

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3532 - L2 Version 3
Chandra X-Ray Center

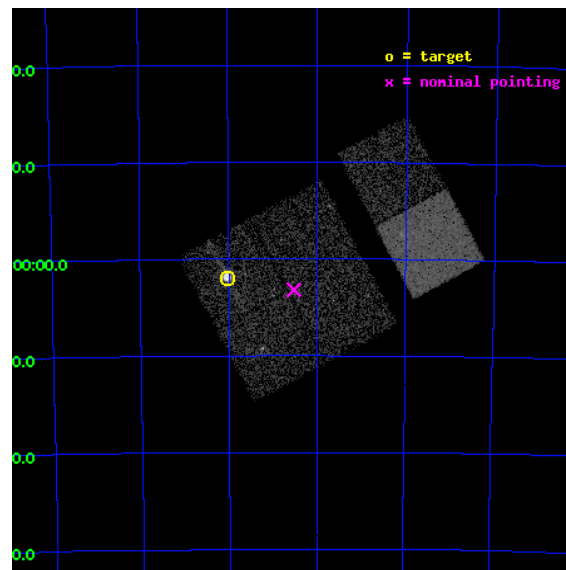
L2 Processing Date : Nov 3 2012

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1 Front

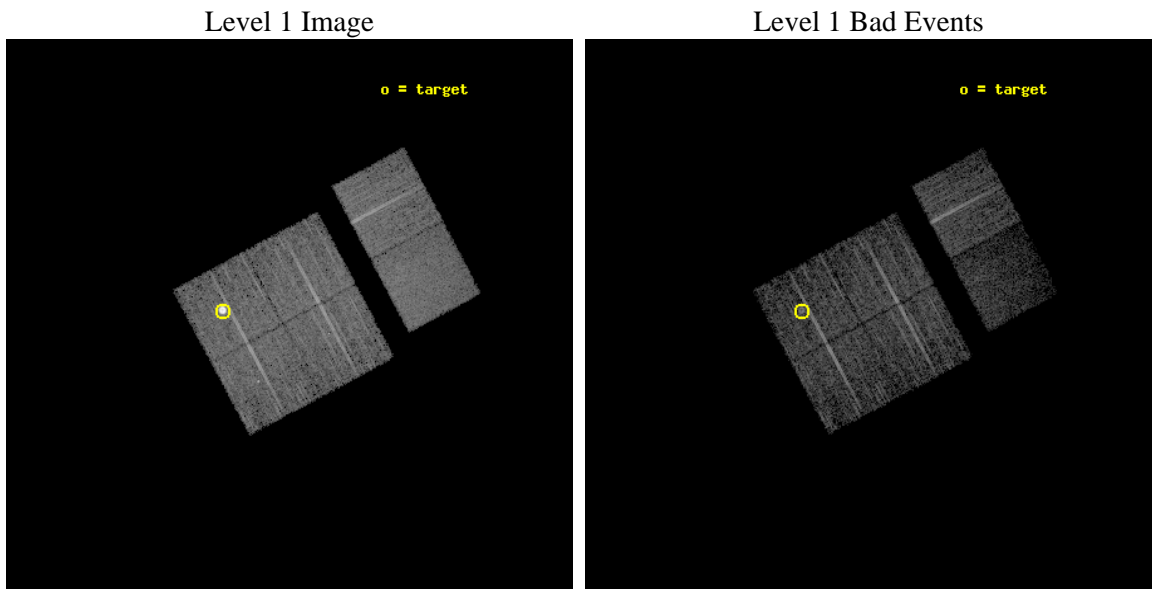
| | | |
|----------|--|---|
| seq_num | 590287 | Sequence number |
| obs_id | 3532 | Observation id |
| title | AO4B ACIS-I CALIBRATION OBSERVATIONS OF E0102-72 | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | E0102-72[I0,-120,4.7,-5.68,0] | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 16.01 | Observer's specified target RA [deg] |
| dec_targ | -72.032028 | Observer's specified target Dec [deg] |
| ra_nom | 15.631132706405 | Nominal RA [deg] |
| dec_nom | -72.053370761955 | Nominal Dec [deg] |
| roll_nom | 61.830540992197 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 7750.3590008616 | Sum of GTIs [s] |
| livetime | 7652.2192884868 | Livetime [s] |
| ontime0 | 7750.3590008616 | Sum of GTIs [s] |
| ontime1 | 7753.5999711156 | Sum of GTIs [s] |
| ontime2 | 7753.5999711156 | Sum of GTIs [s] |
| ontime3 | 7750.3590207696 | Sum of GTIs [s] |
| ontime6 | 7753.5999711156 | Sum of GTIs [s] |
| ontime7 | 7753.5999711156 | Sum of GTIs [s] |
| l2events | 56207 | Number of level 2 events |



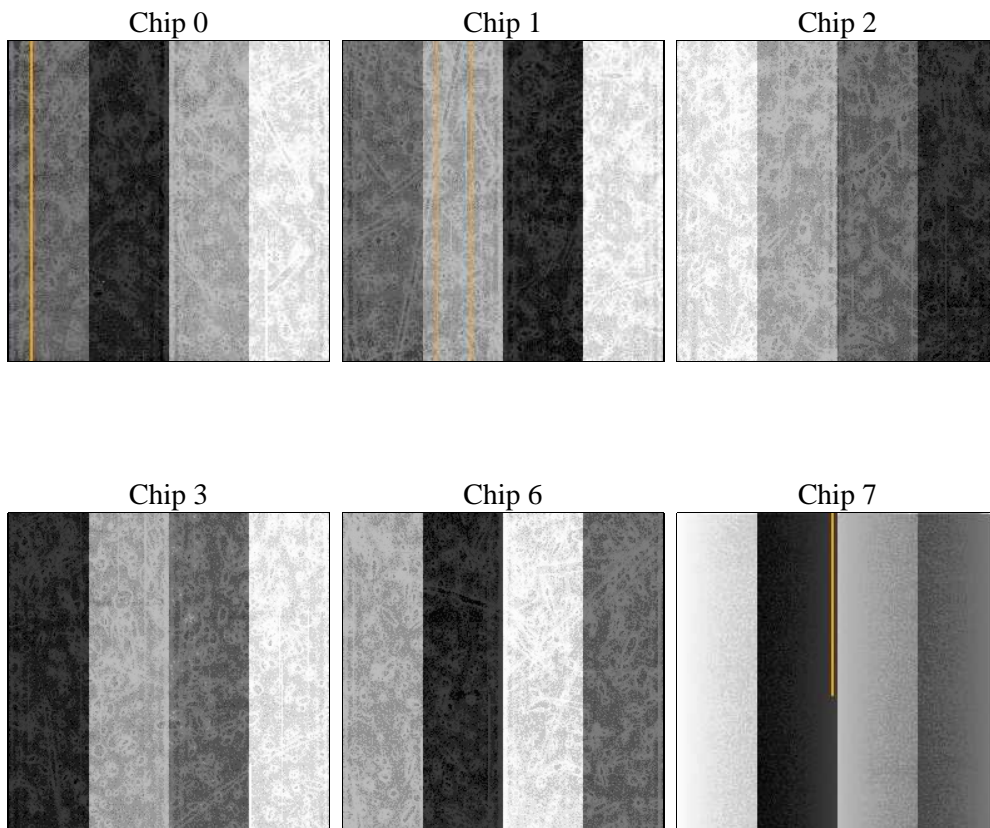
2 OBI

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 | 7750.3590008616 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime0 | 7750.3590008616 | Sum of GTIs [s] |
| date | 2012-11-03T14:27:20 | Date and time of file creation | ontime1 | 7753.5999711156 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 7753.5999711156 | Sum of GTIs [s] |
| | | | ontime3 | 7750.3590207696 | Sum of GTIs [s] |
| | | | ontime6 | 7753.5999711156 | Sum of GTIs [s] |
| | | | ontime7 | 7753.5999711156 | Sum of GTIs [s] |
| | | | l1events | 245192 | Number of level 1 events |

