

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1840 - L2 Version 3
Chandra X-Ray Center

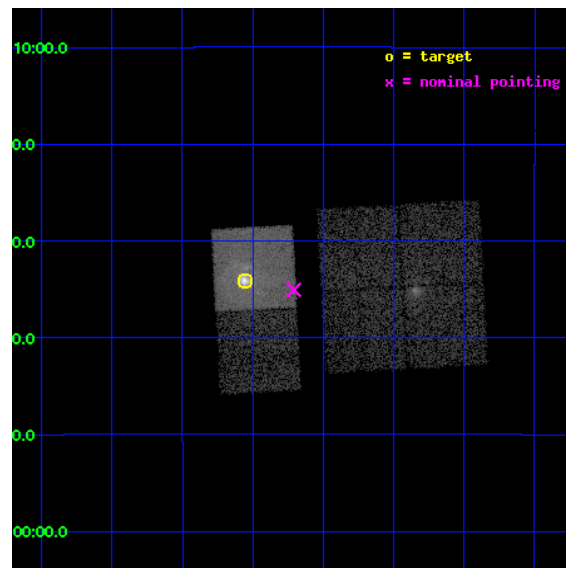
L2 Processing Date : Sep 1 2012

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1 Front

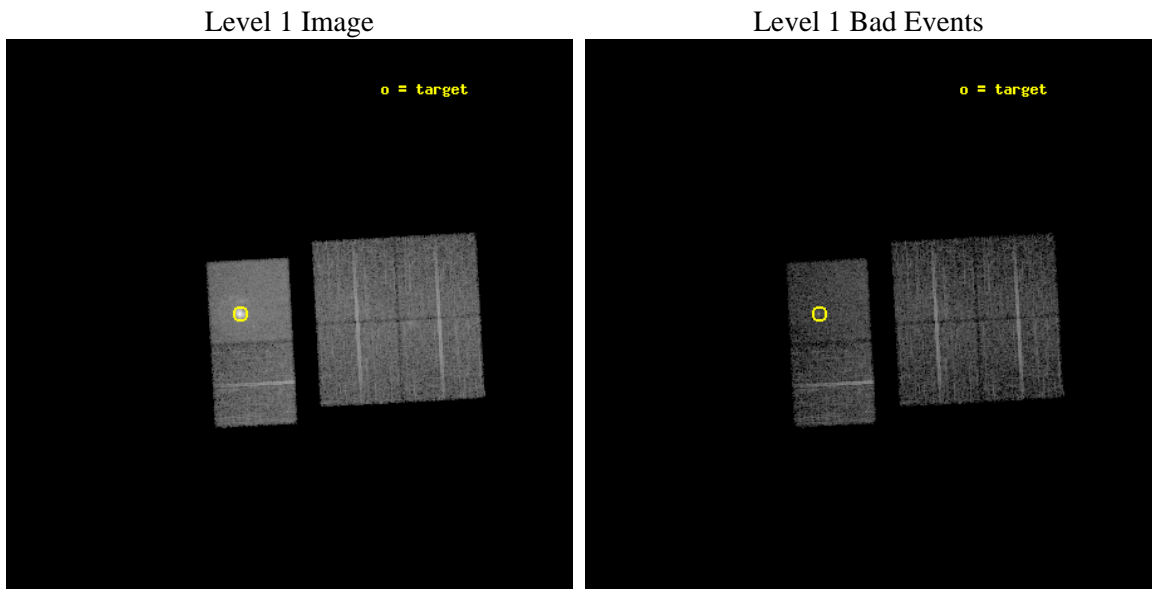
| | | |
|----------|---|---|
| seq_num | 590220 | Sequence number |
| obs_id | 1840 | Observation id |
| title | HRC RESPONSE TO CONTINUUM SOURCE. | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | G21.5-0.9 [Chip S3, T=120, Offsets=-1,5,-4] | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 278.389583 | Observer's specified target RA [deg] |
| dec_targ | -10.568528 | Observer's specified target Dec [deg] |
| ra_nom | 278.30191911608 | Nominal RA [deg] |
| dec_nom | -10.584453266426 | Nominal Dec [deg] |
| roll_nom | 266.84307648253 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 7756.8000072092 | Sum of GTIs [s] |
| livetime | 7658.5787349337 | Livetime [s] |
| ontime0 | 7756.8000072092 | Sum of GTIs [s] |
| ontime1 | 7756.8000072092 | Sum of GTIs [s] |
| ontime2 | 7756.8000072092 | Sum of GTIs [s] |
| ontime3 | 7753.5590469688 | Sum of GTIs [s] |
| ontime6 | 7756.8000072092 | Sum of GTIs [s] |
| ontime7 | 7756.8000072092 | Sum of GTIs [s] |
| l2events | 86902 | Number of level 2 events |



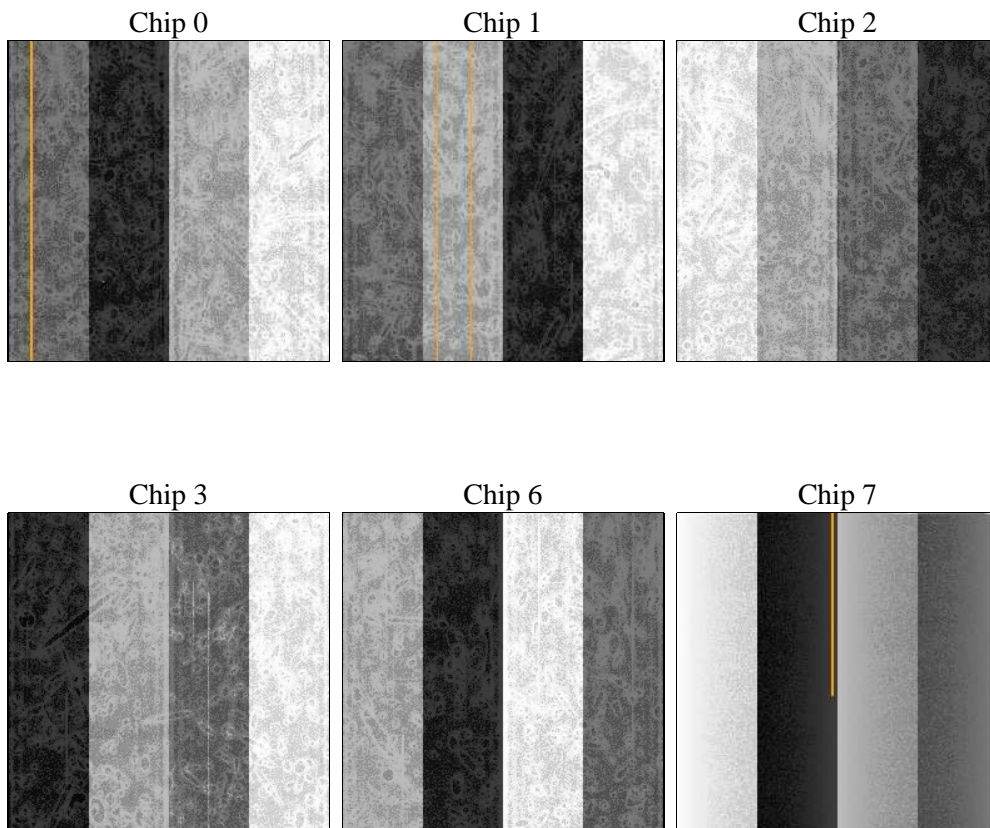
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 8000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 7756.8000072092 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime0 | 7756.8000072092 | Sum of GTIs [s] |
| date | 2012-09-01T03:51:43 | Date and time of file creation | ontime1 | 7756.8000072092 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 7756.8000072092 | Sum of GTIs [s] |
| | | | ontime3 | 7753.5590469688 | Sum of GTIs [s] |
| | | | ontime6 | 7756.8000072092 | Sum of GTIs [s] |
| | | | ontime7 | 7756.8000072092 | Sum of GTIs [s] |
| | | | l1events | 326191 | Number of level 1 events |

