

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 6559 - L2 Version 4  
Chandra X-Ray Center

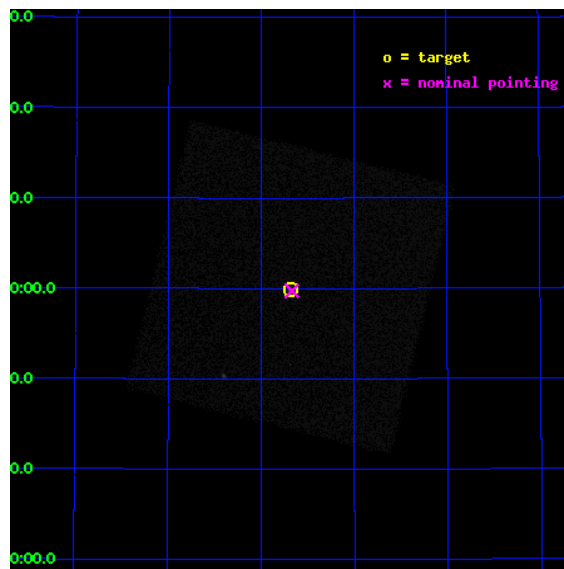
L2 Processing Date : Aug 10 2012

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# 1 Front

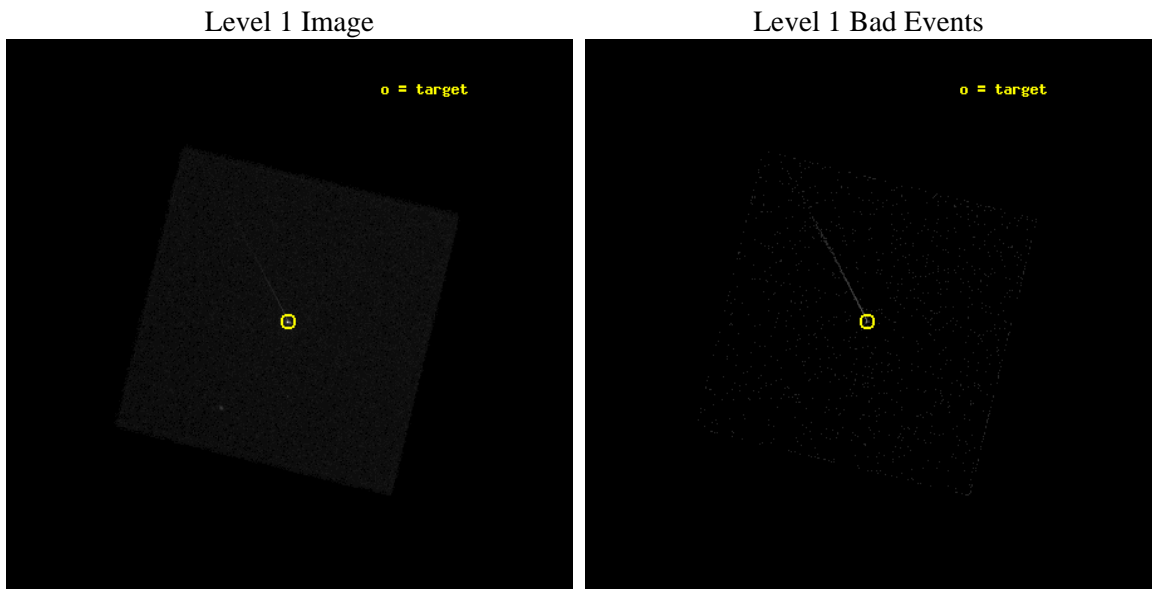
|          |  |                                       |
|----------|--|---------------------------------------|
| seq_num  | 290652   | Sequence number                       |
| obs_id   | 6559   | Observation id                        |
| title    | Improving the De-Gap Corrections for the HRC-I | Proposal title                        |
| observer | Dr. CXC Calibration                            | Principal investigator                |
| object   | Capella  | Source name                           |
| ra_targ  | 79.1725  | Observer's specified target RA [deg]  |
| dec_targ | 45.998   | Observer's specified target Dec [deg] |
| ra_nom   | 79.167604445824                                | Nominal RA [deg]                      |
| dec_nom  | 45.995777570453                                | Nominal Dec [deg]                     |
| roll_nom | 238.83916811807                                | Nominal Roll [deg]                    |
| revision | 4  | Processing version of data            |
| ontime   | 5187.7814904749                                | [s]                                   |
| livetime | 5140.9206204384                                | Ontime multiplied by DTCOR            |
| l2events | 316636   | 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 | 5000.000000     | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5               | Processing system revision     | ontime         | 5187.7814904749 | [s]                                     |
| caldbver | 4.5.1.1             | &#160                          | l1events       | 519752          | Number of level 1 events                |
| date     | 2012-08-10T23:18:15 | Date and time of file creation |                |                 |   |
| revision | 4                   | Processing version of data     |                |                 |   |

### 2.1.3 Events

#### Level 1 Events

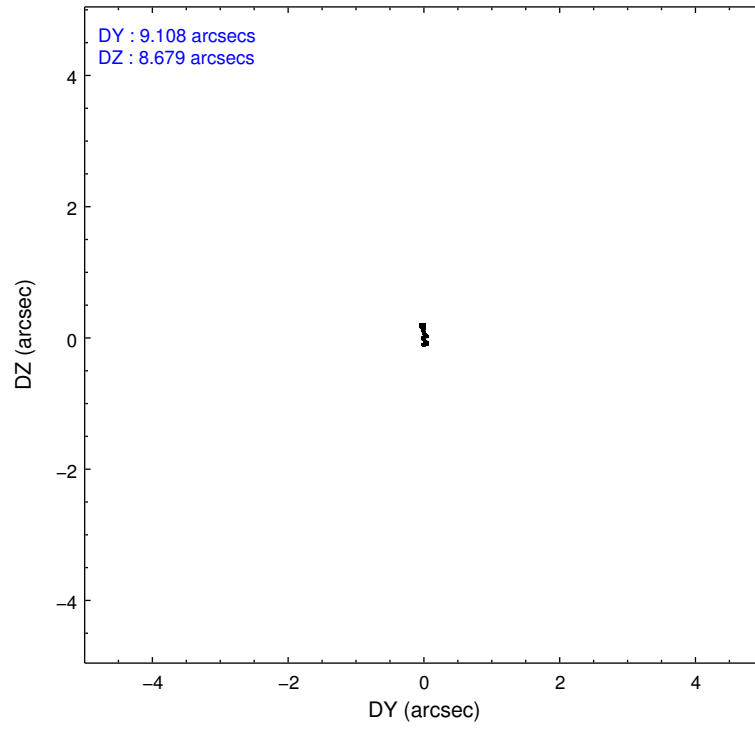
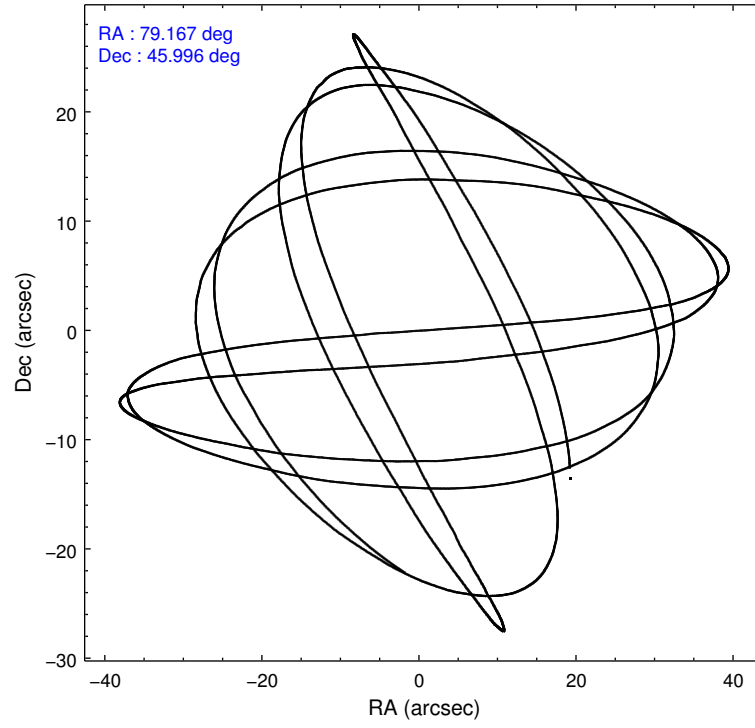
|                 |                      |
|-----------------|----------------------|
|                 | <b>segment<br/>0</b> |
| level 1 events  | 519752               |
| rejected events | 94836                |
| rejected %      | 18%                  |

