

V&V Reference Report

L2 ASCDS Version : 7.6.8

Observation 3539 - L2 Version 001
Chandra X-Ray Center

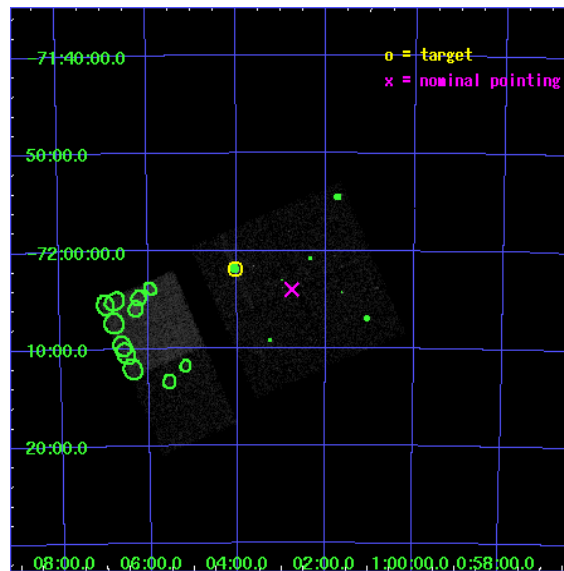
L2 Processing Date : Jul 20 2006

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| 3 | Point Sources | 17 |
| A | Summary | 18 |
| A.1 | Status | 18 |
| A.2 | Comments | 18 |

1 Front

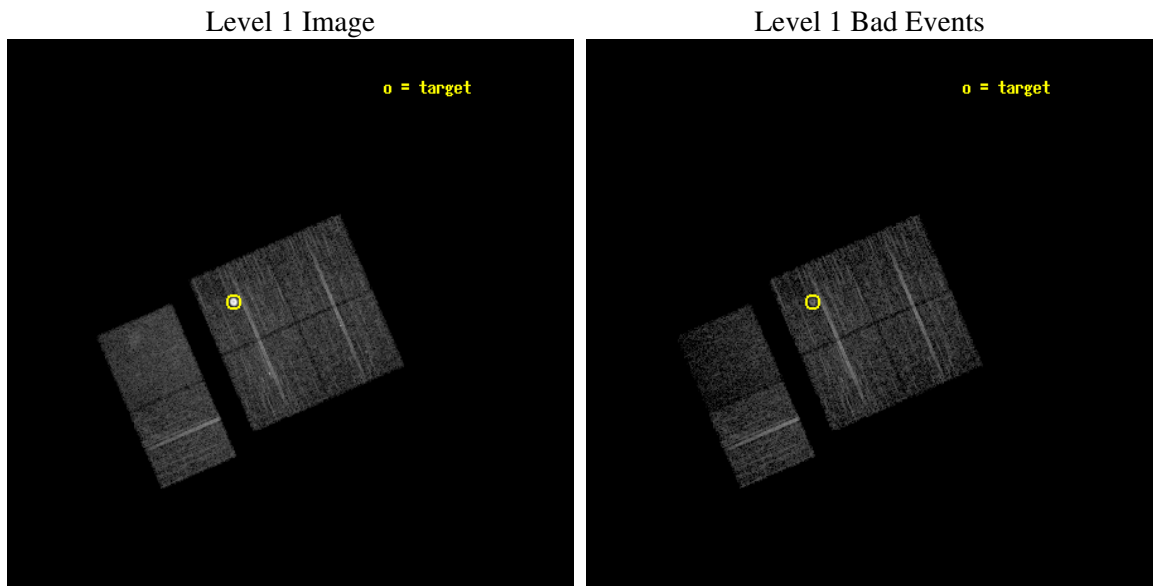
| | |
|----------|--|
| seq_num | 590294 |
| obs_id | 3539 |
| title | AO4A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72 |
| observer | Dr. CXC Calibration |
| object | E0102-72[I3,-120,-4.0,4.5,0] |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 16.01 |
| dec_targ | -72.032028 |
| ra_nom | 15.68979051819 |
| dec_nom | -72.066607175207 |
| roll_nom | 246.63423251405 |
| revision | 2 |
| ontime | 7731.199971199 |
| livetime | 7633.302861994 |
| ontime0 | 7731.199971199 |
| ontime1 | 7731.199971199 |
| ontime2 | 7731.199971199 |
| ontime3 | 7731.199971199 |
| ontime6 | 7731.199971199 |
| ontime7 | 7731.199971199 |
| l2events | 57941 |



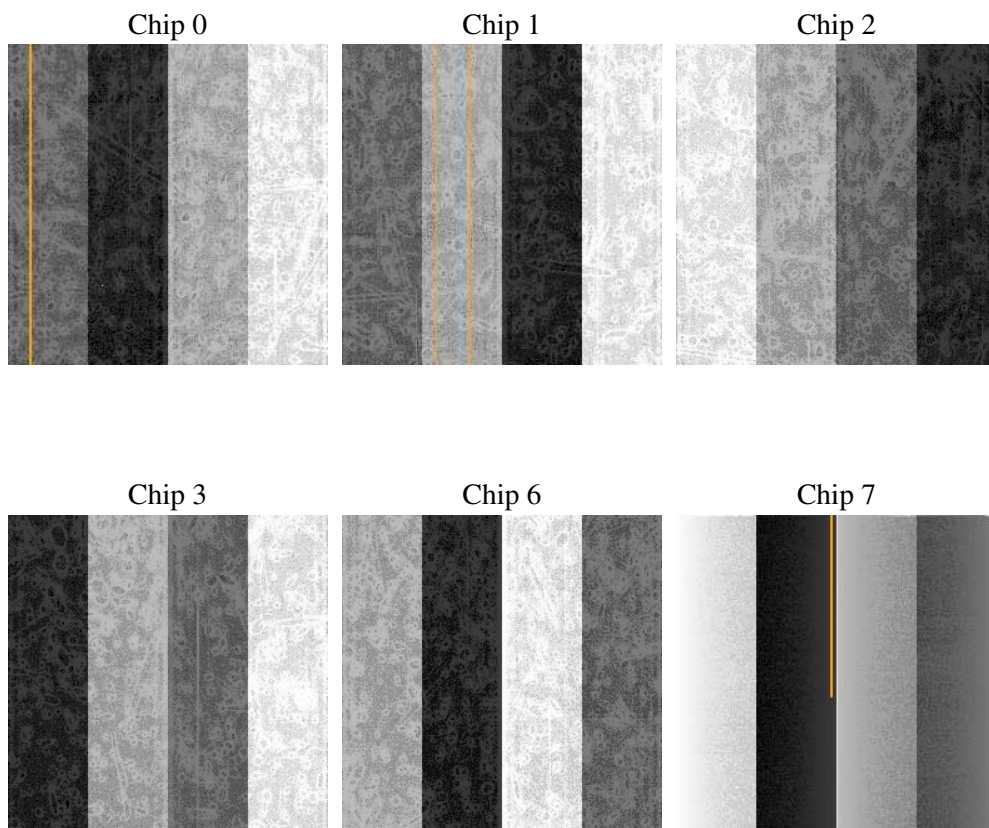
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.8 |
| caldbver | 3.2.2 |
| date | 2006-07-20T14:42:18 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 7973.000000 |
| ontime | 7736.2669945657 |
| ontime0 | 7736.266964674 |
| ontime1 | 7736.2669945657 |
| ontime2 | 7736.2669945657 |
| ontime3 | 7736.2669945657 |
| ontime6 | 7736.2669945657 |
| ontime7 | 7736.2669945657 |
| l1events | 246995 |

