

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9405 - L2 Version 2
Chandra X-Ray Center

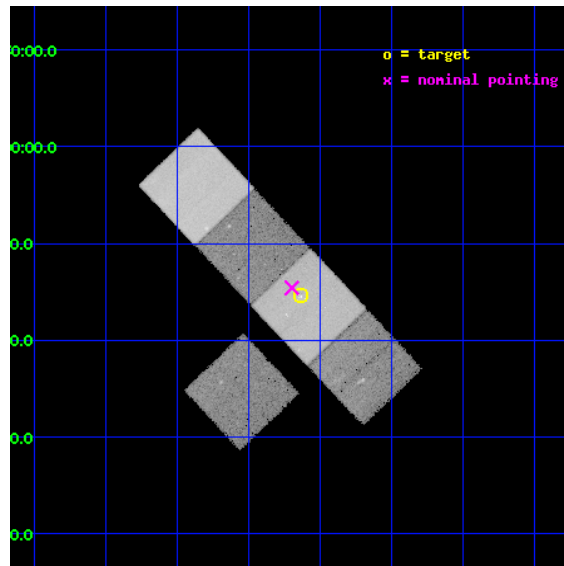
L2 Processing Date : May 4 2012

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1 Front

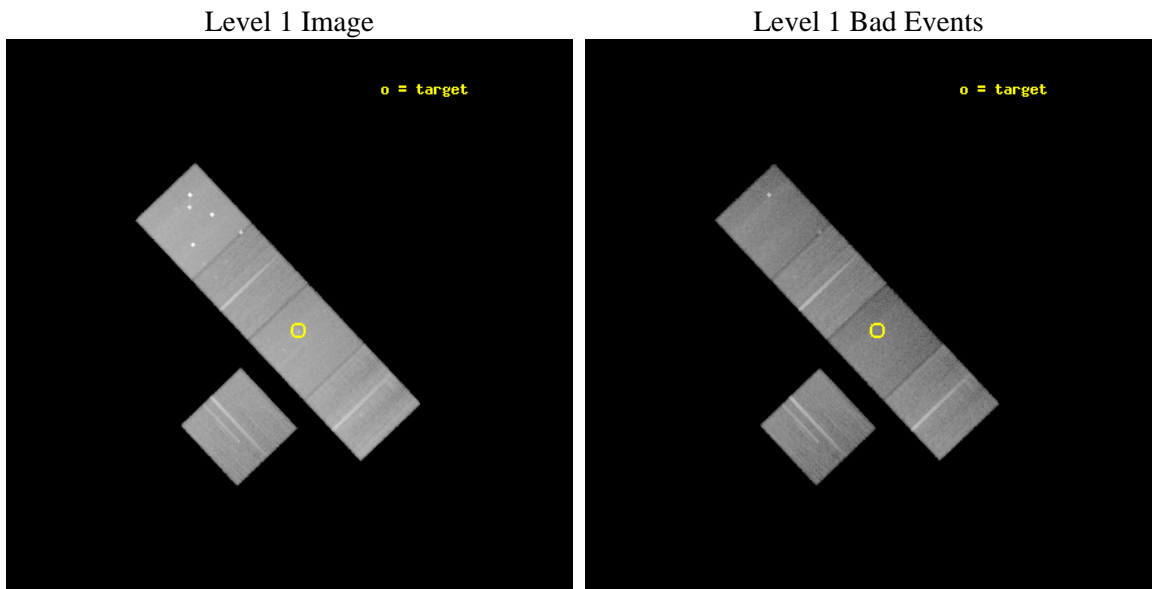
| | | |
|----------|--|---|
| seq_num | 800742 | Sequence number |
| obs_id | 9405 | Observation id |
| title | Chandra/HST Coverage of Compact Galaxy Group Evolution | Proposal ti |
| observer | Dr. Sarah Gallagher | Principal investigator |
| object | HCG 31 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 75.408333 | Observer's specified target RA [deg] |
| dec_targ | -4.256944 | Observer's specified target Dec [deg] |
| ra_nom | 75.423888154677 | Nominal RA [deg] |
| dec_nom | -4.2430018765979 | Nominal Dec [deg] |
| roll_nom | 46.561210810899 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 36036.894294858 | Sum of GTIs [s] |
| livetime | 35566.04574092 | Livetime [s] |
| ontime3 | 36027.348143876 | Sum of GTIs [s] |
| ontime5 | 36036.853254855 | Sum of GTIs [s] |
| ontime6 | 36036.812214851 | Sum of GTIs [s] |
| ontime7 | 36036.894294858 | Sum of GTIs [s] |
| ontime8 | 36033.589124501 | Sum of GTIs [s] |
| l2events | 411641 | Number of level 2 events |



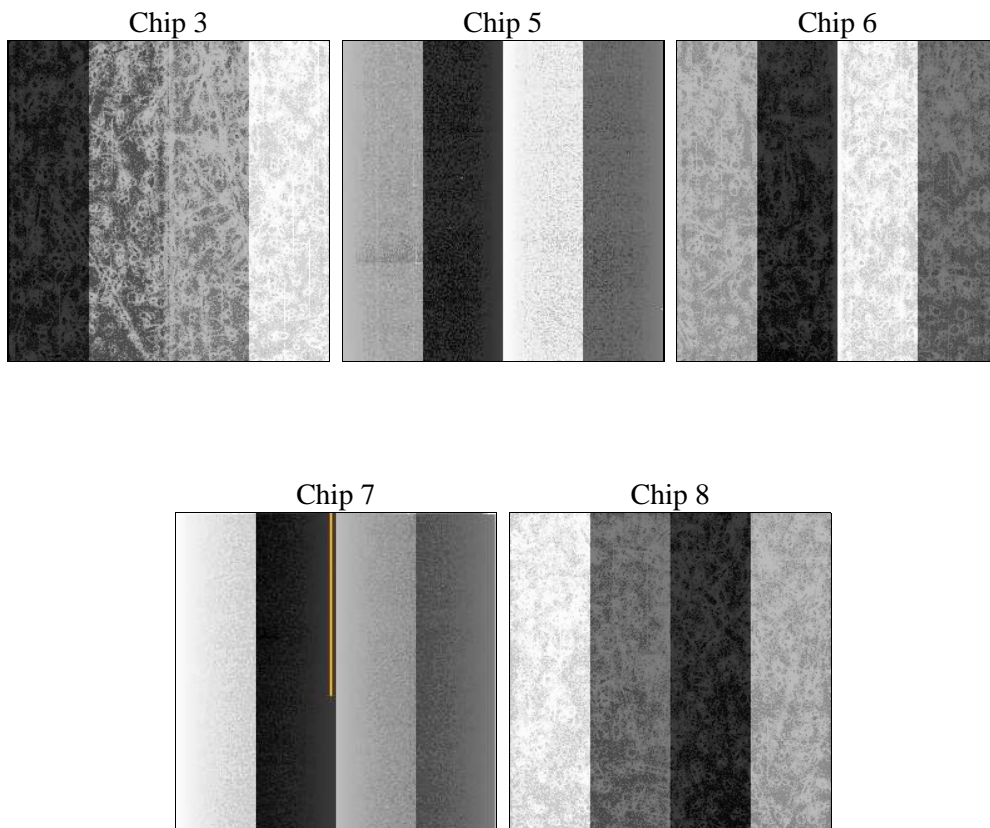
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 36000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 36036.894294858 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime3 | 36027.348143876 | Sum of GTIs [s] |
| date | 2012-05-04T15:12:27 | Date and time of file creation | ontime5 | 36036.853254855 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime6 | 36036.812214851 | Sum of GTIs [s] |
| | | | ontime7 | 36036.894294858 | Sum of GTIs [s] |
| | | | ontime8 | 36033.589124501 | Sum of GTIs [s] |
| | | | l1events | 1702120 | Number of level 1 events |

