

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7897 - L2 Version 3
Chandra X-Ray Center

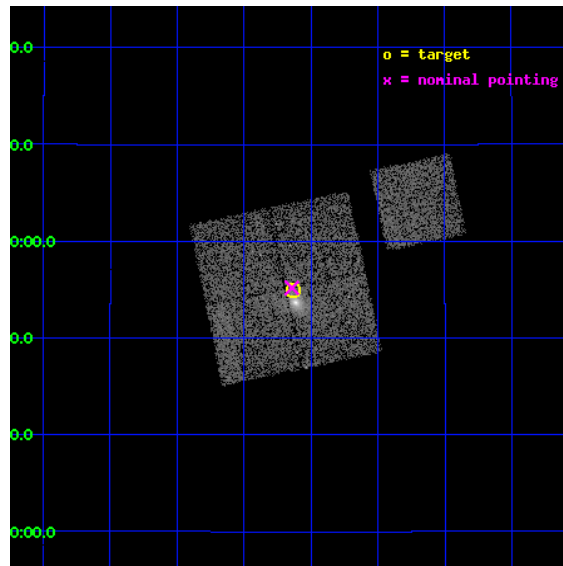
L2 Processing Date : Apr 16 2012

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1 Front

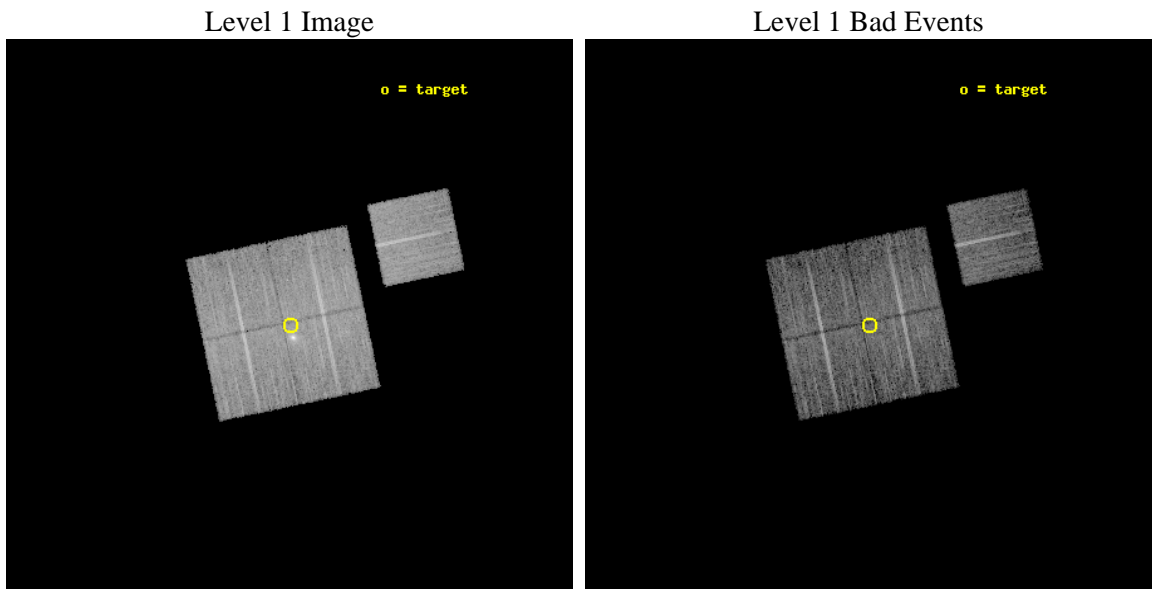
| | | |
|----------|--|---|
| seq_num | 800615 | Sequence number |
| obs_id | 7897 | Observation id |
| title | An X-ray/lensing calibration of cluster mass estimates | Proposal ti |
| observer | Dr. Stephen Murray | Principal investigator |
| object | Z2089 | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 135.157917 | Observer's specified target RA [deg] |
| dec_targ | 20.916 | Observer's specified target Dec [deg] |
| ra_nom | 135.16068754367 | Nominal RA [deg] |
| dec_nom | 20.919880475909 | Nominal Dec [deg] |
| roll_nom | 78.129209894289 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 9169.7590702176 | Sum of GTIs [s] |
| livetime | 9049.9494172868 | Livetime [s] |
| ontime0 | 9172.9000705481 | Sum of GTIs [s] |
| ontime1 | 9172.9000705481 | Sum of GTIs [s] |
| ontime2 | 9172.9000705481 | Sum of GTIs [s] |
| ontime3 | 9169.7590702176 | Sum of GTIs [s] |
| ontime6 | 9169.7590702772 | Sum of GTIs [s] |
| l2events | 32679 | Number of level 2 events |



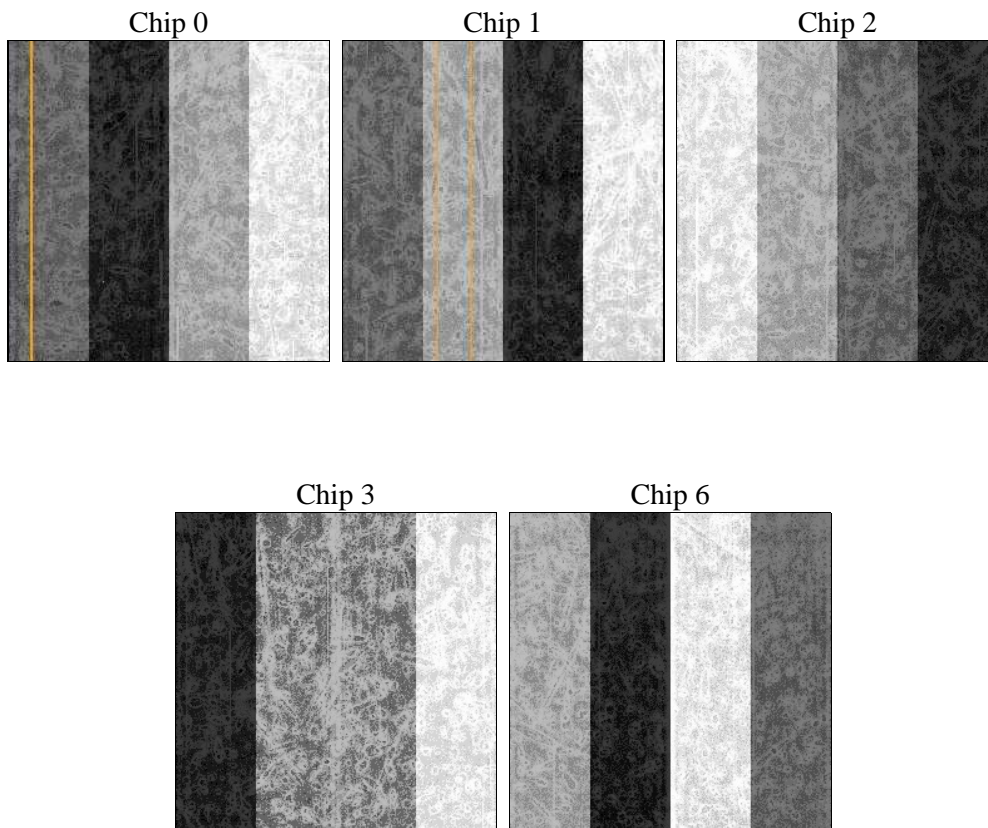
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 9000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 9169.7590702176 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime0 | 9172.9000705481 | Sum of GTIs [s] |
| date | 2012-04-16T04:01:14 | Date and time of file creation | ontime1 | 9172.9000705481 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime2 | 9172.9000705481 | Sum of GTIs [s] |
| | | | ontime3 | 9169.7590702176 | Sum of GTIs [s] |
| | | | ontime6 | 9169.7590702772 | Sum of GTIs [s] |
| | | | l1events | 343232 | Number of level 1 events |

