

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 5326 - L2 Version 3
Chandra X-Ray Center

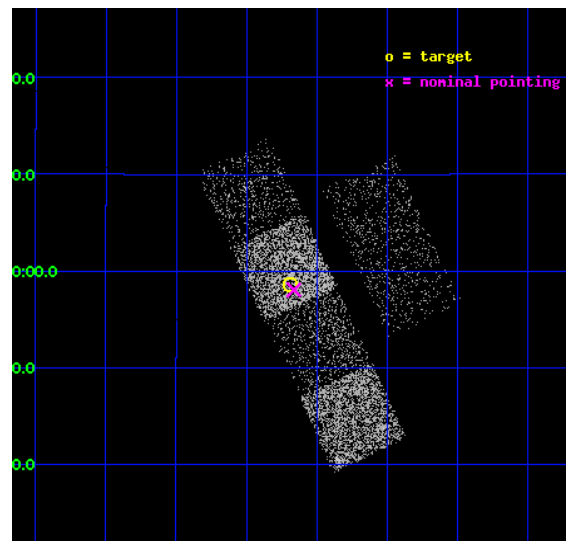
L2 Processing Date : Dec 1 2012

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1 Front

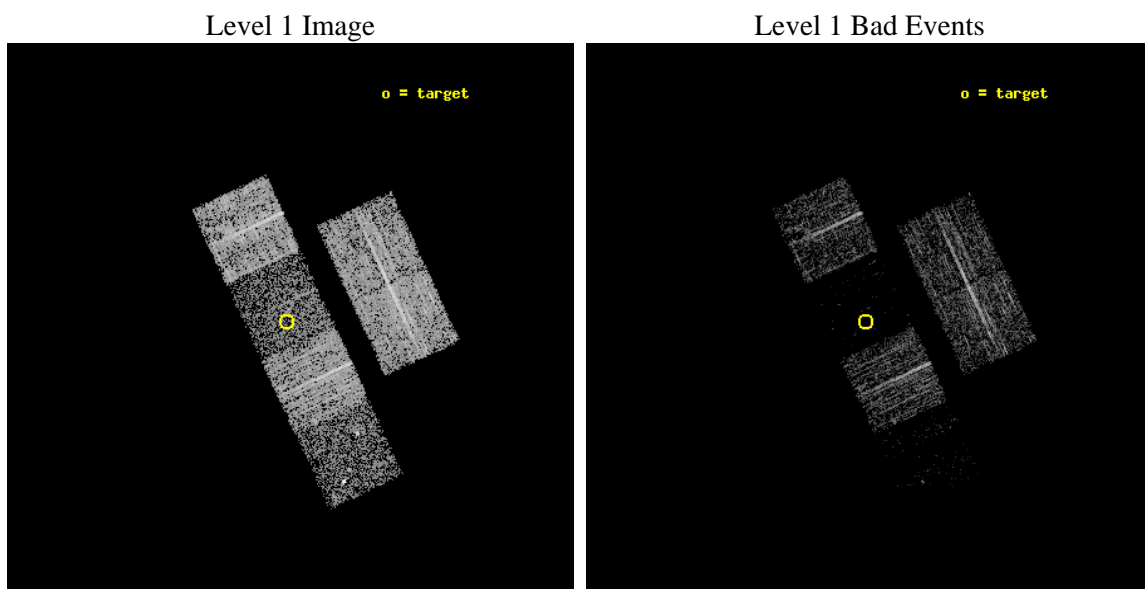
| | | |
|----------|---|---|
| seq_num | 100053 | Sequence number |
| obs_id | 5326 | Observation id |
| title | Chandra Snapshot Spectral Imaging of Comets C/2001 Q4 (NEAT) and C/2002 T7 (LINEAR) | Proposal title |
| observer | Dr. Carey Lisse | Principal investigator |
| object | C/2001 Q4 (NEAT) | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 124.5464 | Observer's specified target RA [deg] |
| dec_targ | 10.975642 | Observer's specified target Dec [deg] |
| ra_nom | 124.54081714464 | Nominal RA [deg] |
| dec_nom | 10.967735932661 | Nominal Dec [deg] |
| roll_nom | 245.15766735958 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 3471.9999870658 | Sum of GTIs [s] |
| livetime | 3428.0354326422 | Livetime [s] |
| ontime2 | 3471.9999870658 | Sum of GTIs [s] |
| ontime3 | 3471.9999870658 | Sum of GTIs [s] |
| ontime5 | 3471.9999870658 | Sum of GTIs [s] |
| ontime6 | 3471.9999870658 | Sum of GTIs [s] |
| ontime7 | 3471.9999870658 | Sum of GTIs [s] |
| ontime8 | 3471.9999870658 | Sum of GTIs [s] |
| l2events | 8870 | Number of level 2 events |



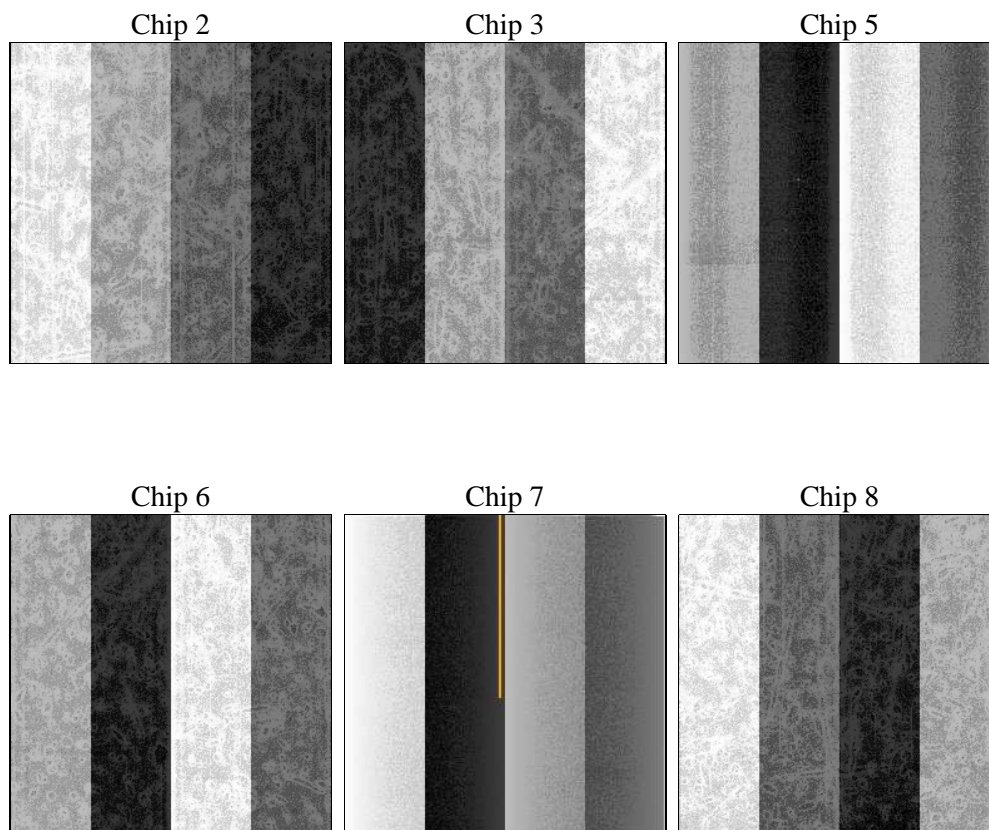
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 3300.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 3471.9999870658 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime2 | 3471.9999870658 | Sum of GTIs [s] |
| date | 2012-12-01T07:16:29 | Date and time of file creation | ontime3 | 3471.9999870658 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 3471.9999870658 | Sum of GTIs [s] |
| | | | ontime6 | 3471.9999870658 | Sum of GTIs [s] |
| | | | ontime7 | 3471.9999870658 | Sum of GTIs [s] |
| | | | ontime8 | 3471.9999870658 | Sum of GTIs [s] |
| | | | l1events | 72058 | Number of level 1 events |

