

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 6495 - L2 Version 3  
Chandra X-Ray Center

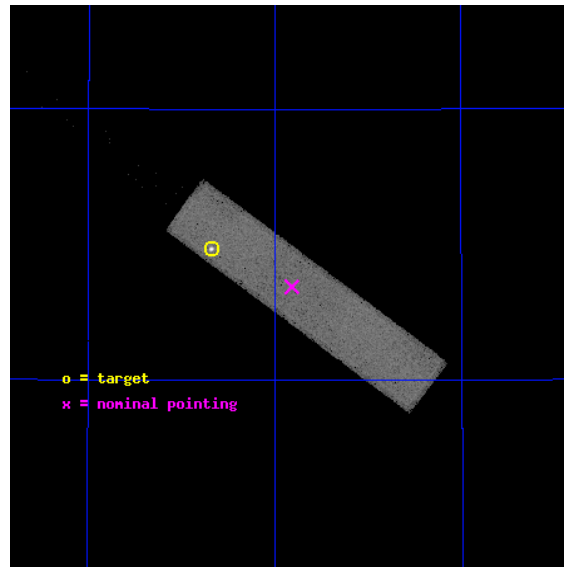
L2 Processing Date : Aug 11 2012

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# 1 Front

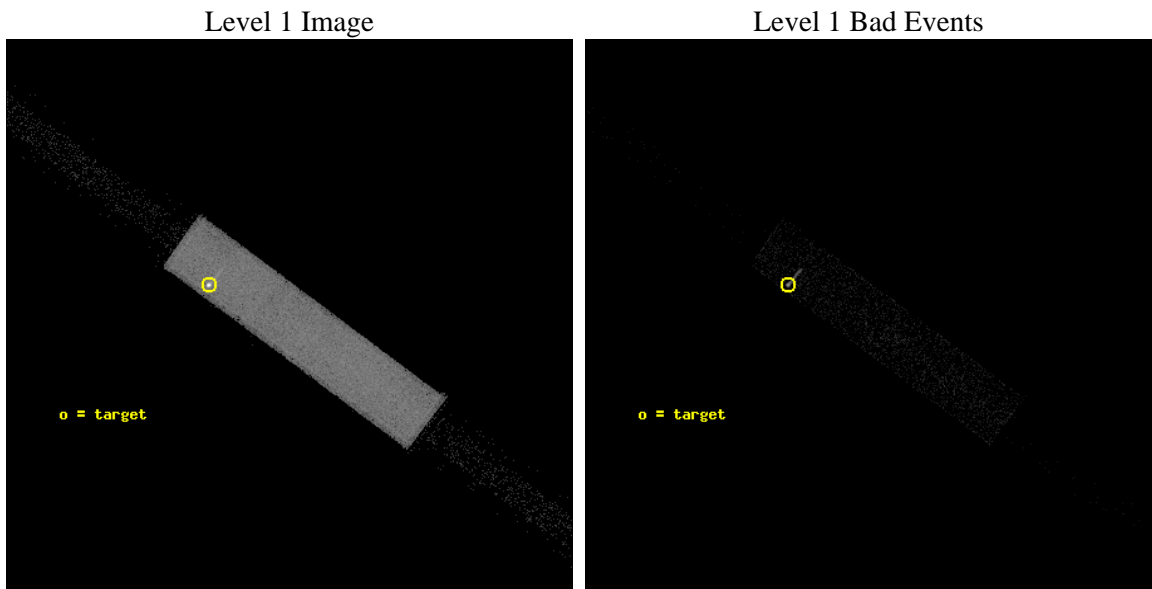
|          |  |                                       |
|----------|--|---------------------------------------|
| seq_num  | 290588   | Sequence number                       |
| obs_id   | 6495   | Observation id                        |
| title    | AO7 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain | Proposal title                        |
| observer | Dr. CXC Calibration  | Principal investigator                |
| object   | ArLac  | Source name                           |
| ra_targ  | 332.17   | Observer's specified target RA [deg]  |
| dec_targ | 45.742306  | Observer's specified target Dec [deg] |
| ra_nom   | 331.95446291449  | Nominal RA [deg]                      |
| dec_nom  | 45.672811349033  | Nominal Dec [deg]                     |
| roll_nom | 36.420410033111  | Nominal Roll [deg]                    |
| revision | 3  | Processing version of data            |
| ontime   | 1159.531303972   | [s]                                   |
| livetime | 1147.6410862168  | Ontime multiplied by DTCOR            |
| l2events | 89268  | Number of level 2 events              |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

|          |                     |                                |                |                |   |
|----------|---------------------|--------------------------------|----------------|----------------|---|
| obi_num  | 0                   | Obi number                     | sched_exp_time | 1000.000000    | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5               | Processing system revision     | ontime         | 1159.531303972 | [s]                                     |
| caldsver | 4.5.1.1             | &#160                          | l1events       | 128142         | Number of level 1 events                |
| date     | 2012-08-11T05:48:25 | Date and time of file creation |                |                |   |
| revision | 3                   | Processing version of data     |                |                |   |

### 2.1.3 Events

Level 1 Events

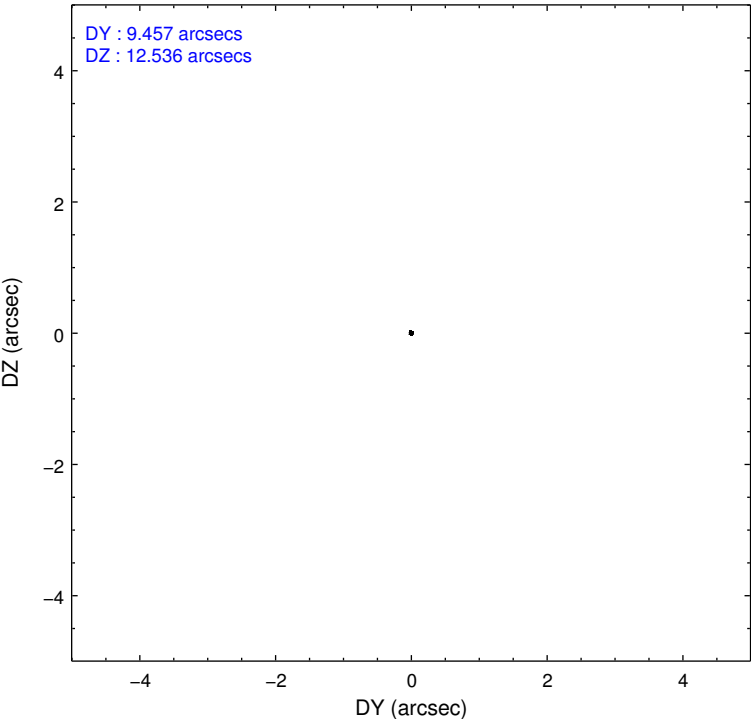
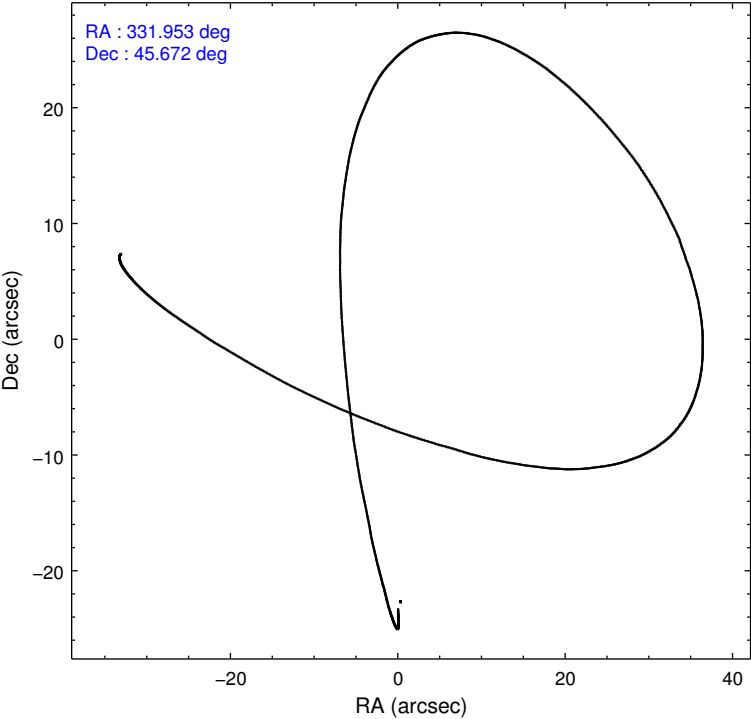
|                 | <b>segment<br/>1</b> | <b>segment<br/>2</b> | <b>segment<br/>3</b> |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events  | 908                  | 126345               | 889                  |
| rejected events | 908                  | 23868                | 865                  |
| rejected %      | 100%                 | 18%                  | 97%                  |

