

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8674 - L2 Version 2
Chandra X-Ray Center

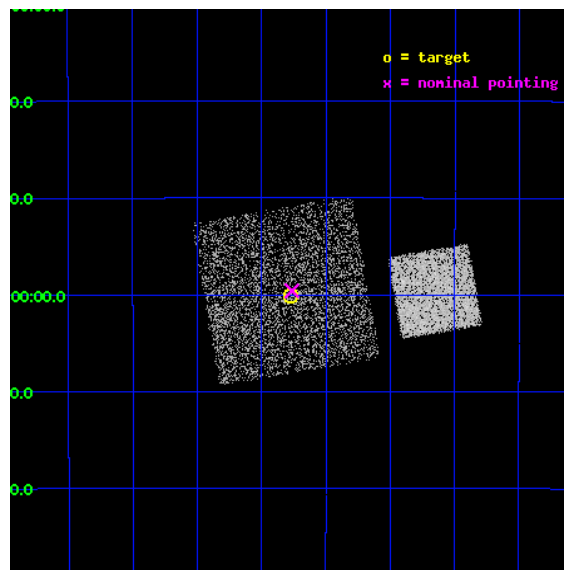
L2 Processing Date : May 14 2012

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

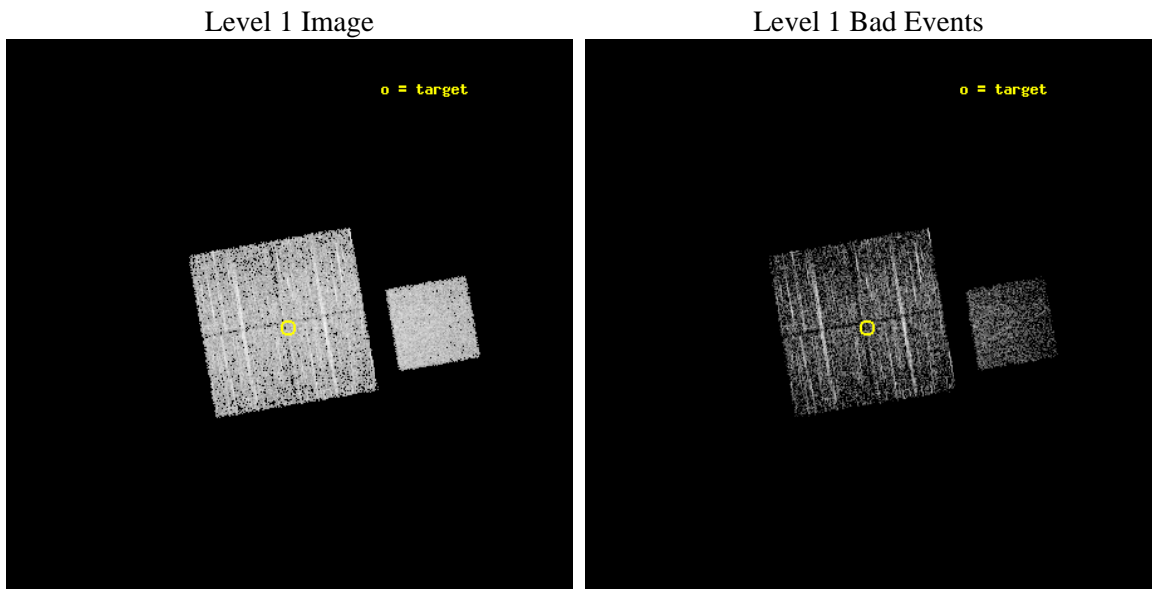
| | | |
|----------|---|---|
| seq_num | 400725 | Sequence number |
| obs_id | 8674 | Observation id |
| title | The Galactic Bulge Survey: categorising the plethora of faint X-ray sources in the Galactic Bulge | Proposal title |
| observer | Prof Mariano Mendez | Principal investigator |
| object | GBSGTO3 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 266.442292 | Observer's specified target RA [deg] |
| dec_targ | -26.001384 | Observer's specified target Dec [deg] |
| ra_nom | 266.44102840775 | Nominal RA [deg] |
| dec_nom | -25.993275014638 | Nominal Dec [deg] |
| roll_nom | 80.208174907374 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 2188.6000168324 | Sum of GTIs [s] |
| livetime | 2160.0043463885 | Livetime [s] |
| ontime0 | 2188.6000168324 | Sum of GTIs [s] |
| ontime1 | 2185.4590164423 | Sum of GTIs [s] |
| ontime2 | 2188.6000168324 | Sum of GTIs [s] |
| ontime3 | 2188.6000168324 | Sum of GTIs [s] |
| ontime7 | 2188.6000168324 | Sum of GTIs [s] |
| l2events | 15569 | Number of level 2 events |



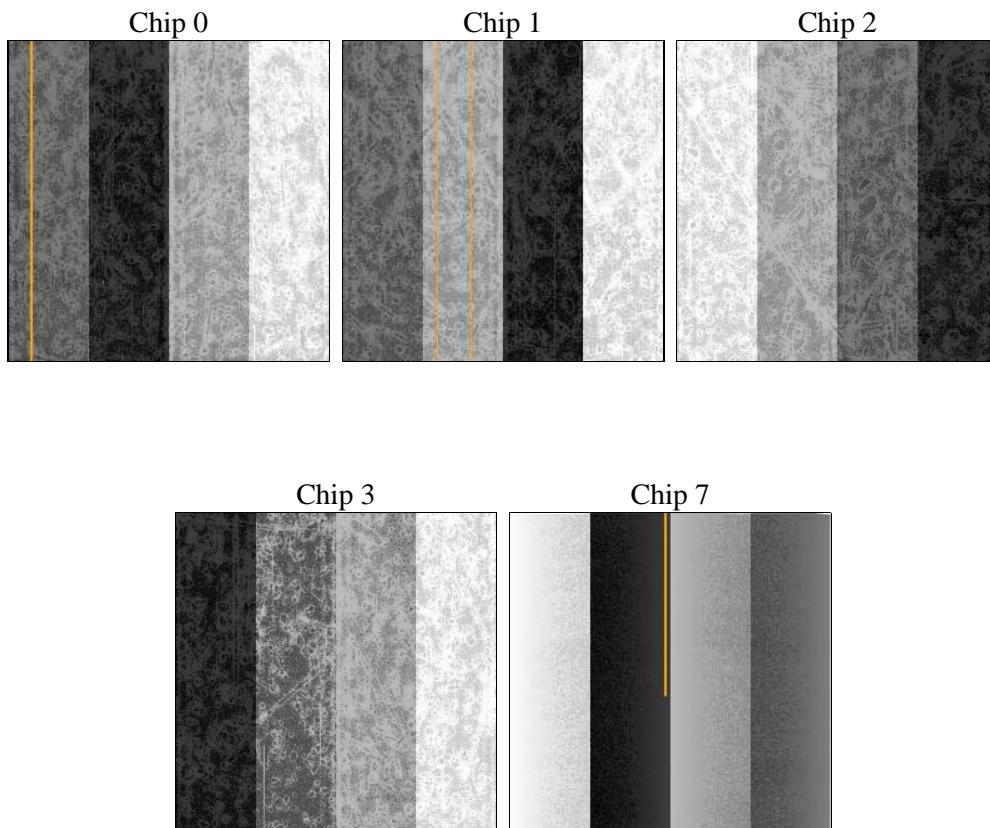
2 OBI

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 | 2188.6000168324 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime0 | 2188.6000168324 | Sum of GTIs [s] |
| date | 2012-05-15T02:57:28 | Date and time of file creation | ontime1 | 2185.4590164423 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 2188.6000168324 | Sum of GTIs [s] |
| | | | ontime3 | 2188.6000168324 | Sum of GTIs [s] |
| | | | ontime7 | 2188.6000168324 | Sum of GTIs [s] |
| | | | l1events | 102779 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 18658 | 19241 | 21770 | 20434 | 22676 |
| rejected events | 16663 | 16965 | 19853 | 18474 | 13597 |
| rejected % | 89% | 88% | 91% | 90% | 59% |

