

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2838 - L2 Version 3
Chandra X-Ray Center

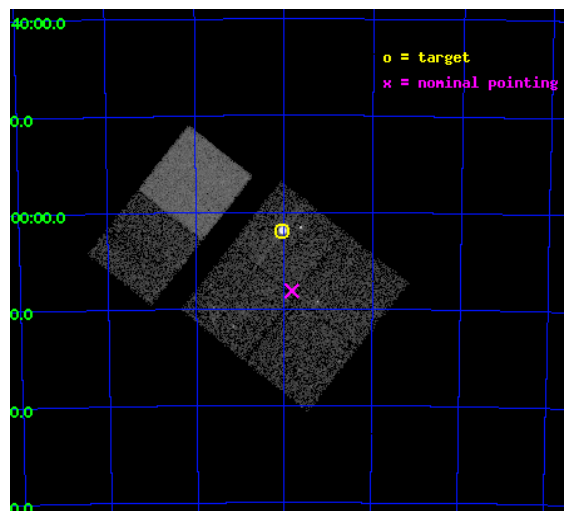
L2 Processing Date : Sep 28 2012

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1 Front

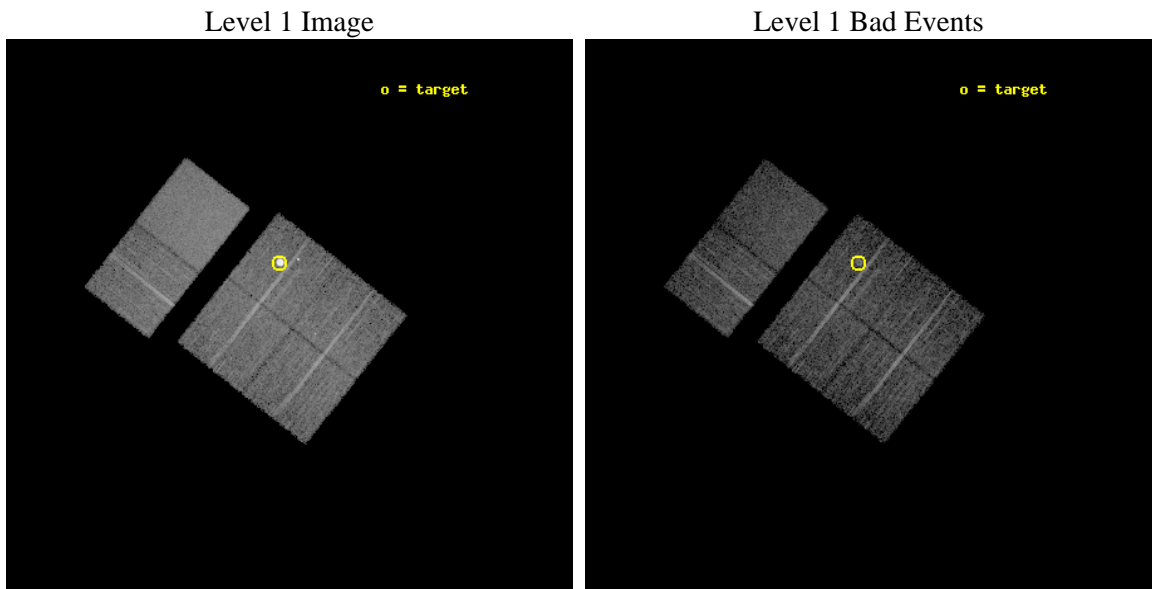
| | | |
|----------|--|---|
| seq_num | 590227 | Sequence number |
| obs_id | 2838 | Observation id |
| title | AO3A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72 | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | E0102-72.3 [Chip I3, T=120, Offsets=-4,4,0] | Source 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 | 15.956446005818 | Nominal RA [deg] |
| dec_nom | -72.135339245497 | Nominal Dec [deg] |
| roll_nom | 308.38511591178 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 7558.4000070244 | Sum of GTIs [s] |
| livetime | 7462.6909950134 | Livetime [s] |
| ontime0 | 7555.1590467542 | Sum of GTIs [s] |
| ontime1 | 7555.1590467542 | Sum of GTIs [s] |
| ontime2 | 7558.4000070244 | Sum of GTIs [s] |
| ontime3 | 7558.4000070244 | Sum of GTIs [s] |
| ontime6 | 7558.4000070244 | Sum of GTIs [s] |
| ontime7 | 7558.4000070244 | Sum of GTIs [s] |
| l2events | 78729 | Number of level 2 events |



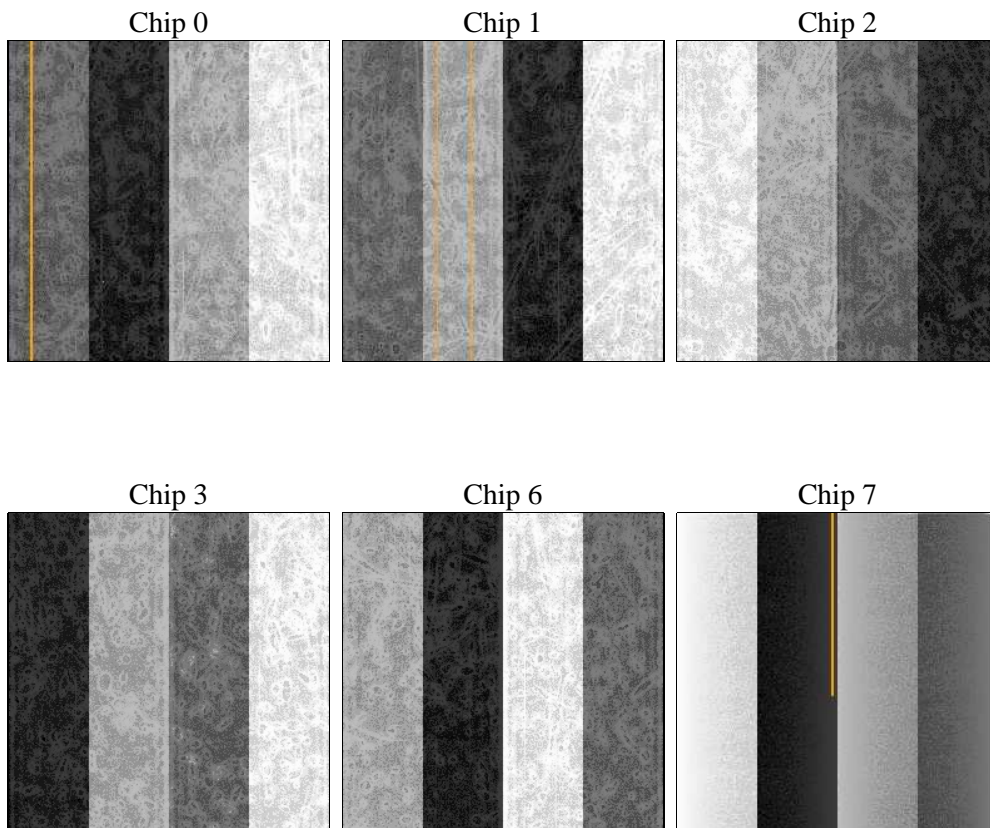
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 7800.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 7558.4000070244 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime0 | 7555.1590467542 | Sum of GTIs [s] |
| date | 2012-09-28T06:38:10 | Date and time of file creation | ontime1 | 7555.1590467542 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 7558.4000070244 | Sum of GTIs [s] |
| | | | ontime3 | 7558.4000070244 | Sum of GTIs [s] |
| | | | ontime6 | 7558.4000070244 | Sum of GTIs [s] |
| | | | ontime7 | 7558.4000070244 | Sum of GTIs [s] |
| | | | l1events | 322858 | Number of level 1 events |

