

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8365 - L2 Version 3
Chandra X-Ray Center

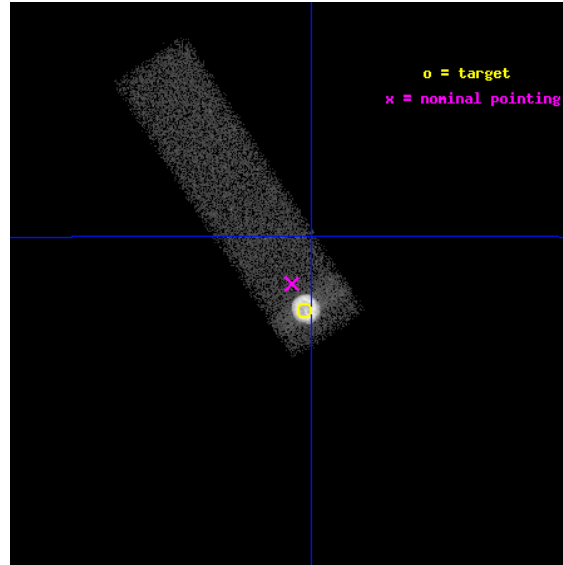
L2 Processing Date : Apr 20 2012

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

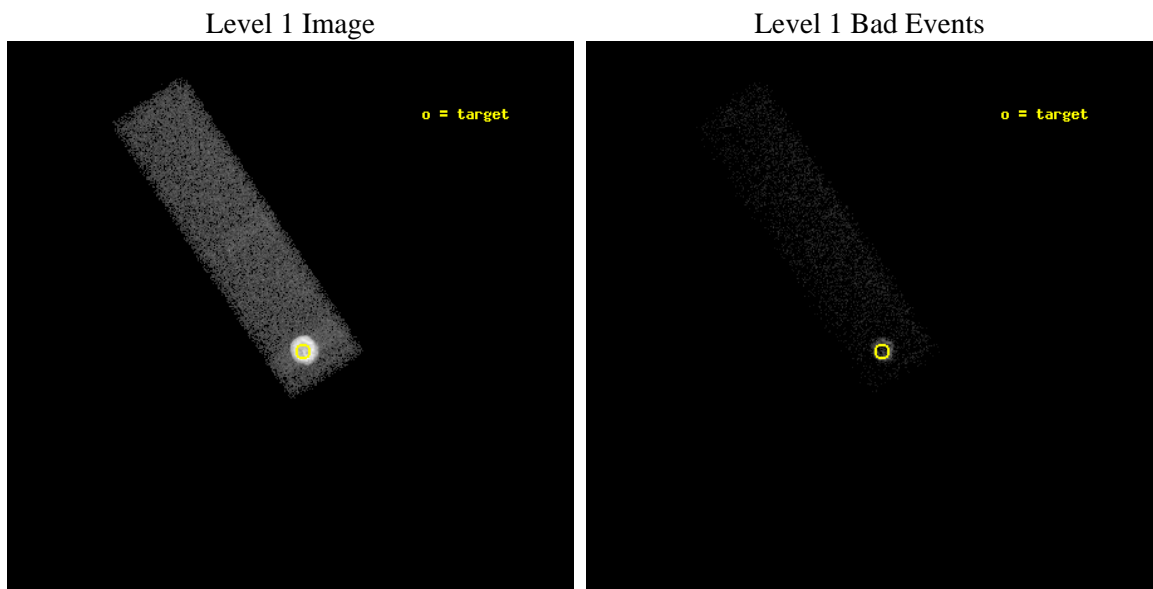
| | | |
|----------|------------------------------------------|---------------------------------------------|
| seq_num | 590458 | Sequence number |
| obs_id | 8365 | Observation id |
| title | AO8 Calibration Observations of E0102-72 | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | E0102-72[S3,-120,1,0,0] | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 16.01 | Observer's specified target RA [deg] |
| dec_targ | -72.032028 | Observer's specified target Dec [deg] |
| ra_nom | 16.028206190528 | Nominal RA [deg] |
| dec_nom | -72.020681314704 | Nominal Dec [deg] |
| roll_nom | 236.46544720465 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 22060.800328791 | Sum of GTIs [s] |
| livetime | 20984.305458757 | Livetime [s] |
| ontime7 | 22060.800328791 | Sum of GTIs [s] |
| l2events | 164725 | Number of level 2 events |



2 OBI

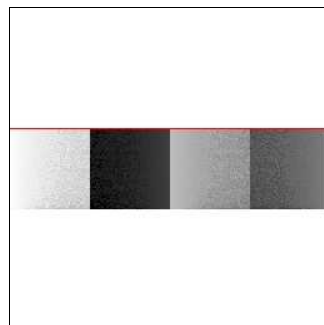
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|-----------------------------------------|
| obi_num | 1 | Obi number | sched_exp_time | 21877.069000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 22060.800328791 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime7 | 22060.800328791 | Sum of GTIs [s] |
| date | 2012-04-20T03:28:04 | Date and time of file creation | l1events | 187419 | Number of level 1 events |
| revision | 3 | Processing version of data | | | |

2.1.4 Events

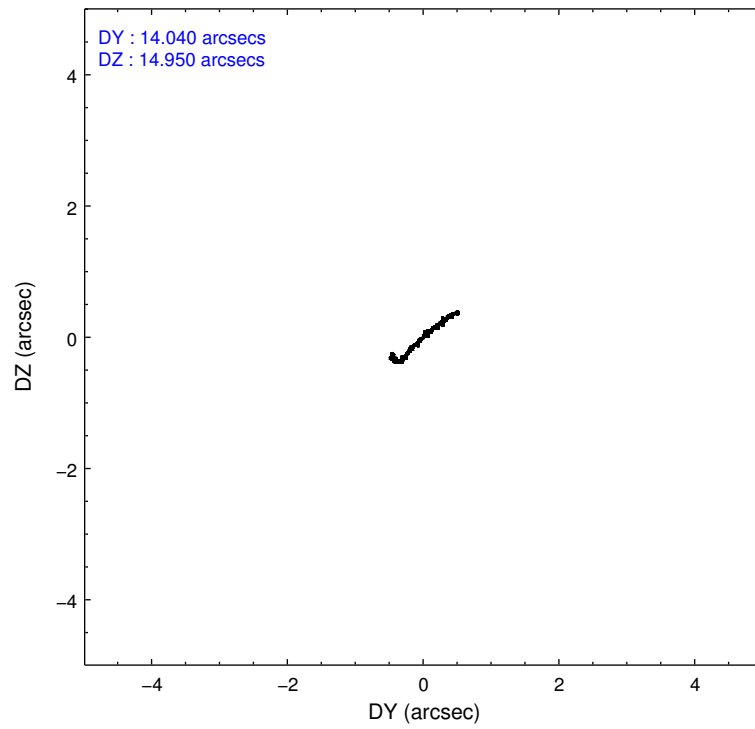
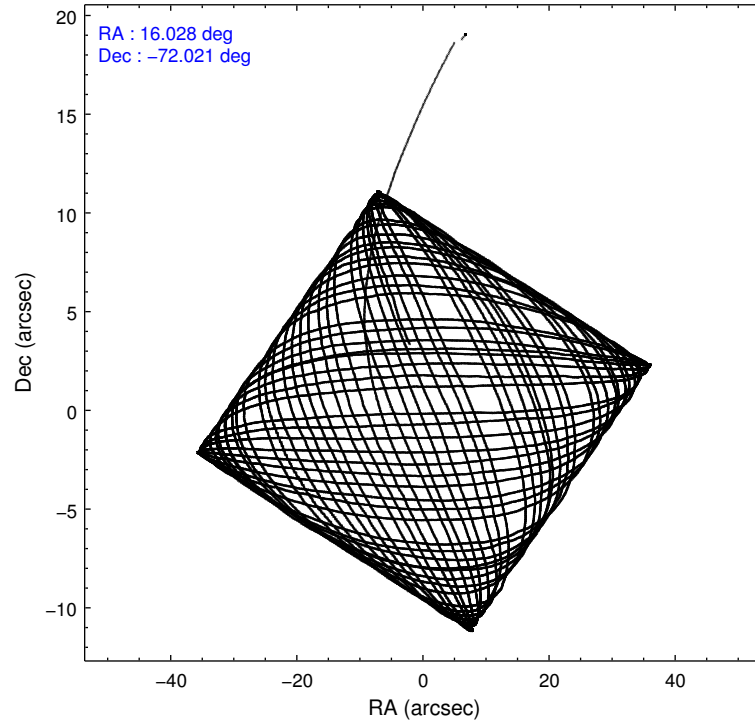
| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 187419 |
| rejected events | 21766 |
| rejected % | 11% |

