

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 5026 - L2 Version 3
Chandra X-Ray Center

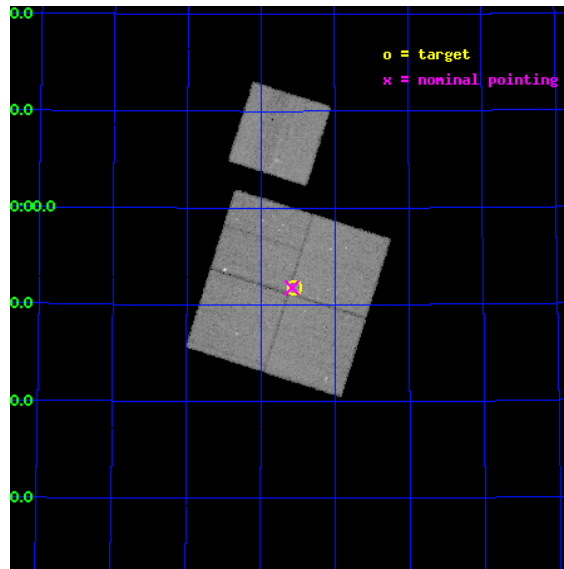
L2 Processing Date : Dec 9 2012

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

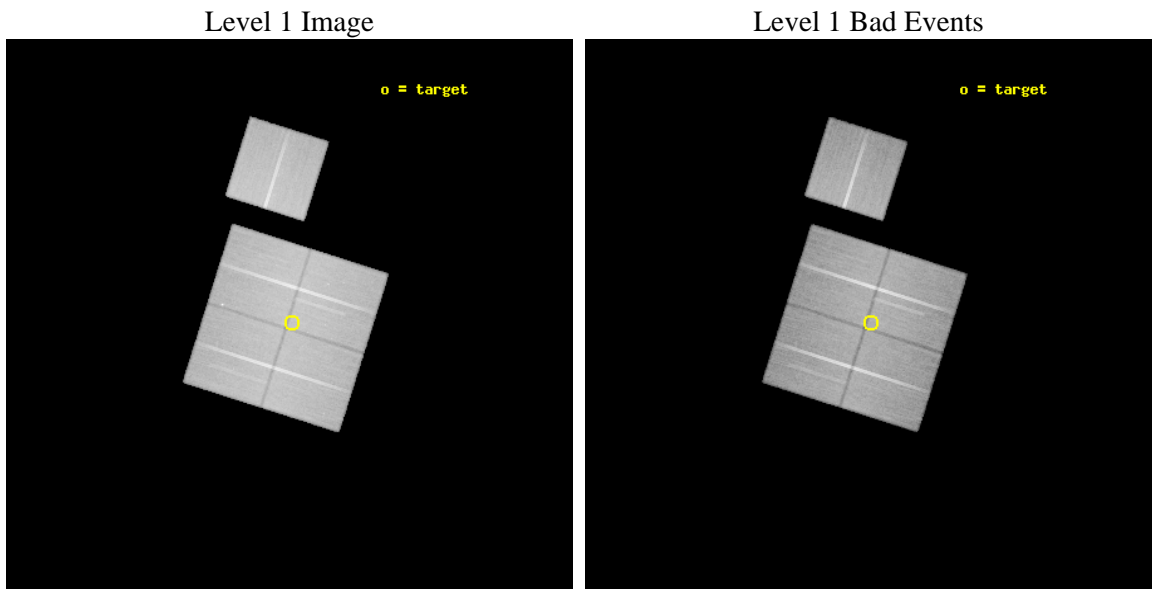
| | | |
|----------|--|---|
| seq_num | 900333 | Sequence number |
| obs_id | 5026 | Observation id |
| title | The Balance of Power between Starbursts and AGN: a Chandra/SIRTf Survey. | Proposal title |
| observer | Dr. Belinda Wilkes | Principal investigator |
| object | SWIRE LOCKMAN 3 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 162.136525 | Observer's specified target RA [deg] |
| dec_targ | 58.863146 | Observer's specified target Dec [deg] |
| ra_nom | 162.14549213302 | Nominal RA [deg] |
| dec_nom | 58.862718777702 | Nominal Dec [deg] |
| roll_nom | 17.601008369544 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 69773.566511452 | Sum of GTIs [s] |
| livetime | 68861.923498428 | Livetime [s] |
| ontime0 | 69770.302421182 | Sum of GTIs [s] |
| ontime1 | 69770.343471169 | Sum of GTIs [s] |
| ontime2 | 69764.102550805 | Sum of GTIs [s] |
| ontime3 | 69773.566511452 | Sum of GTIs [s] |
| ontime6 | 69763.97947067 | Sum of GTIs [s] |
| l2events | 252691 | Number of level 2 events |



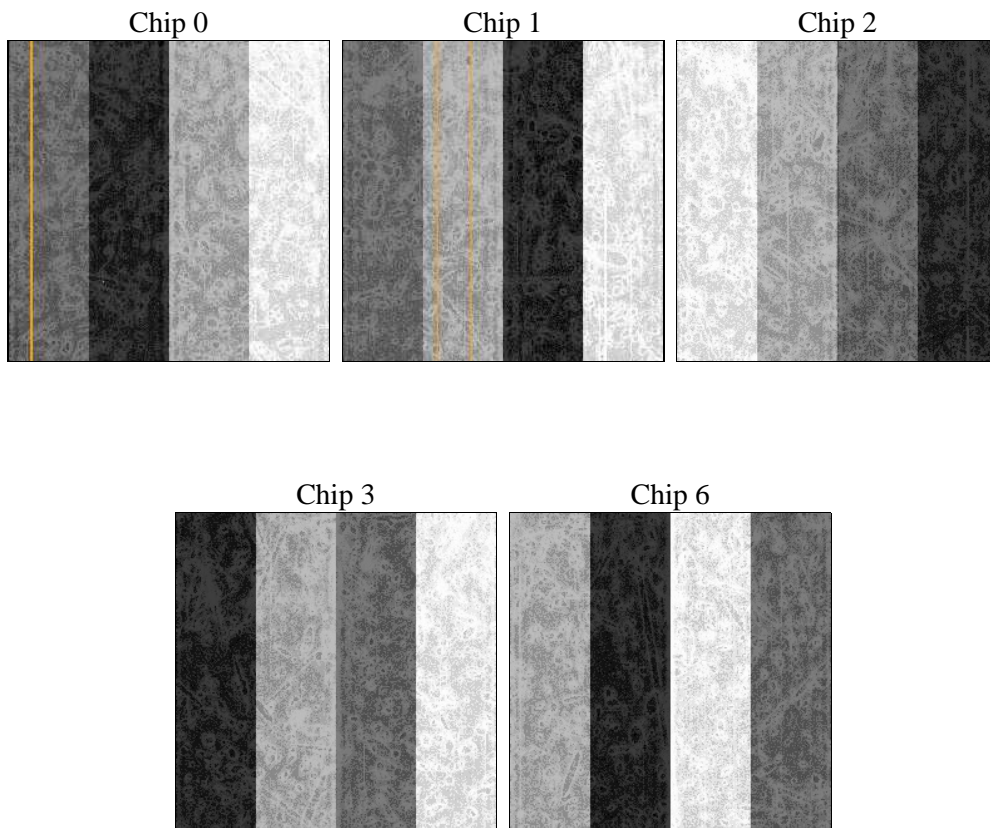
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 70000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5 | Processing system revision | ontime | 69773.566511452 | Sum of GTIs [s] |
| caldbver | 4.5.4 | | ontime0 | 69770.302421182 | Sum of GTIs [s] |
| date | 2012-12-09T03:55:20 | Date and time of file creation | ontime1 | 69770.343471169 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 69764.102550805 | Sum of GTIs [s] |
| | | | ontime3 | 69773.566511452 | Sum of GTIs [s] |
| | | | ontime6 | 69763.97947067 | Sum of GTIs [s] |
| | | | l1events | 2364601 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 448710 | 458420 | 485557 | 485405 | 486509 |
| rejected events | 390061 | 397299 | 426563 | 427992 | 429003 |
| rejected % | 86% | 86% | 87% | 88% | 88% |

