

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 7184 - L2 Version 002  
Chandra X-Ray Center

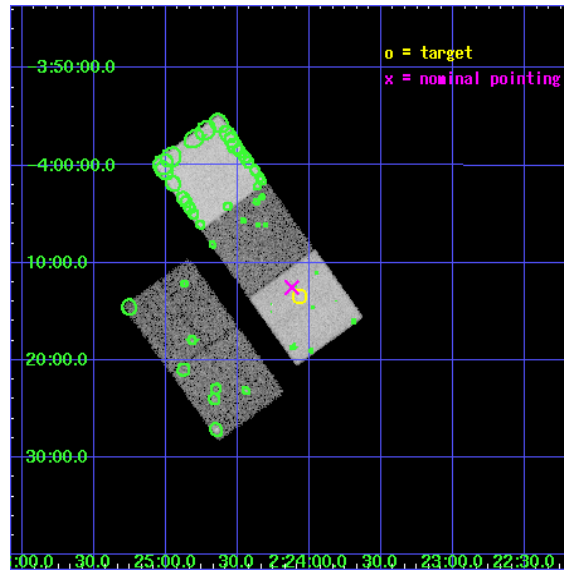
L2 Processing Date : Mar 31 2006

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# 1 Front

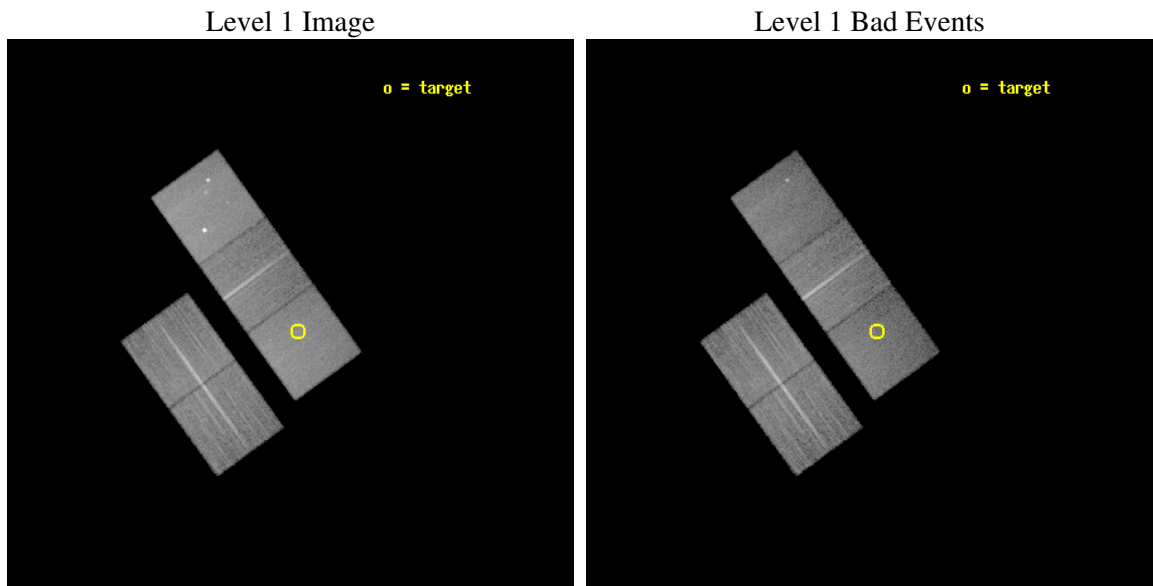
|          |  |
|----------|--|
| seq_num  | 800500                                     |
| obs_id   | 7184                                       |
| title    | A detailed study of a $z>1$ galaxy cluster |
| observer | Dr Laurence Jones                          |
| object   | XLSSJ022404.0-041328                       |
| dtcycle  | 0  |
| cycle    | P  |
| ra_targ  | 36.017083                                  |
| dec_targ | -4.224694                                  |
| ra_nom   | 36.030611025914                            |
| dec_nom  | -4.2089477711974                           |
| roll_nom | 54.157604233435                            |
| revision | 2  |
| ontime   | 22980.299955815                            |
| livetime | 22680.045419042                            |
| ontime2  | 22977.158955663                            |
| ontime3  | 22977.158965647                            |
| ontime5  | 22980.299955815                            |
| ontime6  | 22980.299955815                            |
| ontime7  | 22980.299955815                            |
| l2events | 192658                                     |



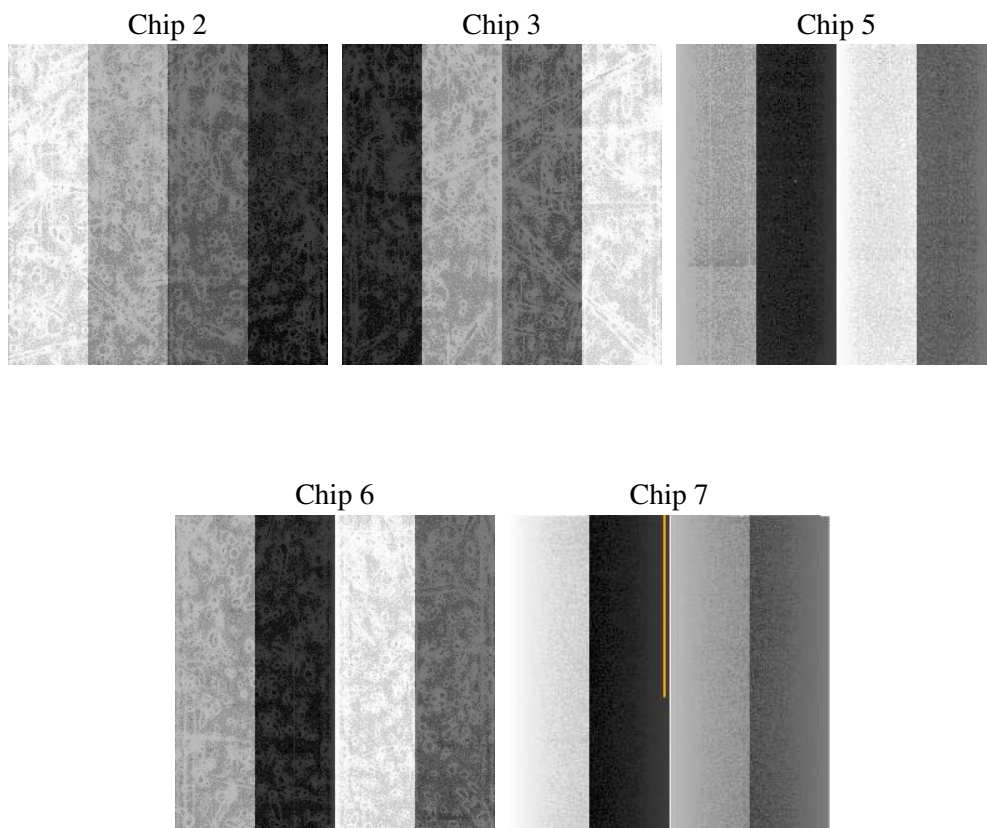
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.7.1             |
| caldbver | 3.2.1               |
| date     | 2006-04-01T02:15:07 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 22800.000000    |
| ontime         | 23918.808531702 |
| ontime2        | 23915.66753155  |
| ontime3        | 23915.667521626 |
| ontime5        | 23918.808531702 |
| ontime6        | 23918.808531702 |
| ontime7        | 23918.808531702 |
| l1events       | 846521          |