2.1.4 Events

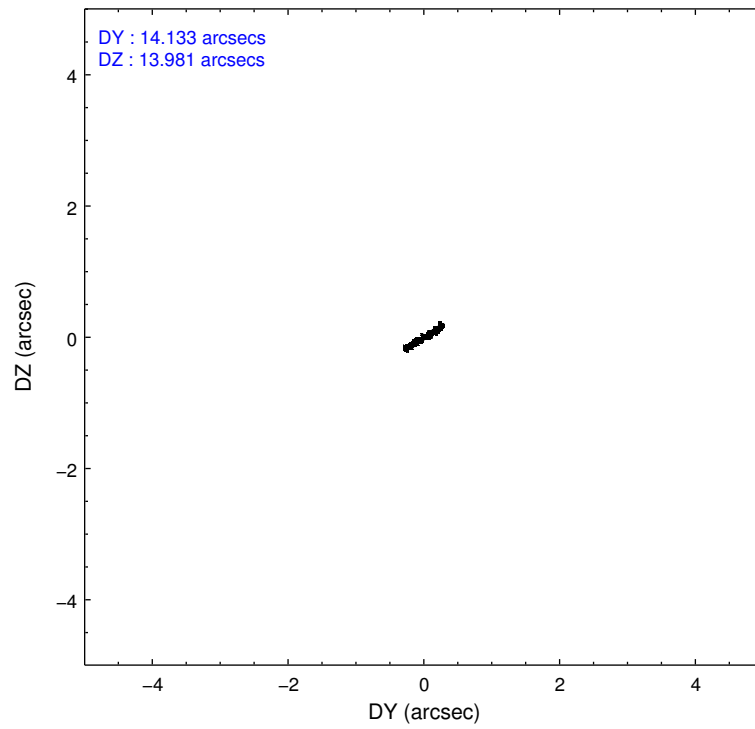
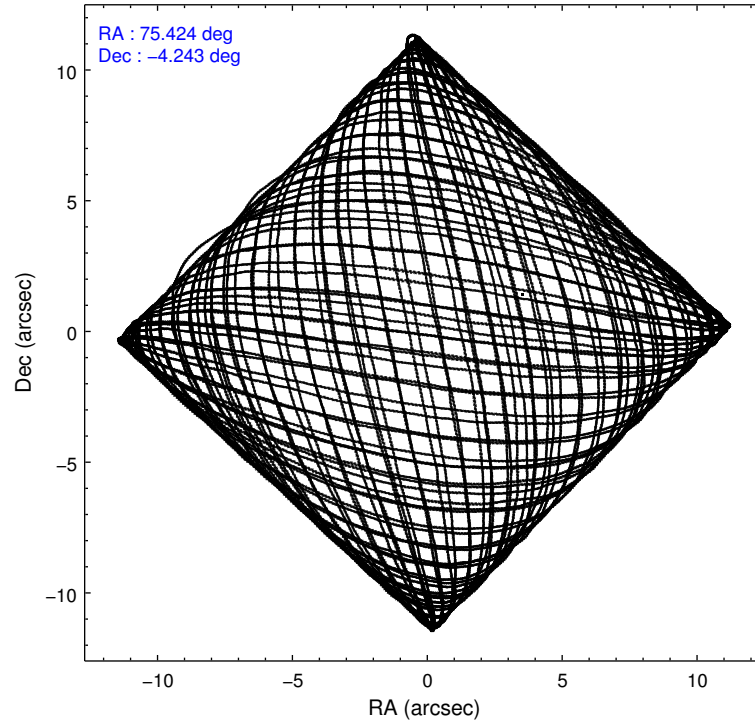
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 281023 | 437482 | 297117 | 325460 | 361038 |
| rejected events | 254219 | 204347 | 266911 | 177696 | 275042 |
| rejected % | 90% | 46% | 89% | 54% | 76% |

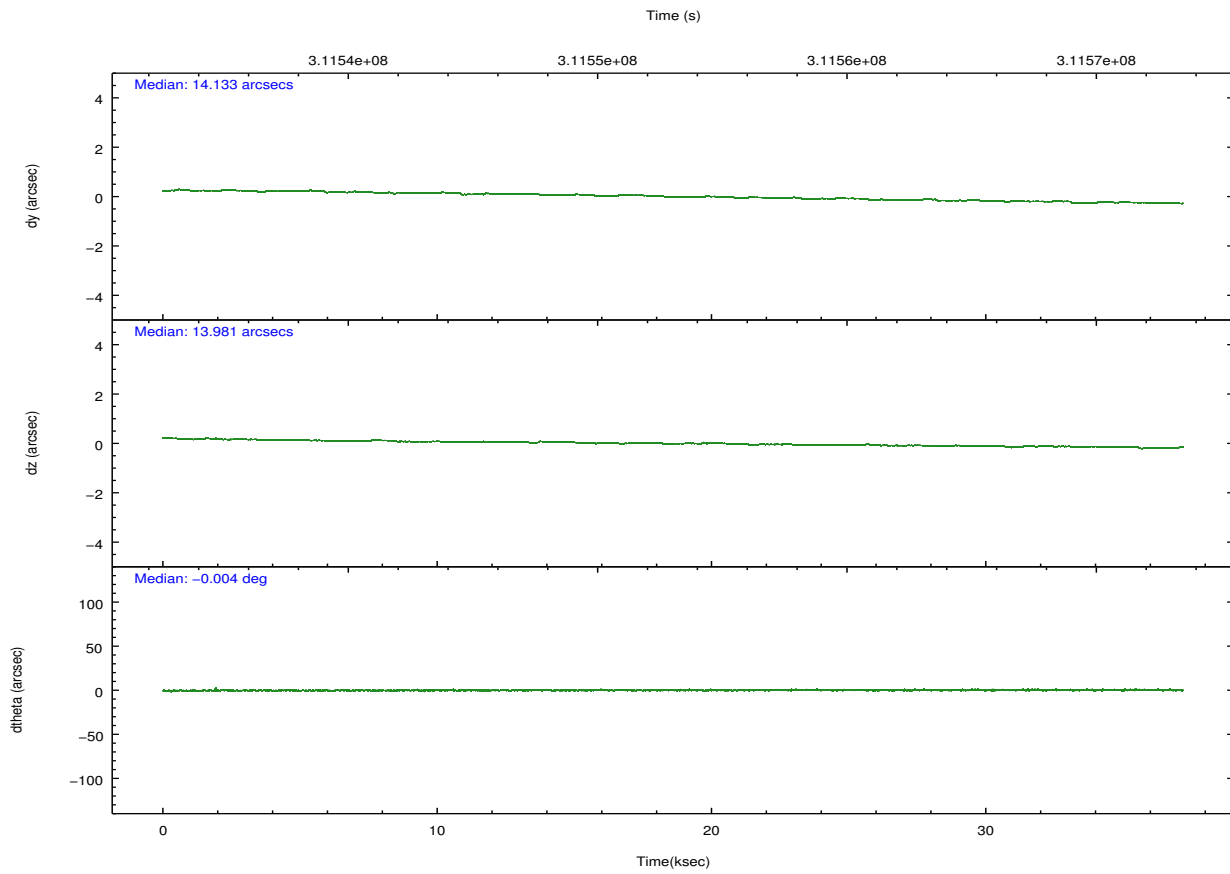
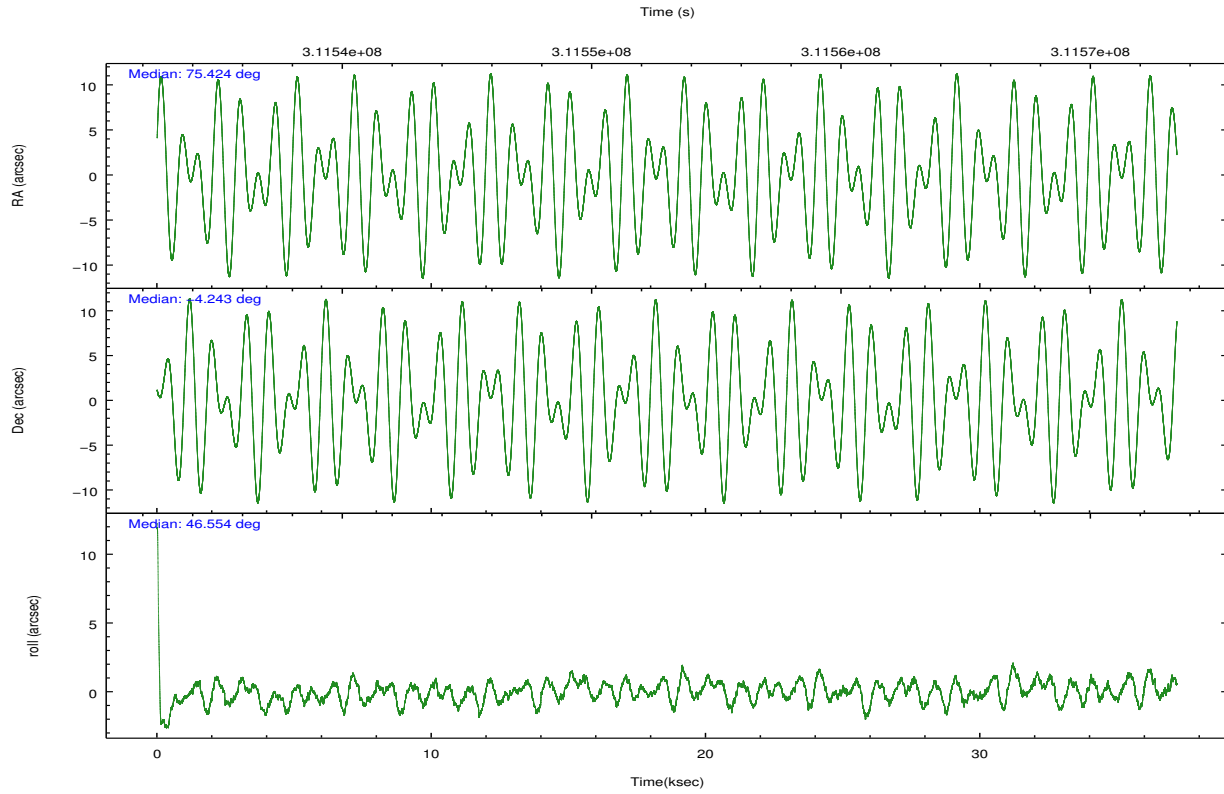
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 9498 | 49350 | 10773 | 14086 | 25577 |
| | 3% | 11% | 3% | 4% | 7% |
| grade 1 events | 159 | 3265 | 163 | 370 | 240 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 5792 | 62451 | 6521 | 29853 | 19865 |
| | 2% | 14% | 2% | 9% | 5% |
| grade 3 events | 3049 | 8552 | 3297 | 13516 | 9309 |
| | 1% | 1% | 1% | 4% | 2% |
| grade 4 events | 3035 | 8134 | 3221 | 13413 | 8568 |
| | 1% | 1% | 1% | 4% | 2% |
| grade 5 events | 11344 | 30948 | 11903 | 33506 | 16670 |
| | 4% | 7% | 4% | 10% | 4% |
| grade 6 events | 5431 | 104672 | 6395 | 76906 | 22679 |
| | 1% | 23% | 2% | 23% | 6% |
| grade 7 events | 242715 | 170110 | 254844 | 143810 | 258130 |
| | 86% | 38% | 85% | 44% | 71% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-35678 | ACIS-35678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 75.417862 | 75.42388815467704 | CCD I2 on | N | N |
| [deg] Pointing Dec | -4.269677 | -4.243001876597877 | CCD I3 on | O1 | Y |
| [deg] Pointing Roll | 46.404138 | 46.56121081089855 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | Y | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | CCD S4 on | Y | Y |
| [s] Observation start time (MET) | 311535619.184000 | 311534049.42207 | CCD S5 on | N | N |
| Observation start date | 2007-11-15T17:39:14 | 2007-11-15T17:14:09 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 311571619.184000 | 311572149.18641 | On-chip summing requested | N | N |
| Observation end date | 2007-11-16T03:39:14 | 2007-11-16T03:49:09 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