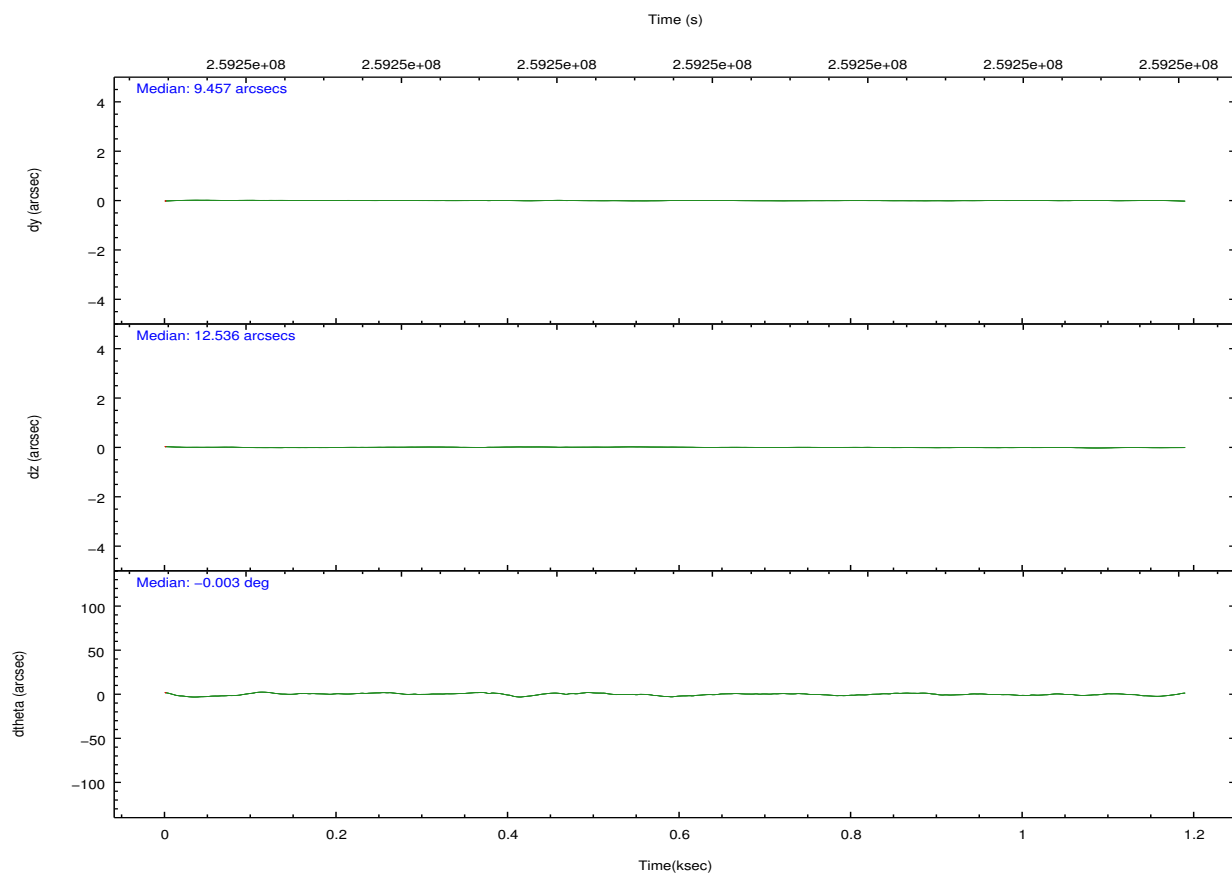
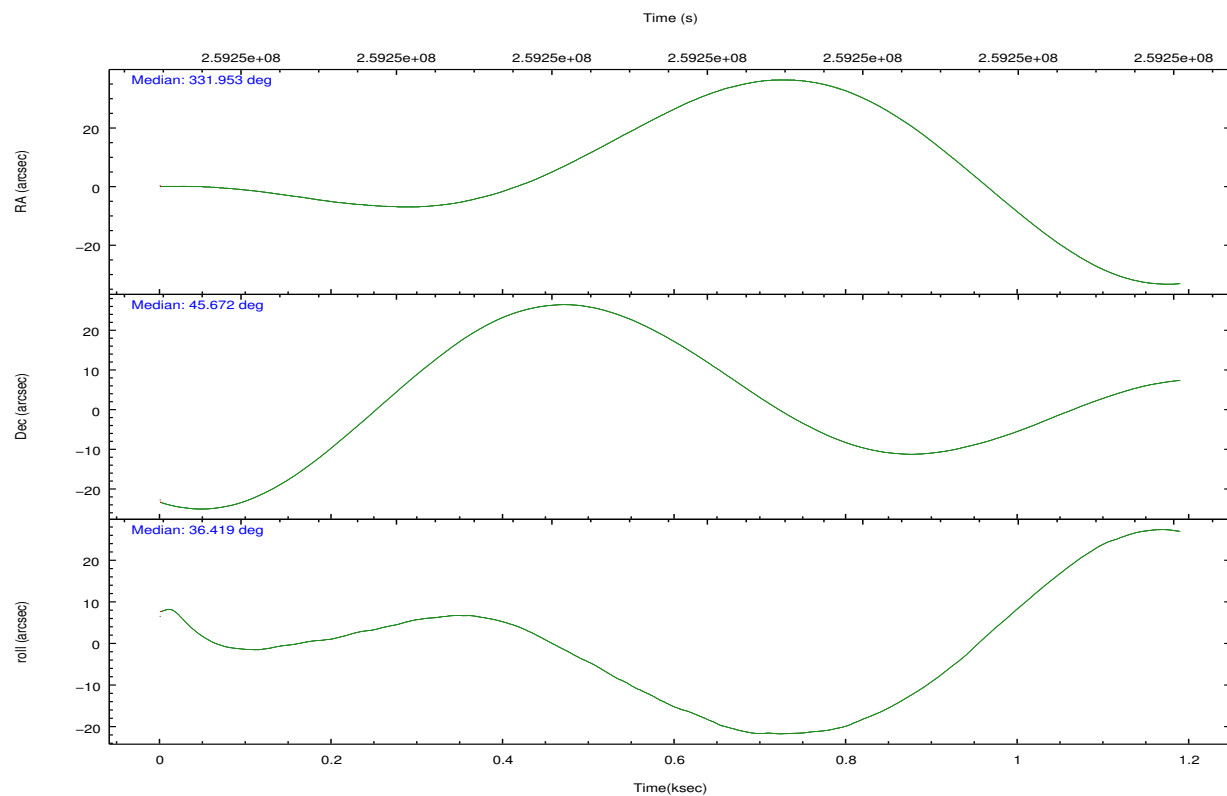
## 2.2 Compared Parameters

