

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9724 - L2 Version 2
Chandra X-Ray Center

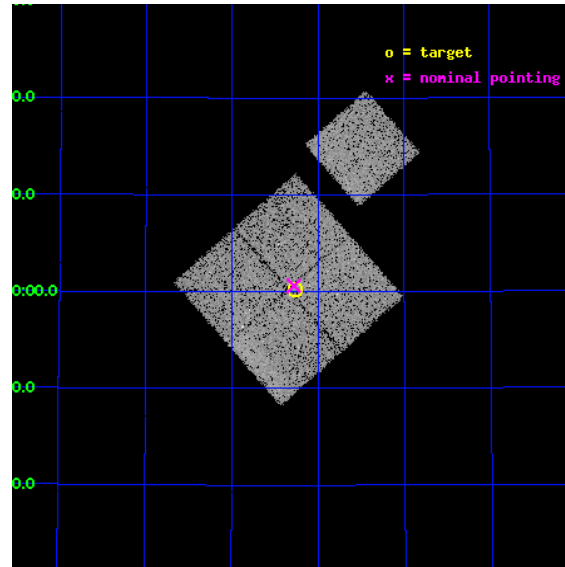
L2 Processing Date : May 6 2012

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1 Front

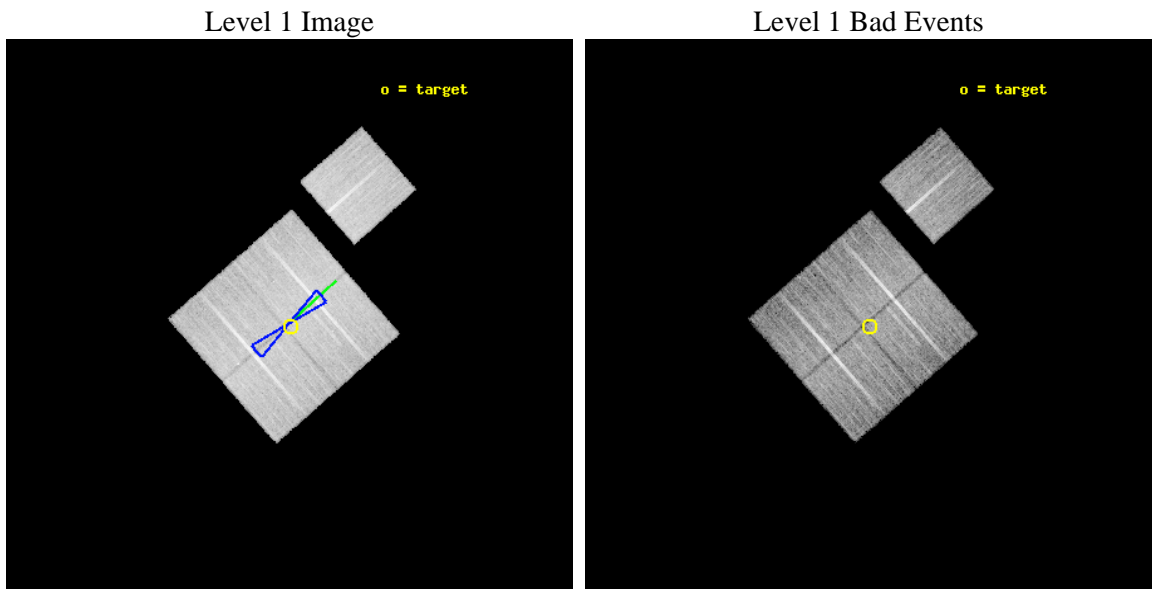
| | | |
|----------|---|---|
| seq_num | 900796 | Sequence number |
| obs_id | 9724 | Observation id |
| title | The Evolution of Faint AGN at High Redshift | Proposal title |
| observer | Prof Kirpal Nandra | Principal investigator |
| object | AEGIS-1 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 215.064583 | Observer's specified target RA [deg] |
| dec_targ | 53.002694 | Observer's specified target Dec [deg] |
| ra_nom | 215.07007401314 | Nominal RA [deg] |
| dec_nom | 53.010059837748 | Nominal Dec [deg] |
| roll_nom | 48.704314583741 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 14268.531965494 | Sum of GTIs [s] |
| livetime | 14082.103091025 | Livetime [s] |
| ontime0 | 14268.408835411 | Sum of GTIs [s] |
| ontime1 | 14271.590845823 | Sum of GTIs [s] |
| ontime2 | 14268.49092555 | Sum of GTIs [s] |
| ontime3 | 14268.531965494 | Sum of GTIs [s] |
| ontime6 | 14271.508765817 | Sum of GTIs [s] |
| l2events | 48354 | Number of level 2 events |



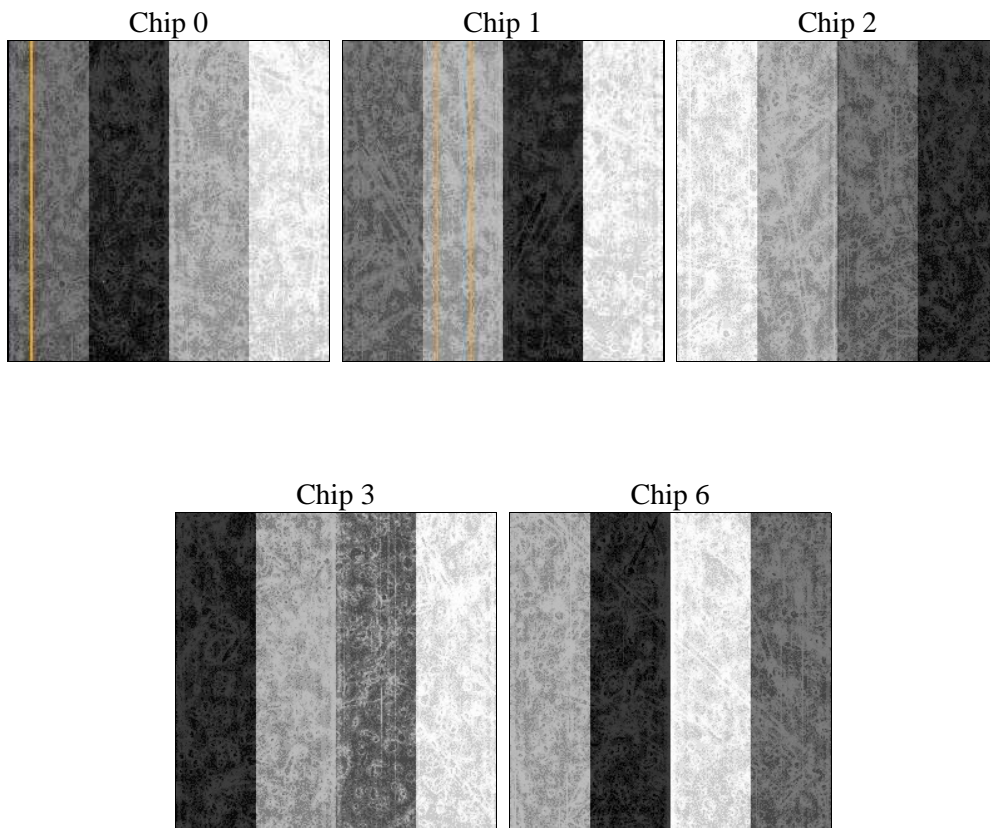
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 14500.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 14268.531965494 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime0 | 14268.408835411 | Sum of GTIs [s] |
| date | 2012-05-06T14:27:20 | Date and time of file creation | ontime1 | 14271.590845823 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 14268.49092555 | Sum of GTIs [s] |
| | | | ontime3 | 14268.531965494 | Sum of GTIs [s] |
| | | | ontime6 | 14271.508765817 | Sum of GTIs [s] |
| | | | l1events | 565806 | Number of level 1 events |