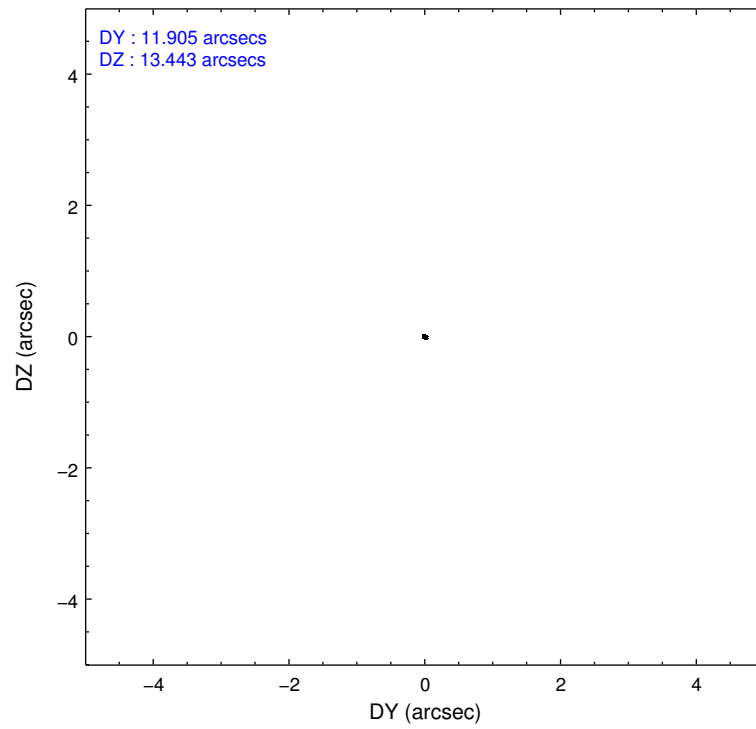
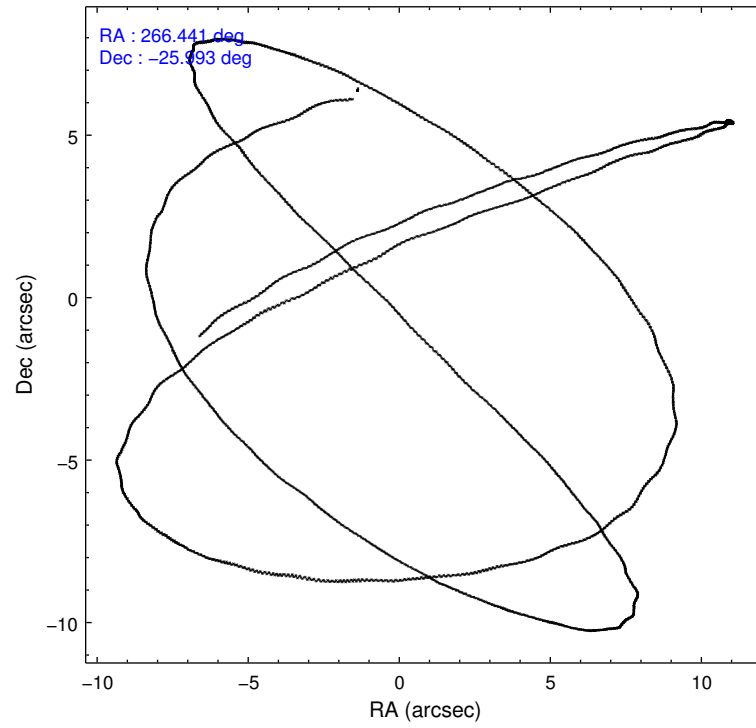
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 907 | 1042 | 935 | 898 | 1050 |
| | 4% | 5% | 4% | 4% | 4% |
| grade 1 events | 8 | 14 | 10 | 10 | 30 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 539 | 552 | 482 | 487 | 2132 |
| | 2% | 2% | 2% | 2% | 9% |
| grade 3 events | 242 | 261 | 230 | 225 | 938 |
| | 1% | 1% | 1% | 1% | 4% |
| grade 4 events | 219 | 262 | 218 | 218 | 974 |
| | 1% | 1% | 1% | 1% | 4% |
| grade 5 events | 656 | 757 | 650 | 824 | 2357 |
| | 3% | 3% | 2% | 4% | 10% |
| grade 6 events | 381 | 493 | 368 | 400 | 5327 |
| | 2% | 2% | 1% | 1% | 23% |
| grade 7 events | 15706 | 15860 | 18877 | 17372 | 9868 |
| | 84% | 82% | 86% | 85% | 43% |

