

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3830 - L2 Version 3
Chandra X-Ray Center

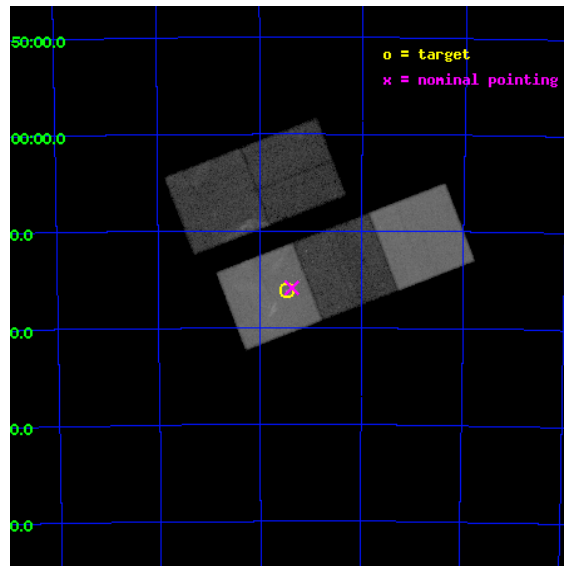
L2 Processing Date : Oct 31 2012

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1 Front

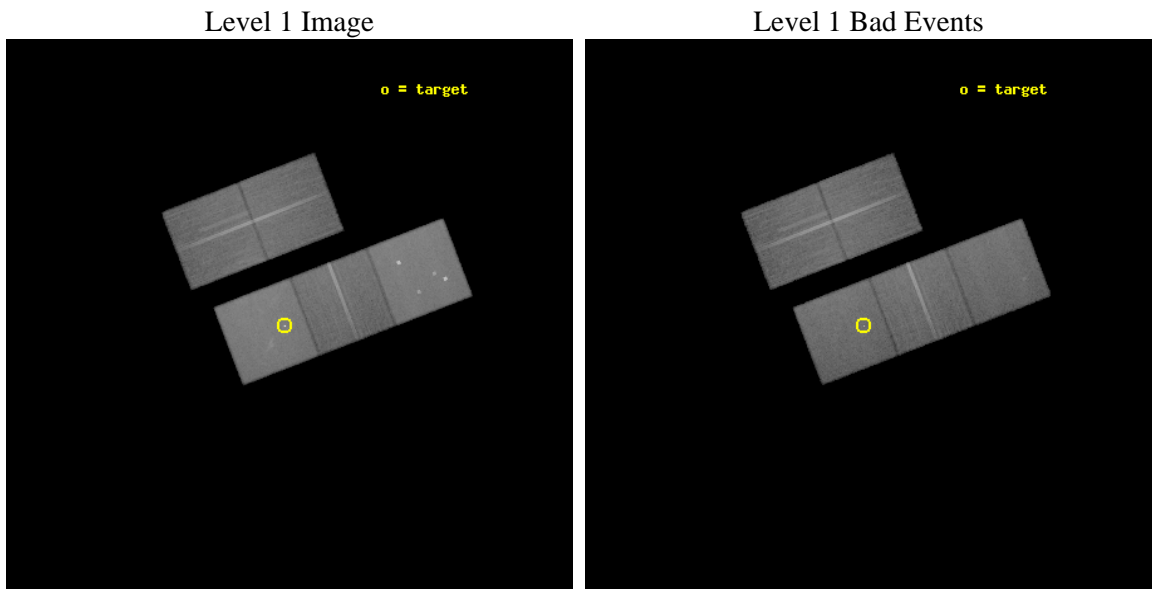
| | | |
|----------|---|---|
| seq_num | 500309 | Sequence number |
| obs_id | 3830 | Observation id |
| title | MONITORING THE BIRTH OF SUPERNOVA REMNANT SNR1987A | Proposal title |
| observer | Prof. David Burrows | Principal investigator |
| object | SNR1987A | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 83.866667 | Observer's specified target RA [deg] |
| dec_targ | -69.26975 | Observer's specified target Dec [deg] |
| ra_nom | 83.843270740625 | Nominal RA [deg] |
| dec_nom | -69.264735952218 | Nominal Dec [deg] |
| roll_nom | 158.90363427502 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 45907.858941436 | Sum of GTIs [s] |
| livetime | 45308.038967492 | Livetime [s] |
| ontime2 | 45904.717971206 | Sum of GTIs [s] |
| ontime3 | 45907.858961374 | Sum of GTIs [s] |
| ontime5 | 45907.858941436 | Sum of GTIs [s] |
| ontime6 | 45907.858941436 | Sum of GTIs [s] |
| ontime7 | 45907.858941436 | Sum of GTIs [s] |
| l2events | 491788 | Number of level 2 events |



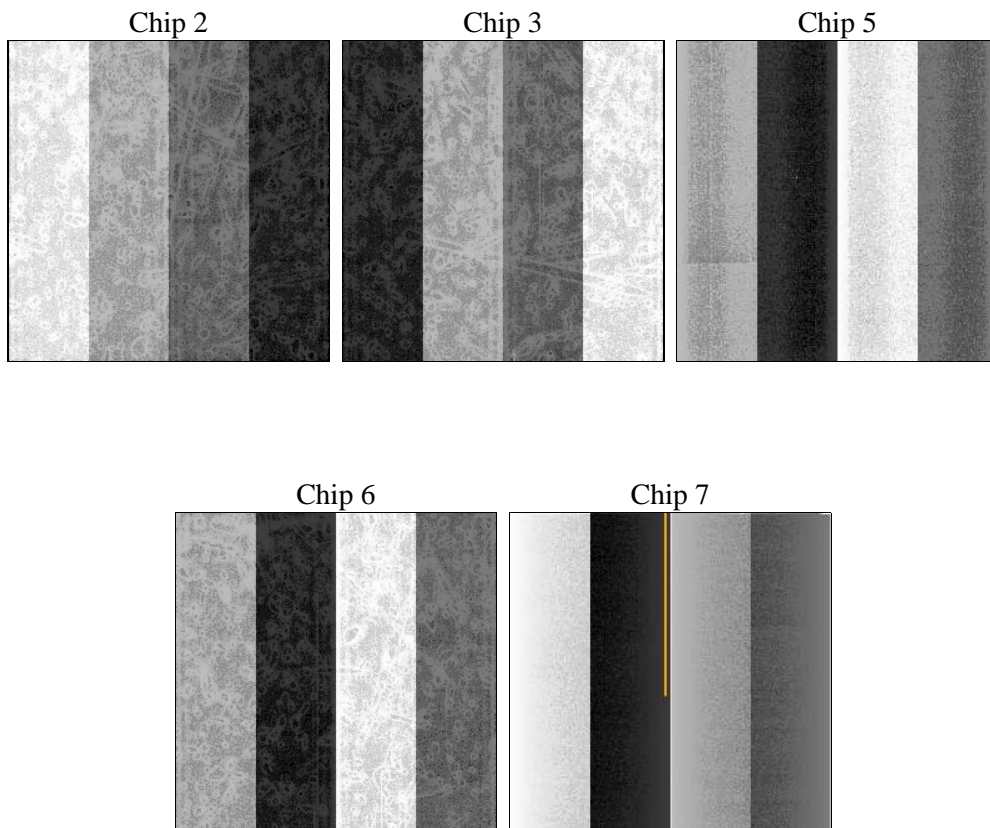
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 45757.824000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 45907.858941436 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime2 | 45904.717971206 | Sum of GTIs [s] |
| date | 2012-10-31T06:01:49 | Date and time of file creation | ontime3 | 45907.858961374 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 45907.858941436 | Sum of GTIs [s] |
| | | | ontime6 | 45907.858941436 | Sum of GTIs [s] |
| | | | ontime7 | 45907.858941436 | Sum of GTIs [s] |
| | | | l1events | 1730426 | Number of level 1 events |

