

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1311 - L2 Version 4
Chandra X-Ray Center

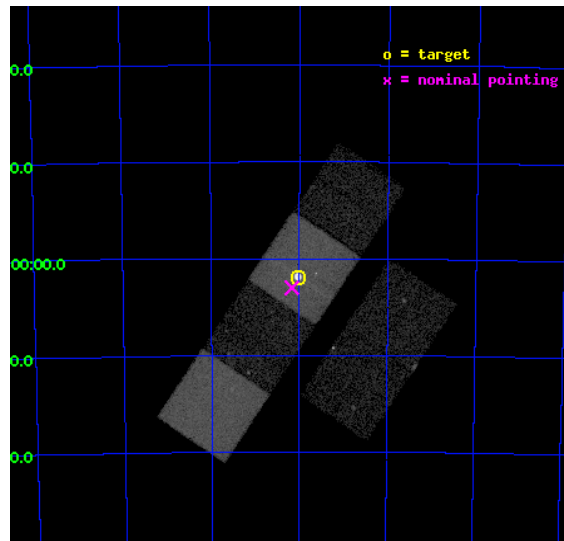
L2 Processing Date : Sep 4 2012

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1 Front

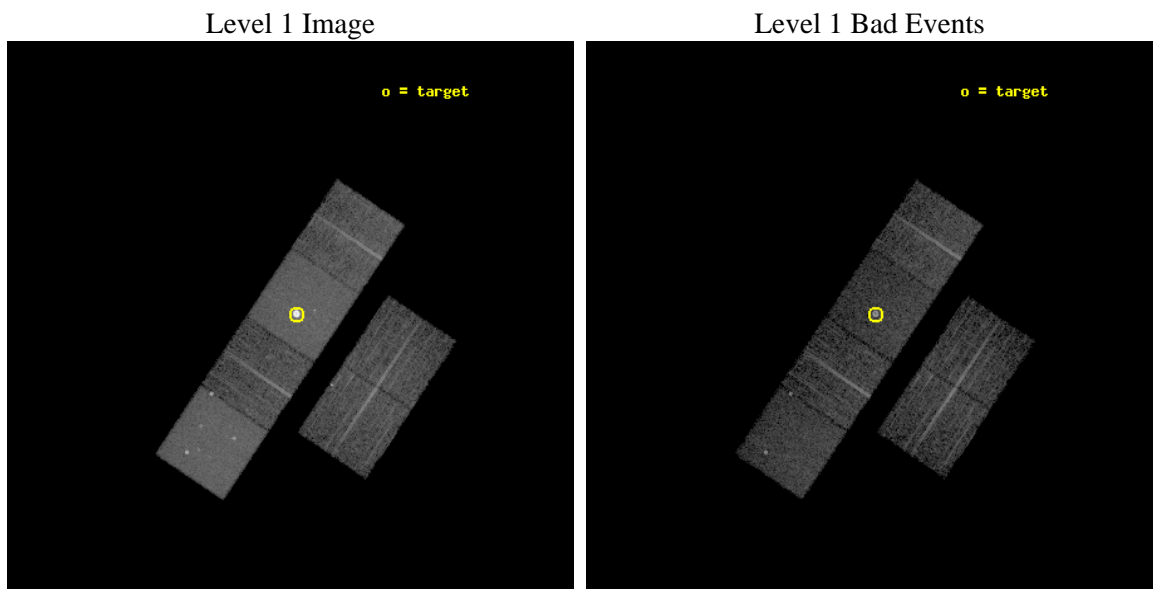
| | | |
|----------|---|---|
| seq_num | 590125 | Sequence number |
| obs_id | 1311 | Observation id |
| title | ACIS CALIBRATION OBSERVATION OF THE SUPERNOVA REMNANT E0102-72 (DEC 2000) | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | E0102-72.3 [Chip S3, T=120, Offsets=-1,0,0] | 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 | 16.042481516623 | Nominal RA [deg] |
| dec_nom | -72.050378258631 | Nominal Dec [deg] |
| roll_nom | 303.73247459753 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 7753.6000072062 | Sum of GTIs [s] |
| livetime | 7655.4192552575 | Livetime [s] |
| ontime2 | 7753.6000072062 | Sum of GTIs [s] |
| ontime3 | 7753.6000072062 | Sum of GTIs [s] |
| ontime5 | 7753.6000072062 | Sum of GTIs [s] |
| ontime6 | 7753.6000072062 | Sum of GTIs [s] |
| ontime7 | 7753.6000072062 | Sum of GTIs [s] |
| ontime8 | 7750.3590469509 | Sum of GTIs [s] |
| l2events | 173654 | Number of level 2 events |



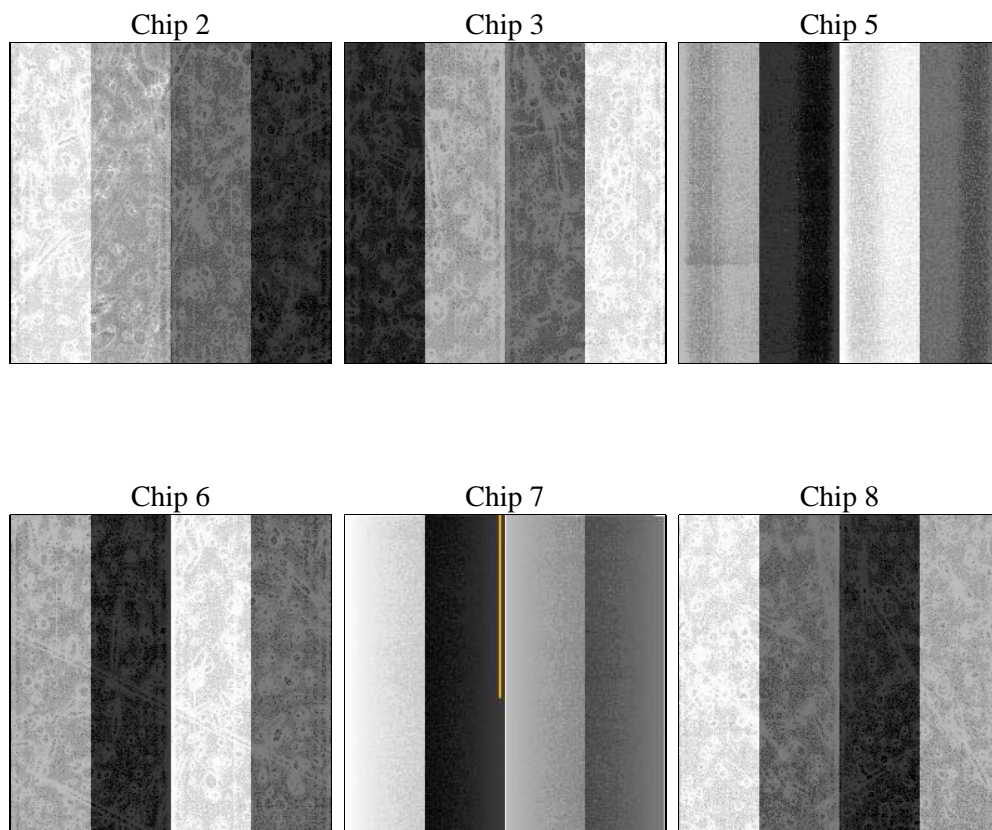
2 OBI

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 | 7753.6000072062 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime2 | 7753.6000072062 | Sum of GTIs [s] |
| date | 2012-09-05T01:02:00 | Date and time of file creation | ontime3 | 7753.6000072062 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime5 | 7753.6000072062 | Sum of GTIs [s] |
| | | | ontime6 | 7753.6000072062 | Sum of GTIs [s] |
| | | | ontime7 | 7753.6000072062 | Sum of GTIs [s] |
| | | | ontime8 | 7750.3590469509 | Sum of GTIs [s] |
| | | | l1events | 429947 | Number of level 1 events |

