

# V&V Reference Report

## L2 ASCDS Version : 8.2.1

Observation 1142 - L2 Version 4

Chandra X-Ray Center

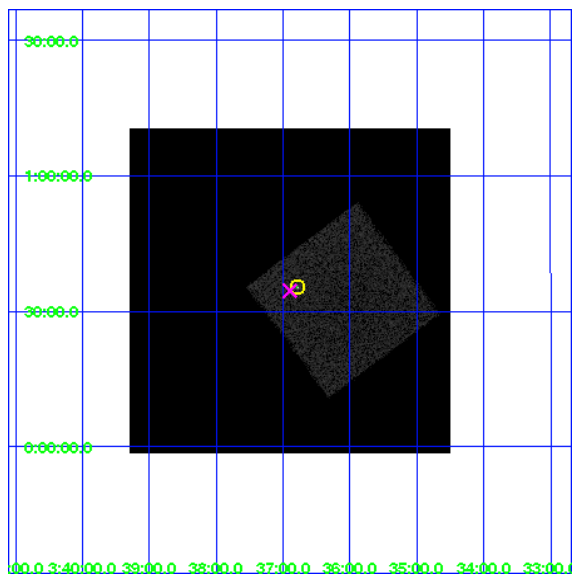
L2 Processing Date : Jan 12 2010

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# 1 Front

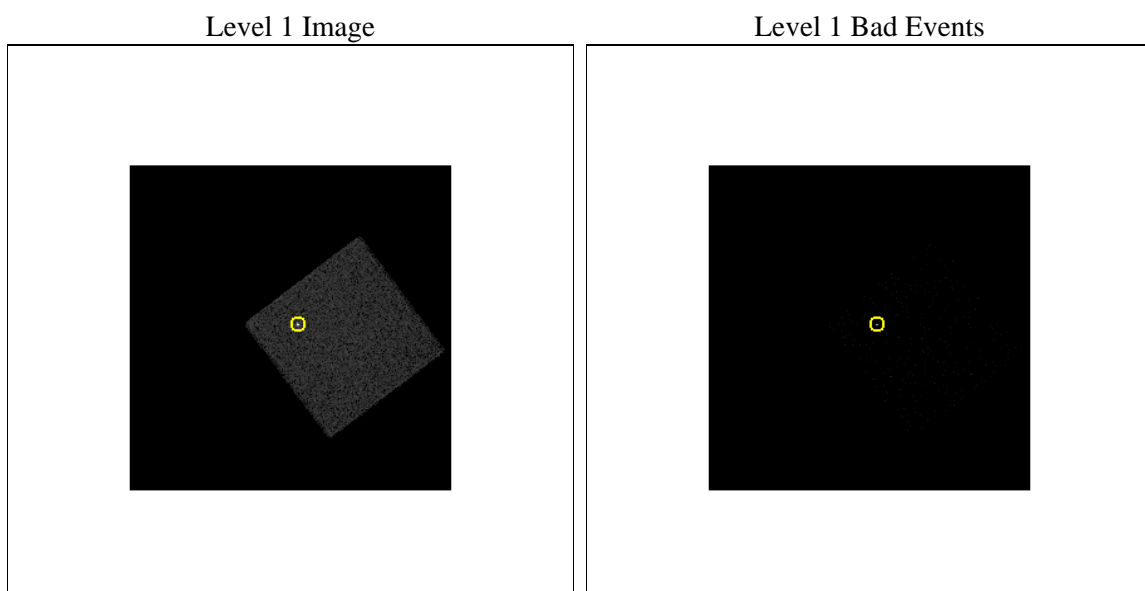
|          |                     |                                 |
|----------|---------------------|---------------------------------|
| seq_num  | 280092              | Sequence number                 |
| obs_id   | 1142                | Observation id                  |
| title    | &#160               | Proposal title                  |
| observer | Dr. CXC Calibration | Principal investigator          |
| object   | HR1099              | Source name                     |
| ra_targ  | 54.197083           | Observer's specified target RA  |
| dec_targ | 0.589972            | Observer's specified target Dec |
| ra_nom   | 54.224726549117     | Nominal RA                      |
| dec_nom  | 0.57585313942493    | Nominal Dec                     |
| roll_nom | 98.079226178513     | Nominal Roll                    |
| revision | 4                   | Processing version of data      |
| ontime   | 793.606278494       | [s]                             |
| livetime | 787.0192807211      | Ontime multiplied by DTCOR      |
| l2events | 34168               | 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 | 1000.000000   | Scheduled observation exposure time |
| ascdsver | 8.2.1               | Processing system revision     | ontime         | 793.606278494 | [s]                                 |
| caldbver | 4.1.5               | &#160                          | l1events       | 55552         | Number of level 1 events            |
| date     | 2010-01-13T00:17:19 | Date and time of file creation |                |               |                                     |
| revision | 4                   | Processing version of data     |                |               |                                     |

### 2.1.3 Events

#### Level 1 Events

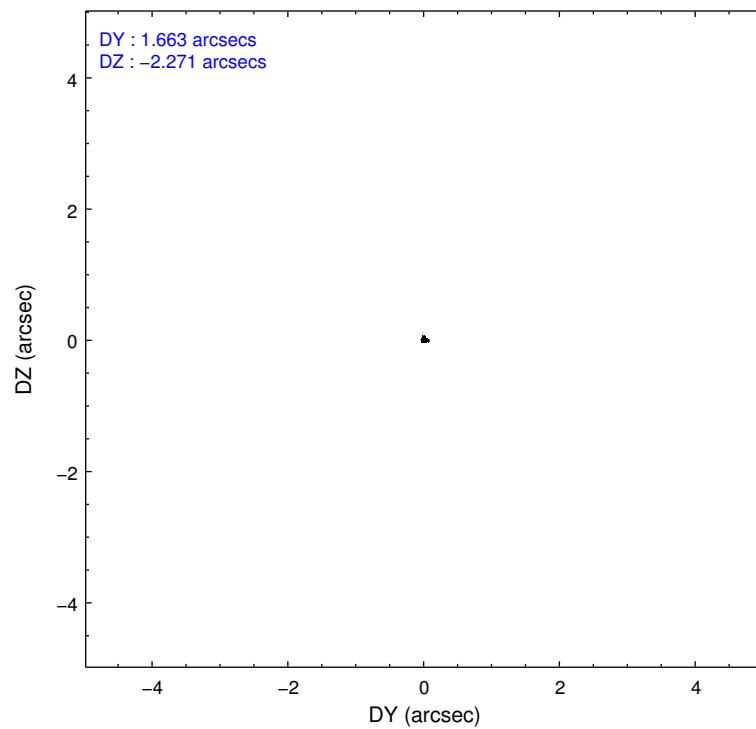
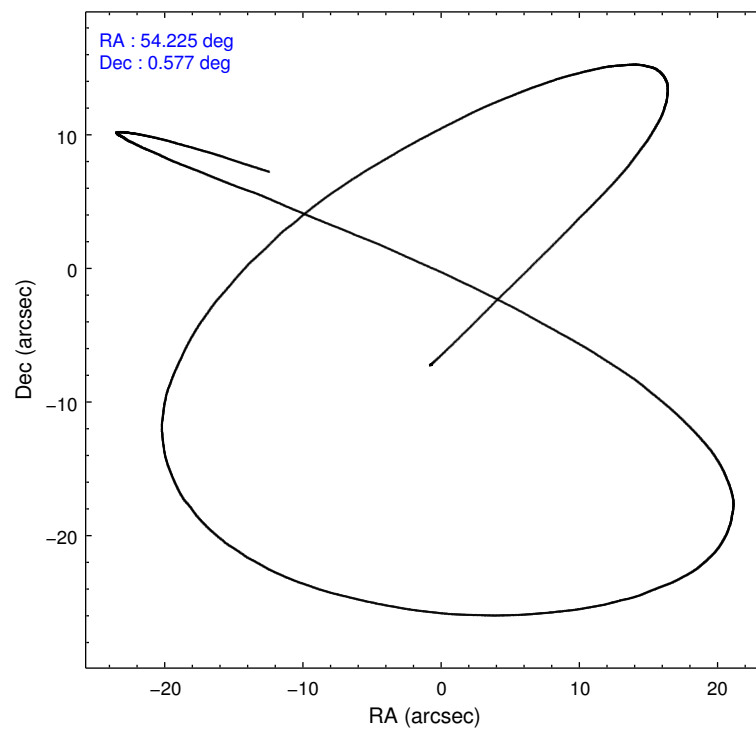
|                 |                      |
|-----------------|----------------------|
|                 | <b>segment<br/>0</b> |
| level 1 events  | 55552                |
| rejected events | 3341                 |
| rejected %      | 6%                   |

