

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10540 - L2 Version 2
Chandra X-Ray Center

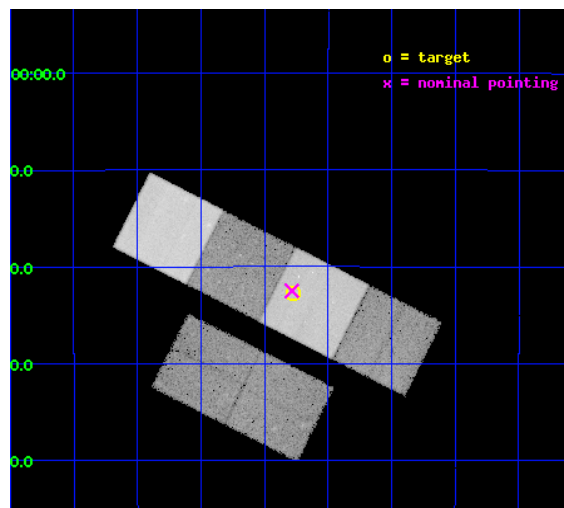
L2 Processing Date : May 31 2012

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1 Front

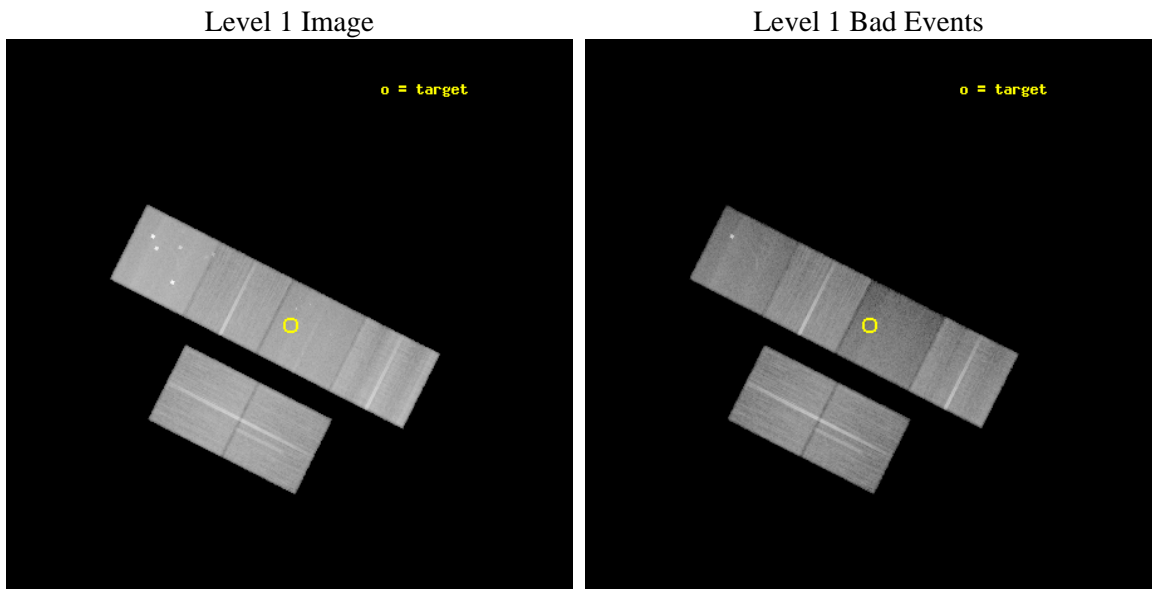
| | | |
|----------|--|---|
| seq_num | 600733 | Sequence number |
| obs_id | 10540 | Observation id |
| title | Infant Ellipticals: the evolution of young merger-remnants | Proposa |
| observer | Dr. Giuseppina Fabbiano | Principal investigator |
| object | AM 1146-270 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 177.193333 | Observer's specified target RA [deg] |
| dec_targ | -27.379167 | Observer's specified target Dec [deg] |
| ra_nom | 177.19619293383 | Nominal RA [deg] |
| dec_nom | -27.3750246759 | Nominal Dec [deg] |
| roll_nom | 26.793070788781 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 37042.864672601 | Sum of GTIs [s] |
| livetime | 36573.805615581 | Livetime [s] |
| ontime2 | 37042.905712605 | Sum of GTIs [s] |
| ontime3 | 37039.500532389 | Sum of GTIs [s] |
| ontime5 | 37042.823632598 | Sum of GTIs [s] |
| ontime6 | 37042.782592595 | Sum of GTIs [s] |
| ontime7 | 37042.864672601 | Sum of GTIs [s] |
| ontime8 | 37036.218601406 | Sum of GTIs [s] |
| l2events | 417104 | Number of level 2 events |



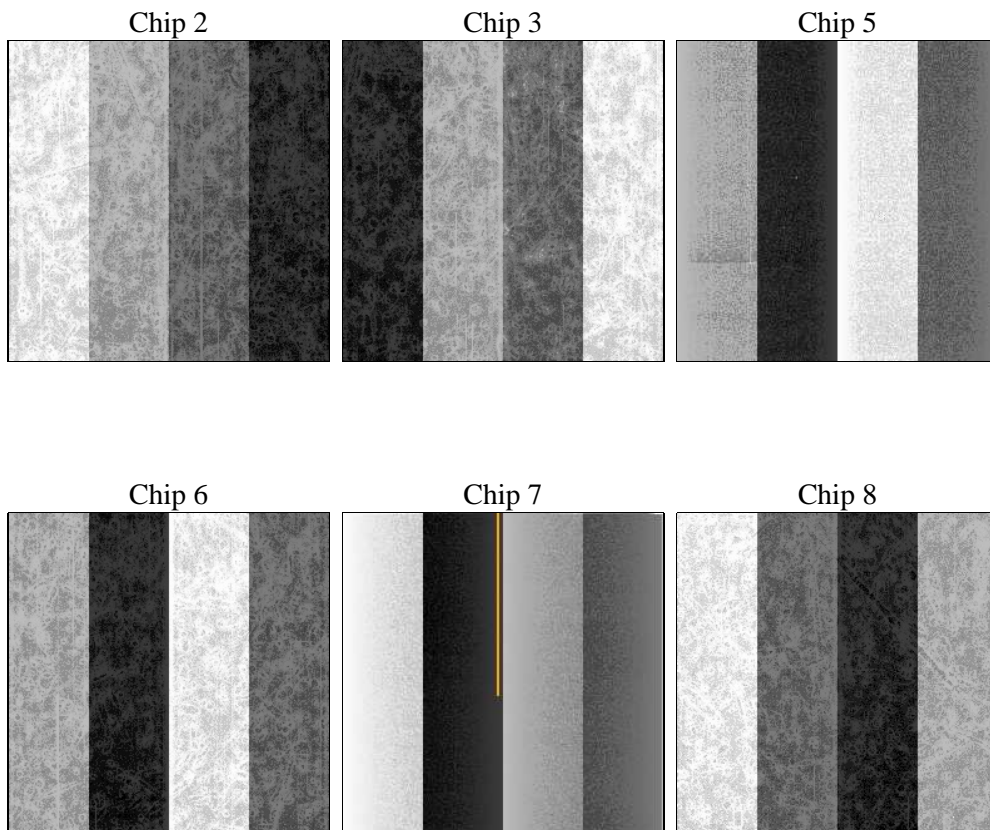
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 37000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 37042.864672601 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime2 | 37042.905712605 | Sum of GTIs [s] |
| date | 2012-05-31T16:19:33 | Date and time of file creation | ontime3 | 37039.500532389 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 37042.823632598 | Sum of GTIs [s] |
| | | | ontime6 | 37042.782592595 | Sum of GTIs [s] |
| | | | ontime7 | 37042.864672601 | Sum of GTIs [s] |
| | | | ontime8 | 37036.218601406 | Sum of GTIs [s] |
| | | | l1events | 1917998 | Number of level 1 events |

