

V&V Reference Report

L2 ASCDS Version : 7.6.8

Observation 3525 - L2 Version 001
Chandra X-Ray Center

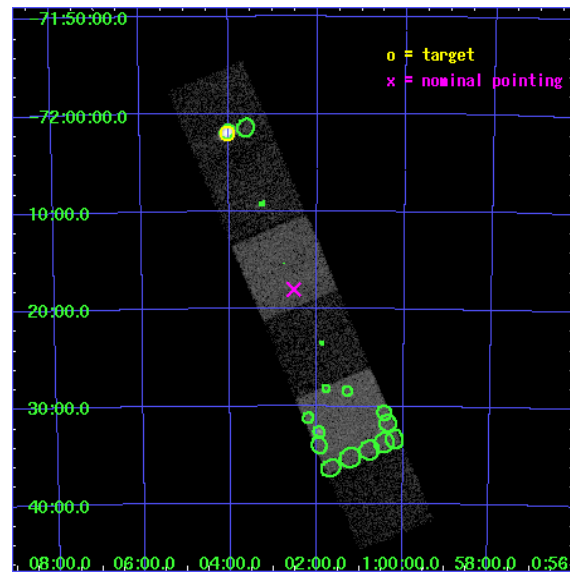
L2 Processing Date : Jul 20 2006

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

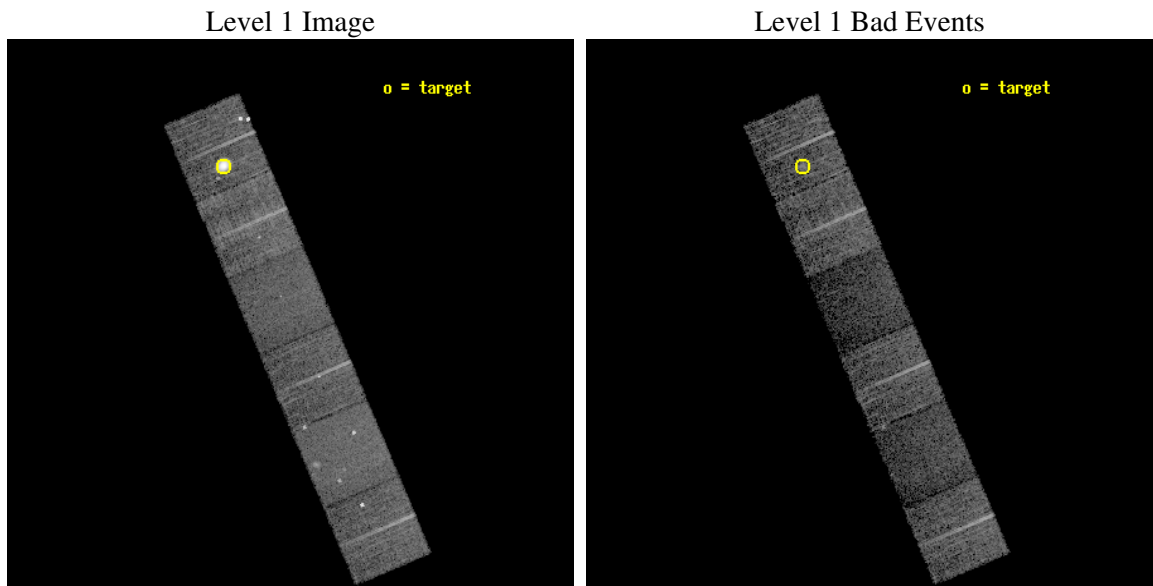
| | |
|----------|--|
| seq_num | 590280 |
| obs_id | 3525 |
| title | AO4A ACIS-S CALIBRATION OBSERVATIONS OF E0102-72 |
| observer | Dr. CXC Calibration |
| object | E0102-72[S5,-120,-17.29,0,0] |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 16.01 |
| dec_targ | -72.032028 |
| ra_nom | 15.632297269805 |
| dec_nom | -72.300325412596 |
| roll_nom | 246.98295028835 |
| revision | 2 |
| ontime | 7727.999971211 |
| livetime | 7630.1433823326 |
| ontime4 | 7727.999971211 |
| ontime5 | 7727.999971211 |
| ontime6 | 7727.999971211 |
| ontime7 | 7727.999971211 |
| ontime8 | 7724.7590009272 |
| ontime9 | 7727.999971211 |
| l2events | 75268 |



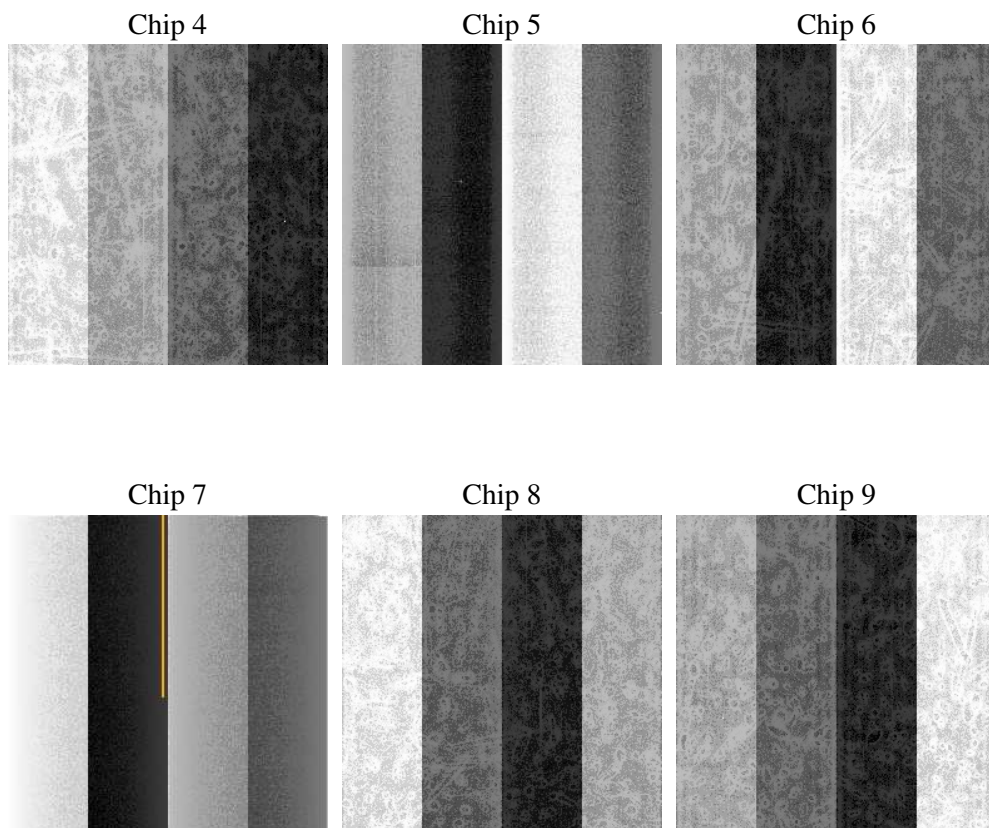
2 OBI

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 | 2006-07-20T14:32:00 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 7973.000000 |
| ontime | 7733.0257548094 |
| ontime4 | 7733.0257548094 |
| ontime5 | 7733.0257747173 |
| ontime6 | 7733.0257548094 |
| ontime7 | 7733.0257747173 |
| ontime8 | 7729.7847845256 |
| ontime9 | 7733.0257548094 |
| l1events | 282720 |

