

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2789 - L2 Version 3
Chandra X-Ray Center

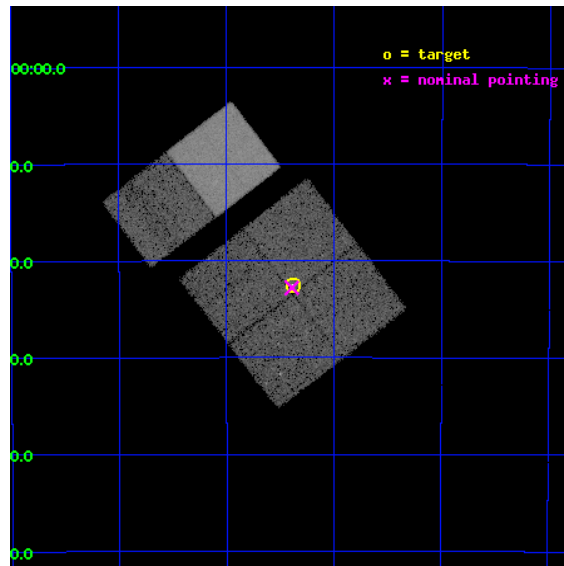
L2 Processing Date : Oct 3 2012

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1 Front

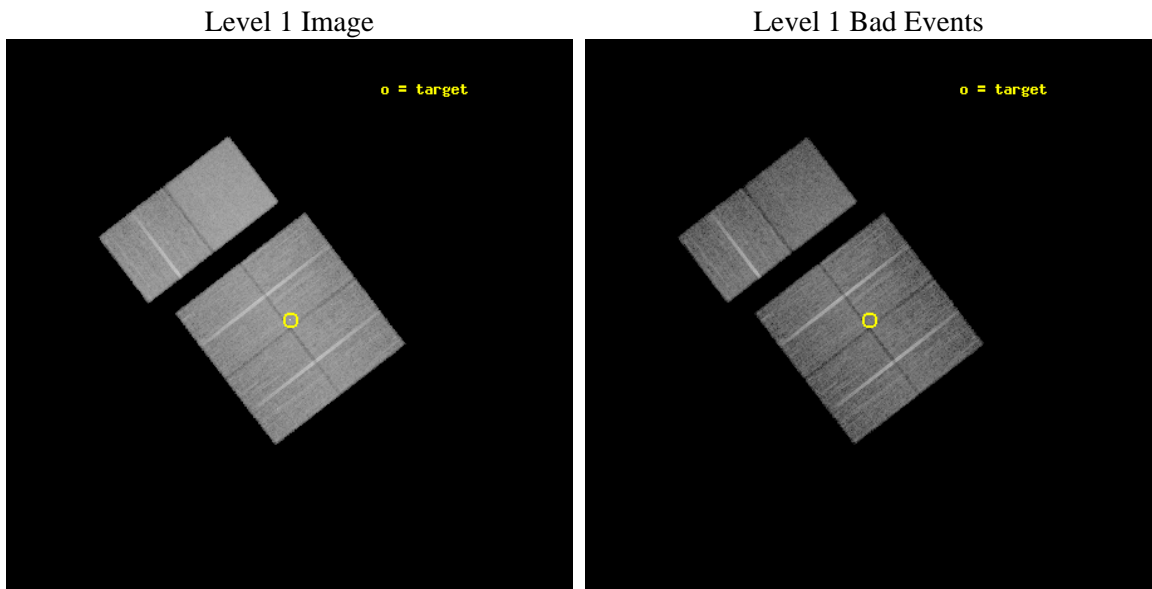
| | | |
|----------|---|---|
| seq_num | 500239 | Sequence number |
| obs_id | 2789 | Observation id |
| title | ASTROMETRIC STUDY OF ISOLATED NEUTRON STARS | Proposal title |
| observer | Dr Christian Motch | Principal investigator |
| object | RX J0806-4123 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 121.595 | Observer's specified target RA [deg] |
| dec_targ | -41.375833 | Observer's specified target Dec [deg] |
| ra_nom | 121.59803457431 | Nominal RA [deg] |
| dec_nom | -41.379892125344 | Nominal Dec [deg] |
| roll_nom | 322.43820977935 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 17910.400016665 | Sum of GTIs [s] |
| livetime | 17683.607747306 | Livetime [s] |
| ontime0 | 17907.159046412 | Sum of GTIs [s] |
| ontime1 | 17910.400016665 | Sum of GTIs [s] |
| ontime2 | 17910.400016665 | Sum of GTIs [s] |
| ontime3 | 17910.400016665 | Sum of GTIs [s] |
| ontime6 | 17907.159026489 | Sum of GTIs [s] |
| ontime7 | 17910.400016665 | Sum of GTIs [s] |
| l2events | 133639 | Number of level 2 events |



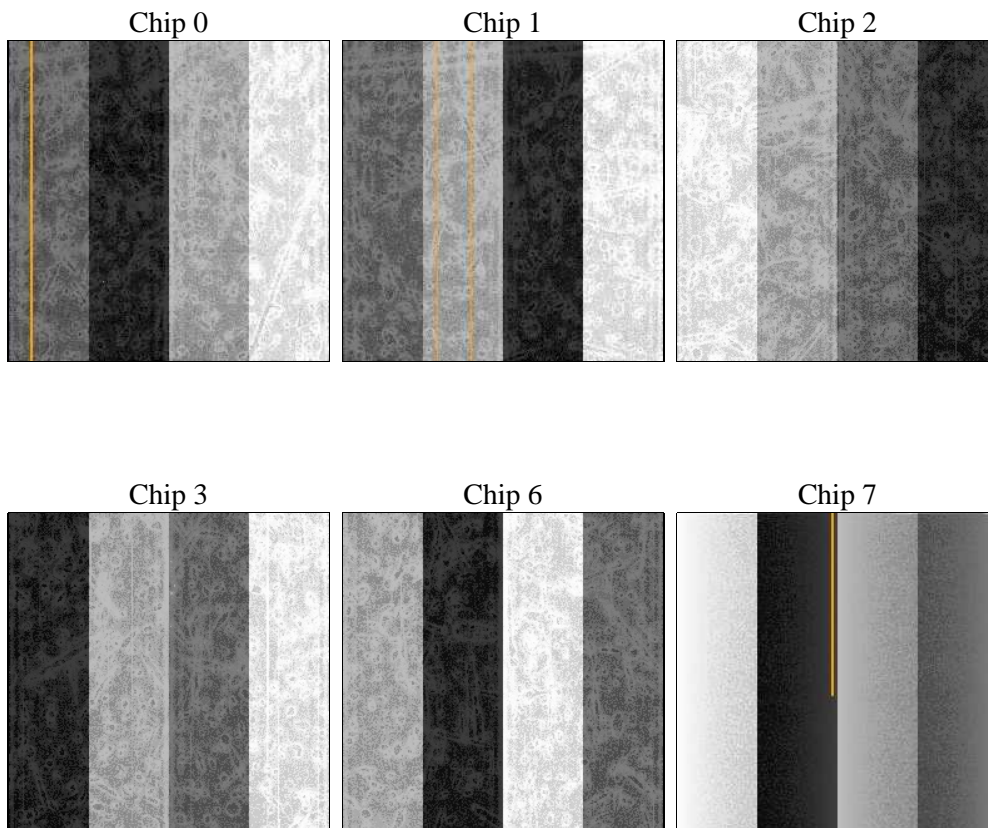
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 18164.216000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 17910.400016665 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime0 | 17907.159046412 | Sum of GTIs [s] |
| date | 2012-10-03T03:00:51 | Date and time of file creation | ontime1 | 17910.400016665 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 17910.400016665 | Sum of GTIs [s] |
| | | | ontime3 | 17910.400016665 | Sum of GTIs [s] |
| | | | ontime6 | 17907.159026489 | Sum of GTIs [s] |
| | | | ontime7 | 17910.400016665 | Sum of GTIs [s] |
| | | | l1events | 763209 | Number of level 1 events |

