

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3232 - L2 Version 3
Chandra X-Ray Center

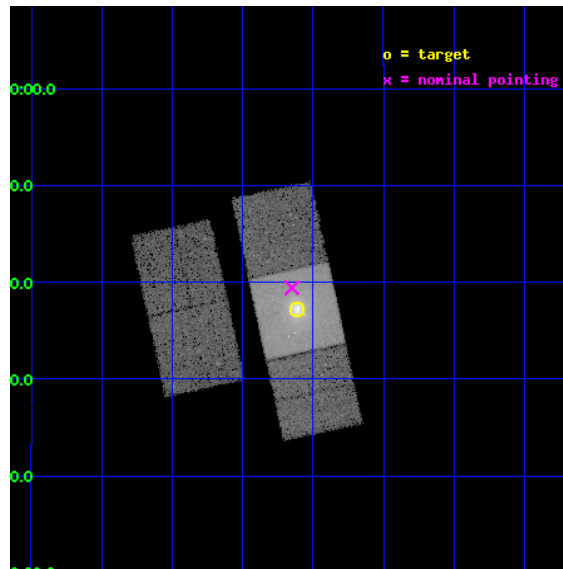
L2 Processing Date : Oct 22 2012

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1 Front

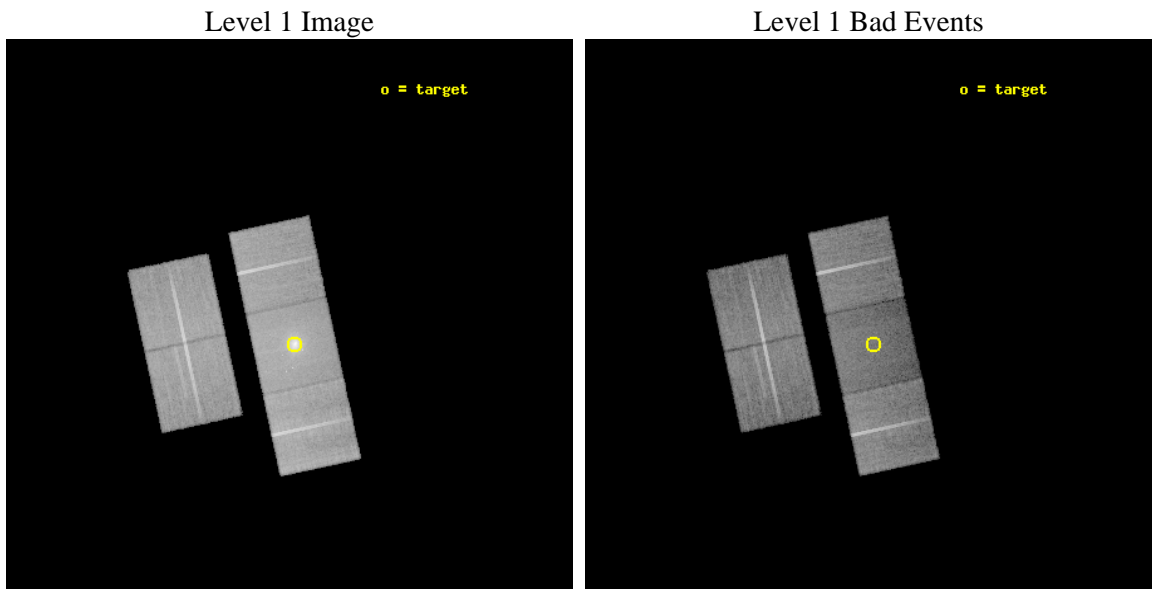
| | | |
|----------|----------------------------|---|
| seq_num | 800232 | Sequence number |
| obs_id | 3232 | Observation id |
| title | REHEATING IN COOLING FLOWS | Proposal title |
| observer | Prof Trevor Ponman | Principal investigator |
| object | NGC 4325 GROUP | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 185.777917 | Observer's specified target RA [deg] |
| dec_targ | 10.621194 | Observer's specified target Dec [deg] |
| ra_nom | 185.78772007067 | Nominal RA [deg] |
| dec_nom | 10.657290860333 | Nominal Dec [deg] |
| roll_nom | 77.779496830494 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 30482.176980674 | Sum of GTIs [s] |
| livetime | 30083.90489777 | Livetime [s] |
| ontime2 | 30485.317961007 | Sum of GTIs [s] |
| ontime3 | 30488.458961129 | Sum of GTIs [s] |
| ontime6 | 30482.176980793 | Sum of GTIs [s] |
| ontime7 | 30482.176980674 | Sum of GTIs [s] |
| ontime8 | 30488.458961099 | Sum of GTIs [s] |
| l2events | 185591 | Number of level 2 events |



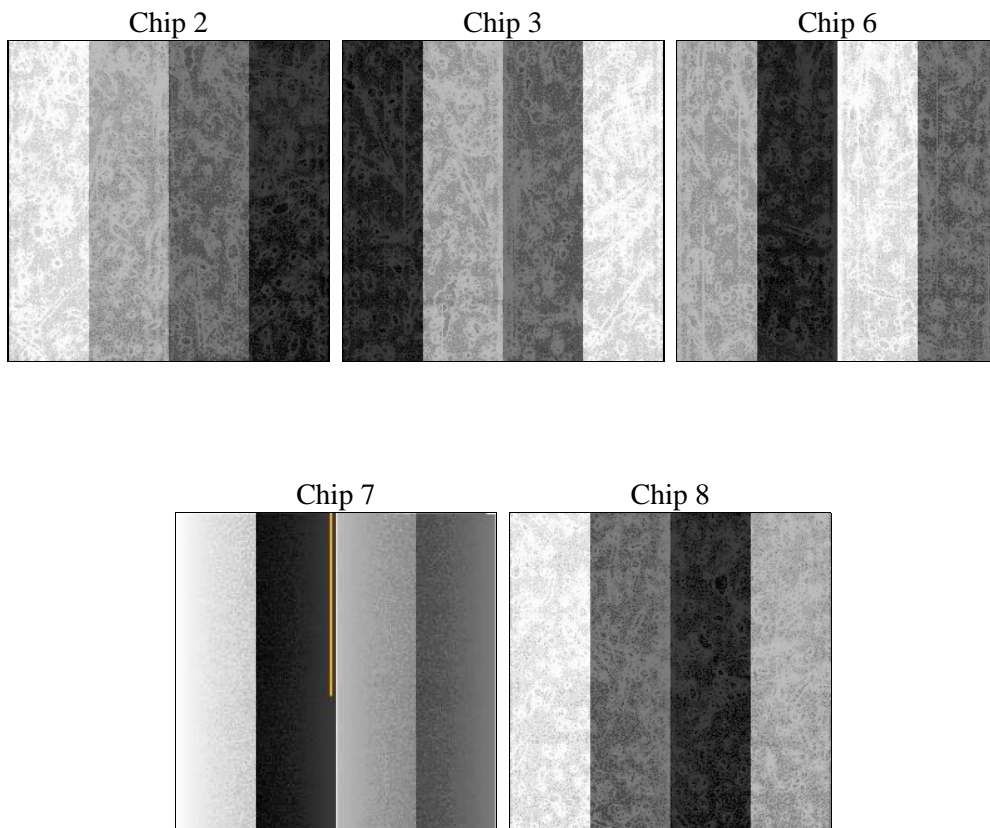
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 30390.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 30482.176980674 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime2 | 30485.317961007 | Sum of GTIs [s] |
| date | 2012-10-22T04:27:20 | Date and time of file creation | ontime3 | 30488.458961129 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 30482.176980793 | Sum of GTIs [s] |
| | | | ontime7 | 30482.176980674 | Sum of GTIs [s] |
| | | | ontime8 | 30488.458961099 | Sum of GTIs [s] |
| | | | l1events | 951678 | Number of level 1 events |