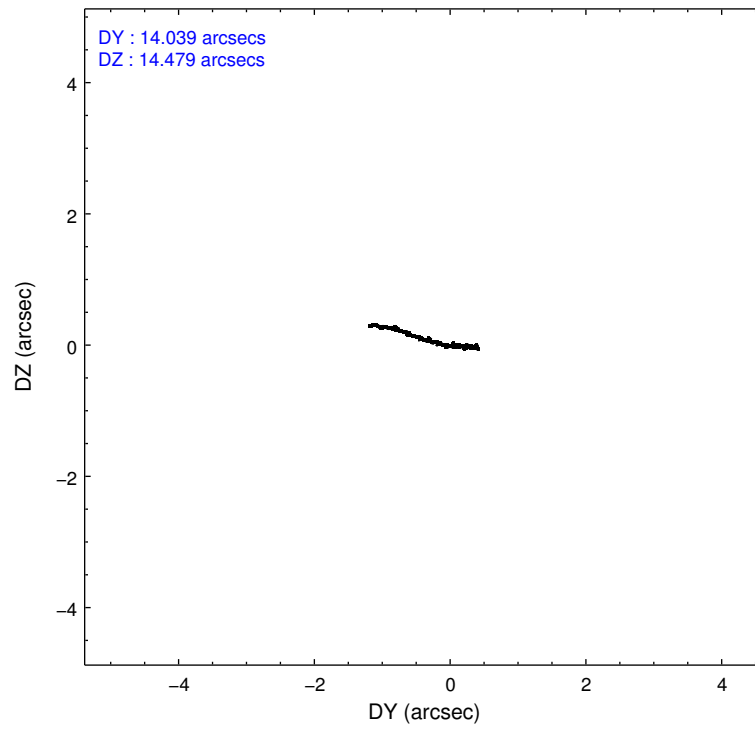
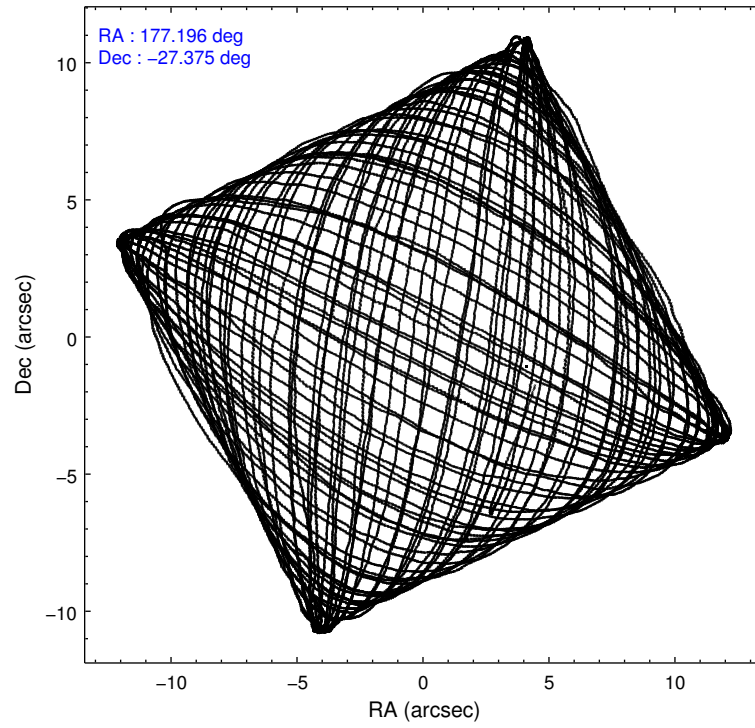
2.1.4 Events

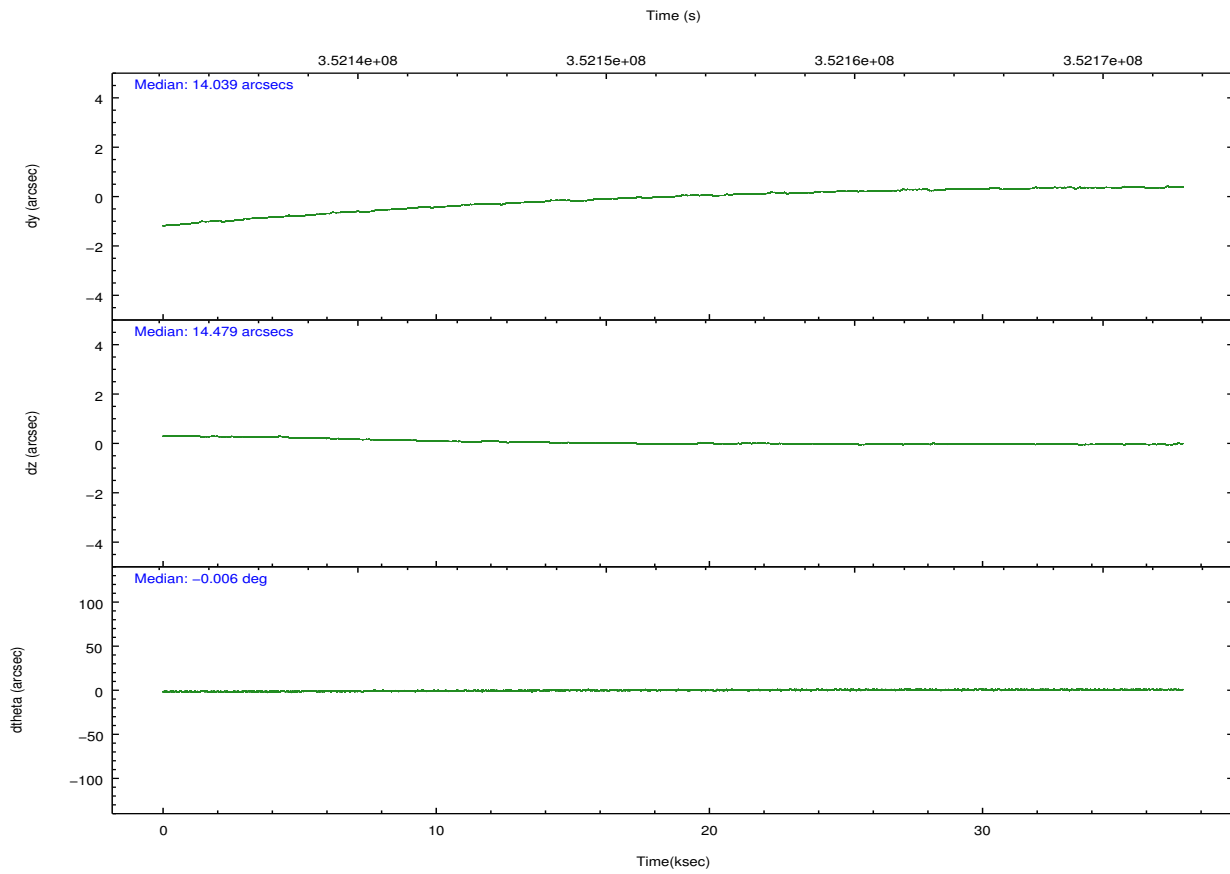
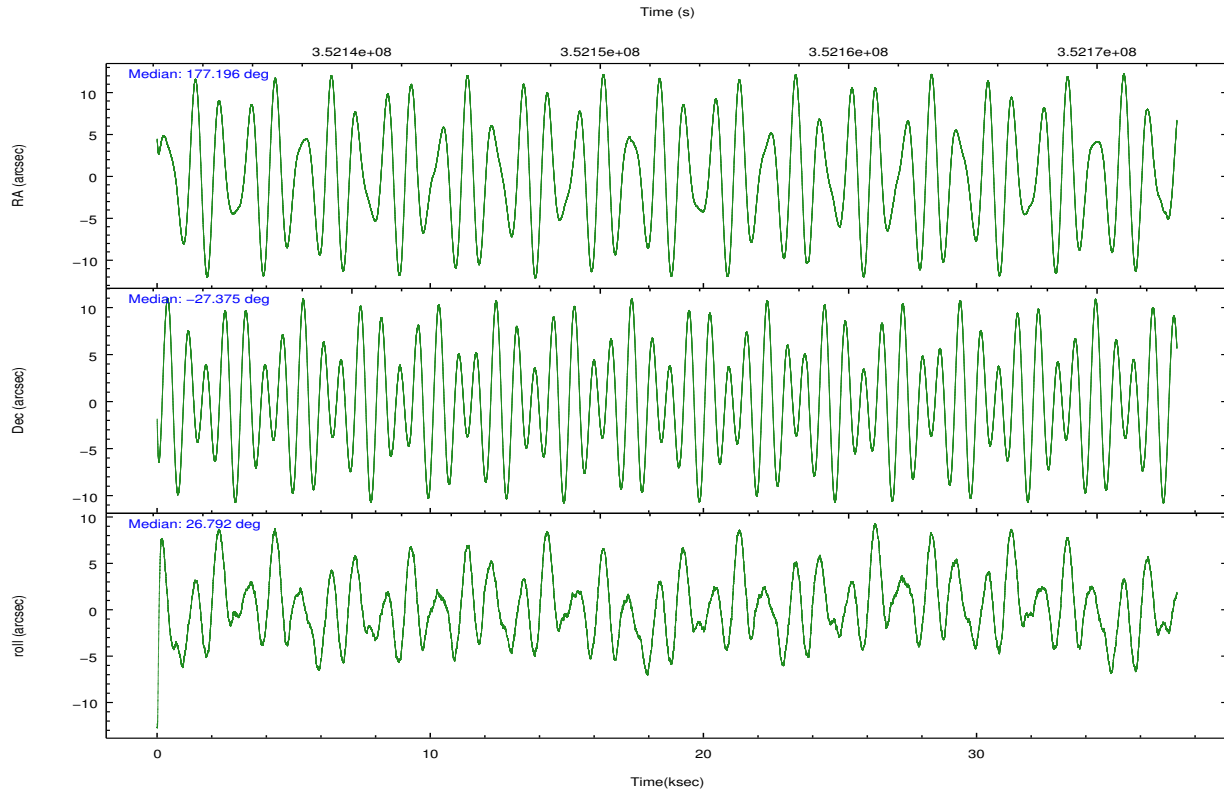
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 313901 | 283206 | 390593 | 287320 | 283830 | 359148 | grade 0 events | 10567 | 9734 | 30053 | 11002 | 13817 | 25253 |
| rejected events | 285444 | 256548 | 178691 | 257308 | 144819 | 267270 | | 3% | 3% | 7% | 3% | 4% | 7% |
| rejected % | 90% | 90% | 45% | 89% | 51% | 74% | grade 1 events | 176 | 161 | 791 | 165 | 427 | 295 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 7109 | 5811 | 66157 | 6726 | 30063 | 21961 |
| | | | | | | | | 2% | 2% | 16% | 2% | 10% | 6% |
| | | | | | | | grade 3 events | 2834 | 2998 | 8479 | 3188 | 12972 | 10064 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 2985 | 3021 | 8057 | 3072 | 12807 | 9239 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 8675 | 10059 | 30892 | 10302 | 30353 | 15450 |
| | | | | | | | | 2% | 3% | 7% | 3% | 10% | 4% |
| | | | | | | | grade 6 events | 4967 | 5102 | 99181 | 6030 | 69369 | 25414 |
| | | | | | | | | 1% | 1% | 25% | 2% | 24% | 7% |
| | | | | | | | grade 7 events | 276588 | 246320 | 146983 | 246835 | 114022 | 251472 |
| | | | | | | | | 88% | 86% | 37% | 85% | 40% | 70% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | 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 | 177.179680 | 177.196192933833 | CCD I2 on | O2 | Y |
| [deg] Pointing Dec | -27.398116 | -27.3750246758997 | CCD I3 on | O1 | Y |
| [deg] Pointing Roll | 26.628849 | 26.79307078878053 | 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) | 352134352.184000 | 352133269.00679 | CCD S5 on | N | N |
| Observation start date | 2009-02-27T15:04:46 | 2009-02-27T14:47:49 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 352171352.184000 | 352172041.17122 | On-chip summing requested | N | N |
| Observation end date | 2009-02-28T01:21:26 | 2009-02-28T01:34:01 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



