

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10689 - L2 Version 2
Chandra X-Ray Center

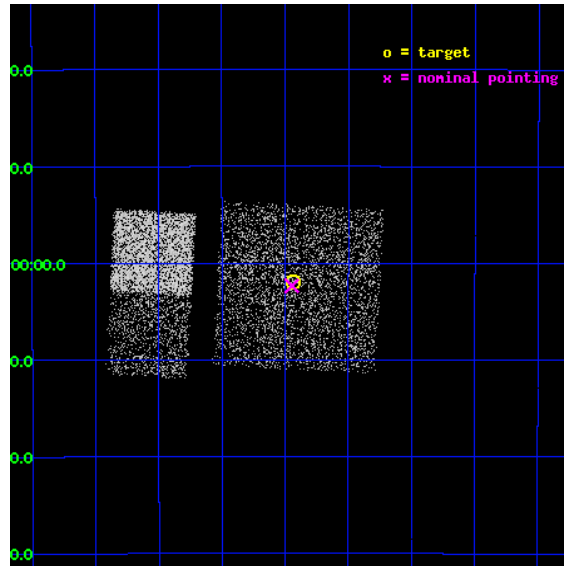
L2 Processing Date : Jun 11 2012

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

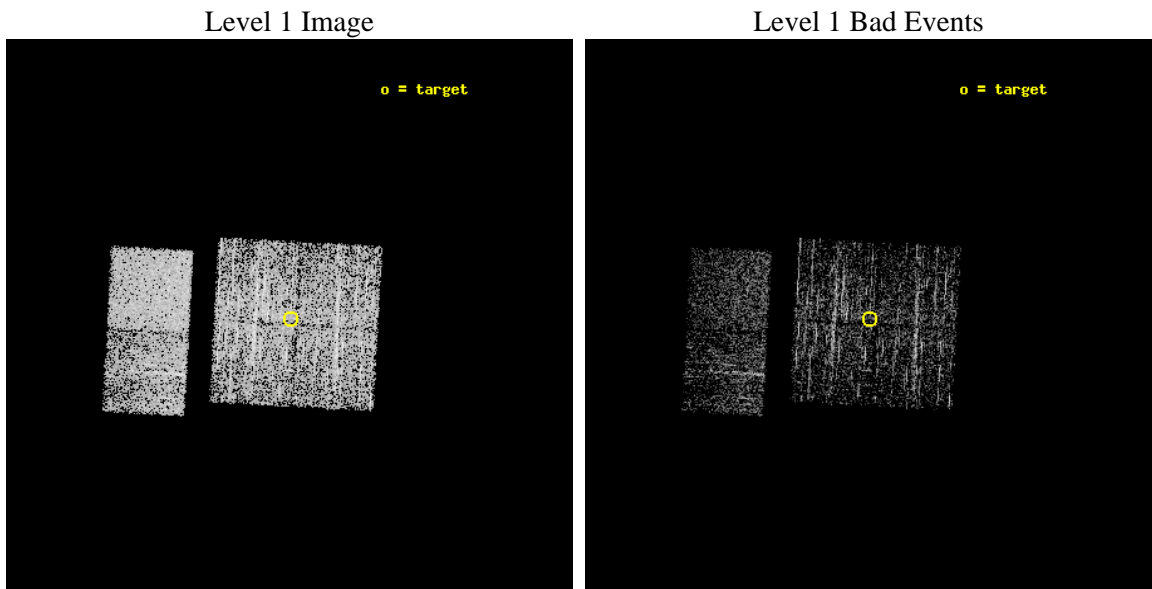
| | | |
|----------|--|---|
| seq_num | 401056 | Sequence number |
| obs_id | 10689 | Observation id |
| title | Chandra follow-up of weak persistent sources | Proposal title |
| observer | Dr Jelle Kaastra | Principal investigator |
| object | IGR J17419-2802 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 265.483333 | Observer's specified target RA [deg] |
| dec_targ | -28.031806 | Observer's specified target Dec [deg] |
| ra_nom | 265.486579798 | Nominal RA [deg] |
| dec_nom | -28.03914144059 | Nominal Dec [deg] |
| roll_nom | 273.13623168408 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 934.39999657869 | Sum of GTIs [s] |
| livetime | 922.56806119388 | Livetime [s] |
| ontime0 | 934.39999657869 | Sum of GTIs [s] |
| ontime1 | 934.39999657869 | Sum of GTIs [s] |
| ontime2 | 934.39999657869 | Sum of GTIs [s] |
| ontime3 | 934.39999657869 | Sum of GTIs [s] |
| ontime6 | 934.39999657869 | Sum of GTIs [s] |
| ontime7 | 934.39999657869 | Sum of GTIs [s] |
| l2events | 11578 | Number of level 2 events |



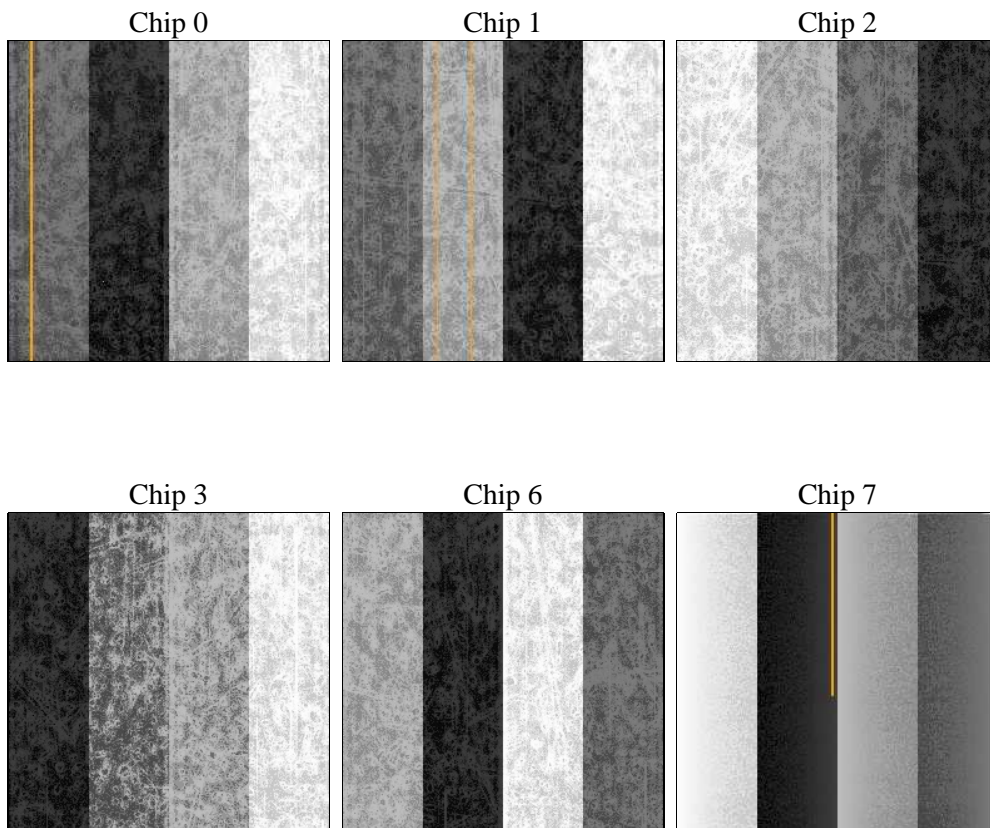
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 1180.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 934.39999657869 | Sum of GTIs [s] |
| caldsver | 4.4.10 | | ontime0 | 934.39999657869 | Sum of GTIs [s] |
| date | 2012-06-11T13:40:40 | Date and time of file creation | ontime1 | 934.39999657869 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 934.39999657869 | Sum of GTIs [s] |
| | | | ontime3 | 934.39999657869 | Sum of GTIs [s] |
| | | | ontime6 | 934.39999657869 | Sum of GTIs [s] |
| | | | ontime7 | 934.39999657869 | Sum of GTIs [s] |
| | | | l1events | 63973 | Number of level 1 events |

