

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 4313 - L2 Version 001  
Chandra X-Ray Center

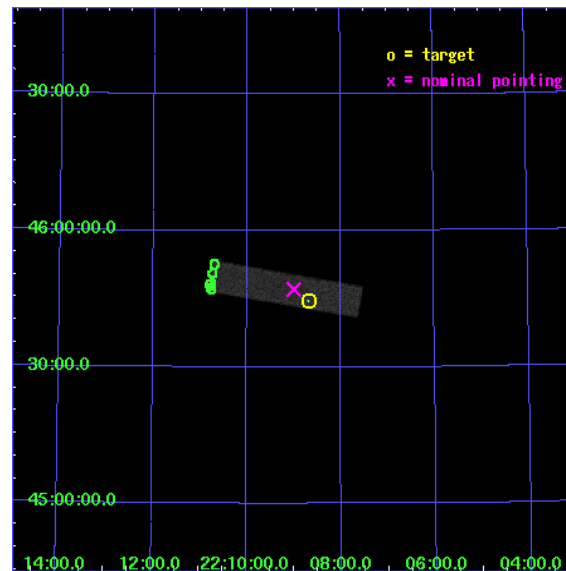
L2 Processing Date : Jul 7 2006

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# 1 Front

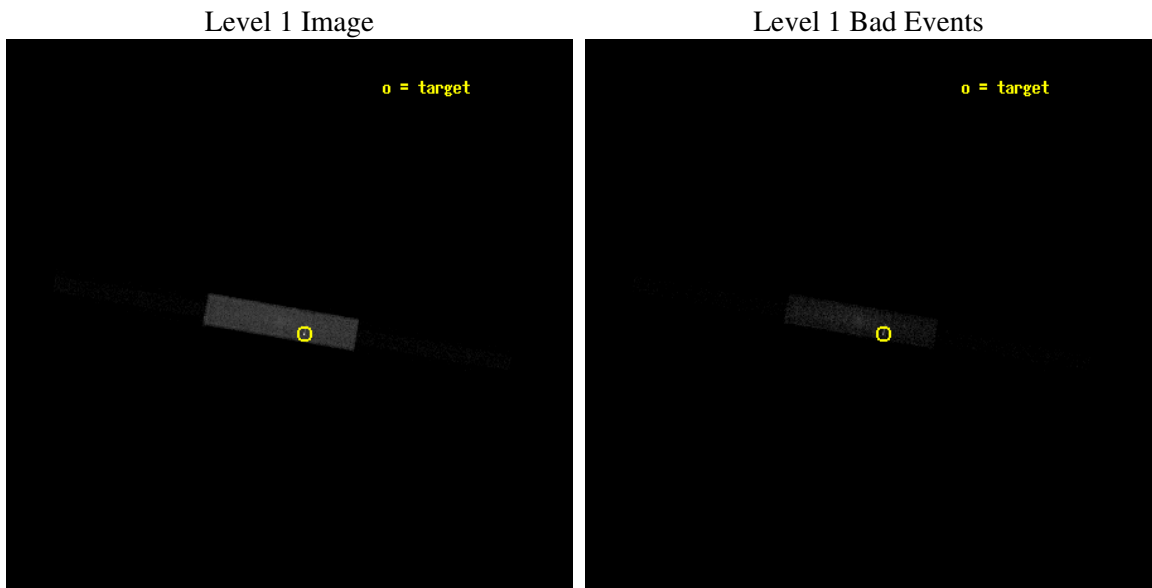
|          |   |
|----------|---|
| seq_num  | 290273  |
| obs_id   | 4313  |
| title    | AO4B CALIBRATION OBSERVATIONS TO MONITOR SPATIAL VARIATIONS IN THE HRC-S GAIN |
| observer | Dr. CXC Calibration   |
| object   | ARLAC   |
| ra_targ  | 332.17  |
| dec_targ | 45.742306   |
| ra_nom   | 332.24915809727   |
| dec_nom  | 45.785096134592   |
| roll_nom | 189.64774804606   |
| revision | 2   |
| ontime   | 1142.1062989235   |
| livetime | 1136.4533311133   |
| l2events | 36829   |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.8               |
| caldbver | 3.2.2               |
| date     | 2006-07-07T20:05:33 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 1000.000000     |
| ontime         | 1184.1313007176 |
| l1events       | 65313           |

### 2.1.3 Events

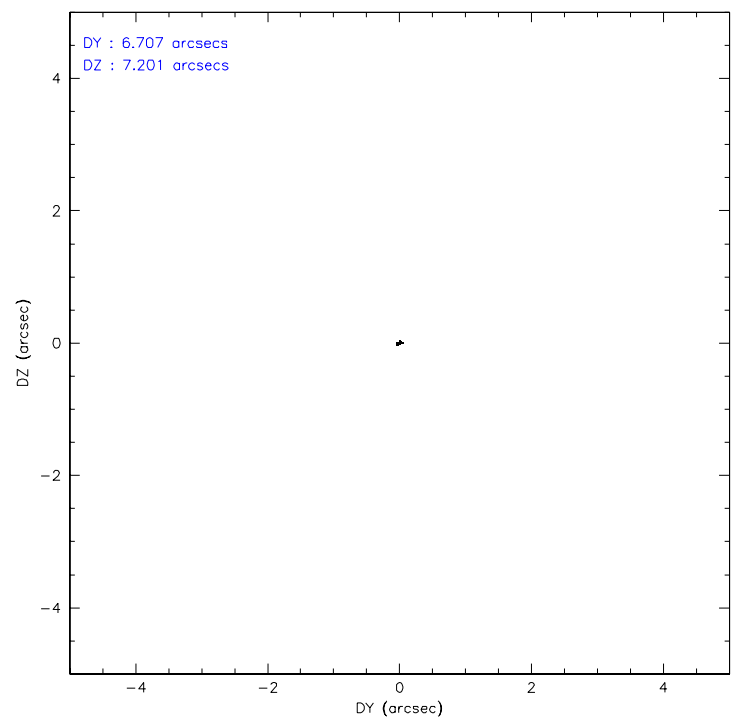
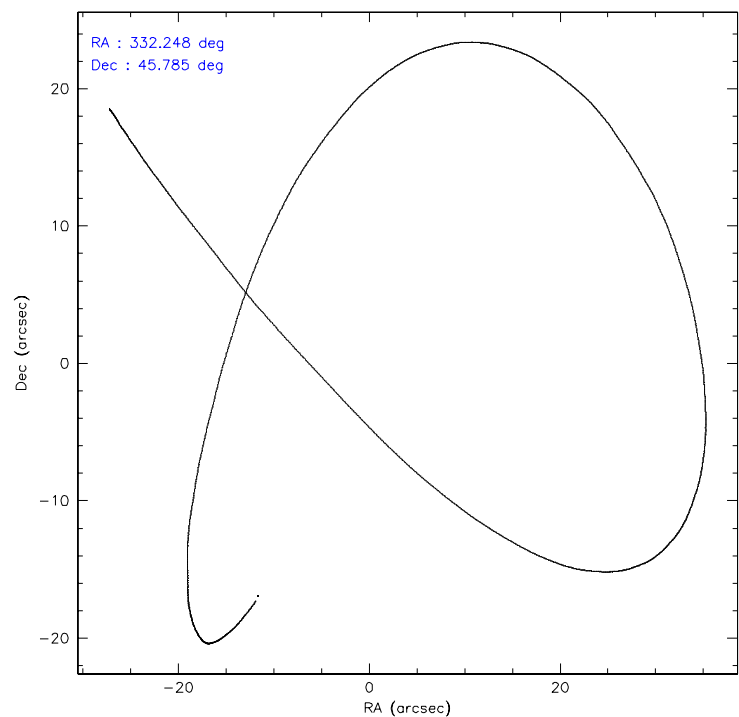
Level 1 Events

