

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 20741 - L2 Version 1  
Chandra X-Ray Center

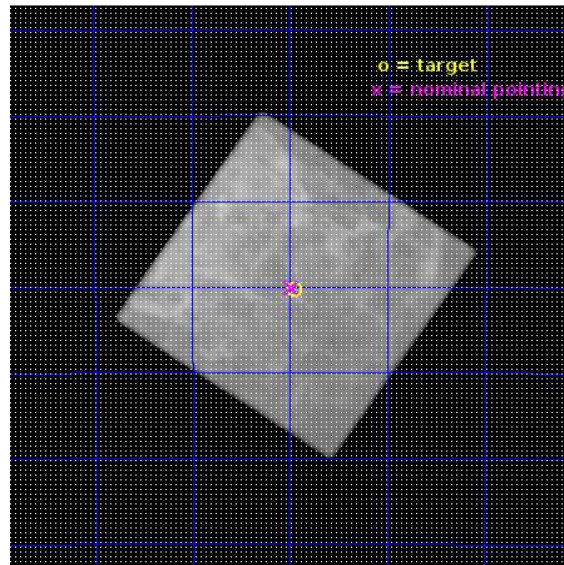
L2 Processing Date : Feb 2 2019

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# 1 Front

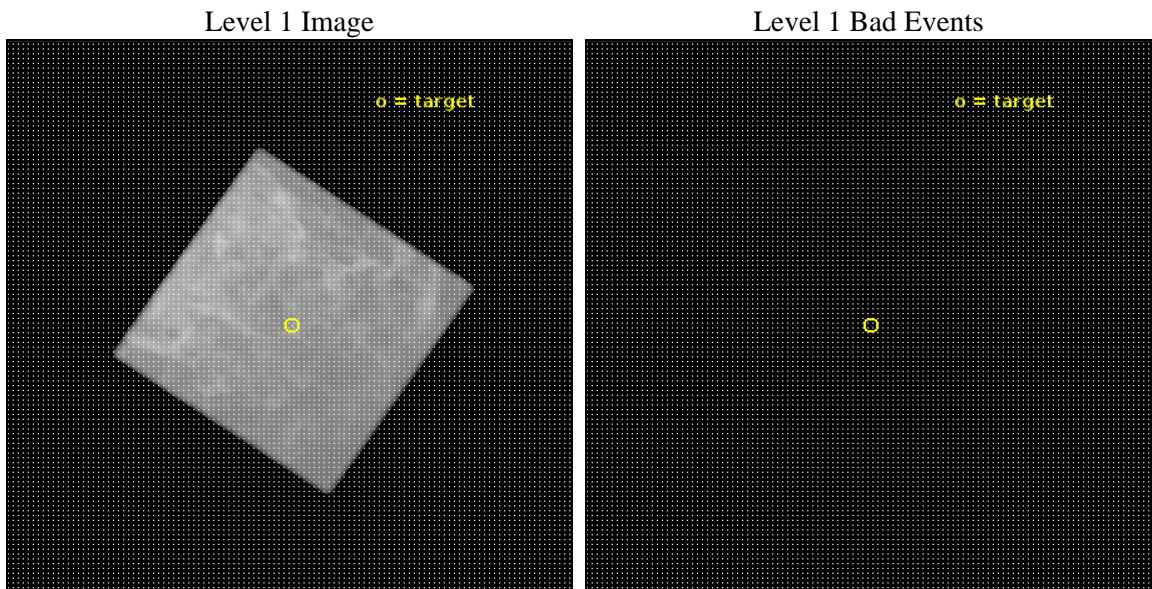
|          |  |                                       |
|----------|--|---------------------------------------|
| seq_num  | 503035   | Sequence number                       |
| obs_id   | 20741  | Observation id                        |
| title    | The Proper Motion of RX J0822-4300 in Puppis A | Proposal title                        |
| observer | Ralph Kraft                                    | Principal investigator                |
| object   | RX J0822-4300                                  | Source name                           |
| ra_targ  | 125.489583                                     | Observer's specified target RA [deg]  |
| dec_targ | -43.004361                                     | Observer's specified target Dec [deg] |
| ra_nom   | 125.49636836778                                | Nominal RA [deg]                      |
| dec_nom  | -43.001995074983                               | Nominal Dec [deg]                     |
| roll_nom | 349.08644211332                                | Nominal Roll [deg]                    |
| revision | 1  | Processing version of data            |
| ontime   | 40175.133650899                                | [s]                                   |
| livetime | 19790.452063086                                | Ontime multiplied by DTCOR            |
| l2events | 6805995  | 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 | 40000.000000    | [s] Scheduled observation exposure time |
| ascdsver | 10.7.1              | Processing system revision     | ontime         | 40175.133650899 | [s]                                     |
| caldbver | 4.8.2               | &#160                          | l1events       | 7518034         | Number of level 1 events                |
| date     | 2019-02-02T23:56:04 | Date and time of file creation |                |                 |   |
| revision | 1                   | Processing version of data     |                |                 |   |

### 2.1.3 Events

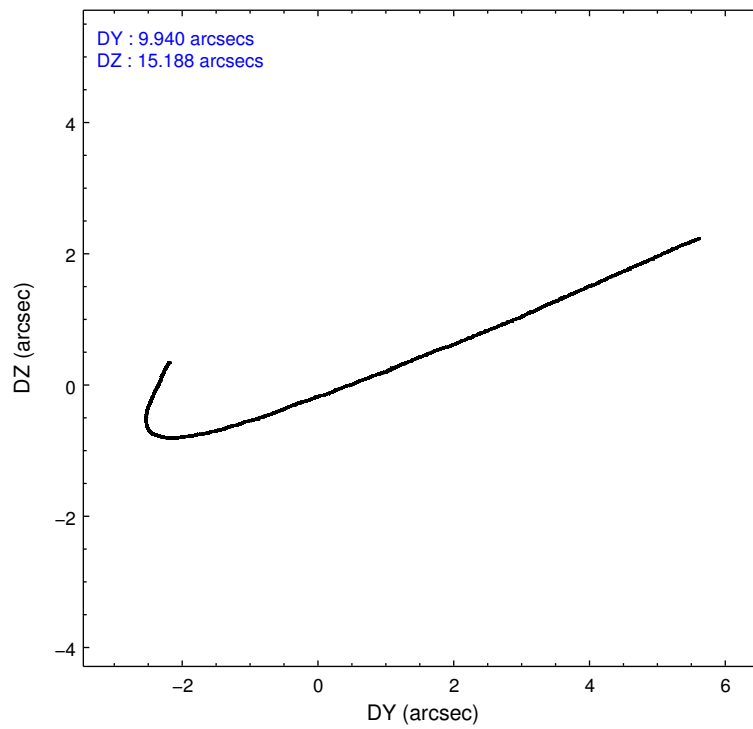
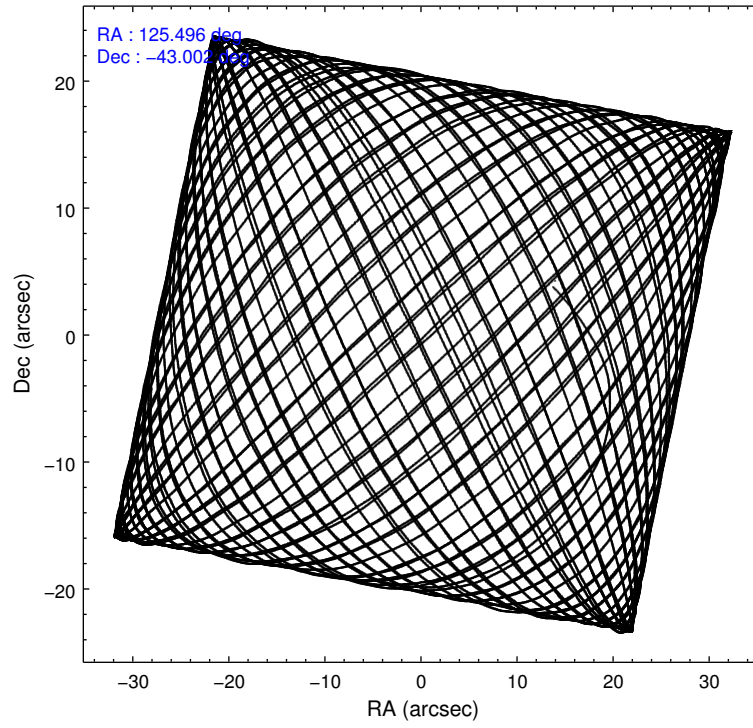
#### Level 1 Events

