

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8464 - L2 Version 2
Chandra X-Ray Center

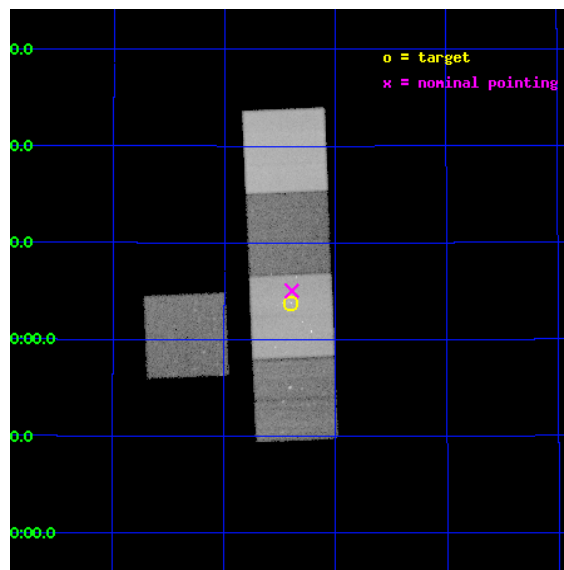
L2 Processing Date : Apr 27 2012

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1 Front

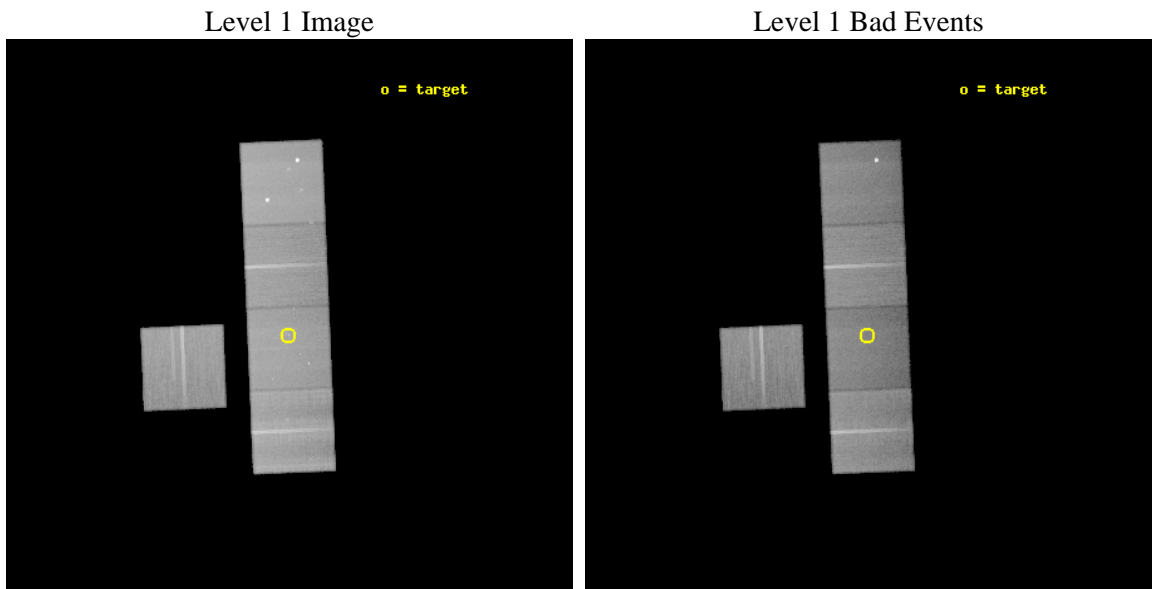
| | | |
|----------|--|---|
| seq_num | 600634 | Sequence number |
| obs_id | 8464 | Observation id |
| title | Deep Chandra and Hubble Observations of NGC 1023: Testing the Origin of Low-Mass X-ray Binaries in a Lenticular Galaxy | Proposal title |
| observer | Prof. Gregory Sivakoff | Principal investigator |
| object | NGC1023 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 40.1 | Observer's specified target RA [deg] |
| dec_targ | 39.06325 | Observer's specified target Dec [deg] |
| ra_nom | 40.097909725298 | Nominal RA [deg] |
| dec_nom | 39.084135309657 | Nominal Dec [deg] |
| roll_nom | 87.598516826976 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 48183.300370574 | Sum of GTIs [s] |
| livetime | 47553.750079203 | Livetime [s] |
| ontime3 | 48183.300370574 | Sum of GTIs [s] |
| ontime5 | 48183.300370574 | Sum of GTIs [s] |
| ontime6 | 48180.159380376 | Sum of GTIs [s] |
| ontime7 | 48183.300370574 | Sum of GTIs [s] |
| ontime8 | 48180.159410238 | Sum of GTIs [s] |
| l2events | 553519 | Number of level 2 events |



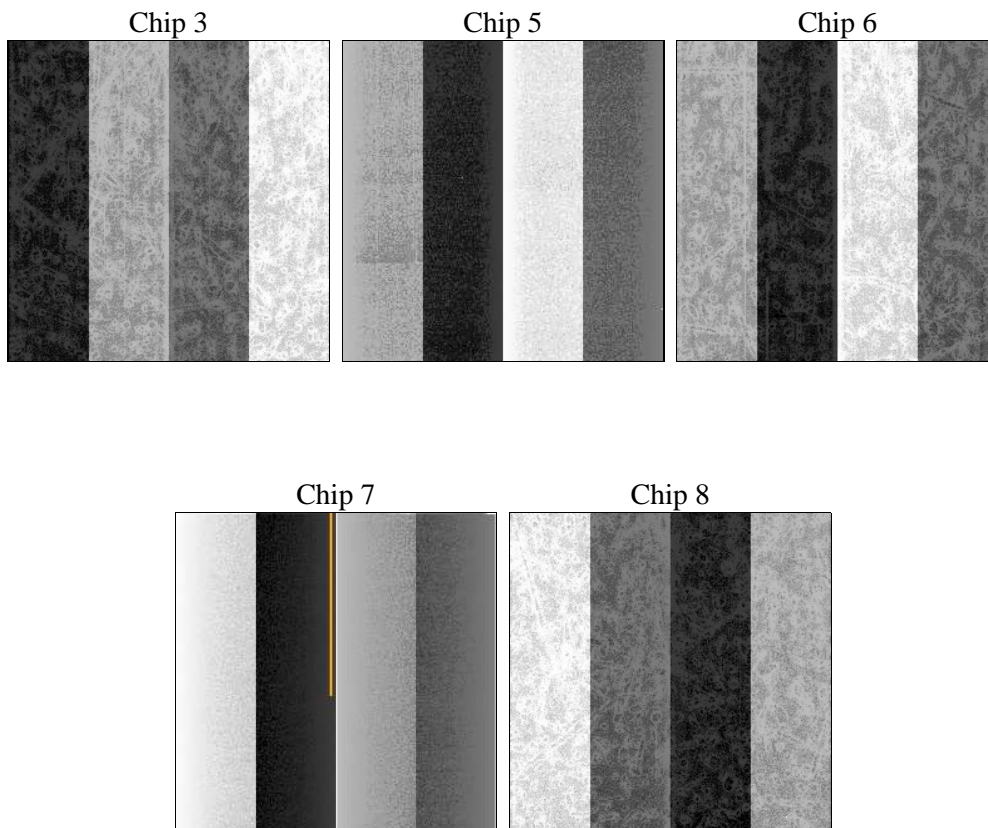
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 48000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 48183.300370574 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime3 | 48183.300370574 | Sum of GTIs [s] |
| date | 2012-04-27T03:26:51 | Date and time of file creation | ontime5 | 48183.300370574 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime6 | 48180.159380376 | Sum of GTIs [s] |
| | | | ontime7 | 48183.300370574 | Sum of GTIs [s] |
| | | | ontime8 | 48180.159410238 | Sum of GTIs [s] |
| | | | l1events | 2290227 | Number of level 1 events |