2.1.4 Events

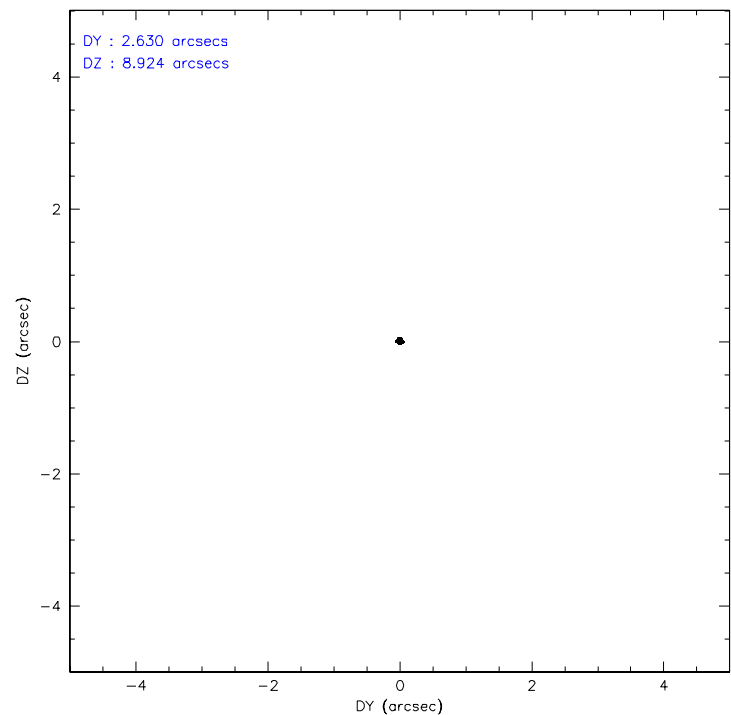
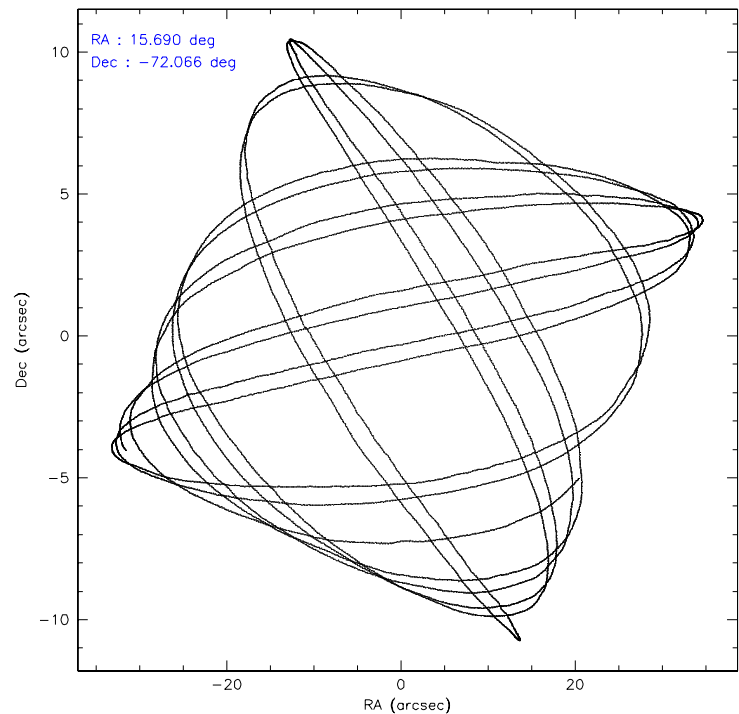
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 34681 | 34693 | 39648 | 62866 | 39146 | 35961 |
| rejected events | 30546 | 30598 | 35437 | 34751 | 34986 | 18595 |
| rejected % | 88% | 88% | 89% | 55% | 89% | 51% |

