

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2721 - L2 Version 4  
Chandra X-Ray Center

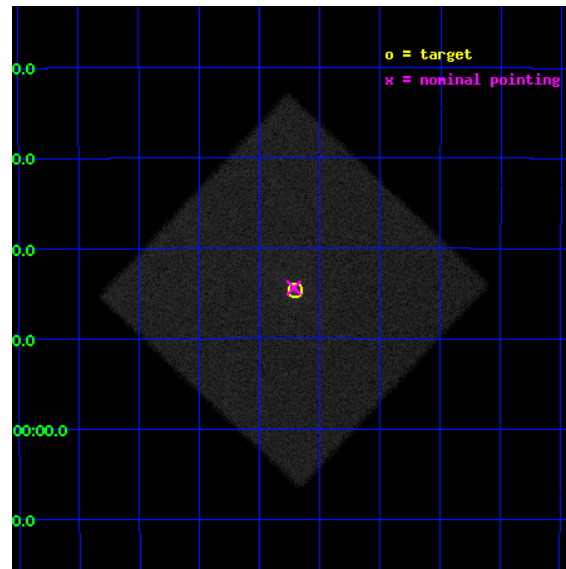
L2 Processing Date : Oct 5 2012

## Contents

|          |                               |           |
|----------|-------------------------------|-----------|
| <b>1</b> | <b>Front</b>                  | <b>2</b>  |
| <b>2</b> | <b>OBI</b>                    | <b>3</b>  |
| 2.1      | OBI . . . . .                 | 3         |
| 2.1.1    | Images . . . . .              | 3         |
| 2.1.2    | Parameters . . . . .          | 4         |
| 2.1.3    | Events . . . . .              | 4         |
| 2.2      | Compared Parameters . . . . . | 5         |
| 2.3      | Aspect . . . . .              | 6         |
| 2.4      | Star Slots . . . . .          | 9         |
| 2.4.1    | Slot 3 . . . . .              | 9         |
| 2.4.2    | Slot 4 . . . . .              | 10        |
| 2.4.3    | Slot 5 . . . . .              | 11        |
| 2.4.4    | Slot 6 . . . . .              | 12        |
| 2.4.5    | Slot 7 . . . . .              | 13        |
| 2.5      | FID Slots . . . . .           | 14        |
| 2.5.1    | Slot 0 . . . . .              | 14        |
| 2.5.2    | Slot 1 . . . . .              | 15        |
| 2.5.3    | Slot 2 . . . . .              | 16        |
| <b>A</b> | <b>Summary</b>                | <b>17</b> |
| A.1      | Status . . . . .              | 17        |
| A.2      | Comments . . . . .            | 17        |

# 1 Front

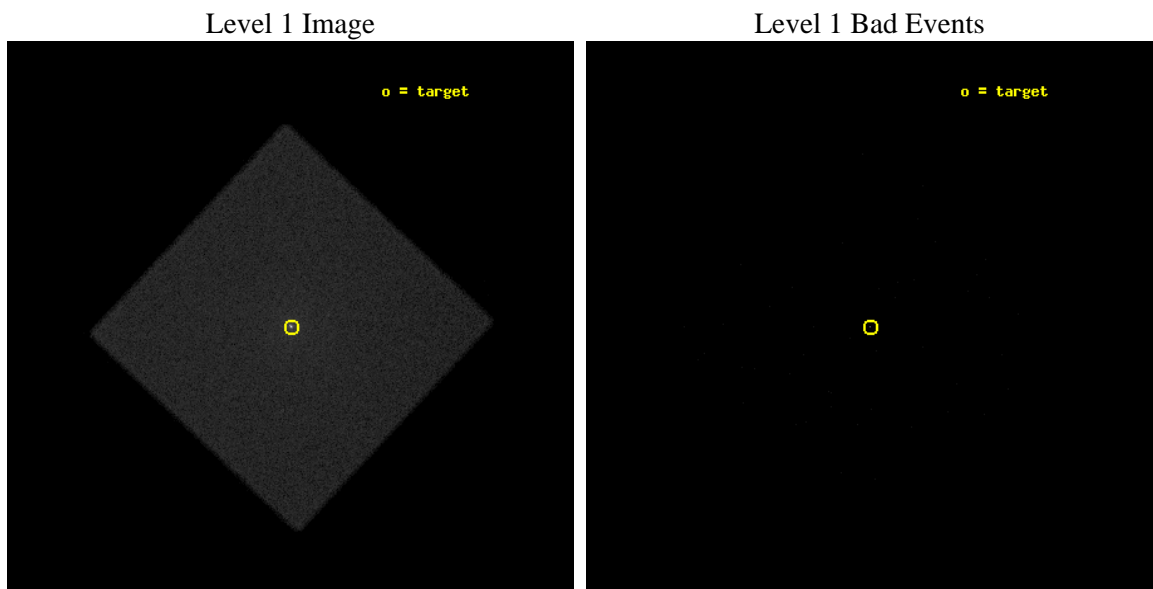
|          |  |                                       |
|----------|--|---------------------------------------|
| seq_num  | 400201   | Sequence number                       |
| obs_id   | 2721   | Observation id                        |
| title    | MONITORING THE MORPHOLOGY OF THE MICRO-QUASARS GRS 1758-258 AND 1E 1740.7-2942 | Proposal title                        |
| observer | Dr. William Heindl   | Principal investigator                |
| object   | GRS 1758-258   | Source name                           |
| ra_targ  | 270.301667   | Observer's specified target RA [deg]  |
| dec_targ | -25.743306   | Observer's specified target Dec [deg] |
| ra_nom   | 270.30369944612  | Nominal RA [deg]                      |
| dec_nom  | -25.739659843315   | Nominal Dec [deg]                     |
| roll_nom | 88.227961253778  | Nominal Roll [deg]                    |
| revision | 4  | Processing version of data            |
| ontime   | 9981.5785301626  | [s]                                   |
| livetime | 9925.9650614492  | Ontime multiplied by DTCOR            |
| l2events | 319377   | 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 | 10000.000000   | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5               | Processing system revision     | ontime         | 9982.731656909 | [s]                                     |
| caldbver | 4.5.2               | &#160                          | l1events       | 463423         | Number of level 1 events                |
| date     | 2012-10-05T16:48:26 | 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  | 463423               |
| rejected events | 2136                 |
| rejected %      | 0%                   |

