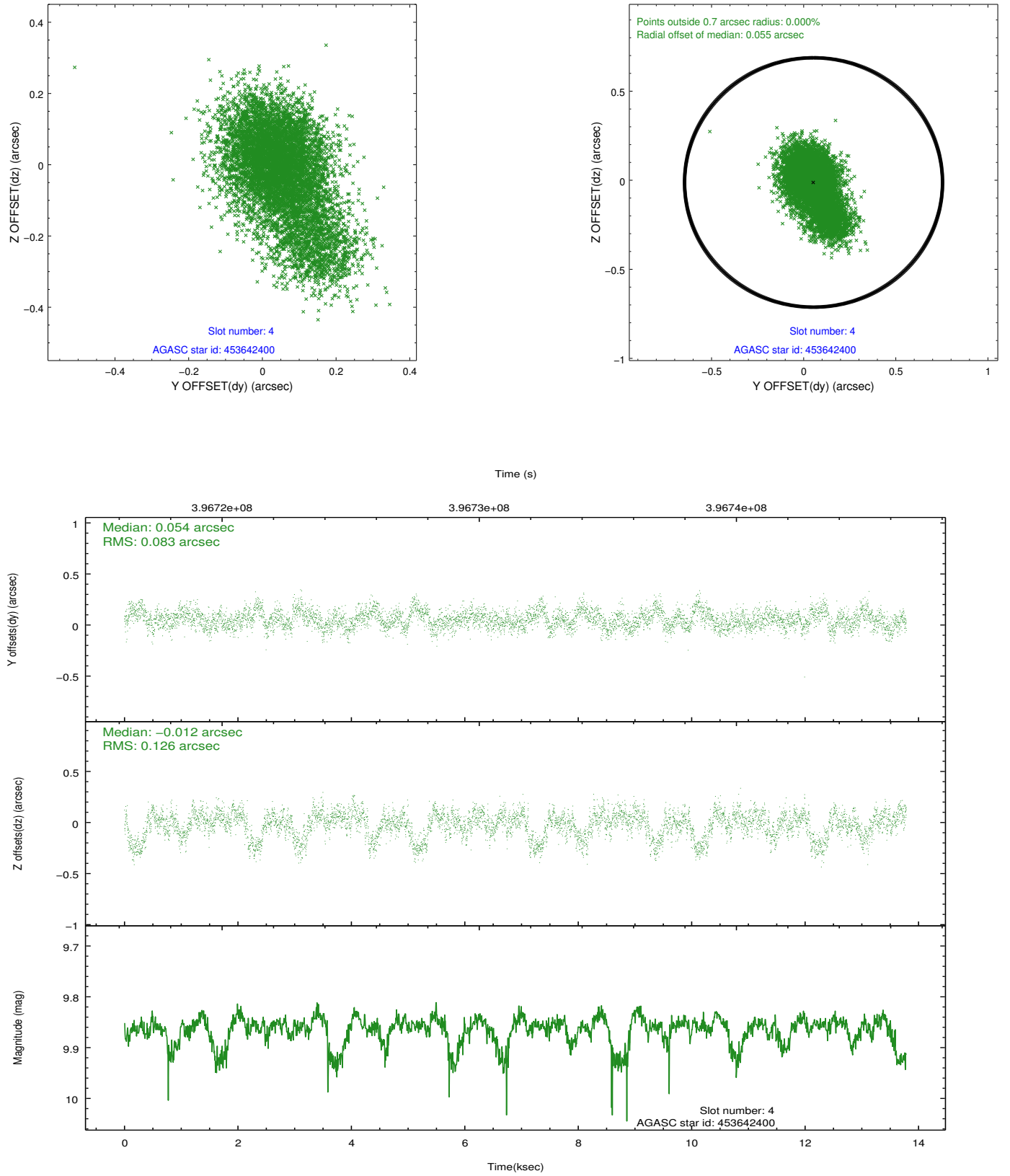
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|---------|
| 0 | FID | ACIS-I-1 | 6.99 | 3362 | 0.037 | 0.013 | 0.006 | 0.011 | 0.000000 | 0.000000 | 922.79 | -841.35 |
