

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2894 - L2 Version 3
Chandra X-Ray Center

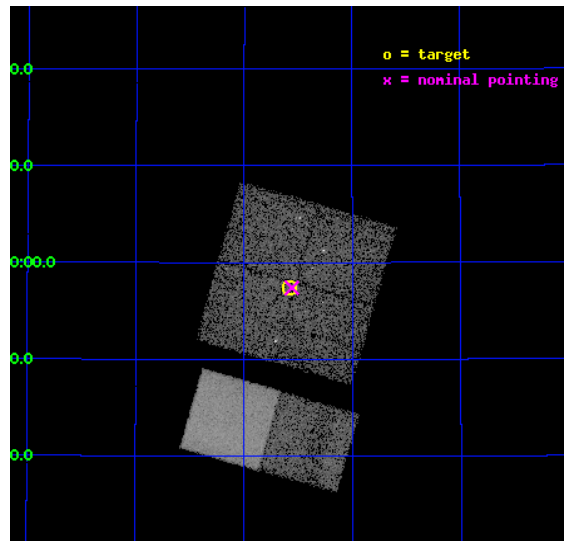
L2 Processing Date : Oct 15 2012

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1 Front

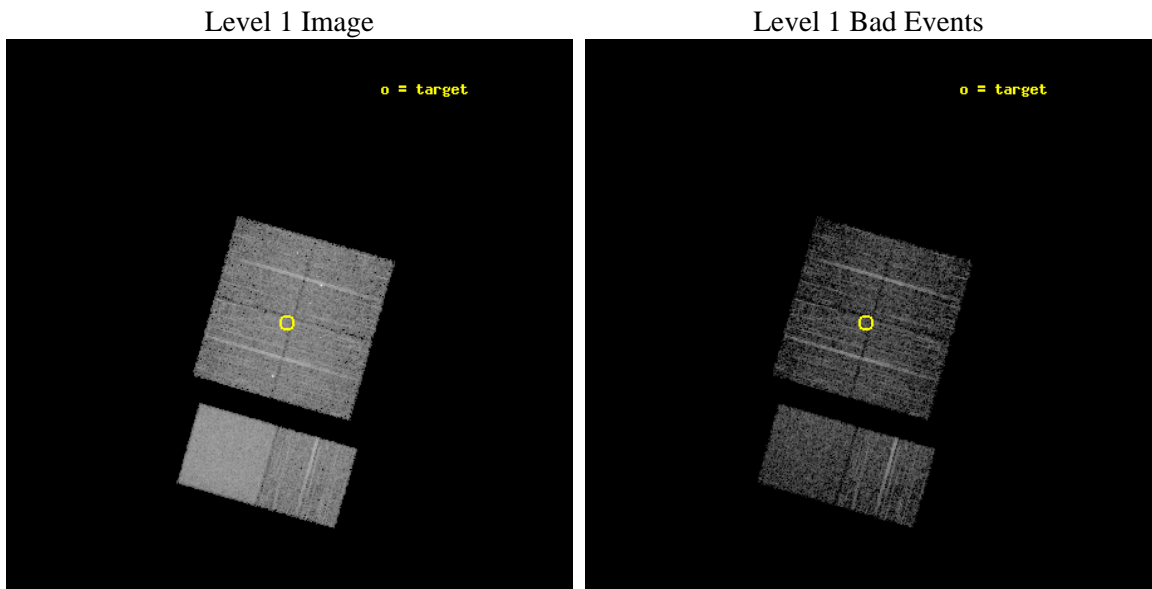
| | | |
|----------|--|---|
| seq_num | 600231 | Sequence number |
| obs_id | 2894 | Observation id |
| title | SEARCHING FOR X-RAY TRANSIENTS IN M31 WITH CHANDRA AND HST | Proposa |
| observer | Dr. Michael Garcia | Principal investigator |
| object | M31-T1 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 10.645417 | Observer's specified target RA [deg] |
| dec_targ | 40.955836 | Observer's specified target Dec [deg] |
| ra_nom | 10.639387875718 | Nominal RA [deg] |
| dec_nom | 40.956430708095 | Nominal Dec [deg] |
| roll_nom | 196.02576057446 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 4713.5999824405 | Sum of GTIs [s] |
| livetime | 4653.9135412736 | Livetime [s] |
| ontime0 | 4713.5999824405 | Sum of GTIs [s] |
| ontime1 | 4713.5999824405 | Sum of GTIs [s] |
| ontime2 | 4713.5999824405 | Sum of GTIs [s] |
| ontime3 | 4713.5999824405 | Sum of GTIs [s] |
| ontime6 | 4710.3589922488 | Sum of GTIs [s] |
| ontime7 | 4713.5999824405 | Sum of GTIs [s] |
| l2events | 77113 | Number of level 2 events |



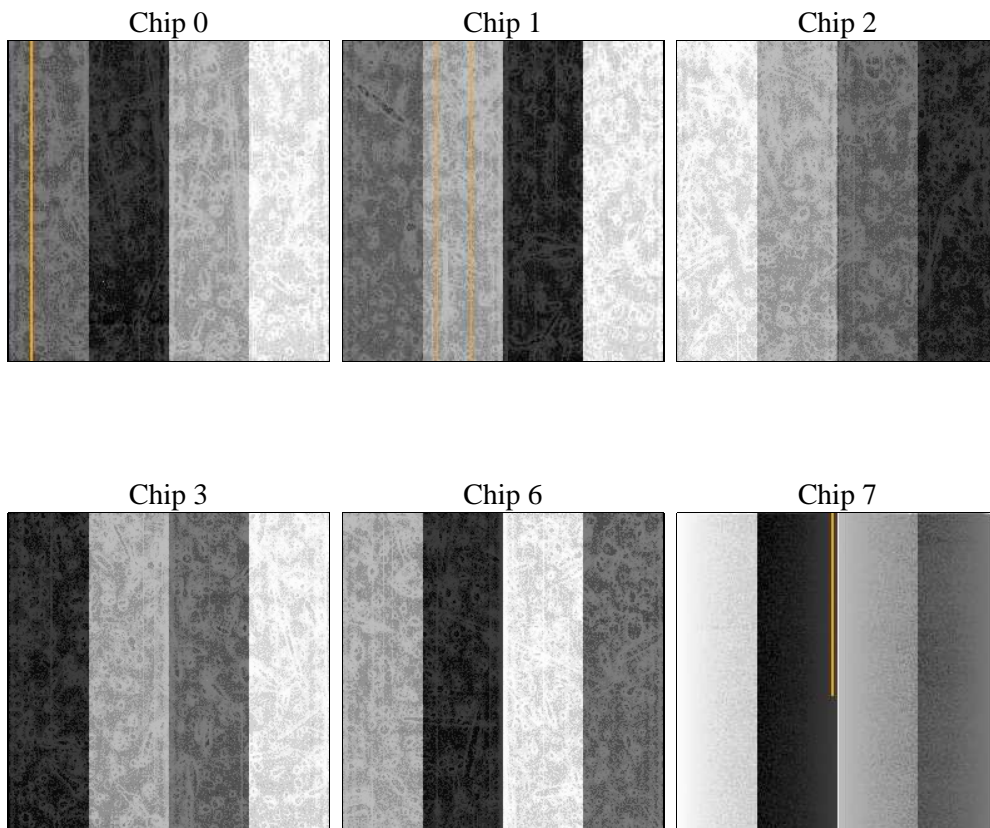
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 4752.151000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 4713.5999824405 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime0 | 4713.5999824405 | Sum of GTIs [s] |
| date | 2012-10-15T13:00:57 | Date and time of file creation | ontime1 | 4713.5999824405 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 4713.5999824405 | Sum of GTIs [s] |
| | | | ontime3 | 4713.5999824405 | Sum of GTIs [s] |
| | | | ontime6 | 4710.3589922488 | Sum of GTIs [s] |
| | | | ontime7 | 4713.5999824405 | Sum of GTIs [s] |
| | | | l1events | 243206 | Number of level 1 events |