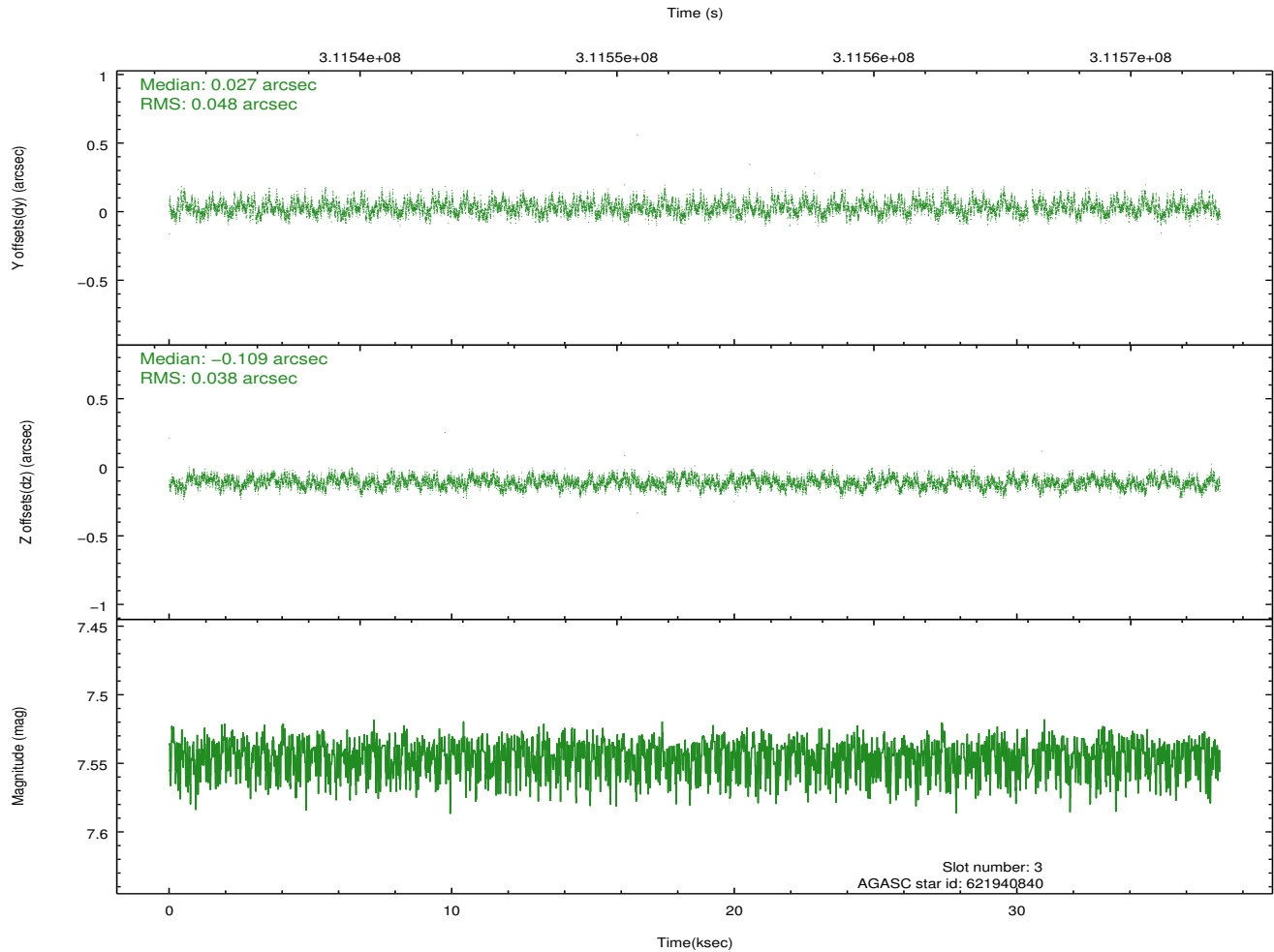
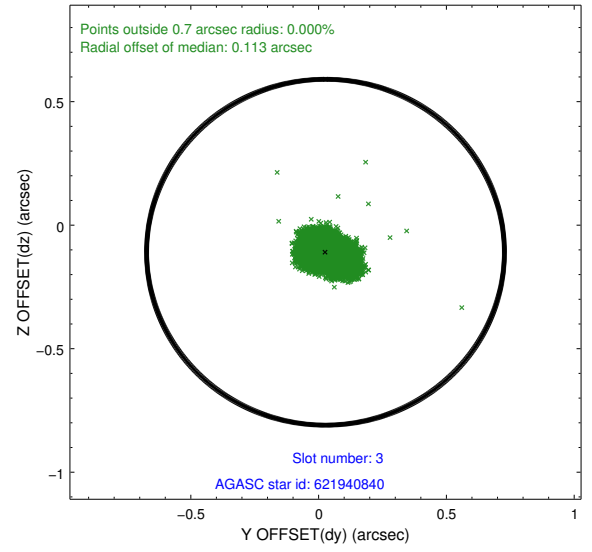
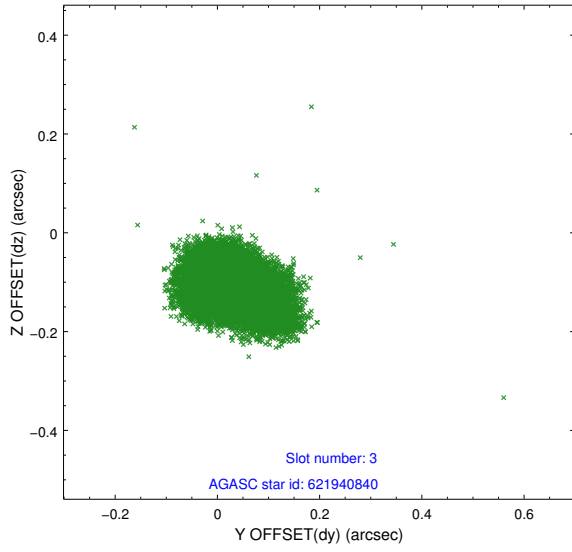


