

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 3334 - L2 Version 001
Chandra X-Ray Center

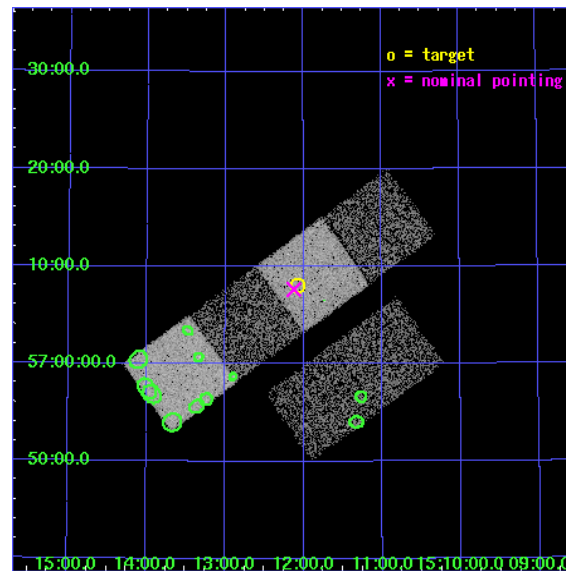
L2 Processing Date : Oct 5 2006

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1 Front

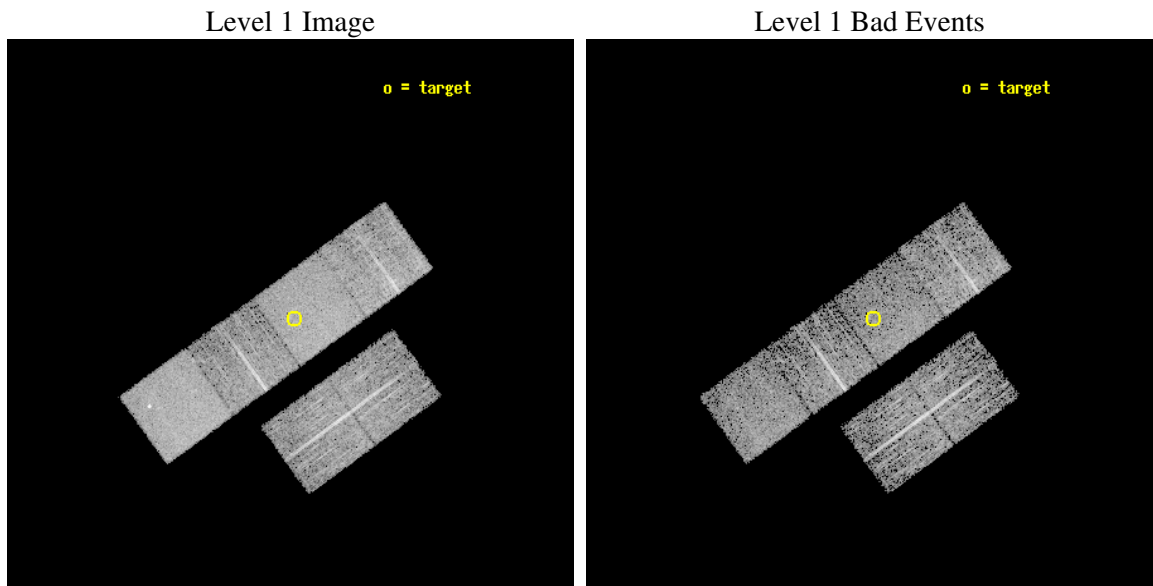
| | |
|----------|---|
| seq_num | 900173 |
| obs_id | 3334 |
| title | THE SHEEP SURVEY: WHAT KIND OF OBJECTS MAKE THE X-RAY BACKGROUND? |
| observer | Professor Kirpal Nandra |
| object | AX J1512.0+5708 |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 228.018333 |
| dec_targ | 57.134722 |
| ra_nom | 228.0306290036 |
| dec_nom | 57.127726902608 |
| roll_nom | 323.95844651115 |
| revision | 2 |
| ontime | 4959.9999815226 |
| livetime | 4897.1934752031 |
| ontime2 | 4959.9999815226 |
| ontime3 | 4956.7590112686 |
| ontime5 | 4959.9999815226 |
| ontime6 | 4956.7590212524 |
| ontime7 | 4959.9999815226 |
| ontime8 | 4959.9999815226 |
| l2events | 50654 |



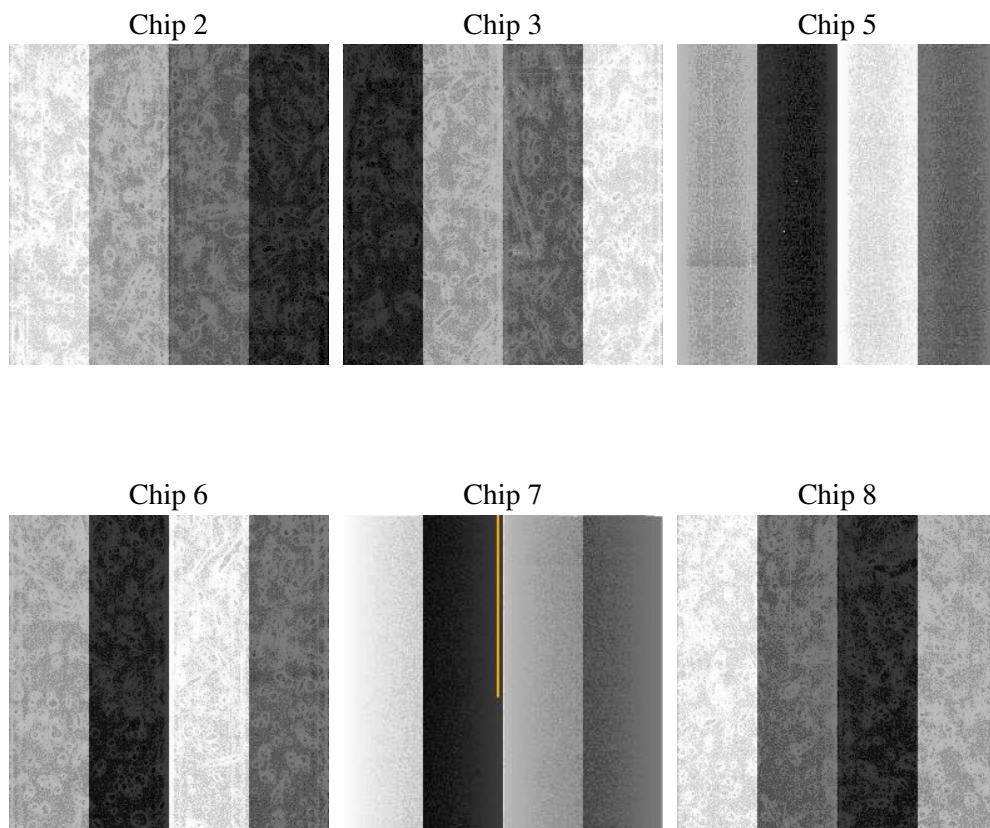
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.9 |
| caldsver | 3.2.3 |
| date | 2006-10-05T18:56:50 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 5000.000000 |
| ontime | 4965.2131157815 |
| ontime2 | 4965.2131157815 |
| ontime3 | 4961.9721455276 |
| ontime5 | 4965.2131157815 |
| ontime6 | 4961.9721555114 |
| ontime7 | 4965.2131157815 |
| ontime8 | 4965.21308586 |
| l1events | 225727 |

