

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 6869 - L2 Version 3
Chandra X-Ray Center

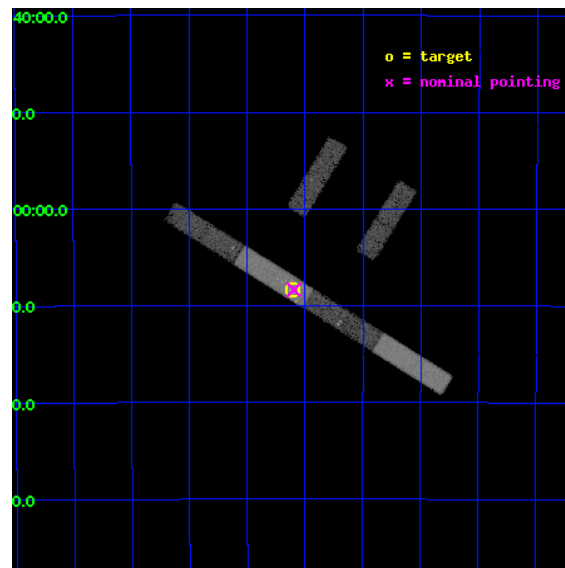
L2 Processing Date : Apr 1 2012

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1 Front

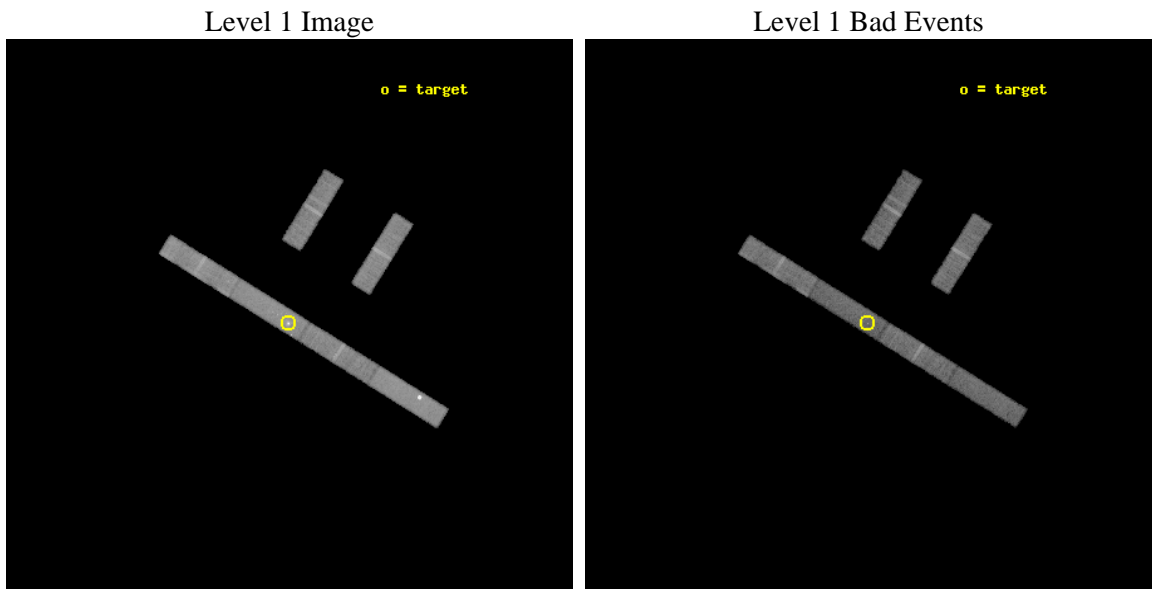
| | | |
|----------|---|---|
| seq_num | 701287 | Sequence number |
| obs_id | 6869 | Observation id |
| title | Short-time monitoring of the extreme variations in NGC~1365 | Propos |
| observer | Dr Guido Risaliti | Principal investigator |
| object | NGC 1365 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 53.401667 | Observer's specified target RA [deg] |
| dec_targ | -36.140278 | Observer's specified target Dec [deg] |
| ra_nom | 53.399270128413 | Nominal RA [deg] |
| dec_nom | -36.139523306259 | Nominal Dec [deg] |
| roll_nom | 211.81812756632 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 16124.899912596 | Sum of GTIs [s] |
| livetime | 15544.932608721 | Livetime [s] |
| ontime2 | 16124.899912596 | Sum of GTIs [s] |
| ontime3 | 16124.899912596 | Sum of GTIs [s] |
| ontime5 | 16124.899912596 | Sum of GTIs [s] |
| ontime6 | 16124.899912596 | Sum of GTIs [s] |
| ontime7 | 16124.899912596 | Sum of GTIs [s] |
| ontime8 | 16124.899912596 | Sum of GTIs [s] |
| l2events | 70238 | Number of level 2 events |



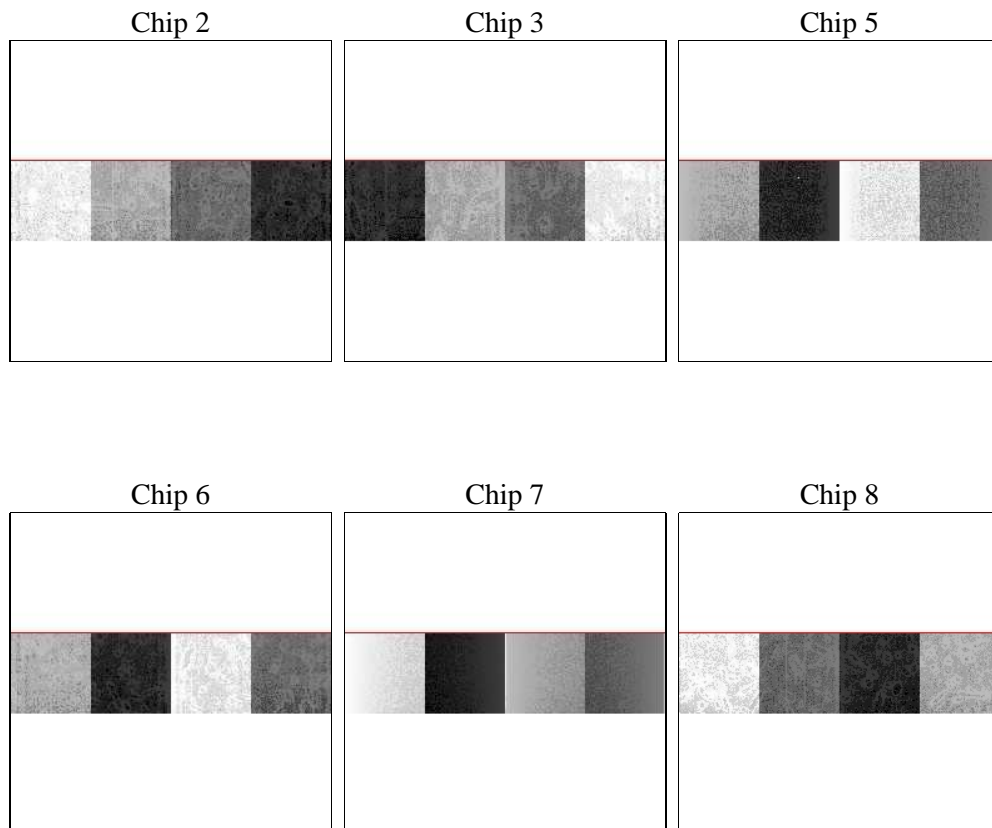
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 16000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3 | Processing system revision | ontime | 16124.899912596 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime2 | 16124.899912596 | Sum of GTIs [s] |
| date | 2012-04-01T17:49:35 | Date and time of file creation | ontime3 | 16124.899912596 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 16124.899912596 | Sum of GTIs [s] |
| | | | ontime6 | 16124.899912596 | Sum of GTIs [s] |
| | | | ontime7 | 16124.899912596 | Sum of GTIs [s] |
| | | | ontime8 | 16124.899912596 | Sum of GTIs [s] |
| | | | l1events | 339784 | Number of level 1 events |