2.1.4 Events

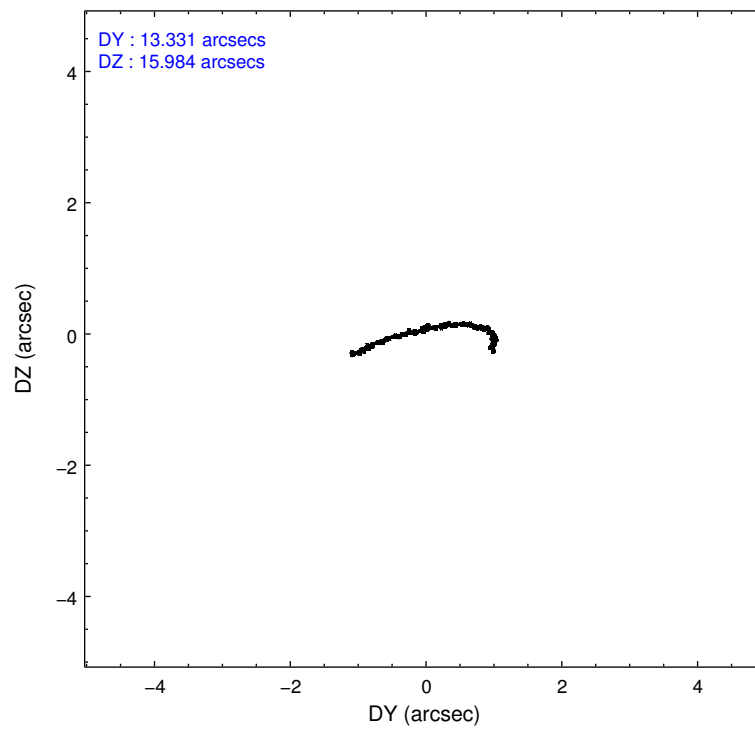
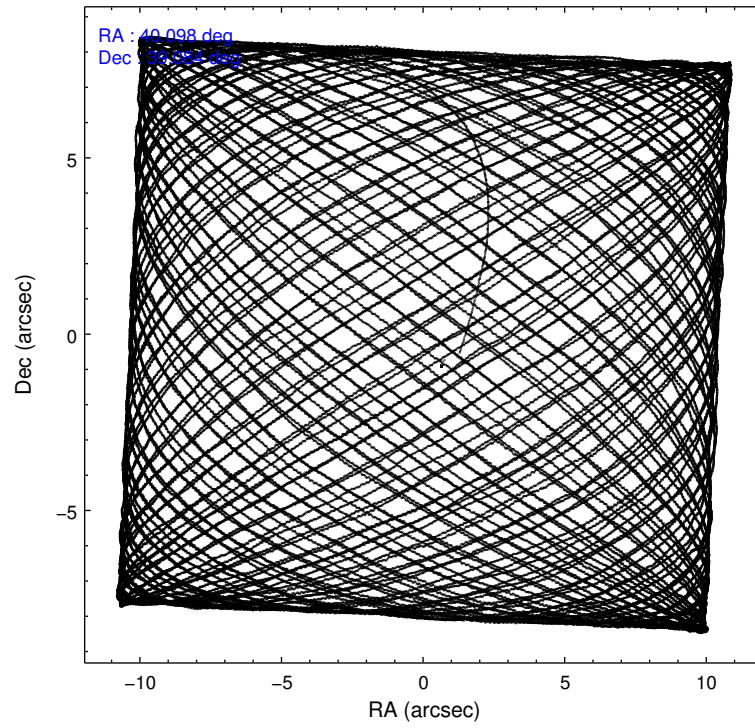
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 388603 | 559573 | 404513 | 439089 | 498449 |
| rejected events | 352411 | 283833 | 364463 | 239831 | 375193 |
| rejected % | 90% | 50% | 90% | 54% | 75% |

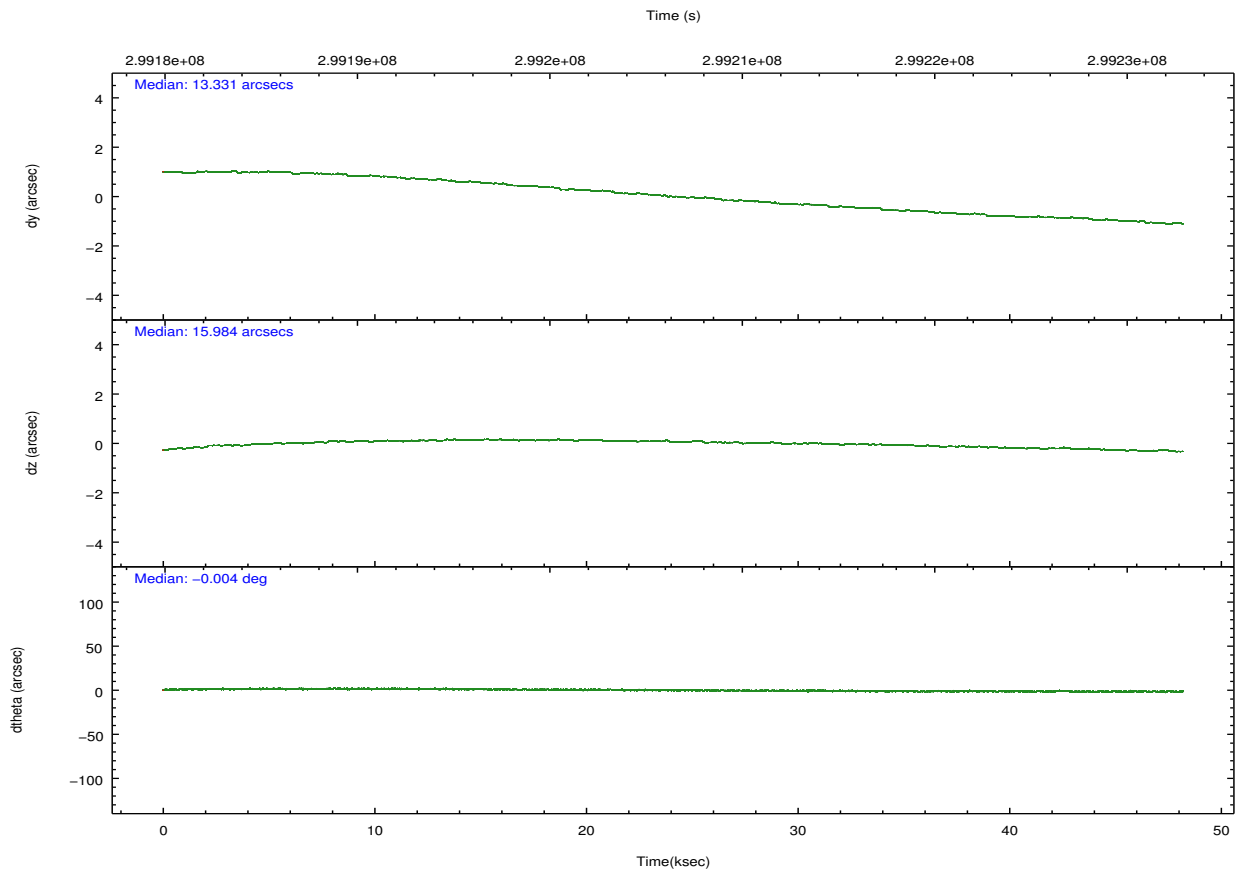
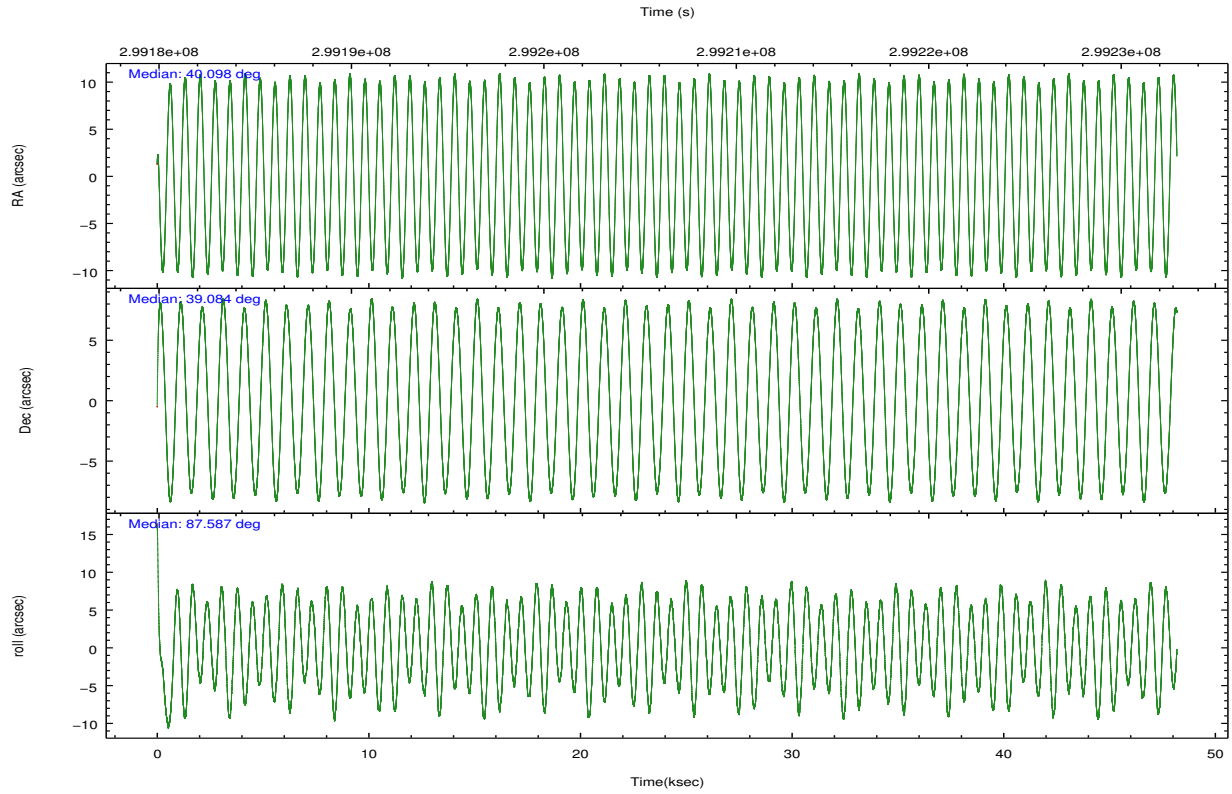
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 12864 | 32564 | 13688 | 19714 | 37991 |
| | 3% | 5% | 3% | 4% | 7% |
| grade 1 events | 221 | 1109 | 206 | 570 | 440 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 7919 | 82768 | 9061 | 40965 | 28021 |
| | 2% | 14% | 2% | 9% | 5% |
| grade 3 events | 4234 | 11891 | 4450 | 18443 | 13473 |
| | 1% | 2% | 1% | 4% | 2% |
| grade 4 events | 4076 | 11111 | 4365 | 18355 | 12482 |
| | 1% | 1% | 1% | 4% | 2% |
| grade 5 events | 15504 | 47192 | 15790 | 46000 | 22497 |
| | 3% | 8% | 3% | 10% | 4% |
| grade 6 events | 7443 | 140210 | 8877 | 103726 | 32673 |
| | 1% | 25% | 2% | 23% | 6% |
| grade 7 events | 336342 | 232728 | 348076 | 191316 | 350872 |
| | 86% | 41% | 86% | 43% | 70% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-35678 | ACIS-35678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 40.114635 | 40.09790972529785 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 39.060070 | 39.08413530965694 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 87.431347 | 87.59851682697618 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 299182488.184000 | 299181245.4406 | | | |
| Observation start date | 2007-06-25T18:13:43 | 2007-06-25T17:54:05 | | | |
| [s] Observation end time (MET) | 299230488.184000 | 299231513.493 | | | |
| Observation end date | 2007-06-26T07:33:43 | 2007-06-26T07:51:53 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



