

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9086 - L2 Version 2
Chandra X-Ray Center

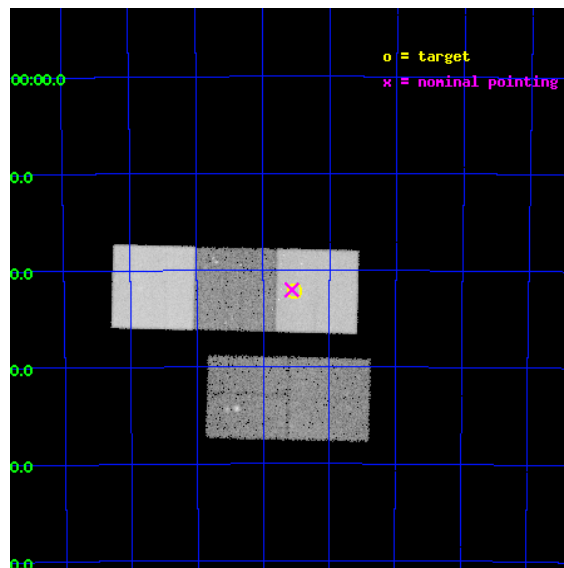
L2 Processing Date : May 6 2012

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1 Front

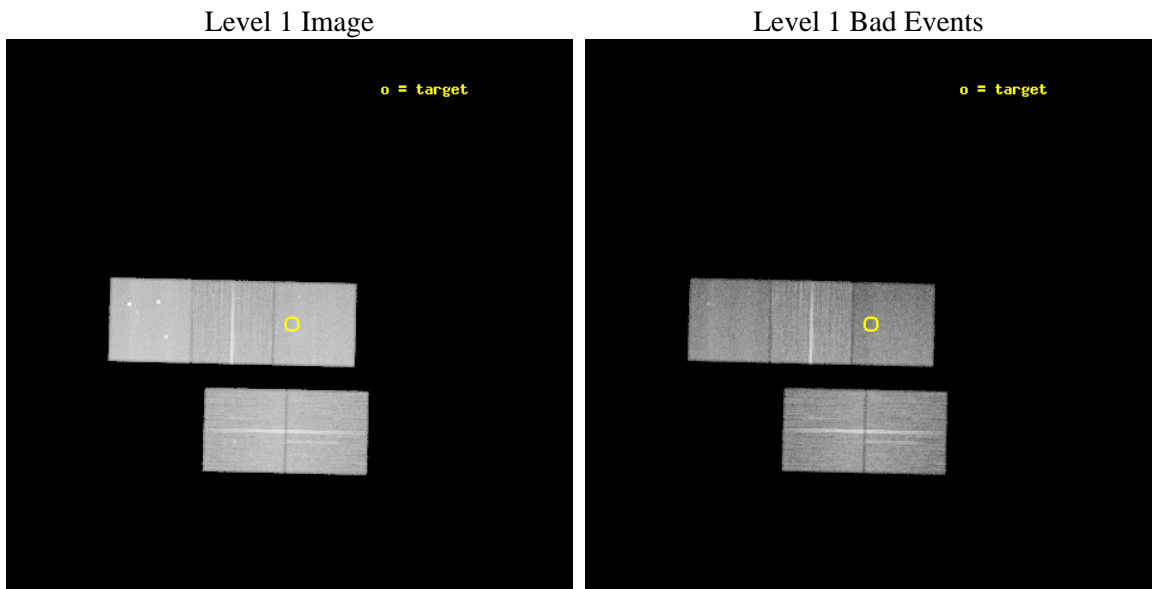
| | | |
|----------|---|---|
| seq_num | 500949 | Sequence number |
| obs_id | 9086 | Observation id |
| title | The extreme late-time light curve of GRB 060729 | Proposal title |
| observer | Dr. Dirk Grupe | Principal investigator |
| object | GRB 060729 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 95.382917 | Observer's specified target RA [deg] |
| dec_targ | -62.370139 | Observer's specified target Dec [deg] |
| ra_nom | 95.391644451001 | Nominal RA [deg] |
| dec_nom | -62.367508889054 | Nominal Dec [deg] |
| roll_nom | 1.3482416364216 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 27757.40021348 | Sum of GTIs [s] |
| livetime | 27394.72934499 | Livetime [s] |
| ontime2 | 27754.25924319 | Sum of GTIs [s] |
| ontime3 | 27754.259223282 | Sum of GTIs [s] |
| ontime5 | 27757.40021348 | Sum of GTIs [s] |
| ontime6 | 27751.118282735 | Sum of GTIs [s] |
| ontime7 | 27757.40021348 | Sum of GTIs [s] |
| l2events | 311326 | Number of level 2 events |



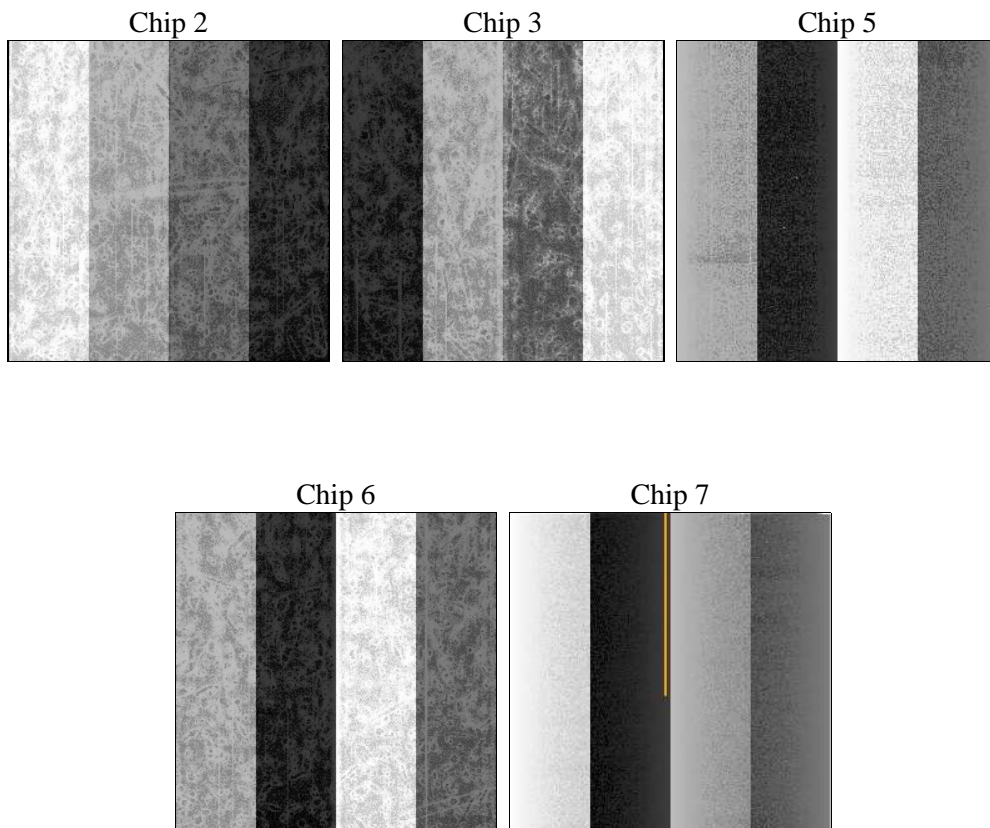
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 27570.908000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 27757.40021348 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime2 | 27754.25924319 | Sum of GTIs [s] |
| date | 2012-05-06T15:25:26 | Date and time of file creation | ontime3 | 27754.259223282 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 27757.40021348 | Sum of GTIs [s] |
| | | | ontime6 | 27751.118282735 | Sum of GTIs [s] |
| | | | ontime7 | 27757.40021348 | Sum of GTIs [s] |
| | | | l1events | 1254219 | Number of level 1 events |

