

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12804 - L2 Version 2  
Chandra X-Ray Center

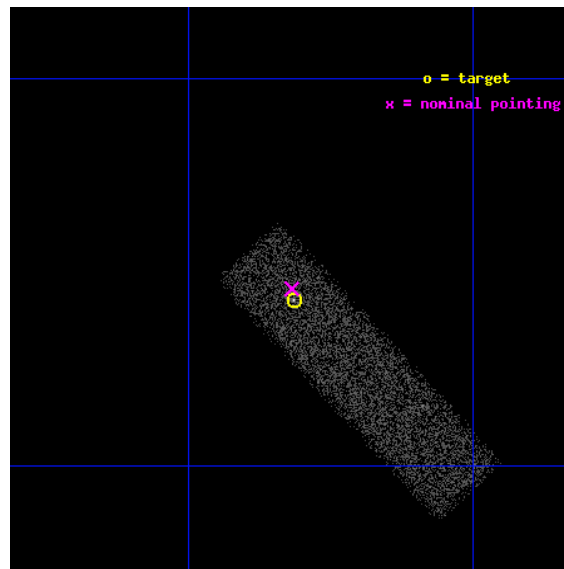
L2 Processing Date : Feb 29 2012

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# 1 Front

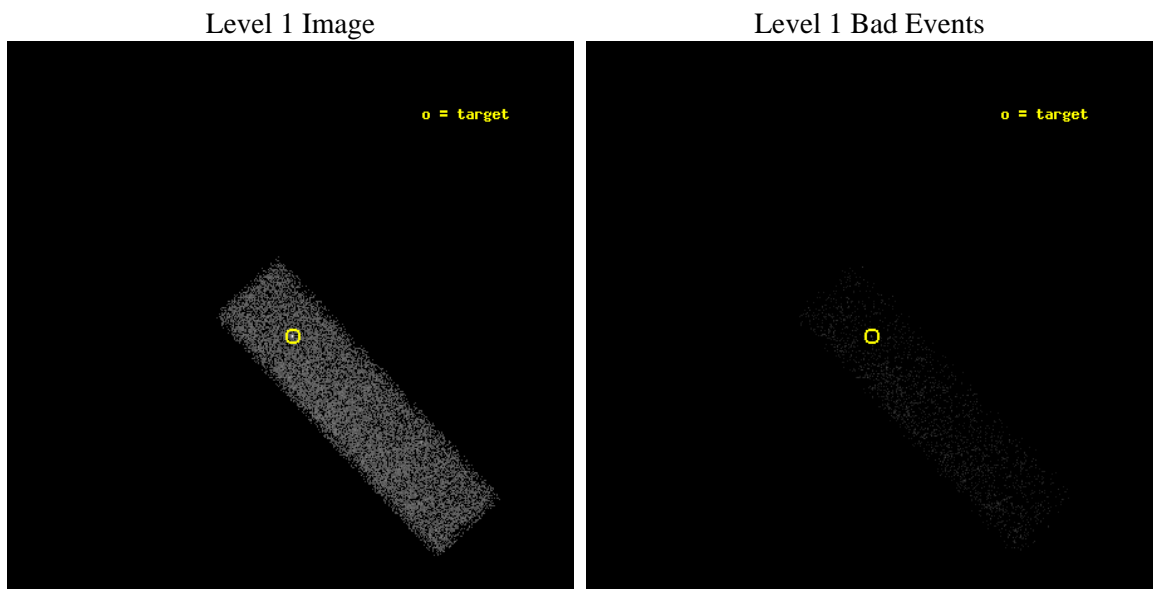
|          |   |   |
|----------|---|---|
| seq_num  | 702440  | Sequence number                             |
| obs_id   | 12804   | Observation id                              |
| title    | Exploring the X-ray Properties of the Highest-Luminosity Double-Peaked Emitters | Proposal title                              |
| observer | Bin Luo   | Principal investigator                      |
| object   | SDSS J160918.93+082416.4  | Source name                                 |
| dtcycle  | 0   | &#160                                       |
| cycle    | P   | events from which exps?<br>Prim/Second/Both |
| ra_targ  | 242.32875   | Observer's specified<br>target RA [deg]     |
| dec_targ | 8.404556  | Observer's specified<br>target Dec [deg]    |
| ra_nom   | 242.32969957603   | Nominal RA [deg]                            |
| dec_nom  | 8.4093069196851   | Nominal Dec [deg]                           |
| roll_nom | 46.922036243154   | Nominal Roll [deg]                          |
| revision | 2   | Processing version of<br>data               |
| ontime   | 10026.400149465   | Sum of GTIs [s]                             |
| livetime | 9537.1446299483   | Livetime [s]                                |
| ontime7  | 10026.400149465   | Sum of GTIs [s]                             |
| l2events | 11012   | Number of level 2<br>events                 |



## 2 OBI

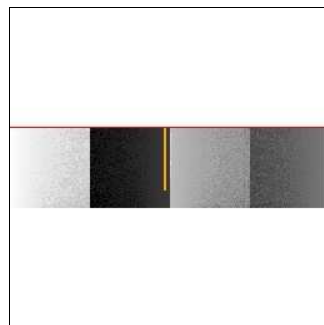
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

|          |                     |                                |                |                 |   |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num  | 2                   | Obi number                     | sched_exp_time | 10000.000000    | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3               | Processing system revision     | ontime         | 10026.400149465 | Sum of GTIs [s]                         |
| caldsver | 4.4.8               | &#160                          | ontime7        | 10026.400149465 | Sum of GTIs [s]                         |
| date     | 2012-02-29T12:53:08 | Date and time of file creation | l1events       | 22027           | Number of level 1 events                |
| revision | 2                   | Processing version of data     |                |                 |   |

### 2.1.4 Events

|                 |              |
|-----------------|--------------|
|                 | <b>ccd 7</b> |
| level 1 events  | 22027        |
| rejected events | 10684        |
| rejected %      | 48%          |

