

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10567 - L2 Version 2
Chandra X-Ray Center

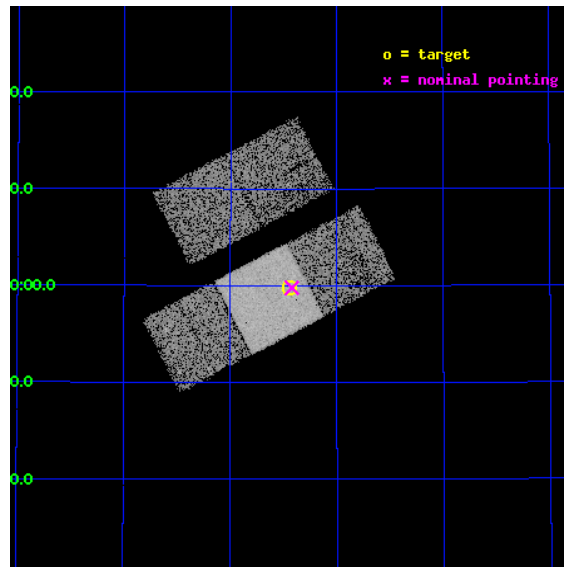
L2 Processing Date : May 30 2012

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1 Front

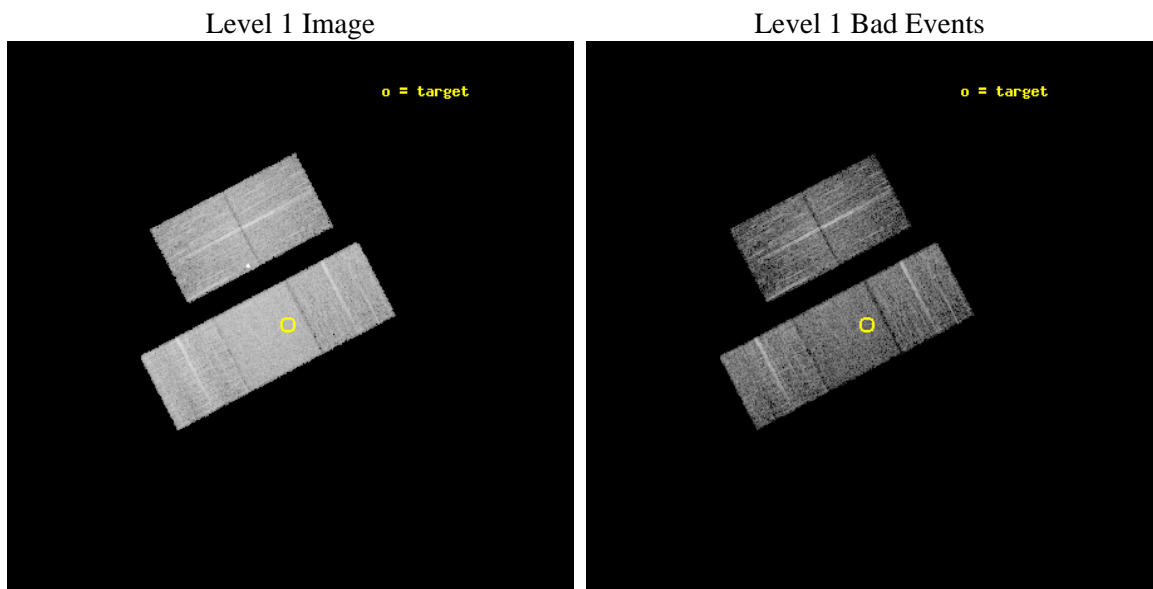
| | | |
|----------|------------------------|--|
| seq_num | 600760 | Sequence number |
| obs_id | 10567 | Observation id |
| title | The Most Luminous ULXs | Proposal title |
| observer | Douglas Swartz | Principal investigator |
| object | Arp 283 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 139.362083 | Observer's specified target RA [deg] |
| dec_targ | 41.996667 | Observer's specified target Dec [deg] |
| ra_nom | 139.35560719955 | Nominal RA [deg] |
| dec_nom | 41.996247499007 | Nominal Dec [deg] |
| roll_nom | 152.39844899739 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 5180.1000398397 | Sum of GTIs [s] |
| livetime | 5112.4182192851 | Livetime [s] |
| ontime2 | 5180.1000398397 | Sum of GTIs [s] |
| ontime3 | 5180.1000398397 | Sum of GTIs [s] |
| ontime6 | 5180.1000398397 | Sum of GTIs [s] |
| ontime7 | 5180.1000398397 | Sum of GTIs [s] |
| ontime8 | 5180.1000398397 | Sum of GTIs [s] |
| l2events | 53662 | Number of level 2 events |



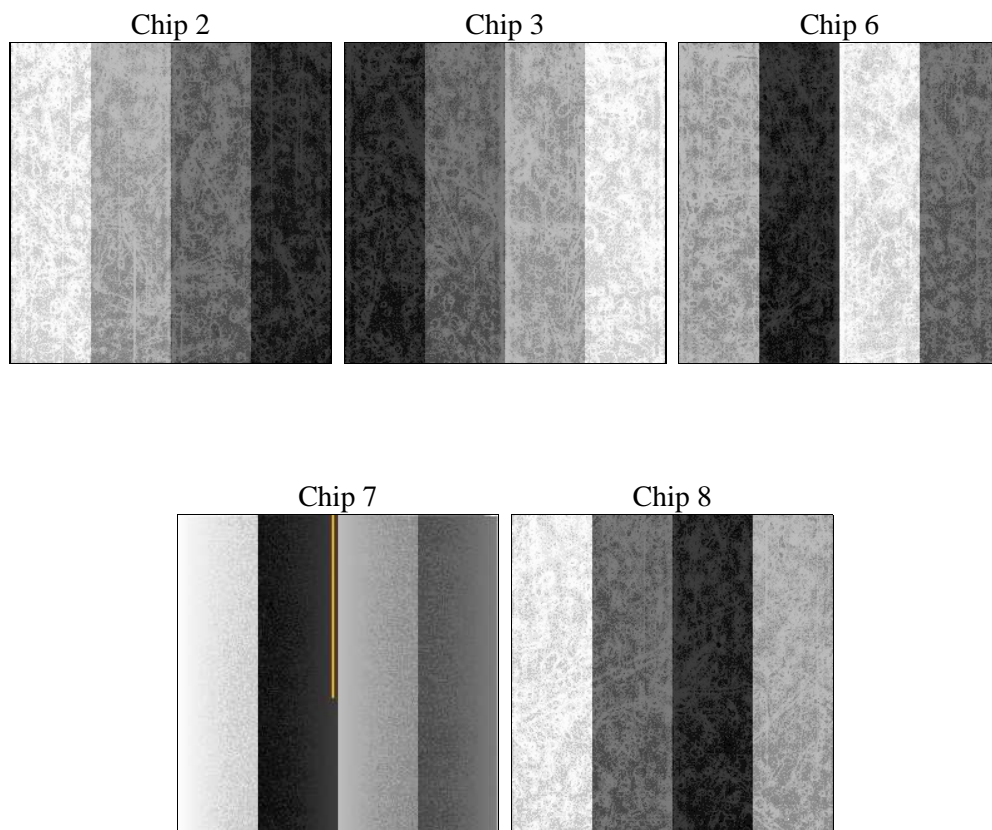
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 5000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 5180.1000398397 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime2 | 5180.1000398397 | Sum of GTIs [s] |
| date | 2012-05-30T05:41:45 | Date and time of file creation | ontime3 | 5180.1000398397 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime6 | 5180.1000398397 | Sum of GTIs [s] |
| | | | ontime7 | 5180.1000398397 | Sum of GTIs [s] |
| | | | ontime8 | 5180.1000398397 | Sum of GTIs [s] |
| | | | l1events | 340809 | Number of level 1 events |

