

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4201 - L2 Version 3
Chandra X-Ray Center

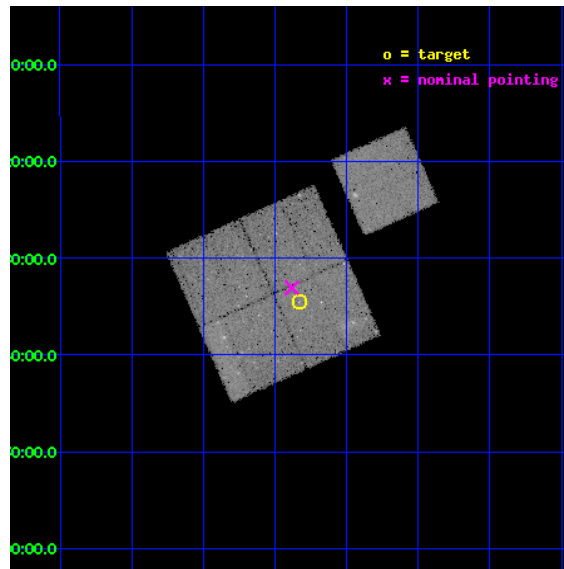
L2 Processing Date : Nov 8 2012

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1 Front

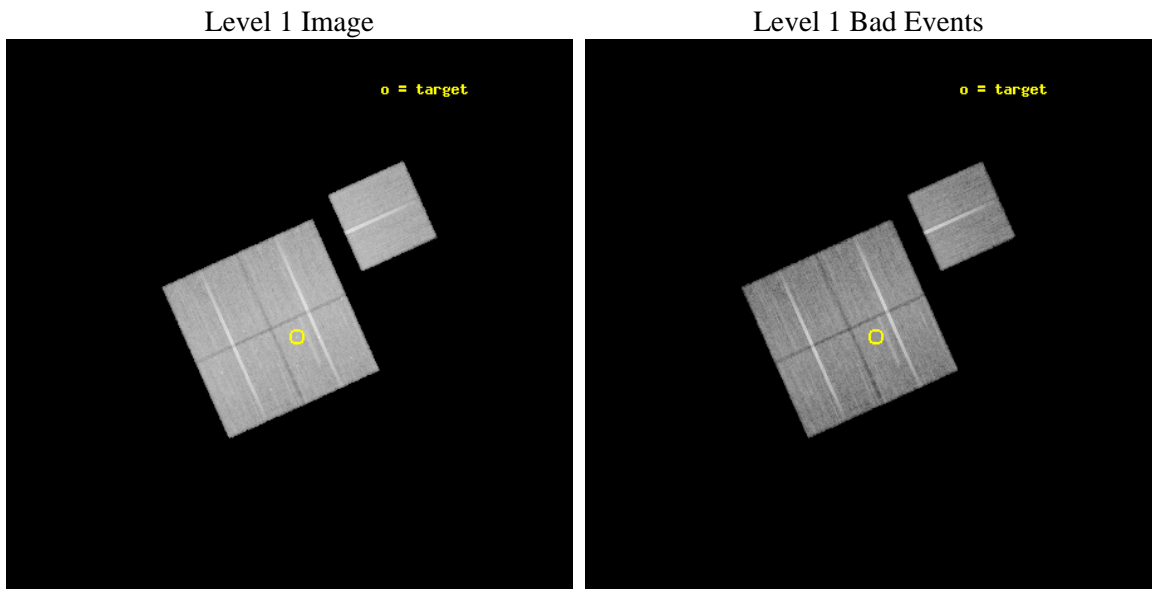
| | | |
|----------|--|---|
| seq_num | 800357 | Sequence number |
| obs_id | 4201 | Observation id |
| title | CHANDRA OBSERVATIONS OF A PROTOCLUSTER AT Z = 1.31 | Proposal title |
| observer | DR. MICHAEL LIU | Principal investigator |
| object | Q1213-0017 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 183.9575 | Observer's specified target RA [deg] |
| dec_targ | -0.575556 | Observer's specified target Dec [deg] |
| ra_nom | 183.97053878434 | Nominal RA [deg] |
| dec_nom | -0.5511325882747 | Nominal Dec [deg] |
| roll_nom | 65.833886175178 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 45109.73188743 | Sum of GTIs [s] |
| livetime | 44520.340031019 | Livetime [s] |
| ontime0 | 45097.044986129 | Sum of GTIs [s] |
| ontime1 | 45106.508936793 | Sum of GTIs [s] |
| ontime2 | 45115.972847641 | Sum of GTIs [s] |
| ontime3 | 45109.73188743 | Sum of GTIs [s] |
| ontime6 | 45100.14487645 | Sum of GTIs [s] |
| l2events | 111819 | Number of level 2 events |



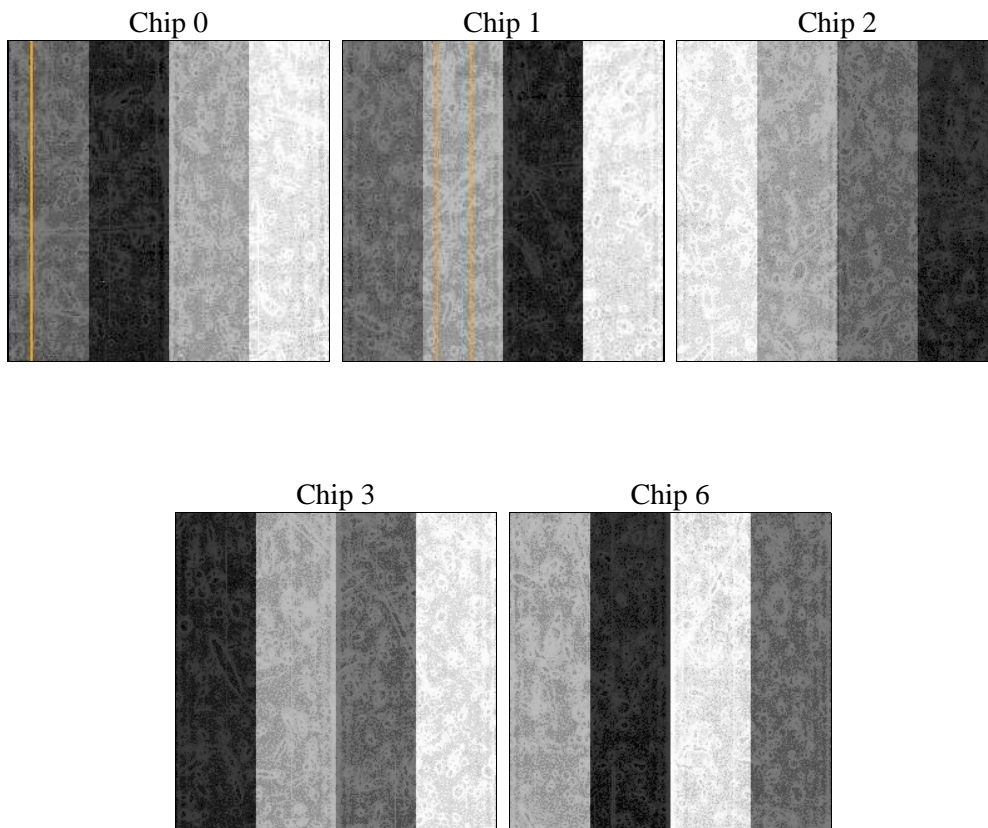
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 45000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 45109.73188743 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime0 | 45097.044986129 | Sum of GTIs [s] |
| date | 2012-11-08T03:22:34 | Date and time of file creation | ontime1 | 45106.508936793 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 45115.972847641 | Sum of GTIs [s] |
| | | | ontime3 | 45109.73188743 | Sum of GTIs [s] |
| | | | ontime6 | 45100.14487645 | Sum of GTIs [s] |
| | | | l1events | 1045290 | Number of level 1 events |