2.1.4 Events

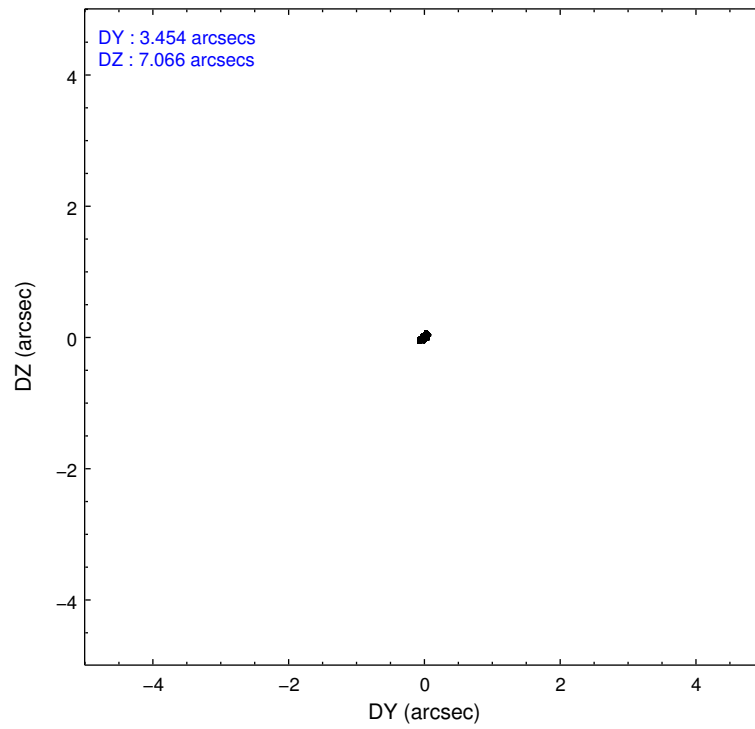
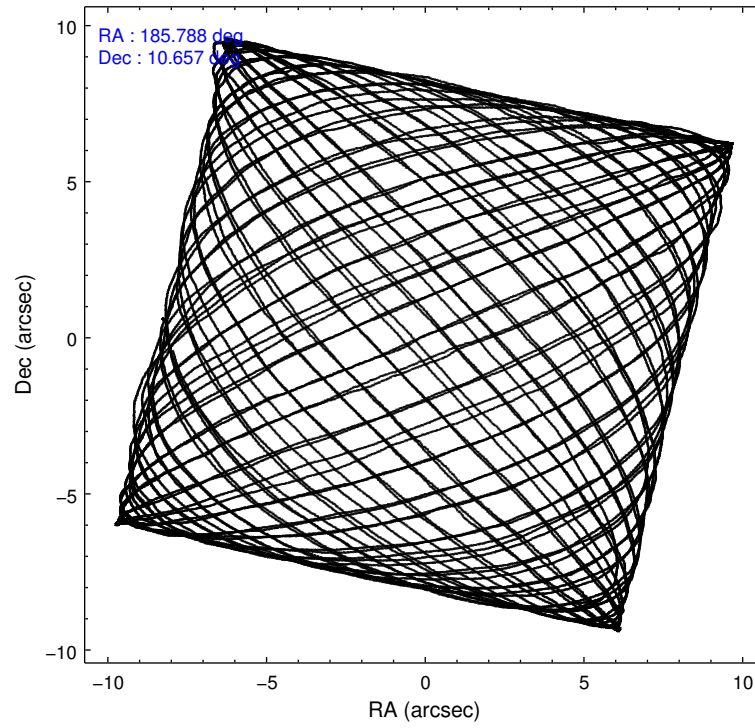
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 169576 | 167201 | 171849 | 228370 | 214682 |
| rejected events | 153778 | 151551 | 153749 | 99931 | 168035 |
| rejected % | 90% | 90% | 89% | 43% | 78% |

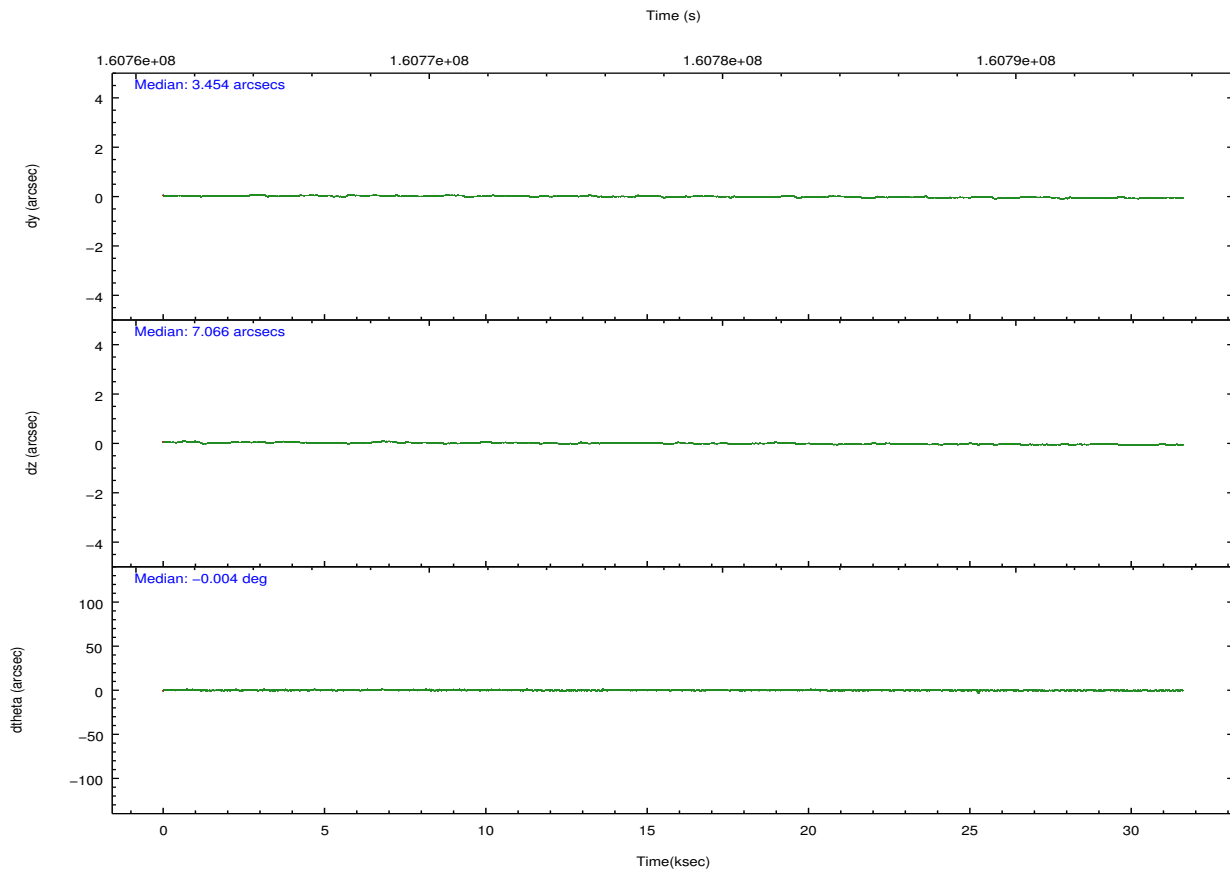
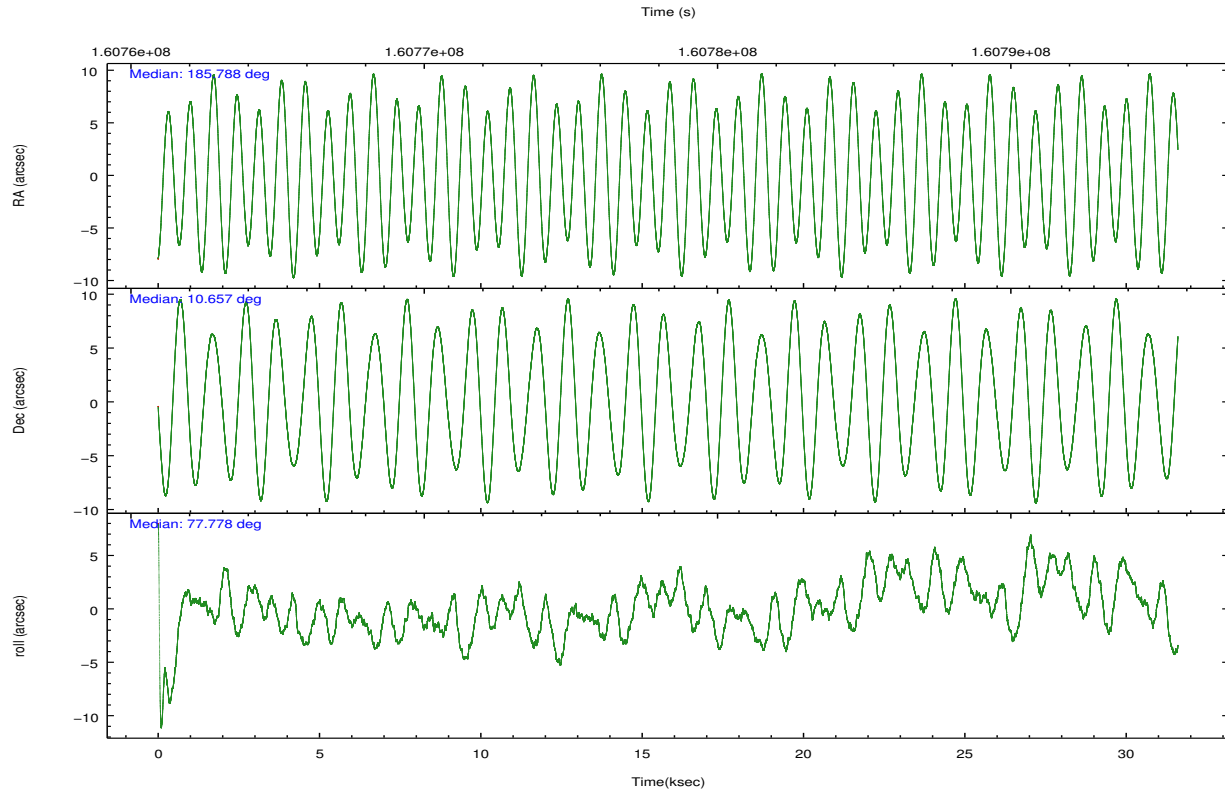
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|-------|--------|
| grade 0 events | 5738 | 5647 | 6883 | 23727 | 14567 |
| | 3% | 3% | 4% | 10% | 6% |
| grade 1 events | 74 | 85 | 70 | 174 | 143 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 3564 | 3131 | 3715 | 28850 | 10062 |
| | 2% | 1% | 2% | 12% | 4% |
| grade 3 events | 1846 | 1884 | 2005 | 13310 | 5107 |
| | 1% | 1% | 1% | 5% | 2% |
| grade 4 events | 1799 | 1841 | 1913 | 13177 | 4674 |
| | 1% | 1% | 1% | 5% | 2% |
| grade 5 events | 5230 | 6249 | 6426 | 19754 | 9137 |
| | 3% | 3% | 3% | 8% | 4% |
| grade 6 events | 2856 | 3149 | 3590 | 49427 | 12268 |
| | 1% | 1% | 2% | 21% | 5% |
| grade 7 events | 148469 | 145215 | 147247 | 79951 | 158724 |
| | 87% | 86% | 85% | 35% | 73% |

