

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2614 - L2 Version 4  
Chandra X-Ray Center

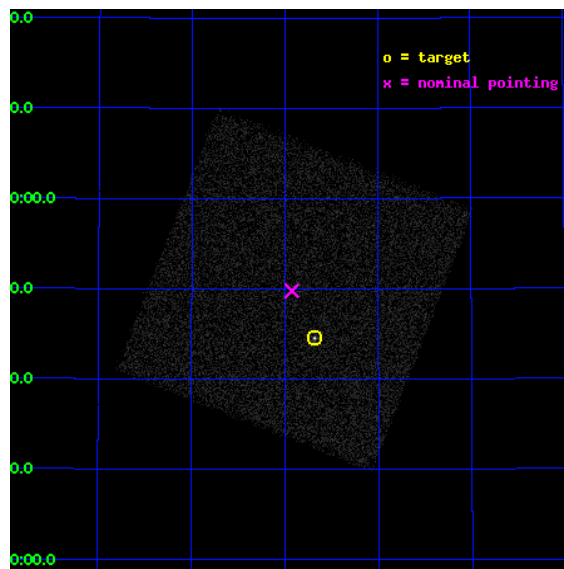
L2 Processing Date : Oct 1 2012

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# 1 Front

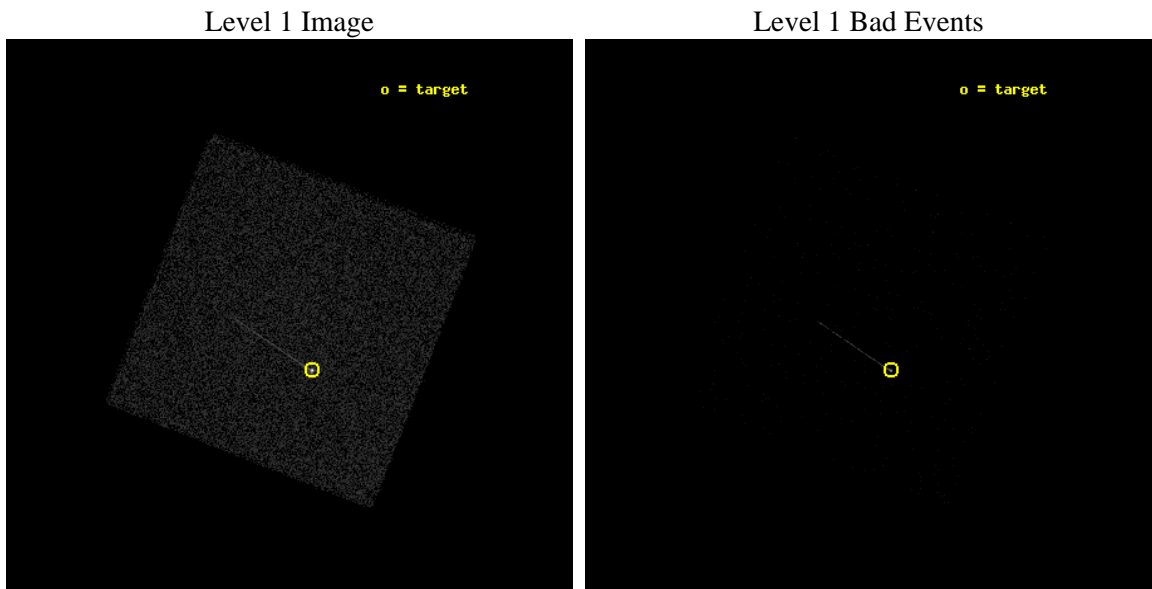
|          |   |                                       |
|----------|---|---------------------------------------|
| seq_num  | 290170  | Sequence number                       |
| obs_id   | 2614  | Observation id                        |
| title    | AO3 HRC-I CALIBRATION OBSERVATION: MINI-SCAN OF ARLAC | Proposal tit                          |
| 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   | 332.23124269796                                       | Nominal RA [deg]                      |
| dec_nom  | 45.829962513651                                       | Nominal Dec [deg]                     |
| roll_nom | 336.48625686801                                       | Nominal Roll [deg]                    |
| revision | 4   | Processing version of data            |
| ontime   | 1194.3812981248                                       | [s]                                   |
| livetime | 1187.7037702948                                       | Ontime multiplied by DTCOR            |
| l2events | 37574   | Number of level 2 events              |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

|          |                     |                                |                |                 |   |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num  | 1                   | Obi number                     | sched_exp_time | 1000.000000     | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5               | Processing system revision     | ontime         | 1194.3812981248 | [s]                                     |
| caldbver | 4.5.2               | &#160                          | l1events       | 68534           | Number of level 1 events                |
| date     | 2012-10-01T03:09:17 | Date and time of file creation |                |                 |   |
| revision | 4                   | Processing version of data     |                |                 |   |

### 2.1.3 Events

#### Level 1 Events

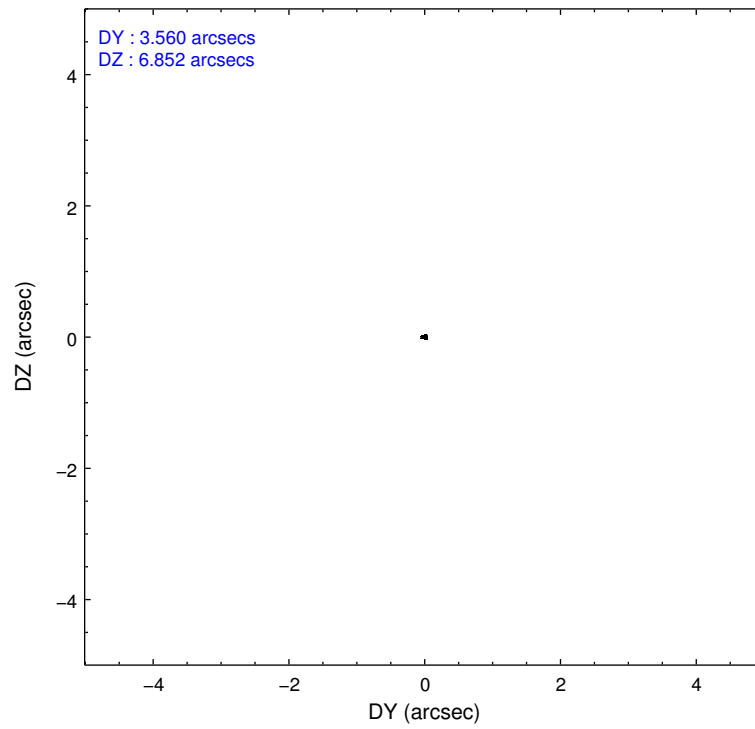
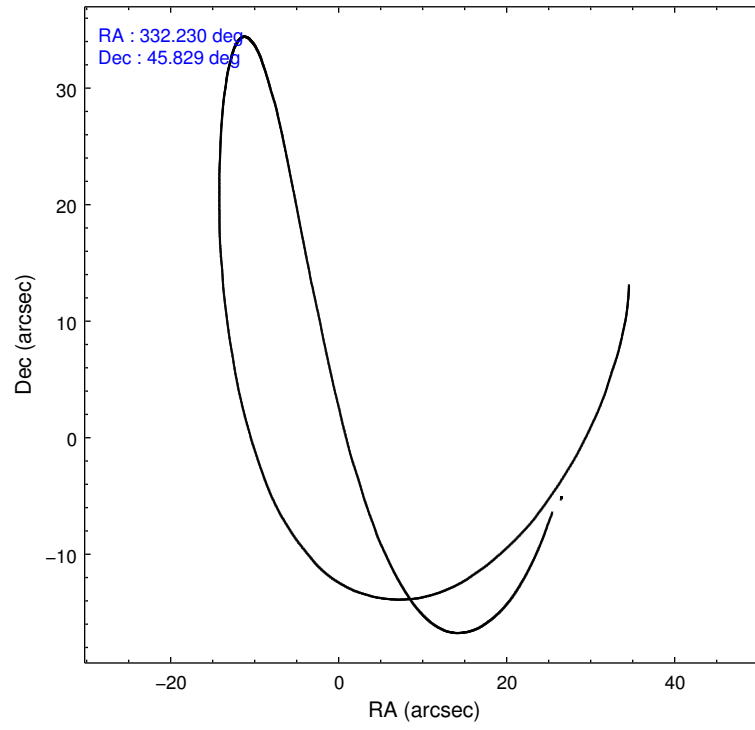
|                 |                      |
|-----------------|----------------------|
|                 | <b>segment<br/>0</b> |
| level 1 events  | 68534                |
| rejected events | 14416                |
| rejected %      | 21%                  |

