

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 4357 - L2 Version 001
Chandra X-Ray Center

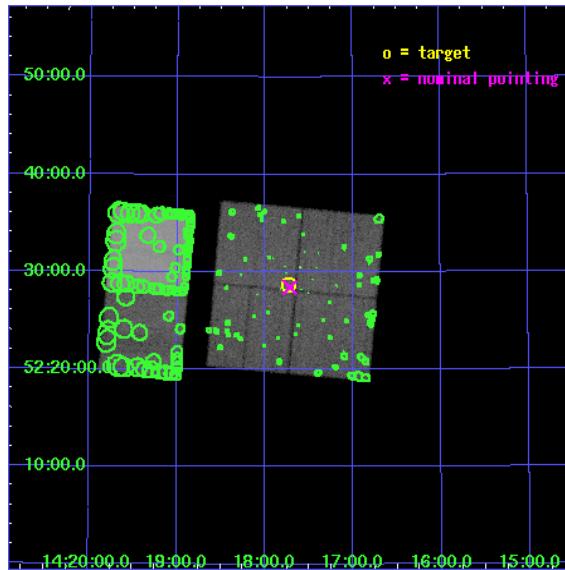
L2 Processing Date : Sep 30 2006

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1 Front

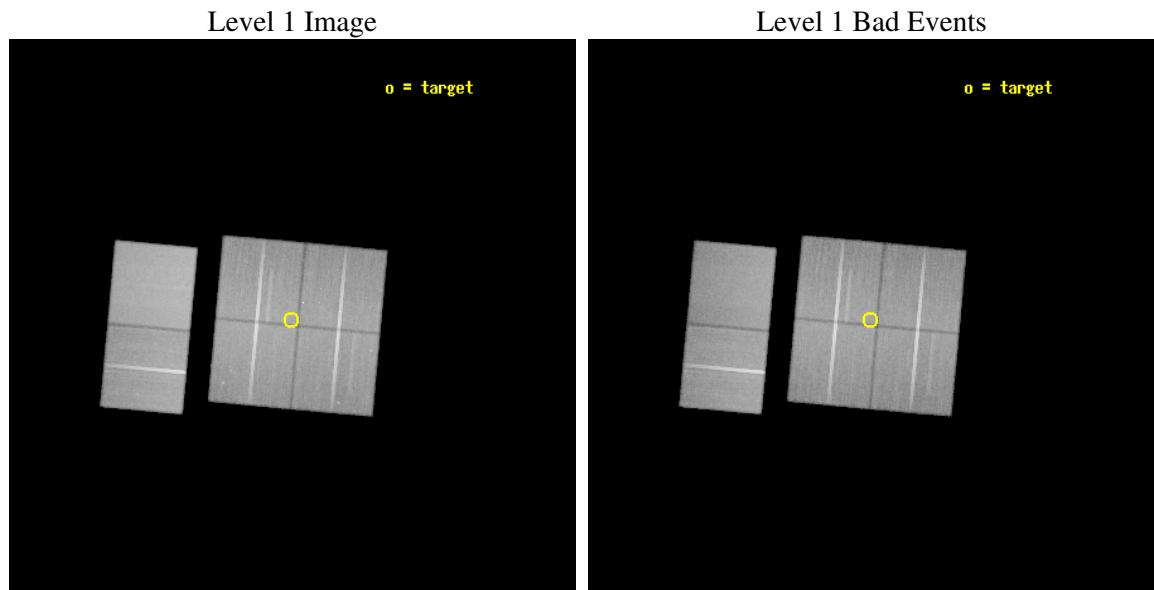
| | |
|----------|-------------------------------------|
| seq_num | 900144 |
| obs_id | 4357 |
| title | THE X-RAY UNIVERSE AT HIGH REDSHIFT |
| observer | Professor Kirpal Nandra |
| object | GROTH-WESTPHAL FIELD |
| dtycycle | 0 |
| cycle | P |
| ra_targ | 214.431667 |
| dec_targ | 52.478111 |
| ra_nom | 214.429321096 |
| dec_nom | 52.473667776365 |
| roll_nom | 275.25626902101 |
| revision | 2 |
| ontime | 85443.199681699 |
| livetime | 84361.266439611 |
| ontime0 | 85443.199681699 |
| ontime1 | 85443.199681699 |
| ontime2 | 85443.199681699 |
| ontime3 | 85443.199681699 |
| ontime6 | 85443.199681699 |
| ontime7 | 85443.199681699 |
| l2events | 546317 |



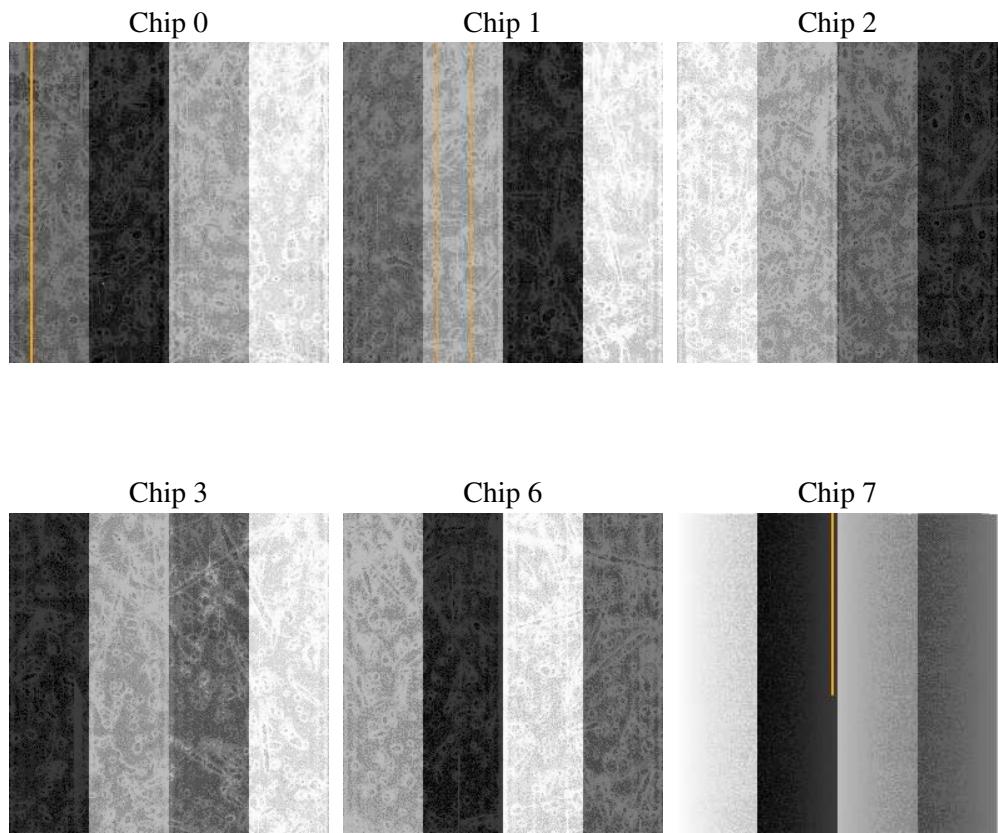
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.9 |
| caldbver | 3.2.3 |
| date | 2006-09-30T14:33:03 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 166967.826000 |
| ontime | 87225.019073606 |
| ontime0 | 87225.019073606 |
| ontime1 | 87225.019073606 |
| ontime2 | 87225.019073606 |
| ontime3 | 87225.019073606 |
| ontime6 | 87225.019073606 |
| ontime7 | 87225.019073606 |
| l1events | 3407689 |

