

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8566 - L2 Version 2
Chandra X-Ray Center

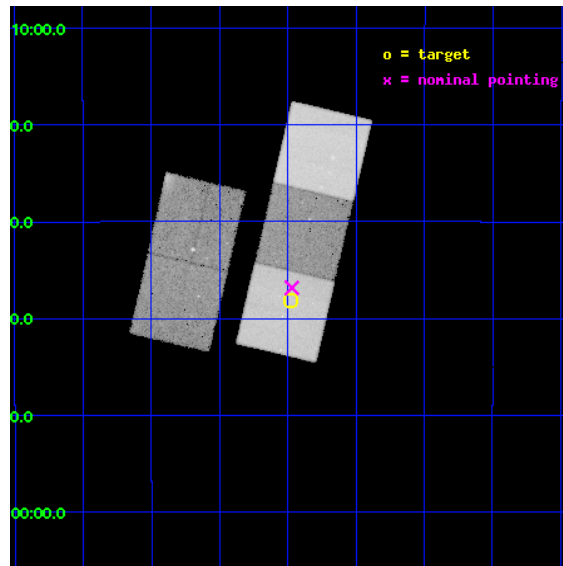
L2 Processing Date : Apr 28 2012

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1 Front

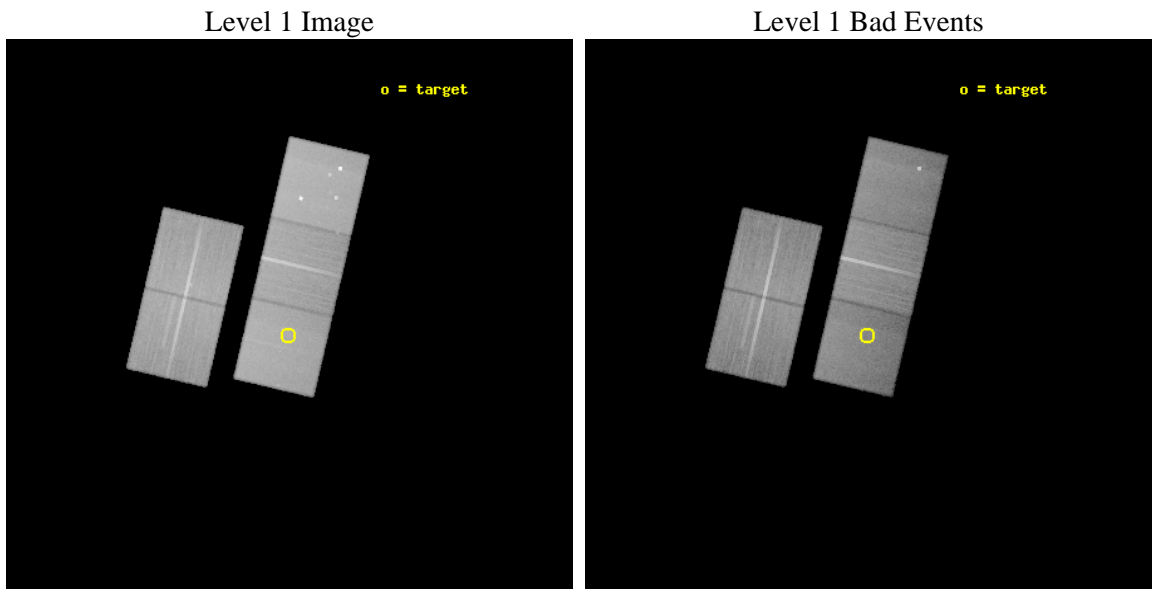
| | | |
|----------|---|---|
| seq_num | 800637 | Sequence number |
| obs_id | 8566 | Observation id |
| title | The Nature of the Intracluster Medium at z=1.45 | Proposal title |
| observer | Dr. Spencer Stanford | Principal investigator |
| object | XMM2215-1738 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 333.995833 | Observer's specified target RA [deg] |
| dec_targ | -17.634722 | Observer's specified target Dec [deg] |
| ra_nom | 333.99257093746 | Nominal RA [deg] |
| dec_nom | -17.614106354589 | Nominal Dec [deg] |
| roll_nom | 103.15564137308 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 43046.600331068 | Sum of GTIs [s] |
| livetime | 42484.164807297 | Livetime [s] |
| ontime2 | 43043.459320843 | Sum of GTIs [s] |
| ontime3 | 43043.459430397 | Sum of GTIs [s] |
| ontime5 | 43046.600331068 | Sum of GTIs [s] |
| ontime6 | 43046.600331068 | Sum of GTIs [s] |
| ontime7 | 43046.600331068 | Sum of GTIs [s] |
| l2events | 483306 | Number of level 2 events |



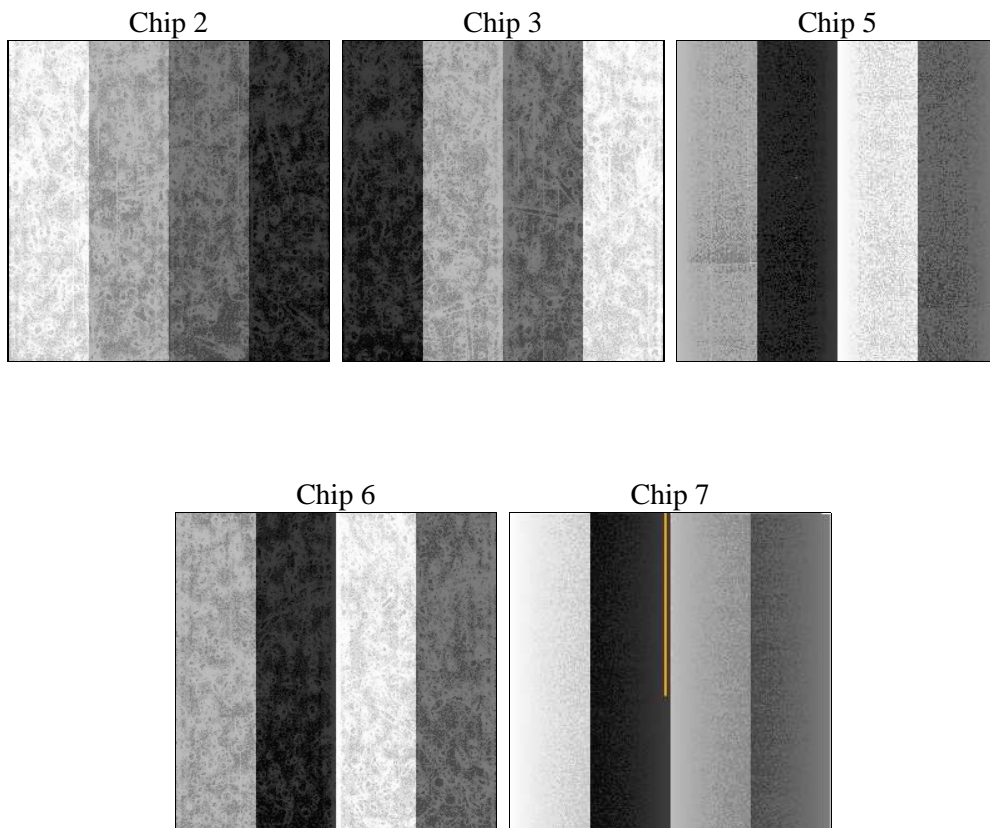
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 42913.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 43046.600331068 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime2 | 43043.459320843 | Sum of GTIs [s] |
| date | 2012-04-28T01:33:04 | Date and time of file creation | ontime3 | 43043.459430397 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 43046.600331068 | Sum of GTIs [s] |
| | | | ontime6 | 43046.600331068 | Sum of GTIs [s] |
| | | | ontime7 | 43046.600331068 | Sum of GTIs [s] |
| | | | l1events | 1940764 | Number of level 1 events |