| Parameter                         | Planned               | Actual               |
|-----------------------------------|-----------------------|----------------------|
| Instrument                        | HRC                   | HRC                  |
| Detector                          | HRC-S                 | HRC-S                |
| Grating                           | NONE                  | NONE                 |
| Data mode                         | OBSERVING             | OBSERVING            |
| Observation mode                  | POINTING              | POINTING             |
| [deg] Pointing RA                 | 331.940374            | 331.9544629144873    |
| [deg] Pointing Dec                | 45.646485             | 45.67281134903293    |
| [deg] Pointing Roll               | 36.363083             | 36.42041003311139    |
| [mm] SIM focus pos                | -1.533336             | -1.526339935833849   |
| [mm] SIM defocus                  | 7.710433287538843e-07 | 0.006996703570447904 |
| [mm] SIM translation stage pos    | 250.455976            | 250.466033080201     |
| [mm] SIM translation stage offset | 0                     | -0.01005468664627074 |
| [s] Observation start time (MET)  | 259249149.184000      | 259248773.36856      |
| Observation start date            | 2006-03-20T13:38:04   | 2006-03-20T13:32:53  |
| [s] Observation end time (MET)    | 259250149.184000      | 259250283.70613      |
| Observation end date              | 2006-03-20T13:54:44   | 2006-03-20T13:58:03  |

| Parameter                    | Planned   | Actual  |
|------------------------------|-----------|---------|
| Obspar format version number | 7         | 7       |
| Obspar file type             | PREDICTED | ACTUAL  |
| Obspar update status         | NONE      | UPDATED |

