

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8309 - L2 Version 4  
Chandra X-Ray Center

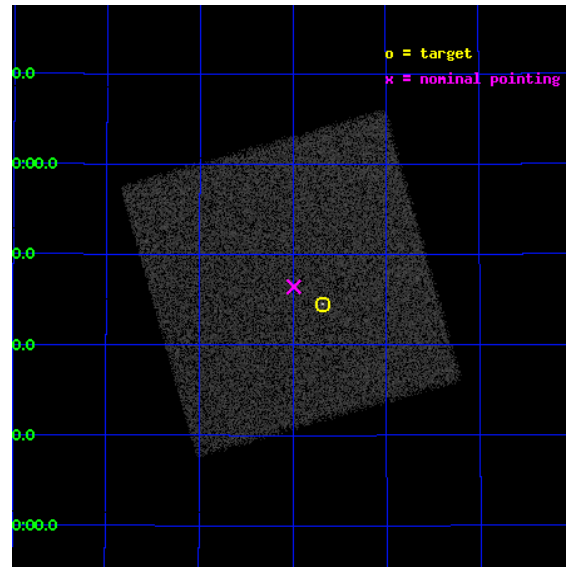
L2 Processing Date : Aug 11 2012

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# 1 Front

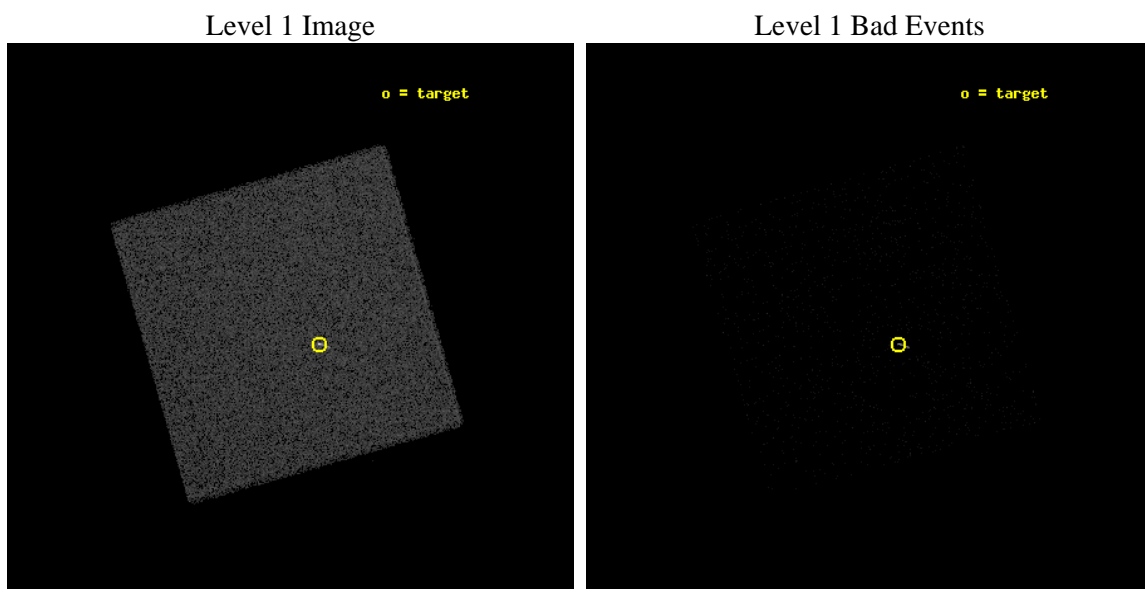
|          |  |                                       |
|----------|--|---------------------------------------|
| seq_num  | 290688   | Sequence number                       |
| obs_id   | 8309   | Observation id                        |
| title    | AO8 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain | Proposal title                        |
| observer | Dr. CXC Calibration  | Principal investigator                |
| object   | ArLac  | Source name                           |
| ra_targ  | 332.17   | Observer's specified target RA [deg]  |
| dec_targ | 45.742306  | Observer's specified target Dec [deg] |
| ra_nom   | 332.24717569751  | Nominal RA [deg]                      |
| dec_nom  | 45.774297305729  | Nominal Dec [deg]                     |
| roll_nom | 209.06966868679  | Nominal Roll [deg]                    |
| revision | 4  | Processing version of data            |
| ontime   | 1188.2313072085  | [s]                                   |
| livetime | 1175.7809834303  | Ontime multiplied by DTCOR            |
| l2events | 74084  | 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     | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5               | Processing system revision     | ontime         | 1188.2313072085 | [s]                                     |
| caldbver | 4.5.1.1             | &#160                          | l1events       | 136797          | Number of level 1 events                |
| date     | 2012-08-12T01:51:22 | Date and time of file creation |                |                 |   |
| revision | 4                   | Processing version of data     |                |                 |   |

### 2.1.3 Events

#### Level 1 Events

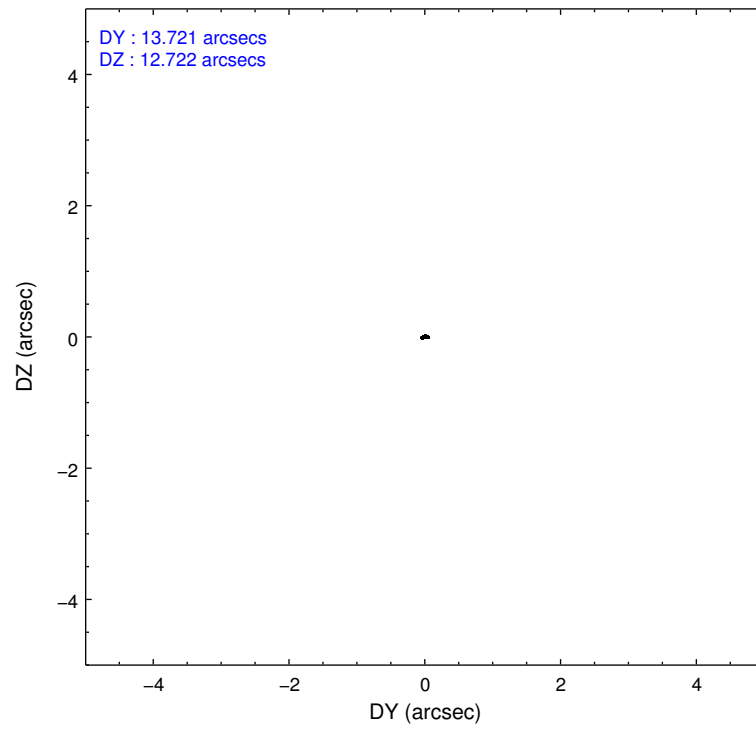
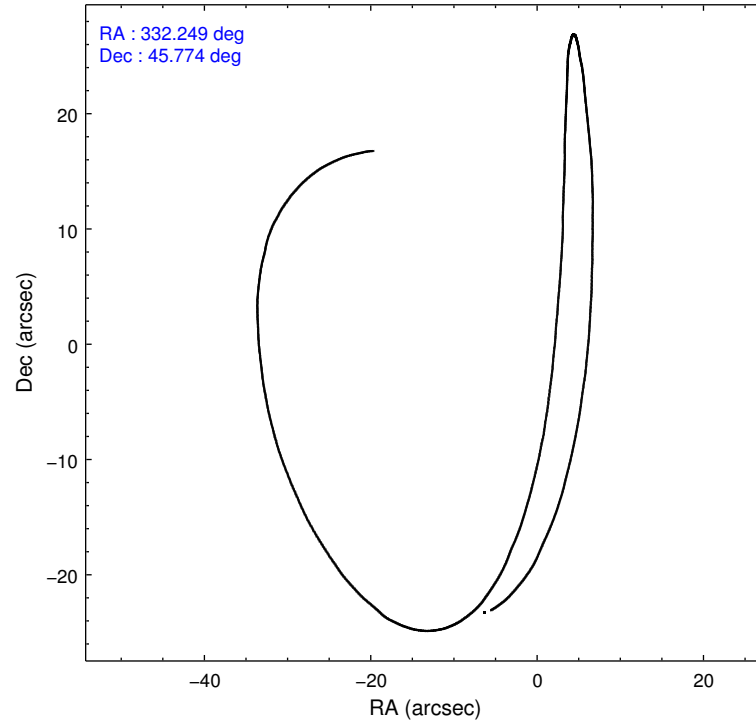
|                 |                      |
|-----------------|----------------------|
|                 | <b>segment<br/>0</b> |
| level 1 events  | 136797               |
| rejected events | 29130                |
| rejected %      | 21%                  |

