

# V&V Reference Report

## L2 ASCDS Version : 7.6.8.1

Observation 3103 - L2 Version 001  
Chandra X-Ray Center

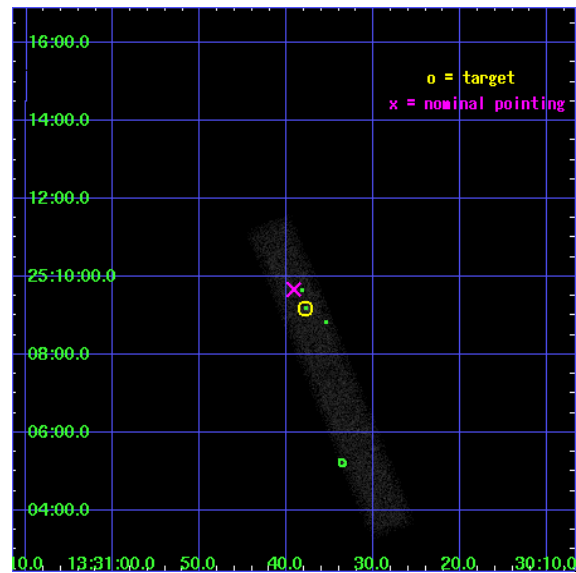
L2 Processing Date : Aug 25 2006

## Contents

|          |                               |           |
|----------|-------------------------------|-----------|
| <b>1</b> | <b>Front</b>                  | <b>2</b>  |
| <b>2</b> | <b>OBI</b>                    | <b>3</b>  |
| 2.1      | OBI . . . . .                 | 3         |
| 2.1.1    | Images . . . . .              | 3         |
| 2.1.2    | Bias . . . . .                | 3         |
| 2.1.3    | Parameters . . . . .          | 4         |
| 2.1.4    | Events . . . . .              | 4         |
| 2.2      | Compared Parameters . . . . . | 5         |
| 2.3      | Aspect . . . . .              | 6         |
| 2.4      | Star Slots . . . . .          | 9         |
| 2.4.1    | Slot 2 . . . . .              | 9         |
| 2.4.2    | Slot 3 . . . . .              | 10        |
| 2.4.3    | Slot 4 . . . . .              | 11        |
| 2.4.4    | Slot 5 . . . . .              | 12        |
| 2.4.5    | Slot 6 . . . . .              | 13        |
| 2.4.6    | Slot 7 . . . . .              | 14        |
| 2.5      | FID Slots . . . . .           | 15        |
| 2.5.1    | Slot 0 . . . . .              | 15        |
| 2.5.2    | Slot 1 . . . . .              | 16        |
| <b>3</b> | <b>Point Sources</b>          | <b>17</b> |
| <b>A</b> | <b>Summary</b>                | <b>18</b> |
| A.1      | Status . . . . .              | 18        |
| A.2      | Comments . . . . .            | 18        |

# 1 Front

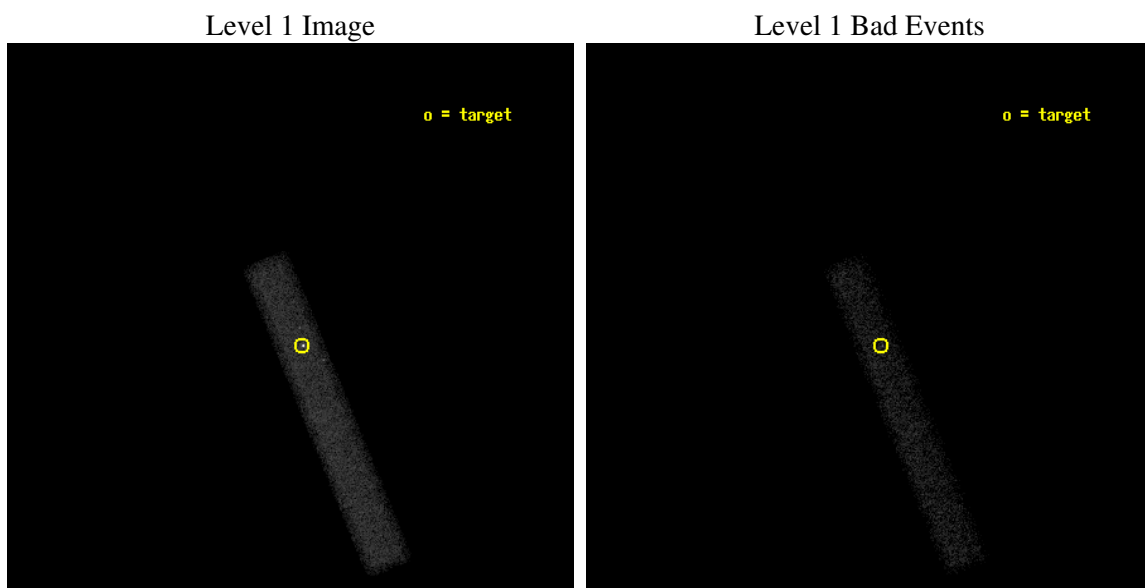
|          |                                      |
|----------|--------------------------------------|
| seq_num  | 700542                               |
| obs_id   | 3103                                 |
| title    | X-RAY IMAGING OF GPS AND CSS QUASARS |
| observer | Dr Aneta Siemiginowska               |
| object   | Q1328+254                            |
| dtcycle  | 0                                    |
| cycle    | P                                    |
| ra_targ  | 202.6575                             |
| dec_targ | 25.153                               |
| ra_nom   | 202.66330542492                      |
| dec_nom  | 25.161181402196                      |
| roll_nom | 67.526761916568                      |
| revision | 3                                    |
| ontime   | 39929.313374937                      |
| livetime | 36213.779589095                      |
| ontime7  | 39929.313374937                      |
| l2events | 21861                                |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 1                   |
| ascdsver | 7.6.8.1             |
| caldbver | 3.2.3               |
| date     | 2006-08-25T23:43:22 |
| revision | 3                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 40000.000000    |
| ontime         | 40856.109192535 |
| ontime7        | 40856.109192535 |
| l1events       | 47274           |