2.1.4 Events

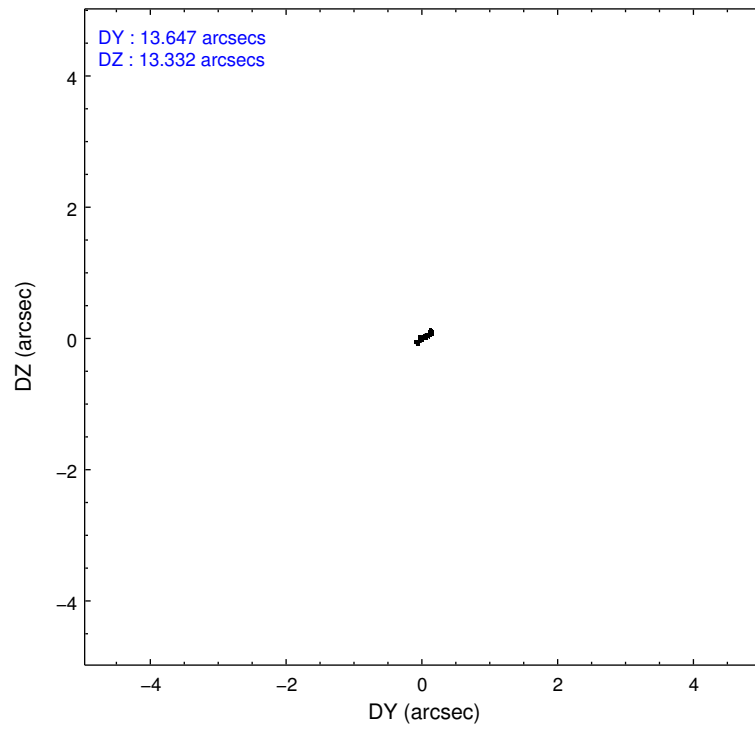
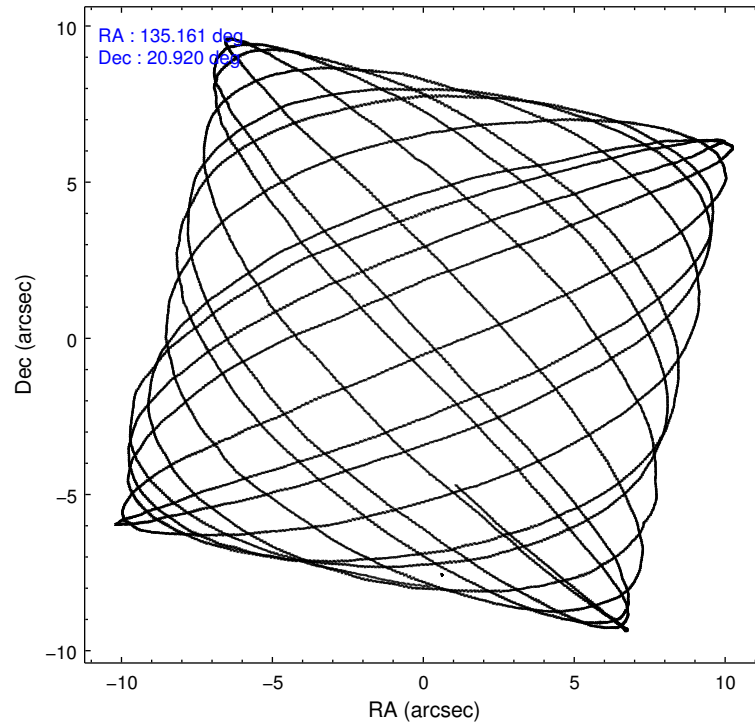
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|-------|-------|-------|-------|-------|
| level 1 events | 63602 | 67127 | 70326 | 74095 | 68082 |
| rejected events | 57095 | 59369 | 63773 | 63259 | 61328 |
| rejected % | 89% | 88% | 90% | 85% | 90% |

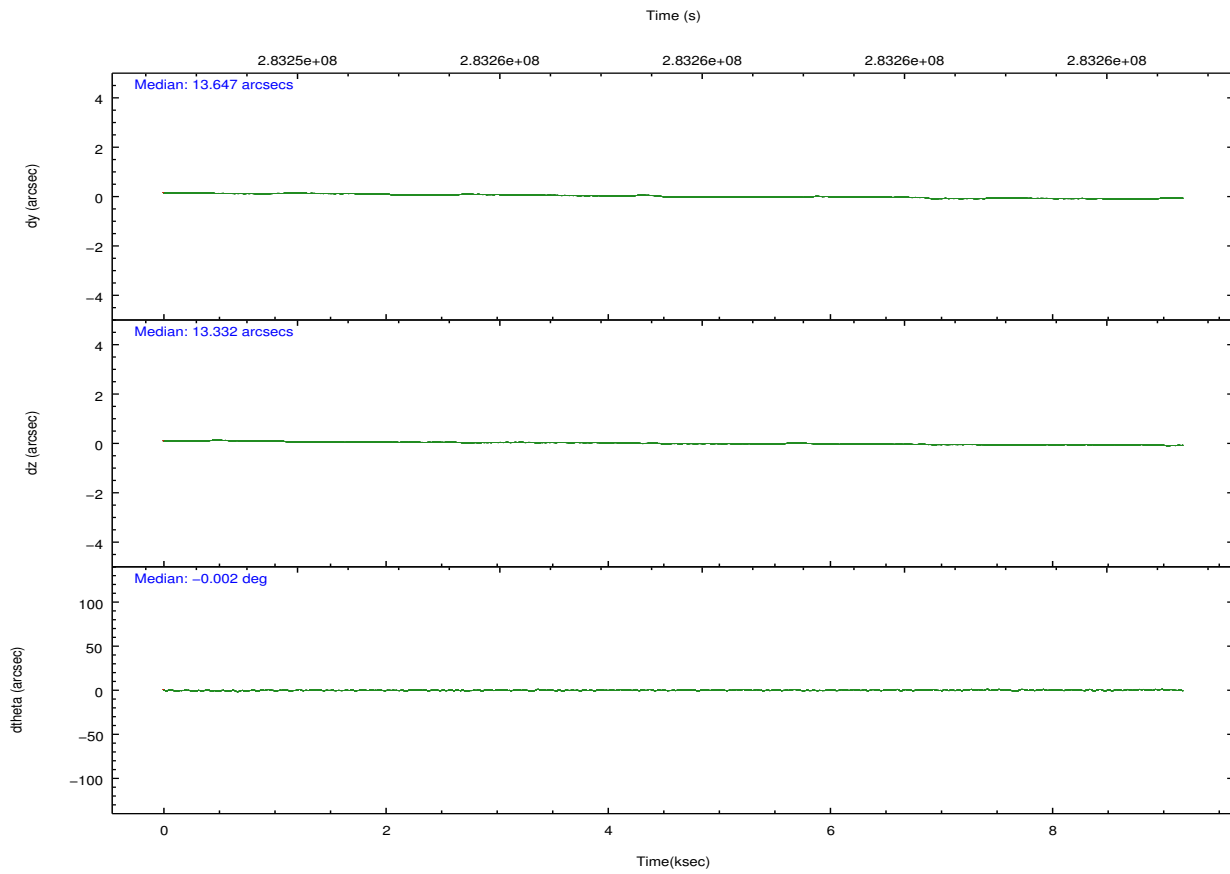
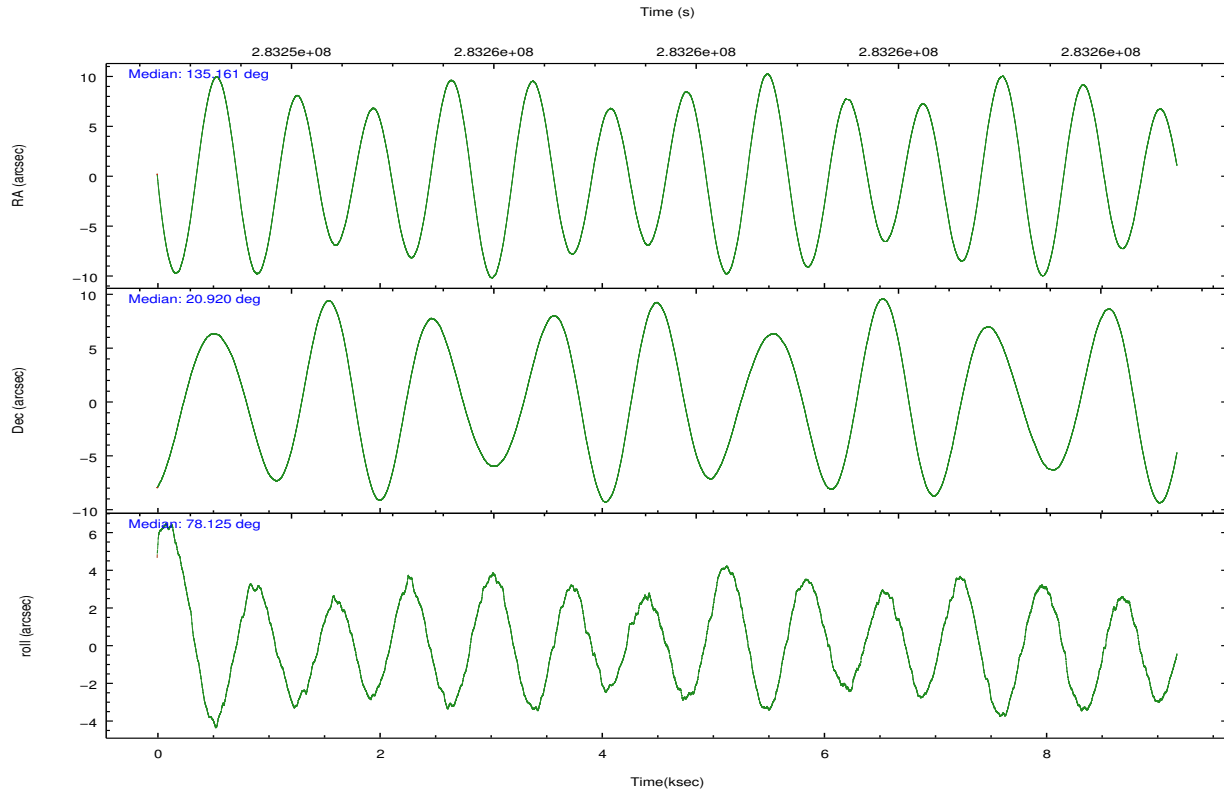
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 2300 | 2982 | 2471 | 6195 | 2423 |
| | 3% | 4% | 3% | 8% | 3% |
| grade 1 events | 34 | 41 | 31 | 61 | 27 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 1576 | 1747 | 1604 | 1757 | 1502 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 841 | 890 | 752 | 862 | 757 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 718 | 865 | 763 | 833 | 778 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 2347 | 2617 | 2303 | 2786 | 2838 |
| | 3% | 3% | 3% | 3% | 4% |
| grade 6 events | 1340 | 1574 | 1228 | 1483 | 1531 |
| | 2% | 2% | 1% | 2% | 2% |
| grade 7 events | 54446 | 56411 | 61174 | 60118 | 58226 |
| | 85% | 84% | 86% | 81% | 85% |

