

# V&V Reference Report

## L2 ASCDS Version : 8.2.1

Observation 1213 - L2 Version 3

Chandra X-Ray Center

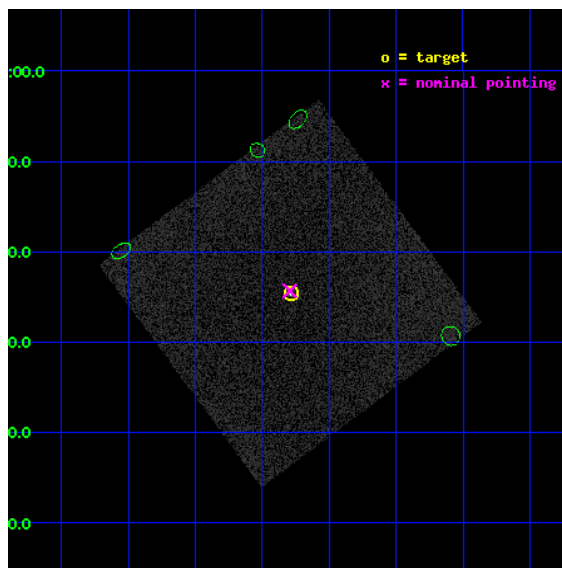
L2 Processing Date : Jul 9 2010

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# 1 Front

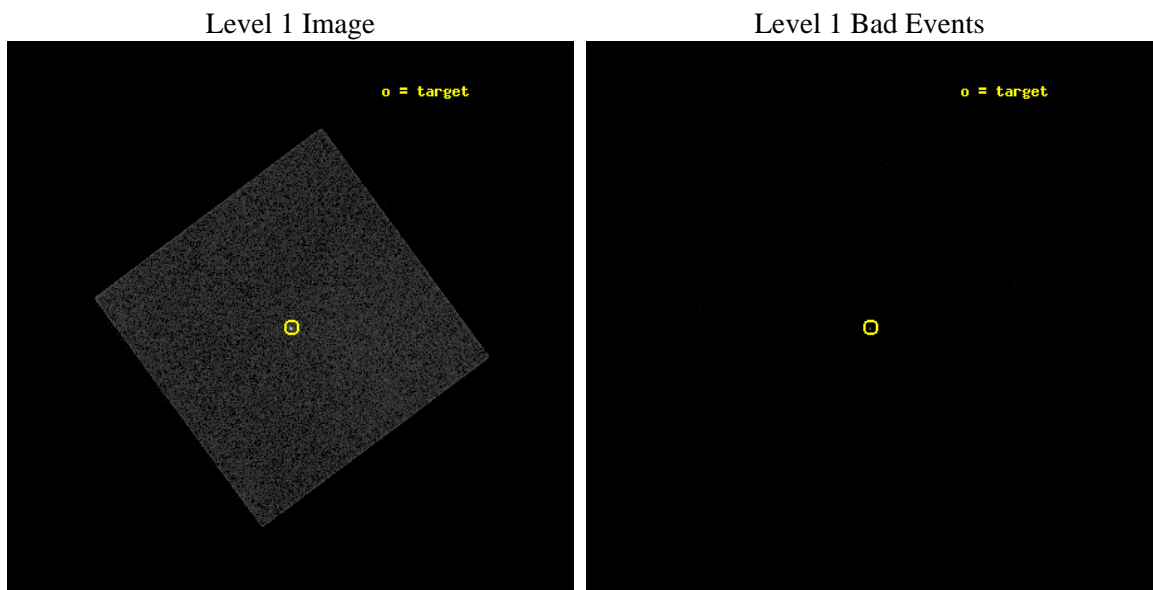
|          |                     |                                 |
|----------|---------------------|---------------------------------|
| seq_num  | 280163              | Sequence number                 |
| obs_id   | 1213                | Observation id                  |
| title    | &#160               | 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   | 54.198398074137     | Nominal RA                      |
| dec_nom  | 0.59458599811883    | Nominal Dec                     |
| roll_nom | 98.447339936008     | Nominal Roll                    |
| revision | 3                   | Processing version of data      |
| ontime   | 1672.0313100517     | [s]                             |
| livetime | 1658.7076547675     | Ontime multiplied by DTCOR      |
| l2events | 60770               | 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 | 2000.000000     | Scheduled observation exposure time |
| ascdsver | 8.2.1               | Processing system revision     | ontime         | 1672.0313100517 | [s]                                 |
| caldbver | 4.1.5               | &#160                          | l1events       | 104566          | Number of level 1 events            |
| date     | 2010-01-12T20:00:51 | Date and time of file creation |                |                 |                                     |
| revision | 4                   | Processing version of data     |                |                 |                                     |