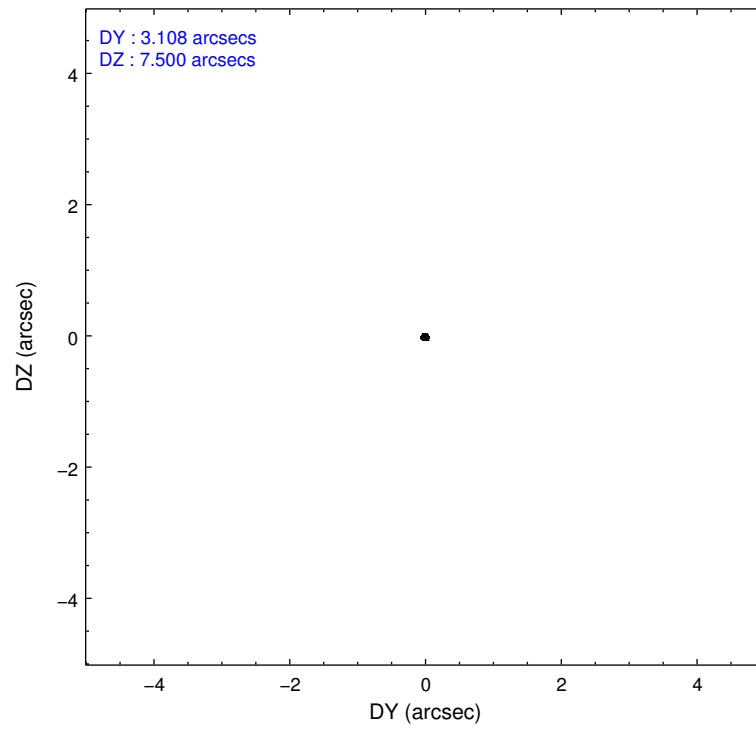
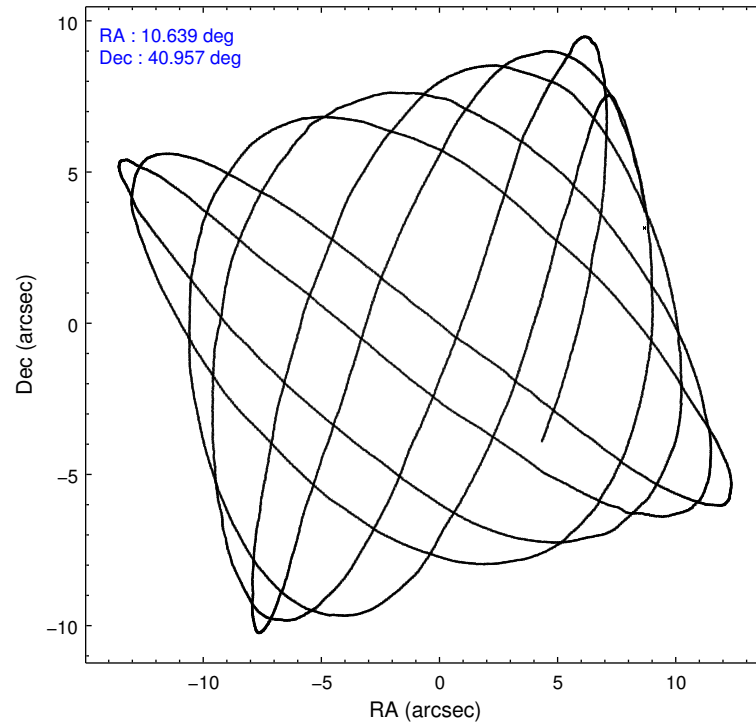
2.1.4 Events

