

# V&V Reference Report

## L2 ASCDS Version : 10.4

Observation 14920 - L2 Version 3  
Chandra X-Ray Center

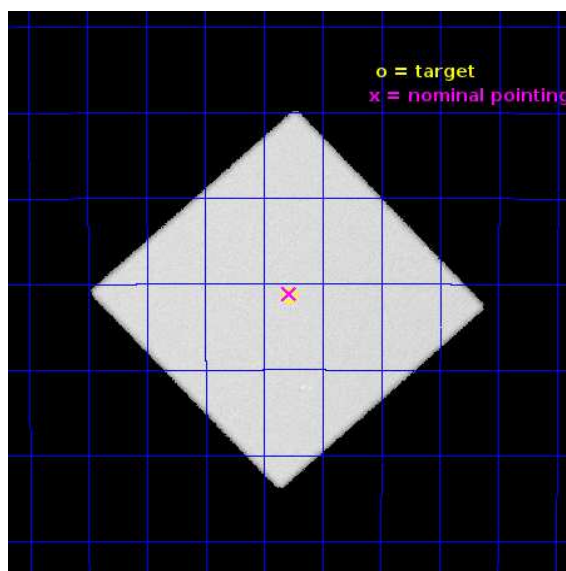
L2 Processing Date : Jun 10 2015

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# 1 Front

|          |   |                                       |
|----------|---|---------------------------------------|
| seq_num  | 601050  | Sequence number                       |
| obs_id   | 14920   | Observation id                        |
| title    | Seeing through Baade's Window: Discovering X-Ray Sources that have Long-Term Optical Light Curves | Proposal title                        |
| observer | Dr. Rosanne Di Stefano  | Principal investigator                |
| object   | Baade's Window HRC-5  | Source name                           |
| ra_targ  | 270.569167  | Observer's specified target RA [deg]  |
| dec_targ | -28.689778  | Observer's specified target Dec [deg] |
| ra_nom   | 270.57074177672   | Nominal RA [deg]                      |
| dec_nom  | -28.685729696954  | Nominal Dec [deg]                     |
| roll_nom | 92.289941217436   | Nominal Roll [deg]                    |
| revision | 3   | Processing version of data            |
| ontime   | 29861.07036531  | [s]                                   |
| livetime | 29598.228685878   | Ontime multiplied by DTCOR            |
| l2events | 1989627   | Number of level 2 events              |

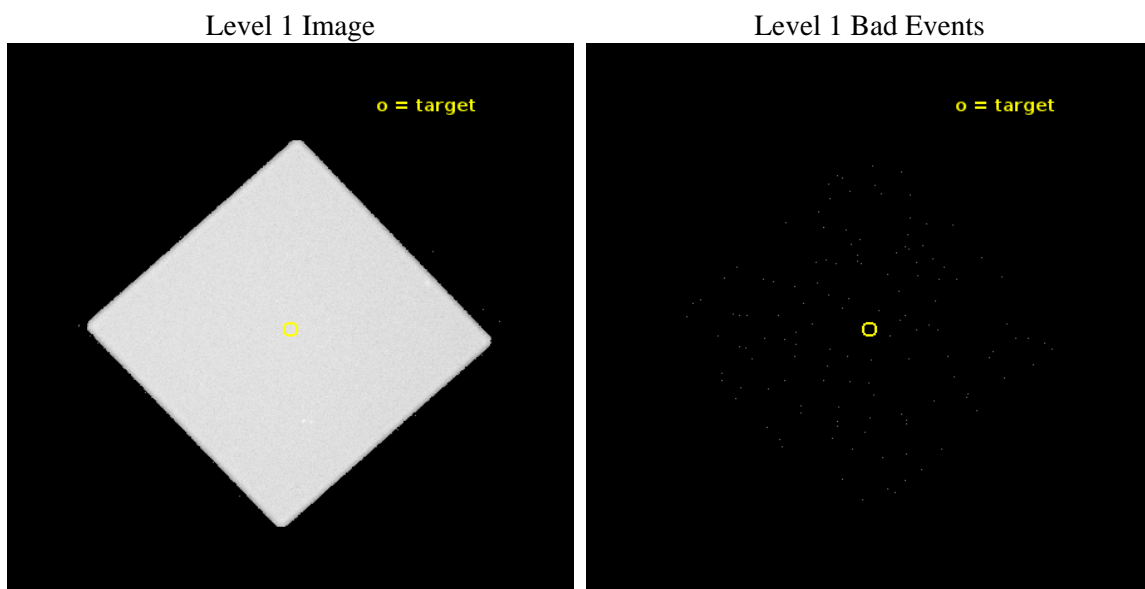




## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

|          |                     |                                |                |                |   |
|----------|---------------------|--------------------------------|----------------|----------------|---|
| obi_num  | 0                   | Obi number                     | sched_exp_time | 30000.000000   | [s] Scheduled observation exposure time |
| ascdsver | 10.4                | Processing system revision     | ontime         | 29861.07036531 | [s]                                     |
| caldsver | 4.6.7               | &#160                          | l1events       | 2782087        | Number of level 1 events                |
| date     | 2015-06-10T14:49:27 | Date and time of file creation |                |                |   |
| revision | 3                   | Processing version of data     |                |                |   |

### 2.1.3 Events

#### Level 1 Events

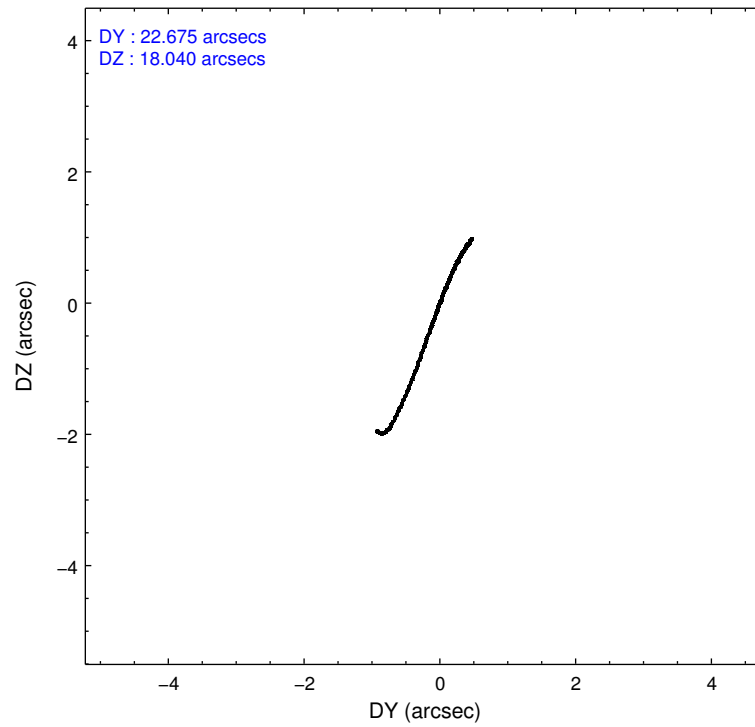
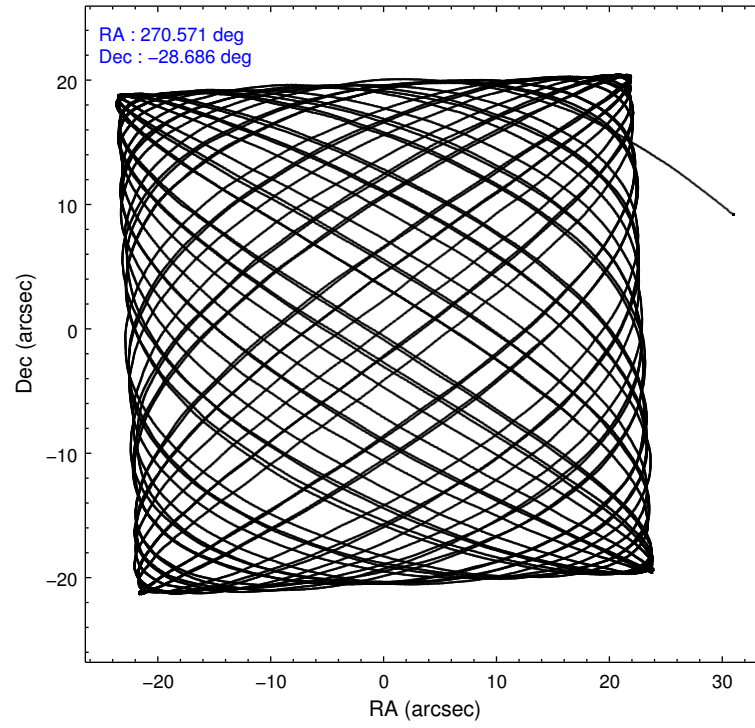
|                 |                      |
|-----------------|----------------------|
|                 | <b>segment<br/>0</b> |
| level 1 events  | 2782087              |
| rejected events | 80594                |
| rejected %      | 2%                   |