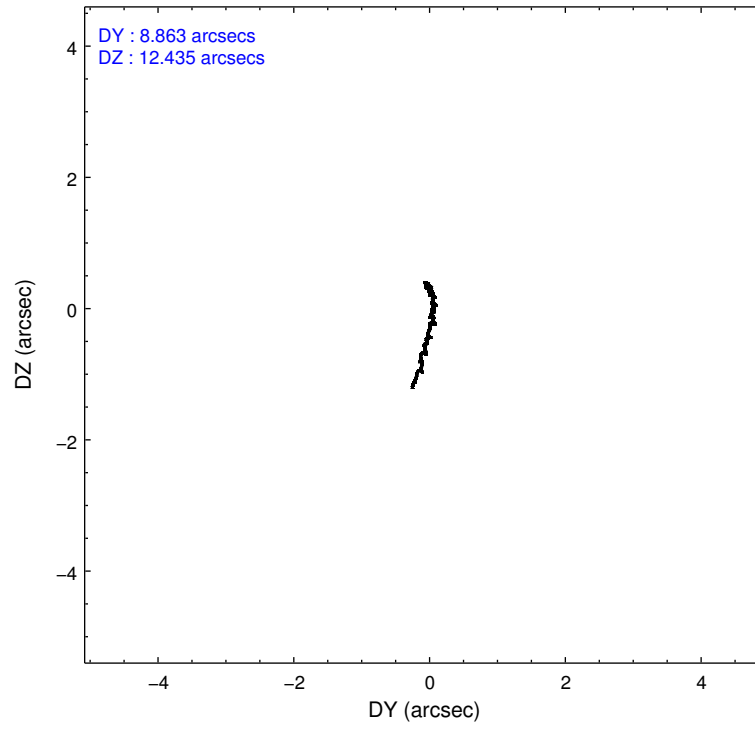
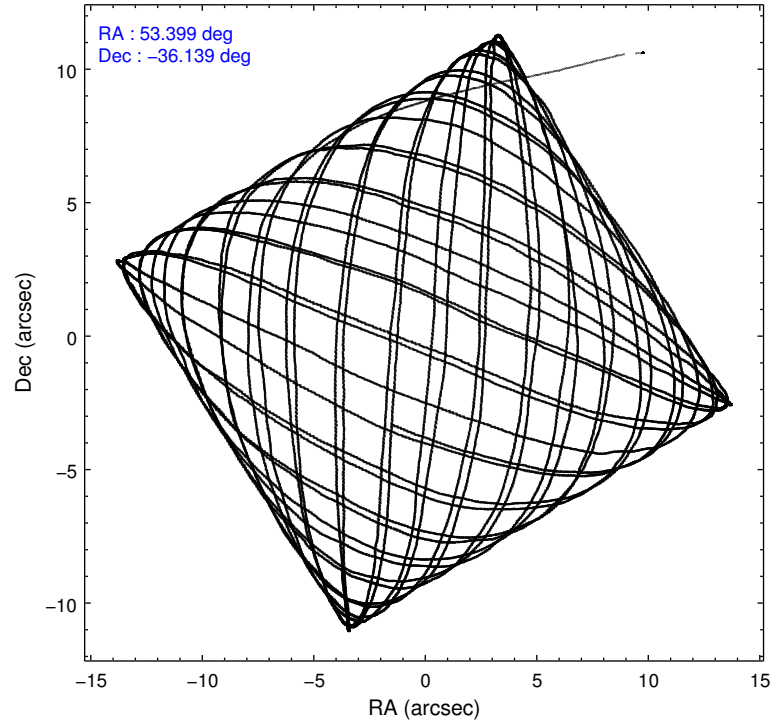
2.1.4 Events