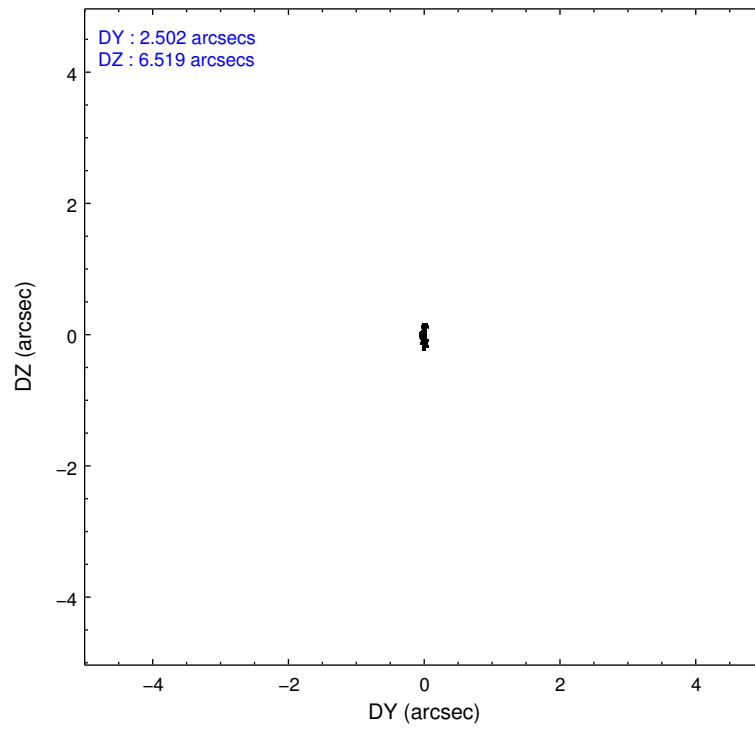
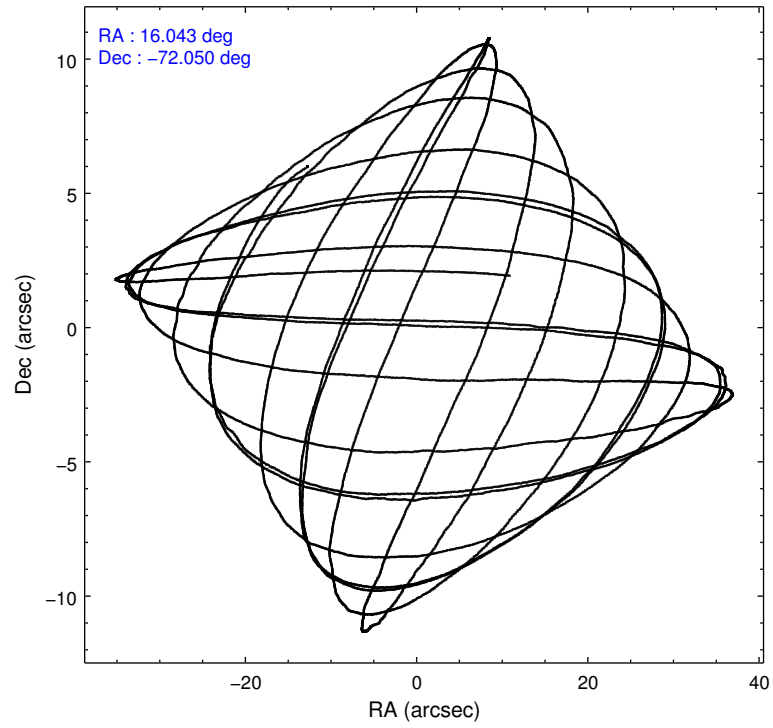
2.1.4 Events

