

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2142 - L2 Version 3
Chandra X-Ray Center

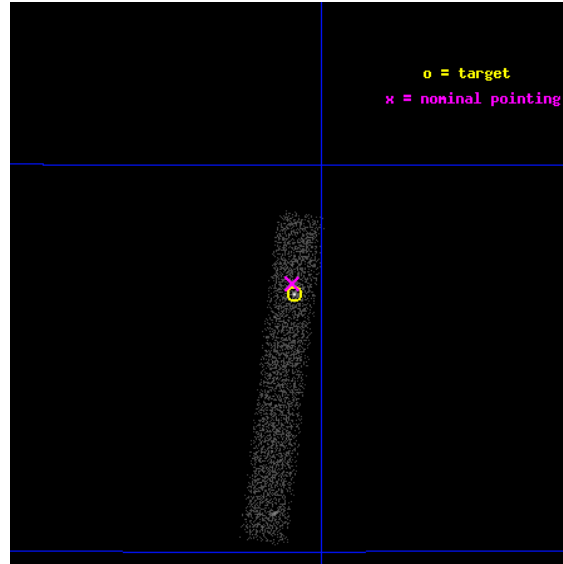
L2 Processing Date : Sep 11 2012

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1 Front

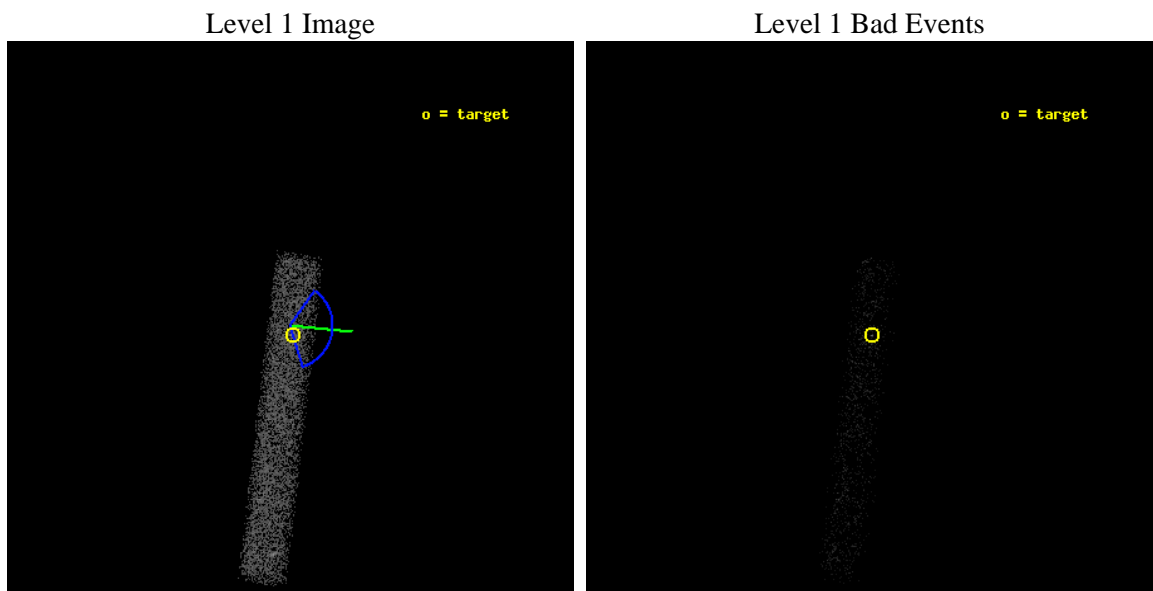
| | | |
|----------|--|---|
| seq_num | 700332 | Sequence number |
| obs_id | 2142 | Observation id |
| title | AN UNBIASED SURVEY OF X-RAY AND OPTICAL EMISSION FROM EXTENDED RADIO JETS IN AGN | Proposal title |
| observer | Dr. Rita Sambruna | Principal investigator |
| object | 1642+690 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 250.5325 | Observer's specified target RA [deg] |
| dec_targ | 68.944444 | Observer's specified target Dec [deg] |
| ra_nom | 250.53592074286 | Nominal RA [deg] |
| dec_nom | 68.948792491132 | Nominal Dec [deg] |
| roll_nom | 96.591174200849 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 9181.2001368105 | Sum of GTIs [s] |
| livetime | 8326.8639006082 | Livetime [s] |
| ontime7 | 9181.2001368105 | Sum of GTIs [s] |
| l2events | 6046 | Number of level 2 events |



2 OBI

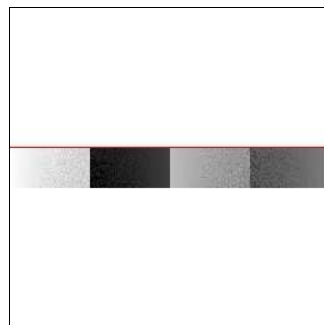
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 9000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 9181.2001368105 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime7 | 9181.2001368105 | Sum of GTIs [s] |
| date | 2012-09-11T23:55:51 | Date and time of file creation | l1events | 12744 | Number of level 1 events |
| revision | 3 | Processing version of data | | | |

2.1.4 Events

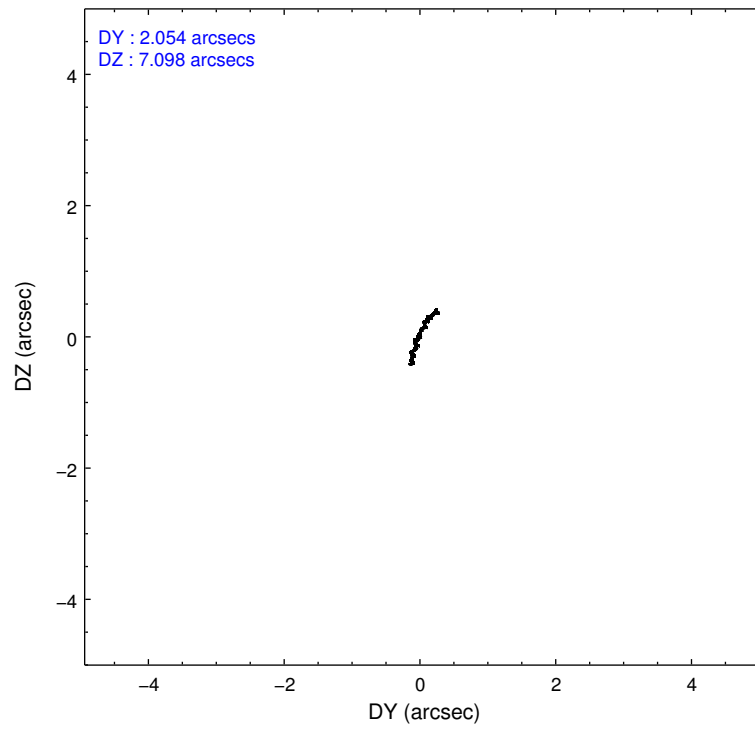
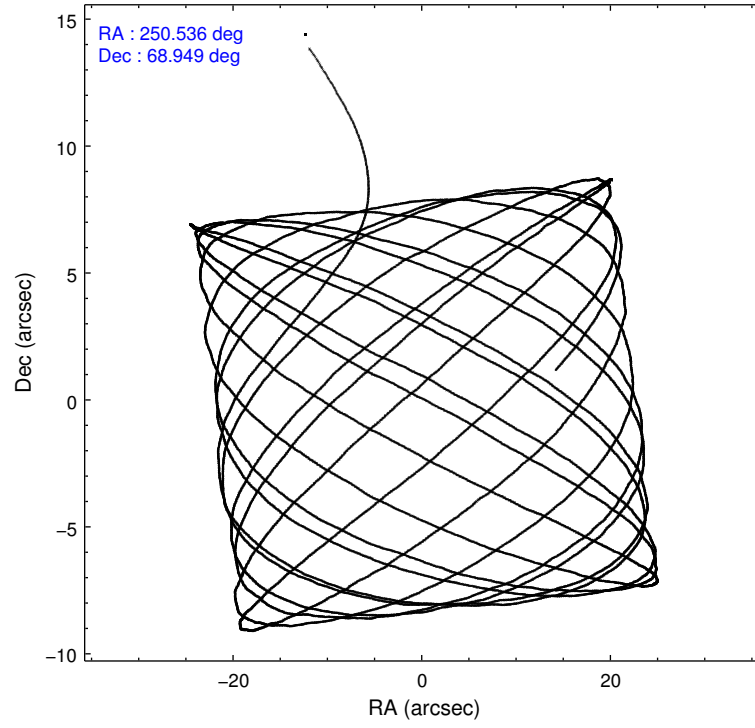
| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 12744 |
| rejected events | 6442 |
| rejected % | 50% |

