

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4488 - L2 Version 3
Chandra X-Ray Center

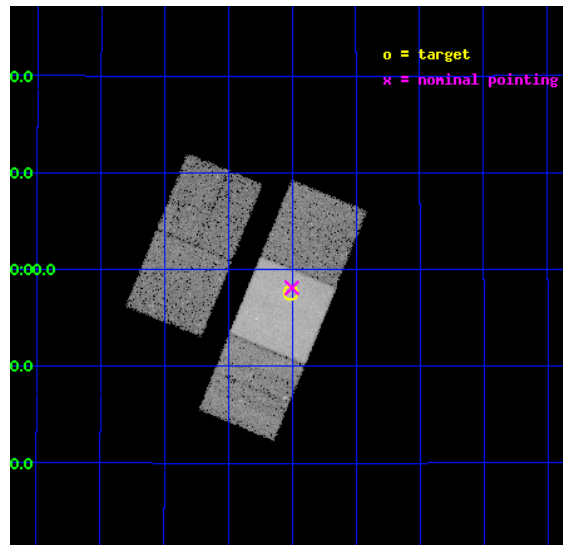
L2 Processing Date : Nov 7 2012

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1 Front

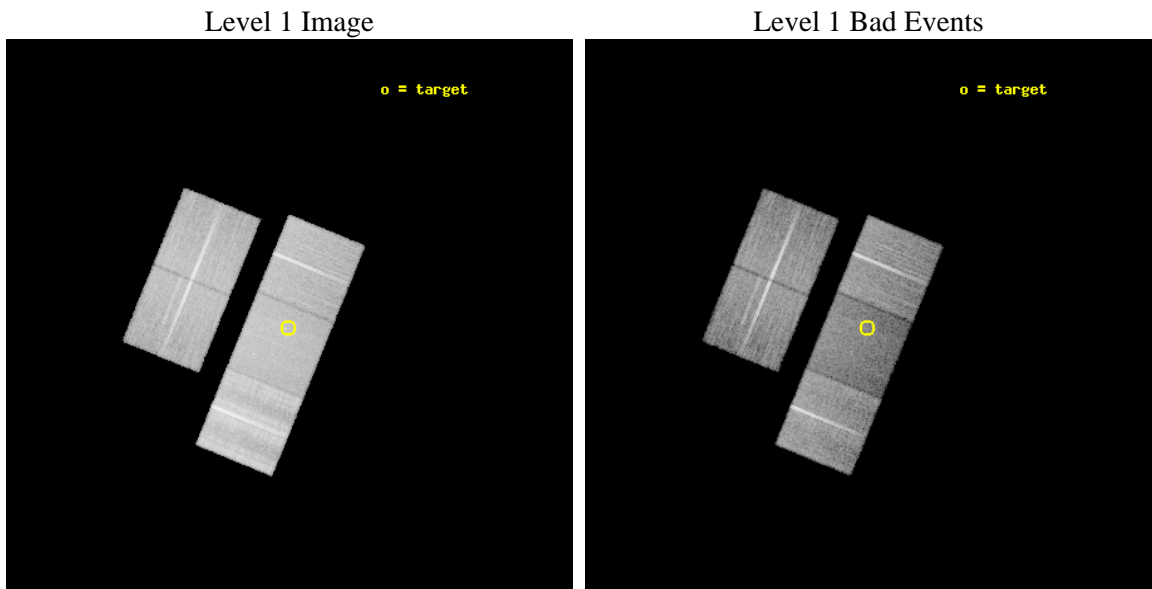
| | | |
|----------|--|---|
| seq_num | 200257 | Sequence number |
| obs_id | 4488 | Observation id |
| title | SHOCKS AND X-RAYS IN PROTOSTELLAR JETS | Proposal title |
| observer | Prof. Manuel Guedel | Principal investigator |
| object | FS Tau AB | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 65.502917 | Observer's specified target RA [deg] |
| dec_targ | 26.95925 | Observer's specified target Dec [deg] |
| ra_nom | 65.500605199529 | Nominal RA [deg] |
| dec_nom | 26.968701681156 | Nominal Dec [deg] |
| roll_nom | 112.24984059684 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 30066.89994216 | Sum of GTIs [s] |
| livetime | 29674.053759486 | Livetime [s] |
| ontime2 | 30063.758961916 | Sum of GTIs [s] |
| ontime3 | 30060.617961764 | Sum of GTIs [s] |
| ontime6 | 30063.758961916 | Sum of GTIs [s] |
| ontime7 | 30066.89994216 | Sum of GTIs [s] |
| ontime8 | 30060.617971689 | Sum of GTIs [s] |
| l2events | 138369 | Number of level 2 events |



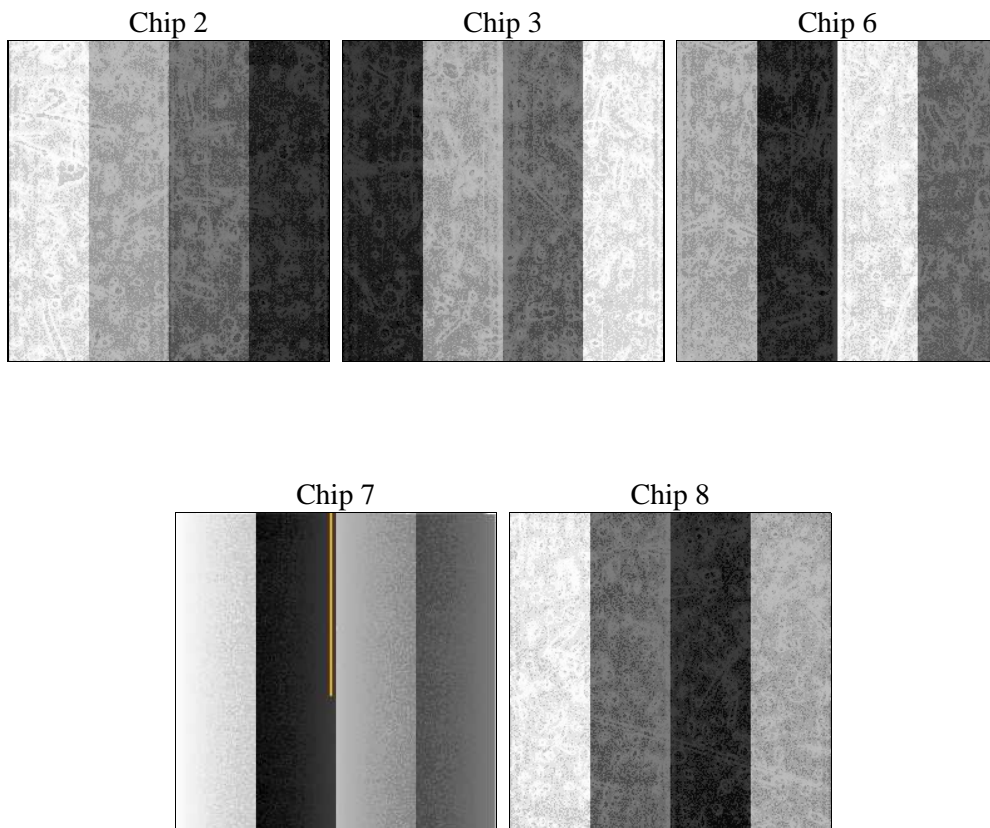
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 30000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 30066.89994216 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime2 | 30063.758961916 | Sum of GTIs [s] |
| date | 2012-11-07T23:02:42 | Date and time of file creation | ontime3 | 30060.617961764 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 30063.758961916 | Sum of GTIs [s] |
| | | | ontime7 | 30066.89994216 | Sum of GTIs [s] |
| | | | ontime8 | 30060.617971689 | Sum of GTIs [s] |
| | | | l1events | 936345 | Number of level 1 events |

