

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9698 - L2 Version 2
Chandra X-Ray Center

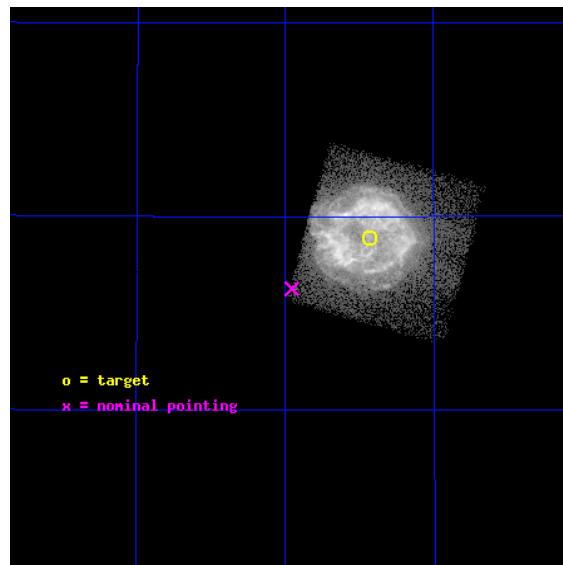
L2 Processing Date : May 11 2012

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1 Front

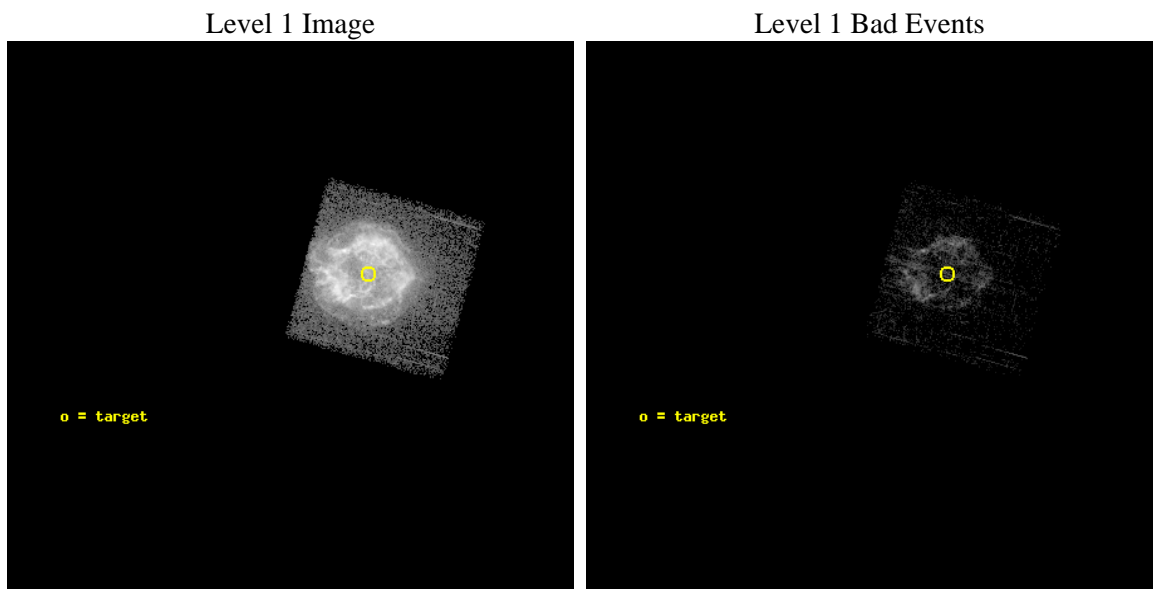
| | | |
|----------|--|---|
| seq_num | 590476 | Sequence number |
| obs_id | 9698 | Observation id |
| title | AO9 Observations of the Standard Candles Cas A and G21.5-09. | Propo |
| observer | Dr. CXC Calibration | Principal investigator |
| object | Cas A[I3,-120,-3.0,3.5,0] | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 350.8575 | Observer's specified target RA [deg] |
| dec_targ | 58.814833 | Observer's specified target Dec [deg] |
| ra_nom | 350.98931113295 | Nominal RA [deg] |
| dec_nom | 58.771047166109 | Nominal Dec [deg] |
| roll_nom | 15.382666054574 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 1772.6137354374 | Sum of GTIs [s] |
| livetime | 1749.4532320047 | Livetime [s] |
| ontime0 | 2055.3000158072 | Sum of GTIs [s] |
| ontime1 | 2055.3000158072 | Sum of GTIs [s] |
| ontime2 | 2055.3000158072 | Sum of GTIs [s] |
| ontime3 | 1772.6137354374 | Sum of GTIs [s] |
| l2events | 358078 | Number of level 2 events |



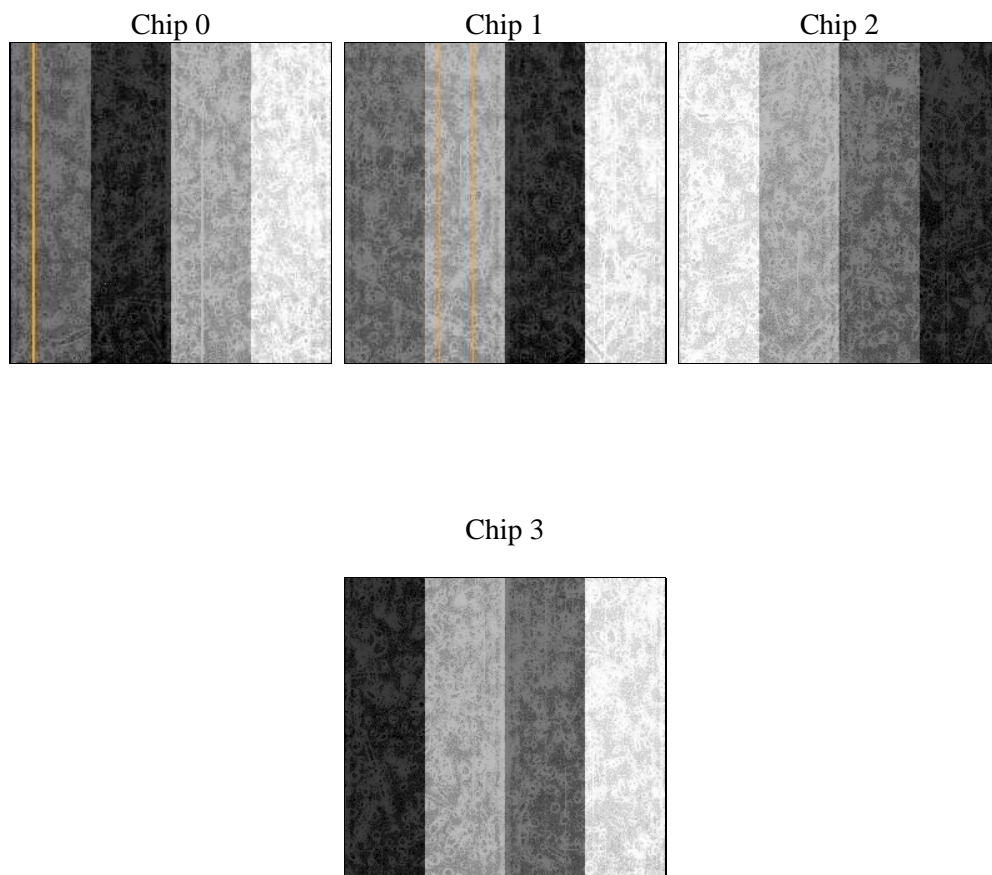
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 2000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 1772.6137354374 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime0 | 2055.3000158072 | Sum of GTIs [s] |
| date | 2012-05-12T00:15:29 | Date and time of file creation | ontime1 | 2055.3000158072 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 2055.3000158072 | Sum of GTIs [s] |
| | | | ontime3 | 1772.6137354374 | Sum of GTIs [s] |
| | | | l1events | 397947 | Number of level 1 events |