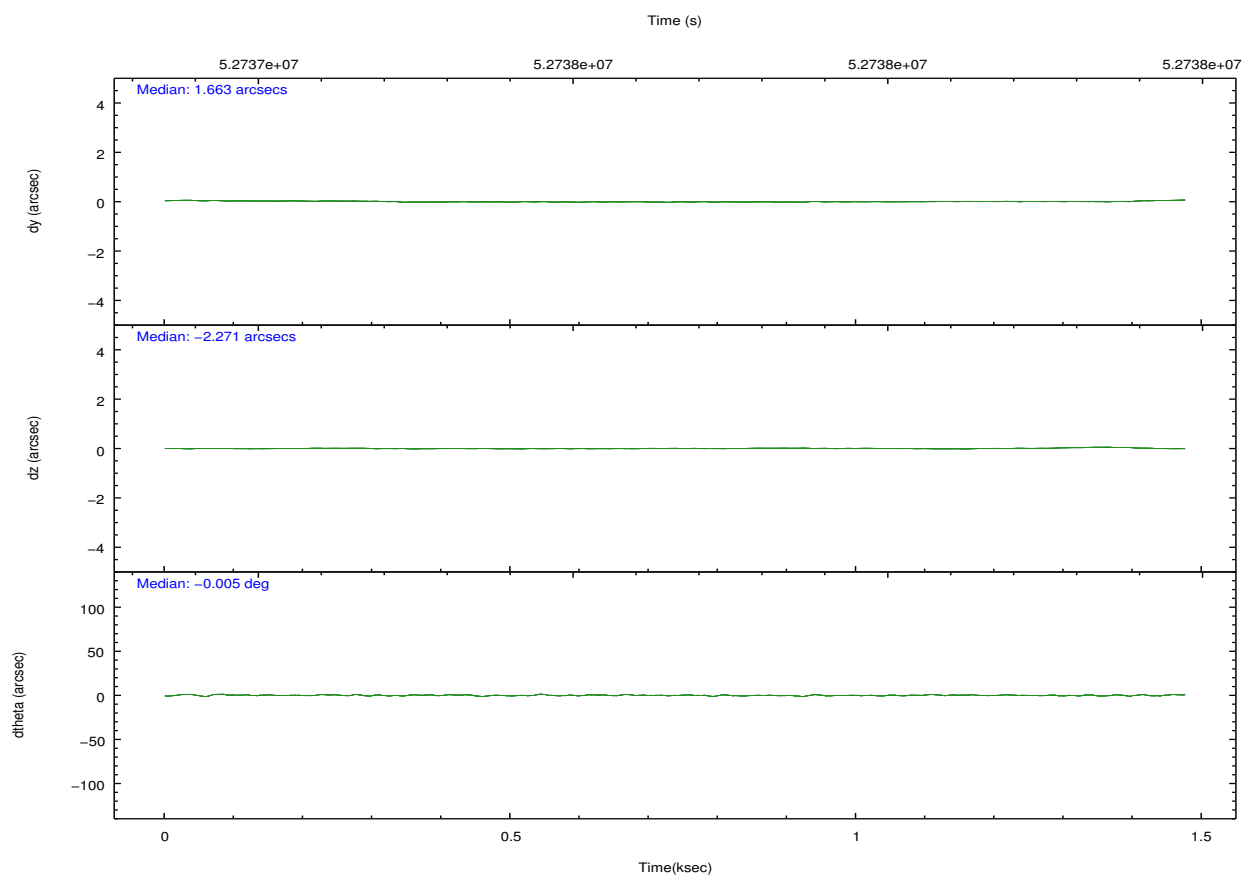
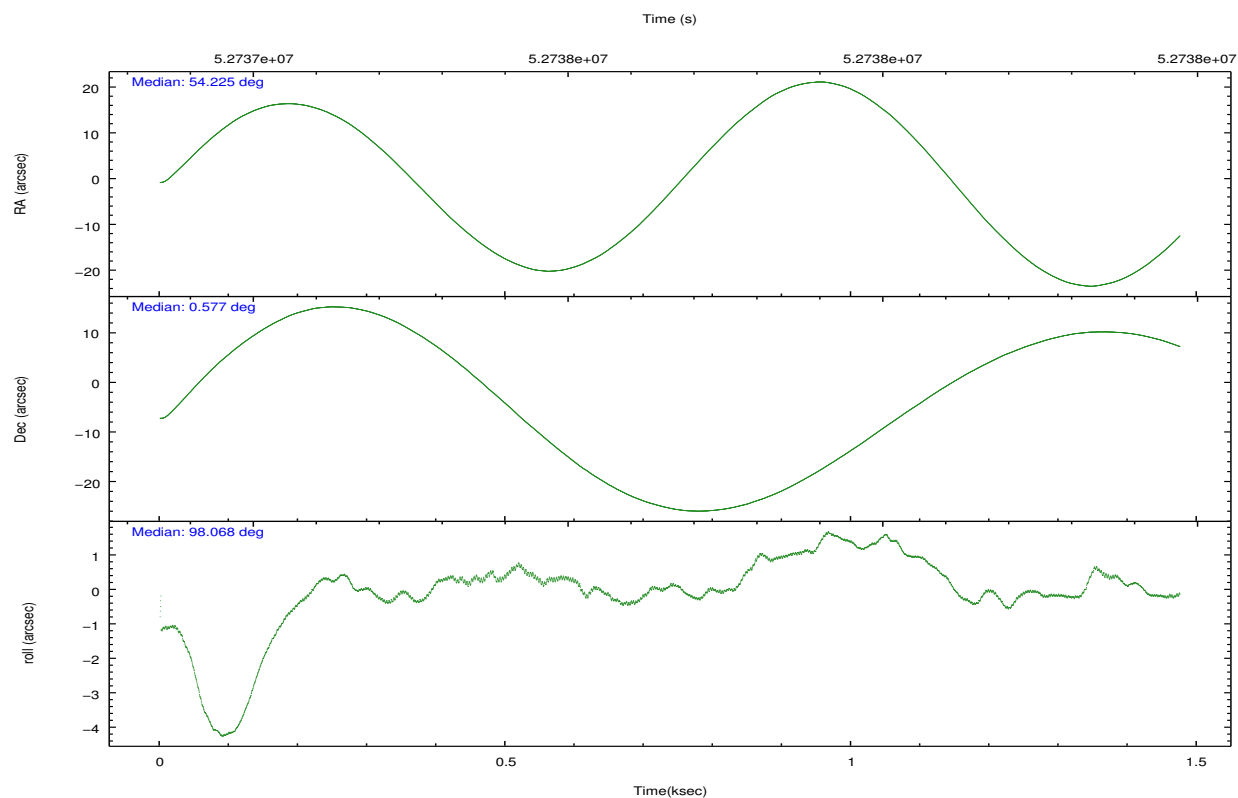
## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual              |
|-----------------------------------|---------------------|---------------------|
| Instrument                        | HRC                 | HRC                 |
| Detector                          | HRC-I               | HRC-I               |
| Grating                           | NONE                | NONE                |
| Data mode                         | OBSERVING           | OBSERVING           |
| Observation mode                  | POINTING            | POINTING            |
| Pointing RA                       | 54.241758           | 54.22472654911662   |
| Pointing Dec                      | 0.553289            | 0.5758531394249279  |
| Pointing Roll                     | 98.174541           | 98.07922617851348   |
| SIM focus pos (mm)                | -1.040293           | -1.300001029371461  |
| SIM defocus (mm)                  | 0                   | -0.259708408712586  |
| SIM translation stage pos (mm)    | 91.869942           | 91.86553817309772   |
| SIM translation stage offset (mm) | 35.115552           | 35.11995071850384   |
| Observation start time            | 52737402.184000     | 52736735.46971      |
| Observation start date            | 1999-09-03T09:15:38 | 1999-09-03T09:05:35 |
| Observation end time              | 52738402.184000     | 52738535.369774     |
| Observation end date              | 1999-09-03T09:32:18 | 1999-09-03T09:35:35 |