### 2.3 Aspect



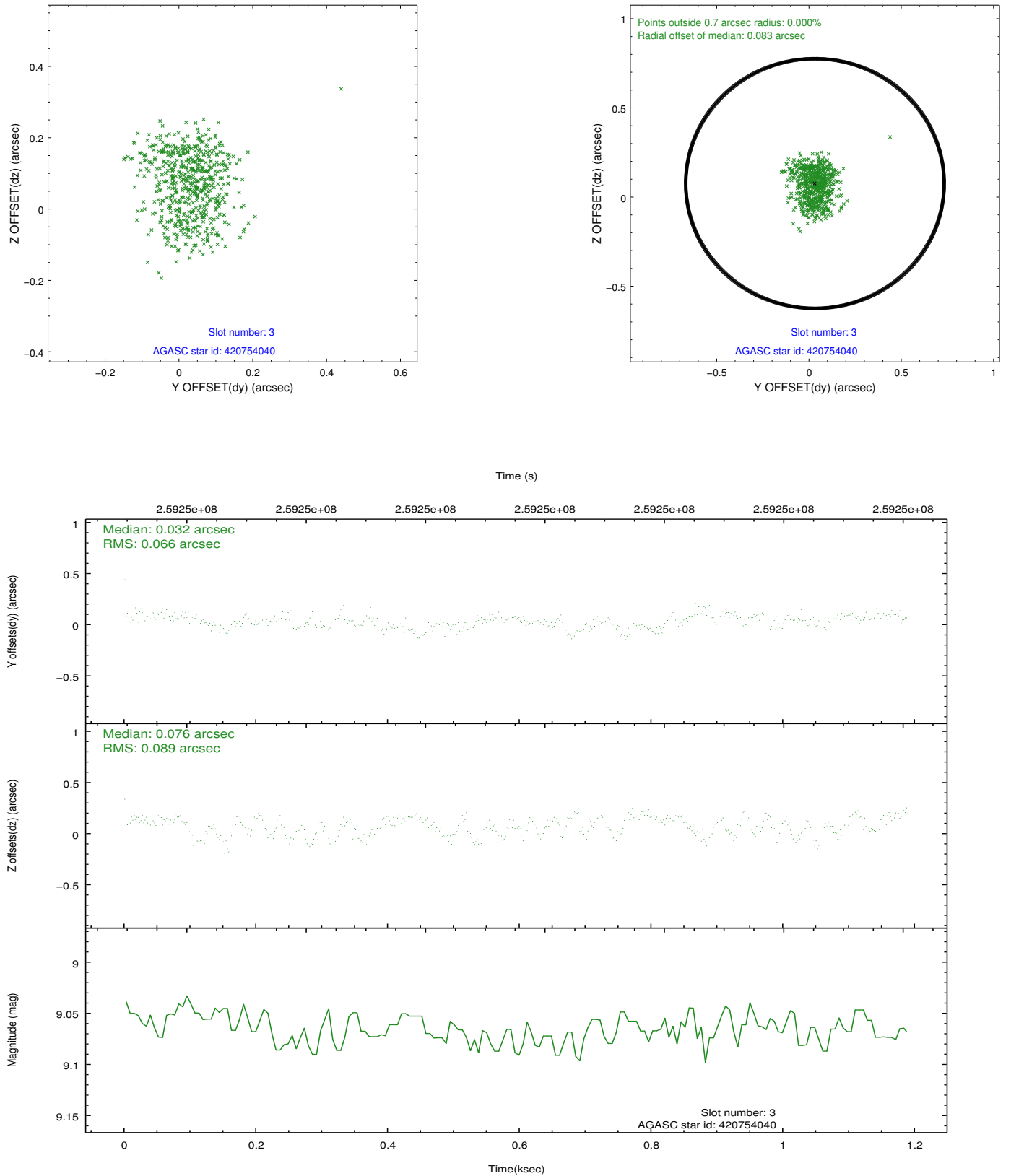


### Slot Statistics

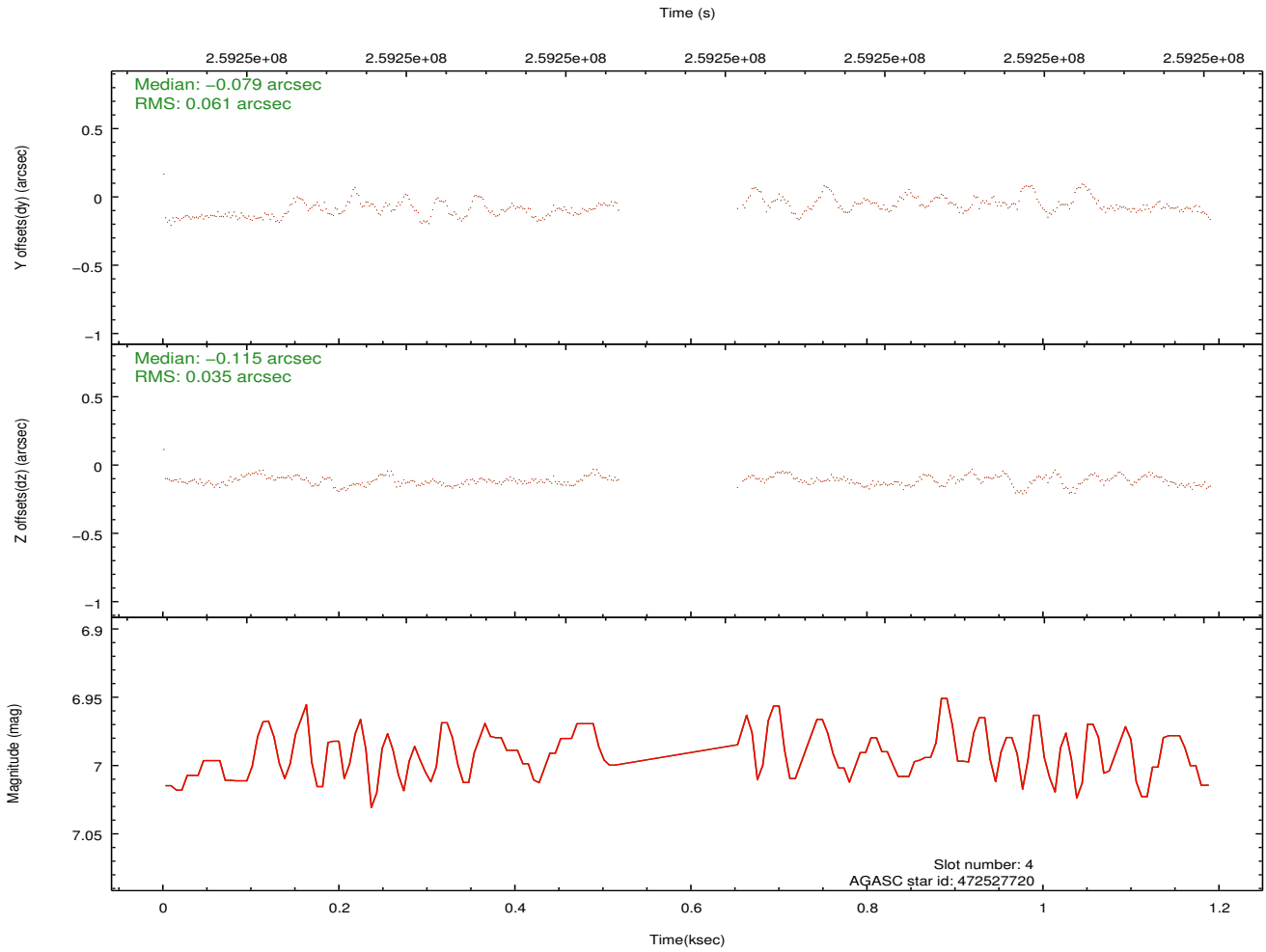
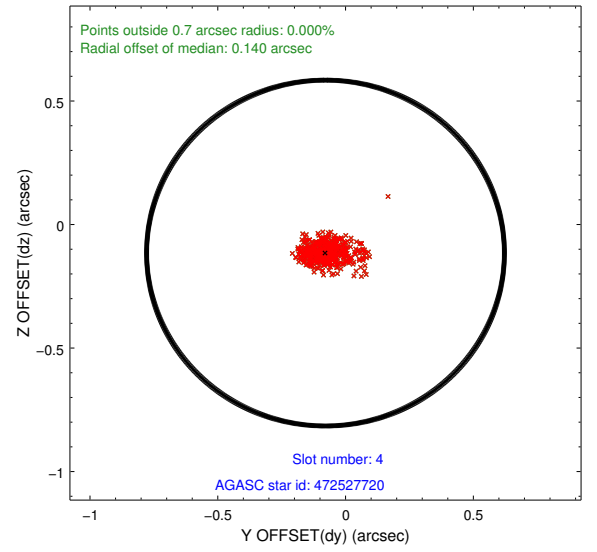
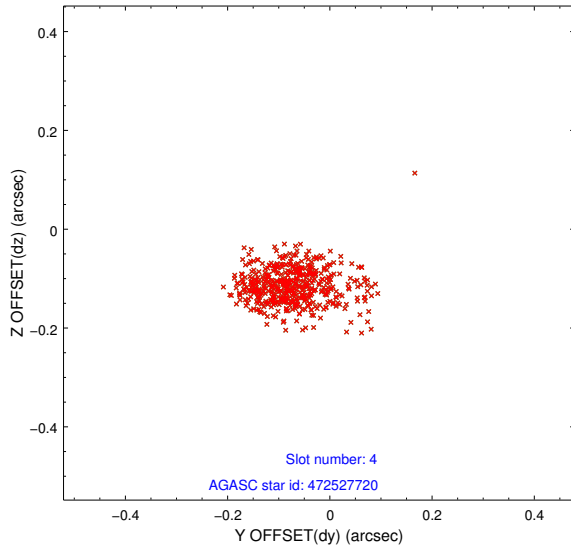
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-S-1   | 7.05 | 290   | 0.104  | -0.137 | 0.005 | 0.014 | 0.000000   | 0.000000  | -1163.68 | -461.27  |
| 1    | FID    | HRC-S-2   | 7.04 | 291   | 0.083  | -0.068 | 0.009 | 0.015 | 0.000000   | 0.000000  | 1231.96  | -455.44  |
| 2    | FID    | HRC-S-4   | 7.02 | 291   | 0.216  | -0.099 | 0.008 | 0.015 | 0.000000   | 0.000000  | 1238.91  | 569.27   |
| 3    | GUIDE  | 420754040 | 9.07 | 581   | 0.032  | 0.076  | 0.120 | 0.187 | 331.917939 | 44.882543 | -1674.01 | -2180.16 |
| 4    | BAD    | 472527720 | 6.99 | 514   | -0.079 | -0.115 | 0.071 | 0.134 | 331.460205 | 45.112509 | -2118.55 | -824.64  |
| 5    | GUIDE  | 472533912 | 9.17 | 578   | 0.052  | -0.103 | 0.118 | 0.201 | 331.791136 | 46.368695 | 1241.45  | 2313.22  |
| 6    | GUIDE  | 472655152 | 9.43 | 581   | 0.112  | 0.101  | 0.105 | 0.169 | 332.504239 | 45.862991 | 1607.56  | -201.55  |
| 7    | GUIDE  | 472523760 | 8.24 | 580   | -0.124 | 0.021  | 0.063 | 0.107 | 331.645363 | 45.403260 | -1114.34 | -261.38  |