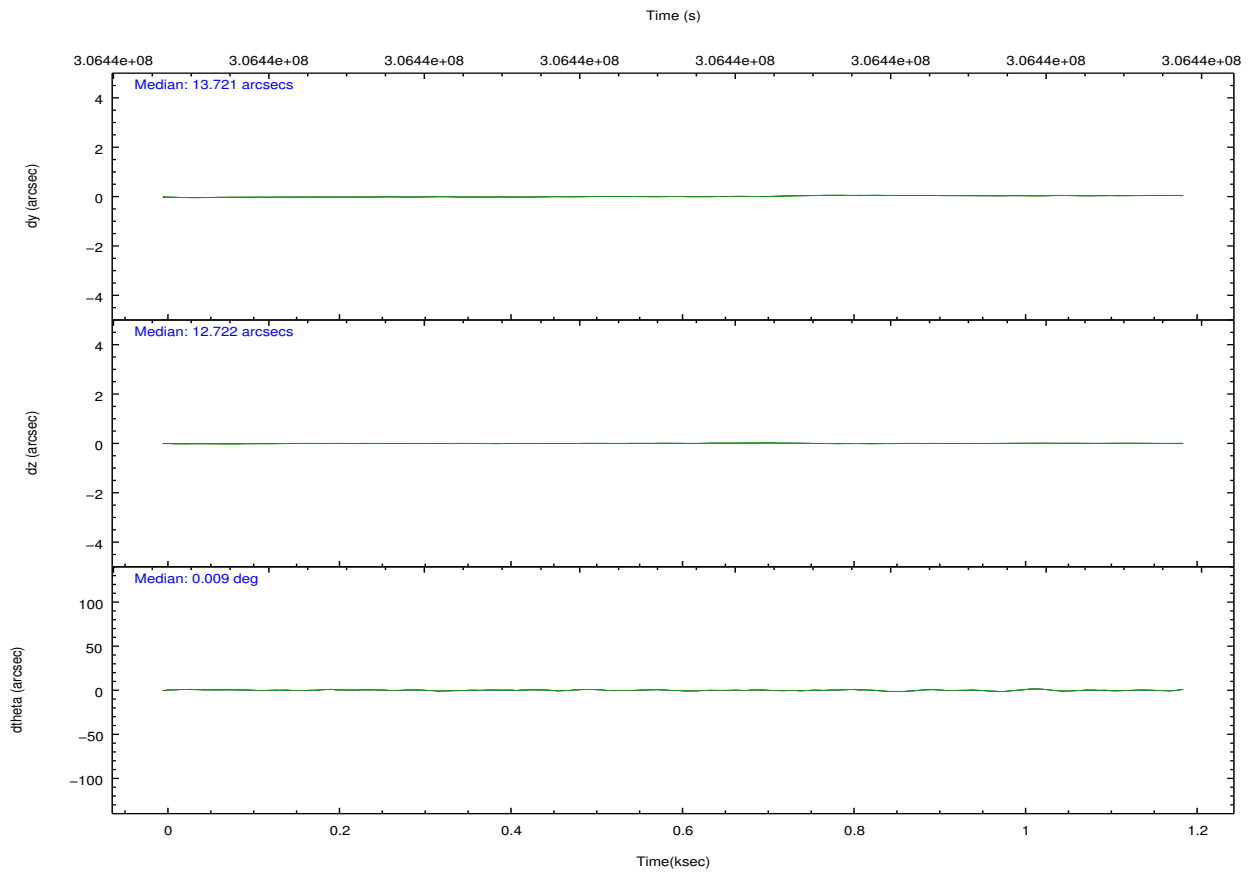
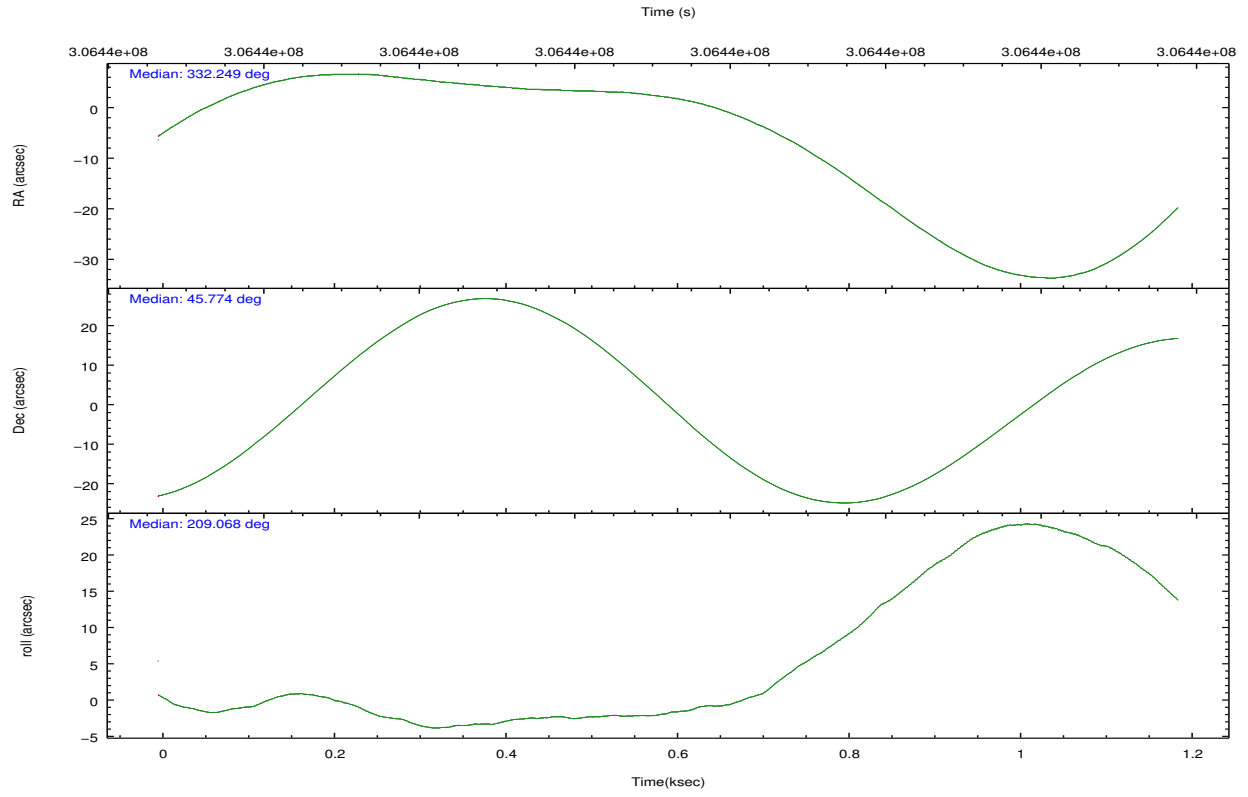
## 2.2 Compared Parameters