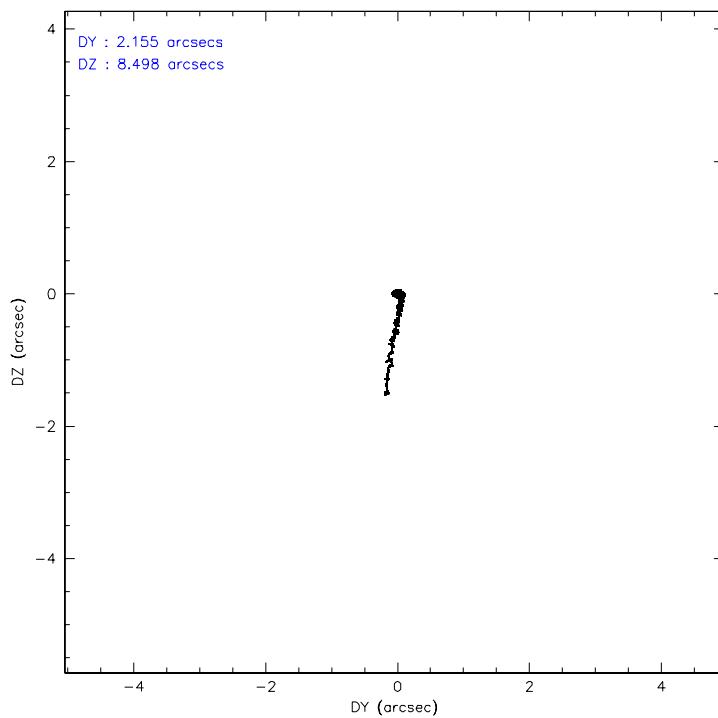
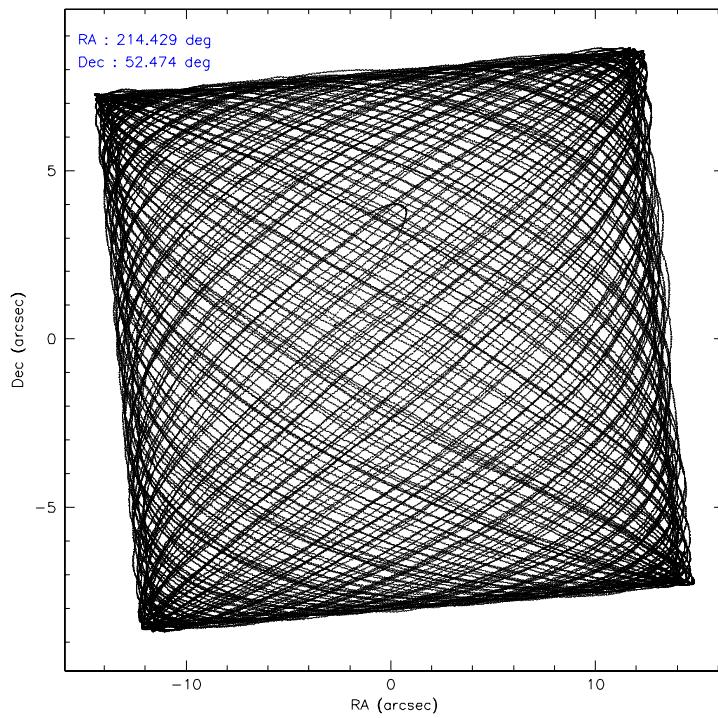
2.1.4 Events