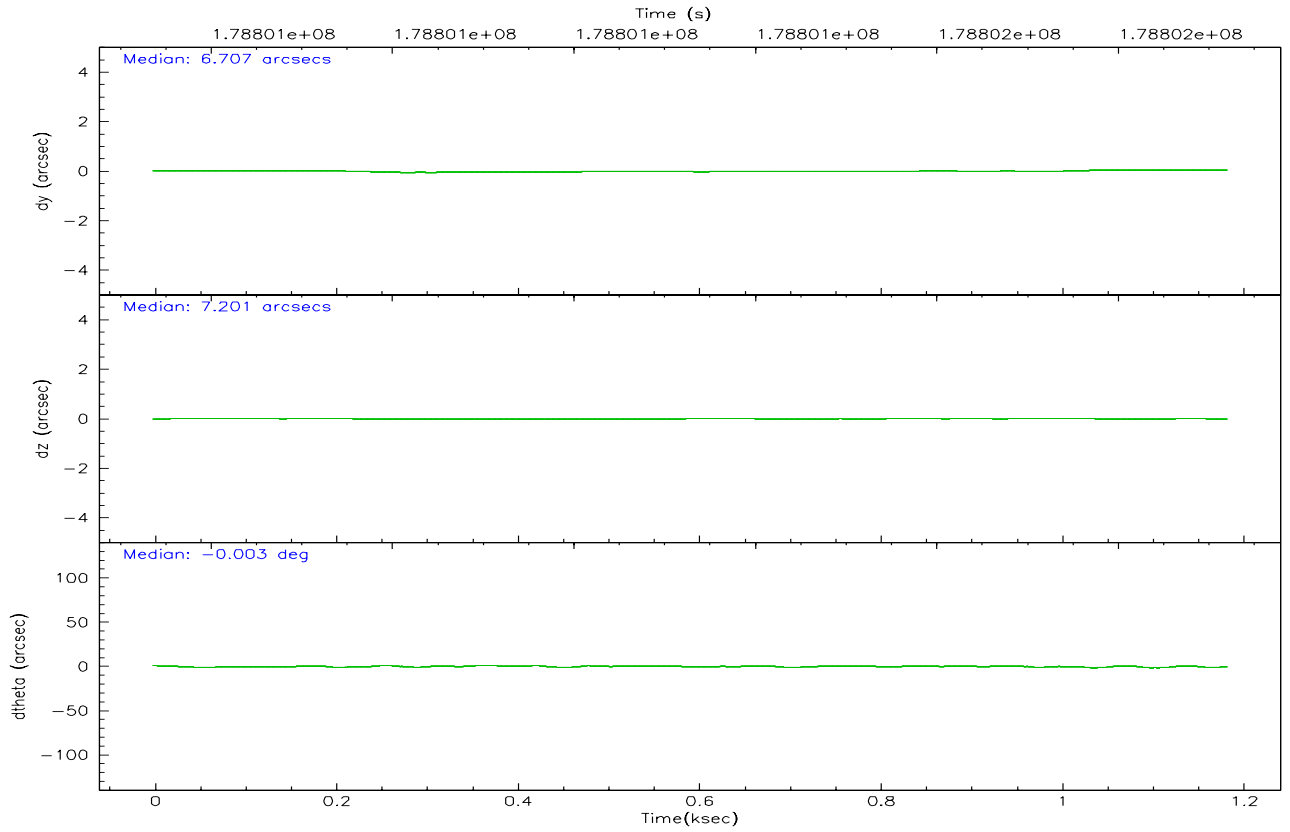
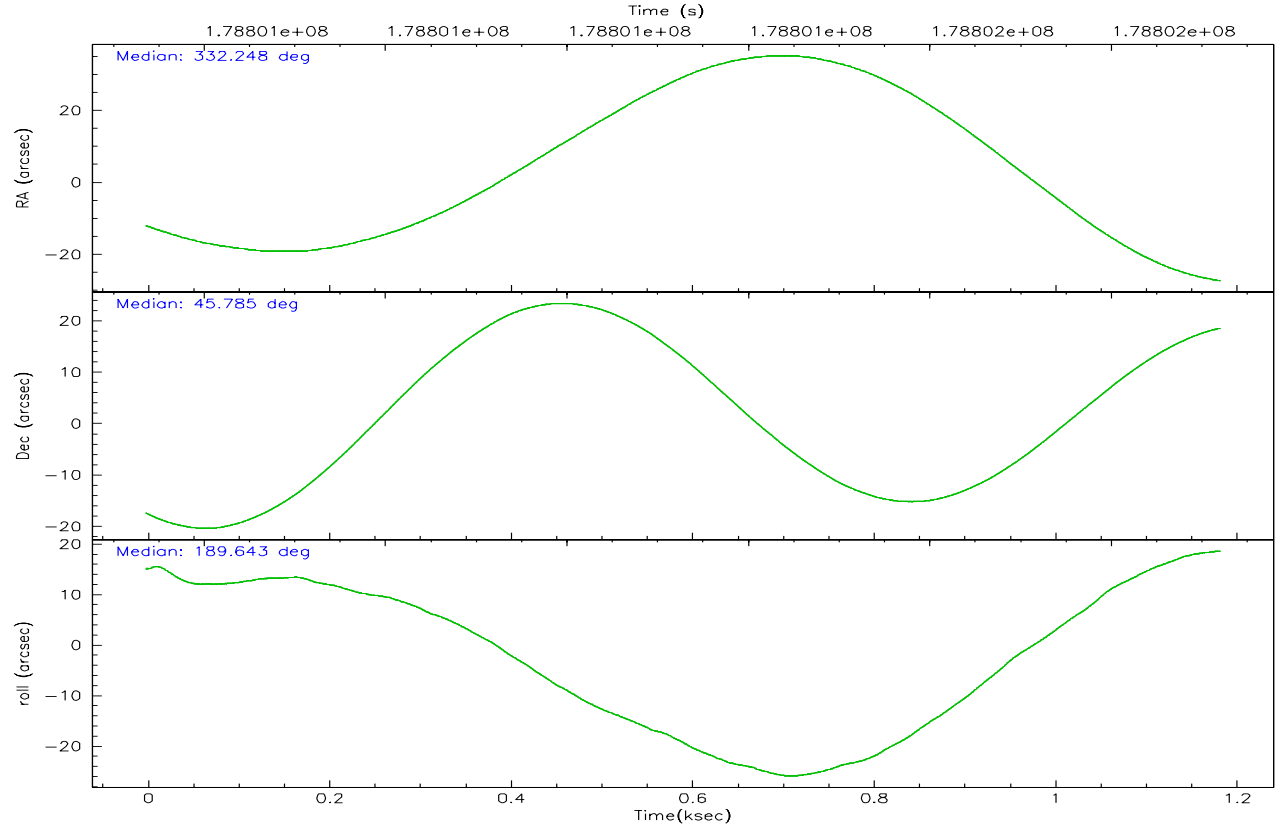
|                    | <b>segment<br/>1</b> | <b>segment<br/>2</b> | <b>segment<br/>3</b> |
|--------------------|----------------------|----------------------|----------------------|
| level 1<br>events  | 1018                 | 63269                | 1026                 |
| rejected<br>events | 1018                 | 23603                | 1026                 |
| rejected<br>%      | 100%                 | 37%                  | 100%                 |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                    | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|------------------------------|-----------|---------|
| Instrument                        | HRC                 | HRC                  | Obspar format version number | 6         | 6       |
| Detector                          | HRC-S               | HRC-S                | Obspar file type             | PREDICTED | ACTUAL  |
| Grating                           | NONE                | NONE                 | Obspar update status         | NONE      | UPDATED |
| Data mode                         | OBSERVING           | OBSERVING            |                              |           |         |
| Observation mode                  | POINTING            | POINTING             |                              |           |         |
| Pointing RA                       | 332.279852          | 332.2491580972658    |                              |           |         |
| Pointing Dec                      | 45.804956           | 45.78509613459171    |                              |           |         |
| Pointing Roll                     | 189.558367          | 189.6477480460639    |                              |           |         |
| SIM focus pos (mm)                | -1.429586           | -1.428180813131781   |                              |           |         |
| SIM defocus (mm)                  | 0.1037507710433287  | 0.1051558262725154   |                              |           |         |
| SIM translation stage pos (mm)    | 250.455976          | 250.466033080201     |                              |           |         |
| SIM translation stage offset (mm) | 0                   | -0.01005468664627074 |                              |           |         |
| Observation start time            | 178800918.184000    | 178800542.36966      |                              |           |         |
| Observation start date            | 2003-09-01T10:54:14 | 2003-09-01T10:49:02  |                              |           |         |
| Observation end time              | 178801918.184000    | 178802052.19472      |                              |           |         |
| Observation end date              | 2003-09-01T11:10:54 | 2003-09-01T11:14:12  |                              |           |         |