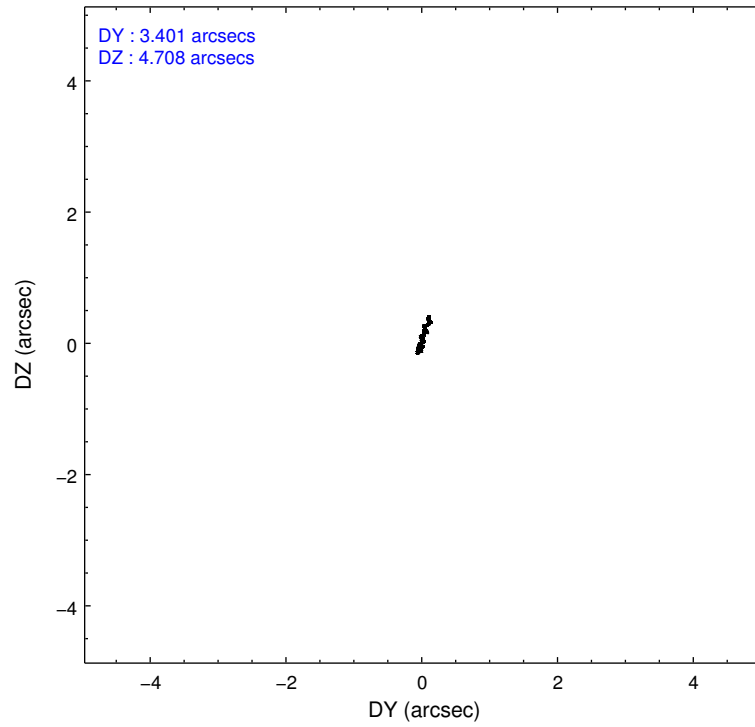
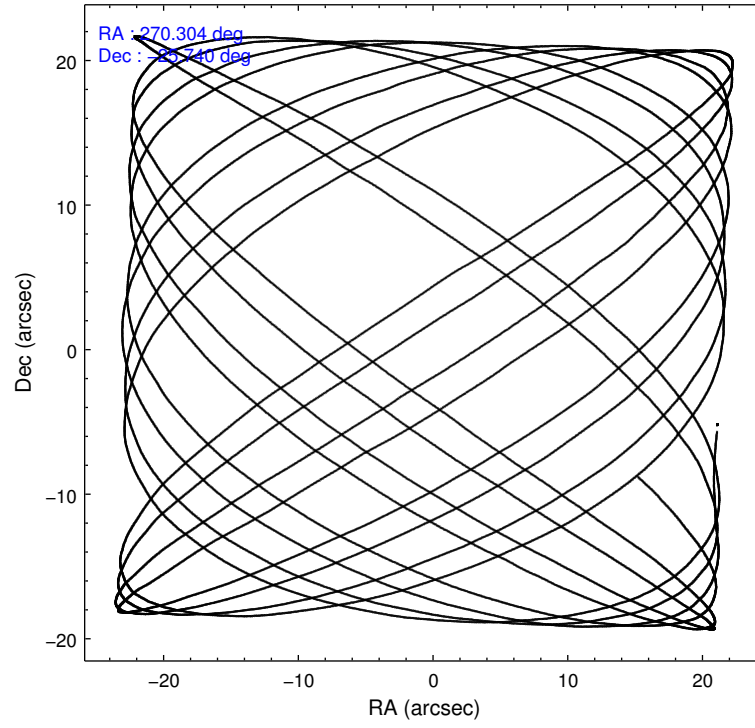


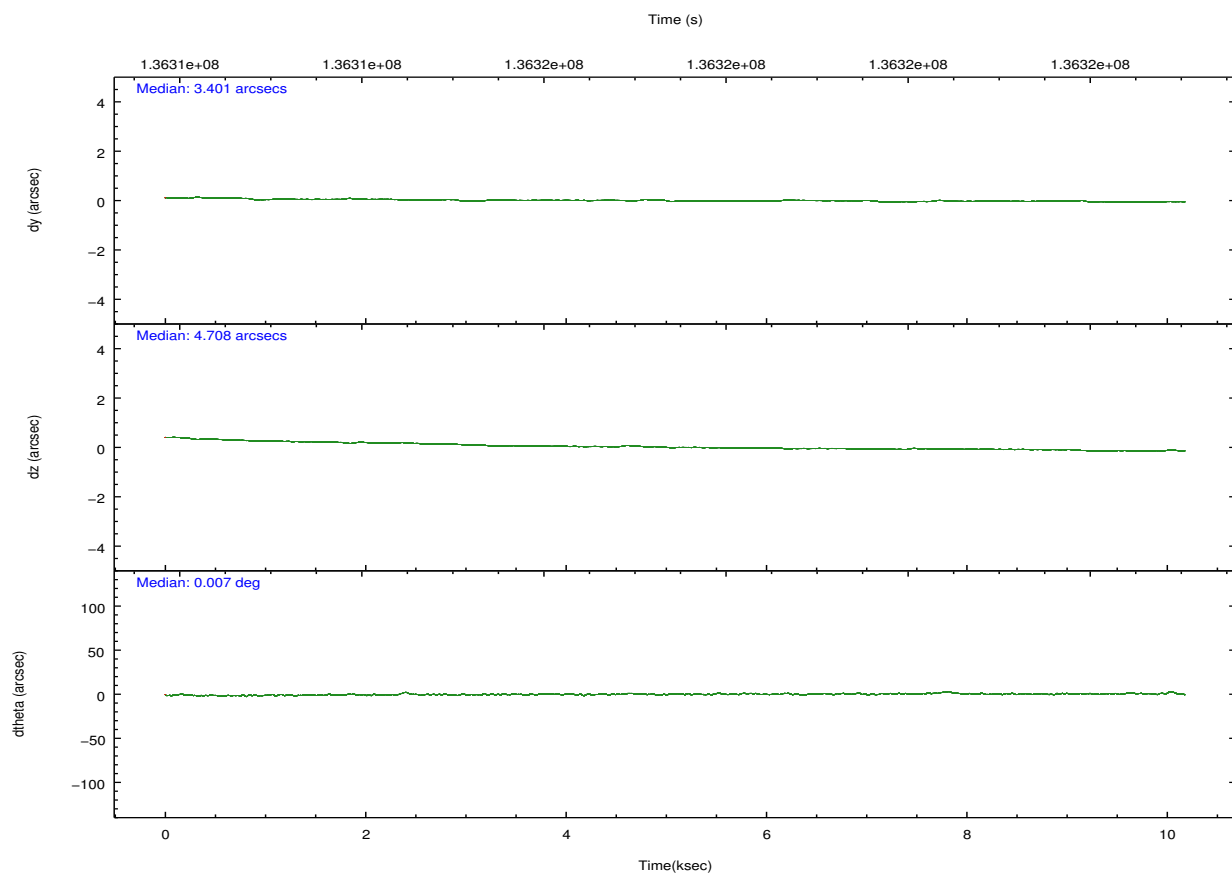
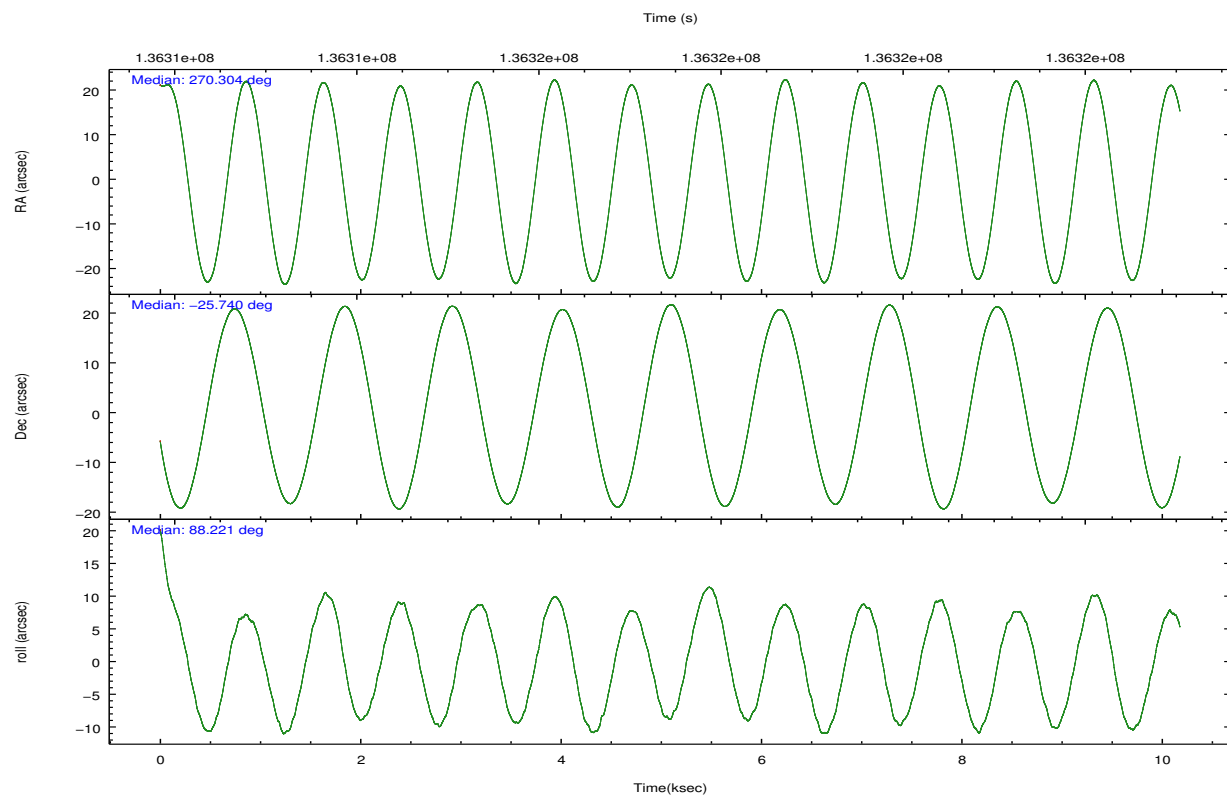
## 2.2 Compared Parameters