2.1.4 Events

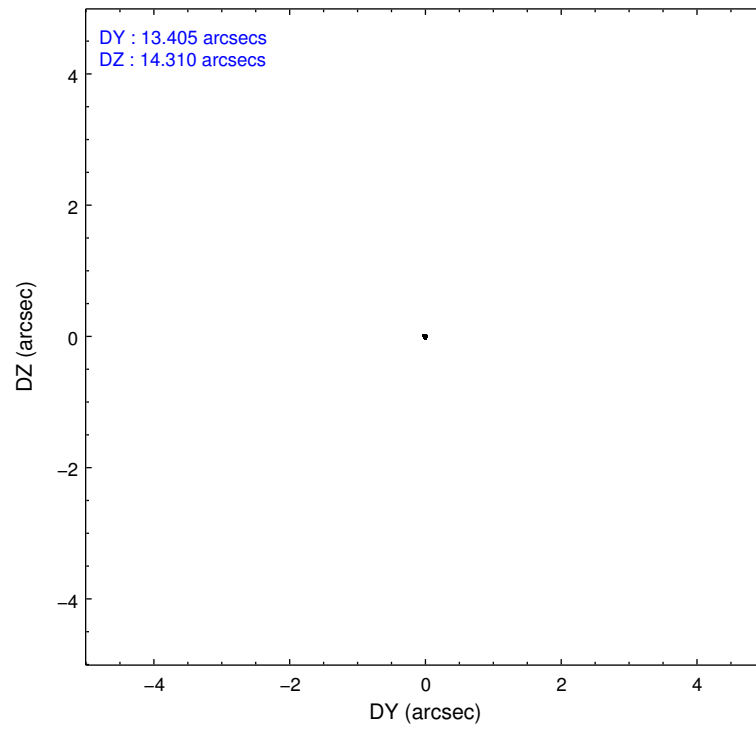
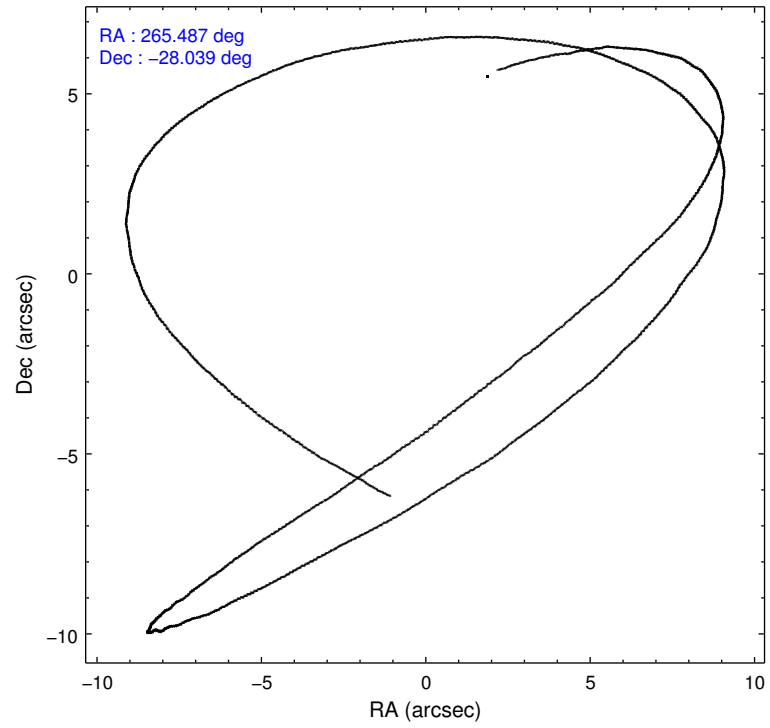
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 9538 | 9599 | 10007 | 10920 | 9547 | 14362 |
| rejected events | 8232 | 8161 | 8714 | 9569 | 8256 | 8438 |
| rejected % | 86% | 85% | 87% | 87% | 86% | 58% |