### 2.1.4 Events

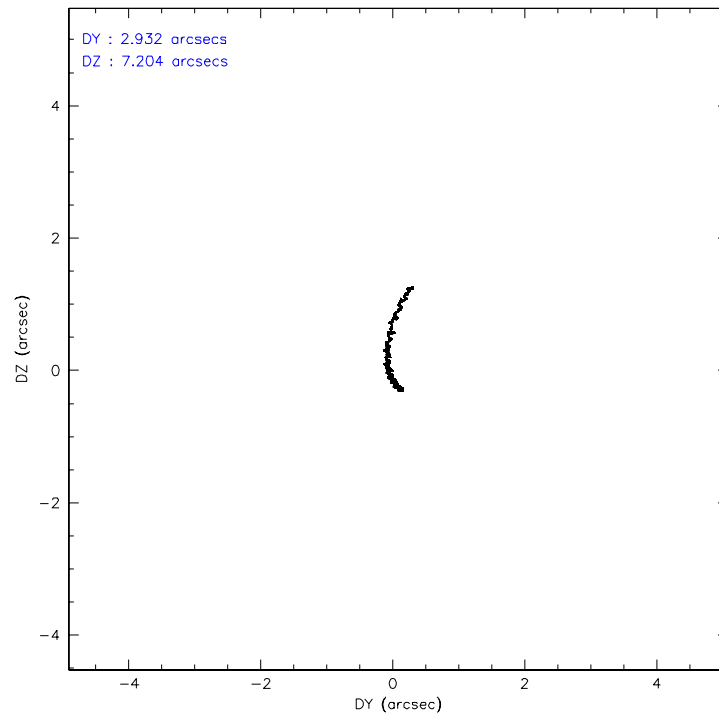
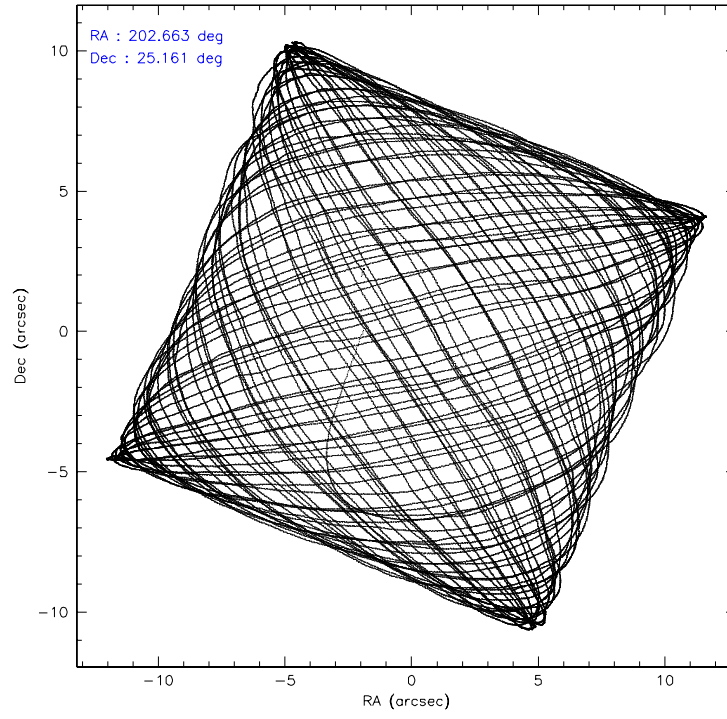
|                 |              |
|-----------------|--------------|
|                 | <b>ccd 7</b> |
| level 1 events  | 47274        |
| rejected events | 24638        |
| rejected %      | 52%          |