| 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                 | 270.318431          | 270.3036994461228    |
| [deg] Pointing Dec                | -25.763083          | -25.73965984331502   |
| [deg] Pointing Roll               | 88.329842           | 88.22796125377818    |
| [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)  | 136312528.184000    | 136312001.76947      |
| Observation start date            | 2002-04-27T16:34:24 | 2002-04-27T16:26:41  |
| [s] Observation end time (MET)    | 136322528.184000    | 136323467.93244      |
| Observation end date              | 2002-04-27T19:21:04 | 2002-04-27T19:37:47  |

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

## 2.3 Aspect



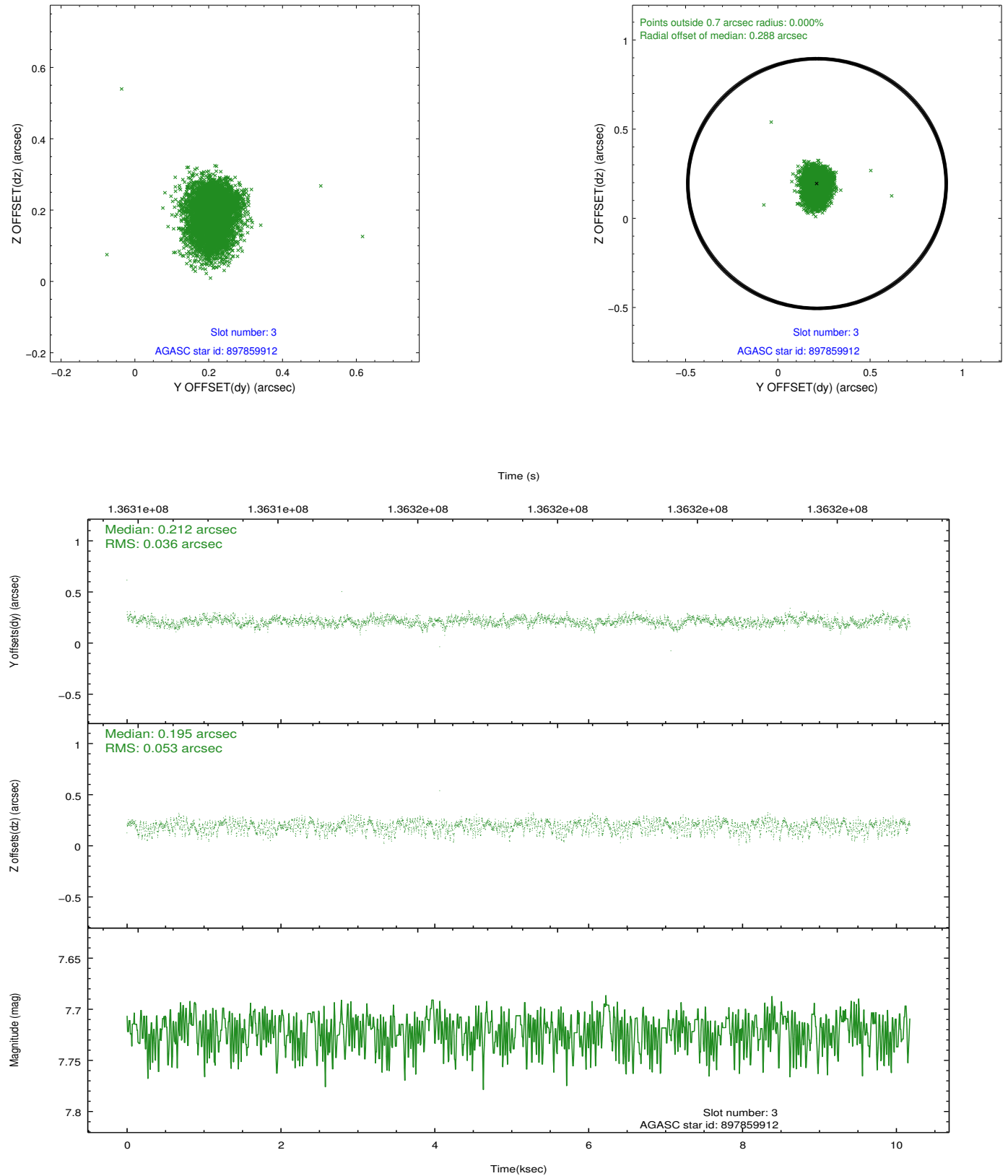


### Slot Statistics

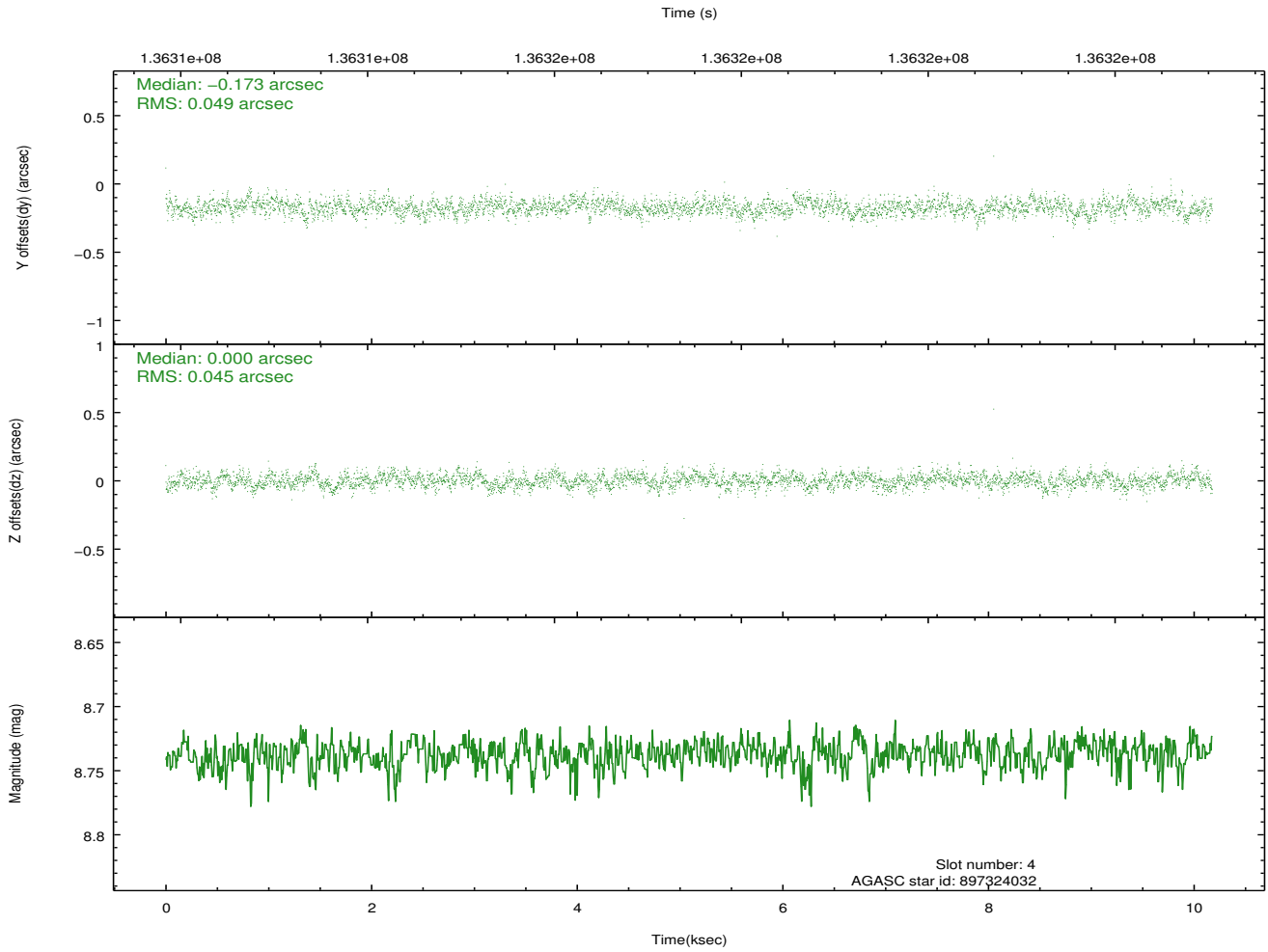
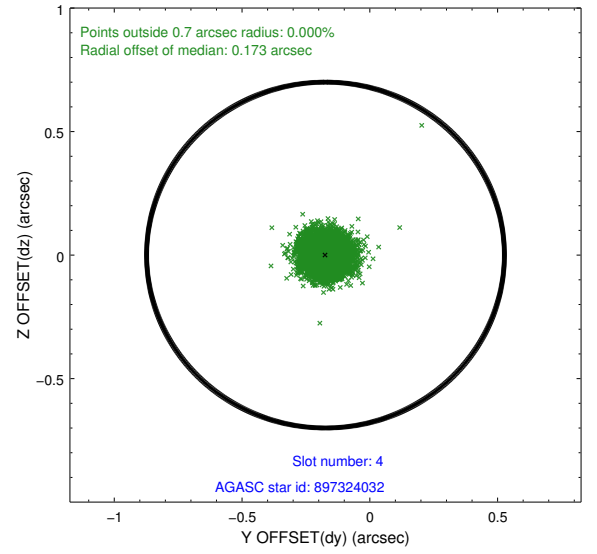
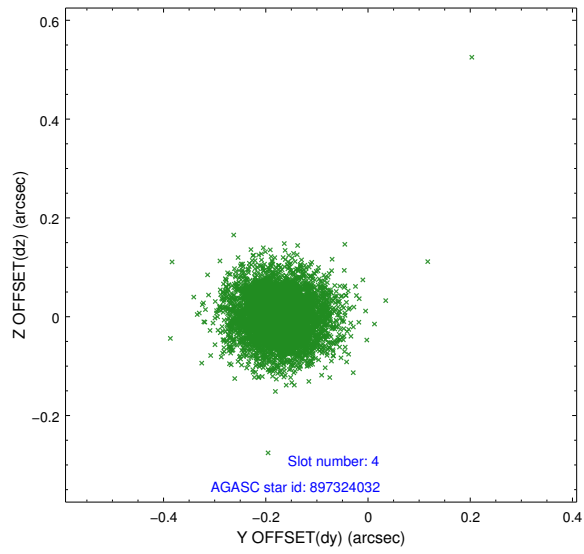