2.3 Aspect





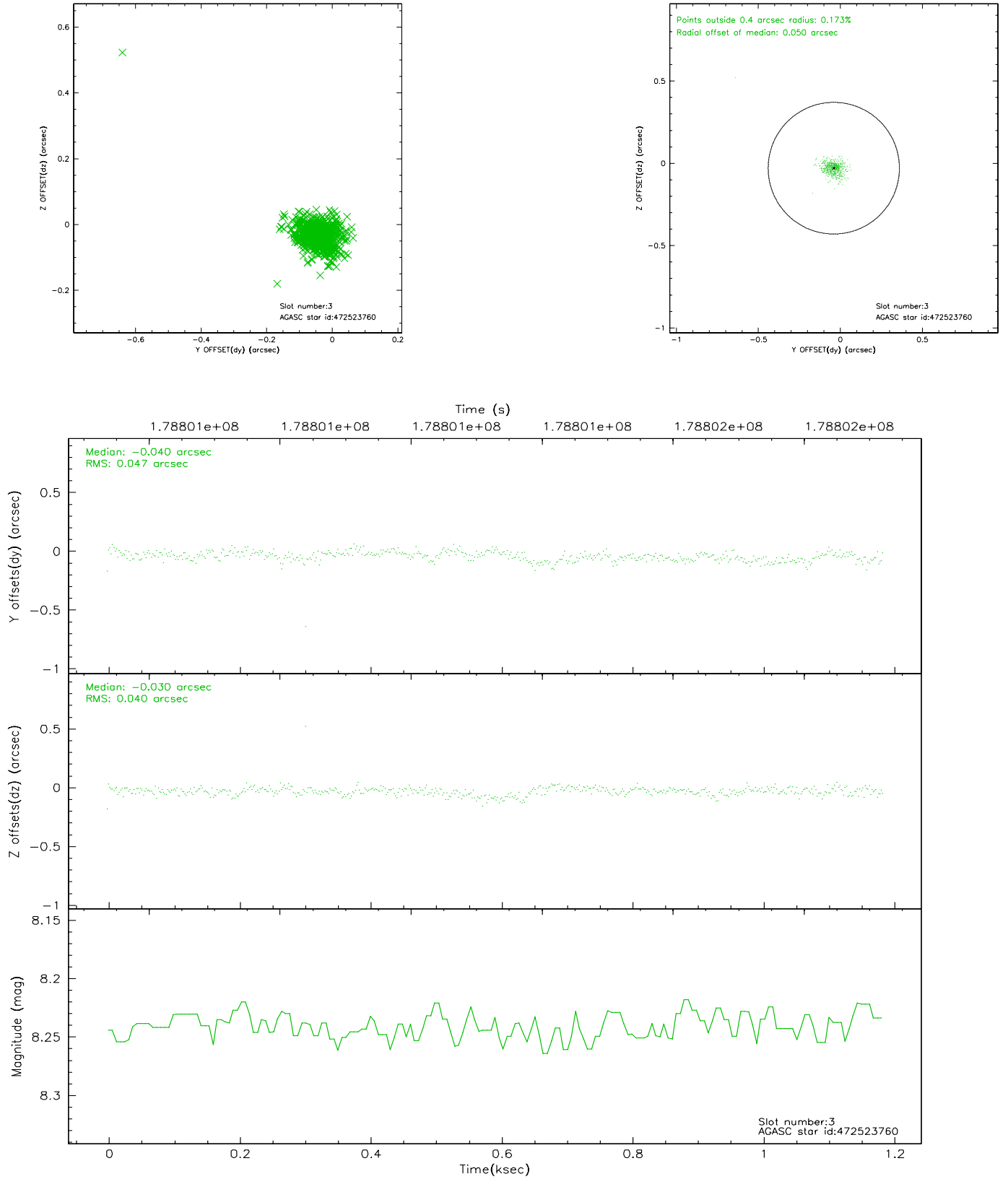
### Slot Statistics

| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | HRC-S-1   | 7.03 | 289   | 0.111  | -0.117 | 0.008 | 0.011 | 0.000000   | 0.000000  | -1160.87 | -455.76  |
| 1    | FID    | HRC-S-2   | 7.04 | 289   | 0.158  | -0.104 | 0.005 | 0.011 | 0.000000   | 0.000000  | 1234.84  | -449.97  |
| 2    | FID    | HRC-S-3   | 7.05 | 289   | 0.122  | -0.081 | 0.007 | 0.010 | 0.000000   | 0.000000  | -1159.31 | 572.25   |
| 3    | GUIDE  | 472523760 | 8.24 | 579   | -0.040 | -0.030 | 0.053 | 0.091 | 331.645363 | 45.403260 | 1819.18  | 1152.02  |
| 4    | GUIDE  | 472525528 | 6.63 | 579   | -0.210 | -0.114 | 0.073 | 0.123 | 331.551102 | 45.248694 | 2154.07  | 1660.27  |
| 5    | GUIDE  | 472533912 | 9.16 | 579   | -0.005 | -0.006 | 0.105 | 0.165 | 331.791136 | 46.368695 | 862.23   | -2205.24 |
| 6    | GUIDE  | 472655152 | 9.45 | 579   | 0.156  | 0.079  | 0.097 | 0.162 | 332.504239 | 45.862991 | -589.18  | -118.77  |
| 7    | GUIDE  | 472659832 | 9.47 | 578   | 0.087  | 0.081  | 0.140 | 0.256 | 332.780399 | 46.098139 | -1410.18 | -839.12  |