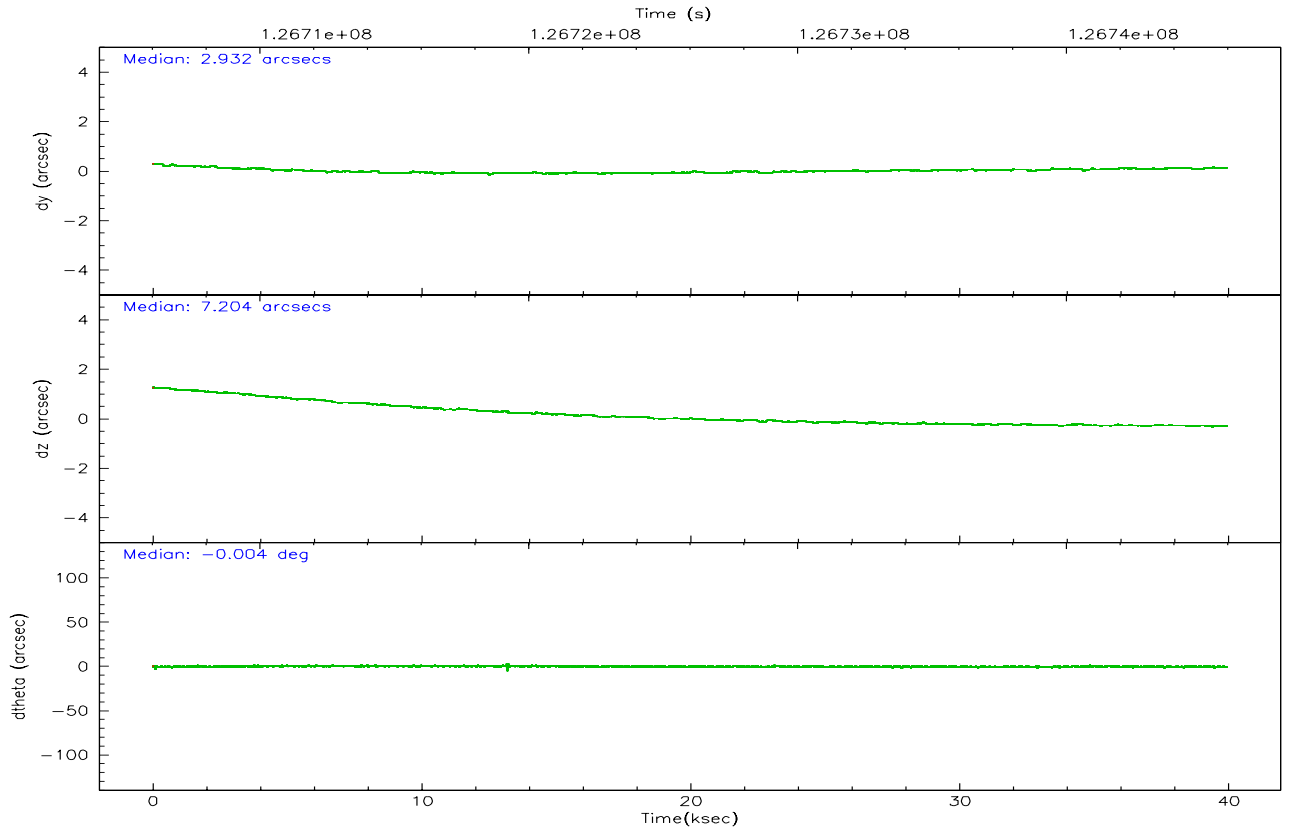
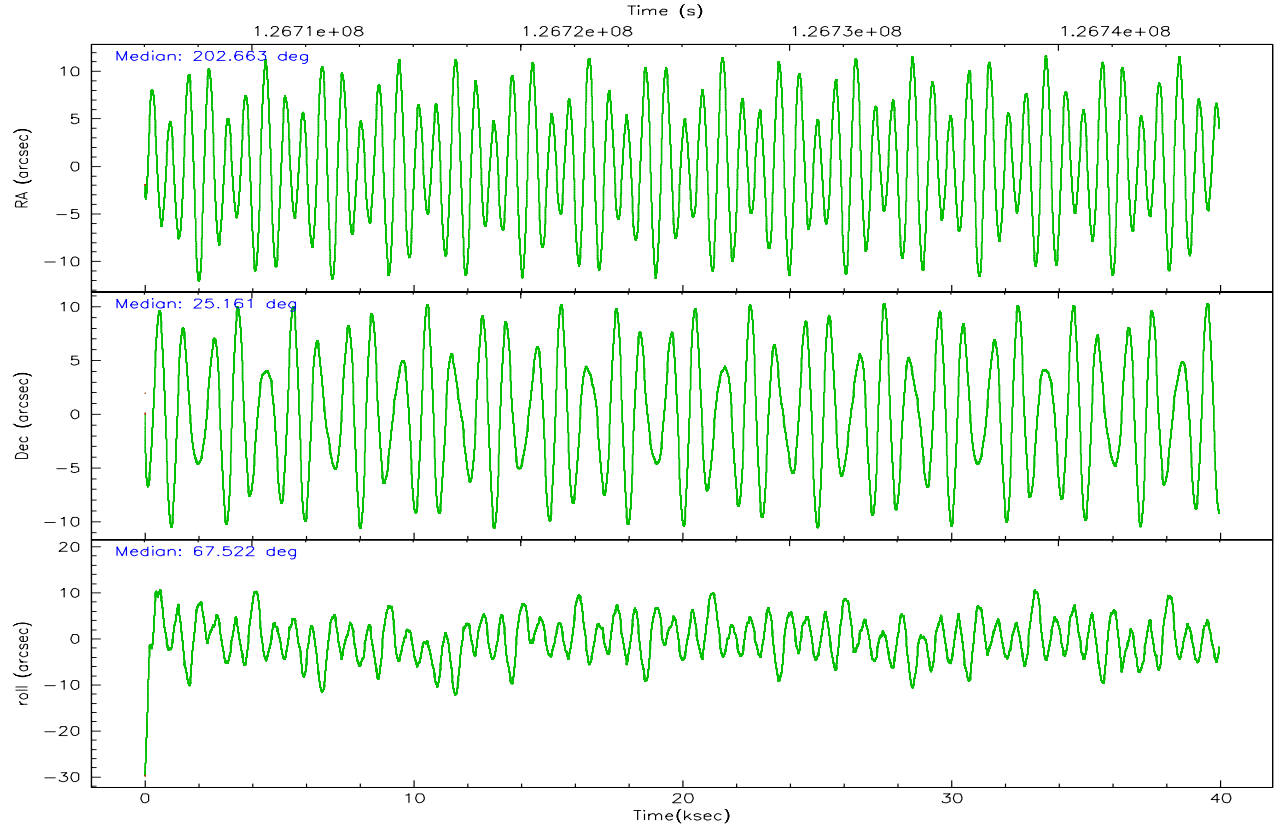
|                |              |
|----------------|--------------|
|                | <b>ccd 7</b> |
| grade 0 events | 3112         |
|                | 6%           |
| grade 1 events | 29           |
|                | 0%           |
| grade 2 events | 5151         |
|                | 10%          |
| grade 3 events | 2532         |
|                | 5%           |
| grade 4 events | 2377         |
|                | 5%           |
| grade 5 events | 3076         |
|                | 6%           |
| grade 6 events | 9943         |
|                | 21%          |
| grade 7 events | 21054        |
|                | 44%          |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                       | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument                        | ACIS                | ACIS                 | Obspar format version number    | 6         | 6       |
| Detector                          | ACIS-7              | ACIS-7               | 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              | CUSTOM    | 1/8     |
| Pointing RA                       | 202.667596          | 202.6633054249241    | Subarray start row              | 449       | 449     |
| Pointing Dec                      | 25.134206           | 25.1611814021956     | Subarray row count              | 128       | 128     |
| Pointing Roll                     | 67.368314           | 67.52676191656832    | Alternating exposures requested | N         | N       |
| SIM focus pos (mm)                | -0.684267           | -0.6828225247311905  | Primary exposure time           | 0.000000  | 0.4     |
| 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            | 126705974.184000    | 126705107.39342      |                                 |           |         |
| Observation start date            | 2002-01-06T12:05:10 | 2002-01-06T11:51:47  |                                 |           |         |
| Observation end time              | 126745974.184000    | 126746525.08258      |                                 |           |         |
| Observation end date              | 2002-01-06T23:11:50 | 2002-01-06T23:22:05  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