2.1.4 Events

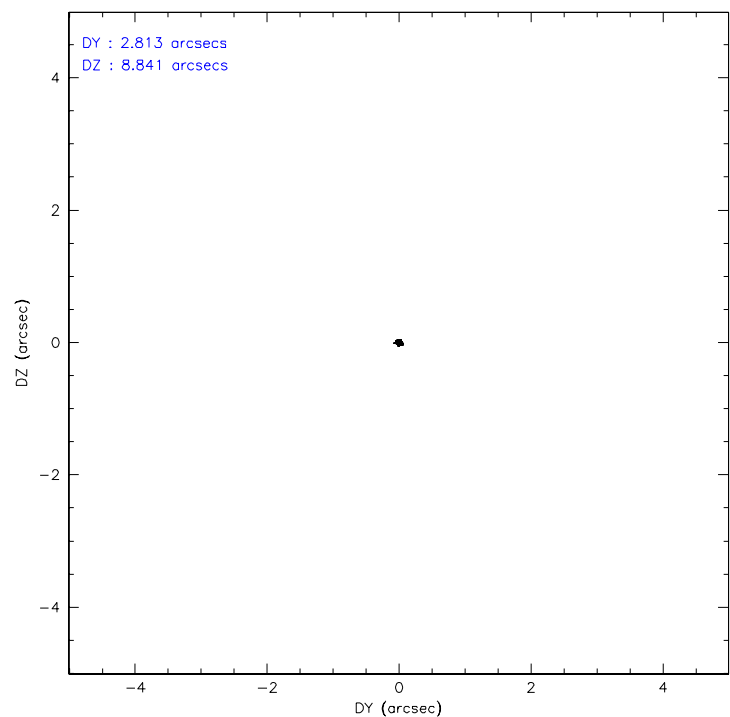
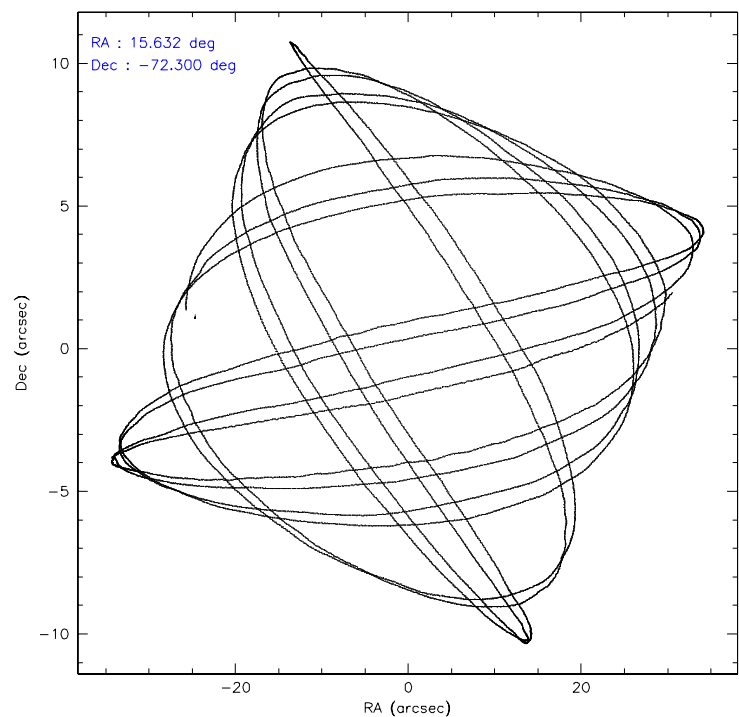
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 44501 | 47374 | 39510 | 36129 | 50599 | 64607 |
| rejected events | 38281 | 21879 | 34903 | 18576 | 38941 | 34634 |
| rejected % | 86% | 46% | 88% | 51% | 76% | 53% |