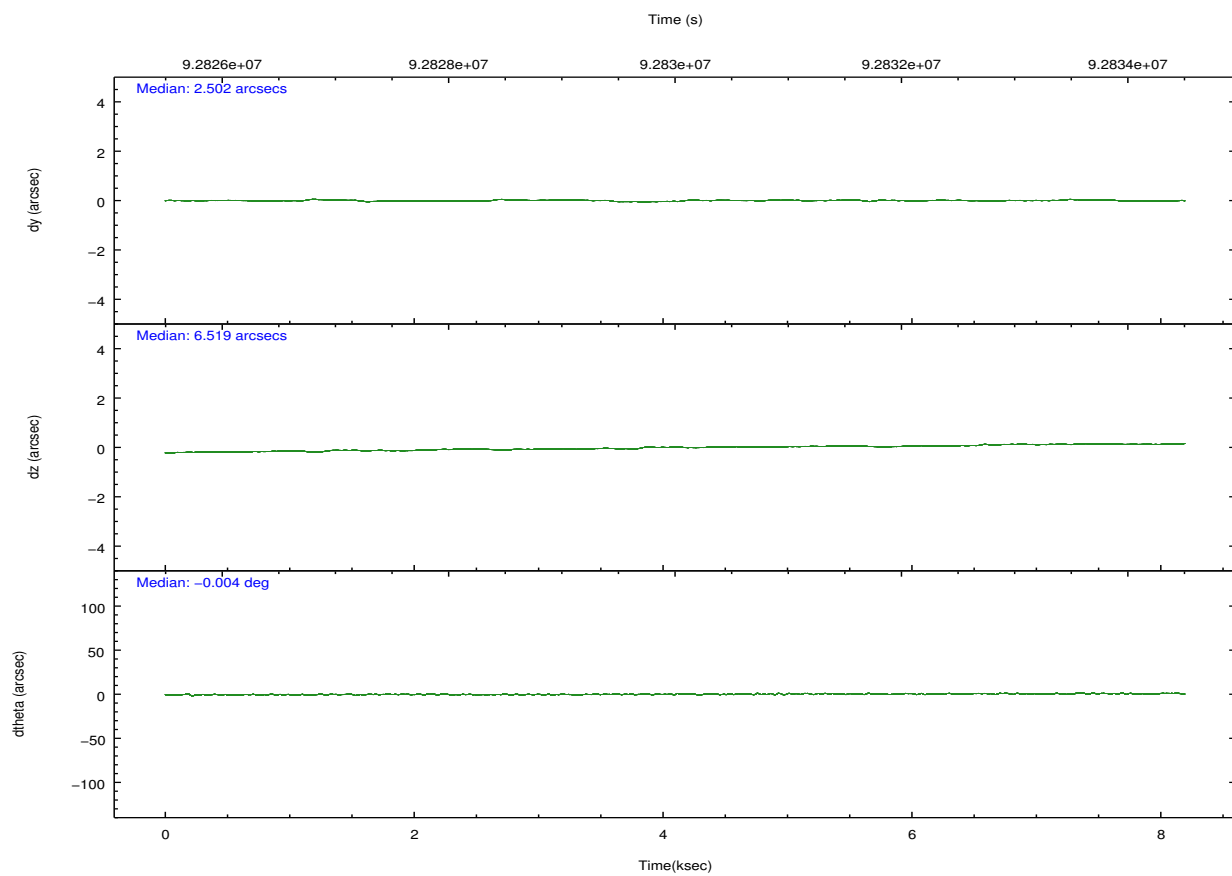
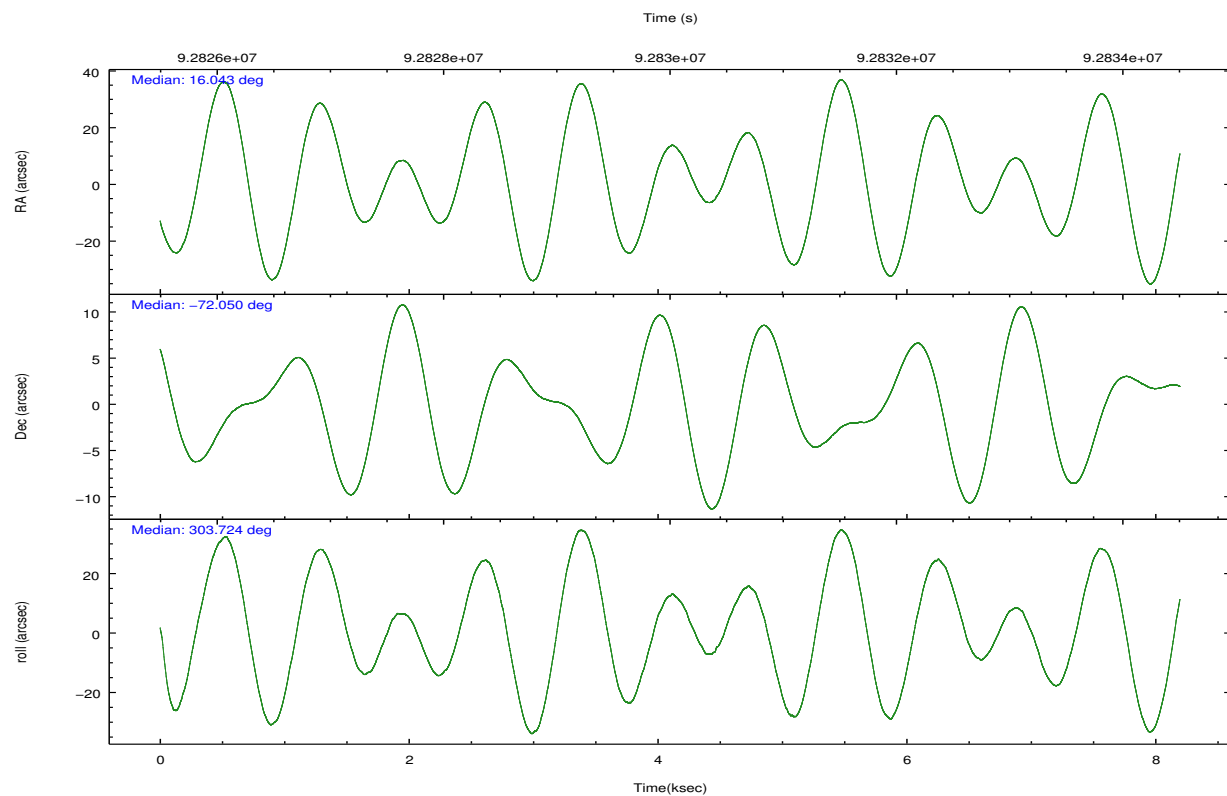
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|--------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 48374 | 43669 | 84417 | 46784 | 146232 | 60471 | grade 0 events | 2958 | 2639 | 7615 | 3324 | 30342 | 4137 |
| rejected events | 42223 | 38005 | 37019 | 40172 | 37100 | 48530 | | 6% | 6% | 9% | 7% | 20% | 6% |
| rejected % | 87% | 87% | 43% | 85% | 25% | 80% | grade 1 events | 35 | 15 | 325 | 20 | 701 | 53 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1210 | 1102 | 13682 | 1164 | 25876 | 2379 |
| | | | | | | | | 2% | 2% | 16% | 2% | 17% | 3% |
| | | | | | | | grade 3 events | 508 | 511 | 2521 | 556 | 11617 | 1369 |
| | | | | | | | | 1% | 1% | 2% | 1% | 7% | 2% |
| | | | | | | | grade 4 events | 523 | 461 | 2458 | 536 | 11621 | 1229 |
| | | | | | | | | 1% | 1% | 2% | 1% | 7% | 2% |
| | | | | | | | grade 5 events | 1467 | 1649 | 5319 | 1911 | 6952 | 2321 |
| | | | | | | | | 3% | 3% | 6% | 4% | 4% | 3% |
| | | | | | | | grade 6 events | 956 | 957 | 21173 | 1043 | 29800 | 2837 |
| | | | | | | | | 1% | 2% | 25% | 2% | 20% | 4% |
| | | | | | | | grade 7 events | 40717 | 36335 | 31324 | 38230 | 29323 | 46146 |
| | | | | | | | | 84% | 83% | 37% | 81% | 20% | 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 | 15.962876 | 16.04248151662322 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -72.038444 | -72.05037825863077 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 303.500120 | 303.73247459753 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 92016064.184000 | 92016064.184000 | | | |
| [s] Window stop time (MET) | 94608064.184000 | 94608064.184000 | | | |
| [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) | 92826098.184000 | 92825722.129777 | | | |
| Observation start date | 2000-12-10T09:00:34 | 2000-12-10T08:55:22 | | | |
| [s] Observation end time (MET) | 92834098.184000 | 92834231.68010201 | | | |
| Observation end date | 2000-12-10T11:13:54 | 2000-12-10T11:17:11 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



