

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8271 - L2 Version 2
Chandra X-Ray Center

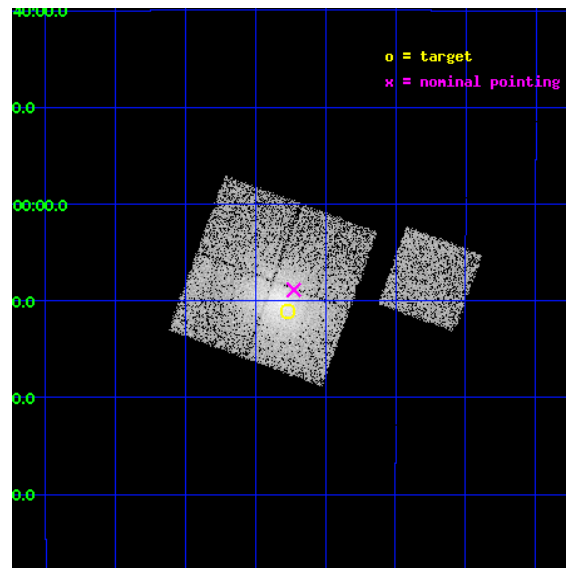
L2 Processing Date : Apr 27 2012

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 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

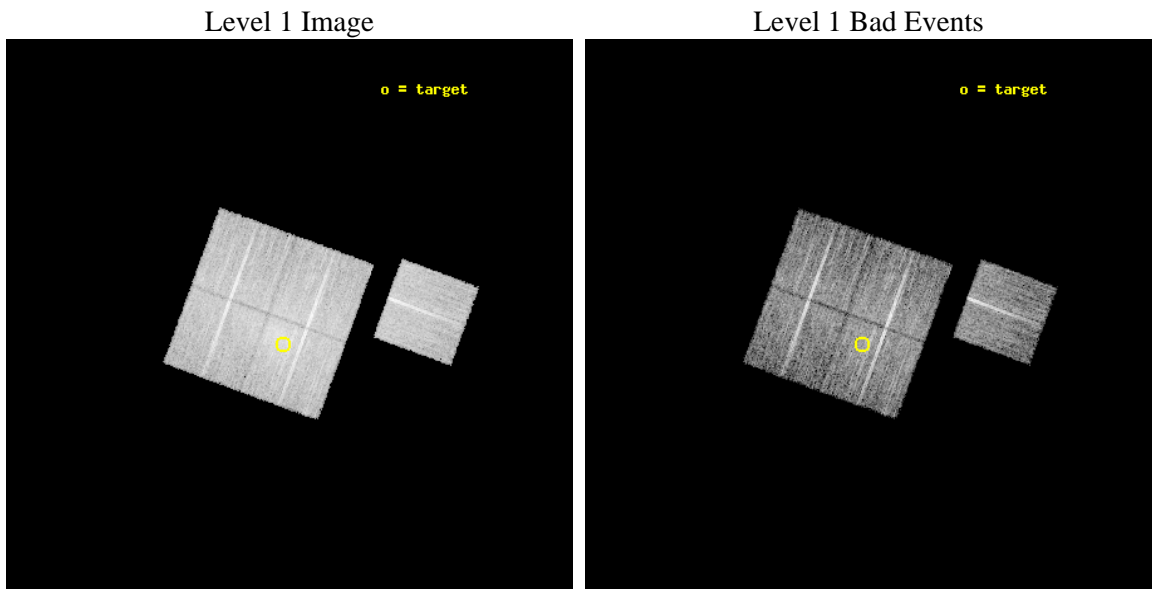
| | | |
|----------|---|---|
| seq_num | 800666 | Sequence number |
| obs_id | 8271 | Observation id |
| title | Chandra observations of flux-limited sample of low-redshift galaxy clusters - A | Proposal title |
| observer | Dr. Stephen Murray | Principal investigator |
| object | A2420 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 332.567917 | Observer's specified target RA [deg] |
| dec_targ | -12.183889 | Observer's specified target Dec [deg] |
| ra_nom | 332.55642290588 | Nominal RA [deg] |
| dec_nom | -12.147895728911 | Nominal Dec [deg] |
| roll_nom | 110.11049470048 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 8177.8000628948 | Sum of GTIs [s] |
| livetime | 8070.9510846643 | Livetime [s] |
| ontime0 | 8174.6590825319 | Sum of GTIs [s] |
| ontime1 | 8177.8000628948 | Sum of GTIs [s] |
| ontime2 | 8177.8000628948 | Sum of GTIs [s] |
| ontime3 | 8177.8000628948 | Sum of GTIs [s] |
| ontime6 | 8177.8000628948 | Sum of GTIs [s] |
| l2events | 45722 | Number of level 2 events |



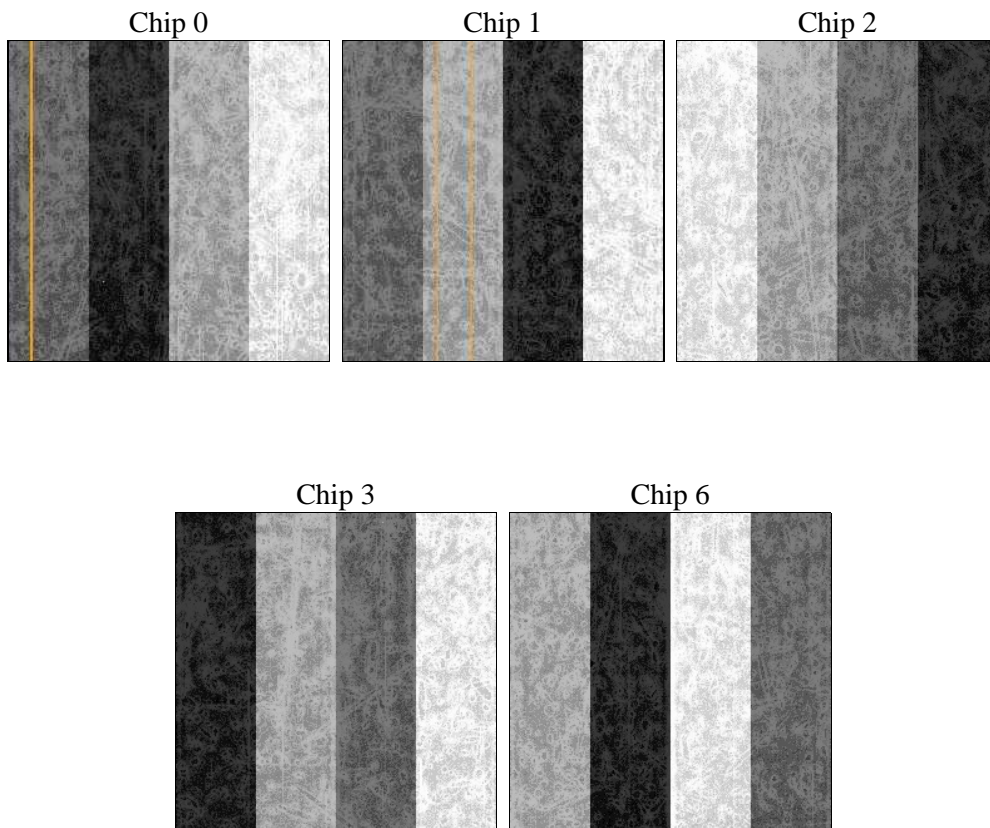
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 8000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 8177.8000628948 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime0 | 8174.6590825319 | Sum of GTIs [s] |
| date | 2012-04-27T13:22:07 | Date and time of file creation | ontime1 | 8177.8000628948 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 8177.8000628948 | Sum of GTIs [s] |
| | | | ontime3 | 8177.8000628948 | Sum of GTIs [s] |
| | | | ontime6 | 8177.8000628948 | Sum of GTIs [s] |
| | | | l1events | 384569 | Number of level 1 events |