2.1.4 Events

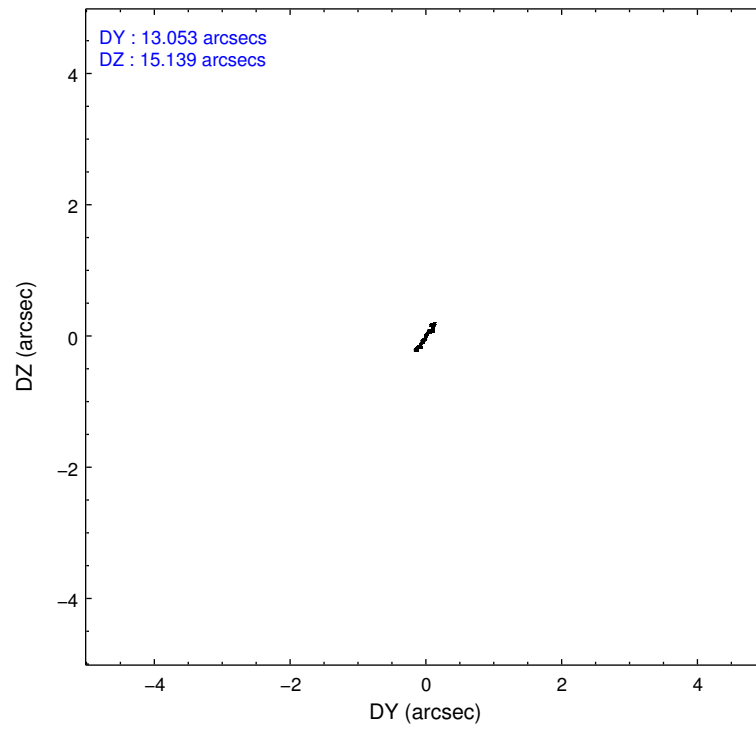
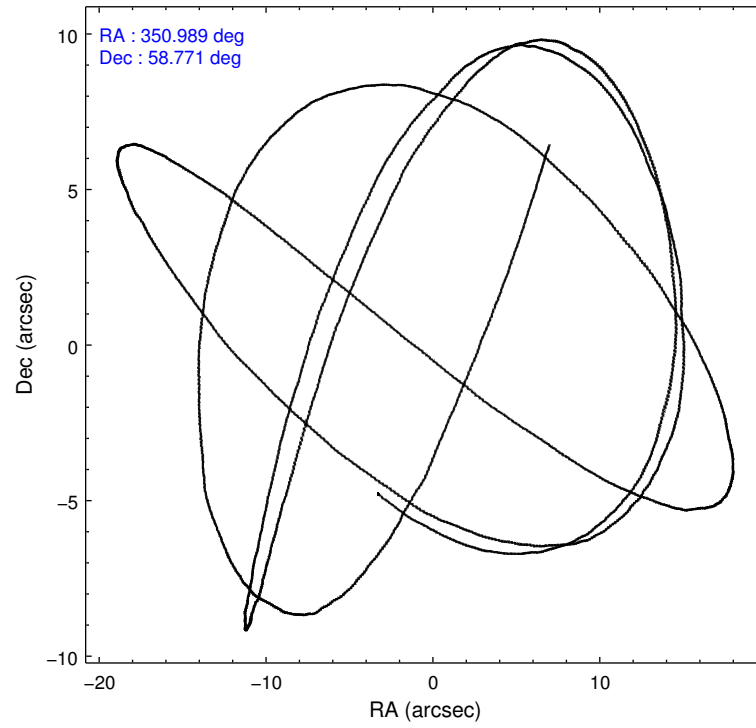
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 |
|-----------------|-------|-------|-------|--------|
| level 1 events | 0 | 0 | 0 | 397947 |
| rejected events | 0 | 0 | 0 | 28755 |
| rejected % | 0% | 0% | 0% | 7% |