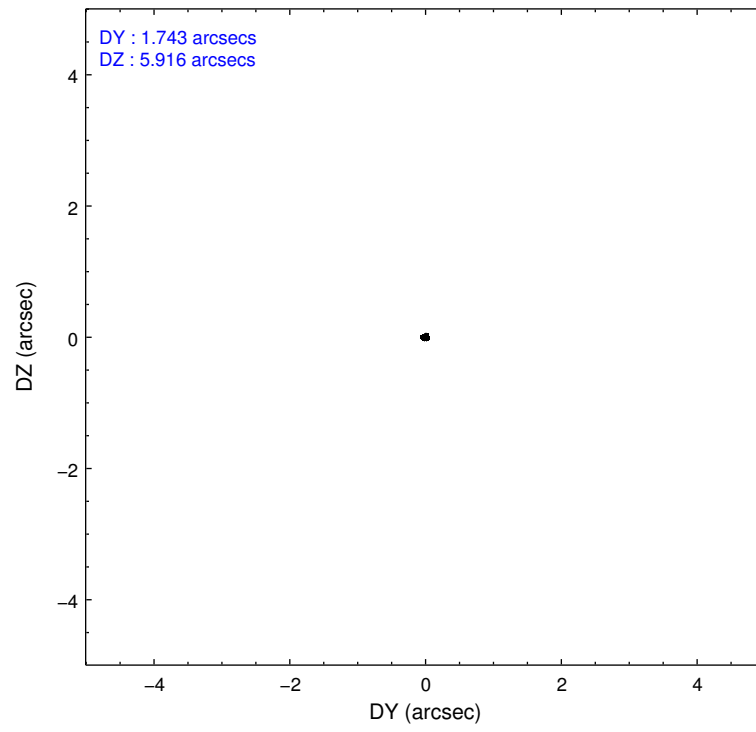
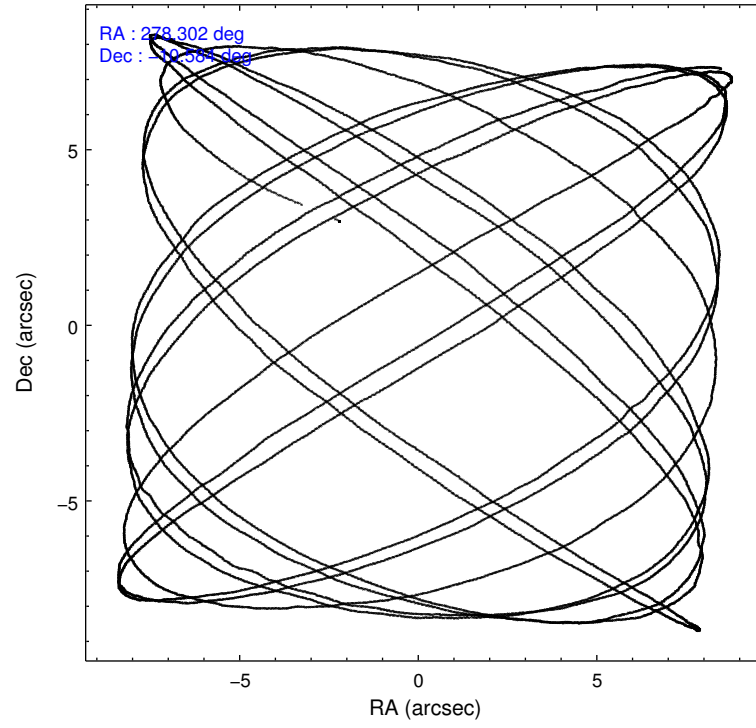
2.1.4 Events

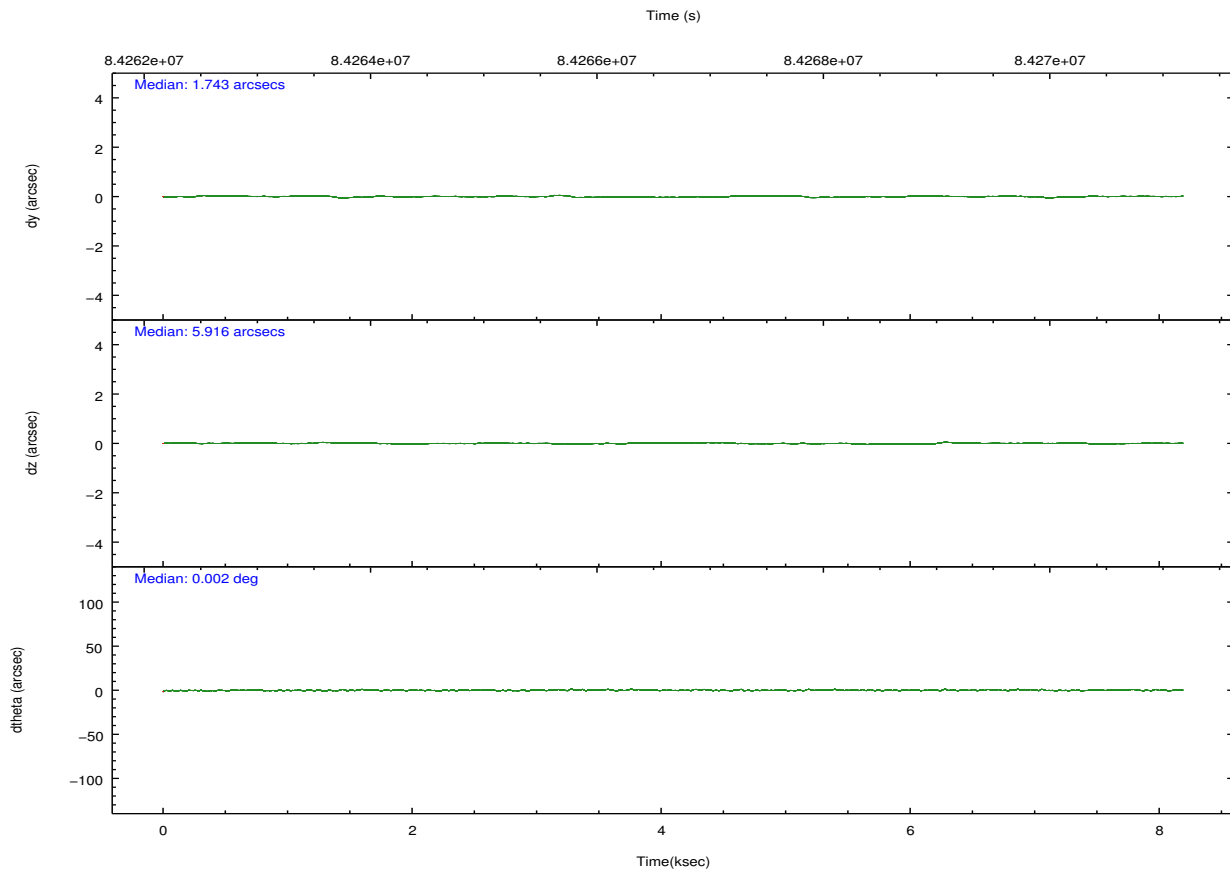
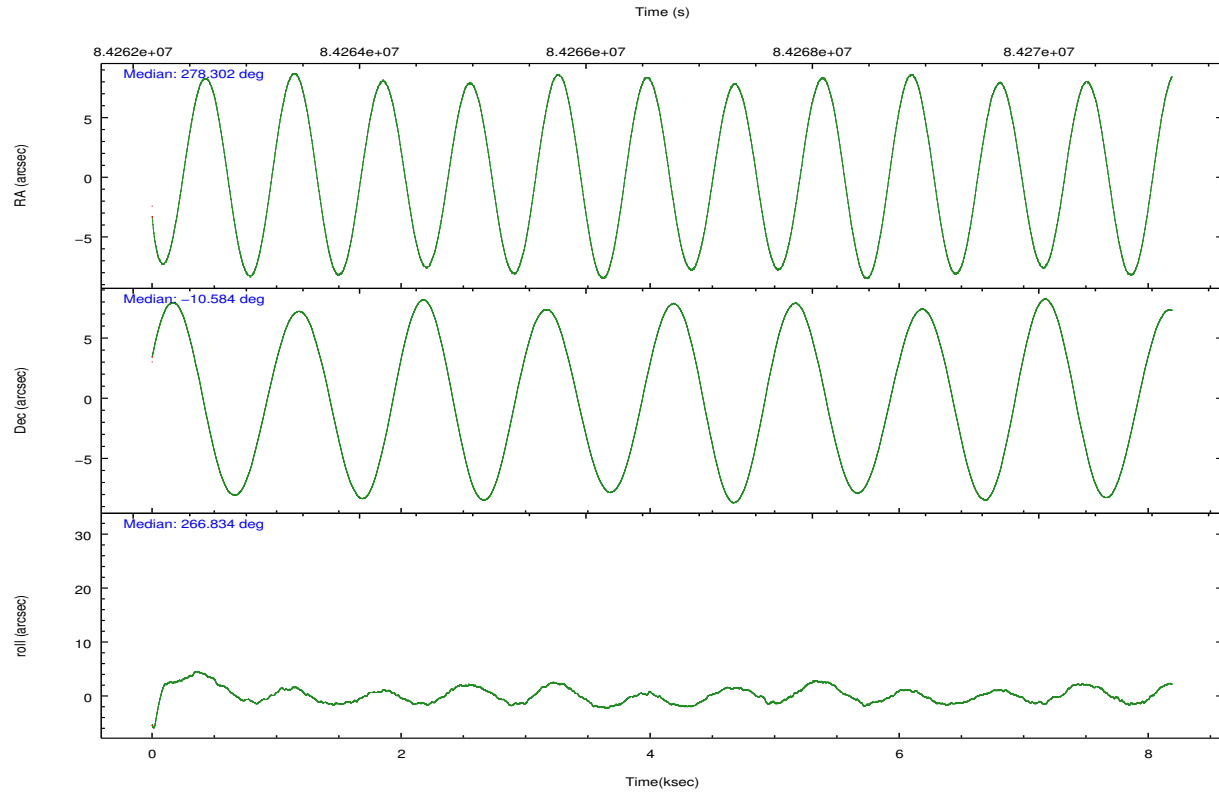
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 46021 | 43094 | 46687 | 47775 | 48379 | 94235 | grade 0 events | 3319 | 3057 | 2790 | 2934 | 3138 | 9582 |
| rejected events | 39178 | 36585 | 40825 | 41709 | 41823 | 34139 | | 7% | 7% | 5% | 6% | 6% | 10% |
| rejected % | 85% | 84% | 87% | 87% | 86% | 36% | grade 1 events | 27 | 19 | 16 | 35 | 29 | 107 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1322 | 1218 | 1166 | 1118 | 1289 | 13221 |
| | | | | | | | | 2% | 2% | 2% | 2% | 2% | 14% |
| | | | | | | | grade 3 events | 627 | 622 | 477 | 542 | 559 | 6153 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 6% |
| | | | | | | | grade 4 events | 563 | 628 | 539 | 530 | 533 | 6058 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 6% |
| | | | | | | | grade 5 events | 1634 | 1656 | 1575 | 1642 | 1885 | 5878 |
| | | | | | | | | 3% | 3% | 3% | 3% | 3% | 6% |
| | | | | | | | grade 6 events | 1017 | 986 | 893 | 944 | 1040 | 25109 |
| | | | | | | | | 2% | 2% | 1% | 1% | 2% | 26% |
| | | | | | | | grade 7 events | 37512 | 34908 | 39231 | 40030 | 39906 | 28127 |
| | | | | | | | | 81% | 81% | 84% | 83% | 82% | 29% |