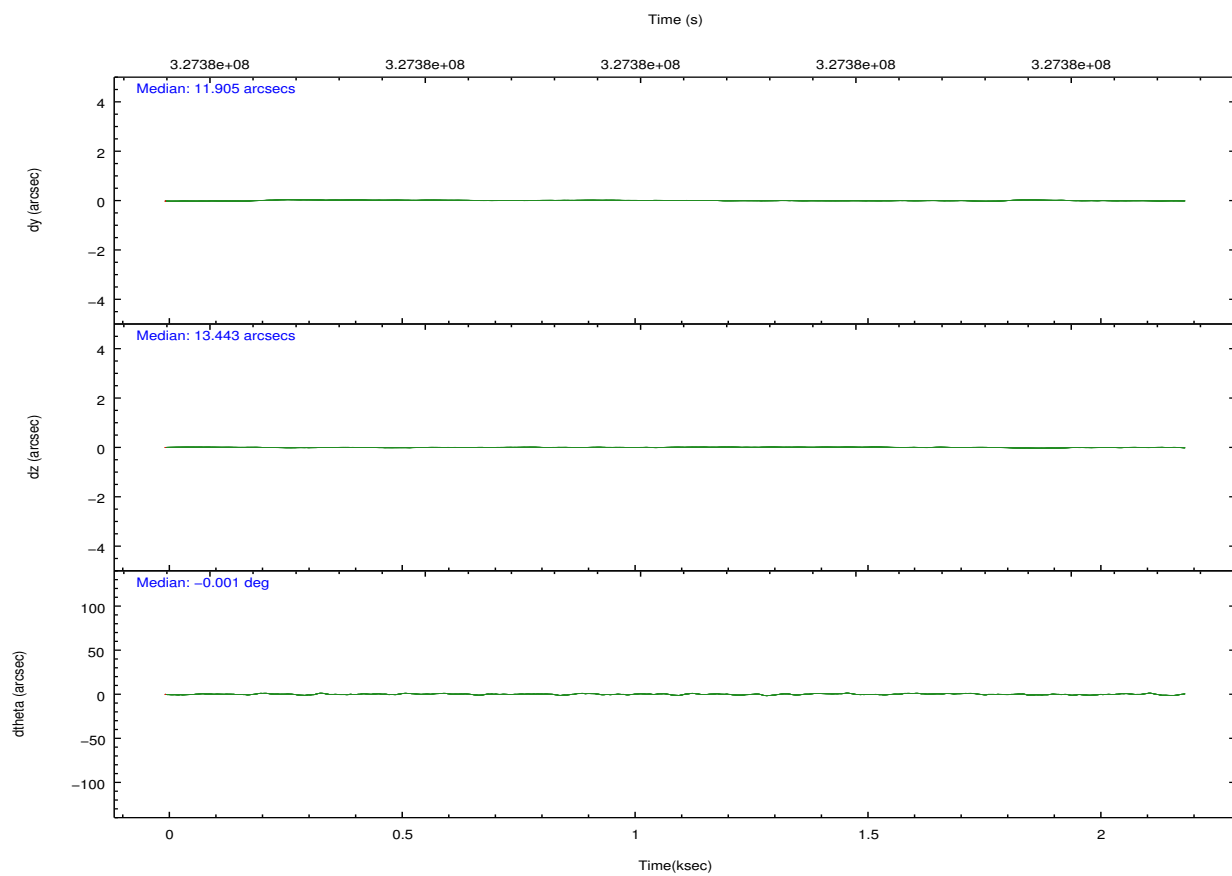
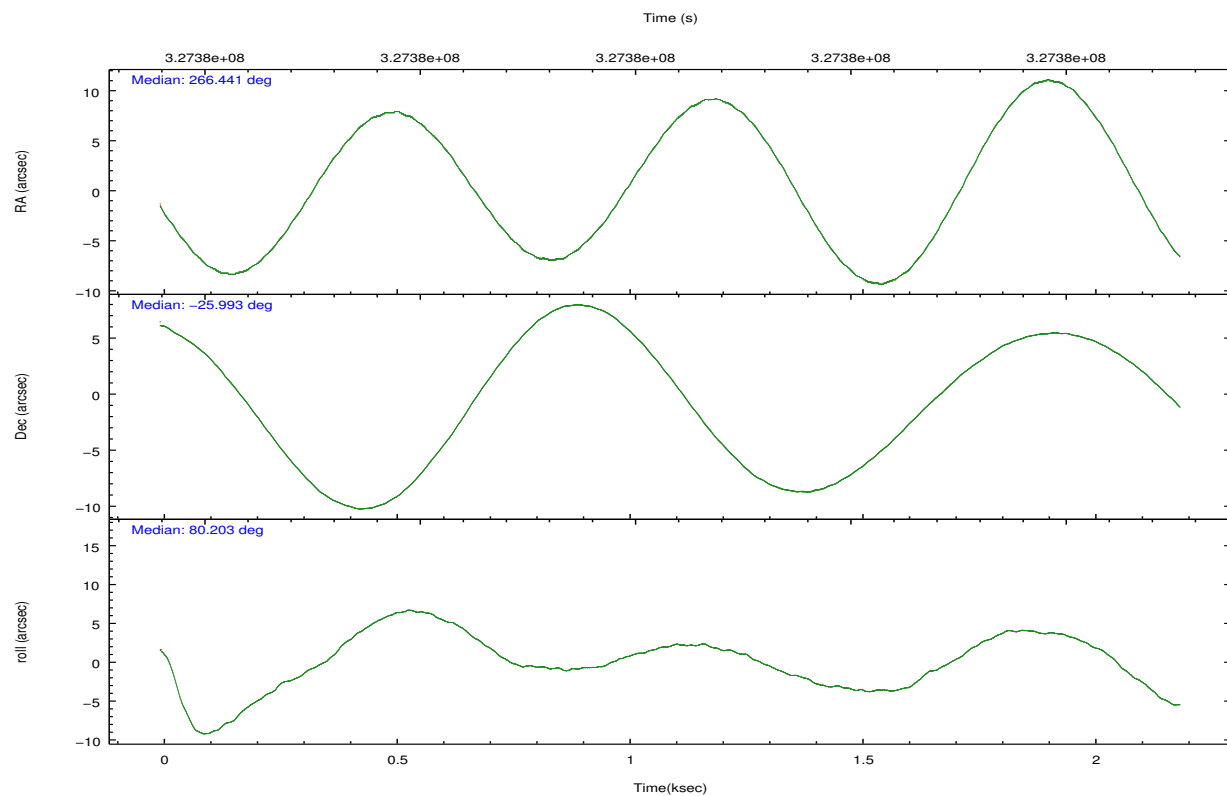
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-01237 | ACIS-01237 |
| Grating | NONE | NONE |
| Data mode | VFAINT | VFAINT |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 266.451797 | 266.4410284077483 |
| [deg] Pointing Dec | -26.019135 | -25.9932750146377 |
| [deg] Pointing Roll | 80.004172 | 80.20817490737448 |
| [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) | 327377173.184000 | 327376797.1535 |
| Observation start date | 2008-05-17T02:05:08 | 2008-05-17T01:59:57 |
| [s] Observation end time (MET) | 327379173.184000 | 327379307.37862 |
| Observation end date | 2008-05-17T02:38:28 | 2008-05-17T02:41:47 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| CCD I0 on | Y | Y |
| CCD I1 on | Y | Y |
| CCD I2 on | Y | Y |
| CCD I3 on | Y | Y |
| CCD S0 on | N | N |
| CCD S1 on | N | N |
| CCD S2 on | N | N |
| CCD S3 on | O1 | Y |
| CCD S4 on | N | N |
| CCD S5 on | N | N |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | NONE | NONE |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