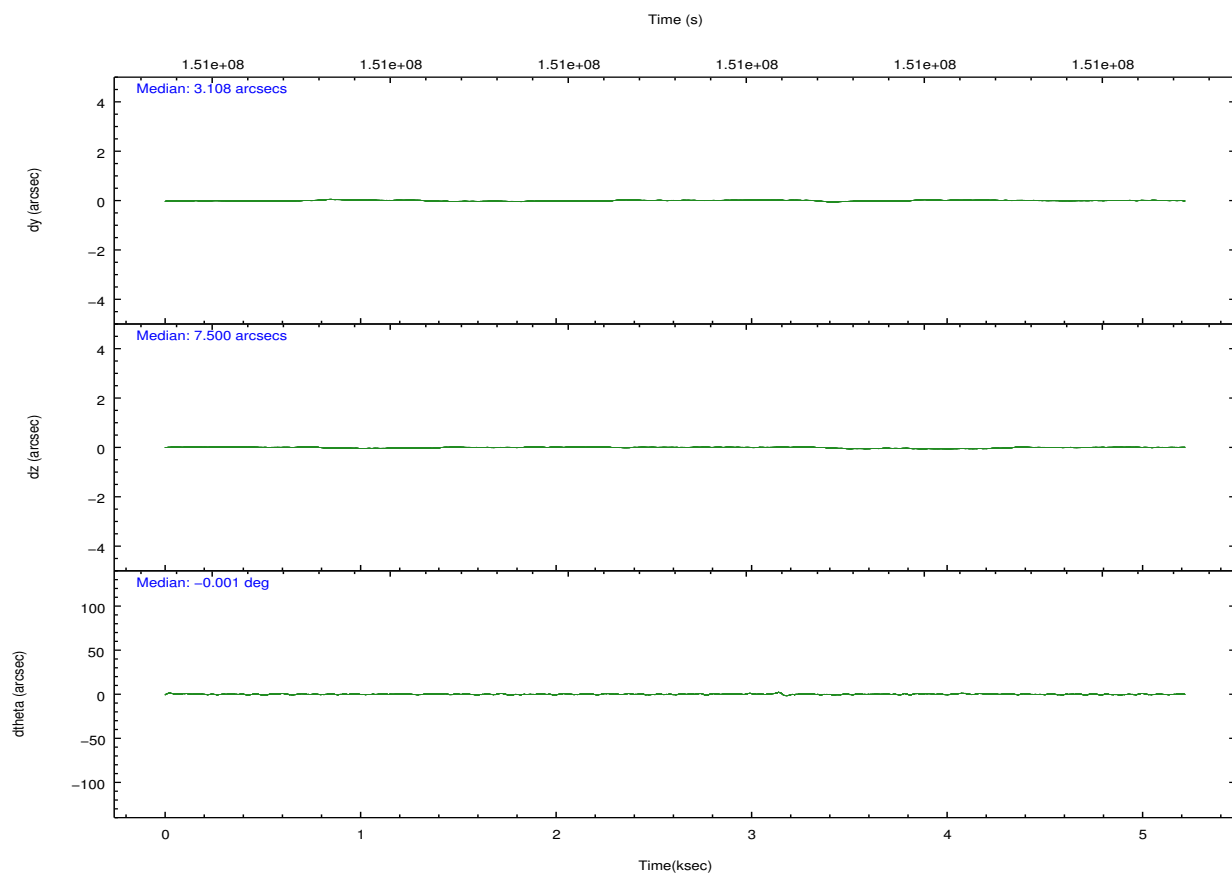
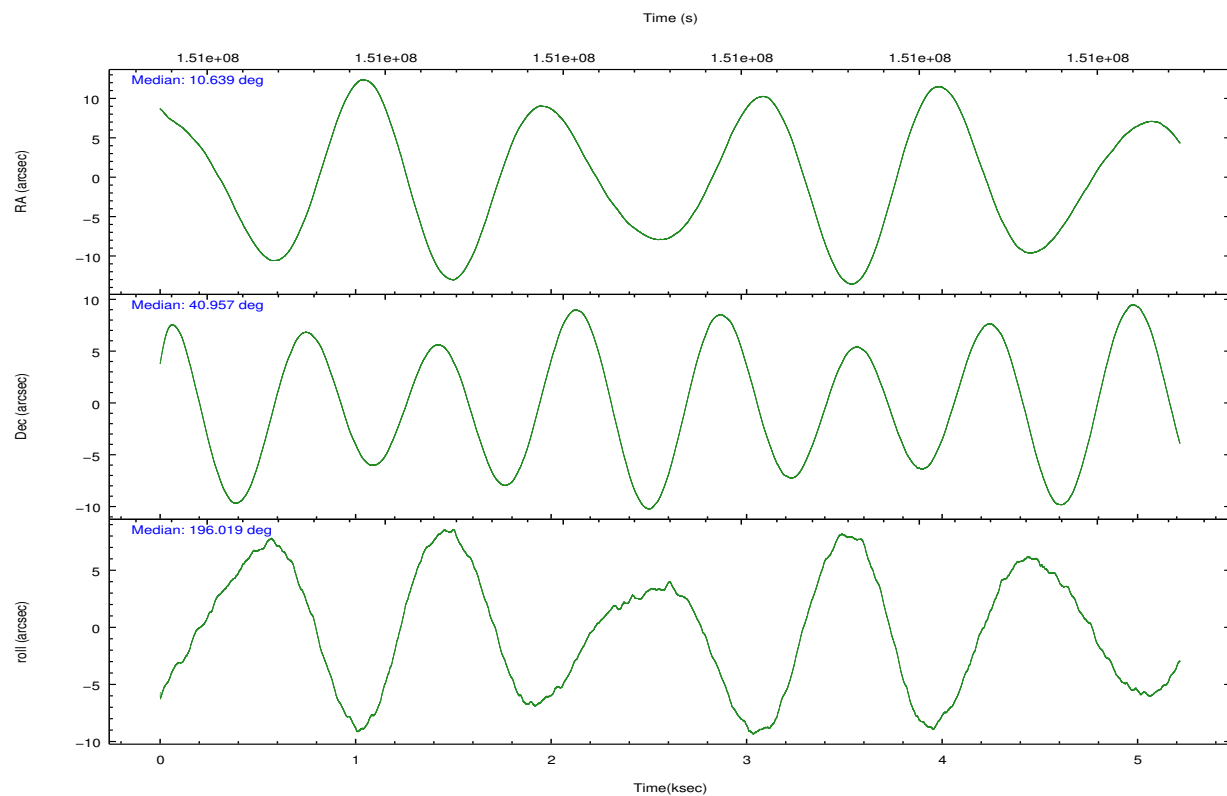
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 33516 | 32165 | 35440 | 36008 | 38407 | 67670 | grade 0 events | 4909 | 4467 | 4237 | 4591 | 5326 | 4620 |
| rejected events | 25550 | 24523 | 28532 | 28539 | 29857 | 24751 | | 14% | 13% | 11% | 12% | 13% | 6% |
| rejected % | 76% | 76% | 80% | 79% | 77% | 36% | grade 1 events | 51 | 21 | 35 | 30 | 19 | 44 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1361 | 1380 | 1114 | 1170 | 1392 | 7918 |
| | | | | | | | | 4% | 4% | 3% | 3% | 3% | 11% |
| | | | | | | | grade 3 events | 513 | 500 | 423 | 485 | 466 | 3394 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 4 events | 430 | 445 | 447 | 456 | 454 | 3453 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 5 events | 1284 | 1262 | 1195 | 1287 | 1458 | 4219 |
| | | | | | | | | 3% | 3% | 3% | 3% | 3% | 6% |
| | | | | | | | grade 6 events | 762 | 855 | 695 | 774 | 917 | 23546 |
| | | | | | | | | 2% | 2% | 1% | 2% | 2% | 34% |
| | | | | | | | grade 7 events | 24206 | 23235 | 27294 | 27215 | 28375 | 20476 |
| | | | | | | | | 72% | 72% | 77% | 75% | 73% | 30% |

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 | 10.664398 | 10.63938787571764 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 40.976178 | 40.95643070809537 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 195.800677 | 196.0257605744575 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 150940864.184000 | 150940864.184000 | | | |
| [s] Window stop time (MET) | 151545664.184000 | 151545664.184000 | | | |
| [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) | 150997456.184000 | 150996354.29784 | | | |
| Observation start date | 2002-10-14T15:43:12 | 2002-10-14T15:25:54 | | | |
| [s] Observation end time (MET) | 151002208.184000 | 151002522.7481 | | | |
| Observation end date | 2002-10-14T17:02:24 | 2002-10-14T17:08:42 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