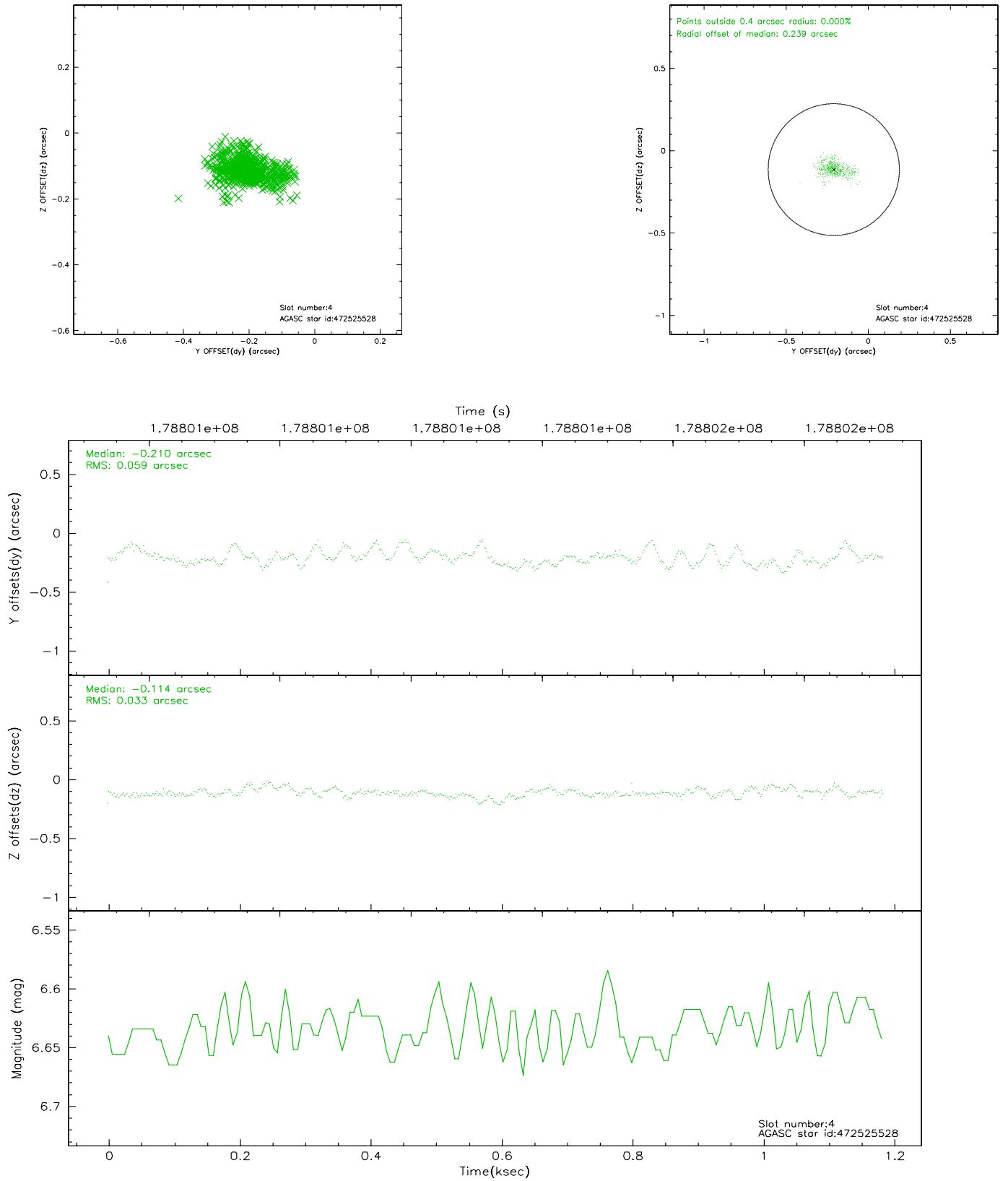


## 2.4 Star Slots

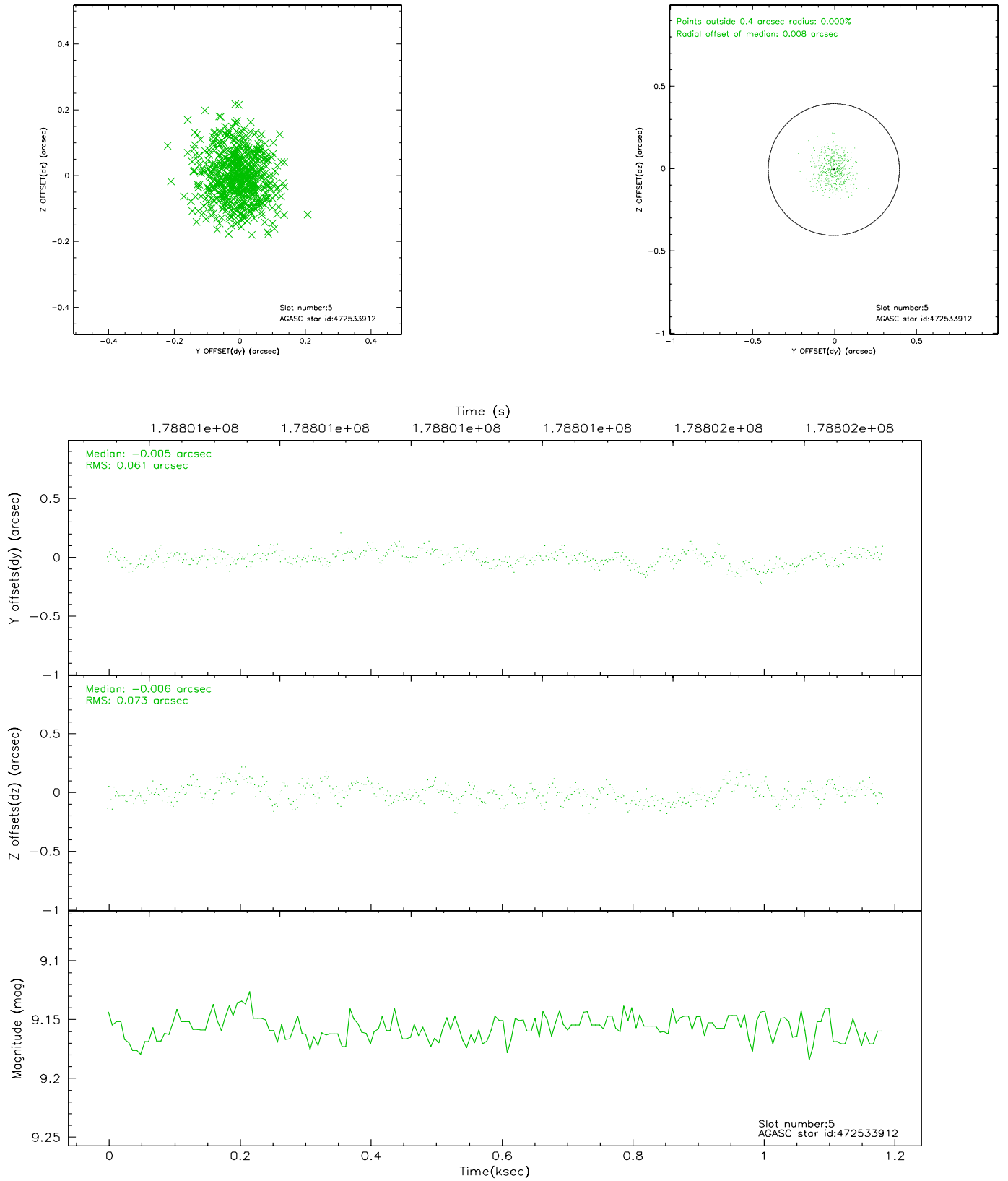
### 2.4.1 Slot 3



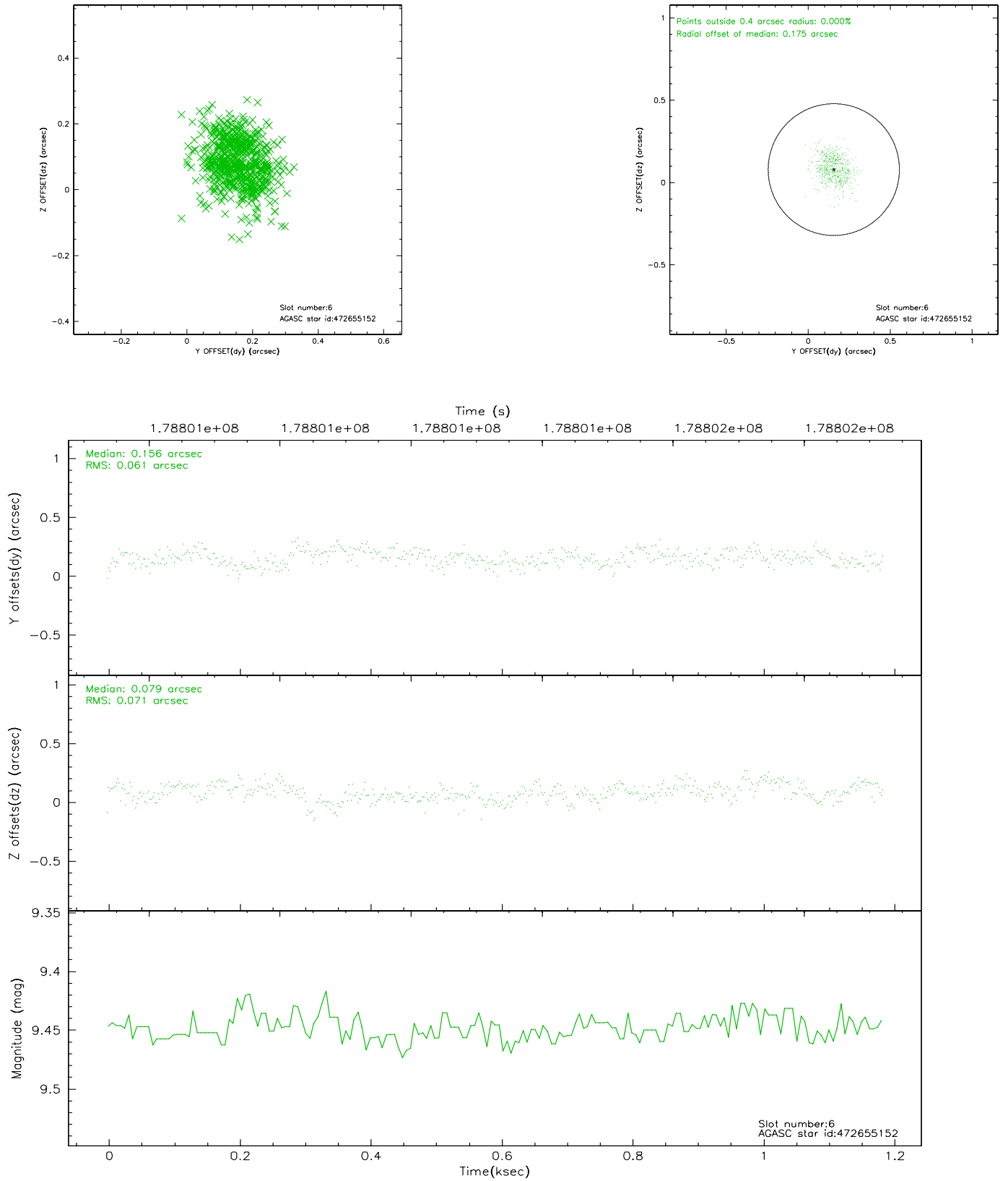
