

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8644 - L2 Version 2
Chandra X-Ray Center

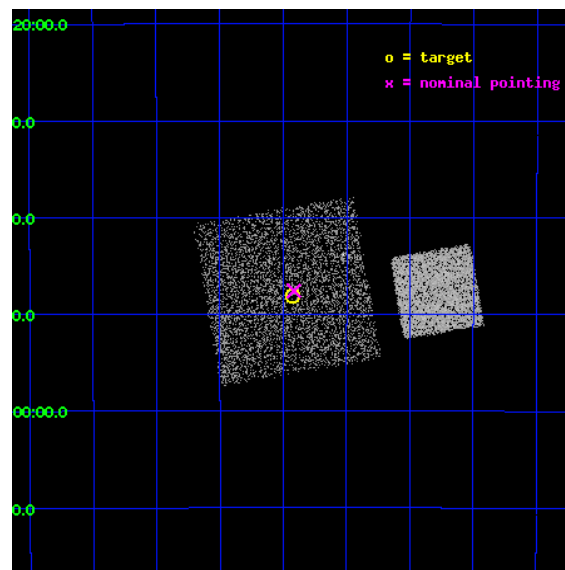
L2 Processing Date : May 14 2012

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1 Front

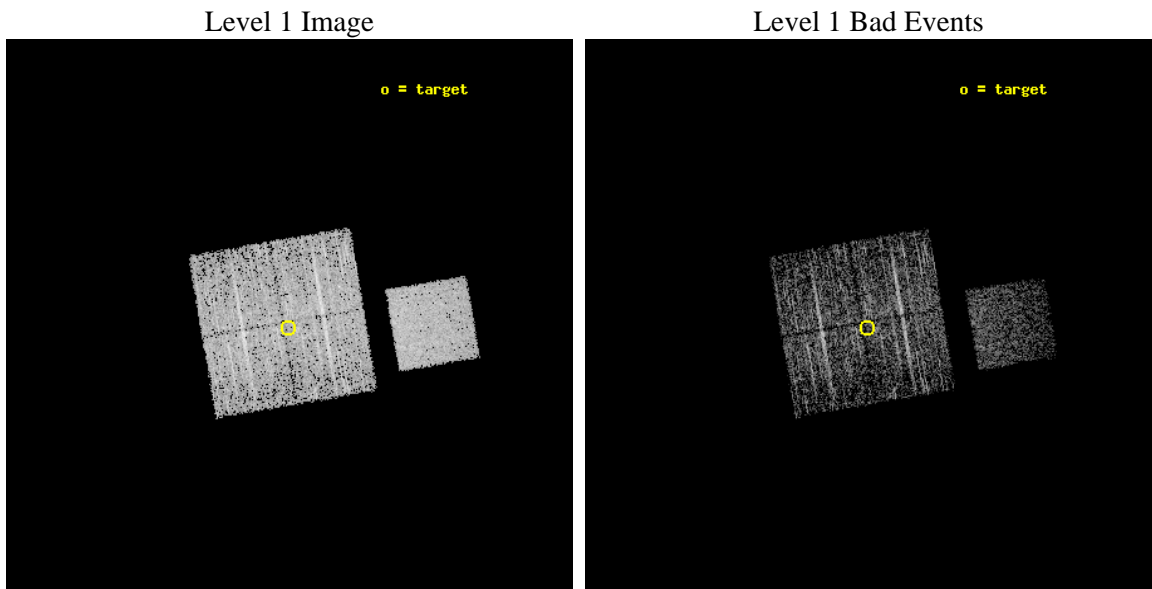
| | | |
|----------|---------------------------------------------------------------------------------------------------|---------------------------------------------|
| seq_num | 400695 | Sequence number |
| obs_id | 8644 | Observation id |
| title | The Galactic Bulge Survey: categorising the plethora of faint X-ray sources in the Galactic Bulge | Proposal title |
| observer | Prof Mariano Mendez | Principal investigator |
| object | GBSGTO1 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 265.730149 | Observer's specified target RA [deg] |
| dec_targ | -27.80121 | Observer's specified target Dec [deg] |
| ra_nom | 265.72890597132 | Nominal RA [deg] |
| dec_nom | -27.793013550386 | Nominal Dec [deg] |
| roll_nom | 80.208123948682 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 2185.5000168085 | Sum of GTIs [s] |
| livetime | 2156.9448501472 | Livetime [s] |
| ontime0 | 2185.5000168085 | Sum of GTIs [s] |
| ontime1 | 2185.5000168085 | Sum of GTIs [s] |
| ontime2 | 2185.5000168085 | Sum of GTIs [s] |
| ontime3 | 2185.5000168085 | Sum of GTIs [s] |
| ontime7 | 2185.5000168085 | Sum of GTIs [s] |
| l2events | 15773 | Number of level 2 events |



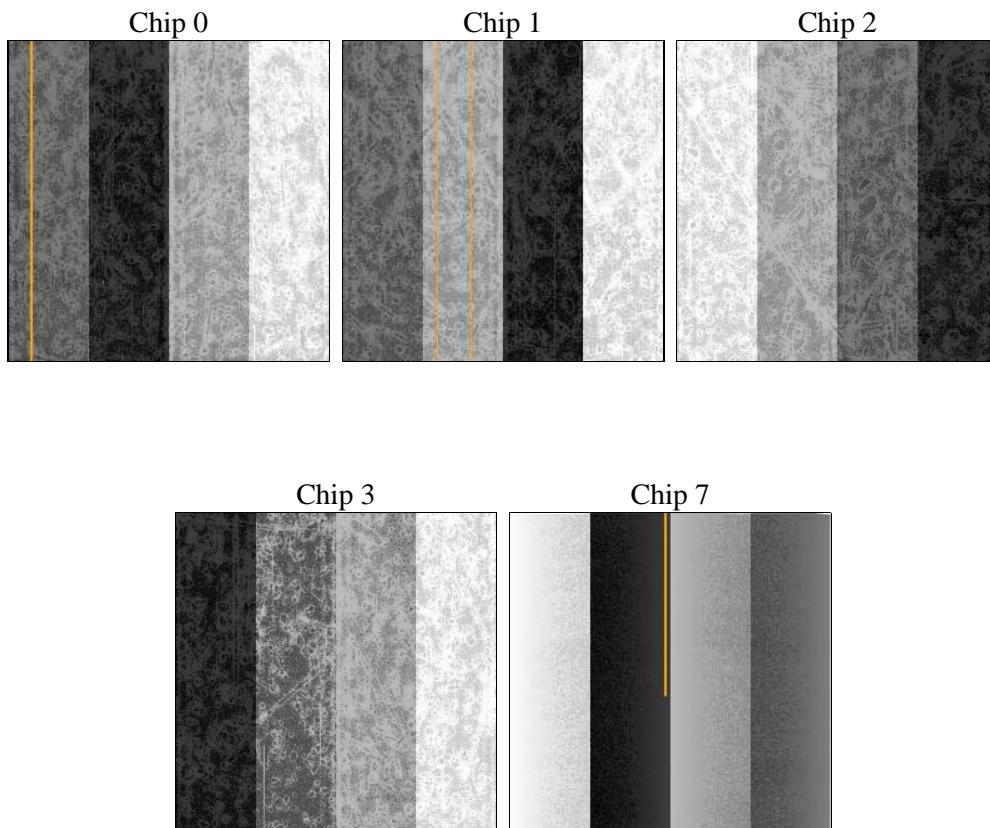
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|-----------------------------------------|
| obi_num | 1 | Obi number | sched_exp_time | 2000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 2185.5000168085 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime0 | 2185.5000168085 | Sum of GTIs [s] |
| date | 2012-05-14T23:52:54 | Date and time of file creation | ontime1 | 2185.5000168085 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 2185.5000168085 | Sum of GTIs [s] |
| | | | ontime3 | 2185.5000168085 | Sum of GTIs [s] |
| | | | ontime7 | 2185.5000168085 | Sum of GTIs [s] |
| | | | l1events | 99822 | Number of level 1 events |

