

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4780 - L2 Version 3  
Chandra X-Ray Center

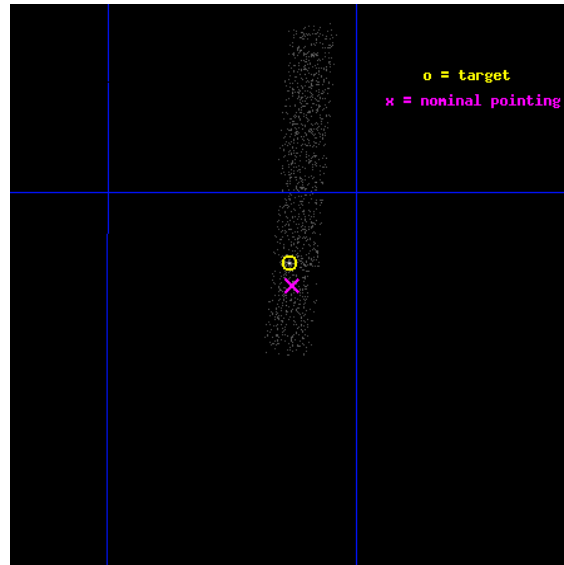
L2 Processing Date : Dec 7 2012

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# 1 Front

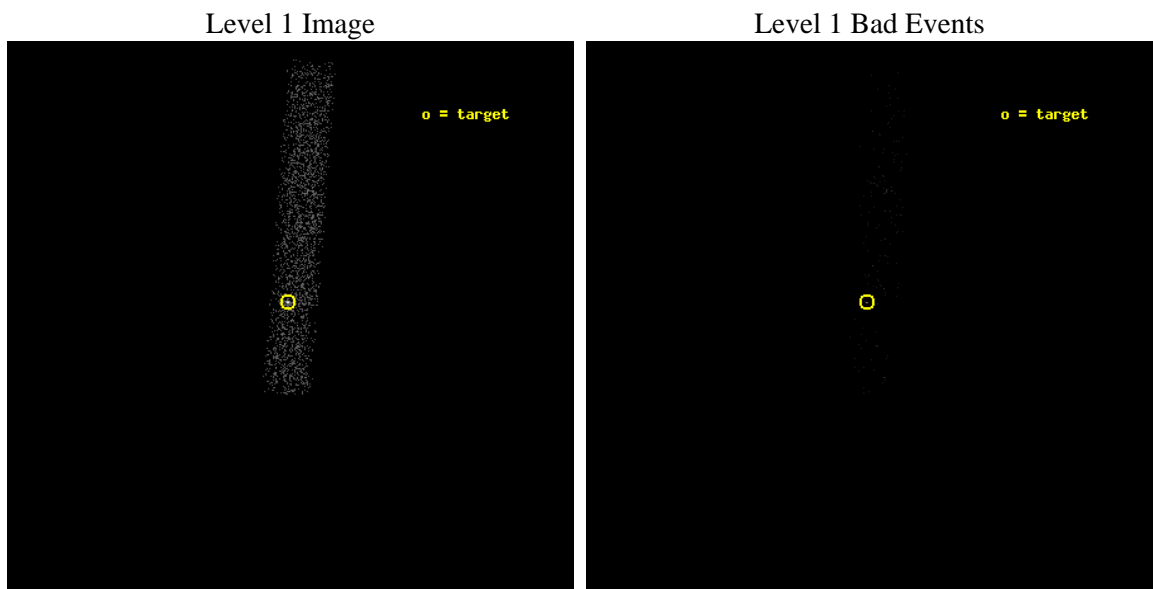
|          |   |   |
|----------|---|---|
| seq_num  | 700863                                      | Sequence number                             |
| obs_id   | 4780  | Observation id                              |
| title    | Anchoring the AGN X-ray Luminosity Function | Proposal title                              |
| observer | Dr. JOHN SALZER                             | Principal investigator                      |
| object   | F1345-3363                                  | Source name                                 |
| dtcycle  | 0   | &#160                                       |
| cycle    | P   | events from which exps?<br>Prim/Second/Both |
| ra_targ  | 206.53375                                   | Observer's specified target RA [deg]        |
| dec_targ | 29.636306                                   | Observer's specified target Dec [deg]       |
| ra_nom   | 206.53262029579                             | Nominal RA [deg]                            |
| dec_nom  | 29.6264682618                               | Nominal Dec [deg]                           |
| roll_nom | 274.4928891614                              | Nominal Roll [deg]                          |
| revision | 3   | Processing version of data                  |
| ontime   | 2188.8000325859                             | Sum of GTIs [s]                             |
| livetime | 1985.1260952166                             | Livetime [s]                                |
| ontime7  | 2188.8000325859                             | Sum of GTIs [s]                             |
| l2events | 1998  | Number of level 2 events                    |



## 2 OBI

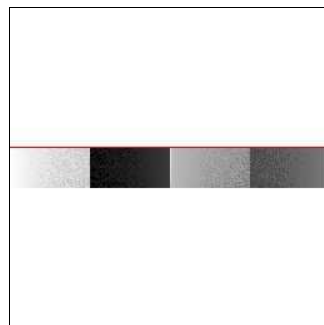
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

|          |                     |                                |                |                 |   |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num  | 1                   | Obi number                     | sched_exp_time | 2007.266000     | [s] Scheduled observation exposure time |
| ascdsver | 8.5                 | Processing system revision     | ontime         | 2188.8000325859 | Sum of GTIs [s]                         |
| caldsver | 4.5.4               | &#160                          | ontime7        | 2188.8000325859 | Sum of GTIs [s]                         |
| date     | 2012-12-07T17:23:41 | Date and time of file creation | l1events       | 4332            | Number of level 1 events                |
| revision | 3                   | Processing version of data     |                |                 |   |