Slot Statistics

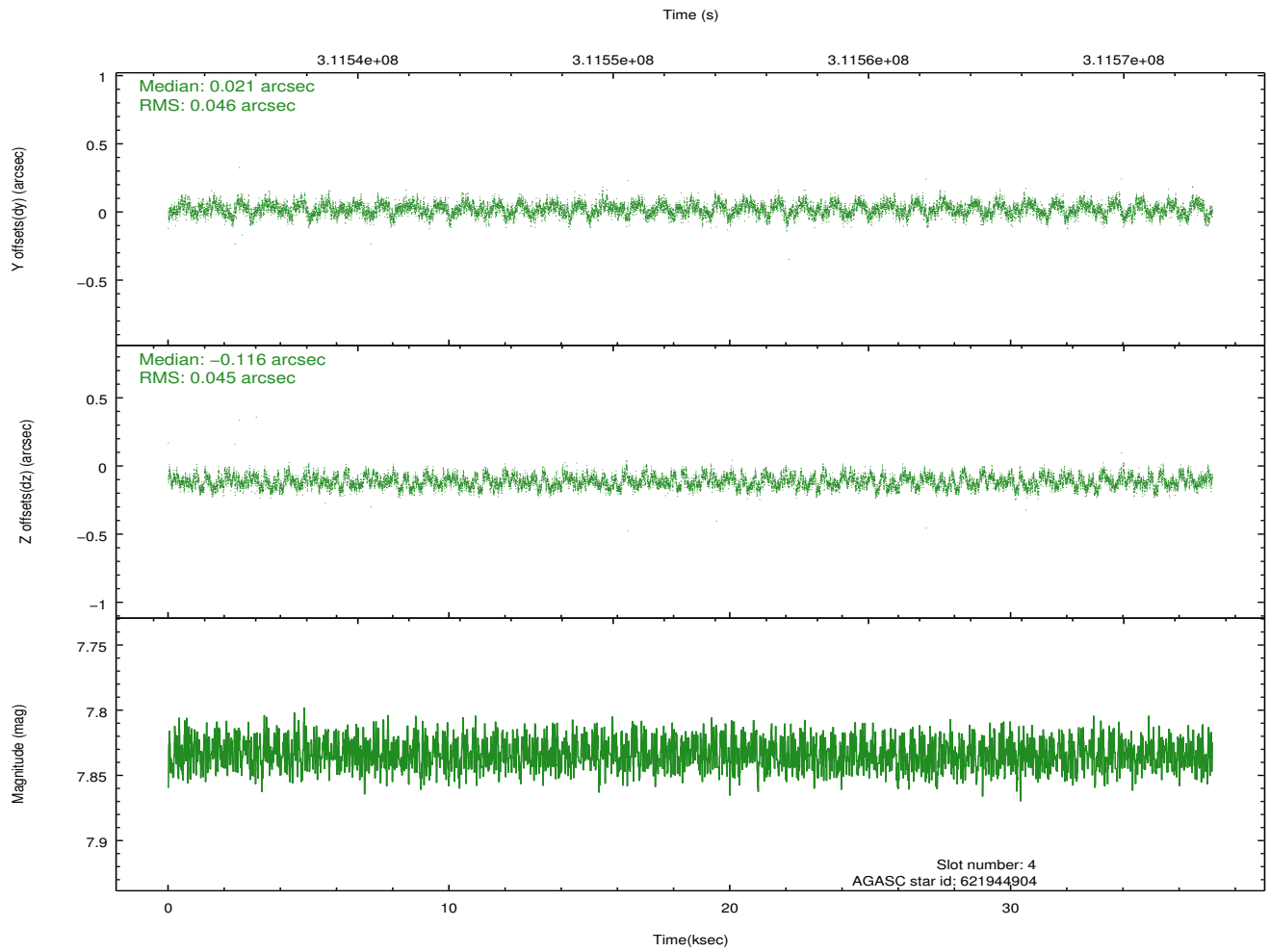
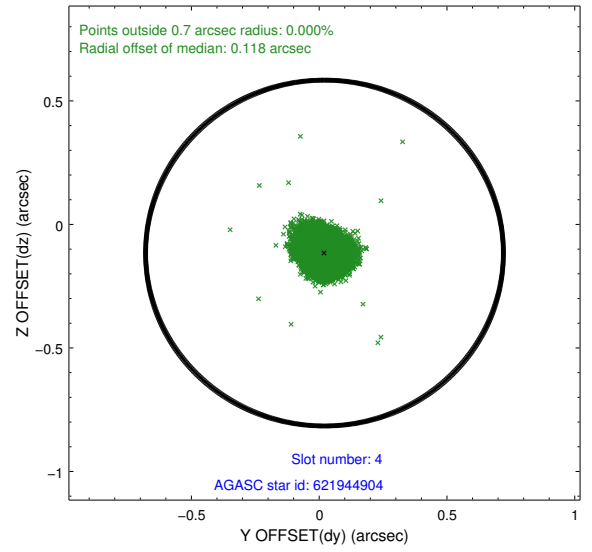
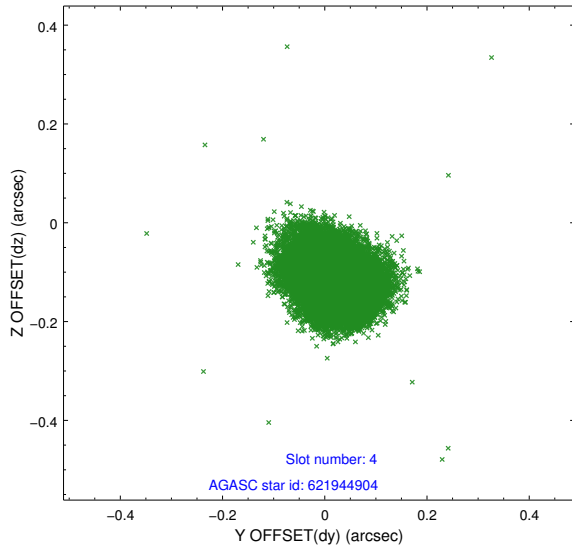
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 9067 | -0.067 | -0.059 | 0.011 | 0.017 | 0.000000 | 0.000000 | -767.15 | -1735.33 |
| 1 | FID | ACIS-S-4 | 7.19 | 9068 | 0.196 | 0.048 | 0.009 | 0.016 | 0.000000 | 0.000000 | 2146.38 | 173.22 |
| 2 | FID | ACIS-S-5 | 7.23 | 9068 | -0.161 | 0.020 | 0.008 | 0.014 | 0.000000 | 0.000000 | -1820.05 | 166.90 |
| 3 | GUIDE | 621940840 | 7.55 | 18064 | 0.027 | -0.109 | 0.064 | 0.106 | 74.853936 | -4.190758 | -1190.93 | 1661.68 |
| 4 | GUIDE | 621944904 | 7.83 | 18135 | 0.021 | -0.116 | 0.068 | 0.105 | 74.947248 | -4.361634 | -1404.96 | 994.81 |
| 5 | GUIDE | 623644720 | 9.43 | 18108 | -0.174 | -0.070 | 0.119 | 0.198 | 75.944035 | -4.275960 | 1285.90 | -1383.71 |
| 6 | GUIDE | 623646896 | 8.57 | 18128 | 0.059 | 0.126 | 0.069 | 0.113 | 75.929944 | -4.205550 | 1435.00 | -1172.31 |
| 7 | GUIDE | 623647896 | 8.76 | 18125 | 0.069 | 0.165 | 0.082 | 0.130 | 75.509731 | -5.029790 | -1753.98 | -2125.54 |