2.1.4 Events

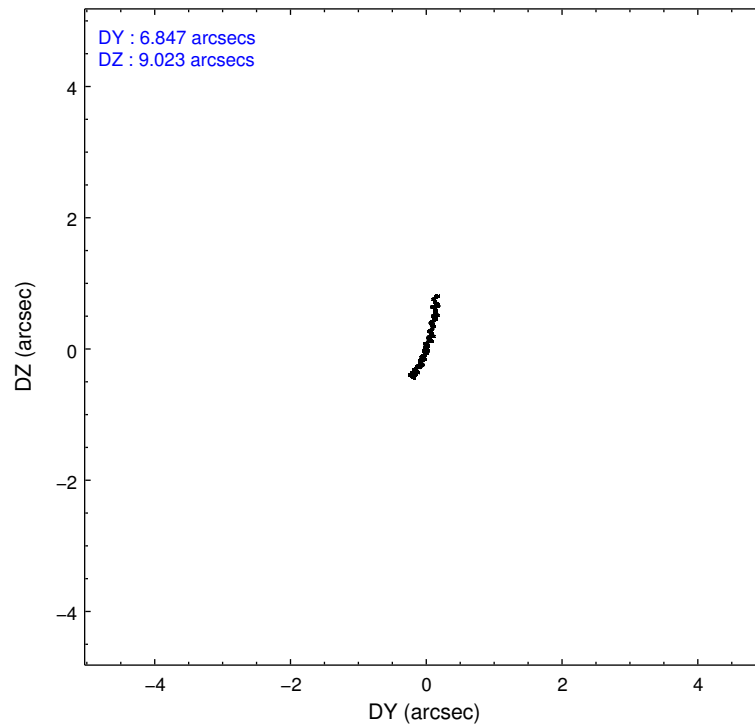
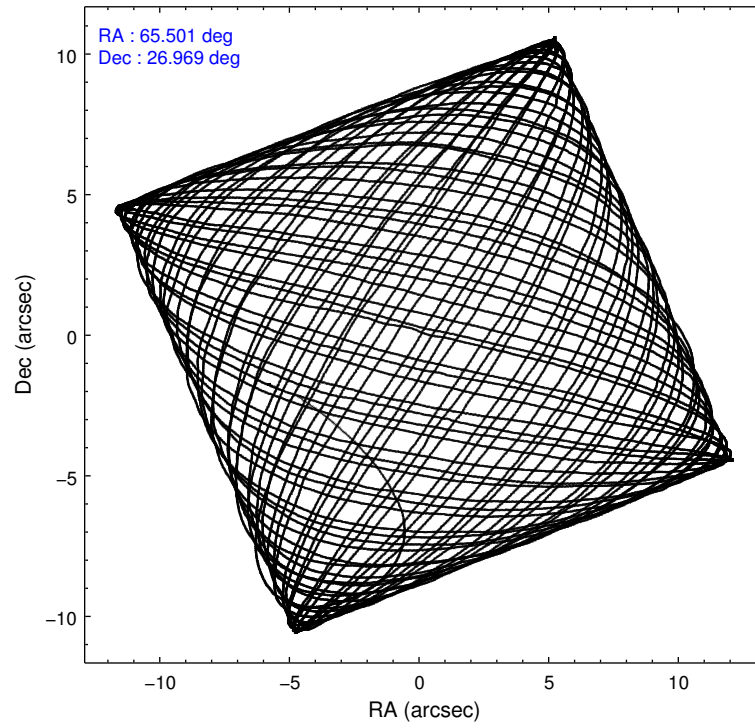
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 163354 | 159132 | 166267 | 194006 | 253586 |
| rejected events | 146365 | 143508 | 147935 | 115006 | 161672 |
| rejected % | 89% | 90% | 88% | 59% | 63% |

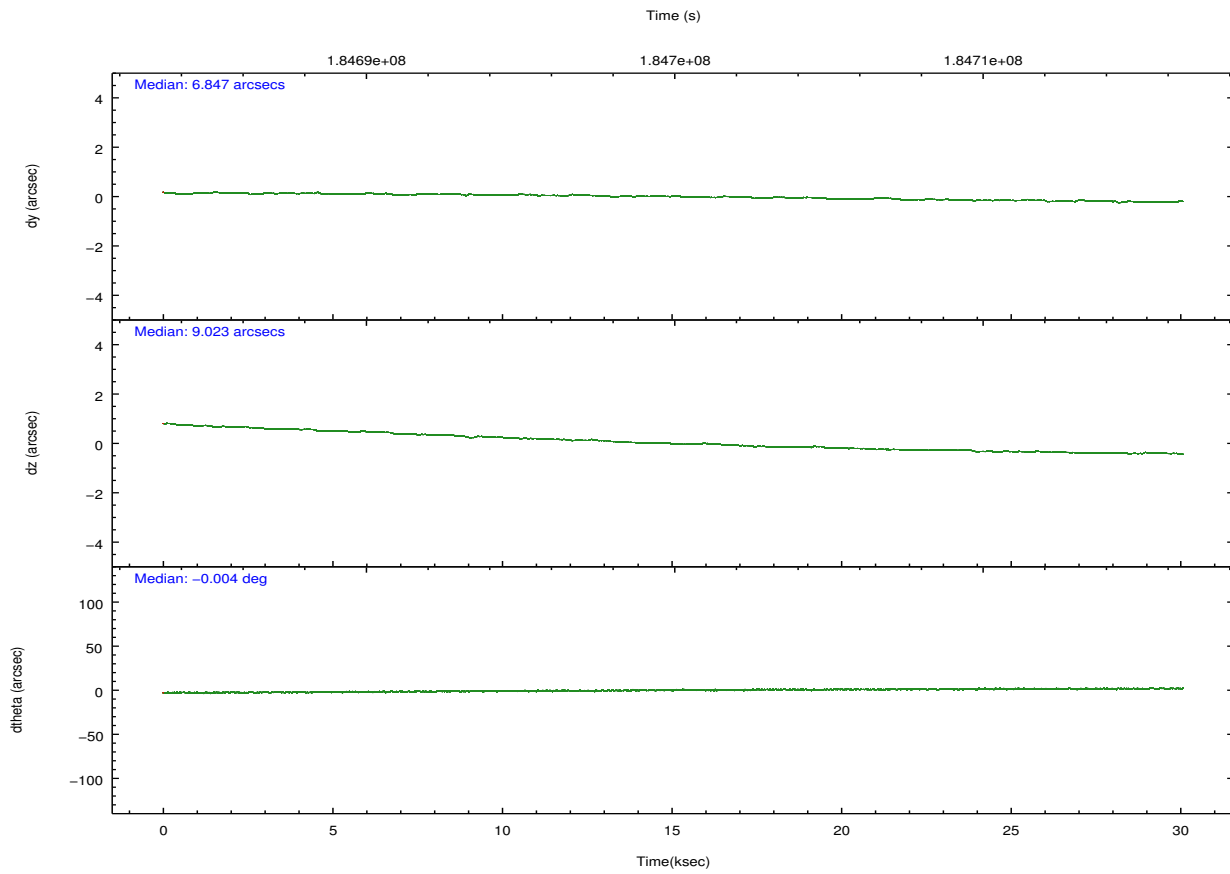
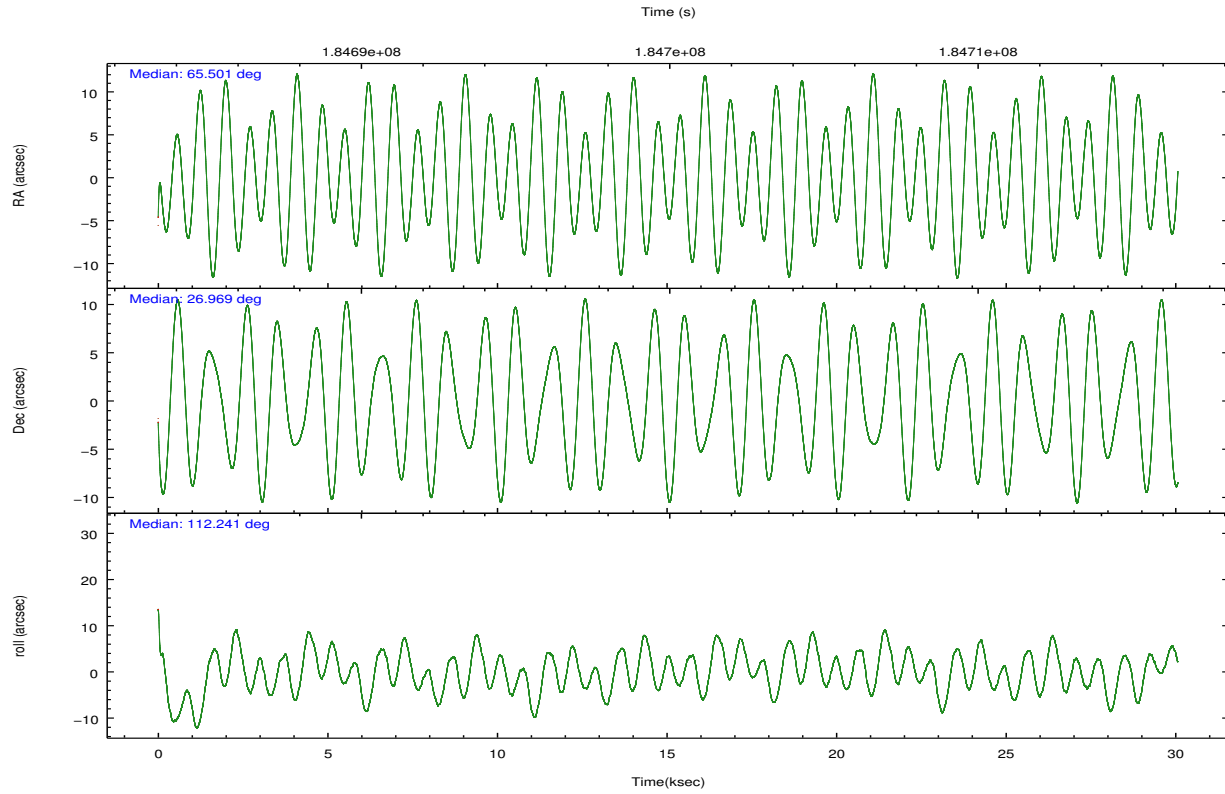
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|-------|--------|
| grade 0 events | 13073 | 12828 | 14182 | 14685 | 40600 |
| | 8% | 8% | 8% | 7% | 16% |
| grade 1 events | 114 | 107 | 90 | 163 | 308 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 5563 | 5133 | 5898 | 22470 | 15489 |
| | 3% | 3% | 3% | 11% | 6% |
| grade 3 events | 2338 | 2442 | 2529 | 10286 | 16008 |
| | 1% | 1% | 1% | 5% | 6% |
| grade 4 events | 2544 | 2416 | 2427 | 10447 | 14460 |
| | 1% | 1% | 1% | 5% | 5% |
| grade 5 events | 4611 | 5631 | 5665 | 16917 | 8356 |
| | 2% | 3% | 3% | 8% | 3% |
| grade 6 events | 4369 | 4583 | 5316 | 49396 | 18743 |
| | 2% | 2% | 3% | 25% | 7% |
| grade 7 events | 130742 | 125992 | 130160 | 69642 | 139622 |
| | 80% | 79% | 78% | 35% | 55% |