| 1 | FID | ACIS-I-5 | 6.98 | 3362 | -0.191 | 0.052 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1825.34 | 1056.03 |
| 2 | FID | ACIS-I-6 | 7.00 | 3362 | 0.062 | 0.005 | 0.008 | 0.012 | 0.000000 | 0.000000 | 388.01 | 1700.86 |
| 3 | GUIDE | 453642176 | 9.75 | 6701 | 0.152 | 0.045 | 0.136 | 0.215 | 193.422997 | 49.313985 | 2358.18 | 2291.02 |
| 4 | GUIDE | 453642400 | 9.86 | 6701 | 0.054 | -0.012 | 0.153 | 0.284 | 192.054577 | 49.925123 | -187.32 | -631.29 |
| 5 | GUIDE | 453643312 | 9.93 | 6715 | 0.028 | 0.116 | 0.133 | 0.213 | 192.240990 | 50.091539 | -730.30 | -131.51 |
| 6 | GUIDE | 453643600 | 10.18 | 6697 | -0.110 | -0.042 | 0.189 | 0.300 | 192.345829 | 49.415481 | 1715.01 | -177.60 |
| 7 | GUIDE | 453652816 | 9.95 | 6710 | -0.123 | -0.099 | 0.156 | 0.258 | 192.734834 | 50.498331 | -2052.37 | 1167.37 |

2.4 Star Slots

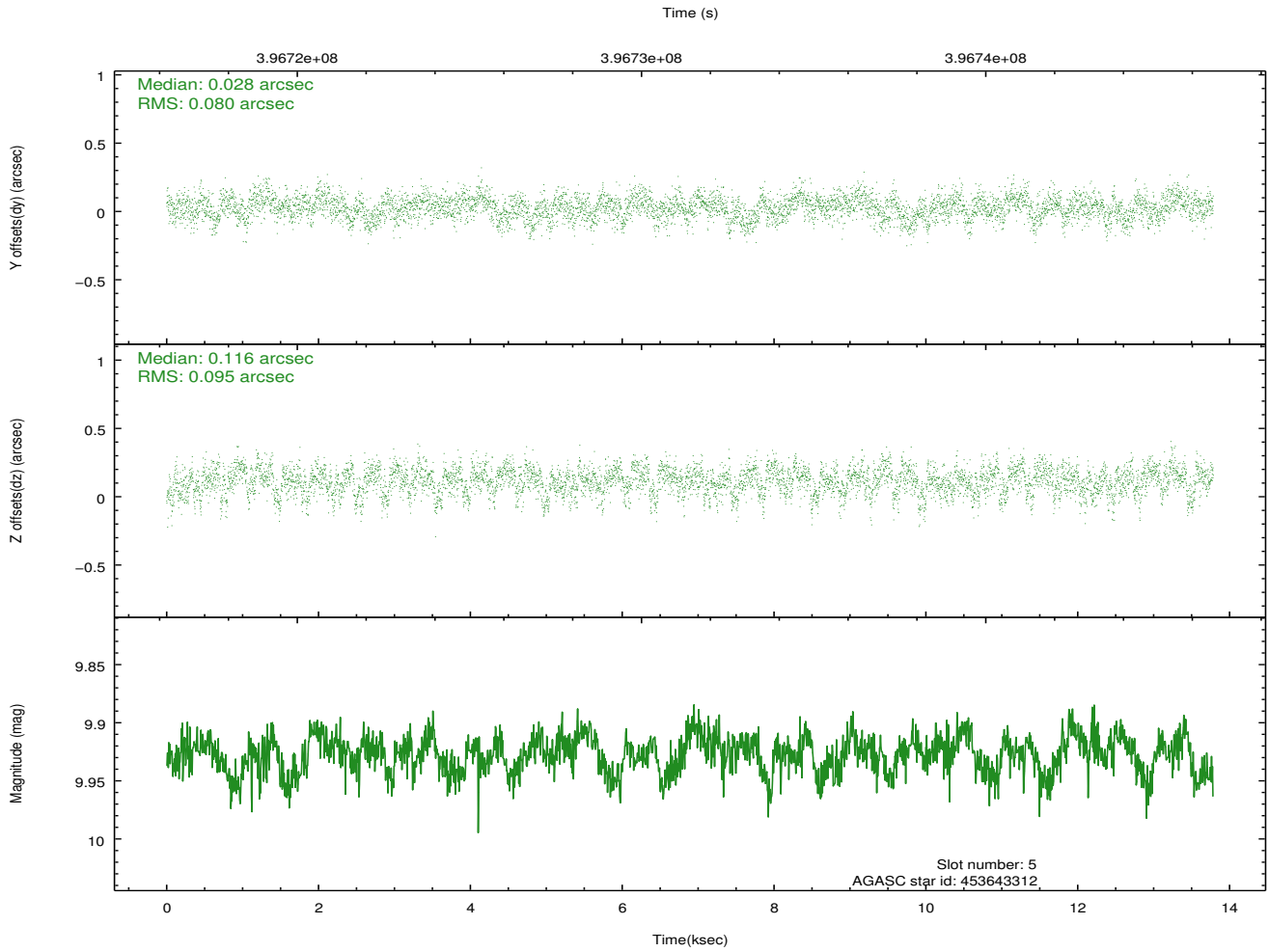
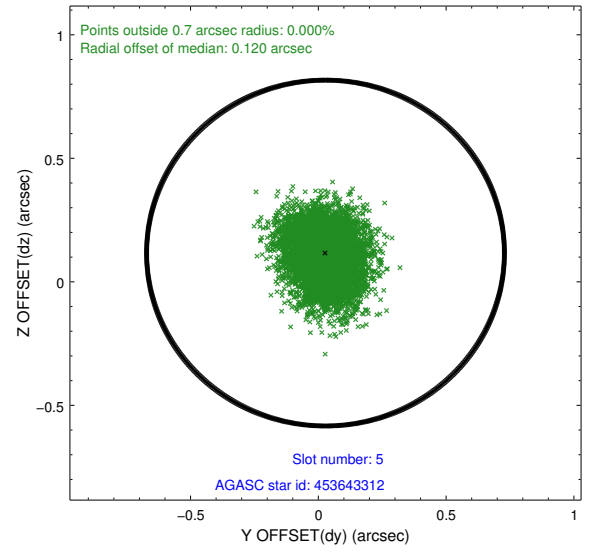