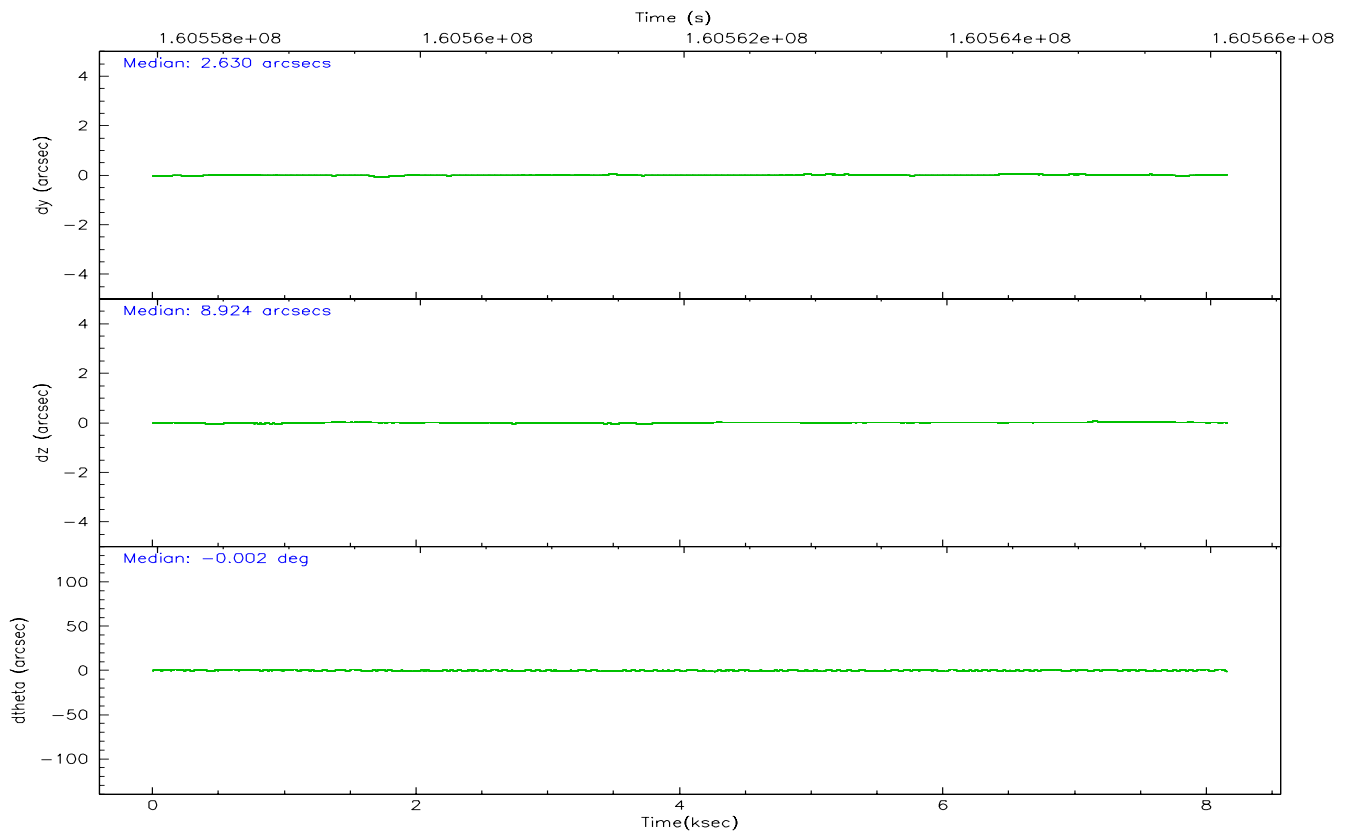
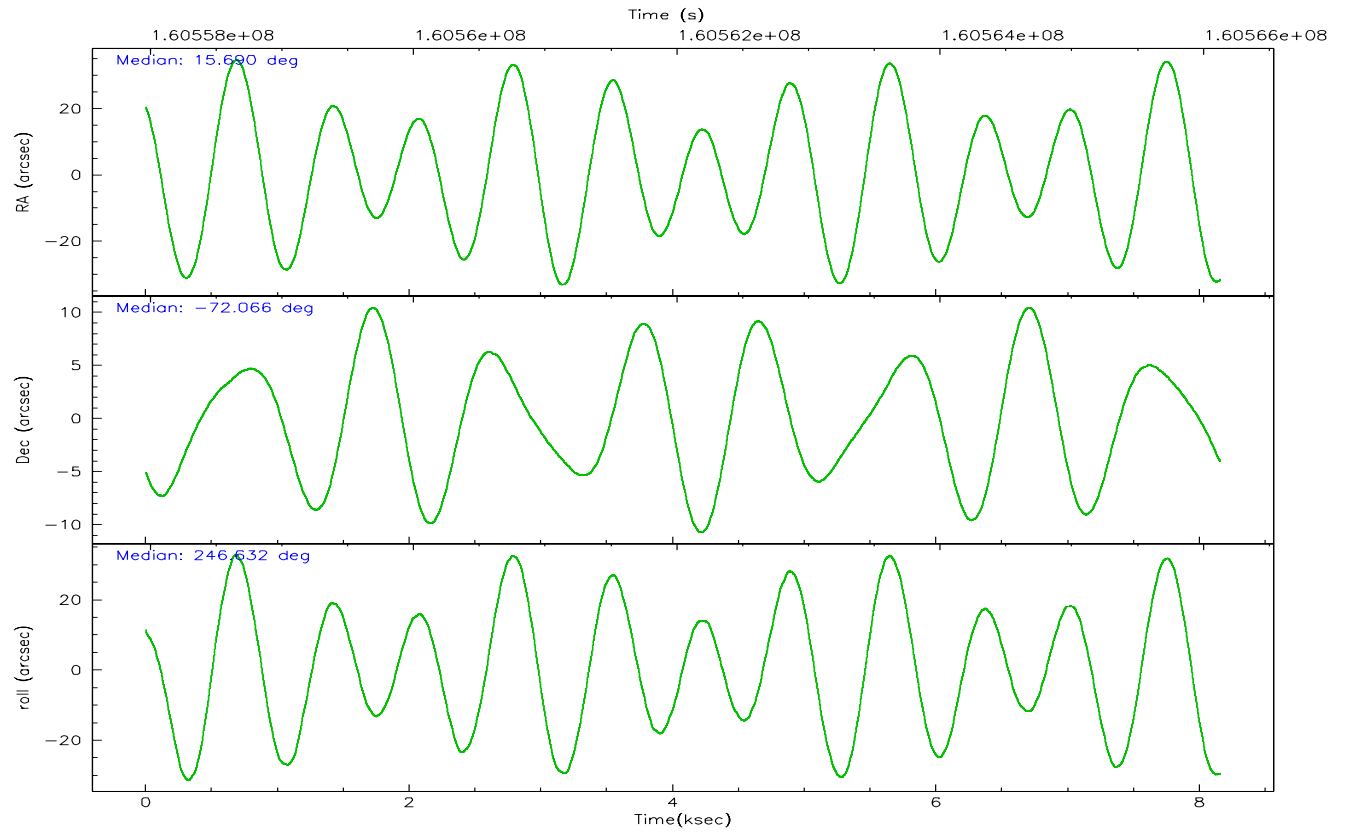
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 1819 | 1615 | 1955 | 23231 | 1679 | 1595 |
| | 5% | 4% | 4% | 36% | 4% | 4% |
| grade 1 events | 23 | 18 | 29 | 206 | 20 | 25 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 895 | 820 | 856 | 2460 | 905 | 4450 |
| | 2% | 2% | 2% | 3% | 2% | 12% |
| grade 3 events | 426 | 487 | 407 | 813 | 414 | 1213 |
| | 1% | 1% | 1% | 1% | 1% | 3% |
| grade 4 events | 420 | 458 | 409 | 802 | 408 | 1106 |
| | 1% | 1% | 1% | 1% | 1% | 3% |
| grade 5 events | 1078 | 1166 | 952 | 1284 | 1244 | 2714 |
| | 3% | 3% | 2% | 2% | 3% | 7% |
| grade 6 events | 582 | 717 | 586 | 830 | 758 | 9018 |
| | 1% | 2% | 1% | 1% | 1% | 25% |
| grade 7 events | 29438 | 29412 | 34454 | 33240 | 33718 | 15840 |
| | 84% | 84% | 86% | 52% | 86% | 44% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-012367 | ACIS-012367 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | On-chip summing requested | N | N |
| Observation mode | POINTING | POINTING | Subarray requested | NONE | NONE |
| Pointing RA | 15.679241 | 15.68979051818974 | Alternating exposures requested | N | N |
| Pointing Dec | -72.039435 | -72.06660717520683 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 246.415518 | 246.634232514045 | | | |
| Window start time | 158976064.184000 | 158976064.184000 | | | |
| Window stop time | 161654464.184000 | 161654464.184000 | | | |
| SIM focus pos (mm) | -0.782348 | -0.7809083437167272 | | | |
| SIM defocus (mm) | 0 | 0.001439871863259334 | | | |
| SIM translation stage pos (mm) | -233.592463 | -233.5874344608287 | | | |
| SIM translation stage offset (mm) | 0 | -0.005018542100998502 | | | |
| Observation start time | 160558154.184000 | 160557778.14664 | | | |
| Observation start date | 2003-02-02T07:28:10 | 2003-02-02T07:22:58 | | | |
| Observation end time | 160566127.184000 | 160566261.047 | | | |
| Observation end date | 2003-02-02T09:41:03 | 2003-02-02T09:44:21 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



