

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7999 - L2 Version 2
Chandra X-Ray Center

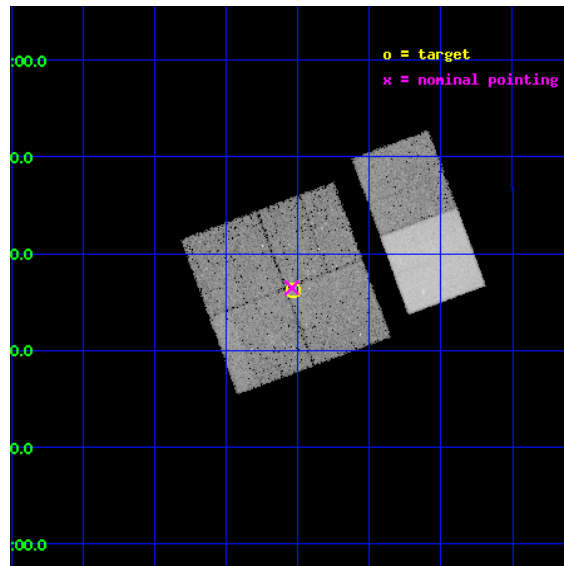
L2 Processing Date : Apr 14 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

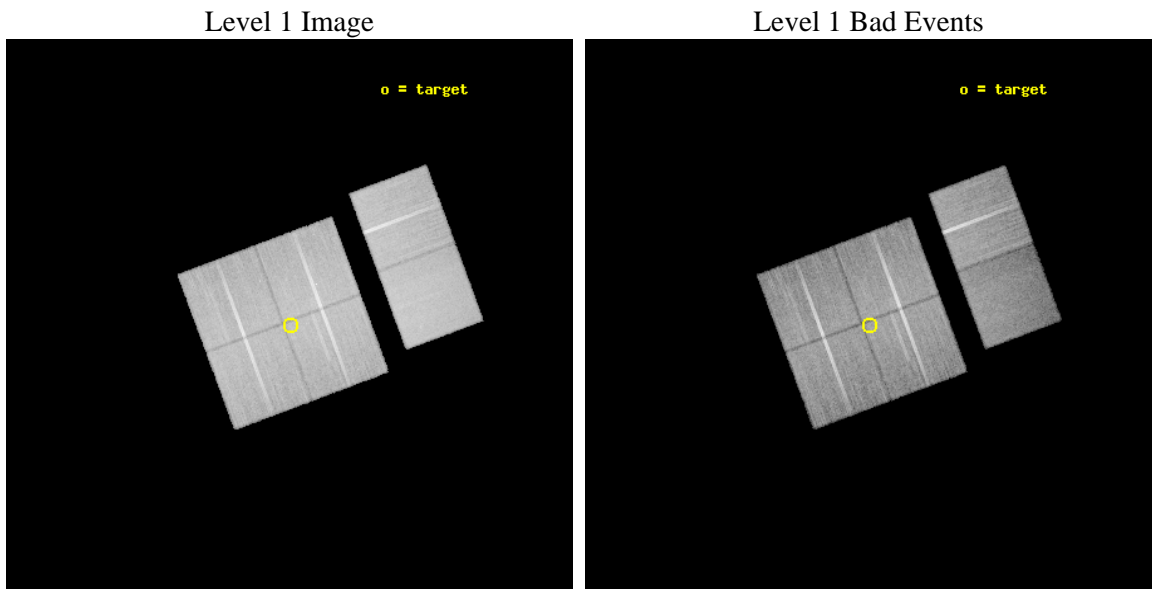
| | | |
|----------|---------------------------|---|
| seq_num | 900543 | Sequence number |
| obs_id | 7999 | Observation id |
| title | THE CHANDRA-COSMOS SURVEY | Proposal title |
| observer | Dr. Martin Elvis | Principal investigator |
| object | C-COSMOS1-6 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 149.882154 | Observer's specified target RA [deg] |
| dec_targ | 2.604606 | Observer's specified target Dec [deg] |
| ra_nom | 149.88535709065 | Nominal RA [deg] |
| dec_nom | 2.6079765654356 | Nominal Dec [deg] |
| roll_nom | 69.608548953916 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 30035.117947578 | Sum of GTIs [s] |
| livetime | 29654.795199149 | Livetime [s] |
| ontime0 | 30041.599888146 | Sum of GTIs [s] |
| ontime1 | 30041.599888146 | Sum of GTIs [s] |
| ontime2 | 30035.117947519 | Sum of GTIs [s] |
| ontime3 | 30035.117947578 | Sum of GTIs [s] |
| ontime6 | 30041.599888146 | Sum of GTIs [s] |
| ontime7 | 30041.599888146 | Sum of GTIs [s] |
| l2events | 207039 | Number of level 2 events |



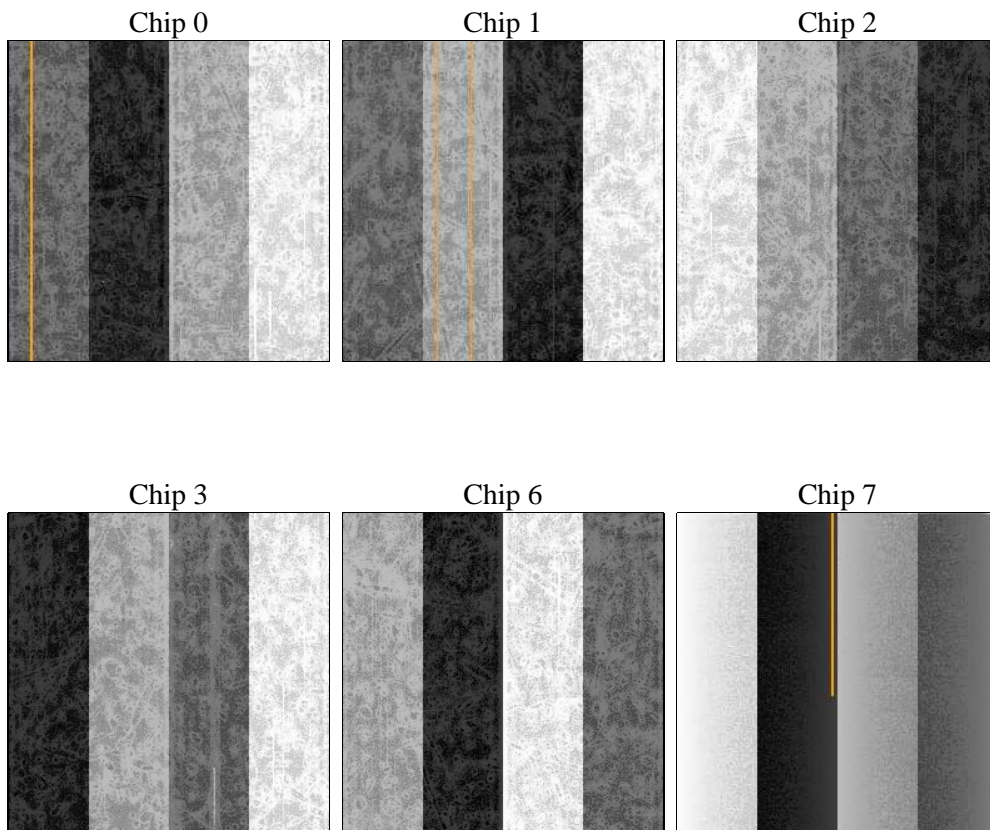
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 30000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 30035.117947578 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime0 | 30041.599888146 | Sum of GTIs [s] |
| date | 2012-04-14T05:07:27 | Date and time of file creation | ontime1 | 30041.599888146 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 30035.117947519 | Sum of GTIs [s] |
| | | | ontime3 | 30035.117947578 | Sum of GTIs [s] |
| | | | ontime6 | 30041.599888146 | Sum of GTIs [s] |
| | | | ontime7 | 30041.599888146 | Sum of GTIs [s] |
| | | | l1events | 1373989 | Number of level 1 events |