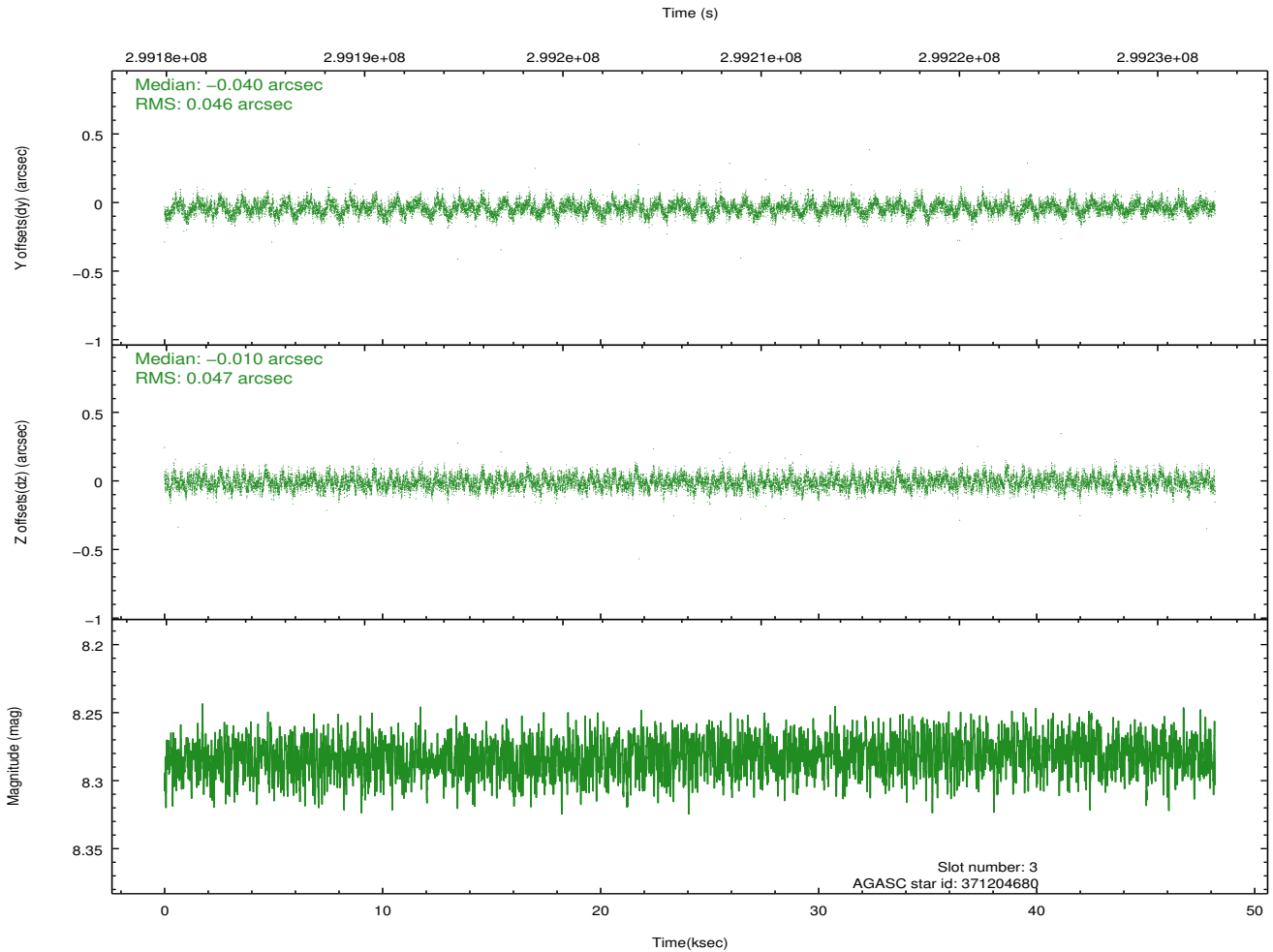
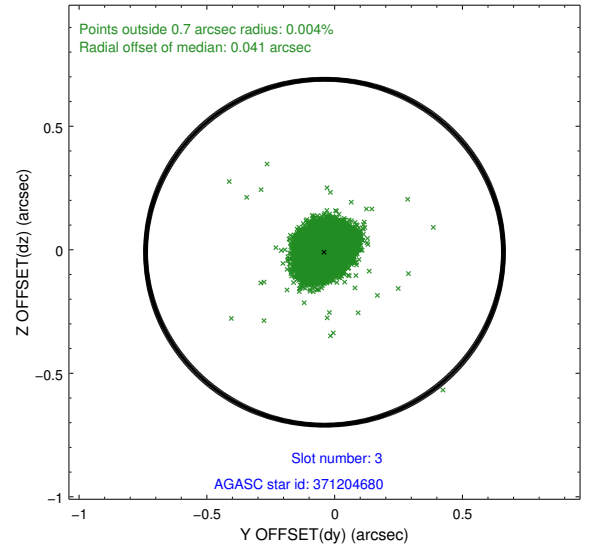
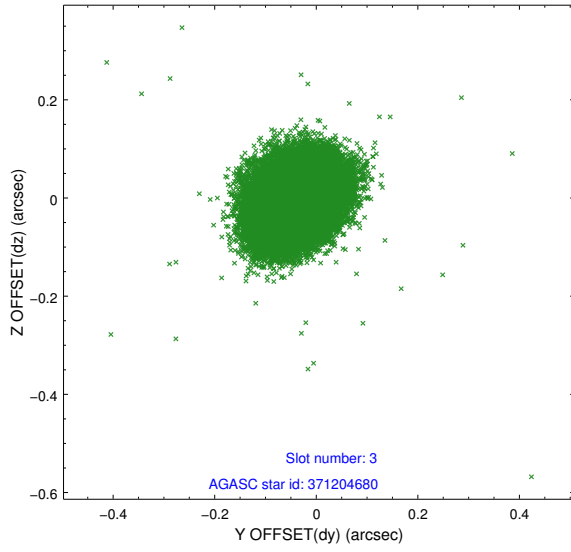