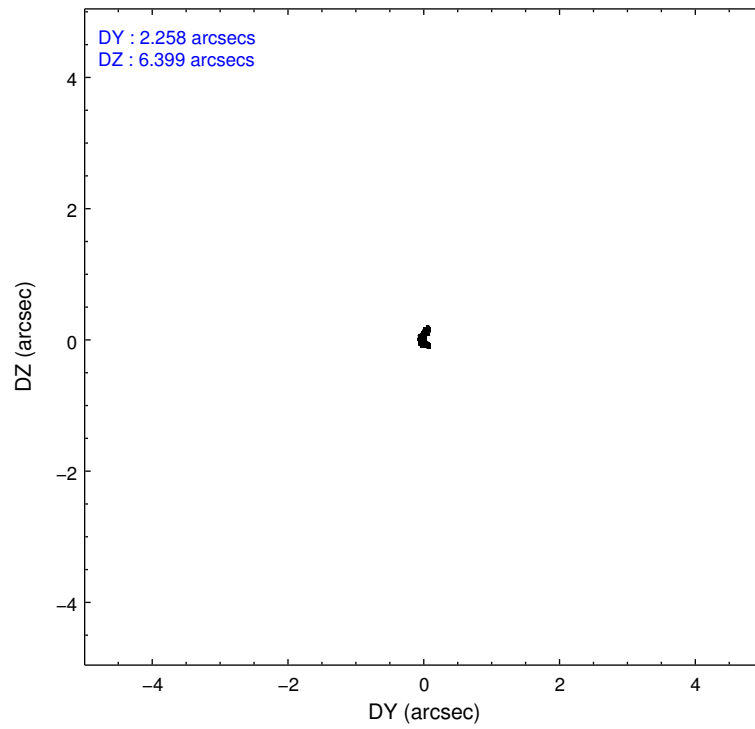
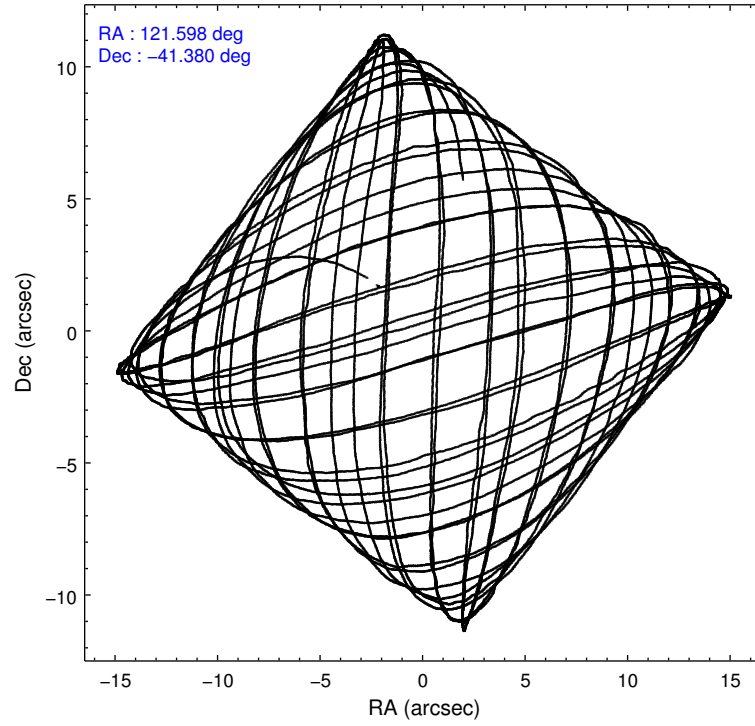
2.1.4 Events

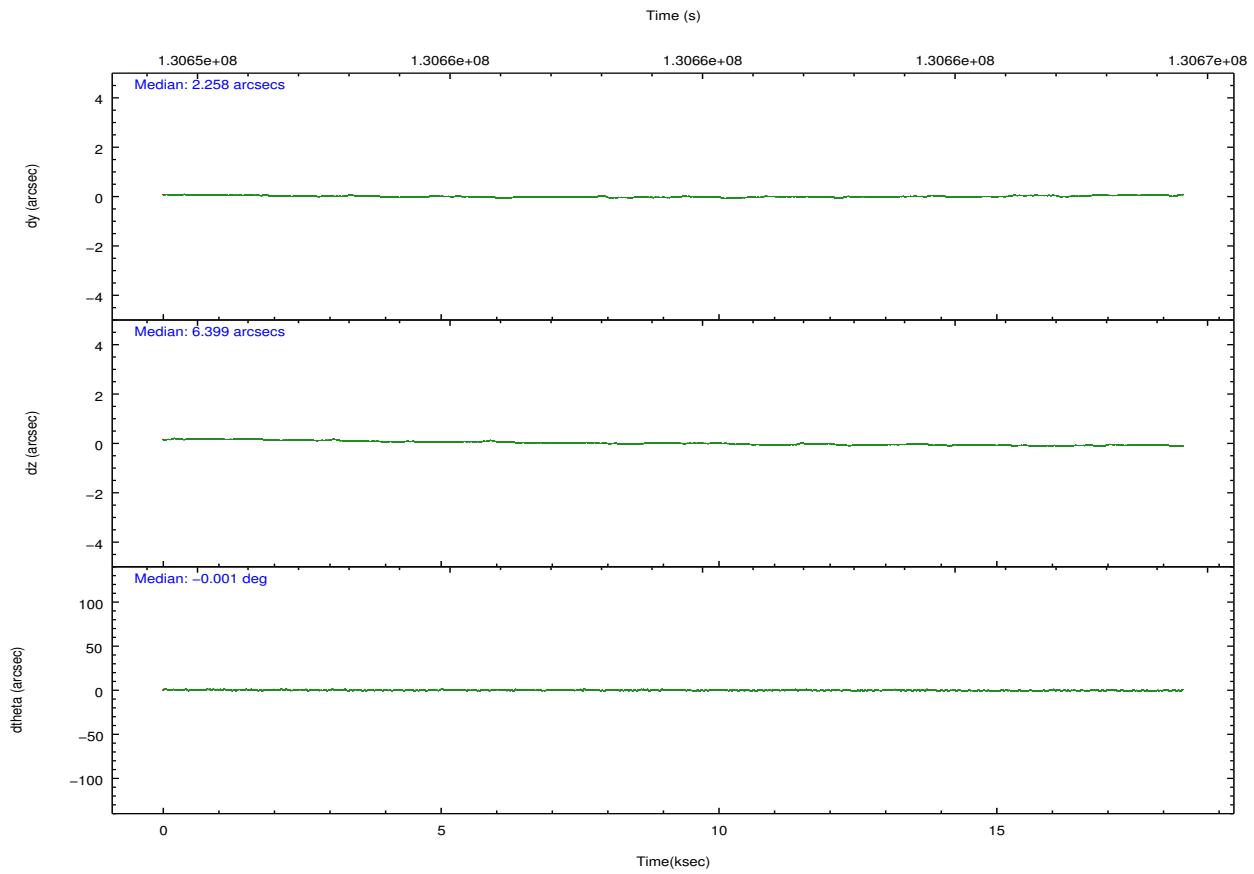
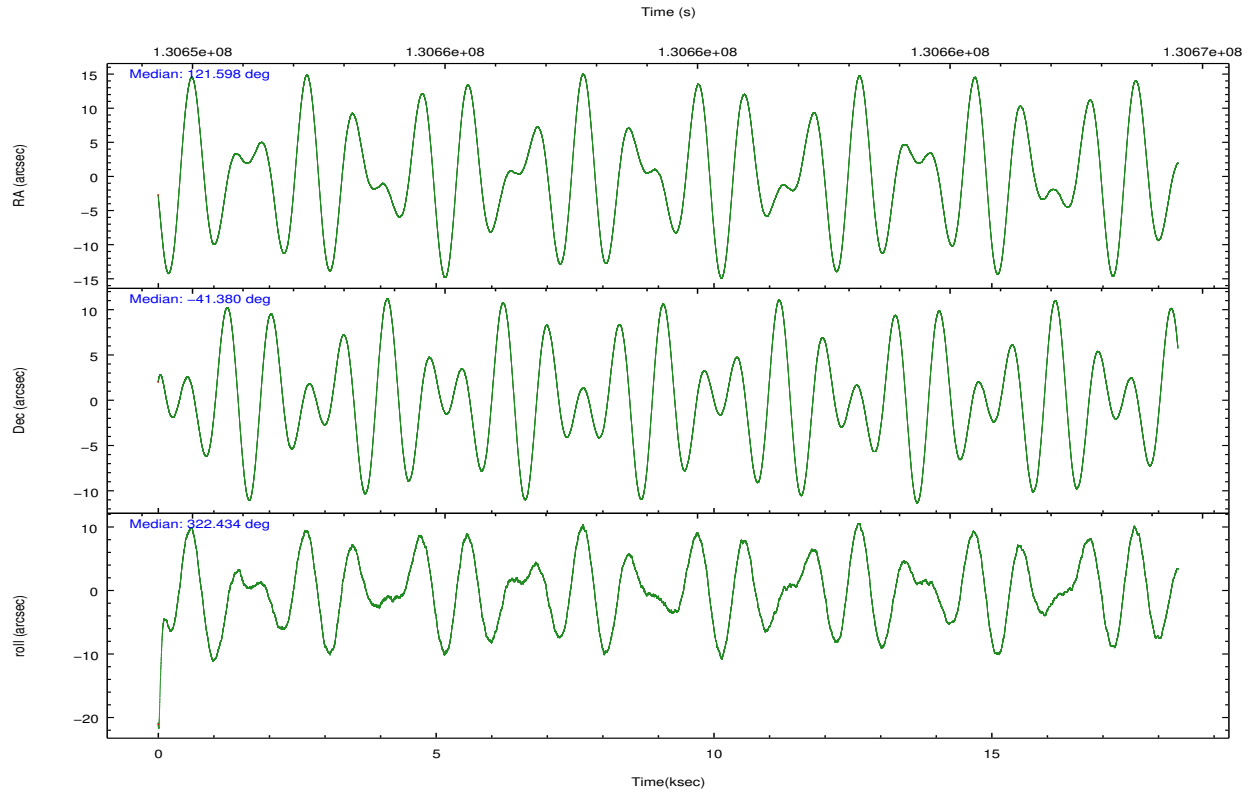
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|-------|-------|--------|--------|--------|-------|
| level 1 events | 111549 | 114308 | 122348 | 124930 | 128089 | 161985 | grade 0 events | 6484 | 6301 | 6354 | 7309 | 6072 | 6614 |
| rejected events | 96130 | 98499 | 107461 | 108764 | 112706 | 93067 | | 5% | 5% | 5% | 5% | 4% | 4% |
| rejected % | 86% | 86% | 87% | 87% | 87% | 57% | grade 1 events | 59 | 54 | 63 | 92 | 56 | 152 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3485 | 3391 | 3325 | 3420 | 3365 | 13867 |
| | | | | | | | | 3% | 2% | 2% | 2% | 2% | 8% |
| | | | | | | | grade 3 events | 1429 | 1577 | 1257 | 1371 | 1395 | 6150 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 1325 | 1525 | 1343 | 1350 | 1454 | 6172 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 4476 | 4624 | 4169 | 4844 | 5311 | 15166 |
| | | | | | | | | 4% | 4% | 3% | 3% | 4% | 9% |
| | | | | | | | grade 6 events | 2700 | 3016 | 2614 | 2721 | 3107 | 36140 |
| | | | | | | | | 2% | 2% | 2% | 2% | 2% | 22% |
| | | | | | | | grade 7 events | 91591 | 93820 | 103223 | 103823 | 107329 | 77724 |
| | | | | | | | | 82% | 82% | 84% | 83% | 83% | 47% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 121.561847 | 121.5980345743111 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -41.376371 | -41.37989212534448 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 322.205615 | 322.4382097793462 | [s] Primary exposure time | 0.000000 | 3.2 |
| [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) | 130650425.184000 | 130649603.26486 | | | |
| Observation start date | 2002-02-21T03:46:01 | 2002-02-21T03:33:23 | | | |
| [s] Observation end time (MET) | 130668589.184000 | 130668904.01564 | | | |
| Observation end date | 2002-02-21T08:48:45 | 2002-02-21T08:55:04 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



