

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 1415 - L2 Version 4

Chandra X-Ray Center

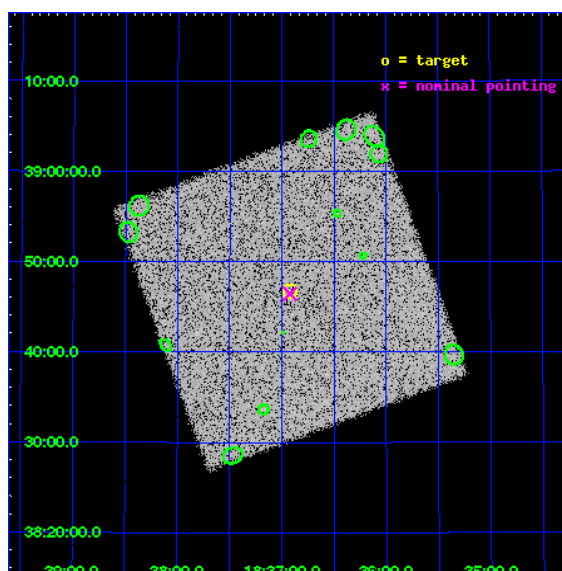
L2 Processing Date : Nov 20 2009

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# 1 Front

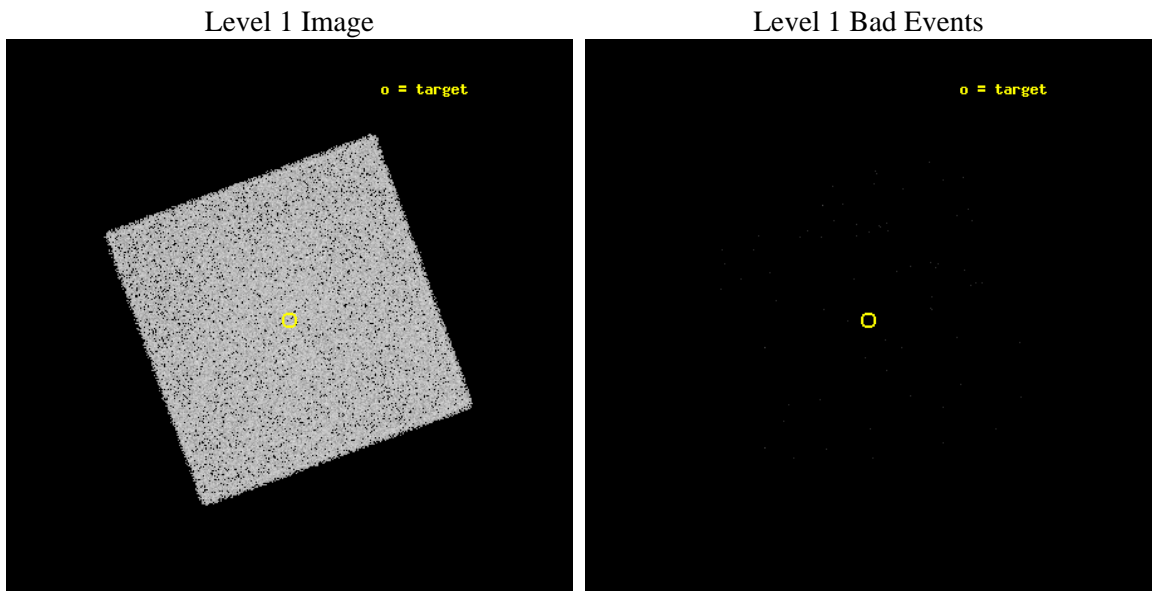
|          |                        |                                 |
|----------|------------------------|---------------------------------|
| seq_num  | 280365                 | Sequence number                 |
| obs_id   | 1415                   | Observation id                  |
| title    | TEST OF UV SENSITIVITY | Proposal title                  |
| observer | Dr. CXC Calibration    | Principal investigator          |
| object   | VEGA                   | Source name                     |
| ra_targ  | 279.230833             | Observer's specified target RA  |
| dec_targ | 38.7795                | Observer's specified target Dec |
| ra_nom   | 279.23069854913        | Nominal RA                      |
| dec_nom  | 38.774399551702        | Nominal Dec                     |
| roll_nom | 294.89304759567        | Nominal Roll                    |
| revision | 4                      | Processing version of data      |
| ontime   | 3244.3813670501        | [s]                             |
| livetime | 3224.0591378953        | Ontime multiplied by DTCOR      |
| l2events | 93965                  | 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 | 3000.000000     | Scheduled observation exposure time |
| ascdsver | 8.1.1               | Processing system revision     | ontime         | 3244.3813670501 | [s]                                 |
| caldbver | 4.1.4               | &#160                          | l1events       | 148550          | Number of level 1 events            |
| date     | 2009-11-20T18:34:36 | Date and time of file creation |                |                 |                                     |
| revision | 4                   | Processing version of data     |                |                 |                                     |

### 2.1.3 Events

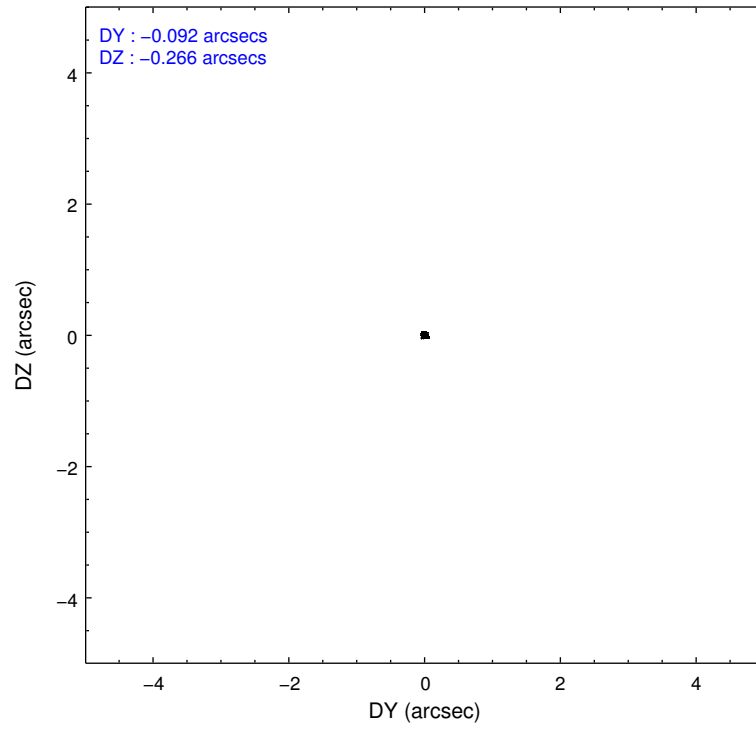
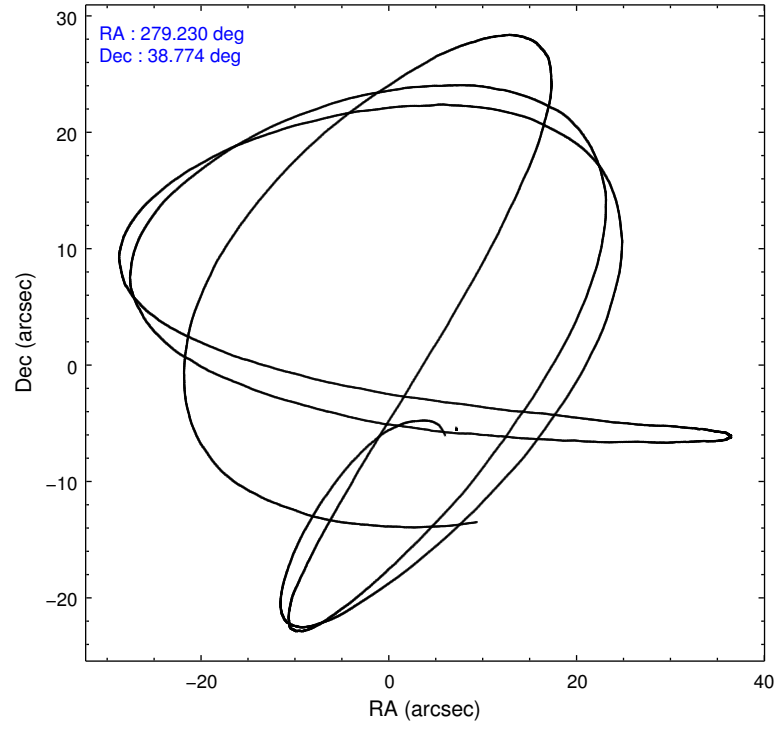
#### Level 1 Events

