

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11268 - L2 Version 2
Chandra X-Ray Center

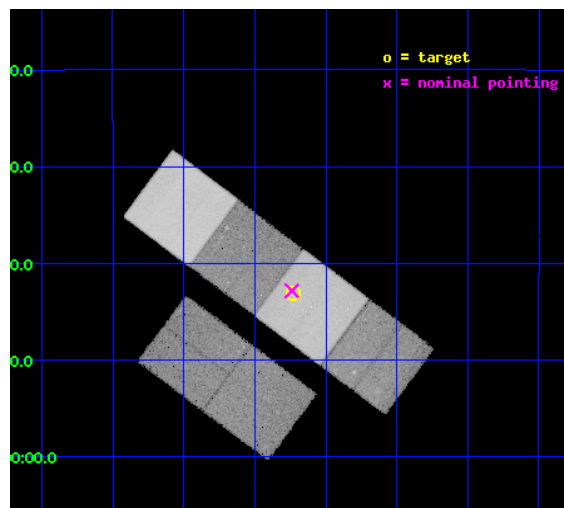
L2 Processing Date : Jun 20 2012

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

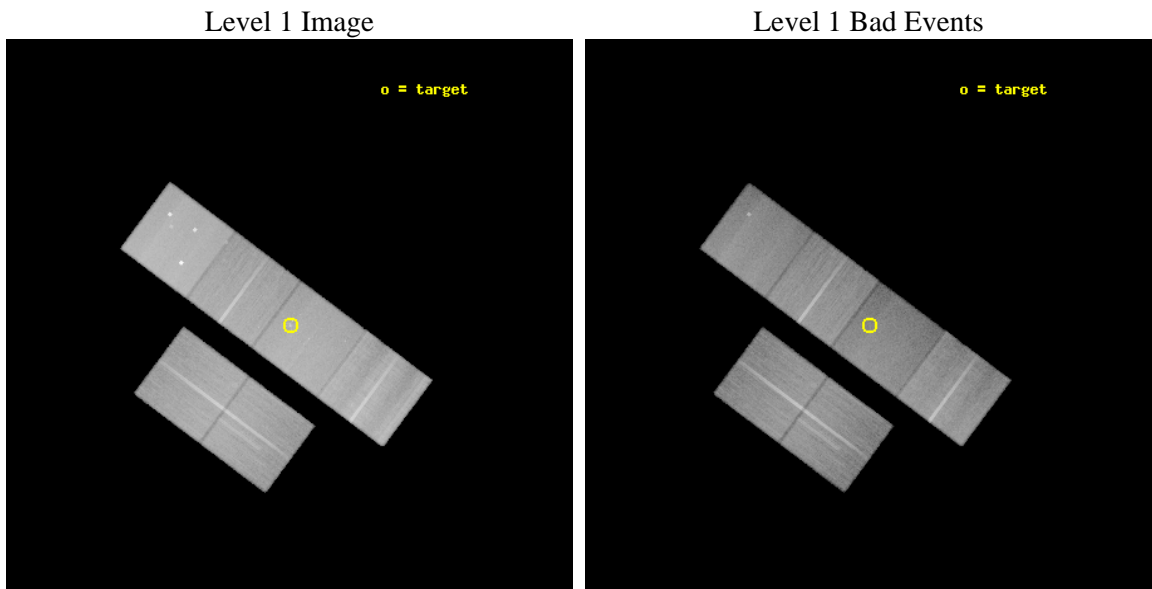
| | | |
|----------|---|---|
| seq_num | 600787 | Sequence number |
| obs_id | 11268 | Observation id |
| title | Peering Into the Bondi Radius of the Supermassive Black Hole of NGC3115 | Proposal title |
| observer | Professor JIMMY IRWIN | Principal investigator |
| object | NGC3115 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 151.307917 | Observer's specified target RA [deg] |
| dec_targ | -7.718583 | Observer's specified target Dec [deg] |
| ra_nom | 151.30971141545 | Nominal RA [deg] |
| dec_nom | -7.7140698089699 | Nominal Dec [deg] |
| roll_nom | 36.756870194532 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 41100.799846947 | Sum of GTIs [s] |
| livetime | 40580.356771355 | Livetime [s] |
| ontime2 | 41097.558816612 | Sum of GTIs [s] |
| ontime3 | 41094.317786396 | Sum of GTIs [s] |
| ontime5 | 41100.799846947 | Sum of GTIs [s] |
| ontime6 | 41097.558816731 | Sum of GTIs [s] |
| ontime7 | 41100.799846947 | Sum of GTIs [s] |
| ontime8 | 41094.317836344 | Sum of GTIs [s] |
| l2events | 546673 | Number of level 2 events |



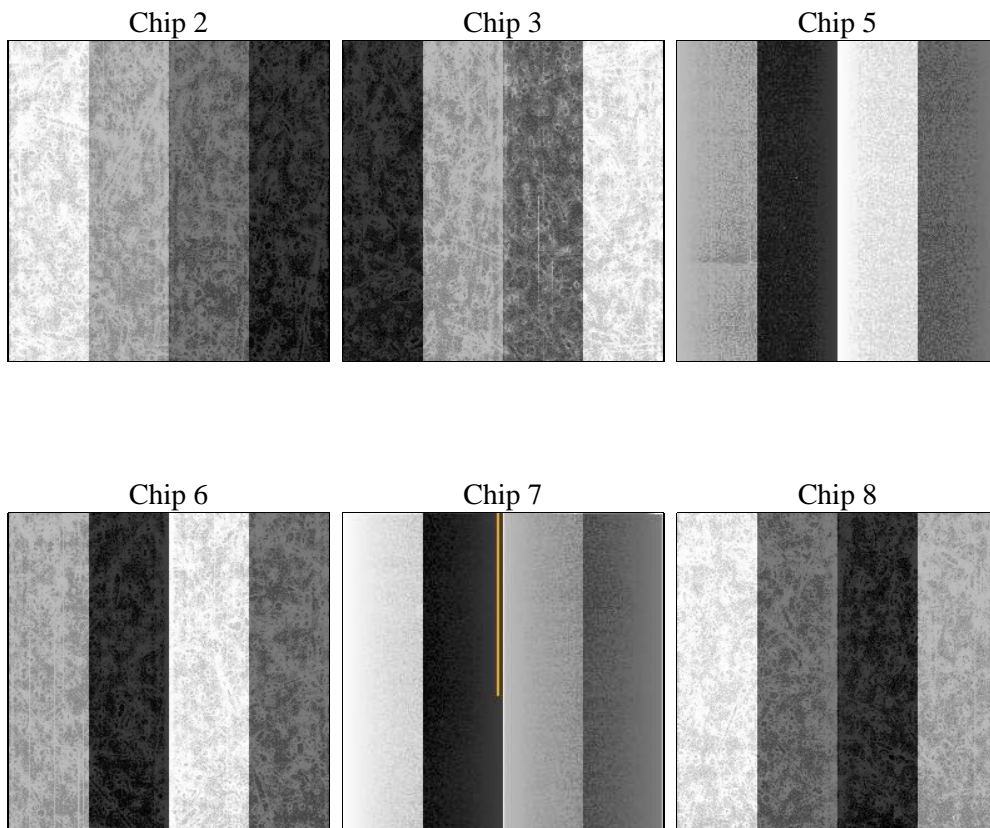
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 40976.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 41100.799846947 | Sum of GTIs [s] |
| caldbver | 4.4.10 | | ontime2 | 41097.558816612 | Sum of GTIs [s] |
| date | 2012-06-20T14:03:43 | Date and time of file creation | ontime3 | 41094.317786396 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 41100.799846947 | Sum of GTIs [s] |
| | | | ontime6 | 41097.558816731 | Sum of GTIs [s] |
| | | | ontime7 | 41100.799846947 | Sum of GTIs [s] |
| | | | ontime8 | 41094.317836344 | Sum of GTIs [s] |
| | | | l1events | 2467498 | Number of level 1 events |