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 | 278.289202 | 278.3019191160796 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -10.560158 | -10.58445326642579 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 266.684113 | 266.8430764825345 | [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 | -201.840523 | -201.8467180939352 | | | |
| [mm] SIM translation stage offset | 11.708 | 11.71419551092742 | | | |
| [s] Observation start time (MET) | 84262768.184000 | 84262392.10568 | | | |
| Observation start date | 2000-09-02T06:18:24 | 2000-09-02T06:13:12 | | | |
| [s] Observation end time (MET) | 84270768.184000 | 84270902.16850001 | | | |
| Observation end date | 2000-09-02T08:31:44 | 2000-09-02T08:35:02 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



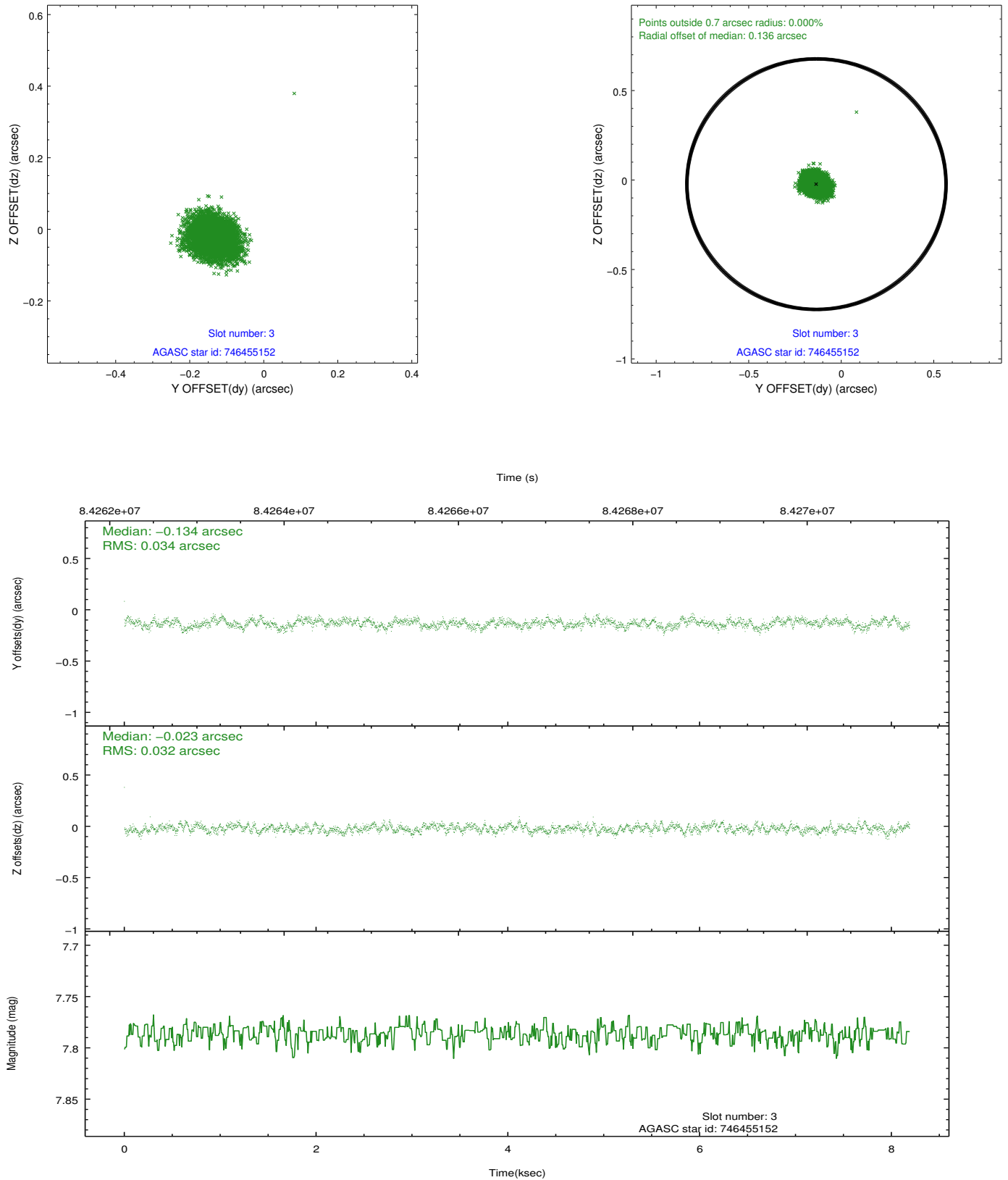


Slot Statistics

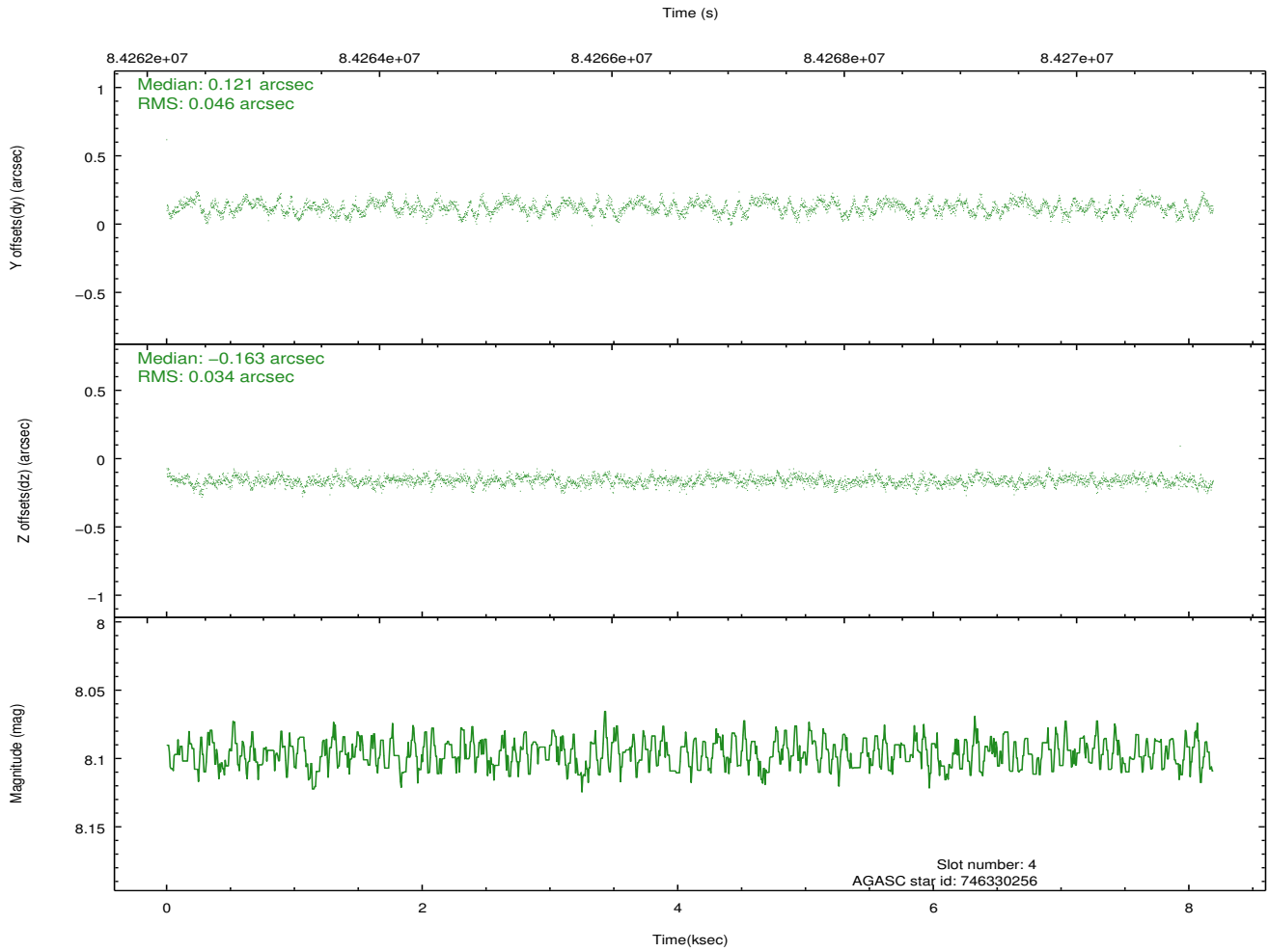
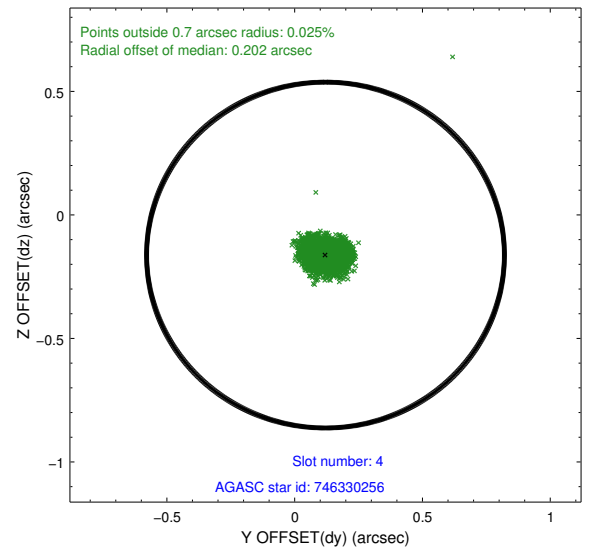
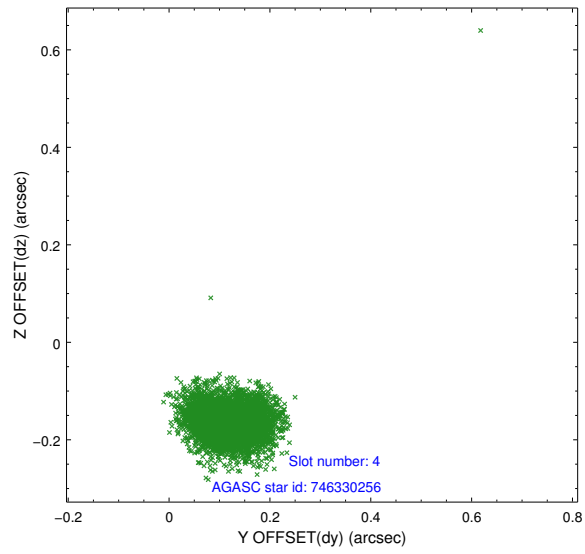
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.15 | 1998 | 0.154 | 0.173 | 0.006 | 0.010 | 0.000000 | 0.000000 | -755.06 | -1485.24 |
| 1 | FID | ACIS-S-4 | 7.23 | 1998 | -0.081 | -0.120 | 0.005 | 0.010 | 0.000000 | 0.000000 | 2157.89 | 422.05 |
| 2 | FID | ACIS-S-5 | 7.22 | 1998 | -0.104 | -0.043 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1807.06 | 417.03 |
| 3 | GUIDE | 746455152 | 7.79 | 3996 | -0.134 | -0.023 | 0.050 | 0.079 | 278.447893 | -9.976732 | -2128.41 | 440.51 |
| 4 | GUIDE | 746330256 | 8.10 | 3996 | 0.121 | -0.163 | 0.061 | 0.094 | 277.634401 | -10.863955 | 1229.19 | -2247.04 |
| 5 | GUIDE | 746462456 | 8.39 | 3993 | 0.017 | 0.132 | 0.055 | 0.090 | 278.652171 | -10.530173 | -180.10 | 1276.51 |
| 6 | GUIDE | 746460272 | 8.94 | 3996 | -0.020 | 0.082 | 0.080 | 0.128 | 278.847488 | -10.152127 | -1578.53 | 1891.01 |
| 7 | GUIDE | 746461728 | 9.80 | 3992 | 0.011 | -0.031 | 0.123 | 0.194 | 278.986921 | -10.530755 | -245.52 | 2460.40 |

