

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11951 - L2 Version 2  
Chandra X-Ray Center

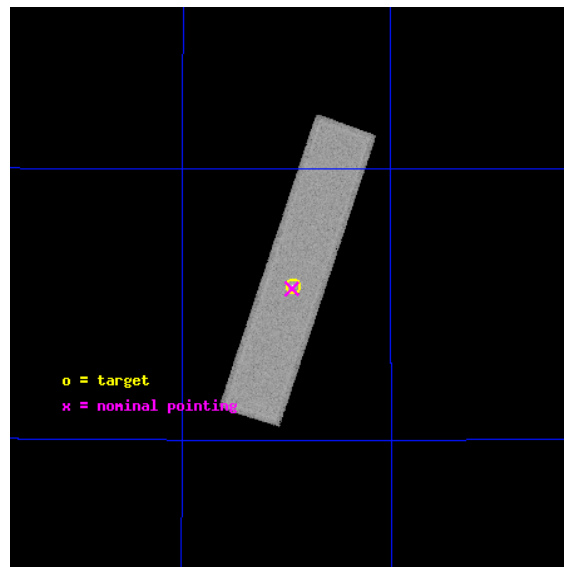
L2 Processing Date : Jul 5 2012

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# 1 Front

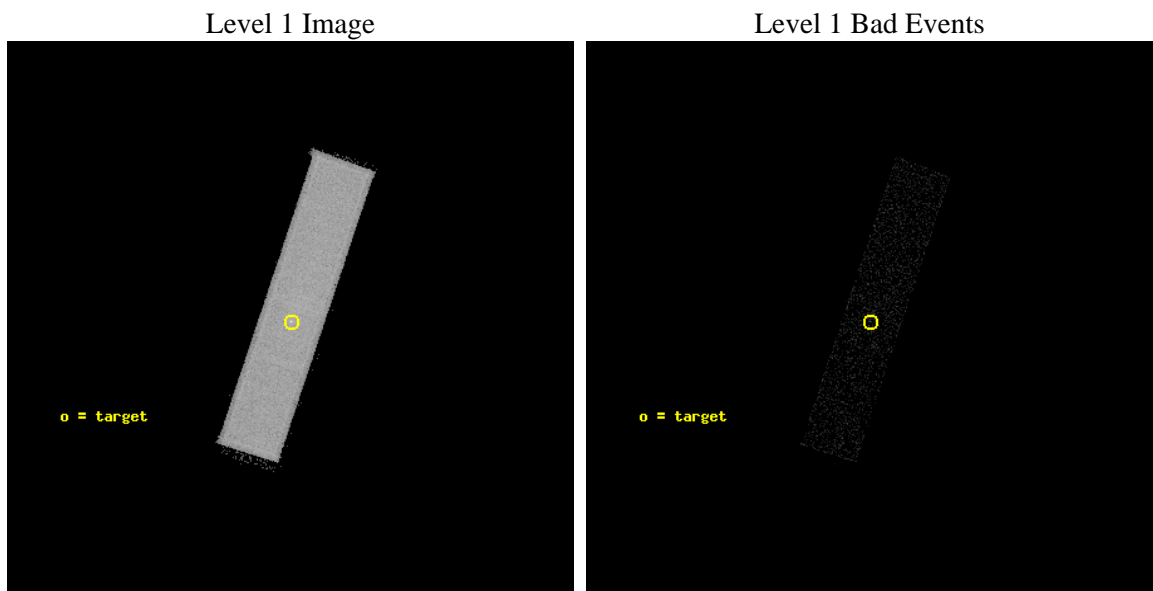
|          |   |                                       |
|----------|---|---------------------------------------|
| seq_num  | 290940  | Sequence number                       |
| obs_id   | 11951   | Observation id                        |
| title    | AO-11 Measurements of the optical/UV Transmission of the HRC Filters. | Proposal title                        |
| observer | Dr. CXC Calibration   | Principal investigator                |
| object   | Vega  | Source name                           |
| ra_targ  | 279.235   | Observer's specified target RA [deg]  |
| dec_targ | 38.783778   | Observer's specified target Dec [deg] |
| ra_nom   | 279.23688418574   | Nominal RA [deg]                      |
| dec_nom  | 38.779218313604   | Nominal Dec [deg]                     |
| roll_nom | 288.55255178914   | Nominal Roll [deg]                    |
| revision | 2   | Processing version of data            |
| ontime   | 2158.9063610435   | [s]                                   |
| livetime | 2141.4923400022   | Ontime multiplied by DTCOR            |
| l2events | 123459  | 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 | 2000.000000     | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5               | Processing system revision     | ontime         | 2158.9063610435 | [s]                                     |
| caldbver | 4.5.0               | &#160                          | l1events       | 159184          | Number of level 1 events                |
| date     | 2012-07-05T05:49:05 | Date and time of file creation |                |                 |   |
| revision | 2                   | Processing version of data     |                |                 |   |

### 2.1.3 Events

Level 1 Events

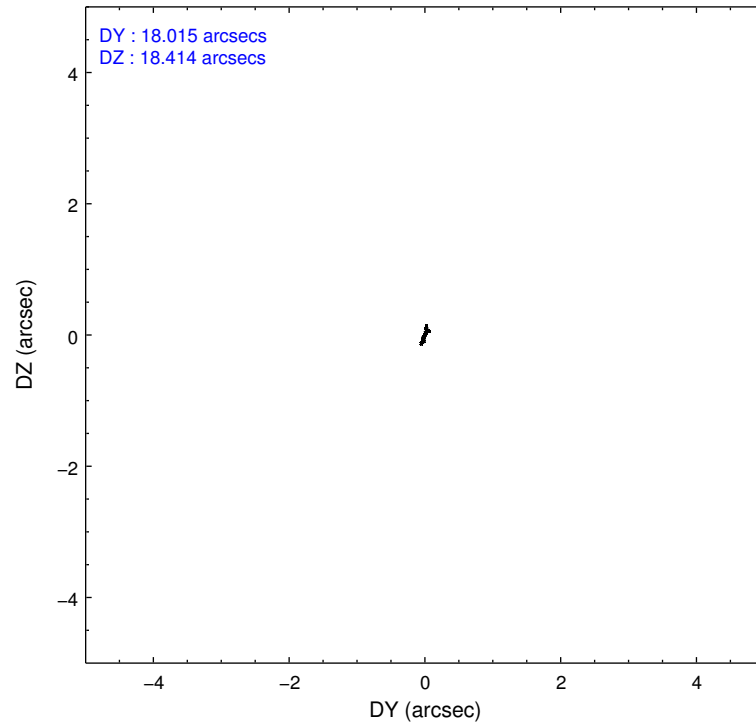
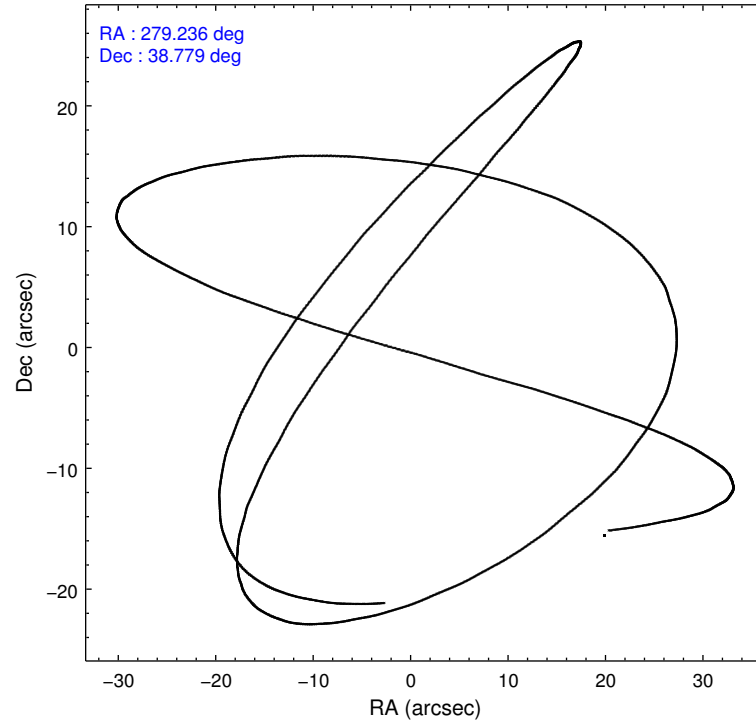
|                 | <b>segment<br/>1</b> | <b>segment<br/>2</b> | <b>segment<br/>3</b> |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events  | 0                    | 159184               | 0                    |
| rejected events | 0                    | 11571                | 0                    |
| rejected %      | 0%                   | 7%                   | 0%                   |