2.1.4 Events

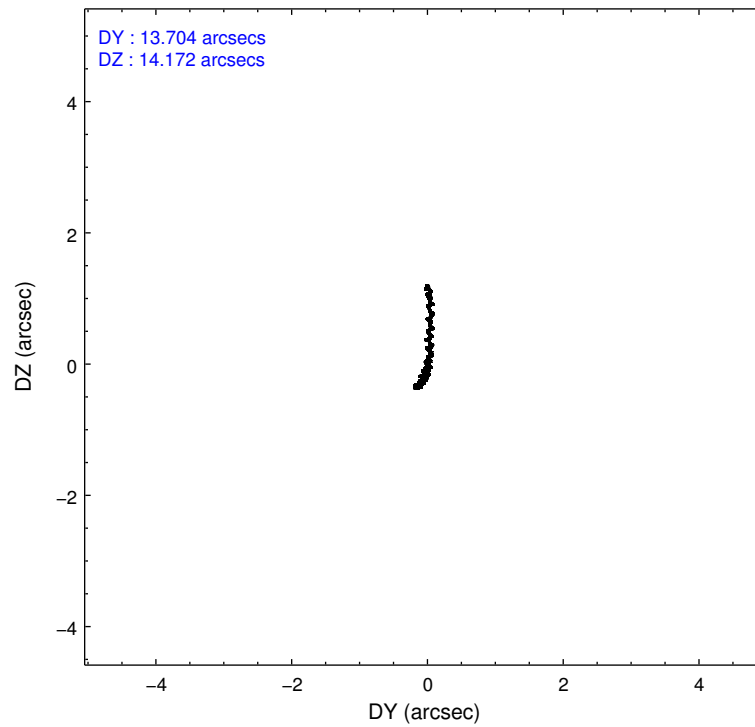
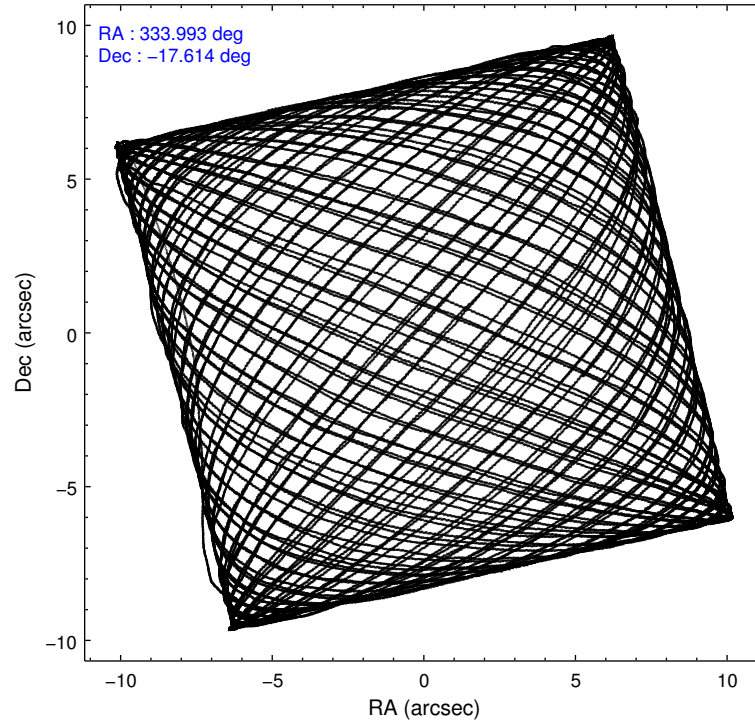
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 370341 | 339064 | 493314 | 350693 | 387352 |
| rejected events | 333779 | 307380 | 242396 | 314945 | 211776 |
| rejected % | 90% | 90% | 49% | 89% | 54% |

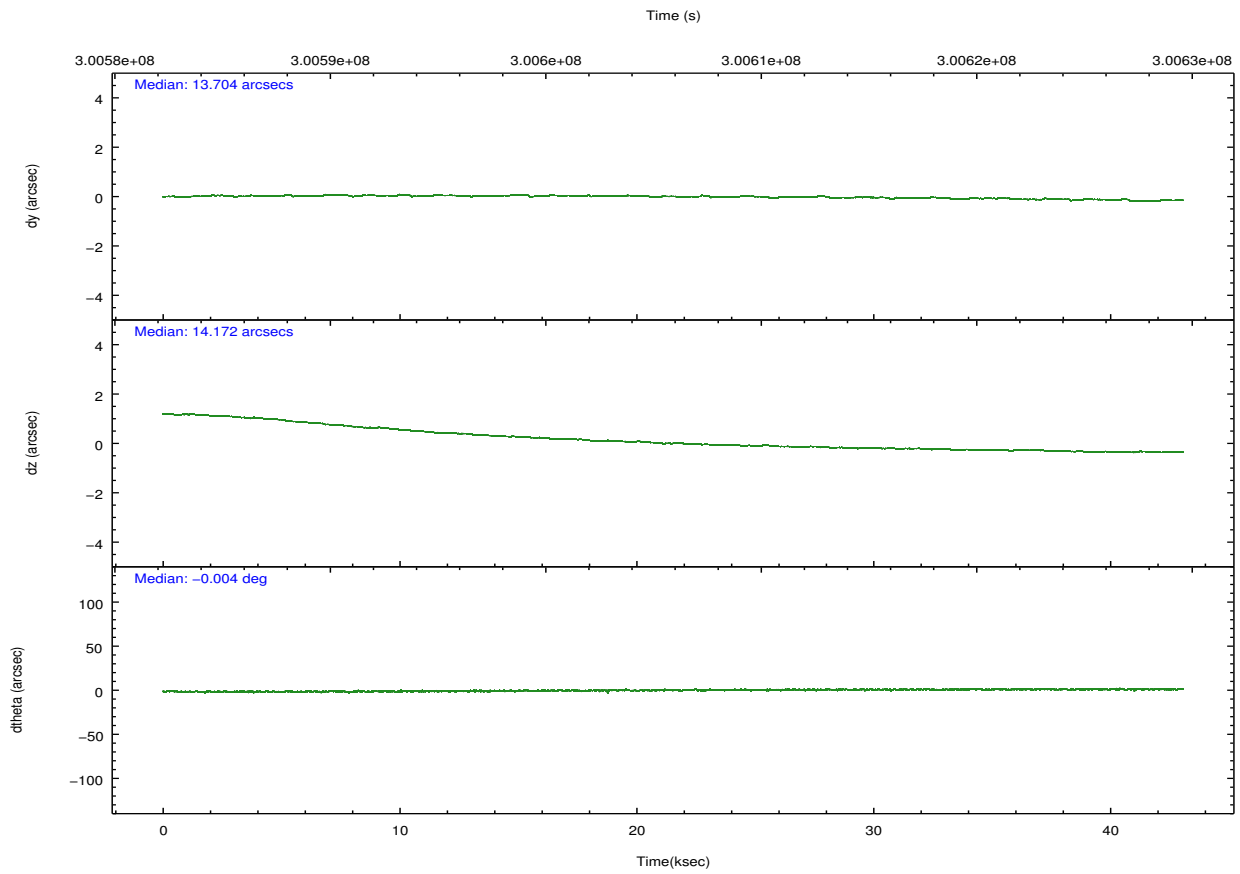
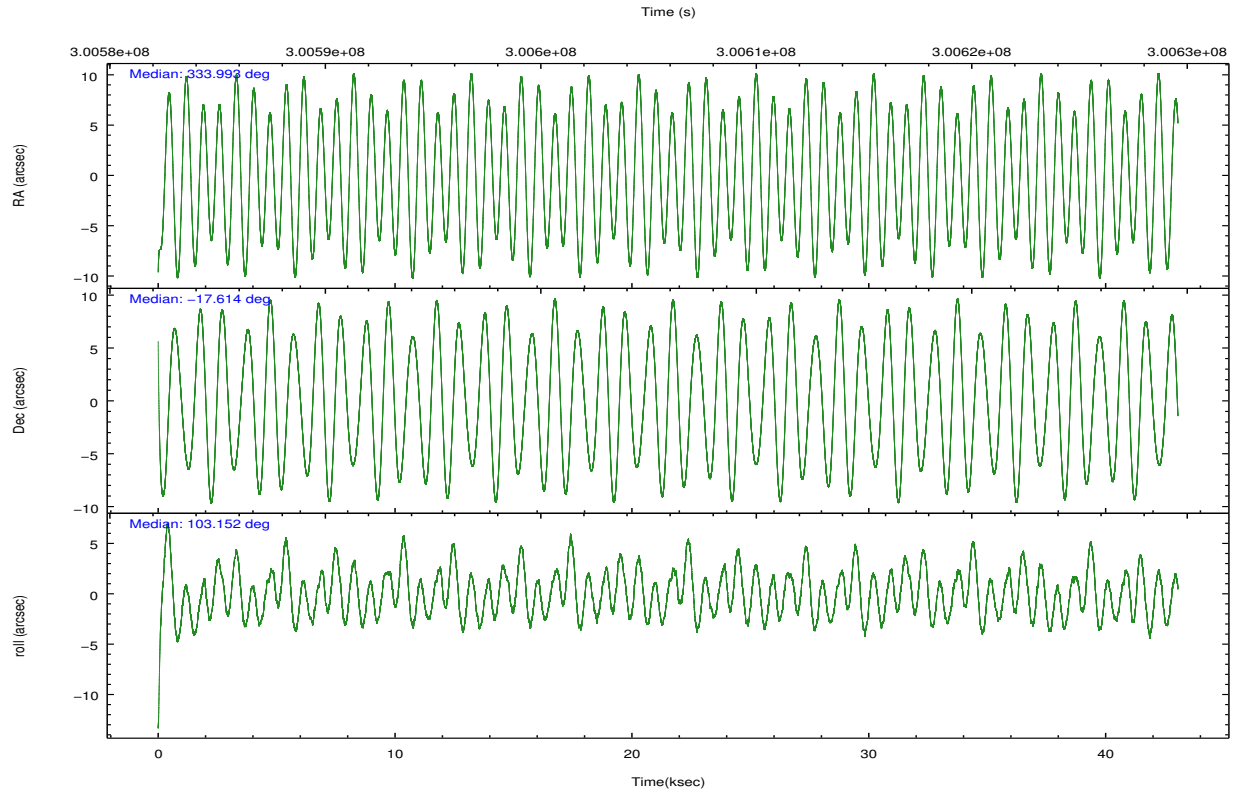
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 14917 | 11014 | 34931 | 12761 | 17207 |
| | 4% | 3% | 7% | 3% | 4% |
| grade 1 events | 240 | 177 | 851 | 167 | 447 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 8154 | 6951 | 72497 | 7981 | 35590 |
| | 2% | 2% | 14% | 2% | 9% |
| grade 3 events | 3752 | 3766 | 11103 | 3865 | 16413 |
| | 1% | 1% | 2% | 1% | 4% |
| grade 4 events | 3842 | 3757 | 10287 | 3858 | 16291 |
| | 1% | 1% | 2% | 1% | 4% |
| grade 5 events | 10946 | 13751 | 39050 | 14120 | 40636 |
| | 2% | 4% | 7% | 4% | 10% |
| grade 6 events | 6129 | 6396 | 123544 | 7474 | 91145 |
| | 1% | 1% | 25% | 2% | 23% |
| grade 7 events | 322361 | 293252 | 201051 | 300467 | 169623 |
| | 87% | 86% | 40% | 85% | 43% |