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 24371 | 23550 | 26644 | 25202 | 22594 |
| | 5% | 5% | 5% | 5% | 4% |
| grade 1 events | 241 | 218 | 278 | 286 | 216 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 12759 | 13377 | 12083 | 11099 | 11936 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 5819 | 6168 | 5461 | 5561 | 5712 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 5412 | 5991 | 5376 | 5551 | 5648 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 19878 | 21120 | 19078 | 22136 | 21990 |
| | 4% | 4% | 3% | 4% | 4% |
| grade 6 events | 10291 | 12036 | 9434 | 10001 | 11616 |
| | 2% | 2% | 1% | 2% | 2% |
| grade 7 events | 369939 | 375960 | 407203 | 405569 | 406797 |
| | 82% | 82% | 83% | 83% | 83% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|--------------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01236 | ACIS-01236 | 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 | 162.109924 | 162.14549213302 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 58.842414 | 58.86271877770225 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 17.422769 | 17.60100836954426 | [s] Primary exposure time | 0.000000 | 3.1 |
| [deg] Roll angle | 19.200000 | 19.200000 | | | |
| [deg] Roll tolerance | 1.800000 | 1.800000 | | | |
| Roll constraint allows 180D rotation | Y | Y | | | |
| [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) | 211911872.184000 | 211911496.0202 | | | |
| Observation start date | 2004-09-18T16:23:28 | 2004-09-18T16:18:16 | | | |
| [s] Observation end time (MET) | 211981872.184000 | 211982279.96086 | | | |
| Observation end date | 2004-09-19T11:50:08 | 2004-09-19T11:57:59 | | | |
| Read mode | TIMED | TIMED | | | |

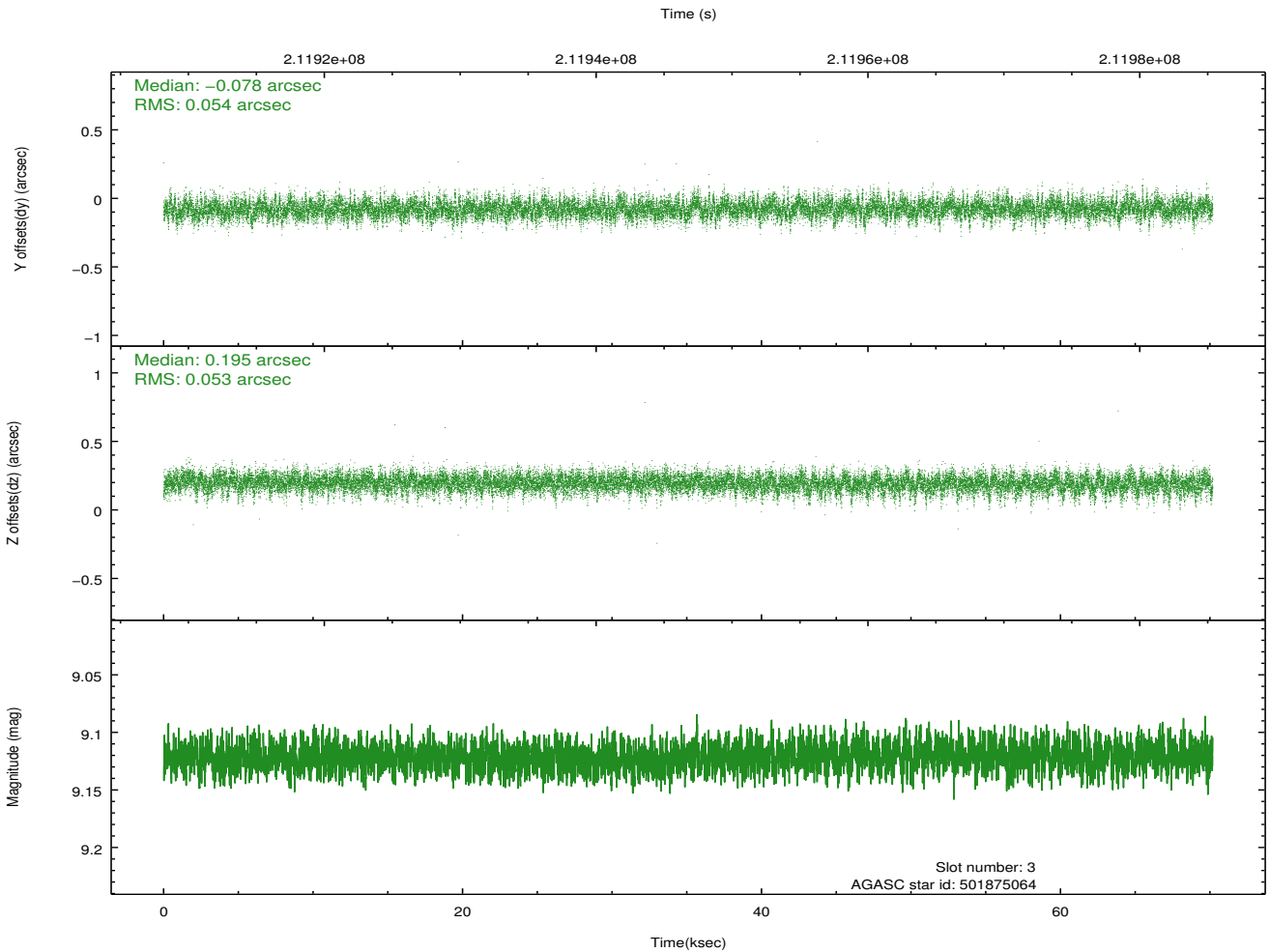
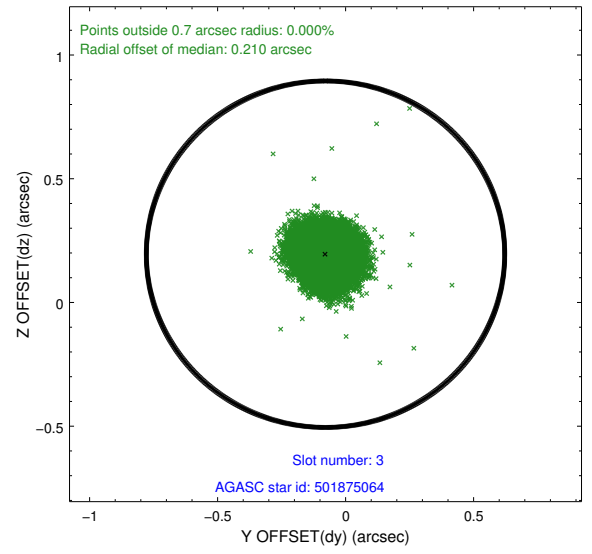
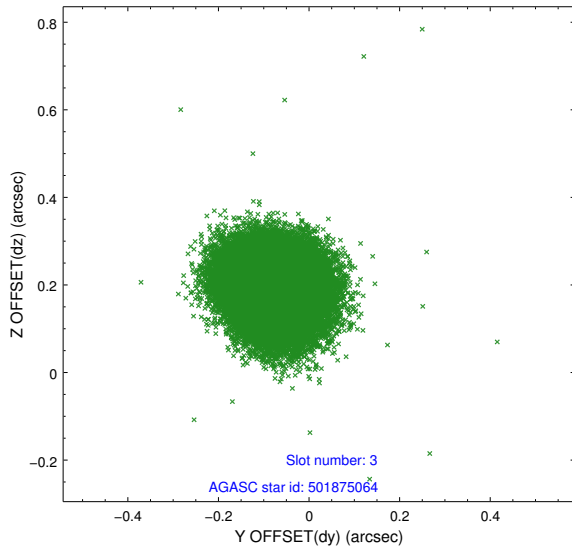
2.3 Aspect