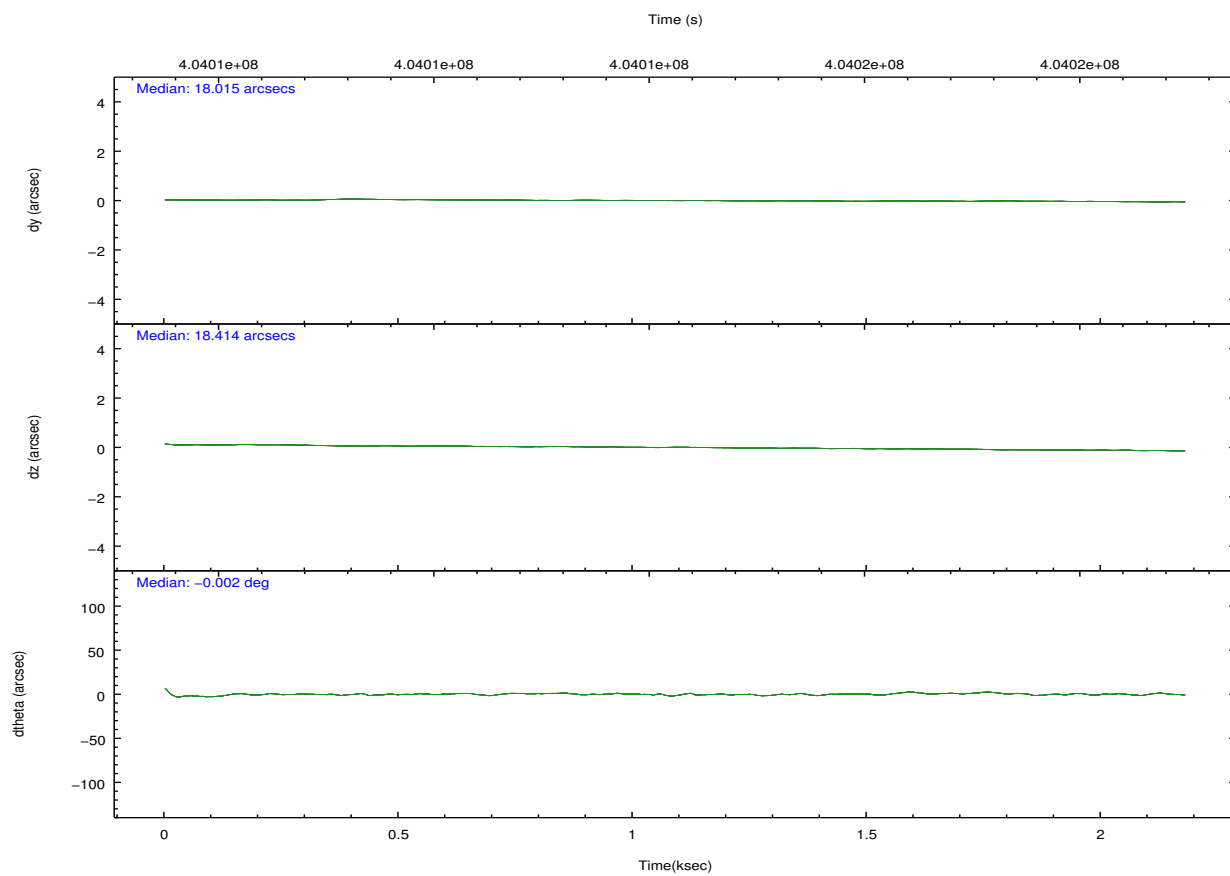
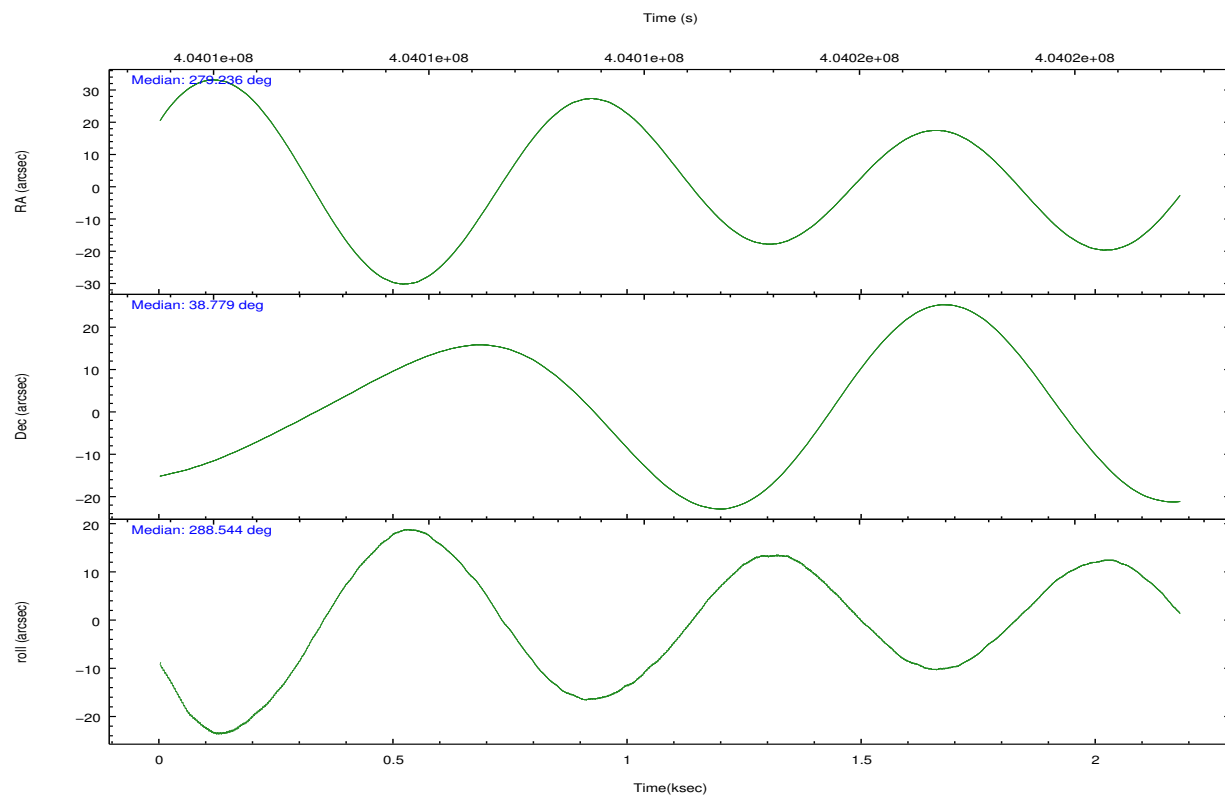
## 2.2 Compared Parameters