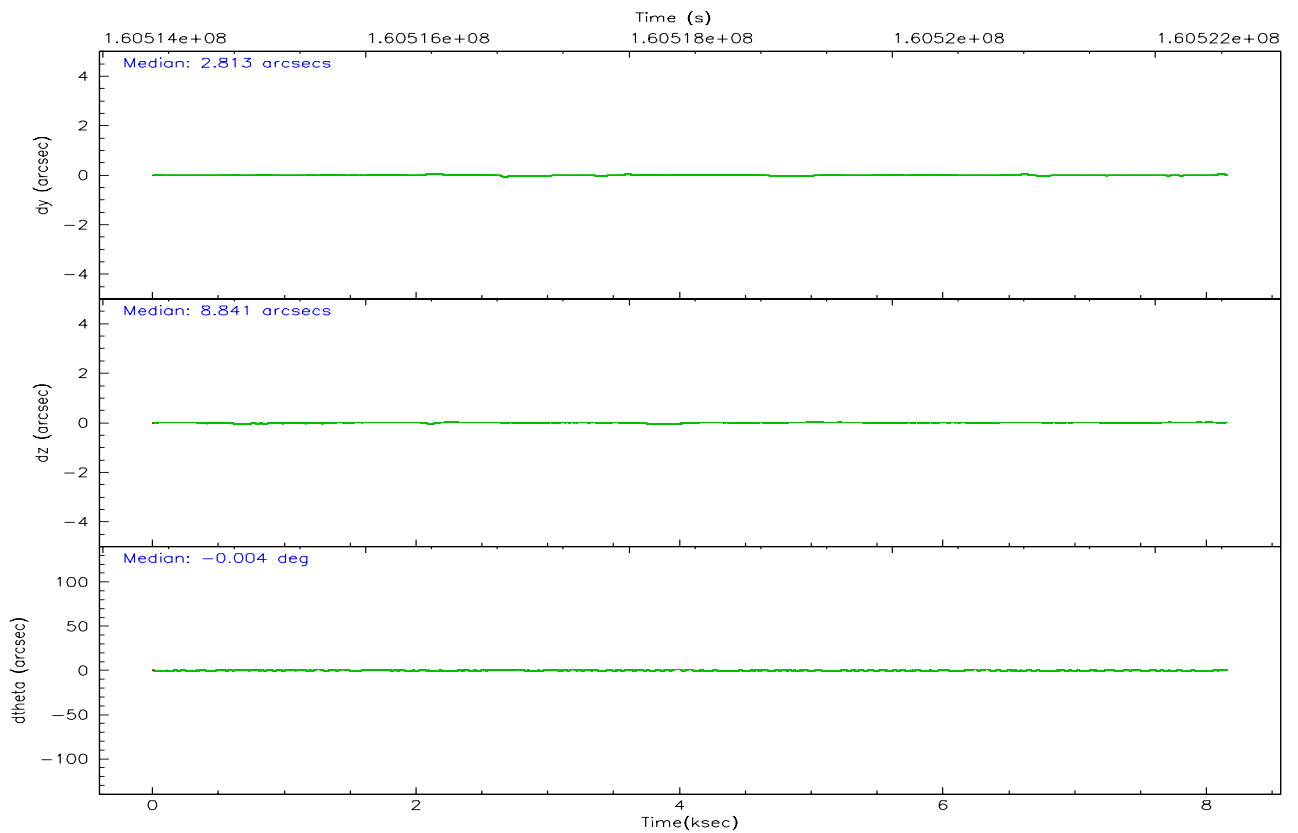
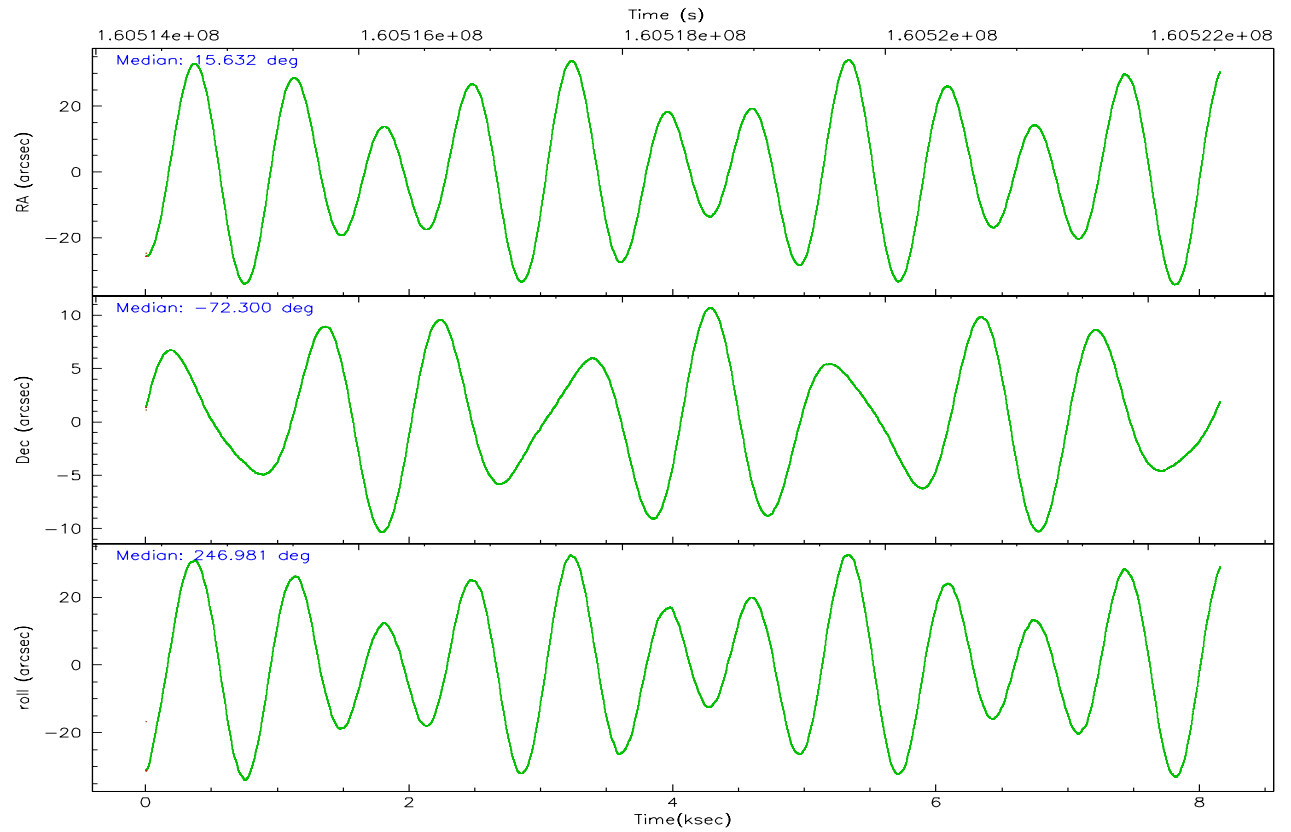
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 3719 | 3152 | 1997 | 1412 | 3674 | 22973 |
| | 8% | 6% | 5% | 3% | 7% | 35% |
| grade 1 events | 42 | 86 | 23 | 20 | 36 | 137 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 975 | 7680 | 912 | 4462 | 2400 | 4435 |
| | 2% | 16% | 2% | 12% | 4% | 6% |
| grade 3 events | 474 | 813 | 504 | 1151 | 1302 | 805 |
| | 1% | 1% | 1% | 3% | 2% | 1% |
| grade 4 events | 427 | 725 | 454 | 1108 | 1316 | 766 |
| | 0% | 1% | 1% | 3% | 2% | 1% |
| grade 5 events | 1233 | 2607 | 1256 | 2868 | 1836 | 1472 |
| | 2% | 5% | 3% | 7% | 3% | 2% |
| grade 6 events | 632 | 13139 | 743 | 9434 | 2966 | 1013 |
| | 1% | 27% | 1% | 26% | 5% | 1% |
| grade 7 events | 36999 | 19172 | 33621 | 15674 | 37069 | 33006 |
| | 83% | 40% | 85% | 43% | 73% | 51% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-456789 | ACIS-456789 | 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 | 15.620206 | 15.63229726980511 | Alternating exposures requested | N | N |
| Pointing Dec | -72.273377 | -72.30032541259565 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 246.814815 | 246.9829502883482 | | | |
| 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 | 160514569.184000 | 160514193.09481 | | | |
| Observation start date | 2003-02-01T19:21:45 | 2003-02-01T19:16:33 | | | |
| Observation end time | 160522542.184000 | 160522675.99517 | | | |
| Observation end date | 2003-02-01T21:34:38 | 2003-02-01T21:37:55 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



