

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2217 - L2 Version 3
Chandra X-Ray Center

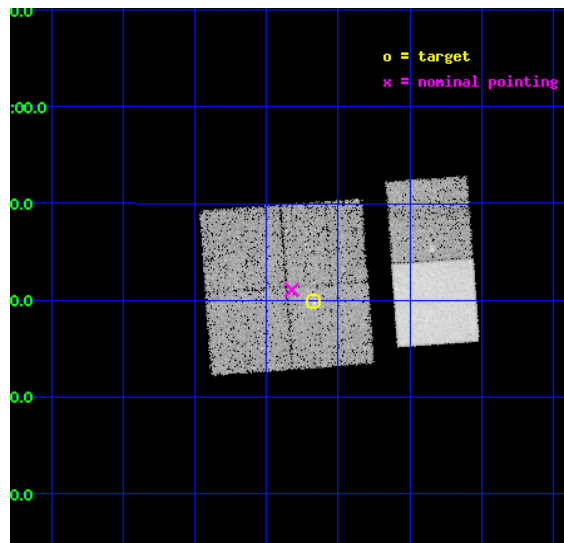
L2 Processing Date : Sep 5 2012

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1 Front

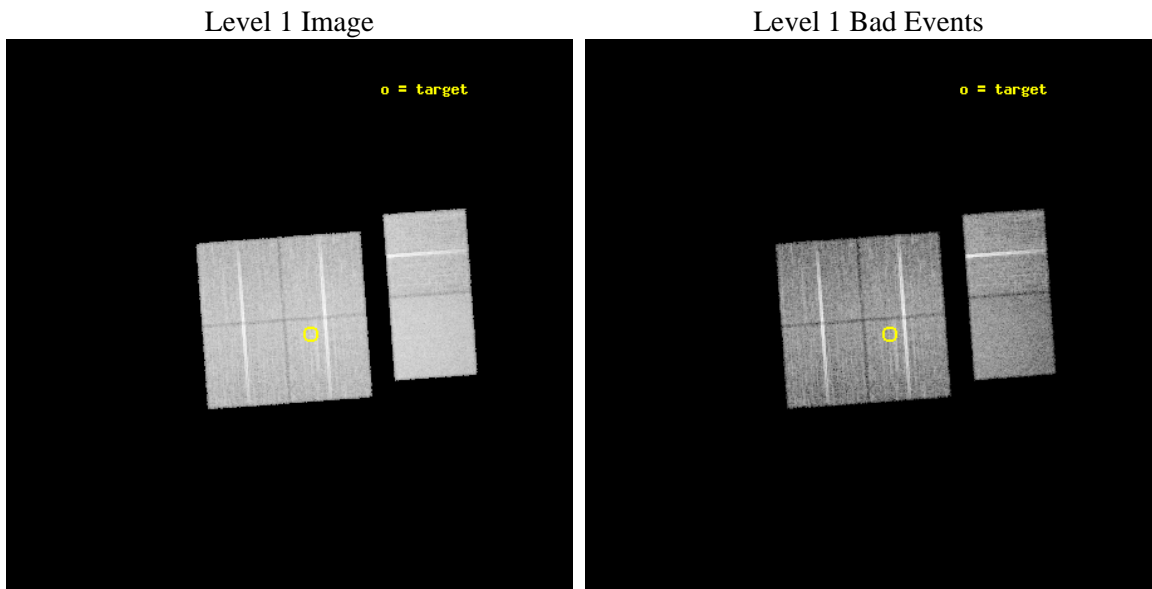
| | | |
|----------|--|---|
| seq_num | 800156 | Sequence number |
| obs_id | 2217 | Observation id |
| title | THE ORIGIN OF X-RAY EMISSION FROM LOW VELOCITY DISPERSION GROUPS | P |
| observer | Prof Trevor Ponman | Principal investigator |
| object | NGC 1587 GROUP | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 67.669238 | Observer's specified target RA [deg] |
| dec_targ | 0.666178 | Observer's specified target Dec [deg] |
| ra_nom | 67.705965561316 | Nominal RA [deg] |
| dec_nom | 0.68458141580372 | Nominal Dec [deg] |
| roll_nom | 85.843550647713 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 20134.359078422 | Sum of GTIs [s] |
| livetime | 19879.405700316 | Livetime [s] |
| ontime0 | 20134.359058499 | Sum of GTIs [s] |
| ontime1 | 20131.118118182 | Sum of GTIs [s] |
| ontime2 | 20134.359058499 | Sum of GTIs [s] |
| ontime3 | 20134.359078422 | Sum of GTIs [s] |
| ontime6 | 20134.359058499 | Sum of GTIs [s] |
| ontime7 | 20131.118058339 | Sum of GTIs [s] |
| l2events | 122203 | Number of level 2 events |



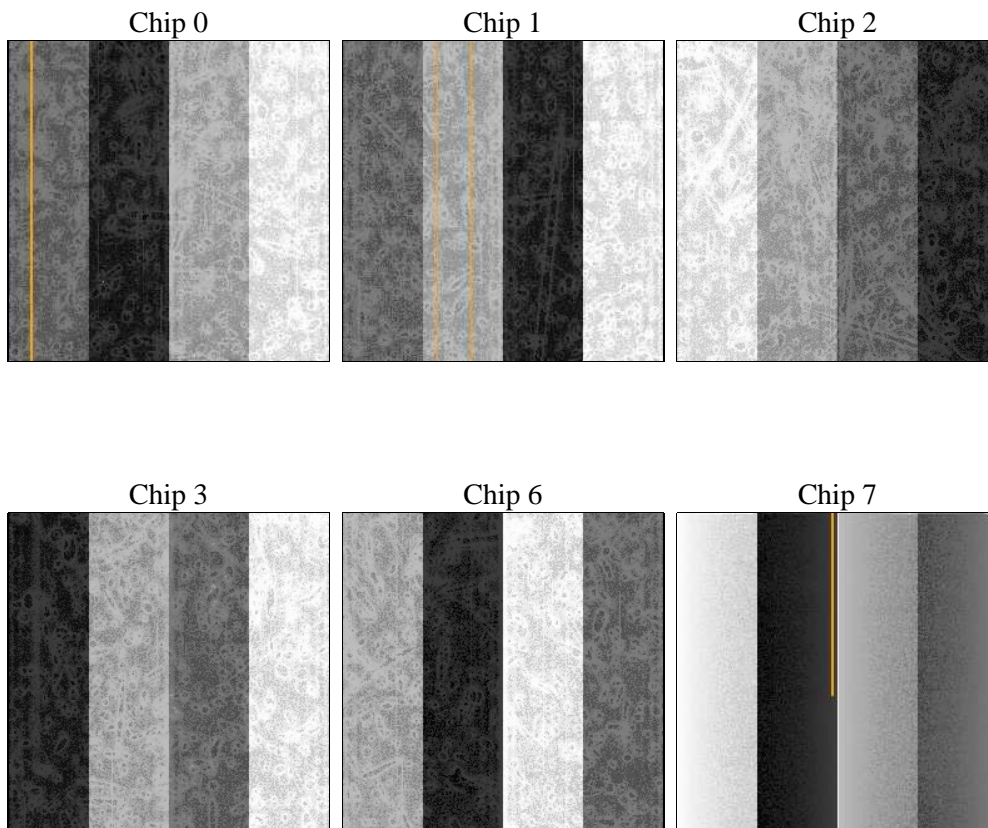
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 20000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 20134.359078422 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime0 | 20134.359058499 | Sum of GTIs [s] |
| date | 2012-09-05T15:44:50 | Date and time of file creation | ontime1 | 20131.118118182 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 20134.359058499 | Sum of GTIs [s] |
| | | | ontime3 | 20134.359078422 | Sum of GTIs [s] |
| | | | ontime6 | 20134.359058499 | Sum of GTIs [s] |
| | | | ontime7 | 20131.118058339 | Sum of GTIs [s] |
| | | | l1events | 756481 | Number of level 1 events |