| Parameter                    | Planned   | Actual  |
|------------------------------|-----------|---------|
| Obspar format version number | 6         | 6       |
| Obspar file type             | PREDICTED | ACTUAL  |
| Obspar update status         | NONE      | UPDATED |

## 2.3 Aspect





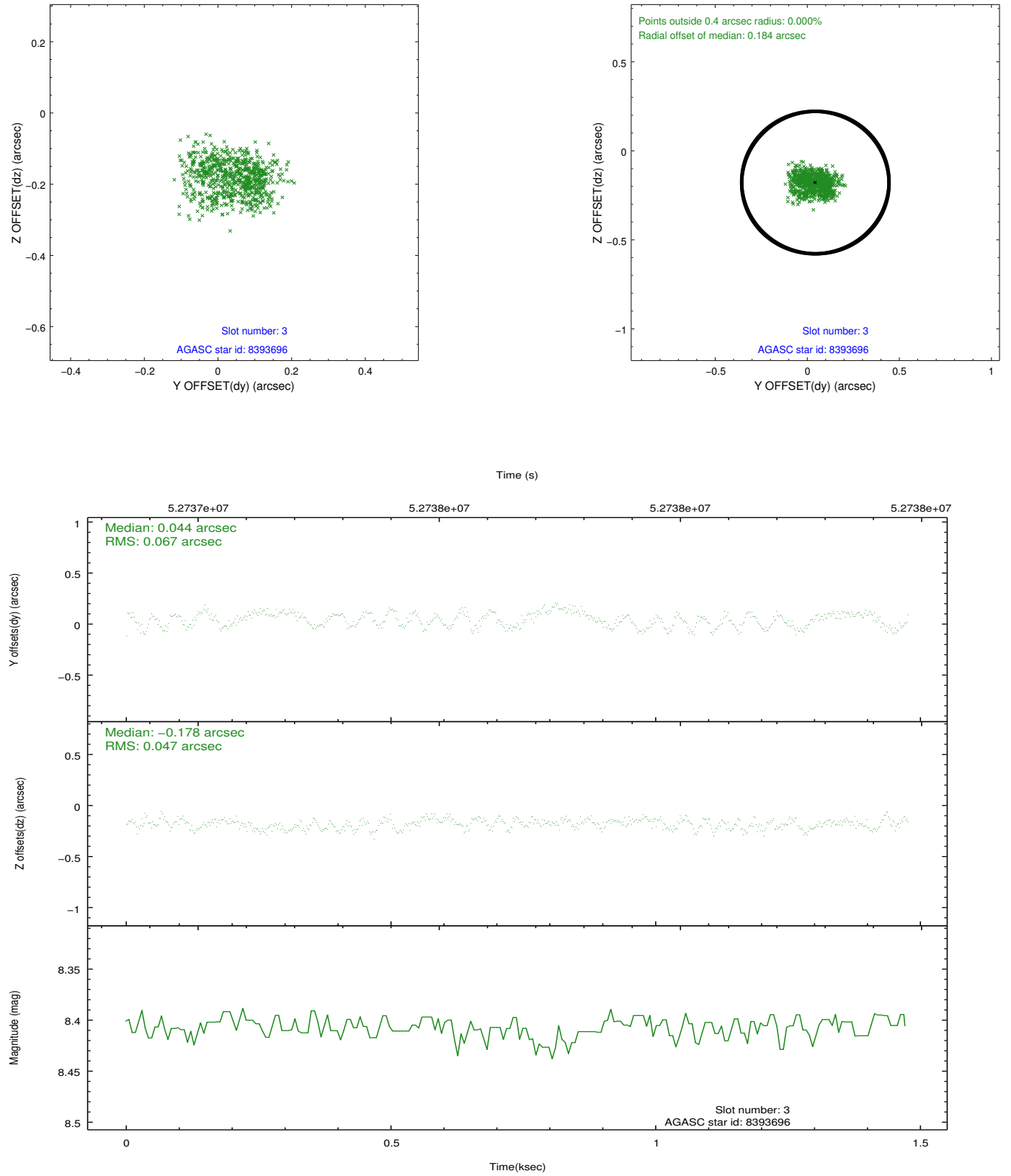
Slot Statistics

| slot | status | id      | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra        | dec      | mean_y   | mean_z   |
|------|--------|---------|------|-------|--------|--------|-------|-------|-----------|----------|----------|----------|
| 0    | FID    | HRC-I-1 | 6.95 | 721   | -0.264 | -0.127 | 0.007 | 0.011 | 0.000000  | 0.000000 | -755.82  | -567.43  |
| 1    | FID    | HRC-I-3 | 7.01 | 721   | 0.250  | -0.230 | 0.007 | 0.011 | 0.000000  | 0.000000 | -1187.44 | 1739.89  |
