

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 611 - L2 Version 4
Chandra X-Ray Center

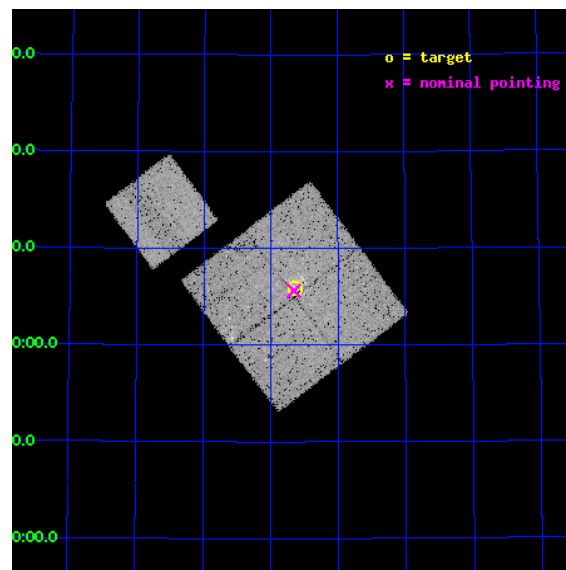
L2 Processing Date : Aug 24 2012

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

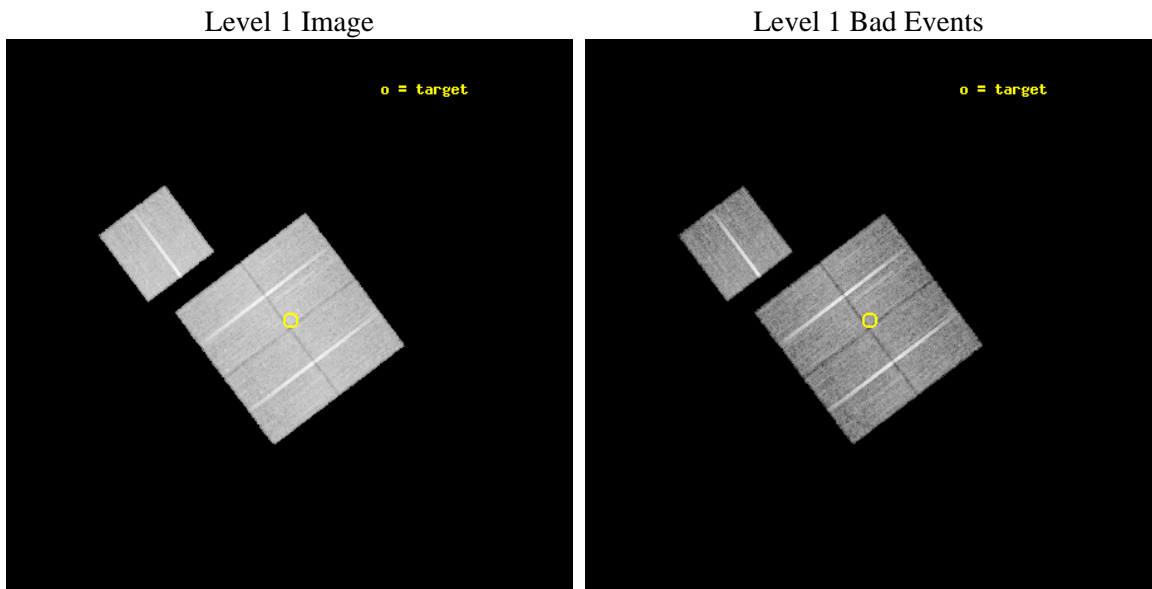
| | | |
|----------|---|---|
| seq_num | 200036 | Sequence number |
| obs_id | 611 | Observation id |
| title | EXTENDED X-RAY EMISSION FROM MASSIVE STAR FORMATION REGIONS | Propos |
| observer | PROFESSOR EDWARD CHURCHWELL | Principal investigator |
| object | W3B | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 36.40875 | Observer's specified target RA [deg] |
| dec_targ | 62.097917 | Observer's specified target Dec [deg] |
| ra_nom | 36.41415685104 | Nominal RA [deg] |
| dec_nom | 62.093544364352 | Nominal Dec [deg] |
| roll_nom | 323.02342119328 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 18702.632873446 | Sum of GTIs [s] |
| livetime | 18465.808874629 | Livetime [s] |
| ontime0 | 18706.038043514 | Sum of GTIs [s] |
| ontime1 | 18705.997003511 | Sum of GTIs [s] |
| ontime2 | 18705.955963507 | Sum of GTIs [s] |
| ontime3 | 18702.632873446 | Sum of GTIs [s] |
| ontime6 | 18705.914923519 | Sum of GTIs [s] |
| l2events | 79623 | Number of level 2 events |



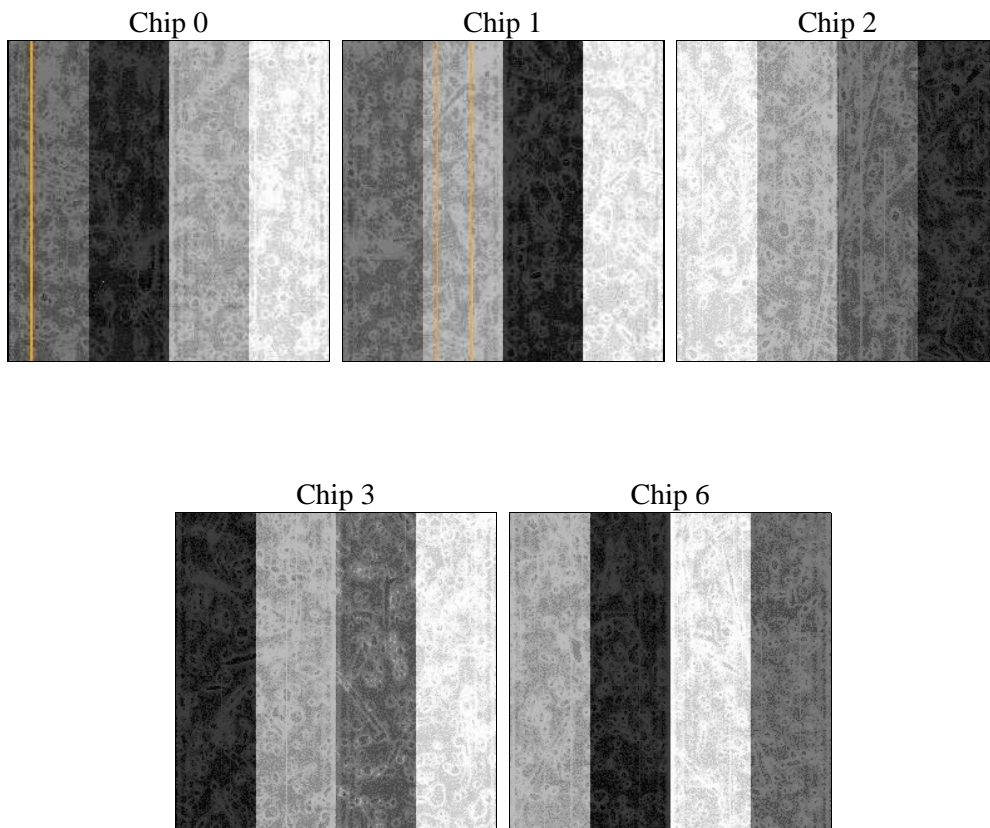
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 18500.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 18702.632873446 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime0 | 18706.038043514 | Sum of GTIs [s] |
| date | 2012-08-24T15:21:10 | Date and time of file creation | ontime1 | 18705.997003511 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime2 | 18705.955963507 | Sum of GTIs [s] |
| | | | ontime3 | 18702.632873446 | Sum of GTIs [s] |
| | | | ontime6 | 18705.914923519 | Sum of GTIs [s] |
| | | | l1events | 692659 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 134125 | 130714 | 144412 | 140895 | 142513 |
| rejected events | 115447 | 111968 | 125783 | 122039 | 124171 |
| rejected % | 86% | 85% | 87% | 86% | 87% |