### 2.1.3 Events

#### Level 1 Events

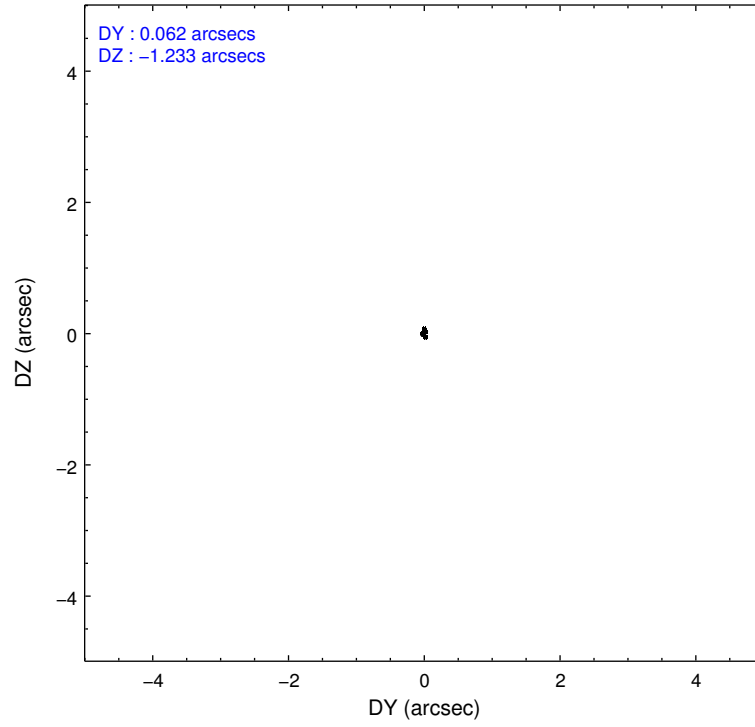
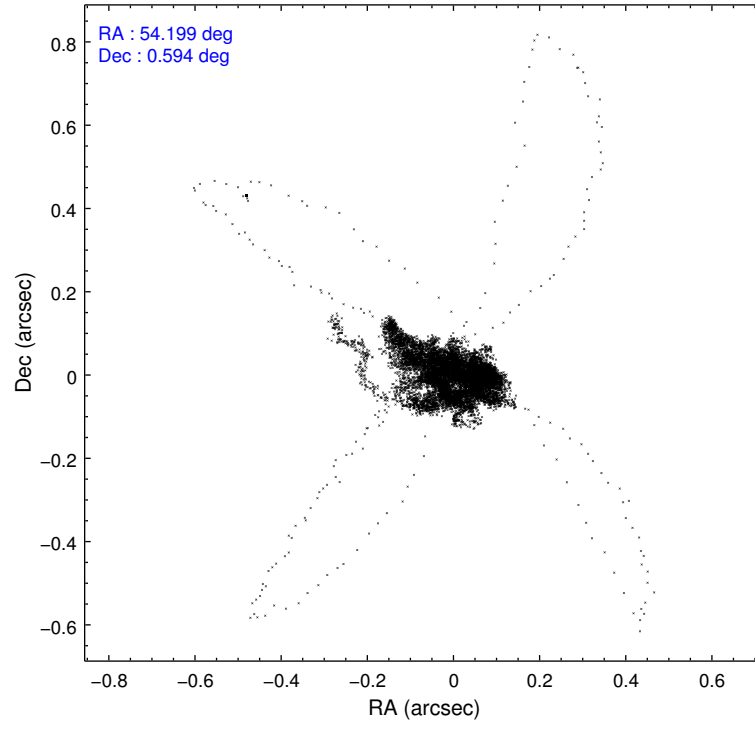
|                 |                      |
|-----------------|----------------------|
|                 | <b>segment<br/>0</b> |
| level 1 events  | 104566               |
| rejected events | 3421                 |
| rejected %      | 3%                   |

