

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5903 - L2 Version 3
Chandra X-Ray Center

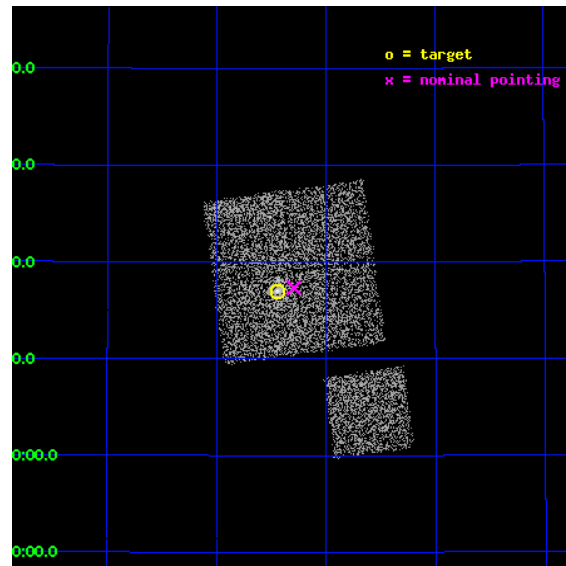
L2 Processing Date : Dec 21 2012

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1 Front

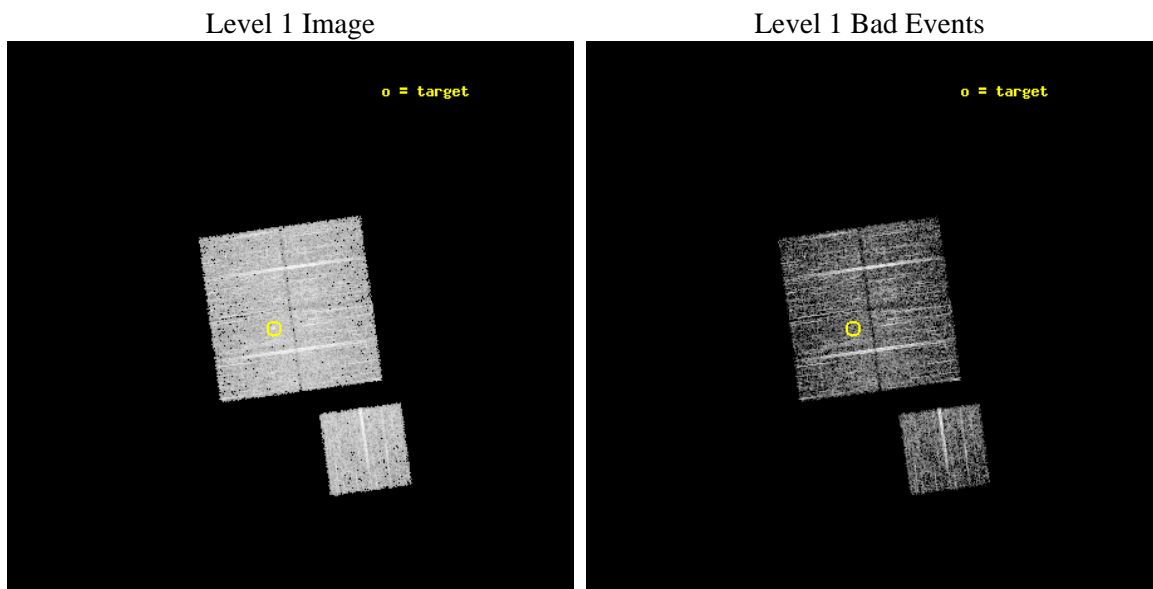
| | | |
|----------|---|---|
| seq_num | 600422 | Sequence number |
| obs_id | 5903 | Observation id |
| title | Snapshot Observations of X-ray Bright Early-Type Galaxies | Proposal |
| observer | Dr. Stephen Murray | Principal investigator |
| object | NGC5353 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 208.36125 | Observer's specified target RA [deg] |
| dec_targ | 40.283056 | Observer's specified target Dec [deg] |
| ra_nom | 208.32352659205 | Nominal RA [deg] |
| dec_nom | 40.288865641672 | Nominal Dec [deg] |
| roll_nom | 172.23325444594 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 4549.4000599682 | Sum of GTIs [s] |
| livetime | 4489.9587989651 | Livetime [s] |
| ontime0 | 4549.2769399583 | Sum of GTIs [s] |
| ontime1 | 4546.176999718 | Sum of GTIs [s] |
| ontime2 | 4549.3590199649 | Sum of GTIs [s] |
| ontime3 | 4549.4000599682 | Sum of GTIs [s] |
| ontime6 | 4549.235899955 | Sum of GTIs [s] |
| l2events | 12800 | Number of level 2 events |



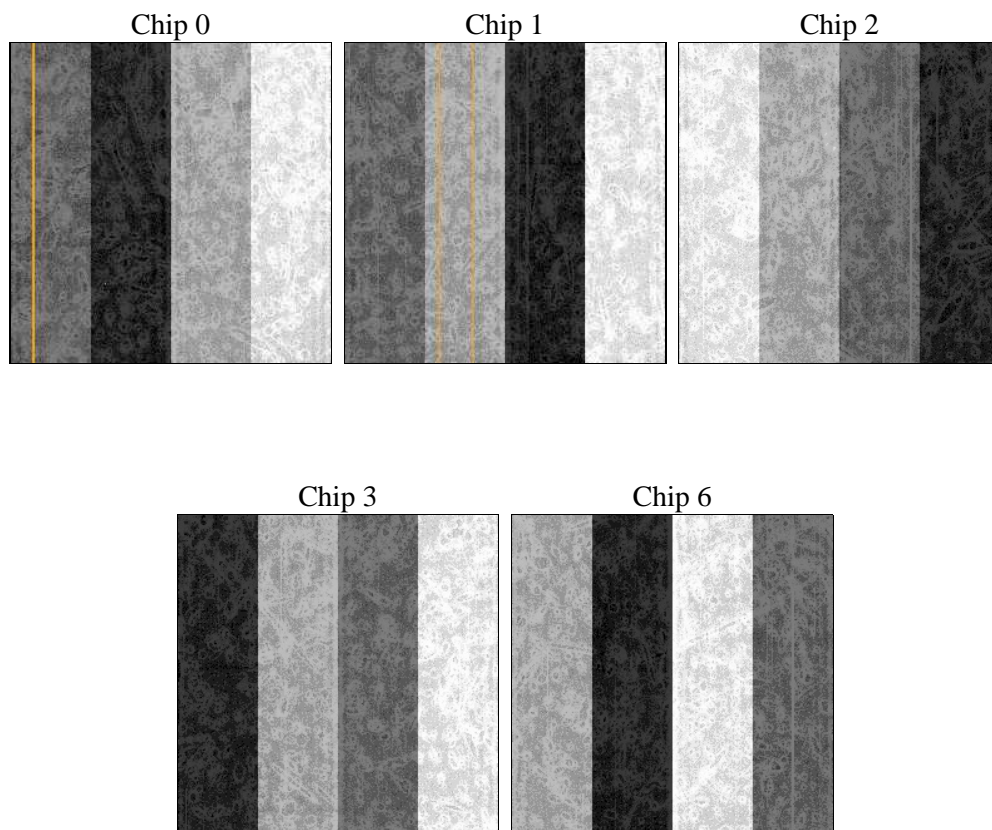
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 4500.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 4549.4000599682 | Sum of GTIs [s] |
| caldsver | 4.5.5 | | ontime0 | 4549.2769399583 | Sum of GTIs [s] |
| date | 2012-12-22T00:33:08 | Date and time of file creation | ontime1 | 4546.176999718 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 4549.3590199649 | Sum of GTIs [s] |
| | | | ontime3 | 4549.4000599682 | Sum of GTIs [s] |
| | | | ontime6 | 4549.235899955 | Sum of GTIs [s] |
| | | | l1events | 142725 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 27483 | 27786 | 30234 | 28663 | 28559 |
| rejected events | 24599 | 24426 | 27283 | 25526 | 25540 |
| rejected % | 89% | 87% | 90% | 89% | 89% |

