

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4181 - L2 Version 3
Chandra X-Ray Center

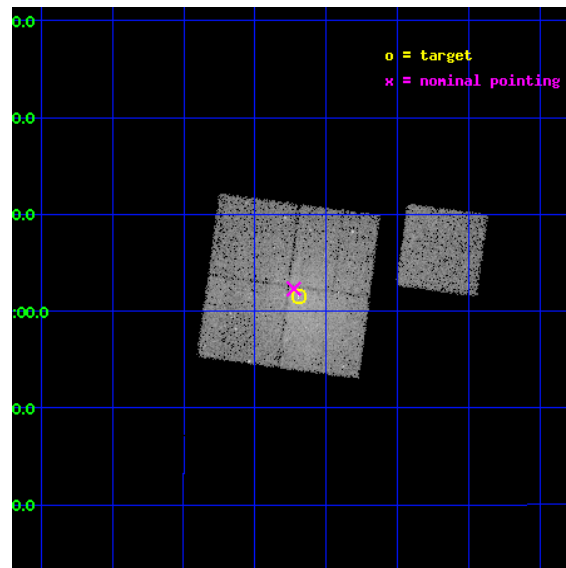
L2 Processing Date : Nov 4 2012

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1 Front

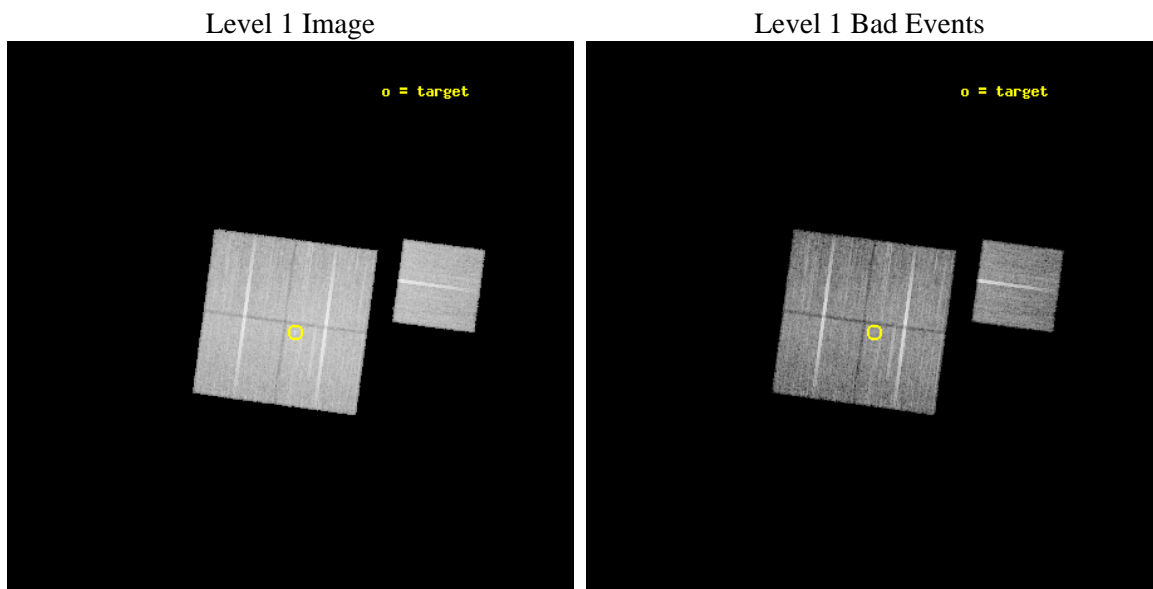
| | | |
|----------|--|---|
| seq_num | 800337 | Sequence number |
| obs_id | 4181 | Observation id |
| title | THE HIFLUGCS CLUSTER SURVEY: A CORNERSTONE FOR COSMOLOGY | Proposal |
| observer | Dr. CRAIG SARAZIN | Principal investigator |
| object | A0400 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 44.42323 | Observer's specified target RA [deg] |
| dec_targ | 6.02467 | Observer's specified target Dec [deg] |
| ra_nom | 44.431660371395 | Nominal RA [deg] |
| dec_nom | 6.038510238196 | Nominal Dec [deg] |
| roll_nom | 97.682049955205 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 21777.499958098 | Sum of GTIs [s] |
| livetime | 21492.960888783 | Livetime [s] |
| ontime0 | 21771.21799764 | Sum of GTIs [s] |
| ontime1 | 21774.358977884 | Sum of GTIs [s] |
| ontime2 | 21774.358957946 | Sum of GTIs [s] |
| ontime3 | 21777.499958098 | Sum of GTIs [s] |
| ontime6 | 21777.499958098 | Sum of GTIs [s] |
| l2events | 80404 | Number of level 2 events |



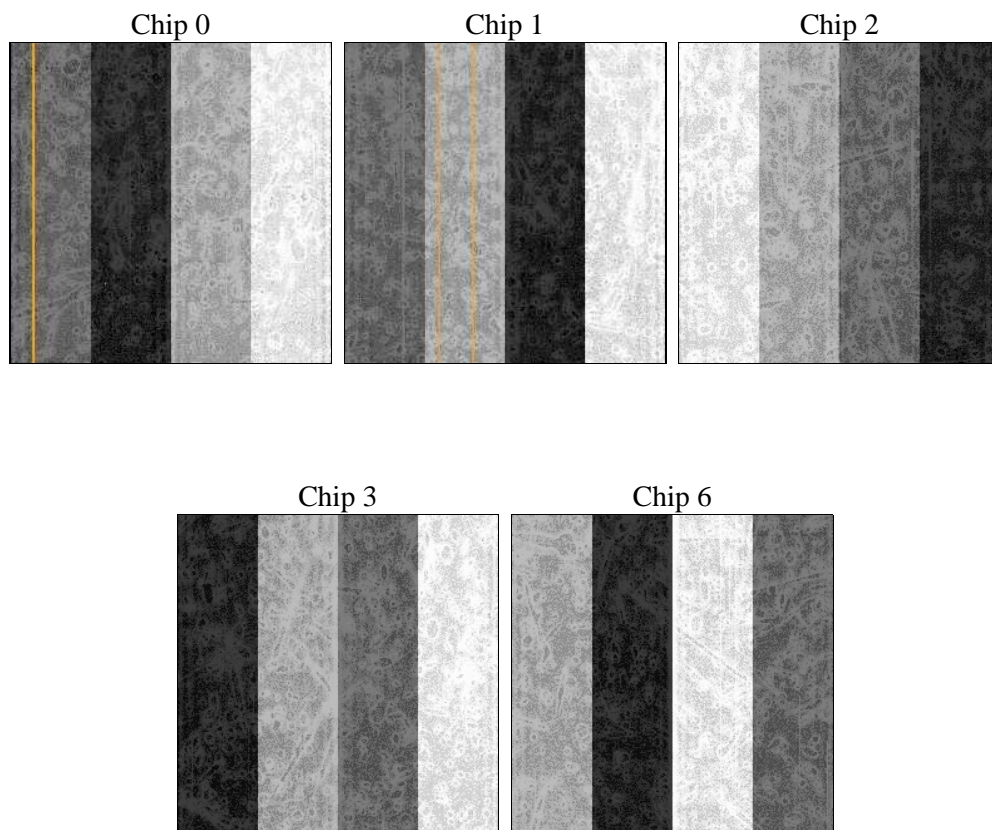
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 21604.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 21777.499958098 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime0 | 21771.21799764 | Sum of GTIs [s] |
| date | 2012-11-04T11:25:25 | Date and time of file creation | ontime1 | 21774.358977884 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 21774.358957946 | Sum of GTIs [s] |
| | | | ontime3 | 21777.499958098 | Sum of GTIs [s] |
| | | | ontime6 | 21777.499958098 | Sum of GTIs [s] |
| | | | l1events | 621305 | Number of level 1 events |