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 | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 334.012484 | 333.9925709374632 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -17.633793 | -17.6141063545886 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 103.005042 | 103.155641373084 | [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) | 300584522.184000 | 300583426.54522 | | | |
| Observation start date | 2007-07-11T23:40:57 | 2007-07-11T23:23:46 | | | |
| [s] Observation end time (MET) | 300627435.184000 | 300628461.97237 | | | |
| Observation end date | 2007-07-12T11:36:10 | 2007-07-12T11:54:21 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



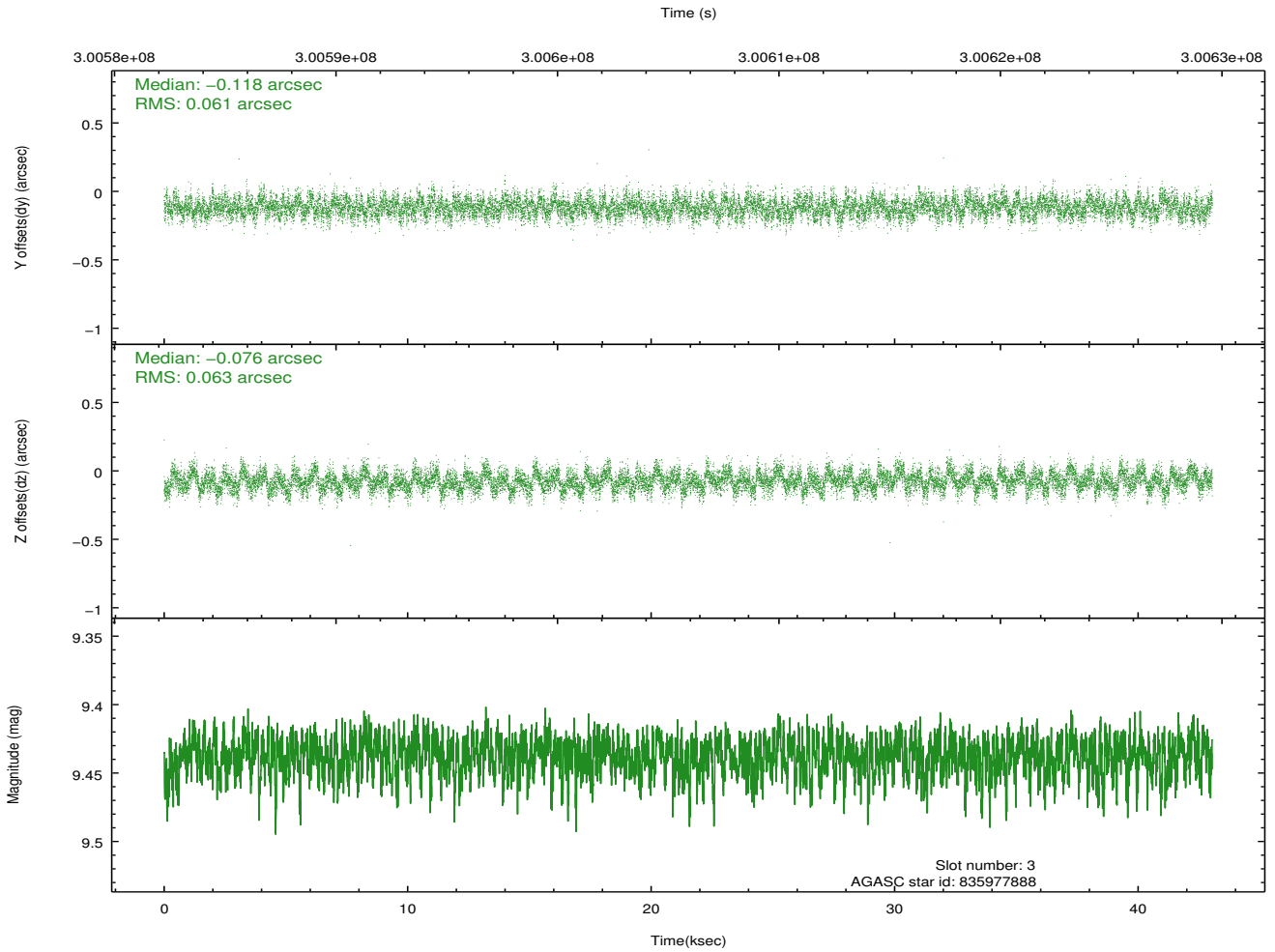
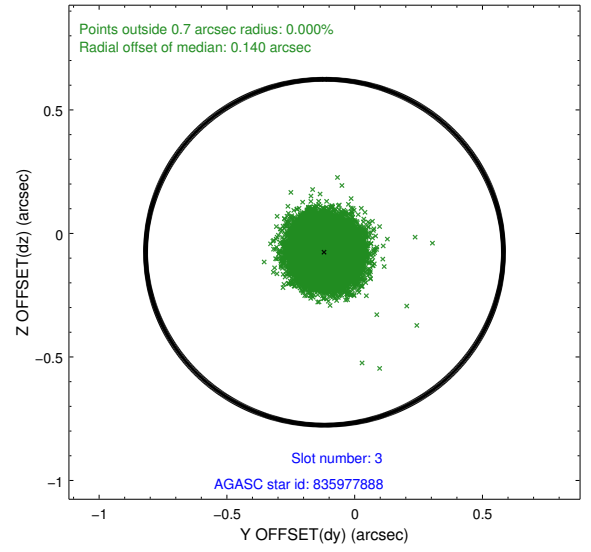
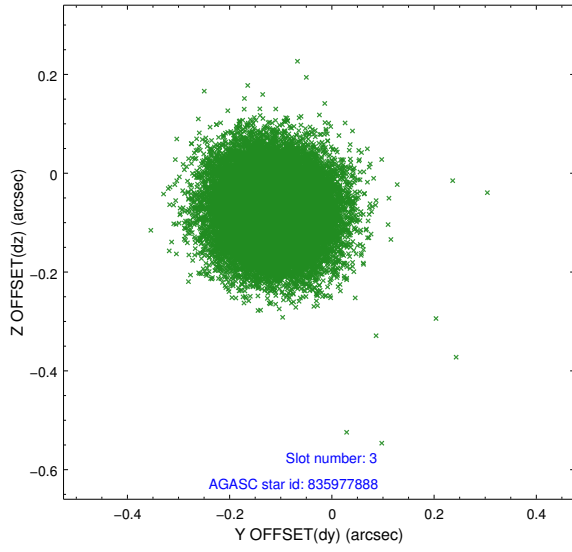