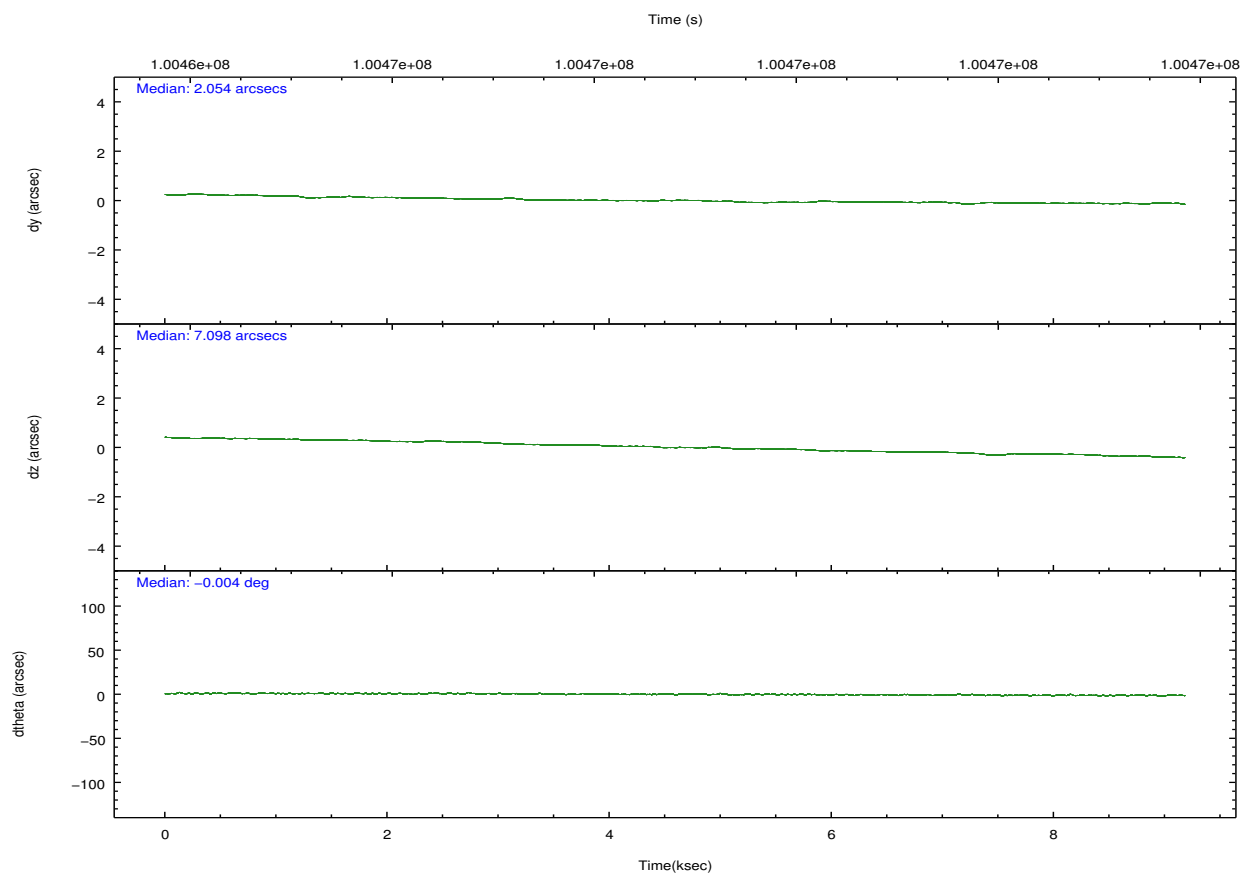
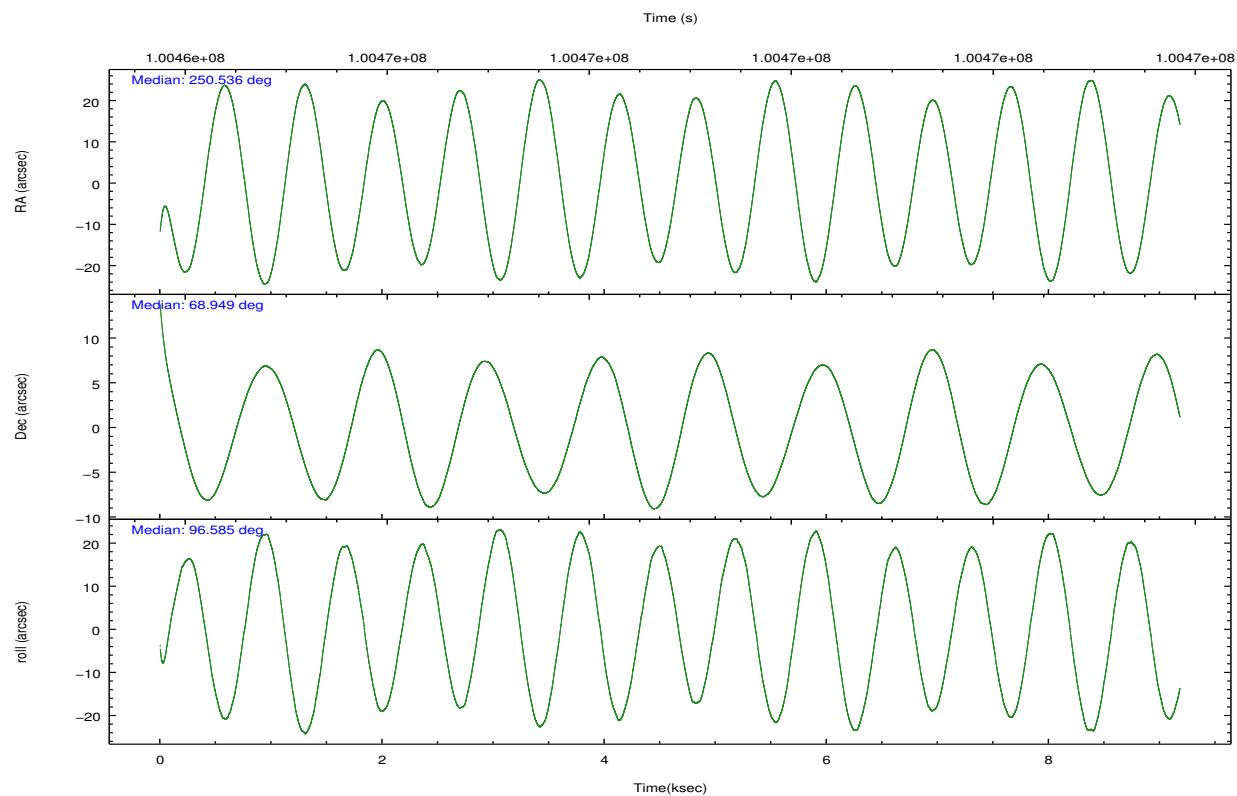
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 1013 |
| | 7% |
| grade 1 events | 12 |
| | 0% |
| grade 2 events | 1344 |
| | 10% |
| grade 3 events | 917 |
| | 7% |
| grade 4 events | 889 |
| | 6% |
| grade 5 events | 1026 |
| | 8% |
| grade 6 events | 2598 |
| | 20% |
| grade 7 events | 4945 |
| | 38% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|--------------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-7 | ACIS-7 | 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 | 250.581818 | 250.5359207428567 | Subarray requested | CUSTOM | 1/8 |
| [deg] Pointing Dec | 68.926969 | 68.94879249113239 | Subarray start row | 449 | 449 |
| [deg] Pointing Roll | 96.391729 | 96.59117420084898 | Subarray row count | 128 | 128 |
| [deg] Roll angle | 100.000000 | 100.000000 | Alternating exposures requested | N | N |
| [deg] Roll tolerance | 64.000000 | 64.000000 | [s] Primary exposure time | 0.000000 | 0.4 |
| Roll constraint allows 180D rotation | N | N | | | |
| [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) | 100464392.184000 | 100463386.92335 | | | |
| Observation start date | 2001-03-08T18:45:28 | 2001-03-08T18:29:46 | | | |
| [s] Observation end time (MET) | 100473392.184000 | 100474285.74878 | | | |
| Observation end date | 2001-03-08T21:15:28 | 2001-03-08T21:31:25 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