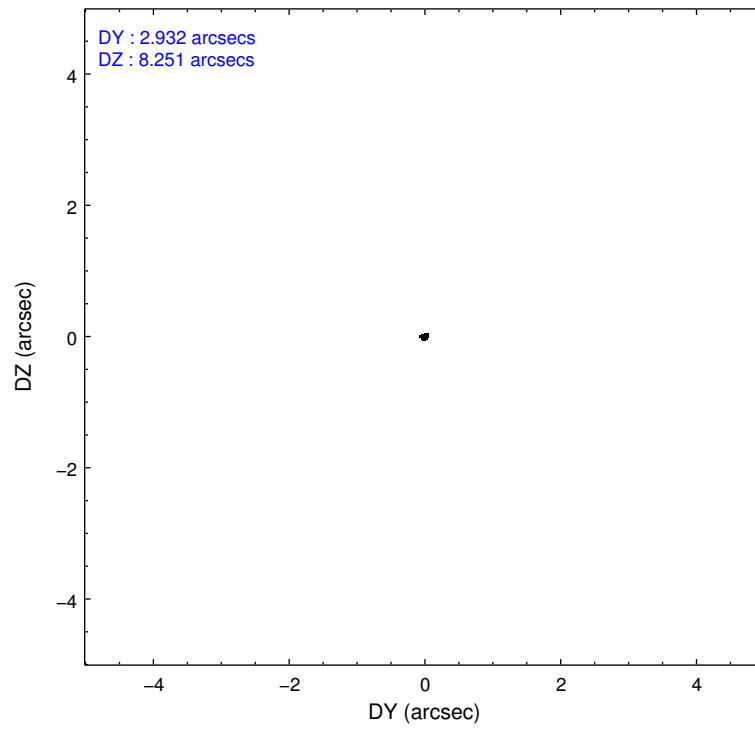
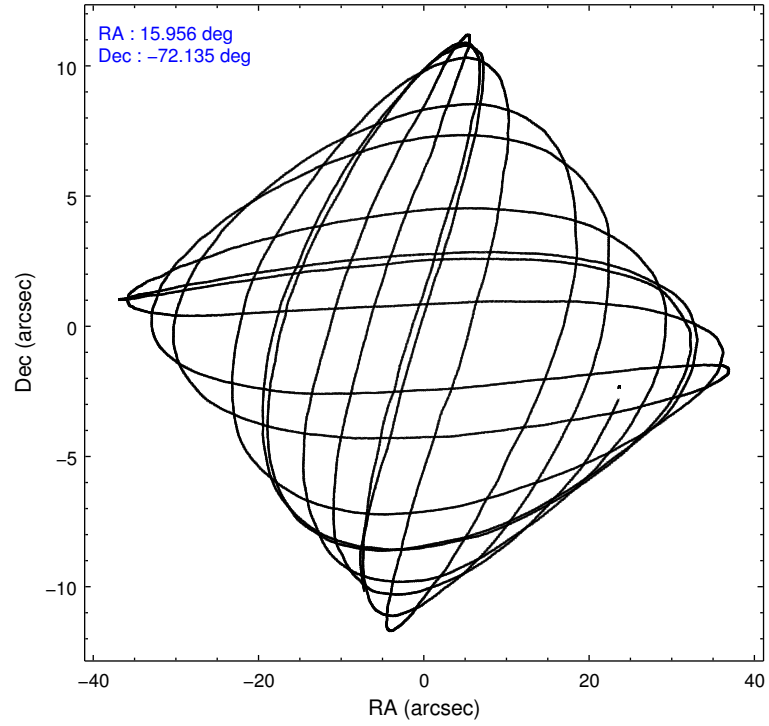
2.1.4 Events