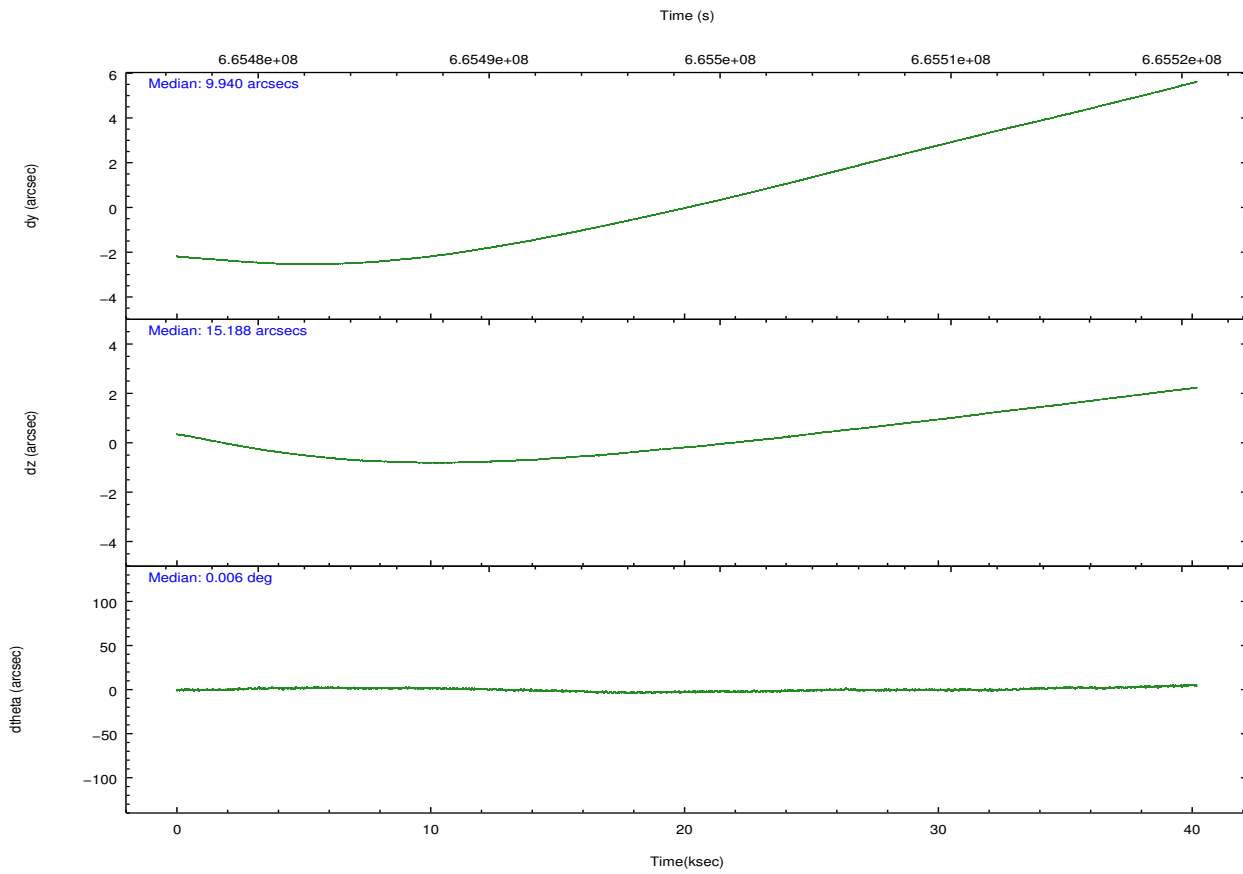
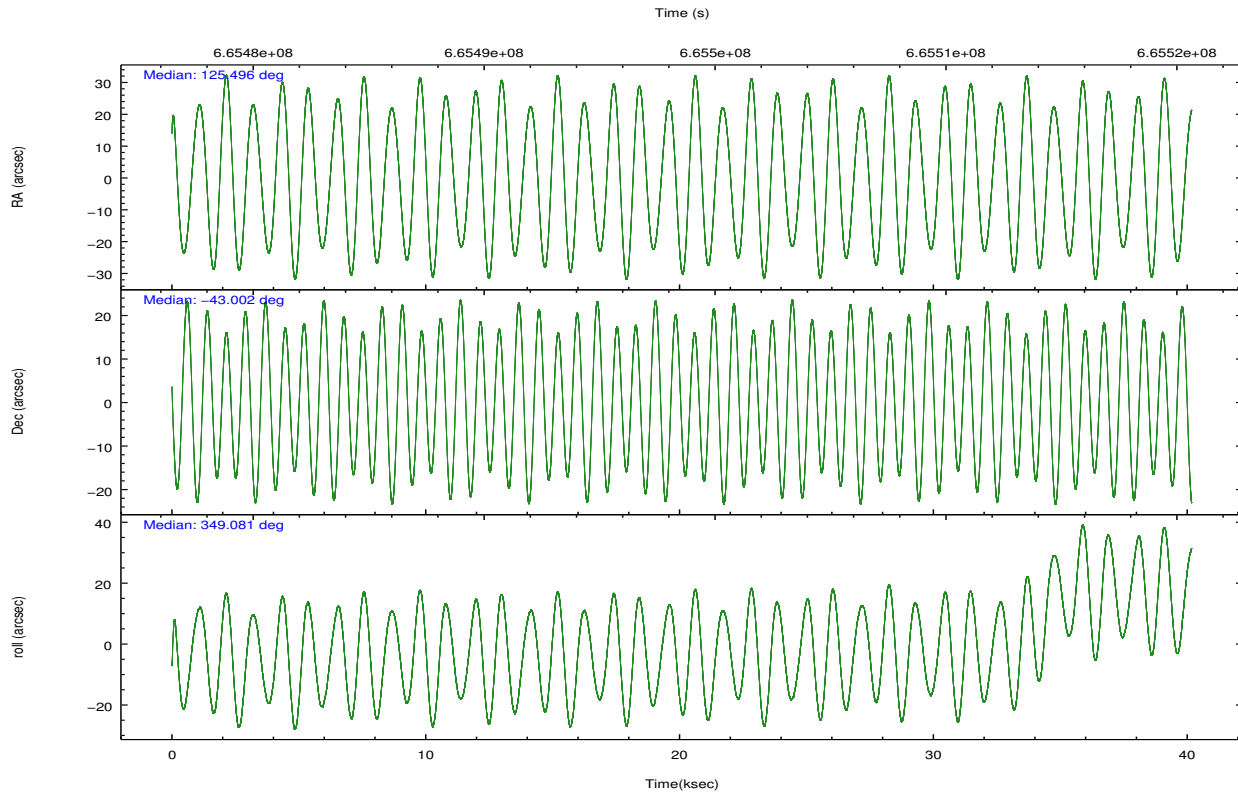
|                 | <b>segment<br/>0</b> |
|-----------------|----------------------|
| level 1 events  | 7518034              |
| rejected events | 110133               |
| rejected %      | 1%                   |

## 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                 | 125.461375          | 125.4963683677827    |                              |           |         |
| [deg] Pointing Dec                | -43.011482          | -43.00199507498298   |                              |           |         |
| [deg] Pointing Roll               | 349.158064          | 349.0864421133169    |                              |           |         |
| [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)  | 665478636.184000    | 665477720.59124      |                              |           |         |
| Observation start date            | 2019-02-02T07:09:27 | 2019-02-02T06:55:20  |                              |           |         |
| [s] Observation end time (MET)    | 665518636.184000    | 665519459.61874      |                              |           |         |
| Observation end date              | 2019-02-02T18:16:07 | 2019-02-02T18:30:59  |                              |           |         |