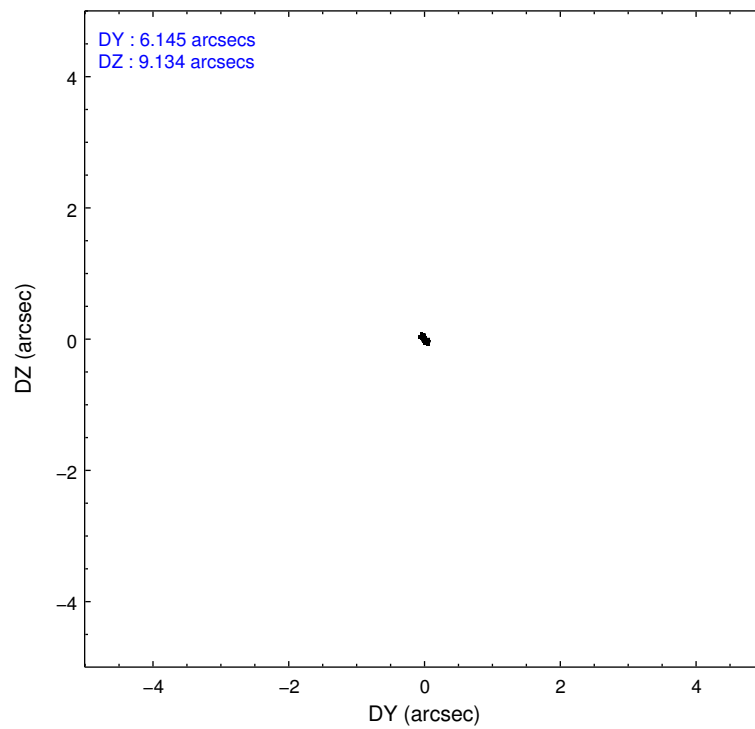
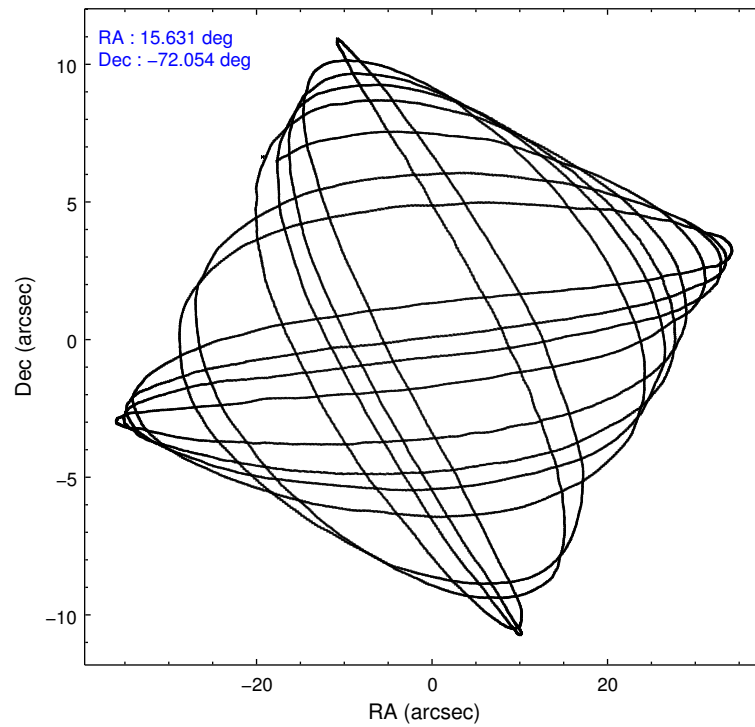
2.1.4 Events