2.1.4 Events

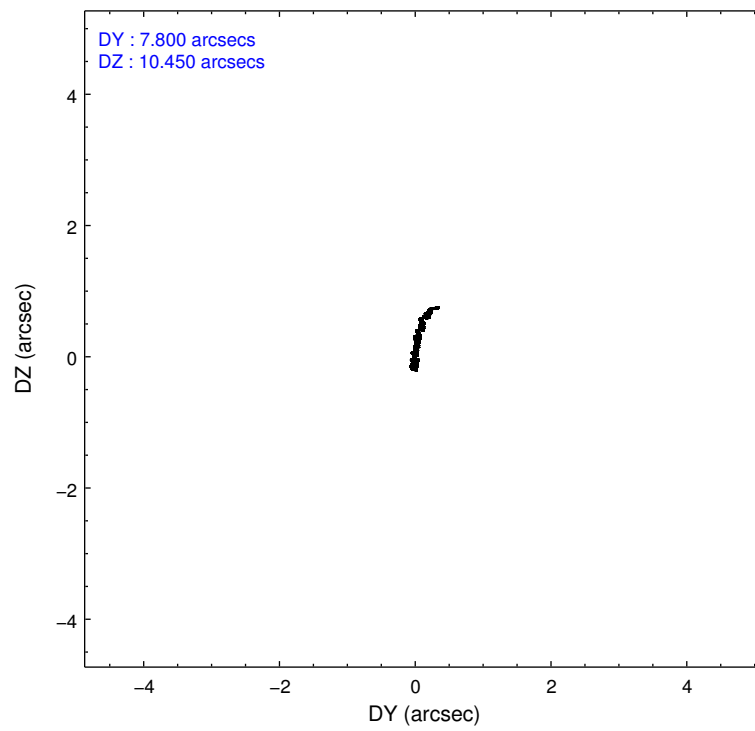
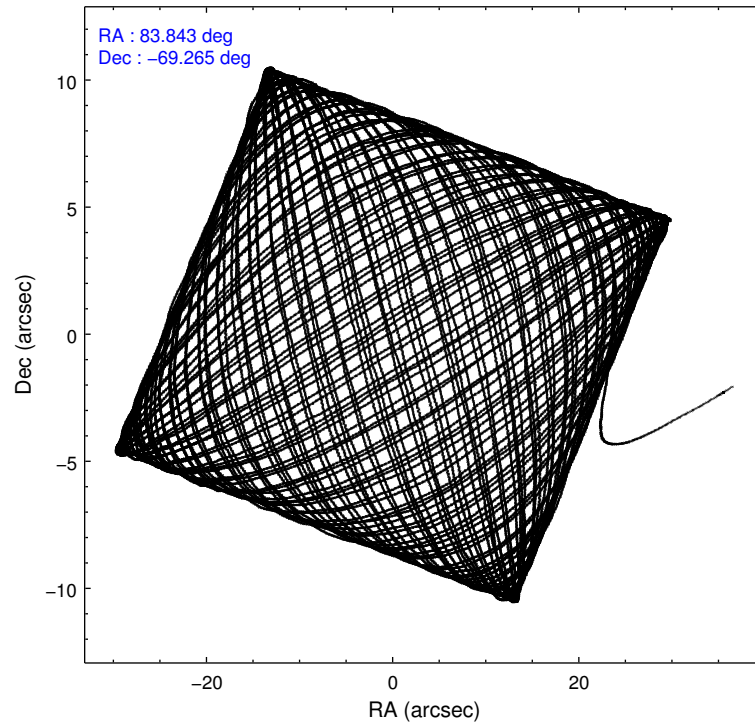
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 282234 | 287480 | 442337 | 293816 | 424559 |
| rejected events | 245200 | 244704 | 228630 | 252700 | 226520 |
| rejected % | 86% | 85% | 51% | 86% | 53% |

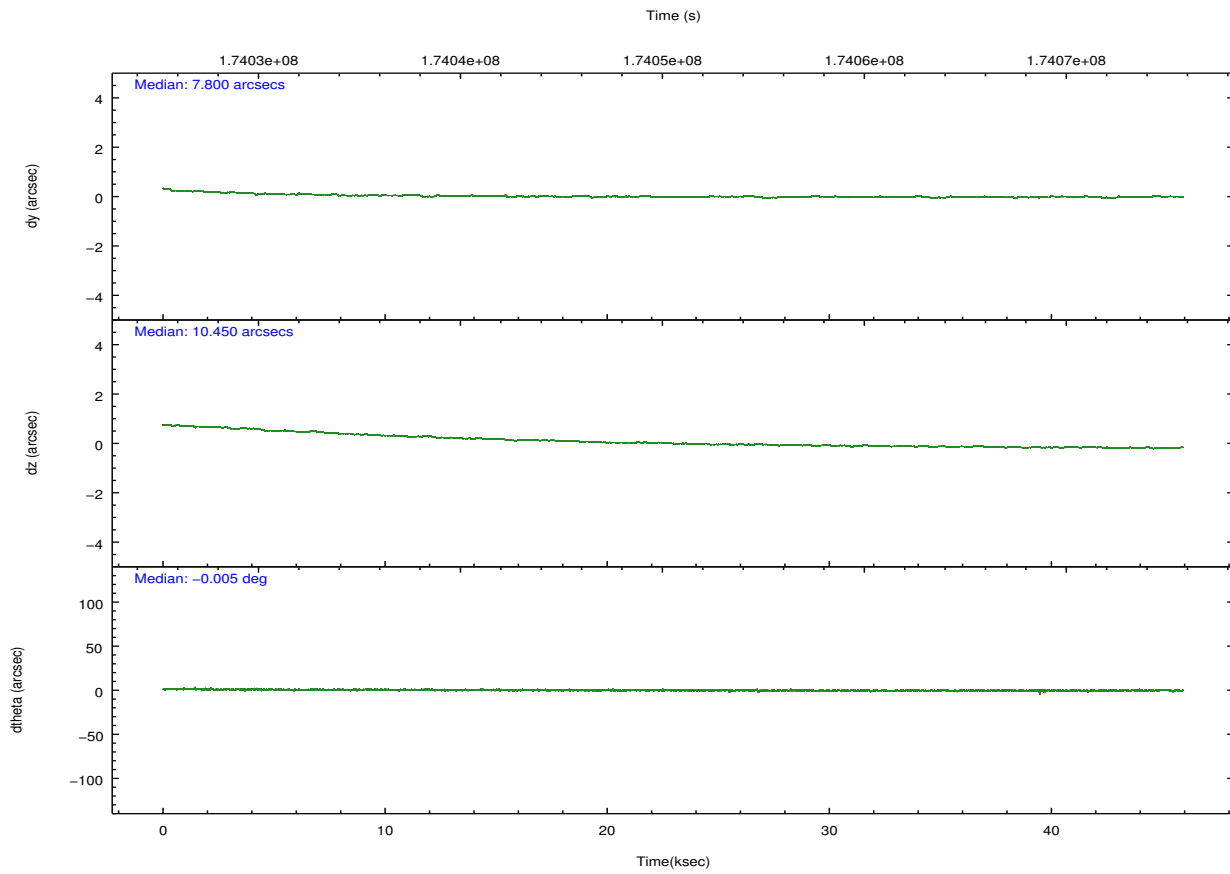
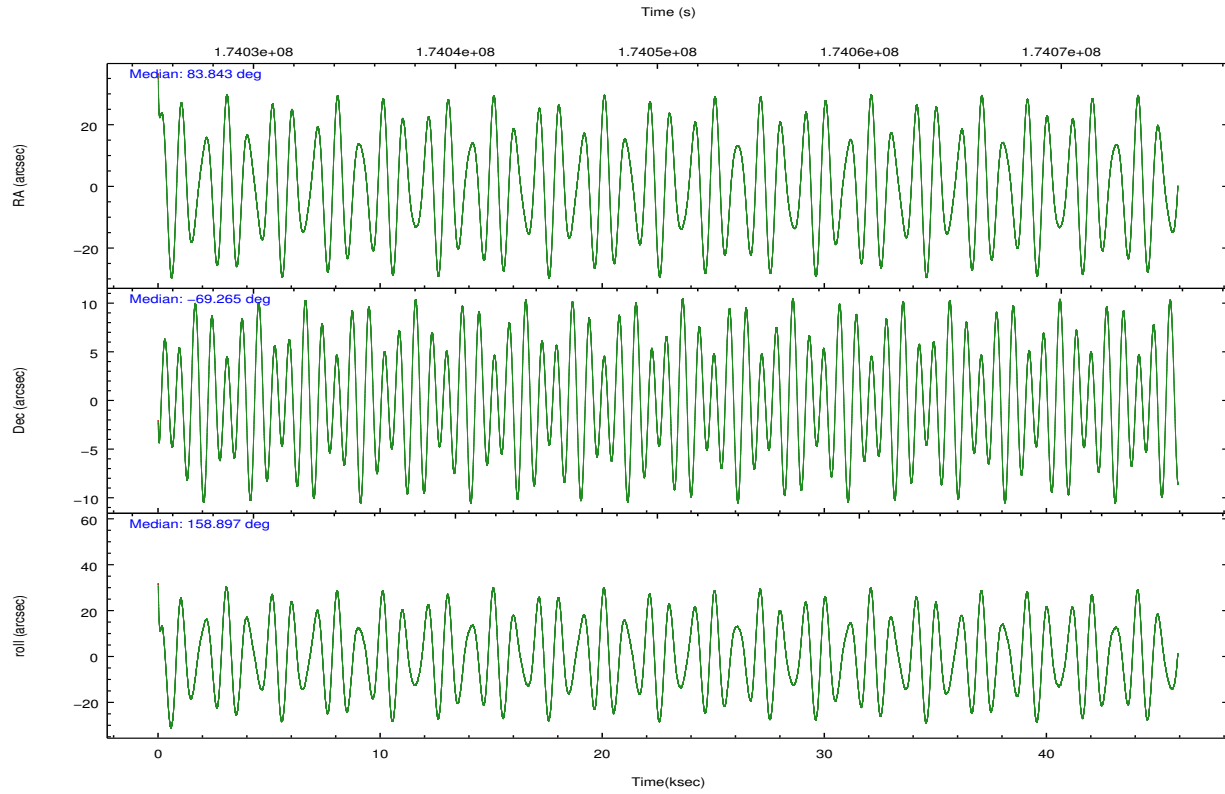
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 18249 | 23362 | 35129 | 20301 | 27165 |
| | 6% | 8% | 7% | 6% | 6% |
| grade 1 events | 172 | 206 | 707 | 166 | 614 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 7072 | 6969 | 60712 | 7562 | 42077 |
| | 2% | 2% | 13% | 2% | 9% |
| grade 3 events | 3371 | 3517 | 9459 | 3487 | 19087 |
| | 1% | 1% | 2% | 1% | 4% |
| grade 4 events | 3273 | 3457 | 8959 | 3420 | 18813 |
| | 1% | 1% | 2% | 1% | 4% |
| grade 5 events | 10692 | 12196 | 31548 | 13156 | 36833 |
| | 3% | 4% | 7% | 4% | 8% |
| grade 6 events | 5349 | 5794 | 101759 | 6707 | 92659 |
| | 1% | 2% | 23% | 2% | 21% |
| grade 7 events | 234056 | 231979 | 194064 | 239017 | 187311 |
| | 82% | 80% | 43% | 81% | 44% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-23567 | ACIS-23567 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 83.919084 | 83.84327074062534 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -69.260151 | -69.26473595221835 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 158.817904 | 158.903634275016 | [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) | 174027732.184000 | 174026501.14085 | | | |
| Observation start date | 2003-07-08T05:01:08 | 2003-07-08T04:41:41 | | | |
| [s] Observation end time (MET) | 174073490.184000 | 174073804.89286 | | | |
| Observation end date | 2003-07-08T17:43:46 | 2003-07-08T17:50:04 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