2.1.4 Events

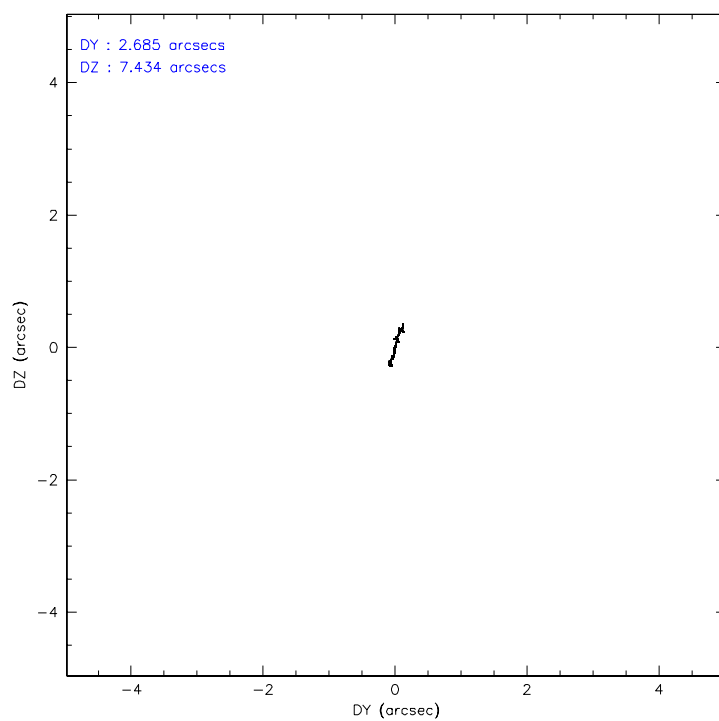
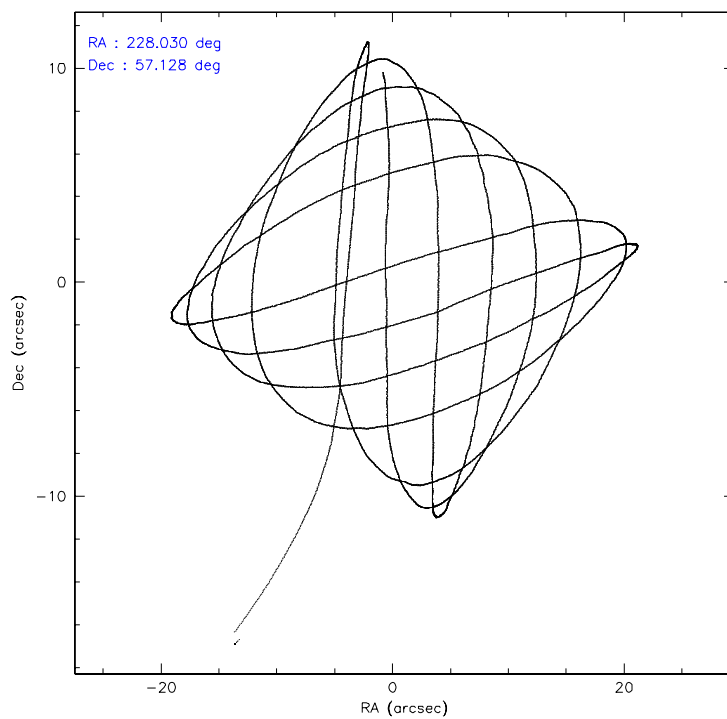
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 33149 | 31031 | 46977 | 31892 | 43182 | 39496 |
| rejected events | 29449 | 27480 | 25746 | 27921 | 25997 | 31770 |
| rejected % | 88% | 88% | 54% | 87% | 60% | 80% |