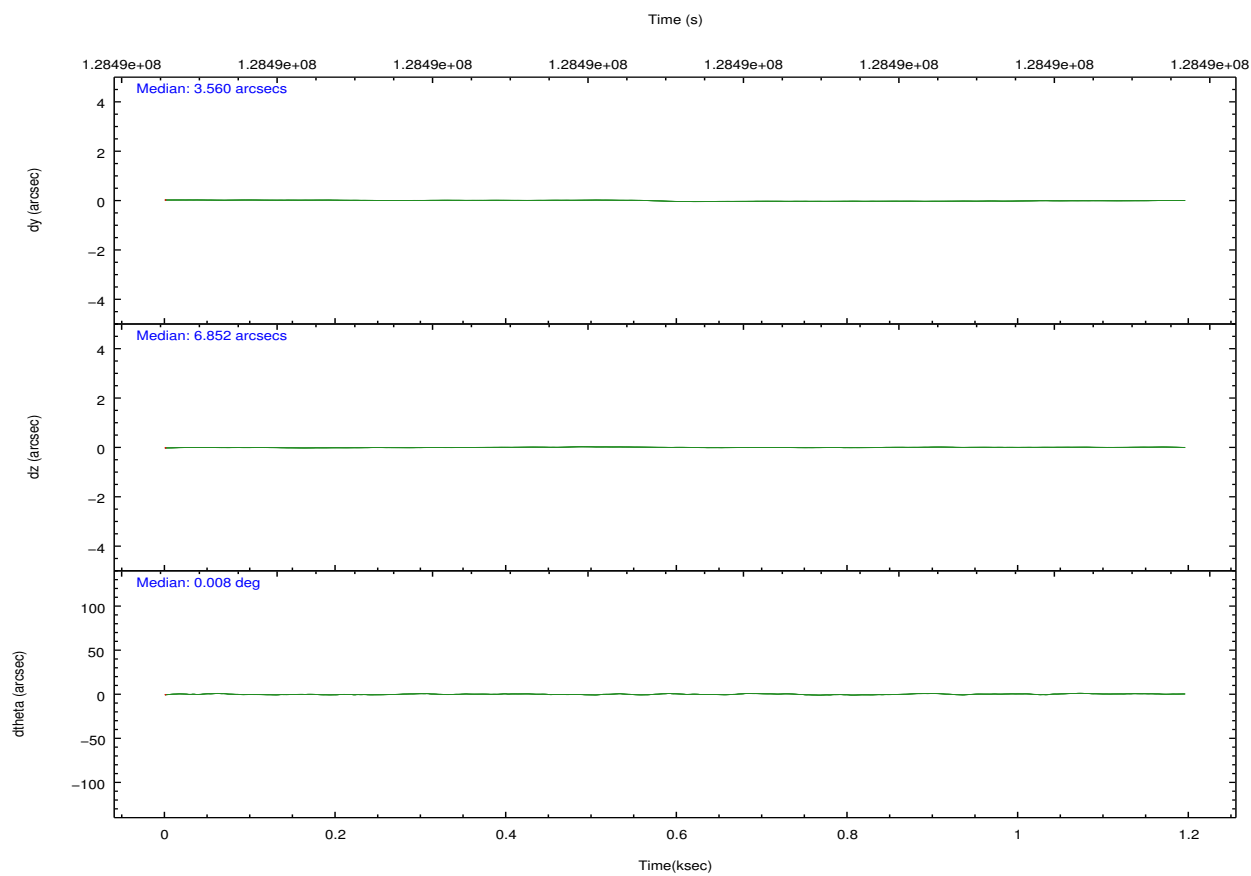
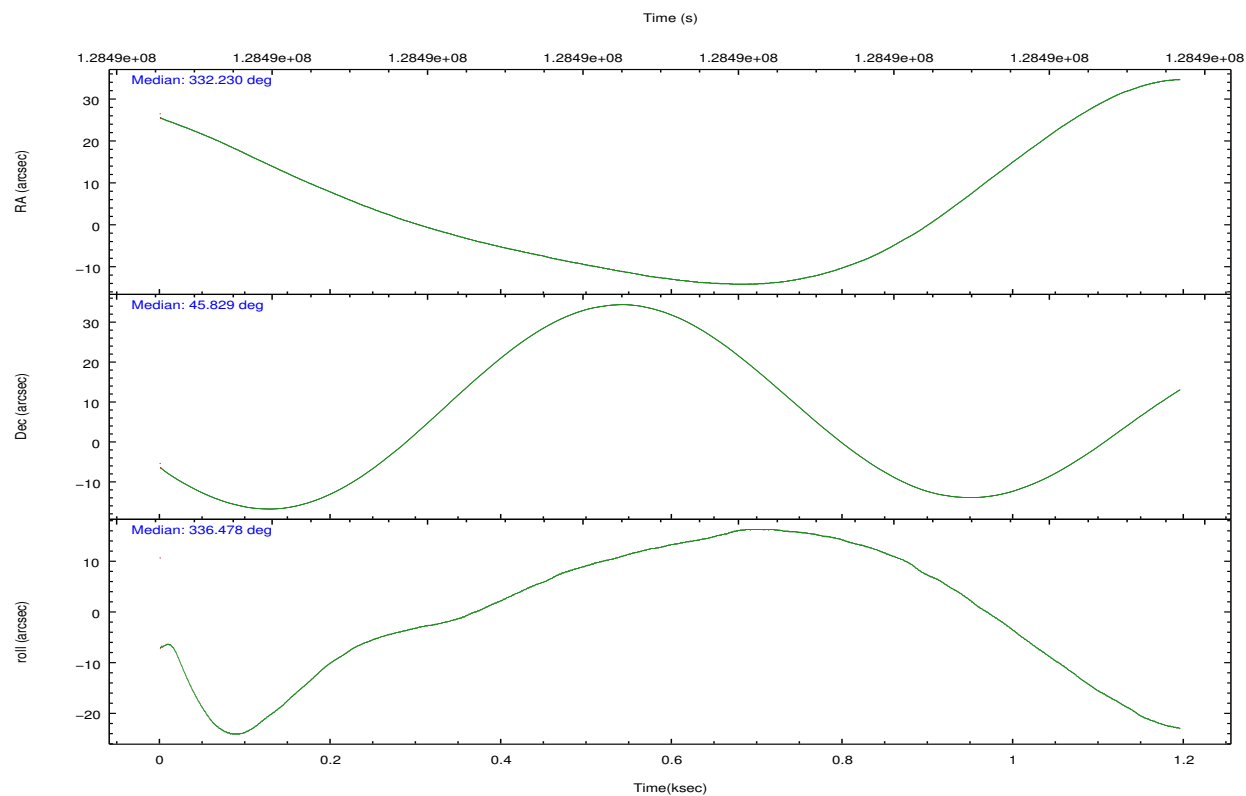
## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual                 |
|-----------------------------------|---------------------|------------------------|
| Instrument                        | HRC                 | HRC                    |
| Detector                          | HRC-I               | HRC-I                  |
| Grating                           | NONE                | NONE                   |
| Data mode                         | OBSERVING           | OBSERVING              |
| Observation mode                  | POINTING            | POINTING               |
| [deg] Pointing RA                 | 332.192555          | 332.2312426979615      |
| [deg] Pointing Dec                | 45.827388           | 45.82996251365077      |
| [deg] Pointing Roll               | 336.609214          | 336.4862568680105      |
| [mm] SIM focus pos                | -1.040293           | -1.038866356238299     |
| [mm] SIM defocus                  | 0                   | 0.001426264420575141   |
| [mm] SIM translation stage pos    | 126.985494          | 126.9854943052878      |
| [mm] SIM translation stage offset | 0                   | -5.413686238853188e-06 |
| [s] Observation start time (MET)  | 128488909.184000    | 128488533.15268        |
| Observation start date            | 2002-01-27T03:20:45 | 2002-01-27T03:15:33    |
| [s] Observation end time (MET)    | 128489909.184000    | 128490043.49025        |
| Observation end date              | 2002-01-27T03:37:25 | 2002-01-27T03:40:43    |