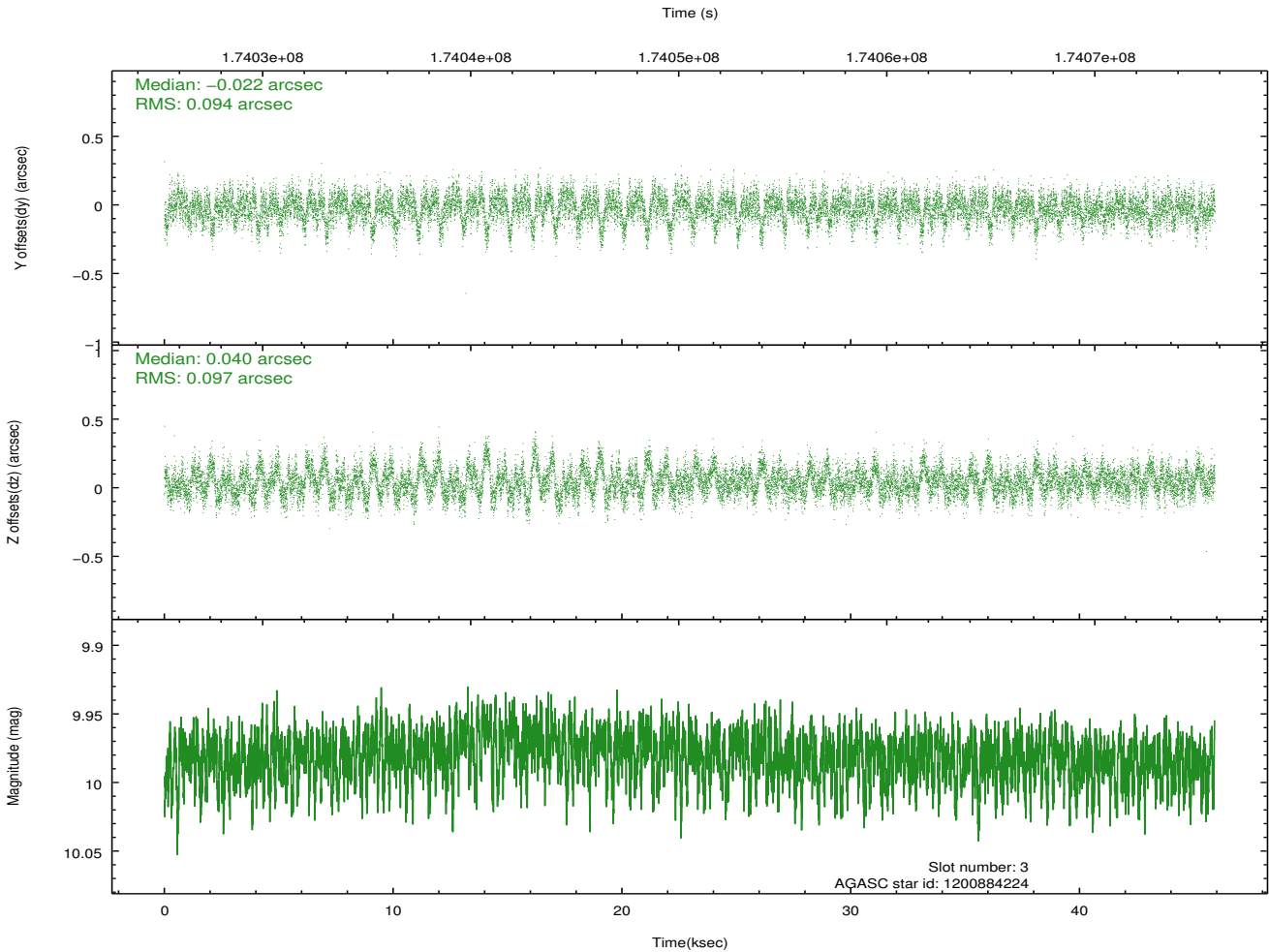
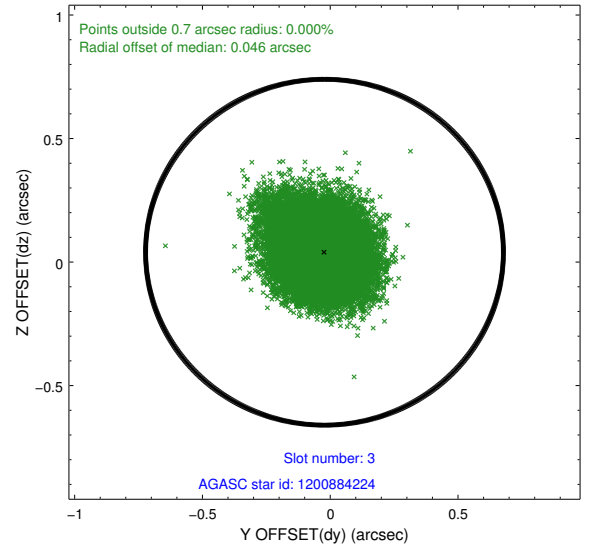
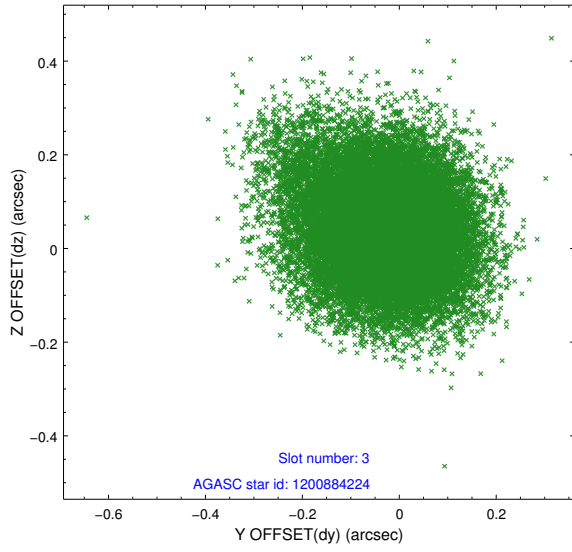
Slot Statistics

| 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 | 11198 | -0.036 | -0.021 | 0.006 | 0.013 | 0.000000 | 0.000000 | -760.61 | -1731.84 |
| 1 | FID | ACIS-S-4 | 7.20 | 11197 | 0.035 | 0.014 | 0.007 | 0.012 | 0.000000 | 0.000000 | 2152.72 | 176.72 |
| 2 | FID | ACIS-S-6 | 7.35 | 11198 | -0.027 | 0.015 | 0.008 | 0.013 | 0.000000 | 0.000000 | 401.34 | 814.09 |
| 3 | GUIDE | 1200884224 | 9.98 | 22377 | -0.022 | 0.040 | 0.143 | 0.237 | 83.314443 | -68.577335 | 1628.57 | -2000.62 |
| 4 | GUIDE | 1200884248 | 9.46 | 22380 | -0.082 | 0.168 | 0.103 | 0.172 | 83.880915 | -68.565170 | 951.28 | -2314.36 |
| 5 | GUIDE | 1200885760 | 9.46 | 22379 | -0.076 | 0.031 | 0.100 | 0.161 | 83.723637 | -68.777667 | 865.27 | -1526.81 |
| 6 | GUIDE | 1201540776 | 9.59 | 22375 | 0.136 | -0.054 | 0.115 | 0.192 | 85.107945 | -69.858480 | -2157.44 | 1489.29 |
| 7 | GUIDE | 1201542672 | 8.20 | 22391 | 0.052 | -0.186 | 0.075 | 0.118 | 84.492488 | -69.957531 | -1568.15 | 2087.82 |