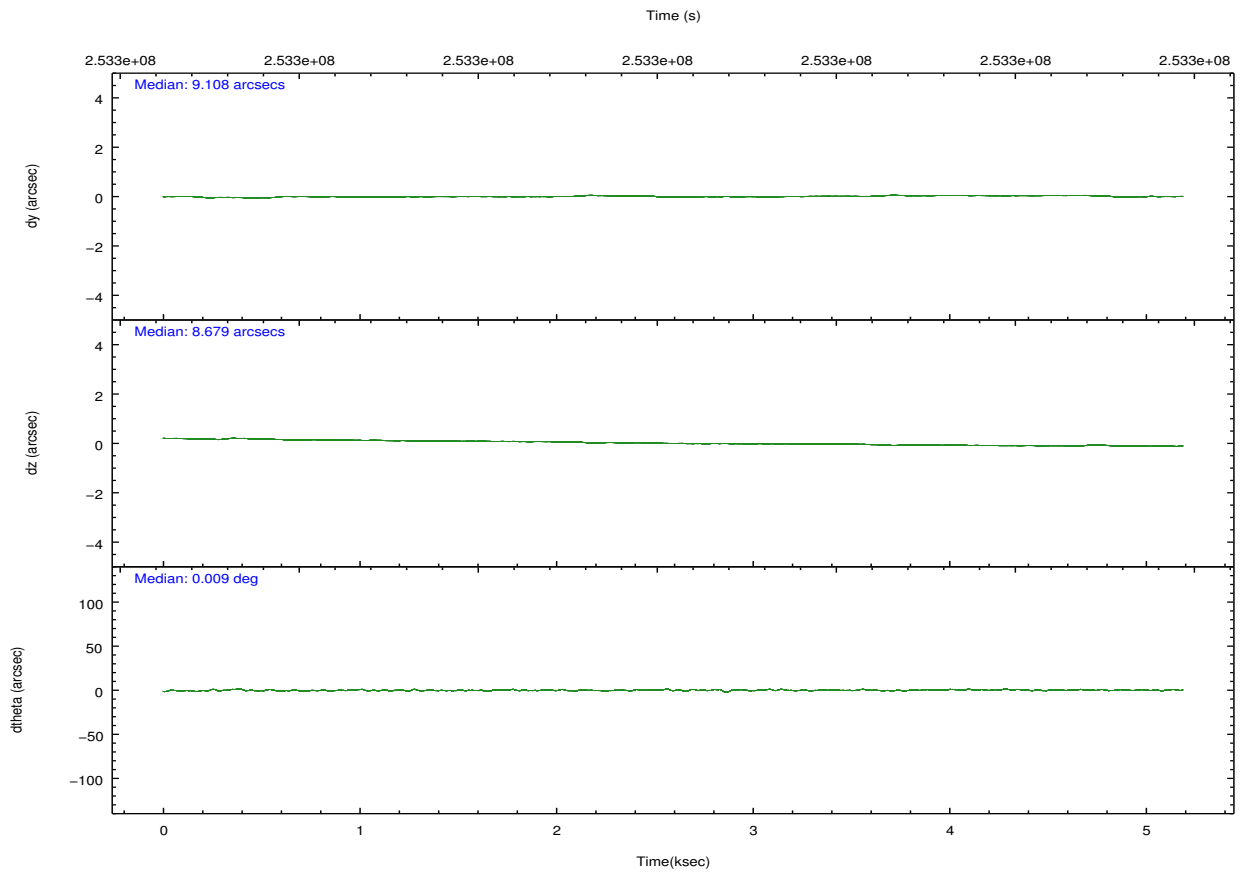
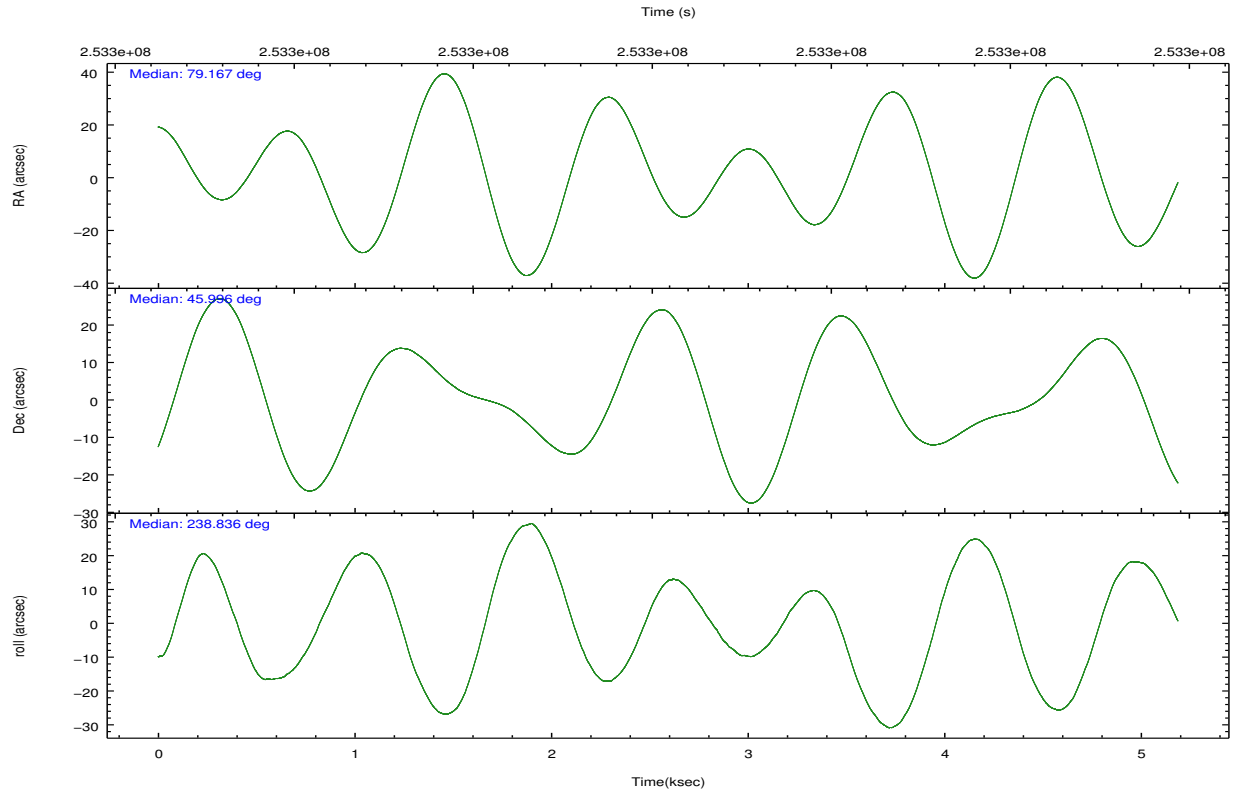


## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                    | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|------------------------------|-----------|---------|
| Instrument                        | HRC                 | HRC                  | Obspar format version number | 7         | 7       |
| Detector                          | HRC-I               | HRC-I                | Obspar file type             | PREDICTED | ACTUAL  |
| Grating                           | NONE                | NONE                 | Obspar update status         | NONE      | UPDATED |
| Data mode                         | OBSERVING           | OBSERVING            |                              |           |         |
| Observation mode                  | POINTING            | POINTING             |                              |           |         |
| [deg] Pointing RA                 | 79.167536           | 79.16760444582421    |                              |           |         |
| [deg] Pointing Dec                | 46.022648           | 45.99577757045259    |                              |           |         |
| [deg] Pointing Roll               | 238.934704          | 238.8391681180689    |                              |           |         |
| [mm] SIM focus pos                | -1.040293           | -1.038866356238299   |                              |           |         |
| [mm] SIM defocus                  | 0                   | 0.001426264420575141 |                              |           |         |
| [mm] SIM translation stage pos    | 126.985494          | 126.9829799899862    |                              |           |         |
| [mm] SIM translation stage offset | 0                   | 0.002508901615314585 |                              |           |         |
| [s] Observation start time (MET)  | 253296683.184000    | 253296306.47966      |                              |           |         |
| Observation start date            | 2006-01-10T16:10:18 | 2006-01-10T16:05:06  |                              |           |         |
| [s] Observation end time (MET)    | 253301683.184000    | 253302929.00497      |                              |           |         |
| Observation end date              | 2006-01-10T17:33:38 | 2006-01-10T17:55:29  |                              |           |         |