2.1.4 Events

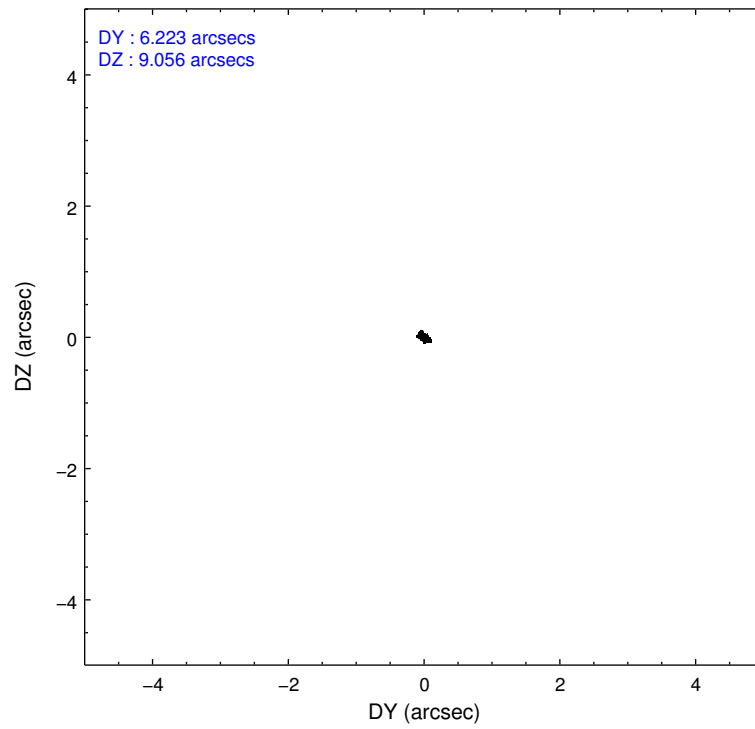
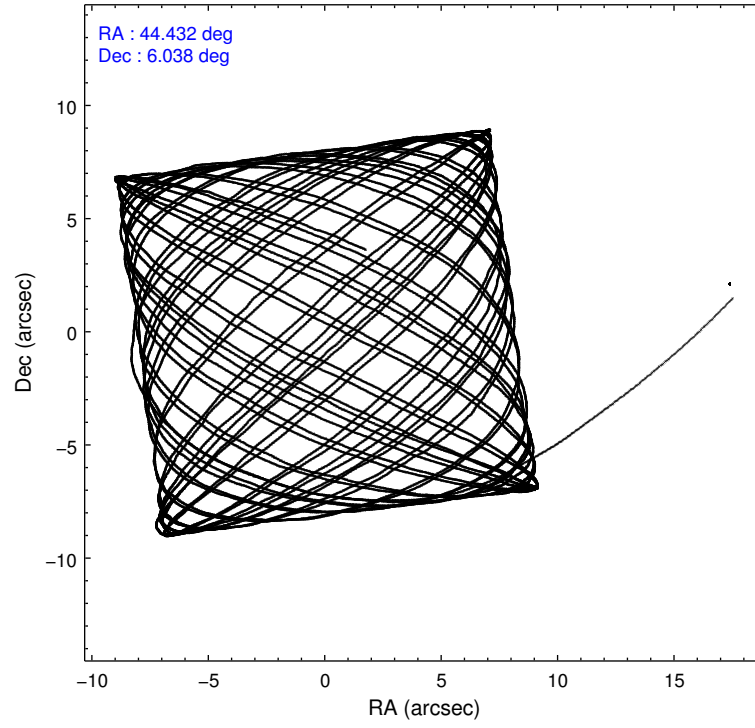
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 113319 | 116872 | 135637 | 136804 | 118673 |
| rejected events | 98002 | 98341 | 116354 | 110795 | 105559 |
| rejected % | 86% | 84% | 85% | 80% | 88% |