Slot Statistics

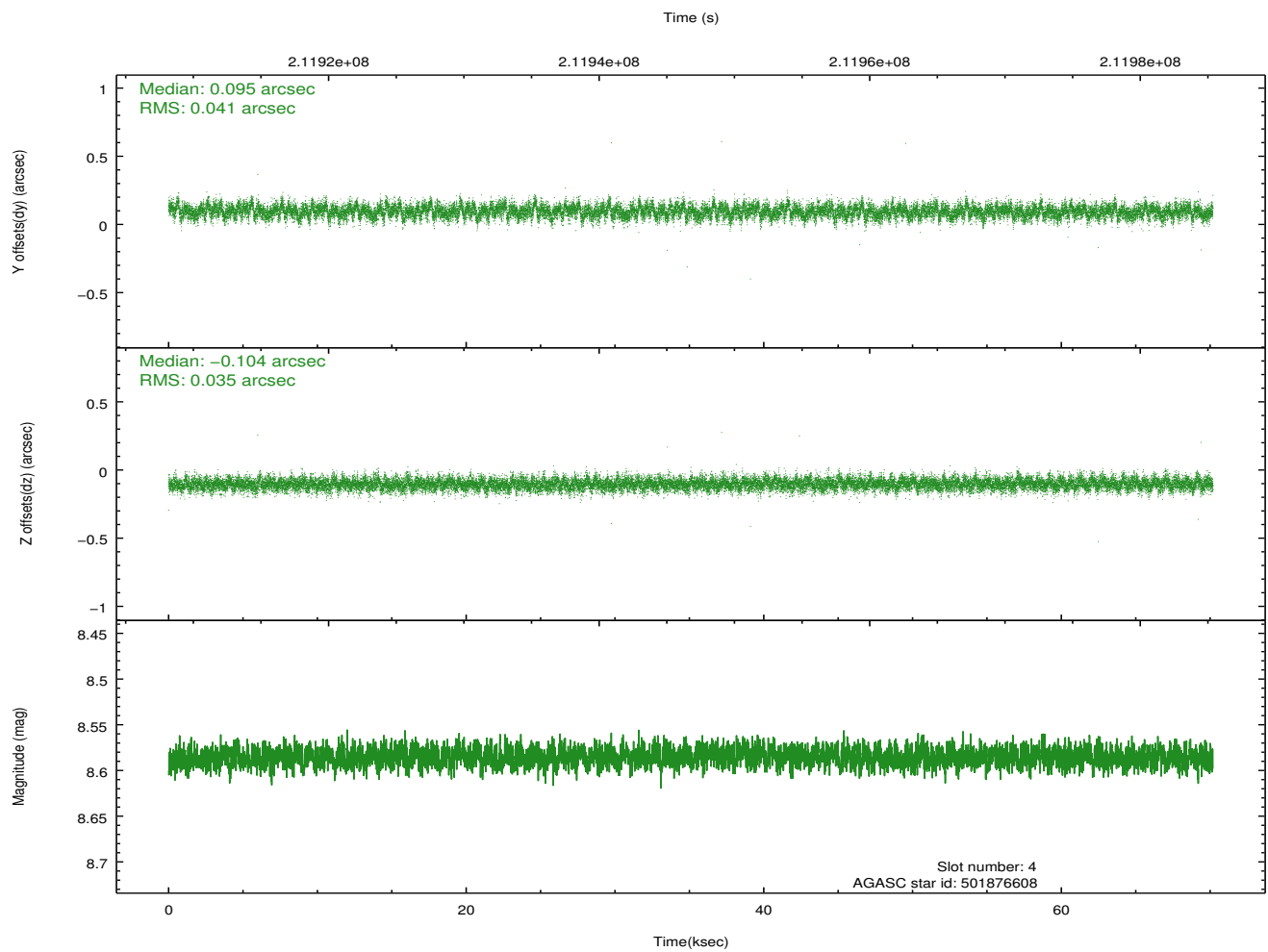
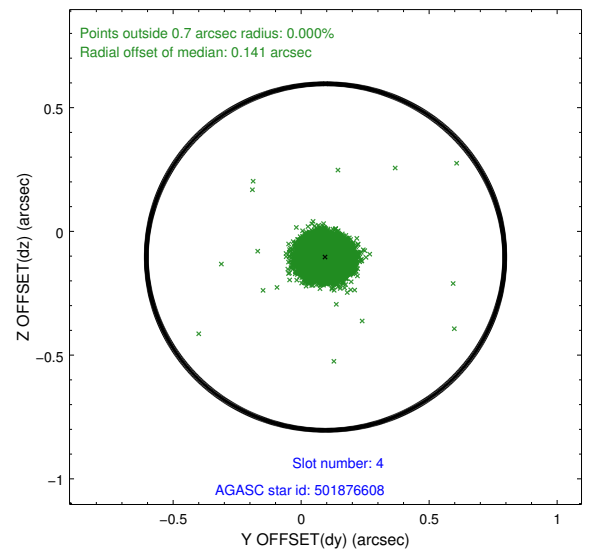
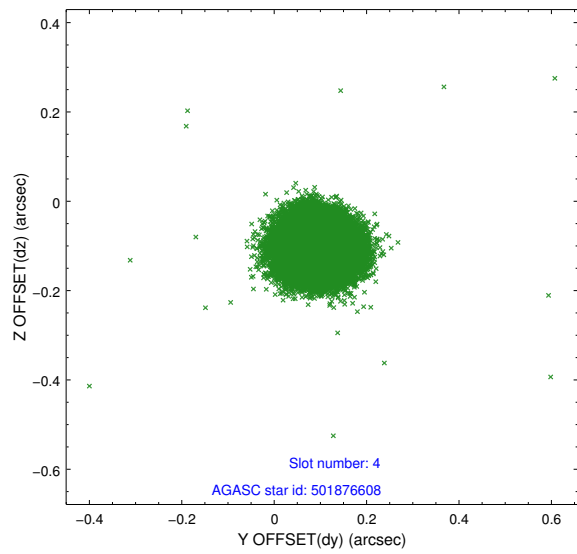
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 17119 | 0.042 | -0.012 | 0.006 | 0.011 | 0.000000 | 0.000000 | 932.56 | -835.40 |
| 1 | FID | ACIS-I-5 | 7.23 | 17119 | -0.159 | 0.062 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1815.72 | 1062.27 |
| 2 | FID | ACIS-I-6 | 7.25 | 17120 | 0.026 | 0.020 | 0.007 | 0.011 | 0.000000 | 0.000000 | 398.22 | 1706.60 |
| 3 | GUIDE | 501875064 | 9.12 | 34228 | -0.078 | 0.195 | 0.080 | 0.132 | 163.017696 | 58.369846 | 1128.64 | -2125.01 |
| 4 | GUIDE | 501876608 | 8.59 | 34230 | 0.095 | -0.104 | 0.057 | 0.092 | 161.204341 | 58.717464 | -1746.16 | 88.21 |
| 5 | GUIDE | 501878216 | 8.99 | 34221 | 0.107 | -0.042 | 0.068 | 0.113 | 161.663048 | 59.249982 | -344.56 | 1648.85 |
| 6 | GUIDE | 501878576 | 7.82 | 34237 | 0.002 | -0.015 | 0.054 | 0.087 | 161.532118 | 59.060873 | -783.36 | 1075.01 |
| 7 | GUIDE | 501878640 | 8.44 | 34226 | -0.127 | -0.032 | 0.055 | 0.090 | 163.346309 | 59.049577 | 2413.80 | 46.90 |