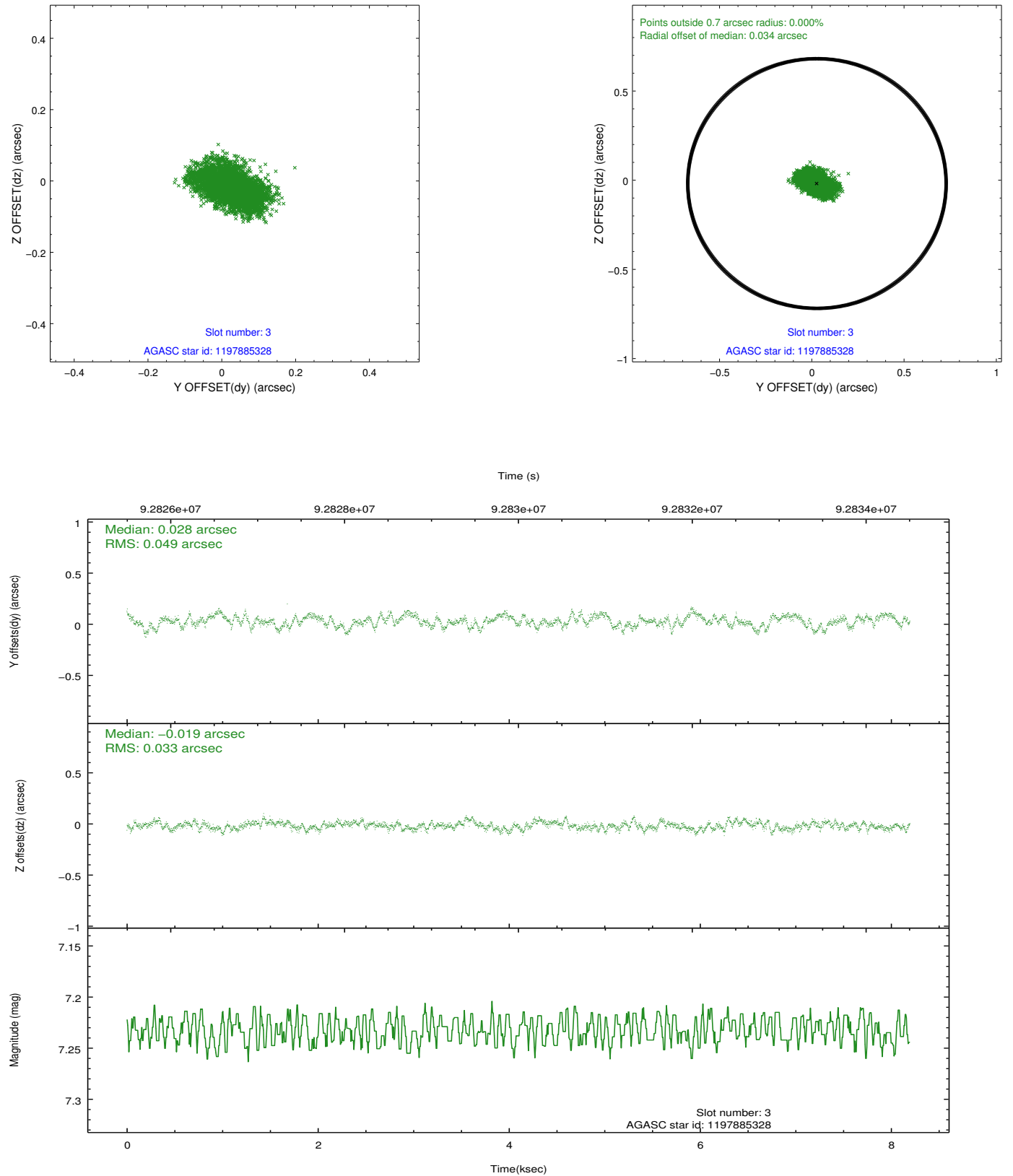


Slot Statistics

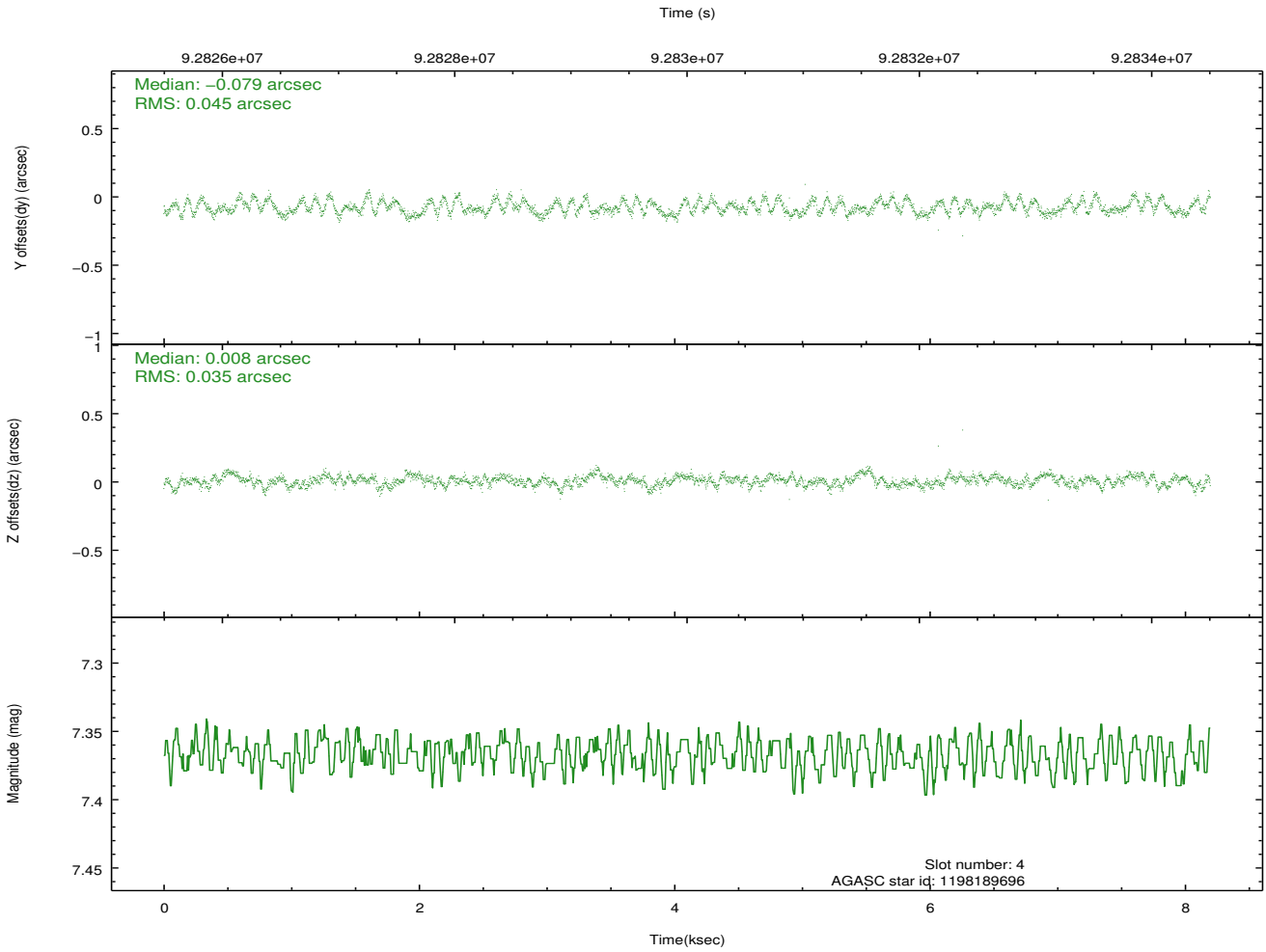
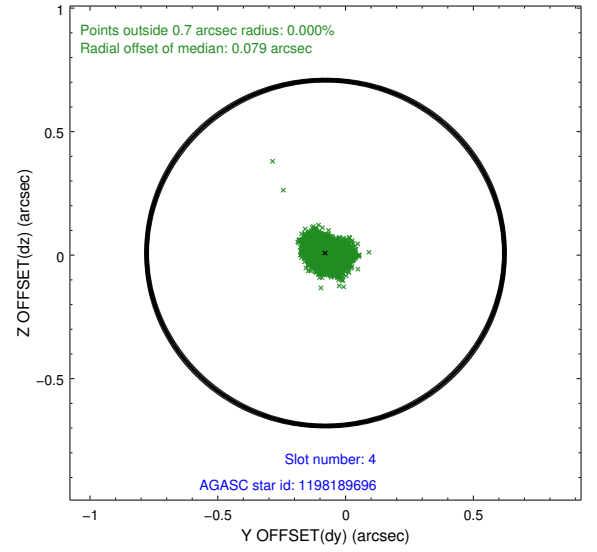
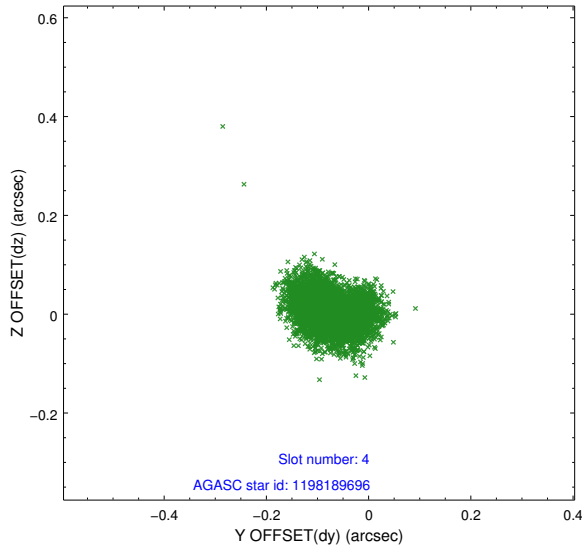
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.12 | 1999 | -0.031 | -0.002 | 0.007 | 0.011 | 0.000000 | 0.000000 | -755.15 | -1727.66 |
| 1 | FID | ACIS-S-4 | 7.20 | 1998 | -0.011 | 0.015 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2157.83 | 180.15 |
| 2 | FID | ACIS-S-5 | 7.23 | 1998 | 0.011 | -0.005 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1807.08 | 174.56 |
| 3 | GUIDE | 1197885328 | 7.23 | 3998 | 0.028 | -0.019 | 0.064 | 0.103 | 16.283090 | -71.733943 | -714.40 | 905.62 |
| 4 | GUIDE | 1198189696 | 7.37 | 3999 | -0.079 | 0.008 | 0.062 | 0.095 | 15.223750 | -72.697522 | 1545.50 | -1971.91 |
| 5 | GUIDE | 1197750936 | 7.56 | 3999 | -0.050 | -0.070 | 0.053 | 0.085 | 15.387940 | -71.549550 | -1826.70 | 422.46 |
| 6 | GUIDE | 1197884536 | 8.49 | 3998 | 0.050 | 0.064 | 0.067 | 0.106 | 17.160729 | -71.835289 | 142.17 | 1517.27 |
| 7 | GUIDE | 1197749416 | 10.28 | 3995 | 0.045 | 0.017 | 0.136 | 0.214 | 13.610513 | -71.871242 | -1913.15 | -1892.93 |