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 | 185.796536 | 185.7877200706695 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 10.631514 | 10.65729086033275 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 77.621227 | 77.77949683049356 | [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) | 160763724.184000 | 160762250.79273 | | | |
| Observation start date | 2003-02-04T16:34:20 | 2003-02-04T16:10:50 | | | |
| [s] Observation end time (MET) | 160794114.184000 | 160794458.34408 | | | |
| Observation end date | 2003-02-05T01:00:50 | 2003-02-05T01:07:38 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



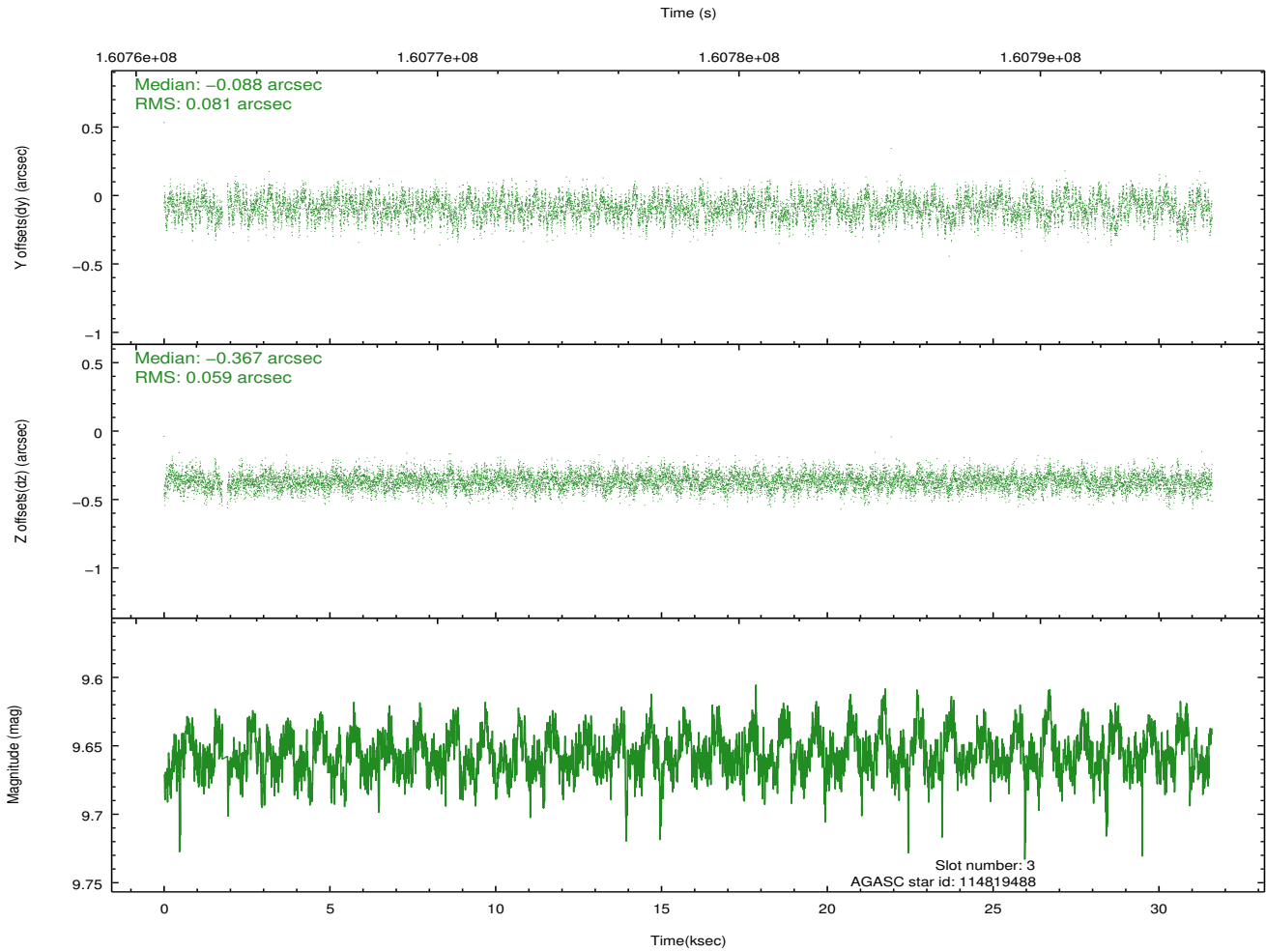
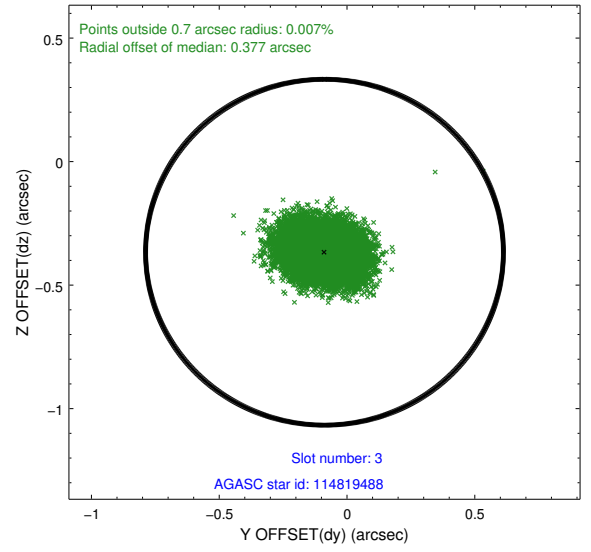
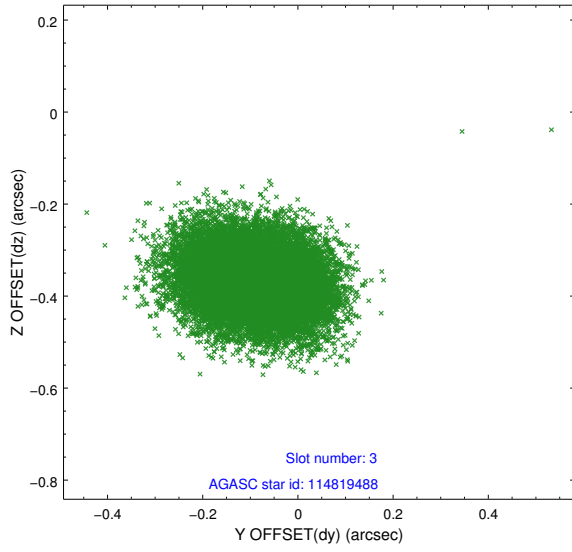