## 2.3 Aspect





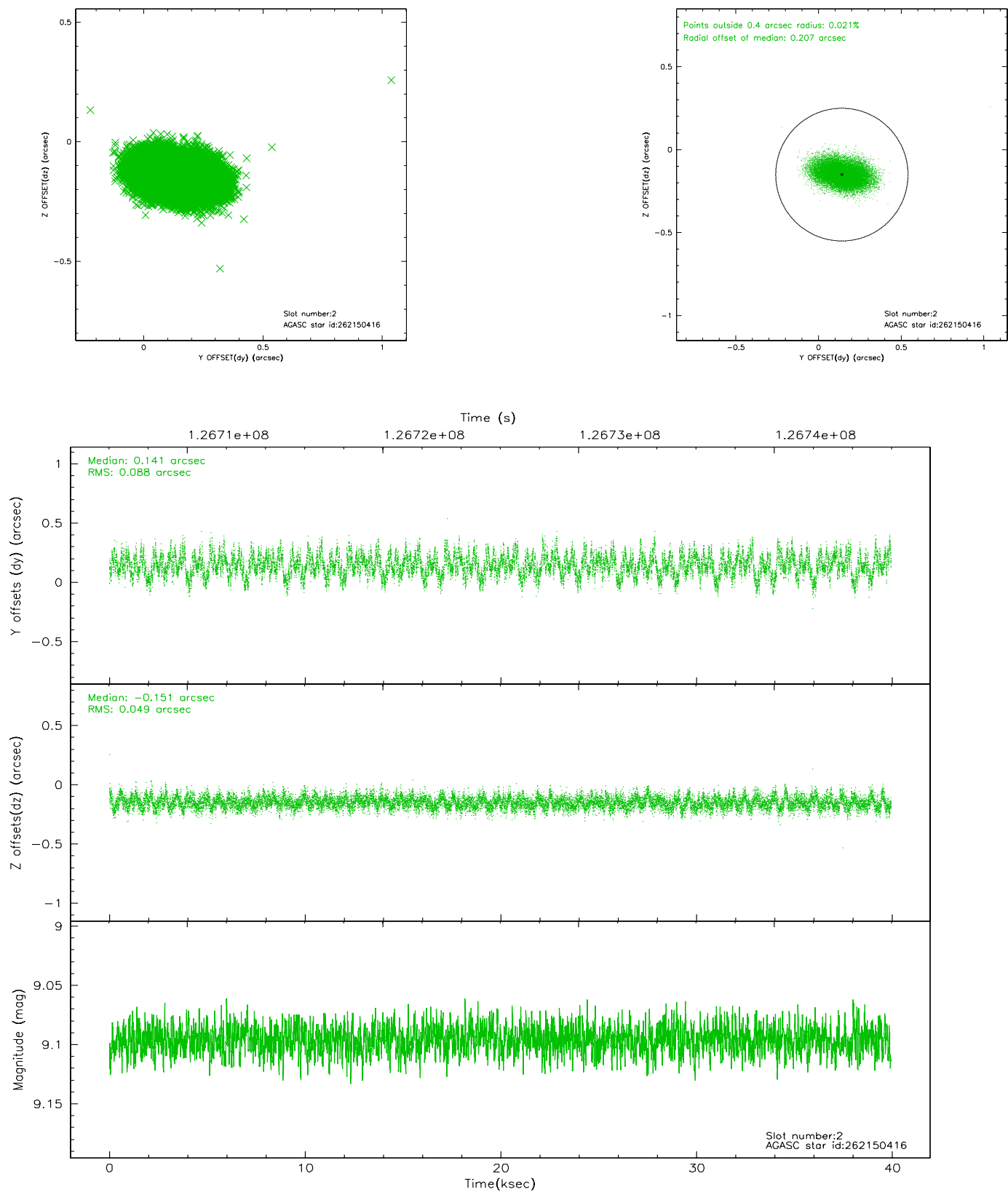
### Slot Statistics

| slot | status | id        | mag   | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | ACIS-S-2  | 6.90  | 9739  | 0.034  | 0.027  | 0.005 | 0.010 | 0.000000   | 0.000000  | -755.56  | -1728.46 |
| 1    | FID    | ACIS-S-4  | 6.99  | 9733  | -0.055 | -0.024 | 0.005 | 0.010 | 0.000000   | 0.000000  | 2157.63  | 179.94   |
| 2    | GUIDE  | 262150416 | 9.10  | 19468 | 0.141  | -0.151 | 0.106 | 0.179 | 201.889414 | 25.009123 | -1386.12 | 2172.49  |
| 3    | GUIDE  | 262151480 | 9.79  | 19386 | -0.111 | 0.114  | 0.112 | 0.186 | 202.351605 | 25.364143 | 369.08   | 1267.92  |
| 4    | GUIDE  | 261753680 | 10.77 | 19446 | -0.048 | 0.331  | 0.224 | 0.378 | 203.296424 | 24.998255 | 342.11   | -2079.92 |
| 5    | GUIDE  | 262150304 | 10.22 | 19461 | -0.152 | -0.033 | 0.233 | 0.366 | 202.471266 | 25.651186 | 1472.63  | 1304.35  |
| 6    | GUIDE  | 261753088 | 10.34 | 19462 | 0.334  | 0.081  | 0.143 | 0.241 | 202.363149 | 24.529737 | -2390.99 | 83.24    |
| 7    | GUIDE  | 262150992 | 10.13 | 19459 | -0.126 | -0.314 | 0.304 | 0.446 | 202.117091 | 25.711028 | 1232.24  | 2448.25  |