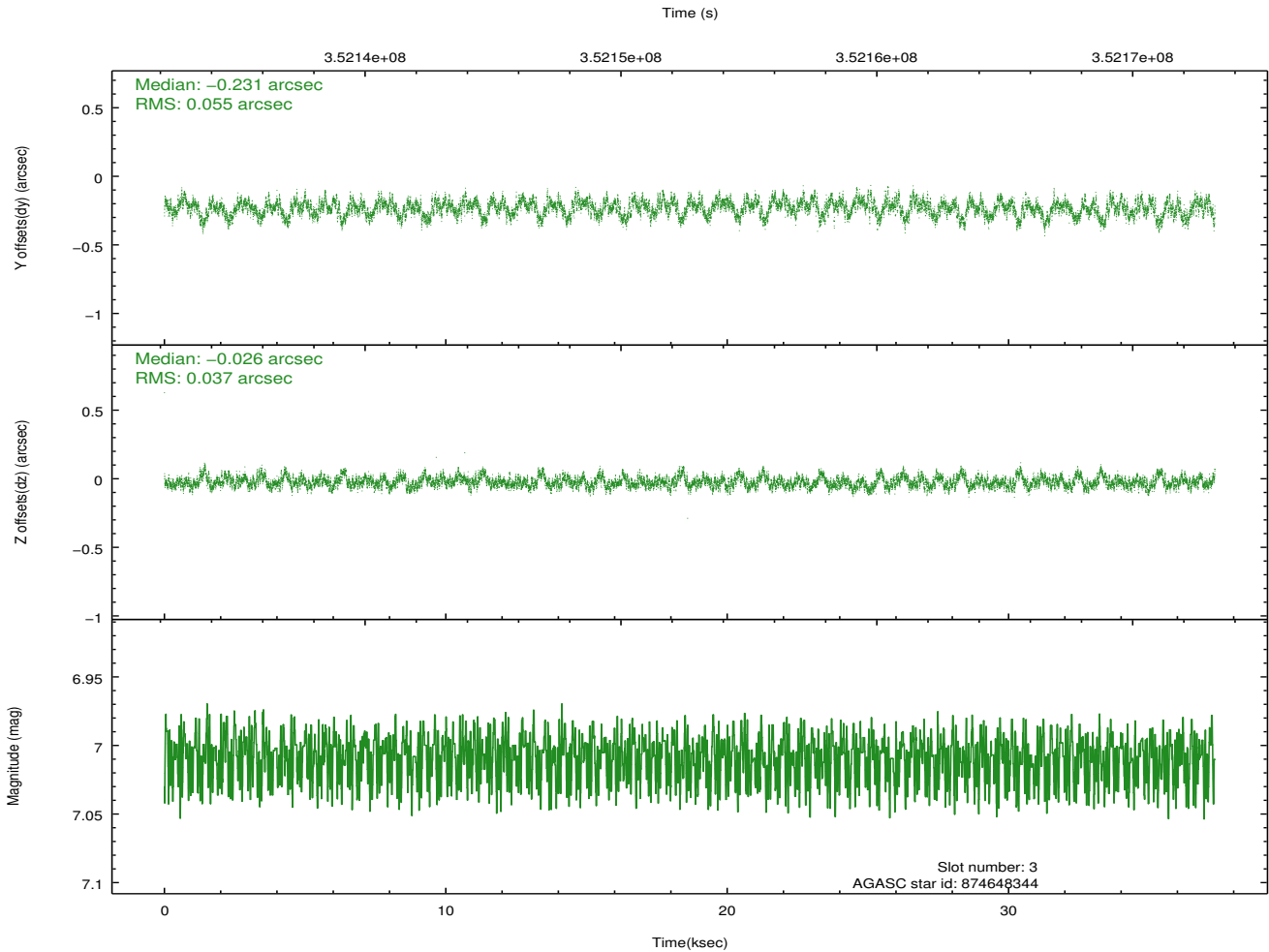
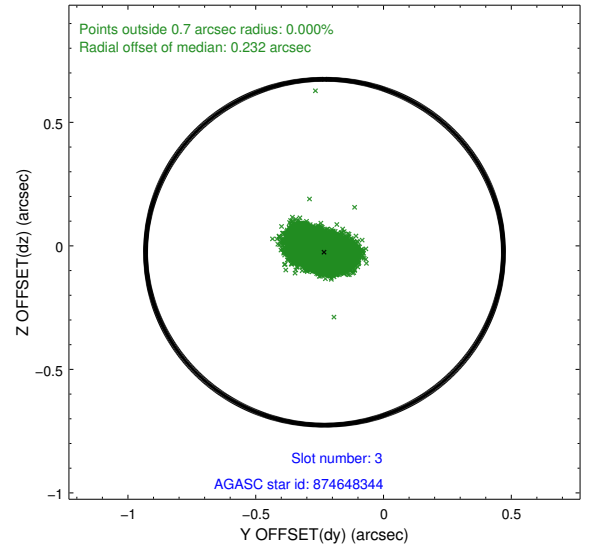
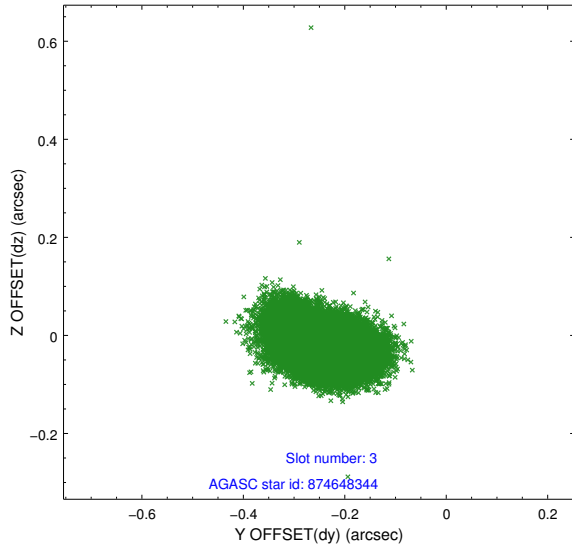