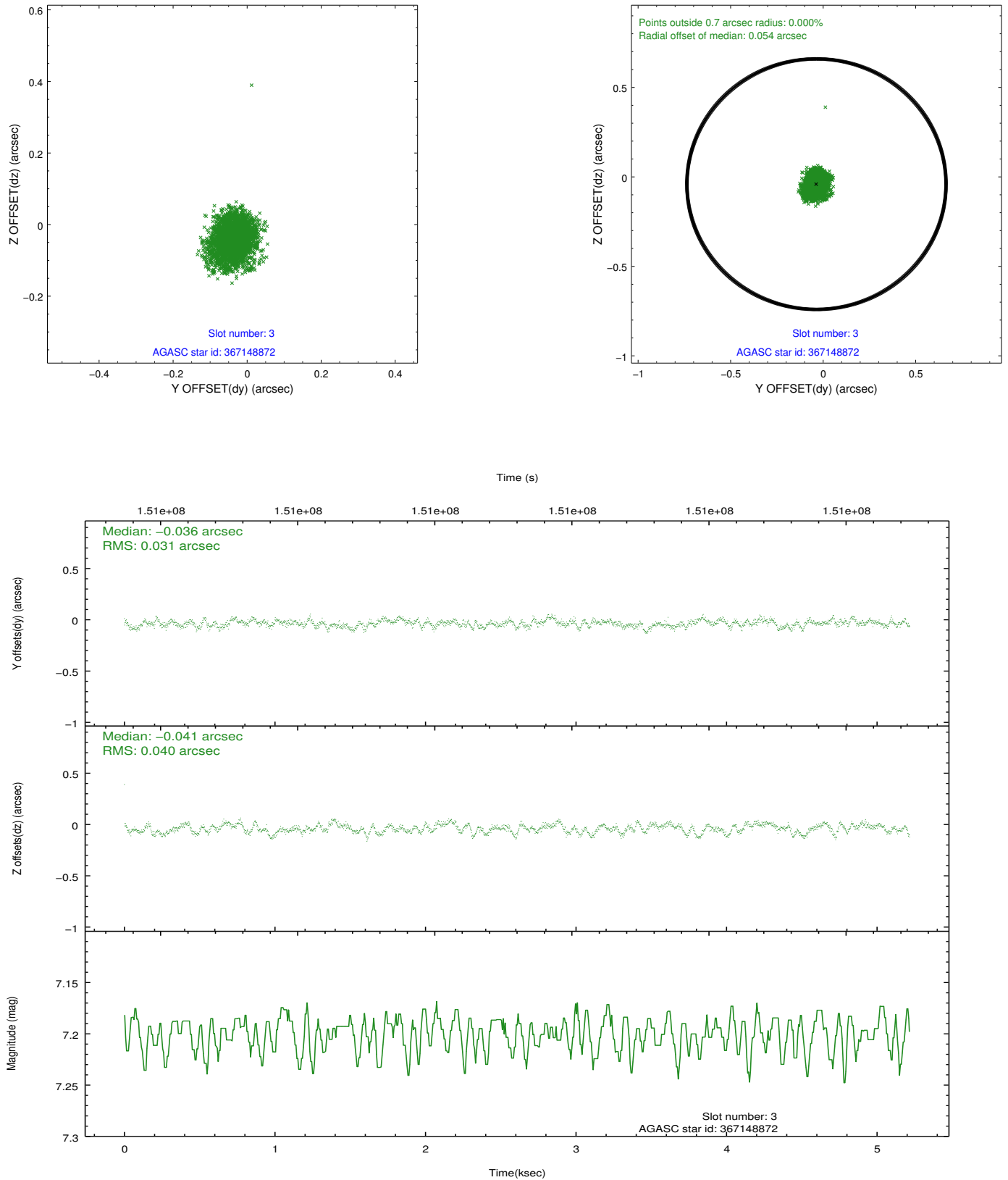


Slot Statistics

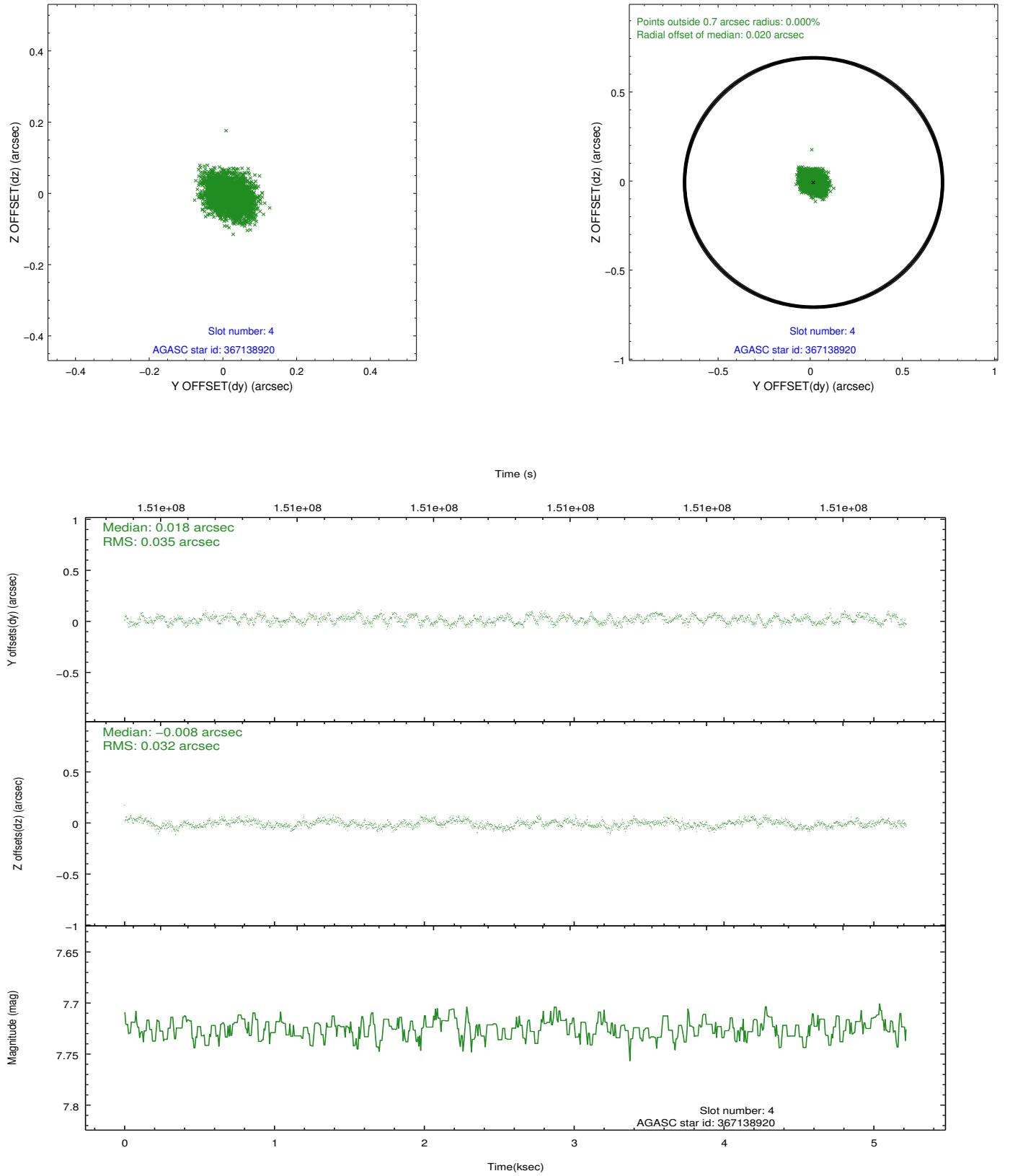
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 1273 | 0.015 | 0.018 | 0.006 | 0.011 | 0.000000 | 0.000000 | 936.69 | -830.89 |
| 1 | FID | ACIS-I-5 | 7.24 | 1273 | -0.091 | 0.057 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1810.85 | 1066.10 |
| 2 | FID | ACIS-I-6 | 7.26 | 1273 | -0.015 | -0.005 | 0.006 | 0.011 | 0.000000 | 0.000000 | 400.98 | 1711.82 |
| 3 | GUIDE | 367148872 | 7.20 | 2546 | -0.036 | -0.041 | 0.054 | 0.086 | 10.505940 | 40.688258 | 698.01 | 880.63 |
| 4 | GUIDE | 367138920 | 7.72 | 2546 | 0.018 | -0.008 | 0.051 | 0.080 | 11.513485 | 40.808909 | -2065.59 | 1200.14 |
| 5 | GUIDE | 367144424 | 8.65 | 2546 | -0.061 | -0.097 | 0.081 | 0.125 | 10.464515 | 40.309136 | 1180.34 | 2162.37 |
| 6 | GUIDE | 367674552 | 8.85 | 2546 | 0.053 | 0.115 | 0.078 | 0.120 | 11.016238 | 41.570845 | -1494.83 | -1801.73 |
| 7 | GUIDE | 367658664 | 9.58 | 2544 | 0.028 | 0.036 | 0.112 | 0.181 | 10.374070 | 41.369746 | 367.97 | -1577.54 |