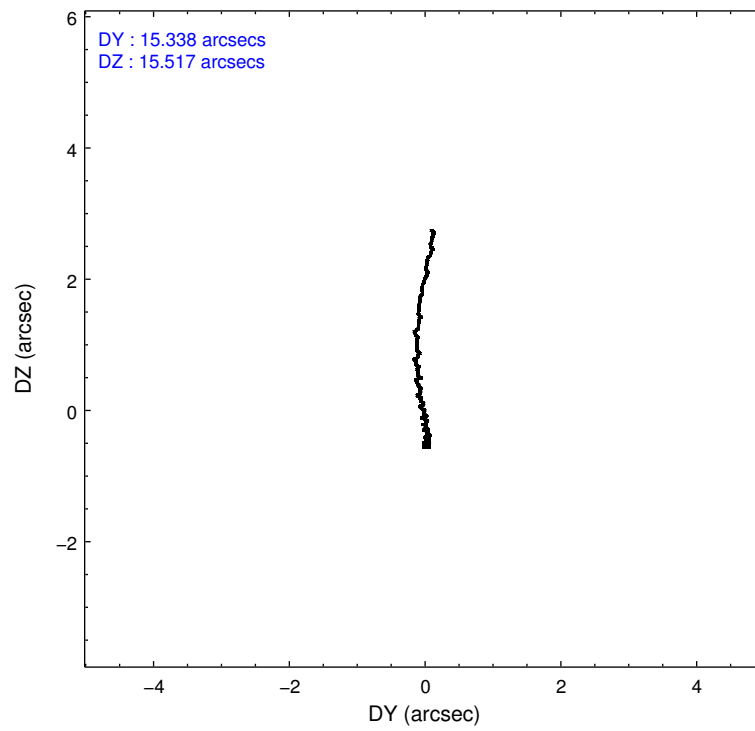
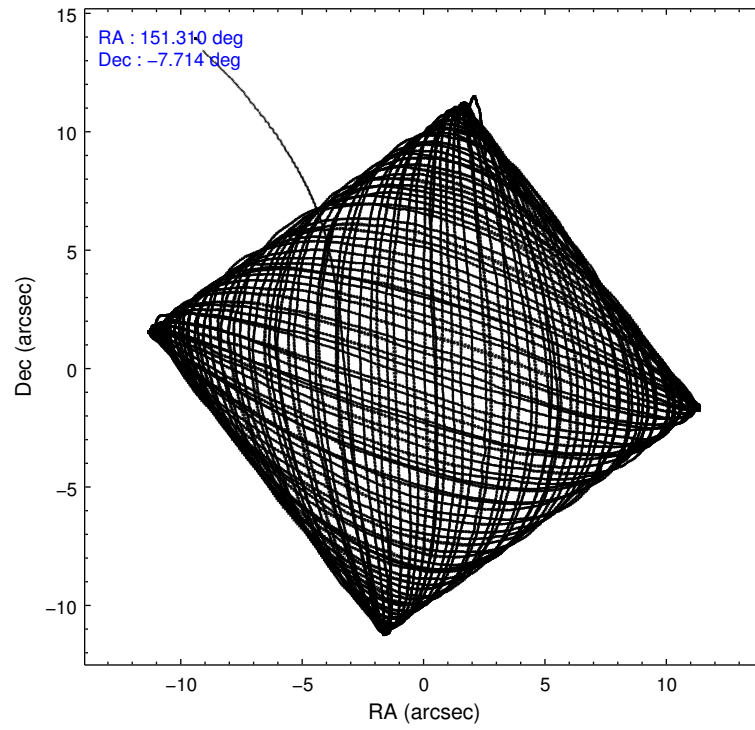
2.1.4 Events

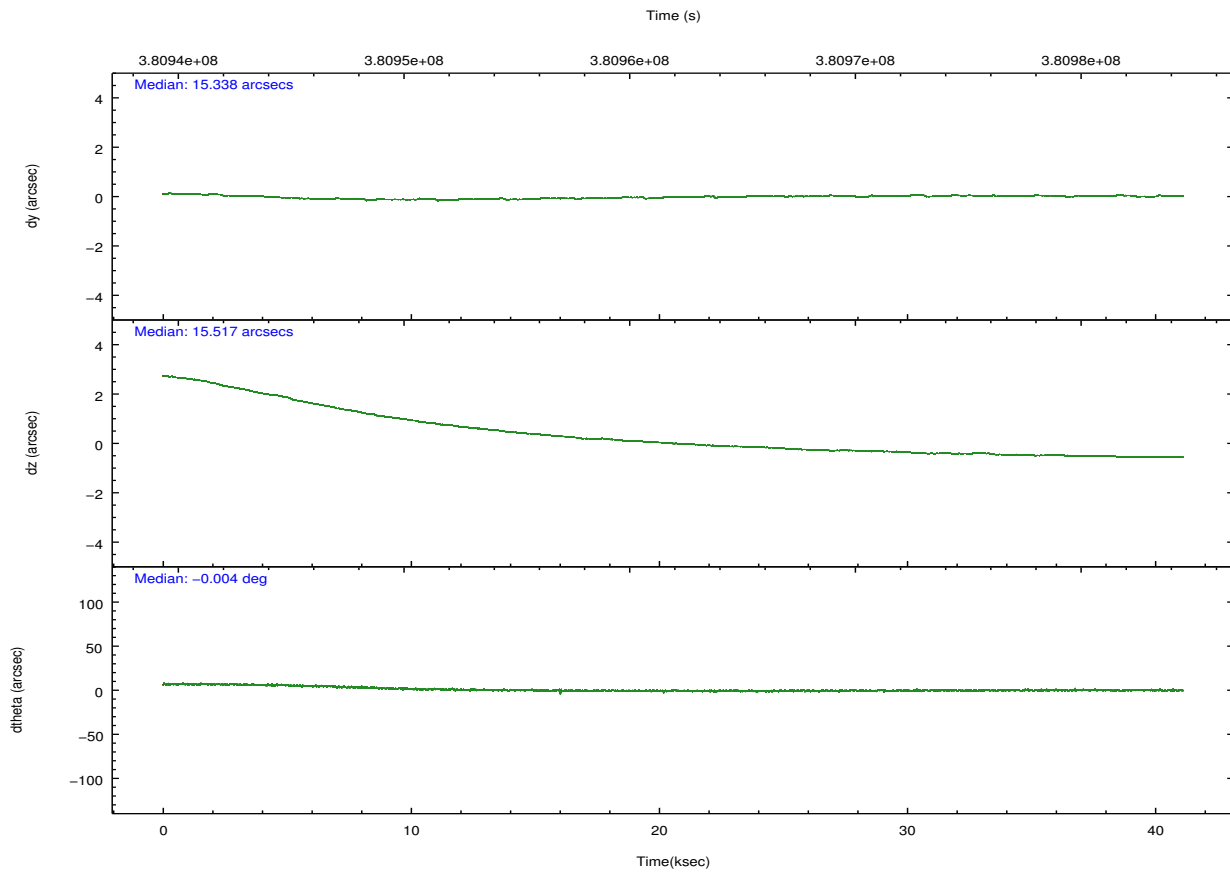
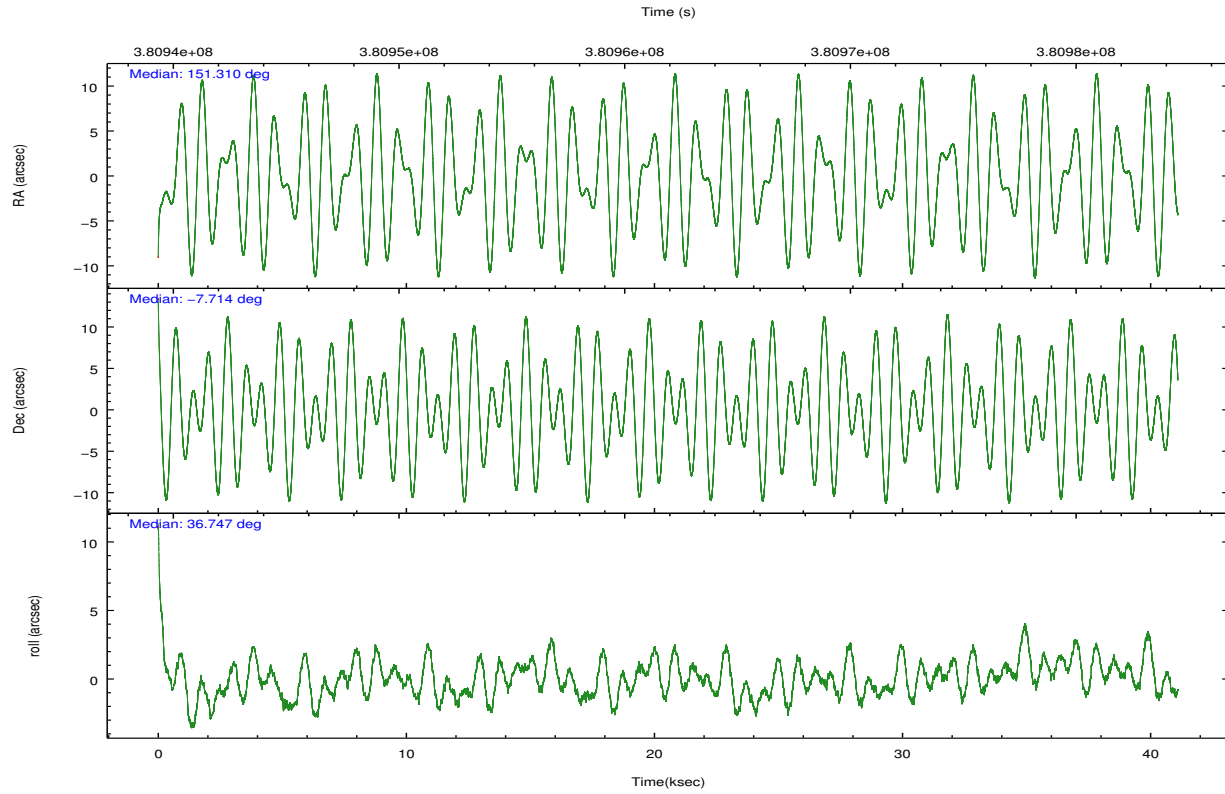
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 365479 | 346091 | 528177 | 358920 | 418579 | 450252 | grade 0 events | 12958 | 11965 | 30906 | 13660 | 18014 | 33727 |
| rejected events | 329817 | 312339 | 267297 | 321098 | 230902 | 334869 | | 3% | 3% | 5% | 3% | 4% | 7% |
| rejected % | 90% | 90% | 50% | 89% | 55% | 74% | grade 1 events | 227 | 187 | 996 | 205 | 570 | 367 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 8752 | 7546 | 79288 | 8475 | 39330 | 27509 |
| | | | | | | | | 2% | 2% | 15% | 2% | 9% | 6% |
| | | | | | | | grade 3 events | 3796 | 3807 | 9798 | 4062 | 17030 | 12636 |
| | | | | | | | | 1% | 1% | 1% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 3838 | 3923 | 9469 | 4021 | 16822 | 11596 |
| | | | | | | | | 1% | 1% | 1% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 13166 | 14974 | 40080 | 15065 | 43008 | 21868 |
| | | | | | | | | 3% | 4% | 7% | 4% | 10% | 4% |
| | | | | | | | grade 6 events | 6930 | 6991 | 135533 | 8189 | 99329 | 31636 |
| | | | | | | | | 1% | 2% | 25% | 2% | 23% | 7% |
| | | | | | | | grade 7 events | 315812 | 296698 | 222107 | 305243 | 184476 | 310913 |
| | | | | | | | | 86% | 85% | 42% | 85% | 44% | 69% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 151.299173 | 151.3097114154528 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | -7.739337 | -7.714069808969909 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 36.598821 | 36.75687019453215 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | Y | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.145094680475 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.01257209746719923 | CCD S4 on | Y | Y |
| [s] Observation start time (MET) | 380941500.184000 | 380940128.75049 | CCD S5 on | N | N |
| Observation start date | 2010-01-27T01:03:54 | 2010-01-27T00:42:08 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 380982476.184000 | 380983467.80268 | On-chip summing requested | N | N |
| Observation end date | 2010-01-27T12:26:50 | 2010-01-27T12:44:27 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