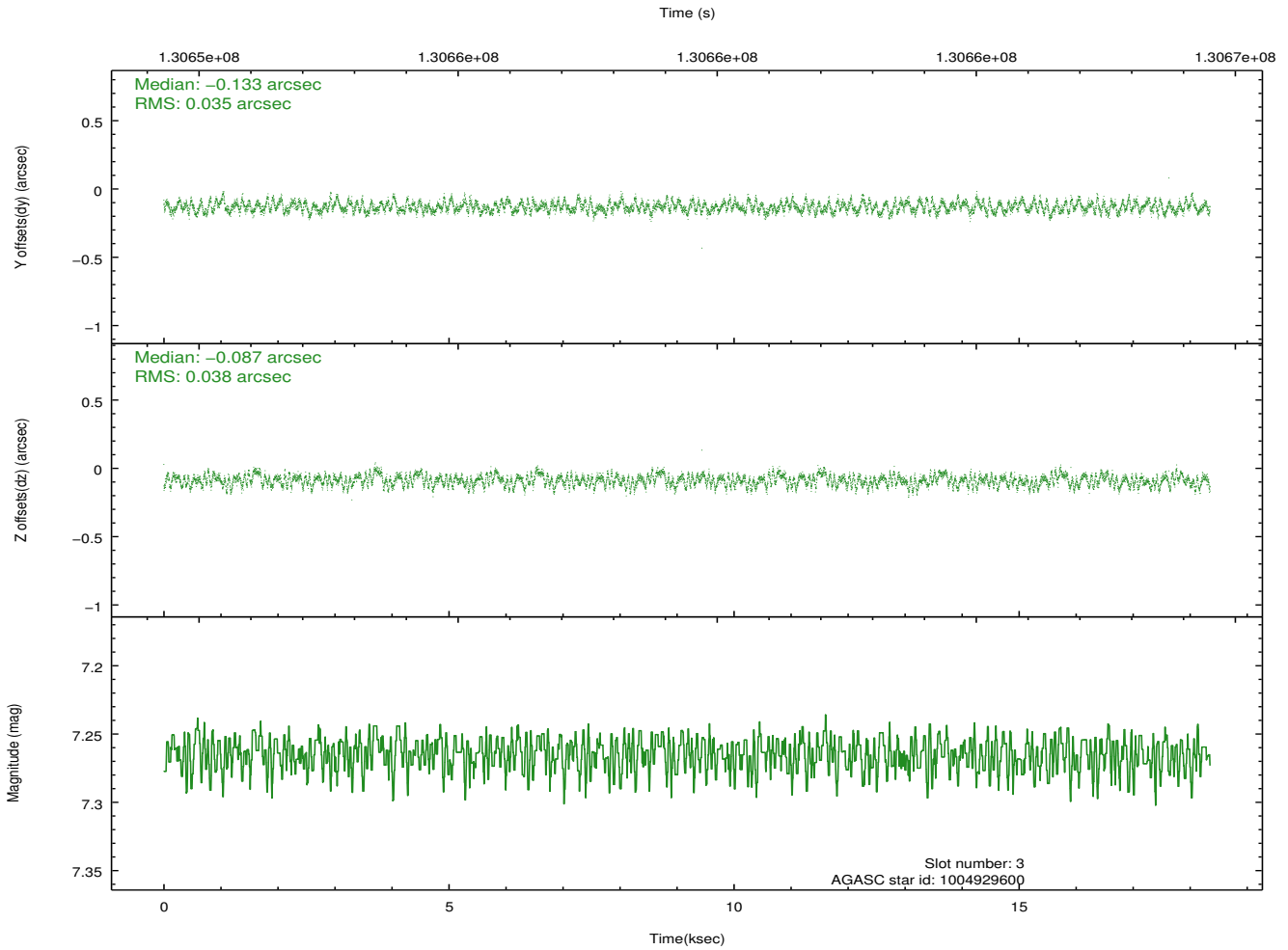
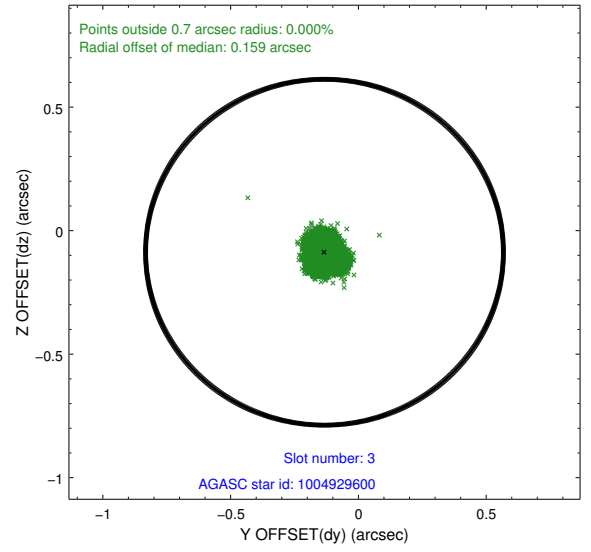
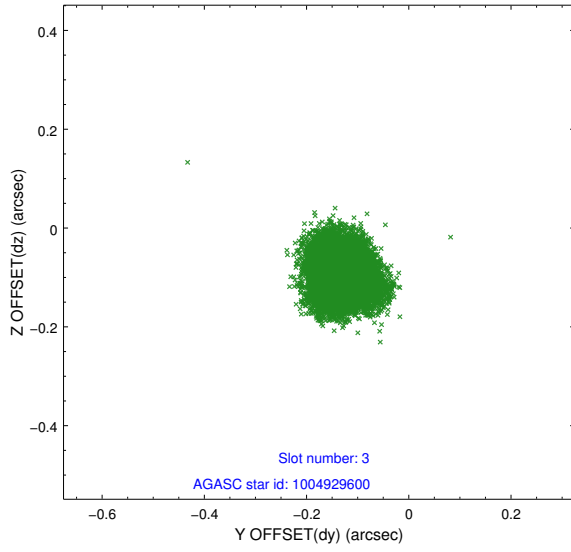