2.4 Star Slots

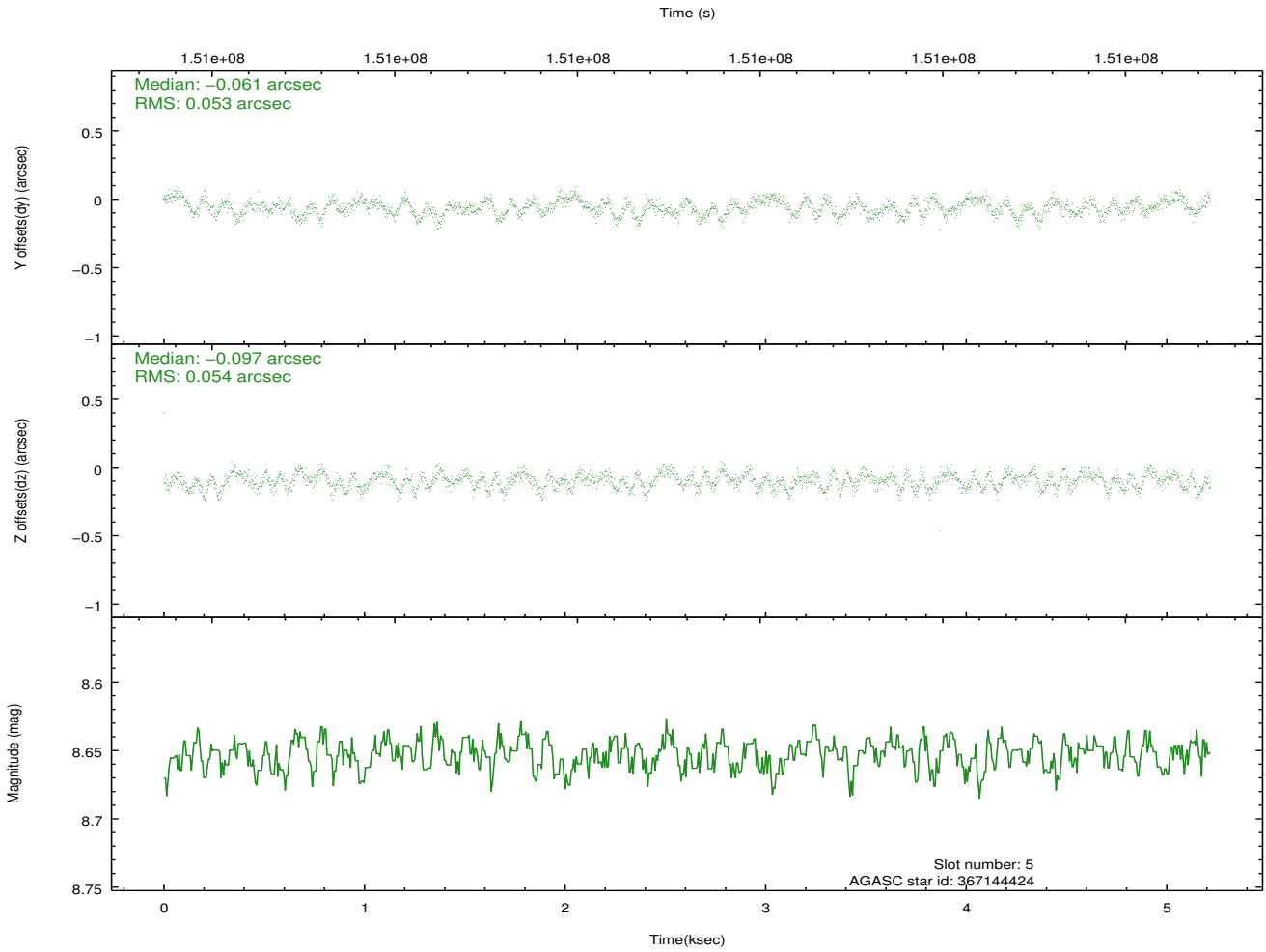
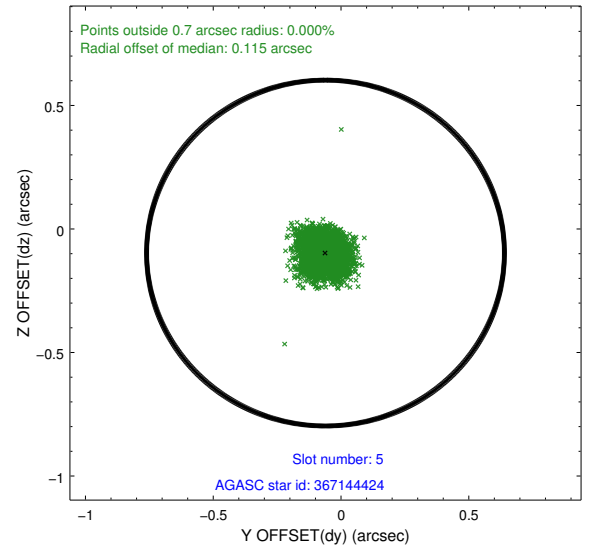
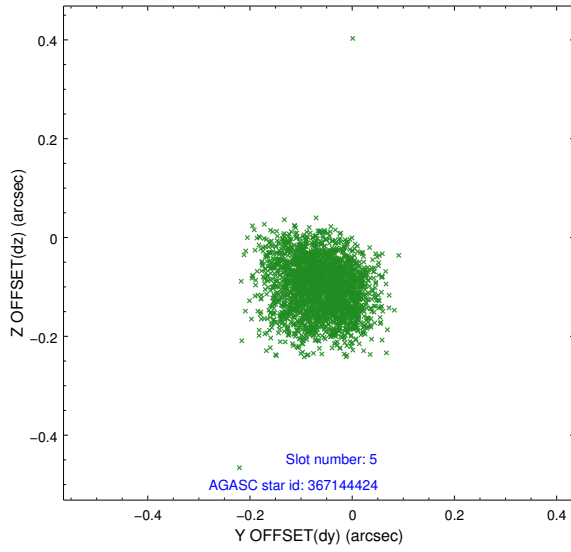
2.4.1 Slot 3