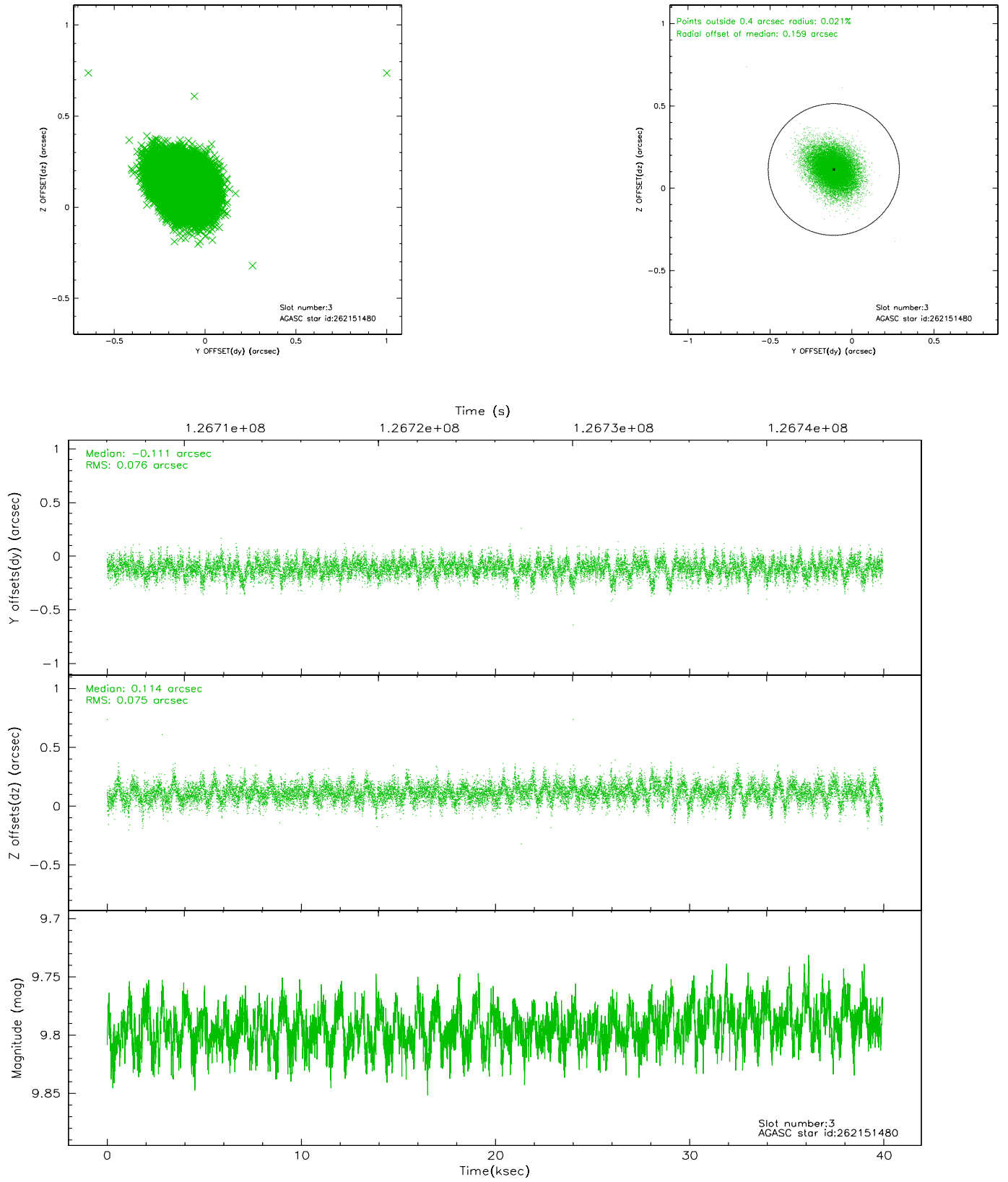


## 2.4 Star Slots

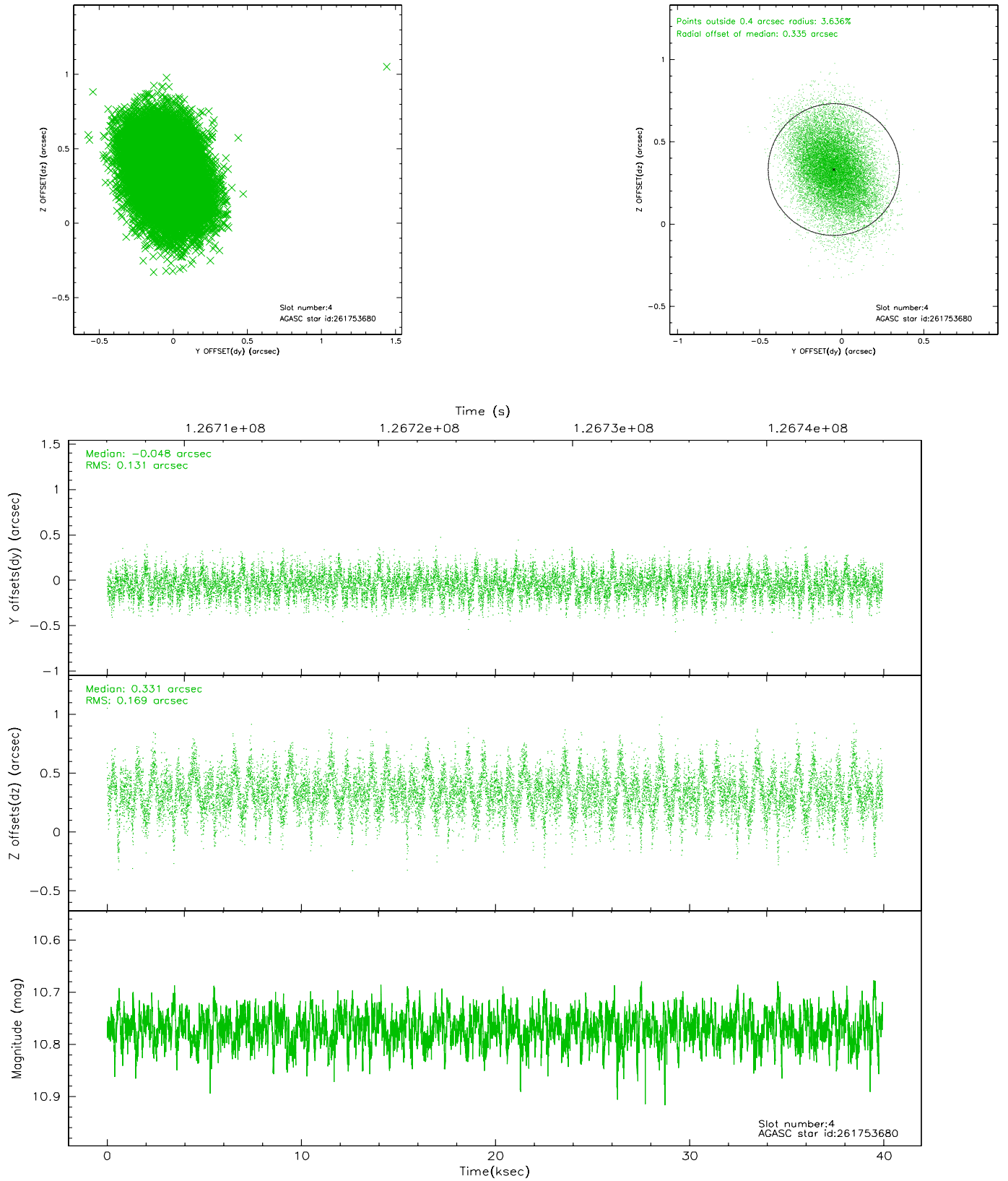