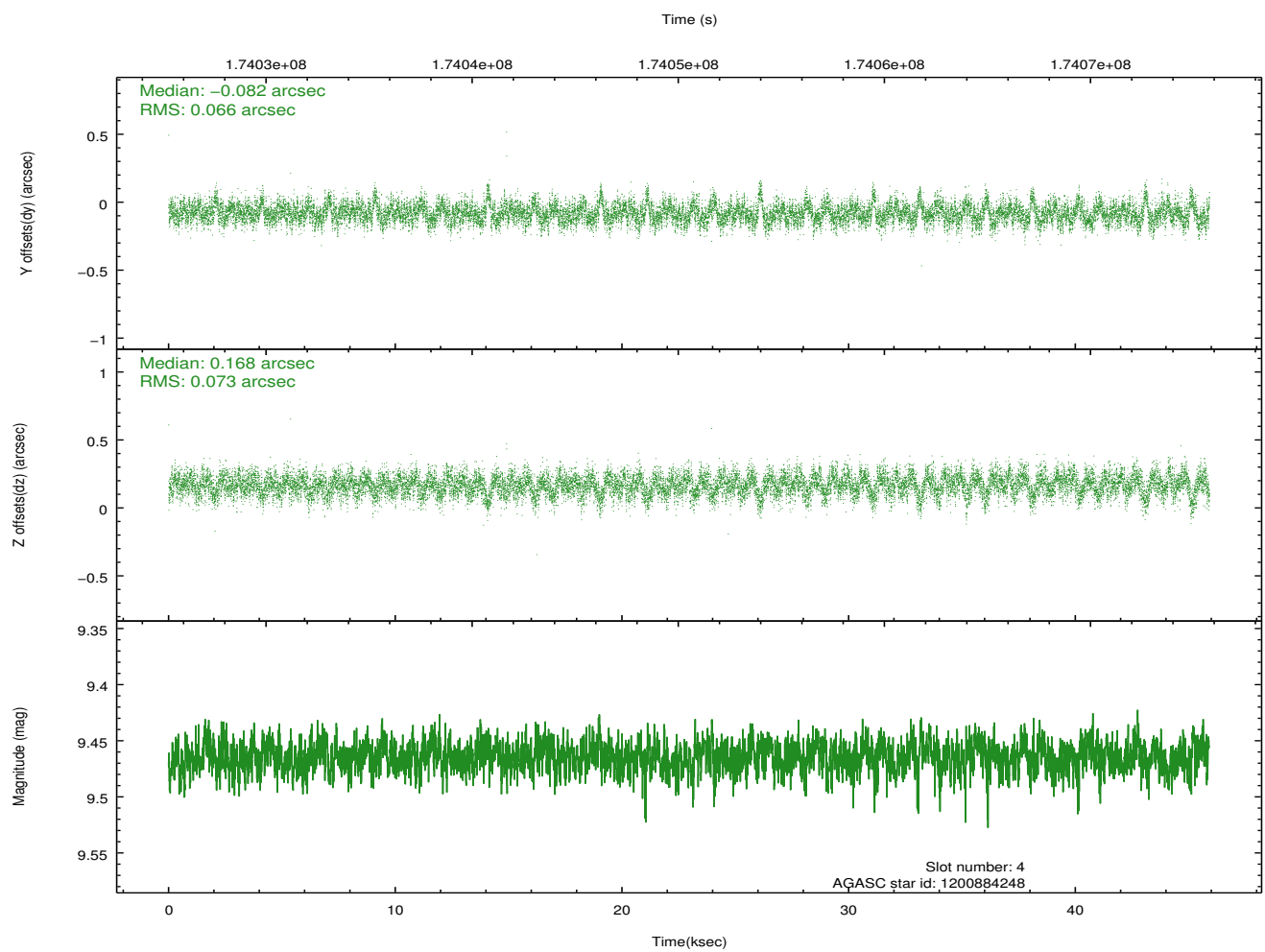
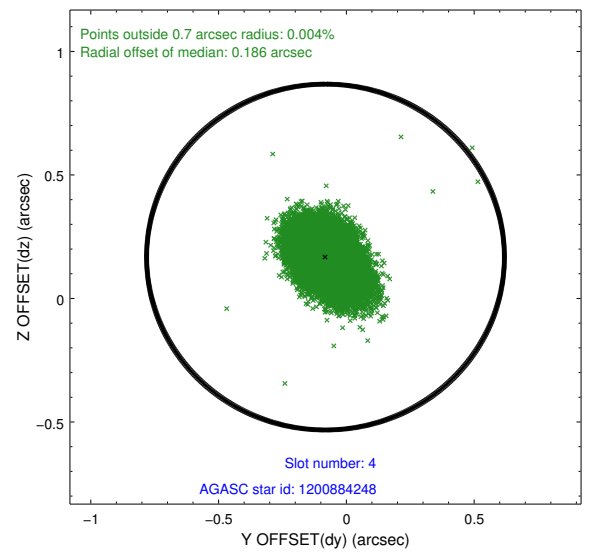
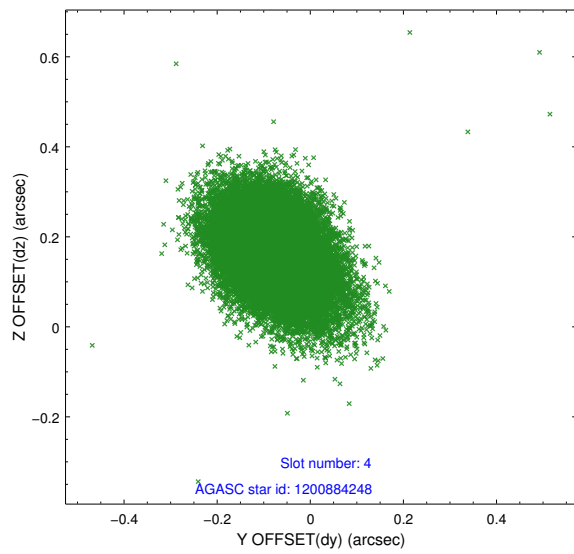
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2.4 Star Slots