2.1.4 Events

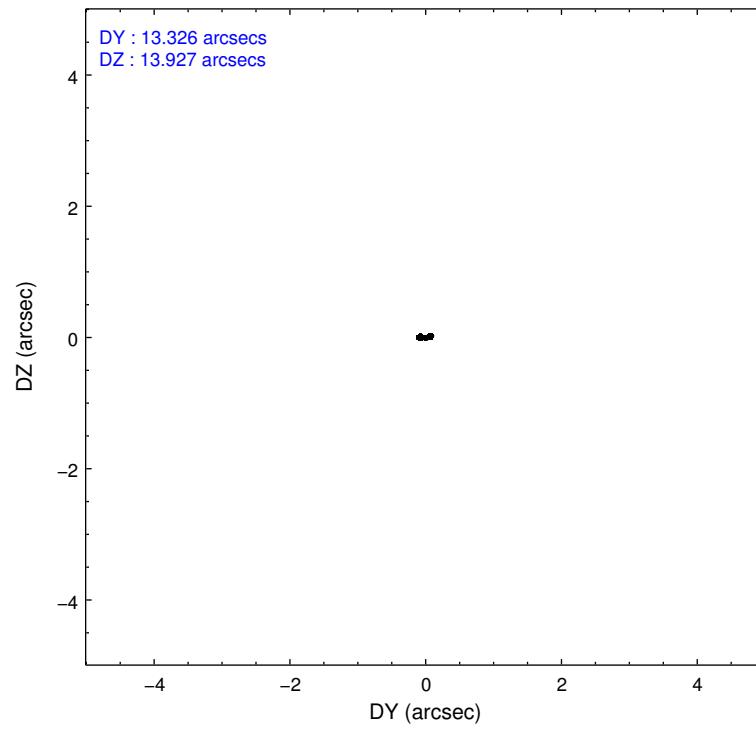
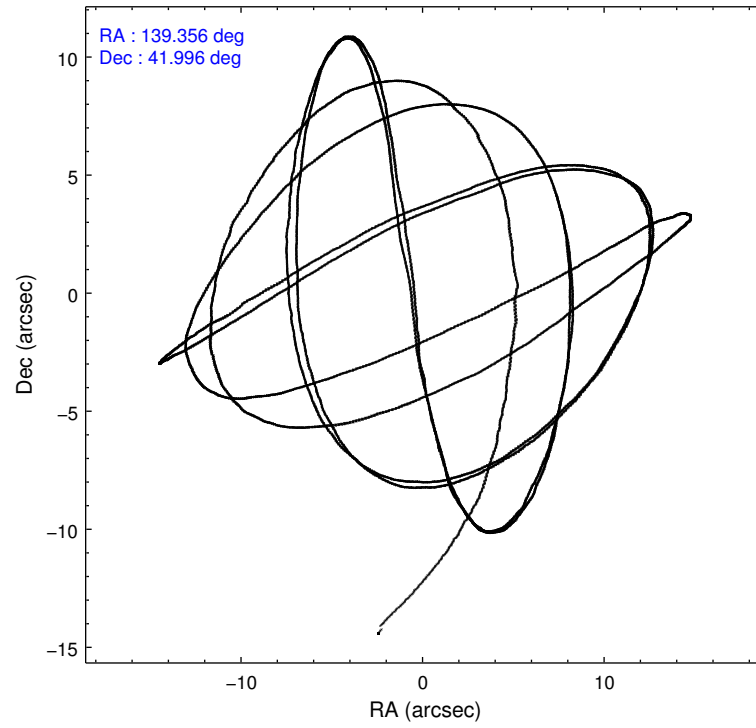
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 57158 | 61995 | 60971 | 83561 | 77124 |
| rejected events | 50921 | 54397 | 54468 | 52601 | 61179 |
| rejected % | 89% | 87% | 89% | 62% | 79% |