2.1.4 Events

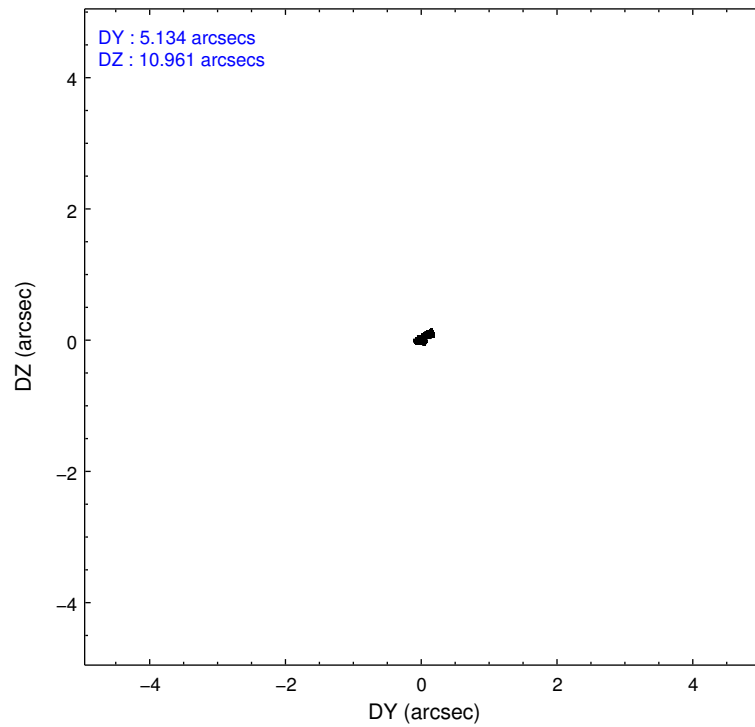
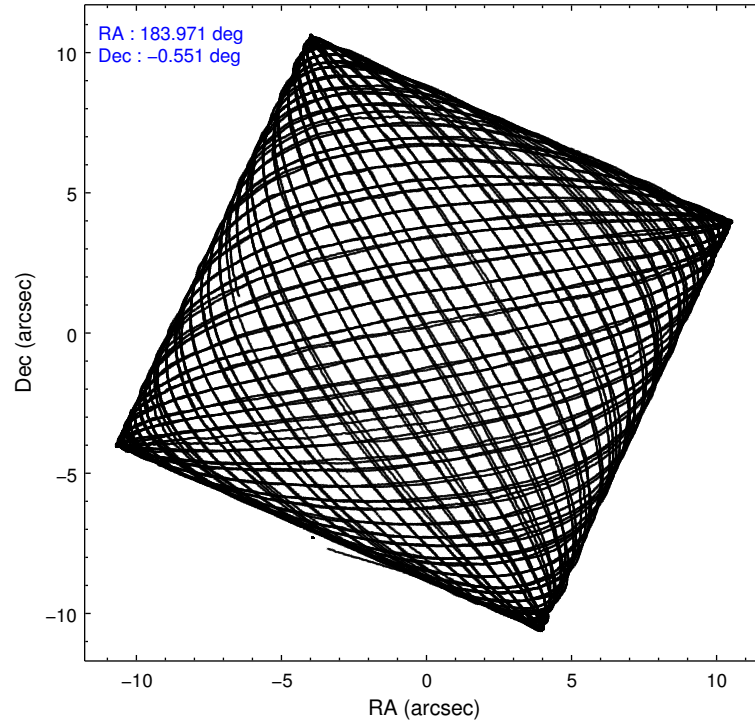
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 198142 | 200673 | 218039 | 213293 | 215143 |
| rejected events | 173680 | 171359 | 193249 | 187733 | 187216 |
| rejected % | 87% | 85% | 88% | 88% | 87% |

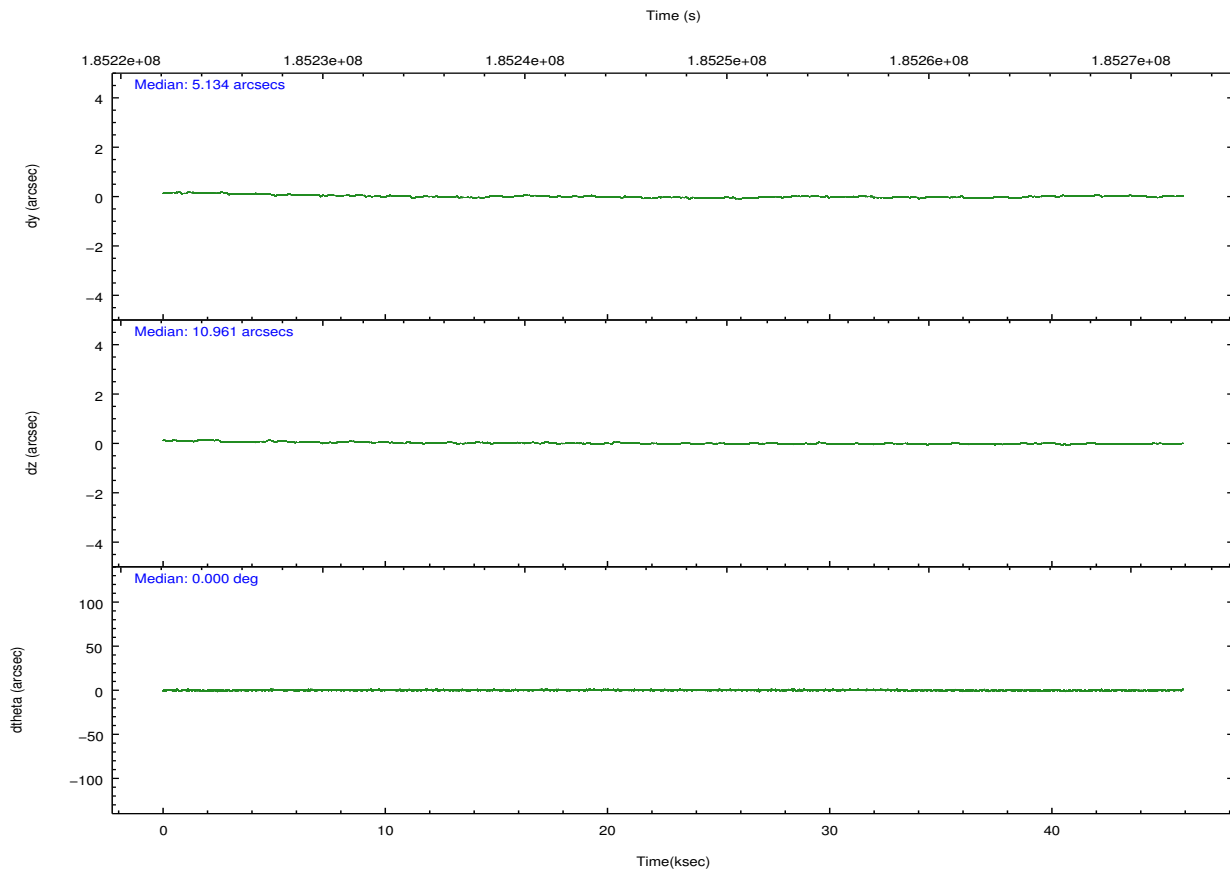
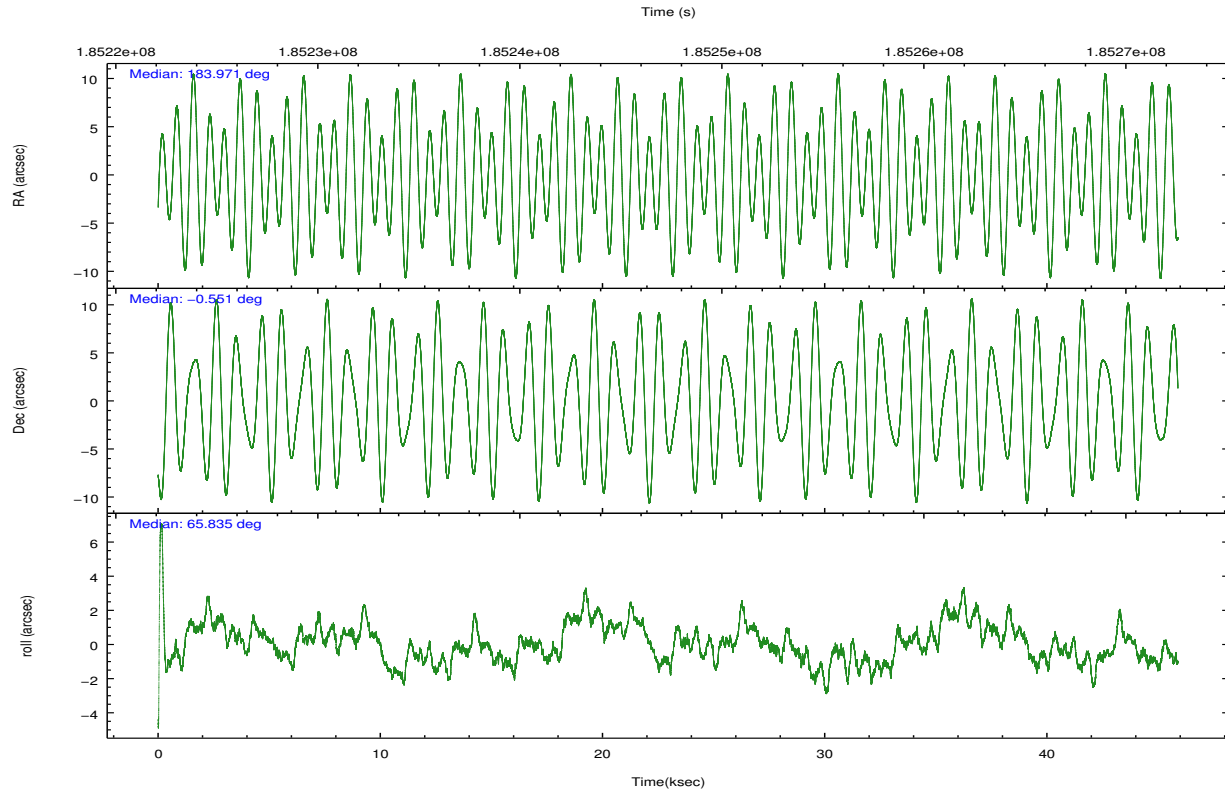
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 9947 | 12647 | 10592 | 11563 | 12647 |
| | 5% | 6% | 4% | 5% | 5% |
| grade 1 events | 102 | 104 | 122 | 130 | 111 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 5278 | 5850 | 5296 | 4746 | 5232 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 2568 | 2765 | 2446 | 2510 | 2538 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 2430 | 2813 | 2501 | 2495 | 2588 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 7680 | 7915 | 7318 | 8515 | 8509 |
| | 3% | 3% | 3% | 3% | 3% |
| grade 6 events | 4241 | 5246 | 3955 | 4248 | 4927 |
| | 2% | 2% | 1% | 1% | 2% |
| grade 7 events | 165896 | 163333 | 185809 | 179086 | 178591 |
| | 83% | 81% | 85% | 83% | 83% |