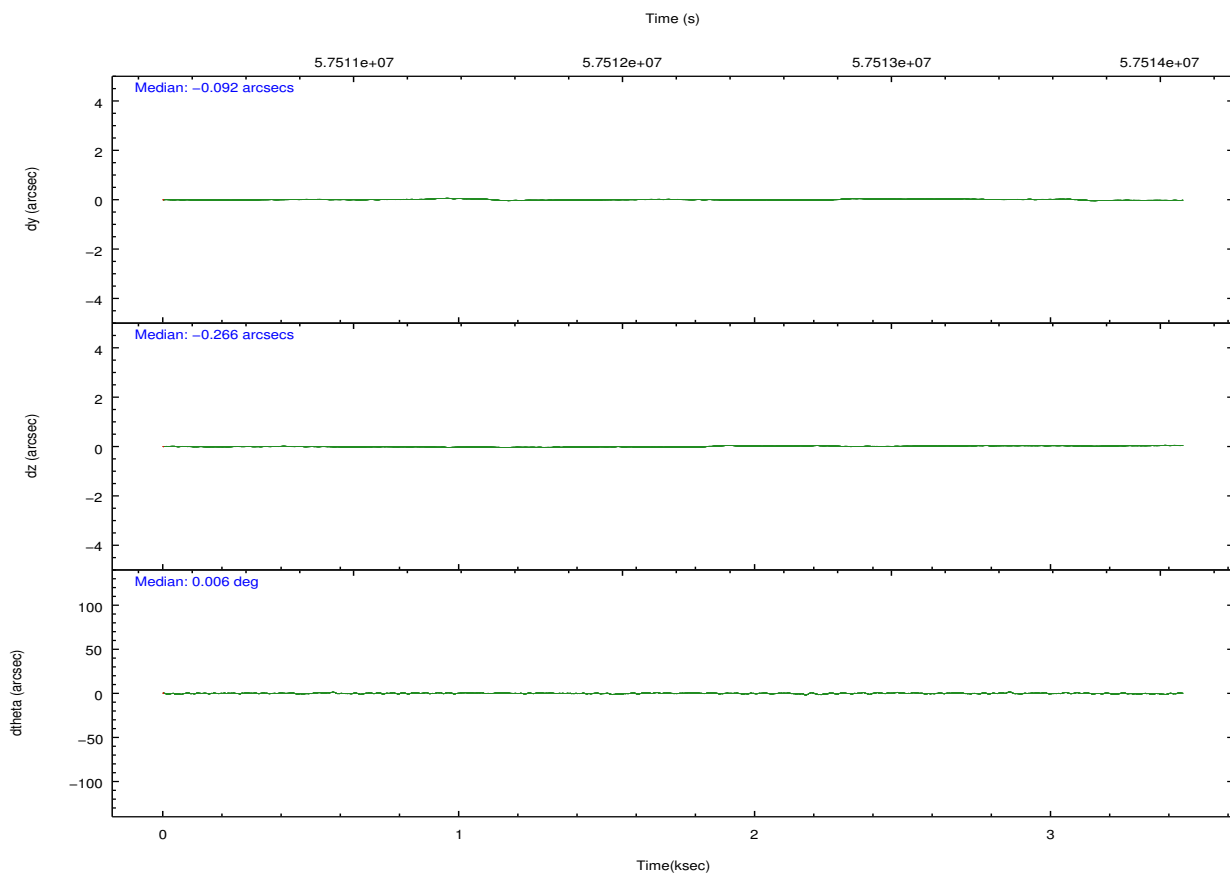
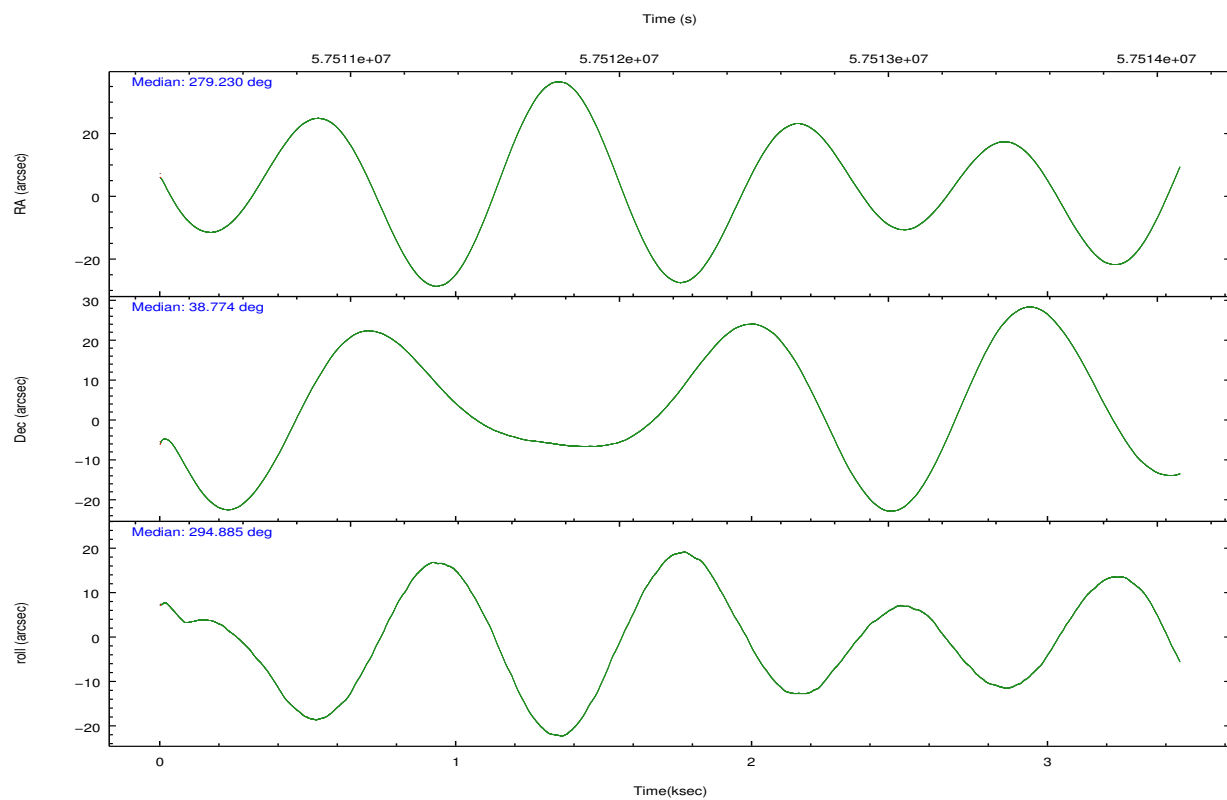
|                 |                      |
|-----------------|----------------------|
|                 | <b>segment<br/>0</b> |
| level 1 events  | 148550               |
| rejected events | 2393                 |
| rejected %      | 1%                   |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual                 | Parameter                    | Planned   | Actual  |
|-----------------------------------|---------------------|------------------------|------------------------------|-----------|---------|
| Instrument                        | HRC                 | HRC                    | Obspar format version number | 6         | 6       |
| 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               |                              |           |         |
| Pointing RA                       | 279.202129          | 279.2306985491312      |                              |           |         |
| Pointing Dec                      | 38.790403           | 38.77439955170183      |                              |           |         |
| Pointing Roll                     | 295.006396          | 294.893047595669       |                              |           |         |
| SIM focus pos (mm)                | -1.040293           | -1.038866356238299     |                              |           |         |
| SIM defocus (mm)                  | 0                   | 0.001426264420575141   |                              |           |         |
| SIM translation stage pos (mm)    | 126.985494          | 126.9854943052878      |                              |           |         |
| SIM translation stage offset (mm) | 0                   | -5.413686238853188e-06 |                              |           |         |
| Observation start time            | 57510913.184000     | 57509598.434235        |                              |           |         |
| Observation start date            | 1999-10-28T15:14:09 | 1999-10-28T14:53:18    |                              |           |         |
| Observation end time              | 57513913.184000     | 57514061.284396        |                              |           |         |
| Observation end date              | 1999-10-28T16:04:09 | 1999-10-28T16:07:41    |                              |           |         |

