

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 1583 - L2 Version 001
Chandra X-Ray Center

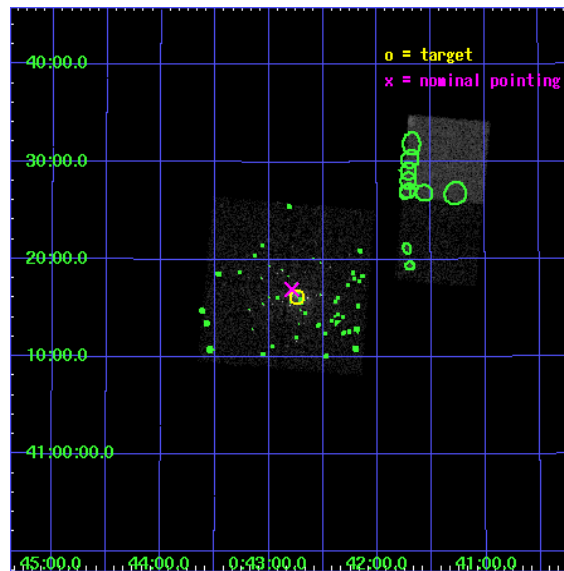
L2 Processing Date : Nov 28 2006

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1 Front

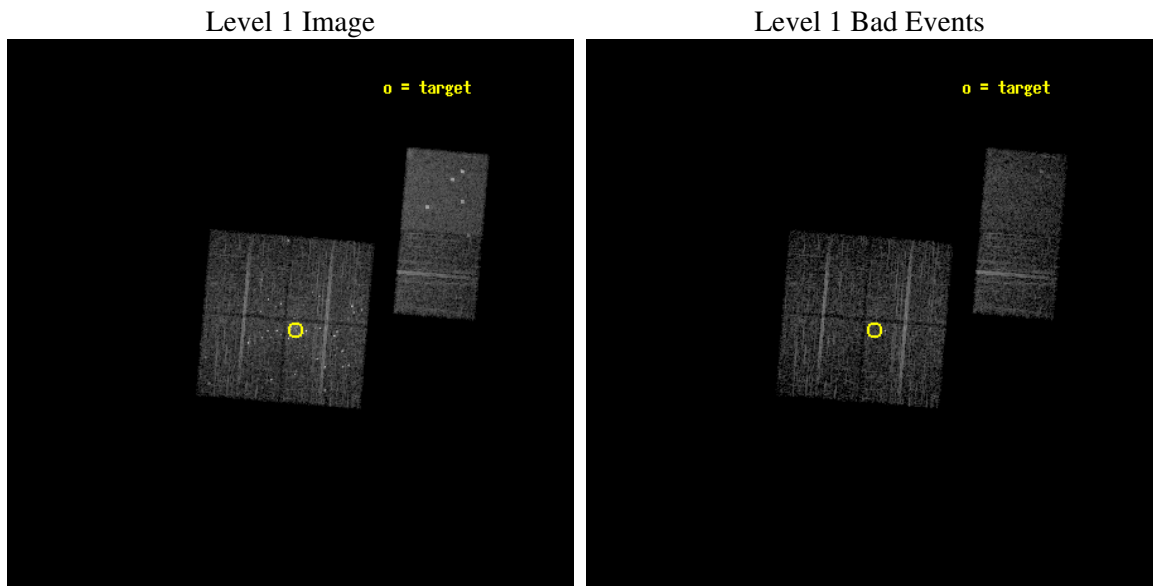
| | |
|----------|-----------------------------------|
| seq_num | 600140 |
| obs_id | 1583 |
| title | MONITORING THE M31 NUCLEAR REGION |
| observer | Dr. Stephen Murray |
| object | M31 NUCLEUS |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 10.685 |
| dec_targ | 41.268972 |
| ra_nom | 10.697133610046 |
| dec_nom | 41.282462707655 |
| roll_nom | 94.903076408959 |
| revision | 2 |
| ontime | 4966.4000046253 |
| livetime | 4903.5124573597 |
| ontime0 | 4966.4000046253 |
| ontime1 | 4966.4000046253 |
| ontime2 | 4966.4000046253 |
| ontime3 | 4966.4000046253 |
| ontime5 | 4966.4000046253 |
| ontime6 | 4966.4000046253 |
| l2events | 49675 |



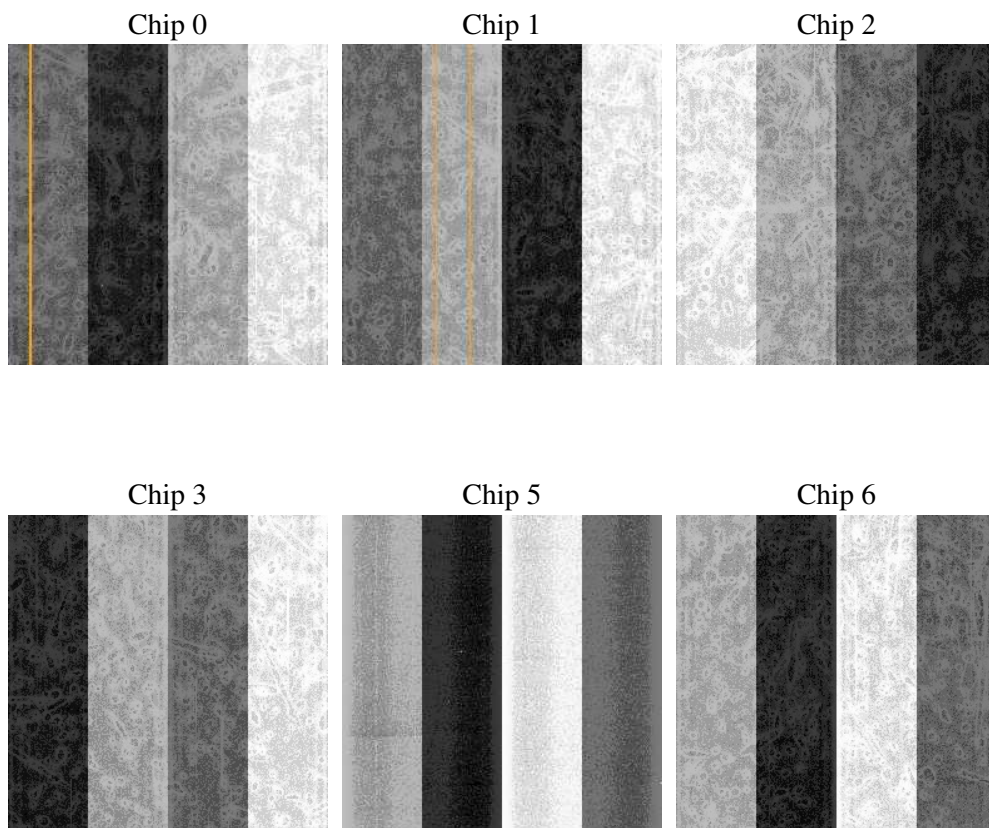
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.9 |
| caldbver | 3.2.4 |
| date | 2006-11-28T04:53:44 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 5000.000000 |
| ontime | 4971.6896039099 |
| ontime0 | 4971.6896039099 |
| ontime1 | 4971.6896039099 |
| ontime2 | 4971.6896039099 |
| ontime3 | 4971.6896039099 |
| ontime5 | 4971.6896039099 |
| ontime6 | 4971.6896039099 |
| l1events | 219462 |