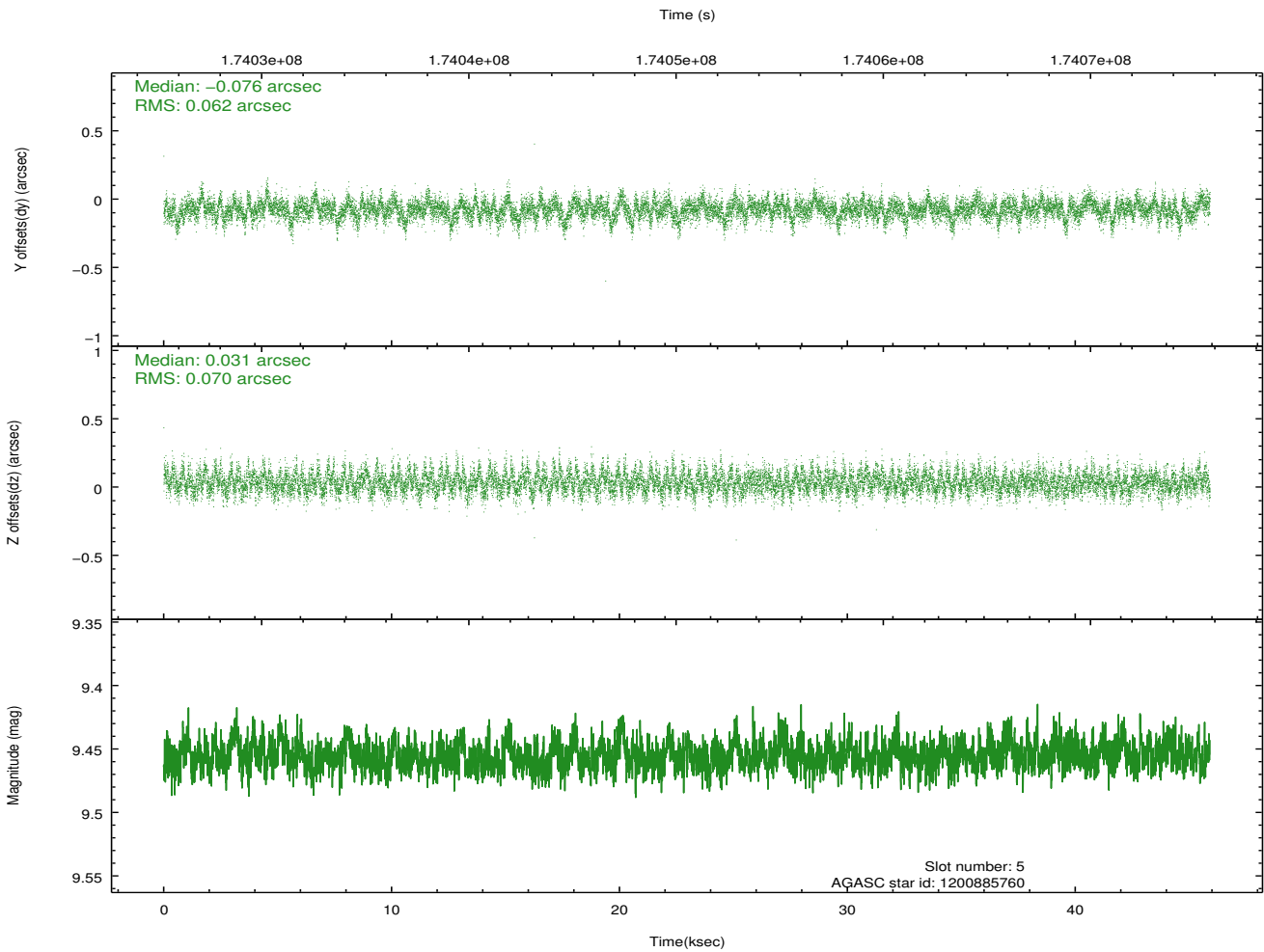
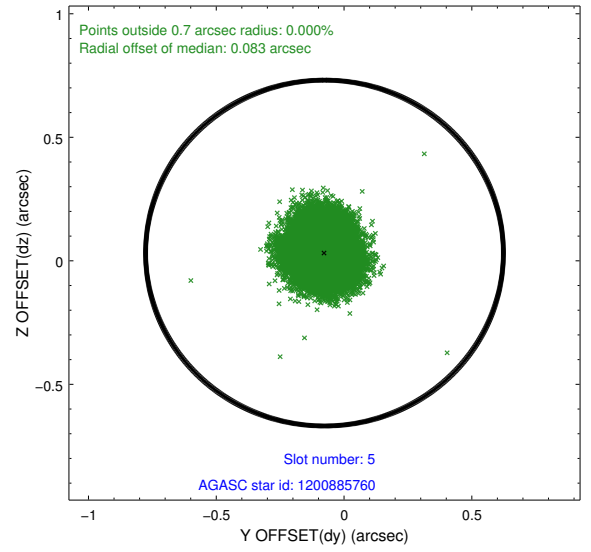
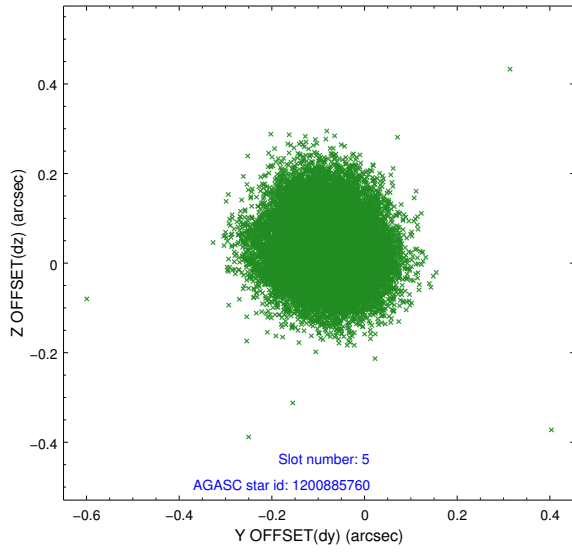
2.4.1 Slot 3



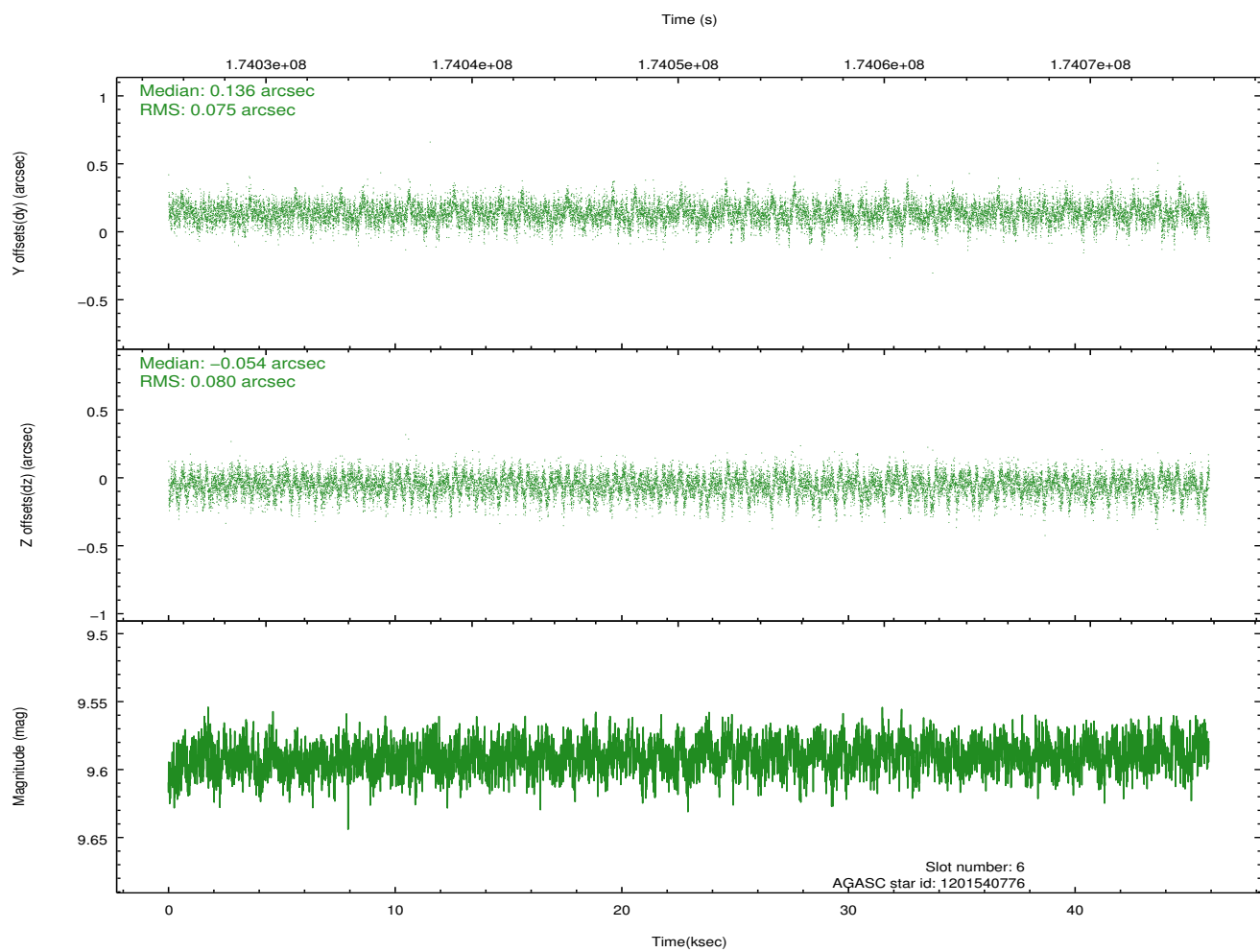
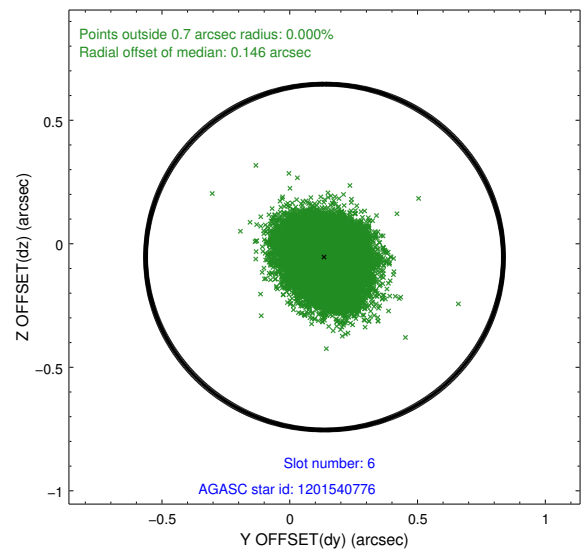
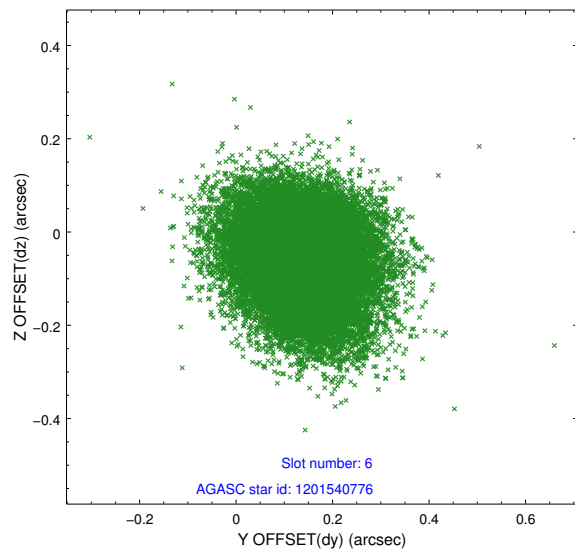
2.4.2 Slot 4