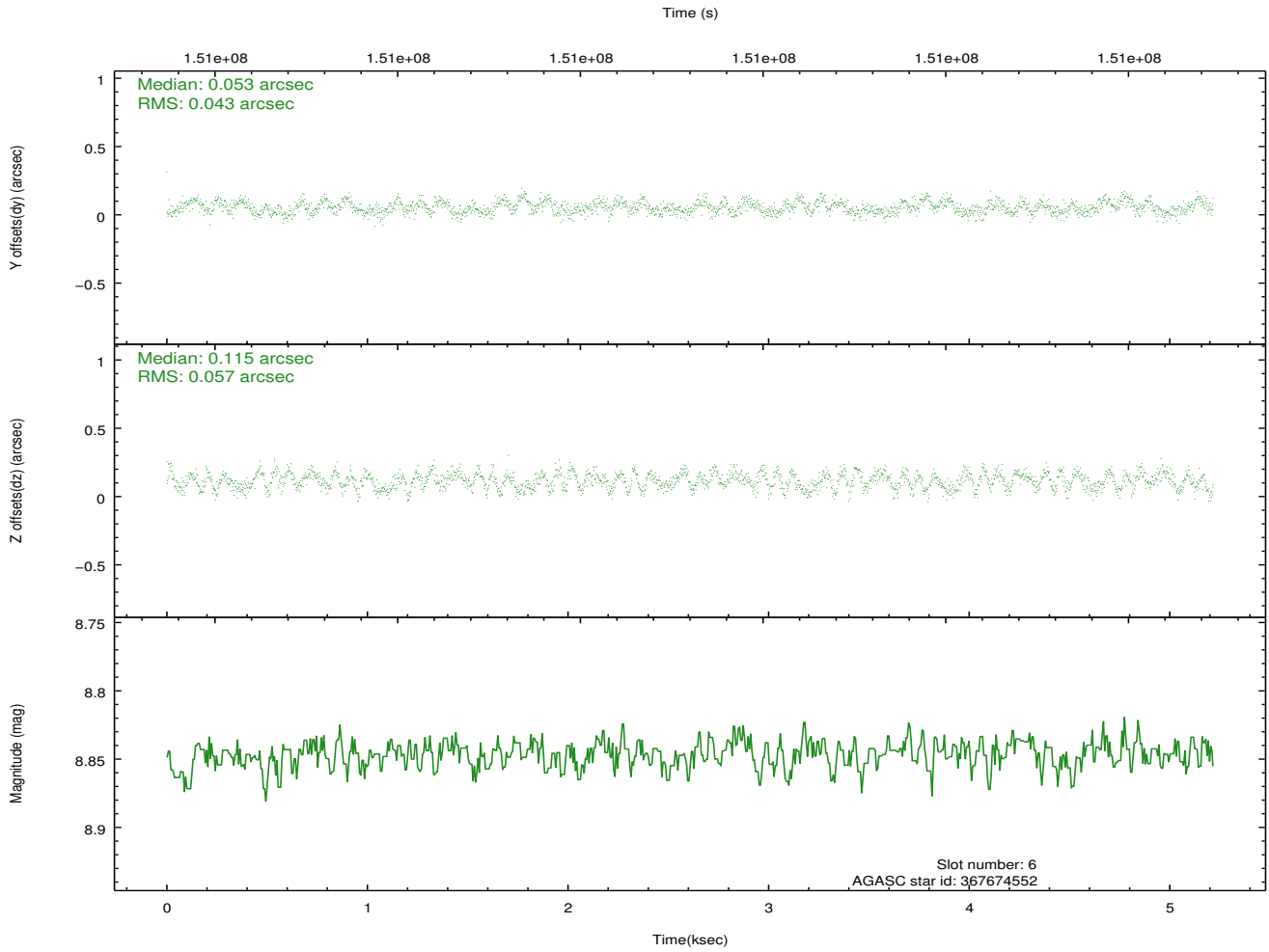
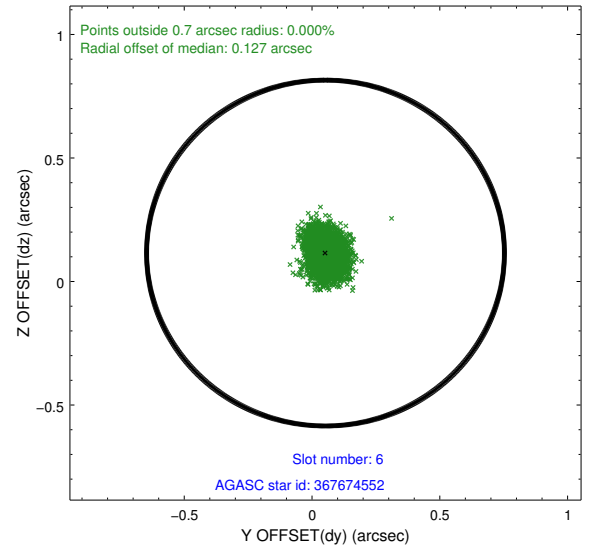
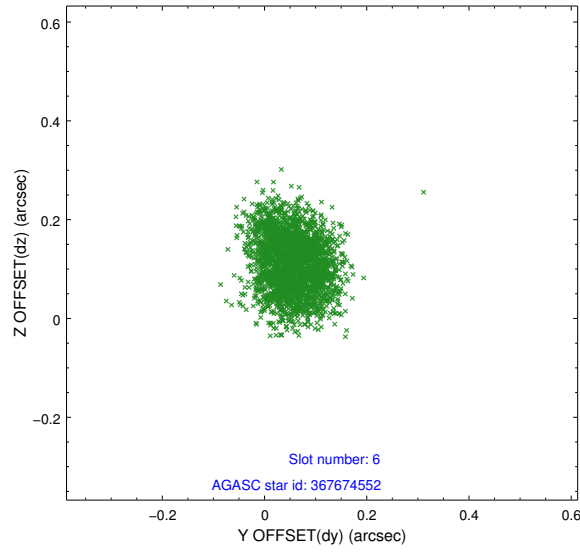
2.4.2 Slot 4