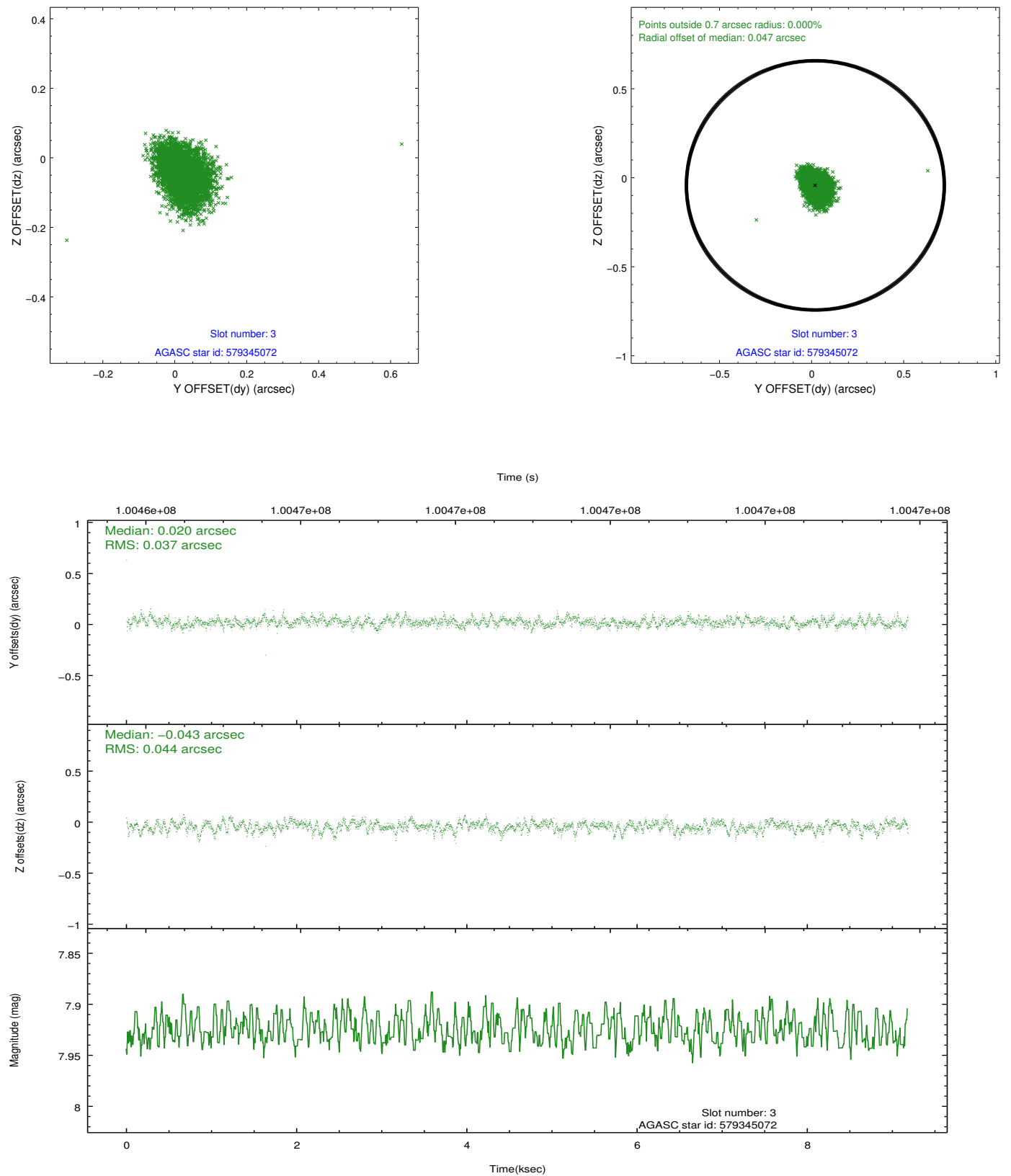


Slot Statistics

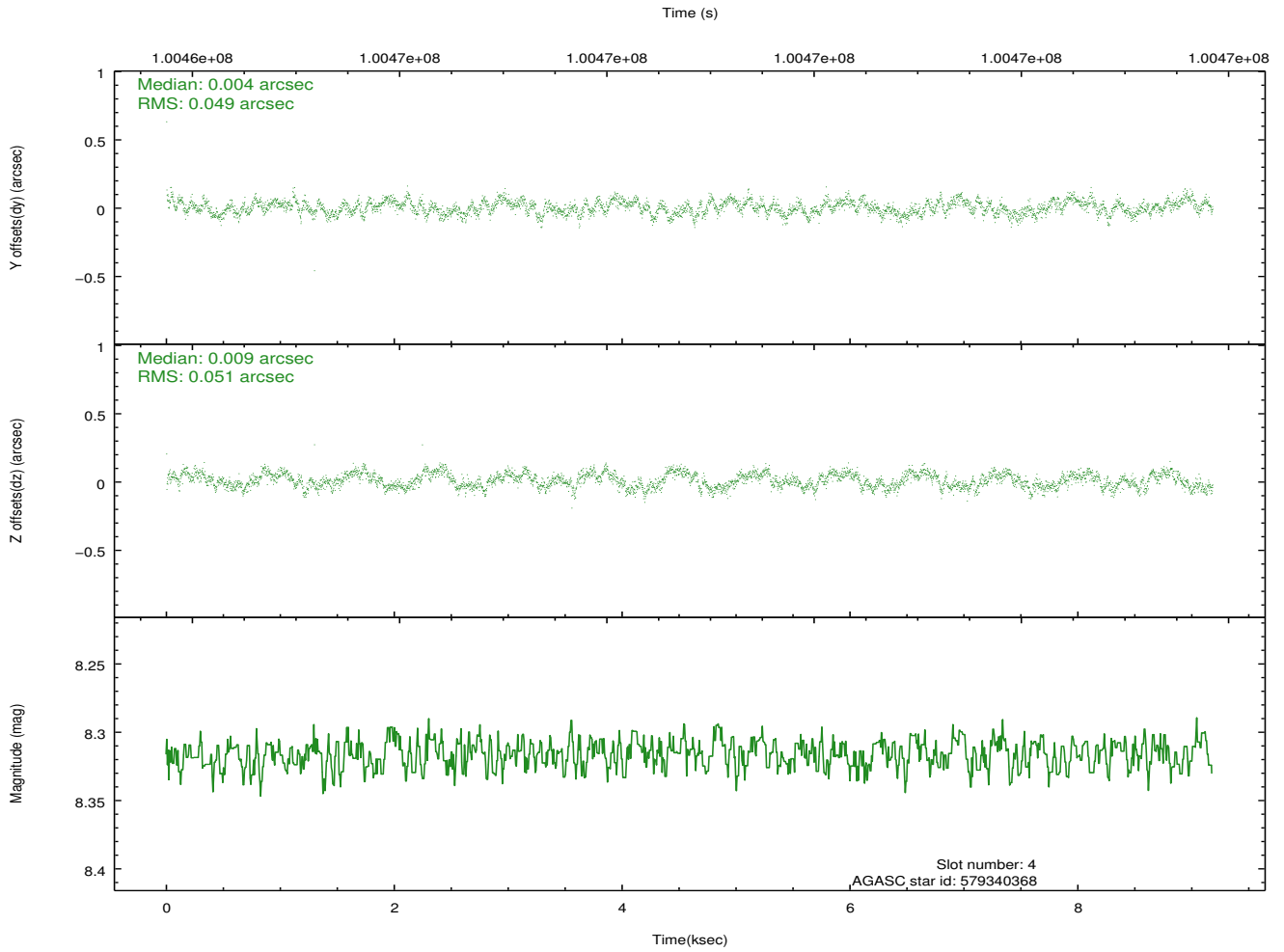
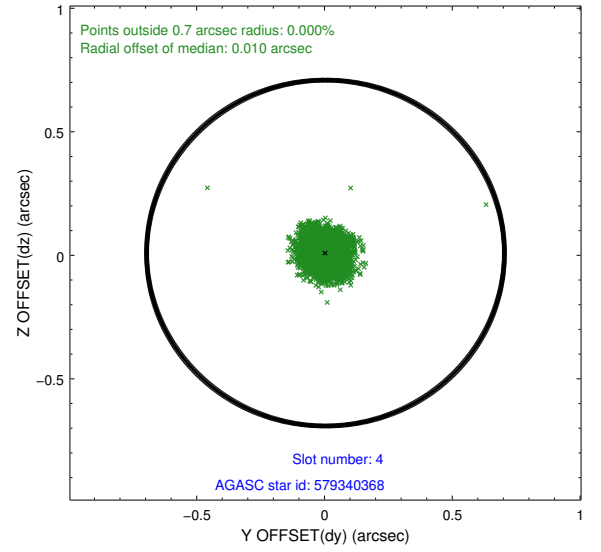
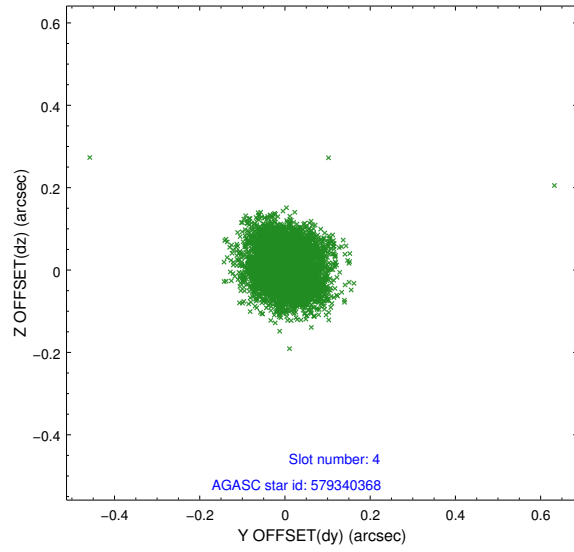
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 2240 | -0.017 | -0.002 | 0.010 | 0.015 | 0.000000 | 0.000000 | -754.70 | -1728.28 |
| 1 | FID | ACIS-S-4 | 7.20 | 2240 | -0.054 | 0.009 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2158.27 | 179.60 |
| 2 | FID | ACIS-S-5 | 7.23 | 2239 | 0.039 | 0.002 | 0.010 | 0.016 | 0.000000 | 0.000000 | -1806.72 | 173.94 |
| 3 | GUIDE | 579345072 | 7.93 | 4479 | 0.020 | -0.043 | 0.059 | 0.100 | 251.844716 | 69.098847 | 451.50 | -1682.62 |
| 4 | GUIDE | 579340368 | 8.32 | 4480 | 0.004 | 0.009 | 0.075 | 0.114 | 251.597969 | 69.330258 | 1310.35 | -1446.31 |
| 5 | GUIDE | 579357080 | 8.40 | 4477 | 0.055 | 0.029 | 0.063 | 0.100 | 249.808649 | 68.321045 | -2046.45 | 1263.33 |
| 6 | GUIDE | 579340848 | 9.07 | 4477 | -0.030 | 0.010 | 0.073 | 0.120 | 249.808213 | 69.050659 | 559.31 | 939.50 |
| 7 | GUIDE | 579340736 | 9.04 | 4478 | -0.049 | -0.003 | 0.064 | 0.106 | 249.397116 | 69.321462 | 1593.82 | 1337.26 |