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 | 135.169982 | 135.1606875436725 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 20.893810 | 20.91988047590937 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 77.917204 | 78.12920989428892 | [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) | 283253294.184000 | 283251972.85732 | | | |
| Observation start date | 2006-12-23T09:27:09 | 2006-12-23T09:06:12 | | | |
| [s] Observation end time (MET) | 283262294.184000 | 283262791.73283 | | | |
| Observation end date | 2006-12-23T11:57:09 | 2006-12-23T12:06:31 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



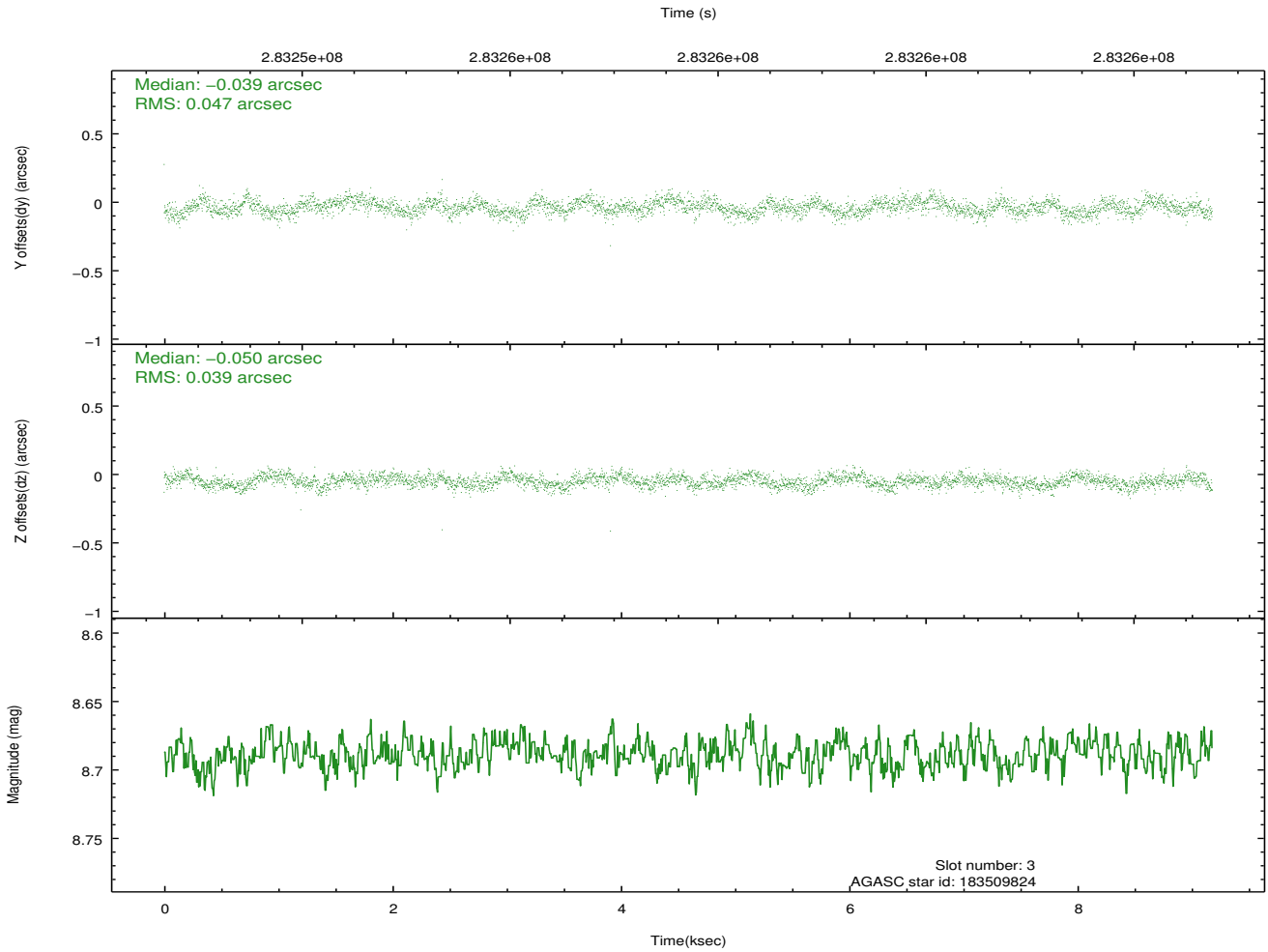
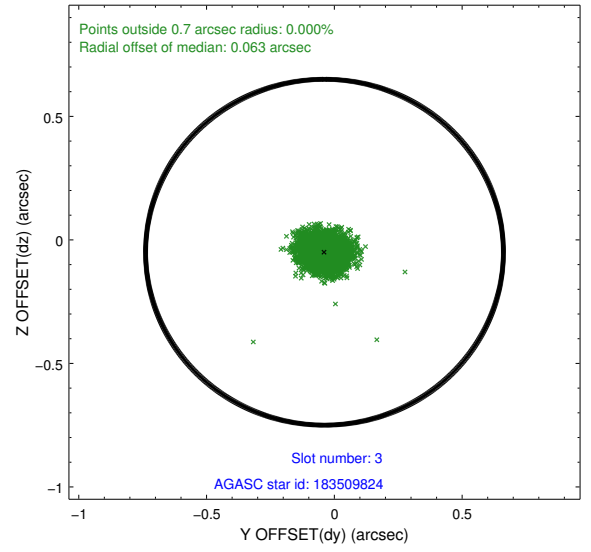
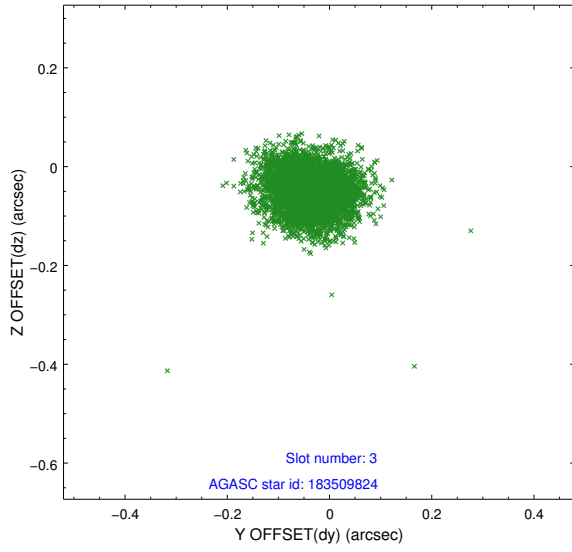