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 | 183.973427 | 183.970538784345 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -0.578378 | -0.5511325882747019 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 65.625235 | 65.83388617517804 | [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 | -229.442463 | -229.4438428438578 | | | |
| [mm] SIM translation stage offset | -4.15 | -4.148610159071865 | | | |
| [s] Observation start time (MET) | 185225281.184000 | 185223967.54595 | | | |
| Observation start date | 2003-11-14T19:26:57 | 2003-11-14T19:06:07 | | | |
| [s] Observation end time (MET) | 185270281.184000 | 185271109.86049 | | | |
| Observation end date | 2003-11-15T07:56:57 | 2003-11-15T08:11:49 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





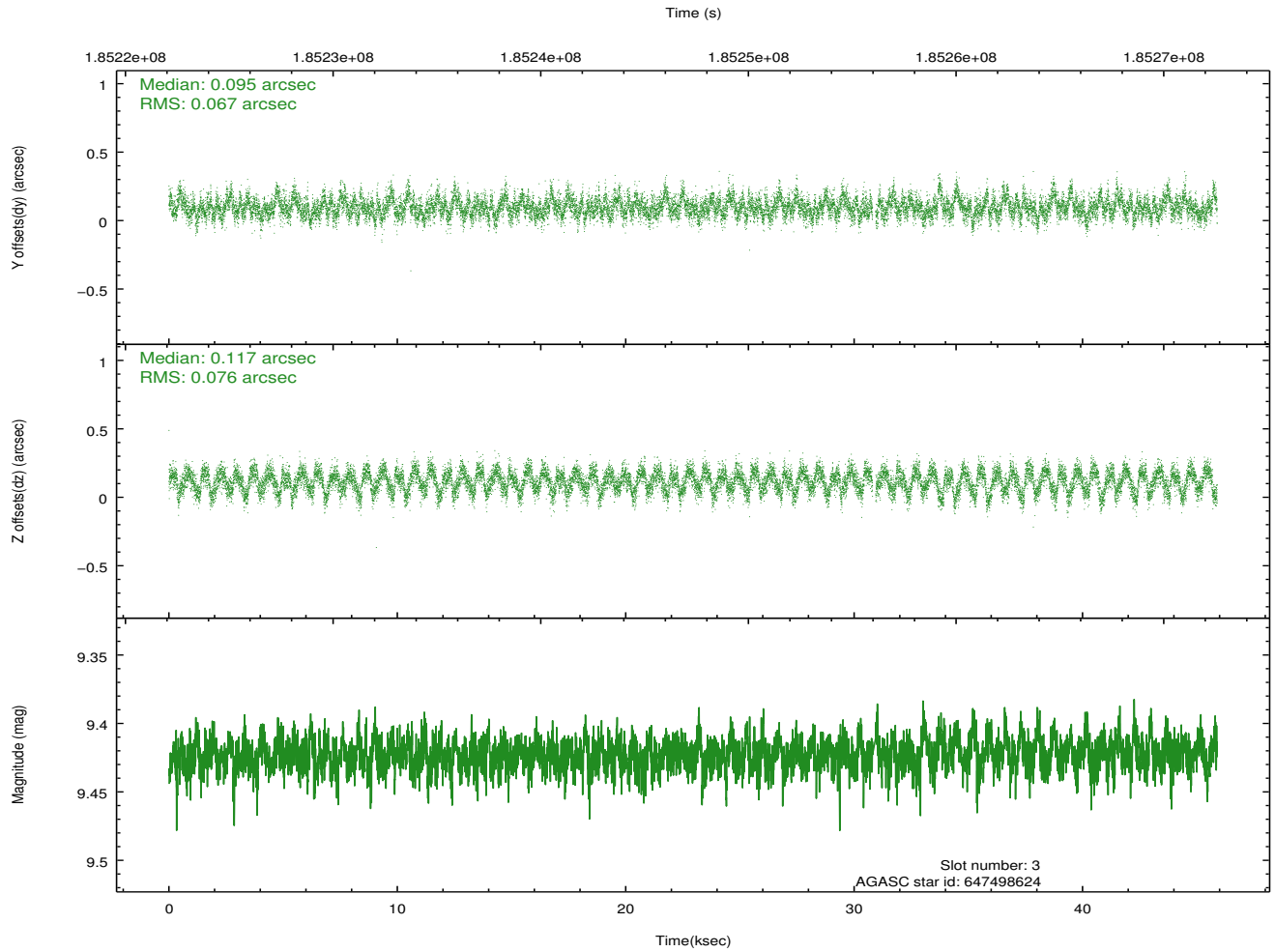
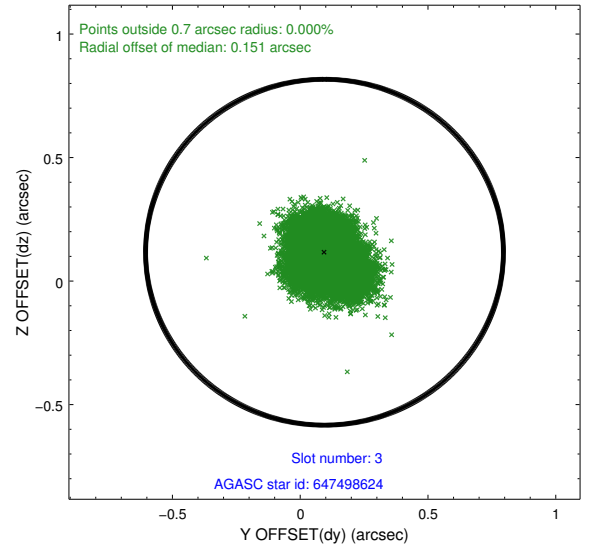
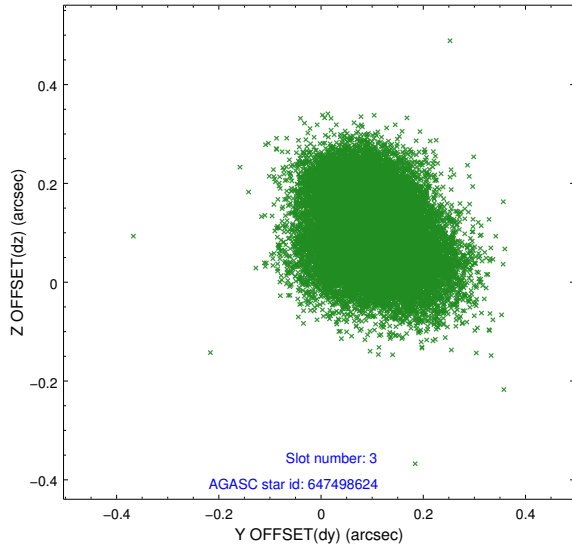
Slot Statistics

| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|---------|
| 0 | FID | ACIS-I-1 | 7.23 | 11182 | 0.089 | -0.026 | 0.006 | 0.011 | 0.000000 | 0.000000 | 934.57 | -919.65 |
| 1 | FID | ACIS-I-5 | 7.22 | 11182 | -0.219 | 0.094 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1813.79 | 978.06 |
| 2 | FID | ACIS-I-6 | 7.25 | 11183 | 0.039 | 0.003 | 0.007 | 0.012 | 0.000000 | 0.000000 | 400.16 | 1622.39 |
| 3 | GUIDE | 647498624 | 9.42 | 22294 | 0.095 | 0.117 | 0.107 | 0.175 | 183.646001 | -0.994152 | -1849.76 | 456.13 |
| 4 | GUIDE | 647501240 | 7.70 | 22370 | -0.068 | -0.074 | 0.053 | 0.083 | 183.470041 | -0.639090 | -947.22 | 1560.62 |
| 5 | GUIDE | 647501584 | 8.80 | 22364 | 0.044 | 0.019 | 0.065 | 0.105 | 183.751277 | -0.660960 | -600.93 | 605.90 |
| 6 | GUIDE | 647502584 | 8.80 | 22367 | -0.058 | 0.027 | 0.062 | 0.099 | 183.850670 | -0.266758 | 839.33 | 865.82 |
| 7 | GUIDE | 647502624 | 9.16 | 22359 | -0.018 | -0.083 | 0.095 | 0.148 | 183.472477 | -0.393485 | -138.05 | 1917.46 |

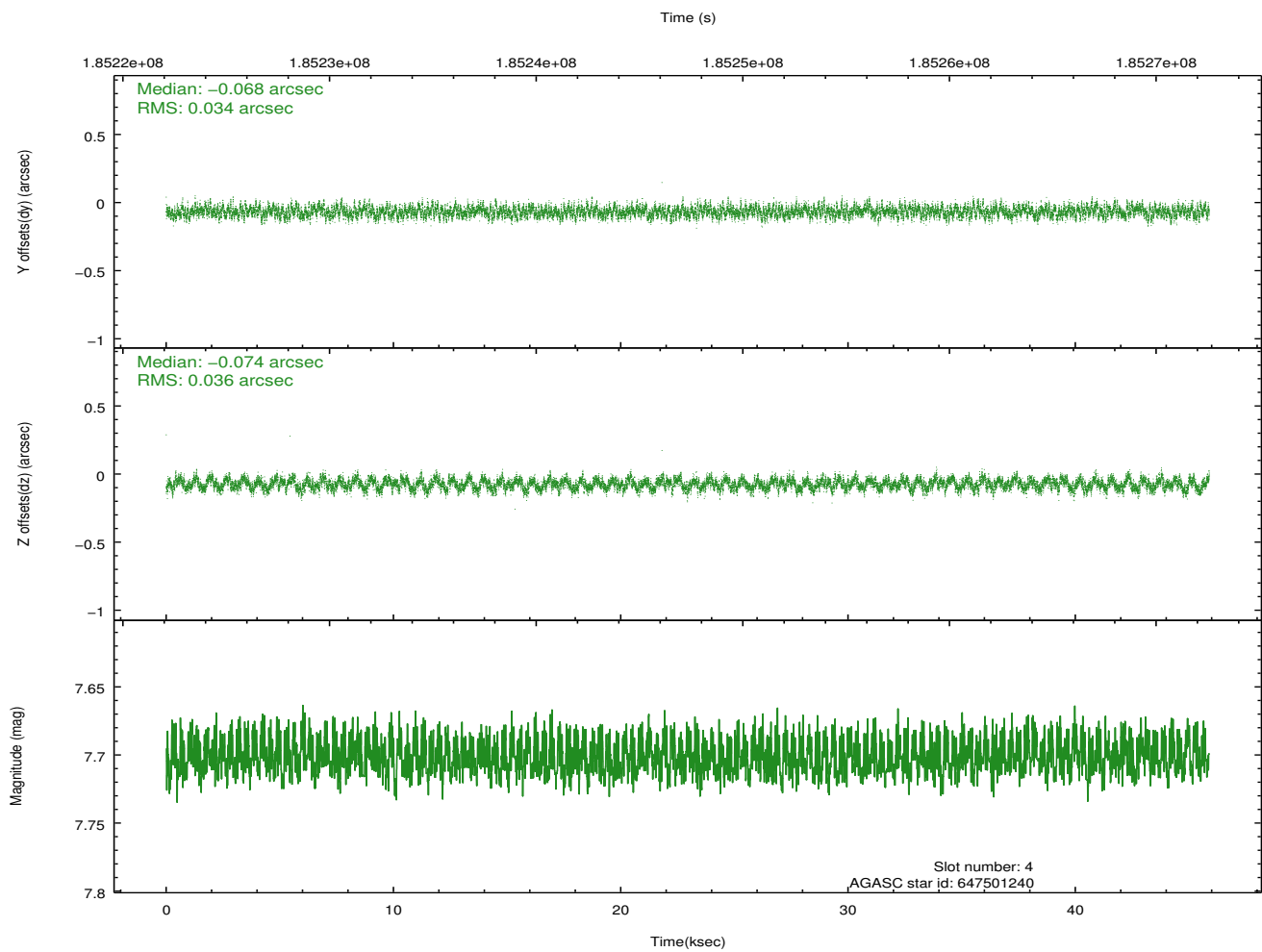
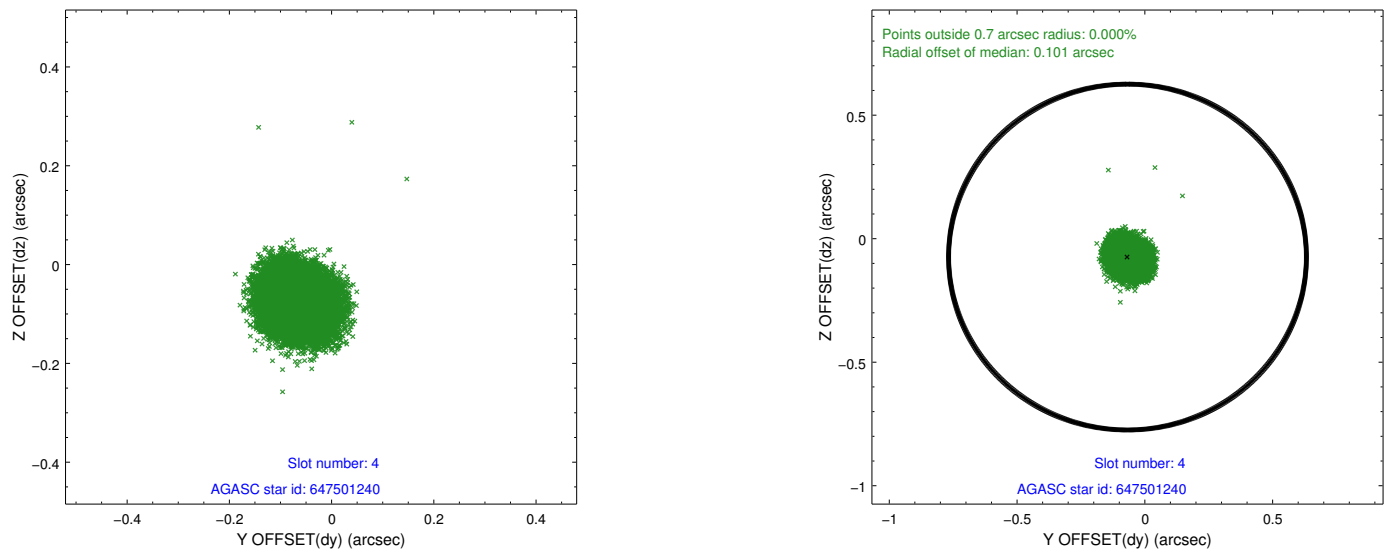
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2.4 Star Slots