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

## 2.3 Aspect





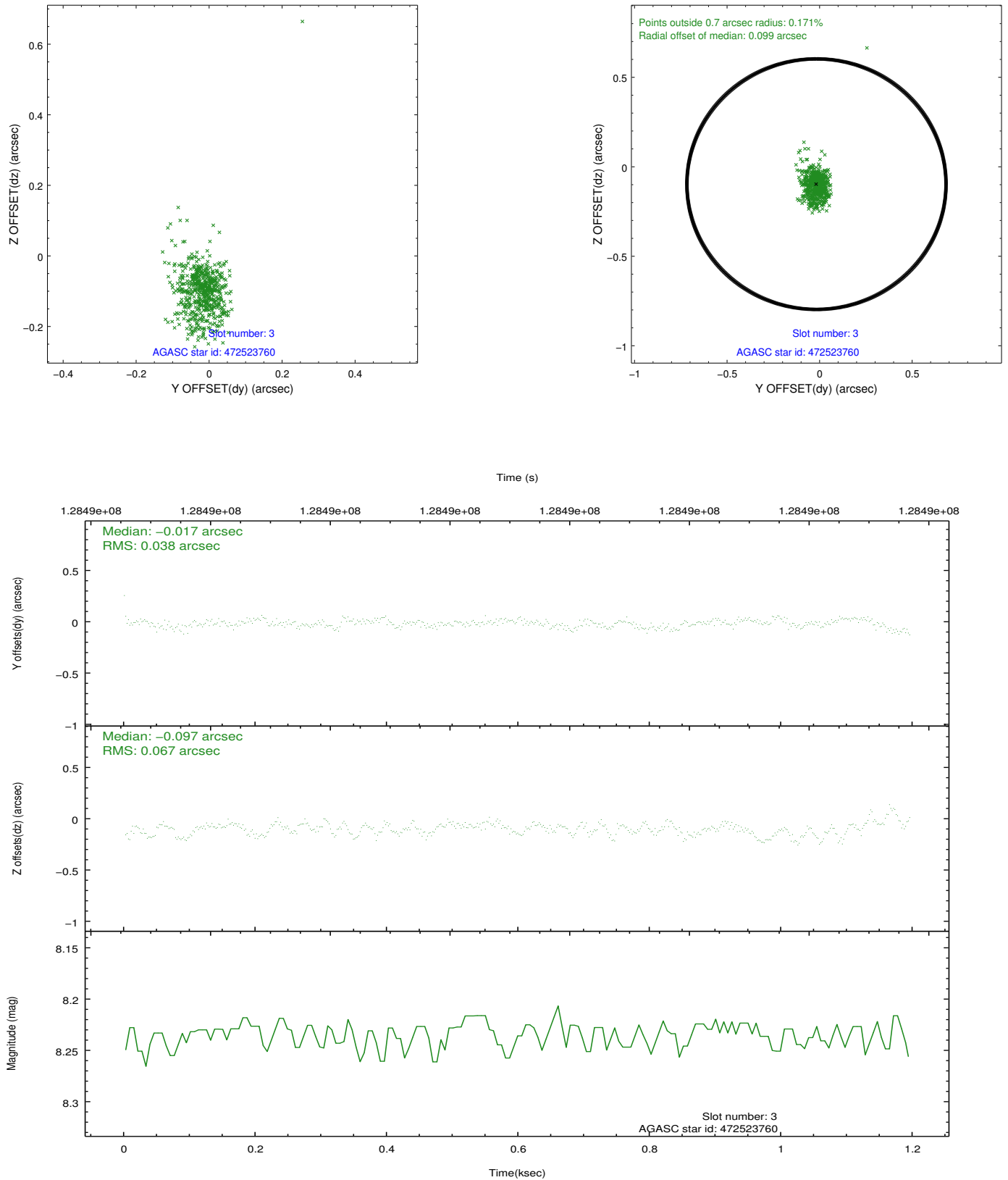
### Slot Statistics

| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-I-1   | 6.96 | 292   | 0.025  | 0.030  | 0.007 | 0.012 | 0.000000   | 0.000000  | -759.00  | -1294.72 |
| 1    | FID    | HRC-I-2   | 7.00 | 292   | 0.077  | -0.068 | 0.005 | 0.009 | 0.000000   | 0.000000  | 851.08   | -1300.80 |
| 2    | FID    | HRC-I-3   | 7.04 | 292   | 0.018  | -0.050 | 0.006 | 0.009 | 0.000000   | 0.000000  | -1184.61 | 1005.30  |
| 3    | GUIDE  | 472523760 | 8.23 | 584   | -0.017 | -0.097 | 0.068 | 0.130 | 331.645363 | 45.403260 | -666.55  | -1943.48 |
| 4    | GUIDE  | 472665256 | 9.01 | 584   | -0.080 | 0.025  | 0.089 | 0.146 | 332.808125 | 46.195041 | 877.01   | 1828.90  |
| 5    | GUIDE  | 472659832 | 9.46 | 584   | 0.117  | 0.084  | 0.110 | 0.381 | 332.780399 | 46.098139 | 957.55   | 1488.35  |
| 6    | GUIDE  | 472655704 | 9.48 | 580   | 0.050  | -0.004 | 0.106 | 0.177 | 332.167195 | 45.285228 | 716.20   | -1811.32 |
| 7    | GUIDE  | 472523568 | 9.33 | 583   | -0.069 | 0.010  | 0.117 | 0.206 | 331.465966 | 45.371411 | -1038.35 | -2228.85 |