Slot Statistics

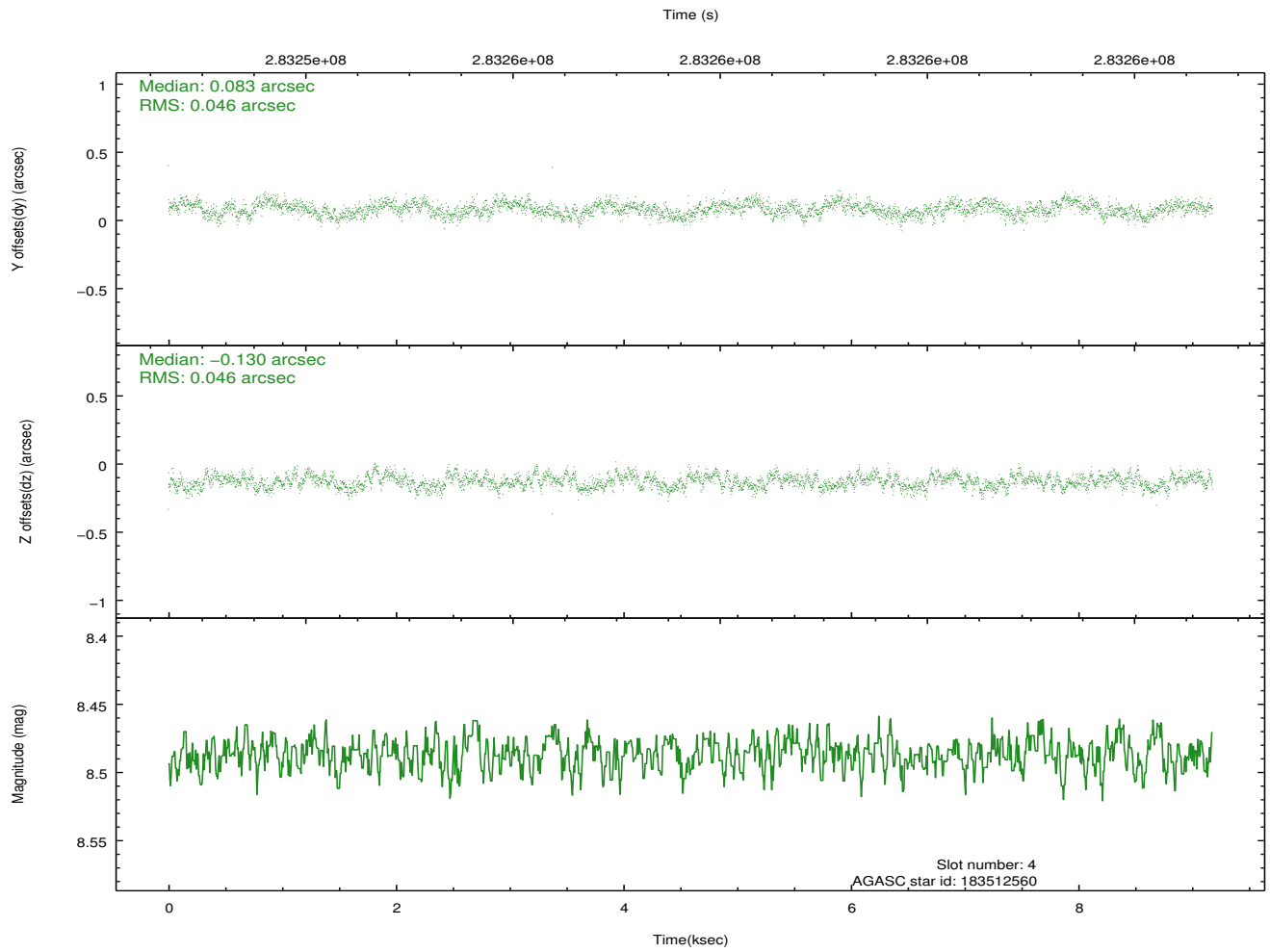
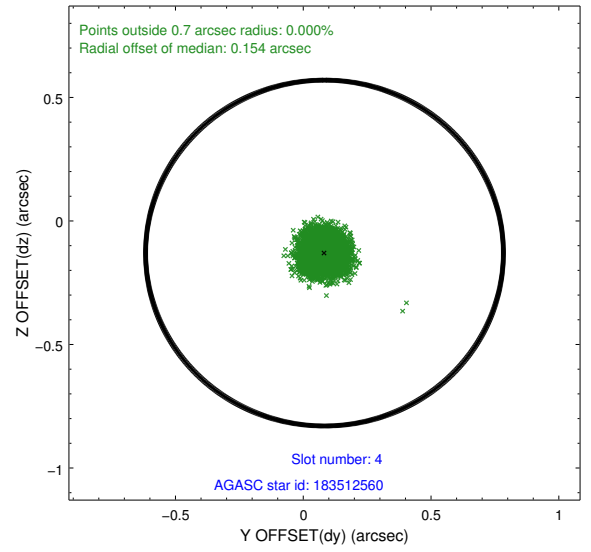
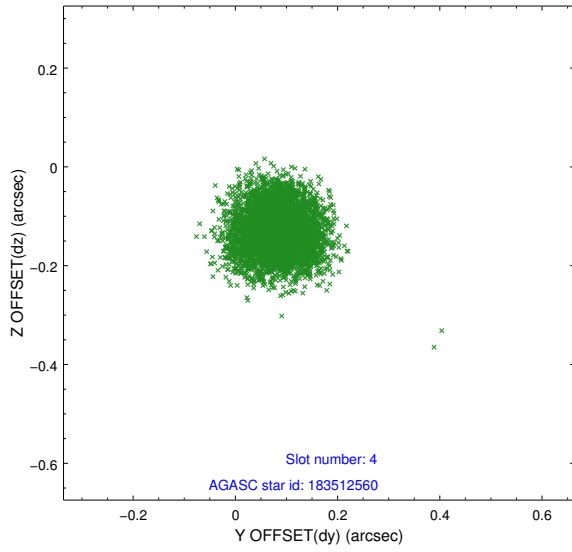
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.25 | 2240 | 0.062 | -0.010 | 0.006 | 0.011 | 0.000000 | 0.000000 | 925.89 | -836.90 |
| 1 | FID | ACIS-I-5 | 7.23 | 2238 | -0.246 | 0.060 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1822.19 | 1060.36 |
| 2 | FID | ACIS-I-6 | 7.25 | 2240 | 0.092 | 0.020 | 0.007 | 0.011 | 0.000000 | 0.000000 | 390.83 | 1705.49 |
| 3 | GUIDE | 183509824 | 8.69 | 4477 | -0.039 | -0.050 | 0.065 | 0.105 | 135.197689 | 21.453708 | 1988.83 | 328.95 |
| 4 | GUIDE | 183512560 | 8.49 | 4478 | 0.083 | -0.130 | 0.069 | 0.109 | 135.118656 | 20.748155 | -548.17 | 59.40 |
| 5 | GUIDE | 183518896 | 8.91 | 4408 | 0.029 | 0.121 | 0.074 | 0.121 | 135.569040 | 20.991361 | 626.14 | -1237.31 |
| 6 | GUIDE | 183509920 | 7.70 | 4479 | -0.126 | -0.092 | 0.077 | 0.118 | 134.732215 | 21.166288 | 653.41 | 1643.03 |
| 7 | GUIDE | 183504544 | 9.15 | 4472 | 0.055 | 0.149 | 0.095 | 0.151 | 135.649286 | 20.125391 | -2362.93 | -2161.66 |