2.1.4 Events

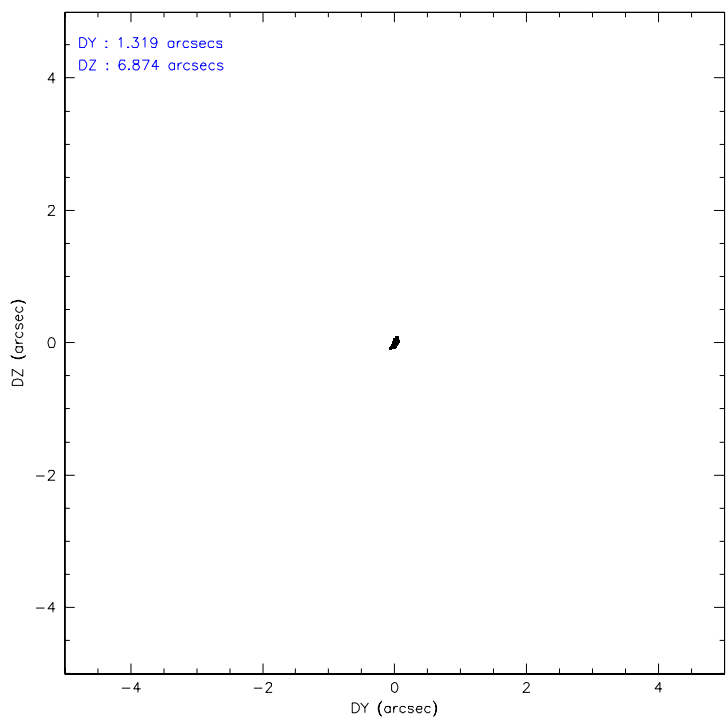
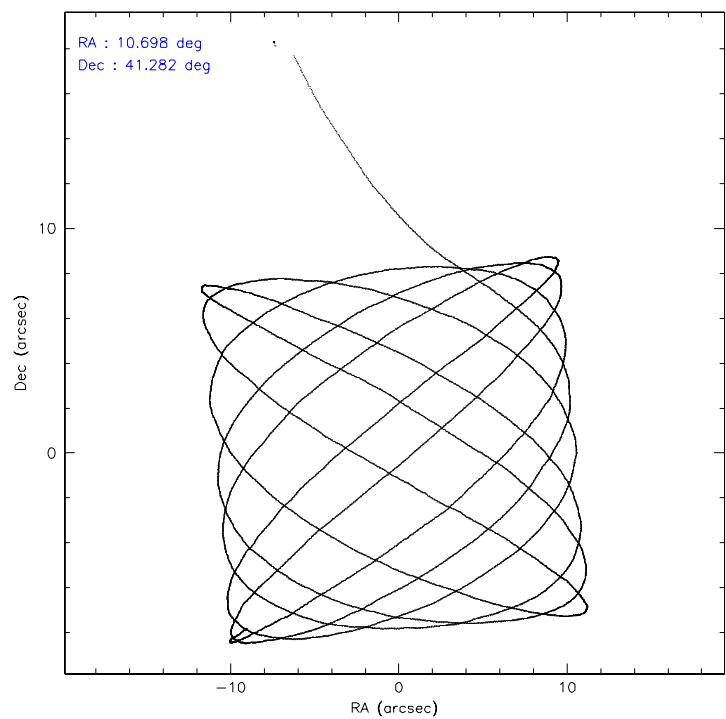
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 5 | ccd 6 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 30242 | 31779 | 35577 | 41365 | 47269 | 33230 |
| rejected events | 24555 | 25068 | 29817 | 28744 | 25288 | 29439 |
| rejected % | 81% | 78% | 83% | 69% | 53% | 88% |