| 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                 | 332.266674          | 332.2471756975078      |
| [deg] Pointing Dec                | 45.797923           | 45.77429730572921      |
| [deg] Pointing Roll               | 209.151183          | 209.0696686867948      |
| [mm] SIM focus pos                | -1.040293           | -1.038866356238299     |
| [mm] SIM defocus                  | 0                   | 0.001426264420575141   |
| [mm] SIM translation stage pos    | 126.985494          | 126.9854943052878      |
| [mm] SIM translation stage offset | 0                   | -5.413686238853188e-06 |
| [s] Observation start time (MET)  | 306441112.184000    | 306440736.53898        |
| Observation start date            | 2007-09-17T18:30:47 | 2007-09-17T18:25:36    |
| [s] Observation end time (MET)    | 306442112.184000    | 306442246.36406        |
| Observation end date              | 2007-09-17T18:47:27 | 2007-09-17T18:50:46    |

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

## 2.3 Aspect





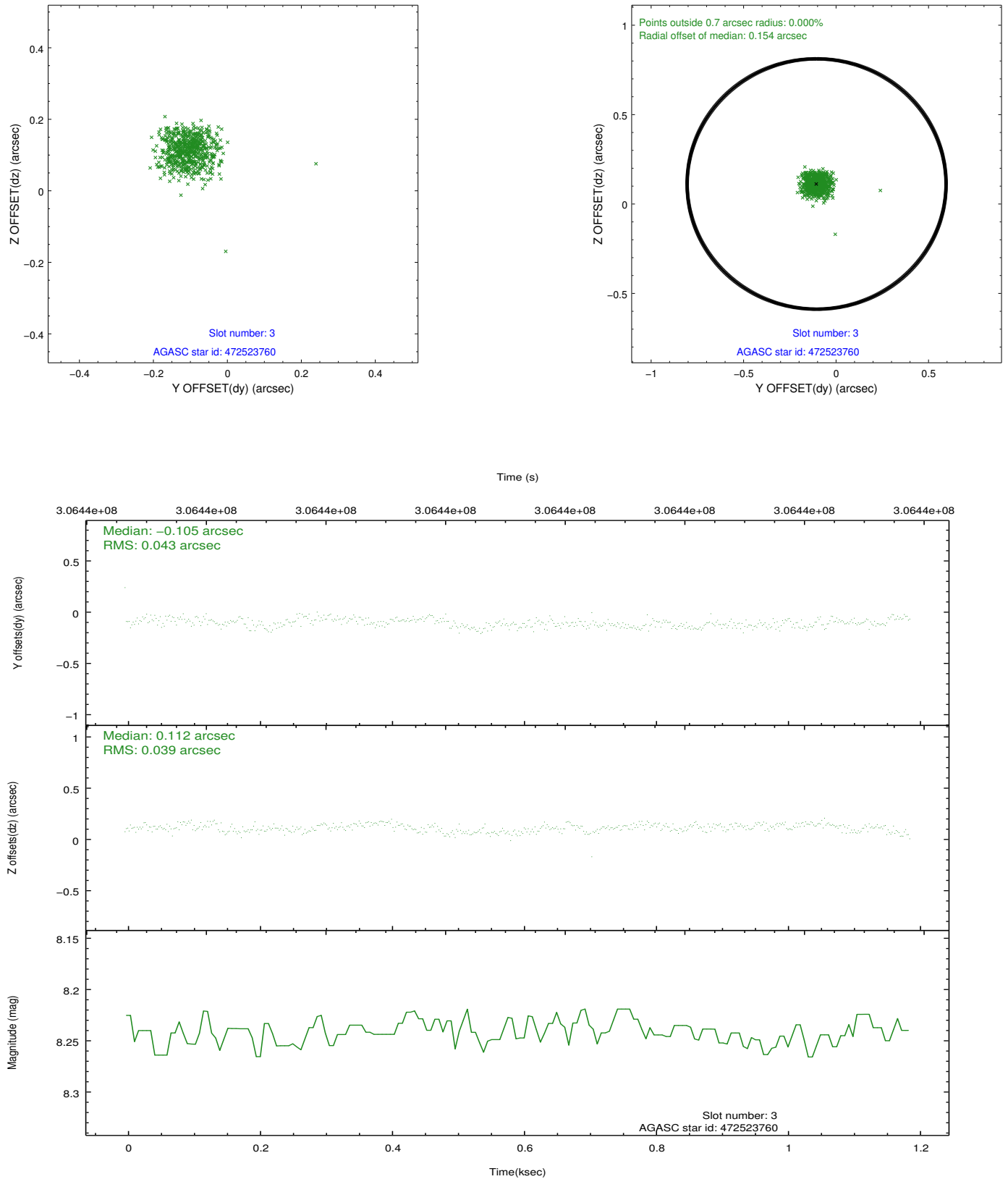
### Slot Statistics

| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-I-1   | 6.99 | 291   | -0.060 | 0.031  | 0.007 | 0.012 | 0.000000   | 0.000000  | -769.56  | -1300.76 |
| 1    | FID    | HRC-I-2   | 7.02 | 291   | 0.244  | -0.161 | 0.006 | 0.011 | 0.000000   | 0.000000  | 840.73   | -1306.99 |
| 2    | FID    | HRC-I-3   | 7.07 | 291   | -0.064 | 0.040  | 0.006 | 0.010 | 0.000000   | 0.000000  | -1195.16 | 999.33   |
| 3    | GUIDE  | 472523760 | 8.24 | 581   | -0.105 | 0.112  | 0.059 | 0.092 | 331.645363 | 45.403260 | 2060.54  | 471.23   |
| 4    | GUIDE  | 472651904 | 6.24 | 581   | -0.165 | -0.246 | 0.081 | 0.128 | 332.170077 | 45.742257 | 312.96   | 57.28    |
| 5    | GUIDE  | 472663080 | 9.41 | 581   | 0.117  | 0.157  | 0.100 | 0.161 | 332.652741 | 46.473840 | -2021.83 | -1660.10 |
| 6    | GUIDE  | 472665256 | 9.00 | 581   | 0.102  | 0.124  | 0.092 | 0.151 | 332.808125 | 46.195041 | -1880.45 | -597.48  |
| 7    | GUIDE  | 472655152 | 9.41 | 578   | 0.058  | -0.136 | 0.138 | 0.211 | 332.504239 | 45.862991 | -637.88  | 84.26    |