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec        | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0    | FID    | HRC-I-1   | 6.96 | 2483  | 0.010  | 0.063  | 0.010 | 0.018 | 0.000000   | 0.000000   | -758.86  | -1292.49 |
| 1    | FID    | HRC-I-2   | 7.00 | 2483  | 0.076  | -0.058 | 0.008 | 0.013 | 0.000000   | 0.000000   | 853.53   | -1294.66 |
| 2    | FID    | HRC-I-3   | 7.05 | 2483  | 0.033  | -0.094 | 0.007 | 0.012 | 0.000000   | 0.000000   | -1187.02 | 1011.39  |
| 3    | GUIDE  | 897859912 | 7.72 | 4965  | 0.212  | 0.195  | 0.067 | 0.111 | 270.849161 | -26.319822 | -1956.19 | -1770.79 |
| 4    | GUIDE  | 897324032 | 8.74 | 4964  | -0.173 | 0.000  | 0.070 | 0.114 | 270.314237 | -25.107248 | 2359.46  | 82.03    |
| 5    | GUIDE  | 897326256 | 8.27 | 4966  | -0.160 | 0.390  | 0.067 | 0.106 | 271.063775 | -25.425801 | 1278.57  | -2386.92 |
| 6    | GUIDE  | 897188632 | 8.65 | 4966  | -0.126 | -0.194 | 0.068 | 0.112 | 269.725883 | -25.281908 | 1671.33  | 1977.65  |
| 7    | GUIDE  | 897188560 | 8.35 | 4965  | 0.248  | -0.382 | 0.076 | 0.123 | 269.612088 | -26.091773 | -1254.80 | 2247.63  |