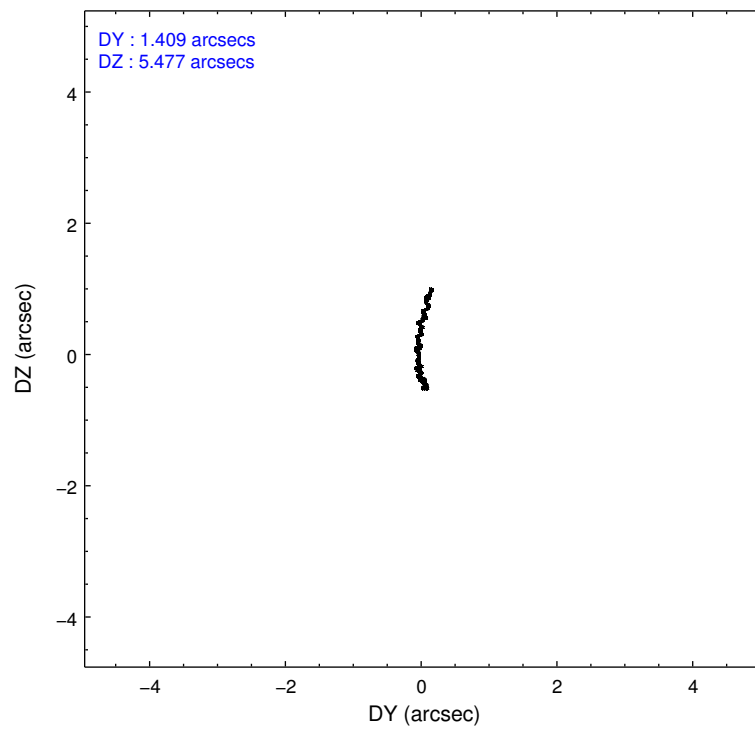
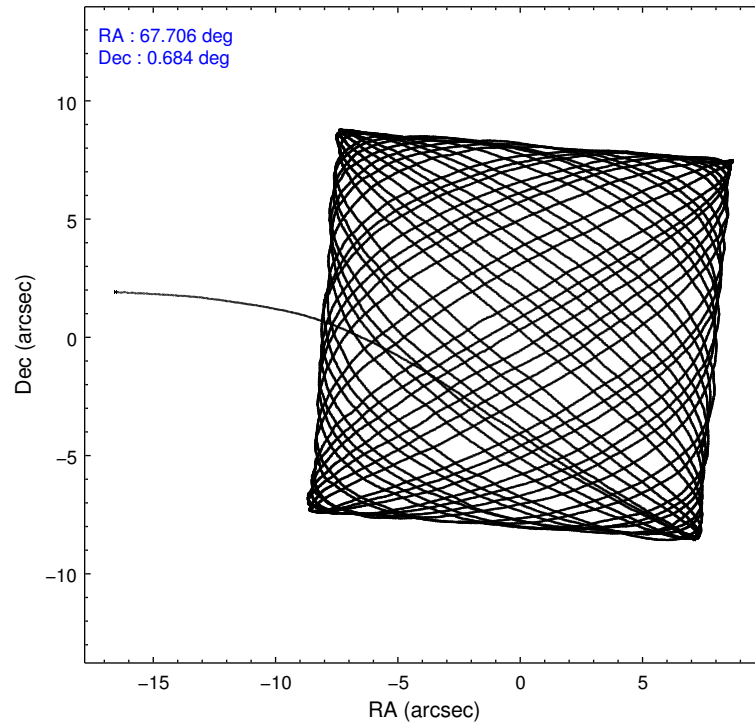
2.1.4 Events

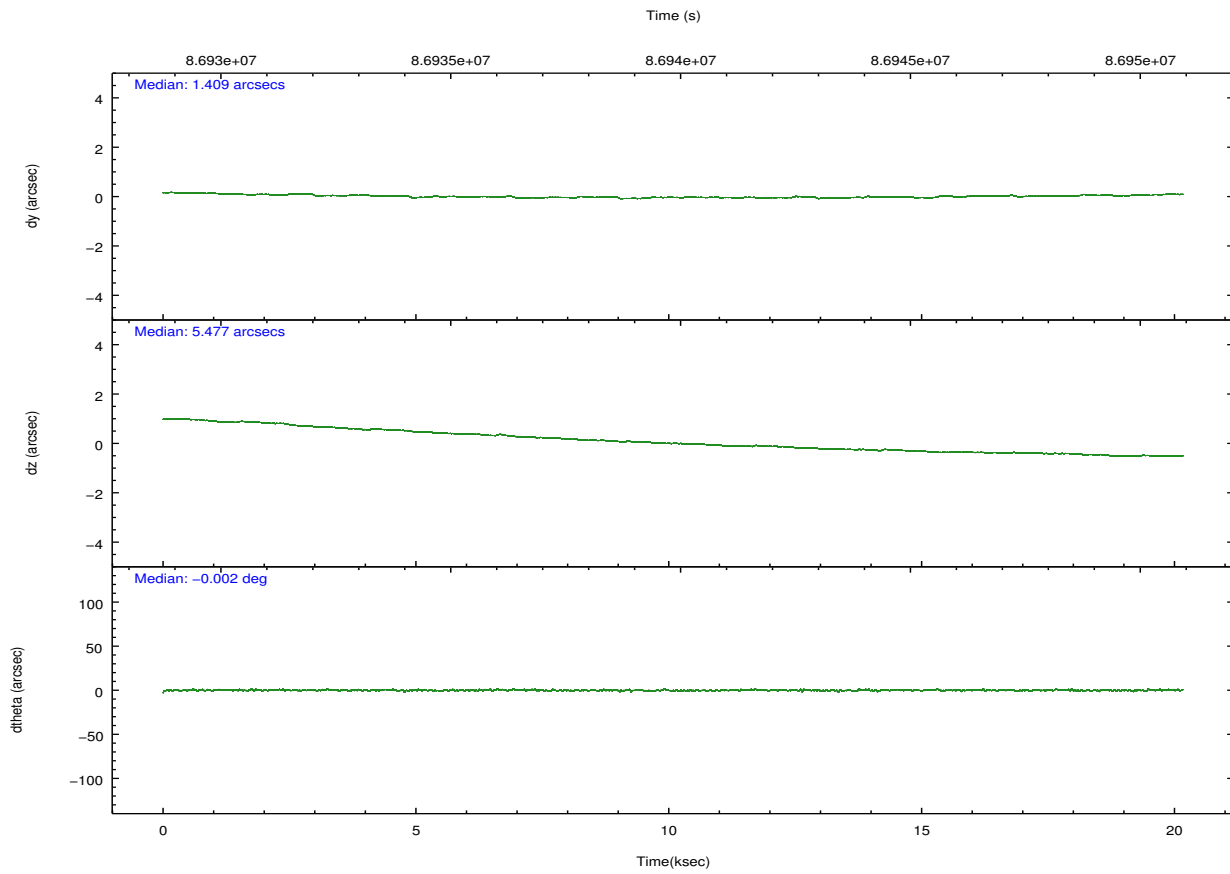
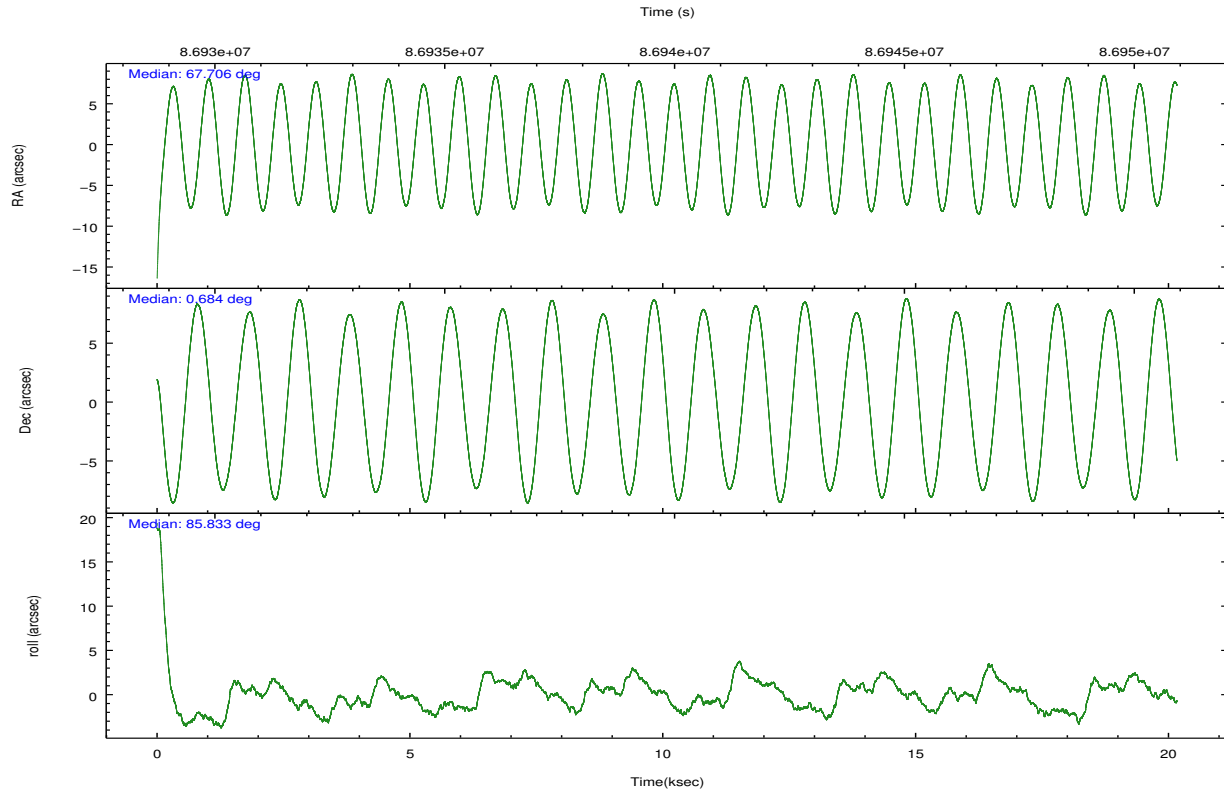
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|-------|-------|--------|--------|--------|-------|
| level 1 events | 111097 | 115449 | 123222 | 124935 | 129572 | 152206 | grade 0 events | 5912 | 6064 | 6210 | 6340 | 5829 | 6004 |
| rejected events | 97297 | 100781 | 109400 | 110693 | 115357 | 88655 | | 5% | 5% | 5% | 5% | 4% | 3% |
| rejected % | 87% | 87% | 88% | 88% | 89% | 58% | grade 1 events | 59 | 38 | 60 | 50 | 49 | 143 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2798 | 2879 | 2837 | 2816 | 2842 | 12159 |
| | | | | | | | | 2% | 2% | 2% | 2% | 2% | 7% |
| | | | | | | | grade 3 events | 1461 | 1530 | 1212 | 1341 | 1399 | 5894 |
| | | | | | | | | 1% | 1% | 0% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 1285 | 1576 | 1310 | 1337 | 1423 | 5704 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 4079 | 4569 | 4155 | 4519 | 5046 | 14502 |
| | | | | | | | | 3% | 3% | 3% | 3% | 3% | 9% |
| | | | | | | | grade 6 events | 2345 | 2620 | 2256 | 2410 | 2726 | 33808 |
| | | | | | | | | 2% | 2% | 1% | 1% | 2% | 22% |
| | | | | | | | grade 7 events | 93158 | 96173 | 105182 | 106122 | 110258 | 73992 |
| | | | | | | | | 83% | 83% | 85% | 84% | 85% | 48% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | 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 | 67.717899 | 67.70596556131557 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0.659790 | 0.6845814158037191 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 85.634716 | 85.84355064771287 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | | | |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | | | |
| [s] Observation start time (MET) | 86929920.184000 | 86928867.69348399 | | | |
| Observation start date | 2000-10-03T03:10:56 | 2000-10-03T02:54:27 | | | |
| [s] Observation end time (MET) | 86949920.184000 | 86950206.144289 | | | |
| Observation end date | 2000-10-03T08:44:16 | 2000-10-03T08:50:06 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