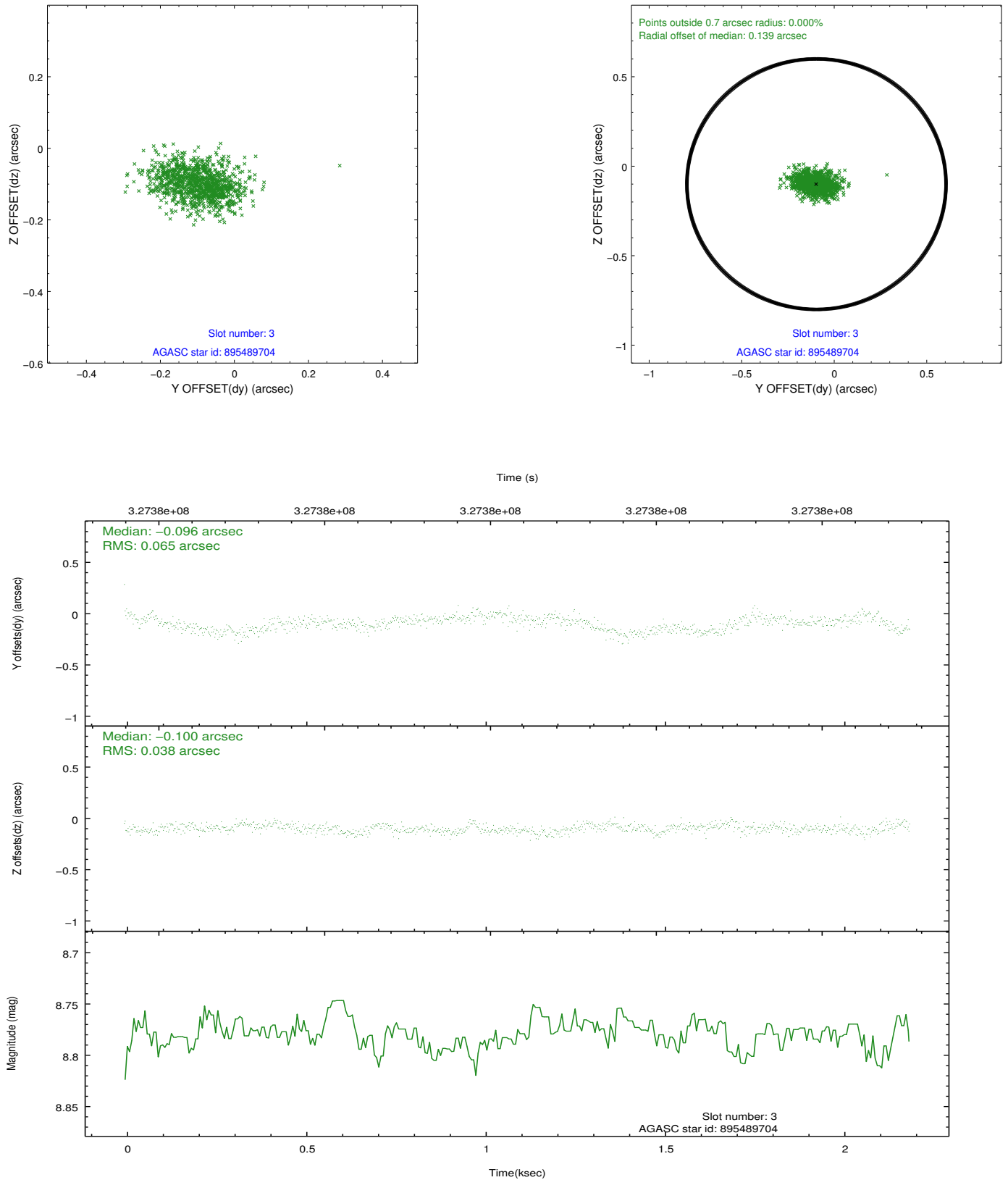


Slot Statistics

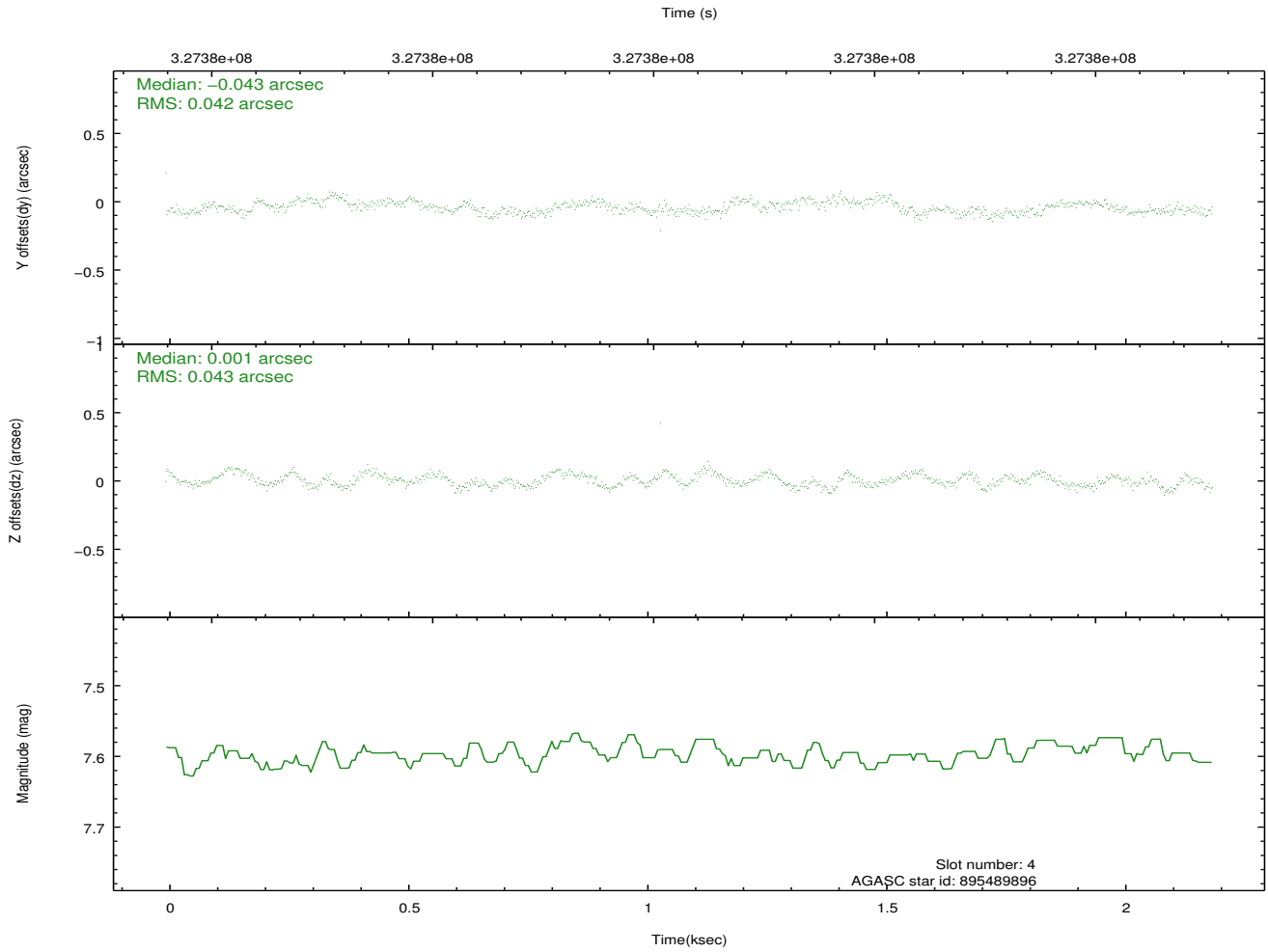
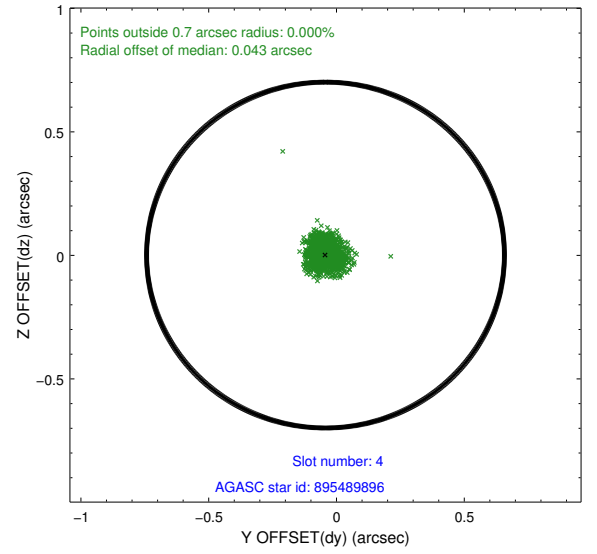
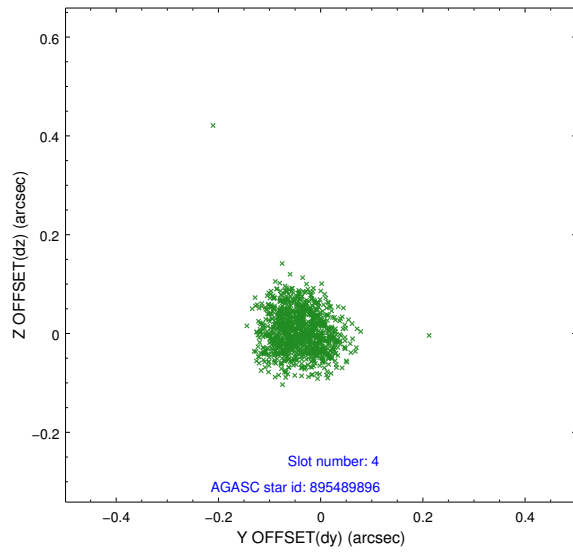
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.07 | 535 | -0.068 | 0.043 | 0.006 | 0.013 | 0.000000 | 0.000000 | 927.55 | -836.98 |
| 1 | FID | ACIS-I-4 | 7.01 | 535 | 0.061 | 0.036 | 0.008 | 0.013 | 0.000000 | 0.000000 | 2149.42 | 1061.30 |
| 2 | FID | ACIS-I-6 | 7.06 | 535 | -0.089 | -0.014 | 0.008 | 0.013 | 0.000000 | 0.000000 | 397.32 | 1706.85 |
| 3 | GUIDE | 895489704 | 8.78 | 1069 | -0.096 | -0.100 | 0.079 | 0.131 | 266.328076 | -25.361339 | 2261.25 | 807.13 |
| 4 | GUIDE | 895489896 | 7.60 | 1069 | -0.043 | 0.001 | 0.064 | 0.095 | 266.605795 | -26.200300 | -554.21 | -602.56 |
| 5 | GUIDE | 896009584 | 9.25 | 1063 | 0.197 | 0.073 | 0.108 | 0.173 | 266.891313 | -26.347528 | -920.82 | -1602.73 |
| 6 | GUIDE | 896015880 | 8.50 | 1068 | -0.105 | -0.251 | 0.080 | 0.125 | 265.986633 | -26.306686 | -1283.87 | 1296.25 |
| 7 | GUIDE | 896011536 | 9.37 | 1066 | 0.047 | 0.272 | 0.100 | 0.158 | 267.007333 | -26.766562 | -2344.86 | -2225.21 |

