

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9965 - L2 Version 2
Chandra X-Ray Center

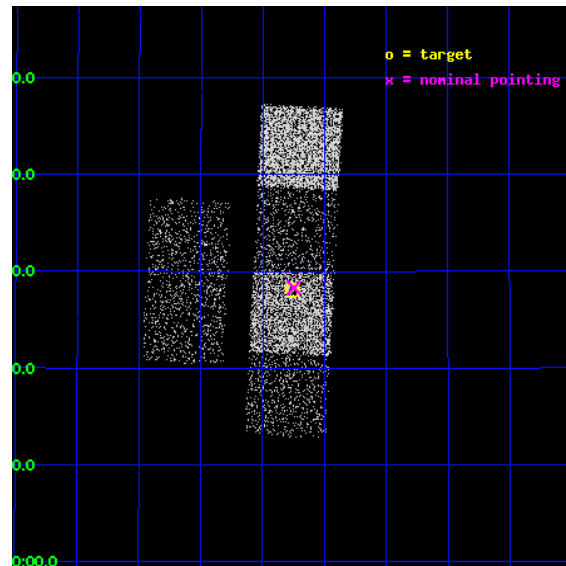
L2 Processing Date : May 28 2012

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1 Front

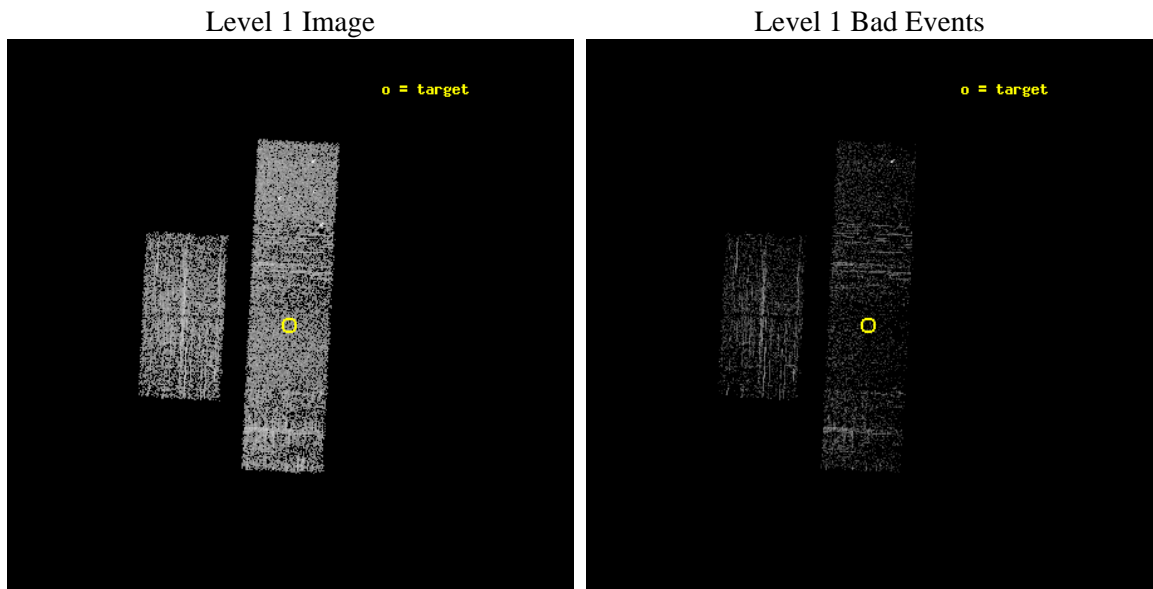
| | | |
|----------|--|---|
| seq_num | 300252 | Sequence number |
| obs_id | 9965 | Observation id |
| title | Searching for Millisecond Pulsars in Extremely Low-Mass White Dwarf Binaries | Proposal title |
| observer | Prof. Craig Heinke | Principal investigator |
| object | SDSS J092345+302805 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 140.94 | Observer's specified target RA [deg] |
| dec_targ | 30.468056 | Observer's specified target Dec [deg] |
| ra_nom | 140.93676187955 | Nominal RA [deg] |
| dec_nom | 30.471848997433 | Nominal Dec [deg] |
| roll_nom | 92.883307477835 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 1041.6835946441 | Sum of GTIs [s] |
| livetime | 1028.4931697421 | Livetime [s] |
| ontime2 | 1041.7246346474 | Sum of GTIs [s] |
| ontime3 | 1041.5604746342 | Sum of GTIs [s] |
| ontime5 | 1041.6425546408 | Sum of GTIs [s] |
| ontime6 | 1041.6015146375 | Sum of GTIs [s] |
| ontime7 | 1041.6835946441 | Sum of GTIs [s] |
| ontime8 | 1041.5194346309 | Sum of GTIs [s] |
| l2events | 11490 | Number of level 2 events |



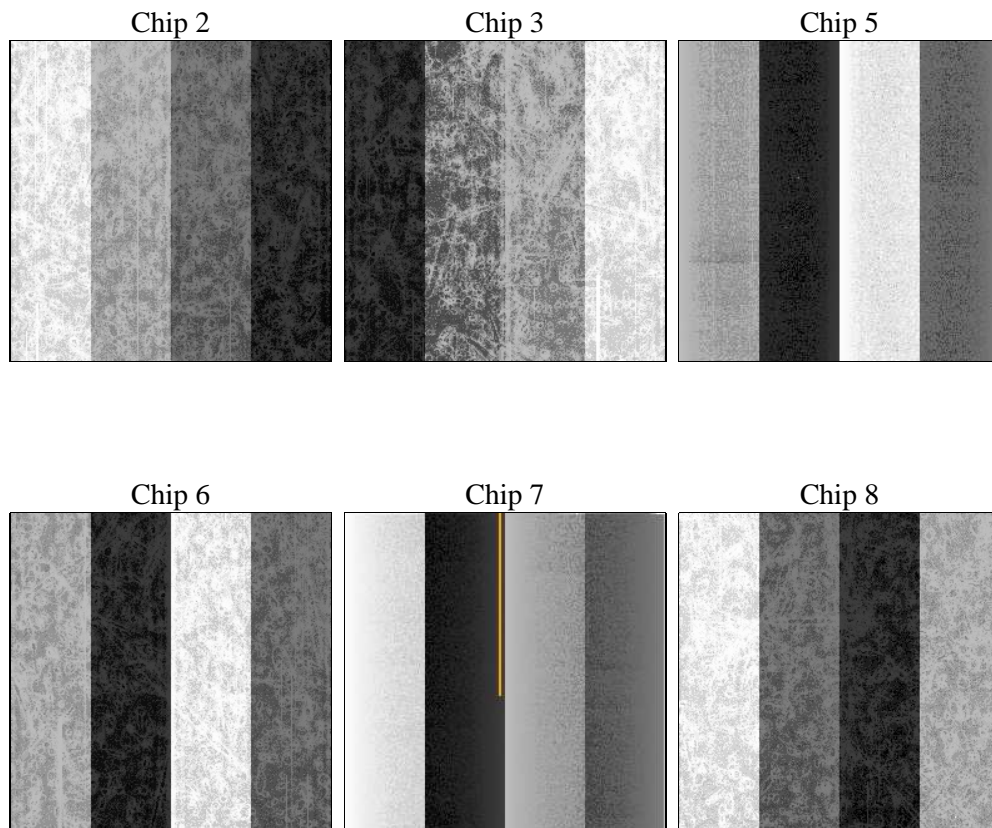
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 1041.6835946441 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime2 | 1041.7246346474 | Sum of GTIs [s] |
| date | 2012-05-28T11:40:17 | Date and time of file creation | ontime3 | 1041.5604746342 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 1041.6425546408 | Sum of GTIs [s] |
| | | | ontime6 | 1041.6015146375 | Sum of GTIs [s] |
| | | | ontime7 | 1041.6835946441 | Sum of GTIs [s] |
| | | | ontime8 | 1041.5194346309 | Sum of GTIs [s] |
| | | | l1events | 53359 | Number of level 1 events |