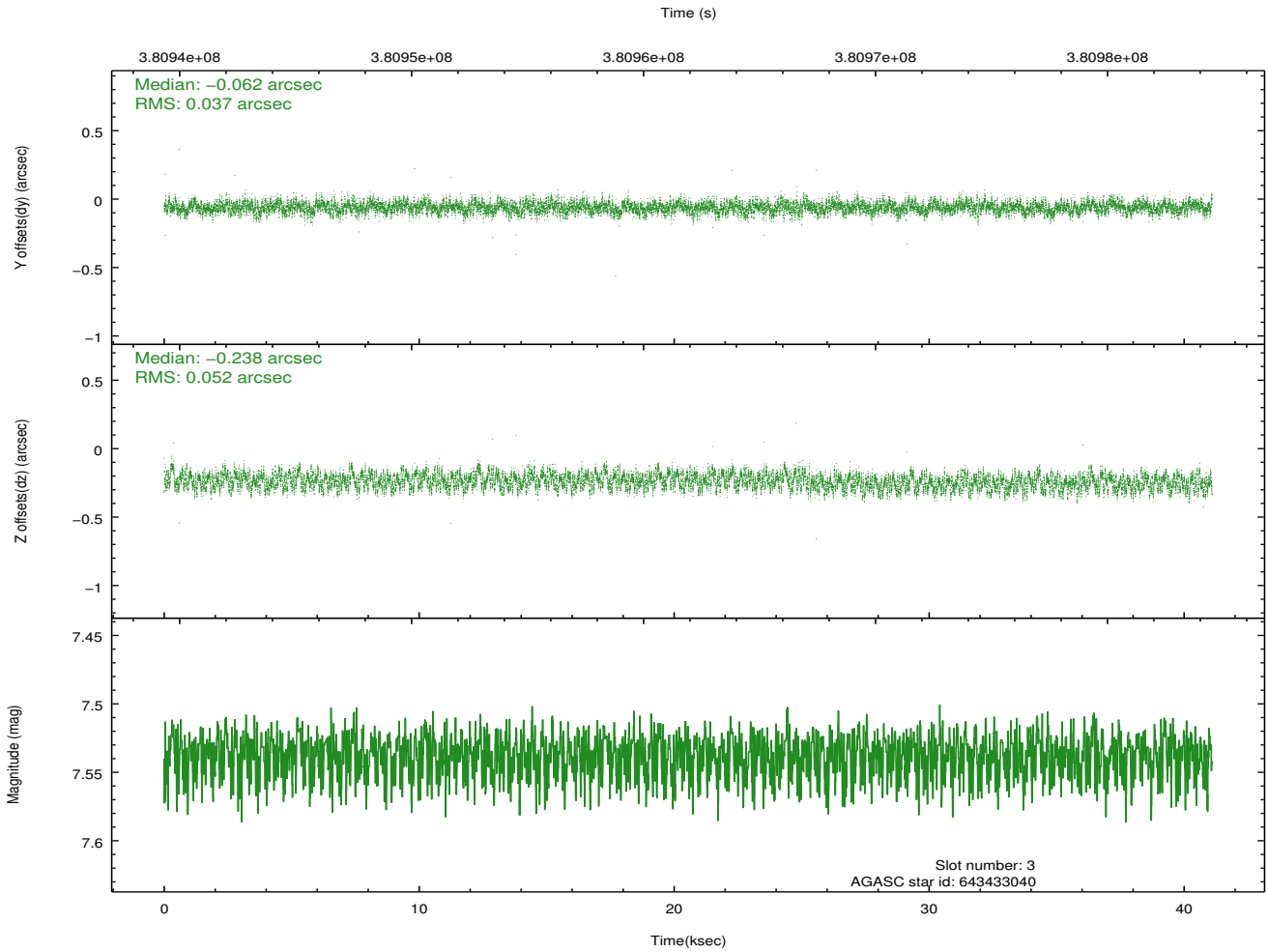
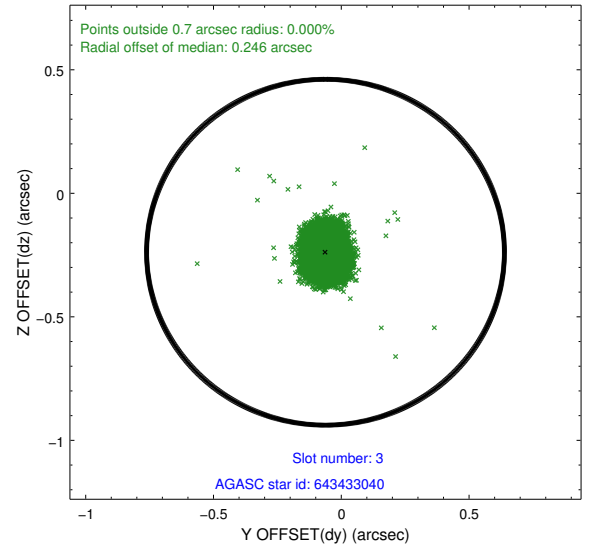
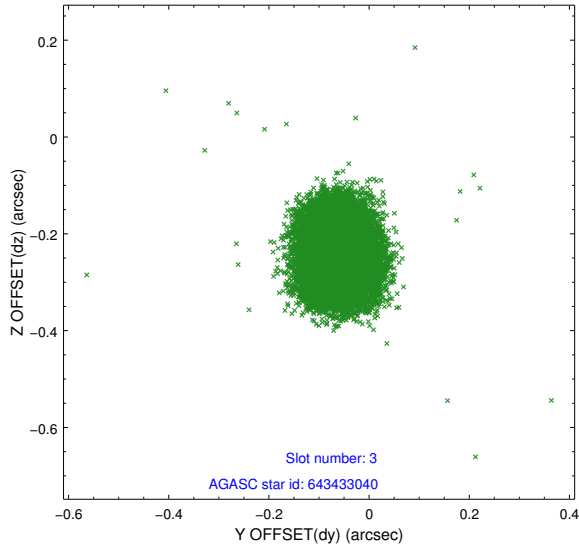