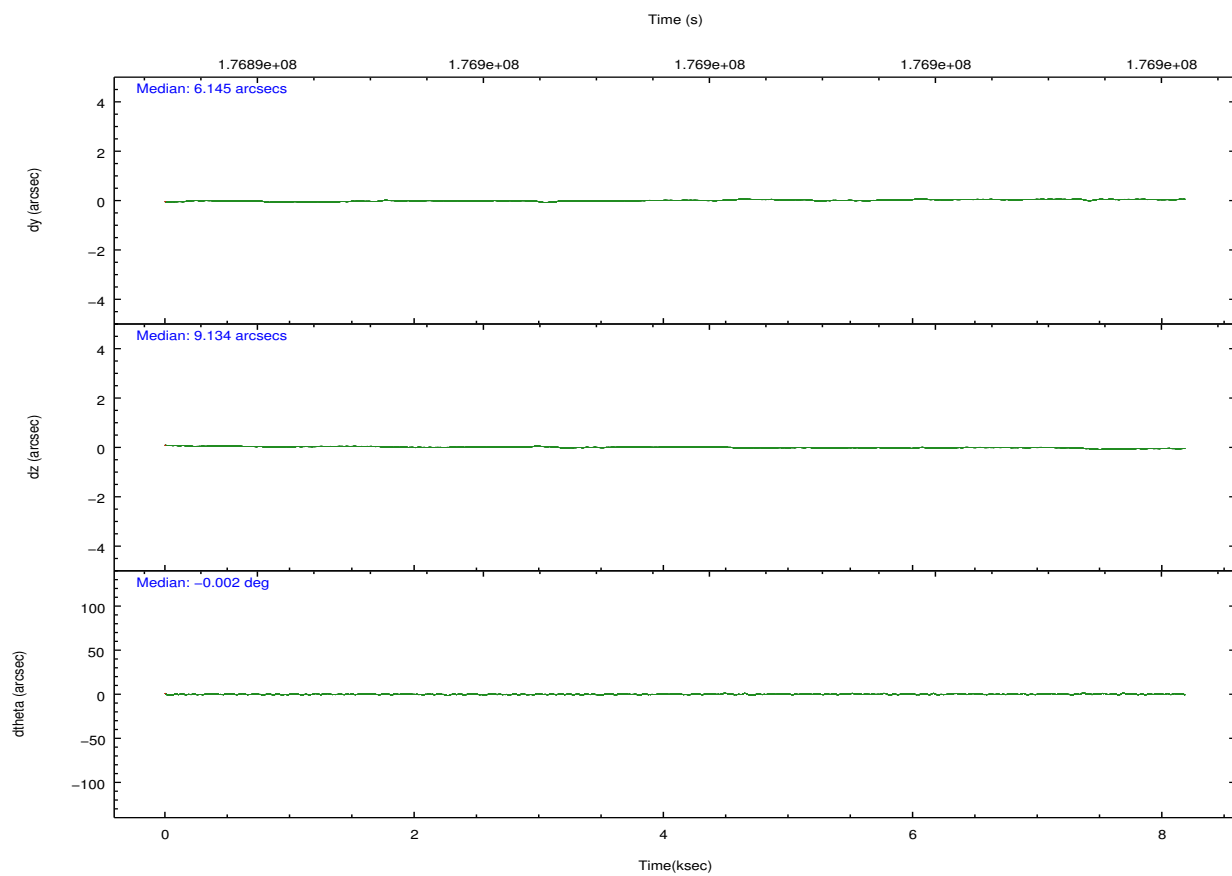
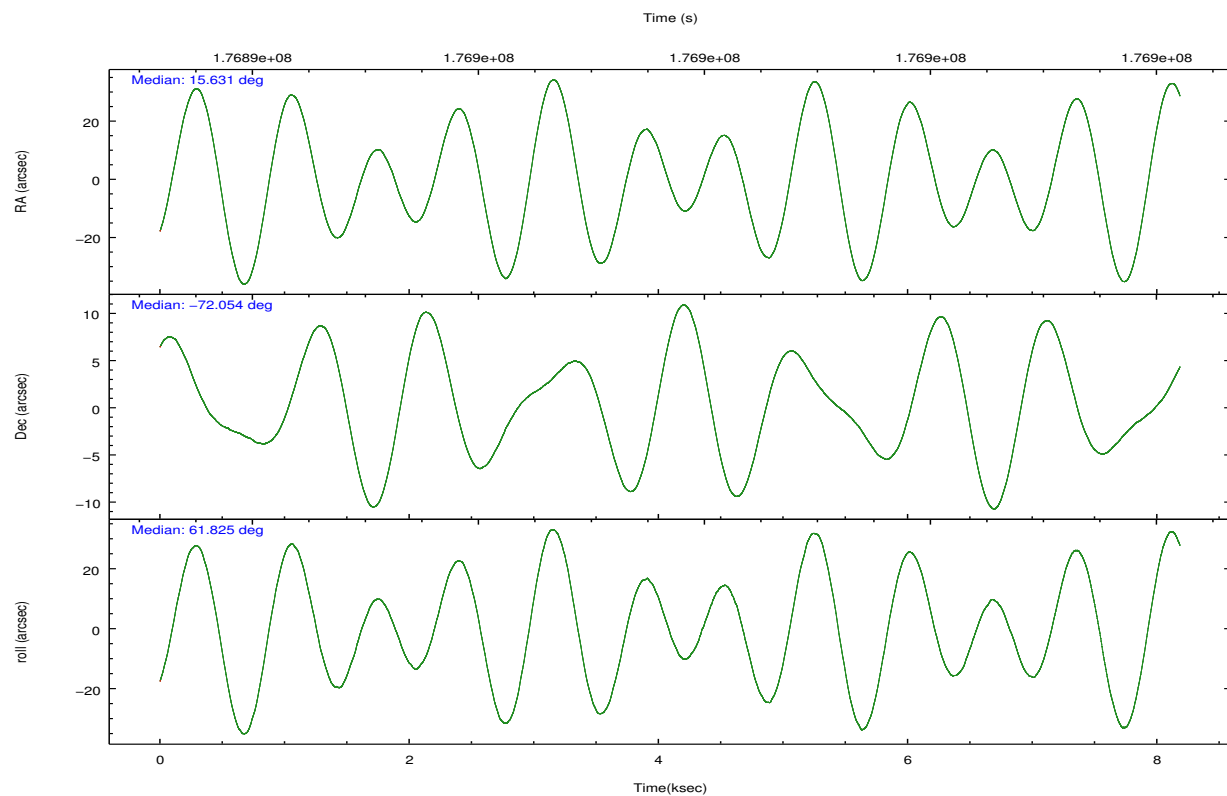
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 58625 | 35463 | 39072 | 36926 | 39443 | 35663 | grade 0 events | 21639 | 1825 | 1578 | 1679 | 1477 | 1854 |
| rejected events | 32088 | 31062 | 35278 | 33075 | 35532 | 18023 | | 36% | 5% | 4% | 4% | 3% | 5% |
| rejected % | 54% | 87% | 90% | 89% | 90% | 50% | grade 1 events | 190 | 20 | 24 | 22 | 19 | 29 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2478 | 917 | 825 | 717 | 833 | 3706 |
| | | | | | | | | 4% | 2% | 2% | 1% | 2% | 10% |
| | | | | | | | grade 3 events | 844 | 497 | 411 | 392 | 413 | 1770 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 4% |
| | | | | | | | grade 4 events | 803 | 433 | 389 | 418 | 393 | 1745 |
| | | | | | | | | 1% | 1% | 0% | 1% | 0% | 4% |
| | | | | | | | grade 5 events | 1195 | 1164 | 1058 | 1204 | 1246 | 3855 |
| | | | | | | | | 2% | 3% | 2% | 3% | 3% | 10% |
| | | | | | | | grade 6 events | 793 | 732 | 593 | 649 | 797 | 8589 |
| | | | | | | | | 1% | 2% | 1% | 1% | 2% | 24% |
| | | | | | | | grade 7 events | 30683 | 29875 | 34194 | 31845 | 34265 | 14115 |
| | | | | | | | | 52% | 84% | 87% | 86% | 86% | 39% |

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 | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 15.634227 | 15.63113270640477 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -72.080779 | -72.05337076195546 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 61.624797 | 61.83054099219709 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 174614464.184000 | 174614464.184000 | | | |
| [s] Window stop time (MET) | 177292864.184000 | 177292864.184000 | | | |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | | | |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | | | |
| [s] Observation start time (MET) | 176893785.184000 | 176893409.86308 | | | |
| Observation start date | 2003-08-10T09:08:41 | 2003-08-10T09:03:29 | | | |
| [s] Observation end time (MET) | 176901785.184000 | 176901919.41345 | | | |
| Observation end date | 2003-08-10T11:22:01 | 2003-08-10T11:25:19 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