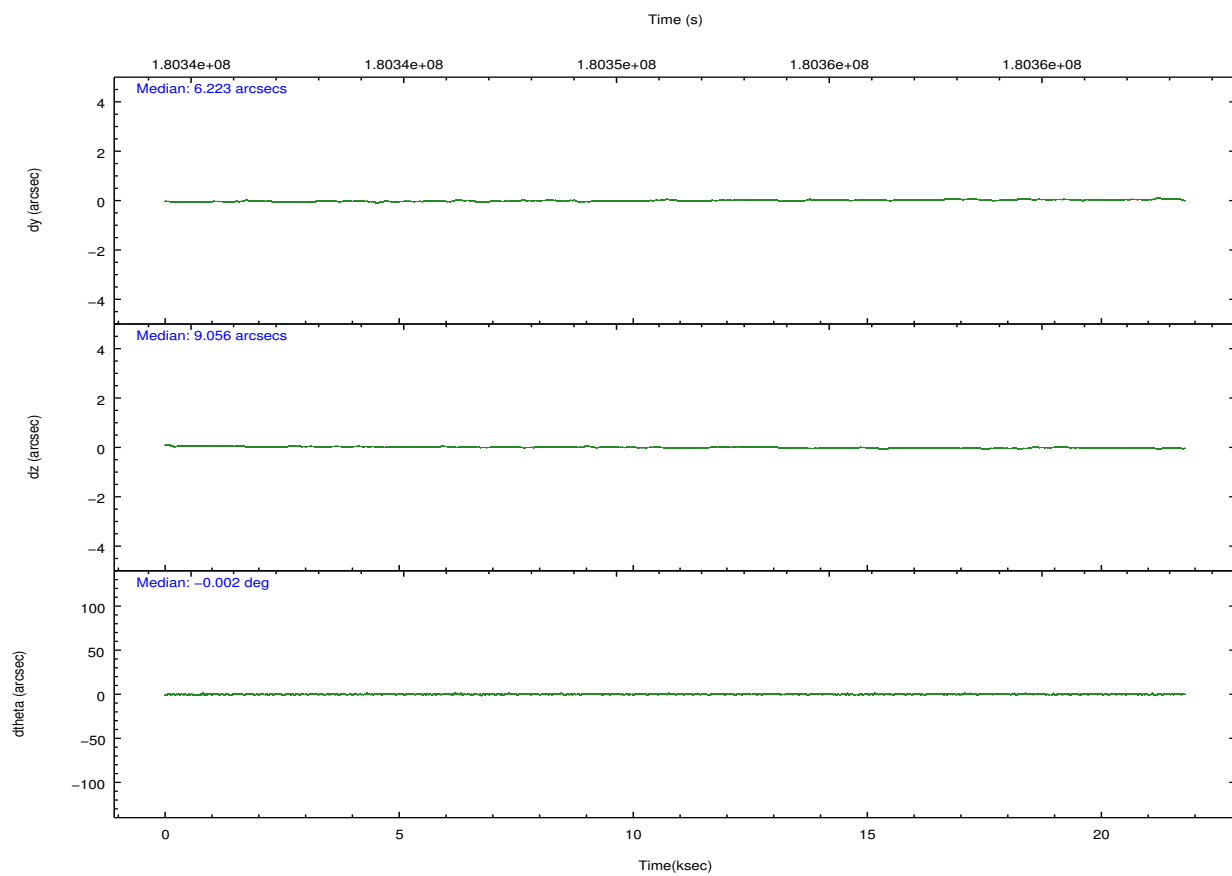
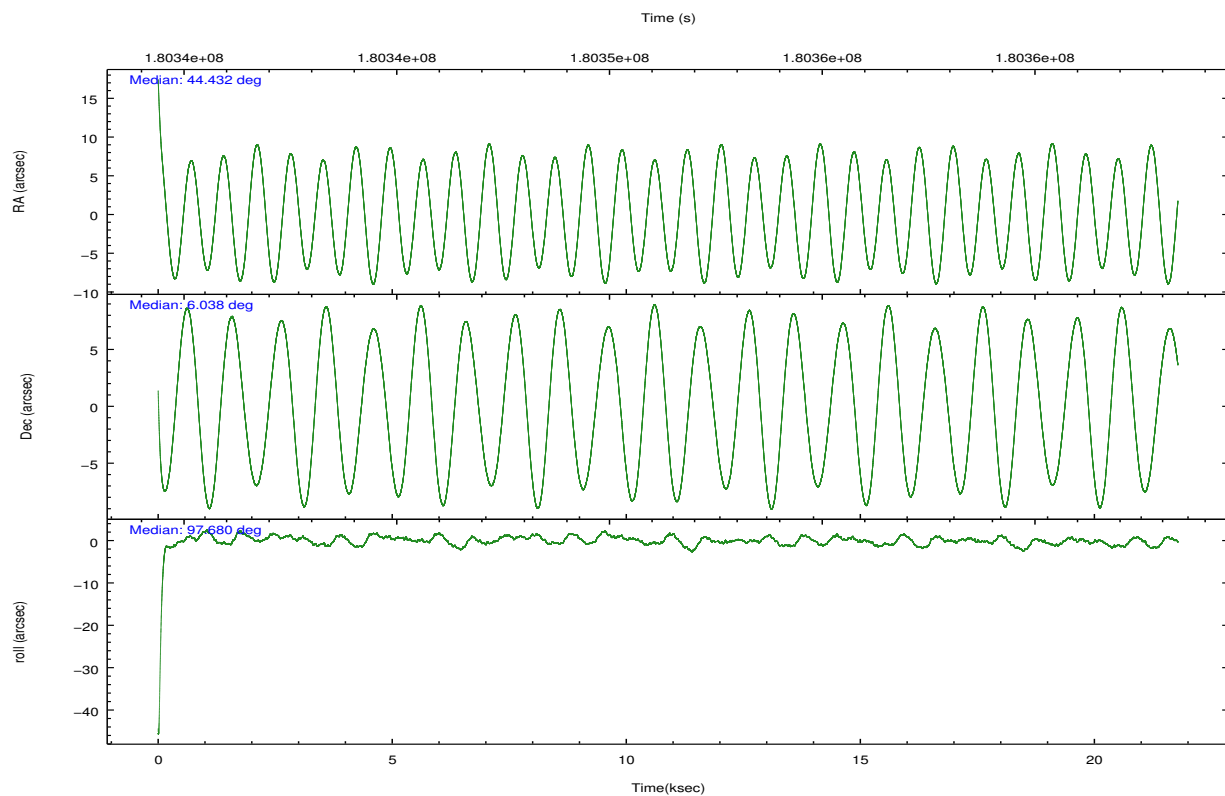
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|-------|-------|--------|--------|--------|
| grade 0 events | 7463 | 9503 | 10939 | 16709 | 5425 |
| | 6% | 8% | 8% | 12% | 4% |
| grade 1 events | 68 | 85 | 91 | 123 | 57 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2969 | 3334 | 3384 | 3718 | 2688 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 1561 | 1669 | 1499 | 1667 | 1414 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 1411 | 1600 | 1517 | 1742 | 1345 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 3992 | 4453 | 3973 | 4656 | 4586 |
| | 3% | 3% | 2% | 3% | 3% |
| grade 6 events | 2232 | 2781 | 2261 | 2570 | 2527 |
| | 1% | 2% | 1% | 1% | 2% |
| grade 7 events | 93623 | 93447 | 111973 | 105619 | 100631 |
| | 82% | 79% | 82% | 77% | 84% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01236 | ACIS-01236 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 44.448596 | 44.43166037139527 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 6.016886 | 6.038510238195987 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 97.471615 | 97.68204995520517 | [s] Primary exposure time | 0.000000 | 3.1 |
| [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) | 180340660.184000 | 180339403.12311 | | | |
| Observation start date | 2003-09-19T06:36:36 | 2003-09-19T06:16:43 | | | |
| [s] Observation end time (MET) | 180362264.184000 | 180363083.69913 | | | |
| Observation end date | 2003-09-19T12:36:40 | 2003-09-19T12:51:23 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