## 2.3 Aspect





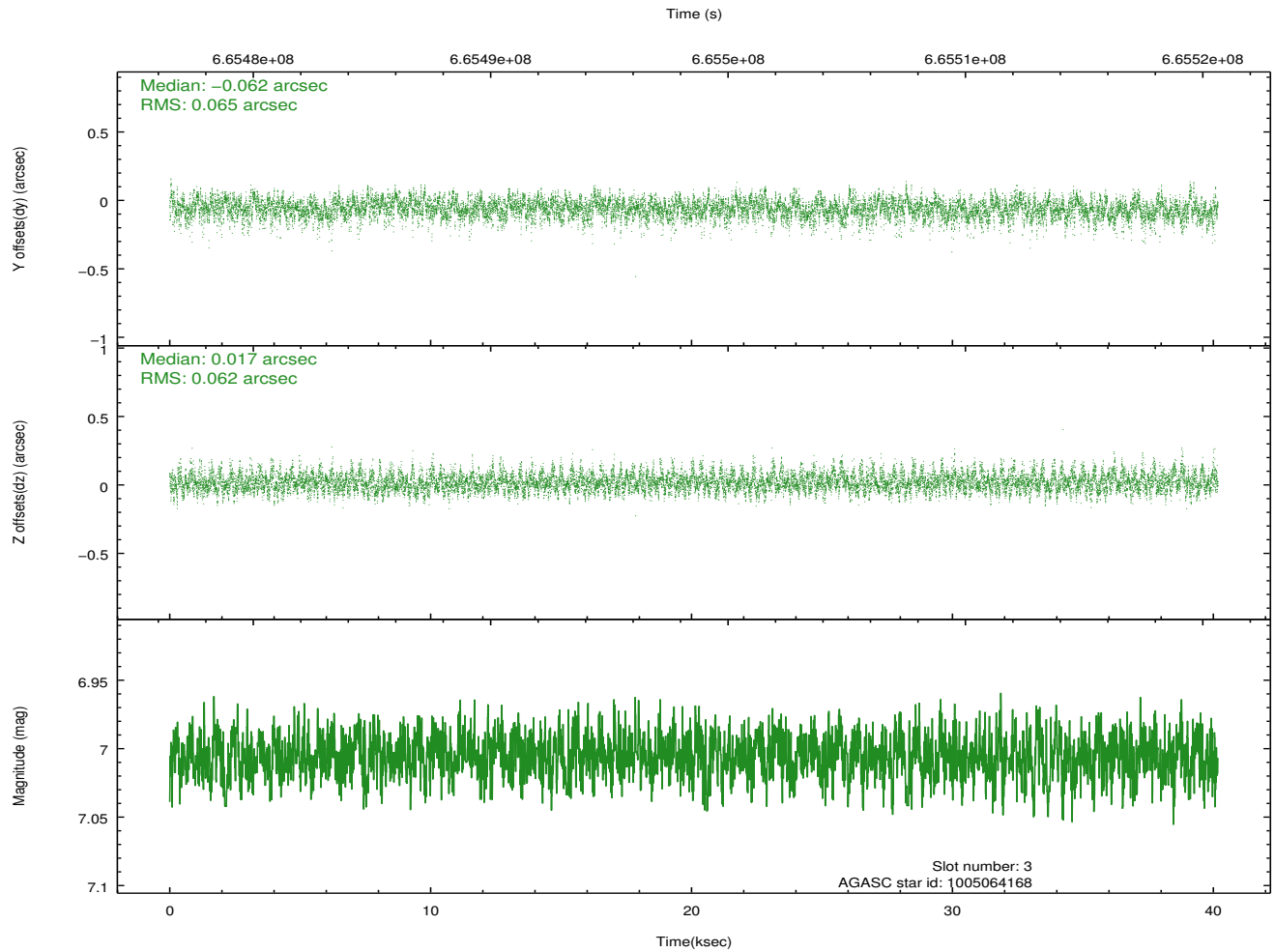
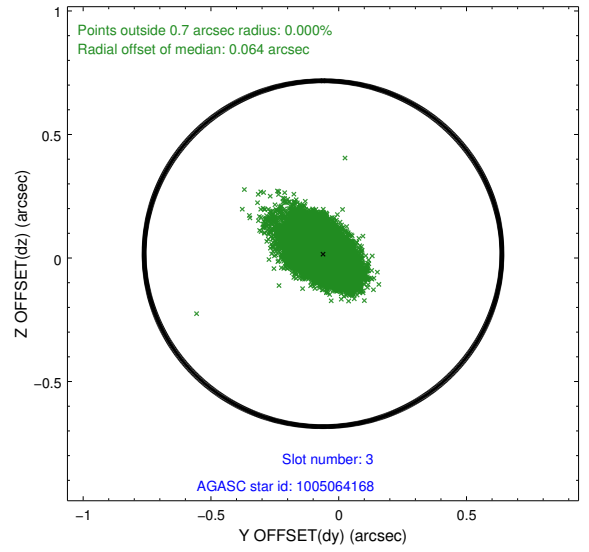
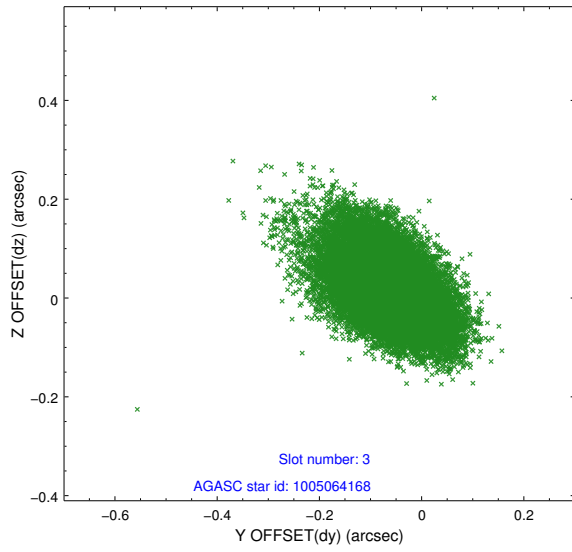
### Slot Statistics

| slot | status | used | id         | mag  | n_pts | frac_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec        | mean_y   | mea   |
|------|--------|------|------------|------|-------|----------|--------|--------|-------|-------|------------|------------|----------|-------|
| 0    | FID    |      | HRC-I-1    | 7.06 | 9799  | 1.000    | -0.224 | -0.053 | 0.062 | 0.114 | 0.000000   | 0.000000   | -766.28  | -1303 |
| 1    | FID    |      | HRC-I-2    | 7.07 | 9800  | 1.000    | 0.383  | -0.121 | 0.062 | 0.132 | 0.000000   | 0.000000   | 846.91   | -1305 |
| 2    | FID    |      | HRC-I-3    | 7.14 | 9799  | 1.000    | -0.044 | 0.082  | 0.017 | 0.025 | 0.000000   | 0.000000   | -1194.60 | 1000  |
| 3    | GUIDE  | used | 1005064168 | 7.01 | 19597 | 1.000    | -0.062 | 0.017  | 0.093 | 0.159 | 124.723843 | -42.526737 | -2248.33 | 1337  |
| 4    | GUIDE  | used | 1005065848 | 7.58 | 19594 | 1.000    | -0.069 | -0.053 | 0.085 | 0.150 | 124.947854 | -42.722303 | -1529.10 | 763   |
| 5    | GUIDE  | used | 1005723560 | 8.45 | 19591 | 1.000    | 0.038  | -0.156 | 0.118 | 0.200 | 126.279097 | -43.364629 | 2343.34  | -855  |
| 6    | GUIDE  | used | 1005724040 | 7.55 | 19593 | 1.000    | 0.101  | 0.008  | 0.105 | 0.172 | 125.738175 | -43.227880 | 860.35   | -629  |
| 7    | GUIDE  | used | 1005726872 | 7.35 | 19596 | 1.000    | -0.010 | 0.183  | 0.098 | 0.160 | 125.535449 | -43.662820 | 631.05   | -2265 |