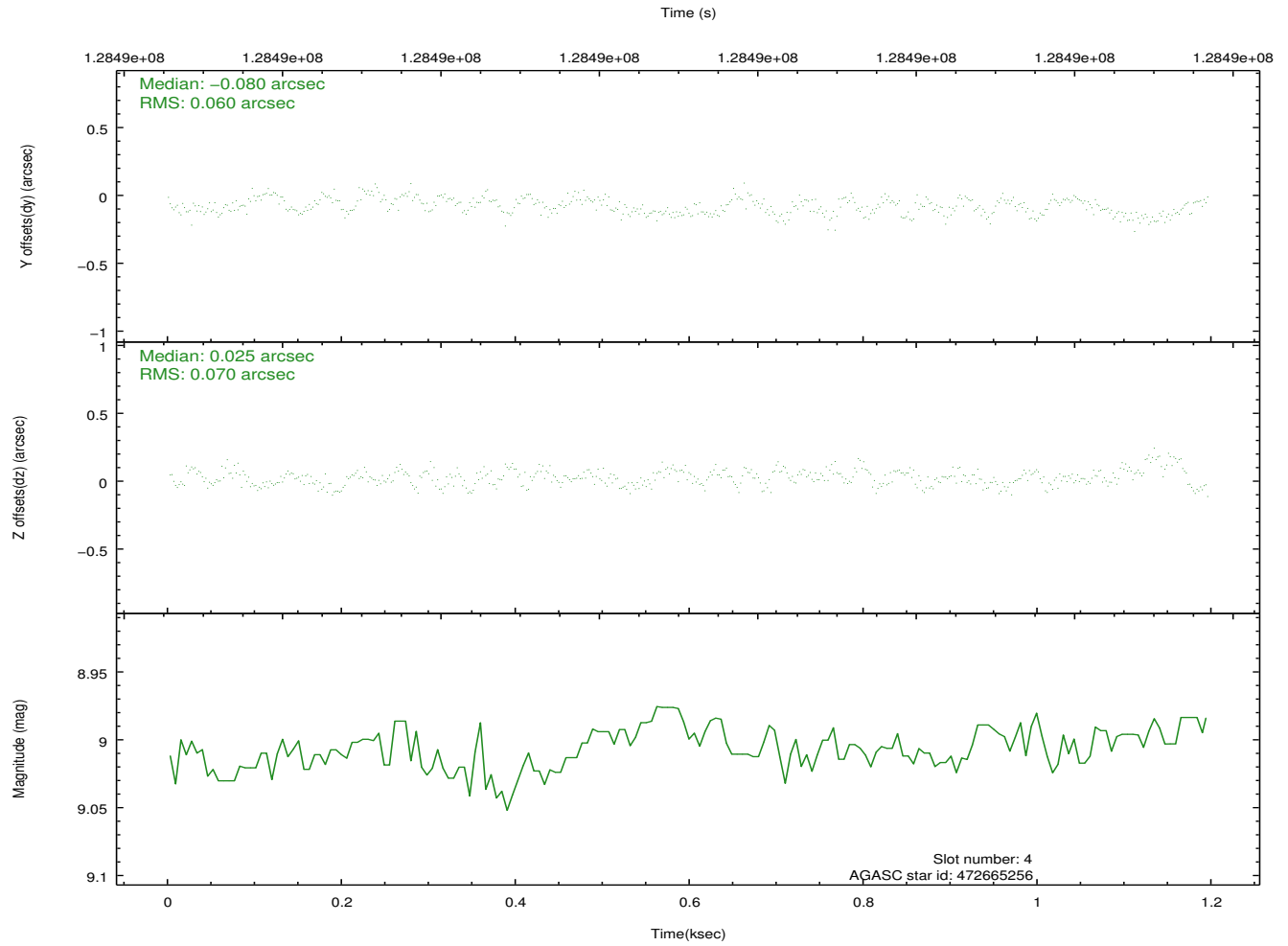
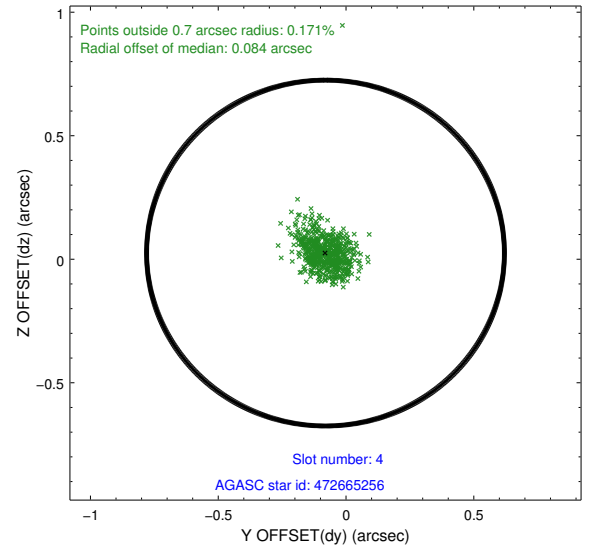
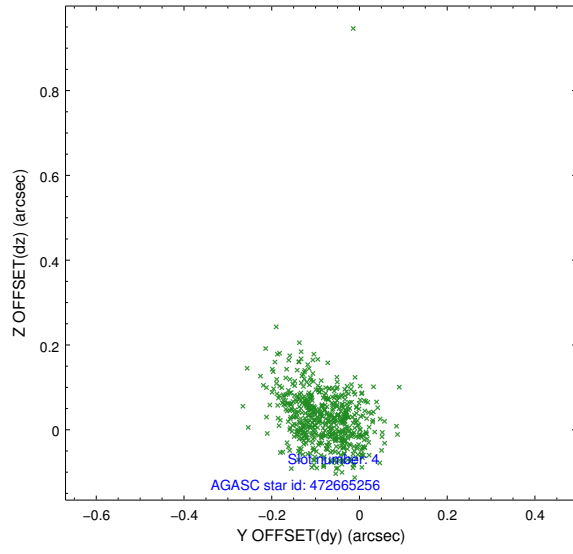