2.1.4 Events

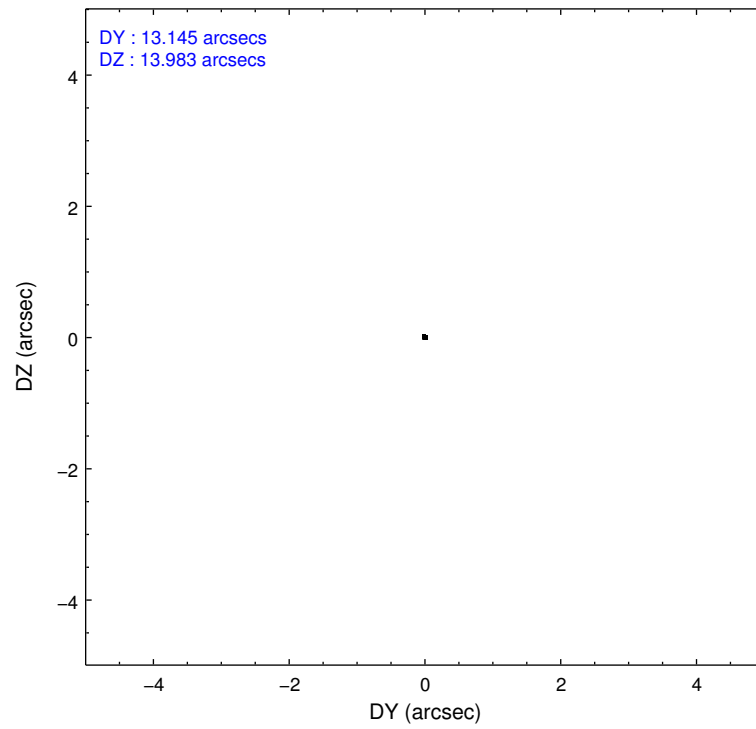
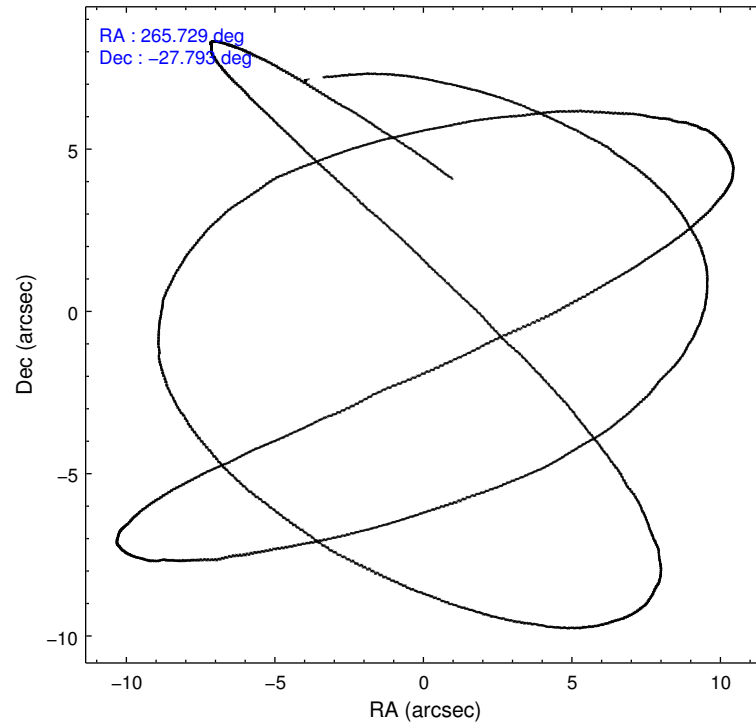
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 18150 | 18945 | 21199 | 18699 | 22829 |
| rejected events | 16139 | 16661 | 19095 | 16854 | 13635 |
| rejected % | 88% | 87% | 90% | 90% | 59% |