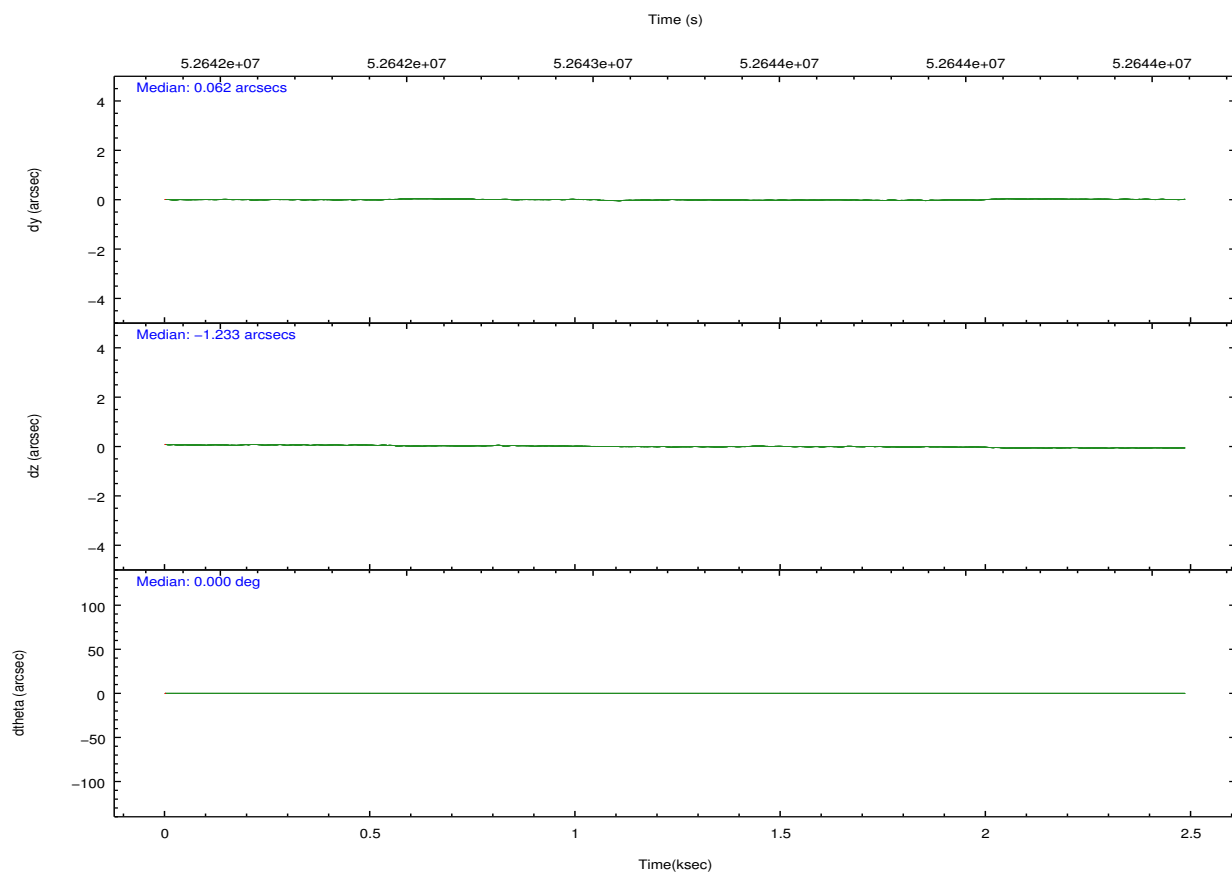
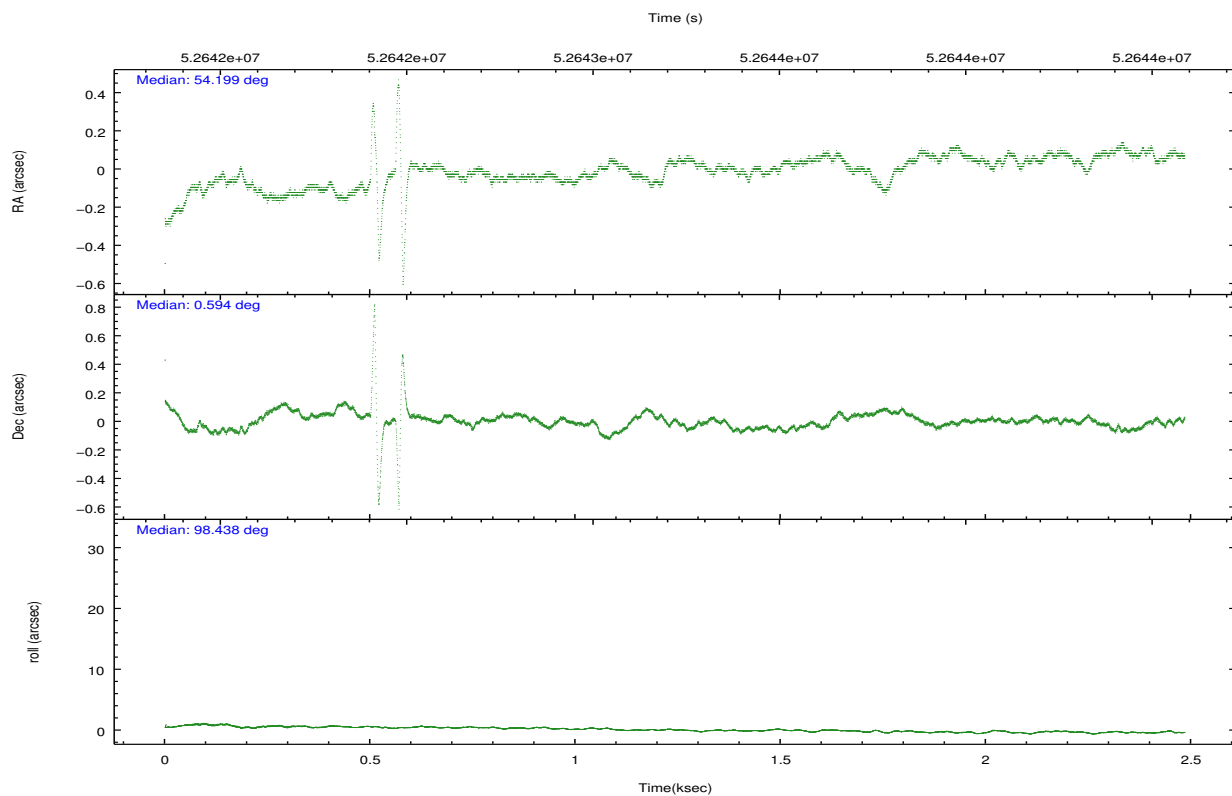
## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               |
|-----------------------------------|---------------------|----------------------|
| Instrument                        | HRC                 | HRC                  |
| Detector                          | HRC-I               | HRC-I                |
| Grating                           | NONE                | NONE                 |
| Data mode                         | OBSERVING           | OBSERVING            |
| Observation mode                  | POINTING            | POINTING             |
| Pointing RA                       | 54.215448           | 54.19839807413687    |
| Pointing Dec                      | 0.573179            | 0.594585998118828    |
| Pointing Roll                     | 98.542649           | 98.44733993600836    |
| SIM focus pos (mm)                | -1.040293           | -1.016036269358593   |
| SIM defocus (mm)                  | 0                   | 0.02425635130028114  |
| SIM translation stage pos (mm)    | 126.985494          | 126.9829799899862    |
| SIM translation stage offset (mm) | 0                   | 0.002508901615314585 |
| Observation start time            | 52642464.184000     | 52641797.4038        |
| Observation start date            | 1999-09-02T06:53:20 | 1999-09-02T06:43:17  |
| Observation end time              | 52644464.184000     | 52644597.191401      |
| Observation end date              | 1999-09-02T07:26:40 | 1999-09-02T07:29:57  |