2.1.4 Events

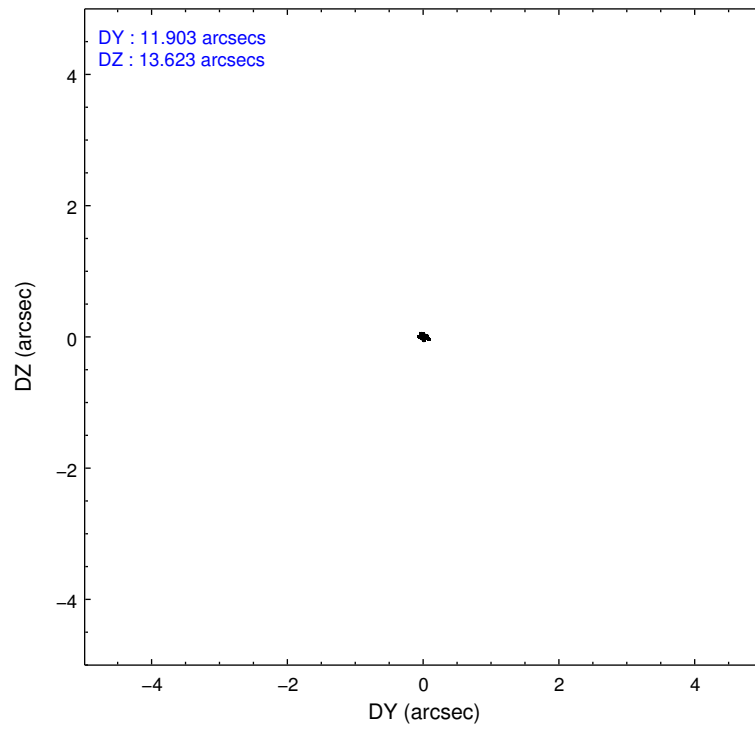
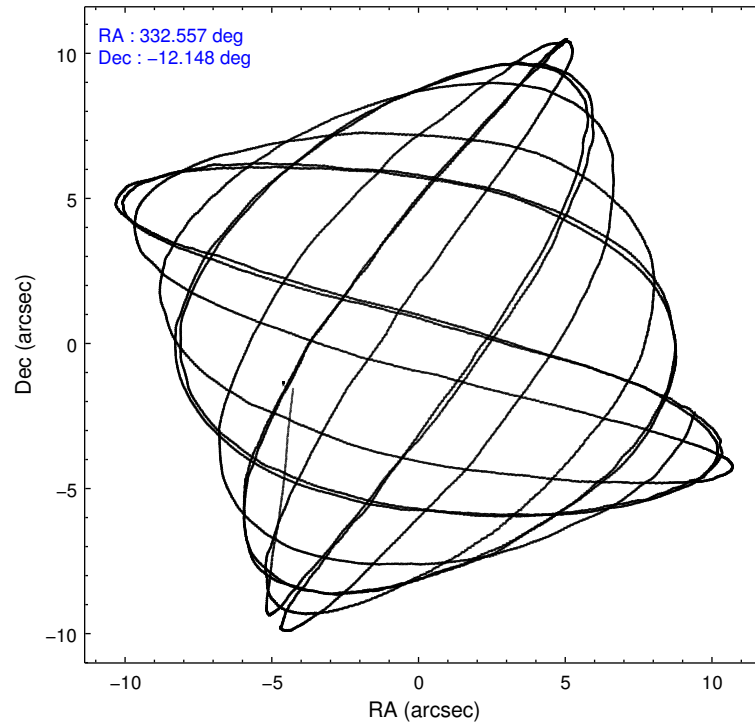
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 71955 | 71373 | 80888 | 87967 | 72386 |
| rejected events | 64179 | 59897 | 72143 | 70349 | 65673 |
| rejected % | 89% | 83% | 89% | 79% | 90% |

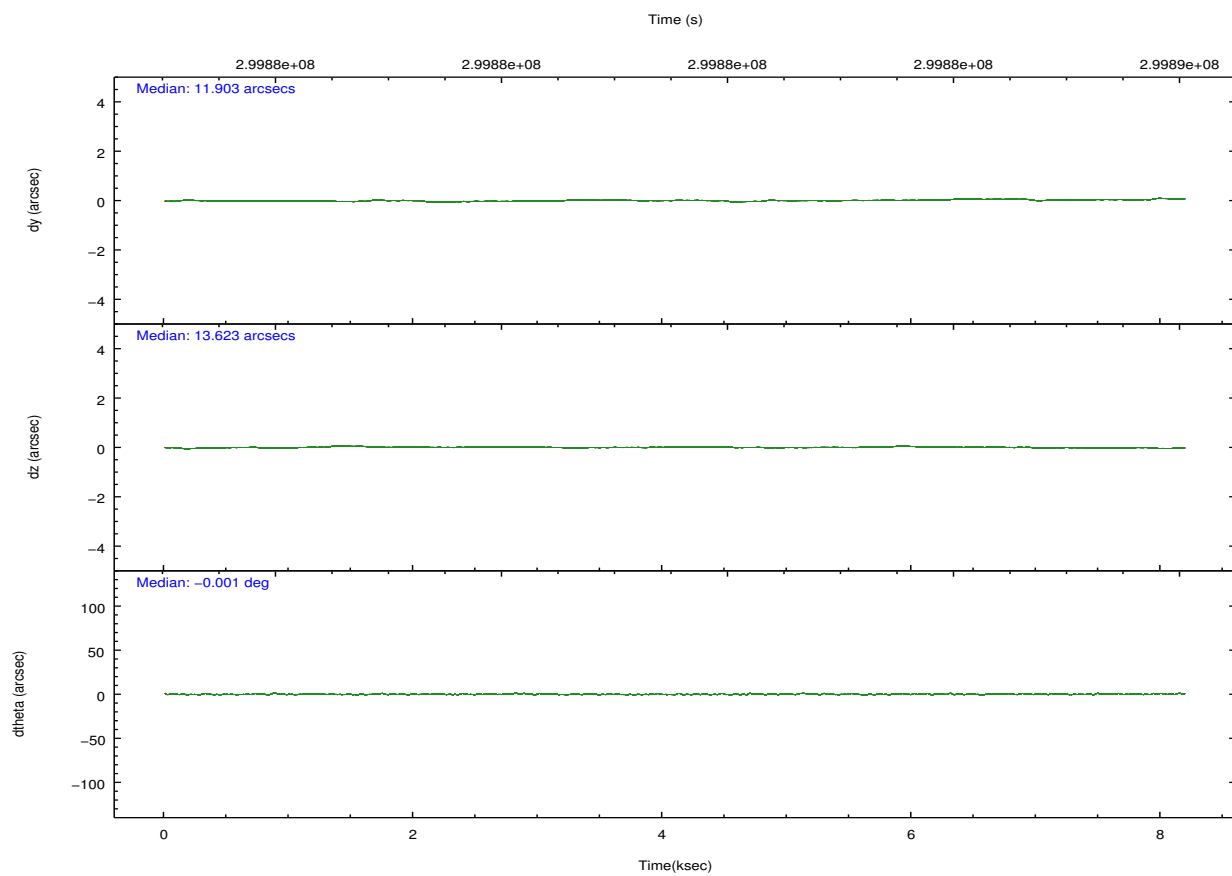
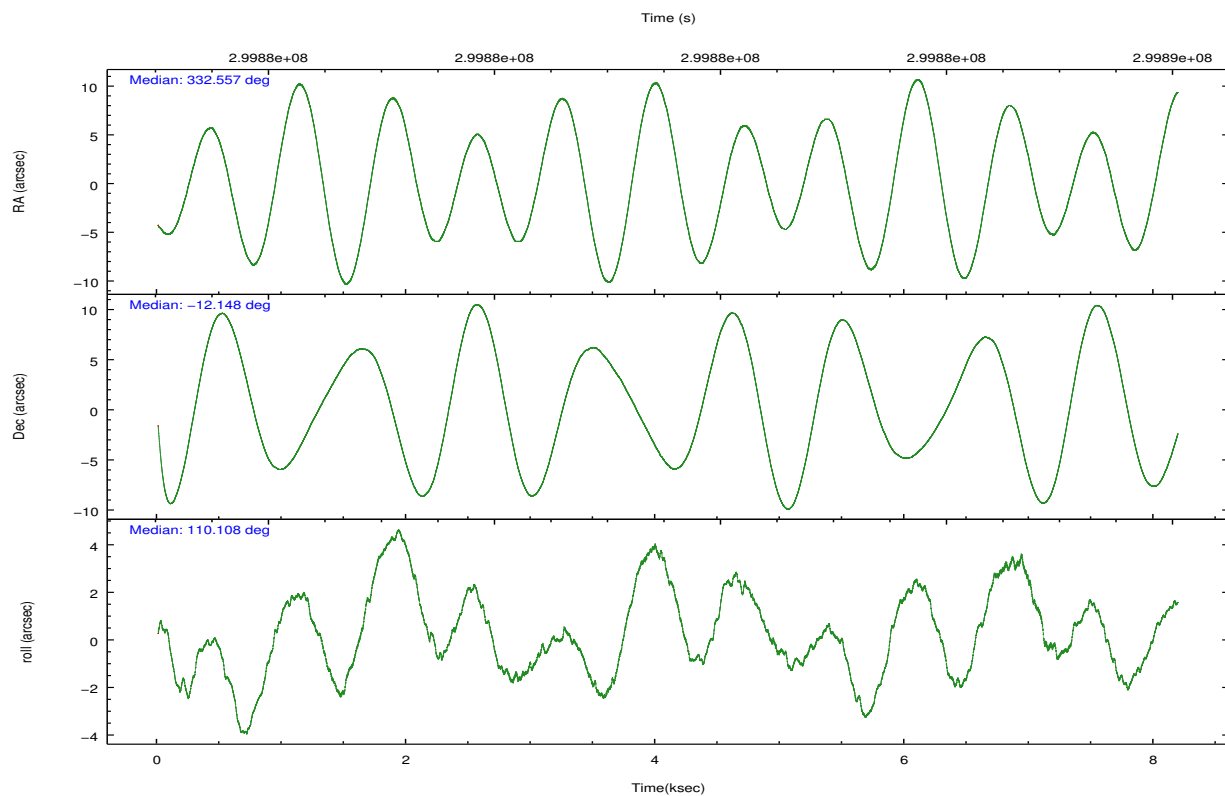
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 3577 | 6265 | 4490 | 11842 | 2663 |
| | 4% | 8% | 5% | 13% | 3% |
| grade 1 events | 27 | 53 | 64 | 95 | 36 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 1889 | 2305 | 1968 | 2746 | 1607 |
| | 2% | 3% | 2% | 3% | 2% |
| grade 3 events | 852 | 1038 | 813 | 1104 | 796 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 812 | 998 | 796 | 1132 | 826 |
| | 1% | 1% | 0% | 1% | 1% |
| grade 5 events | 2611 | 2737 | 2417 | 3014 | 2833 |
| | 3% | 3% | 2% | 3% | 3% |
| grade 6 events | 1414 | 1739 | 1471 | 1674 | 1548 |
| | 1% | 2% | 1% | 1% | 2% |
| grade 7 events | 60773 | 56238 | 68869 | 66360 | 62077 |
| | 84% | 78% | 85% | 75% | 85% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01236 | ACIS-01236 | 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 | 332.578110 | 332.5564229058832 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -12.165391 | -12.14789572891118 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 109.906373 | 110.1104947004785 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -228.592463 | -228.5990329025337 | | | |
| [mm] SIM translation stage offset | -5 | -4.993420100396037 | | | |
| [s] Observation start time (MET) | 299877641.184000 | 299876189.83636 | | | |
| Observation start date | 2007-07-03T19:19:36 | 2007-07-03T18:56:29 | | | |
| [s] Observation end time (MET) | 299885641.184000 | 299886021.12433 | | | |
| Observation end date | 2007-07-03T21:32:56 | 2007-07-03T21:40:21 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