2.1.4 Events

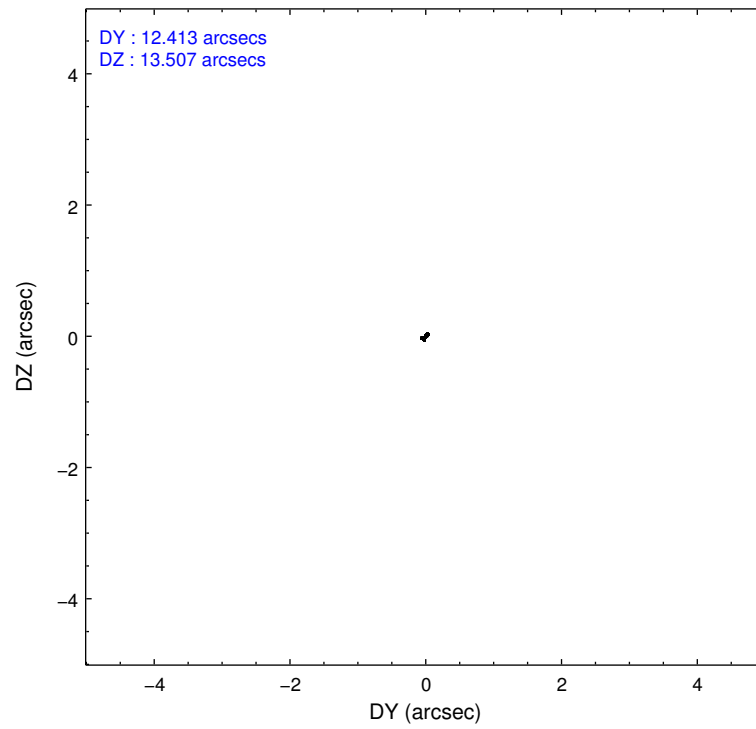
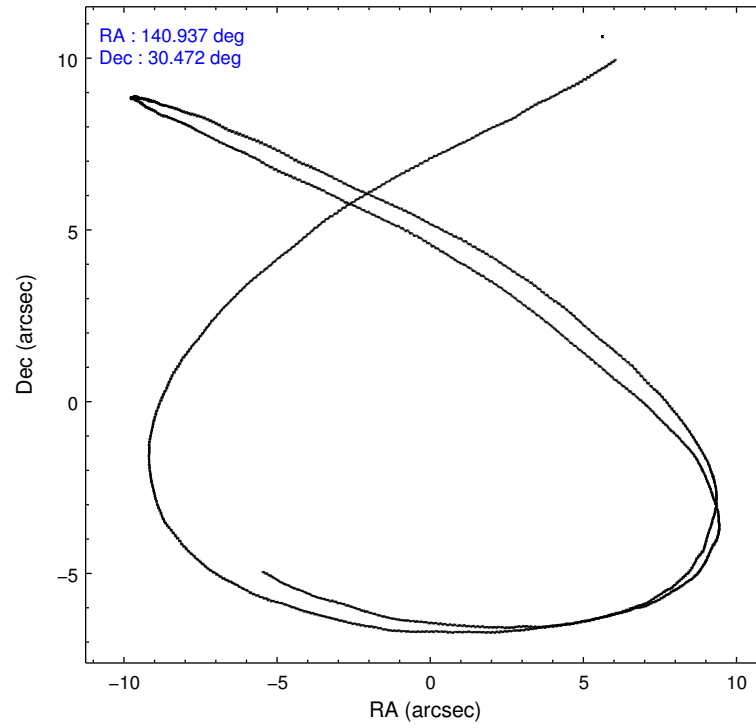
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 8276 | 8563 | 11124 | 8184 | 7749 | 9463 |
| rejected events | 7485 | 7810 | 5163 | 7373 | 3968 | 6973 |
| rejected % | 90% | 91% | 46% | 90% | 51% | 73% |