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

## 2.3 Aspect





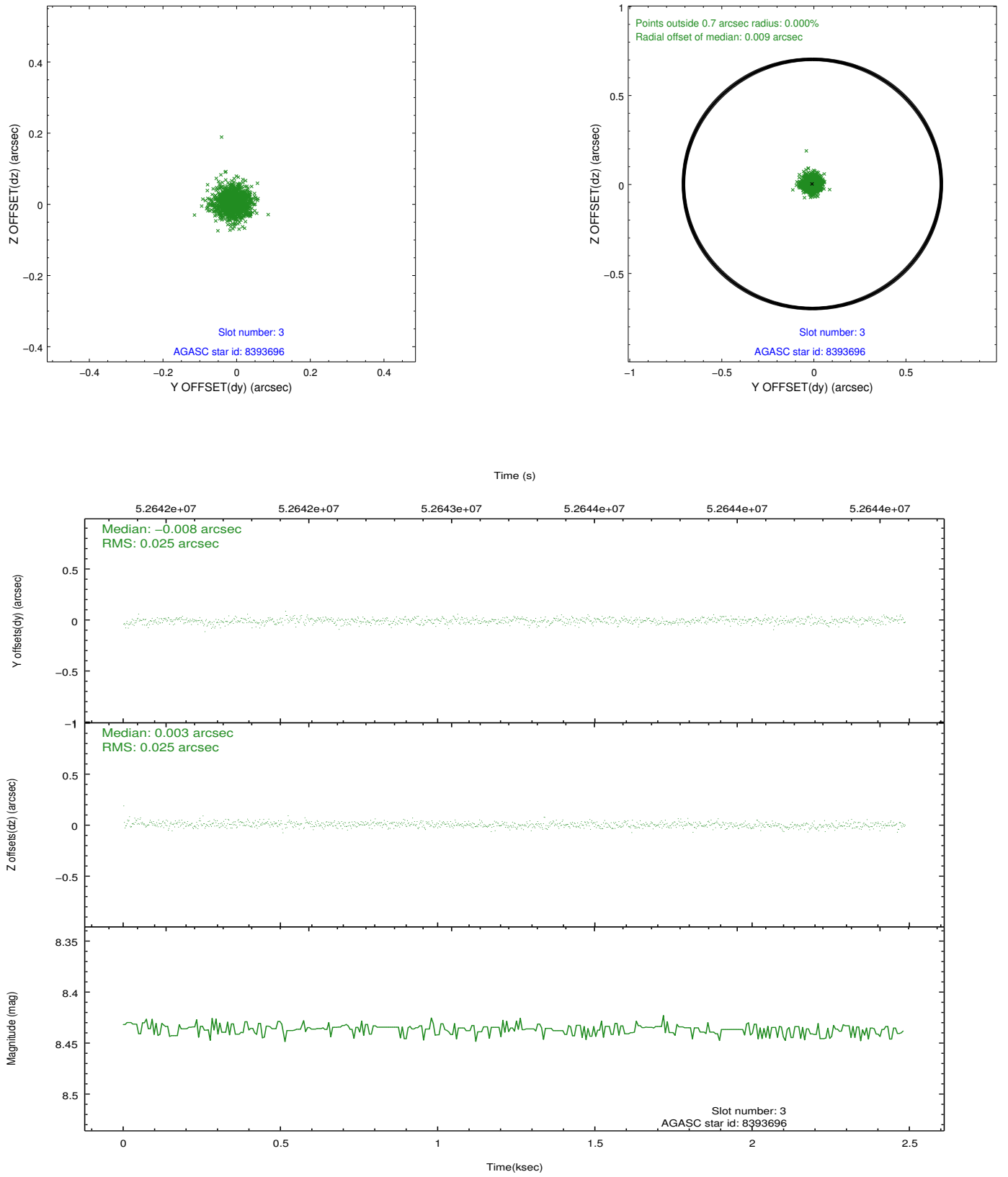
Slot Statistics

| slot | status | id      | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra        | dec      | mean_y  | mean_z   |
|------|--------|---------|------|-------|--------|--------|-------|-------|-----------|----------|---------|----------|
| 0    | UNUSED |         | 0.00 | 0     | 0.000  | 0.000  | 0.000 | 0.000 | 0.000000  | 0.000000 | 0.00    | 0.00     |
| 1    | UNUSED |         | 0.00 | 0     | 0.000  | 0.000  | 0.000 | 0.000 | 0.000000  | 0.000000 | 0.00    | 0.00     |
| 2    | FID    | HRC-I-4 | 6.99 | 1206  | 0.037  | -0.030 | 0.000 | 0.000 | 0.000000  | 0.000000 | 1287.23 | 1015.94  |
| 3    | GUIDE  | 8393696 | 8.44 | 1209  | -0.008 | 0.003  | 0.037 | 0.061 | 53.645666 | 0.680479 | 687.02  | 1971.43  |
| 4    | GUIDE  | 8398800 | 8.71 | 1209  | 0.064  | 0.119  | 0.043 | 0.073 | 54.242352 | 0.922024 | 1228.73 | -279.99  |
| 5    | GUIDE  | 8390744 | 9.01 | 1209  | 0.006  | -0.122 | 0.047 | 0.077 | 53.677290 | 0.926294 | 1546.29 | 1727.10  |
| 6    | GUIDE  | 8395104 | 8.65 | 1208  | 0.081  | 0.122  | 0.042 | 0.069 | 54.744893 | 0.796520 | 514.34  | -2002.10 |
| 7    | GUIDE  | 8399352 | 9.94 | 1207  | -0.137 | -0.125 | 0.082 | 0.143 | 53.946831 | 1.204693 | 2392.61 | 617.39   |