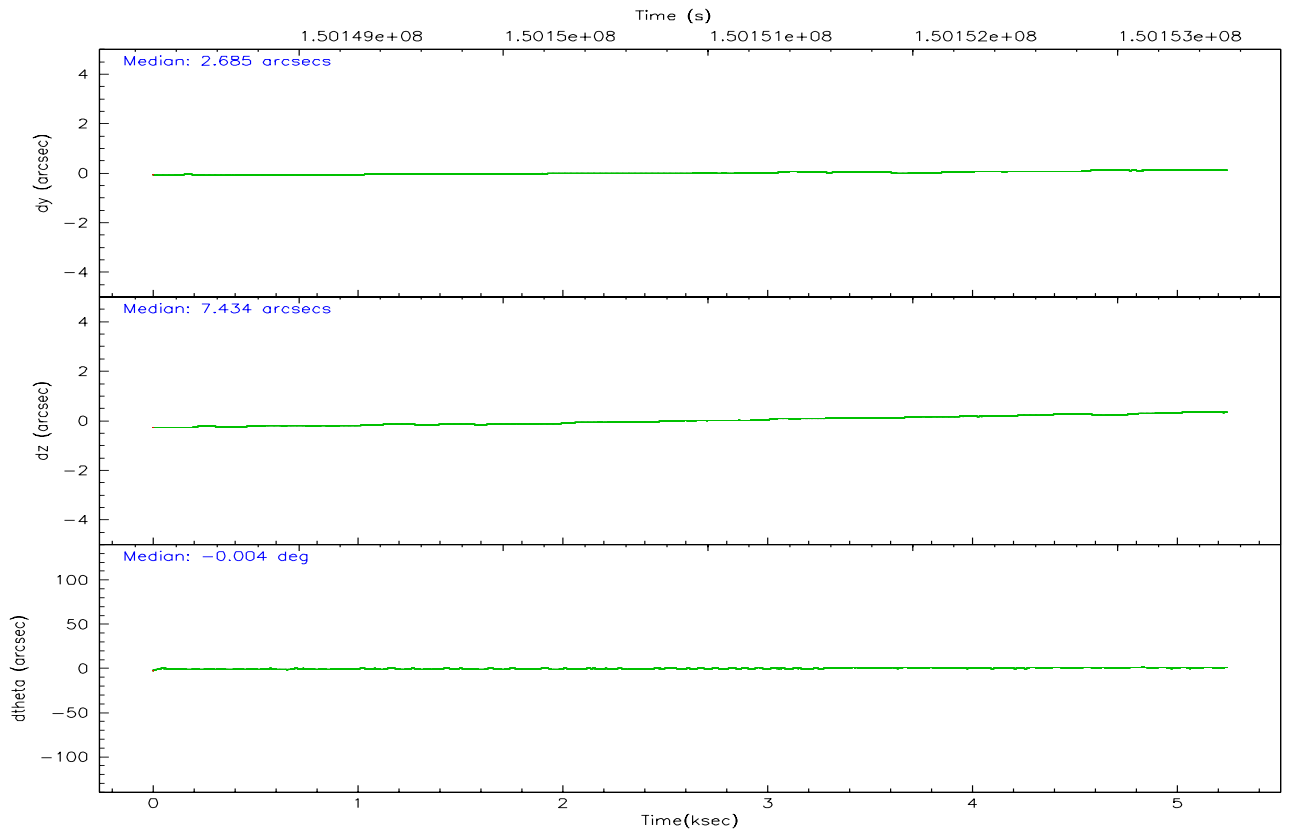
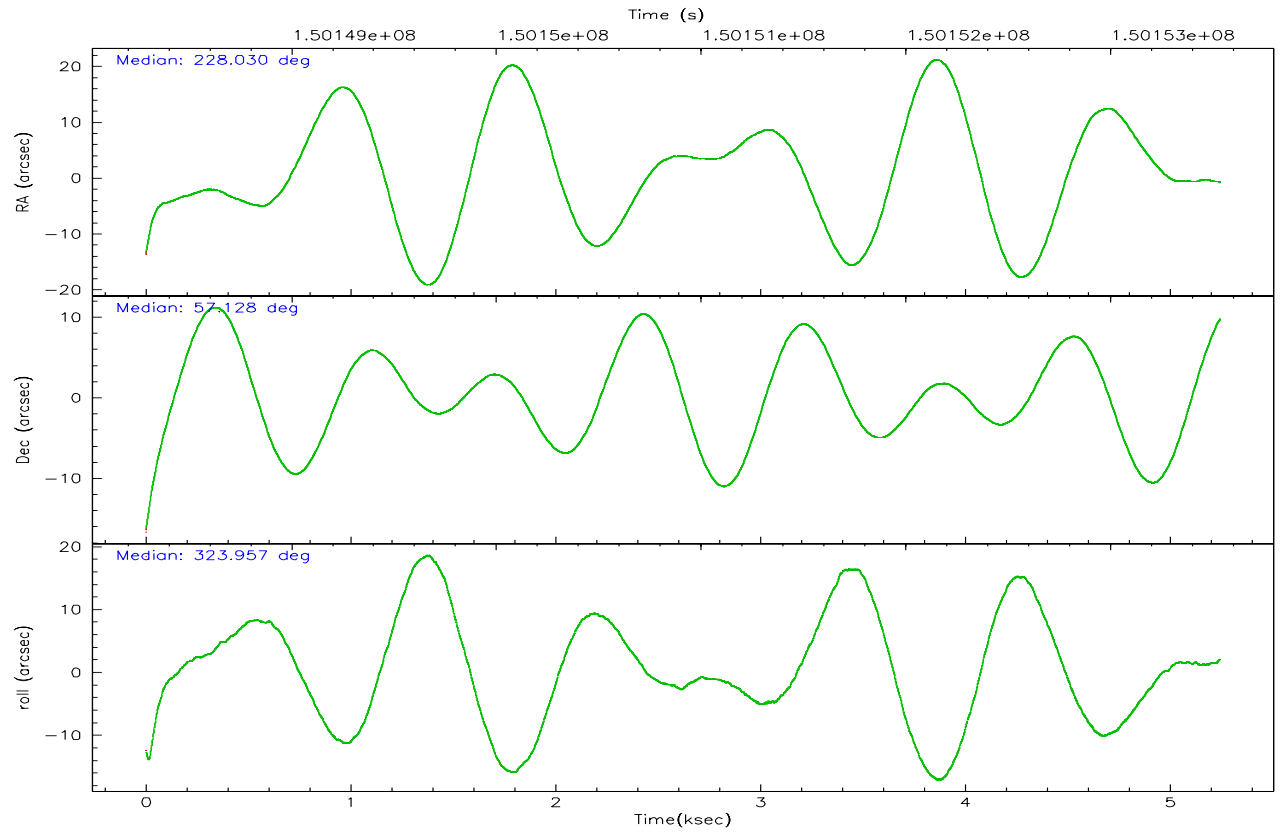
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 1625 | 1542 | 1438 | 1639 | 1149 | 2603 |
| | 4% | 4% | 3% | 5% | 2% | 6% |
| grade 1 events | 21 | 21 | 42 | 15 | 23 | 32 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 760 | 715 | 6360 | 854 | 4075 | 1642 |
| | 2% | 2% | 13% | 2% | 9% | 4% |
| grade 3 events | 357 | 327 | 489 | 343 | 865 | 839 |
| | 1% | 1% | 1% | 1% | 2% | 2% |
| grade 4 events | 351 | 359 | 483 | 354 | 832 | 780 |
| | 1% | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 1146 | 1313 | 2115 | 1382 | 2581 | 1733 |
| | 3% | 4% | 4% | 4% | 5% | 4% |
| grade 6 events | 612 | 616 | 12488 | 783 | 10277 | 1871 |
| | 1% | 1% | 26% | 2% | 23% | 4% |
| grade 7 events | 28277 | 26138 | 23562 | 26522 | 23380 | 29996 |
| | 85% | 84% | 50% | 83% | 54% | 75% |

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 | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| Pointing RA | 227.980718 | 228.0306290035975 | Subarray requested | NONE | NONE |
| Pointing Dec | 57.130228 | 57.12772690260842 | Alternating exposures requested | N | N |
| Pointing Roll | 323.843790 | 323.9584465111522 | Primary exposure time | 0.000000 | 3.2 |
| SIM focus pos (mm) | -0.684267 | -0.6828225247311905 | | | |
| SIM defocus (mm) | 0 | 0.001444936568705701 | | | |
| SIM translation stage pos (mm) | -190.132523 | -190.1400660498719 | | | |
| SIM translation stage offset (mm) | 0 | 0.00754346686406393 | | | |
| Observation start time | 150148533.184000 | 150147539.97517 | | | |
| Observation start date | 2002-10-04T19:54:29 | 2002-10-04T19:38:59 | | | |
| Observation end time | 150153533.184000 | 150154299.33795 | | | |
| Observation end date | 2002-10-04T21:17:49 | 2002-10-04T21:31:39 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