### 2.1.4 Events

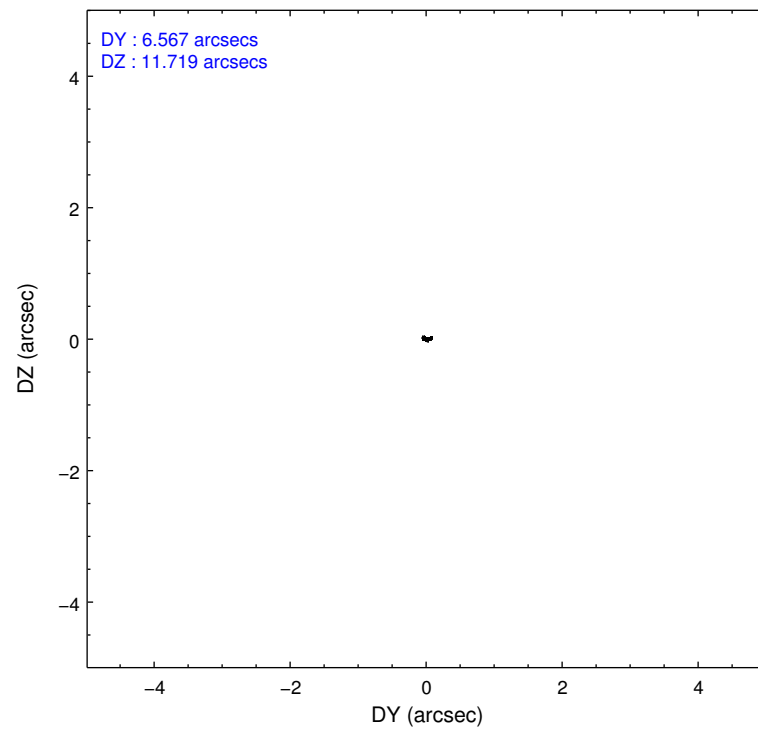
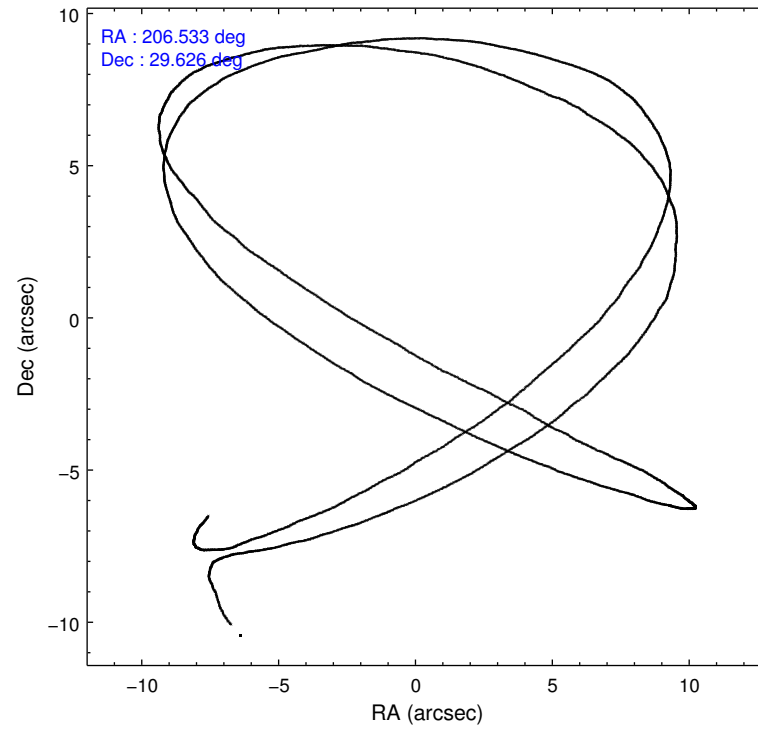
|                 |              |
|-----------------|--------------|
|                 | <b>ccd 7</b> |
| level 1 events  | 4332         |
| rejected events | 2279         |
| rejected %      | 52%          |

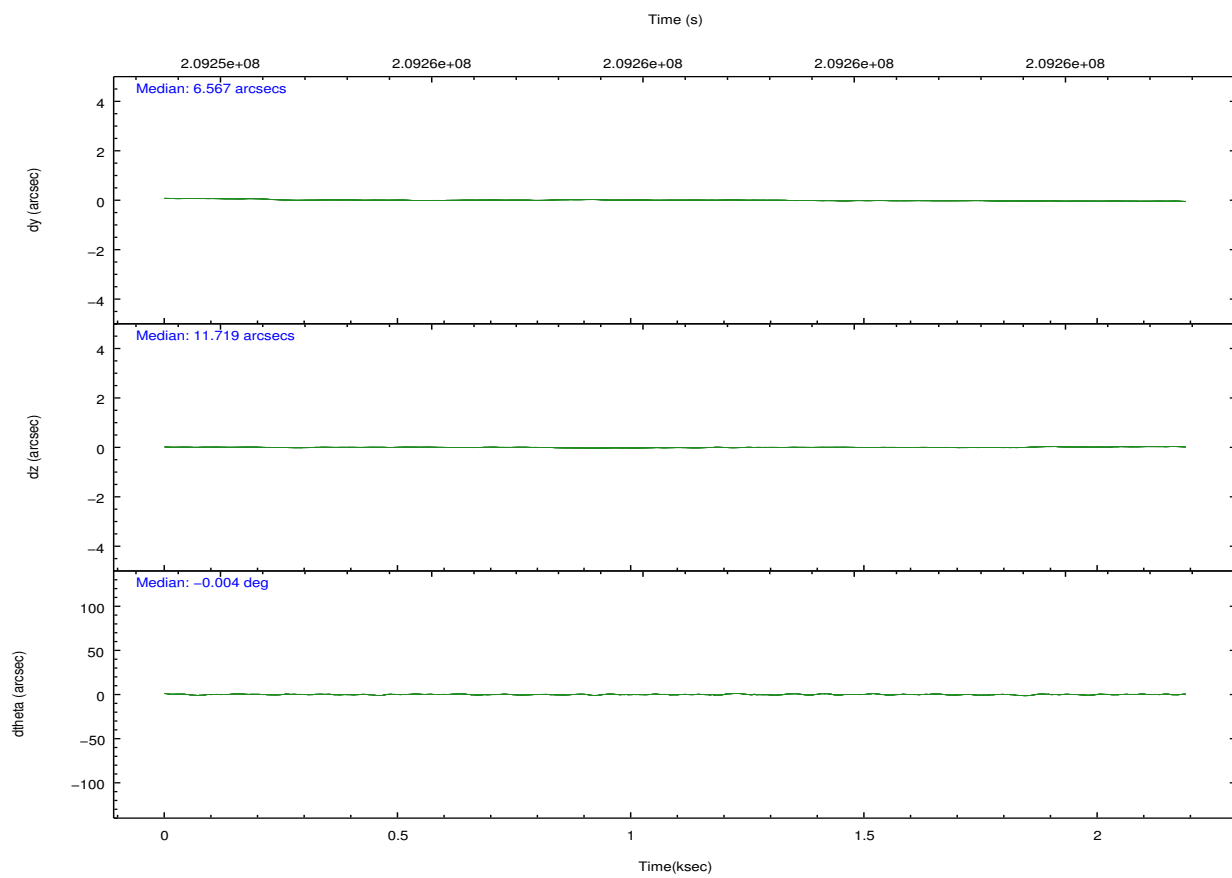
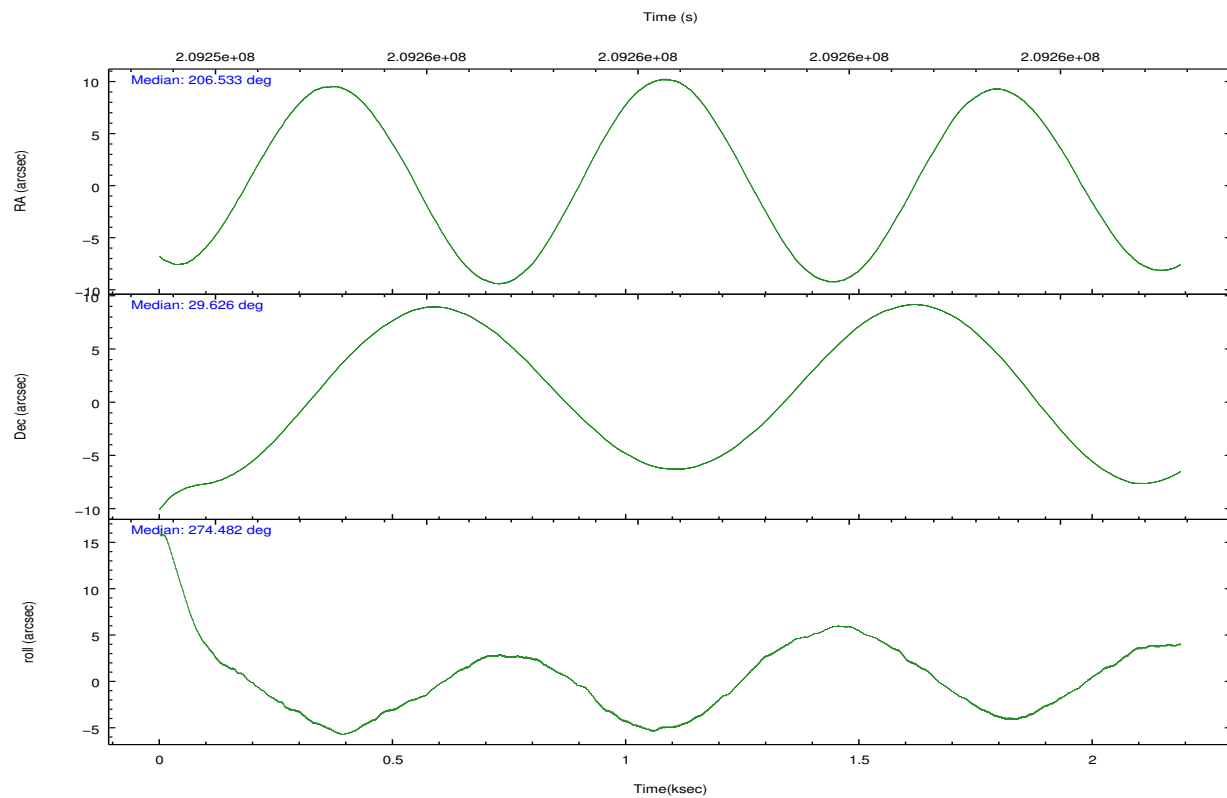
|                |              |
|----------------|--------------|
|                | <b>ccd 7</b> |
| grade 0 events | 467          |
|                | 10%          |
| grade 1 events | 7            |
|                | 0%           |
| grade 2 events | 483          |
|                | 11%          |
| grade 3 events | 310          |
|                | 7%           |
| grade 4 events | 294          |
|                | 6%           |
| grade 5 events | 360          |
|                | 8%           |
| grade 6 events | 850          |
|                | 19%          |
| grade 7 events | 1561         |
|                | 36%          |

