

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 402 - L2 Version 4
Chandra X-Ray Center

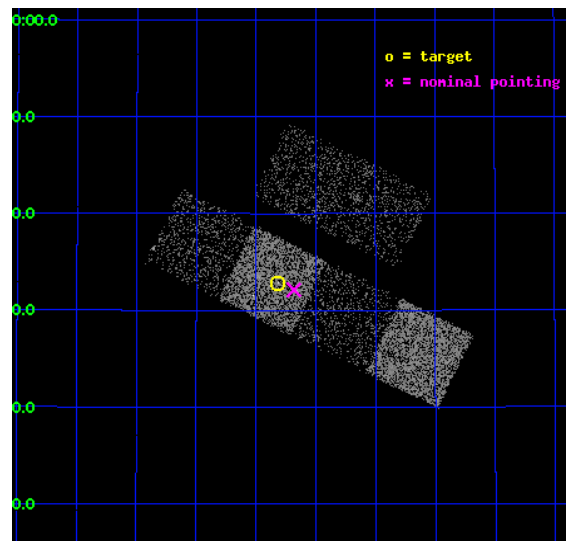
L2 Processing Date : Aug 25 2012

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1 Front

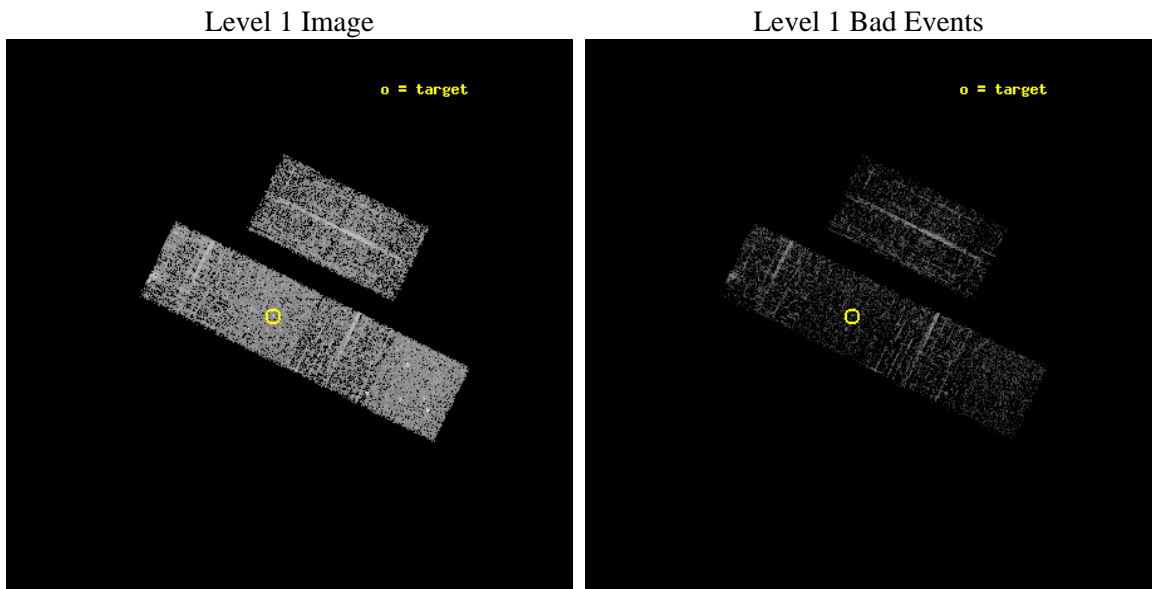
| | | |
|----------|--|---|
| seq_num | 700074 | Sequence number |
| obs_id | 402 | Observation id |
| title | LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI IN NEARBY GALAXIES | Proposal |
| observer | Professor Gordon Garmire | Principal investigator |
| object | NGC 4395 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 186.45375 | Observer's specified target RA [deg] |
| dec_targ | 33.546667 | Observer's specified target Dec [deg] |
| ra_nom | 186.42074201948 | Nominal RA [deg] |
| dec_nom | 33.535423313283 | Nominal Dec [deg] |
| roll_nom | 206.18178133549 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 1257.6000011563 | Sum of GTIs [s] |
| livetime | 1241.6755127059 | Livetime [s] |
| ontime2 | 1257.6000011563 | Sum of GTIs [s] |
| ontime3 | 1257.6000011563 | Sum of GTIs [s] |
| ontime5 | 1257.6000011563 | Sum of GTIs [s] |
| ontime6 | 1257.6000011563 | Sum of GTIs [s] |
| ontime7 | 1257.6000011563 | Sum of GTIs [s] |
| ontime8 | 1257.6000011563 | Sum of GTIs [s] |
| l2events | 13361 | Number of level 2 events |



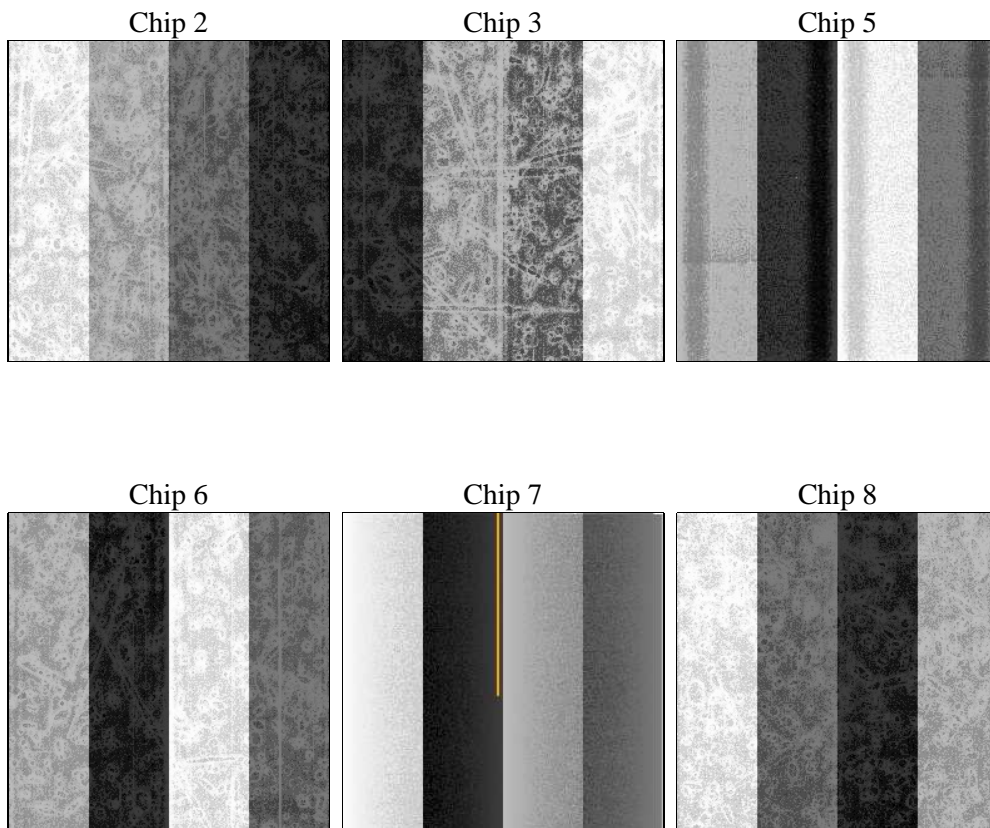
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 2000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 1257.6000011563 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime2 | 1257.6000011563 | Sum of GTIs [s] |
| date | 2012-08-25T15:39:58 | Date and time of file creation | ontime3 | 1257.6000011563 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime5 | 1257.6000011563 | Sum of GTIs [s] |
| | | | ontime6 | 1257.6000011563 | Sum of GTIs [s] |
| | | | ontime7 | 1257.6000011563 | Sum of GTIs [s] |
| | | | ontime8 | 1257.6000011563 | Sum of GTIs [s] |
| | | | l1events | 62907 | Number of level 1 events |