2.4 Star Slots

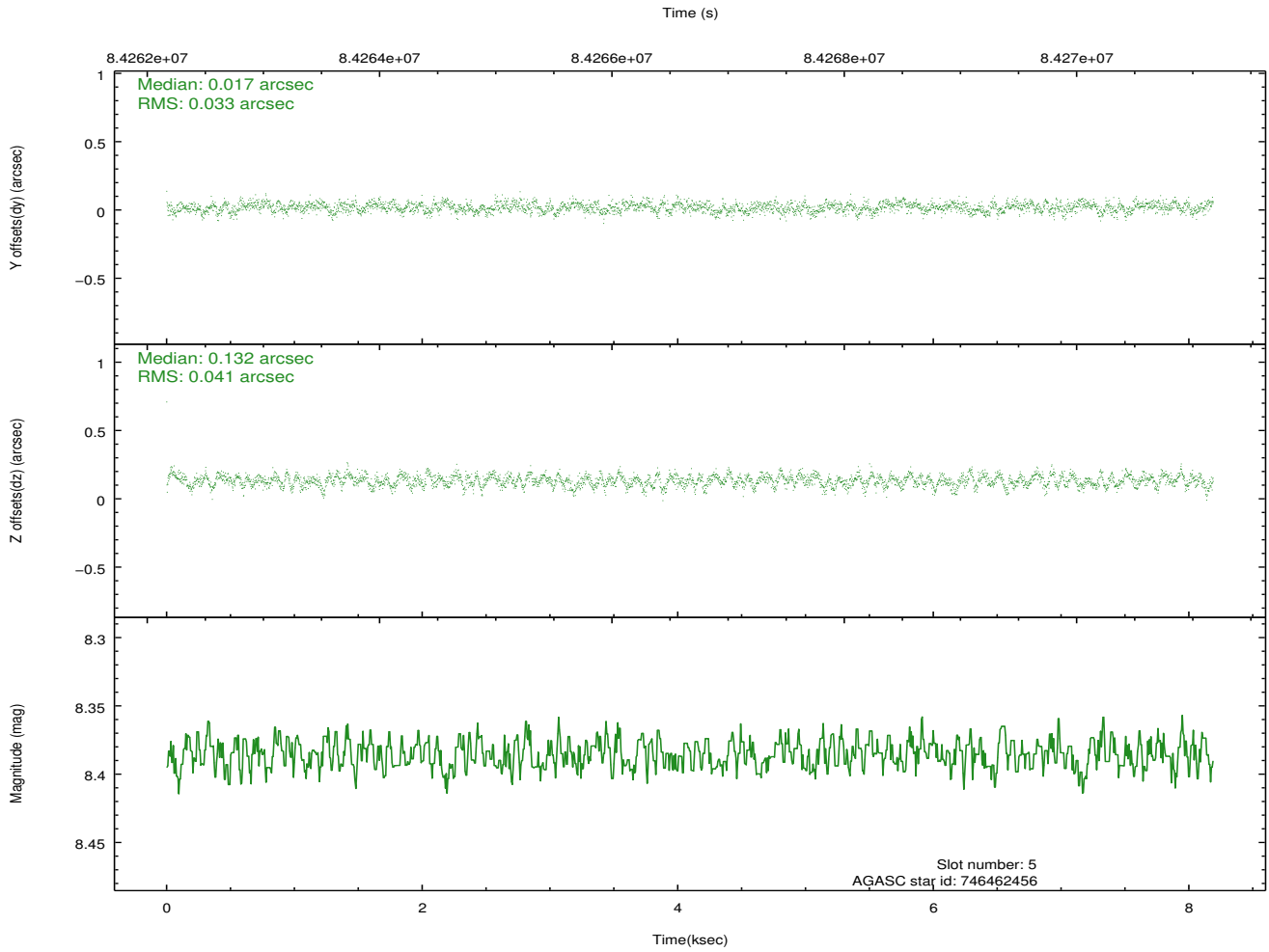
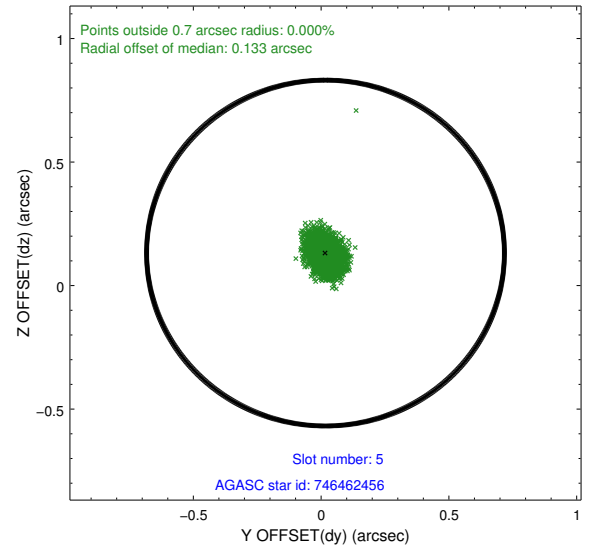
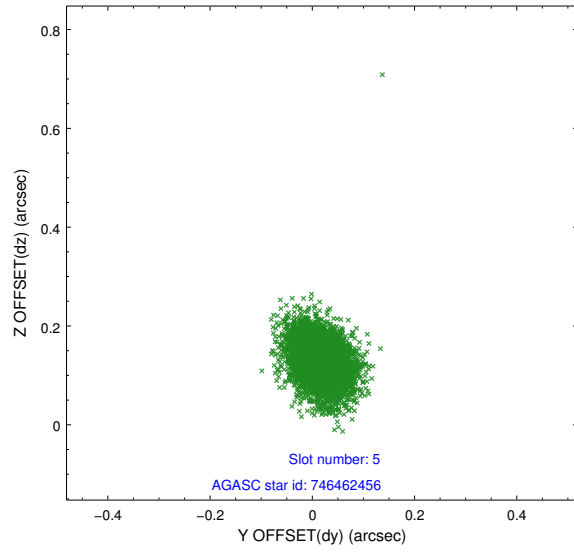
2.4.1 Slot 3