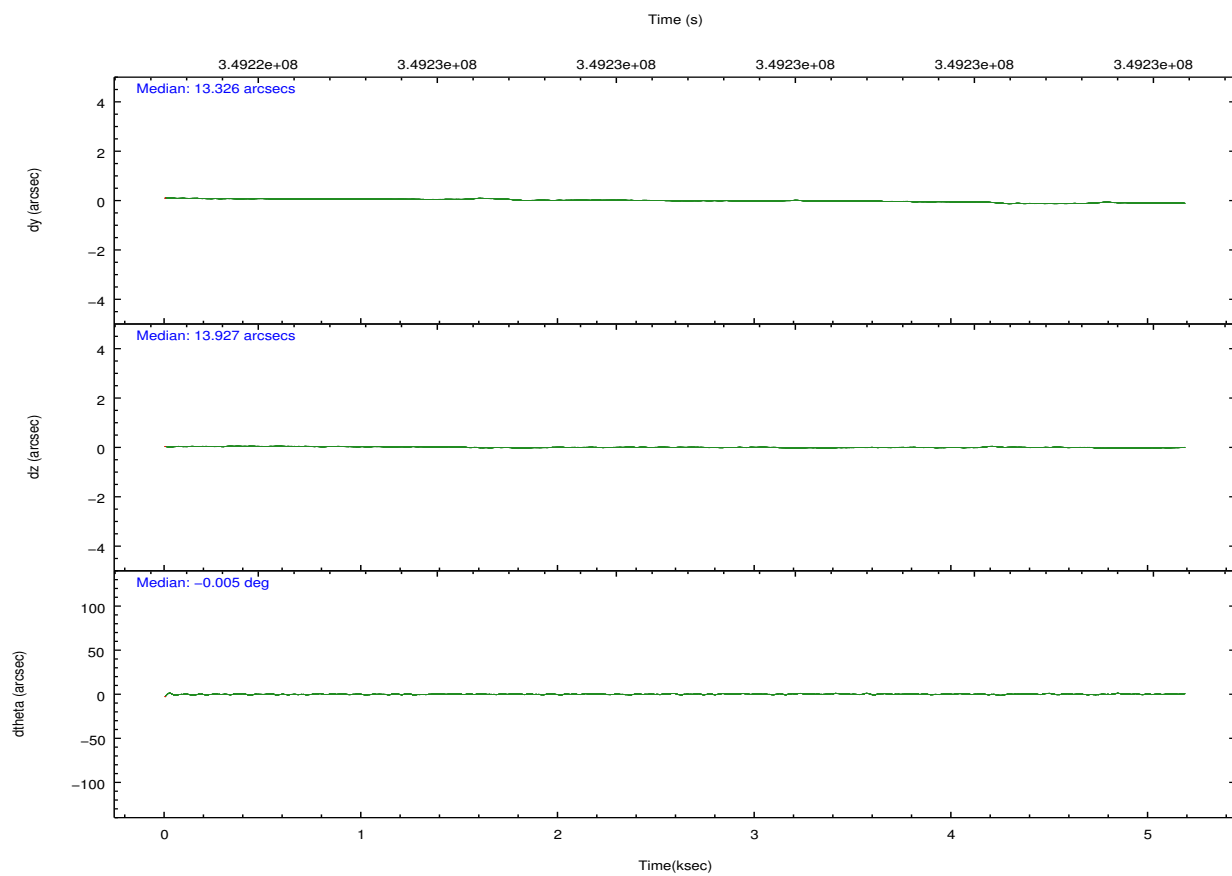
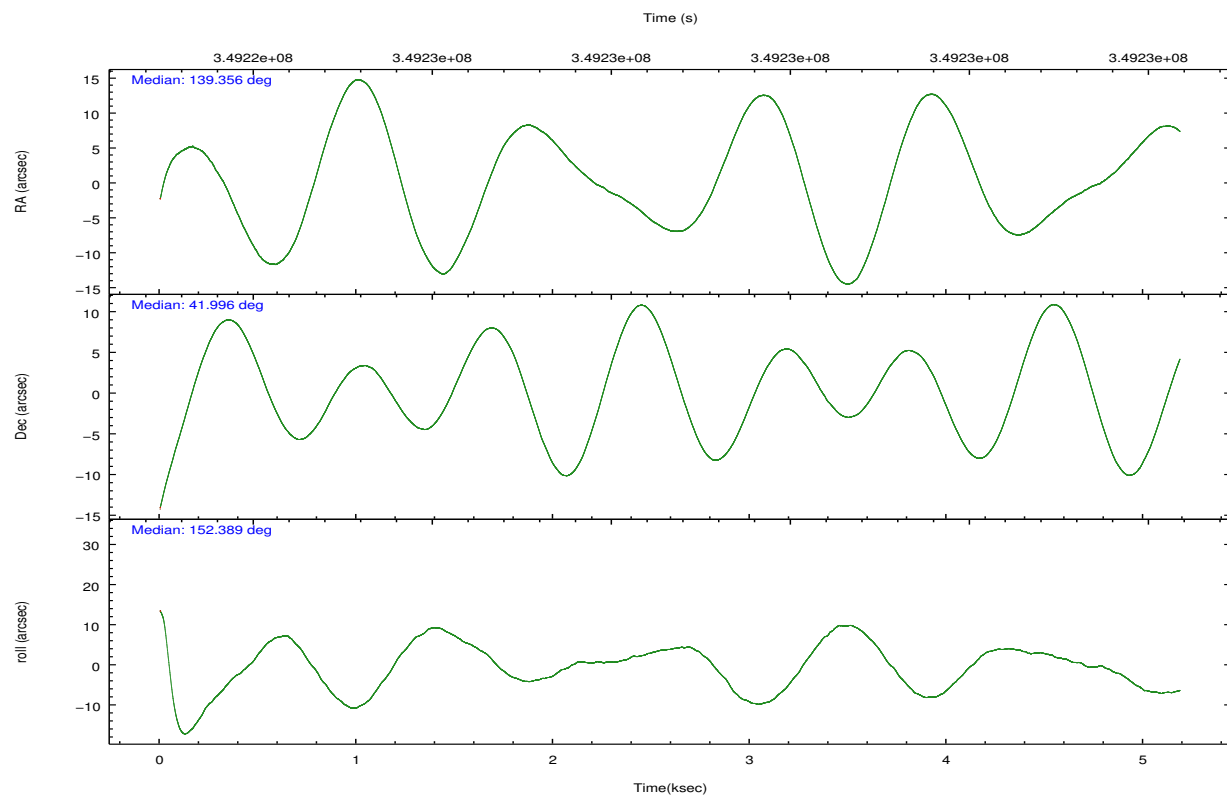
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 2892 | 4443 | 2769 | 3061 | 5645 |
| | 5% | 7% | 4% | 3% | 7% |
| grade 1 events | 42 | 50 | 33 | 97 | 68 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 1432 | 1391 | 1667 | 7119 | 3952 |
| | 2% | 2% | 2% | 8% | 5% |
| grade 3 events | 677 | 701 | 636 | 2831 | 1732 |
| | 1% | 1% | 1% | 3% | 2% |
| grade 4 events | 631 | 645 | 667 | 2823 | 1707 |
| | 1% | 1% | 1% | 3% | 2% |
| grade 5 events | 2420 | 2882 | 2876 | 7785 | 3820 |
| | 4% | 4% | 4% | 9% | 4% |
| grade 6 events | 1296 | 1291 | 1540 | 18504 | 4440 |
| | 2% | 2% | 2% | 22% | 5% |
| grade 7 events | 47768 | 50592 | 50783 | 41341 | 55760 |
| | 83% | 81% | 83% | 49% | 72% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-23678 | ACIS-23678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 139.392305 | 139.3556071995548 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | 41.997834 | 41.99624749900707 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 152.217195 | 152.3984489973905 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | CCD S4 on | Y | Y |
| [s] Observation start time (MET) | 349224927.184000 | 349223488.09999 | CCD S5 on | N | N |
| Observation start date | 2009-01-24T22:54:21 | 2009-01-24T22:31:28 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 349229927.184000 | 349230894.75036 | On-chip summing requested | N | N |
| Observation end date | 2009-01-25T00:17:41 | 2009-01-25T00:34:54 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