2.4 Star Slots

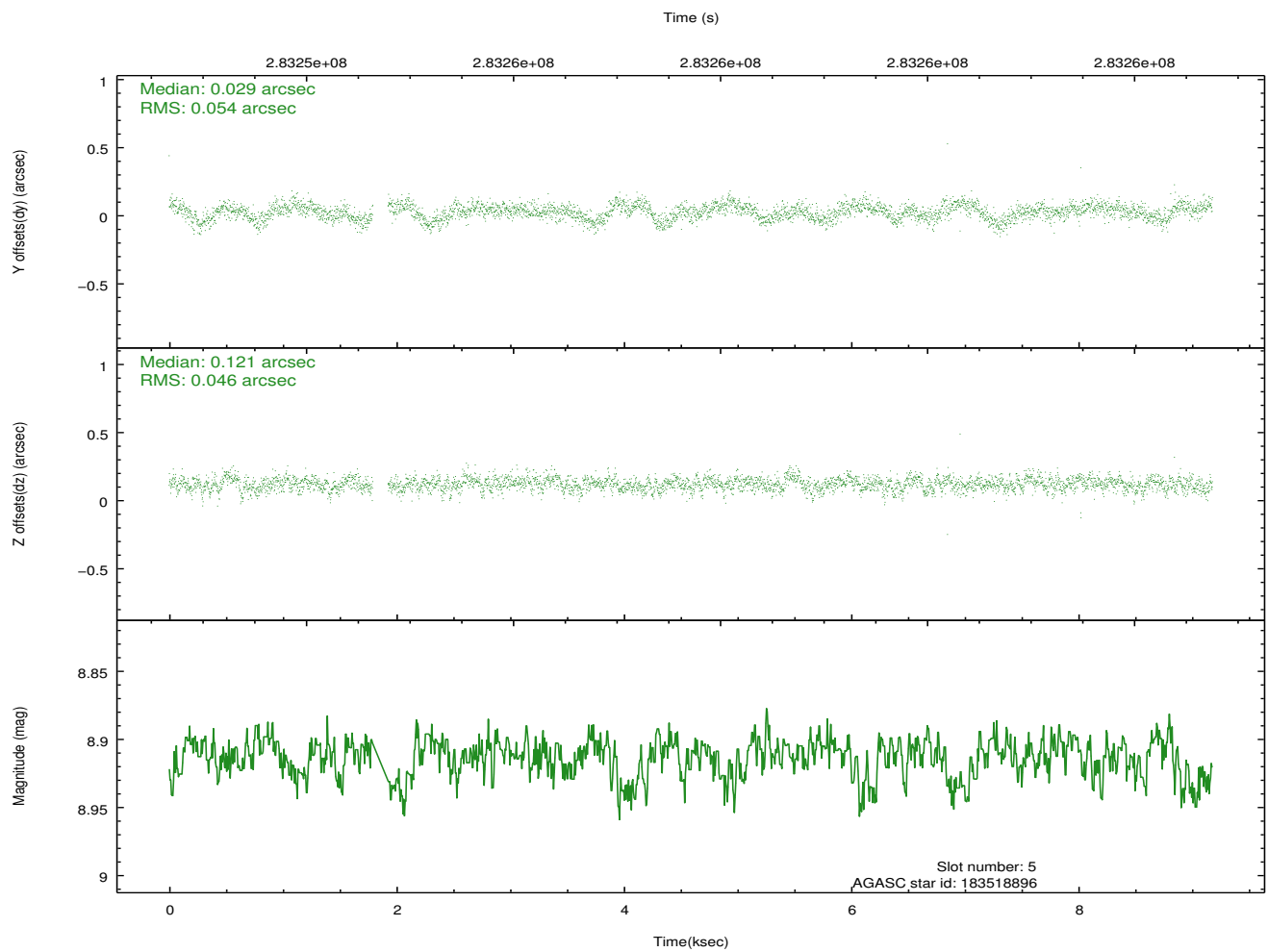
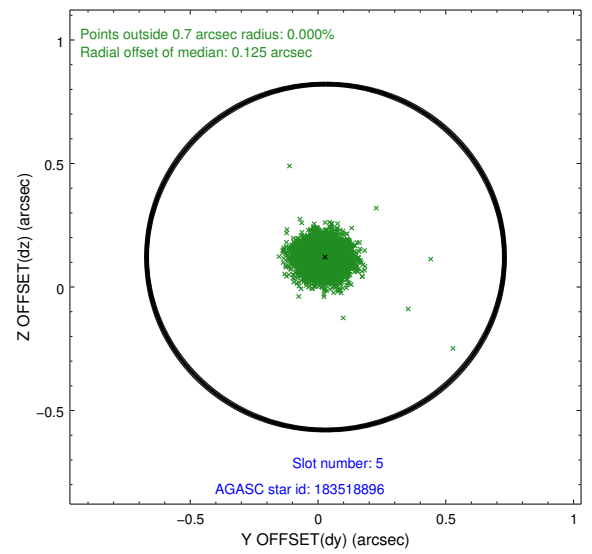
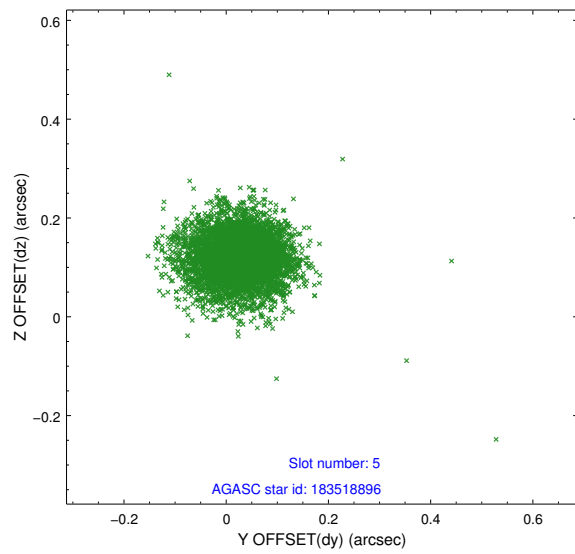
2.4.1 Slot 3



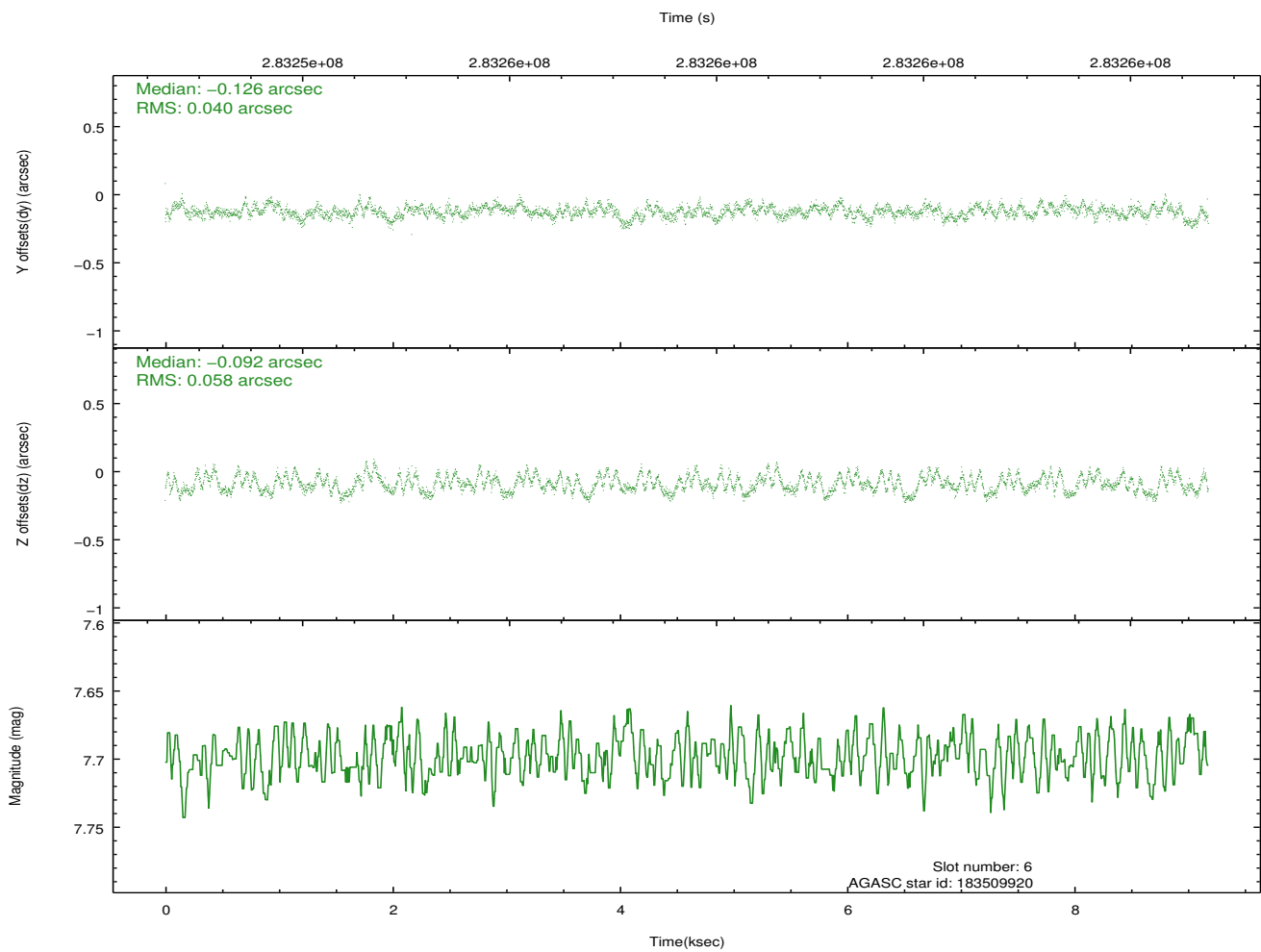
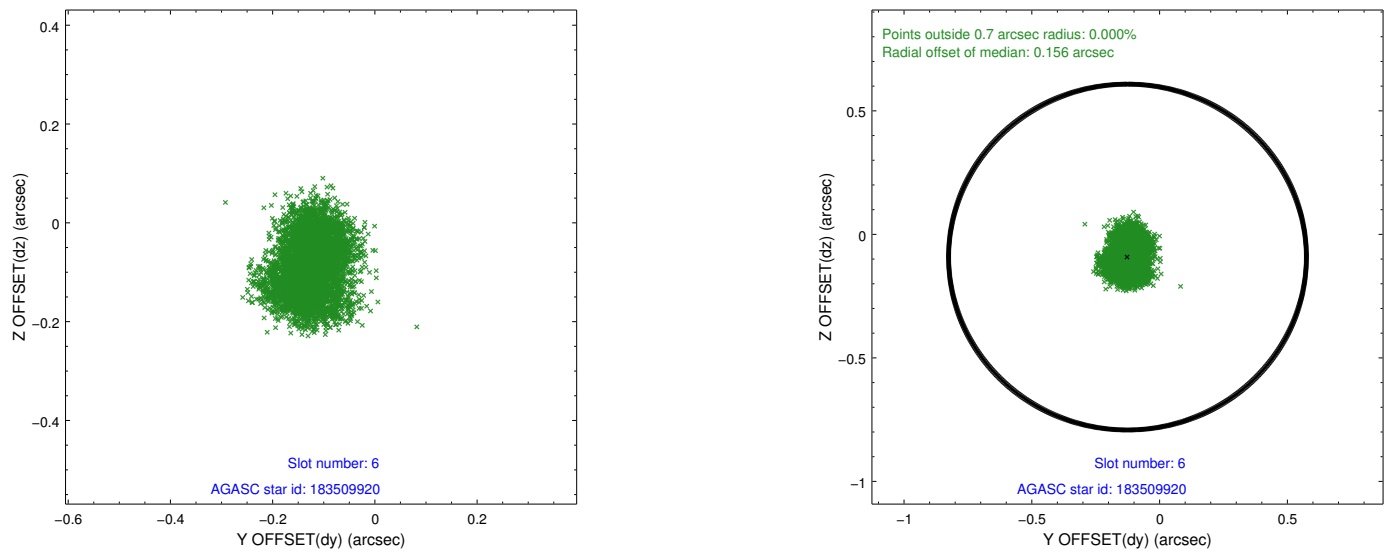
2.4.2 Slot 4



