

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 6222 - L2 Version 3
Chandra X-Ray Center

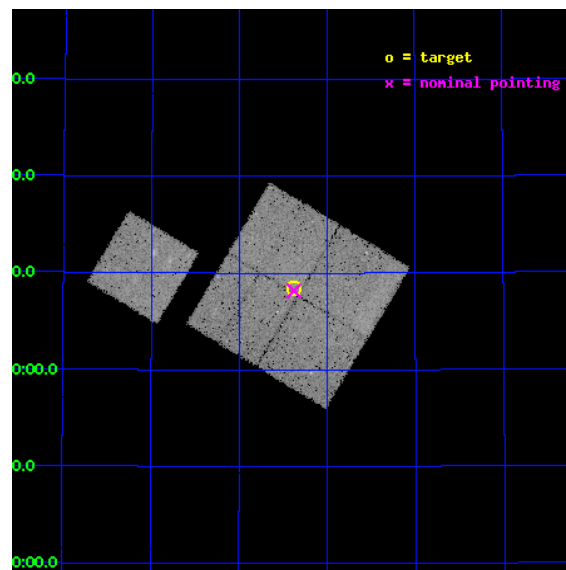
L2 Processing Date : Dec 27 2012

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1 Front

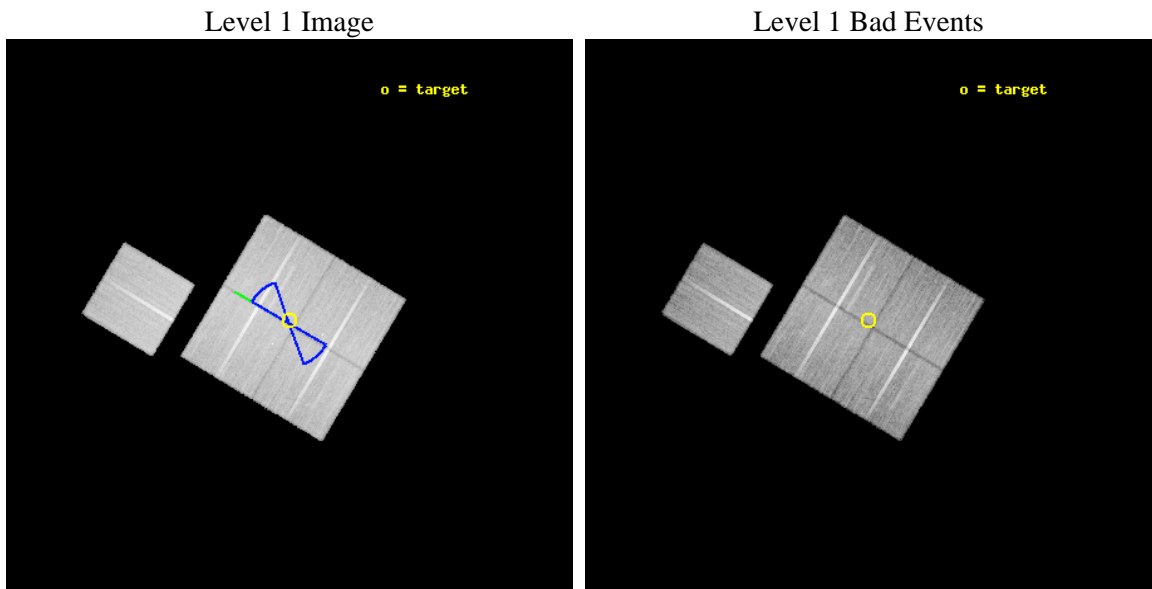
| | | |
|----------|------------------------------------------------------------------------------------------------|---------------------------------------------|
| seq_num | 900354 | Sequence number |
| obs_id | 6222 | Observation id |
| title | Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies | Proposal title |
| observer | Prof Kirpal Nandra | Principal investigator |
| object | EGS-7 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 213.843735 | Observer's specified target RA [deg] |
| dec_targ | 52.140667 | Observer's specified target Dec [deg] |
| ra_nom | 213.84480223966 | Nominal RA [deg] |
| dec_nom | 52.1360492415 | Nominal Dec [deg] |
| roll_nom | 300.96385384992 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 35153.958952129 | Sum of GTIs [s] |
| livetime | 34694.646598451 | Livetime [s] |
| ontime0 | 35150.817922056 | Sum of GTIs [s] |
| ontime1 | 35157.099932373 | Sum of GTIs [s] |
| ontime2 | 35147.677081287 | Sum of GTIs [s] |
| ontime3 | 35153.958952129 | Sum of GTIs [s] |
| ontime6 | 35150.817932069 | Sum of GTIs [s] |
| l2events | 92945 | Number of level 2 events |



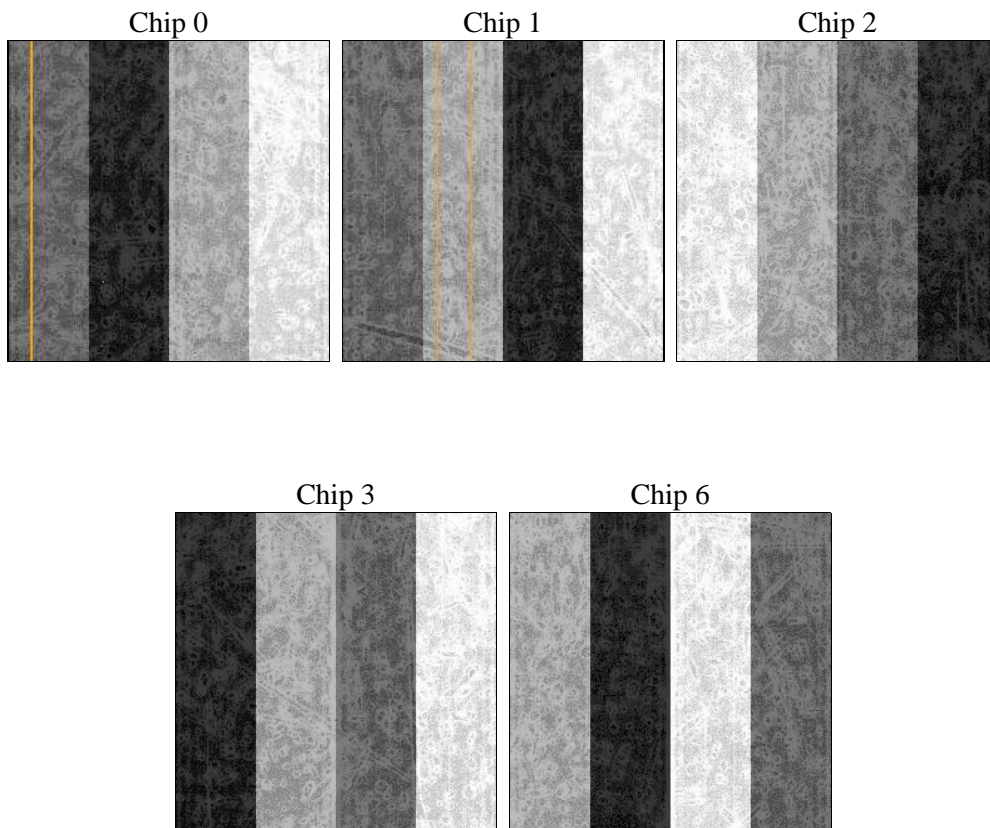
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|-----------------------------------------|
| obi_num | 0 | Obi number | sched_exp_time | 35000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 35153.958952129 | Sum of GTIs [s] |
| caldsver | 4.5.5 | | ontime0 | 35150.817922056 | Sum of GTIs [s] |
| date | 2012-12-28T00:53:22 | Date and time of file creation | ontime1 | 35157.099932373 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 35147.677081287 | Sum of GTIs [s] |
| | | | ontime3 | 35153.958952129 | Sum of GTIs [s] |
| | | | ontime6 | 35150.817932069 | Sum of GTIs [s] |
| | | | l1events | 1098317 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 209661 | 207510 | 235541 | 220558 | 225047 |
| rejected events | 188000 | 182707 | 213588 | 199416 | 202090 |
| rejected % | 89% | 88% | 90% | 90% | 89% |