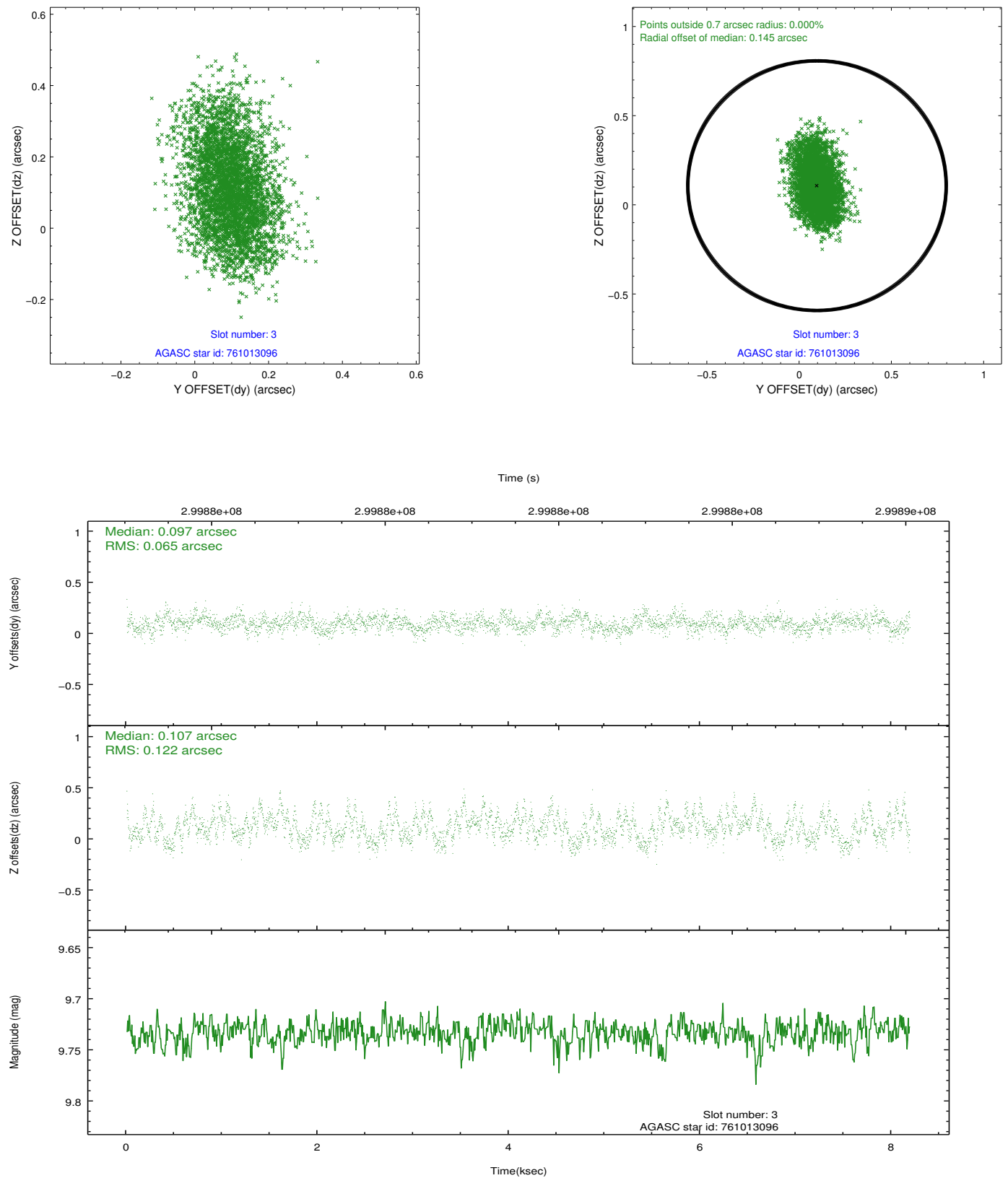


Slot Statistics

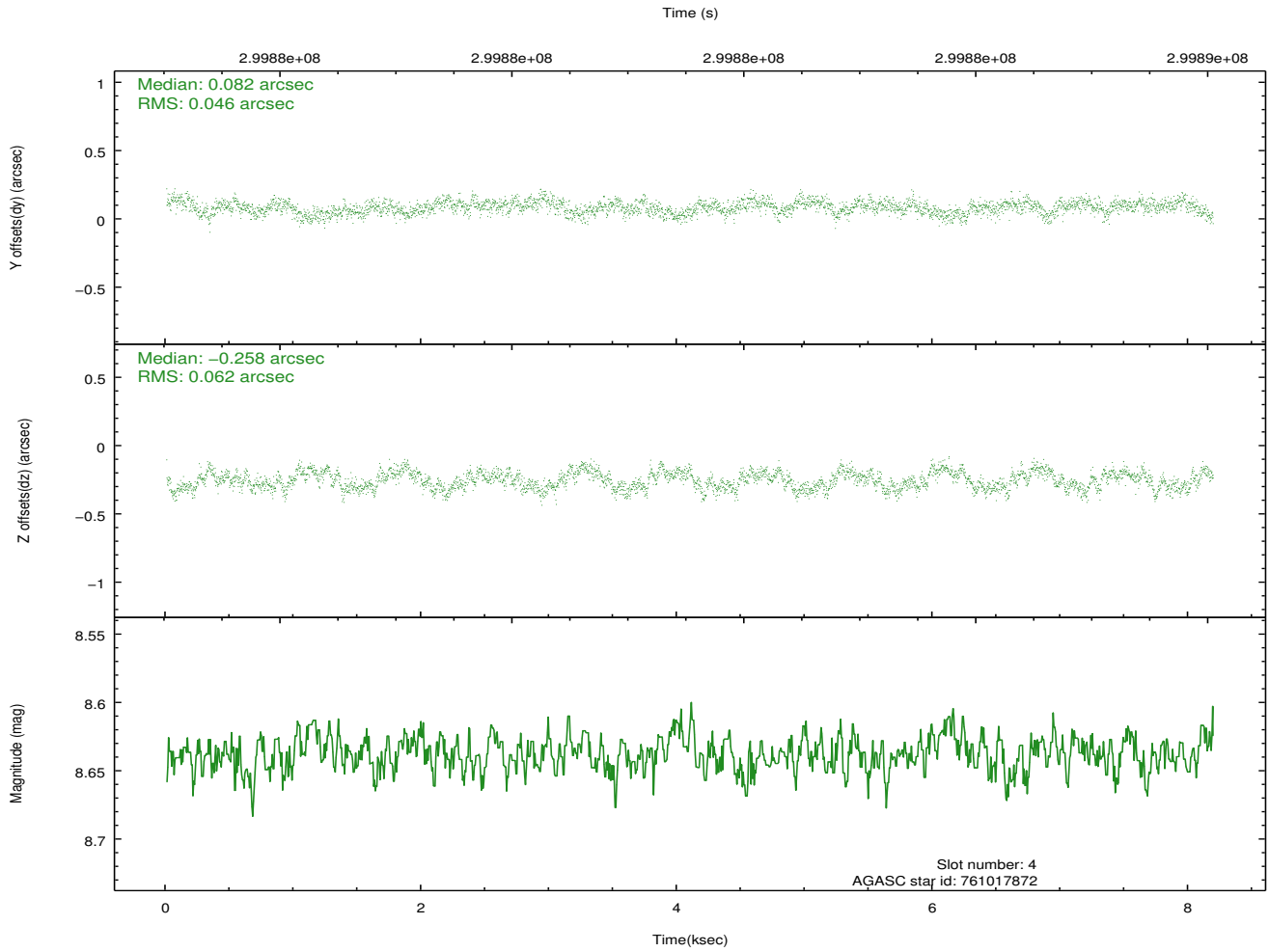
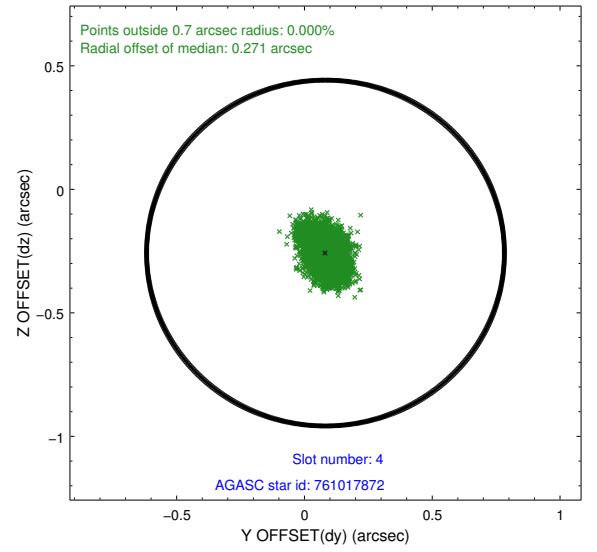
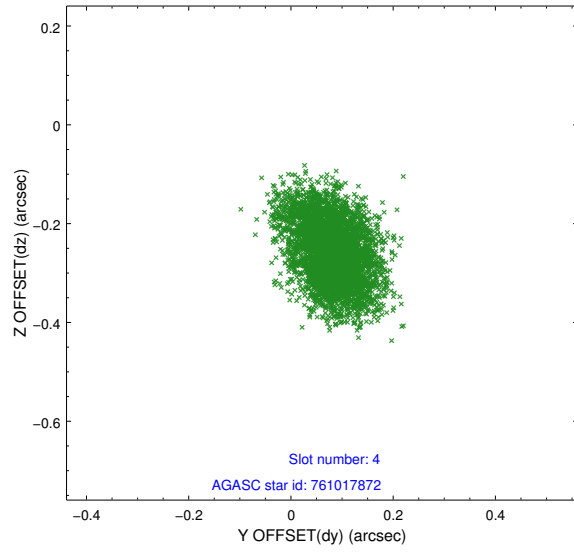
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.22 | 1998 | 0.117 | -0.086 | 0.006 | 0.011 | 0.000000 | 0.000000 | 927.64 | -939.76 |
| 1 | FID | ACIS-I-5 | 7.22 | 1997 | -0.243 | 0.105 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1820.40 | 957.58 |
| 2 | FID | ACIS-I-6 | 7.23 | 1998 | 0.035 | 0.051 | 0.007 | 0.011 | 0.000000 | 0.000000 | 392.42 | 1602.76 |
| 3 | GUIDE | 761013096 | 9.73 | 3992 | 0.097 | 0.107 | 0.146 | 0.244 | 333.270050 | -12.155838 | -798.94 | -2300.04 |
| 4 | GUIDE | 761017872 | 8.64 | 3994 | 0.082 | -0.258 | 0.082 | 0.131 | 332.566894 | -12.333438 | -554.47 | 242.26 |
| 5 | GUIDE | 761397280 | 9.56 | 3992 | 0.243 | 0.097 | 0.106 | 0.173 | 333.129090 | -12.611611 | -2170.88 | -1272.42 |
| 6 | GUIDE | 761017384 | 7.14 | 3995 | -0.479 | -0.190 | 0.063 | 0.102 | 332.142254 | -11.613540 | 2389.38 | 768.74 |
| 7 | GUIDE | 761012632 | 9.70 | 3991 | 0.054 | 0.242 | 0.115 | 0.188 | 333.394060 | -12.374429 | -1687.35 | -2439.62 |