Slot Statistics

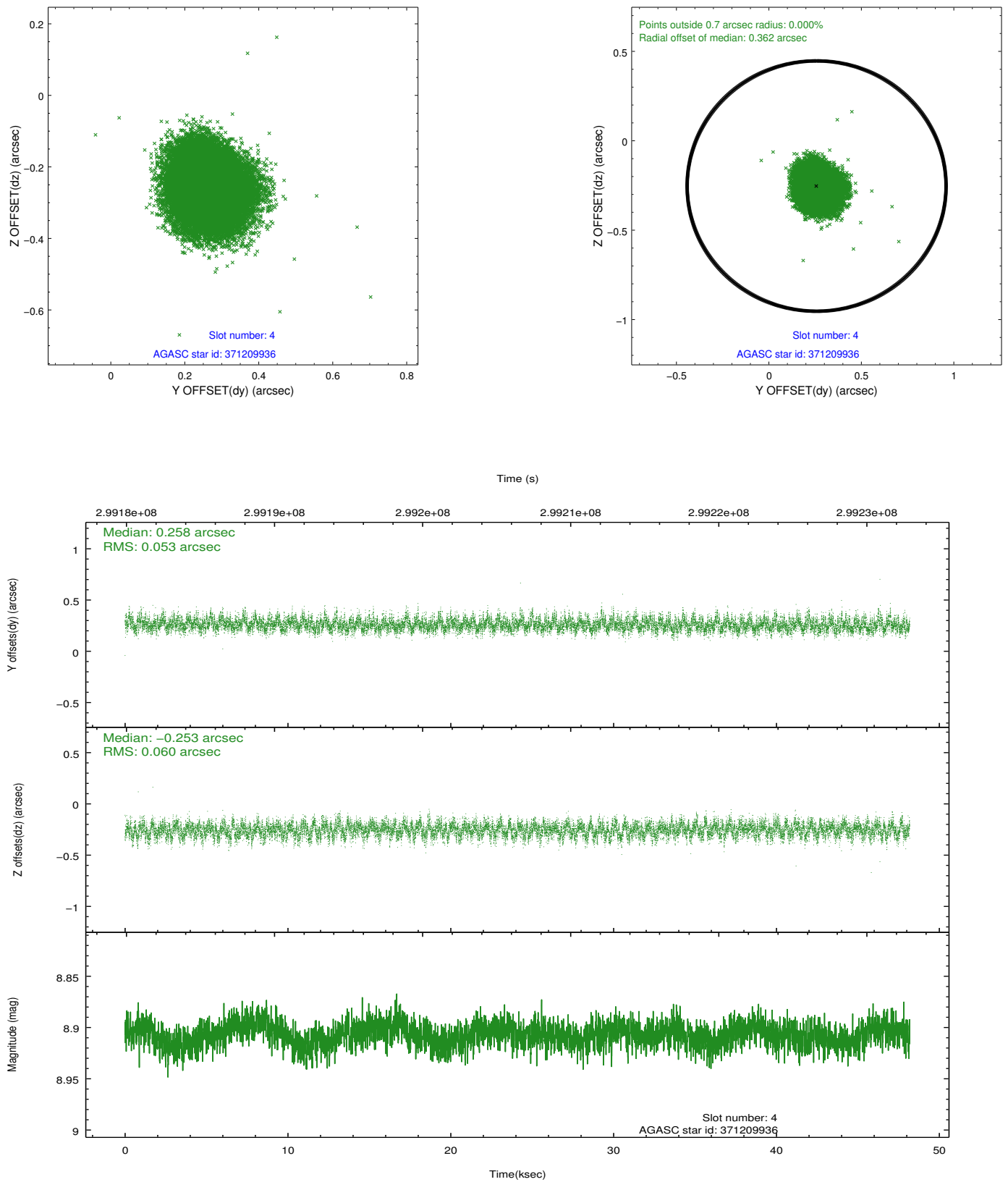
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.09 | 11754 | -0.051 | -0.030 | 0.017 | 0.030 | 0.000000 | 0.000000 | -766.33 | -1737.35 |
| 1 | FID | ACIS-S-4 | 7.19 | 11754 | 0.184 | 0.033 | 0.027 | 0.038 | 0.000000 | 0.000000 | 2147.18 | 171.23 |
| 2 | FID | ACIS-S-5 | 7.22 | 11753 | -0.160 | 0.007 | 0.018 | 0.029 | 0.000000 | 0.000000 | -1819.31 | 164.83 |
| 3 | GUIDE | 371204680 | 8.28 | 23500 | -0.040 | -0.010 | 0.069 | 0.112 | 39.715200 | 39.150194 | 276.56 | 1128.89 |
| 4 | GUIDE | 371209936 | 8.91 | 23500 | 0.258 | -0.253 | 0.085 | 0.136 | 39.300739 | 38.838291 | -889.88 | 2244.08 |
| 5 | GUIDE | 372903184 | 9.03 | 23492 | -0.029 | 0.239 | 0.093 | 0.151 | 40.811300 | 39.366216 | 1195.83 | -1886.60 |
| 6 | GUIDE | 373438184 | 7.30 | 23505 | -0.275 | 0.186 | 0.047 | 0.077 | 40.413347 | 39.537922 | 1757.23 | -750.72 |
| 7 | GUIDE | 371206192 | 9.30 | 23486 | 0.084 | -0.160 | 0.109 | 0.172 | 39.265479 | 38.799854 | -1031.63 | 2338.32 |