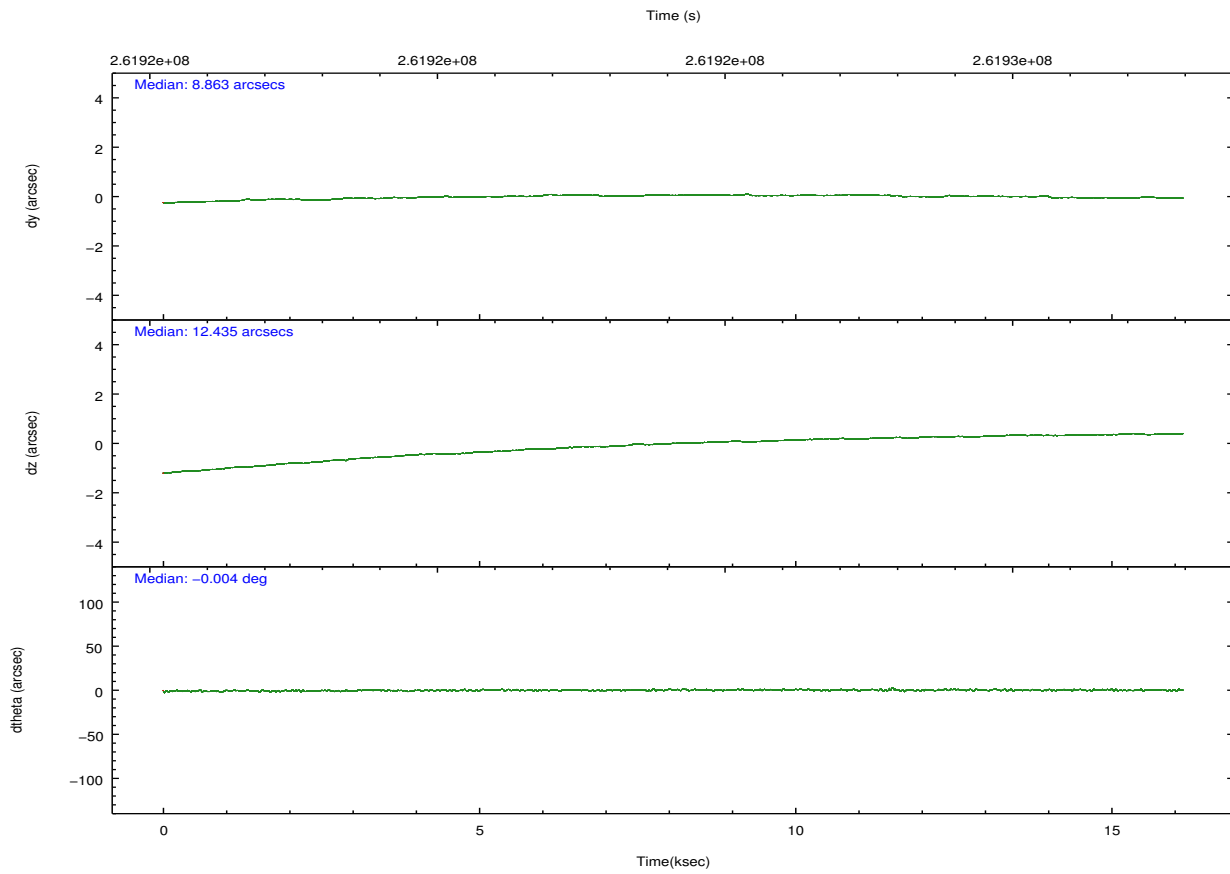
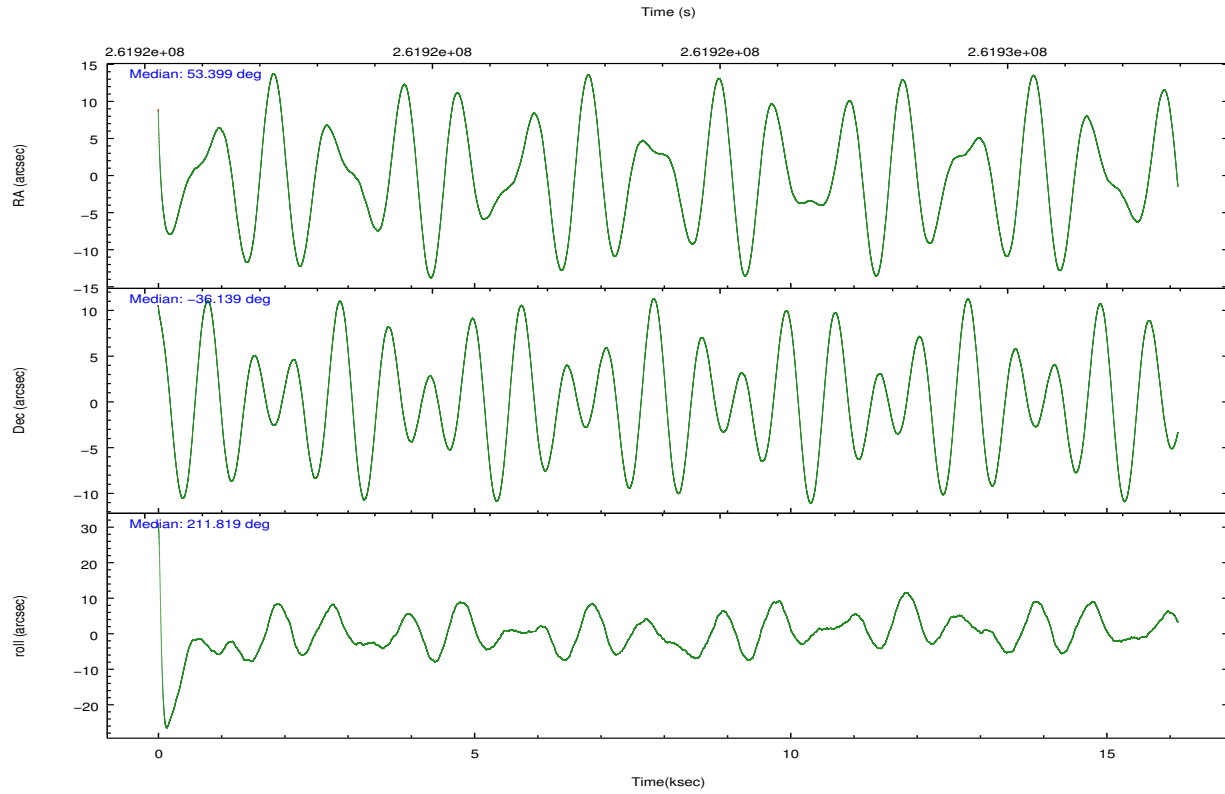
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 49897 | 43403 | 74398 | 46494 | 63765 | 61827 | grade 0 events | 2287 | 2106 | 15592 | 2243 | 4554 | 3542 |
| rejected events | 44778 | 38665 | 36779 | 41279 | 34710 | 50338 | | 4% | 4% | 20% | 4% | 7% | 5% |
| rejected % | 89% | 89% | 49% | 88% | 54% | 81% | grade 1 events | 13 | 23 | 110 | 16 | 90 | 31 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 1073 | 905 | 8345 | 1013 | 6727 | 2721 |
| | | | | | | | | 2% | 2% | 11% | 2% | 10% | 4% |
| | | | | | | | grade 3 events | 714 | 692 | 1690 | 724 | 3229 | 1362 |
| | | | | | | | | 1% | 1% | 2% | 1% | 5% | 2% |
| | | | | | | | grade 4 events | 701 | 675 | 1607 | 742 | 3192 | 1319 |
| | | | | | | | | 1% | 1% | 2% | 1% | 5% | 2% |
| | | | | | | | grade 5 events | 1695 | 1827 | 5131 | 1912 | 5569 | 2473 |
| | | | | | | | | 3% | 4% | 6% | 4% | 8% | 3% |
| | | | | | | | grade 6 events | 854 | 850 | 14204 | 1004 | 13576 | 3480 |
| | | | | | | | | 1% | 1% | 19% | 2% | 21% | 5% |
| | | | | | | | grade 7 events | 42560 | 36325 | 27719 | 38840 | 26828 | 46899 |
| | | | | | | | | 85% | 83% | 37% | 83% | 42% | 75% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | 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 | 53.414787 | 53.39927012841298 | Subarray requested | CUSTOM | 1/4 |
| [deg] Pointing Dec | -36.115340 | -36.13952330625918 | Subarray start row | 385 | 385 |
| [deg] Pointing Roll | 211.670613 | 211.8181275663216 | Subarray row count | 256 | 256 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | [s] Primary exposure time | 0.000000 | 1.1 |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 261916156.184000 | 261914427.44271 | | | |
| Observation start date | 2006-04-20T10:28:11 | 2006-04-20T10:00:27 | | | |
| [s] Observation end time (MET) | 261932156.184000 | 261933037.85608 | | | |
| Observation end date | 2006-04-20T14:54:51 | 2006-04-20T15:10:37 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