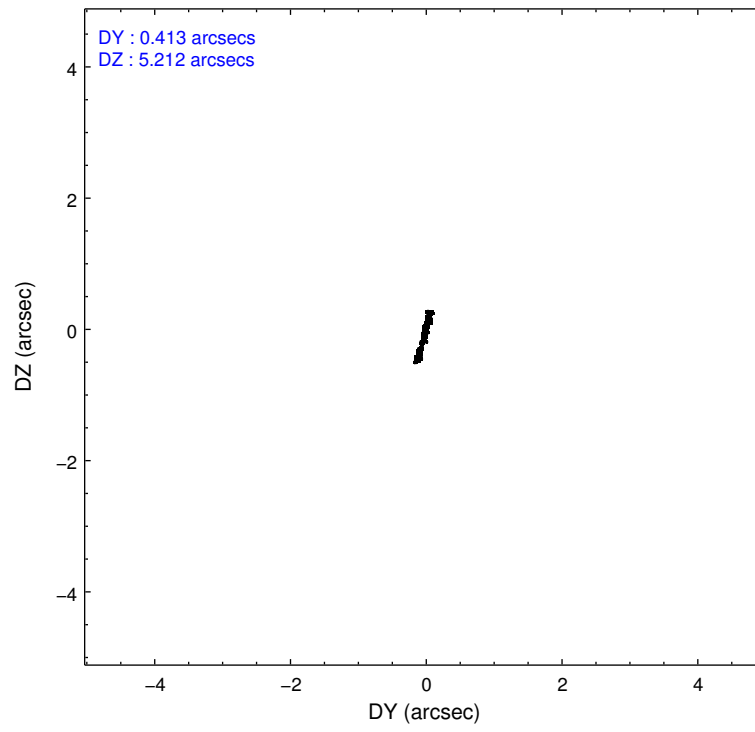
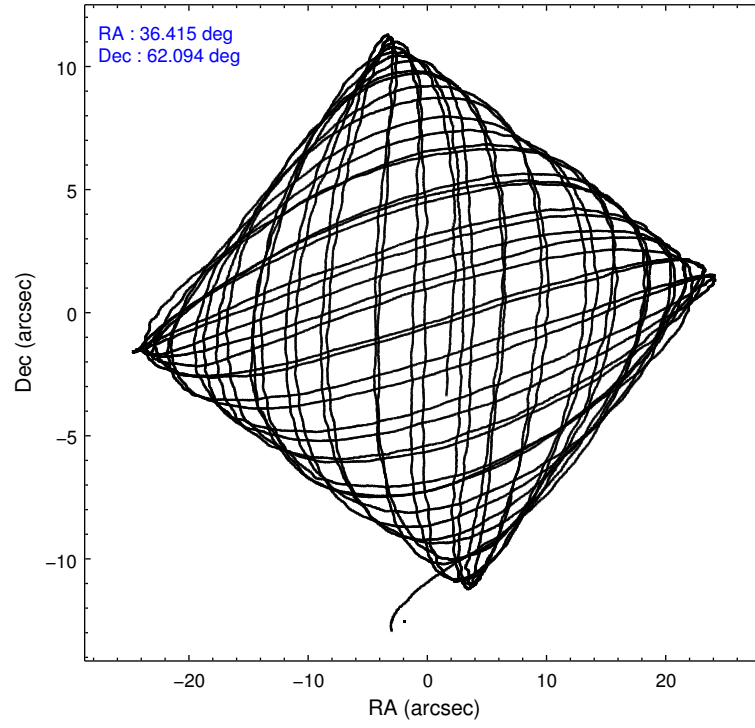
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 8446 | 8194 | 9074 | 8878 | 8345 |
| | 6% | 6% | 6% | 6% | 5% |
| grade 1 events | 76 | 64 | 63 | 76 | 67 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 4138 | 4035 | 3799 | 3813 | 3729 |
| | 3% | 3% | 2% | 2% | 2% |
| grade 3 events | 1518 | 1650 | 1437 | 1565 | 1557 |
| | 1% | 1% | 0% | 1% | 1% |
| grade 4 events | 1495 | 1654 | 1483 | 1516 | 1555 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 4372 | 4391 | 4002 | 4459 | 4922 |
| | 3% | 3% | 2% | 3% | 3% |
| grade 6 events | 3083 | 3220 | 2838 | 3086 | 3158 |
| | 2% | 2% | 1% | 2% | 2% |
| grade 7 events | 110997 | 107506 | 121716 | 117502 | 119180 |
| | 82% | 82% | 84% | 83% | 83% |