2.4 Star Slots

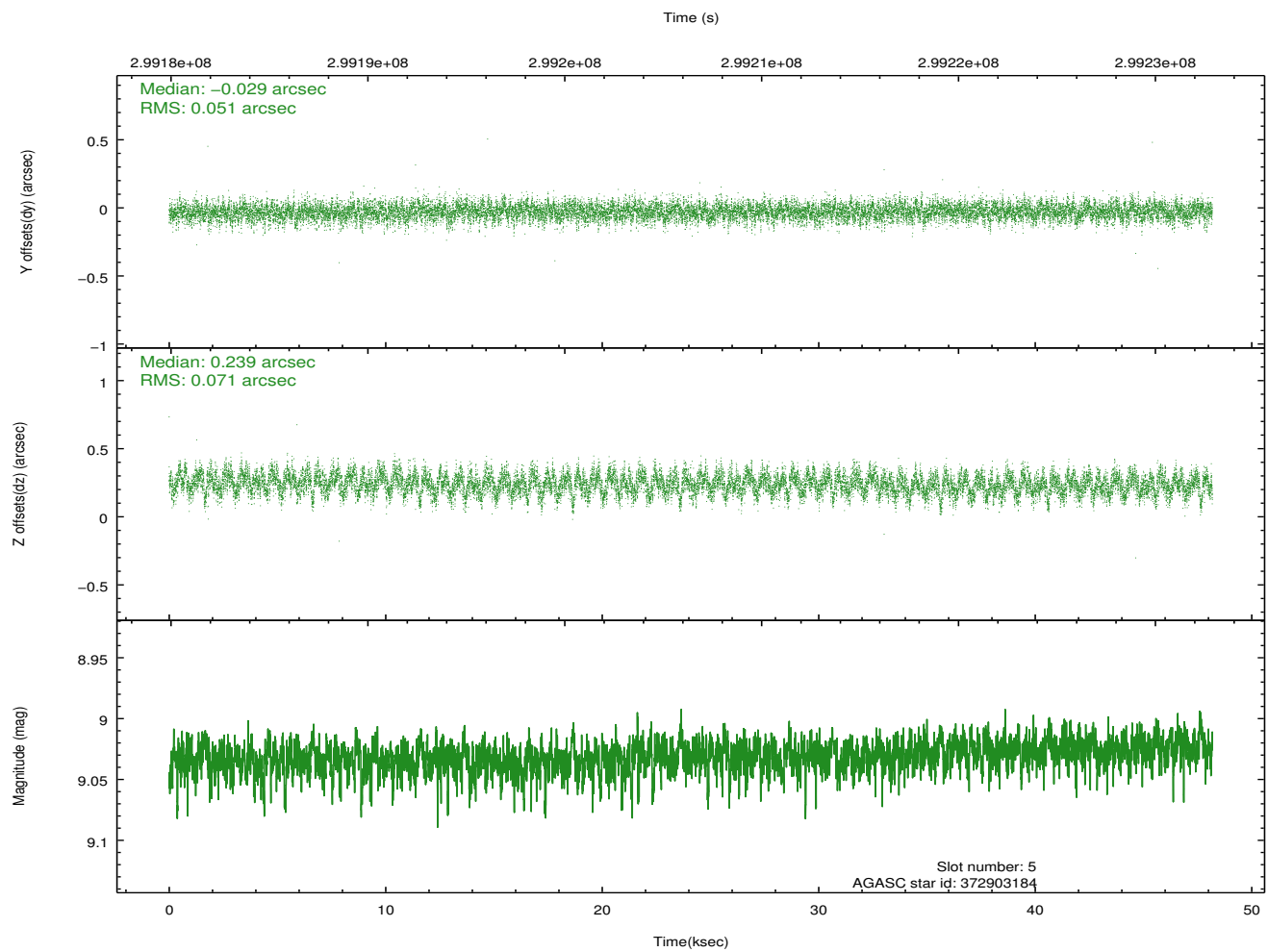
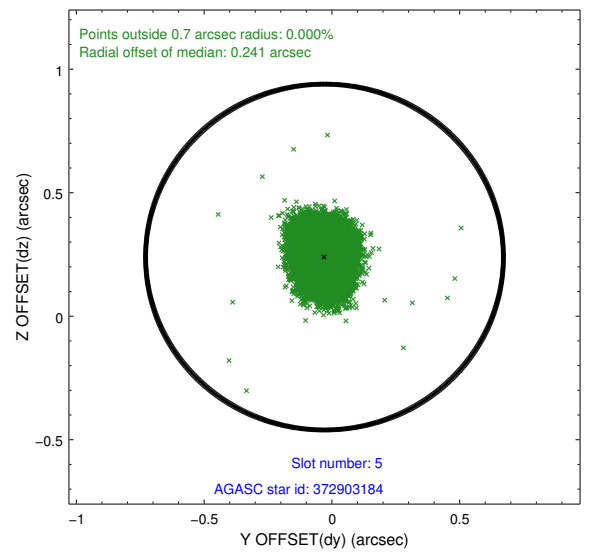
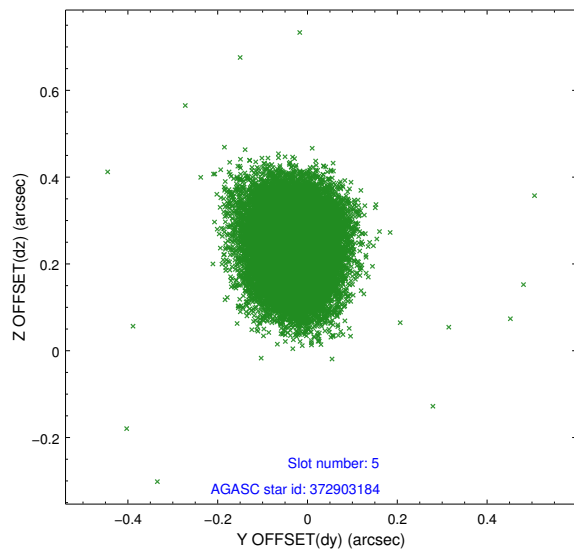
2.4.1 Slot 3



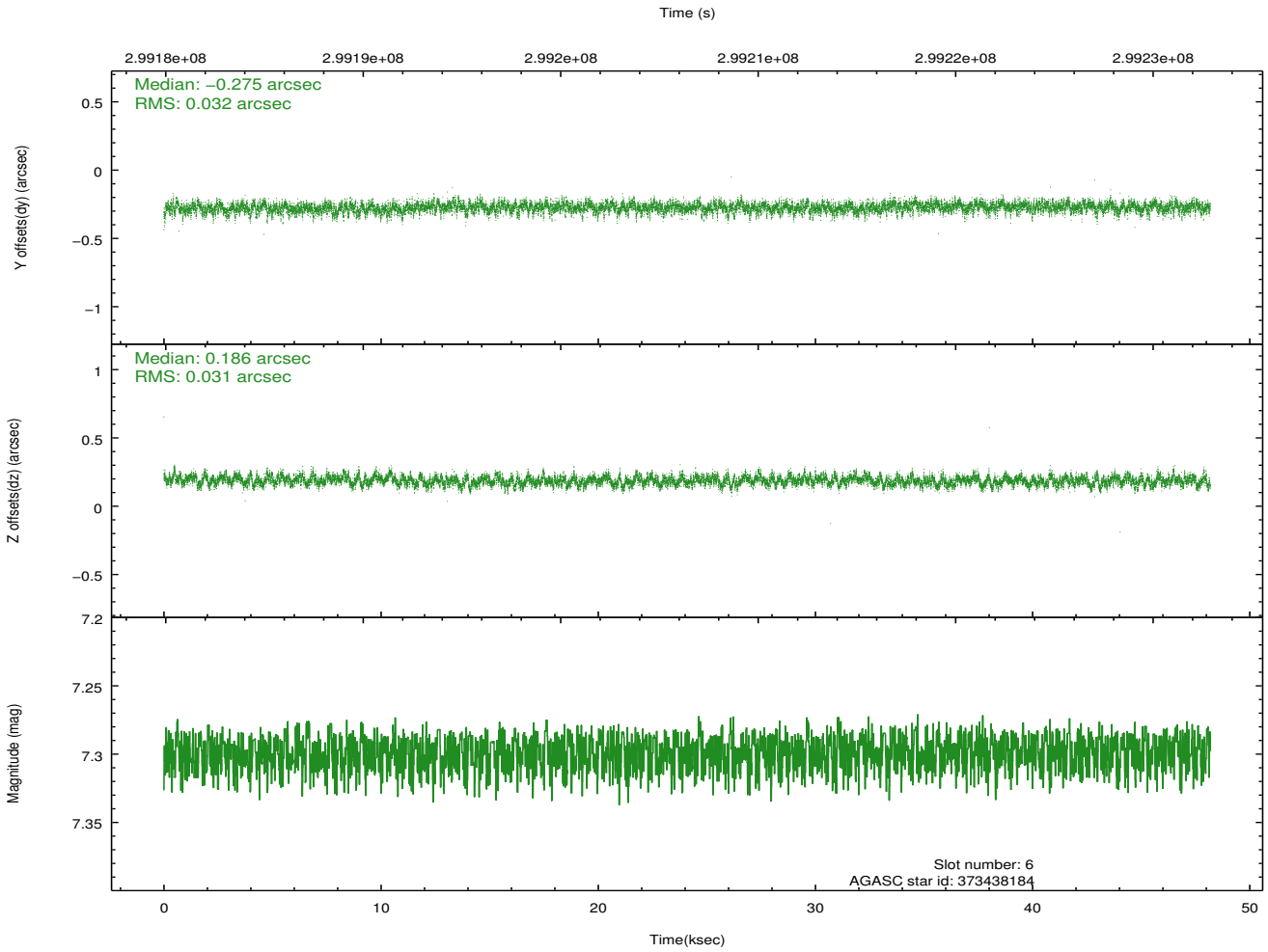
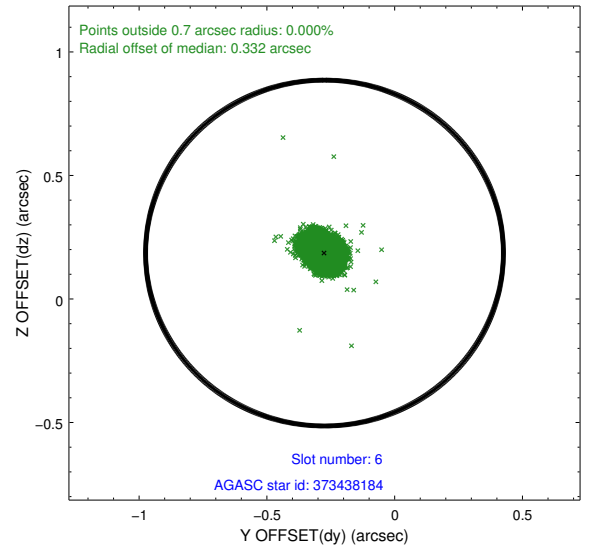
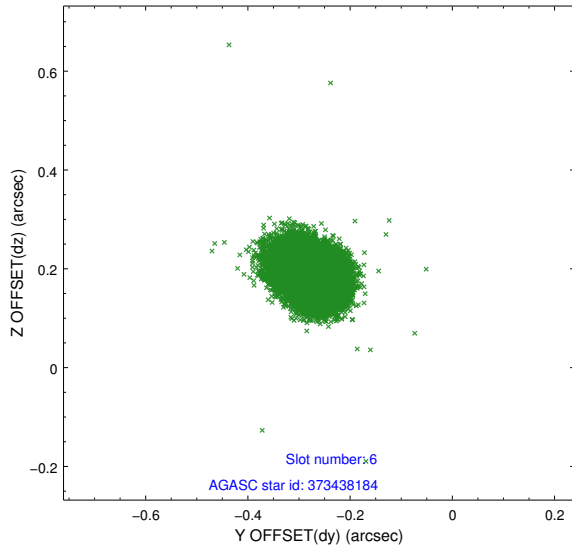
2.4.2 Slot 4