2.4 Star Slots

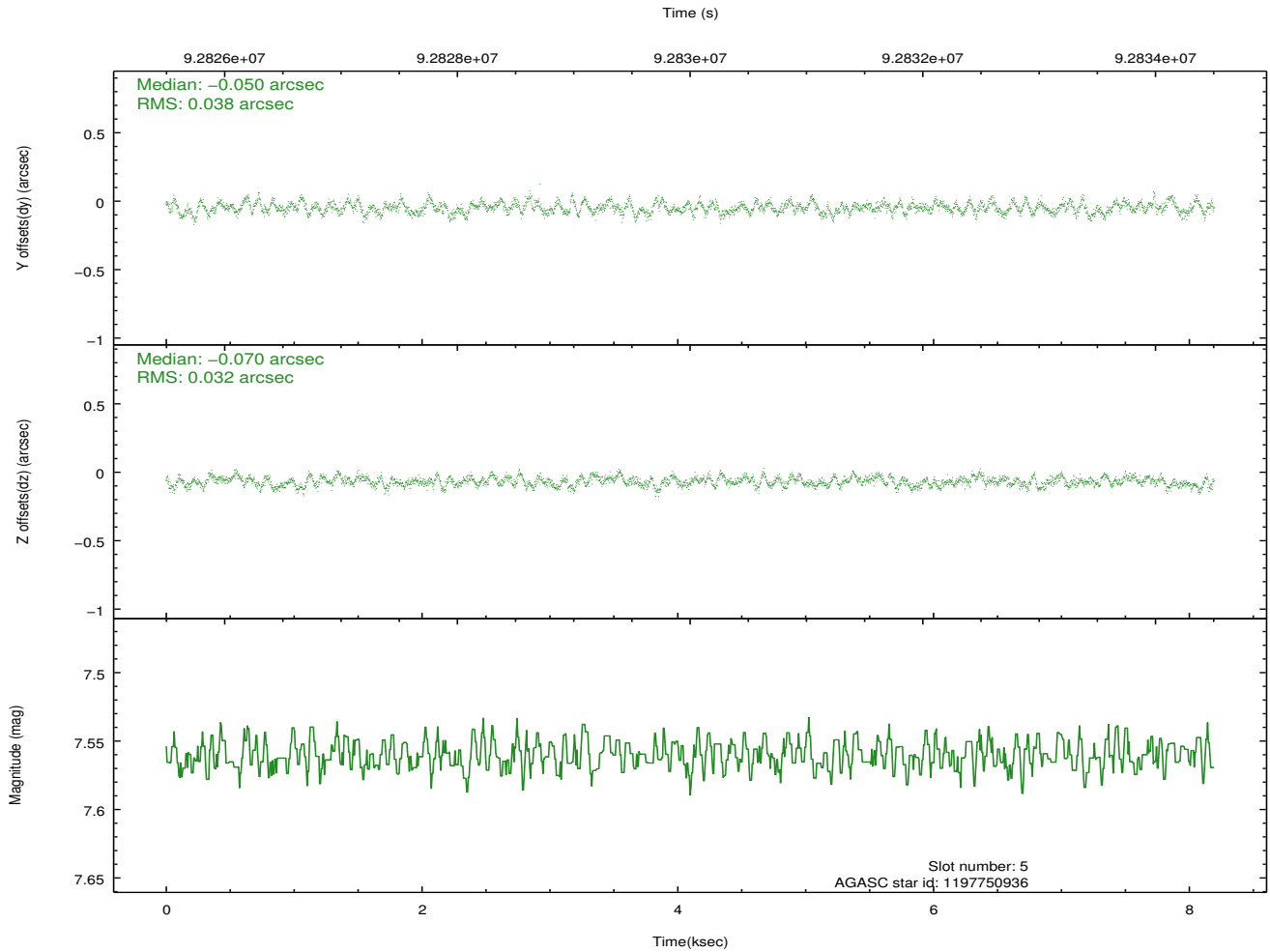
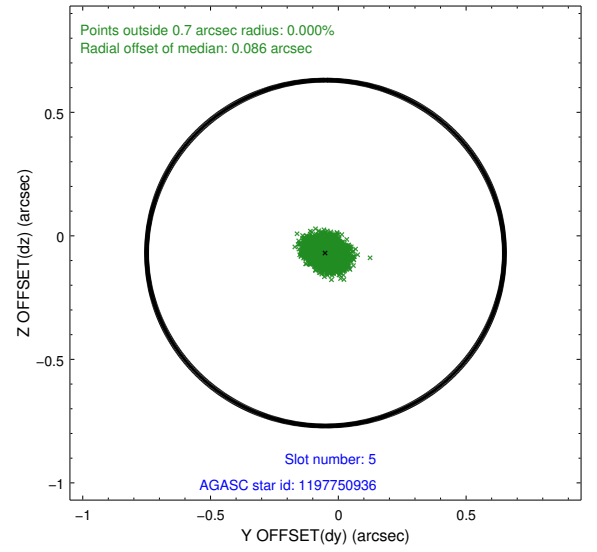
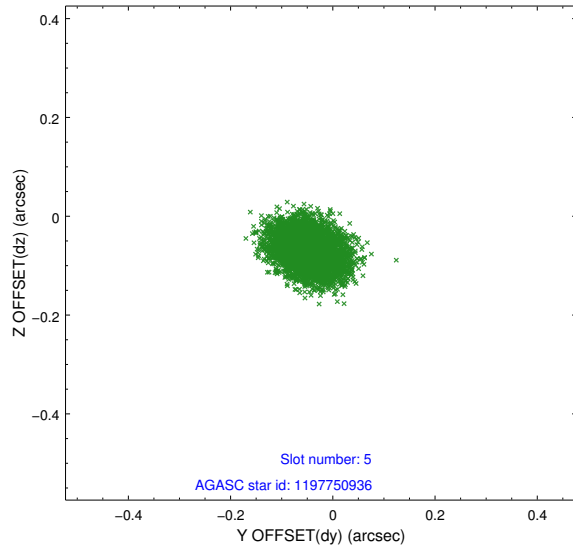
2.4.1 Slot 3