Slot Statistics

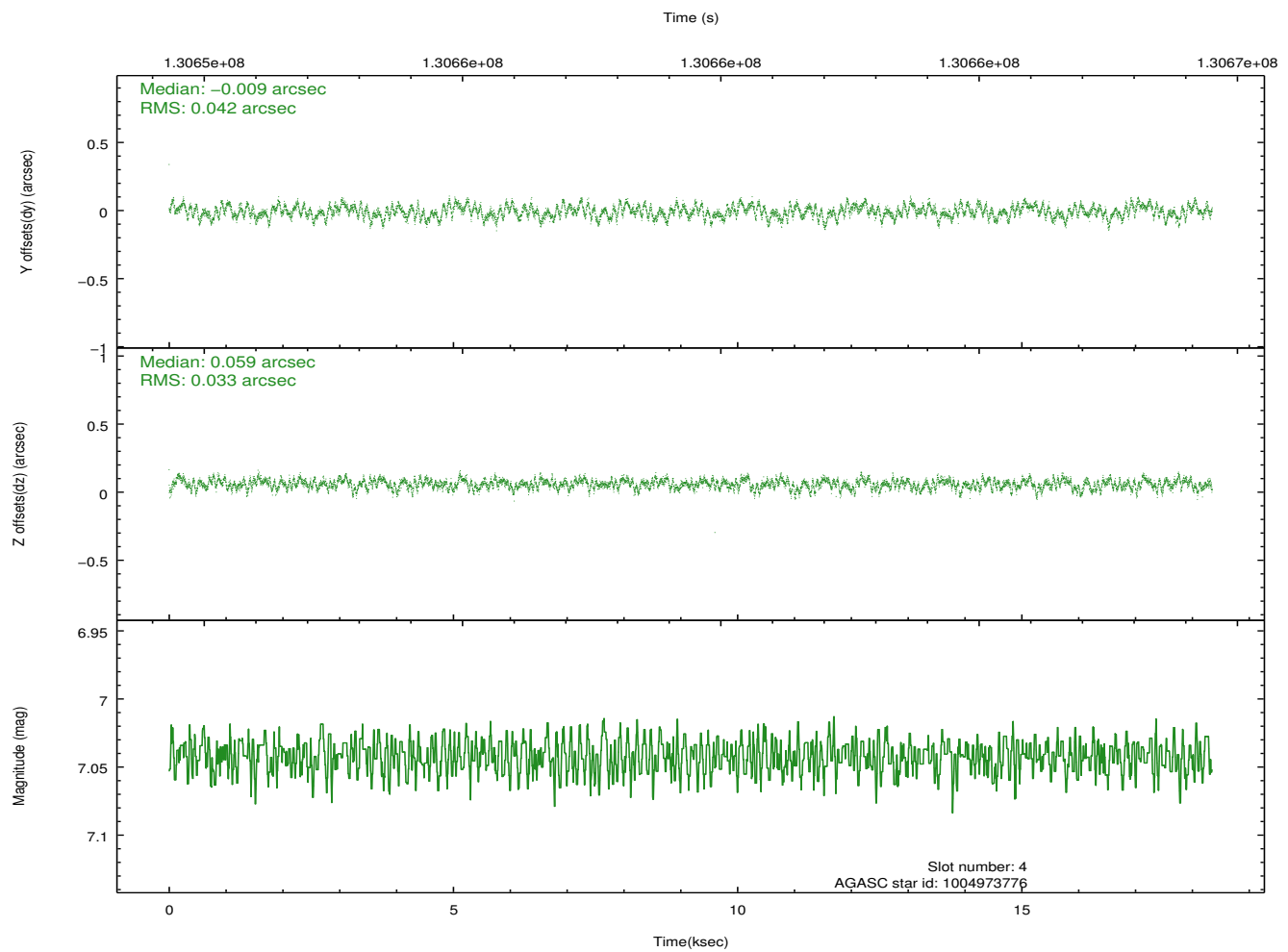
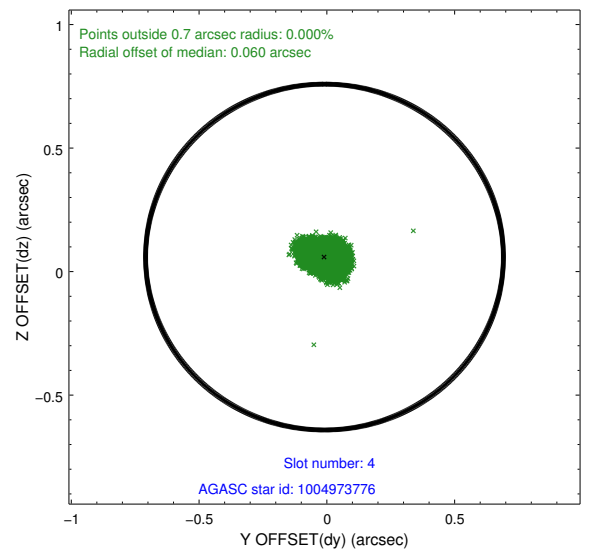
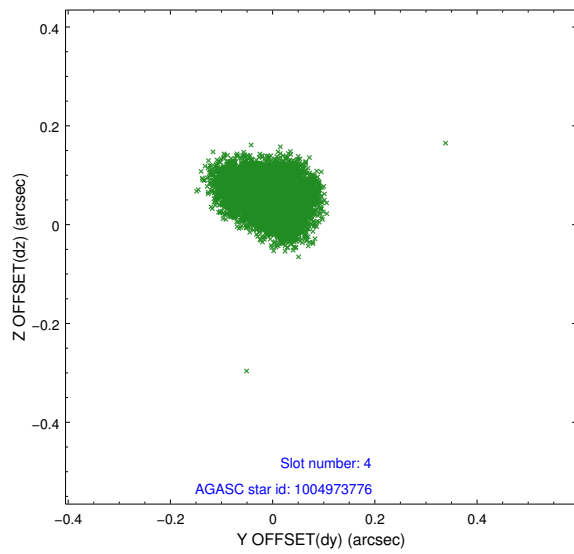
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 4477 | -0.010 | 0.013 | 0.007 | 0.012 | 0.000000 | 0.000000 | 937.52 | -829.79 |
| 1 | FID | ACIS-I-5 | 7.24 | 4476 | -0.041 | 0.042 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1810.46 | 1067.67 |
| 2 | FID | ACIS-I-6 | 7.26 | 4475 | -0.041 | 0.015 | 0.007 | 0.012 | 0.000000 | 0.000000 | 402.85 | 1712.35 |
| 3 | GUIDE | 1004929600 | 7.26 | 8952 | -0.133 | -0.087 | 0.057 | 0.087 | 122.465633 | -41.276185 | 1718.75 | 1773.21 |
| 4 | GUIDE | 1004973776 | 7.04 | 8953 | -0.009 | 0.059 | 0.058 | 0.093 | 121.821280 | -41.735378 | 1343.61 | -594.95 |
| 5 | GUIDE | 1004956944 | 8.31 | 8951 | 0.025 | 0.101 | 0.069 | 0.106 | 120.897818 | -41.757031 | -564.87 | -2181.43 |
| 6 | GUIDE | 1004407752 | 8.34 | 8891 | 0.025 | -0.026 | 0.071 | 0.111 | 122.148112 | -41.238636 | 953.32 | 1359.78 |
| 7 | GUIDE | 1004424976 | 9.64 | 8946 | 0.093 | -0.046 | 0.139 | 0.229 | 121.434544 | -40.582502 | -2026.36 | 2044.62 |