| 2    | FID    | HRC-I-4 | 6.87 | 721   | 0.128  | 0.265  | 0.005 | 0.008 | 0.000000  | 0.000000 | 1283.06  | 1741.80  |
| 3    | GUIDE  | 8393696 | 8.41 | 721   | 0.044  | -0.178 | 0.087 | 0.136 | 53.645666 | 0.680479 | 754.10   | 2058.35  |
| 4    | GUIDE  | 8398800 | 8.69 | 721   | 0.026  | 0.097  | 0.062 | 0.106 | 54.242352 | 0.922024 | 1310.72  | -188.15  |
| 5    | GUIDE  | 8390744 | 9.02 | 721   | -0.067 | -0.138 | 0.078 | 0.125 | 53.677290 | 0.926294 | 1615.61  | 1819.71  |
| 6    | GUIDE  | 8395104 | 8.66 | 719   | 0.005  | 0.177  | 0.071 | 0.109 | 54.744893 | 0.796520 | 607.95   | -1914.83 |
| 7    | GUIDE  | 8397624 | 9.54 | 717   | -0.012 | 0.041  | 0.121 | 0.187 | 54.812881 | 1.297049 | 2355.63  | -2418.26 |

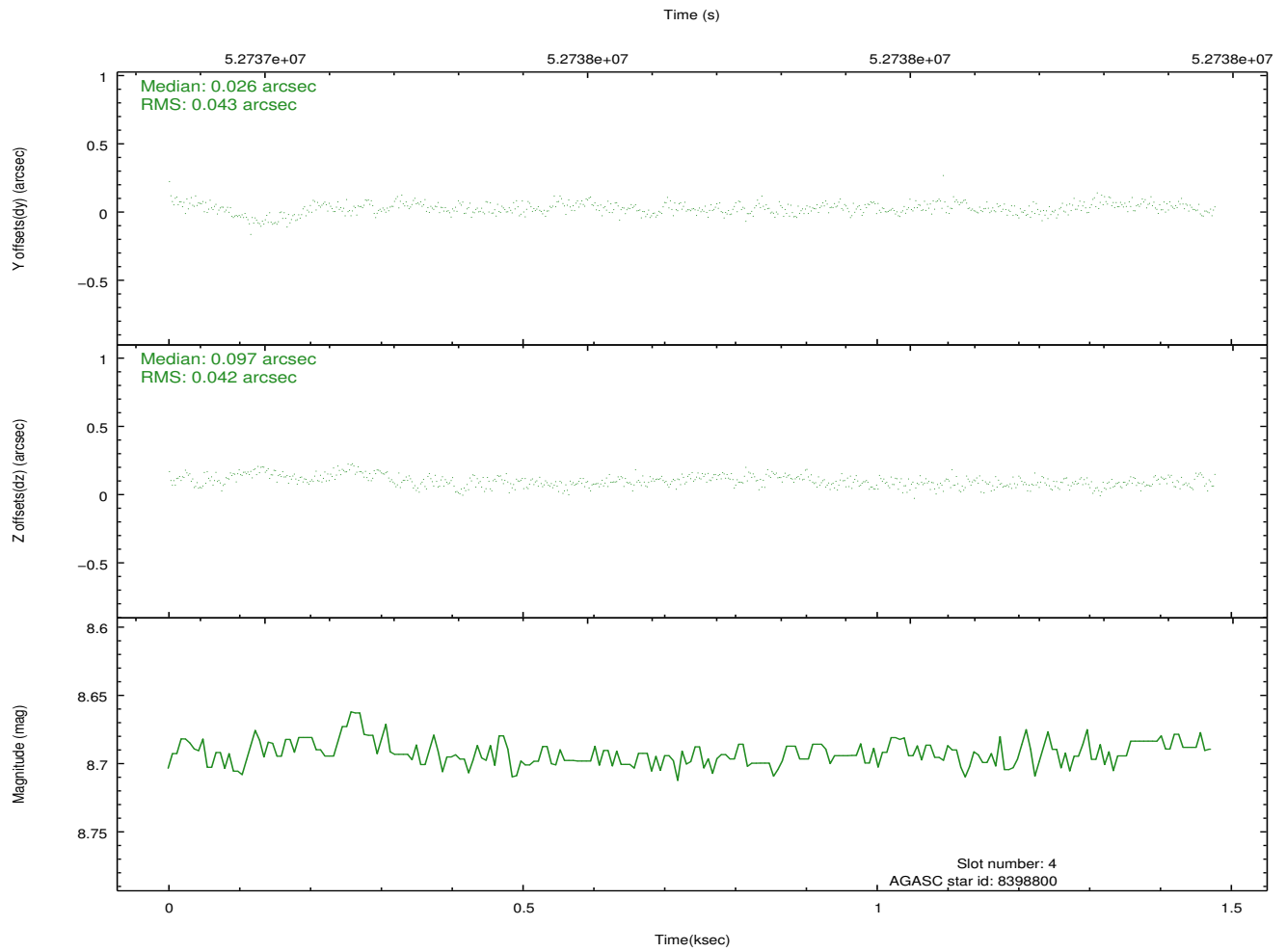
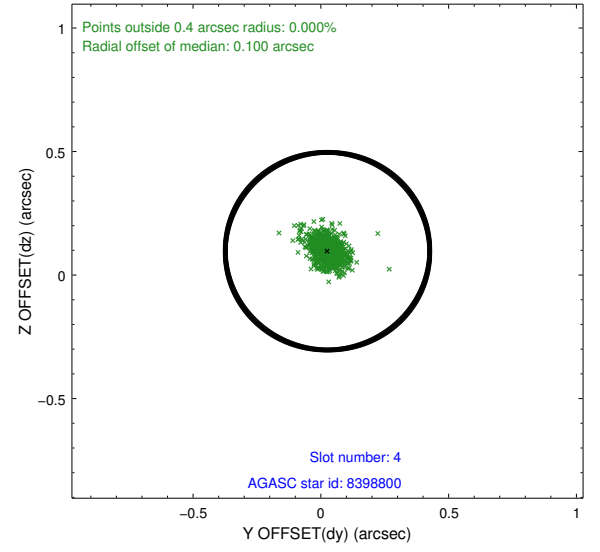
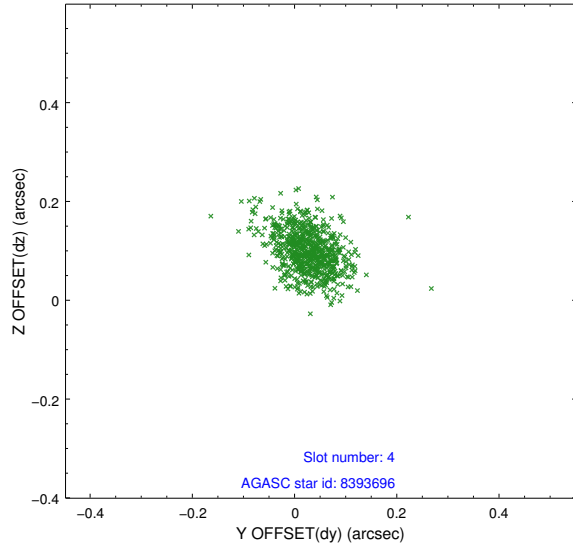