### 2.4.1 Slot 2



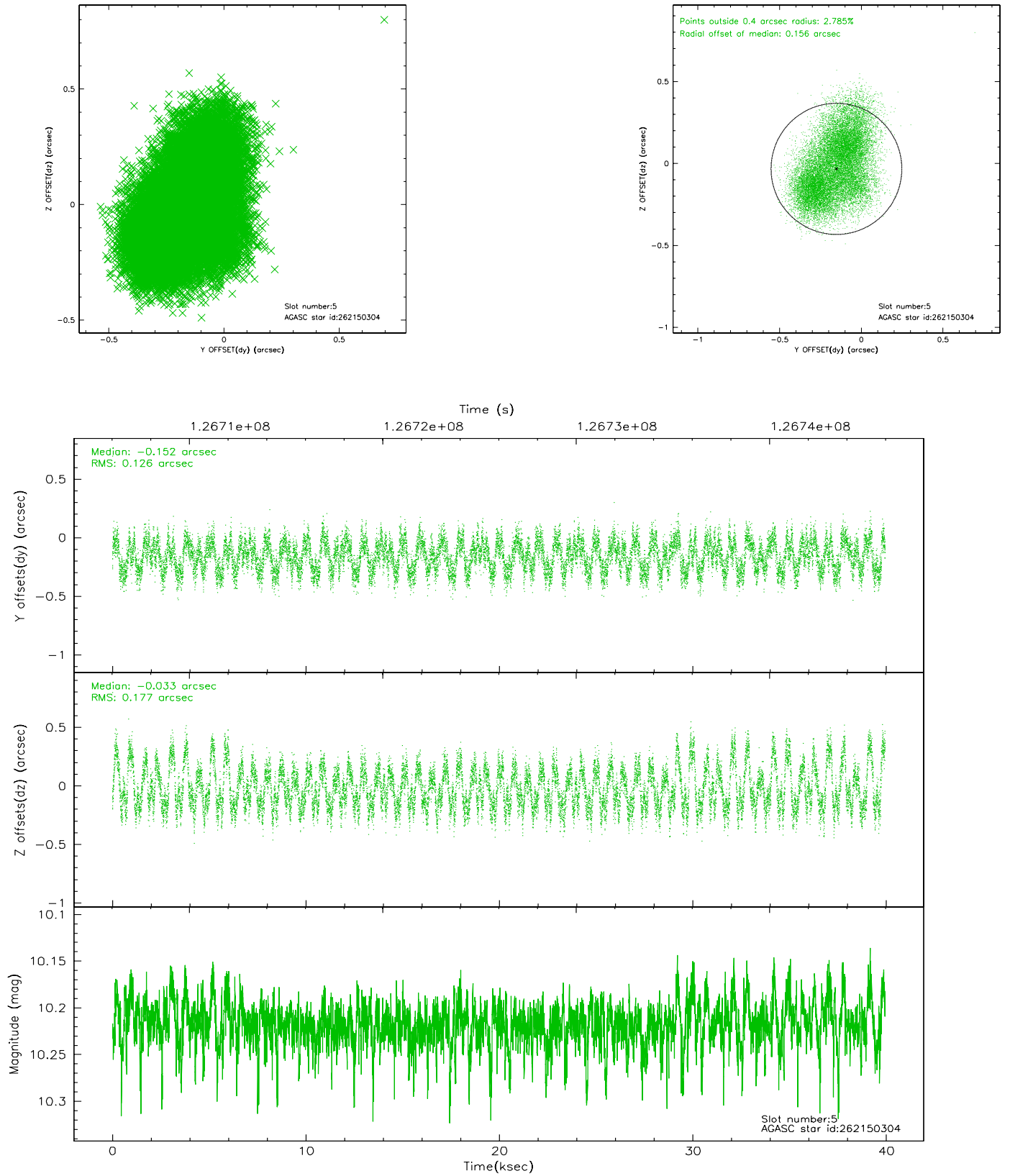
## 2.4.2 Slot 3