2.1.4 Events

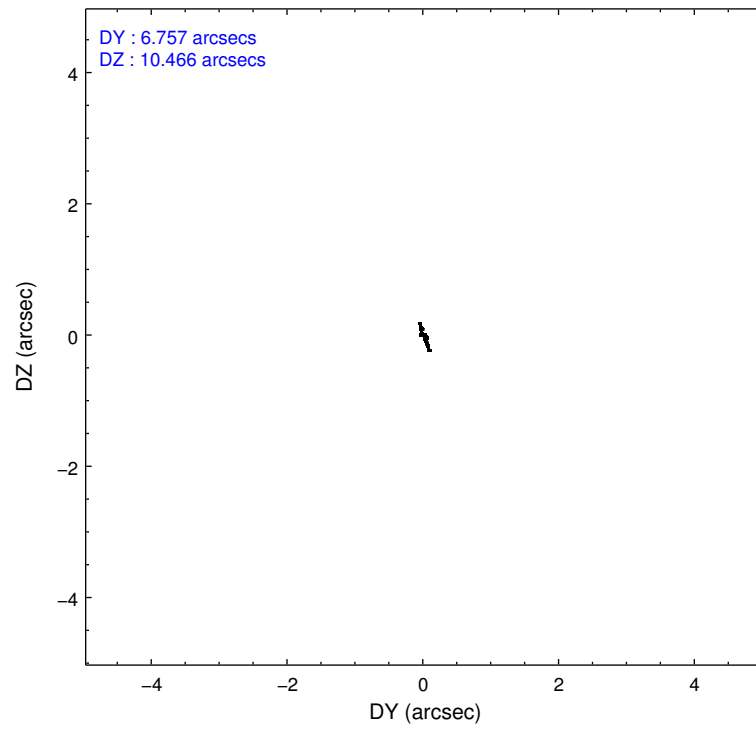
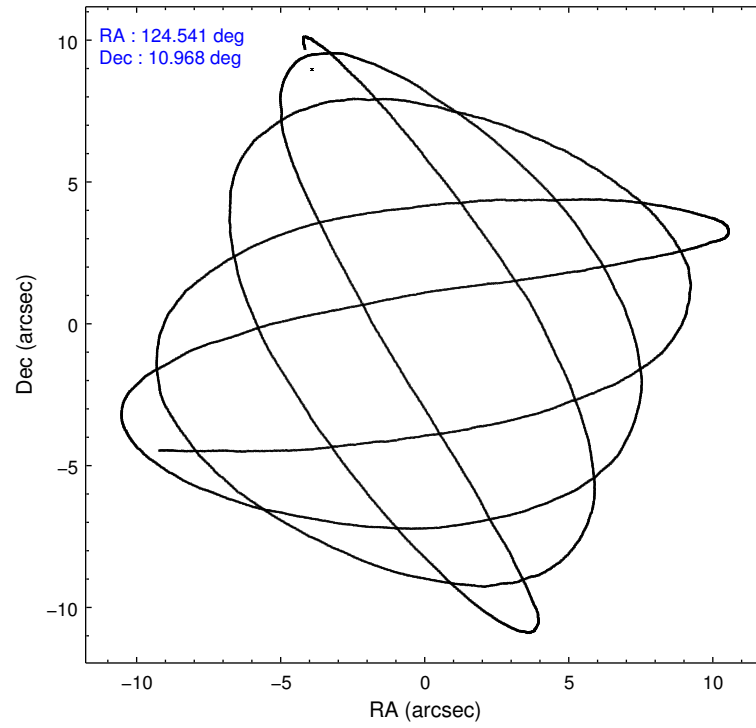
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 16232 | 14270 | 4966 | 14968 | 4295 | 17327 |
| rejected events | 15514 | 13680 | 986 | 13941 | 599 | 13179 |
| rejected % | 95% | 95% | 19% | 93% | 13% | 76% |