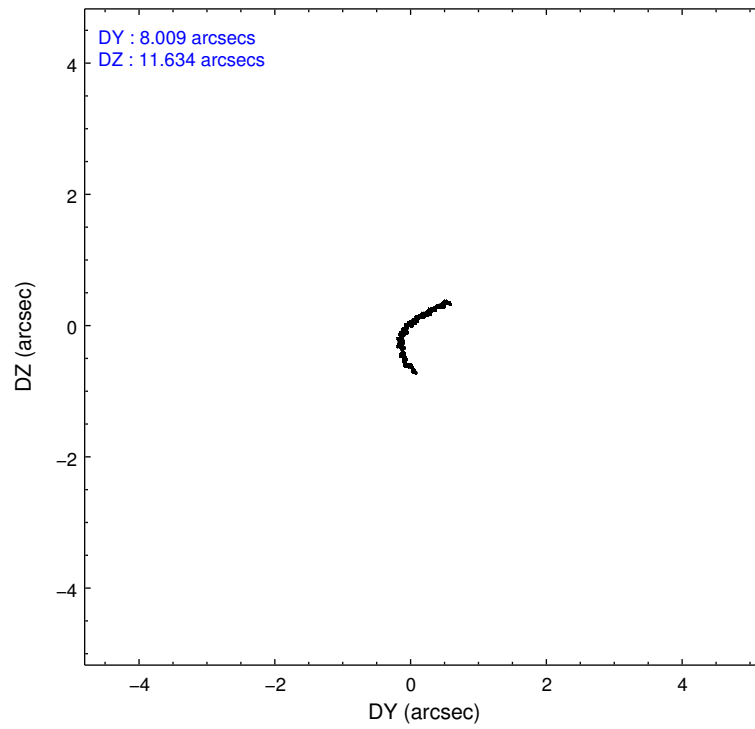
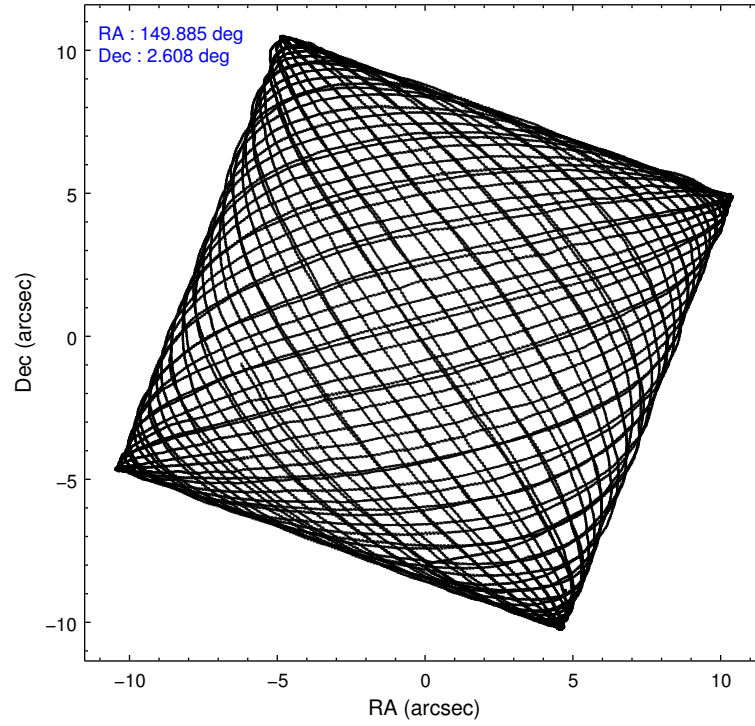
2.1.4 Events

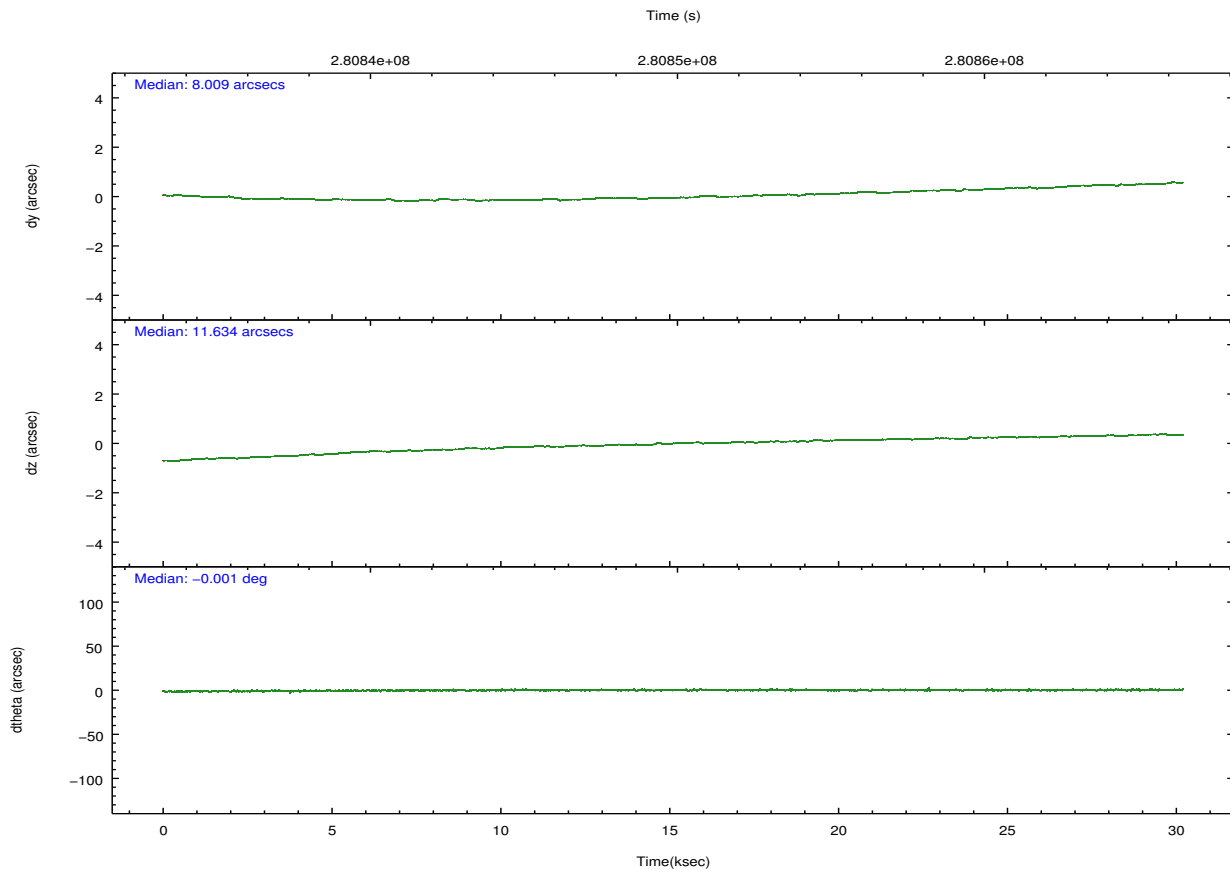
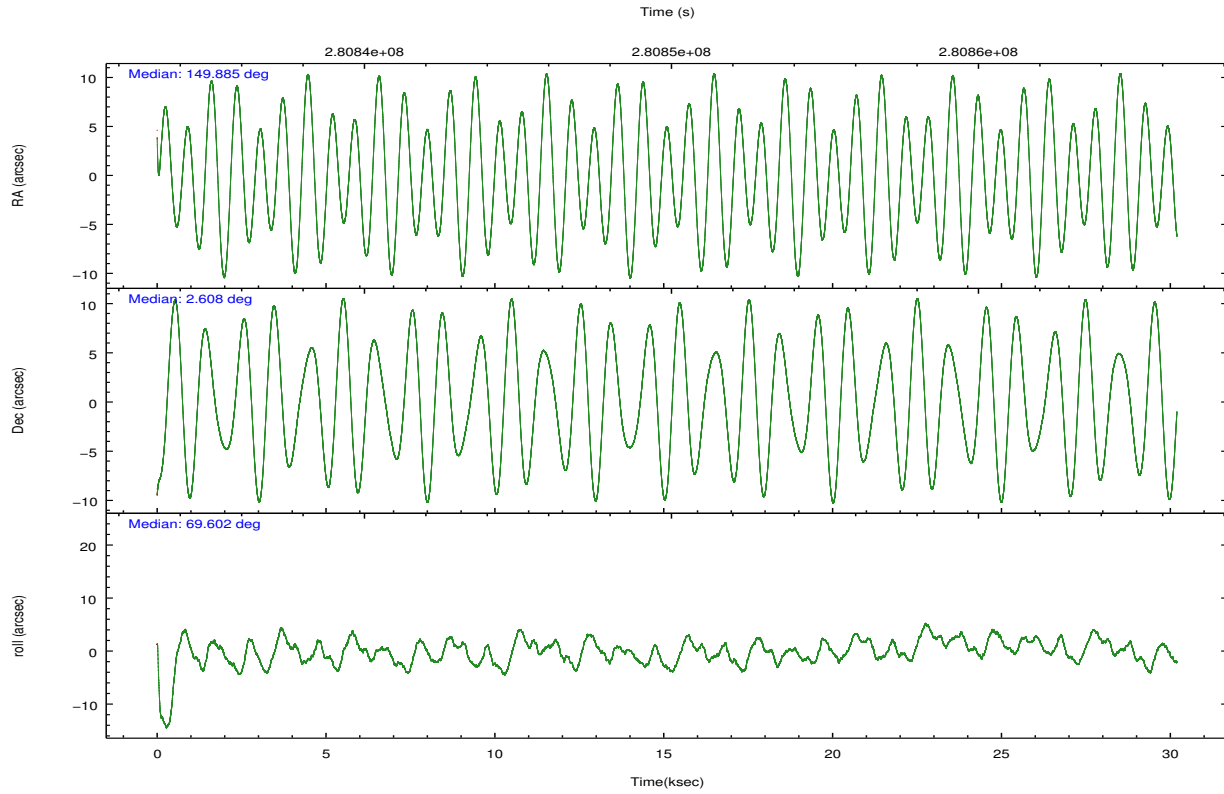
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 213832 | 210250 | 236085 | 223313 | 237868 | 252641 | grade 0 events | 7799 | 9164 | 8076 | 7467 | 8071 | 10940 |
| rejected events | 191728 | 185001 | 213780 | 202206 | 214165 | 137198 | | 3% | 4% | 3% | 3% | 3% | 4% |
| rejected % | 89% | 87% | 90% | 90% | 90% | 54% | grade 1 events | 118 | 105 | 150 | 122 | 117 | 310 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 5248 | 5554 | 5341 | 4620 | 5320 | 23160 |
| | | | | | | | | 2% | 2% | 2% | 2% | 2% | 9% |
| | | | | | | | grade 3 events | 2473 | 2826 | 2339 | 2397 | 2663 | 10680 |
| | | | | | | | | 1% | 1% | 0% | 1% | 1% | 4% |
| | | | | | | | grade 4 events | 2429 | 2740 | 2471 | 2385 | 2512 | 10703 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 4% |
| | | | | | | | grade 5 events | 7380 | 8531 | 7084 | 9044 | 9284 | 27152 |
| | | | | | | | | 3% | 4% | 3% | 4% | 3% | 10% |
| | | | | | | | grade 6 events | 4162 | 4971 | 4090 | 4244 | 5140 | 59984 |
| | | | | | | | | 1% | 2% | 1% | 1% | 2% | 23% |
| | | | | | | | grade 7 events | 184223 | 176359 | 206534 | 193034 | 204761 | 109712 |
| | | | | | | | | 86% | 83% | 87% | 86% | 86% | 43% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | CCD I0 on | Y | Y |
| Observation mode | POINTING | POINTING | CCD I1 on | Y | Y |
| [deg] Pointing RA | 149.890030 | 149.8853570906543 | CCD I2 on | Y | Y |
| [deg] Pointing Dec | 2.580994 | 2.607976565435553 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 69.399646 | 69.60854895391599 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001439871863259334 | CCD S2 on | O1 | Y |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | CCD S3 on | O2 | Y |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | CCD S4 on | N | N |
| [s] Observation start time (MET) | 280834947.184000 | 280833917.28047 | CCD S5 on | N | N |
| Observation start date | 2006-11-25T09:41:22 | 2006-11-25T09:25:17 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 280864947.184000 | 280865559.54446 | On-chip summing requested | N | N |
| Observation end date | 2006-11-25T18:01:22 | 2006-11-25T18:12:39 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect





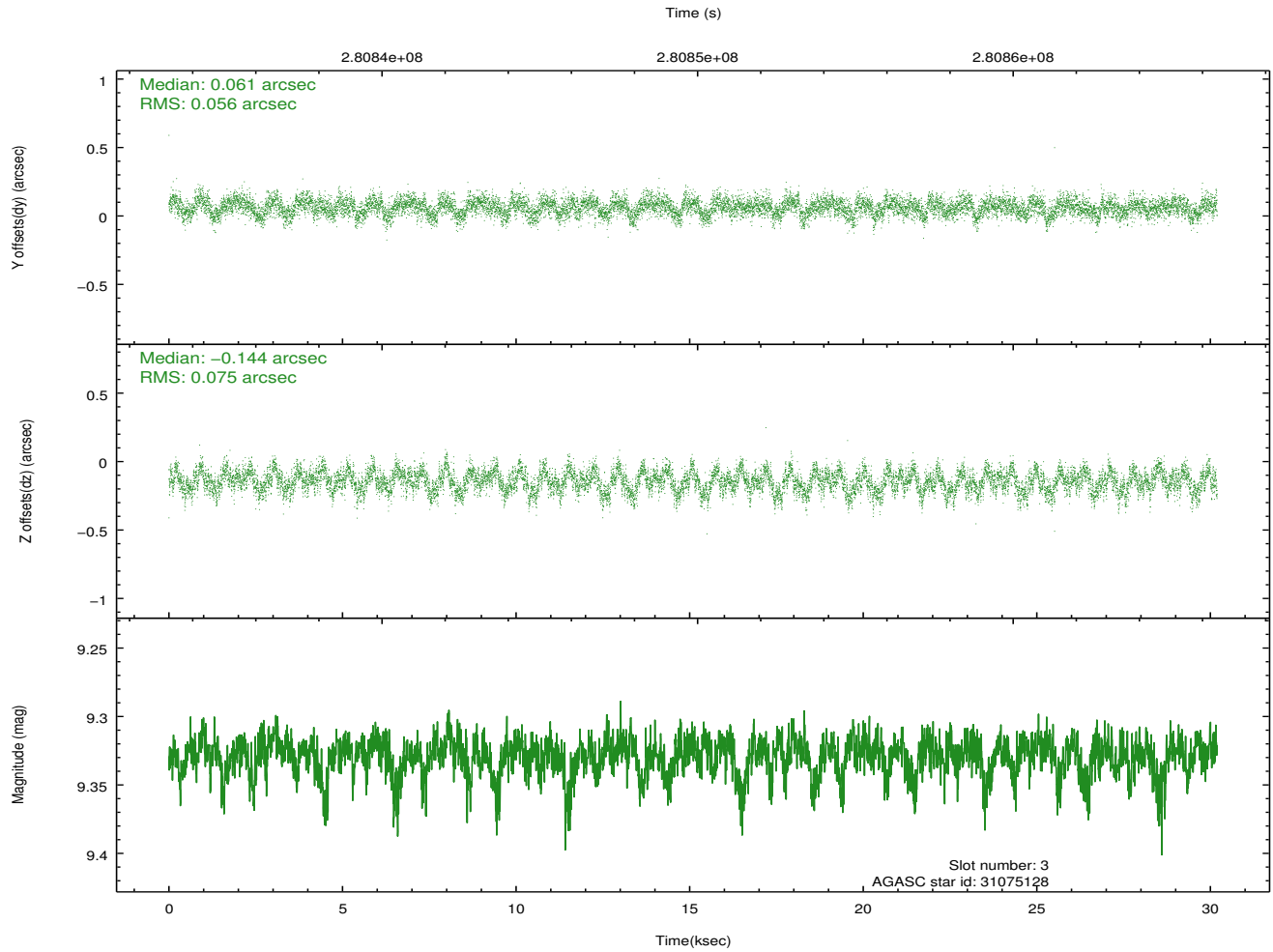
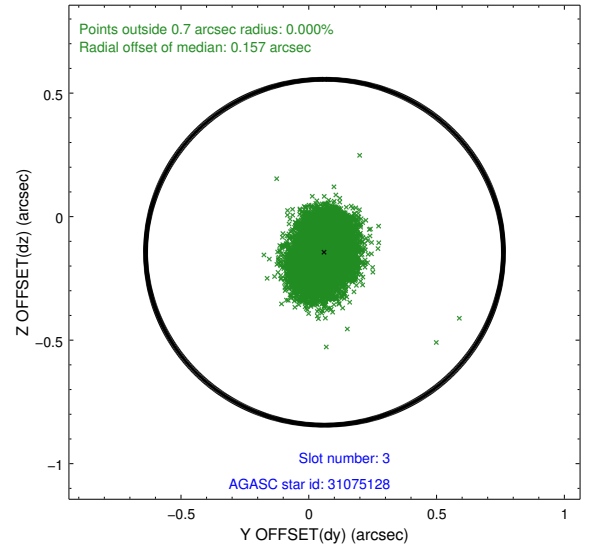
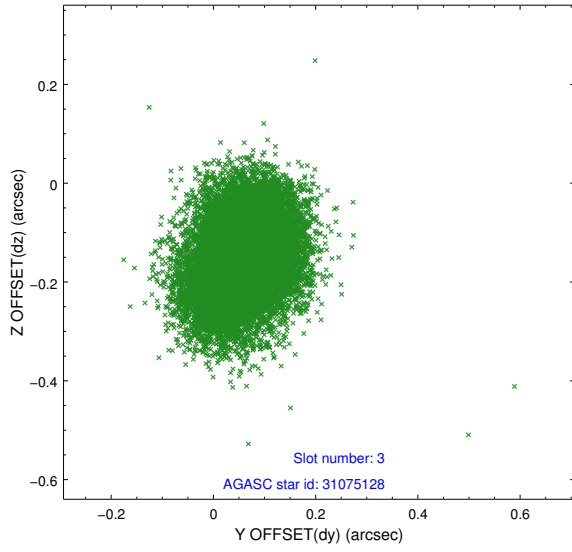
Slot Statistics