2.4 Star Slots

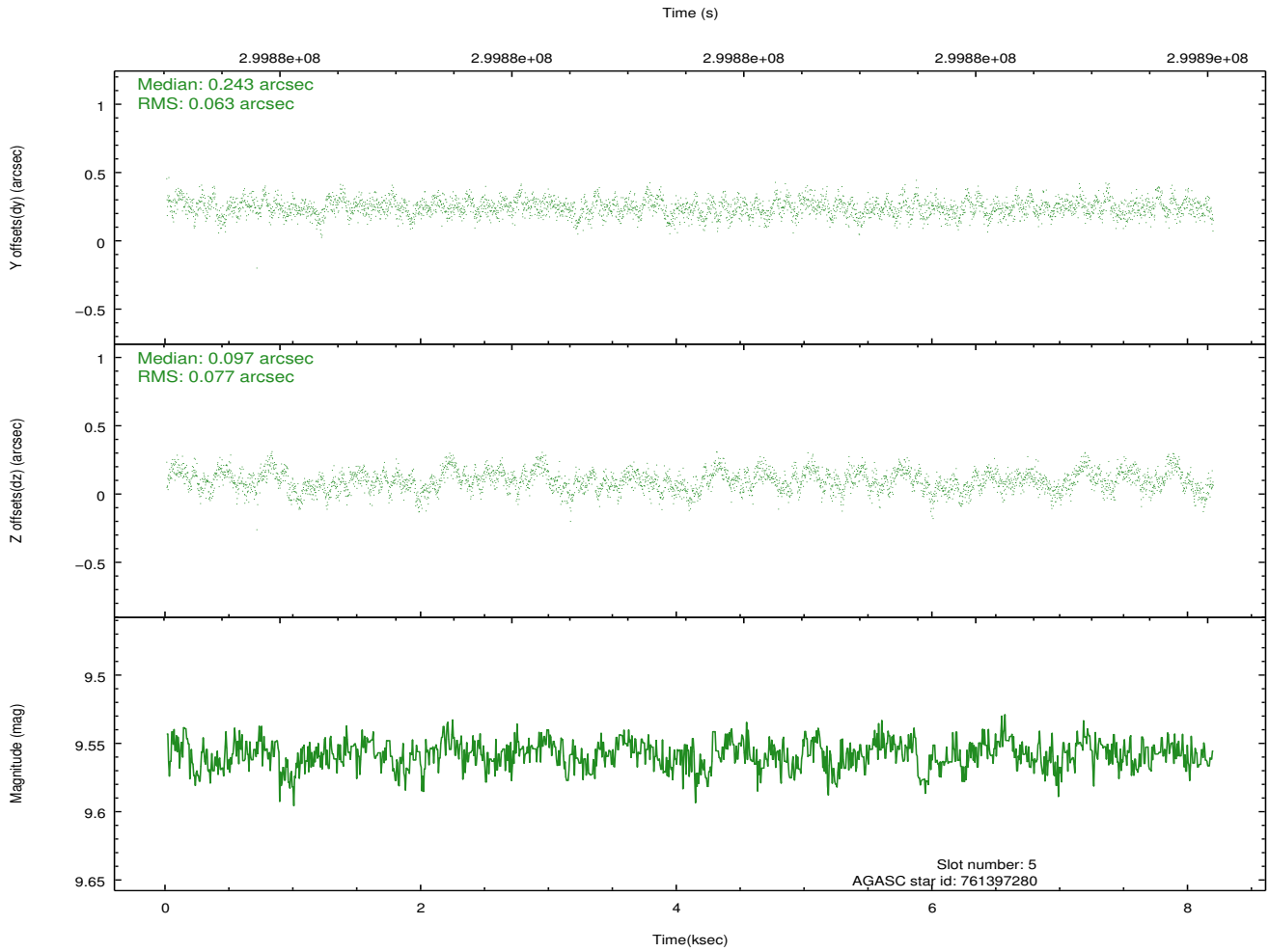
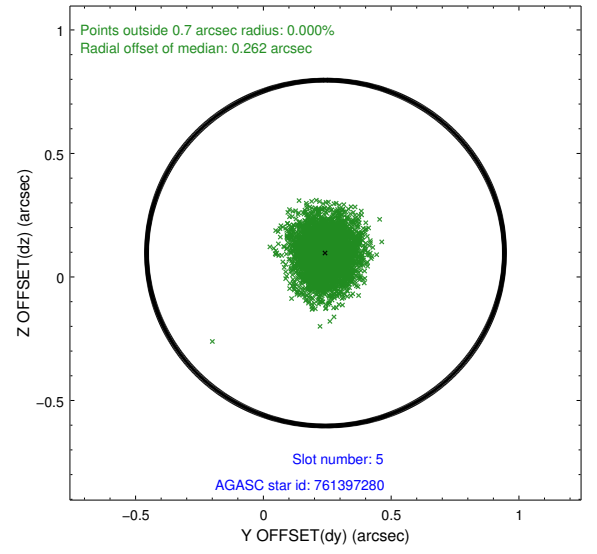
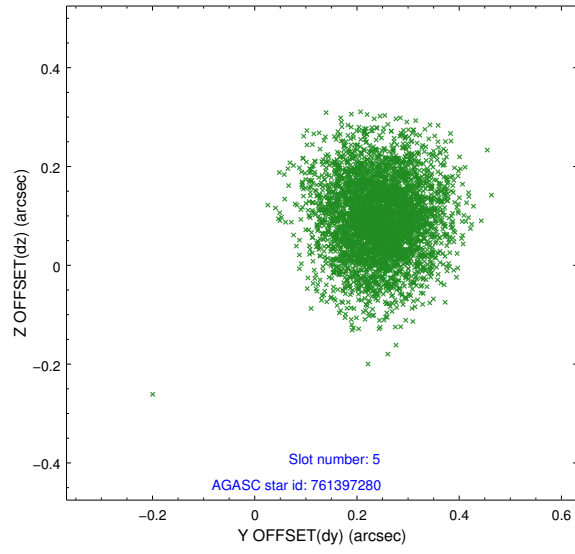
2.4.1 Slot 3



