

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9794 - L2 Version 2
Chandra X-Ray Center

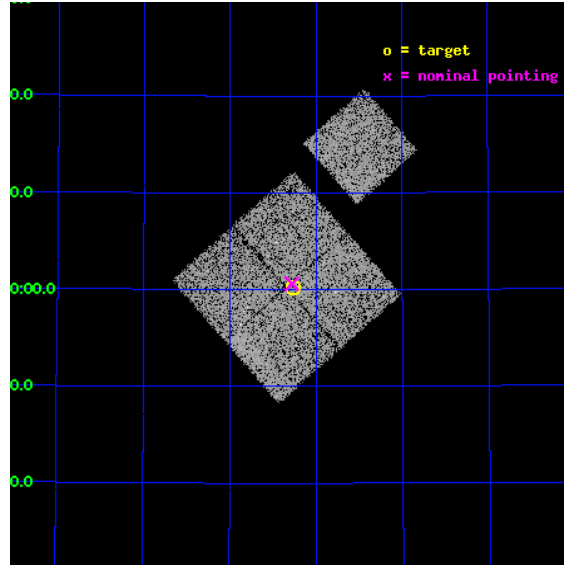
L2 Processing Date : May 7 2012

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1 Front

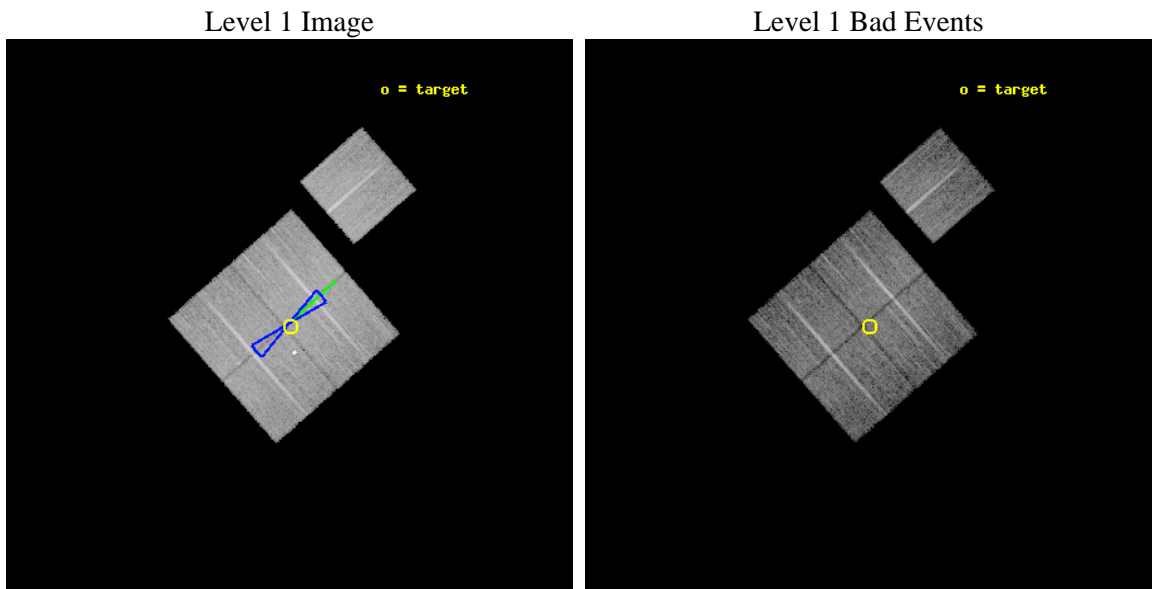
| | | |
|----------|---|---|
| seq_num | 900796 | Sequence number |
| obs_id | 9794 | Observation id |
| title | The Evolution of Faint AGN at High Redshift | Proposal title |
| observer | Prof Kirpal Nandra | Principal investigator |
| object | AEGIS-1 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 215.064583 | Observer's specified target RA [deg] |
| dec_targ | 53.002694 | Observer's specified target Dec [deg] |
| ra_nom | 215.07008797677 | Nominal RA [deg] |
| dec_nom | 53.010035881002 | Nominal Dec [deg] |
| roll_nom | 48.704316940529 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 10161.800078154 | Sum of GTIs [s] |
| livetime | 10029.028679124 | Livetime [s] |
| ontime0 | 10161.800078154 | Sum of GTIs [s] |
| ontime1 | 10161.800078154 | Sum of GTIs [s] |
| ontime2 | 10161.800078154 | Sum of GTIs [s] |
| ontime3 | 10161.800078154 | Sum of GTIs [s] |
| ontime6 | 10161.800078154 | Sum of GTIs [s] |
| l2events | 34182 | Number of level 2 events |



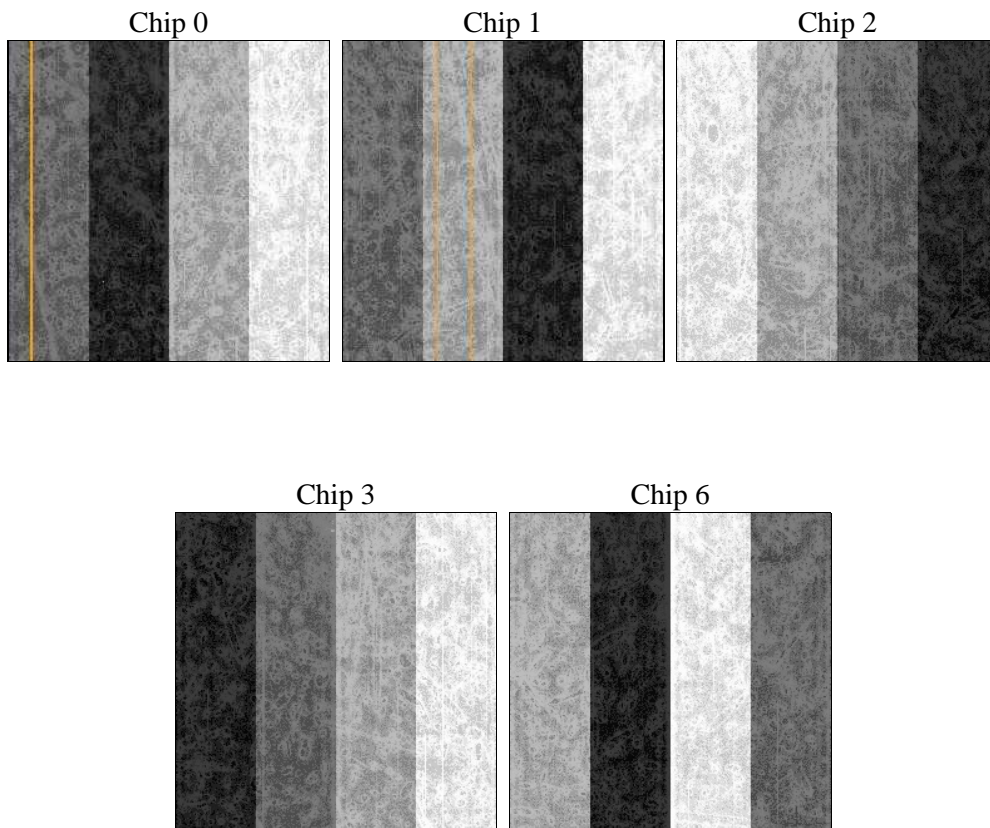
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 10000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 10161.800078154 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime0 | 10161.800078154 | Sum of GTIs [s] |
| date | 2012-05-07T03:46:55 | Date and time of file creation | ontime1 | 10161.800078154 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 10161.800078154 | Sum of GTIs [s] |
| | | | ontime3 | 10161.800078154 | Sum of GTIs [s] |
| | | | ontime6 | 10161.800078154 | Sum of GTIs [s] |
| | | | l1events | 417725 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 79544 | 79824 | 90350 | 82034 | 85973 |
| rejected events | 71305 | 67911 | 82316 | 74429 | 77736 |
| rejected % | 89% | 85% | 91% | 90% | 90% |