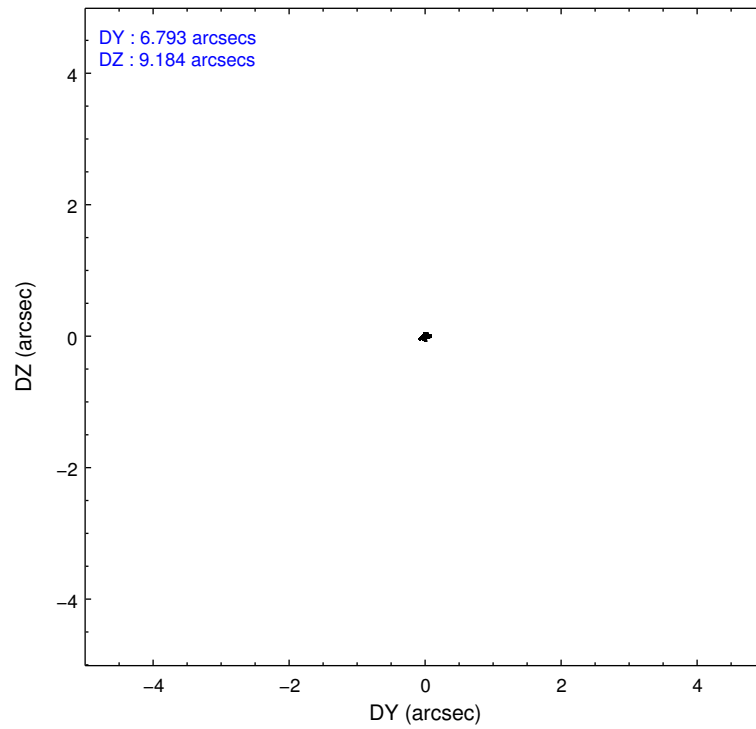
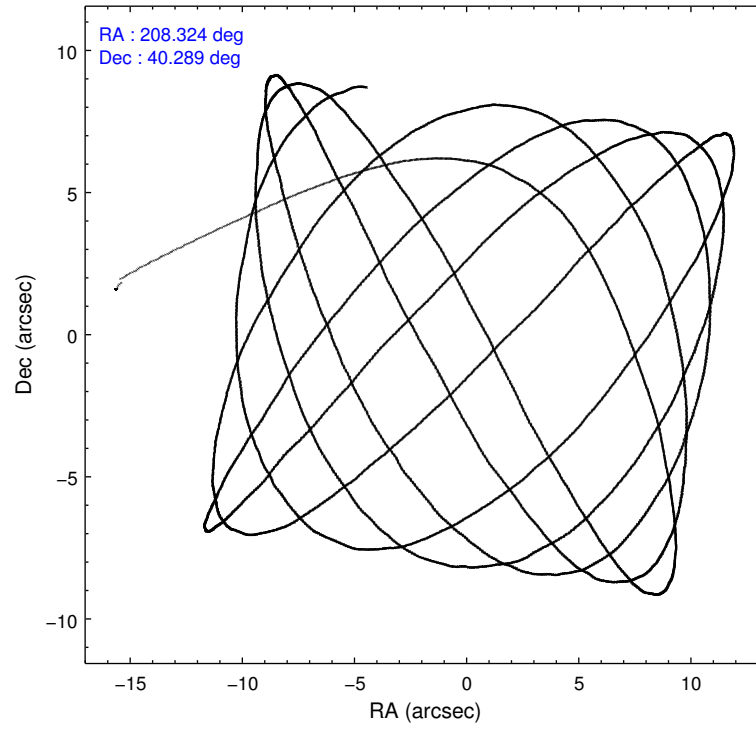
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 1018 | 1335 | 1099 | 1338 | 1045 |
| | 3% | 4% | 3% | 4% | 3% |
| grade 1 events | 17 | 12 | 19 | 24 | 7 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 653 | 674 | 656 | 584 | 643 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 327 | 366 | 307 | 334 | 348 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 307 | 367 | 335 | 323 | 332 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 1024 | 1128 | 963 | 1154 | 1150 |
| | 3% | 4% | 3% | 4% | 4% |
| grade 6 events | 585 | 630 | 558 | 563 | 653 |
| | 2% | 2% | 1% | 1% | 2% |
| grade 7 events | 23552 | 23274 | 26297 | 24343 | 24381 |
| | 85% | 83% | 86% | 84% | 85% |