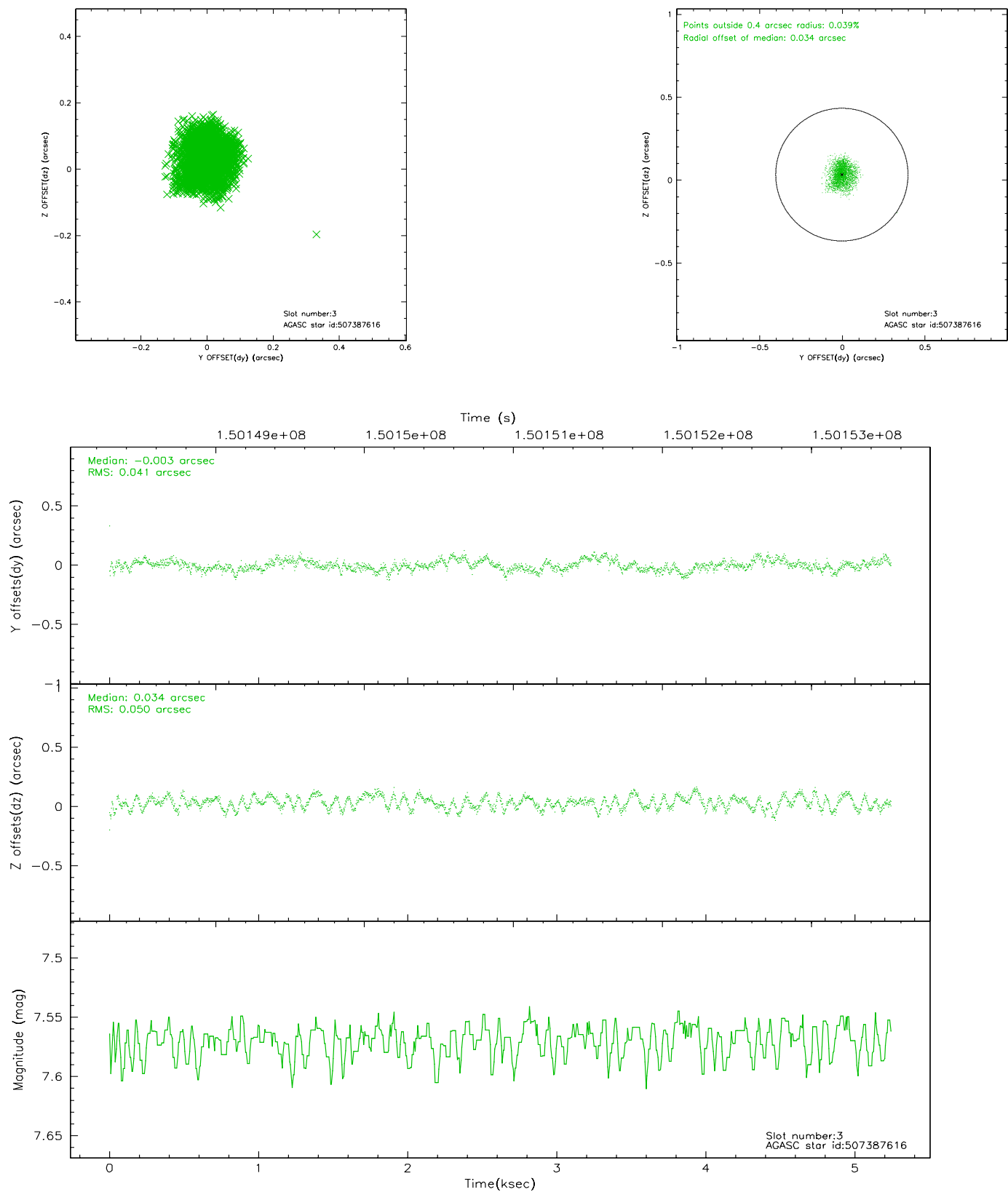


Slot Statistics

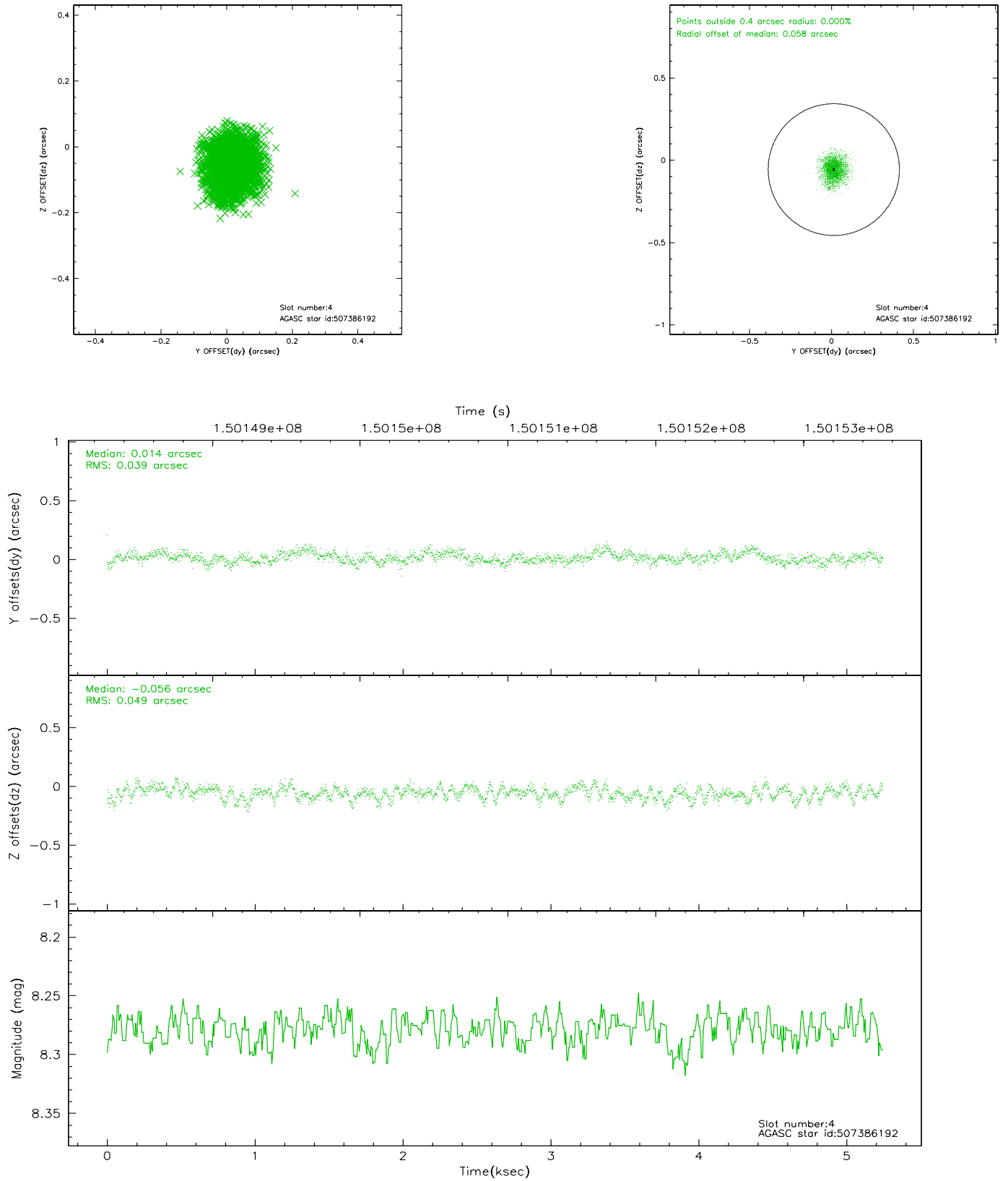
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 1280 | 0.000 | 0.026 | 0.008 | 0.013 | 0.000000 | 0.000000 | -755.34 | -1728.60 |
| 1 | FID | ACIS-S-4 | 7.20 | 1280 | -0.062 | -0.007 | 0.005 | 0.008 | 0.000000 | 0.000000 | 2157.37 | 178.65 |
| 2 | FID | ACIS-S-5 | 7.24 | 1280 | 0.030 | -0.010 | 0.008 | 0.014 | 0.000000 | 0.000000 | -1806.65 | 173.65 |
| 3 | GUIDE | 507387616 | 7.57 | 2559 | -0.003 | 0.034 | 0.071 | 0.107 | 227.343190 | 57.112136 | -969.70 | -783.03 |
| 4 | GUIDE | 507386192 | 8.28 | 2559 | 0.014 | -0.056 | 0.066 | 0.111 | 228.408253 | 57.191638 | 542.22 | 672.69 |
| 5 | GUIDE | 507388744 | 8.84 | 2558 | -0.061 | -0.091 | 0.079 | 0.121 | 229.218810 | 57.378704 | 1400.68 | 2157.95 |
| 6 | GUIDE | 507387168 | 9.61 | 2557 | 0.051 | 0.090 | 0.121 | 0.191 | 226.927533 | 56.702730 | -779.98 | -2456.47 |
| 7 | GUIDE | 507385608 | 9.61 | 2556 | -0.008 | 0.015 | 0.095 | 0.156 | 228.578240 | 57.333615 | 503.25 | 1279.67 |