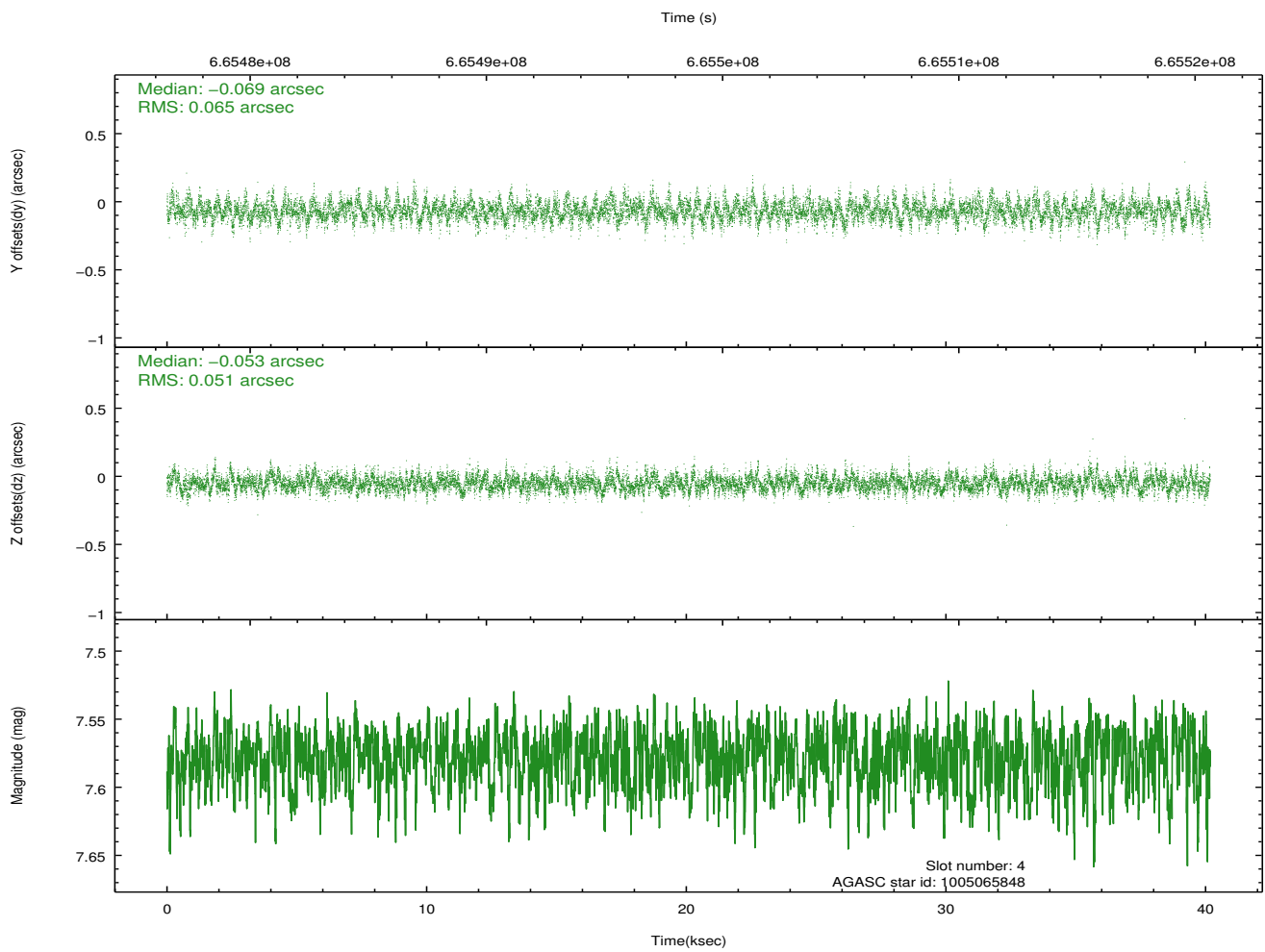
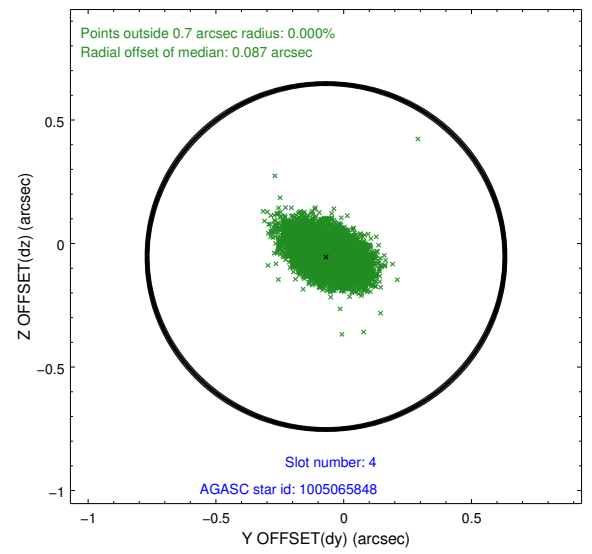
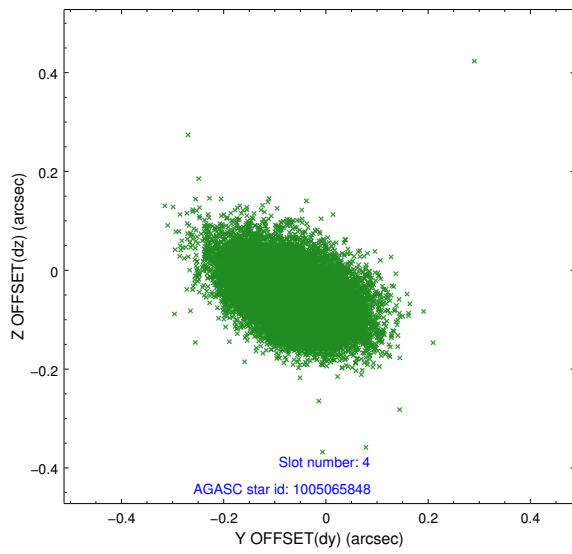
∞