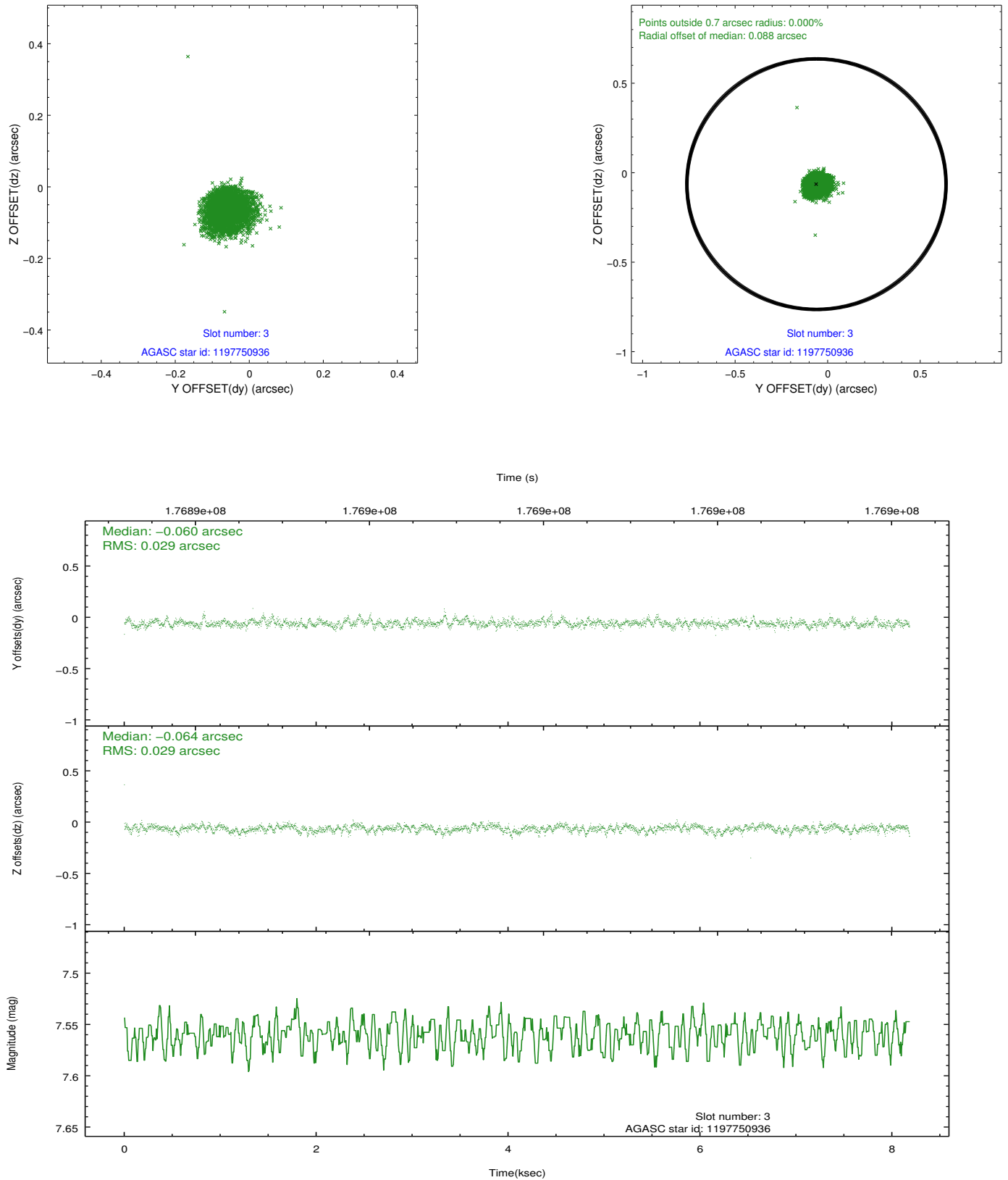


Slot Statistics

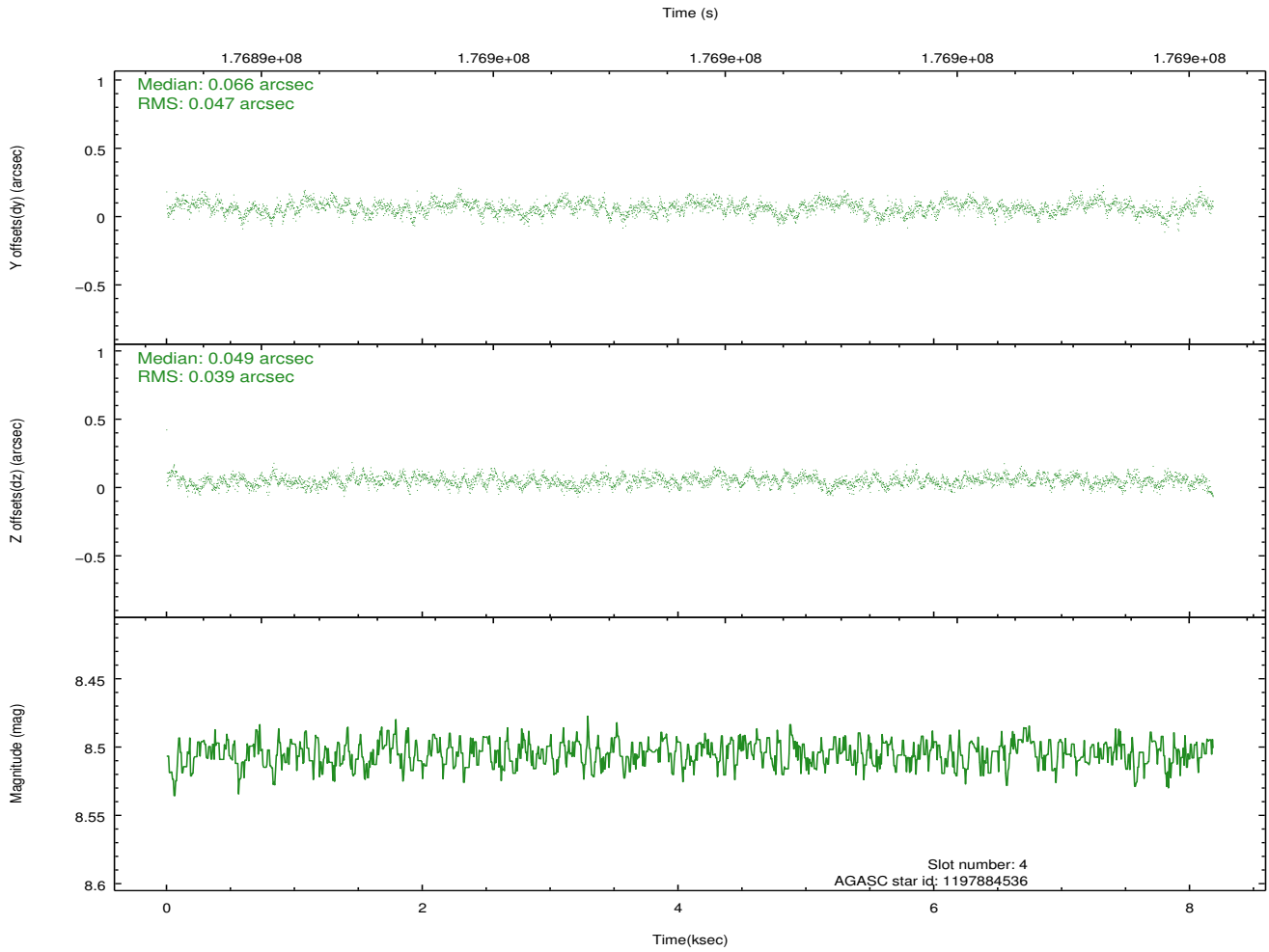
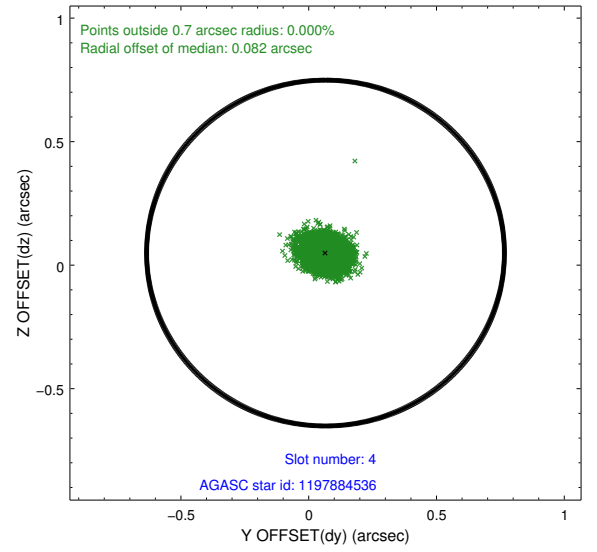
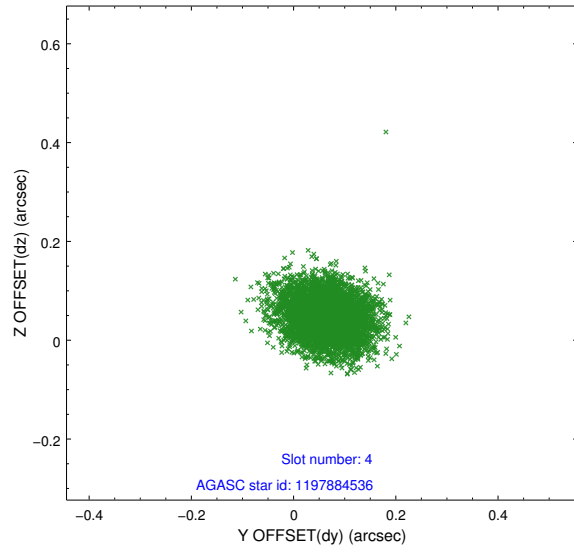
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 1997 | 0.002 | 0.040 | 0.006 | 0.010 | 0.000000 | 0.000000 | 933.56 | -832.54 |
| 1 | FID | ACIS-I-5 | 7.23 | 1997 | -0.140 | 0.034 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1814.32 | 1064.59 |
| 2 | FID | ACIS-I-6 | 7.25 | 1996 | 0.047 | -0.003 | 0.007 | 0.011 | 0.000000 | 0.000000 | 398.40 | 1709.84 |
| 3 | GUIDE | 1197750936 | 7.56 | 3993 | -0.060 | -0.064 | 0.042 | 0.071 | 15.387940 | -71.549550 | 1548.65 | 1155.66 |
| 4 | GUIDE | 1197884536 | 8.51 | 3992 | 0.066 | 0.049 | 0.065 | 0.104 | 17.160729 | -71.835289 | 1573.28 | -1096.87 |
| 5 | GUIDE | 1197884712 | 8.31 | 3992 | 0.061 | -0.058 | 0.059 | 0.095 | 16.087398 | -72.252690 | -309.21 | -732.75 |
| 6 | GUIDE | 1197885104 | 9.36 | 3992 | -0.061 | 0.048 | 0.093 | 0.146 | 17.845067 | -72.189368 | 773.38 | -2348.38 |
| 7 | GUIDE | 1198189696 | 7.34 | 3991 | -0.005 | 0.028 | 0.055 | 0.084 | 15.223750 | -72.697522 | -2163.35 | -669.88 |