## 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                         | FAINT               | FAINT                | Number of optional ACIS chips dropped | 0         | 0       |
| Observation mode                  | POINTING            | POINTING             | On-chip summing requested             | N         | N       |
| [deg] Pointing RA                 | 206.514576          | 206.5326202957851    | Subarray requested                    | CUSTOM    | 1/8     |
| [deg] Pointing Dec                | 29.648915           | 29.62646826180002    | Subarray start row                    | 449       | 449     |
| [deg] Pointing Roll               | 274.345152          | 274.492889161403     | Subarray row count                    | 128       | 128     |
| [mm] SIM focus pos                | -0.684267           | -0.6828225247311905  | Alternating exposures requested       | N         | N       |
| [mm] SIM defocus                  | 0                   | 0.001444936568705701 | [s] Primary exposure time             | 0.000000  | 0.4     |
| [mm] SIM translation stage pos    | -190.132523         | -190.1425803651734   |                                       |           |         |
| [mm] SIM translation stage offset | 0                   | 0.01005778216563158  |                                       |           |         |
| [s] Observation start time (MET)  | 209254662.184000    | 209253752.38921      |                                       |           |         |
| Observation start date            | 2004-08-18T22:16:38 | 2004-08-18T22:02:32  |                                       |           |         |
| [s] Observation end time (MET)    | 209256670.184000    | 209256897.08935      |                                       |           |         |
| Observation end date              | 2004-08-18T22:50:06 | 2004-08-18T22:54:57  |                                       |           |         |
| Read mode                         | TIMED               | TIMED                |                                       |           |         |