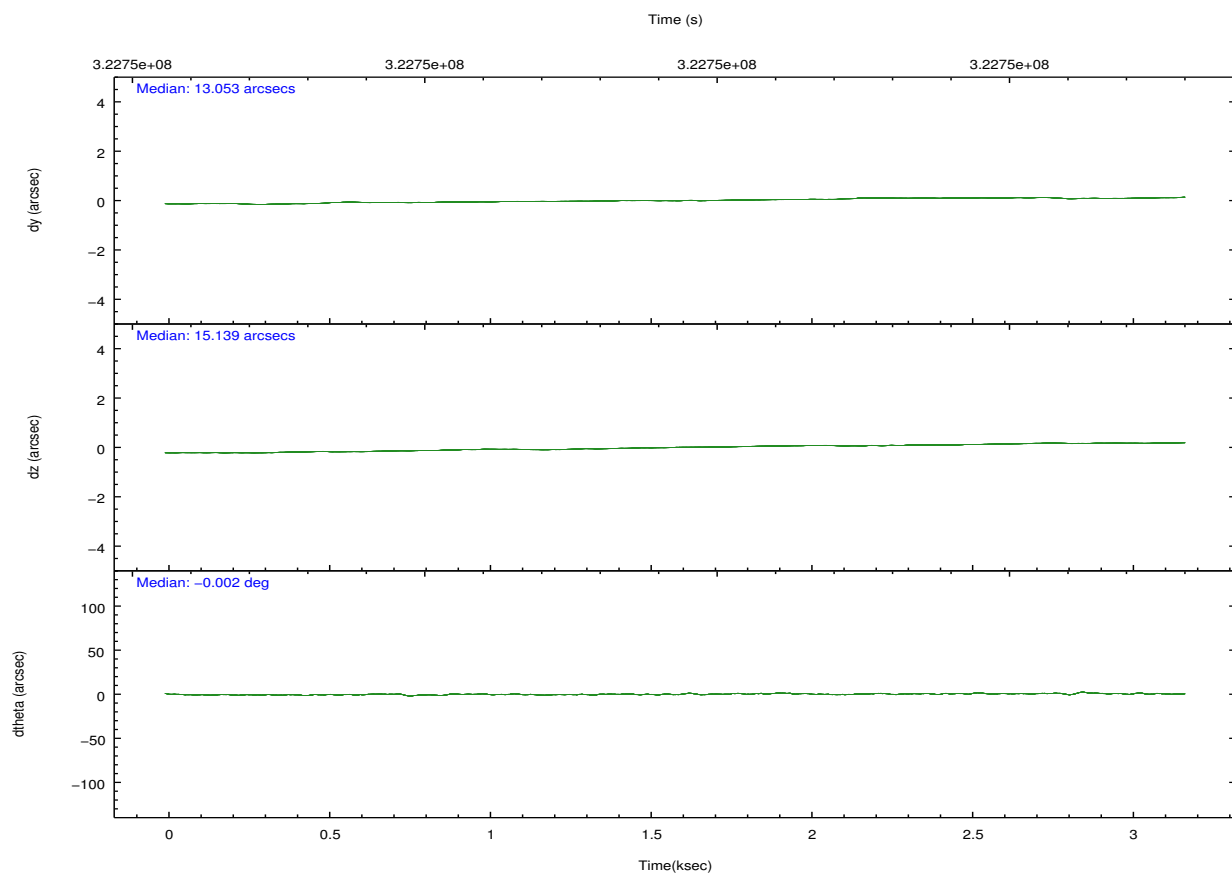
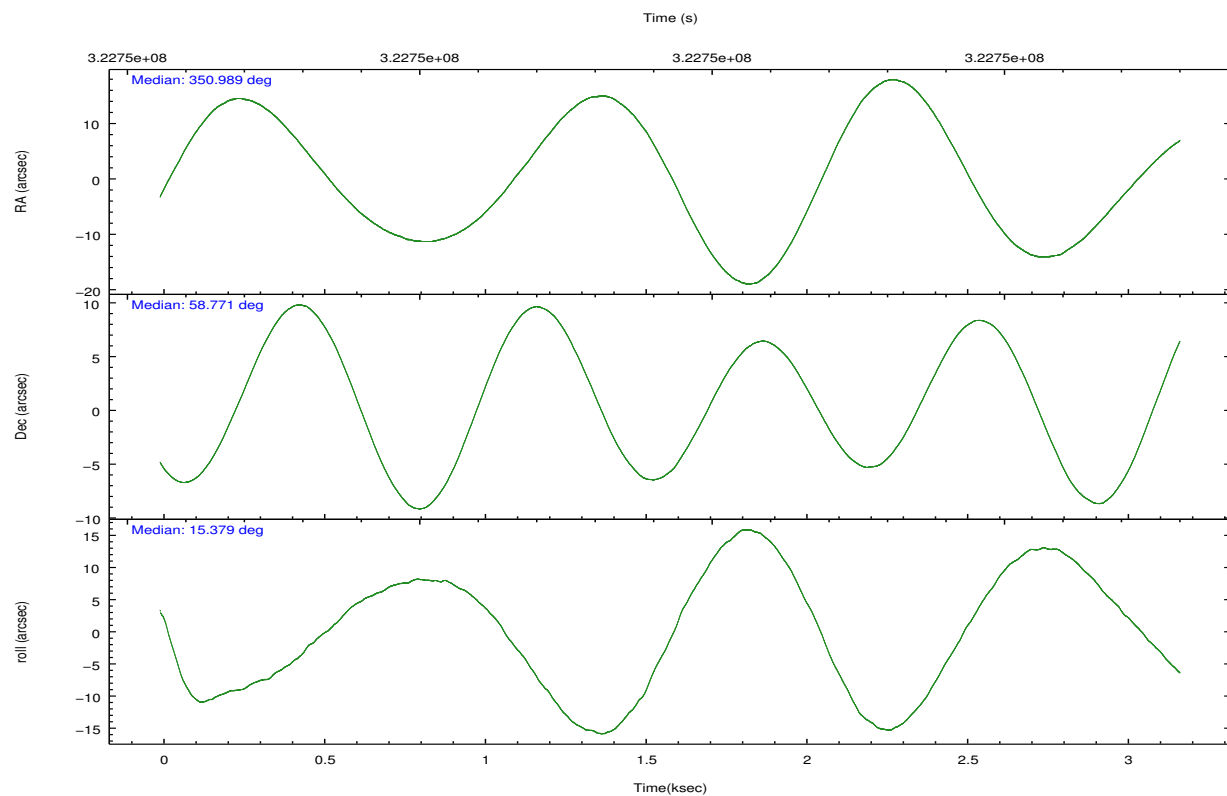
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 |
|----------------|-------|-------|-------|--------|
| grade 0 events | 0 | 0 | 0 | 300273 |
| | 0% | 0% | 0% | 75% |
| grade 1 events | 0 | 0 | 0 | 5064 |
| | 0% | 0% | 0% | 1% |
| grade 2 events | 0 | 0 | 0 | 37510 |
| | 0% | 0% | 0% | 9% |
| grade 3 events | 0 | 0 | 0 | 12175 |
| | 0% | 0% | 0% | 3% |
| grade 4 events | 0 | 0 | 0 | 12036 |
| | 0% | 0% | 0% | 3% |
| grade 5 events | 0 | 0 | 0 | 3346 |
| | 0% | 0% | 0% | 0% |
| grade 6 events | 0 | 0 | 0 | 7809 |
| | 0% | 0% | 0% | 1% |
| grade 7 events | 0 | 0 | 0 | 19734 |
| | 0% | 0% | 0% | 4% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-0123 | ACIS-0123 | 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 |
| [deg] Pointing RA | 350.952132 | 350.9893111329509 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 58.751494 | 58.77104716610868 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 15.205773 | 15.38266605457372 | [s] Primary exposure time | 0.000000 | 3.1 |
| [s] Window start time (MET) | 318211265.184000 | 318211265.184000 | | | |
| [s] Window stop time (MET) | 328579265.184000 | 328579265.184000 | | | |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | | | |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | | | |
| [s] Observation start time (MET) | 322751433.184000 | 322750070.95315 | | | |
| Observation start date | 2008-03-24T13:09:28 | 2008-03-24T12:47:50 | | | |
| [s] Observation end time (MET) | 322753433.184000 | 322753642.56583 | | | |
| Observation end date | 2008-03-24T13:42:48 | 2008-03-24T13:47:22 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