### 2.1.4 Events

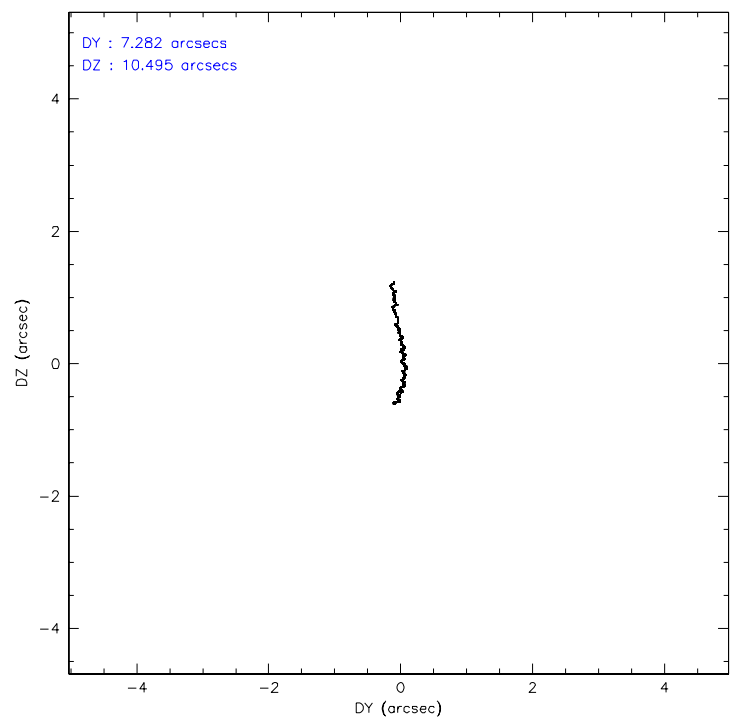
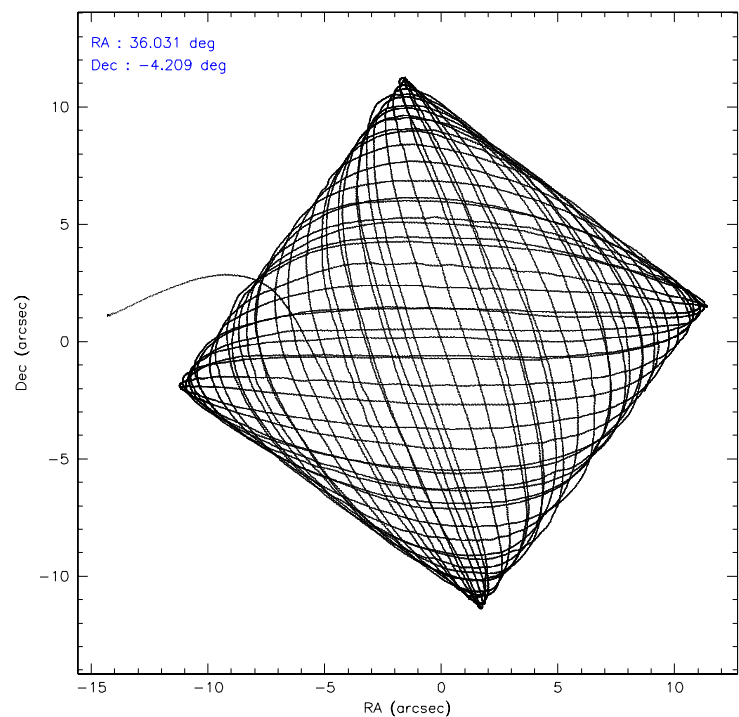
|                 | ccd 2  | ccd 3  | ccd 5  | ccd 6  | ccd 7  |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events  | 159429 | 149059 | 213937 | 151373 | 172723 |
| rejected events | 145476 | 135157 | 114407 | 136108 | 104412 |
| rejected %      | 91%    | 90%    | 53%    | 89%    | 60%    |