## 2.3 Aspect





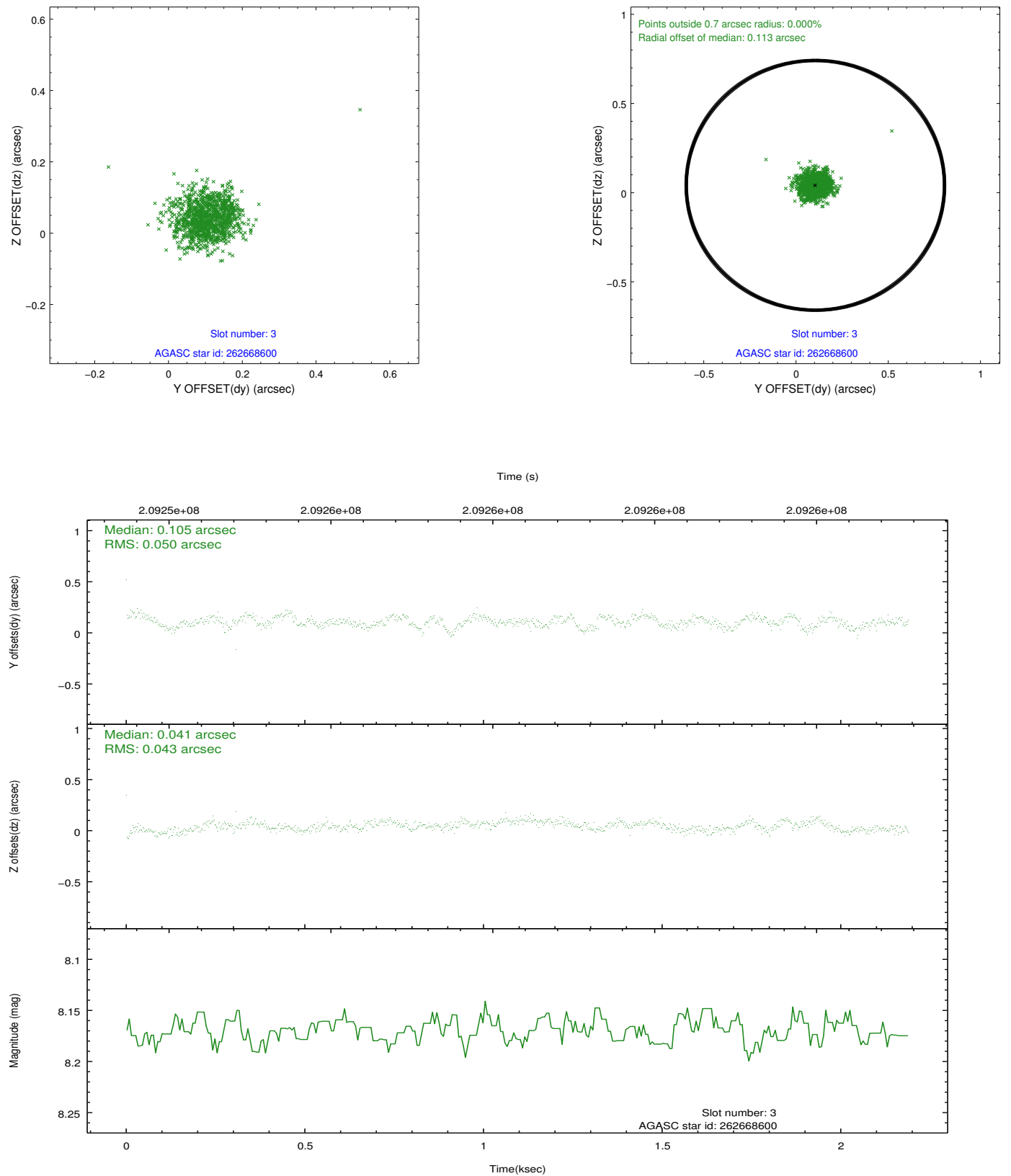
### Slot Statistics

| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | ACIS-S-2  | 7.10 | 534   | -0.043 | -0.021 | 0.007 | 0.012 | 0.000000   | 0.000000  | -759.35  | -1732.98 |
| 1    | FID    | ACIS-S-4  | 7.20 | 534   | 0.069  | 0.026  | 0.005 | 0.010 | 0.000000   | 0.000000  | 2152.69  | 172.47   |
| 2    | FID    | ACIS-S-5  | 7.23 | 534   | -0.057 | 0.003  | 0.006 | 0.011 | 0.000000   | 0.000000  | -1808.37 | 169.50   |
| 3    | GUIDE  | 262668600 | 8.17 | 1069  | 0.105  | 0.041  | 0.068 | 0.107 | 206.125817 | 28.976683 | 2318.28  | -1403.53 |
| 4    | GUIDE  | 262668712 | 9.68 | 1067  | -0.037 | 0.064  | 0.114 | 0.184 | 206.121190 | 29.995616 | -1337.68 | -1129.48 |
| 5    | GUIDE  | 262670112 | 9.49 | 1067  | 0.049  | -0.067 | 0.137 | 0.209 | 205.765562 | 29.678751 | -293.27  | -2327.99 |
| 6    | GUIDE  | 262670984 | 9.24 | 1065  | -0.092 | -0.143 | 0.099 | 0.160 | 205.849583 | 29.505137 | 351.86   | -2118.22 |
| 7    | GUIDE  | 262800336 | 7.60 | 1068  | -0.025 | 0.095  | 0.062 | 0.105 | 207.134957 | 29.861227 | -621.07  | 1987.89  |

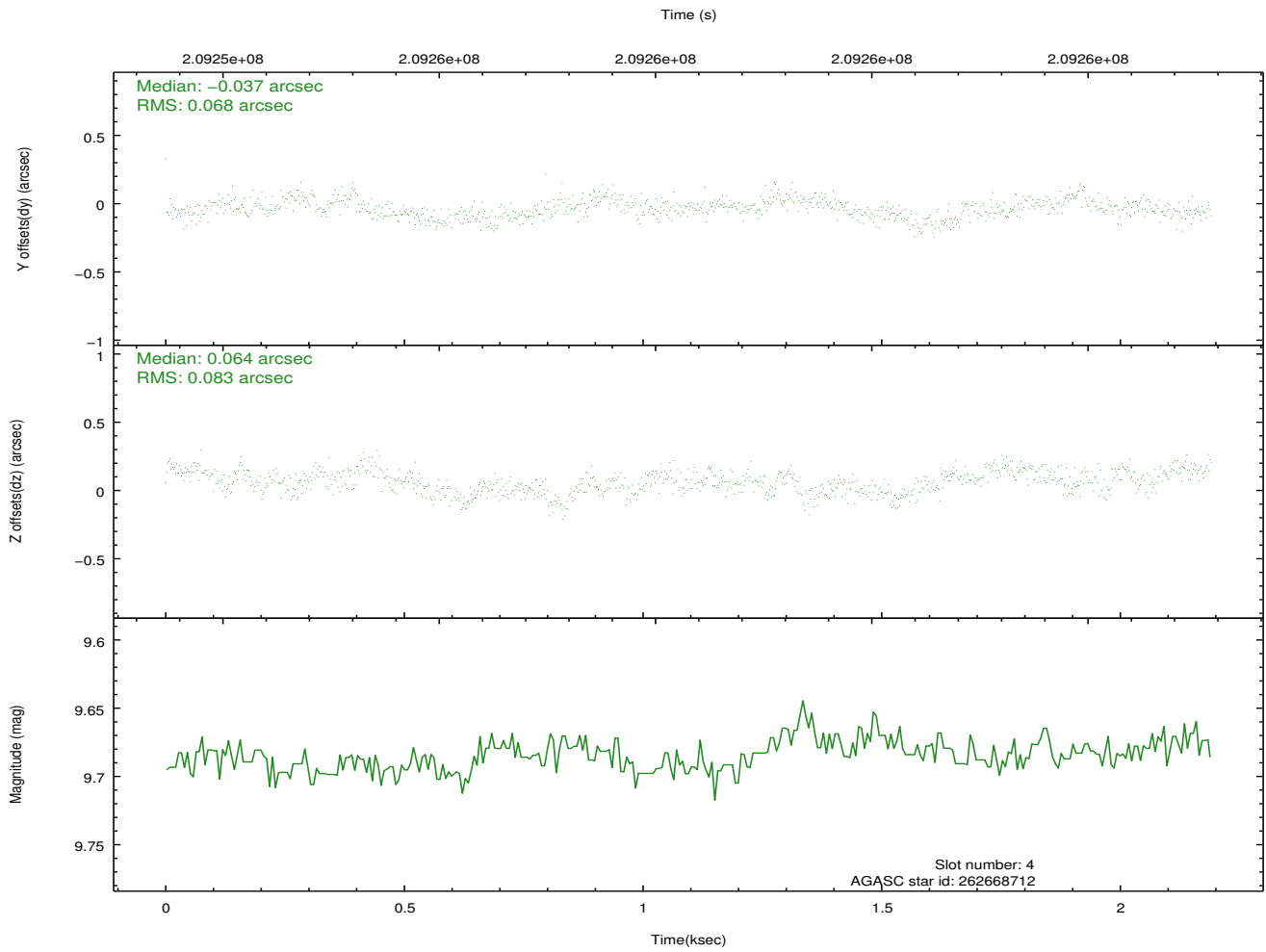
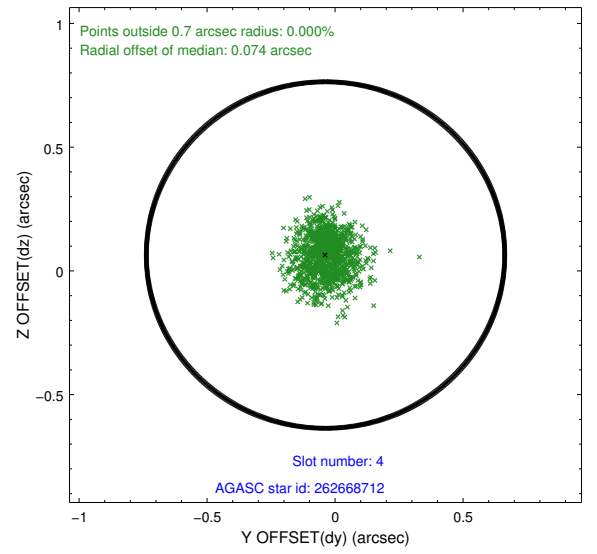
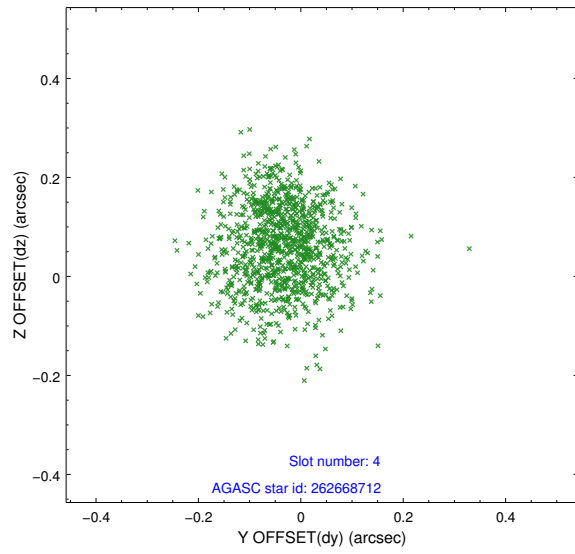