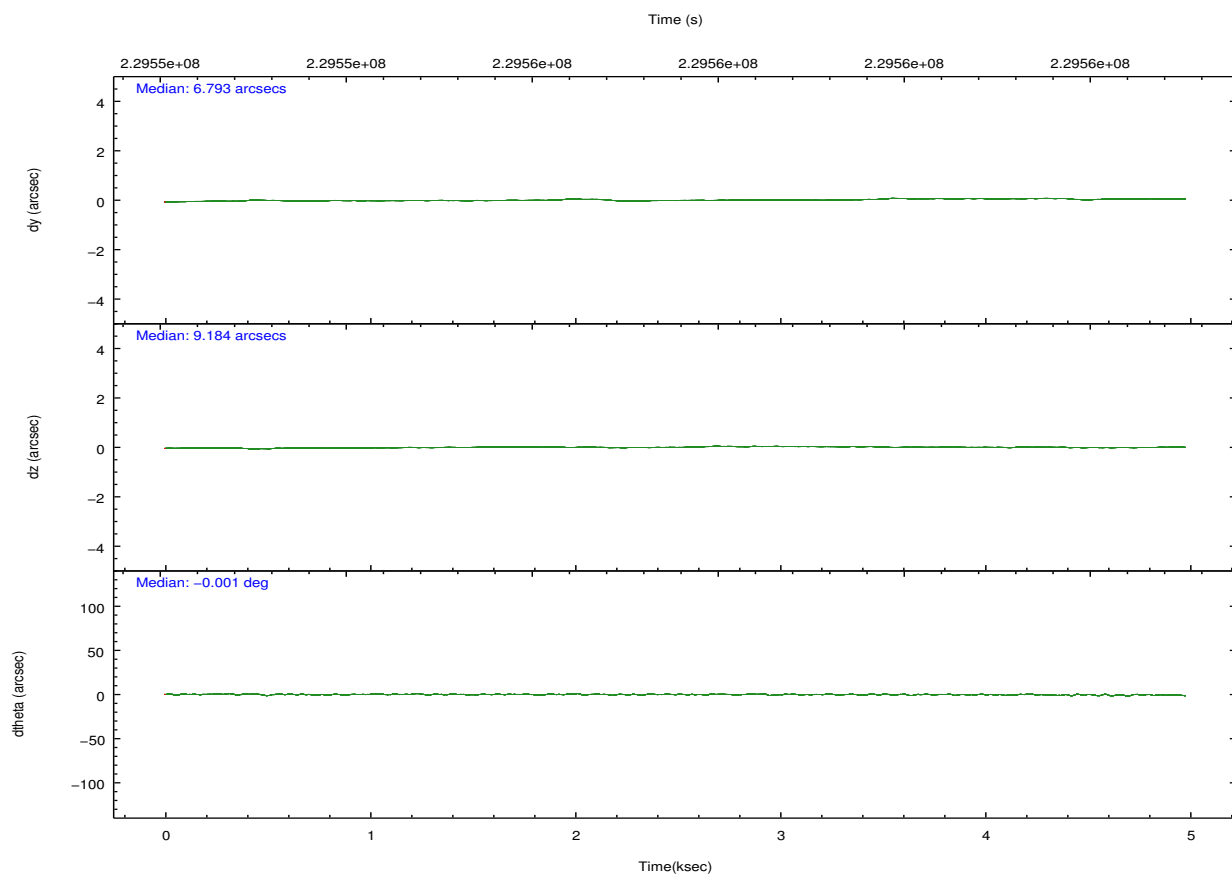
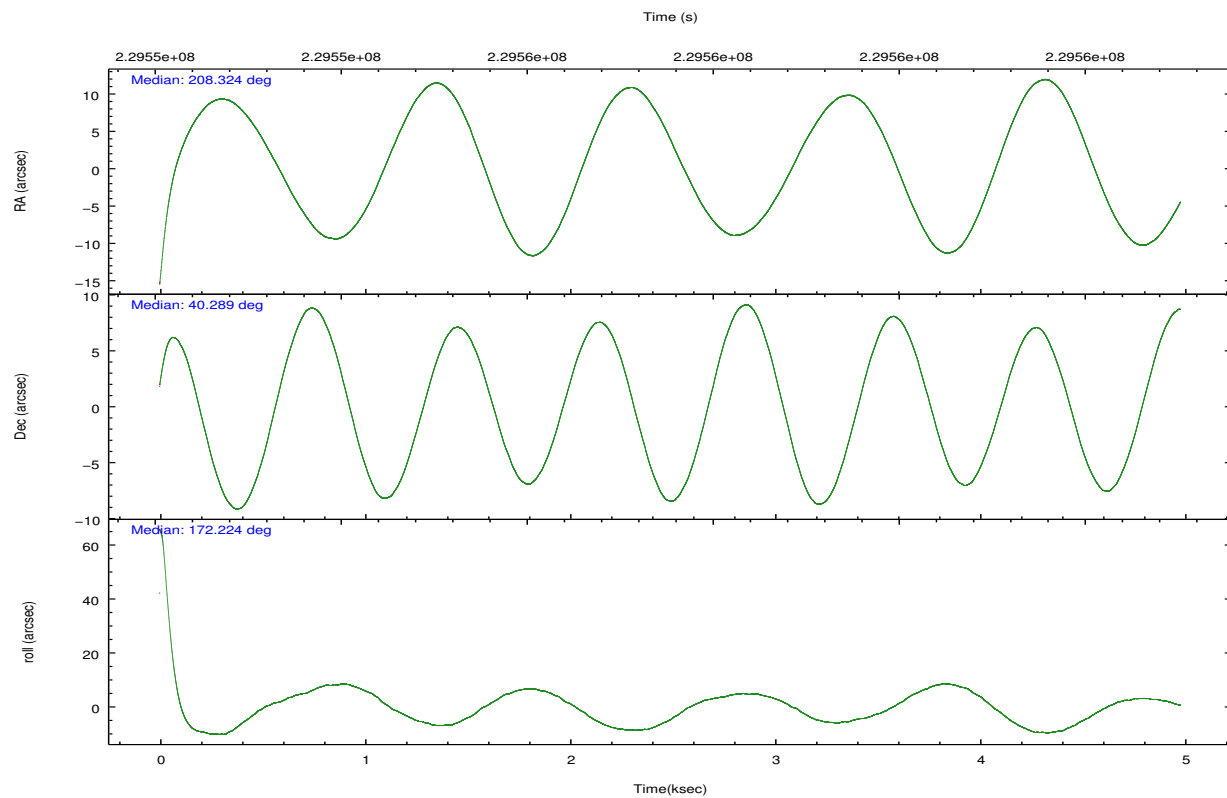
2.2 Compared Parameters

| 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 | 208.356757 | 208.3235265920494 |
| [deg] Pointing Dec | 40.299350 | 40.28886564167223 |
| [deg] Pointing Roll | 172.002898 | 172.2332544459379 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 |
| [mm] SIM defocus | 0 | 0.001439871863259334 |
| [mm] SIM translation stage pos | -230.592463 | -230.5903706213692 |
| [mm] SIM translation stage offset | -3 | -3.002082381560513 |
| [s] Observation start time (MET) | 229553755.184000 | 229552677.00248 |
| Observation start date | 2005-04-10T20:54:51 | 2005-04-10T20:37:57 |
| [s] Observation end time (MET) | 229558255.184000 | 229559545.0153 |
| Observation end date | 2005-04-10T22:09:51 | 2005-04-10T22:32:25 |
| 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