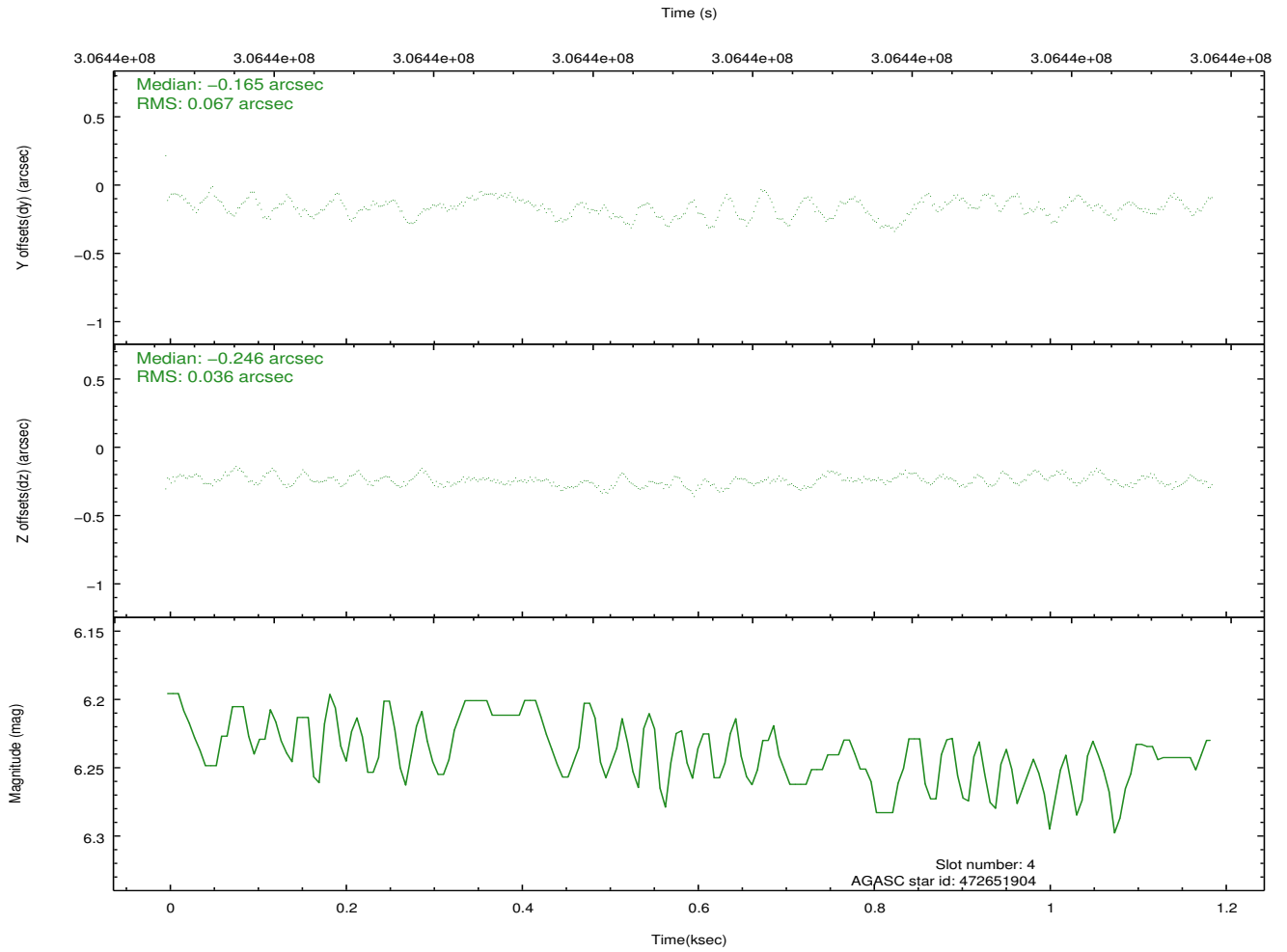
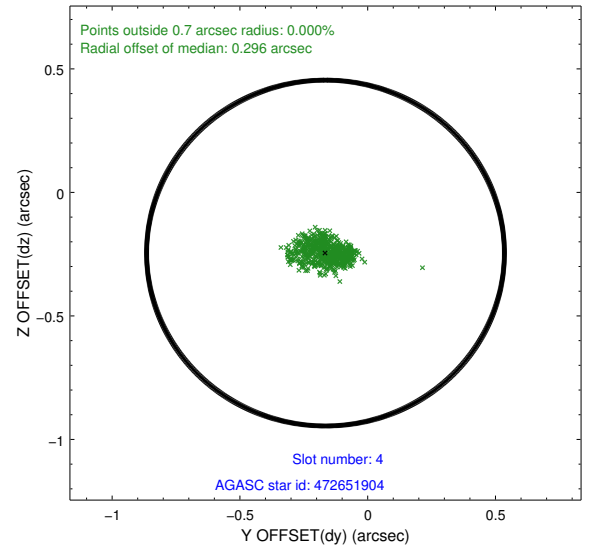
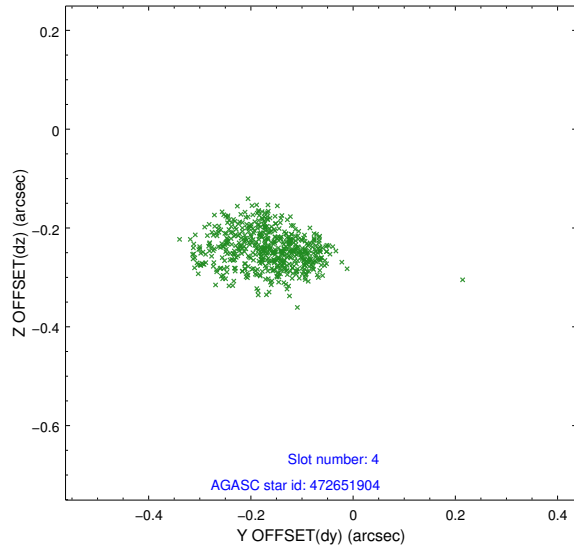