## 2.3 Aspect



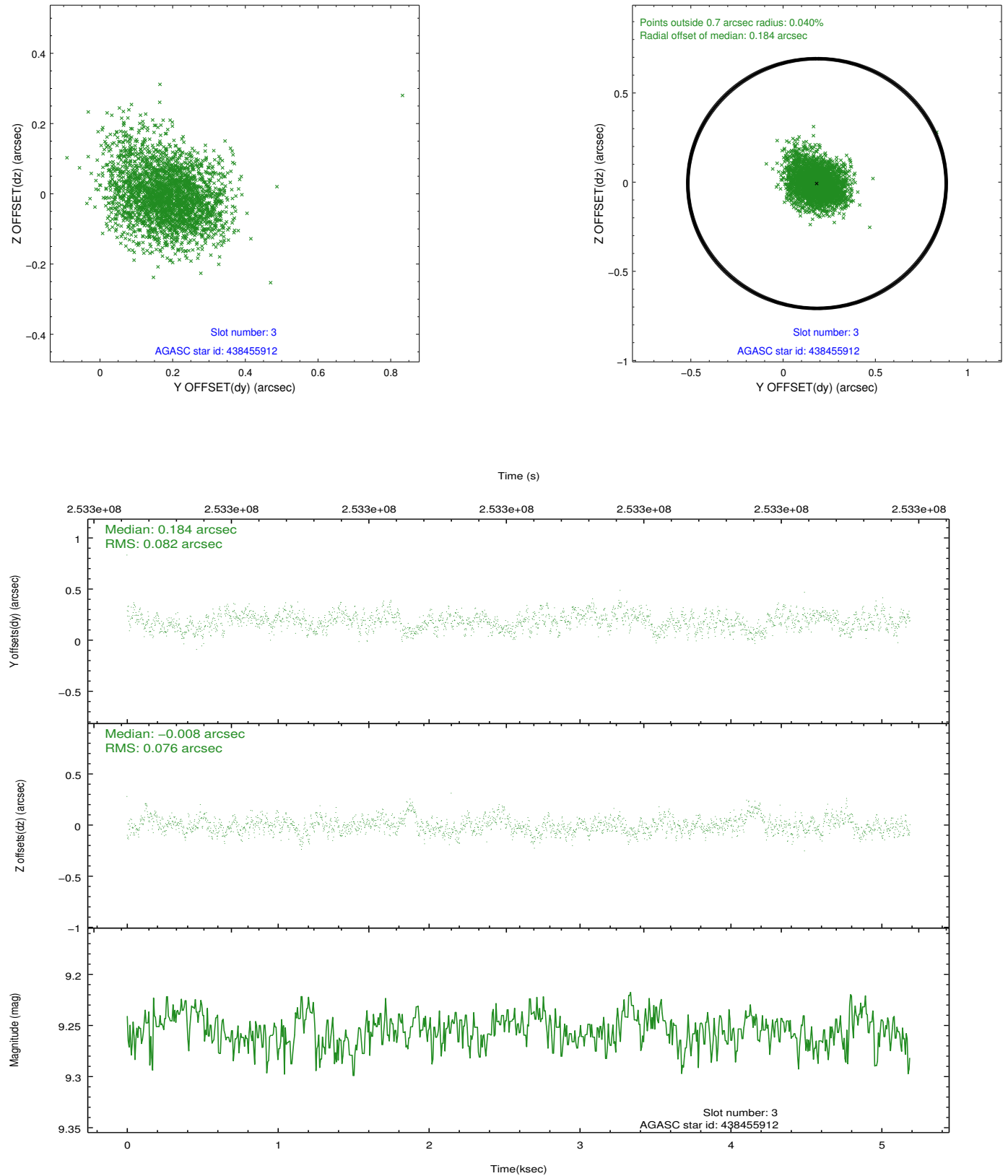


### Slot Statistics

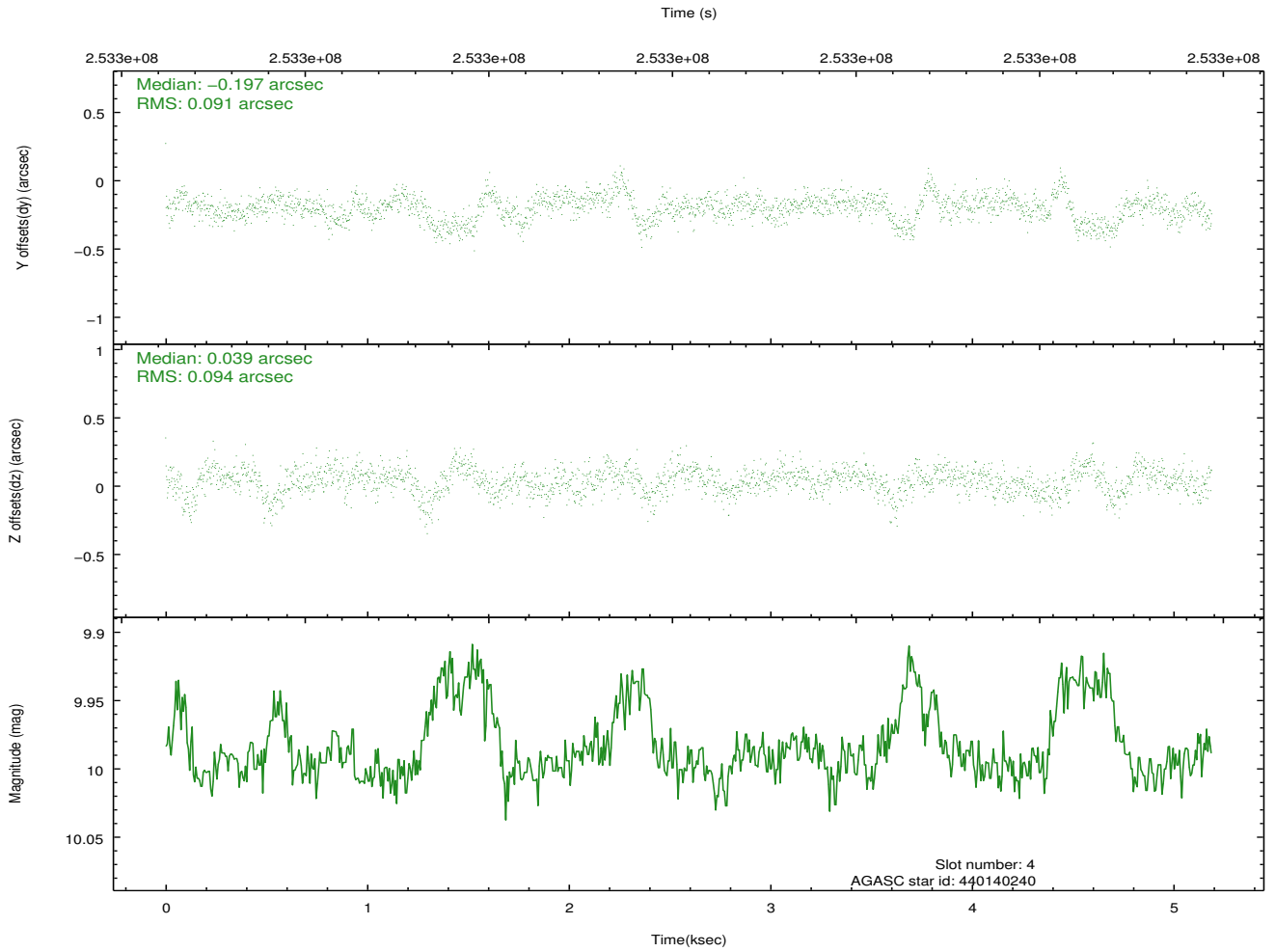
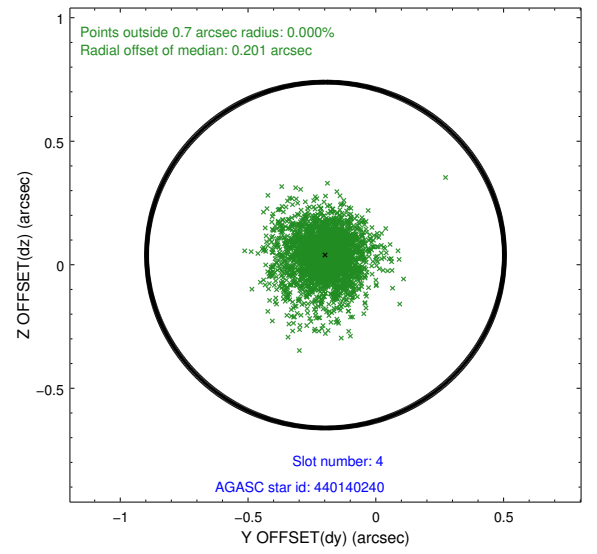
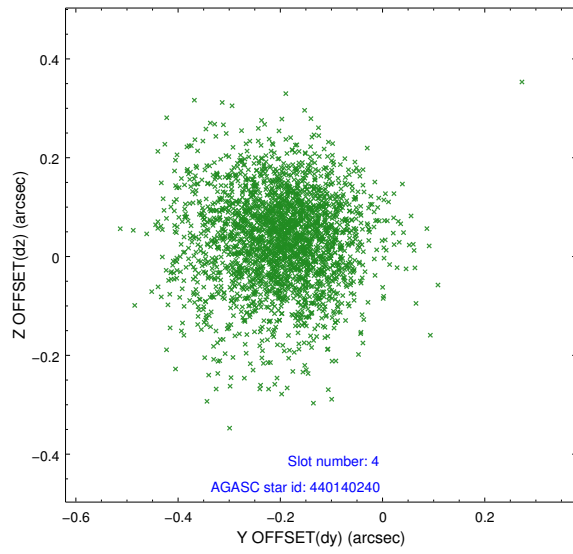
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra        | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0    | FID    | HRC-I-1   | 7.03 | 1266  | -0.020 | 0.054  | 0.008 | 0.016 | 0.000000  | 0.000000  | -764.78  | -1296.54 |
| 1    | FID    | HRC-I-2   | 7.06 | 1266  | 0.174  | -0.132 | 0.007 | 0.011 | 0.000000  | 0.000000  | 847.44   | -1299.33 |
| 2    | FID    | HRC-I-3   | 7.11 | 1266  | -0.034 | -0.011 | 0.007 | 0.012 | 0.000000  | 0.000000  | -1192.61 | 1006.93  |
| 3    | GUIDE  | 438455912 | 9.25 | 2531  | 0.184  | -0.008 | 0.119 | 0.193 | 78.251946 | 45.690923 | 2201.07  | -1361.99 |
| 4    | GUIDE  | 440140240 | 9.99 | 2531  | -0.197 | 0.039  | 0.137 | 0.233 | 78.889349 | 46.726437 | -1815.24 | -1896.00 |
| 5    | GUIDE  | 440150048 | 7.13 | 2532  | -0.107 | -0.058 | 0.083 | 0.128 | 79.112838 | 46.416060 | -1142.84 | -847.29  |
| 6    | GUIDE  | 440163960 | 8.88 | 2530  | 0.024  | -0.047 | 0.080 | 0.130 | 79.298370 | 45.827072 | 434.03   | 644.70   |
| 7    | GUIDE  | 438460832 | 8.99 | 2531  | 0.105  | 0.075  | 0.101 | 0.161 | 78.414614 | 45.554782 | 2416.02  | -759.97  |

