

V&V Reference Report

L2 ASCDS Version : 7.6.8

Observation 3520 - L2 Version 001
Chandra X-Ray Center

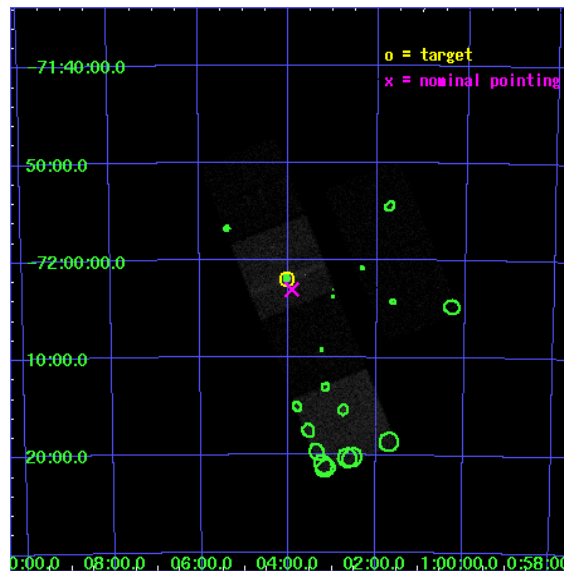
L2 Processing Date : Jul 20 2006

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1 Front

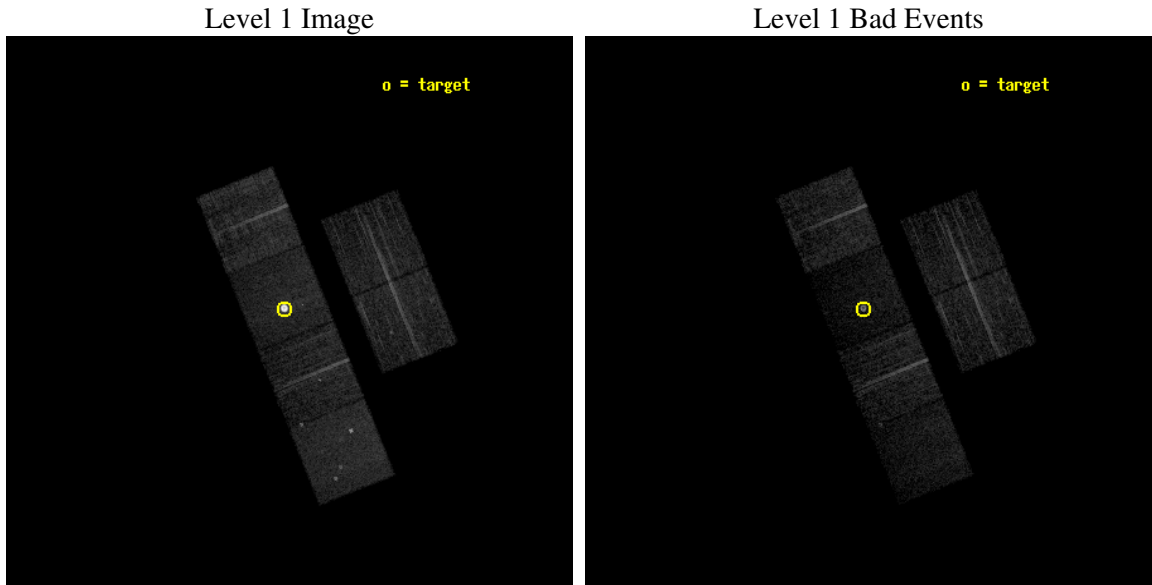
| | |
|----------|--|
| seq_num | 590275 |
| obs_id | 3520 |
| title | AO4A ACIS-S CALIBRATION OBSERVATIONS OF E0102-72 |
| observer | Dr. CXC Calibration |
| object | E0102-72[S3,-120,-1,0,0] |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 16.01 |
| dec_targ | -72.032028 |
| ra_nom | 15.979880577052 |
| dec_nom | -72.050558344028 |
| roll_nom | 248.00691948123 |
| revision | 2 |
| ontime | 7727.999971211 |
| livetime | 7630.1433823326 |
| ontime2 | 7727.999971211 |
| ontime3 | 7727.999971211 |
| ontime5 | 7727.999971211 |
| ontime6 | 7727.999971211 |
| ontime7 | 7727.999971211 |
| ontime8 | 7724.759010911 |
| l2events | 109667 |



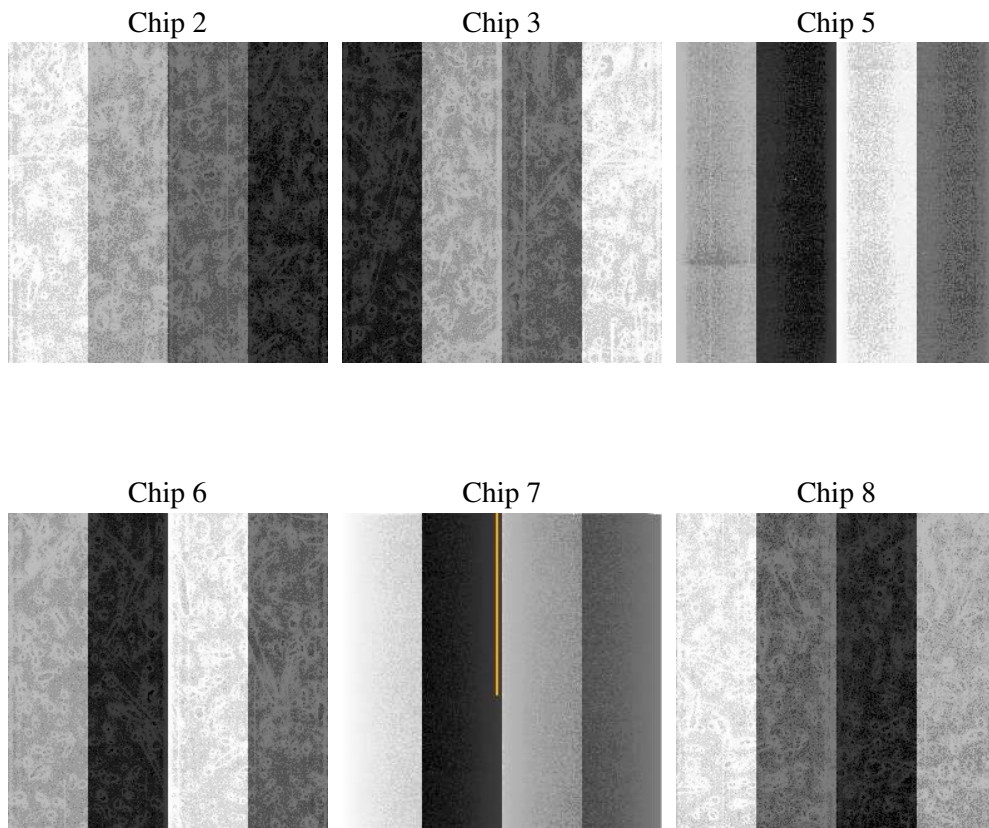
2 OBI

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 | 2006-07-20T13:21:06 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 7973.000000 |
| ontime | 7733.0258447528 |
| ontime2 | 7733.025824815 |
| ontime3 | 7733.025824815 |
| ontime5 | 7733.025824815 |
| ontime6 | 7733.025824815 |
| ontime7 | 7733.0258447528 |
| ontime8 | 7729.7848645151 |
| l1events | 314727 |