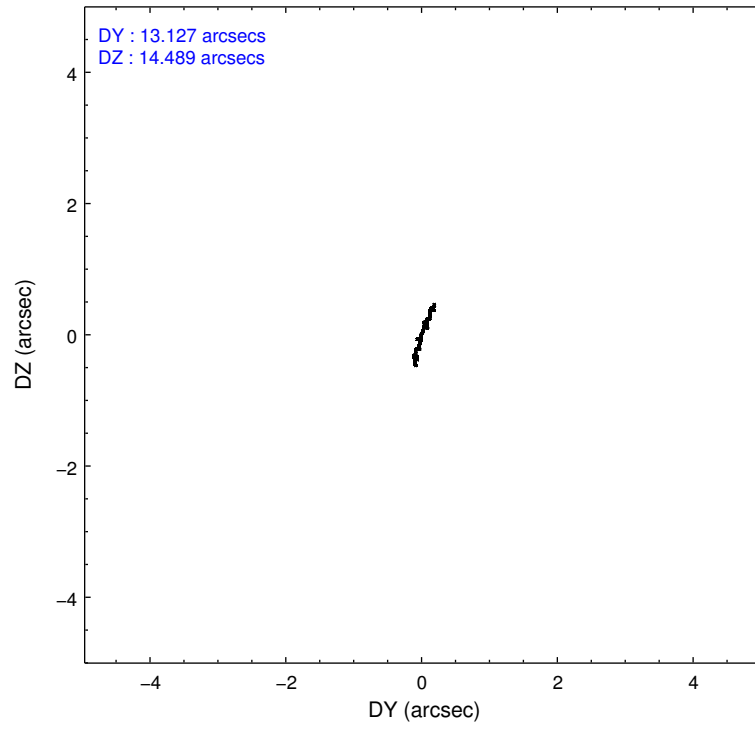
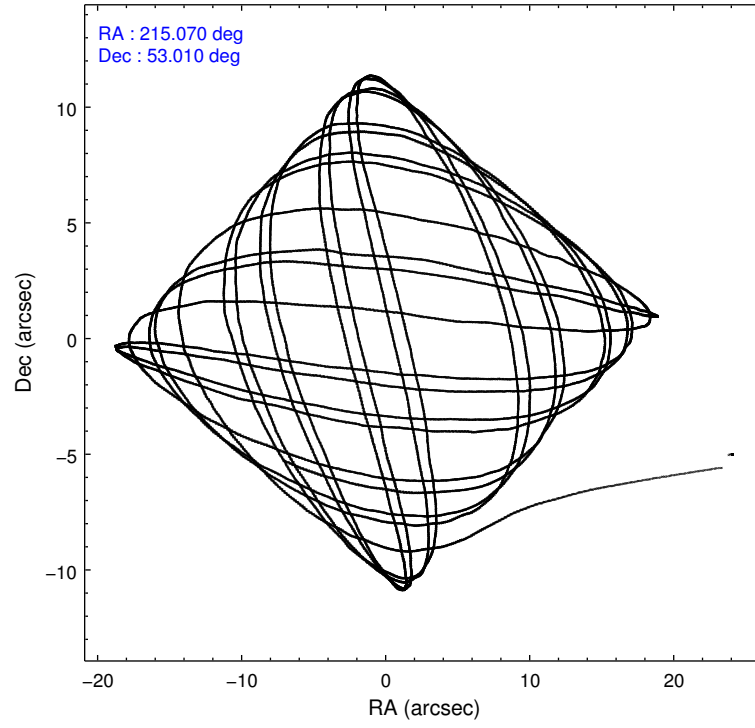
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 2974 | 6375 | 3007 | 2830 | 2976 |
| | 3% | 7% | 3% | 3% | 3% |
| grade 1 events | 54 | 59 | 53 | 48 | 43 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2014 | 2065 | 1909 | 1673 | 1834 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 930 | 980 | 921 | 879 | 965 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 910 | 1016 | 880 | 865 | 930 |
| | 1% | 1% | 0% | 1% | 1% |
| grade 5 events | 2965 | 3154 | 2673 | 3473 | 3274 |
| | 3% | 3% | 2% | 4% | 3% |
| grade 6 events | 1644 | 1860 | 1556 | 1586 | 1754 |
| | 2% | 2% | 1% | 1% | 2% |
| grade 7 events | 68053 | 64315 | 79351 | 70680 | 74197 |
| | 85% | 80% | 87% | 86% | 86% |