Slot Statistics

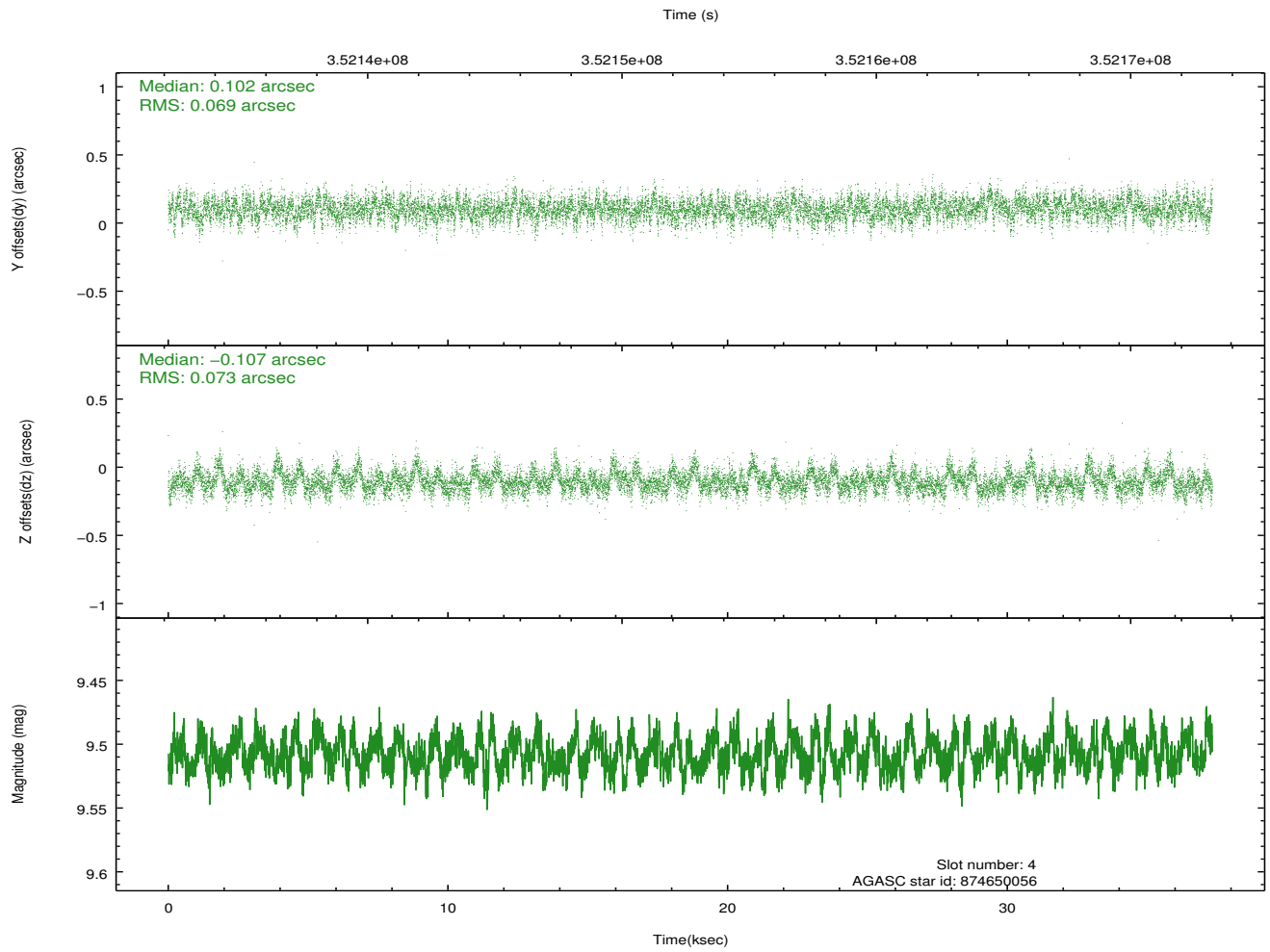
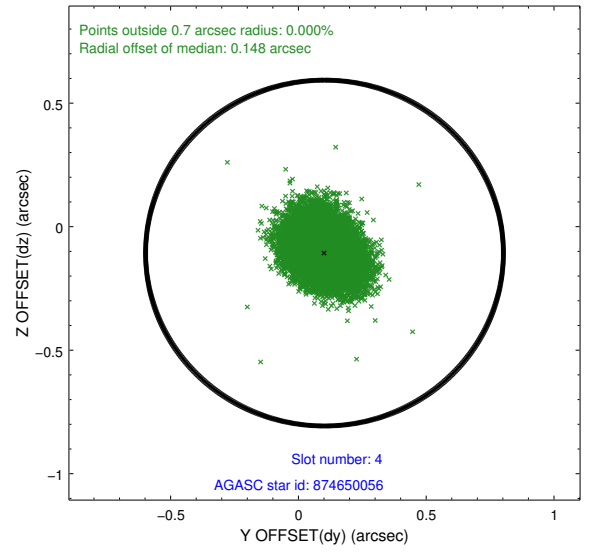
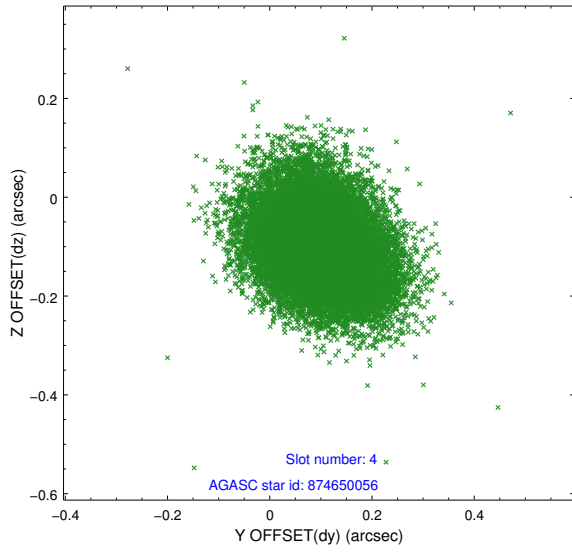
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.00 | 9106 | 0.067 | -0.026 | 0.013 | 0.026 | 0.000000 | 0.000000 | 929.27 | -1731.49 |
| 1 | FID | ACIS-S-5 | 7.03 | 9106 | -0.149 | 0.038 | 0.014 | 0.022 | 0.000000 | 0.000000 | -1819.95 | 166.07 |
| 2 | FID | ACIS-S-6 | 7.14 | 9106 | 0.067 | -0.002 | 0.012 | 0.027 | 0.000000 | 0.000000 | 394.77 | 810.04 |
| 3 | GUIDE | 874648344 | 7.01 | 18211 | -0.231 | -0.026 | 0.069 | 0.119 | 177.771571 | -27.080228 | 2206.23 | 169.07 |
| 4 | GUIDE | 874650056 | 9.51 | 18197 | 0.102 | -0.107 | 0.106 | 0.175 | 176.327846 | -27.214469 | -2145.51 | 1805.19 |
| 5 | GUIDE | 874650944 | 9.71 | 18121 | 0.035 | 0.000 | 0.138 | 0.225 | 176.727122 | -27.064291 | -759.61 | 1722.66 |
| 6 | GUIDE | 874651224 | 8.99 | 18197 | 0.072 | -0.151 | 0.086 | 0.141 | 176.582396 | -27.063650 | -1174.28 | 1930.91 |
| 7 | GUIDE | 874646152 | 8.29 | 18207 | 0.023 | 0.277 | 0.078 | 0.124 | 177.238074 | -27.509803 | -13.55 | -442.40 |