2.1.4 Events

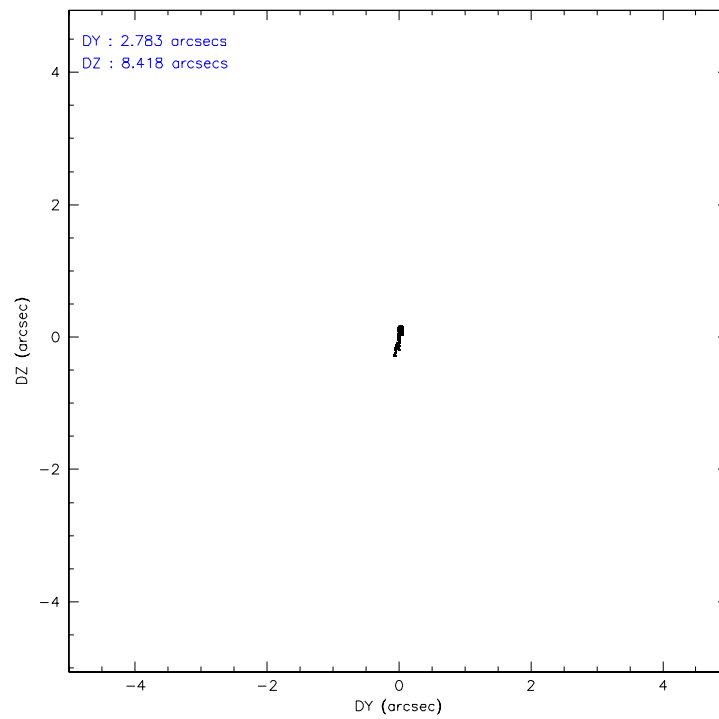
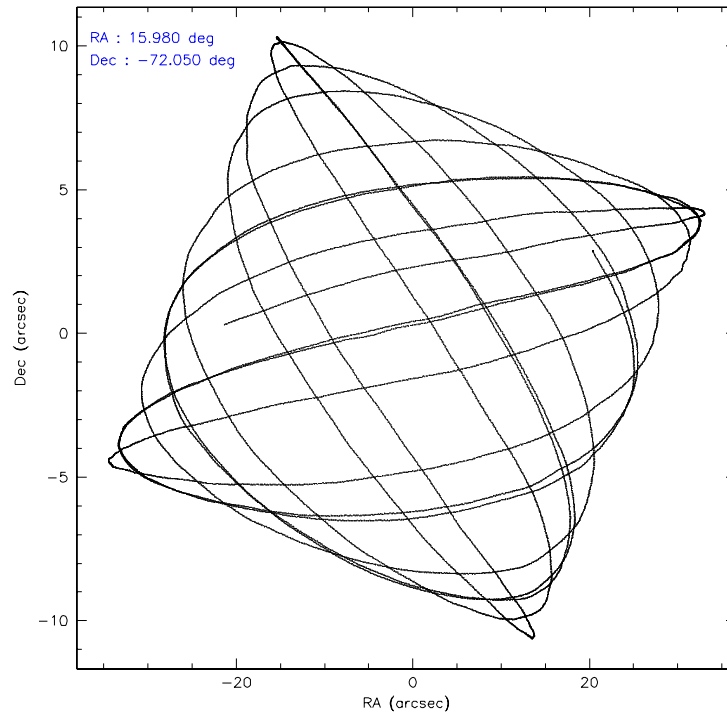
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 43489 | 38571 | 47566 | 39843 | 94999 | 50259 |
| rejected events | 39405 | 34939 | 22558 | 35171 | 21184 | 39025 |
| rejected % | 90% | 90% | 47% | 88% | 22% | 77% |

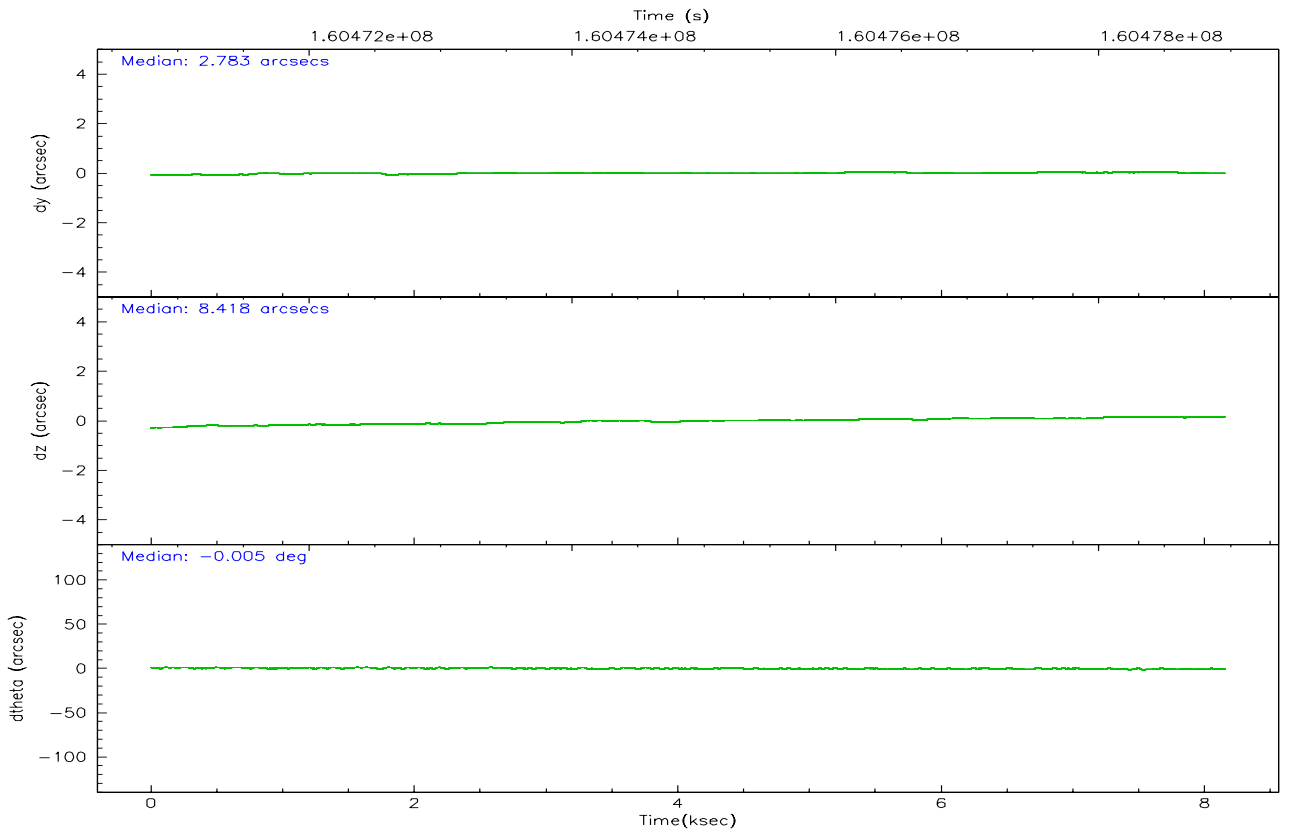
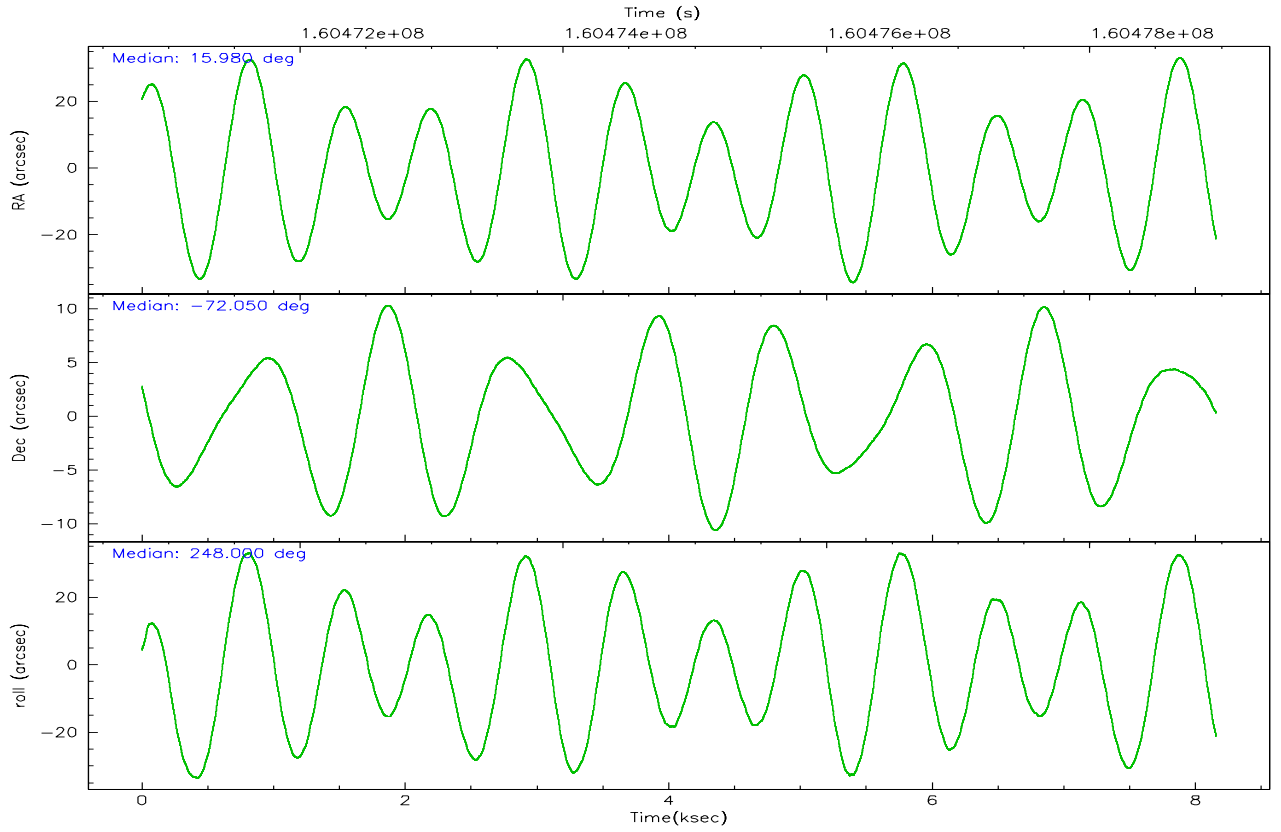
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 1736 | 1437 | 3236 | 2061 | 21381 | 3002 |
| | 3% | 3% | 6% | 5% | 22% | 5% |
| grade 1 events | 23 | 26 | 95 | 13 | 421 | 37 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 877 | 751 | 7623 | 867 | 19922 | 2529 |
| | 2% | 1% | 16% | 2% | 20% | 5% |
| grade 3 events | 440 | 384 | 773 | 487 | 7938 | 1283 |
| | 1% | 0% | 1% | 1% | 8% | 2% |
| grade 4 events | 426 | 399 | 668 | 481 | 7663 | 1221 |
| | 0% | 1% | 1% | 1% | 8% | 2% |
| grade 5 events | 1049 | 1207 | 2590 | 1248 | 3778 | 1813 |
| | 2% | 3% | 5% | 3% | 3% | 3% |
| grade 6 events | 605 | 663 | 12717 | 777 | 16933 | 3201 |
| | 1% | 1% | 26% | 1% | 17% | 6% |
| grade 7 events | 38333 | 33704 | 19864 | 33909 | 16963 | 37173 |
| | 88% | 87% | 41% | 85% | 17% | 73% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-235678 | ACIS-235678 | 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 | 15.966230 | 15.9798805770525 | Alternating exposures requested | N | N |
| Pointing Dec | -72.023629 | -72.0505583440283 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 247.837308 | 248.0069194812272 | | | |
| Window start time | 159019264.184000 | 159019264.184000 | | | |
| Window stop time | 161697664.184000 | 161697664.184000 | | | |
| SIM focus pos (mm) | -0.684267 | -0.6828225247311905 | | | |
| SIM defocus (mm) | 0 | 0.001444936568705701 | | | |
| SIM translation stage pos (mm) | -190.132523 | -190.1425803651734 | | | |
| SIM translation stage offset (mm) | 0 | 0.01005778216563158 | | | |
| Observation start time | 160470984.184000 | 160470608.04298 | | | |
| Observation start date | 2003-02-01T07:15:20 | 2003-02-01T07:10:08 | | | |
| Observation end time | 160478957.184000 | 160479090.94334 | | | |
| Observation end date | 2003-02-01T09:28:13 | 2003-02-01T09:31:30 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