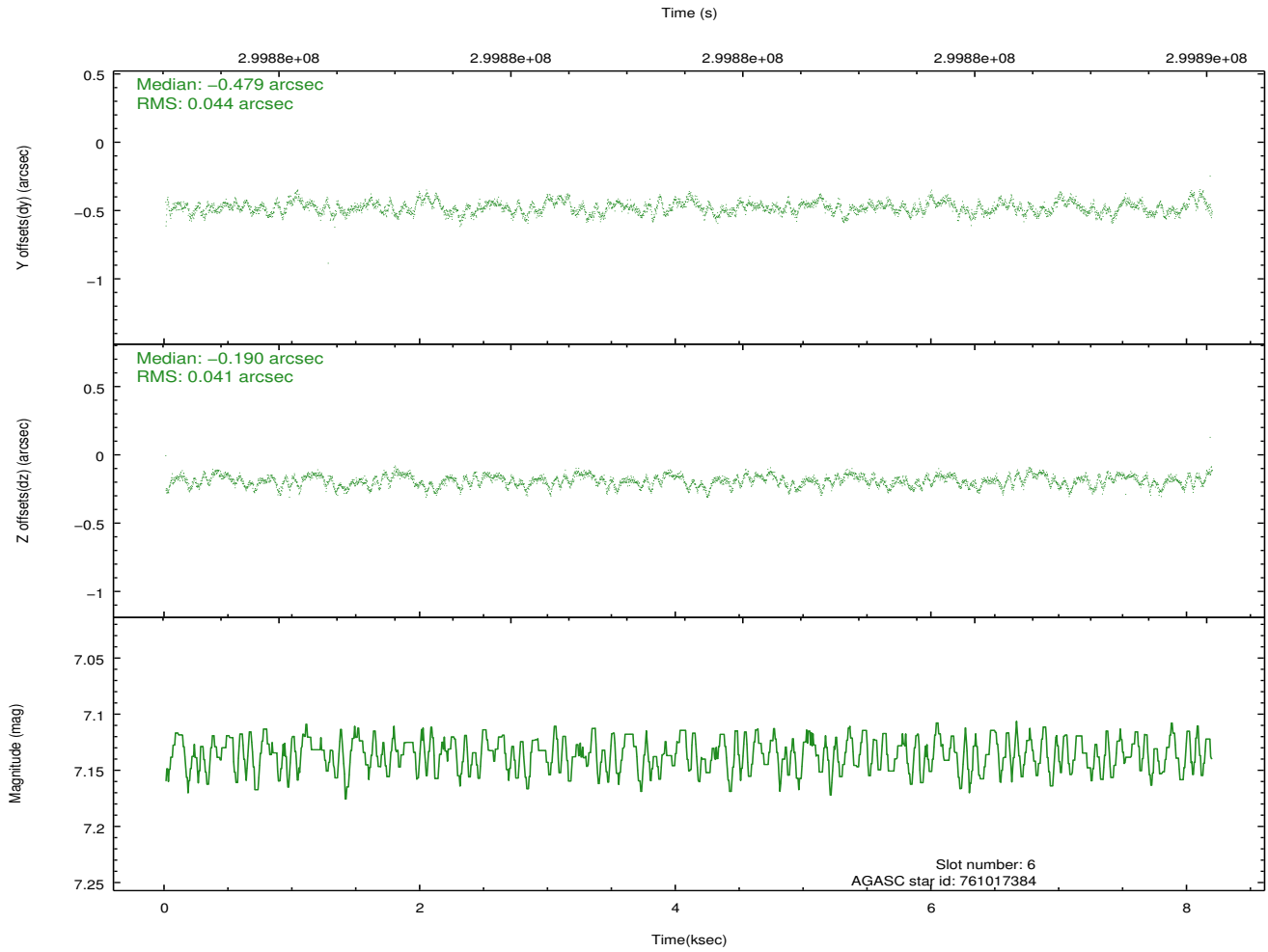
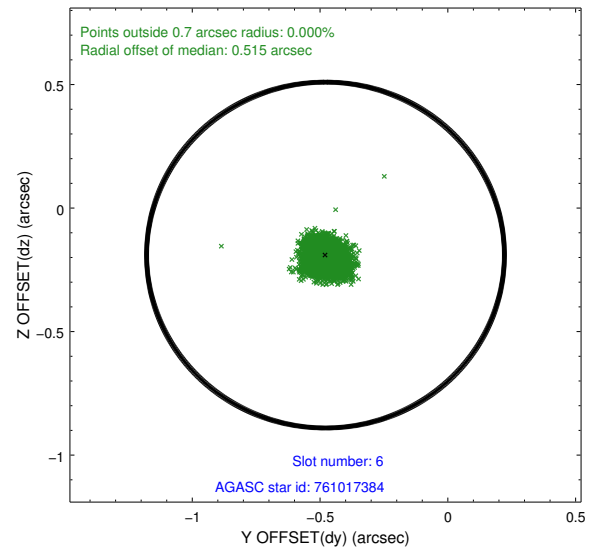
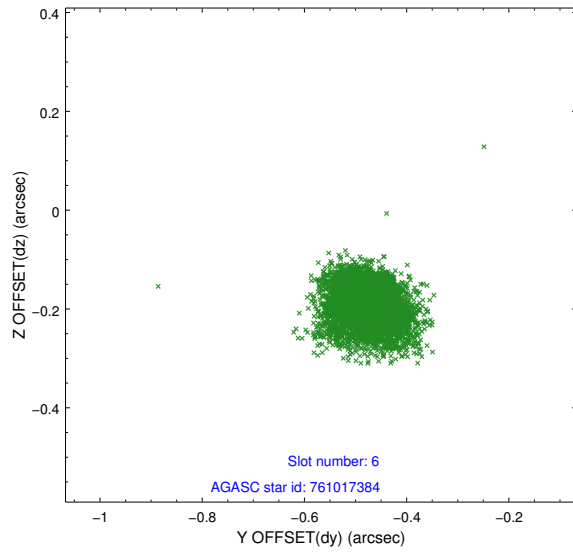
2.4.2 Slot 4