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 | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 65.525041 | 65.50060519952936 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 26.952327 | 26.9687016811558 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 112.082133 | 112.2498405968351 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 184684976.184000 | 184683478.36002 | | | |
| Observation start date | 2003-11-08T13:21:52 | 2003-11-08T12:57:58 | | | |
| [s] Observation end time (MET) | 184714976.184000 | 184715794.56142 | | | |
| Observation end date | 2003-11-08T21:41:52 | 2003-11-08T21:56:34 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



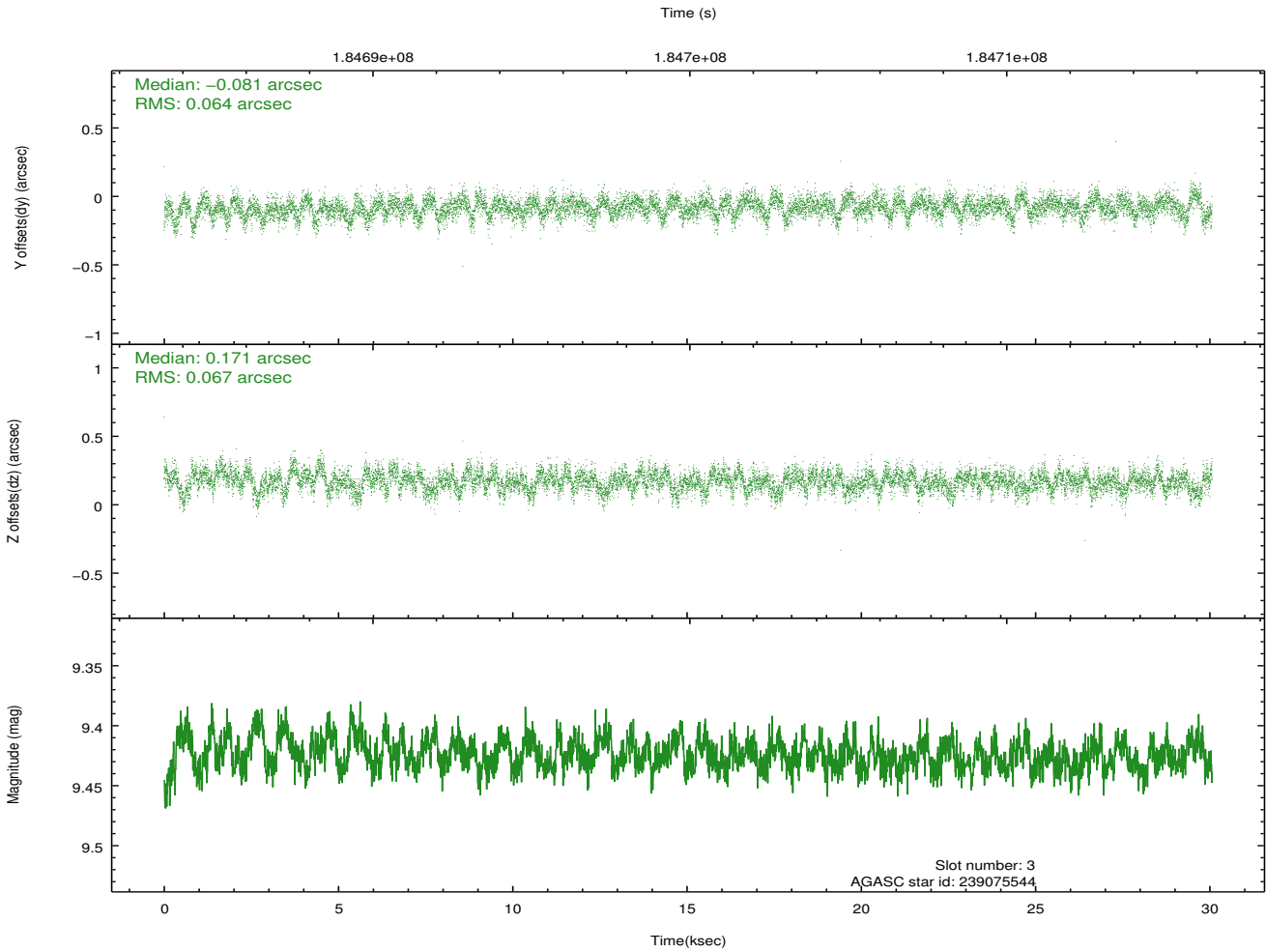
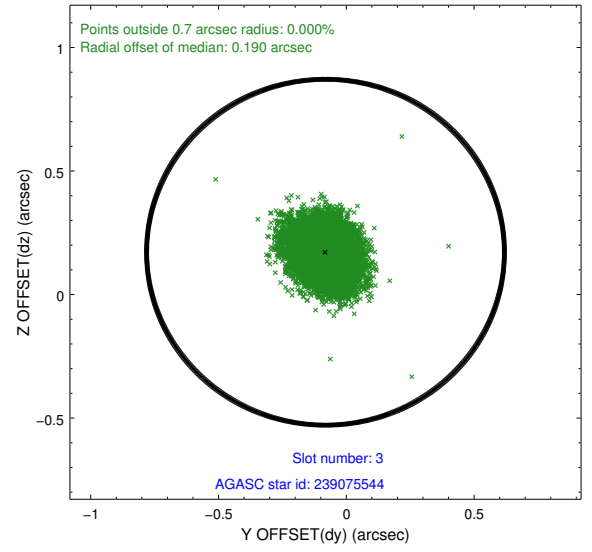
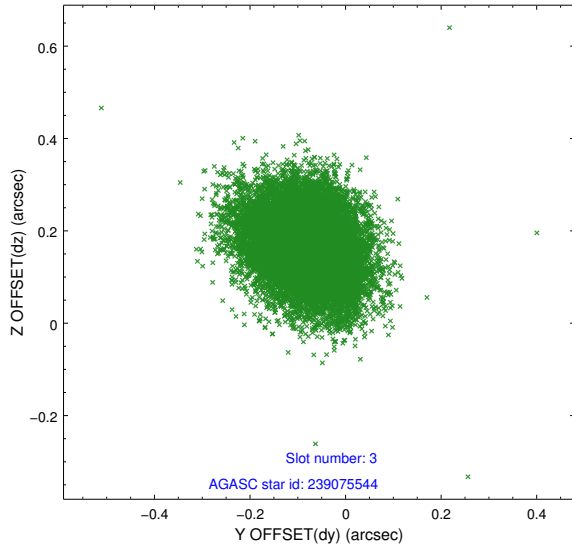