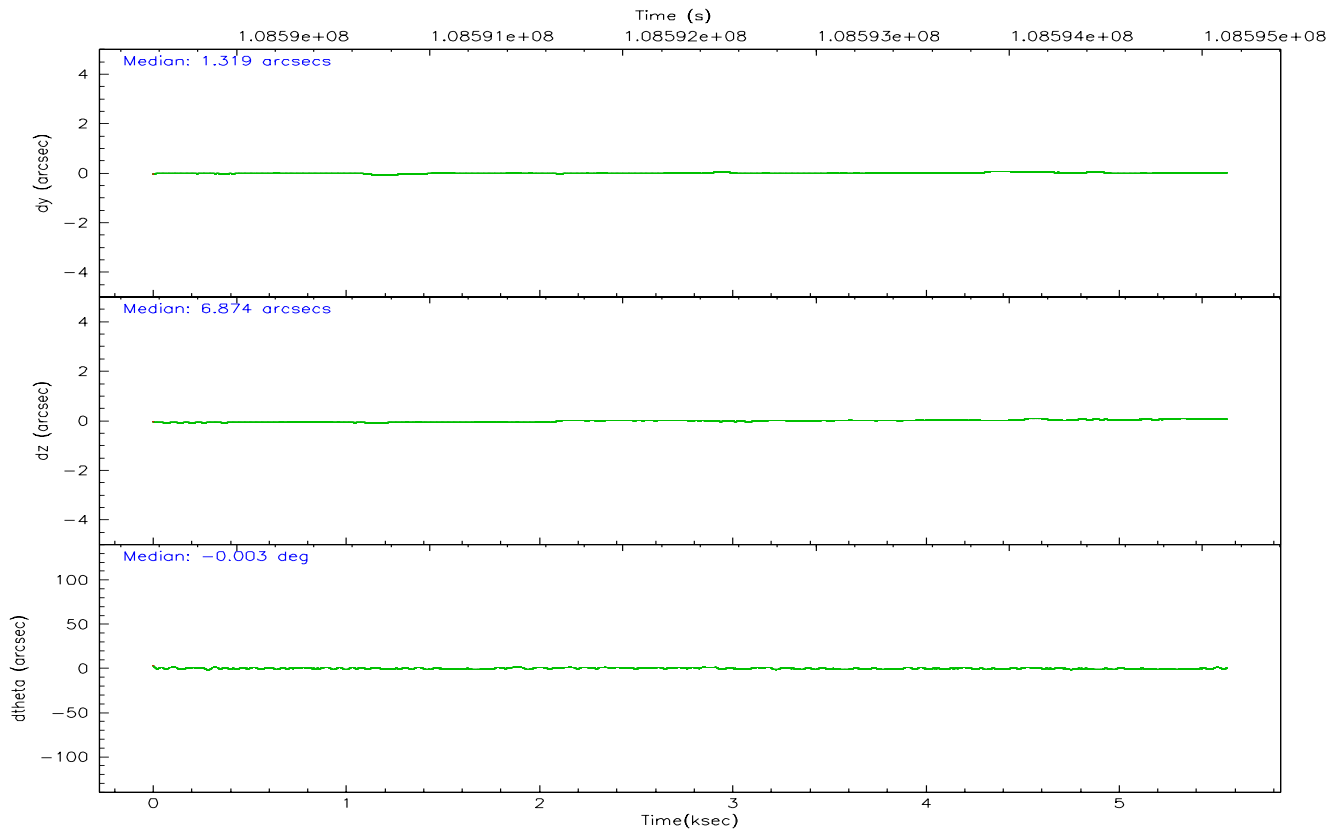
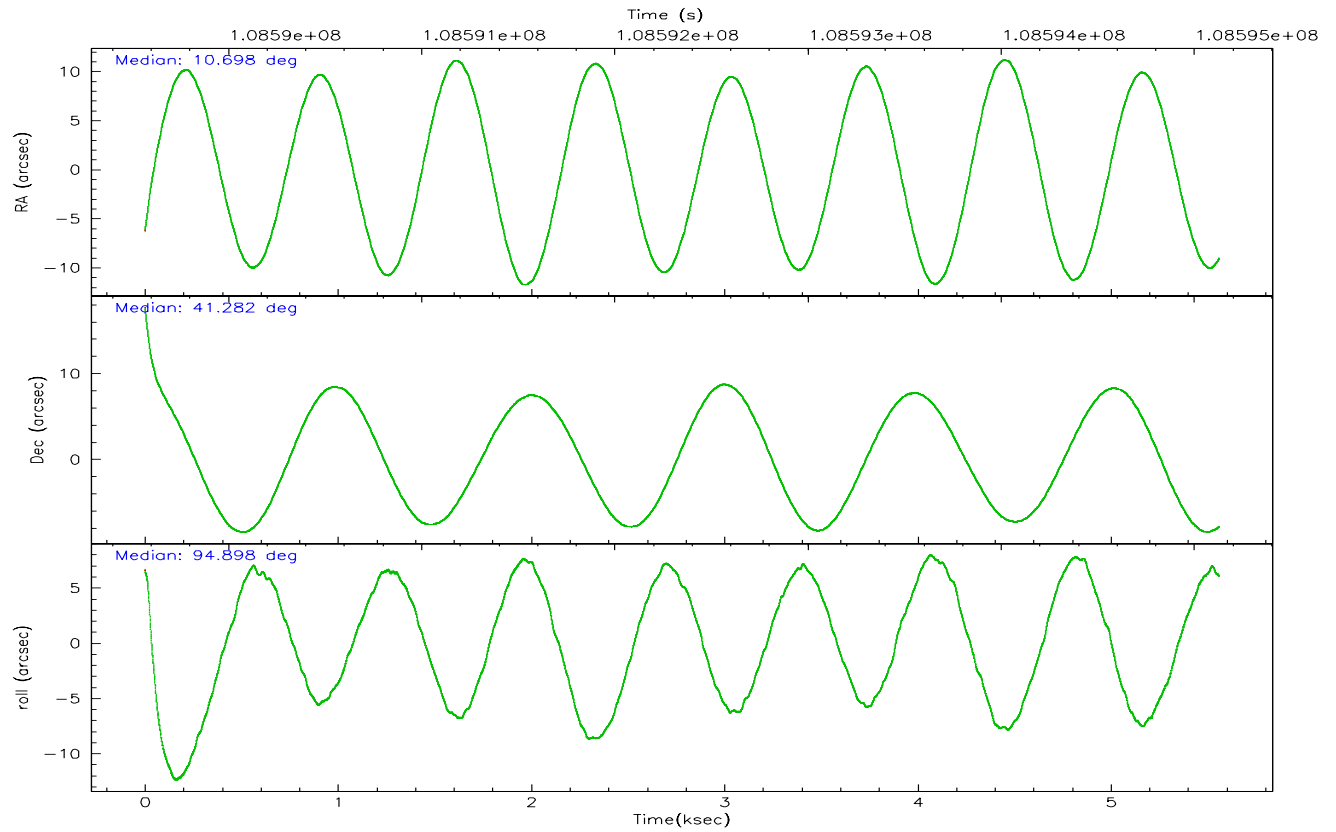
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 5 | ccd 6 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 3147 | 3834 | 3271 | 8800 | 3854 | 1605 |
| | 10% | 12% | 9% | 21% | 8% | 4% |
| grade 1 events | 36 | 42 | 35 | 256 | 160 | 17 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 1015 | 1082 | 963 | 1737 | 6076 | 682 |
| | 3% | 3% | 2% | 4% | 12% | 2% |
| grade 3 events | 482 | 495 | 454 | 579 | 442 | 374 |
| | 1% | 1% | 1% | 1% | 0% | 1% |
| grade 4 events | 384 | 515 | 436 | 598 | 447 | 394 |
| | 1% | 1% | 1% | 1% | 0% | 1% |
| grade 5 events | 1172 | 1199 | 1114 | 1399 | 2209 | 1381 |
| | 3% | 3% | 3% | 3% | 4% | 4% |
| grade 6 events | 664 | 788 | 641 | 916 | 11176 | 739 |
| | 2% | 2% | 1% | 2% | 23% | 2% |
| grade 7 events | 23342 | 23824 | 28663 | 27080 | 22905 | 28038 |
| | 77% | 74% | 80% | 65% | 48% | 84% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-012356 | ACIS-012356 | 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 |
| Pointing RA | 10.718019 | 10.6971336100463 | Subarray requested | NONE | NONE |
| Pointing Dec | 41.259980 | 41.28246270765541 | Alternating exposures requested | N | N |
| Pointing Roll | 94.680592 | 94.90307640895935 | Primary exposure time | 0.000000 | 3.2 |
| Window start time | 107740864.184000 | 107740864.184000 | | | |
| Window stop time | 108864064.184000 | 108864064.184000 | | | |
| SIM focus pos (mm) | -0.782348 | -0.7809083437167272 | | | |
| SIM defocus (mm) | 0 | 0.001439871863259334 | | | |
| SIM translation stage pos (mm) | -233.592463 | -233.5874344608287 | | | |
| SIM translation stage offset (mm) | 0 | -0.005018542100998502 | | | |
| Observation start time | 108590126.184000 | 108588969.16365 | | | |
| Observation start date | 2001-06-10T19:54:22 | 2001-06-10T19:36:09 | | | |
| Observation end time | 108595126.184000 | 108595329.8014 | | | |
| Observation end date | 2001-06-10T21:17:42 | 2001-06-10T21:22:09 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