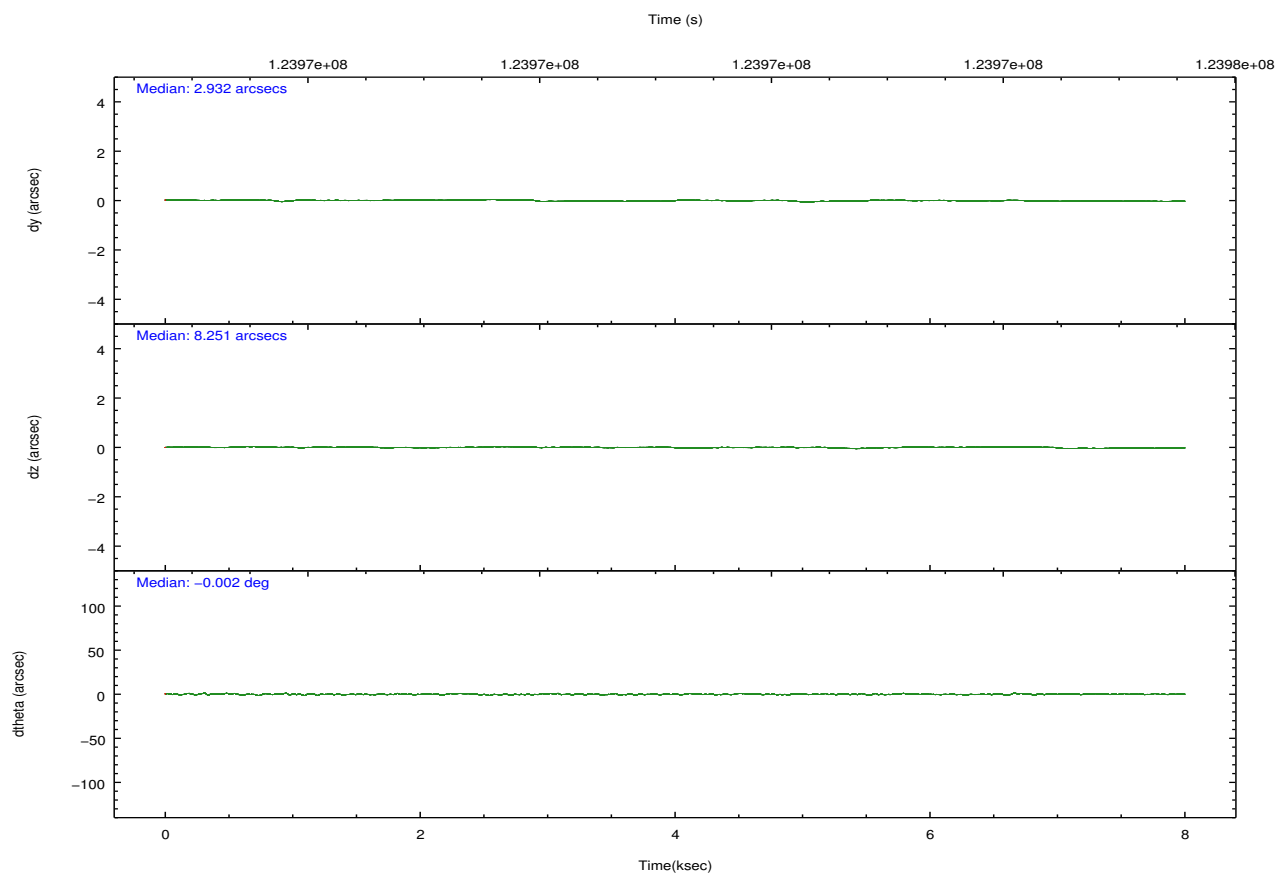
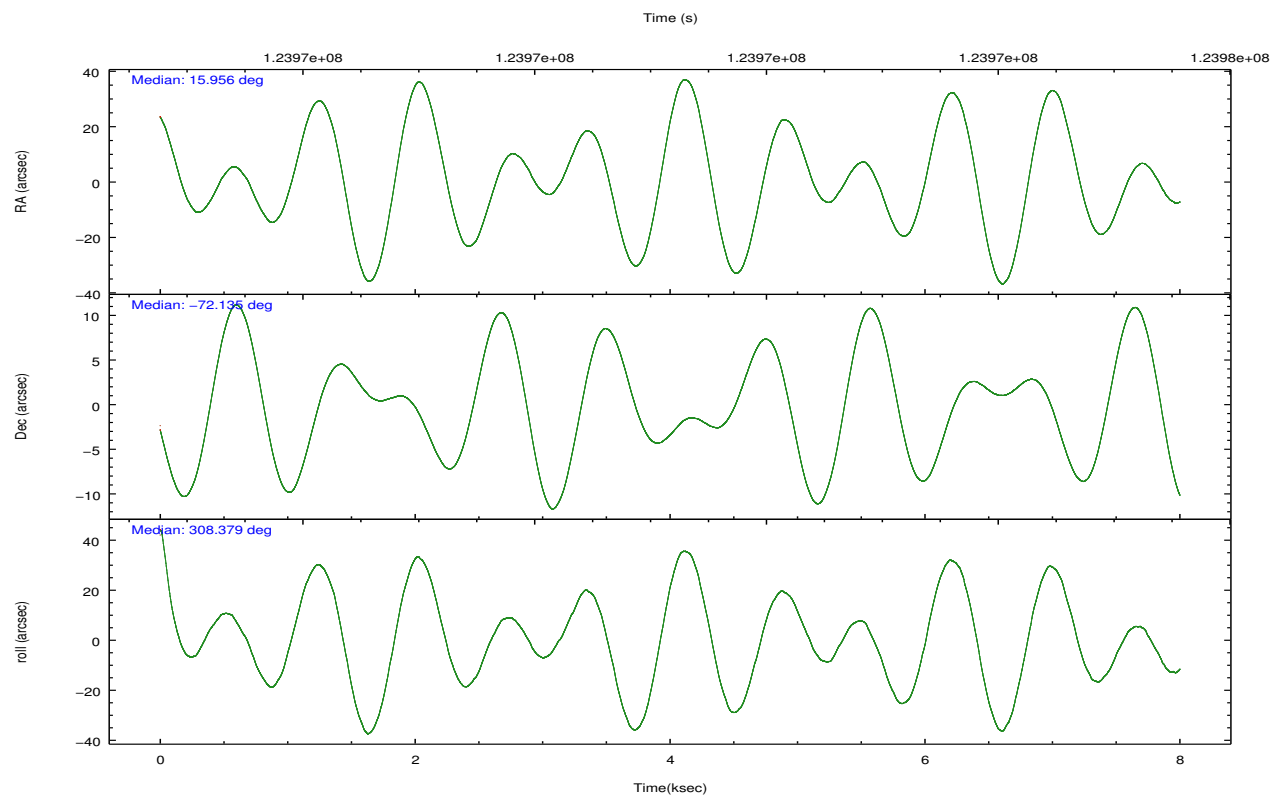
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 43993 | 44899 | 48236 | 71874 | 49344 | 64512 | grade 0 events | 2582 | 2941 | 3049 | 25208 | 2421 | 2651 |
| rejected events | 38188 | 38296 | 41949 | 40443 | 43521 | 36989 | | 5% | 6% | 6% | 35% | 4% | 4% |
| rejected % | 86% | 85% | 86% | 56% | 88% | 57% | grade 1 events | 29 | 23 | 24 | 195 | 31 | 56 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1265 | 1230 | 1246 | 2983 | 1164 | 5437 |
| | | | | | | | | 2% | 2% | 2% | 4% | 2% | 8% |
| | | | | | | | grade 3 events | 536 | 635 | 517 | 1022 | 548 | 2368 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 483 | 615 | 512 | 983 | 541 | 2440 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 1818 | 1834 | 1723 | 1935 | 1992 | 5968 |
| | | | | | | | | 4% | 4% | 3% | 2% | 4% | 9% |
| | | | | | | | grade 6 events | 941 | 1187 | 968 | 1262 | 1154 | 14656 |
| | | | | | | | | 2% | 2% | 2% | 1% | 2% | 22% |
| | | | | | | | grade 7 events | 36339 | 36434 | 40197 | 38286 | 41493 | 30936 |
| | | | | | | | | 82% | 81% | 83% | 53% | 84% | 47% |

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 | 15.873396 | 15.95644600581841 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -72.125281 | -72.13533924549732 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 308.097356 | 308.3851159117822 | [s] Primary exposure time | 0.000000 | 3.2 |
| [s] Window start time (MET) | 123552064.184000 | 123552064.184000 | | | |
| [s] Window stop time (MET) | 126144064.184000 | 126144064.184000 | | | |
| [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) | 123967369.184000 | 123966993.00864 | | | |
| Observation start date | 2001-12-05T19:21:45 | 2001-12-05T19:16:33 | | | |
| [s] Observation end time (MET) | 123975169.184000 | 123975303.19647 | | | |
| Observation end date | 2001-12-05T21:31:45 | 2001-12-05T21:35:03 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