## 2.4 Star Slots

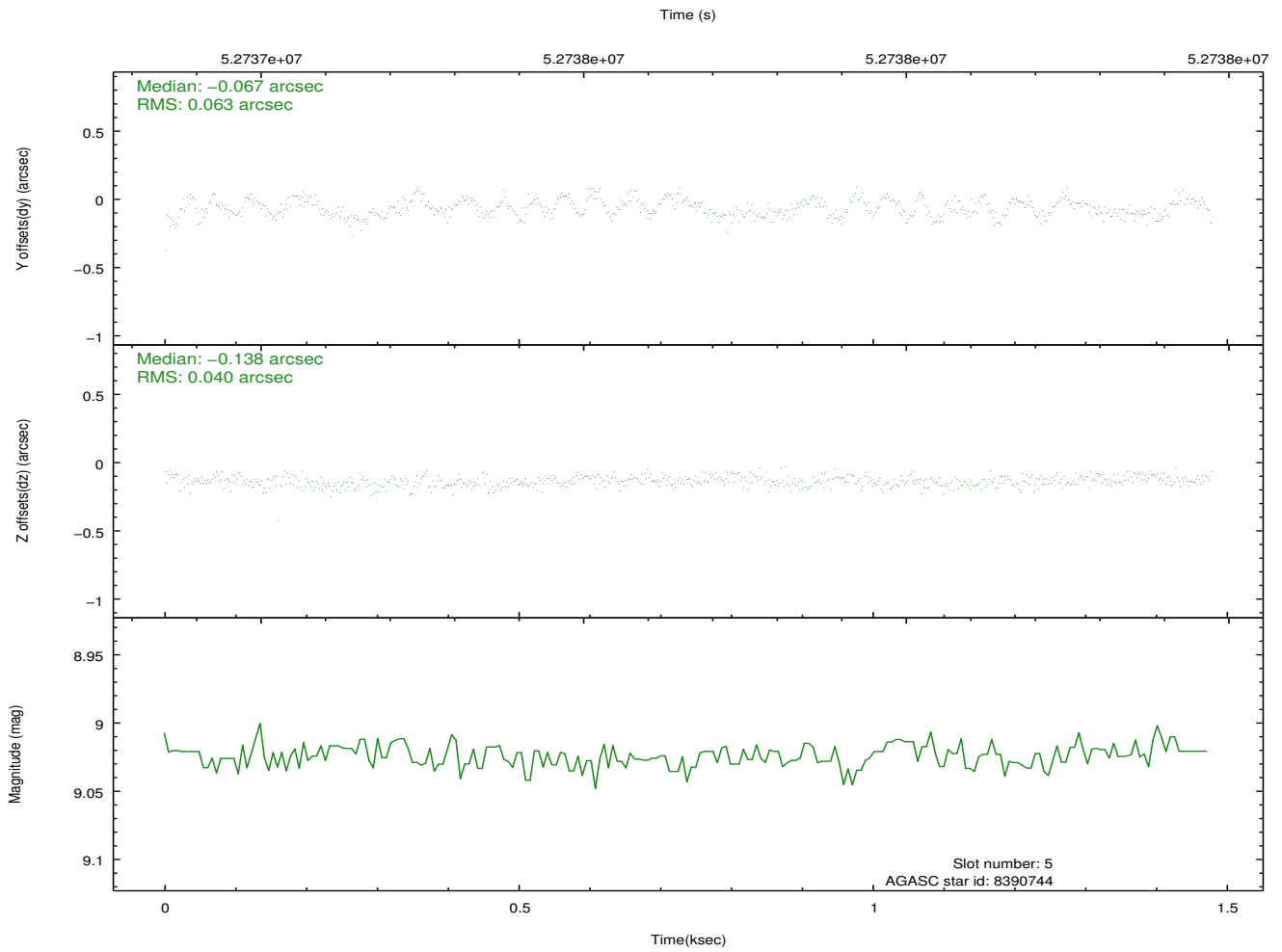
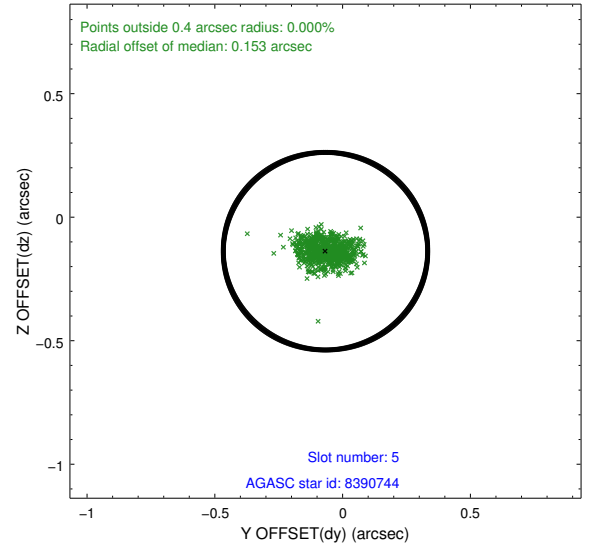
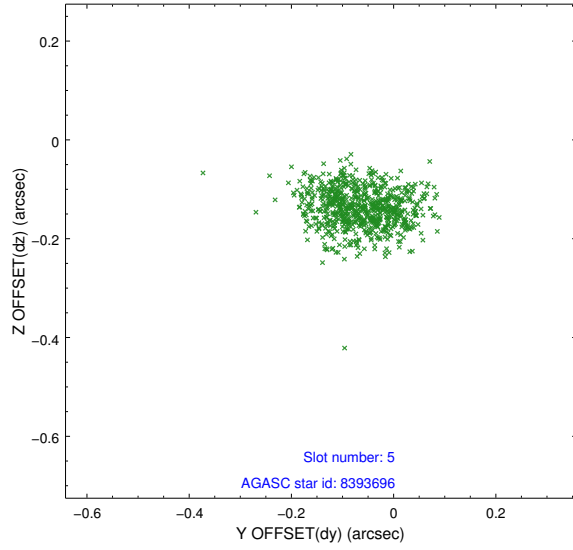
### 2.4.1 Slot 3