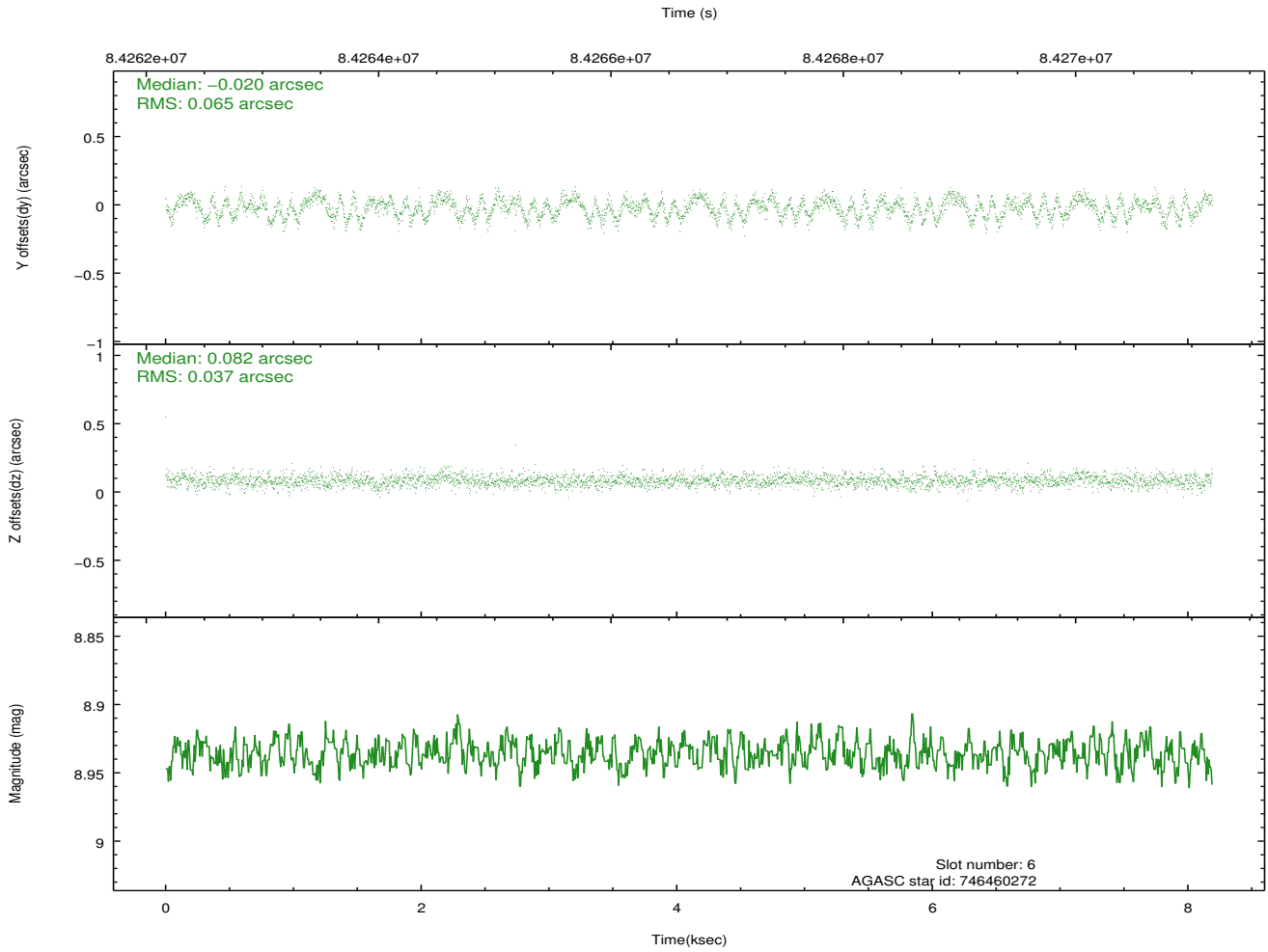
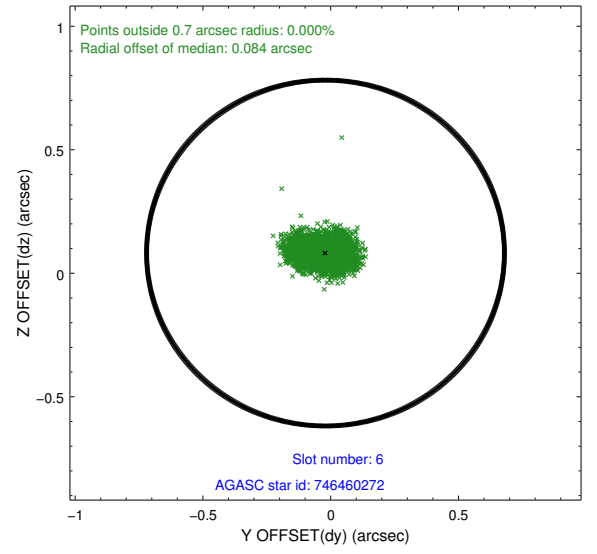
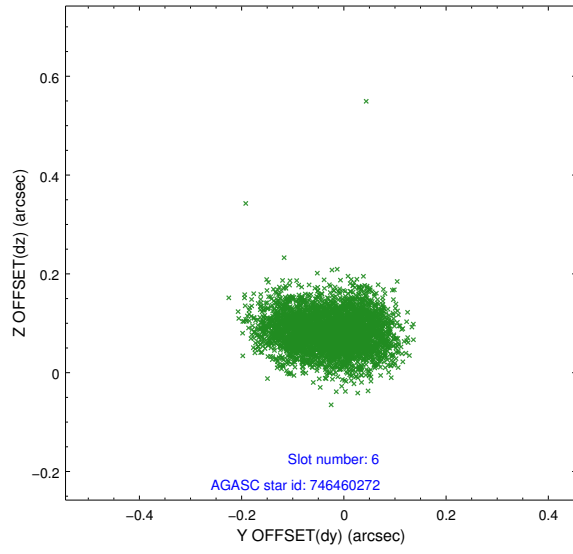
2.4.2 Slot 4