## 2.4 Star Slots

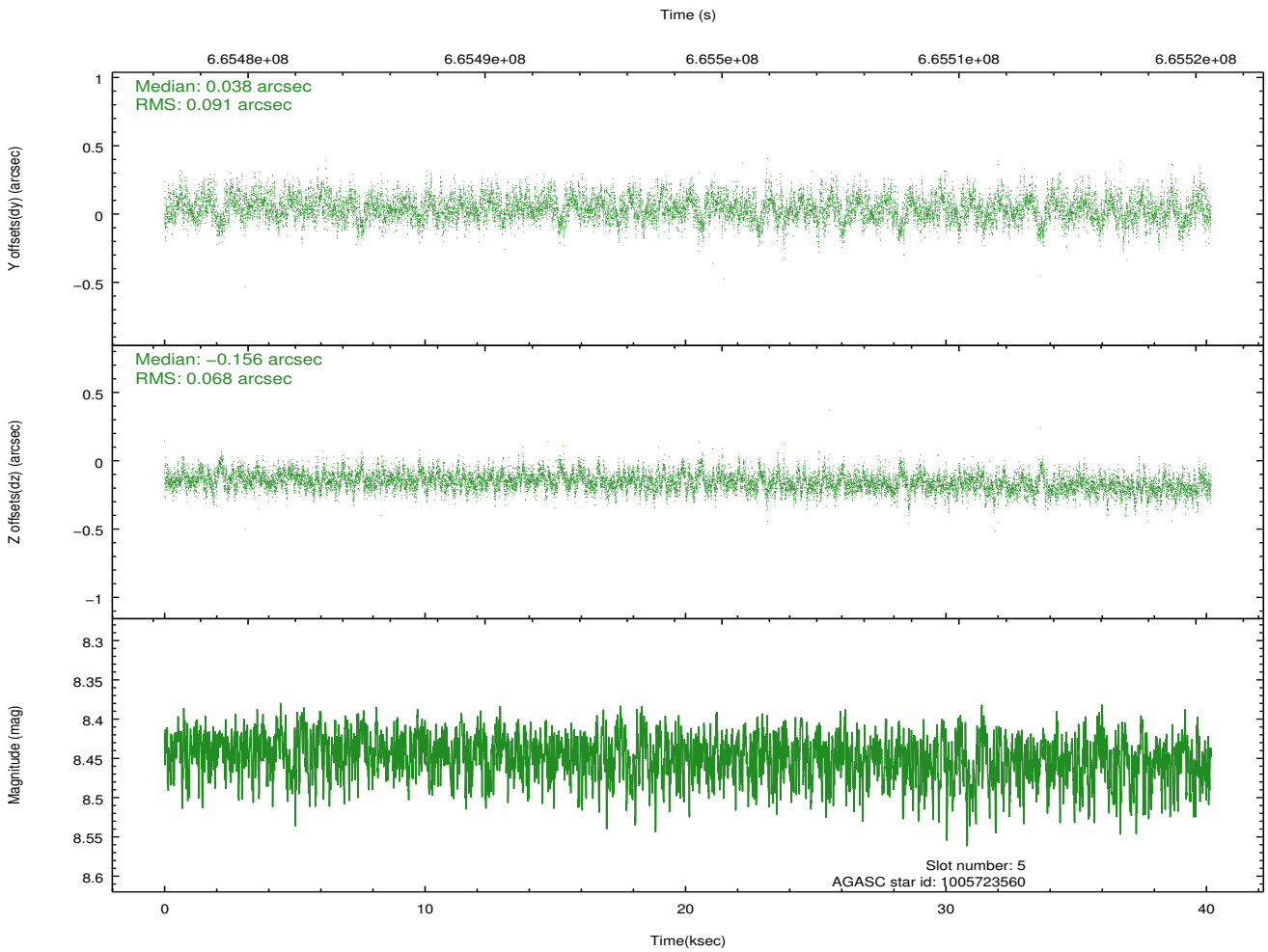
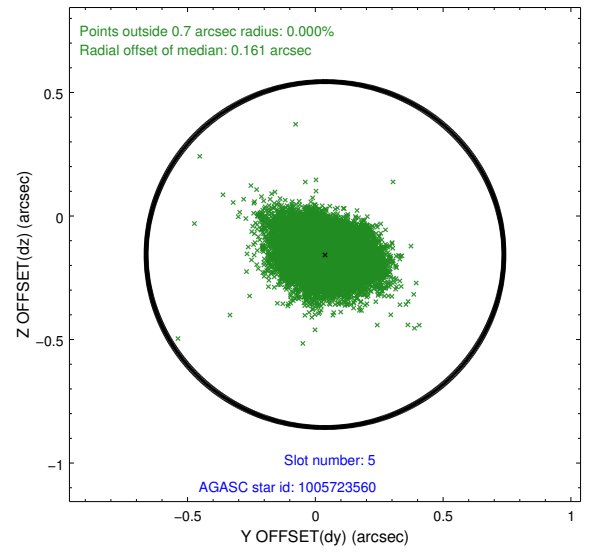
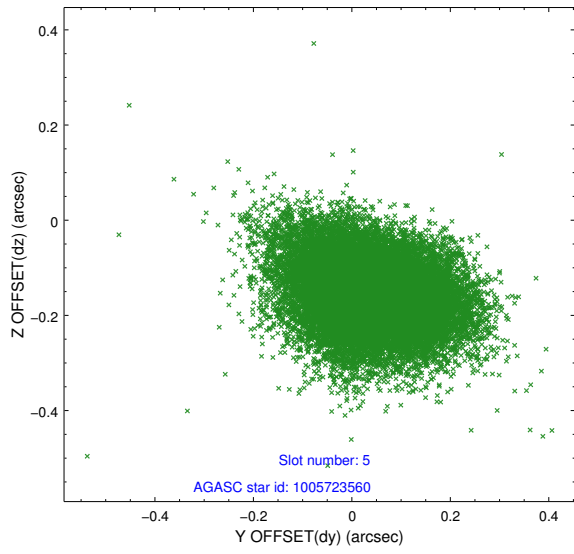
### 2.4.1 Slot 3



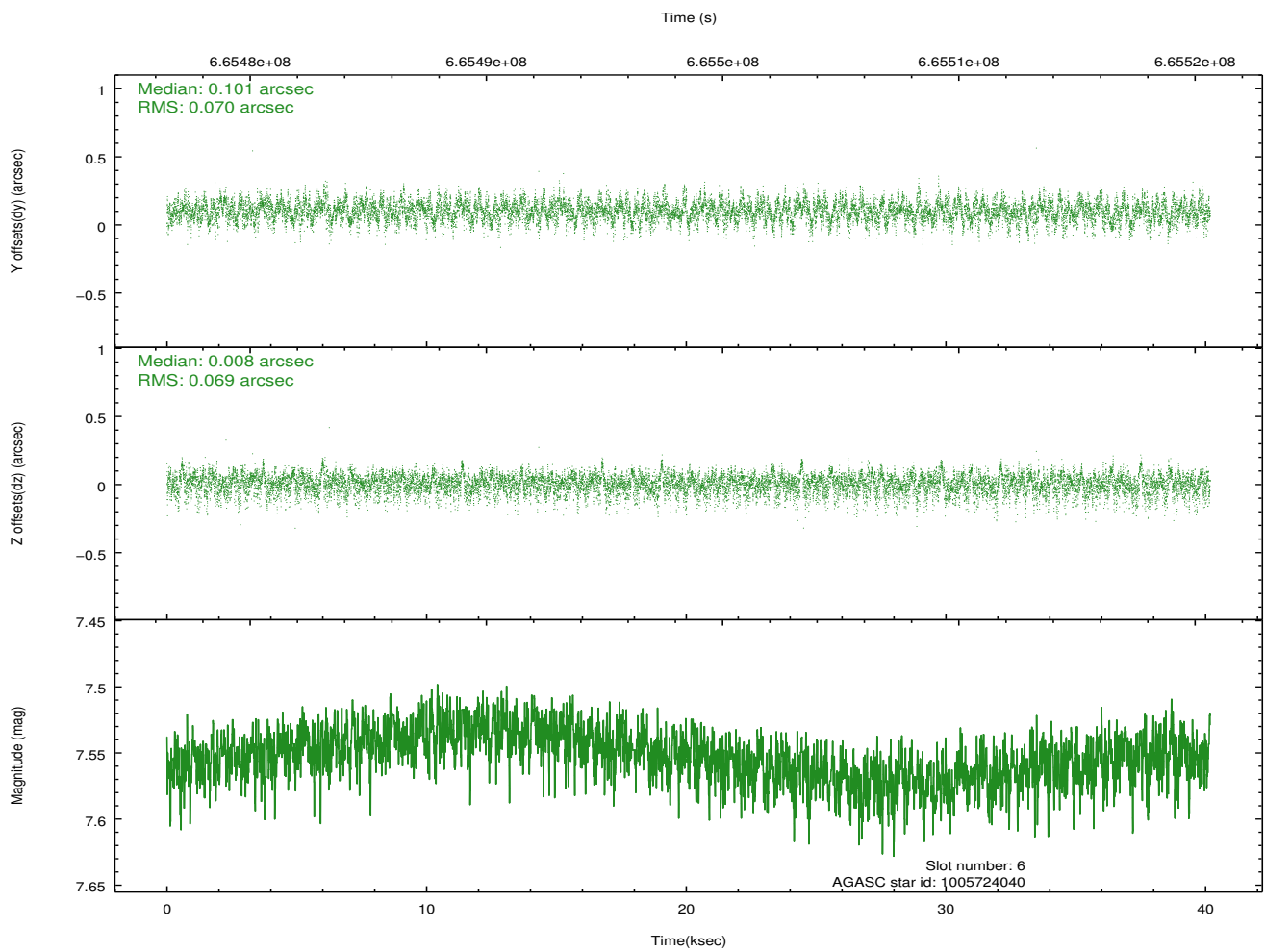
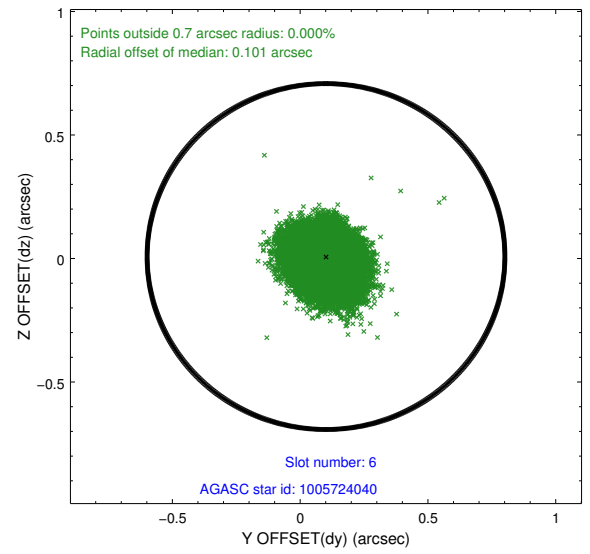
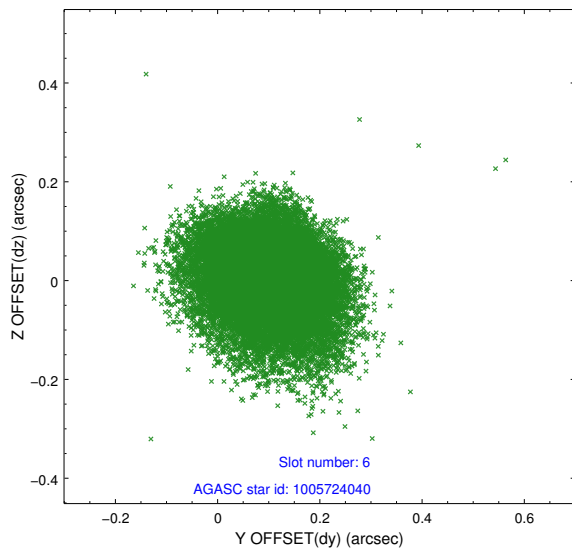
## 2.4.2 Slot 4