Slot Statistics

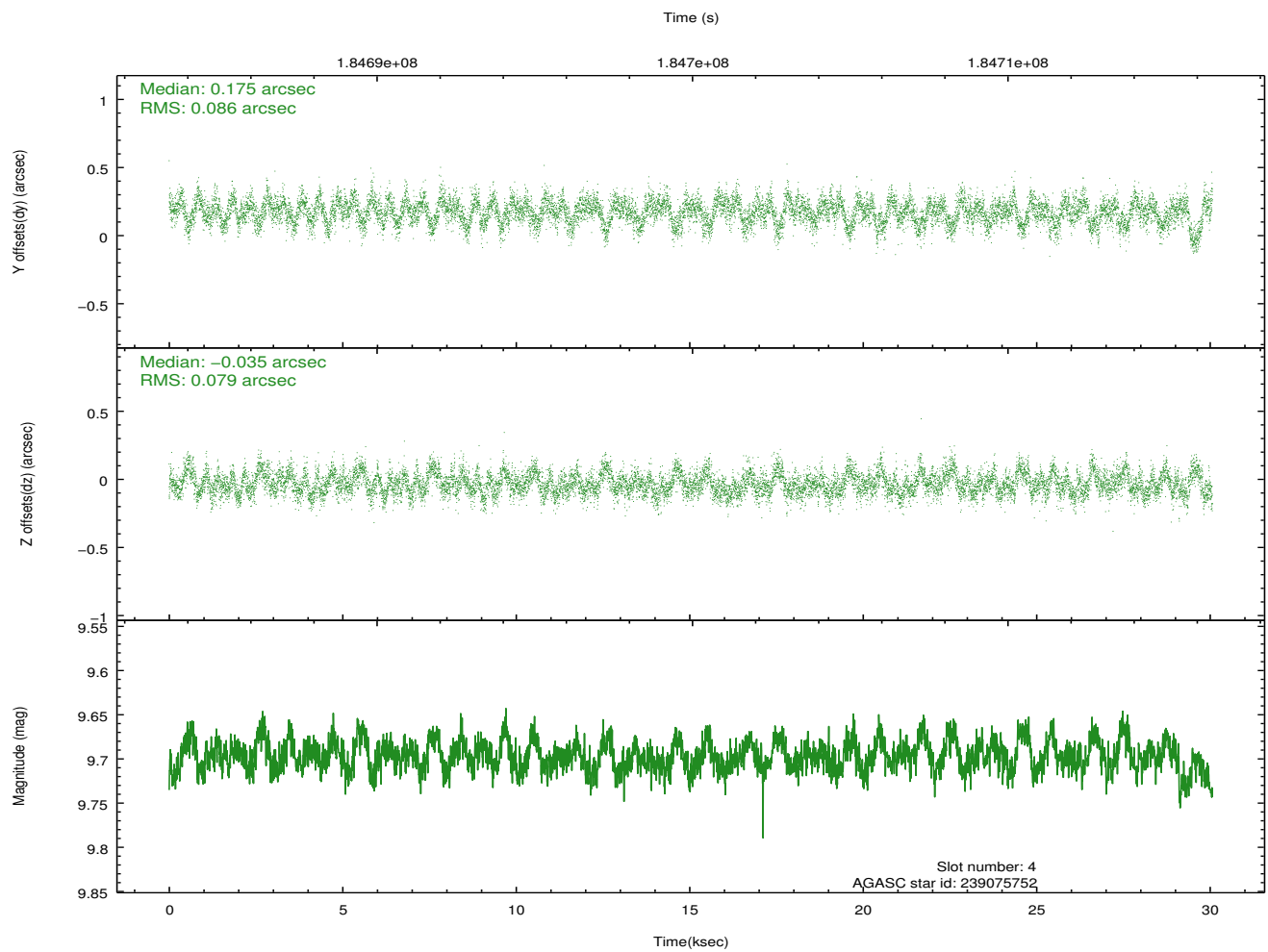
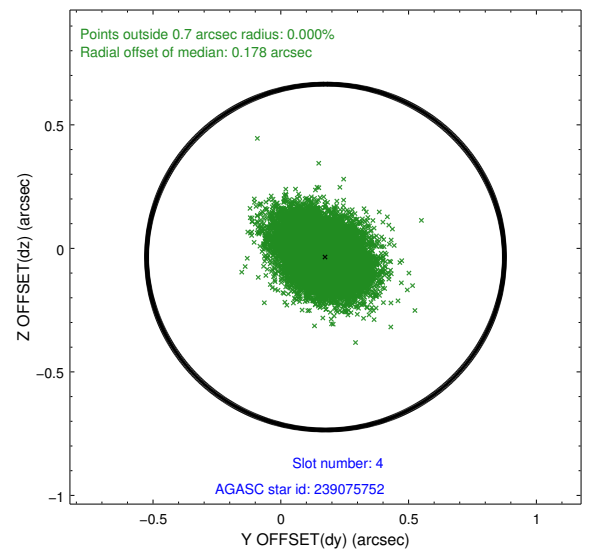
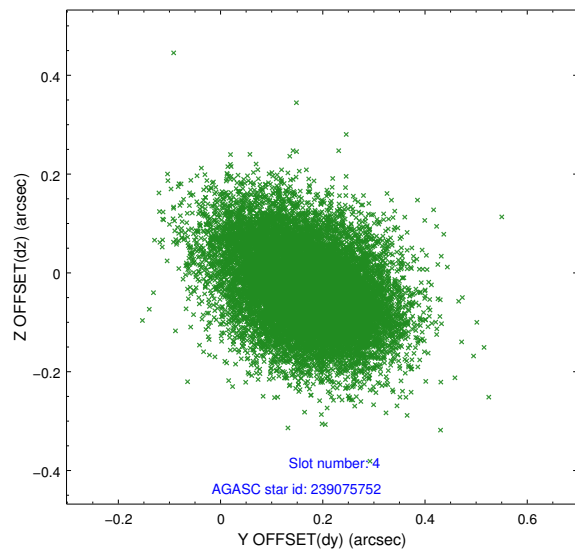
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 7335 | -0.041 | -0.042 | 0.011 | 0.019 | 0.000000 | 0.000000 | -759.61 | -1730.35 |
| 1 | FID | ACIS-S-4 | 7.20 | 7335 | 0.073 | 0.031 | 0.007 | 0.014 | 0.000000 | 0.000000 | 2153.74 | 178.14 |
| 2 | FID | ACIS-S-5 | 7.23 | 7334 | -0.063 | 0.020 | 0.010 | 0.018 | 0.000000 | 0.000000 | -1812.39 | 171.86 |
| 3 | GUIDE | 239075544 | 9.42 | 14650 | -0.081 | 0.171 | 0.098 | 0.161 | 65.454352 | 27.284696 | 1194.07 | -239.82 |
| 4 | GUIDE | 239075752 | 9.70 | 14661 | 0.175 | -0.035 | 0.123 | 0.206 | 65.644780 | 26.331316 | -2216.27 | 482.14 |
| 5 | GUIDE | 239076720 | 7.62 | 14668 | -0.119 | -0.082 | 0.051 | 0.087 | 65.782214 | 27.230295 | 618.76 | -1139.21 |
| 6 | GUIDE | 239080856 | 9.23 | 14662 | 0.054 | -0.075 | 0.085 | 0.137 | 65.285900 | 26.367744 | -1659.36 | 1505.39 |
| 7 | GUIDE | 239081136 | 9.96 | 7330 | -0.054 | 0.046 | 0.175 | 0.275 | 65.934218 | 27.207584 | 361.07 | -1559.91 |