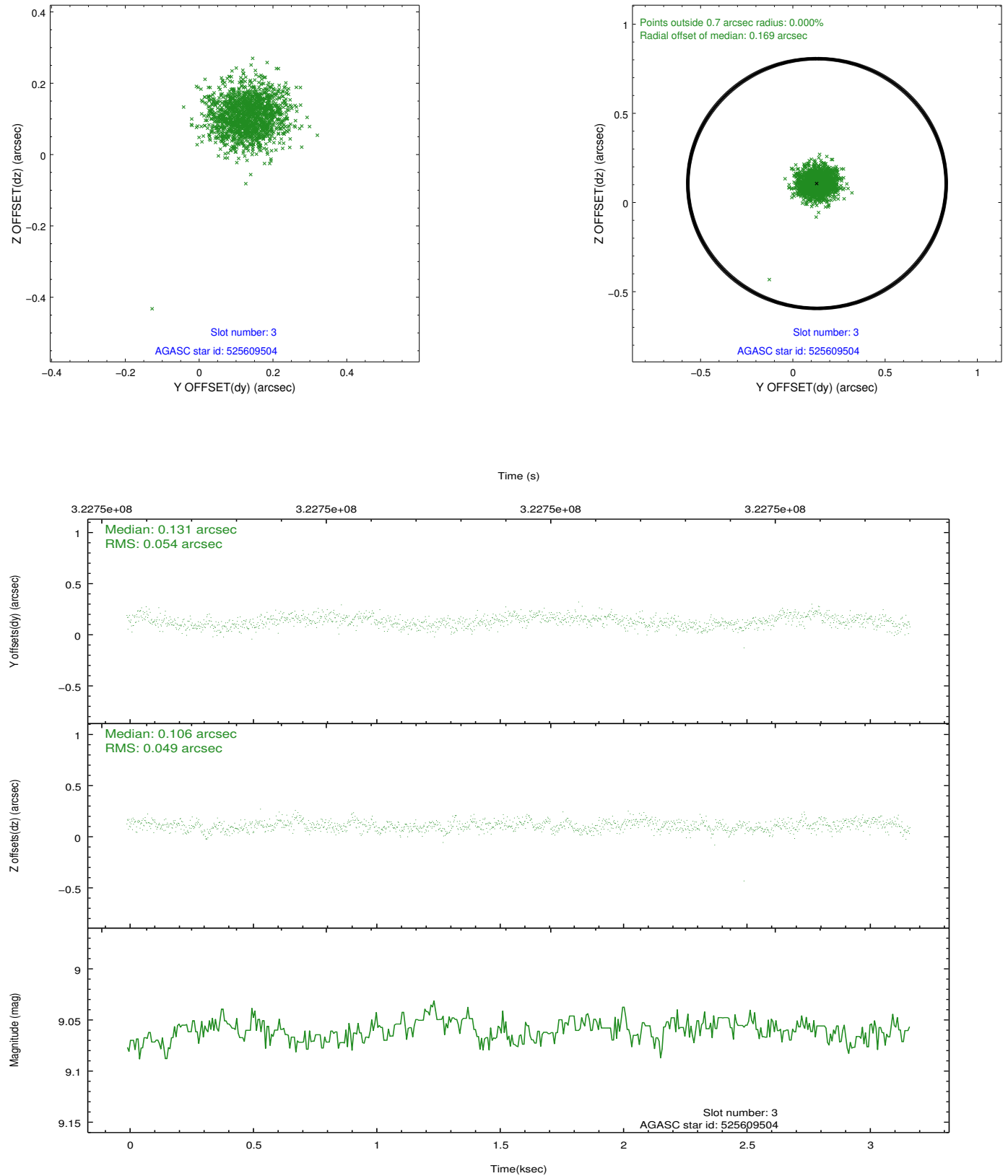


Slot Statistics

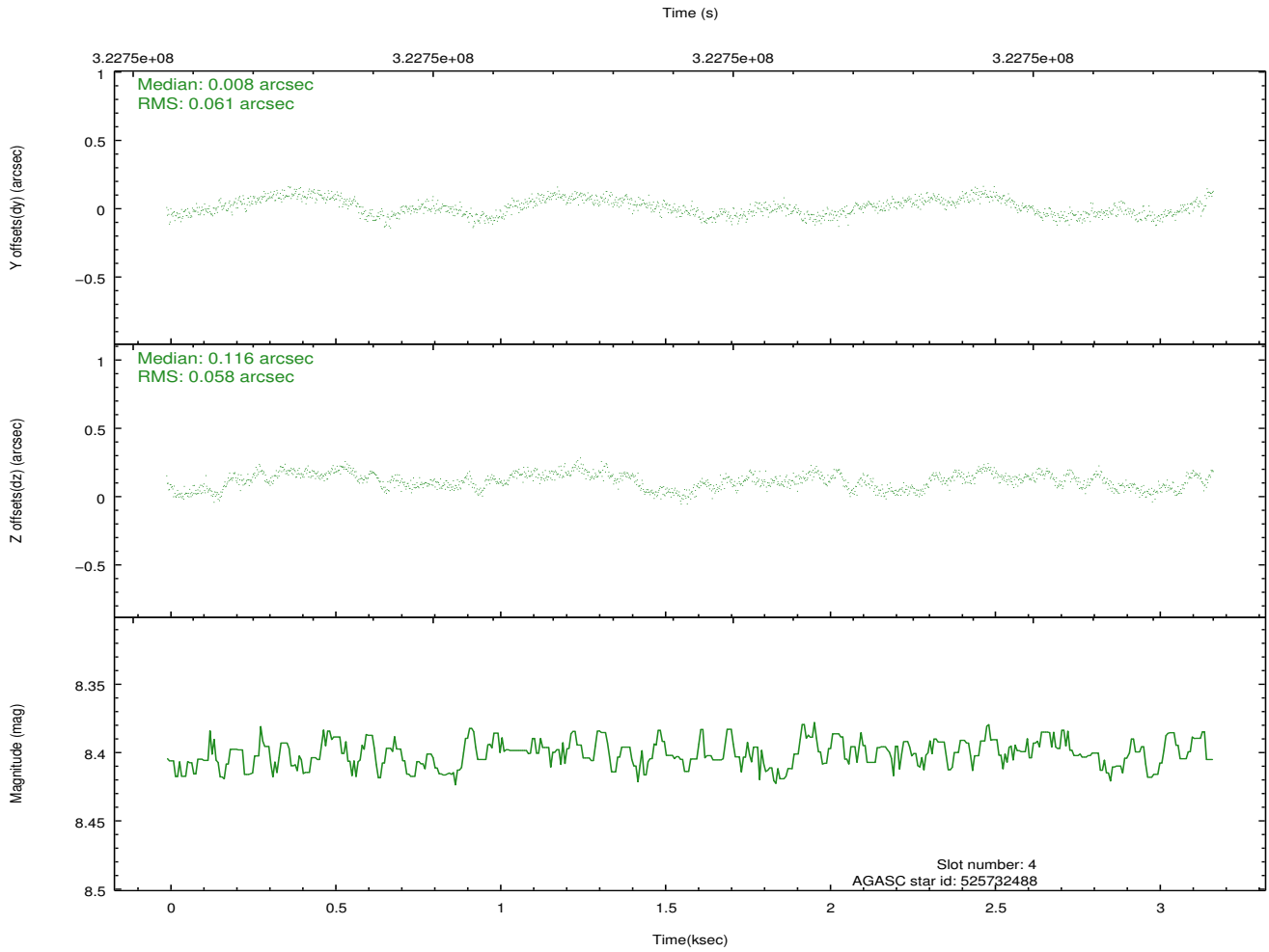
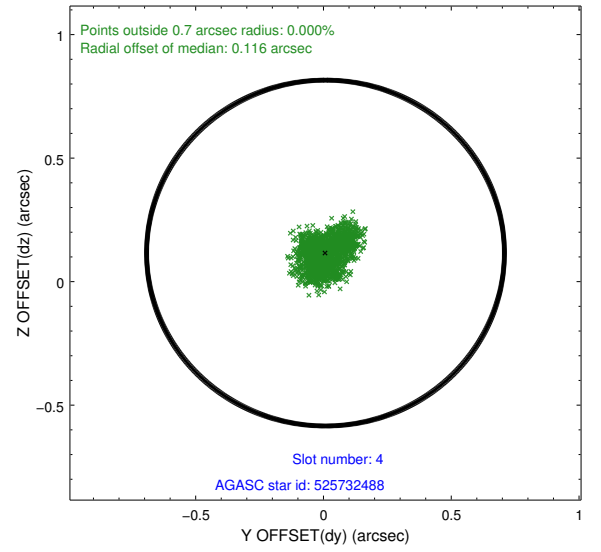
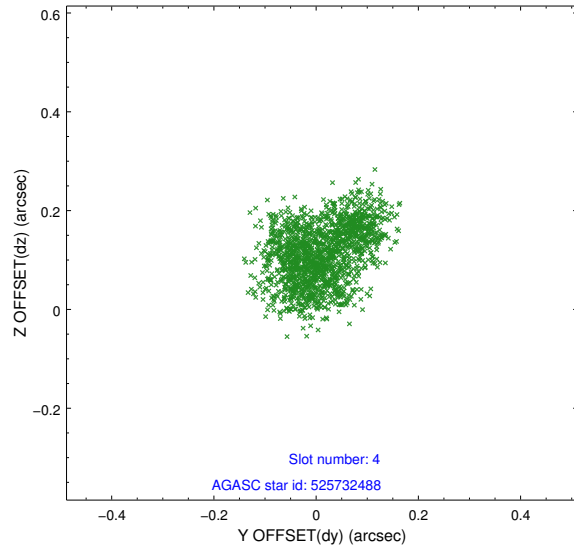
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.22 | 774 | 0.029 | -0.018 | 0.011 | 0.018 | 0.000000 | 0.000000 | 926.48 | -838.75 |
| 1 | FID | ACIS-I-5 | 7.21 | 774 | -0.187 | 0.037 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1820.72 | 1057.80 |
| 2 | FID | ACIS-I-6 | 7.23 | 774 | 0.068 | 0.052 | 0.009 | 0.015 | 0.000000 | 0.000000 | 389.89 | 1704.58 |
| 3 | GUIDE | 525609504 | 9.06 | 1548 | 0.131 | 0.106 | 0.076 | 0.122 | 349.896632 | 58.356658 | -2292.30 | -833.06 |
| 4 | GUIDE | 525732488 | 8.40 | 1548 | 0.008 | 0.116 | 0.092 | 0.137 | 350.087090 | 58.516915 | -1789.34 | -378.20 |
| 5 | GUIDE | 525732528 | 9.33 | 1547 | -0.068 | 0.018 | 0.095 | 0.156 | 351.607241 | 59.298932 | 1679.13 | 1592.15 |
| 6 | GUIDE | 525735456 | 7.20 | 1549 | -0.113 | -0.297 | 0.060 | 0.088 | 350.628183 | 59.307249 | -48.45 | 2089.50 |
| 7 | GUIDE | 525735976 | 8.56 | 1546 | 0.043 | 0.059 | 0.075 | 0.114 | 350.142956 | 58.277622 | -1922.98 | -1233.76 |