2.1.4 Events

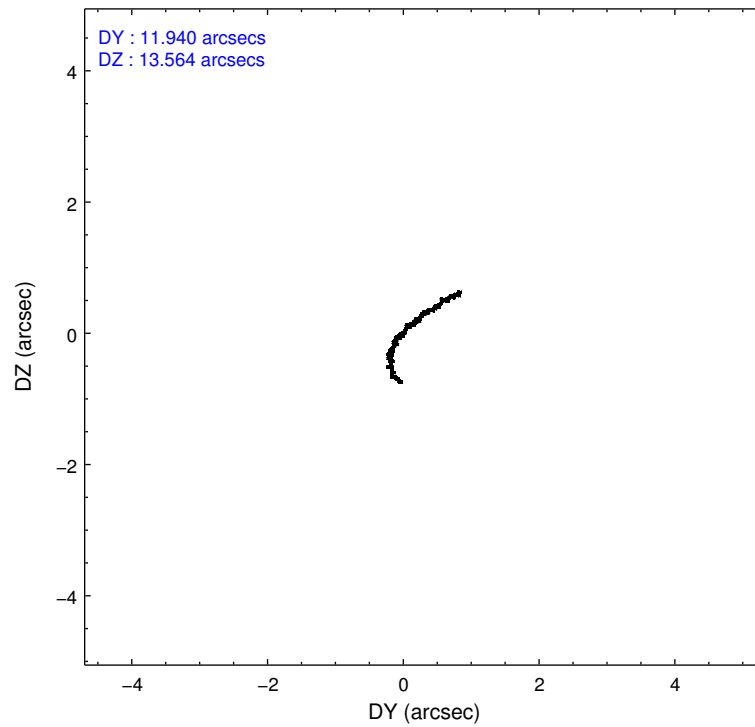
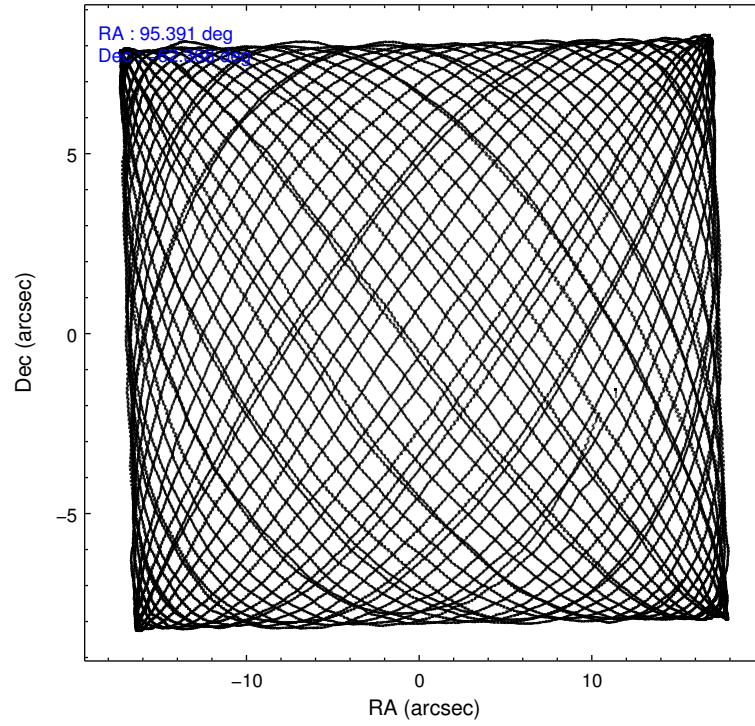
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 232762 | 219033 | 315563 | 233417 | 253444 |
| rejected events | 211023 | 198363 | 159839 | 209780 | 139839 |
| rejected % | 90% | 90% | 50% | 89% | 55% |

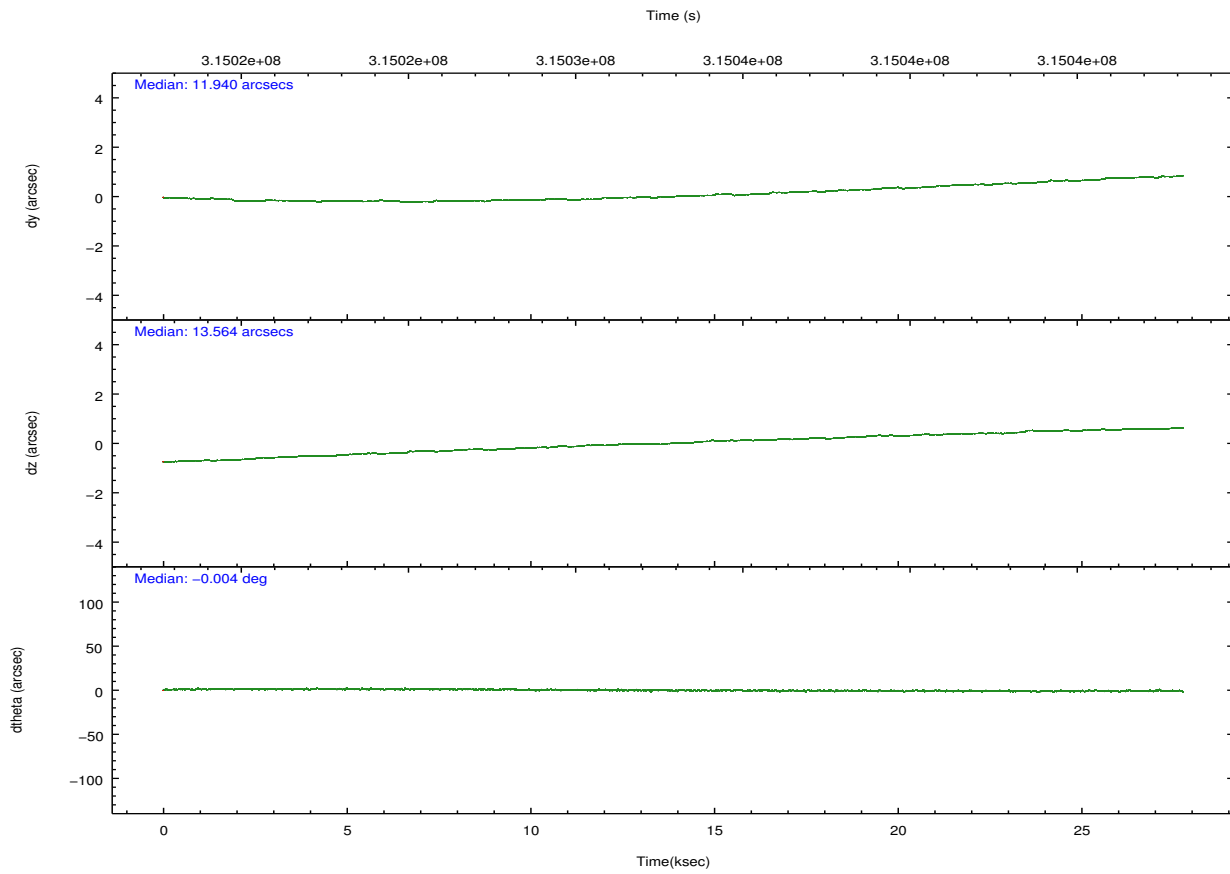
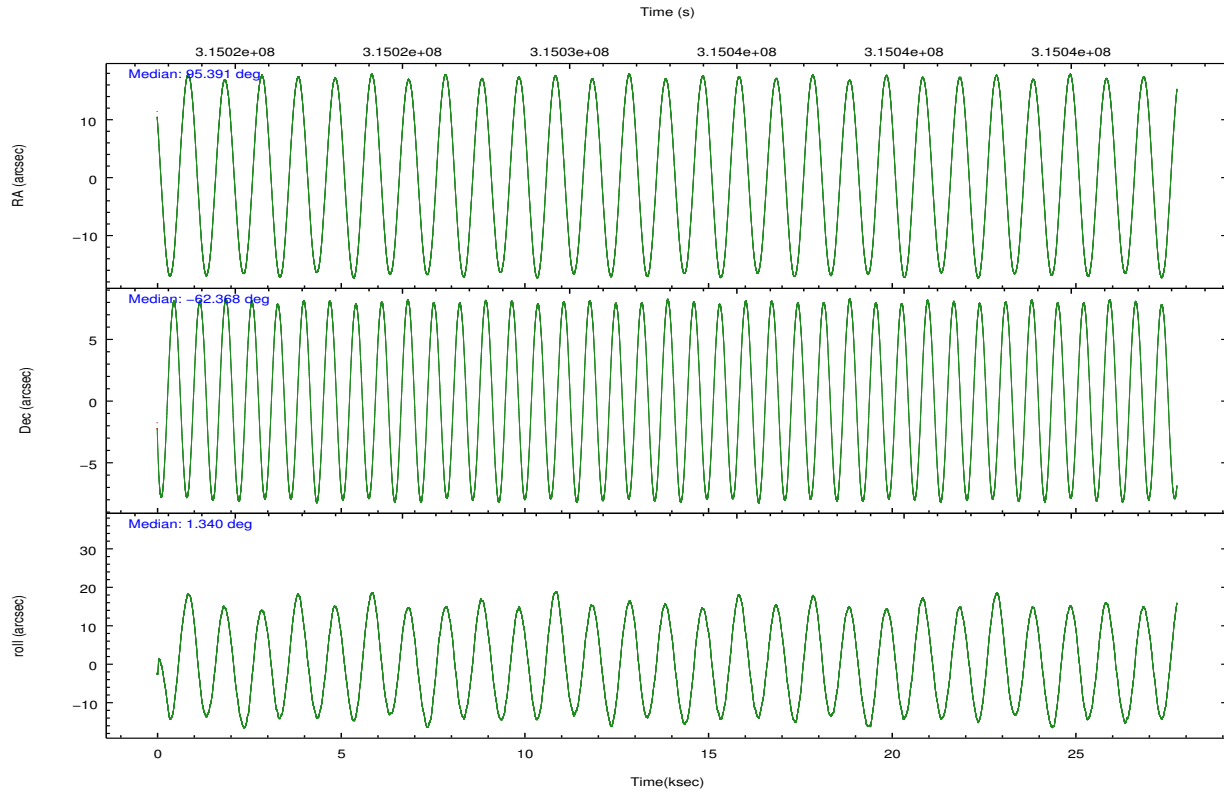
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 8010 | 7242 | 17120 | 8433 | 10654 |
| | 3% | 3% | 5% | 3% | 4% |
| grade 1 events | 130 | 110 | 863 | 106 | 306 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 5032 | 4442 | 45645 | 5222 | 22962 |
| | 2% | 2% | 14% | 2% | 9% |
| grade 3 events | 2374 | 2410 | 6061 | 2575 | 10339 |
| | 1% | 1% | 1% | 1% | 4% |
| grade 4 events | 2361 | 2425 | 5869 | 2518 | 10237 |
| | 1% | 1% | 1% | 1% | 4% |
| grade 5 events | 7196 | 8891 | 23821 | 9180 | 26390 |
| | 3% | 4% | 7% | 3% | 10% |
| grade 6 events | 4062 | 4243 | 81840 | 5025 | 59920 |
| | 1% | 1% | 25% | 2% | 23% |
| grade 7 events | 203597 | 189270 | 134344 | 200358 | 112636 |
| | 87% | 86% | 42% | 85% | 44% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-23567 | ACIS-23567 | 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 | 95.341733 | 95.39164445100101 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -62.382036 | -62.36750888905402 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 1.147394 | 1.348241636421596 | [s] Primary exposure time | 0.000000 | 3.1 |
| [s] Window start time (MET) | 312854465.184000 | 312854465.184000 | | | |
| [s] Window stop time (MET) | 320716865.184000 | 320716865.184000 | | | |
| [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) | 315019220.184000 | 315018150.15298 | | | |
| Observation start date | 2007-12-26T01:19:15 | 2007-12-26T01:02:30 | | | |
| [s] Observation end time (MET) | 315046791.184000 | 315047018.25437 | | | |
| Observation end date | 2007-12-26T08:58:46 | 2007-12-26T09:03:38 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