| Parameter                         | Planned               | Actual               |
|-----------------------------------|-----------------------|----------------------|
| Instrument                        | HRC                   | HRC                  |
| Detector                          | HRC-S                 | HRC-S                |
| Grating                           | NONE                  | NONE                 |
| Data mode                         | OBSERVING             | OBSERVING            |
| Observation mode                  | POINTING              | POINTING             |
| [deg] Pointing RA                 | 279.208069            | 279.2368841857417    |
| [deg] Pointing Dec                | 38.797139             | 38.77921831360422    |
| [deg] Pointing Roll               | 288.503277            | 288.5525517891415    |
| [s] Window start time (MET)       | 399686466.184000      | 399686466.184000     |
| [s] Window stop time (MET)        | 407462466.184000      | 407462466.184000     |
| [mm] SIM focus pos                | -1.533336             | -1.526339935833849   |
| [mm] SIM defocus                  | 7.710433287538843e-07 | 0.006996703570447904 |
| [mm] SIM translation stage pos    | 250.455976            | 250.466033080201     |
| [mm] SIM translation stage offset | 0                     | -0.01005468664627074 |
| [s] Observation start time (MET)  | 404013654.184000      | 404013275.57729      |
| Observation start date            | 2010-10-21T01:59:48   | 2010-10-21T01:54:35  |
| [s] Observation end time (MET)    | 404015654.184000      | 404015787.85242      |
| Observation end date              | 2010-10-21T02:33:08   | 2010-10-21T02:36:27  |

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

## 2.3 Aspect





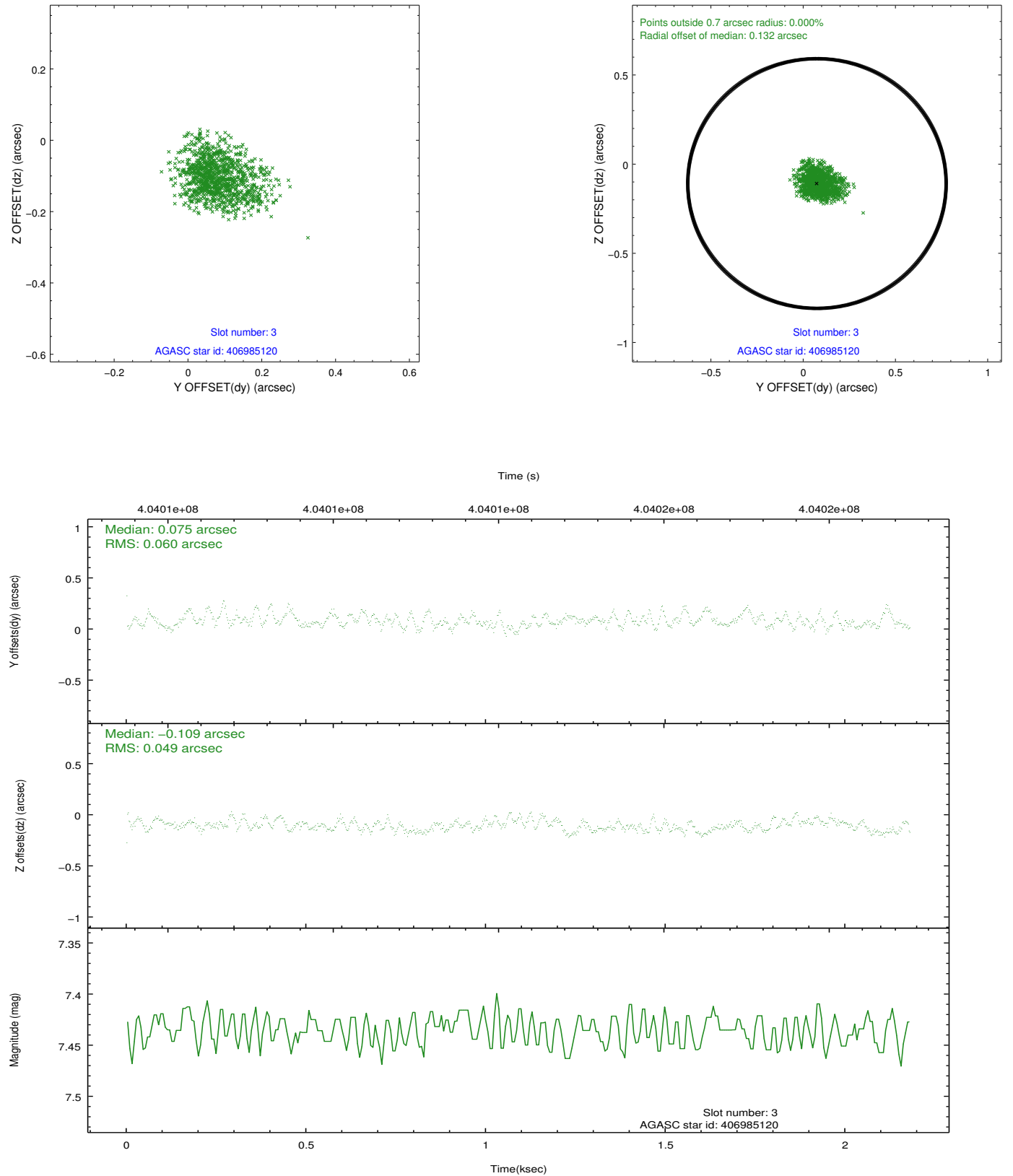
### Slot Statistics

| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-S-2   | 6.98 | 532   | 0.146  | -0.096 | 0.010 | 0.025 | 0.000000   | 0.000000  | 1227.23  | -459.98  |
| 1    | FID    | HRC-S-3   | 7.01 | 532   | 0.008  | -0.094 | 0.006 | 0.012 | 0.000000   | 0.000000  | -1172.95 | 561.39   |
| 2    | FID    | HRC-S-4   | 6.96 | 532   | 0.251  | -0.106 | 0.010 | 0.024 | 0.000000   | 0.000000  | 1223.74  | 565.79   |
| 3    | GUIDE  | 406985120 | 7.44 | 1064  | 0.075  | -0.109 | 0.082 | 0.133 | 278.839732 | 38.894839 | -662.51  | -866.42  |
| 4    | GUIDE  | 406987272 | 6.96 | 1064  | -0.103 | 0.165  | 0.076 | 0.113 | 278.536588 | 38.437504 | 619.61   | -2204.74 |
| 5    | GUIDE  | 406987384 | 8.96 | 1064  | -0.031 | 0.055  | 0.101 | 0.170 | 278.815518 | 38.115336 | 1973.70  | -1834.16 |
| 6    | GUIDE  | 407521232 | 8.64 | 1064  | 0.074  | 0.006  | 0.093 | 0.154 | 279.628883 | 39.431715 | -1795.71 | 1833.72  |
| 7    | GUIDE  | 406983600 | 8.93 | 1062  | -0.020 | -0.110 | 0.092 | 0.147 | 279.940957 | 39.020708 | -121.08  | 2204.28  |