2.4 Star Slots

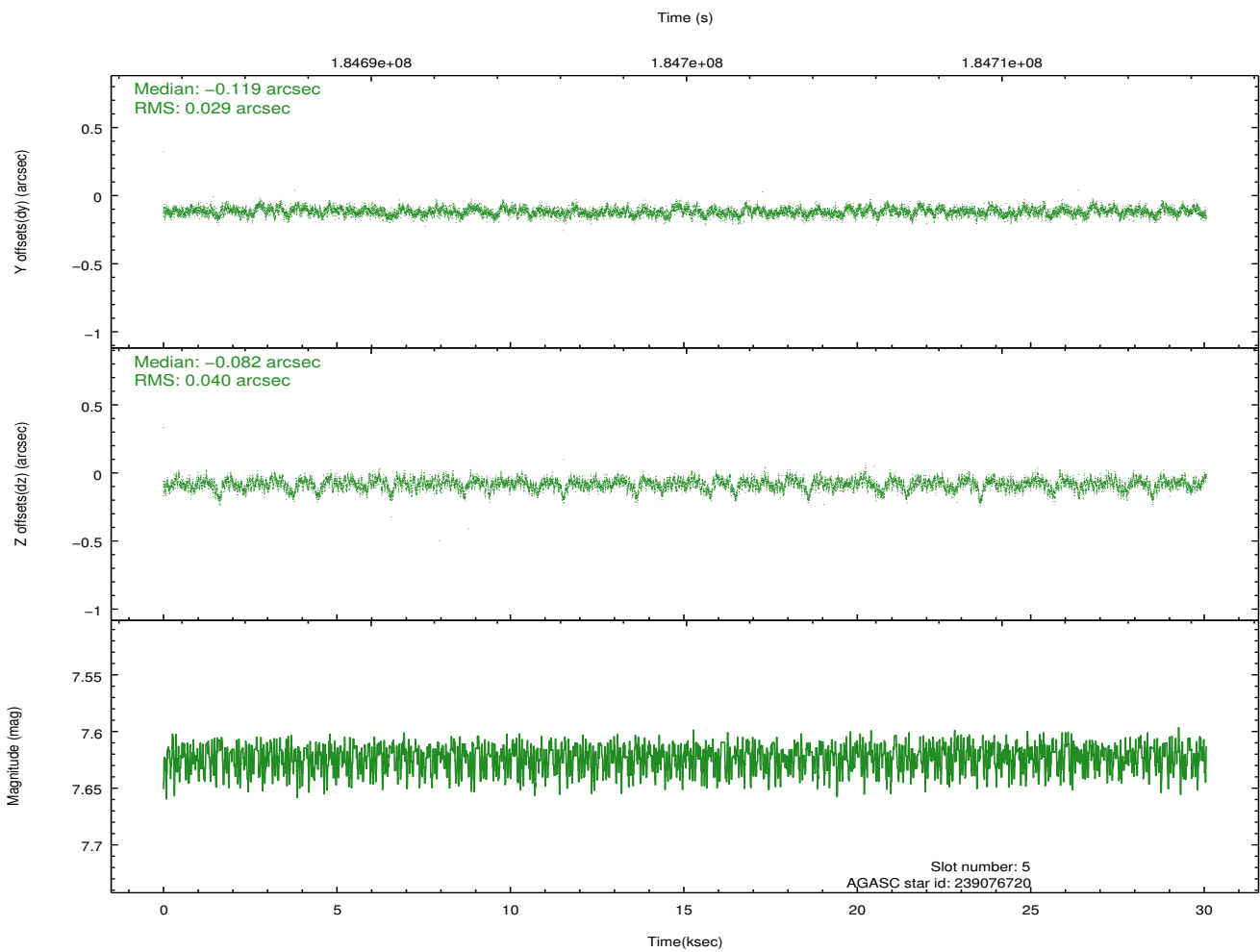
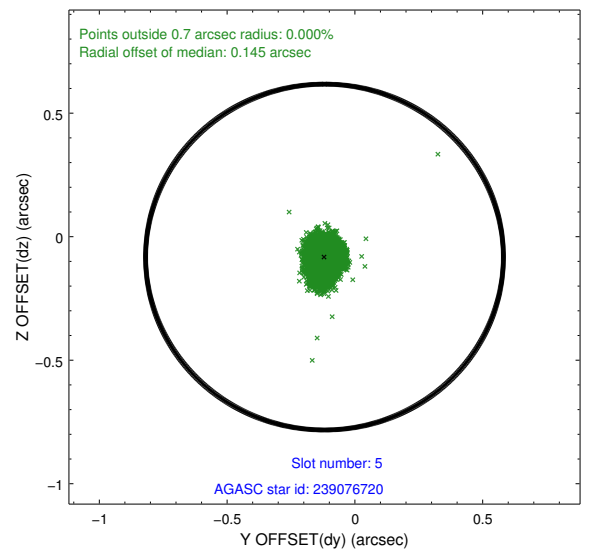
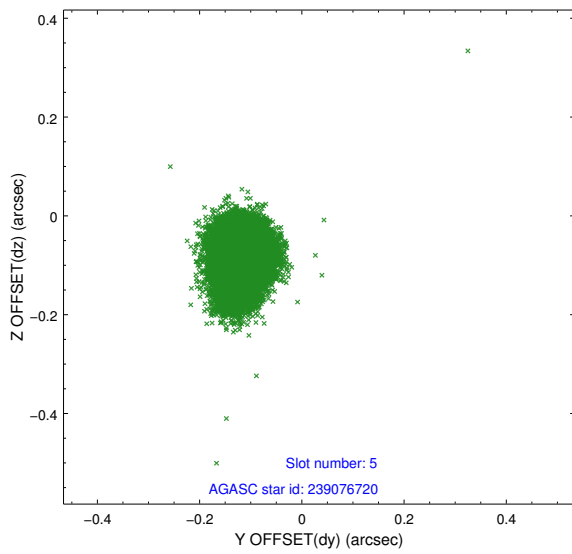
2.4.1 Slot 3



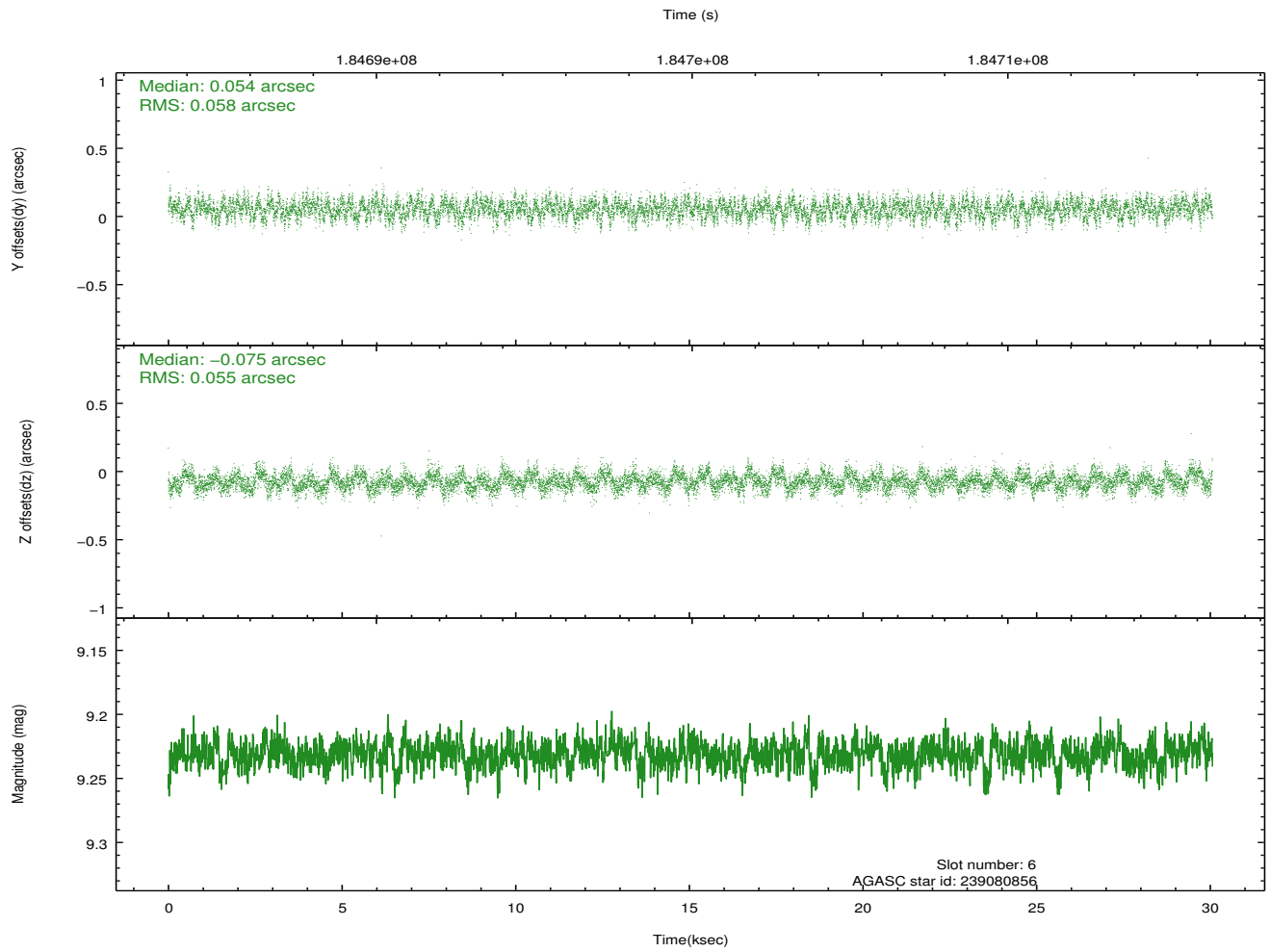
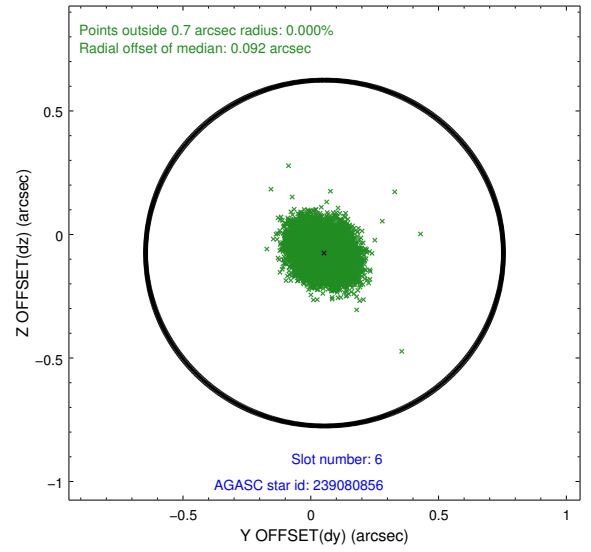
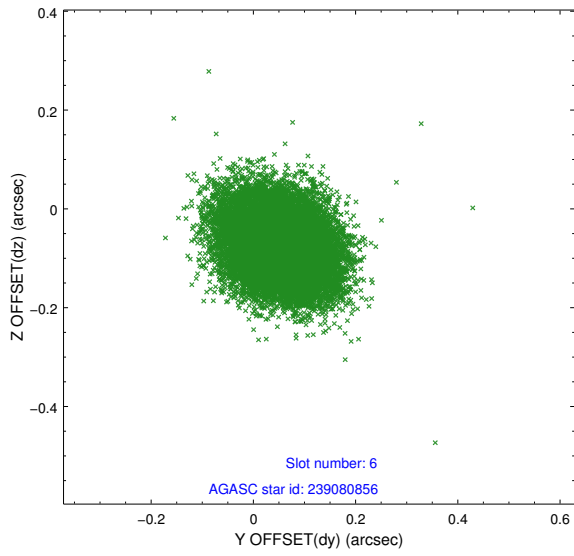
2.4.2 Slot 4