Slot Statistics

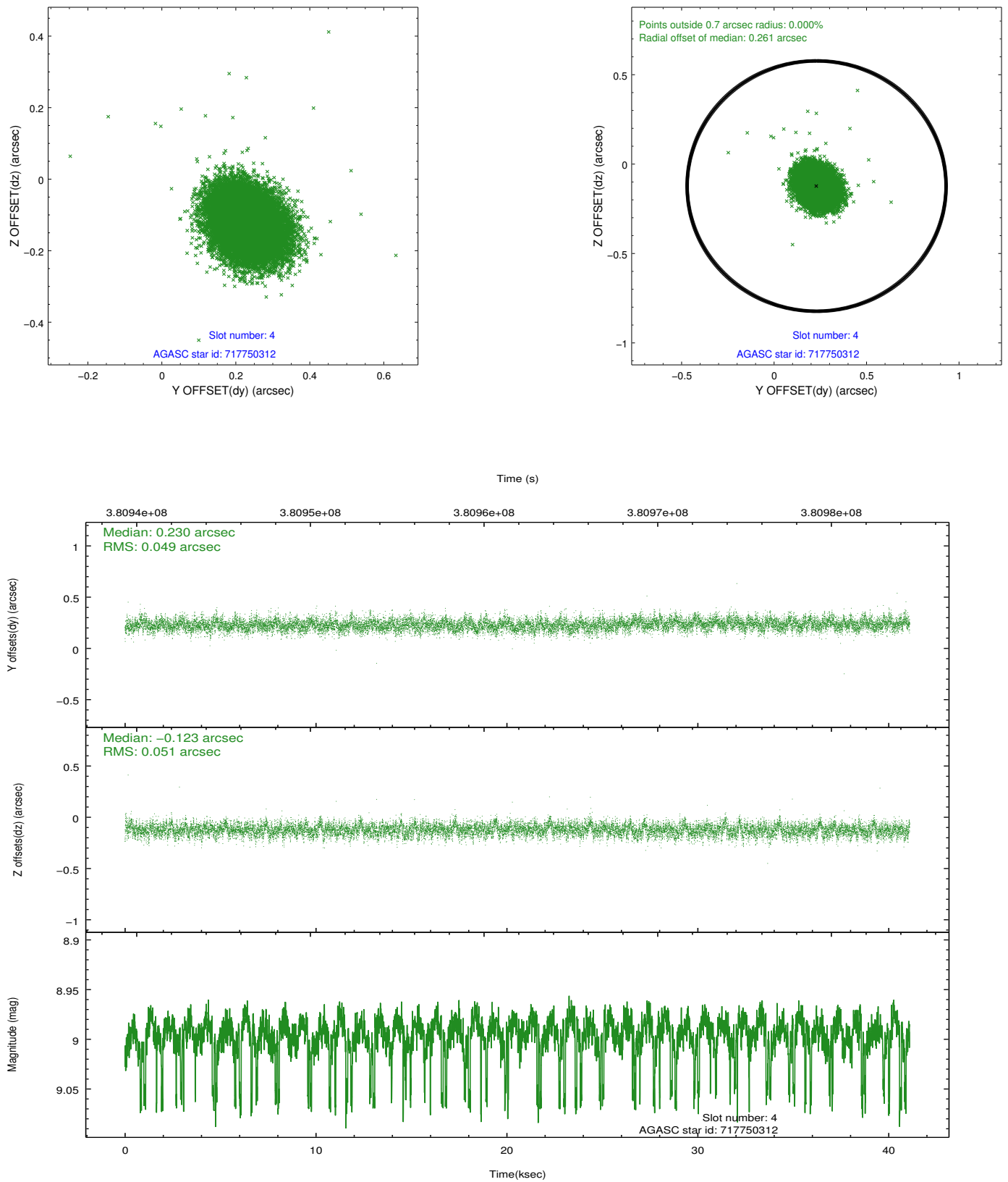
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 6.92 | 10025 | -0.028 | -0.025 | 0.013 | 0.037 | 0.000000 | 0.000000 | -768.34 | -1737.20 |
| 1 | FID | ACIS-S-5 | 7.03 | 10025 | -0.083 | -0.025 | 0.015 | 0.046 | 0.000000 | 0.000000 | -1821.50 | 164.78 |
| 2 | FID | ACIS-S-6 | 7.15 | 10025 | 0.079 | 0.053 | 0.015 | 0.024 | 0.000000 | 0.000000 | 393.39 | 808.74 |
| 3 | GUIDE | 643433040 | 7.54 | 20048 | -0.062 | -0.238 | 0.068 | 0.108 | 151.111617 | -7.218386 | 580.06 | 1902.34 |
| 4 | GUIDE | 717750312 | 9.00 | 19957 | 0.230 | -0.123 | 0.074 | 0.122 | 150.984877 | -7.661913 | -733.93 | 891.96 |
| 5 | GUIDE | 717888608 | 8.85 | 20035 | -0.296 | 0.349 | 0.085 | 0.139 | 152.106705 | -7.949613 | 1858.95 | -2325.81 |
| 6 | GUIDE | 717889000 | 8.04 | 20044 | 0.127 | 0.004 | 0.066 | 0.105 | 151.849024 | -7.724812 | 1605.71 | -1127.95 |
| 7 | GUIDE | 717887528 | 8.29 | 20043 | 0.006 | 0.013 | 0.074 | 0.127 | 152.119530 | -7.711999 | 2407.14 | -1667.73 |

