

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 5143 - L2 Version 3
Chandra X-Ray Center

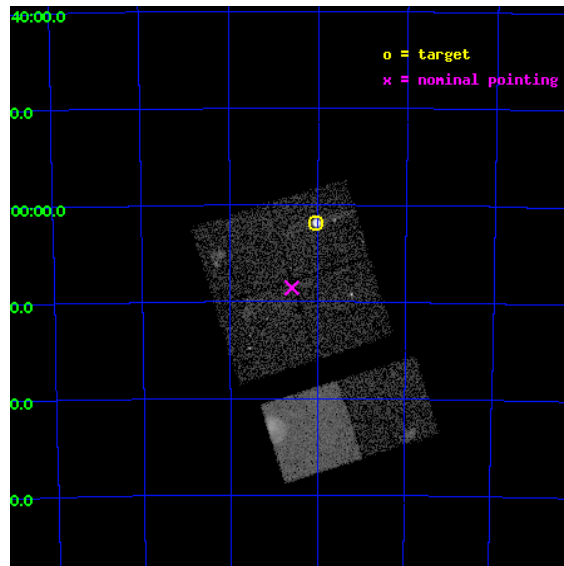
L2 Processing Date : Nov 30 2012

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1 Front

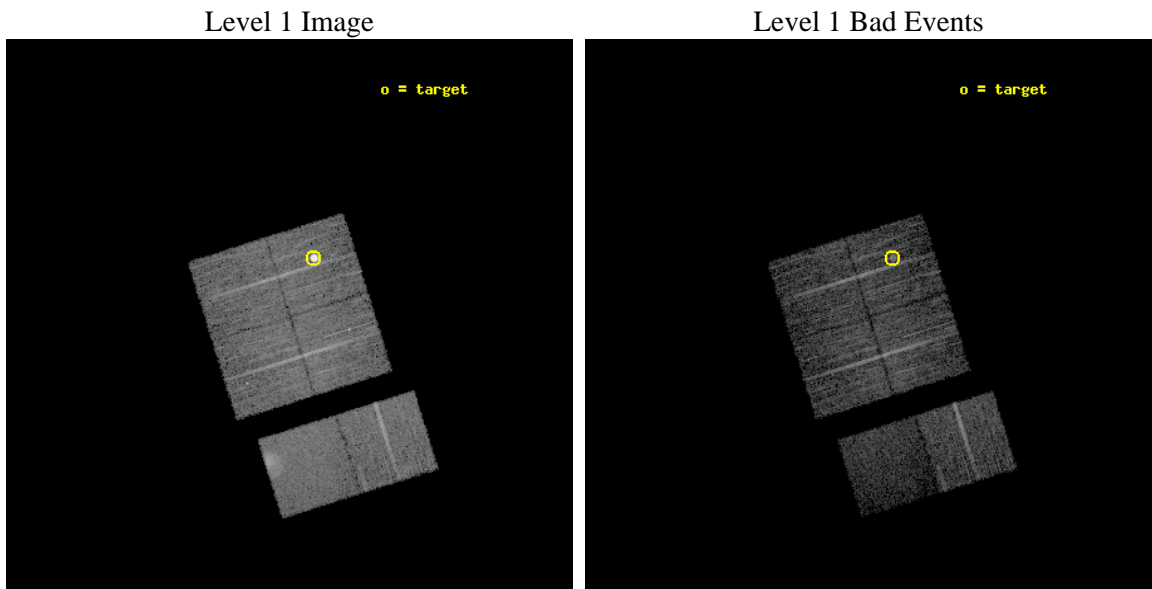
| | | |
|----------|--|---|
| seq_num | 590341 | Sequence number |
| obs_id | 5143 | Observation id |
| title | AO5B ACIS-I Calibration Observations of E0102-72 | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | E0102-72[I0,-120,4.7,-5.68,0] | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 16.01 | Observer's specified target RA [deg] |
| dec_targ | -72.032028 | Observer's specified target Dec [deg] |
| ra_nom | 16.148182047068 | Nominal RA [deg] |
| dec_nom | -72.142964380029 | Nominal Dec [deg] |
| roll_nom | 162.672514672 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 7443.1999722719 | Sum of GTIs [s] |
| livetime | 7348.9496924661 | Livetime [s] |
| ontime0 | 7443.1999722719 | Sum of GTIs [s] |
| ontime1 | 7443.1999722719 | Sum of GTIs [s] |
| ontime2 | 7443.1999722719 | Sum of GTIs [s] |
| ontime3 | 7443.1999722719 | Sum of GTIs [s] |
| ontime6 | 7443.1999722719 | Sum of GTIs [s] |
| ontime7 | 7443.1999722719 | Sum of GTIs [s] |
| l2events | 61826 | Number of level 2 events |



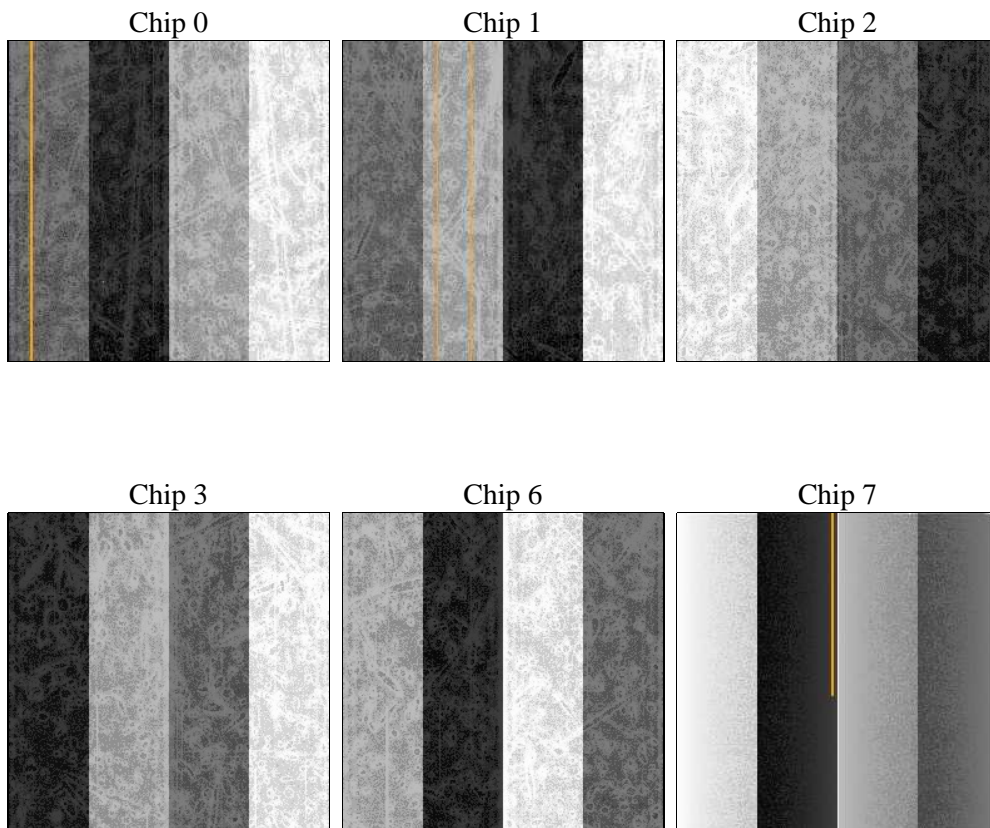
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 7481.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 7443.1999722719 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime0 | 7443.1999722719 | Sum of GTIs [s] |
| date | 2012-11-30T15:44:38 | Date and time of file creation | ontime1 | 7443.1999722719 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 7443.1999722719 | Sum of GTIs [s] |
| | | | ontime3 | 7443.1999722719 | Sum of GTIs [s] |
| | | | ontime6 | 7443.1999722719 | Sum of GTIs [s] |
| | | | ontime7 | 7443.1999722719 | Sum of GTIs [s] |
| | | | l1events | 261772 | Number of level 1 events |