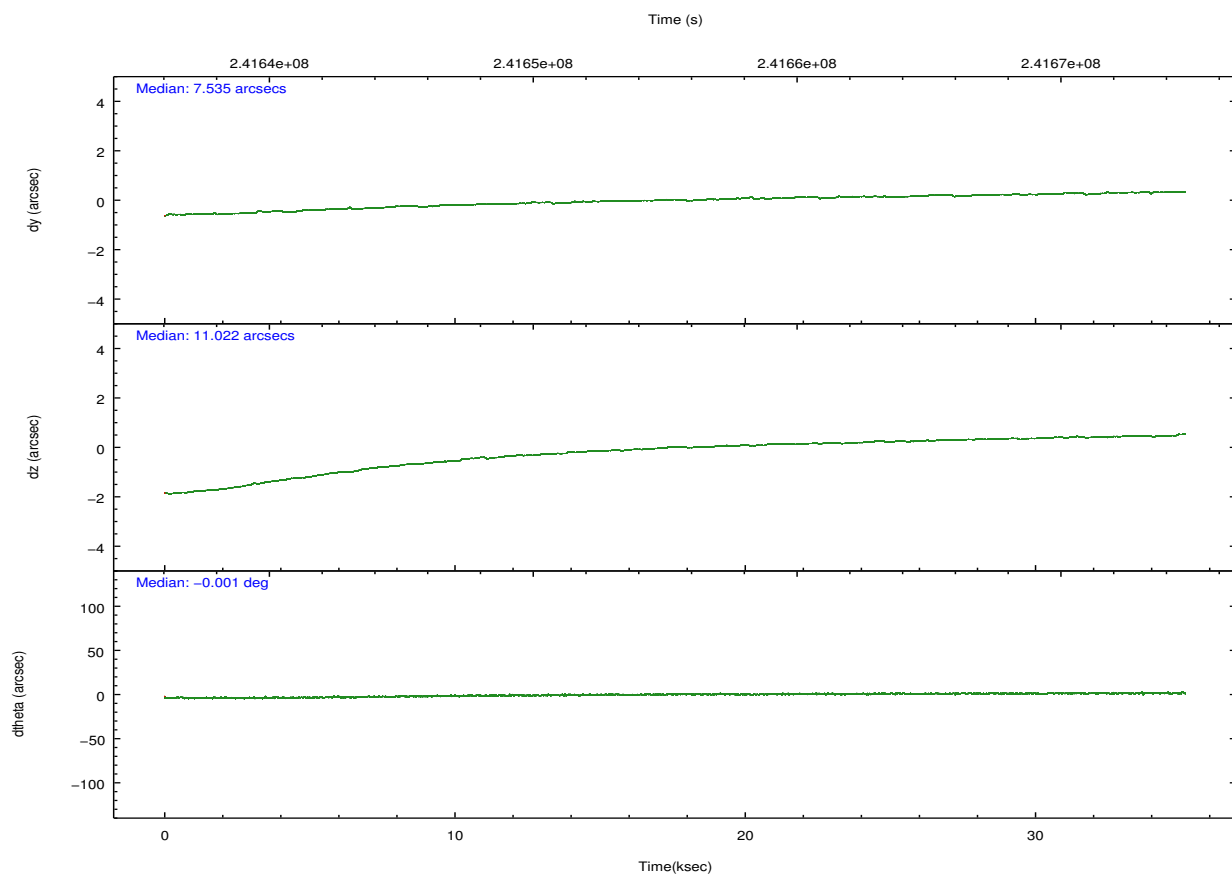
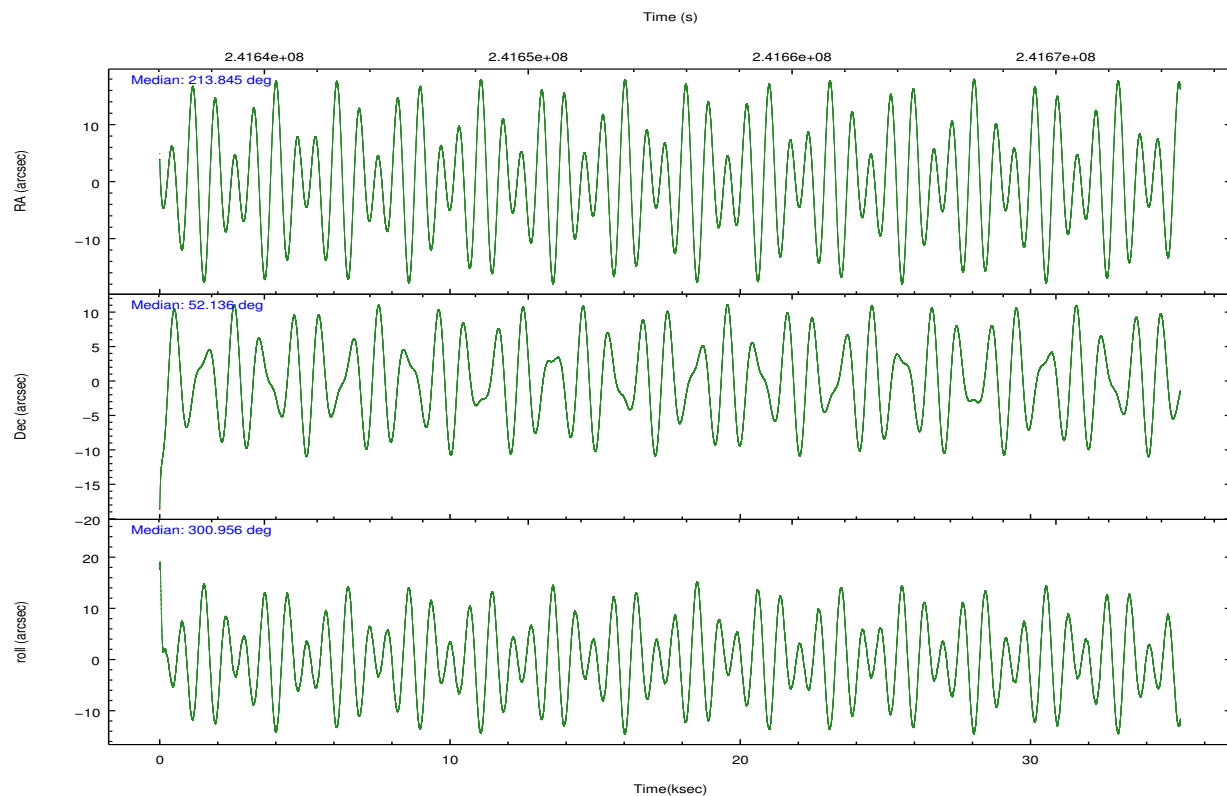
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 7612 | 9158 | 8174 | 7650 | 8235 |
| | 3% | 4% | 3% | 3% | 3% |
| grade 1 events | 115 | 108 | 127 | 121 | 105 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 5144 | 5482 | 5255 | 4684 | 4992 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 2511 | 2631 | 2281 | 2398 | 2597 |
| | 1% | 1% | 0% | 1% | 1% |
| grade 4 events | 2377 | 2652 | 2412 | 2368 | 2596 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 7630 | 8571 | 7208 | 8749 | 8765 |
| | 3% | 4% | 3% | 3% | 3% |
| grade 6 events | 4212 | 5060 | 4020 | 4251 | 4734 |
| | 2% | 2% | 1% | 1% | 2% |
| grade 7 events | 180060 | 173848 | 206064 | 190337 | 193023 |
| | 85% | 83% | 87% | 86% | 85% |