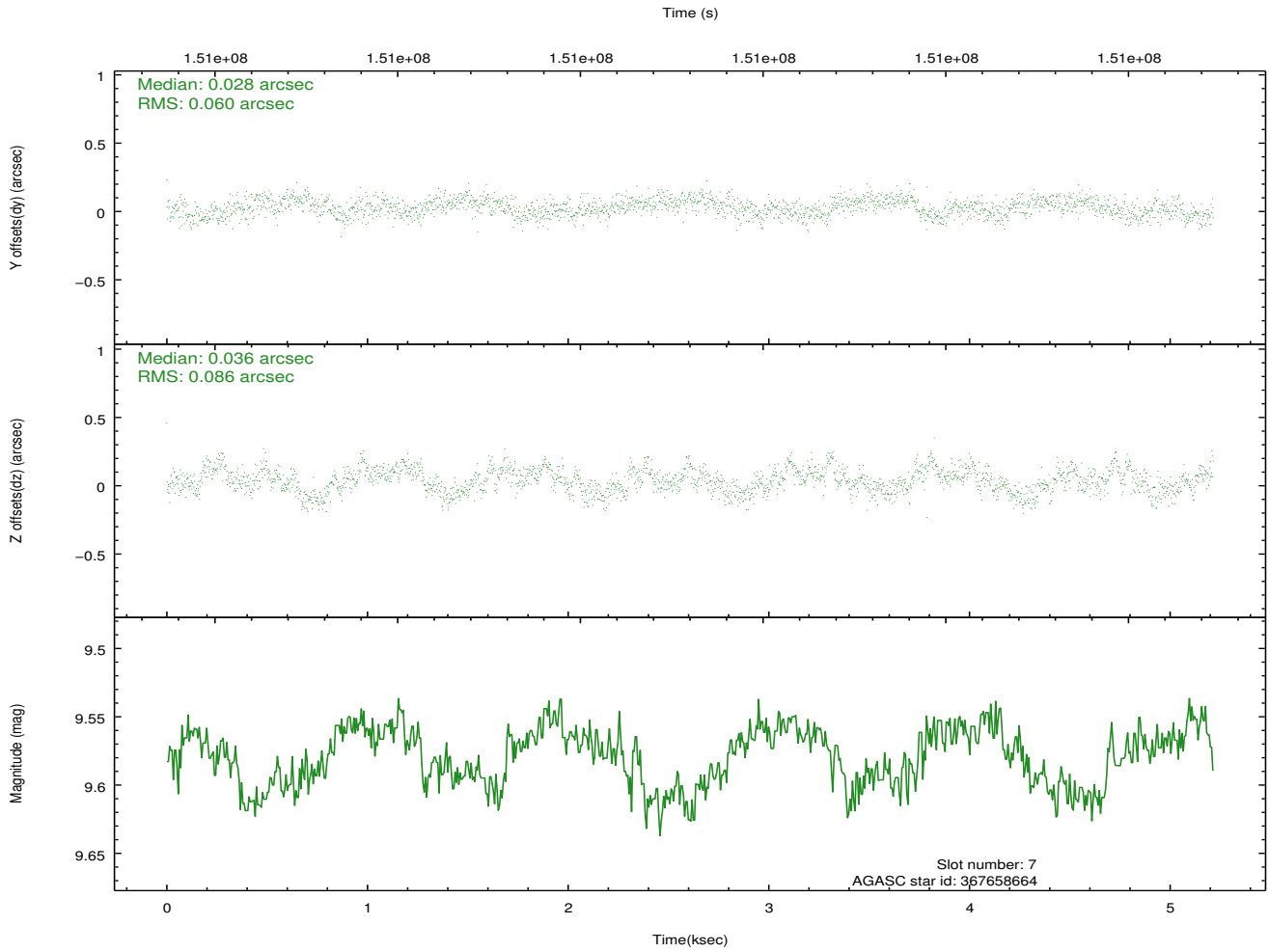
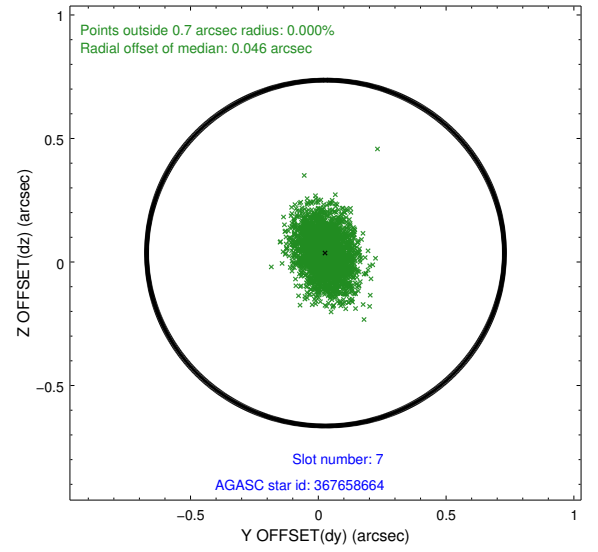
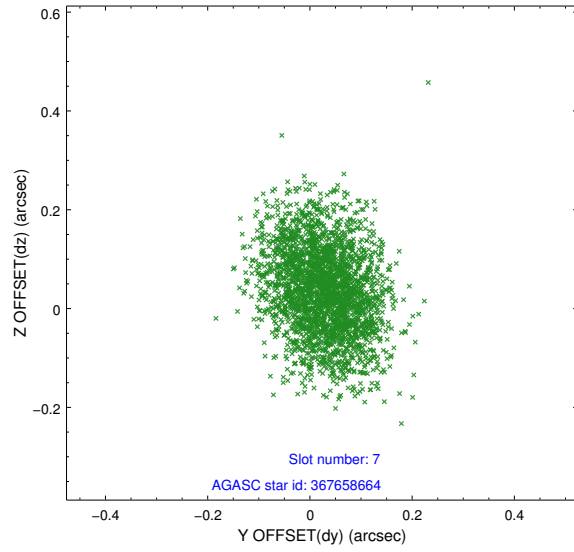
2.4.3 Slot 5