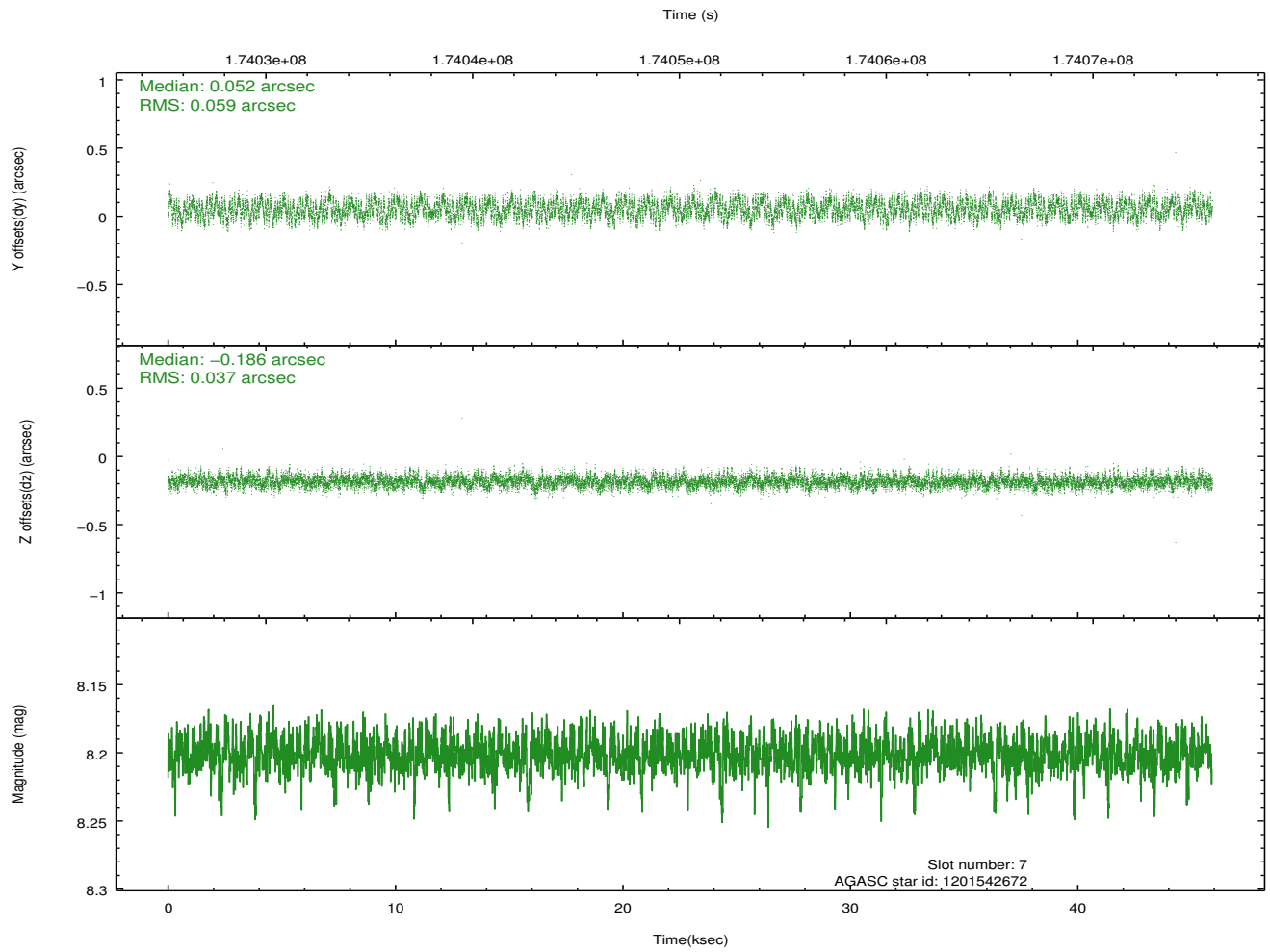
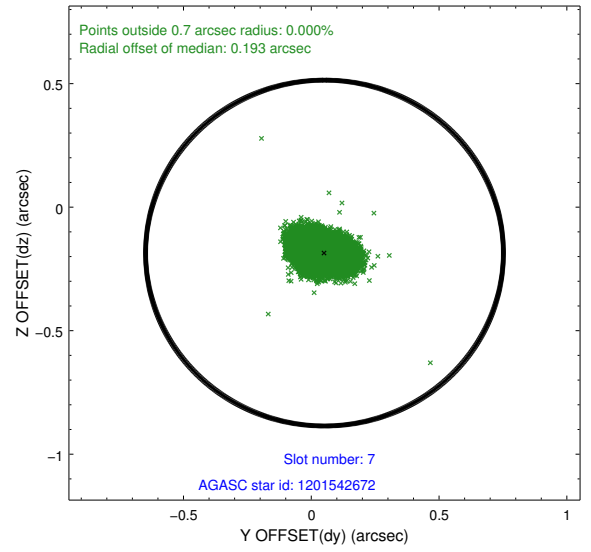
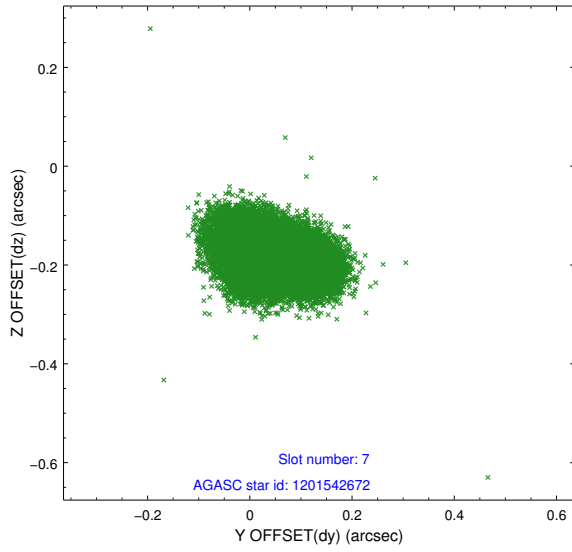
2.4.3 Slot 5