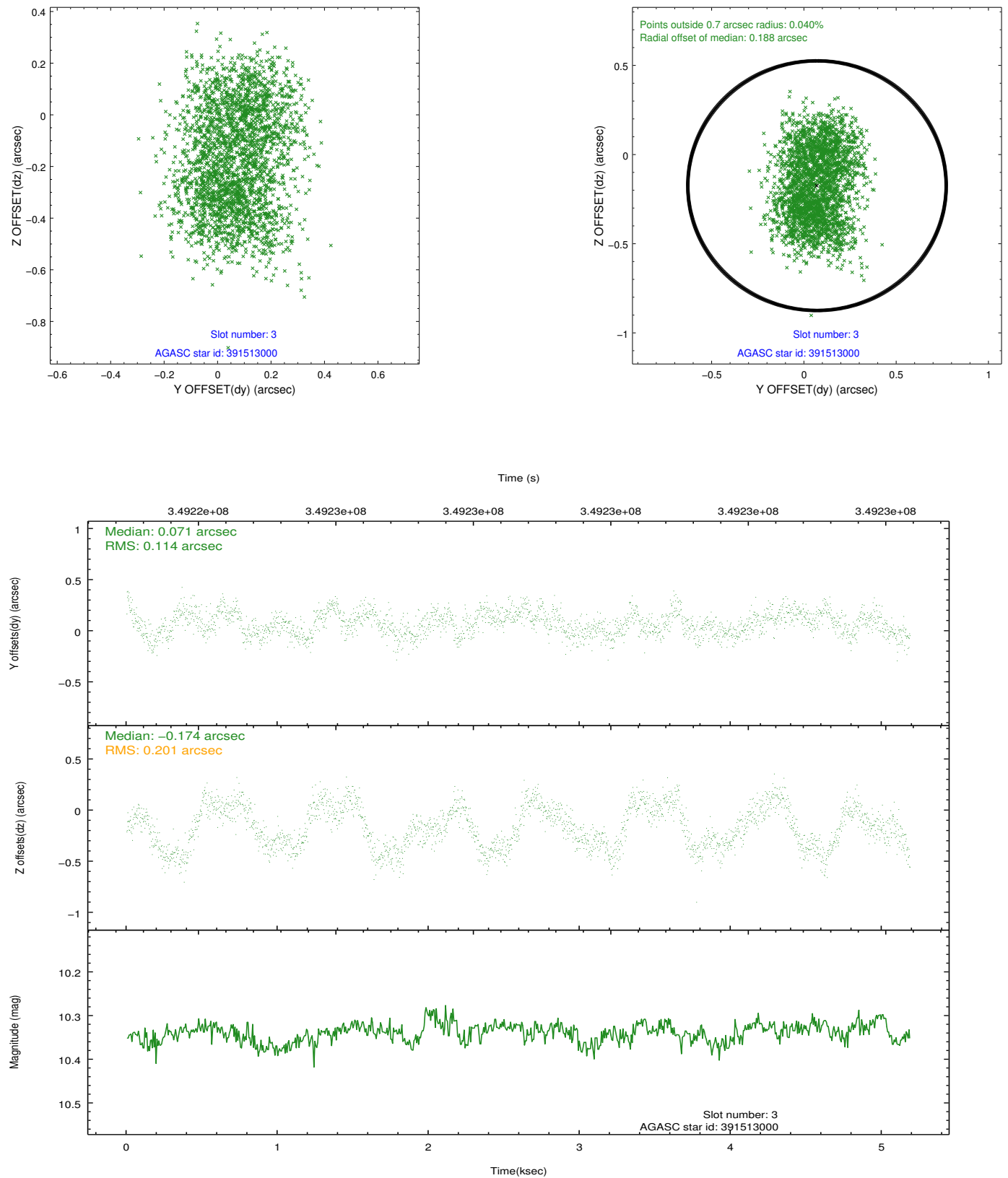


Slot Statistics

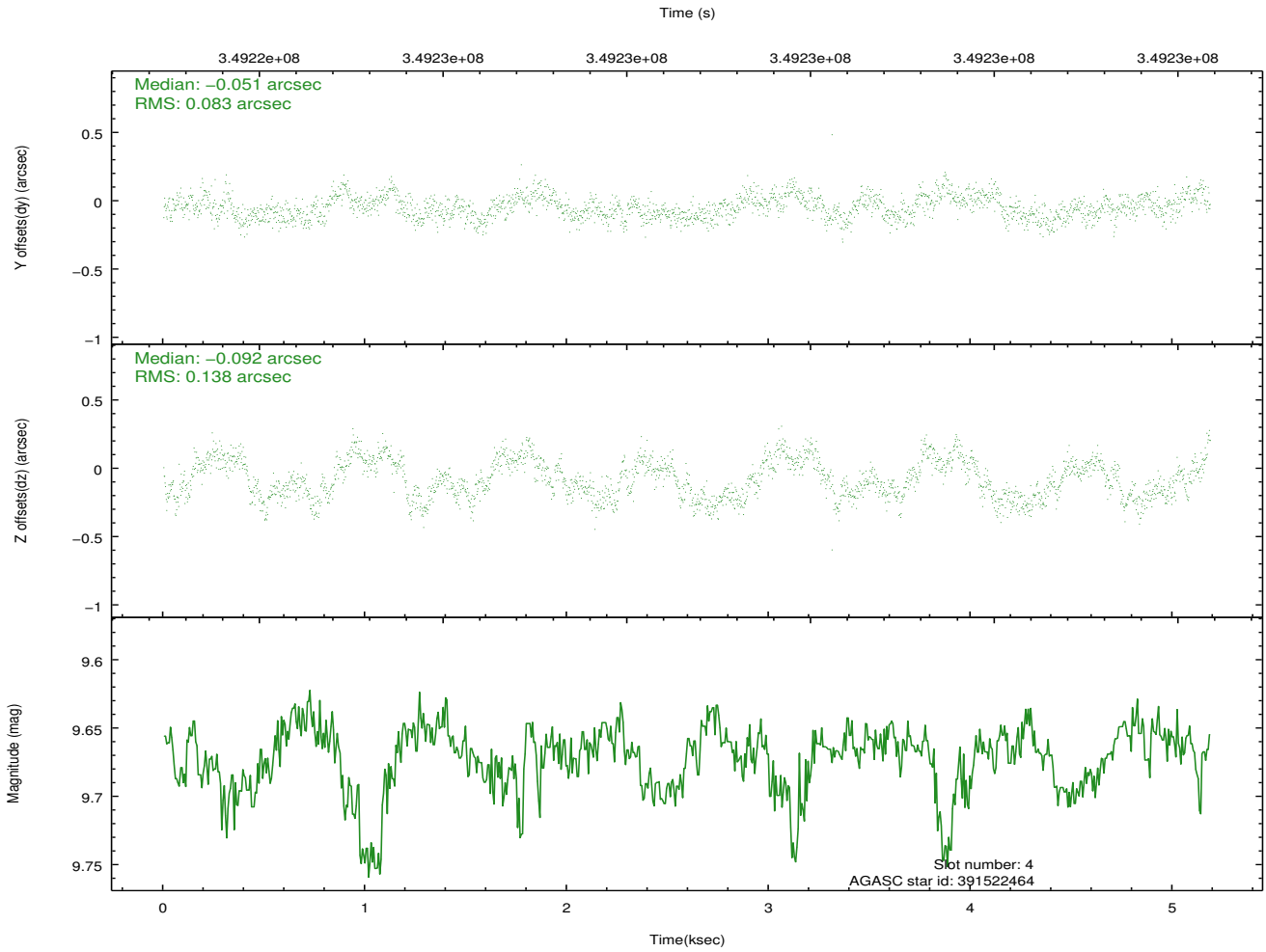
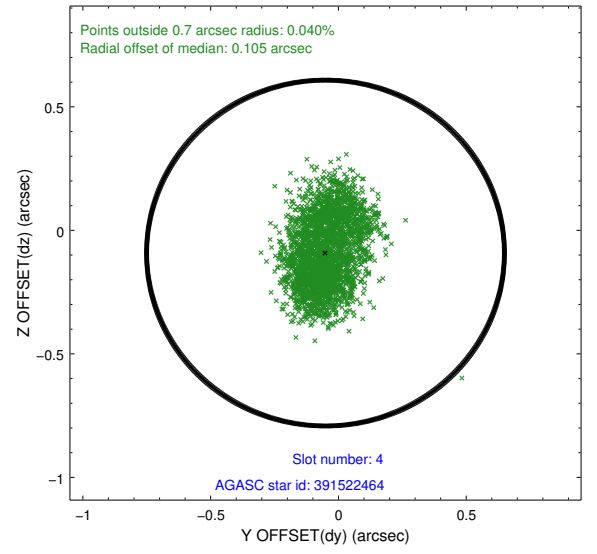
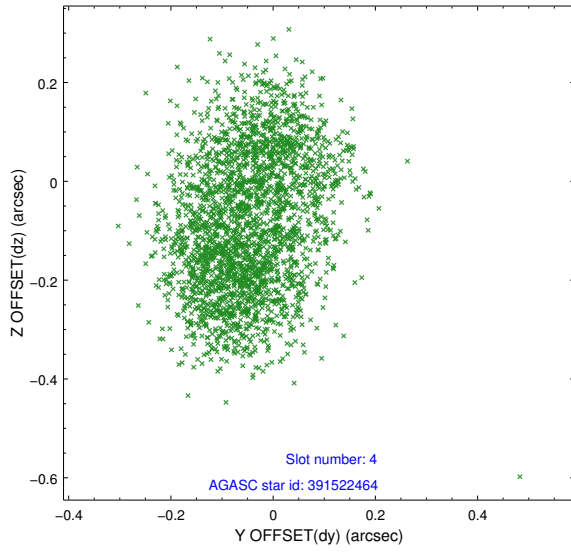
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.09 | 1265 | 0.054 | -0.005 | 0.007 | 0.012 | 0.000000 | 0.000000 | 929.84 | -1730.92 |
| 1 | FID | ACIS-S-4 | 7.08 | 1265 | 0.111 | -0.018 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2147.95 | 172.02 |
| 2 | FID | ACIS-S-5 | 7.12 | 1265 | -0.192 | 0.036 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1817.78 | 166.99 |
| 3 | GUIDE | 391513000 | 10.34 | 2525 | 0.071 | -0.174 | 0.253 | 0.378 | 139.502720 | 41.287876 | -1455.11 | 2123.62 |
| 4 | GUIDE | 391522464 | 9.67 | 2527 | -0.051 | -0.092 | 0.177 | 0.265 | 138.966017 | 41.666181 | 458.37 | 1589.03 |
| 5 | GUIDE | 391906008 | 8.35 | 2528 | -0.113 | 0.145 | 0.069 | 0.106 | 139.782047 | 42.516852 | -42.11 | -2136.46 |
| 6 | GUIDE | 391525768 | 9.28 | 2526 | 0.211 | 0.042 | 0.118 | 0.193 | 139.553312 | 42.045291 | -300.32 | -353.00 |
| 7 | GUIDE | 391905880 | 8.41 | 2529 | -0.121 | 0.073 | 0.070 | 0.111 | 138.774143 | 42.573728 | 2419.26 | -1075.27 |