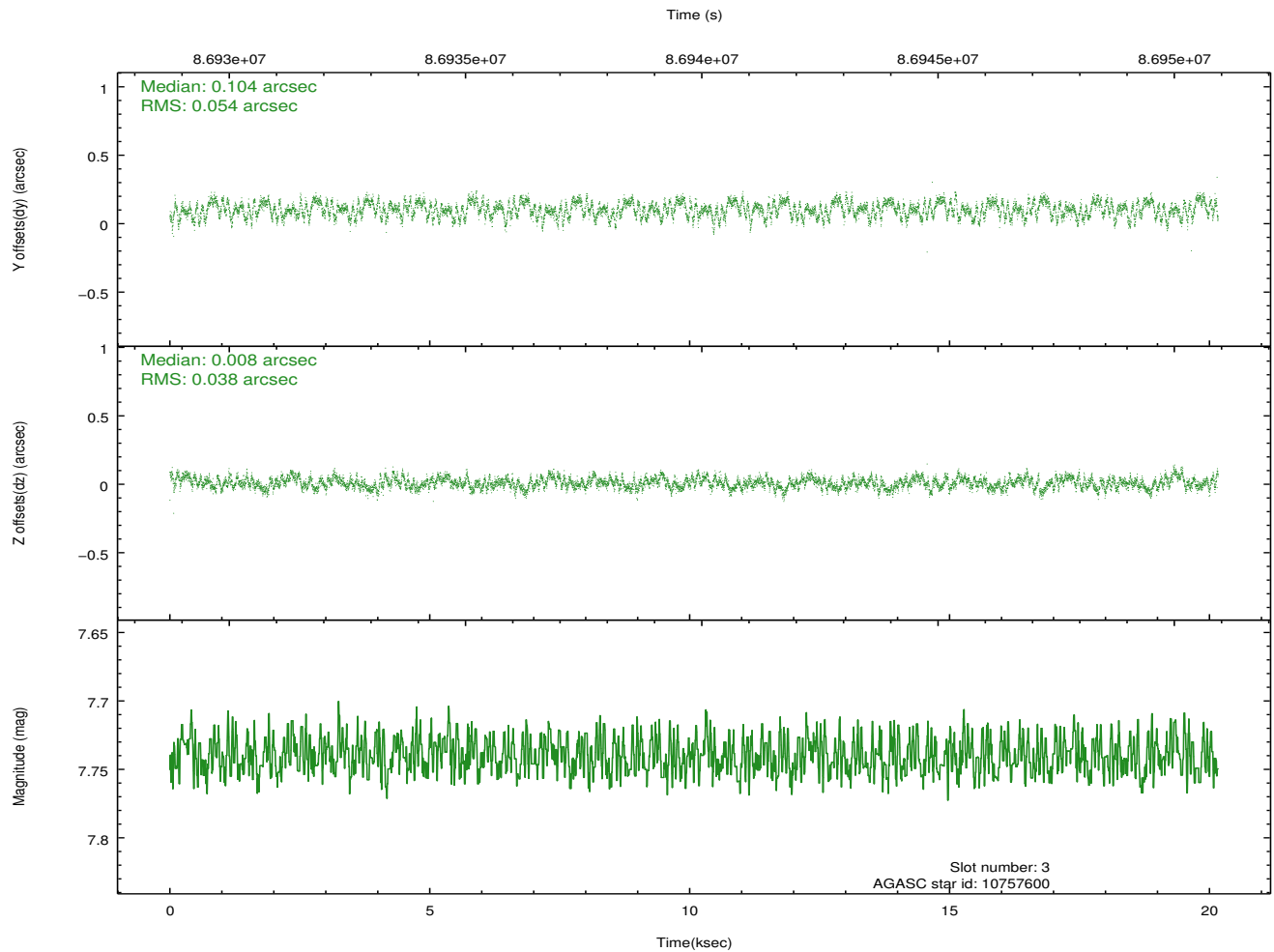
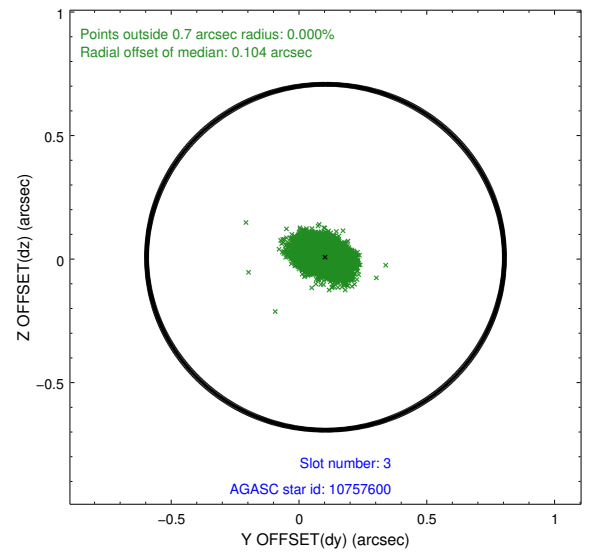
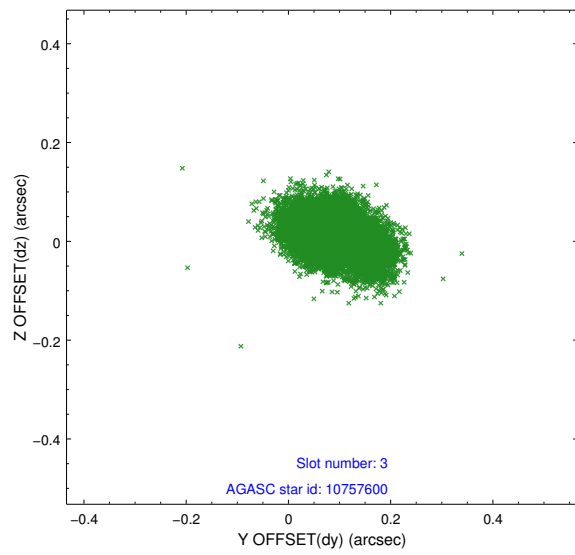
Slot Statistics

| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|----------|------|-------|--------|--------|-------|-------|-----------|----------|----------|----------|
| 0 | FID | ACIS-I-3 | 7.45 | 4917 | -0.005 | 0.157 | 0.027 | 0.047 | 0.000000 | 0.000000 | 55.83 | -962.00 |
| 1 | FID | ACIS-I-4 | 7.19 | 4915 | -0.061 | -0.055 | 0.015 | 0.025 | 0.000000 | 0.000000 | 2158.32 | 1070.71 |
| 2 | FID | ACIS-I-5 | 7.23 | 4915 | -0.032 | -0.032 | 0.016 | 0.024 | 0.000000 | 0.000000 | -1809.37 | 1068.82 |
| 3 | GUIDE | 10757600 | 7.74 | 9832 | 0.104 | 0.008 | 0.071 | 0.112 | 68.101972 | 0.980126 | 1255.75 | -1289.82 |
| 4 | GUIDE | 10754888 | 7.79 | 9834 | -0.109 | 0.166 | 0.073 | 0.115 | 68.381987 | 1.022476 | 1484.77 | -2283.12 |
| 5 | GUIDE | 10751432 | 9.47 | 9831 | 0.036 | 0.147 | 0.085 | 0.140 | 68.276784 | 0.522722 | -337.97 | -2043.15 |
| 6 | GUIDE | 10754360 | 9.23 | 9831 | -0.064 | 0.040 | 0.079 | 0.131 | 68.128628 | 1.121938 | 1771.91 | -1346.74 |
| 7 | GUIDE | 9845336 | 9.14 | 9828 | 0.035 | -0.359 | 0.091 | 0.145 | 67.151860 | 0.759033 | 201.24 | 2058.91 |

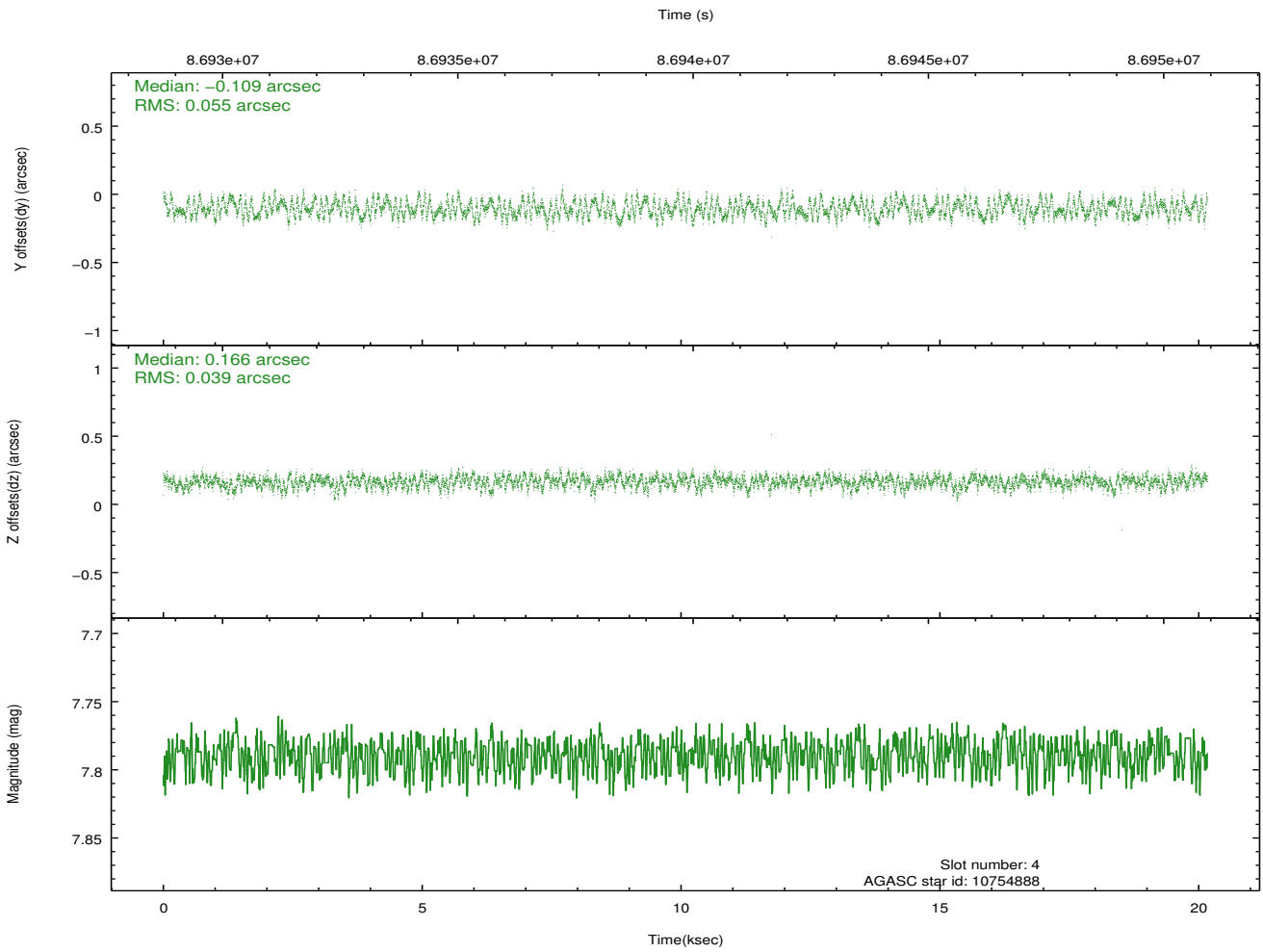
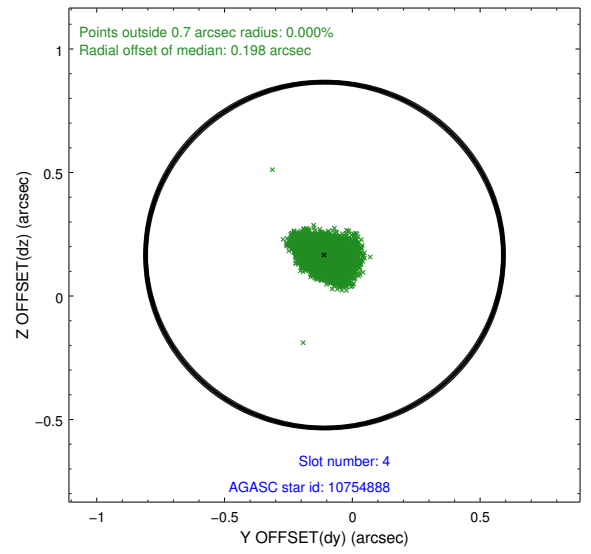
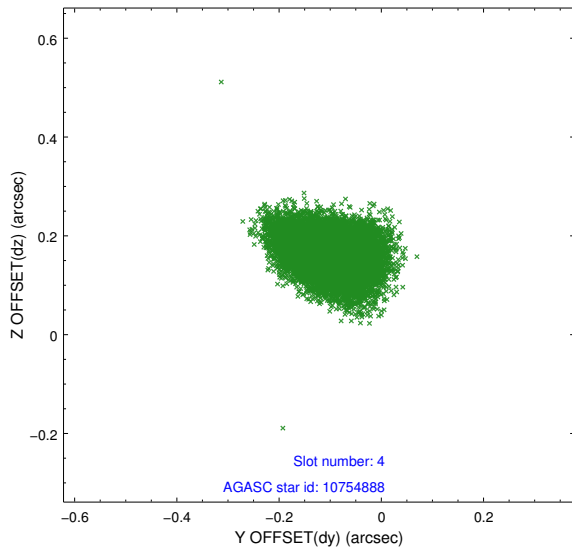
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2.4 Star Slots