2.4 Star Slots

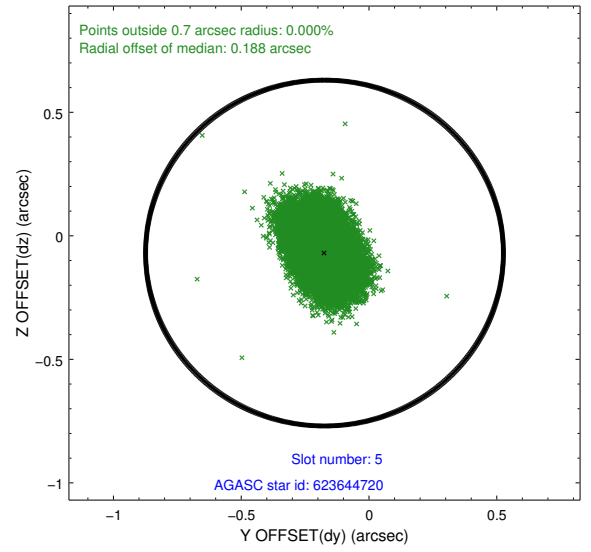
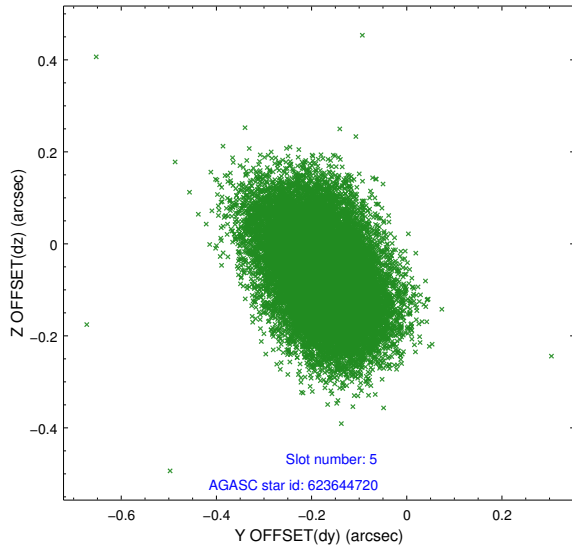
2.4.1 Slot 3