2.4 Star Slots

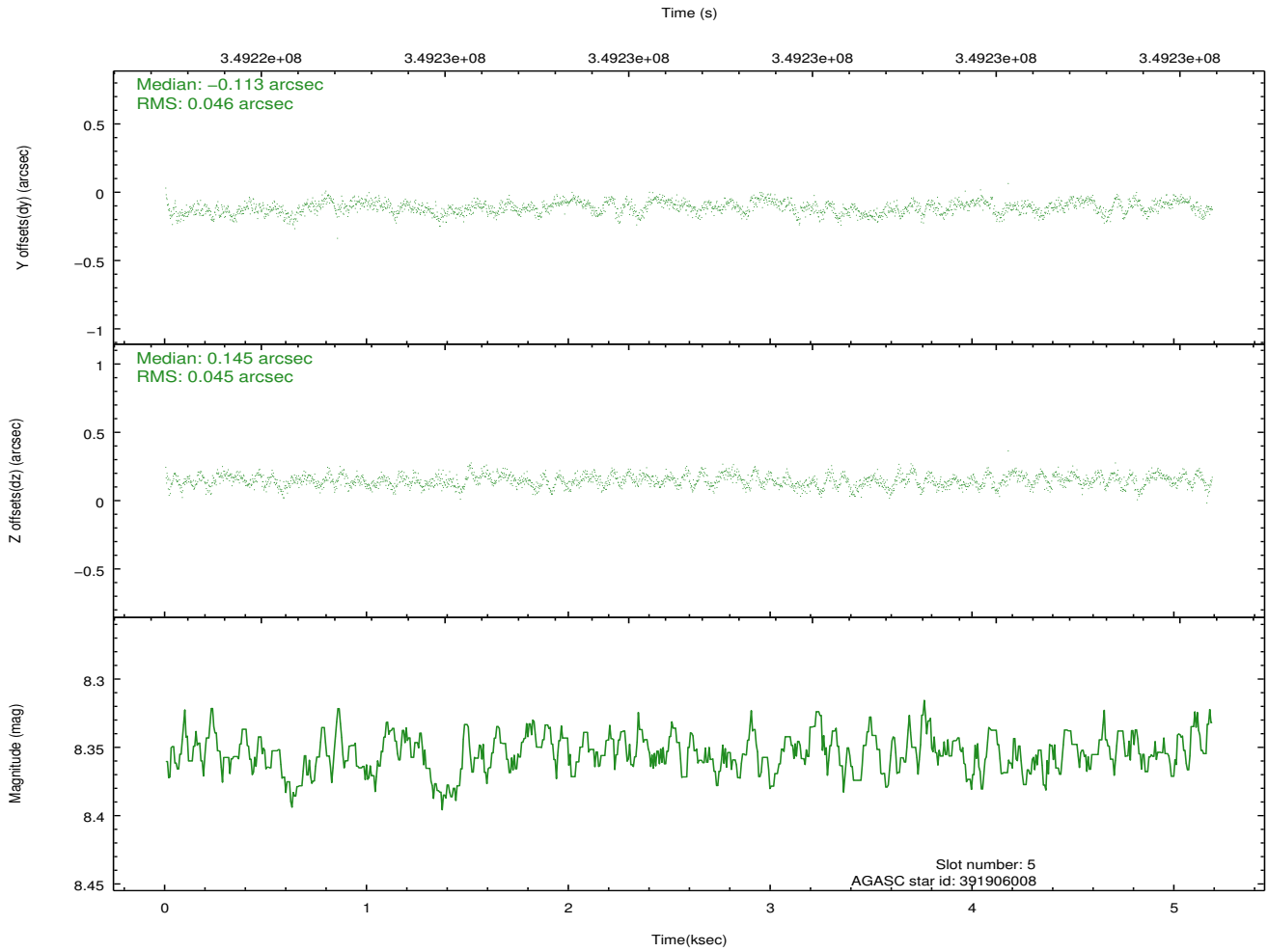
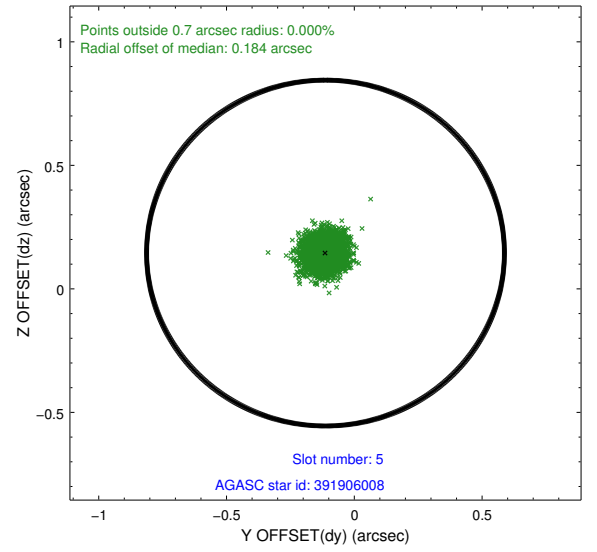
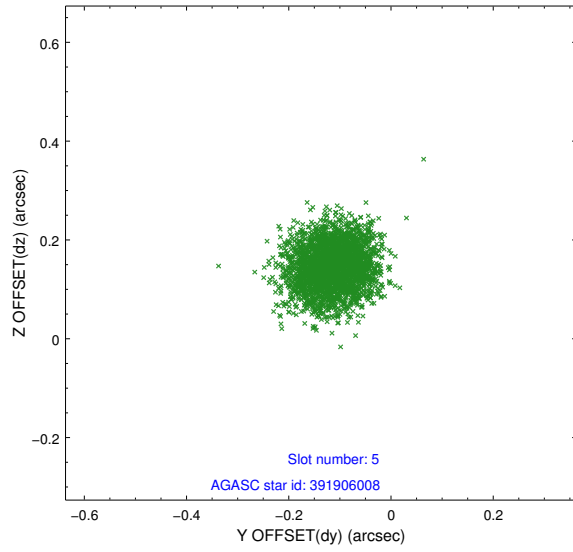
2.4.1 Slot 3