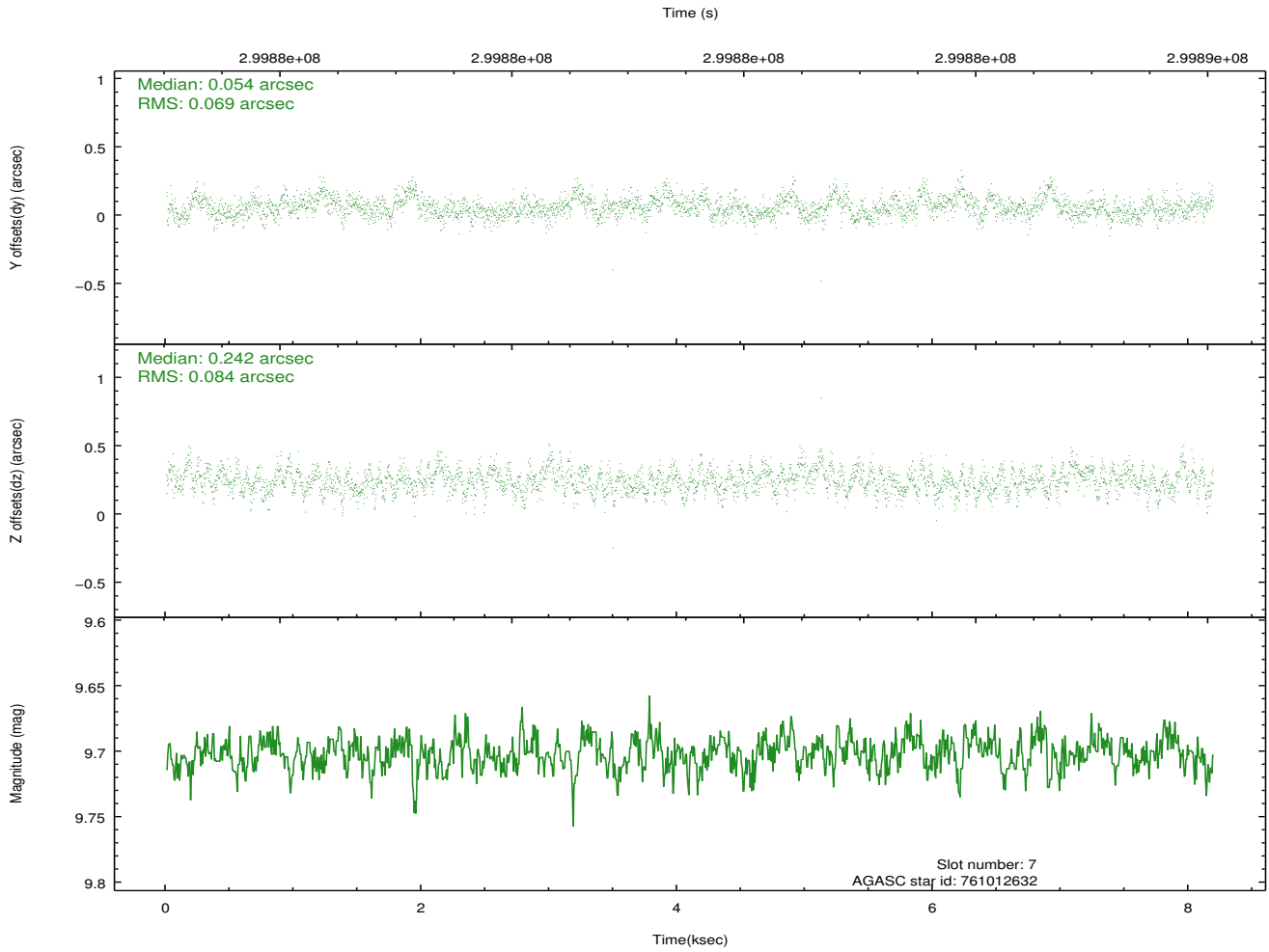
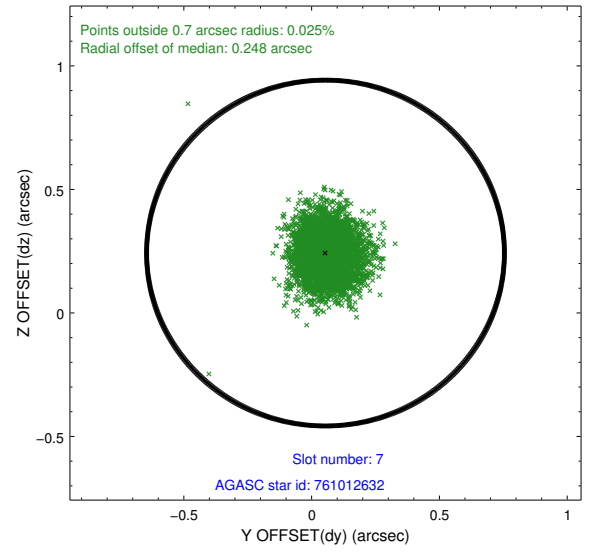
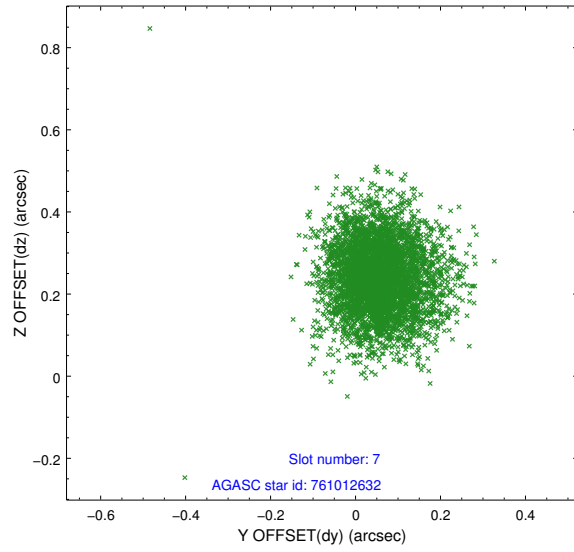
2.4.3 Slot 5