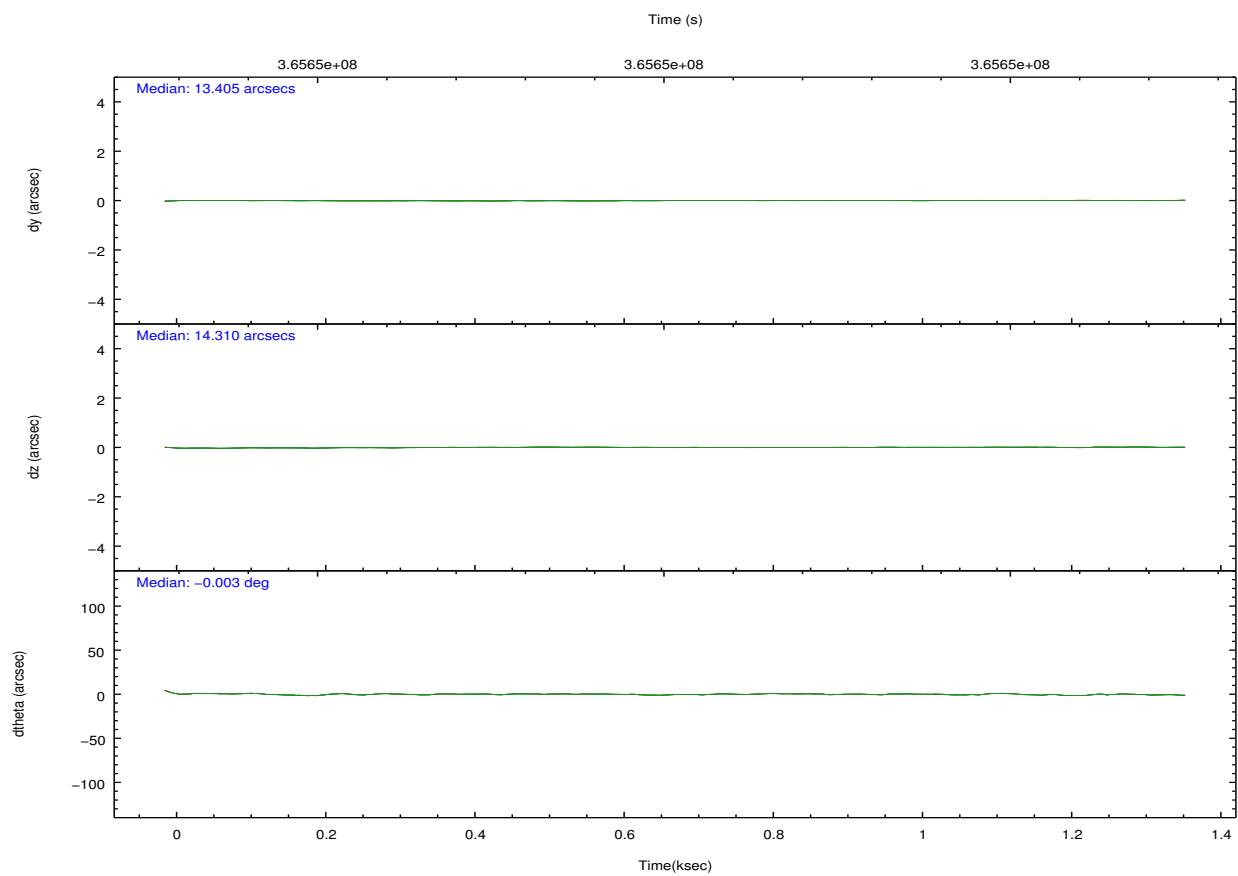
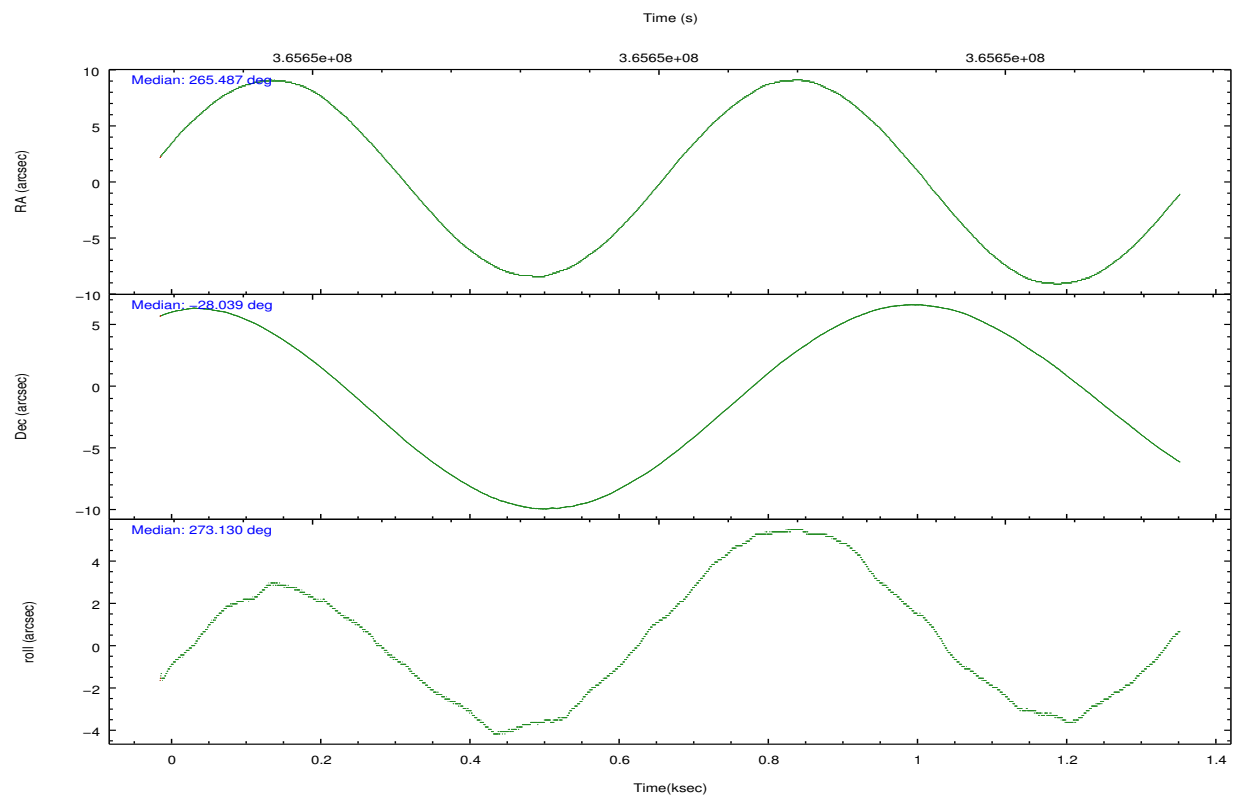
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 569 | 611 | 598 | 621 | 505 | 525 |
| | 5% | 6% | 5% | 5% | 5% | 3% |
| grade 1 events | 7 | 10 | 8 | 12 | 12 | 10 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 263 | 345 | 237 | 266 | 313 | 1245 |
| | 2% | 3% | 2% | 2% | 3% | 8% |
| grade 3 events | 126 | 123 | 133 | 114 | 117 | 474 |
| | 1% | 1% | 1% | 1% | 1% | 3% |
| grade 4 events | 95 | 118 | 124 | 139 | 96 | 497 |
| | 0% | 1% | 1% | 1% | 1% | 3% |
| grade 5 events | 398 | 446 | 403 | 484 | 497 | 1361 |
| | 4% | 4% | 4% | 4% | 5% | 9% |
| grade 6 events | 255 | 246 | 206 | 220 | 262 | 3196 |
| | 2% | 2% | 2% | 2% | 2% | 22% |
| grade 7 events | 7825 | 7700 | 8298 | 9064 | 7745 | 7054 |
| | 82% | 80% | 82% | 83% | 81% | 49% |

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 | FAINT | FAINT | CCD I0 on | Y | Y |
| Observation mode | POINTING | POINTING | CCD I1 on | Y | Y |
| [deg] Pointing RA | 265.469388 | 265.4865797980017 | CCD I2 on | Y | Y |
| [deg] Pointing Dec | -28.016415 | -28.0391414405898 | CCD I3 on | Y | Y |
| [deg] Pointing Roll | 272.919464 | 273.1362316840764 | 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 | O2 | Y |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | CCD S3 on | O1 | Y |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | CCD S4 on | N | N |
| [s] Observation start time (MET) | 365645517.184000 | 365645084.64287 | CCD S5 on | N | N |
| Observation start date | 2009-08-03T00:10:51 | 2009-08-03T00:04:44 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 365646697.184000 | 365647205.36798 | On-chip summing requested | N | N |
| Observation end date | 2009-08-03T00:30:31 | 2009-08-03T00:40:05 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