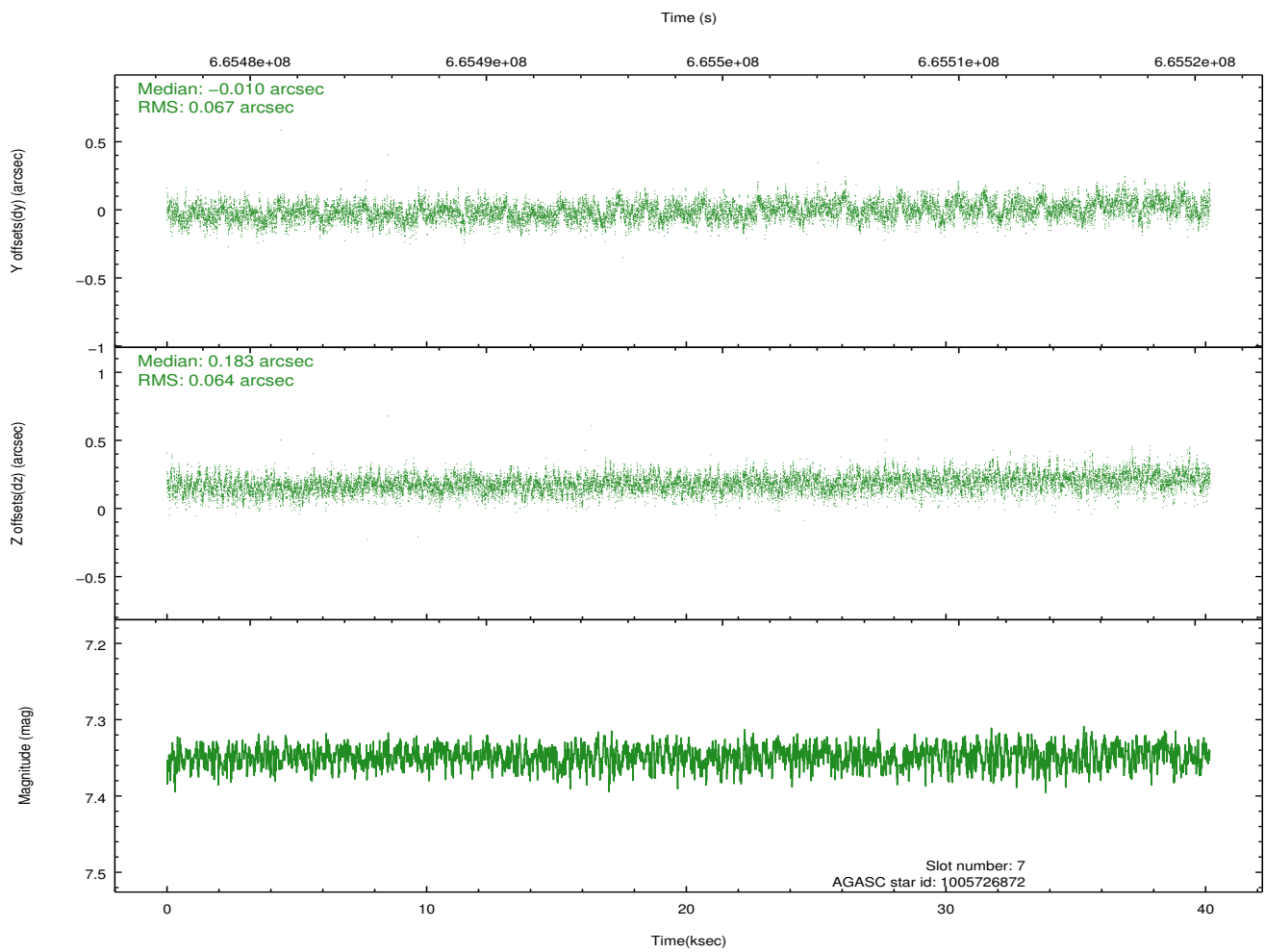
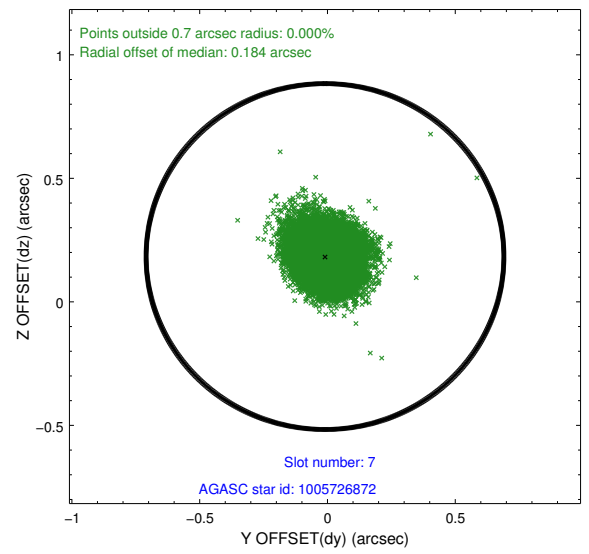
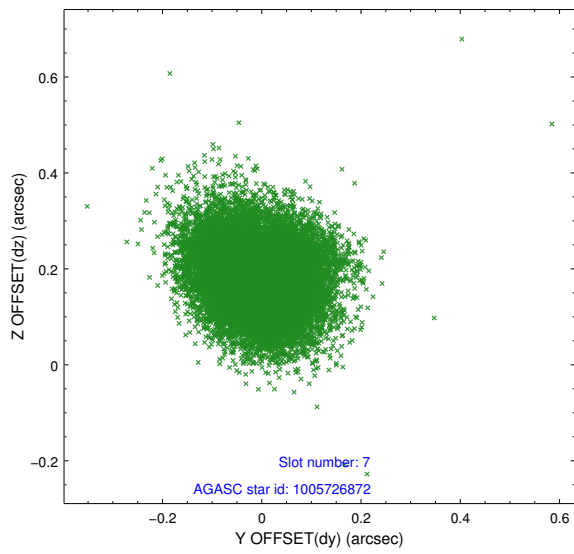
### 2.4.3 Slot 5