2.2 Compared Parameters

| Parameter | Planned | Actual |
|--------------------------------------|---------------------|-----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-01236 | ACIS-01236 |
| Grating | NONE | NONE |
| Data mode | VFAINT | VFAINT |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 213.805675 | 213.8448022396566 |
| [deg] Pointing Dec | 52.149270 | 52.13604924149979 |
| [deg] Pointing Roll | 300.786054 | 300.9638538499214 |
| [deg] Roll angle | 50.756000 | 50.756000 |
| [deg] Roll tolerance | 20.000000 | 20.000000 |
| Roll constraint allows 180D rotation | Y | Y |
| [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) | 241637956.184000 | 241636824.85436 |
| Observation start date | 2005-08-28T17:38:12 | 2005-08-28T17:20:24 |
| [s] Observation end time (MET) | 241672956.184000 | 241673920.63106 |
| Observation end date | 2005-08-29T03:21:32 | 2005-08-29T03:38:40 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | NONE | NONE |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect

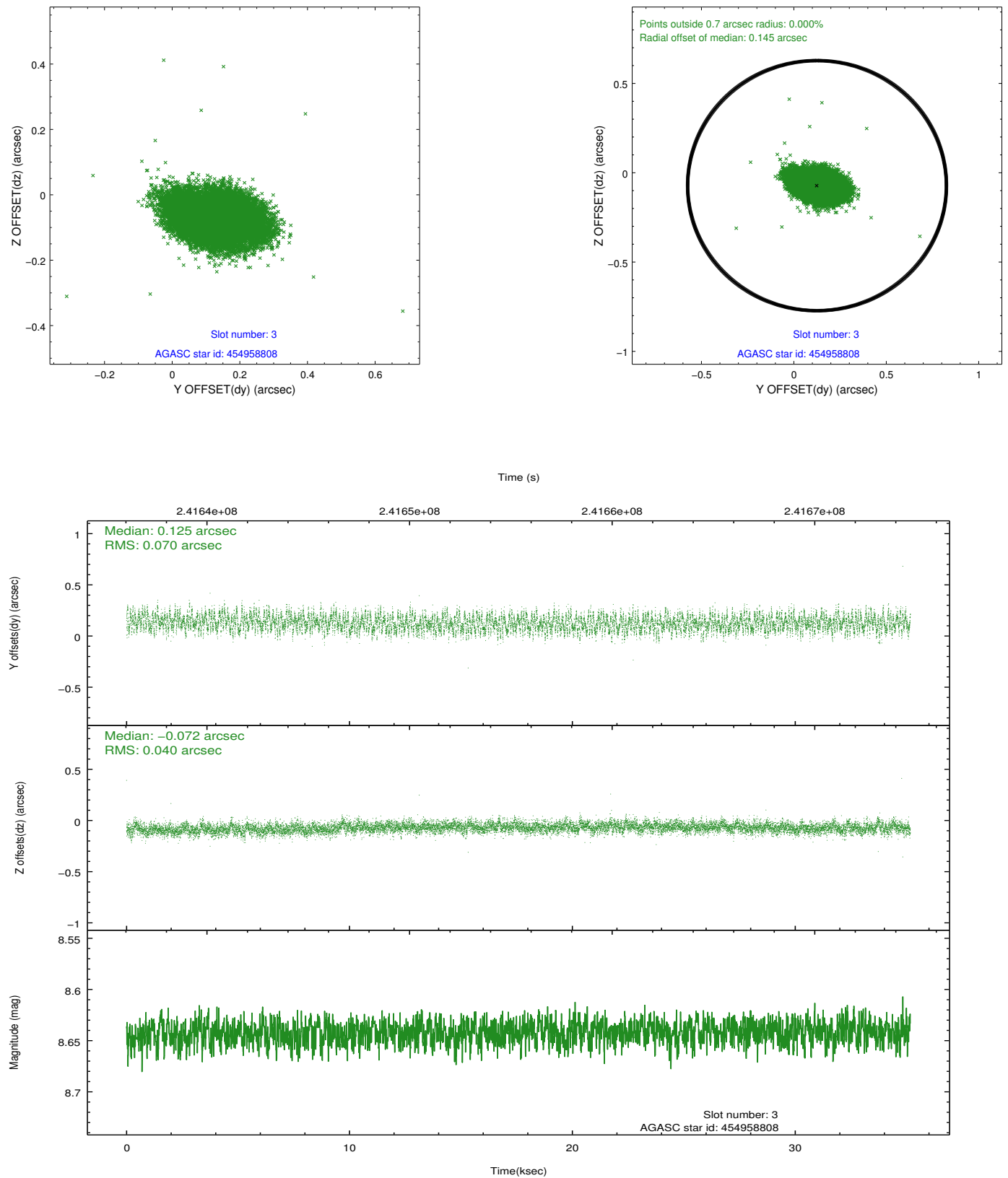


Slot Statistics