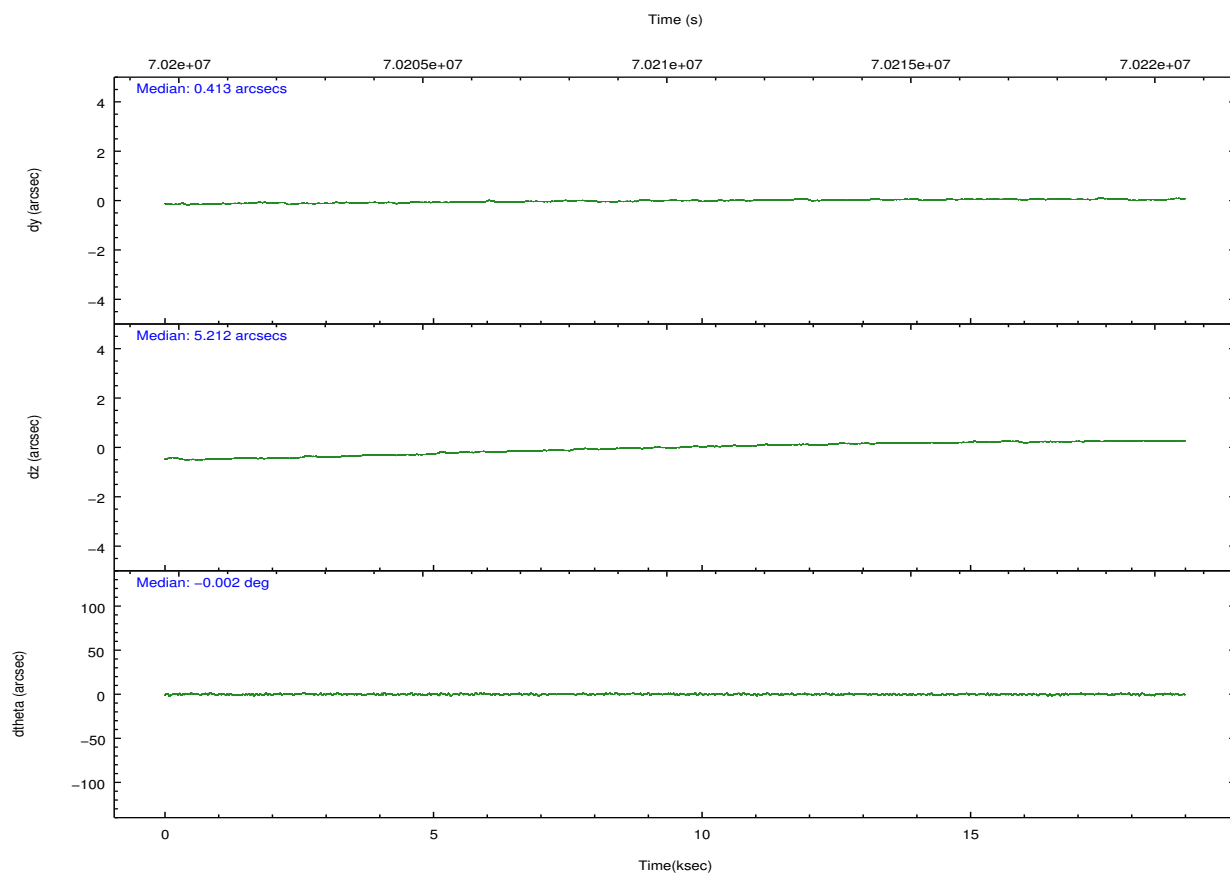
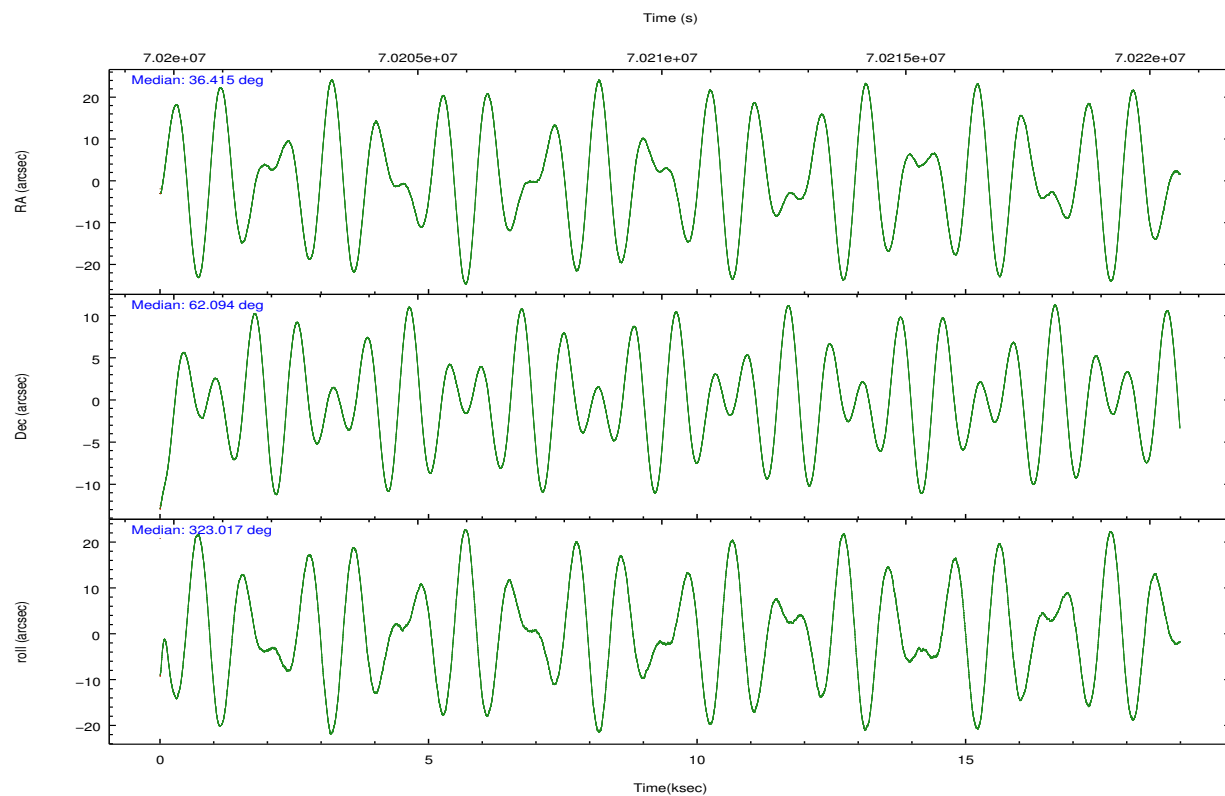
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-01236 | ACIS-01236 |
| Grating | NONE | NONE |
| Data mode | FAINT | FAINT |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 36.355607 | 36.41415685104045 |
| [deg] Pointing Dec | 62.097092 | 62.09354436435237 |
| [deg] Pointing Roll | 322.866480 | 323.0234211932777 |
| [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) | 70201163.184000 | 70199995.823954 |
| Observation start date | 2000-03-23T12:18:19 | 2000-03-23T11:59:55 |
| [s] Observation end time (MET) | 70219663.184000 | 70221219.47473 |
| Observation end date | 2000-03-23T17:26:39 | 2000-03-23T17:53:39 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | NONE | NONE |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