Slot Statistics

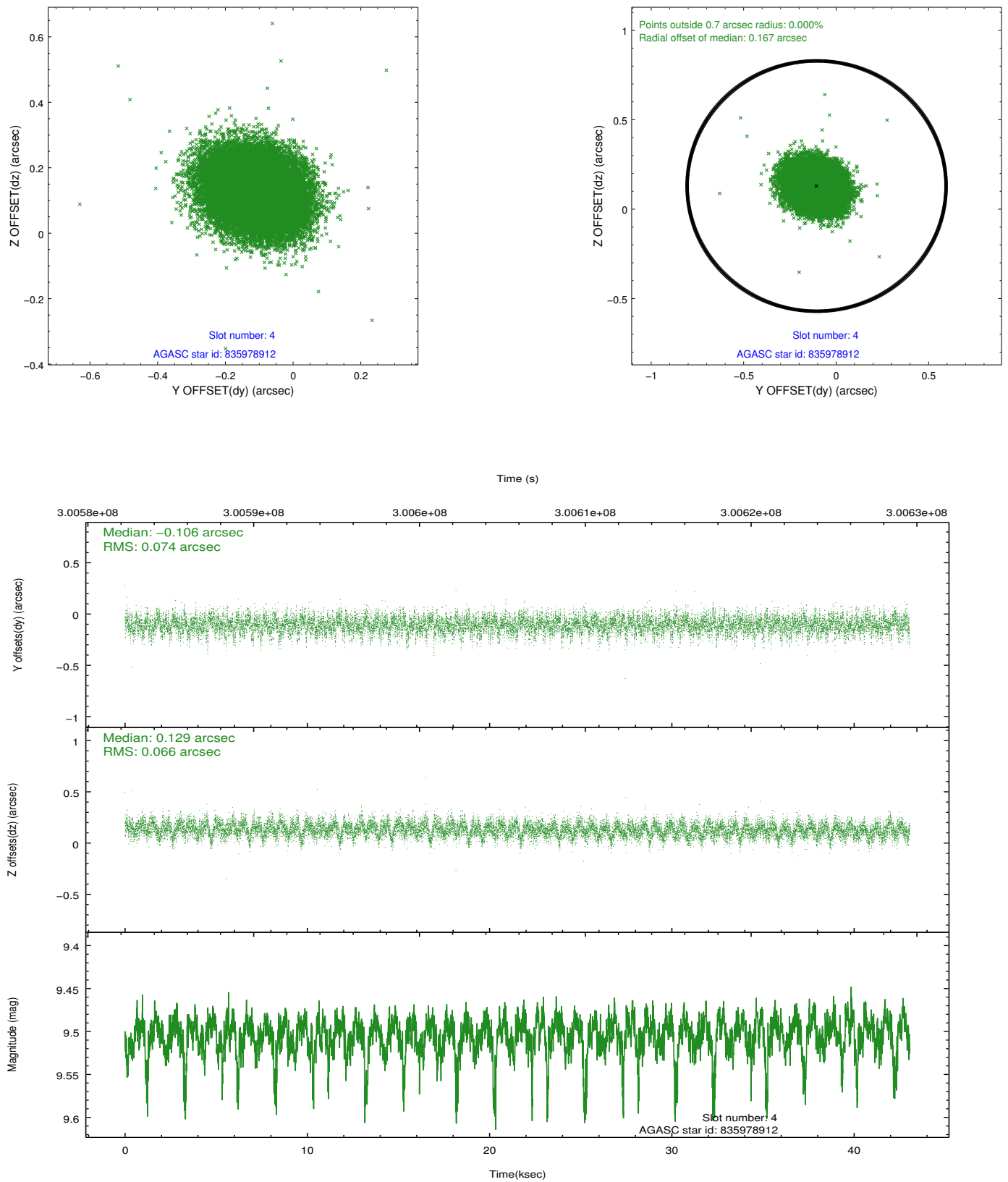
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 10501 | -0.063 | -0.061 | 0.015 | 0.027 | 0.000000 | 0.000000 | -766.66 | -1735.77 |
| 1 | FID | ACIS-S-4 | 7.19 | 10499 | 0.208 | 0.046 | 0.008 | 0.015 | 0.000000 | 0.000000 | 2146.86 | 172.84 |
| 2 | FID | ACIS-S-5 | 7.22 | 10501 | -0.176 | 0.023 | 0.014 | 0.024 | 0.000000 | 0.000000 | -1819.63 | 166.45 |
| 3 | GUIDE | 835977888 | 9.44 | 20979 | -0.118 | -0.076 | 0.094 | 0.148 | 333.352822 | -17.230918 | 1919.60 | 1884.65 |
| 4 | GUIDE | 835978912 | 9.50 | 20972 | -0.106 | 0.129 | 0.105 | 0.172 | 334.237511 | -16.984216 | 2103.86 | -1280.37 |
| 5 | GUIDE | 836370768 | 9.51 | 20909 | 0.139 | -0.146 | 0.122 | 0.185 | 333.935509 | -18.144712 | -1734.04 | 669.45 |
| 6 | GUIDE | 836377664 | 8.23 | 20994 | 0.133 | 0.204 | 0.070 | 0.112 | 334.386200 | -18.161865 | -2140.92 | -817.39 |
| 7 | GUIDE | 835850272 | 9.79 | 20914 | -0.048 | -0.115 | 0.136 | 0.213 | 333.242614 | -17.411688 | 1368.78 | 2398.25 |