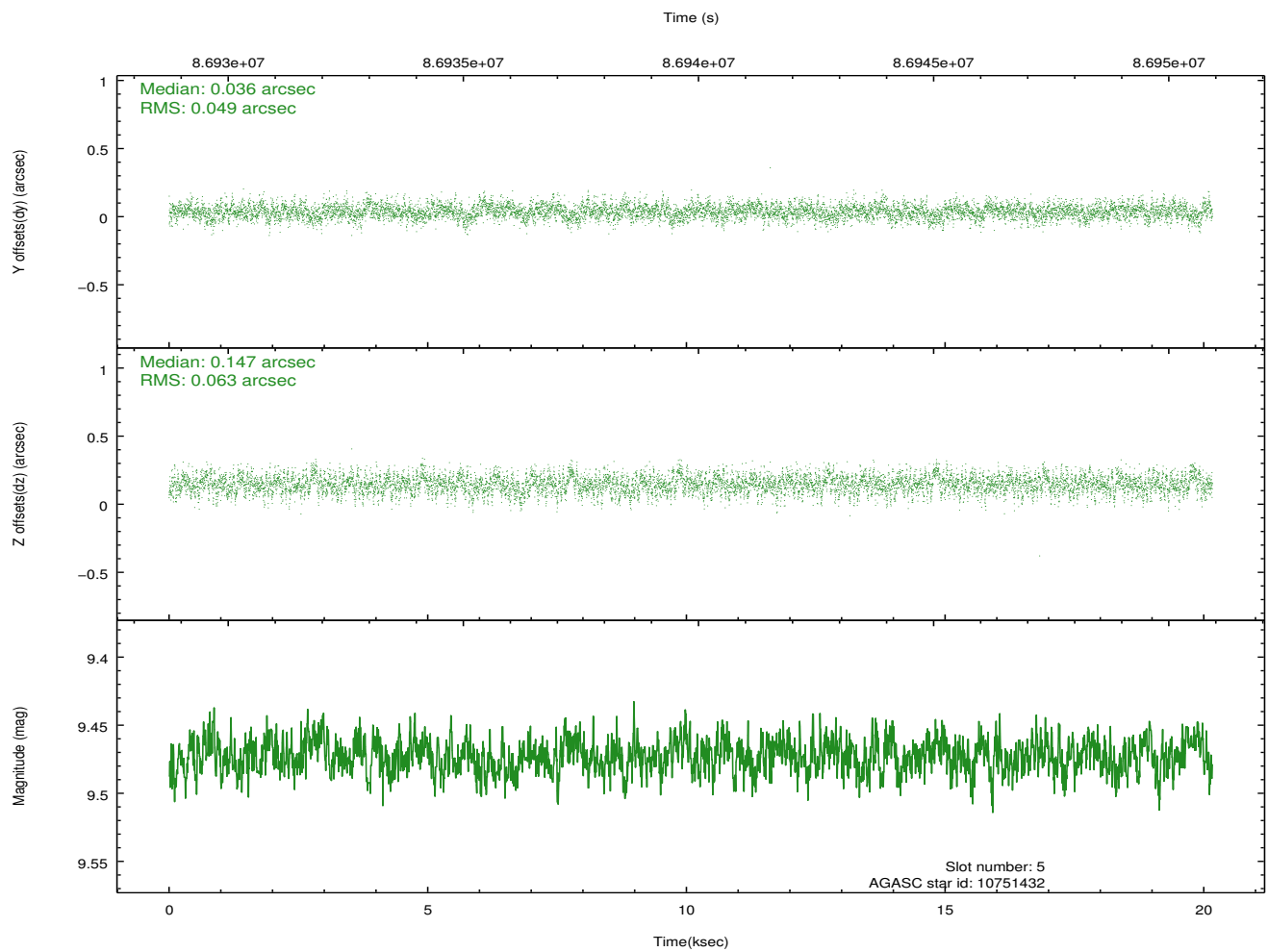
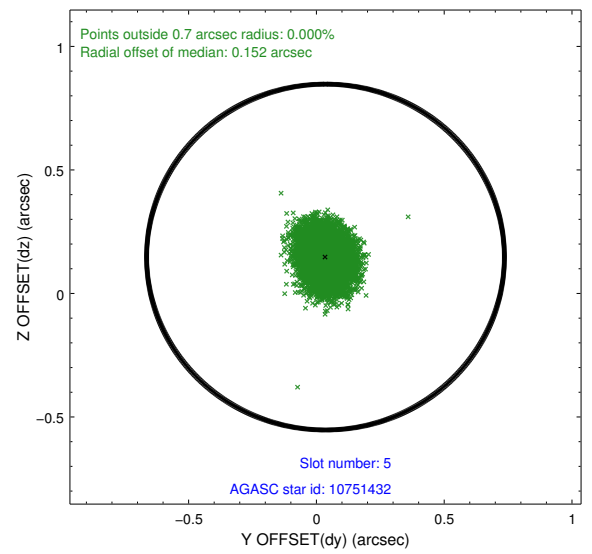
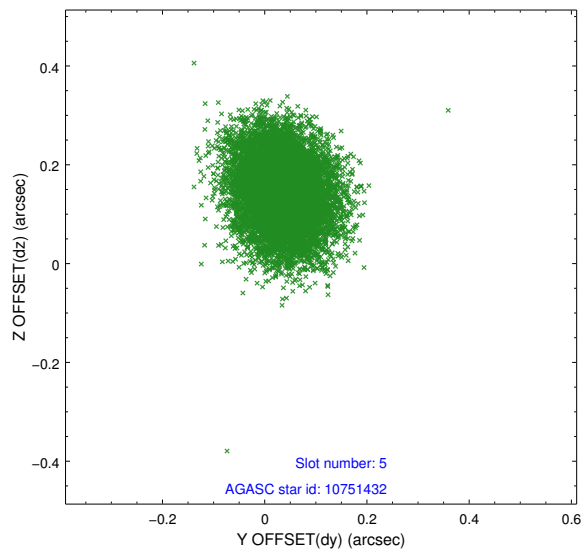
2.4.1 Slot 3



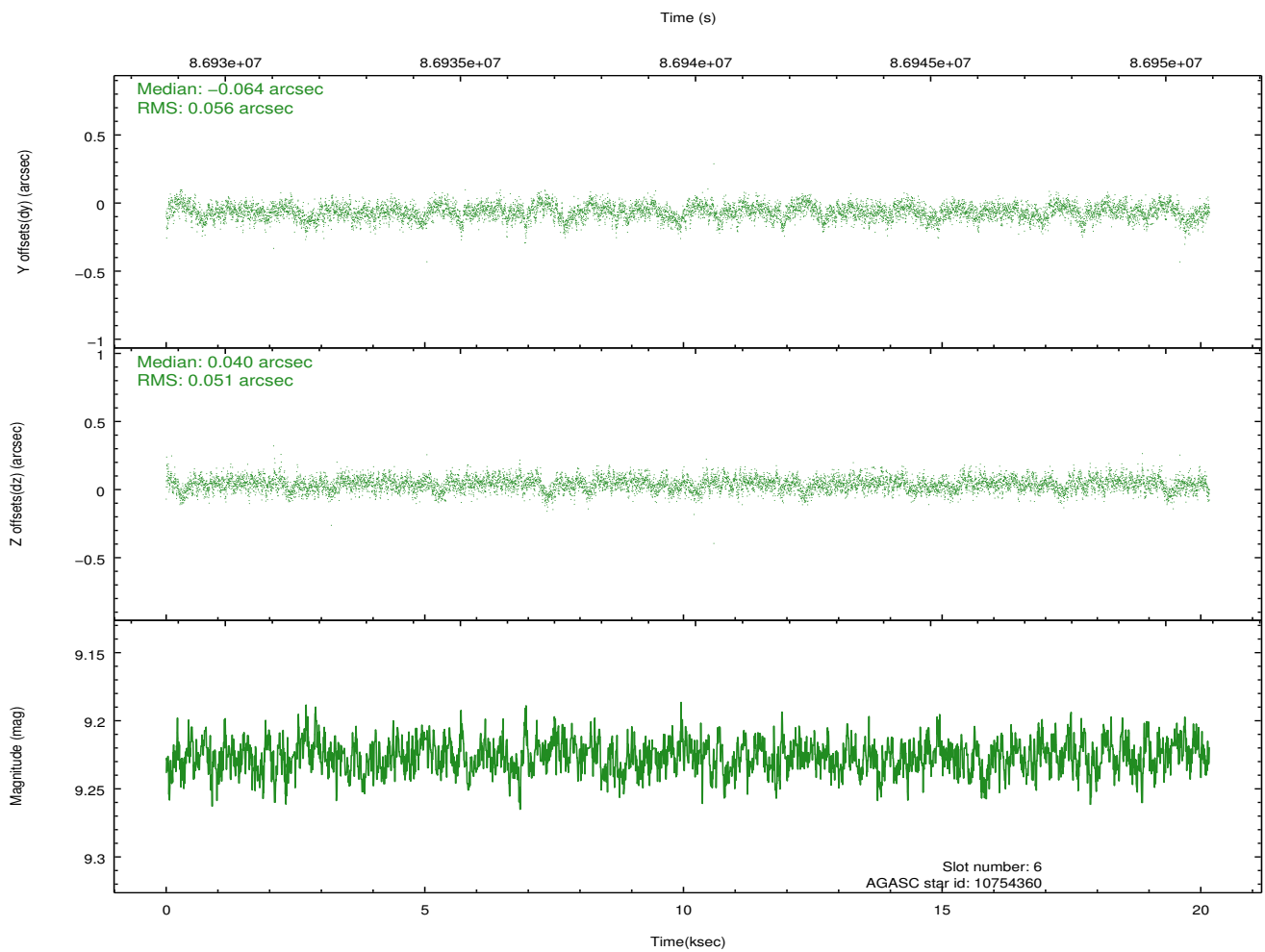
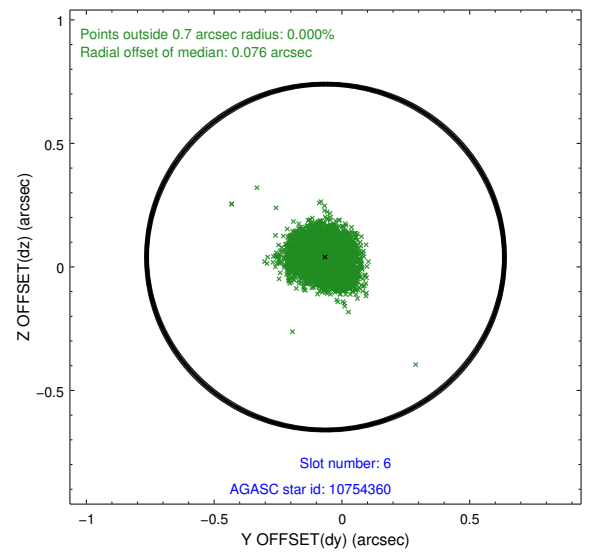
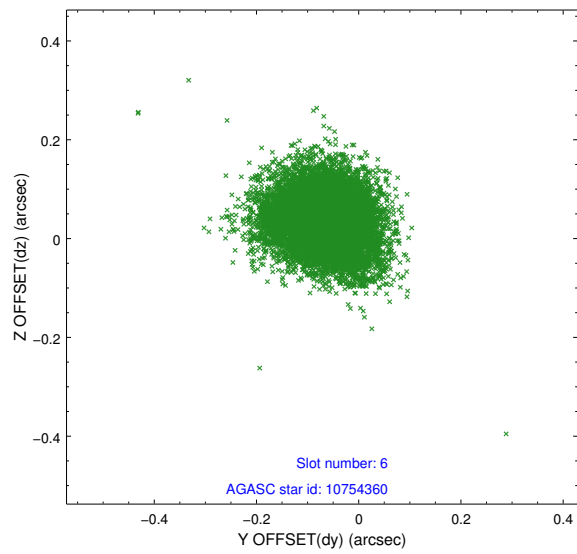
2.4.2 Slot 4