## 2.3 Aspect



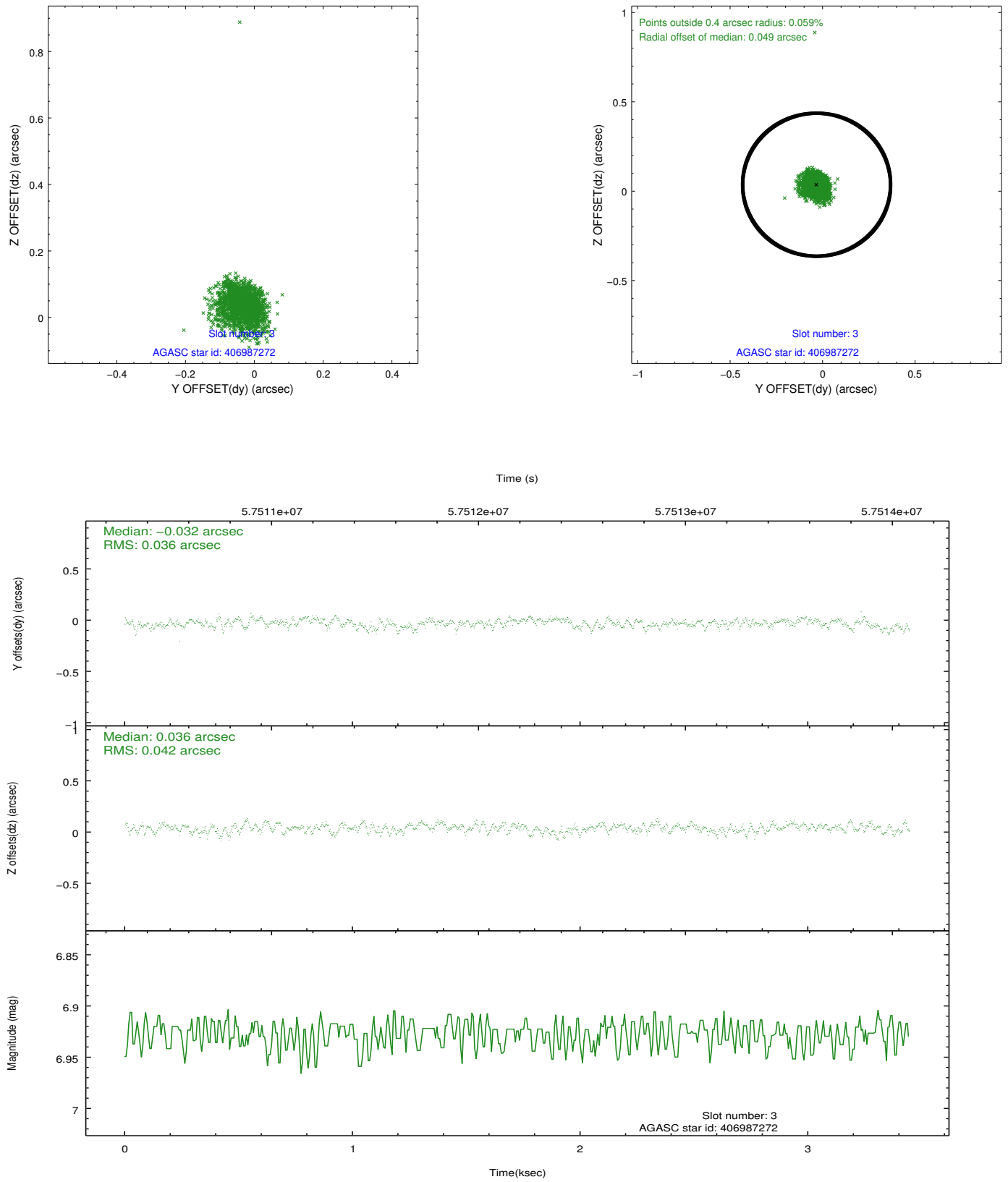


Slot Statistics

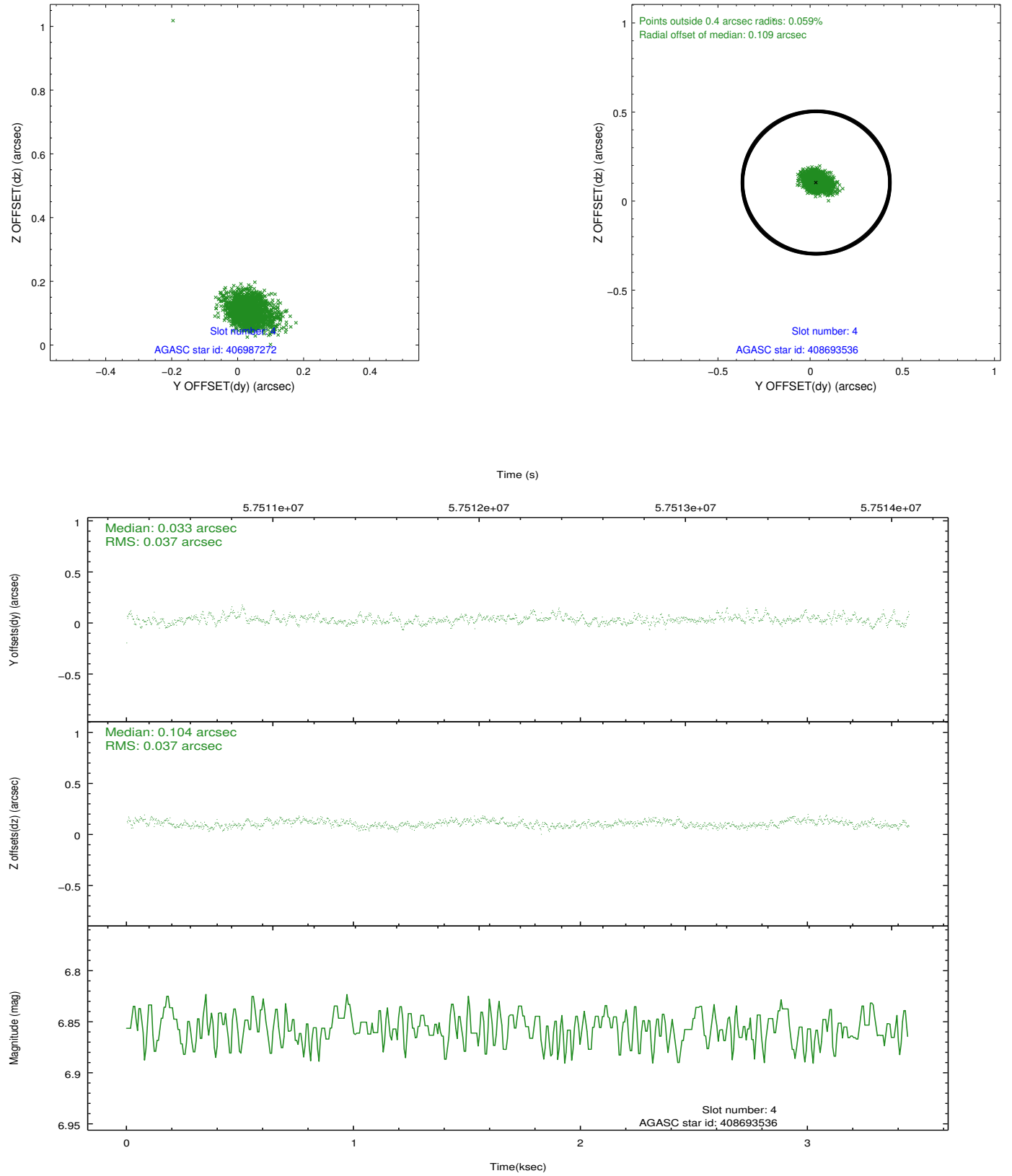
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-I-2   | 6.99 | 1682  | 0.040  | -0.051 | 0.006 | 0.010 | 0.000000   | 0.000000  | 857.42   | -1289.01 |
| 1    | FID    | HRC-I-3   | 7.04 | 1682  | 0.047  | -0.025 | 0.005 | 0.009 | 0.000000   | 0.000000  | -1183.27 | 1016.30  |
| 2    | FID    | HRC-I-4   | 6.97 | 1682  | 0.032  | -0.010 | 0.006 | 0.009 | 0.000000   | 0.000000  | 1286.78  | 1015.39  |
| 3    | GUIDE  | 406987272 | 6.93 | 1682  | -0.032 | 0.036  | 0.054 | 0.091 | 278.536588 | 38.437504 | 352.06   | -2233.01 |
| 4    | GUIDE  | 408693536 | 6.86 | 1682  | 0.033  | 0.104  | 0.050 | 0.088 | 280.050821 | 38.367191 | 2383.31  | 1532.61  |
| 5    | GUIDE  | 406985256 | 8.62 | 1682  | -0.083 | -0.123 | 0.063 | 0.102 | 278.693335 | 38.842203 | -774.26  | -1209.86 |
| 6    | GUIDE  | 406980288 | 9.31 | 1682  | 0.041  | 0.021  | 0.074 | 0.119 | 278.903147 | 39.061646 | -1239.90 | -343.11  |
| 7    | GUIDE  | 408696904 | 9.97 | 1679  | 0.040  | -0.038 | 0.122 | 0.192 | 280.049074 | 38.878750 | 704.05   | 2291.85  |