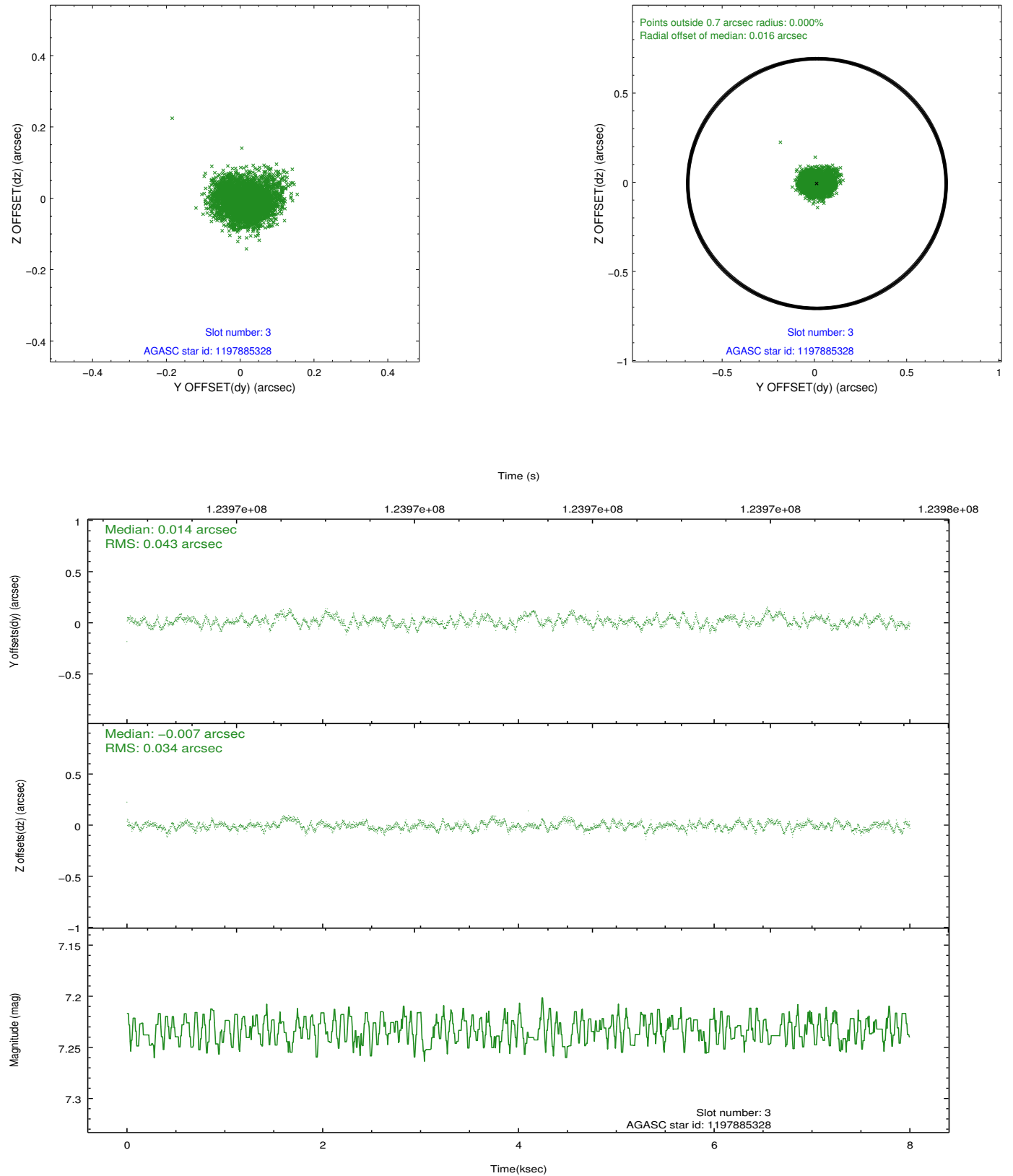


Slot Statistics

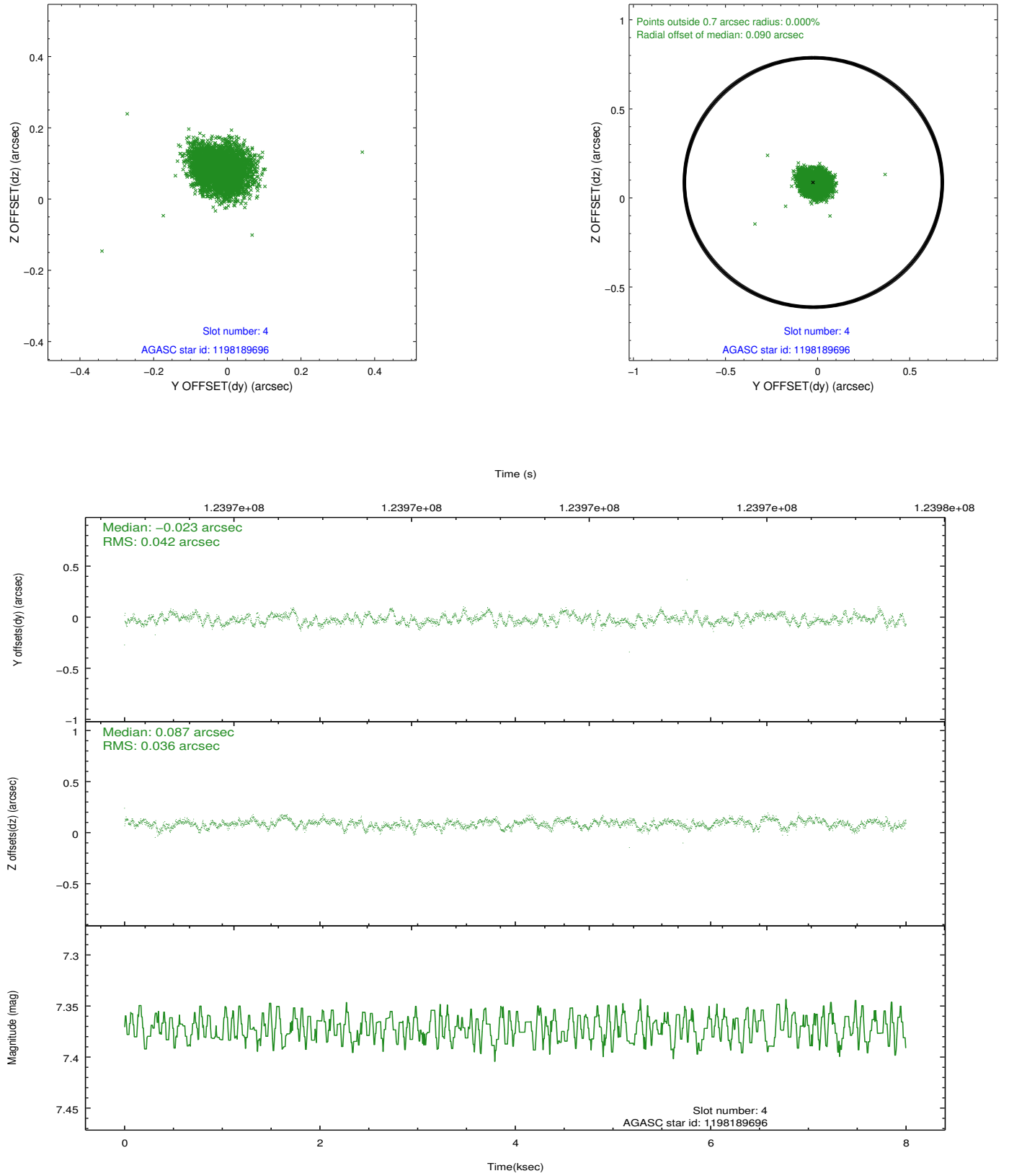
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 1952 | -0.024 | 0.061 | 0.007 | 0.012 | 0.000000 | 0.000000 | 936.83 | -831.62 |
| 1 | FID | ACIS-I-5 | 7.24 | 1952 | -0.044 | 0.037 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1810.89 | 1065.52 |
| 2 | FID | ACIS-I-6 | 7.26 | 1952 | -0.023 | -0.028 | 0.007 | 0.011 | 0.000000 | 0.000000 | 401.64 | 1710.73 |
| 3 | GUIDE | 1197885328 | 7.23 | 3902 | 0.014 | -0.007 | 0.058 | 0.095 | 16.283090 | -71.733943 | -822.45 | 1232.43 |
| 4 | GUIDE | 1198189696 | 7.37 | 3901 | -0.023 | 0.087 | 0.059 | 0.092 | 15.223750 | -72.697522 | 1194.85 | -1820.02 |
| 5 | GUIDE | 1197750936 | 7.56 | 3902 | 0.016 | -0.013 | 0.061 | 0.100 | 15.387940 | -71.549550 | -1970.46 | 841.72 |
| 6 | GUIDE | 1198283128 | 8.01 | 3904 | -0.111 | -0.080 | 0.050 | 0.081 | 17.272580 | -72.642428 | 2405.20 | 23.64 |
| 7 | GUIDE | 1197749416 | 10.25 | 3899 | 0.104 | 0.013 | 0.165 | 0.296 | 13.610513 | -71.871242 | -2245.15 | -1459.28 |