2.4 Star Slots

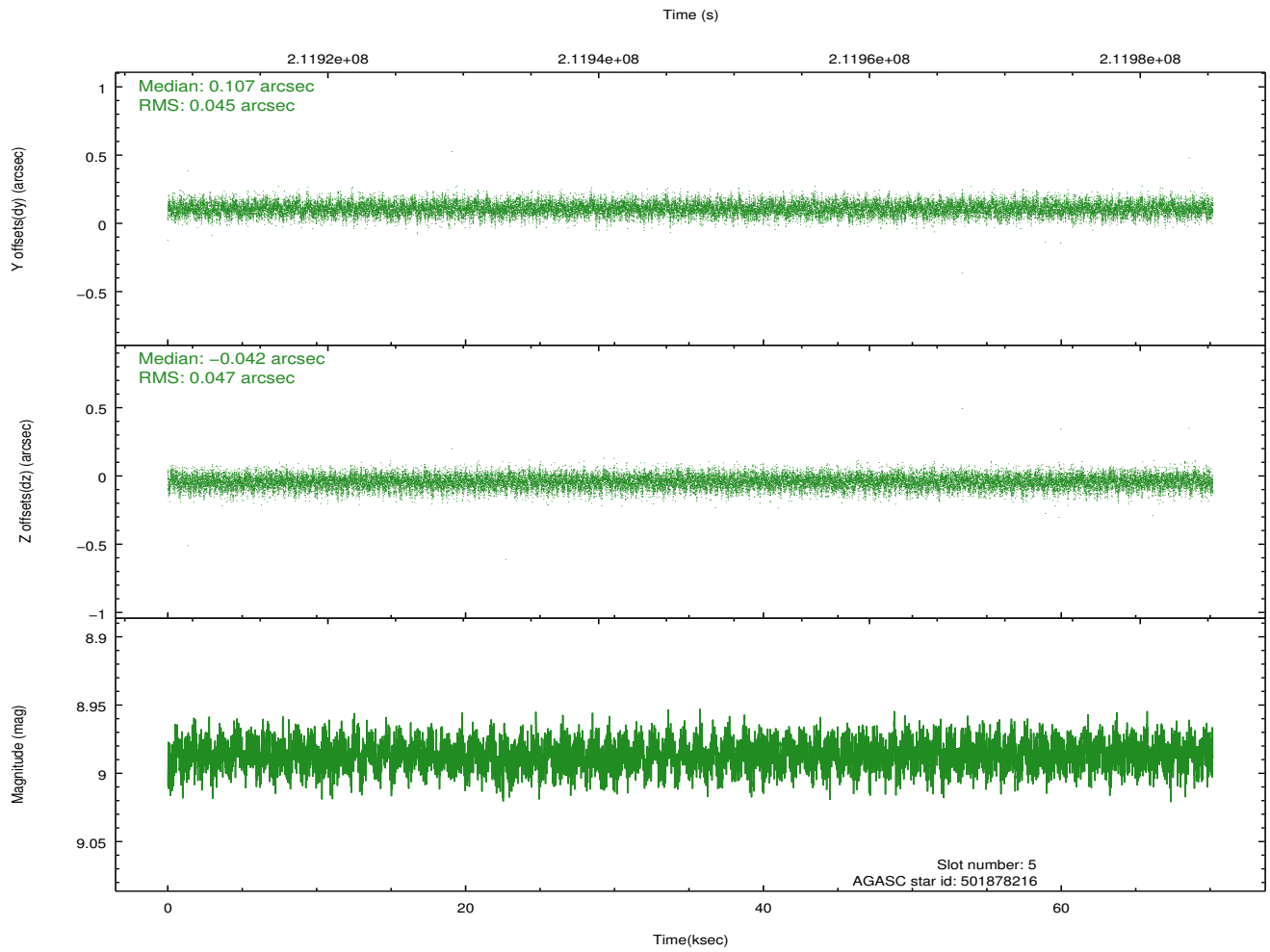
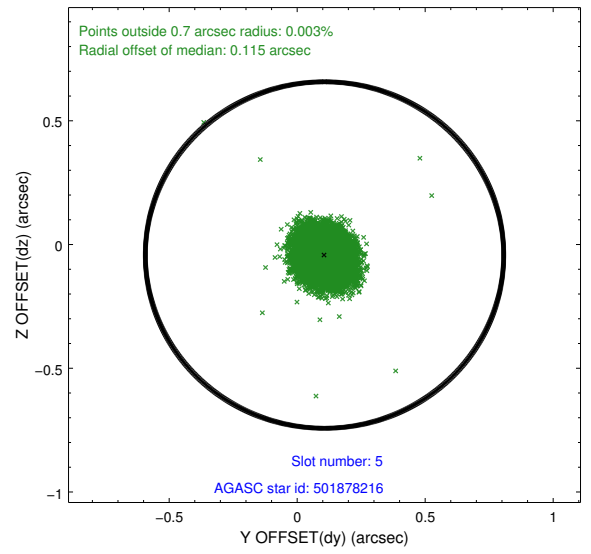
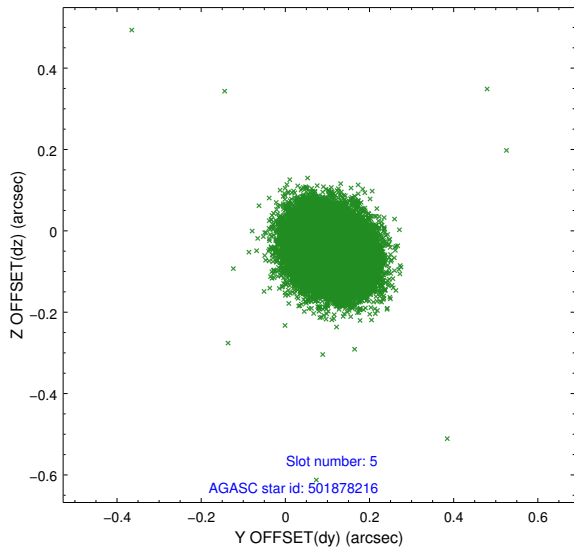
2.4.1 Slot 3