## 2.4 Star Slots

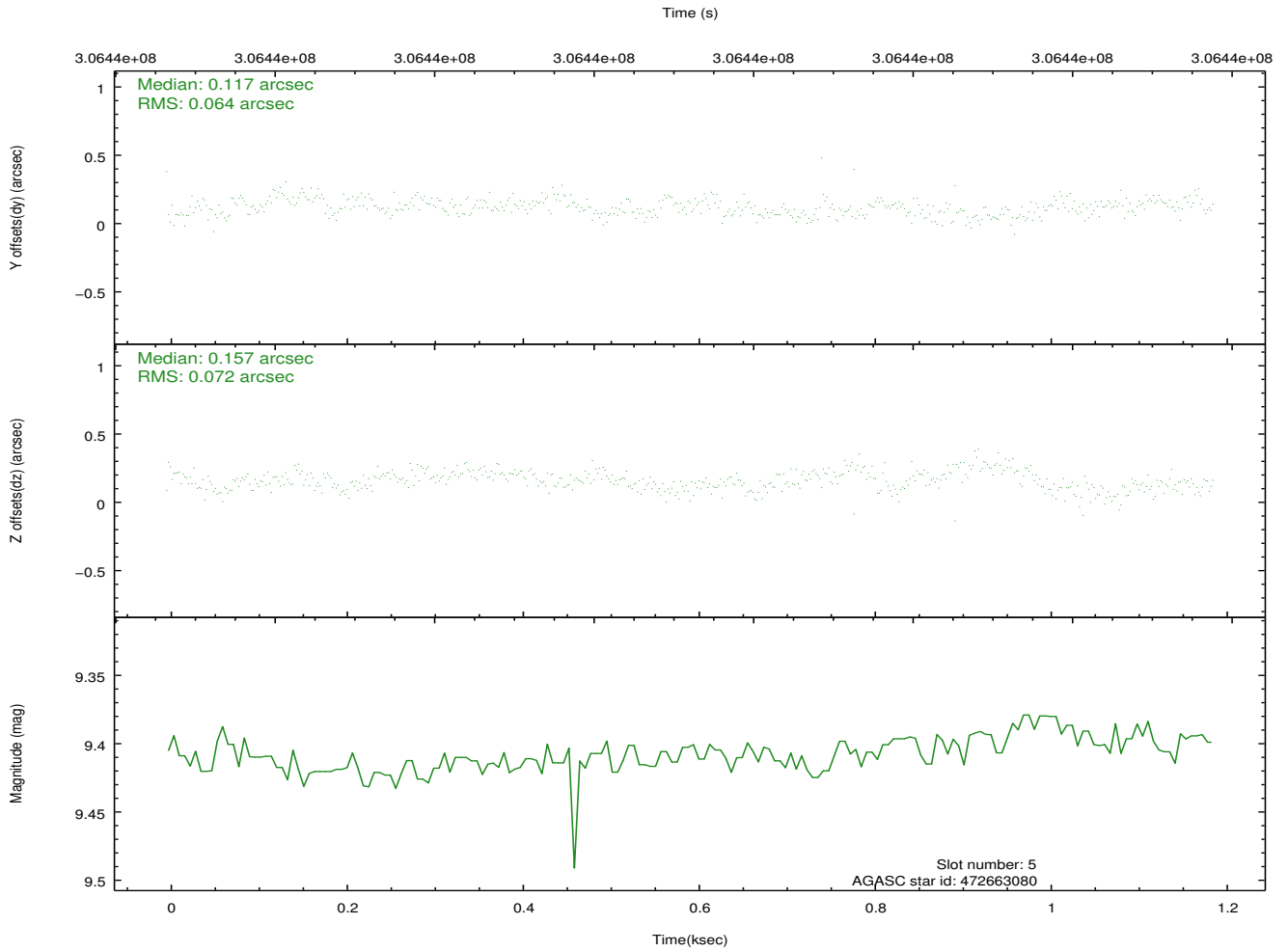
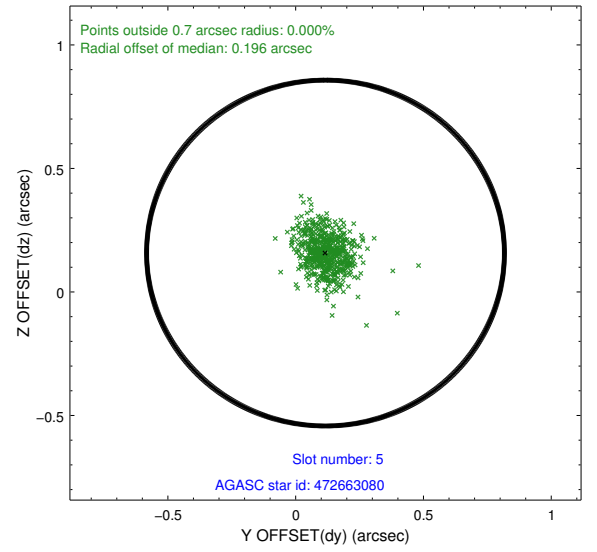
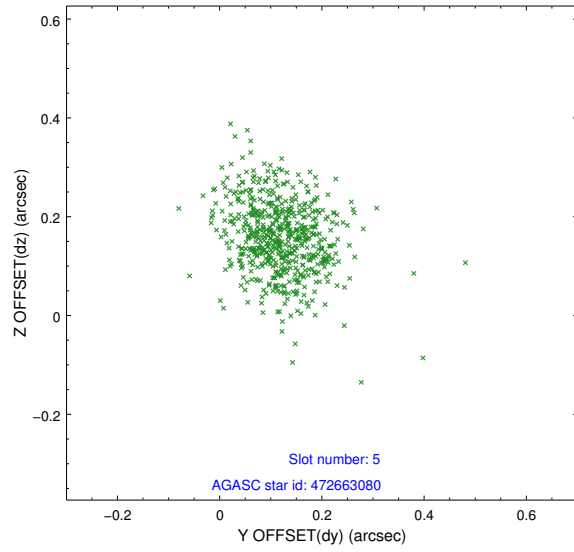
### 2.4.1 Slot 3