2.4 Star Slots

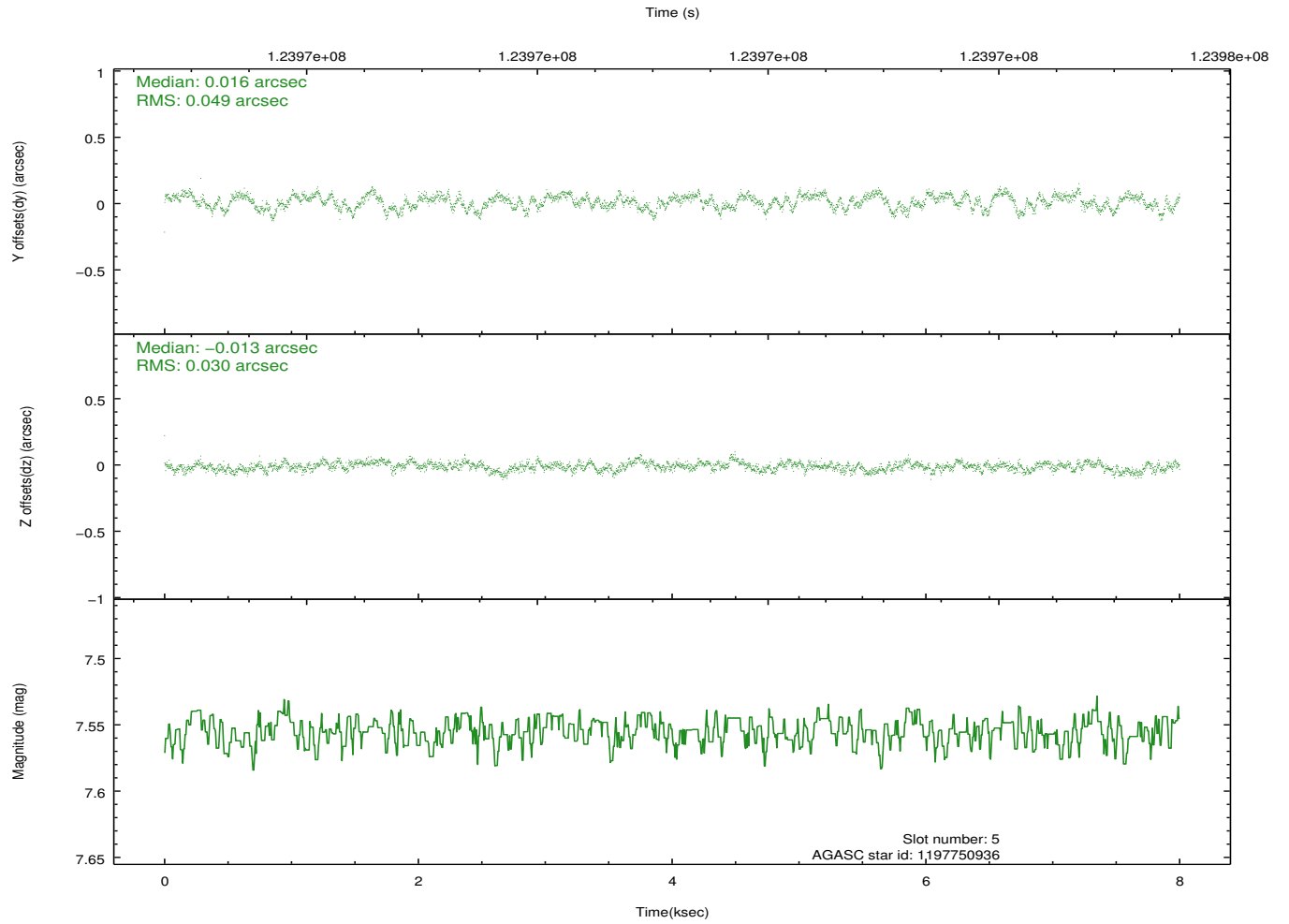
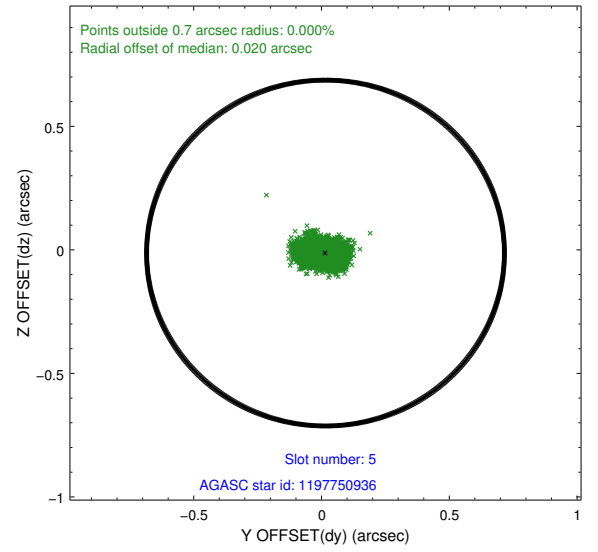
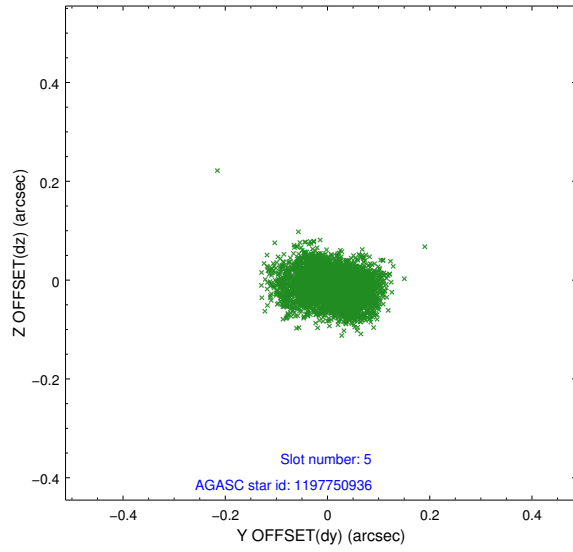
2.4.1 Slot 3