## 2.4 Star Slots

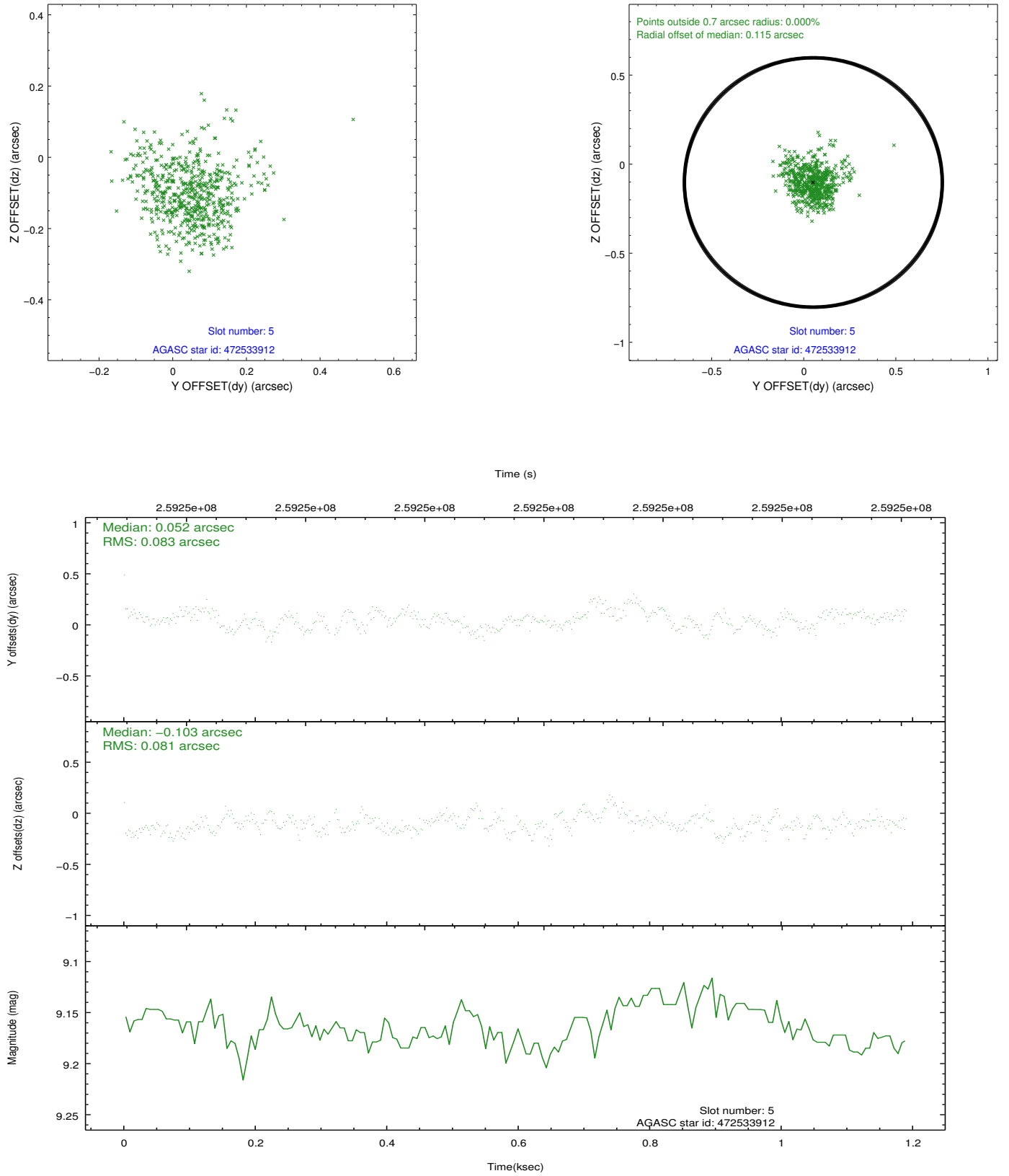
### 2.4.1 Slot 3



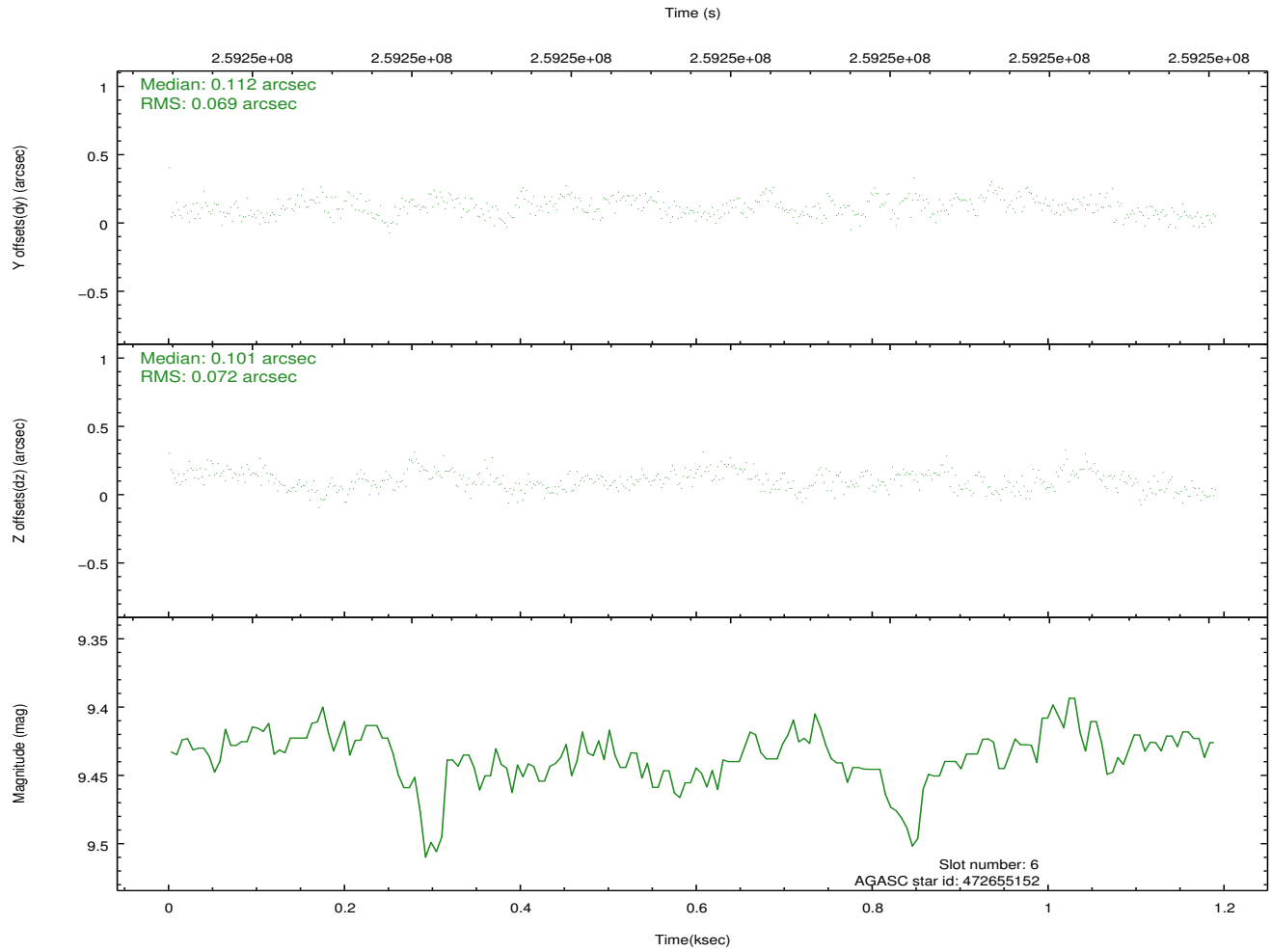
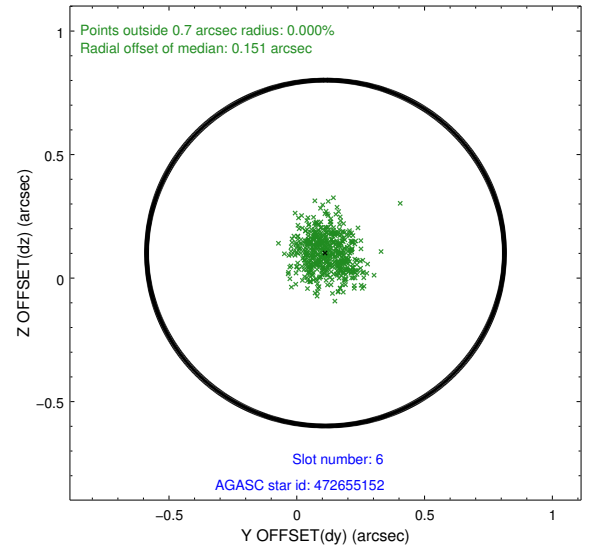