2.4 Star Slots

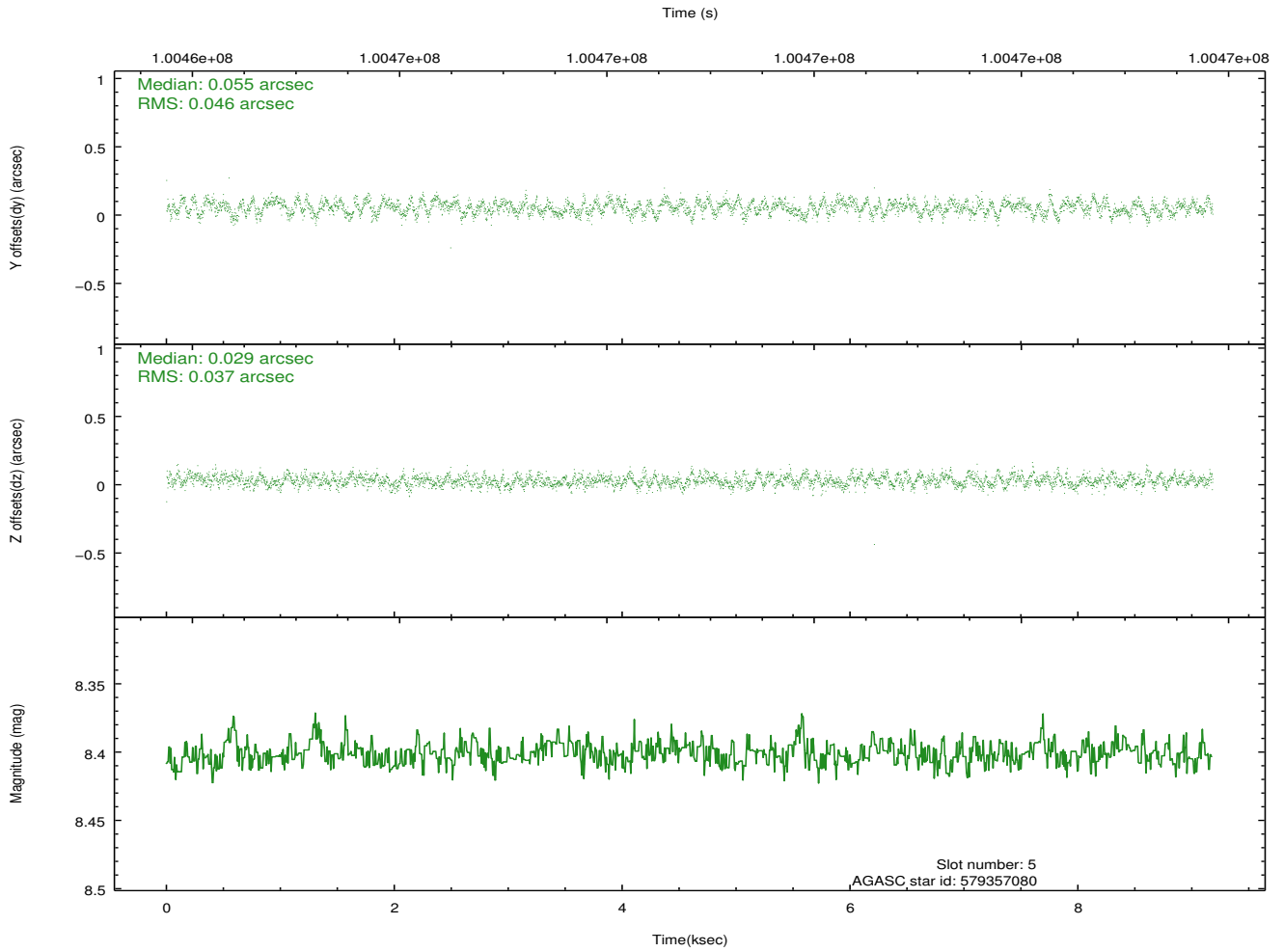
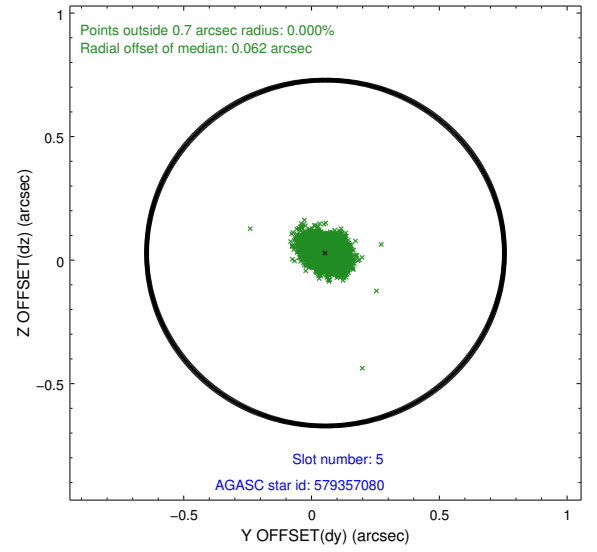
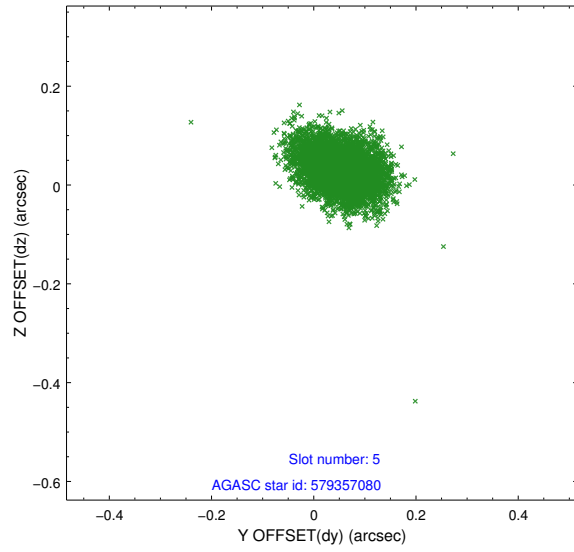
2.4.1 Slot 3