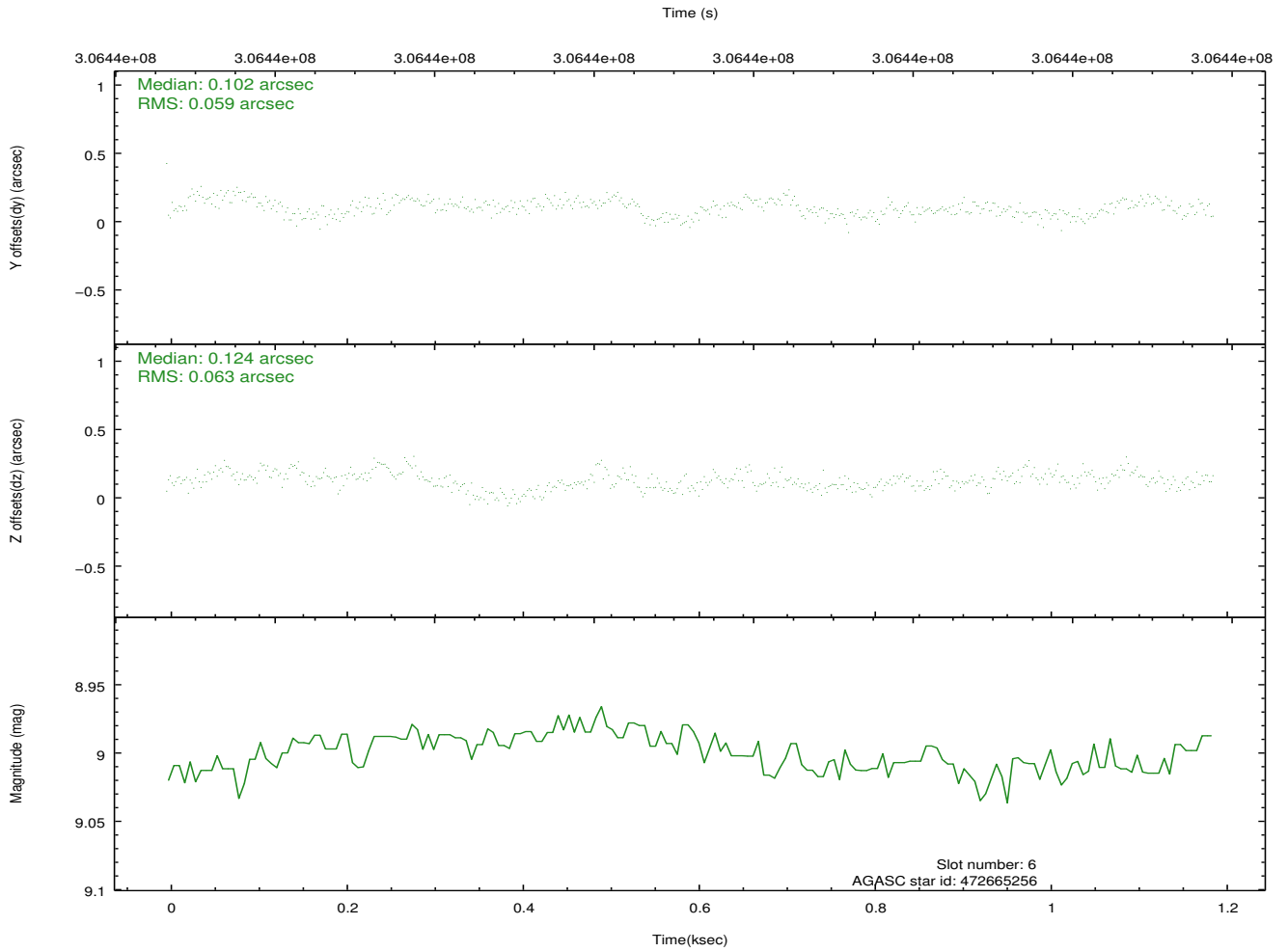
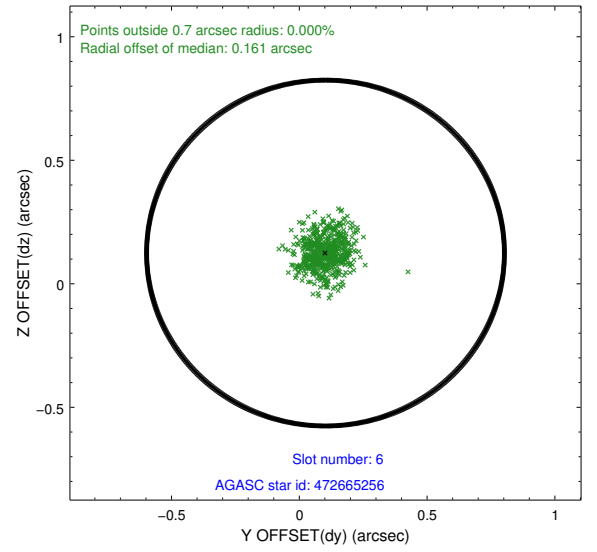
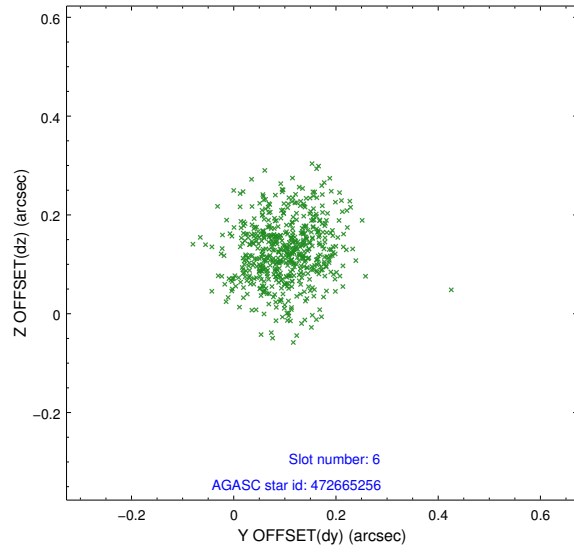