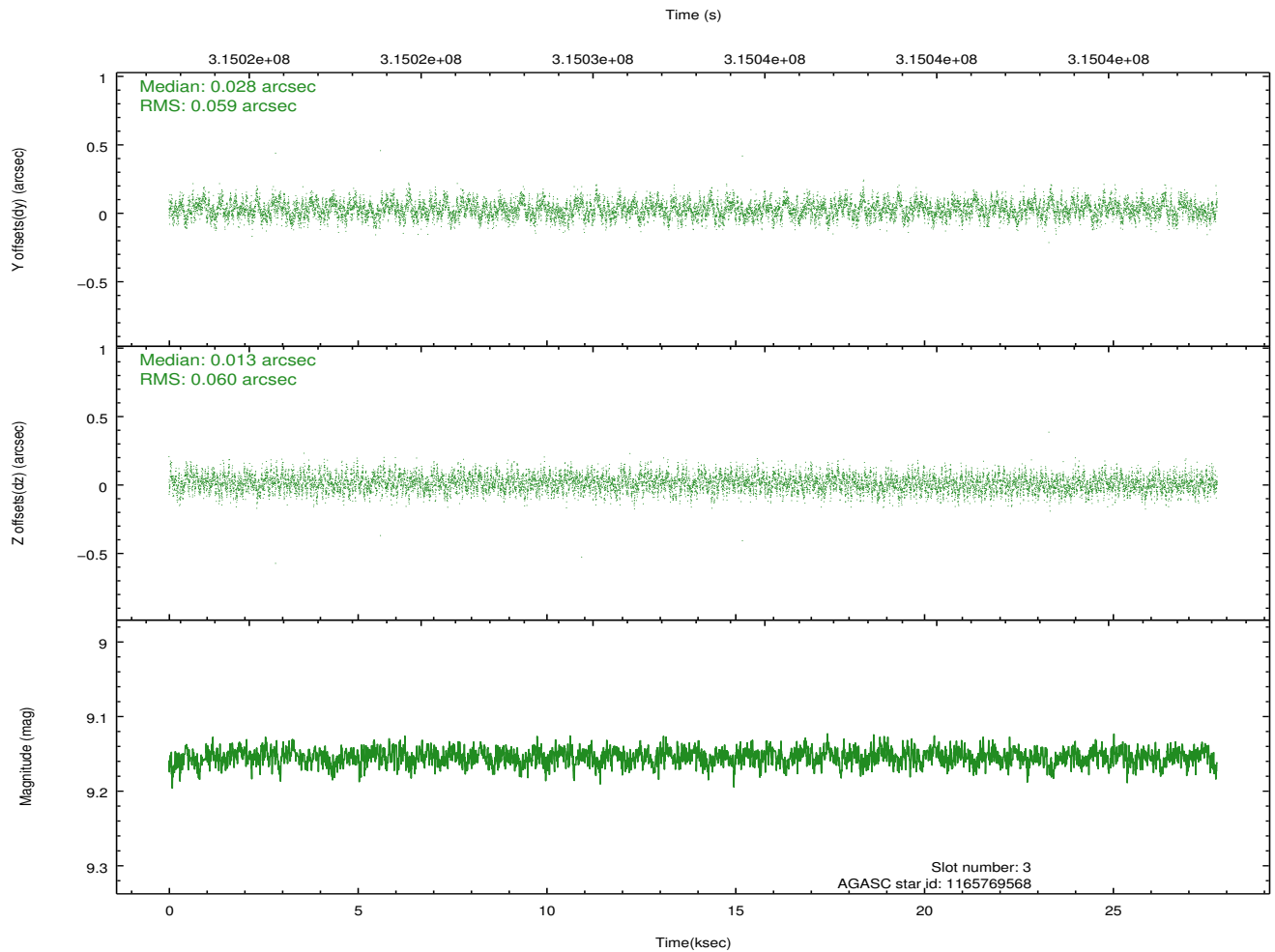
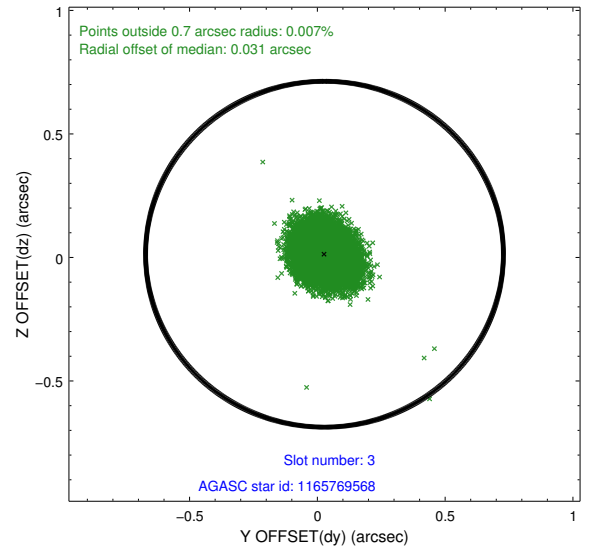
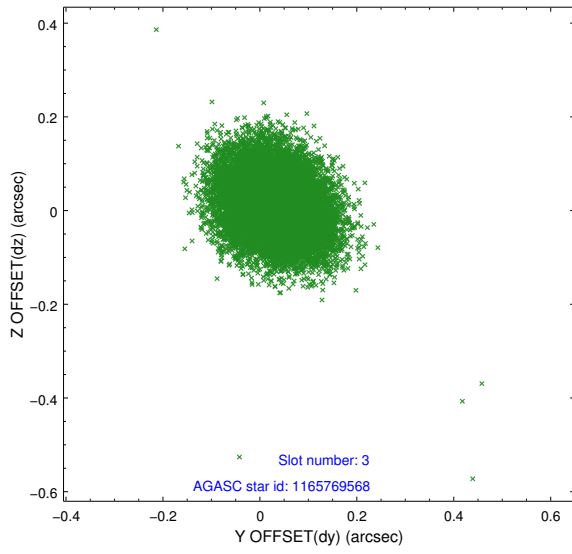