## 2.4 Star Slots

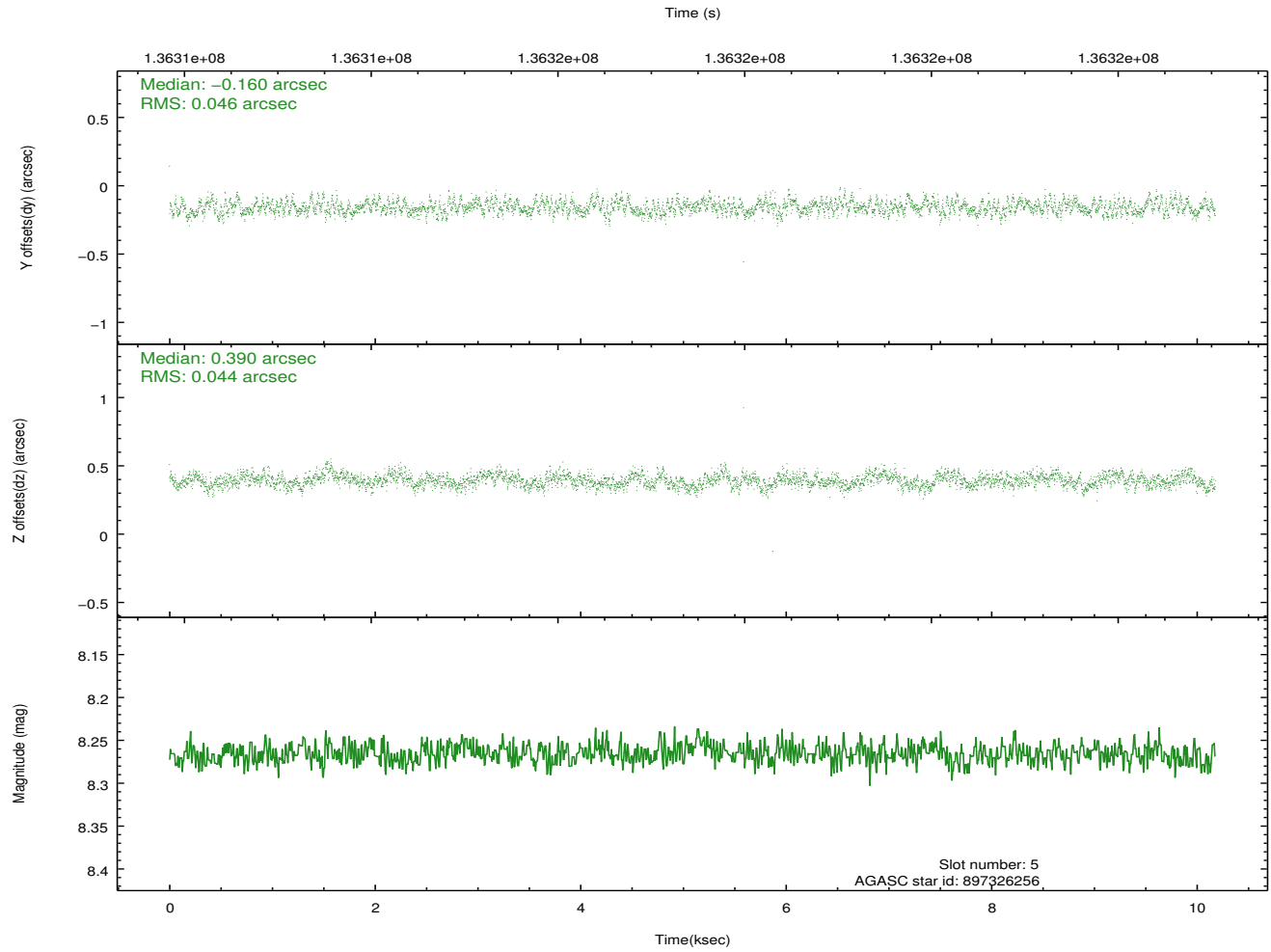
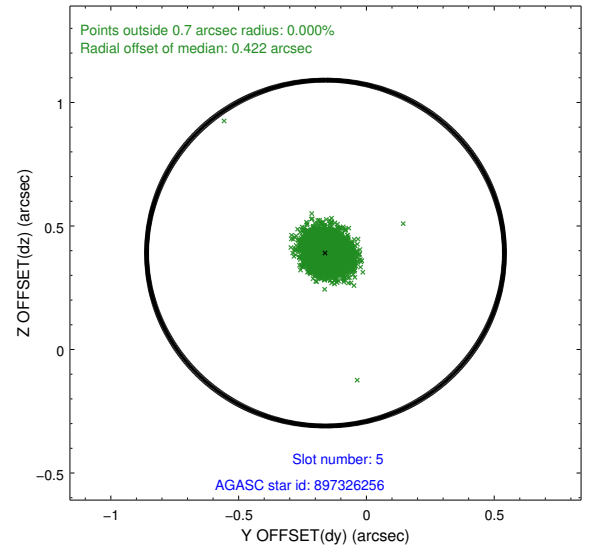
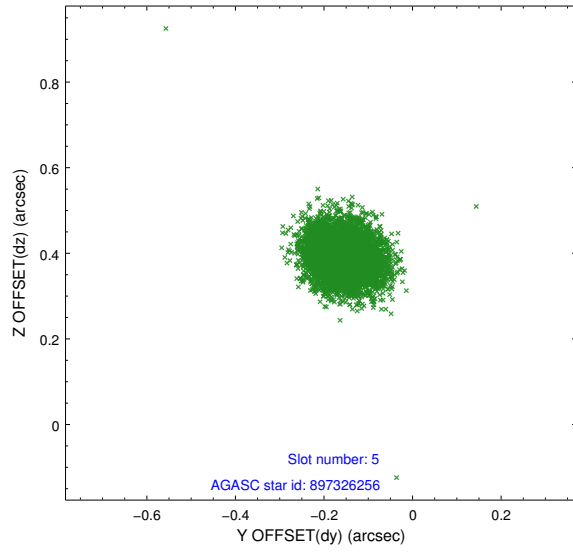
### 2.4.1 Slot 3