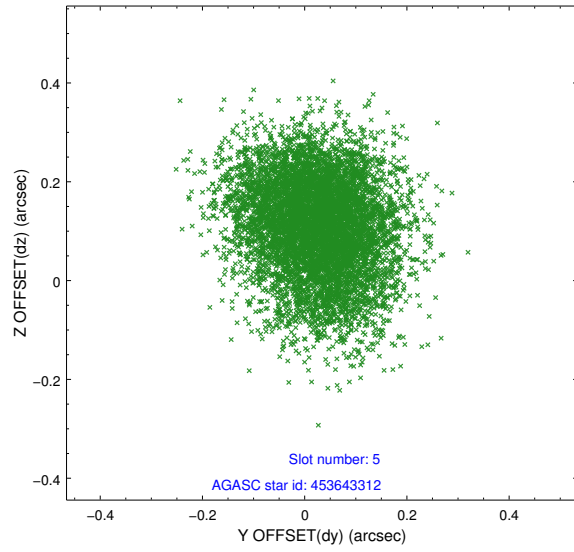
2.4.1 Slot 3



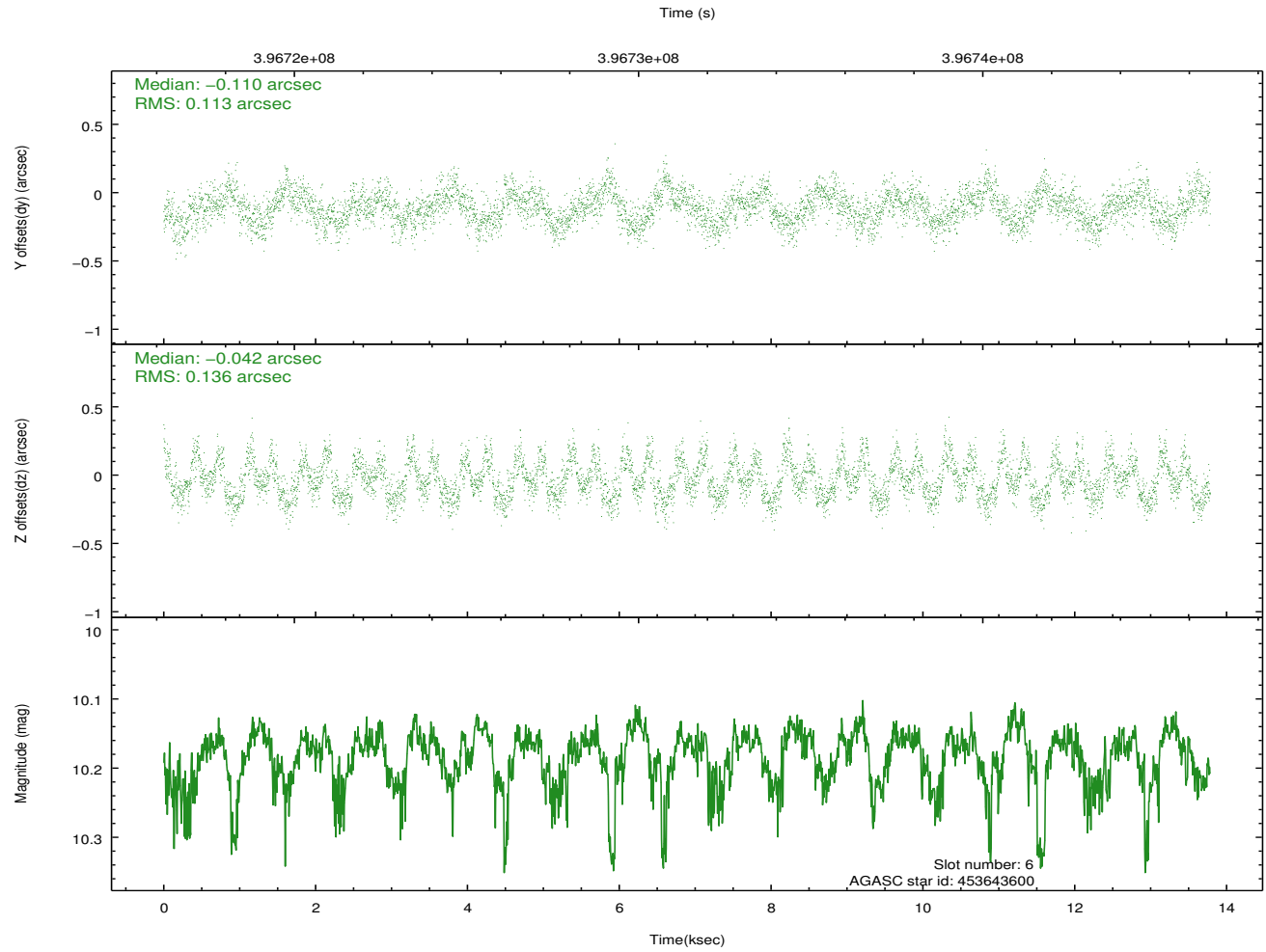
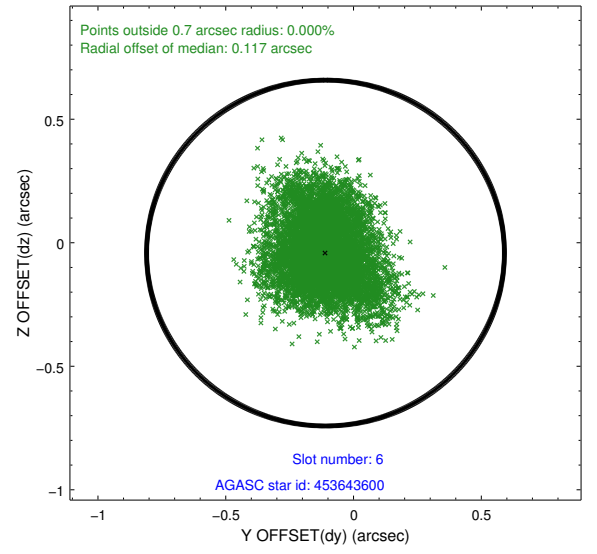
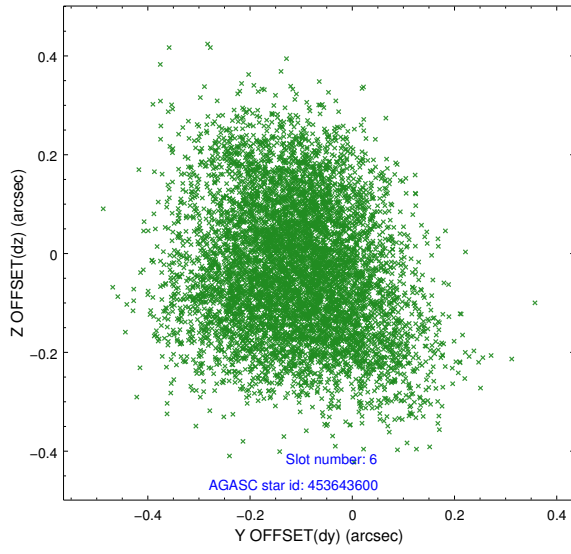
2.4.2 Slot 4



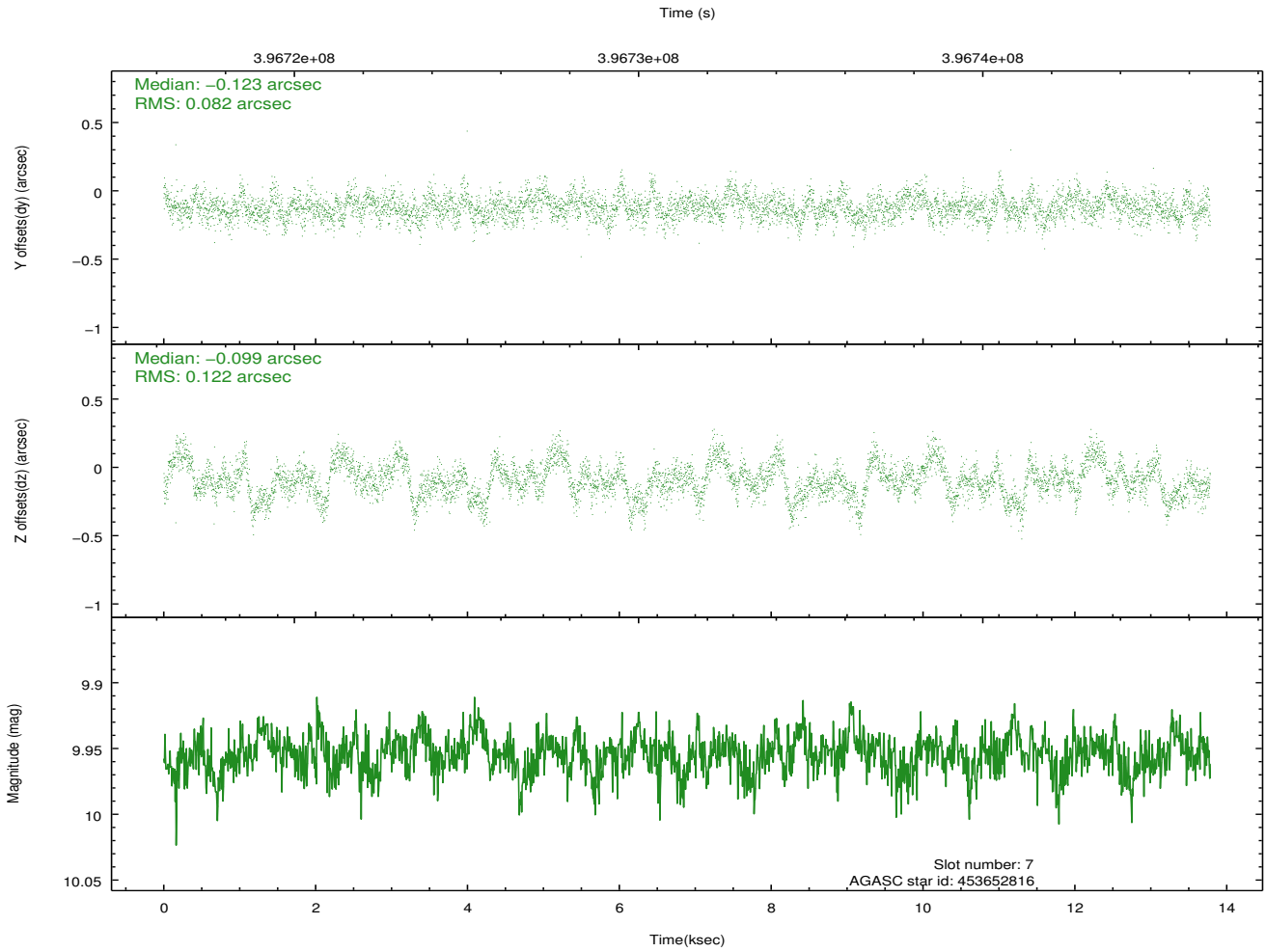