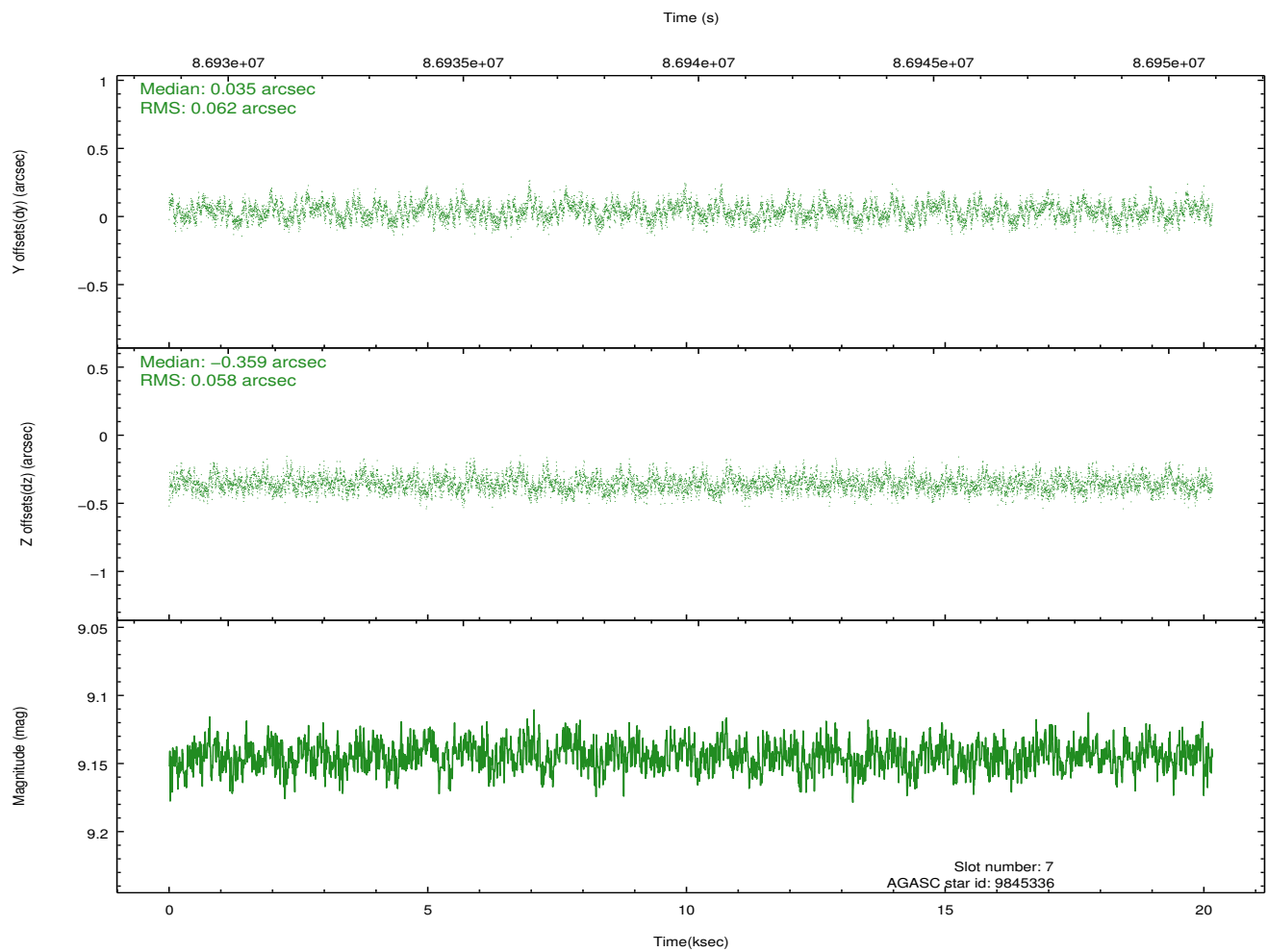
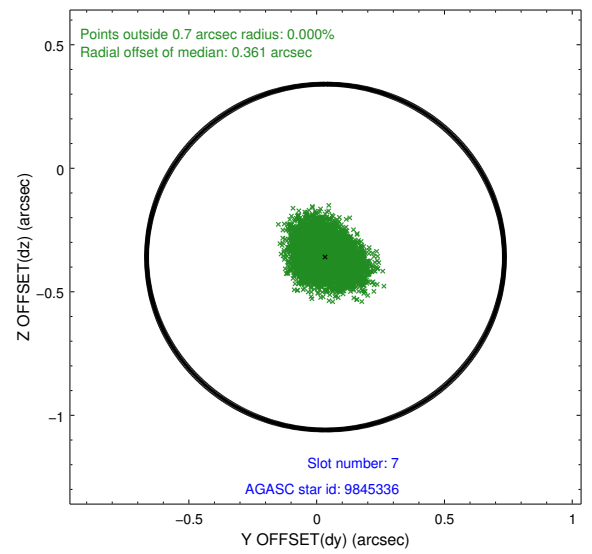
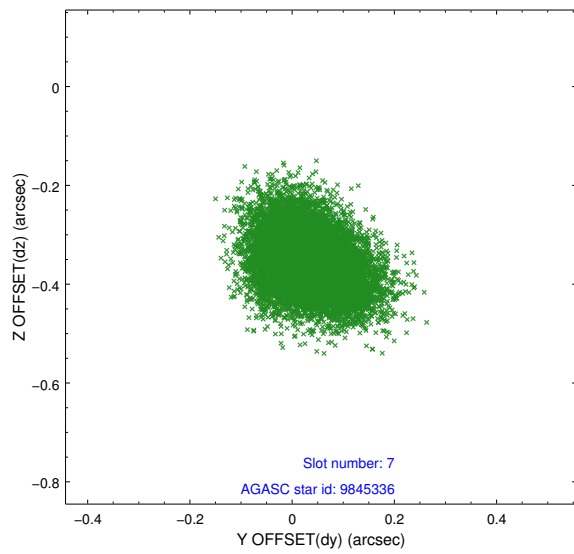
2.4.3 Slot 5