Slot Statistics

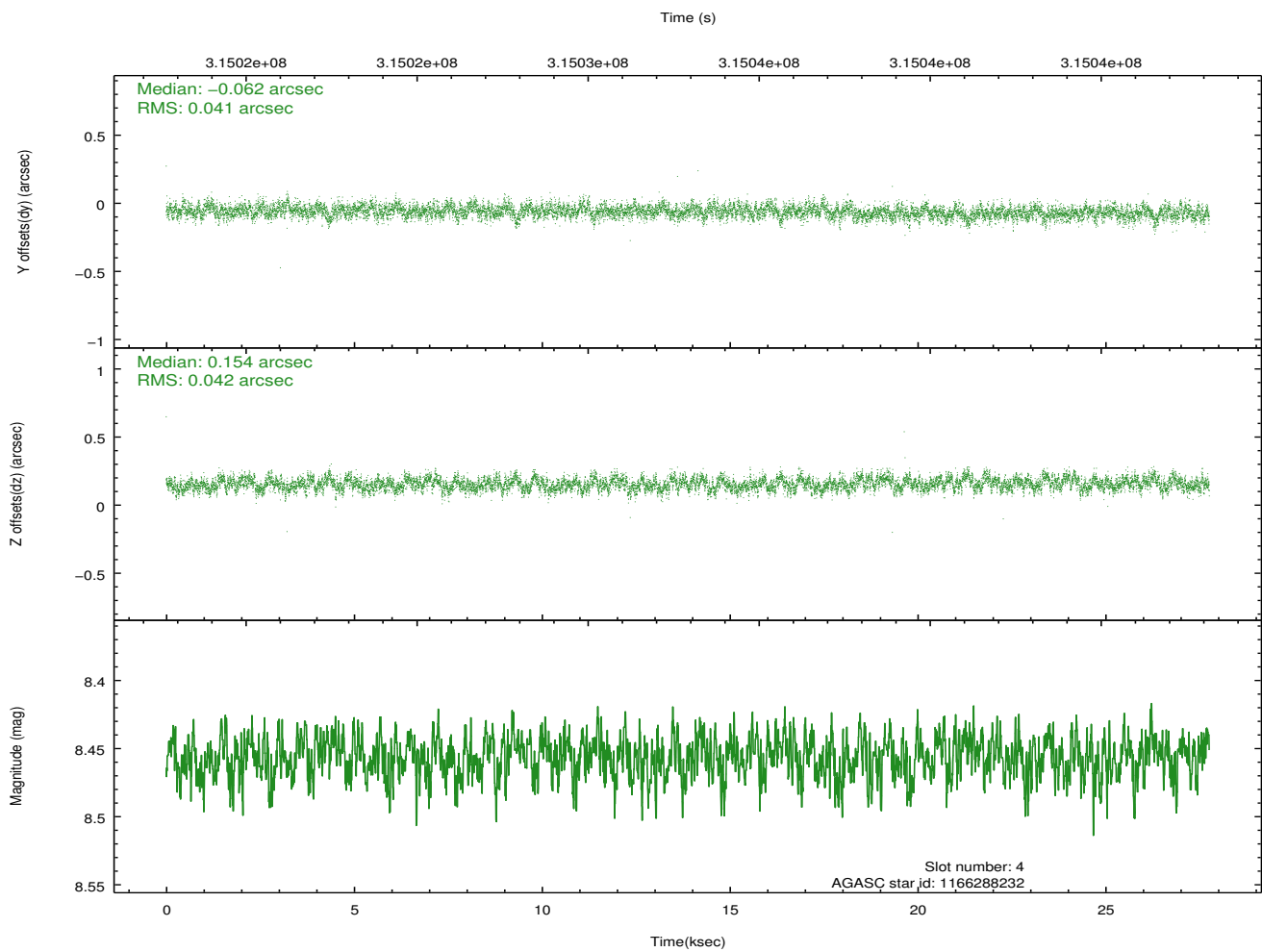
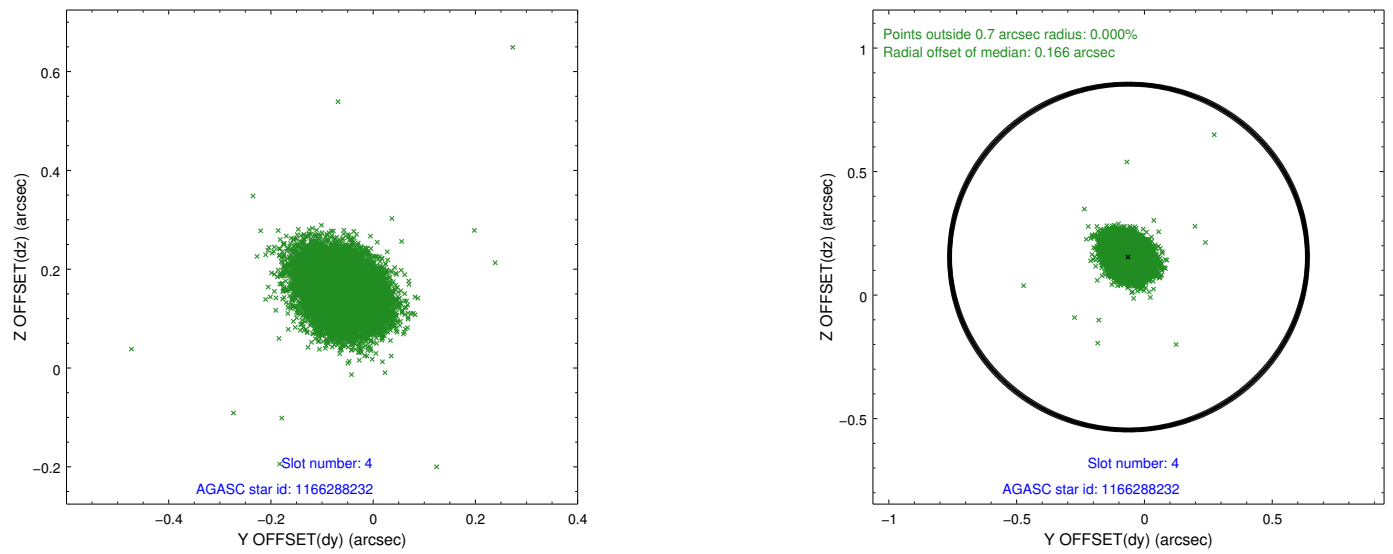
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.09 | 6772 | -0.073 | -0.043 | 0.009 | 0.015 | 0.000000 | 0.000000 | -765.04 | -1734.89 |
| 1 | FID | ACIS-S-4 | 7.19 | 6770 | 0.094 | 0.031 | 0.009 | 0.014 | 0.000000 | 0.000000 | 2148.36 | 173.58 |
| 2 | FID | ACIS-S-6 | 7.33 | 6770 | -0.048 | 0.019 | 0.008 | 0.013 | 0.000000 | 0.000000 | 397.09 | 811.06 |
| 3 | GUIDE | 1165769568 | 9.15 | 13529 | 0.028 | 0.013 | 0.090 | 0.143 | 94.966799 | -61.821220 | -596.86 | 2029.53 |
| 4 | GUIDE | 1166288232 | 8.46 | 13537 | -0.062 | 0.154 | 0.061 | 0.100 | 96.353495 | -62.422658 | 1682.86 | -191.91 |
| 5 | GUIDE | 1166289624 | 7.97 | 13540 | 0.006 | -0.210 | 0.065 | 0.108 | 95.229966 | -62.354097 | -184.14 | 104.09 |
| 6 | GUIDE | 1166290504 | 9.15 | 13531 | -0.050 | 0.044 | 0.087 | 0.140 | 94.421217 | -62.304320 | -1534.23 | 299.89 |
| 7 | GUIDE | 1165770328 | 9.12 | 13526 | 0.073 | 0.003 | 0.093 | 0.152 | 94.916512 | -61.741093 | -678.46 | 2319.21 |