## 2.4.2 Slot 4



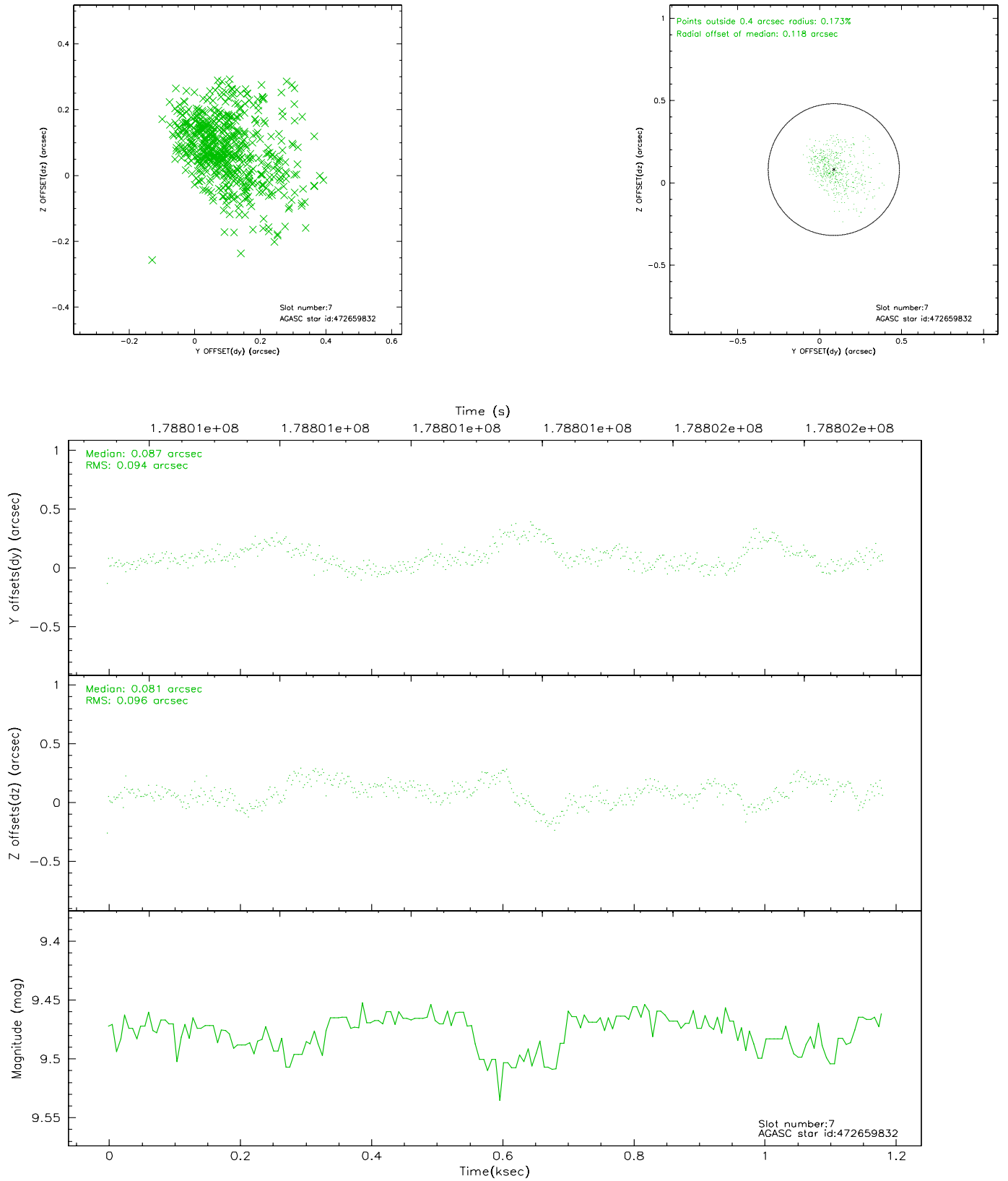
### 2.4.3 Slot 5



## 2.4.4 Slot 6

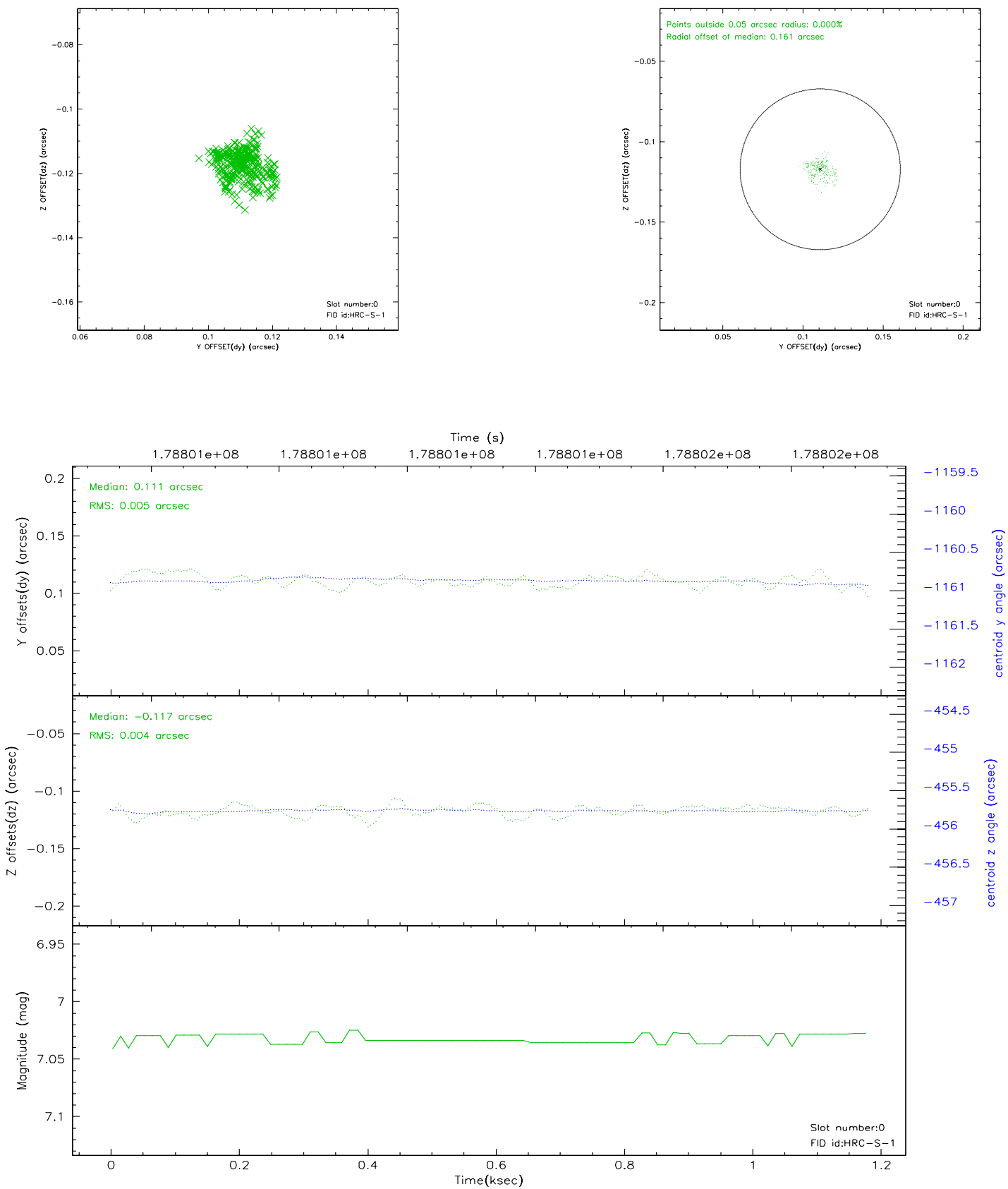


## 2.4.5 Slot 7