| 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 | 7365 | 0.060 | -0.047 | 0.009 | 0.015 | 0.000000 | 0.000000 | 931.61 | -835.14 |
| 1 | FID | ACIS-I-5 | 7.23 | 7364 | -0.197 | 0.063 | 0.012 | 0.019 | 0.000000 | 0.000000 | -1816.68 | 1062.47 |
| 2 | FID | ACIS-I-6 | 7.24 | 7364 | 0.046 | 0.055 | 0.011 | 0.017 | 0.000000 | 0.000000 | 397.11 | 1707.01 |
| 3 | GUIDE | 31075128 | 9.33 | 14712 | 0.061 | -0.144 | 0.100 | 0.161 | 149.584516 | 2.364347 | -1116.16 | 754.27 |
| 4 | GUIDE | 31076560 | 9.66 | 14712 | 0.142 | 0.025 | 0.123 | 0.198 | 149.884782 | 2.009277 | -1932.84 | -706.61 |
| 5 | GUIDE | 31463496 | 9.46 | 14714 | -0.094 | -0.178 | 0.099 | 0.156 | 149.845020 | 2.964001 | 1233.89 | 636.80 |
| 6 | GUIDE | 31983336 | 8.60 | 14722 | 0.139 | 0.250 | 0.098 | 0.152 | 150.429924 | 2.291234 | -291.83 | -2184.25 |
| 7 | GUIDE | 32375384 | 9.95 | 14715 | -0.252 | 0.056 | 0.198 | 0.317 | 150.238117 | 2.622063 | 579.29 | -1119.15 |

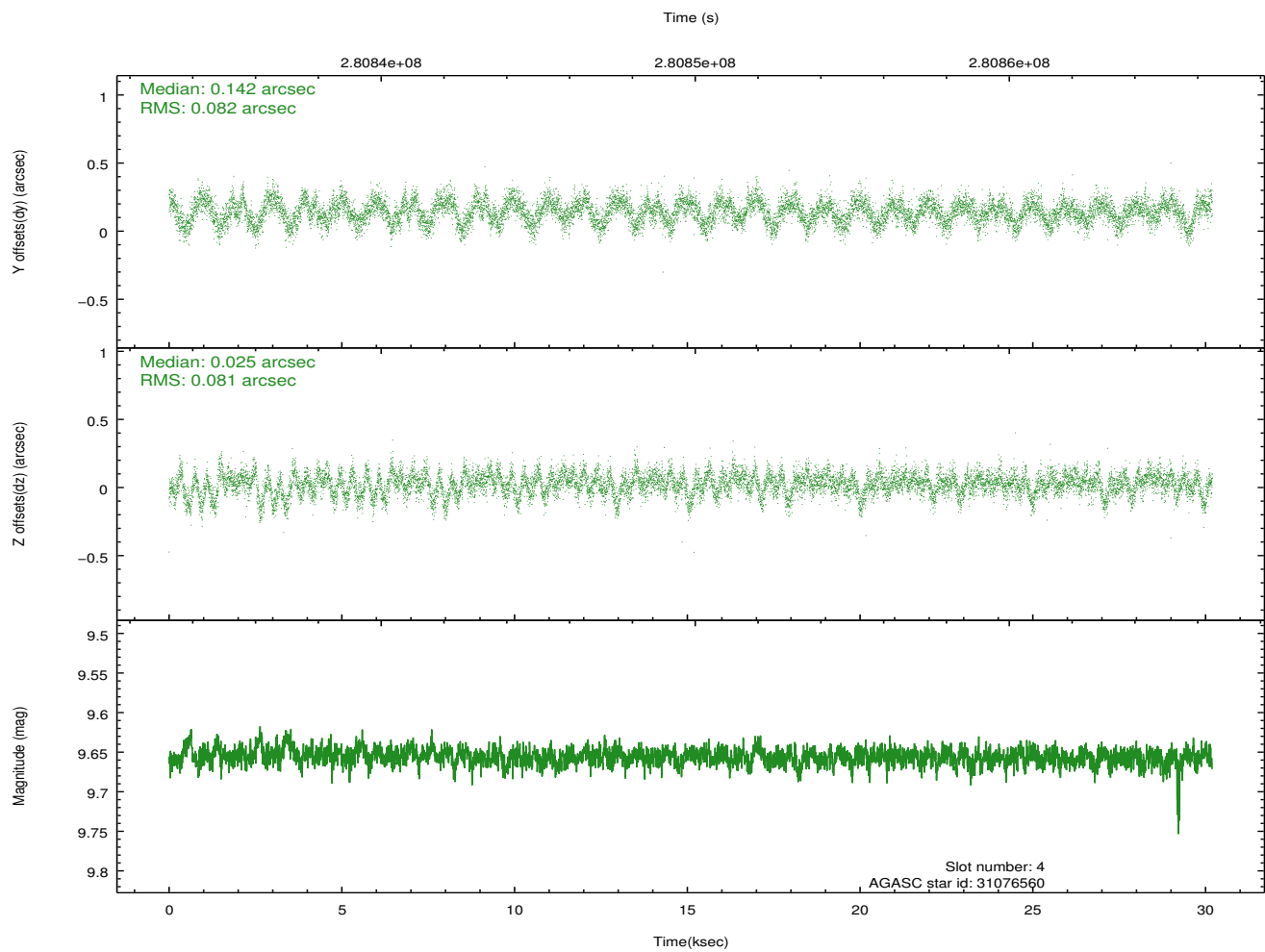
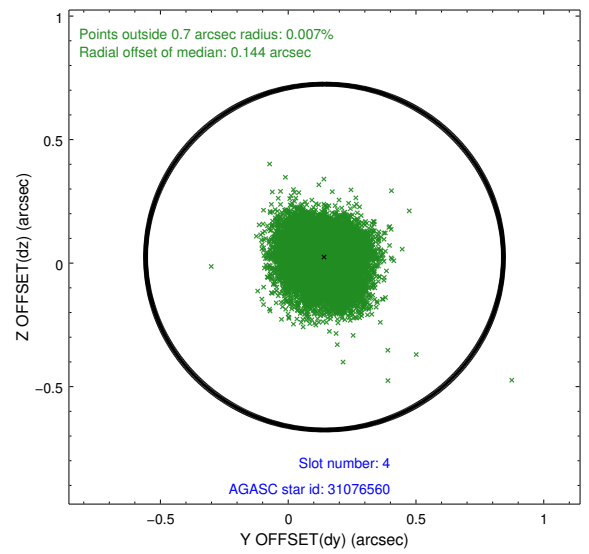
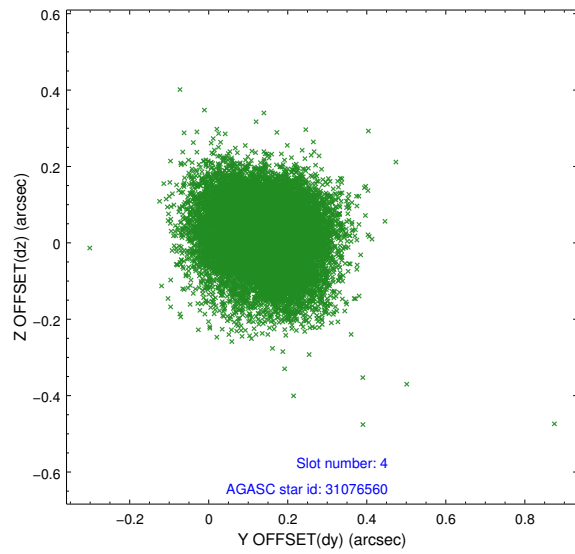
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2.4 Star Slots