2.4 Star Slots

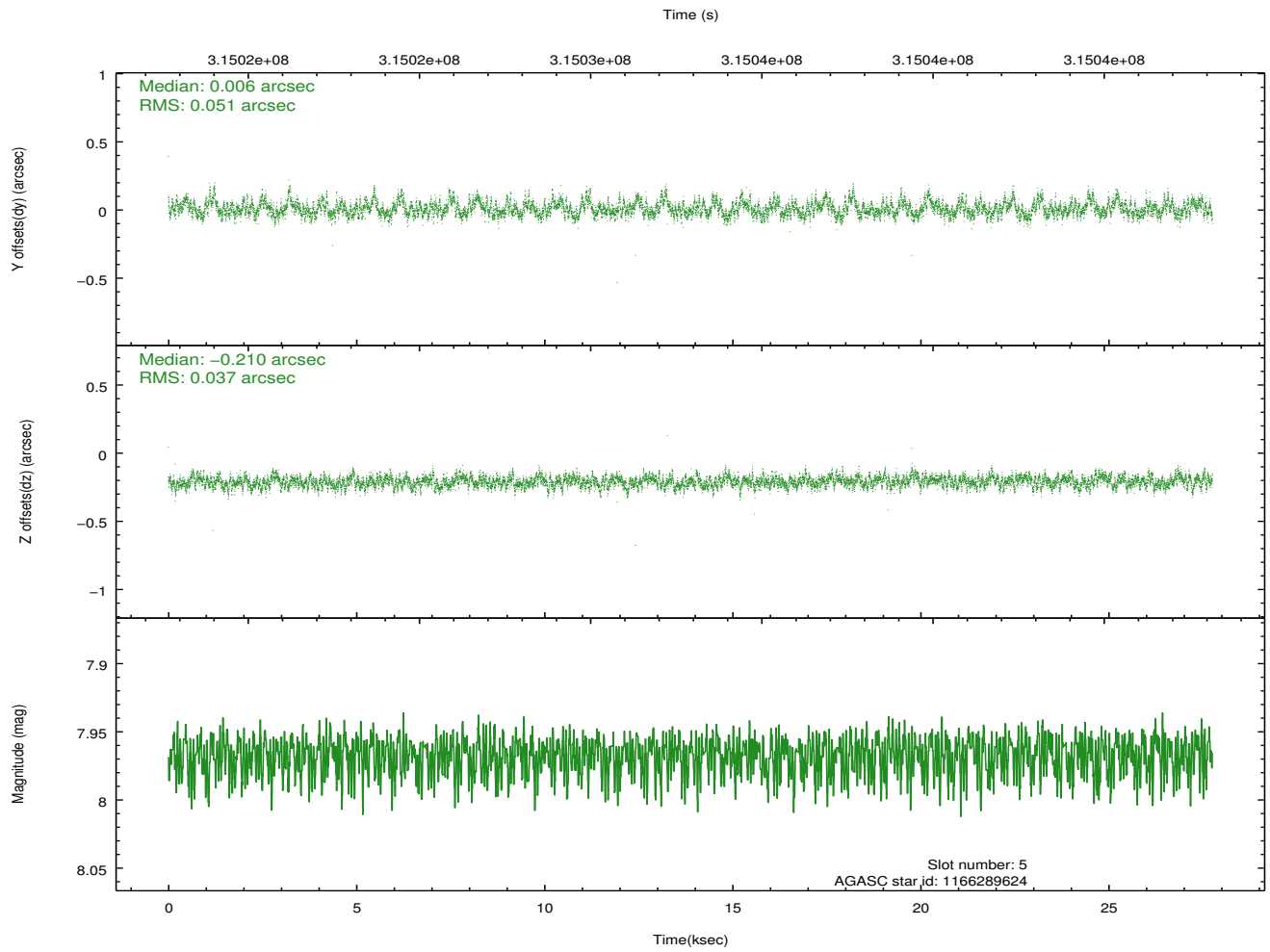
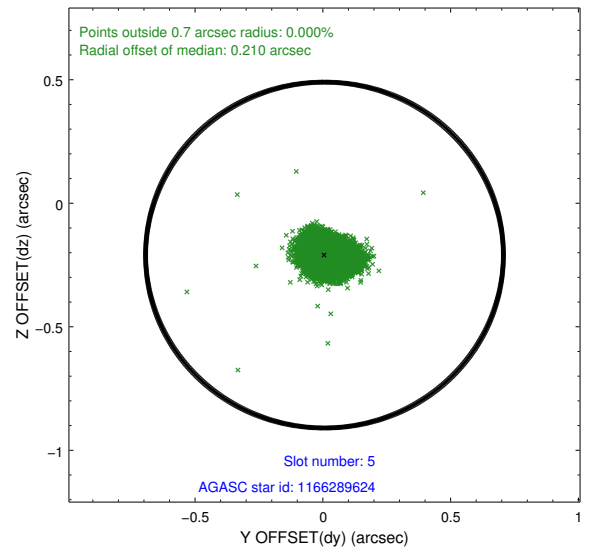
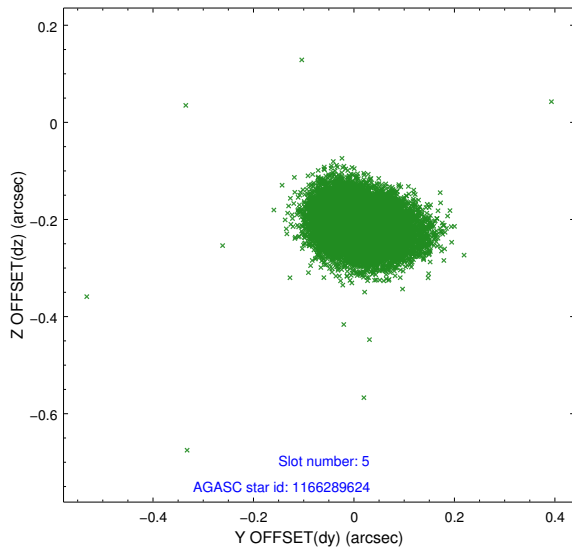
2.4.1 Slot 3