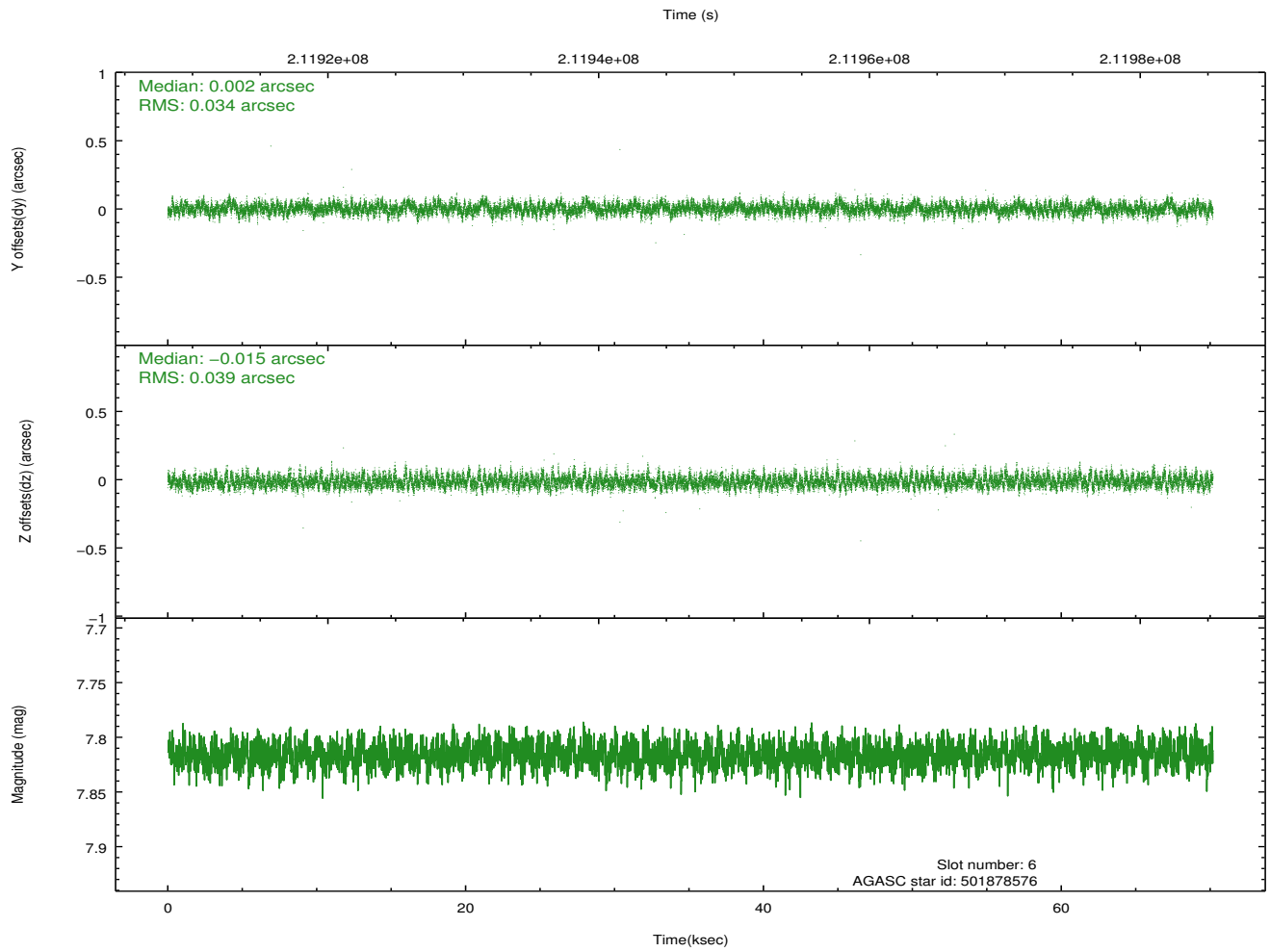
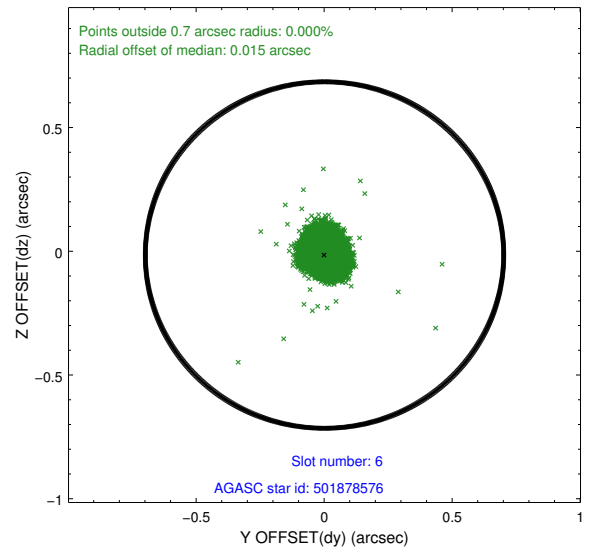
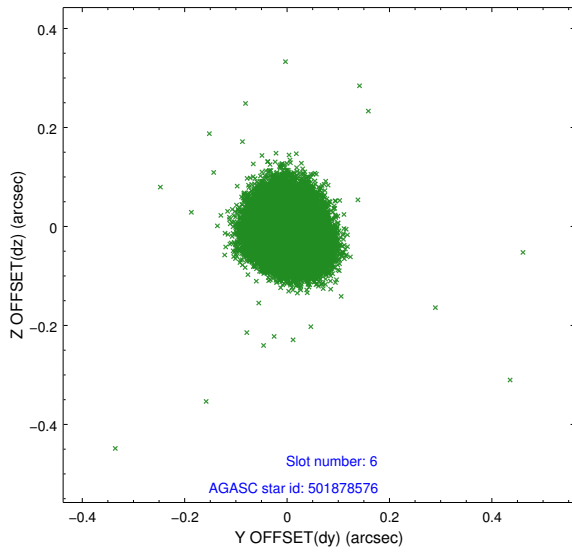
2.4.2 Slot 4