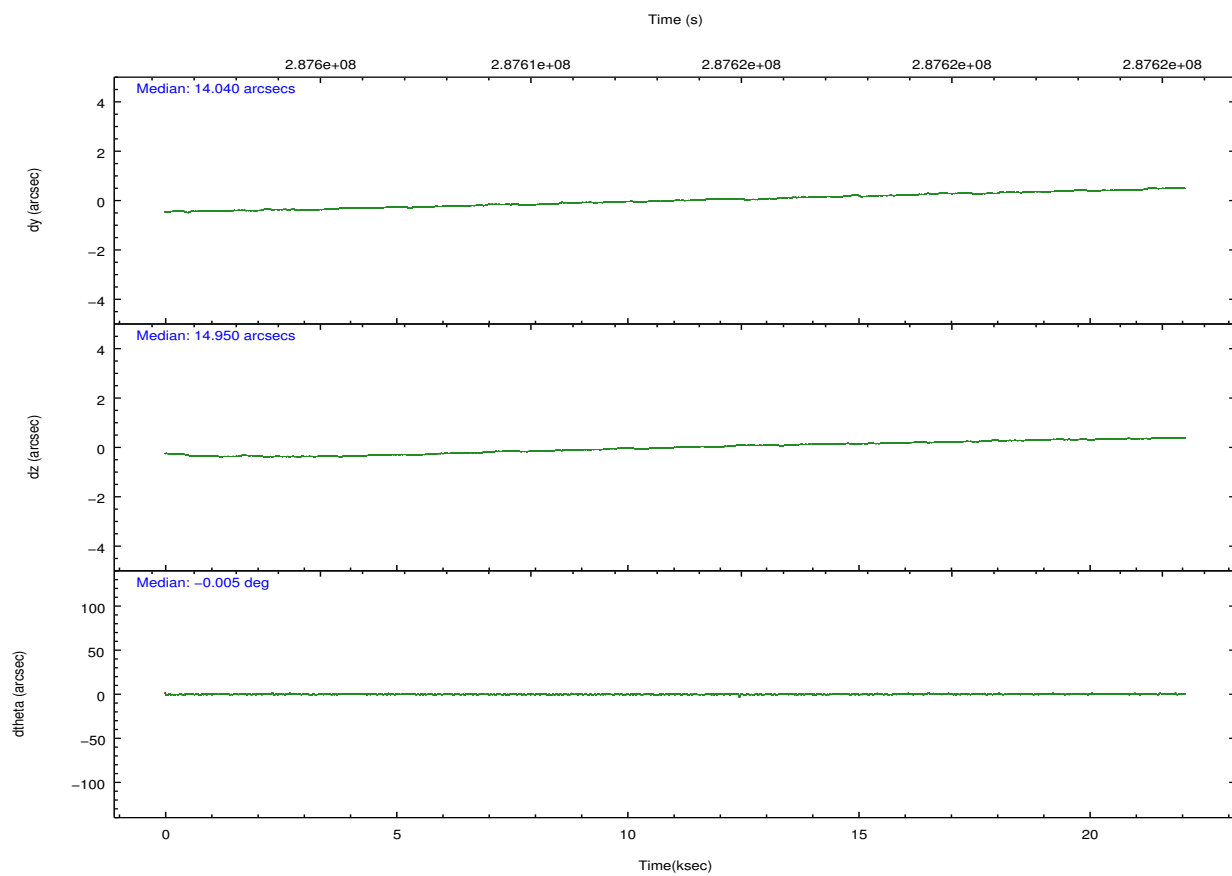
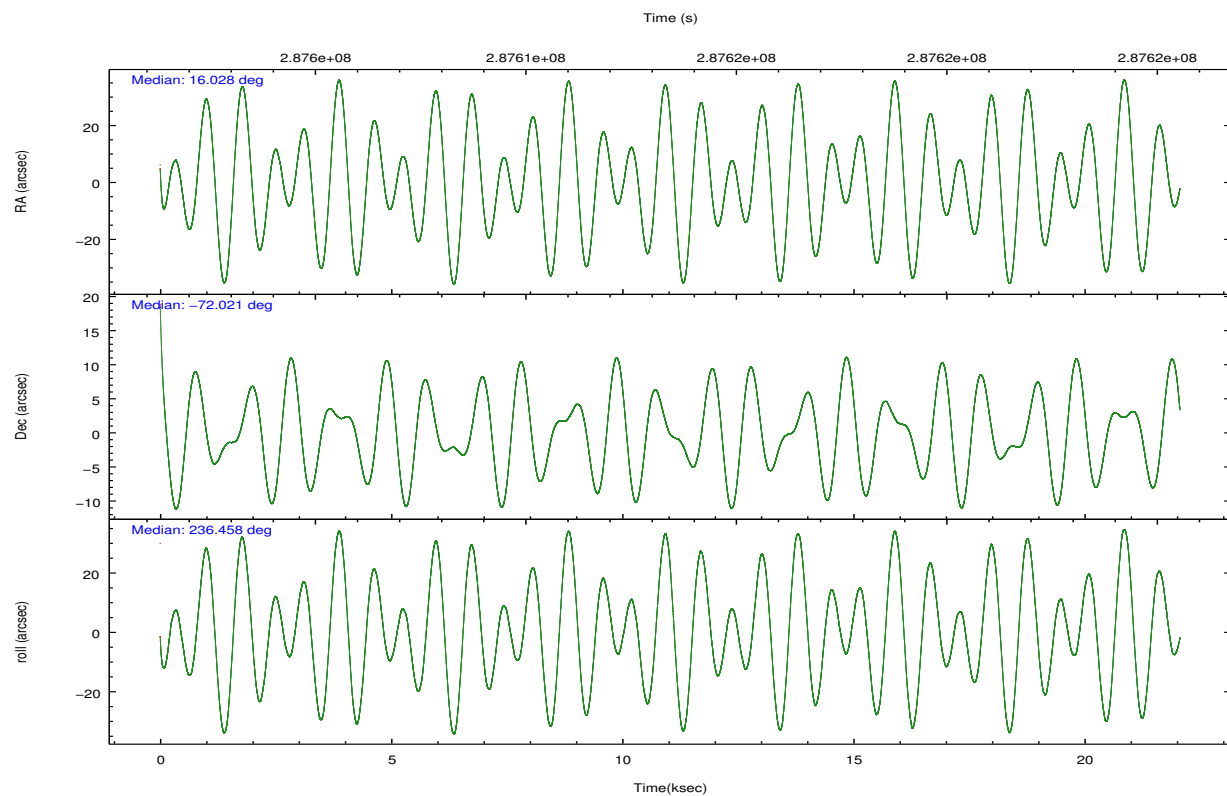
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 46046 |
| | 24% |
| grade 1 events | 292 |
| | 0% |
| grade 2 events | 45675 |
| | 24% |
| grade 3 events | 20791 |
| | 11% |
| grade 4 events | 19943 |
| | 10% |
| grade 5 events | 5670 |
| | 3% |
| grade 6 events | 34718 |
| | 18% |
| grade 7 events | 14284 |
| | 7% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-7 | ACIS-7 | 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 | 16.032464 | 16.02820619052834 | Subarray requested | CUSTOM | 1/4 |
| [deg] Pointing Dec | -71.993379 | -72.02068131470371 | Subarray start row | 384 | 384 |
| [deg] Pointing Roll | 236.312869 | 236.4654472046543 | Subarray row count | 256 | 256 |
| [s] Window start time (MET) | 281318465.184000 | 281318465.184000 | Alternating exposures requested | N | N |
| [s] Window stop time (MET) | 294278465.184000 | 294278465.184000 | [s] Primary exposure time | 0.000000 | 0.8 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 287602575.184000 | 287601463.701 | | | |
| Observation start date | 2007-02-11T17:35:10 | 2007-02-11T17:17:43 | | | |
| [s] Observation end time (MET) | 287624452.184000 | 287624680.4646 | | | |
| Observation end date | 2007-02-11T23:39:47 | 2007-02-11T23:44:40 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