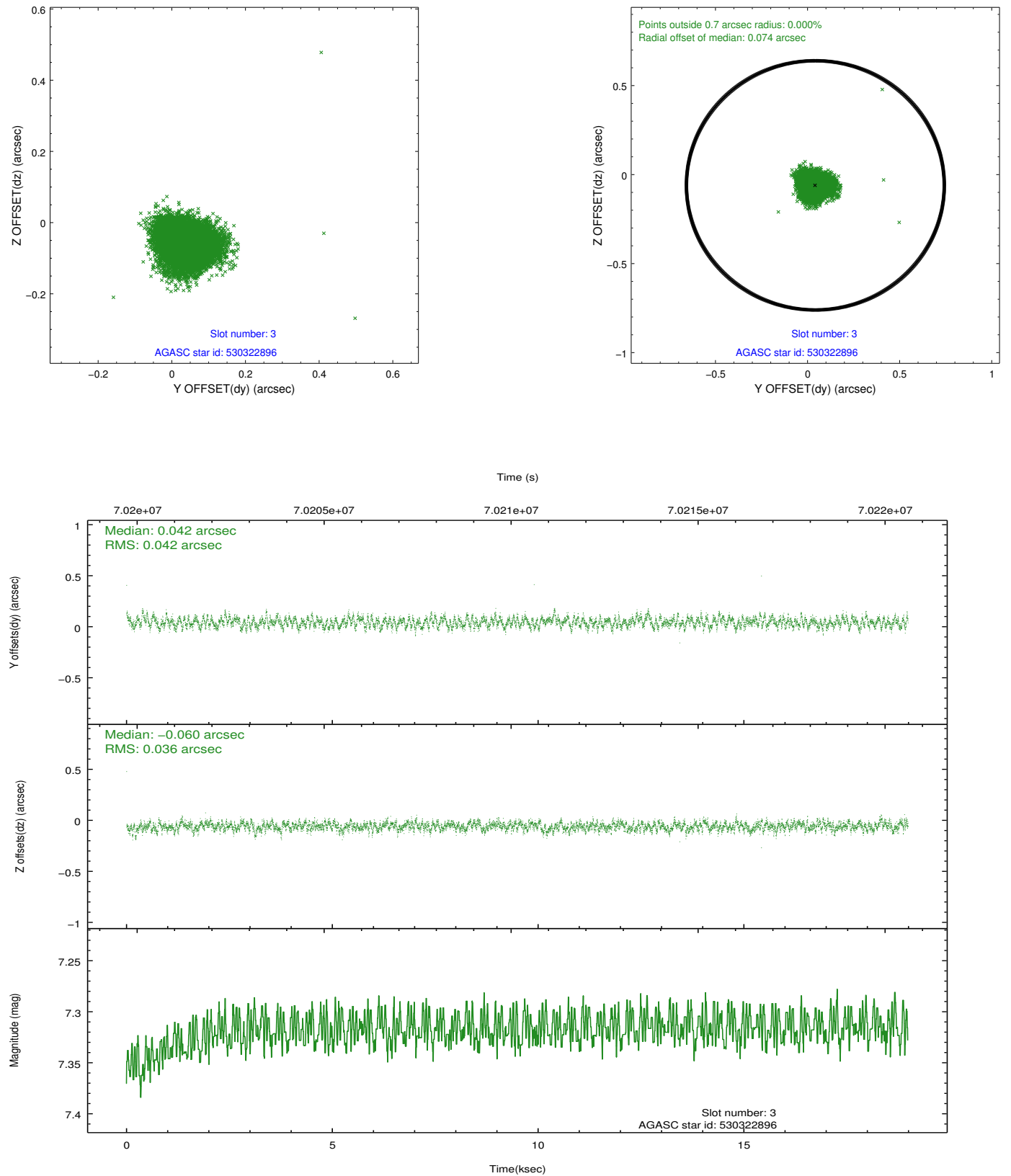


Slot Statistics

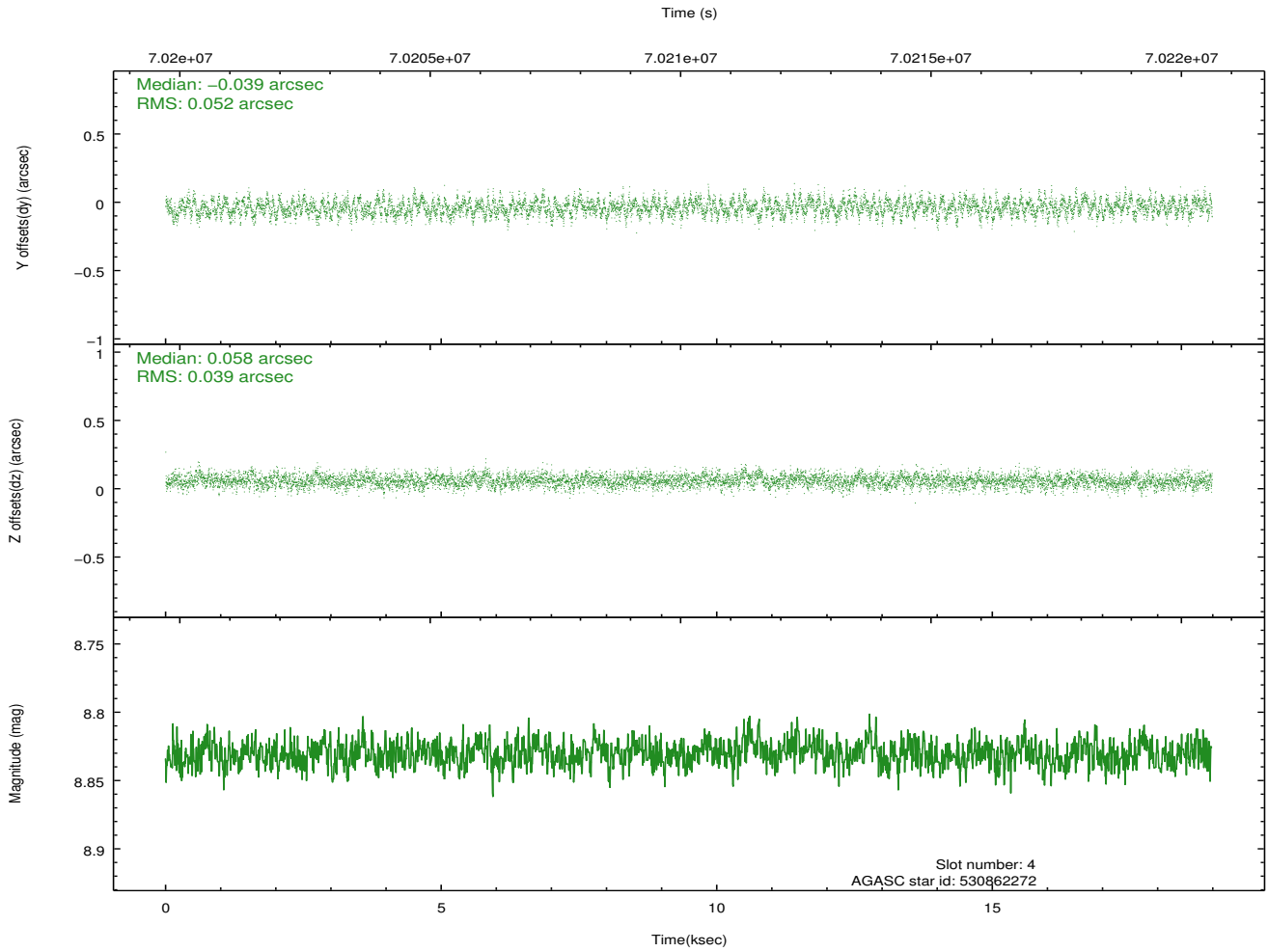
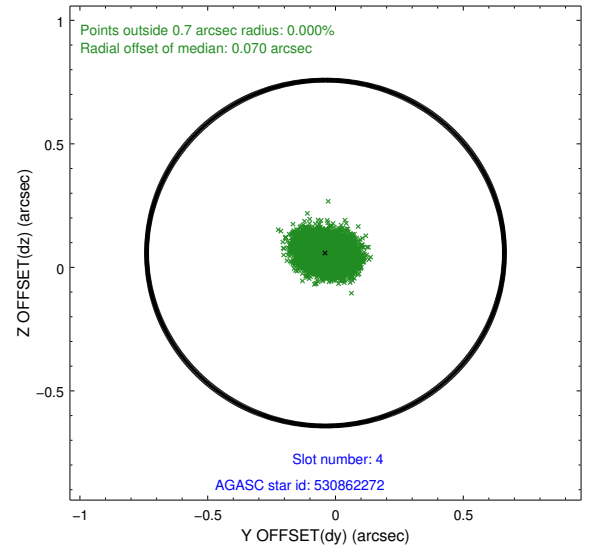
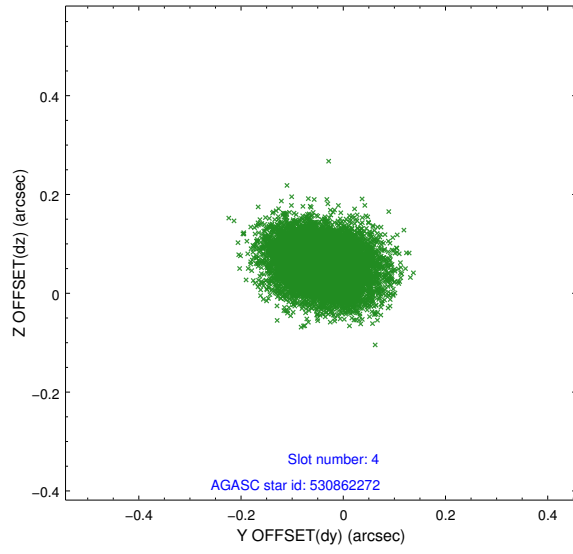
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-I-2 | 7.15 | 4630 | -0.029 | -0.029 | 0.011 | 0.019 | 0.000000 | 0.000000 | -754.73 | -834.90 |
| 1 | FID | ACIS-I-4 | 7.19 | 4630 | -0.030 | 0.033 | 0.011 | 0.019 | 0.000000 | 0.000000 | 2159.24 | 1071.22 |
| 2 | FID | ACIS-I-5 | 7.23 | 4631 | -0.042 | 0.065 | 0.013 | 0.021 | 0.000000 | 0.000000 | -1808.30 | 1069.34 |
| 3 | GUIDE | 530322896 | 7.32 | 9260 | 0.042 | -0.060 | 0.059 | 0.093 | 36.417213 | 61.549666 | 1273.53 | -1507.64 |
| 4 | GUIDE | 530862272 | 8.83 | 9260 | -0.039 | 0.058 | 0.069 | 0.113 | 36.216069 | 62.475924 | -1009.10 | 946.75 |
| 5 | GUIDE | 530862896 | 8.91 | 9260 | -0.060 | 0.037 | 0.069 | 0.112 | 35.753276 | 62.216485 | -1068.81 | -264.11 |
| 6 | GUIDE | 530863576 | 9.24 | 9256 | 0.079 | 0.073 | 0.087 | 0.138 | 38.002549 | 62.242334 | 1863.58 | 2111.50 |
| 7 | GUIDE | 530861360 | 9.74 | 9255 | -0.022 | -0.108 | 0.091 | 0.145 | 35.345736 | 62.078254 | -1324.51 | -1071.56 |