2.4 Star Slots

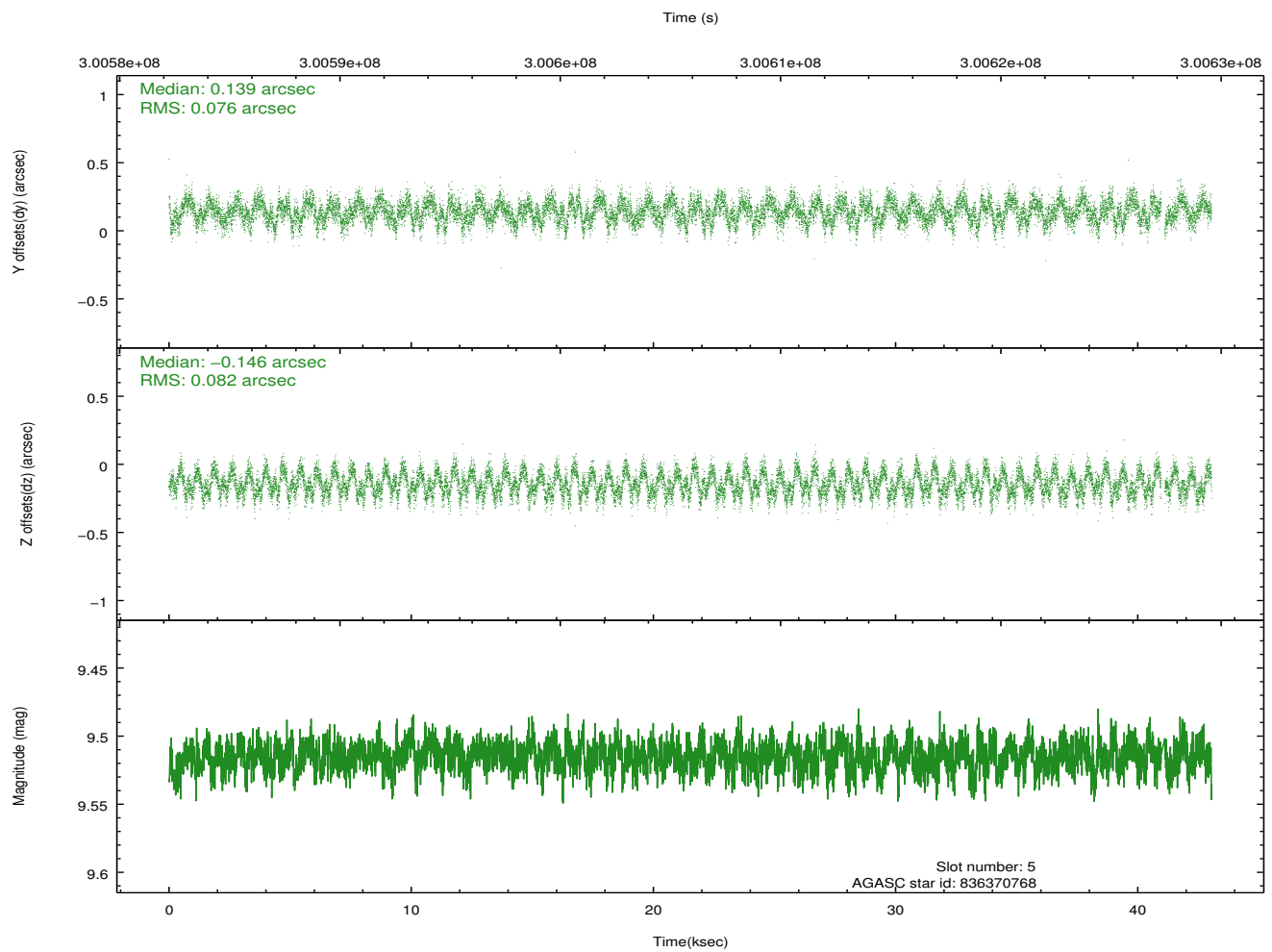
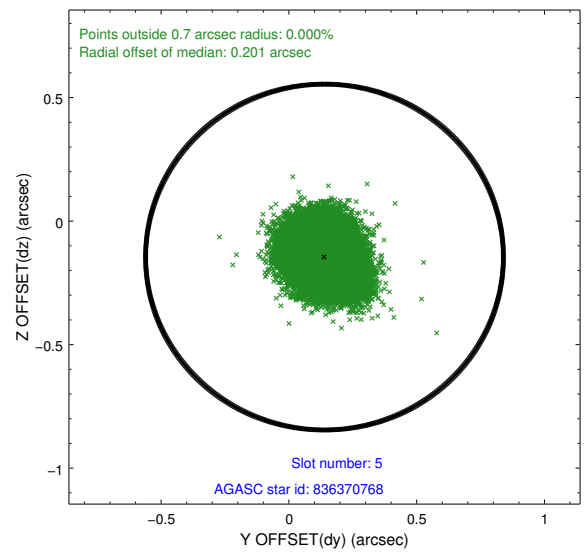
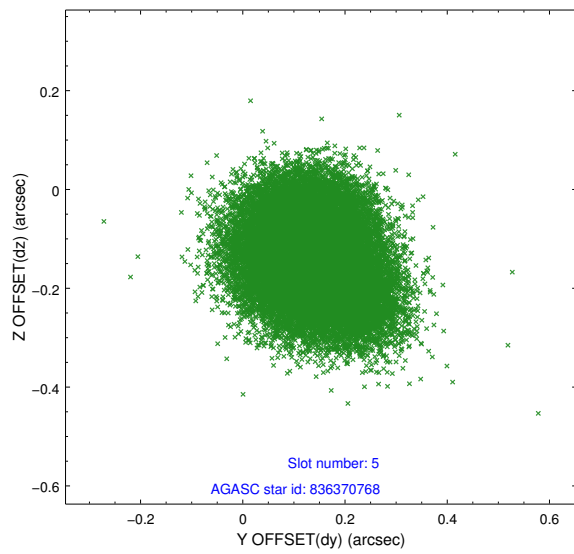
2.4.1 Slot 3



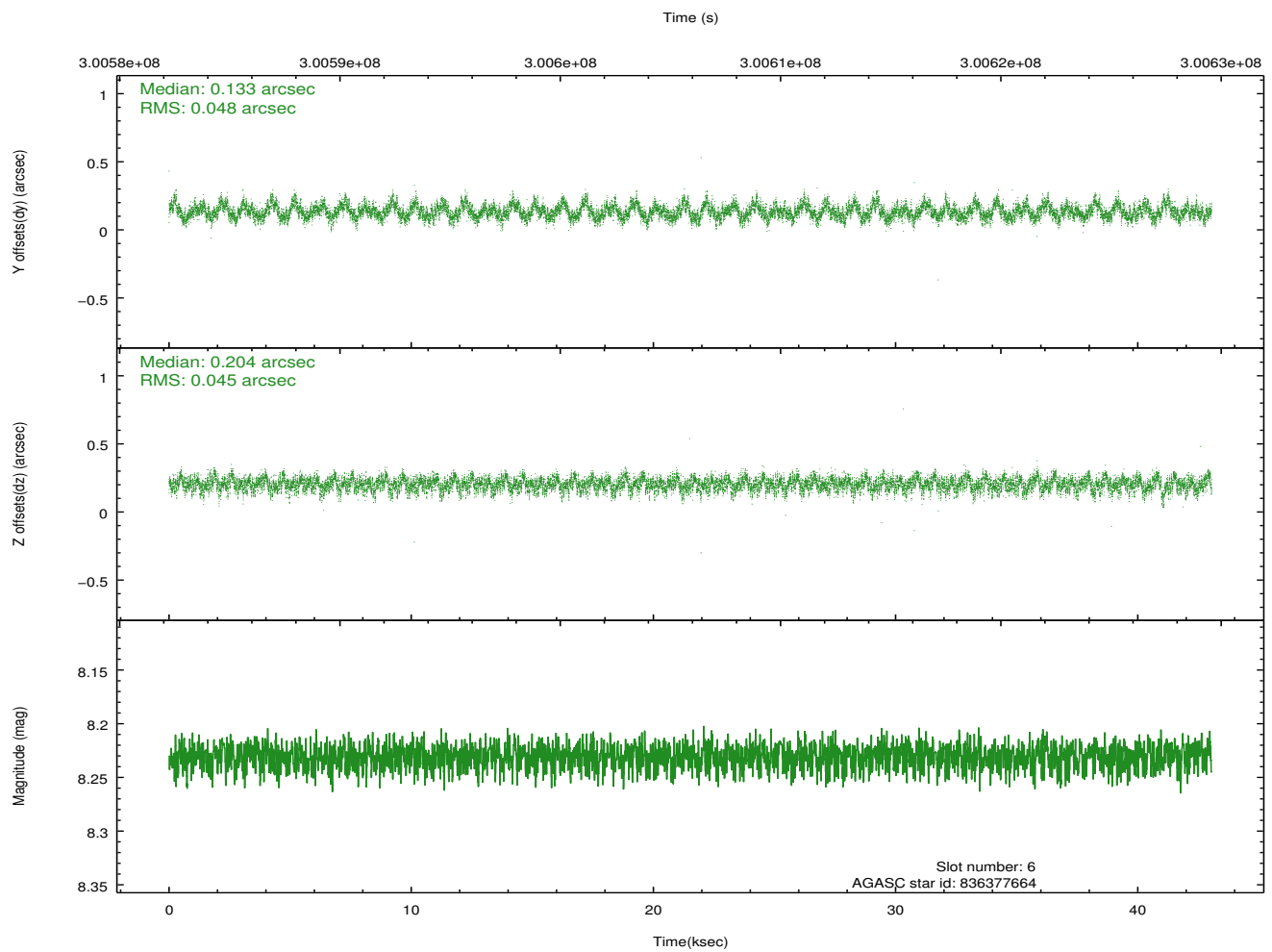
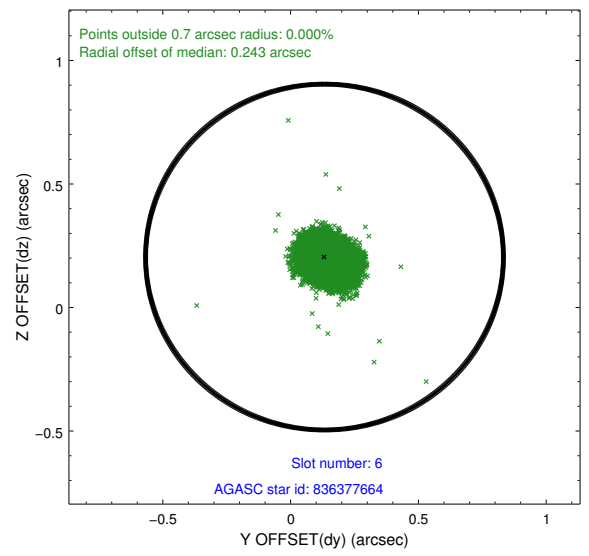
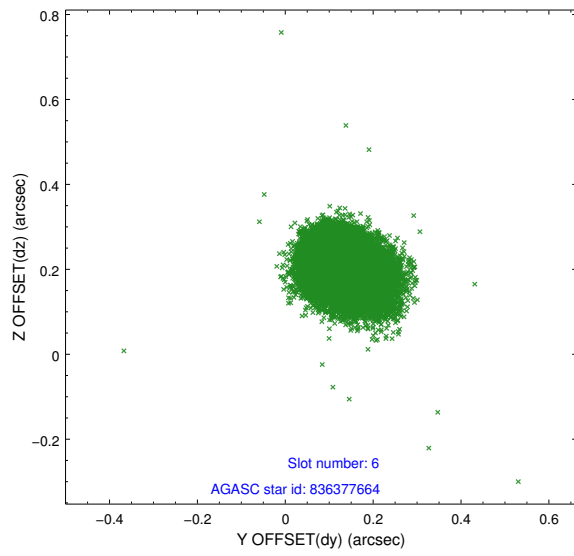
2.4.2 Slot 4