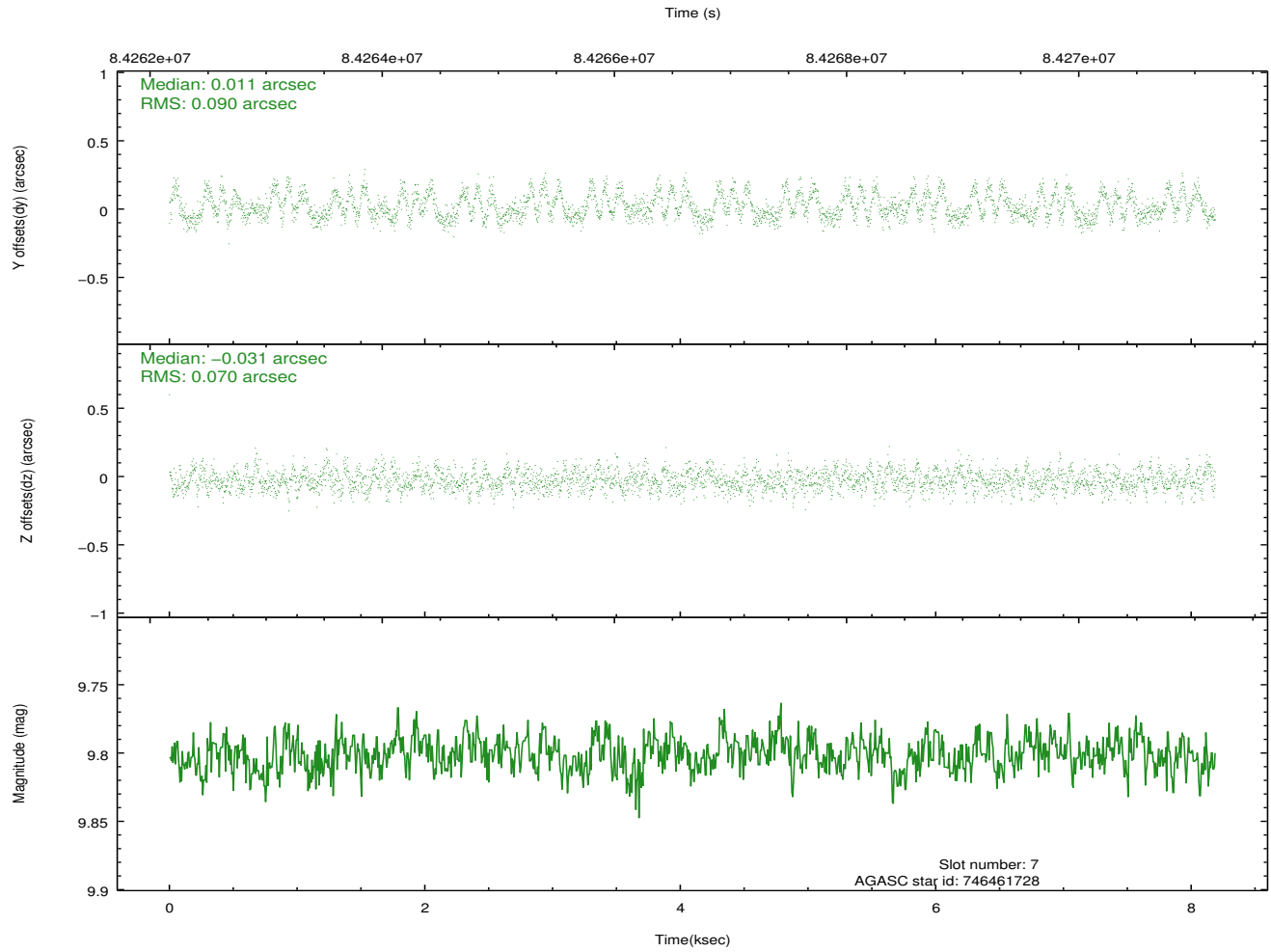
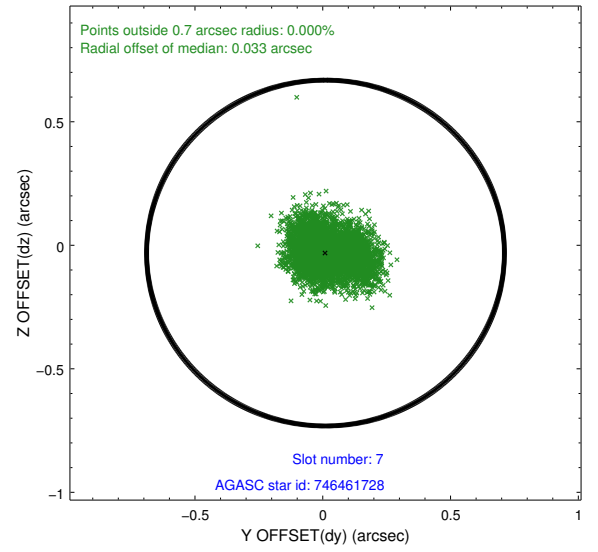
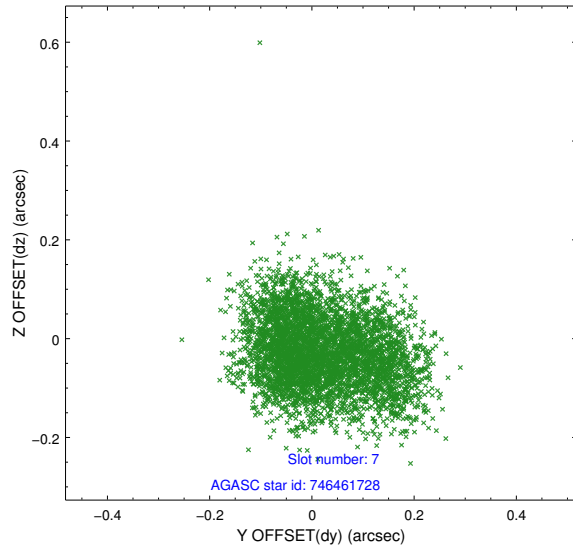
2.4.3 Slot 5