## 2.4 Star Slots

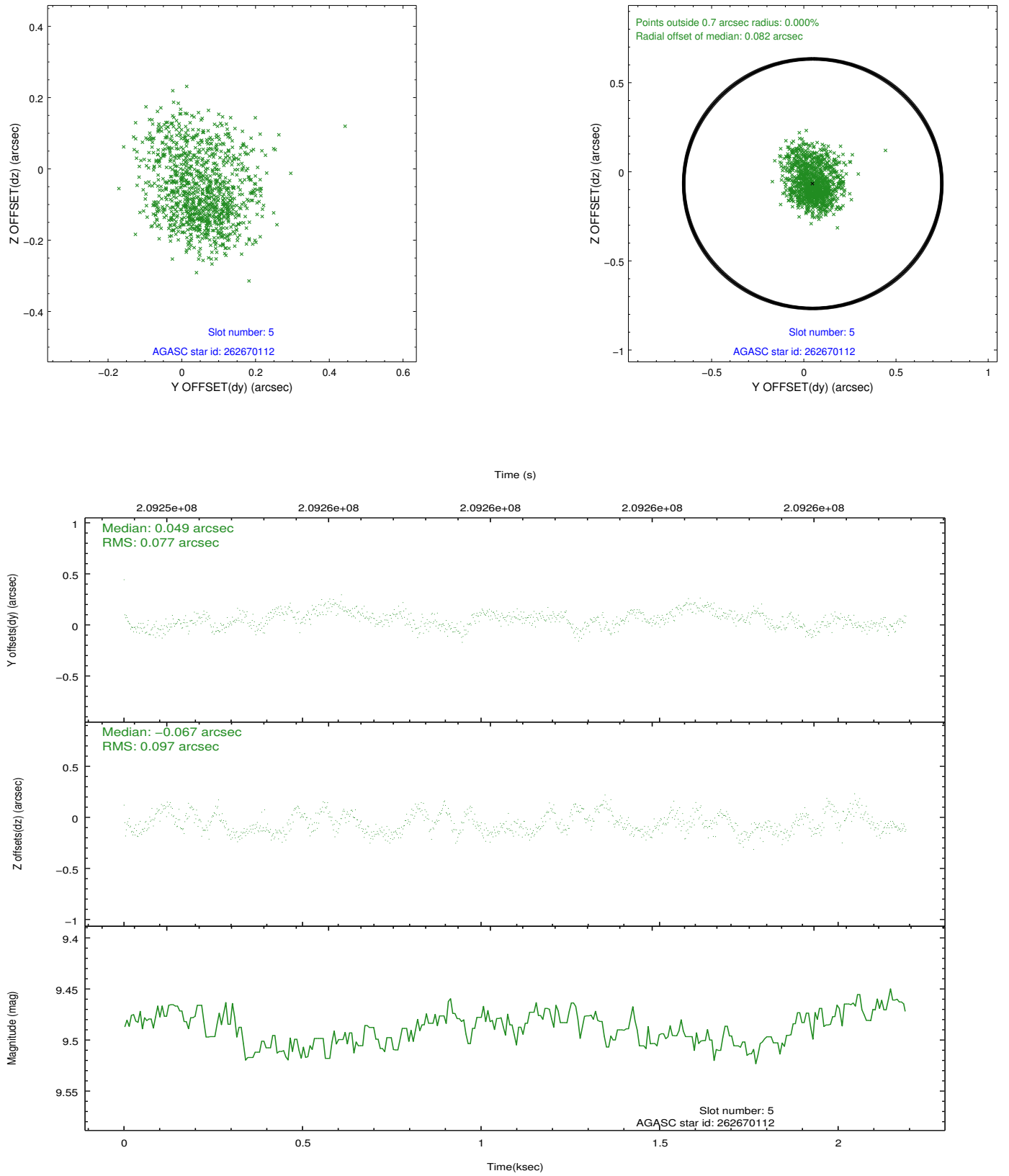
### 2.4.1 Slot 3



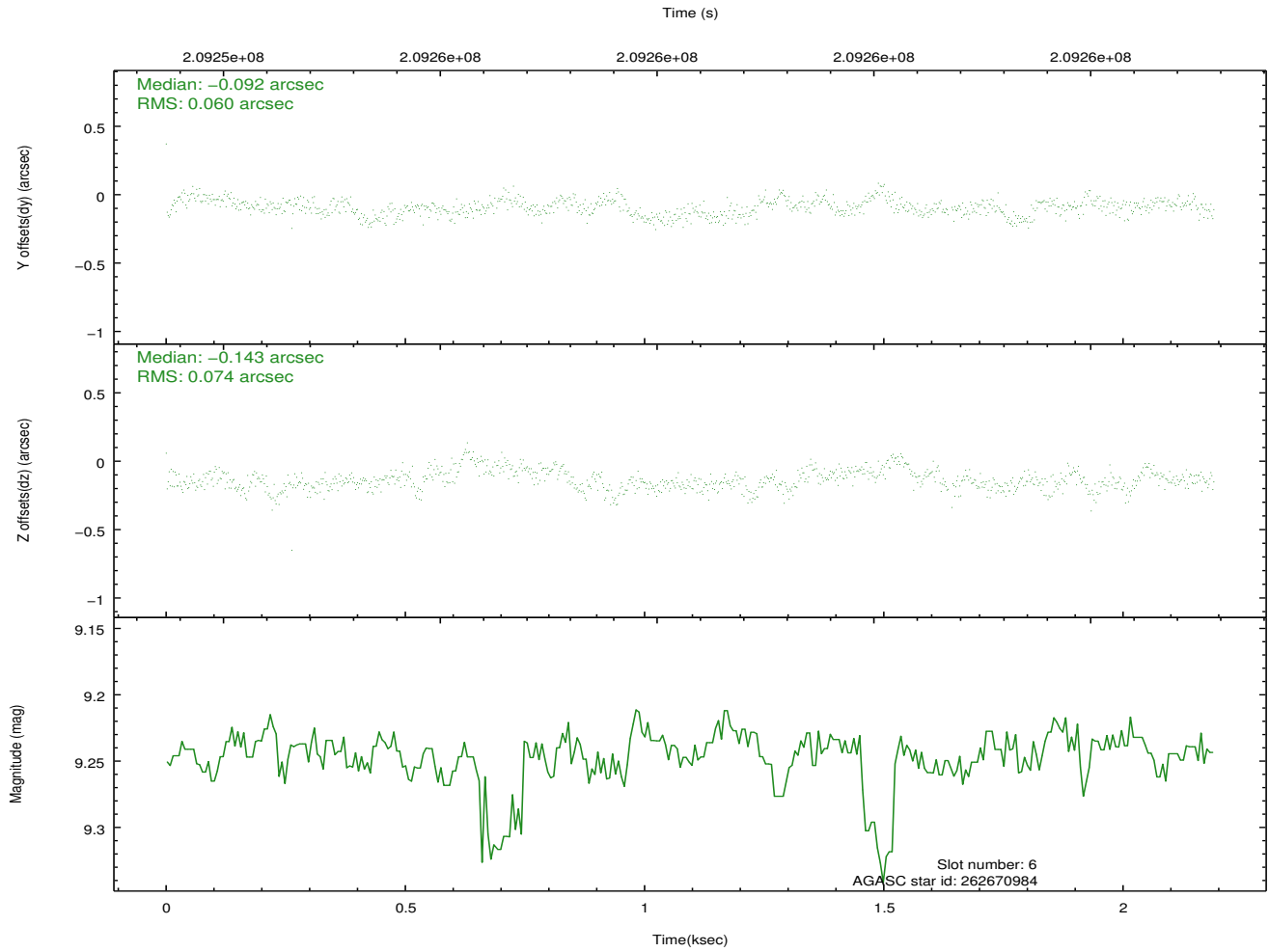
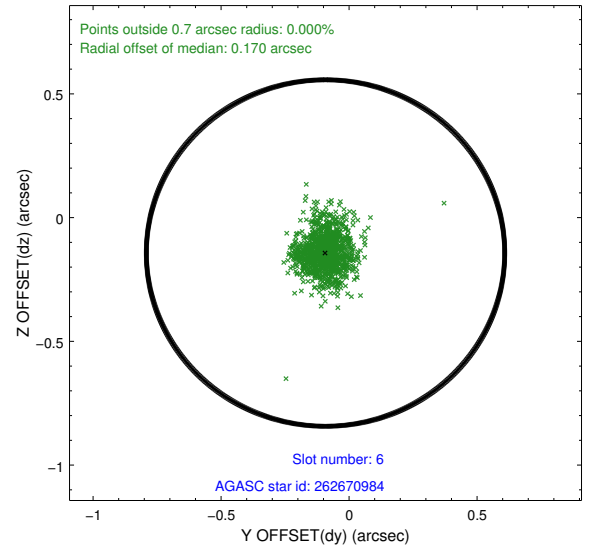