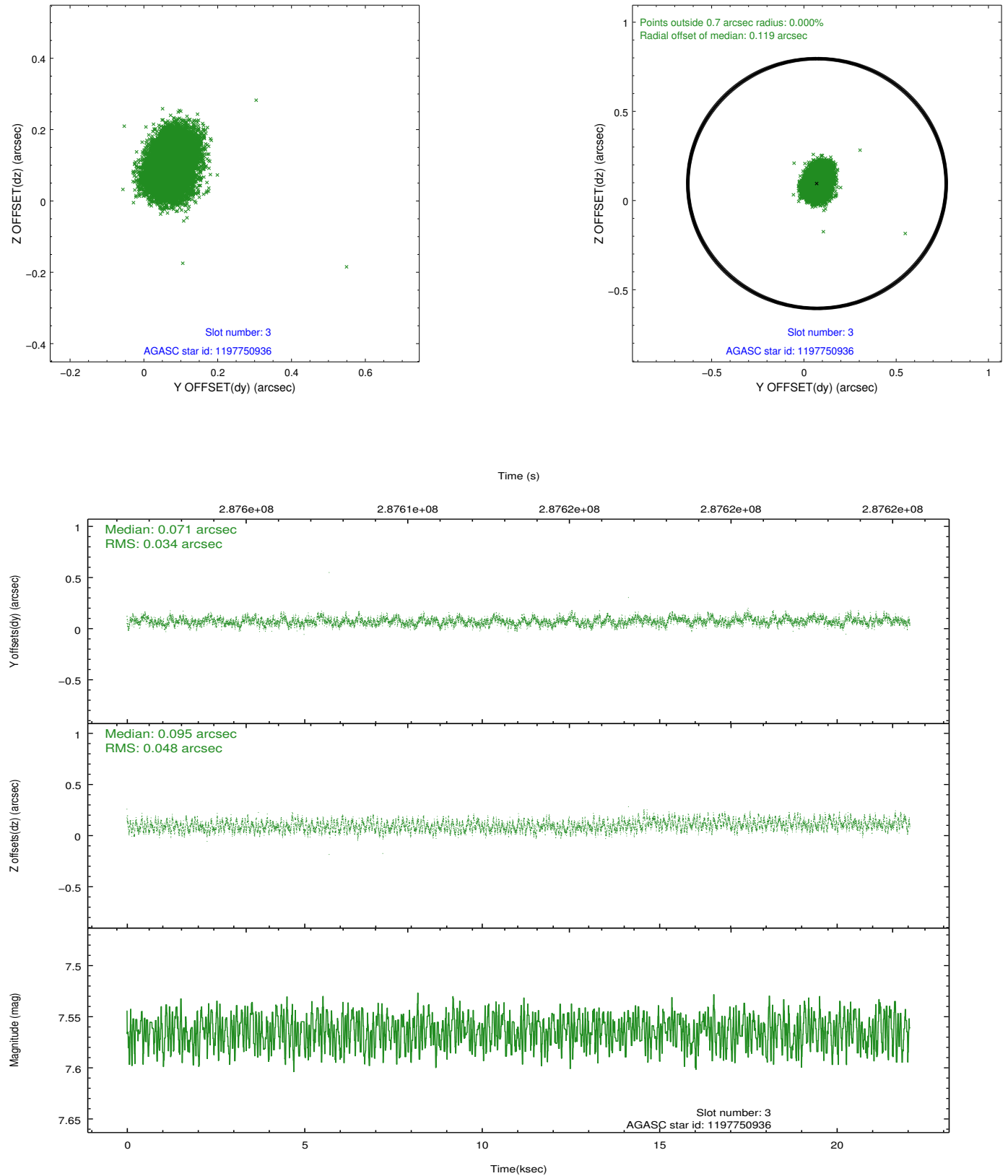


Slot Statistics

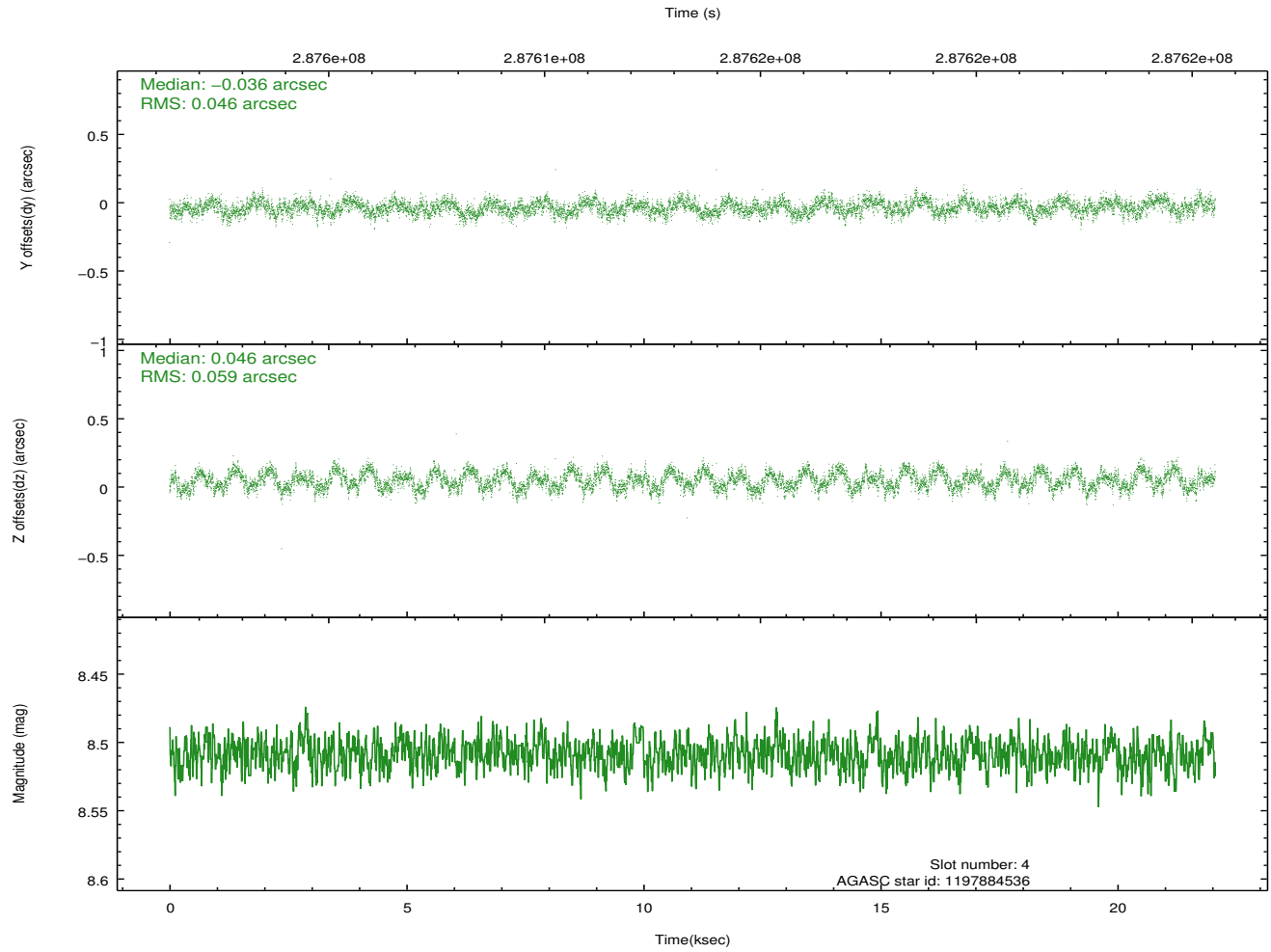
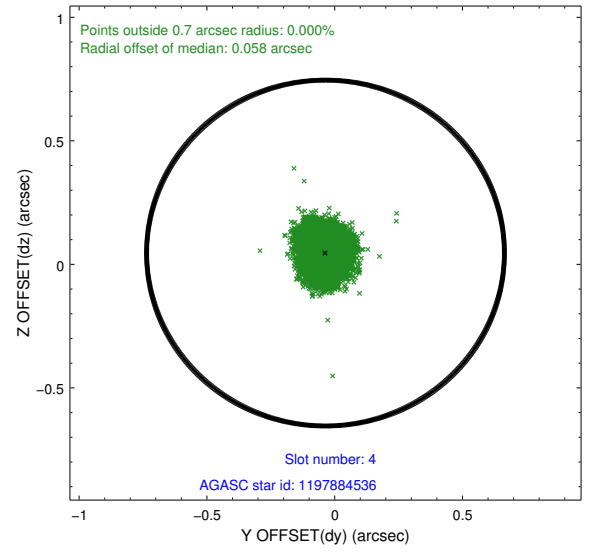
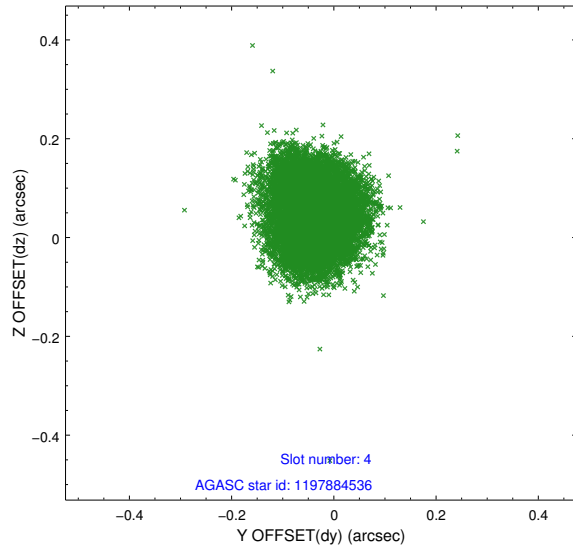
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.19 | 5382 | 0.033 | -0.037 | 0.014 | 0.020 | 0.000000 | 0.000000 | 929.08 | -1731.98 |
| 1 | FID | ACIS-S-4 | 7.20 | 5381 | 0.153 | 0.015 | 0.012 | 0.020 | 0.000000 | 0.000000 | 2146.68 | 172.08 |
| 2 | FID | ACIS-S-5 | 7.22 | 5381 | -0.213 | 0.035 | 0.012 | 0.019 | 0.000000 | 0.000000 | -1819.84 | 165.84 |
| 3 | GUIDE | 1197750936 | 7.56 | 10762 | 0.071 | 0.095 | 0.063 | 0.100 | 15.387940 | -71.549550 | -918.25 | -1494.56 |
| 4 | GUIDE | 1197884536 | 8.51 | 10759 | -0.036 | 0.046 | 0.081 | 0.123 | 17.160729 | -71.835289 | -1165.98 | 744.53 |
| 5 | GUIDE | 1197884712 | 8.30 | 10761 | 0.006 | -0.003 | 0.067 | 0.112 | 16.087398 | -72.252690 | 743.43 | 568.46 |
| 6 | GUIDE | 1197885104 | 9.36 | 10751 | 0.087 | -0.029 | 0.095 | 0.155 | 17.845067 | -72.189368 | -494.17 | 2068.81 |
| 7 | GUIDE | 1198283128 | 7.78 | 10760 | -0.132 | -0.114 | 0.060 | 0.093 | 17.272580 | -72.642428 | 1216.75 | 2412.34 |