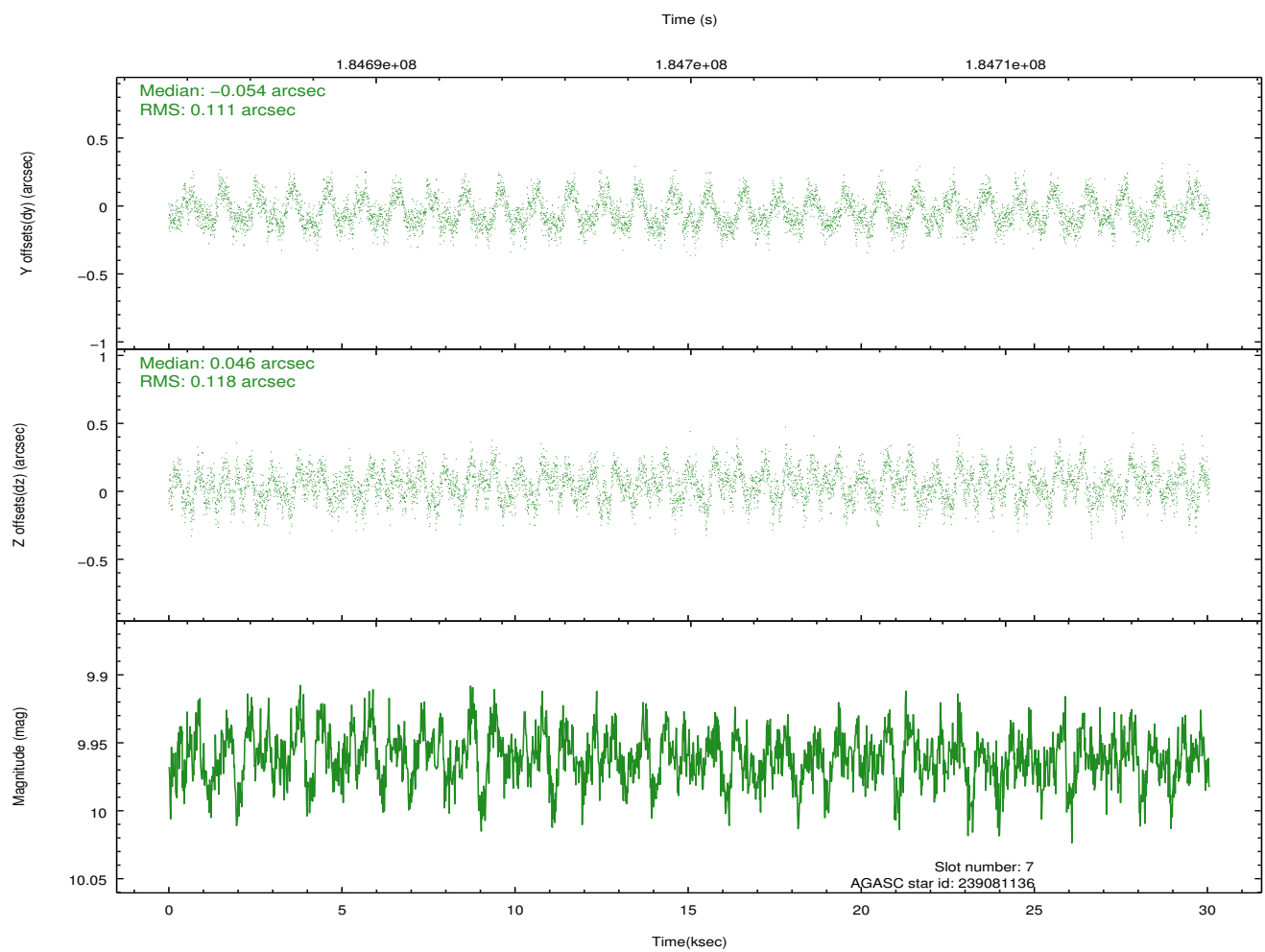
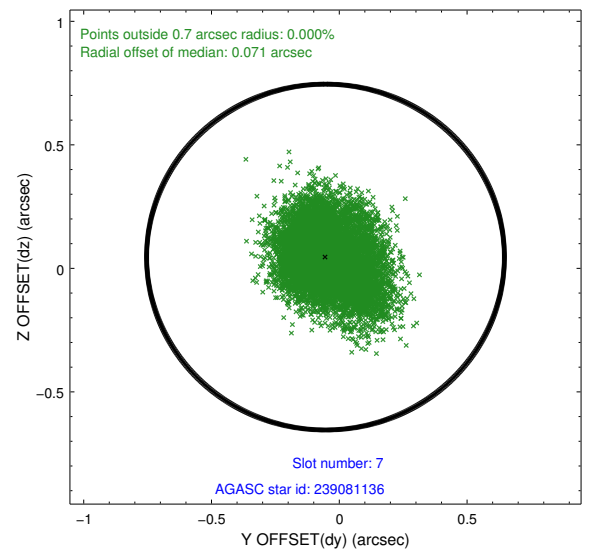
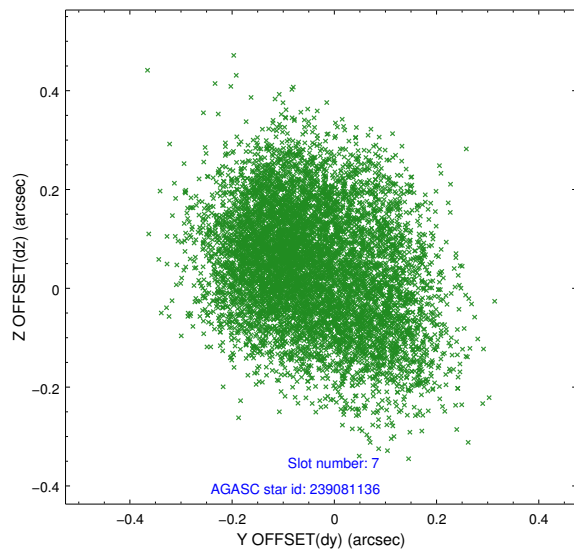
2.4.3 Slot 5