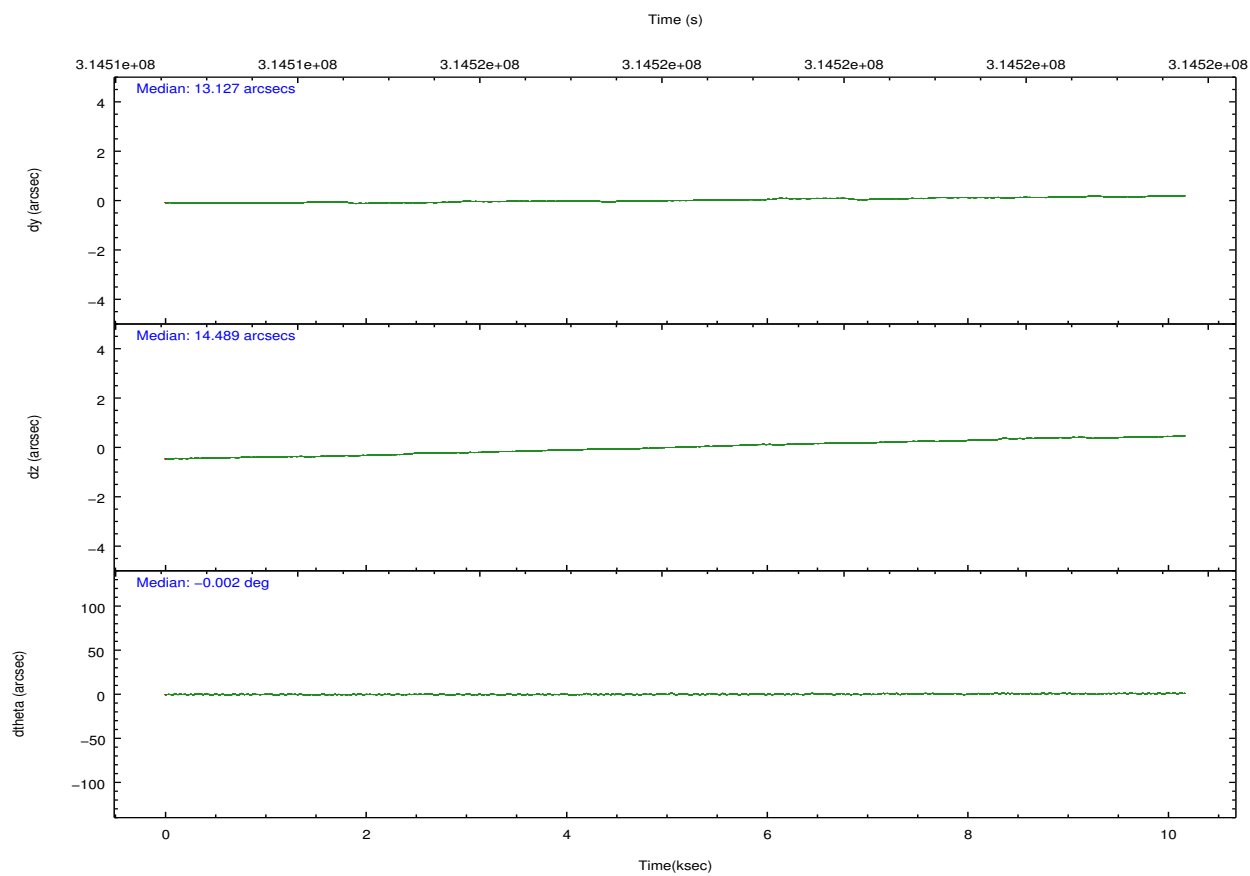
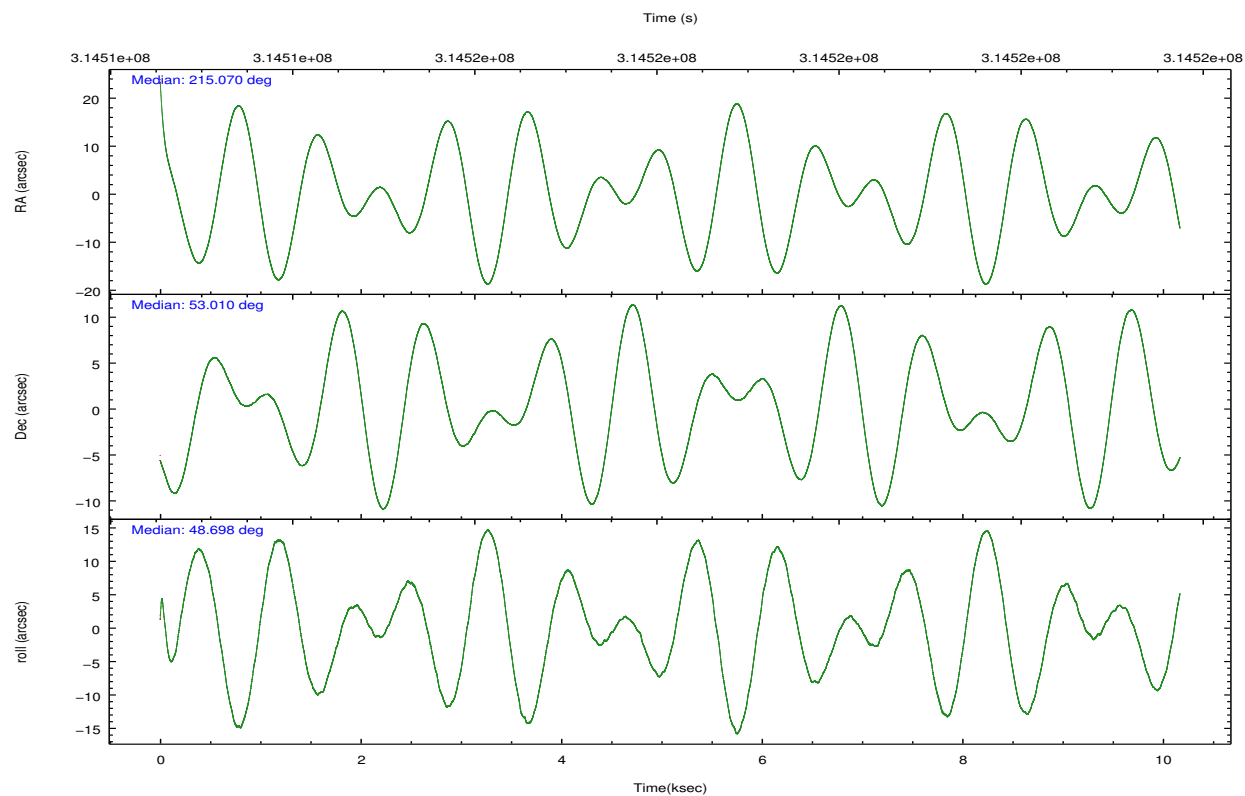
2.2 Compared Parameters

| 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 | 215.061283 | 215.0700879767729 |
| [deg] Pointing Dec | 52.983099 | 53.01003588100214 |
| [deg] Pointing Roll | 48.502636 | 48.70431694052887 |
| [deg] Roll angle | 50.000000 | 50.000000 |
| [deg] Roll tolerance | 10.000000 | 10.000000 |
| 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) | 314513221.184000 | 314512079.441 |
| Observation start date | 2007-12-20T04:45:56 | 2007-12-20T04:27:59 |
| [s] Observation end time (MET) | 314523221.184000 | 314524176.49158 |
| Observation end date | 2007-12-20T07:32:36 | 2007-12-20T07:49:36 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| CCD I0 on | Y | Y |
| CCD I1 on | Y | Y |
| CCD I2 on | Y | Y |
| CCD I3 on | Y | Y |
| CCD S0 on | N | N |
| CCD S1 on | N | N |
| CCD S2 on | O1 | Y |
| CCD S3 on | N | N |
| CCD S4 on | N | N |
| CCD S5 on | N | N |
| 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