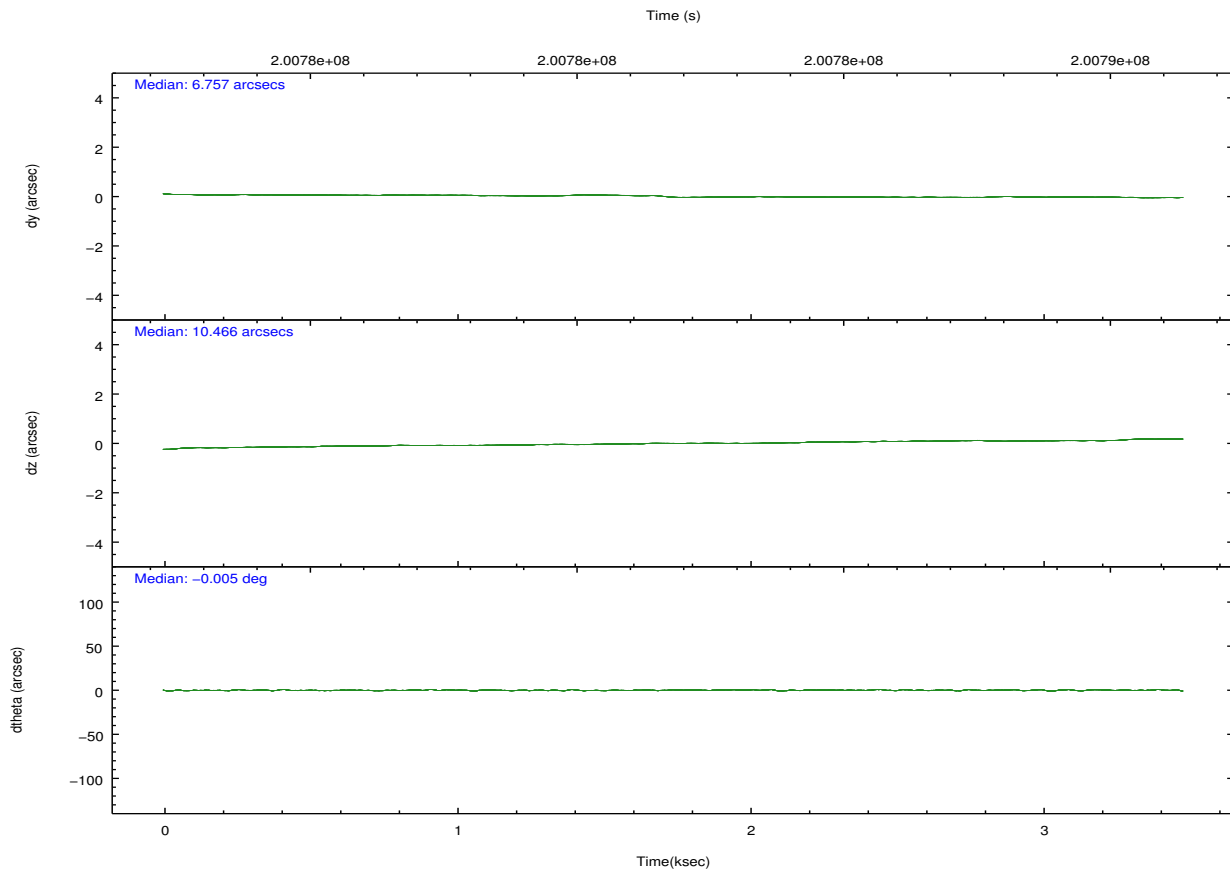
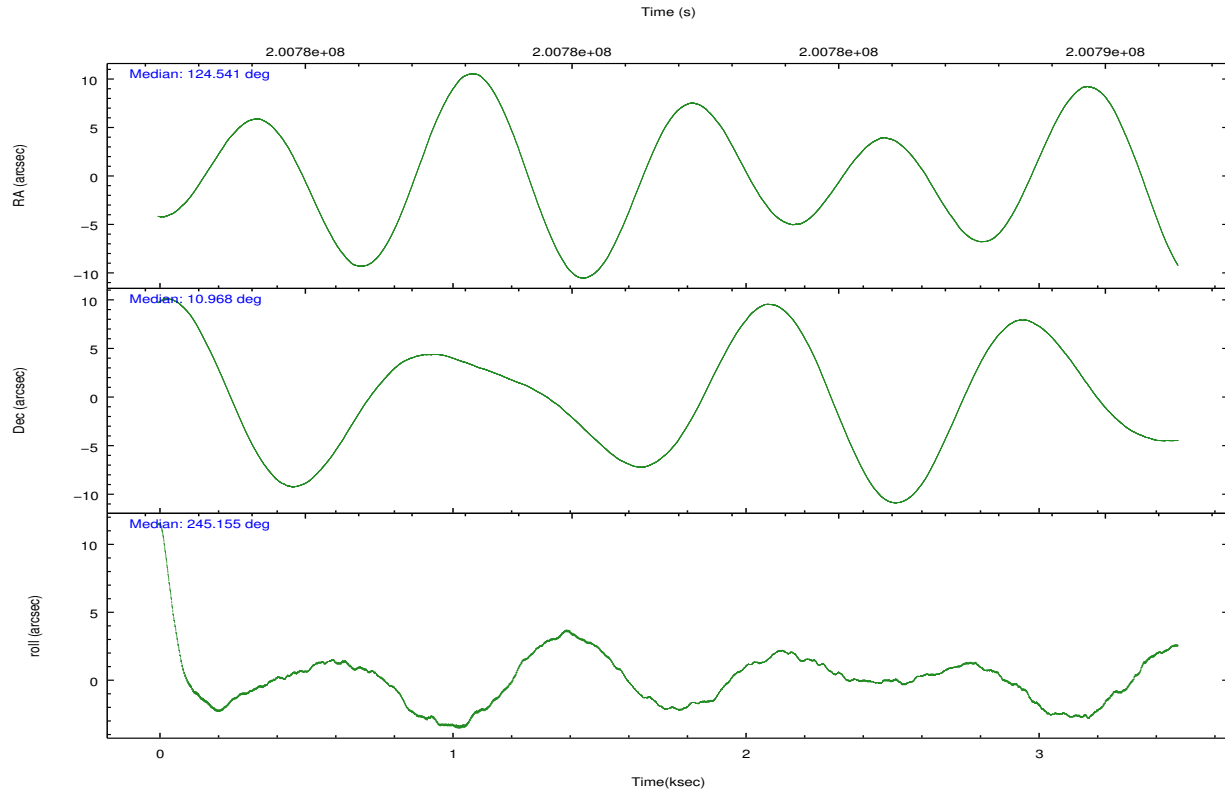
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 414 | 350 | 2261 | 732 | 1773 | 1322 |
| | 2% | 2% | 45% | 4% | 41% | 7% |
| grade 1 events | 8 | 3 | 57 | 6 | 8 | 12 |
| | 0% | 0% | 1% | 0% | 0% | 0% |
| grade 2 events | 132 | 61 | 1008 | 108 | 972 | 914 |
| | 0% | 0% | 20% | 0% | 22% | 5% |
| grade 3 events | 75 | 95 | 407 | 102 | 410 | 518 |
| | 0% | 0% | 8% | 0% | 9% | 2% |
| grade 4 events | 92 | 72 | 324 | 92 | 417 | 446 |
| | 0% | 0% | 6% | 0% | 9% | 2% |
| grade 5 events | 16 | 13 | 135 | 8 | 68 | 80 |
| | 0% | 0% | 2% | 0% | 1% | 0% |
| grade 6 events | 53 | 51 | 239 | 44 | 305 | 1213 |
| | 0% | 0% | 4% | 0% | 7% | 7% |
| grade 7 events | 15442 | 13625 | 535 | 13876 | 342 | 12822 |
| | 95% | 95% | 10% | 92% | 7% | 74% |

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 | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 124.537891 | 124.5408171446395 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 10.994799 | 10.96773593266053 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 245.001614 | 245.1576673595756 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 200361664.184000 | 200361664.184000 | | | |
| [s] Window stop time (MET) | 201484864.184000 | 201484864.184000 | | | |
| [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) | 200782798.184000 | 200782422.72624 | | | |
| Observation start date | 2004-05-12T20:58:54 | 2004-05-12T20:53:42 | | | |
| [s] Observation end time (MET) | 200786098.184000 | 200786830.73893 | | | |
| Observation end date | 2004-05-12T21:53:54 | 2004-05-12T22:07:10 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