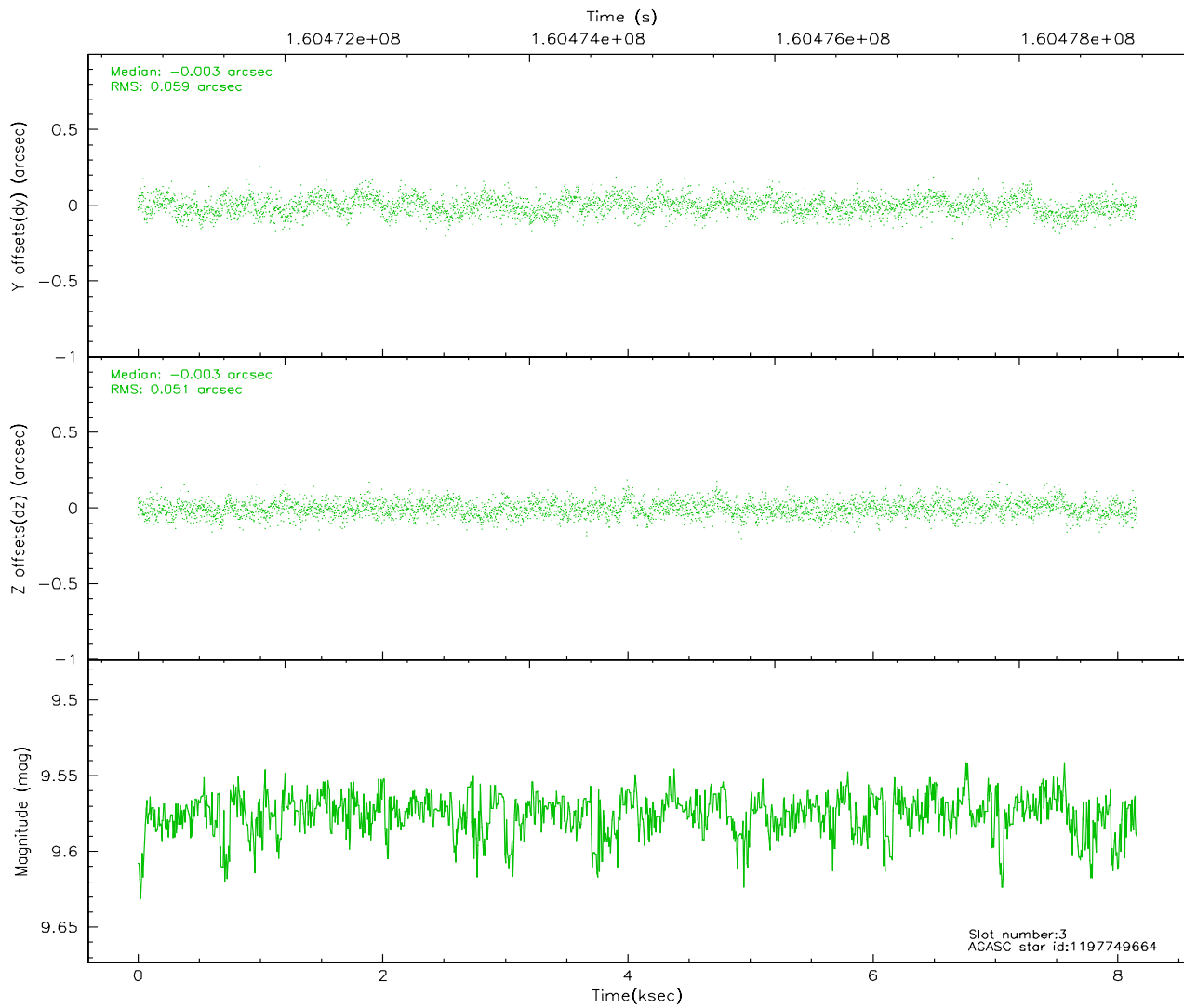
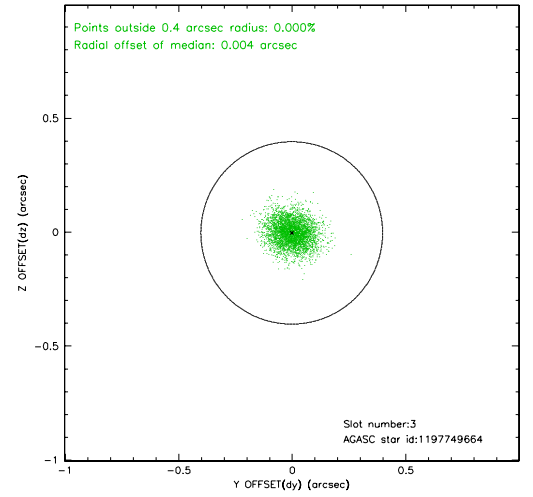
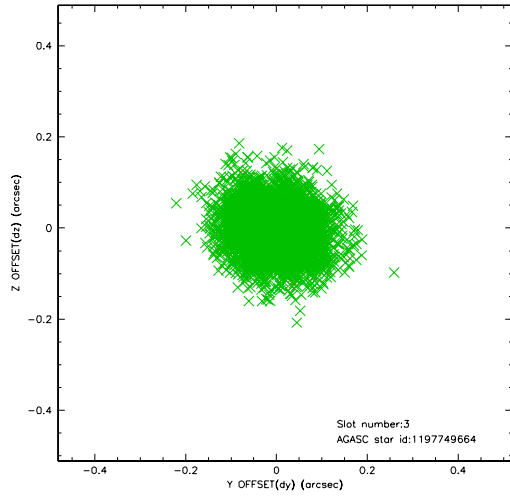