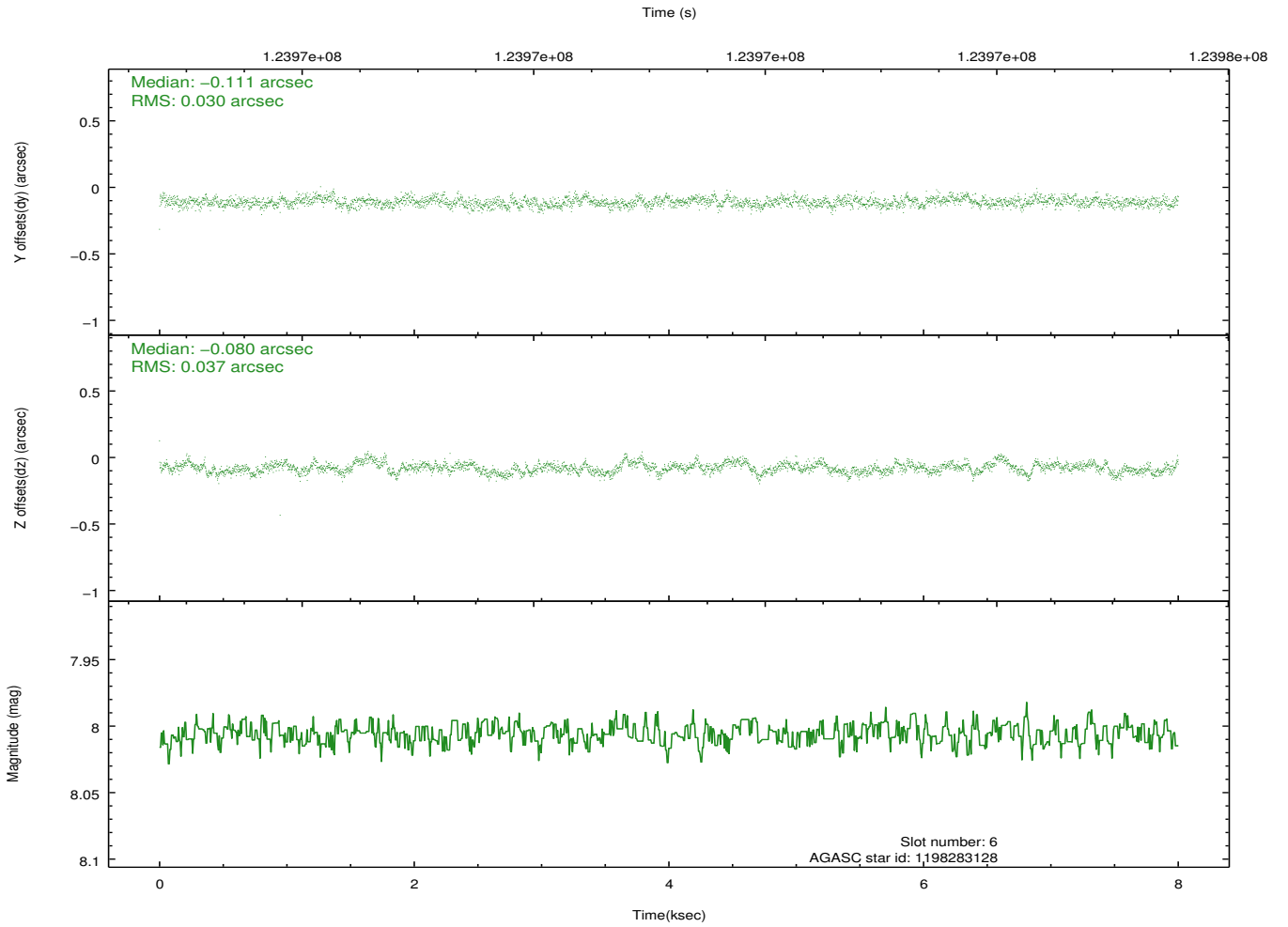
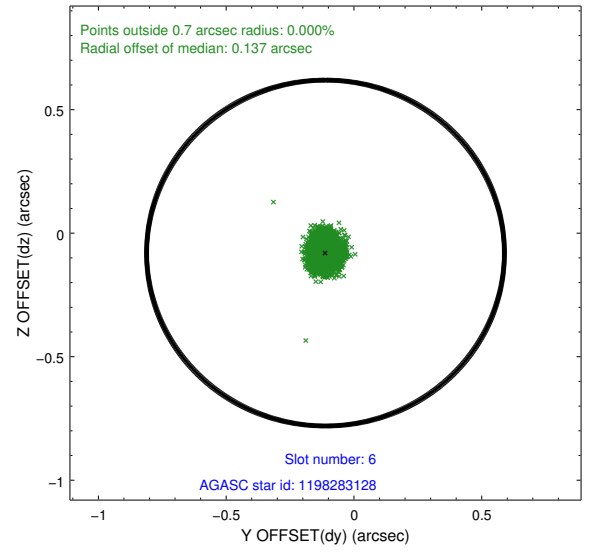
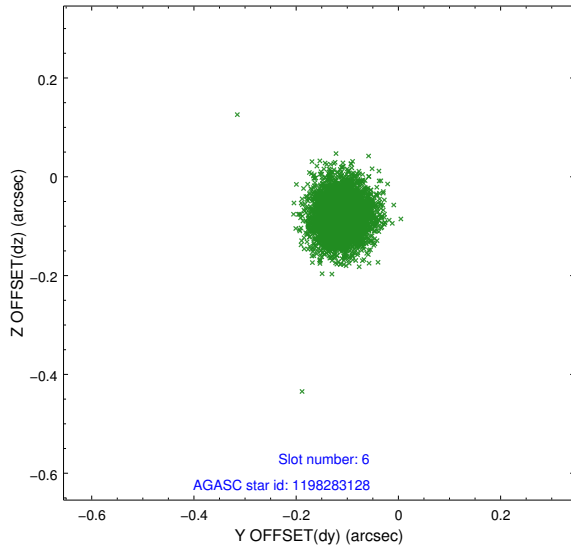
2.4.2 Slot 4