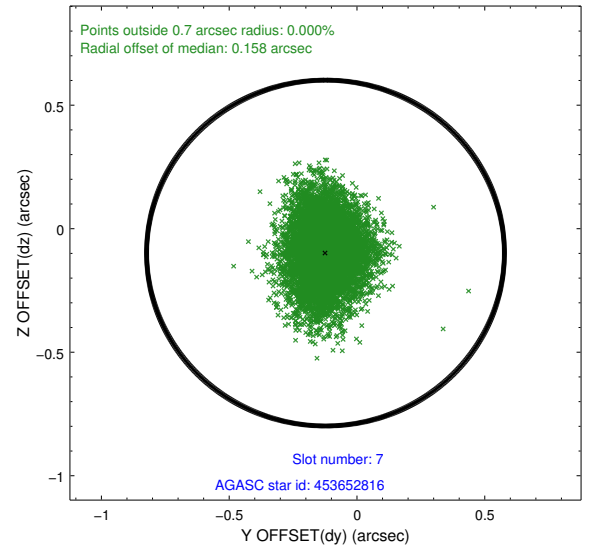
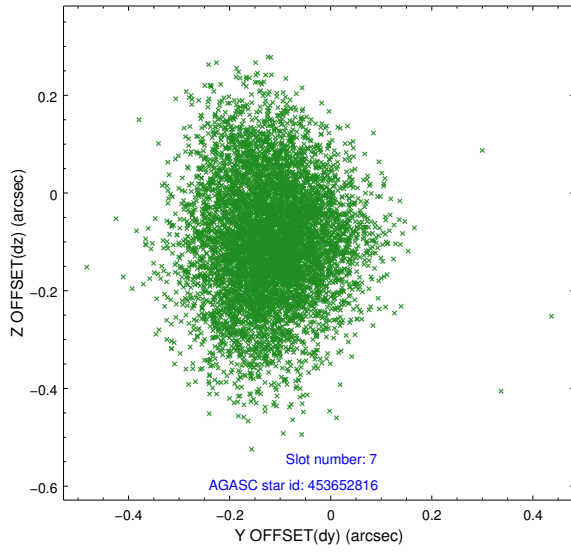
2.4.3 Slot 5



2.4.4 Slot 6

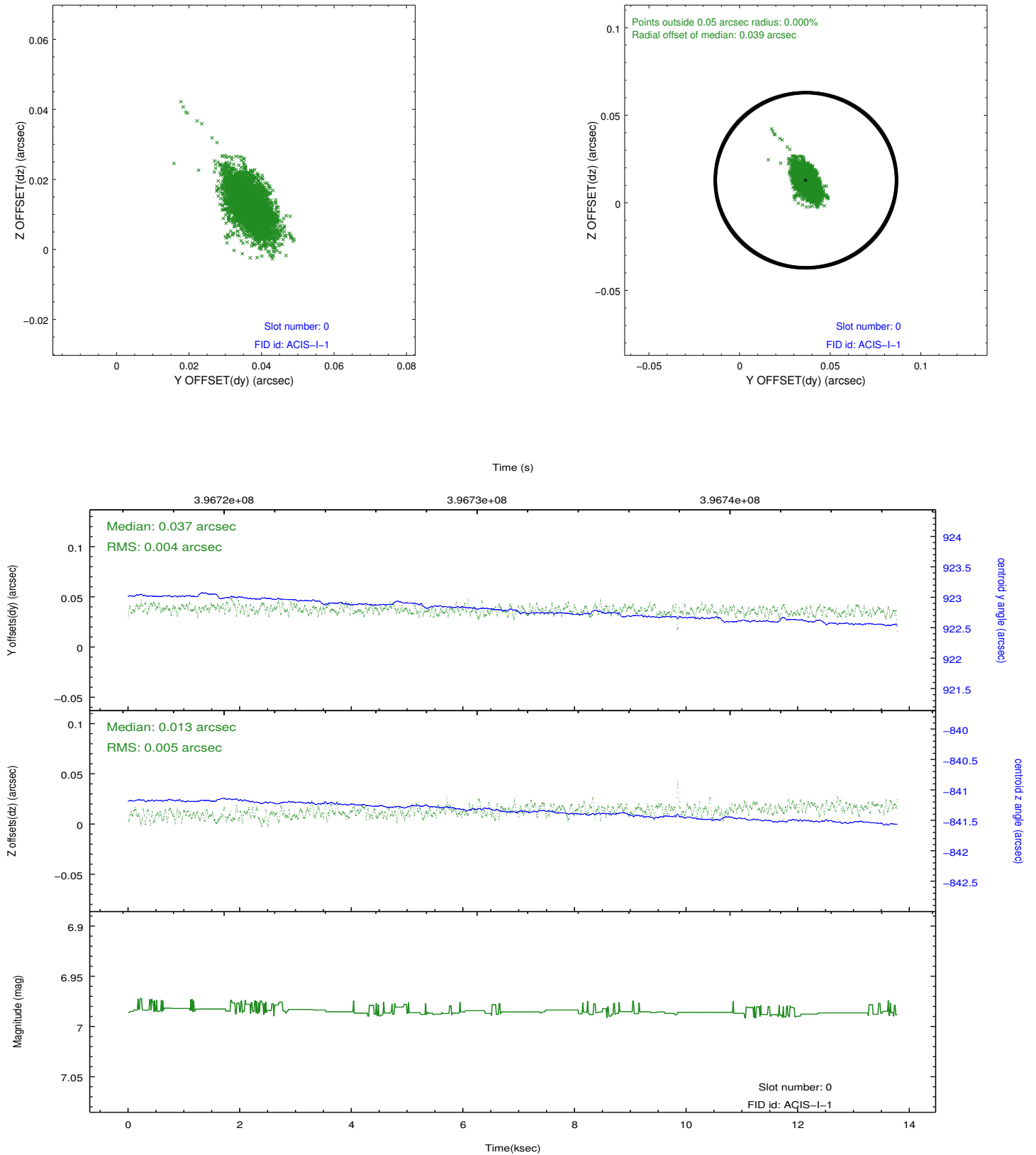


2.4.5 Slot 7

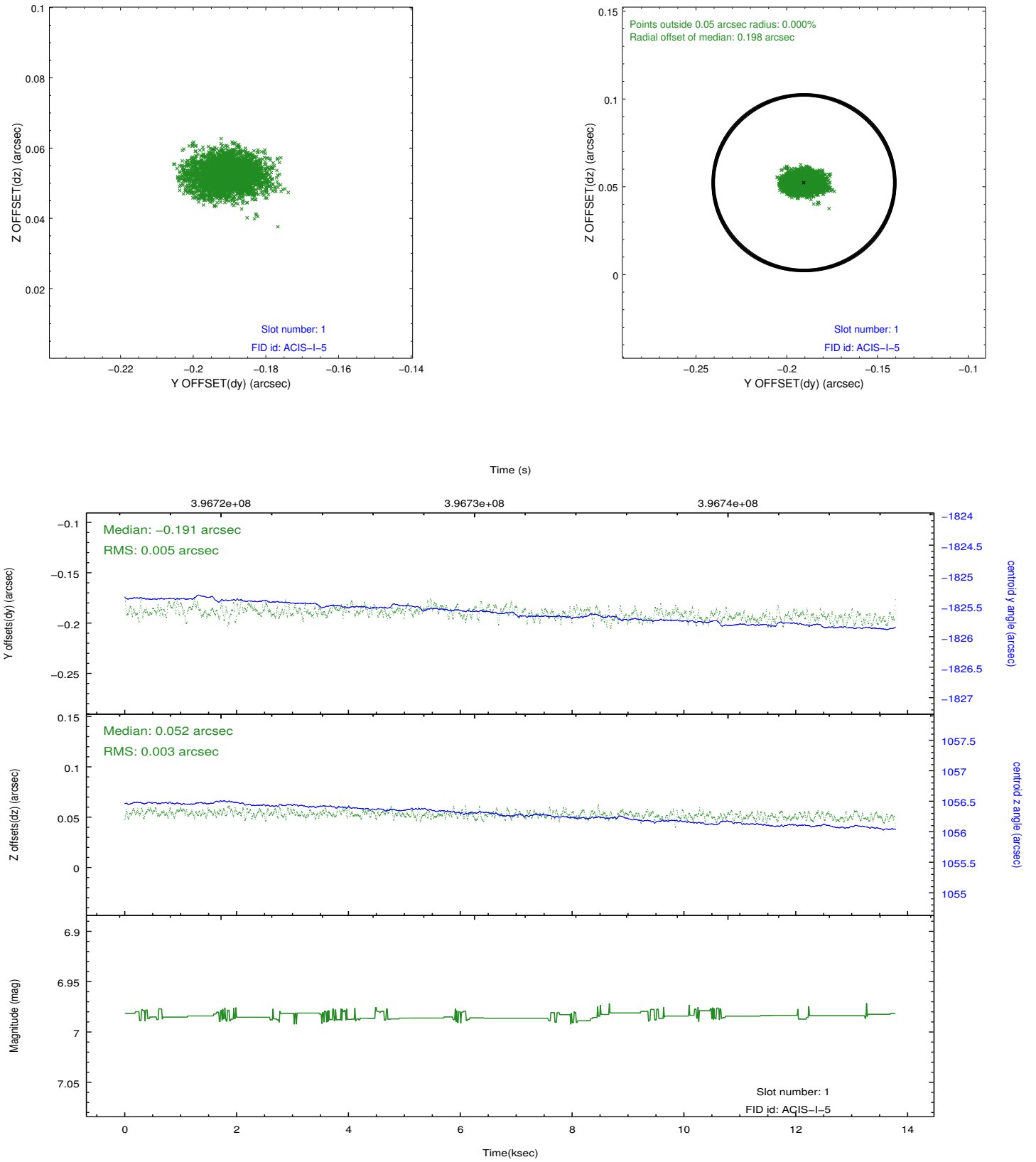