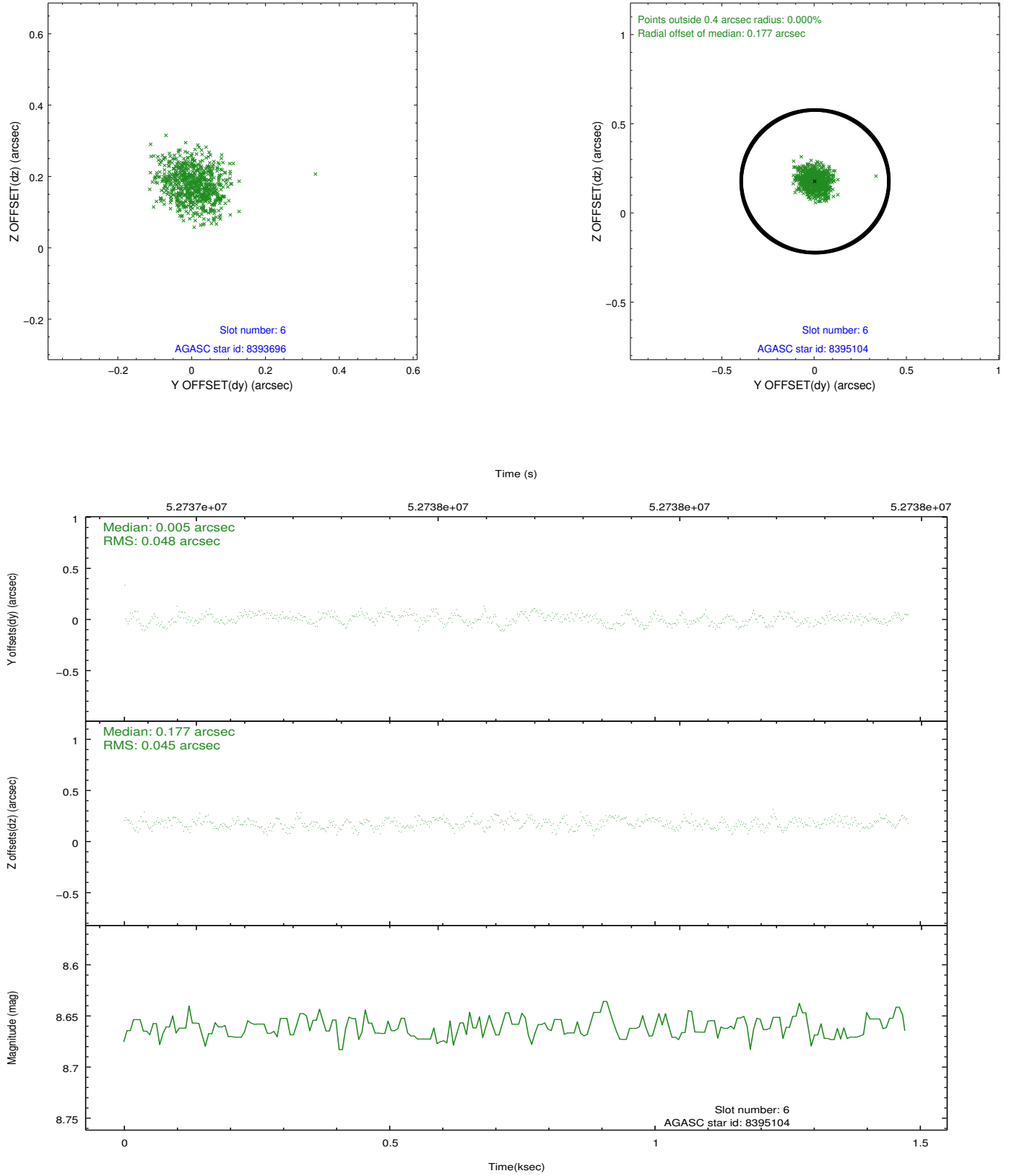
## 2.4.2 Slot 4



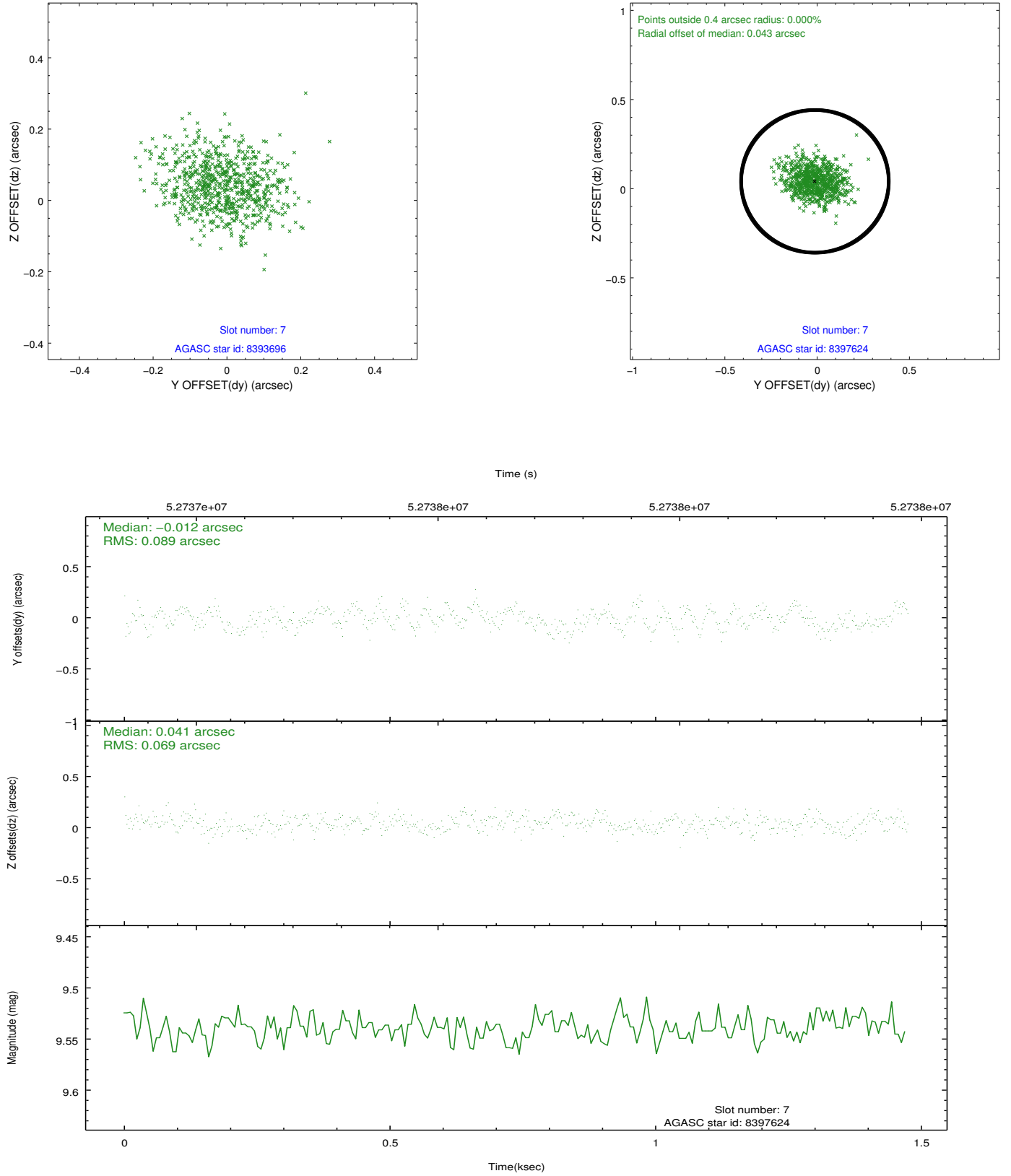
### 2.4.3 Slot 5



## 2.4.4 Slot 6

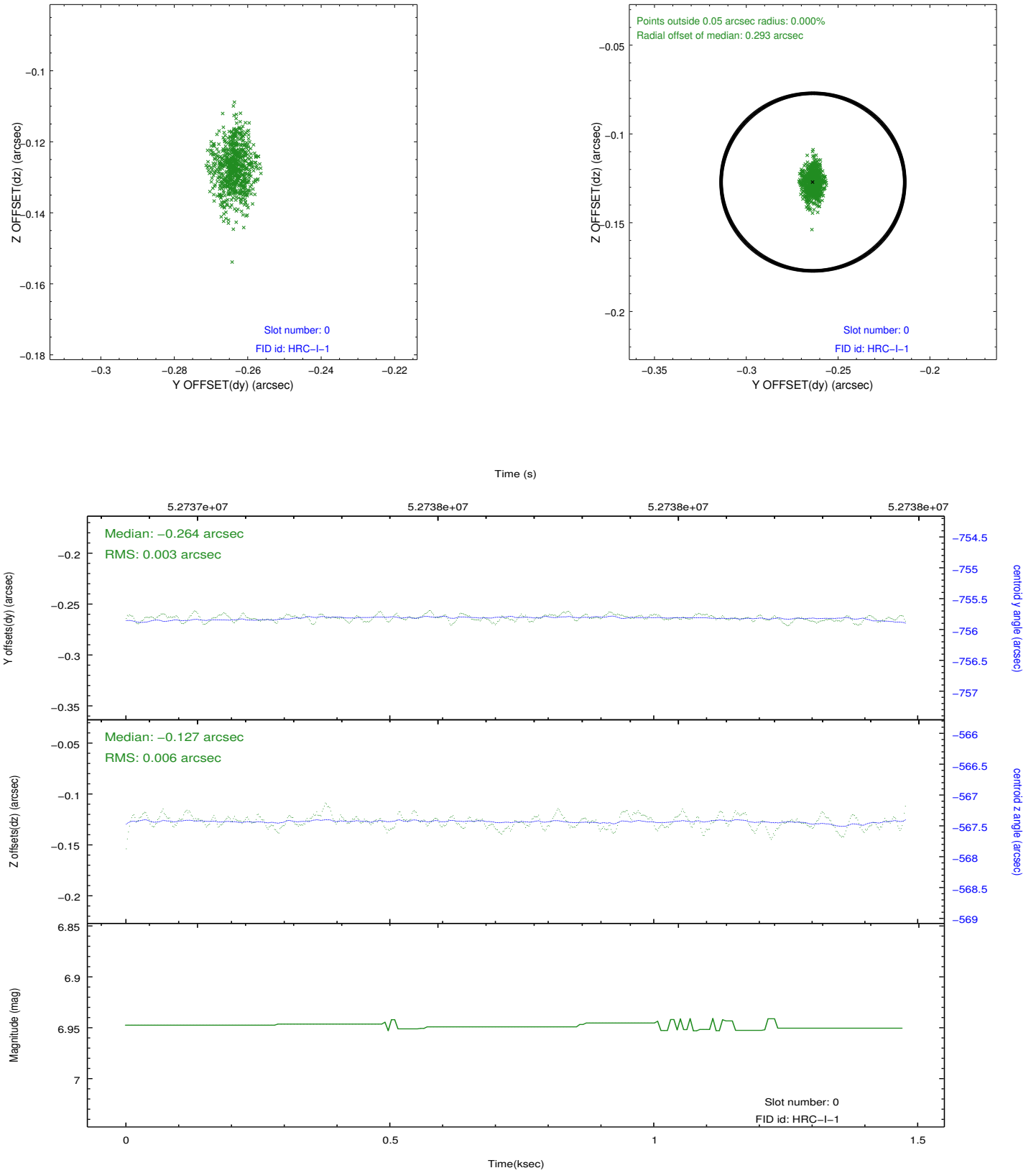


## 2.4.5 Slot 7

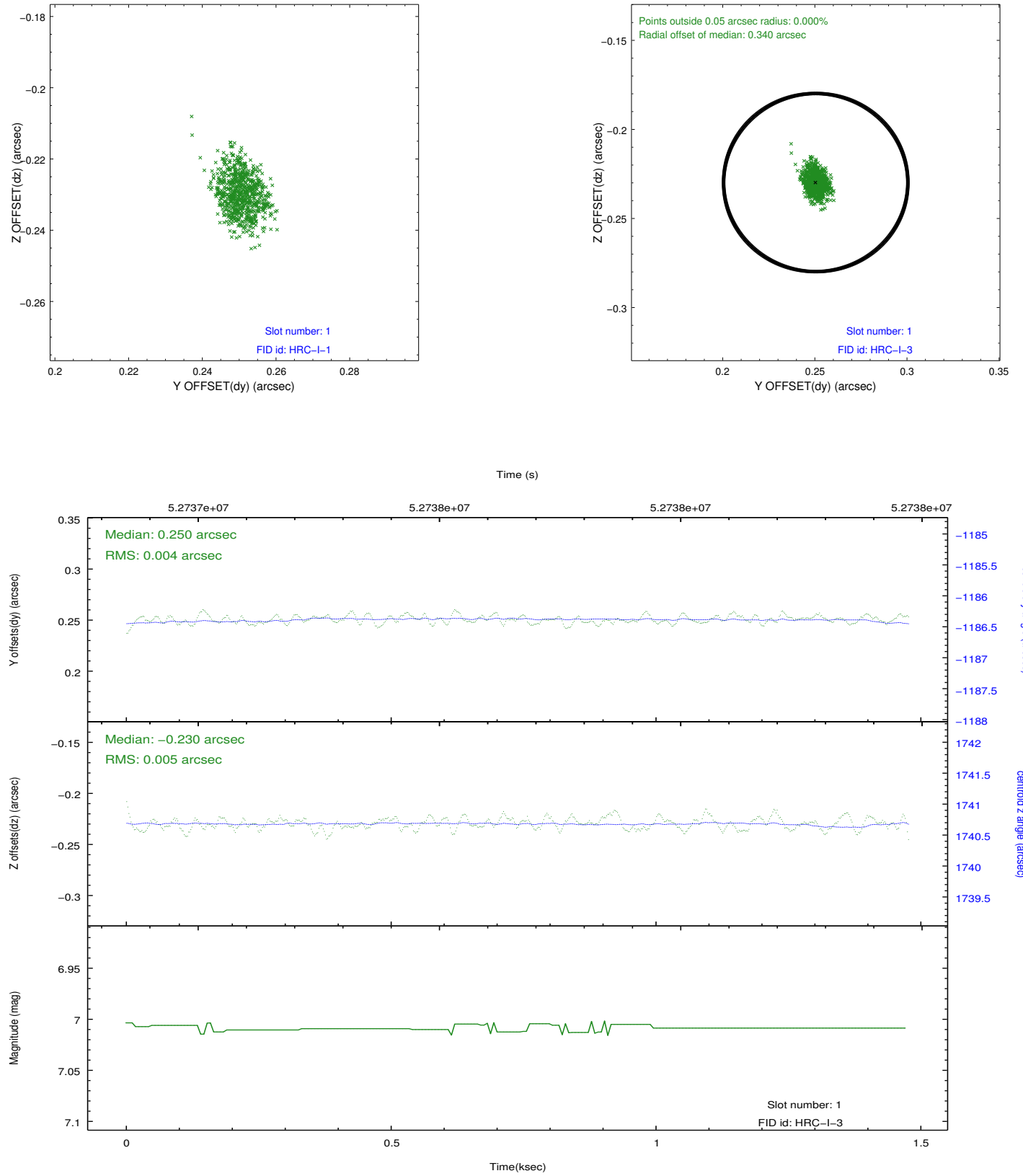