2.4 Star Slots

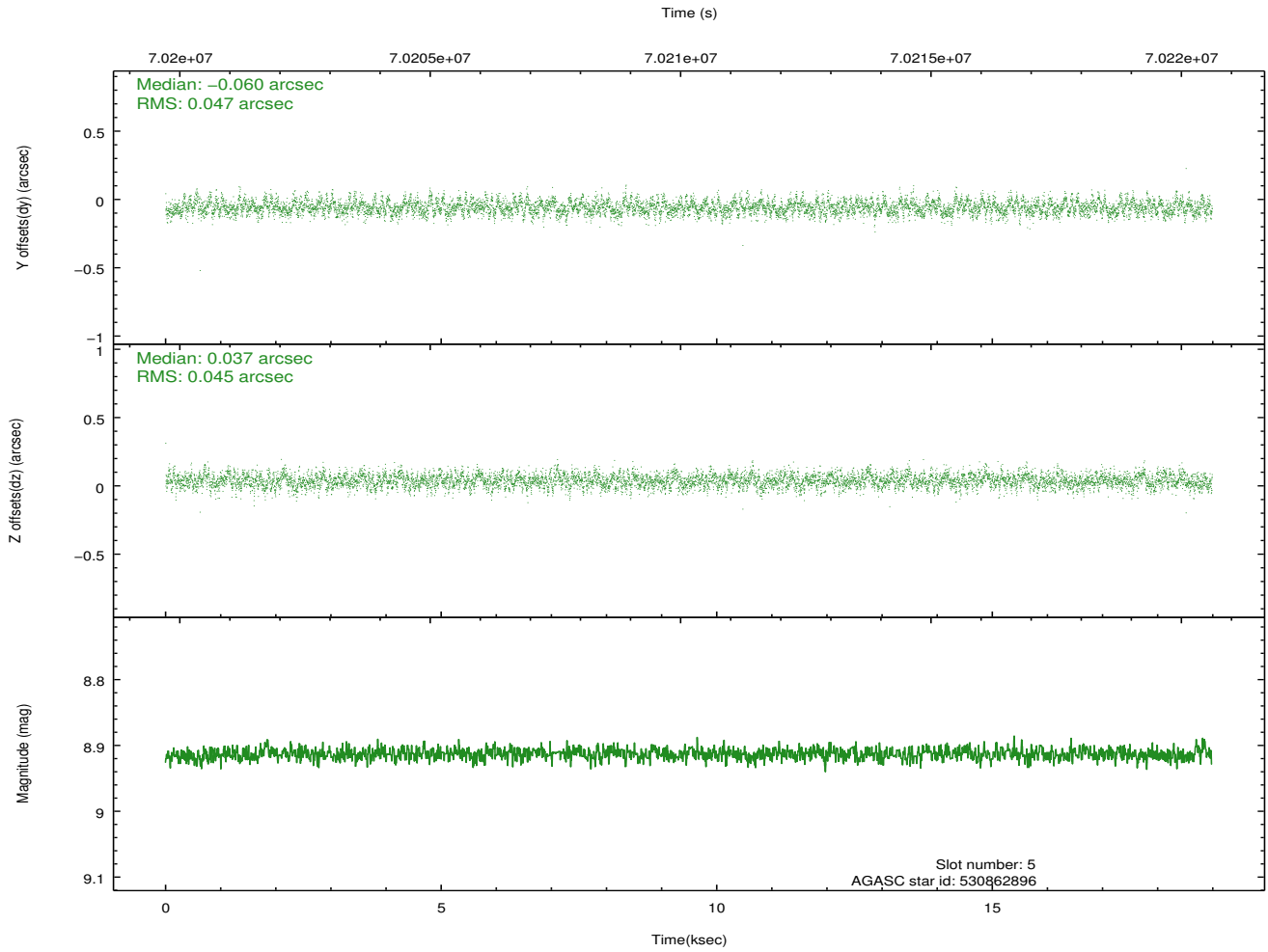
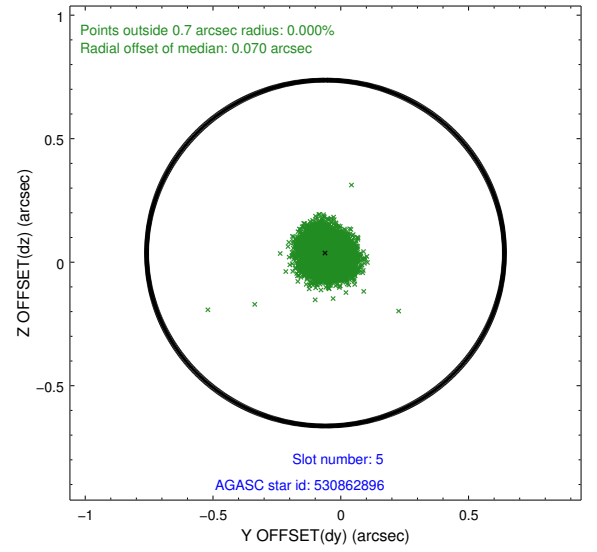
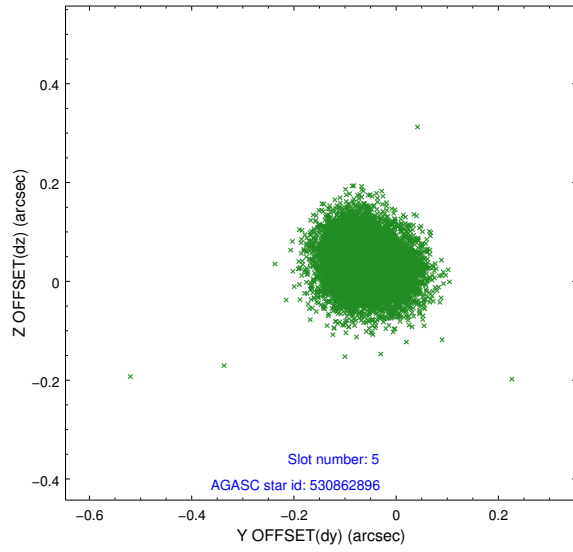
2.4.1 Slot 3