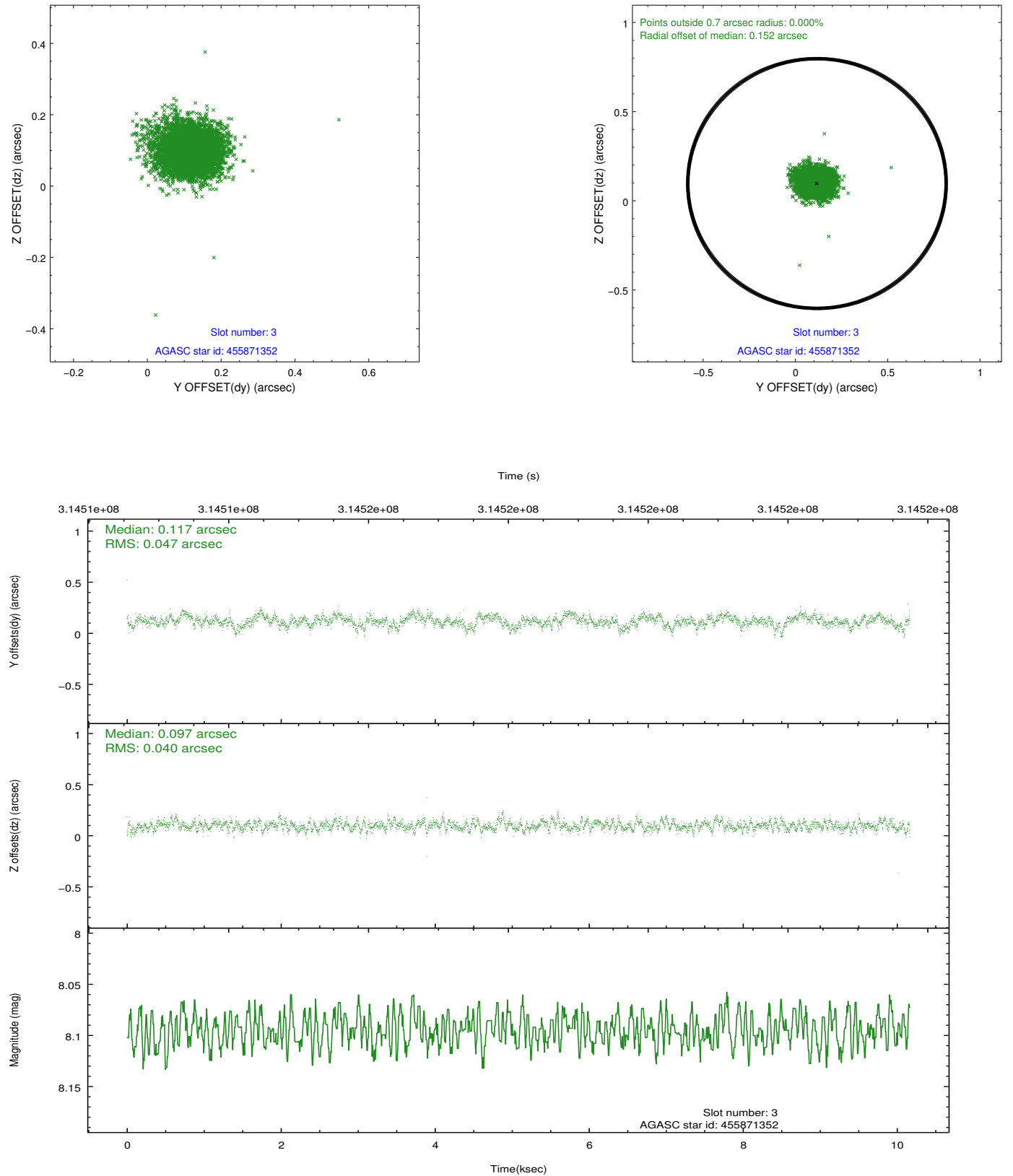


Slot Statistics

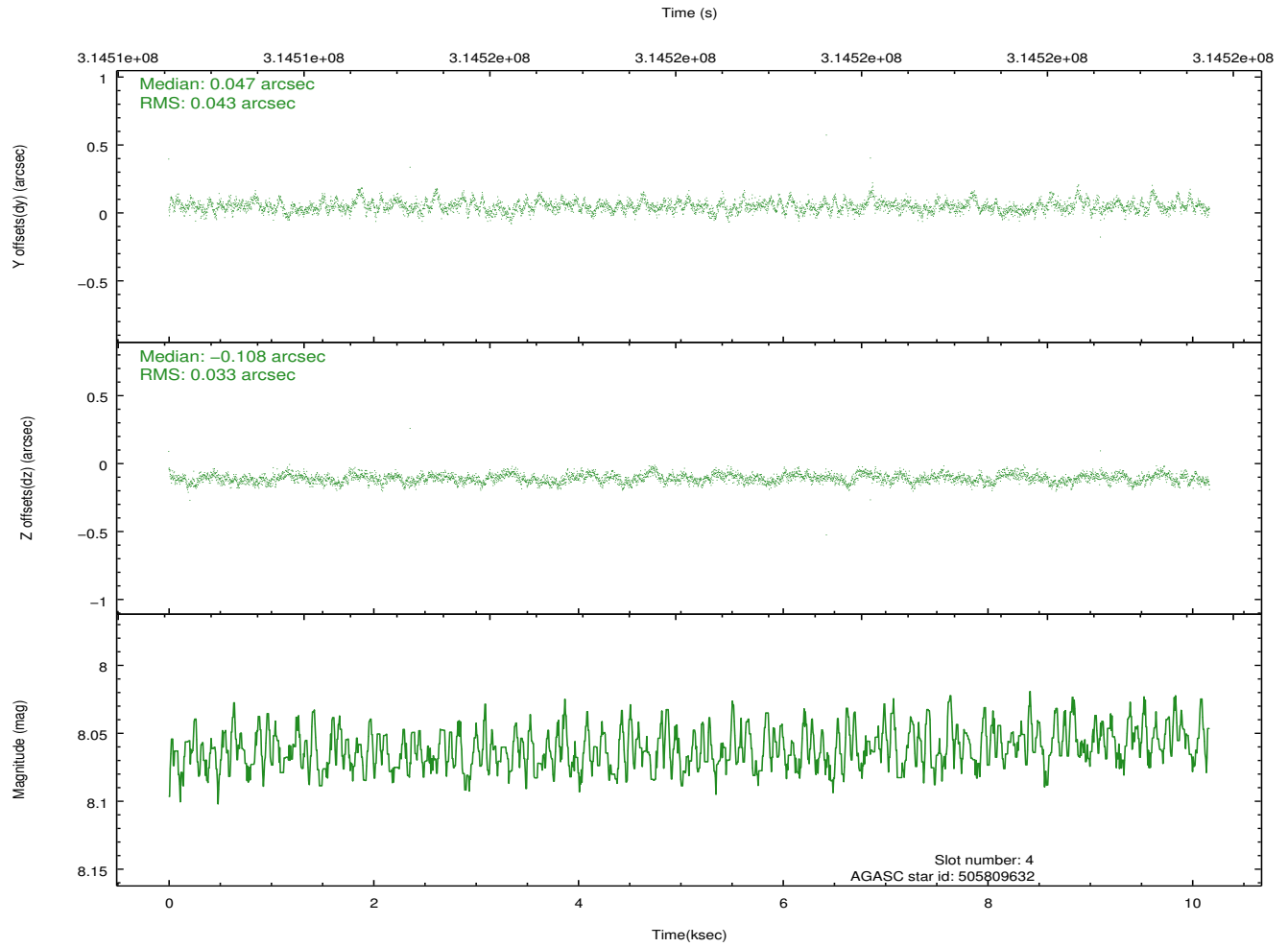
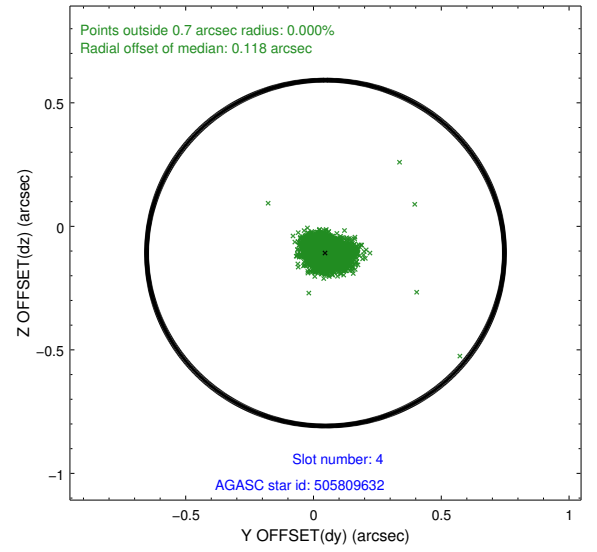
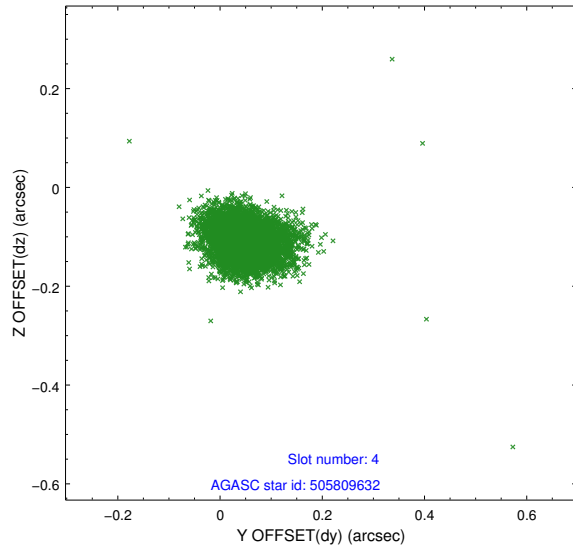
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 2480 | 0.027 | 0.005 | 0.013 | 0.023 | 0.000000 | 0.000000 | 926.40 | -838.06 |
| 1 | FID | ACIS-I-5 | 7.23 | 2481 | -0.209 | 0.033 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1821.67 | 1059.17 |
| 2 | FID | ACIS-I-6 | 7.24 | 2480 | 0.091 | 0.034 | 0.013 | 0.020 | 0.000000 | 0.000000 | 391.42 | 1704.28 |
| 3 | GUIDE | 455871352 | 8.10 | 4960 | 0.117 | 0.097 | 0.064 | 0.109 | 215.099961 | 52.172669 | -2128.05 | -1996.91 |
| 4 | GUIDE | 505809632 | 8.06 | 4961 | 0.047 | -0.108 | 0.055 | 0.093 | 215.499426 | 53.521185 | 2074.23 | 583.10 |
| 5 | GUIDE | 505812088 | 8.15 | 4959 | 0.027 | -0.155 | 0.064 | 0.104 | 214.186617 | 53.263562 | -482.55 | 2087.49 |
| 6 | GUIDE | 505812376 | 7.59 | 4960 | -0.105 | 0.038 | 0.064 | 0.101 | 214.039537 | 52.937930 | -1578.86 | 1563.71 |
| 7 | GUIDE | 505815928 | 8.35 | 4959 | -0.088 | 0.132 | 0.063 | 0.104 | 216.234742 | 53.074559 | 1943.79 | -1667.94 |