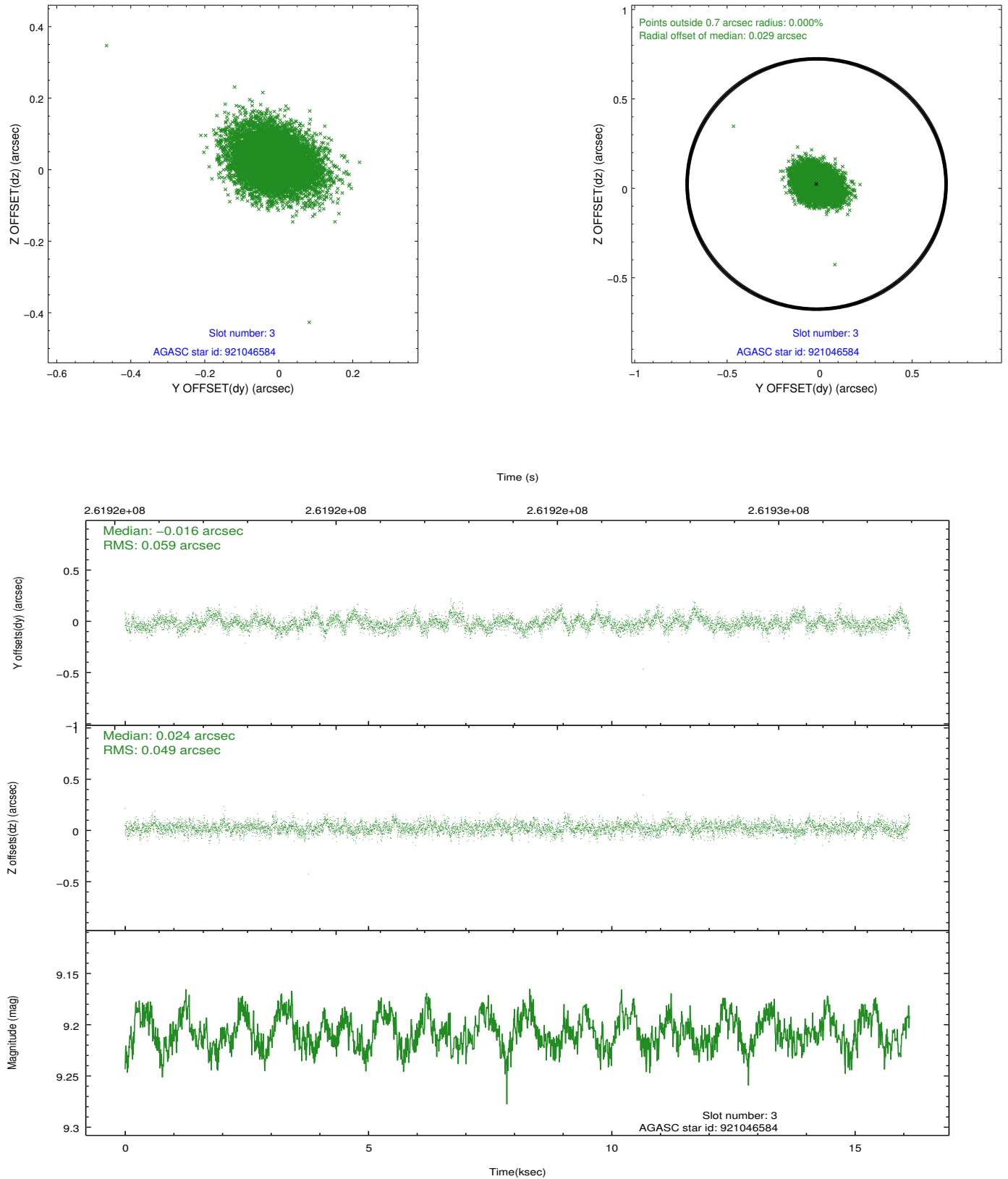


Slot Statistics

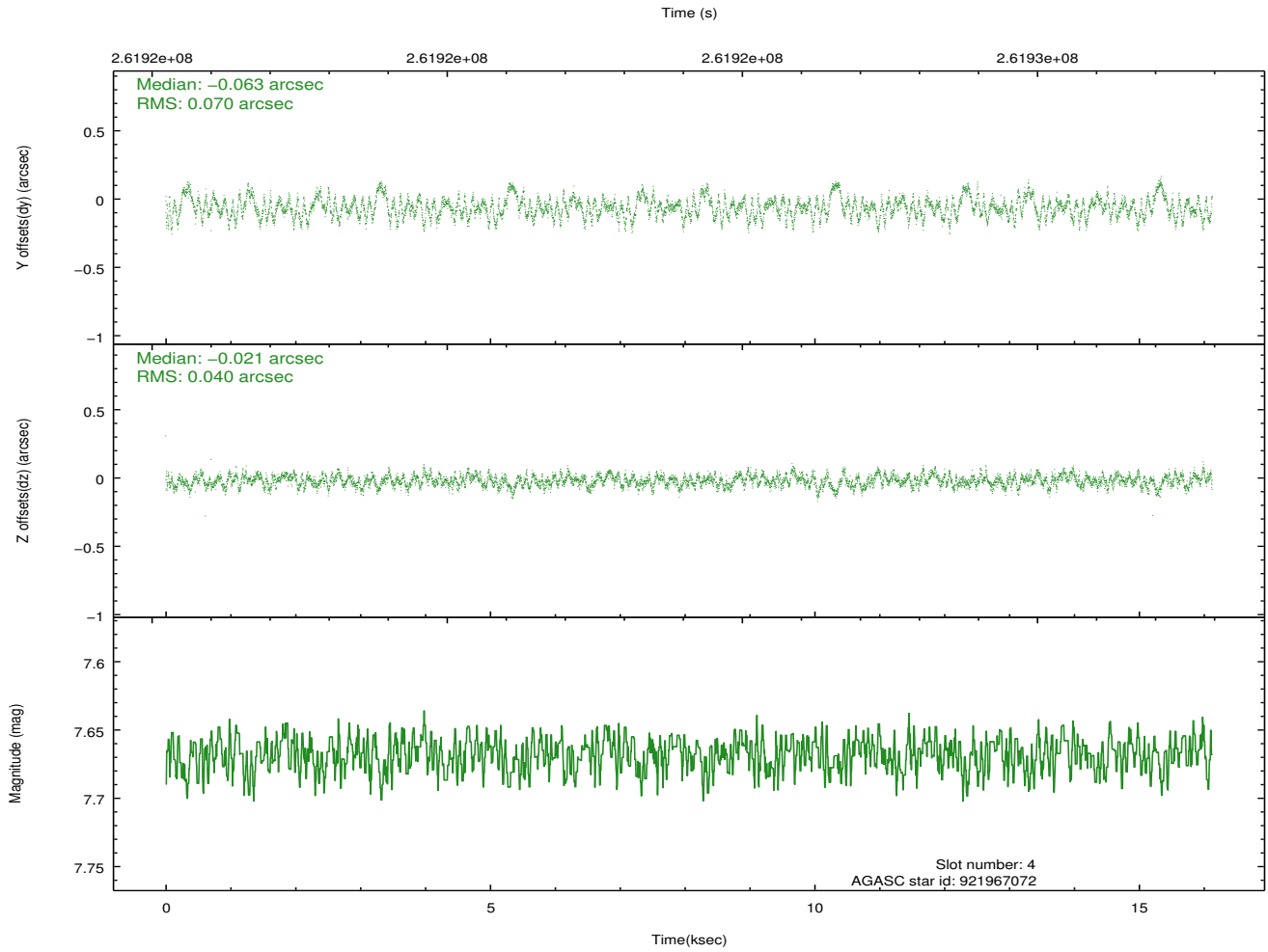
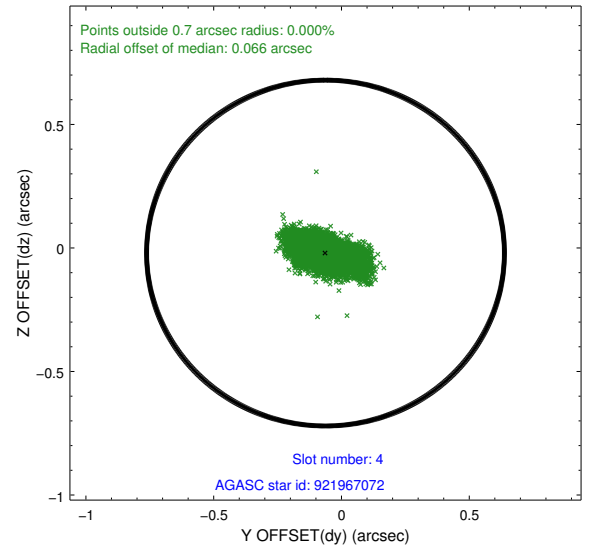
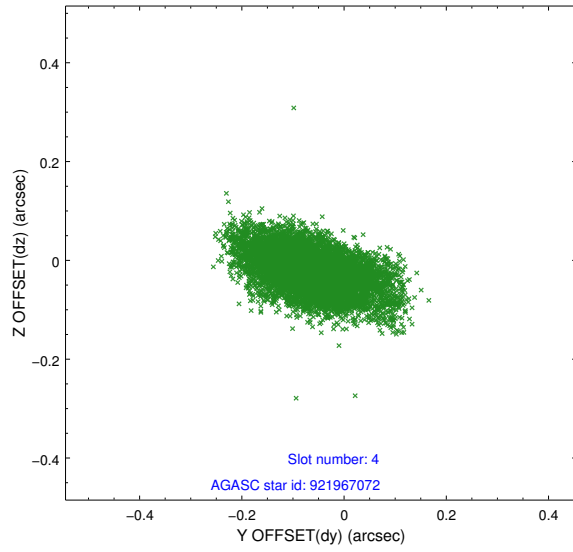
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|---------|-----------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.19 | 3934 | -0.020 | -0.048 | 0.026 | 0.041 | 0.000000 | 0.000000 | 934.34 | -1729.24 |
| 1 | FID | ACIS-S-4 | 7.20 | 3934 | 0.046 | 0.021 | 0.012 | 0.019 | 0.000000 | 0.000000 | 2151.99 | 174.70 |
| 2 | FID | ACIS-S-6 | 7.35 | 3933 | -0.049 | 0.038 | 0.016 | 0.025 | 0.000000 | 0.000000 | 400.63 | 812.40 |
| 3 | GUIDE | 921046584 | 9.21 | 7860 | -0.016 | 0.024 | 0.080 | 0.134 | 53.976815 | -36.314393 | -1008.89 | 1470.28 |
| 4 | GUIDE | 921967072 | 7.67 | 7868 | -0.063 | -0.021 | 0.082 | 0.149 | 54.269247 | -36.292226 | -1770.28 | 1853.45 |
| 5 | GUIDE | 921970016 | 9.39 | 7863 | 0.030 | 0.064 | 0.102 | 0.167 | 54.228536 | -36.081558 | -2075.02 | 1149.12 |
| 6 | OMITTED | | 0.00 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000 | 0.000000 | 0.00 | 0.00 |
| 7 | GUIDE | 921968840 | 9.84 | 7859 | 0.047 | -0.067 | 0.127 | 0.217 | 54.248141 | -36.359344 | -1589.88 | 2025.44 |