2.4 Star Slots

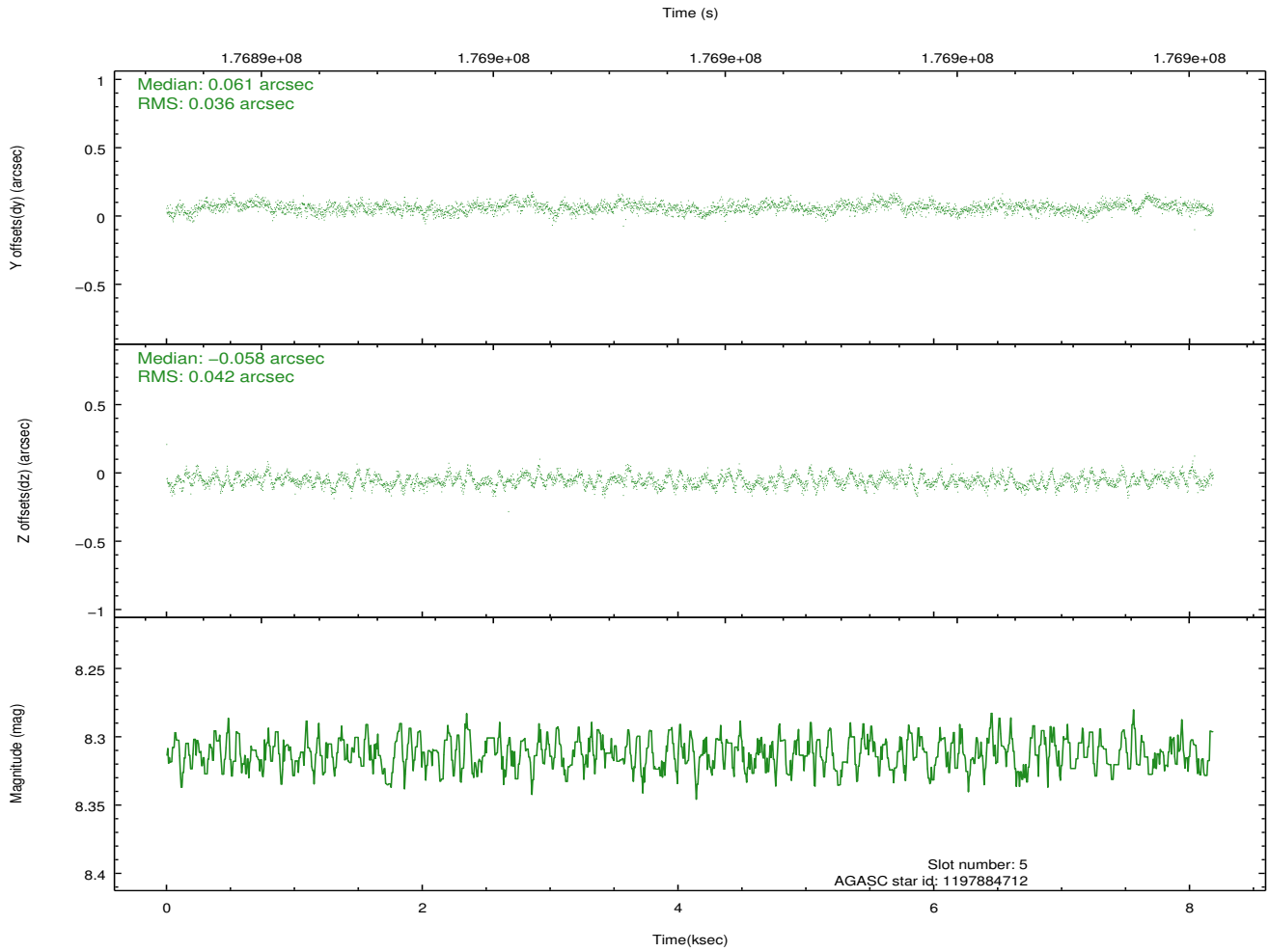
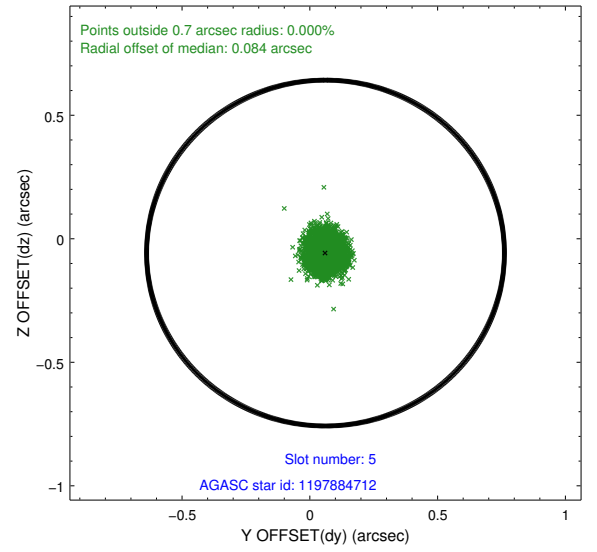
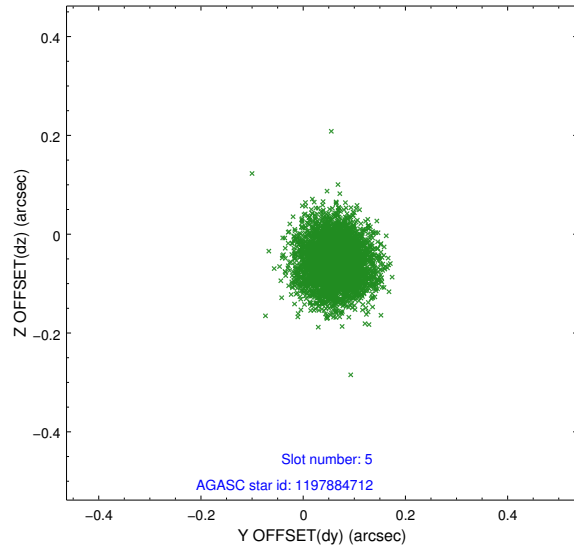
2.4.1 Slot 3