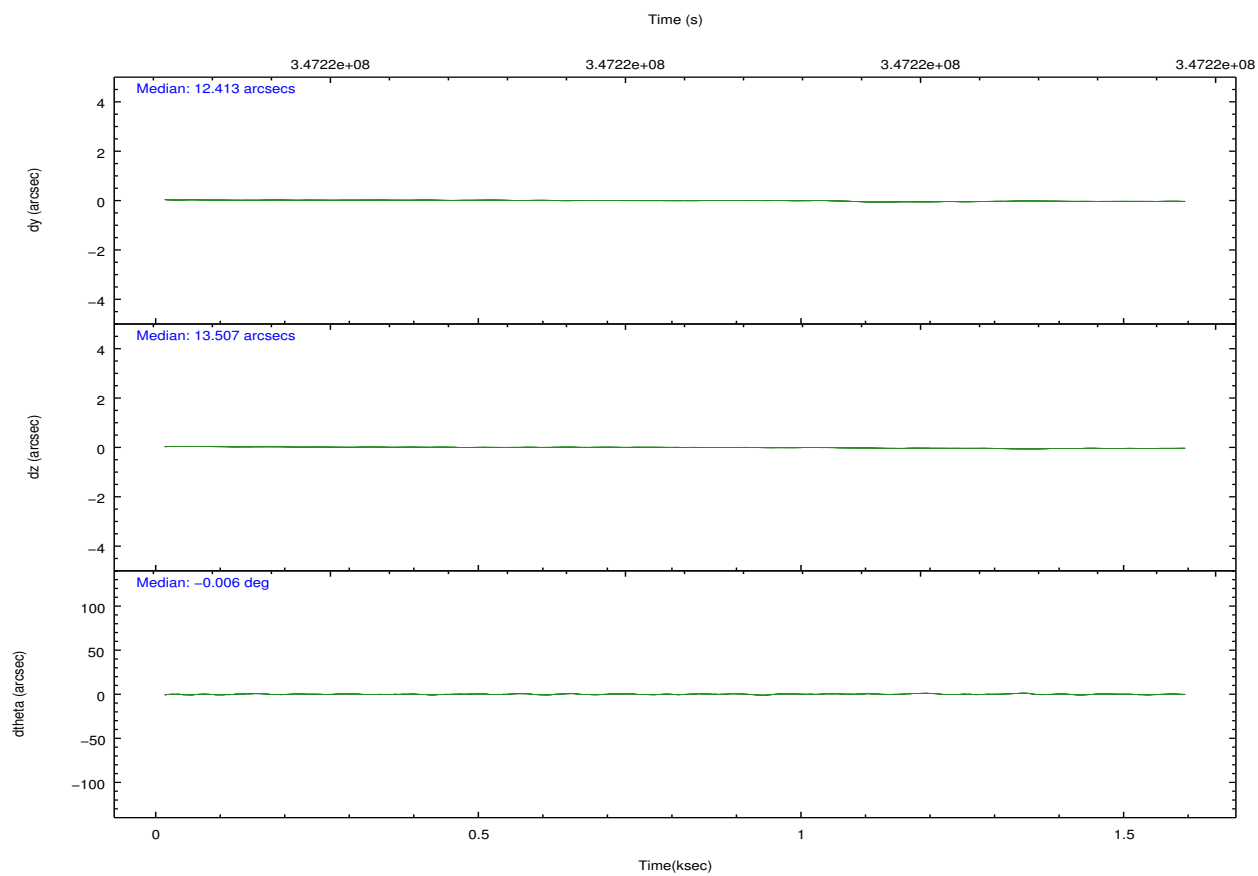
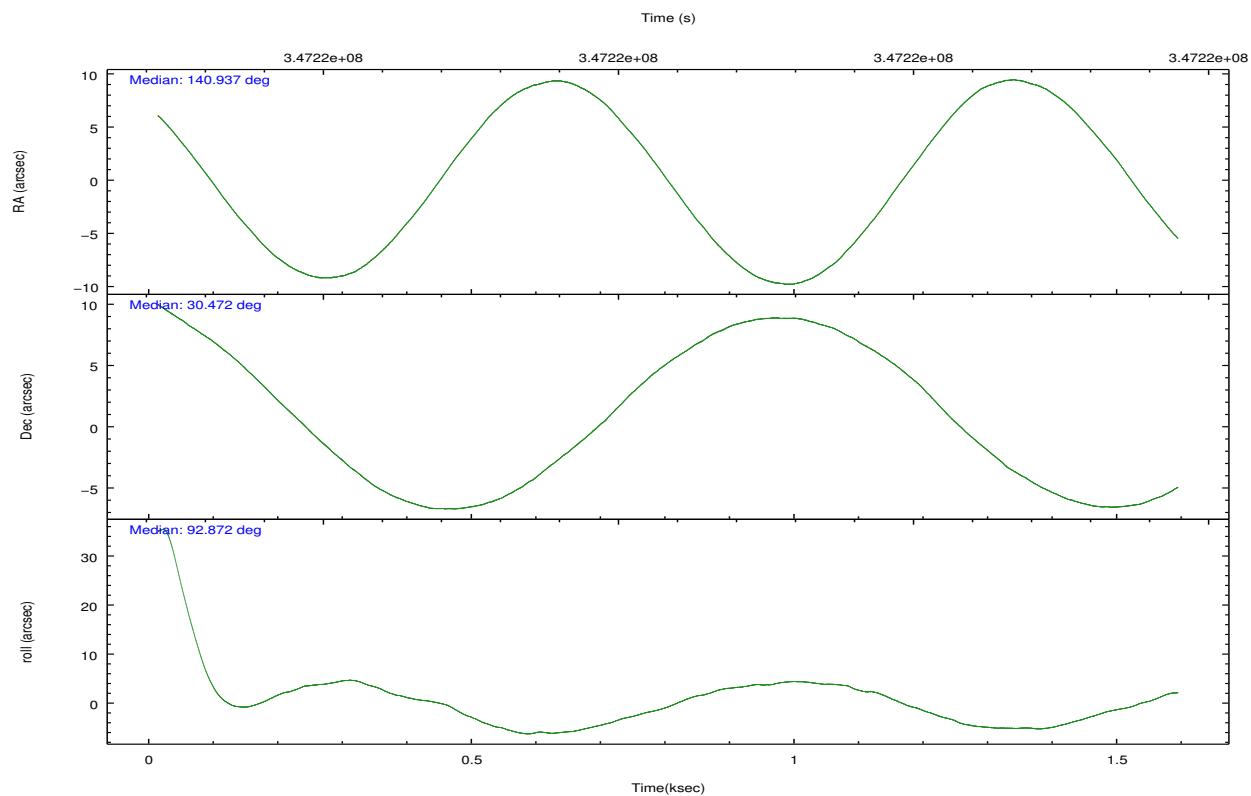
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 327 | 292 | 775 | 296 | 368 | 732 |
| | 3% | 3% | 6% | 3% | 4% | 7% |
| grade 1 events | 6 | 4 | 23 | 2 | 18 | 8 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 196 | 158 | 1738 | 184 | 824 | 577 |
| | 2% | 1% | 15% | 2% | 10% | 6% |
| grade 3 events | 77 | 76 | 223 | 106 | 340 | 255 |
| | 0% | 0% | 2% | 1% | 4% | 2% |
| grade 4 events | 58 | 90 | 222 | 74 | 322 | 220 |
| | 0% | 1% | 1% | 0% | 4% | 2% |
| grade 5 events | 209 | 265 | 872 | 287 | 832 | 438 |
| | 2% | 3% | 7% | 3% | 10% | 4% |
| grade 6 events | 141 | 147 | 3038 | 157 | 1946 | 713 |
| | 1% | 1% | 27% | 1% | 25% | 7% |
| grade 7 events | 7262 | 7531 | 4233 | 7078 | 3099 | 6520 |
| | 87% | 87% | 38% | 86% | 39% | 68% |

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 | 140.954391 | 140.9367618795491 | CCD I2 on | O2 | Y |
| [deg] Pointing Dec | 30.449291 | 30.47184899743318 | CCD I3 on | O3 | Y |
| [deg] Pointing Roll | 92.717374 | 92.88330747783462 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | O1 | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.145094680475 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.01257209746719923 | CCD S4 on | O4 | Y |
| [s] Observation start time (MET) | 347215380.184000 | 347214176.4006 | CCD S5 on | N | N |
| Observation start date | 2009-01-01T16:41:54 | 2009-01-01T16:22:56 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 347216380.184000 | 347217117.12575 | On-chip summing requested | N | N |
| Observation end date | 2009-01-01T16:58:34 | 2009-01-01T17:11:57 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