Slot Statistics

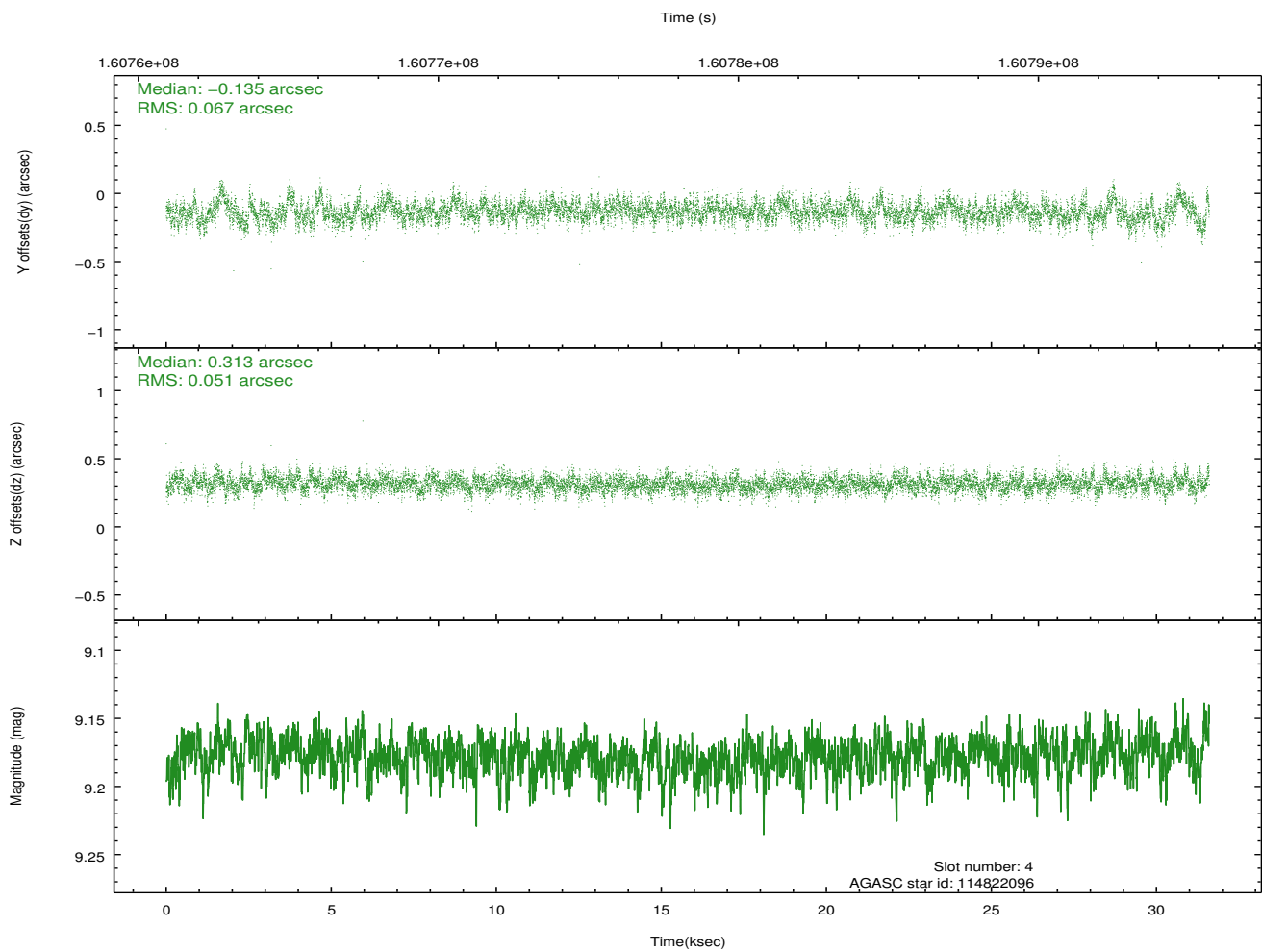
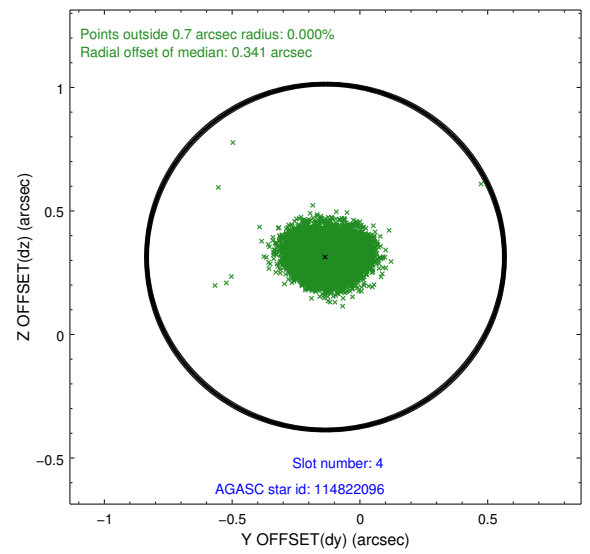
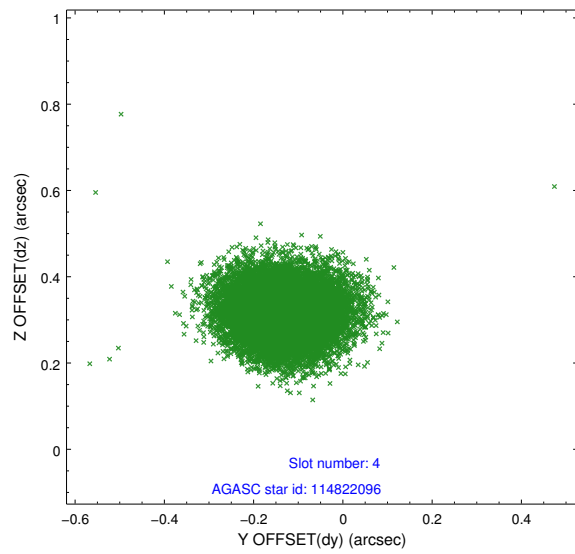
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.12 | 7708 | -0.013 | 0.009 | 0.007 | 0.011 | 0.000000 | 0.000000 | -756.11 | -1728.23 |
| 1 | FID | ACIS-S-4 | 7.20 | 7708 | -0.002 | 0.004 | 0.006 | 0.010 | 0.000000 | 0.000000 | 2157.14 | 180.20 |
| 2 | FID | ACIS-S-5 | 7.24 | 7708 | -0.016 | -0.004 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1808.88 | 173.92 |
| 3 | GUIDE | 114819488 | 9.66 | 15334 | -0.088 | -0.367 | 0.107 | 0.171 | 185.439323 | 11.182195 | 1667.02 | 1657.45 |
| 4 | GUIDE | 114822096 | 9.18 | 15409 | -0.135 | 0.313 | 0.088 | 0.146 | 186.117793 | 11.168056 | 2130.94 | -693.21 |
| 5 | GUIDE | 114823704 | 9.59 | 15398 | 0.108 | 0.252 | 0.109 | 0.195 | 186.069404 | 10.291925 | -985.77 | -1205.43 |
| 6 | GUIDE | 114823840 | 9.22 | 15407 | 0.150 | -0.211 | 0.087 | 0.144 | 186.195871 | 10.717151 | 605.13 | -1313.02 |
| 7 | GUIDE | 114957648 | 9.57 | 15397 | -0.028 | 0.010 | 0.096 | 0.155 | 186.459555 | 10.641928 | 542.26 | -2281.84 |