2.1.4 Events

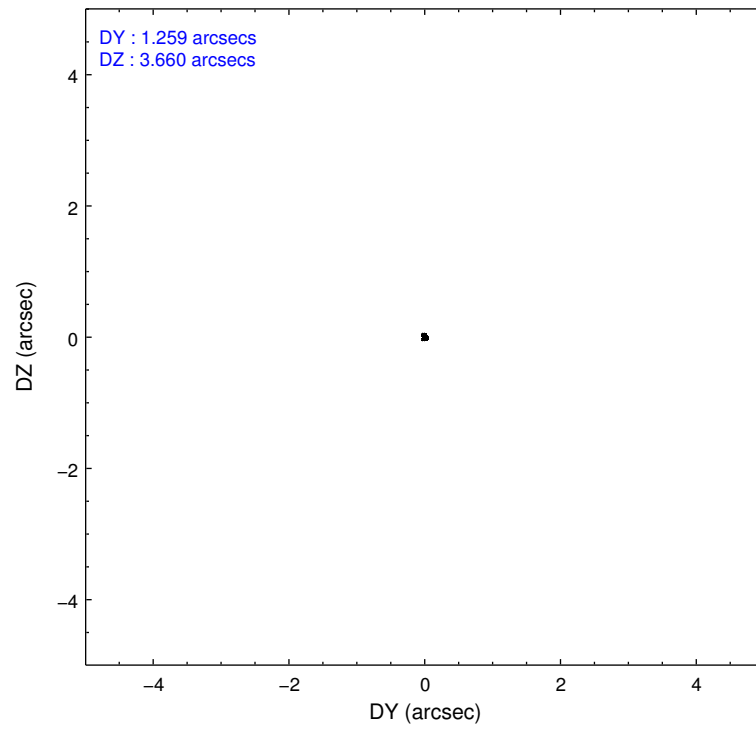
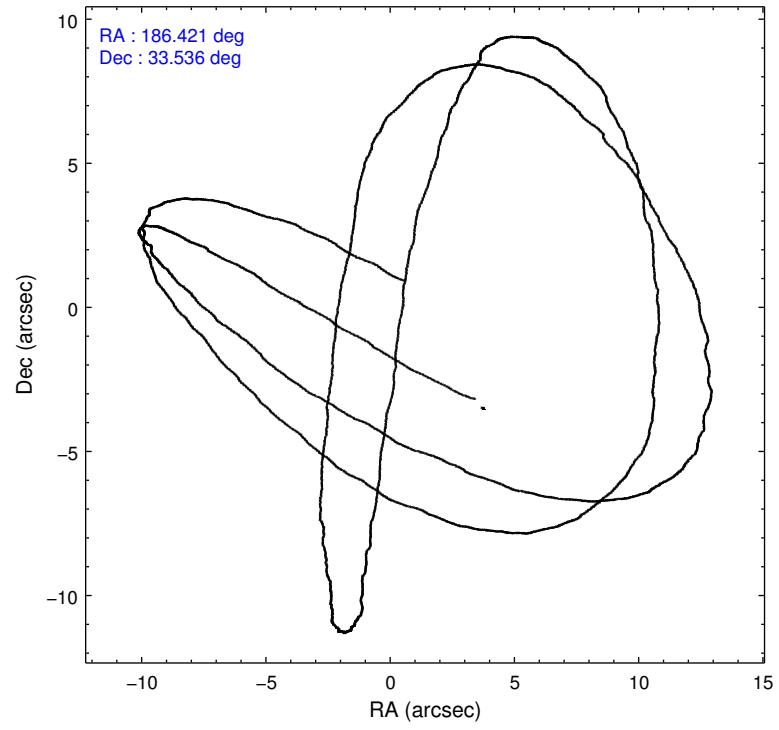
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 9417 | 8590 | 12169 | 9461 | 11256 | 12014 |
| rejected events | 8455 | 7641 | 6258 | 8539 | 6279 | 9630 |
| rejected % | 89% | 88% | 51% | 90% | 55% | 80% |