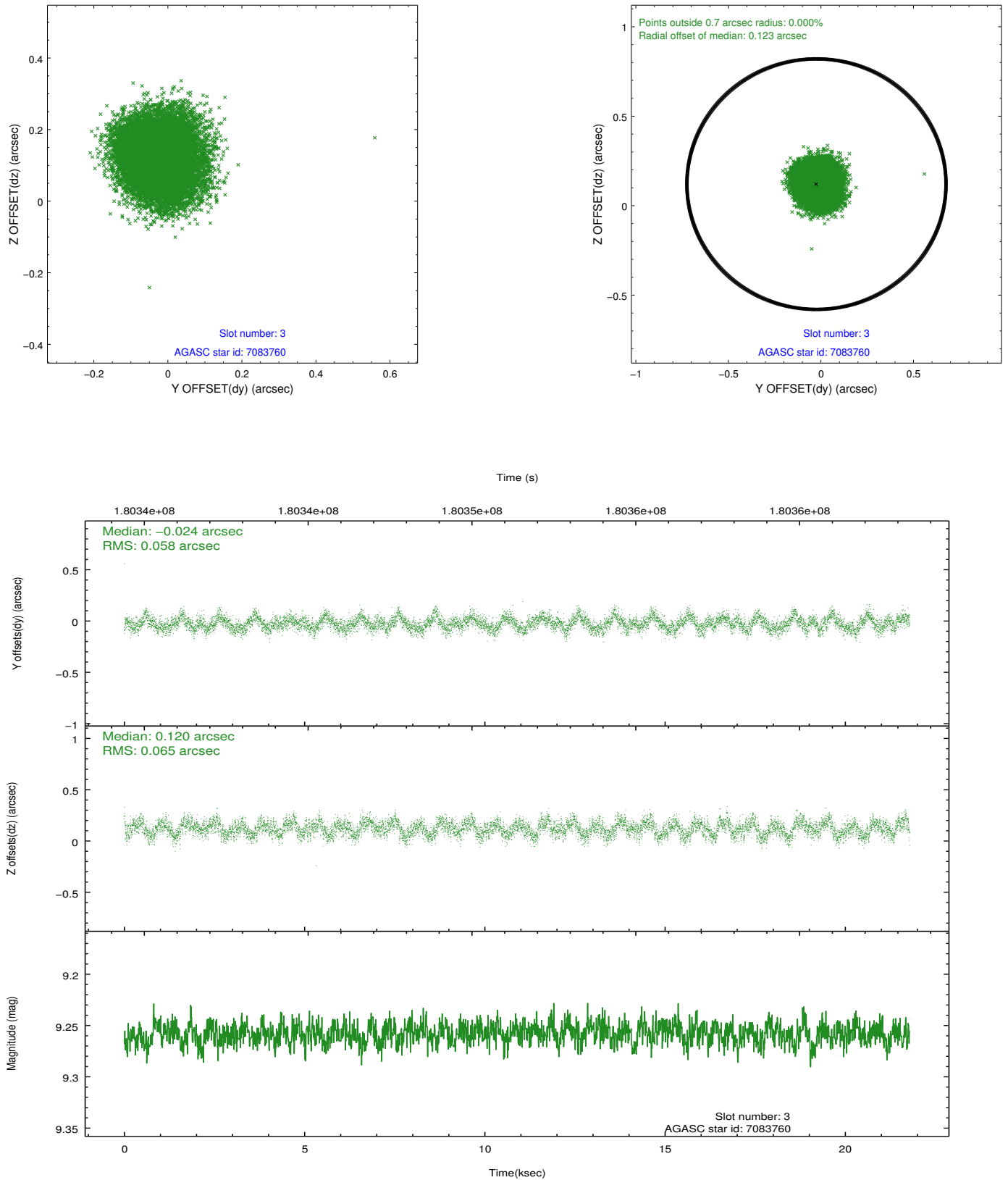


Slot Statistics

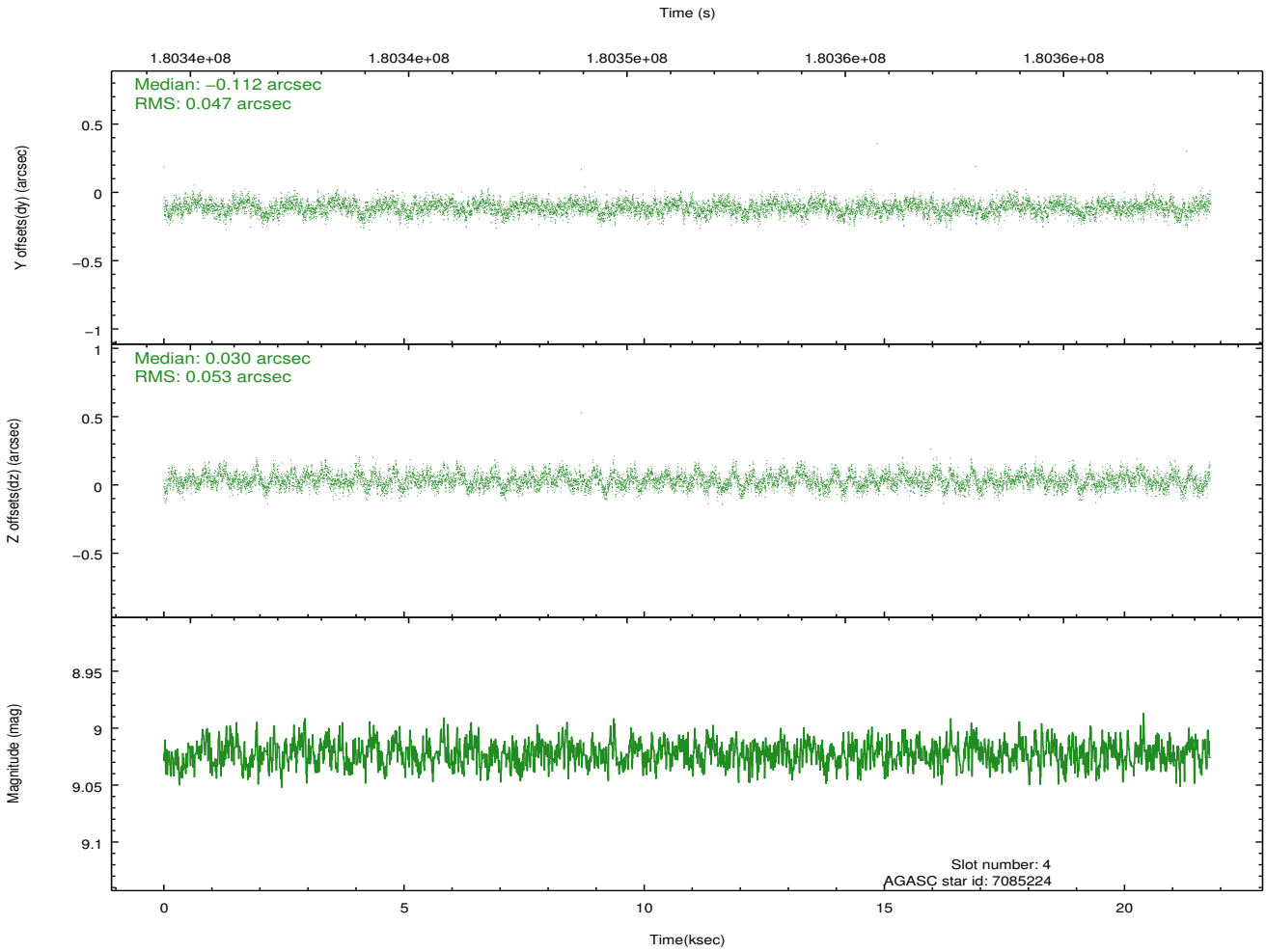
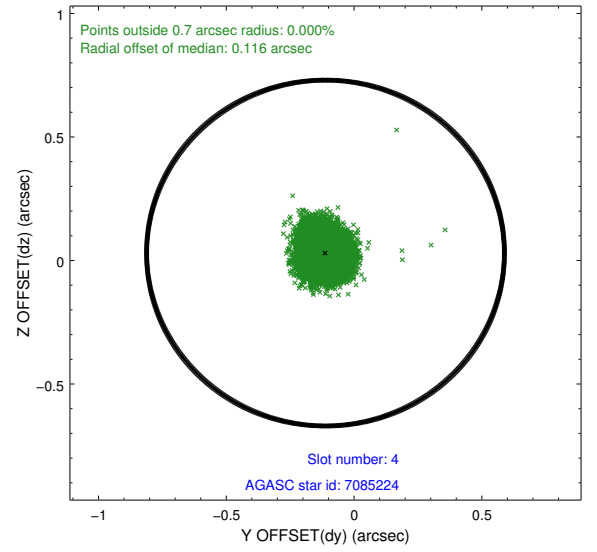
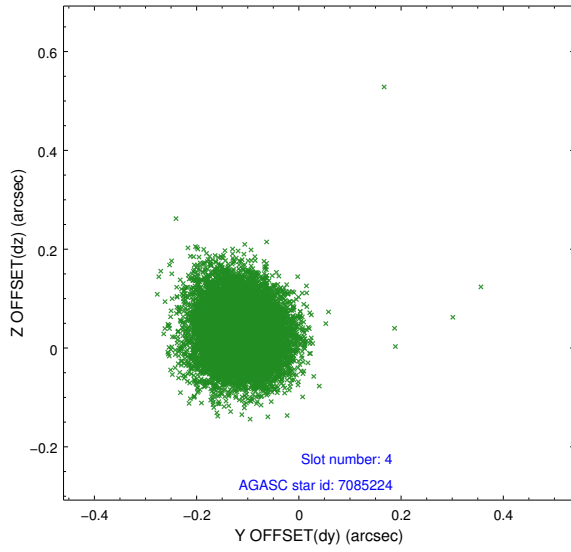
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|----------|------|-------|--------|--------|-------|-------|-----------|----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.24 | 5314 | 0.005 | 0.037 | 0.006 | 0.011 | 0.000000 | 0.000000 | 933.49 | -832.46 |
| 1 | FID | ACIS-I-5 | 7.23 | 5314 | -0.146 | 0.035 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1814.69 | 1064.94 |
| 2 | FID | ACIS-I-6 | 7.26 | 5314 | 0.049 | -0.002 | 0.006 | 0.011 | 0.000000 | 0.000000 | 398.90 | 1709.59 |
| 3 | GUIDE | 7083760 | 9.26 | 10618 | -0.024 | 0.120 | 0.094 | 0.146 | 44.777406 | 5.881265 | -636.76 | -1103.87 |
| 4 | GUIDE | 7085224 | 9.02 | 10622 | -0.112 | 0.030 | 0.076 | 0.121 | 44.072881 | 5.998689 | 110.25 | 1342.19 |
| 5 | GUIDE | 7085384 | 8.81 | 10623 | 0.085 | -0.044 | 0.077 | 0.123 | 44.099254 | 5.614865 | -1271.72 | 1429.10 |
| 6 | GUIDE | 7085864 | 9.20 | 10618 | 0.111 | -0.036 | 0.083 | 0.135 | 44.337583 | 5.477979 | -1871.77 | 646.86 |
| 7 | GUIDE | 7078976 | 9.34 | 10624 | -0.060 | -0.073 | 0.093 | 0.148 | 43.883933 | 6.307004 | 1299.12 | 1867.58 |