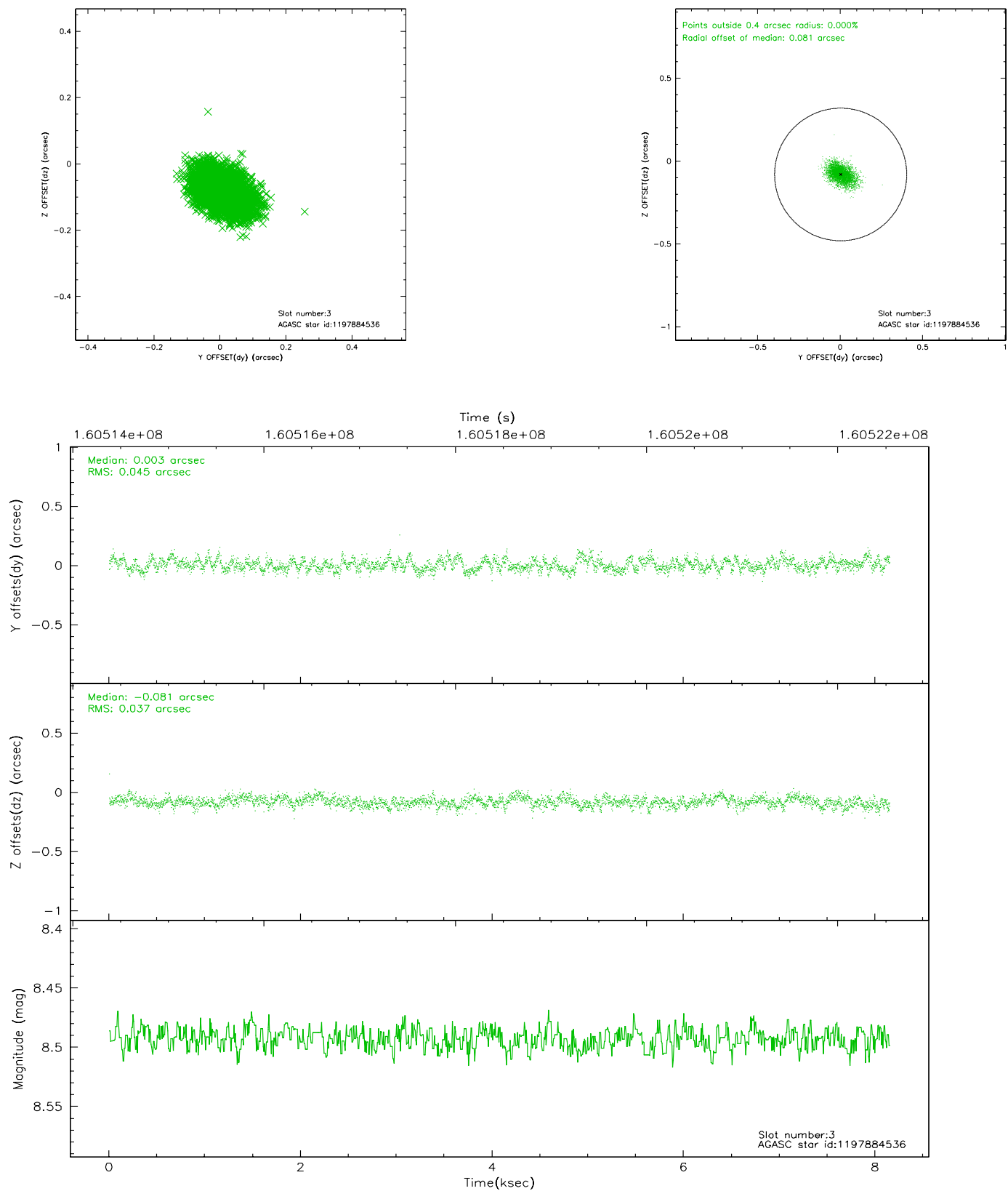


Slot Statistics

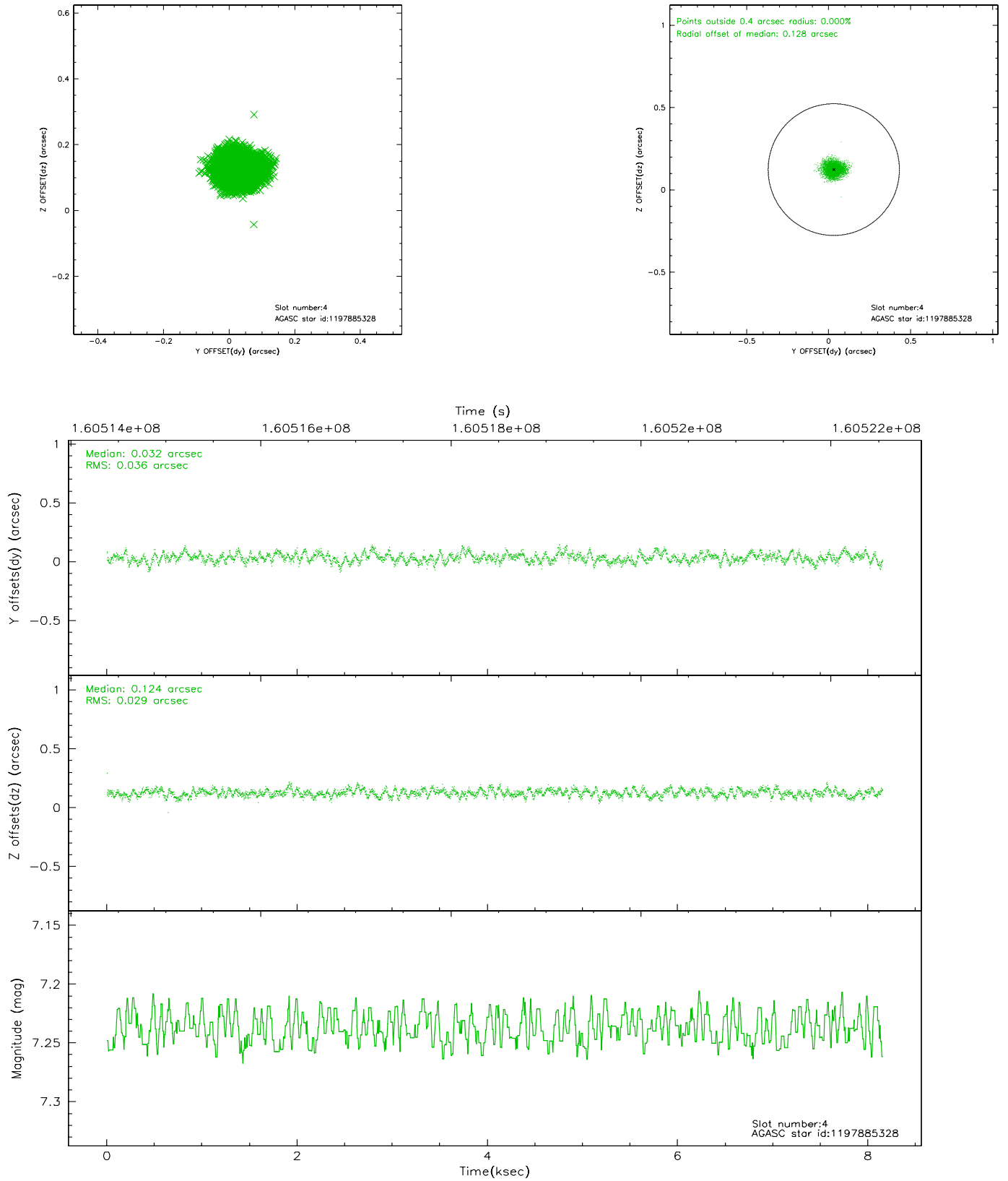
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 1989 | -0.012 | 0.013 | 0.007 | 0.011 | 0.000000 | 0.000000 | -755.45 | -1729.99 |
| 1 | FID | ACIS-S-4 | 7.20 | 1989 | -0.045 | 0.002 | 0.005 | 0.010 | 0.000000 | 0.000000 | 2157.47 | 177.78 |
| 2 | FID | ACIS-S-5 | 7.24 | 1989 | 0.026 | -0.007 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1807.38 | 172.21 |
| 3 | GUIDE | 1197884536 | 8.49 | 3977 | 0.003 | -0.081 | 0.061 | 0.103 | 17.160729 | -71.835289 | -2109.93 | 976.96 |
| 4 | GUIDE | 1197885328 | 7.24 | 3978 | 0.032 | 0.124 | 0.049 | 0.078 | 16.283090 | -71.733943 | -2076.42 | -74.70 |
| 5 | GUIDE | 1198189696 | 7.36 | 3978 | -0.058 | -0.099 | 0.055 | 0.085 | 15.223750 | -72.697522 | 1571.58 | 211.68 |
| 6 | GUIDE | 1197750936 | 7.55 | 3977 | 0.030 | -0.019 | 0.062 | 0.095 | 15.387940 | -71.549550 | -2289.97 | -1268.83 |
| 7 | GUIDE | 1198282744 | 9.01 | 3975 | -0.006 | 0.077 | 0.073 | 0.117 | 17.028326 | -73.013356 | 1881.29 | 2417.02 |