2.4 Star Slots

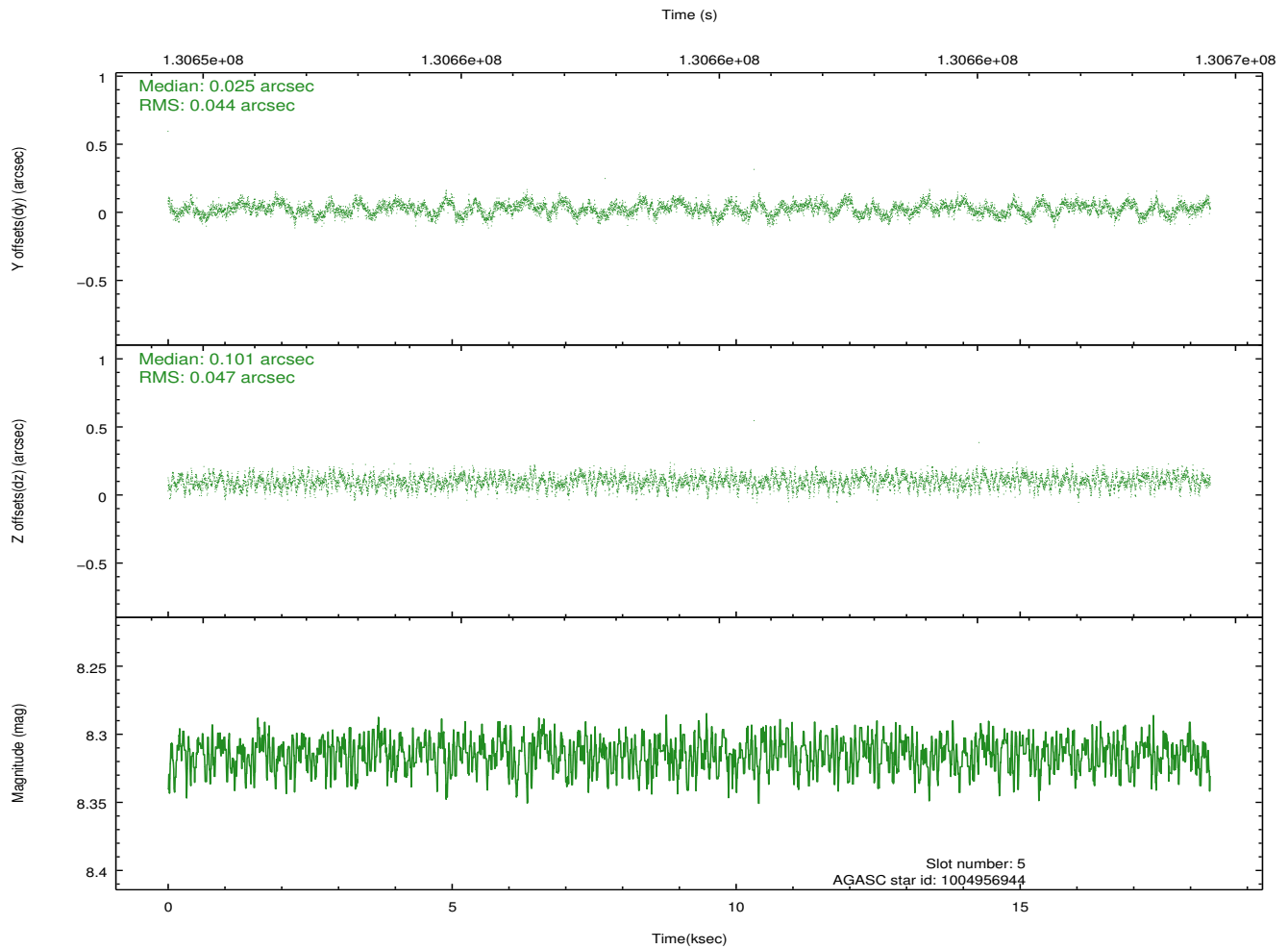
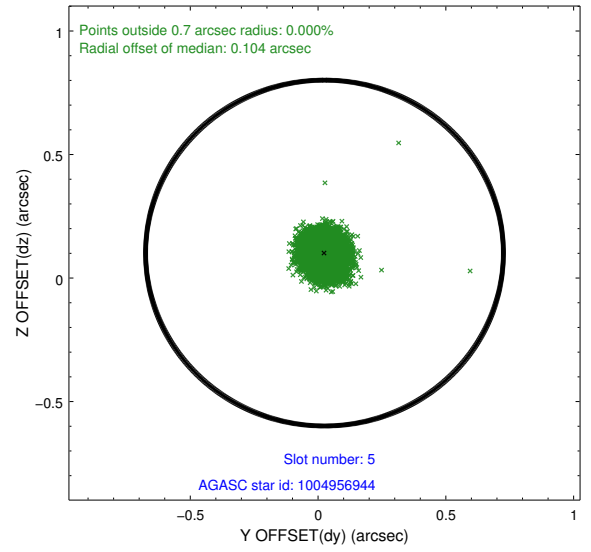
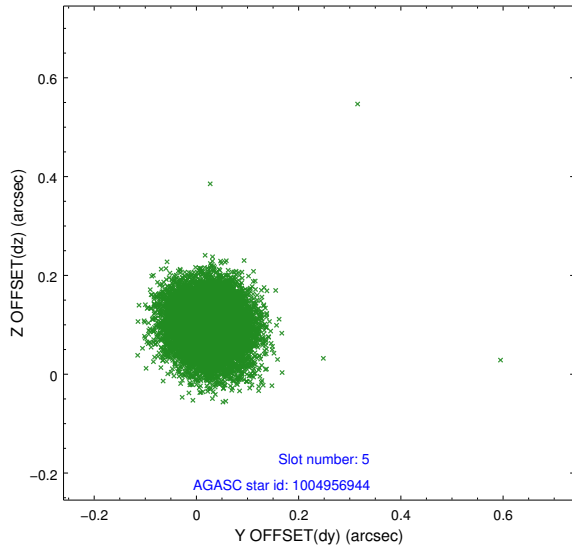
2.4.1 Slot 3