2.4 Star Slots

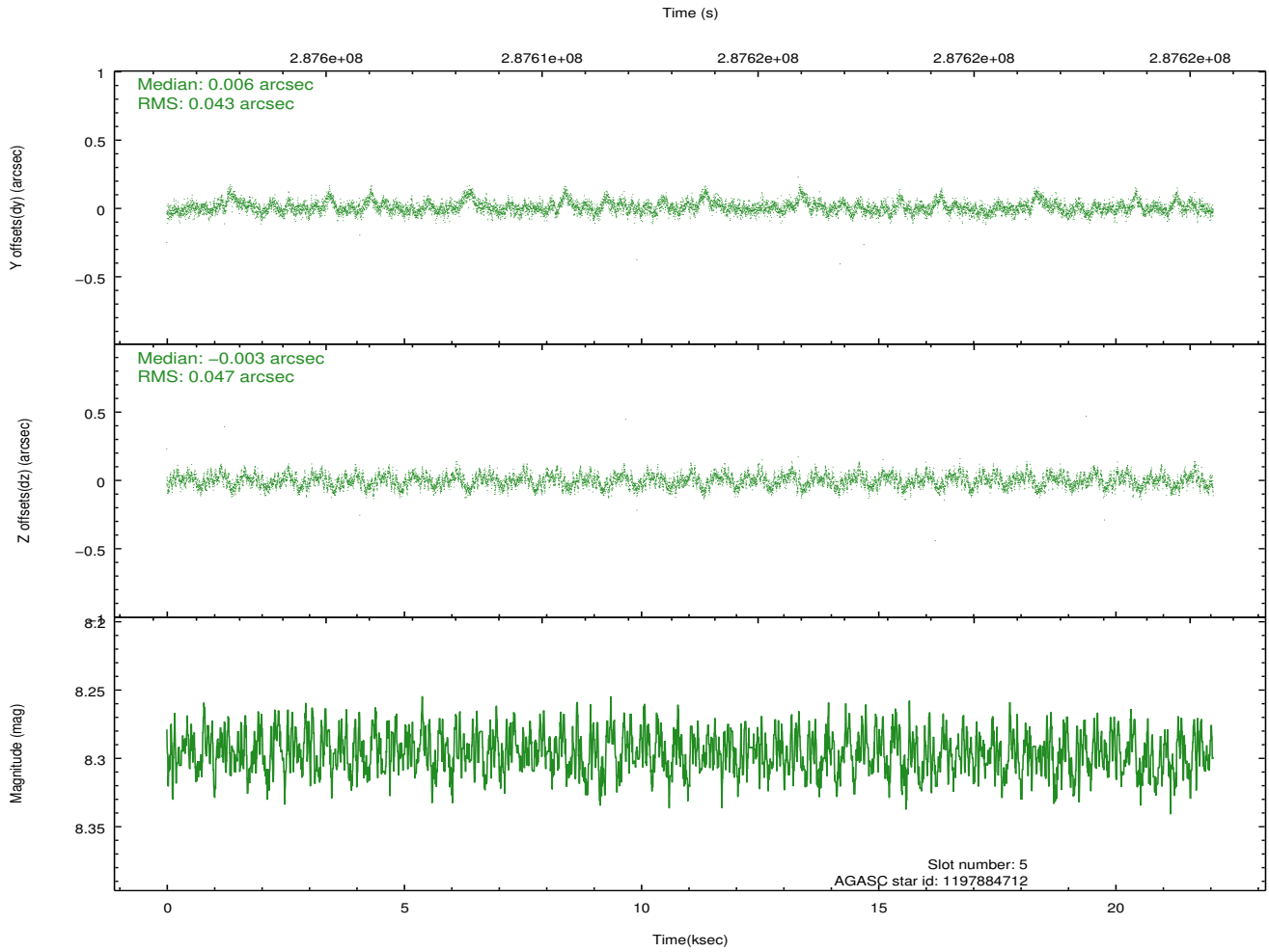
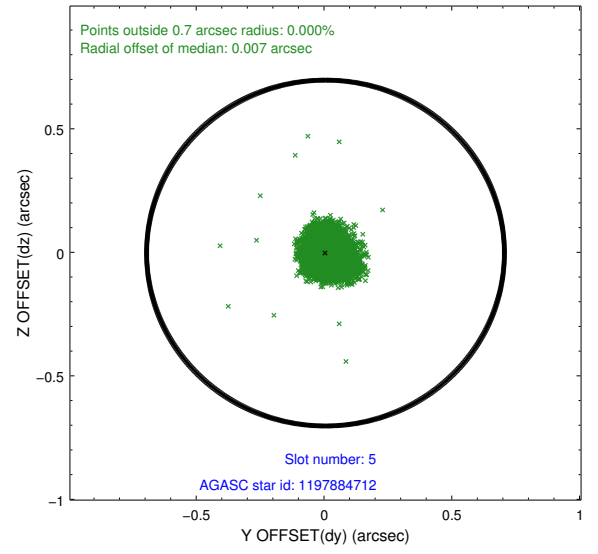
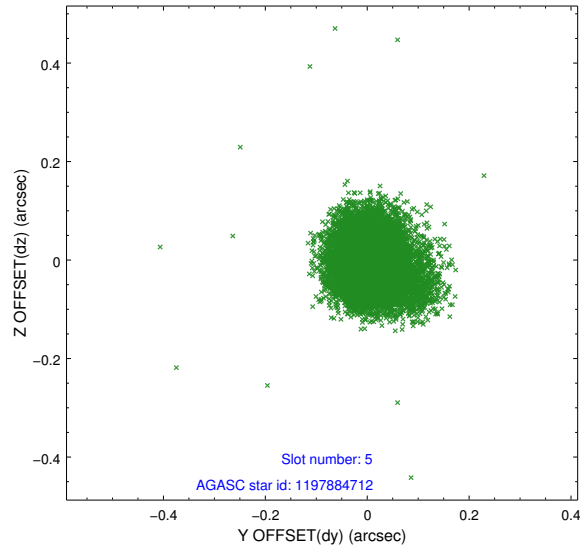
2.4.1 Slot 3