2.4 Star Slots

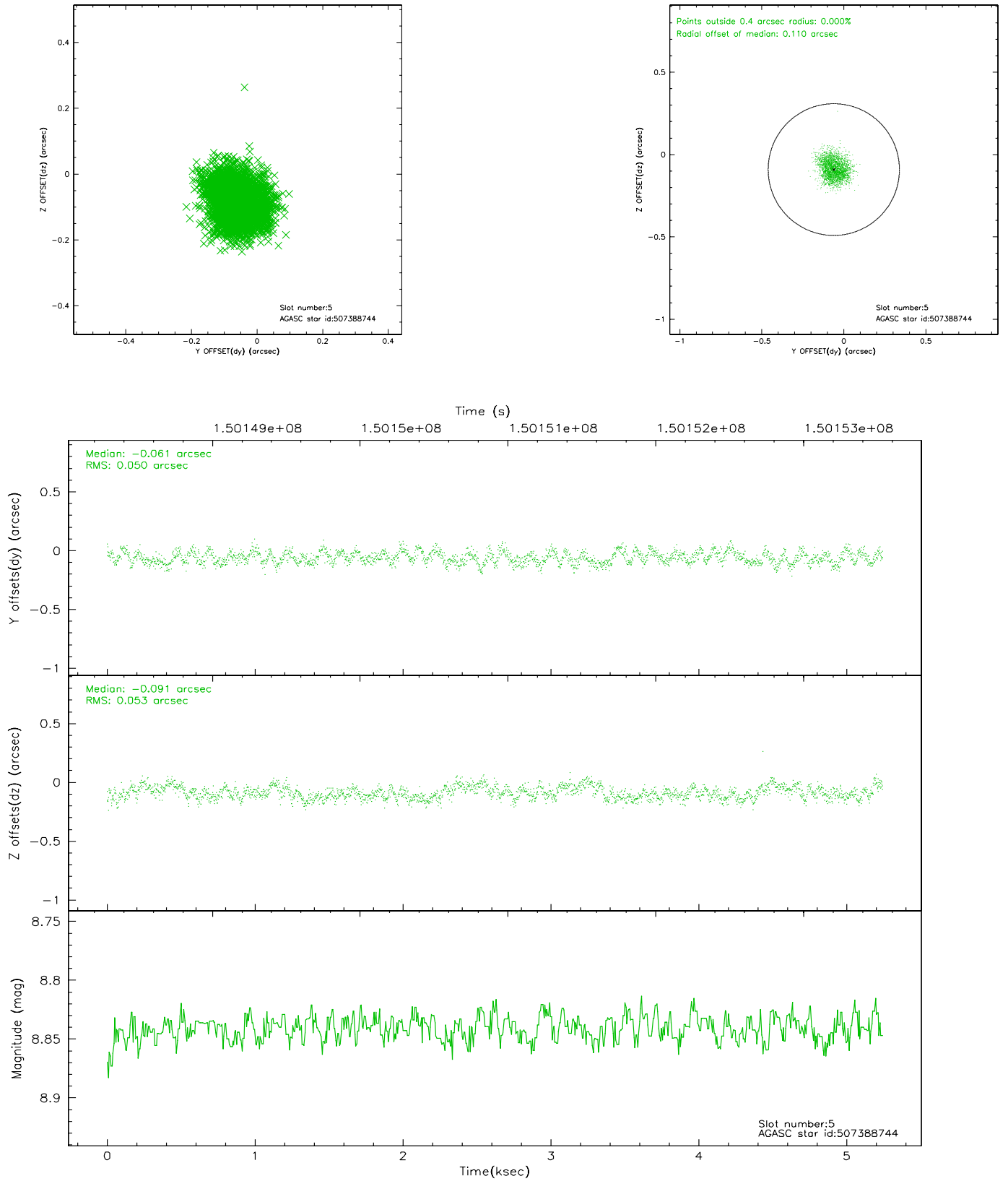
2.4.1 Slot 3



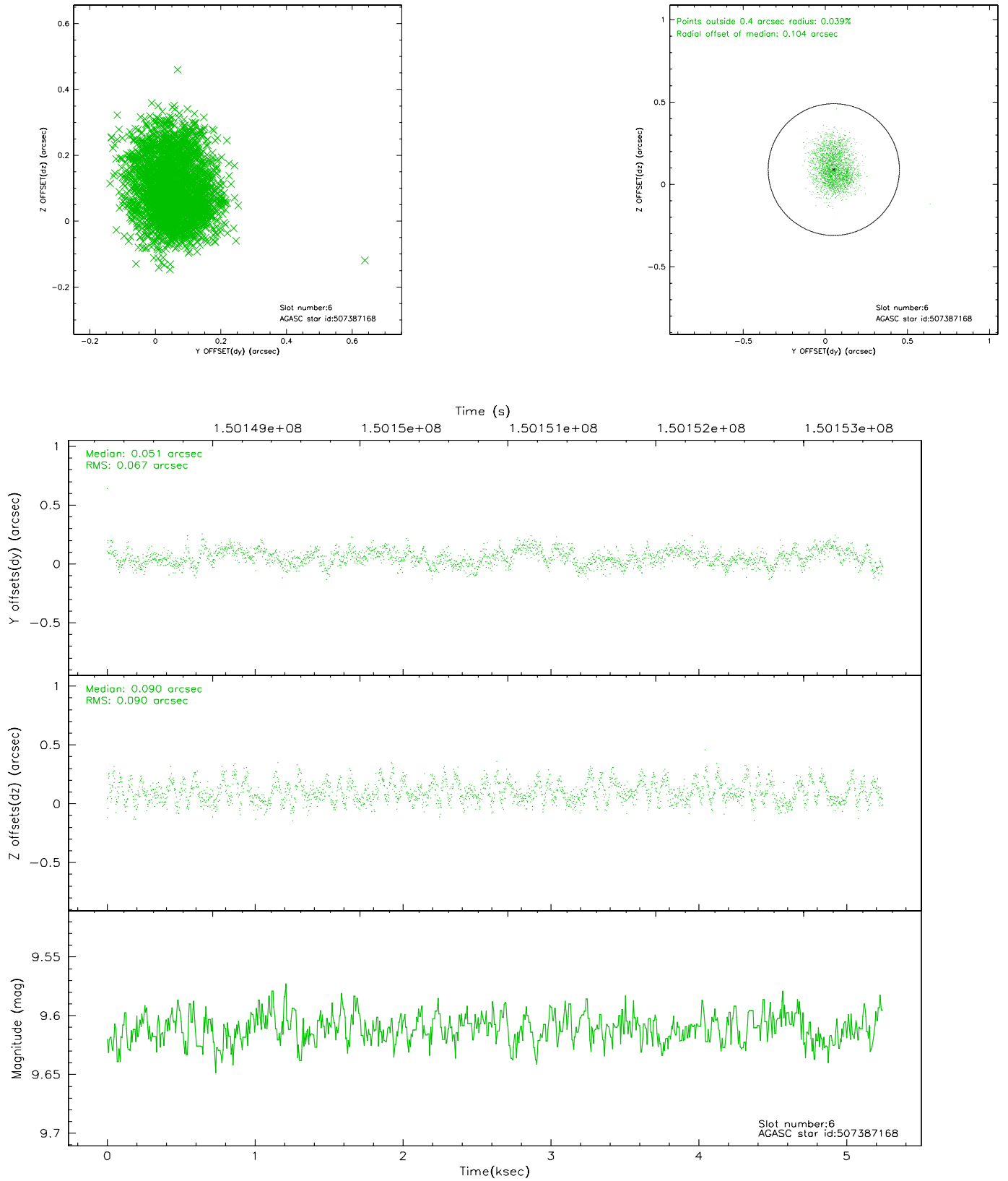