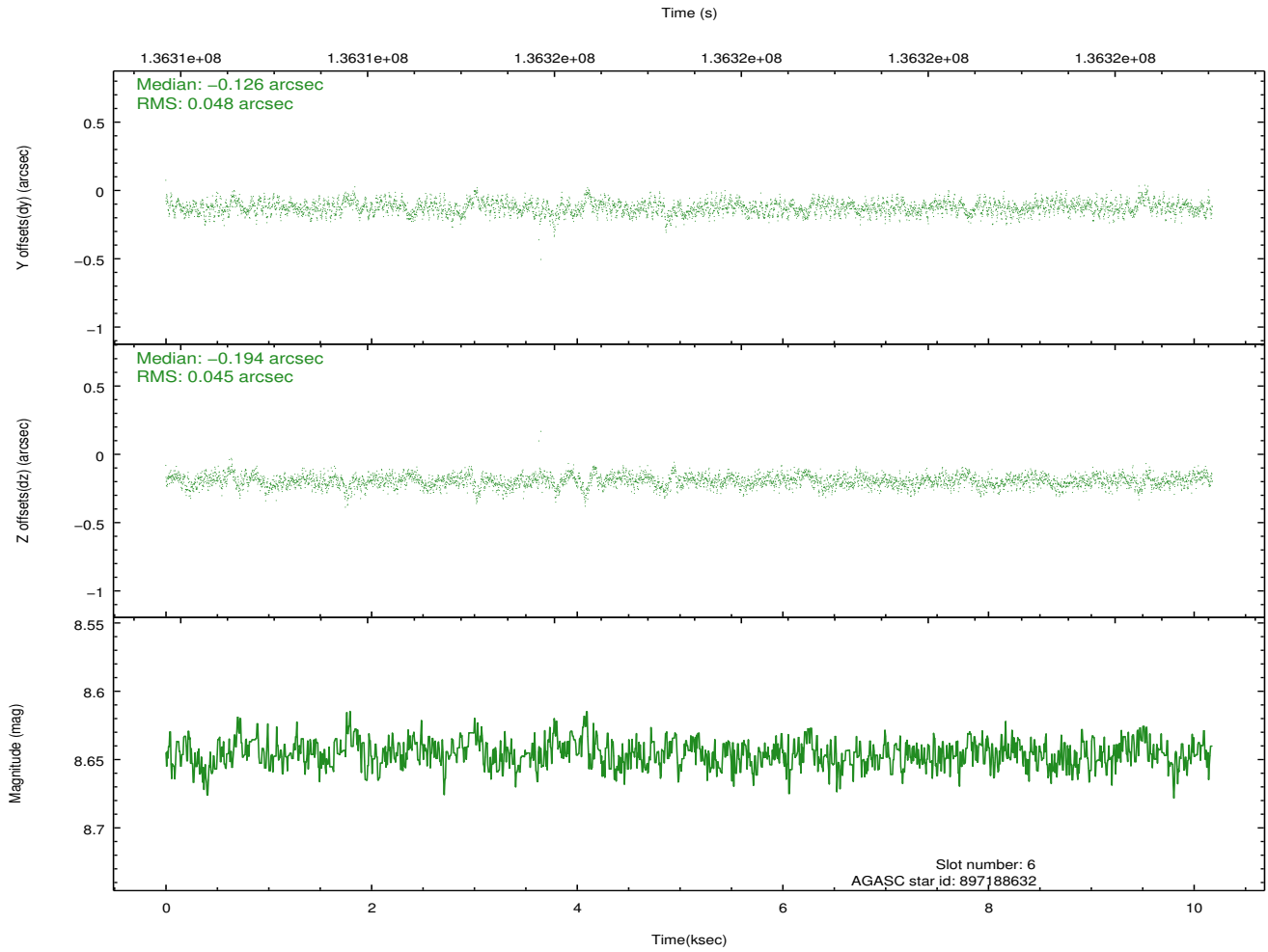
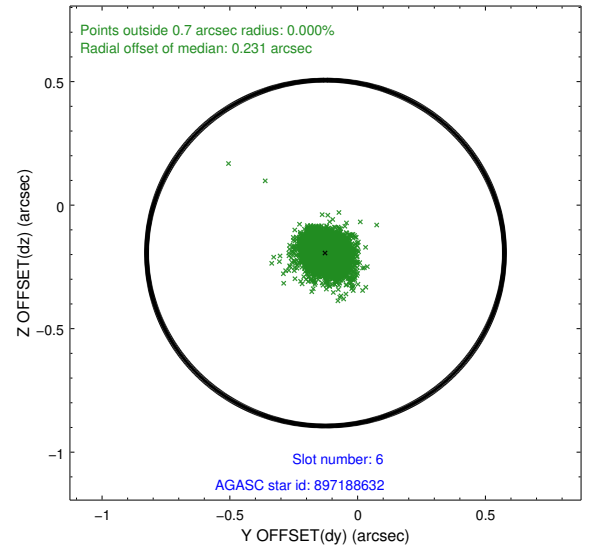
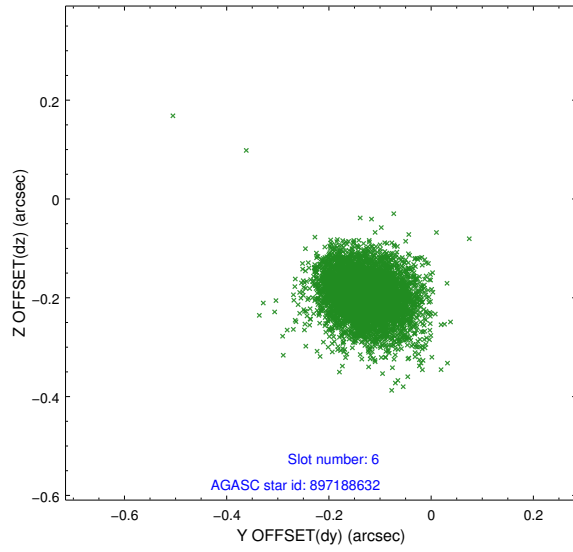