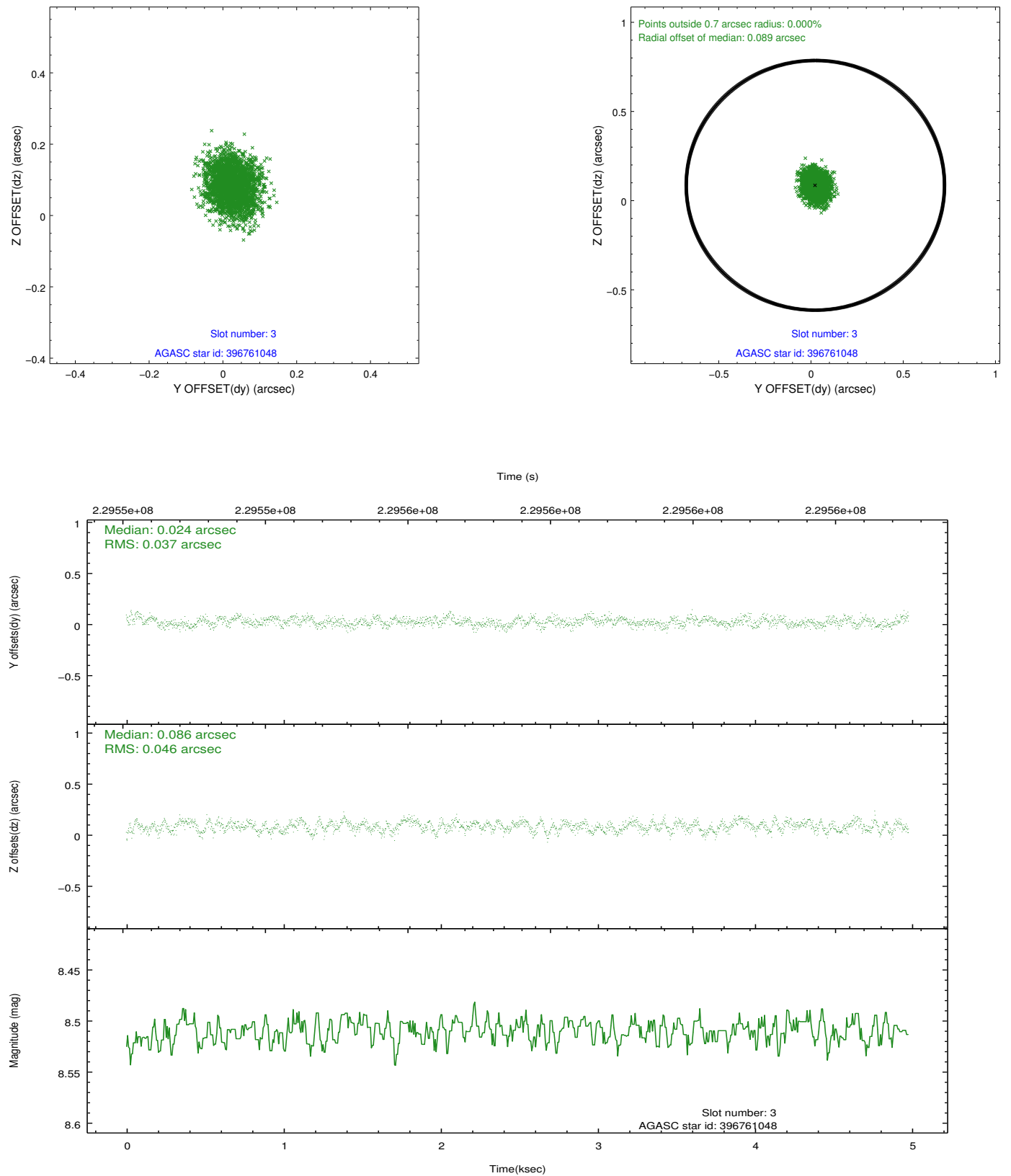


Slot Statistics

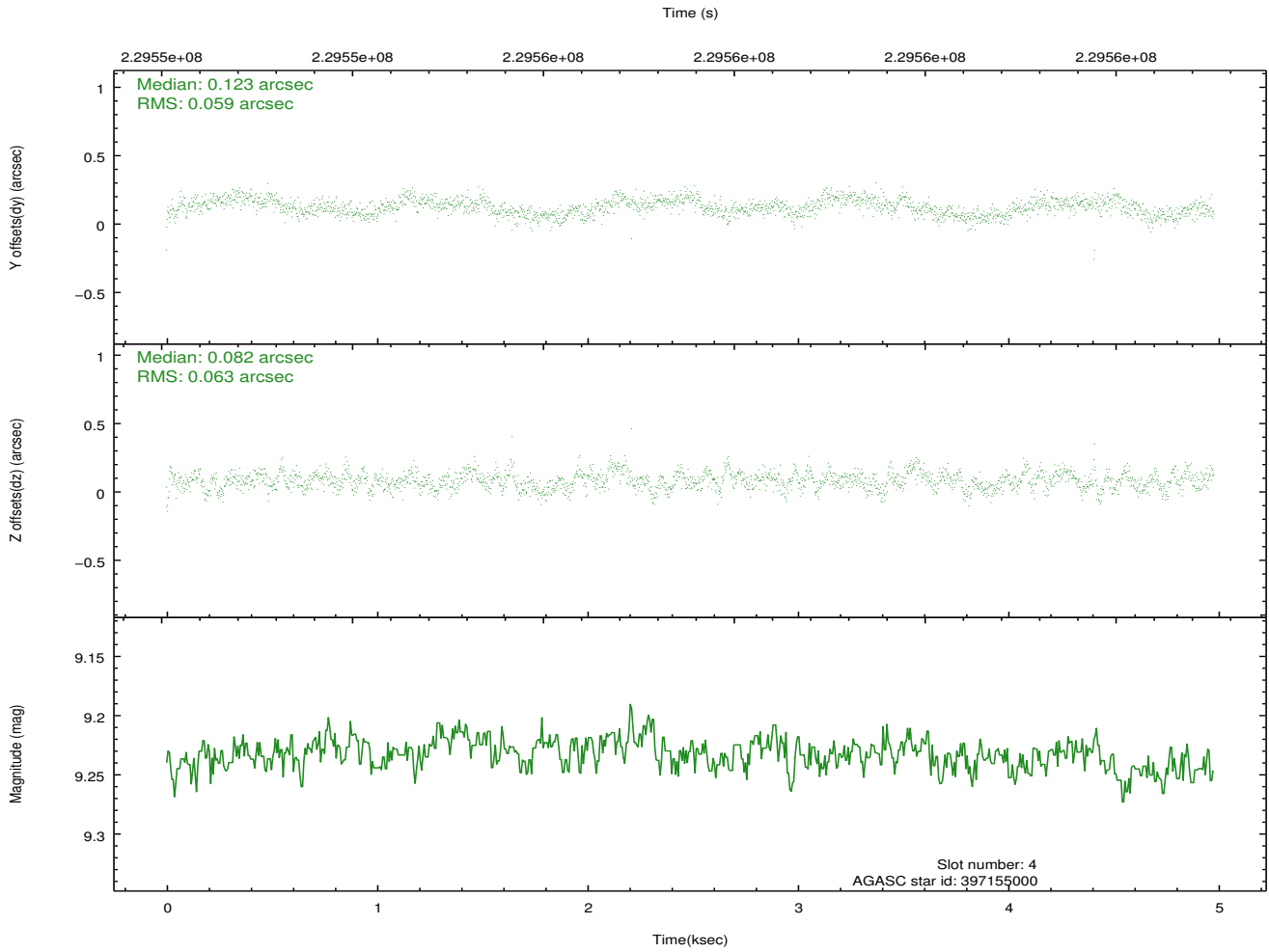
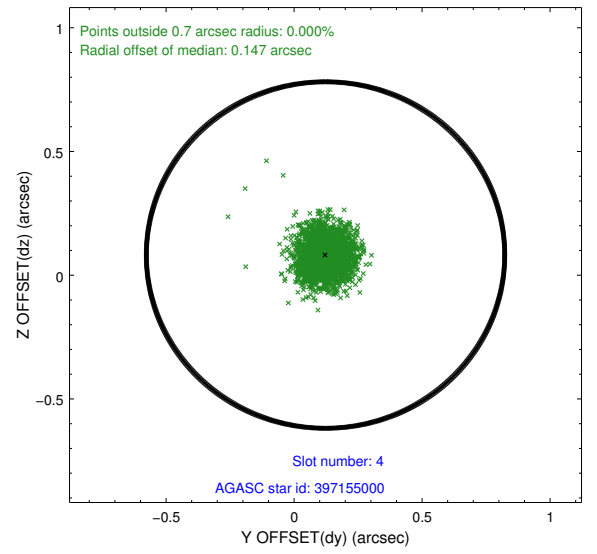
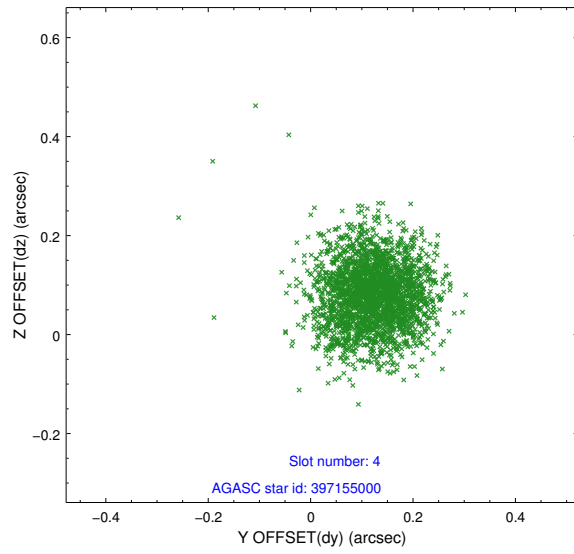
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 1215 | 0.078 | -0.043 | 0.006 | 0.011 | 0.000000 | 0.000000 | 932.89 | -894.26 |
| 1 | FID | ACIS-I-5 | 7.24 | 1215 | -0.201 | 0.084 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1814.78 | 1002.75 |
| 2 | FID | ACIS-I-6 | 7.26 | 1214 | 0.031 | 0.030 | 0.007 | 0.011 | 0.000000 | 0.000000 | 397.11 | 1648.55 |
| 3 | GUIDE | 396761048 | 8.51 | 2429 | 0.024 | 0.086 | 0.063 | 0.100 | 208.356917 | 39.848251 | -226.43 | 1608.27 |
| 4 | GUIDE | 397155000 | 9.23 | 2428 | 0.123 | 0.082 | 0.091 | 0.144 | 208.578535 | 40.761769 | -366.05 | -1732.38 |
| 5 | GUIDE | 397156112 | 8.15 | 2428 | -0.000 | 0.048 | 0.056 | 0.089 | 208.309778 | 40.715583 | 335.78 | -1466.66 |
| 6 | GUIDE | 397157096 | 8.66 | 2429 | 0.001 | 0.138 | 0.065 | 0.103 | 208.961272 | 40.488605 | -1543.02 | -911.19 |
| 7 | GUIDE | 396762336 | 5.81 | 2422 | -0.149 | -0.355 | 0.051 | 0.082 | 207.946236 | 39.669422 | 810.42 | 2400.95 |