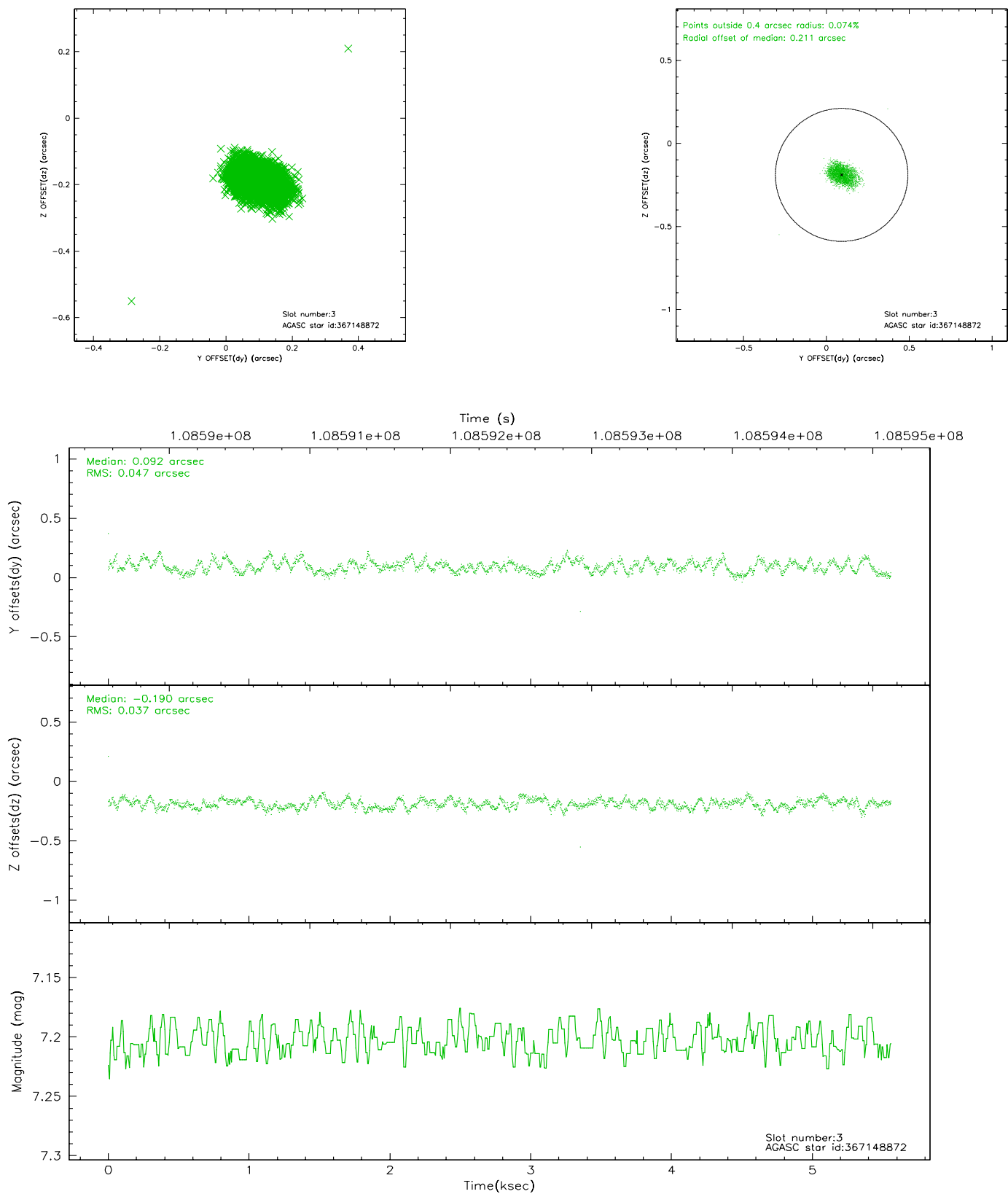


Slot Statistics

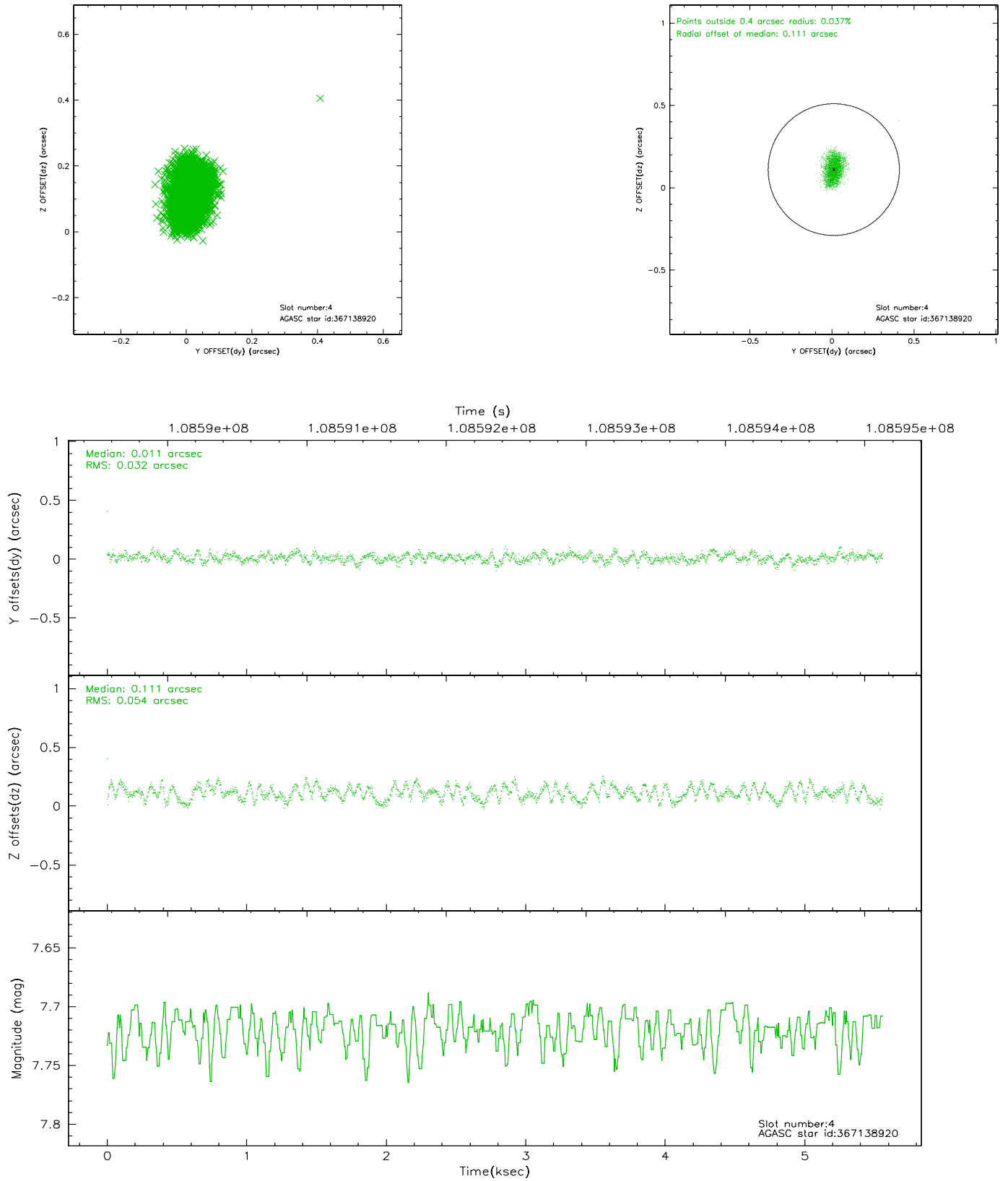
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-I-2 | 7.16 | 1357 | -0.030 | -0.051 | 0.009 | 0.015 | 0.000000 | 0.000000 | -755.67 | -836.68 |
| 1 | FID | ACIS-I-4 | 7.18 | 1356 | -0.084 | 0.039 | 0.006 | 0.010 | 0.000000 | 0.000000 | 2157.82 | 1069.08 |
| 2 | FID | ACIS-I-5 | 7.23 | 1356 | 0.012 | 0.080 | 0.009 | 0.014 | 0.000000 | 0.000000 | -1808.09 | 1068.15 |
| 3 | GUIDE | 367148872 | 7.20 | 2712 | 0.092 | -0.190 | 0.062 | 0.099 | 10.505940 | 40.688258 | -2003.02 | 745.91 |
| 4 | GUIDE | 367138920 | 7.72 | 2713 | 0.011 | 0.111 | 0.067 | 0.105 | 11.513485 | 40.808909 | -1785.71 | -2027.18 |
| 5 | GUIDE | 367674552 | 8.84 | 2713 | -0.083 | 0.055 | 0.056 | 0.093 | 11.016238 | 41.570845 | 1050.99 | -891.26 |
| 6 | GUIDE | 367146616 | 8.86 | 2713 | -0.004 | 0.168 | 0.081 | 0.133 | 11.418645 | 41.190163 | -396.79 | -1870.72 |
| 7 | GUIDE | 367658664 | 9.59 | 2711 | -0.016 | -0.138 | 0.093 | 0.146 | 10.374070 | 41.369746 | 471.70 | 894.27 |