2.1.4 Events

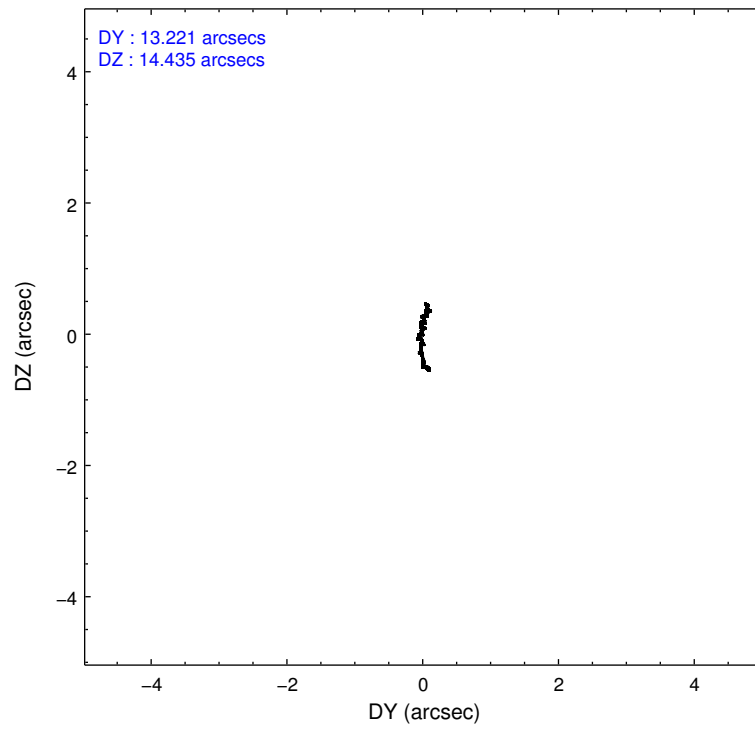
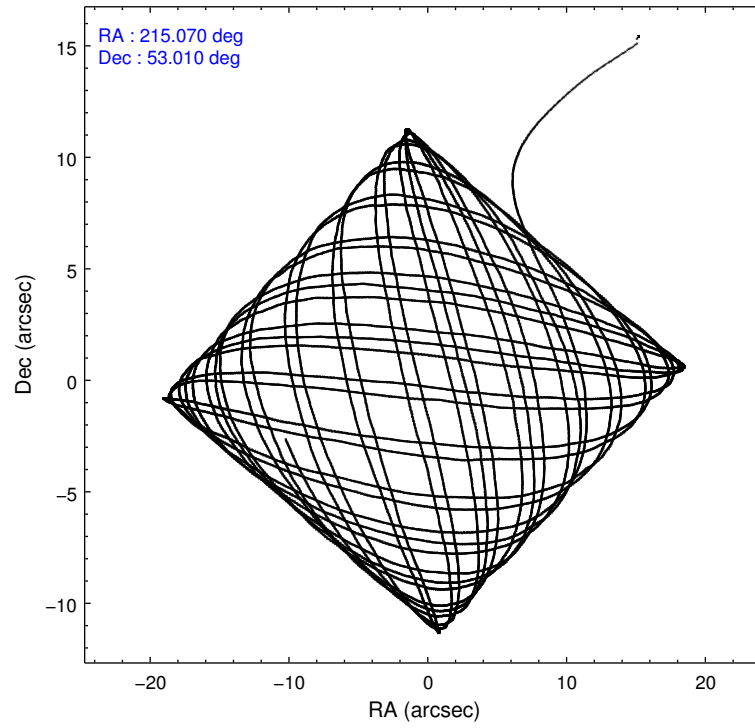
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 105841 | 110557 | 118137 | 114343 | 116928 |
| rejected events | 94105 | 97876 | 106902 | 103490 | 105320 |
| rejected % | 88% | 88% | 90% | 90% | 90% |