2.4 Star Slots

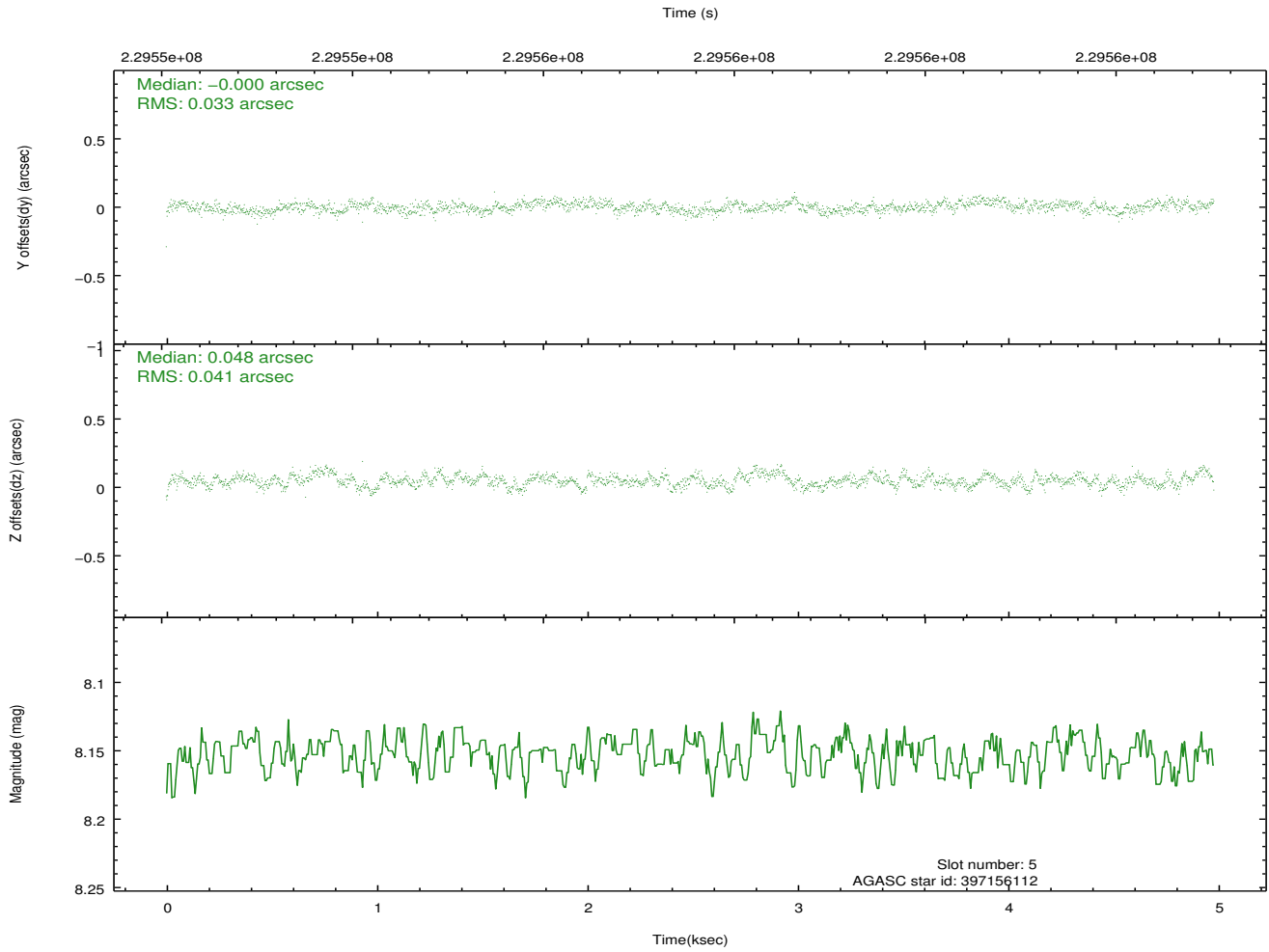
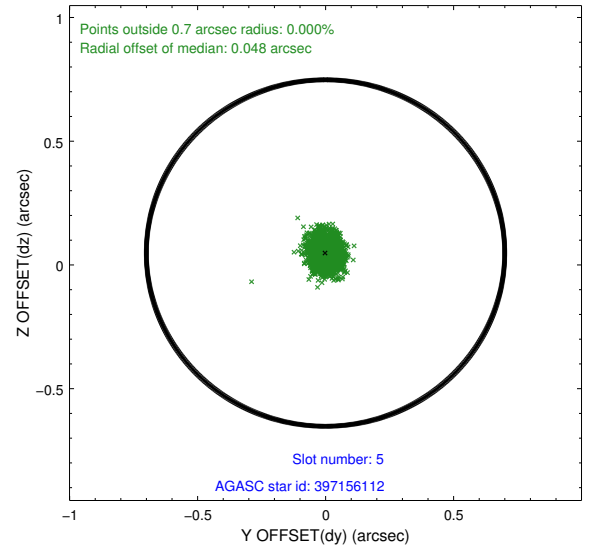
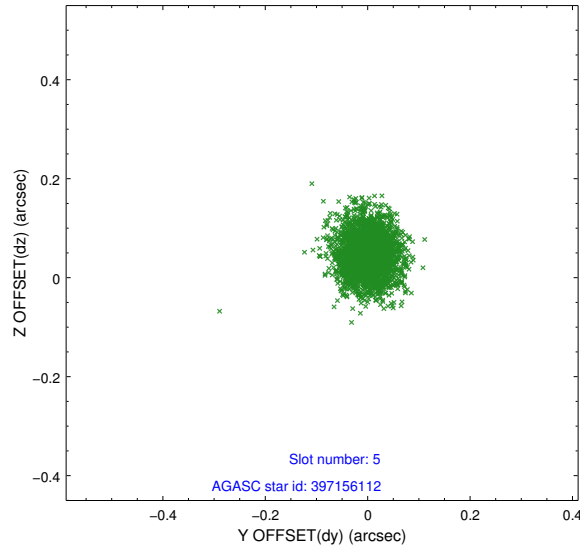
2.4.1 Slot 3