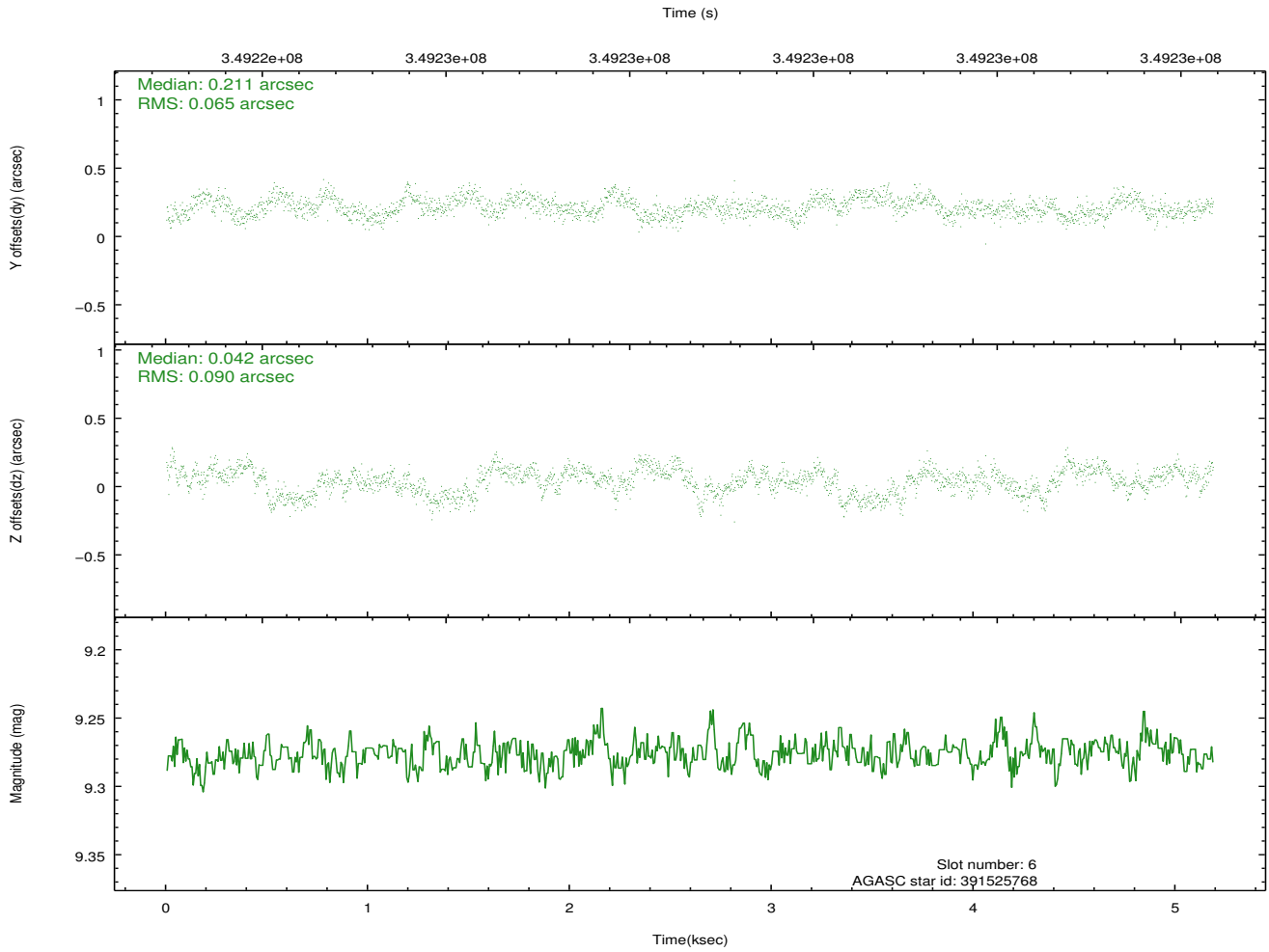
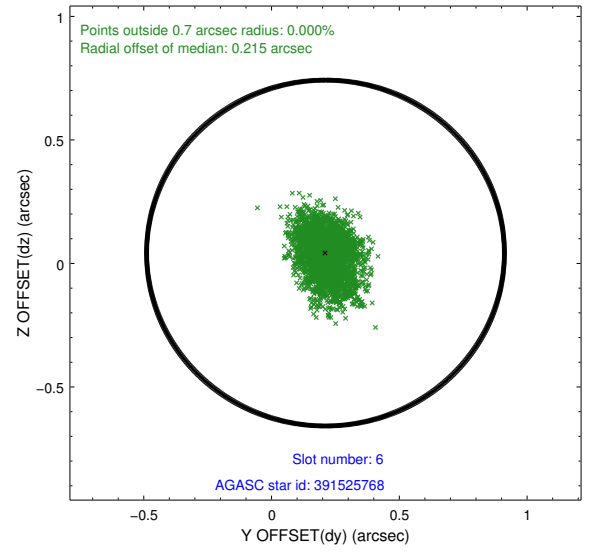
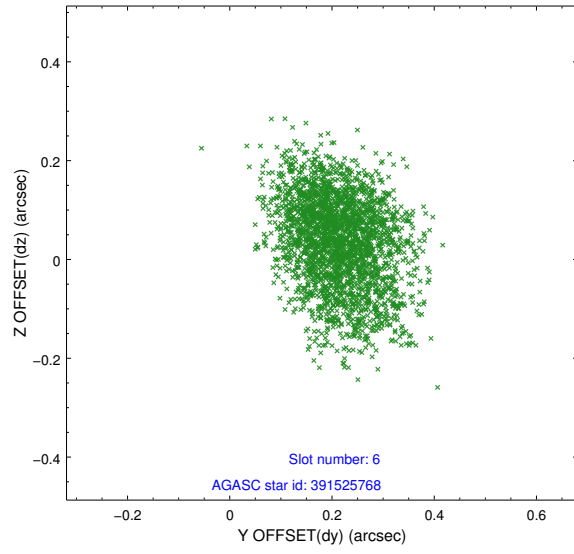
2.4.2 Slot 4