## 2.4 Star Slots

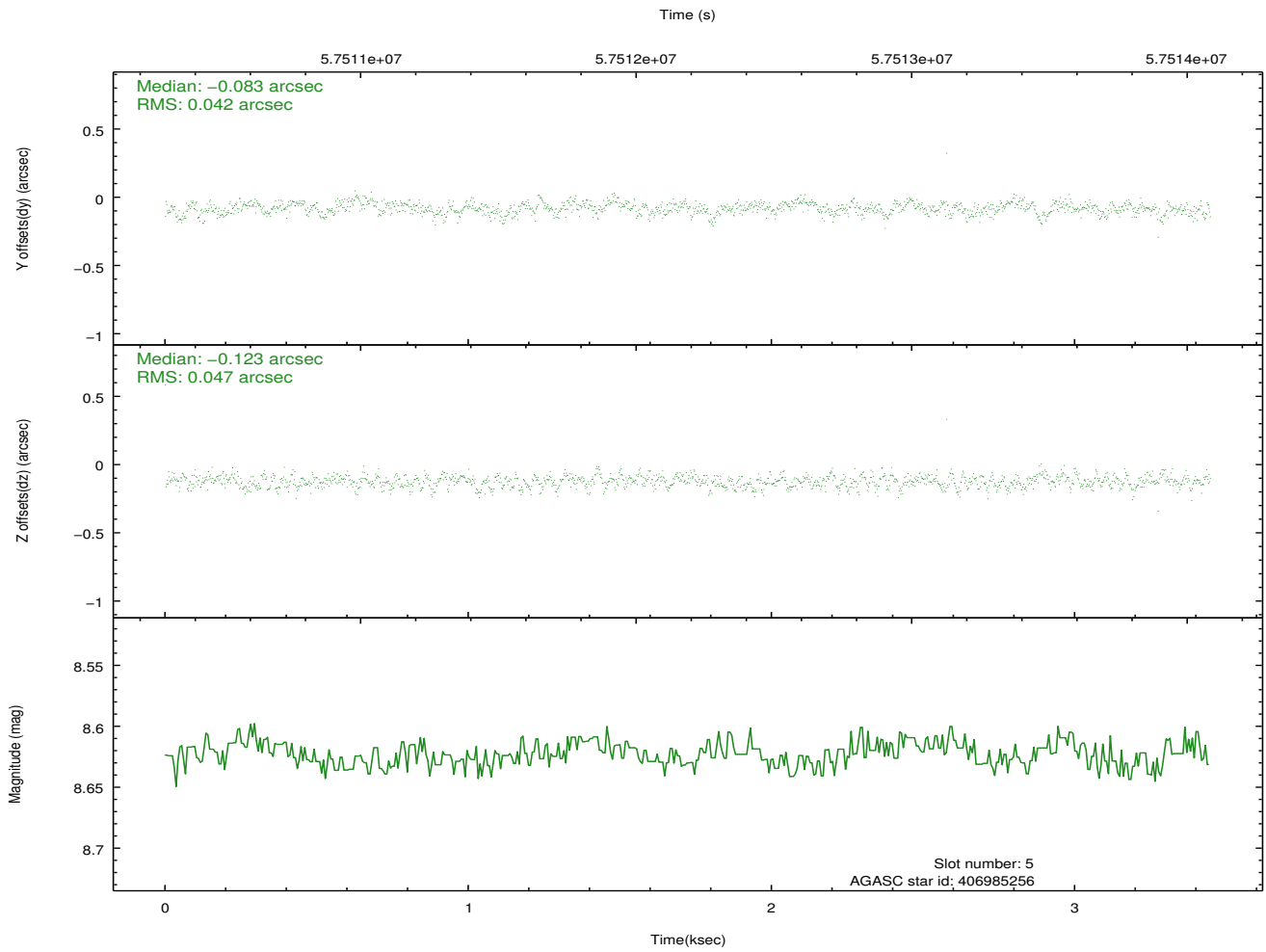
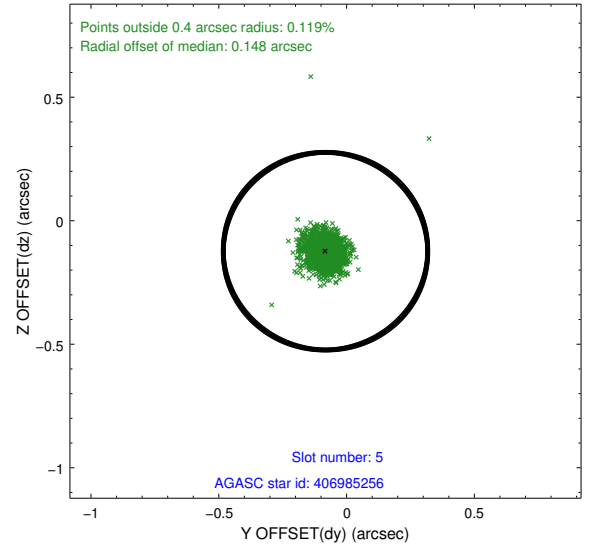
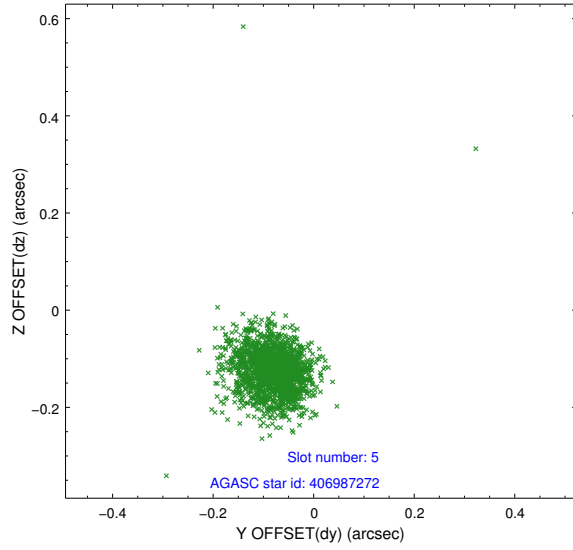
### 2.4.1 Slot 3