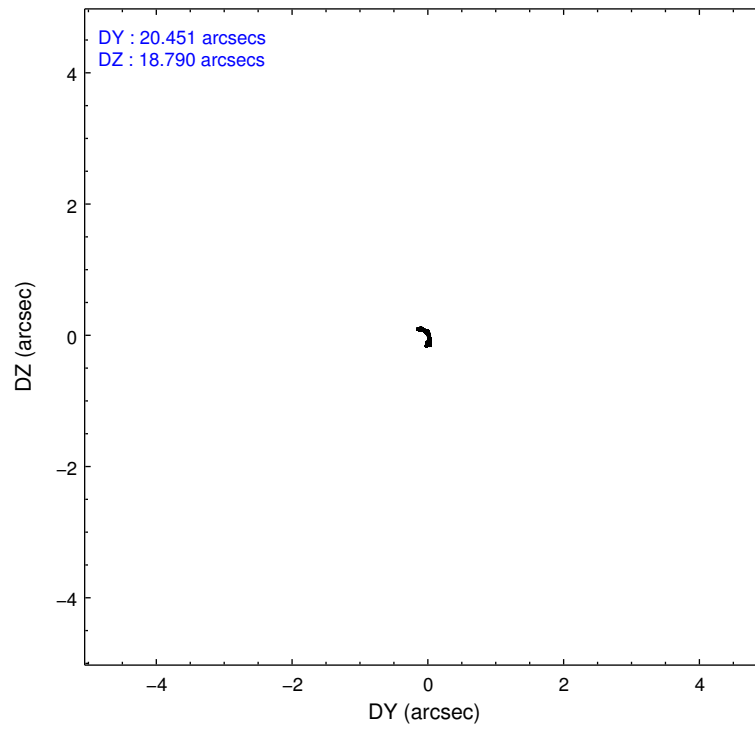
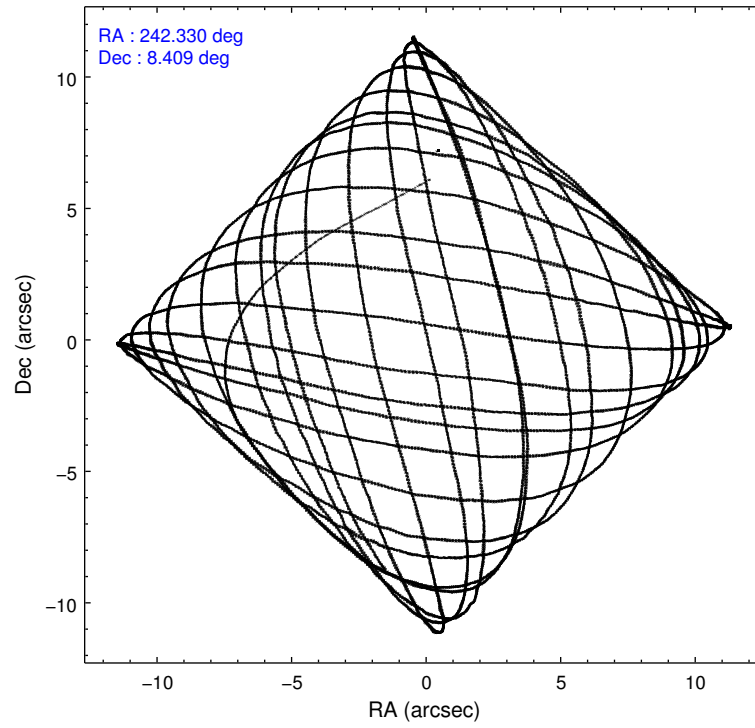
|                |              |
|----------------|--------------|
|                | <b>ccd 7</b> |
| grade 0 events | 1466         |
|                | 6%           |
| grade 1 events | 28           |
|                | 0%           |
| grade 2 events | 2367         |
|                | 10%          |
| grade 3 events | 1324         |
|                | 6%           |
| grade 4 events | 1277         |
|                | 5%           |
| grade 5 events | 2199         |
|                | 9%           |
| grade 6 events | 4911         |
|                | 22%          |
| grade 7 events | 8455         |
|                | 38%          |

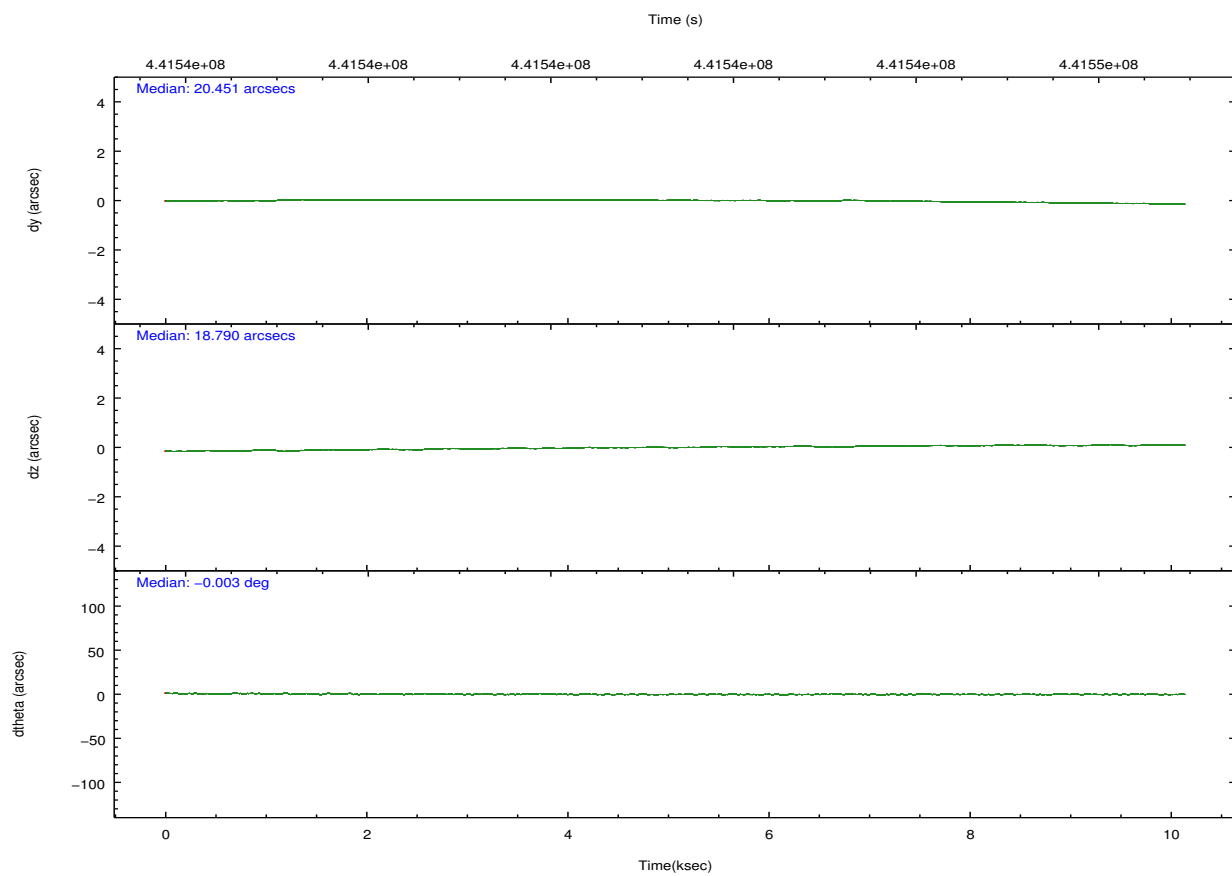
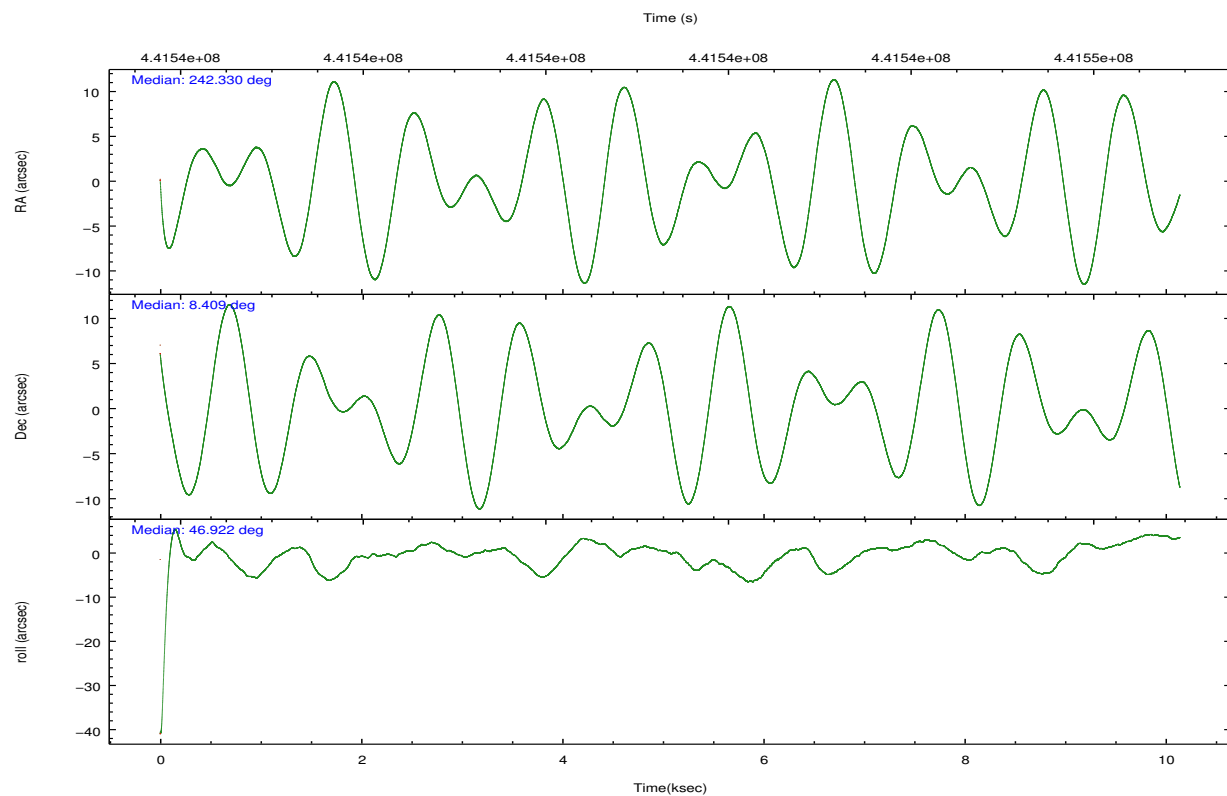