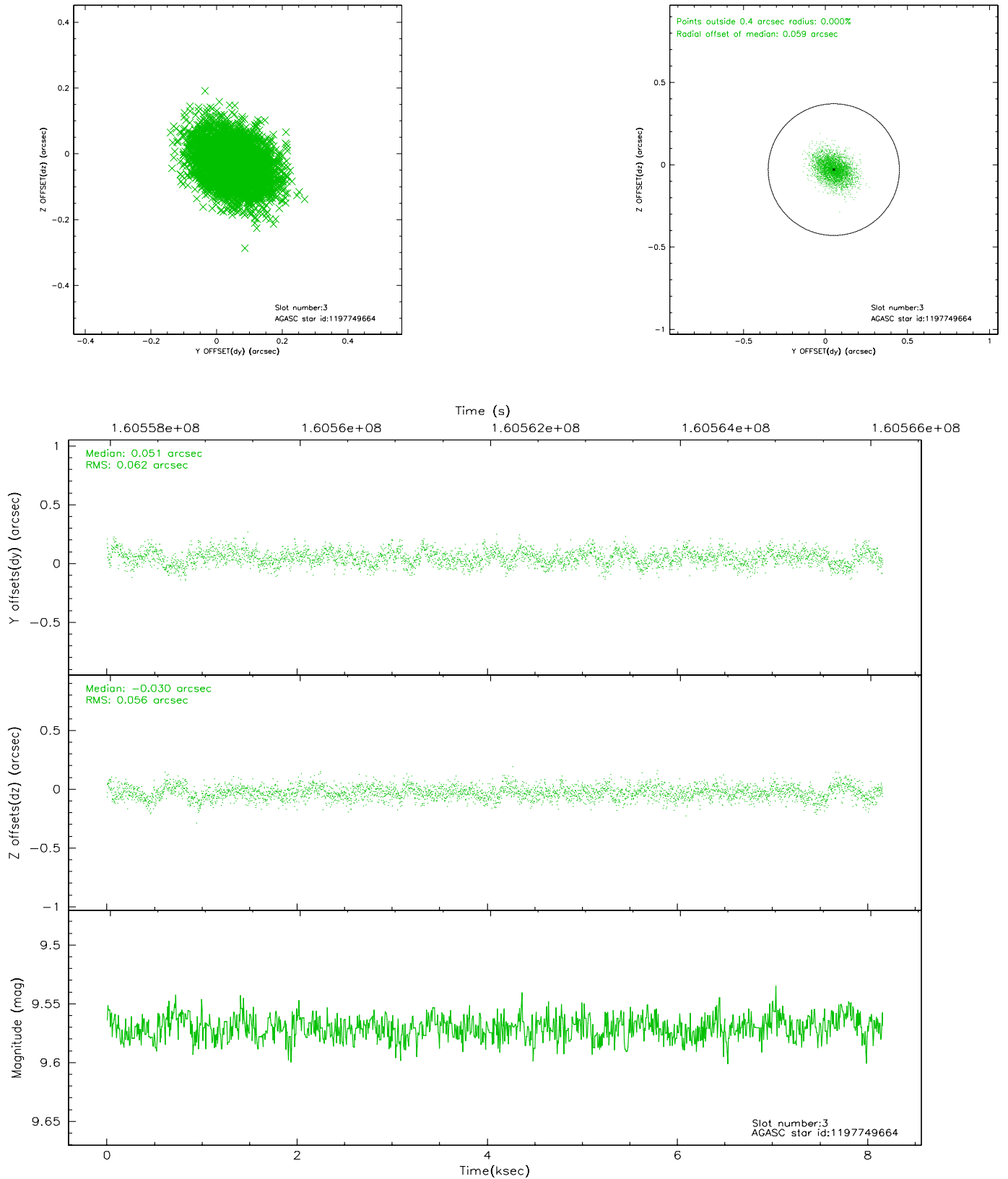


Slot Statistics

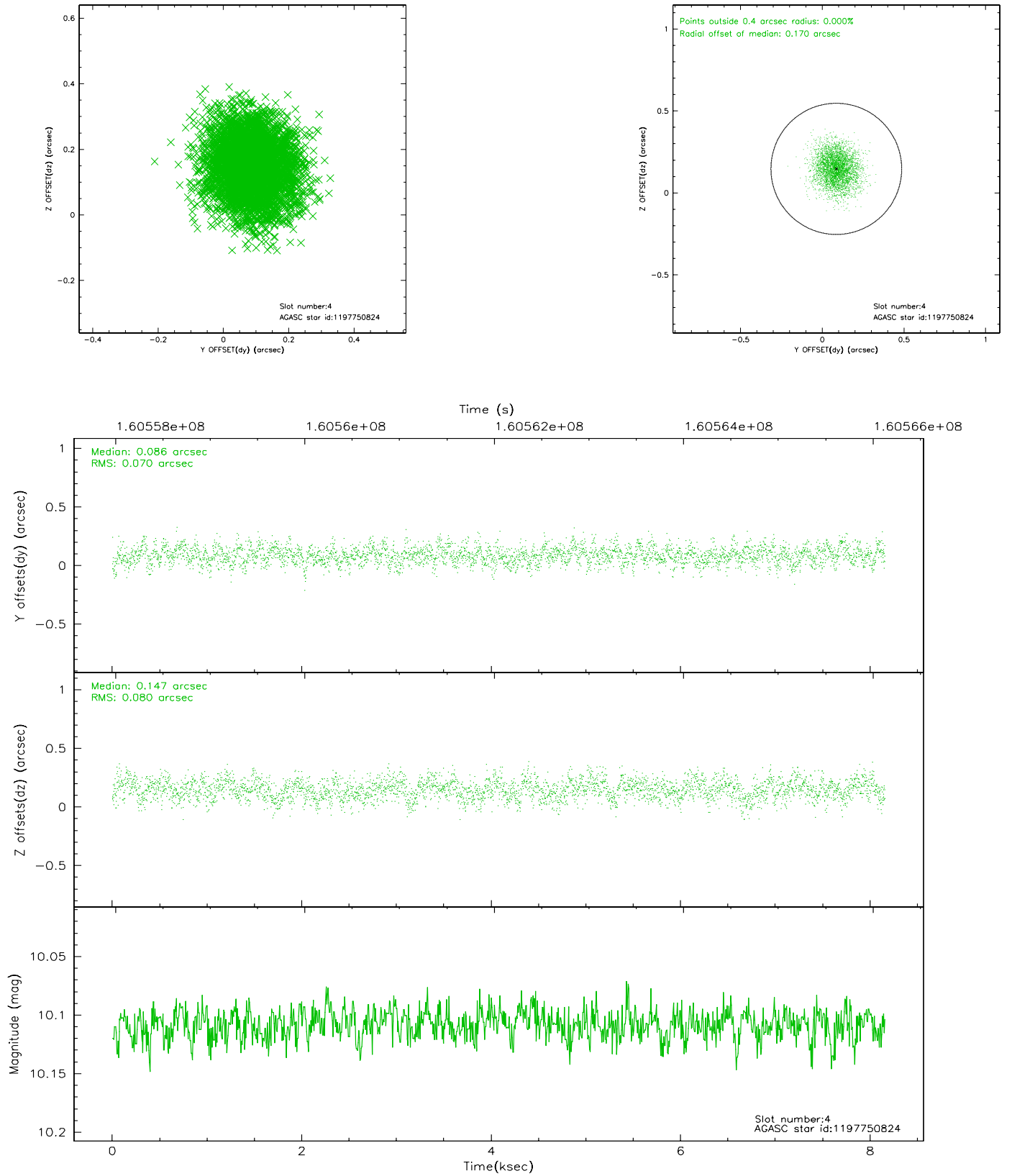
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 1990 | -0.054 | 0.093 | 0.007 | 0.011 | 0.000000 | 0.000000 | 937.12 | -832.27 |
| 1 | FID | ACIS-I-5 | 7.24 | 1990 | -0.027 | 0.015 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1810.59 | 1064.78 |
| 2 | FID | ACIS-I-6 | 7.26 | 1989 | -0.011 | -0.038 | 0.007 | 0.011 | 0.000000 | 0.000000 | 401.95 | 1710.02 |
| 3 | GUIDE | 1197749664 | 9.57 | 3979 | 0.051 | -0.030 | 0.088 | 0.147 | 15.809015 | -72.366369 | 1022.40 | 601.06 |
| 4 | GUIDE | 1197750824 | 10.11 | 3974 | 0.086 | 0.147 | 0.114 | 0.183 | 14.791487 | -71.393477 | -1715.73 | -1861.41 |
| 5 | GUIDE | 1197884536 | 8.51 | 3978 | 0.049 | 0.017 | 0.068 | 0.110 | 17.160729 | -71.835289 | -1320.18 | 1237.63 |
| 6 | GUIDE | 1197885328 | 7.23 | 3980 | 0.013 | -0.123 | 0.056 | 0.084 | 16.283090 | -71.733943 | -1277.73 | 186.50 |
| 7 | GUIDE | 1198189696 | 7.37 | 3979 | -0.196 | -0.010 | 0.049 | 0.075 | 15.223750 | -72.697522 | 2367.77 | 502.21 |