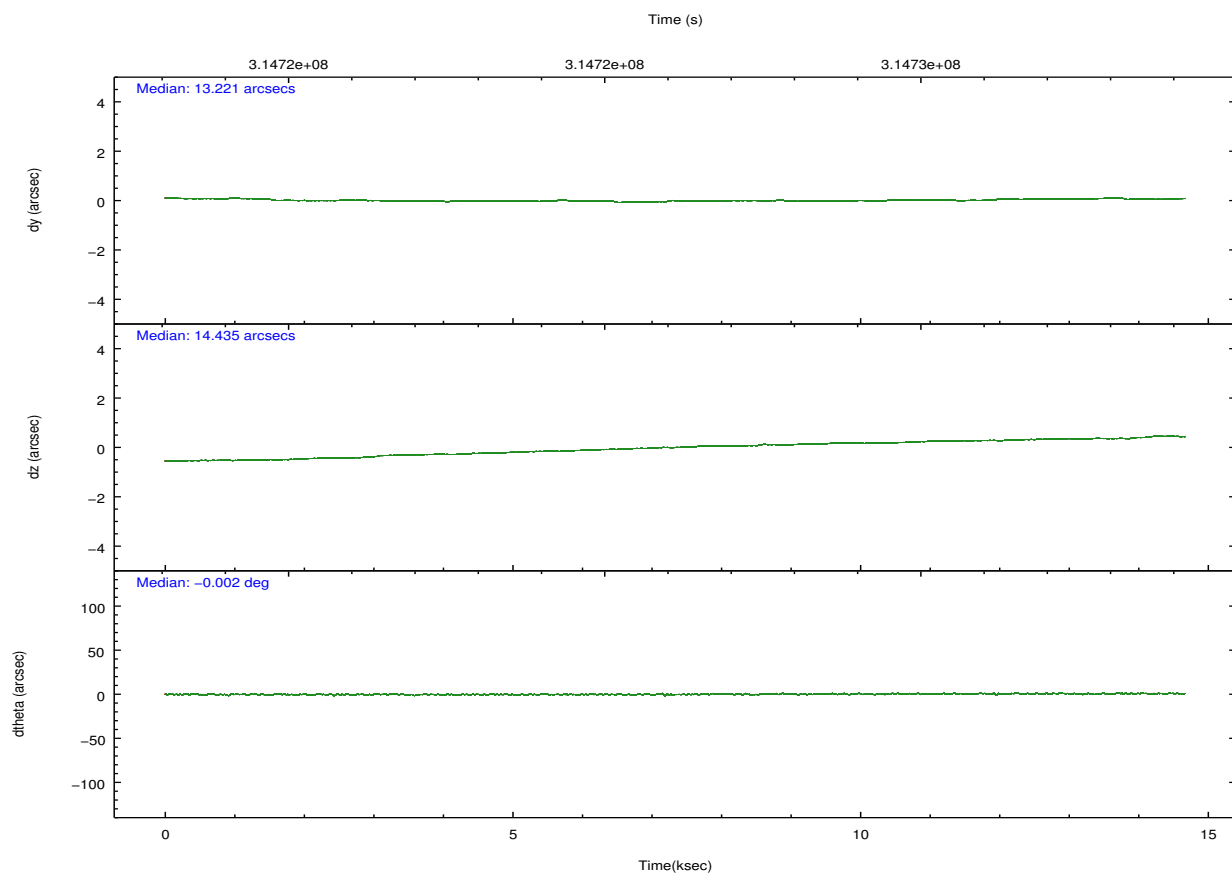
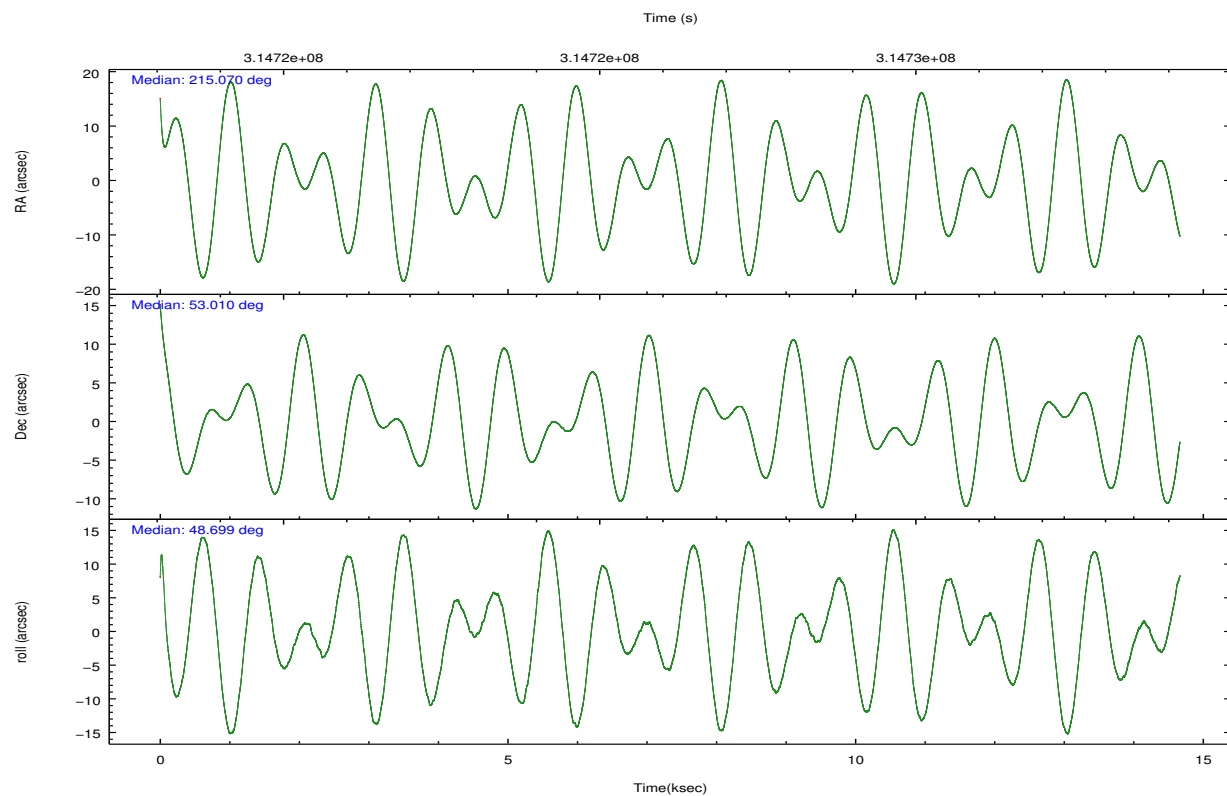
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|-------|-------|--------|-------|--------|
| grade 0 events | 4209 | 4545 | 4098 | 3867 | 3976 |
| | 3% | 4% | 3% | 3% | 3% |
| grade 1 events | 54 | 64 | 58 | 61 | 57 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2755 | 2837 | 2700 | 2244 | 2510 |
| | 2% | 2% | 2% | 1% | 2% |
| grade 3 events | 1251 | 1343 | 1184 | 1294 | 1270 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 1247 | 1426 | 1197 | 1212 | 1241 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 3948 | 4377 | 3731 | 4755 | 4566 |
| | 3% | 3% | 3% | 4% | 3% |
| grade 6 events | 2275 | 2533 | 2059 | 2236 | 2614 |
| | 2% | 2% | 1% | 1% | 2% |
| grade 7 events | 90102 | 93432 | 103110 | 98674 | 100694 |
| | 85% | 84% | 87% | 86% | 86% |

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 | CCD I0 on | Y | Y |
| Observation mode | POINTING | POINTING | CCD I1 on | Y | Y |
| [deg] Pointing RA | 215.061283 | 215.0700740131392 | CCD I2 on | Y | Y |
| [deg] Pointing Dec | 52.983099 | 53.01005983774785 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 48.502636 | 48.70431458374091 | CCD S0 on | N | N |
| [deg] Roll angle | 50.000000 | 50.000000 | CCD S1 on | N | N |
| [deg] Roll tolerance | 10.000000 | 10.000000 | CCD S2 on | O1 | Y |
| Roll constraint allows 180D rotation | Y | Y | CCD S3 on | N | N |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | CCD S4 on | N | N |
| [mm] SIM defocus | 0 | 0.001439871863259334 | CCD S5 on | N | N |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | Number of optional ACIS chips dropped | 0 | 0 |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | On-chip summing requested | N | N |
| [s] Observation start time (MET) | 314718947.184000 | 314717846.66345 | Subarray requested | NONE | NONE |
| Observation start date | 2007-12-22T13:54:42 | 2007-12-22T13:37:26 | Alternating exposures requested | N | N |
| [s] Observation end time (MET) | 314733447.184000 | 314734040.12673 | [s] Primary exposure time | 0.000000 | 3.1 |
| Observation end date | 2007-12-22T17:56:22 | 2007-12-22T18:07:20 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