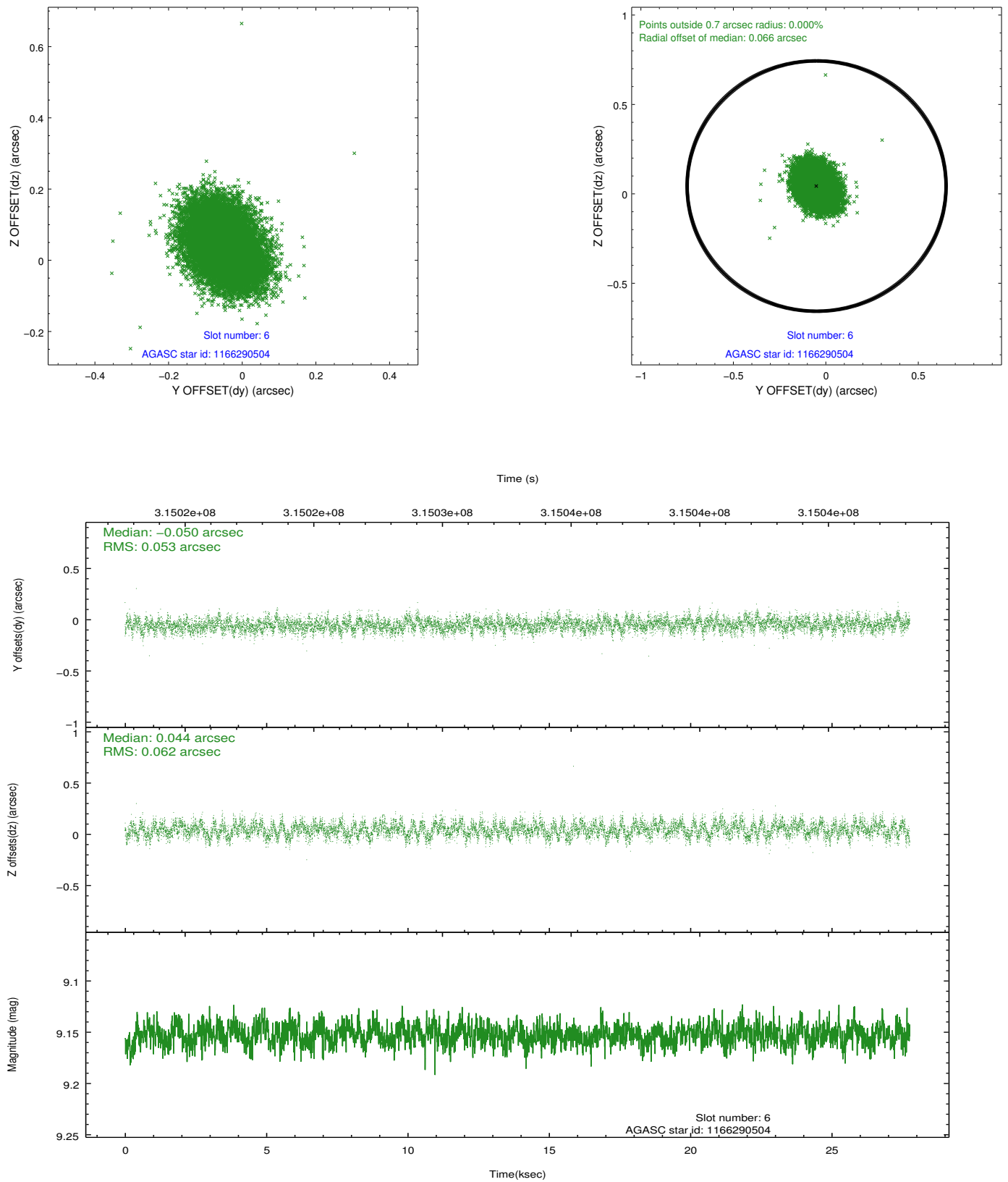
2.4.2 Slot 4



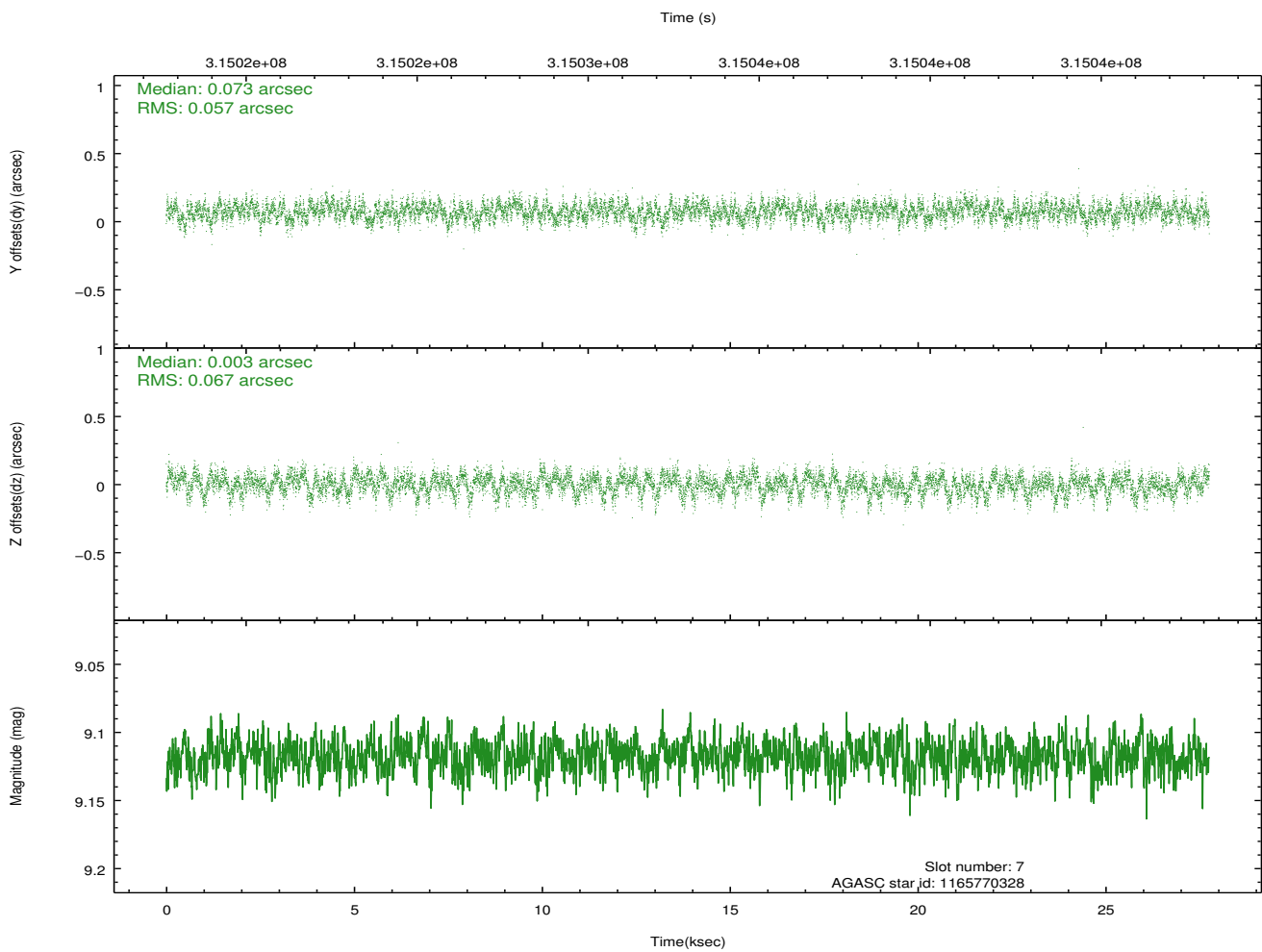
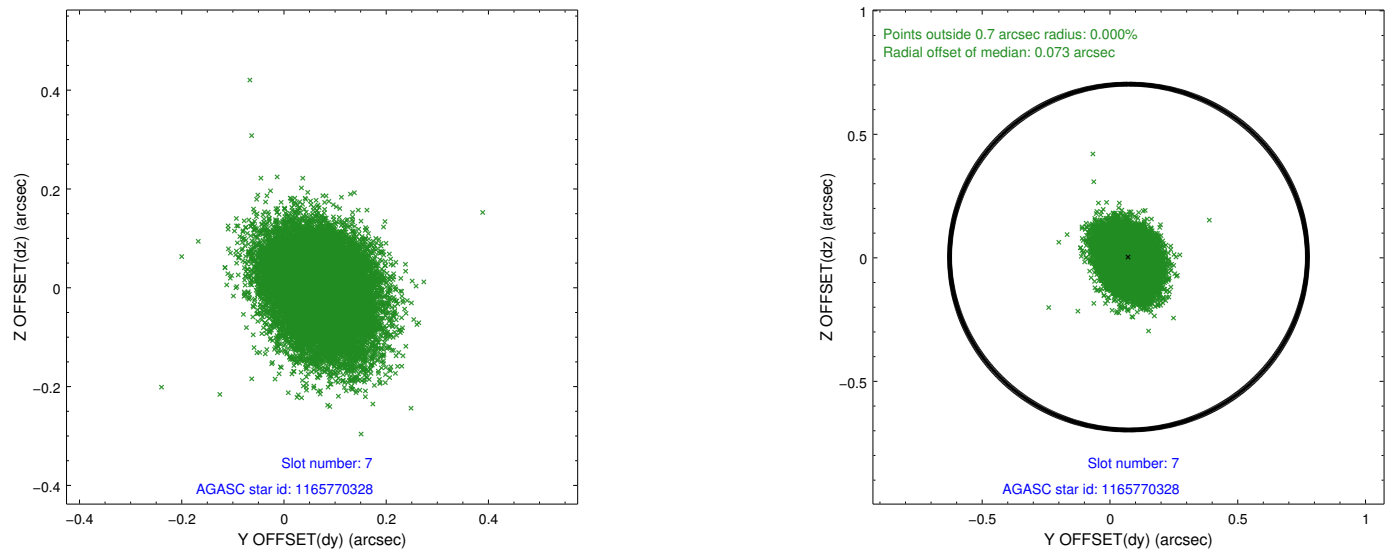
2.4.3 Slot 5