2.4 Star Slots

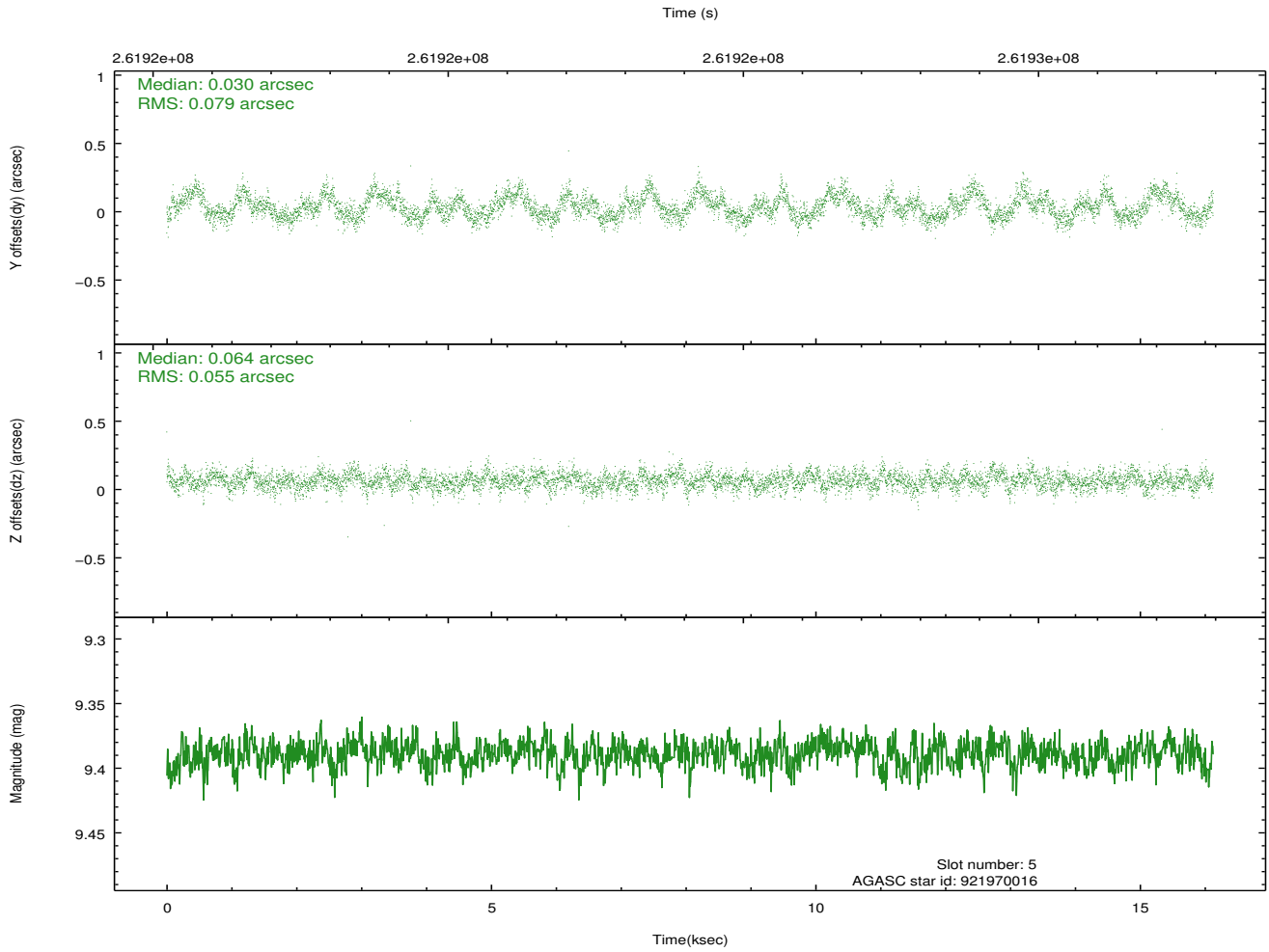
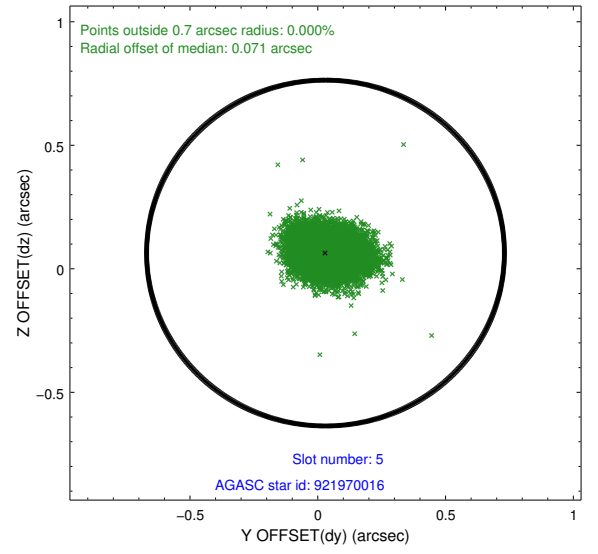
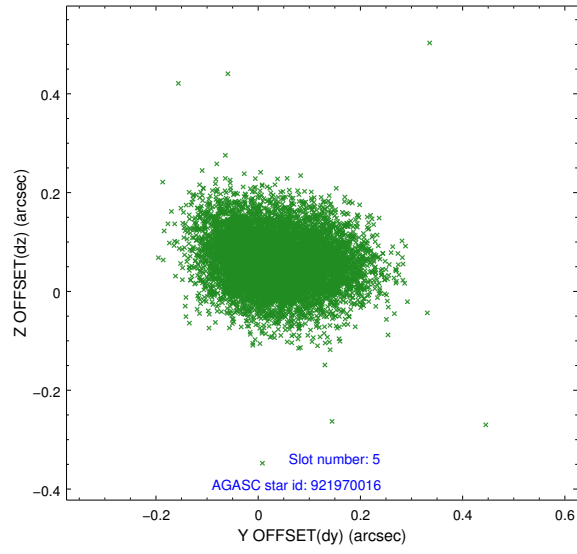