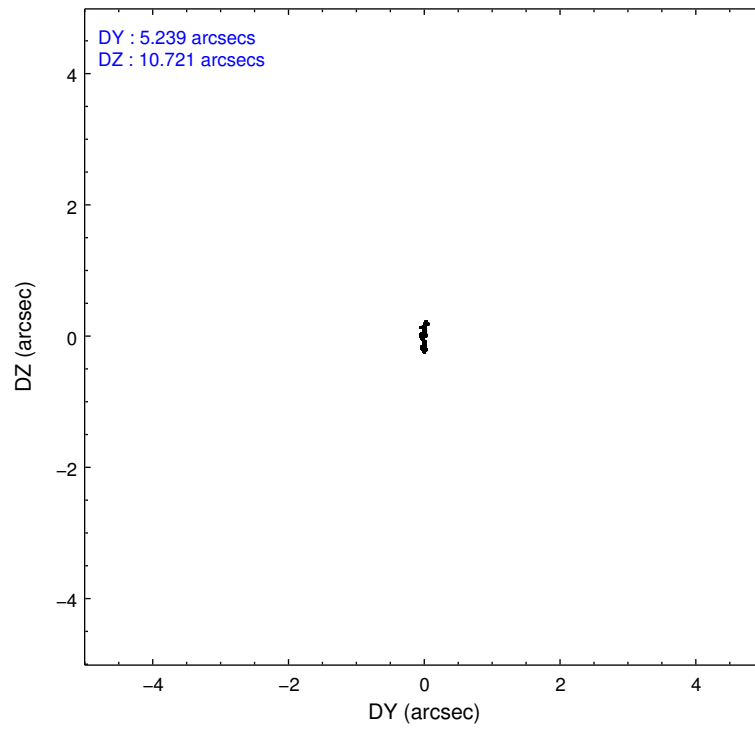
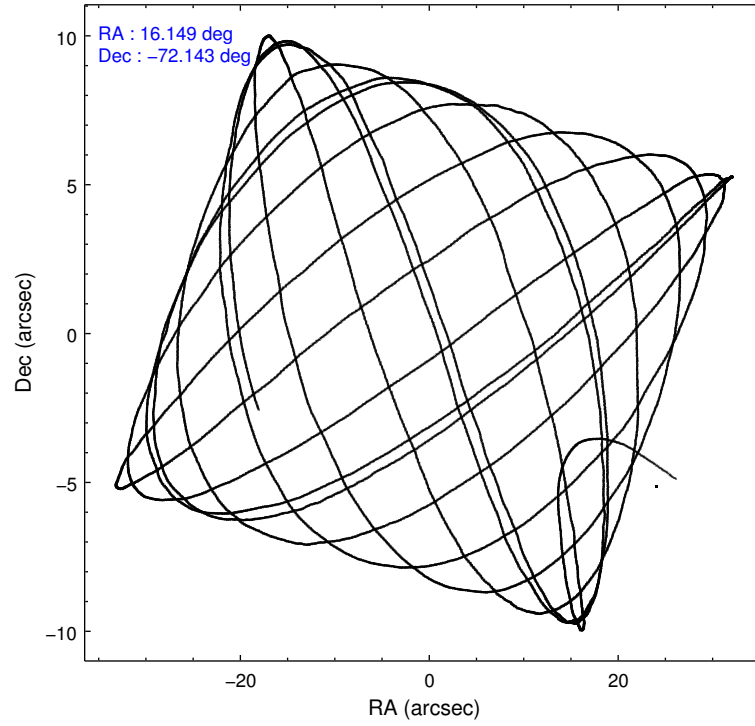
2.1.4 Events

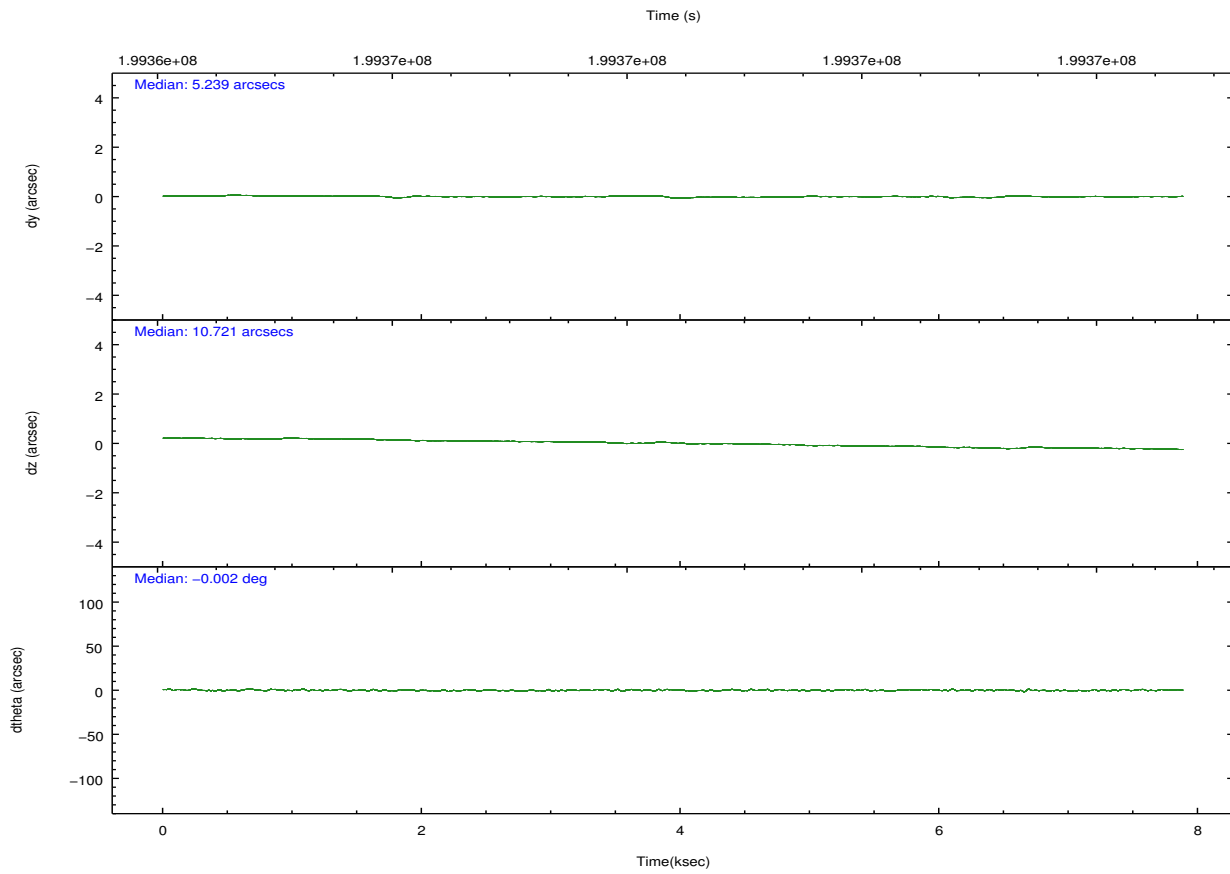
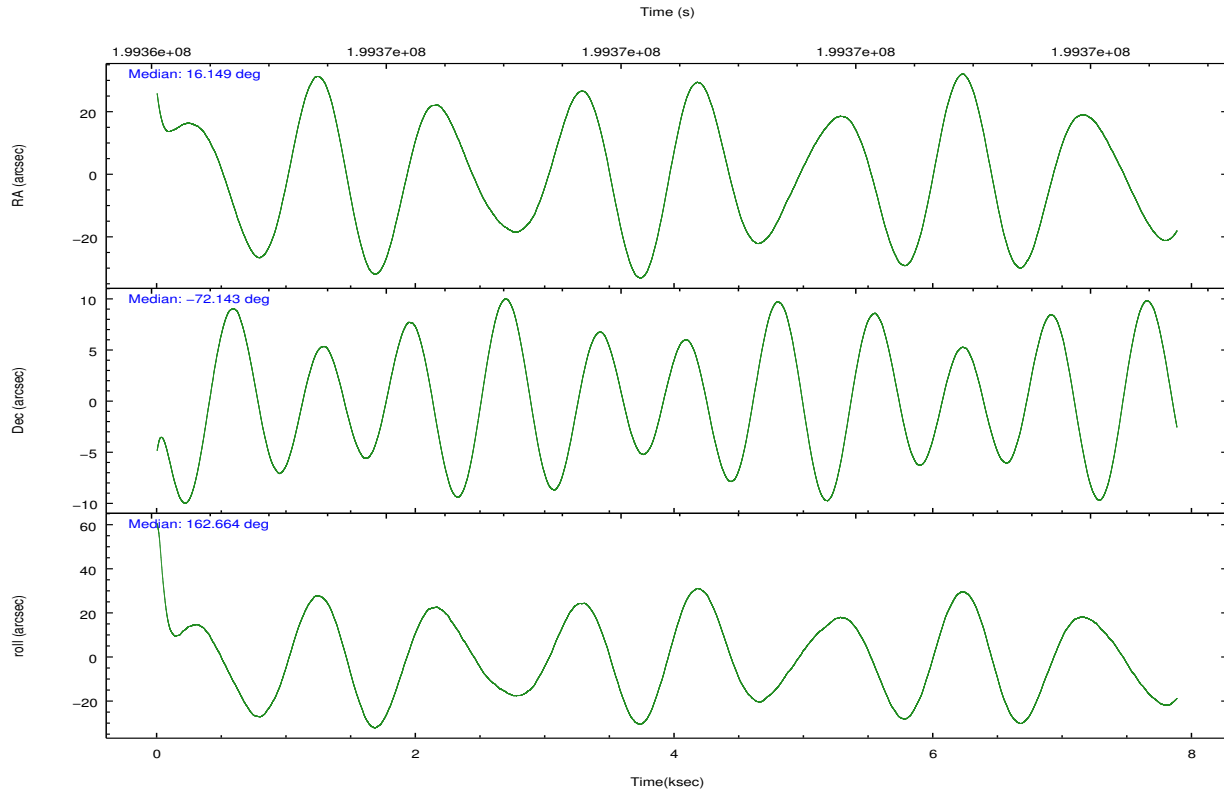
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 59984 | 36285 | 43106 | 39622 | 40811 | 41964 | grade 0 events | 20518 | 1827 | 2113 | 1934 | 1647 | 3416 |
| rejected events | 34591 | 31801 | 38367 | 35253 | 36477 | 19337 | | 34% | 5% | 4% | 4% | 4% | 8% |
| rejected % | 57% | 87% | 89% | 88% | 89% | 46% | grade 1 events | 160 | 18 | 27 | 19 | 16 | 40 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2402 | 891 | 1003 | 844 | 843 | 4779 |
| | | | | | | | | 4% | 2% | 2% | 2% | 2% | 11% |
| | | | | | | | grade 3 events | 782 | 487 | 474 | 476 | 485 | 2236 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 4 events | 818 | 467 | 460 | 440 | 489 | 2313 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 5 events | 1300 | 1273 | 1188 | 1387 | 1400 | 4187 |
| | | | | | | | | 2% | 3% | 2% | 3% | 3% | 9% |
| | | | | | | | grade 6 events | 889 | 813 | 690 | 676 | 870 | 9883 |
| | | | | | | | | 1% | 2% | 1% | 1% | 2% | 23% |
| | | | | | | | grade 7 events | 33115 | 30509 | 37151 | 33846 | 35061 | 15110 |
| | | | | | | | | 55% | 84% | 86% | 85% | 85% | 36% |