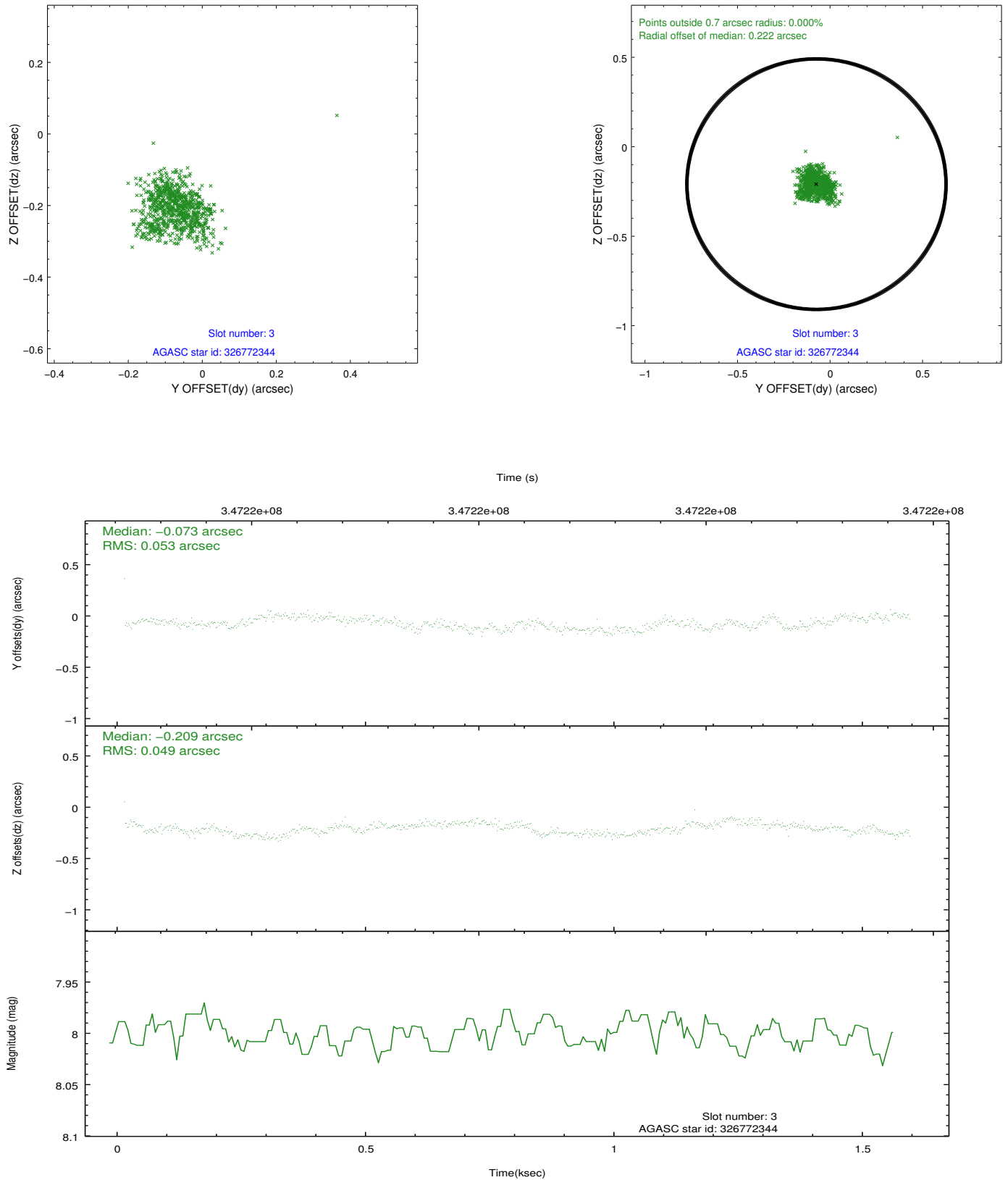


Slot Statistics

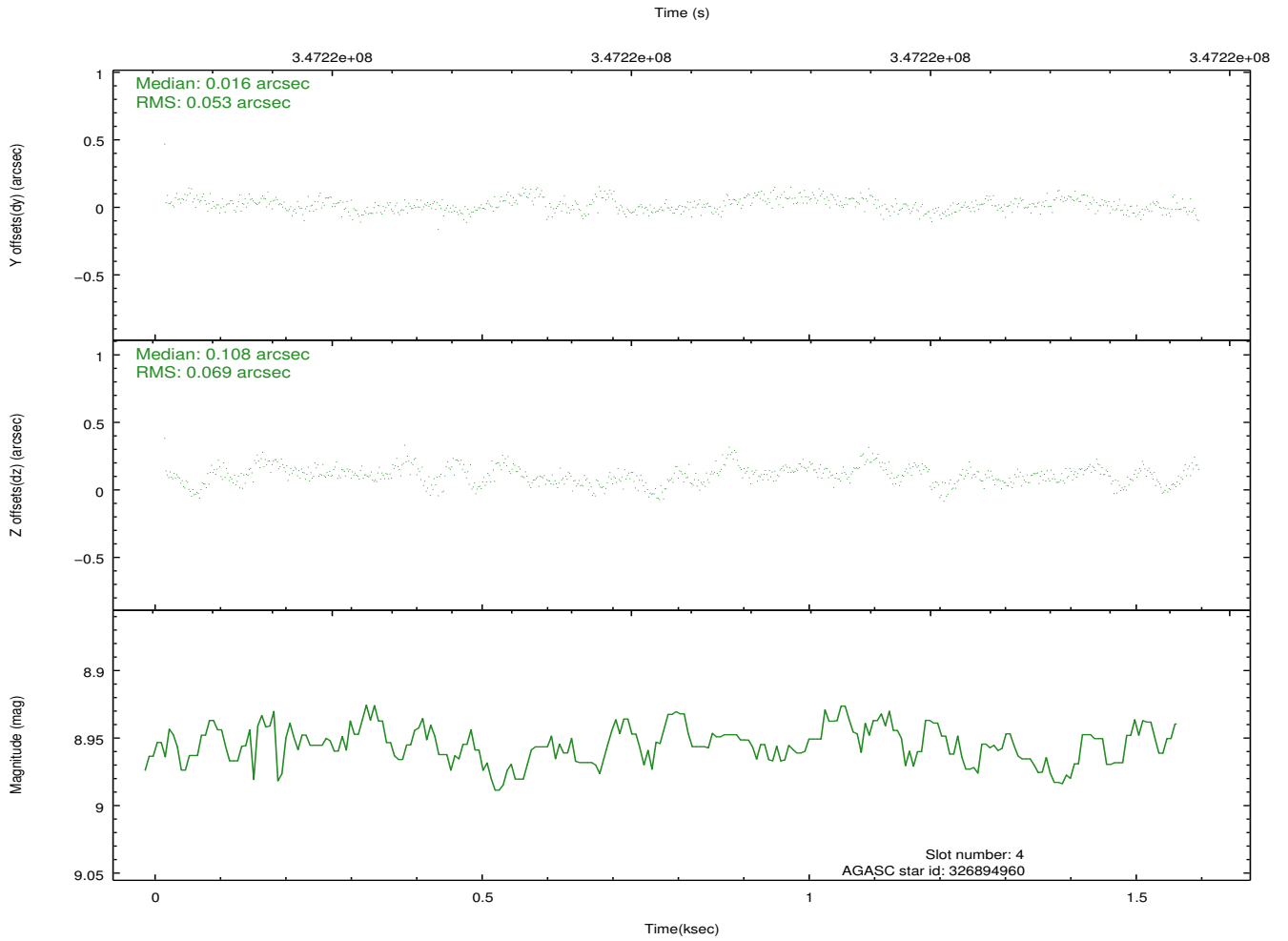
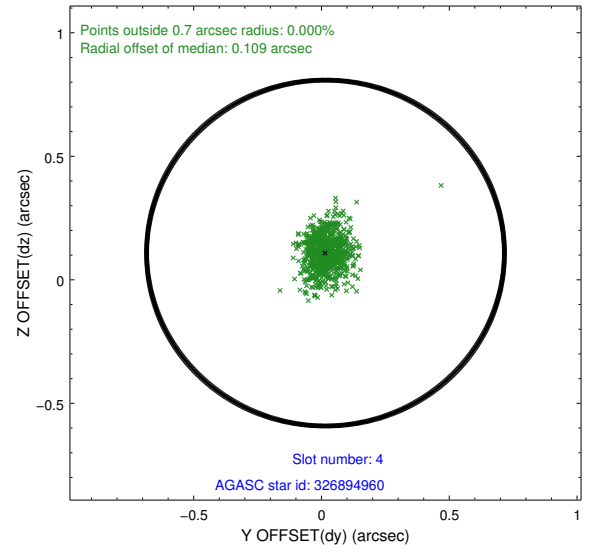
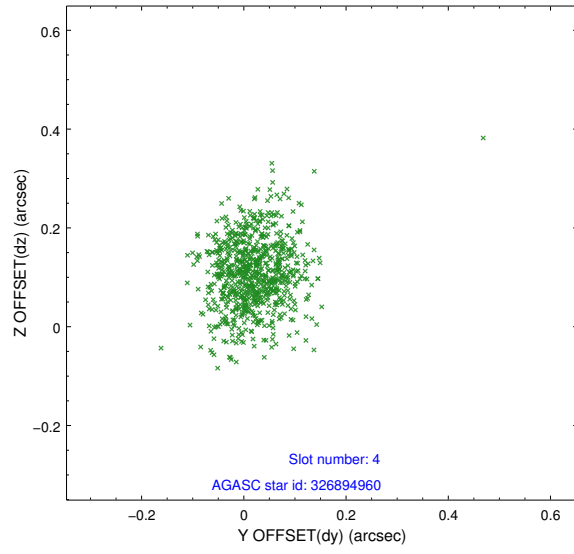
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.06 | 386 | 0.102 | -0.054 | 0.005 | 0.009 | 0.000000 | 0.000000 | 930.84 | -1730.42 |
| 1 | FID | ACIS-S-5 | 7.10 | 386 | -0.130 | 0.079 | 0.005 | 0.010 | 0.000000 | 0.000000 | -1816.07 | 162.95 |
| 2 | FID | ACIS-S-6 | 7.19 | 386 | 0.007 | -0.012 | 0.007 | 0.010 | 0.000000 | 0.000000 | 391.76 | 811.55 |
| 3 | GUIDE | 326772344 | 8.00 | 772 | -0.073 | -0.209 | 0.075 | 0.116 | 140.750494 | 30.197118 | -875.42 | 676.43 |
| 4 | GUIDE | 326894960 | 8.96 | 772 | 0.016 | 0.108 | 0.088 | 0.151 | 141.736989 | 30.296358 | -657.08 | -2403.22 |
| 5 | GUIDE | 326899216 | 9.24 | 769 | -0.132 | 0.070 | 0.097 | 0.158 | 141.627351 | 30.776310 | 1083.84 | -2138.04 |
| 6 | GUIDE | 326903944 | 7.60 | 772 | -0.040 | -0.034 | 0.065 | 0.108 | 141.372366 | 30.493208 | 99.65 | -1305.95 |
| 7 | GUIDE | 326904496 | 9.67 | 769 | 0.228 | 0.063 | 0.097 | 0.162 | 141.156023 | 30.122423 | -1203.35 | -572.86 |