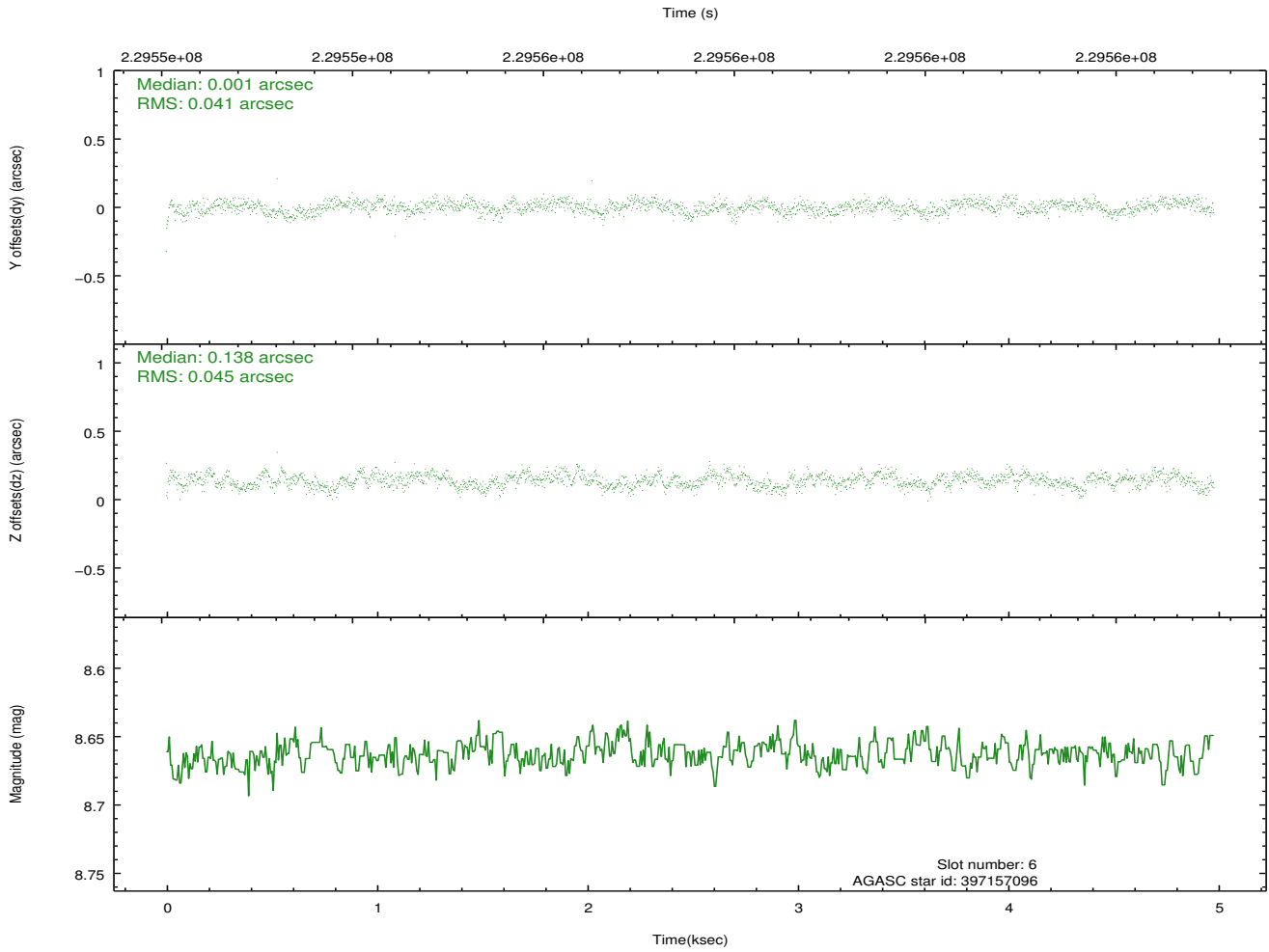
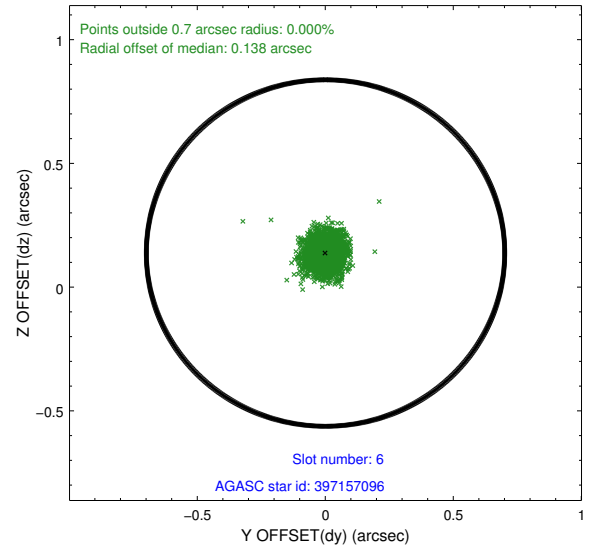
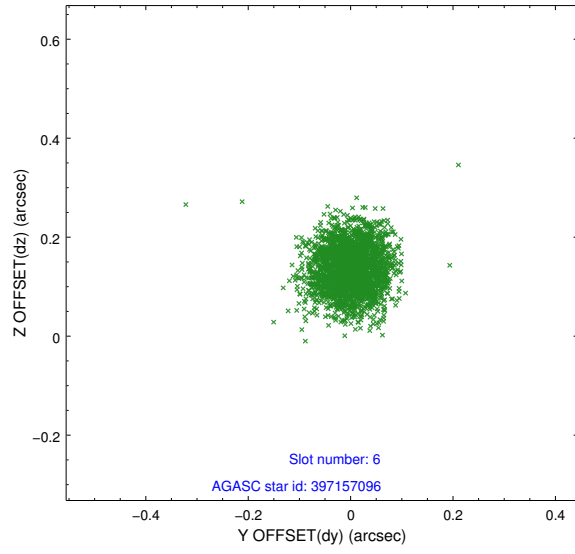
2.4.2 Slot 4