2.4 Star Slots

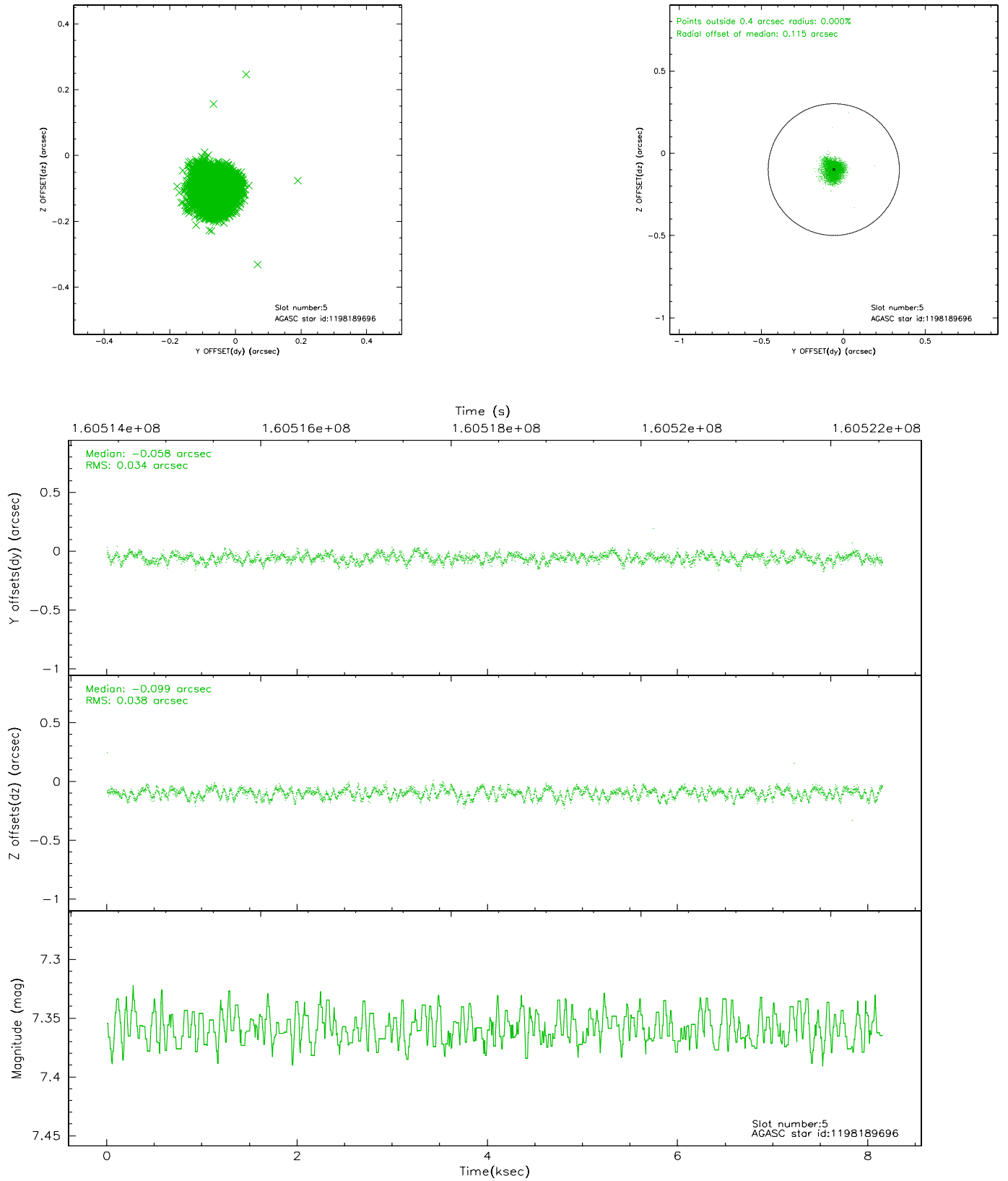
2.4.1 Slot 3



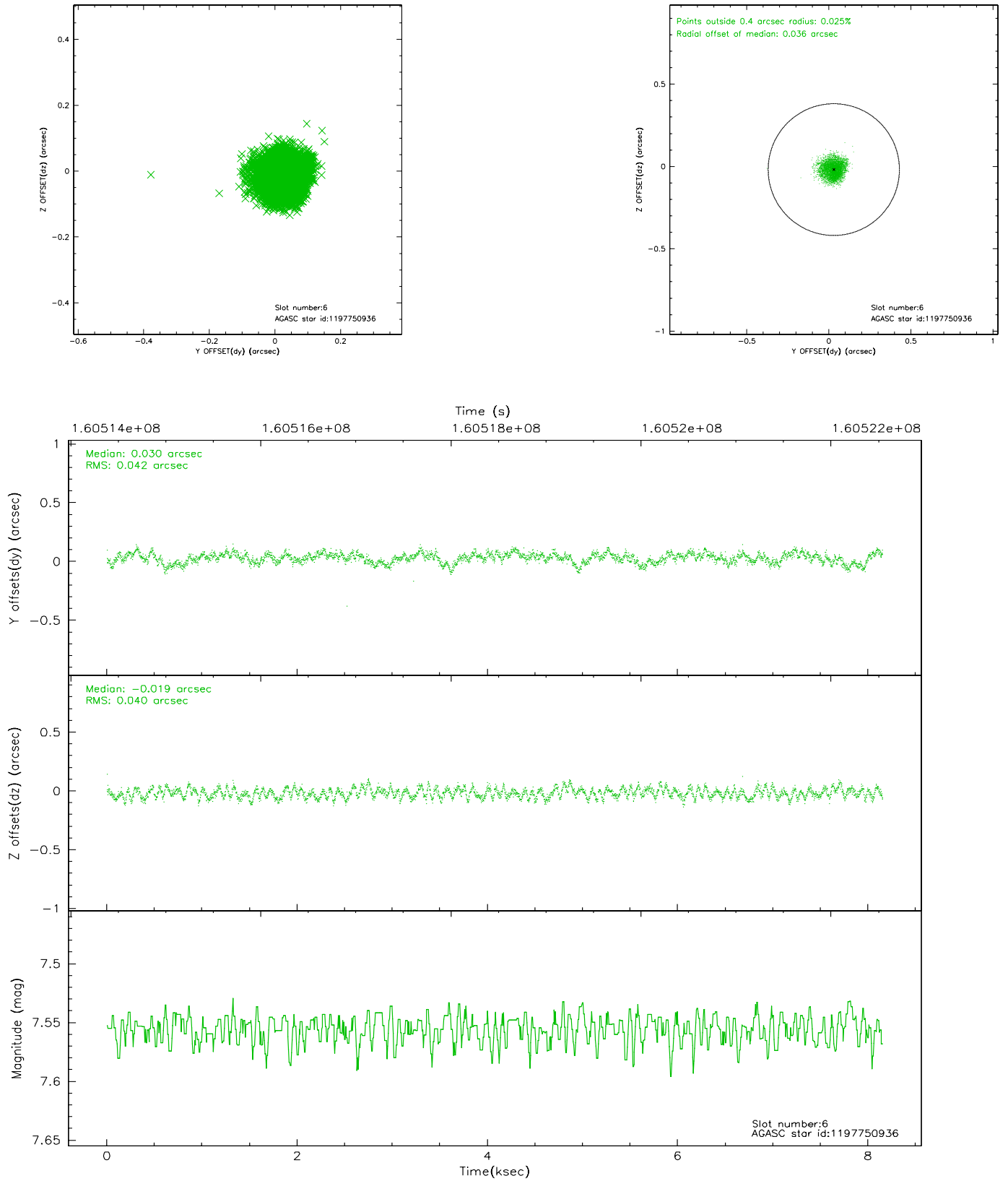
2.4.2 Slot 4



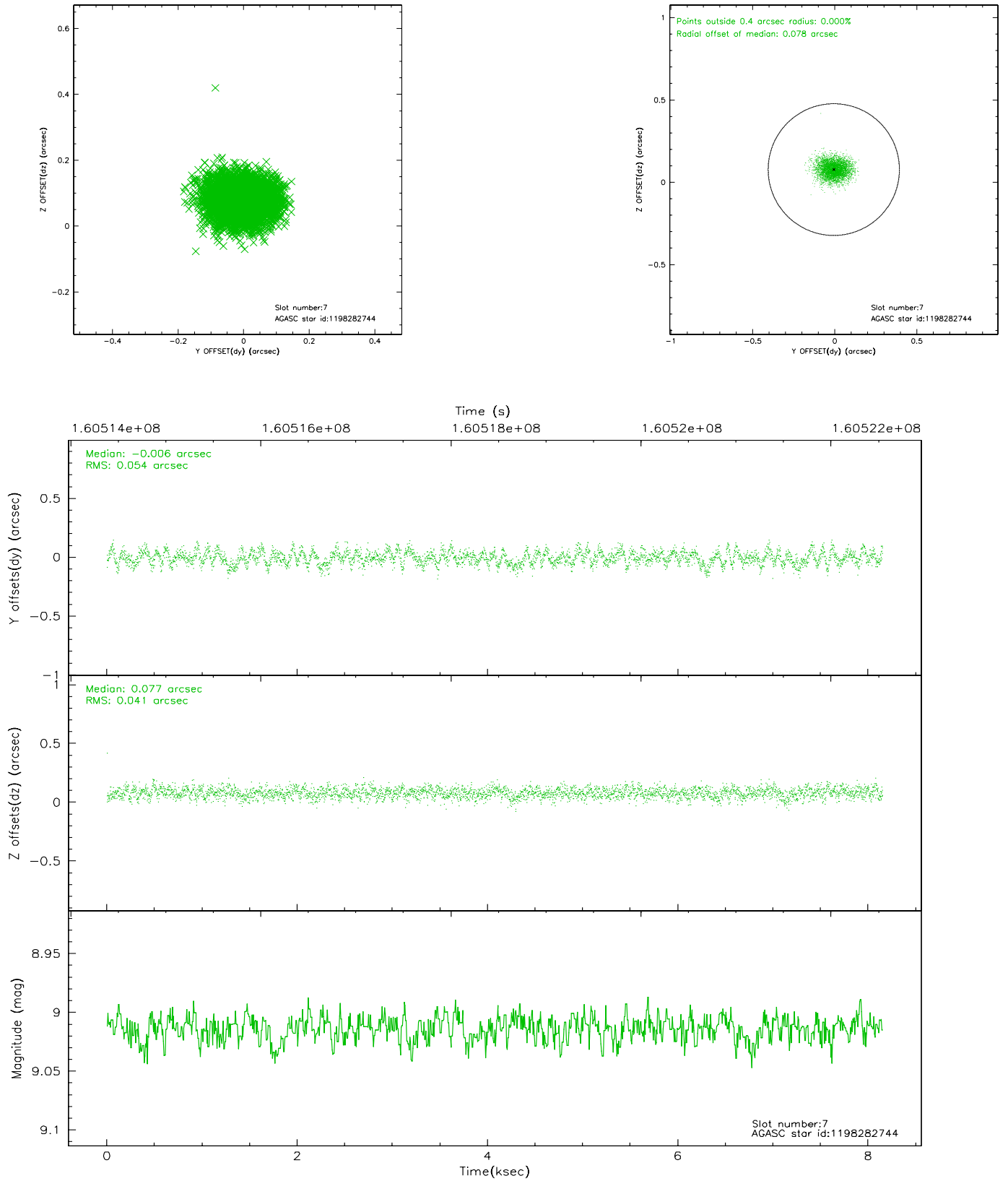