## 2.2 Compared Parameters

| 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                 | 242.323831          | 242.3296995760271    | Subarray requested                    | CUSTOM    | 1/4     |
| [deg] Pointing Dec                | 8.382591            | 8.409306919685111    | Subarray start row                    | 385       | 385     |
| [deg] Pointing Roll               | 46.766329           | 46.92203624315389    | Subarray row count                    | 256       | 256     |
| [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  | 0.8     |
| [mm] SIM translation stage pos    | -190.132523         | -190.1400660498719   |                                       |           |         |
| [mm] SIM translation stage offset | 0                   | 0.00754346686406393  |                                       |           |         |
| [s] Observation start time (MET)  | 441536423.184000    | 441535183.39627      |                                       |           |         |
| Observation start date            | 2011-12-29T08:59:17 | 2011-12-29T08:39:43  |                                       |           |         |
| [s] Observation end time (MET)    | 441546423.184000    | 441547418.30942      |                                       |           |         |
| Observation end date              | 2011-12-29T11:45:57 | 2011-12-29T12:03:38  |                                       |           |         |
| Read mode                         | TIMED               | TIMED                |                                       |           |         |

## 2.3 Aspect



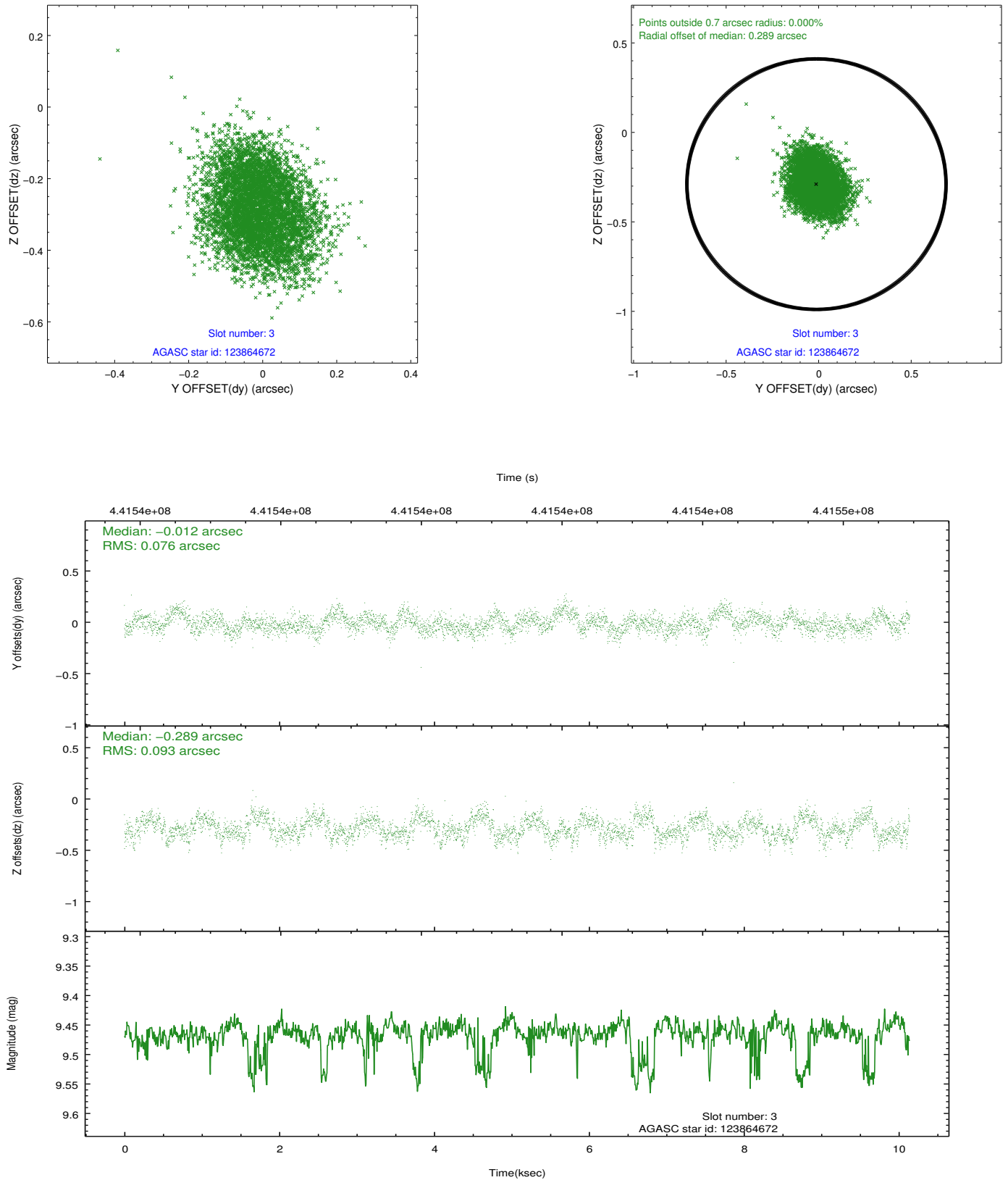


### Slot Statistics

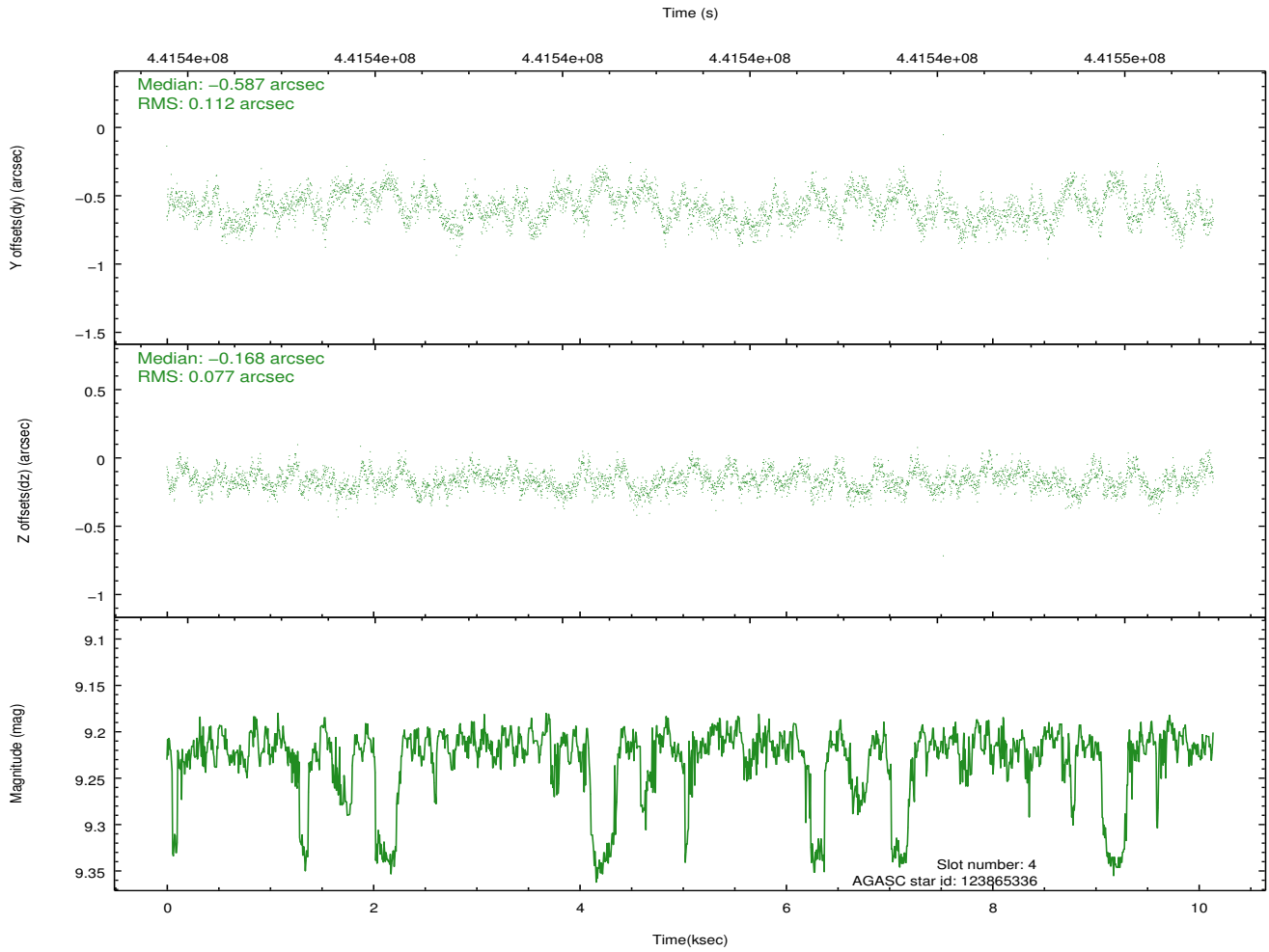
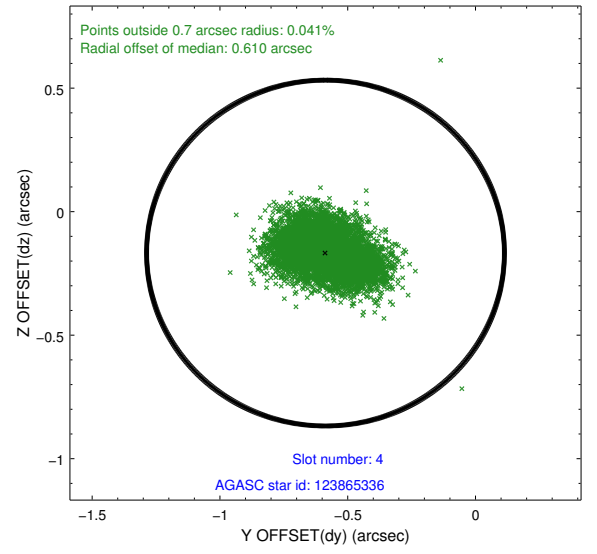
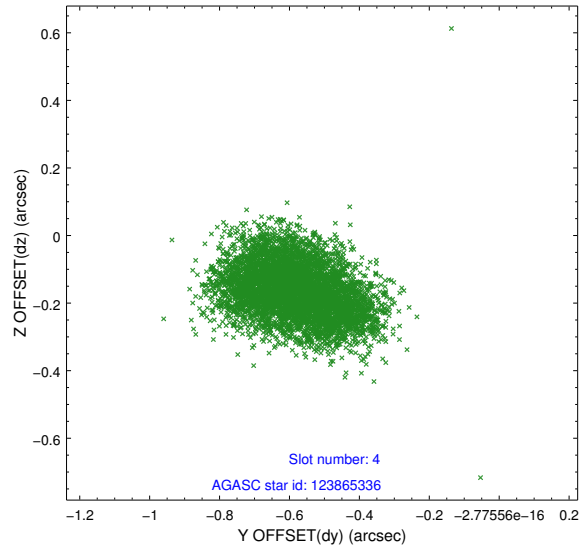
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec      | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|----------|----------|----------|
| 0    | FID    | ACIS-S-2  | 6.89 | 2474  | -0.114 | -0.046 | 0.007 | 0.012 | 0.000000   | 0.000000 | -773.71  | -1740.29 |
| 1    | FID    | ACIS-S-4  | 6.97 | 2474  | 0.248  | 0.067  | 0.006 | 0.011 | 0.000000   | 0.000000 | 2139.74  | 167.70   |
| 2    | FID    | ACIS-S-5  | 6.99 | 2474  | -0.165 | -0.013 | 0.007 | 0.011 | 0.000000   | 0.000000 | -1825.89 | 161.97   |
| 3    | GUIDE  | 123864672 | 9.46 | 4927  | -0.012 | -0.289 | 0.129 | 0.203 | 241.830753 | 8.512681 | -860.87  | 1600.85  |
| 4    | GUIDE  | 123865336 | 9.22 | 4937  | -0.587 | -0.168 | 0.147 | 0.230 | 242.950420 | 8.689956 | 2334.41  | -865.27  |
| 5    | GUIDE  | 123866376 | 8.87 | 4942  | 0.381  | 0.257  | 0.105 | 0.166 | 242.307779 | 7.879227 | -1358.28 | -1199.62 |
| 6    | GUIDE  | 123874416 | 9.57 | 4924  | -0.110 | -0.190 | 0.118 | 0.189 | 242.243790 | 8.714888 | 675.61   | 1026.45  |
| 7    | GUIDE  | 123868576 | 7.14 | 4947  | 0.320  | 0.378  | 0.062 | 0.100 | 242.701177 | 7.779153 | -659.74  | -2467.88 |