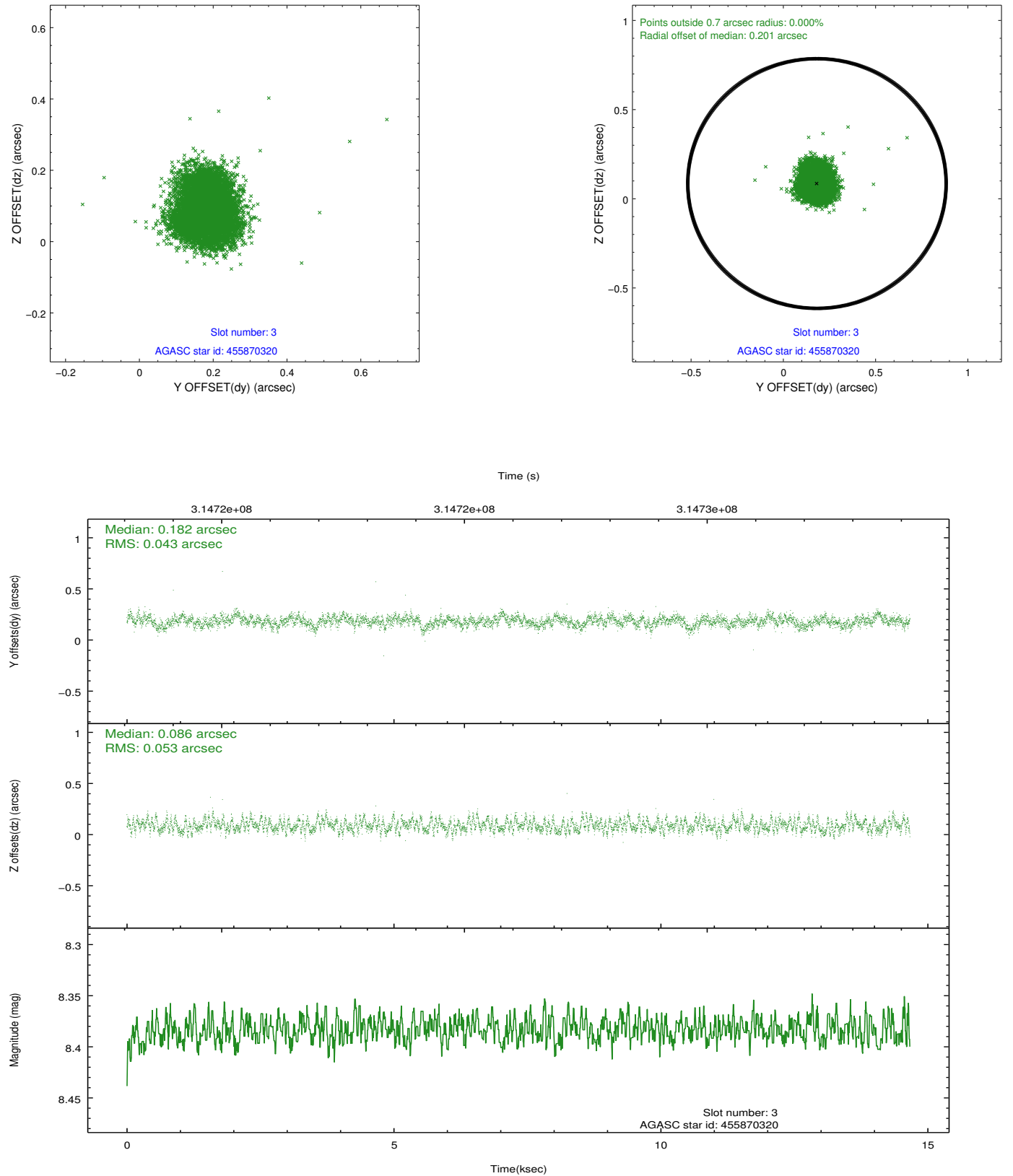


Slot Statistics

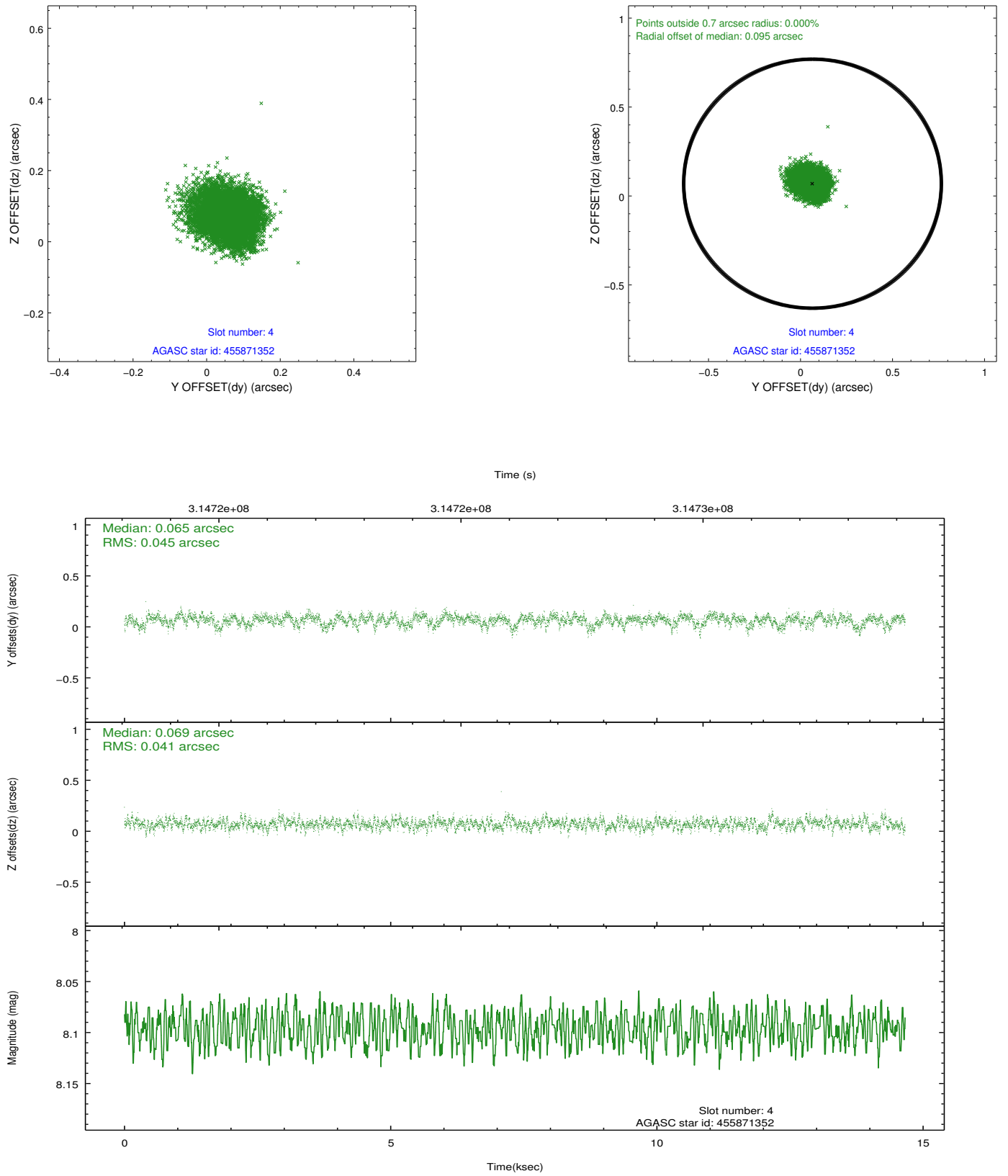
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.23 | 3577 | 0.022 | 0.011 | 0.011 | 0.018 | 0.000000 | 0.000000 | 926.30 | -837.96 |
| 1 | FID | ACIS-I-5 | 7.23 | 3578 | -0.206 | 0.031 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1821.88 | 1059.37 |
| 2 | FID | ACIS-I-6 | 7.24 | 3575 | 0.093 | 0.031 | 0.013 | 0.020 | 0.000000 | 0.000000 | 391.55 | 1704.24 |
| 3 | GUIDE | 455870320 | 8.38 | 7154 | 0.182 | 0.086 | 0.073 | 0.114 | 214.874440 | 52.401638 | -1838.79 | -1079.21 |
| 4 | GUIDE | 455871352 | 8.10 | 7154 | 0.065 | 0.069 | 0.064 | 0.107 | 215.099961 | 52.172669 | -2128.36 | -1997.16 |
| 5 | GUIDE | 505809632 | 8.06 | 7155 | -0.032 | -0.113 | 0.052 | 0.085 | 215.499426 | 53.521185 | 2074.32 | 583.09 |
| 6 | GUIDE | 505812088 | 8.14 | 7149 | -0.057 | -0.182 | 0.064 | 0.102 | 214.186617 | 53.263562 | -482.69 | 2087.33 |
| 7 | GUIDE | 505815928 | 8.33 | 7151 | -0.153 | 0.137 | 0.066 | 0.108 | 216.234742 | 53.074559 | 1943.99 | -1668.09 |