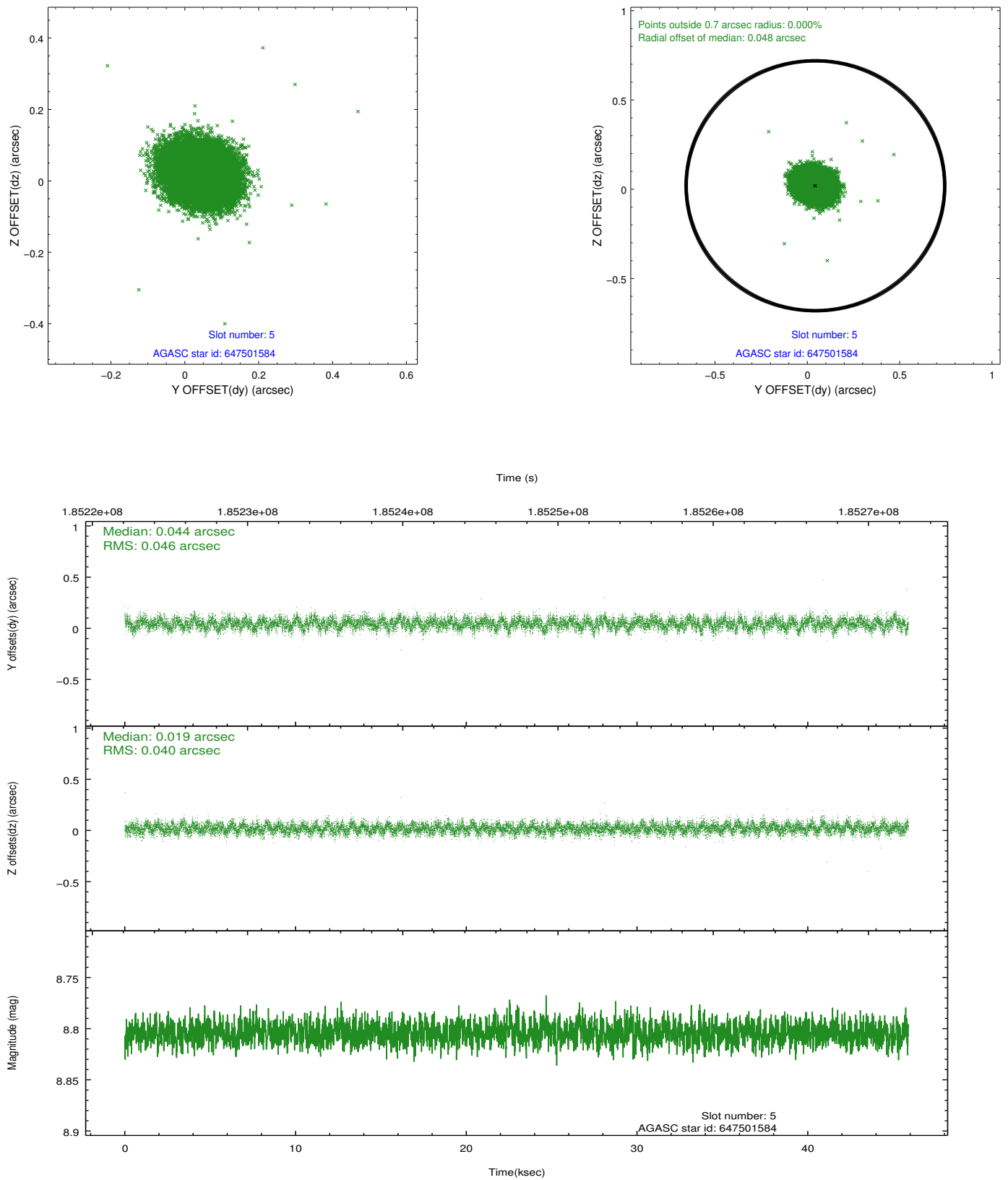
2.4.1 Slot 3



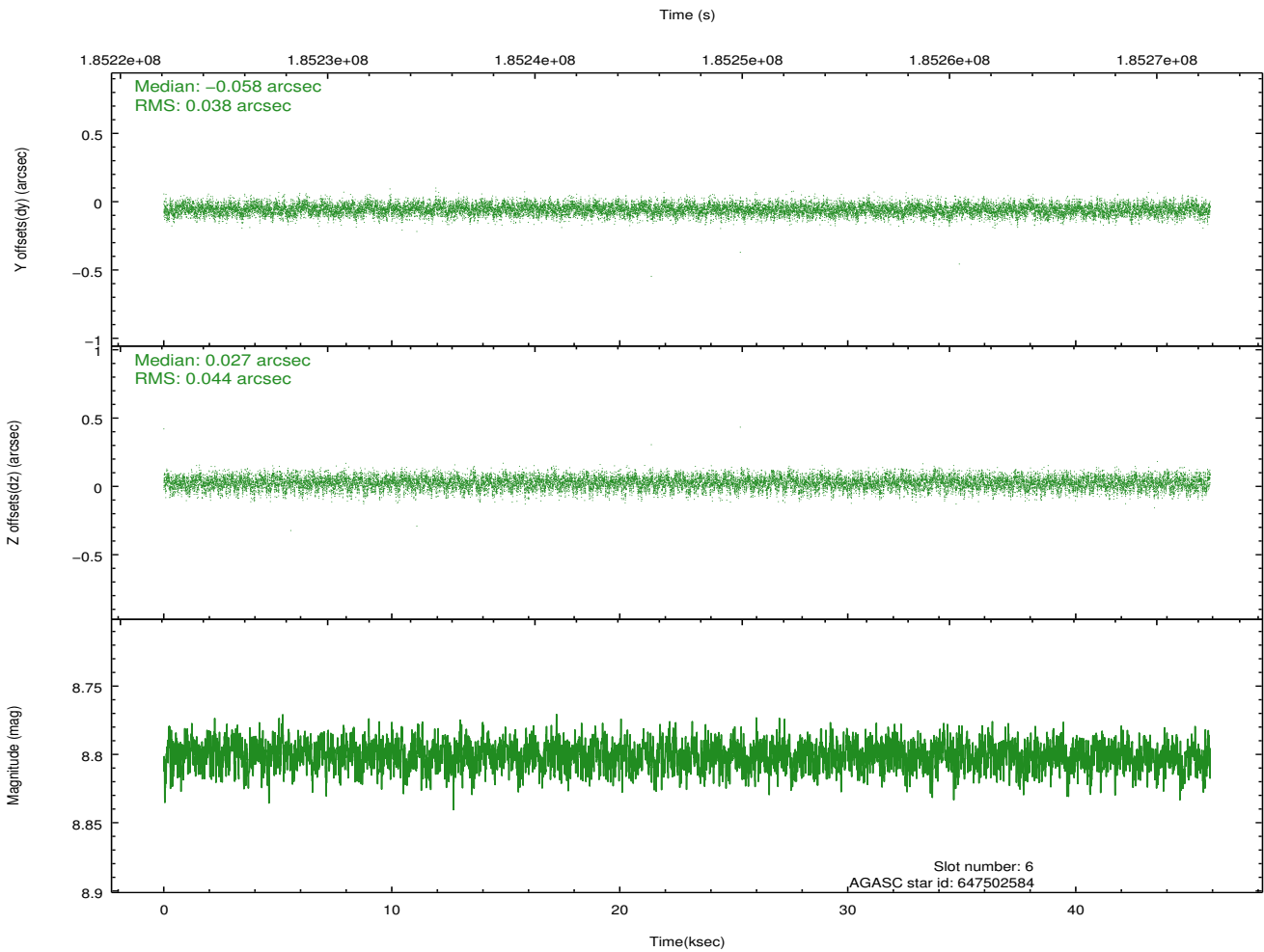
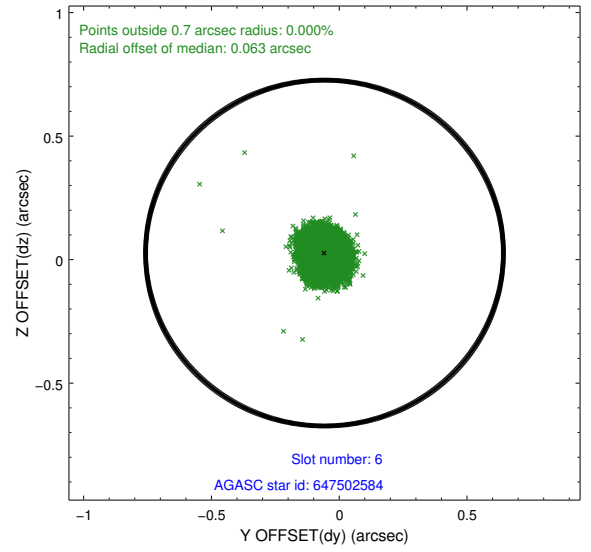
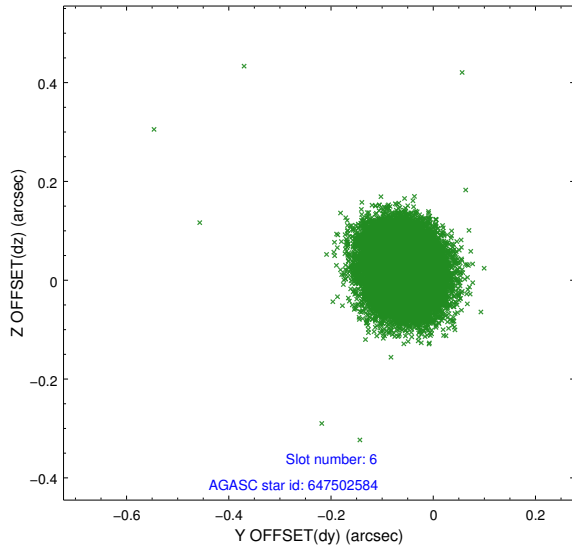
2.4.2 Slot 4