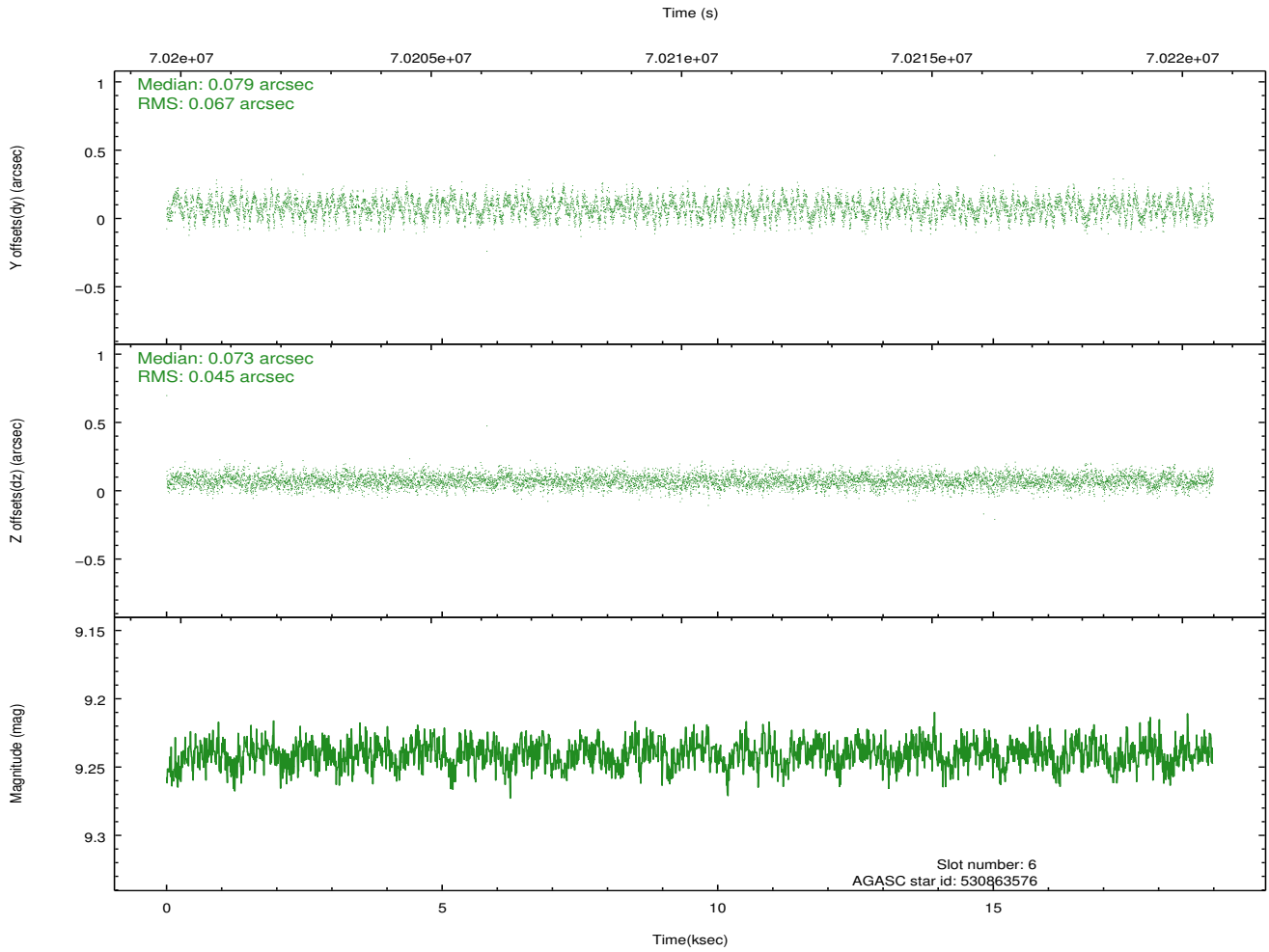
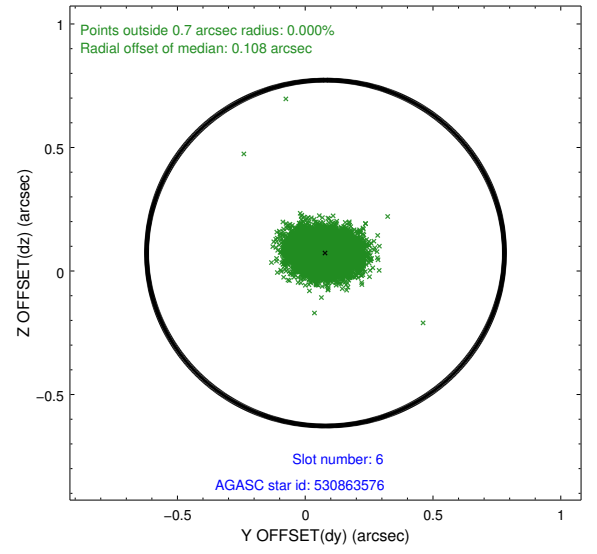
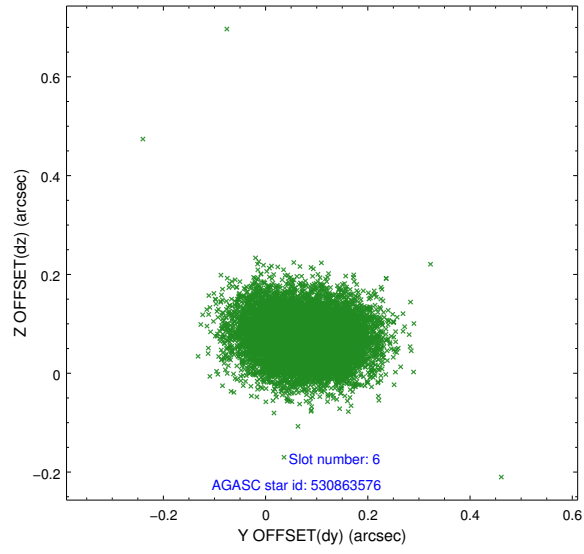
2.4.2 Slot 4



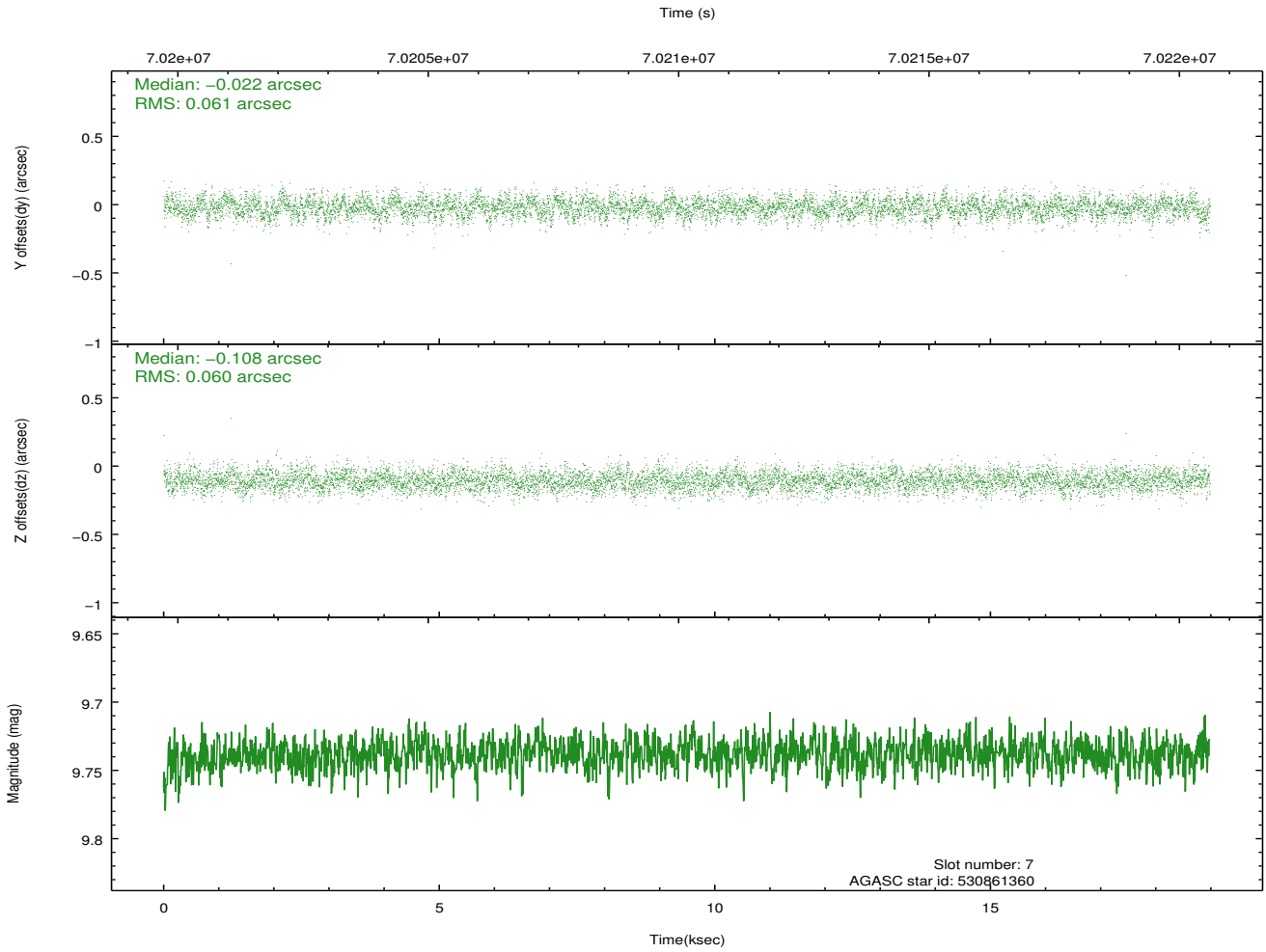
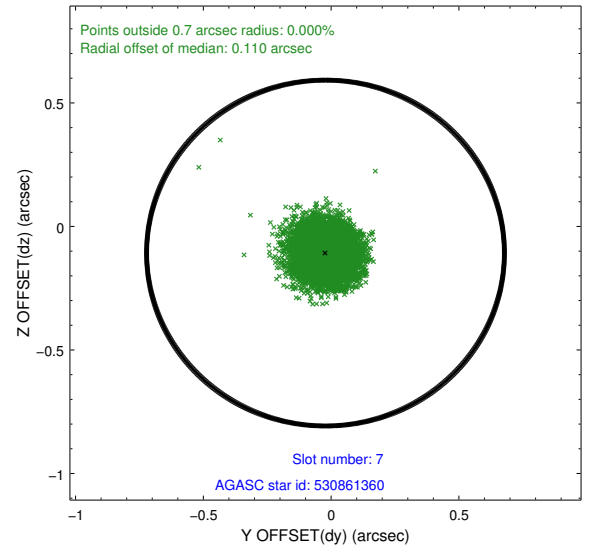
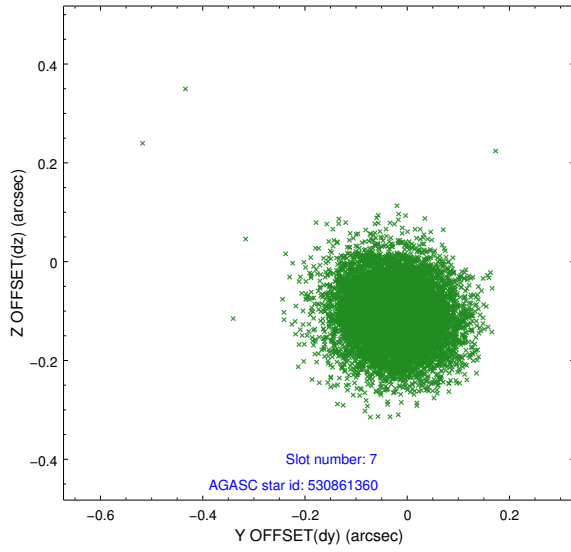
2.4.3 Slot 5