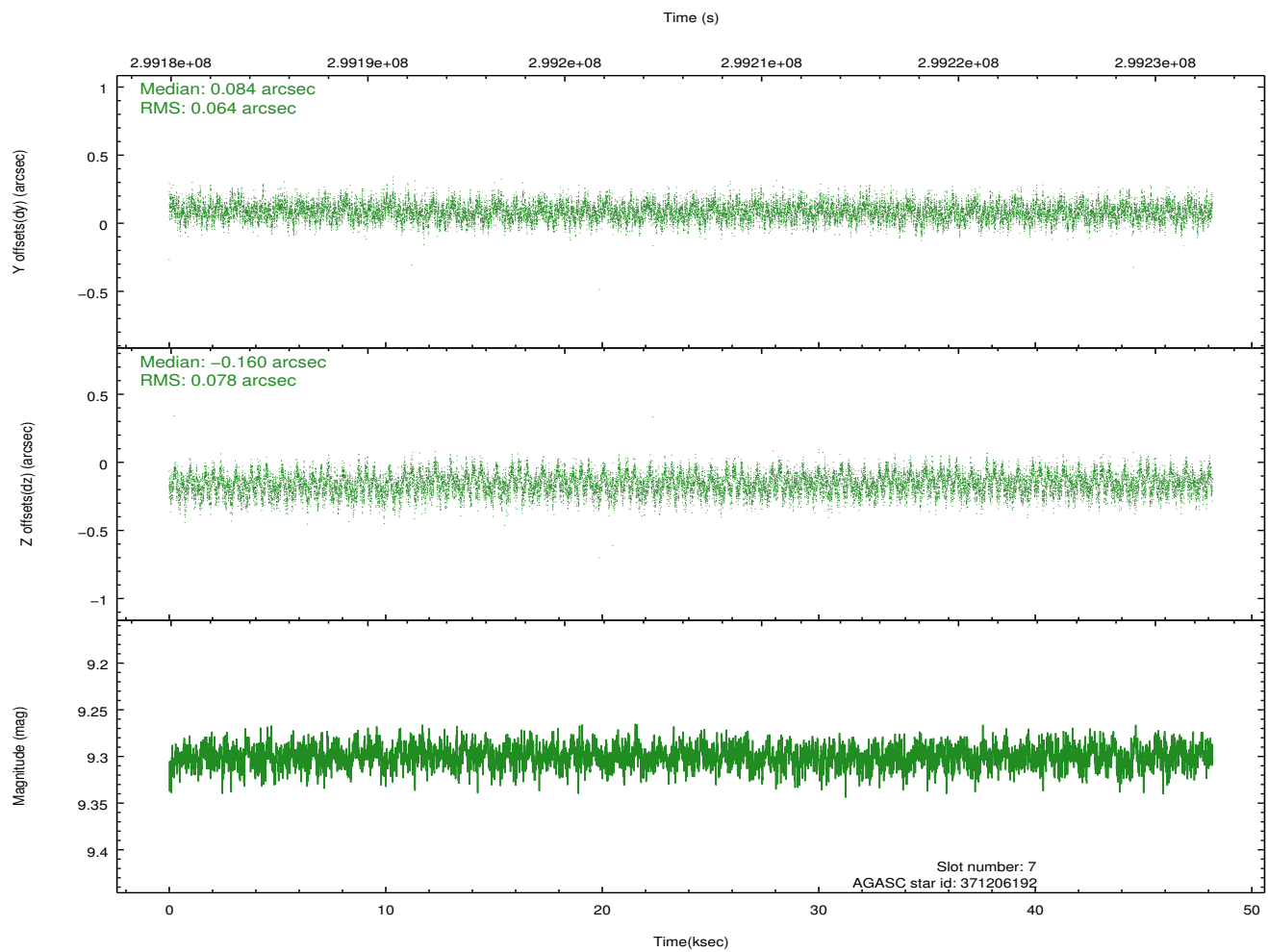
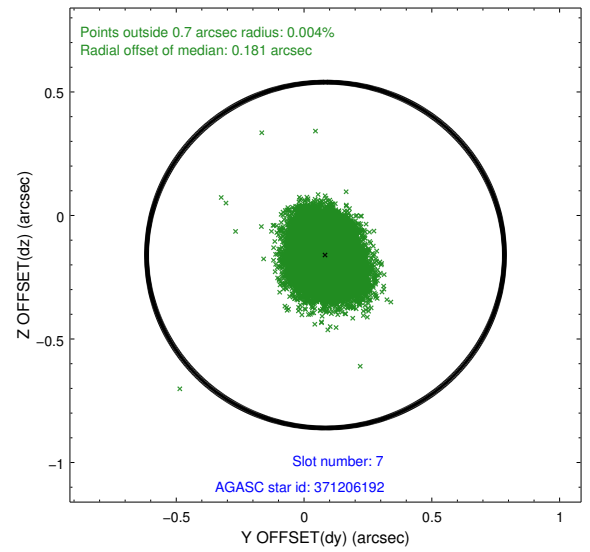
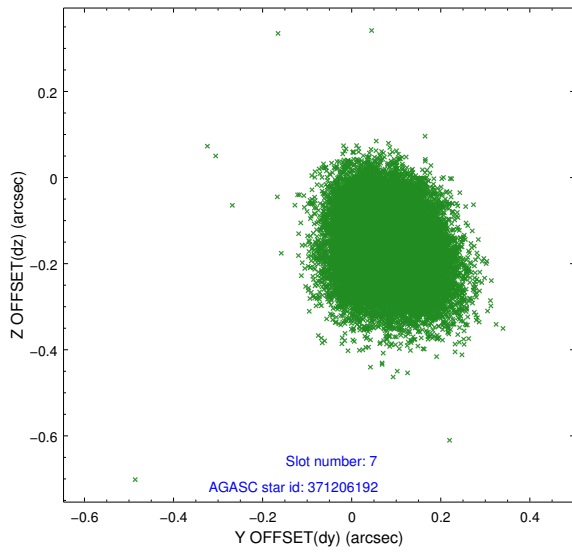
2.4.3 Slot 5