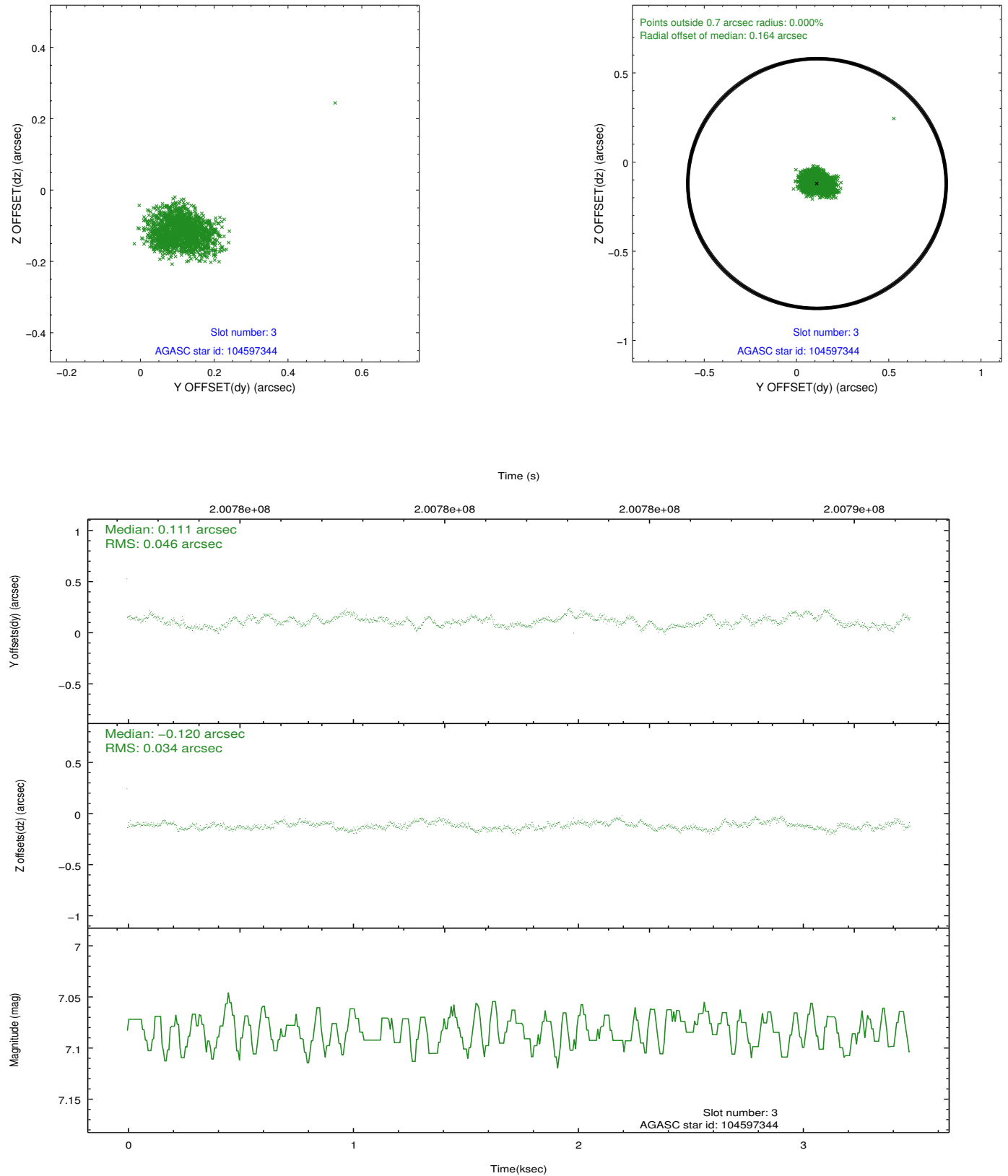


Slot Statistics

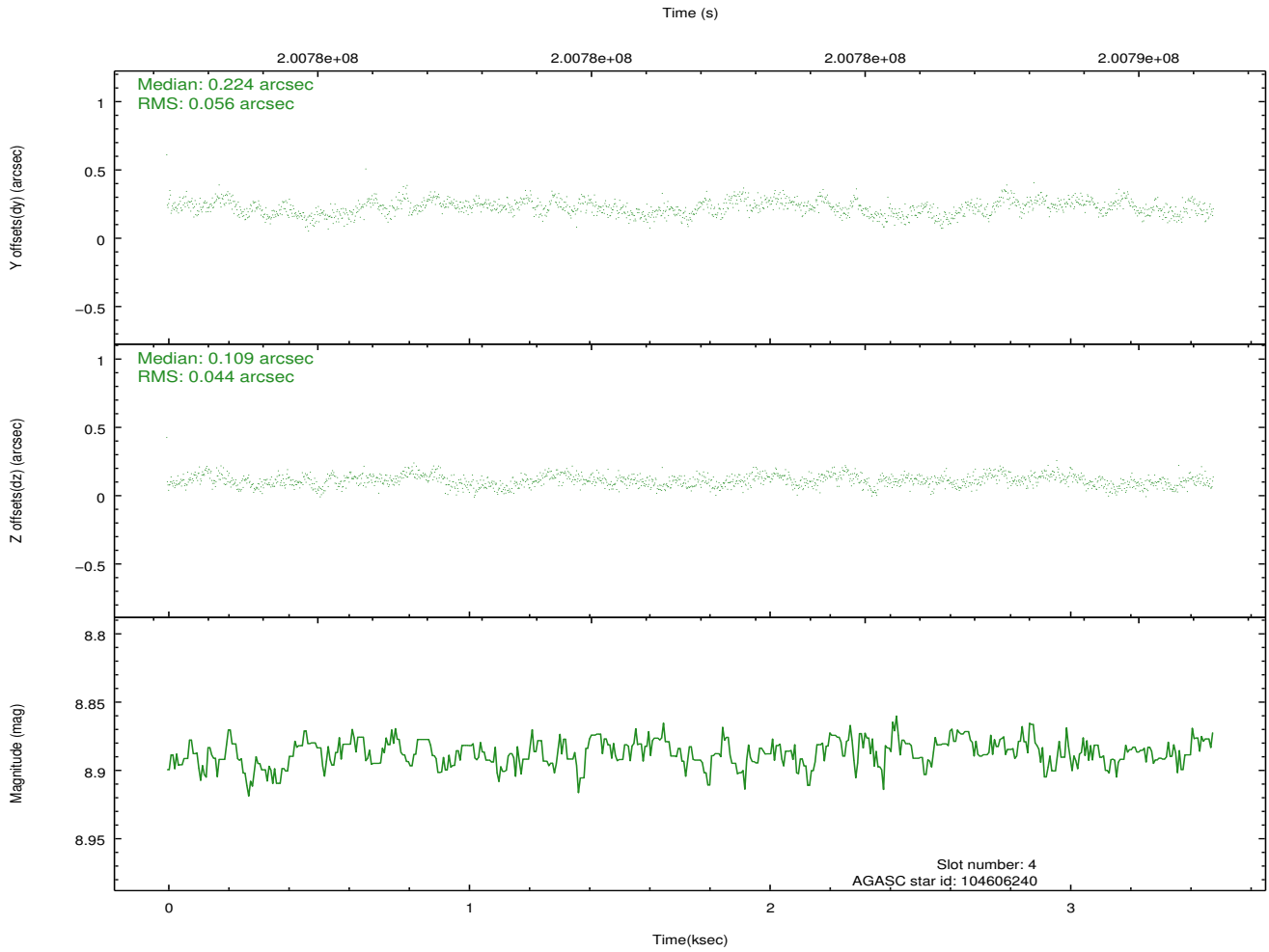
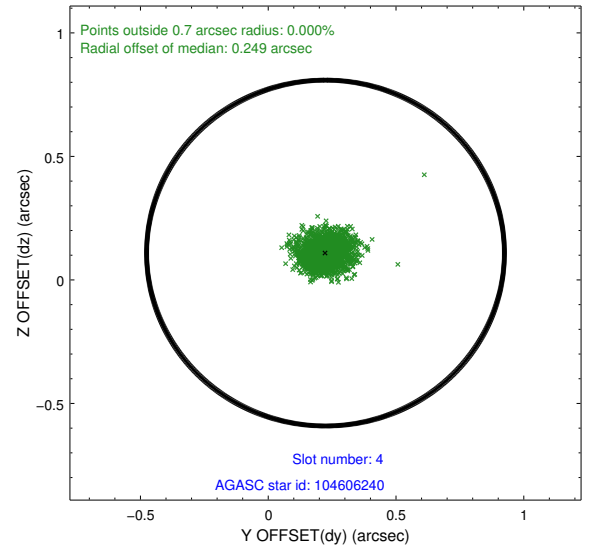
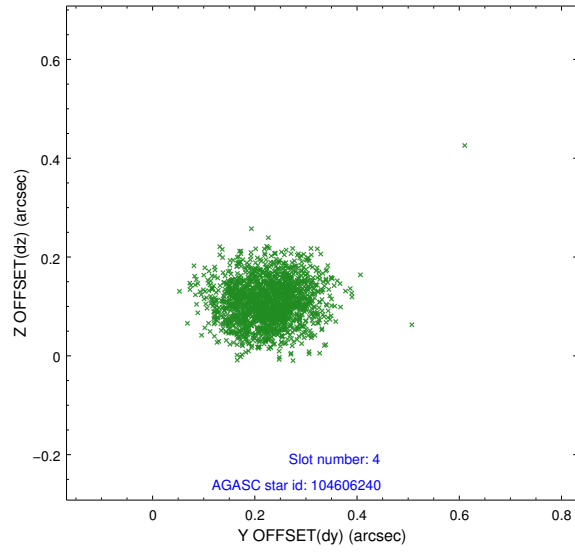
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 849 | -0.057 | -0.009 | 0.006 | 0.010 | 0.000000 | 0.000000 | -759.54 | -1731.74 |
| 1 | FID | ACIS-S-4 | 7.20 | 849 | 0.074 | 0.030 | 0.005 | 0.010 | 0.000000 | 0.000000 | 2153.01 | 174.95 |
| 2 | FID | ACIS-S-5 | 7.23 | 850 | -0.048 | -0.012 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1810.08 | 170.58 |
| 3 | GUIDE | 104597344 | 7.08 | 1699 | 0.111 | -0.120 | 0.060 | 0.094 | 124.136828 | 11.043606 | 439.49 | -1358.93 |
| 4 | GUIDE | 104606240 | 8.89 | 1698 | 0.224 | 0.109 | 0.074 | 0.120 | 124.221640 | 10.540343 | 1956.45 | -323.76 |
| 5 | GUIDE | 104729968 | 9.26 | 1699 | 0.115 | 0.146 | 0.145 | 0.207 | 124.567030 | 10.276646 | 2301.31 | 1186.38 |
| 6 | GUIDE | 105255296 | 8.53 | 1699 | -0.141 | -0.159 | 0.059 | 0.096 | 124.534672 | 11.656846 | -2153.36 | -1016.93 |
| 7 | GUIDE | 105131768 | 5.94 | 1698 | -0.309 | 0.023 | 0.053 | 0.079 | 124.140938 | 11.726243 | -1797.04 | -2381.91 |