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 | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 16.235208 | 16.14818204706824 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -72.136824 | -72.14296438002853 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 162.546590 | 162.6725146720028 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 197164864.184000 | 197164864.184000 | | | |
| [s] Window stop time (MET) | 199670464.184000 | 199670464.184000 | | | |
| [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) | 199364855.184000 | 199363777.56367 | | | |
| Observation start date | 2004-04-26T11:06:31 | 2004-04-26T10:49:37 | | | |
| [s] Observation end time (MET) | 199372336.184000 | 199372469.56406 | | | |
| Observation end date | 2004-04-26T13:11:12 | 2004-04-26T13:14:29 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



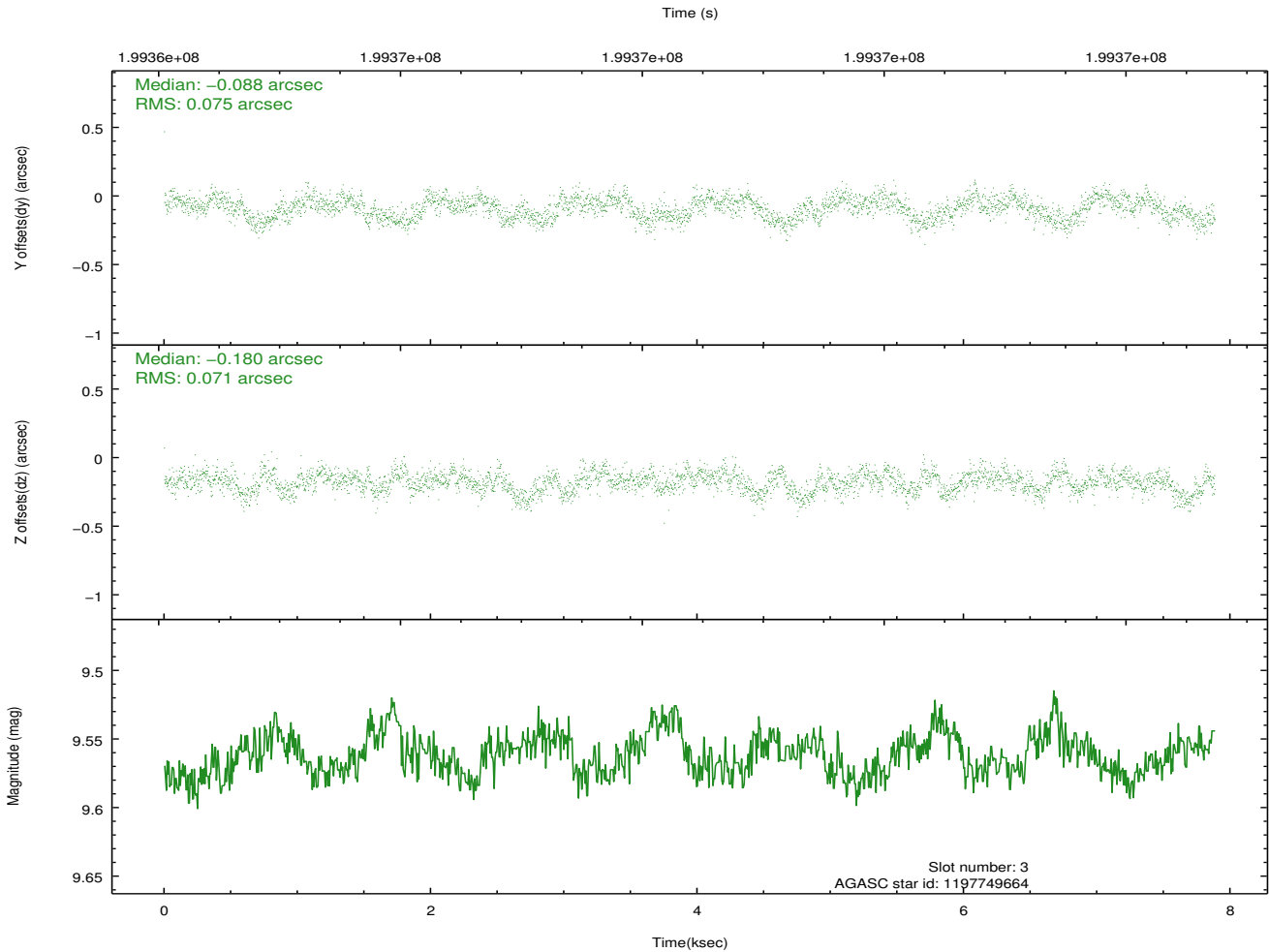
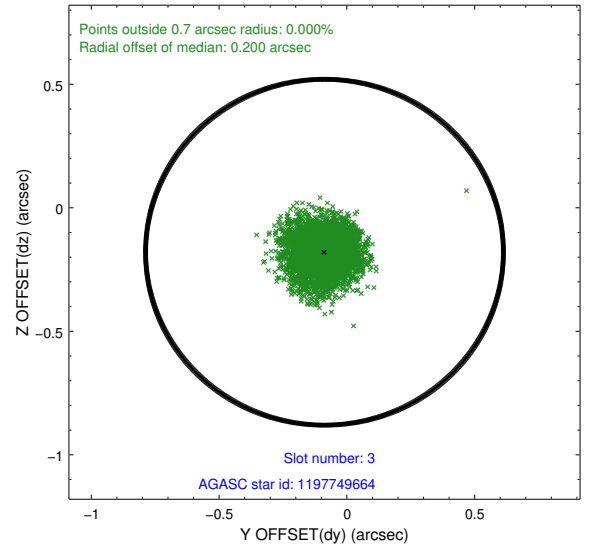
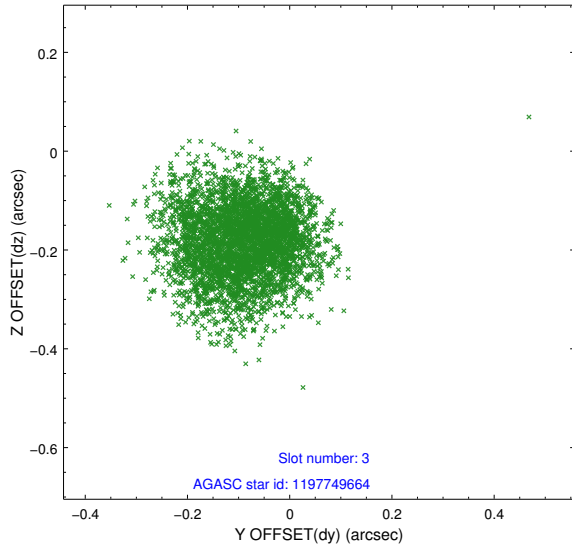