2.4 Star Slots

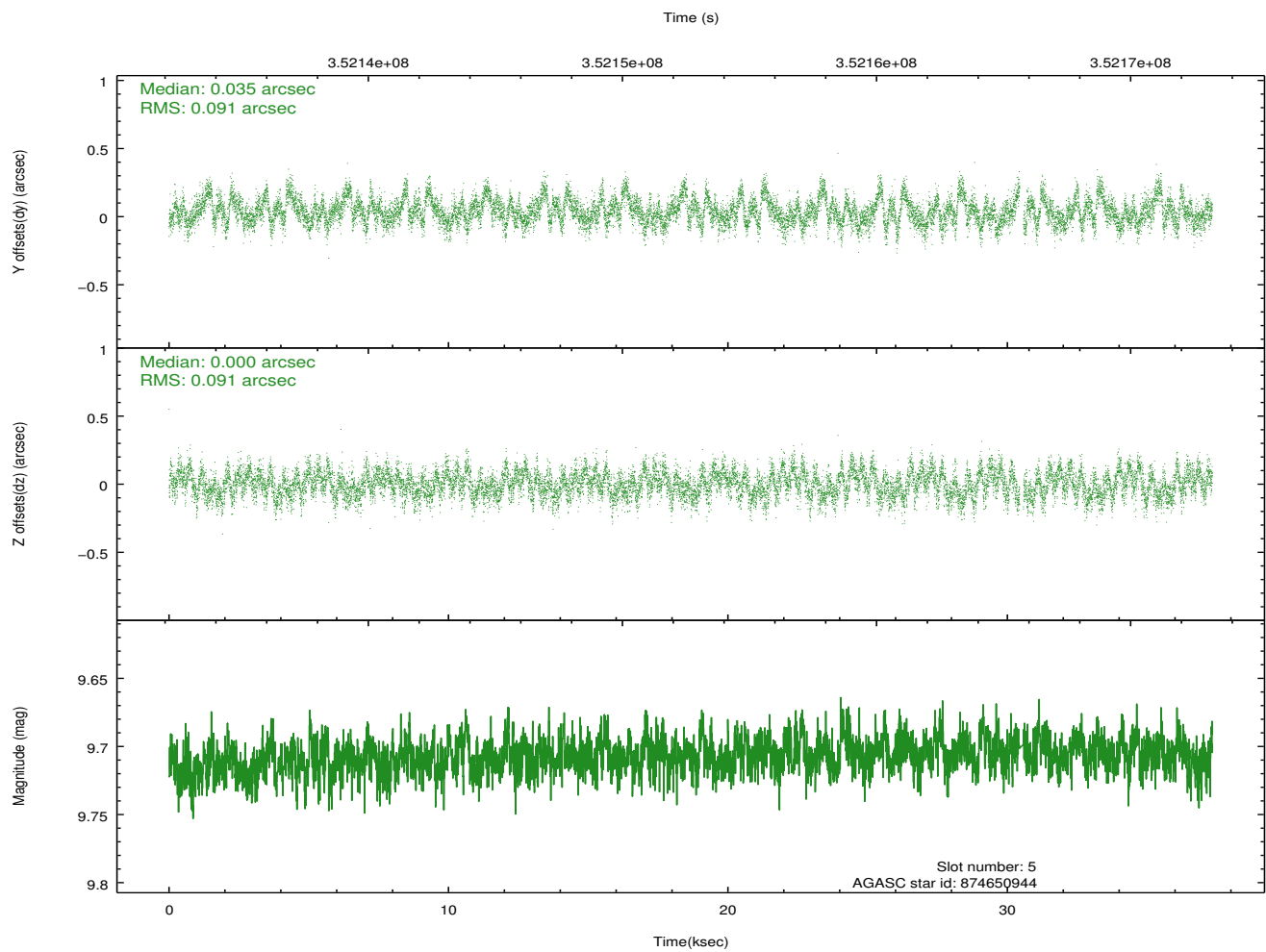
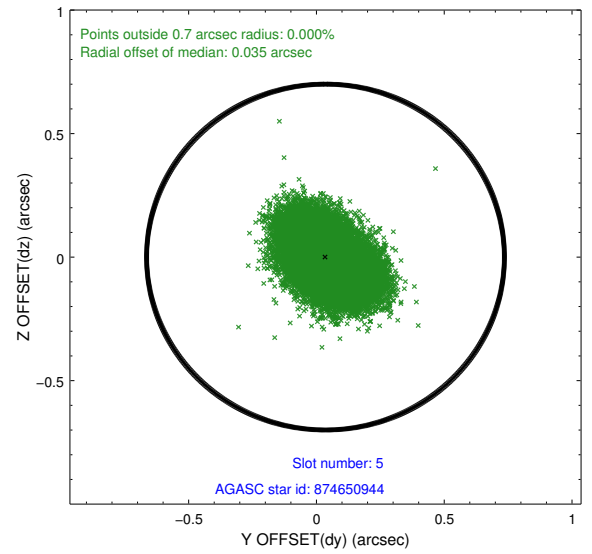
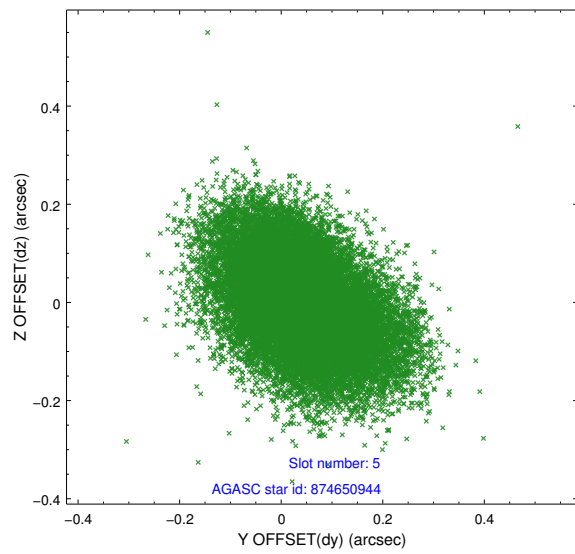
2.4.1 Slot 3



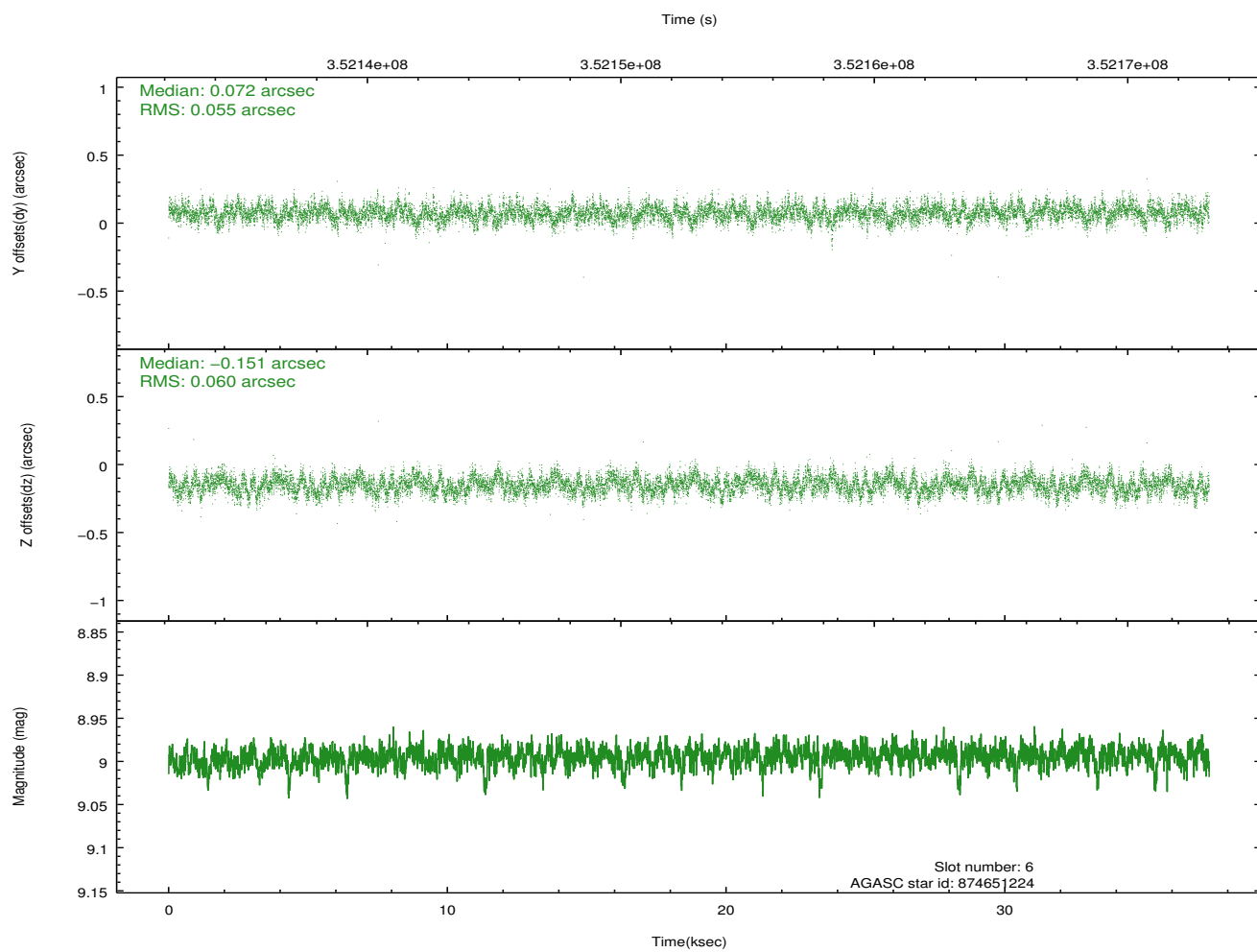
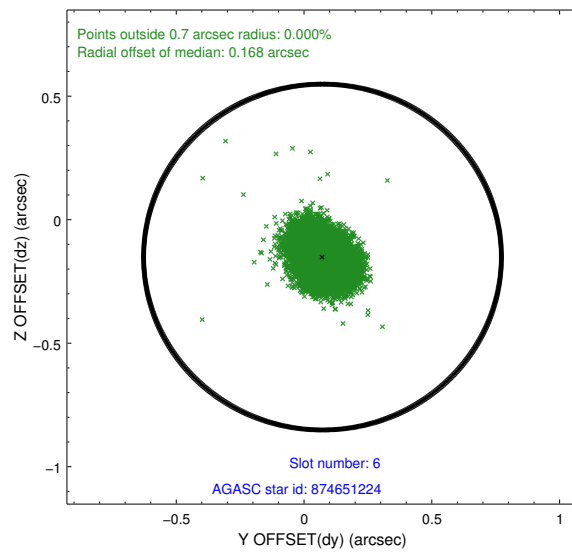
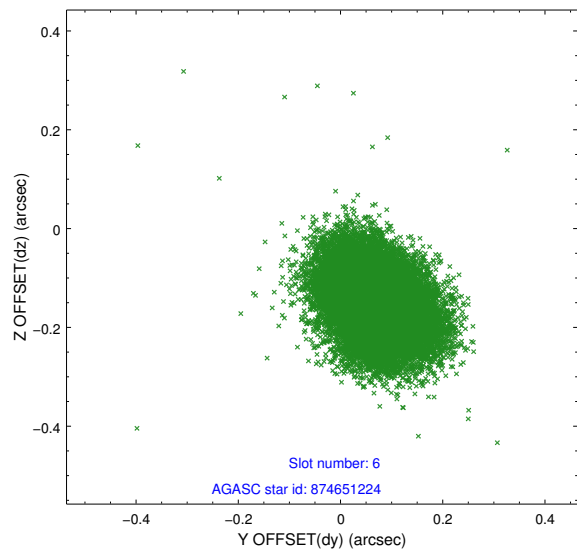
2.4.2 Slot 4