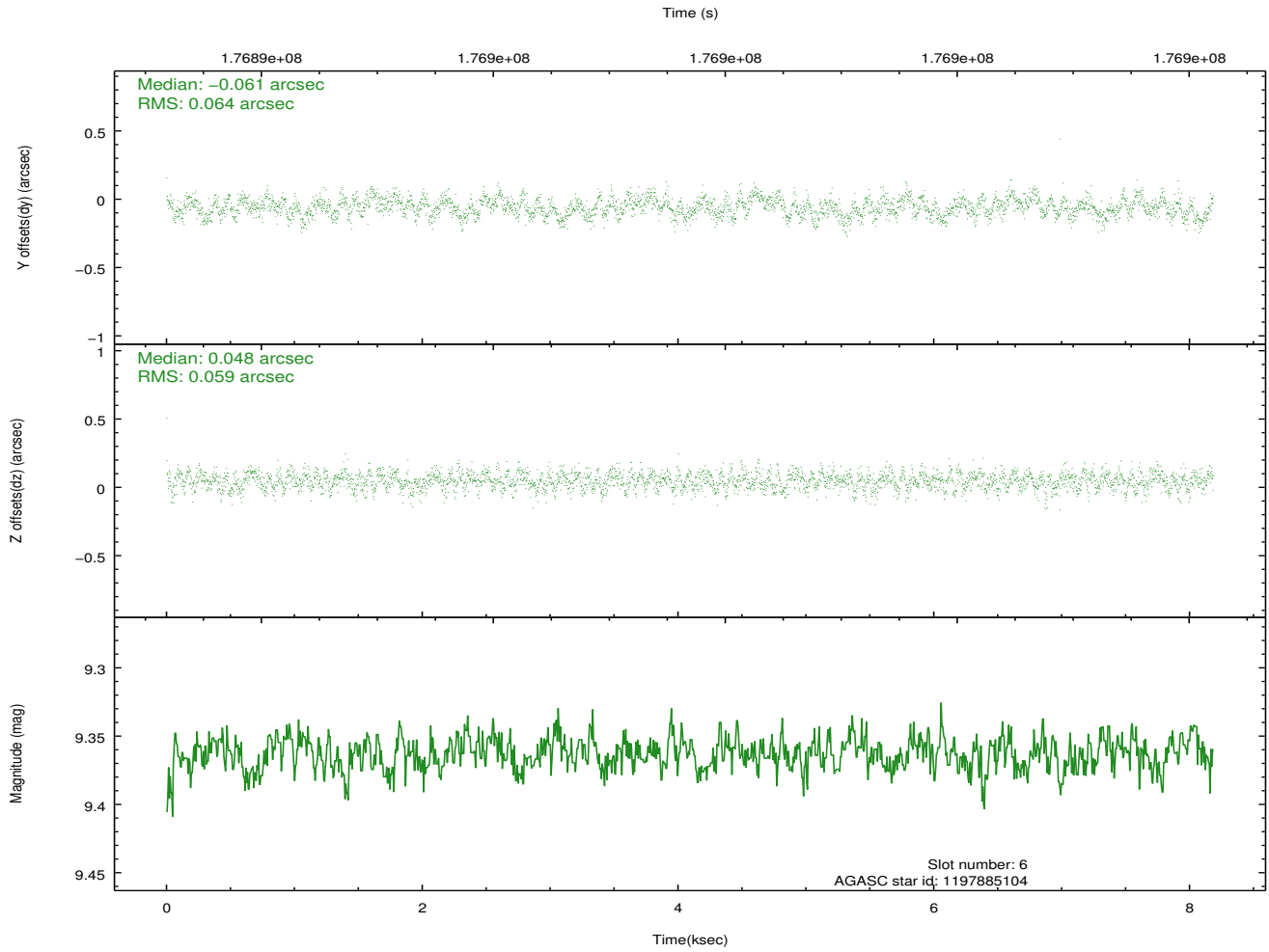
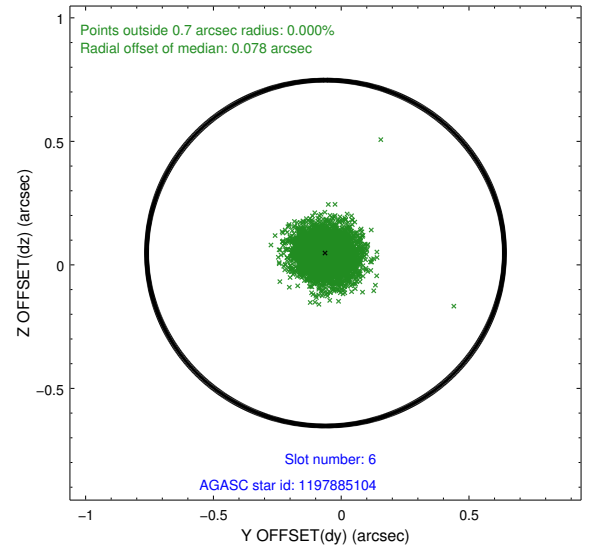
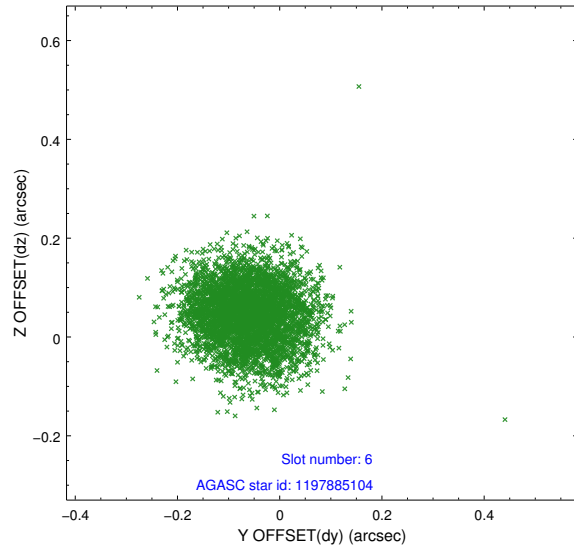
2.4.2 Slot 4