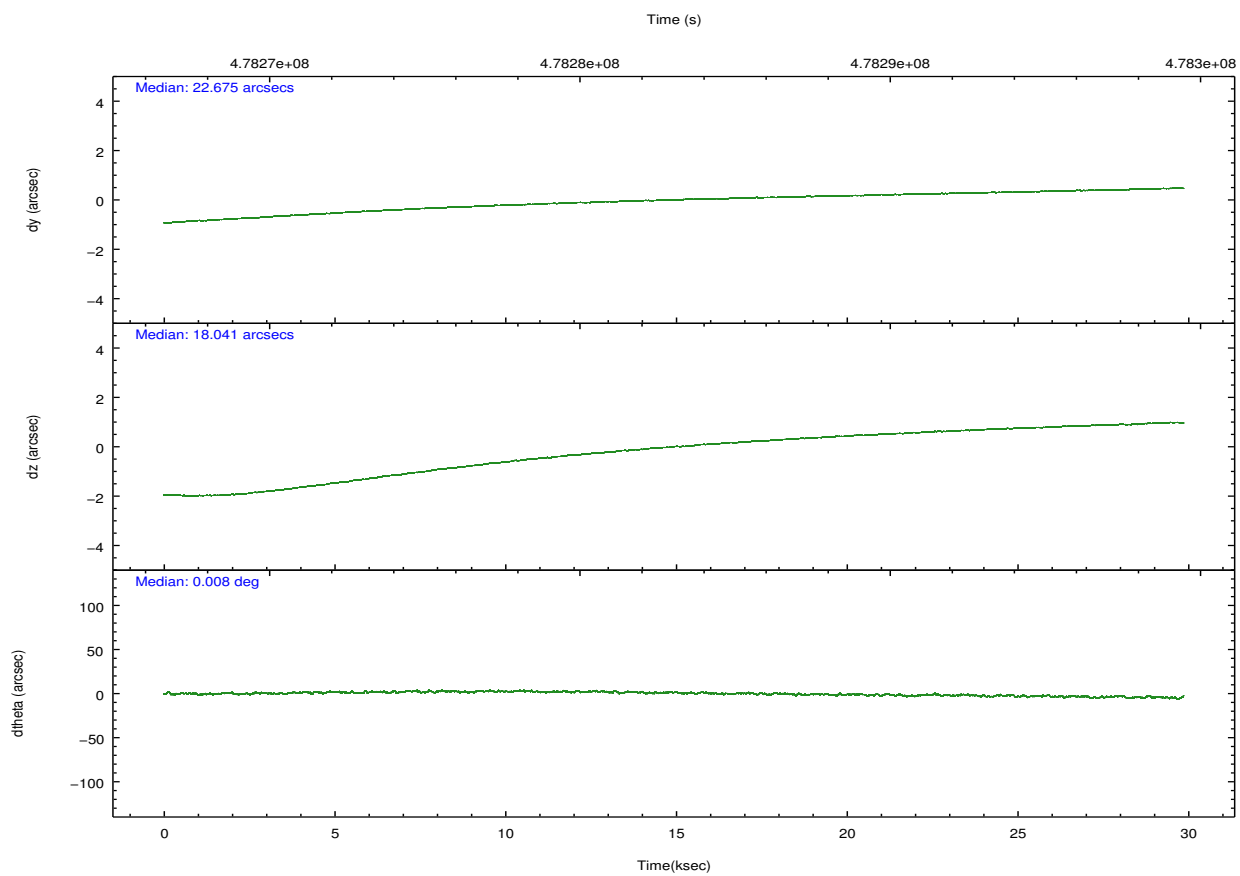
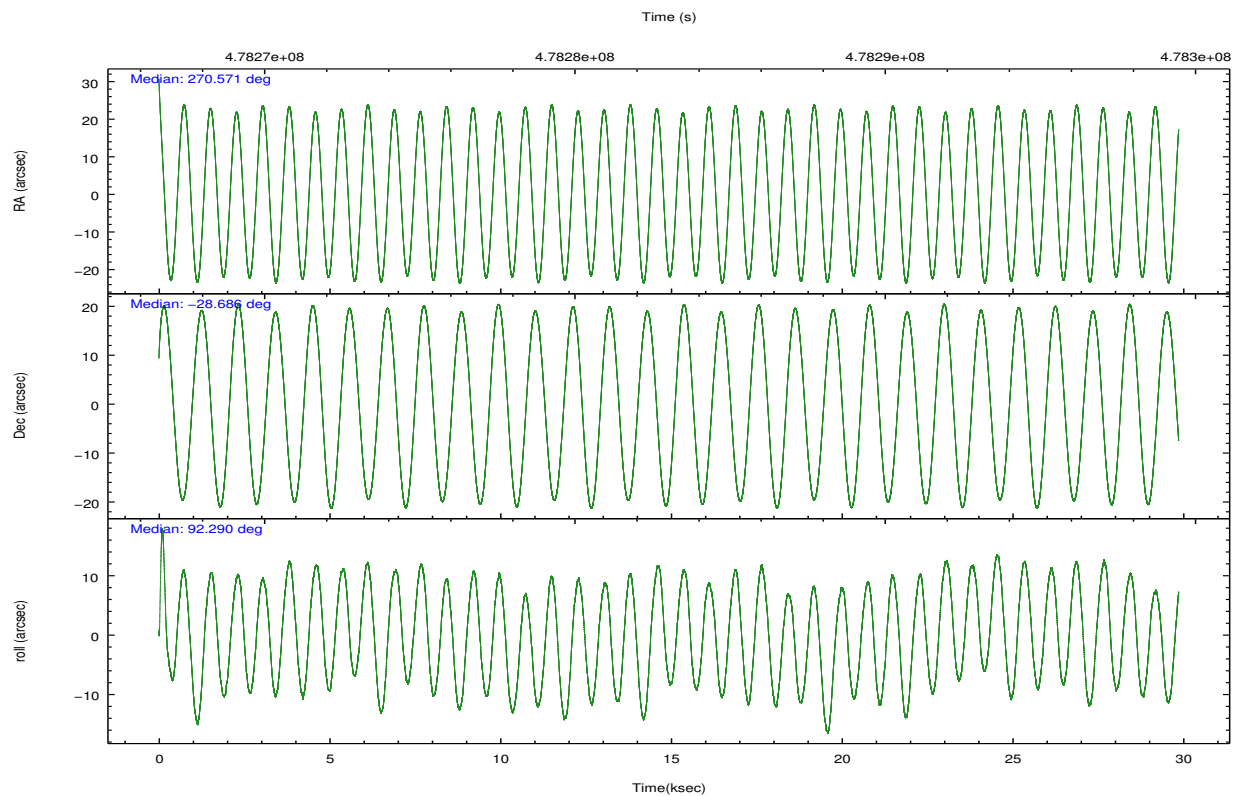
## 2.2 Compared Parameters

| 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                 | 270.587935          | 270.5707417767237    |
| [deg] Pointing Dec                | -28.708438          | -28.68572969695435   |
| [deg] Pointing Roll               | 92.393704           | 92.28994121743625    |
| [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)  | 478267947.184000    | 478267211.42976      |
| Observation start date            | 2013-02-26T12:11:20 | 2013-02-26T12:00:11  |
| [s] Observation end time (MET)    | 478297947.184000    | 478298951.58148      |
| Observation end date              | 2013-02-26T20:31:20 | 2013-02-26T20:49:11  |