## 2.4.2 Slot 4



### 2.4.3 Slot 5

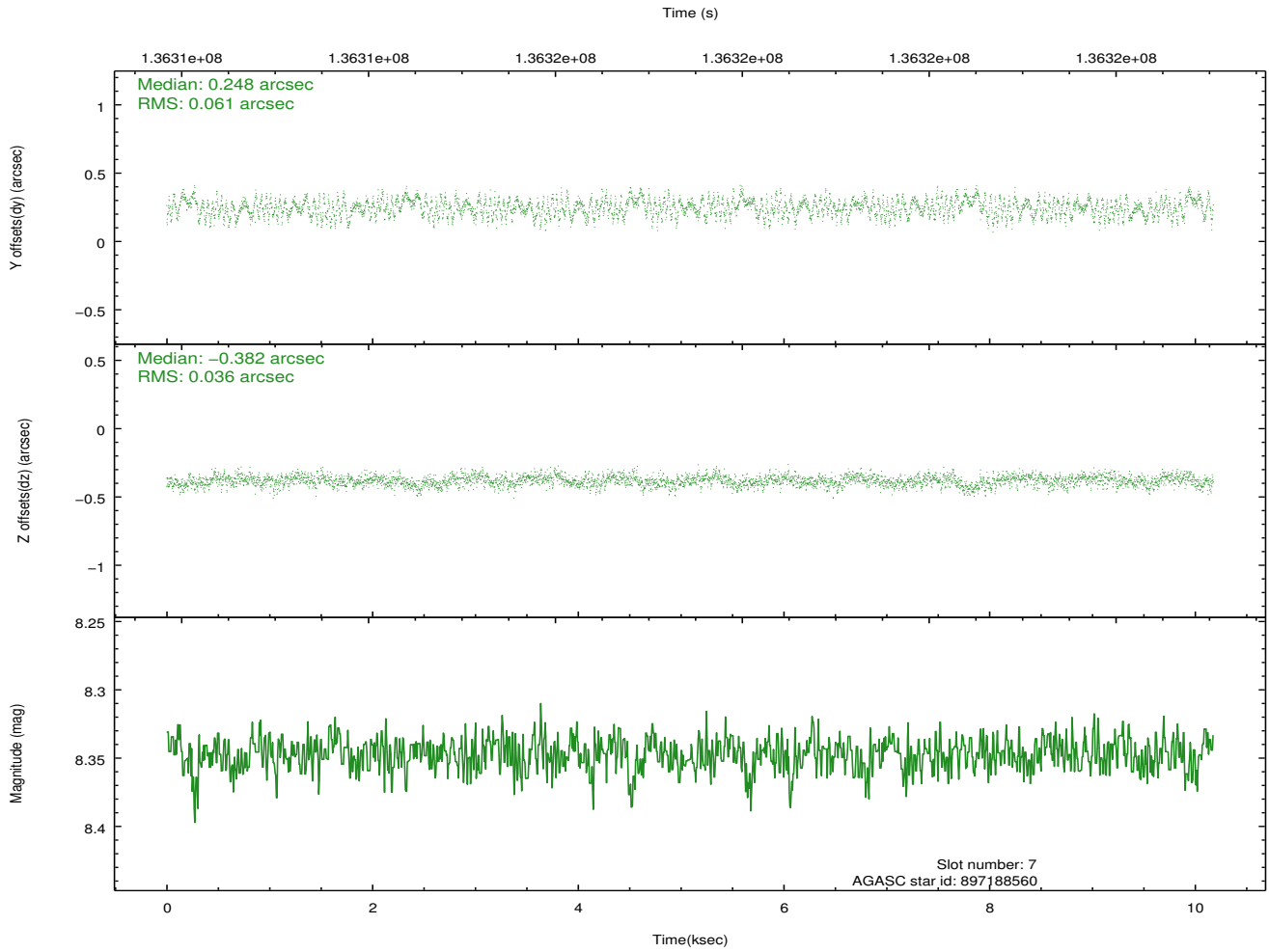
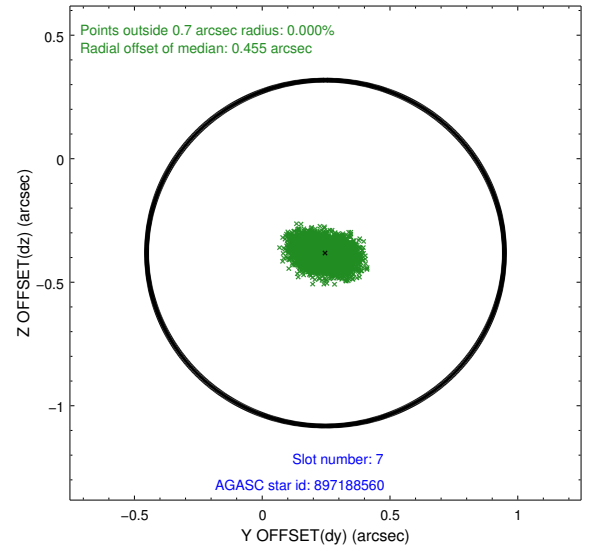
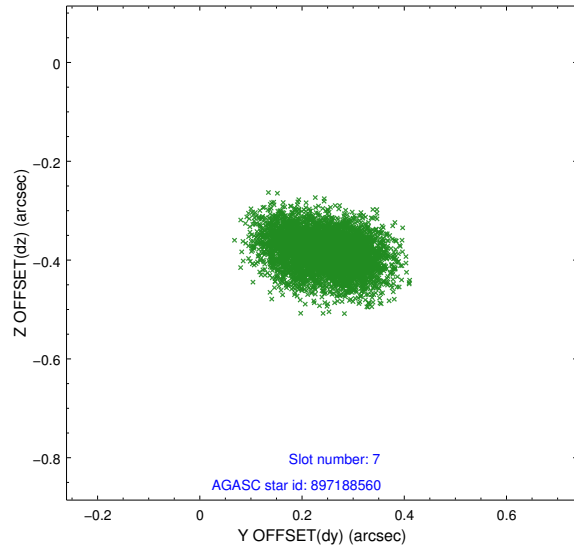