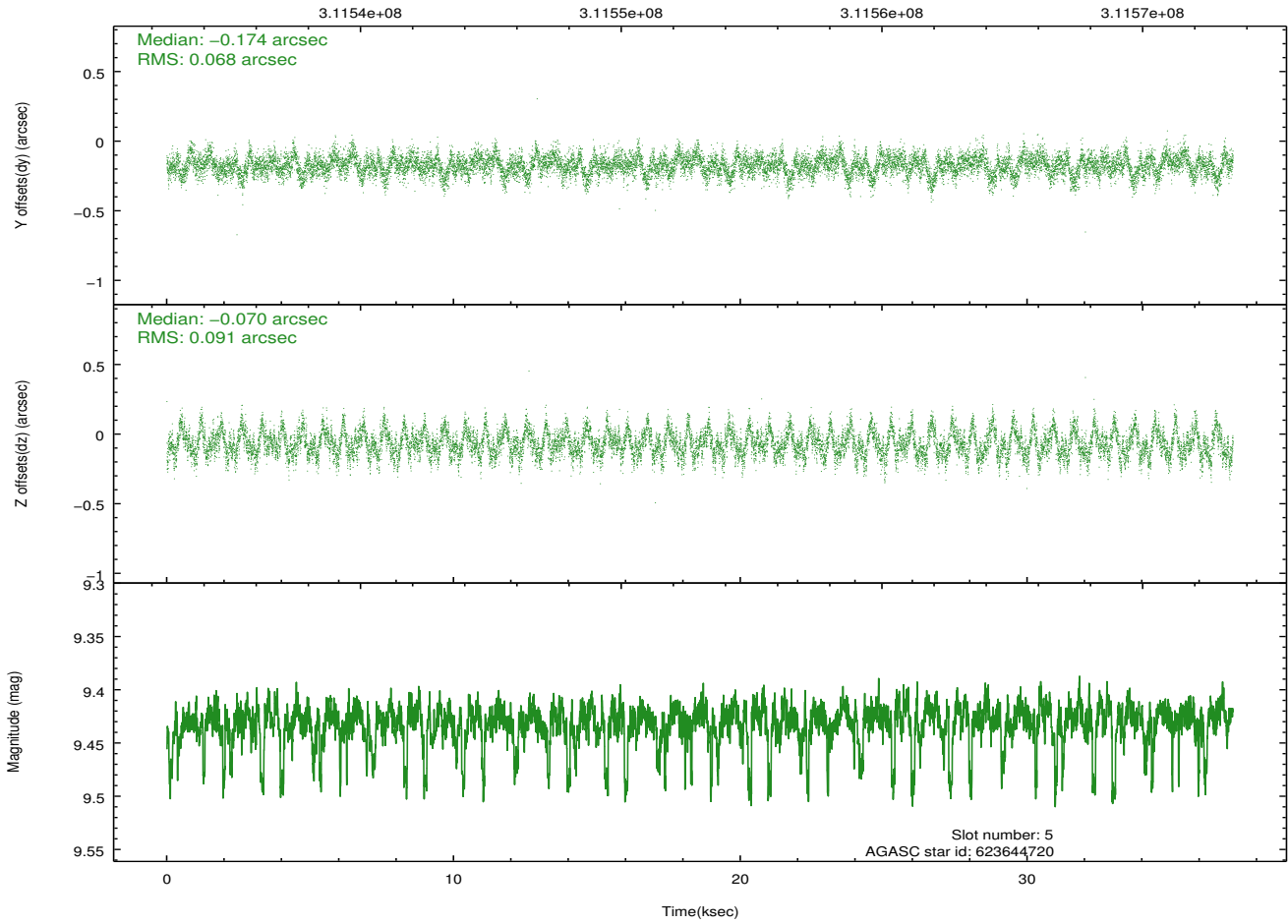
2.4.2 Slot 4



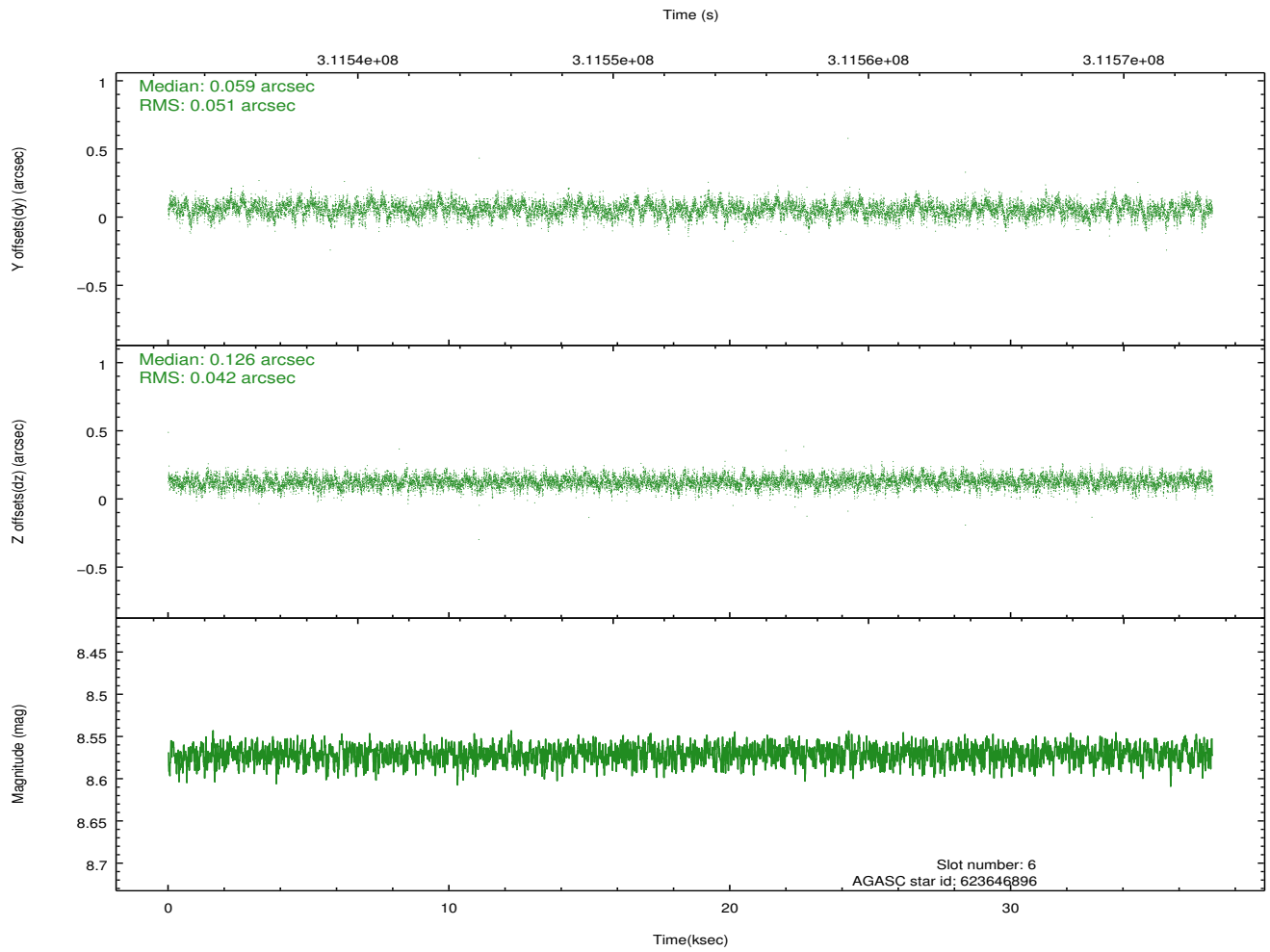
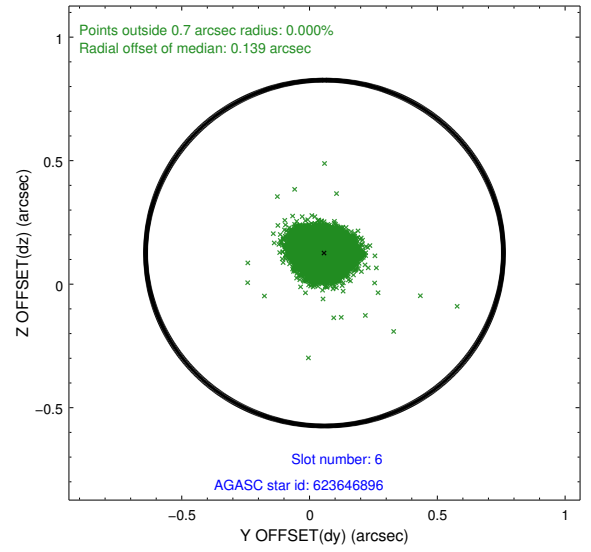
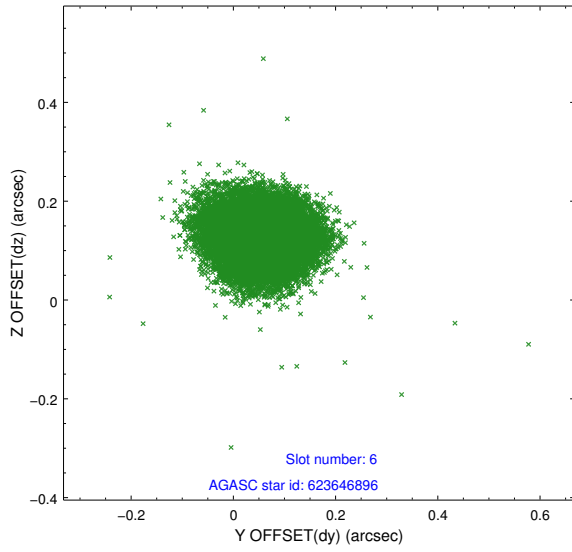