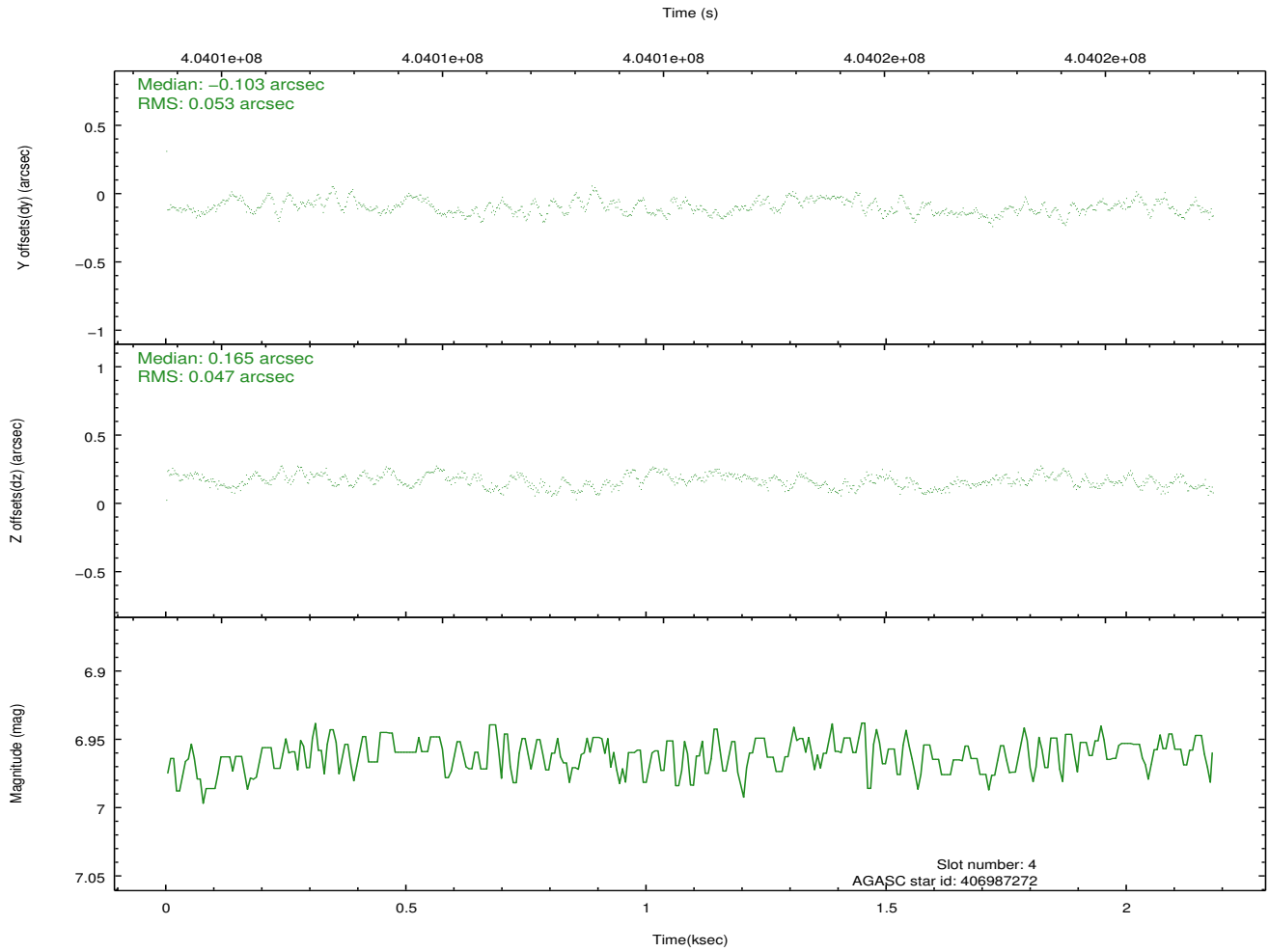
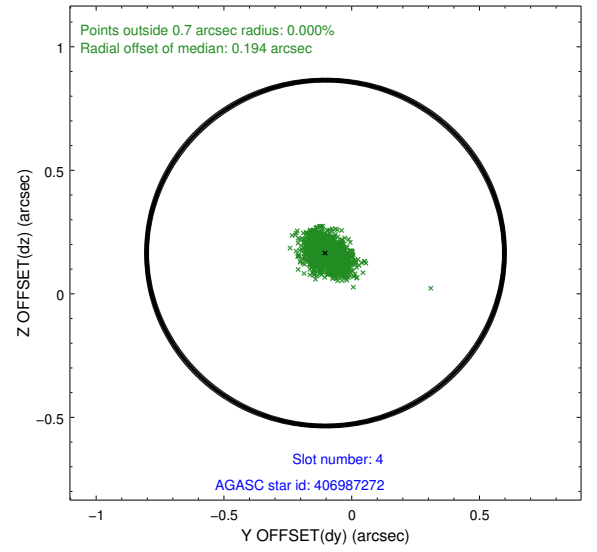
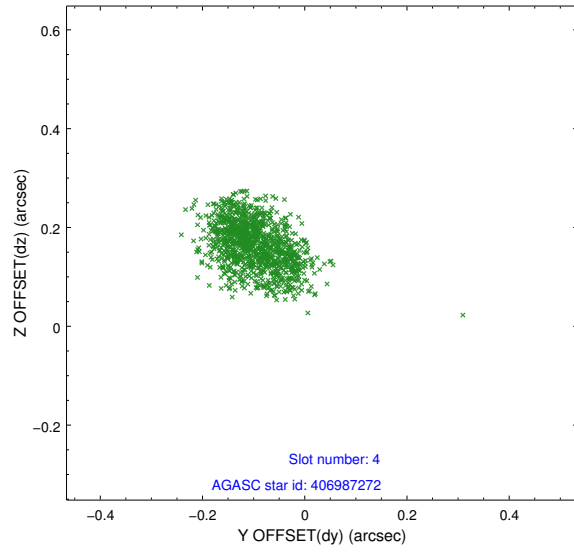