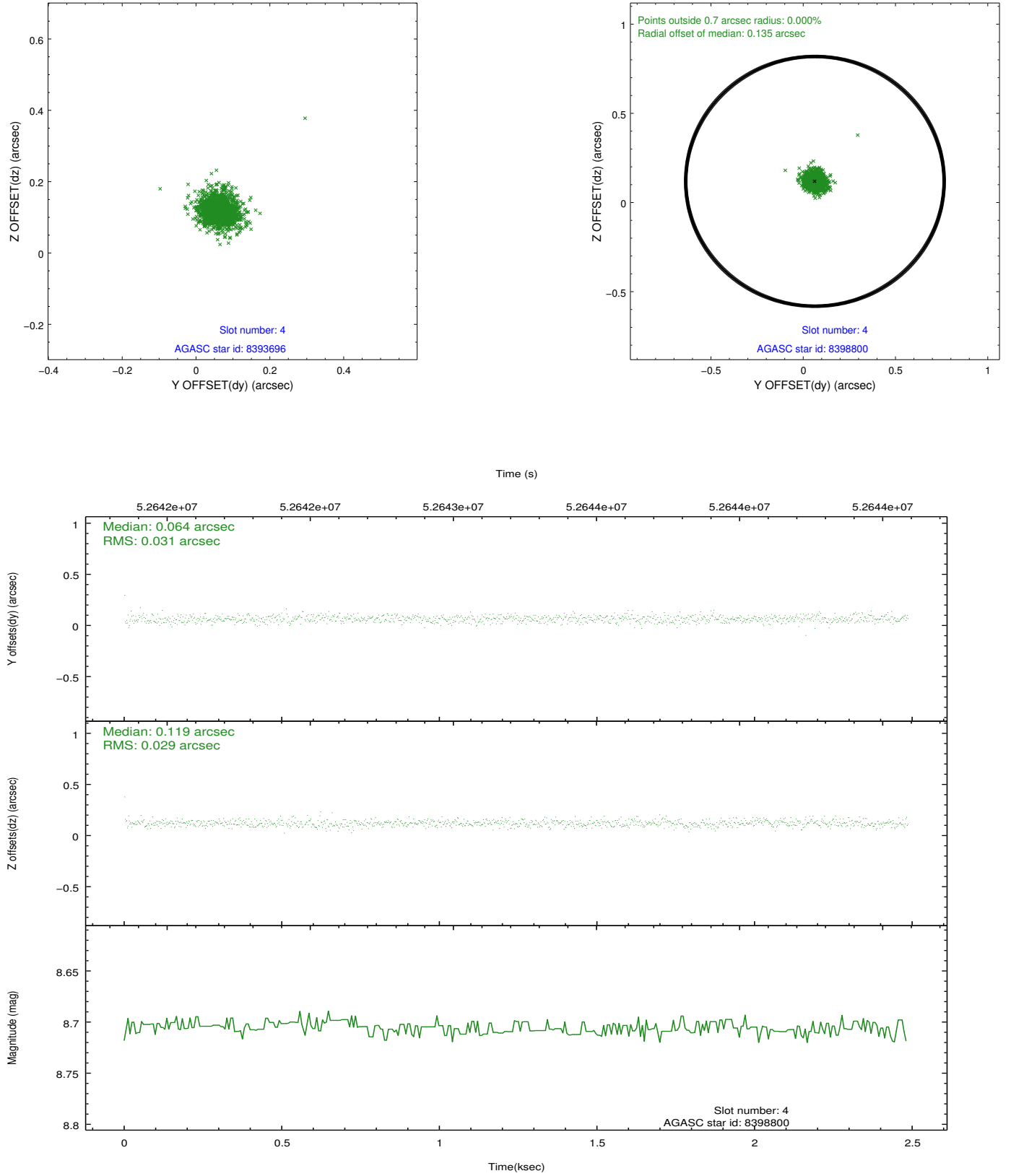


## 2.4 Star Slots

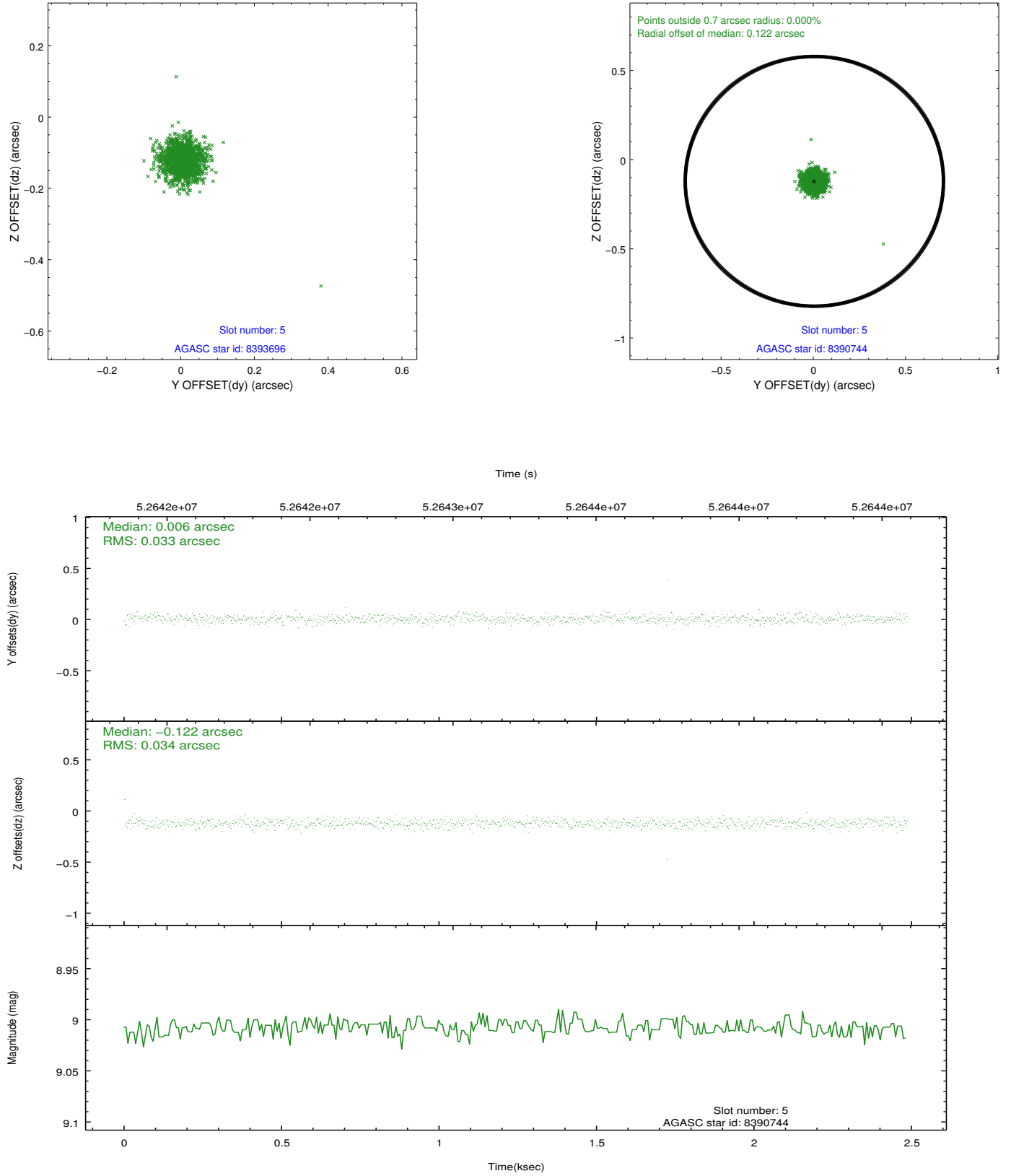
### 2.4.1 Slot 3