## 2.4 Star Slots

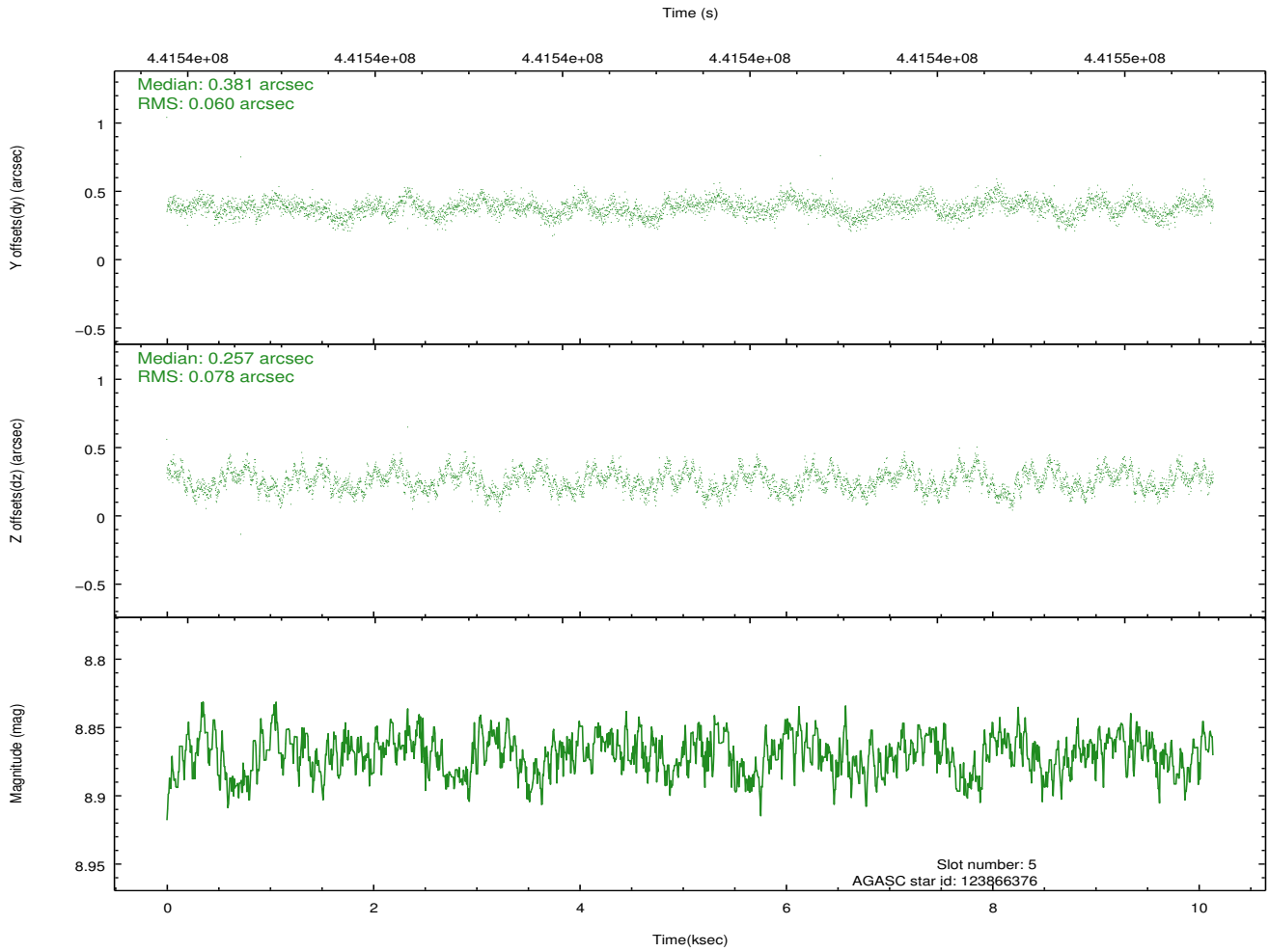
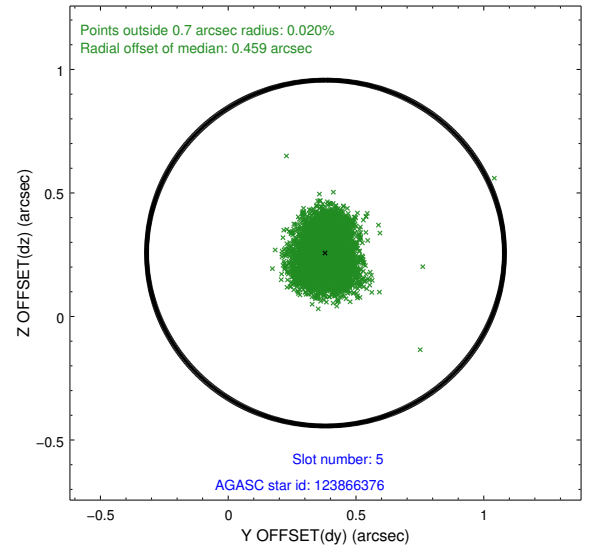
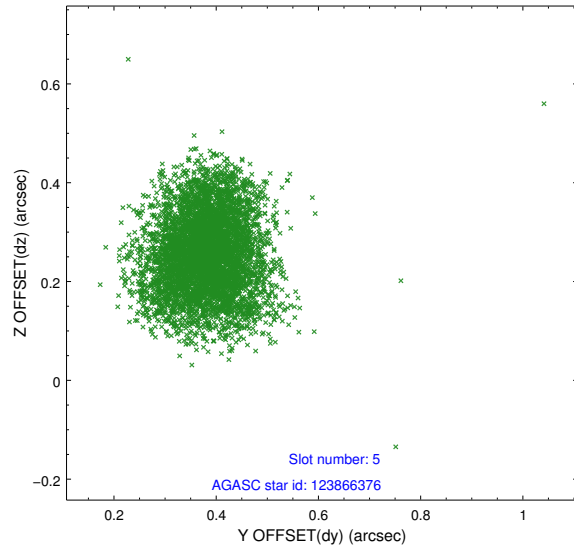
### 2.4.1 Slot 3