2.4.1 Slot 3



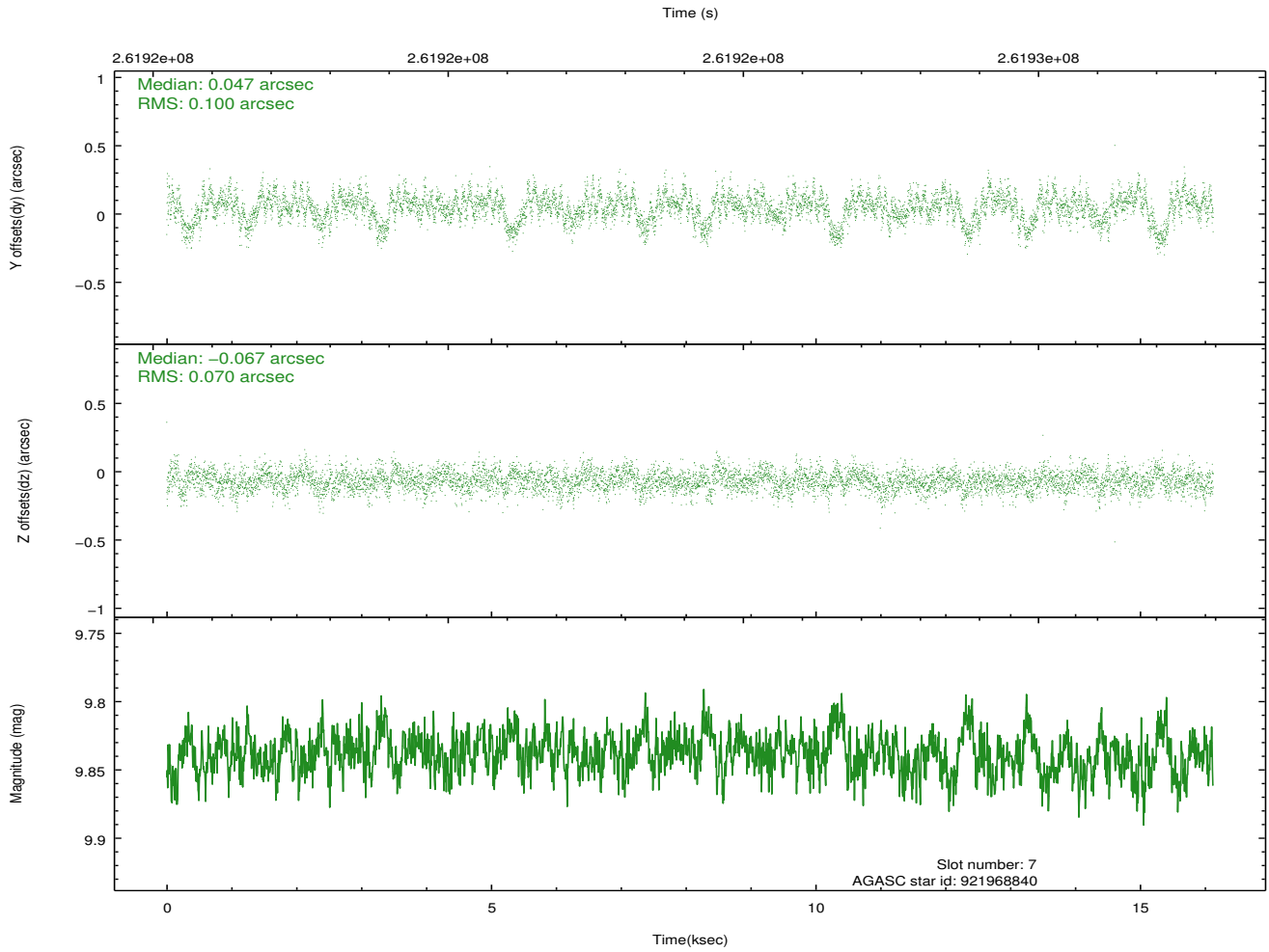
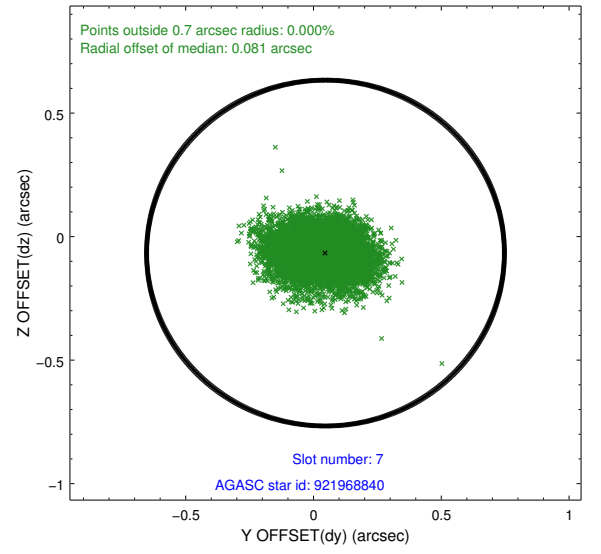
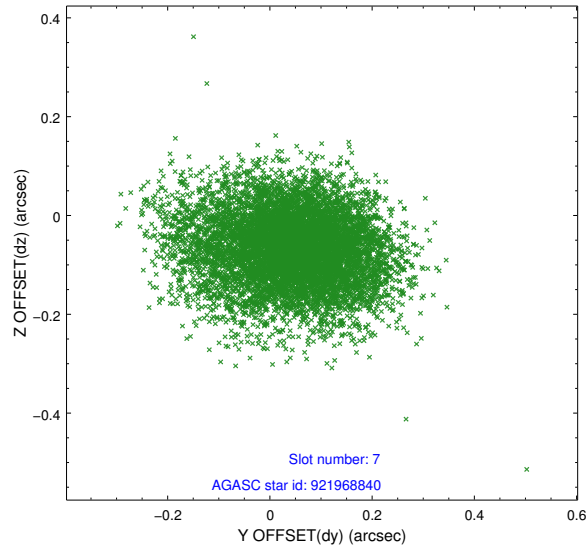
2.4.2 Slot 4