2.4.4 Slot 6

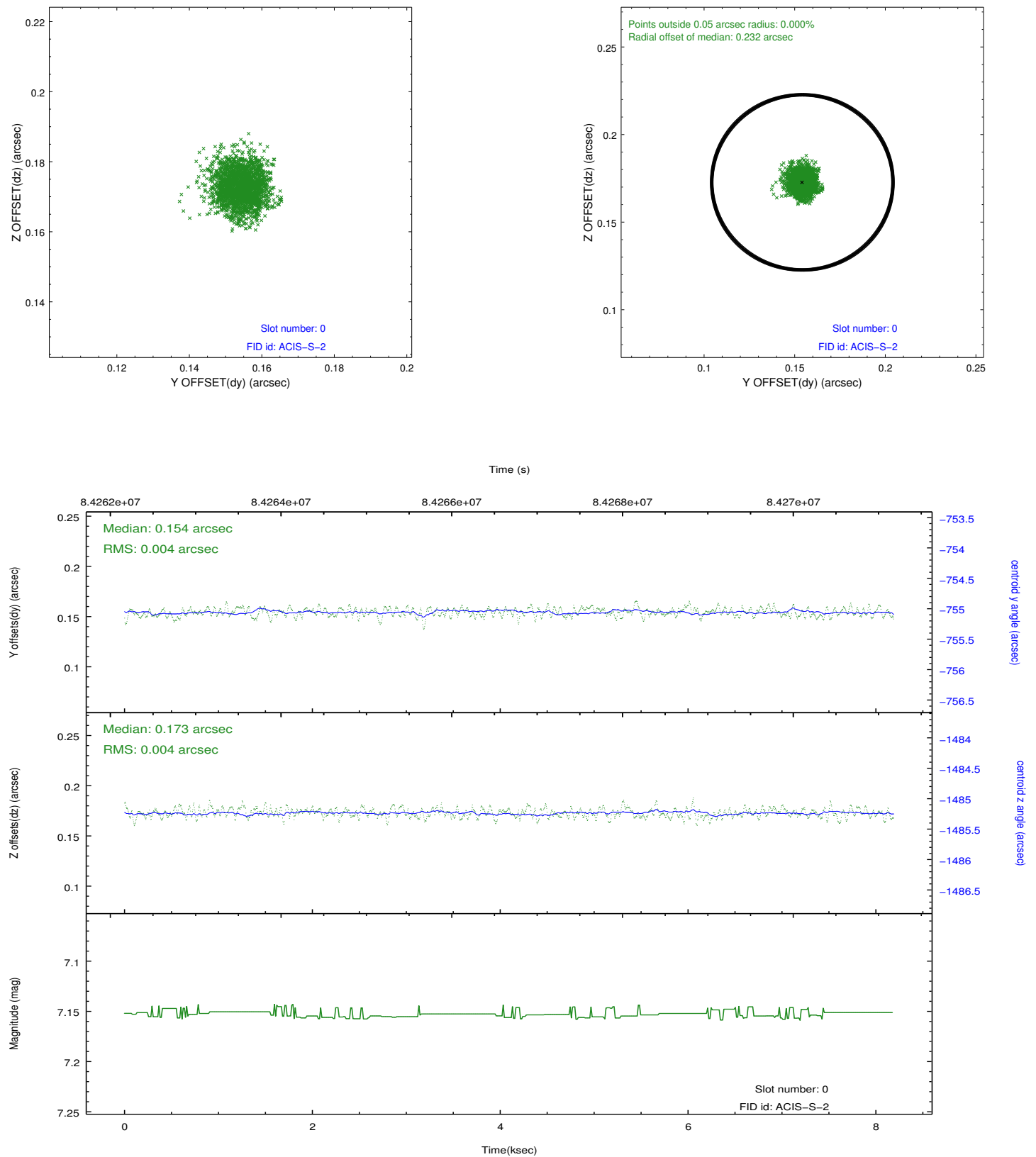


2.4.5 Slot 7

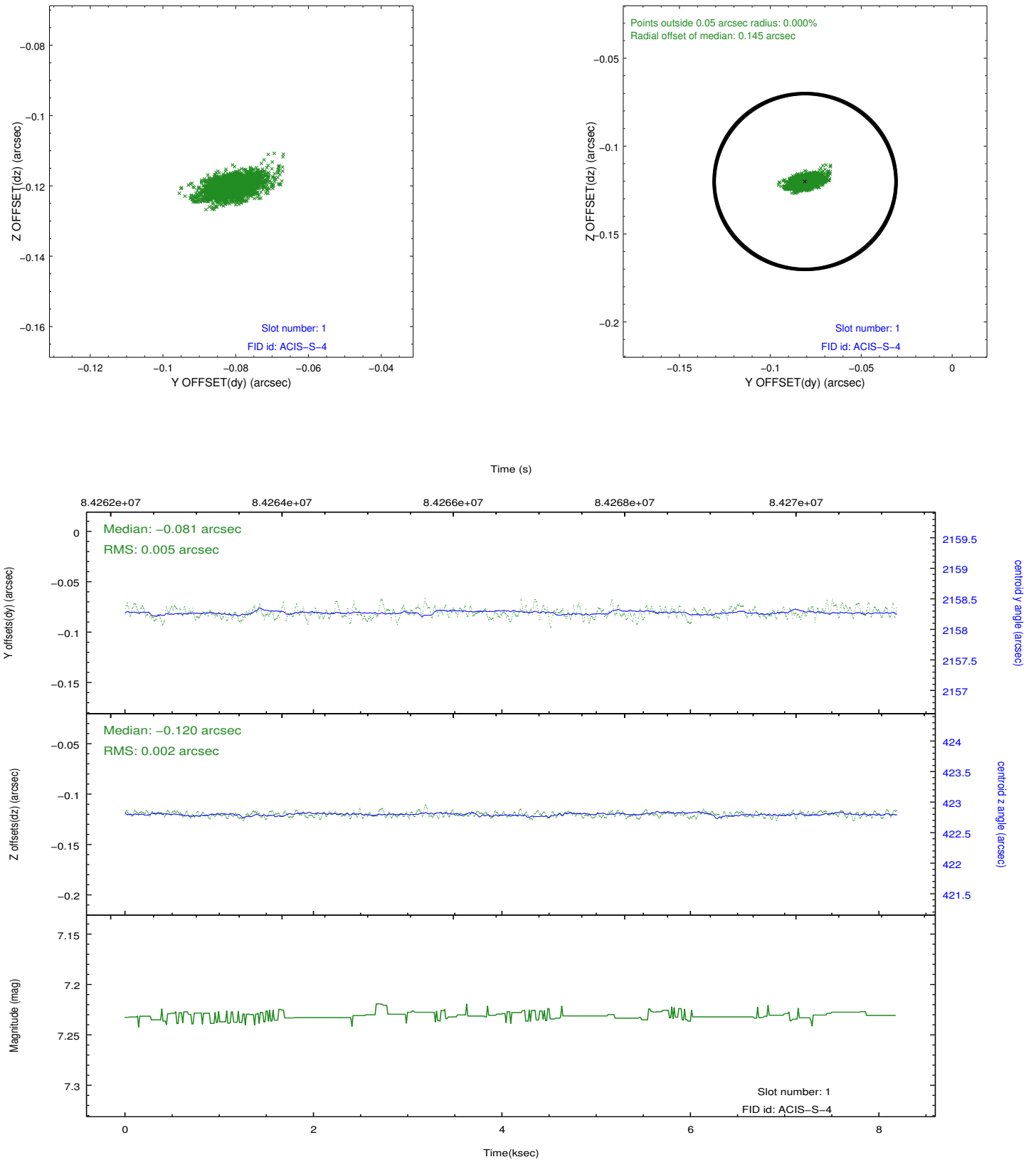


2.5 FID Slots

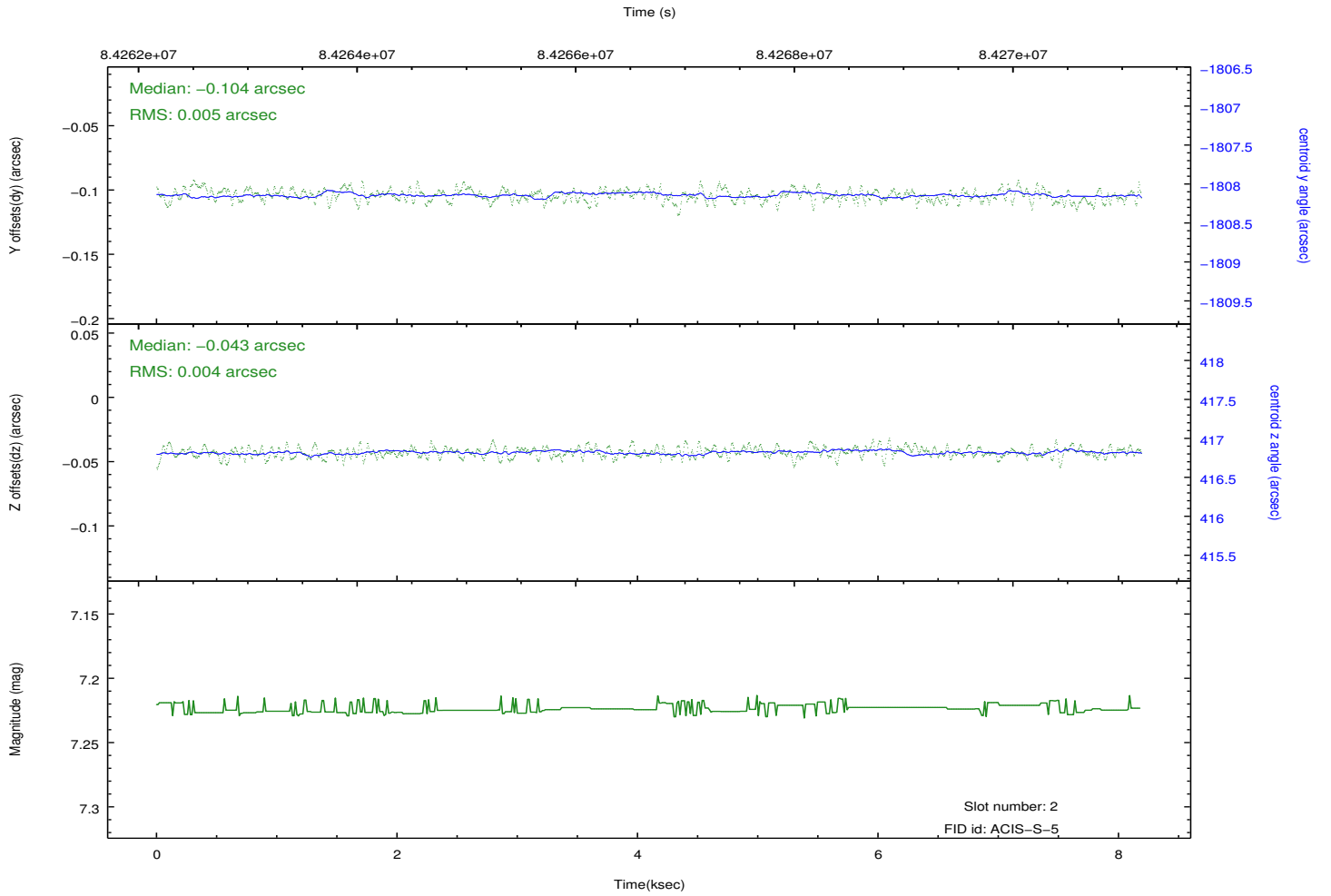