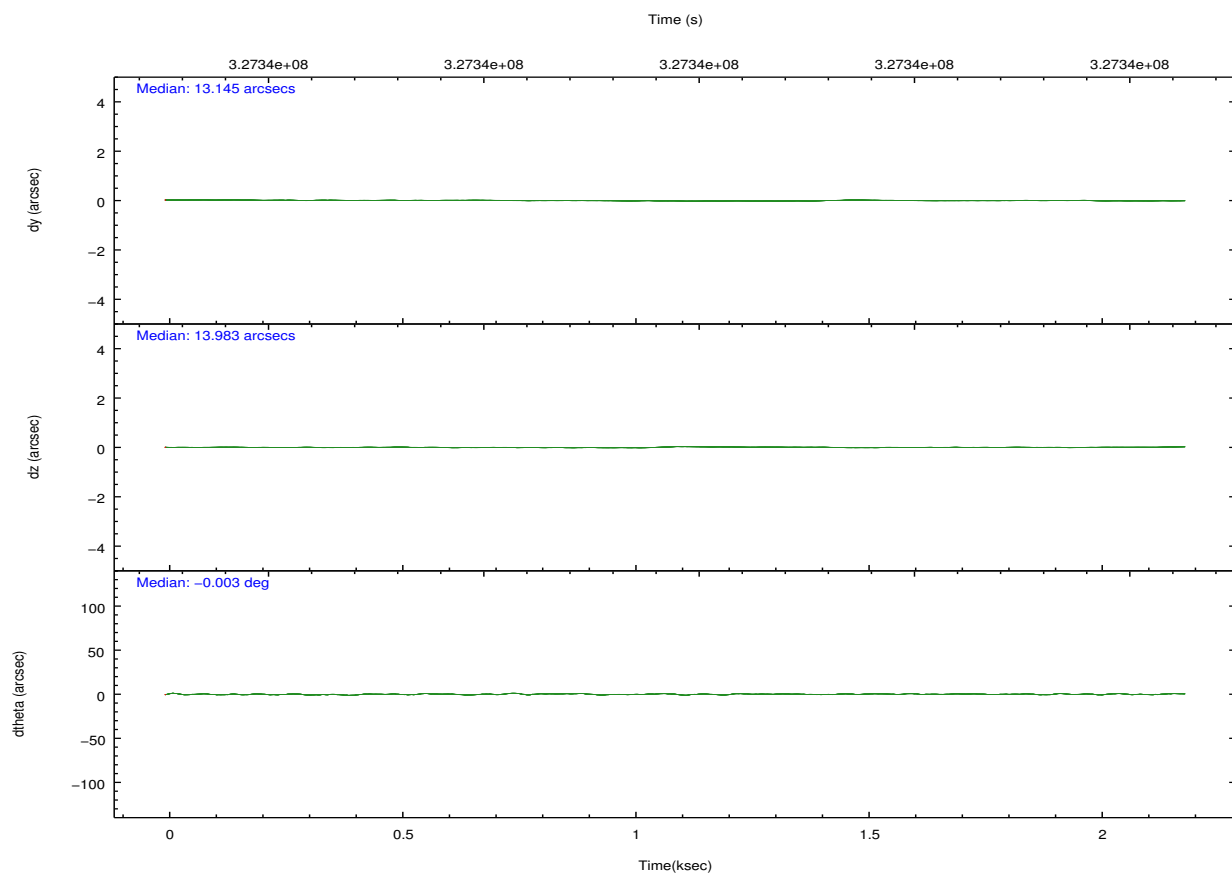
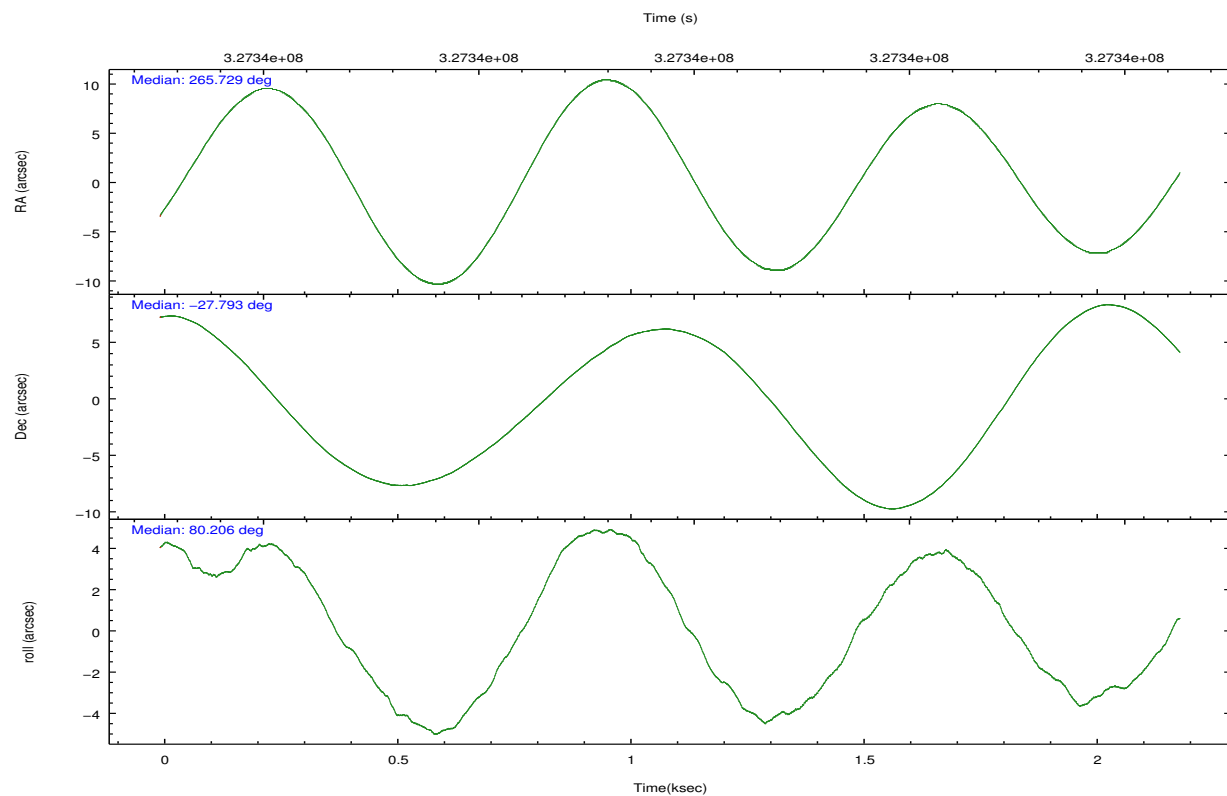
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 941 | 1090 | 1022 | 852 | 1025 |
| | 5% | 5% | 4% | 4% | 4% |
| grade 1 events | 7 | 9 | 9 | 8 | 27 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 522 | 547 | 549 | 466 | 2201 |
| | 2% | 2% | 2% | 2% | 9% |
| grade 3 events | 237 | 246 | 195 | 194 | 968 |
| | 1% | 1% | 0% | 1% | 4% |
| grade 4 events | 223 | 254 | 223 | 227 | 982 |
| | 1% | 1% | 1% | 1% | 4% |
| grade 5 events | 728 | 807 | 652 | 799 | 2353 |
| | 4% | 4% | 3% | 4% | 10% |
| grade 6 events | 397 | 468 | 392 | 411 | 5394 |
| | 2% | 2% | 1% | 2% | 23% |
| grade 7 events | 15095 | 15524 | 18157 | 15742 | 9879 |
| | 83% | 81% | 85% | 84% | 43% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01237 | ACIS-01237 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | CCD I0 on | Y | Y |
| Observation mode | POINTING | POINTING | CCD I1 on | Y | Y |
| [deg] Pointing RA | 265.739808 | 265.7289059713228 | CCD I2 on | Y | Y |
| [deg] Pointing Dec | -27.818959 | -27.79301355038591 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 80.004511 | 80.20812394868217 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001439871863259334 | CCD S2 on | N | N |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | CCD S3 on | O1 | Y |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | CCD S4 on | N | N |
| [s] Observation start time (MET) | 327342033.184000 | 327341657.07678 | CCD S5 on | N | N |
| Observation start date | 2008-05-16T16:19:28 | 2008-05-16T16:14:17 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 327344033.184000 | 327344167.30191 | On-chip summing requested | N | N |
| Observation end date | 2008-05-16T16:52:48 | 2008-05-16T16:56:07 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