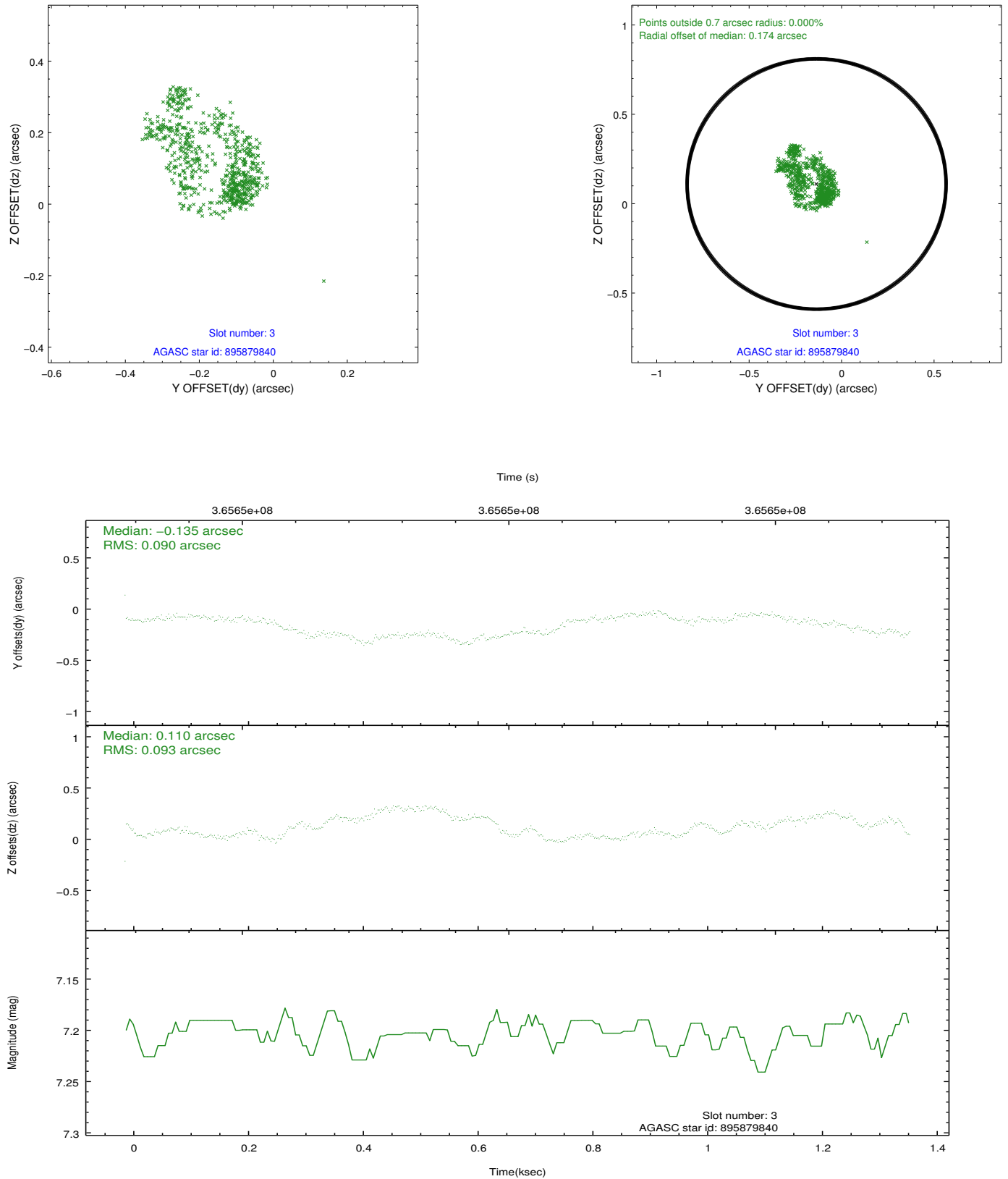


Slot Statistics

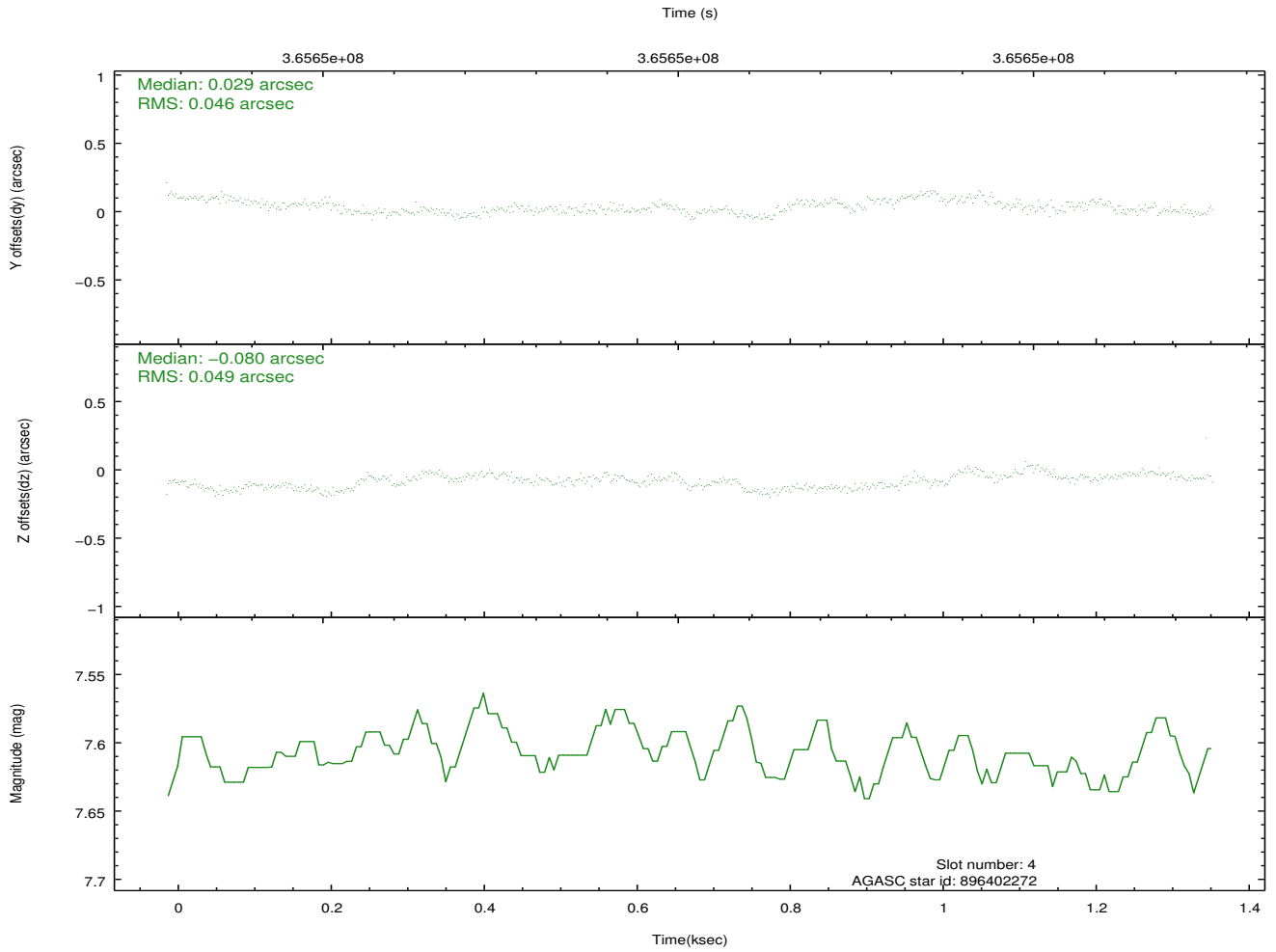
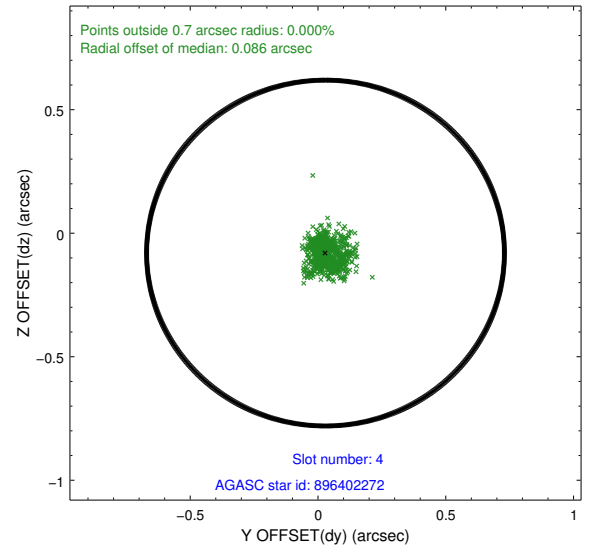
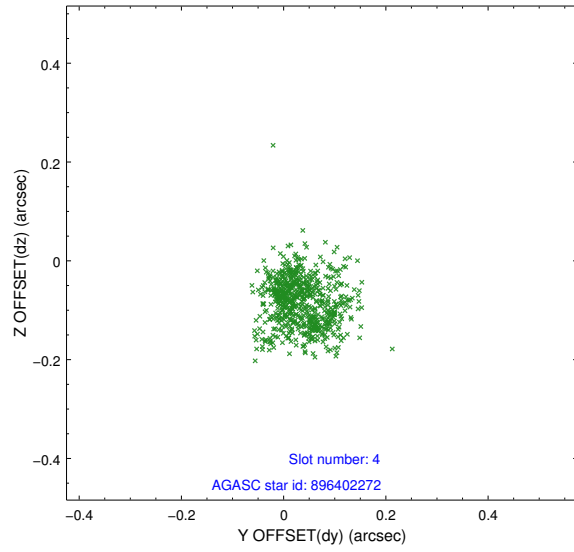
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.07 | 334 | -0.015 | 0.016 | 0.011 | 0.021 | 0.000000 | 0.000000 | 926.10 | -837.86 |
| 1 | FID | ACIS-I-4 | 6.99 | 334 | 0.184 | 0.020 | 0.009 | 0.015 | 0.000000 | 0.000000 | 2149.01 | 1059.53 |
| 2 | FID | ACIS-I-5 | 7.06 | 334 | -0.267 | 0.035 | 0.007 | 0.013 | 0.000000 | 0.000000 | -1815.94 | 1062.86 |
| 3 | GUIDE | 895879840 | 7.20 | 668 | -0.135 | 0.110 | 0.127 | 0.227 | 265.218397 | -27.395778 | -2270.28 | -687.98 |
| 4 | GUIDE | 896402272 | 7.61 | 668 | 0.029 | -0.080 | 0.071 | 0.116 | 265.637294 | -28.313189 | 1092.18 | 475.86 |
| 5 | GUIDE | 896404568 | 7.85 | 667 | 0.051 | -0.006 | 0.068 | 0.105 | 265.687293 | -28.431080 | 1529.36 | 613.61 |
| 6 | GUIDE | 896405616 | 7.86 | 668 | 0.171 | -0.085 | 0.084 | 0.145 | 264.752771 | -28.412560 | 1319.99 | -2339.06 |
| 7 | GUIDE | 896539744 | 8.32 | 666 | -0.099 | 0.063 | 0.103 | 0.151 | 266.154264 | -28.178023 | 700.65 | 2137.02 |