Slot Statistics

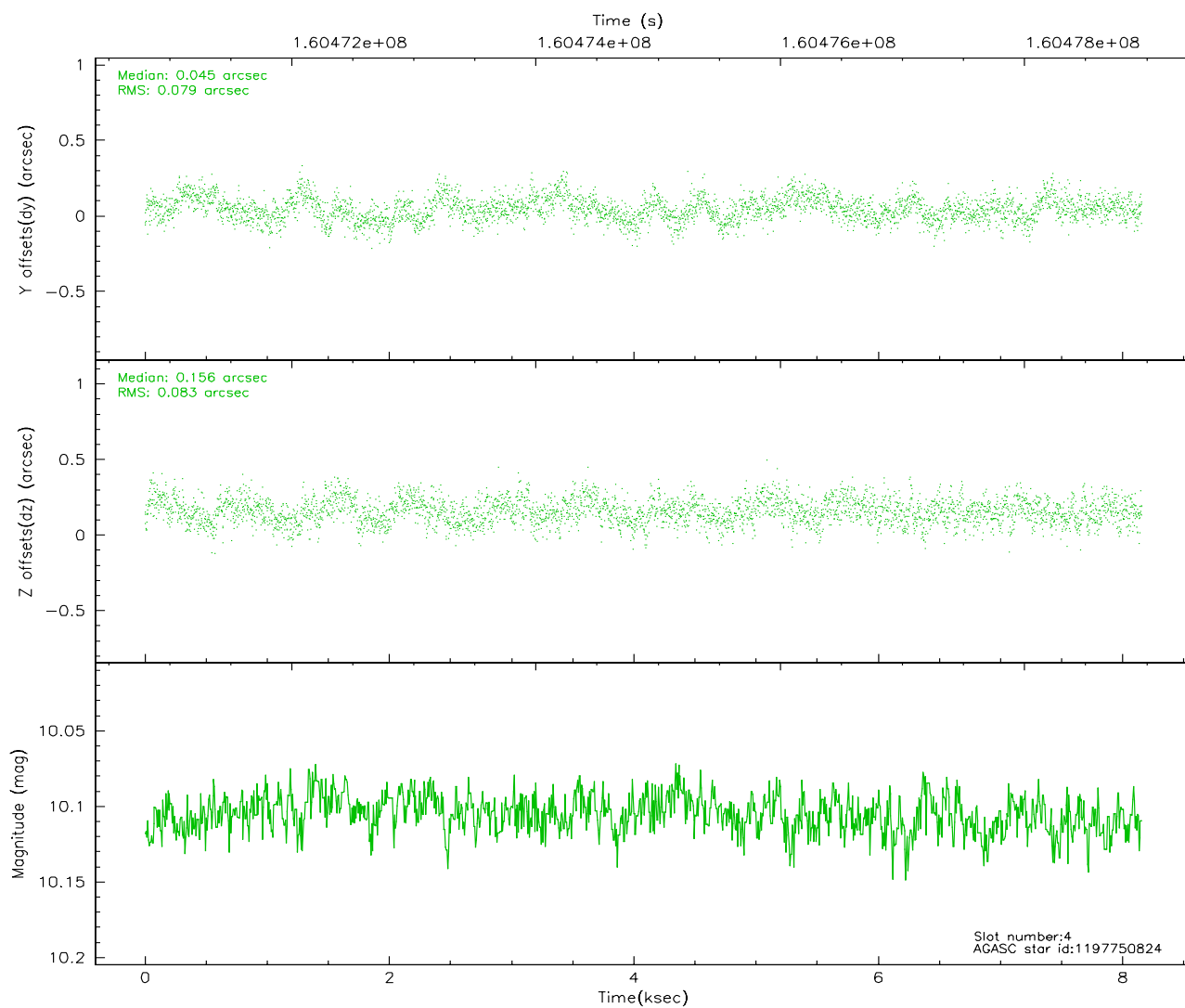
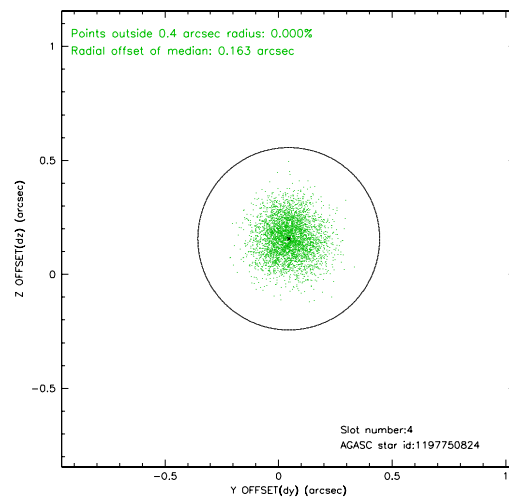
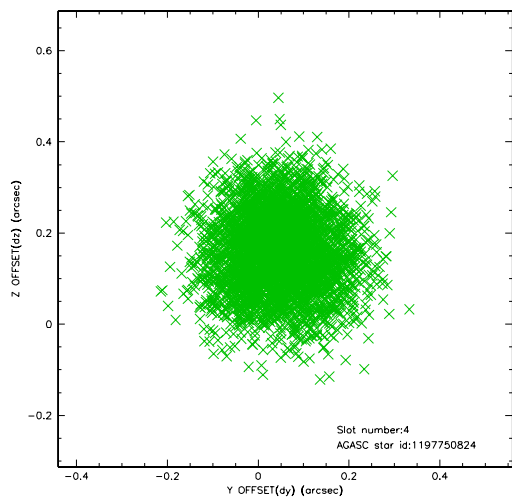
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.19 | 1990 | 0.014 | 0.026 | 0.009 | 0.016 | 0.000000 | 0.000000 | 940.62 | -1725.16 |
| 1 | FID | ACIS-S-5 | 7.24 | 1990 | 0.009 | 0.038 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1807.98 | 171.73 |
| 2 | FID | ACIS-S-6 | 7.35 | 1990 | -0.044 | -0.052 | 0.008 | 0.014 | 0.000000 | 0.000000 | 405.40 | 816.35 |
| 3 | GUIDE | 1197749664 | 9.57 | 3980 | -0.003 | -0.003 | 0.082 | 0.135 | 15.809015 | -72.366369 | 1207.74 | 306.96 |
| 4 | GUIDE | 1197750824 | 10.10 | 3974 | 0.045 | 0.156 | 0.122 | 0.198 | 14.791487 | -71.393477 | -1578.97 | -2100.44 |
| 5 | GUIDE | 1197884712 | 8.30 | 3978 | -0.051 | -0.044 | 0.075 | 0.118 | 16.087398 | -72.252690 | 713.39 | 433.82 |
| 6 | GUIDE | 1197885104 | 9.37 | 3977 | -0.030 | -0.080 | 0.092 | 0.153 | 17.845067 | -72.189368 | -197.54 | 2152.93 |
| 7 | GUIDE | 1197750936 | 7.56 | 3979 | 0.035 | -0.028 | 0.052 | 0.087 | 15.387940 | -71.549550 | -1328.65 | -1252.41 |