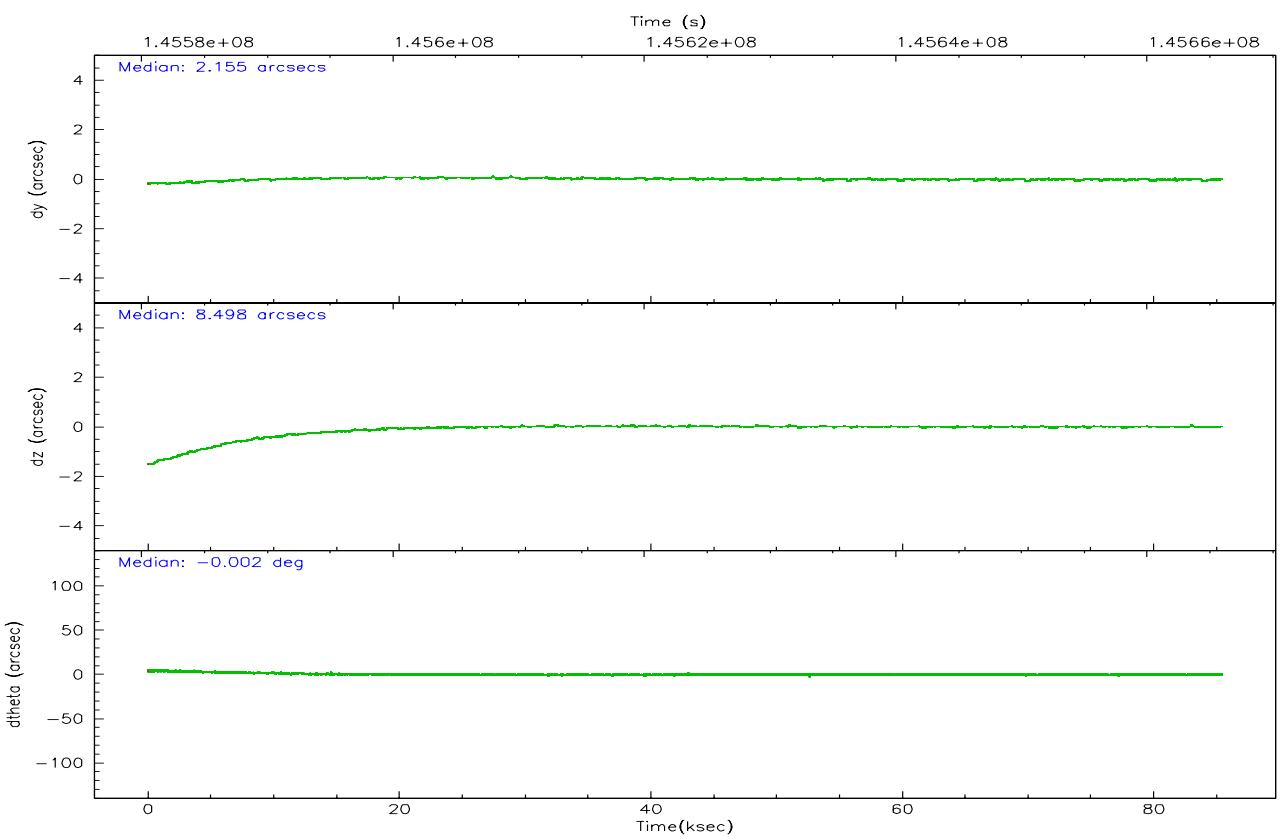
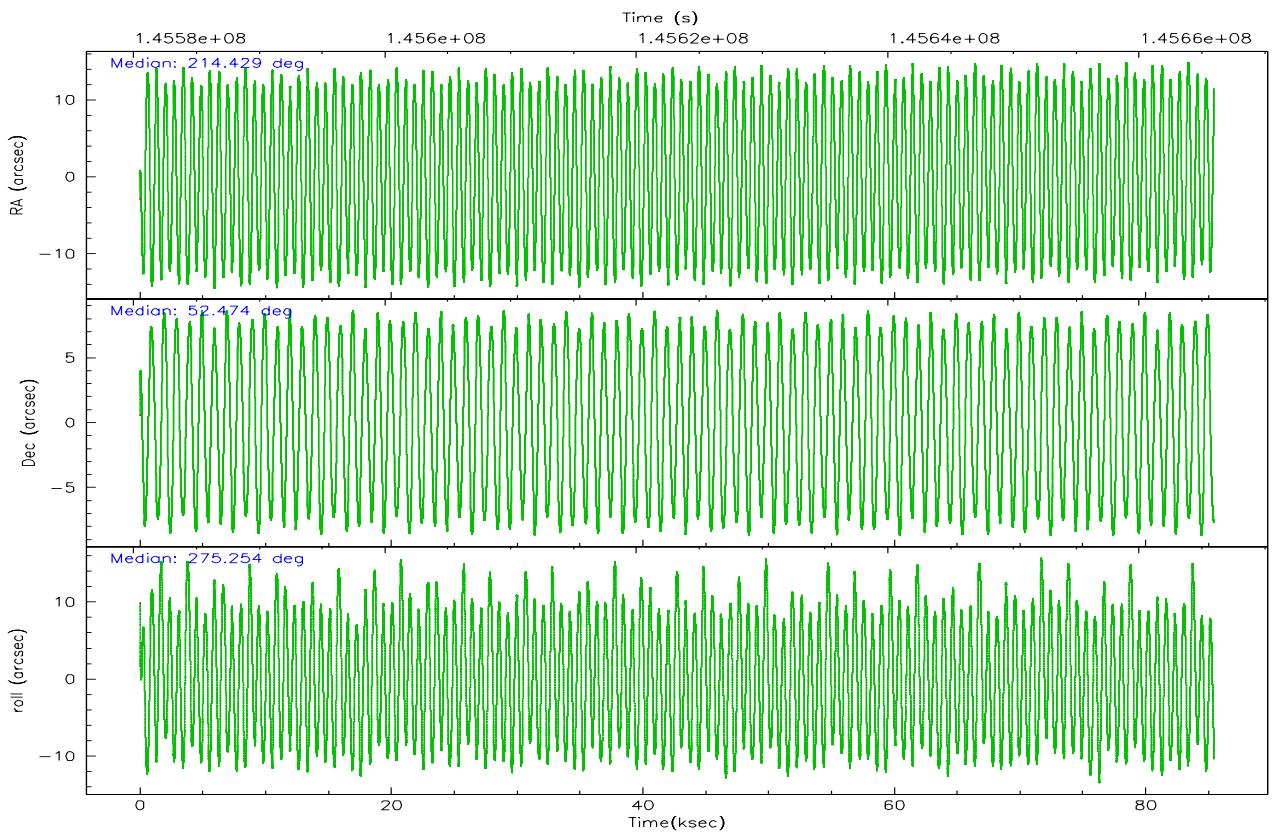
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 504033 | 509760 | 546320 | 541957 | 578351 | 727268 | grade 0 events | 28922 | 28253 | 29247 | 27776 | 25791 | 17183 |
| rejected events | 439182 | 441086 | 482903 | 479780 | 514648 | 452051 | 5% | 5% | 5% | 5% | 4% | 2% | |
| rejected % | 87% | 86% | 88% | 88% | 88% | 62% | grade 1 events | 310 | 257 | 329 | 325 | 285 | 434 |
| | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% | |
| | | | | | | | grade 2 events | 13432 | 14561 | 12880 | 11962 | 13203 | 68452 |
| | | | | | | | 2% | 2% | 2% | 2% | 2% | 9% | |
| | | | | | | | grade 3 events | 6680 | 6933 | 6104 | 6381 | 6497 | 14793 |
| | | | | | | | 1% | 1% | 1% | 1% | 1% | 2% | |
| | | | | | | | grade 4 events | 6074 | 6930 | 6032 | 6252 | 6294 | 14645 |
| | | | | | | | 1% | 1% | 1% | 1% | 1% | 2% | |
| | | | | | | | grade 5 events | 21224 | 22214 | 20580 | 23081 | 25733 | 49330 |
| | | | | | | | 4% | 4% | 3% | 4% | 4% | 6% | |
| | | | | | | | grade 6 events | 11113 | 13318 | 10482 | 11054 | 13298 | 165808 |
| | | | | | | | 2% | 2% | 1% | 2% | 2% | 22% | |
| | | | | | | | grade 7 events | 416278 | 417294 | 460666 | 455126 | 487250 | 396623 |
| | | | | | | | 82% | 81% | 84% | 83% | 84% | 54% | |

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 | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| Pointing RA | 214.403240 | 214.4293210959952 | Subarray requested | NONE | NONE |
| Pointing Dec | 52.495987 | 52.47366777636493 | Alternating exposures requested | N | N |
| Pointing Roll | 275.068273 | 275.2562690210122 | Primary exposure time | 0.000000 | 3.2 |
| 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 | 145580659.184000 | 145578720.67394 | | | |
| Observation start date | 2002-08-12T23:03:15 | 2002-08-12T22:32:00 | | | |
| Observation end time | 145747627.184000 | 145666849.15257 | | | |
| Observation end date | 2002-08-14T21:26:03 | 2002-08-13T23:00:49 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