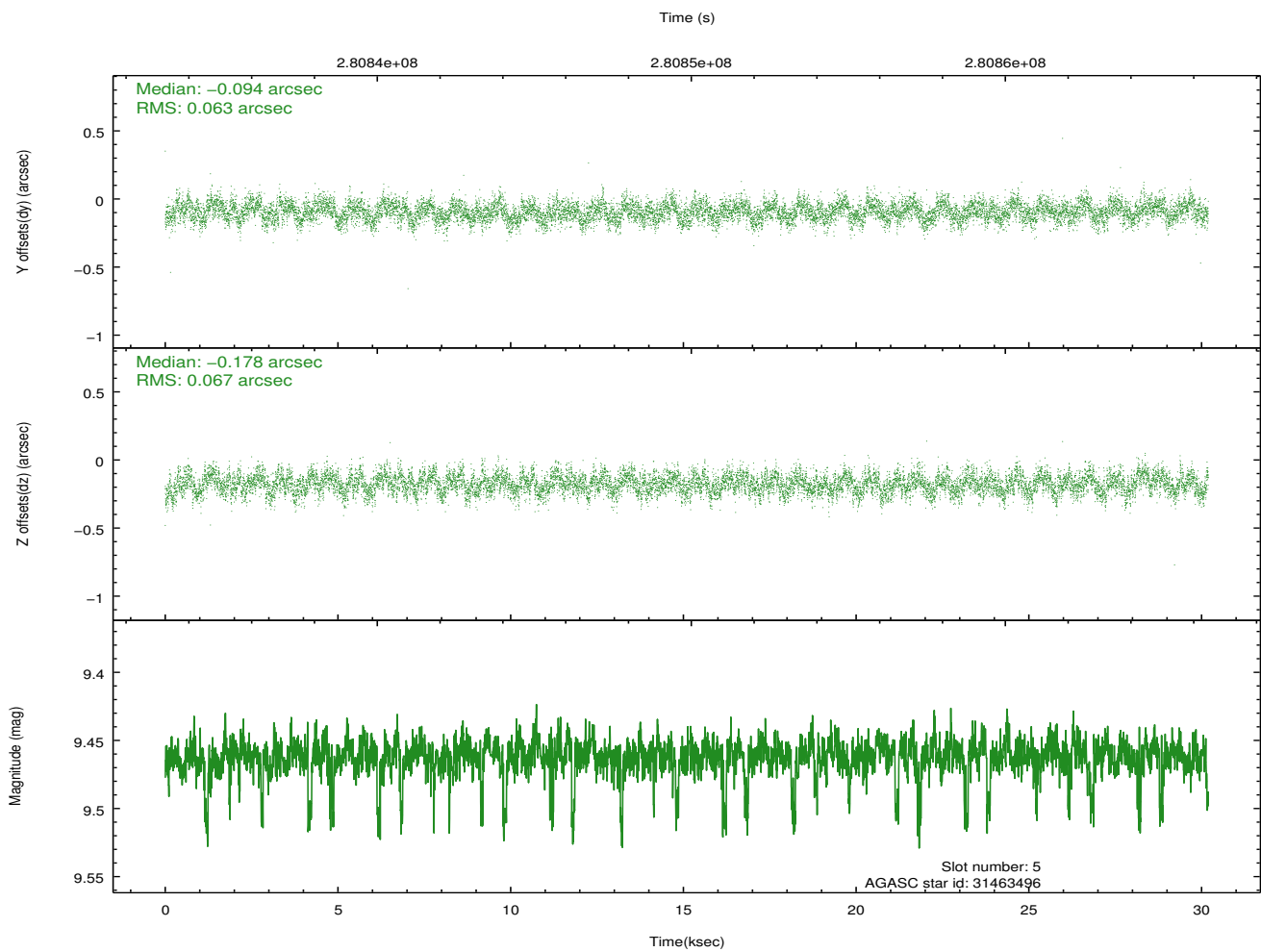
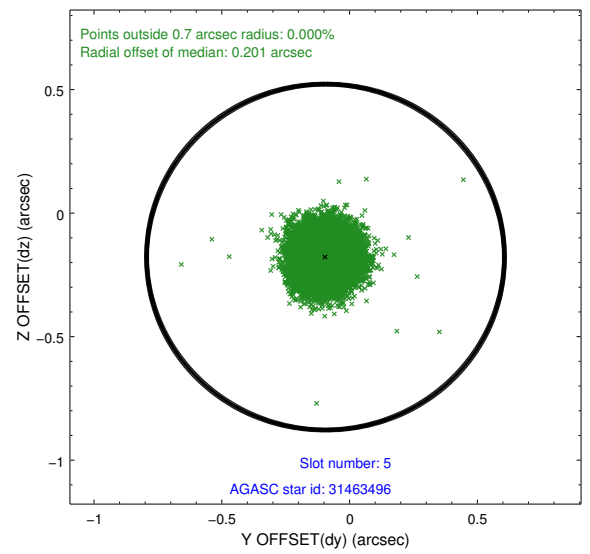
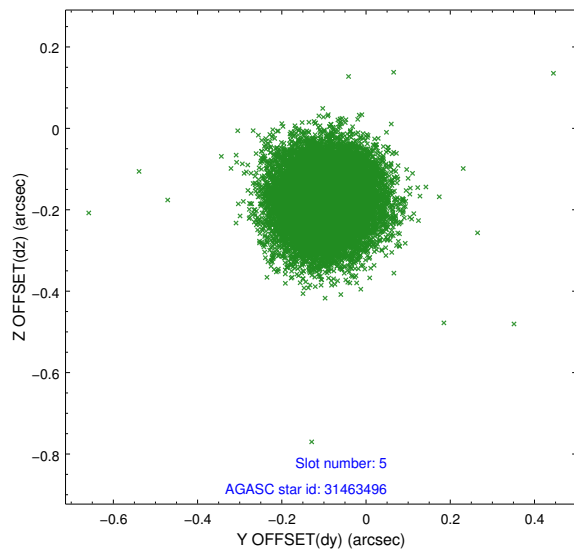
2.4.1 Slot 3



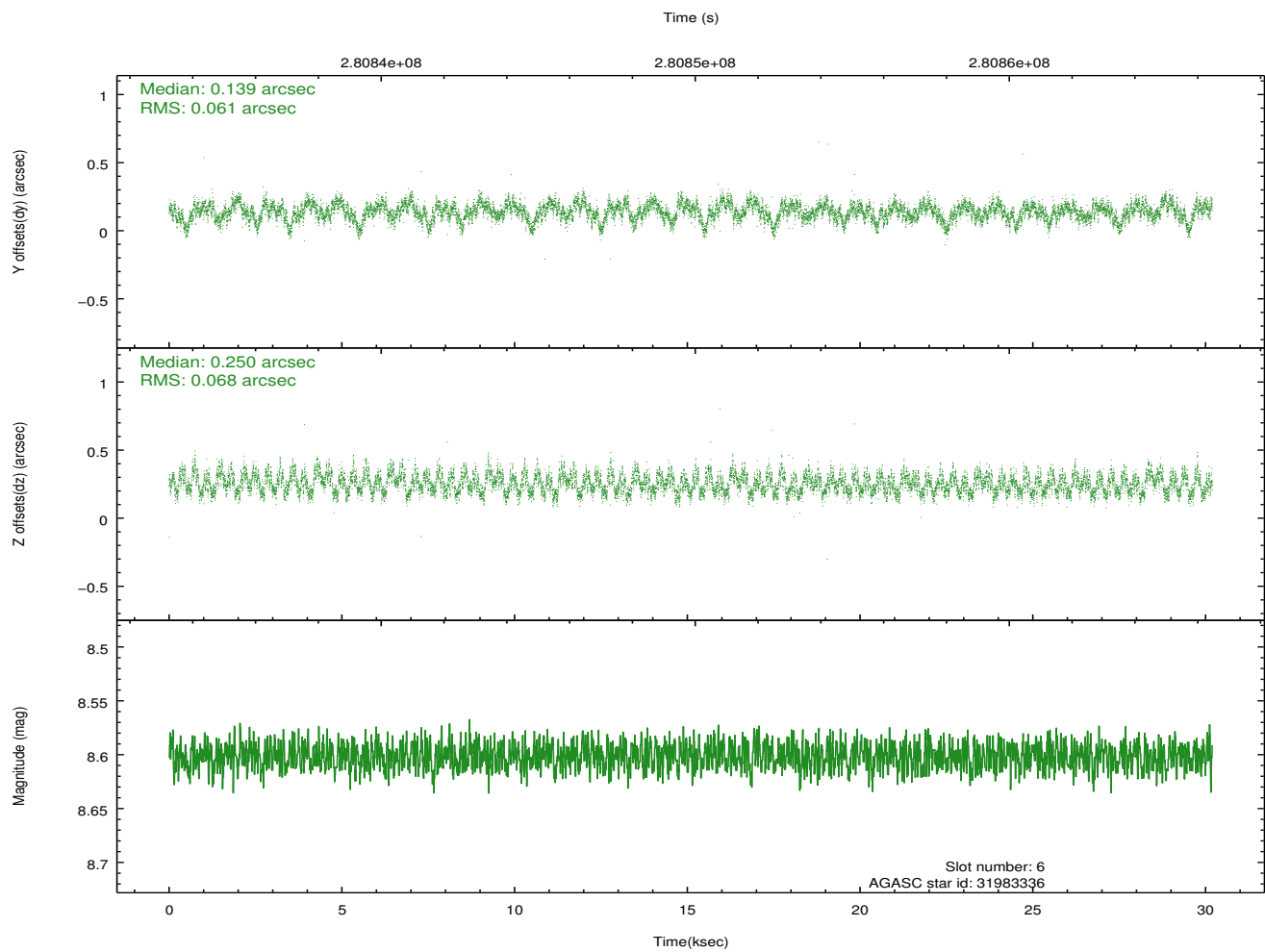
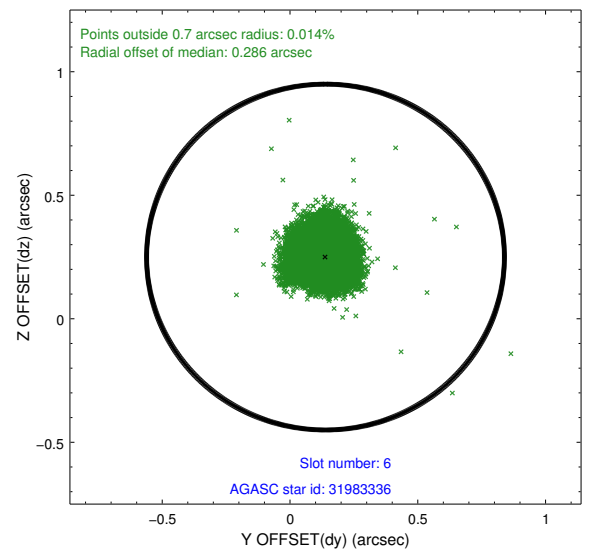
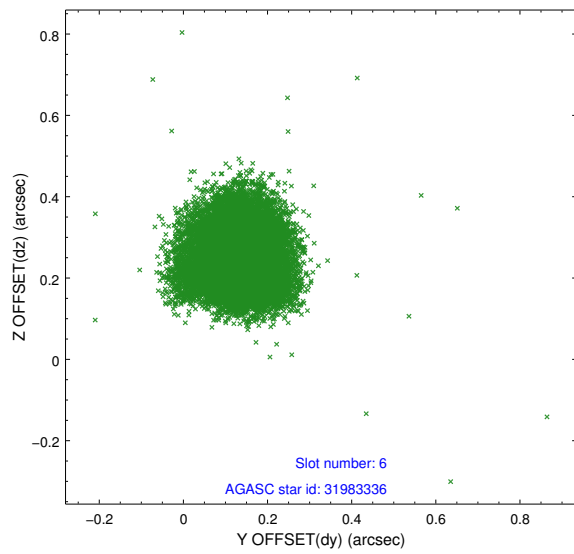
2.4.2 Slot 4