2.4 Star Slots

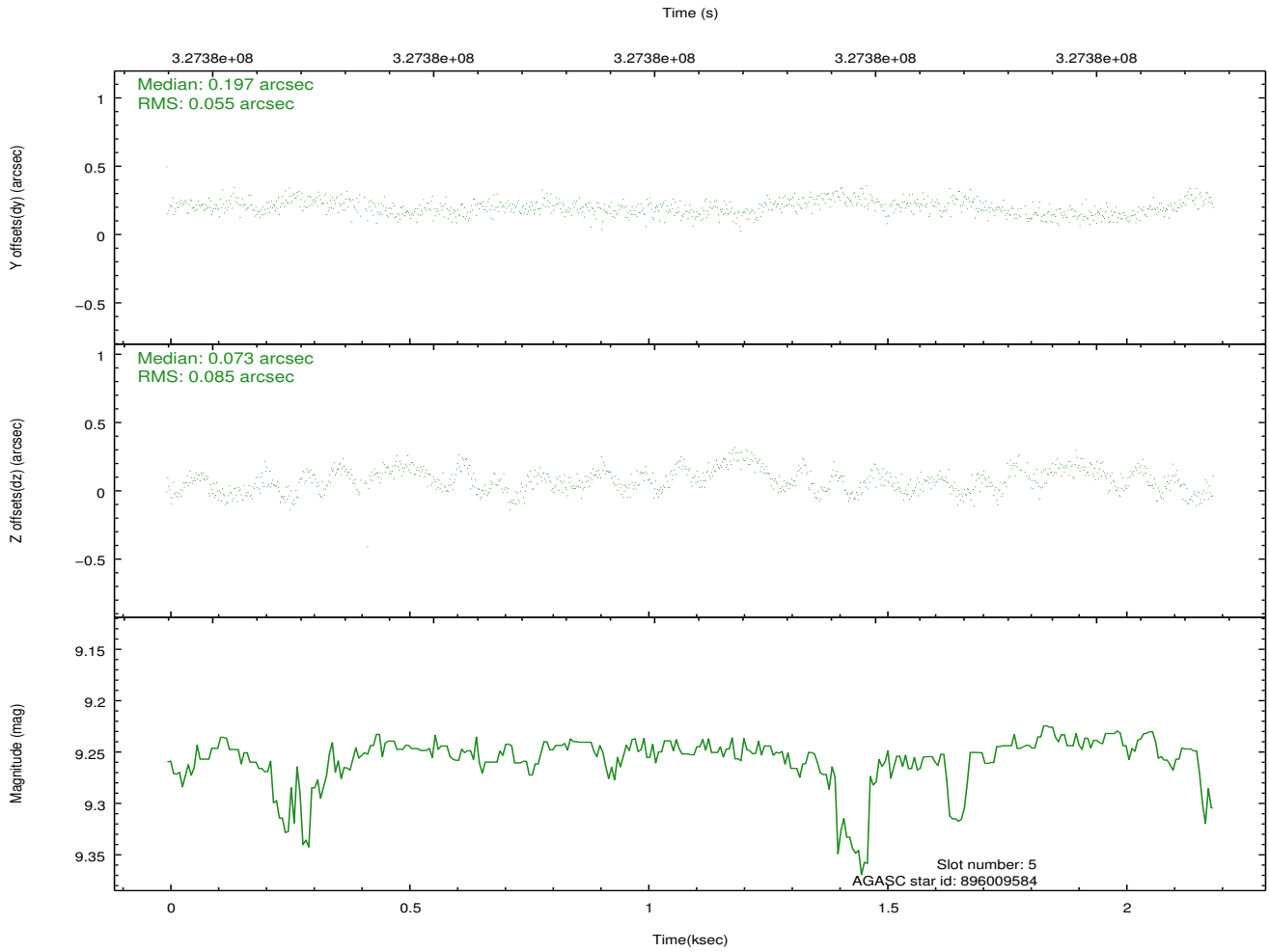
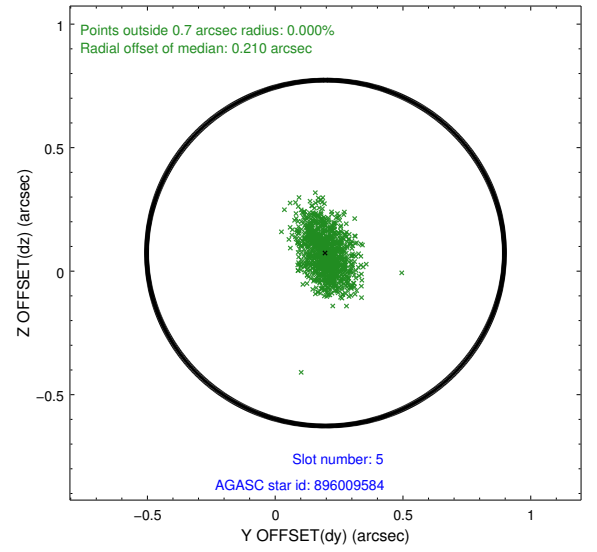
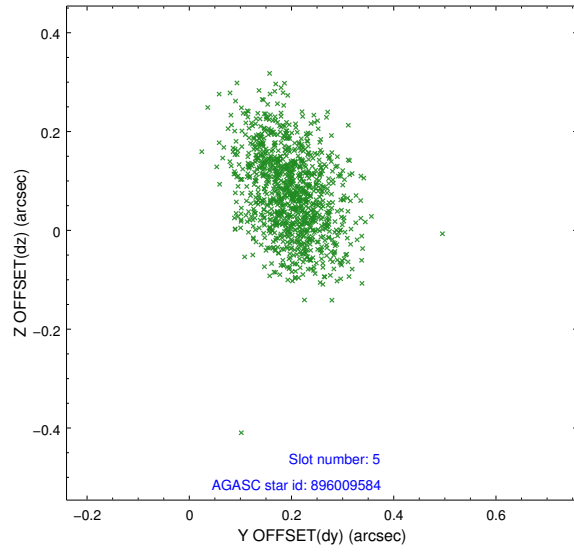
2.4.1 Slot 3