## 2.4 Star Slots

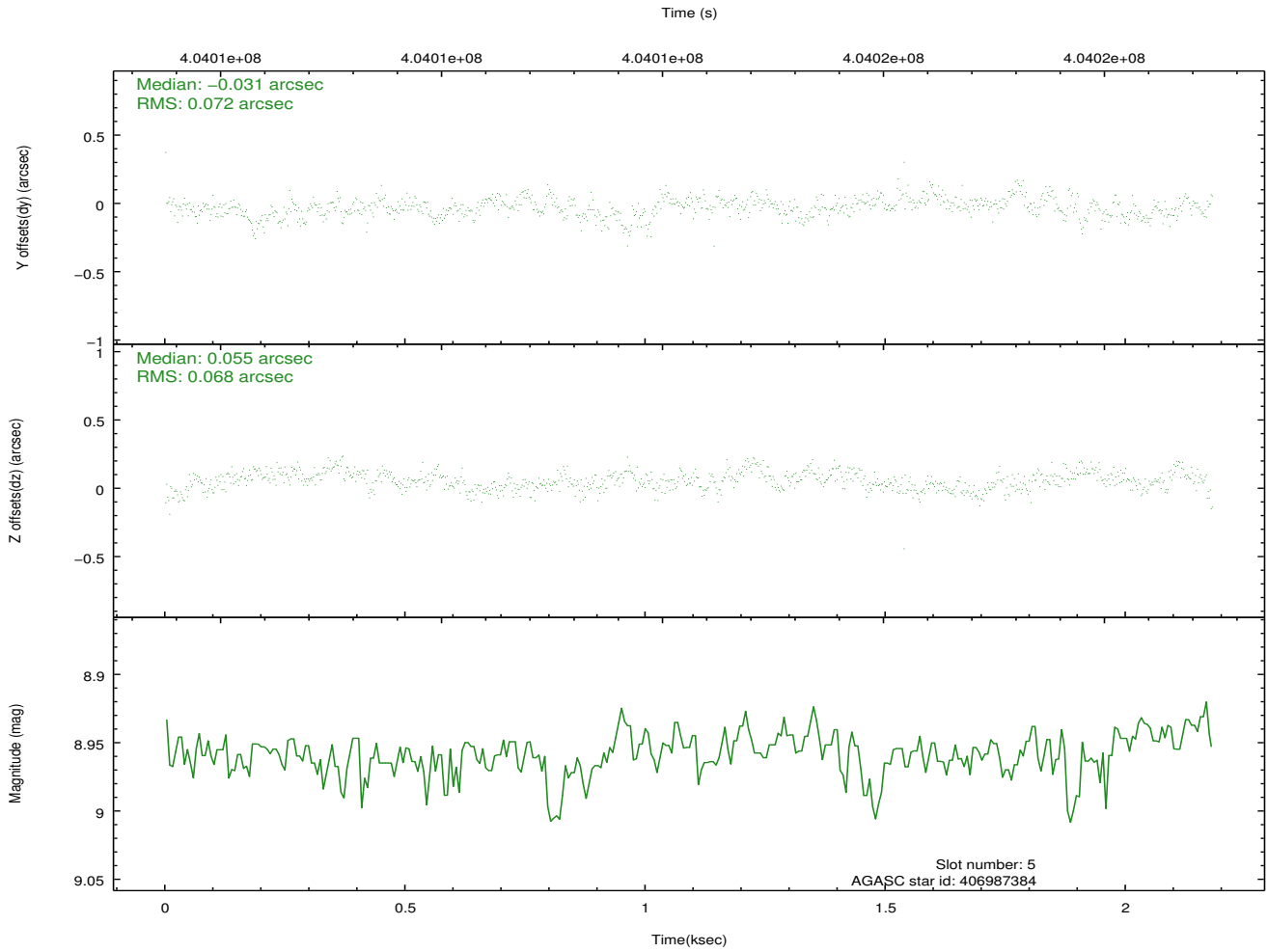
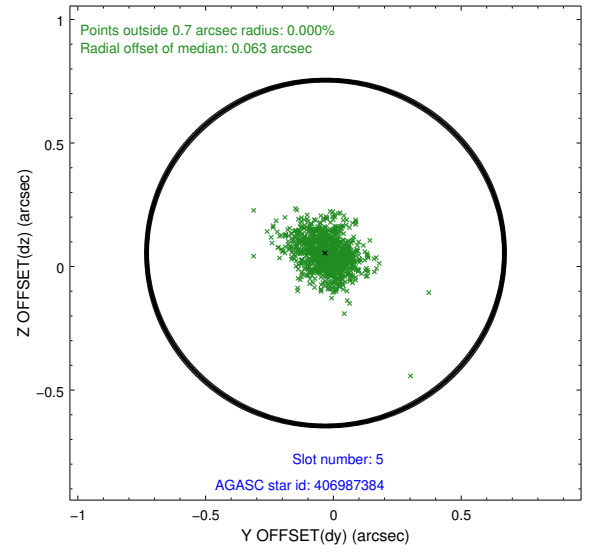
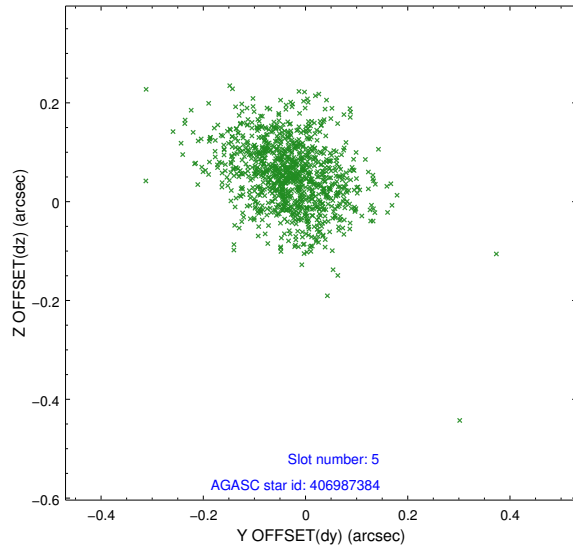
### 2.4.1 Slot 3