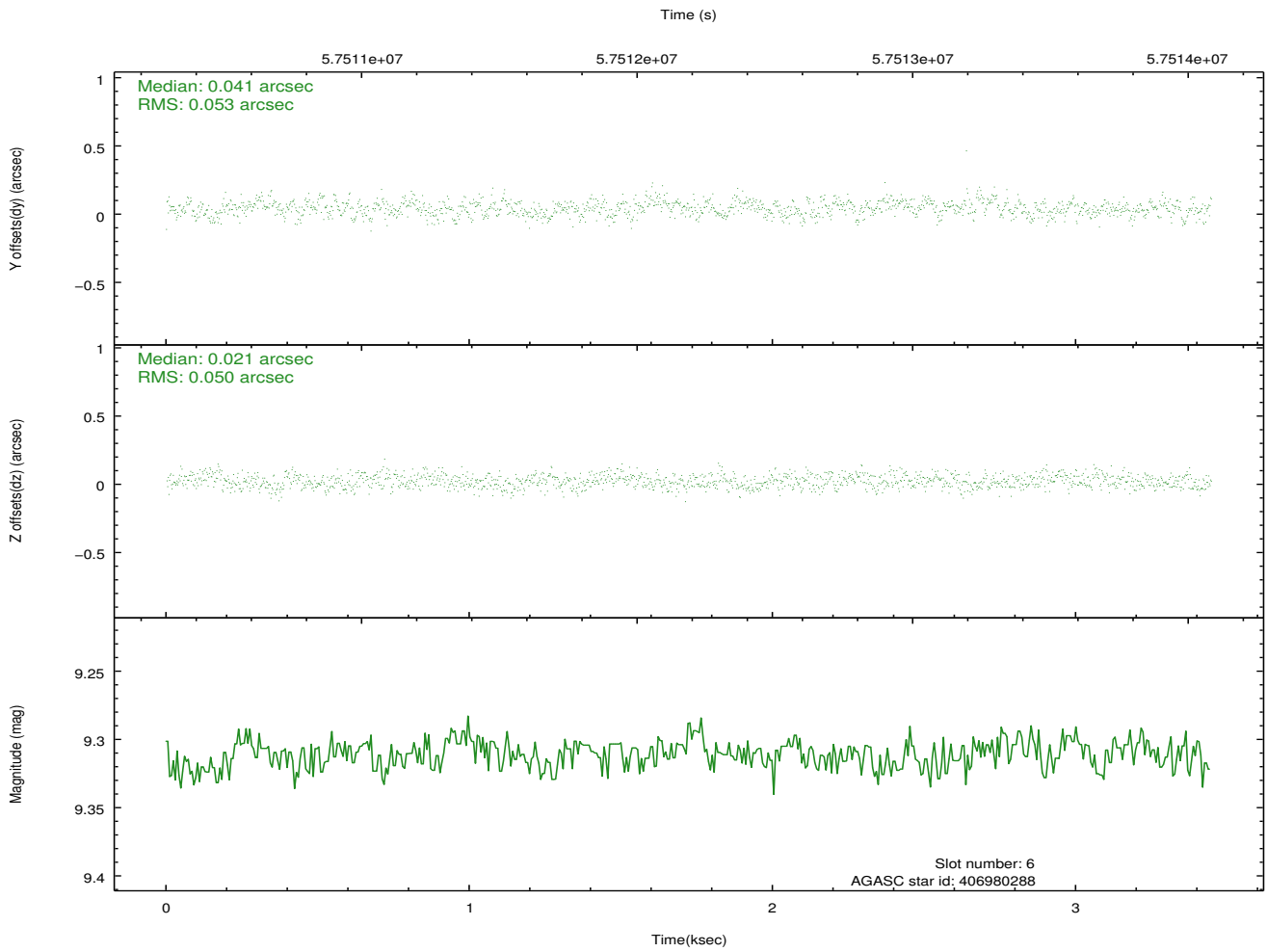
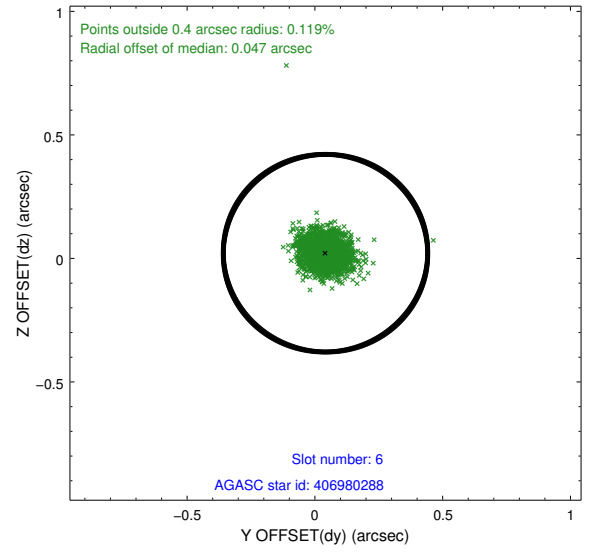
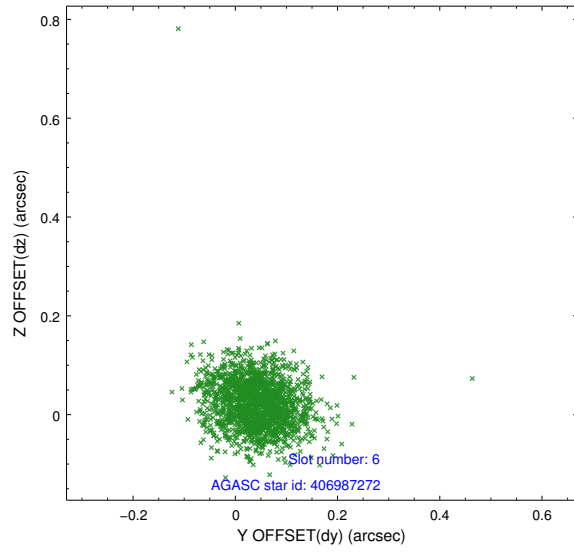
## 2.4.2 Slot 4