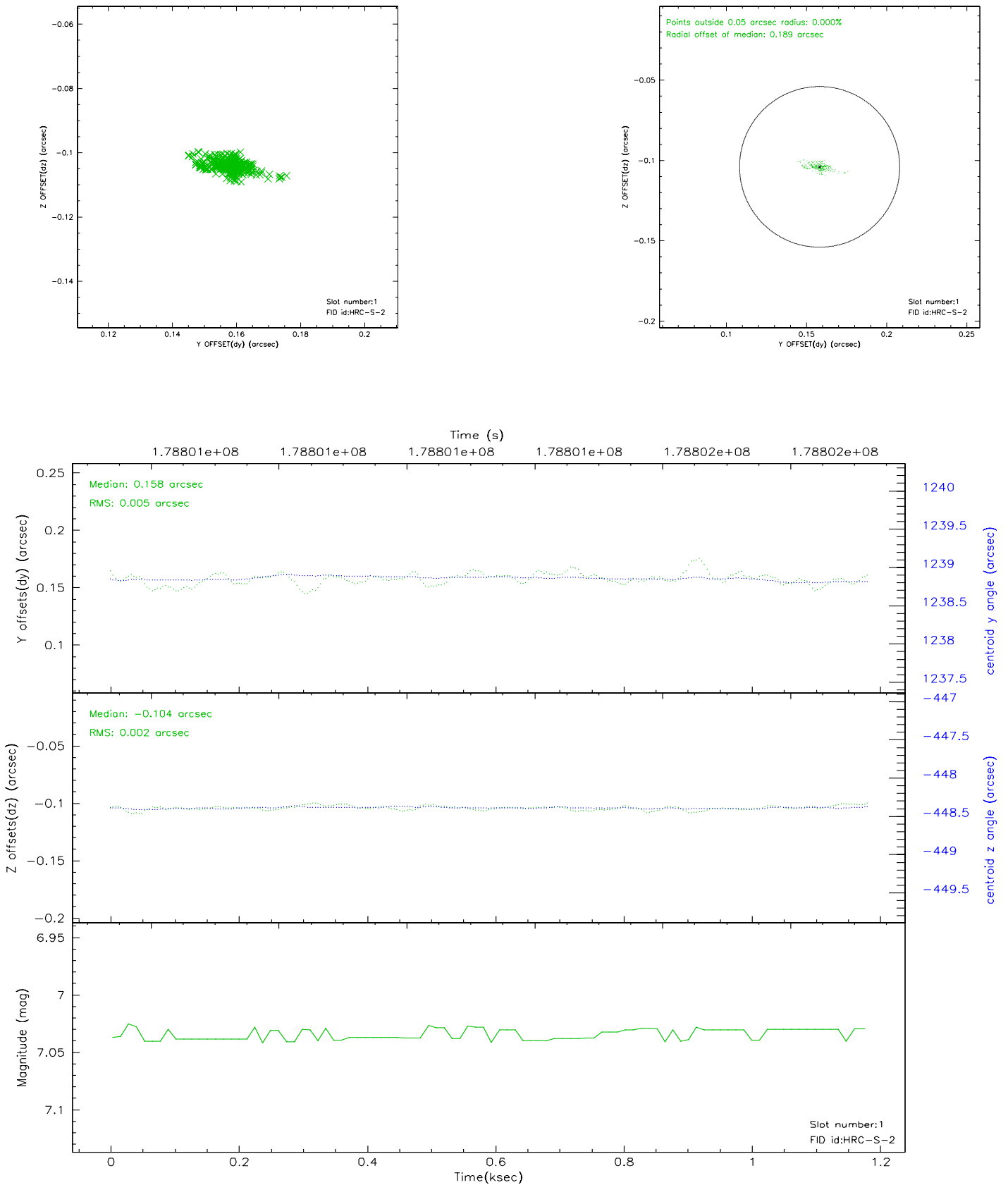


## 2.5 FID Slots

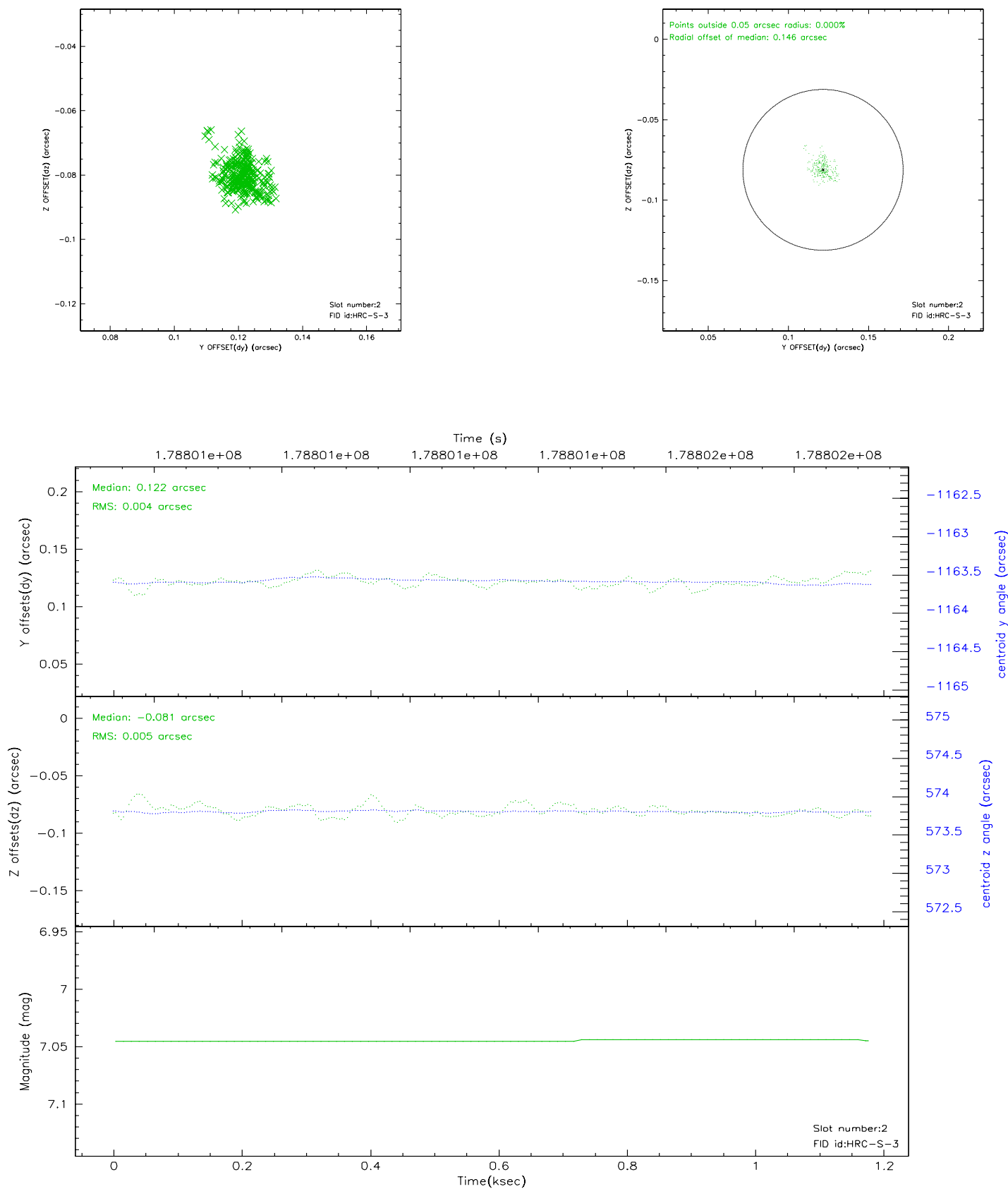
### 2.5.1 Slot 0



## 2.5.2 Slot 1

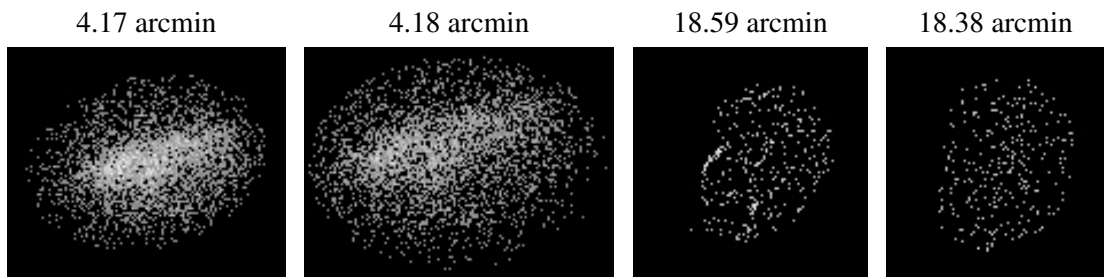


2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

|                            |            |
|----------------------------|------------|
| V&V Scientist              | Jen Lauer  |
| V&V Date (YYYY-MM-DD)      | 2006.07.10 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 1.142      |

### A.2 Comments

Monitor constraint met.