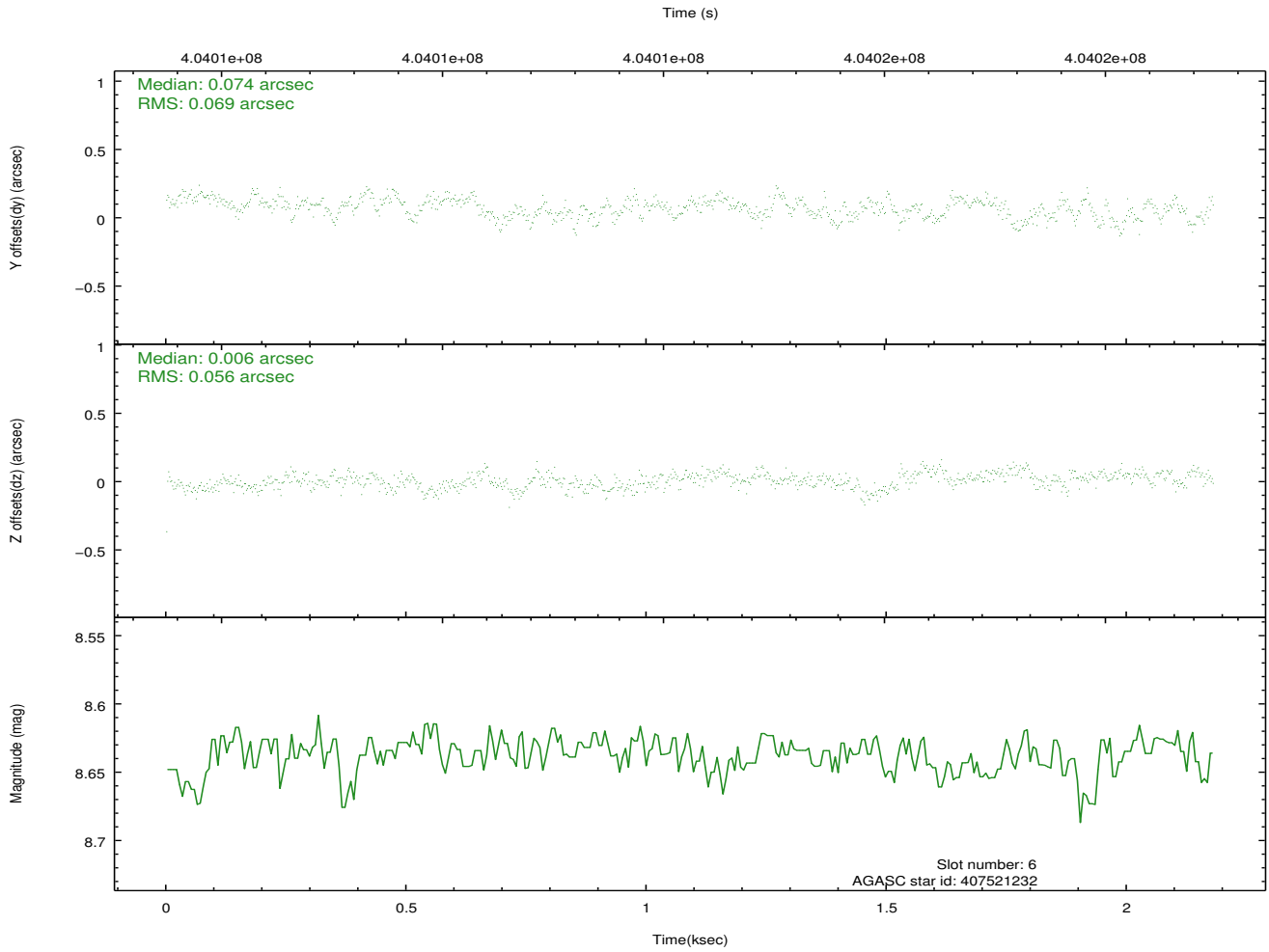
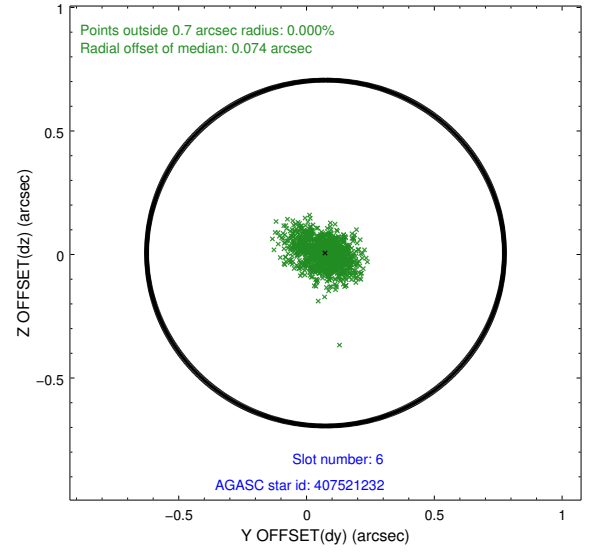
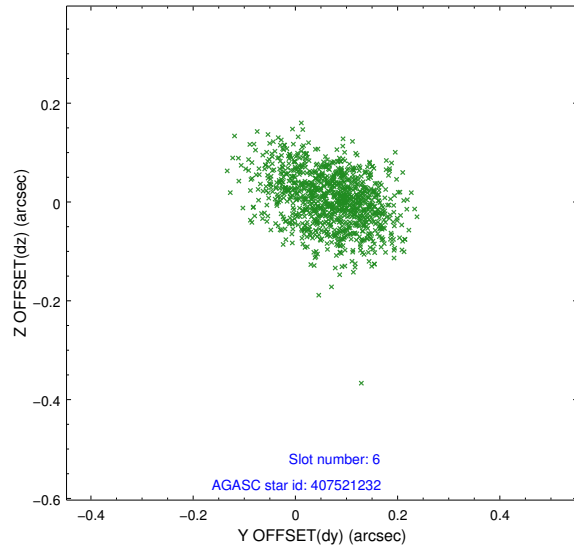