2.4 Star Slots

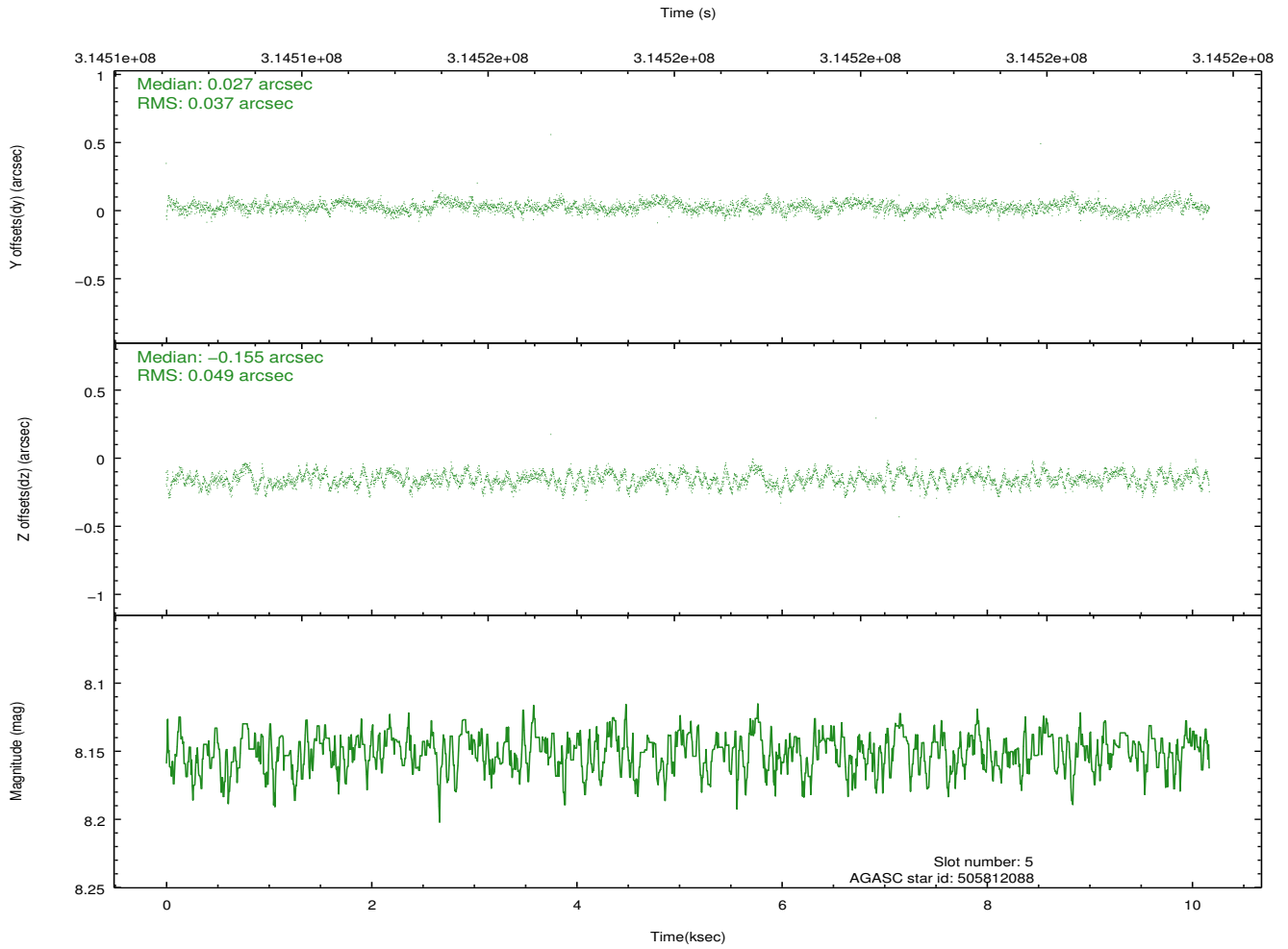
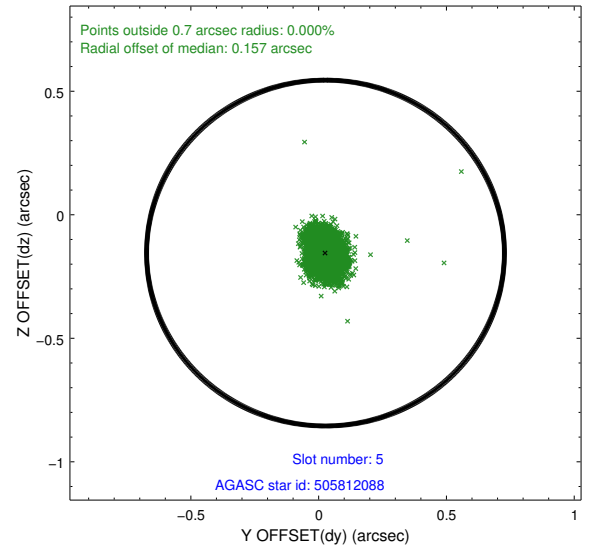
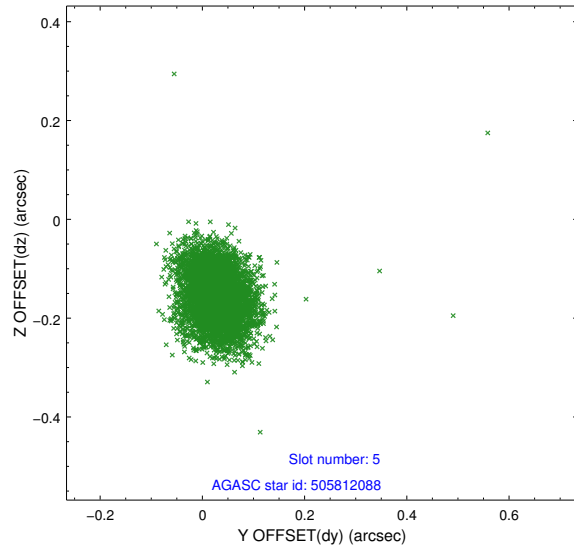
2.4.1 Slot 3