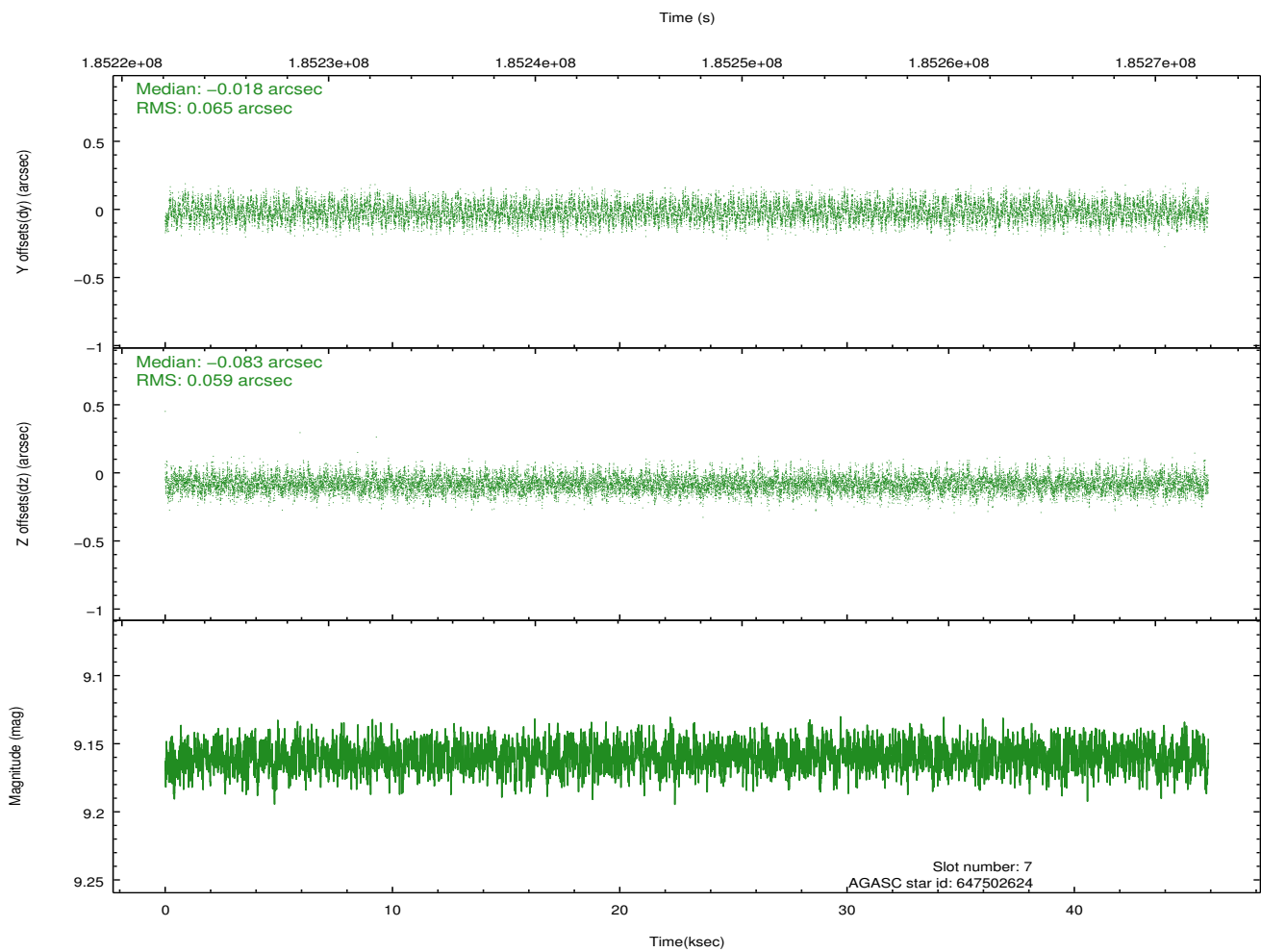
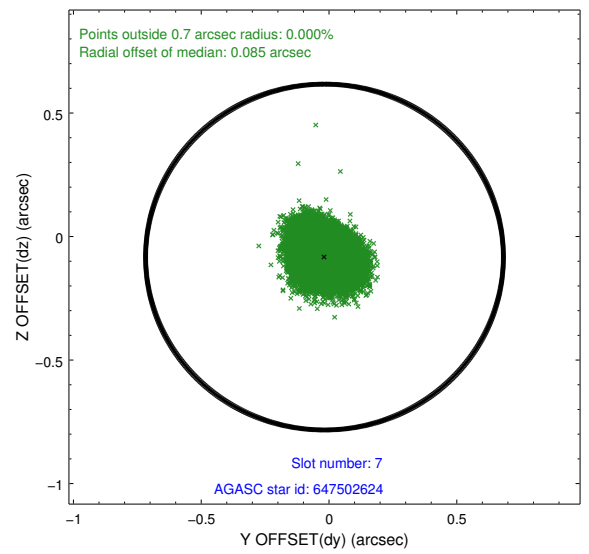
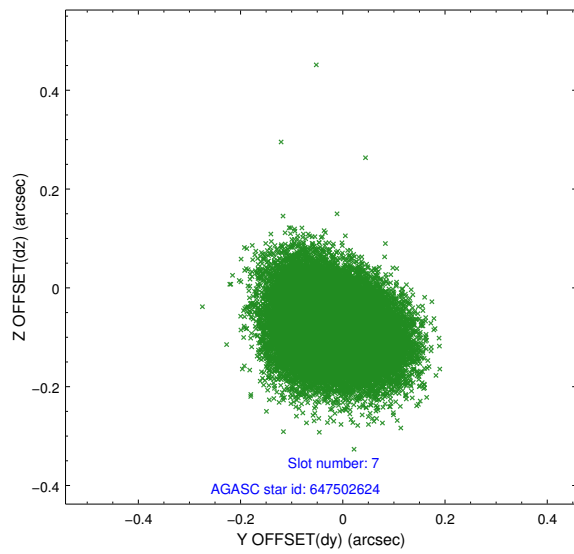
2.4.3 Slot 5