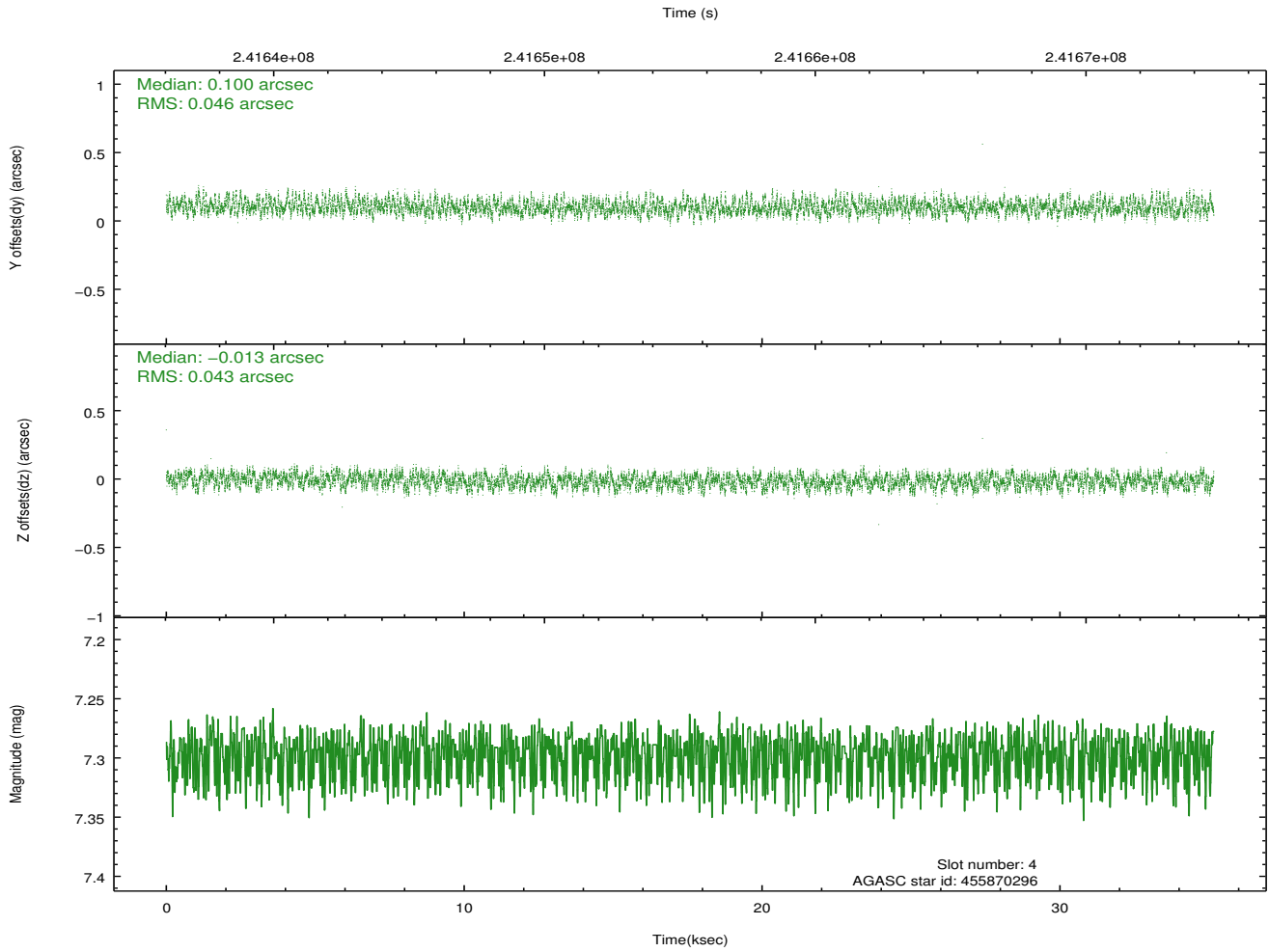
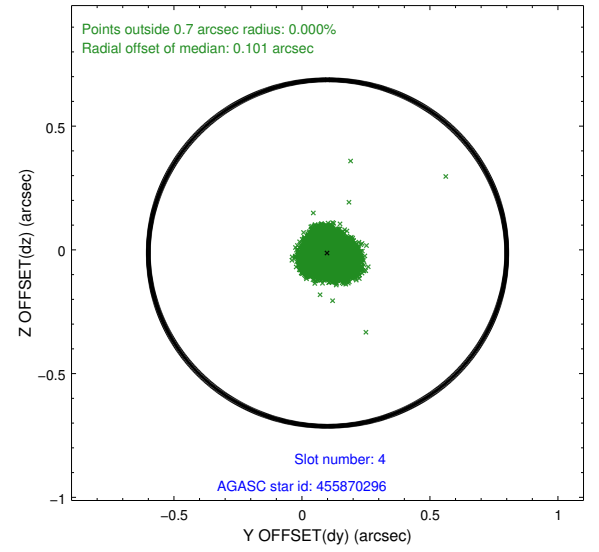
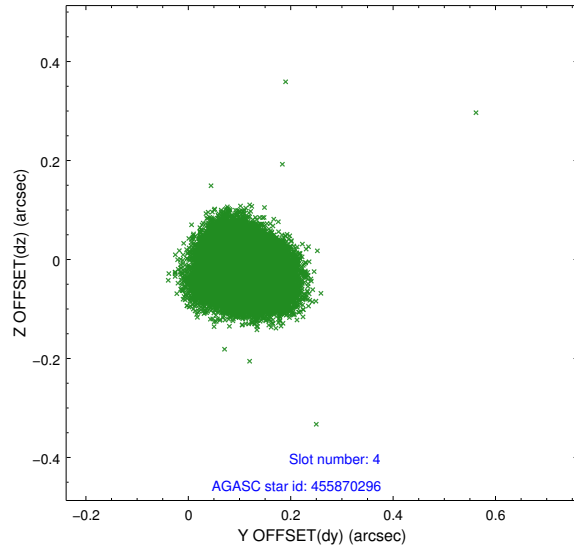
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 8578 | 0.032 | -0.017 | 0.020 | 0.052 | 0.000000 | 0.000000 | 932.20 | -834.27 |
| 1 | FID | ACIS-I-5 | 7.23 | 8578 | -0.167 | 0.048 | 0.017 | 0.025 | 0.000000 | 0.000000 | -1816.06 | 1063.28 |
| 2 | FID | ACIS-I-6 | 7.25 | 8576 | 0.042 | 0.038 | 0.012 | 0.035 | 0.000000 | 0.000000 | 397.74 | 1707.80 |
| 3 | GUIDE | 454958808 | 8.64 | 17147 | 0.125 | -0.072 | 0.085 | 0.140 | 213.416486 | 51.296487 | 2187.61 | -2322.34 |
| 4 | GUIDE | 455870296 | 7.30 | 17152 | 0.100 | -0.013 | 0.069 | 0.105 | 214.629779 | 52.033323 | 1283.99 | 1359.94 |
| 5 | GUIDE | 505806936 | 7.02 | 17153 | -0.076 | -0.010 | 0.056 | 0.114 | 213.820815 | 52.535927 | -1178.87 | 741.13 |
| 6 | GUIDE | 505812376 | 7.56 | 17155 | -0.092 | -0.091 | 0.049 | 0.080 | 214.039537 | 52.937930 | -2180.50 | 1889.51 |
| 7 | GUIDE | 454958240 | 9.05 | 17132 | -0.067 | 0.180 | 0.109 | 0.171 | 212.550018 | 52.097330 | -1280.99 | -2468.57 |