2.4.3 Slot 5



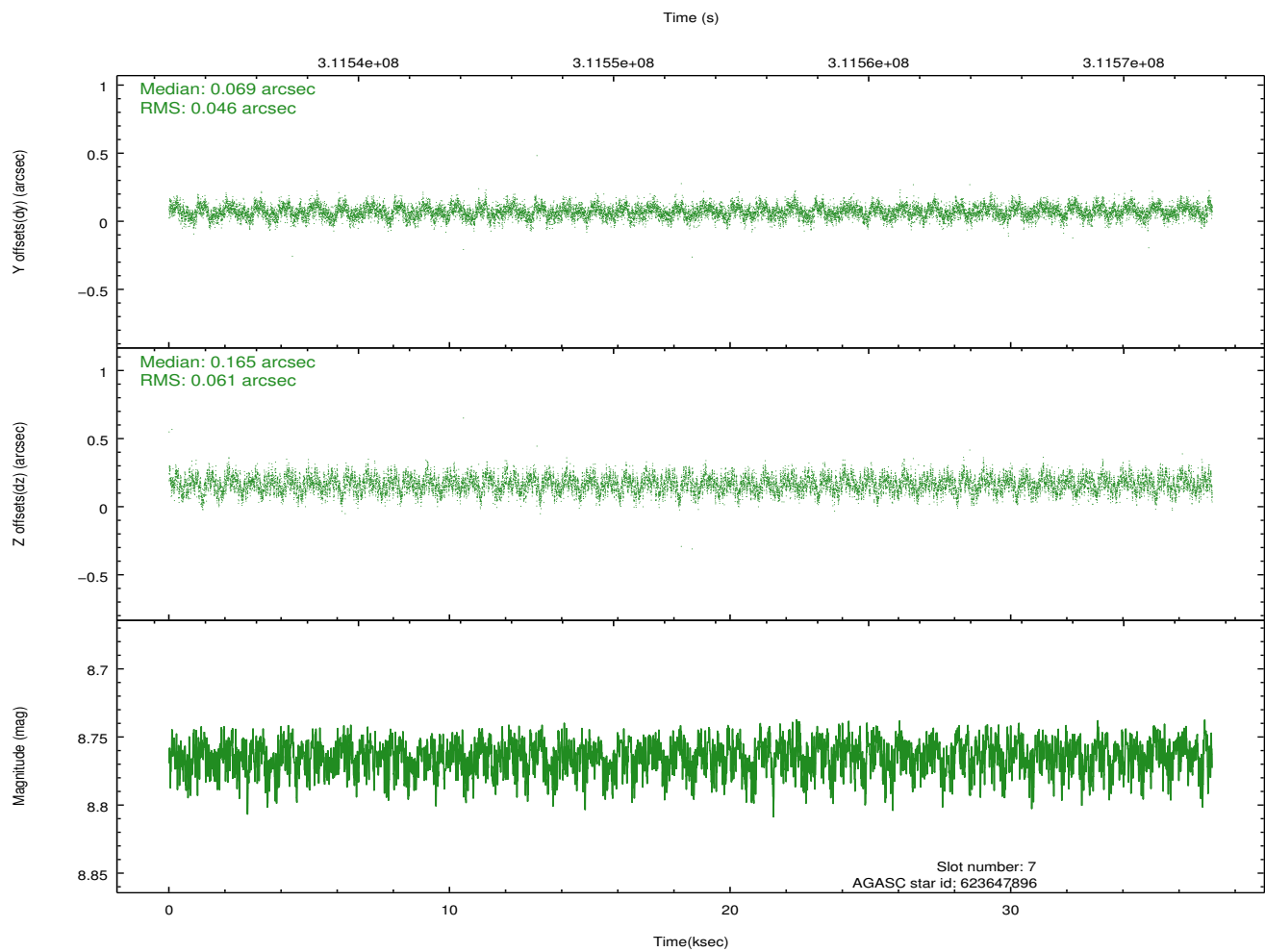
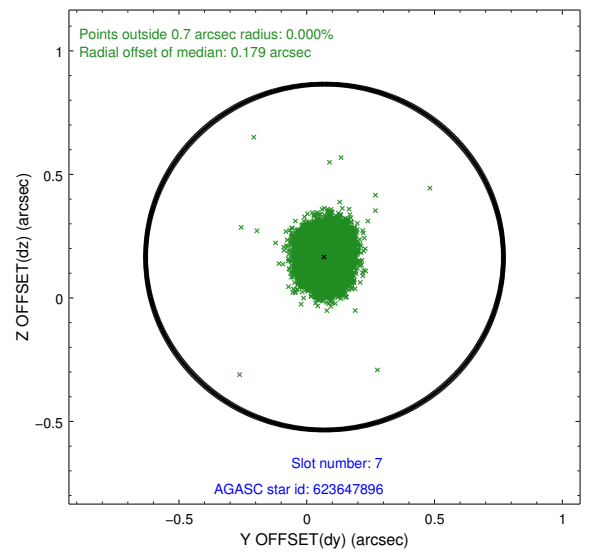
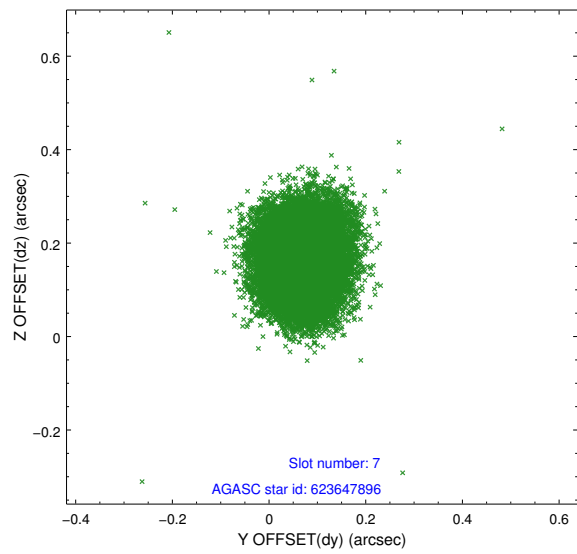
Time (s)