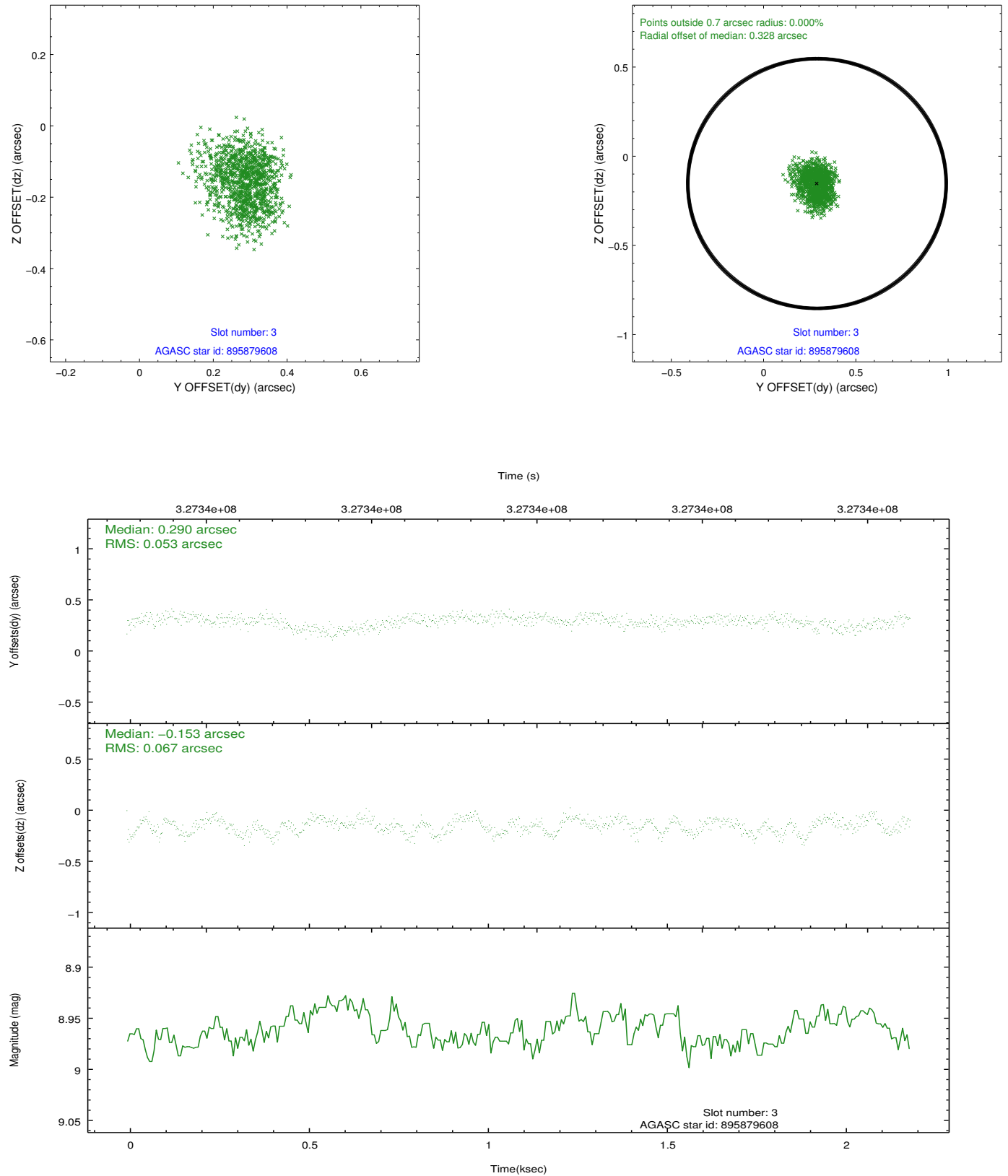


Slot Statistics

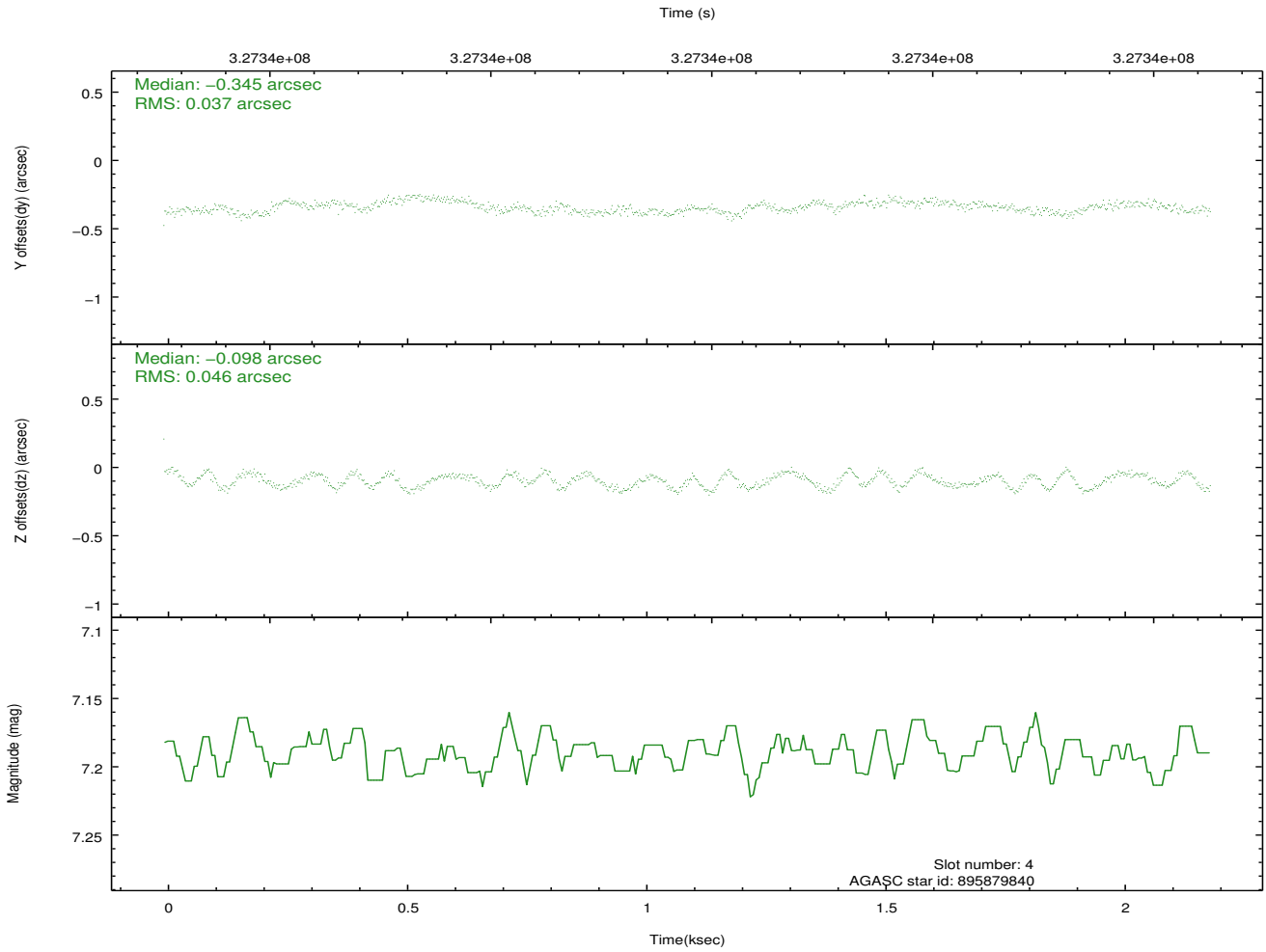
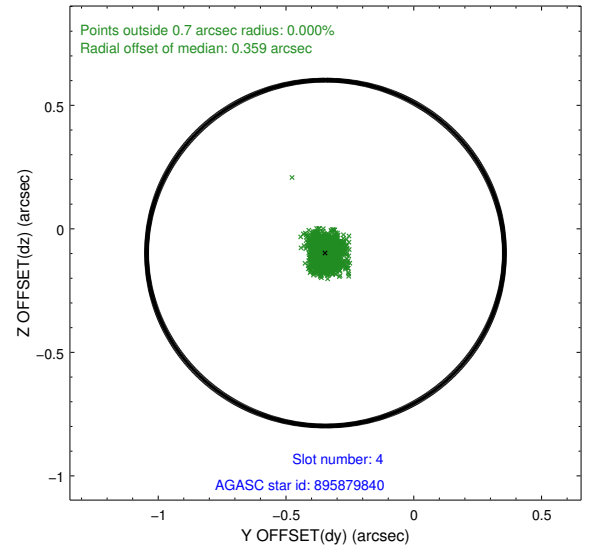
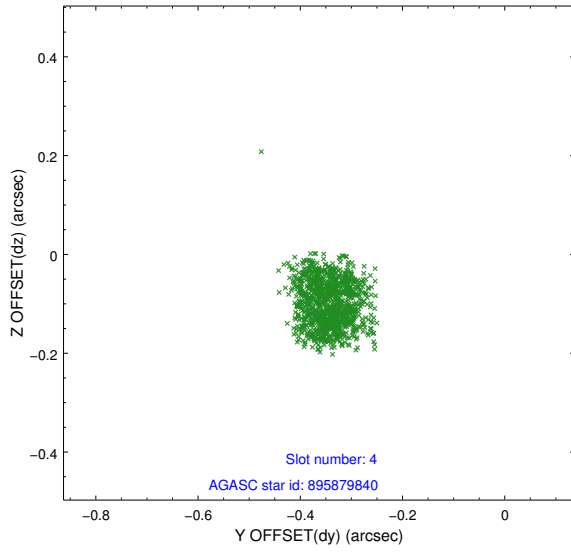
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.06 | 534 | 0.005 | 0.045 | 0.007 | 0.011 | 0.000000 | 0.000000 | 926.38 | -837.50 |
| 1 | FID | ACIS-I-5 | 7.05 | 534 | -0.174 | 0.029 | 0.006 | 0.012 | 0.000000 | 0.000000 | -1820.28 | 1058.45 |
| 2 | FID | ACIS-I-6 | 7.06 | 534 | 0.077 | -0.003 | 0.006 | 0.011 | 0.000000 | 0.000000 | 388.73 | 1706.32 |
| 3 | GUIDE | 895879608 | 8.96 | 1068 | 0.290 | -0.153 | 0.091 | 0.146 | 265.708239 | -27.843915 | -106.07 | 83.05 |
| 4 | GUIDE | 895879840 | 7.19 | 1068 | -0.345 | -0.098 | 0.064 | 0.094 | 265.218397 | -27.395778 | 1206.54 | 1905.13 |
| 5 | GUIDE | 896402656 | 8.86 | 1068 | 0.091 | -0.025 | 0.071 | 0.114 | 265.739192 | -28.230753 | -1459.49 | -253.84 |
| 6 | GUIDE | 896538696 | 6.90 | 1068 | 0.176 | 0.193 | 0.039 | 0.059 | 266.298470 | -28.325572 | -1494.42 | -2061.07 |
| 7 | GUIDE | 896534664 | 8.19 | 1066 | -0.209 | 0.086 | 0.062 | 0.105 | 266.405570 | -28.407461 | -1728.23 | -2447.01 |