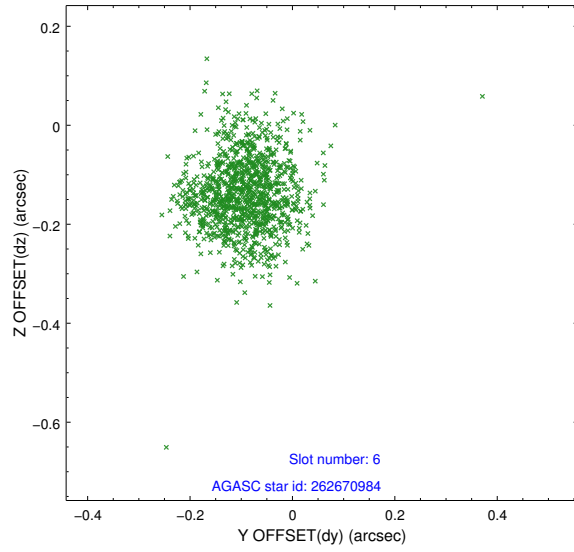
## 2.4.2 Slot 4



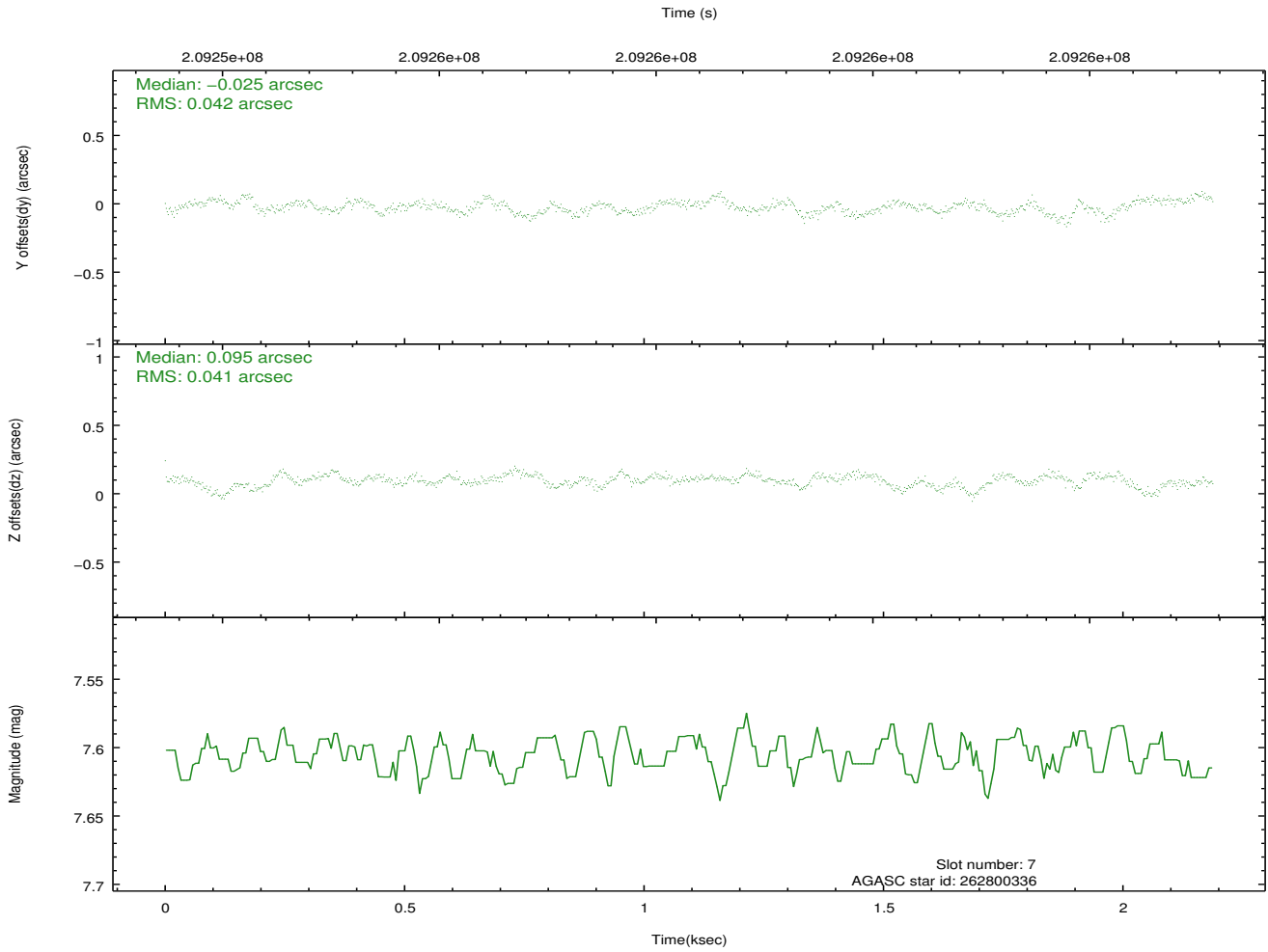
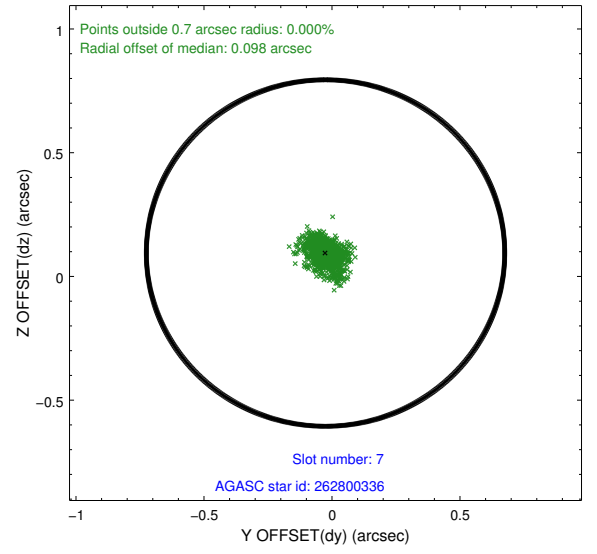
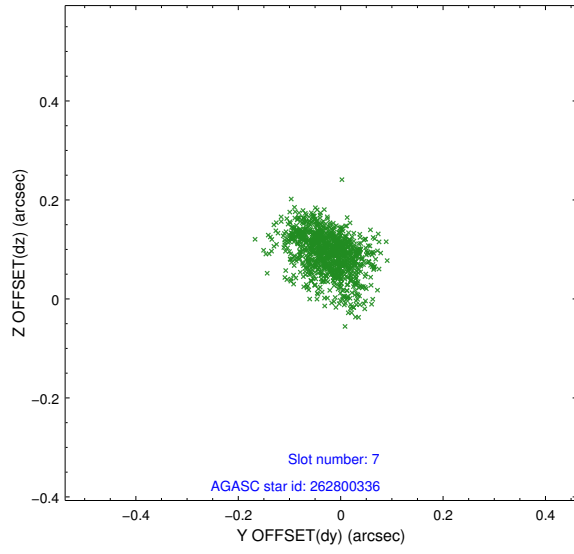
### 2.4.3 Slot 5