2.4 Star Slots

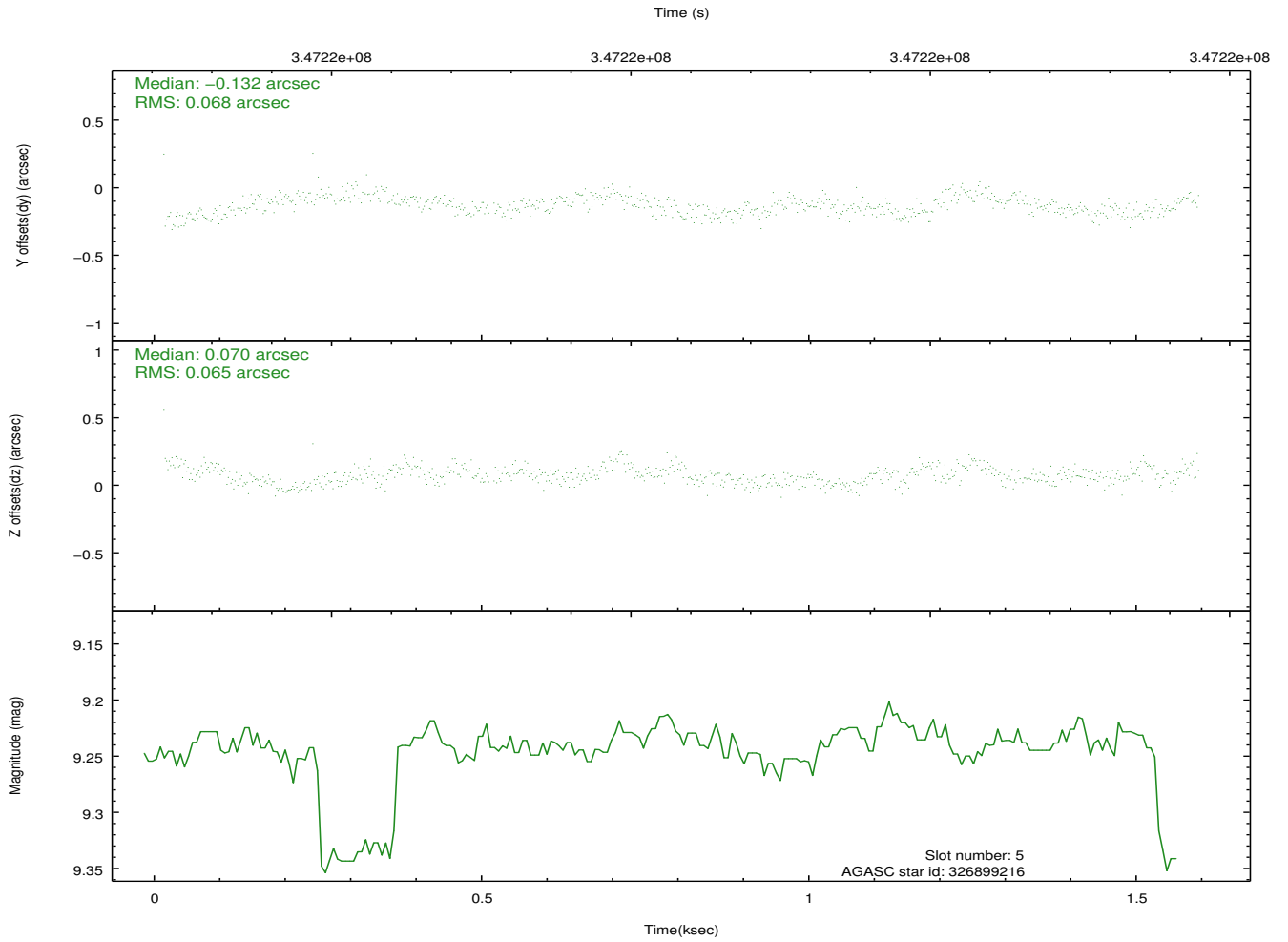
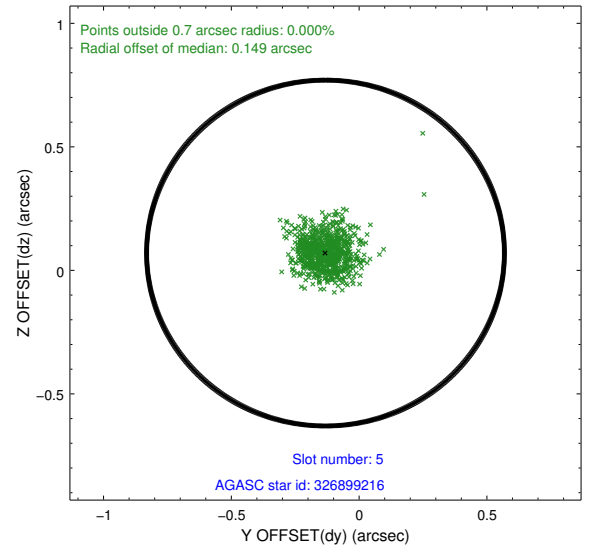
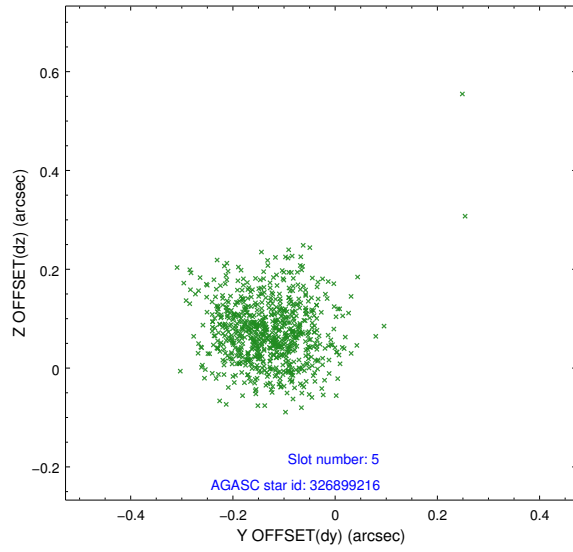
2.4.1 Slot 3