2.4.2 Slot 4



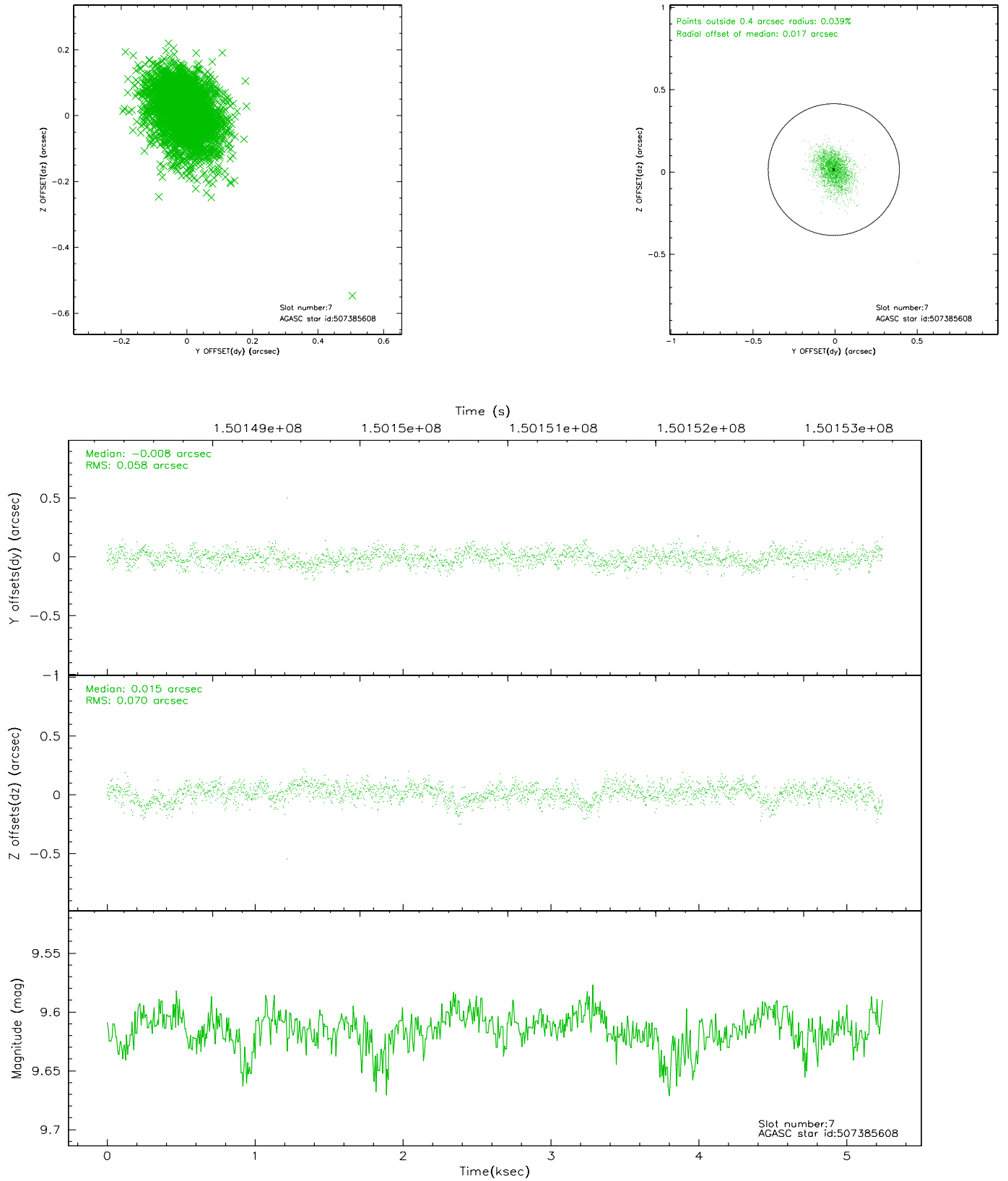
2.4.3 Slot 5



2.4.4 Slot 6