## 2.4 Star Slots

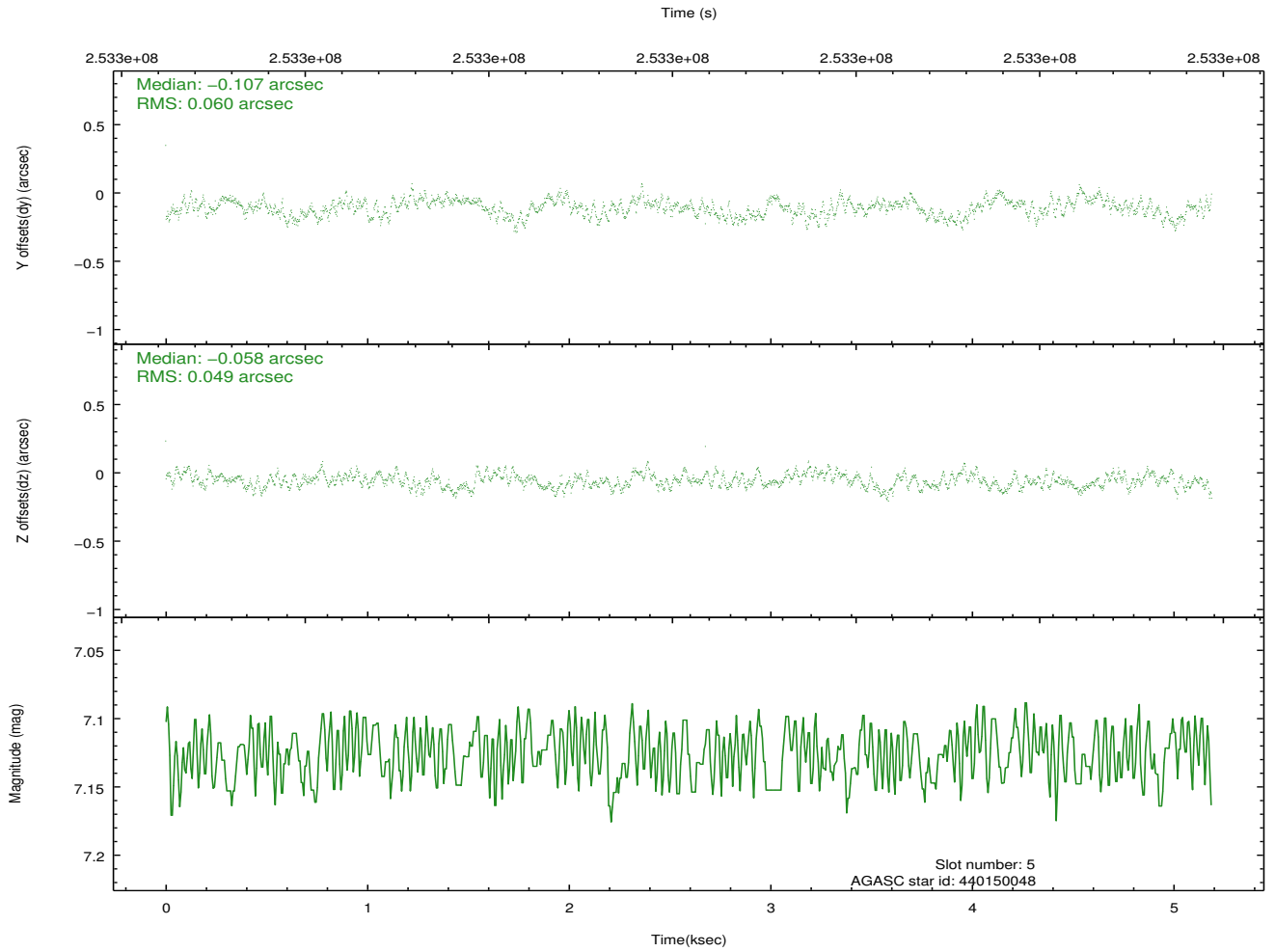
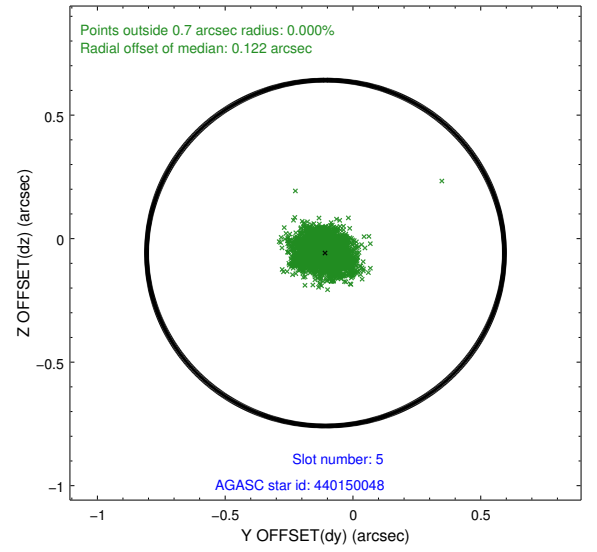
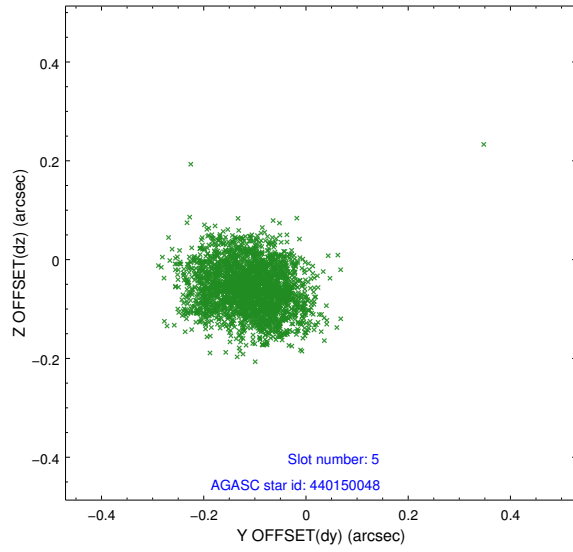
### 2.4.1 Slot 3



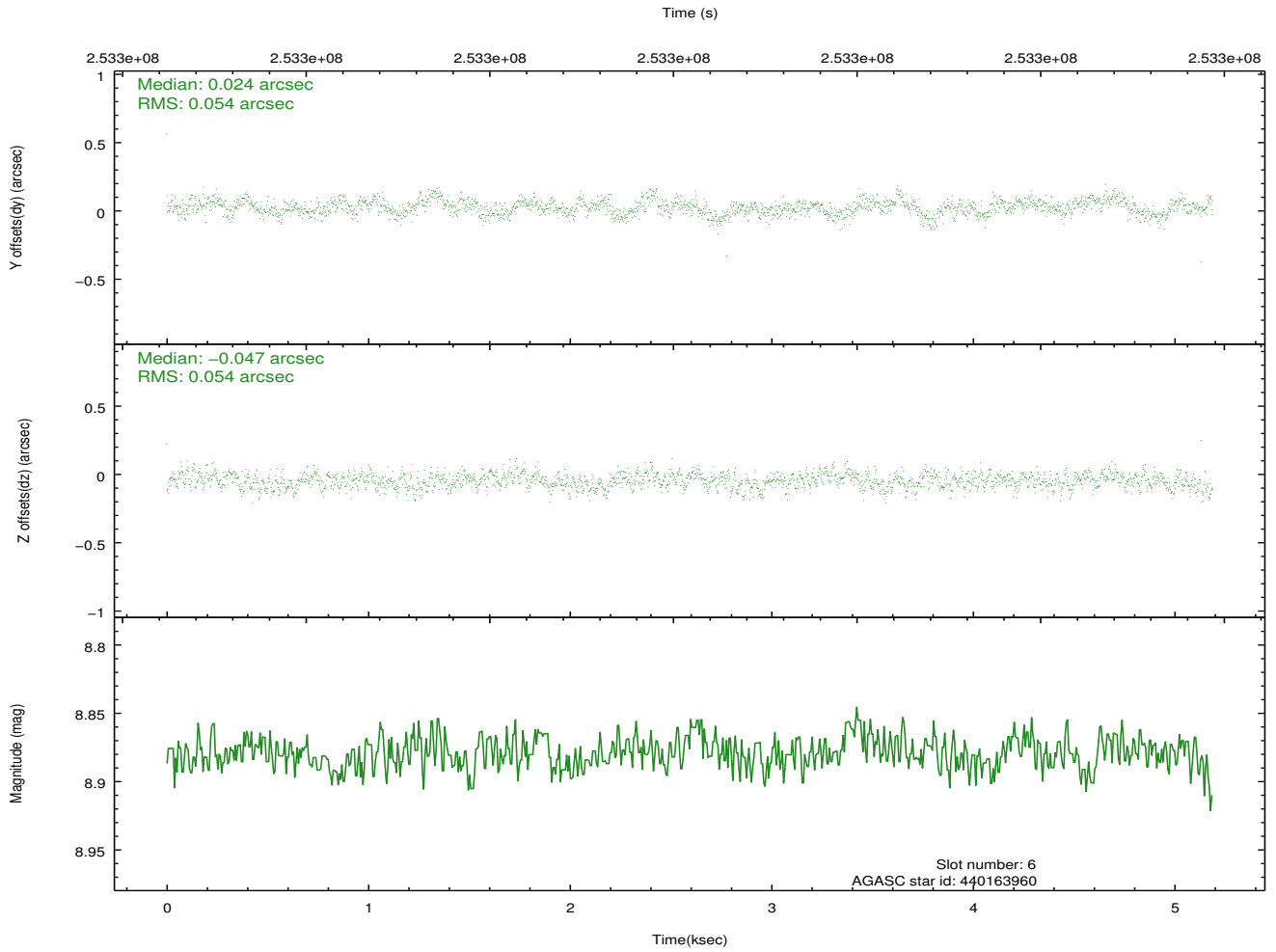
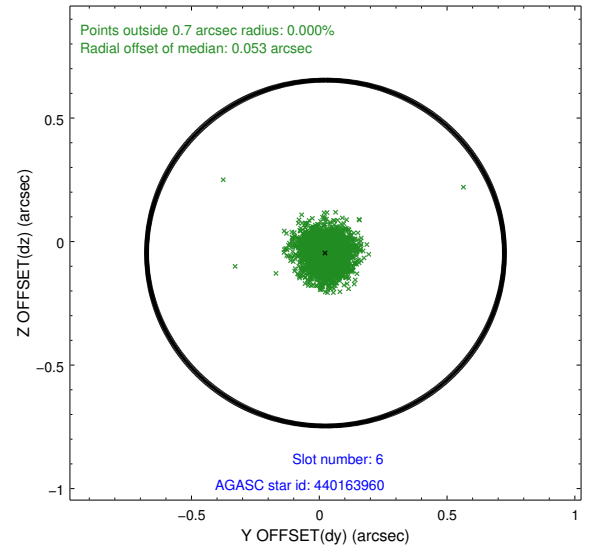
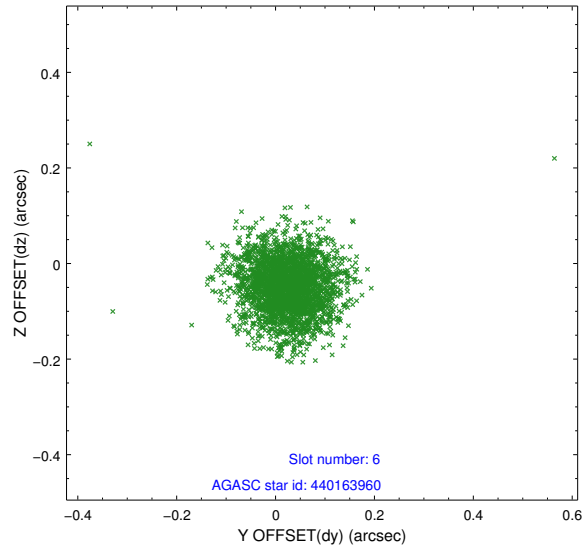
## 2.4.2 Slot 4