## 2.4 Star Slots

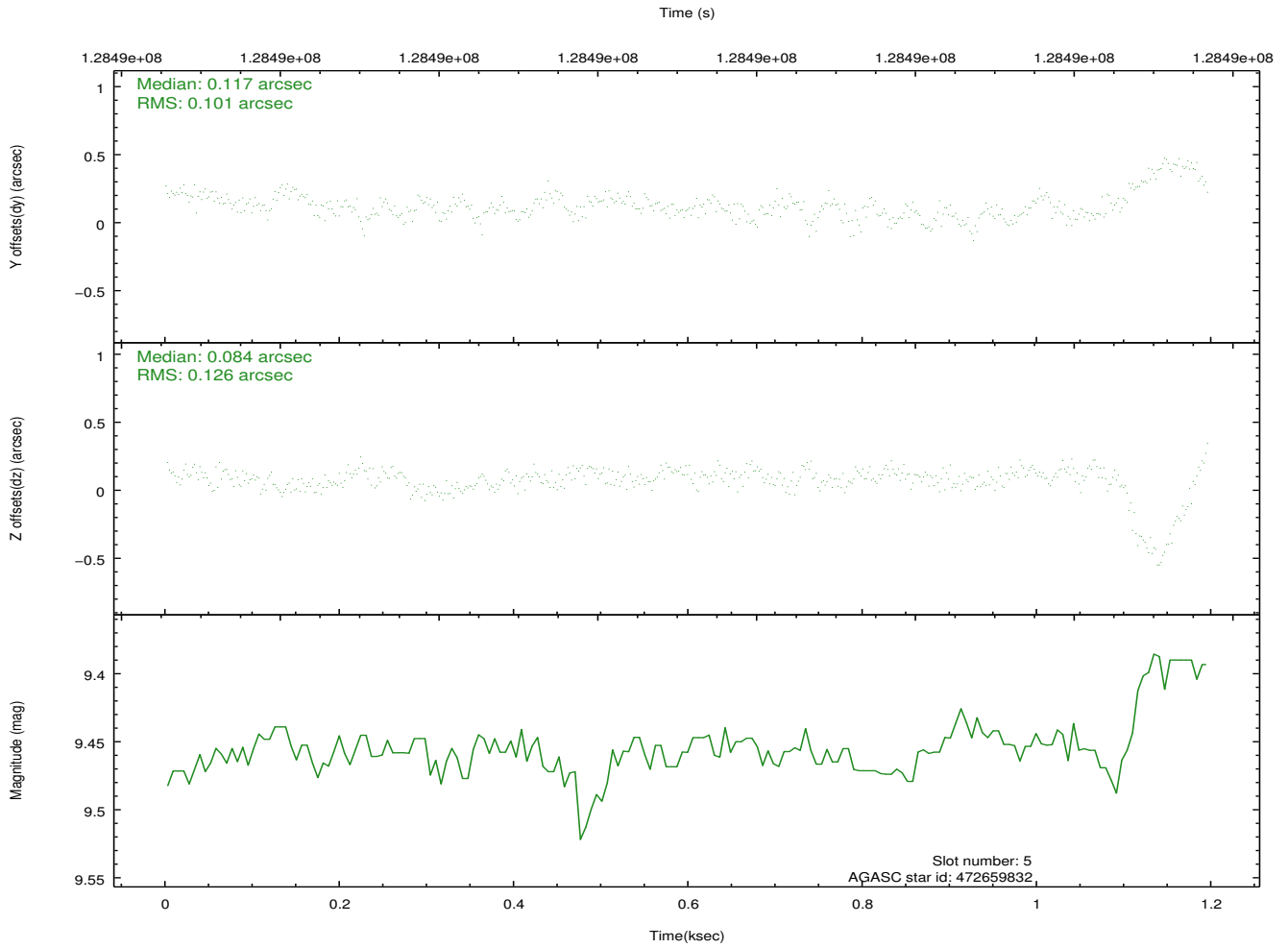
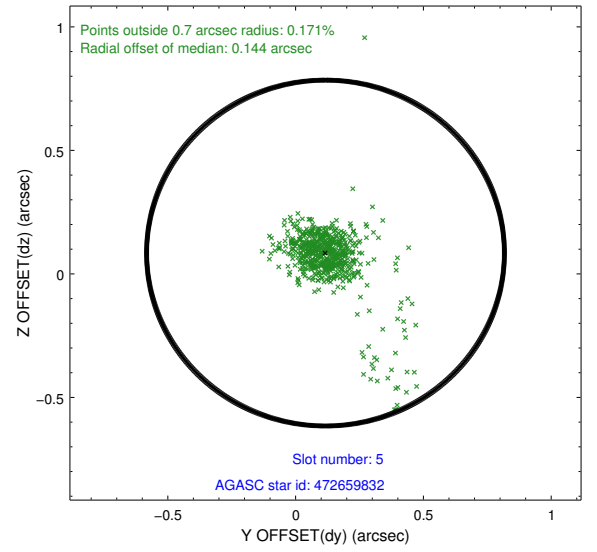
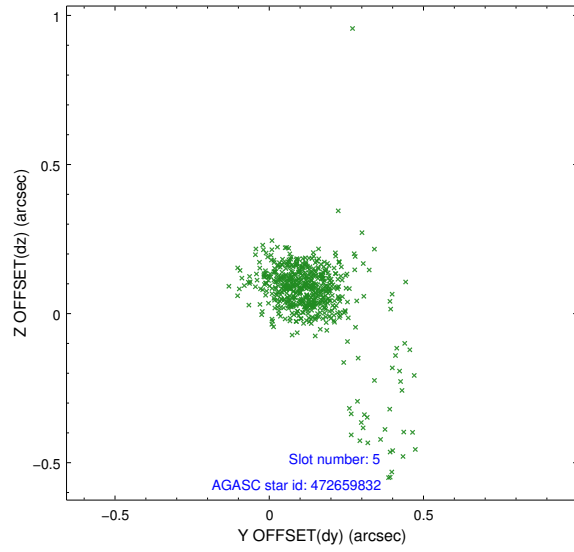
### 2.4.1 Slot 3



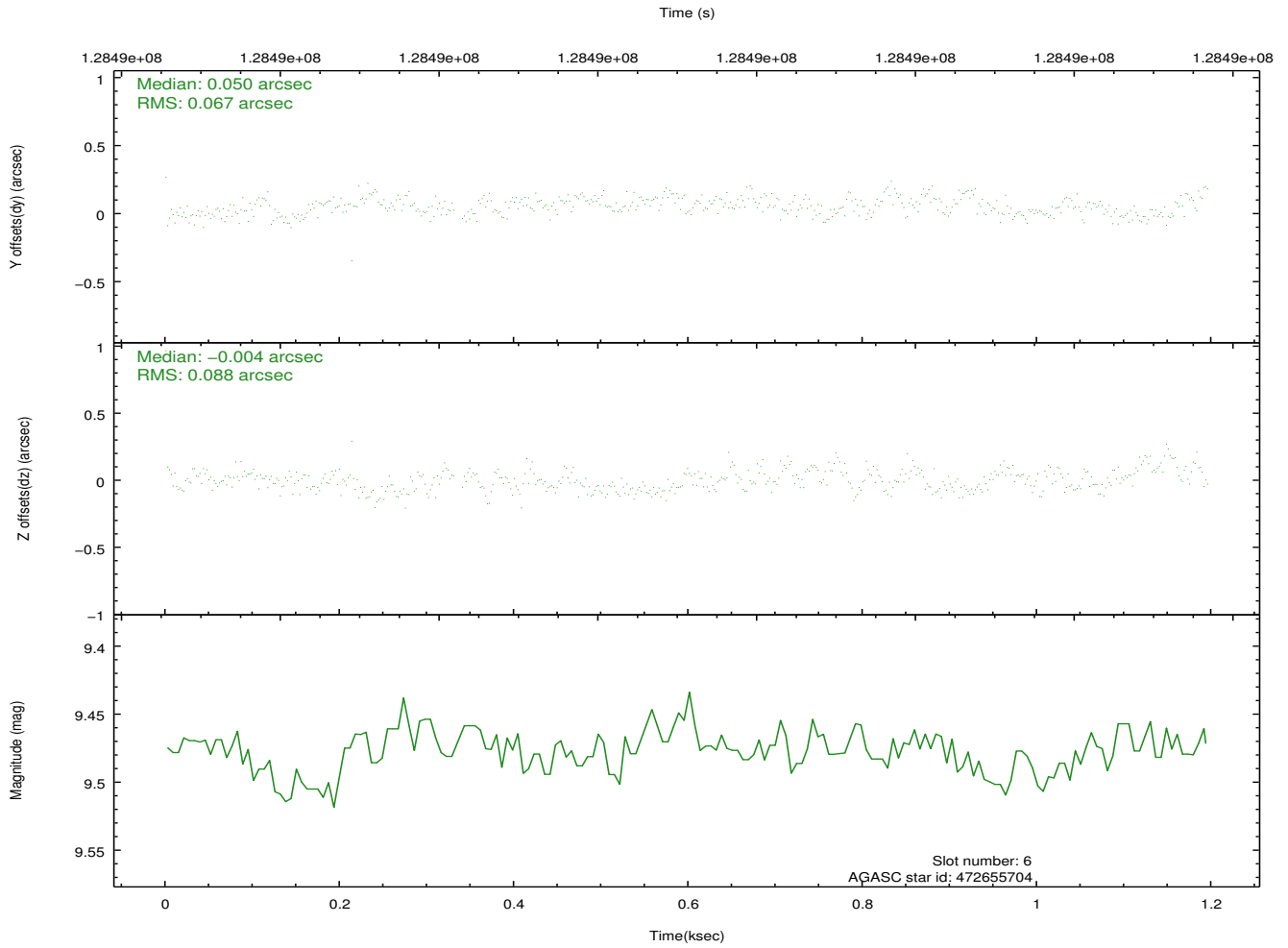
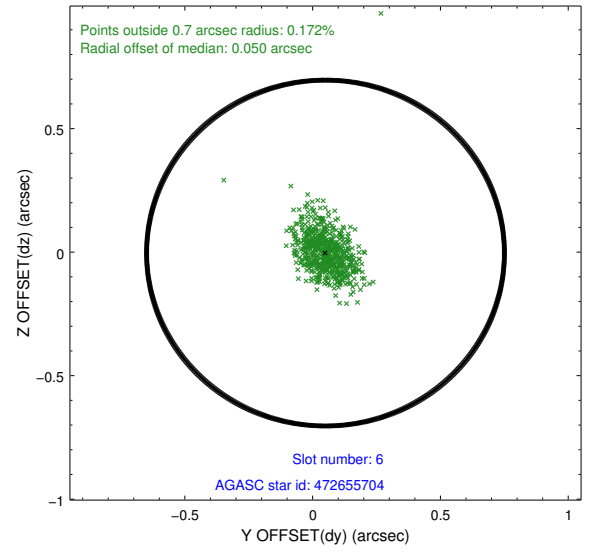
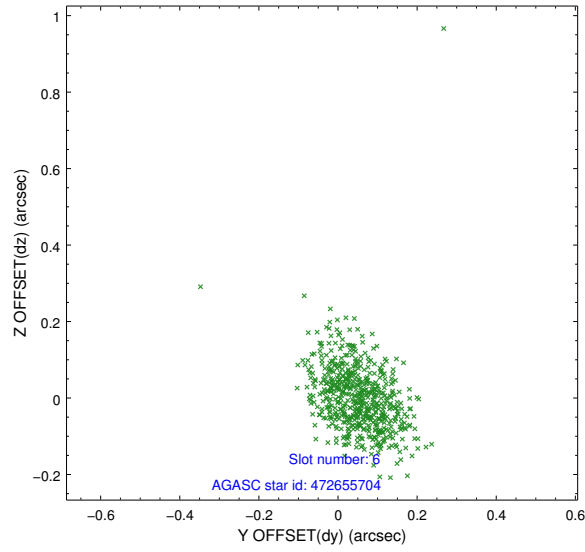
## 2.4.2 Slot 4