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

## 2.3 Aspect



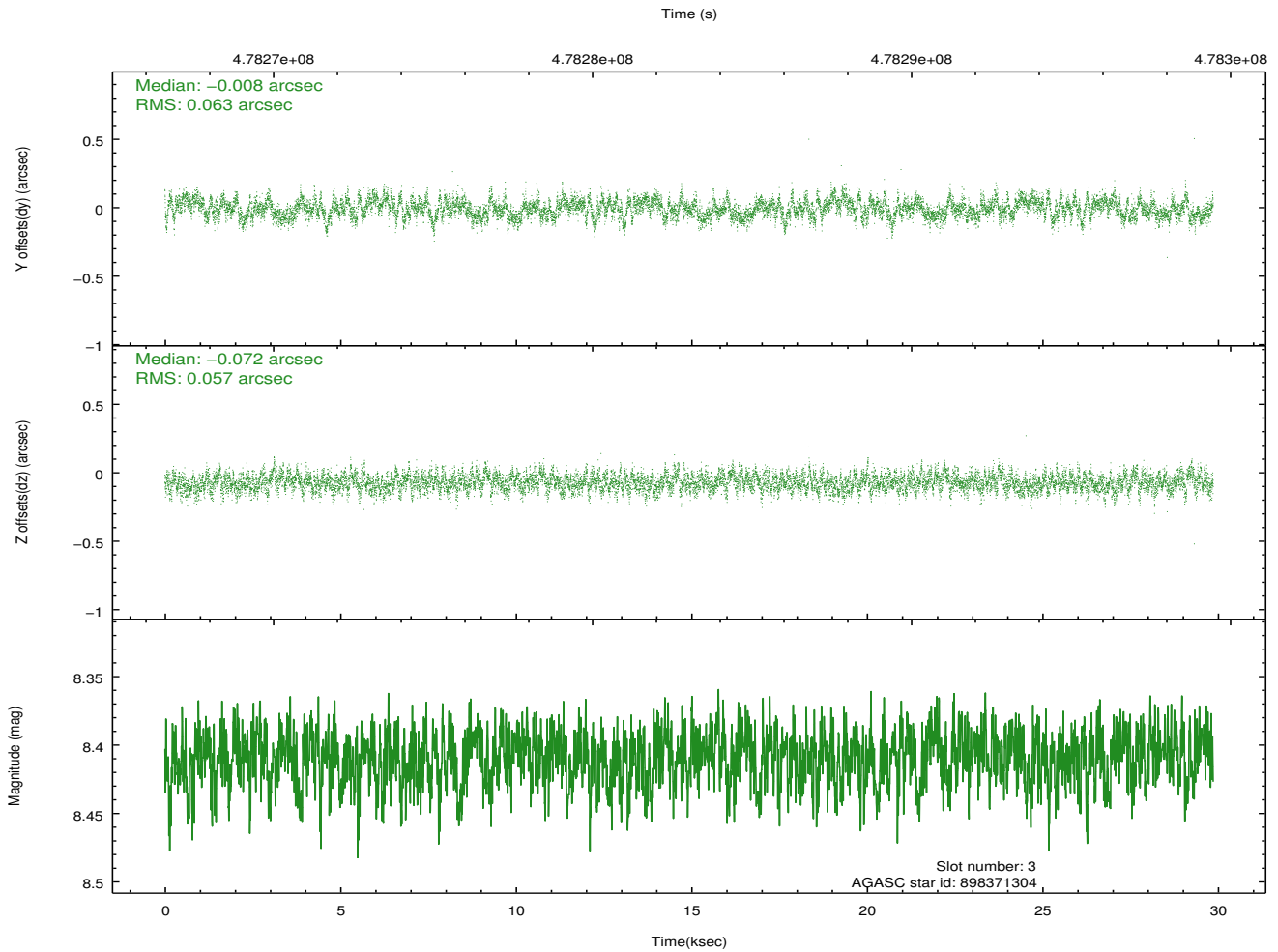
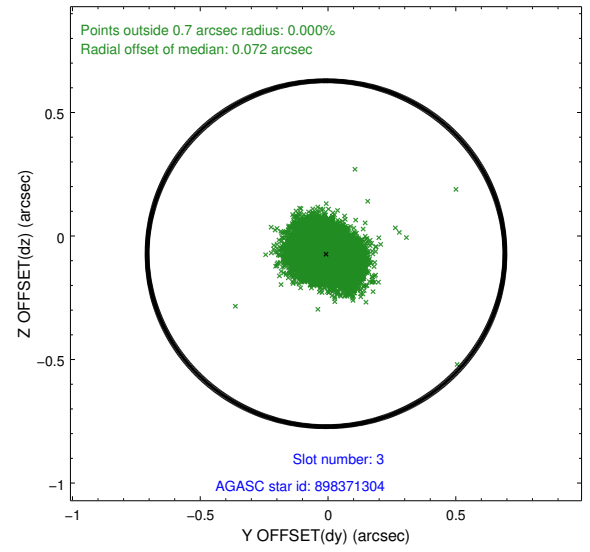
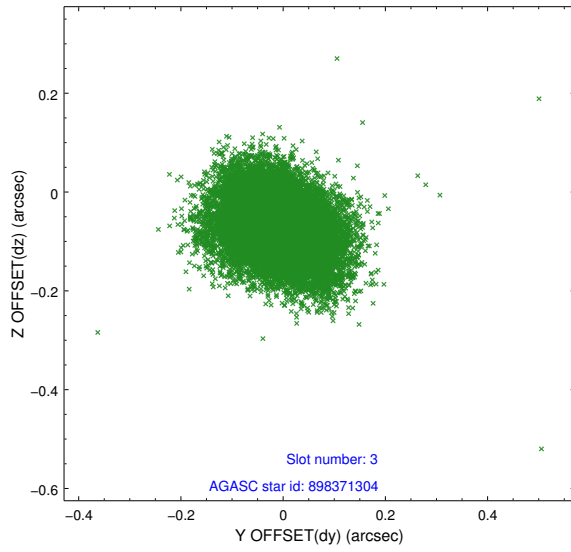