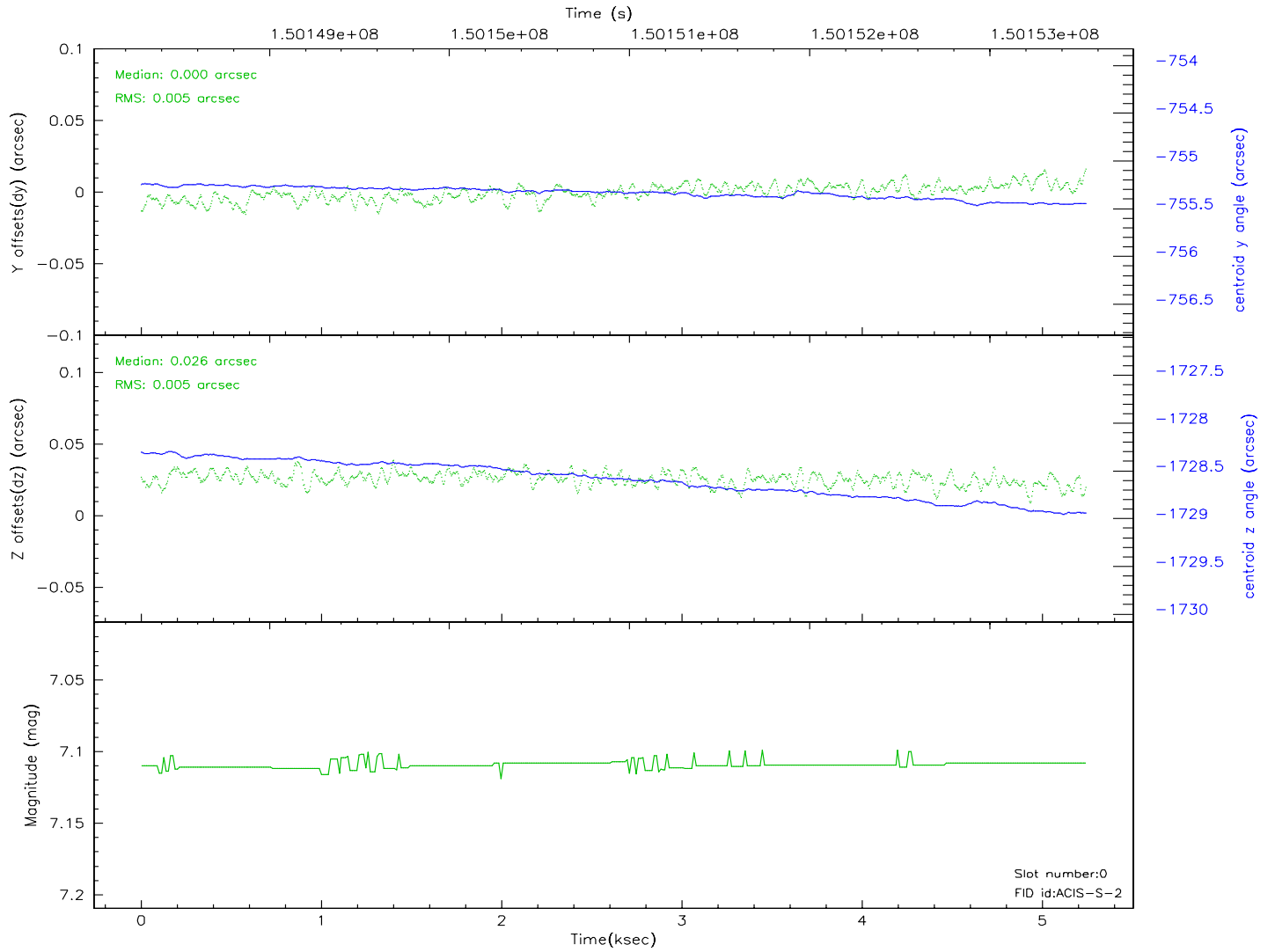
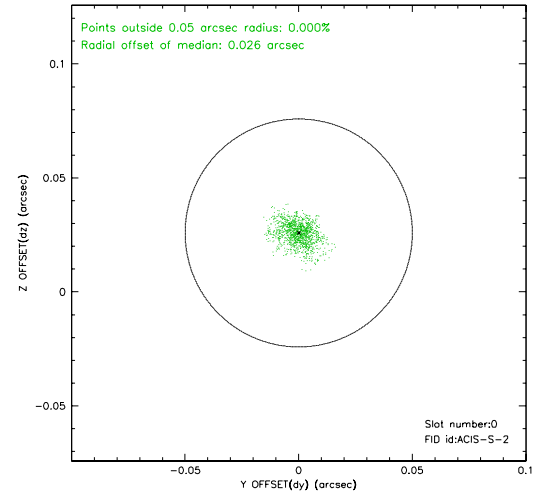
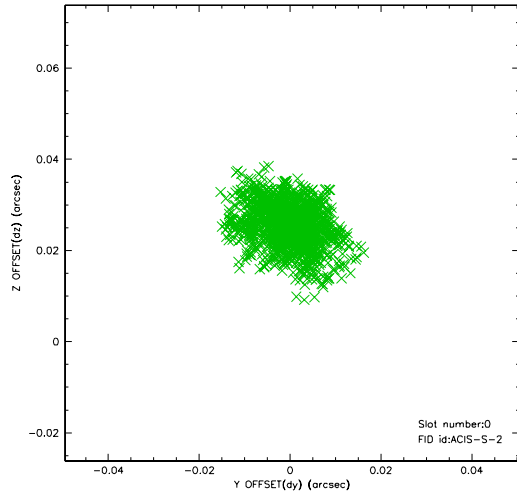