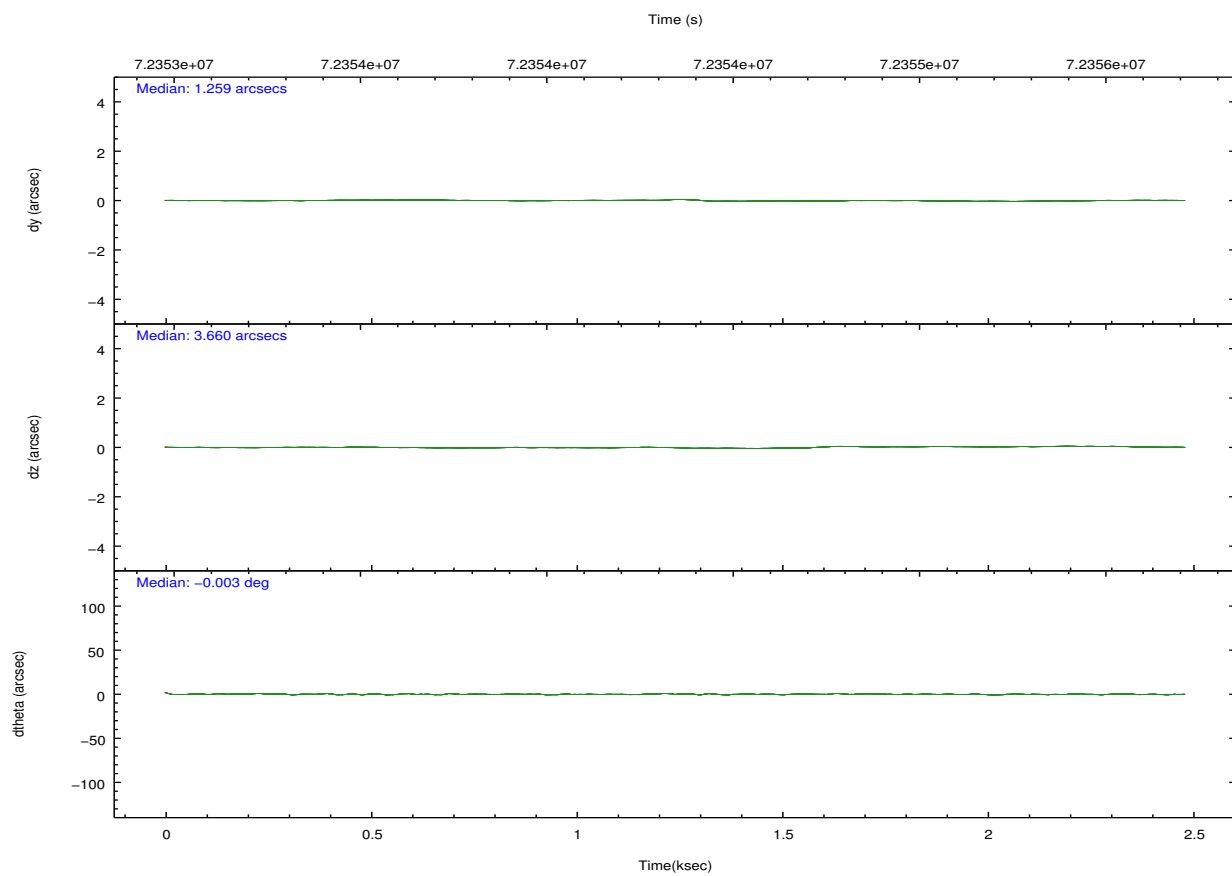
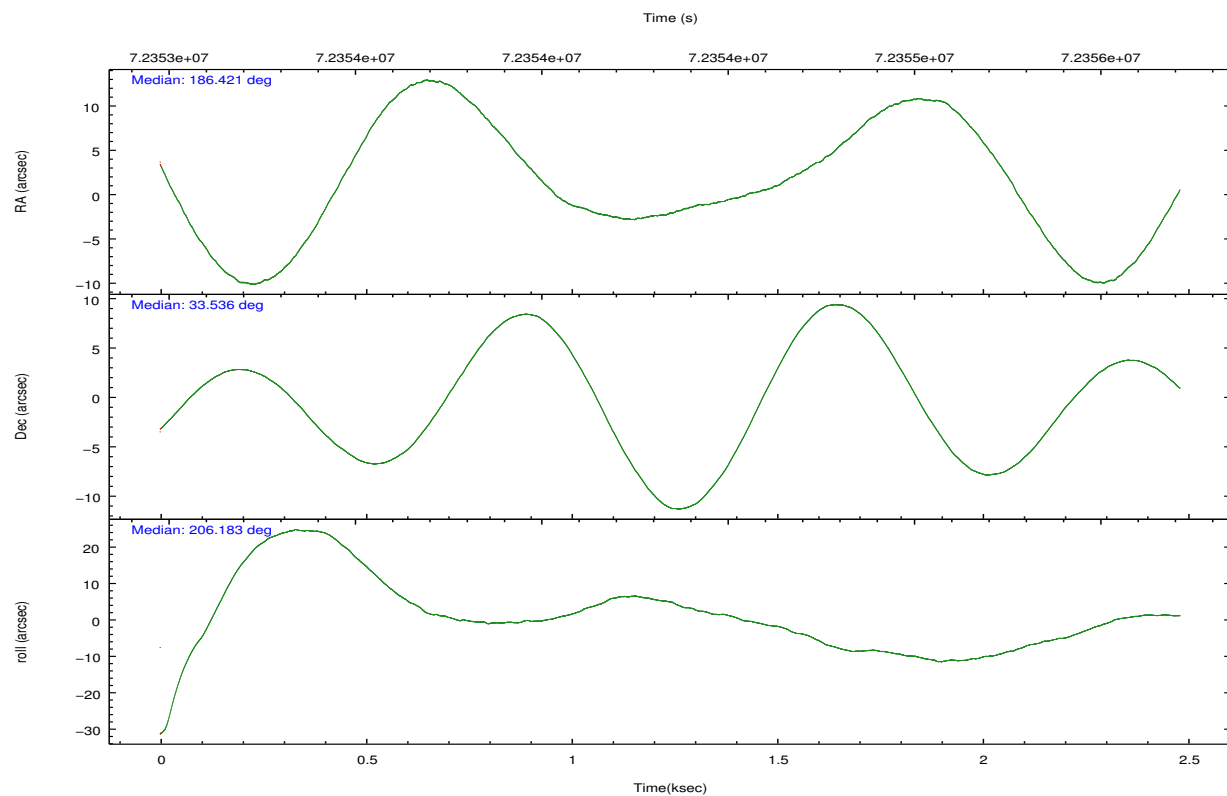
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 394 | 415 | 994 | 391 | 597 | 691 |
| | 4% | 4% | 8% | 4% | 5% | 5% |
| grade 1 events | 4 | 9 | 63 | 6 | 14 | 3 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 198 | 194 | 1677 | 169 | 998 | 505 |
| | 2% | 2% | 13% | 1% | 8% | 4% |
| grade 3 events | 99 | 94 | 256 | 107 | 469 | 275 |
| | 1% | 1% | 2% | 1% | 4% | 2% |
| grade 4 events | 116 | 86 | 269 | 85 | 461 | 272 |
| | 1% | 1% | 2% | 0% | 4% | 2% |
| grade 5 events | 311 | 315 | 933 | 349 | 1083 | 405 |
| | 3% | 3% | 7% | 3% | 9% | 3% |
| grade 6 events | 164 | 162 | 2742 | 175 | 2469 | 648 |
| | 1% | 1% | 22% | 1% | 21% | 5% |
| grade 7 events | 8131 | 7315 | 5235 | 8179 | 5165 | 9215 |
| | 86% | 85% | 43% | 86% | 45% | 76% |

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 | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 186.439399 | 186.4207420194842 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 33.558261 | 33.53542331328288 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 206.014969 | 206.1817813354892 | [s] Primary exposure time | 0.000000 | 3.2 |
| [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) | 72353583.184000 | 72352807.50279 | | | |
| Observation start date | 2000-04-17T10:11:59 | 2000-04-17T10:00:07 | | | |
| [s] Observation end time (MET) | 72355583.184000 | 72355965.527905 | | | |
| Observation end date | 2000-04-17T10:45:19 | 2000-04-17T10:52:45 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