### Slot Statistics

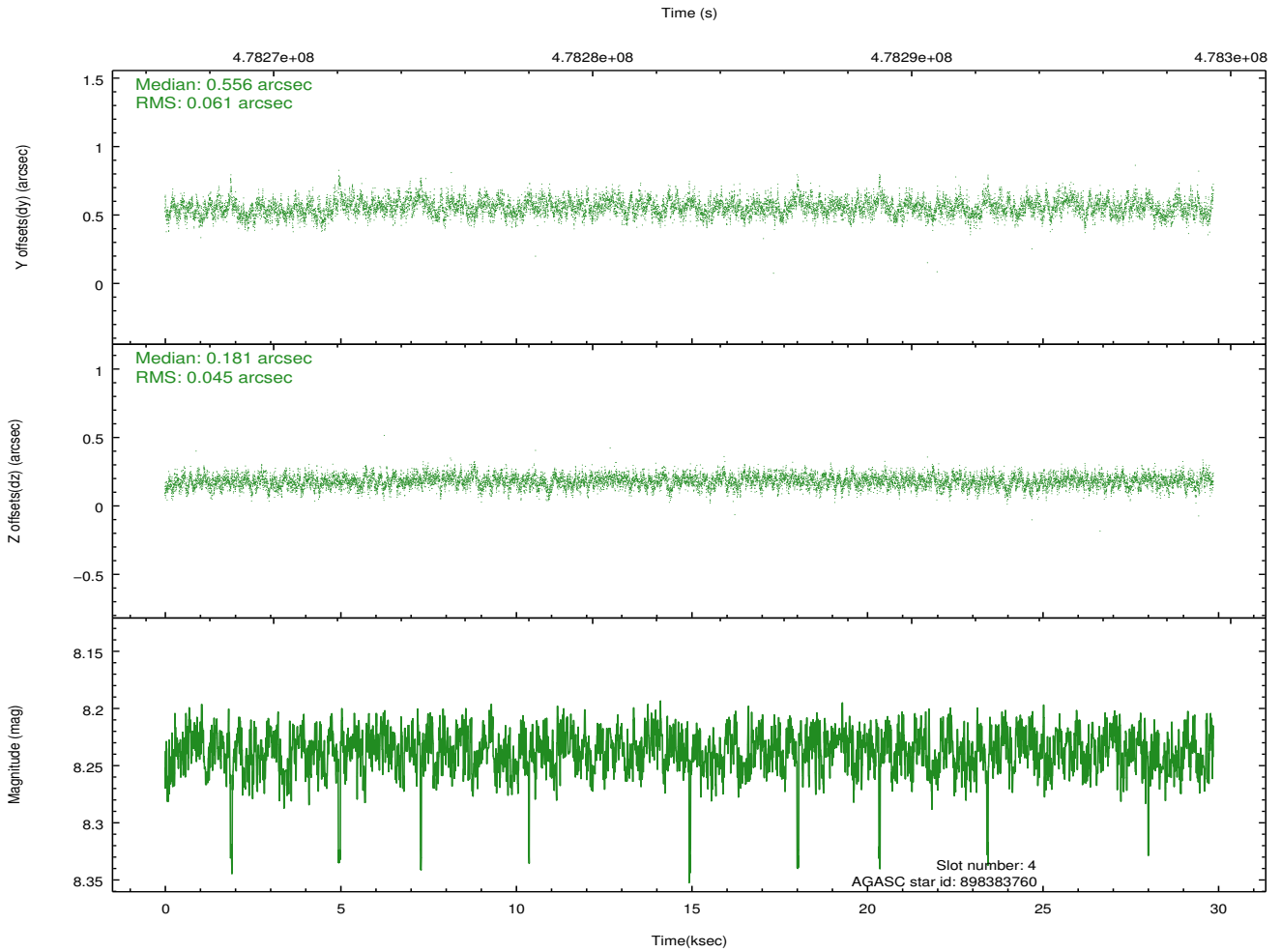
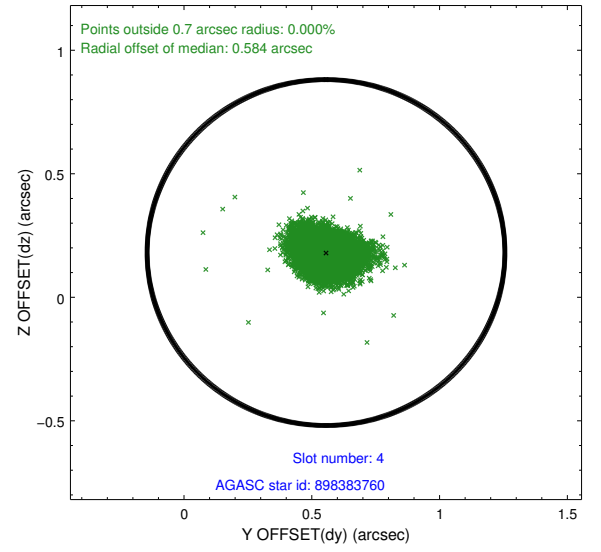
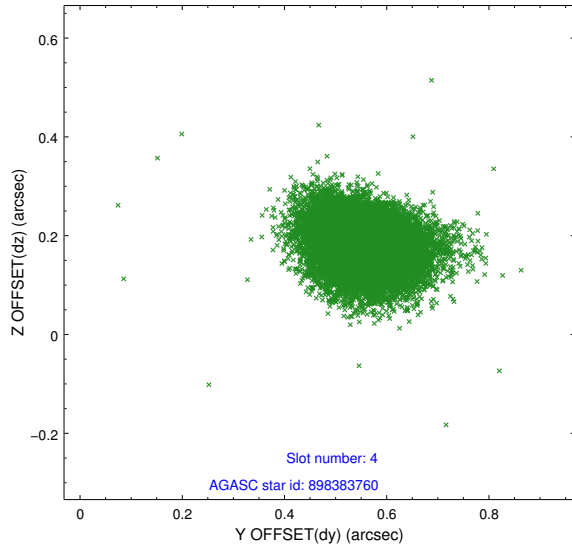
| slot | status | used | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec        | mean_y   | mean_z   |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0    | FID    |      | HRC-I-1   | 6.96 | 7284  | -0.094 | 0.046  | 0.023 | 0.036 | 0.000000   | 0.000000   | -778.68  | -1305.93 |
| 1    | FID    |      | HRC-I-2   | 7.00 | 7283  | 0.240  | -0.113 | 0.022 | 0.044 | 0.000000   | 0.000000   | 834.17   | -1307.81 |
| 2    | FID    |      | HRC-I-3   | 7.04 | 7284  | -0.020 | -0.020 | 0.018 | 0.030 | 0.000000   | 0.000000   | -1207.01 | 998.38   |
| 3    | GUIDE  | used | 898371304 | 8.41 | 14559 | -0.008 | -0.072 | 0.091 | 0.146 | 270.531151 | -28.390506 | 1150.88  | 131.84   |
| 4    | GUIDE  | used | 898383760 | 8.24 | 14542 | 0.556  | 0.181  | 0.079 | 0.132 | 270.301358 | -29.342458 | -2244.34 | 994.47   |
| 5    | GUIDE  | used | 898391736 | 9.35 | 14451 | 0.058  | 0.059  | 0.155 | 0.281 | 270.367313 | -28.729065 | -48.23   | 699.81   |
| 6    | GUIDE  | used | 897862152 | 9.26 | 14467 | -0.354 | 0.008  | 0.116 | 0.203 | 270.075629 | -28.076037 | 2338.71  | 1531.09  |
| 7    | GUIDE  | used | 898252768 | 8.82 | 14543 | -0.254 | -0.188 | 0.132 | 0.208 | 269.910789 | -28.705322 | 94.22    | 2135.98  |