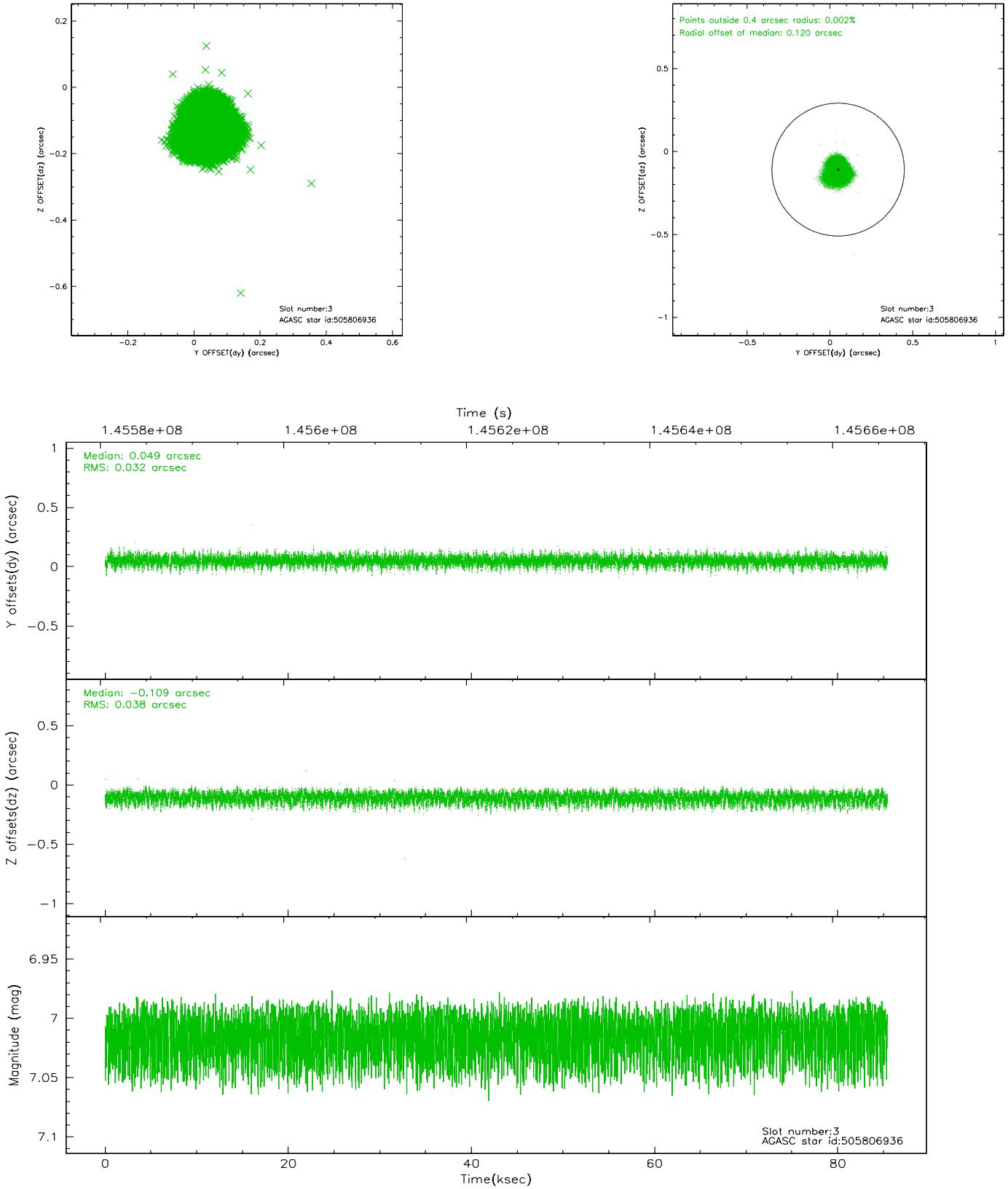
Slot Statistics

| 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 | 20840 | -0.063 | 0.105 | 0.008 | 0.042 | 0.000000 | 0.000000 | 937.60 | -831.71 |
| 1 | FID | ACIS-I-5 | 7.24 | 20840 | -0.001 | 0.016 | 0.008 | 0.023 | 0.000000 | 0.000000 | -1810.48 | 1065.75 |
| 2 | FID | ACIS-I-6 | 7.26 | 20841 | -0.029 | -0.051 | 0.008 | 0.020 | 0.000000 | 0.000000 | 403.27 | 1710.08 |
| 3 | GUIDE | 505806936 | 7.01 | 41554 | 0.049 | -0.109 | 0.052 | 0.087 | 213.820815 | 52.535927 | -260.50 | -1256.40 |
| 4 | GUIDE | 455871352 | 8.10 | 41672 | 0.066 | 0.028 | 0.062 | 0.097 | 215.099961 | 52.172669 | 1288.35 | 1431.01 |
| 5 | GUIDE | 505812376 | 7.60 | 41676 | -0.141 | 0.021 | 0.055 | 0.089 | 214.039537 | 52.937930 | -1656.14 | -644.41 |
| 6 | GUIDE | 505808024 | 9.05 | 41672 | 0.015 | 0.012 | 0.067 | 0.108 | 213.832794 | 52.669095 | -735.24 | -1184.10 |
| 7 | GUIDE | 455872024 | 9.34 | 41648 | 0.014 | 0.055 | 0.093 | 0.150 | 215.329595 | 52.026605 | 1851.76 | 1896.82 |