2.4 Star Slots

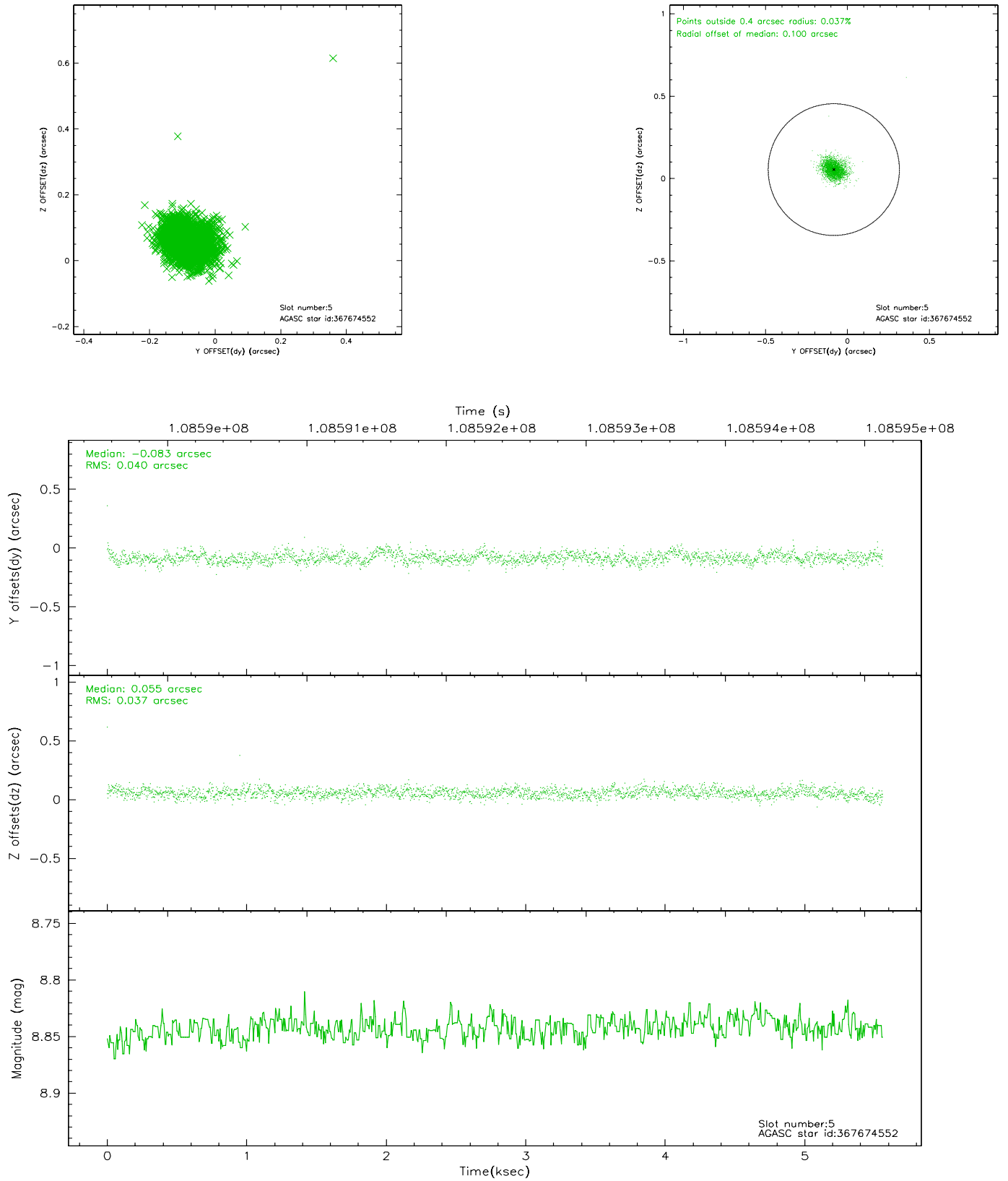
2.4.1 Slot 3



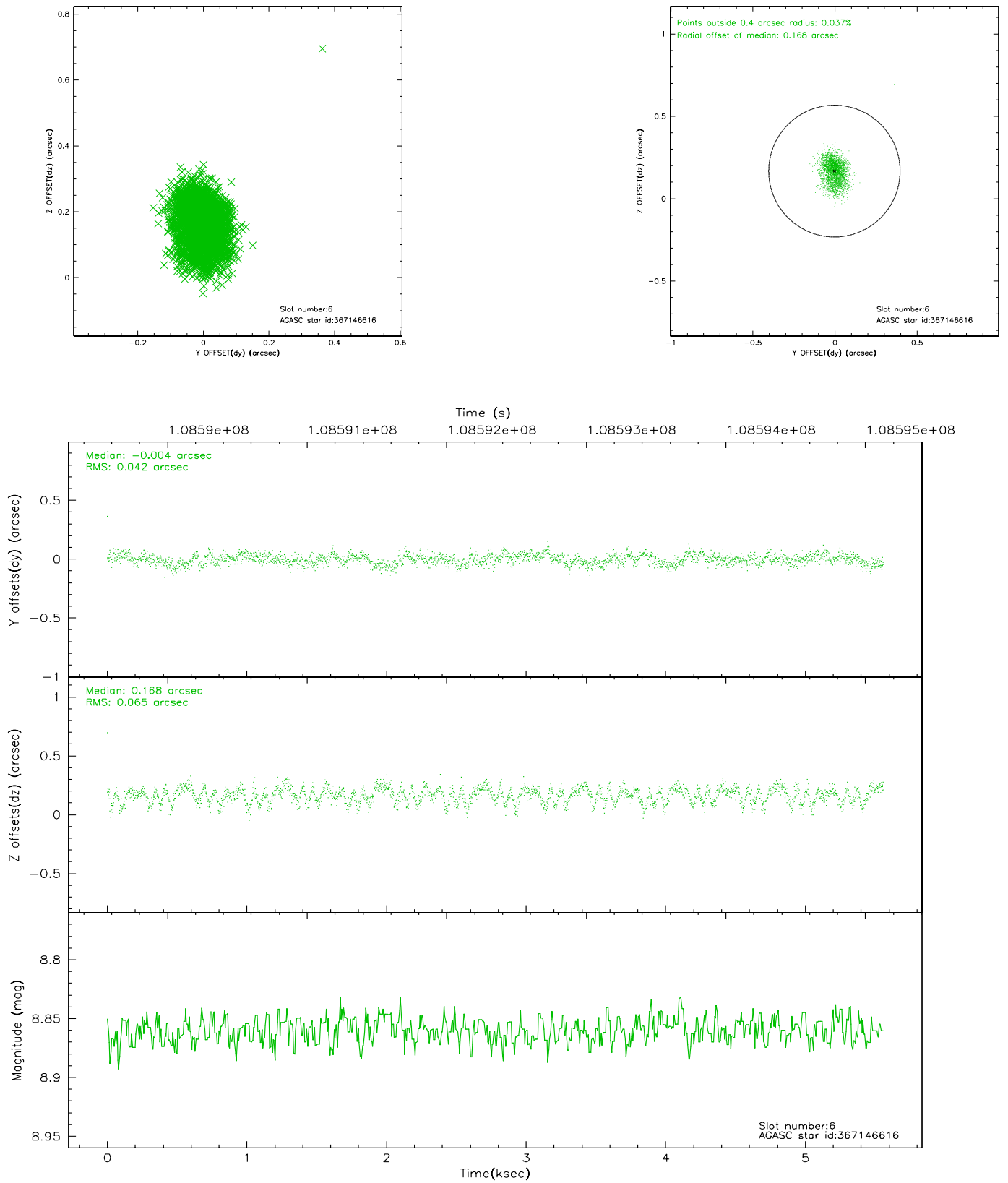
2.4.2 Slot 4