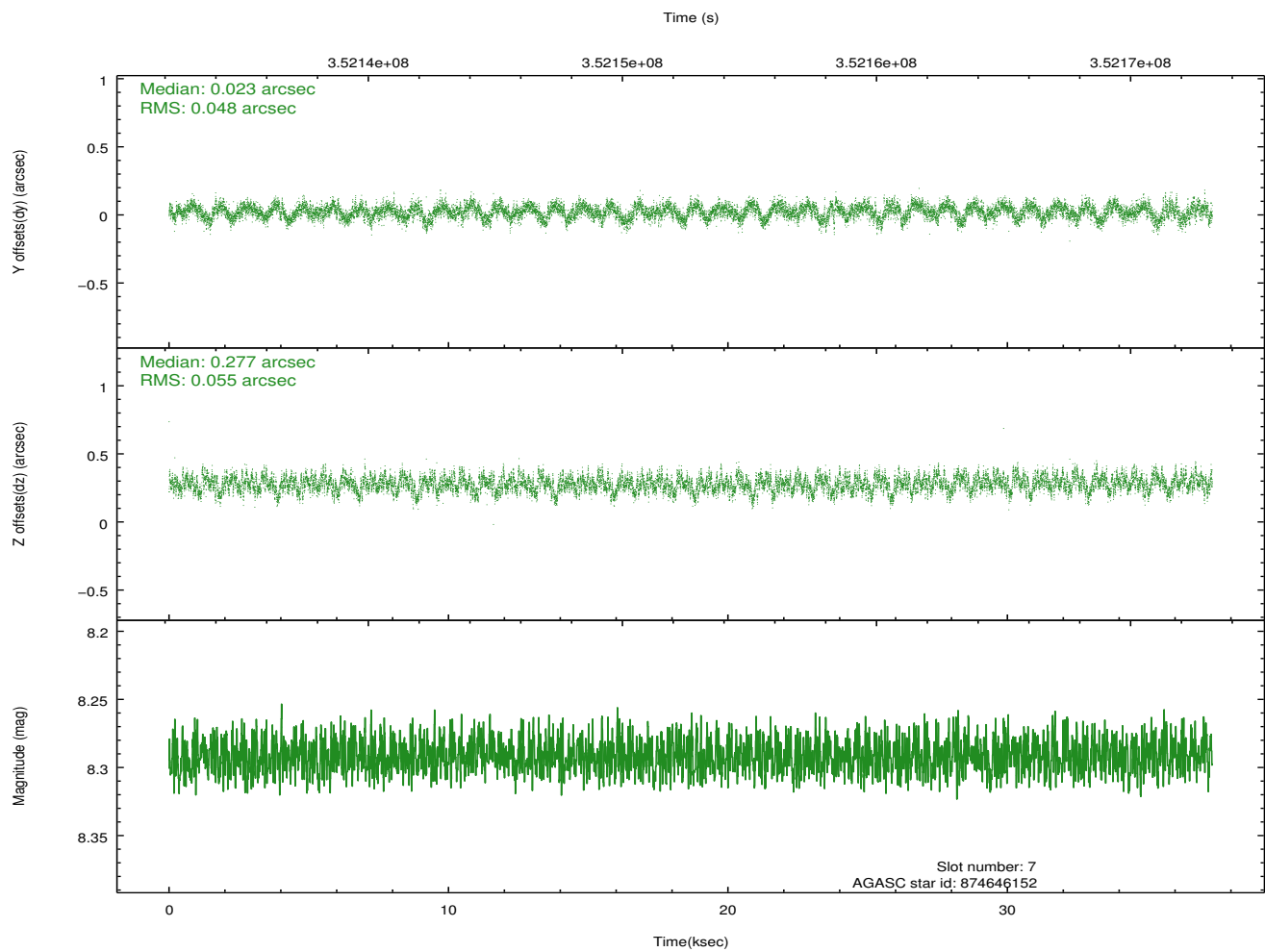
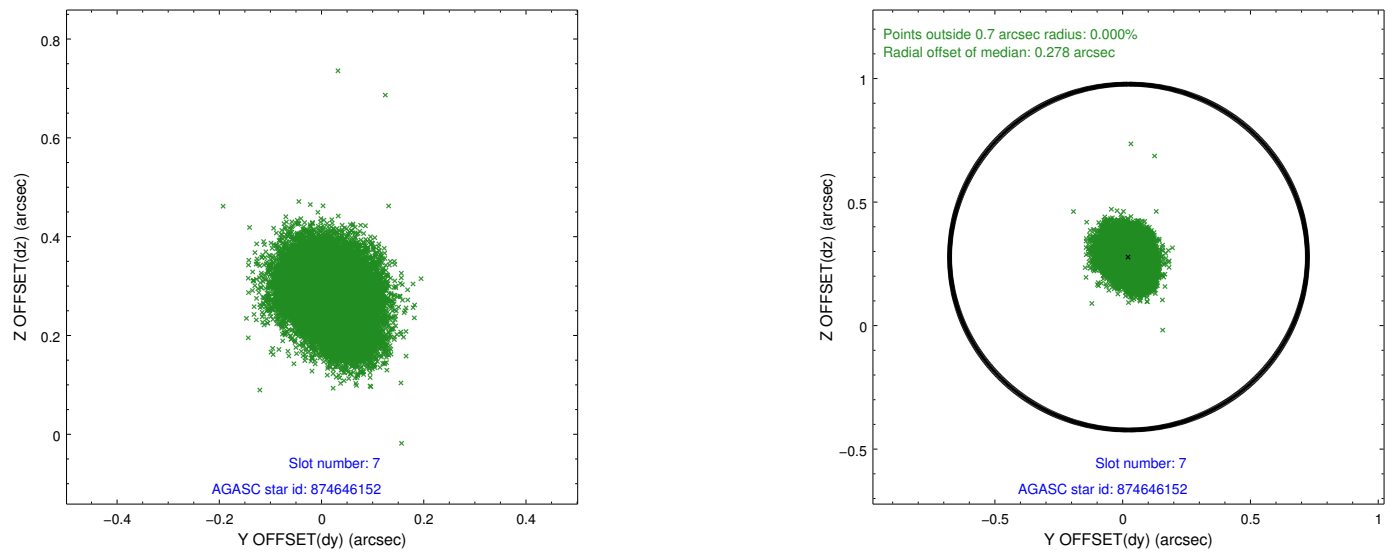
2.4.3 Slot 5