2.4.4 Slot 6

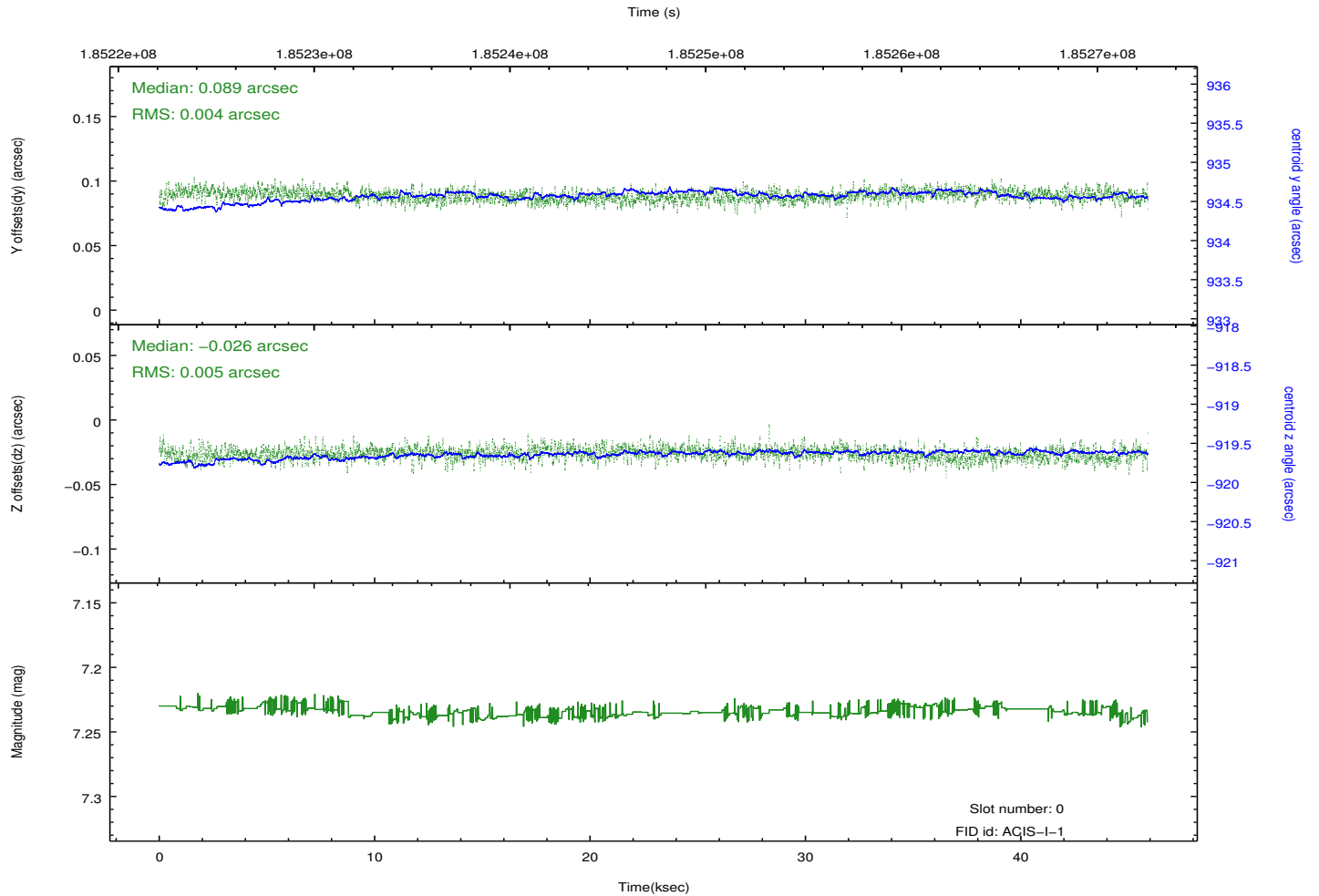
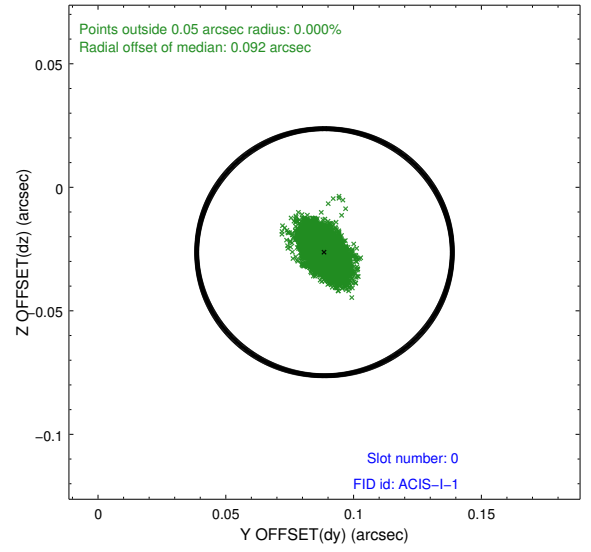
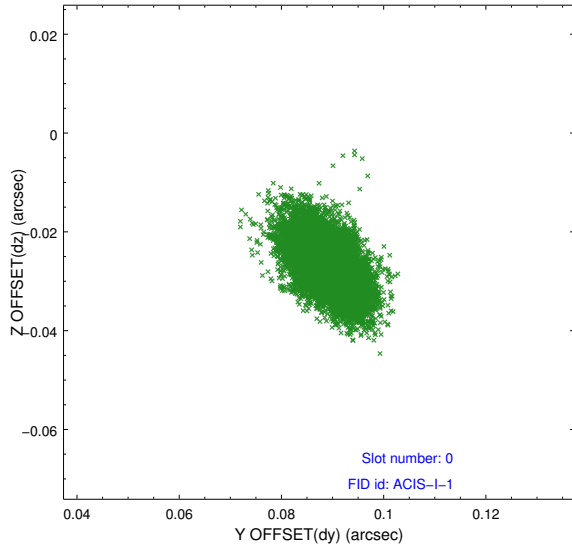


2.4.5 Slot 7

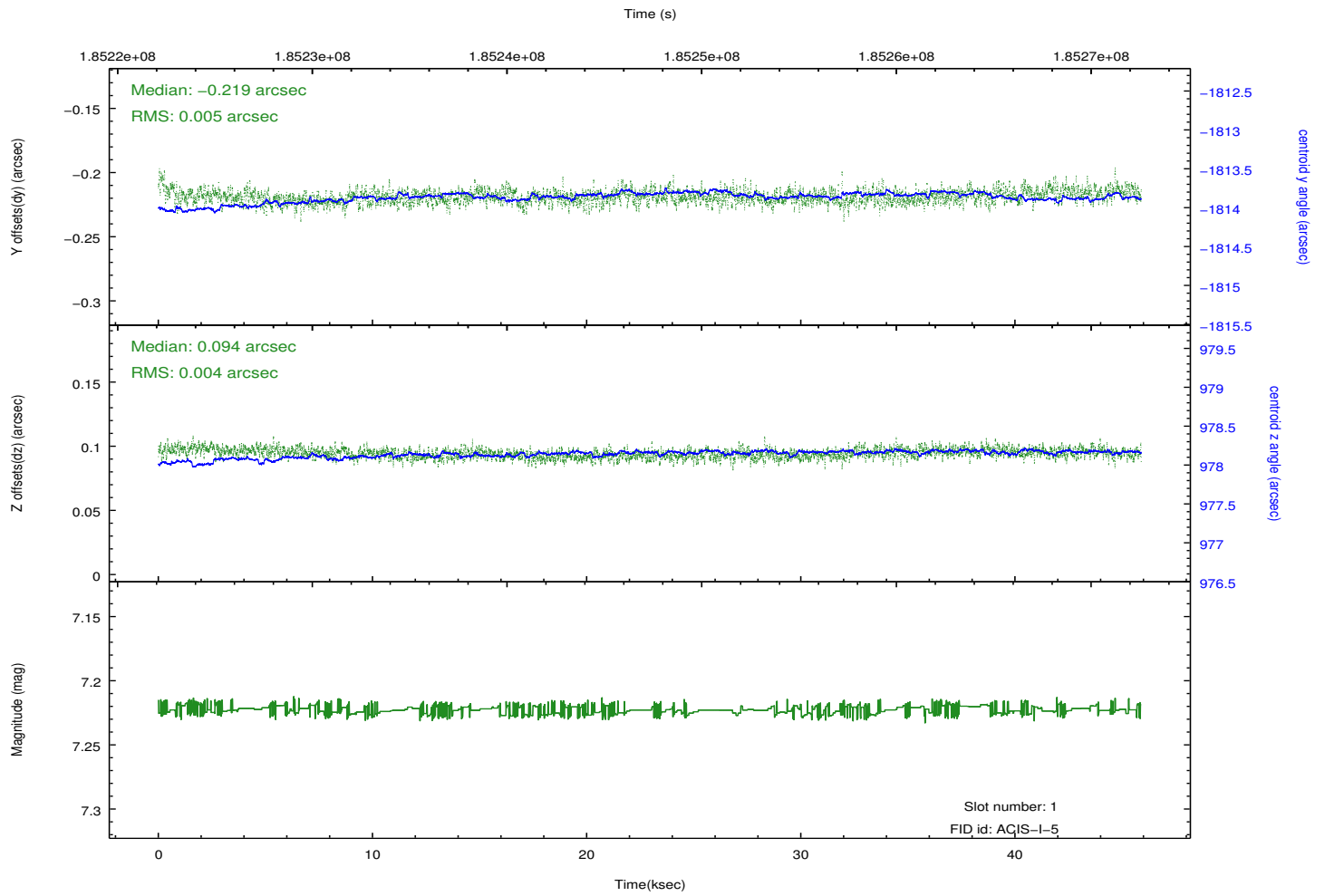
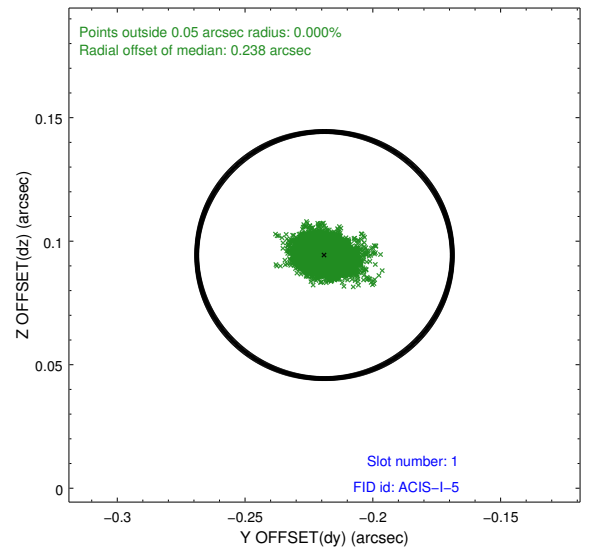
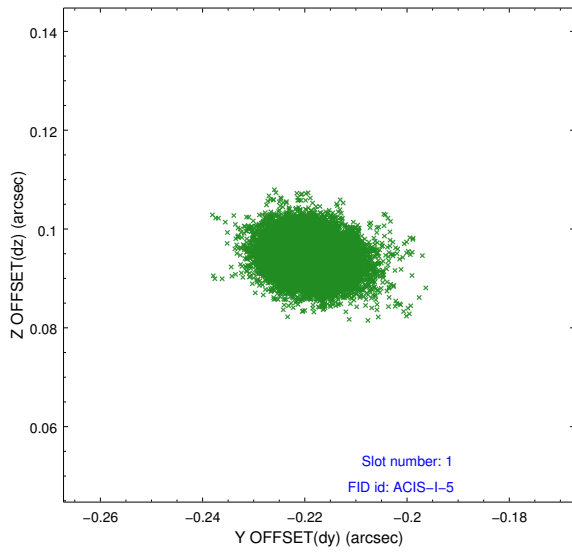