2.5 FID Slots

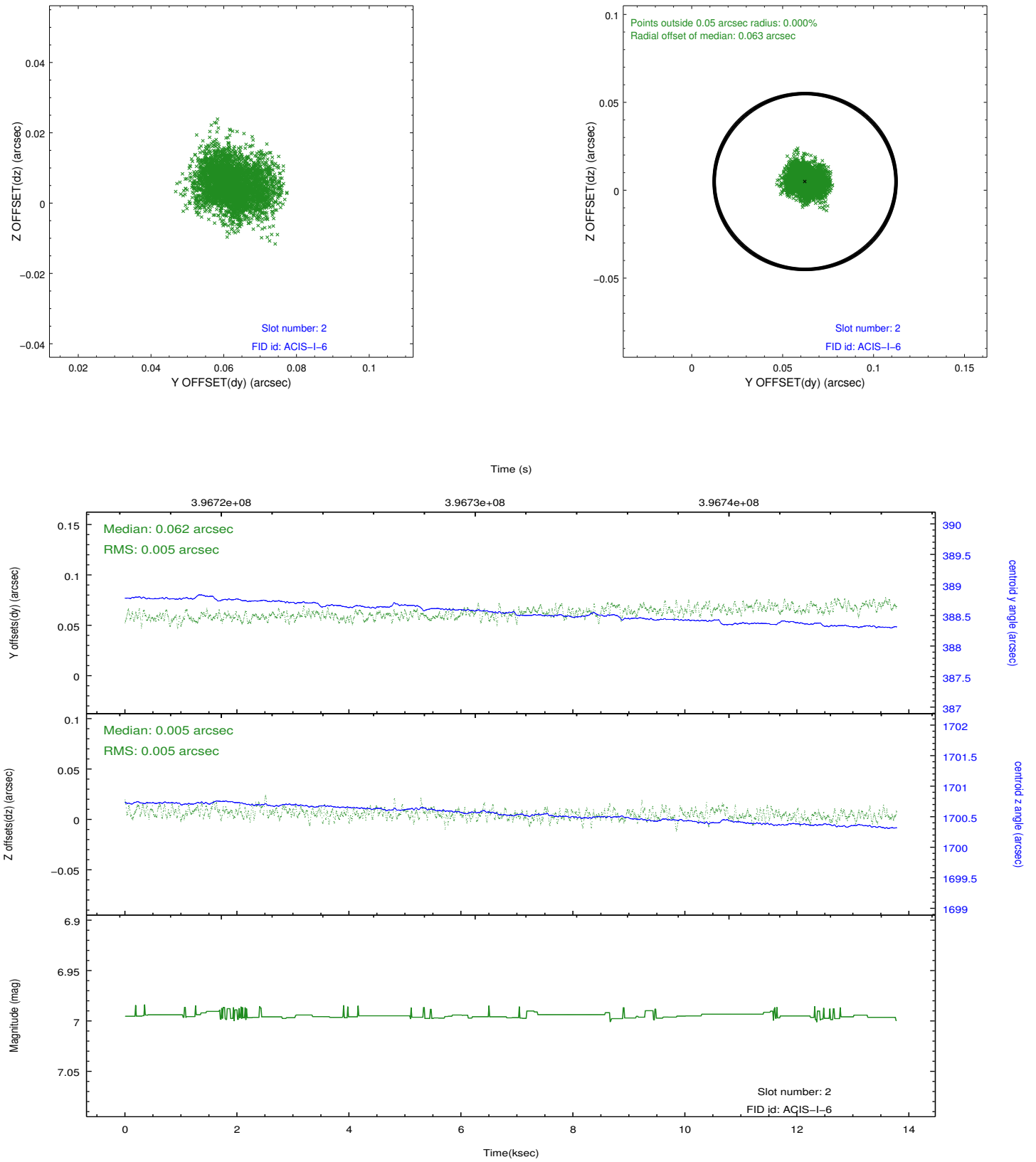
2.5.1 Slot 0



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) | 2012.07.10 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 13.053288093626 |

A.2 Comments