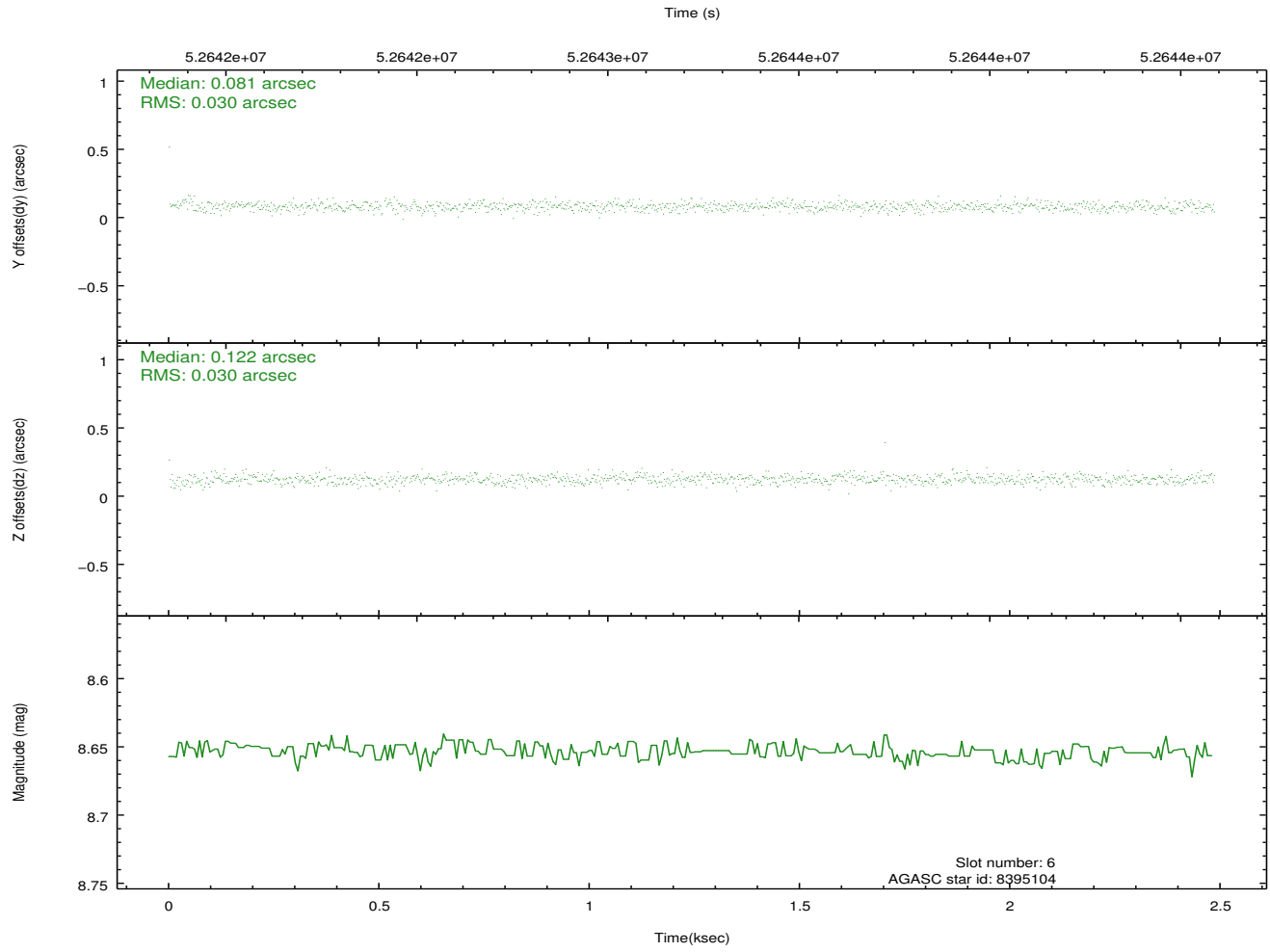
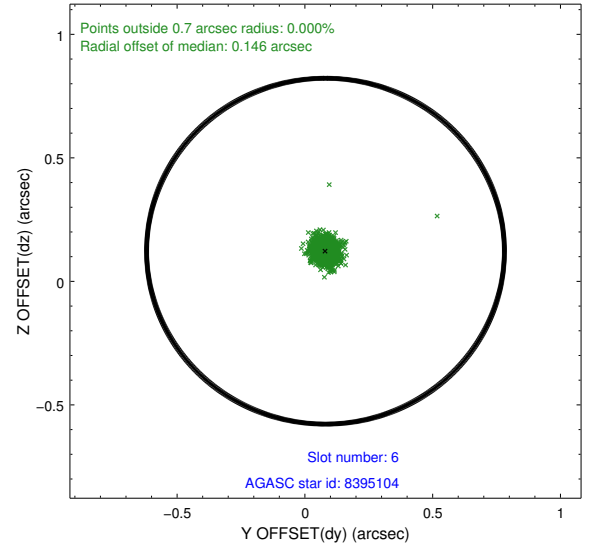
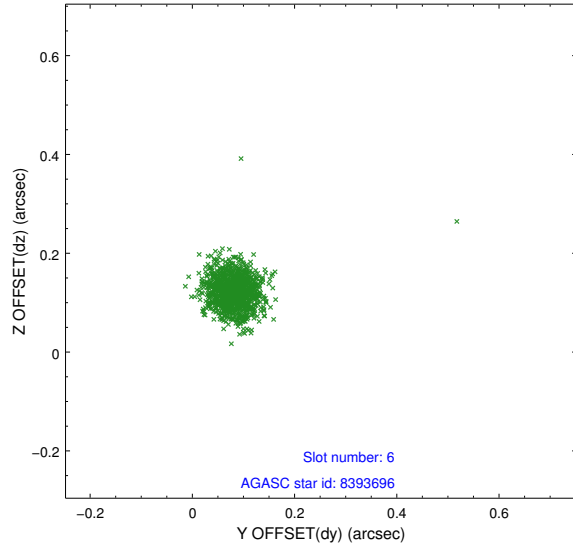
## 2.4.2 Slot 4