2.4 Star Slots

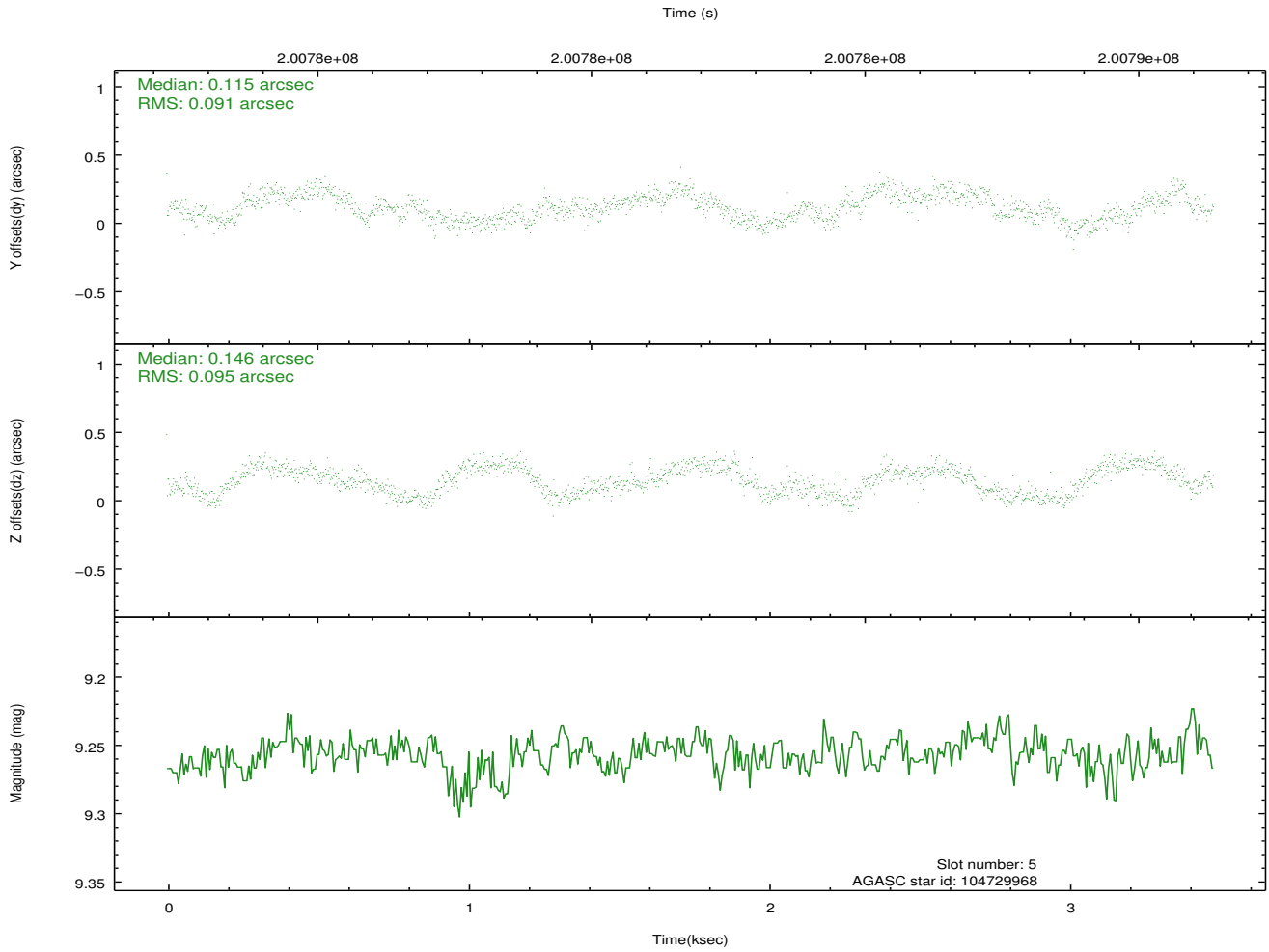
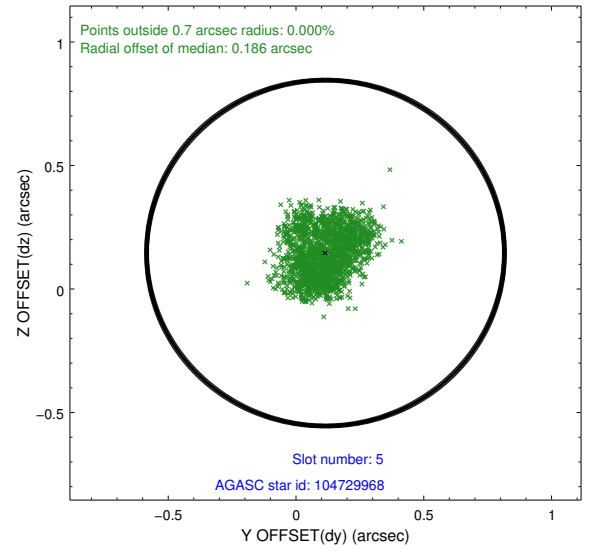
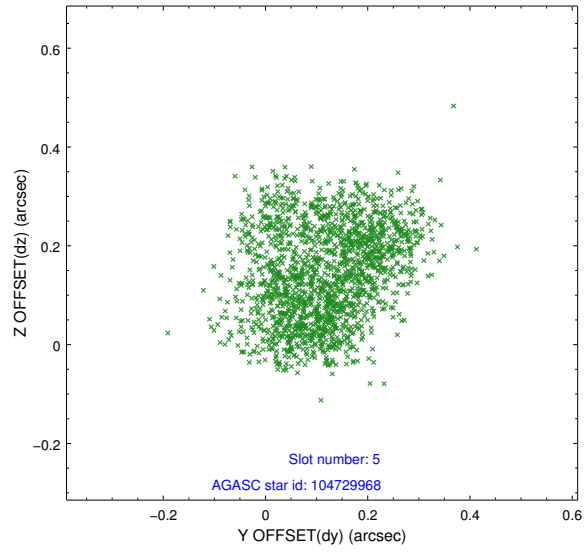
2.4.1 Slot 3