2.4.4 Slot 6

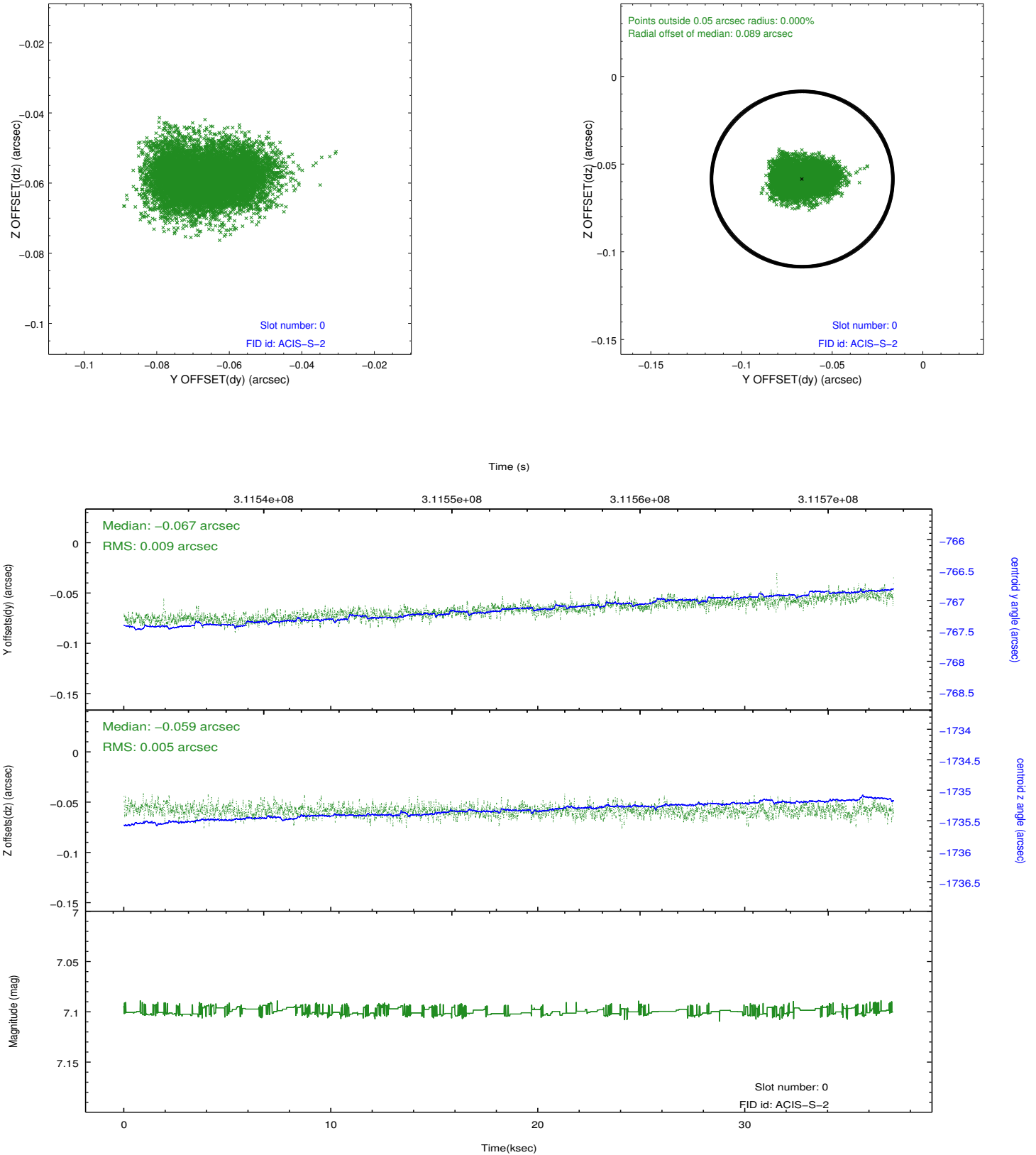


2.4.5 Slot 7

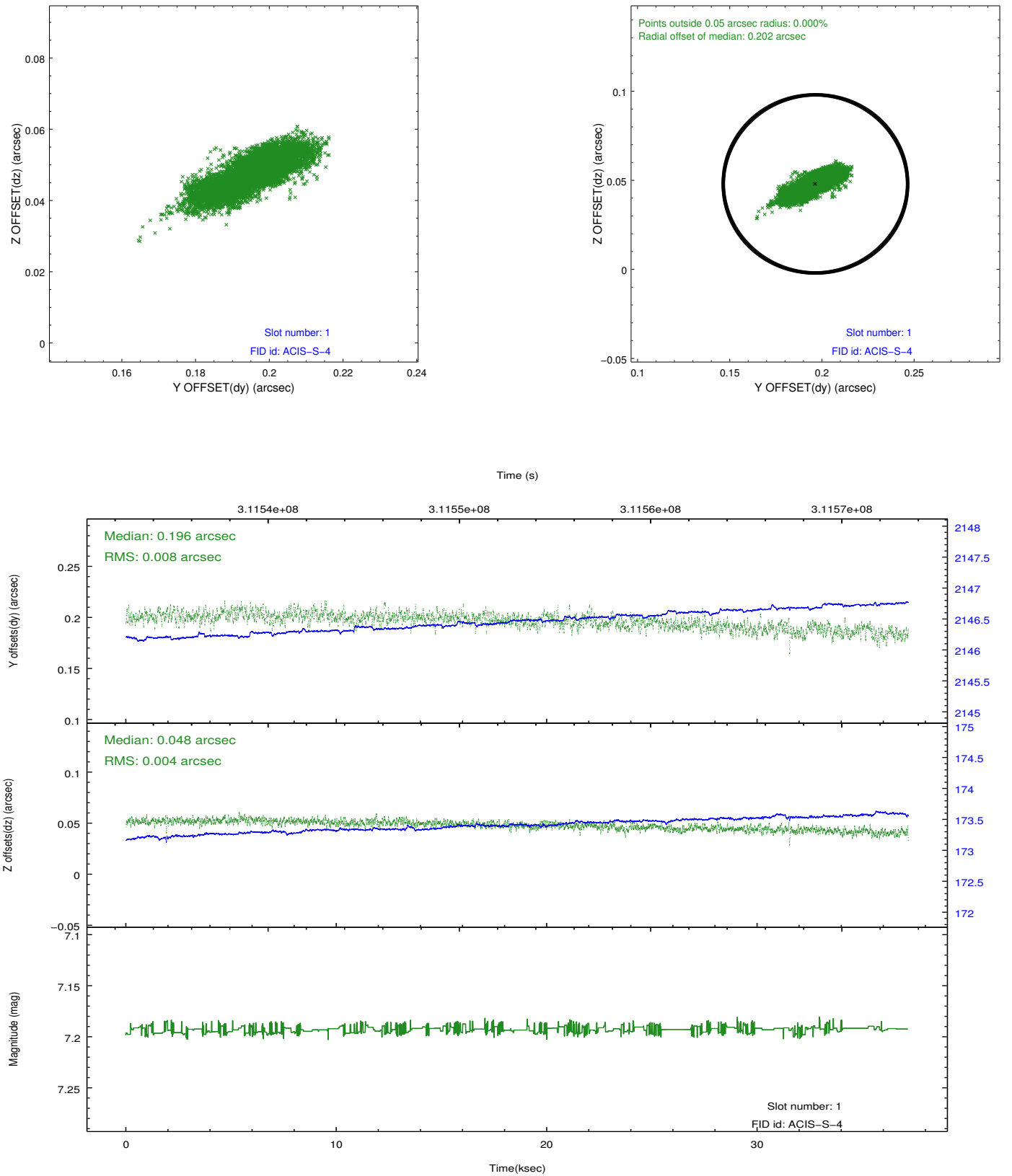


2.5 FID Slots

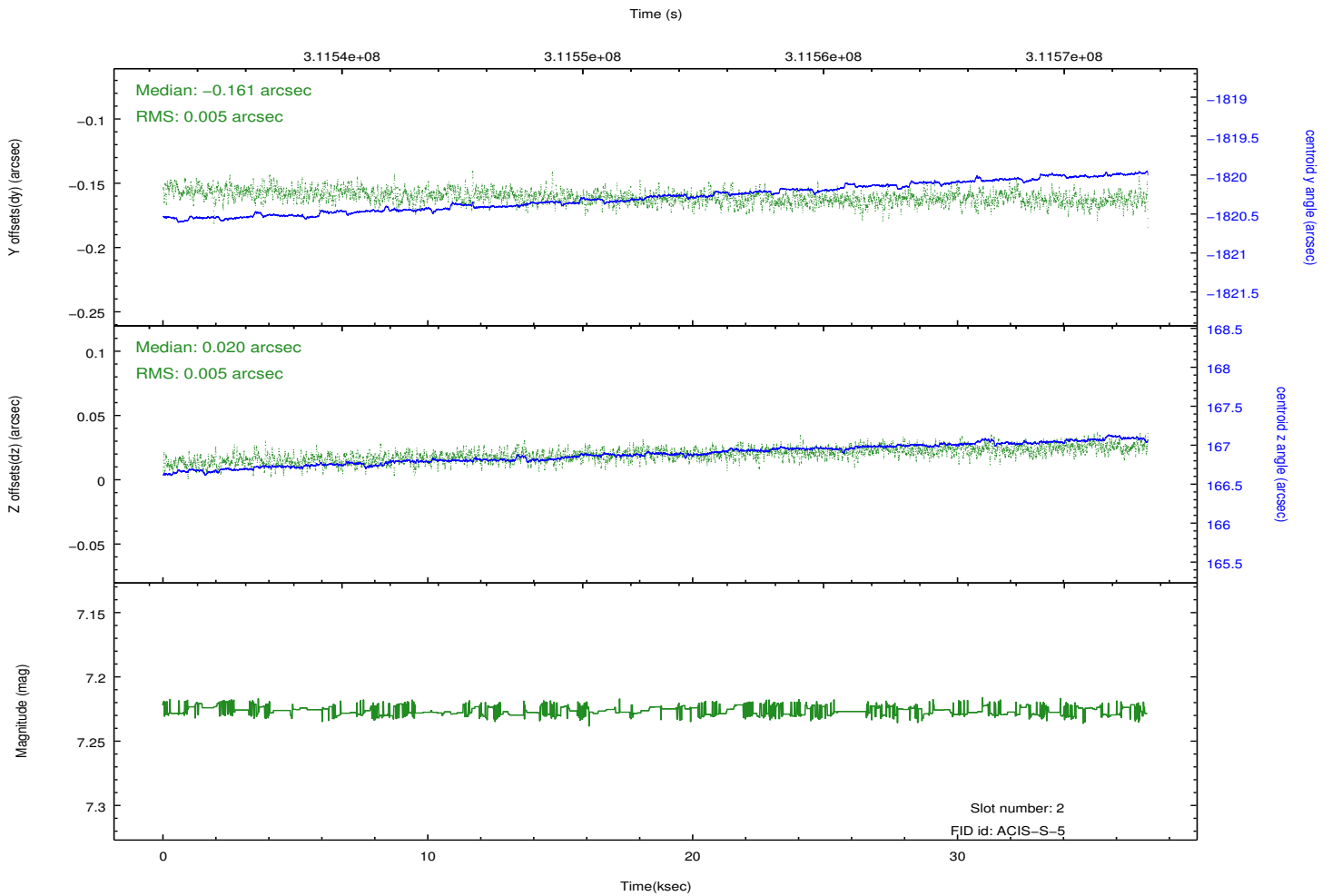
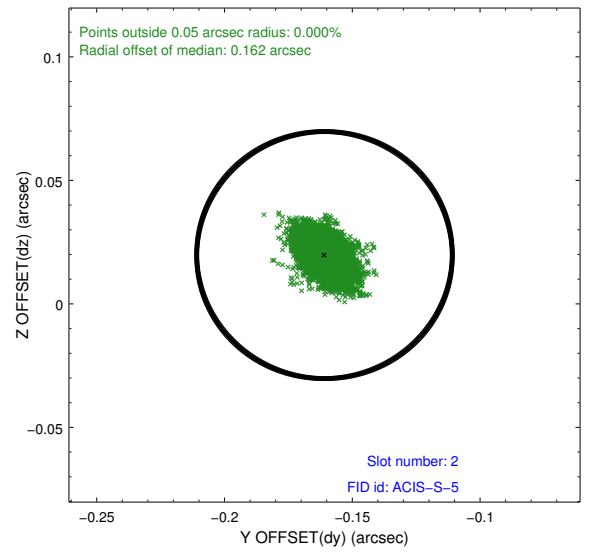
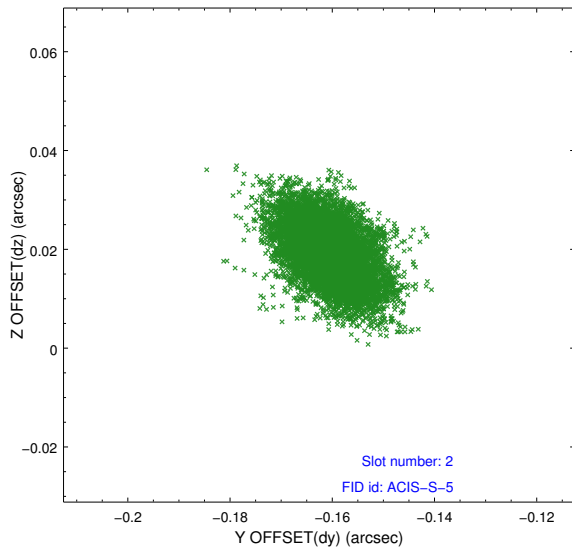
2.5.1 Slot 0



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) | 2012.05.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 36.0375002 |

A.2 Comments