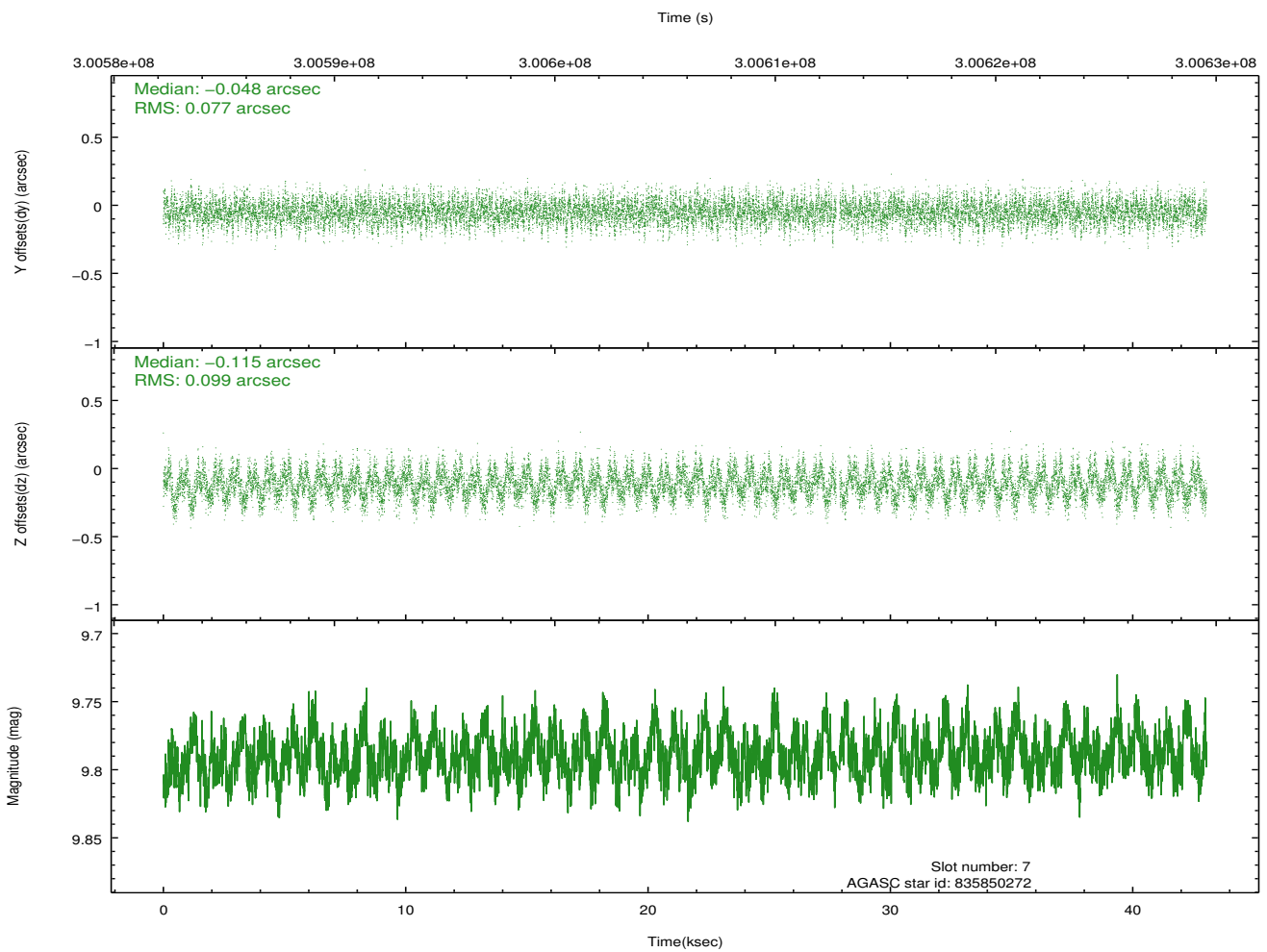
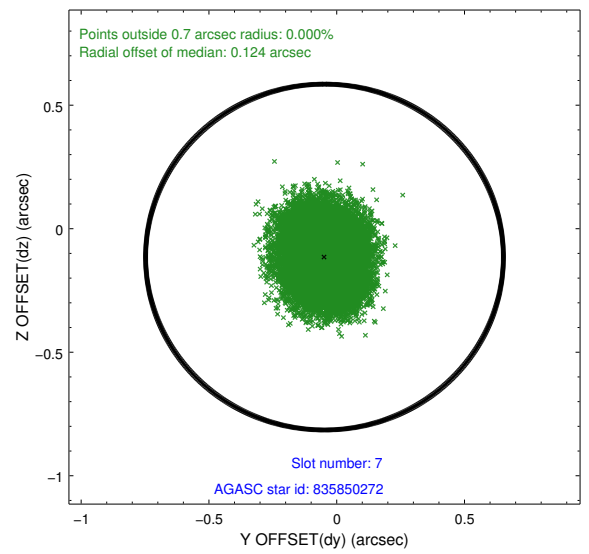
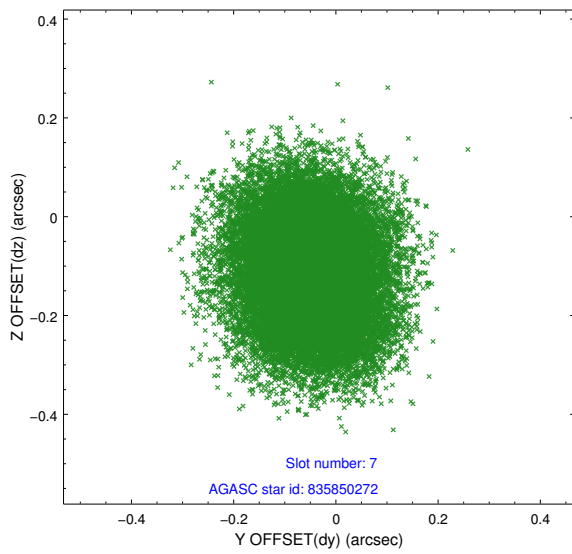
2.4.3 Slot 5