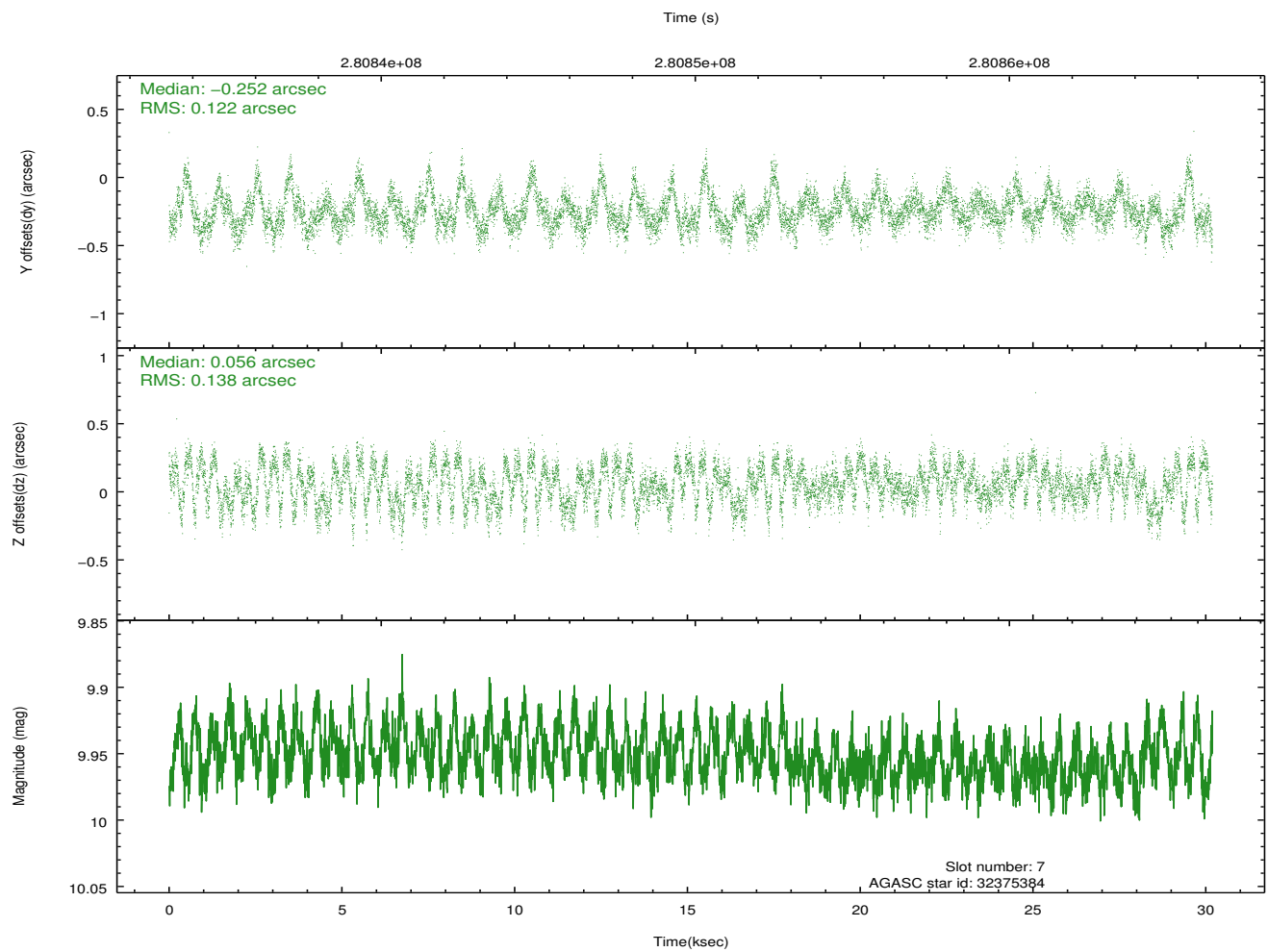
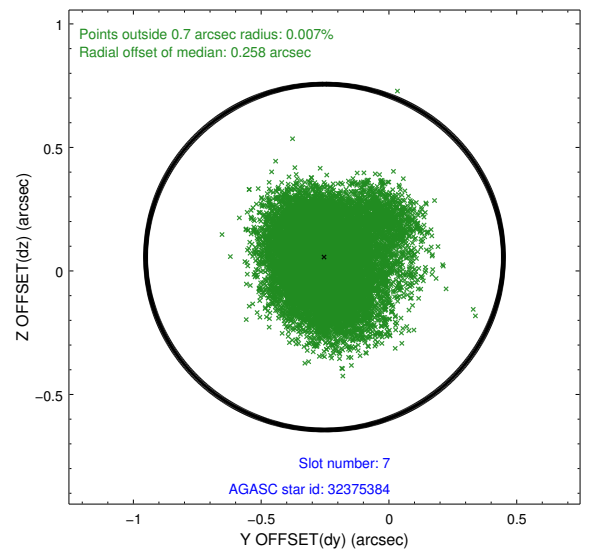
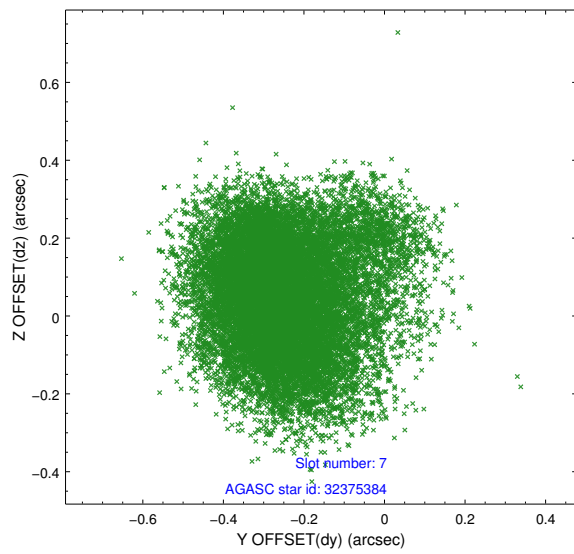
2.4.3 Slot 5