2.4.4 Slot 6

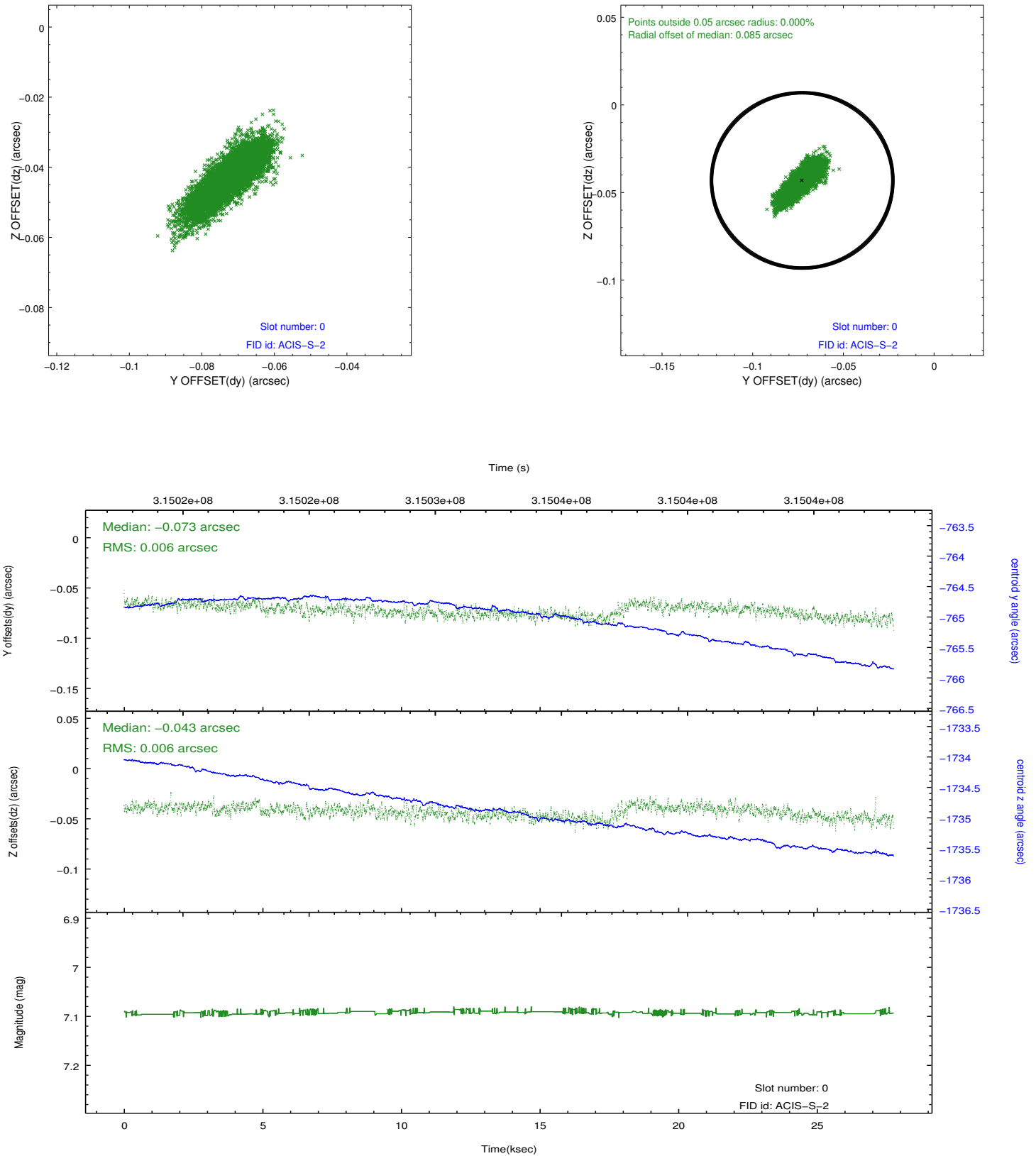


2.4.5 Slot 7

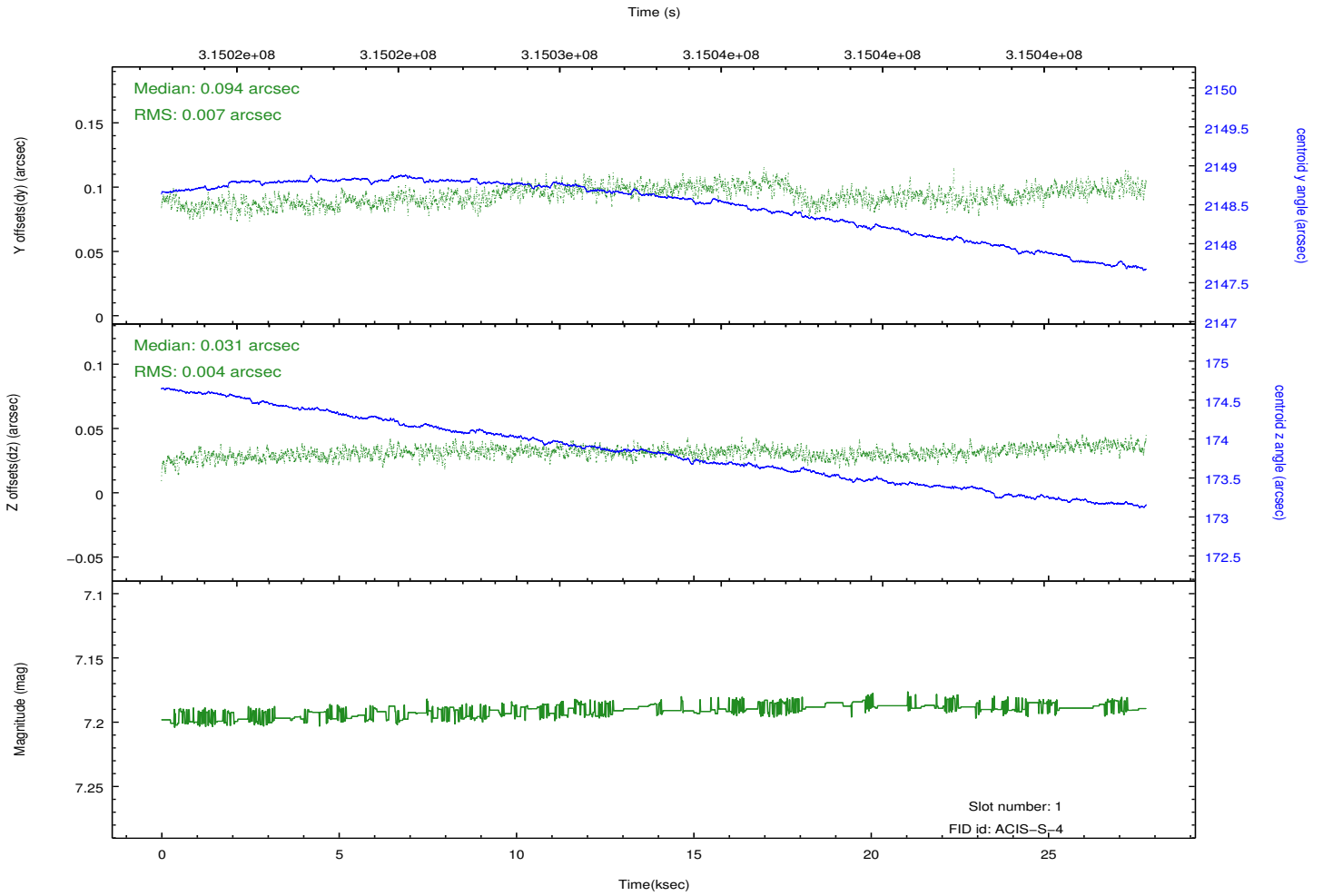
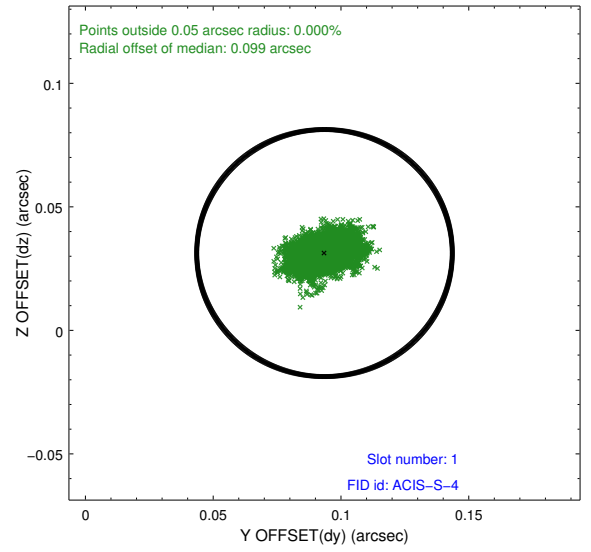
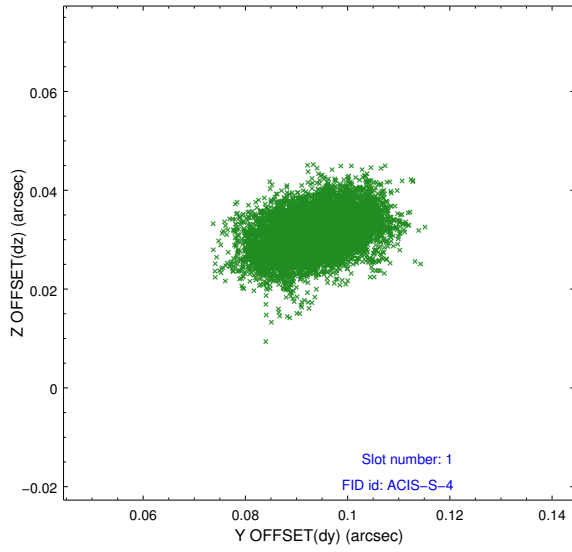