## 2.4 Star Slots

### 2.4.1 Slot 3

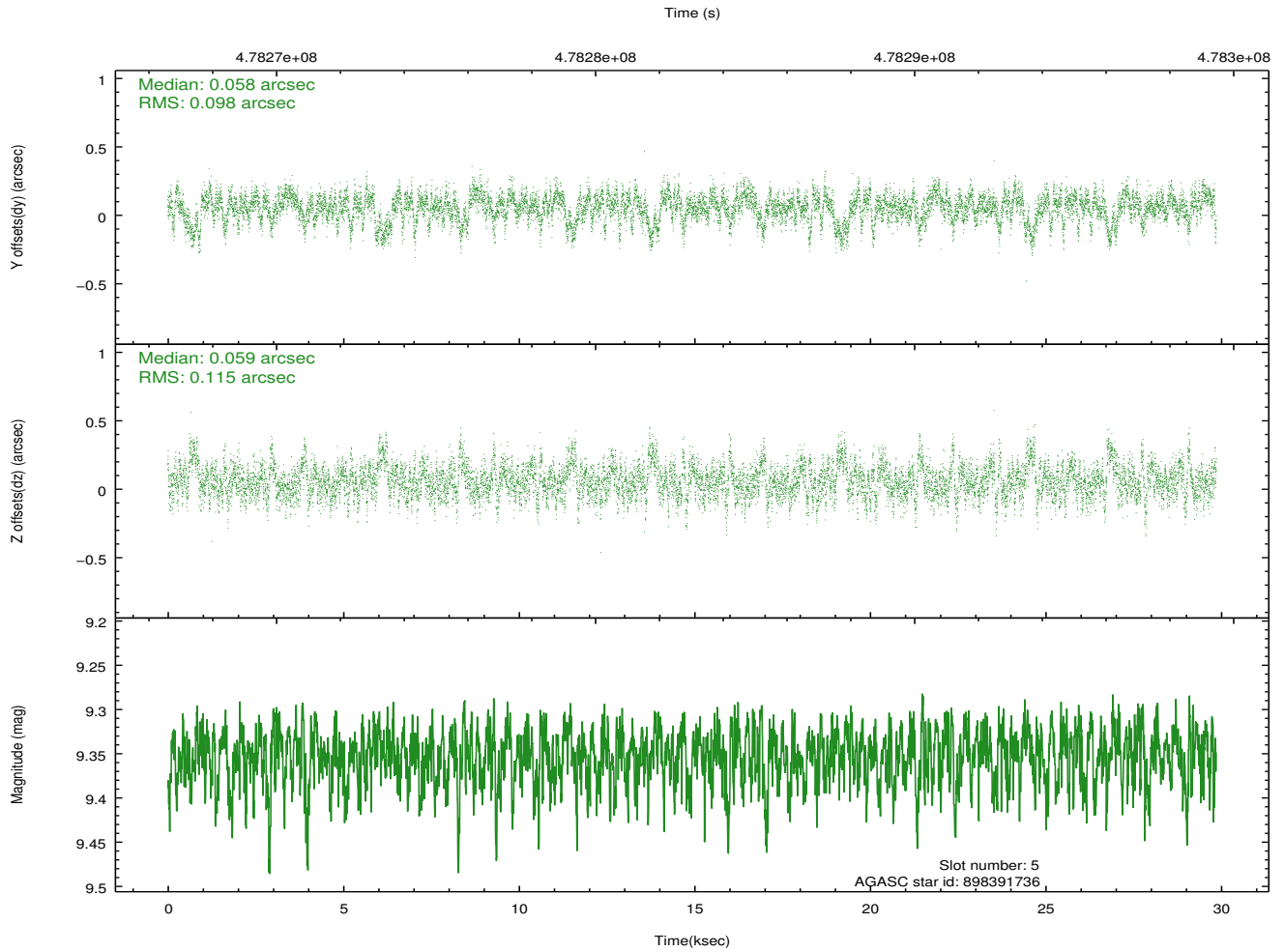
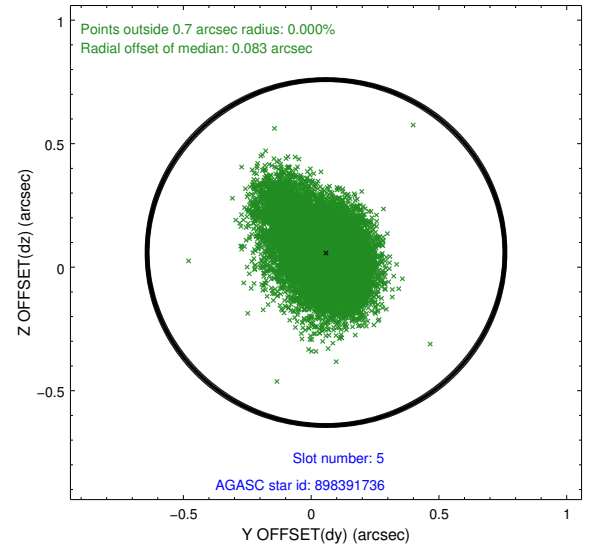
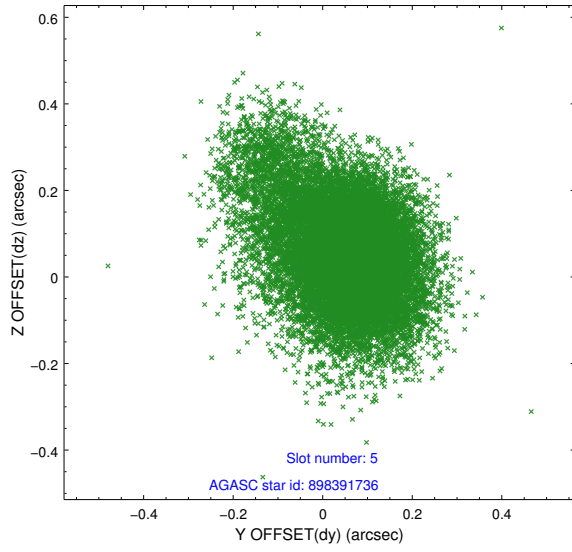


## 2.4.2 Slot 4

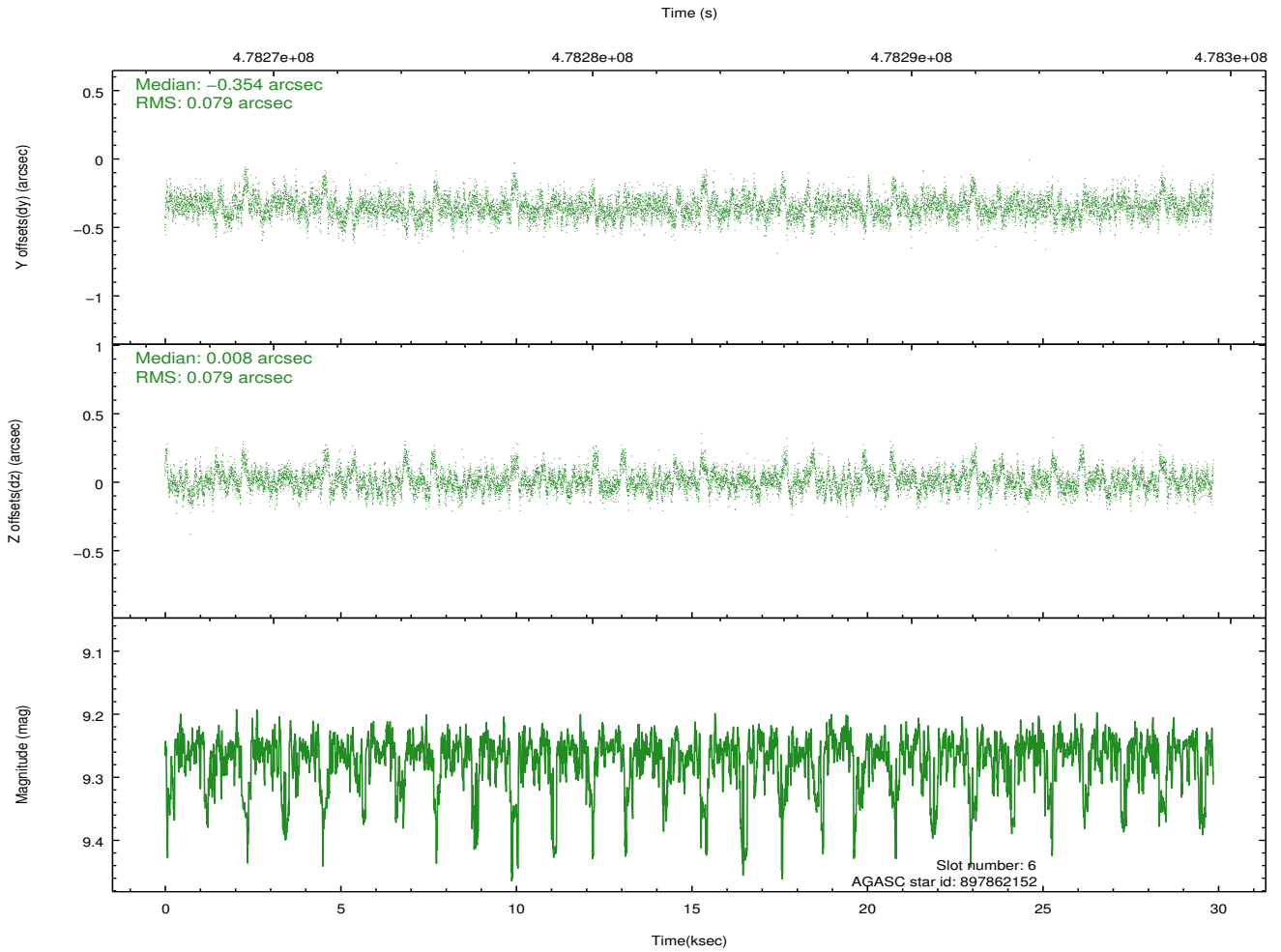
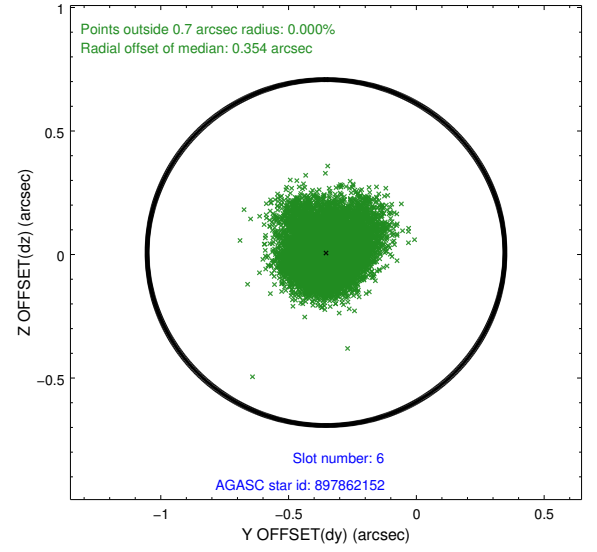
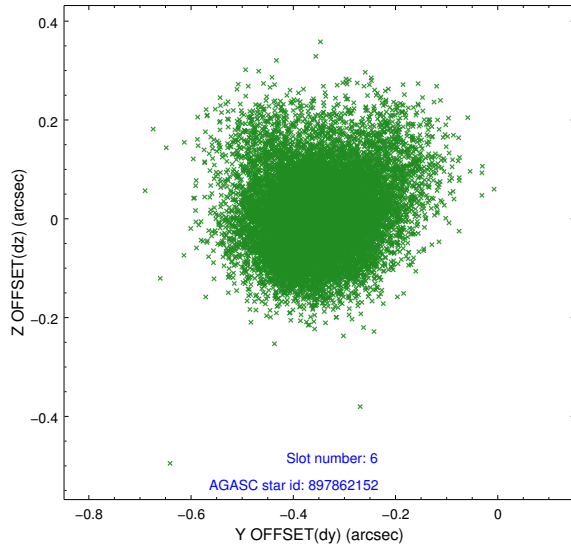