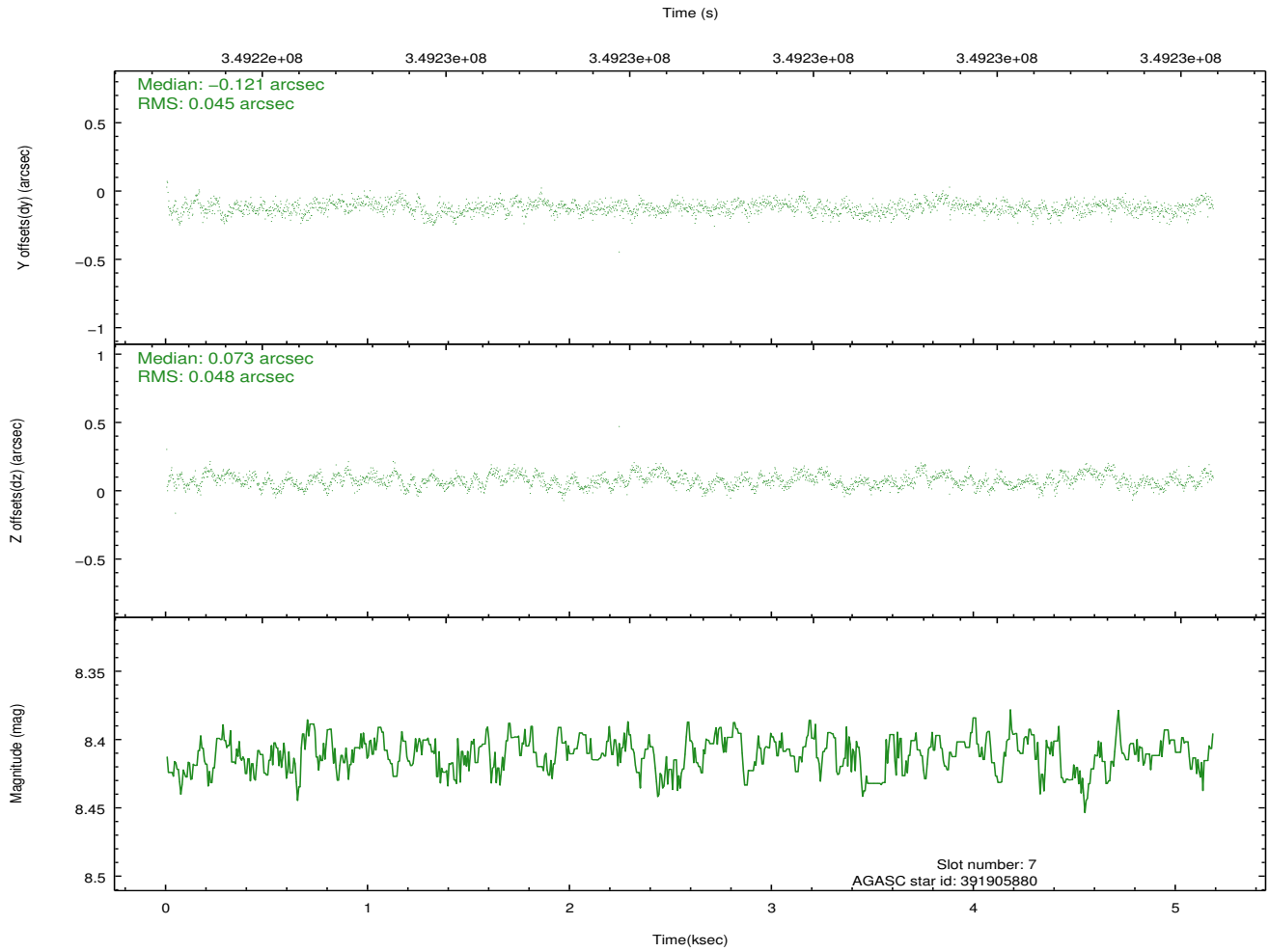
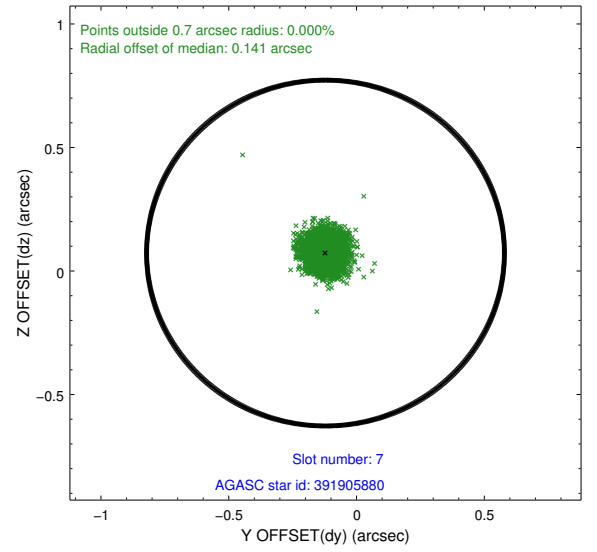
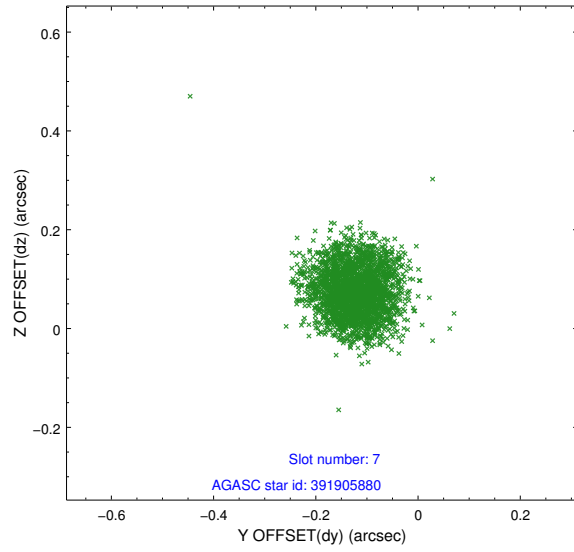
2.4.3 Slot 5