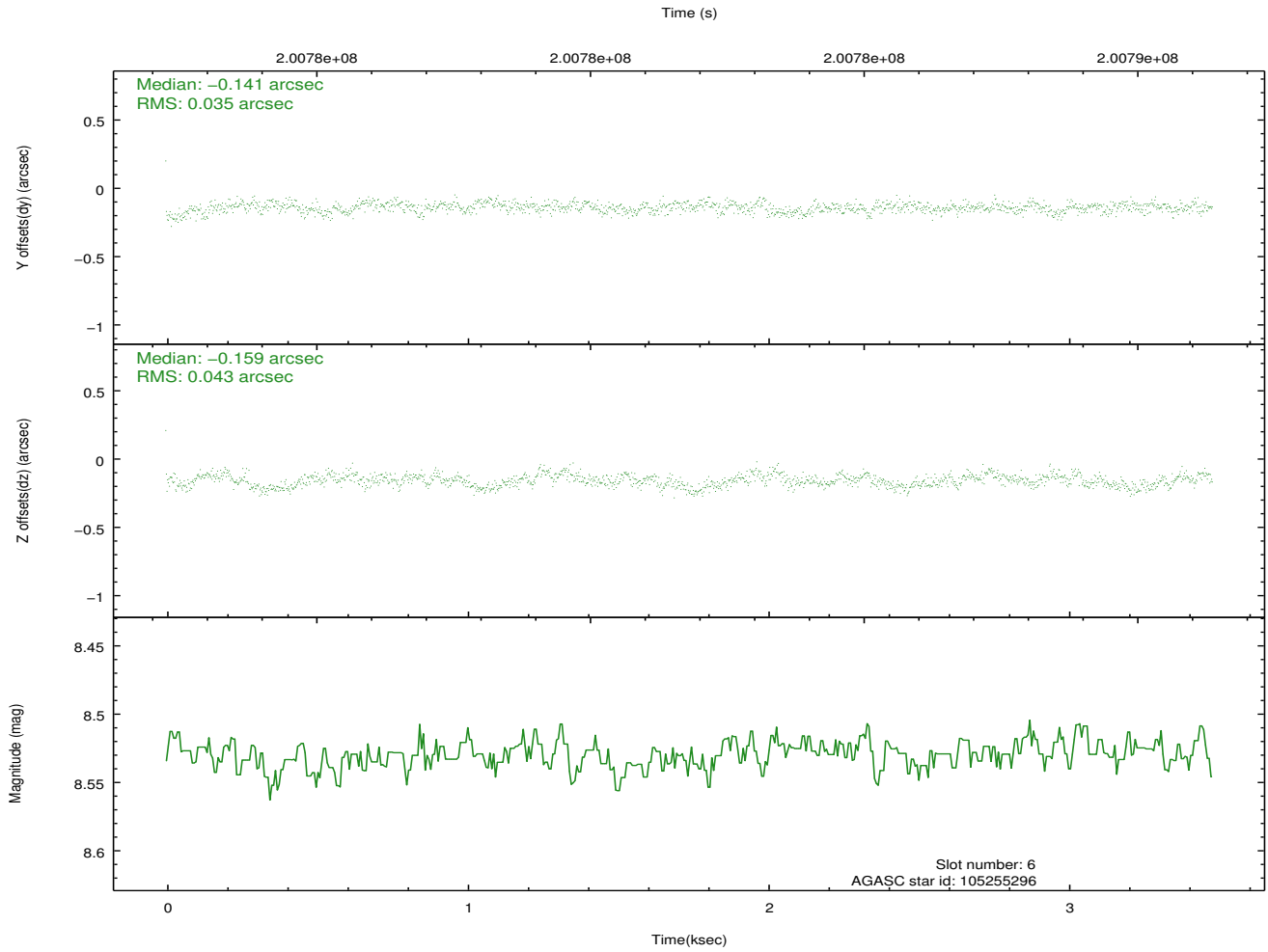
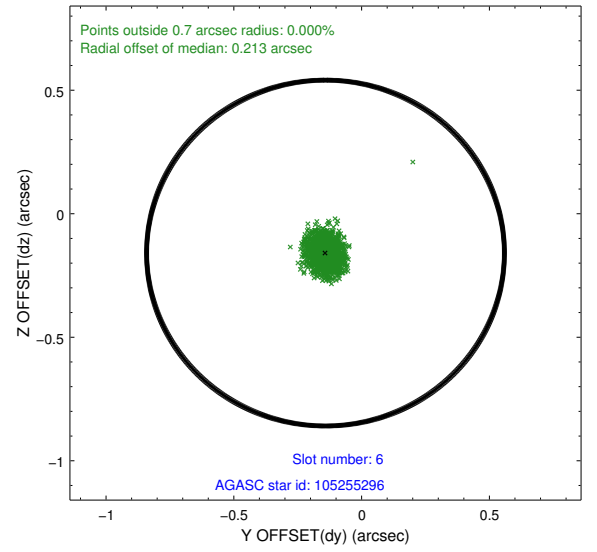
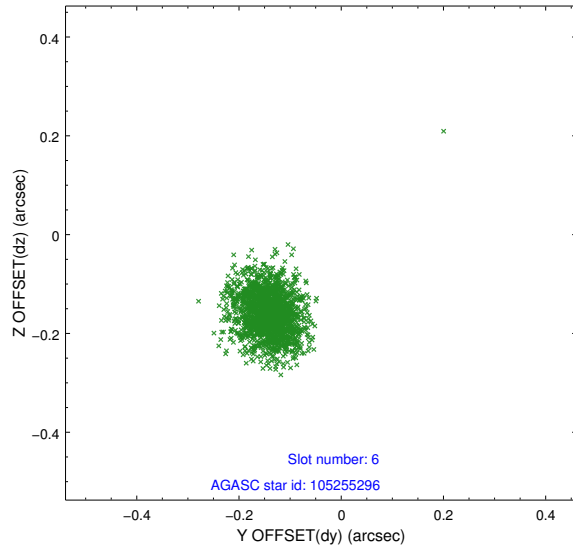
2.4.2 Slot 4