2.4 Star Slots

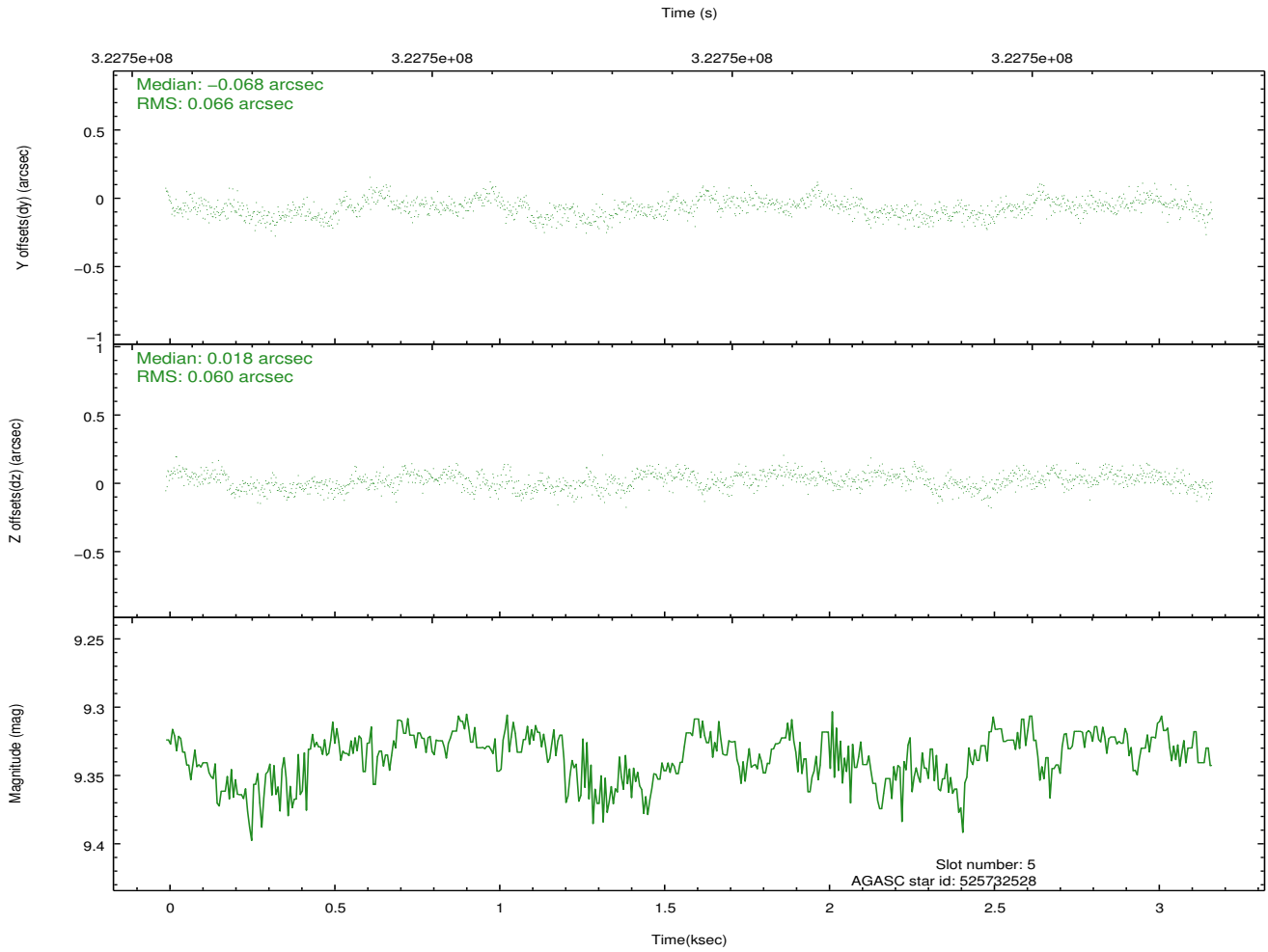
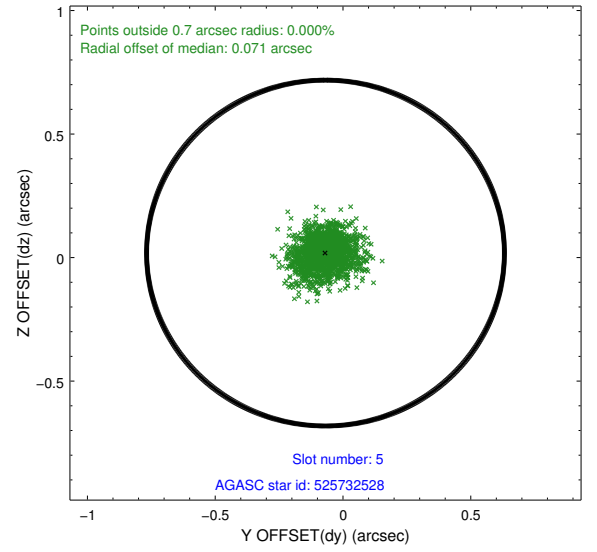
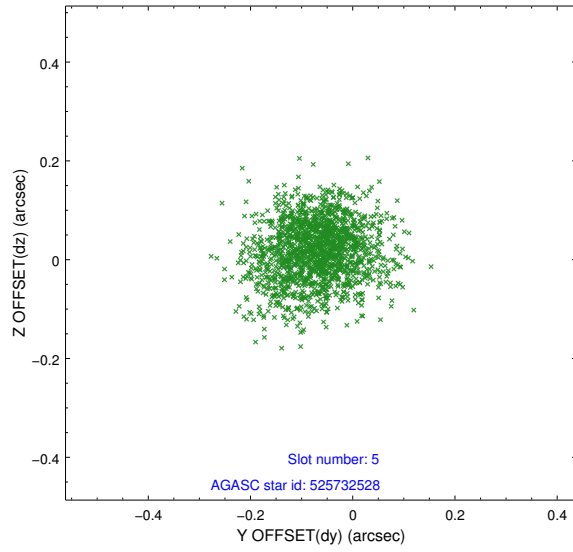
2.4.1 Slot 3