2.4.4 Slot 6

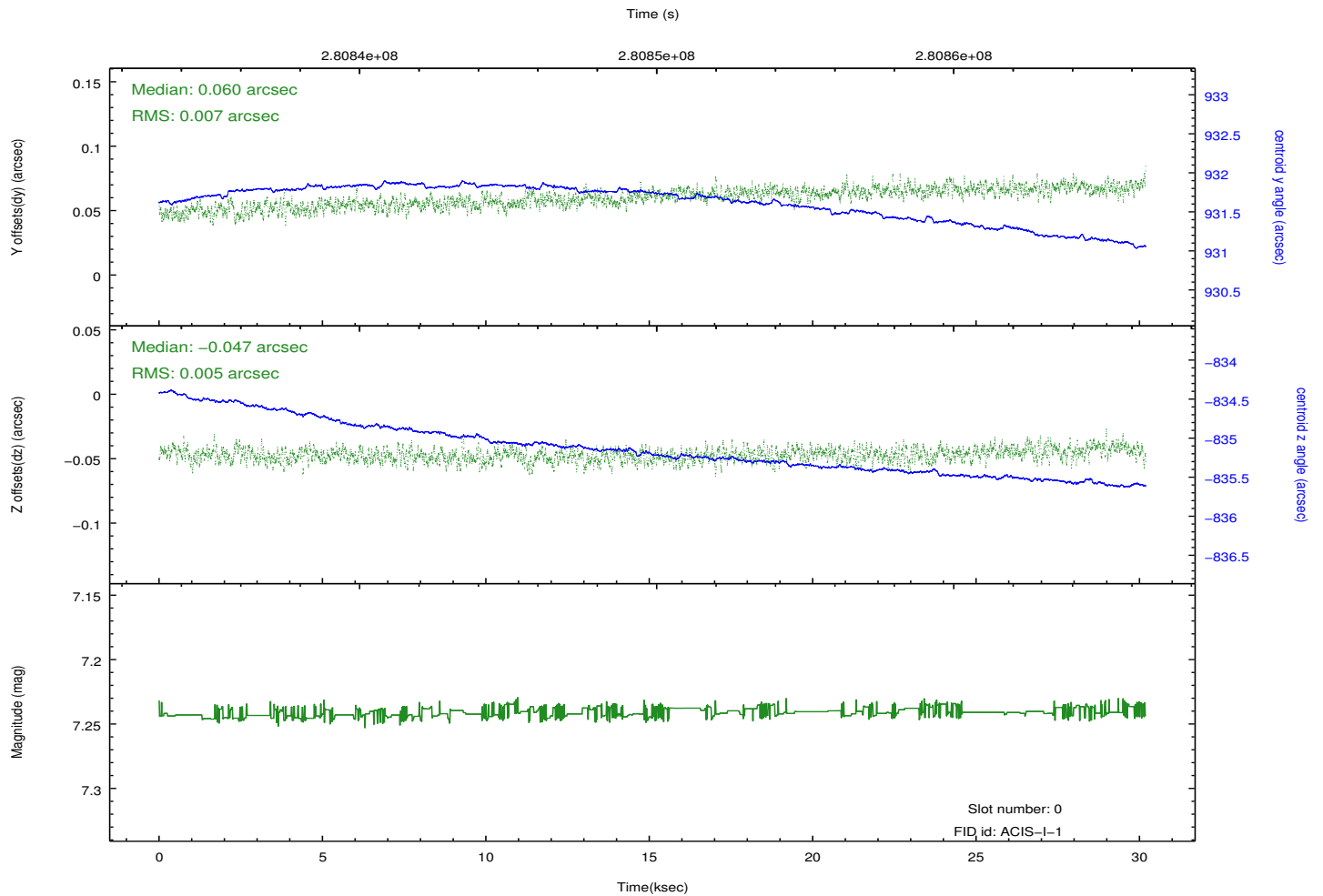
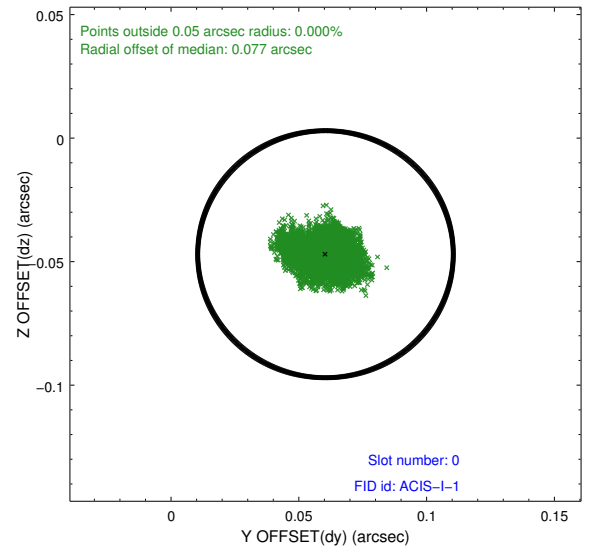
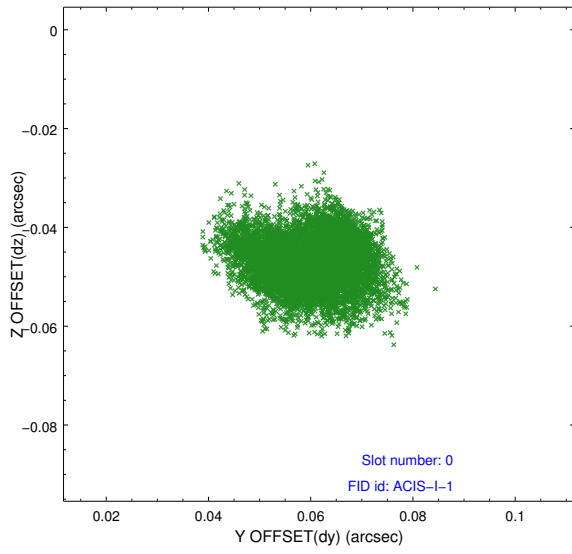


2.4.5 Slot 7

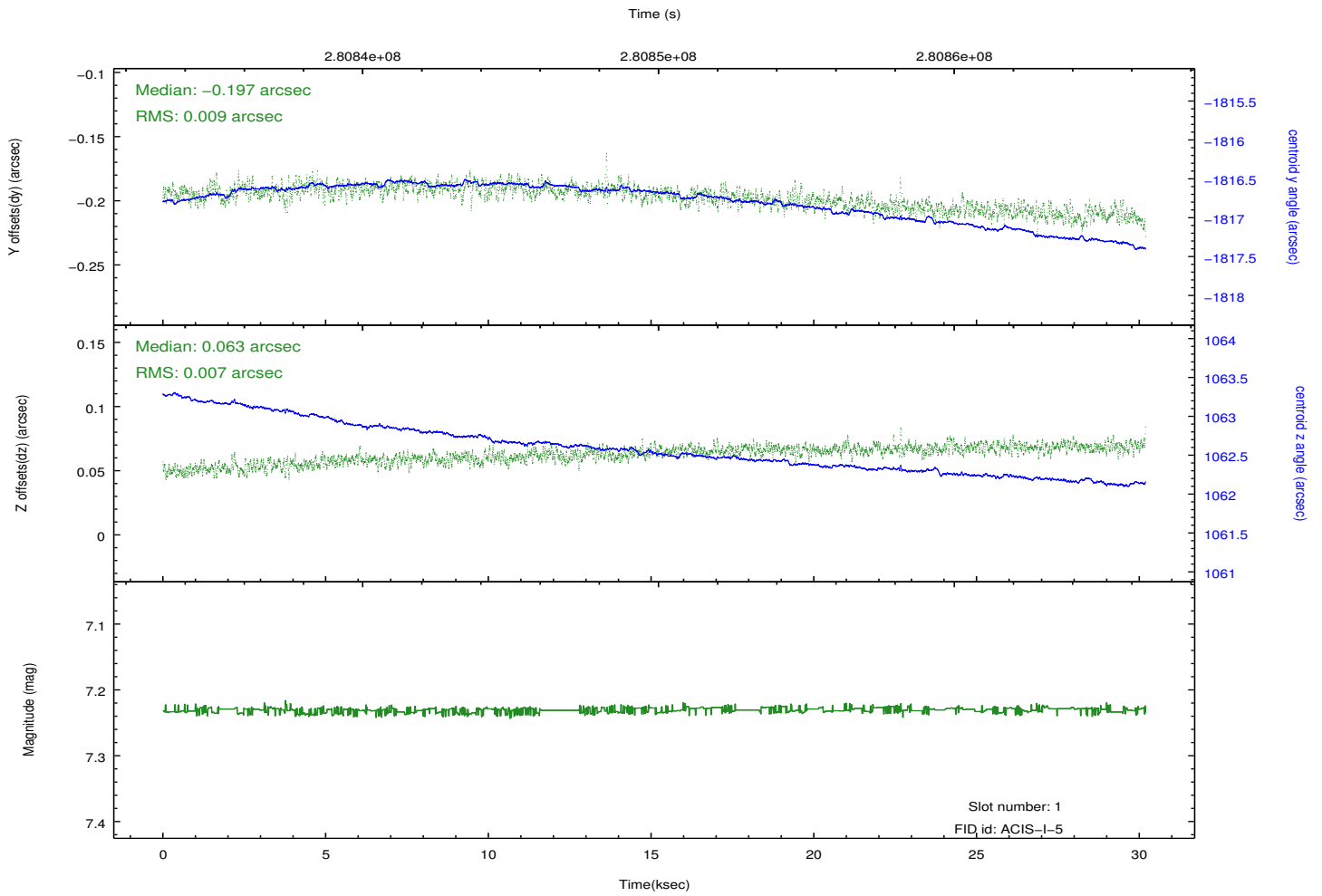
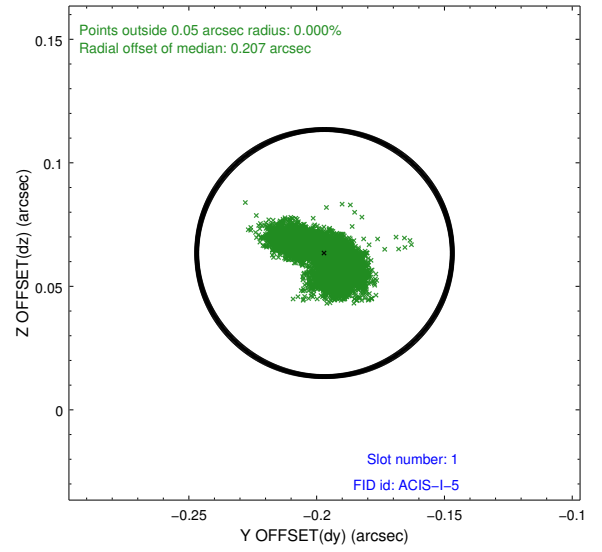
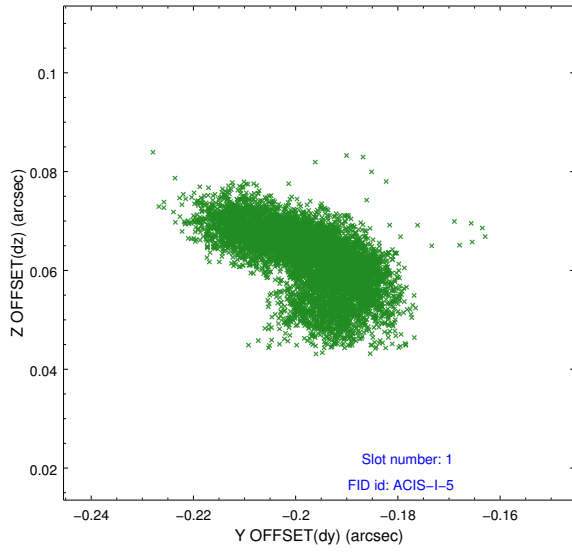