## 2.4.2 Slot 4



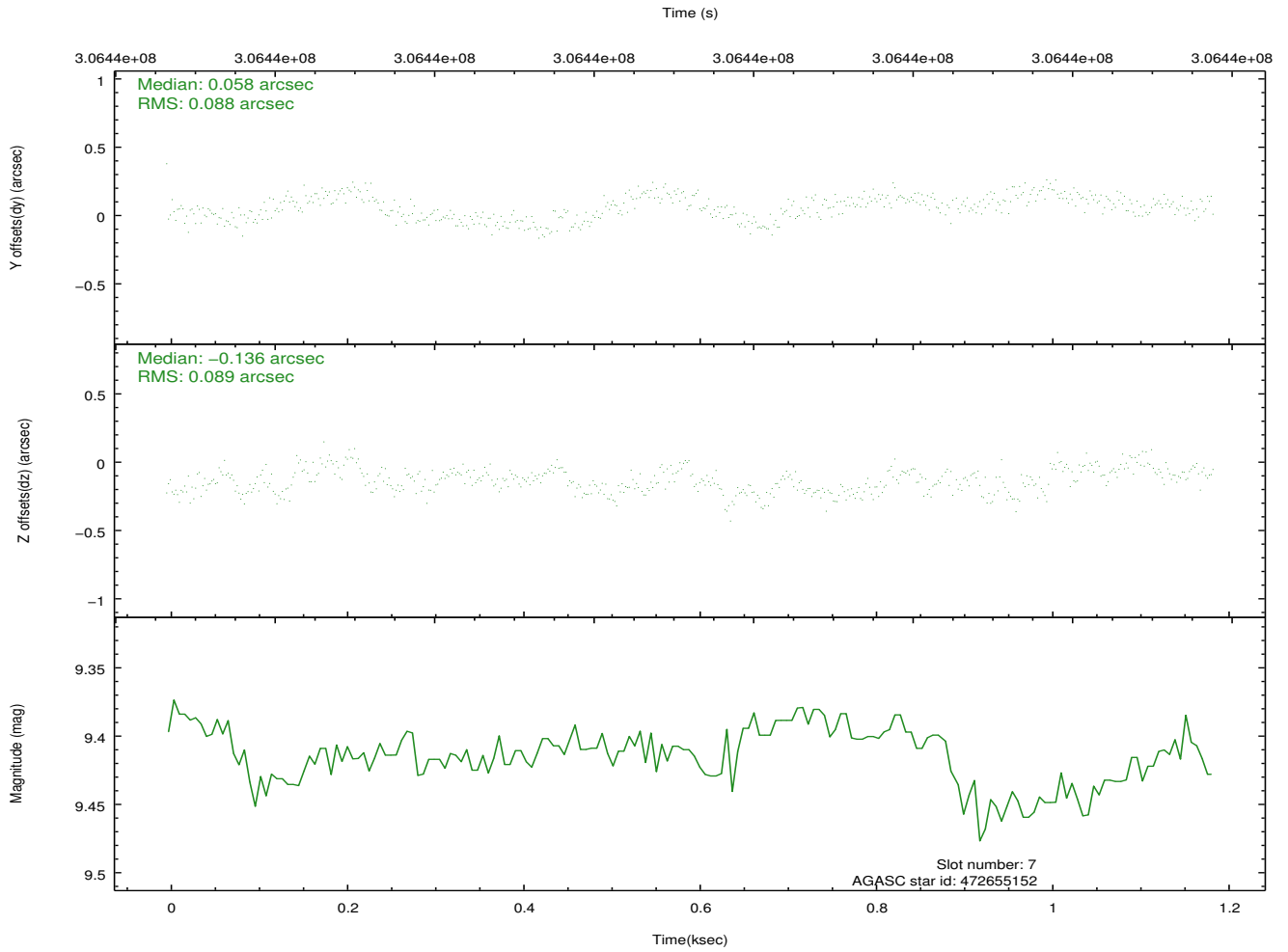
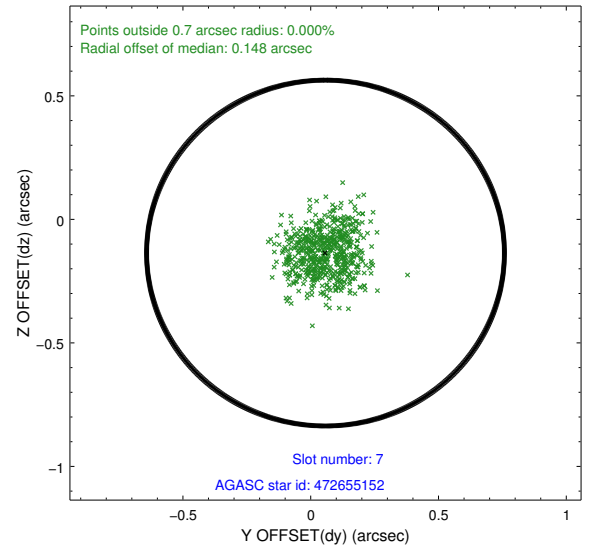
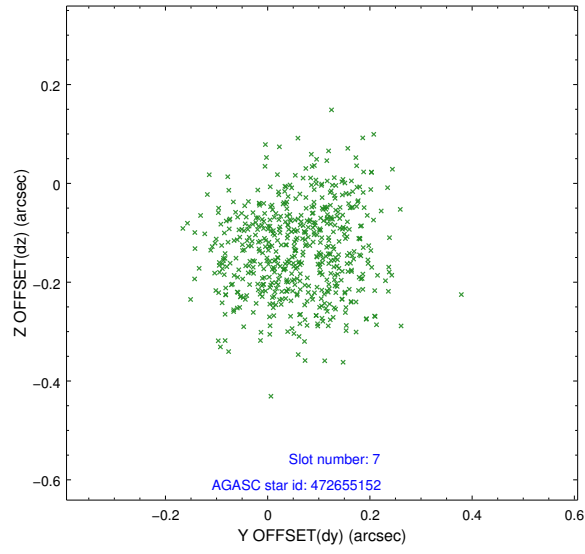
### 2.4.3 Slot 5