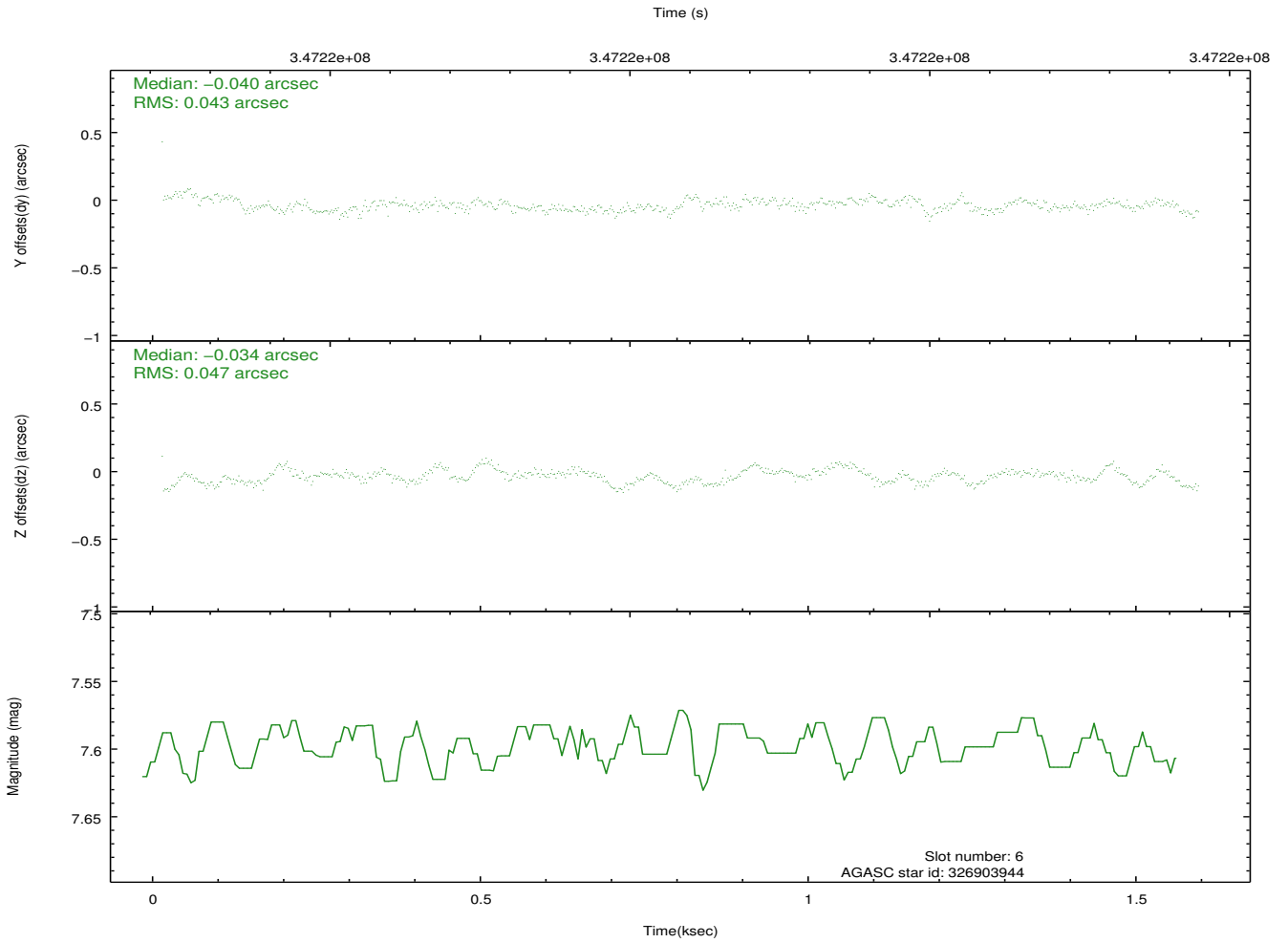
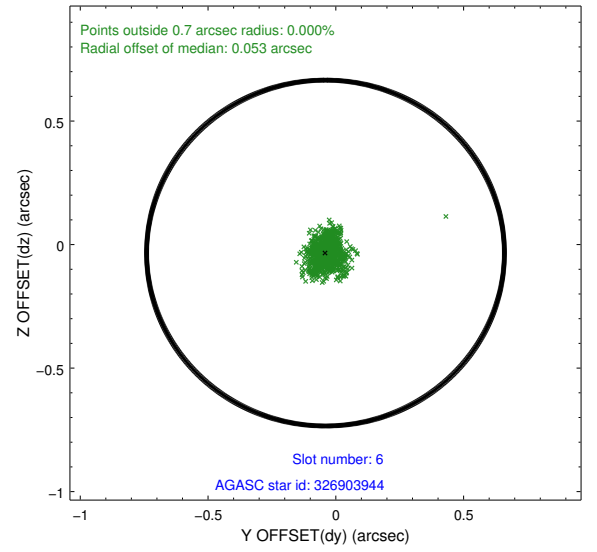
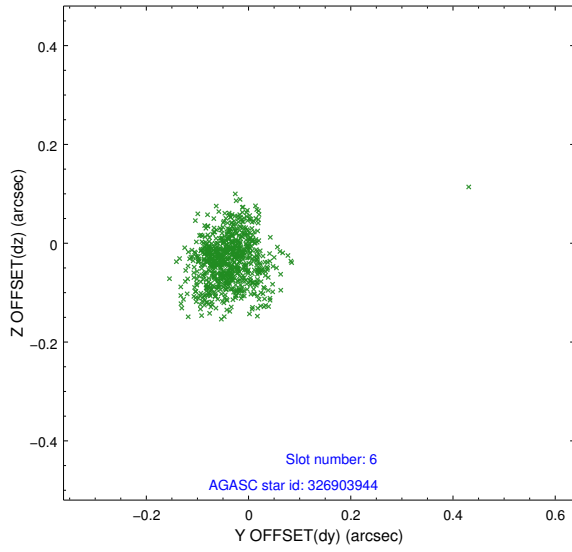
2.4.2 Slot 4