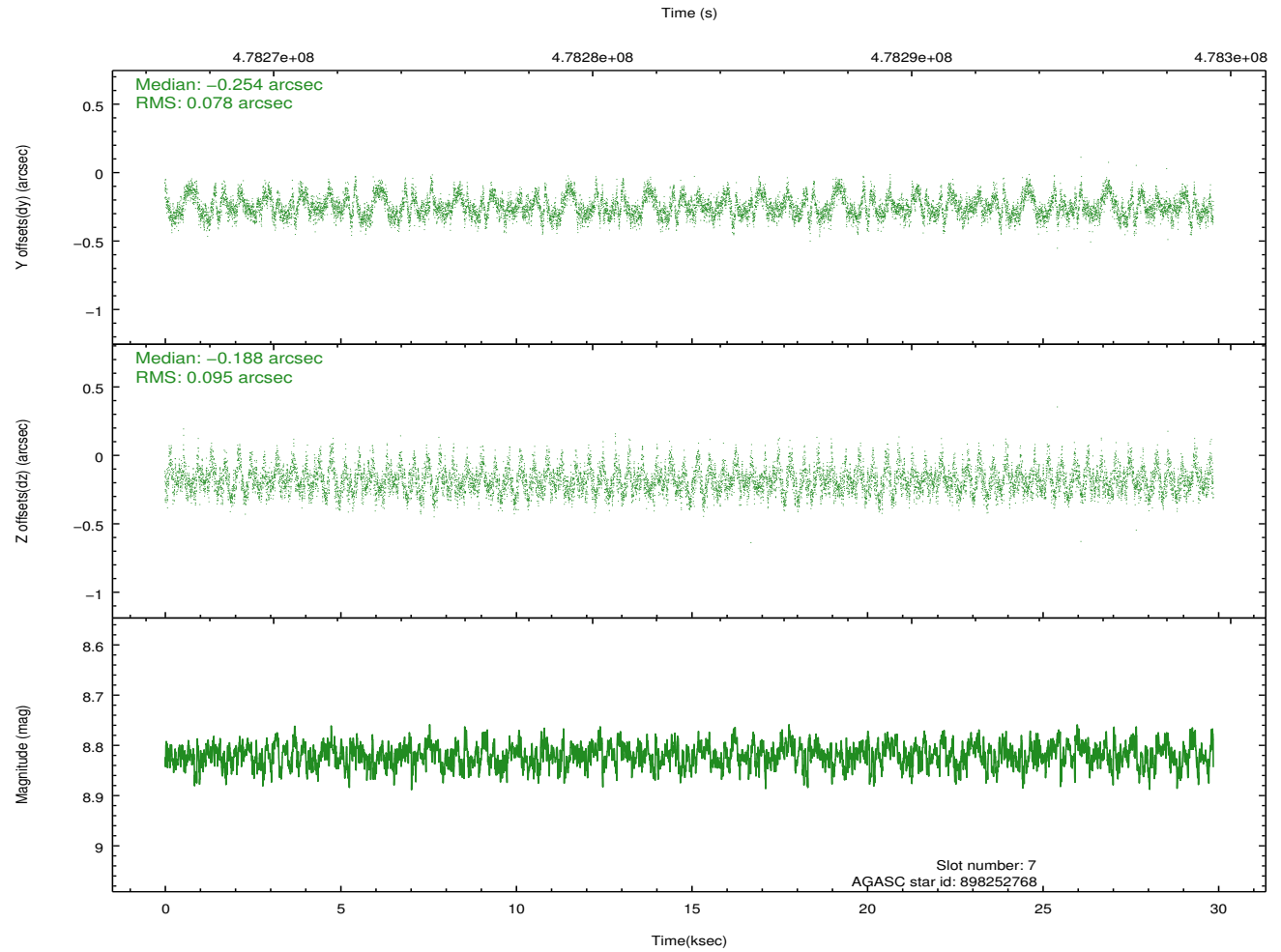
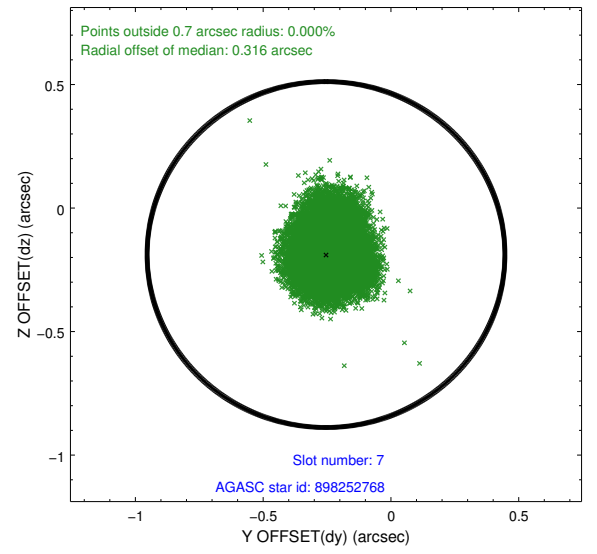
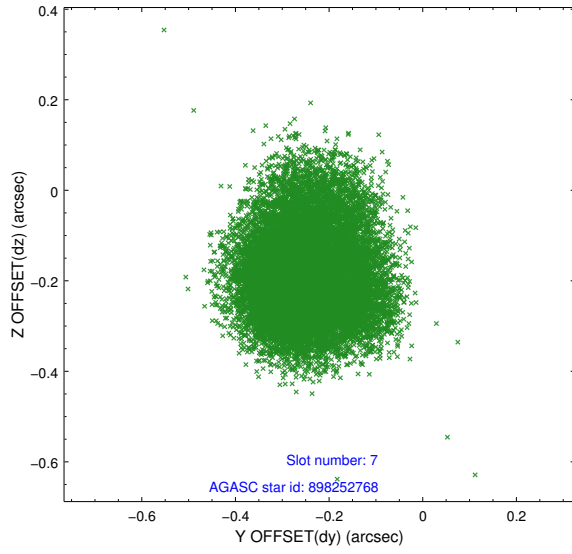
### 2.4.3 Slot 5