## 2.5 FID Slots

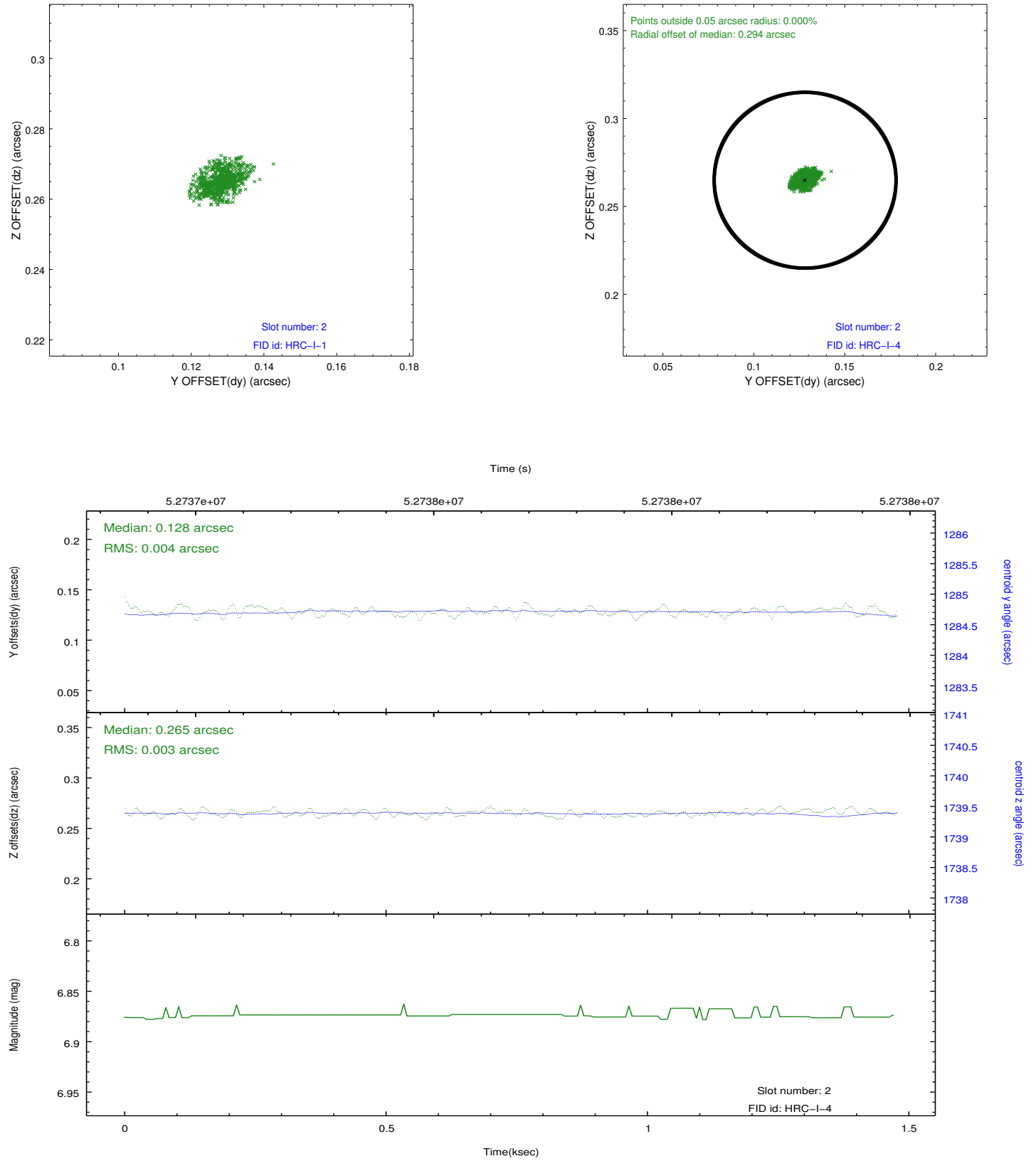
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





### 3 Point Sources

# A Summary

## A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2010.02.01    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 0.794         |

## A.2 Comments

This observation was performed with a large SIM offset, per PI request. As a result, the fid light positions are offset beyond normally expected ranges, but the fid light position correction has compensated for this offset.