## 2.4.4 Slot 6

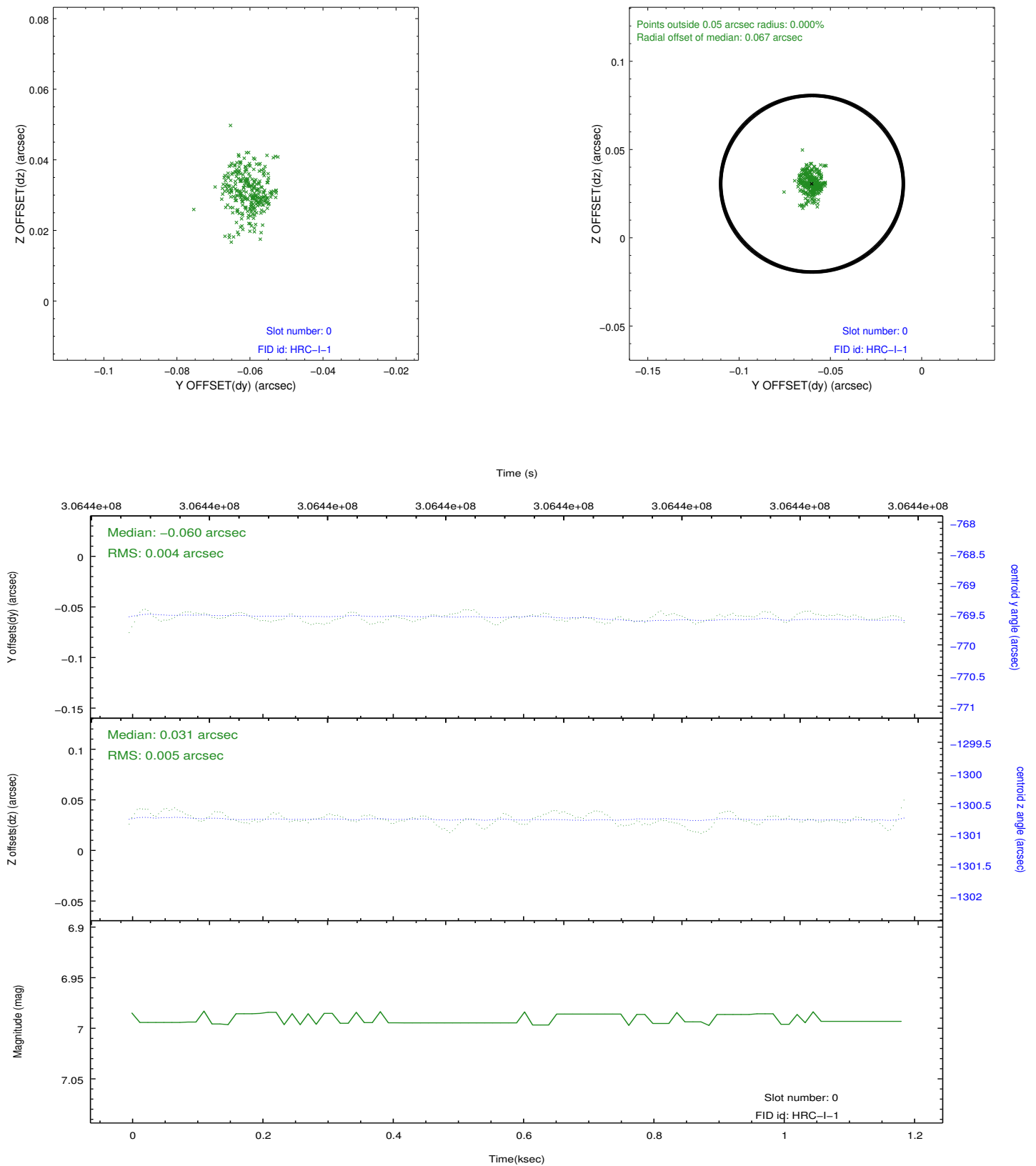


## 2.4.5 Slot 7

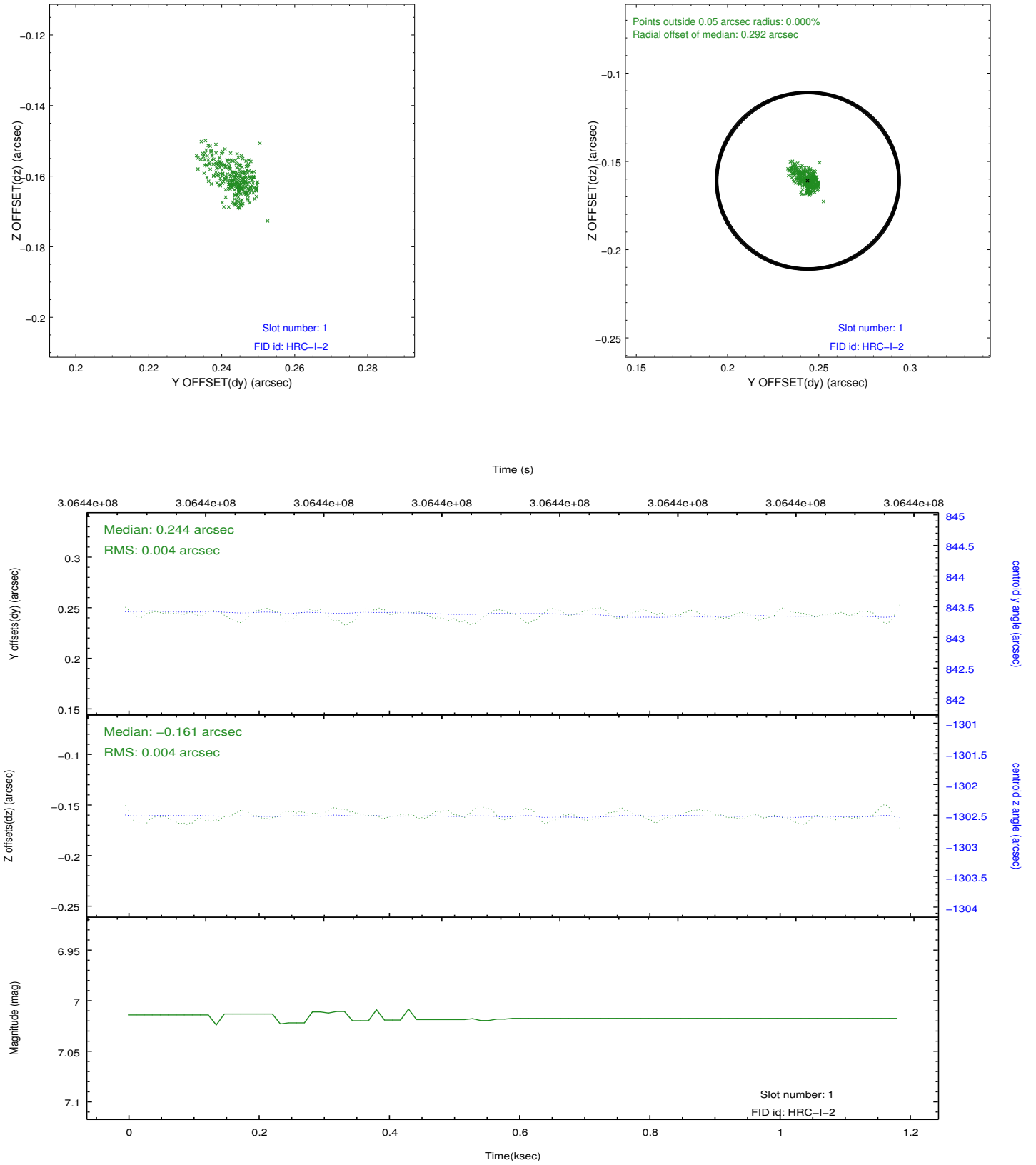


## 2.5 FID Slots

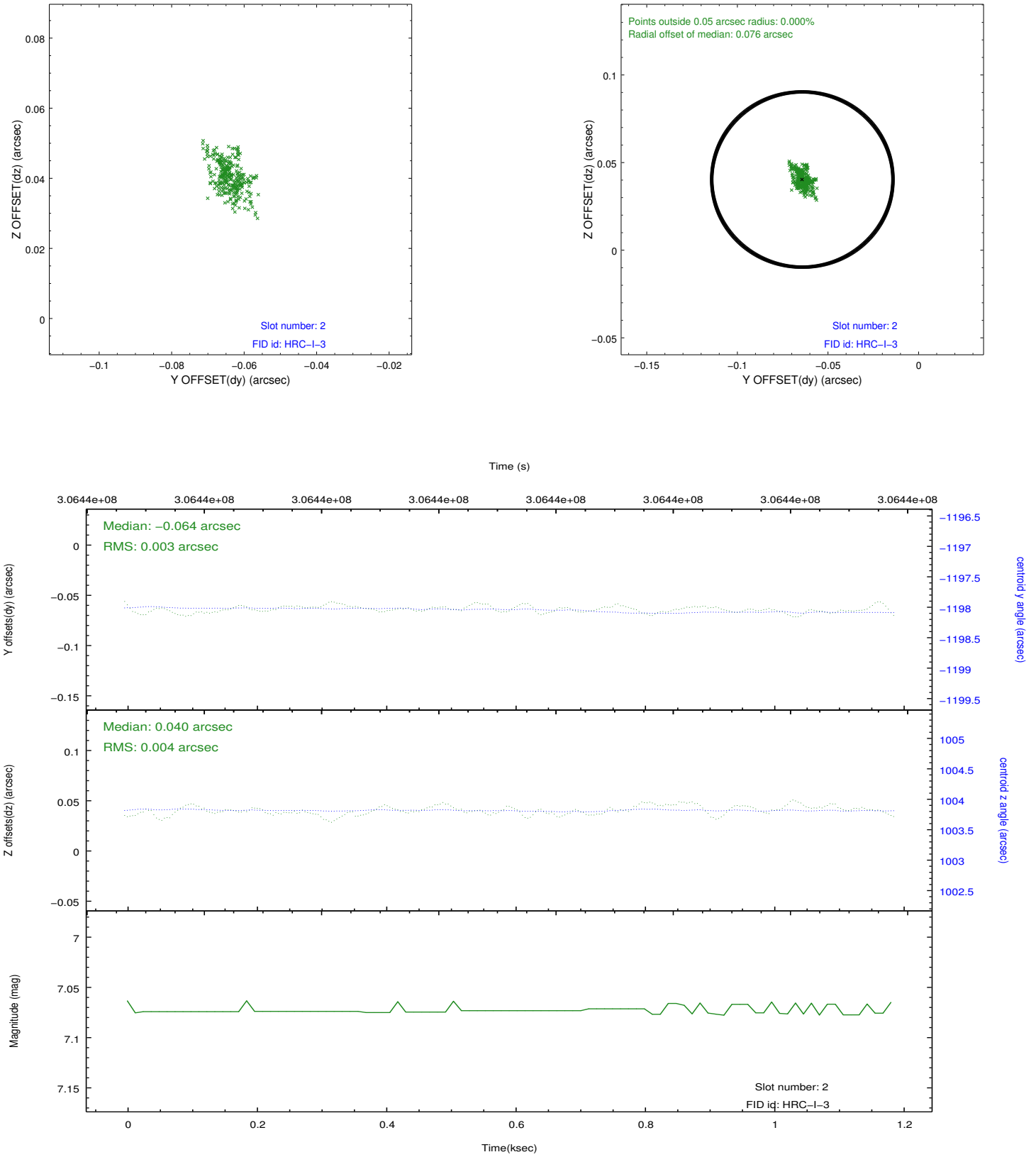
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

|                            |            |
|----------------------------|------------|
| V&V Scientist              | Jen Lauer  |
| V&V Date (YYYY-MM-DD)      | 2012.08.15 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 1.1882313  |

### A.2 Comments