2.4 Star Slots

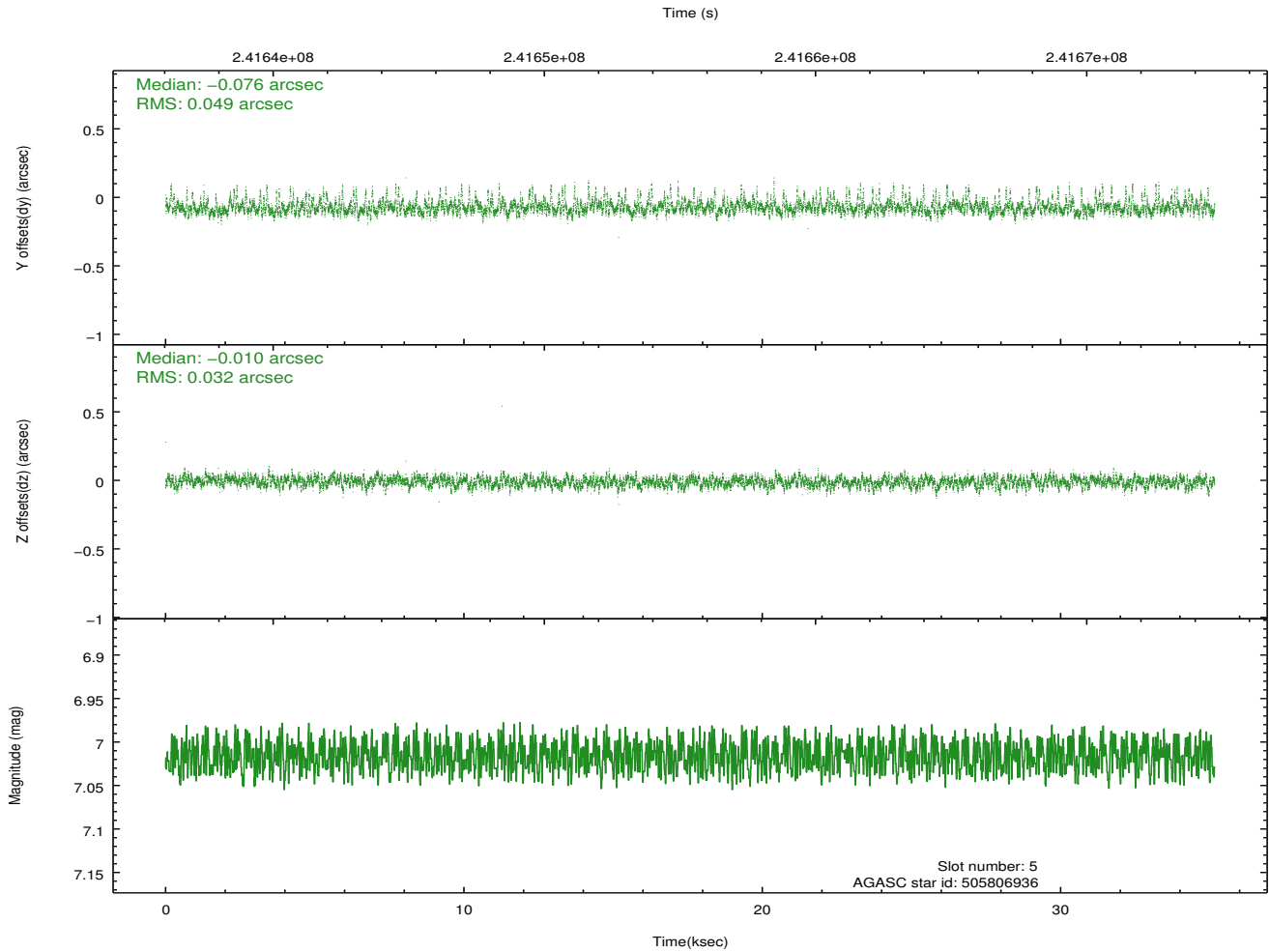
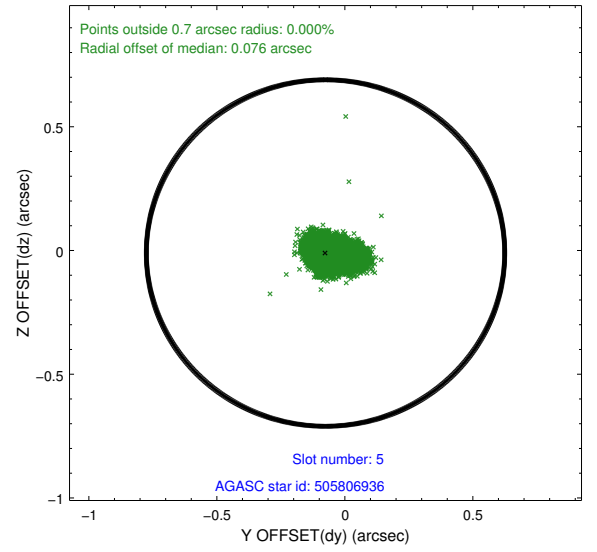
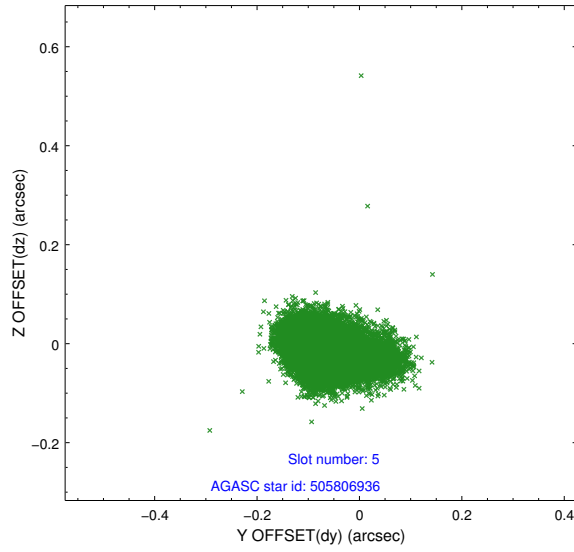
2.4.1 Slot 3