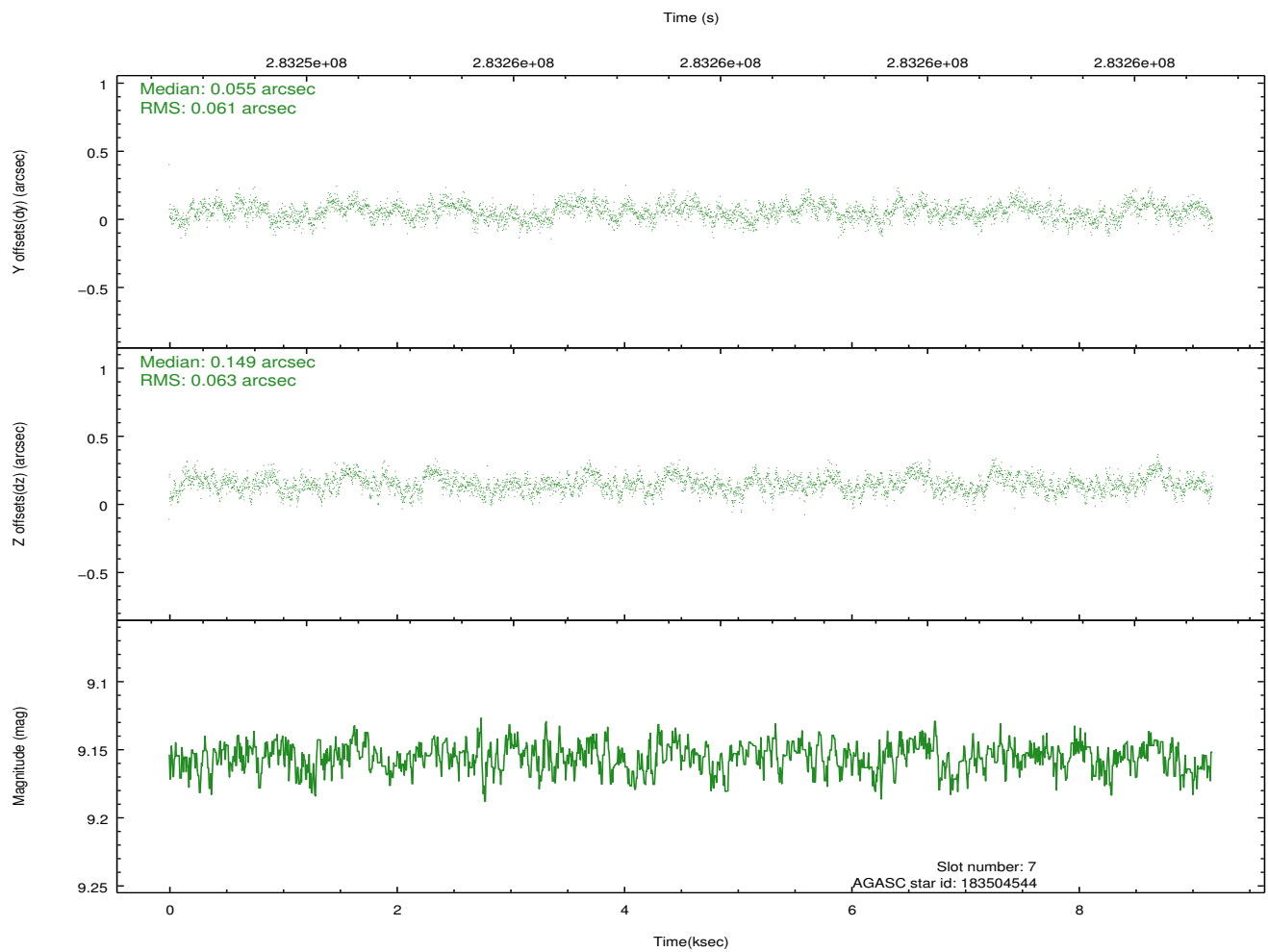
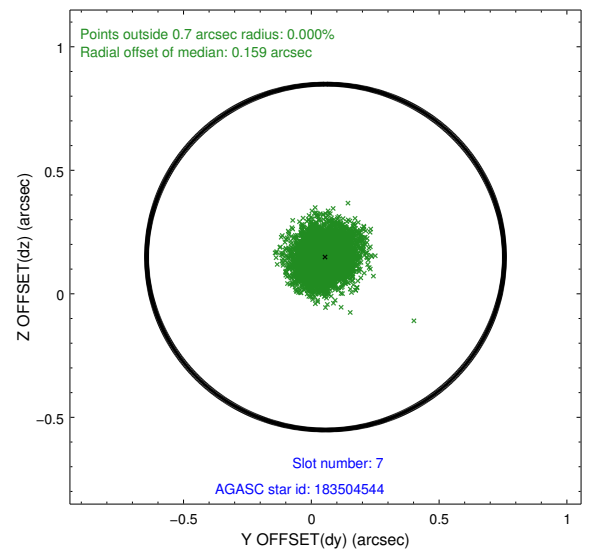
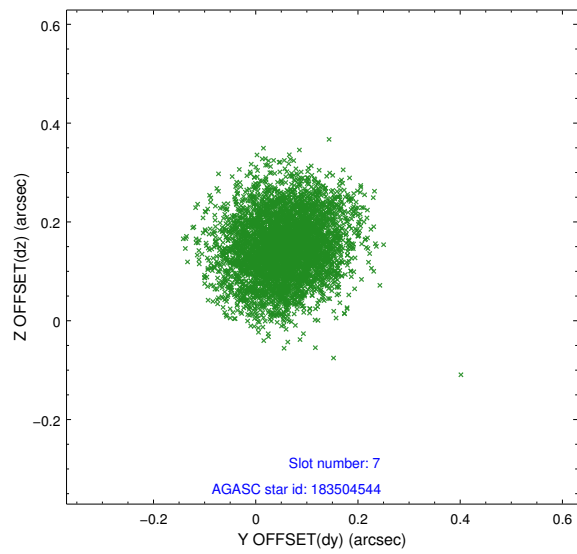
2.4.3 Slot 5