## 2.4.4 Slot 6

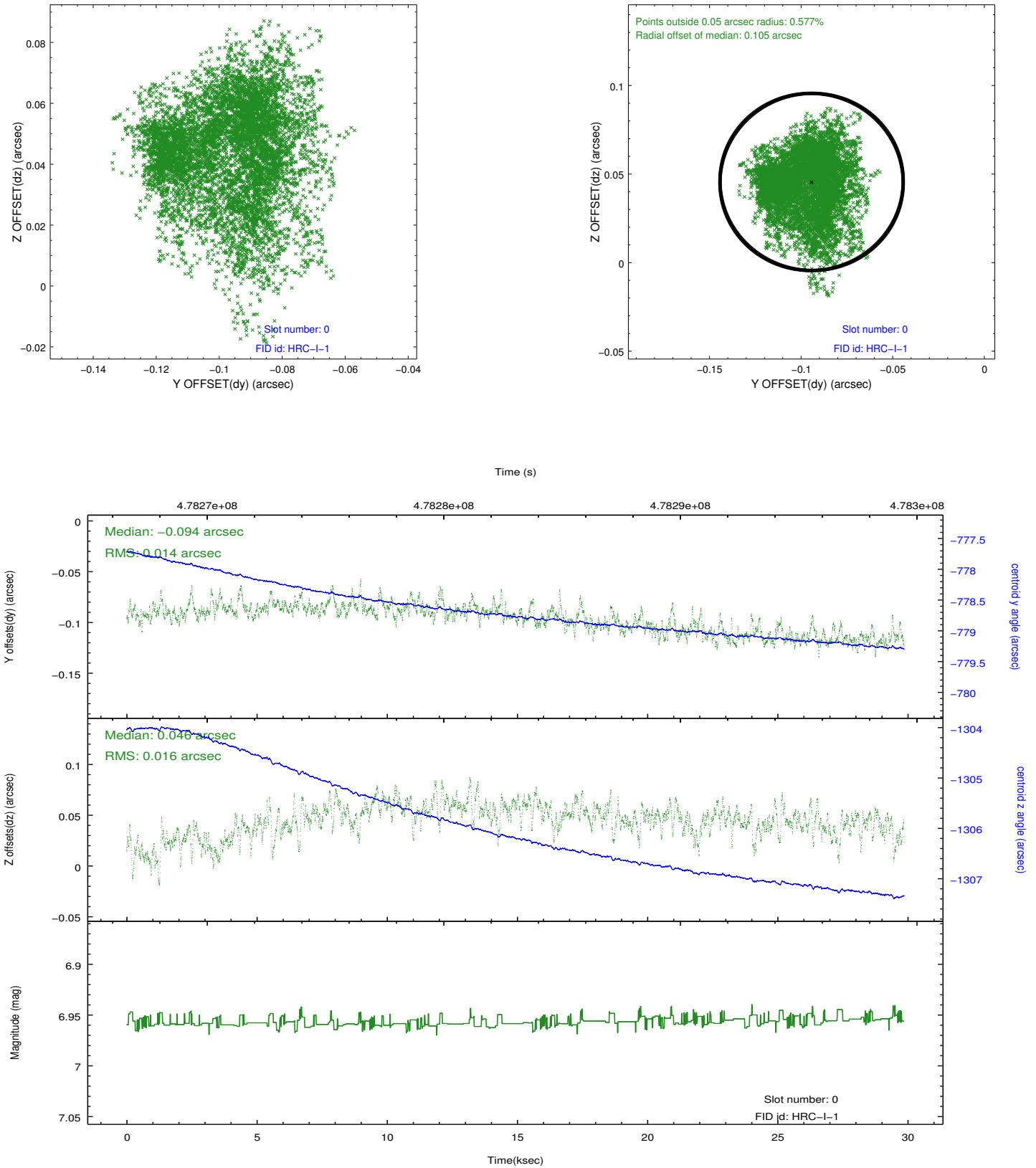


## 2.4.5 Slot 7

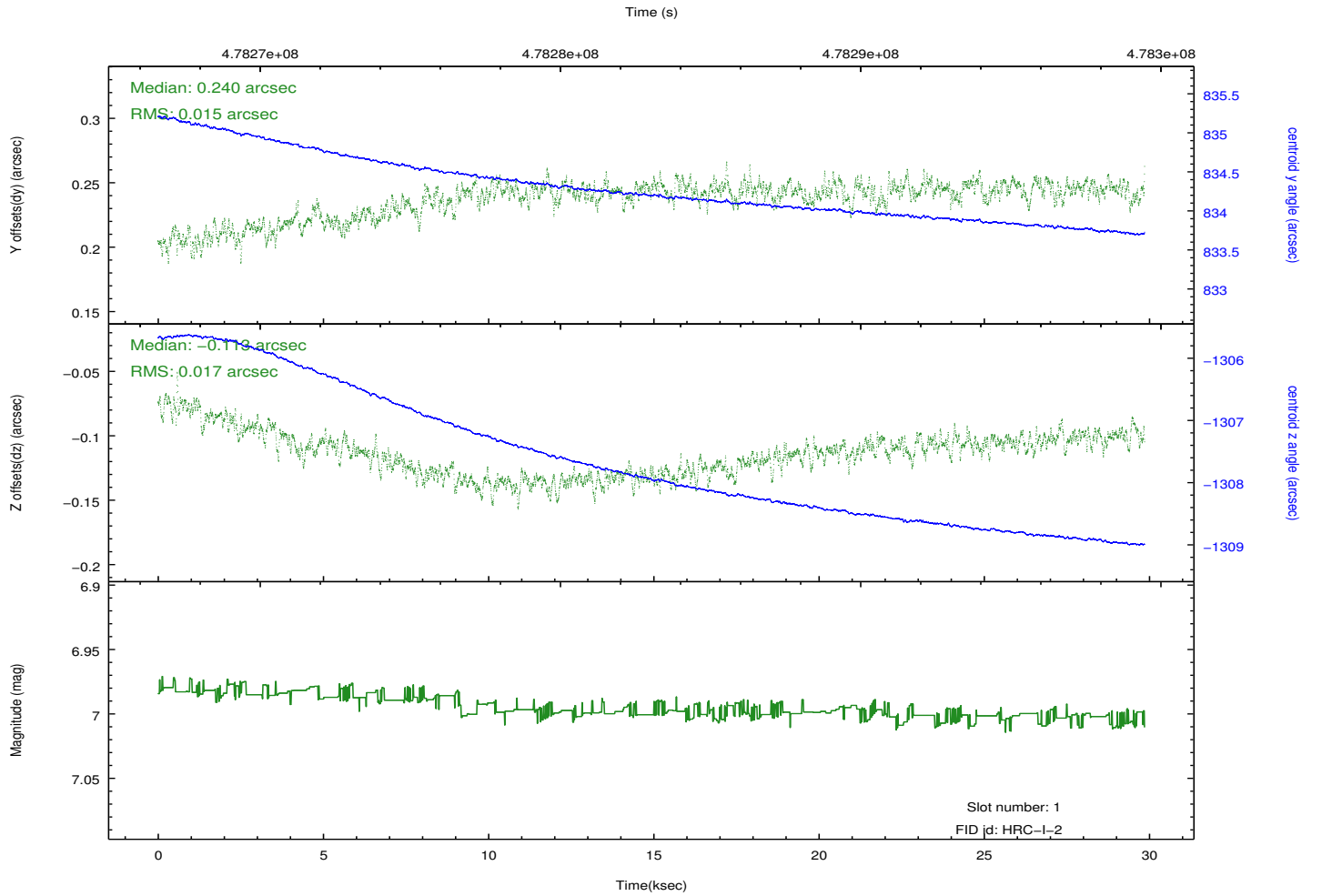
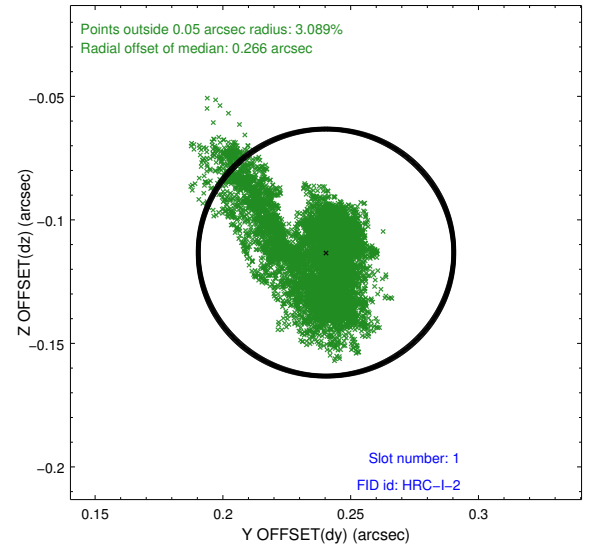
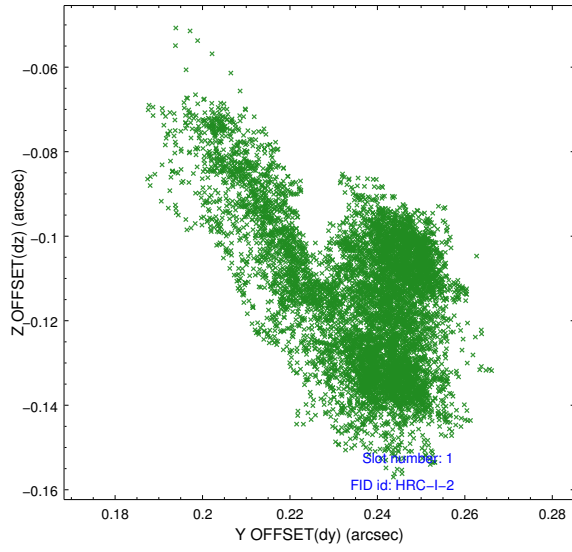