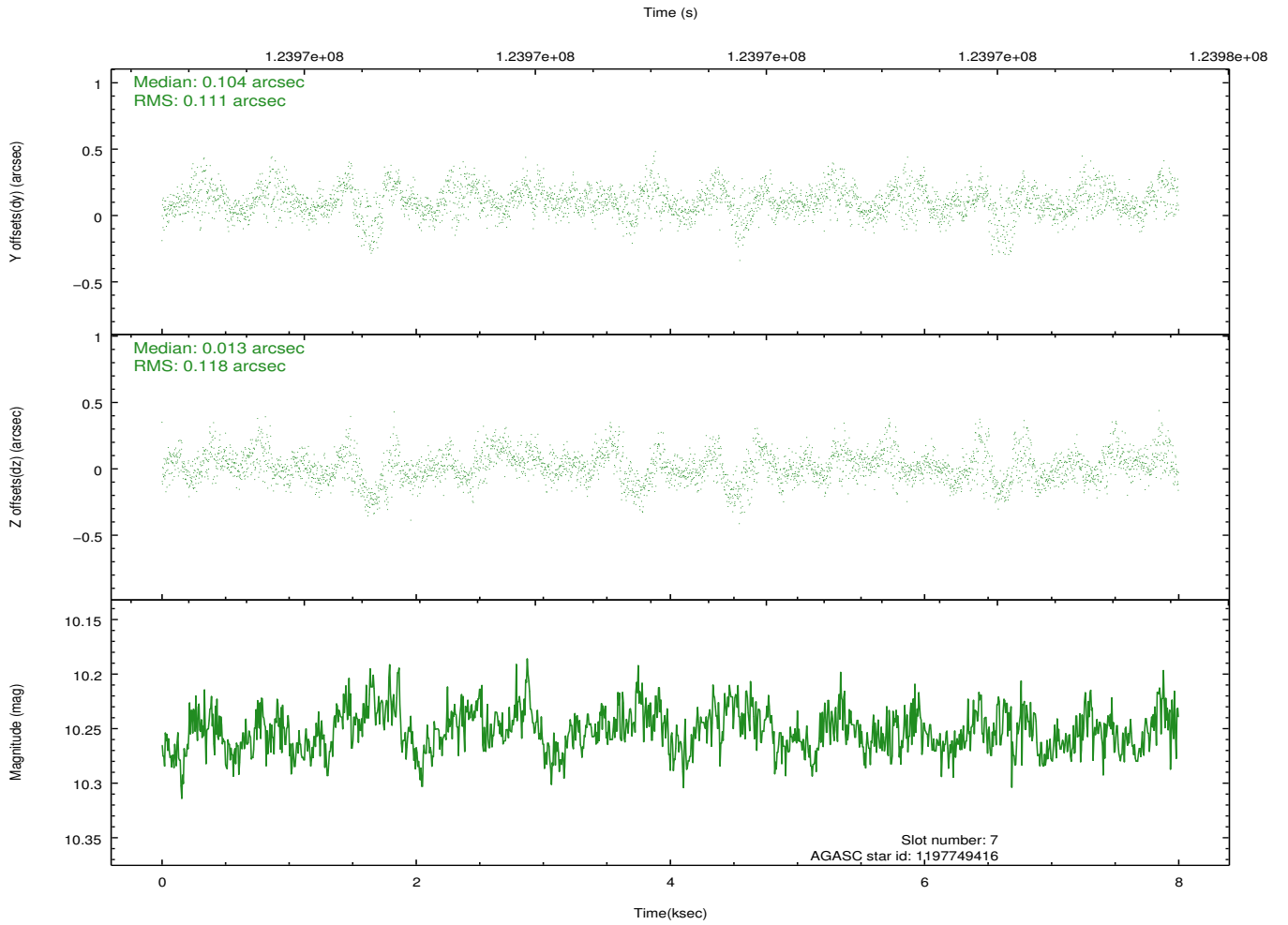
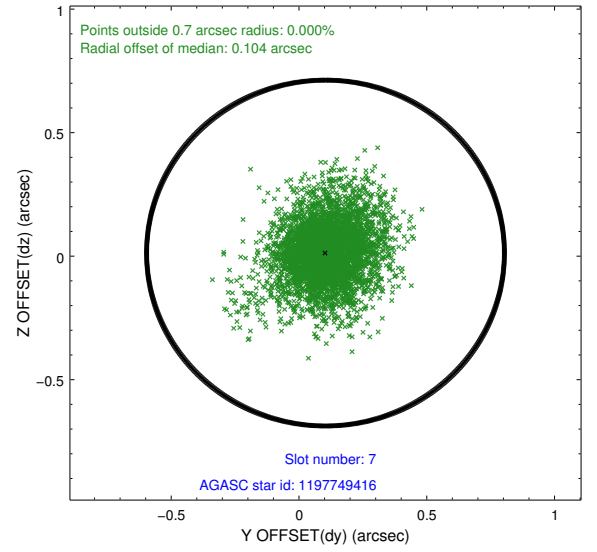
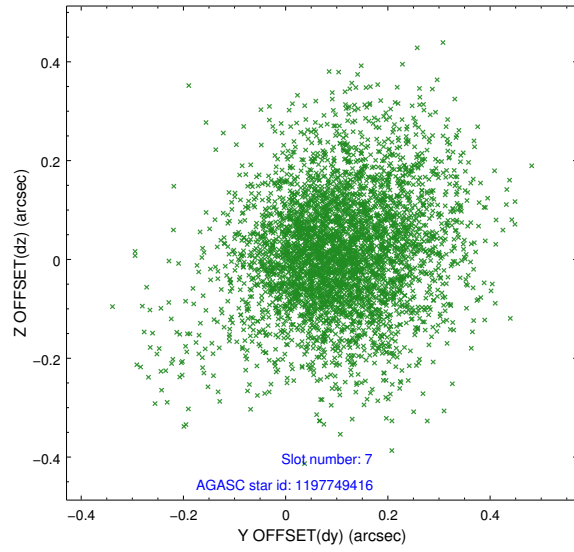
2.4.3 Slot 5