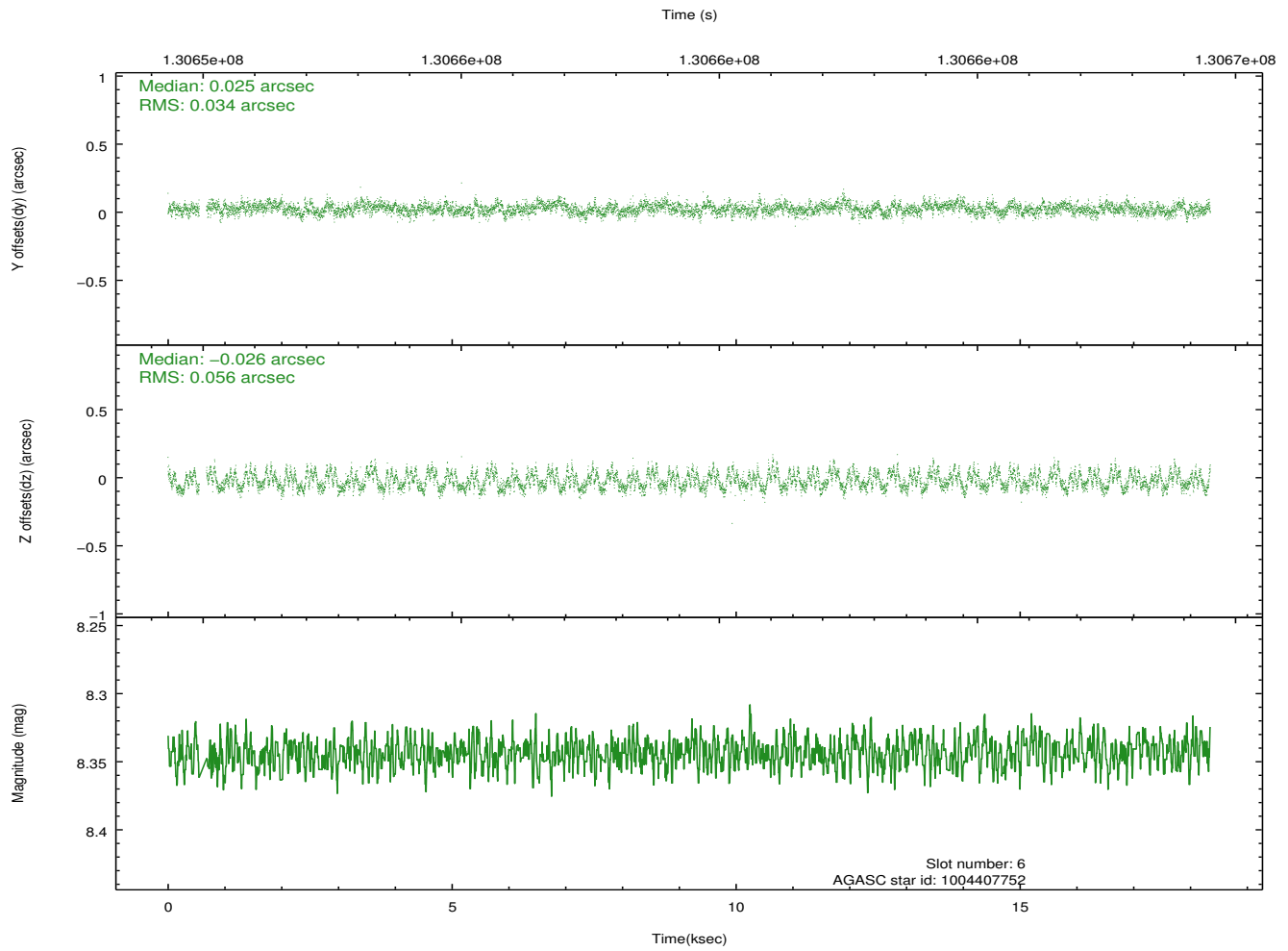
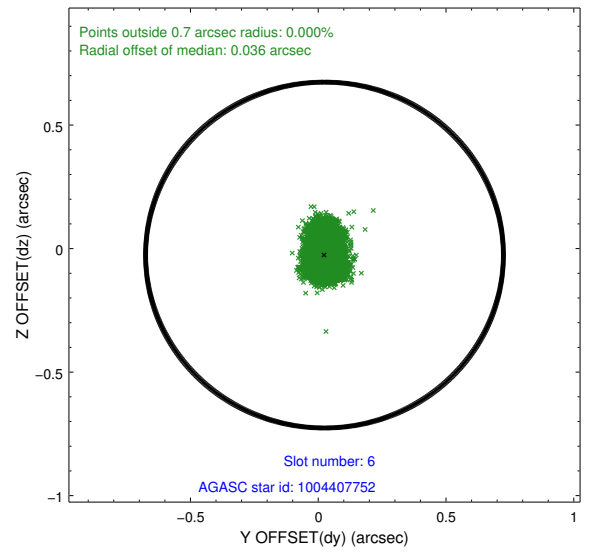
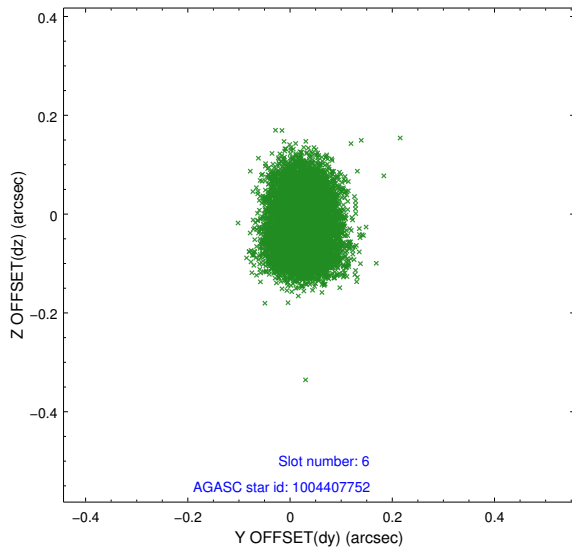
2.4.2 Slot 4