2.4 Star Slots

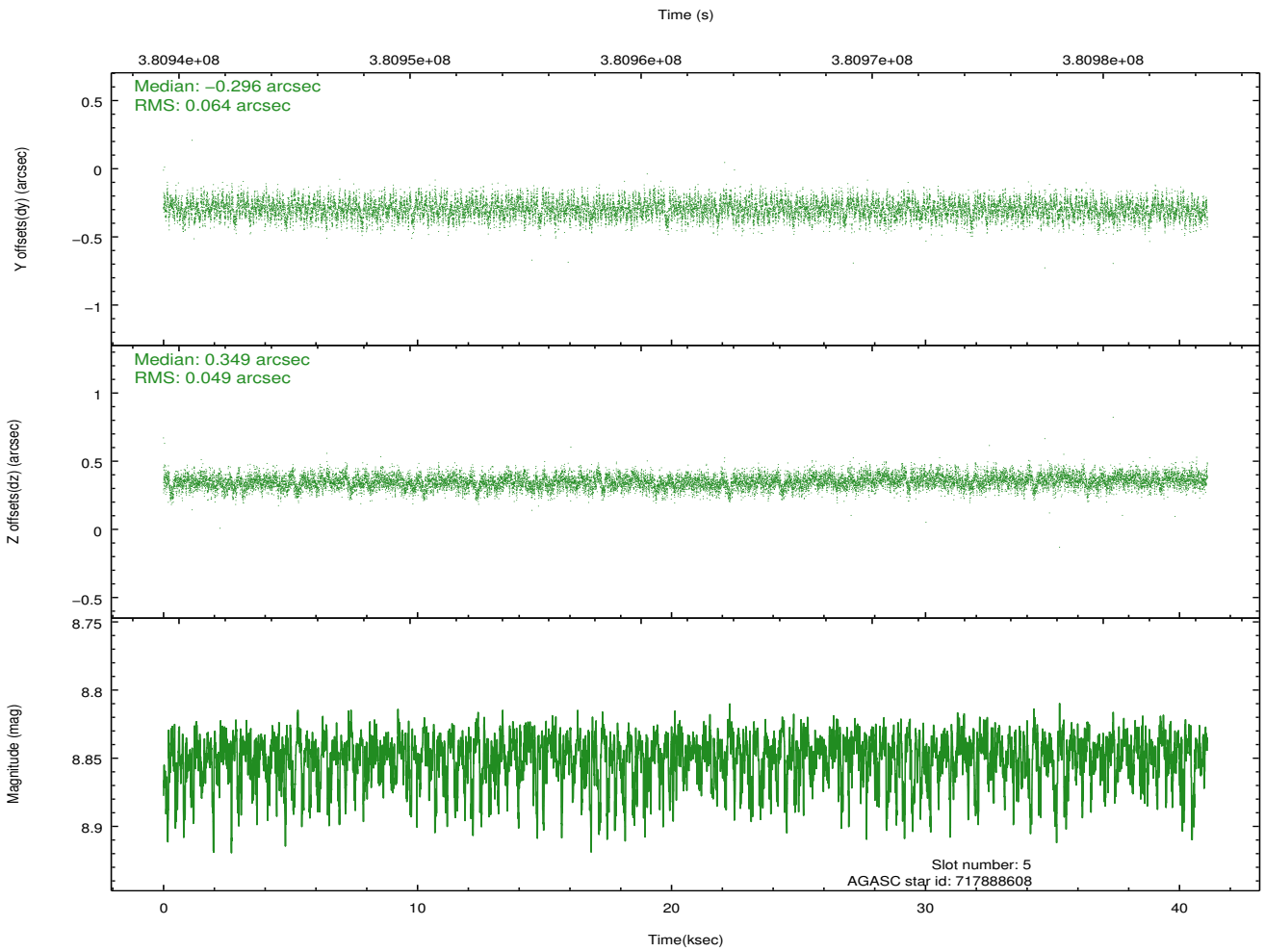
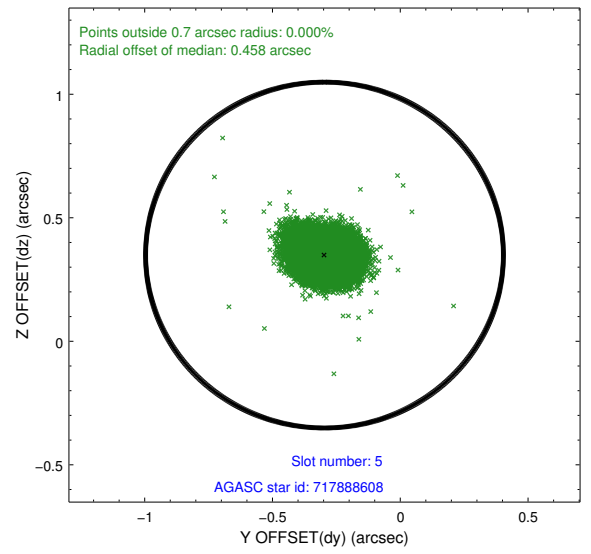
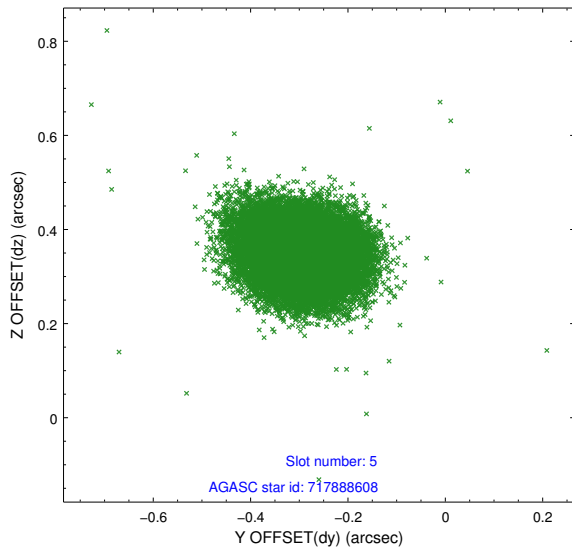
2.4.1 Slot 3



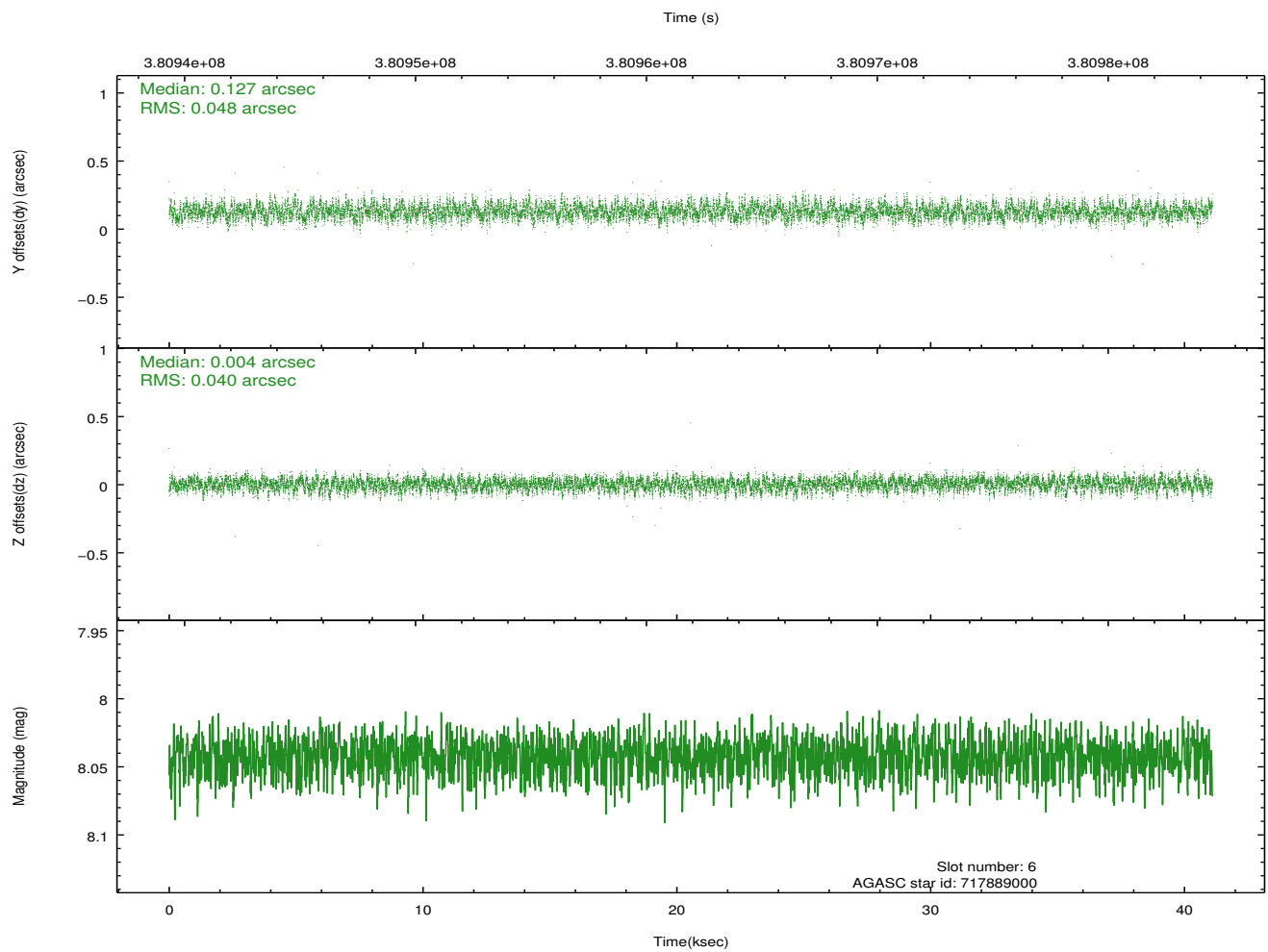
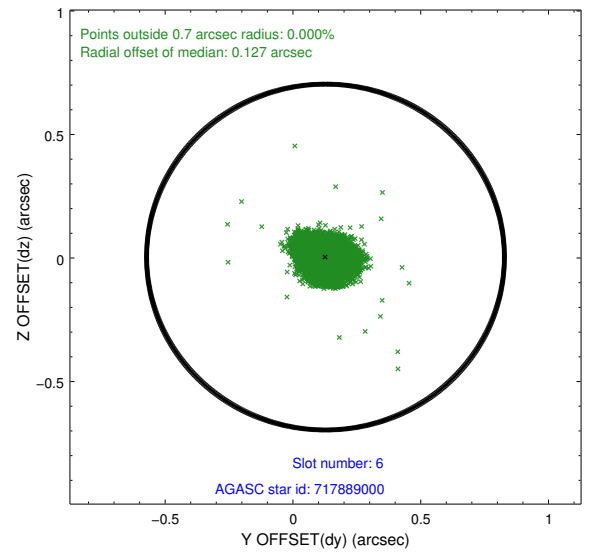
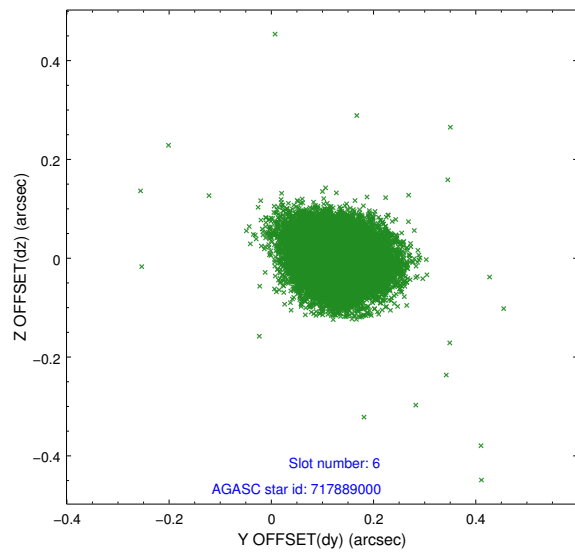
2.4.2 Slot 4