2.4 Star Slots

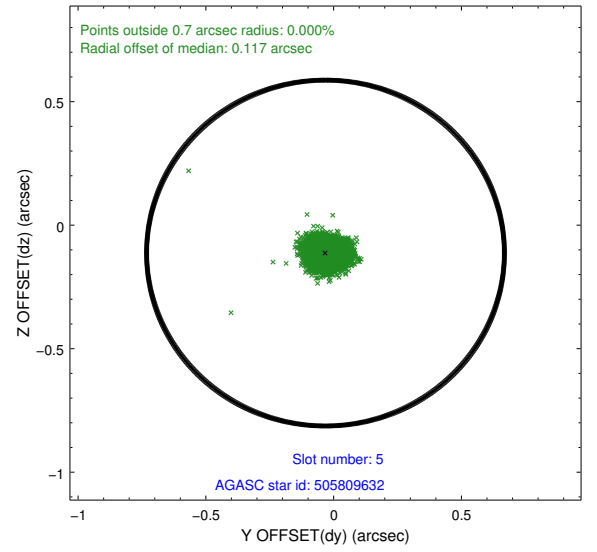
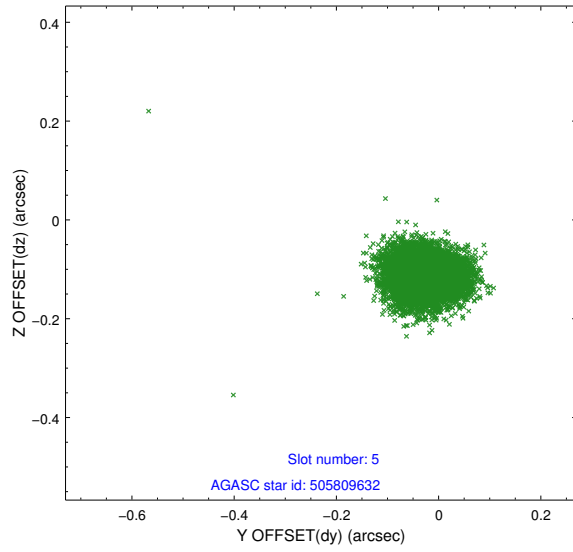
2.4.1 Slot 3