## 2.4.4 Slot 6

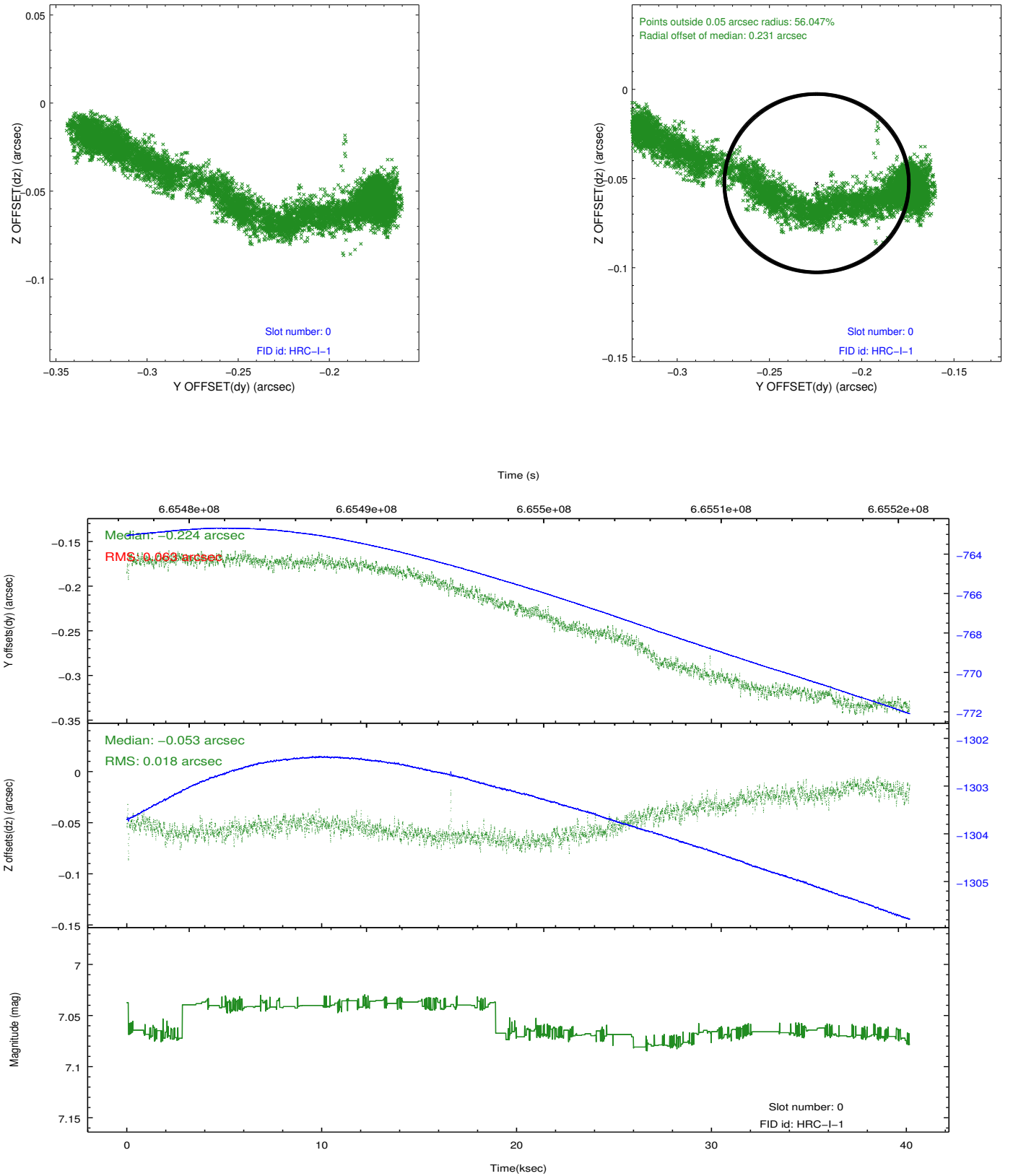


## 2.4.5 Slot 7

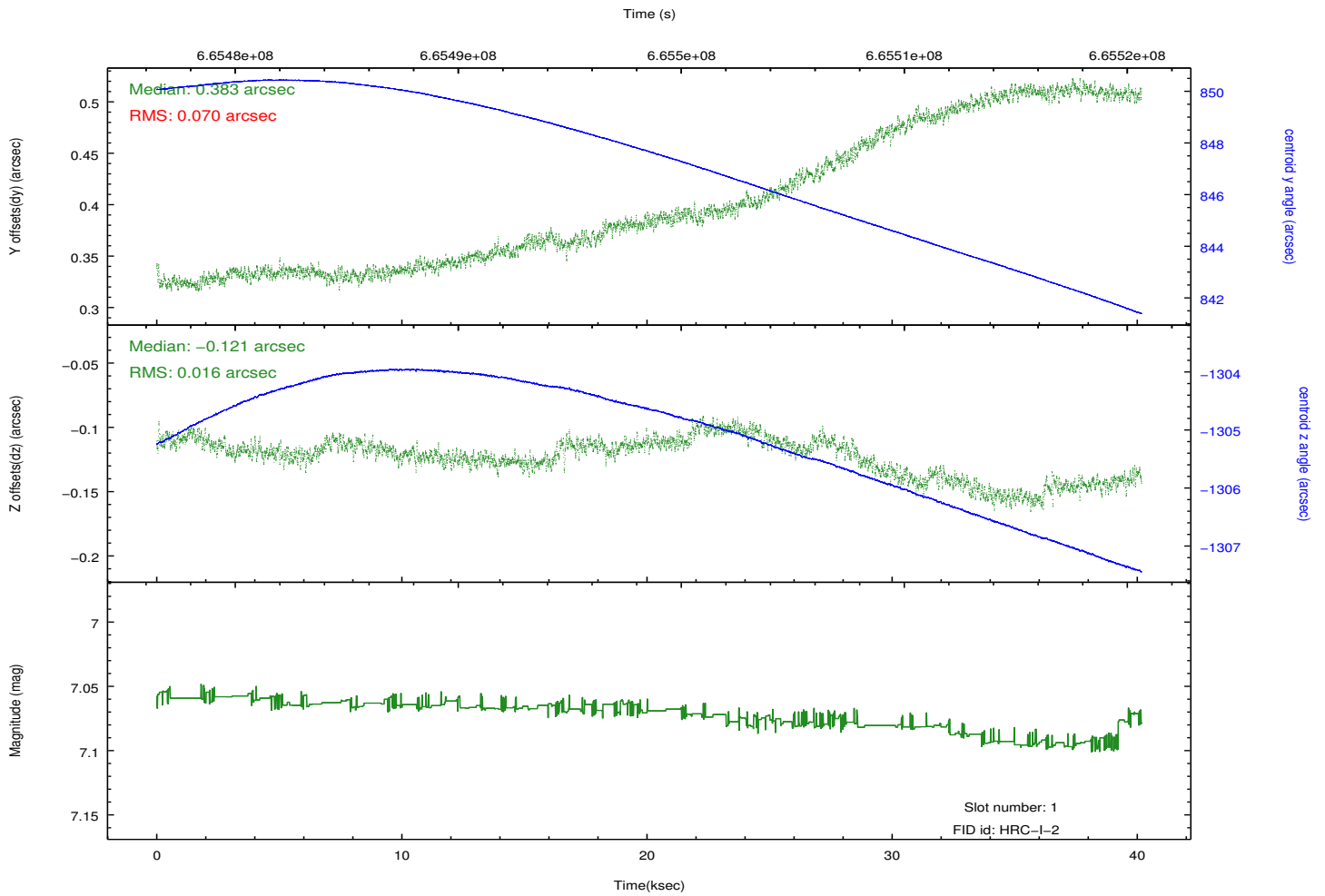
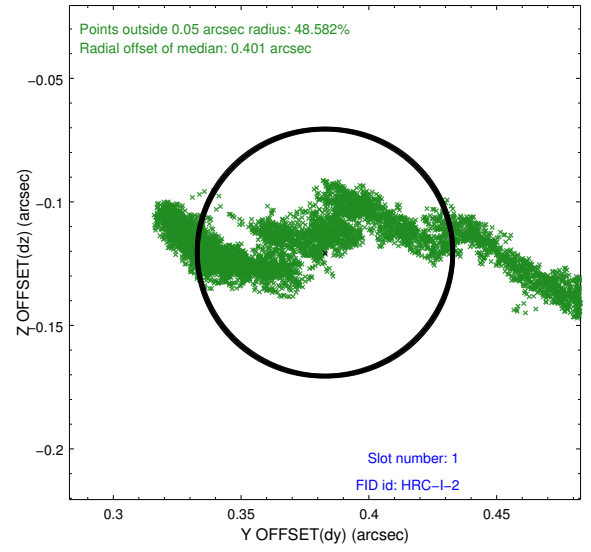
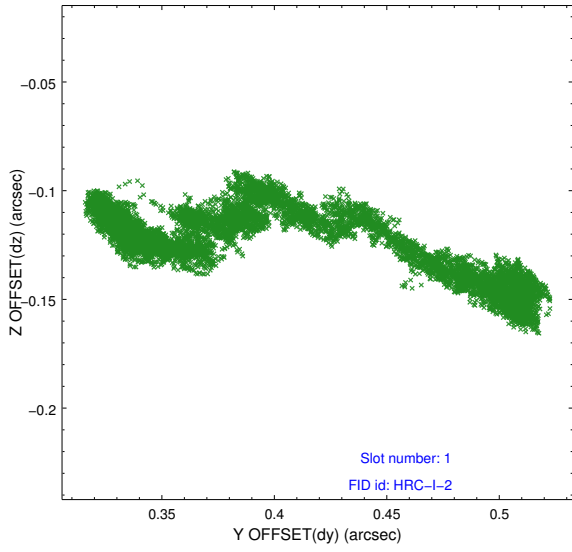