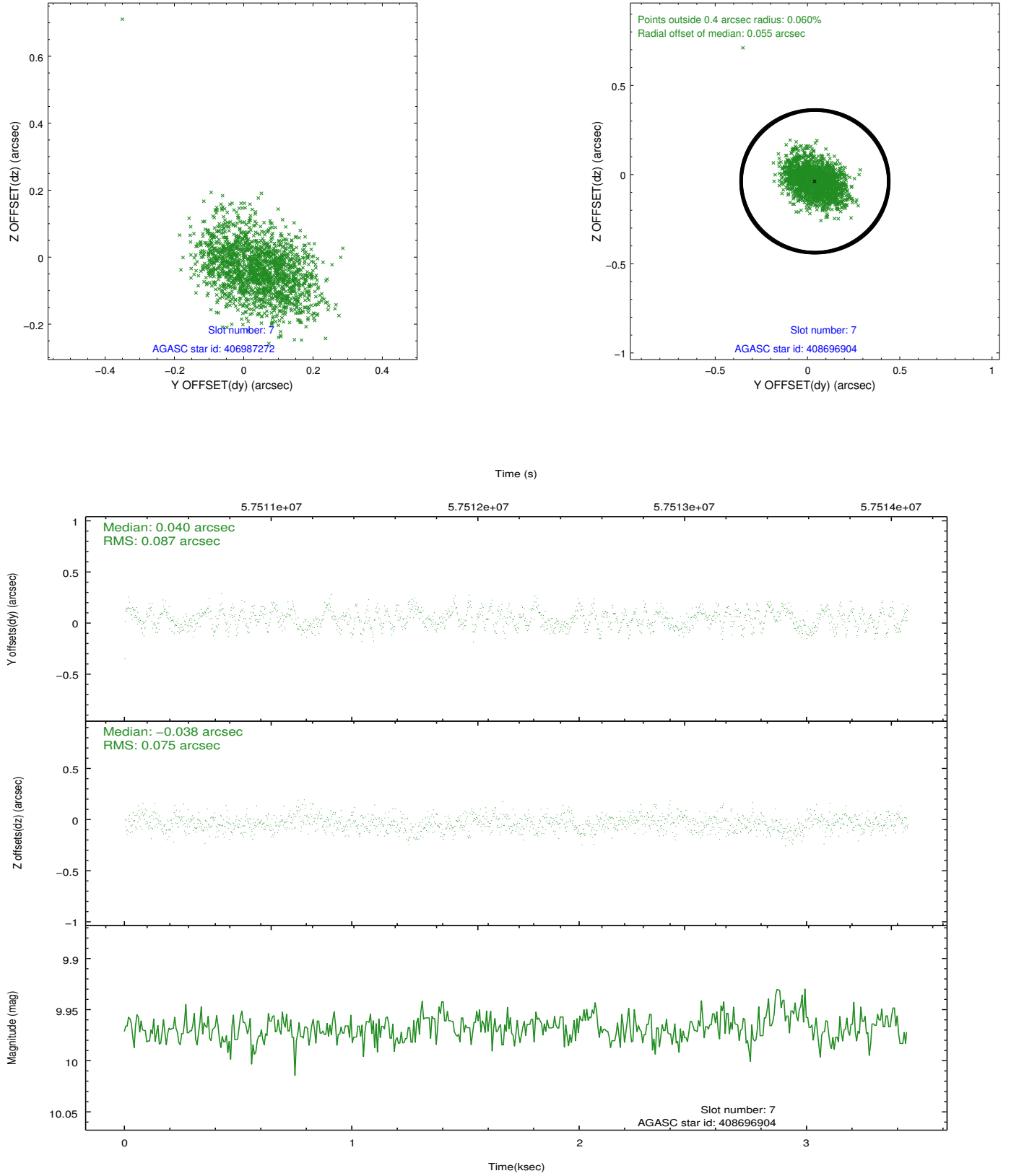
### 2.4.3 Slot 5



## 2.4.4 Slot 6

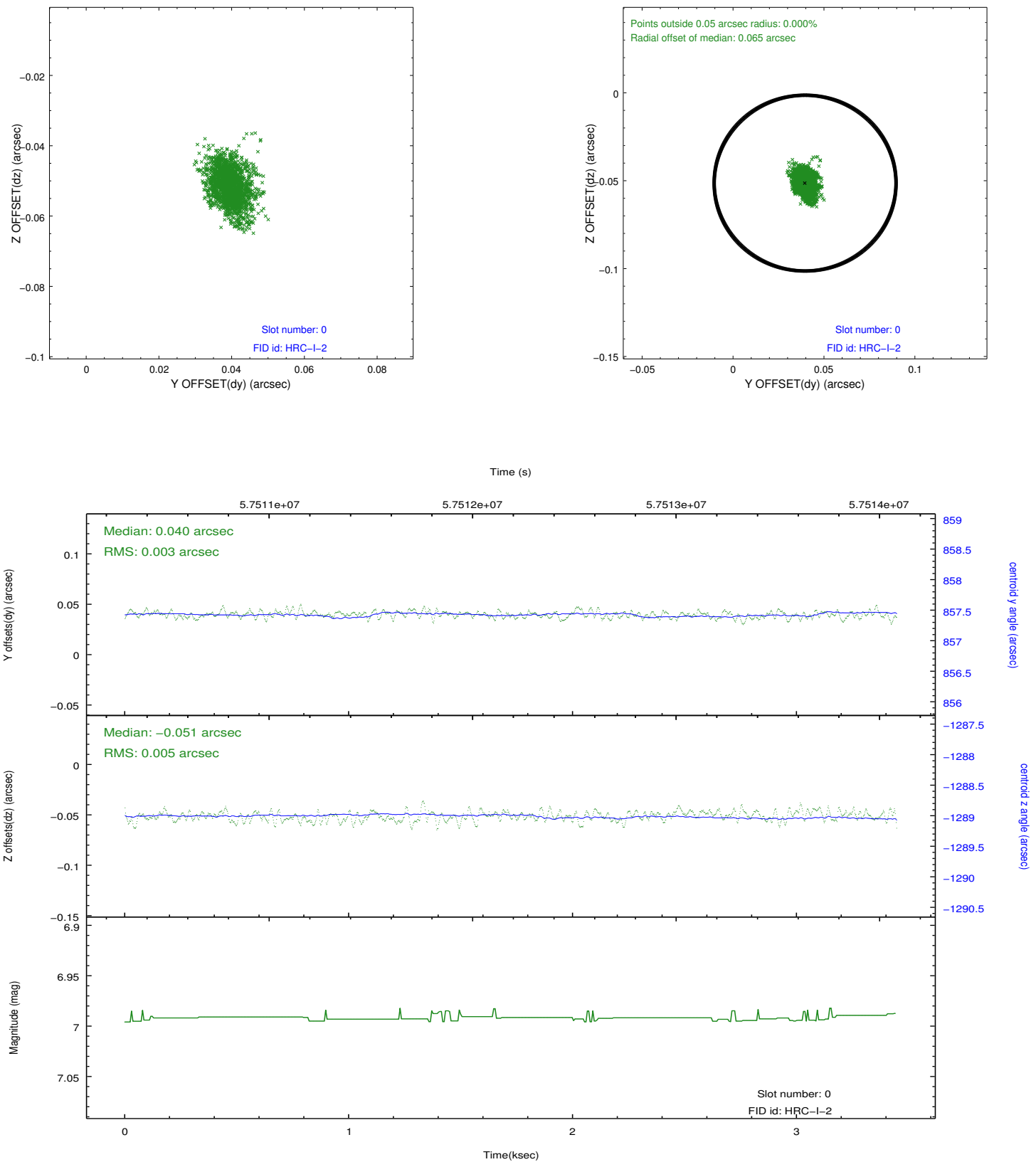


## 2.4.5 Slot 7

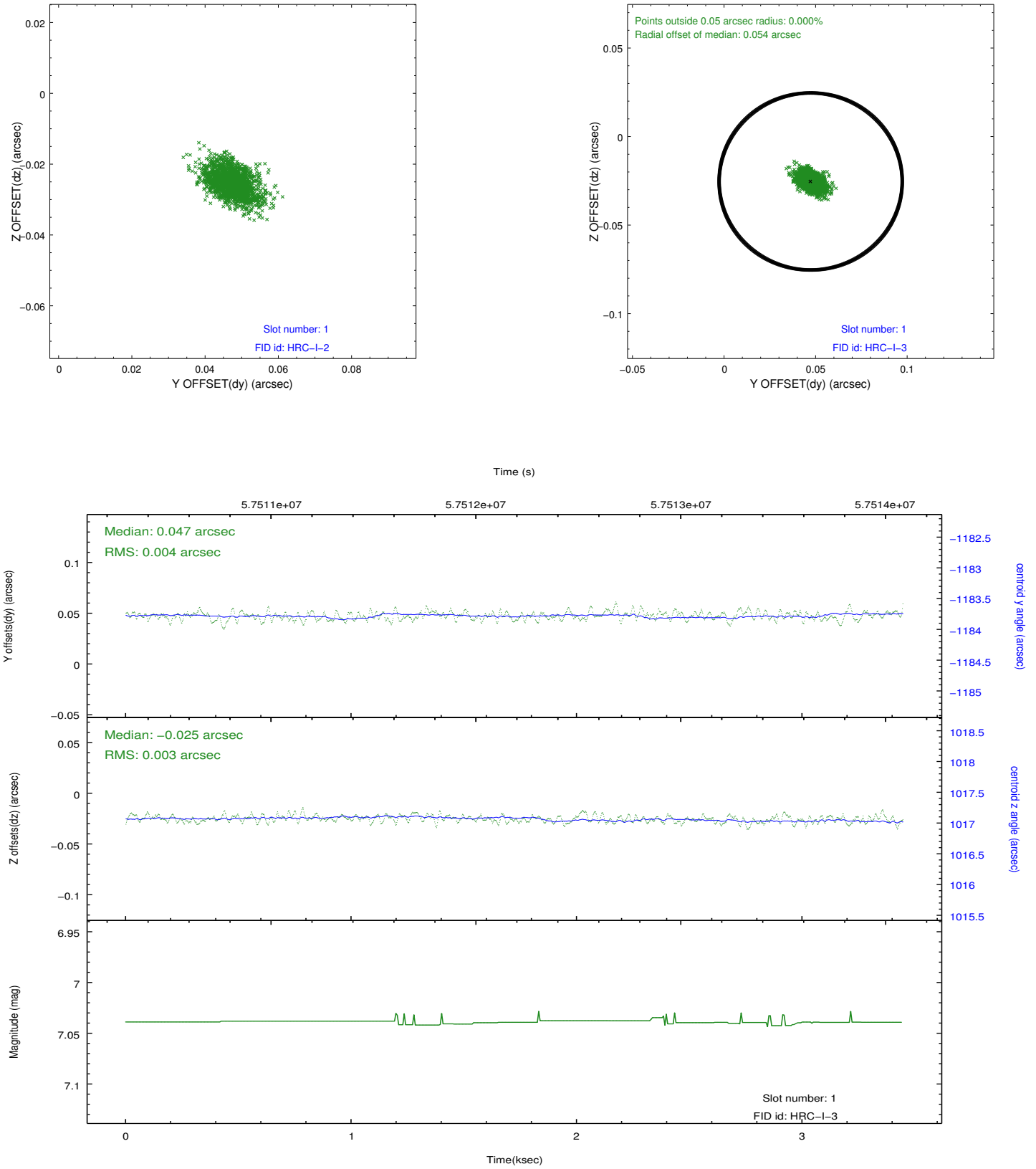


## 2.5 FID Slots

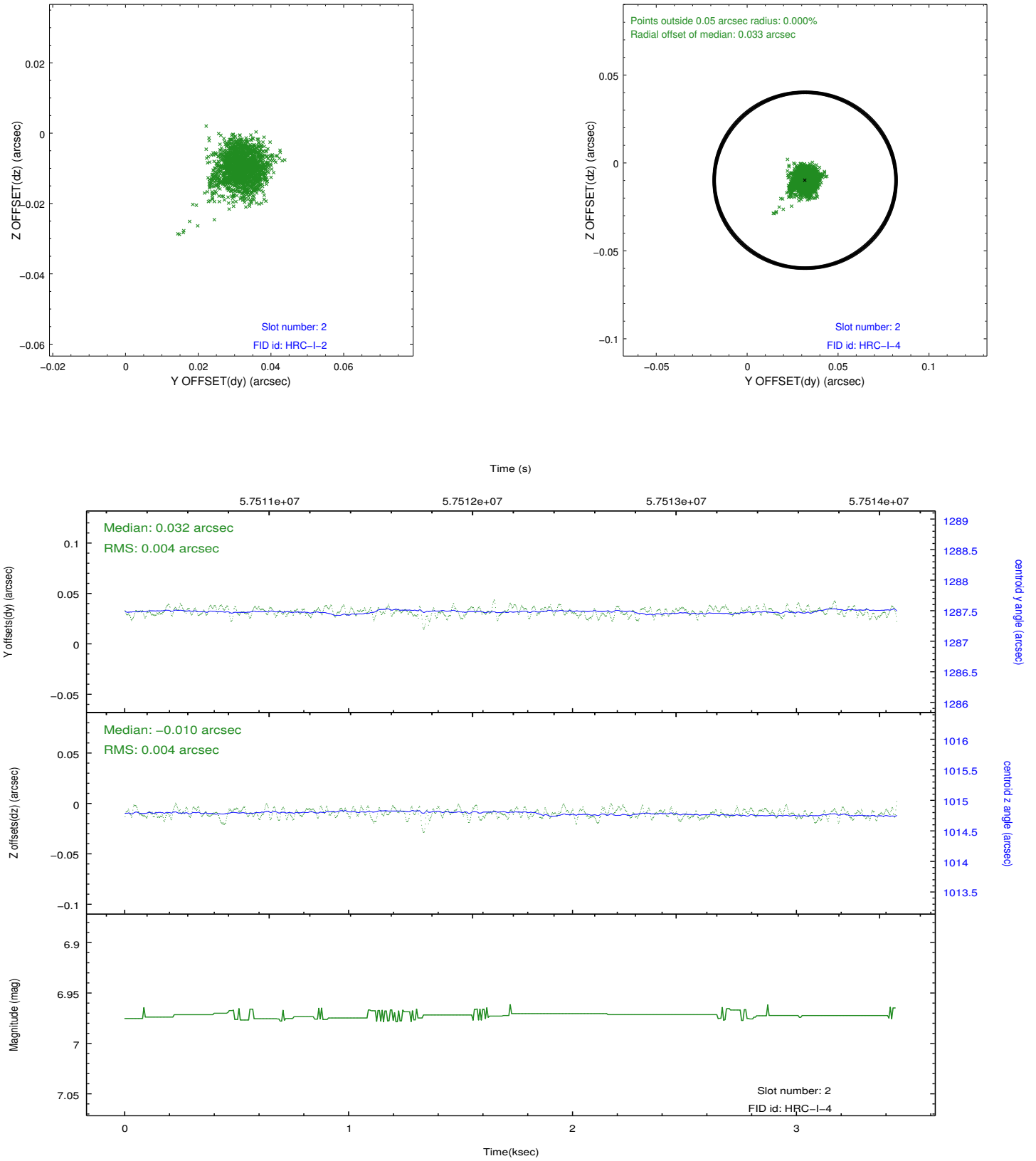