2.4.4 Slot 6

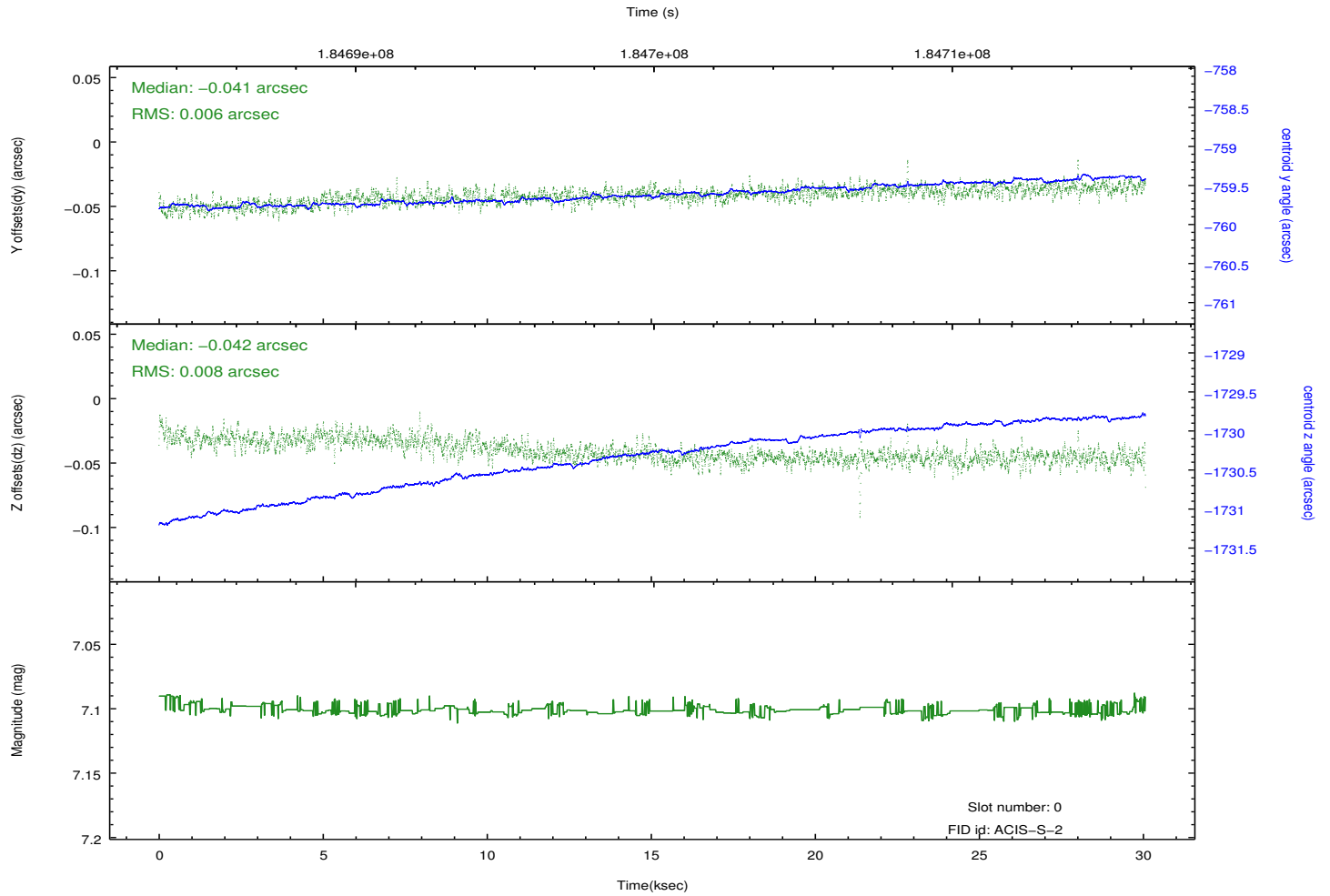
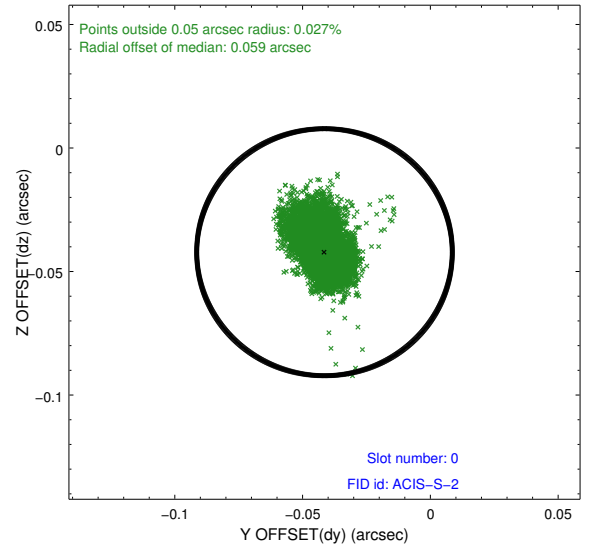
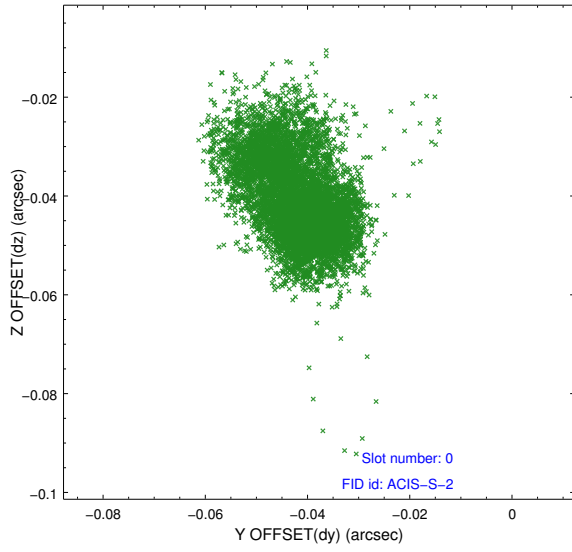


2.4.5 Slot 7

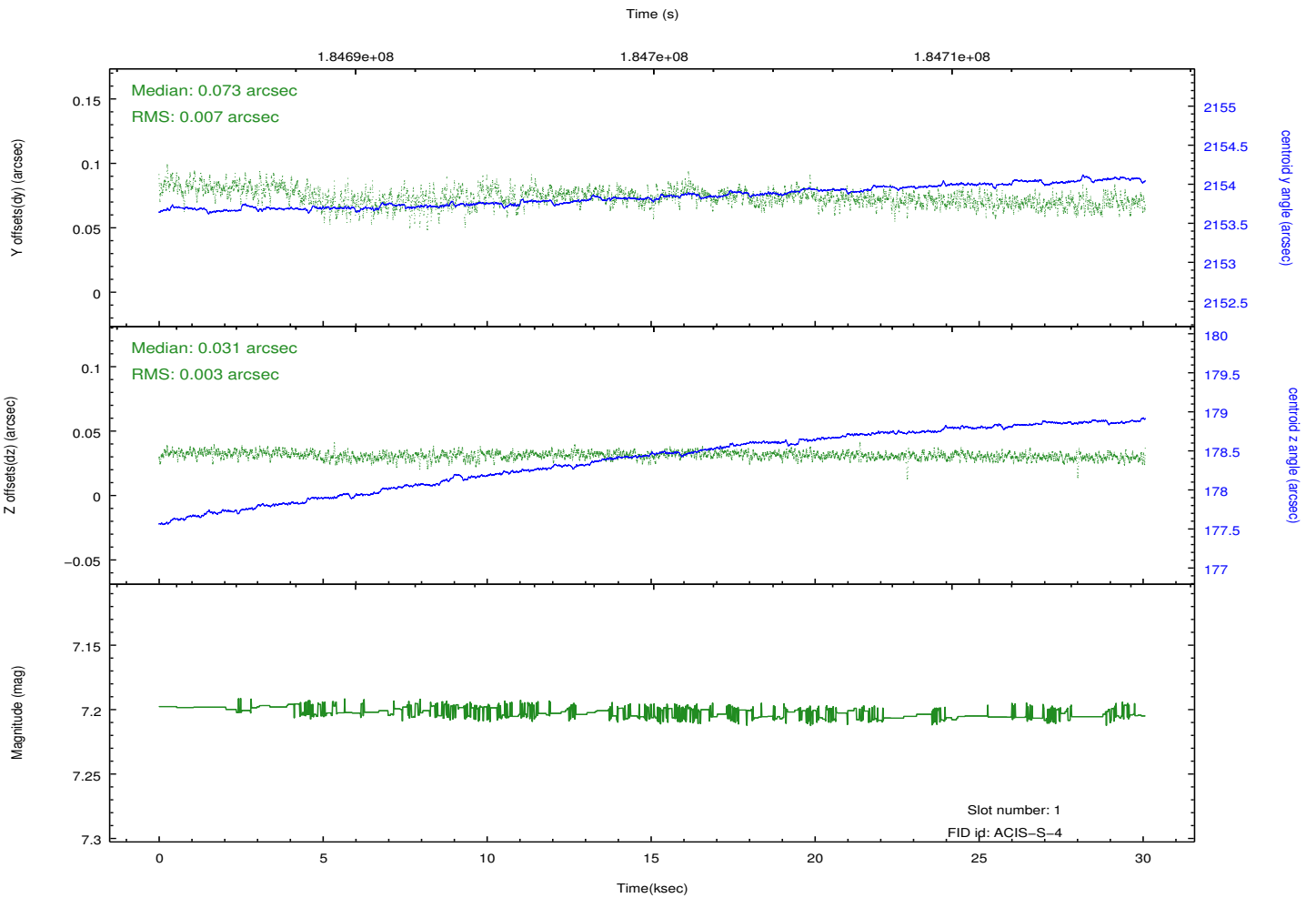
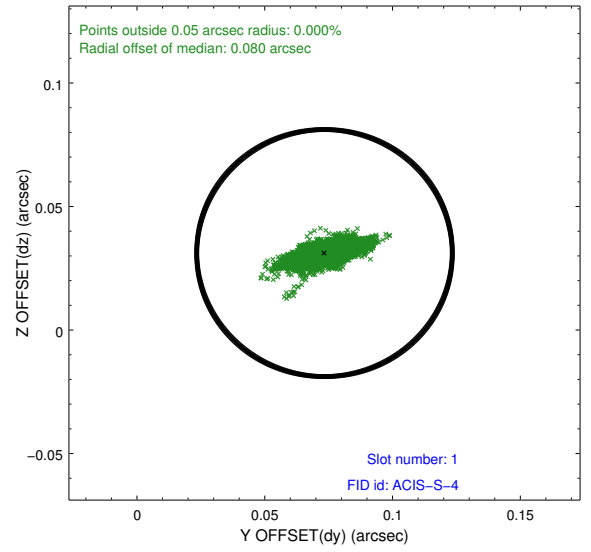
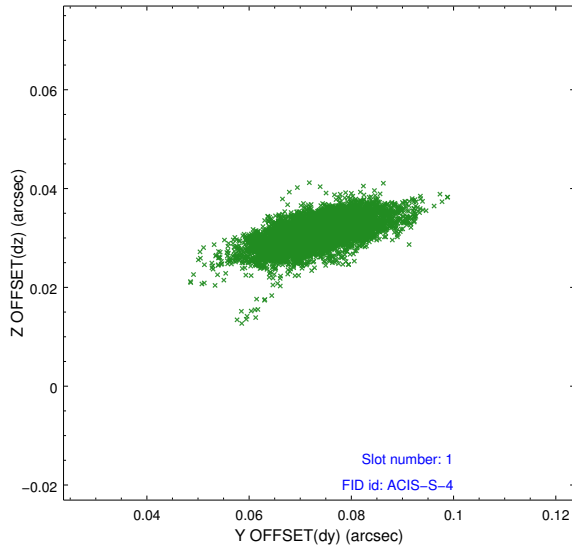