2.4 Star Slots

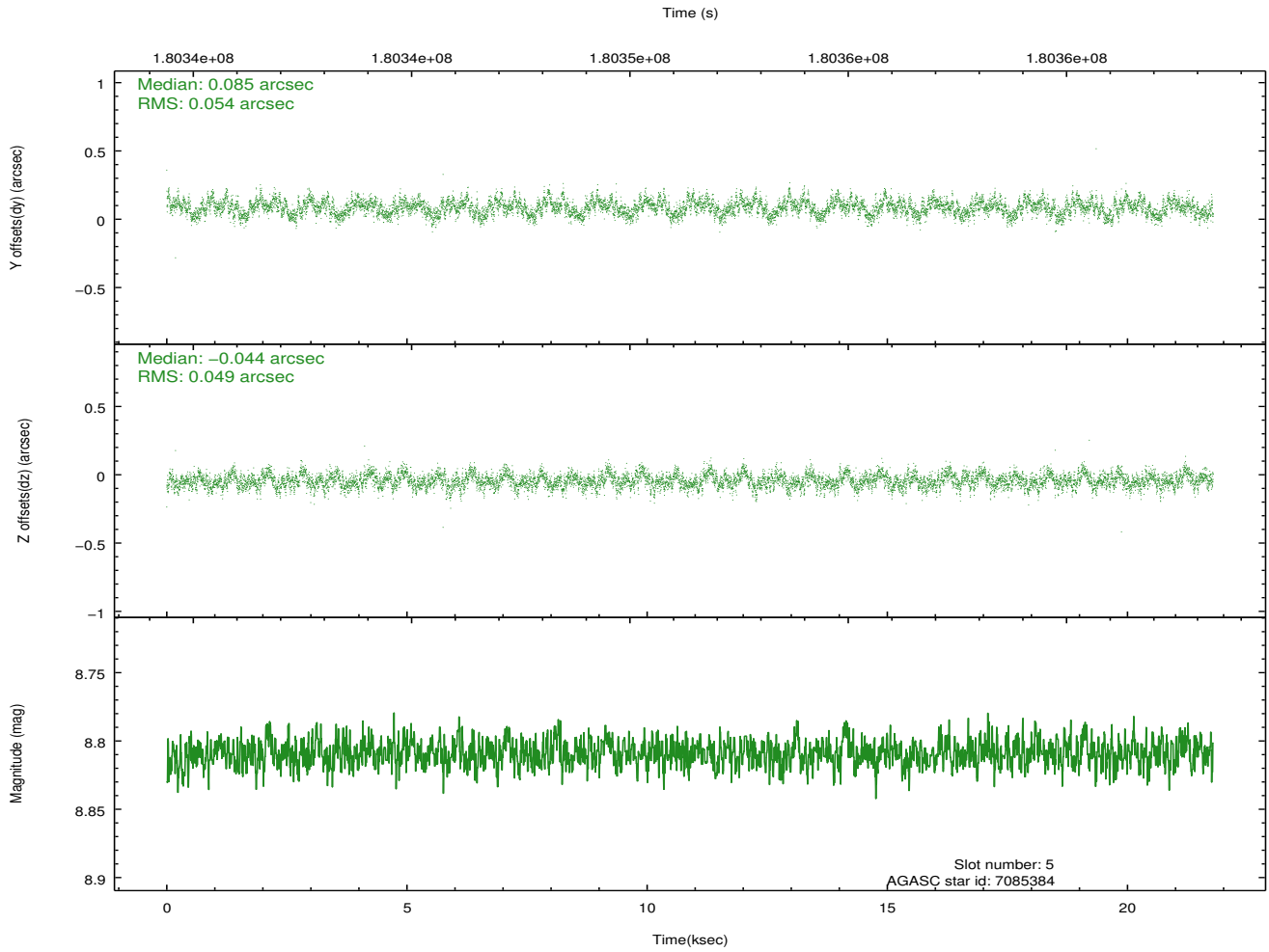
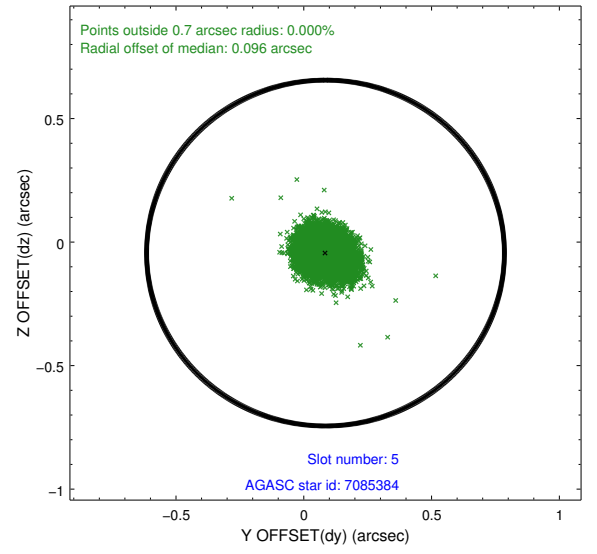
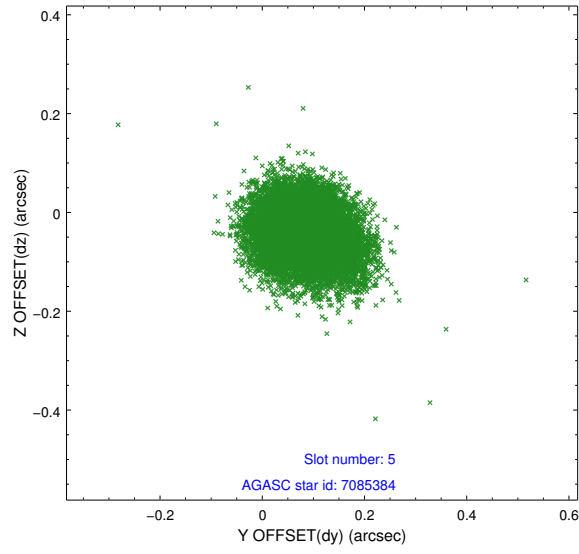
2.4.1 Slot 3