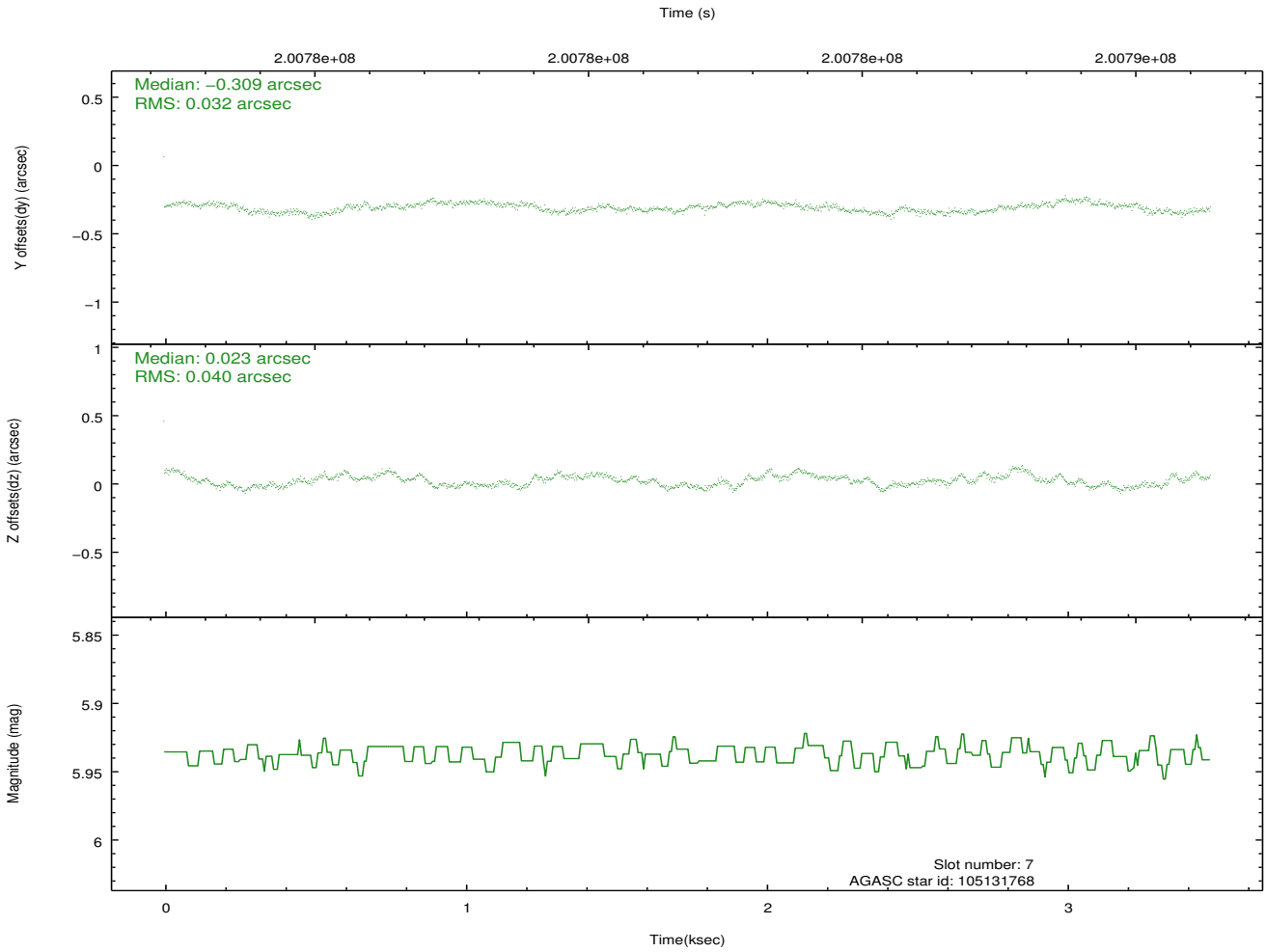
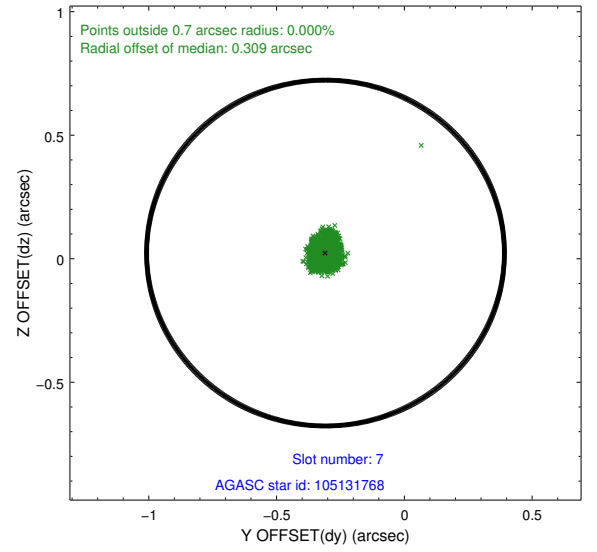
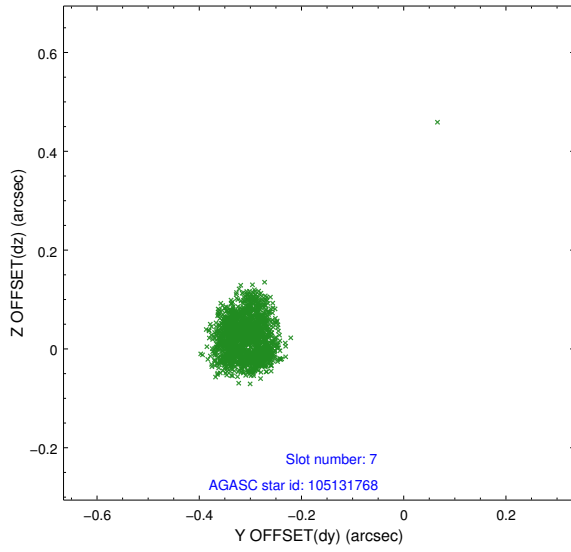
2.4.3 Slot 5