2.4.4 Slot 6

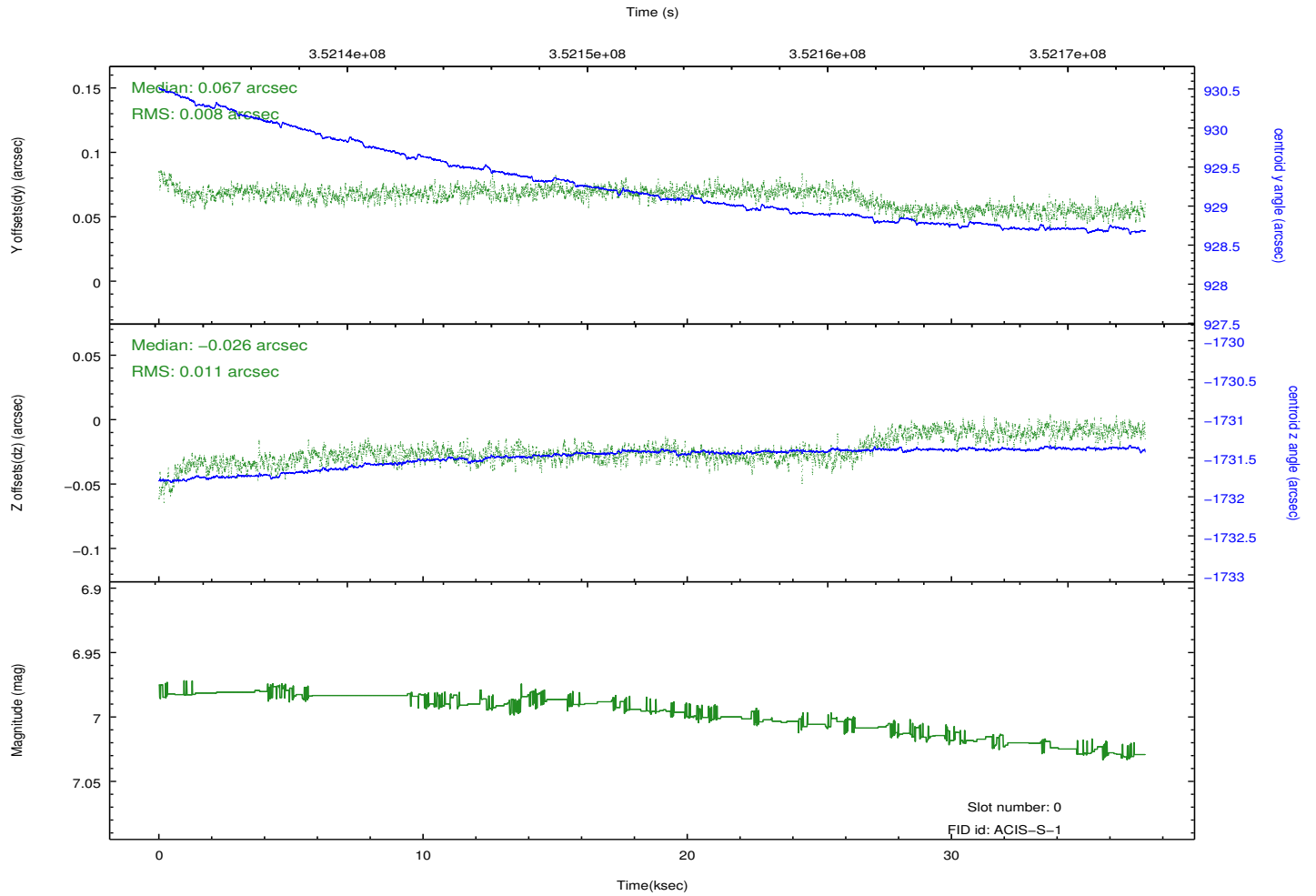
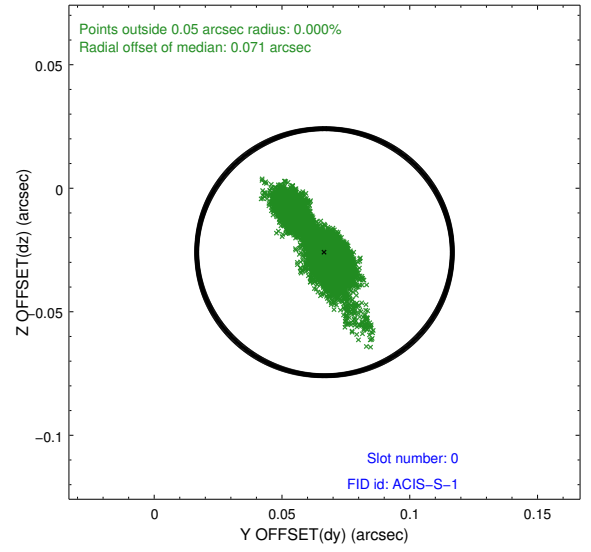
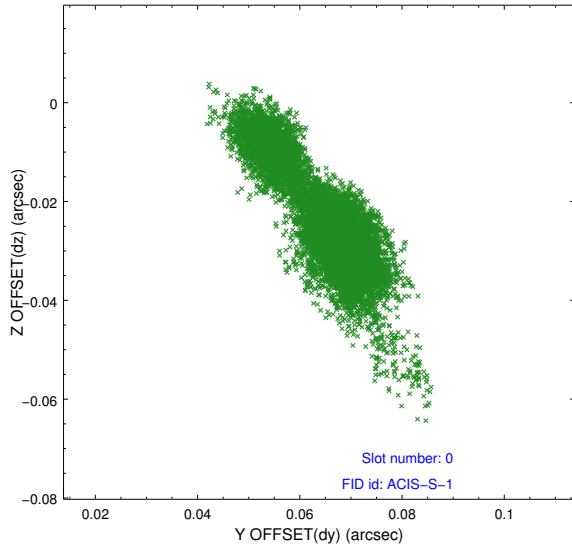


2.4.5 Slot 7

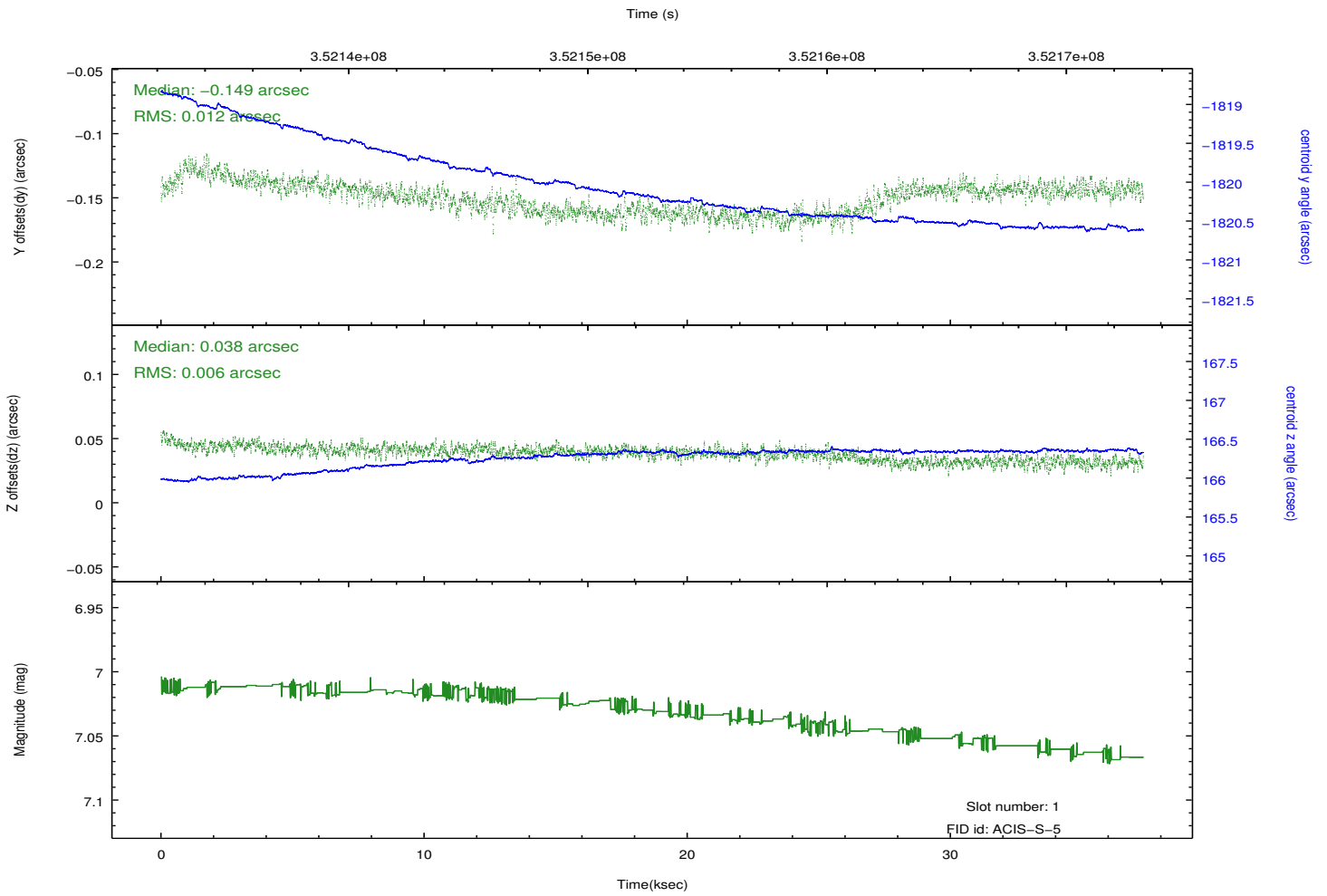
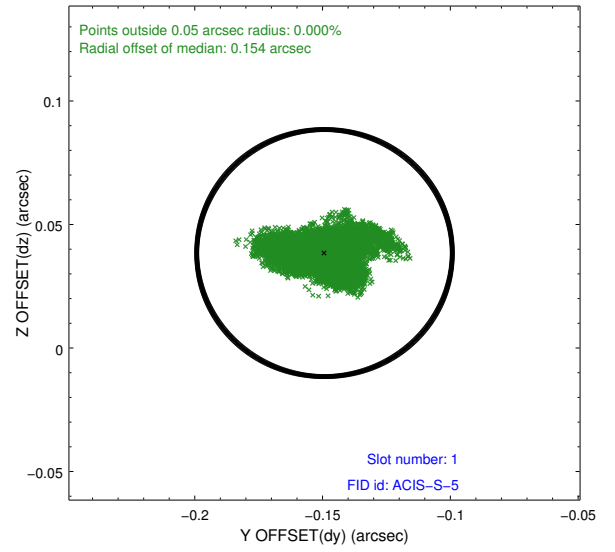
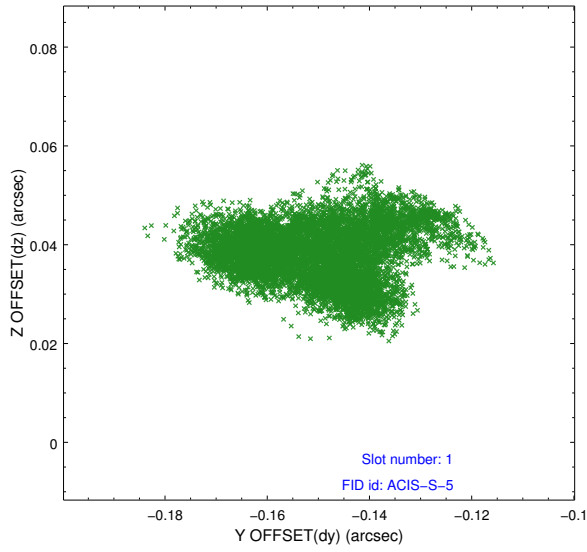