2.4 Star Slots

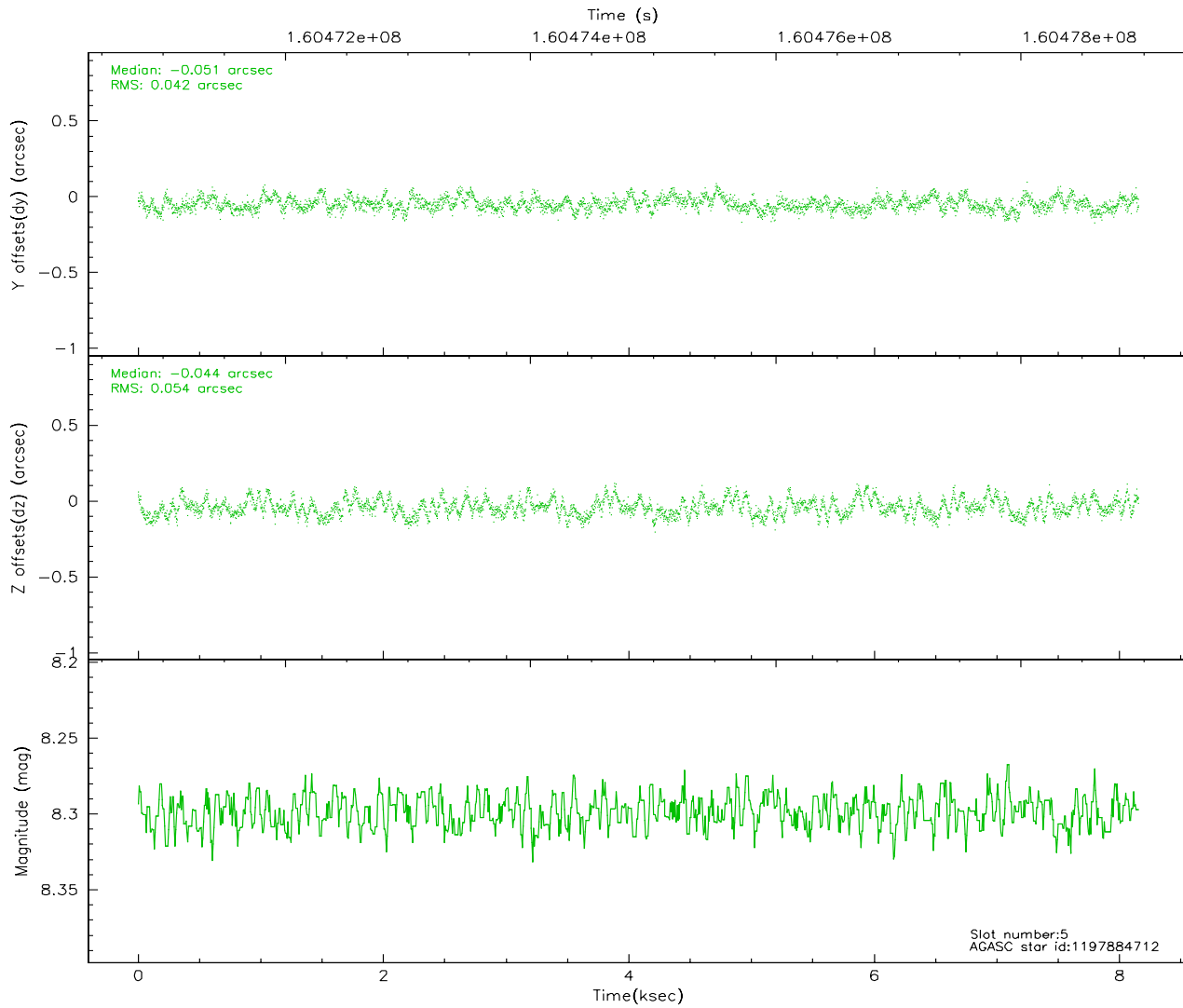
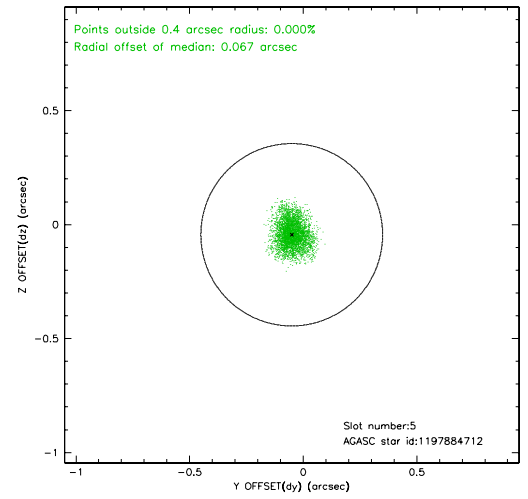
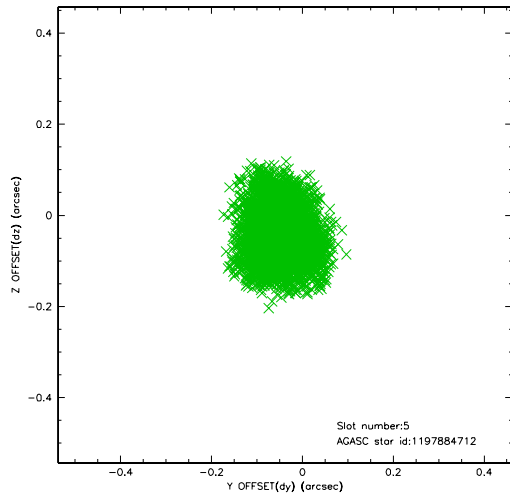
2.4.1 Slot 3



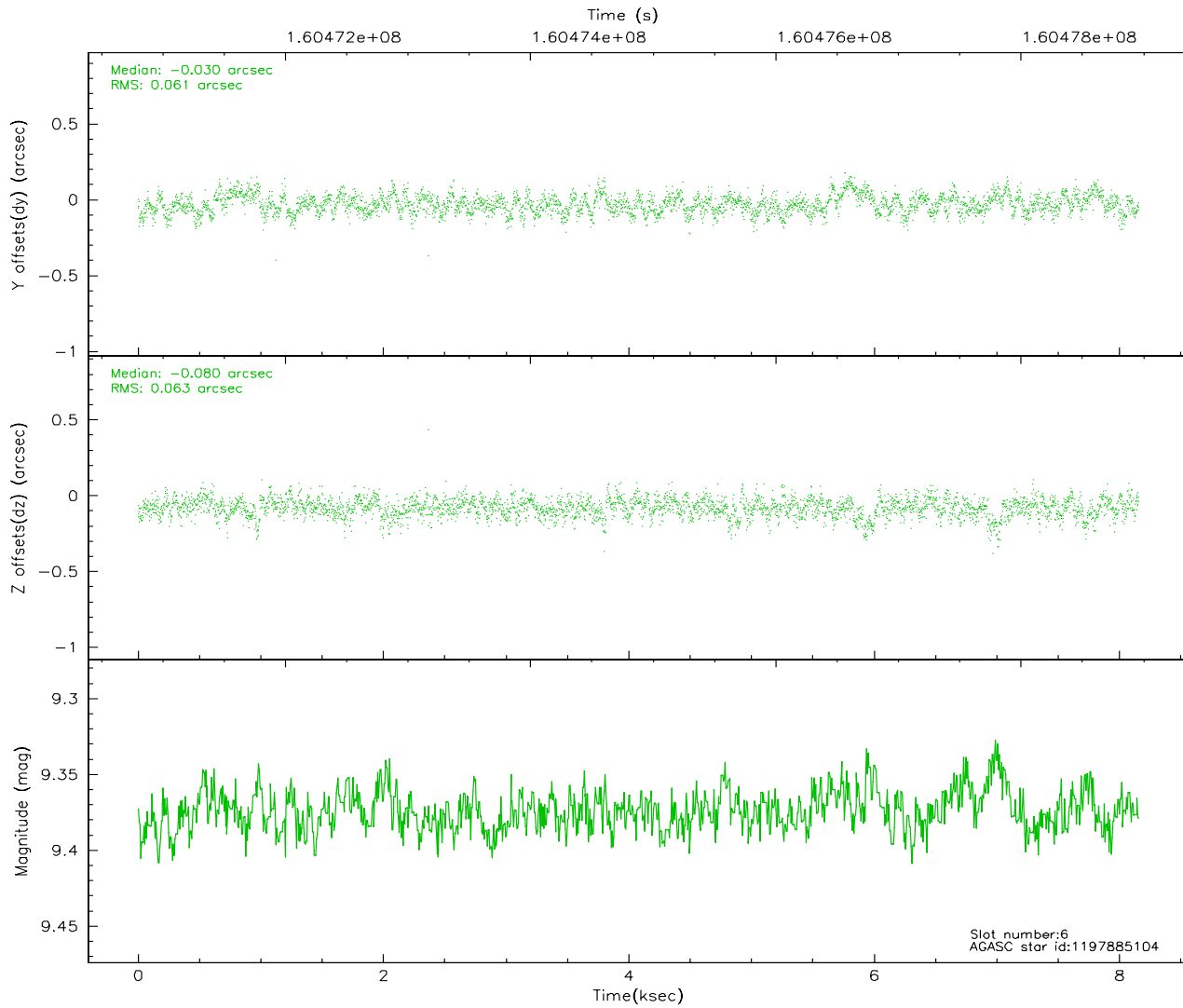
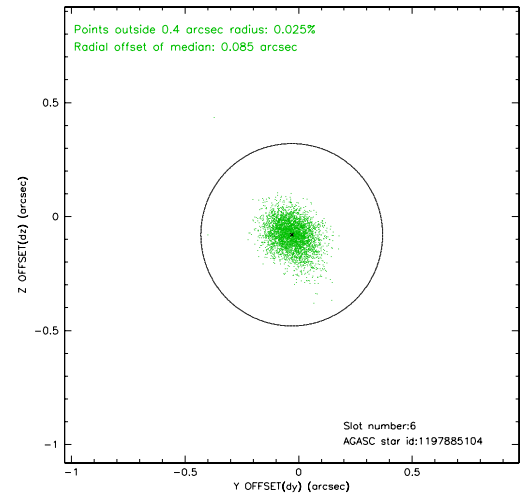
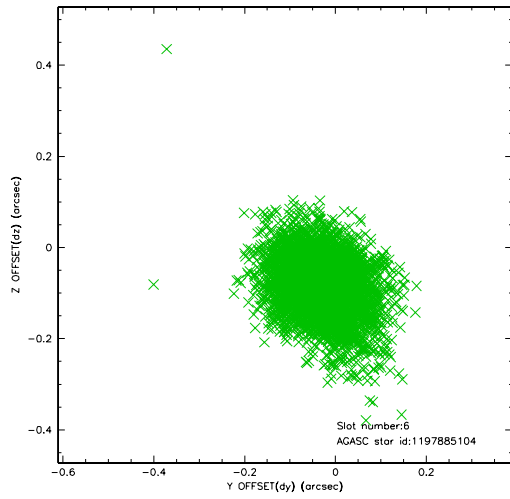
2.4.2 Slot 4