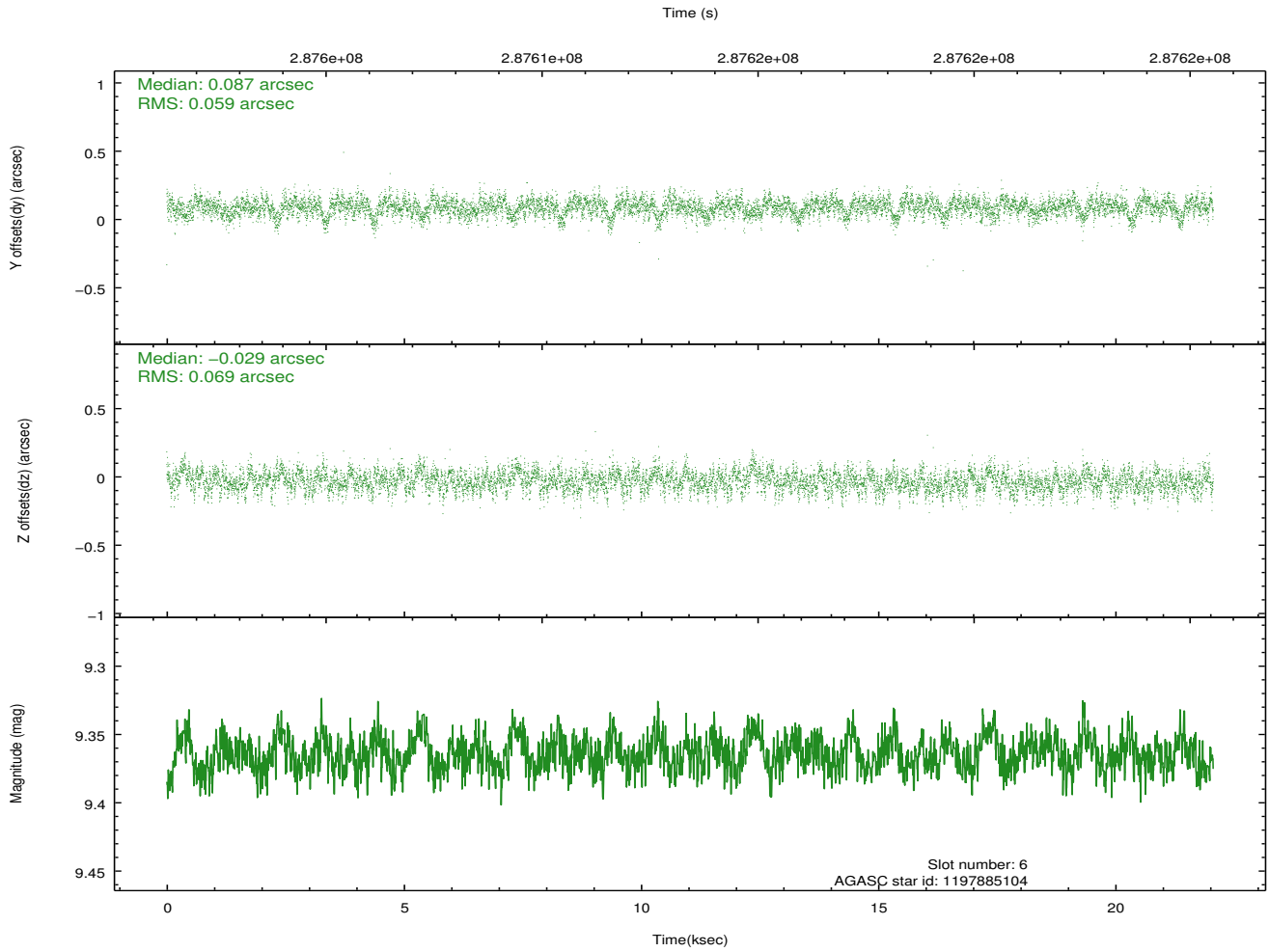
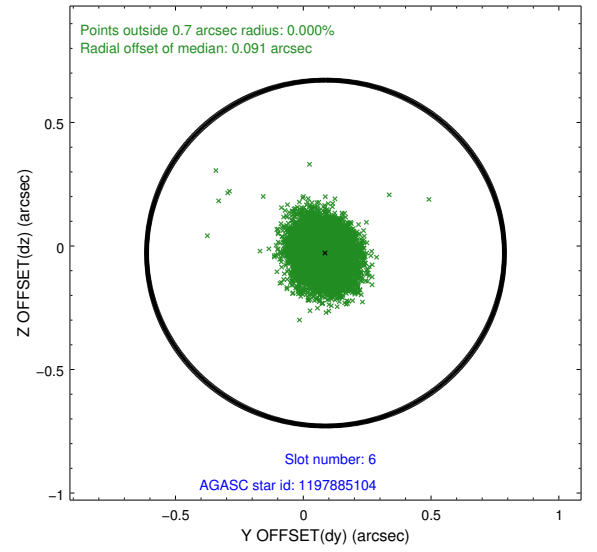
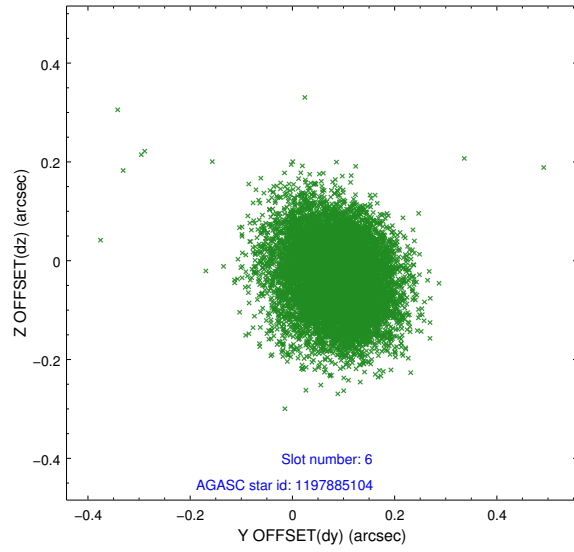
2.4.2 Slot 4