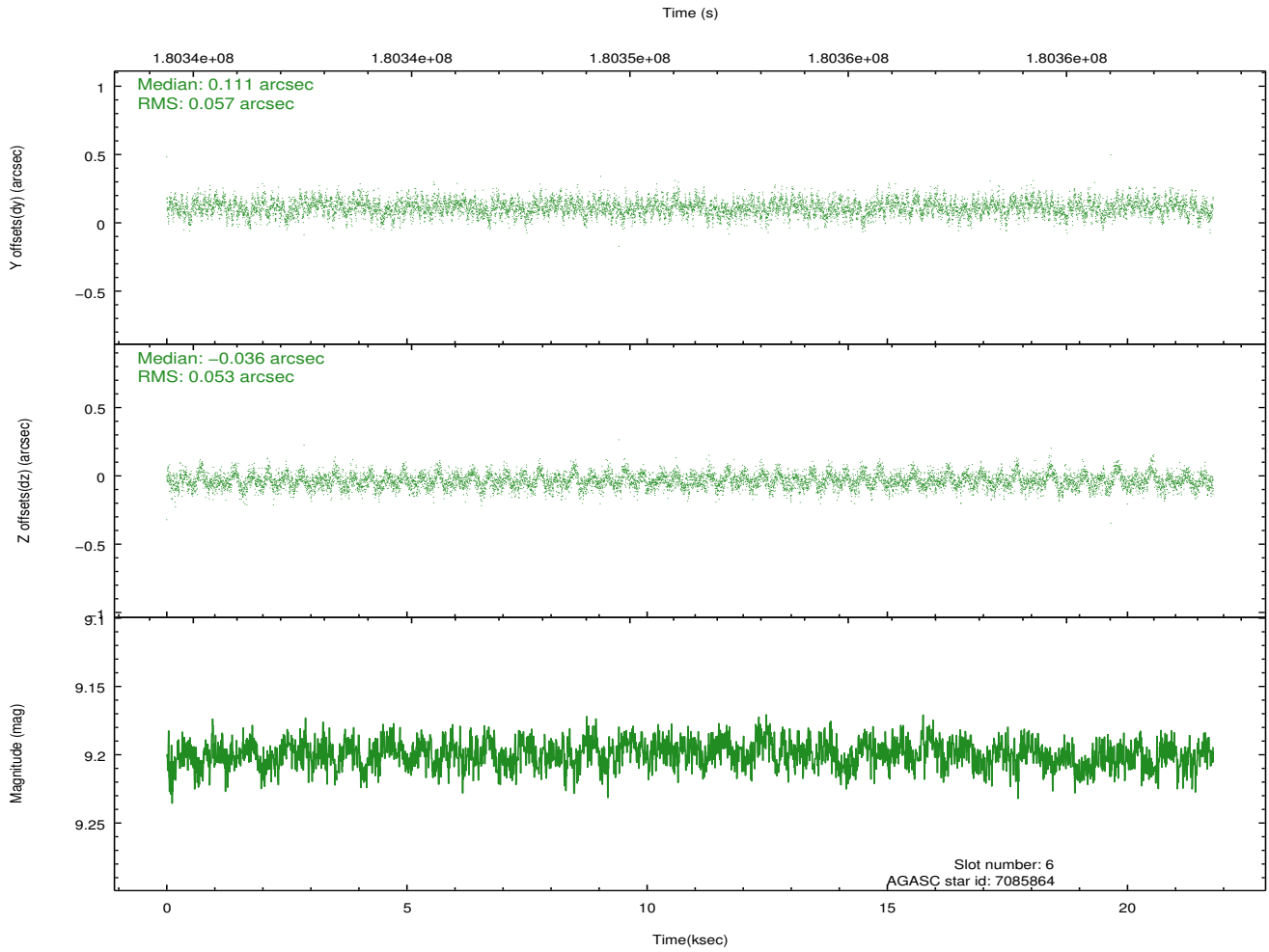
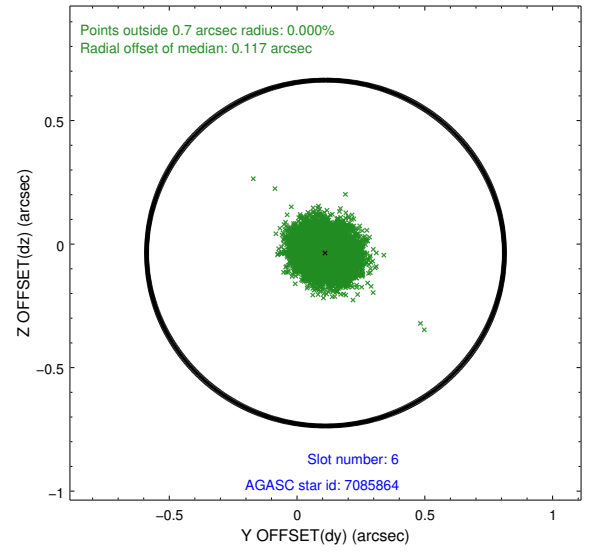
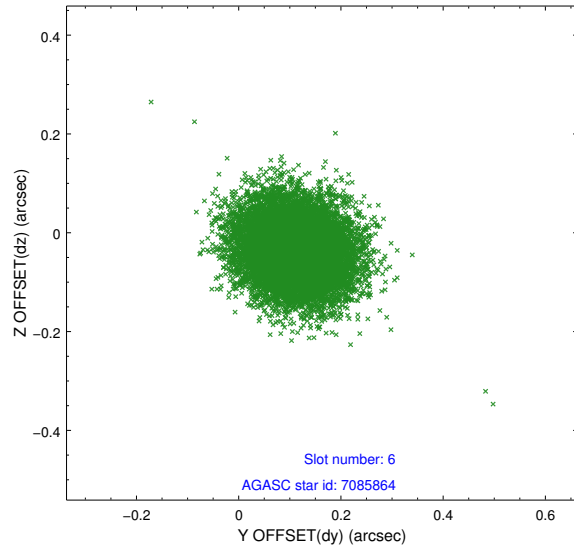
2.4.2 Slot 4