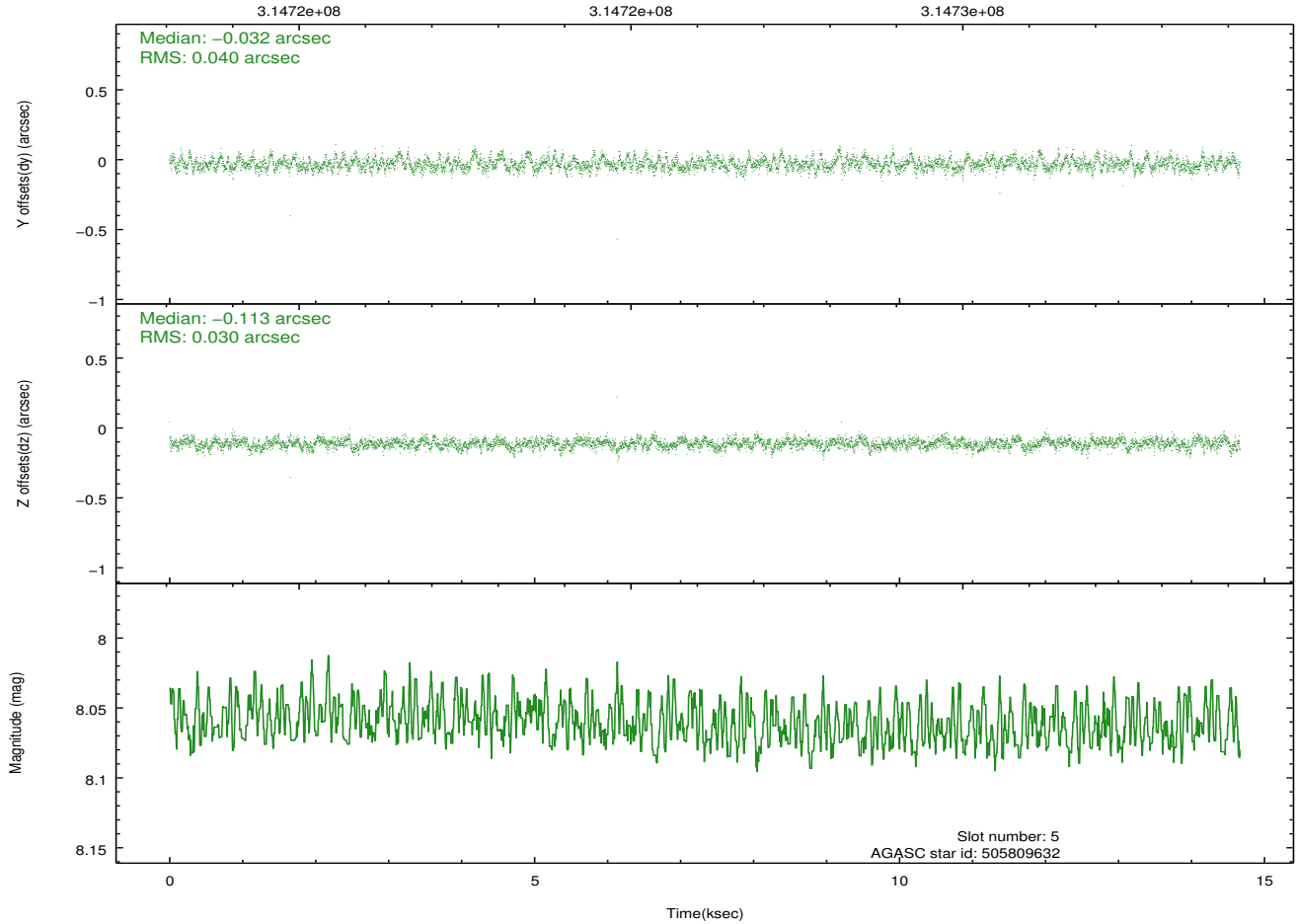
2.4.2 Slot 4



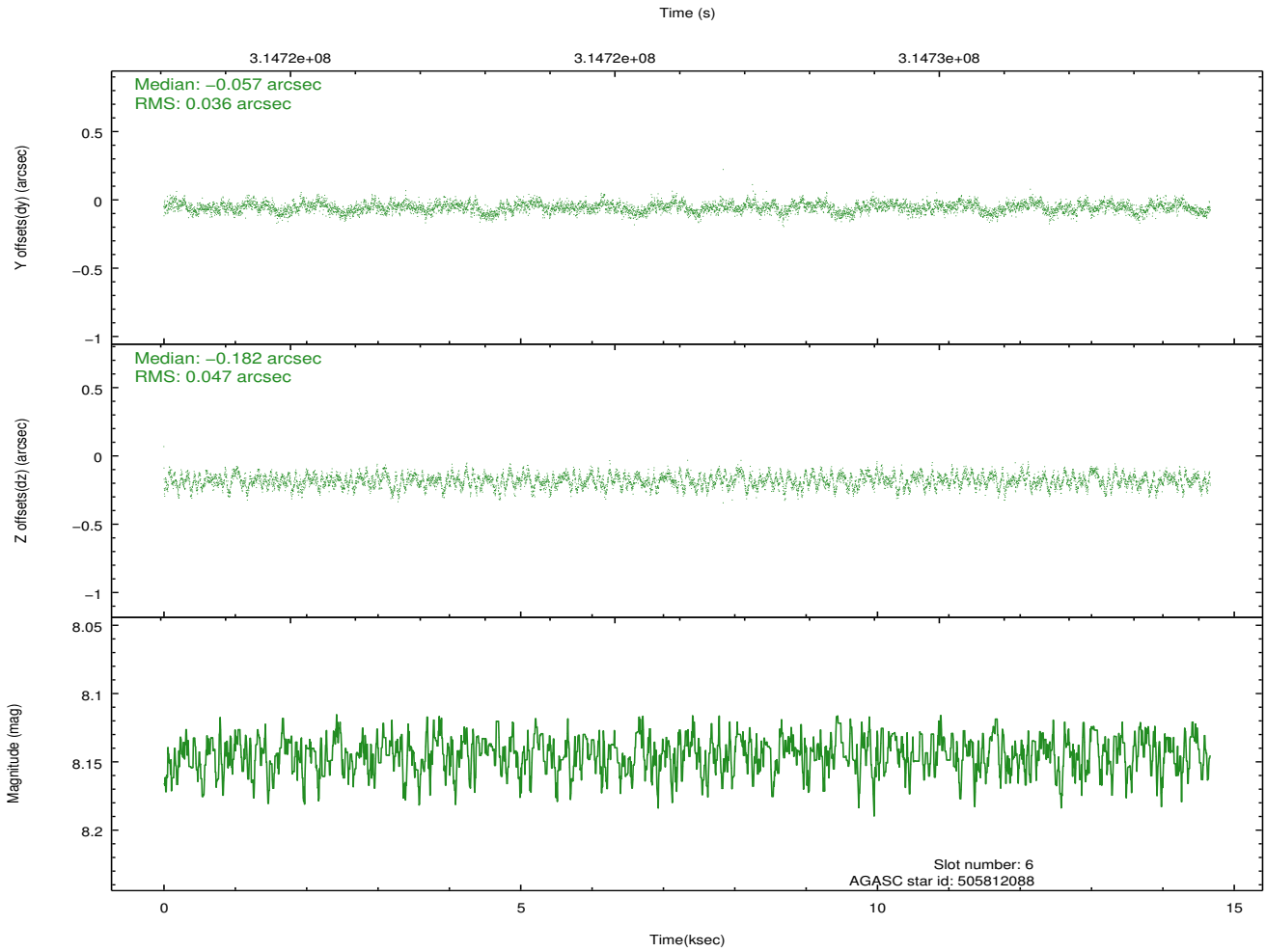
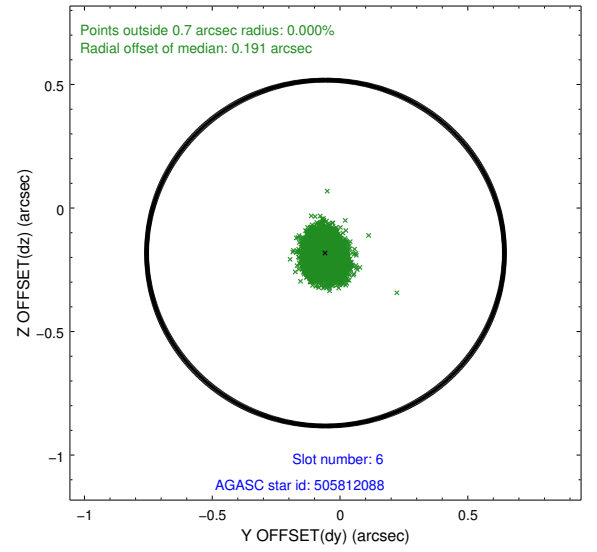
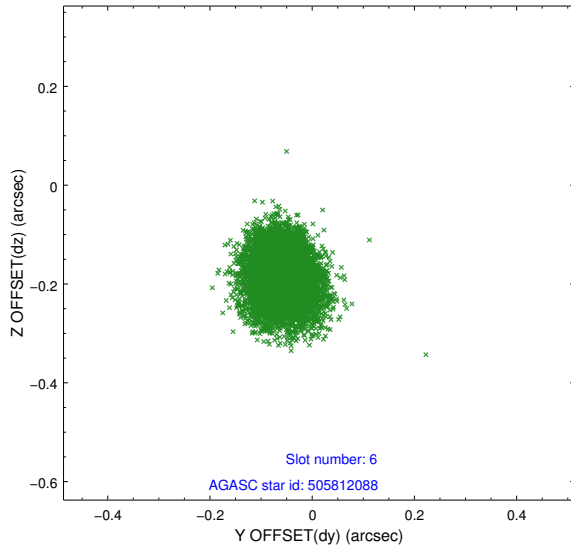
2.4.3 Slot 5



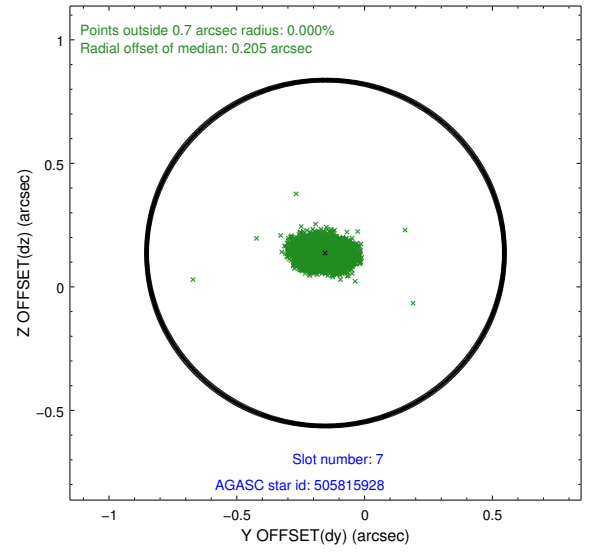
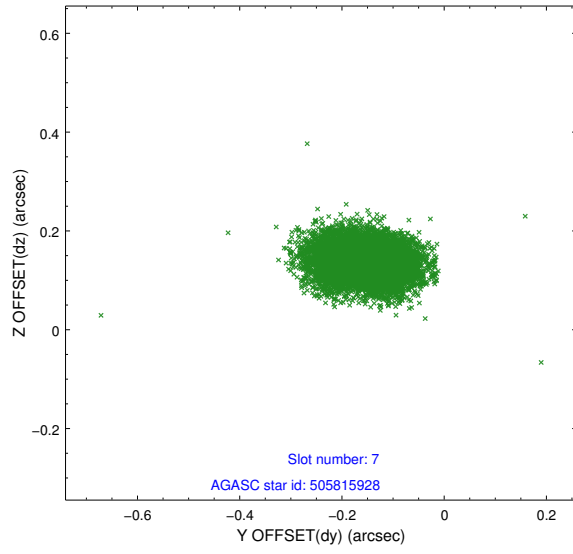
Time (s)