### 2.5.1 Slot 0



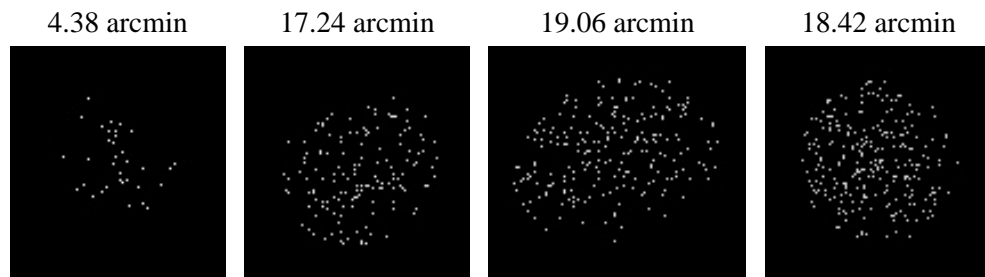
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



## A Summary

### A.1 Status

|                            |             |
|----------------------------|-------------|
| V&V Scientist              | Joy Nichols |
| V&V Date (YYYY-MM-DD)      | 2009.11.25  |
| V&V Edition                | 1           |
| V&V Disposition and Status | OK          |
| V&V Charge Time            | 3.242       |

### A.2 Comments

Test of UV sensitivity.