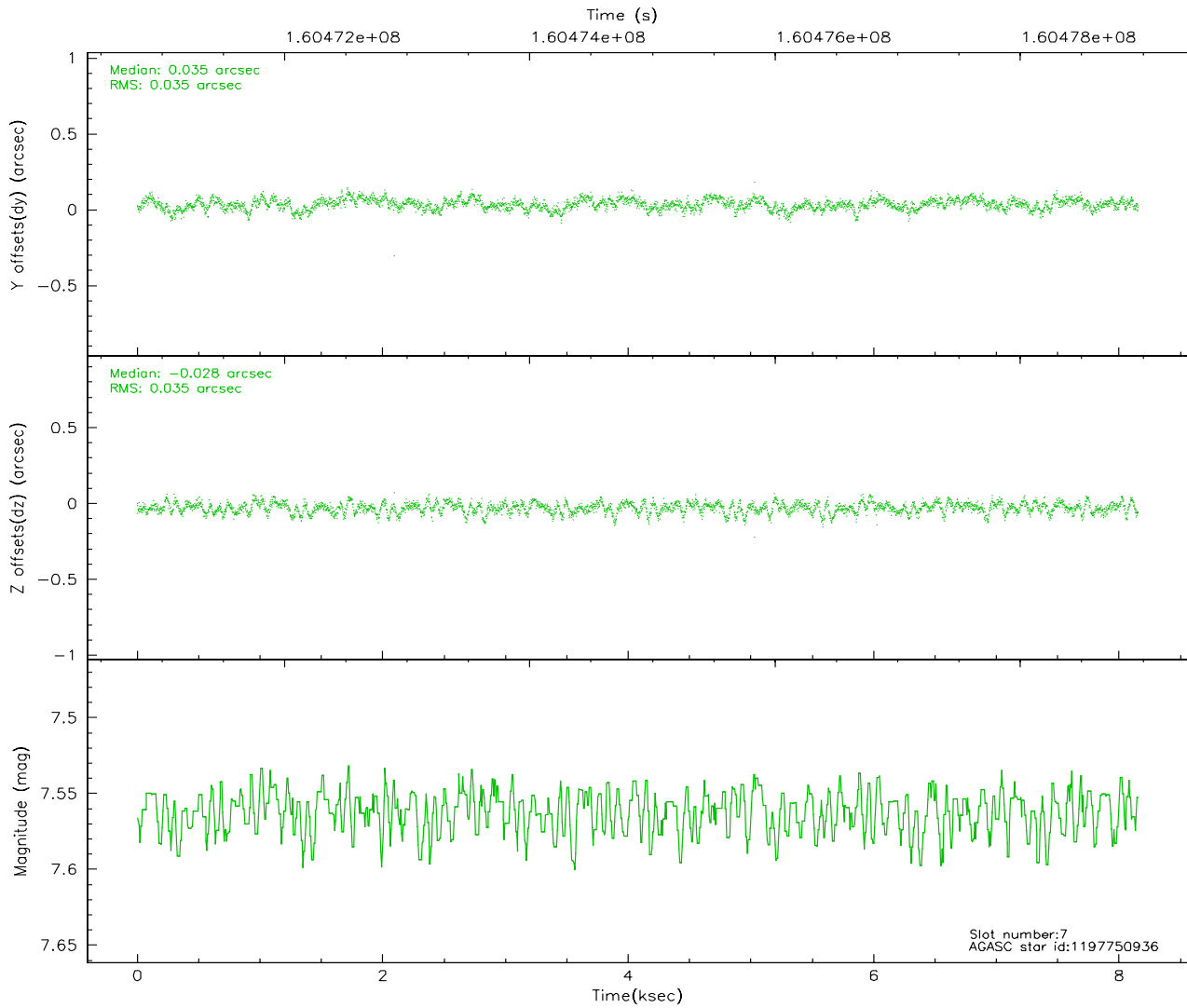
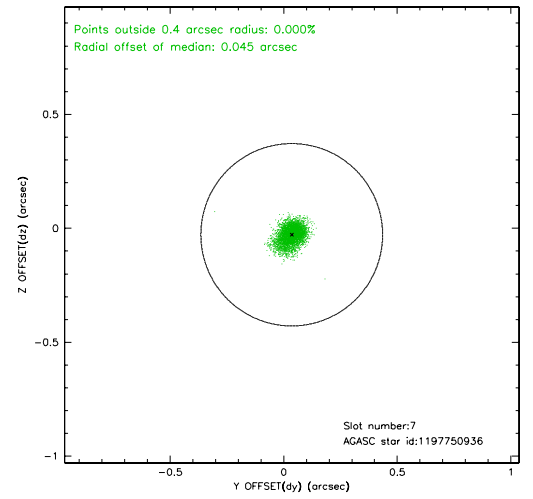
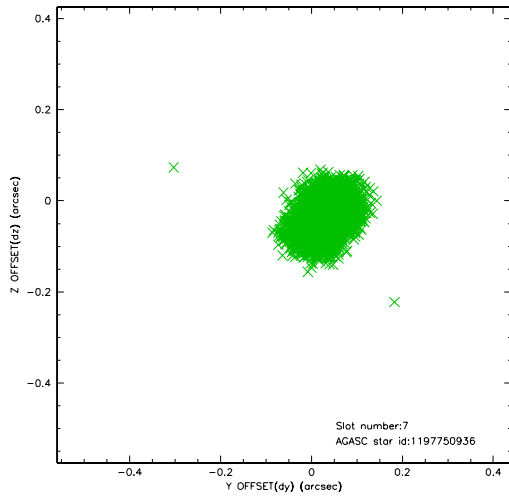
2.4.3 Slot 5