2.4.4 Slot 6

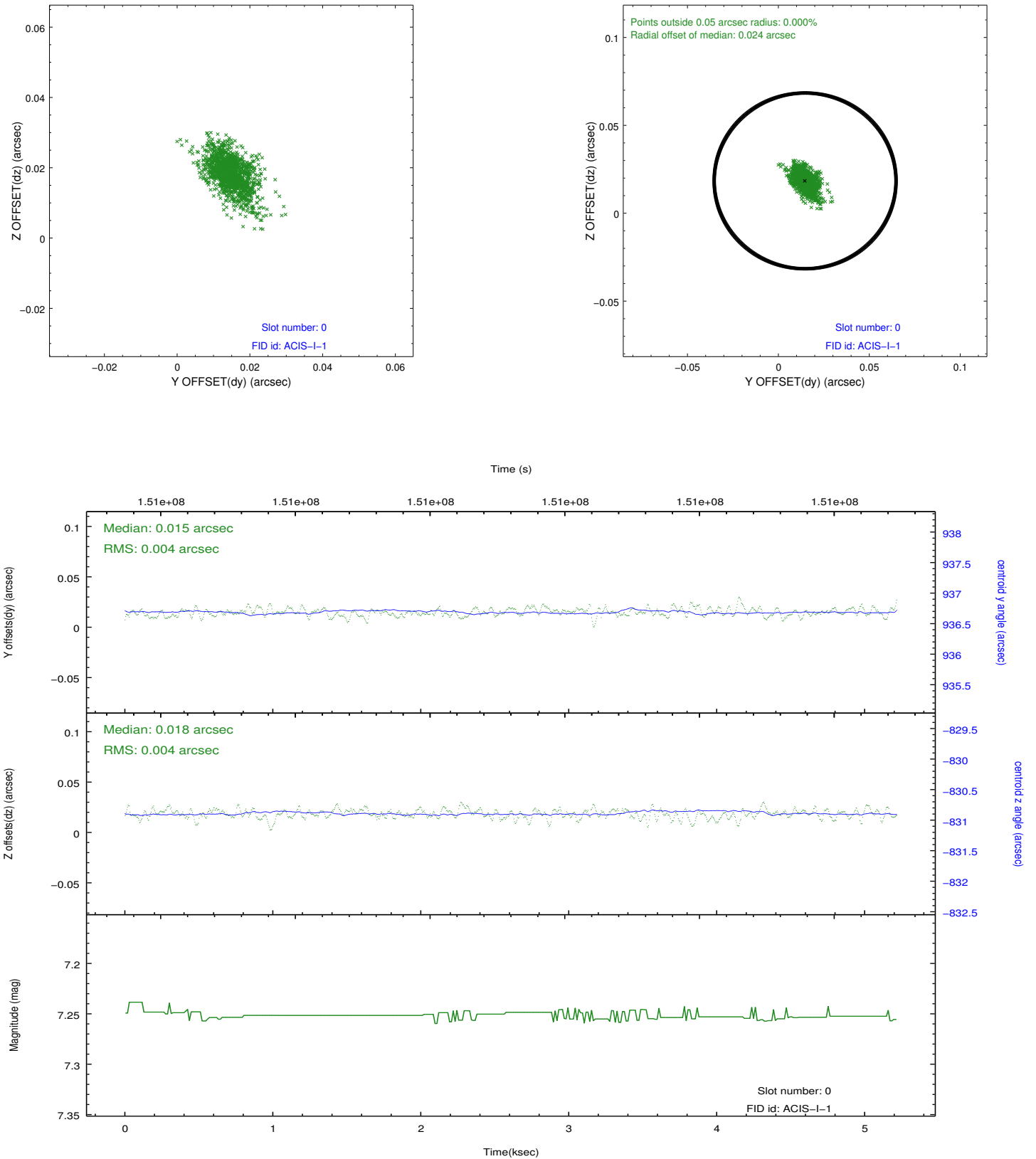


2.4.5 Slot 7

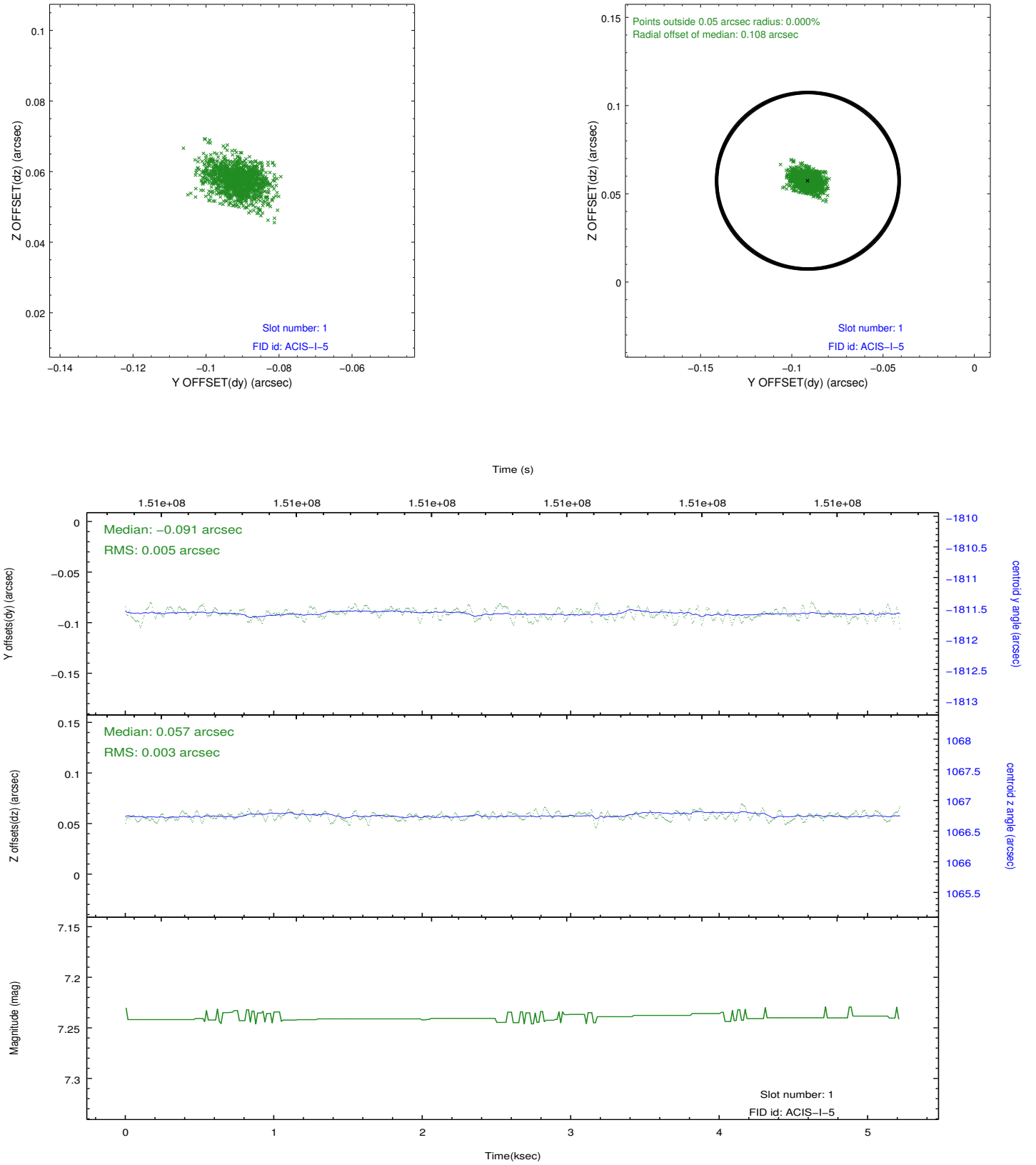


2.5 FID Slots

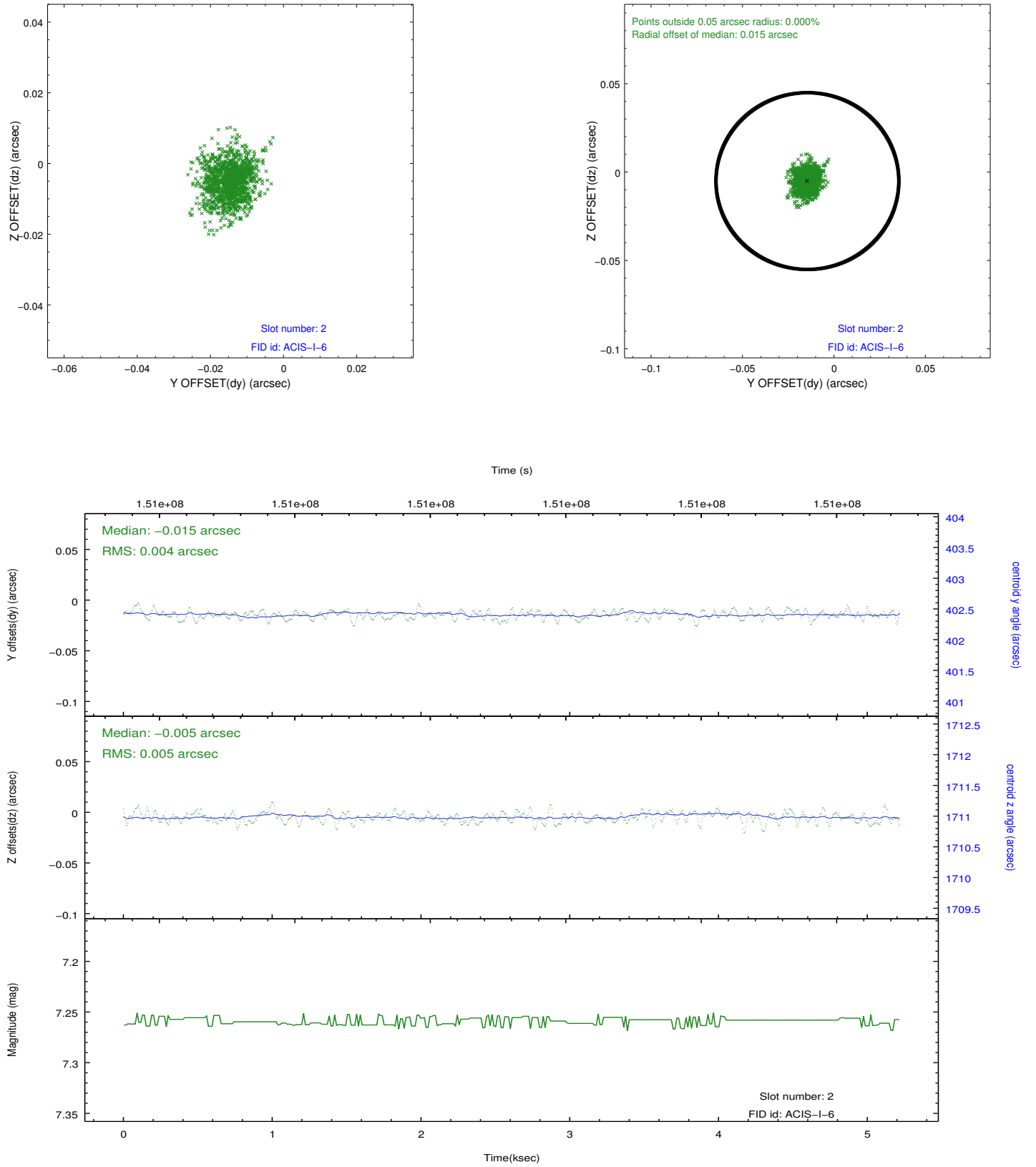
2.5.1 Slot 0



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) | 2012.10.24 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.716 |

A.2 Comments

Window constraint met.