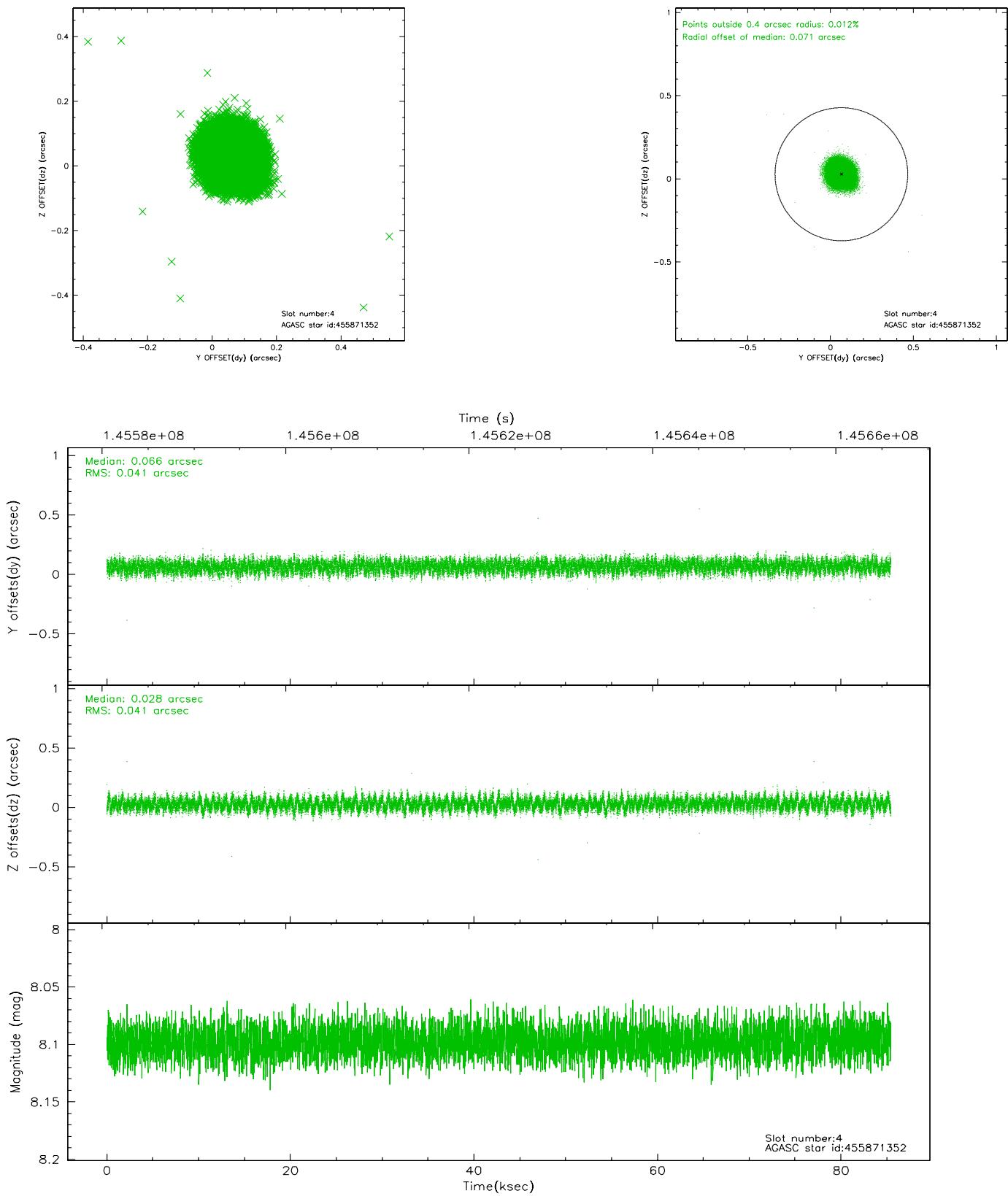
∞

2.4 Star Slots

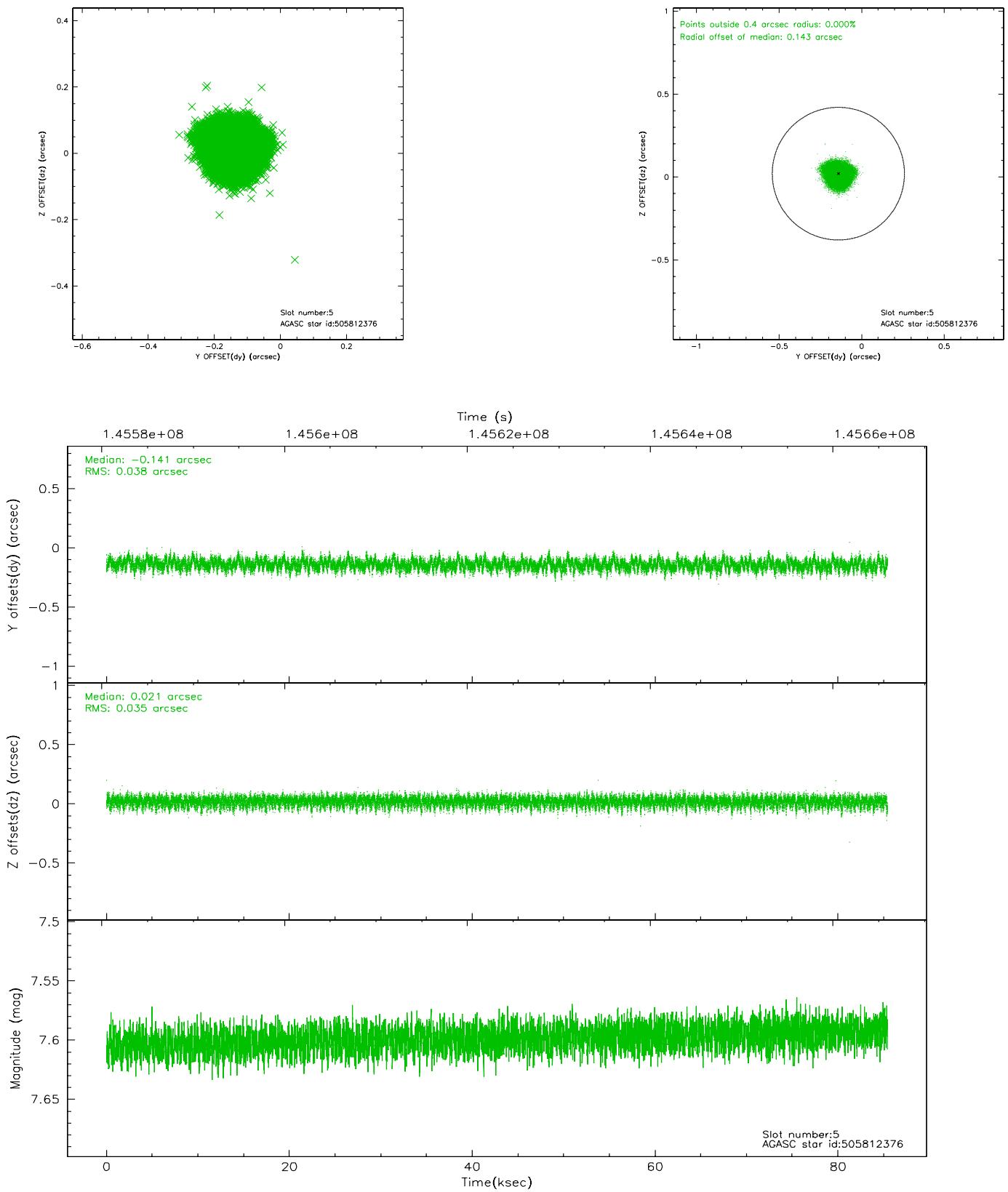
2.4.1 Slot 3



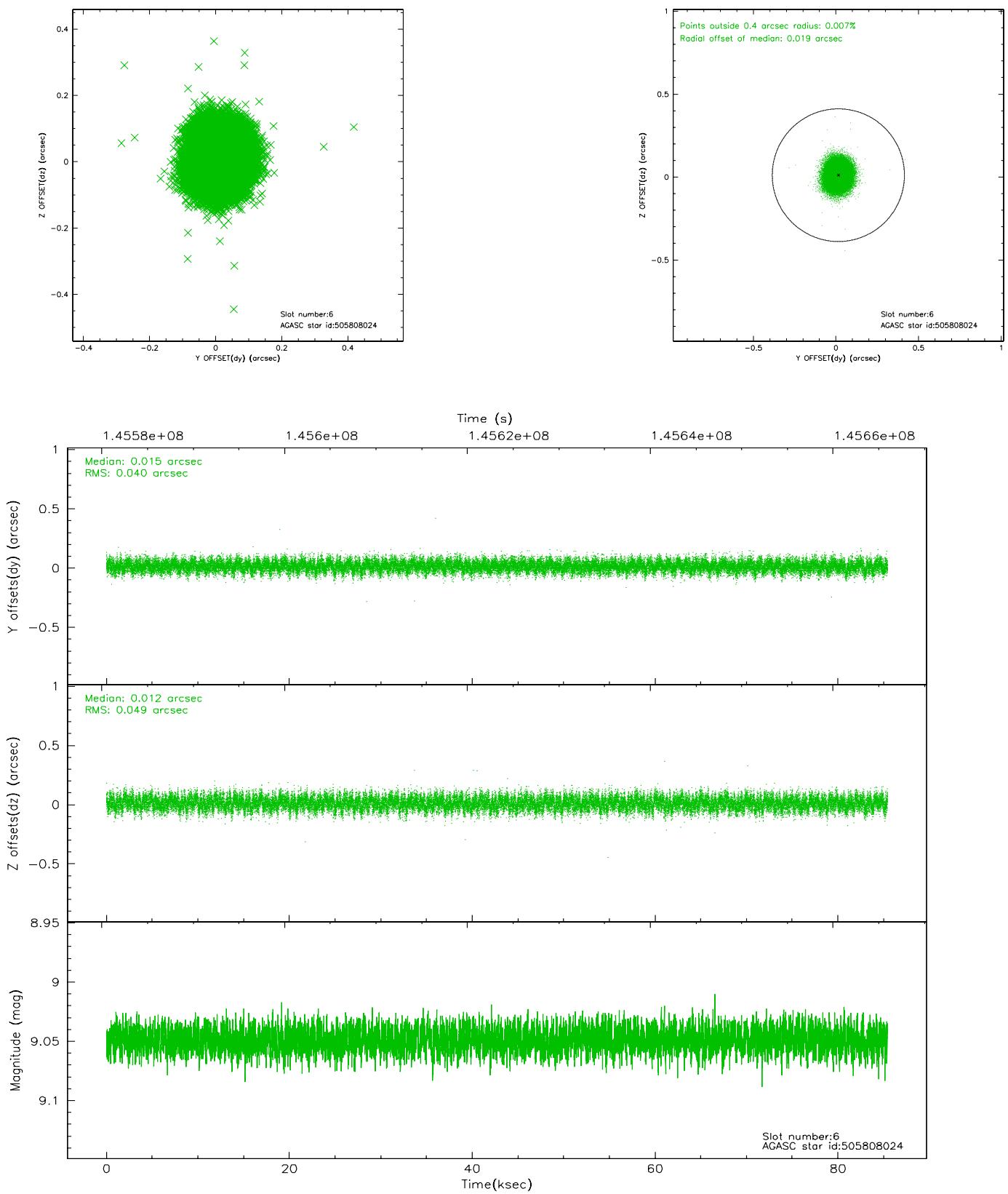
2.4.2 Slot 4



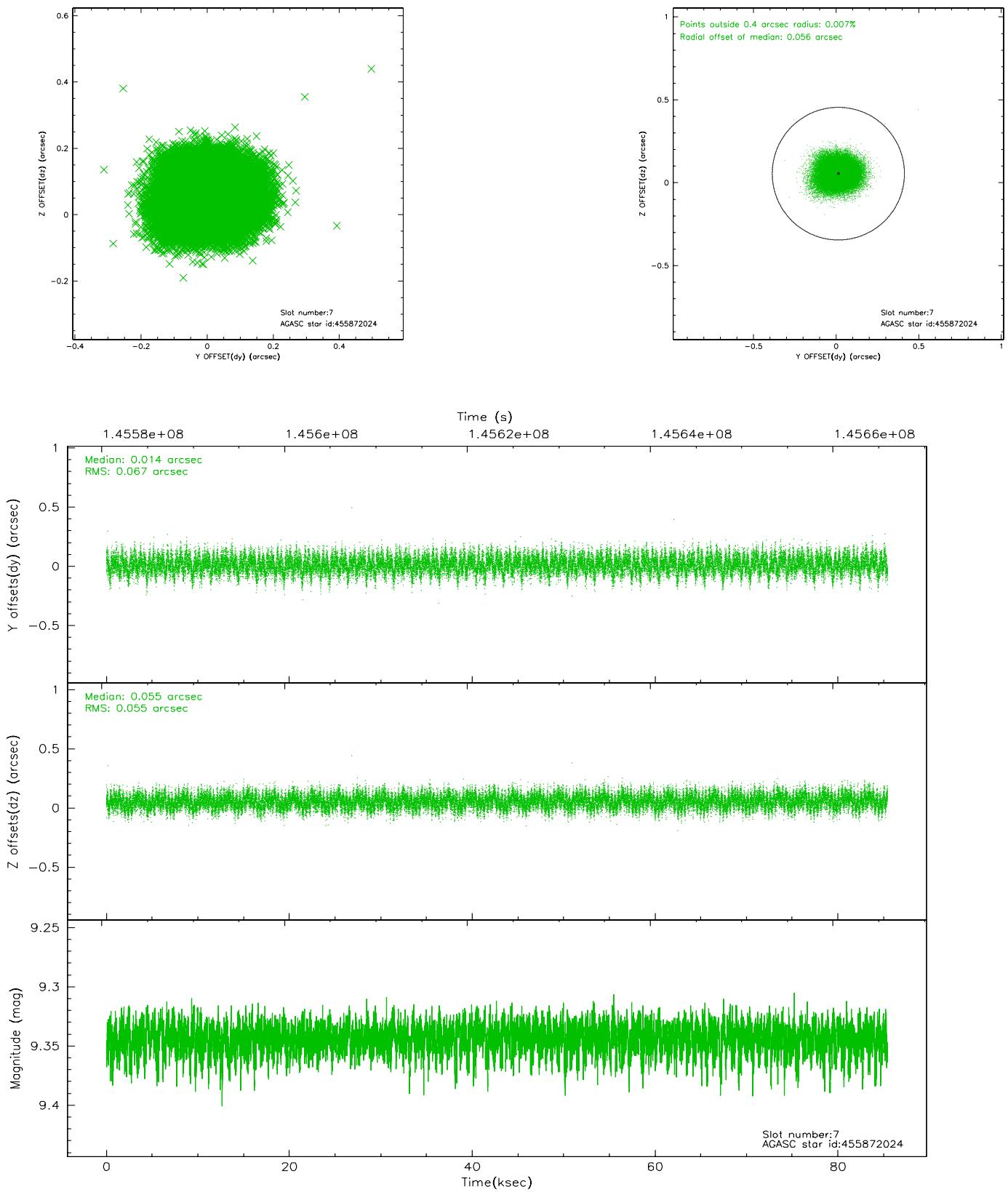
2.4.3 Slot 5



2.4.4 Slot 6

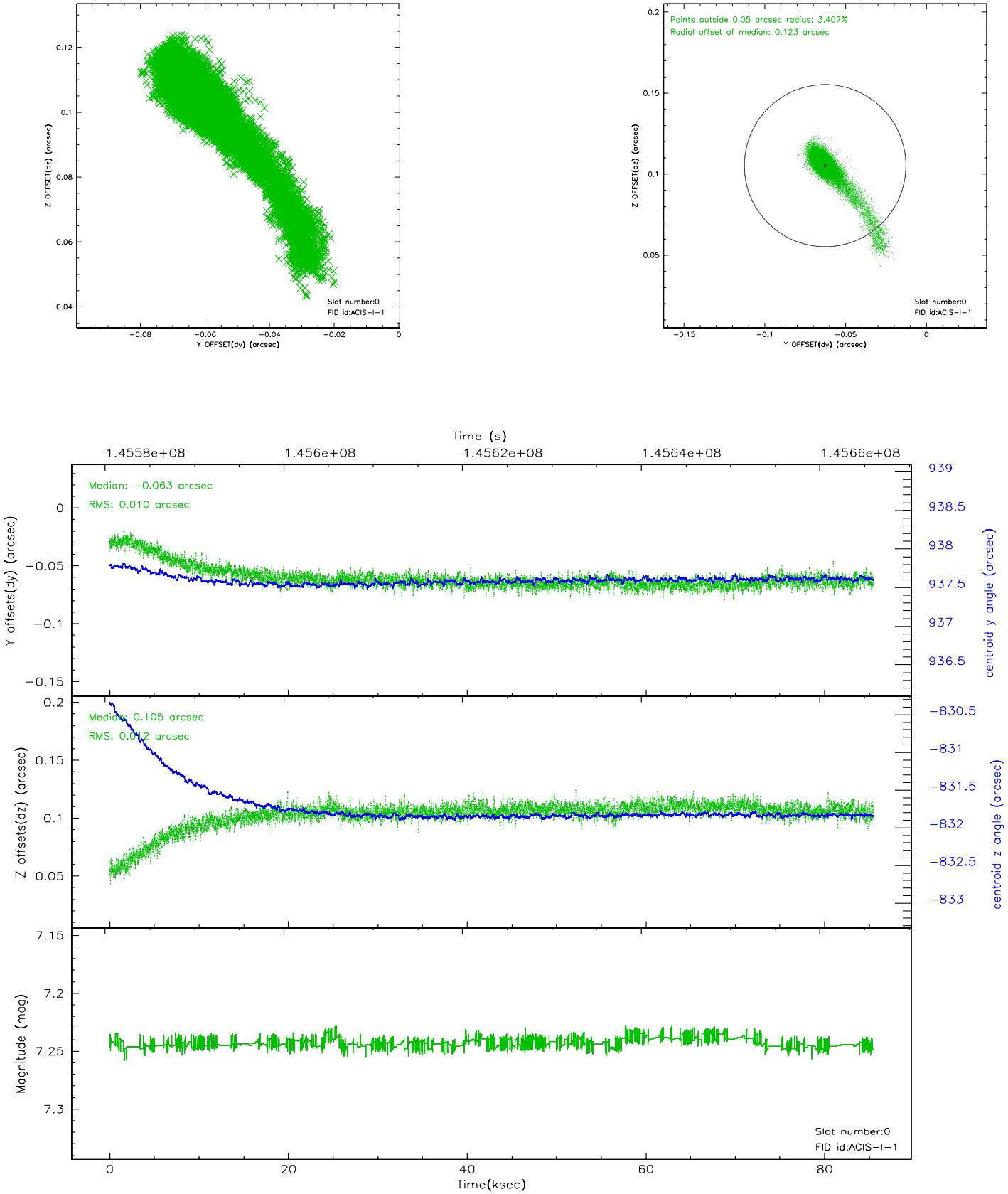