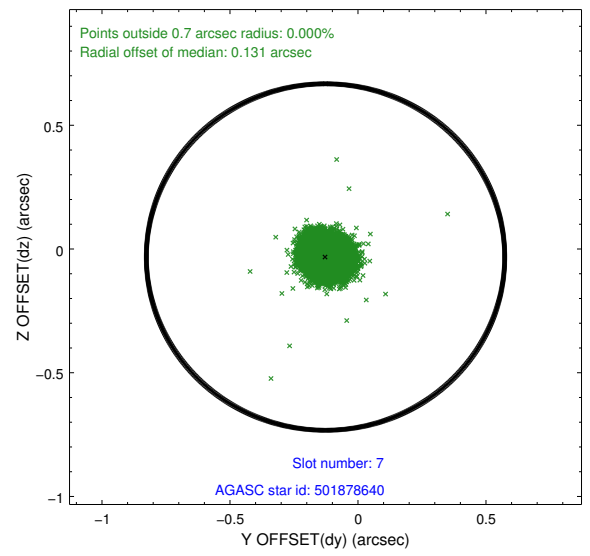
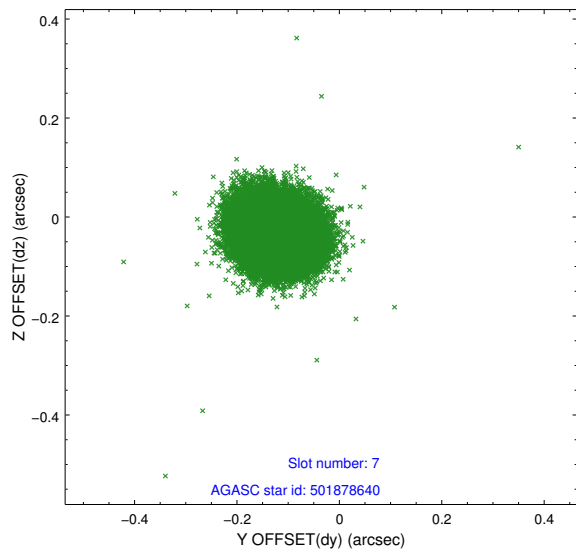
2.4.3 Slot 5