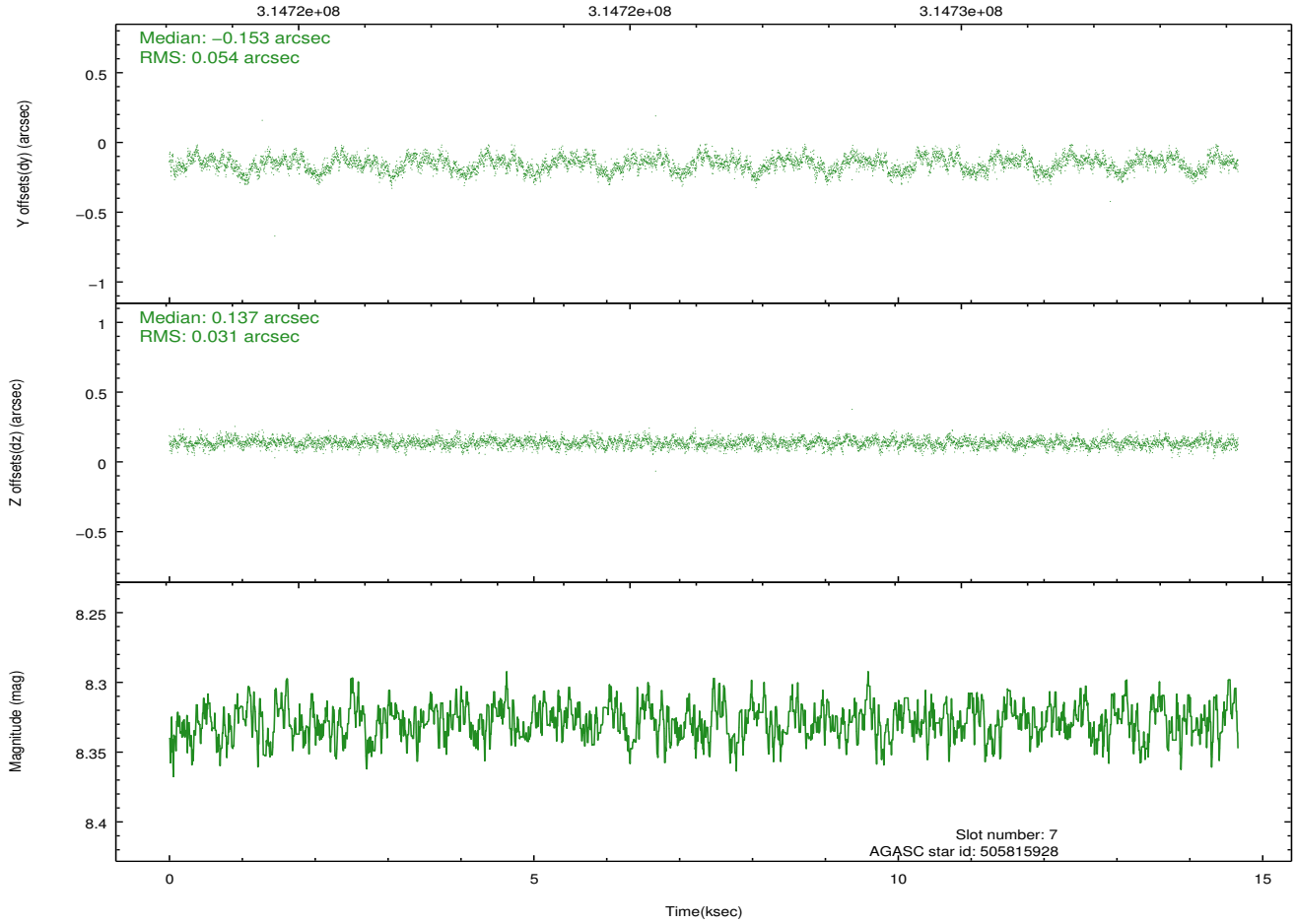
2.4.4 Slot 6



2.4.5 Slot 7

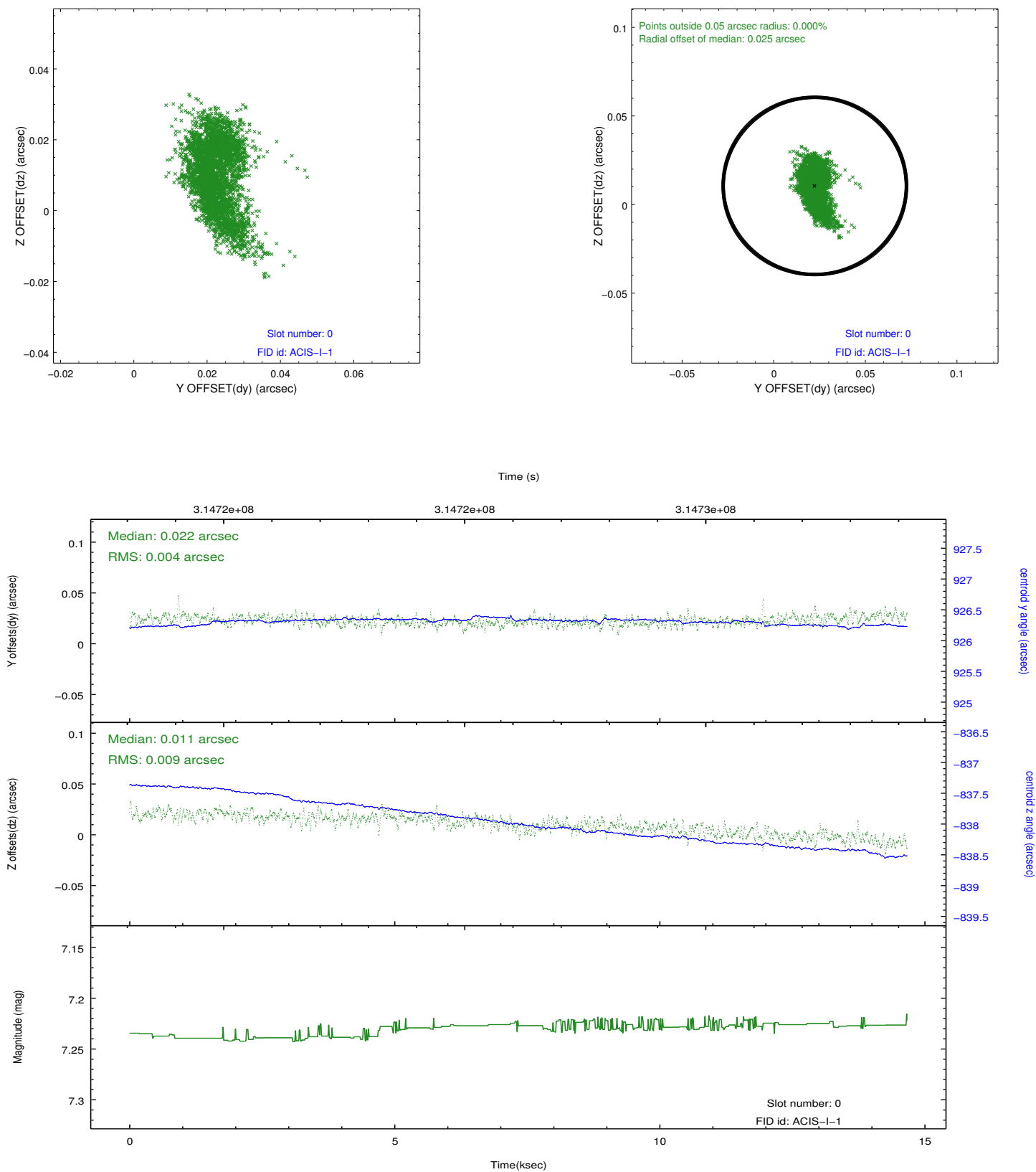


Time (s)