2.4 Star Slots

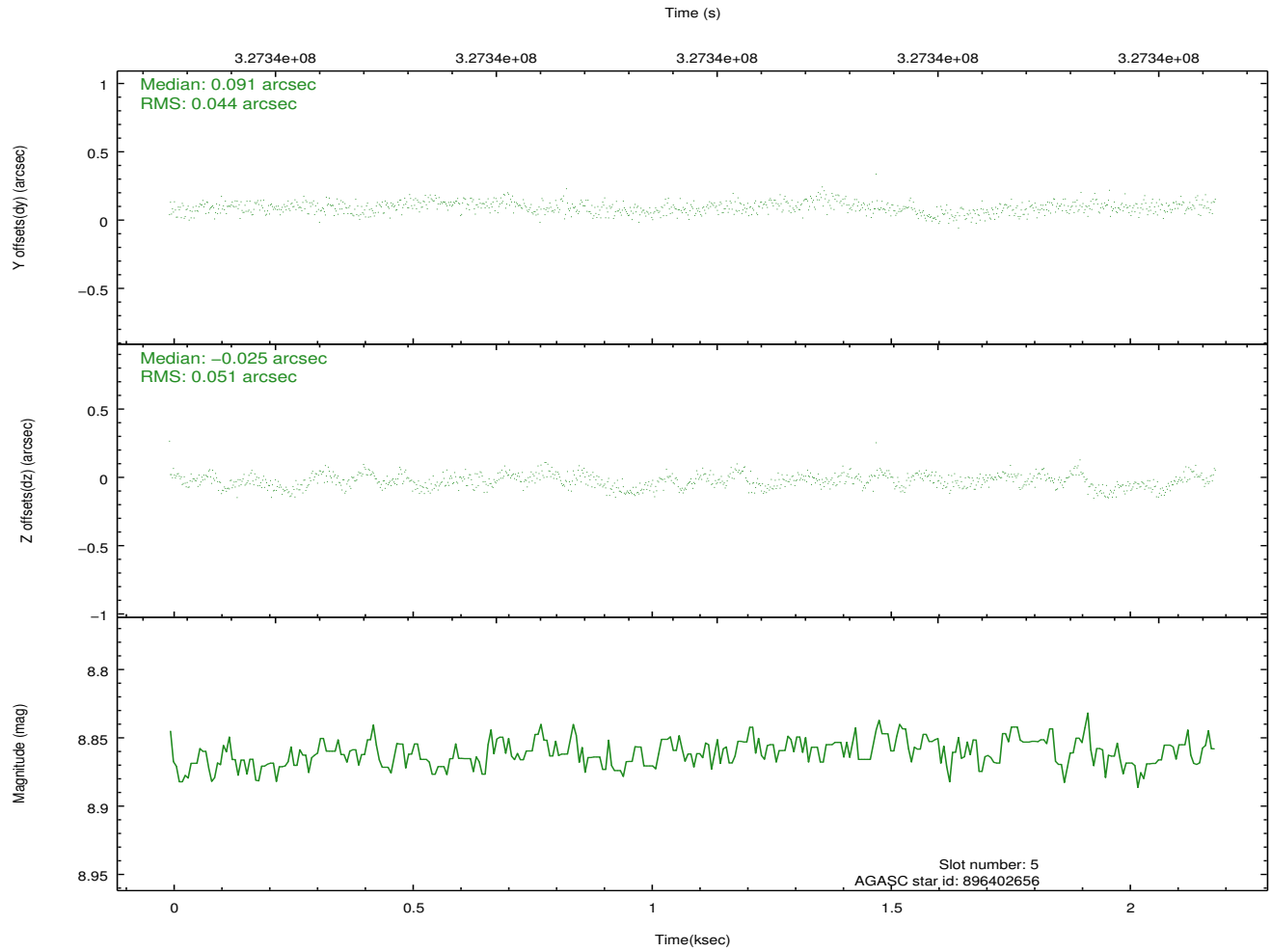
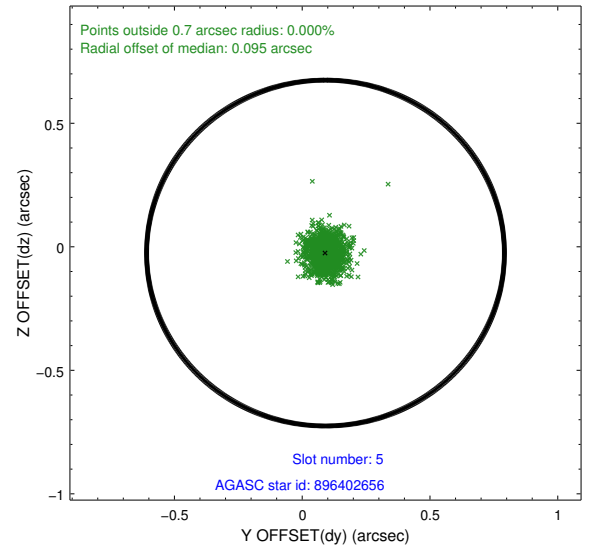
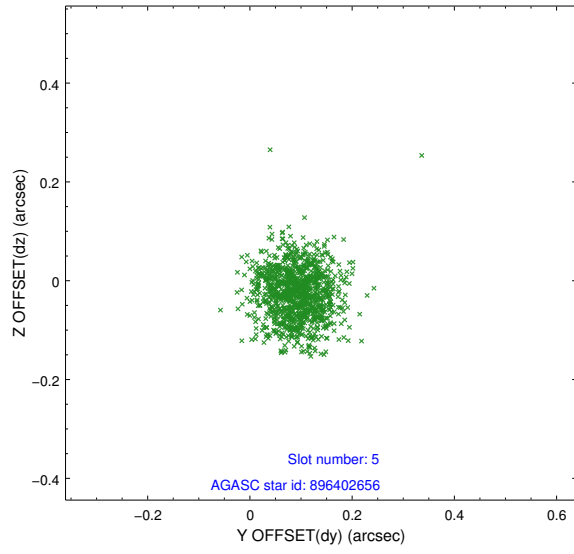
2.4.1 Slot 3