2.5 FID Slots

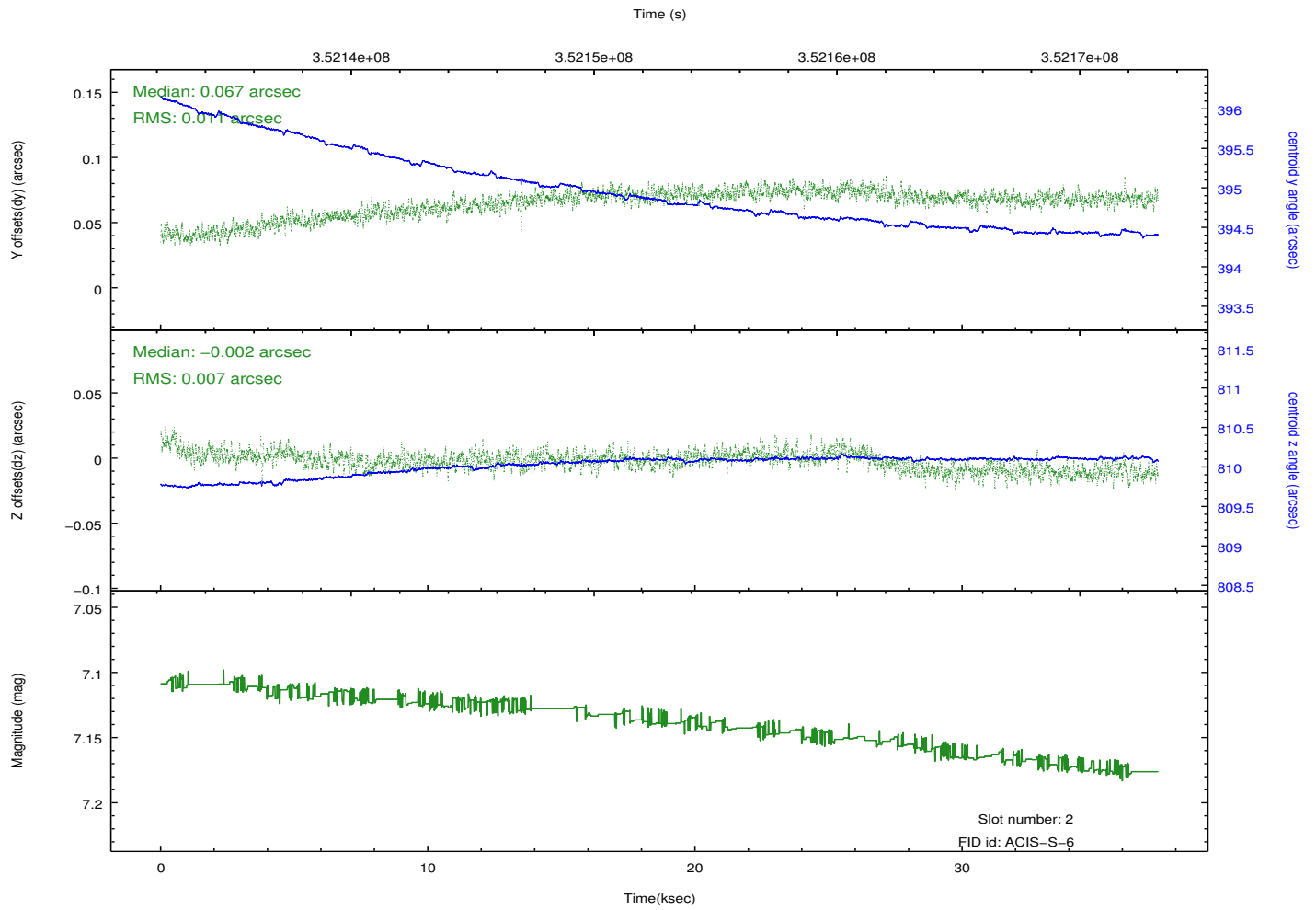
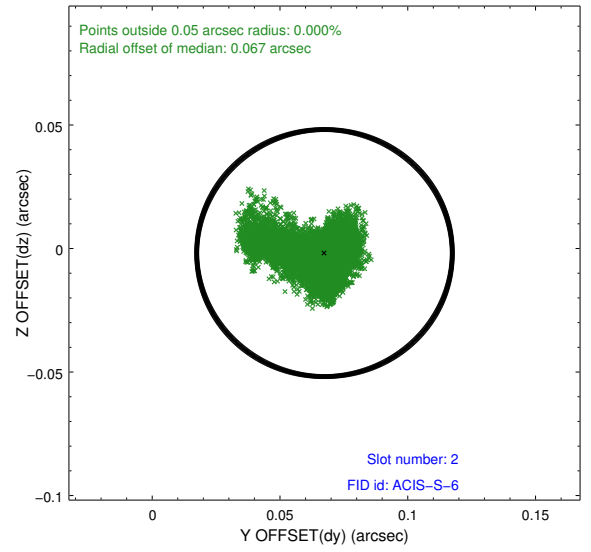
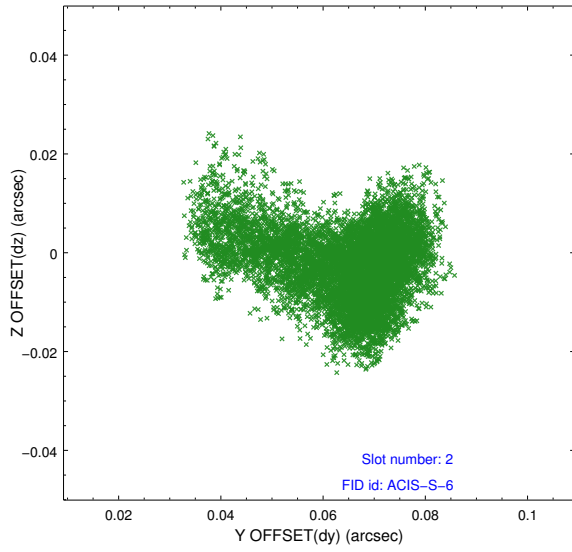
2.5.1 Slot 0



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) | 2012.06.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 37.0431998 |

A.2 Comments