2.4 Star Slots

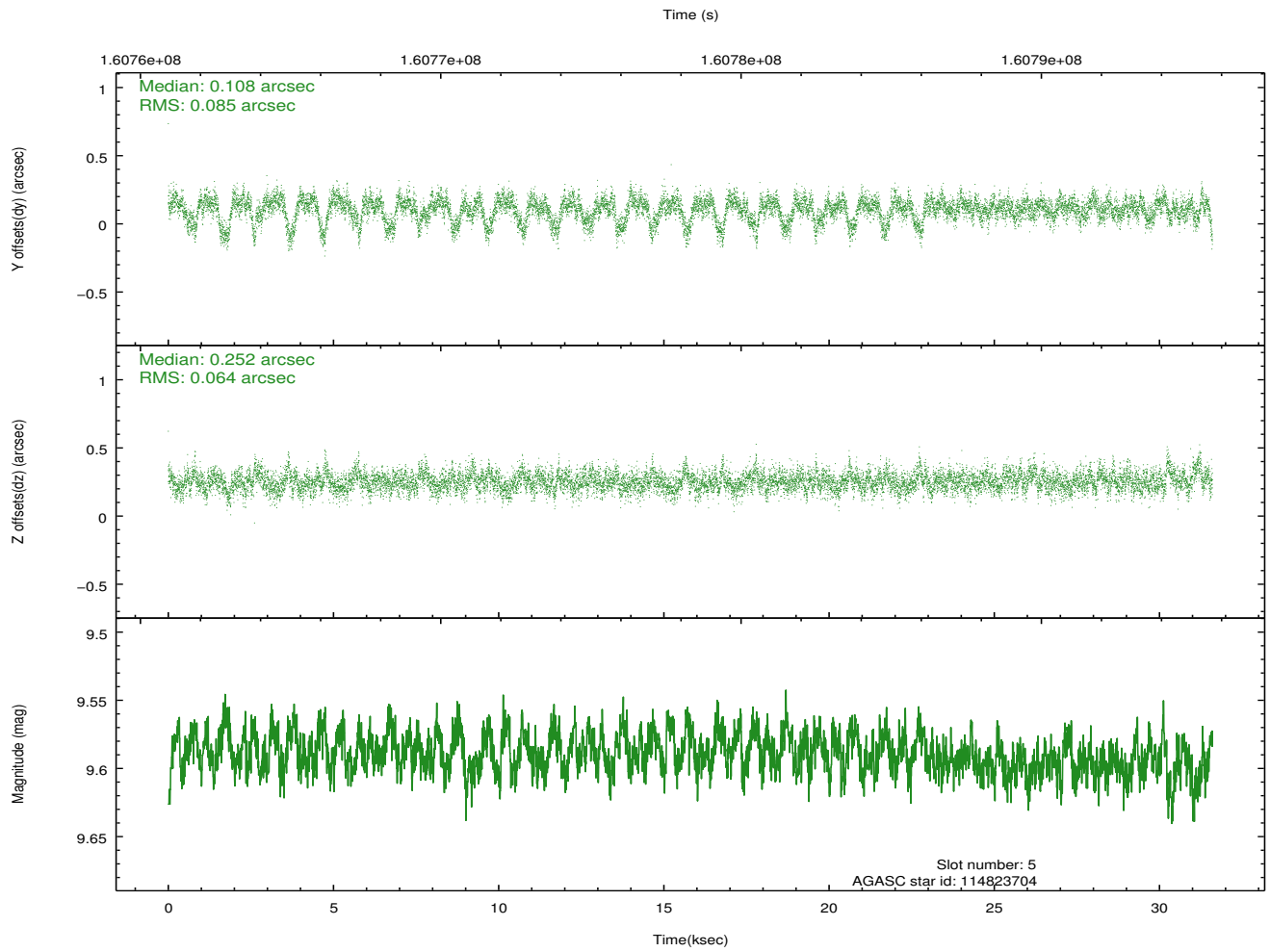
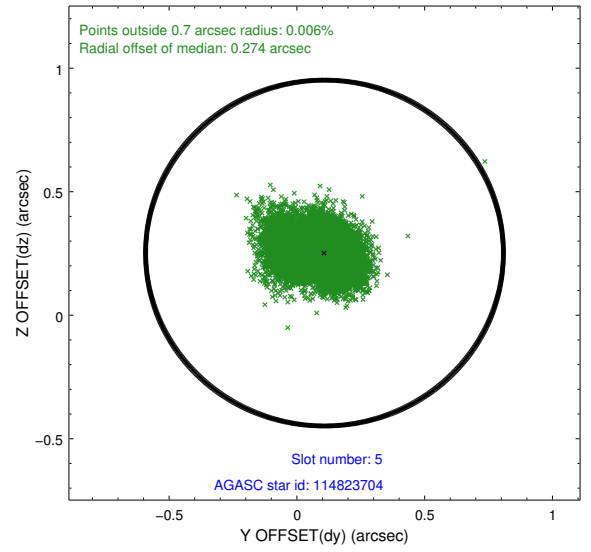
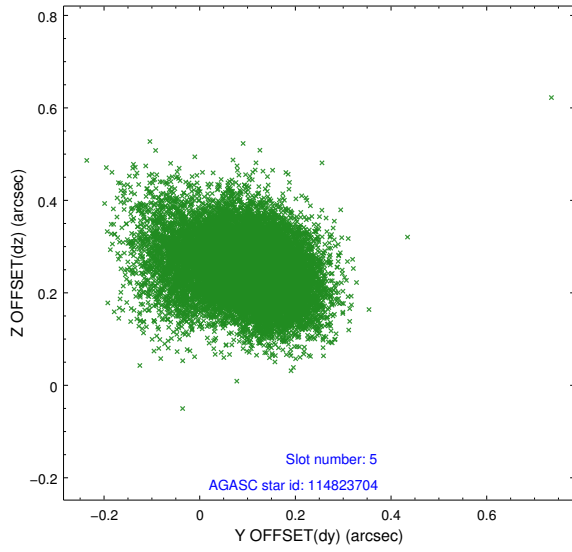
2.4.1 Slot 3



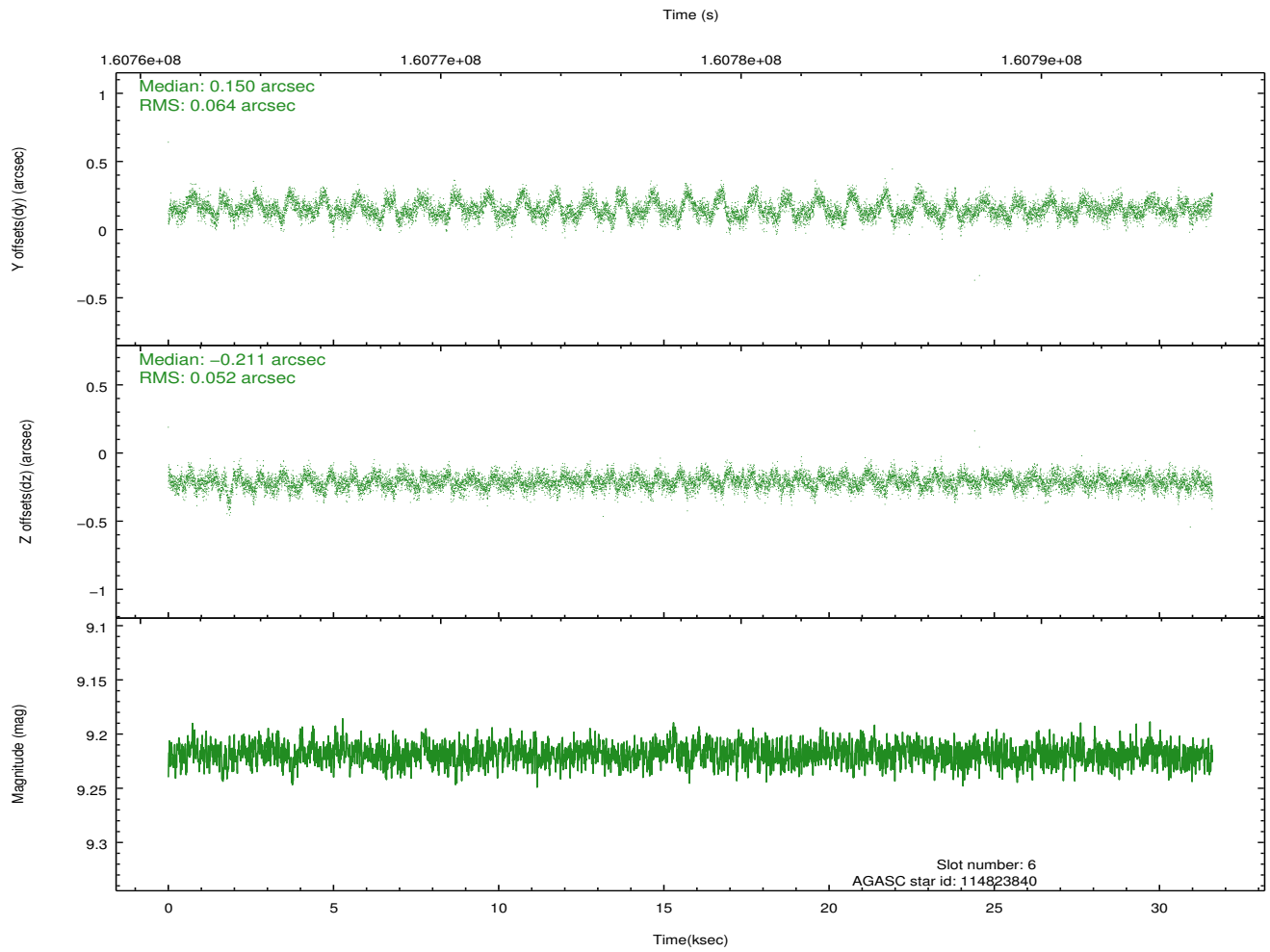
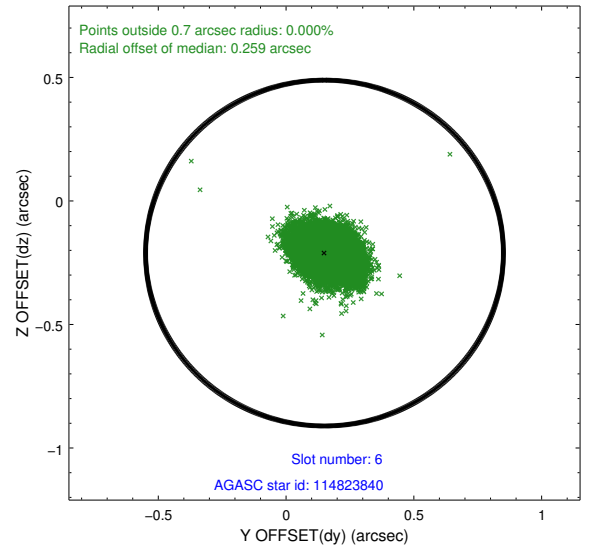
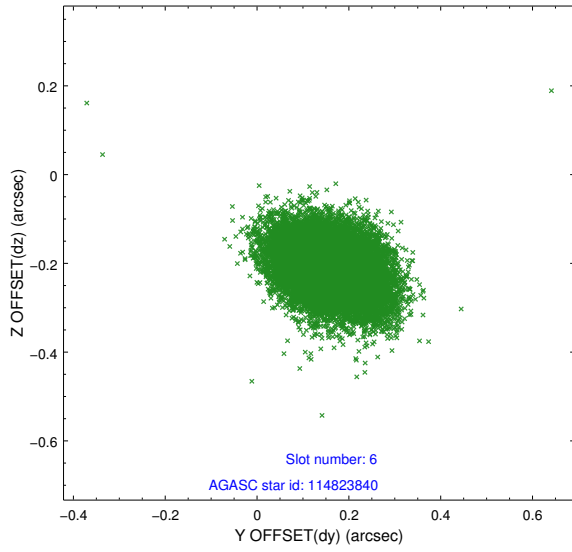
2.4.2 Slot 4