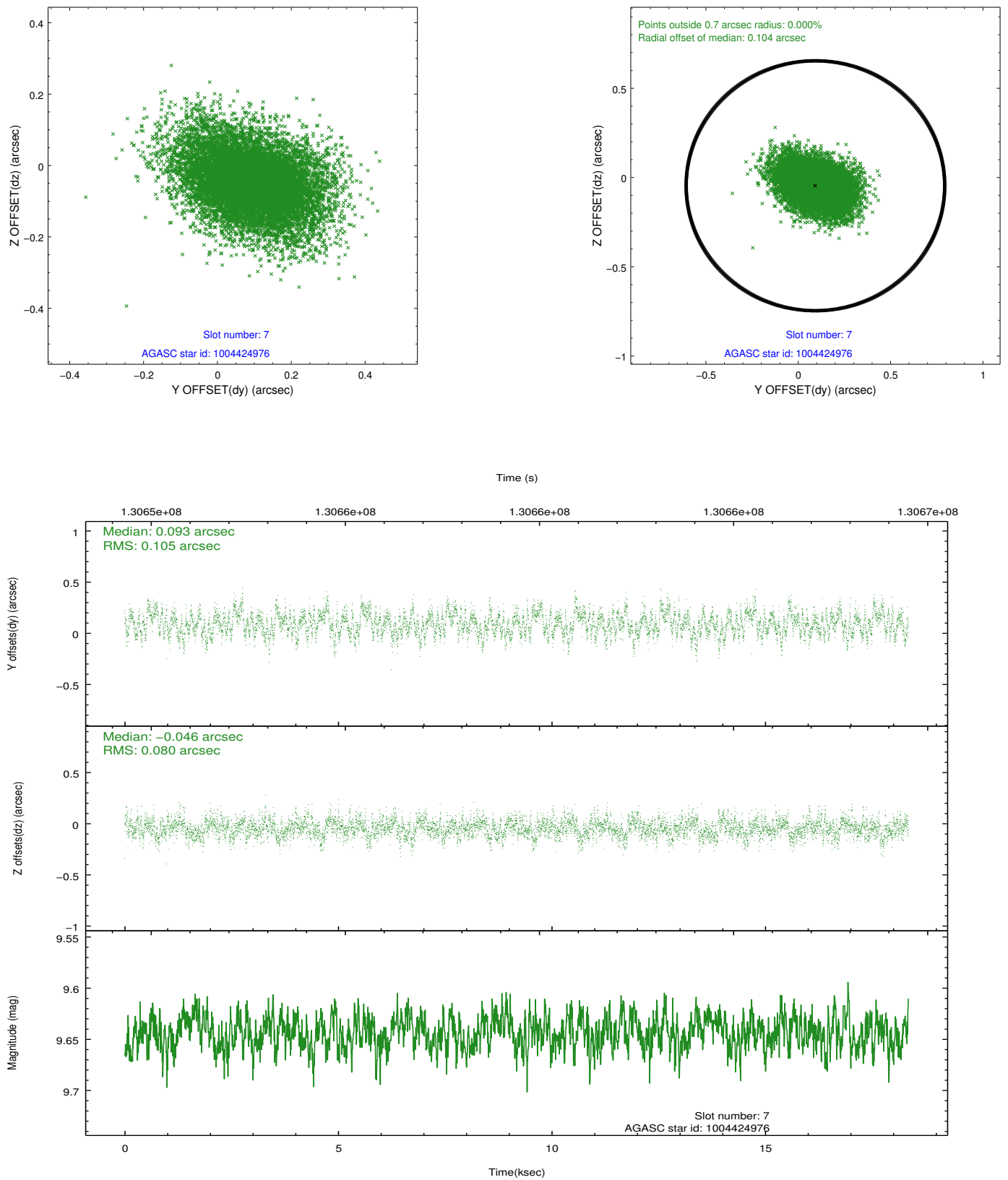
2.4.3 Slot 5



2.4.4 Slot 6

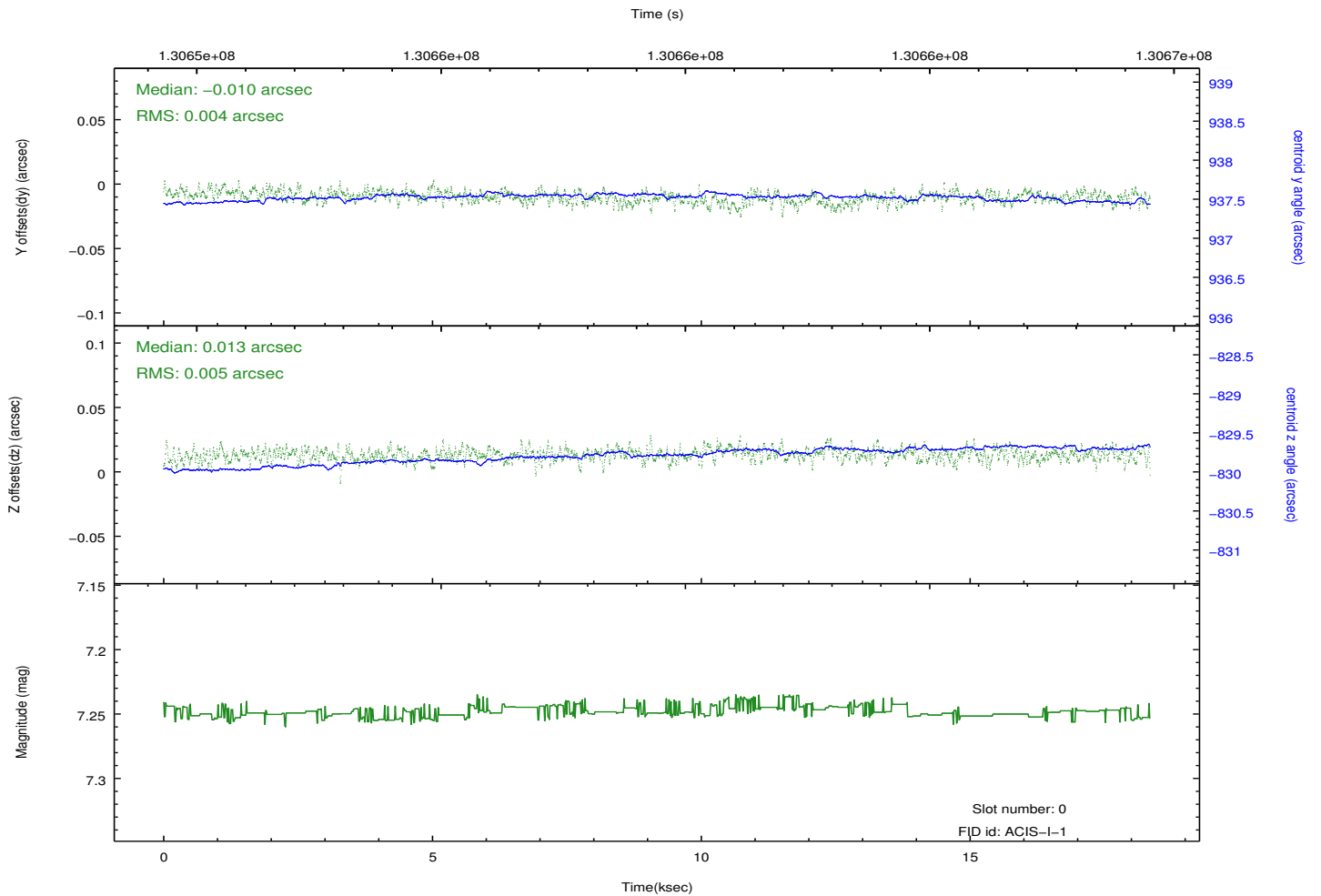
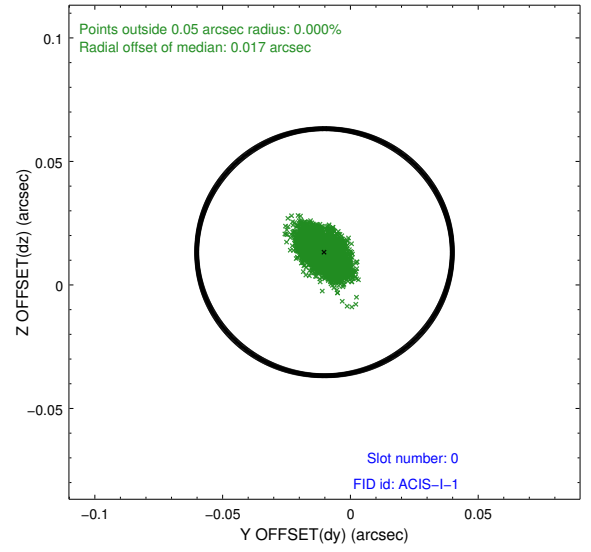
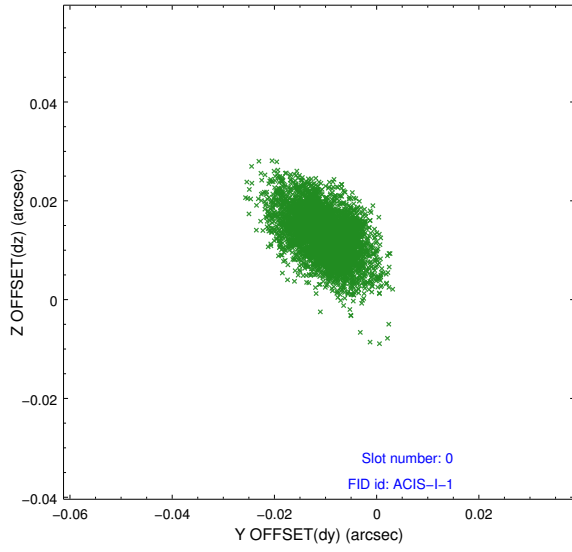