2.4.4 Slot 6

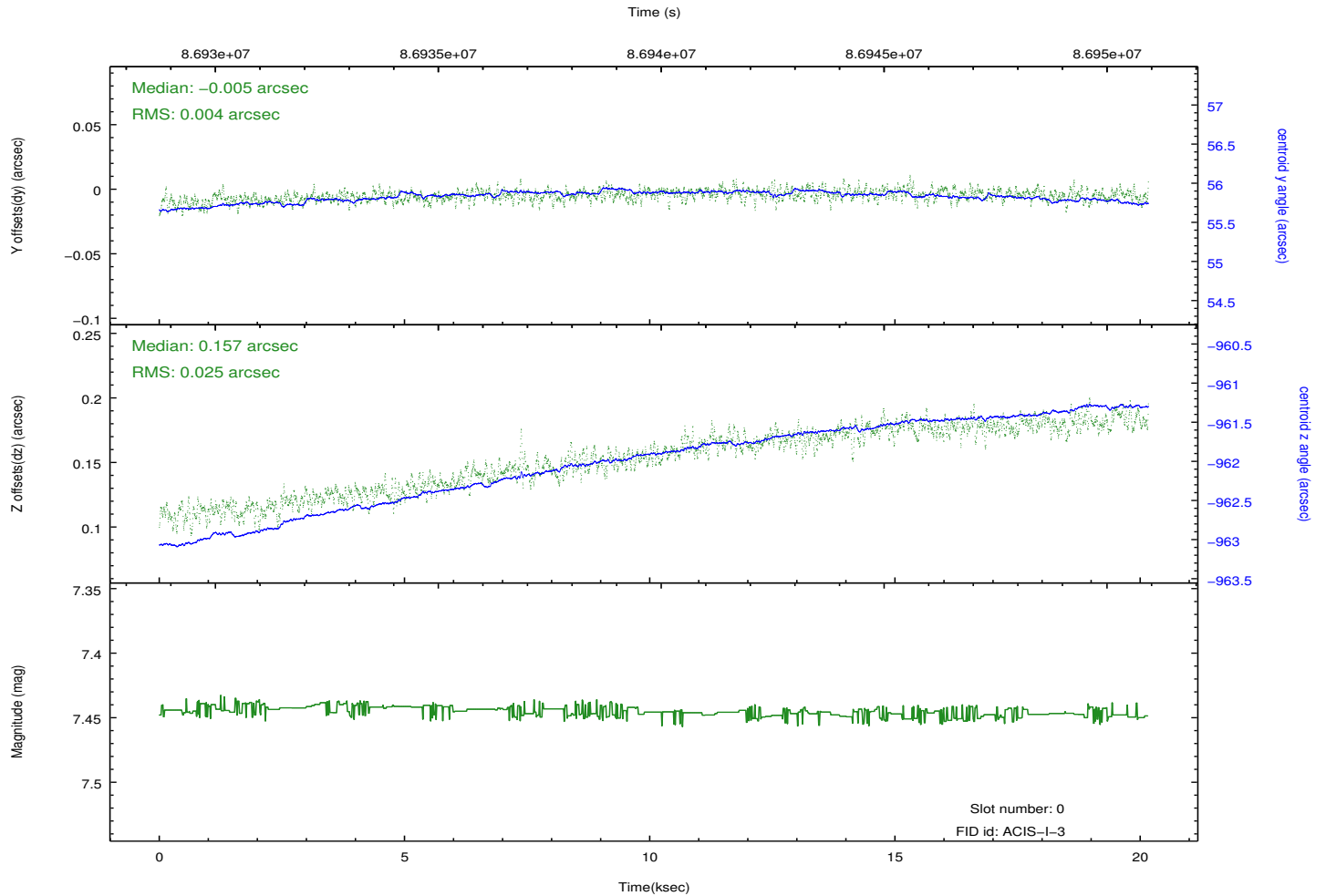
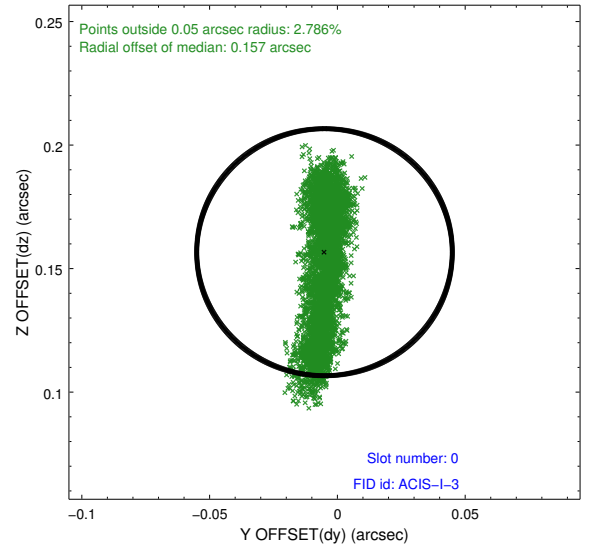
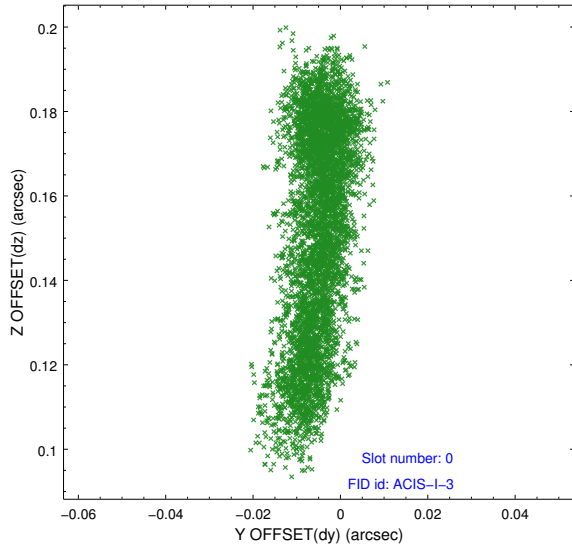


2.4.5 Slot 7

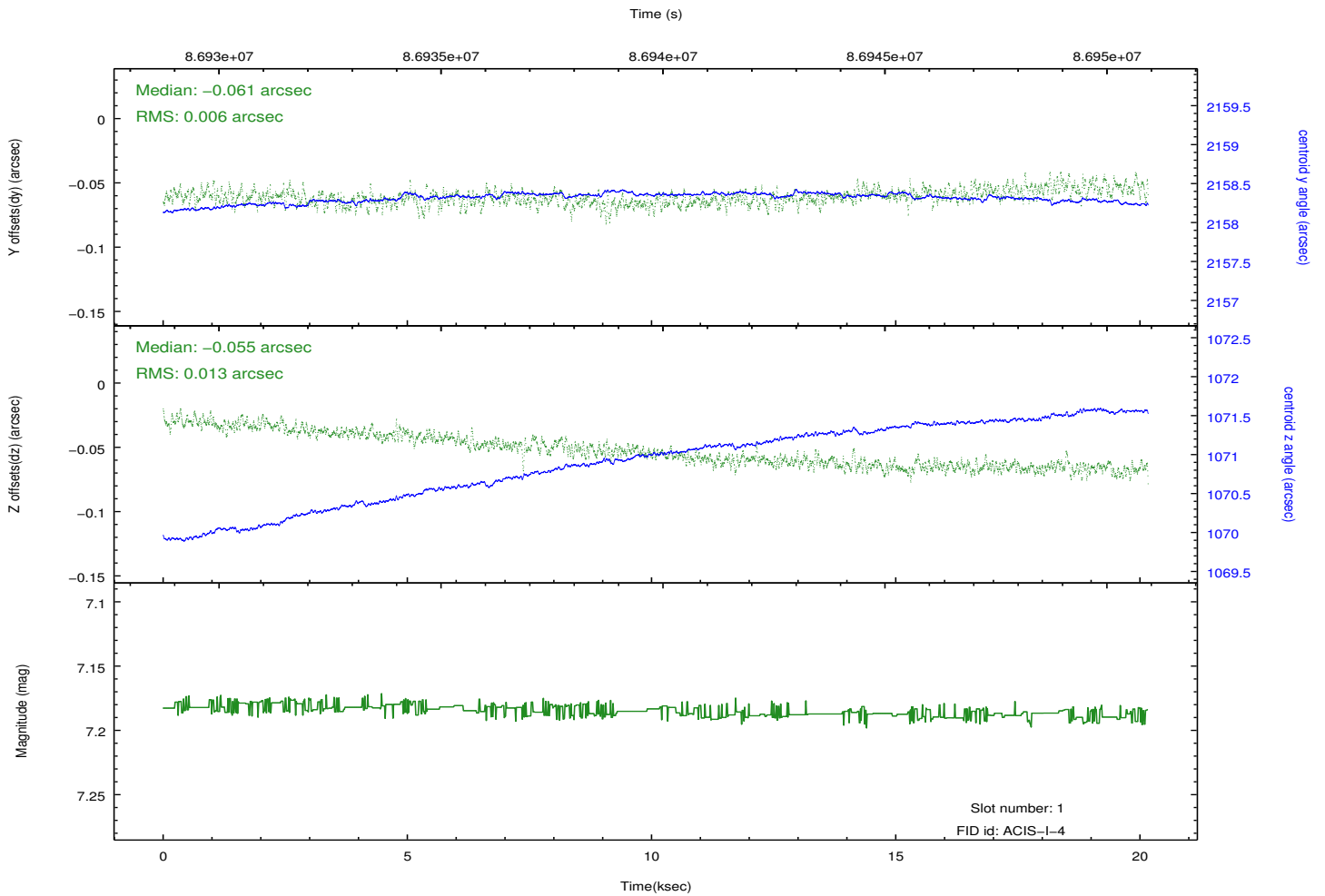
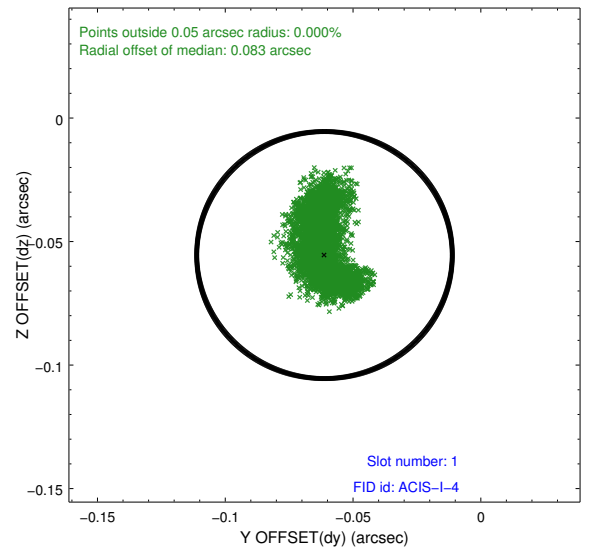
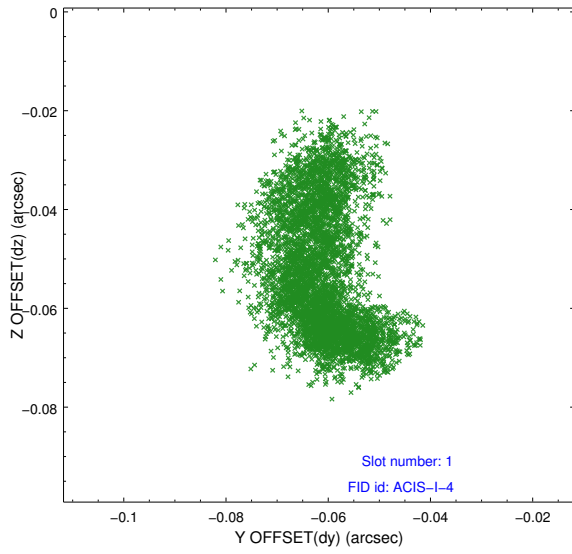