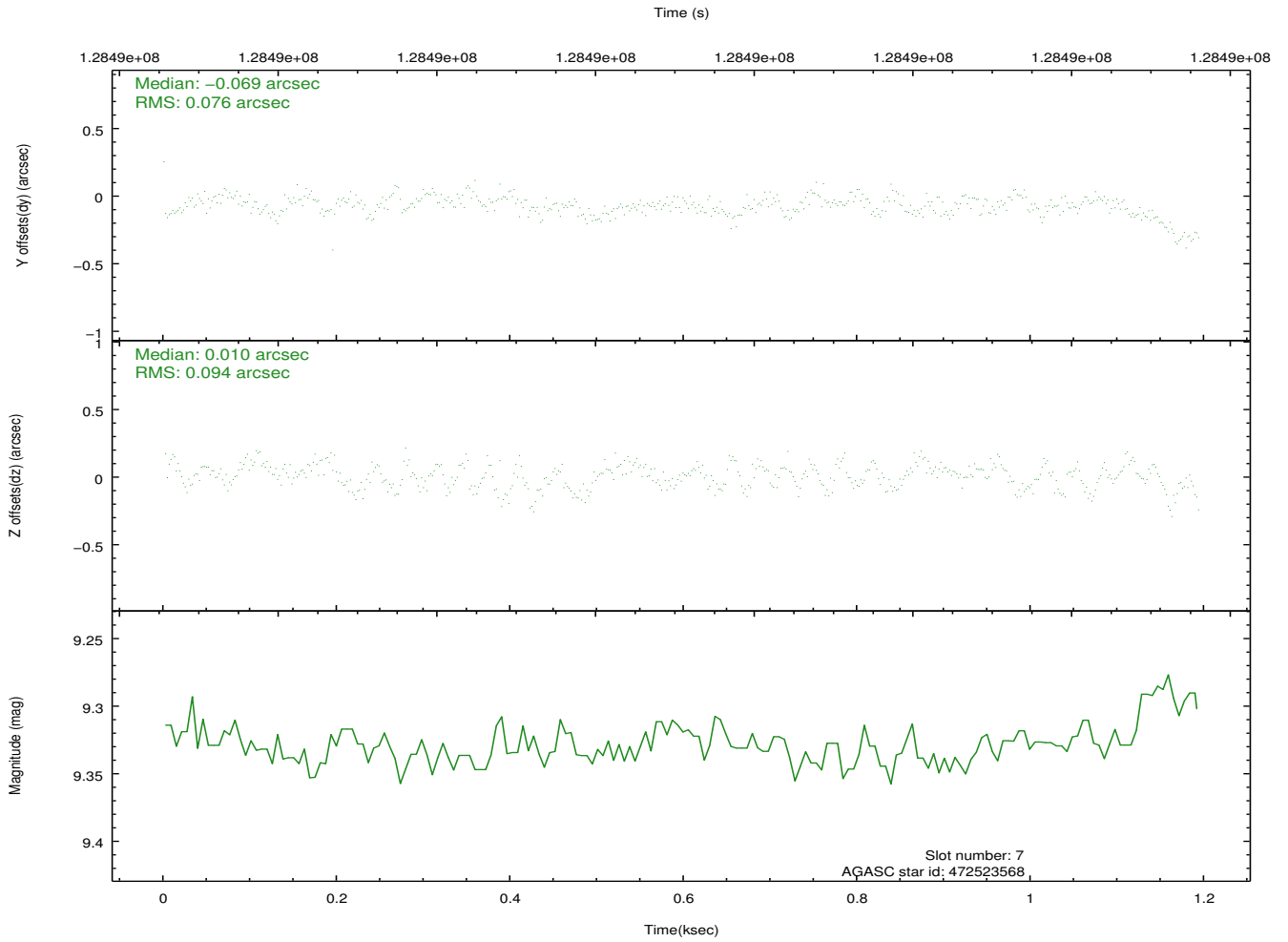
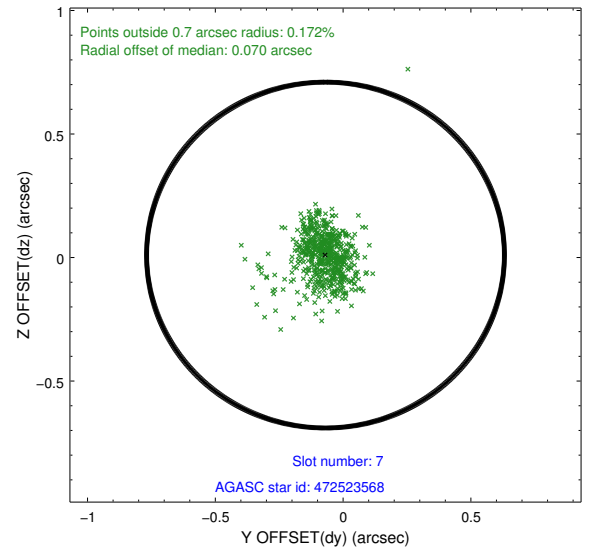
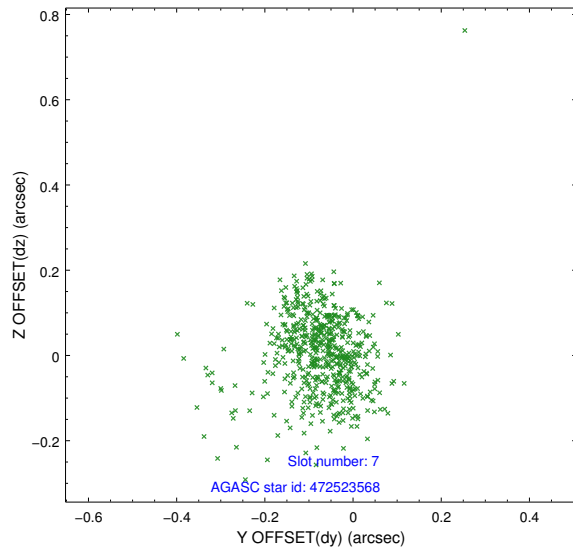
### 2.4.3 Slot 5