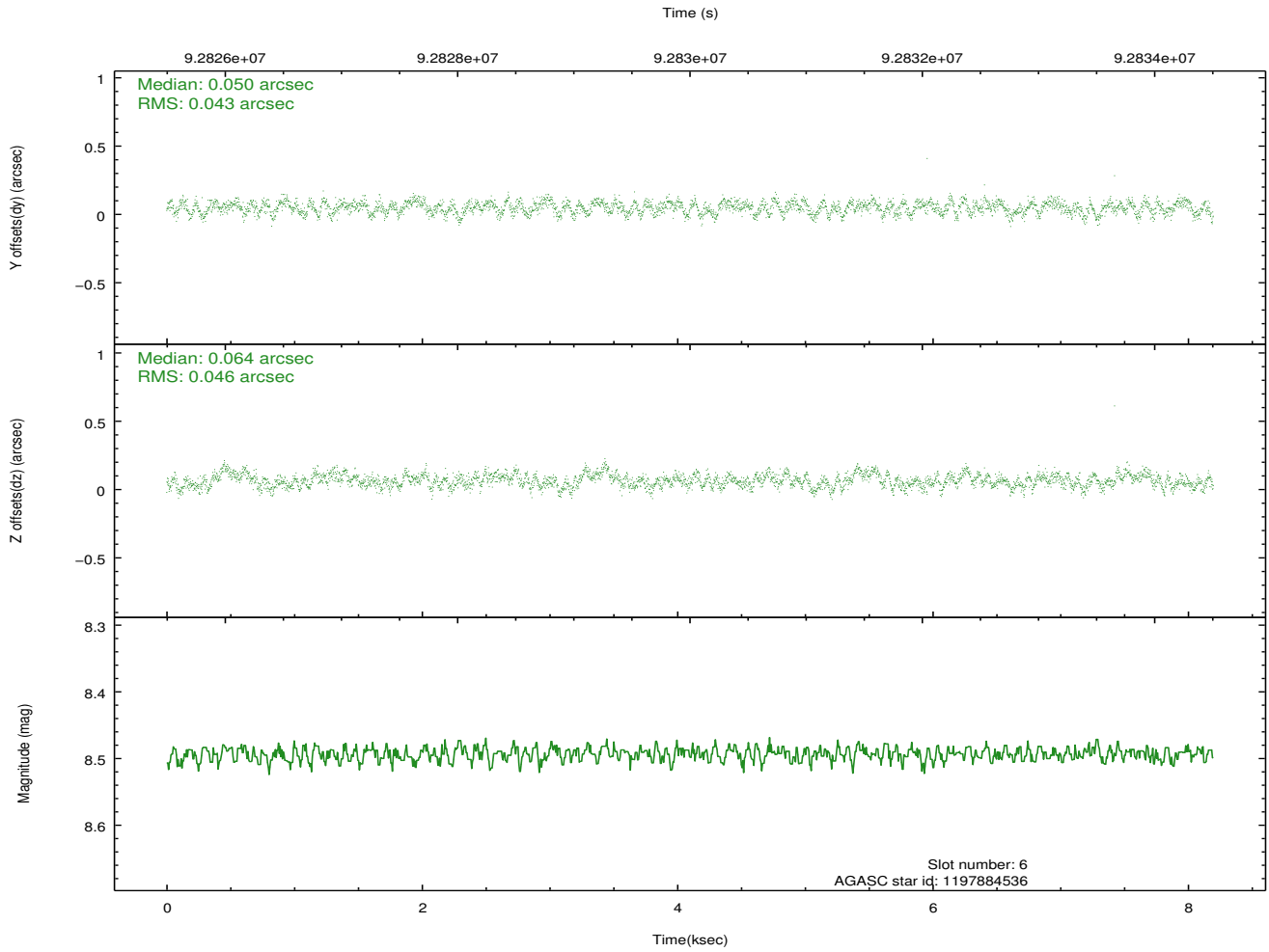
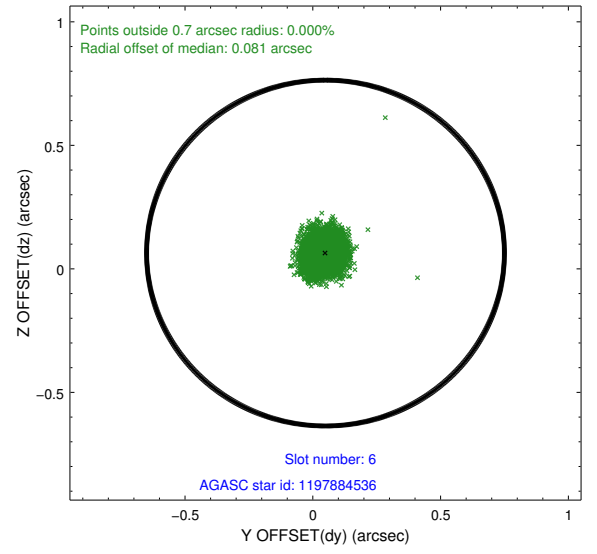
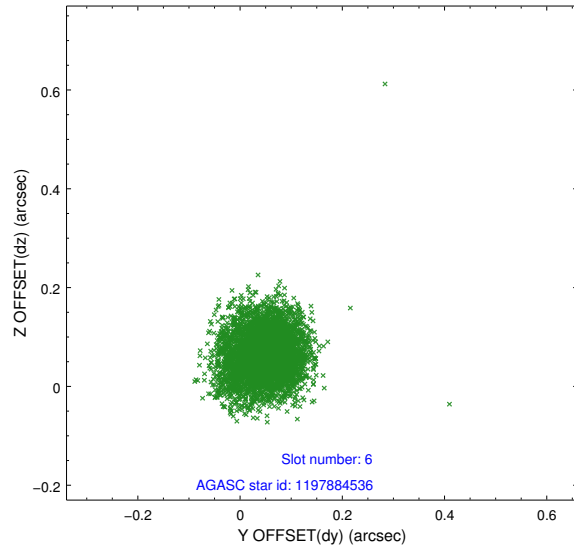
2.4.2 Slot 4