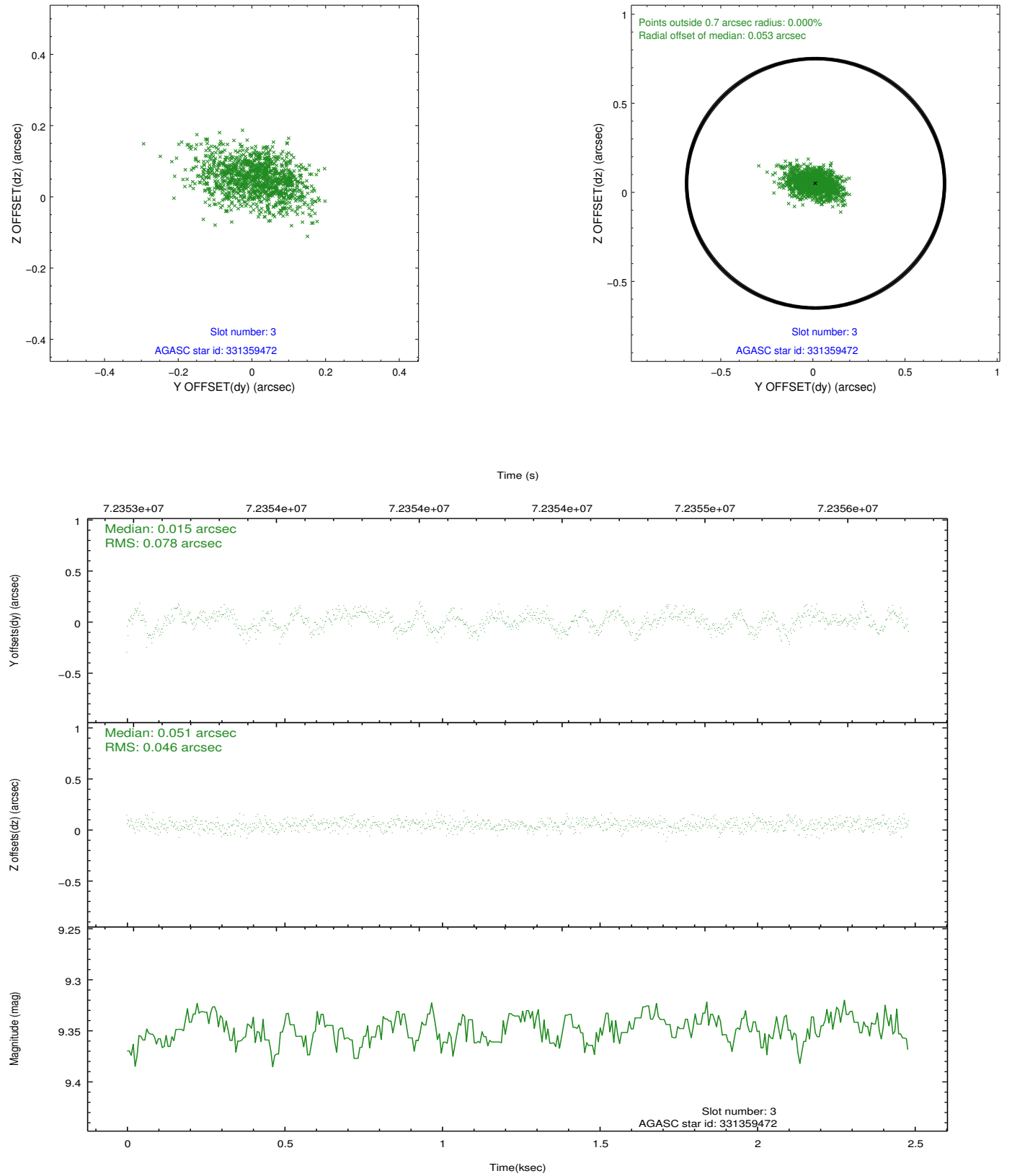


Slot Statistics

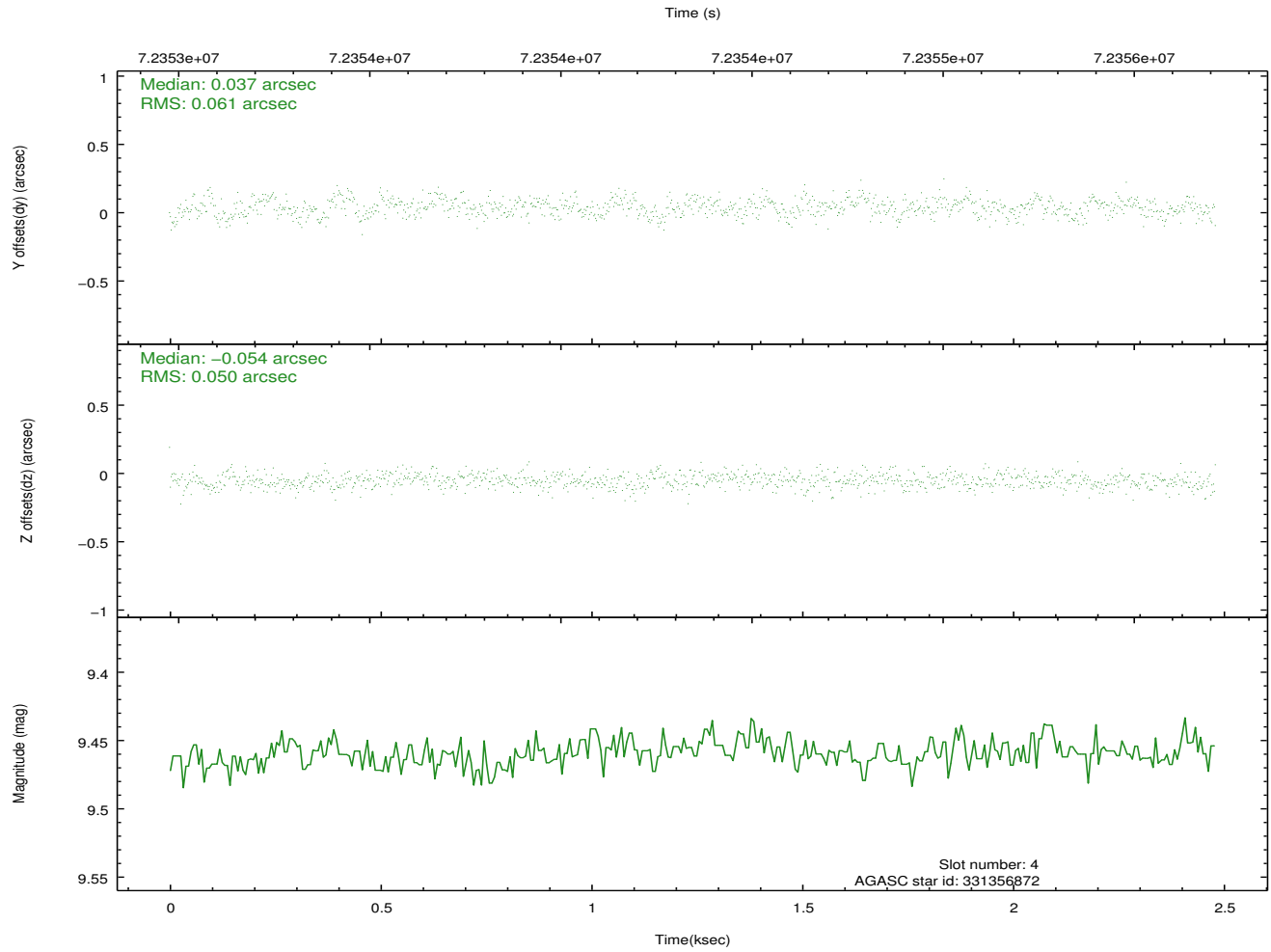
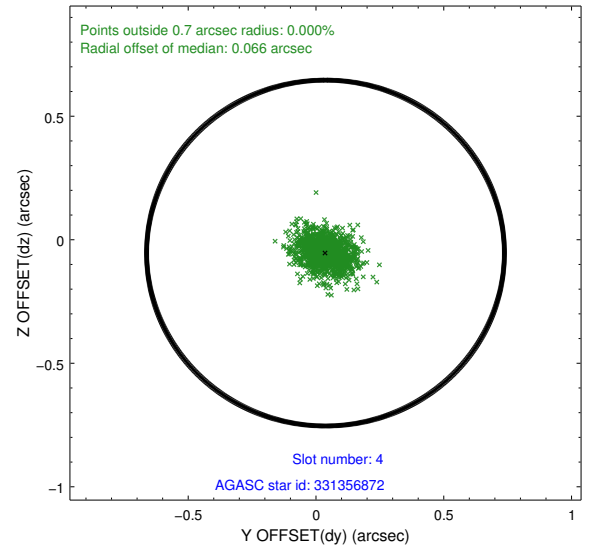
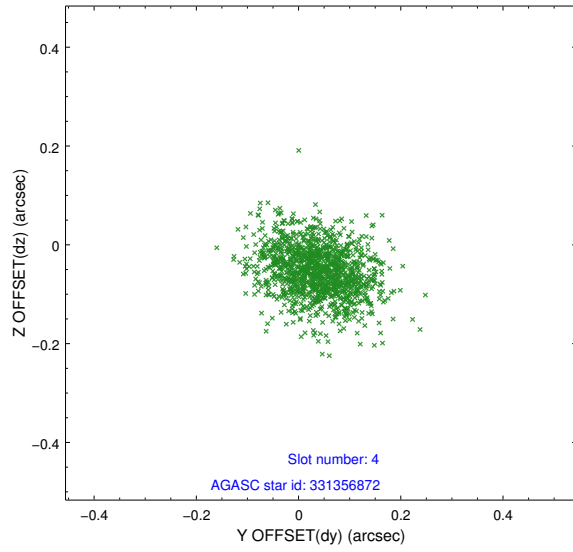
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 606 | -0.008 | -0.016 | 0.006 | 0.011 | 0.000000 | 0.000000 | -753.91 | -1724.73 |
| 1 | FID | ACIS-S-4 | 7.21 | 606 | -0.002 | 0.008 | 0.006 | 0.009 | 0.000000 | 0.000000 | 2158.25 | 181.01 |
| 2 | FID | ACIS-S-5 | 7.24 | 606 | -0.021 | 0.017 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1803.35 | 177.76 |
| 3 | GUIDE | 331359472 | 9.35 | 1211 | 0.015 | 0.051 | 0.093 | 0.161 | 187.224794 | 33.172746 | -1522.41 | 2278.10 |
| 4 | GUIDE | 331356872 | 9.46 | 1210 | 0.037 | -0.054 | 0.085 | 0.139 | 186.232000 | 33.528992 | 603.66 | -176.31 |
| 5 | GUIDE | 331359824 | 9.90 | 1208 | 0.015 | 0.045 | 0.126 | 0.204 | 185.748520 | 33.293976 | 2282.67 | -62.46 |
| 6 | GUIDE | 331361424 | 10.46 | 1211 | -0.057 | 0.019 | 0.142 | 0.231 | 187.160339 | 33.746695 | -2238.79 | 330.93 |
| 7 | GUIDE | 331361744 | 10.36 | 1210 | -0.001 | -0.059 | 0.124 | 0.201 | 186.680106 | 33.592306 | -705.06 | 206.68 |