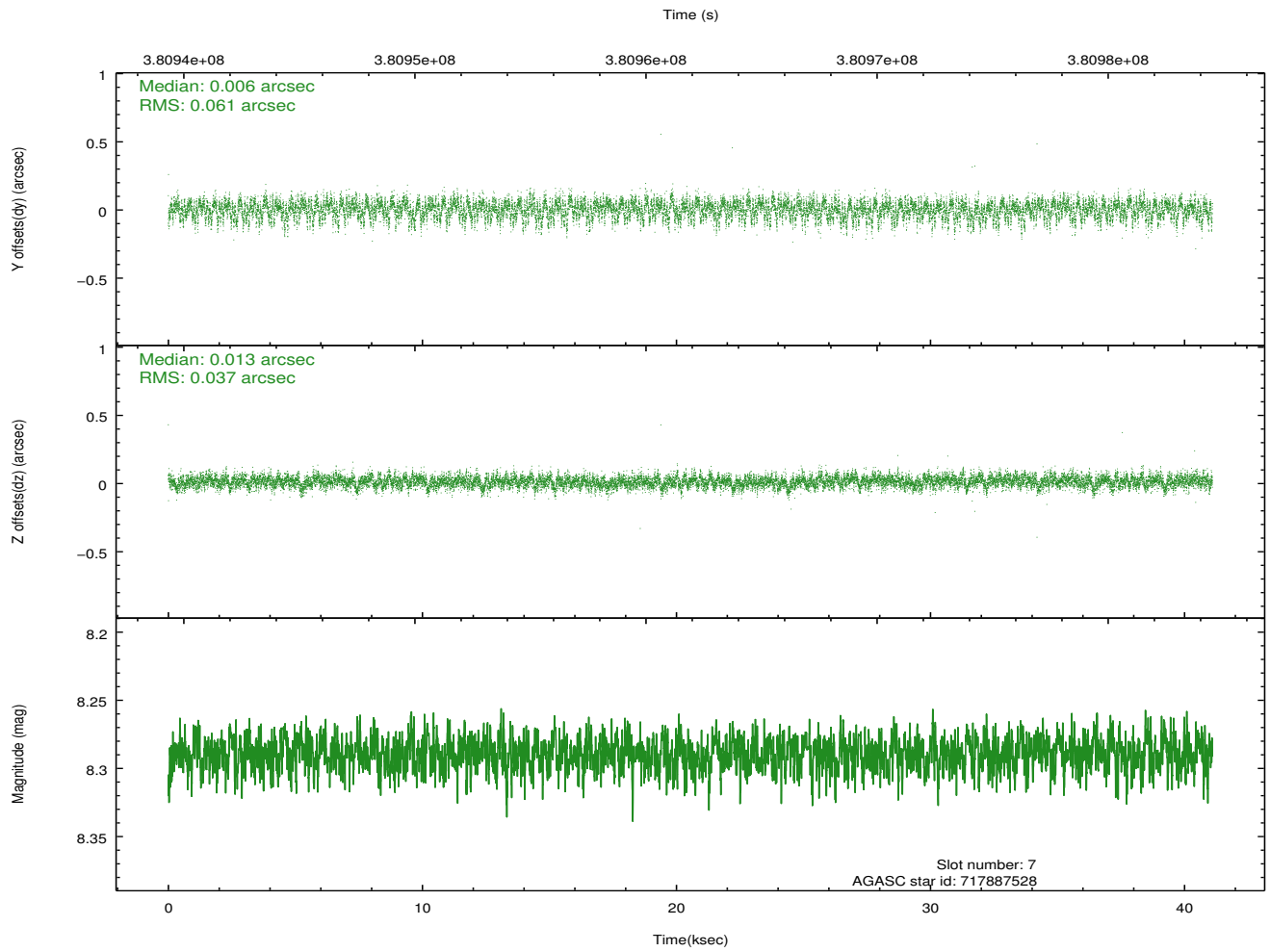
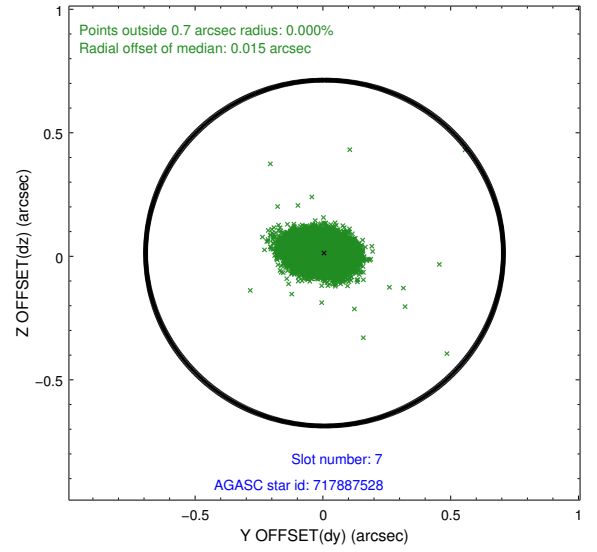
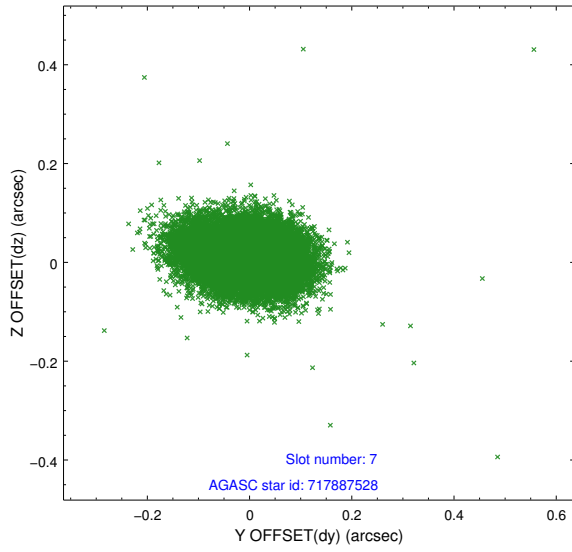
2.4.3 Slot 5