2.4.5 Slot 7

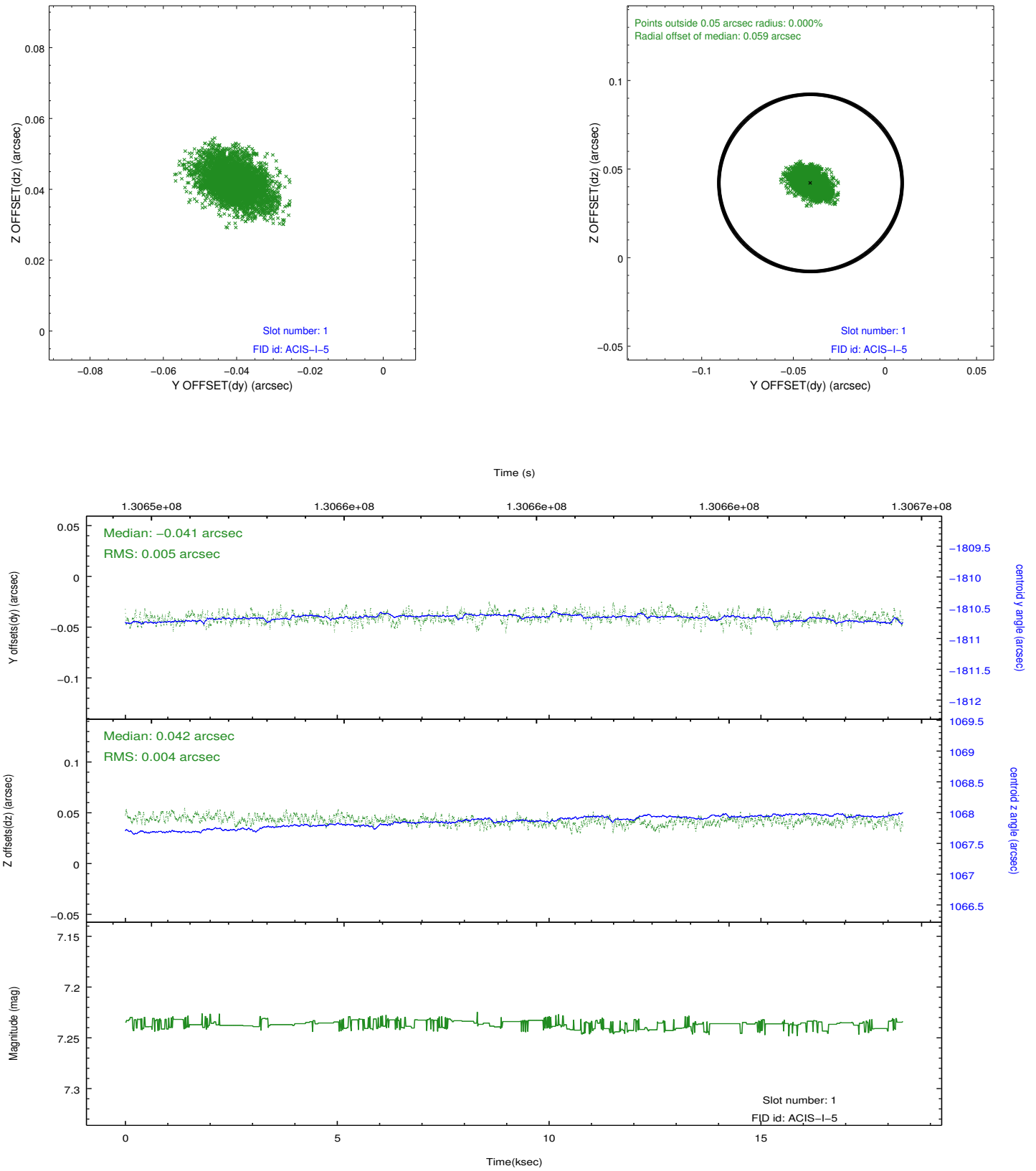


2.5 FID Slots

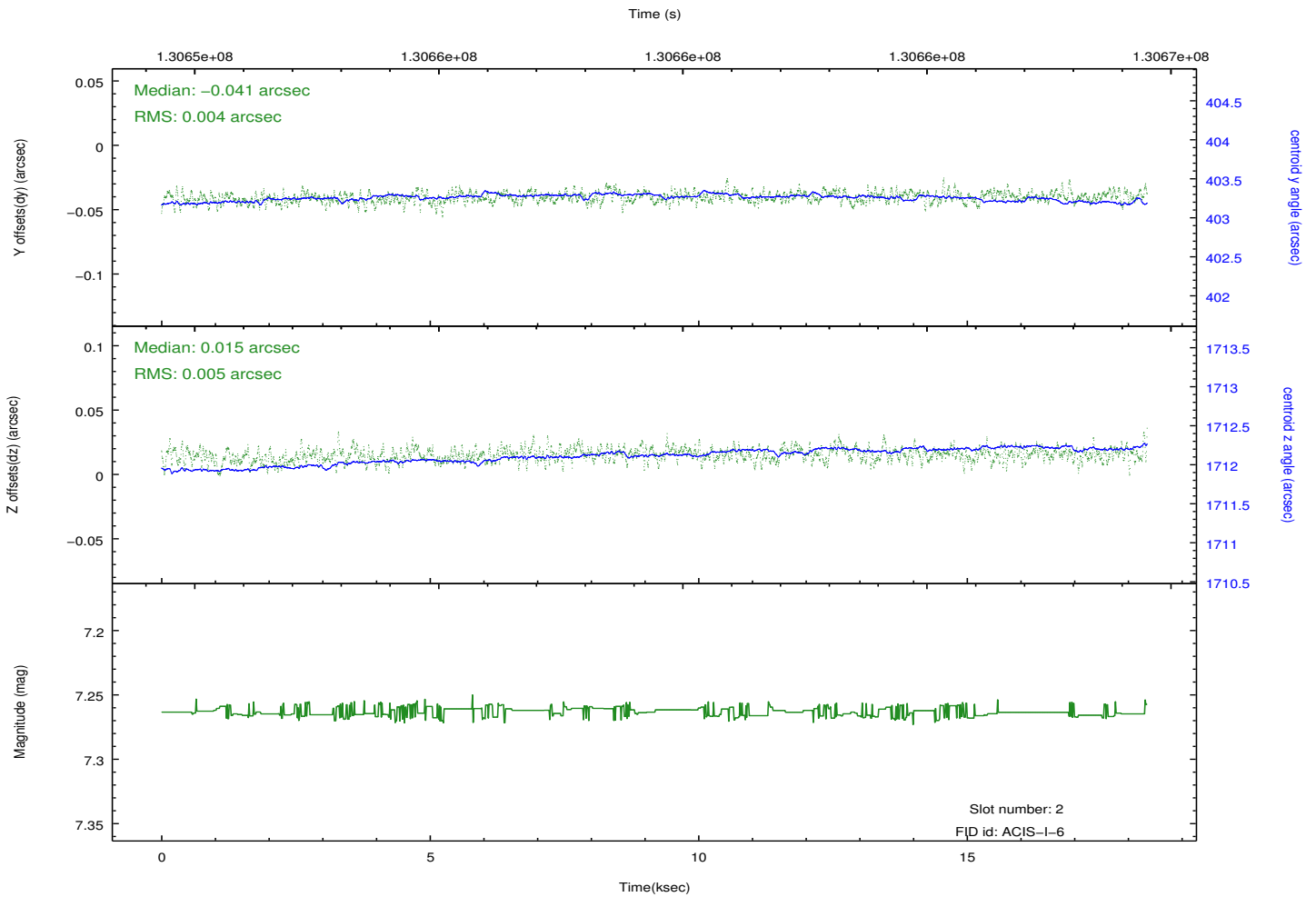
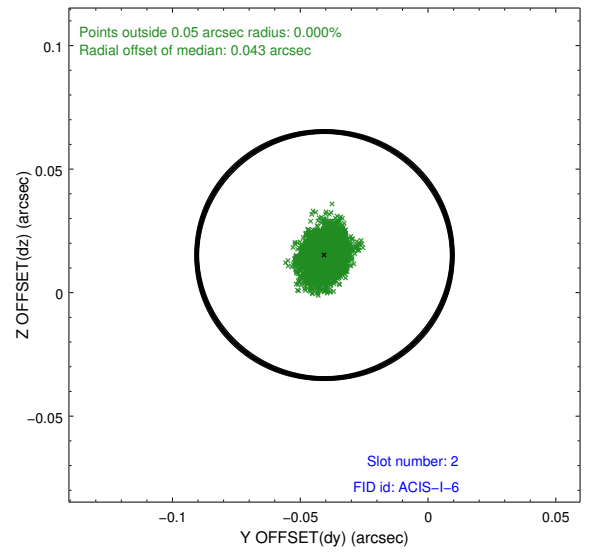
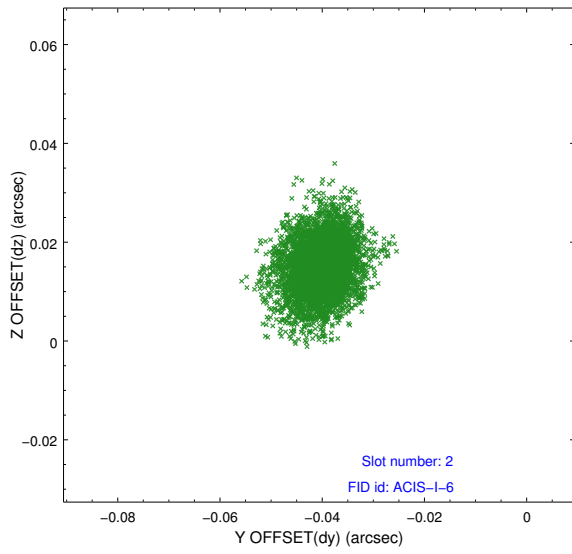
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.10.04 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 17.913 |

A.2 Comments