2.4 Star Slots

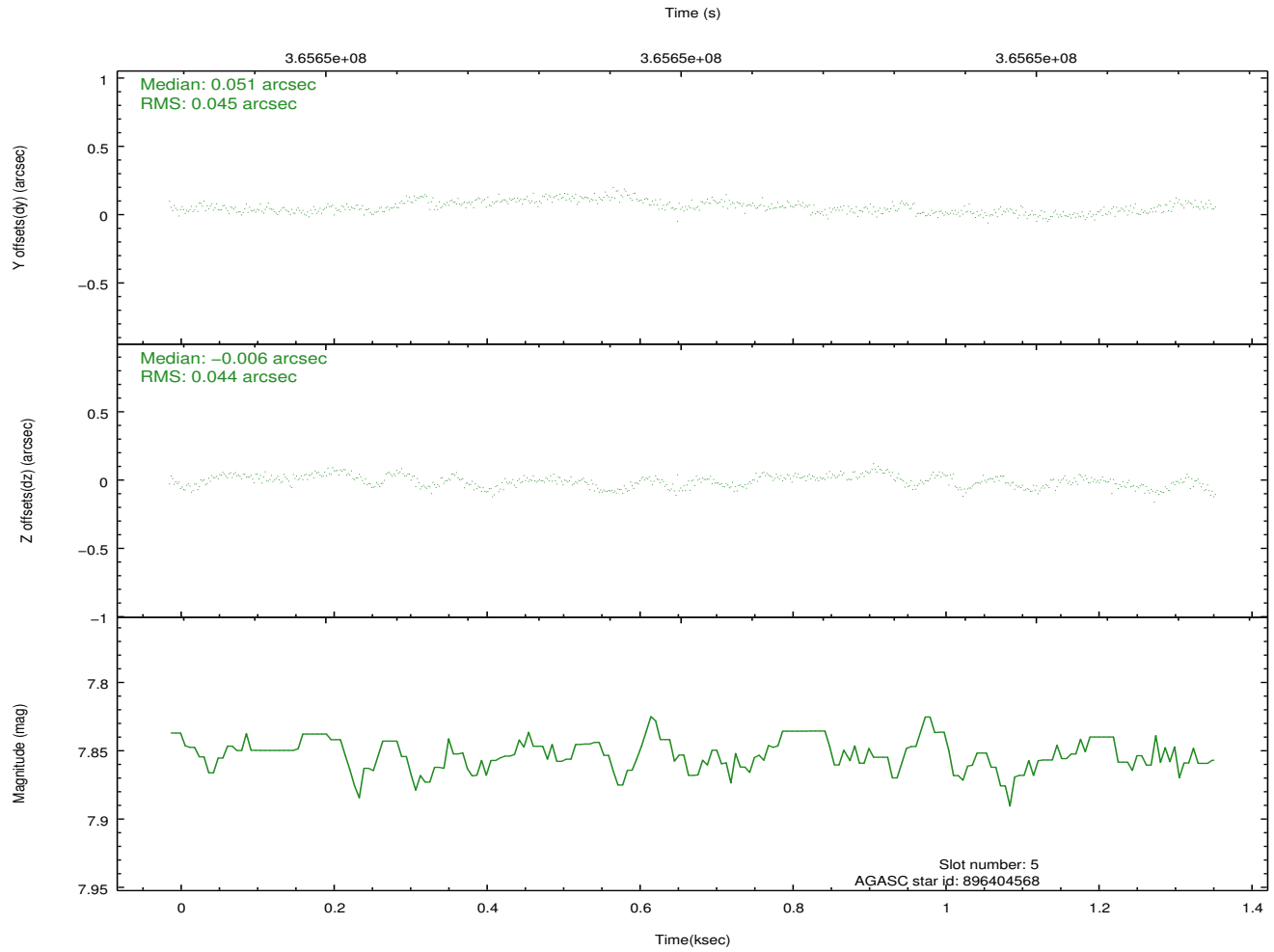
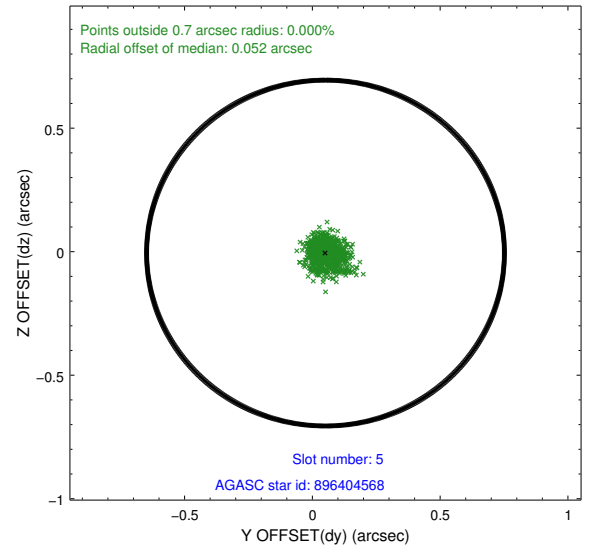
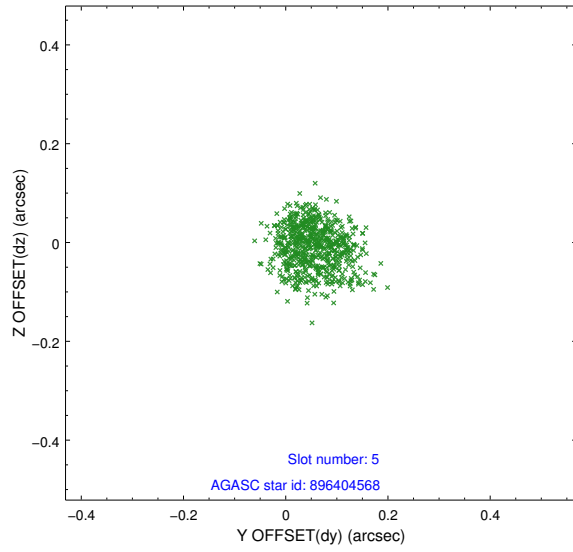
2.4.1 Slot 3