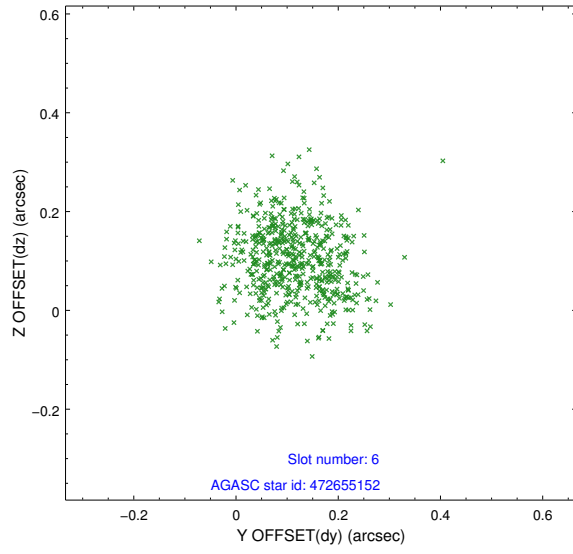
## 2.4.2 Slot 4



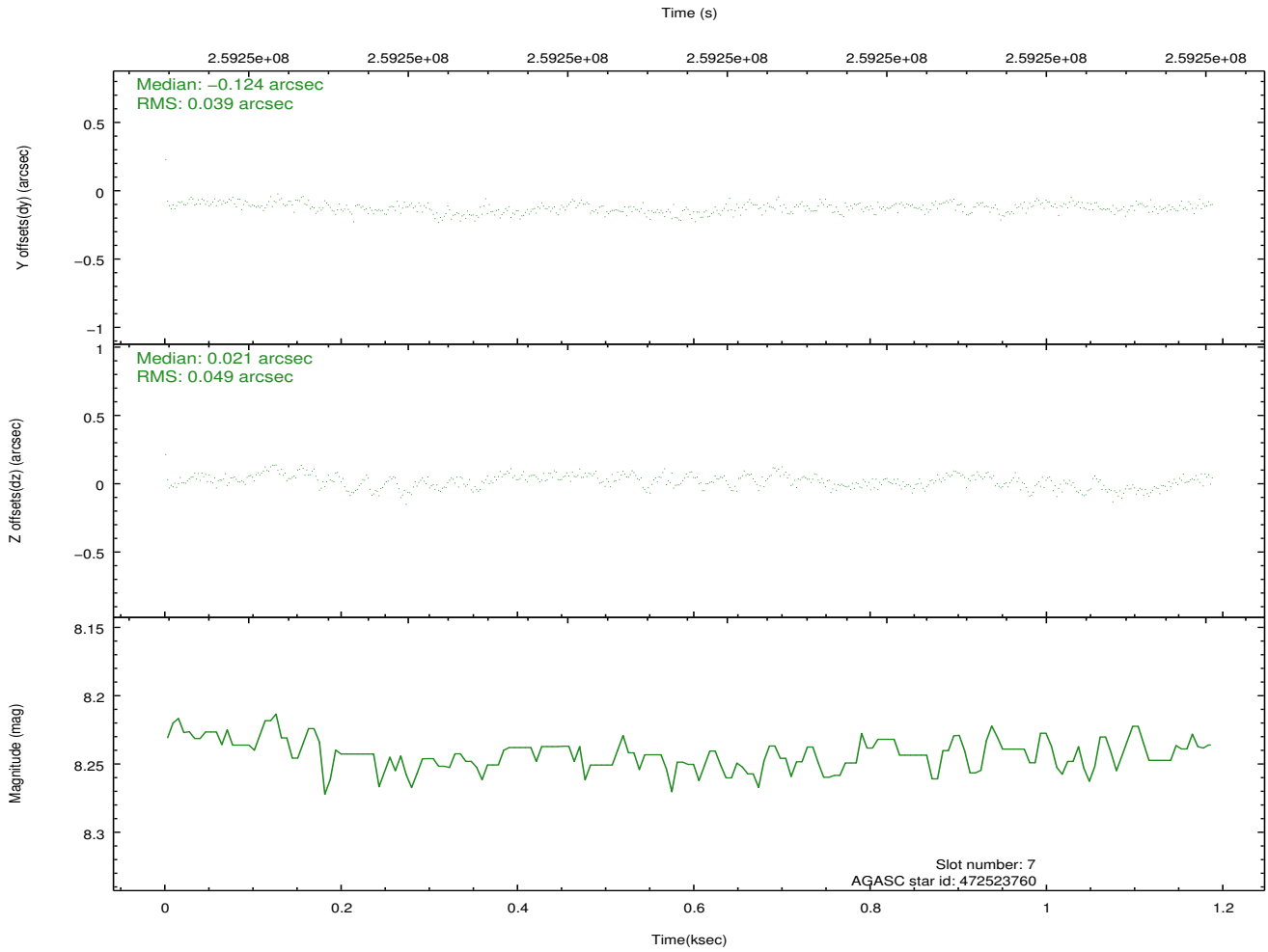
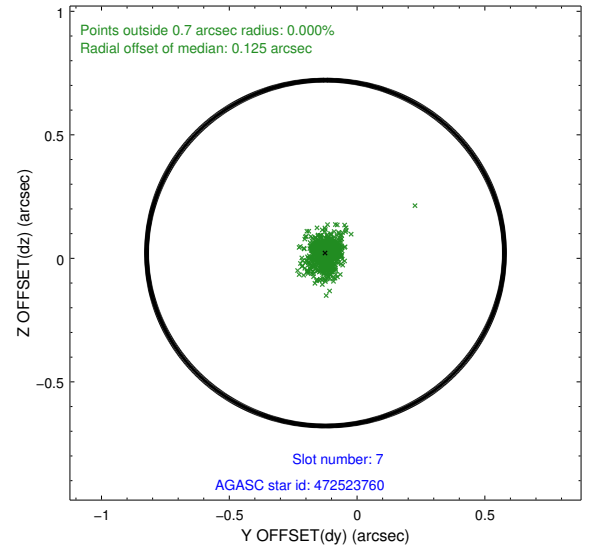
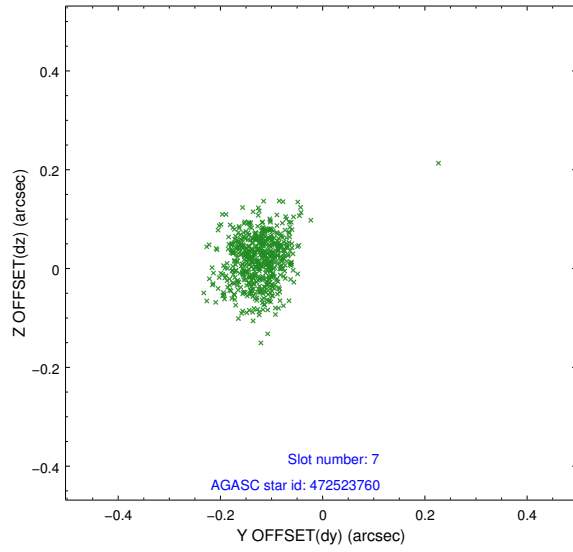
### 2.4.3 Slot 5