2.4.4 Slot 6

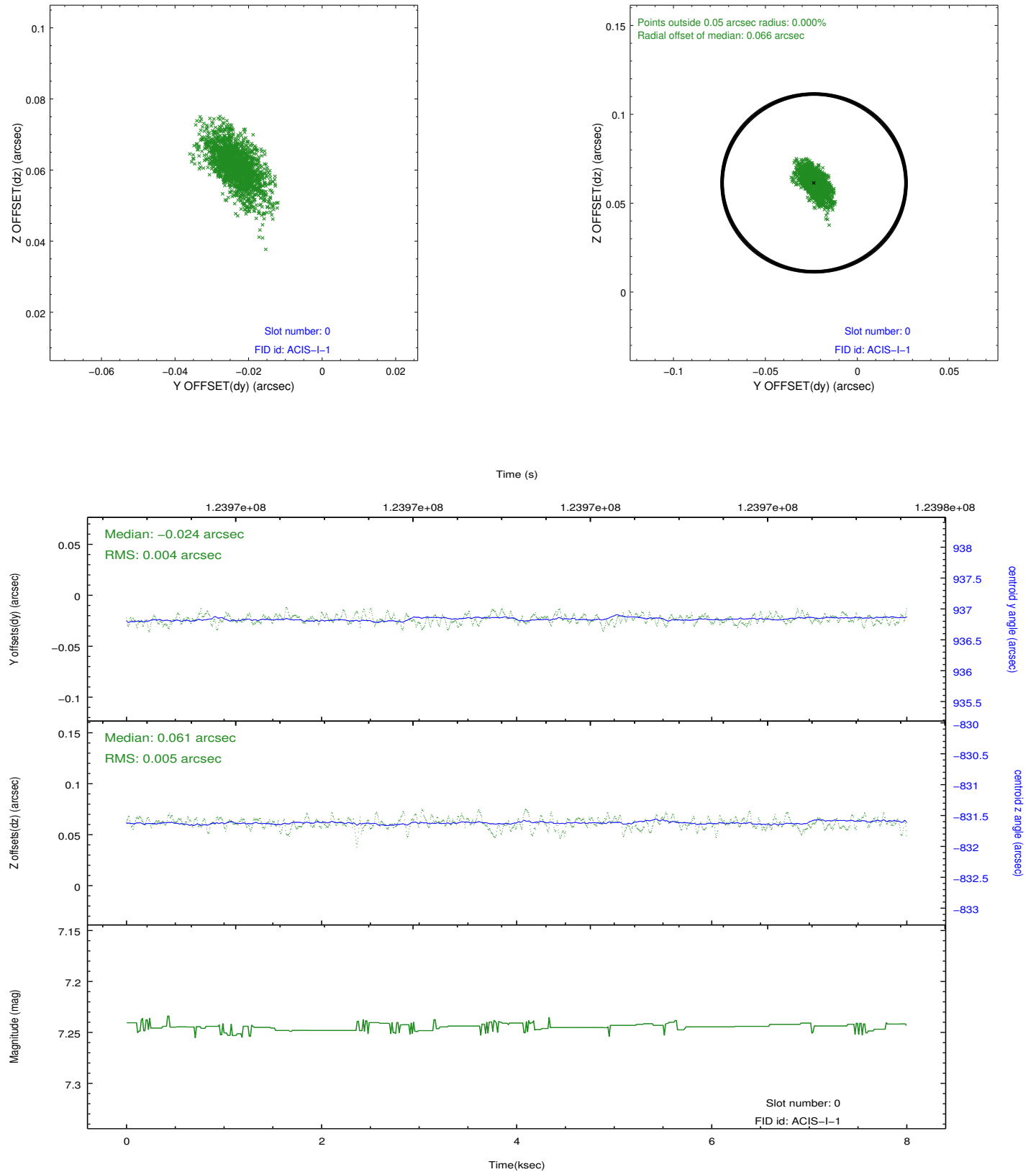


2.4.5 Slot 7

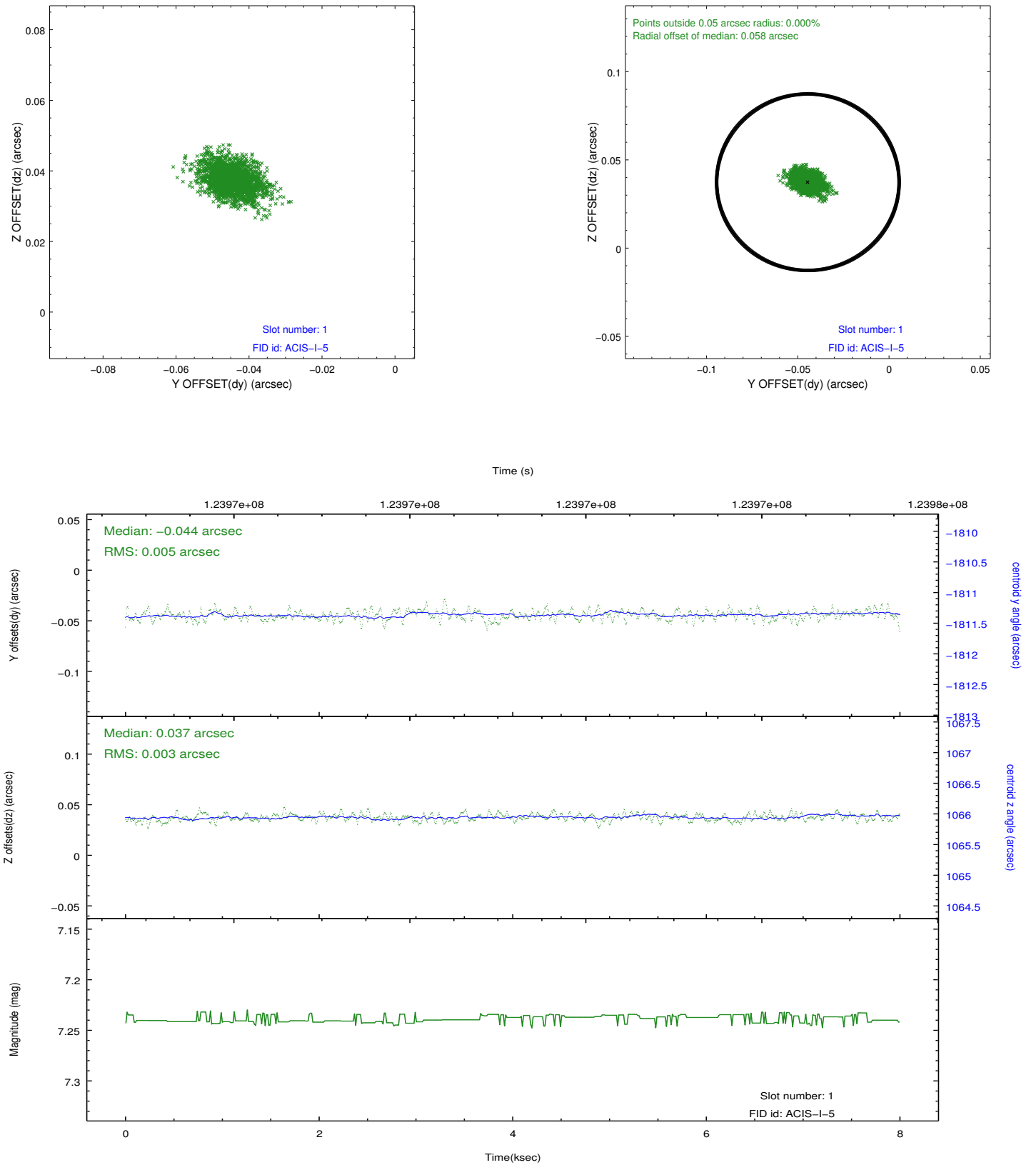


2.5 FID Slots

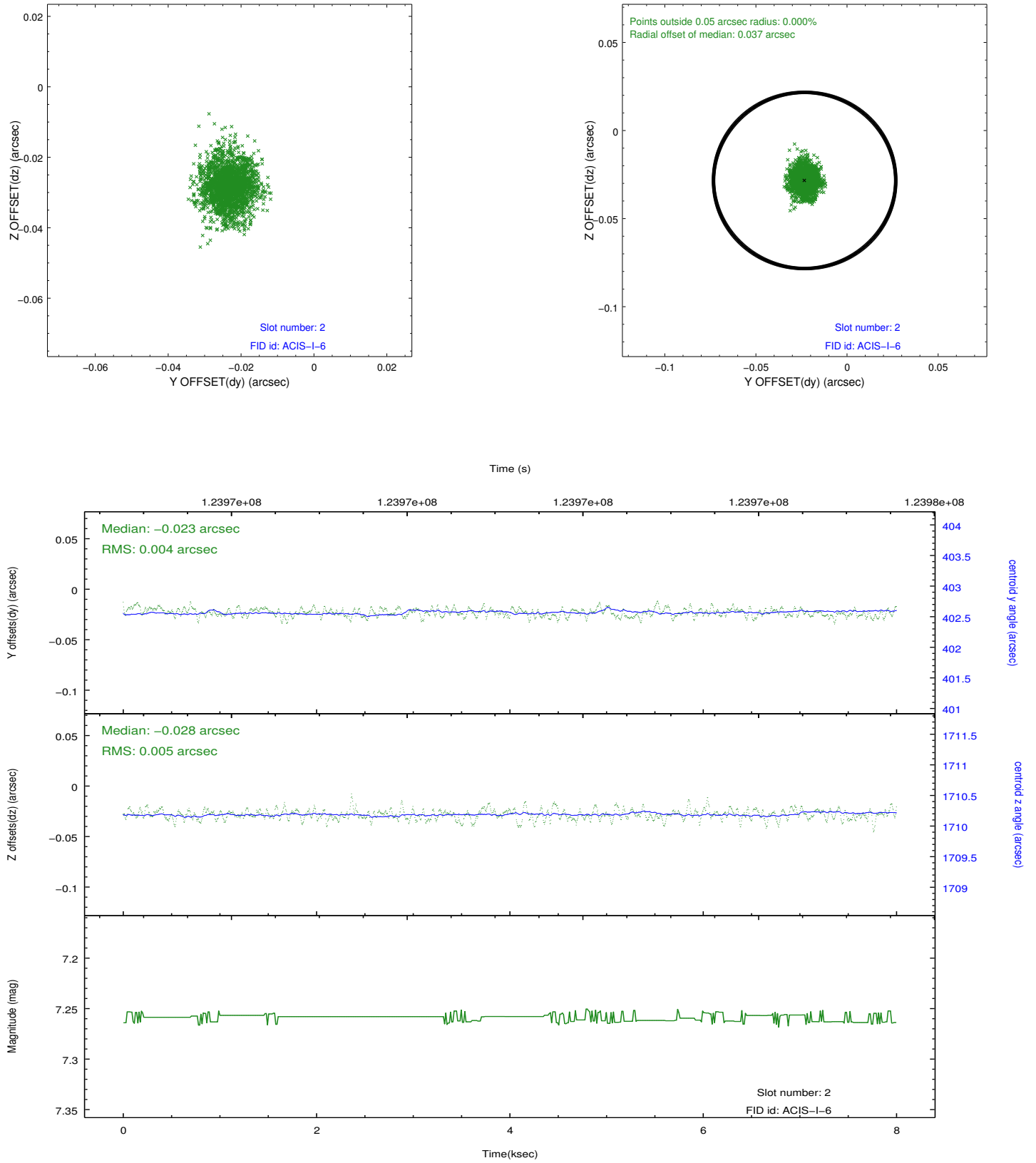
2.5.1 Slot 0



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) | 2012.09.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.561 |

A.2 Comments

Window constraint met.