## 2.4.2 Slot 4



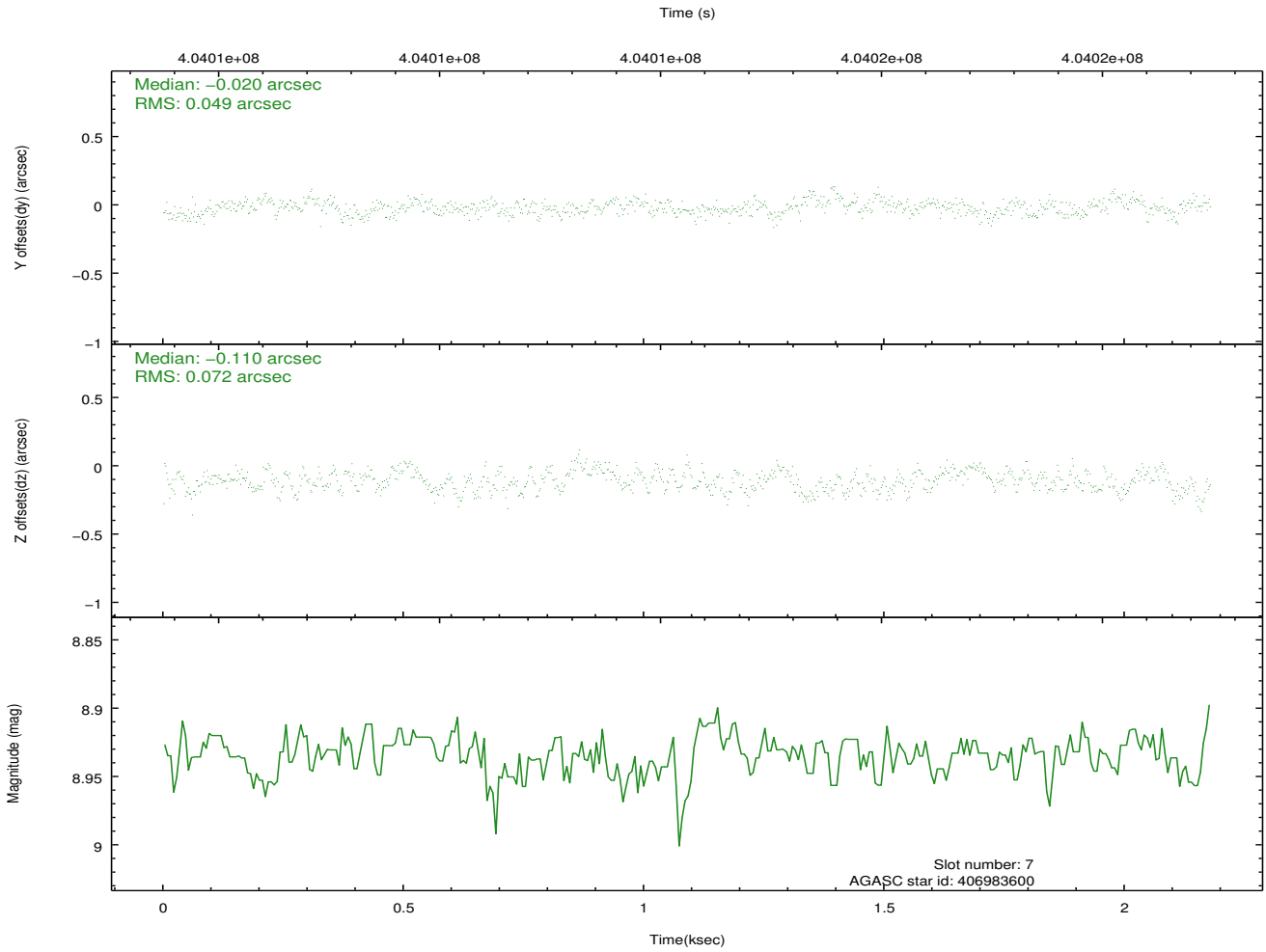
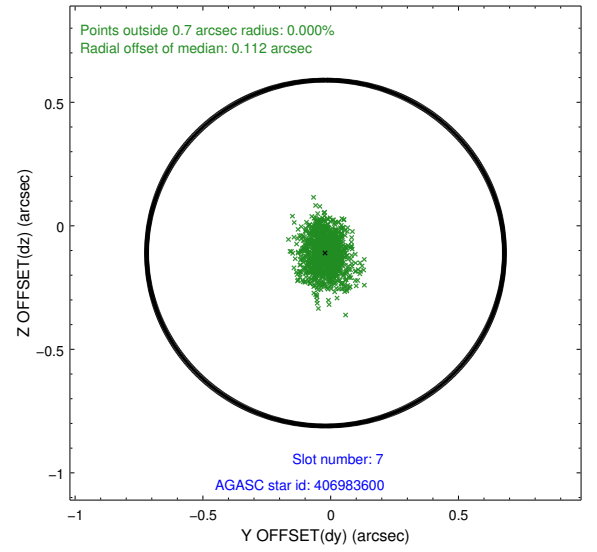
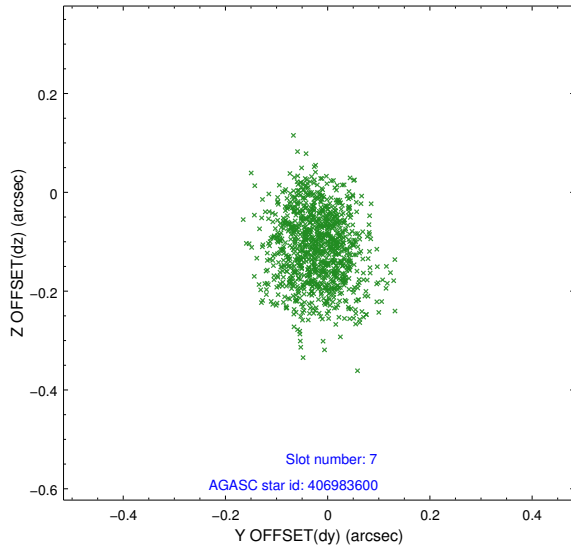
### 2.4.3 Slot 5