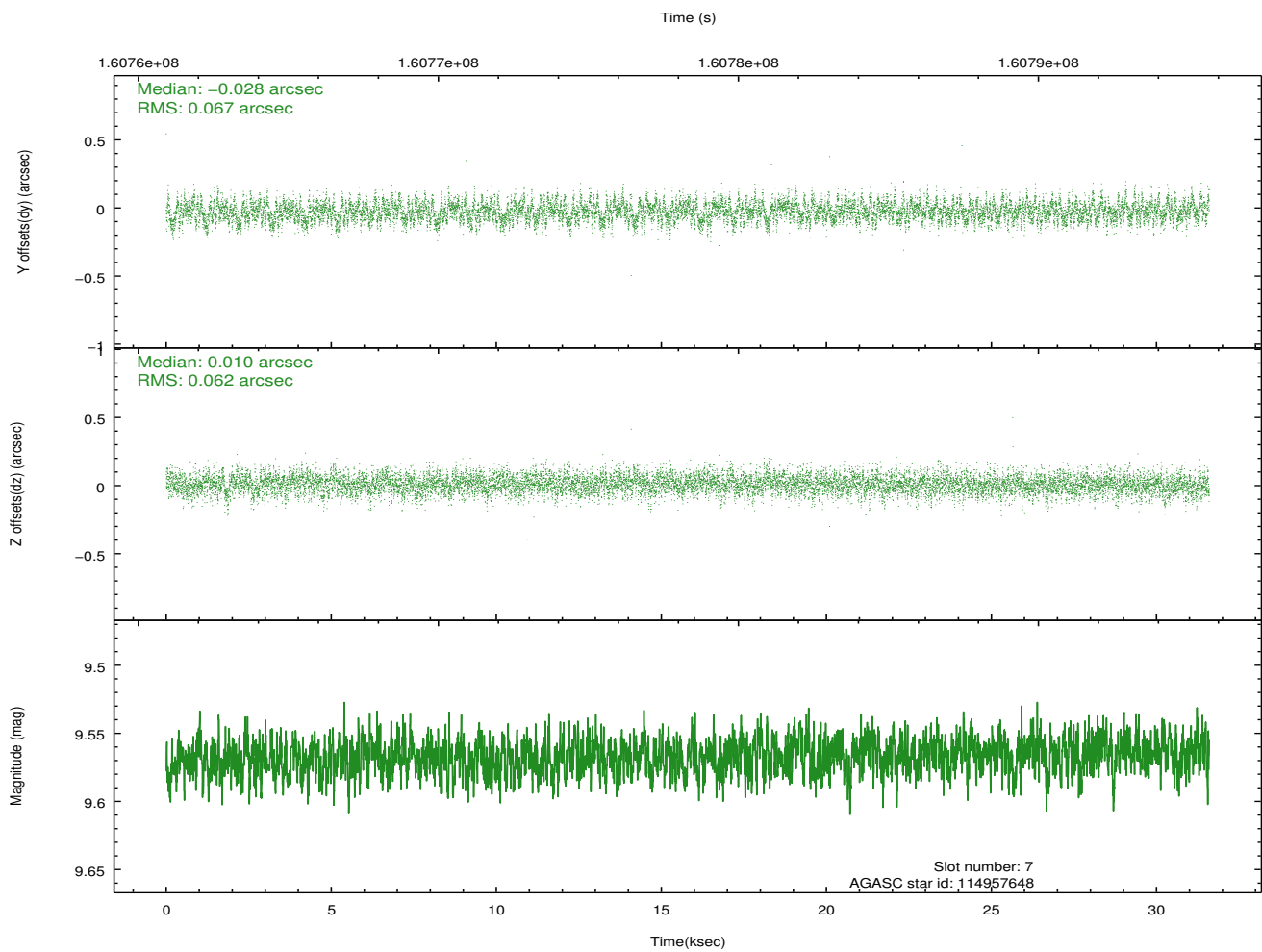
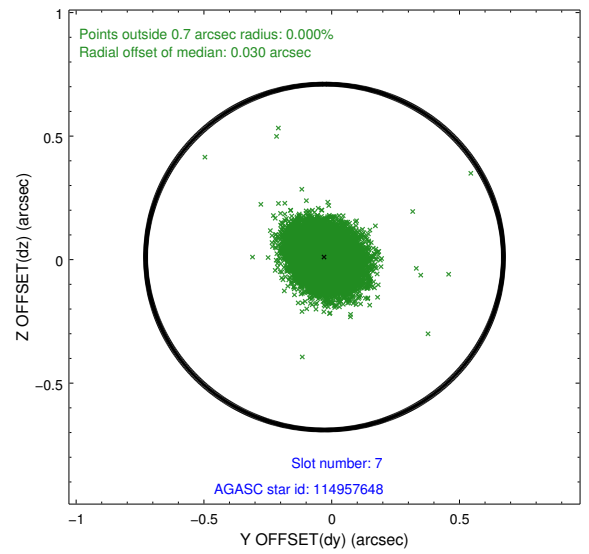
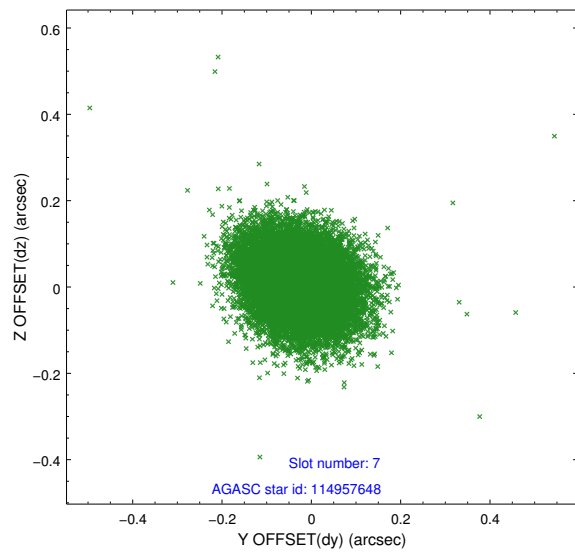
2.4.3 Slot 5