### 2.4.3 Slot 5

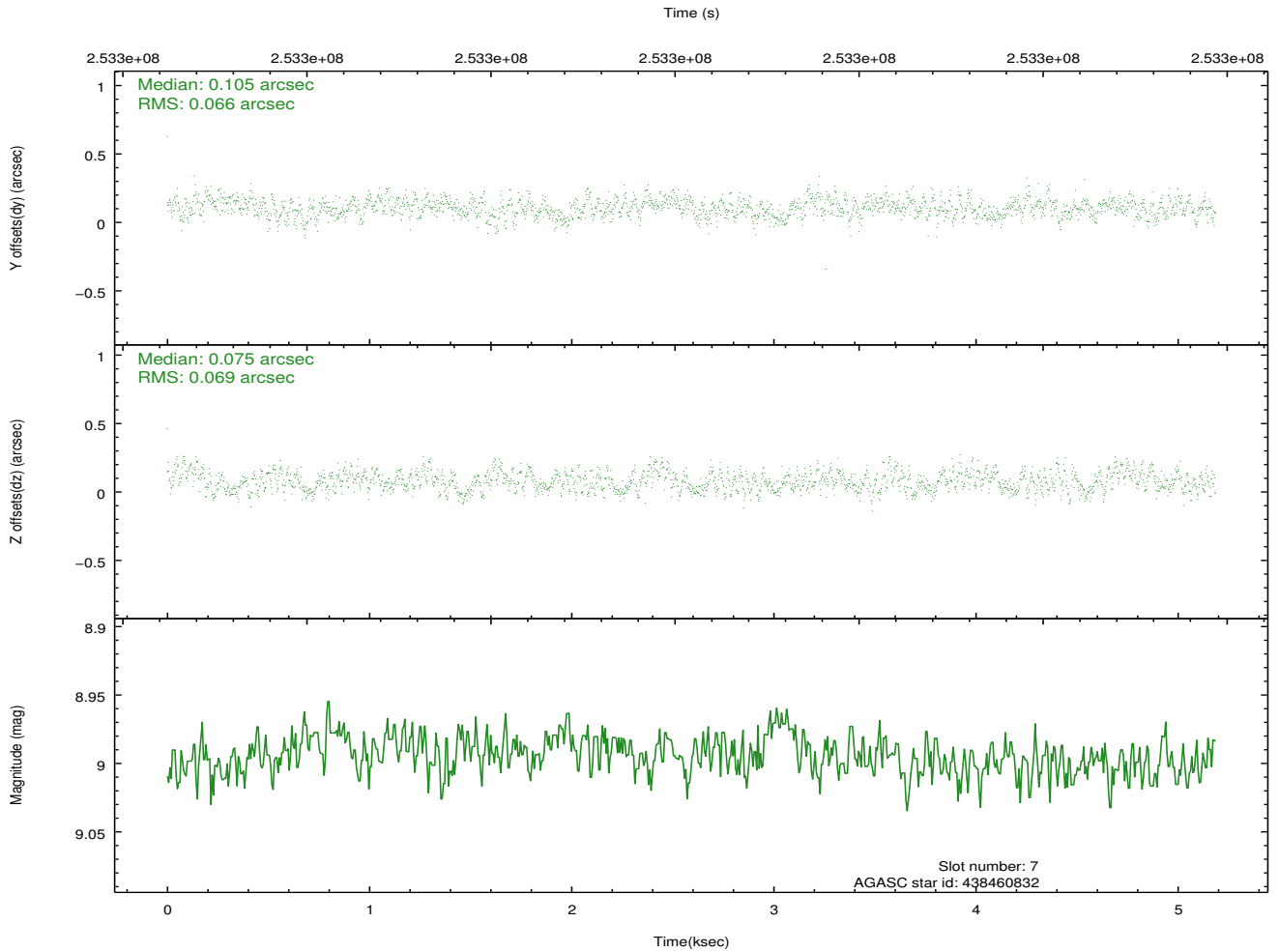
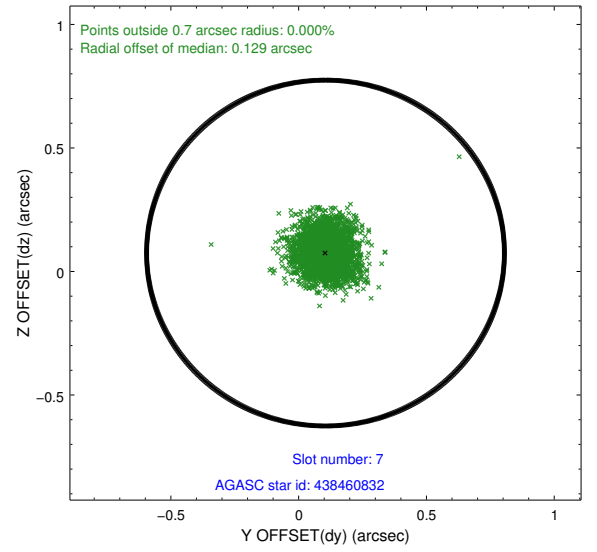
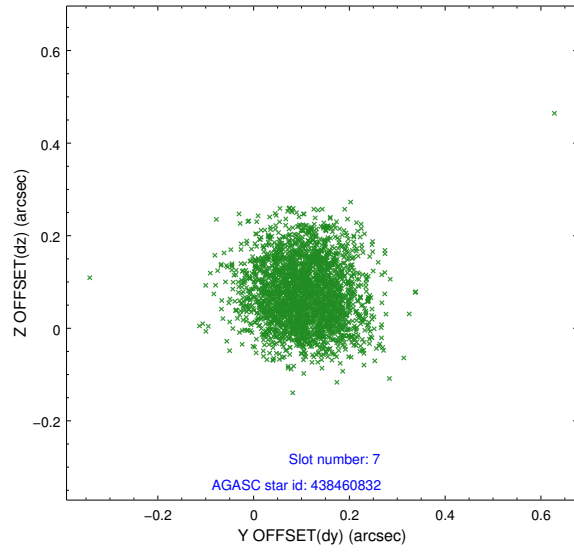