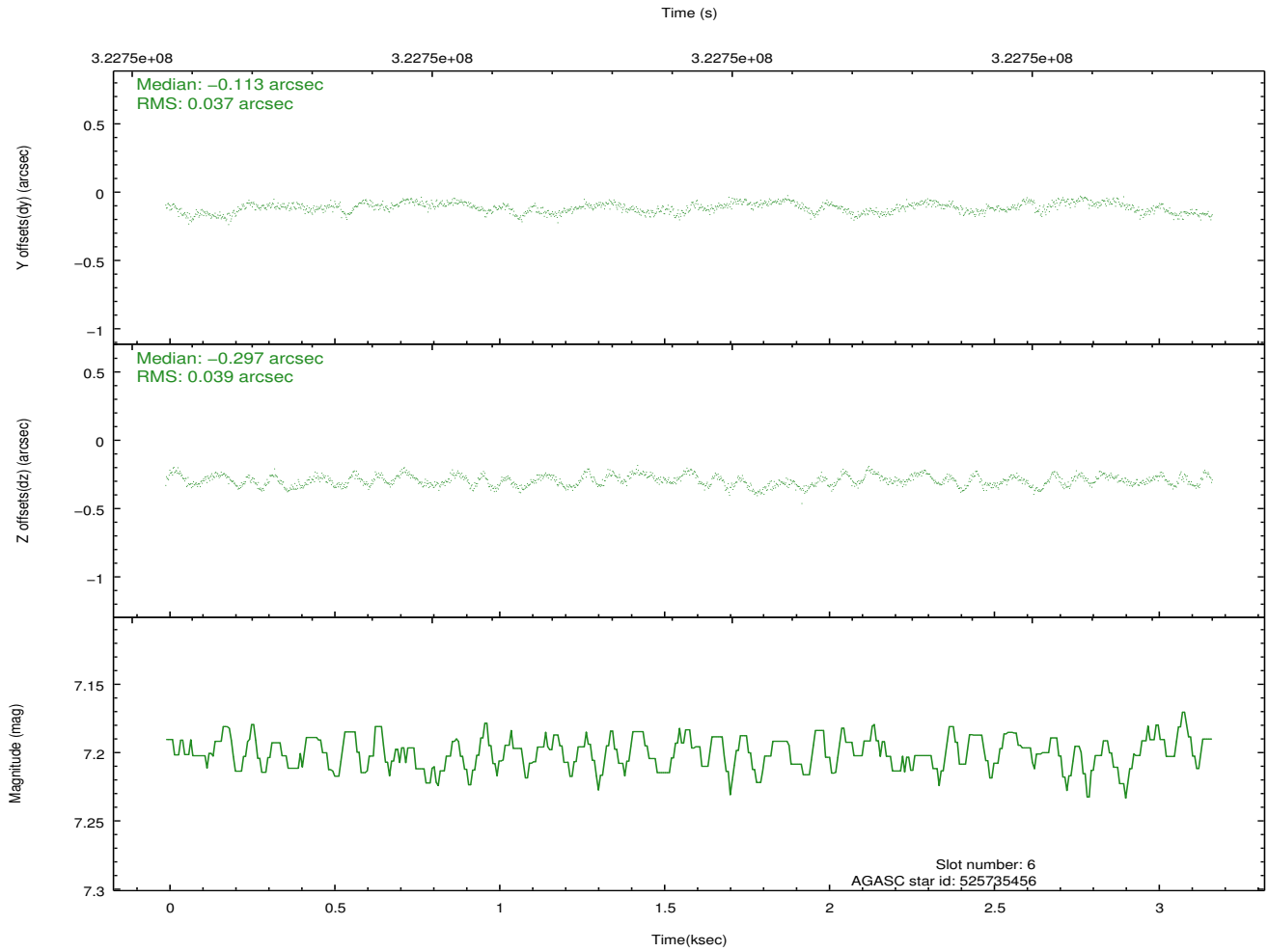
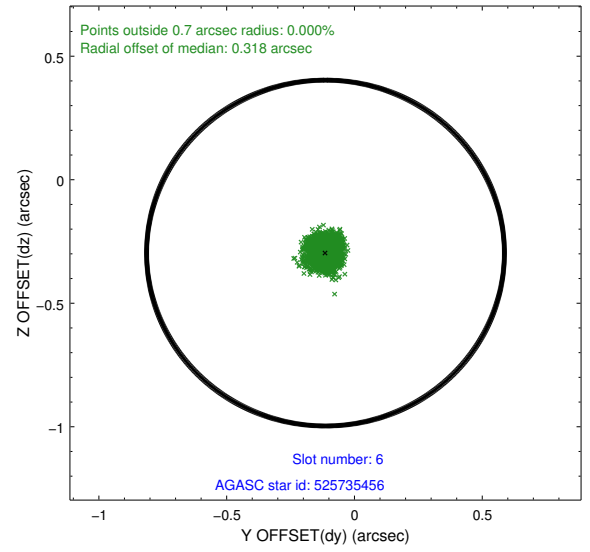
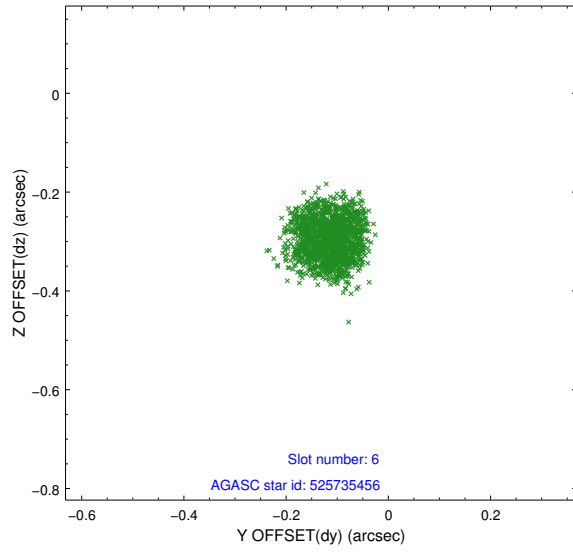
2.4.2 Slot 4



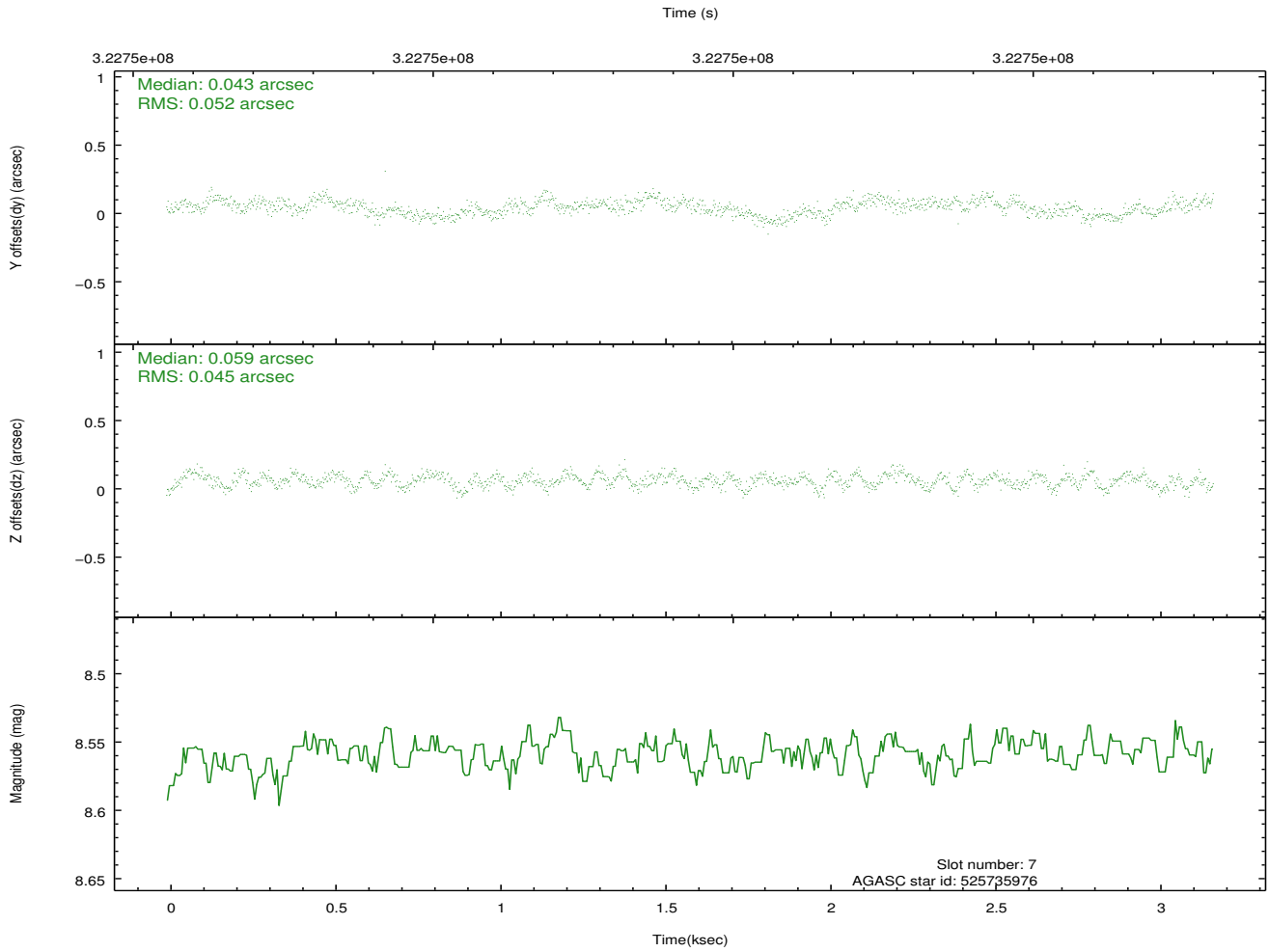
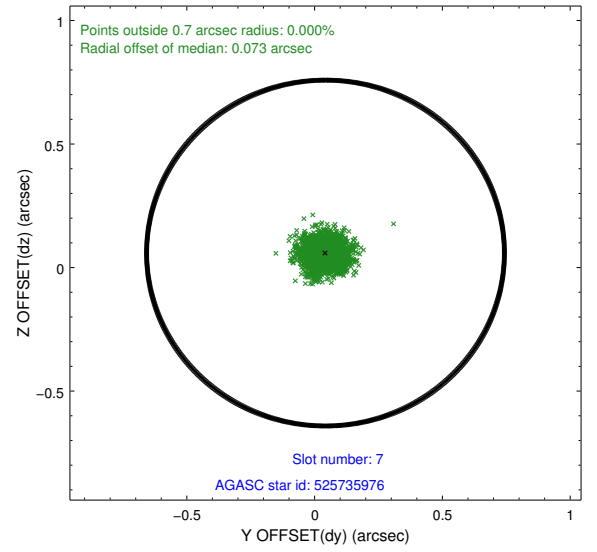
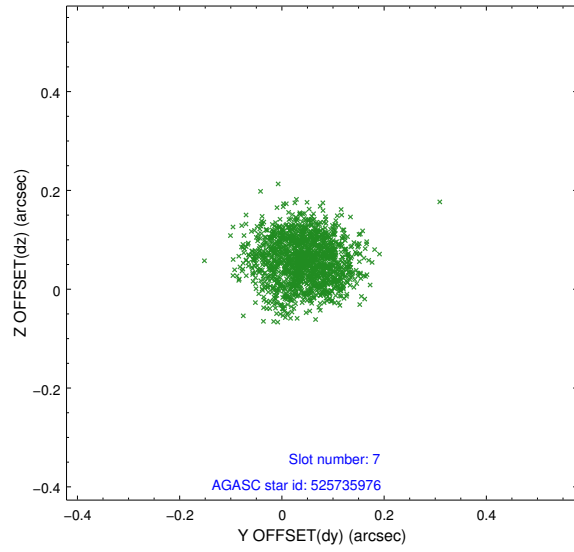
2.4.3 Slot 5