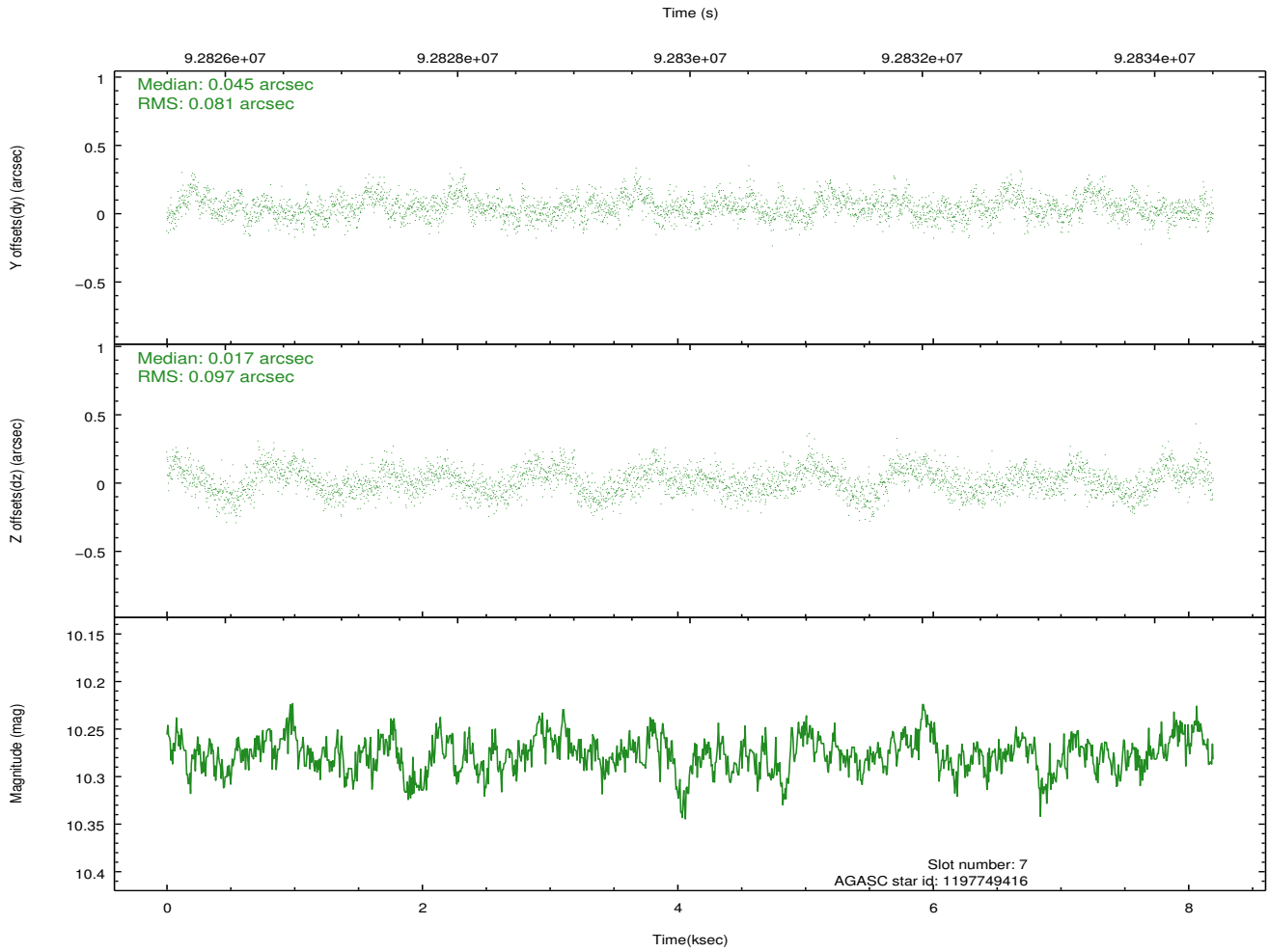
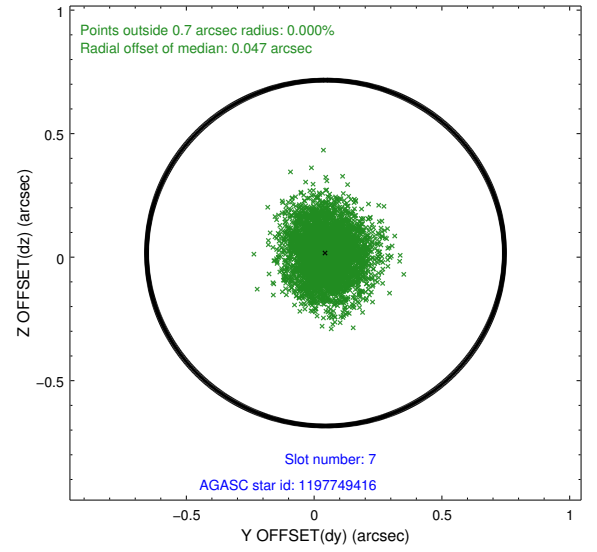
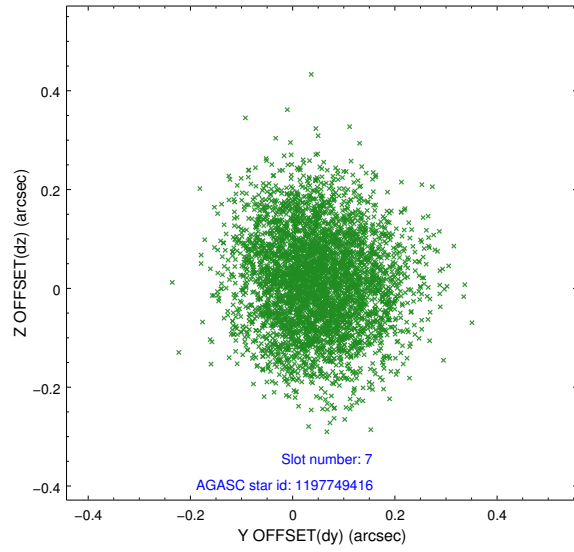
2.4.3 Slot 5