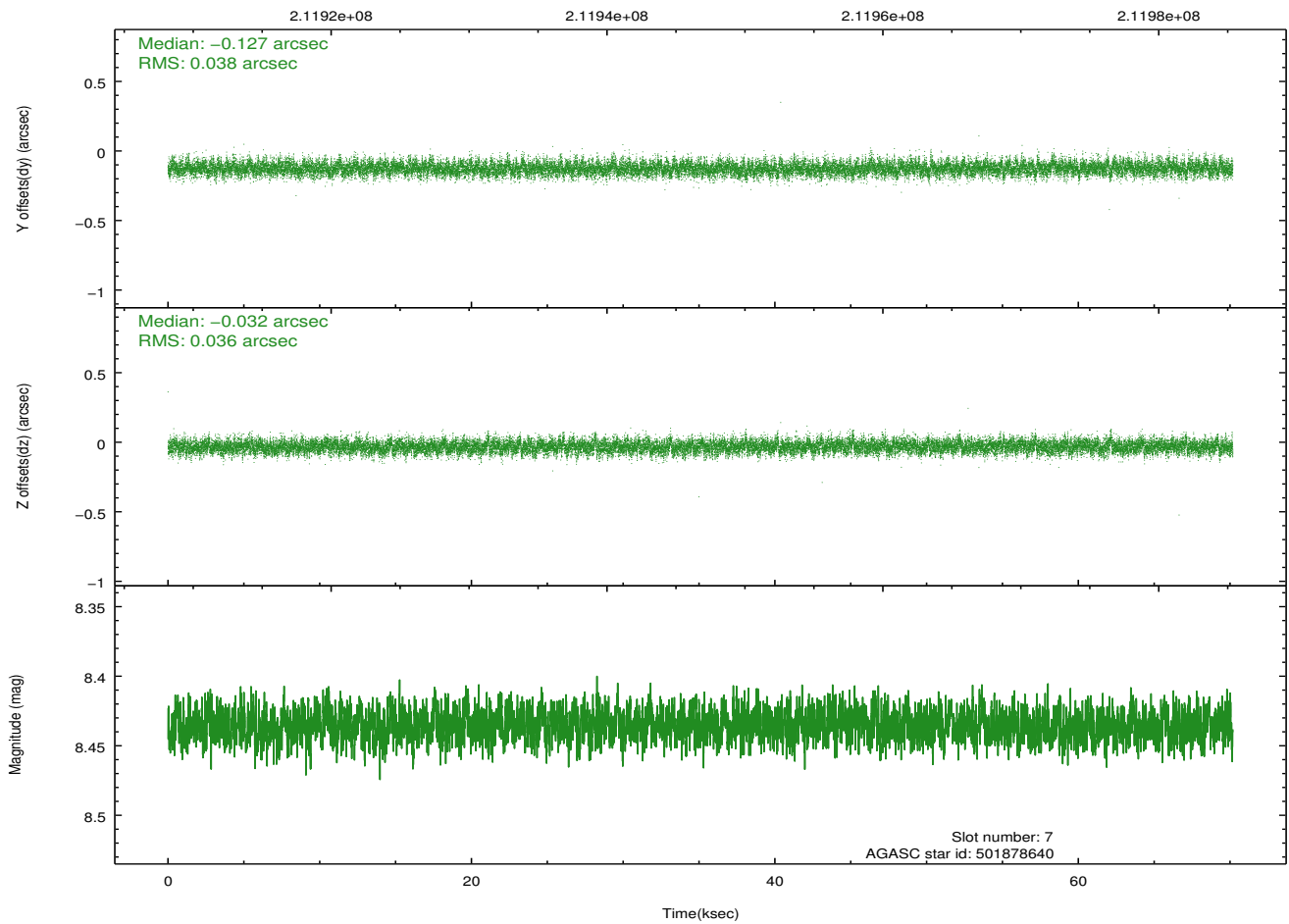
2.4.4 Slot 6



2.4.5 Slot 7

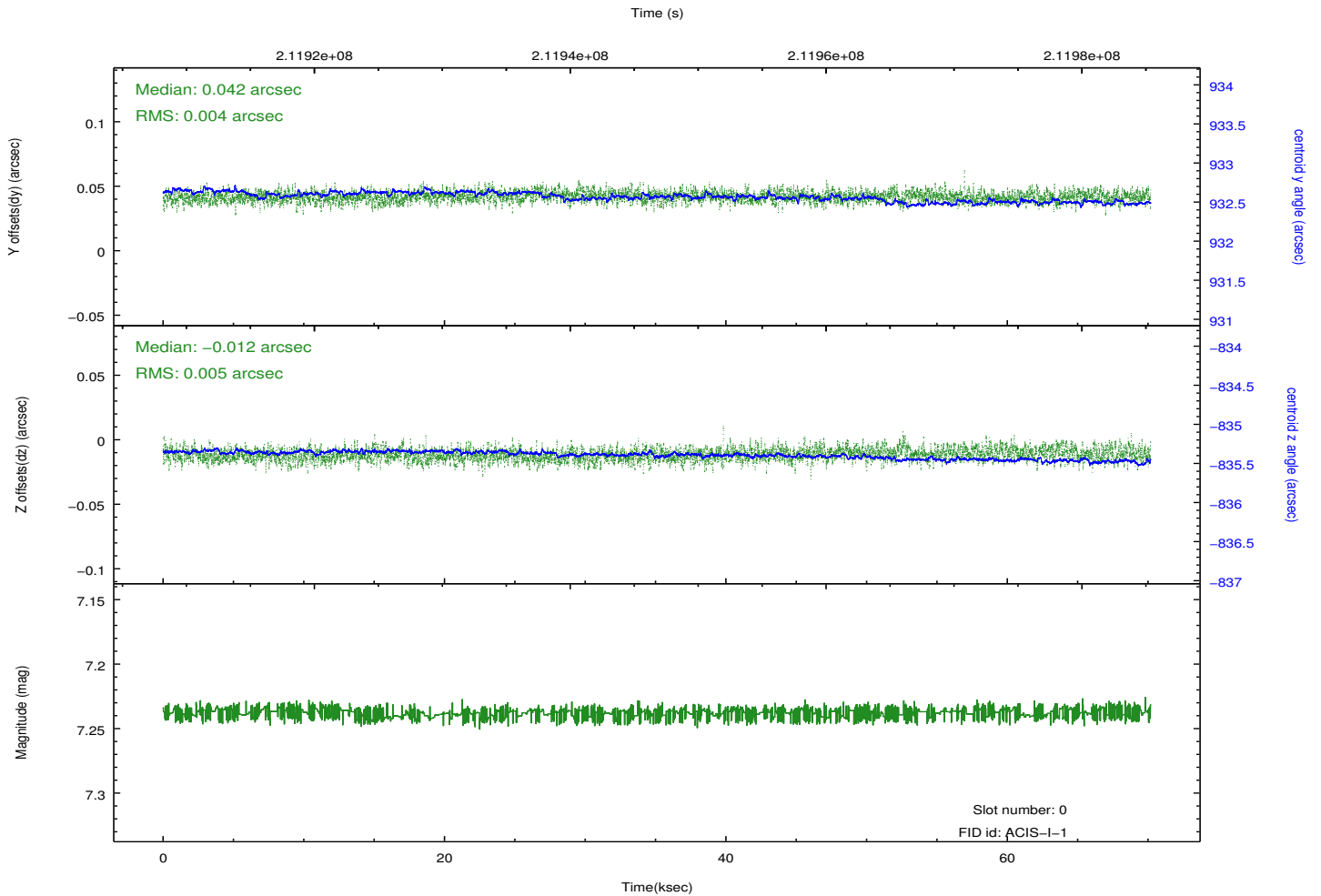
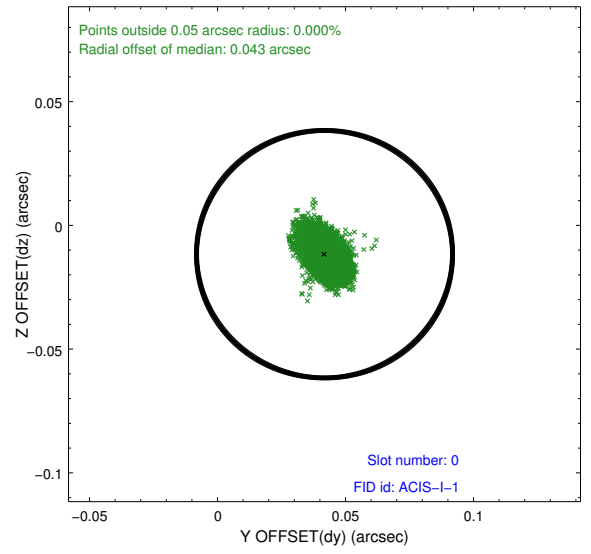
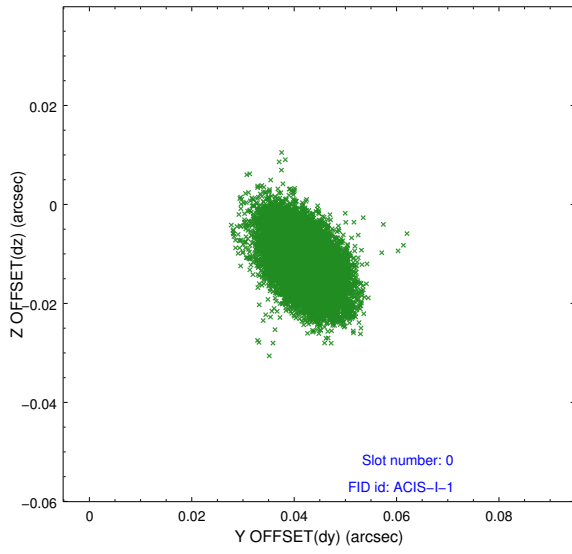


Time (s)