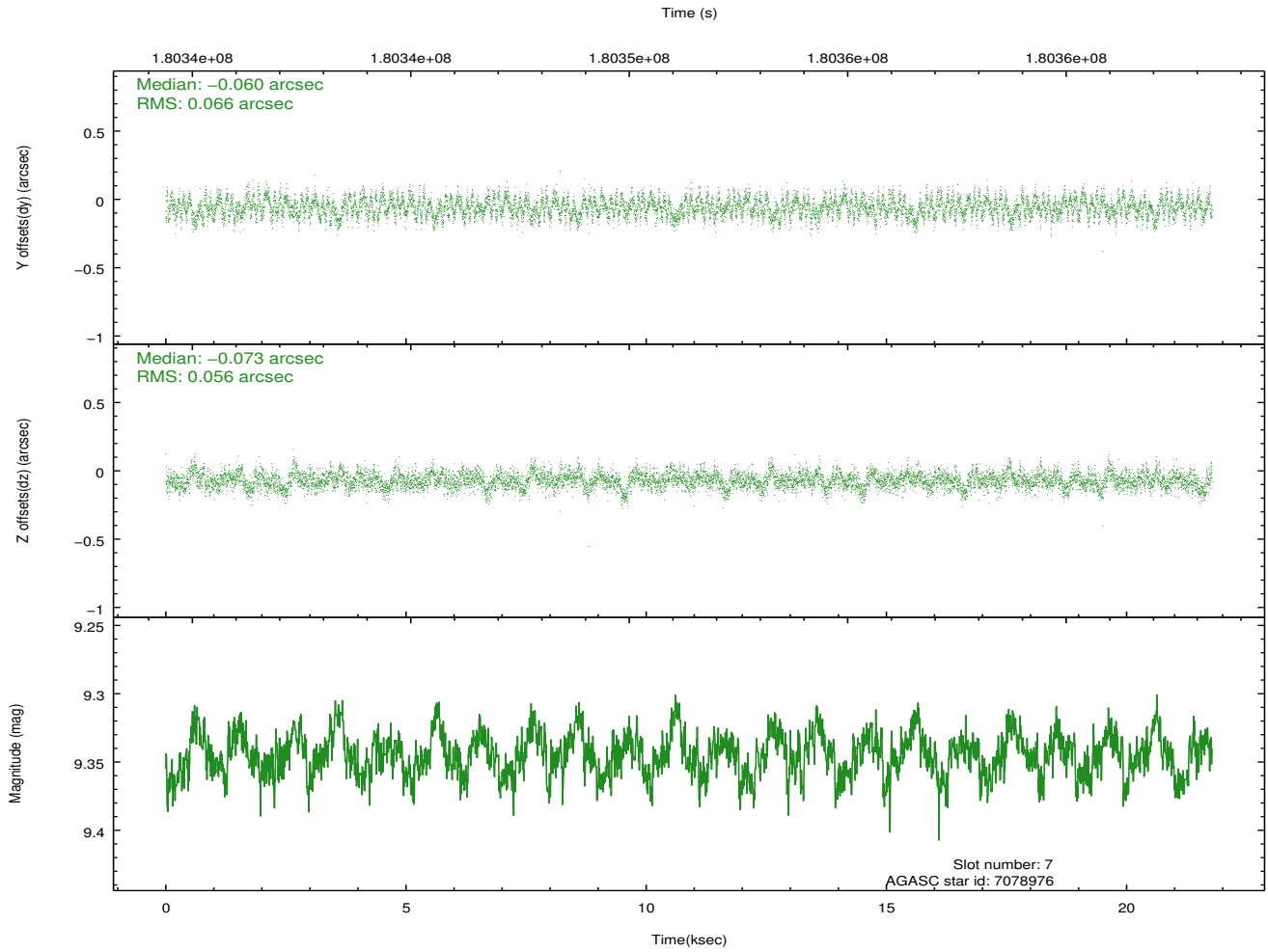
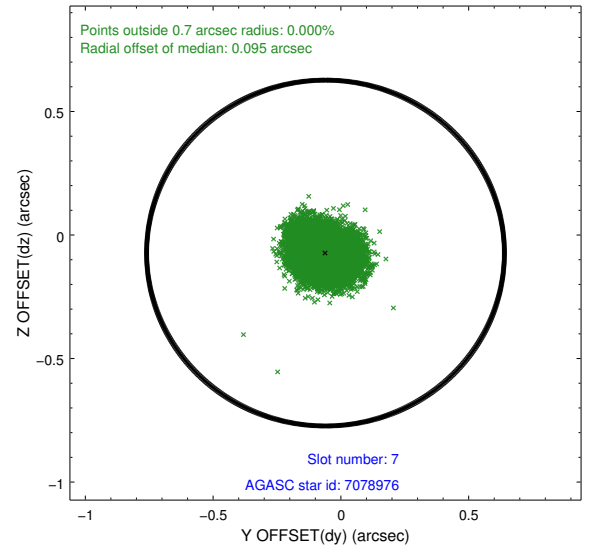
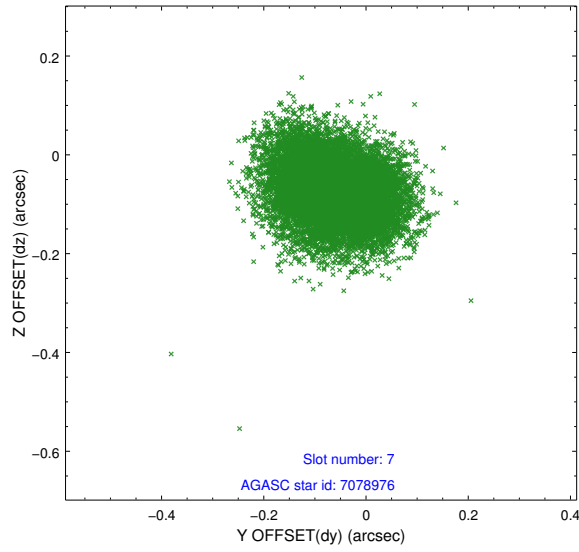
2.4.3 Slot 5