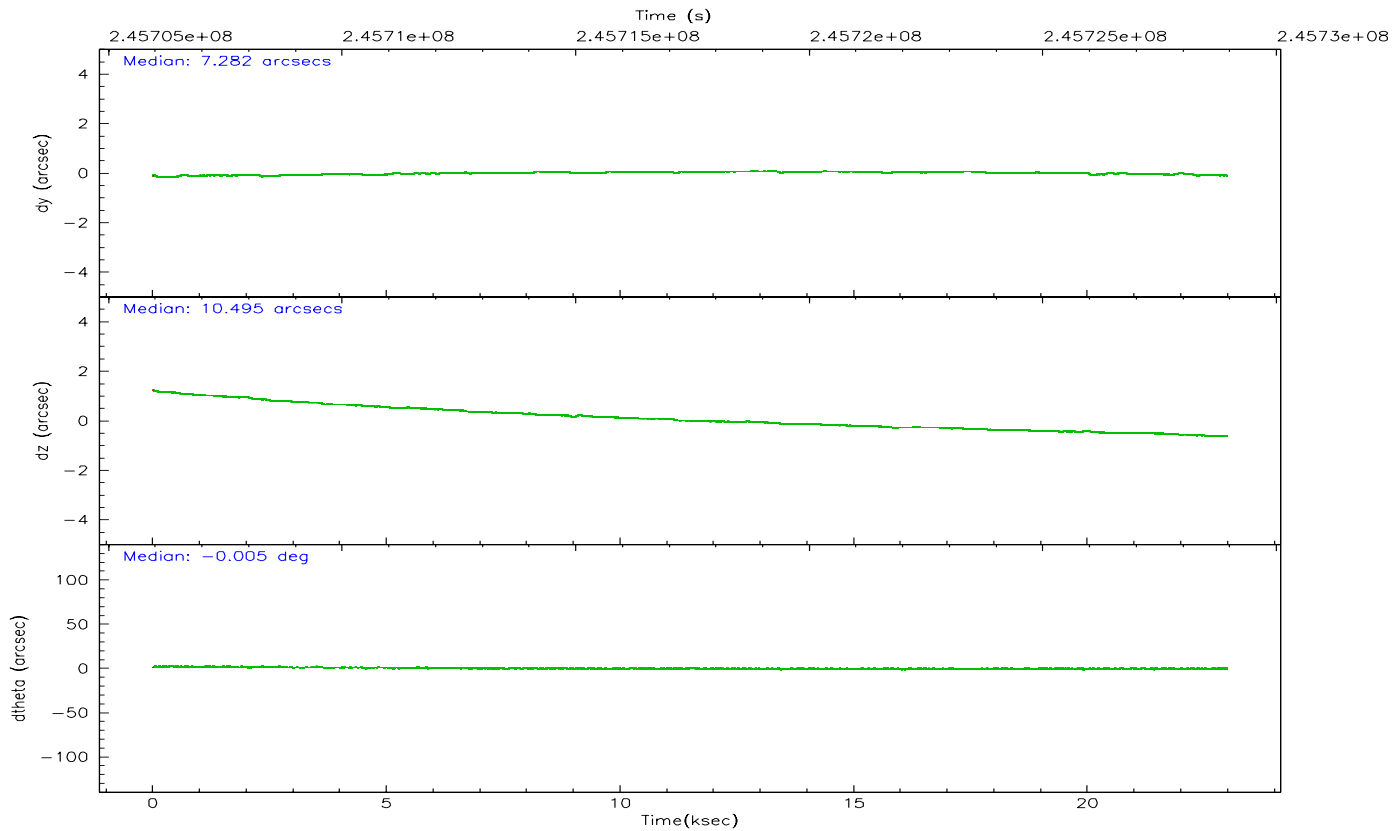
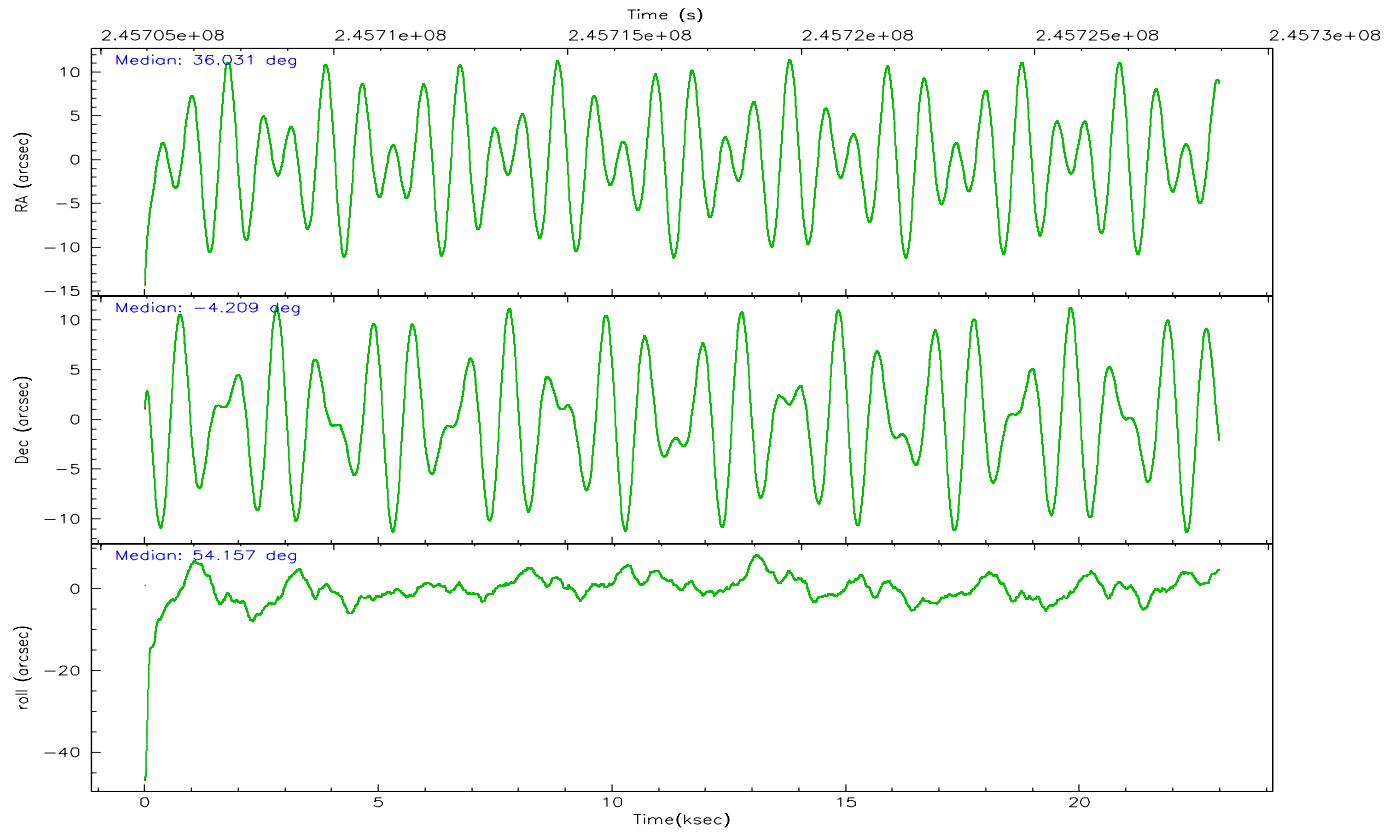
|                | ccd 2  | ccd 3  | ccd 5 | ccd 6  | ccd 7 |
|----------------|--------|--------|-------|--------|-------|
| grade 0 events | 5109   | 5328   | 10459 | 5553   | 3947  |
|                | 3%     | 3%     | 4%    | 3%     | 2%    |
| grade 1 events | 83     | 63     | 75    | 77     | 88    |
|                | 0%     | 0%     | 0%    | 0%     | 0%    |
| grade 2 events | 3511   | 3027   | 31635 | 3405   | 17499 |
|                | 2%     | 2%     | 14%   | 2%     | 10%   |
| grade 3 events | 1583   | 1635   | 2614  | 1771   | 4129  |
|                | 0%     | 1%     | 1%    | 1%     | 2%    |
| grade 4 events | 1678   | 1666   | 2370  | 1738   | 3791  |
|                | 1%     | 1%     | 1%    | 1%     | 2%    |
| grade 5 events | 4919   | 6030   | 11481 | 6227   | 12792 |
|                | 3%     | 4%     | 5%    | 4%     | 7%    |
| grade 6 events | 2632   | 2794   | 56605 | 3433   | 41813 |
|                | 1%     | 1%     | 26%   | 2%     | 24%   |
| grade 7 events | 139914 | 128516 | 98698 | 129169 | 88664 |
|                | 87%    | 86%    | 46%   | 85%    | 51%   |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                       | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument                        | ACIS                | ACIS                 | Obspar format version number    | 6         | 6       |
| Detector                          | ACIS-23567          | ACIS-23567           | Obspar file type                | PREDICTED | ACTUAL  |
| Grating                           | NONE                | NONE                 | Obspar update status            | NONE      | UPDATED |
| Data mode                         | VFAINT              | VFAINT               | On-chip summing requested       | N         | N       |
| Observation mode                  | POINTING            | POINTING             | Subarray requested              | NONE      | NONE    |
| Pointing RA                       | 36.028223           | 36.03061102591389    | Alternating exposures requested | N         | N       |
| Pointing Dec                      | -4.236056           | -4.208947771197393   | Primary exposure time           | 0.000000  | 3.1     |
| Pointing Roll                     | 54.000825           | 54.15760423343537    |                                 |           |         |
| SIM focus pos (mm)                | -0.684267           | -0.6828225247311905  |                                 |           |         |
| SIM defocus (mm)                  | 0                   | 0.001444936568705701 |                                 |           |         |
| SIM translation stage pos (mm)    | -190.132523         | -190.1425803651734   |                                 |           |         |
| SIM translation stage offset (mm) | 0                   | 0.01005778216563158  |                                 |           |         |
| Observation start time            | 245706146.184000    | 245704678.99139      |                                 |           |         |
| Observation start date            | 2005-10-14T19:41:22 | 2005-10-14T19:17:58  |                                 |           |         |
| Observation end time              | 245728946.184000    | 245730174.84256      |                                 |           |         |
| Observation end date              | 2005-10-15T02:01:22 | 2005-10-15T02:22:54  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