2.4.5 Slot 7

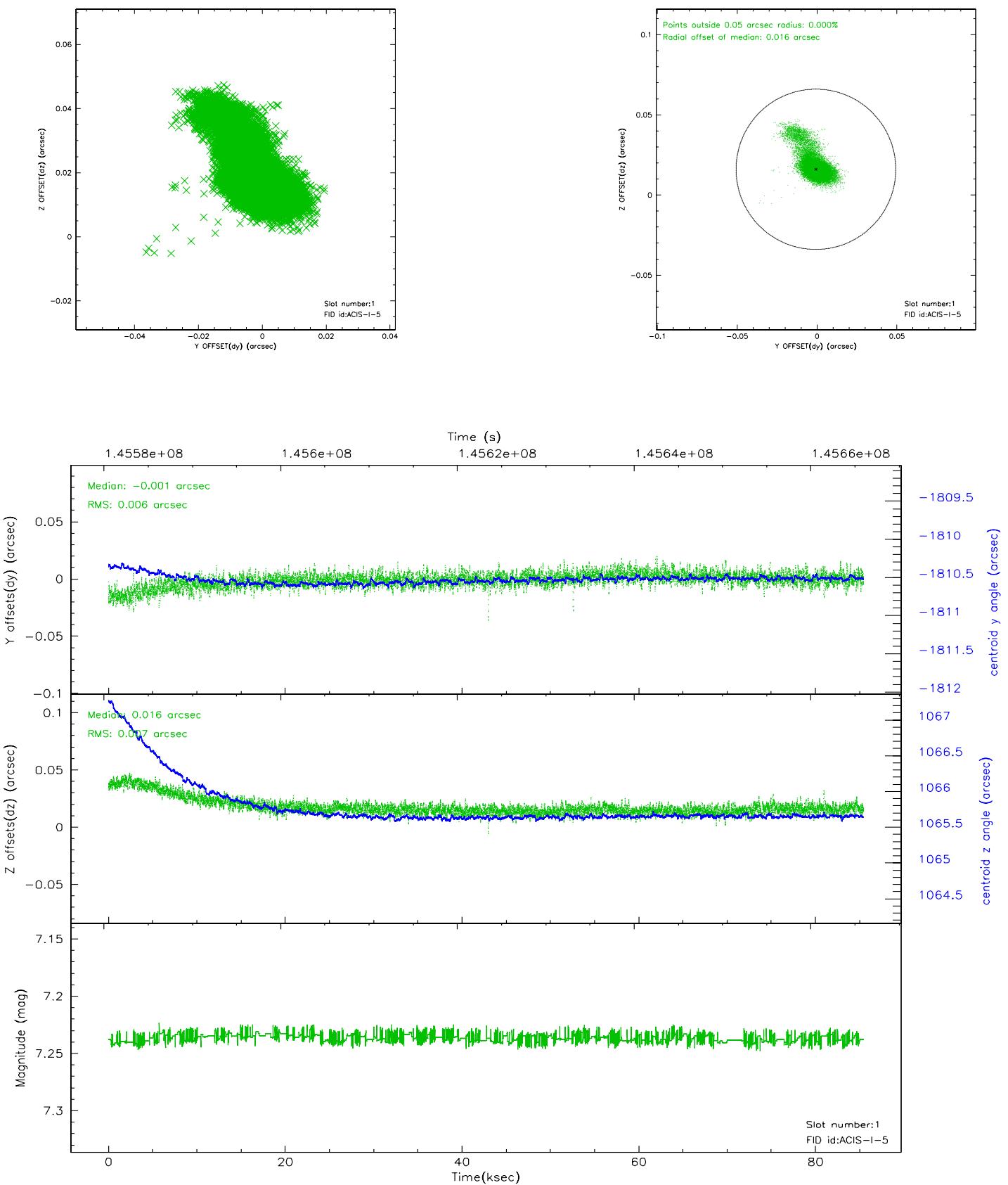


2.5 FID Slots

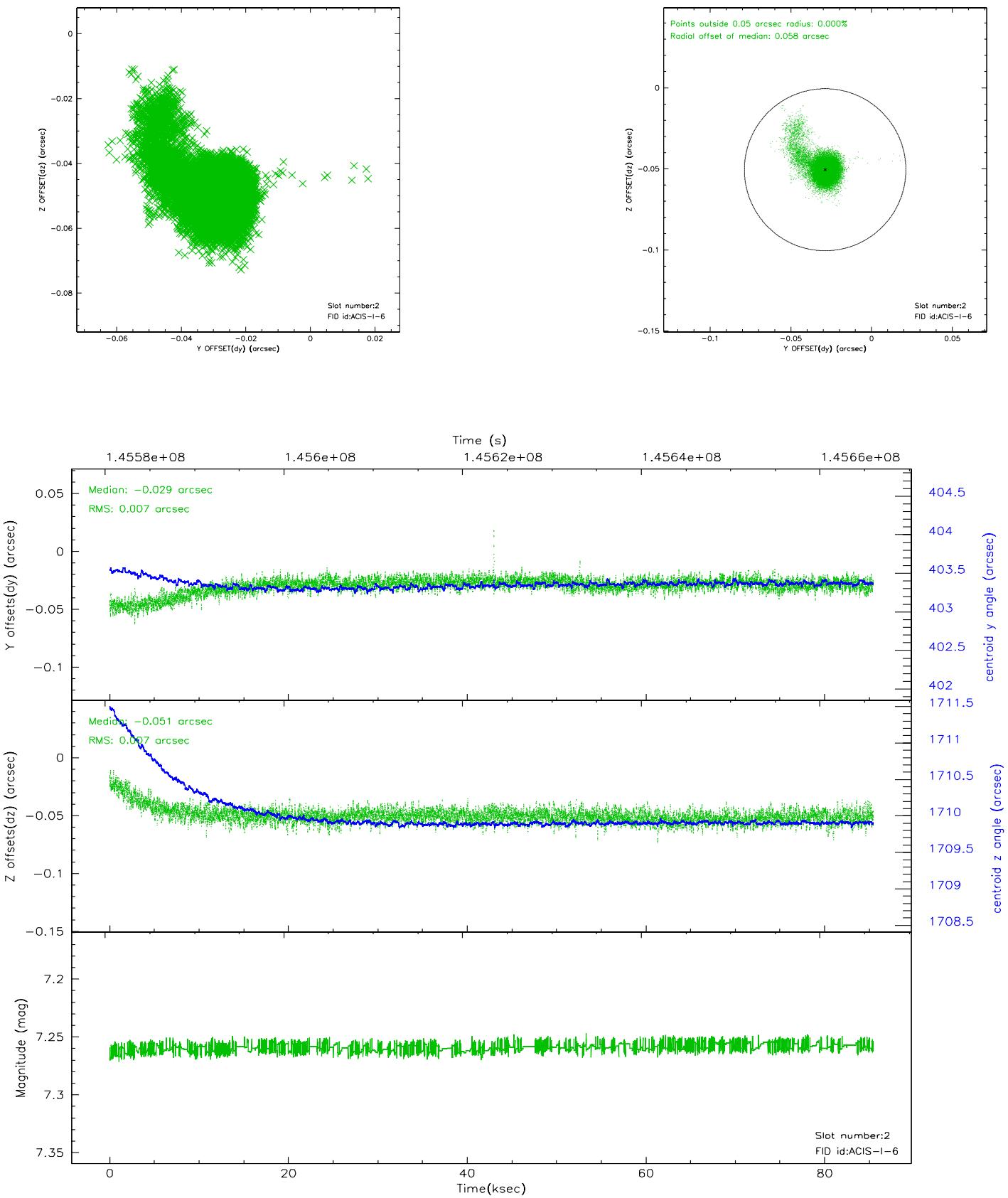
2.5.1 Slot 0



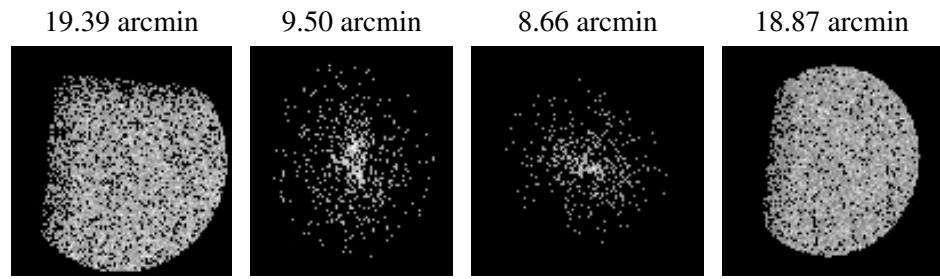
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2006.10.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 85.443 |

A.2 Comments

The observation was interrupted for a TOO; the remainder of the observing time was scheduled under a different obsid.

Focal plane temperature is warmer than -118.7 C degrees during the first 5 ksec of this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -119.7 C. The back-illuminated chips are not affected at the focal plane temperatures recorded for this observation. Users whose science objectives depend on the most accurate spectral response (i.e.: 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.