2.4.4 Slot 6

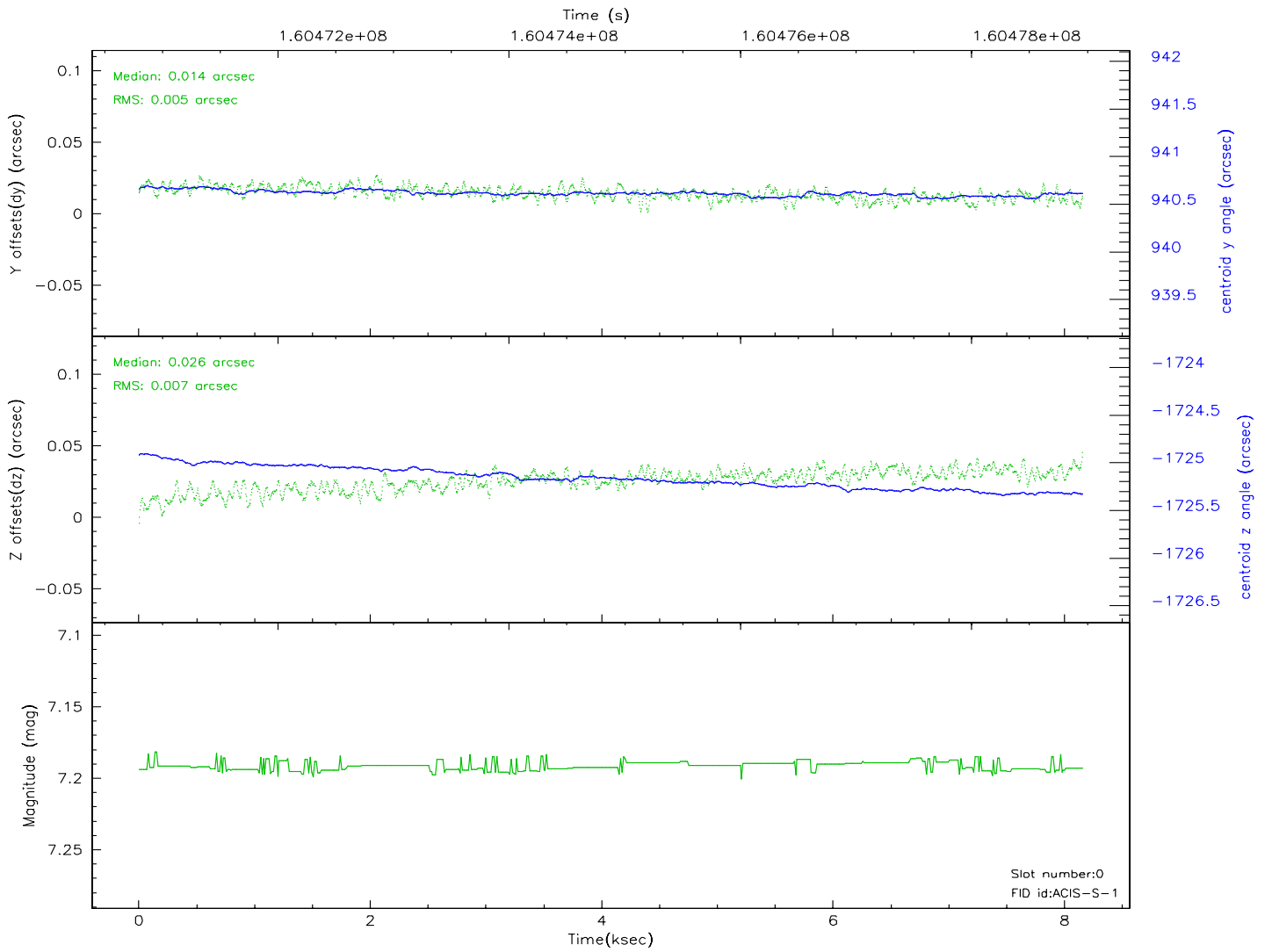
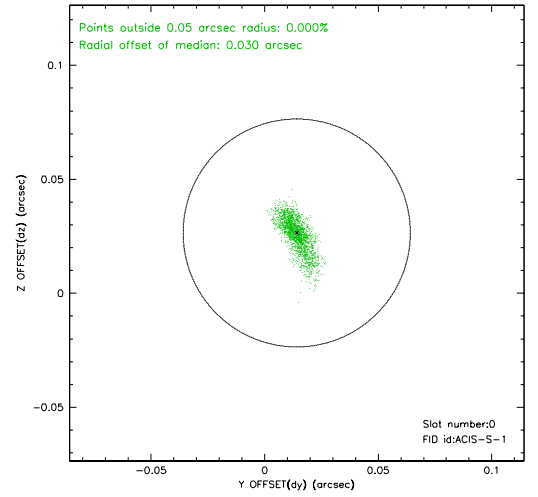
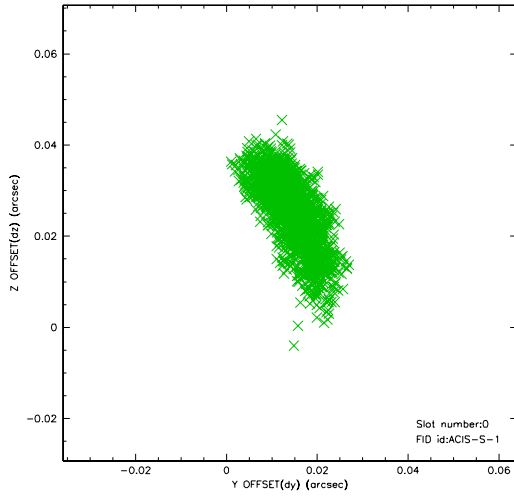


2.4.5 Slot 7

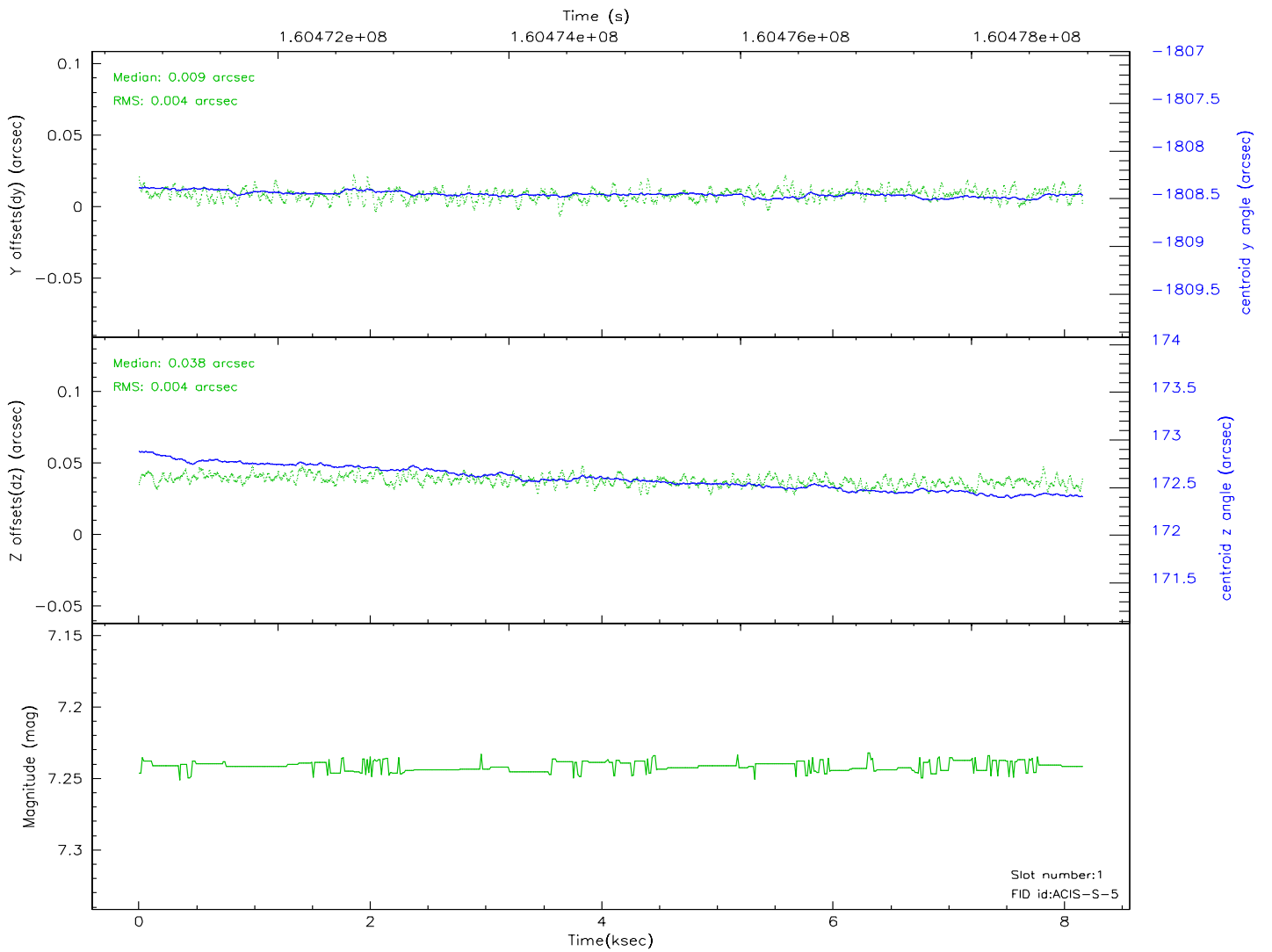
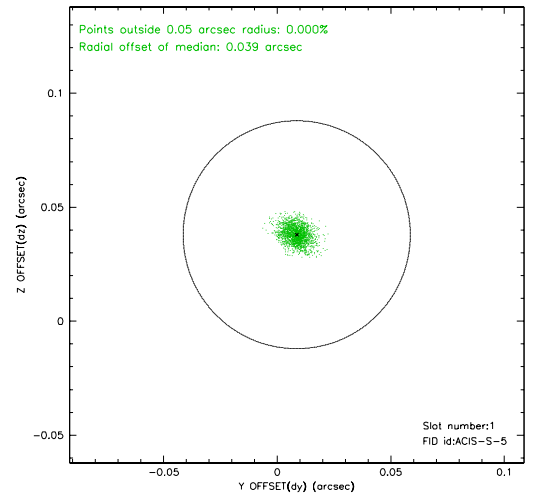
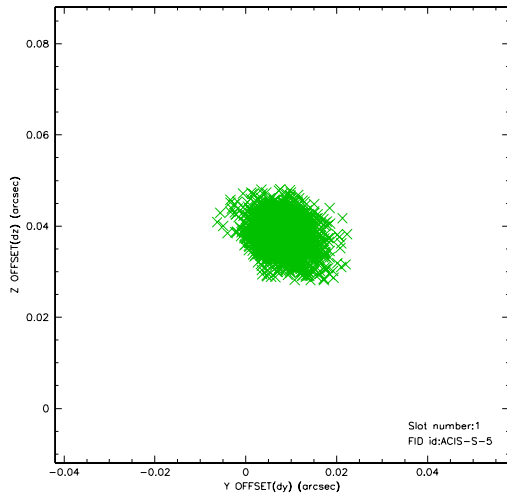