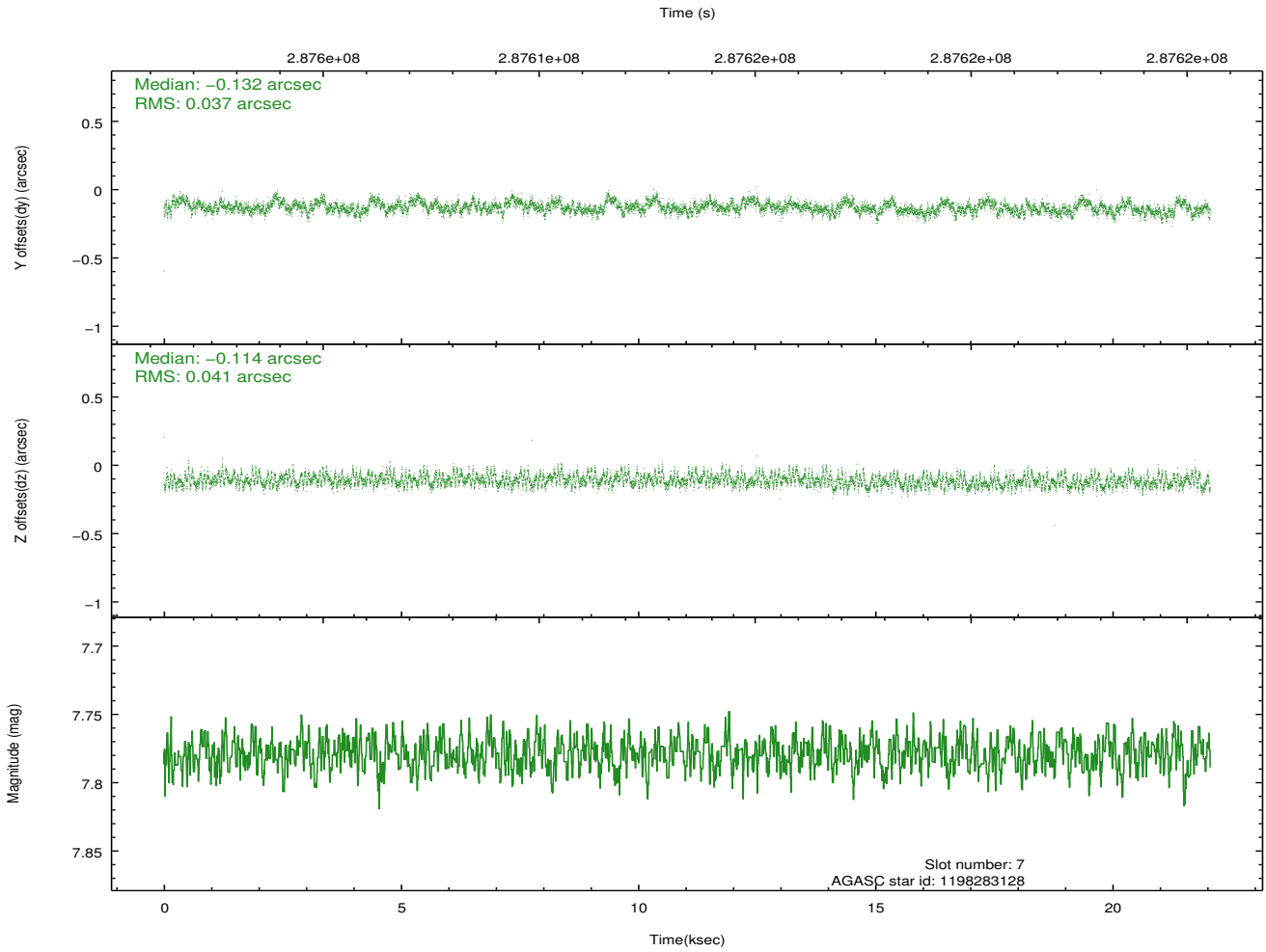
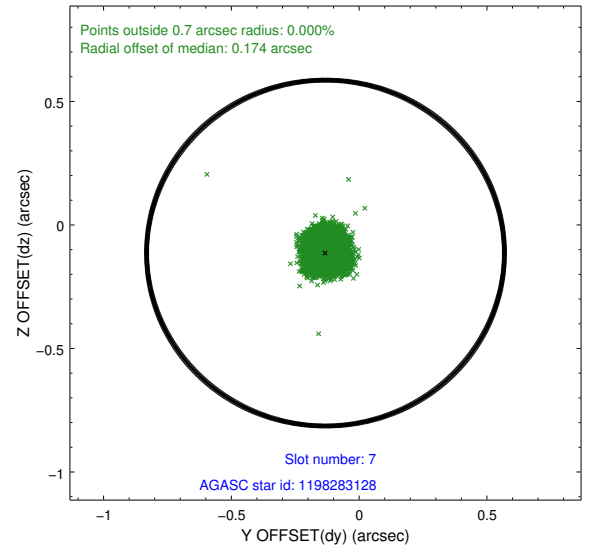
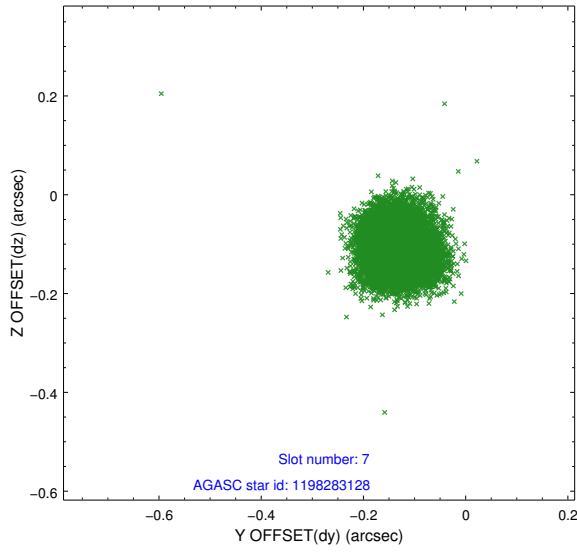
2.4.3 Slot 5