2.4.4 Slot 6

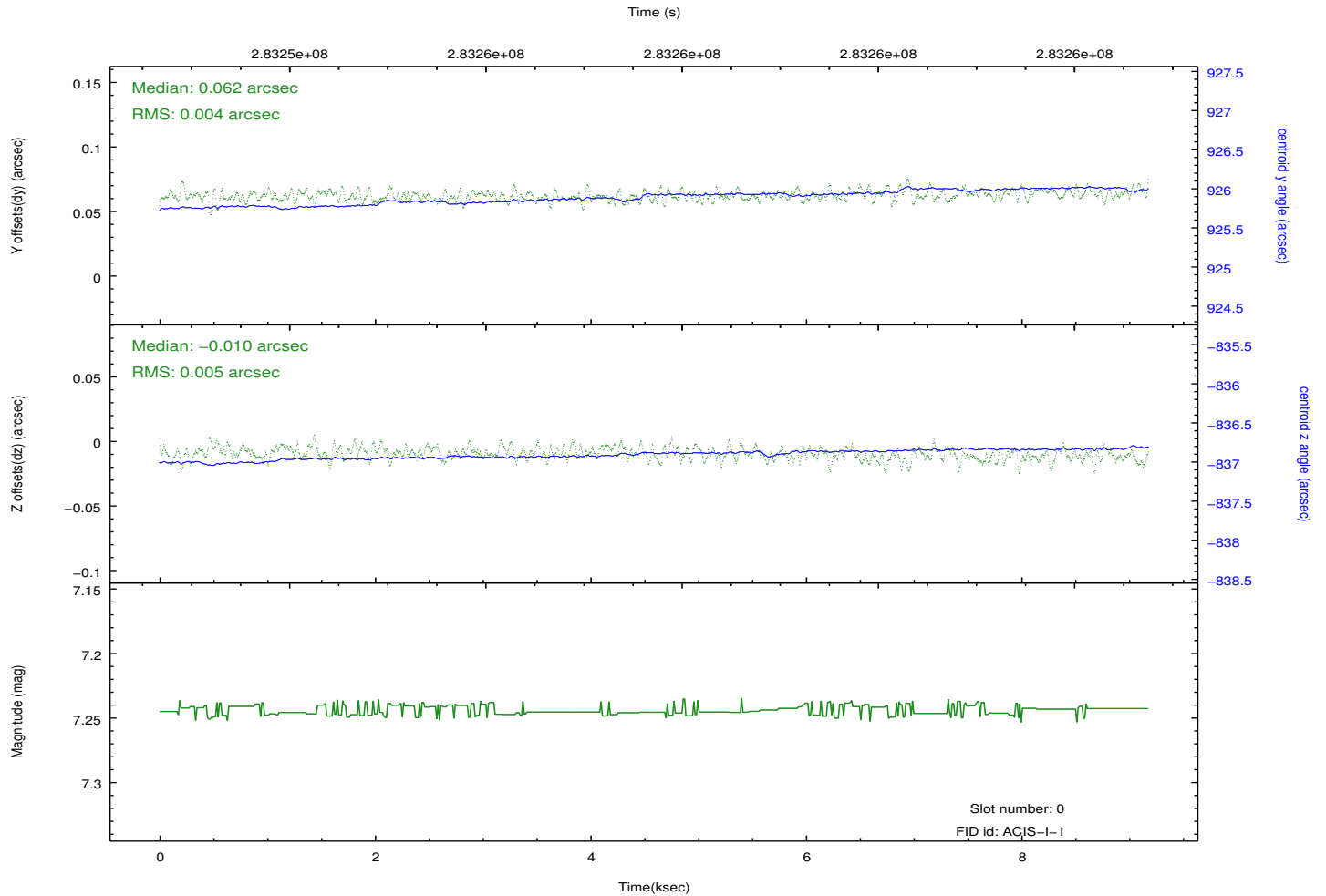
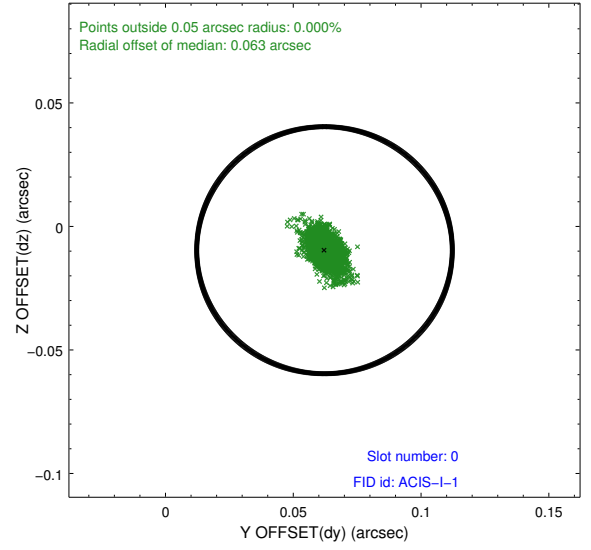
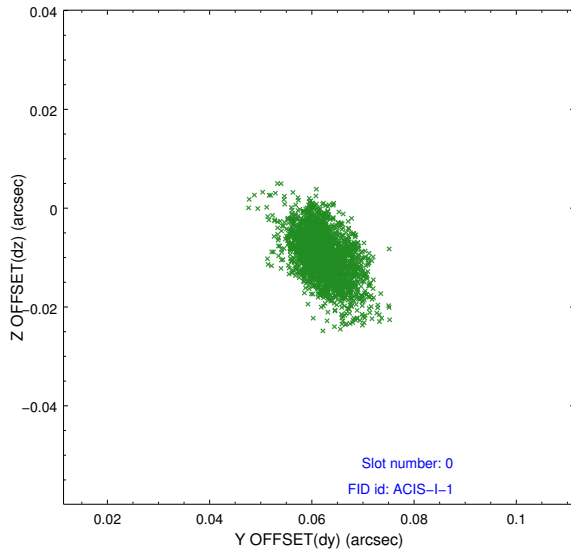


2.4.5 Slot 7

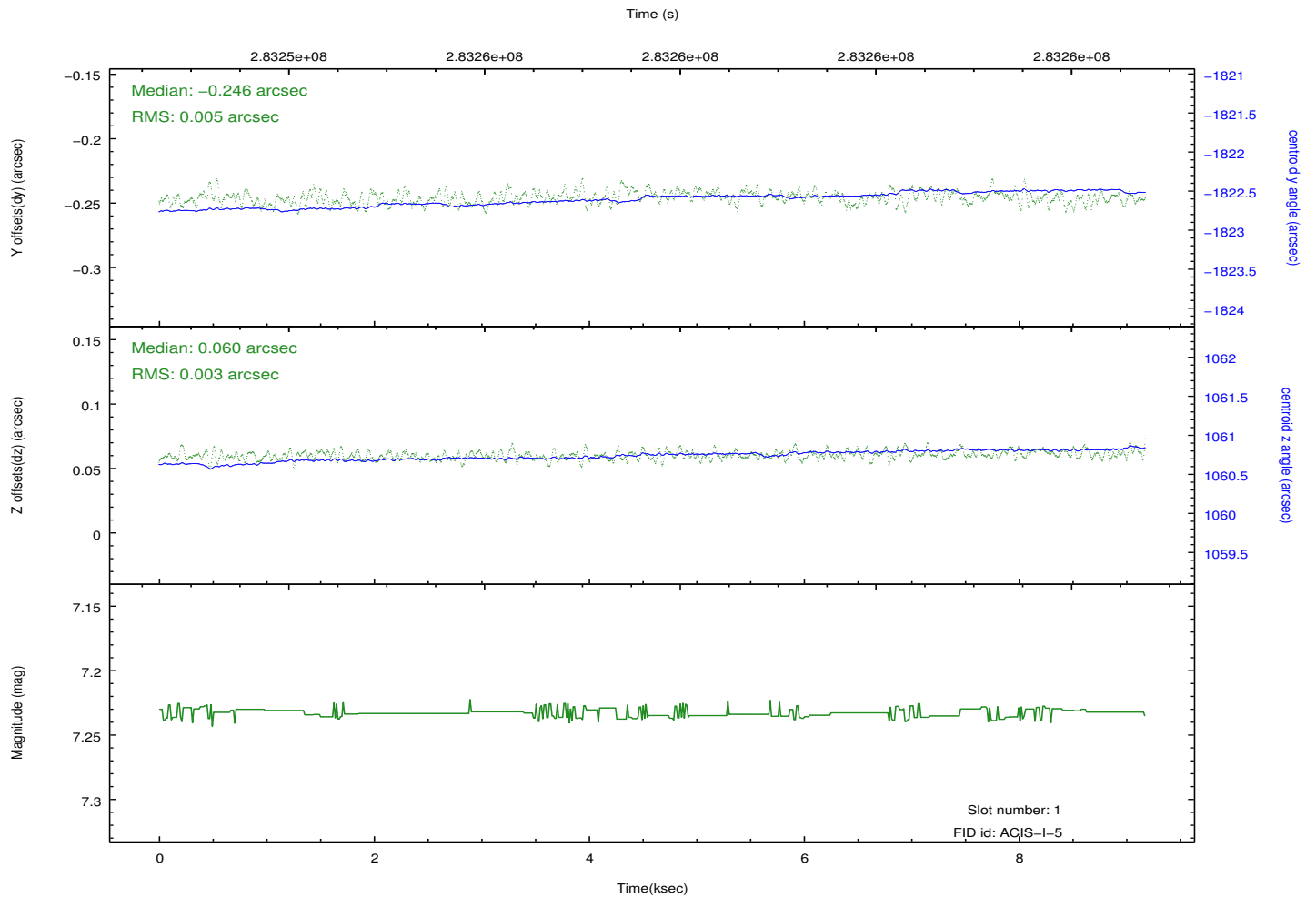
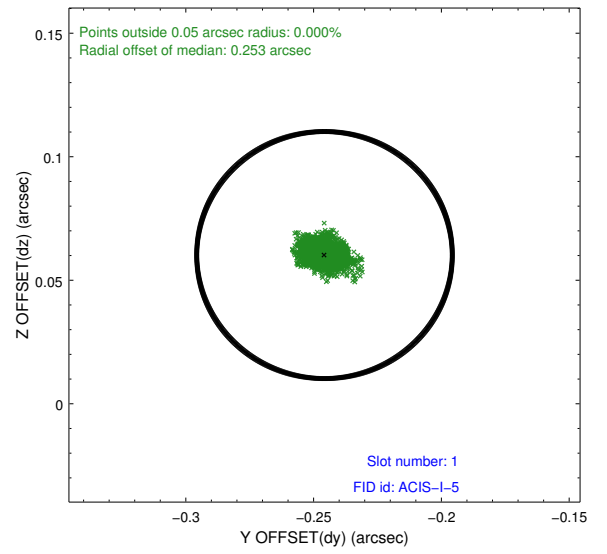
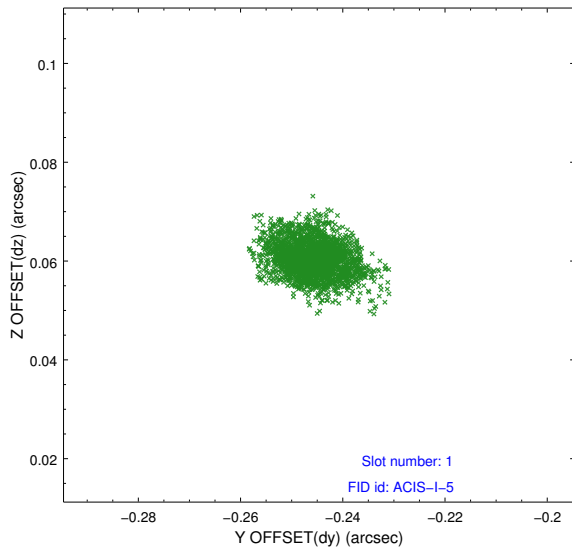