## 2.4.4 Slot 6

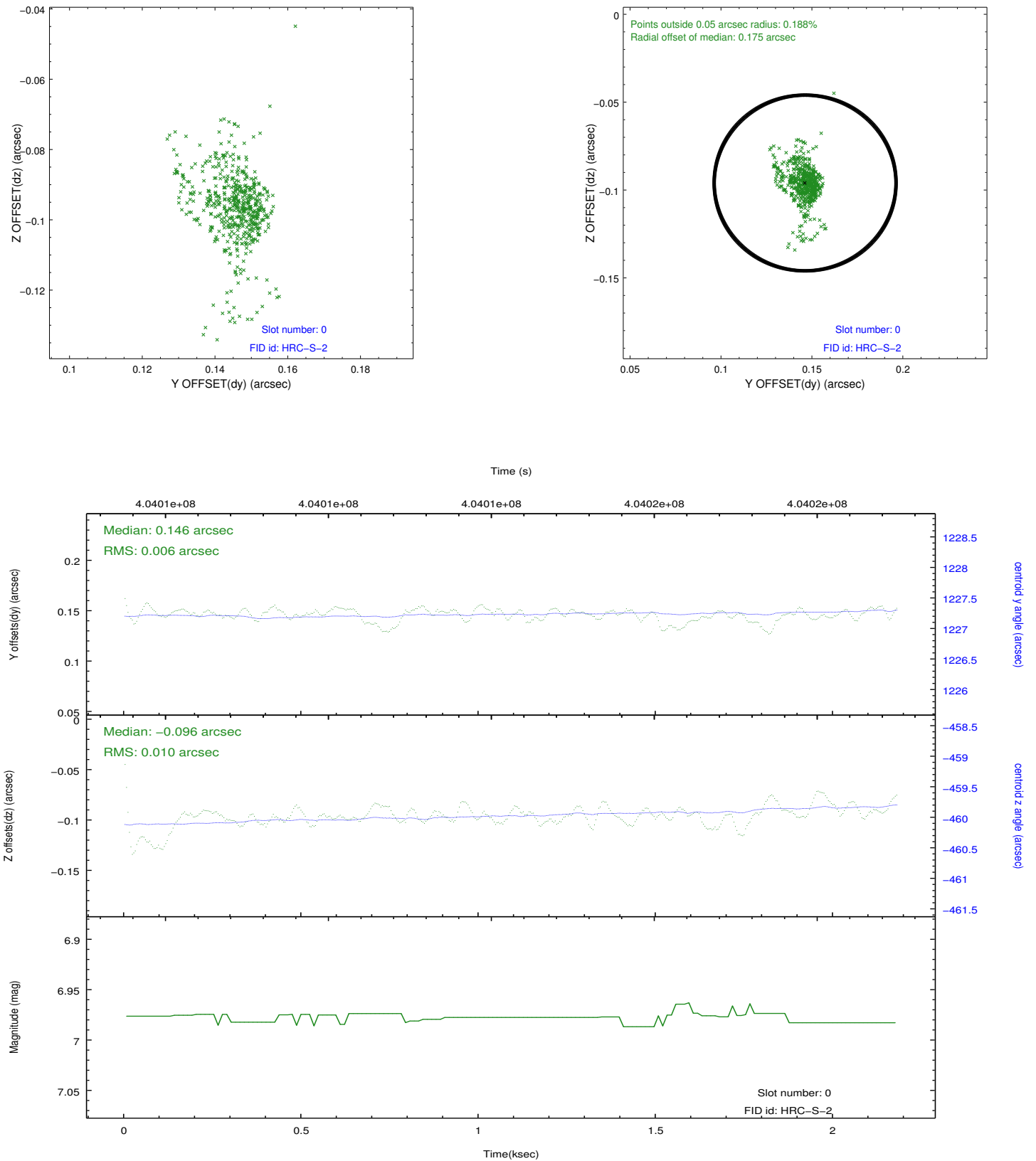


### 2.4.5 Slot 7

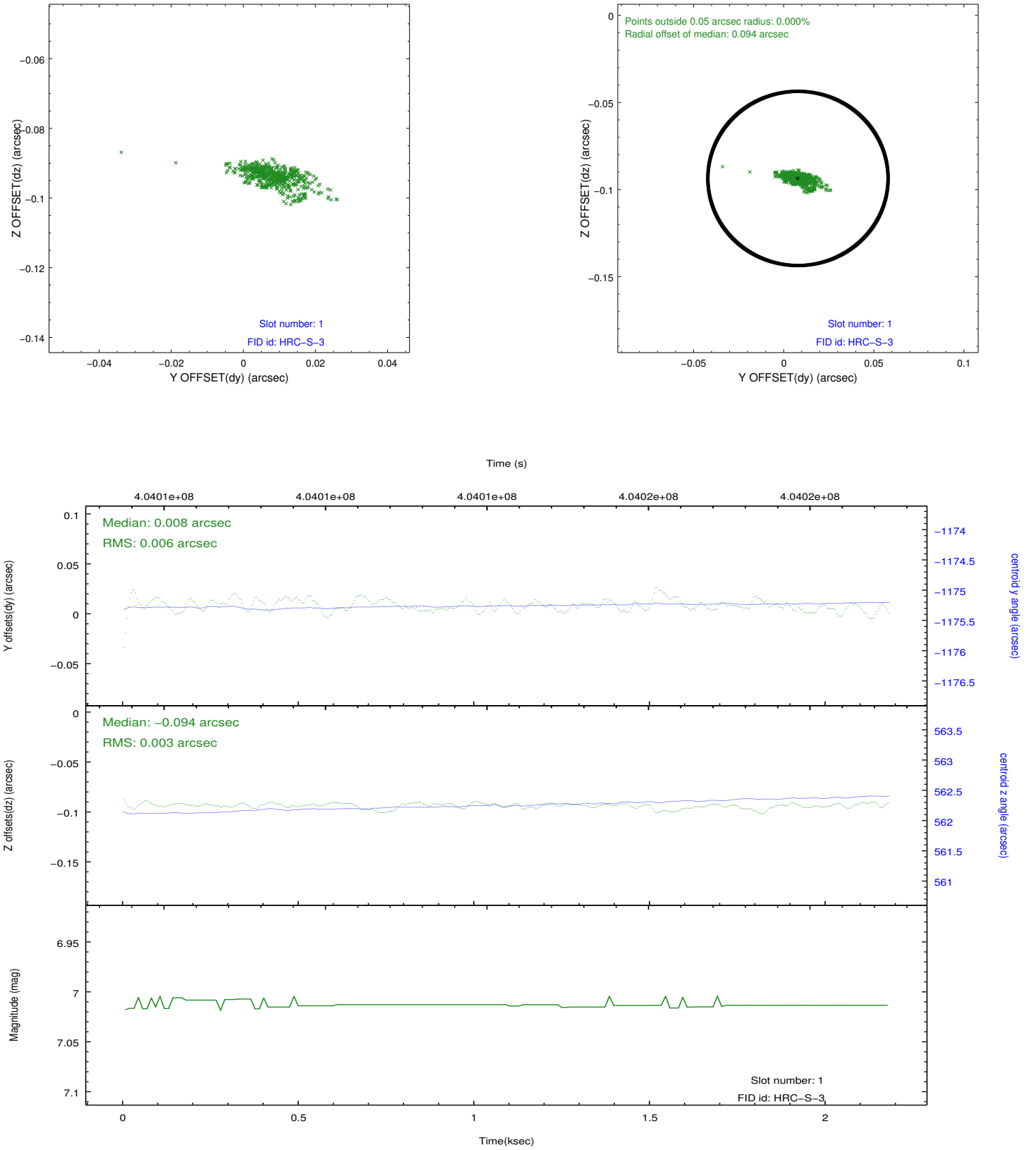


## 2.5 FID Slots

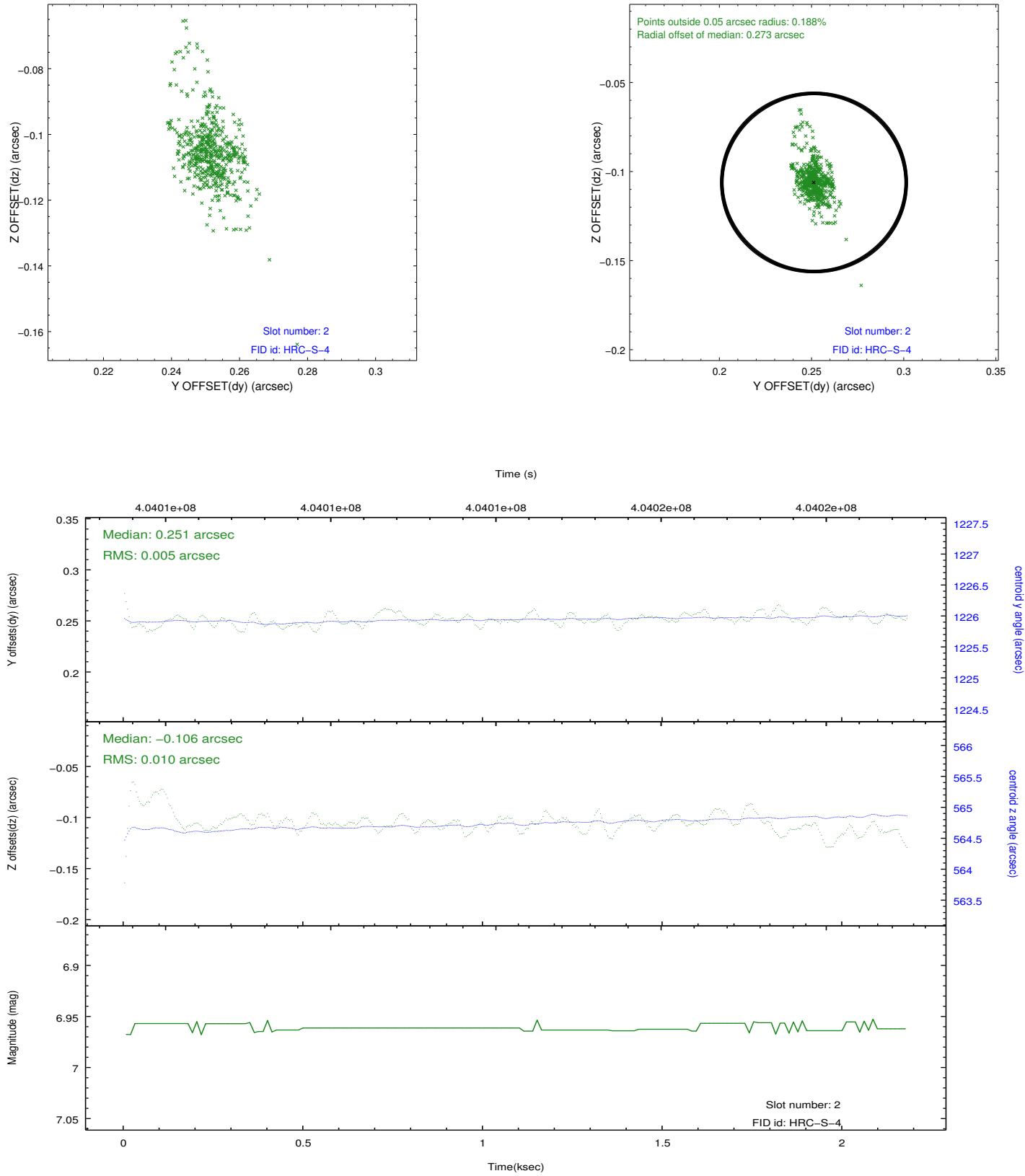
### 2.5.1 Slot 0



## 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)      | 2012.07.13      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 2.1589063610435 |

### A.2 Comments

Window constraint met.