2.5 FID Slots

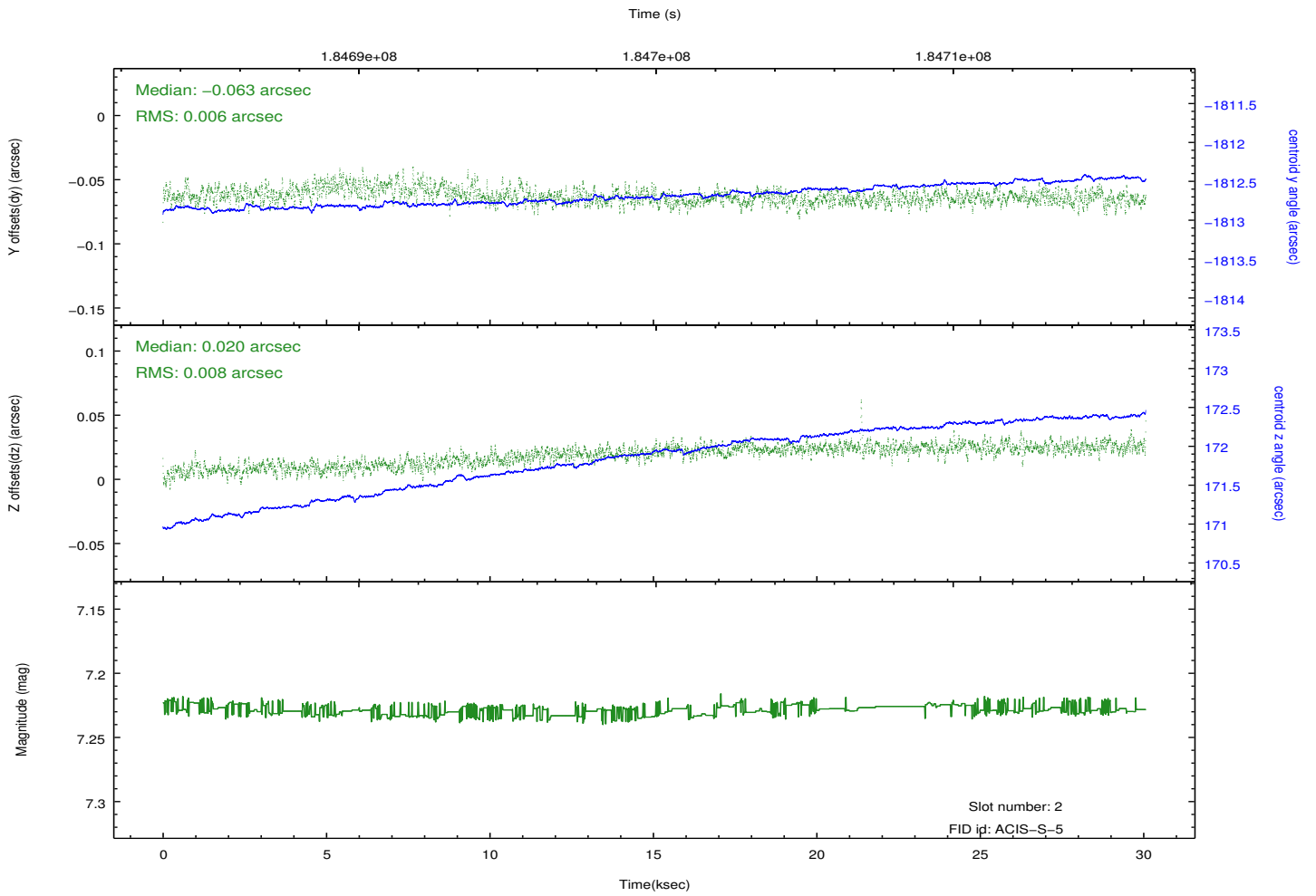
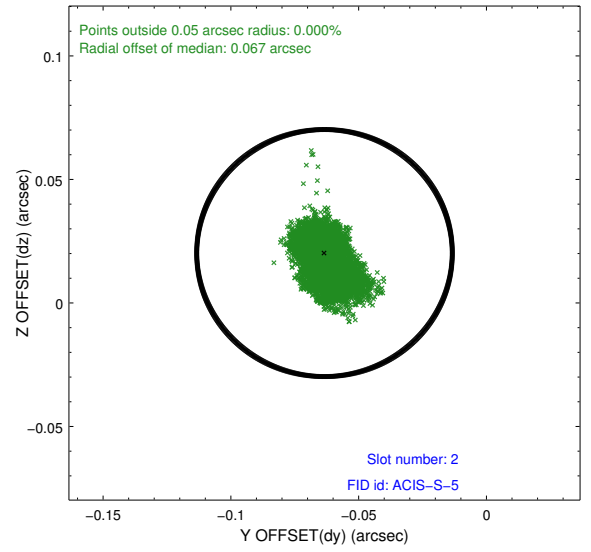
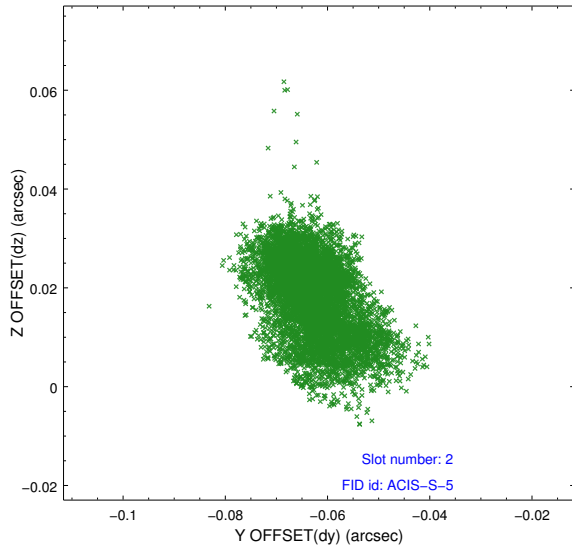
2.5.1 Slot 0



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) | 2012.11.30 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 30.066 |

A.2 Comments