Slot Statistics

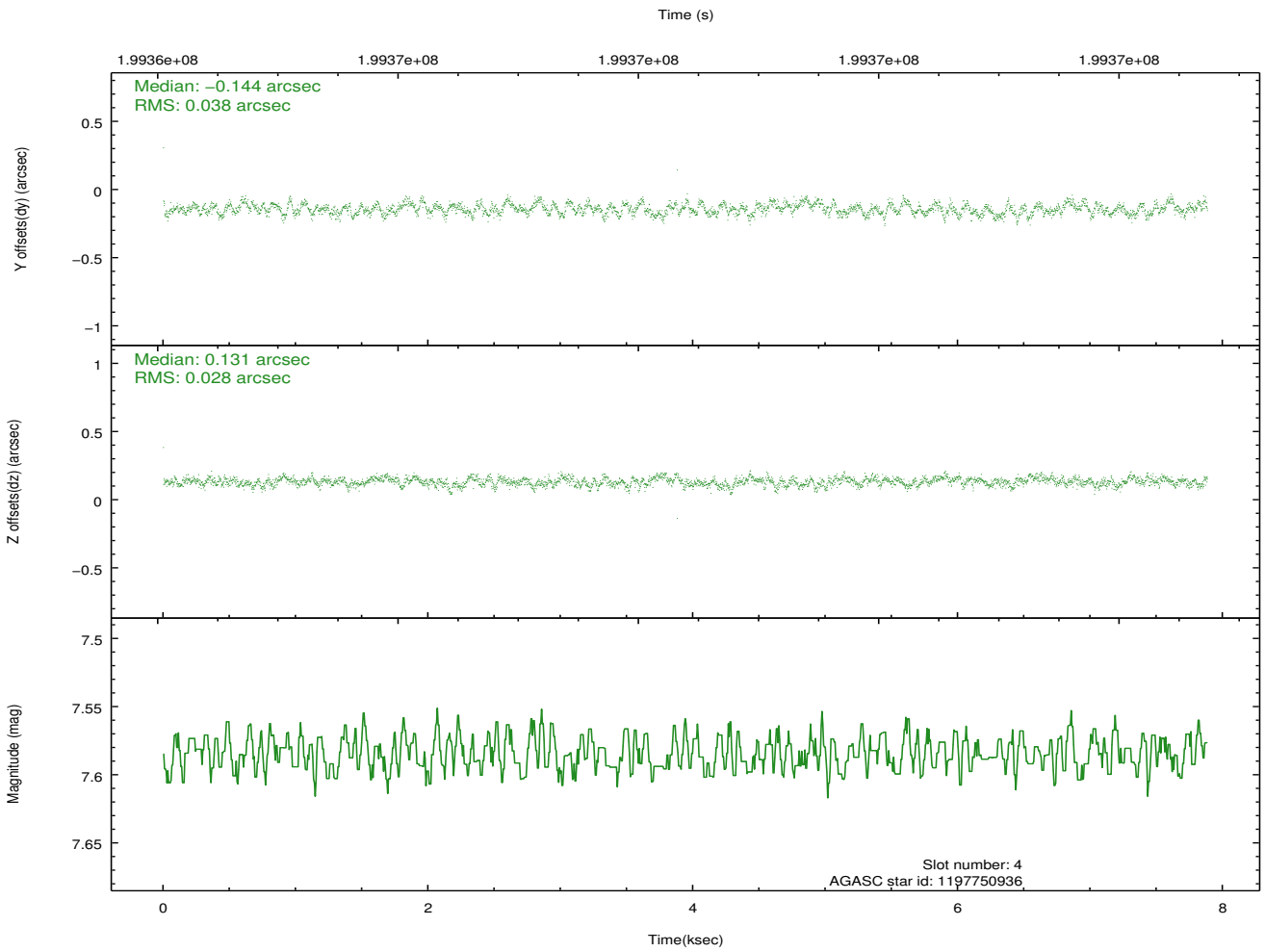
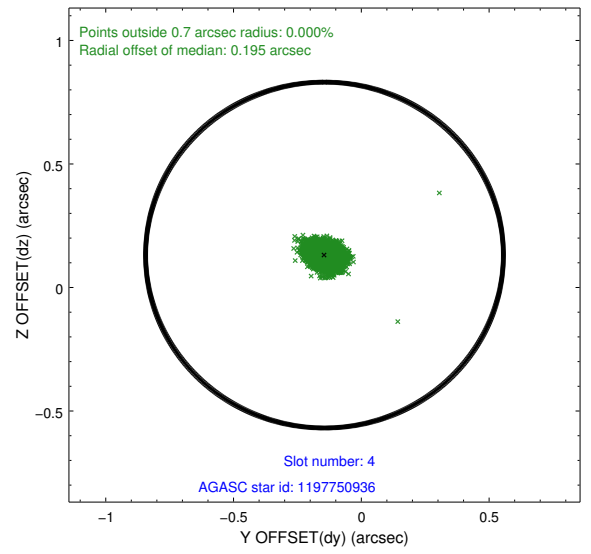
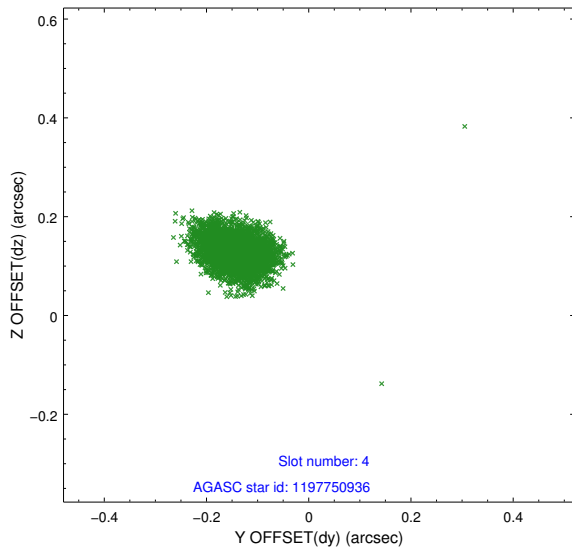
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 1922 | 0.007 | -0.033 | 0.015 | 0.024 | 0.000000 | 0.000000 | 934.50 | -834.24 |
| 1 | FID | ACIS-I-4 | 7.18 | 1922 | 0.049 | 0.043 | 0.011 | 0.018 | 0.000000 | 0.000000 | 2154.99 | 1065.28 |
| 2 | FID | ACIS-I-5 | 7.23 | 1923 | -0.155 | 0.060 | 0.009 | 0.014 | 0.000000 | 0.000000 | -1812.74 | 1063.97 |
| 3 | GUIDE | 1197749664 | 9.56 | 3847 | -0.088 | -0.180 | 0.111 | 0.173 | 15.809015 | -72.366369 | 195.17 | 929.29 |
| 4 | GUIDE | 1197750936 | 7.59 | 3846 | -0.144 | 0.131 | 0.050 | 0.080 | 15.387940 | -71.549550 | 1553.47 | -1719.91 |
| 5 | GUIDE | 1197884536 | 8.50 | 3845 | 0.095 | -0.072 | 0.077 | 0.123 | 17.160729 | -71.835289 | -666.54 | -1339.90 |
| 6 | GUIDE | 1197885104 | 9.37 | 3846 | 0.154 | 0.125 | 0.079 | 0.129 | 17.845067 | -72.189368 | -1754.18 | -328.54 |
| 7 | GUIDE | 1197885328 | 7.24 | 3846 | -0.017 | 0.007 | 0.054 | 0.084 | 16.283090 | -71.733943 | 383.27 | -1399.93 |