## 2.5 FID Slots

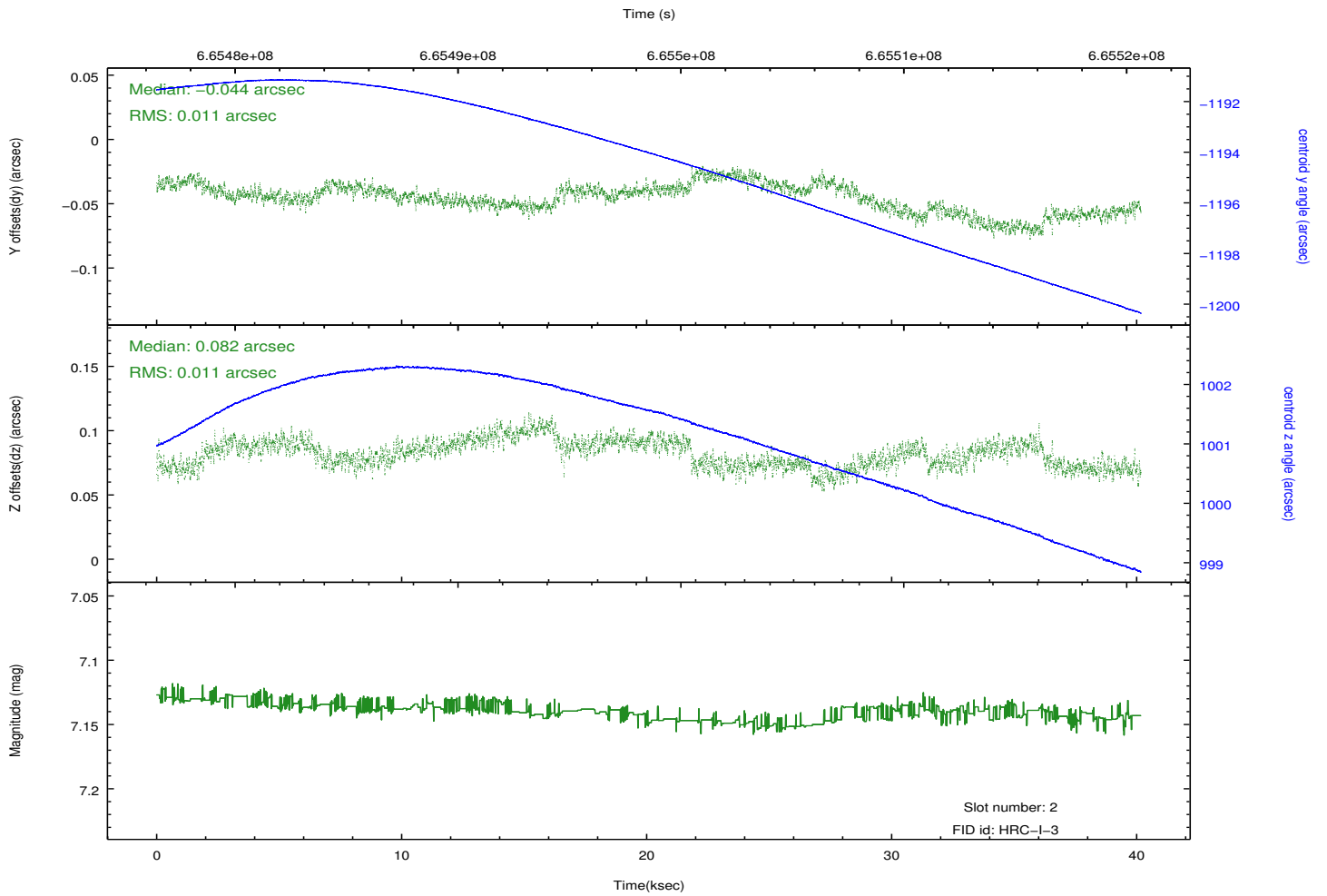
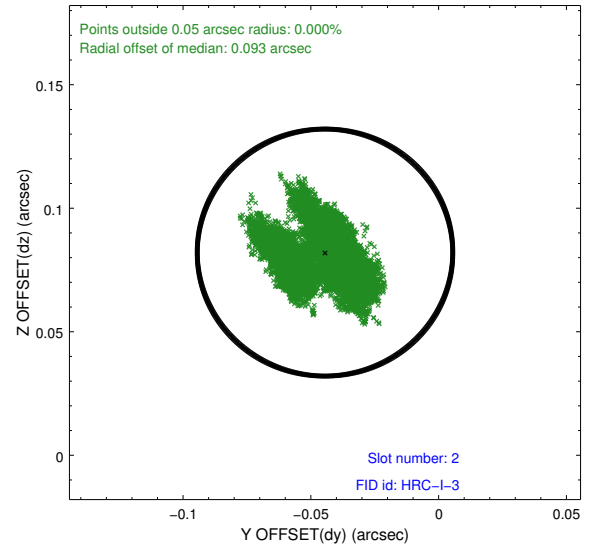
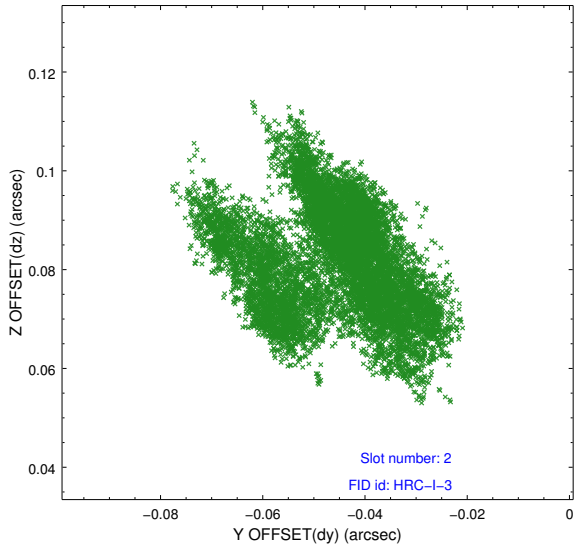
### 2.5.1 Slot 0



## 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)      | 2019.02.04      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 40.175133650899 |

## A.2 Comments