2.5 FID Slots

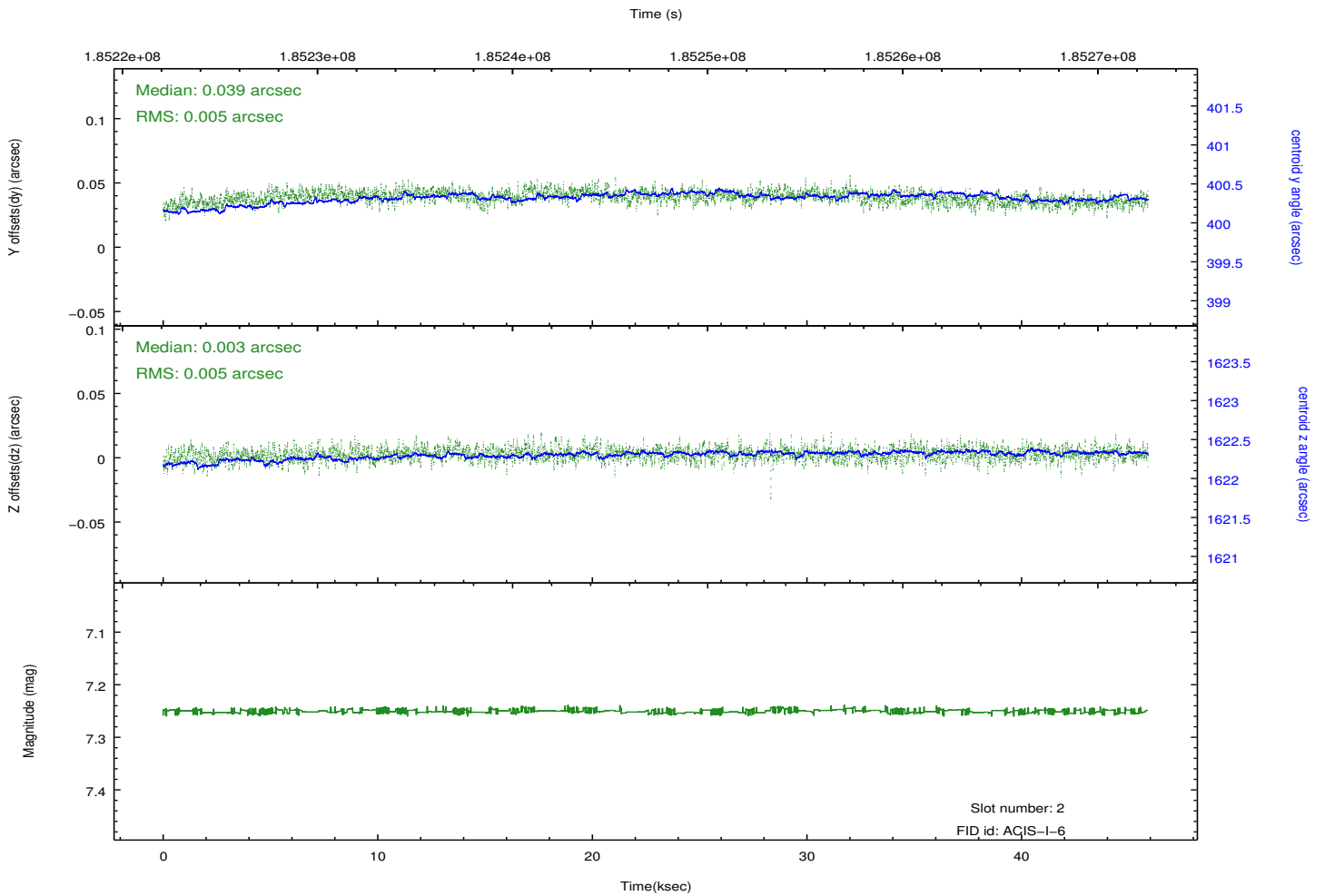
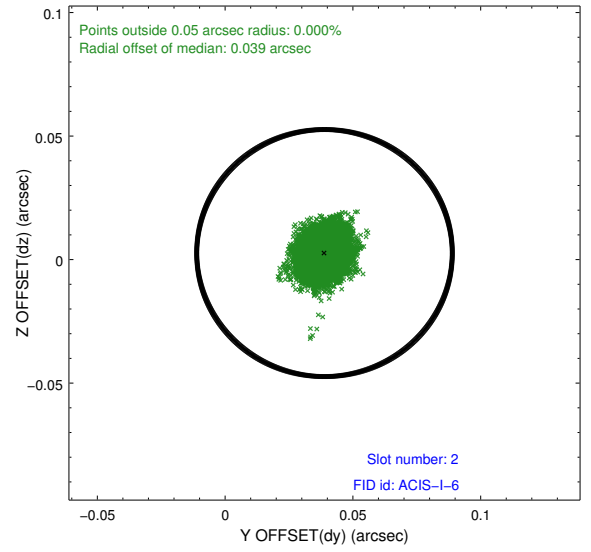
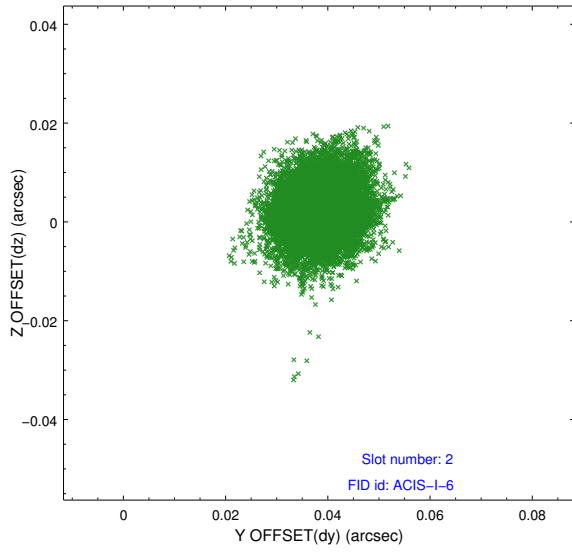
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.12.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 45.111 |

A.2 Comments