## 2.4.4 Slot 6

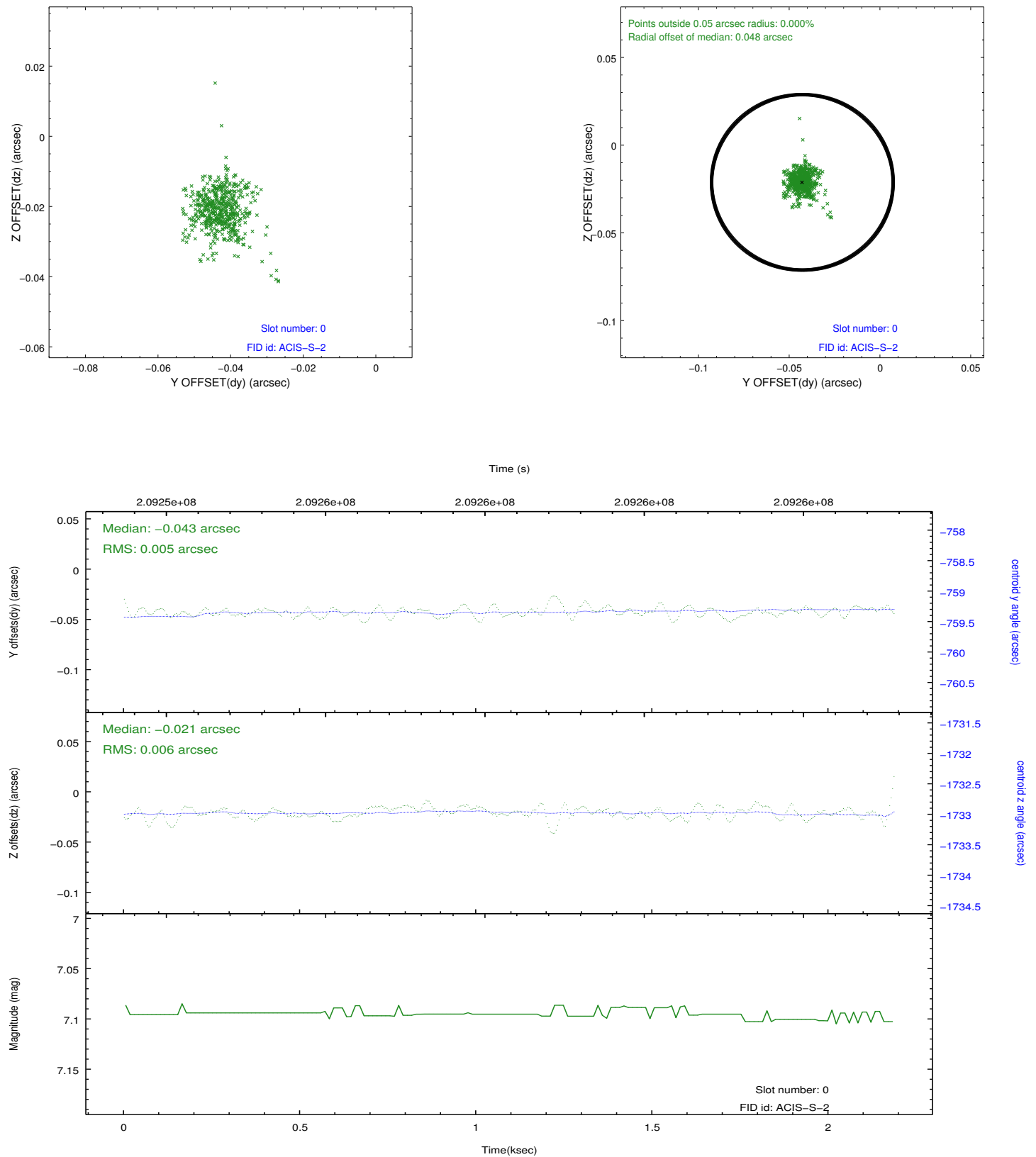


## 2.4.5 Slot 7

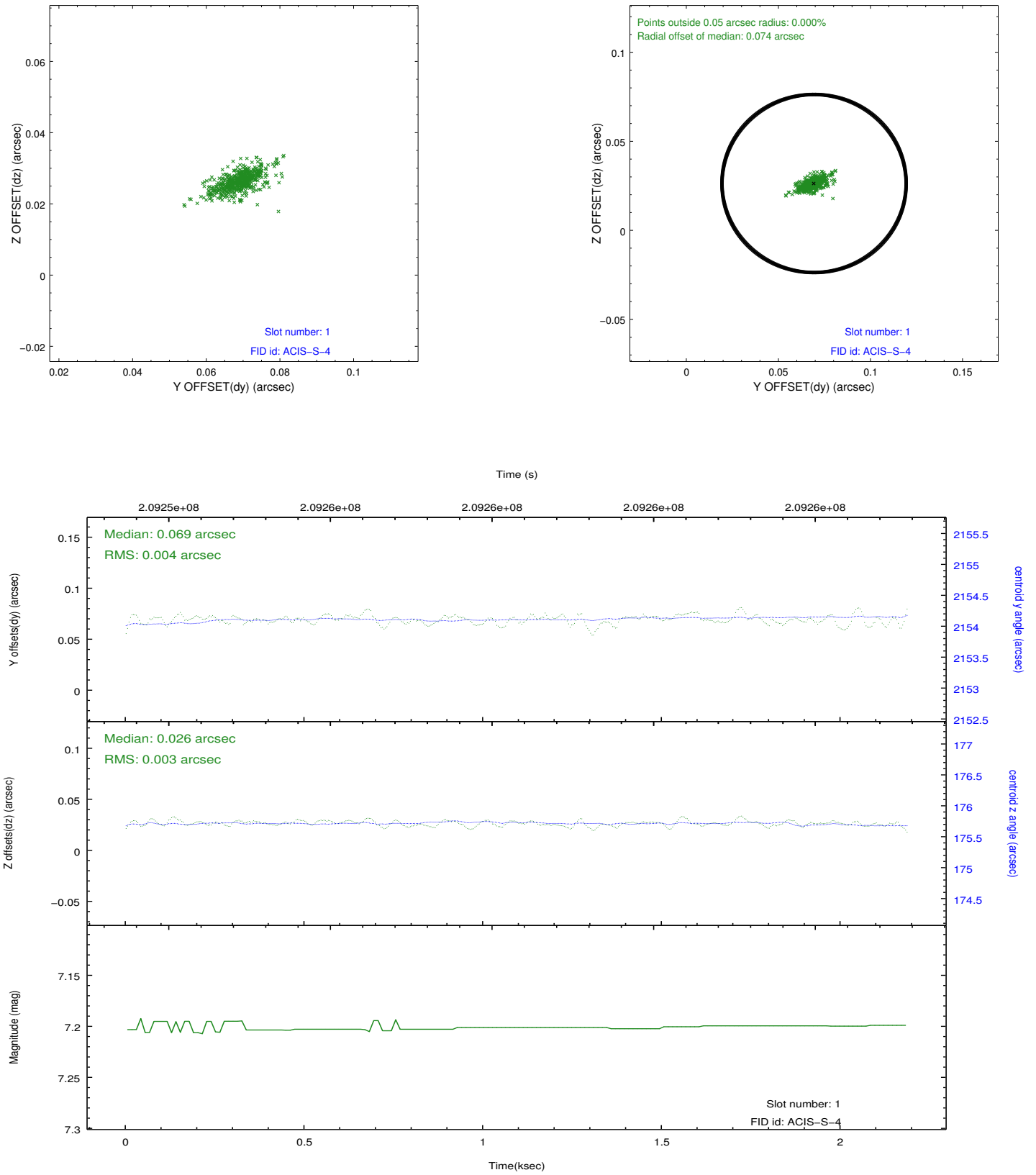


## 2.5 FID Slots

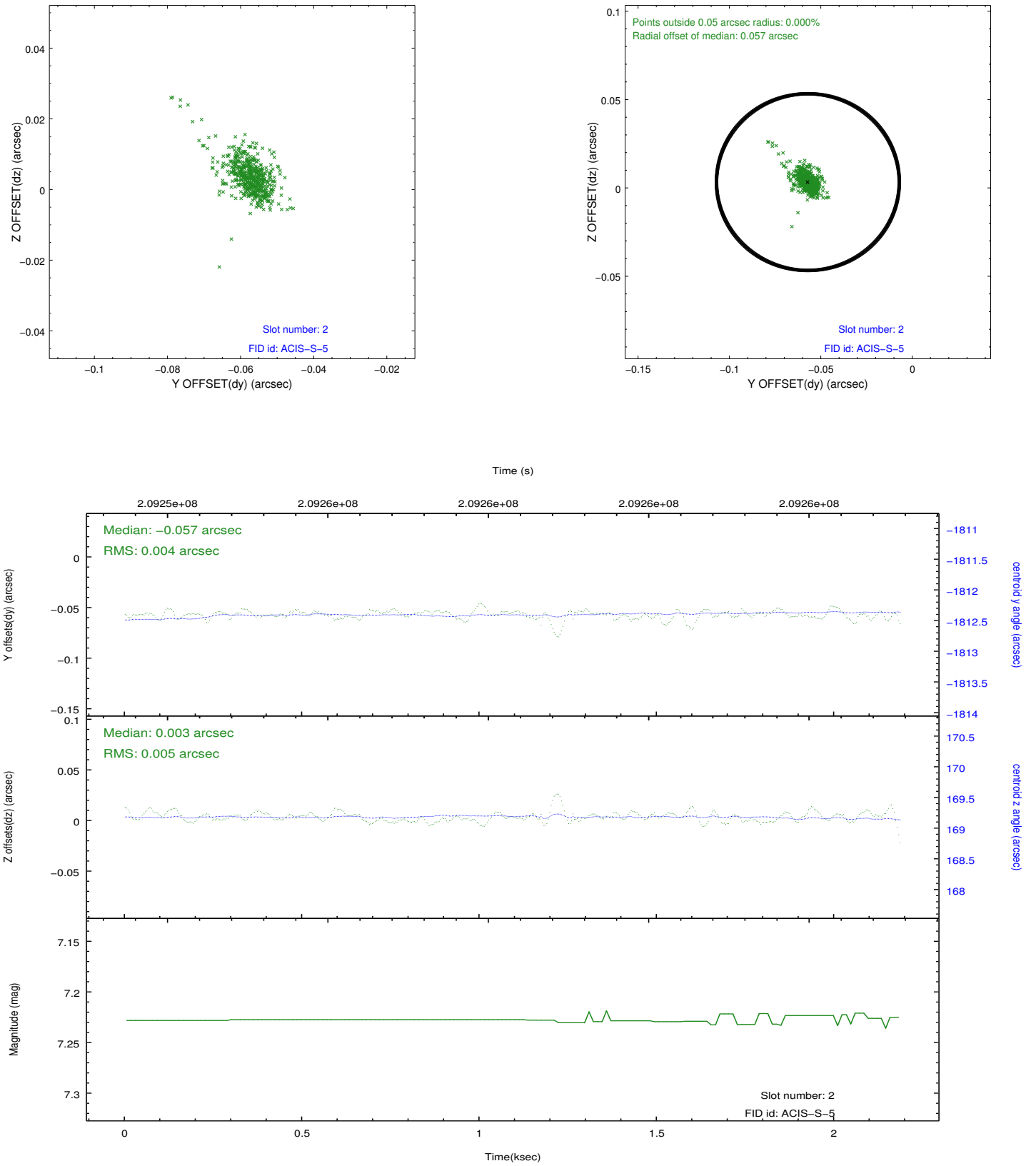
### 2.5.1 Slot 0



## 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)      | 2012.12.21 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 2.188      |

### A.2 Comments