## 2.4.4 Slot 6



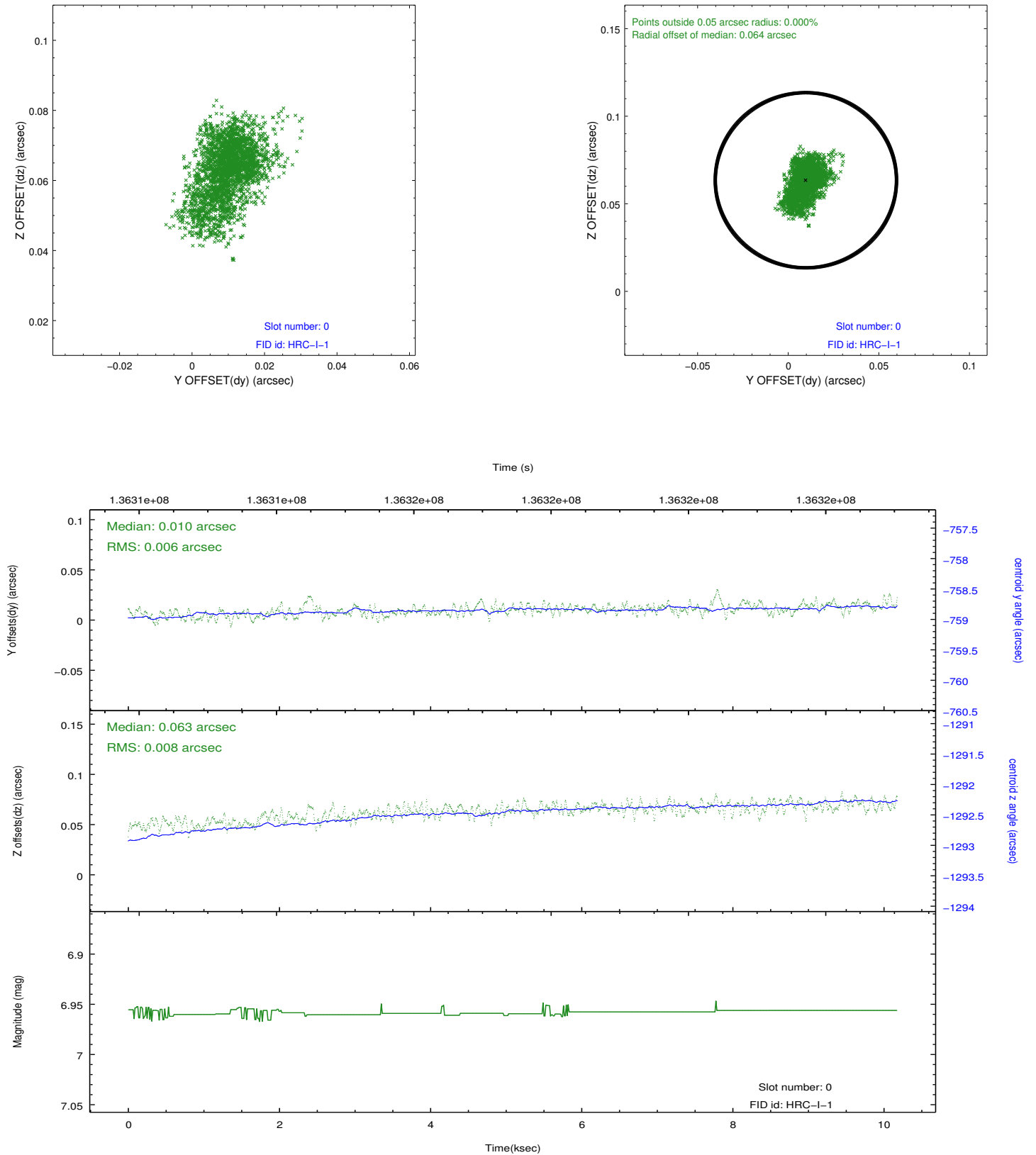


## 2.4.5 Slot 7

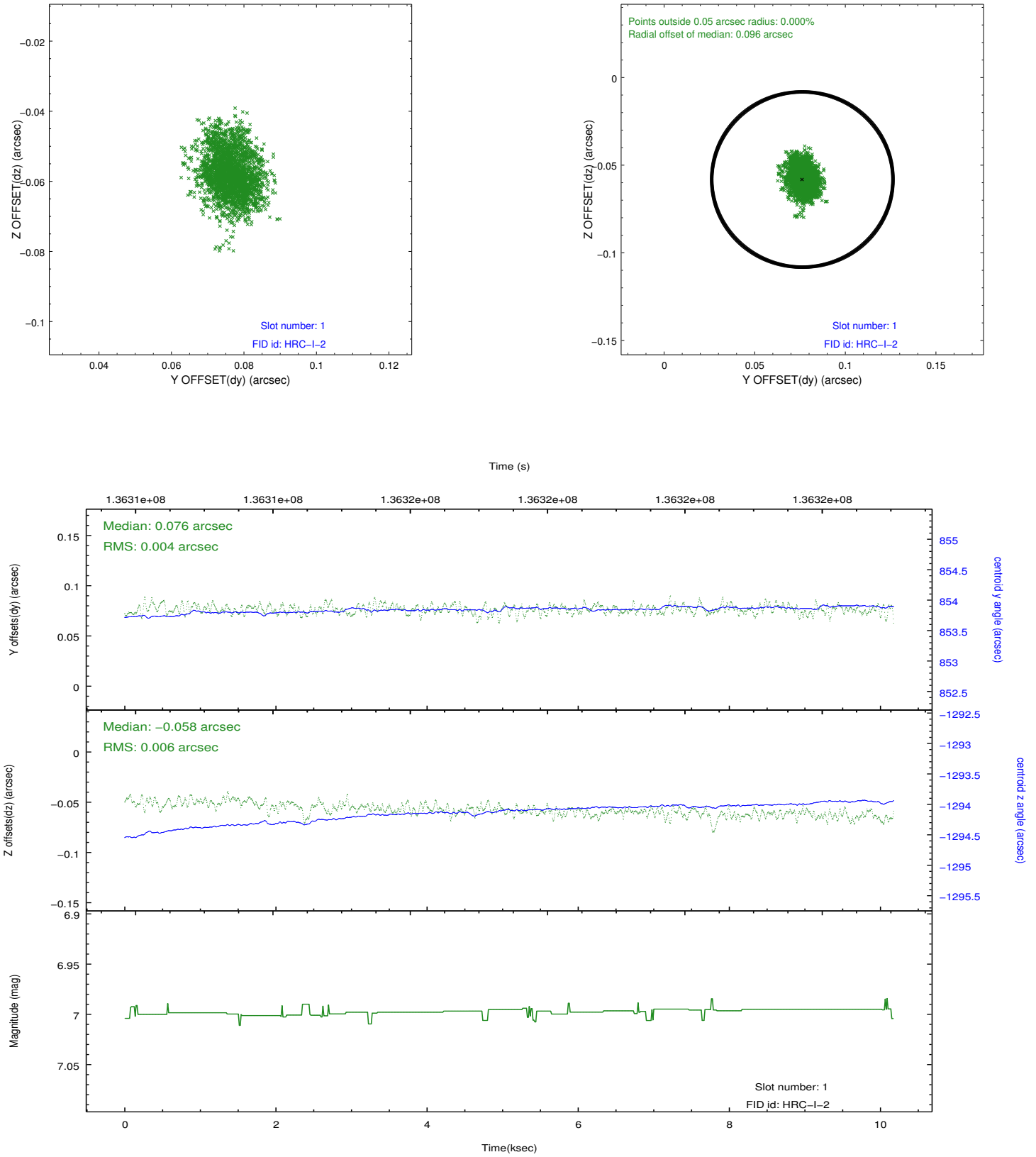


## 2.5 FID Slots

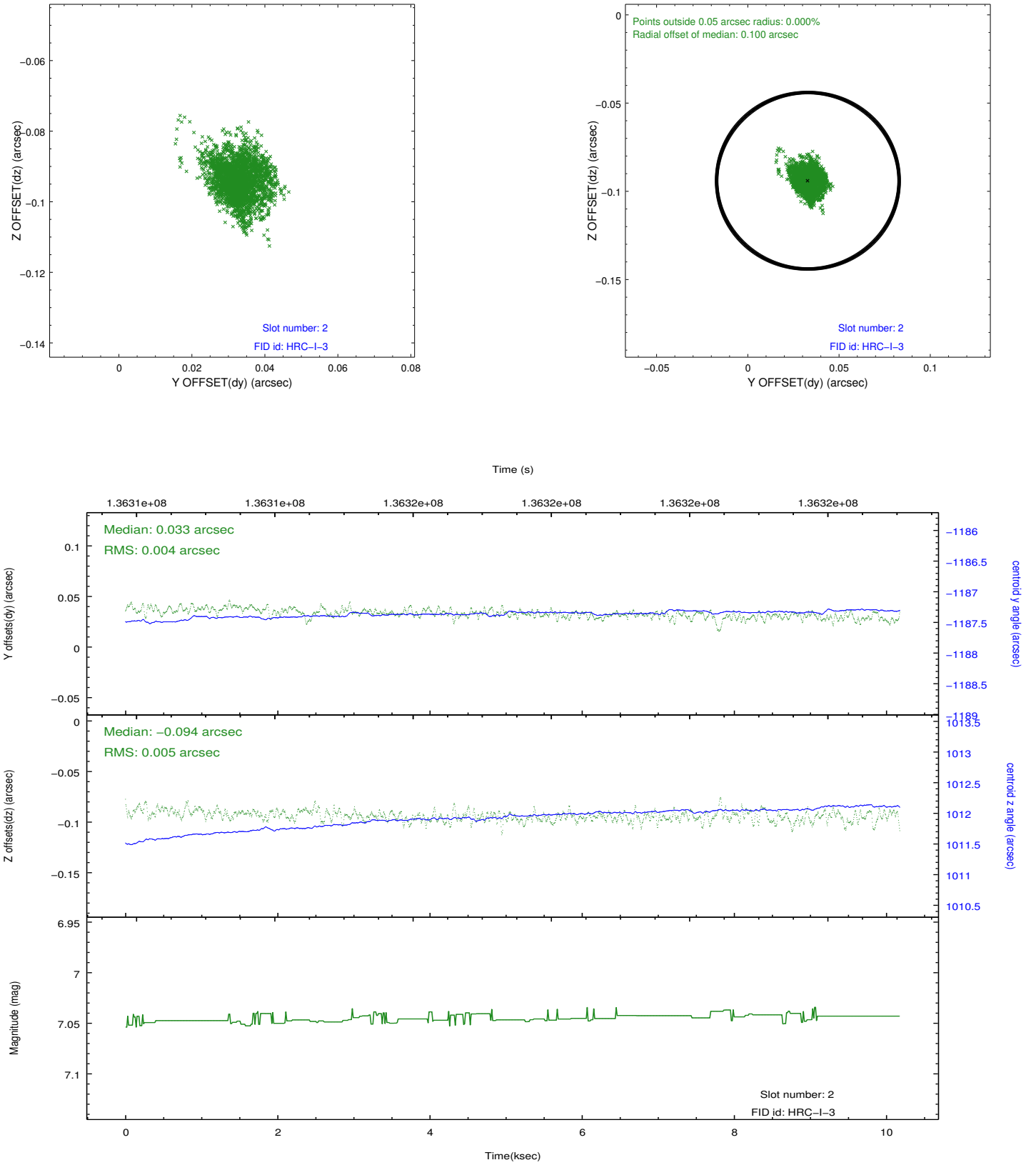
### 2.5.1 Slot 0



## 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)      | 2012.10.12    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 9.981         |

### A.2 Comments