2.4.4 Slot 6

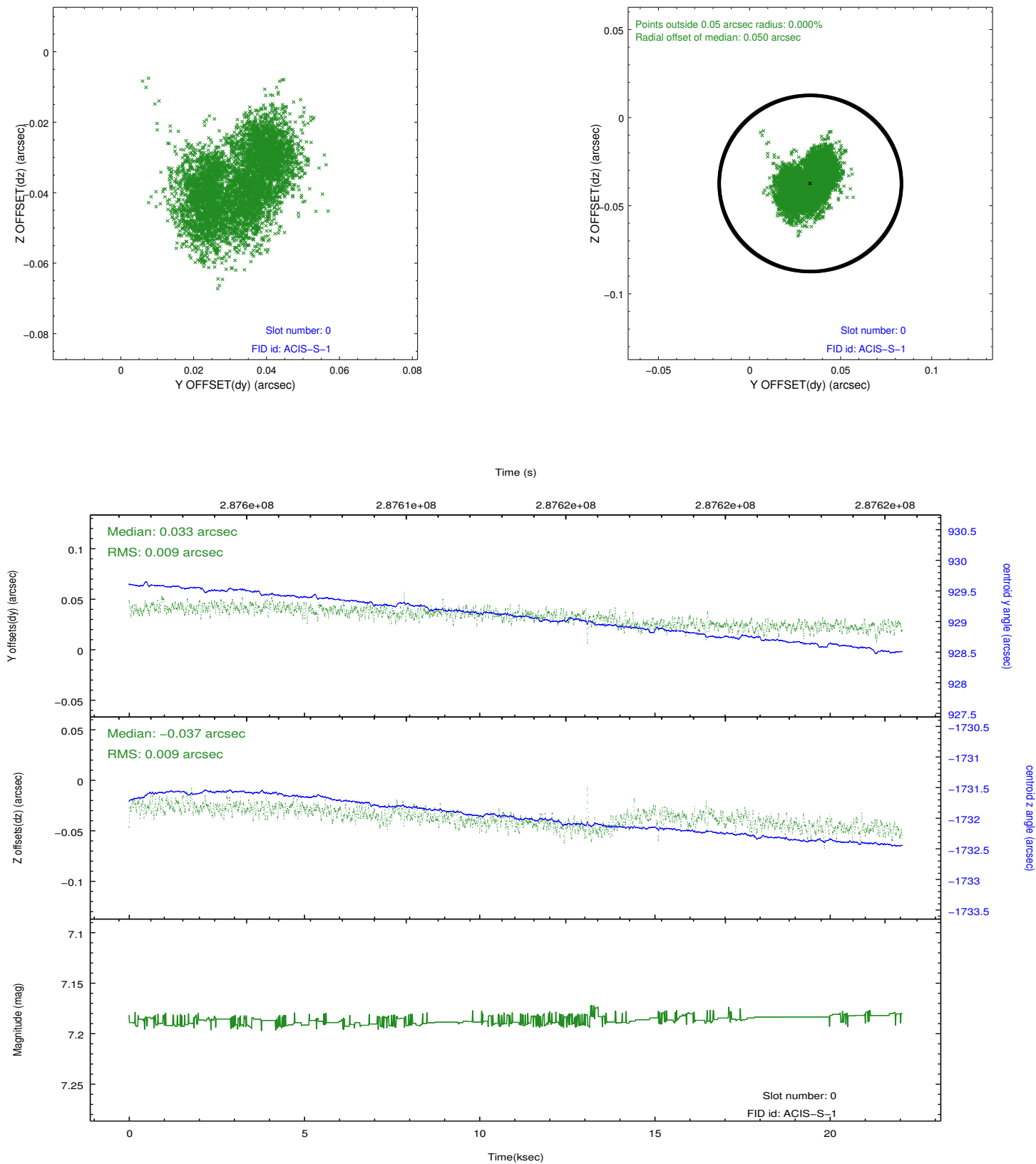


2.4.5 Slot 7

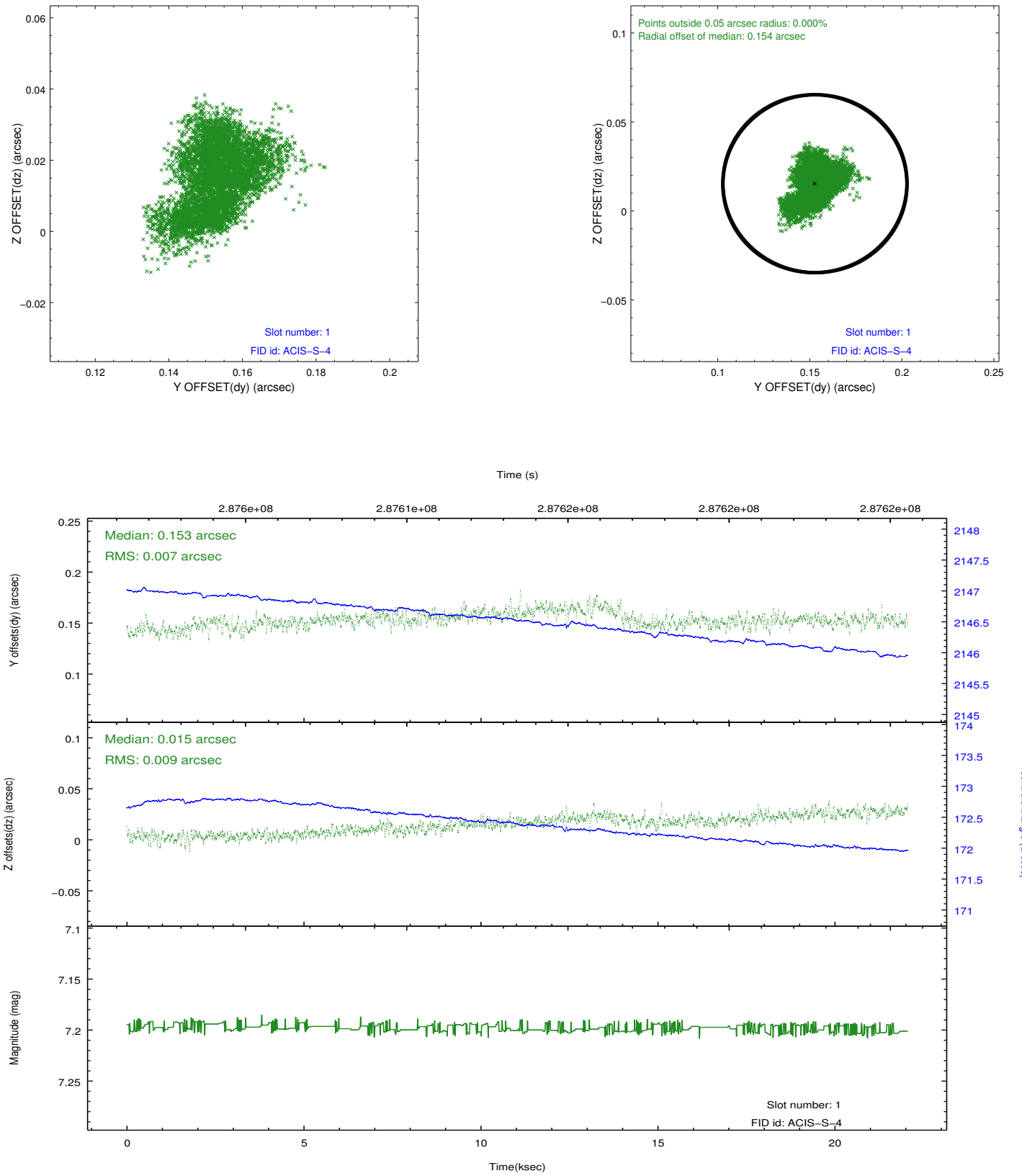


2.5 FID Slots

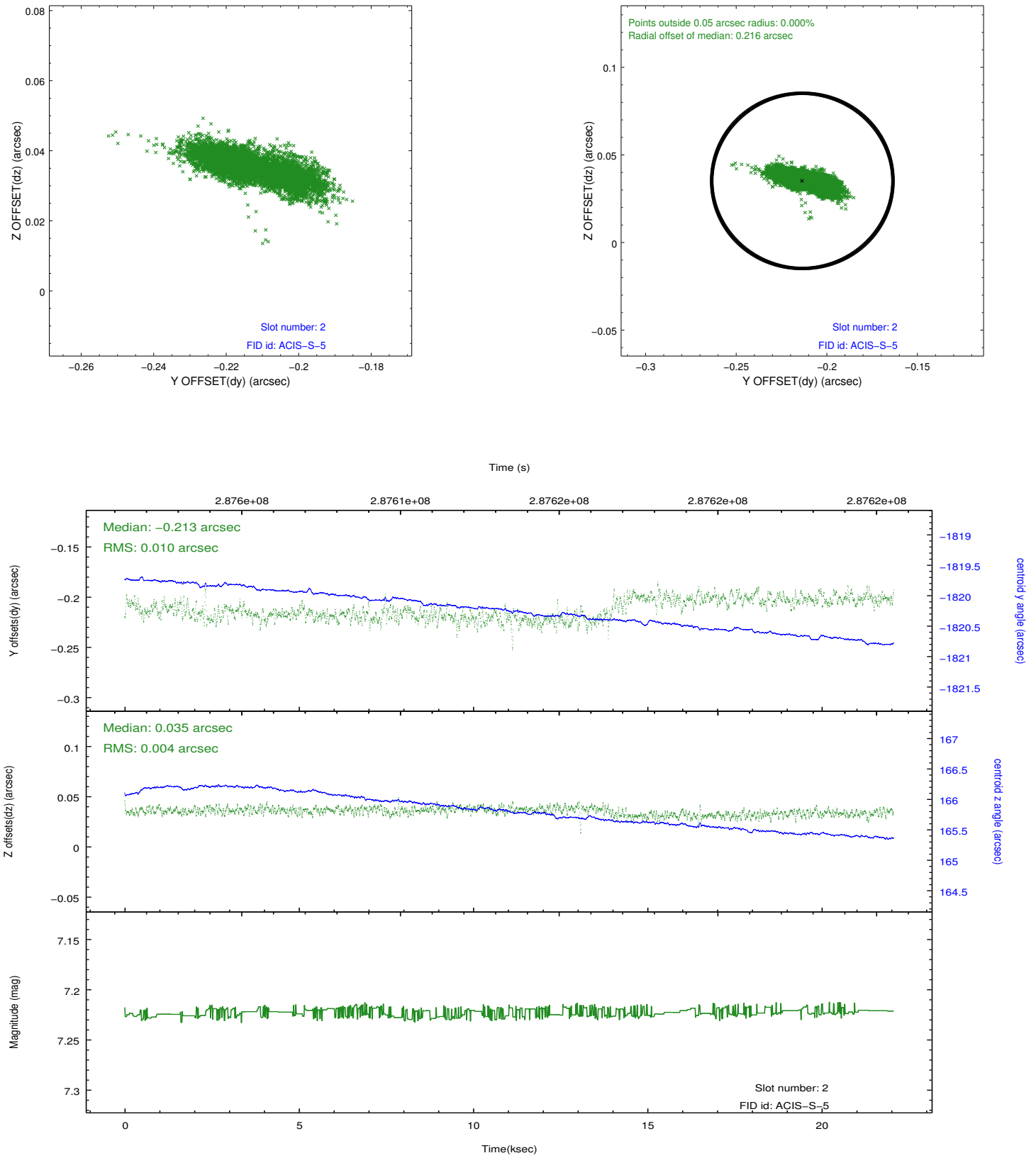
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.04.22 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 22.0608003 |

A.2 Comments

Window preference met.