2.4.4 Slot 6

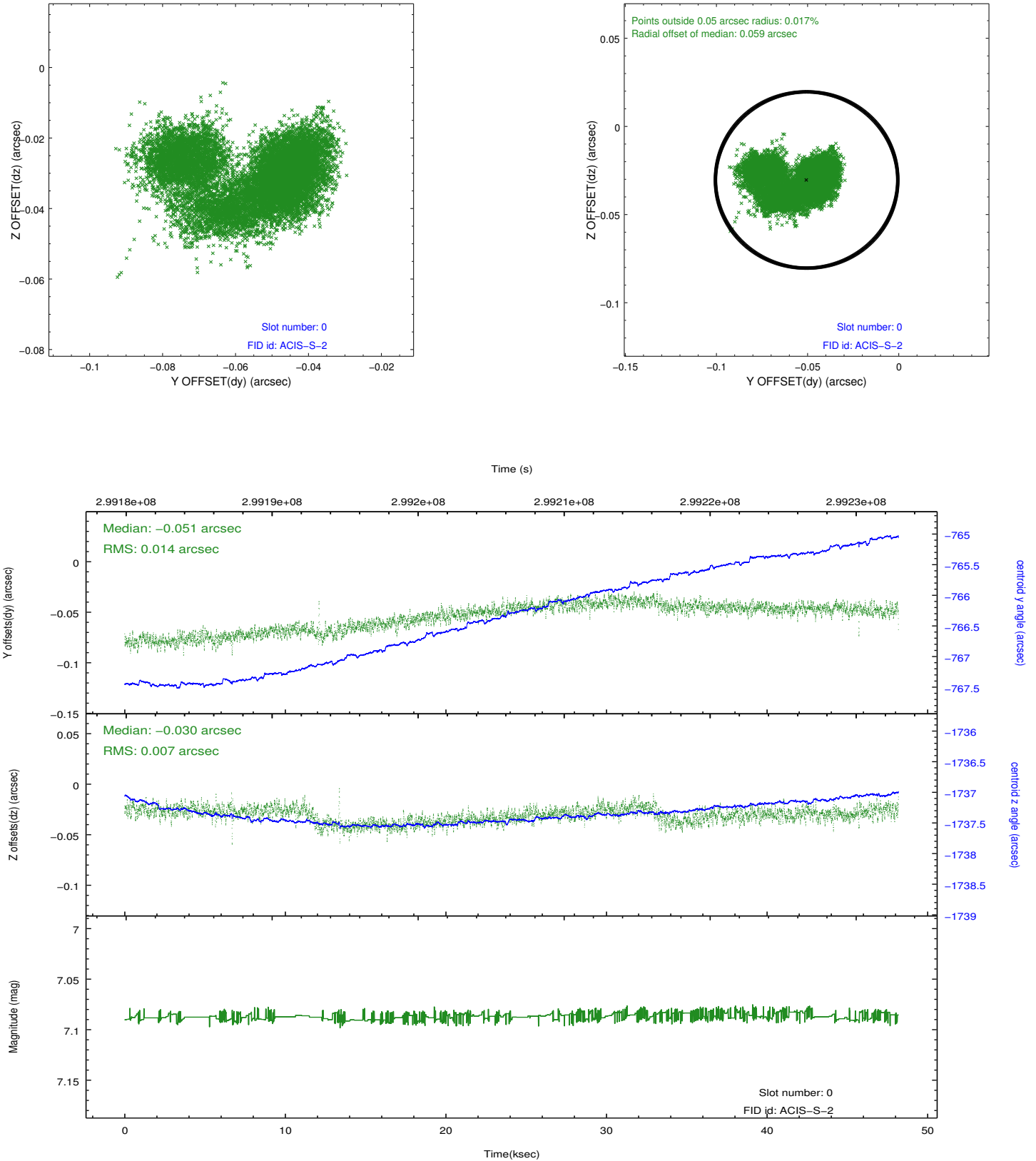


2.4.5 Slot 7

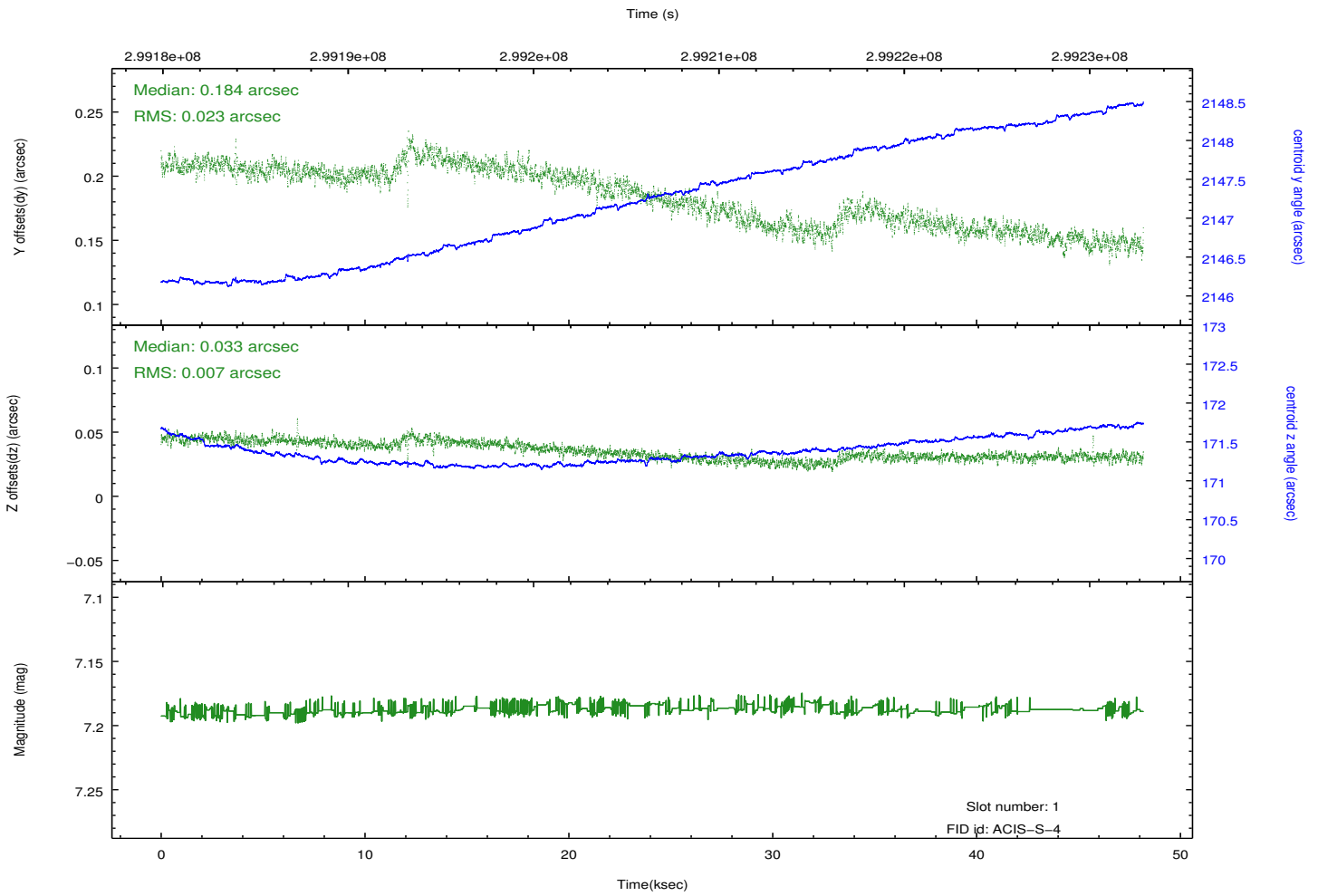
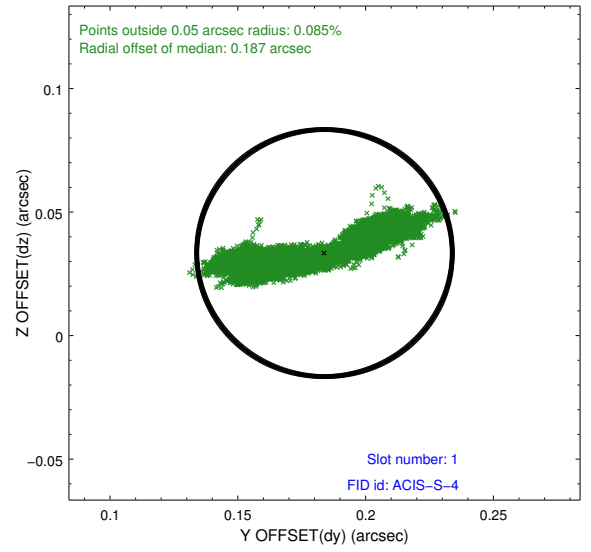
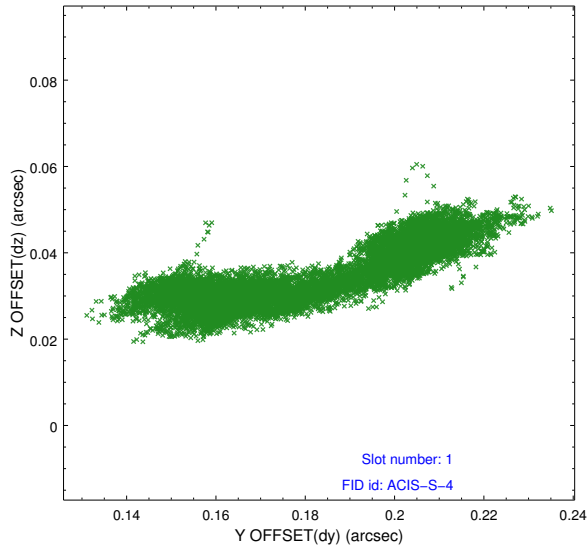