2.4.3 Slot 5



2.4.4 Slot 6

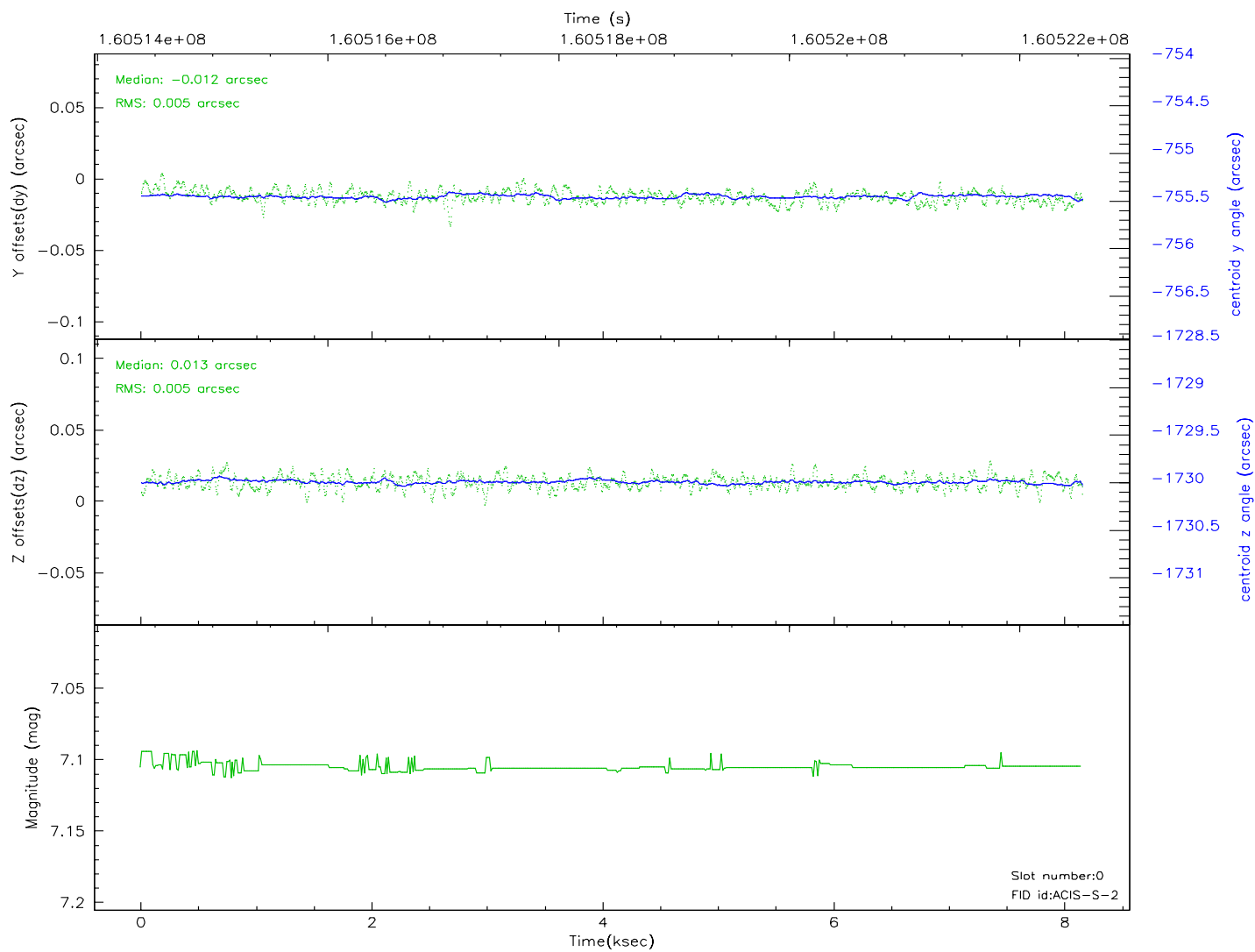
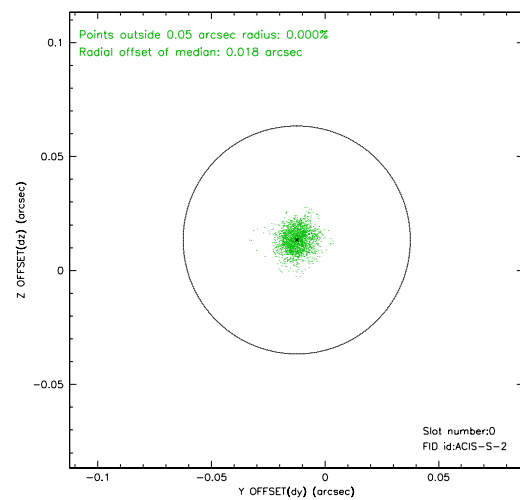
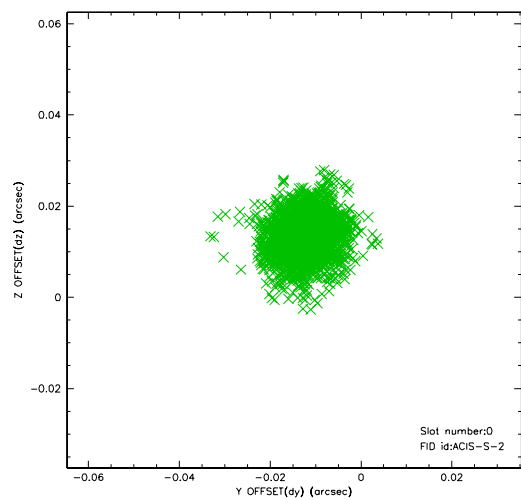