2.4.5 Slot 7

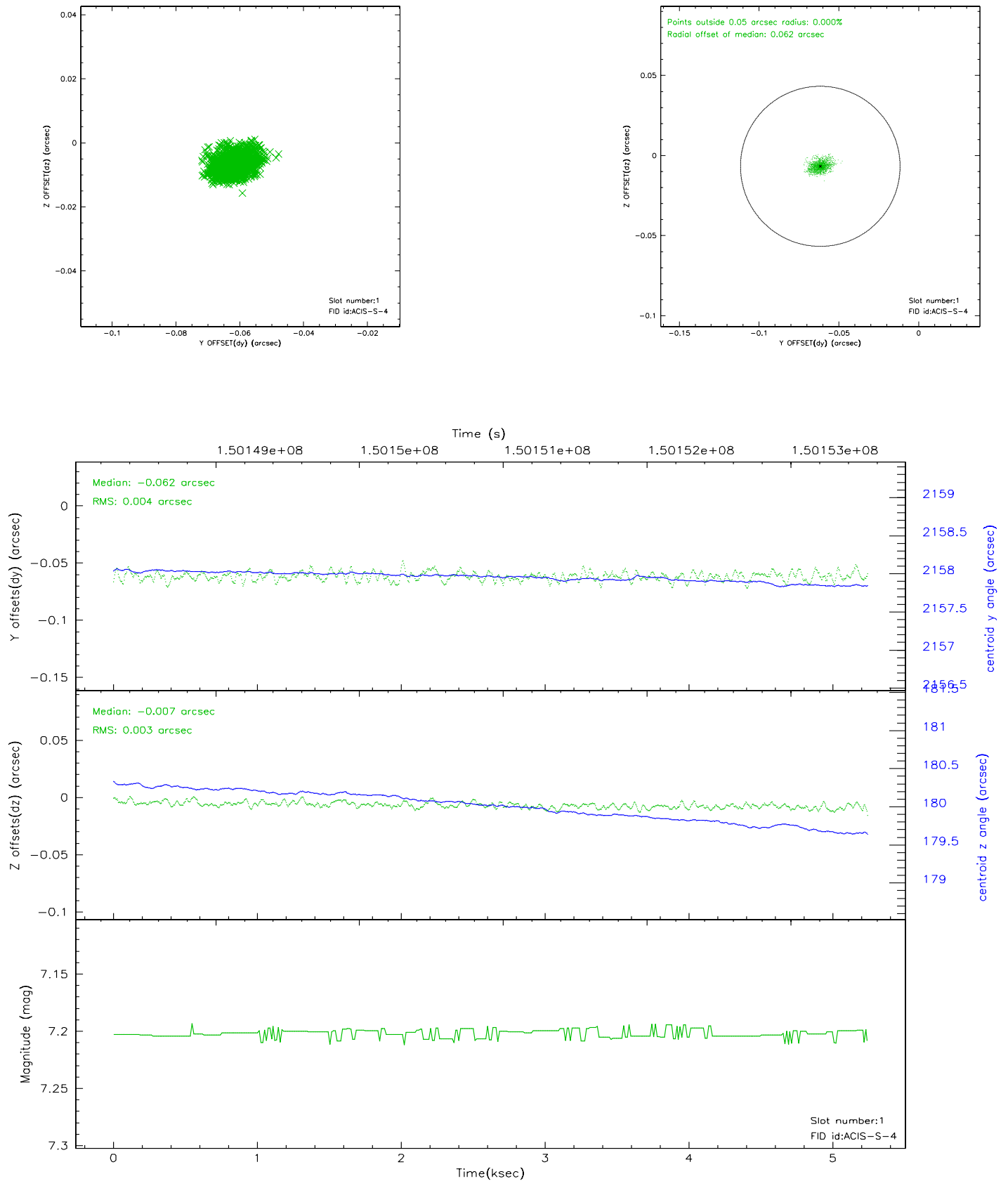


2.5 FID Slots

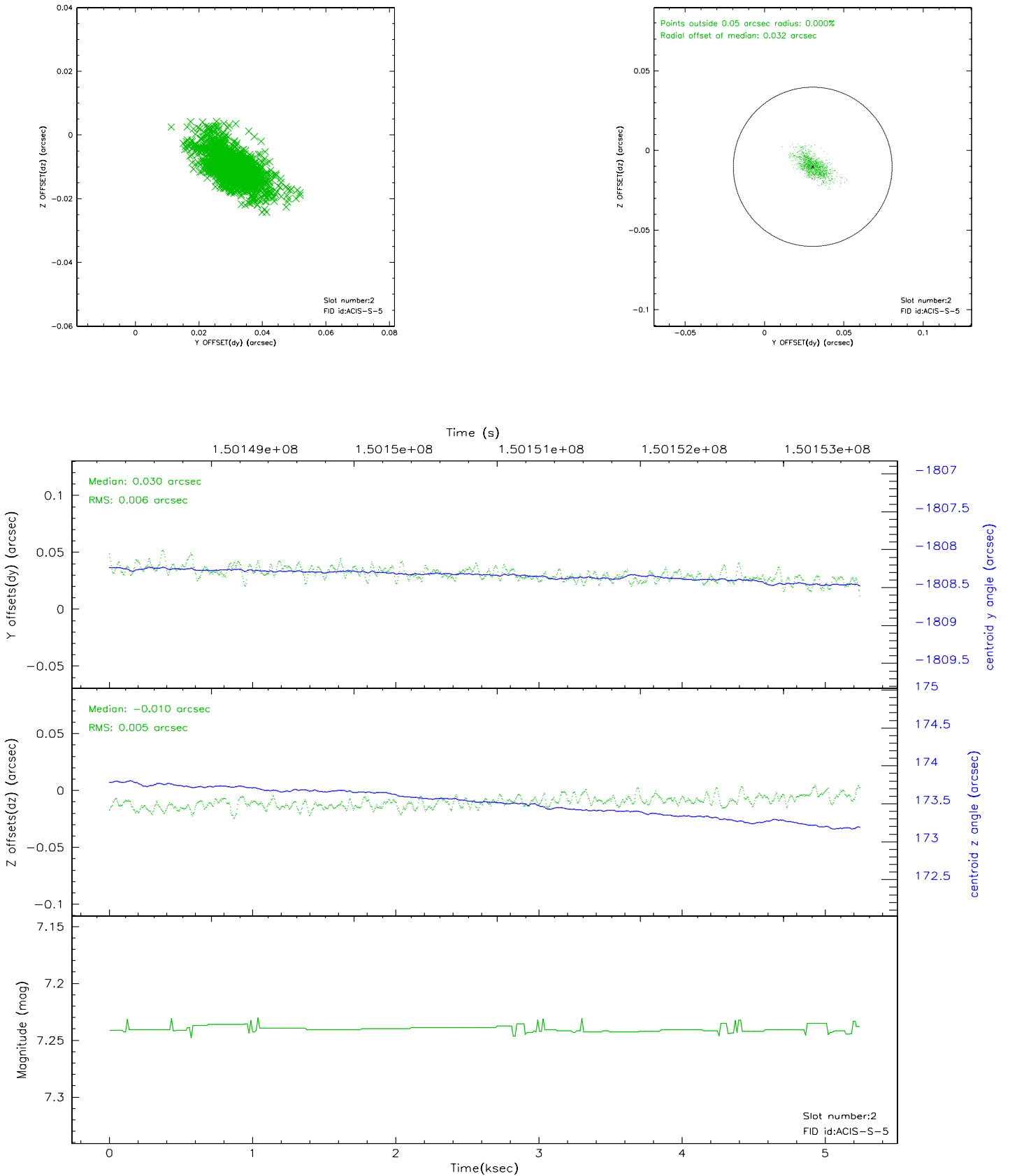
2.5.1 Slot 0



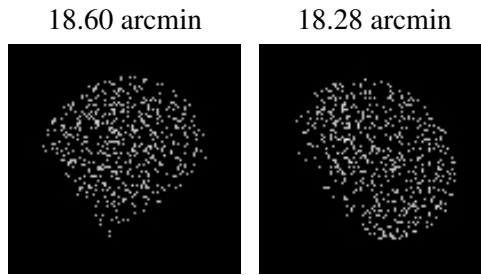
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2006.10.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.963 |

A.2 Comments

Focal plane temperature is warmer than -118.7 C degrees during the first 2 ksec of the observations. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C for approximately the first 8 ksec of this observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.