2.4.4 Slot 6

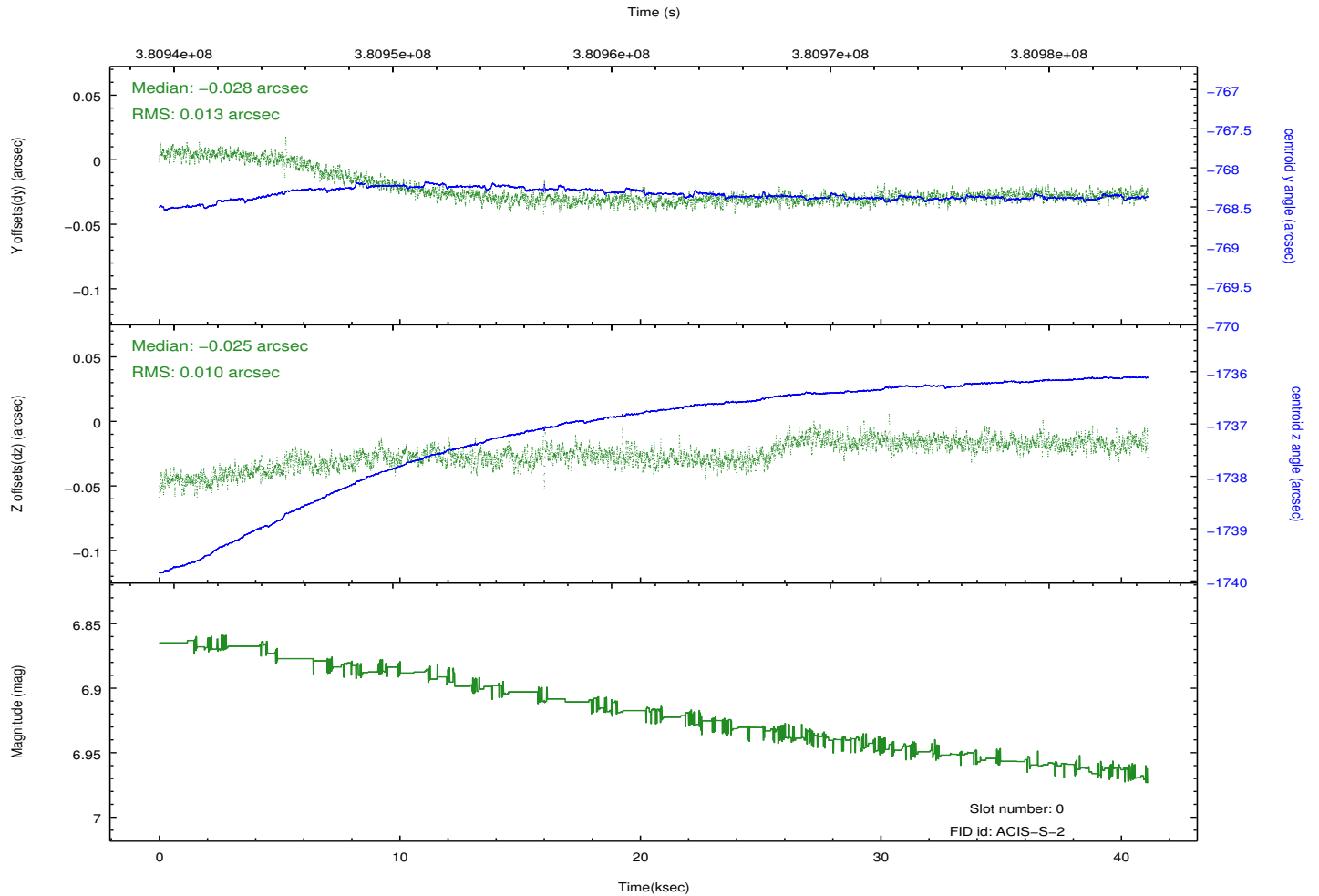
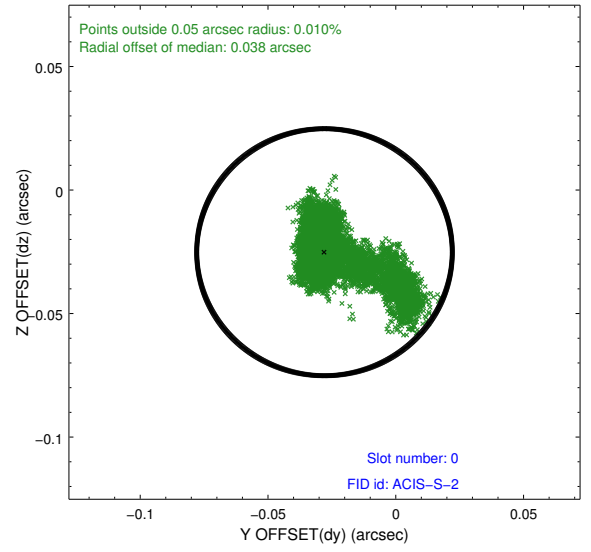
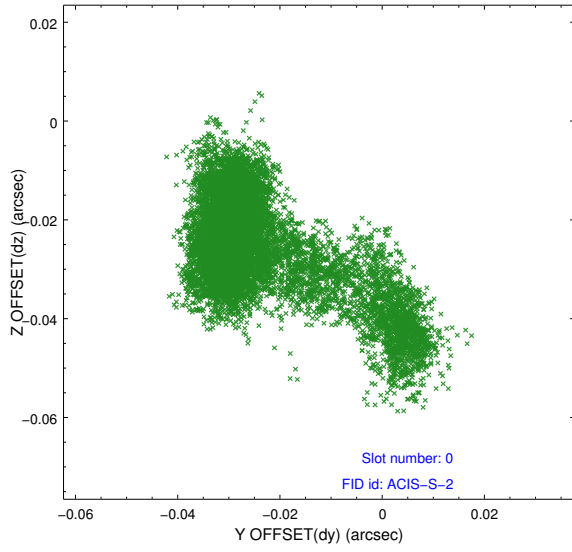


2.4.5 Slot 7

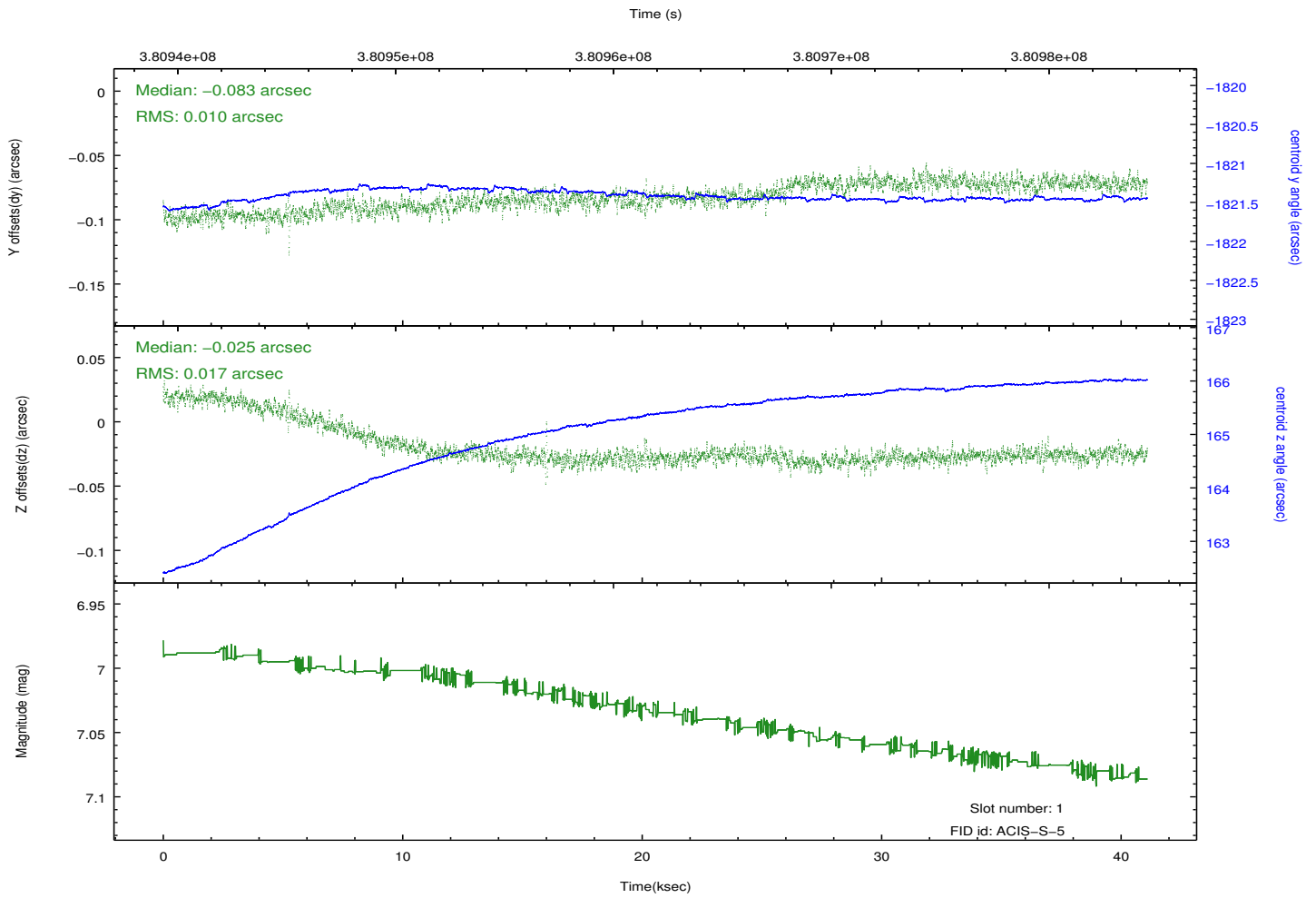
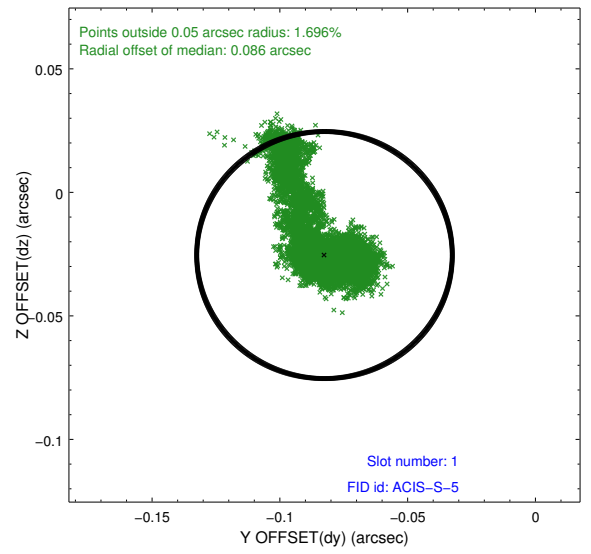
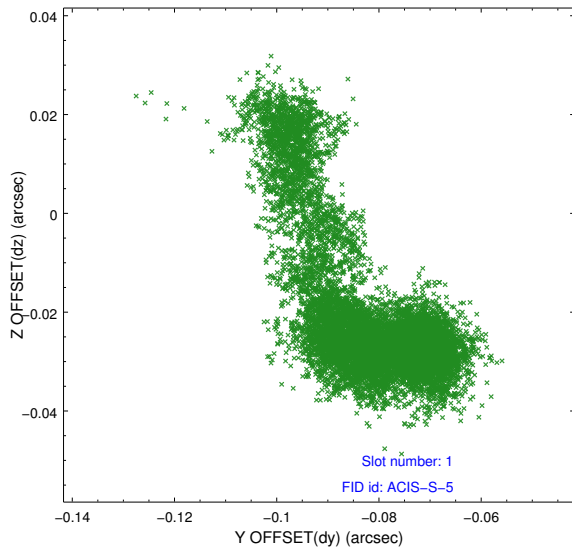