2.4.4 Slot 6

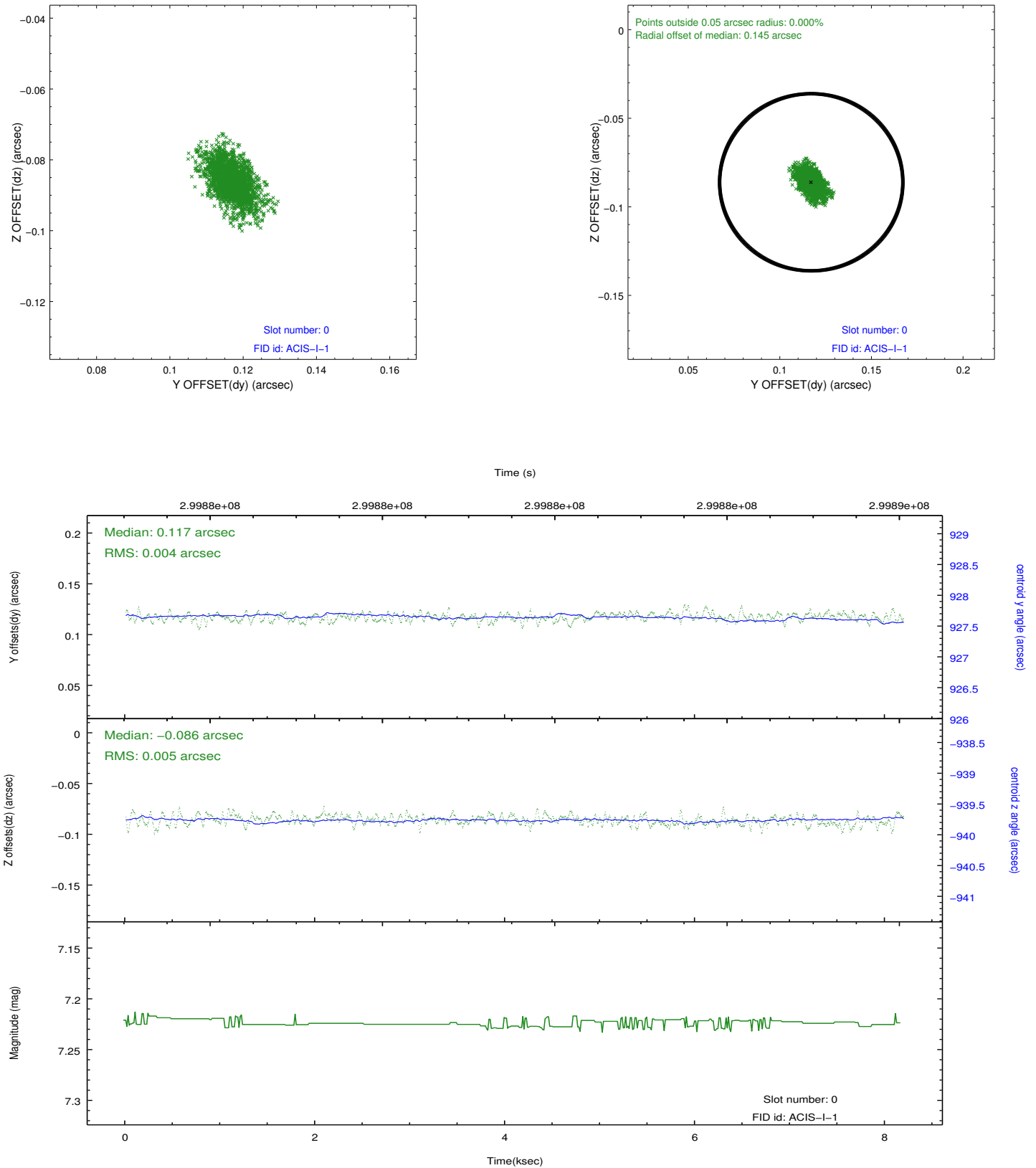


2.4.5 Slot 7

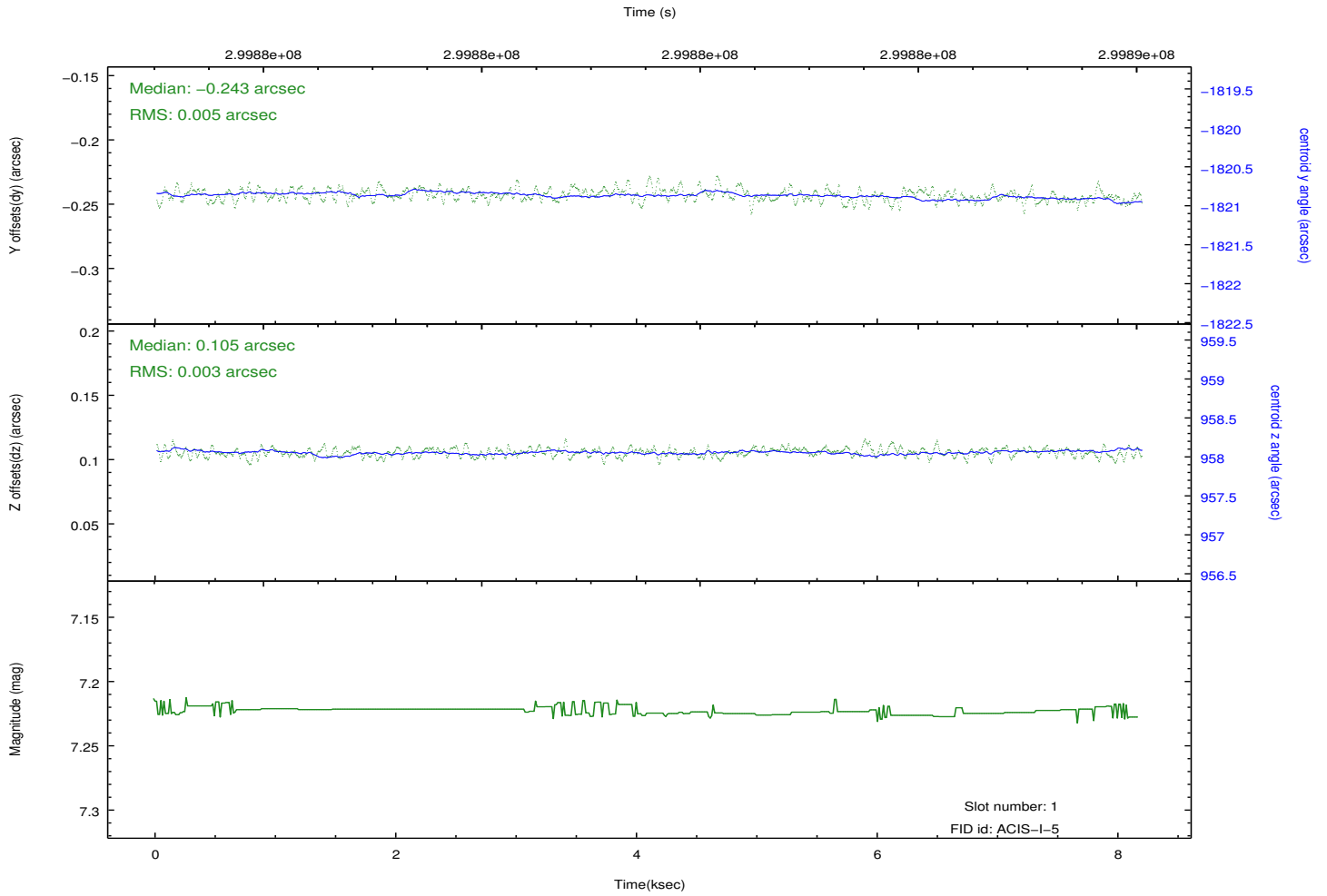
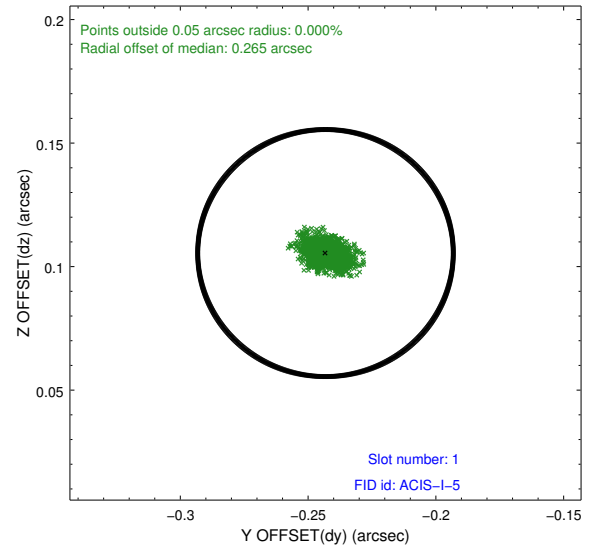
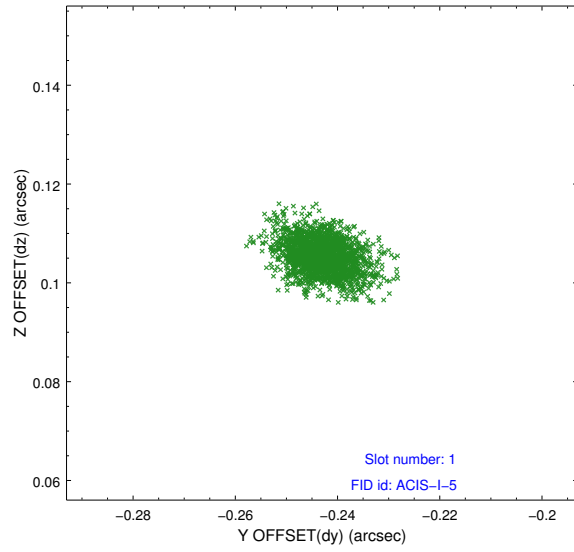