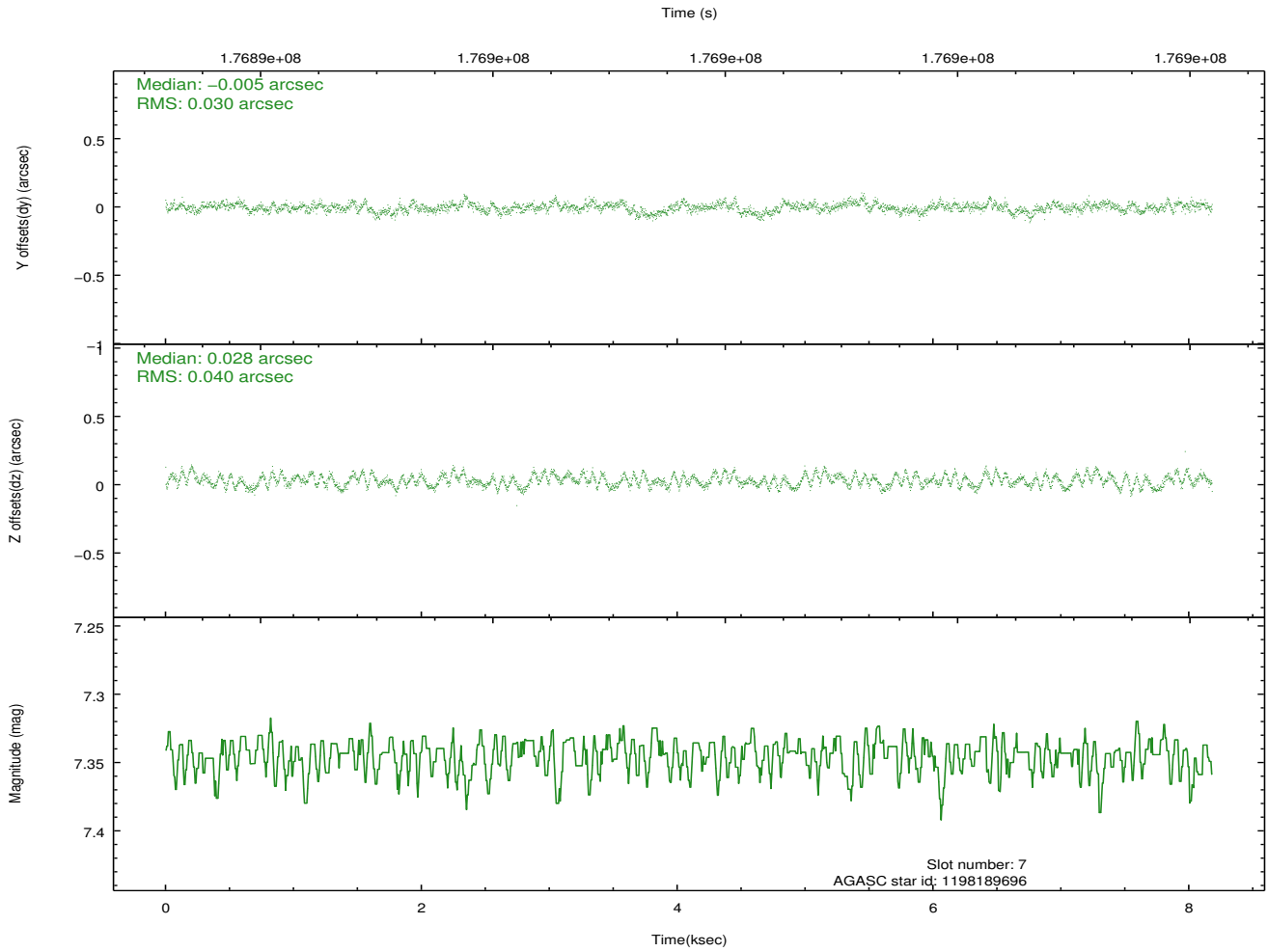
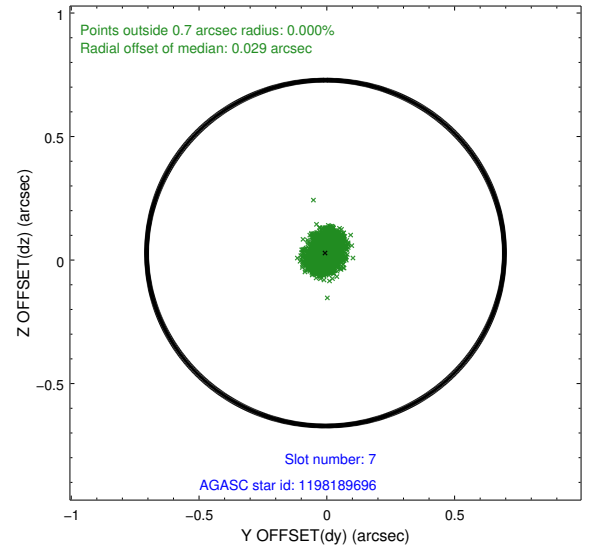
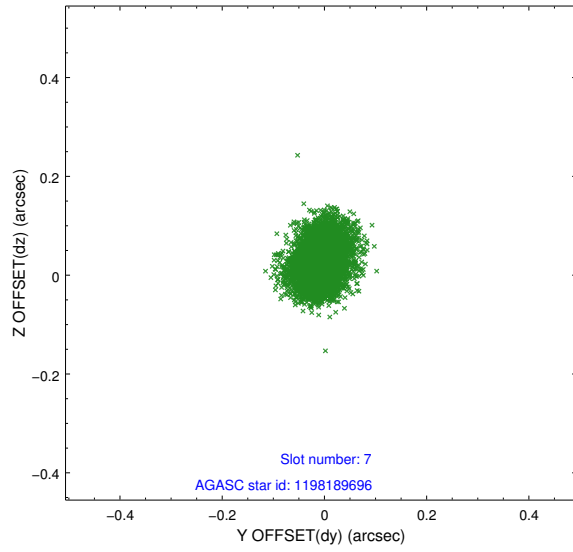
2.4.3 Slot 5