2.4.4 Slot 6

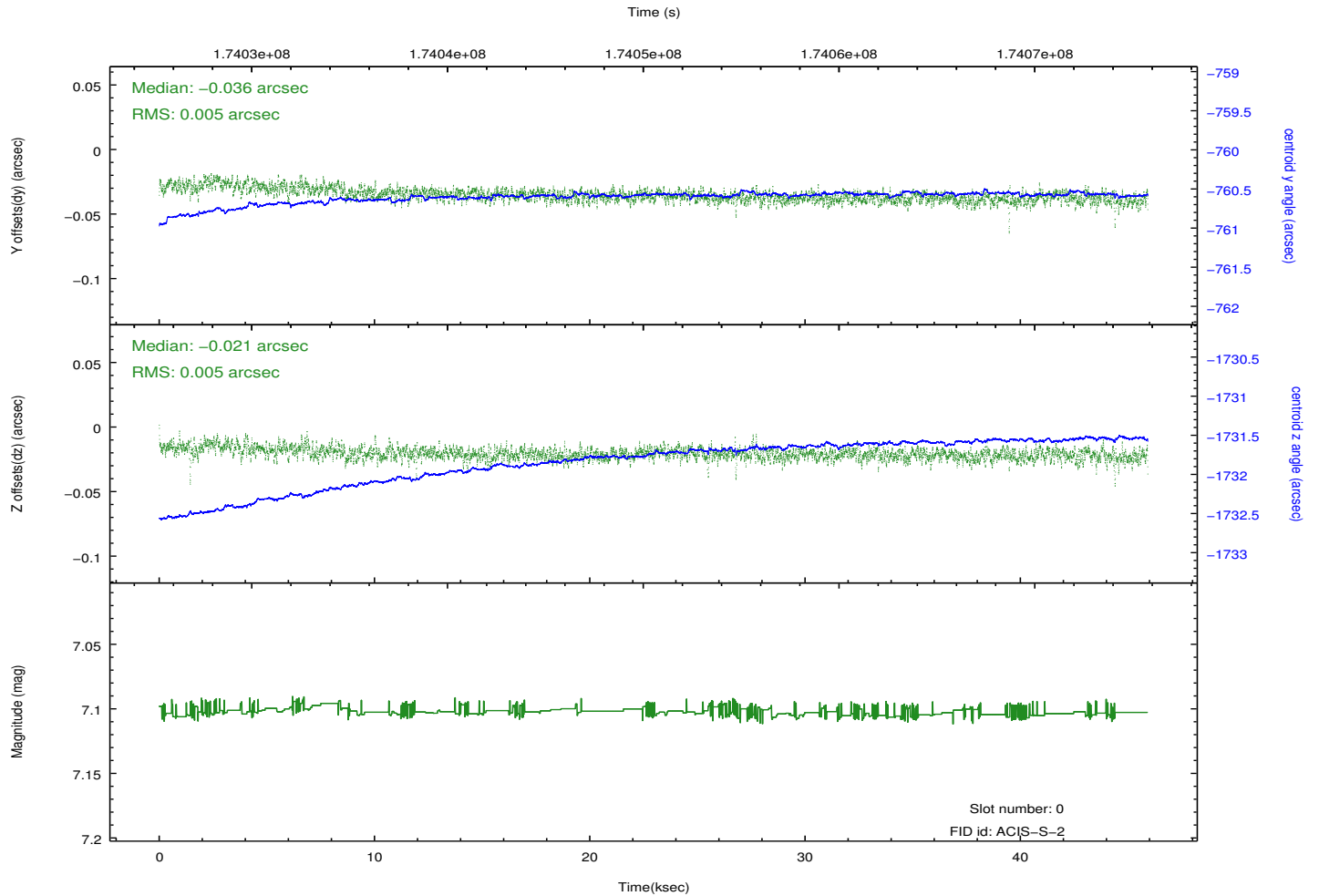
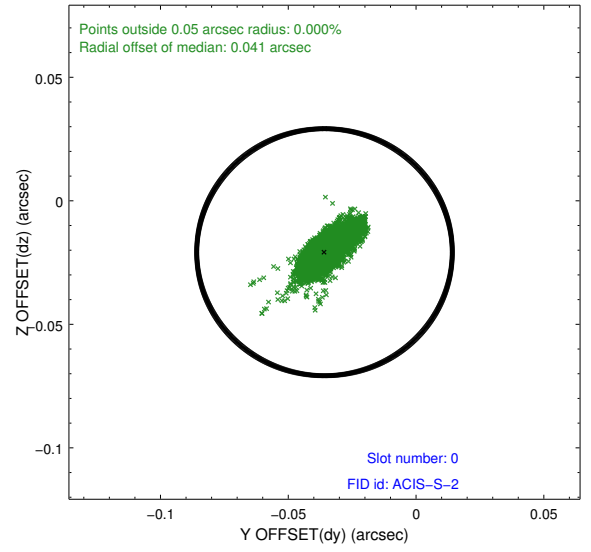
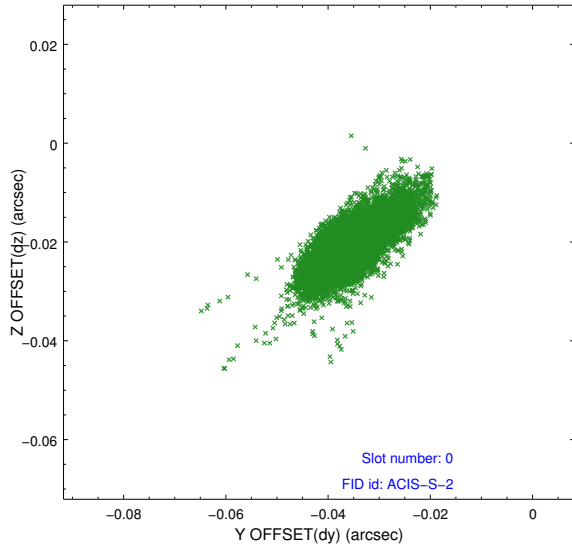


2.4.5 Slot 7

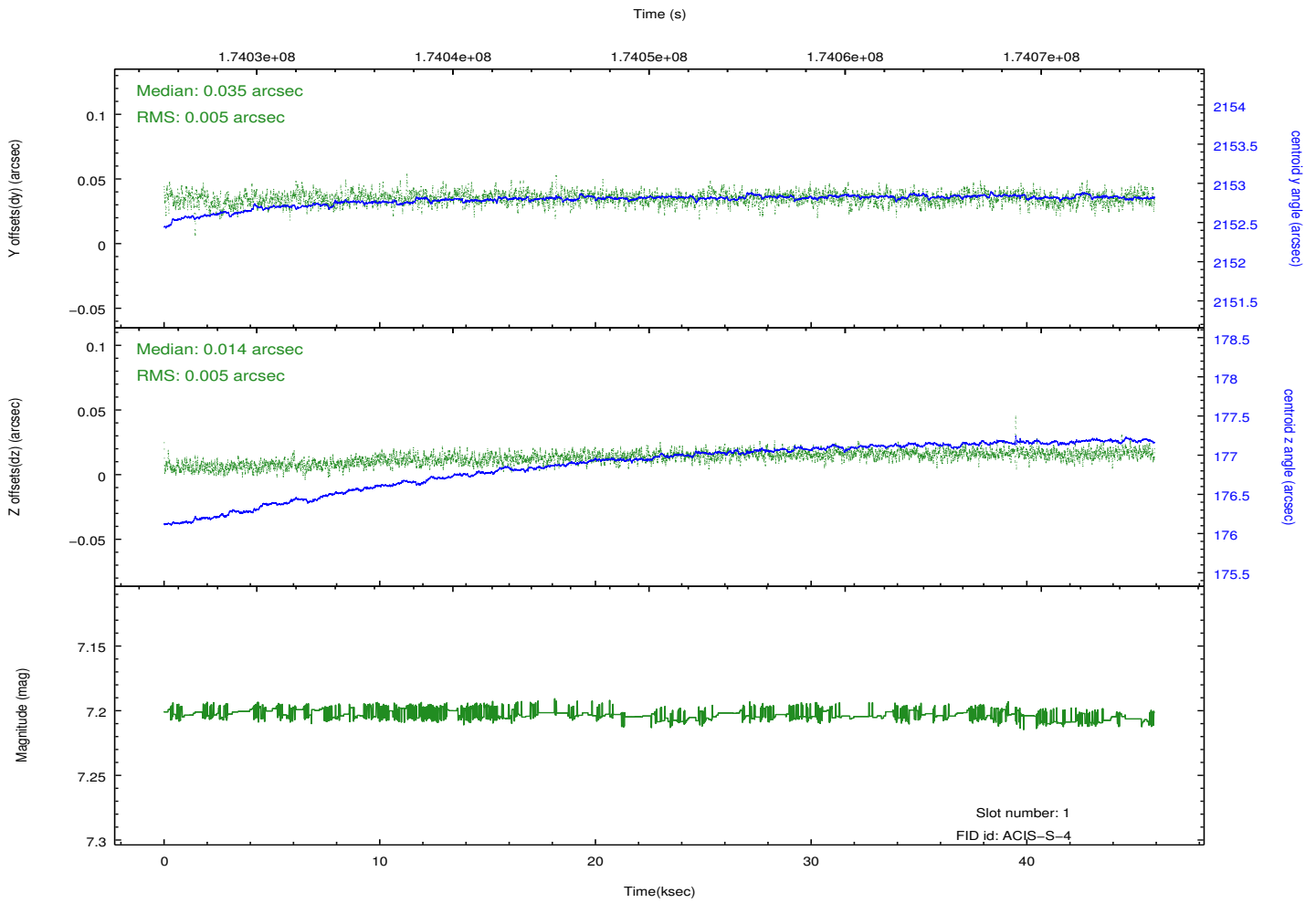
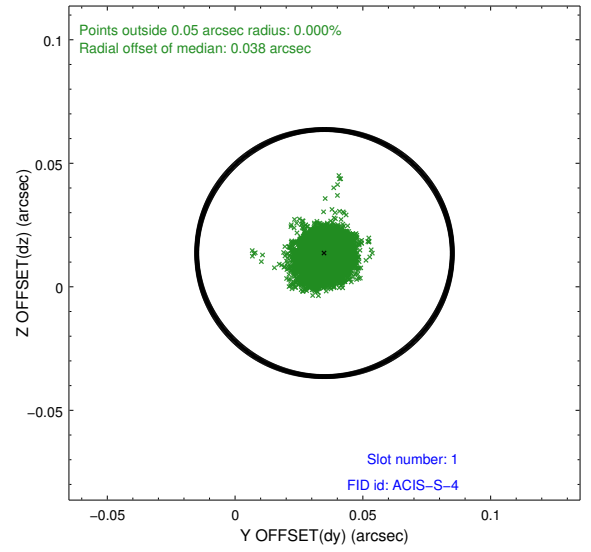
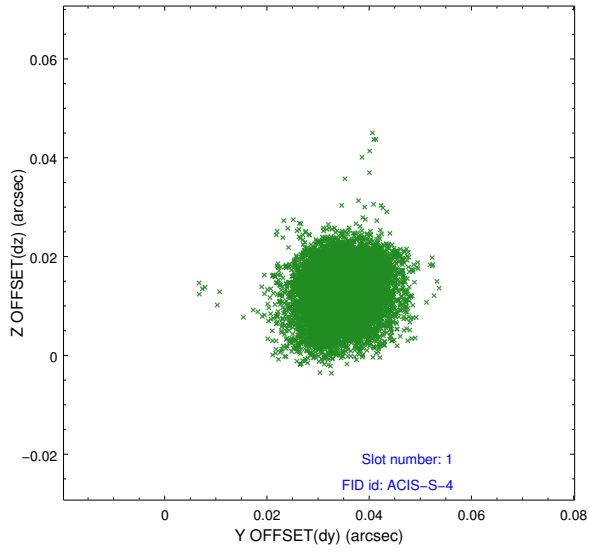