2.4.5 Slot 7

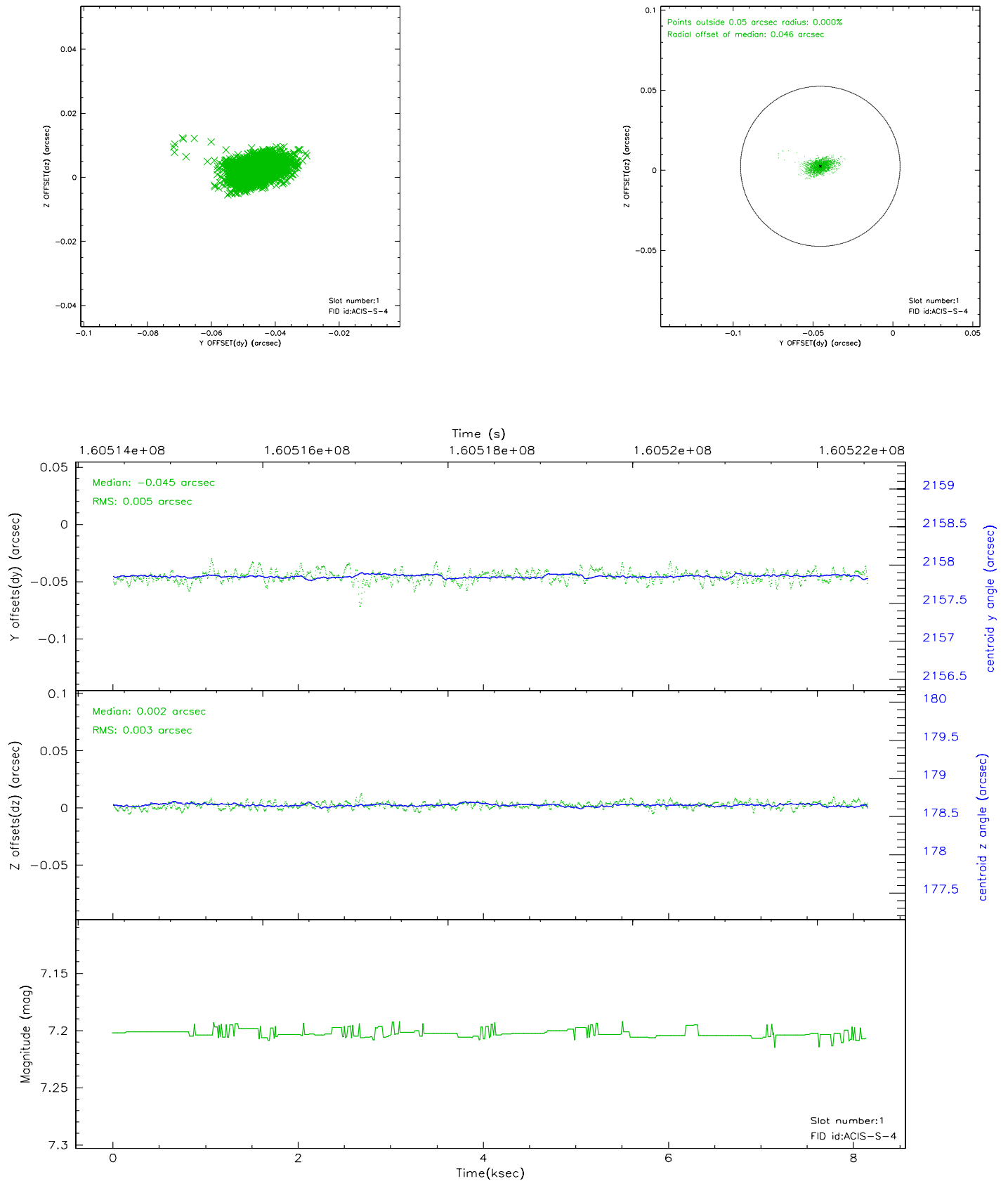


2.5 FID Slots

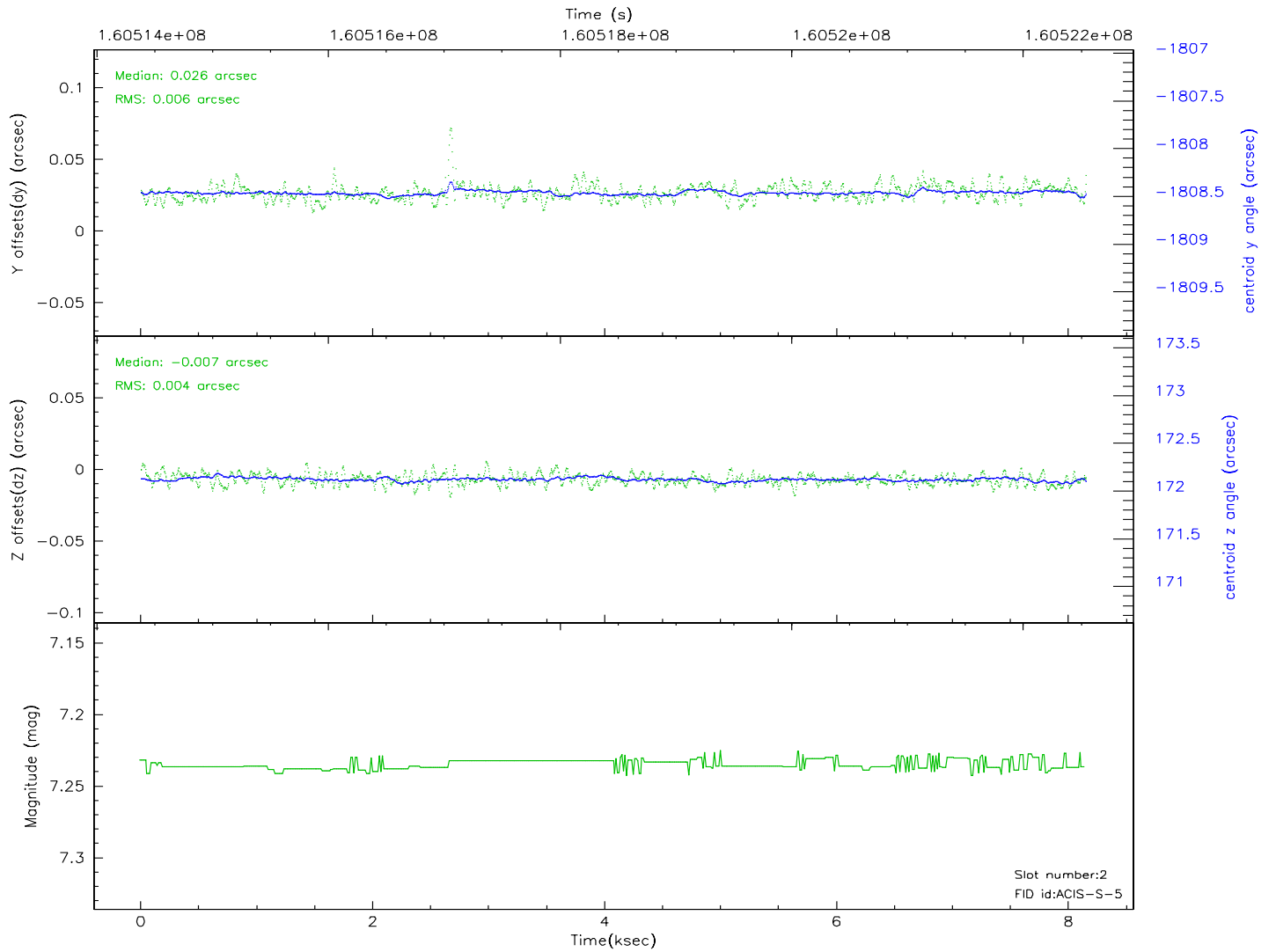
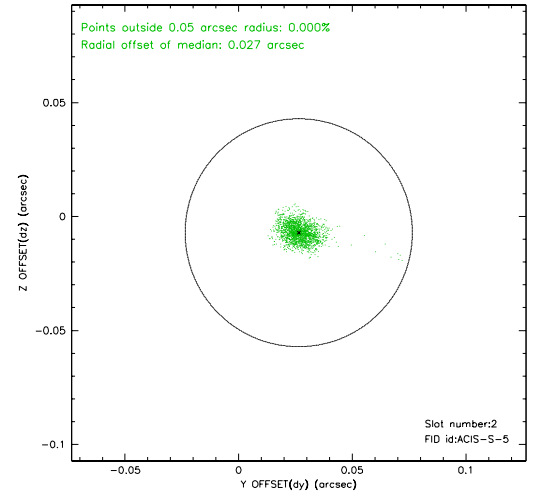
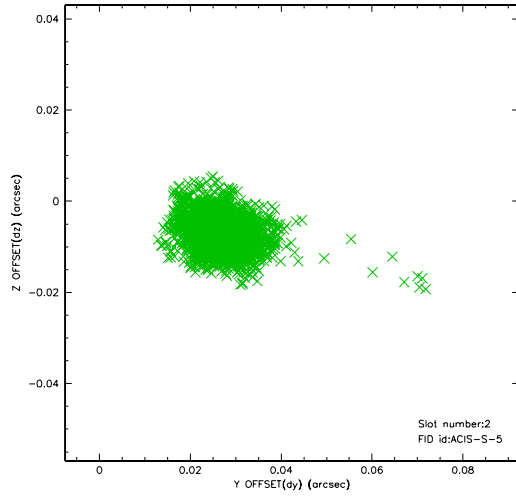
2.5.1 Slot 0



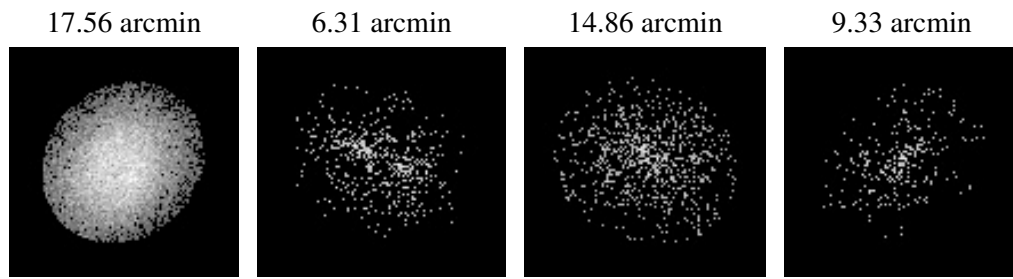
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2006.07.20 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.731 |

A.2 Comments

Window constraint satisfied.