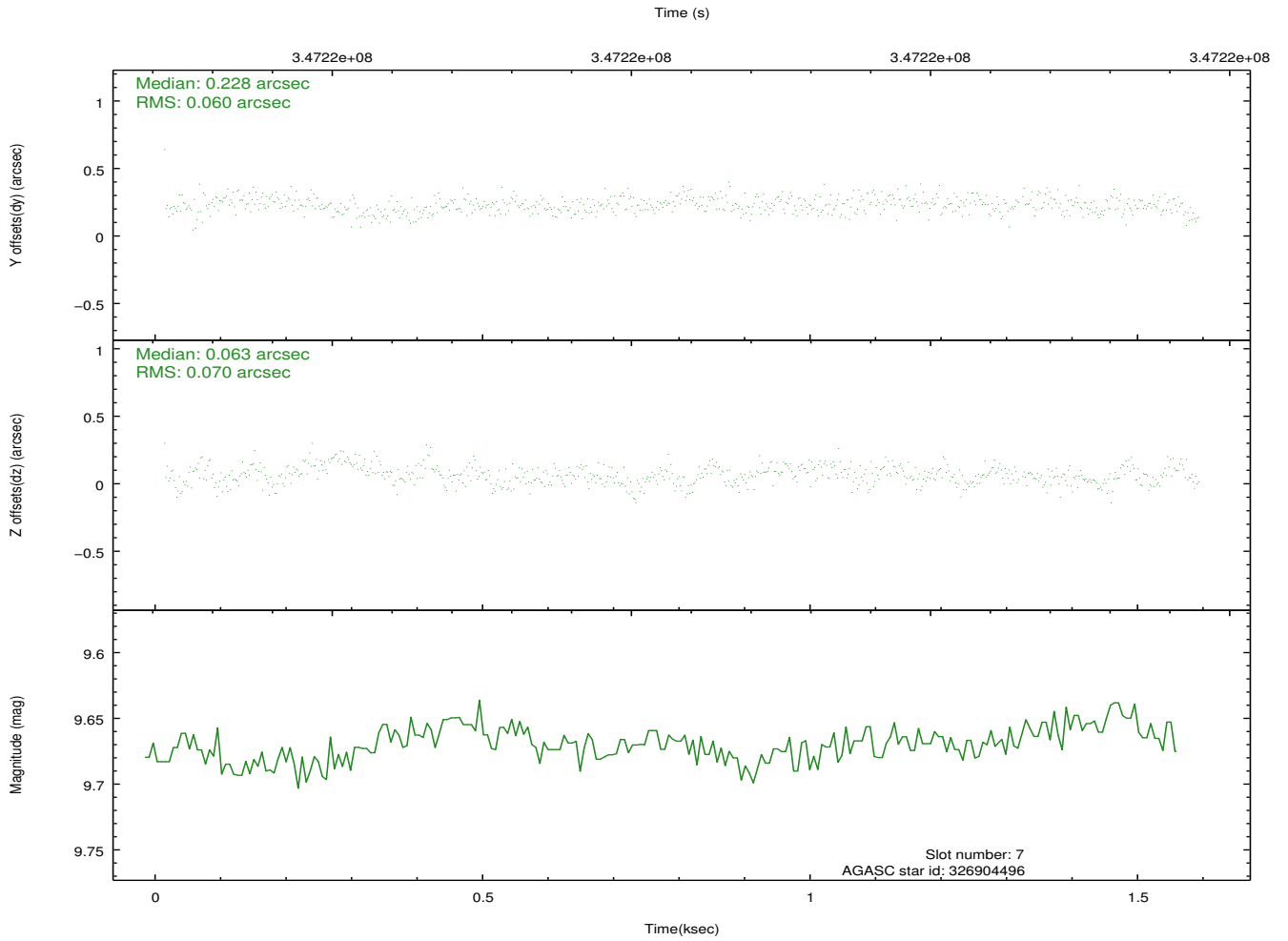
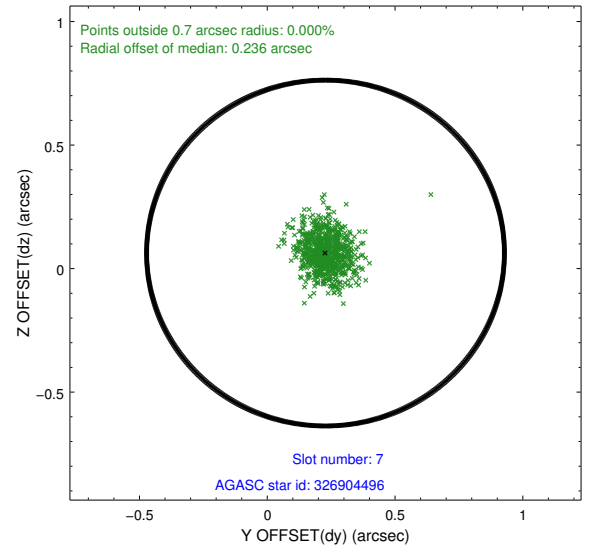
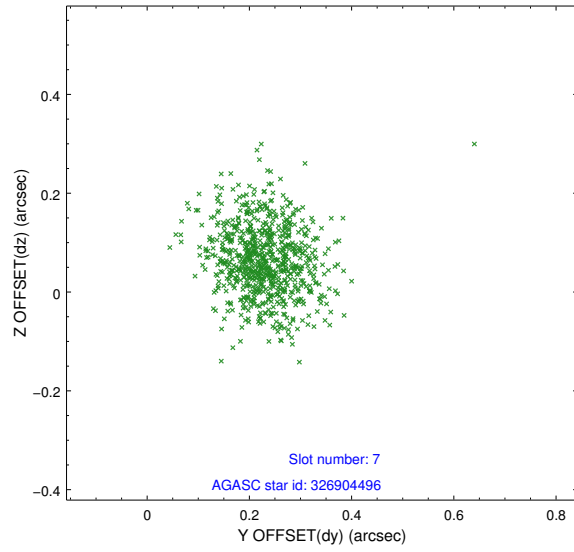
2.4.3 Slot 5