## 2.3 Aspect





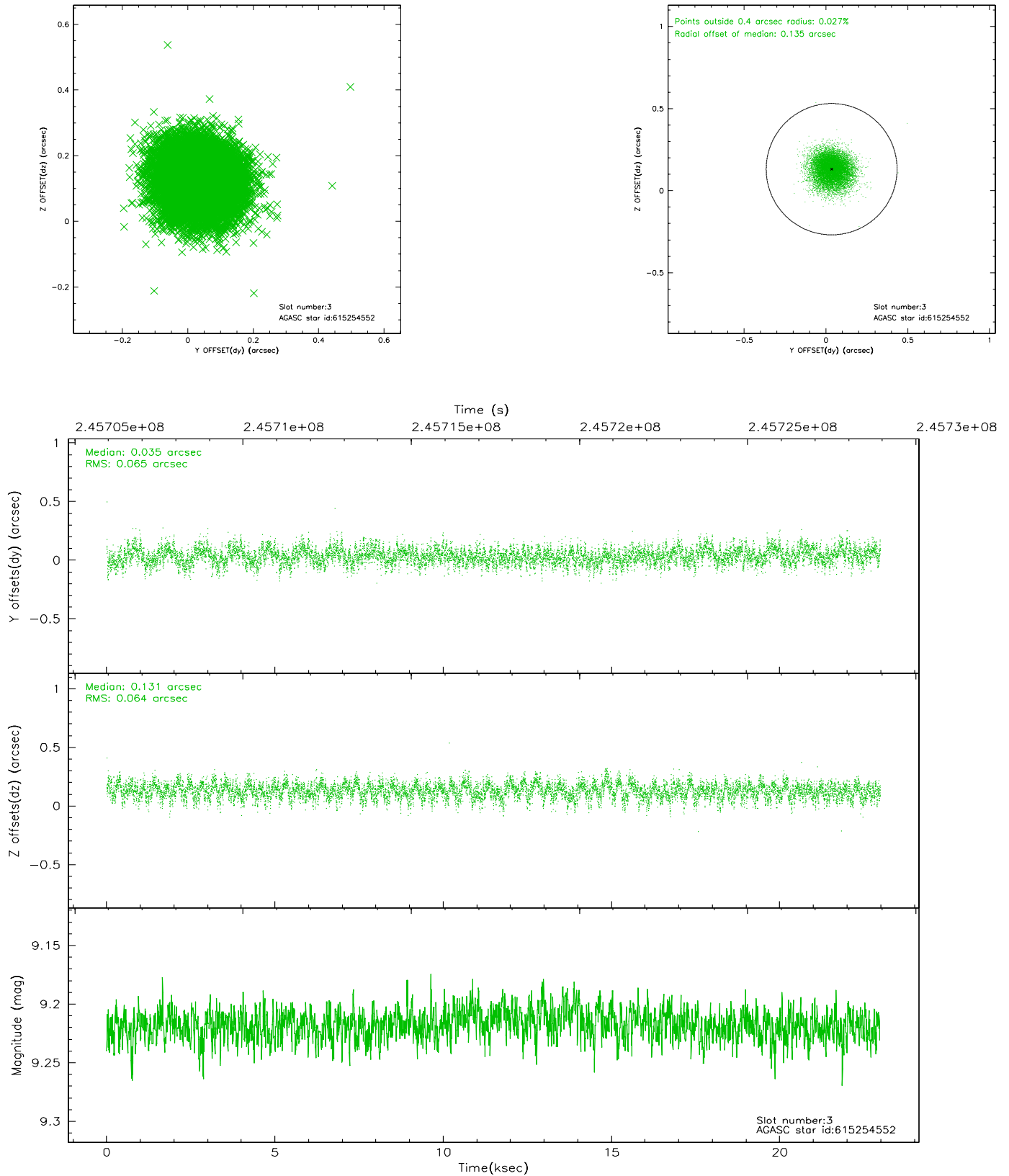
### Slot Statistics

| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra        | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0    | FID    | ACIS-S-2  | 7.10 | 5607  | -0.048 | -0.028 | 0.011 | 0.023 | 0.000000  | 0.000000  | -760.05  | -1731.85 |
| 1    | FID    | ACIS-S-4  | 7.21 | 5606  | 0.048  | 0.022  | 0.010 | 0.018 | 0.000000  | 0.000000  | 2153.22  | 176.57   |
| 2    | FID    | ACIS-S-6  | 7.35 | 5607  | -0.028 | 0.013  | 0.009 | 0.015 | 0.000000  | 0.000000  | 402.09   | 814.10   |
| 3    | GUIDE  | 615254552 | 9.22 | 11201 | 0.035  | 0.131  | 0.097 | 0.157 | 36.600600 | -3.877551 | 2252.03  | -904.85  |
| 4    | GUIDE  | 615256360 | 7.78 | 11208 | -0.122 | -0.184 | 0.077 | 0.124 | 36.286608 | -3.875886 | 1594.71  | 10.82    |
| 5    | GUIDE  | 615256944 | 9.79 | 11180 | 0.209  | 0.020  | 0.131 | 0.256 | 35.497386 | -4.510719 | -1919.84 | 959.82   |
| 6    | GUIDE  | 615260160 | 9.70 | 11198 | -0.003 | 0.056  | 0.145 | 0.225 | 35.737387 | -3.921265 | 302.23   | 1510.83  |
| 7    | GUIDE  | 615260392 | 7.63 | 11212 | -0.126 | -0.024 | 0.063 | 0.104 | 35.914136 | -3.376682 | 2261.94  | 2150.46  |