2.4.4 Slot 6

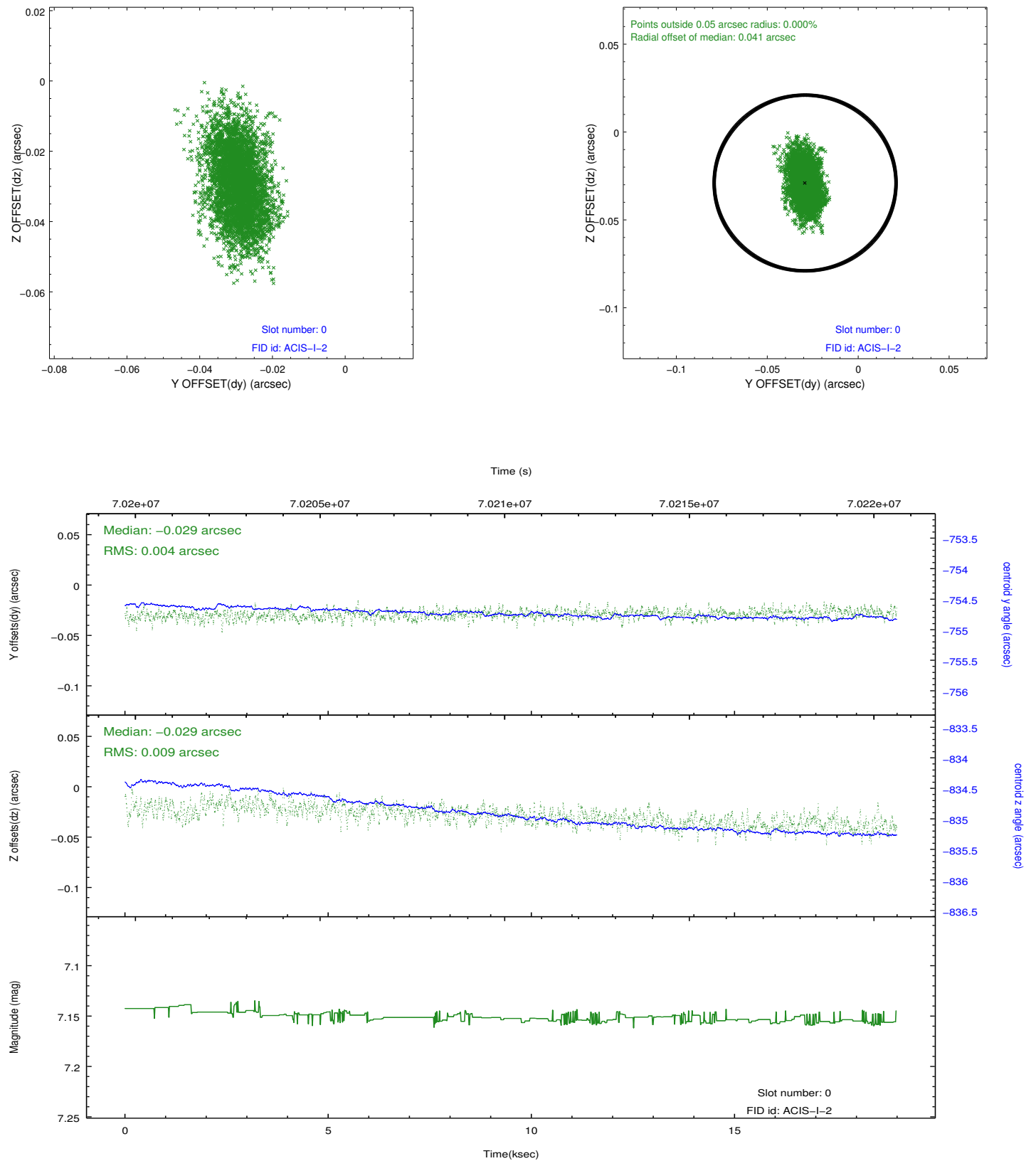


2.4.5 Slot 7

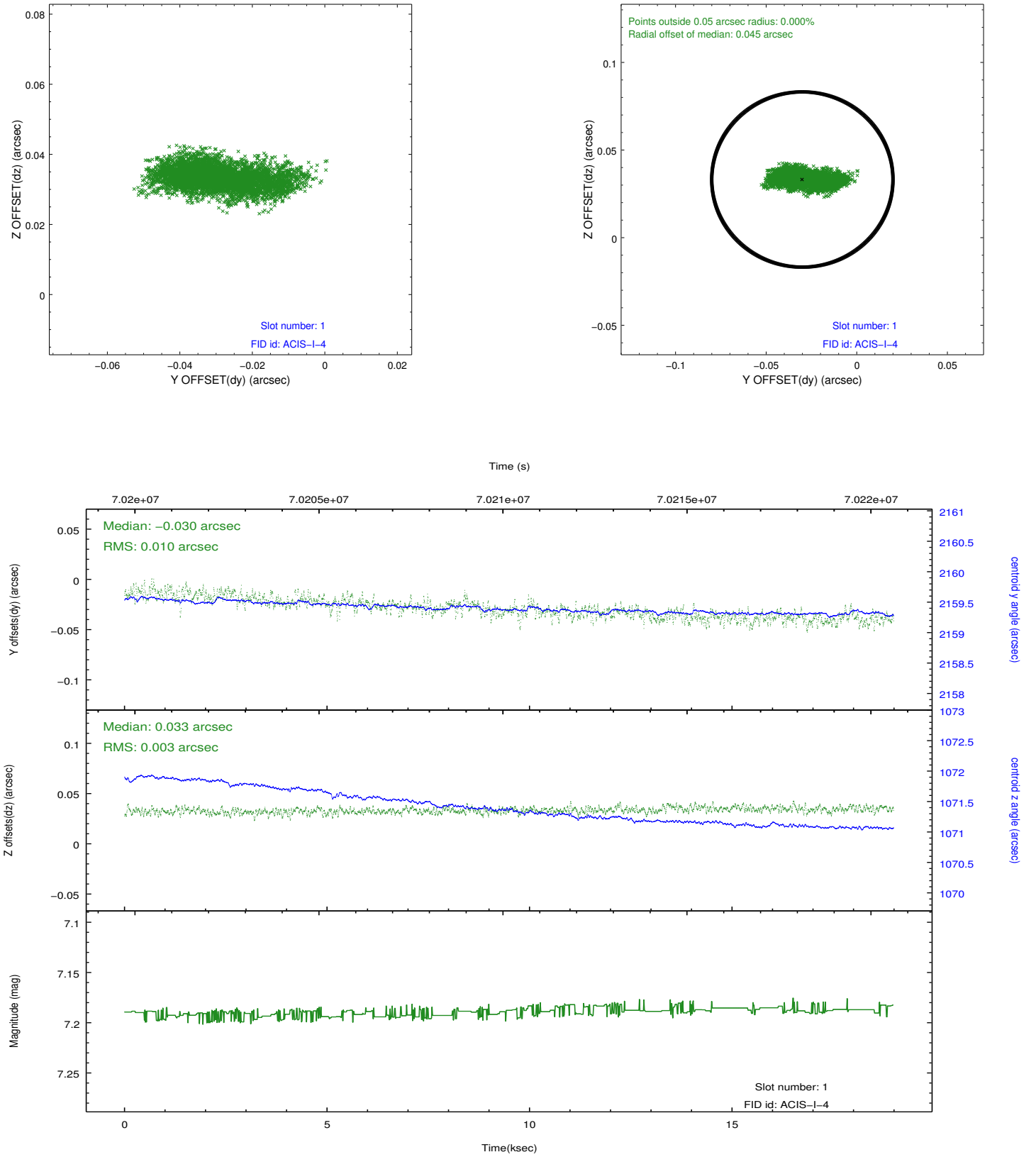


2.5 FID Slots

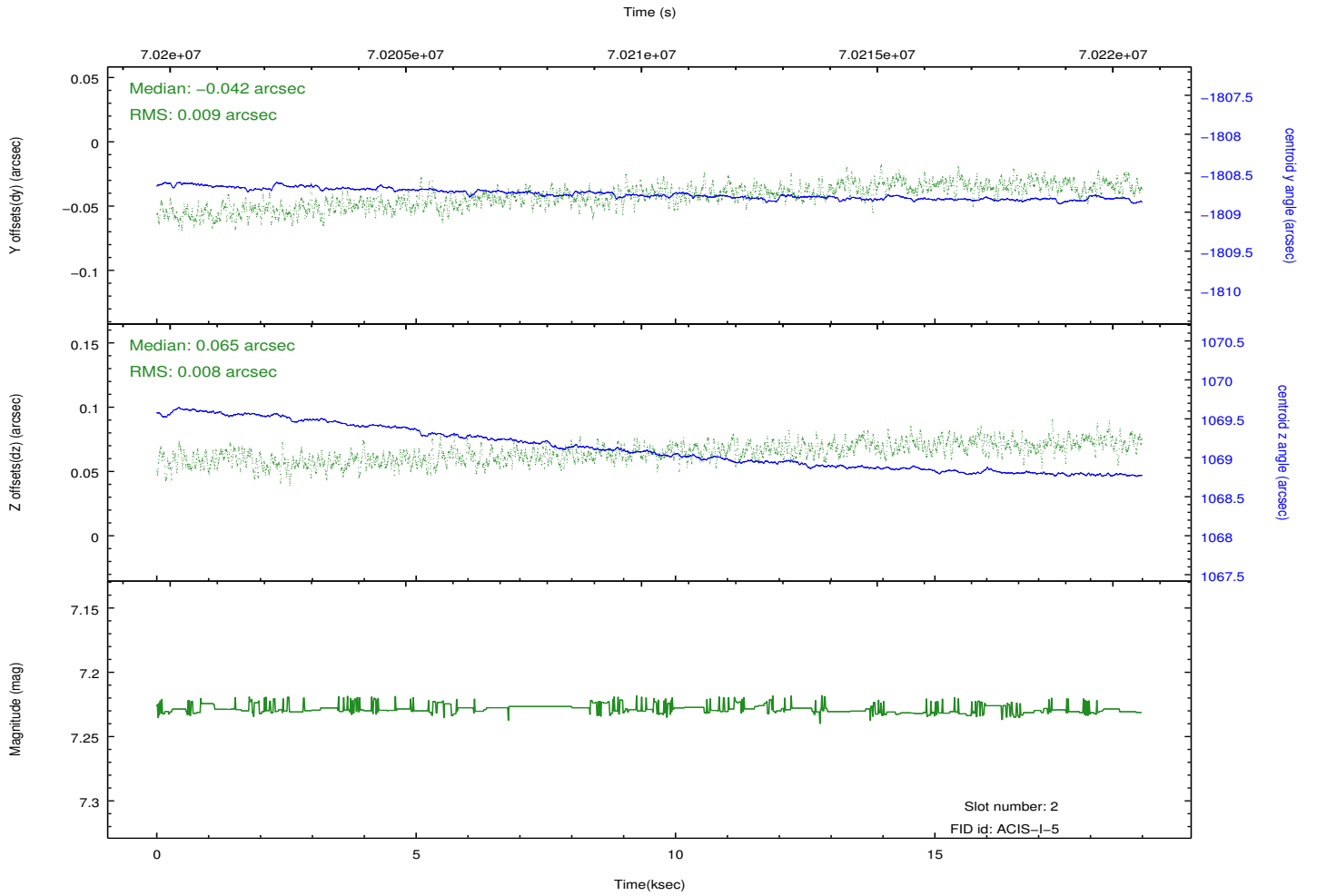
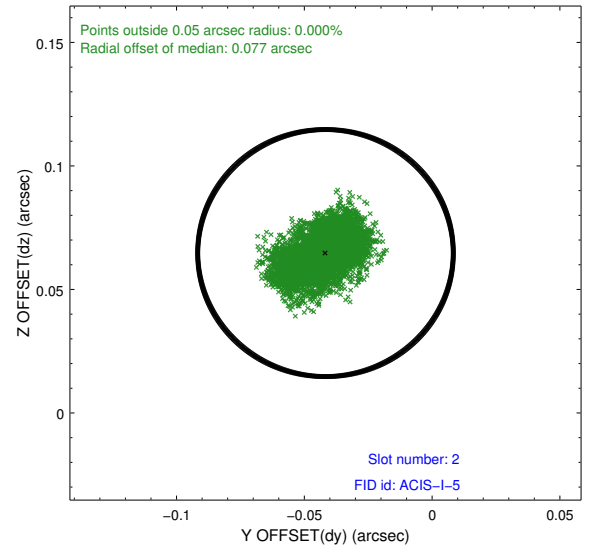
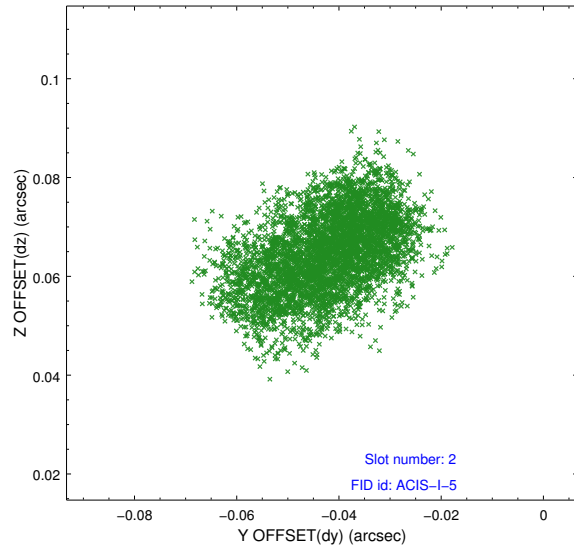
2.5.1 Slot 0



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) | 2012.08.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 18.704 |

A.2 Comments