2.4.4 Slot 6

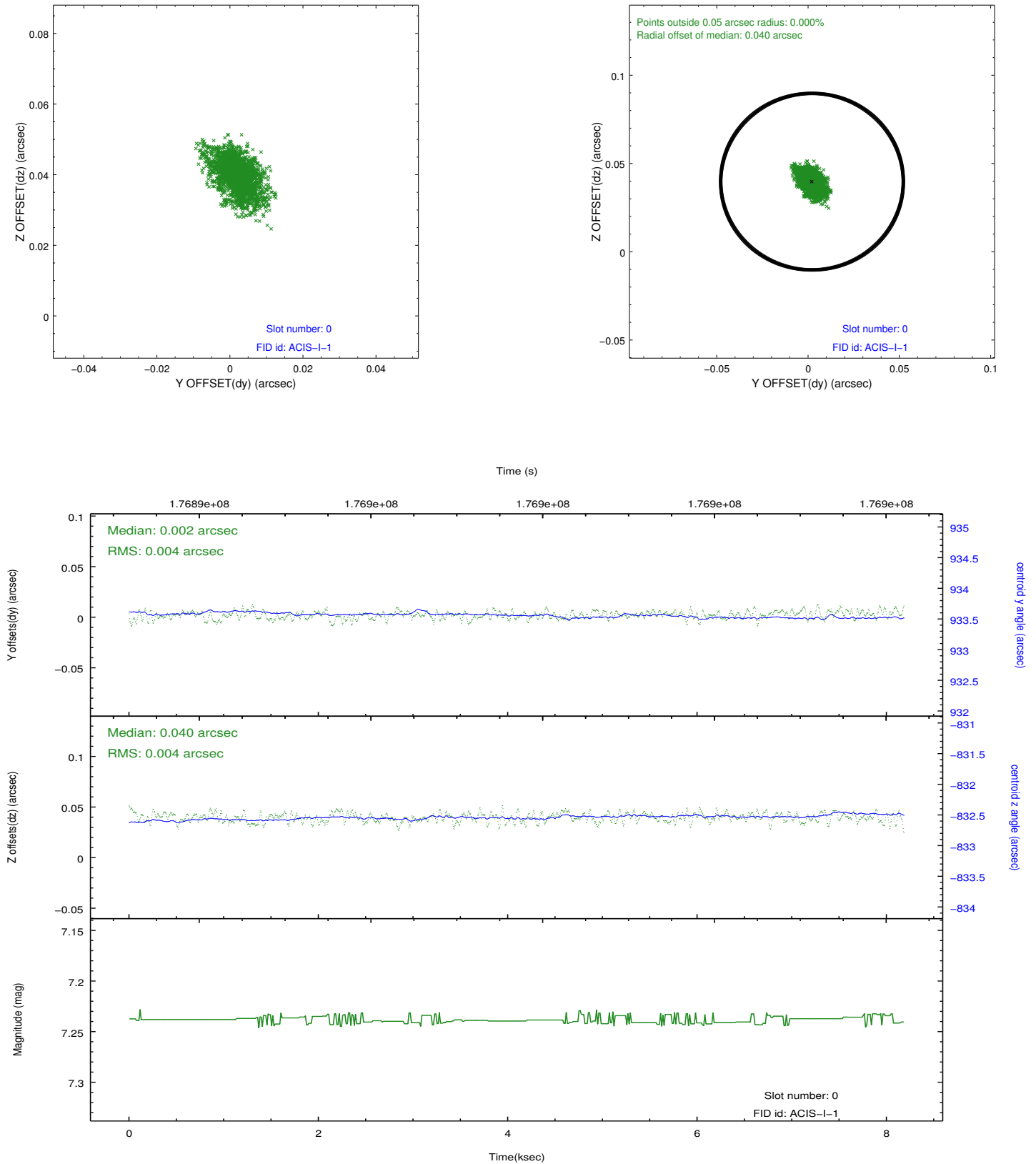


2.4.5 Slot 7

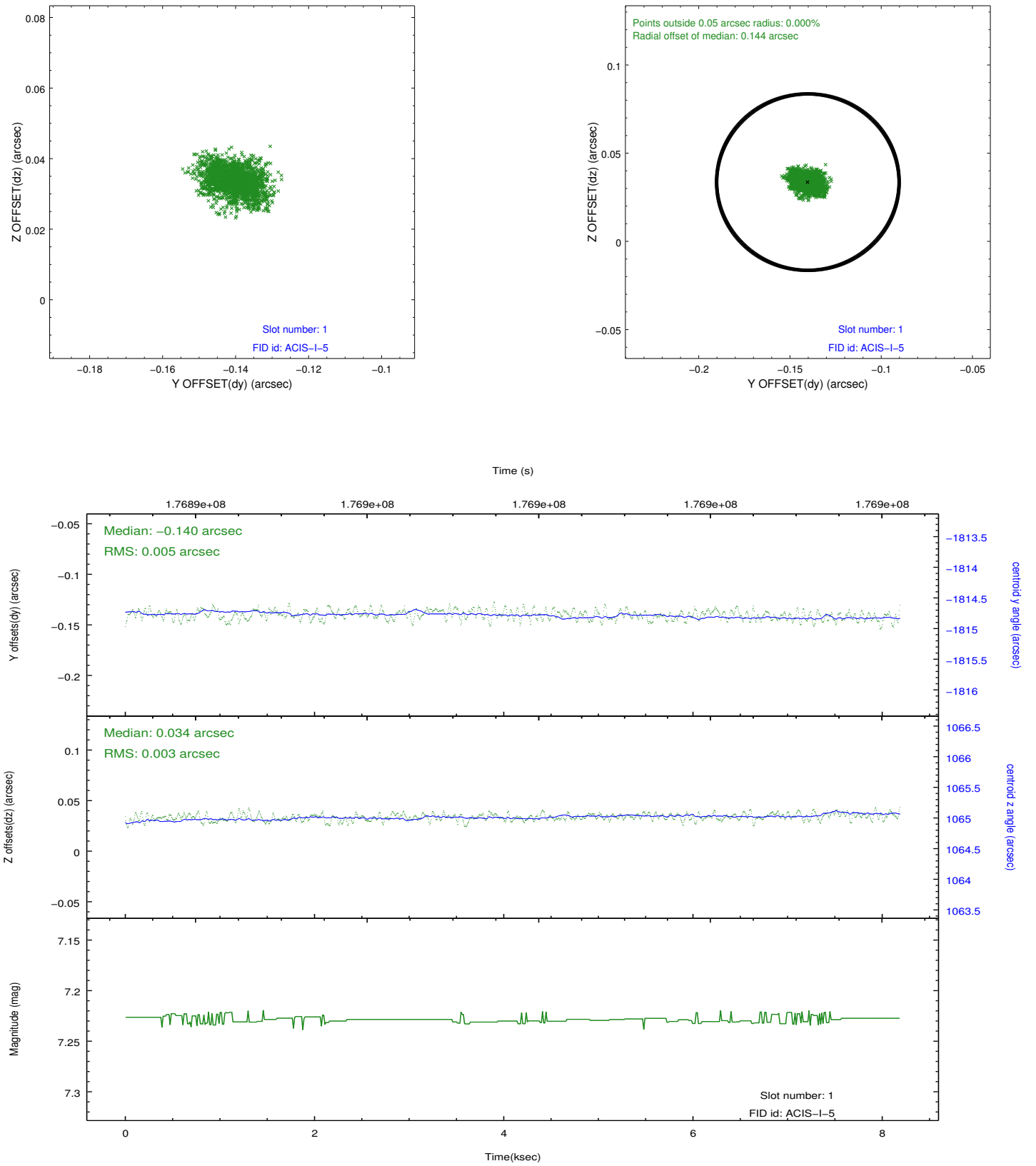


2.5 FID Slots

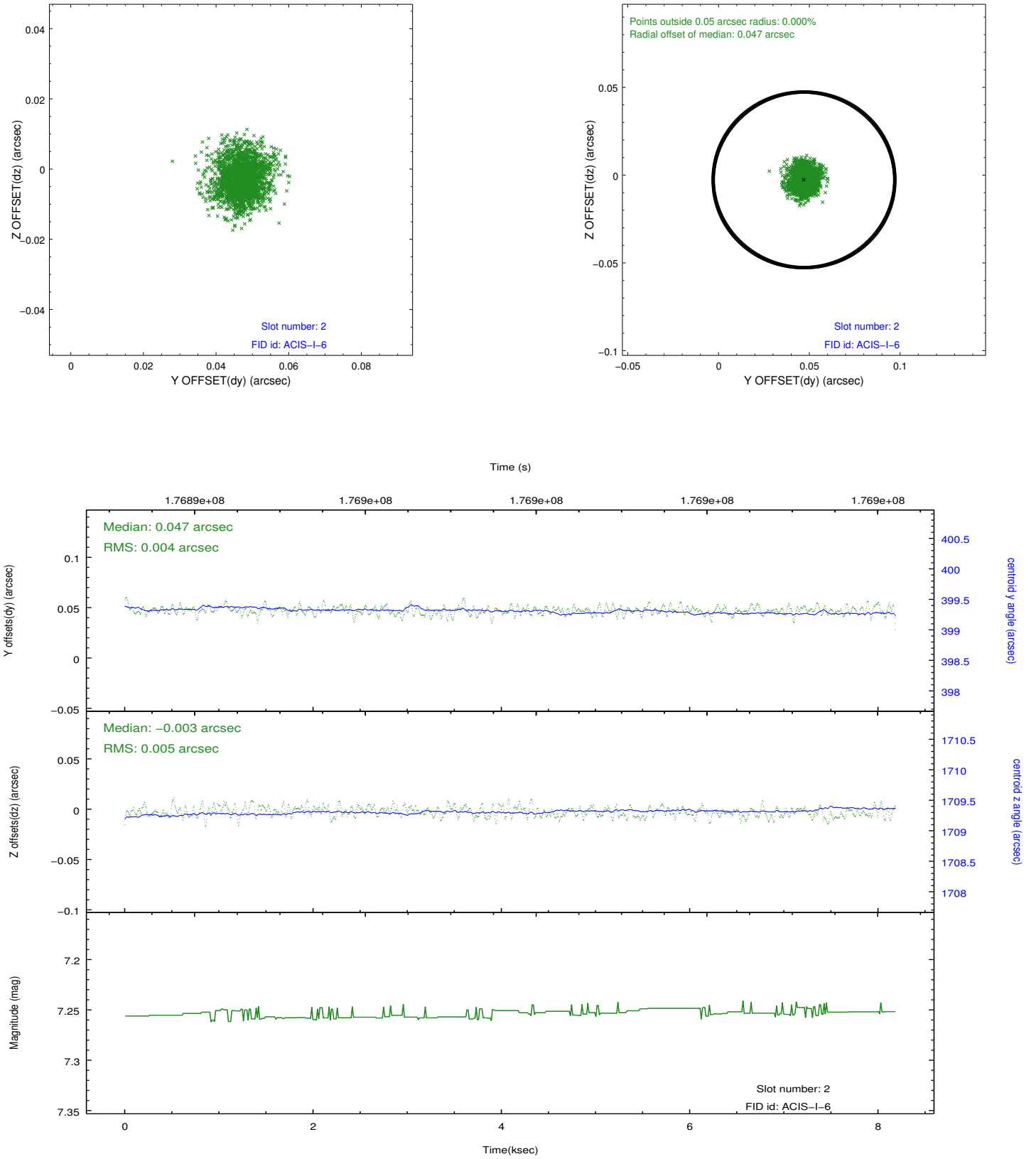
2.5.1 Slot 0



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) | 2012.11.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.757 |

A.2 Comments

Window constraint met.