2.5 FID Slots

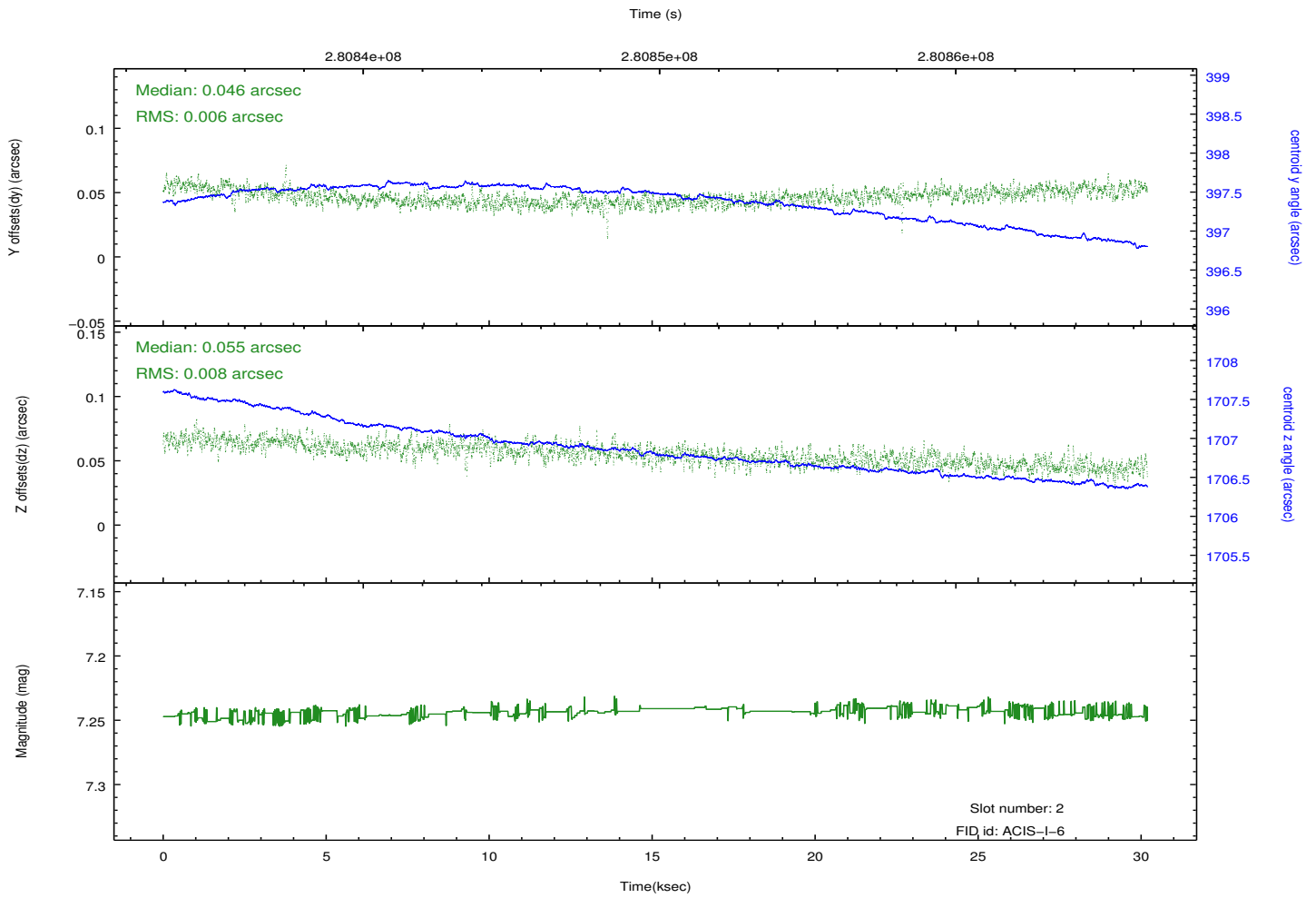
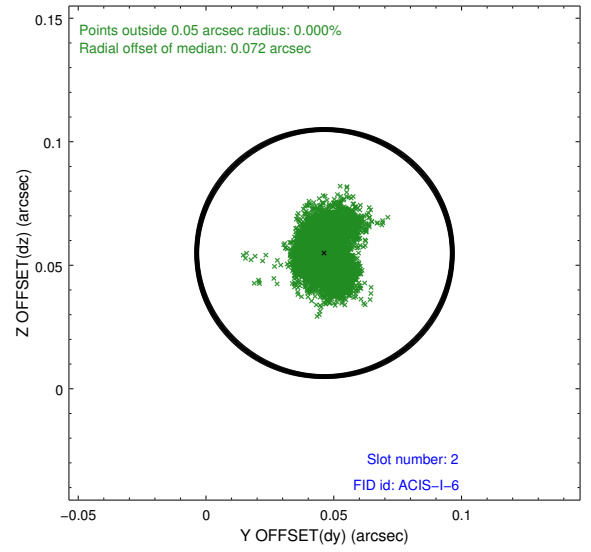
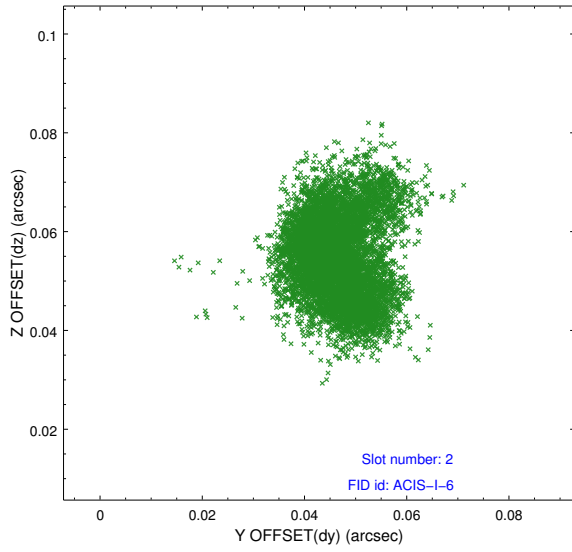
2.5.1 Slot 0



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) | 2012.04.17 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 30.0351179 |

A.2 Comments