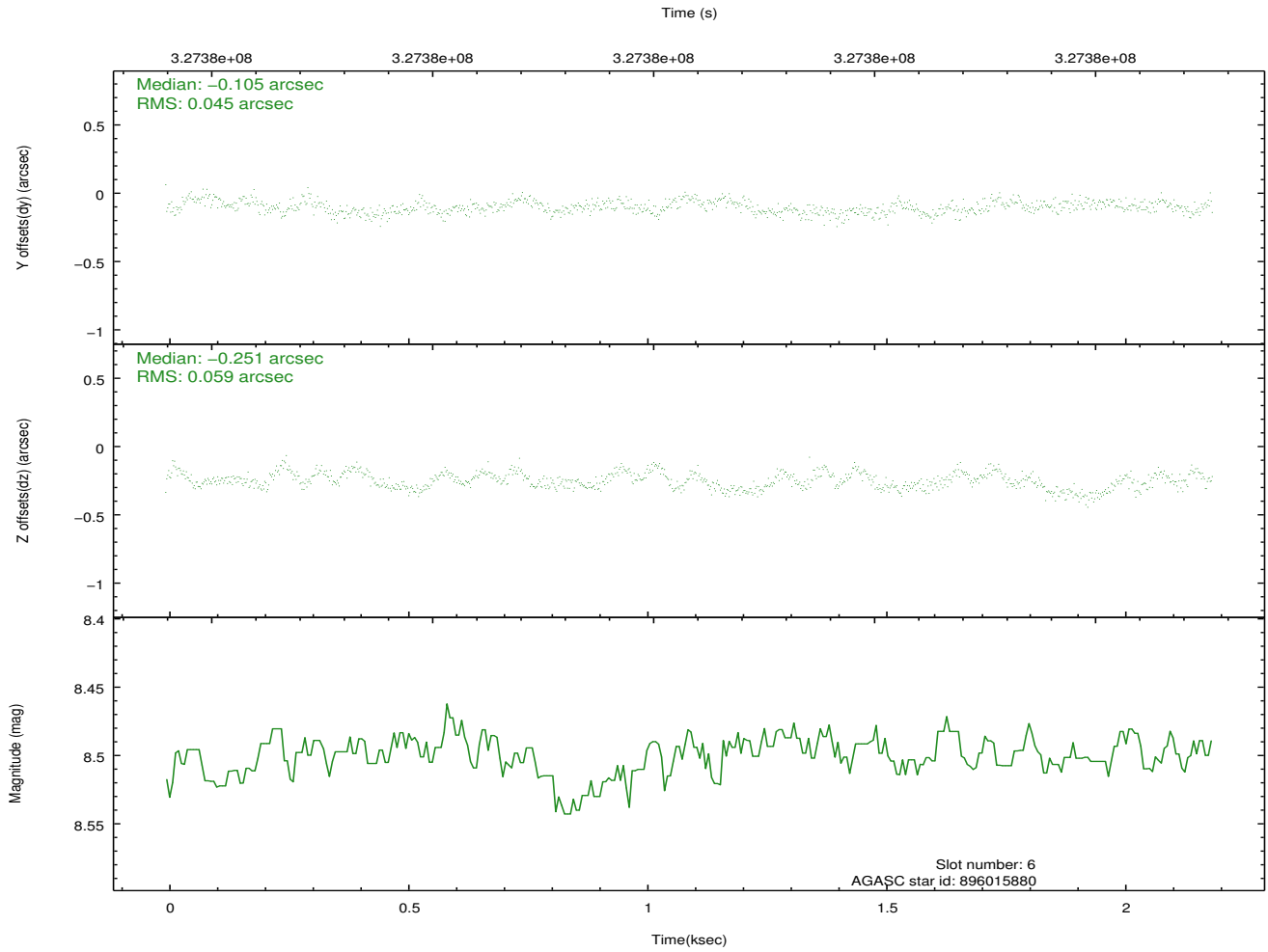
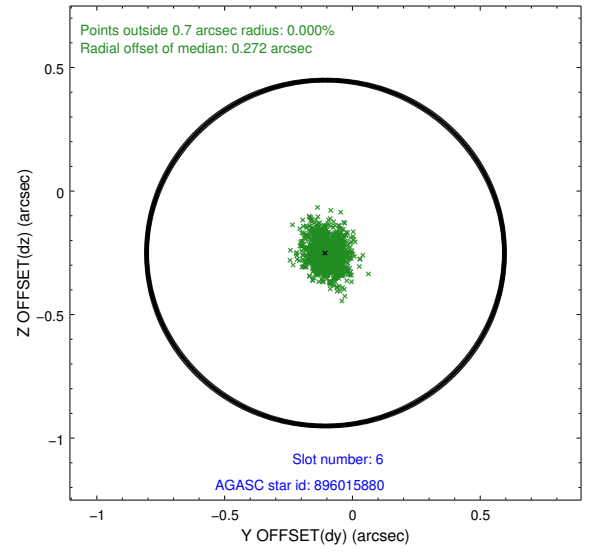
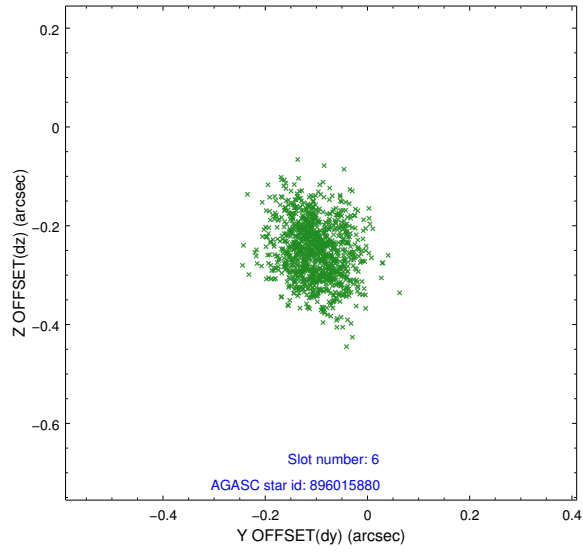
2.4.2 Slot 4