2.4.4 Slot 6

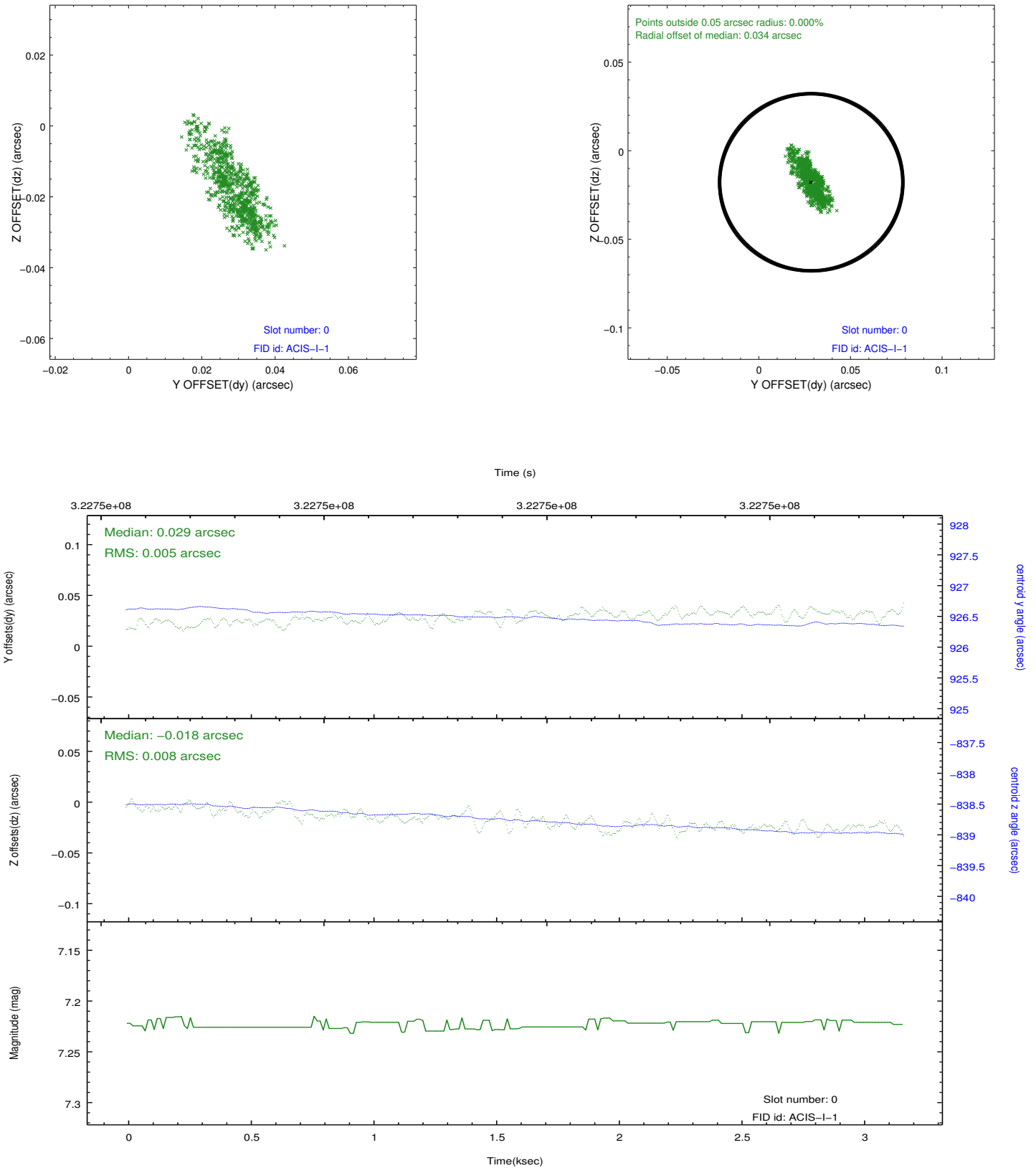


2.4.5 Slot 7

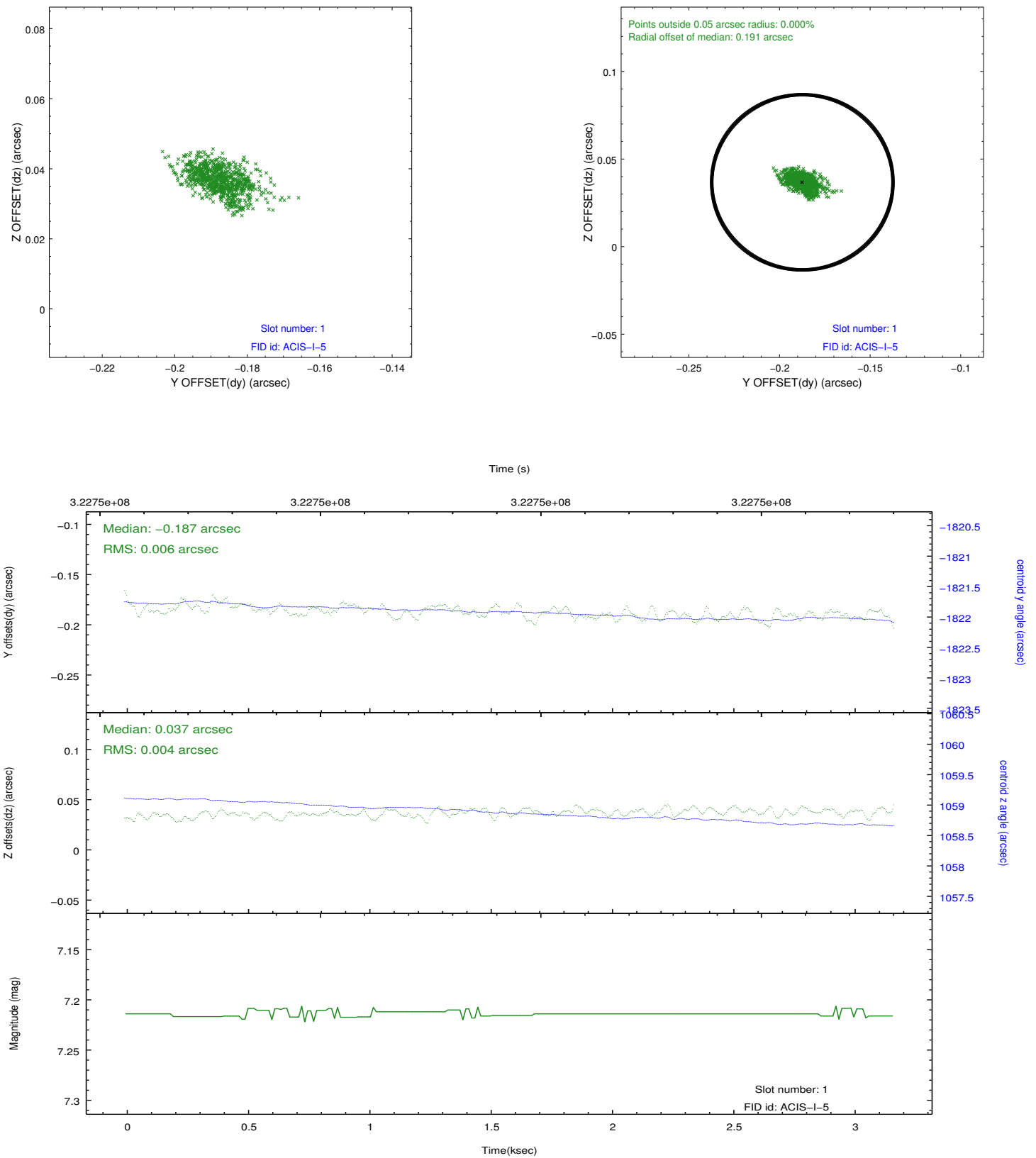


2.5 FID Slots

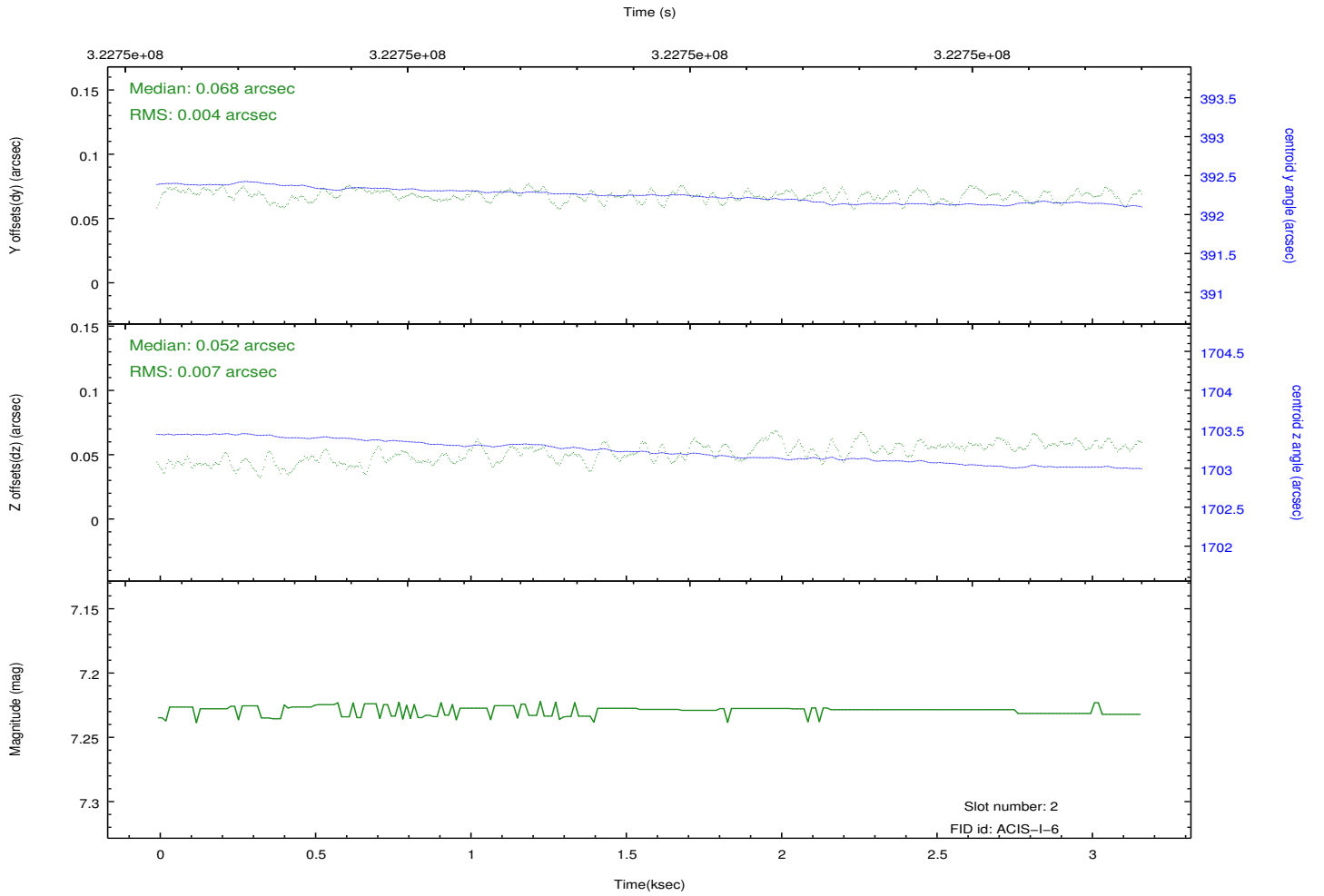
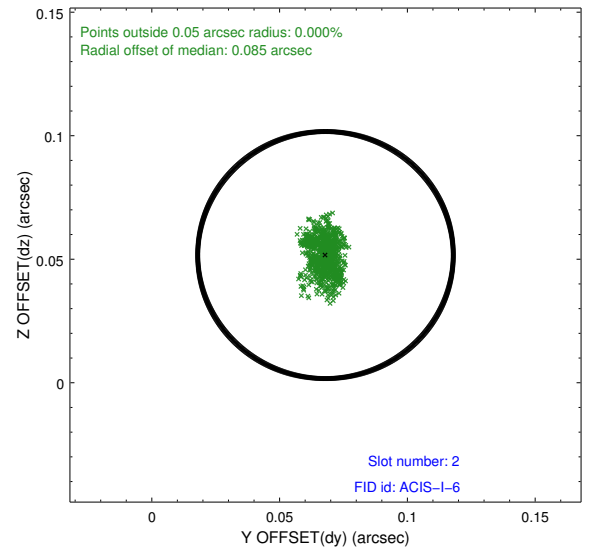
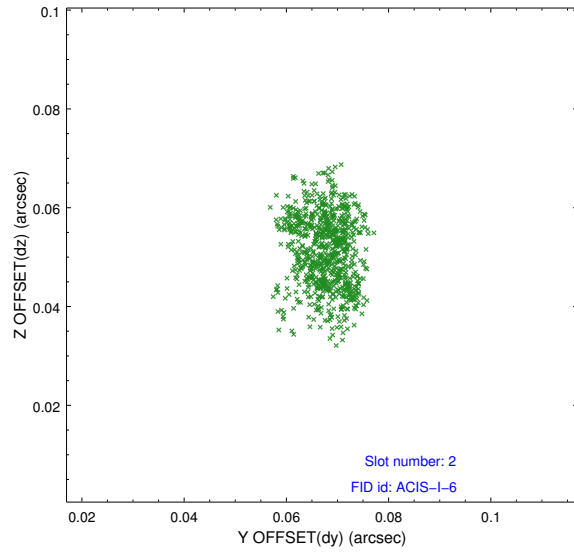
2.5.1 Slot 0



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) | 2012.05.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.77261373 |

A.2 Comments

Although the 4 ACIS-I CCDs were turned on for this observation, only data from chip I3 were collected. An exclusion filter was used to exclude data from the other 3 chips. Window constraint met.