## 2.4.4 Slot 6

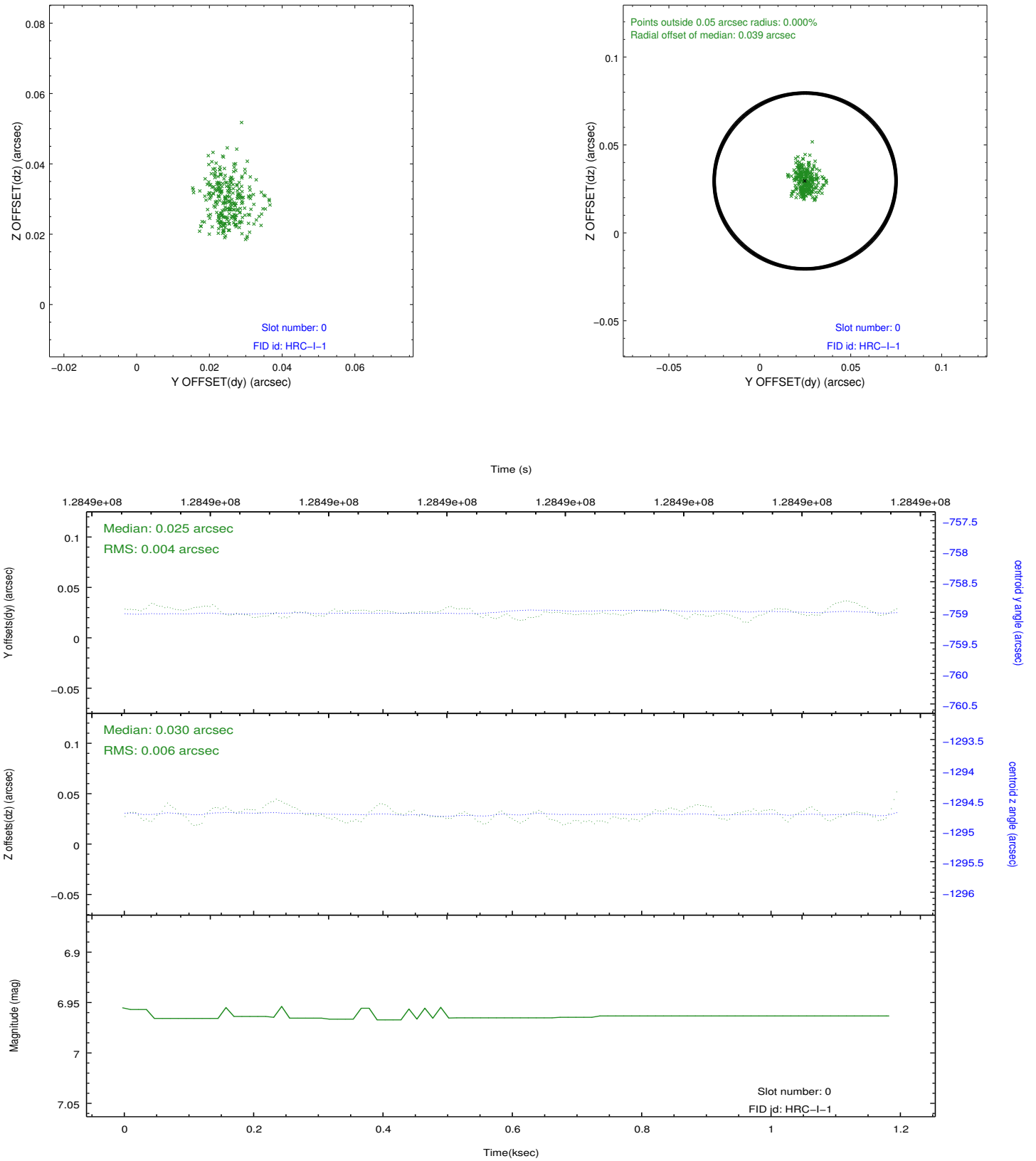


## 2.4.5 Slot 7

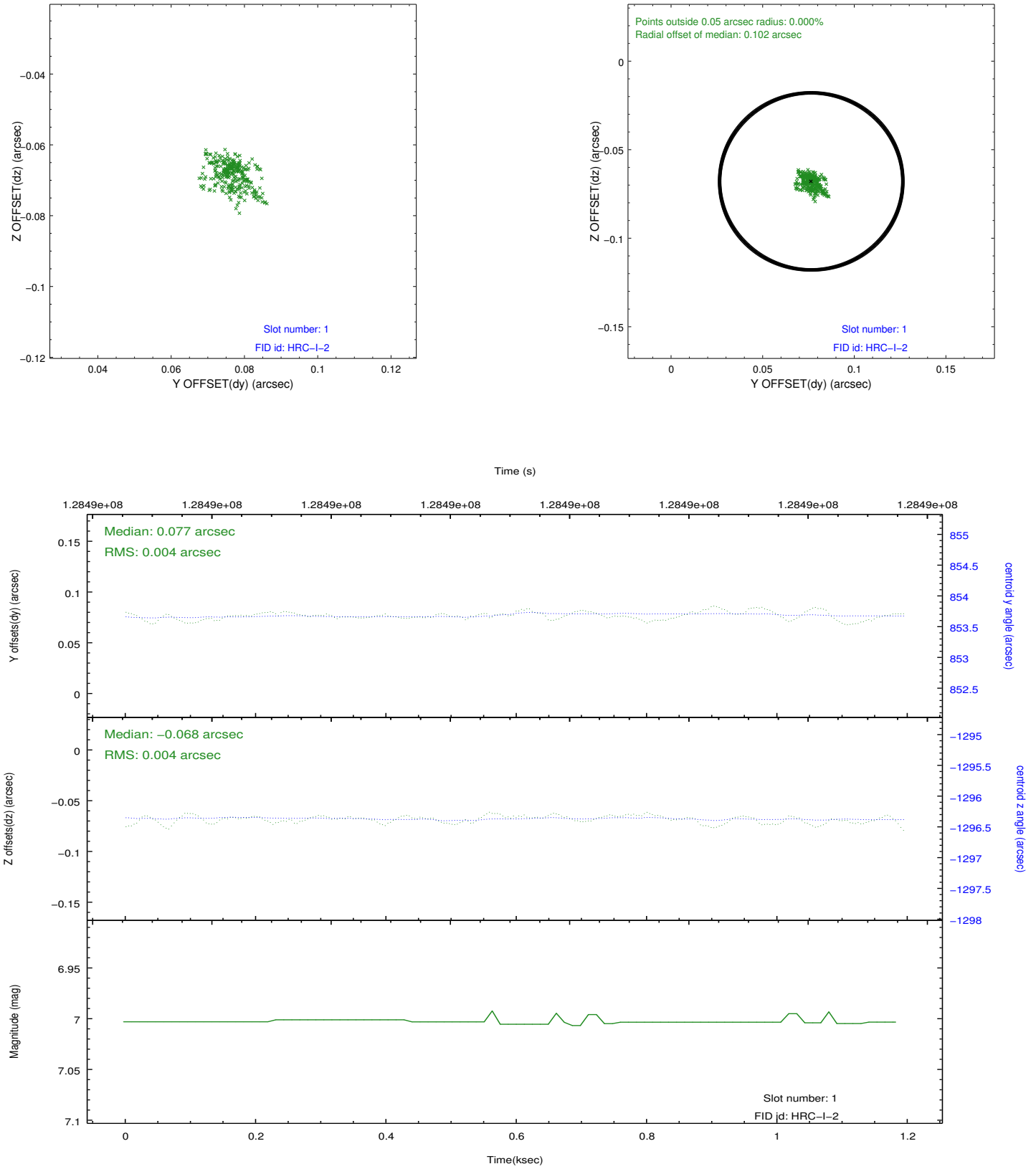


## 2.5 FID Slots

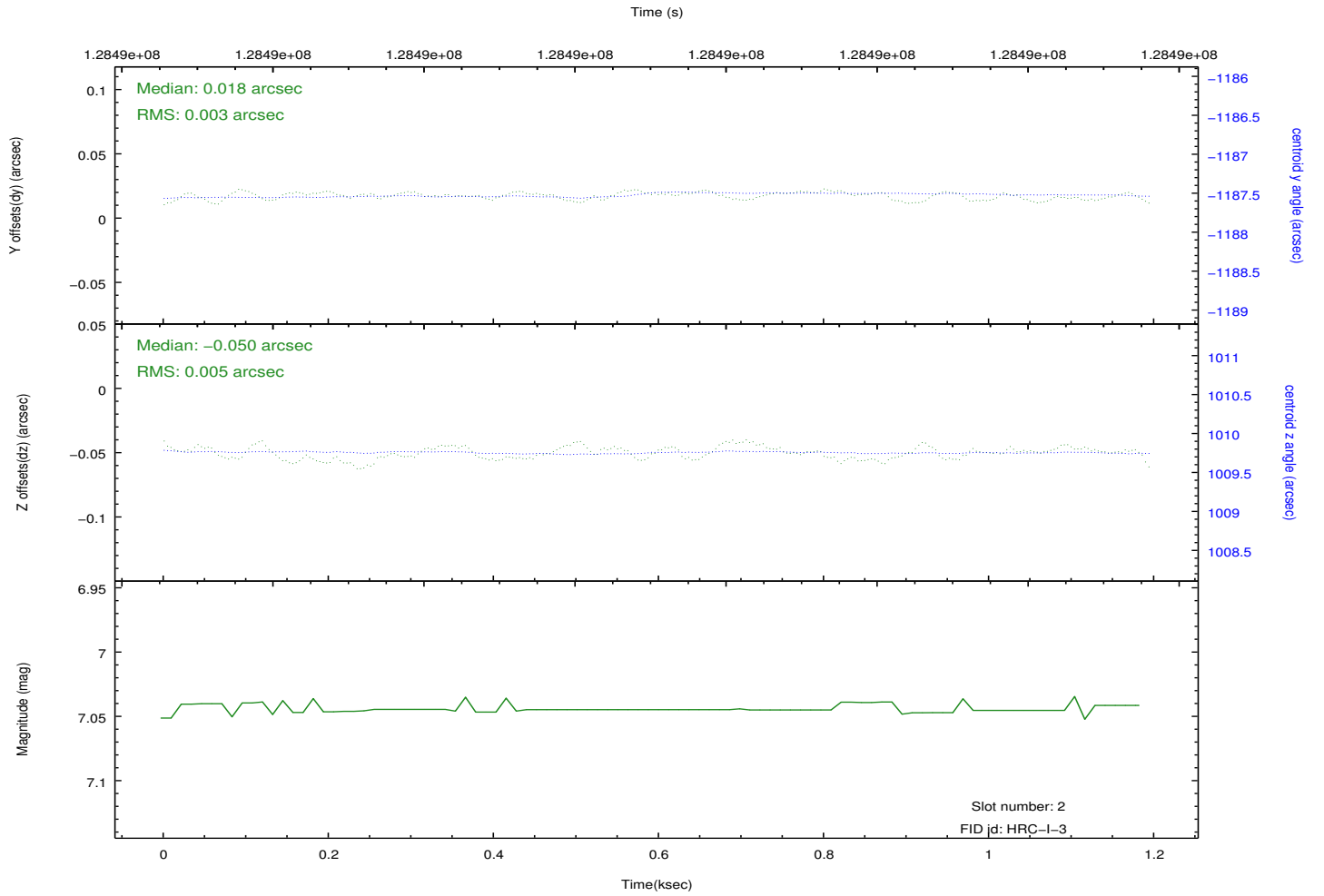
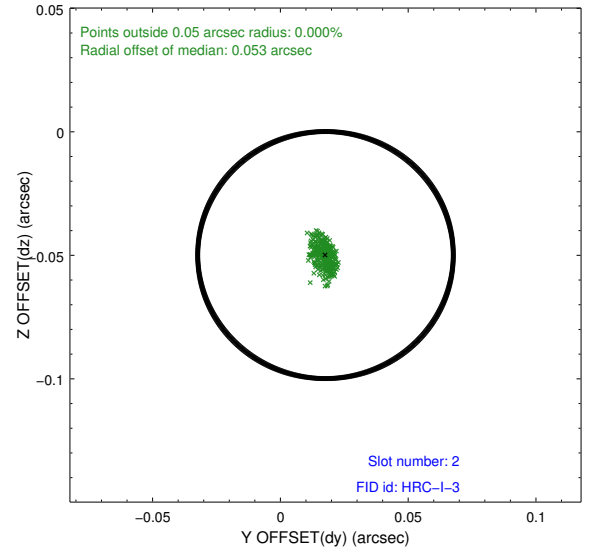
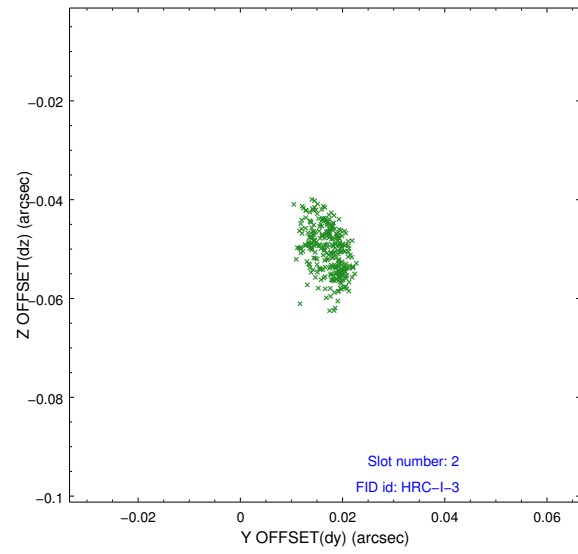
### 2.5.1 Slot 0



## 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)      | 2012.10.02    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 1.194         |

### A.2 Comments