2.5 FID Slots

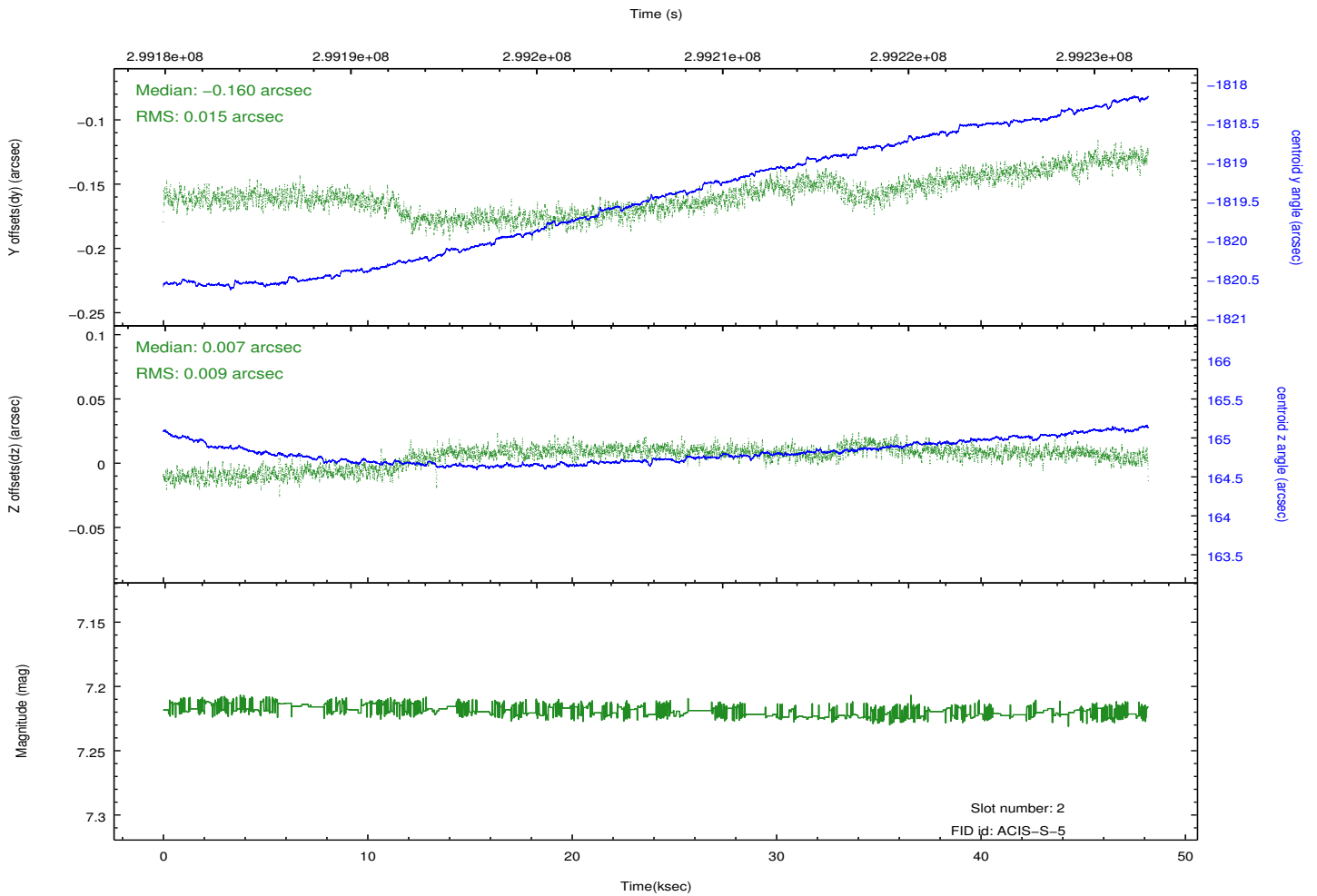
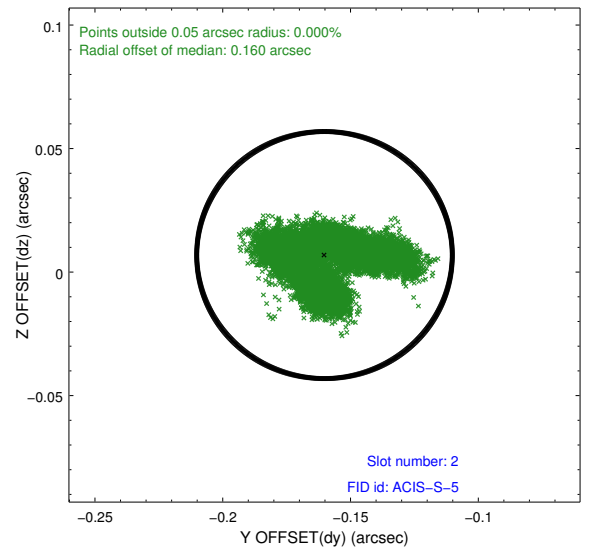
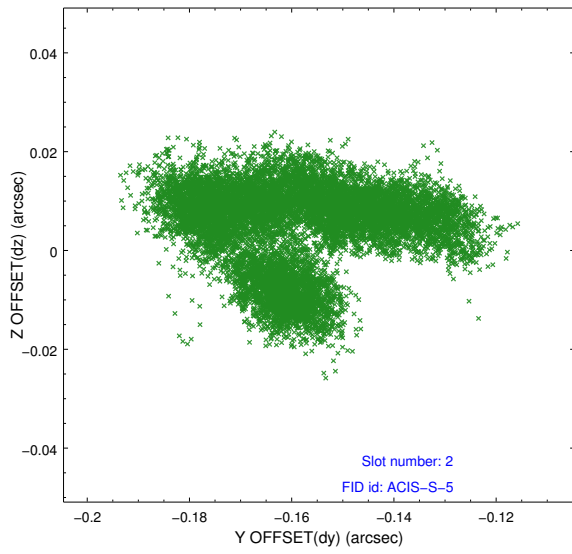
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.04.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 48.1833003 |

A.2 Comments