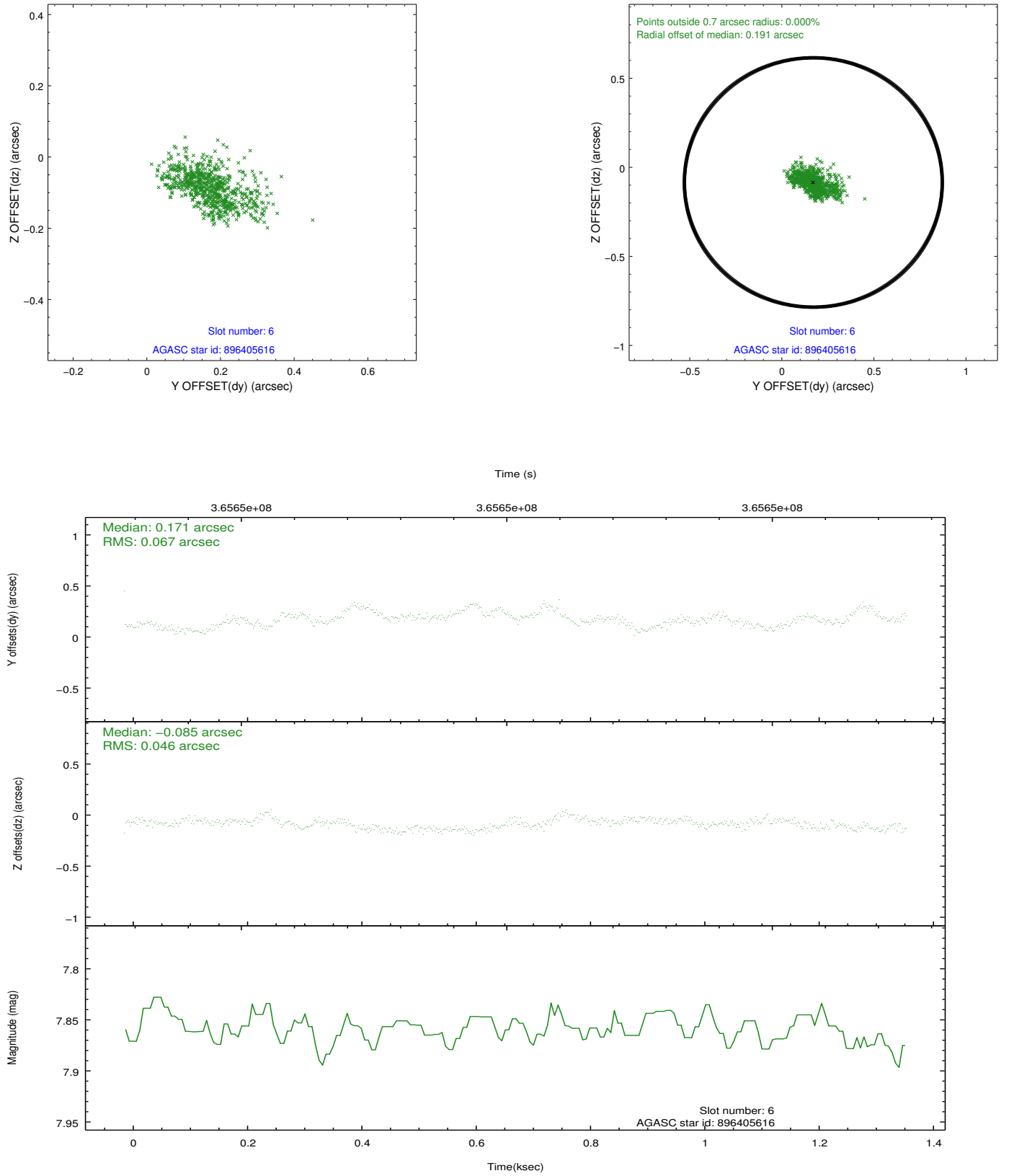
2.4.2 Slot 4



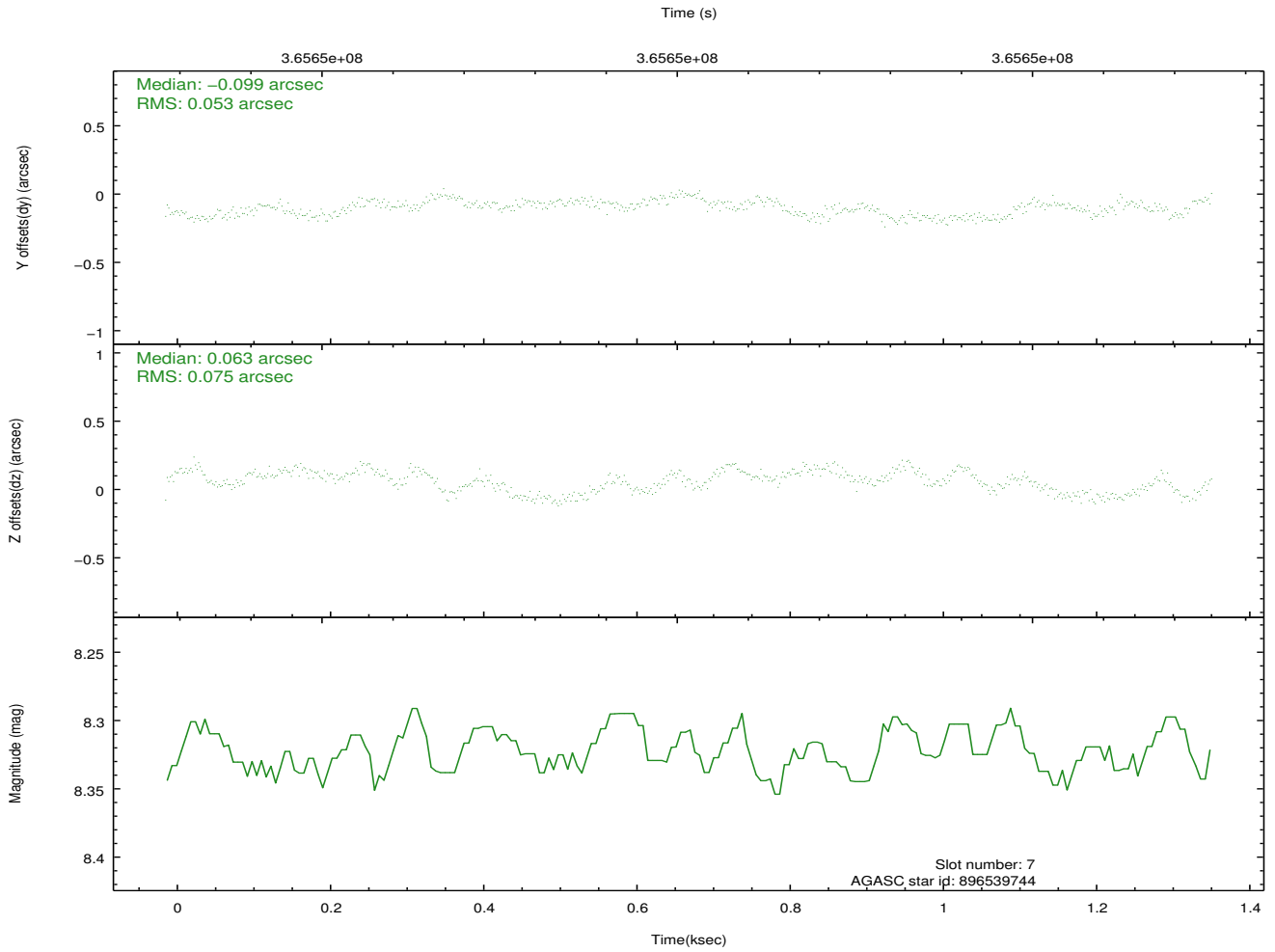
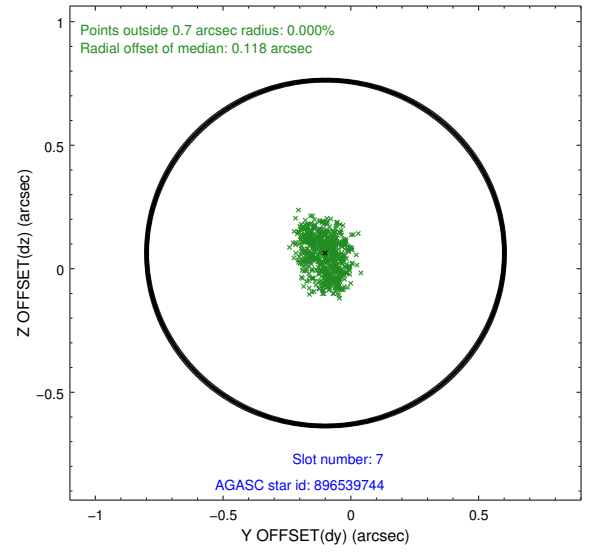
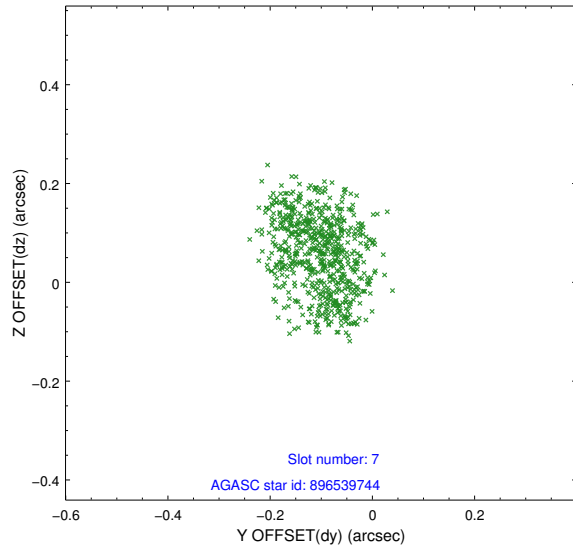
2.4.3 Slot 5