## 2.5 FID Slots

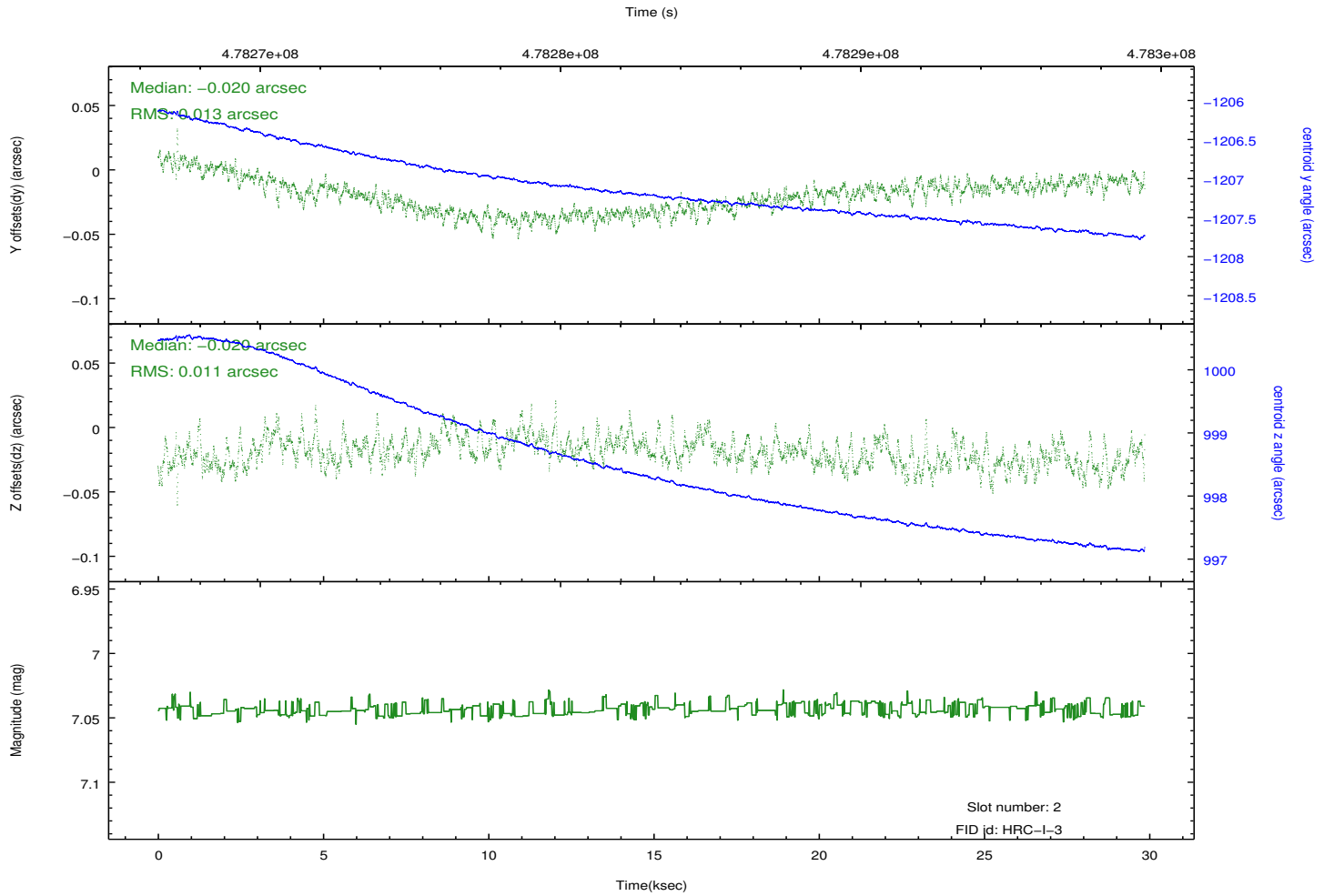
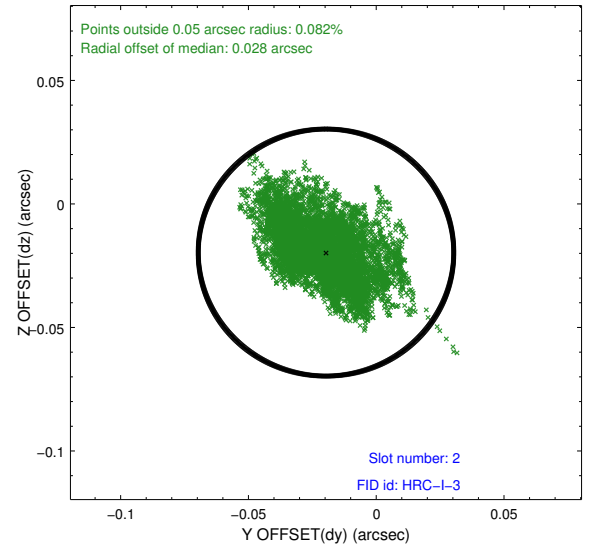
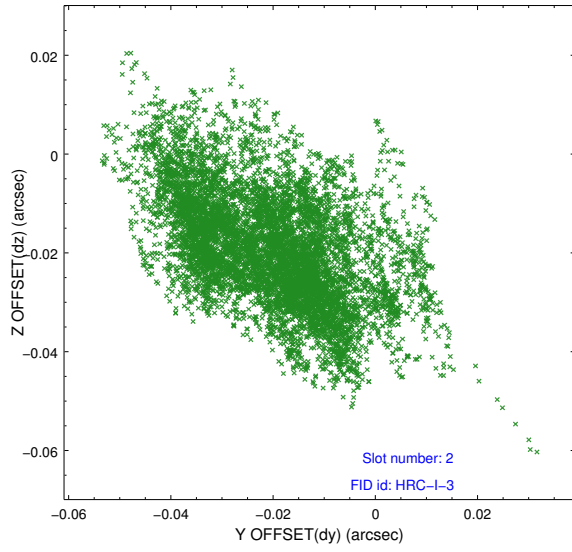
### 2.5.1 Slot 0



## 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)      | 2015.06.18     |
| V&V Edition                | 1              |
| V&V Disposition and Status | OK             |
| V&V Charge Time            | 29.86107036531 |

### A.2 Comments

This observation was reprocessed to update the target name.