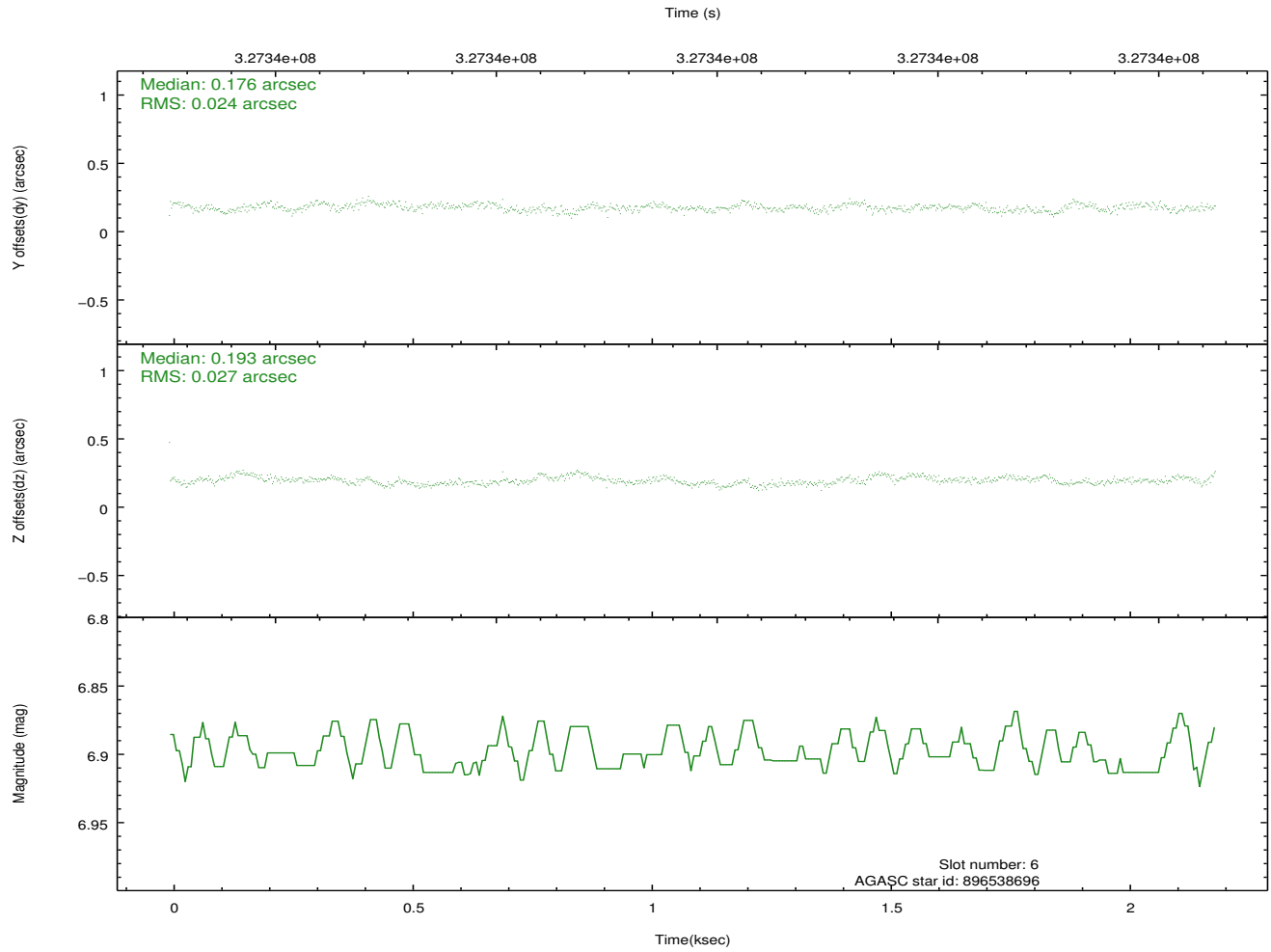
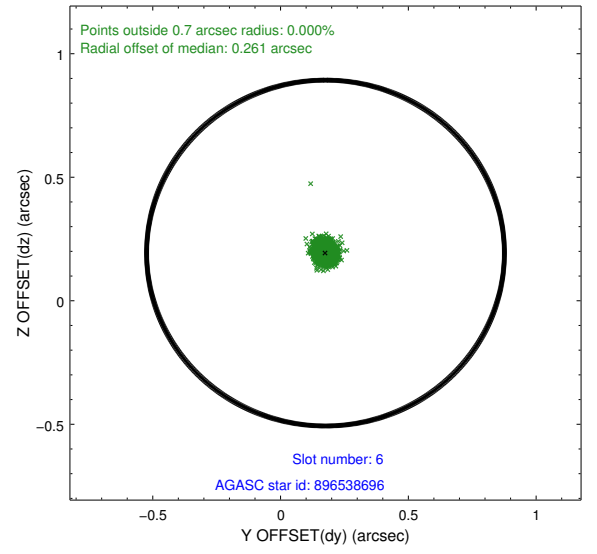
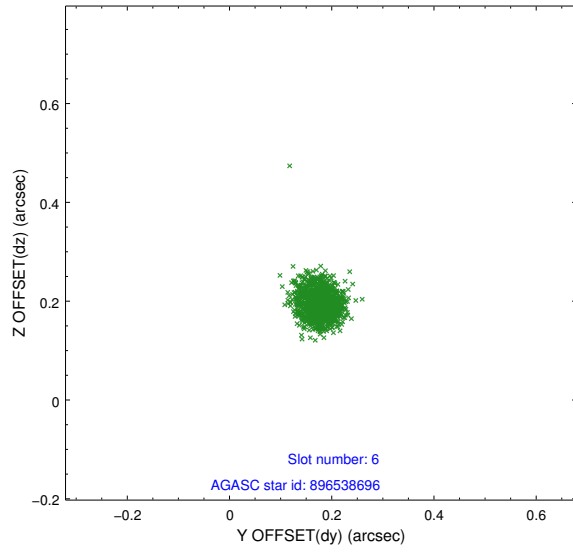
2.4.2 Slot 4