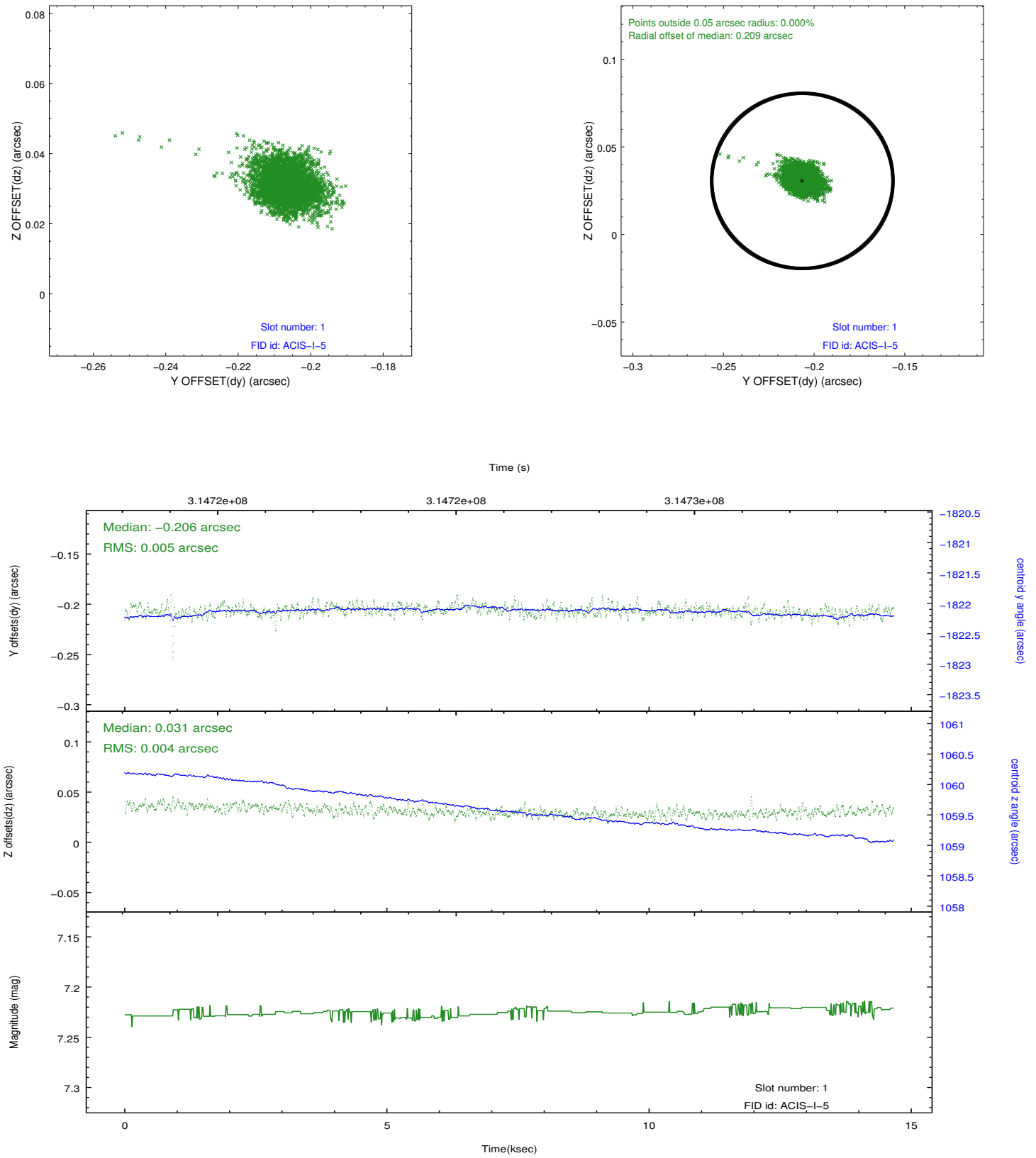


2.5 FID Slots

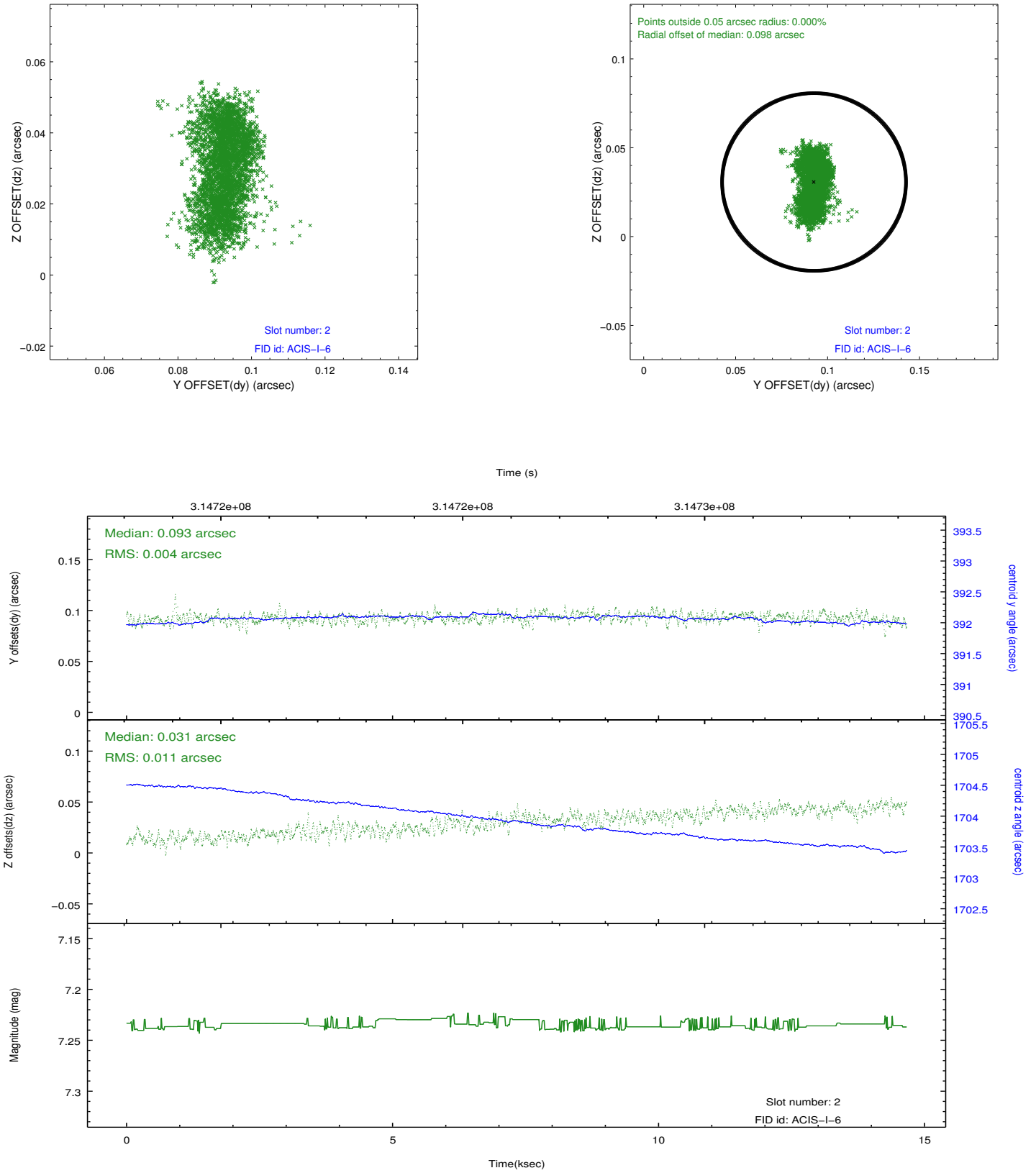
2.5.1 Slot 0



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) | 2012.05.08 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 14.2692591 |

A.2 Comments

Joint Proposal: Spitzer. Roll constraint met.