2.4 Star Slots

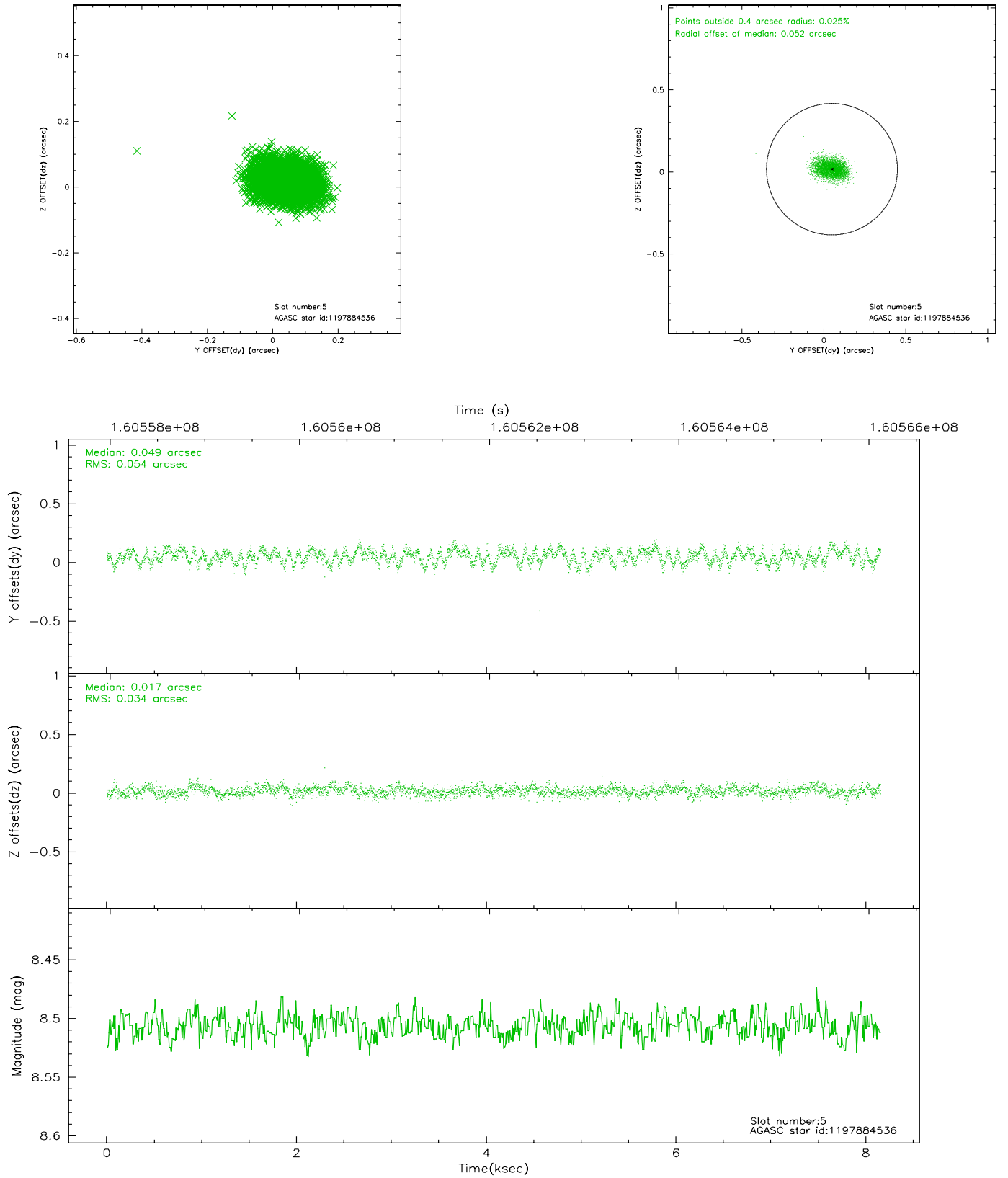
2.4.1 Slot 3



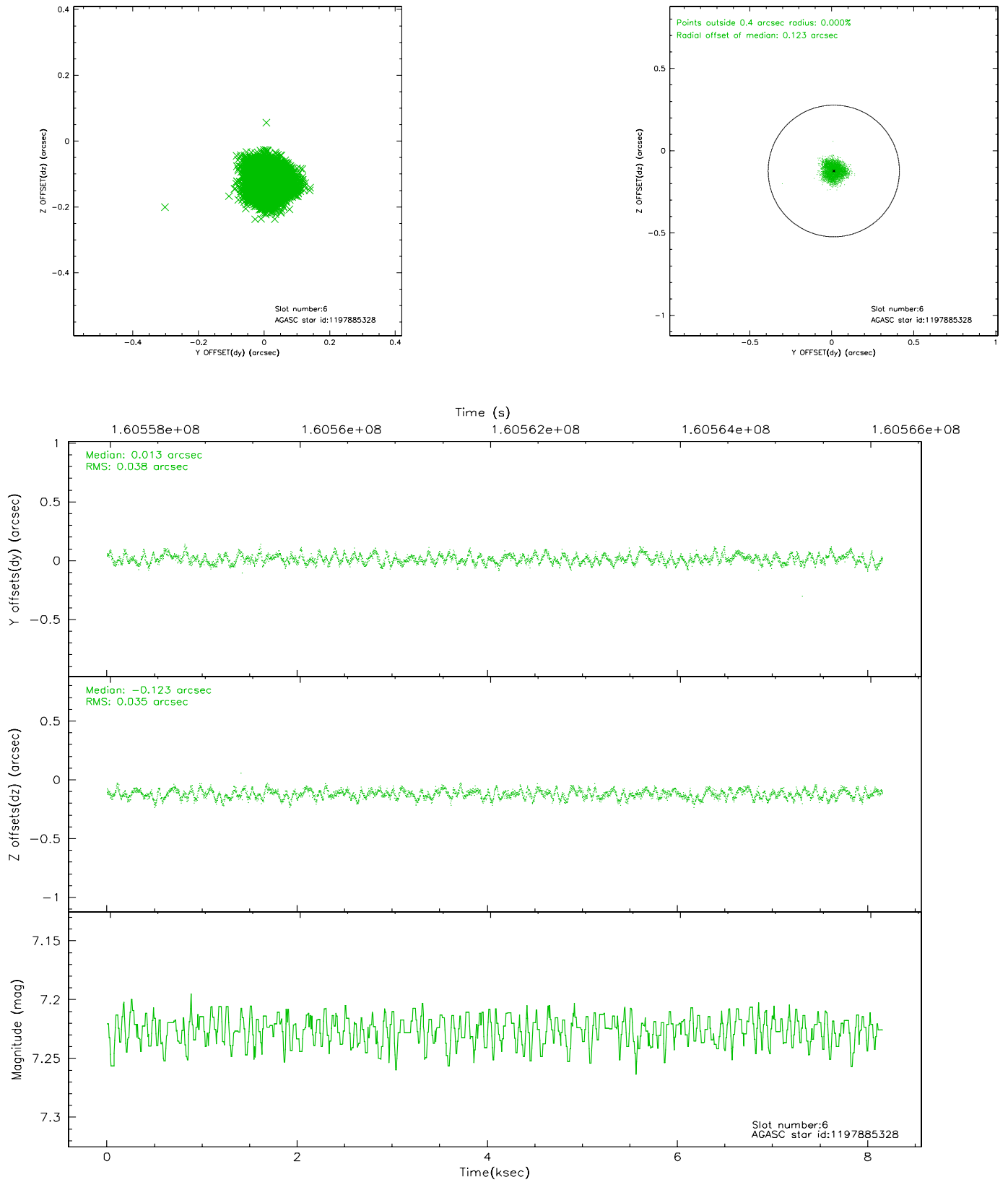