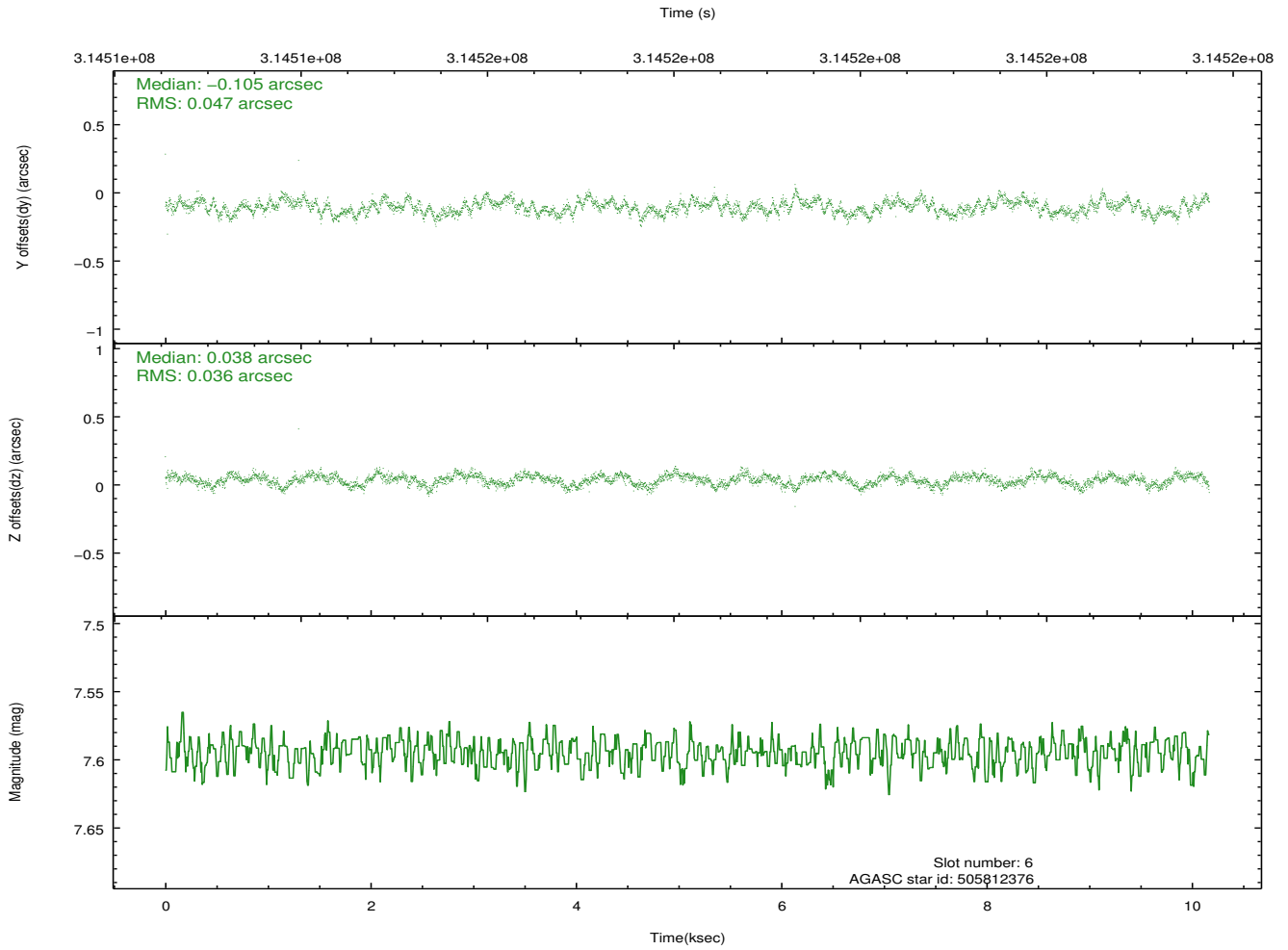
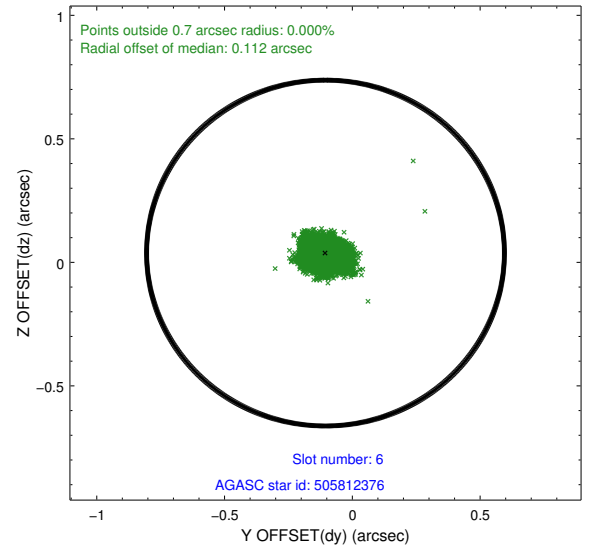
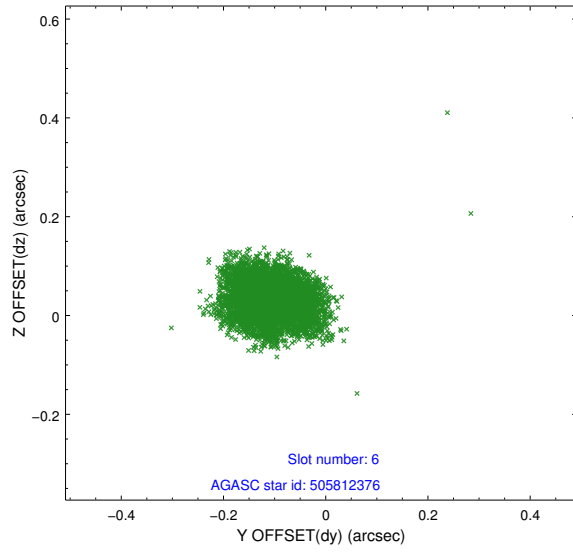
2.4.2 Slot 4