2.4.4 Slot 6

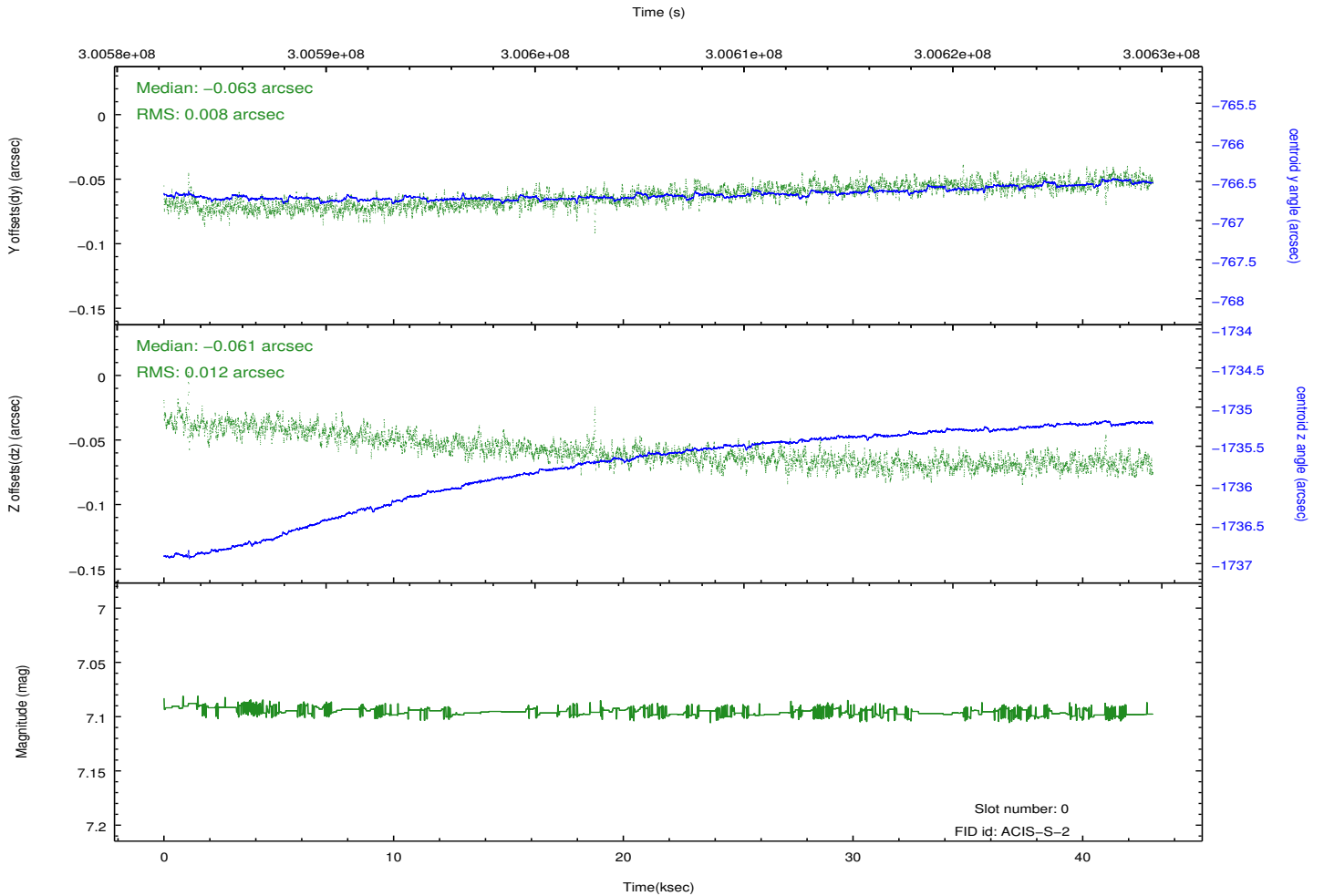
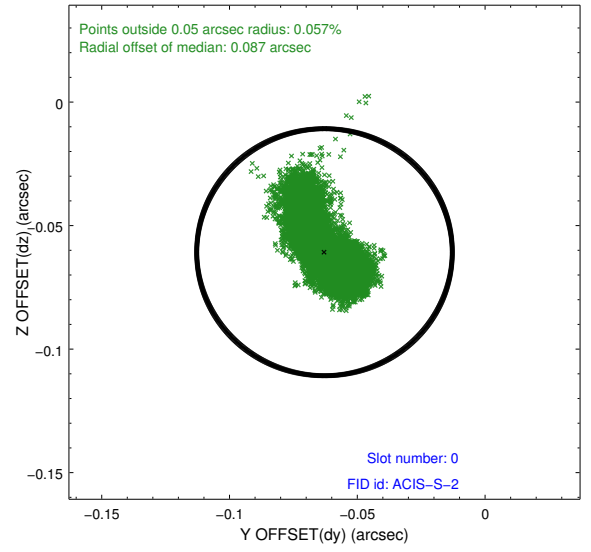
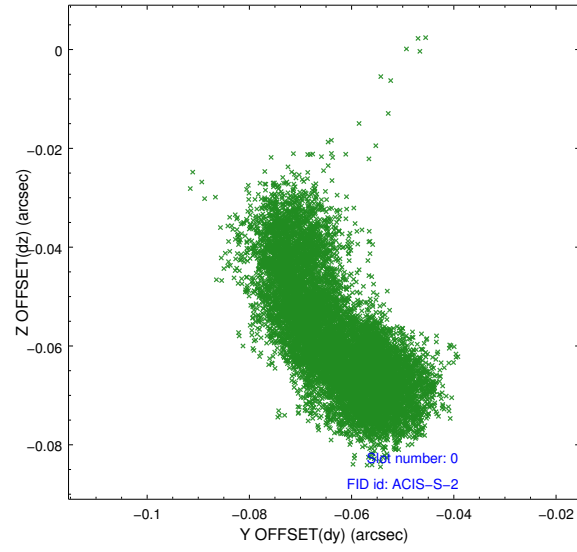