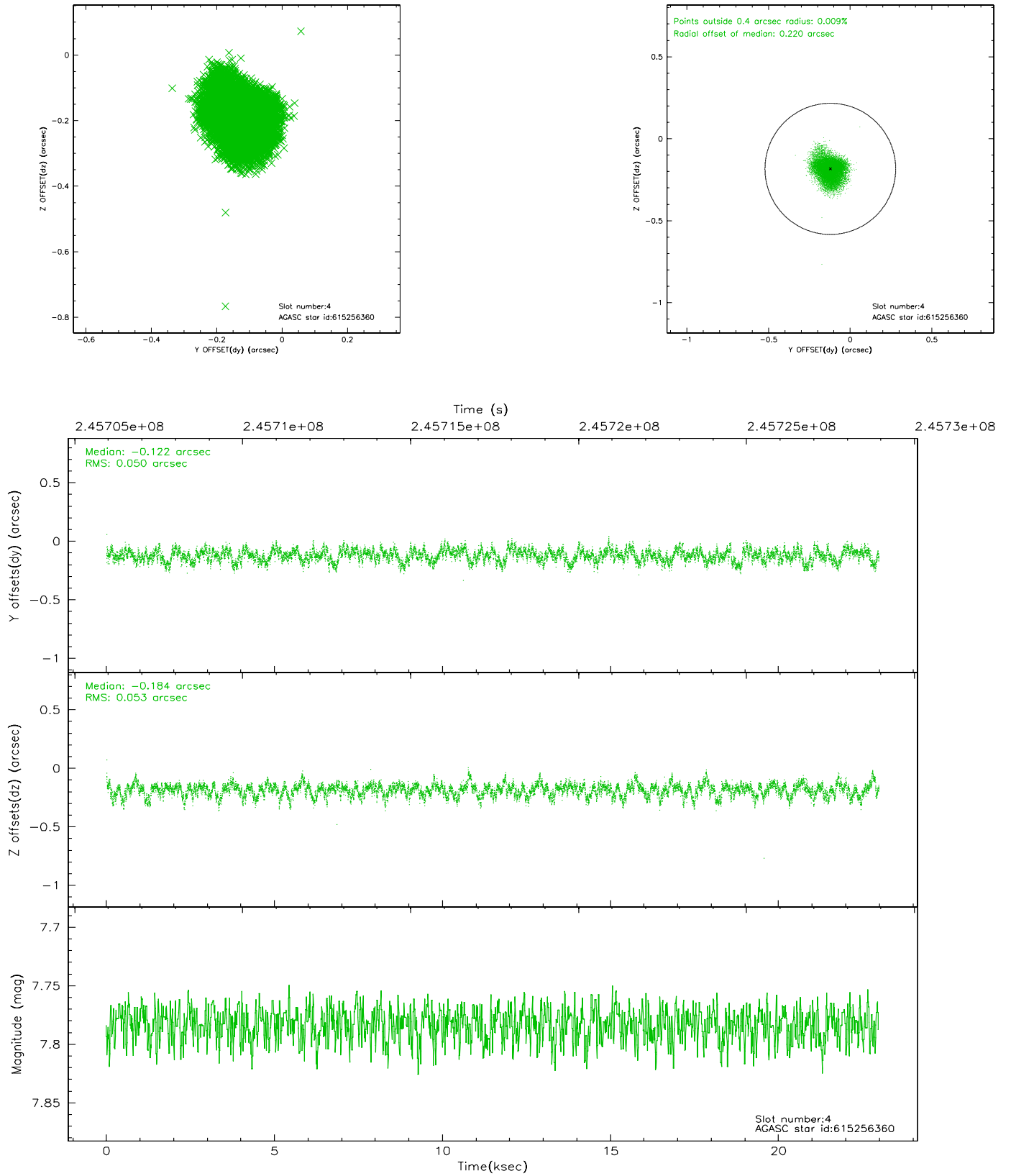


## 2.4 Star Slots

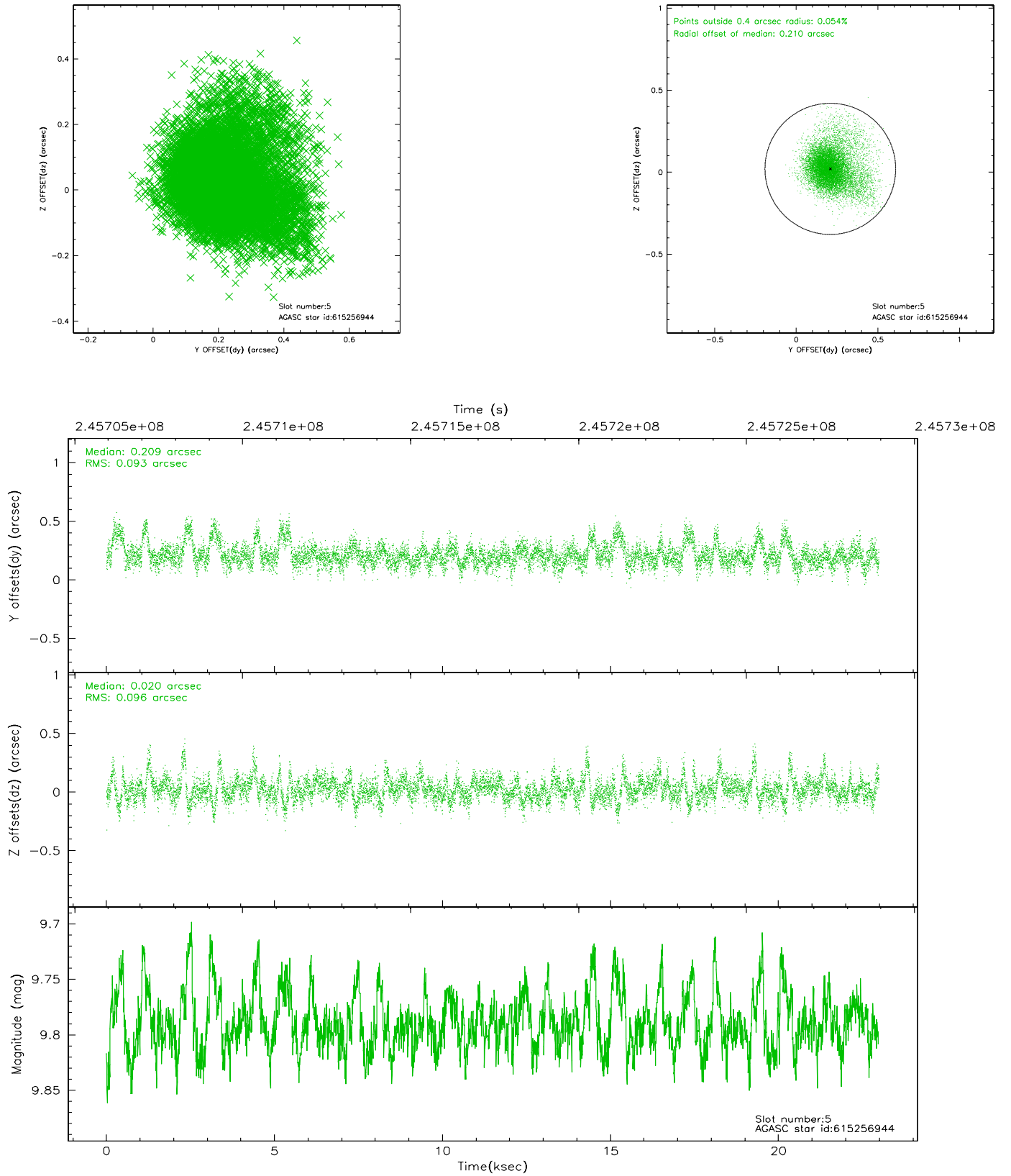
### 2.4.1 Slot 3



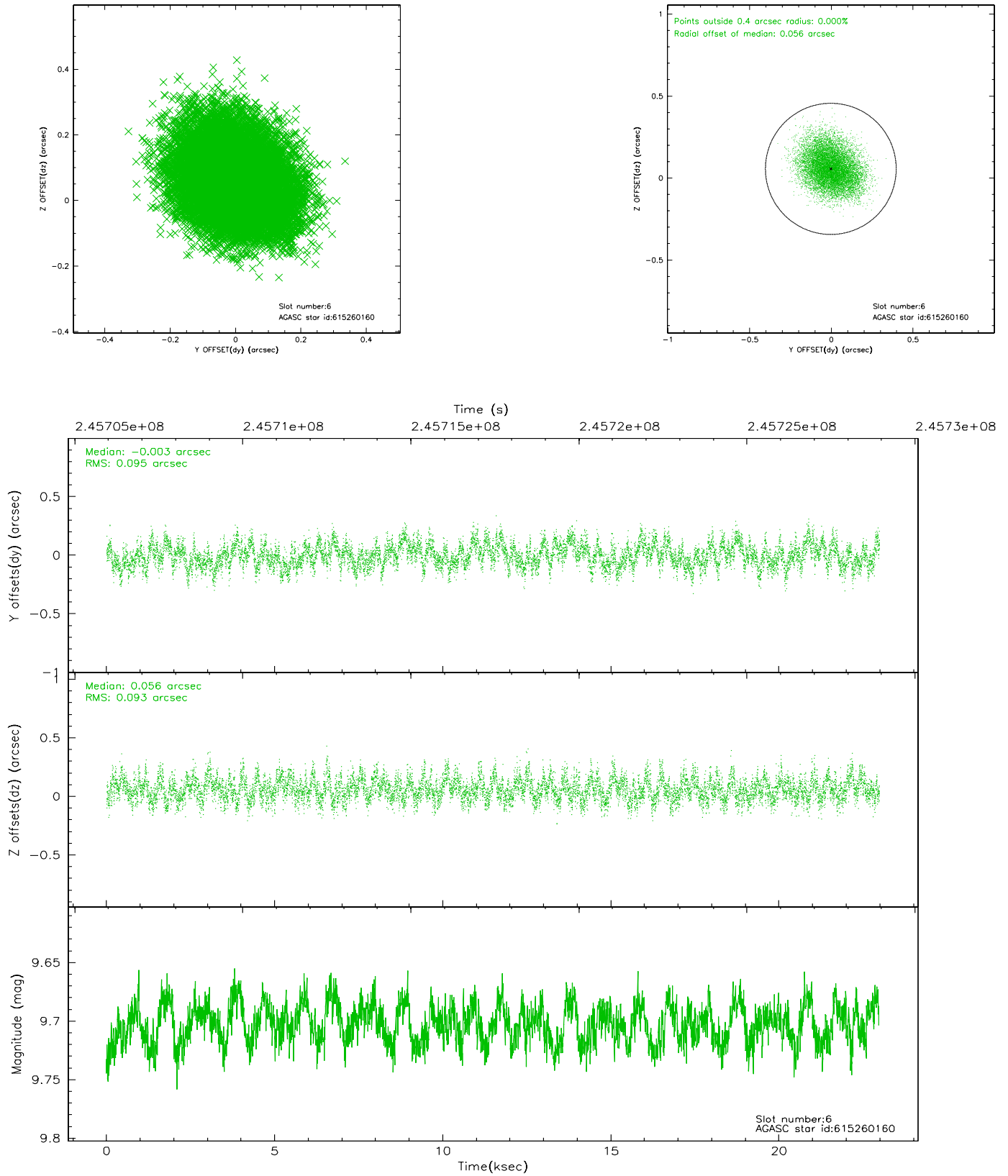