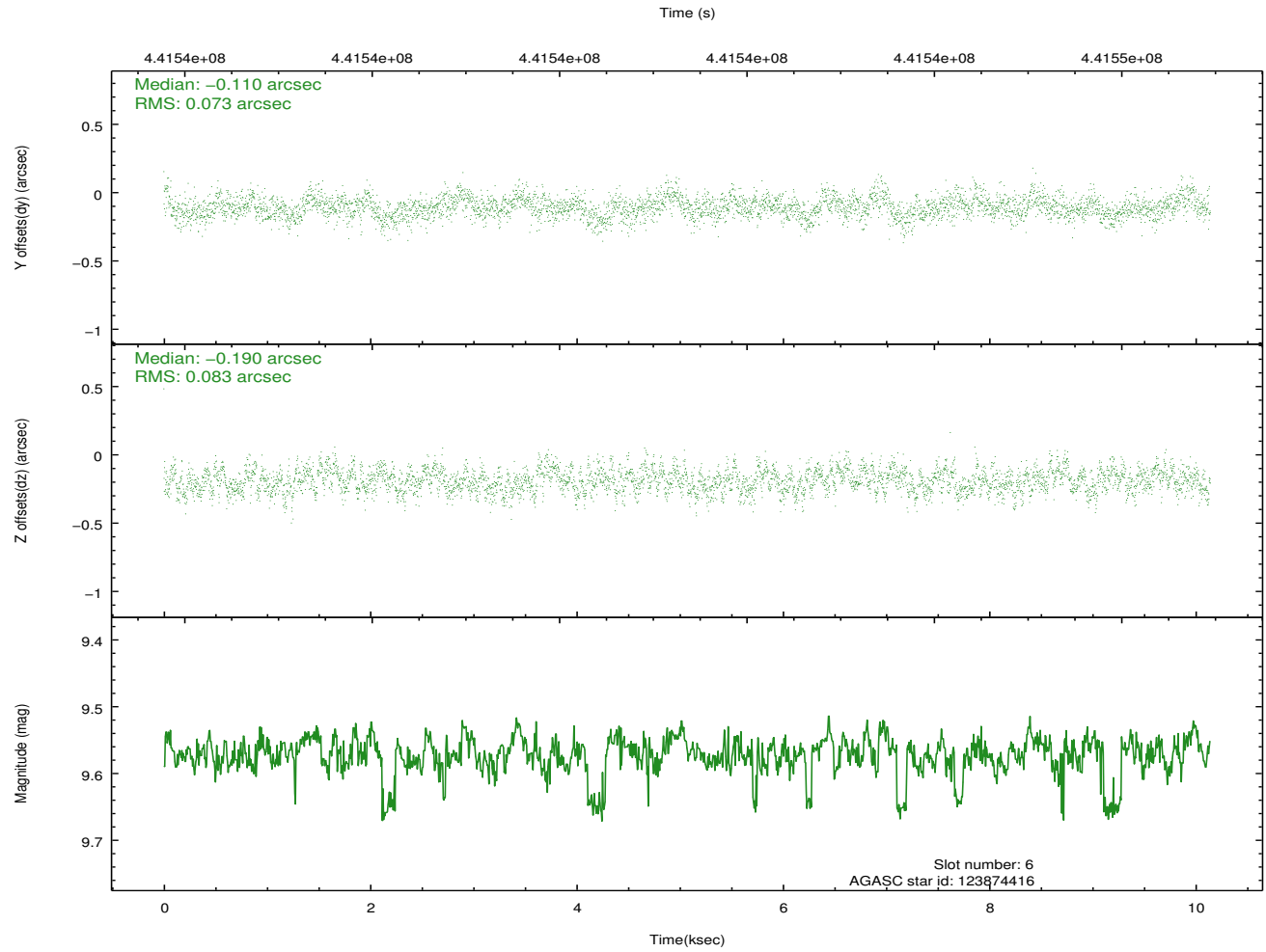
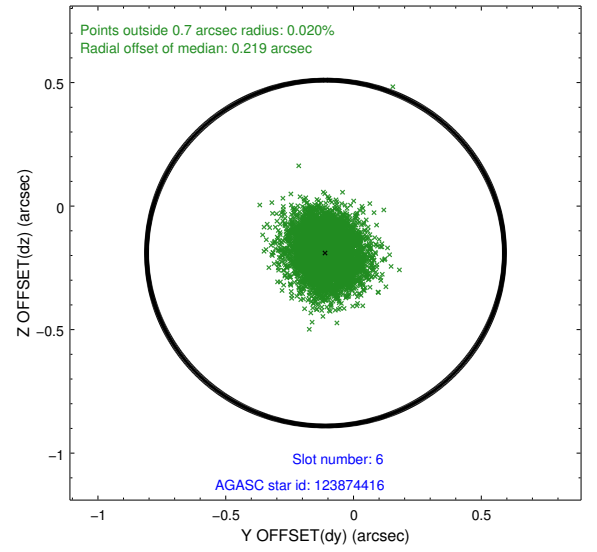
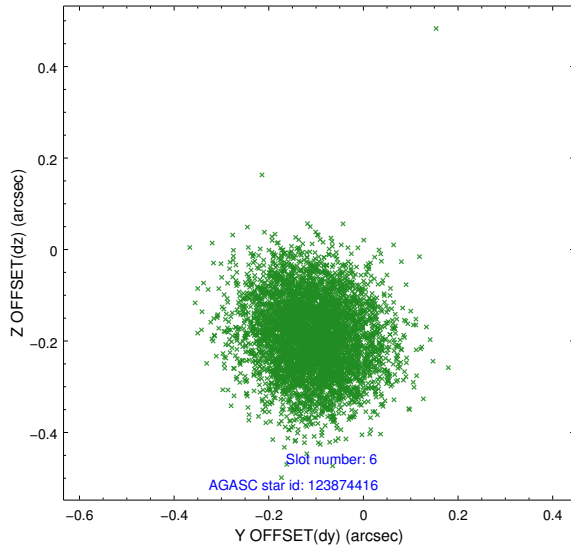
## 2.4.2 Slot 4