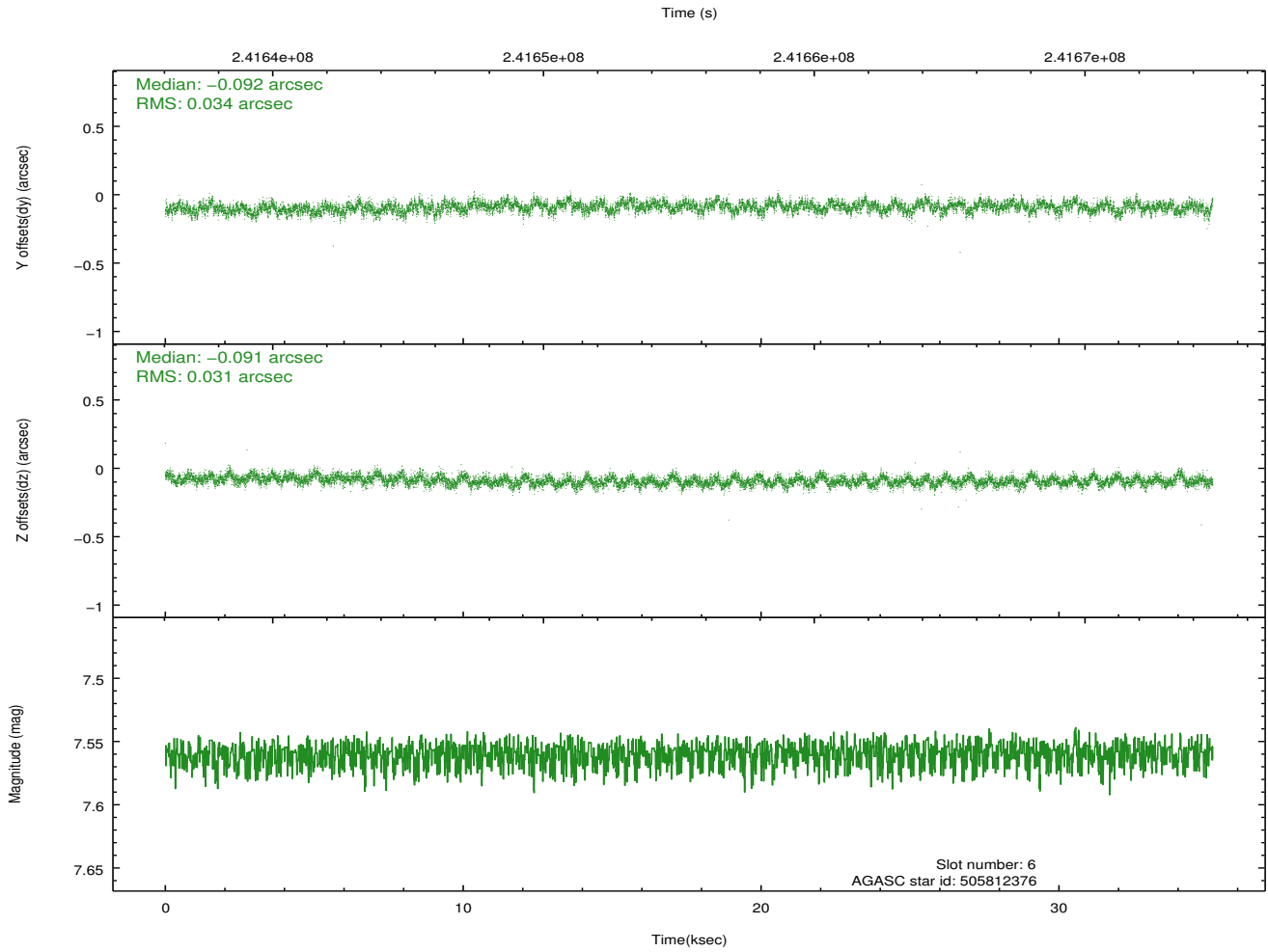
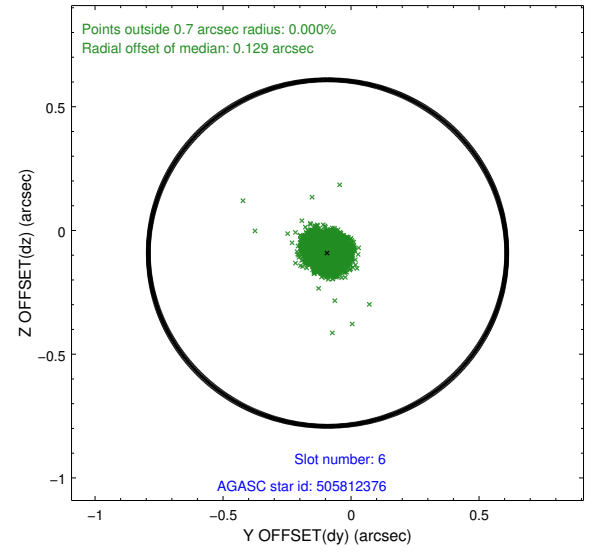
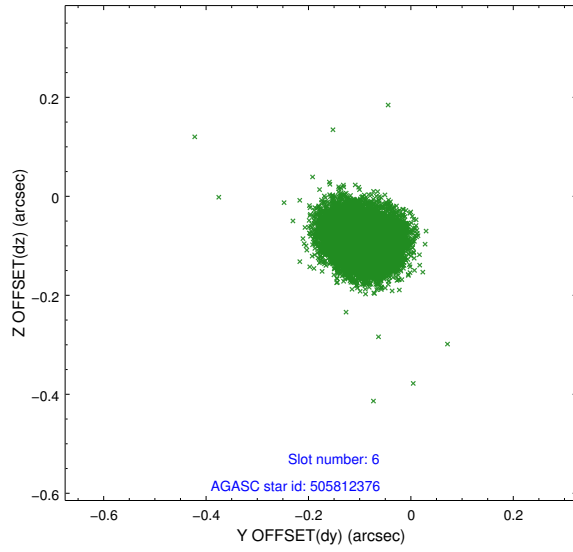
2.4.2 Slot 4