2.4.2 Slot 4



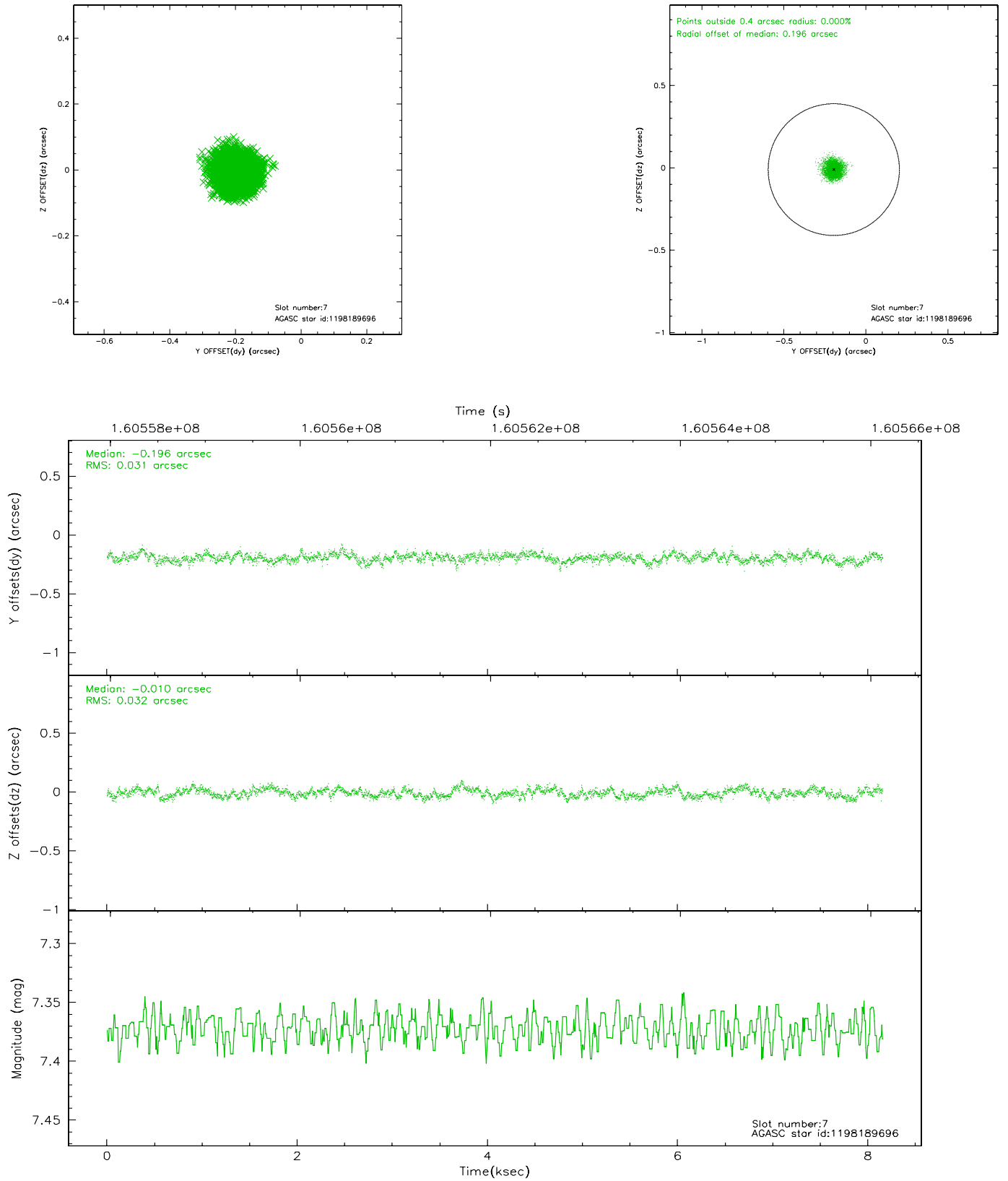
2.4.3 Slot 5



2.4.4 Slot 6