2.4.4 Slot 6

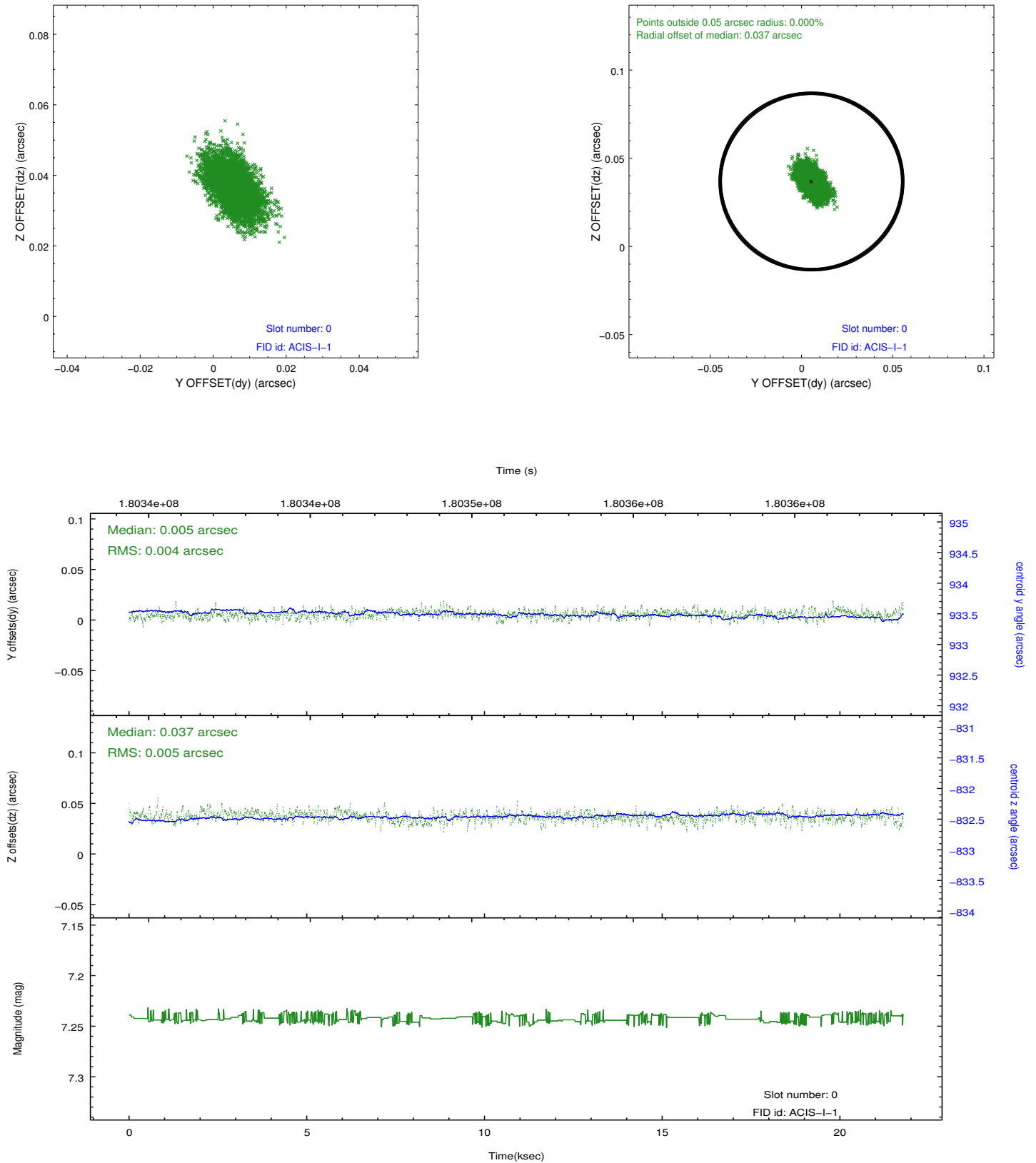


2.4.5 Slot 7

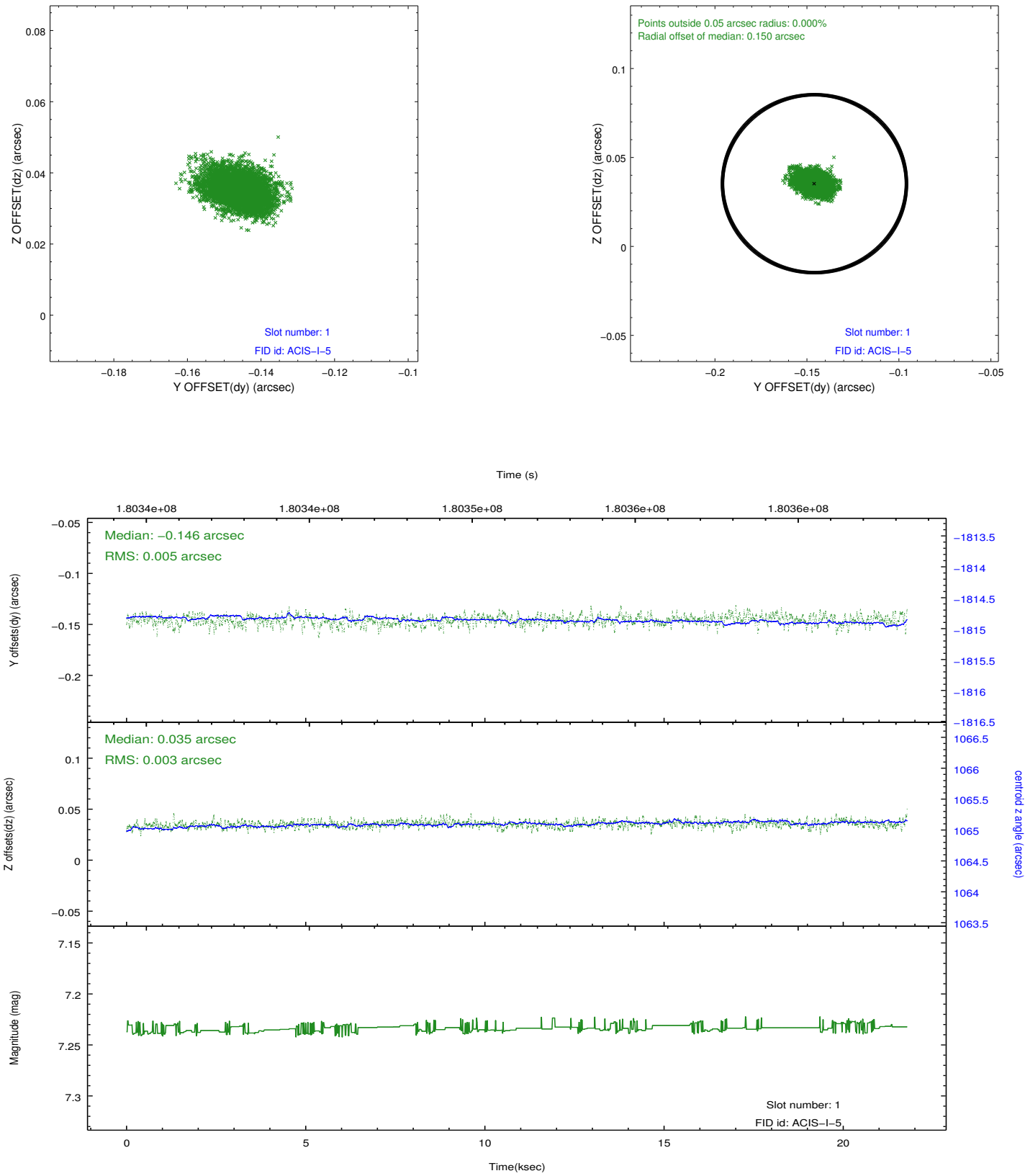


2.5 FID Slots

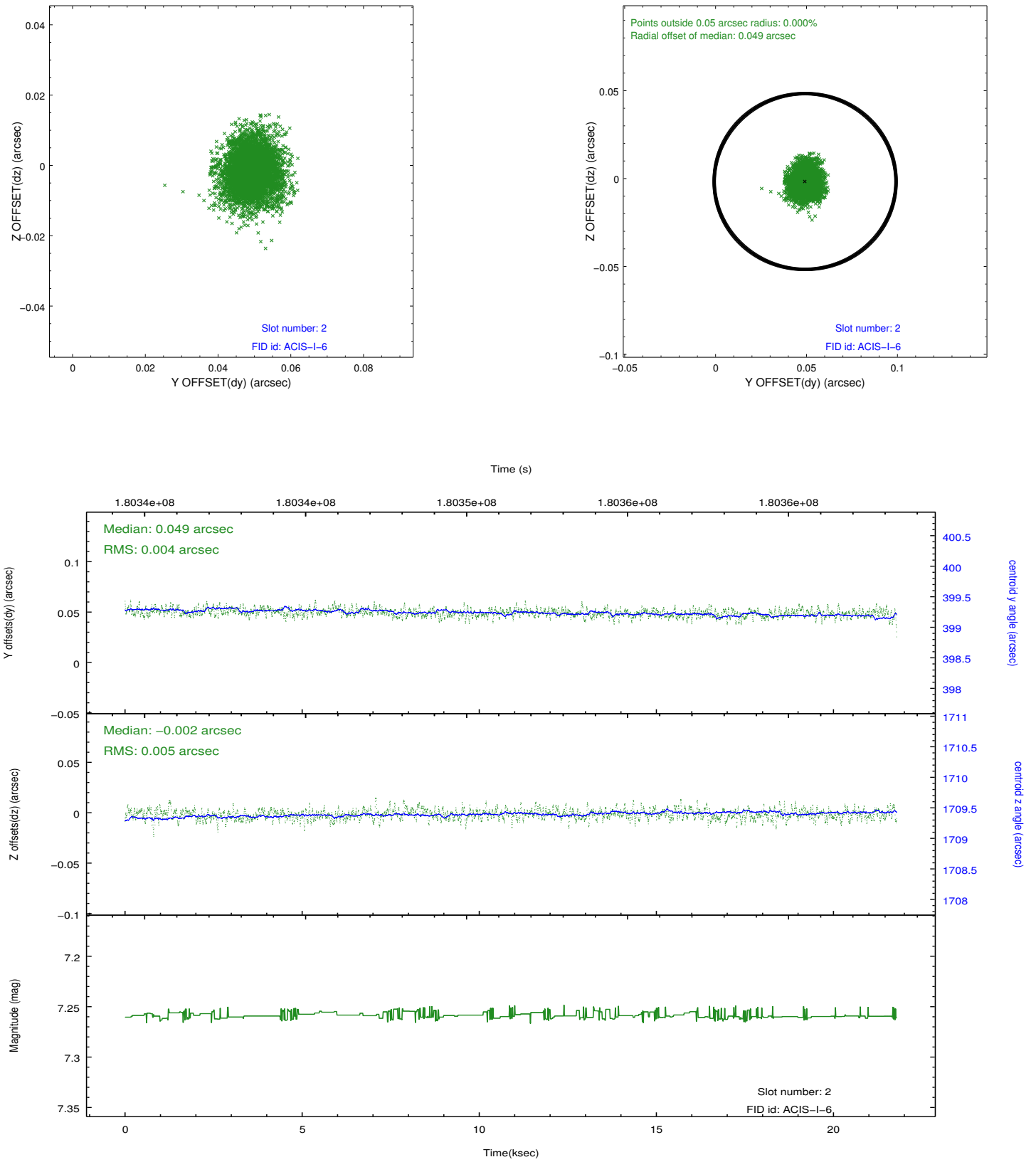
2.5.1 Slot 0



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) | 2012.11.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 21.777 |

A.2 Comments