2.4 Star Slots

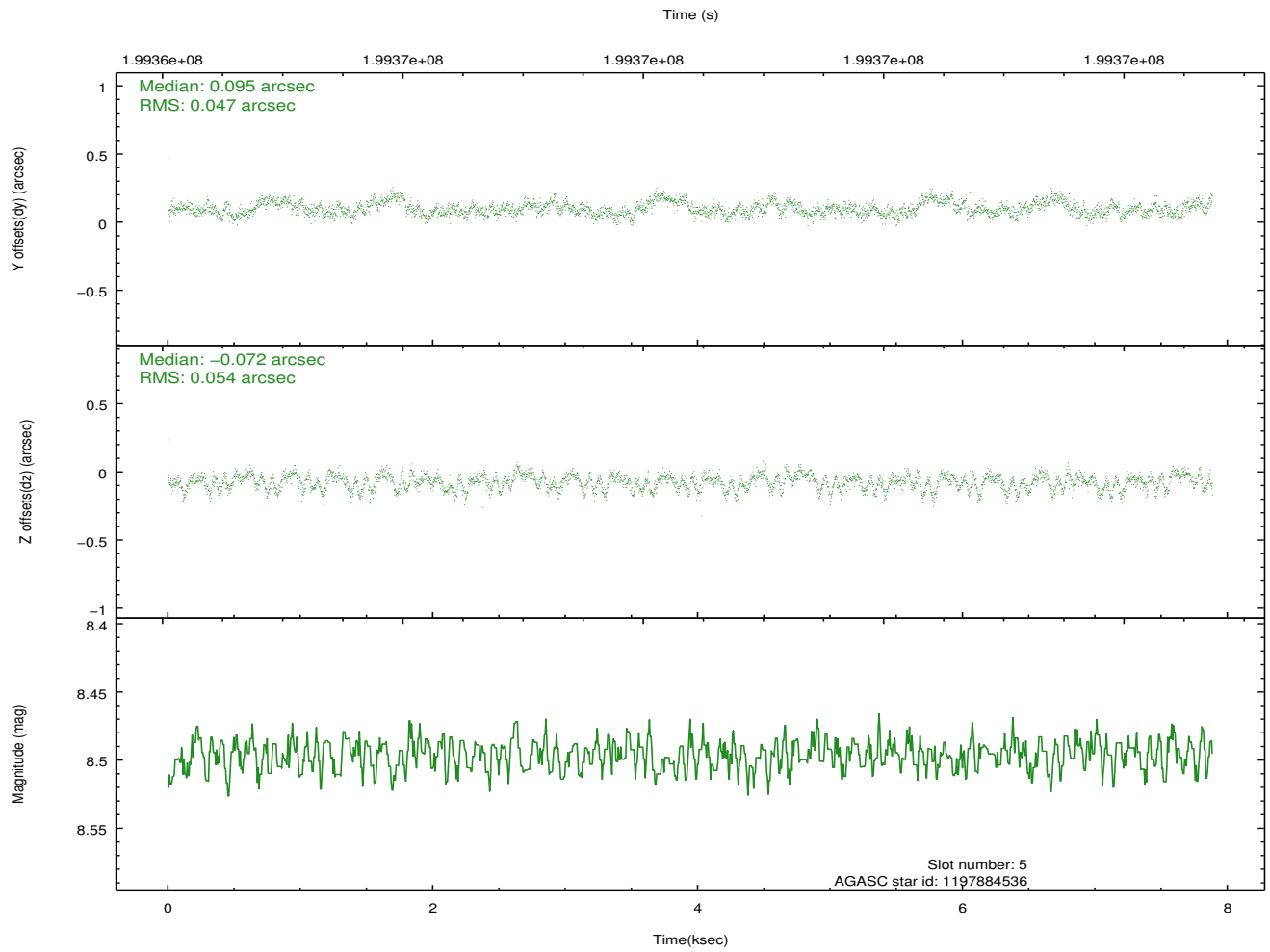
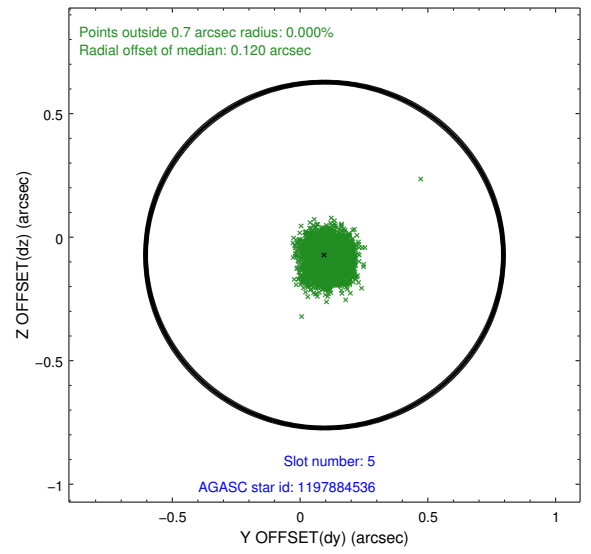
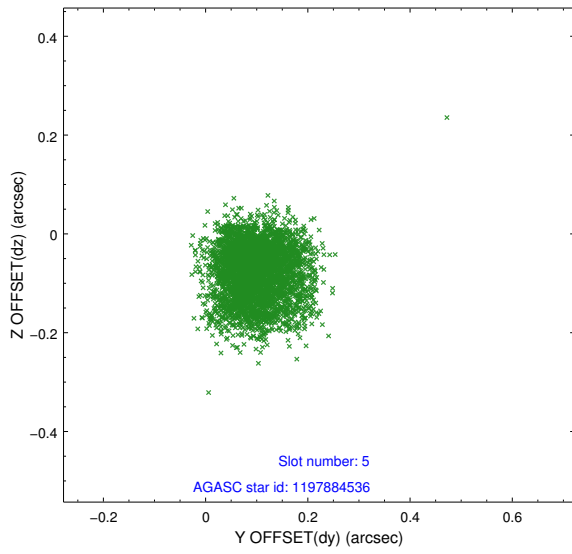
2.4.1 Slot 3