2.4.5 Slot 7

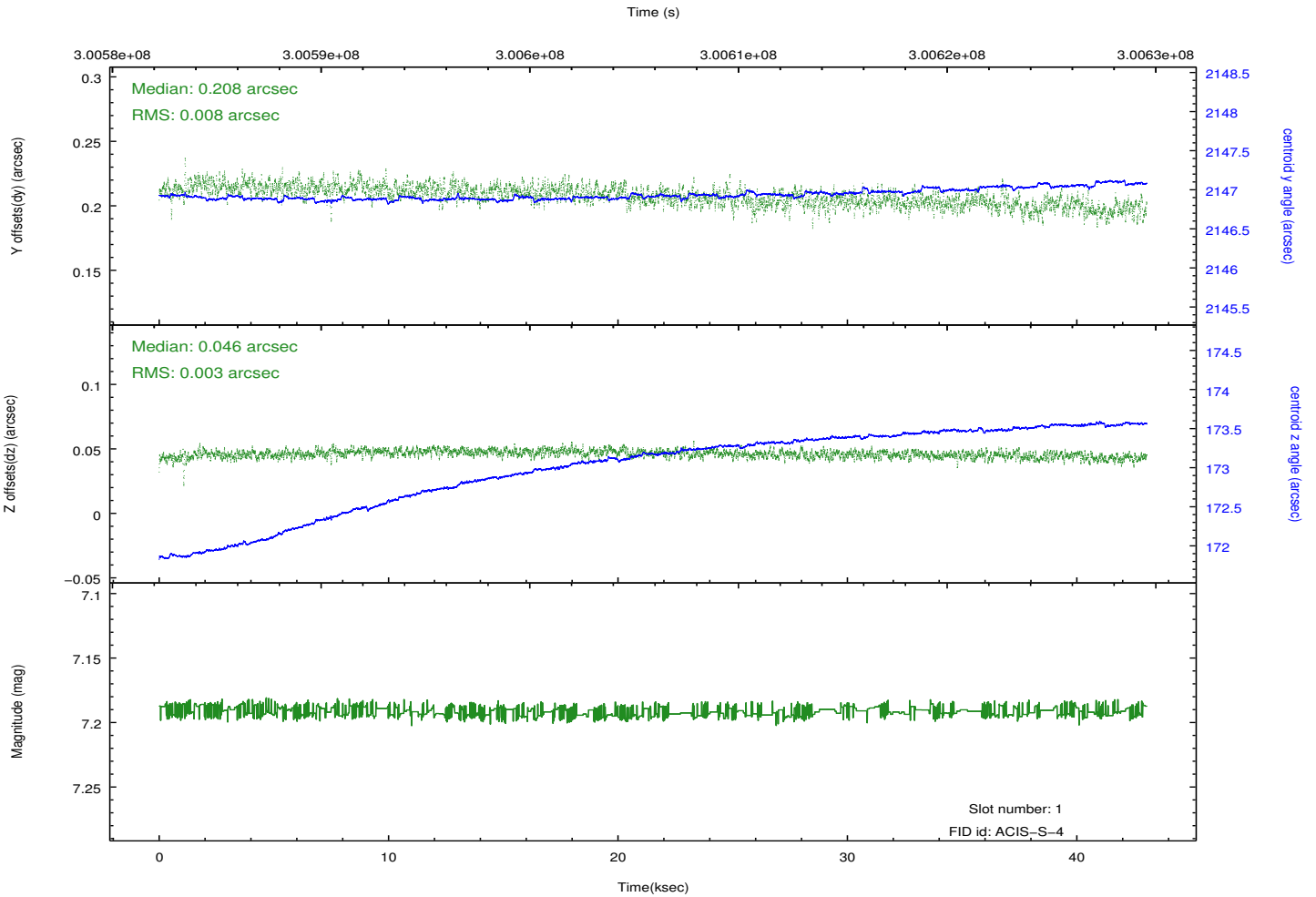
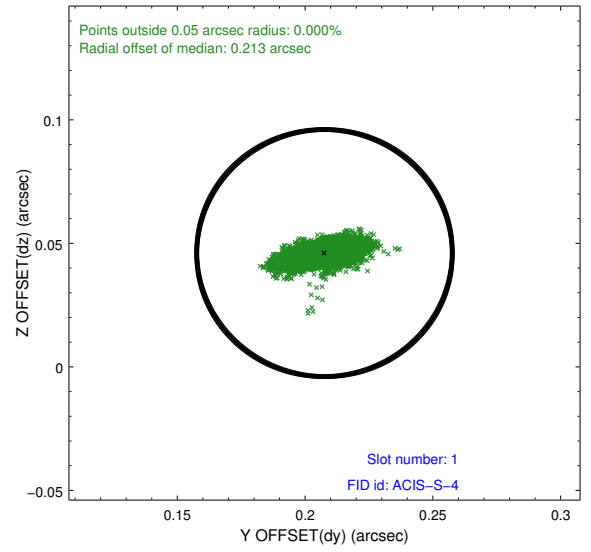
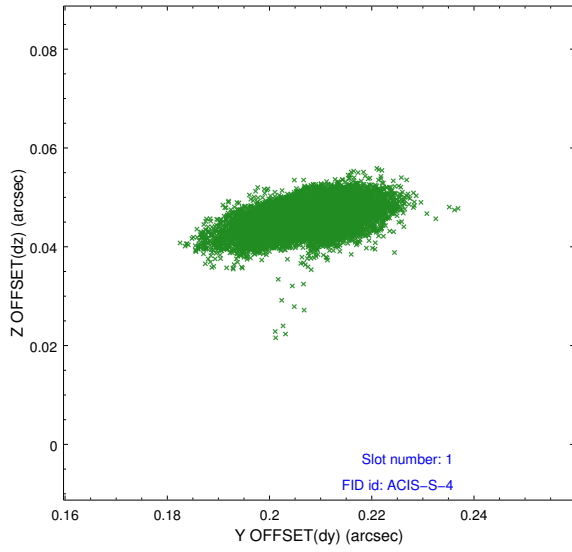


2.5 FID Slots

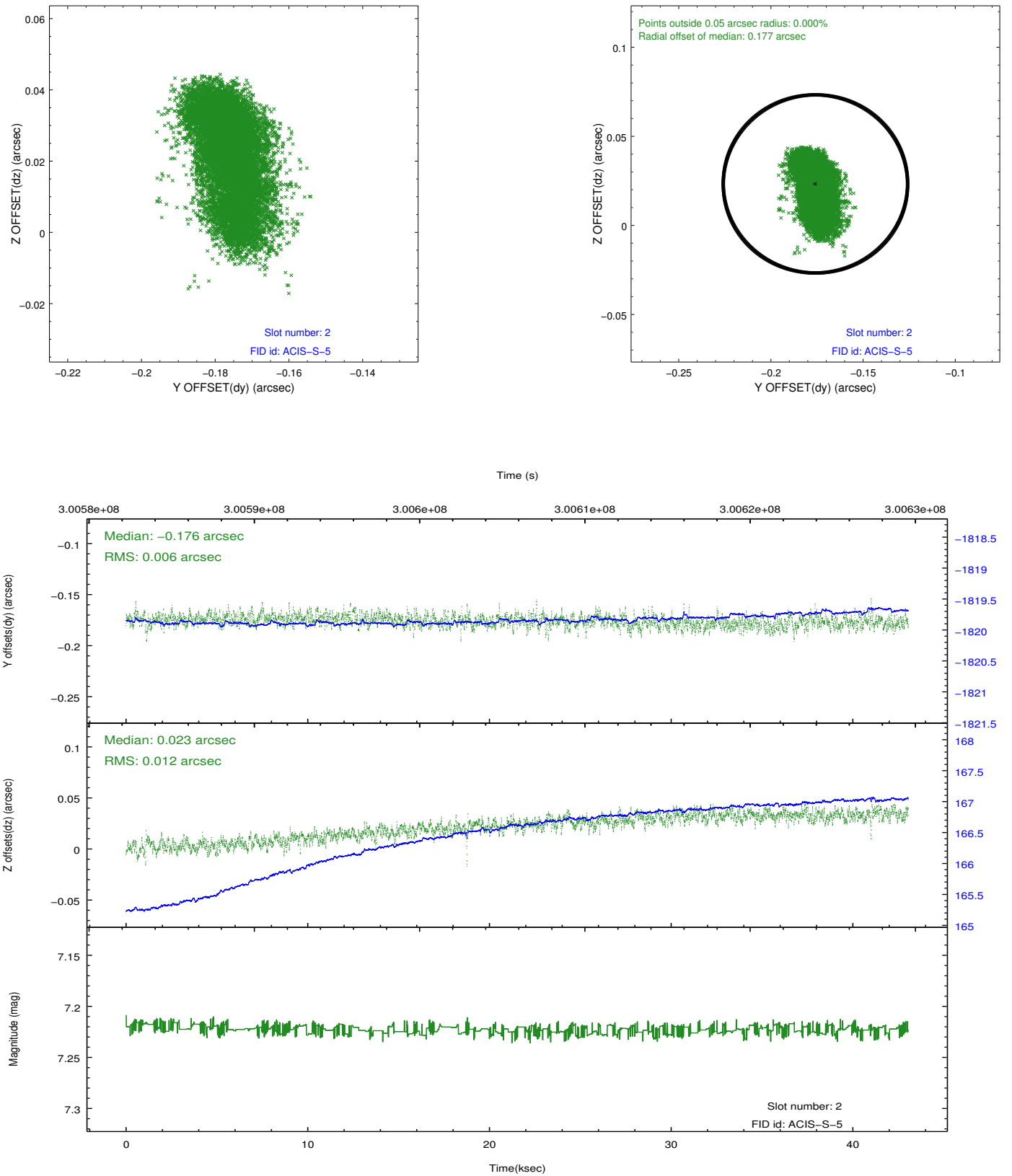
2.5.1 Slot 0



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) | 2012.04.30 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 43.0466003 |

A.2 Comments