## 2.4.4 Slot 6



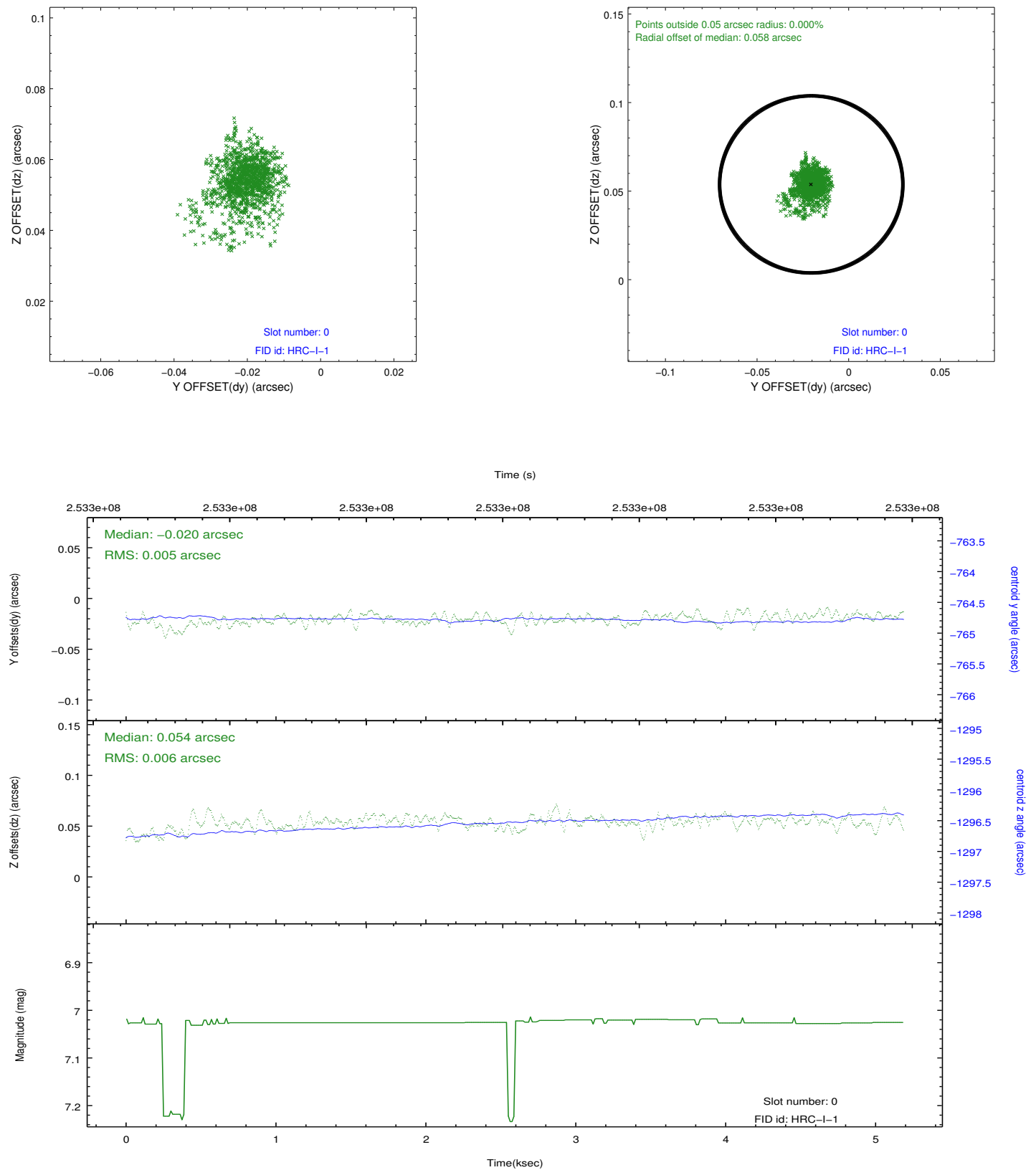


## 2.4.5 Slot 7

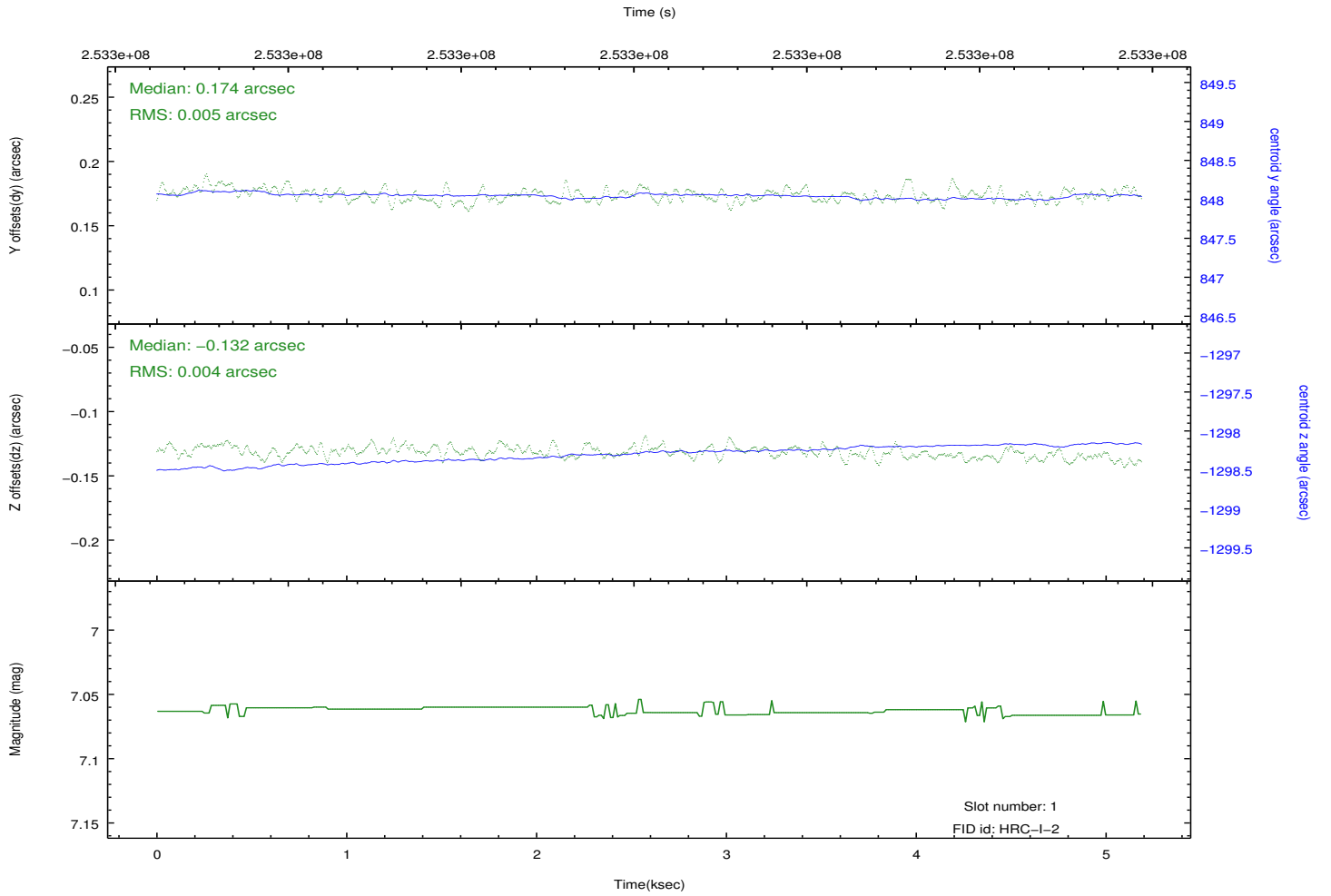
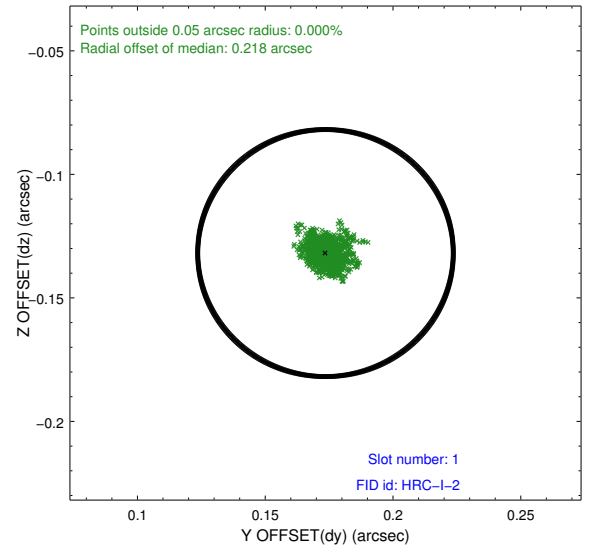
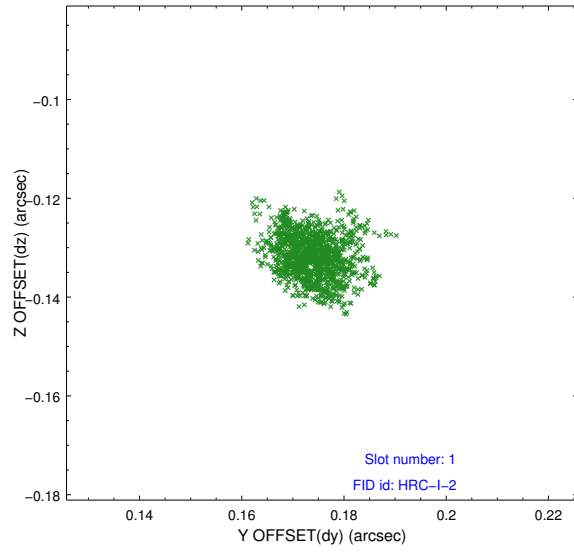