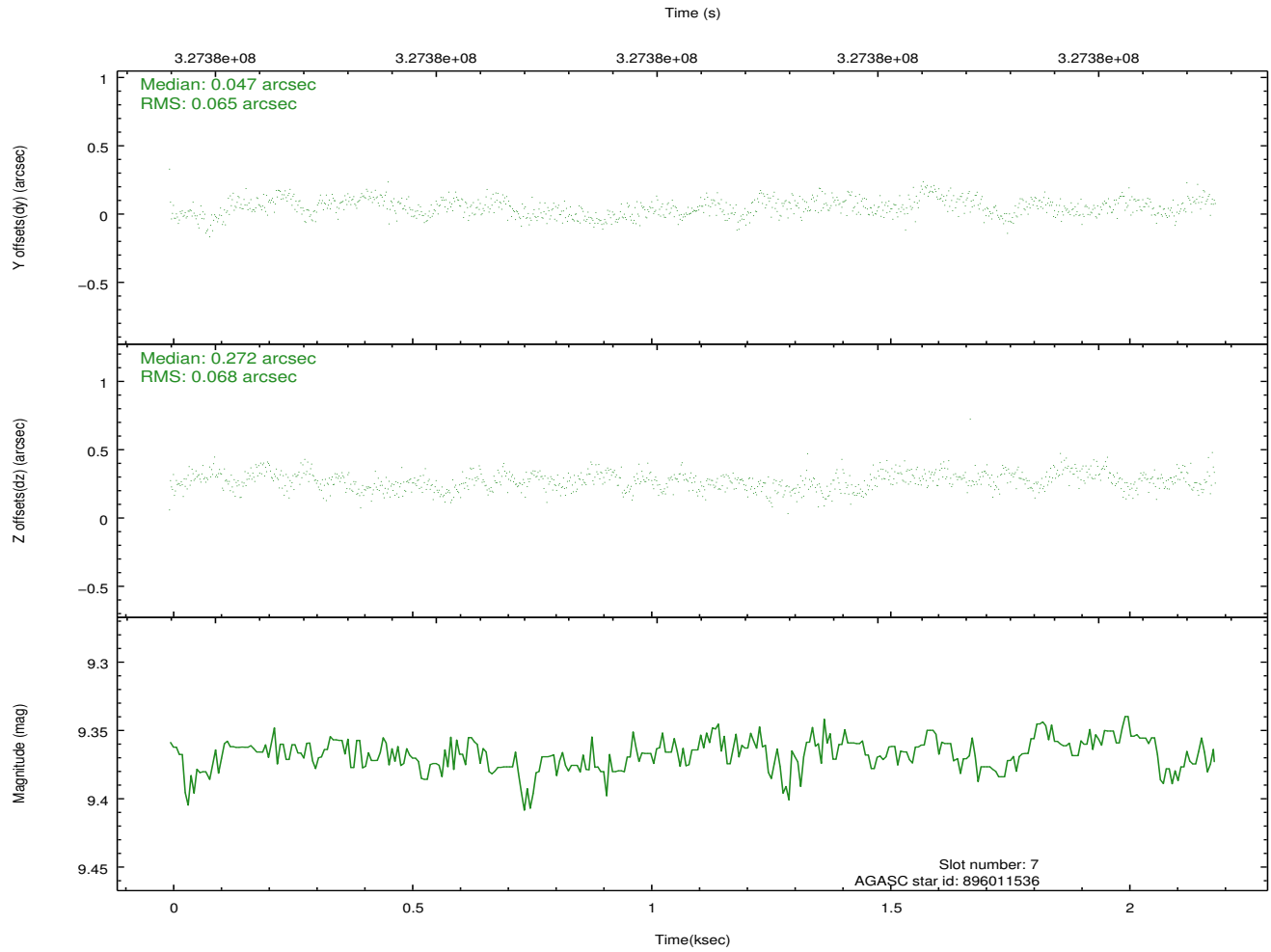
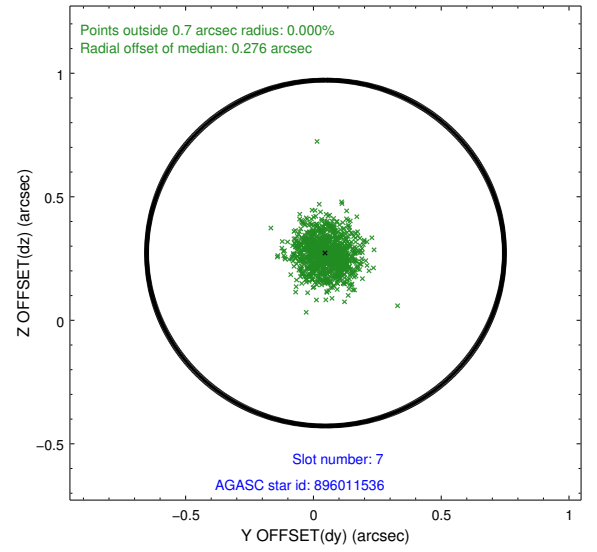
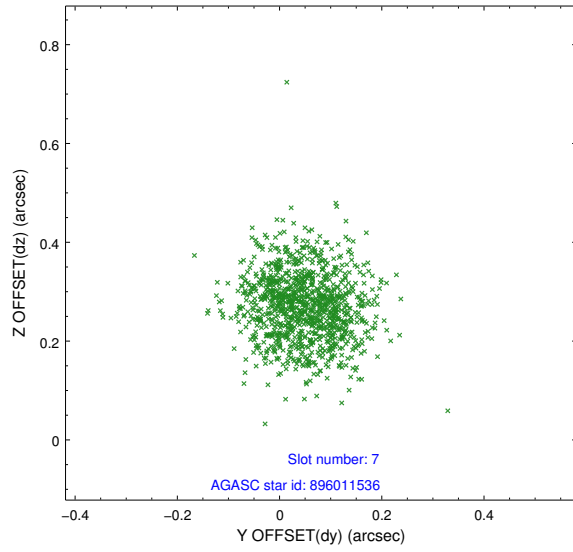
2.4.3 Slot 5