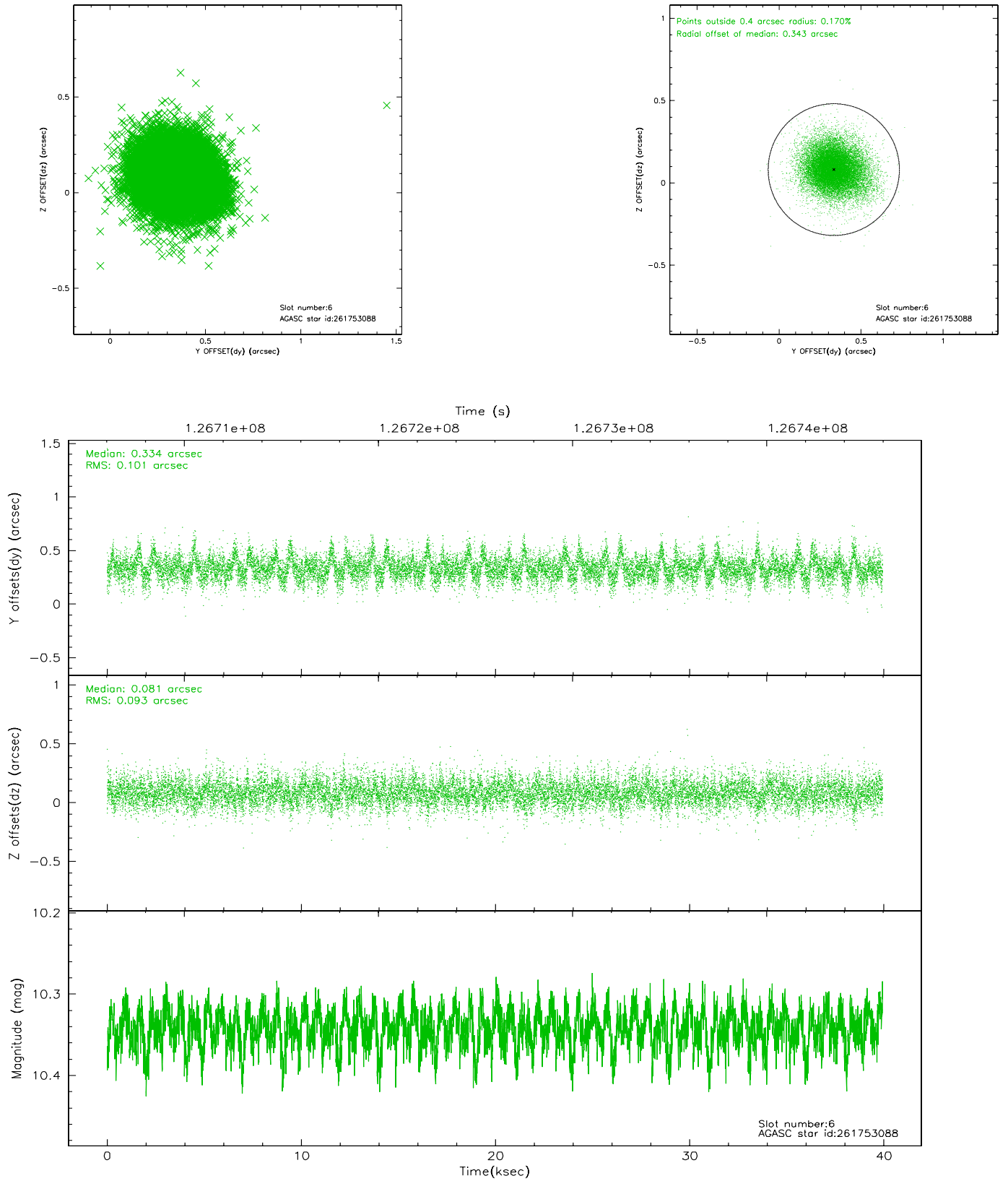
### 2.4.3 Slot 4



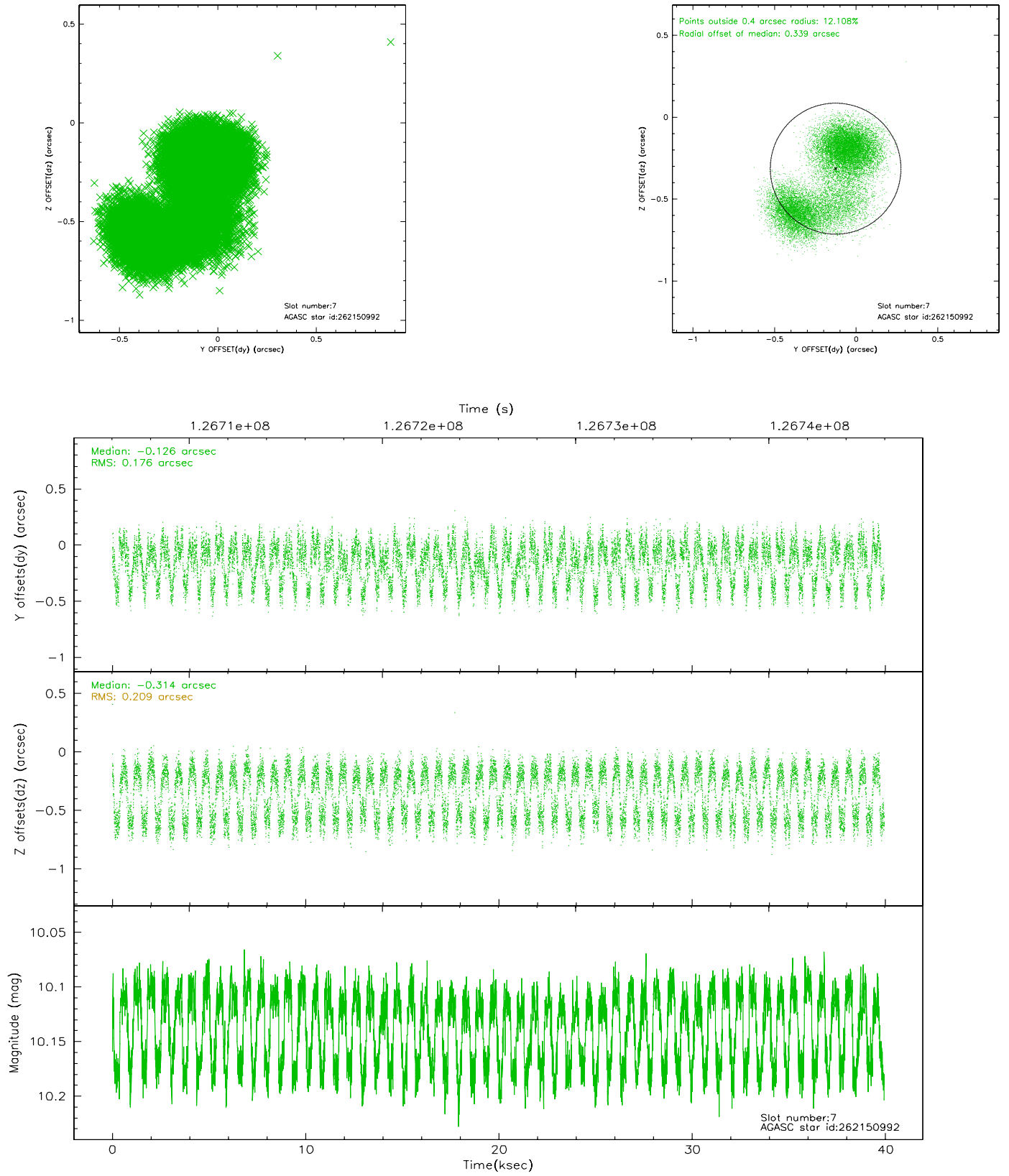