## 2.4.2 Slot 4



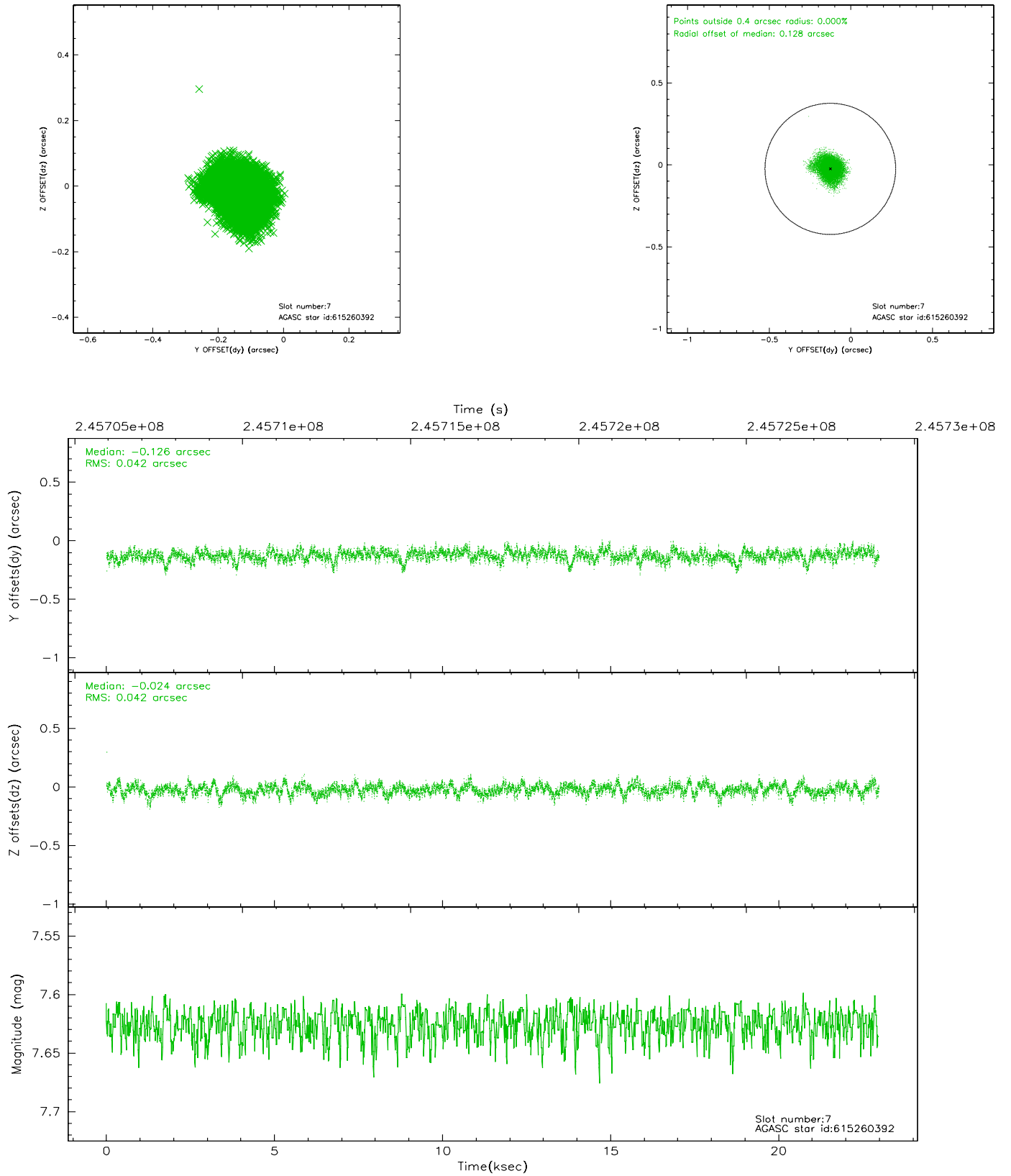
### 2.4.3 Slot 5



## 2.4.4 Slot 6

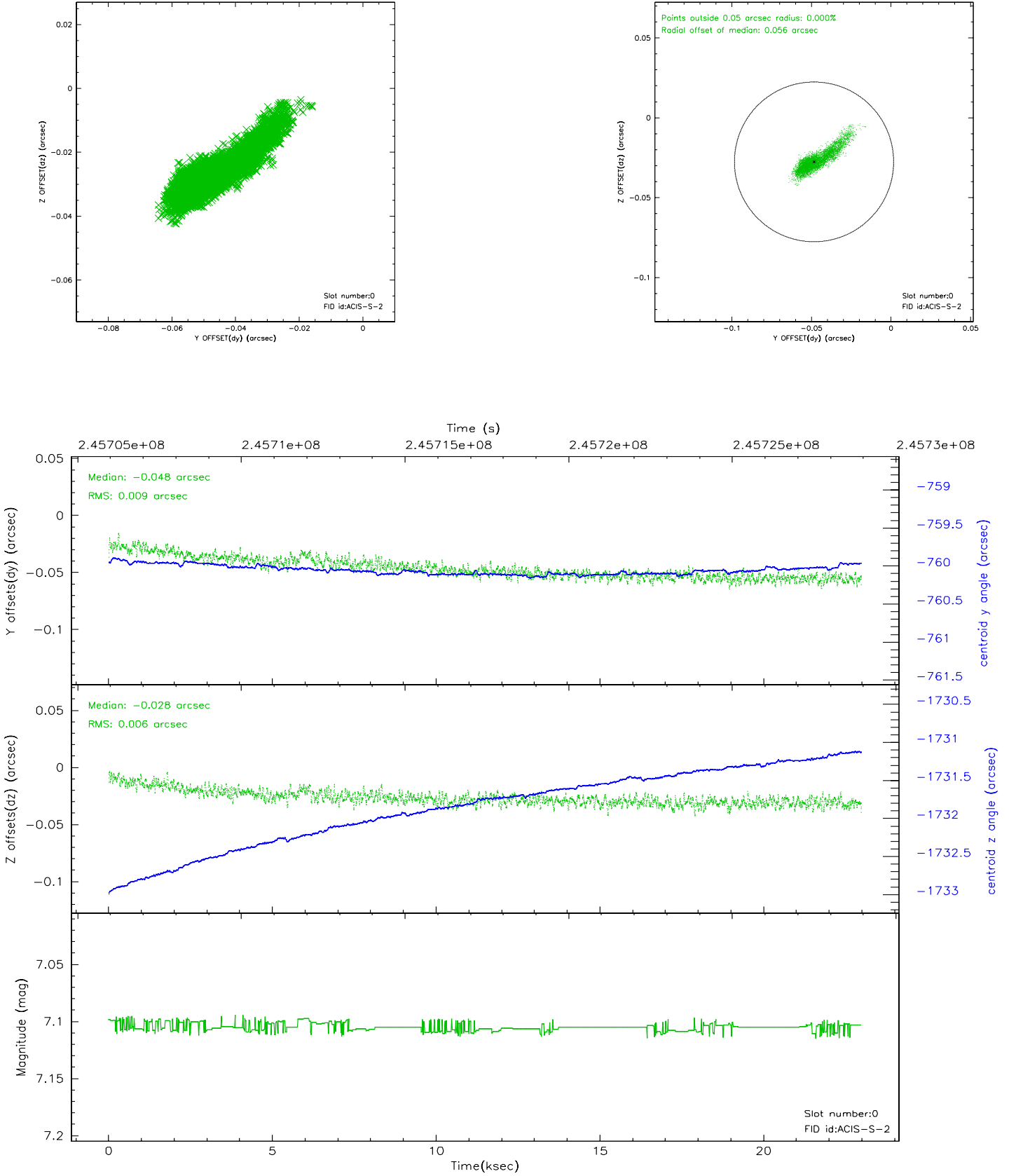