2.4.4 Slot 6

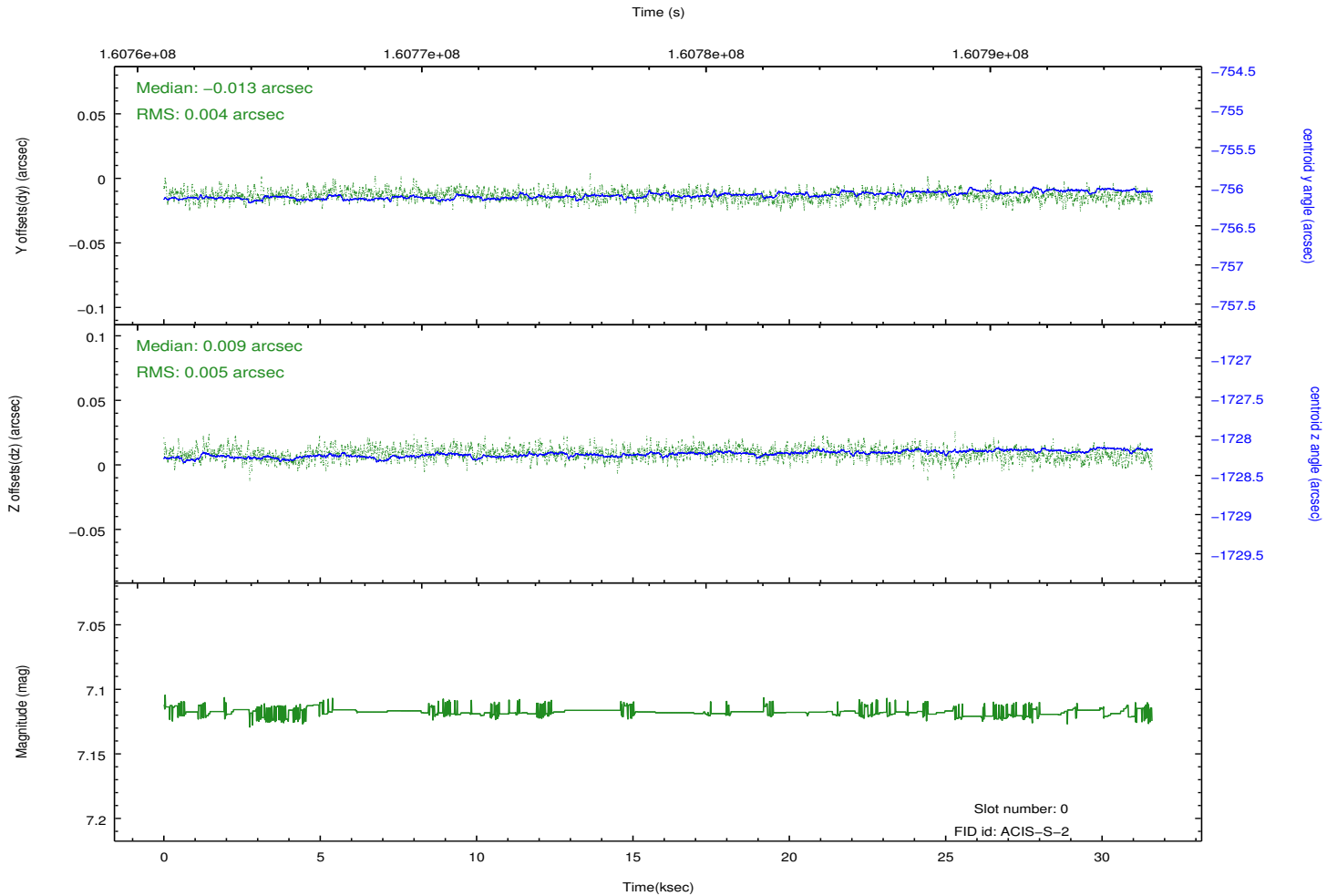
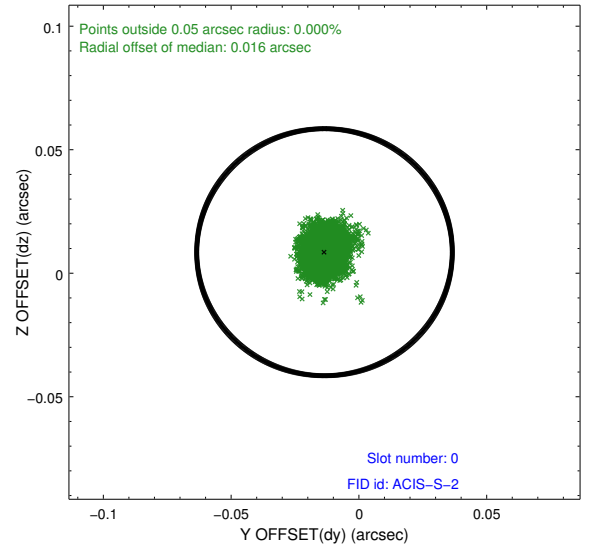
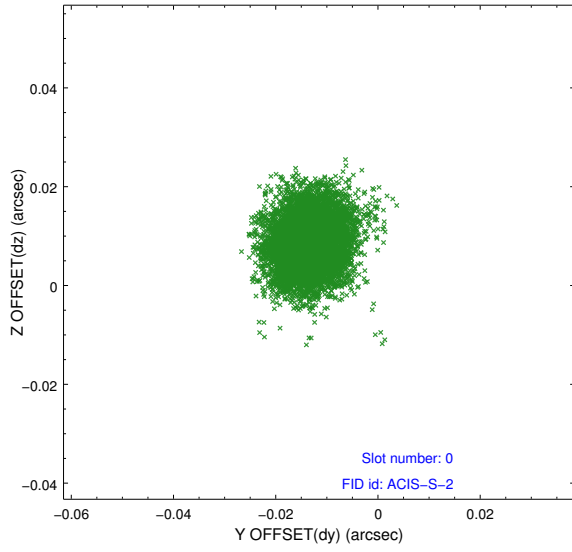


2.4.5 Slot 7

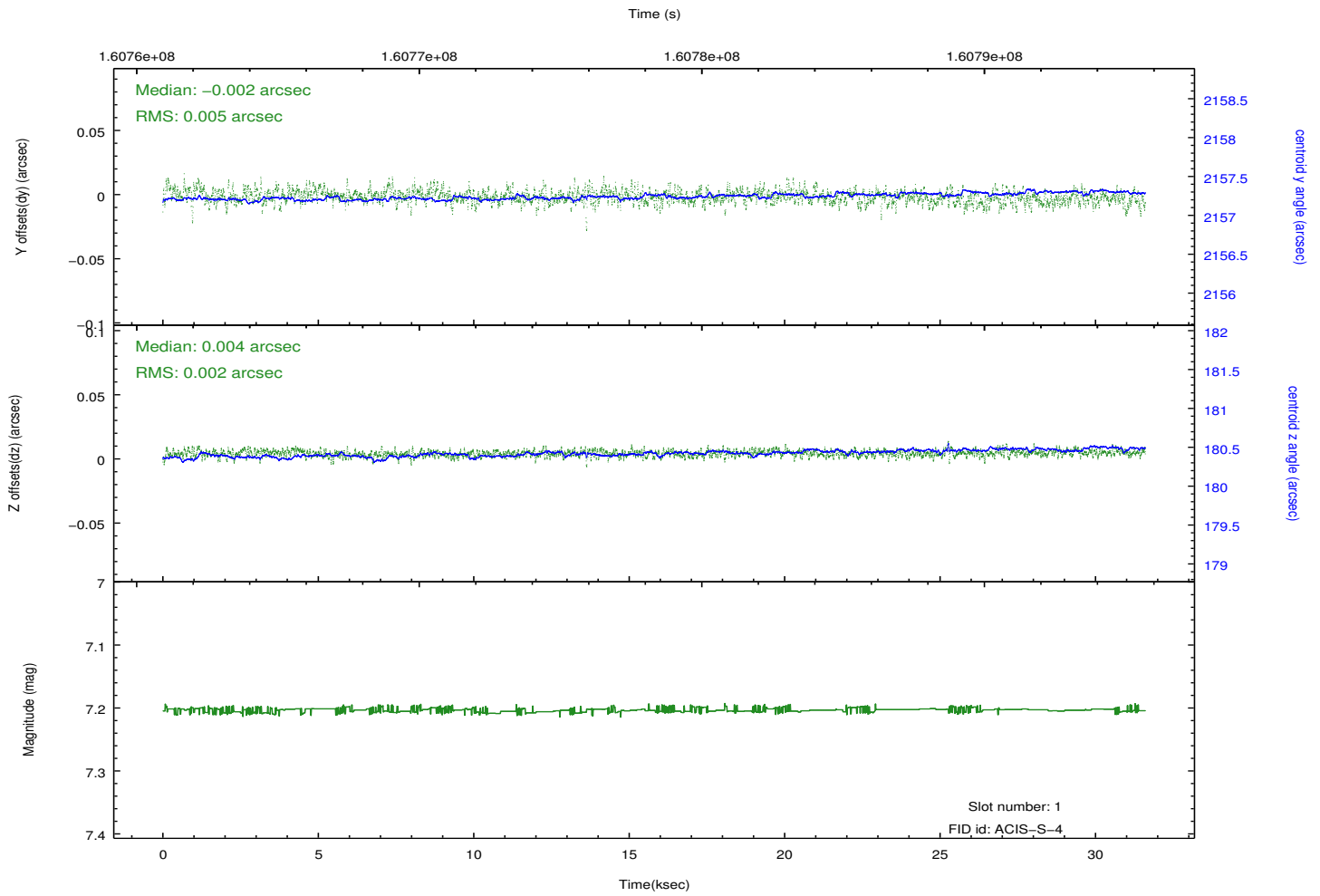
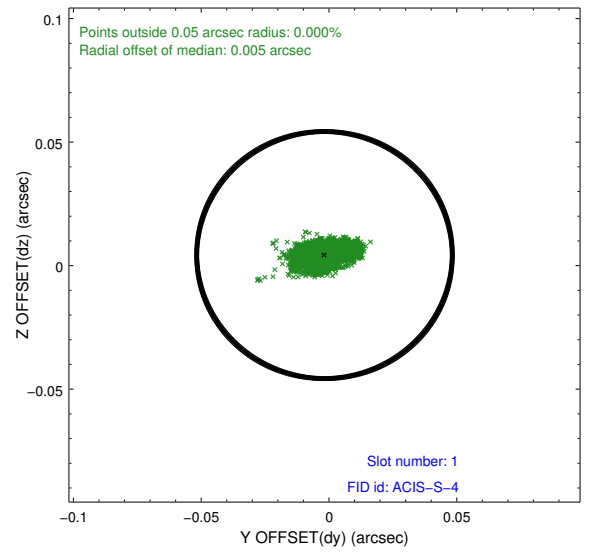
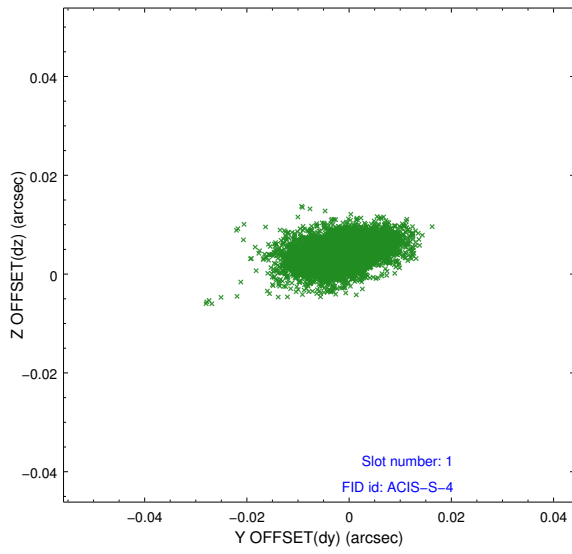