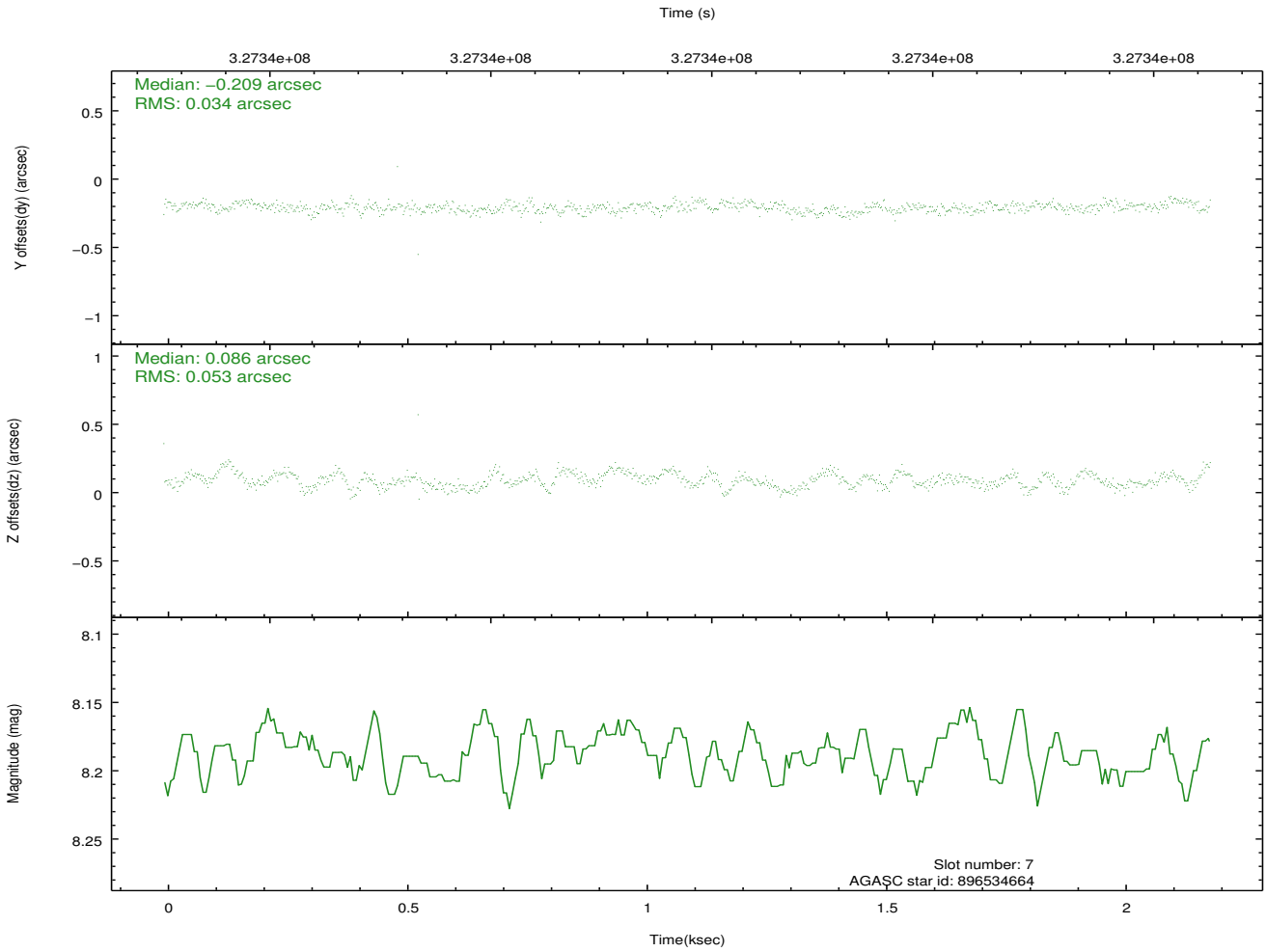
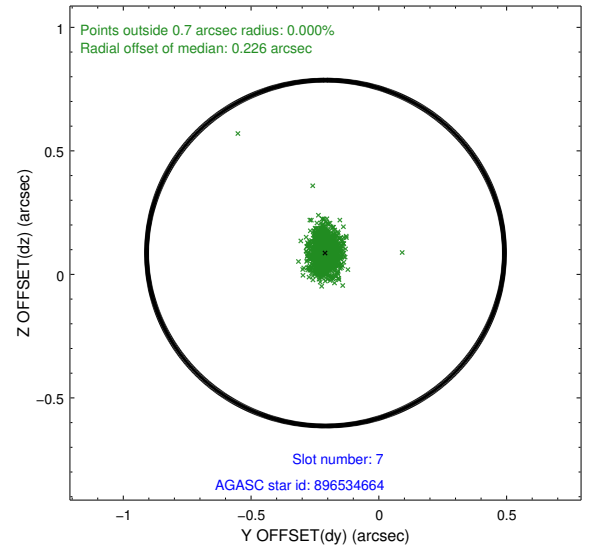
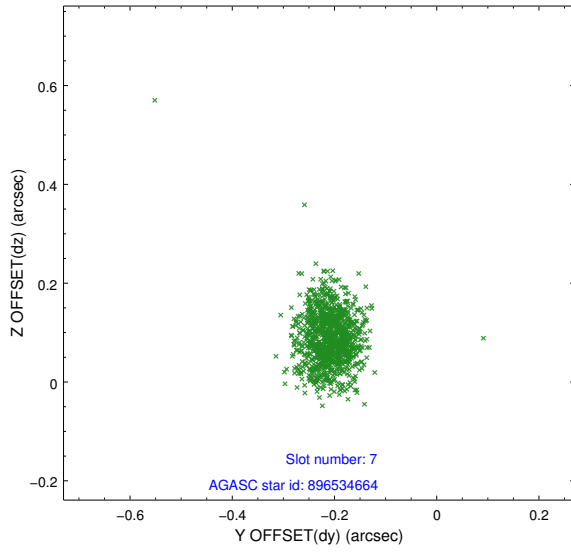
2.4.3 Slot 5