## 2.4.4 Slot 6

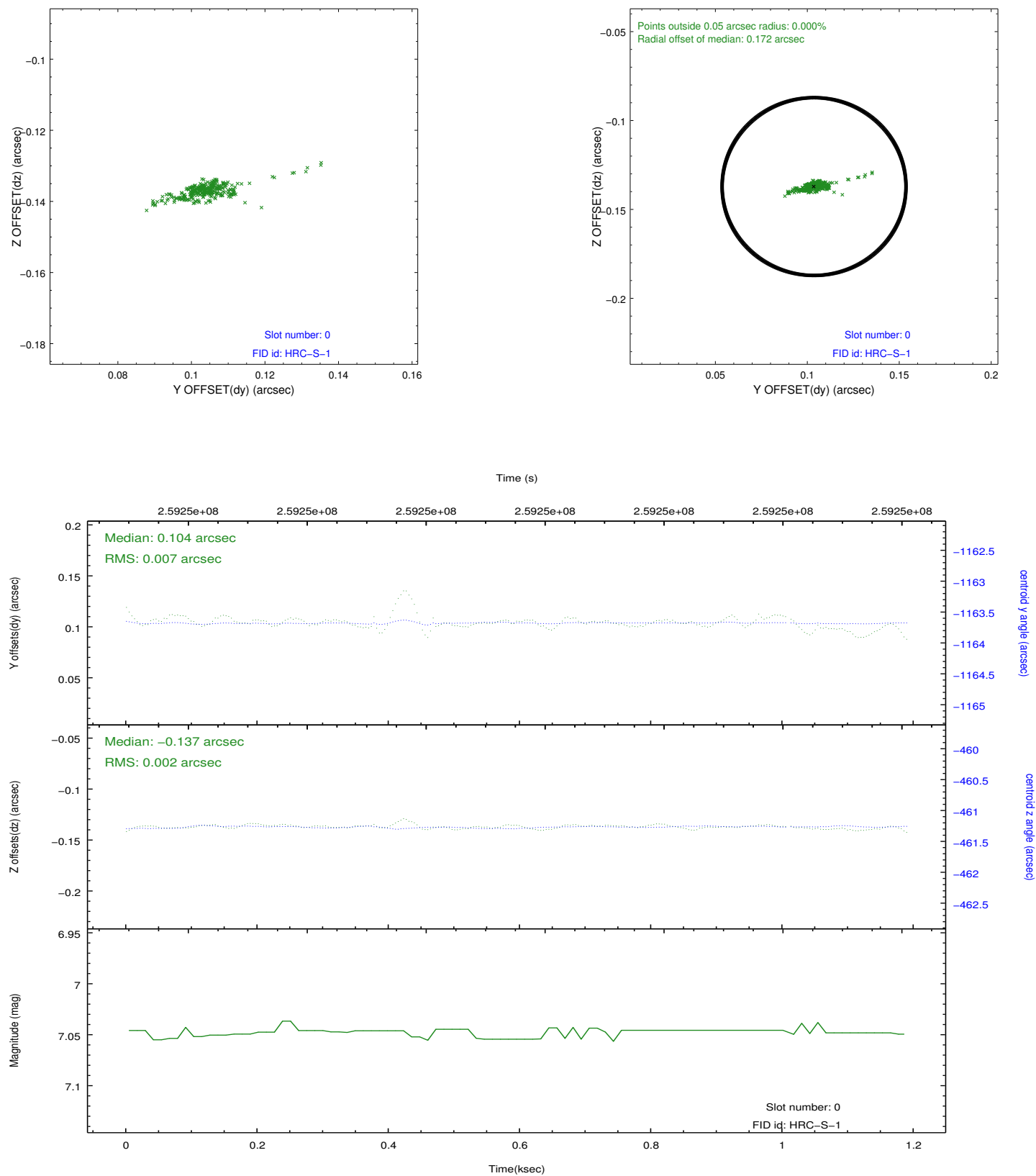


## 2.4.5 Slot 7

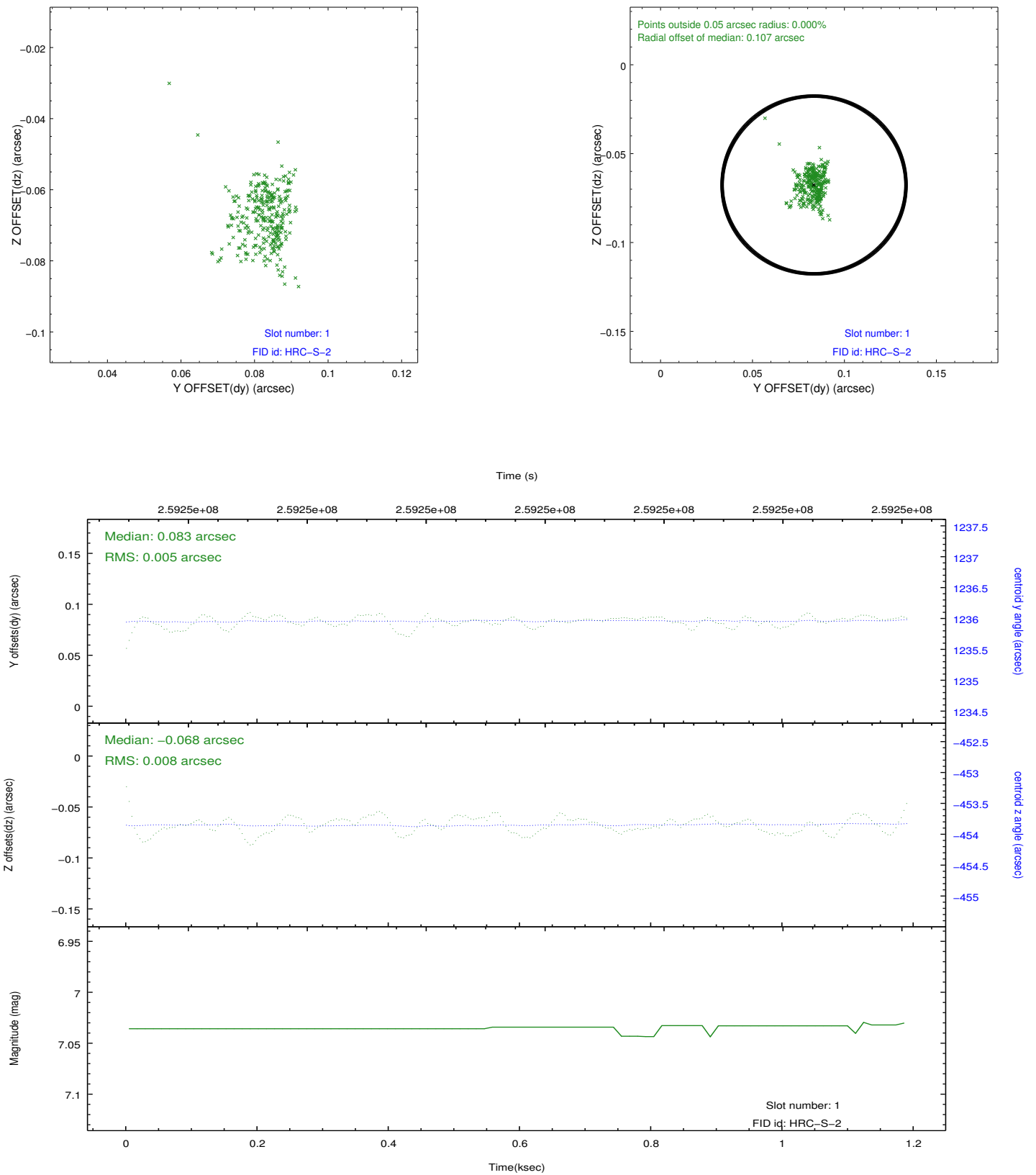


## 2.5 FID Slots

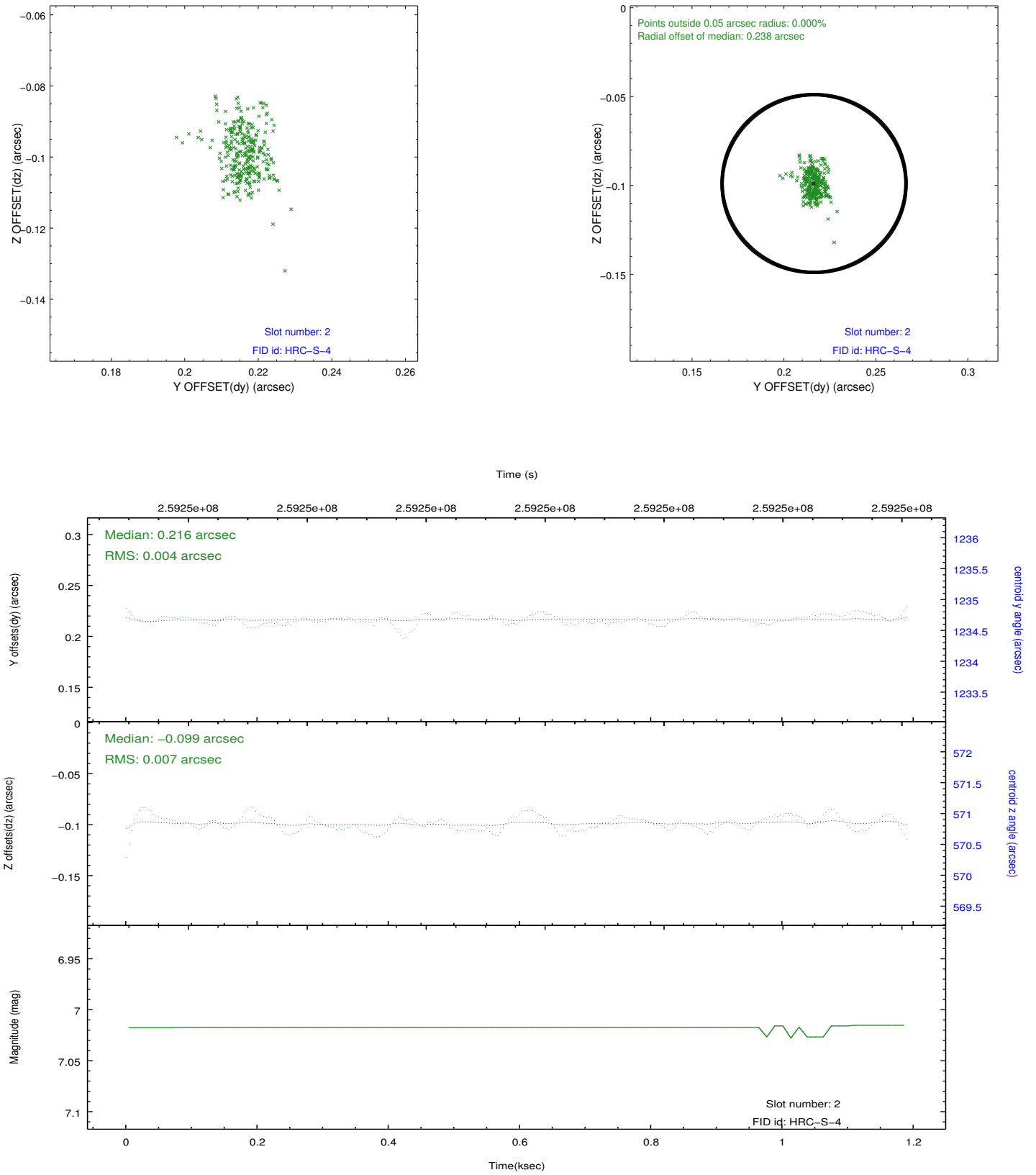
### 2.5.1 Slot 0



## 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)      | 2012.08.13    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 1.1595313     |

### A.2 Comments