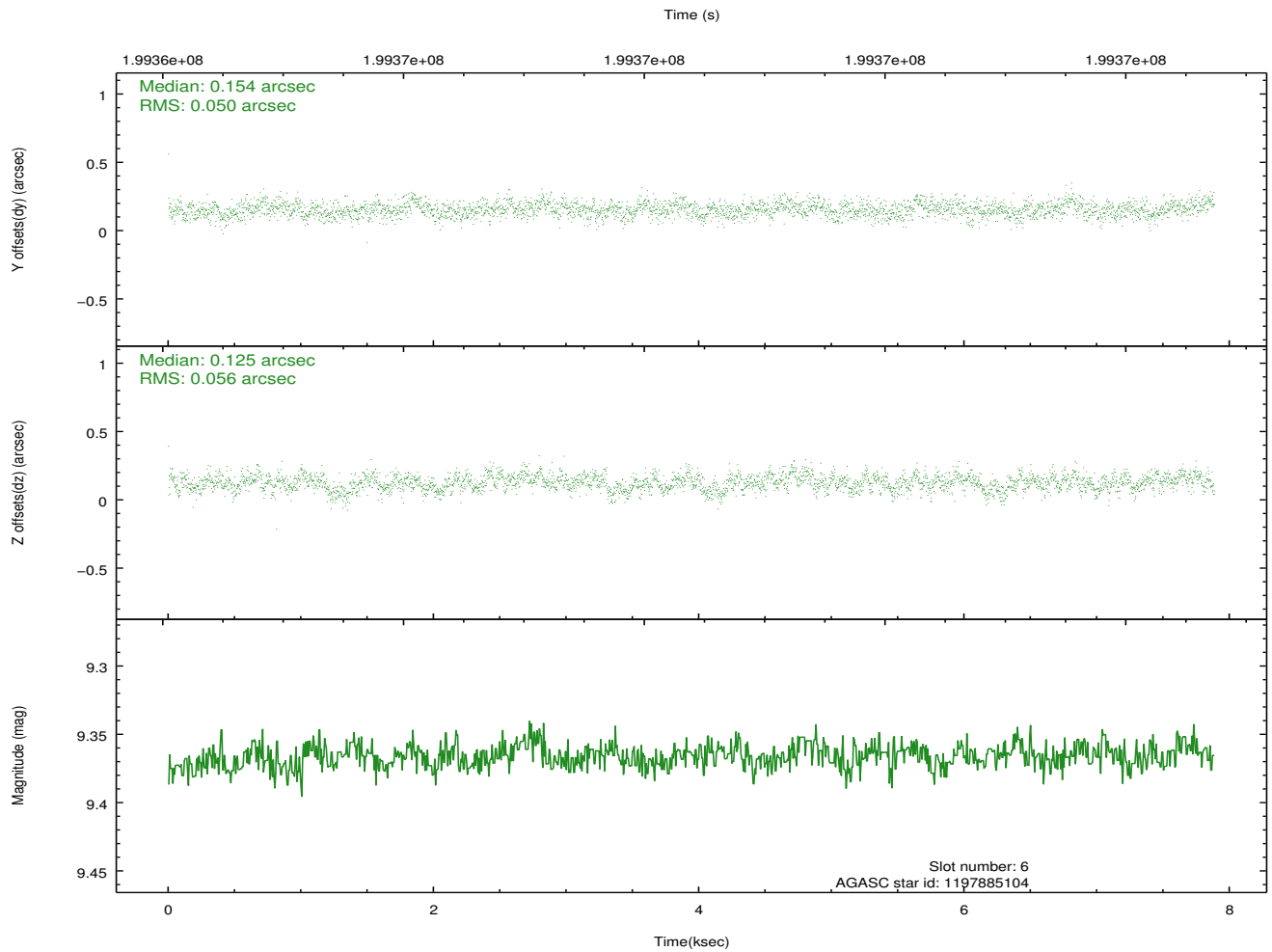
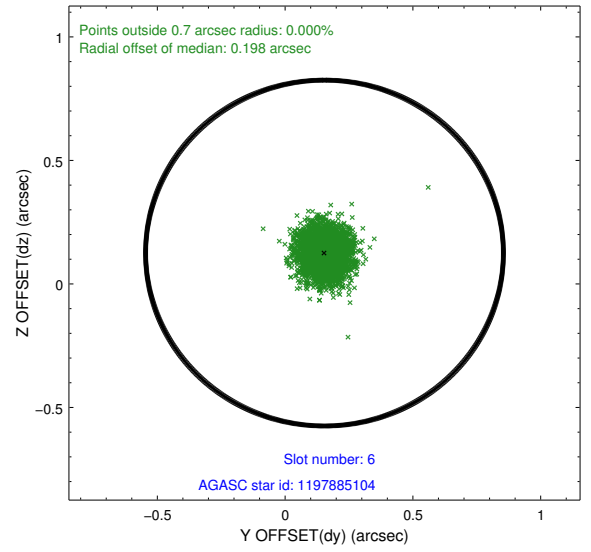
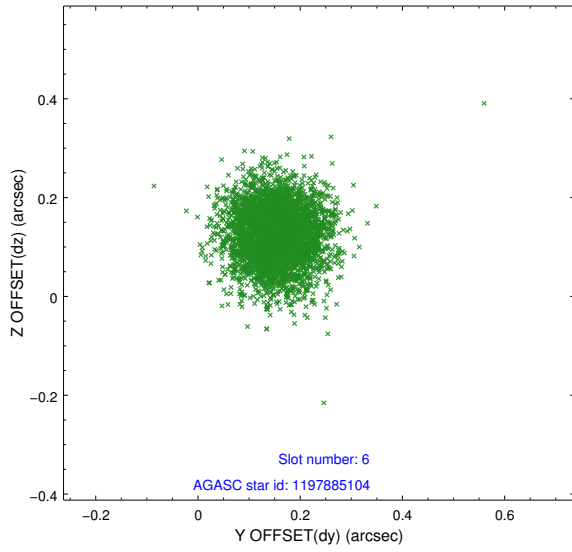
2.4.2 Slot 4



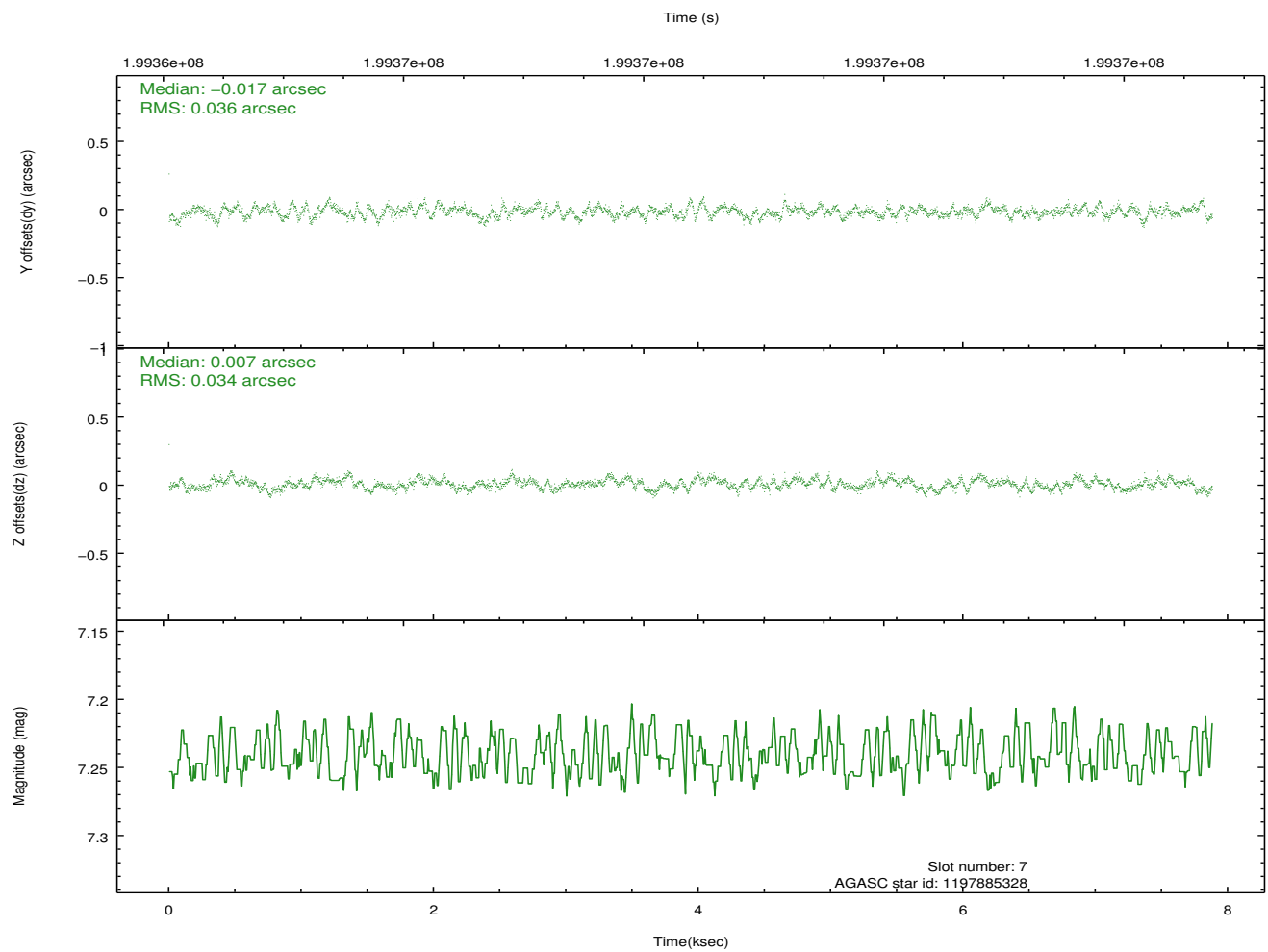
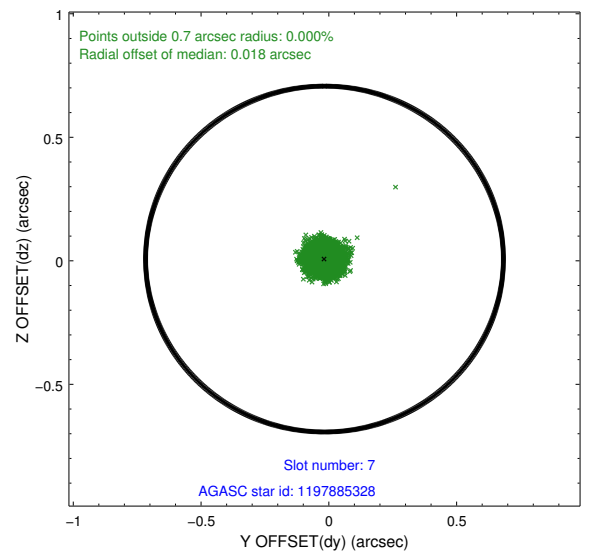
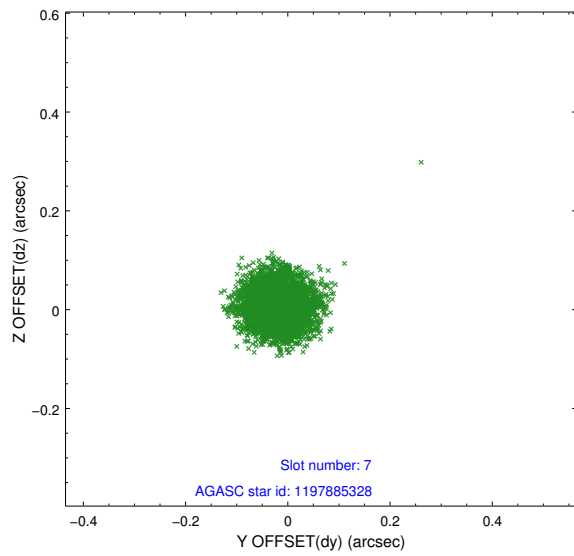
2.4.3 Slot 5