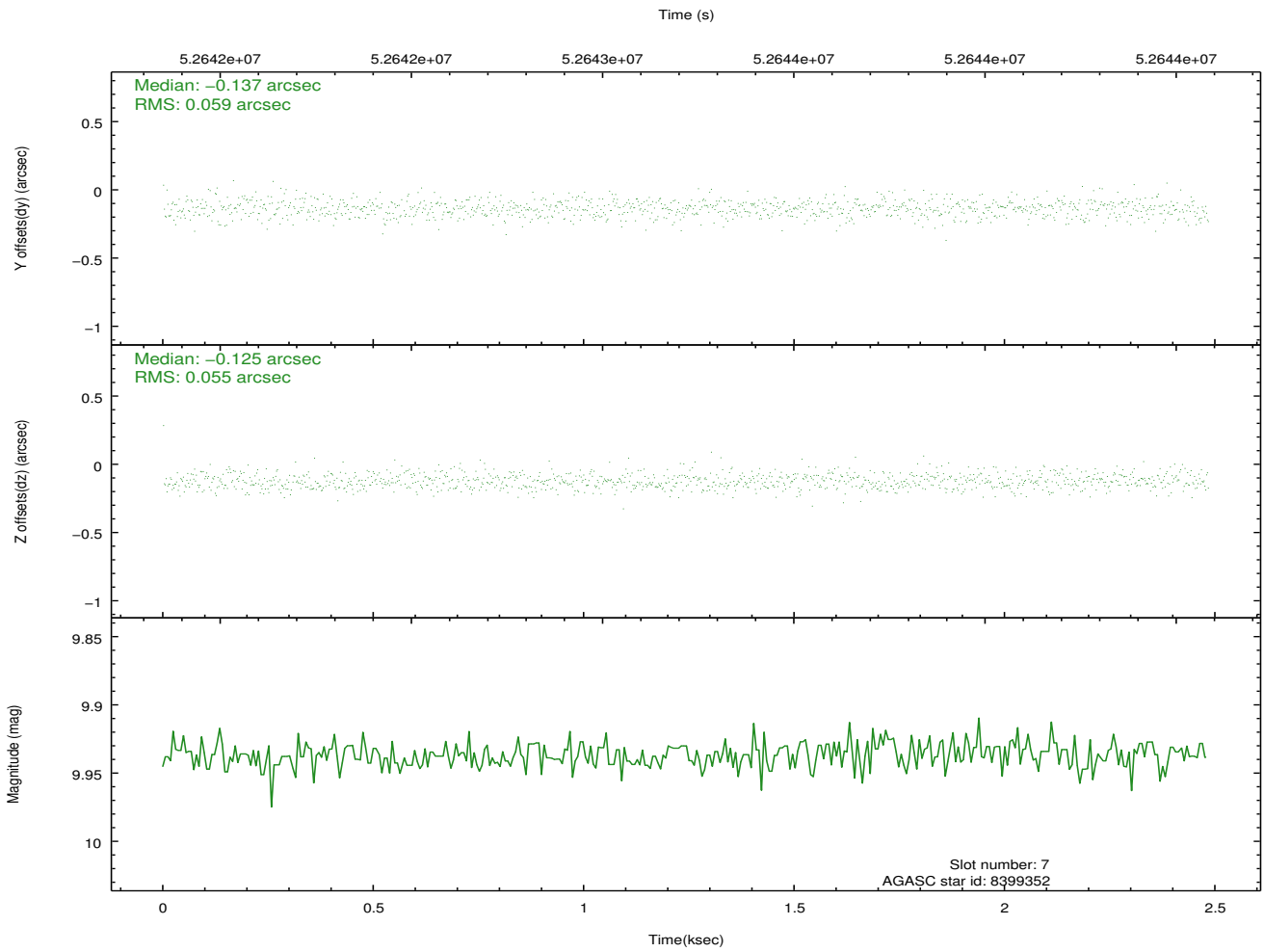
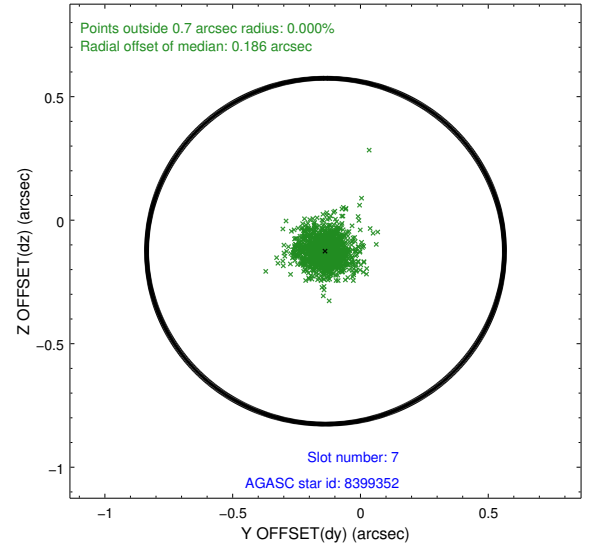
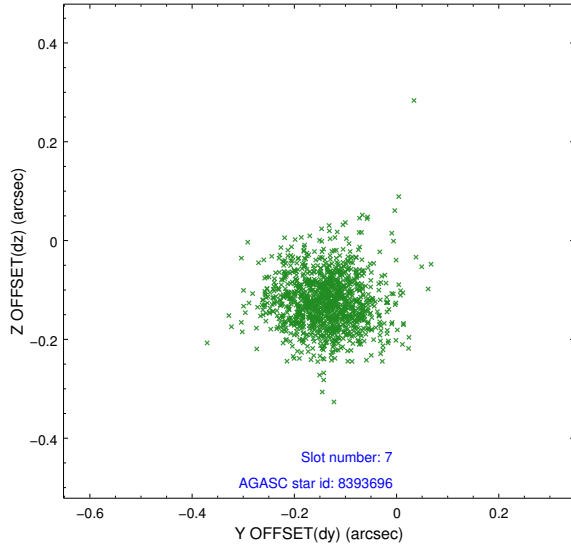
### 2.4.3 Slot 5