2.4.4 Slot 6

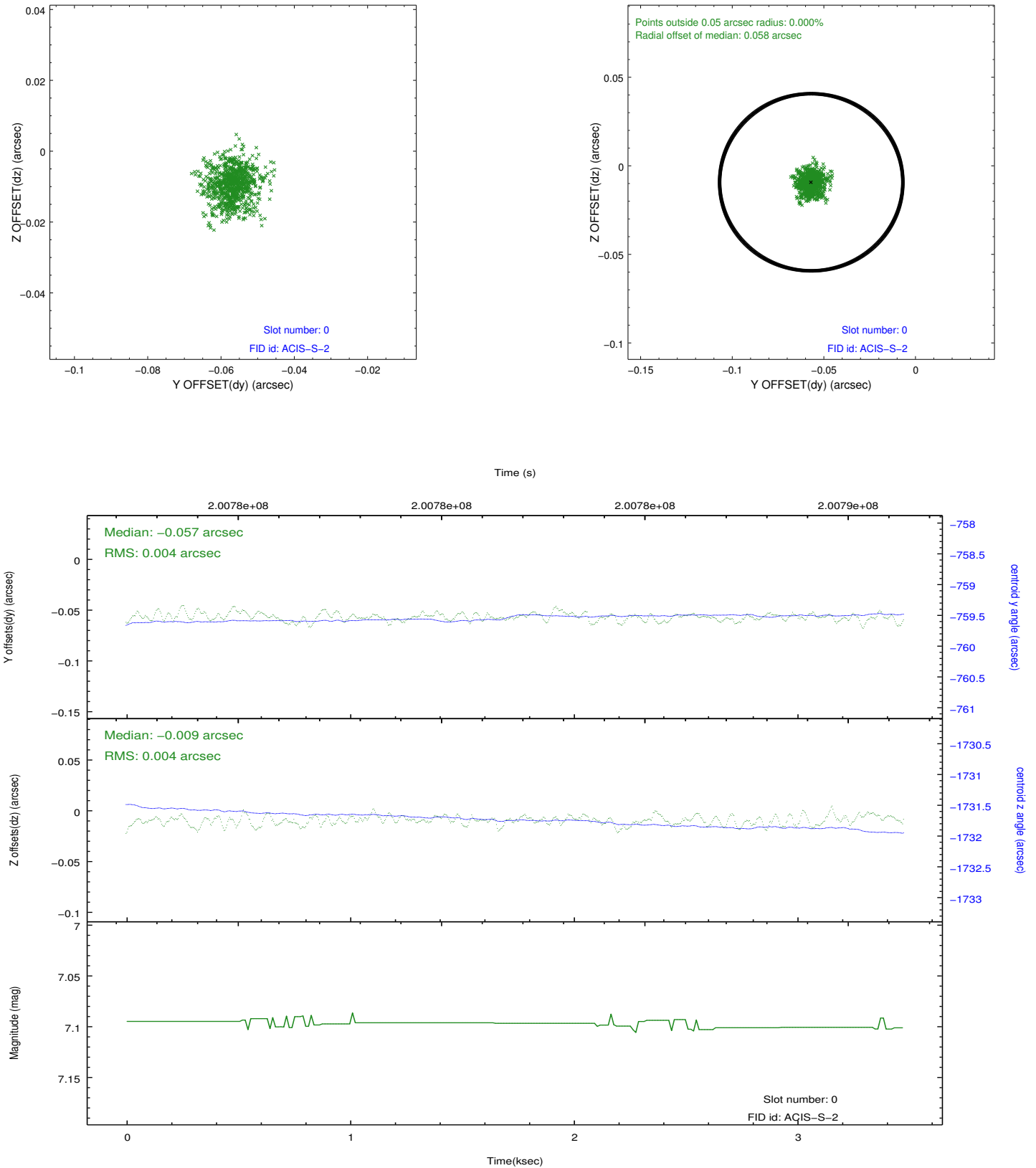


2.4.5 Slot 7

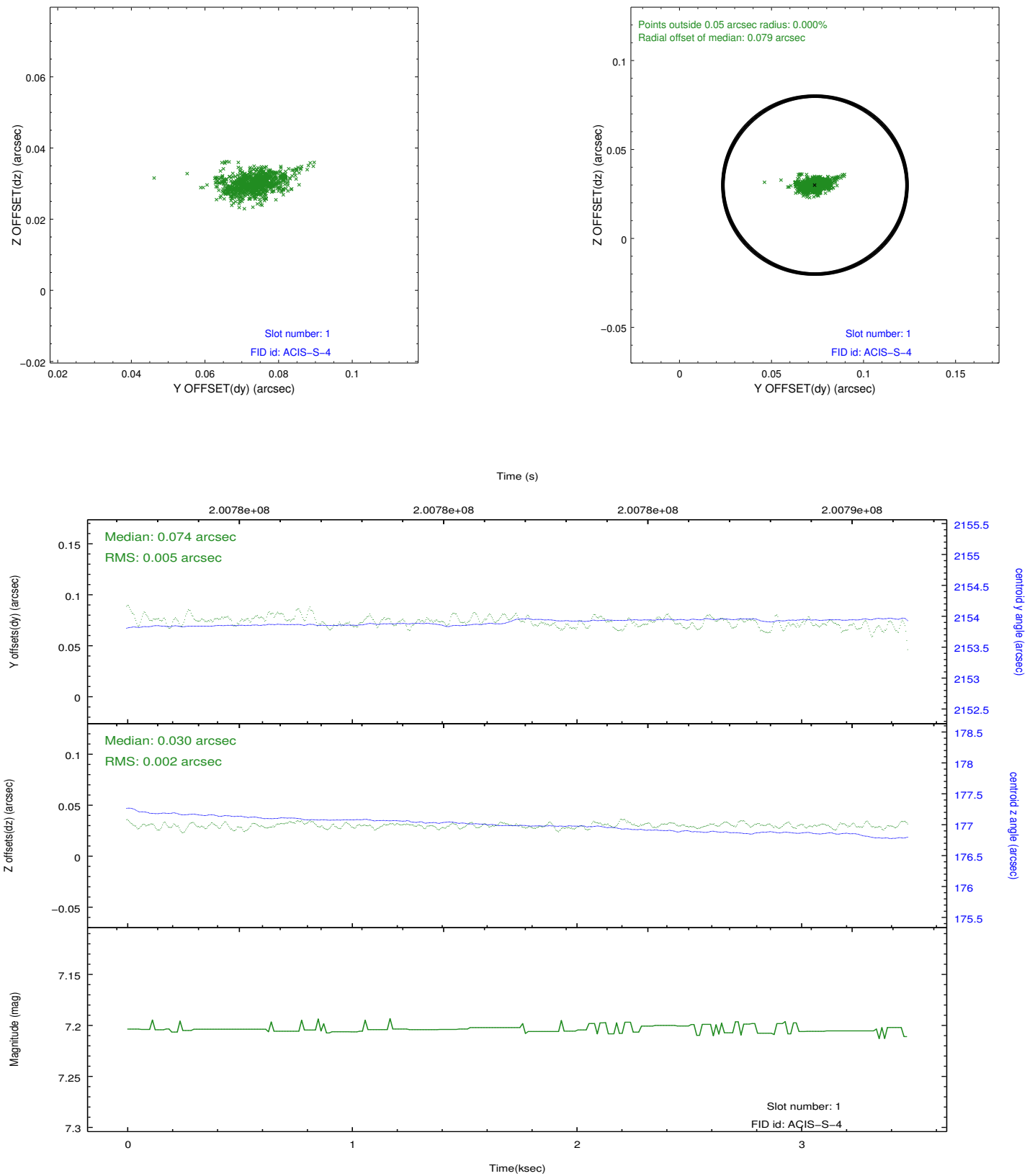


2.5 FID Slots

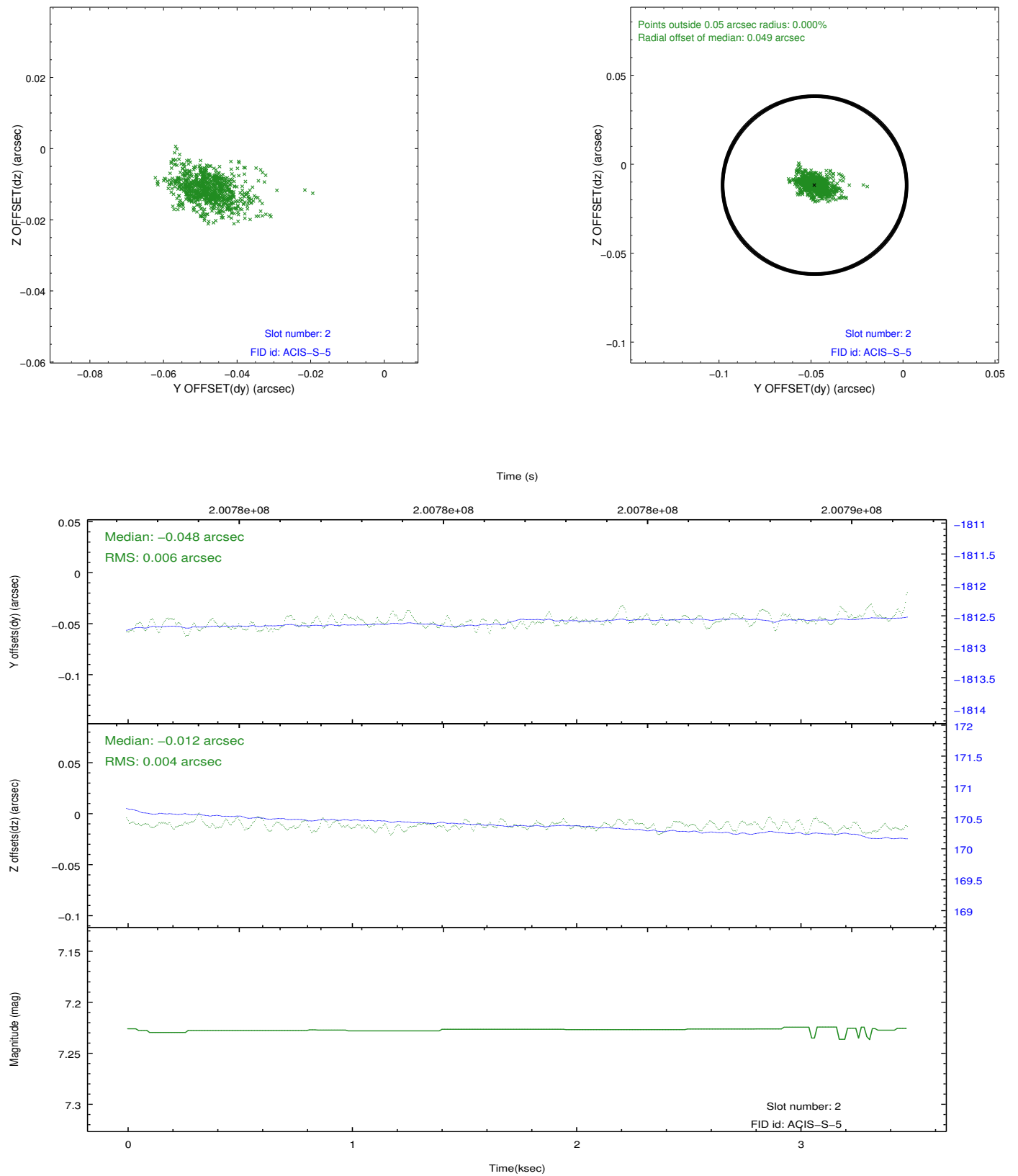
2.5.1 Slot 0



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) | 2012.12.17 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 3.471 |

A.2 Comments

Window constraint met. Roll preference met.

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This is a moving target. Users will need to run sso_freeze or similar software to position the events in the reference frame of the target.