2.5 FID Slots

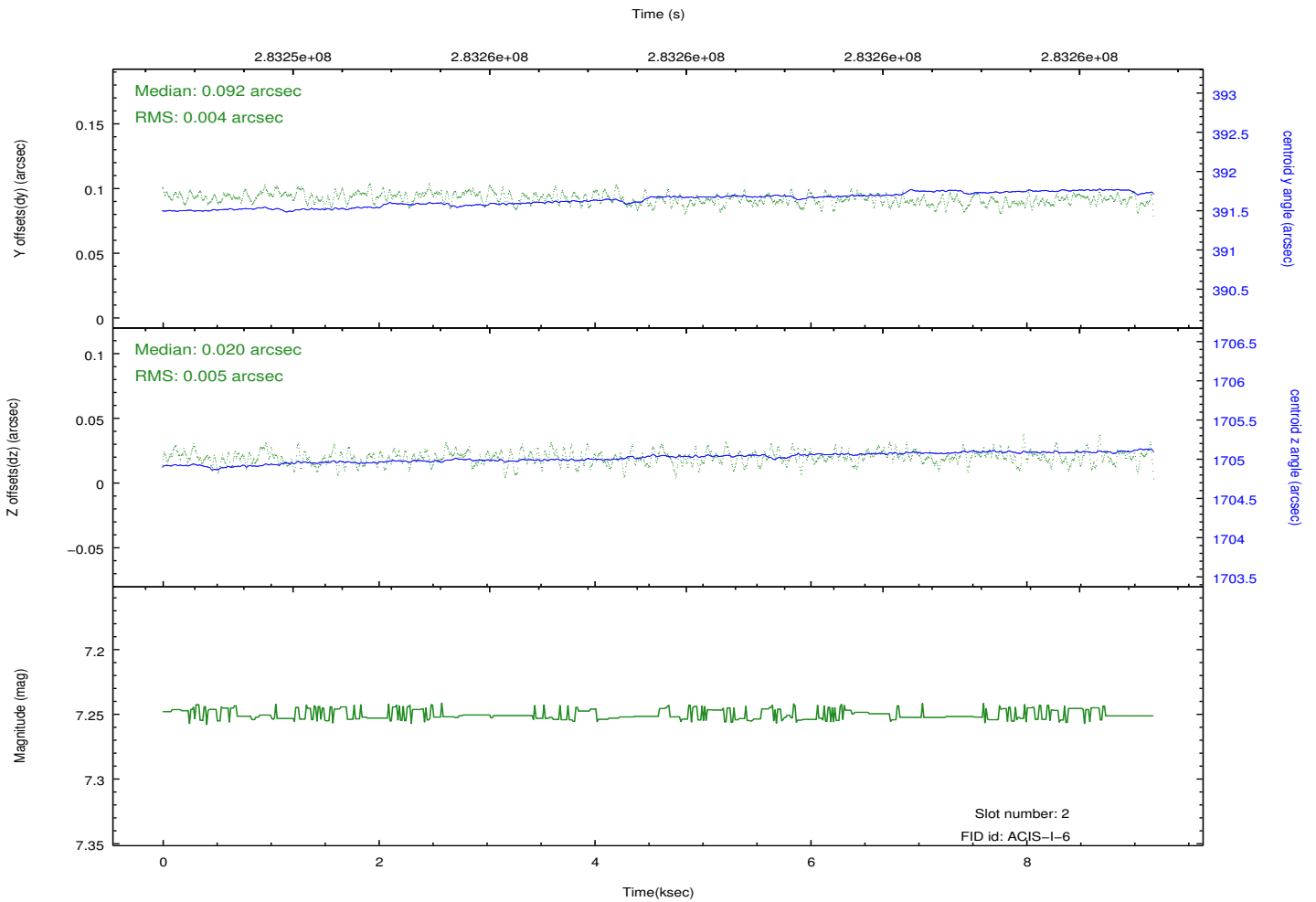
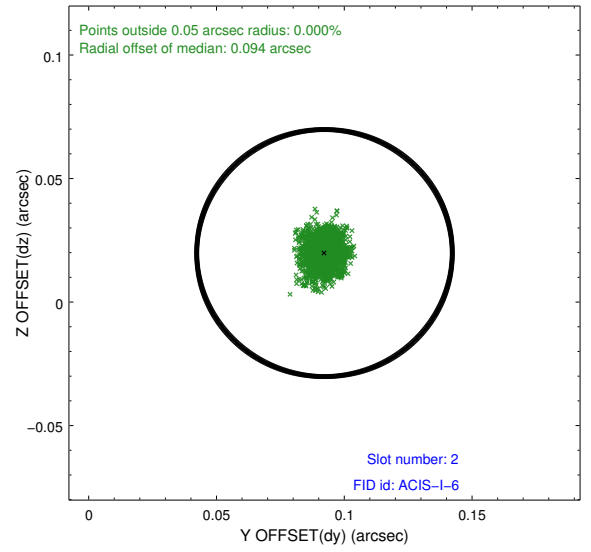
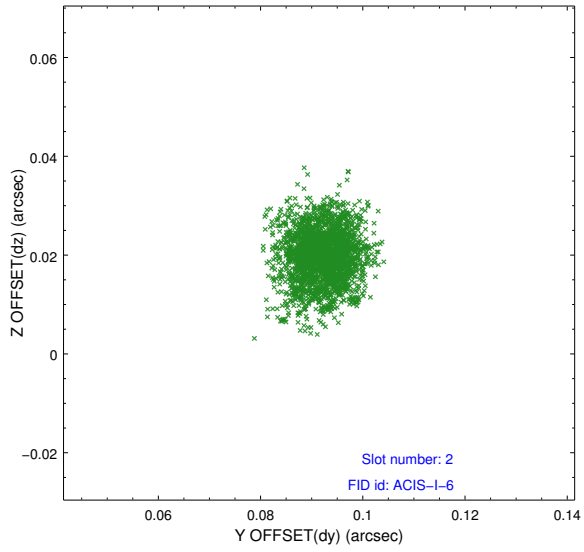
2.5.1 Slot 0



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) | 2012.04.18 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 9.16975907 |

A.2 Comments