## 2.5 FID Slots

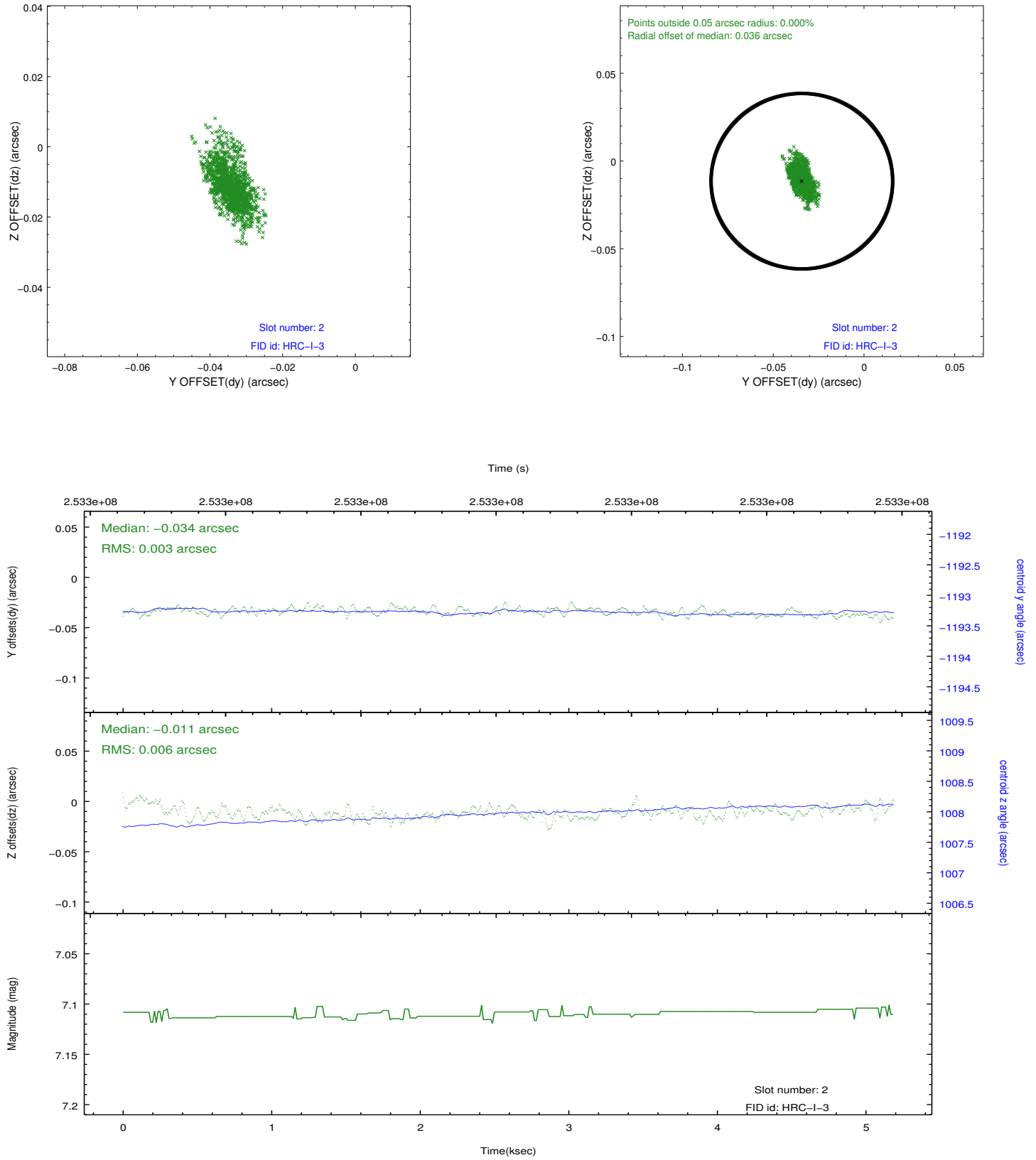
### 2.5.1 Slot 0



## 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)      | 2012.08.12 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 5.18752524 |

### A.2 Comments