2.4.4 Slot 6

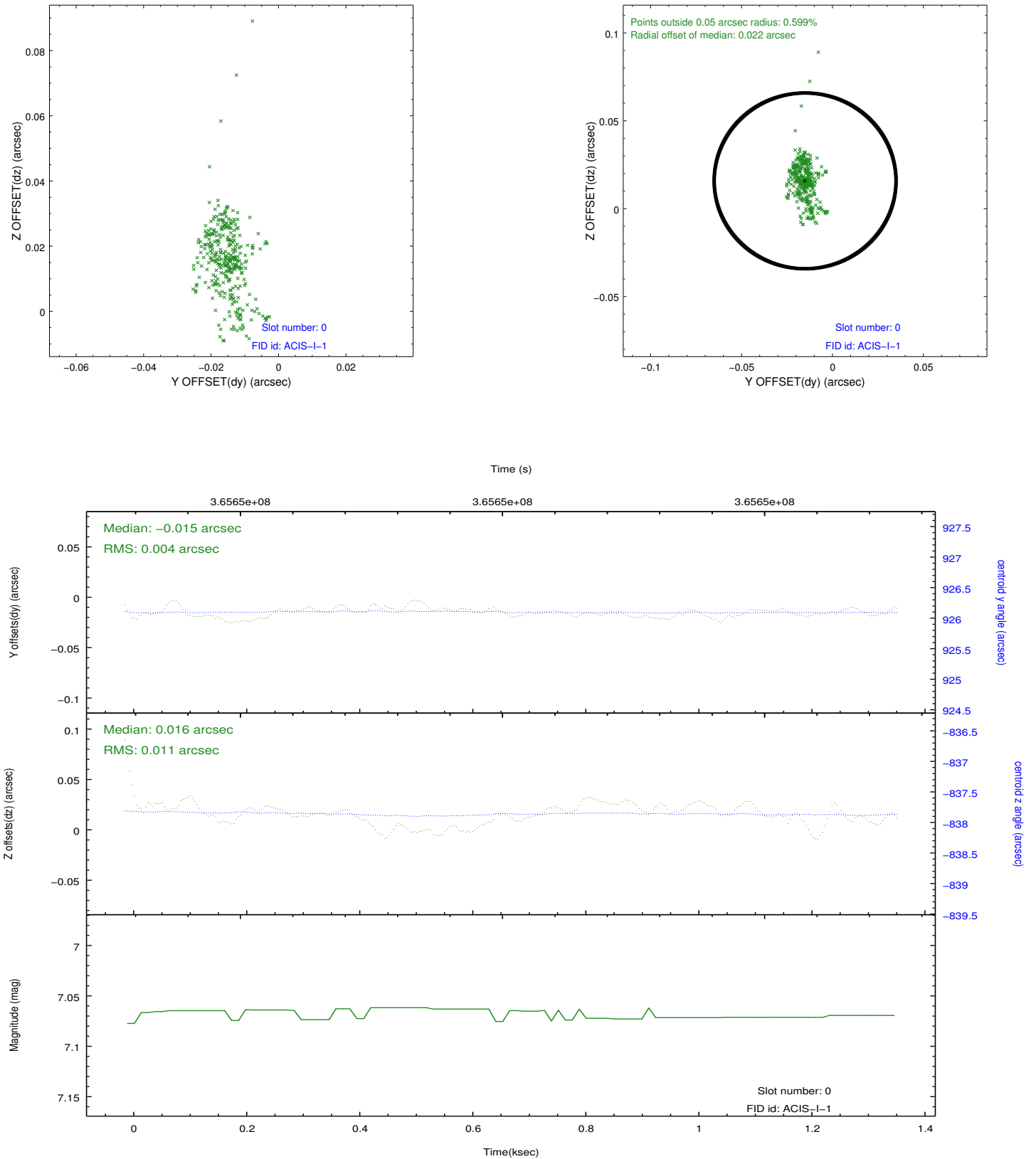


2.4.5 Slot 7

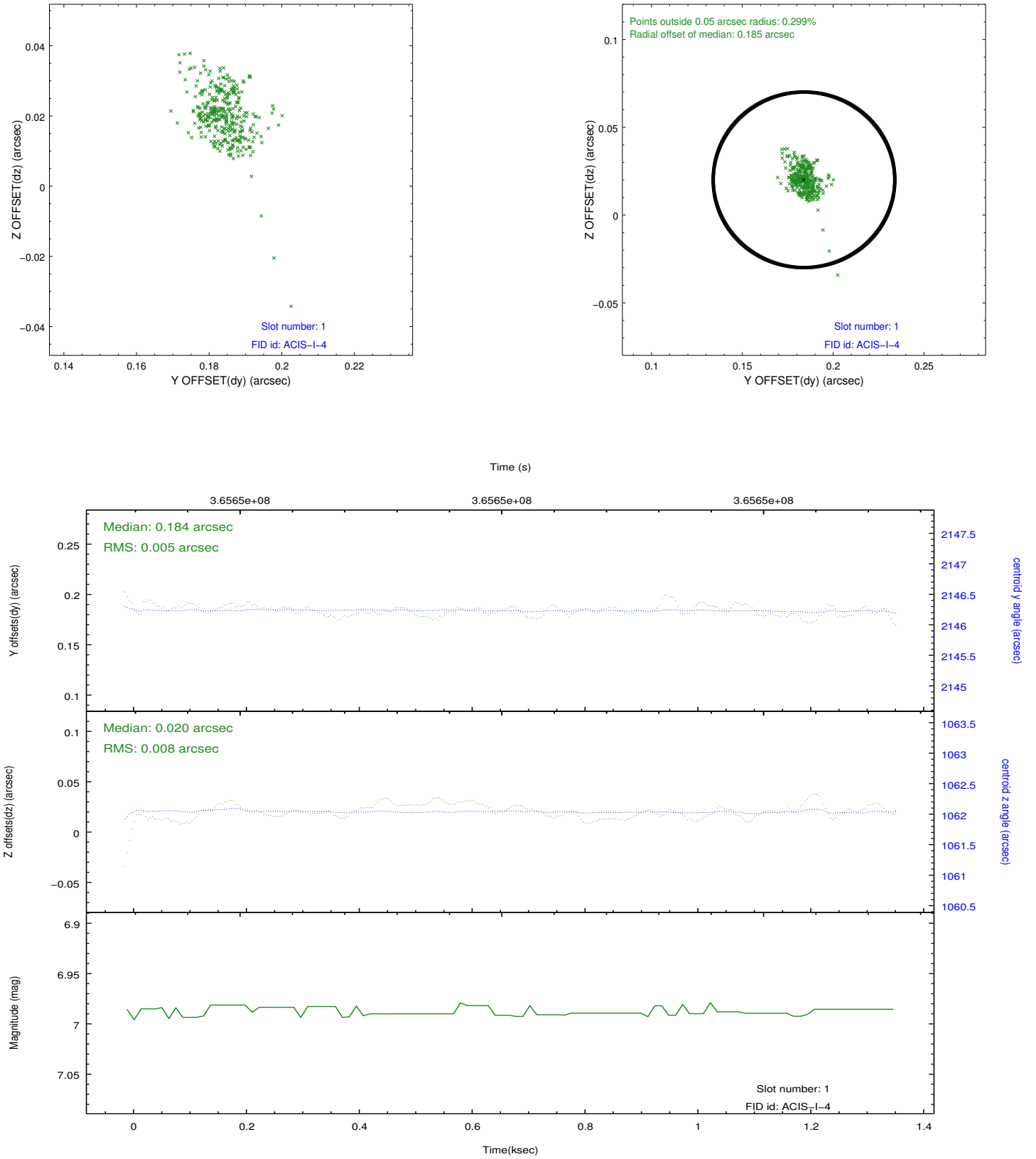


2.5 FID Slots

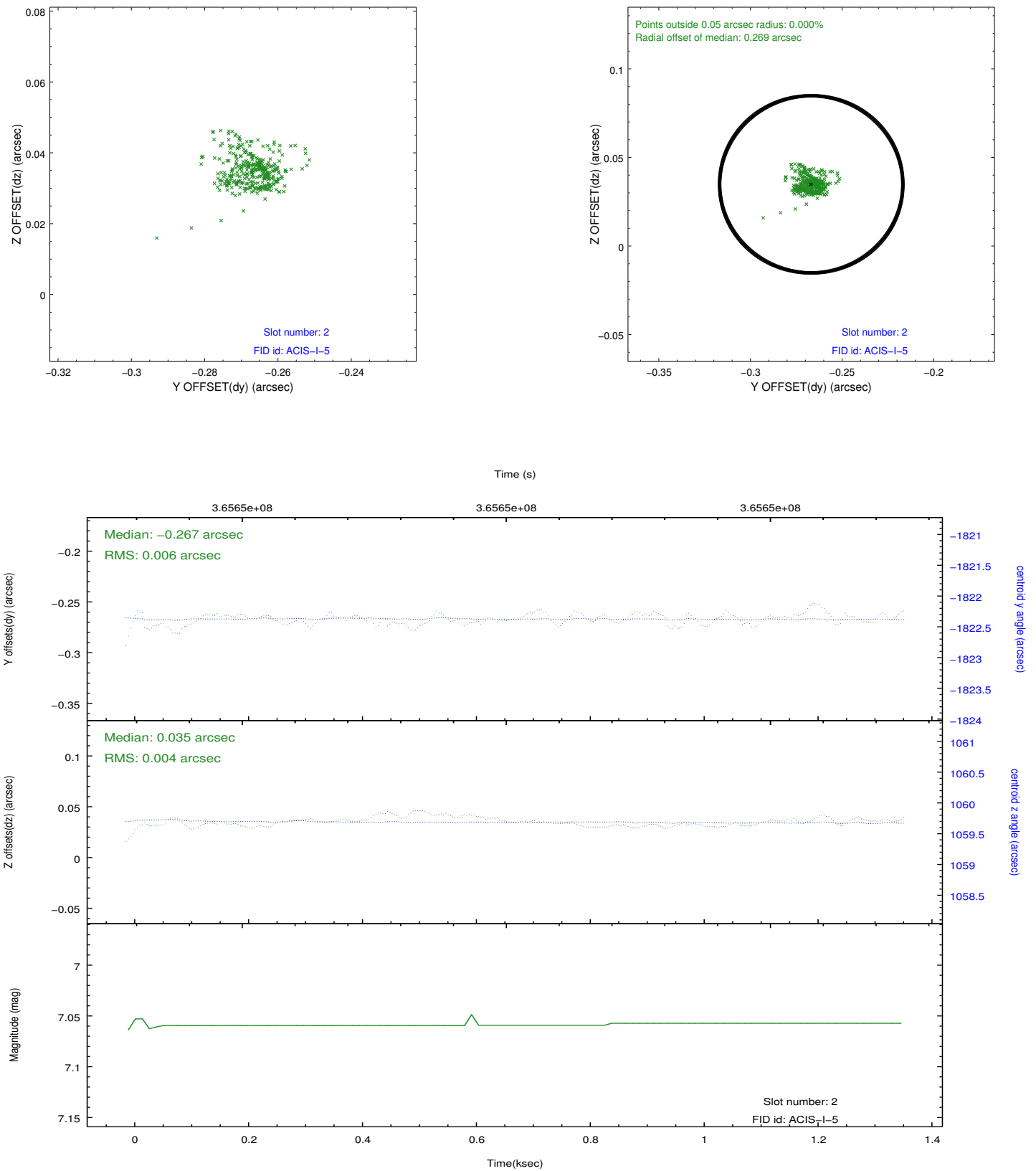
2.5.1 Slot 0



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) | 2012.06.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 0.93439999657869 |

A.2 Comments