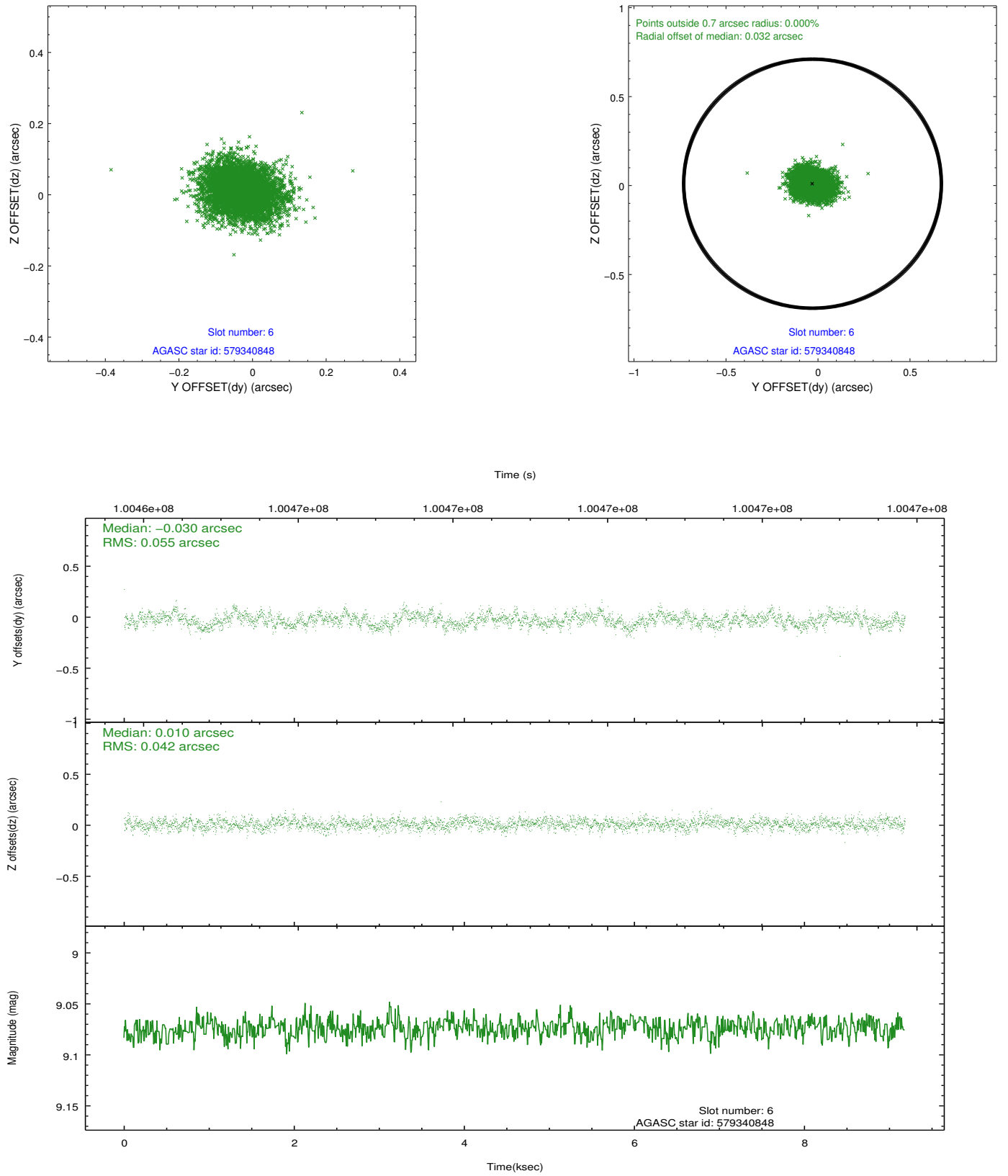
2.4.2 Slot 4



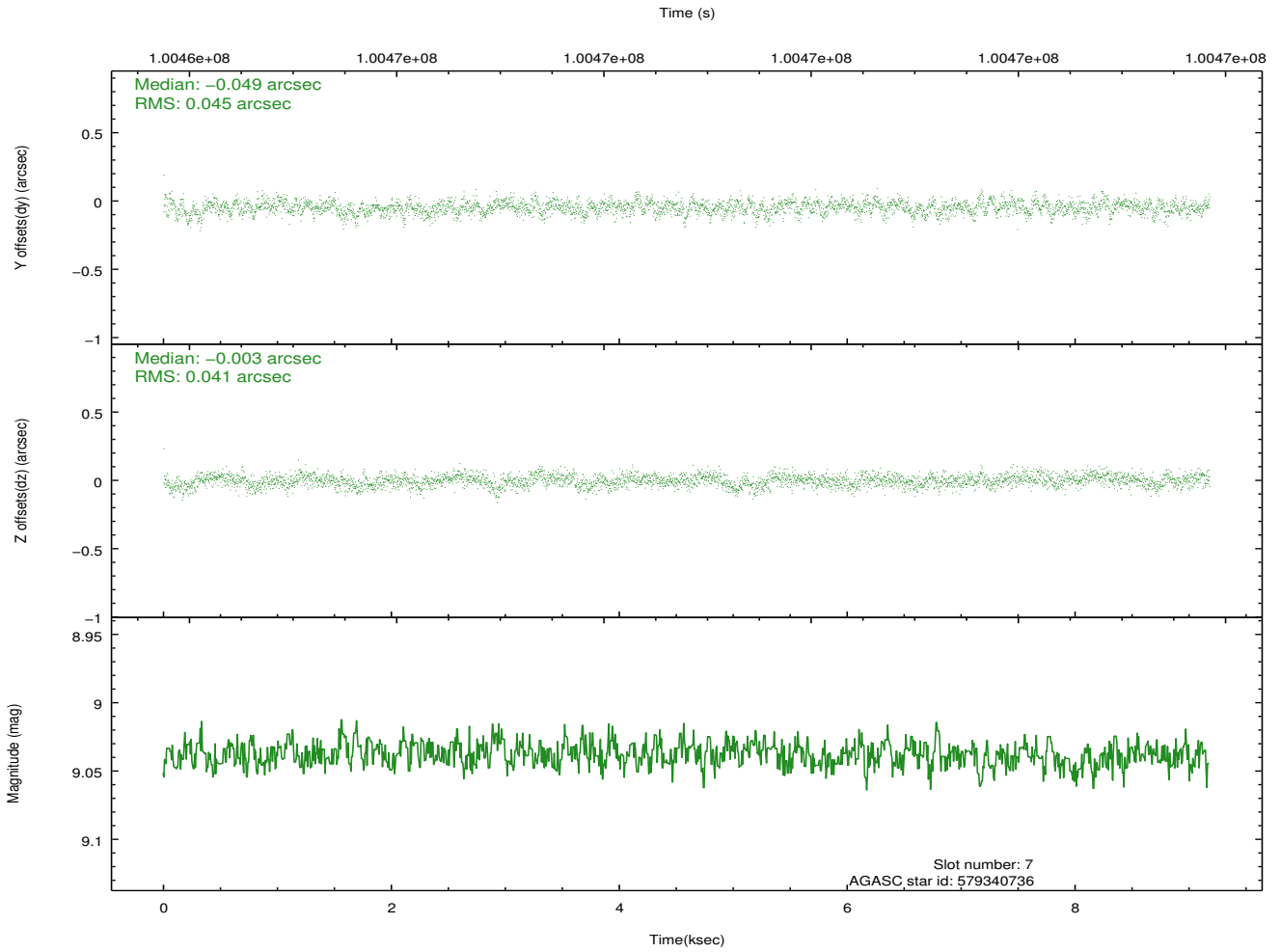
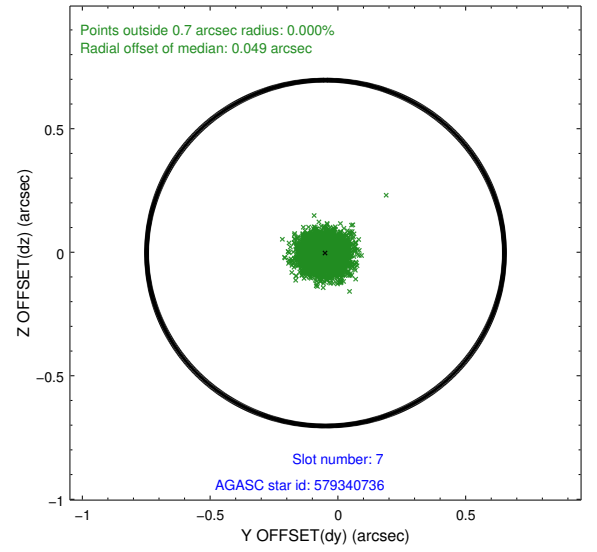
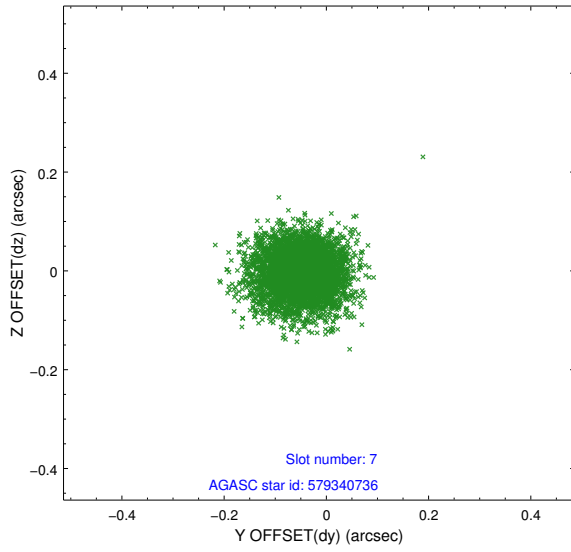
2.4.3 Slot 5