## 2.4.4 Slot 6

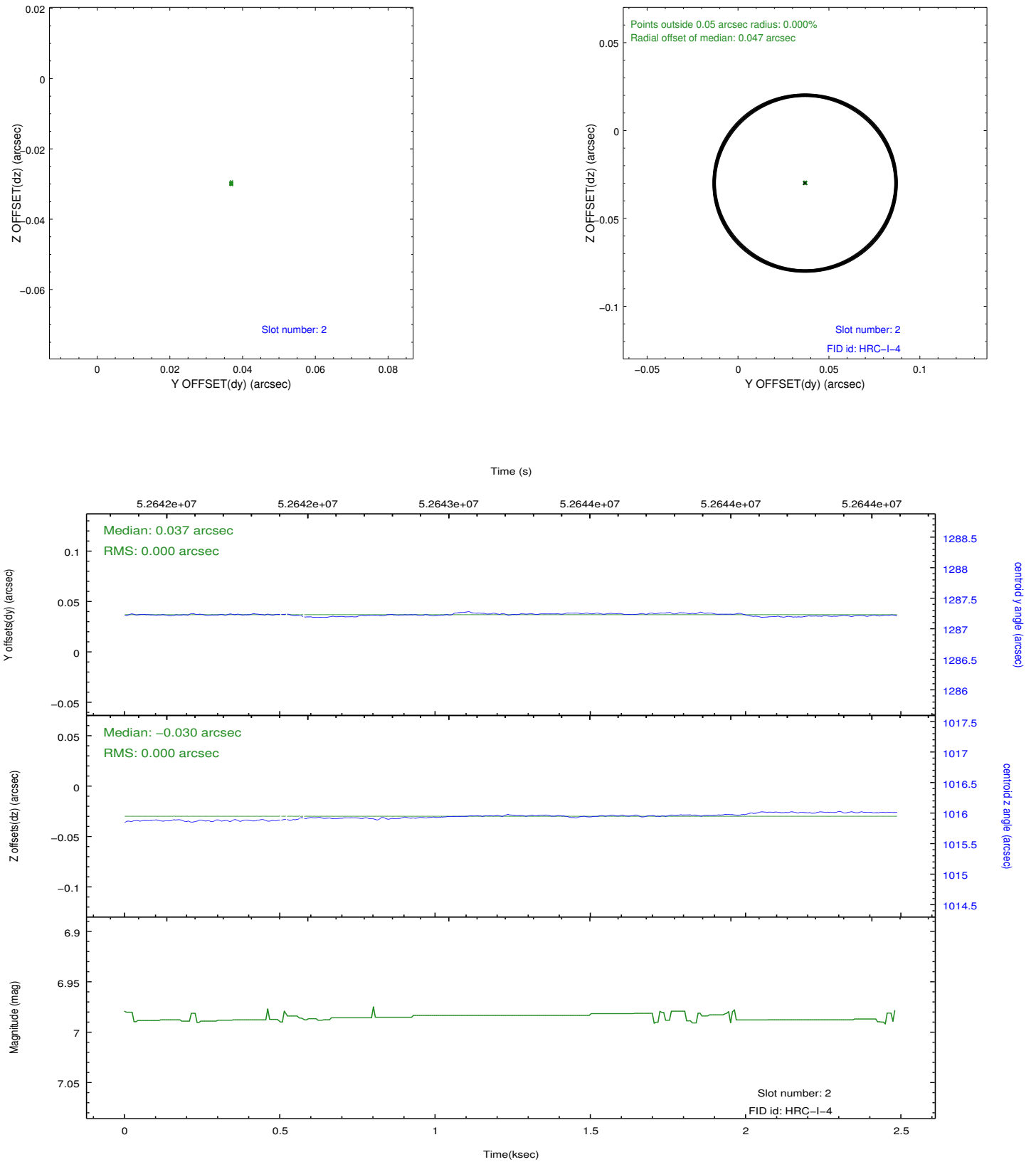


## 2.4.5 Slot 7

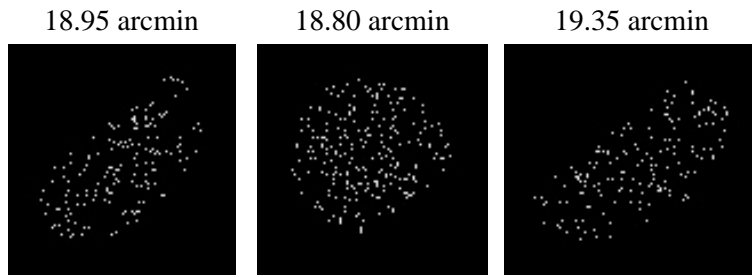


## 2.5 FID Slots

### 2.5.1 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

|                            |             |
|----------------------------|-------------|
| V&V Scientist              | Joy Nichols |
| V&V Date (YYYY-MM-DD)      | 2010.07.28  |
| V&V Edition                | 1           |
| V&V Disposition and Status | OK          |
| V&V Charge Time            | 1.568       |

## A.2 Comments

Target very slightly off-axis. Dither is disabled.

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Charge time remains at previous value of 1.568 ksec, although with the current processing the charge time would have been 1.672 ksec.

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Two of the 3 fid lights were occulted by the HRC shutter, which was partially closed for this observation. Since the shutter was partially closed, the flux calibration may be compromised.