2.4 Star Slots

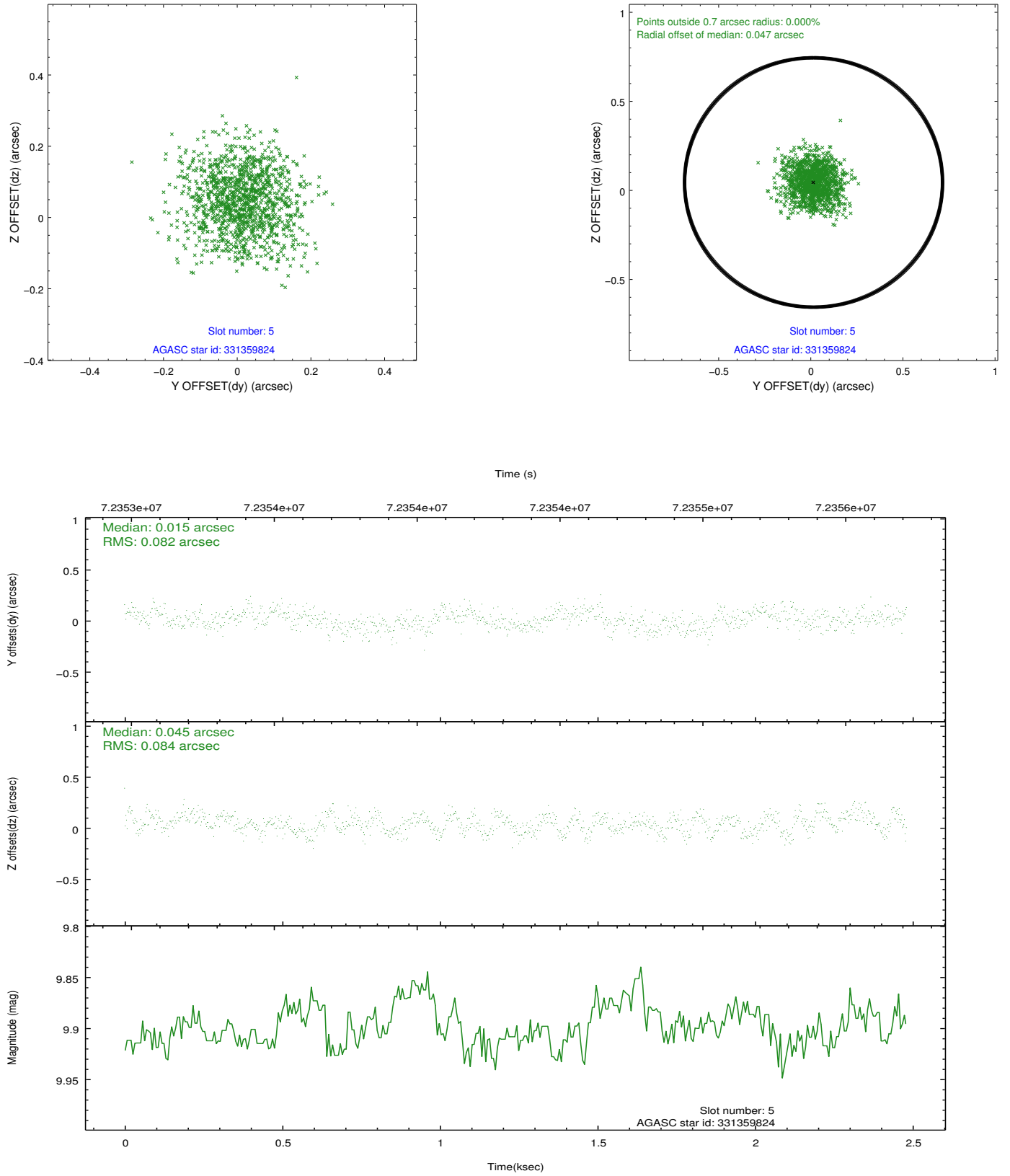
2.4.1 Slot 3



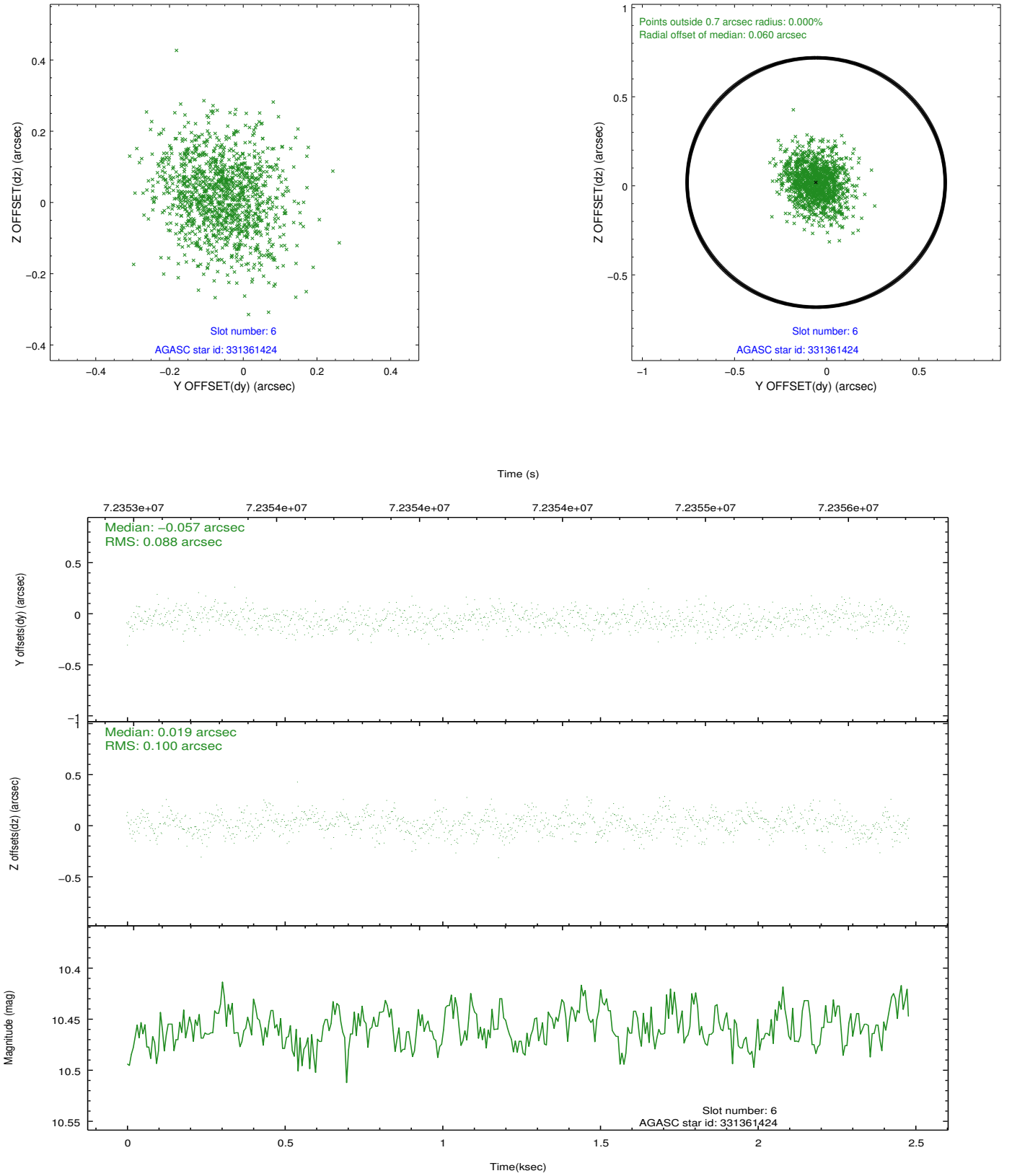
2.4.2 Slot 4



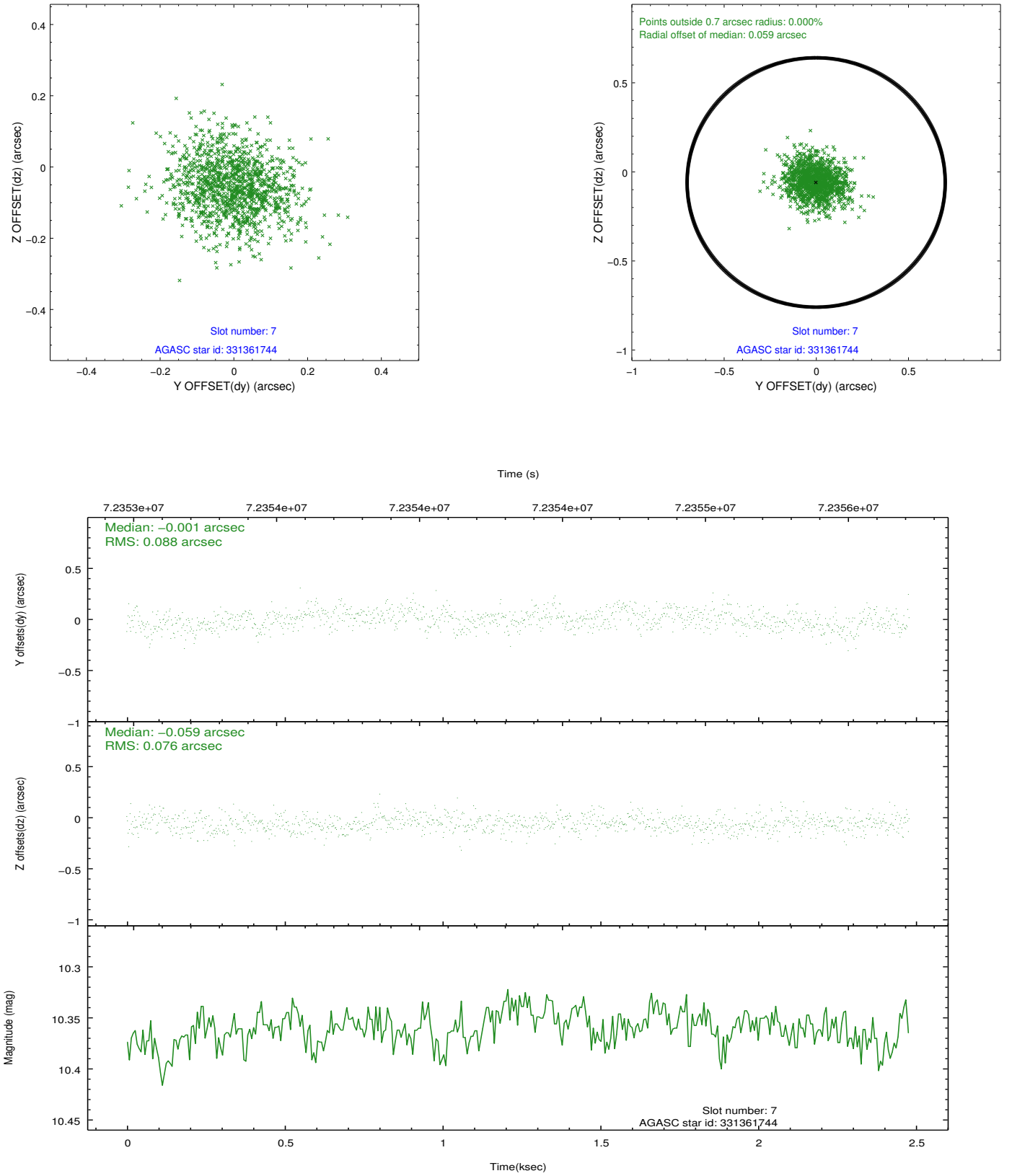