2.5 FID Slots

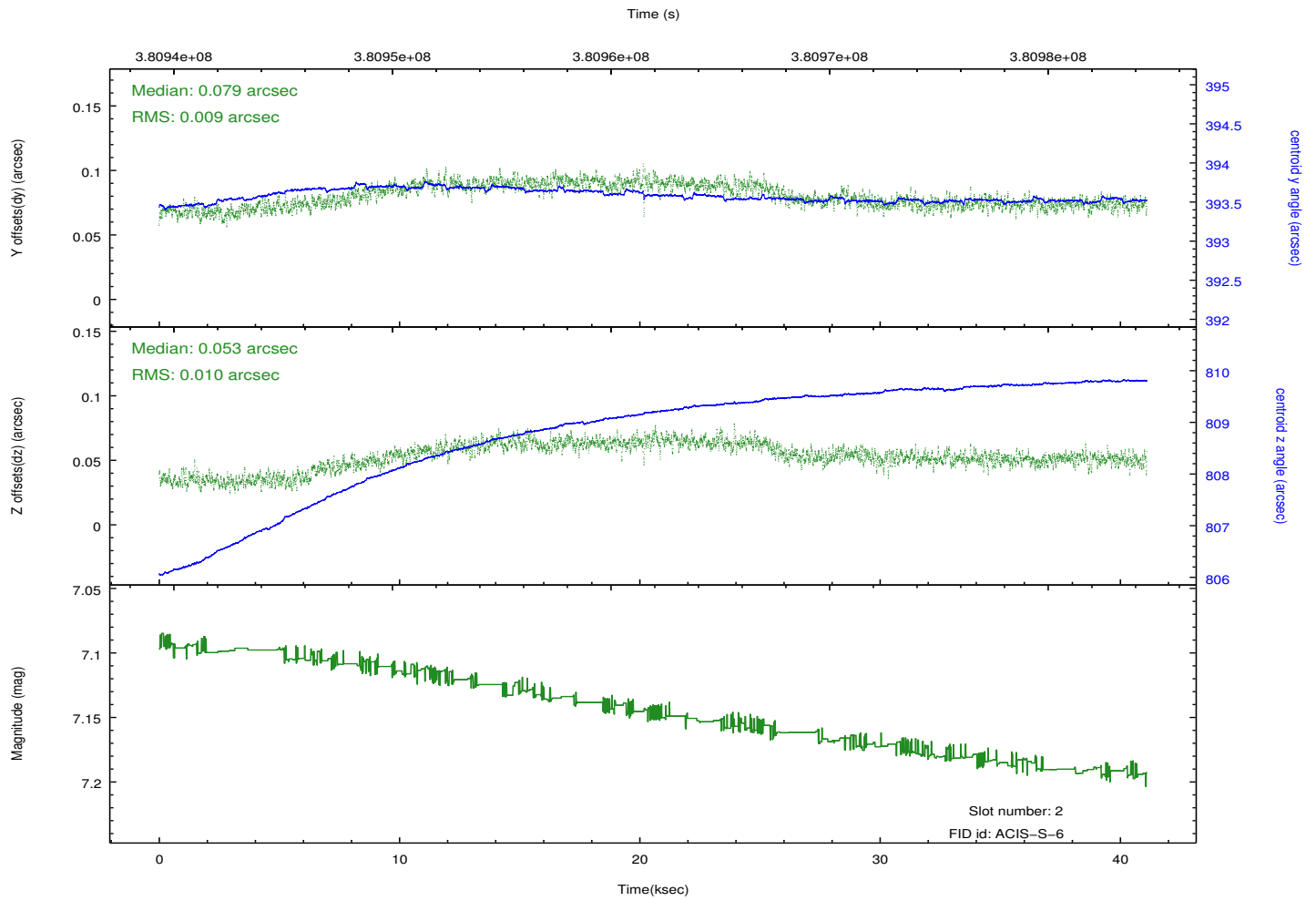
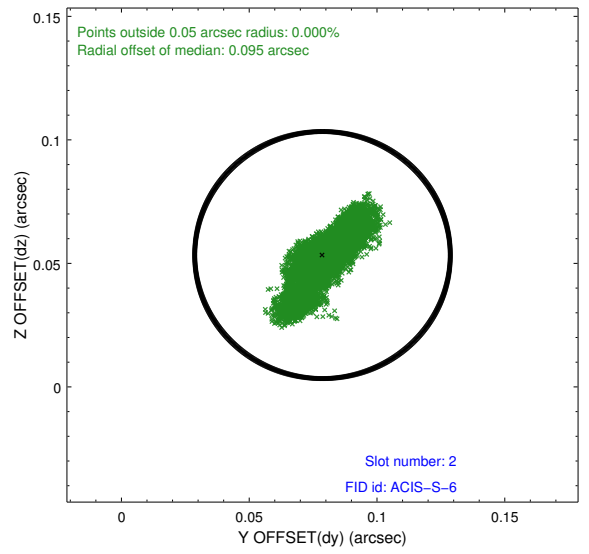
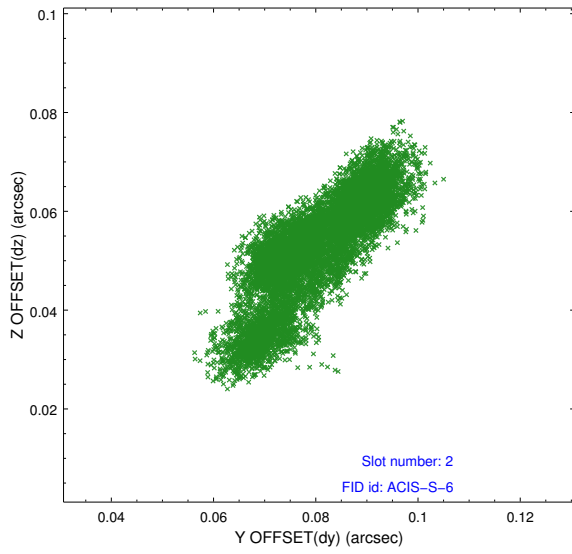
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.06.26 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 41.100799846947 |

A.2 Comments