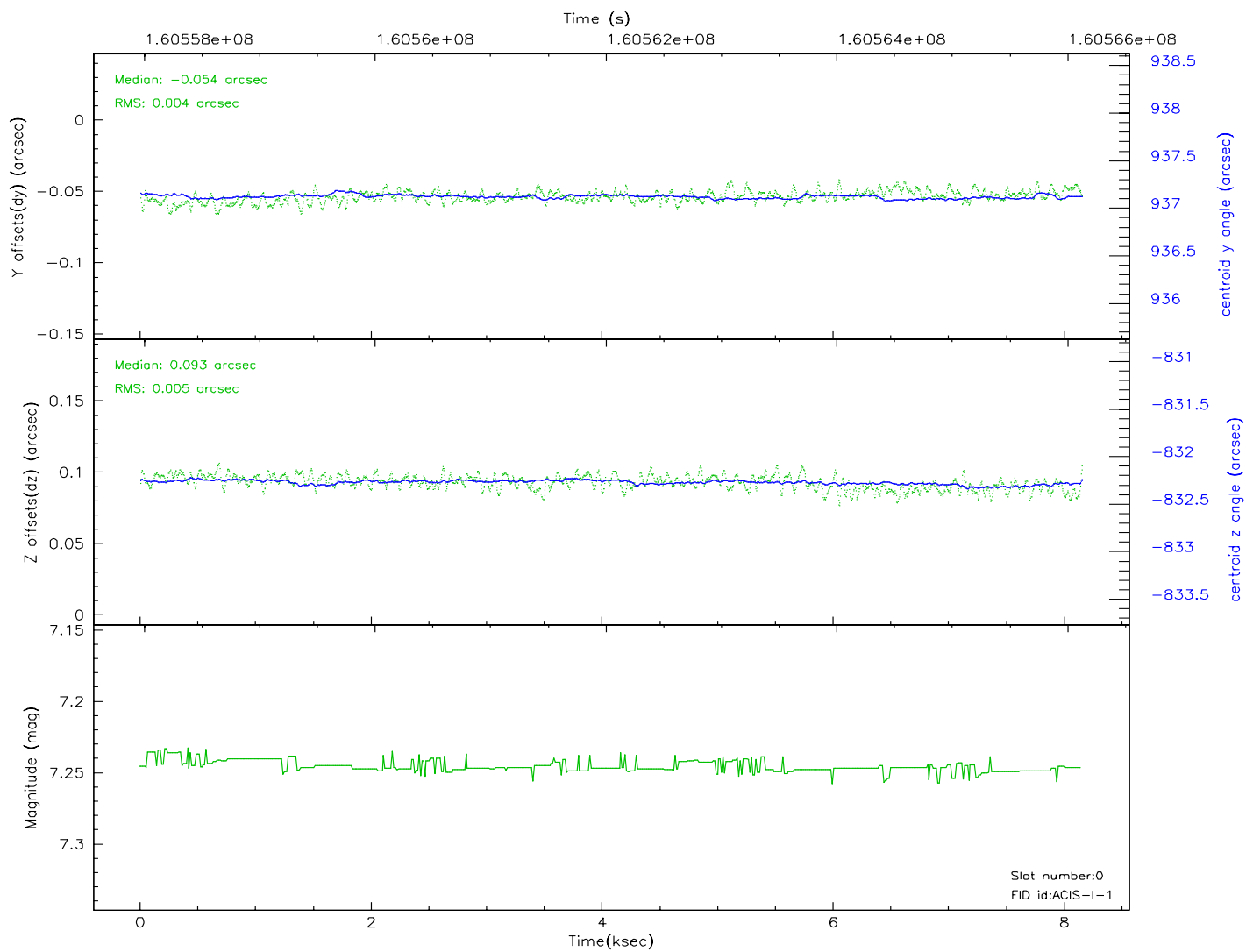
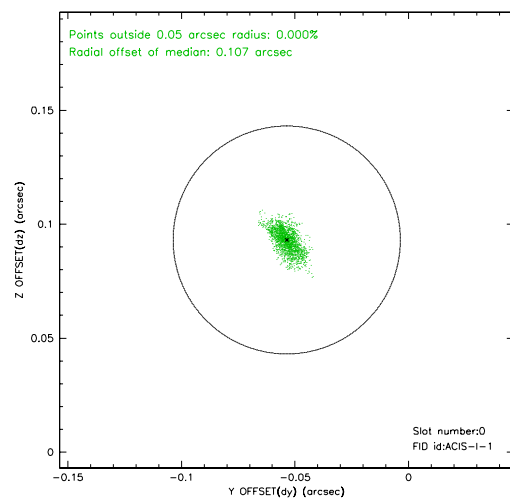
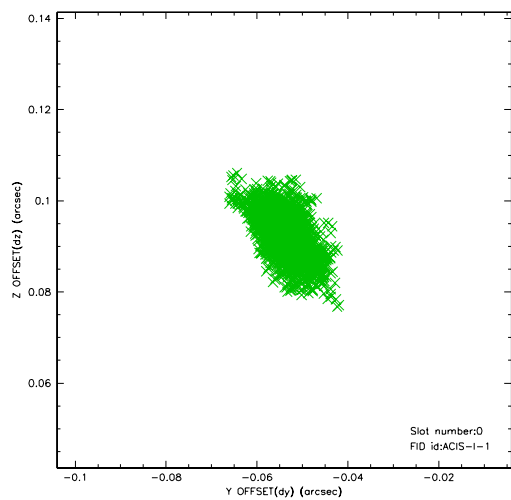