2.5 FID Slots

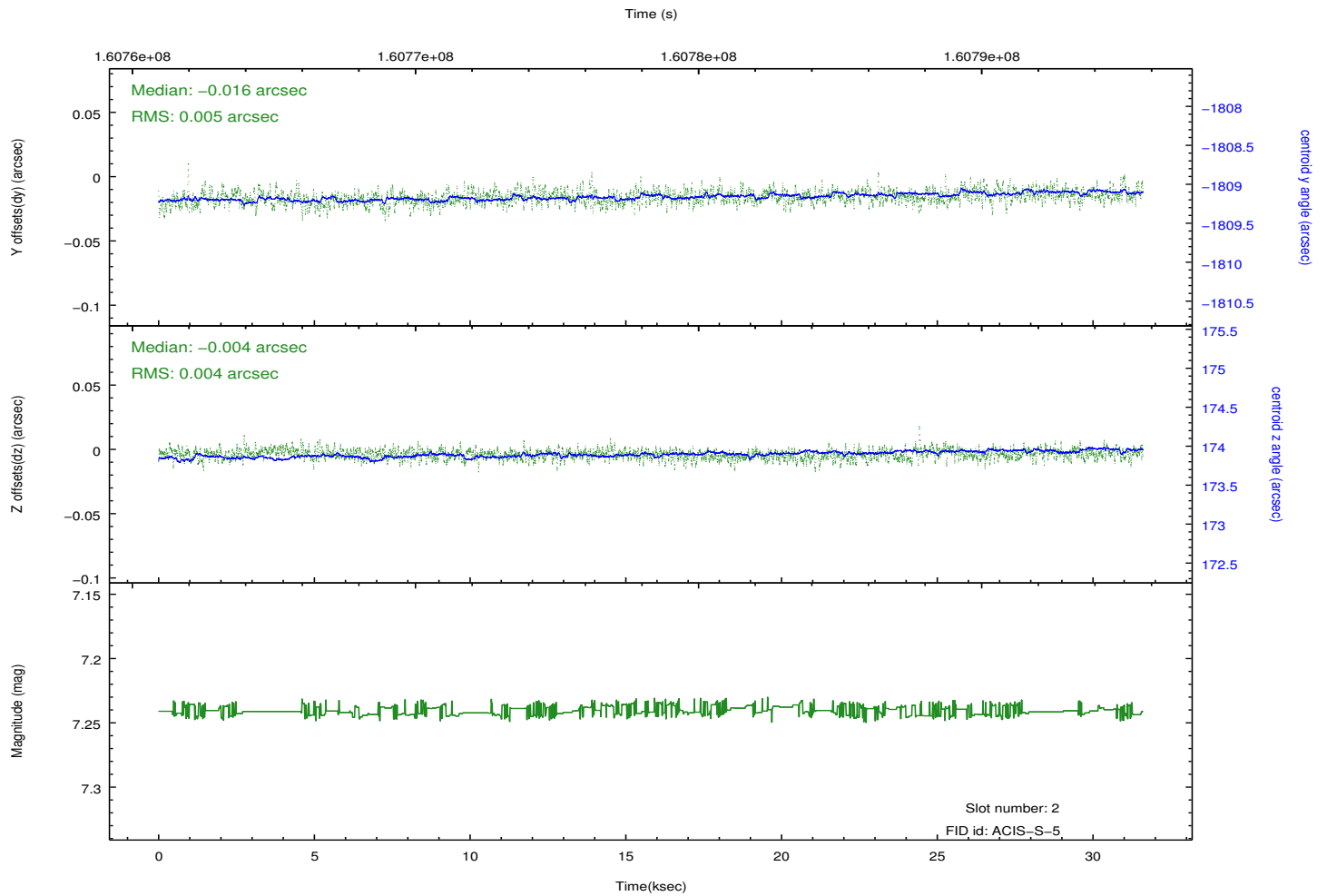
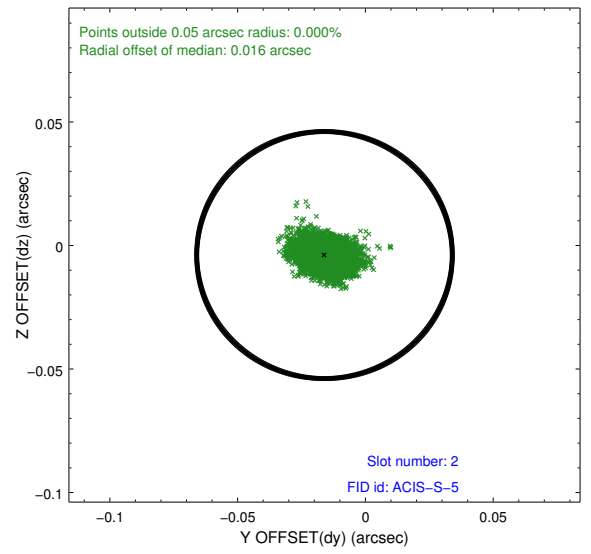
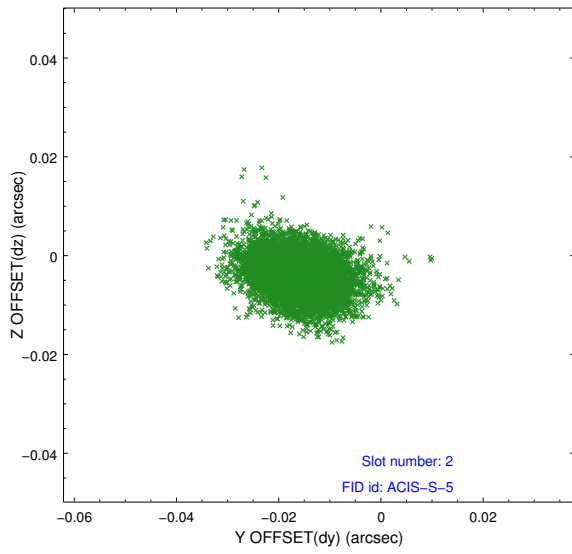
2.5.1 Slot 0



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) | 2012.11.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 30.485 |

A.2 Comments