2.5 FID Slots

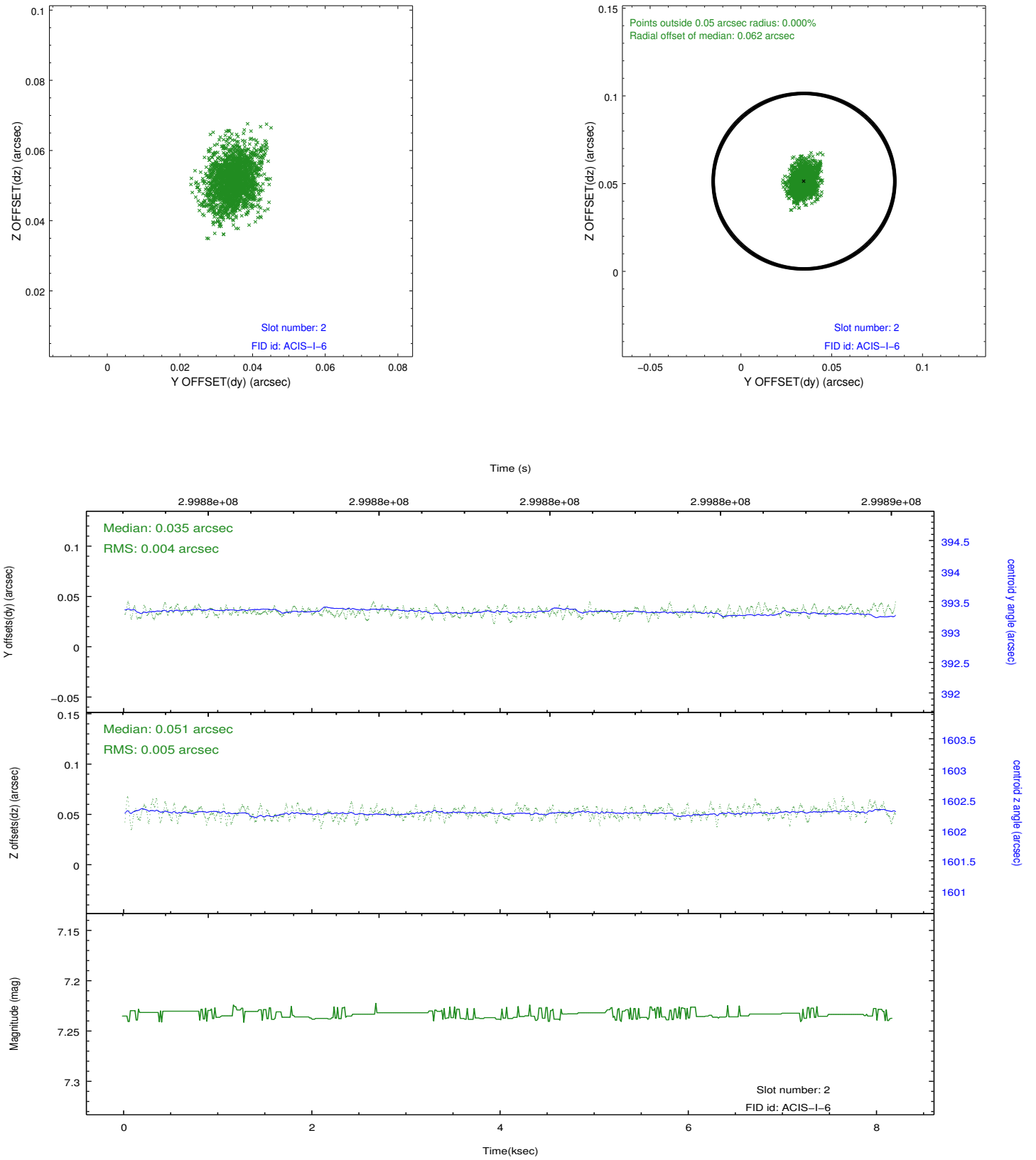
2.5.1 Slot 0



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 | 8.17780006 |

A.2 Comments