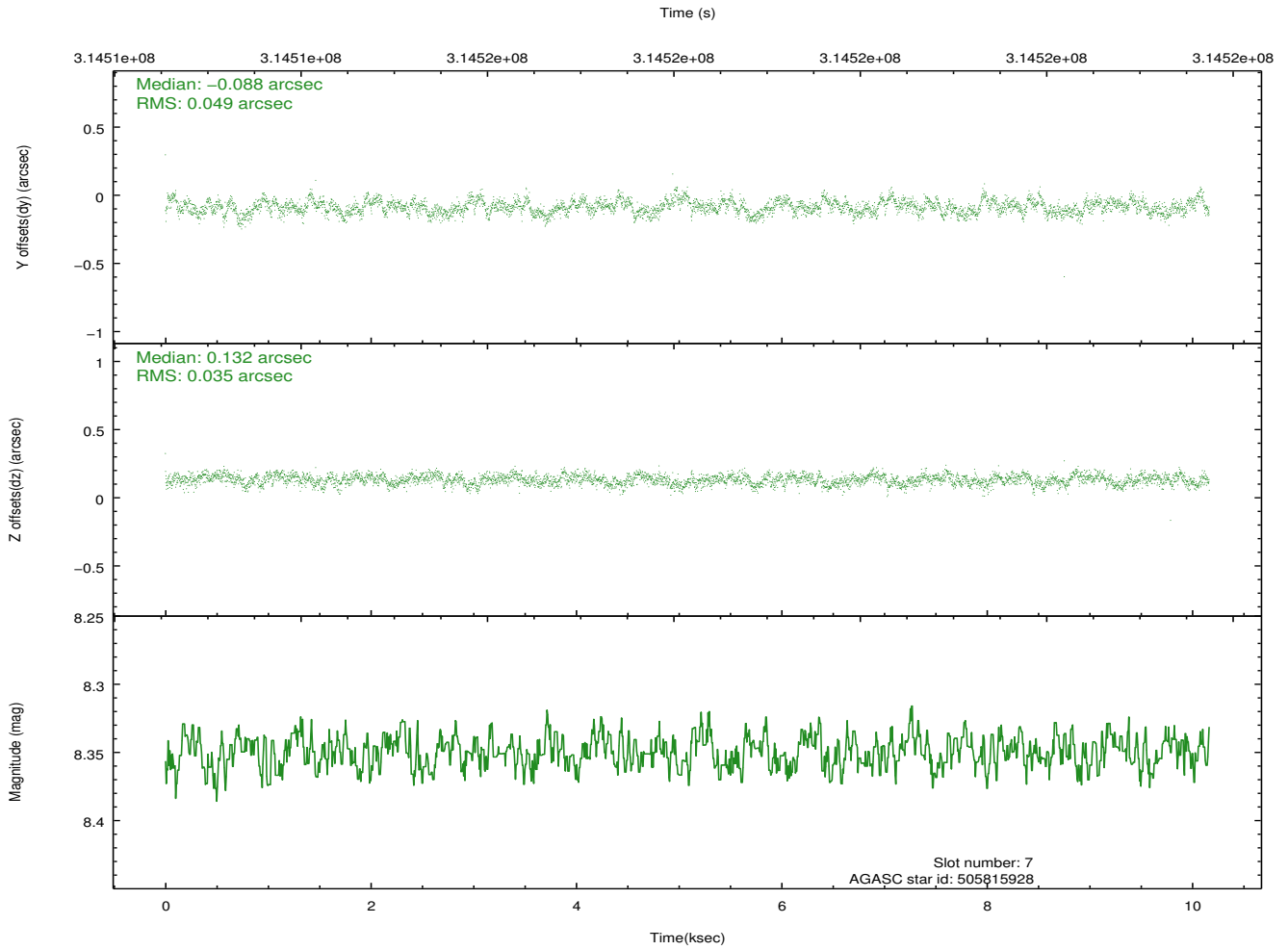
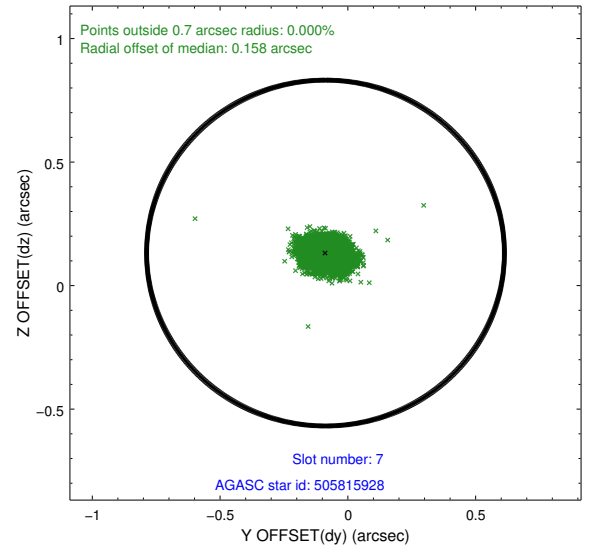
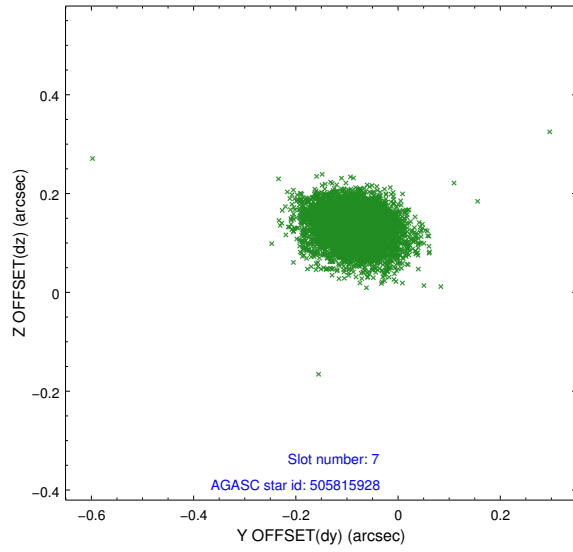
2.4.3 Slot 5