2.4.4 Slot 6

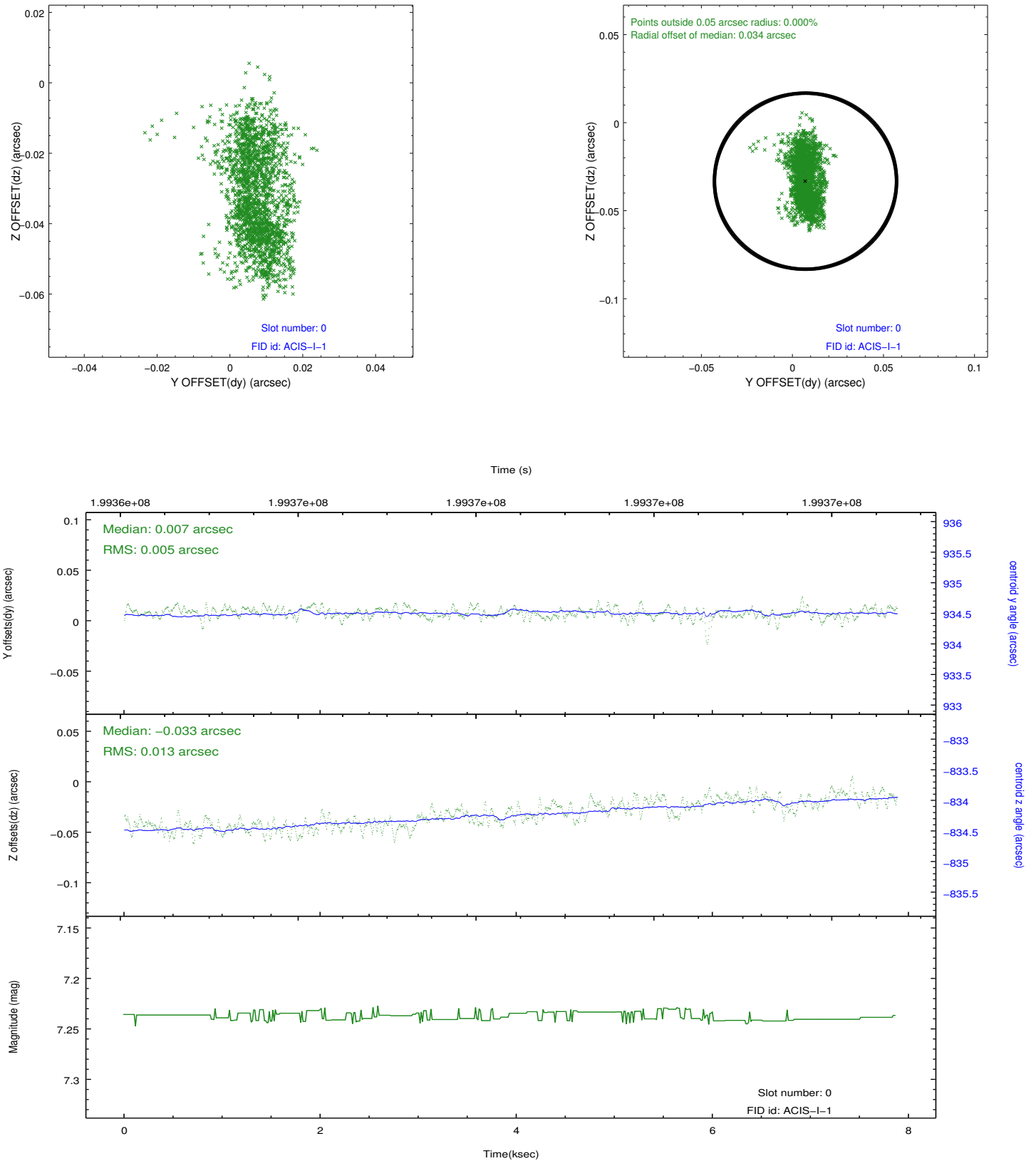


2.4.5 Slot 7

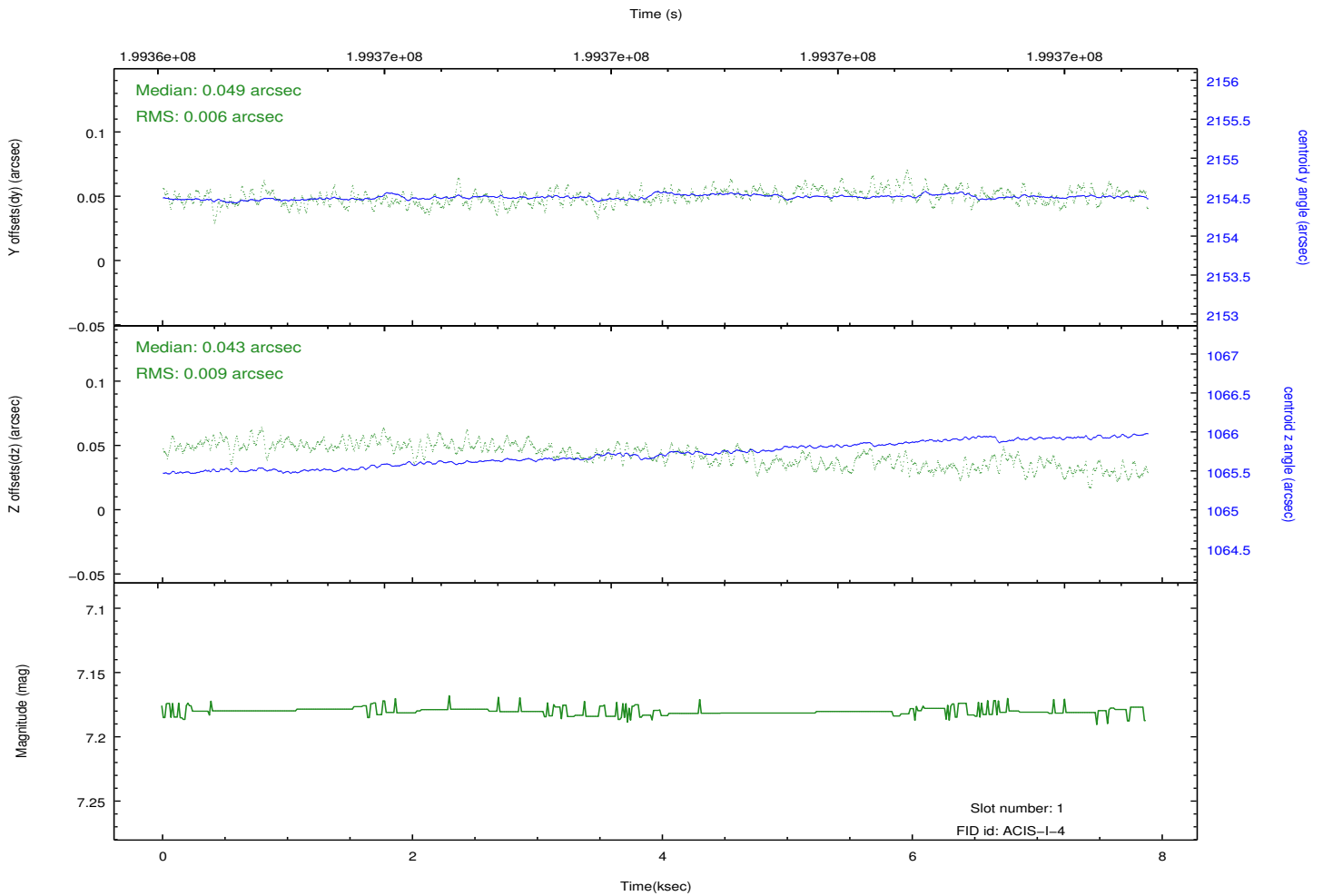
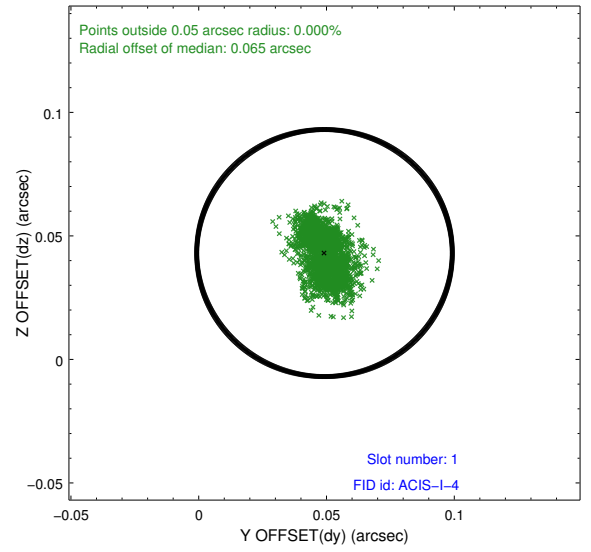
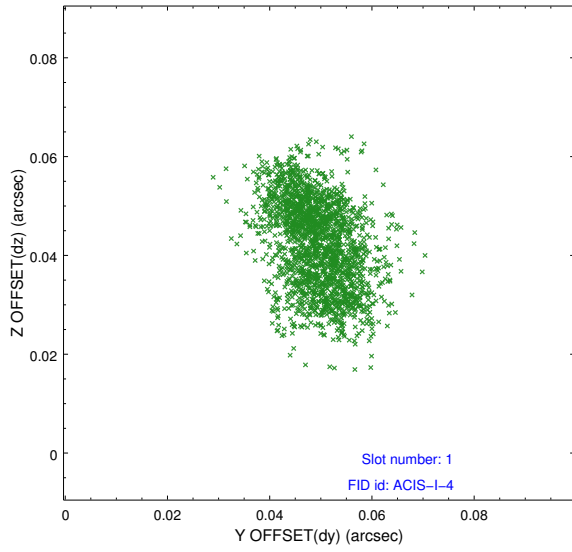