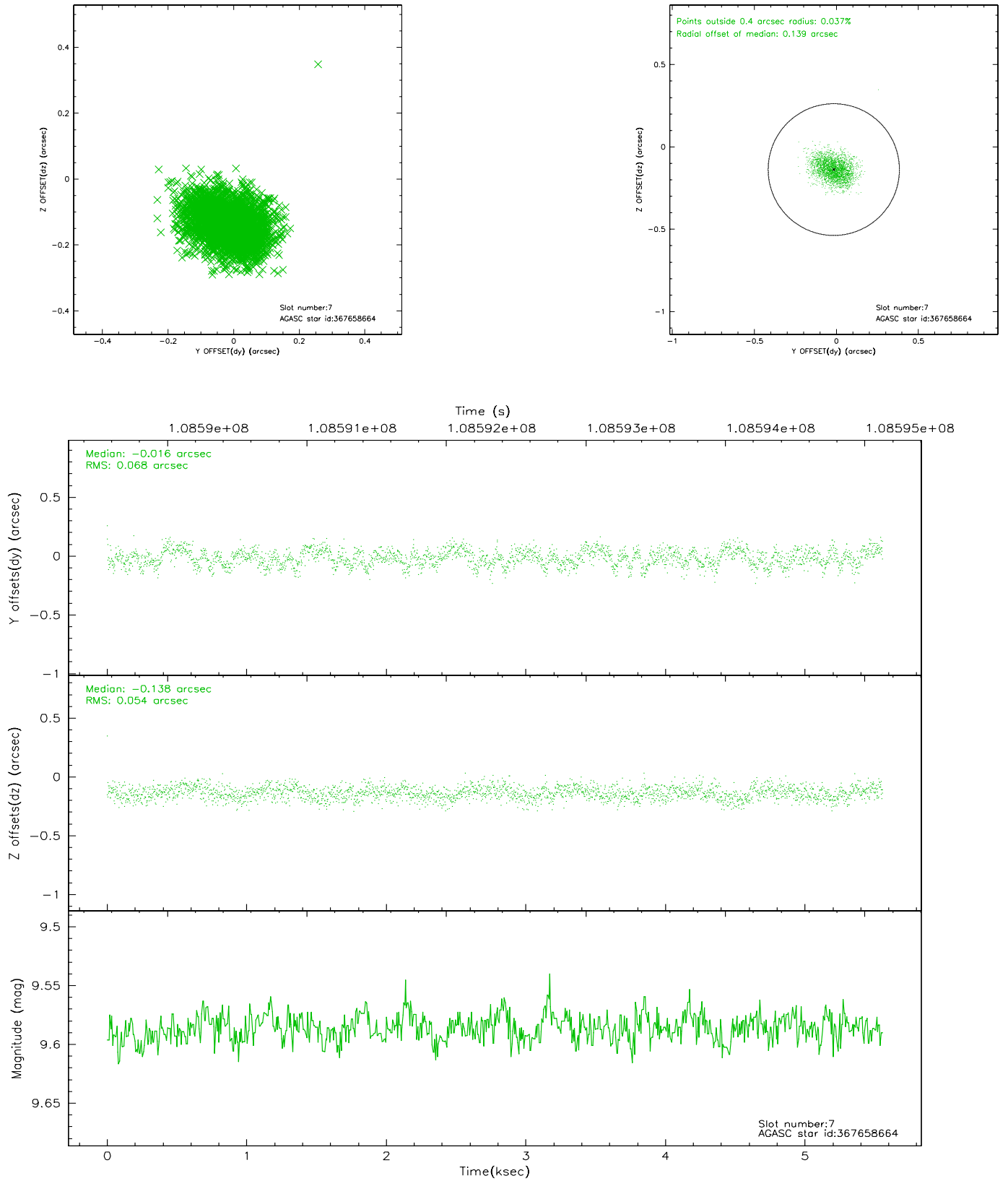
2.4.3 Slot 5



2.4.4 Slot 6

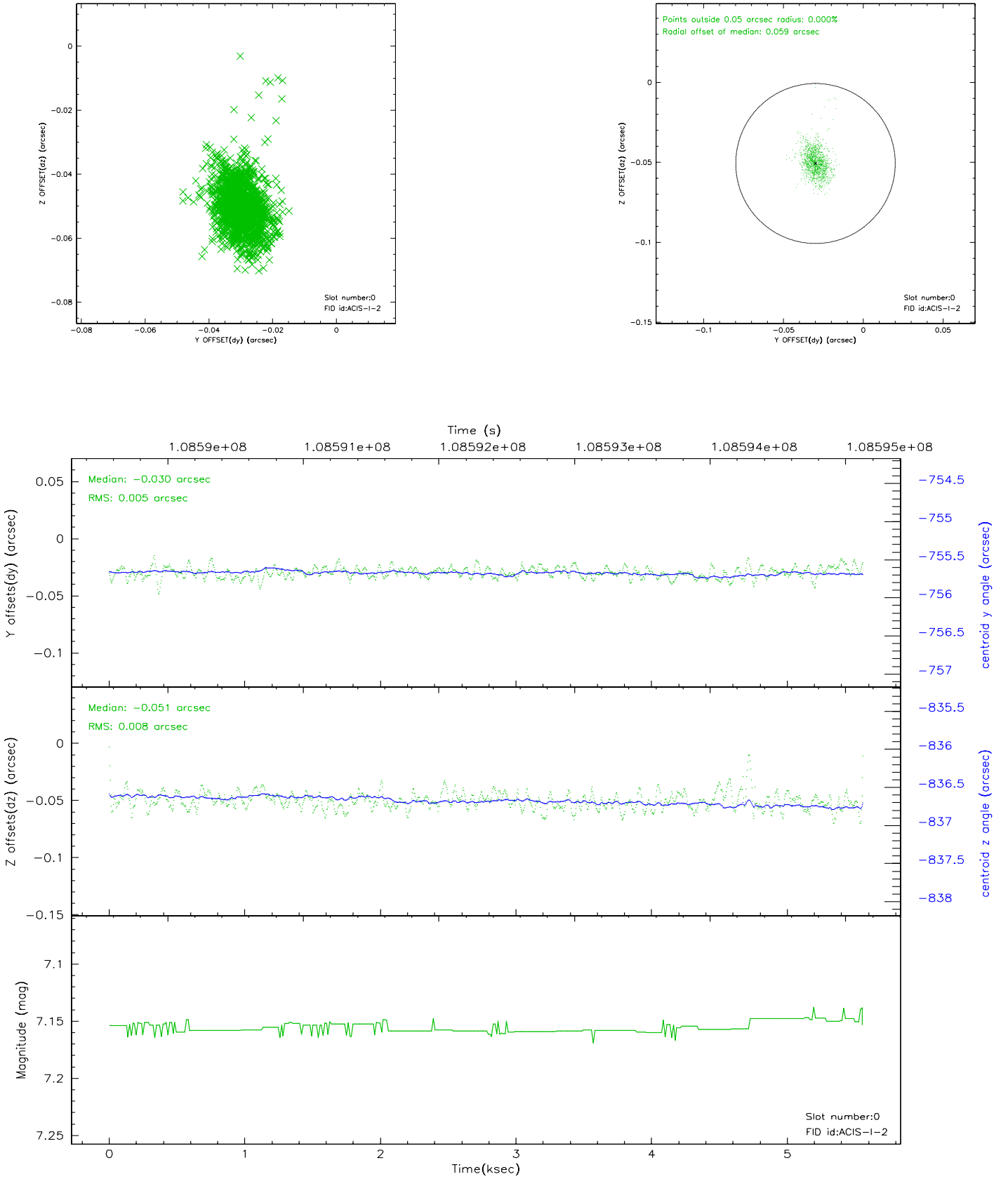


2.4.5 Slot 7

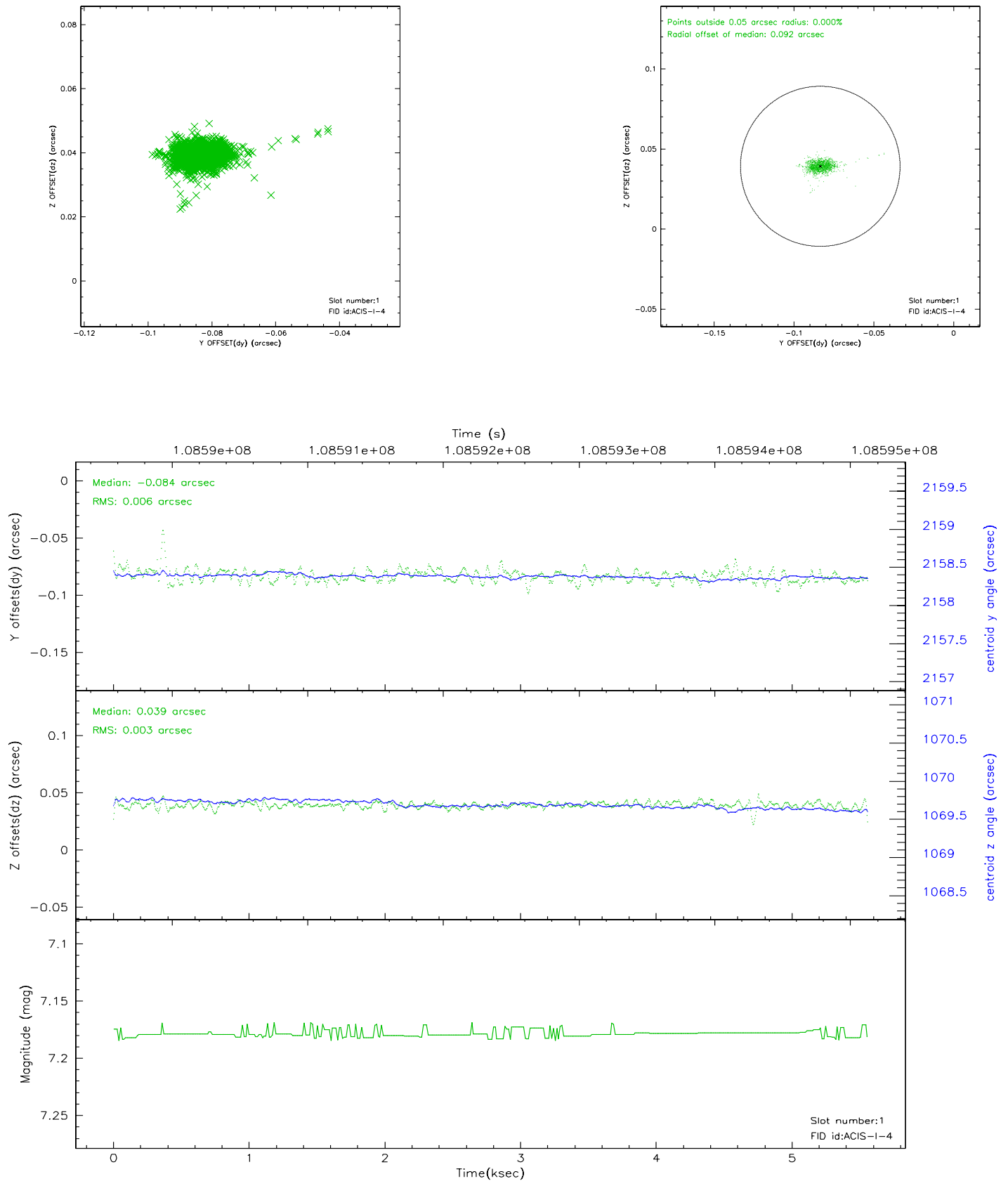