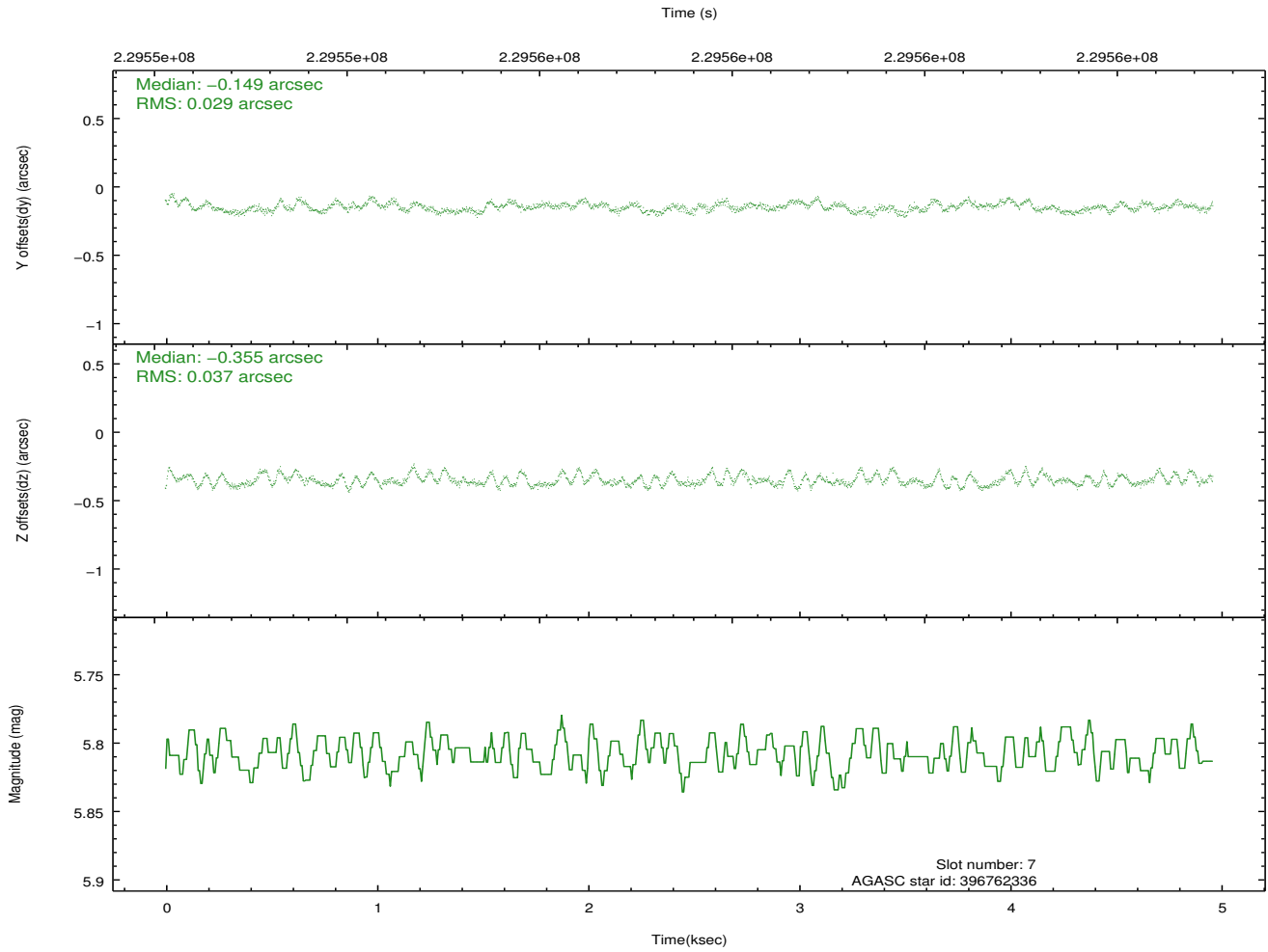
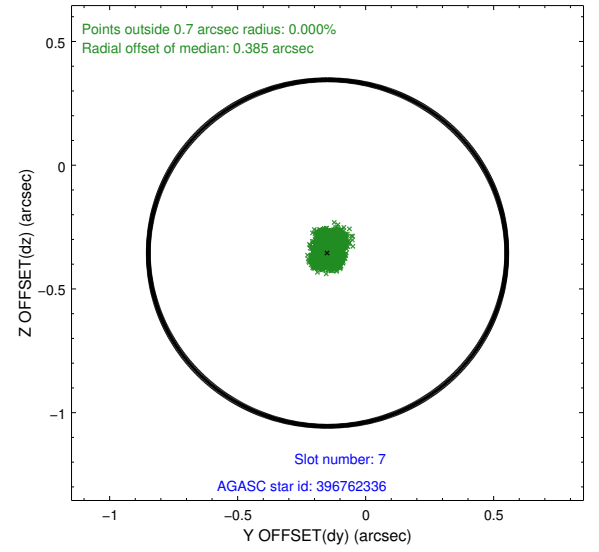
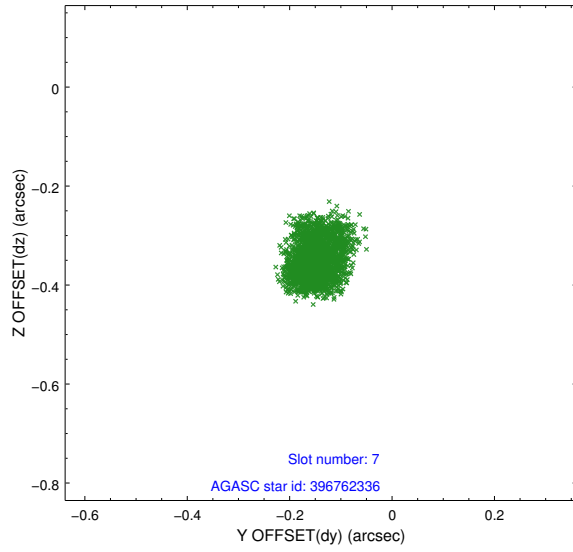
2.4.3 Slot 5