2.5 FID Slots

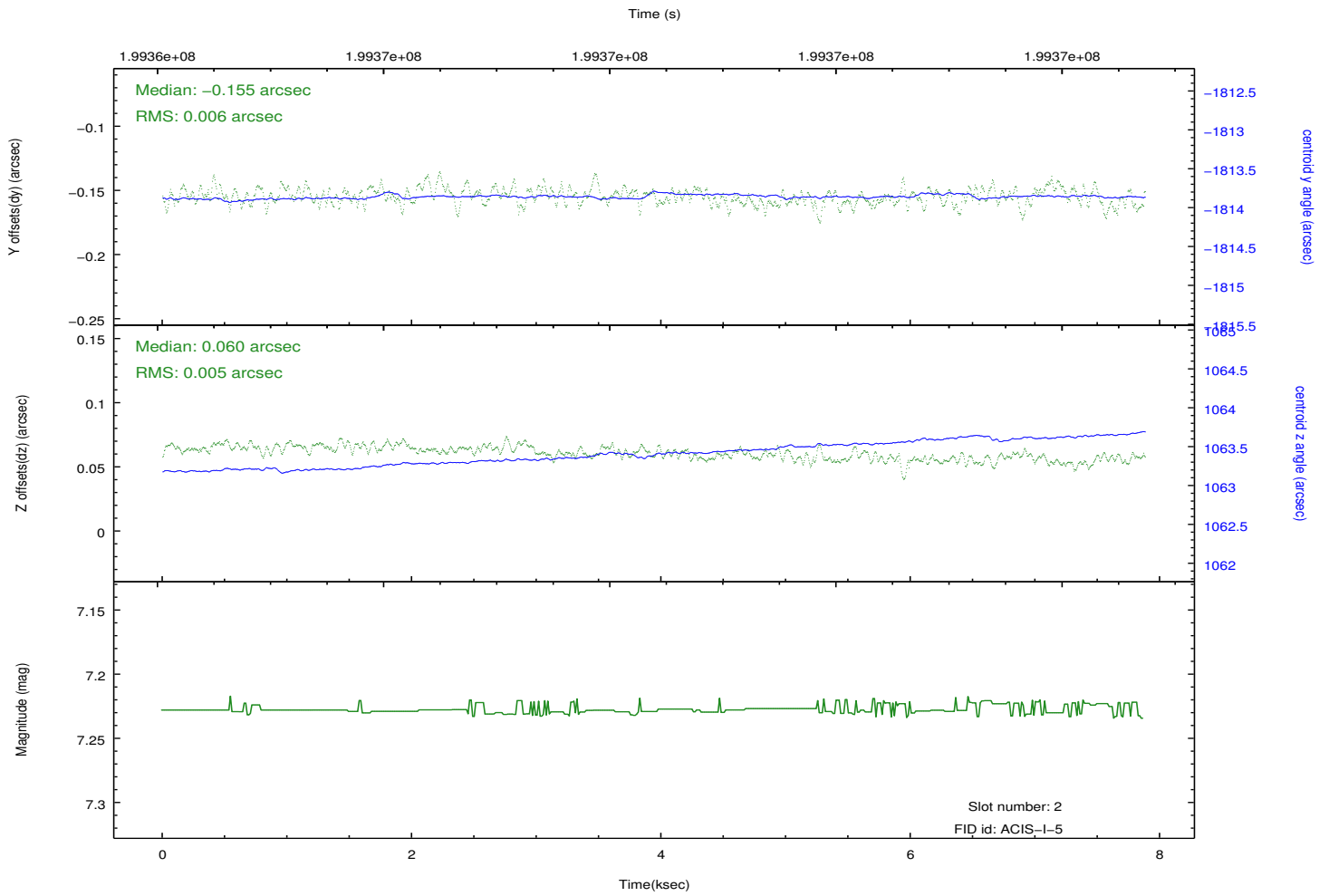
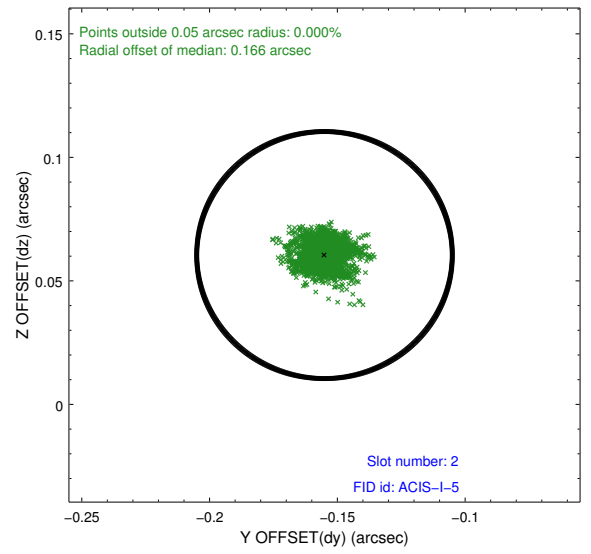
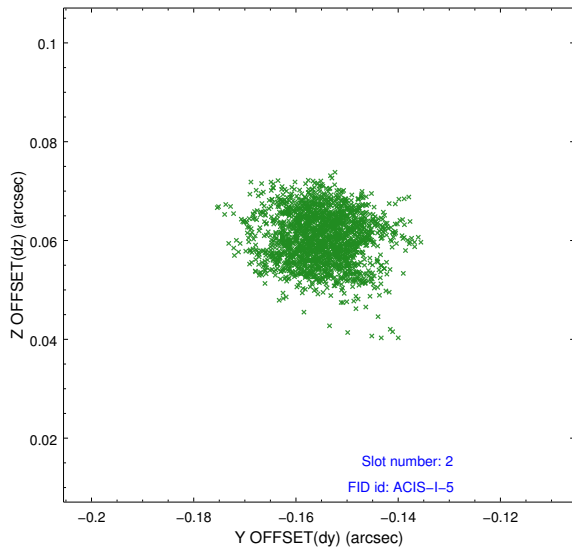
2.5.1 Slot 0



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) | 2012.12.04 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.446 |

A.2 Comments

Window preference met.