### 2.4.3 Slot 5

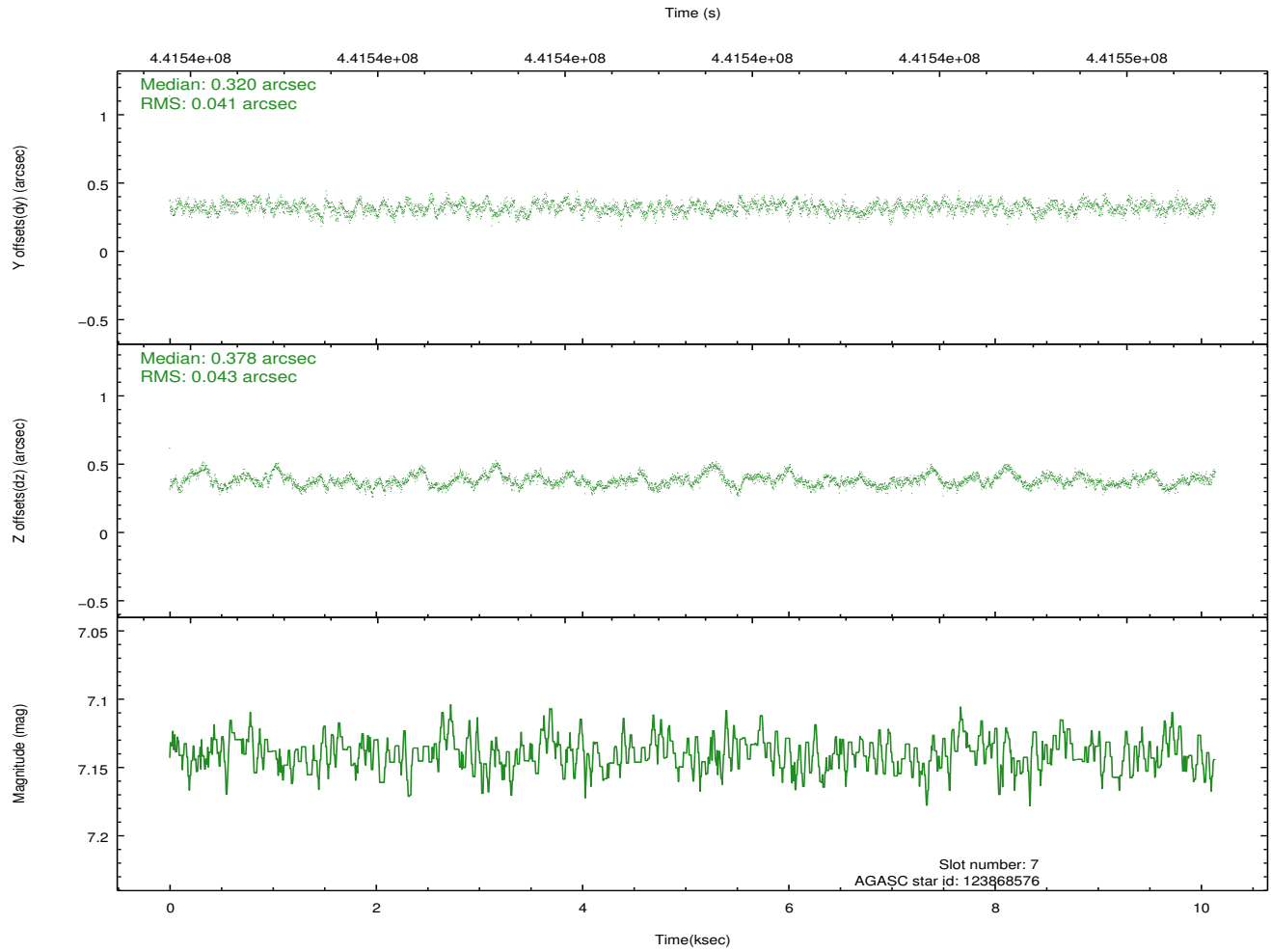
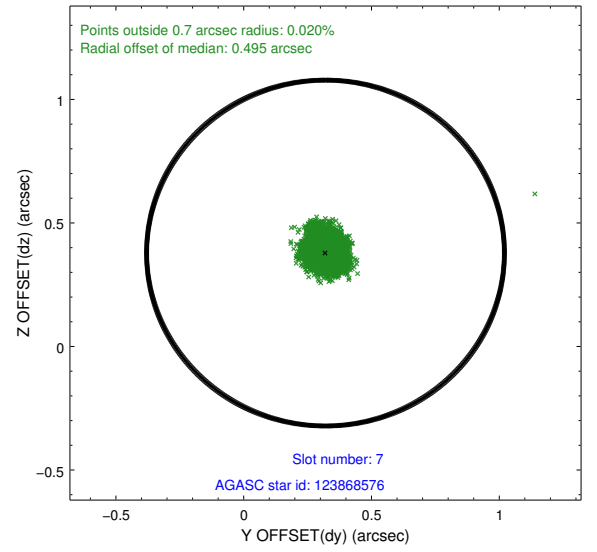
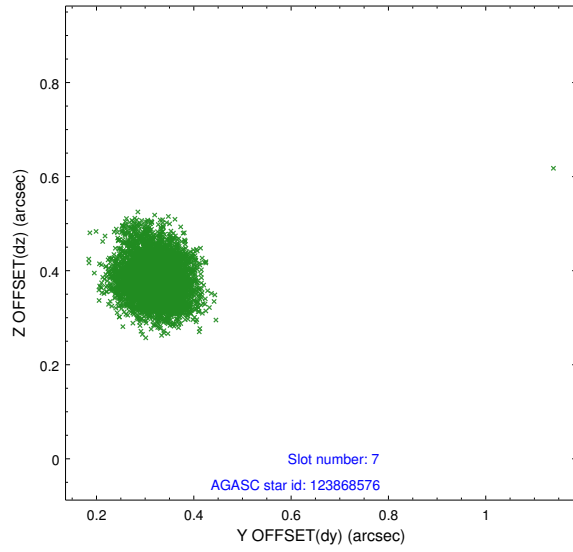