2.4.3 Slot 5

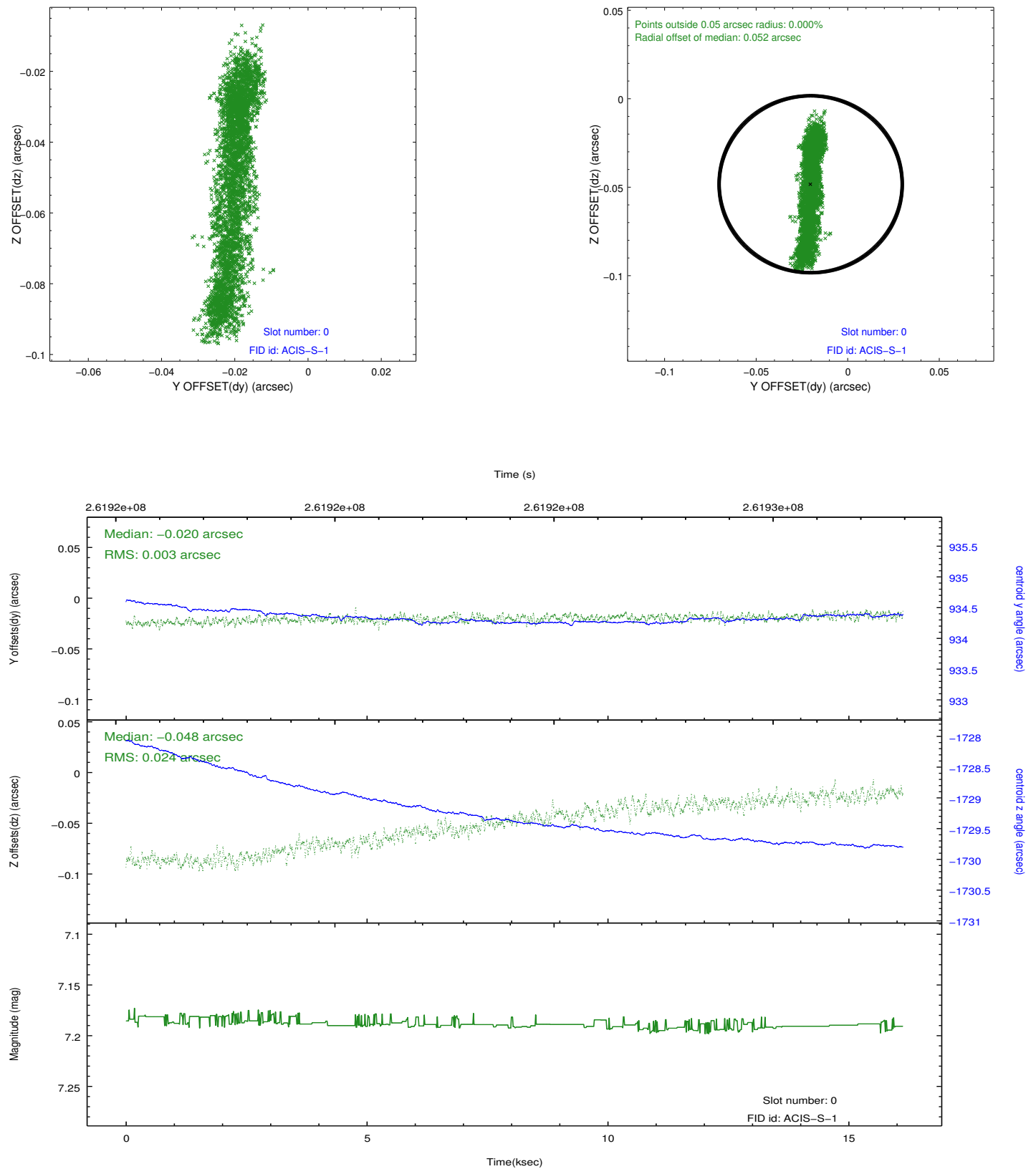


2.4.4 Slot 7

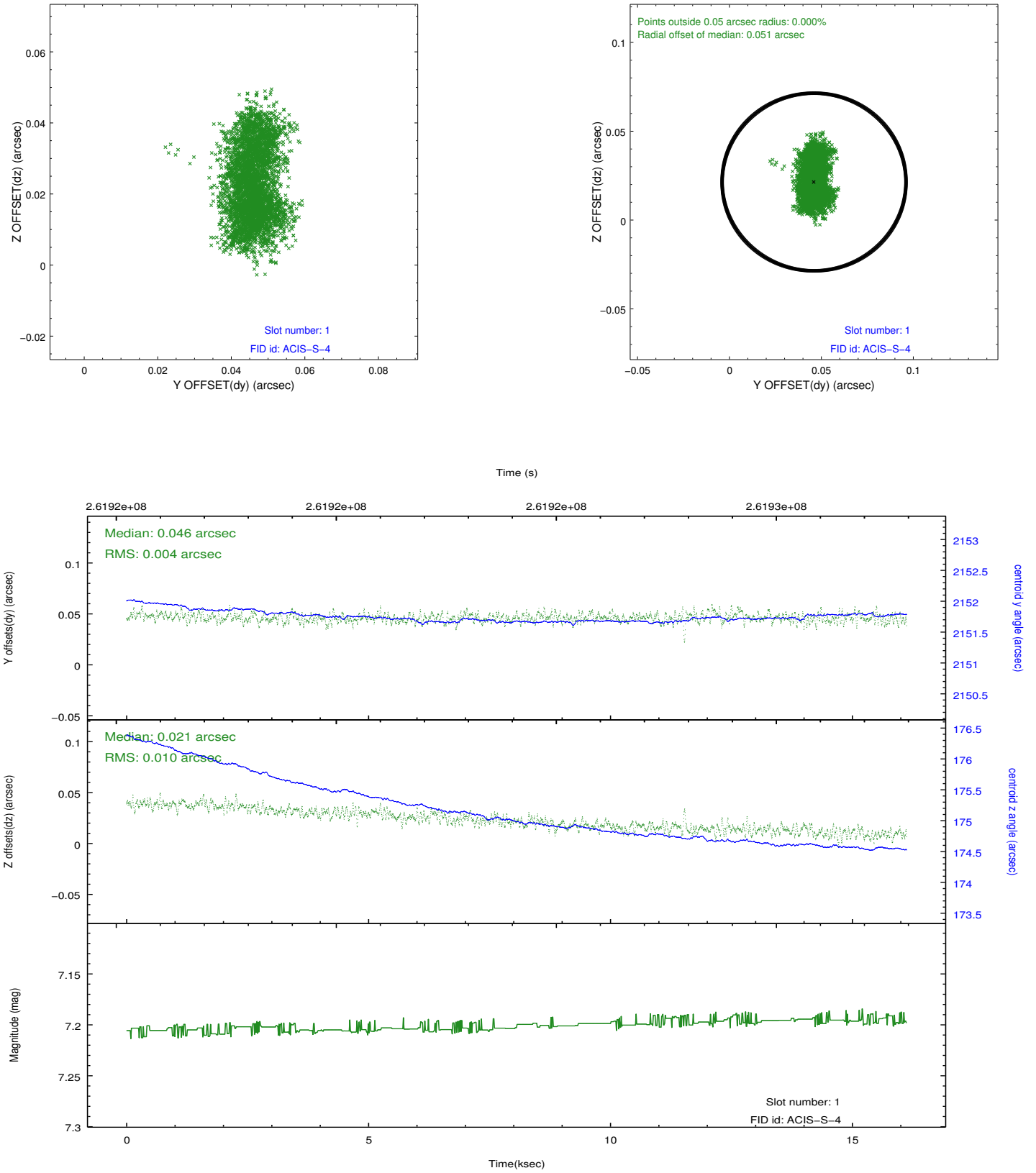


2.5 FID Slots

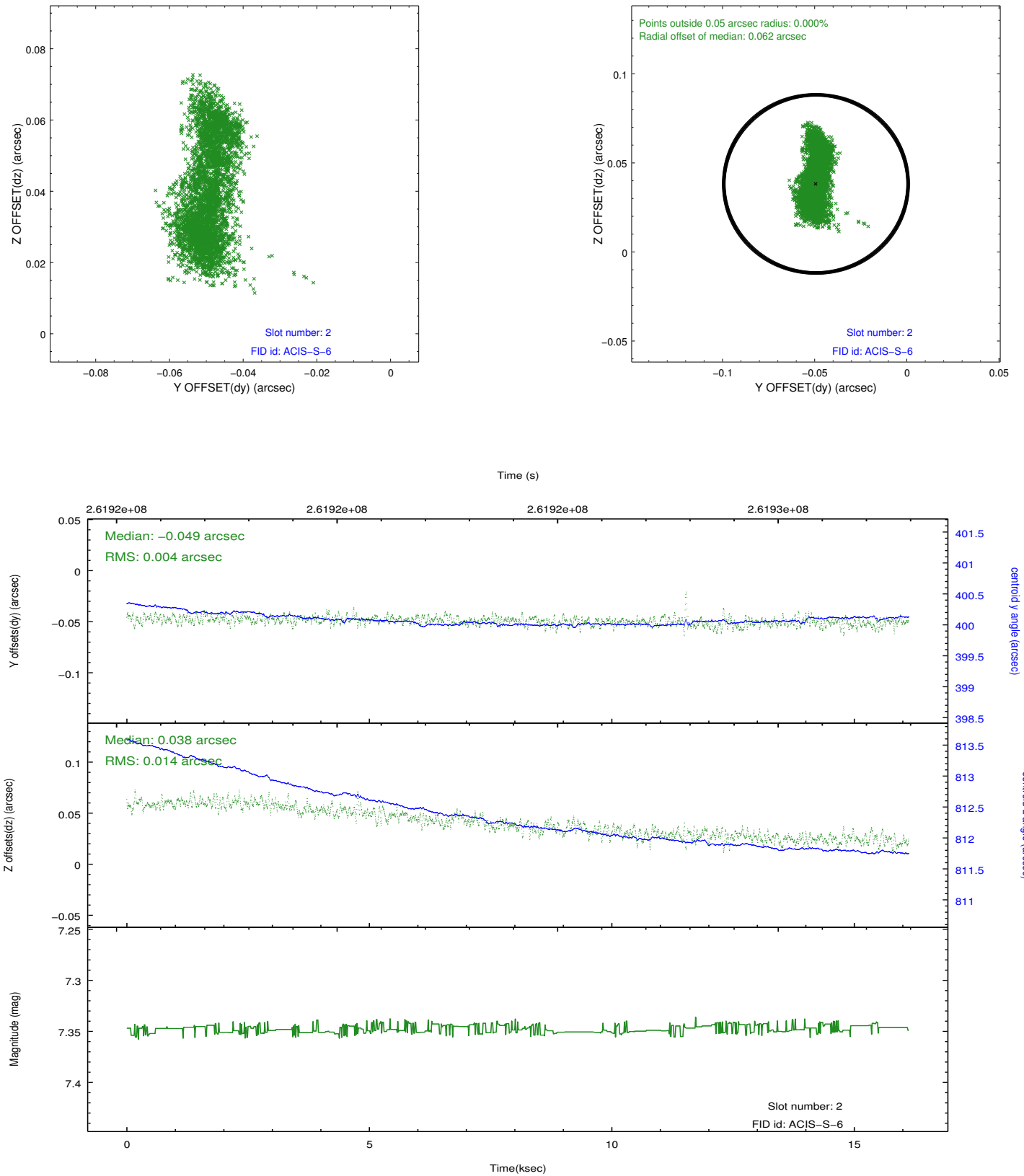
2.5.1 Slot 0



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) | 2012.04.03 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 16.1248999 |

A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.