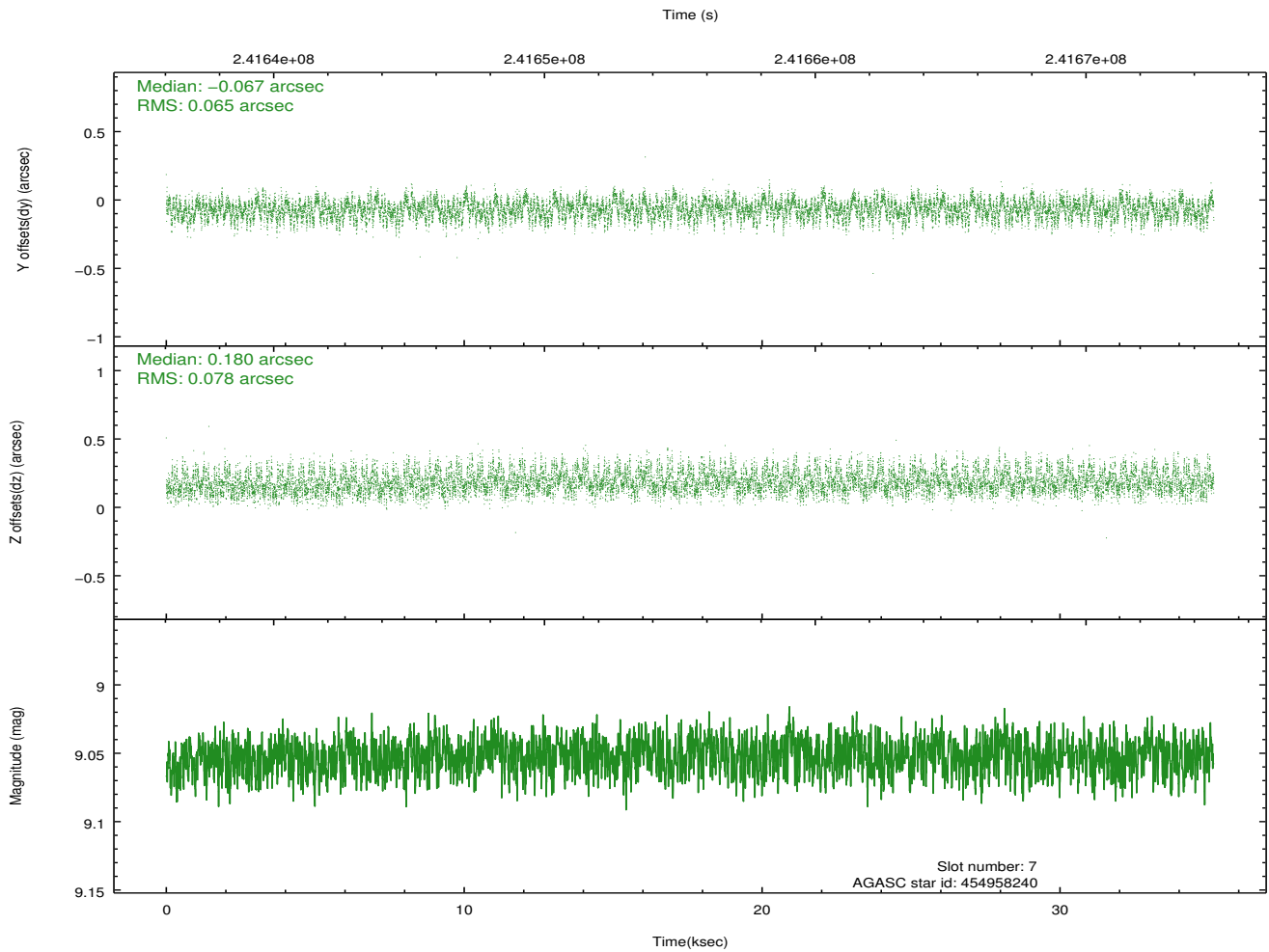
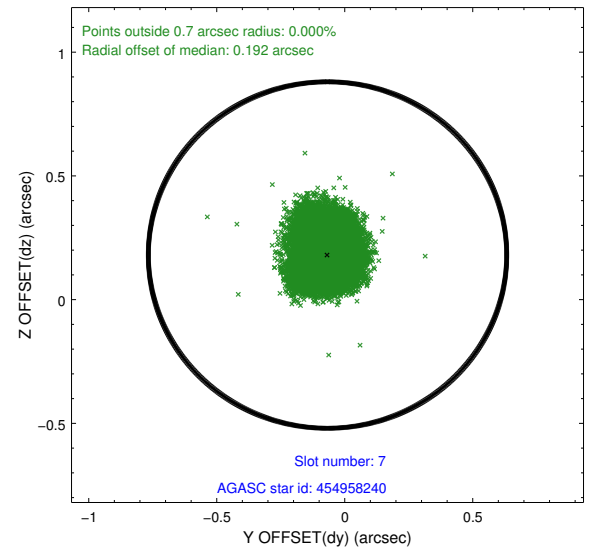
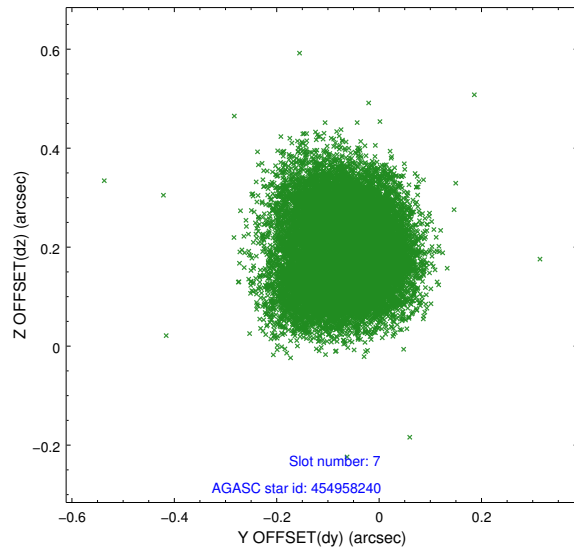
2.4.3 Slot 5