2.4.4 Slot 6

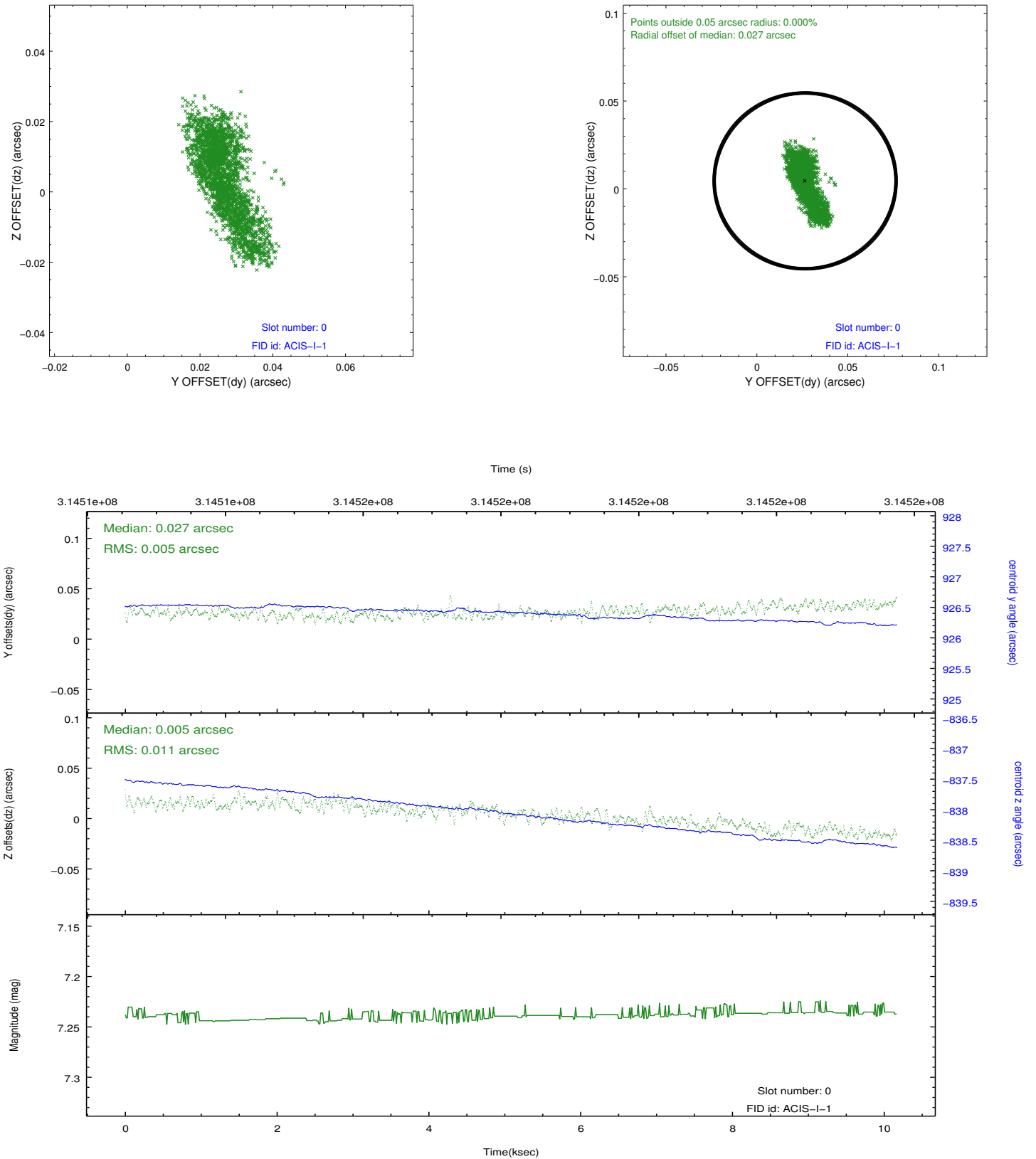


2.4.5 Slot 7

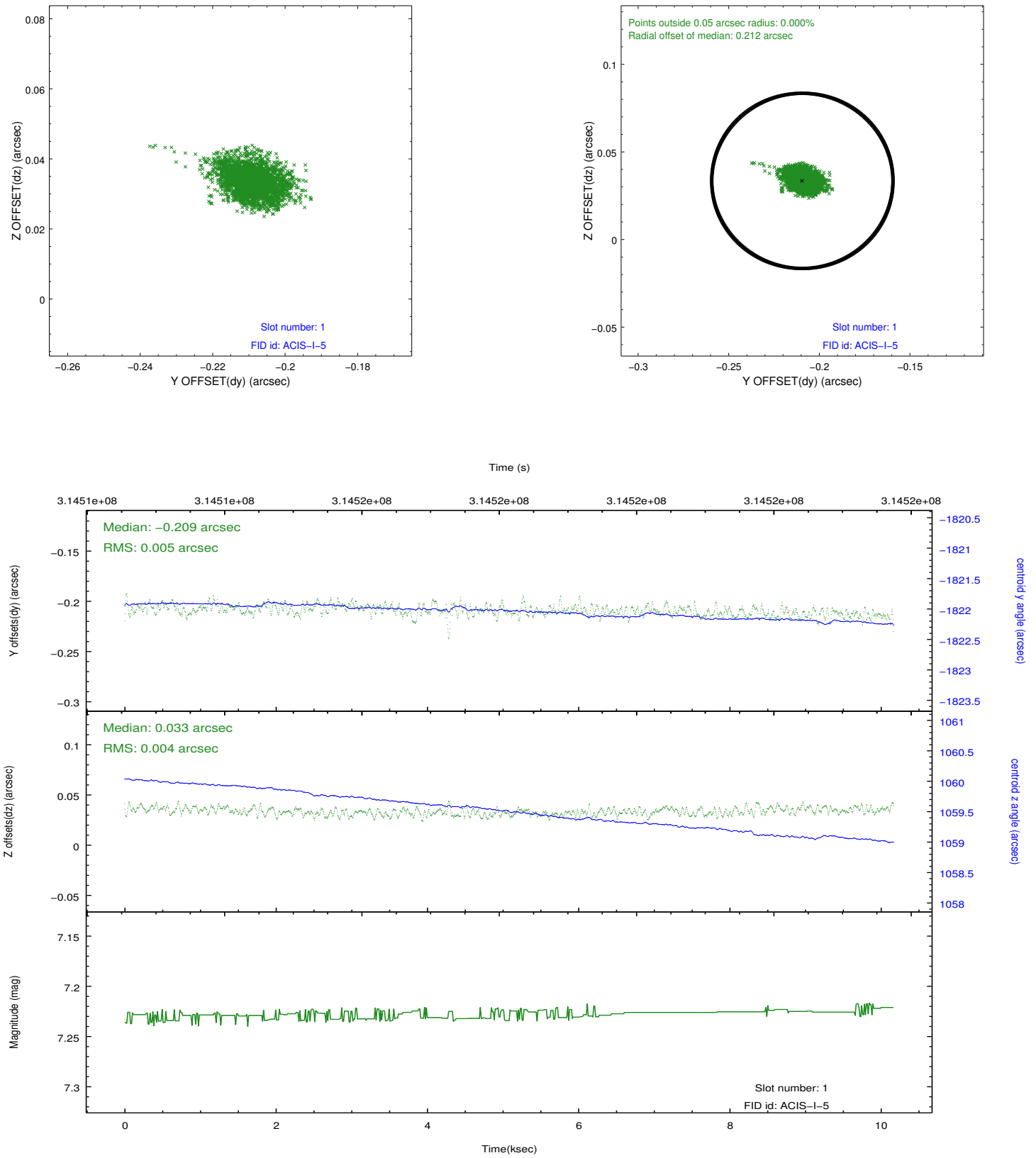


2.5 FID Slots

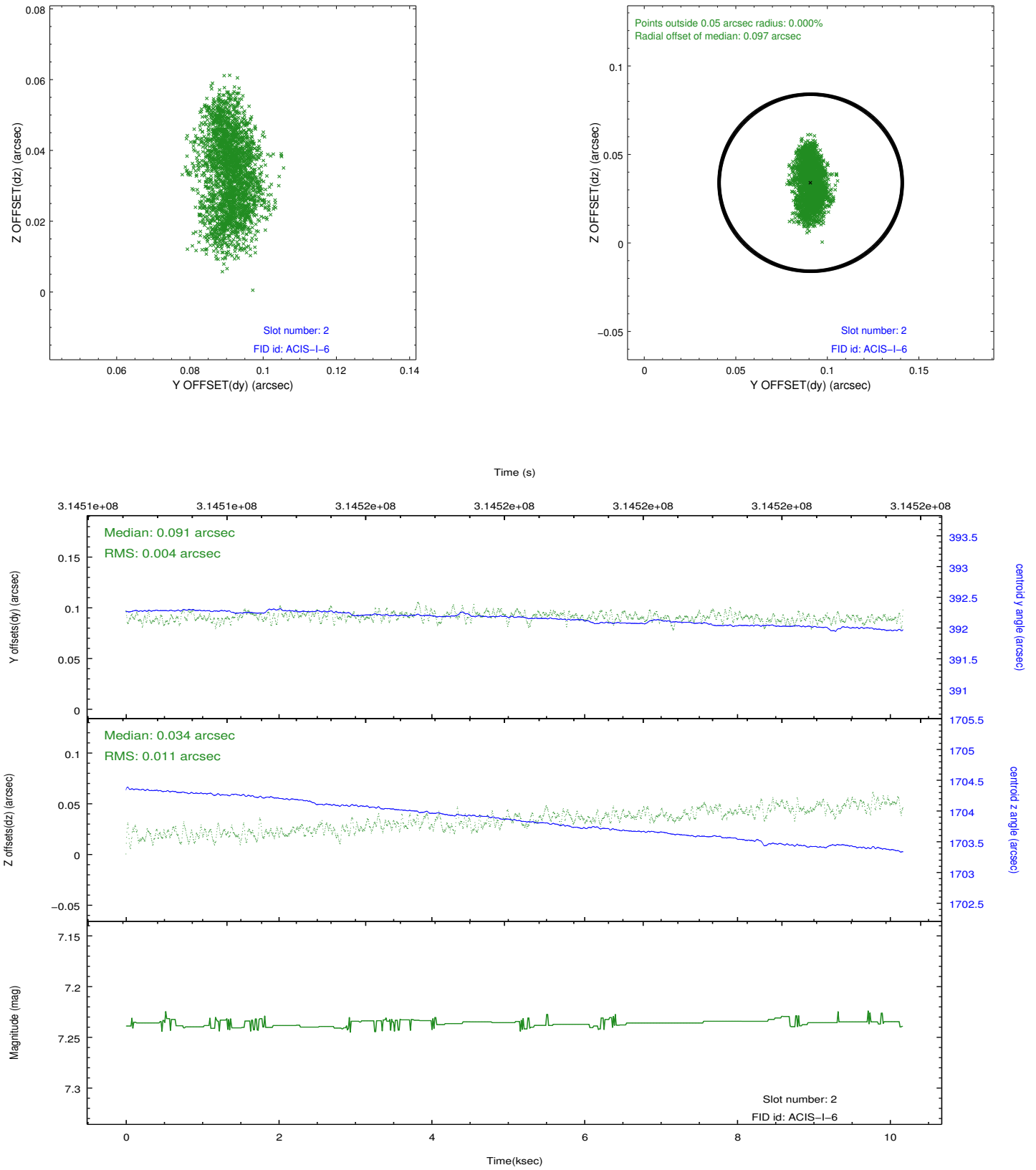
2.5.1 Slot 0



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) | 2012.05.08 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 10.1618 |

A.2 Comments

Joint proposal: Spitzer. Roll constraint met.