2.4.4 Slot 6

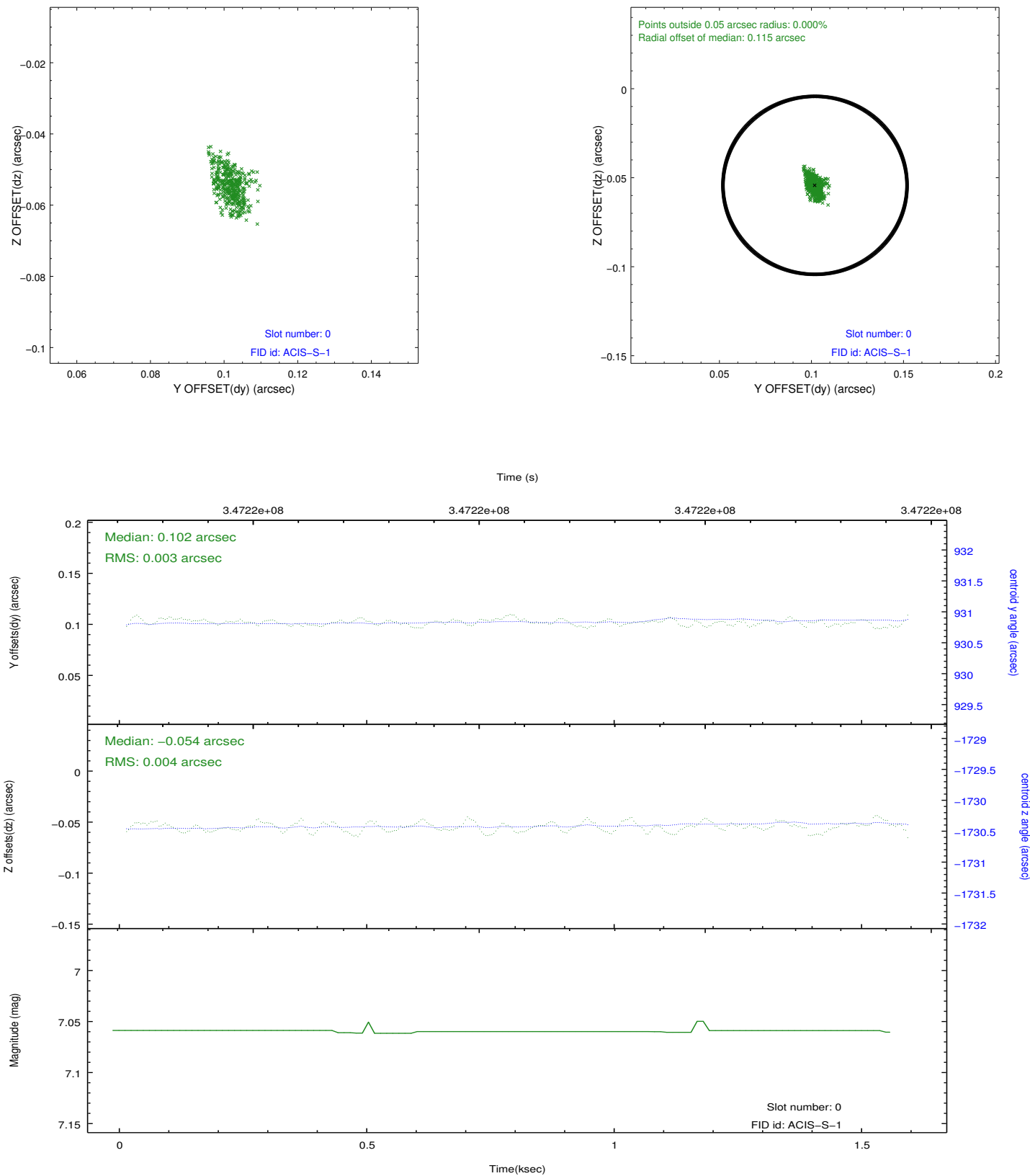


2.4.5 Slot 7

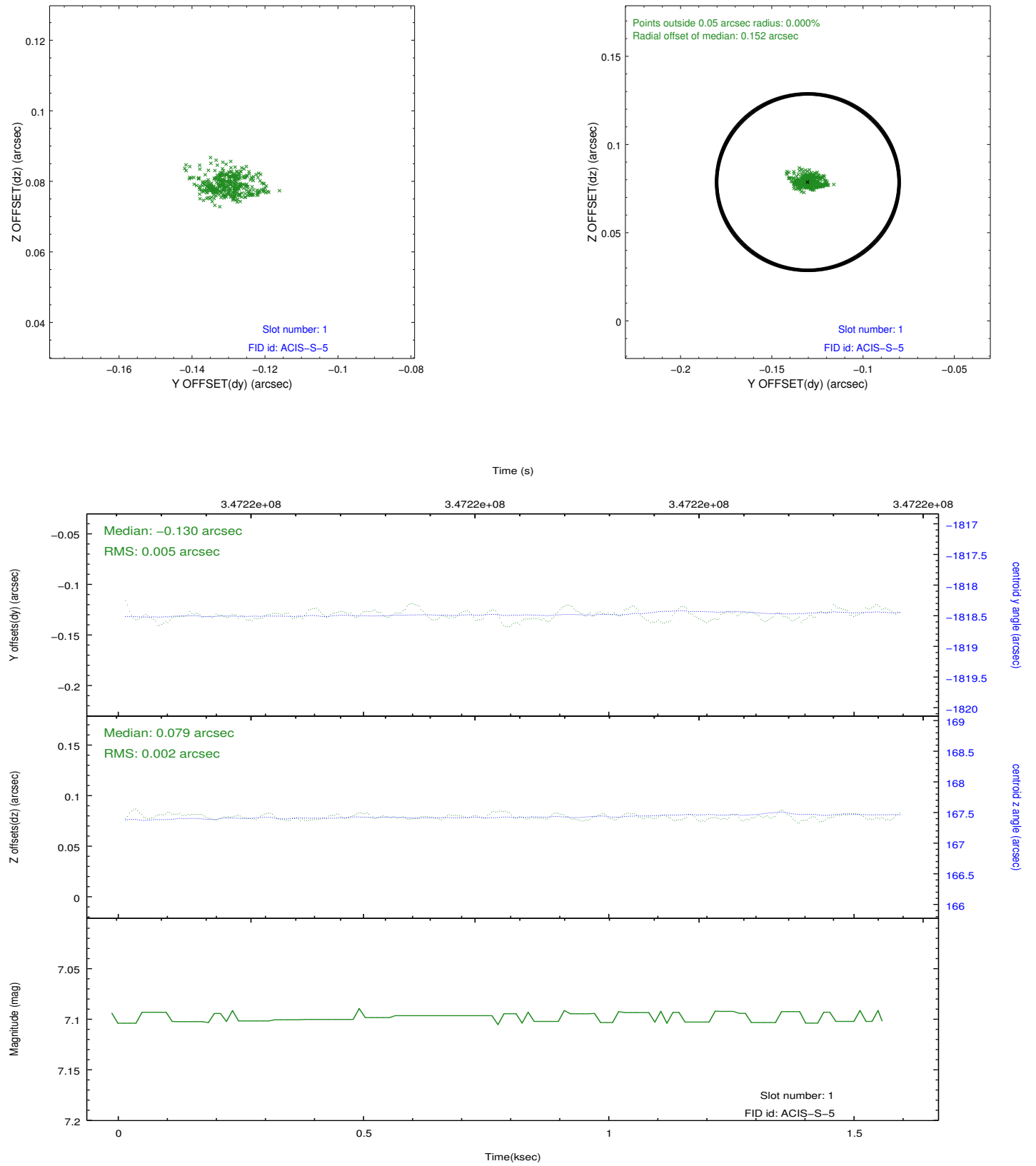


2.5 FID Slots

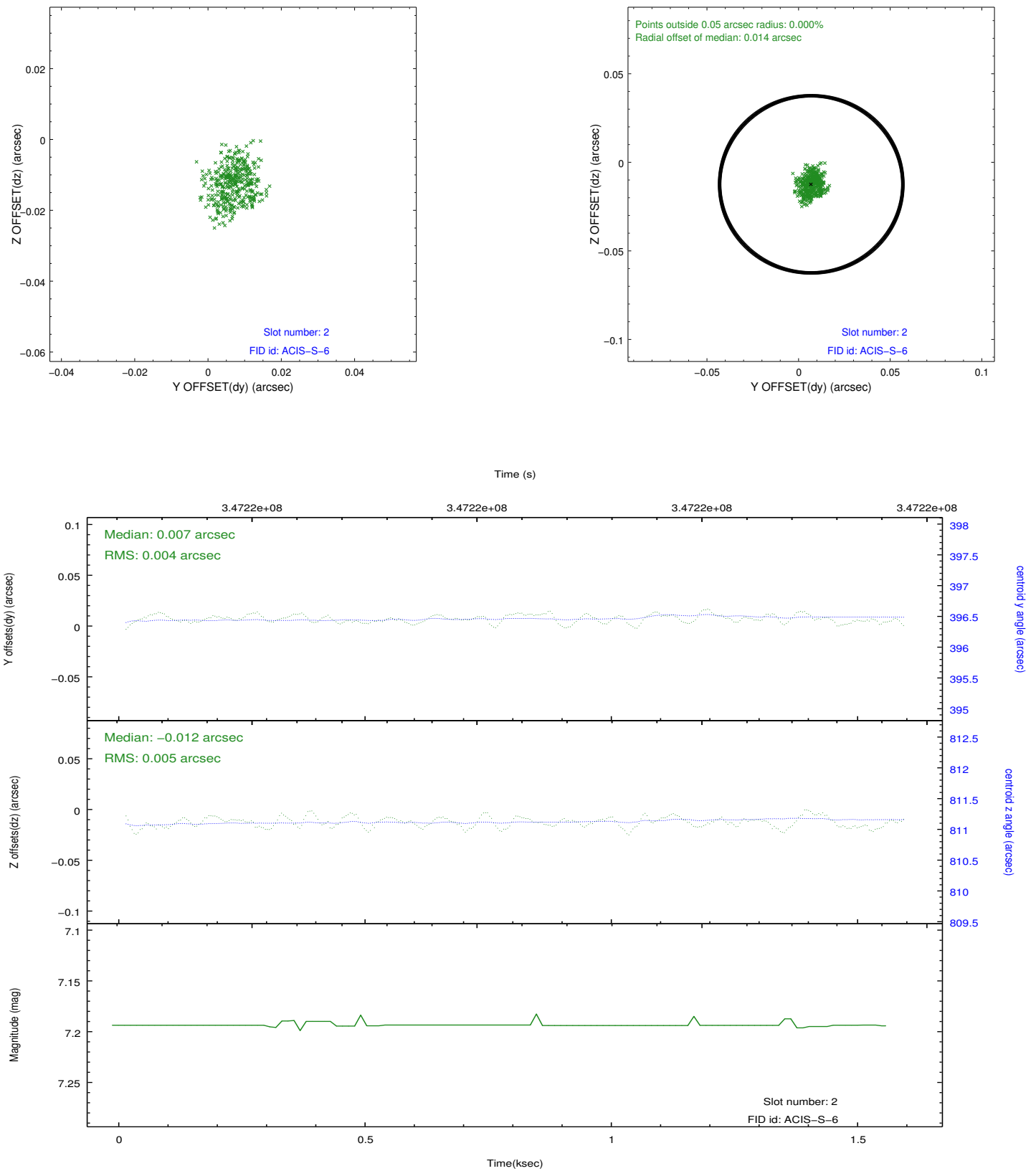
2.5.1 Slot 0



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) | 2012.06.01 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.04319999 |

A.2 Comments