2.4.4 Slot 6

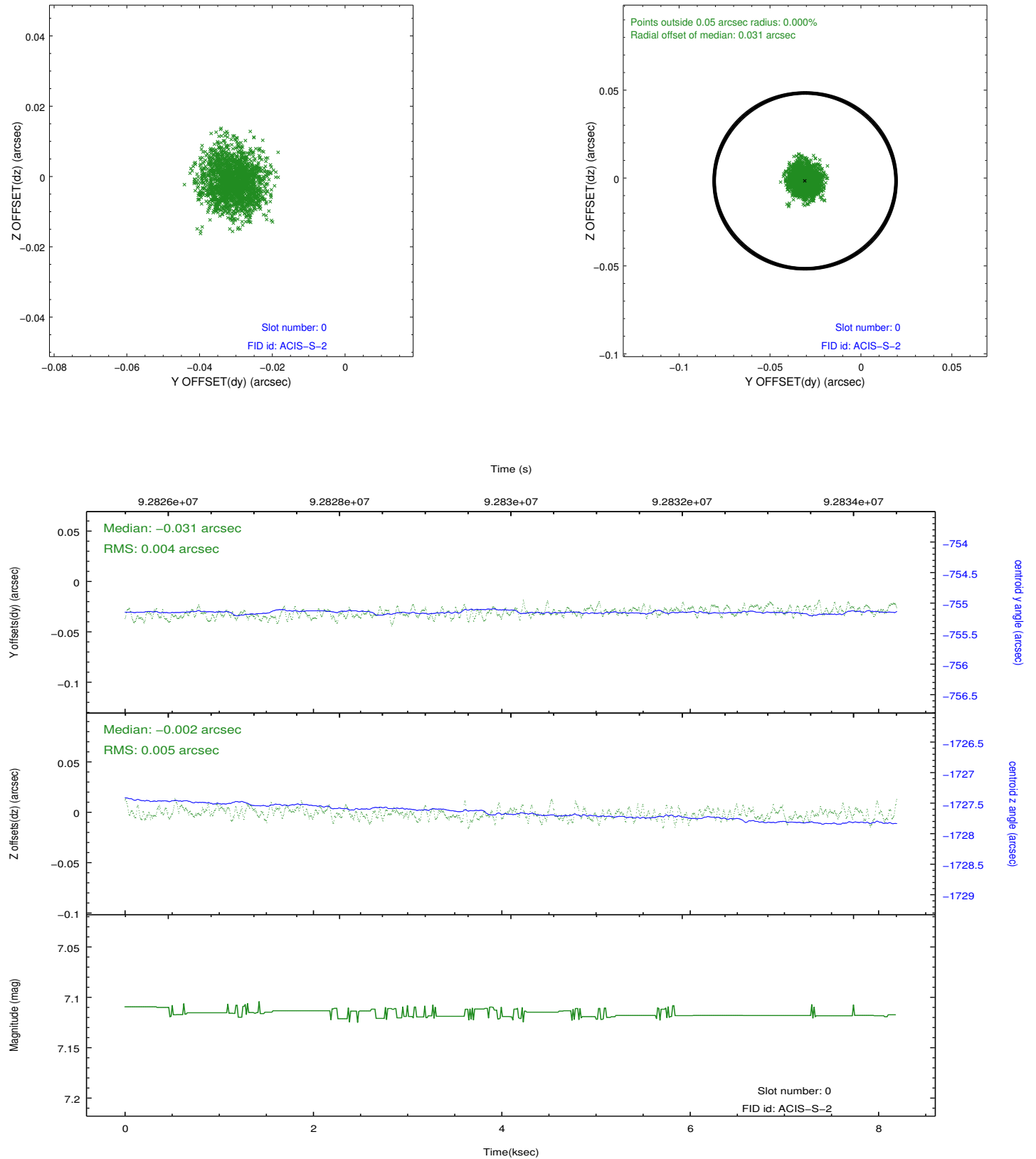


2.4.5 Slot 7

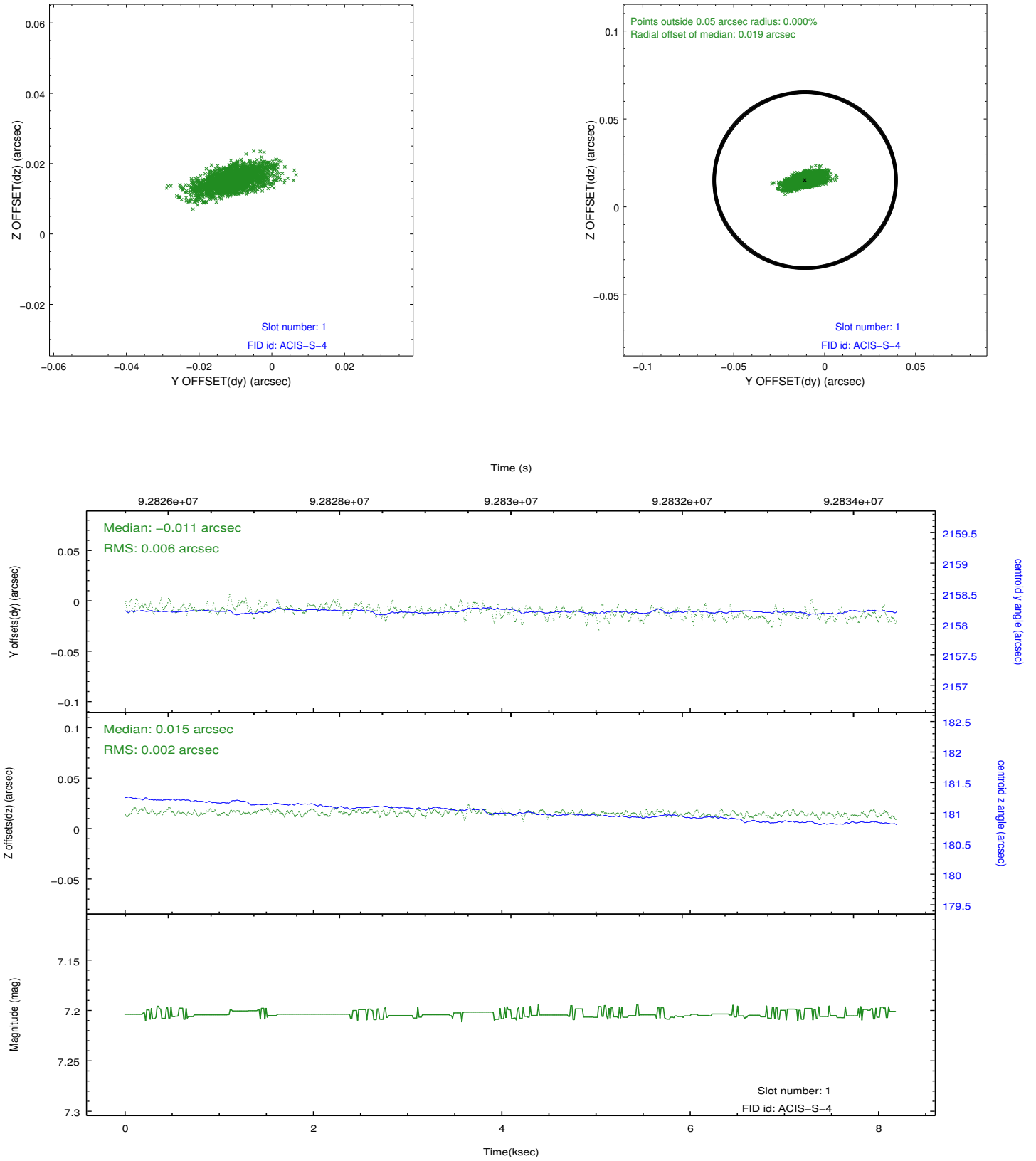


2.5 FID Slots

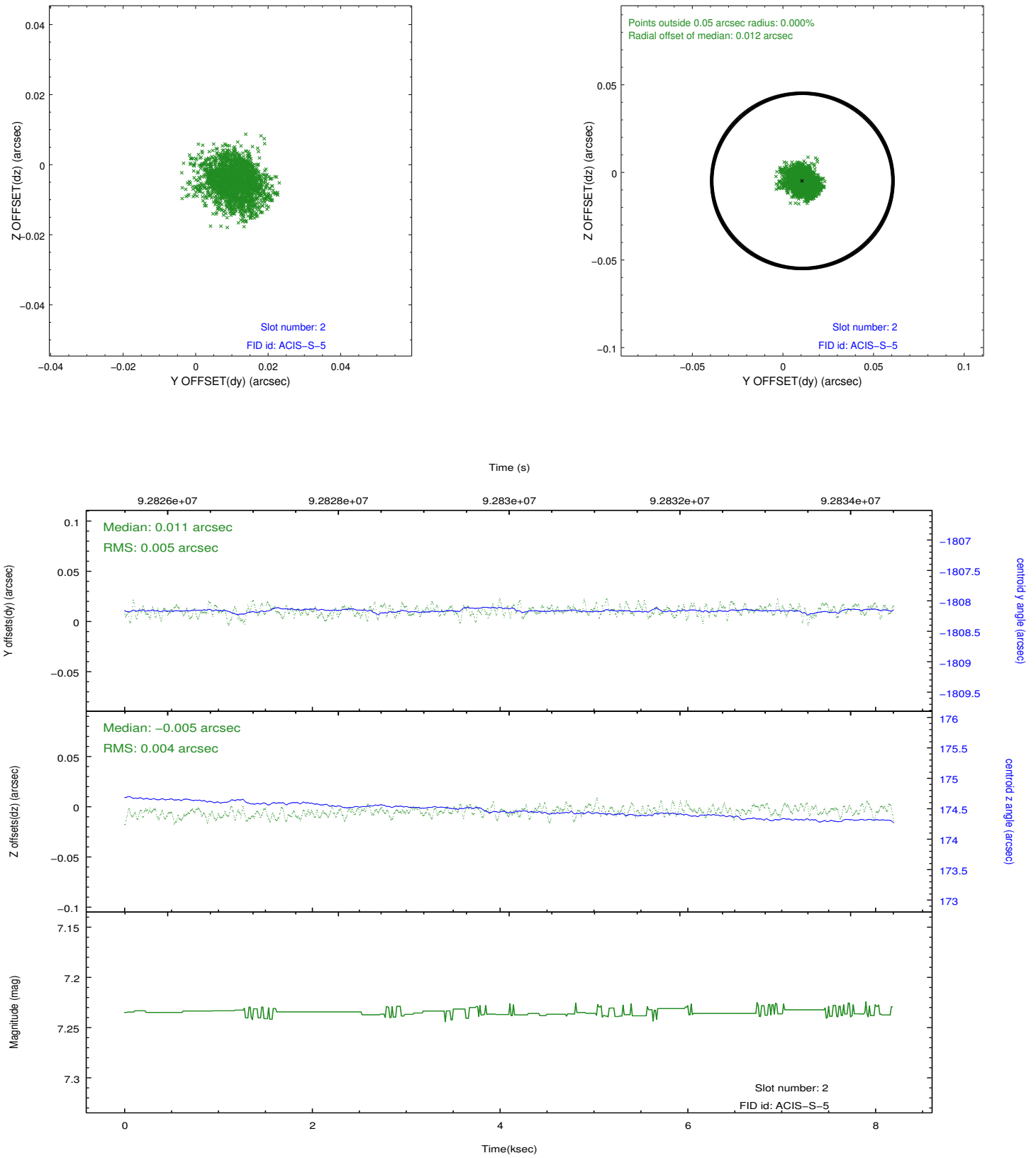
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.10.11 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.8 |

A.2 Comments

Charge time for this ObsId remains at previous value of 7.8 ks, although with the current processing the charge time would be 7.754 ks. ===

There are 2 observations with the obsid 1311. They appear in separate spacecraft loads with these duplicate numbers. Because the 2 obsids used different instrument configurations, the telemetry file of the first obsid 1311 was edited to create a new obsid number, obsid 62864. This obsid retains the 1311 designation.