2.5 FID Slots

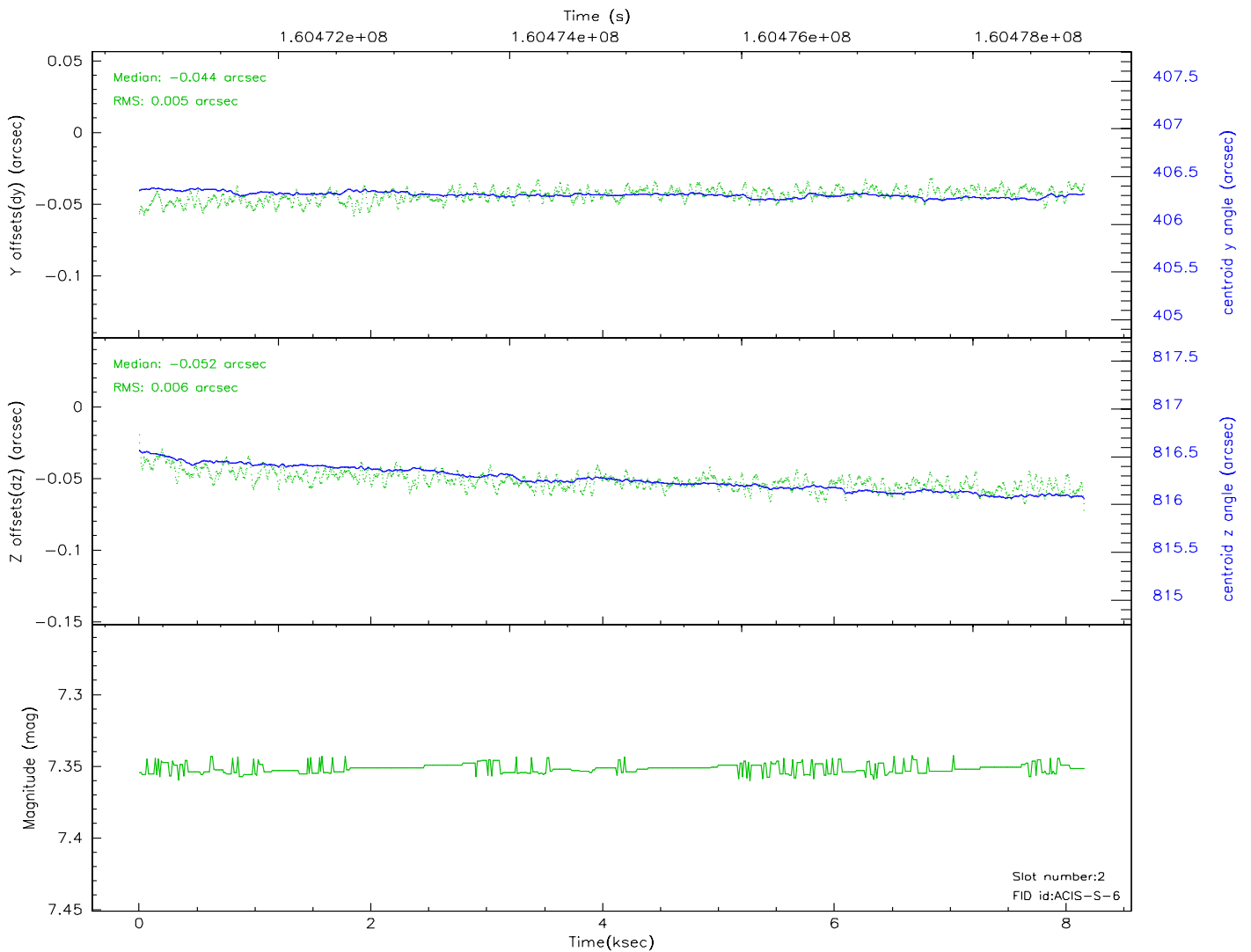
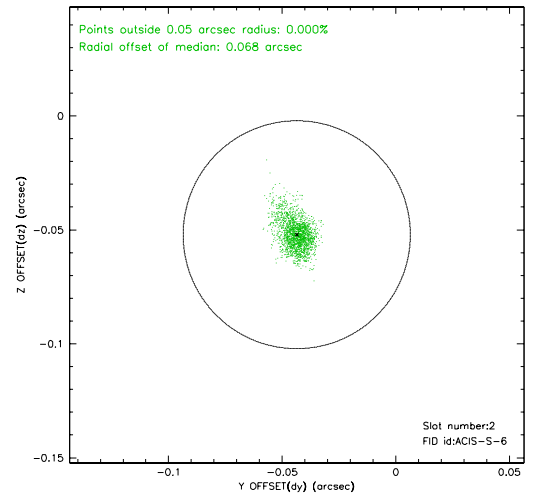
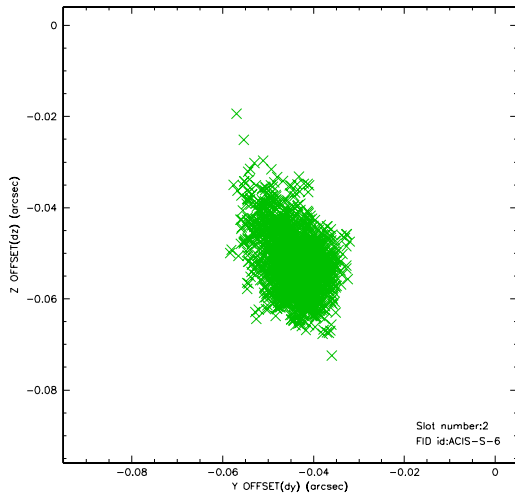
2.5.1 Slot 0



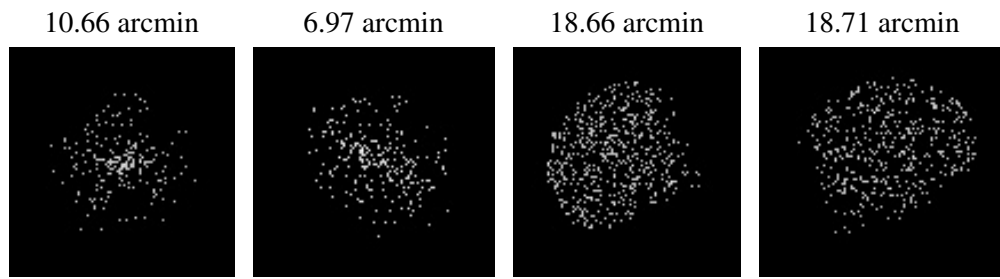
2.5.2 Slot 1



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 | 7.728 |

A.2 Comments

Window constraint met.