2.4.5 Slot 7

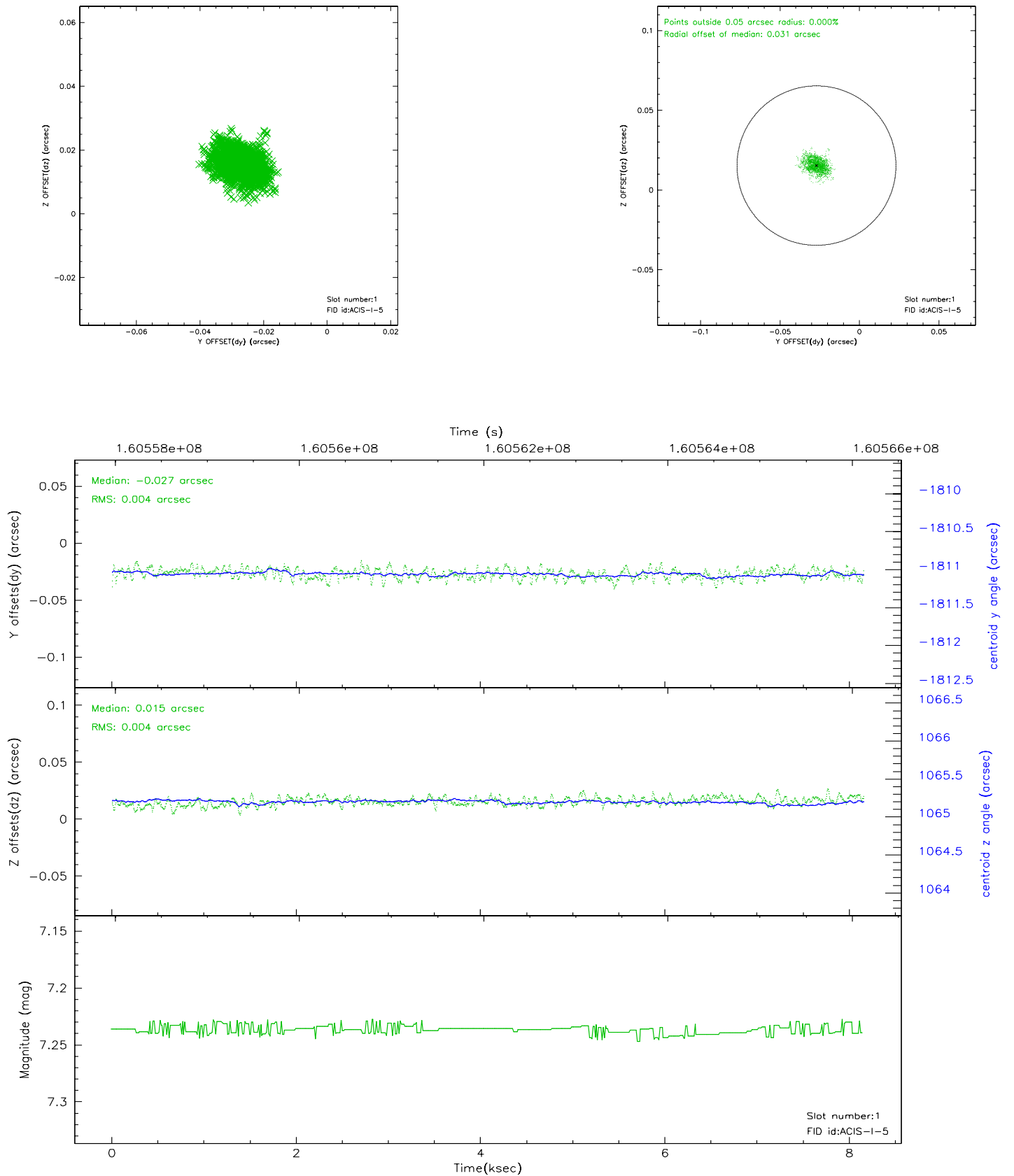


2.5 FID Slots

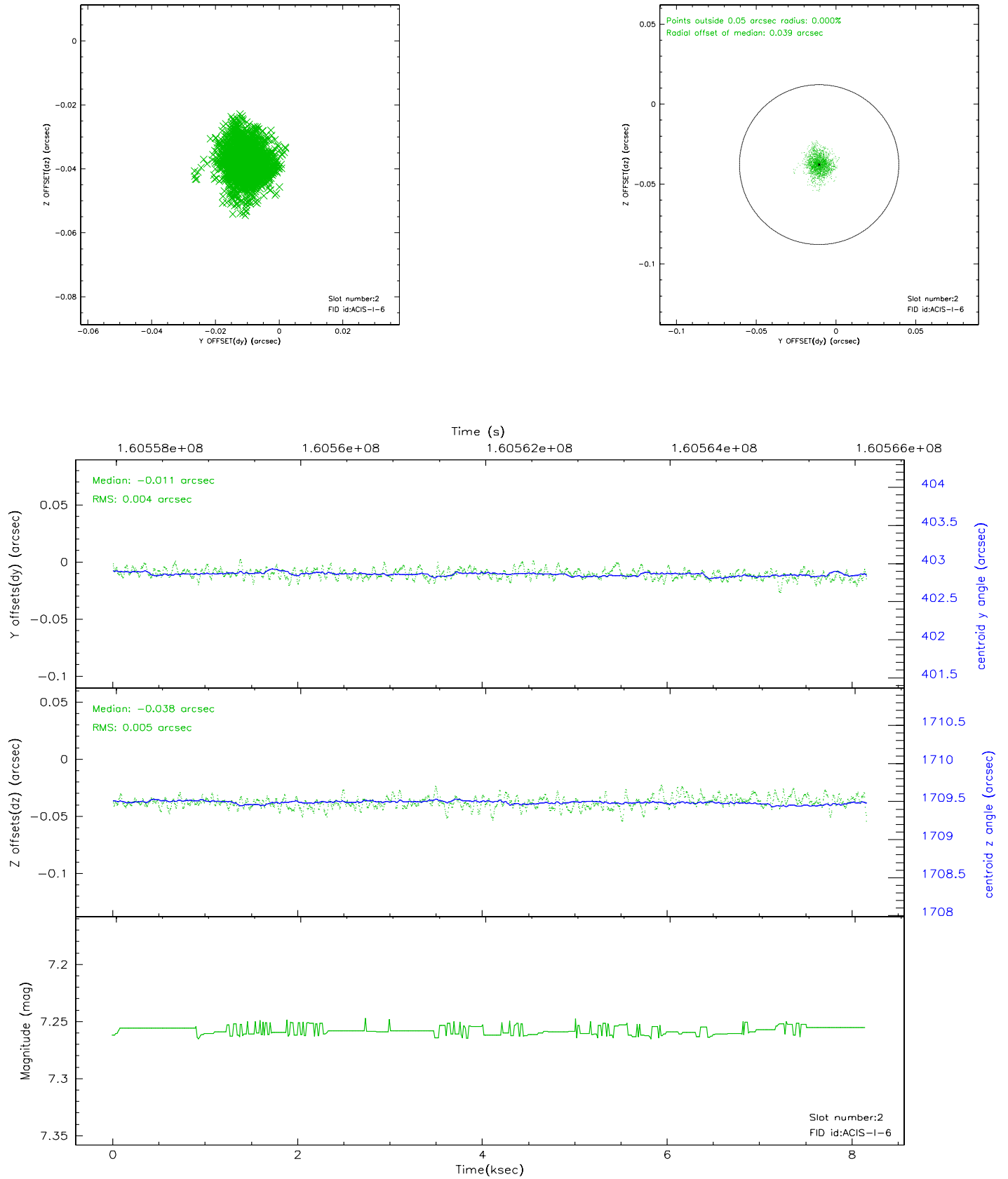
2.5.1 Slot 0



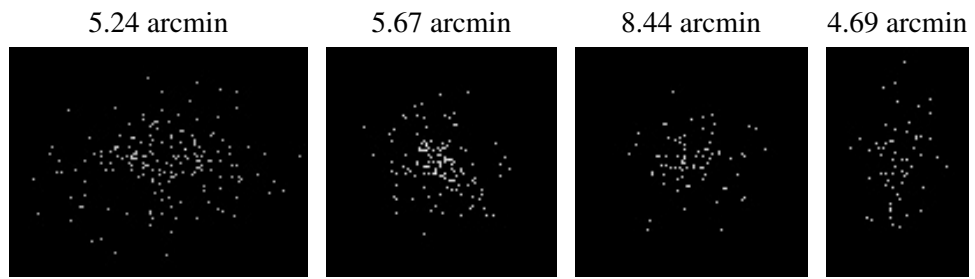
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2006.07.20 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.735 |

A.2 Comments

Window constraint met.