2.5 FID Slots

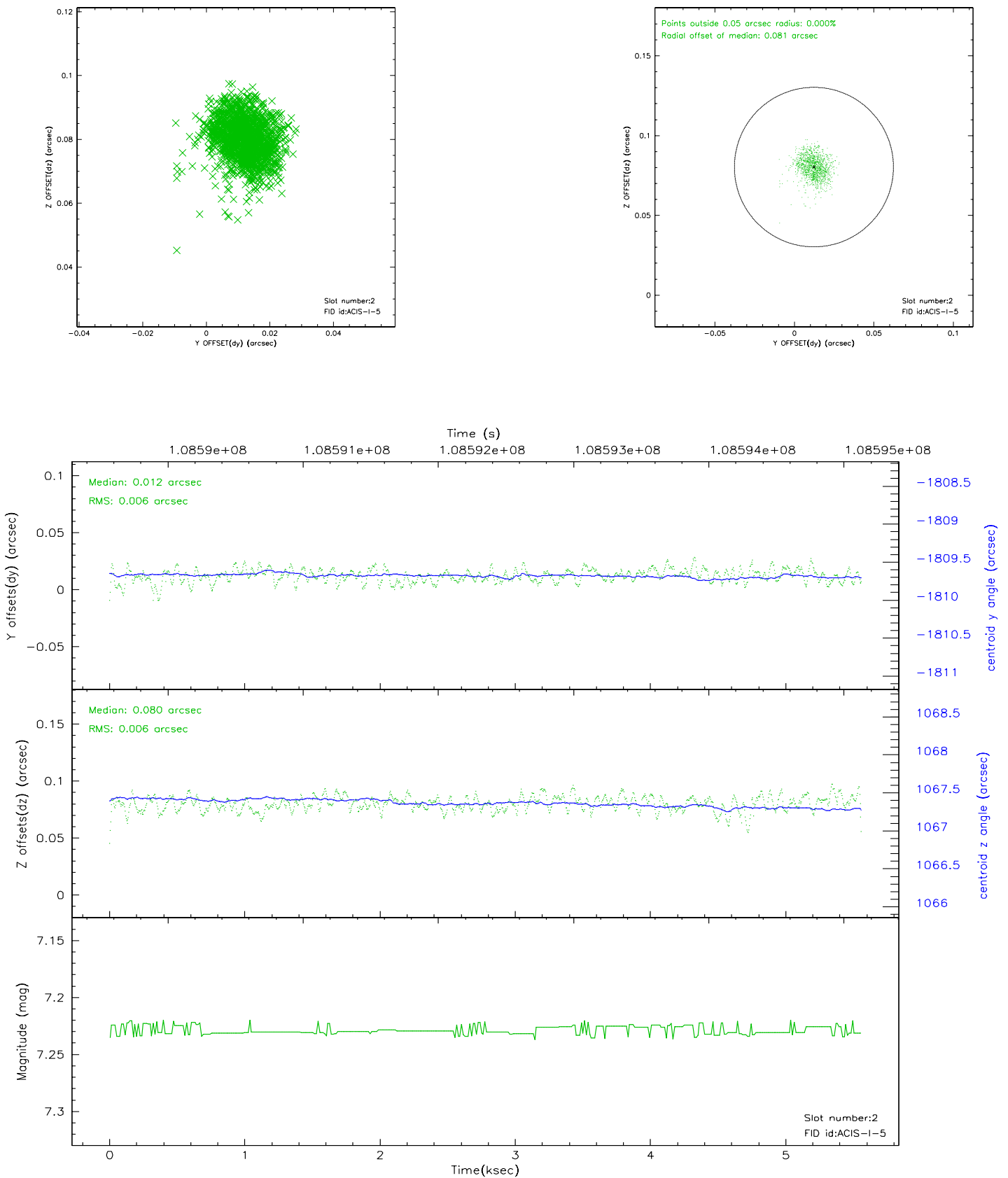
2.5.1 Slot 0



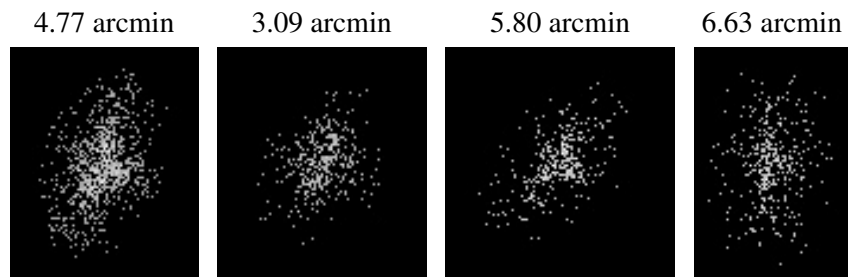
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2006.11.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5 |

A.2 Comments

Window constraint met.