2.4.3 Slot 5



2.4.4 Slot 6

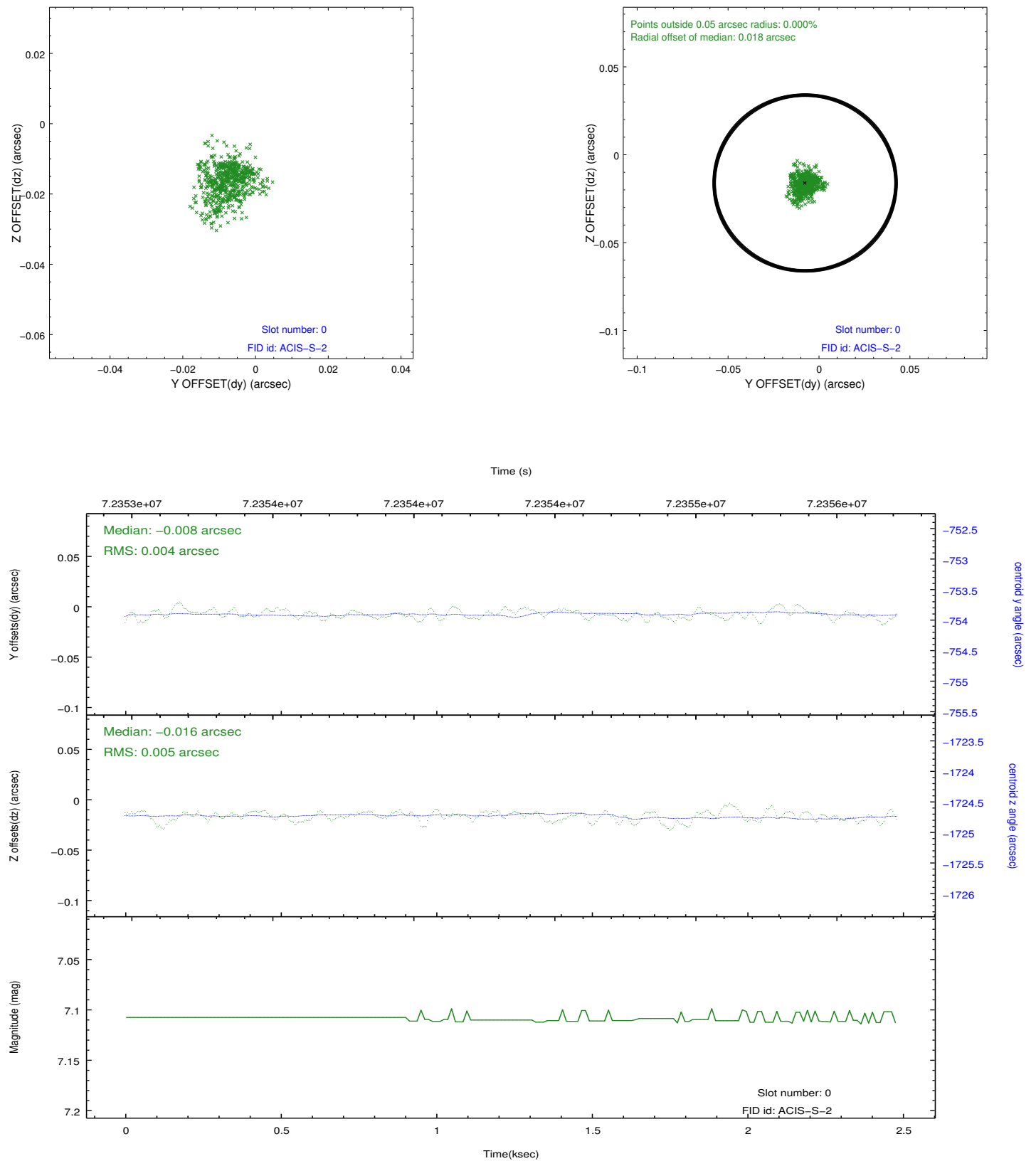


2.4.5 Slot 7

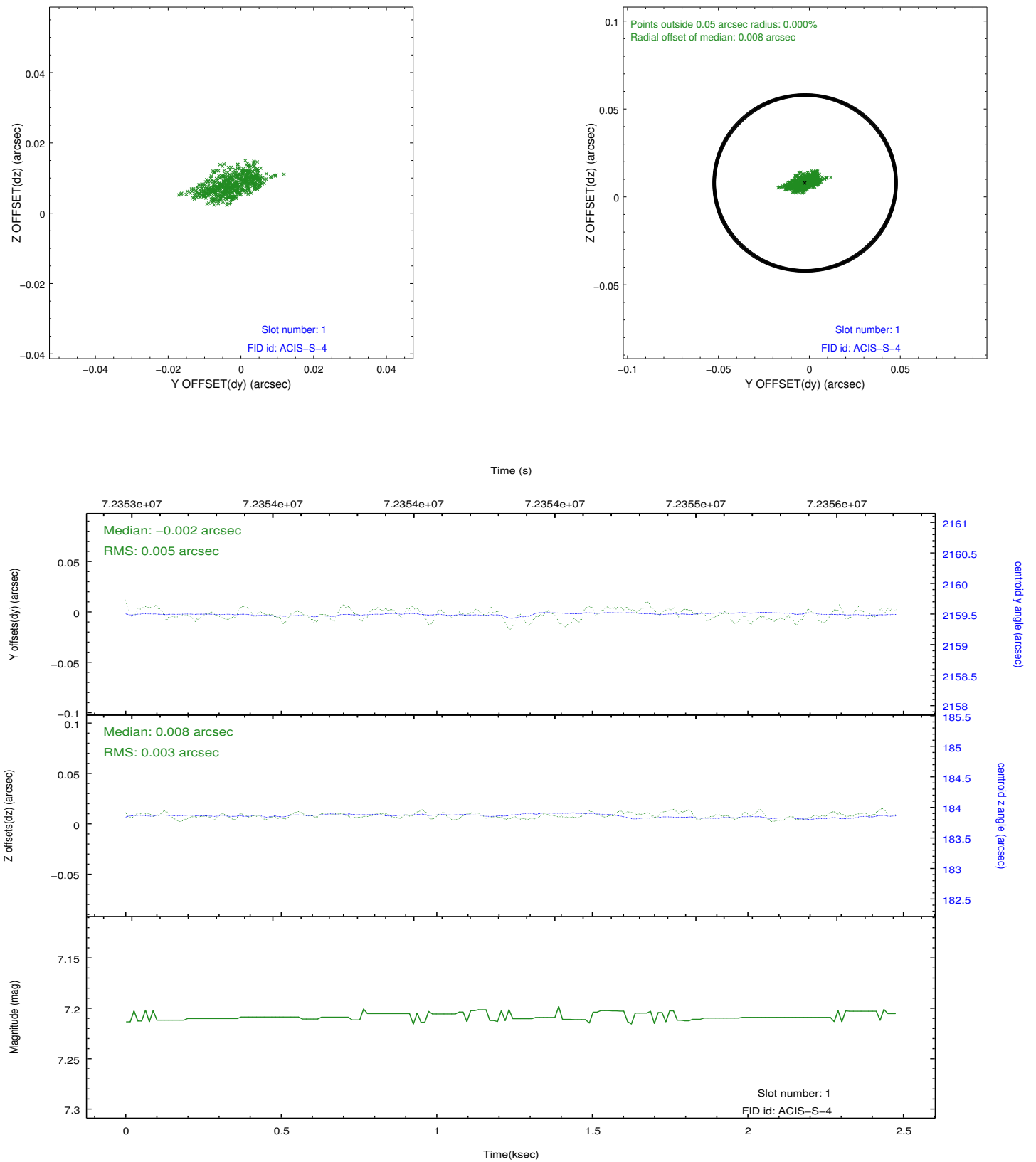


2.5 FID Slots

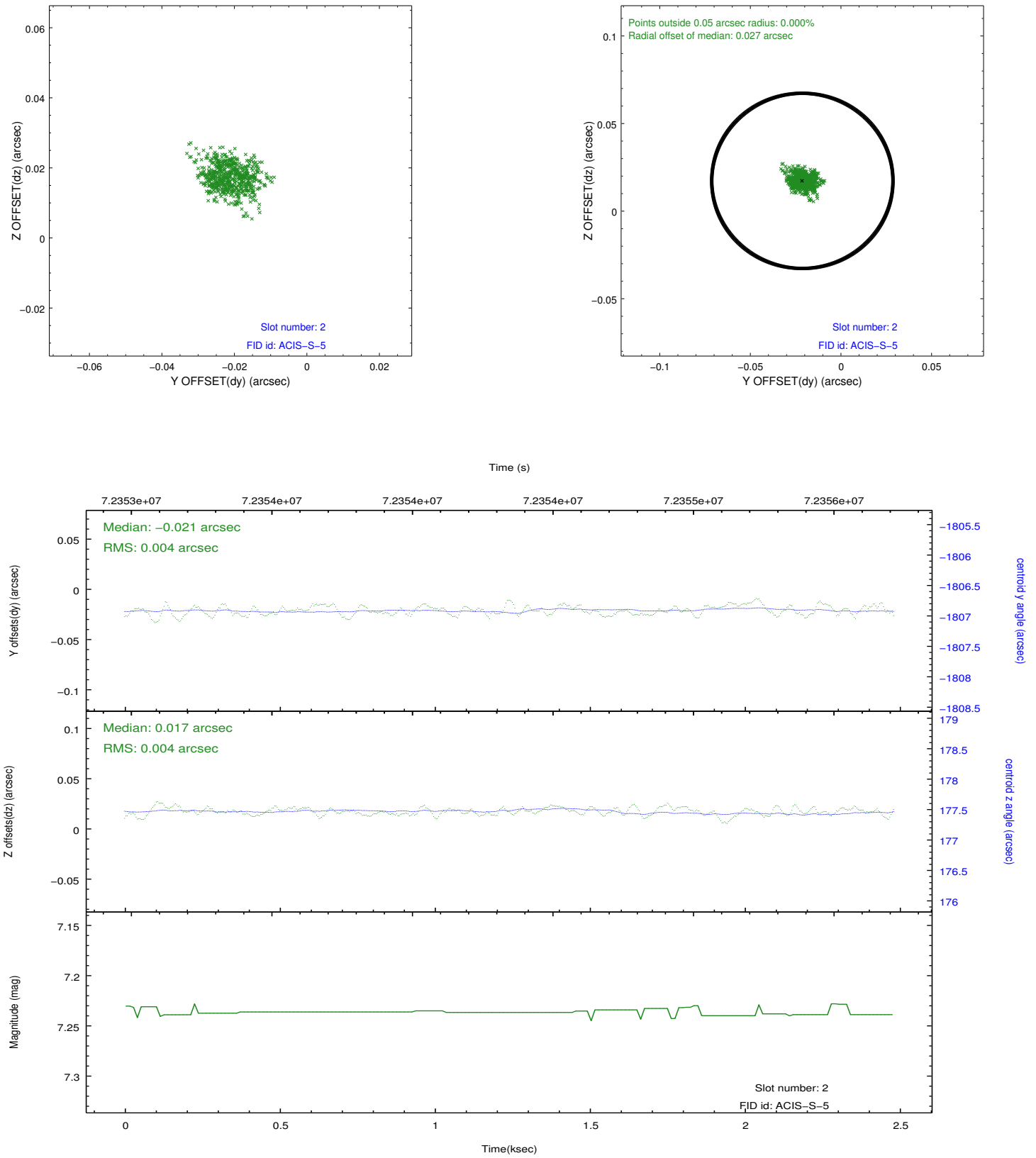
2.5.1 Slot 0



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) | 2012.08.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.26 |

A.2 Comments