2.5 FID Slots

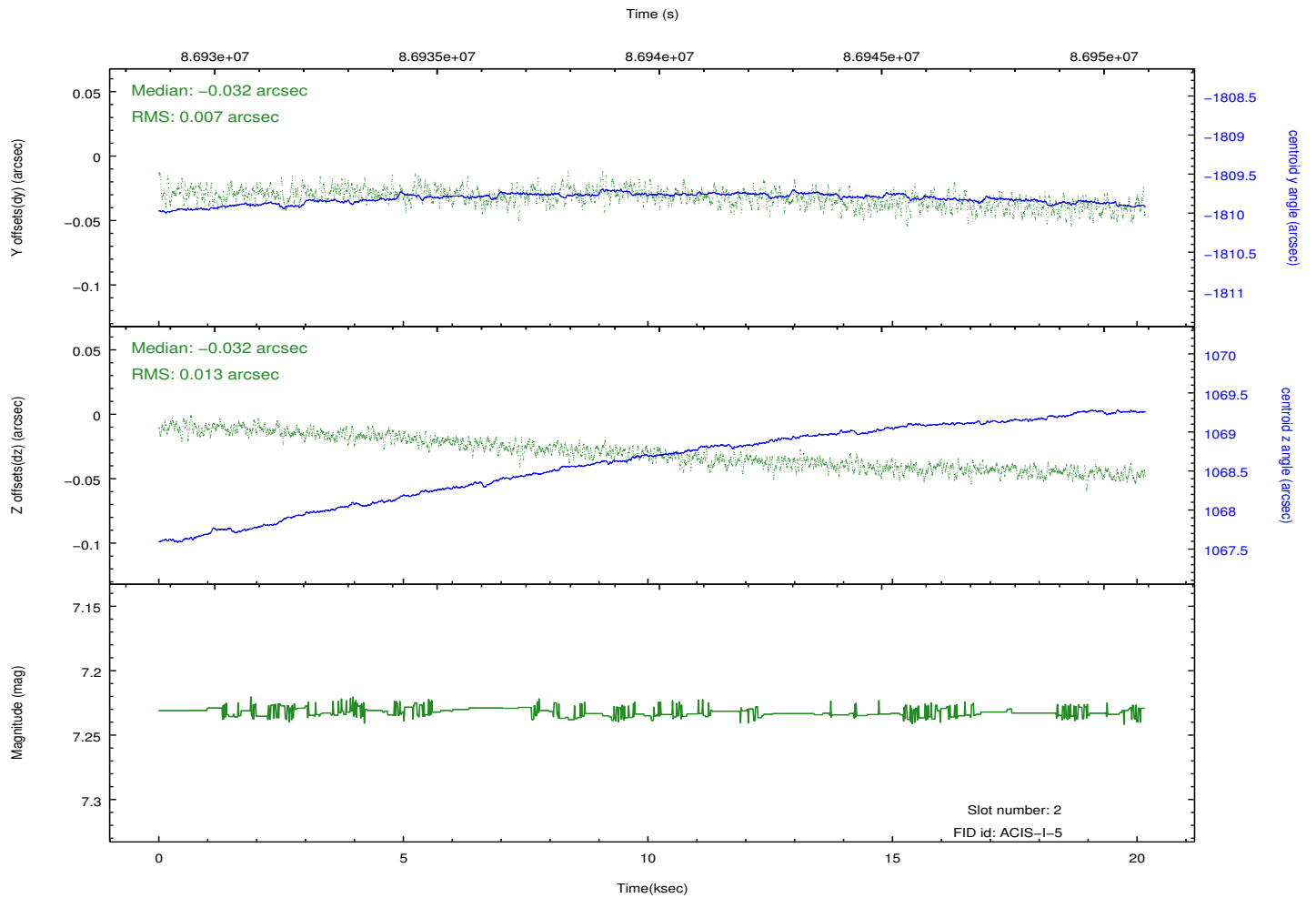
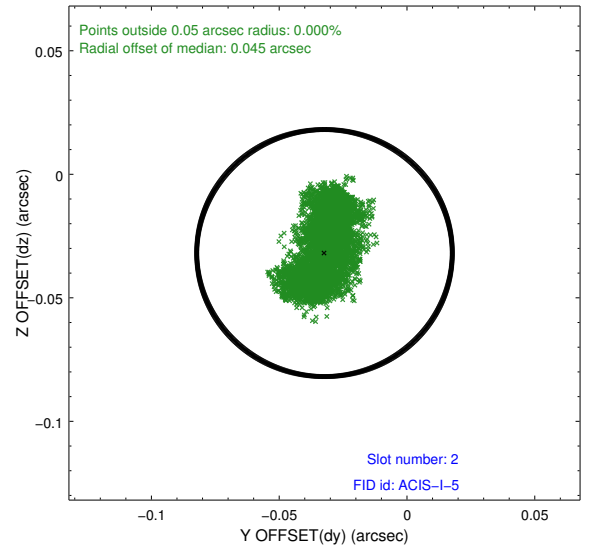
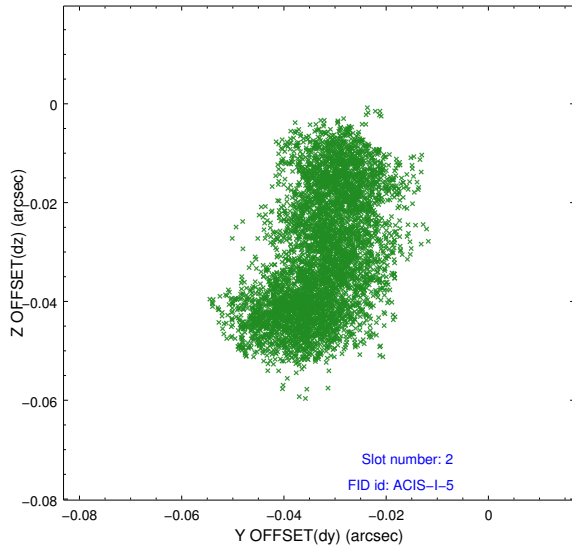
2.5.1 Slot 0



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) | 2012.09.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 20.137 |

A.2 Comments