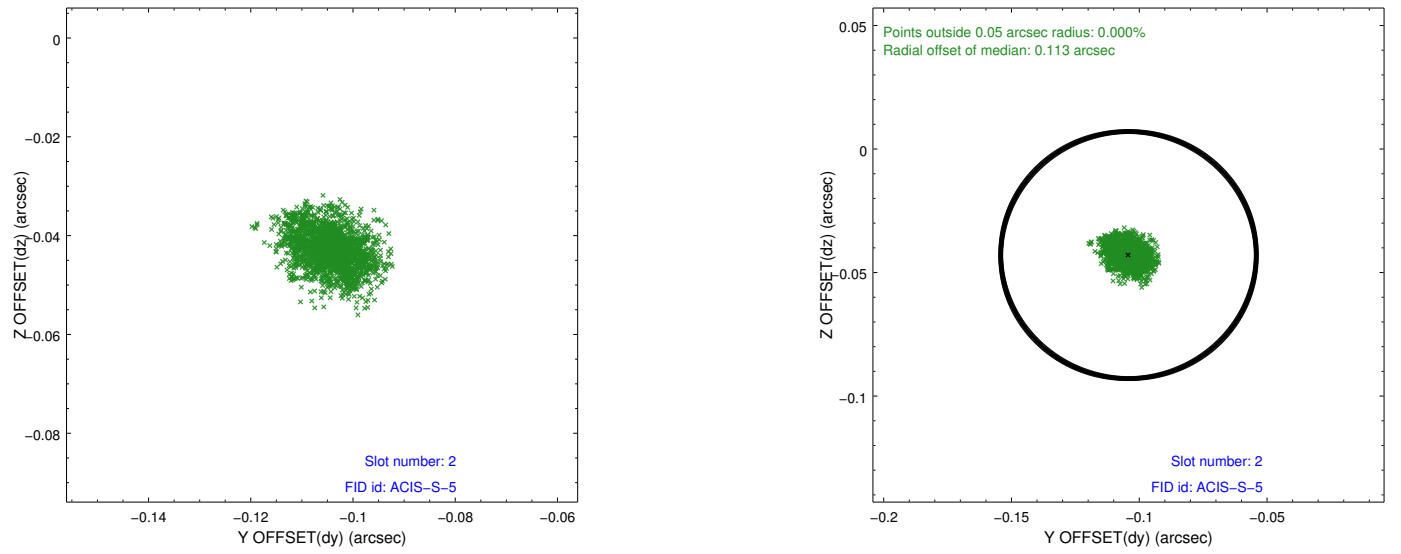
2.5.1 Slot 0



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) | 2012.09.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.76 |

A.2 Comments