2.4.4 Slot 6

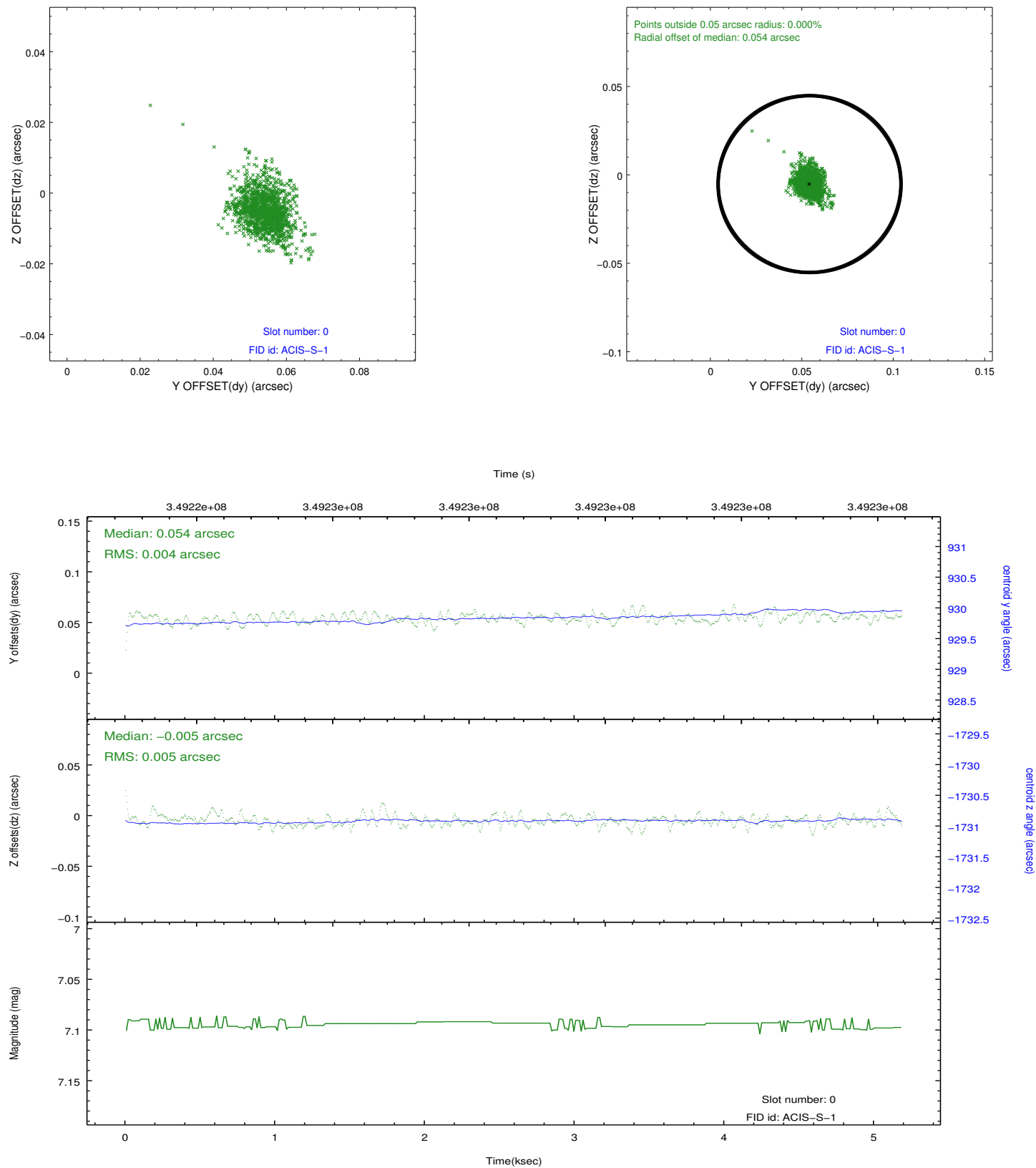


2.4.5 Slot 7

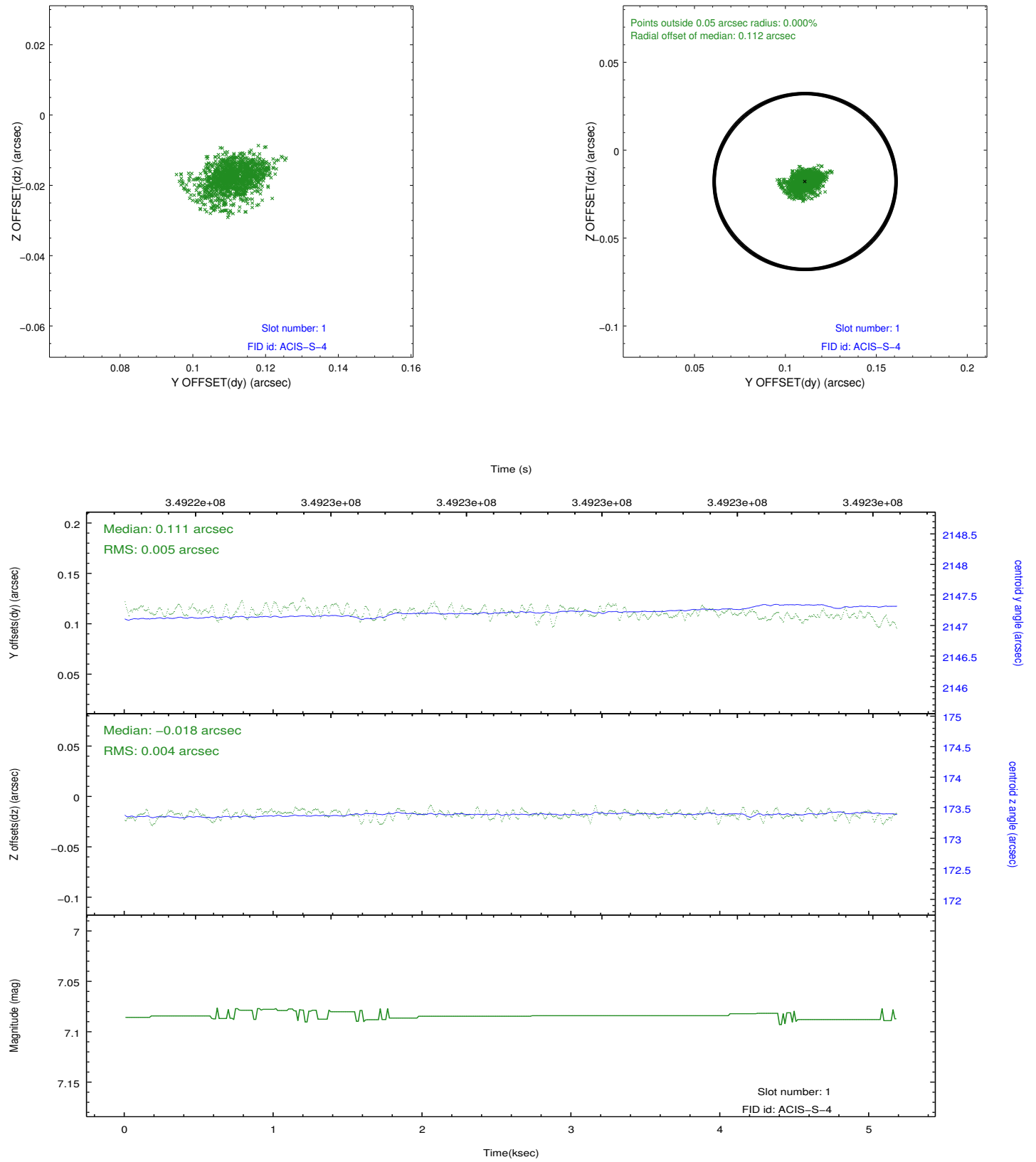


2.5 FID Slots

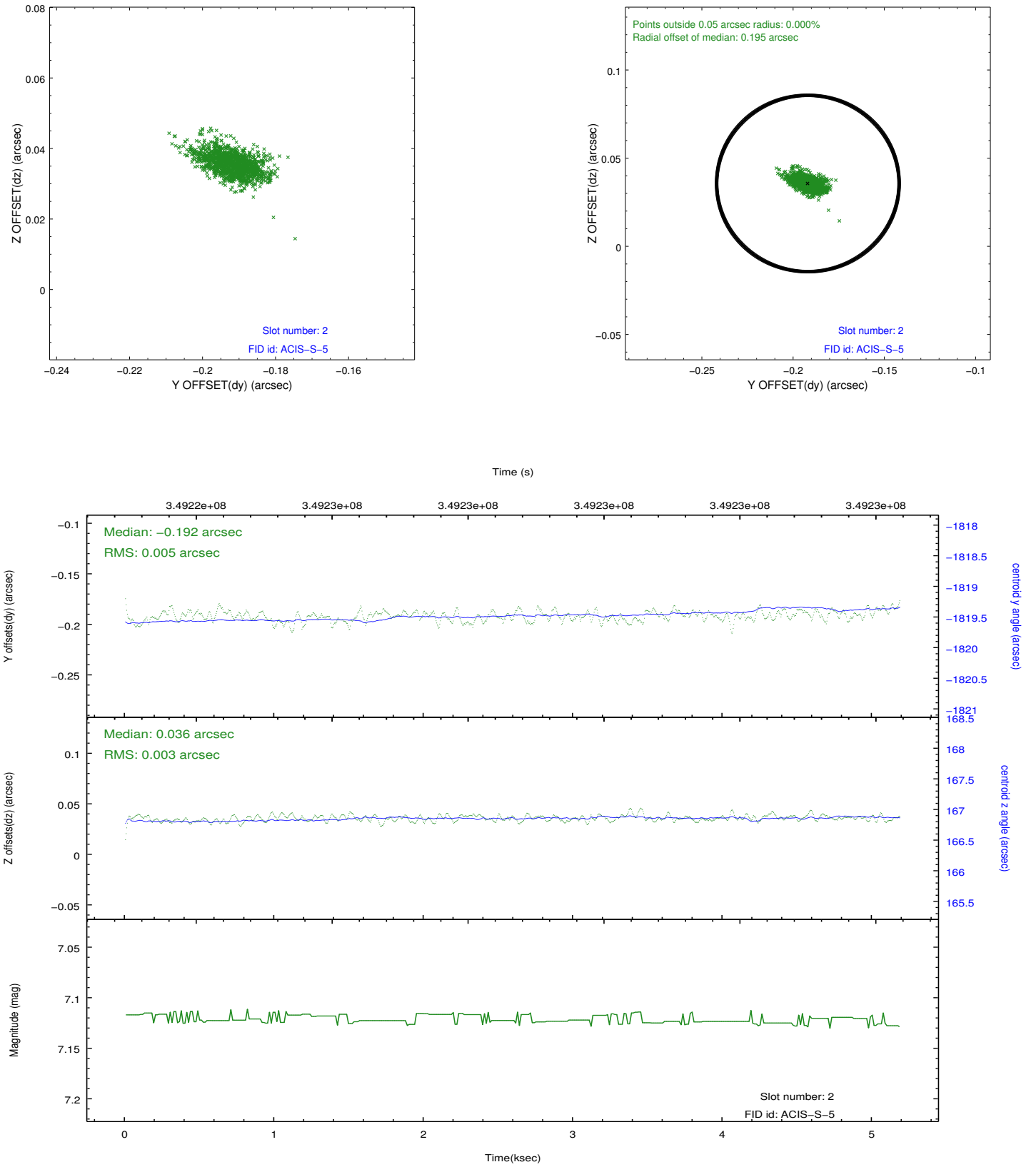
2.5.1 Slot 0



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) | 2012.06.04 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.18010003 |

A.2 Comments