2.4.4 Slot 6

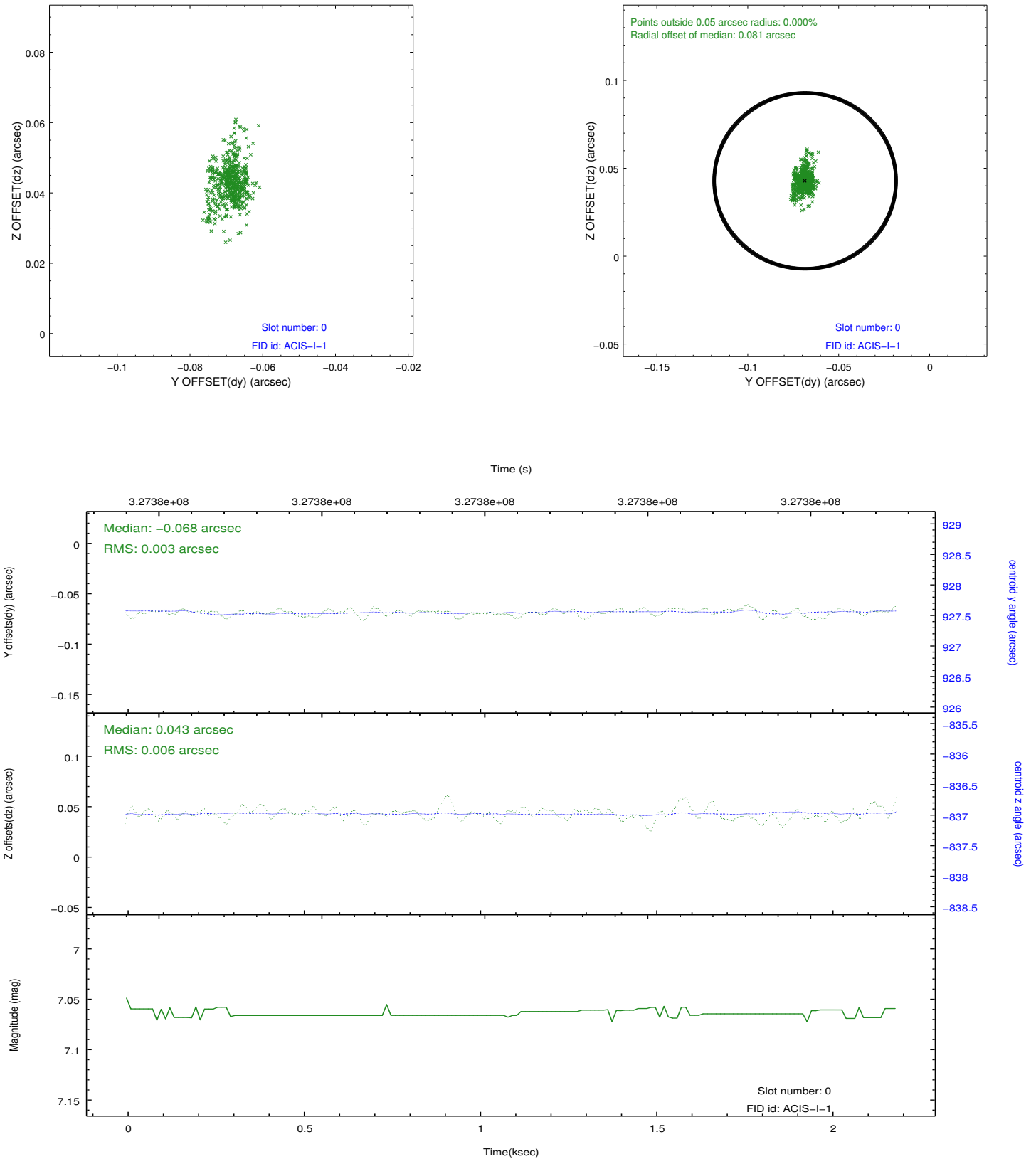


2.4.5 Slot 7

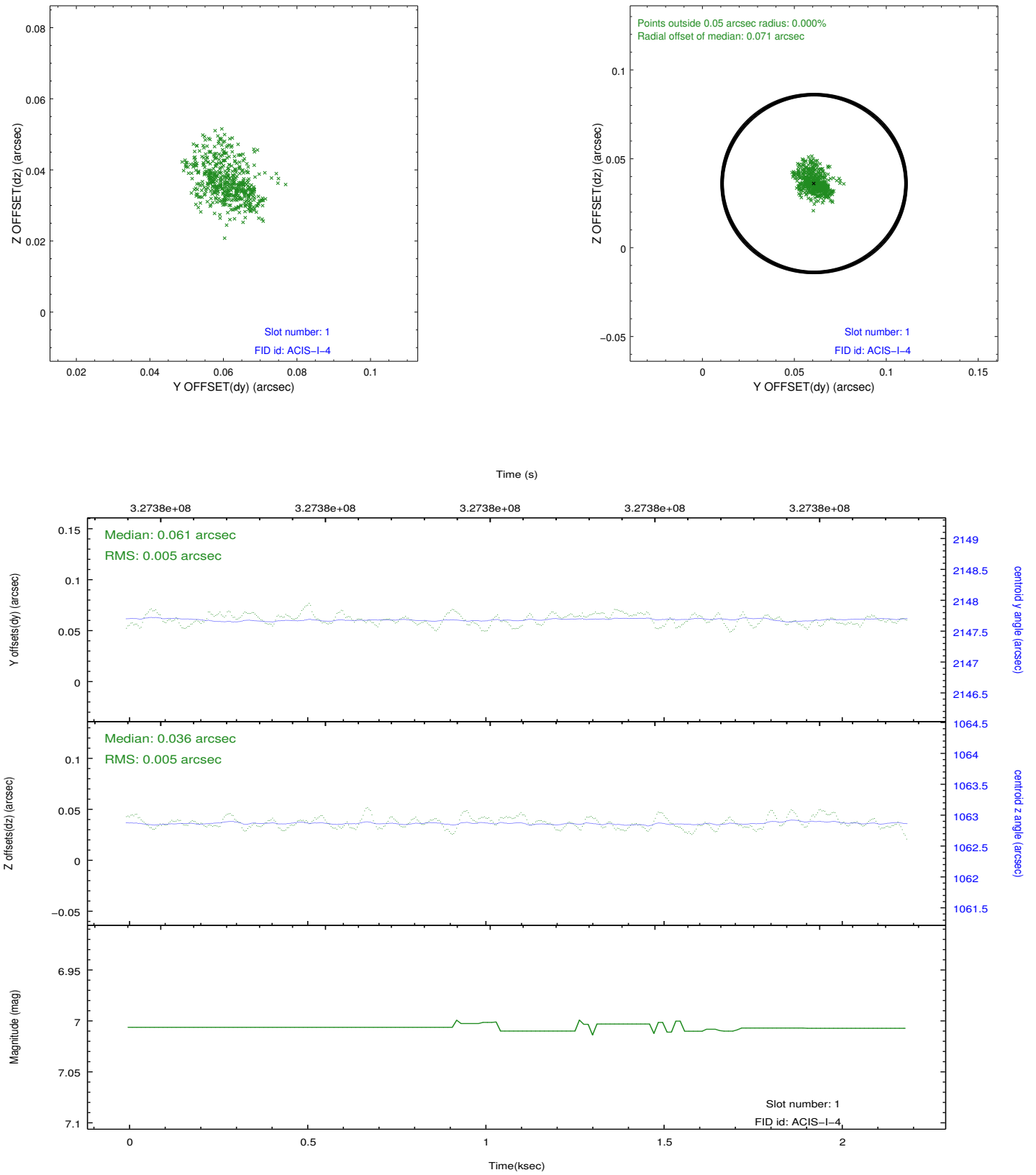


2.5 FID Slots

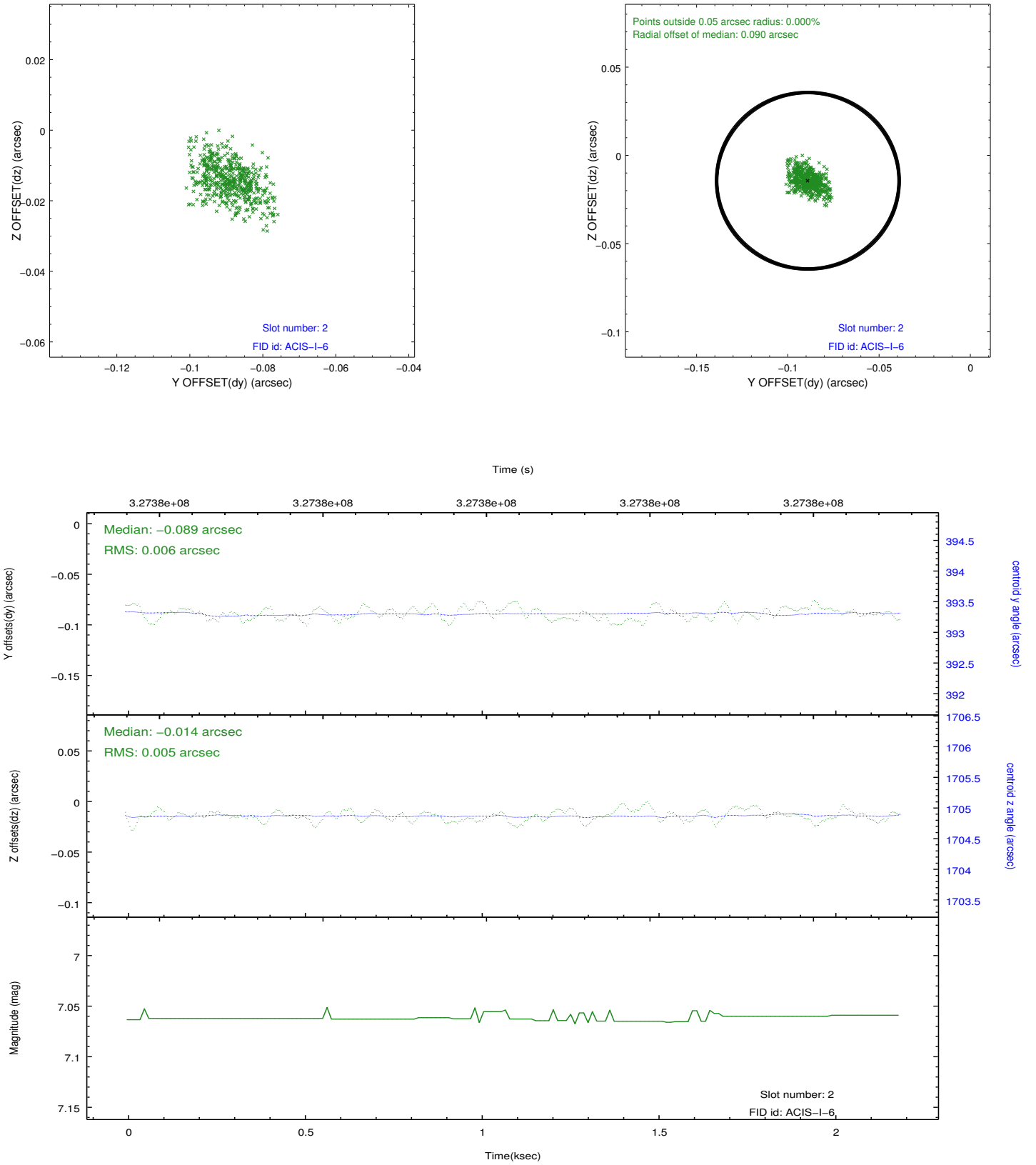
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | 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 | 2.18860001 |

A.2 Comments