2.4.4 Slot 6

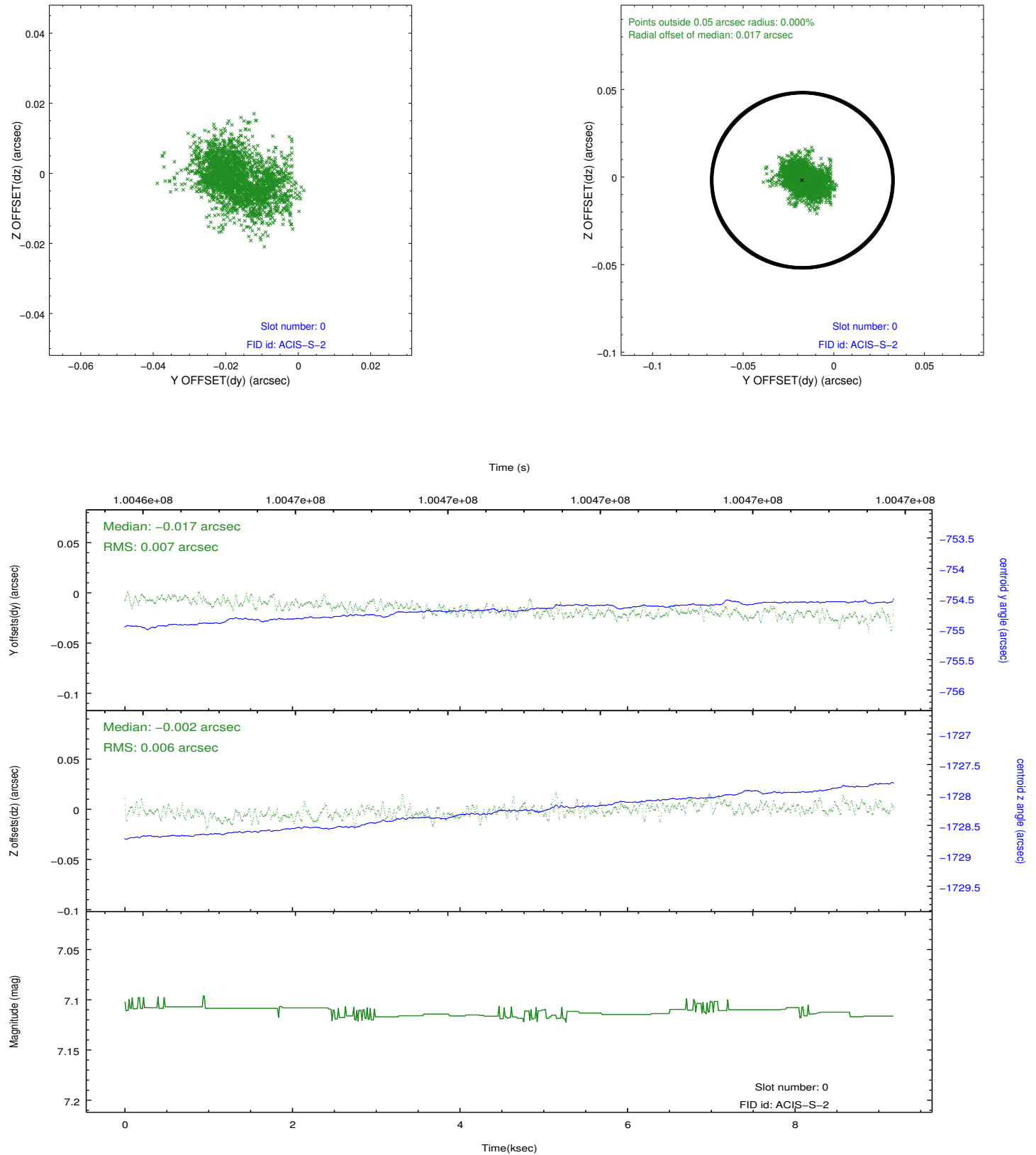


2.4.5 Slot 7

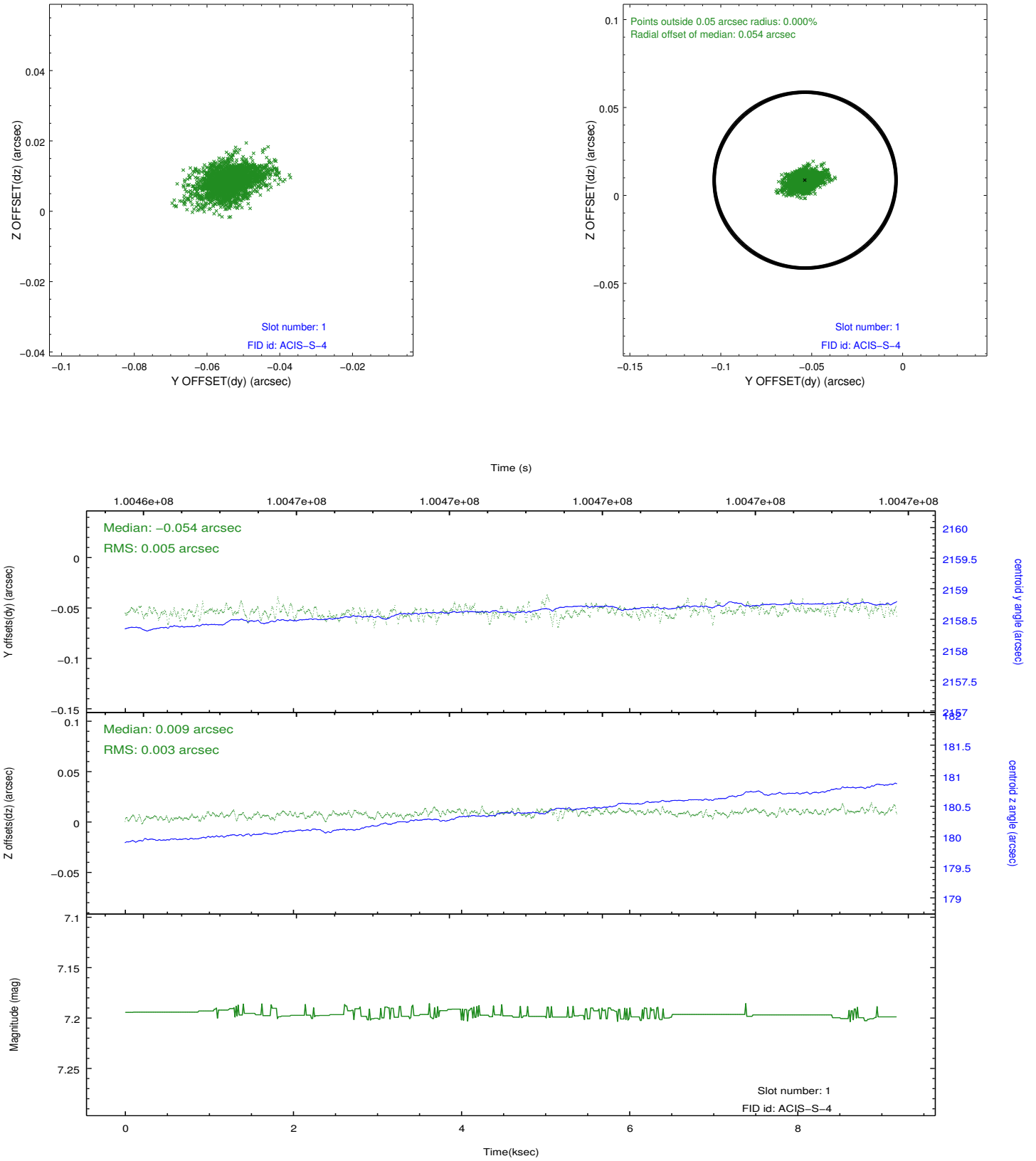


2.5 FID Slots

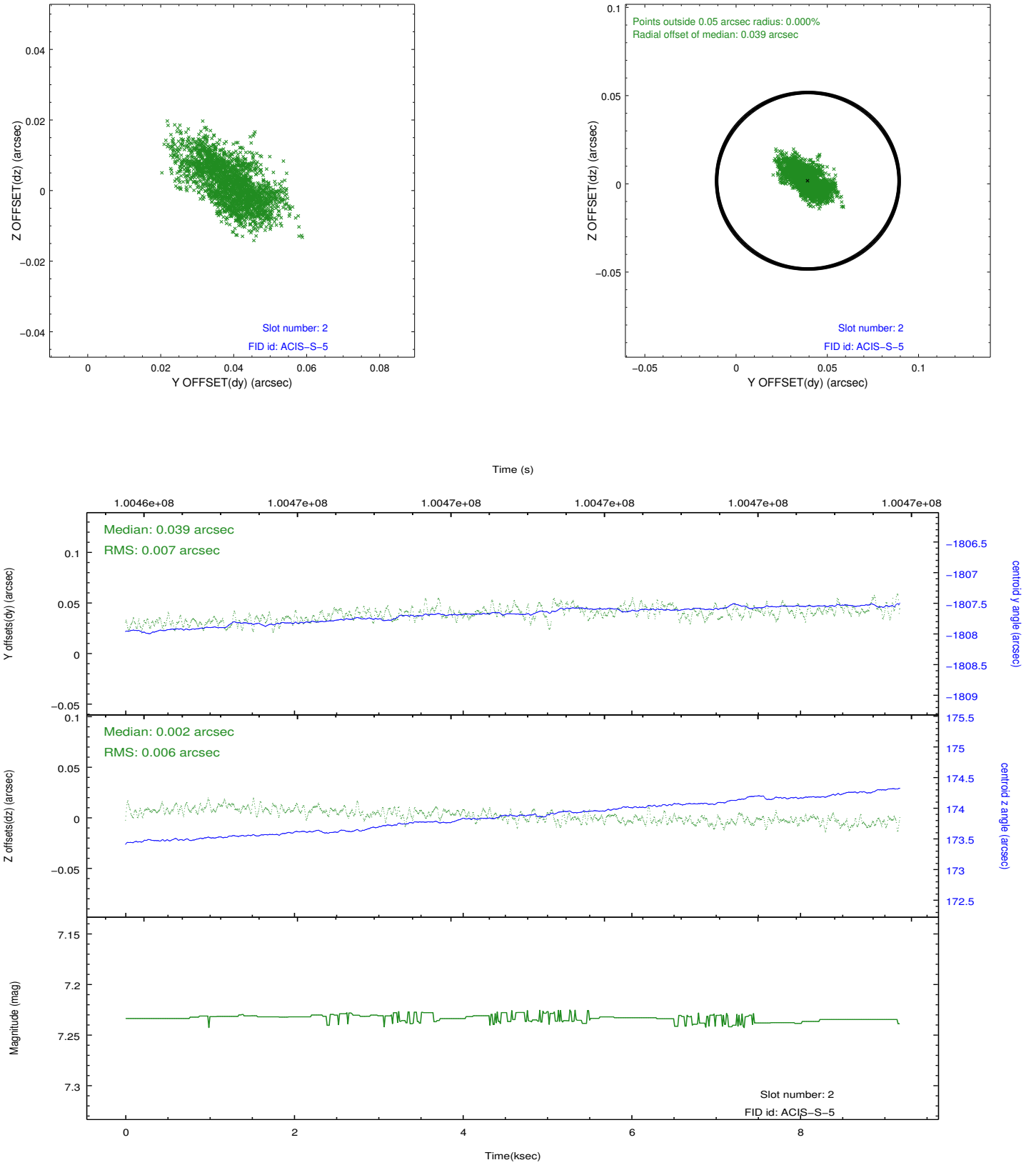
2.5.1 Slot 0



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) | 2012.09.19 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 9.181 |

A.2 Comments

Roll constraint met.