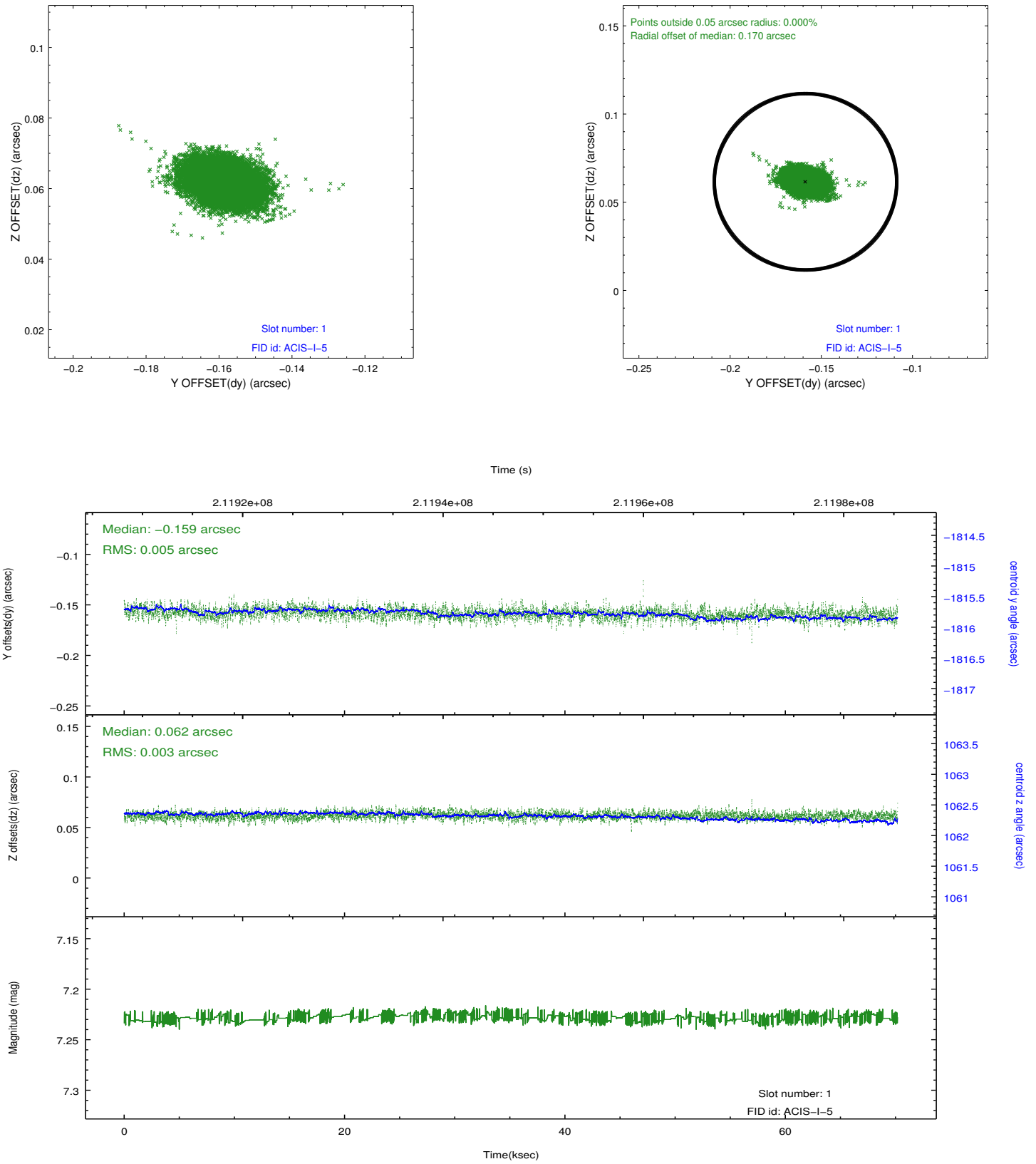


2.5 FID Slots

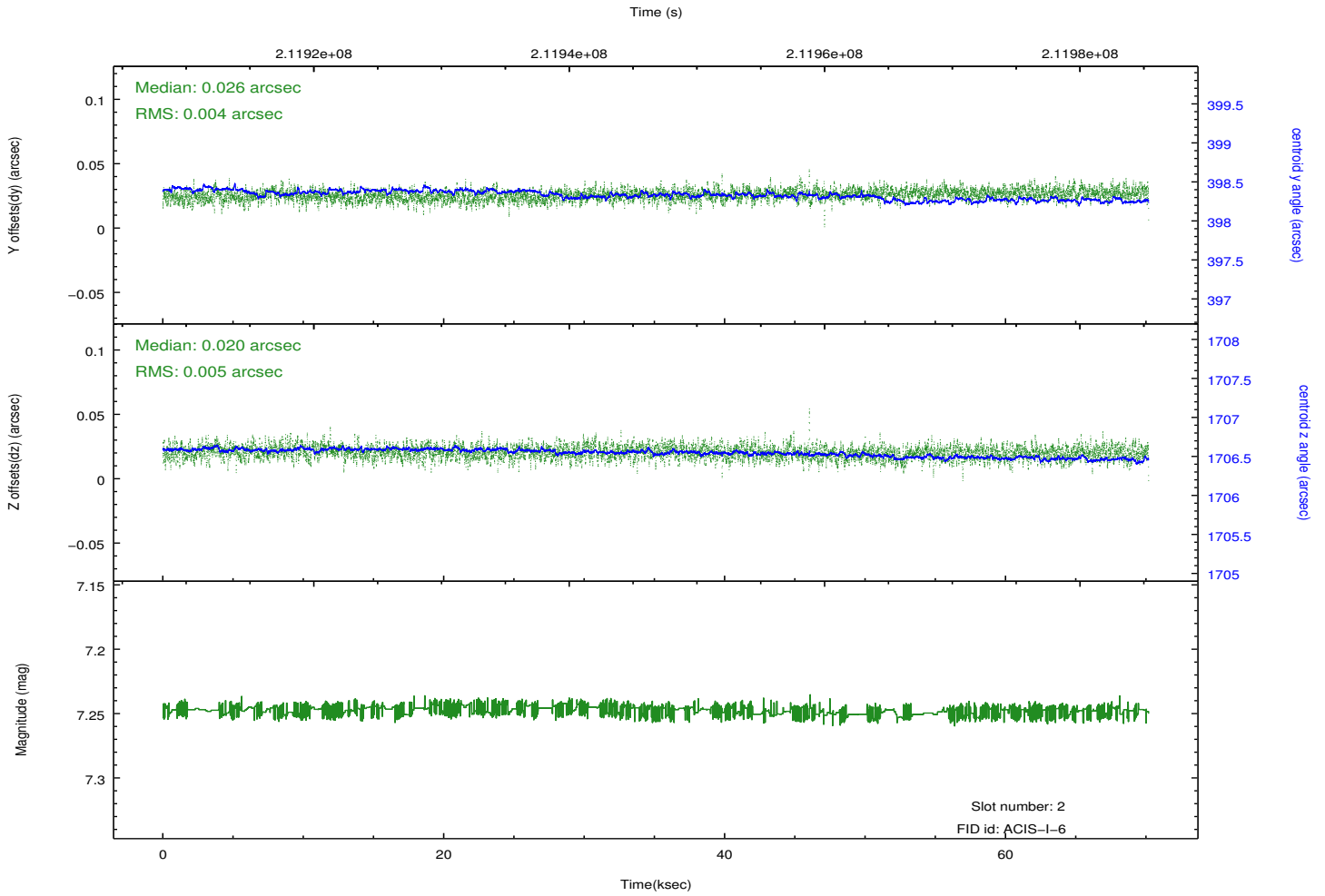
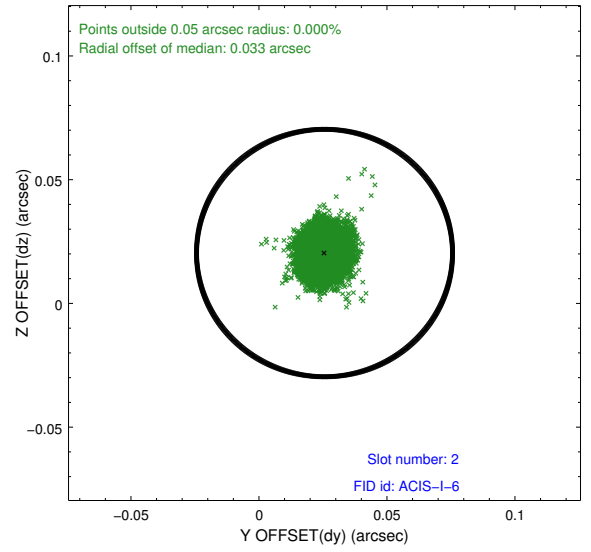
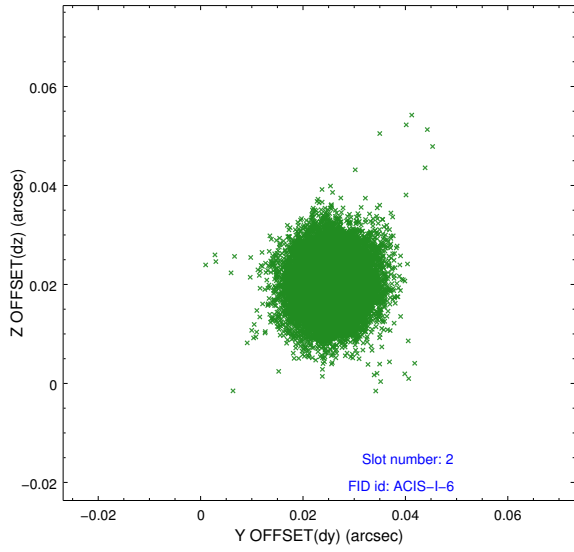
2.5.1 Slot 0



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) | 2012.12.31 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 69.774 |

A.2 Comments