2.5 FID Slots

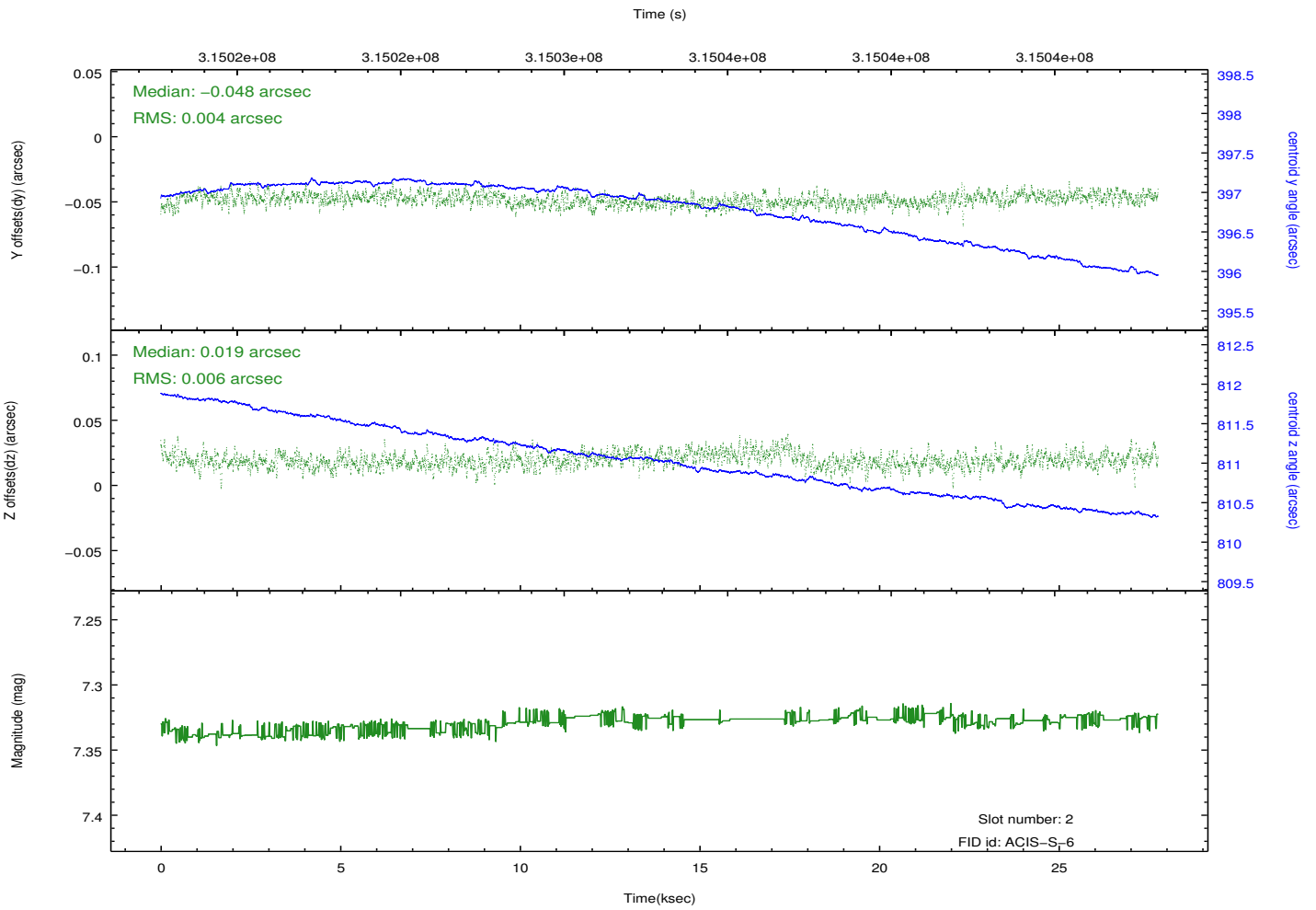
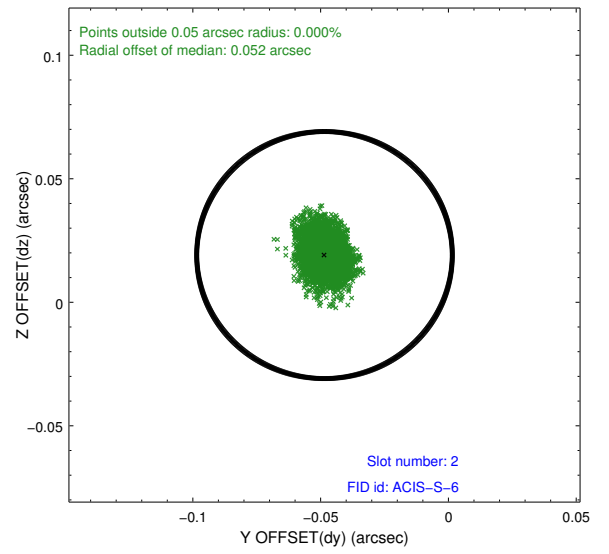
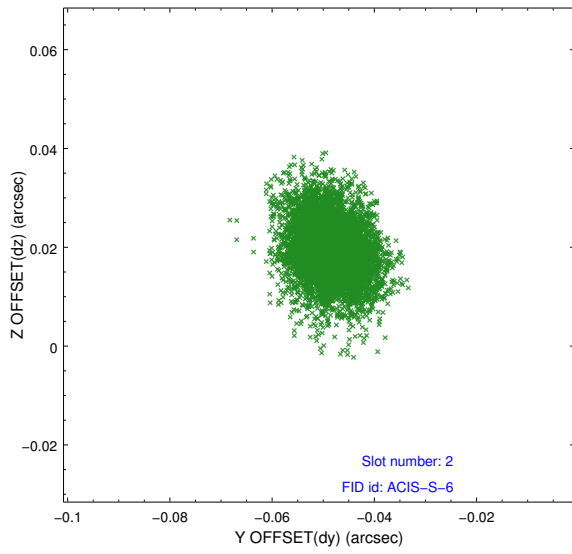
2.5.1 Slot 0



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) | 2012.05.08 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 27.7574002 |

A.2 Comments

Window constraint met.