2.5 FID Slots

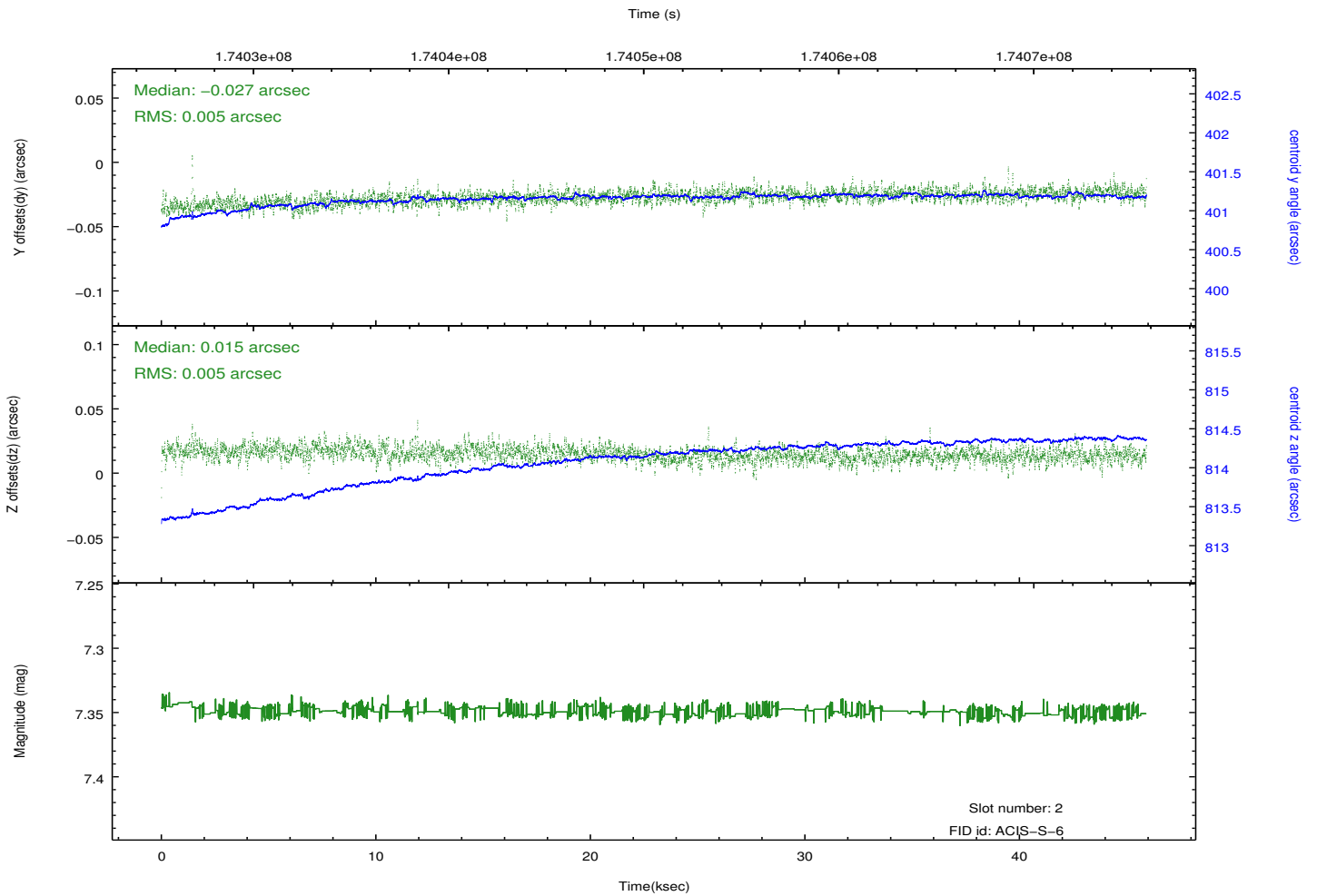
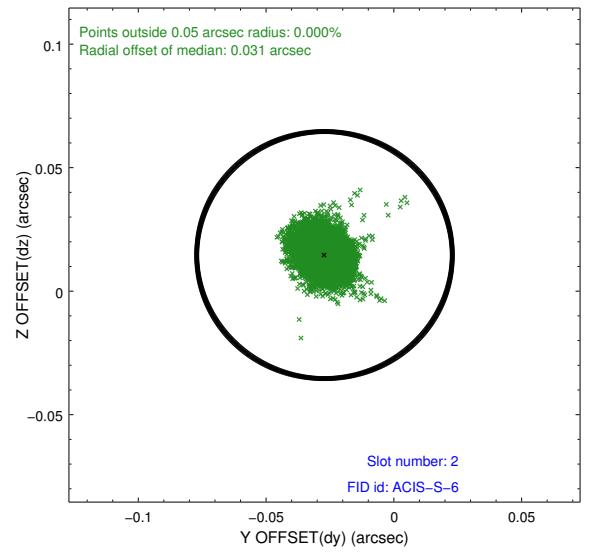
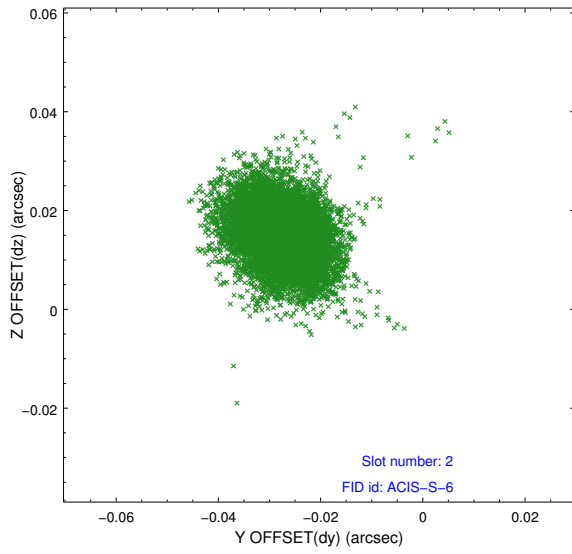
2.5.1 Slot 0



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) | 2012.11.16 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 45.907 |

A.2 Comments

Monitor constraint met.