## 2.4.5 Slot 7

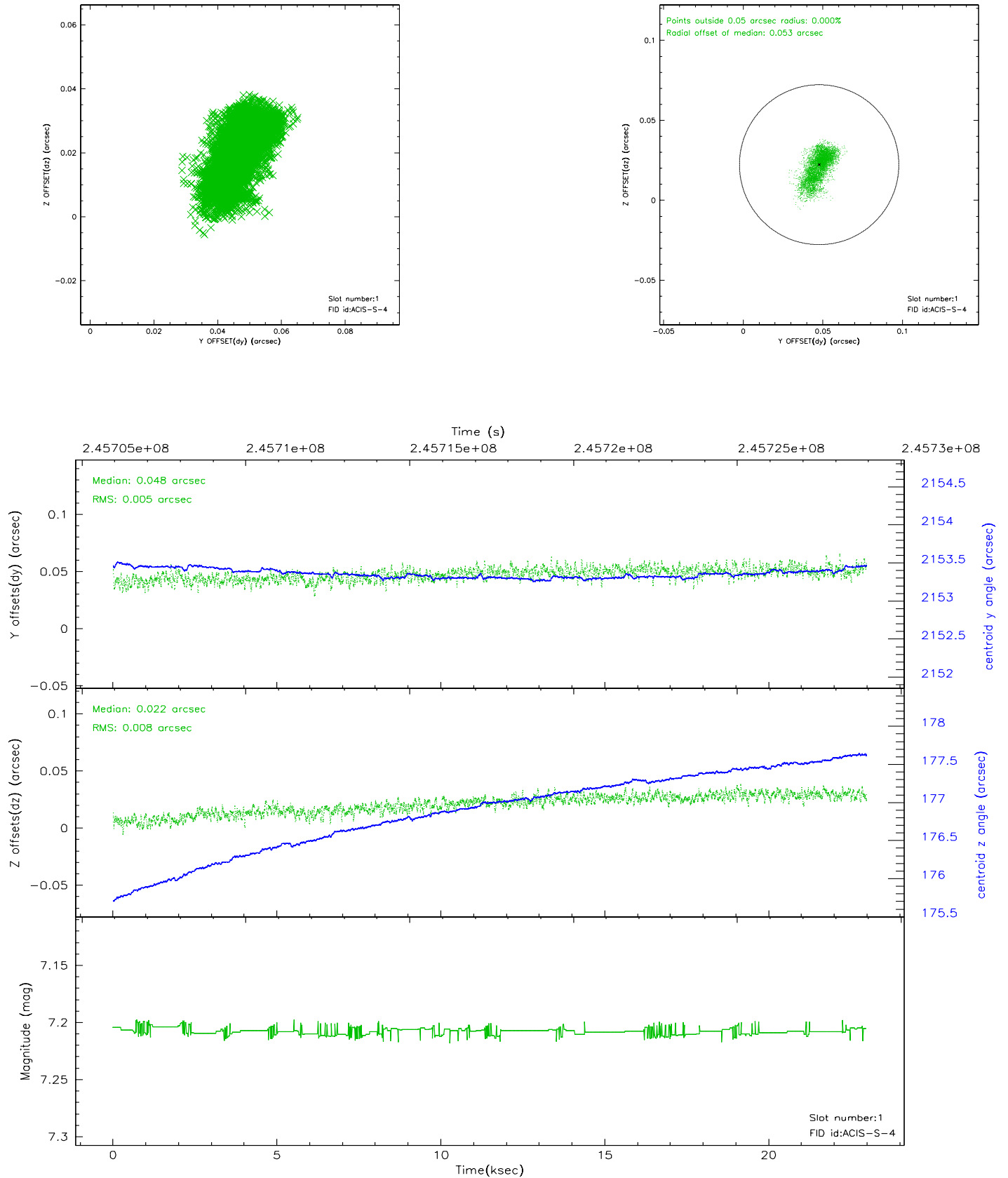


## 2.5 FID Slots

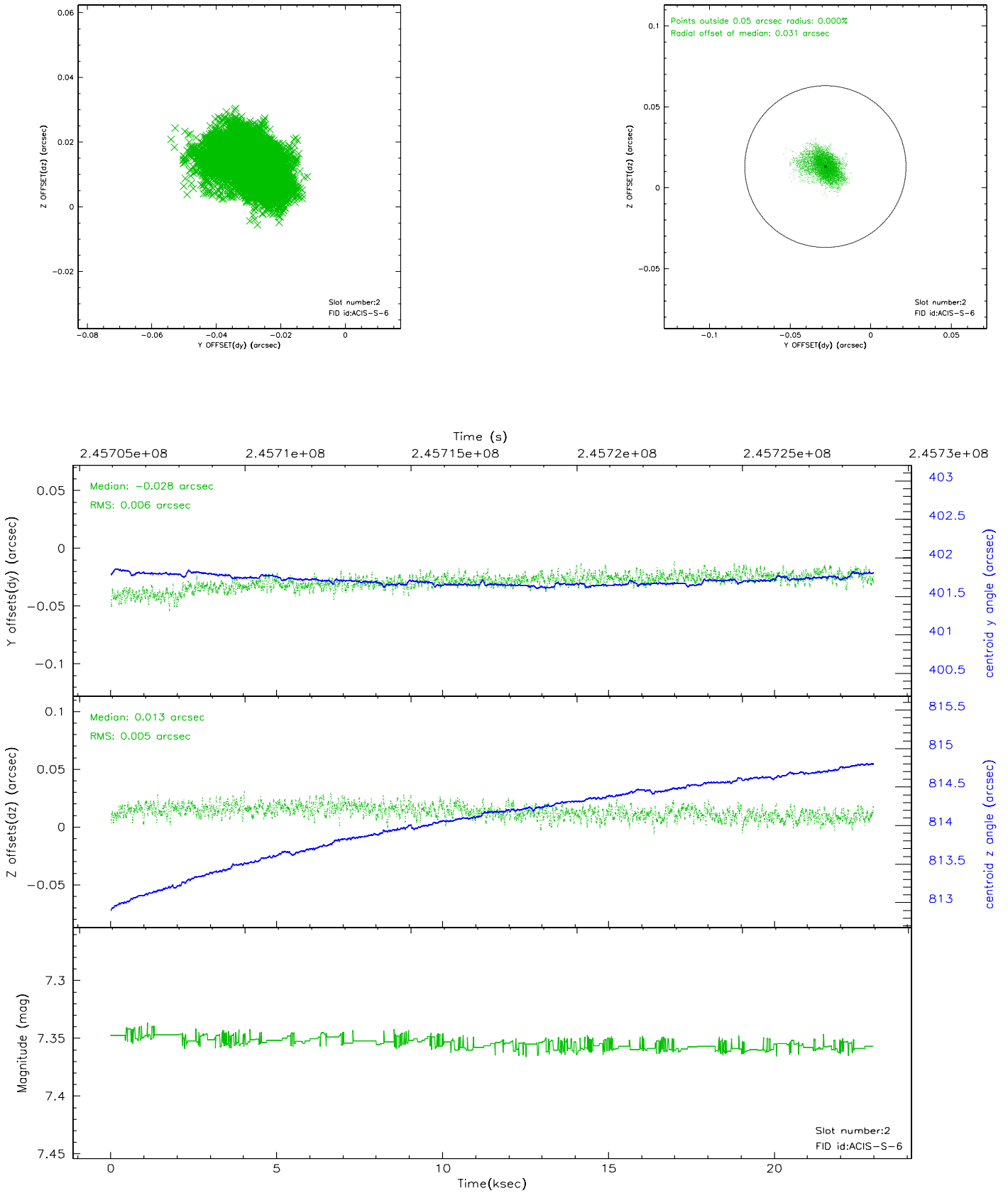
### 2.5.1 Slot 0



## 2.5.2 Slot 1

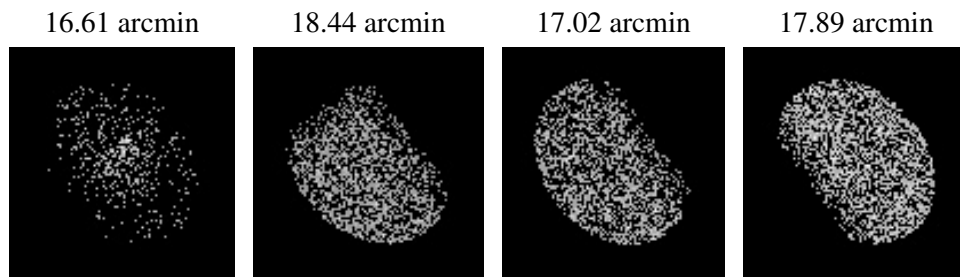


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2006.04.03    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 22.98029      |

### A.2 Comments