2.4.4 Slot 6

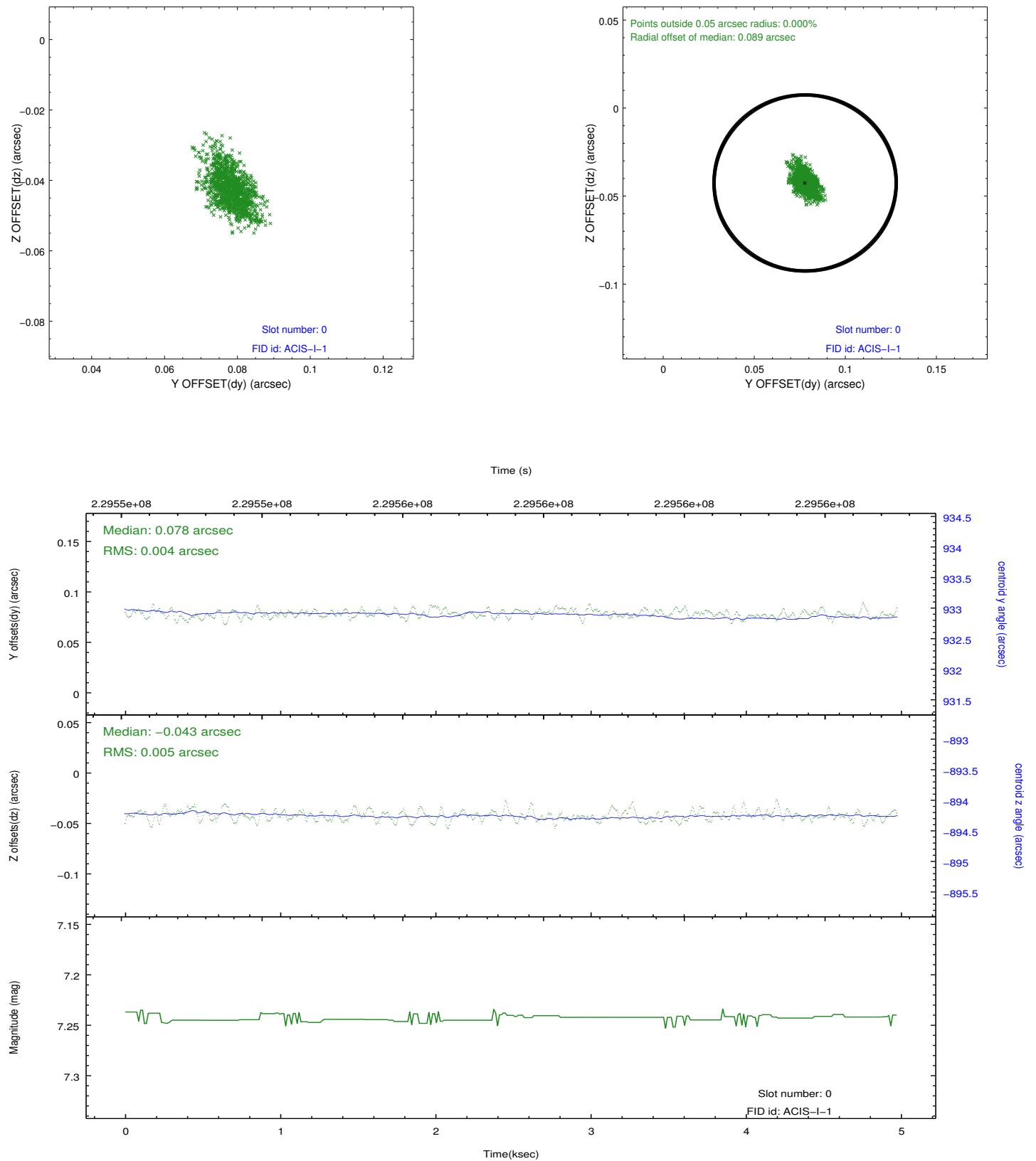


2.4.5 Slot 7

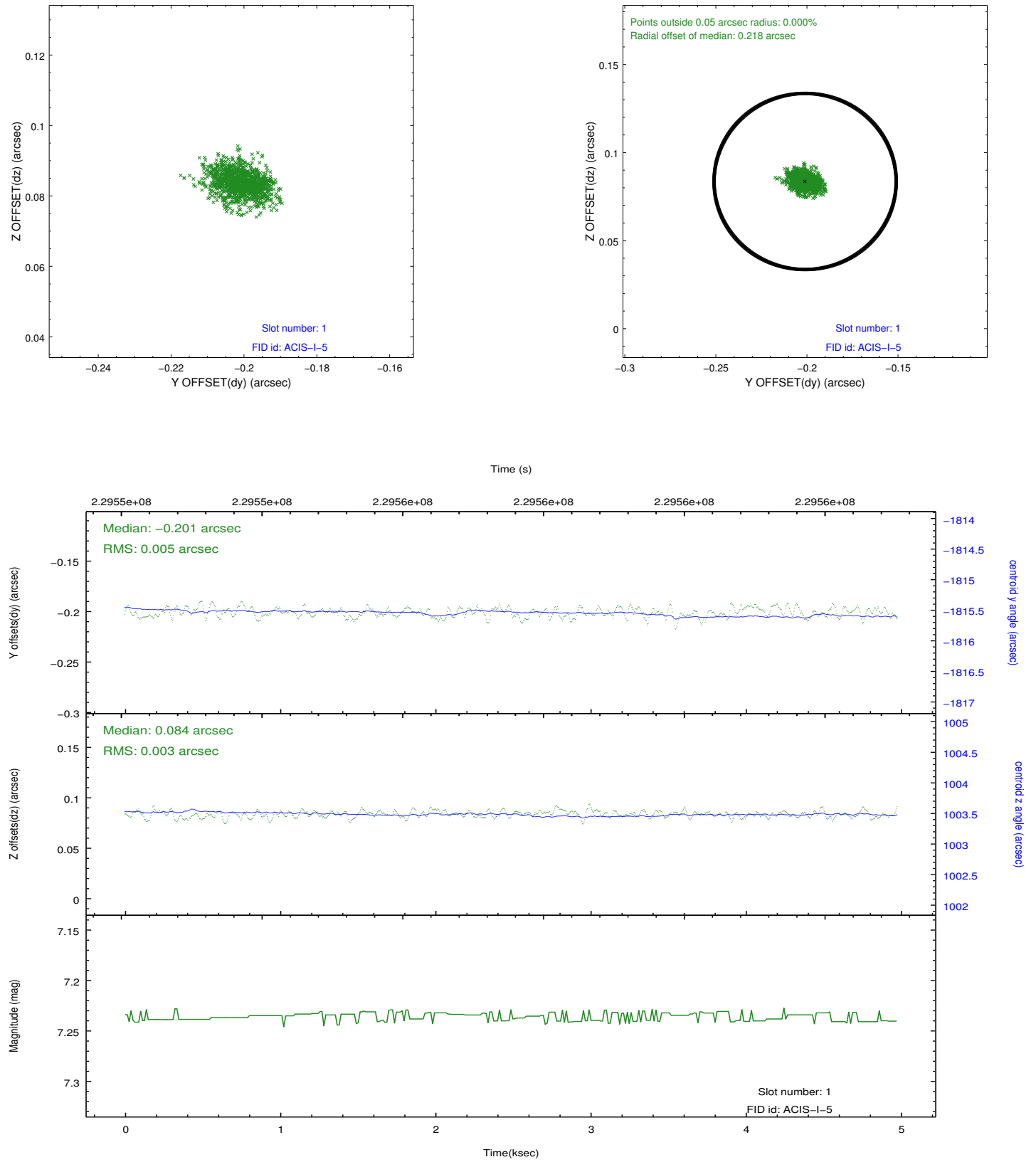


2.5 FID Slots

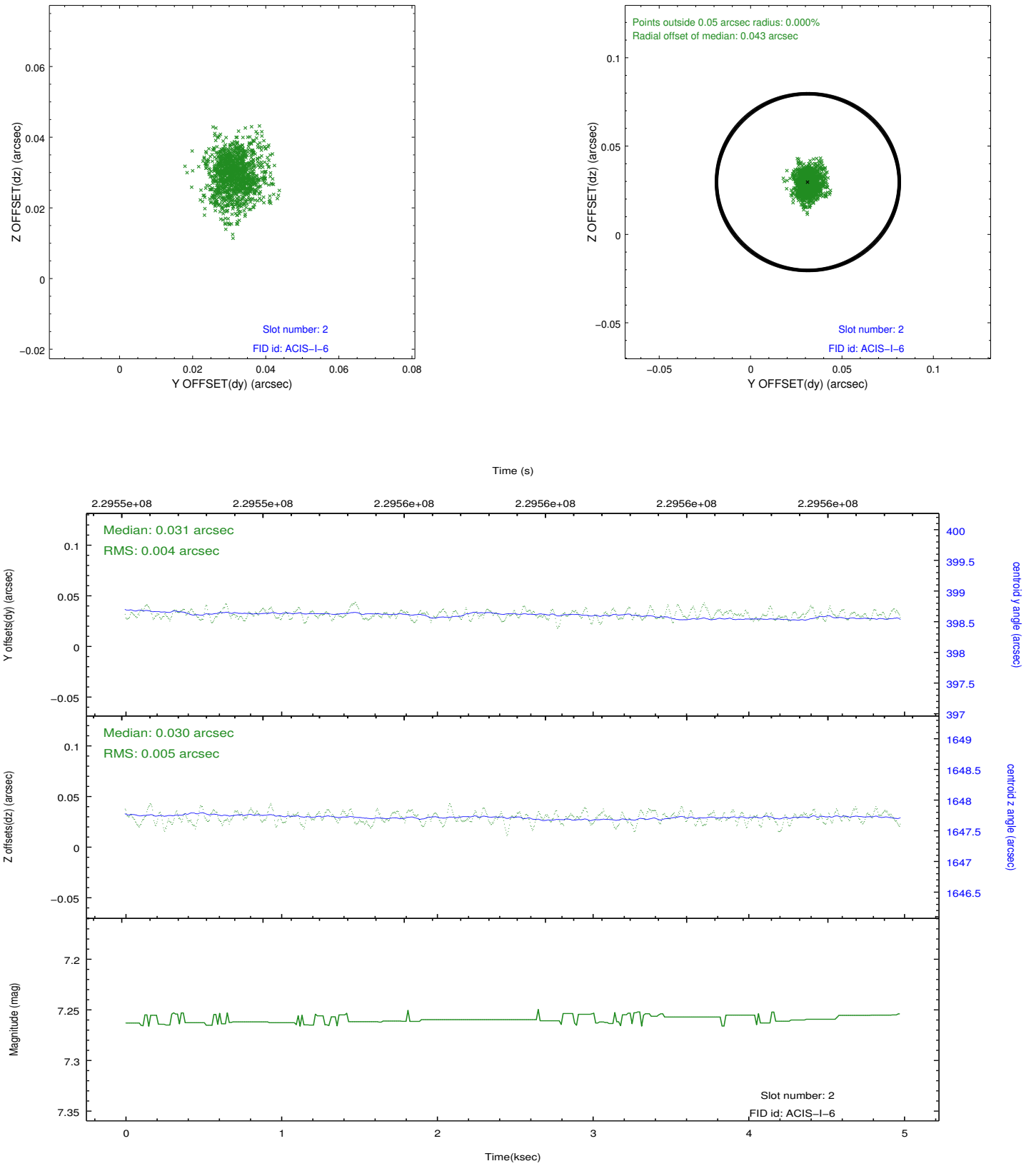
2.5.1 Slot 0



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) | 2013.01.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.550799 |

A.2 Comments