2.4.4 Slot 6

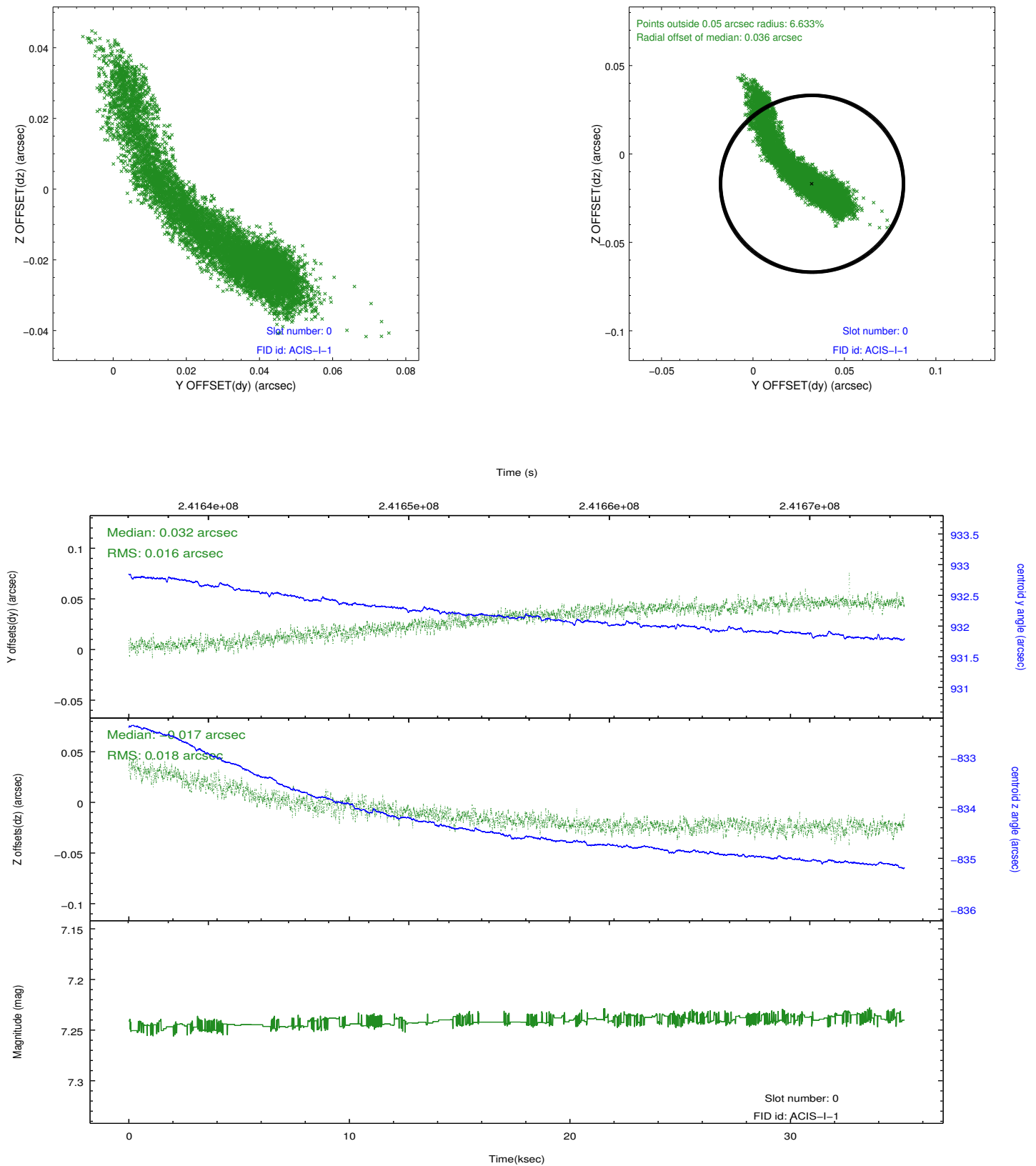


2.4.5 Slot 7

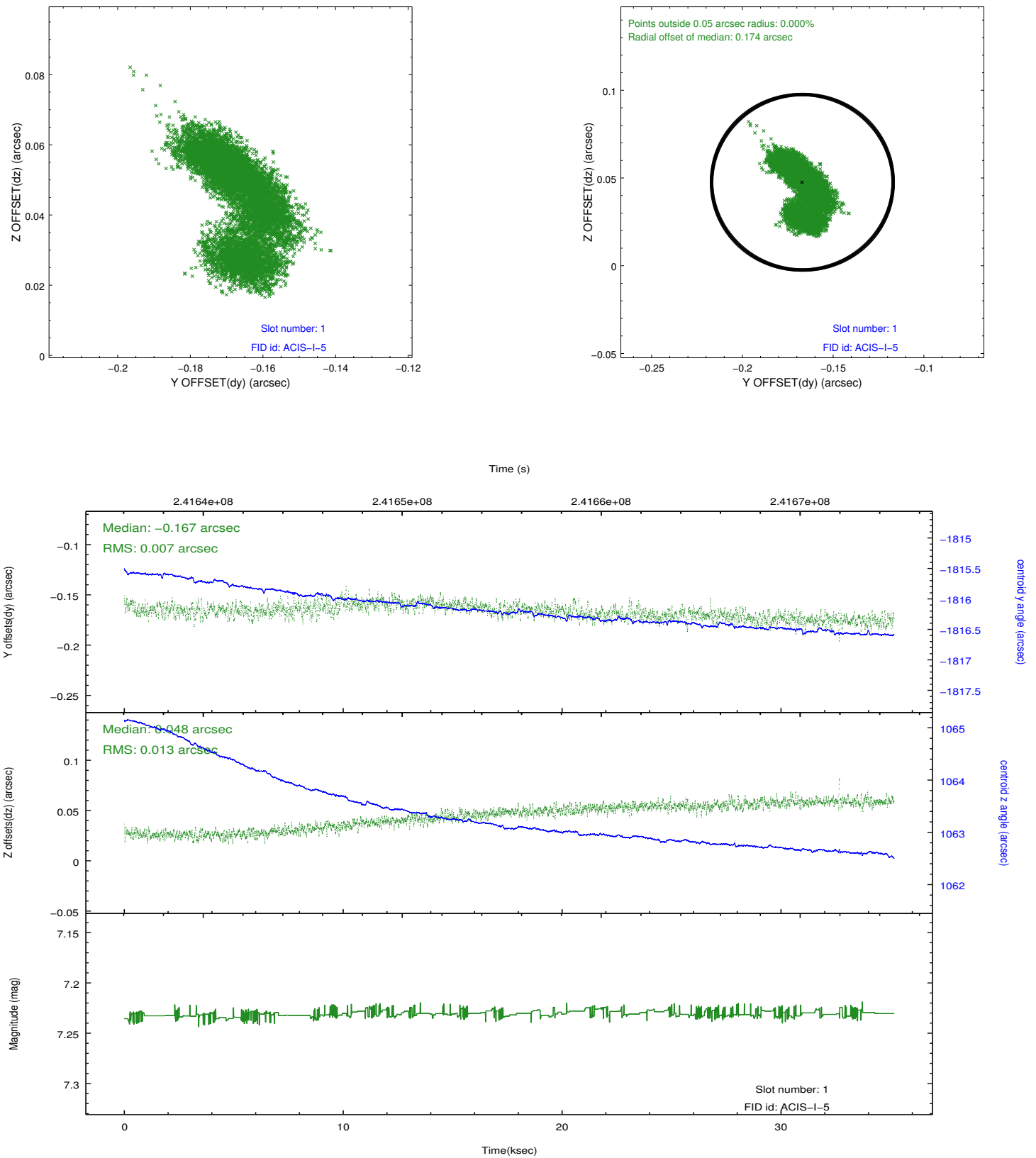


2.5 FID Slots

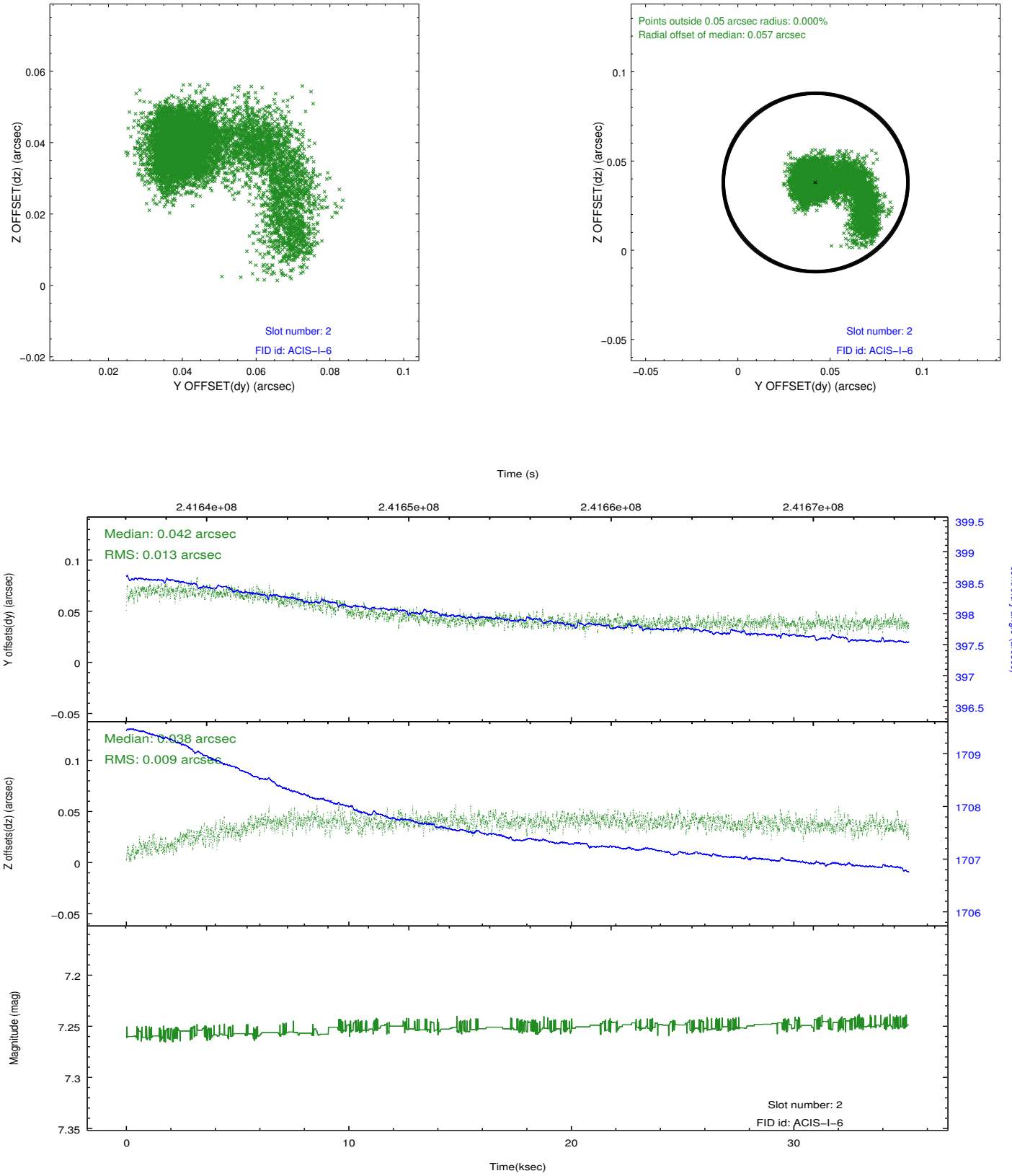
2.5.1 Slot 0



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) | 2013.01.24 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 35.15395 |

A.2 Comments

Roll constraint met.