## 2.4.4 Slot 6



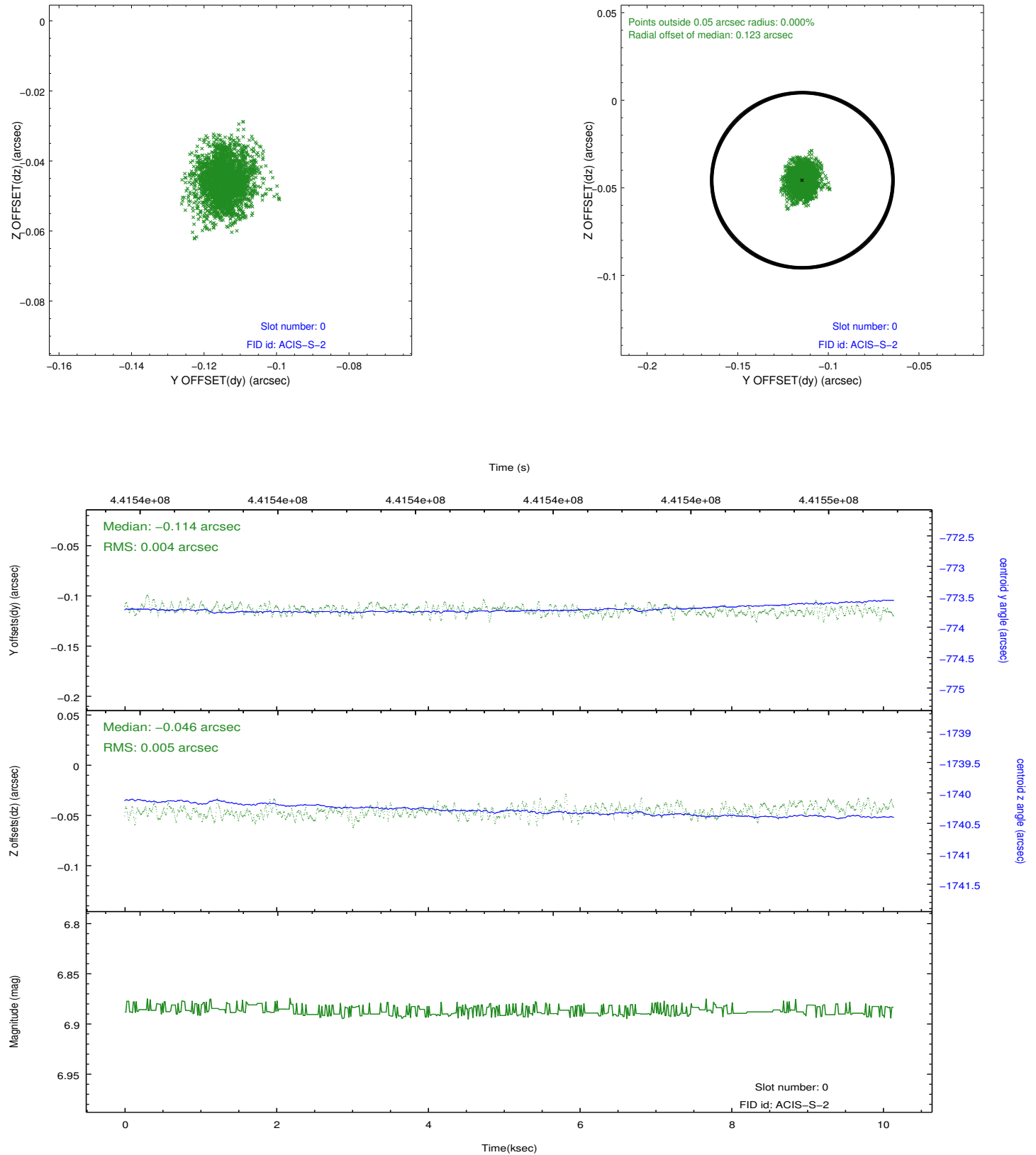


## 2.4.5 Slot 7

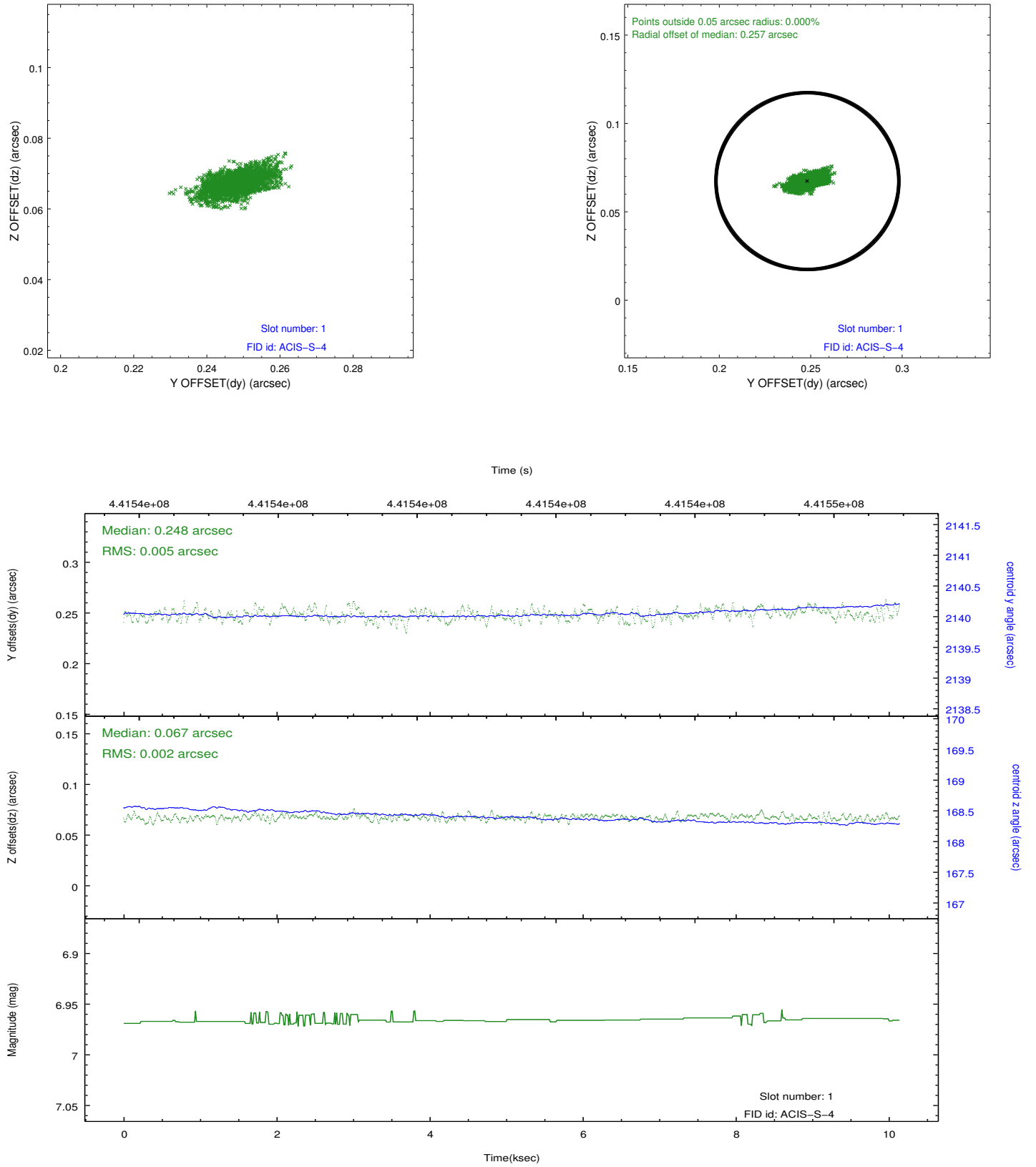


## 2.5 FID Slots

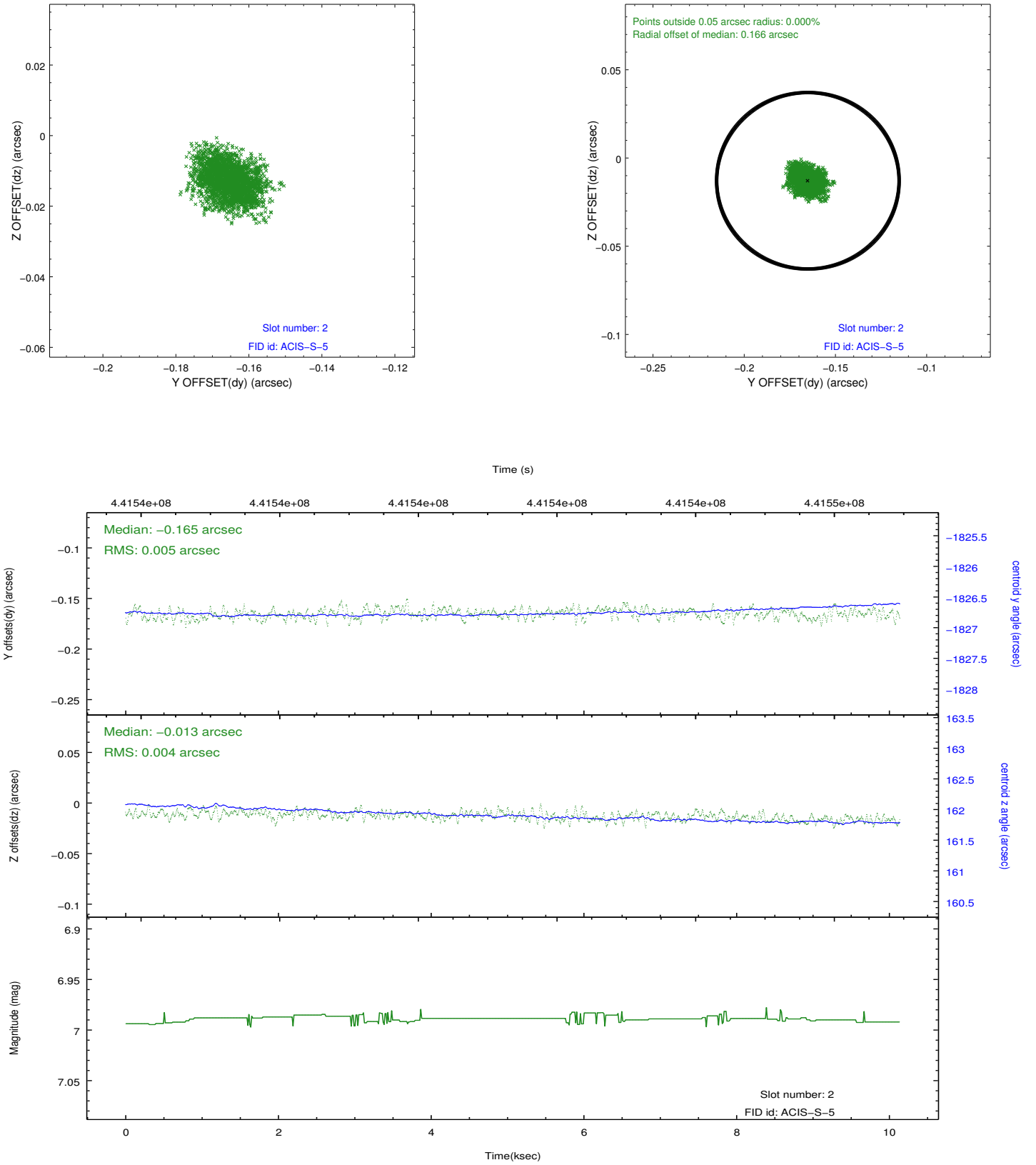
### 2.5.1 Slot 0



## 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)      | 2012.02.29      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 10.026400149465 |

### A.2 Comments