2.4.4 Slot 6

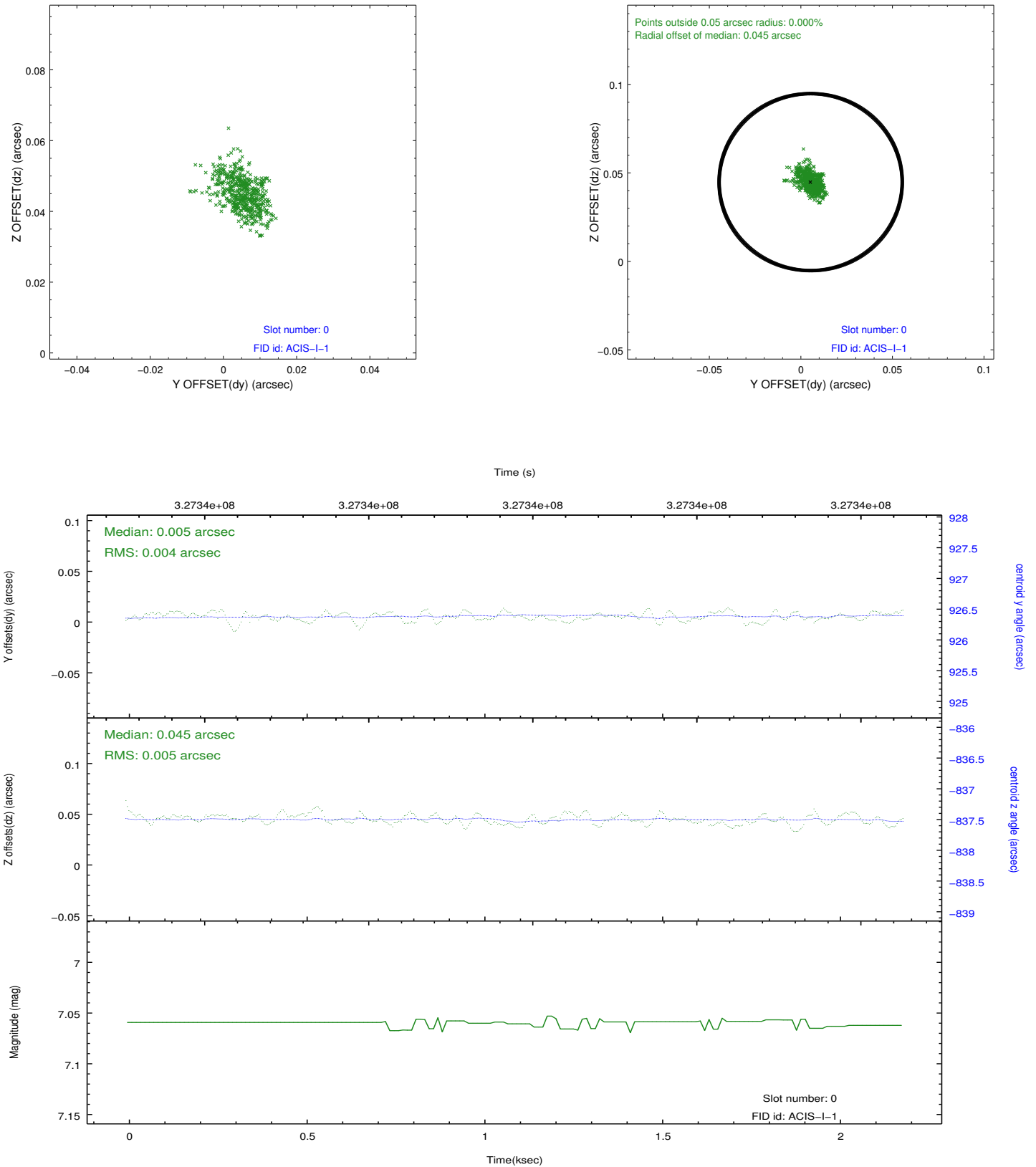


2.4.5 Slot 7

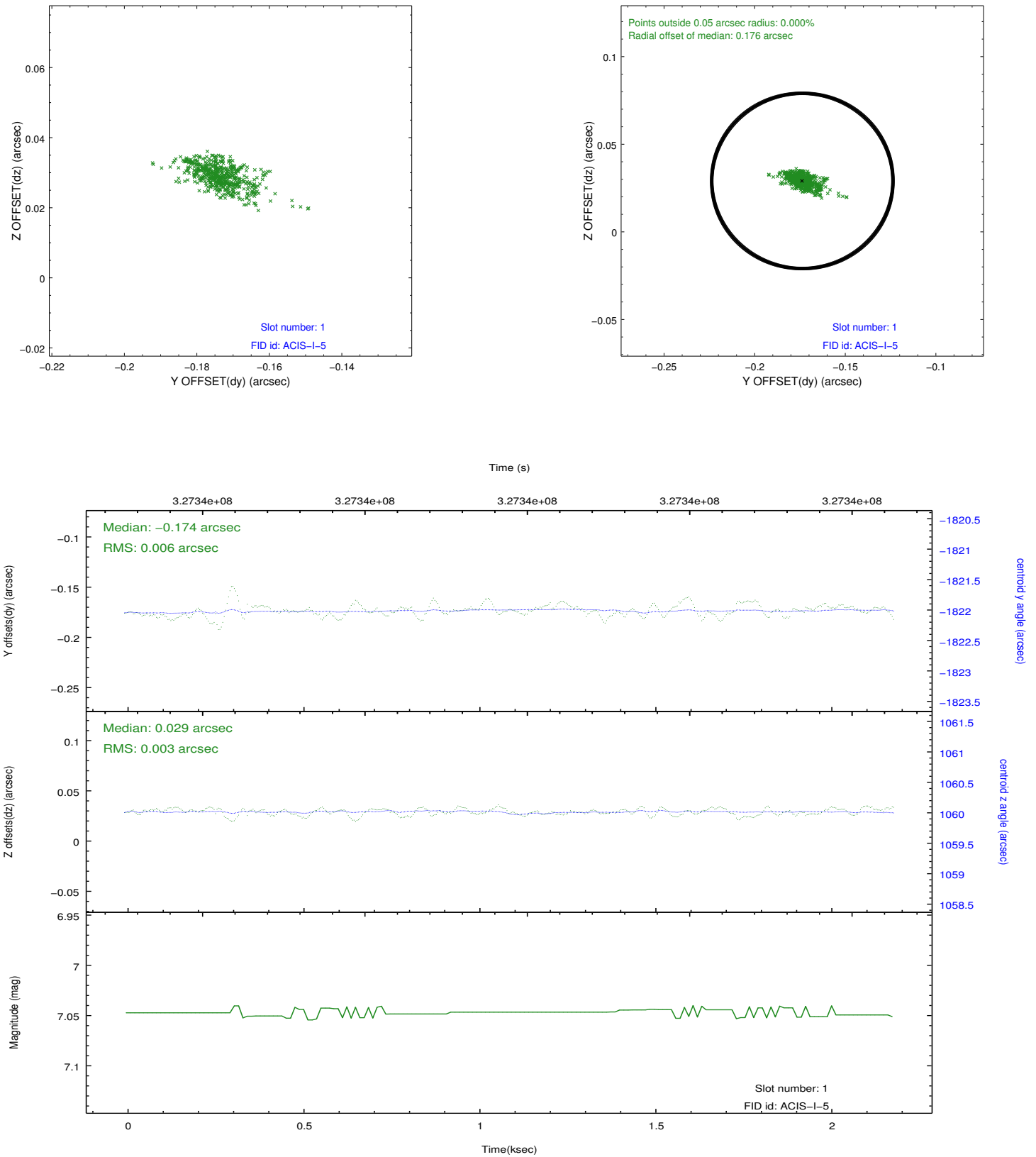


2.5 FID Slots

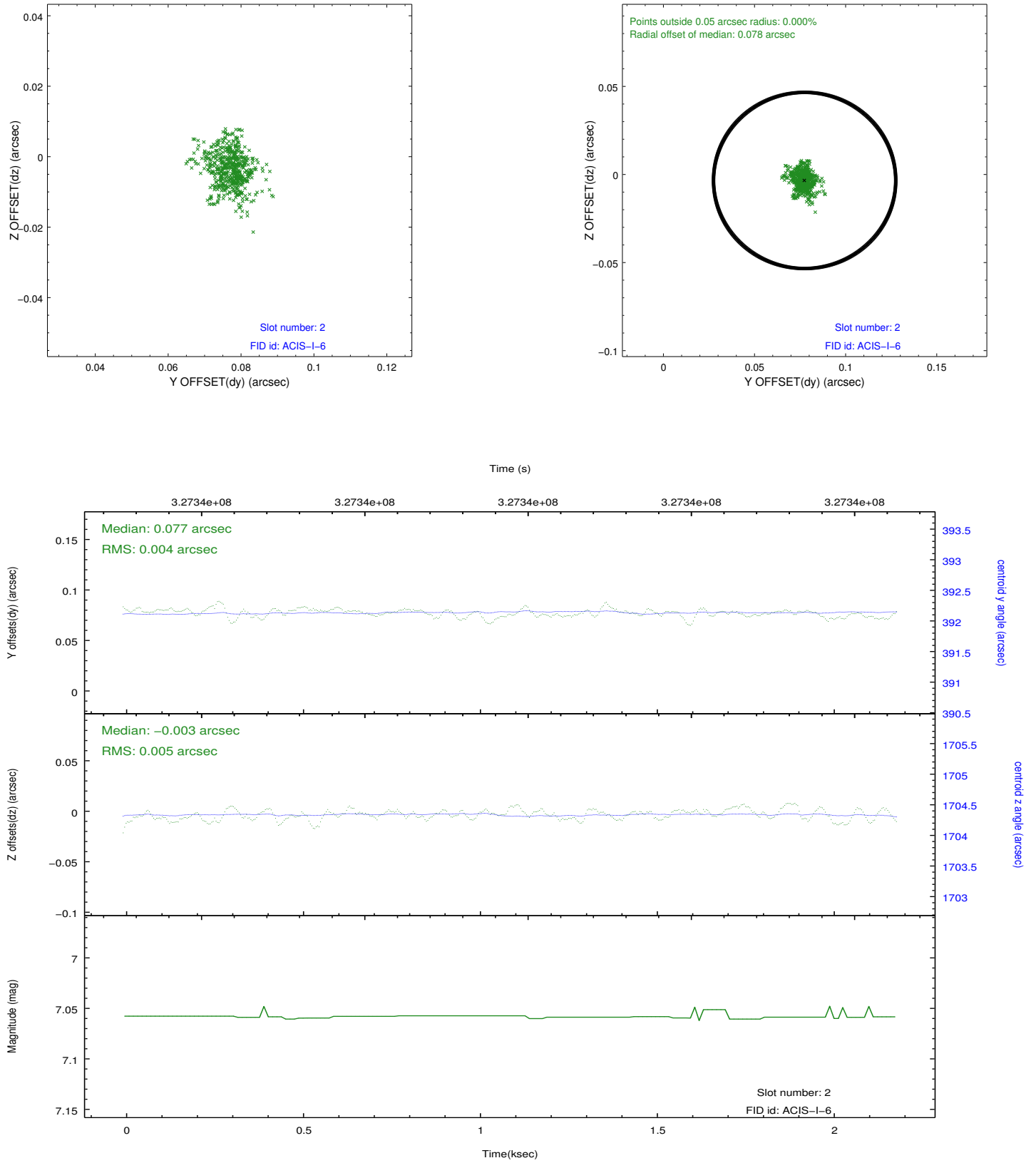
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.05.18 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 2.18550001 |

A.2 Comments