## 2.4.4 Slot 5



## 2.4.5 Slot 6

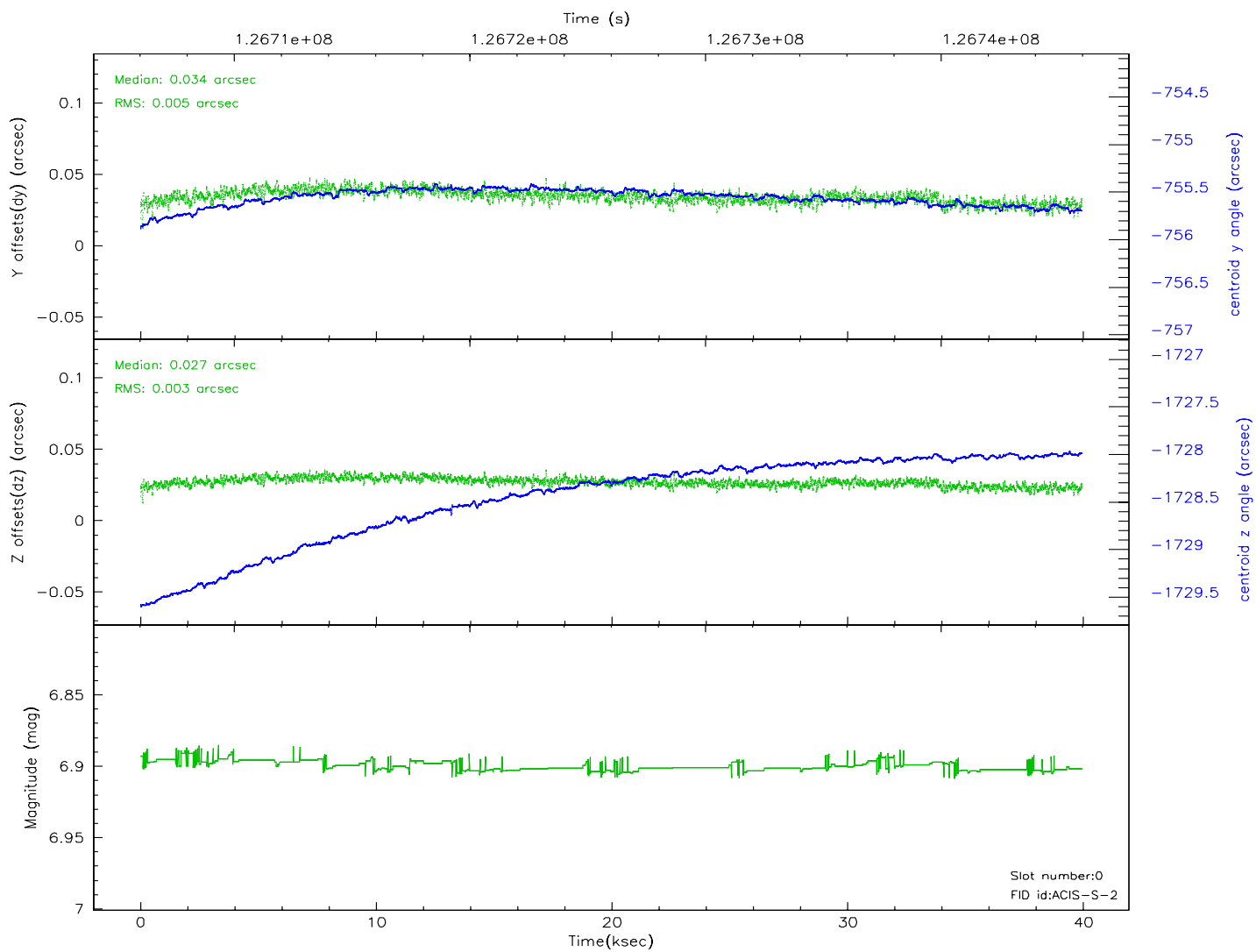
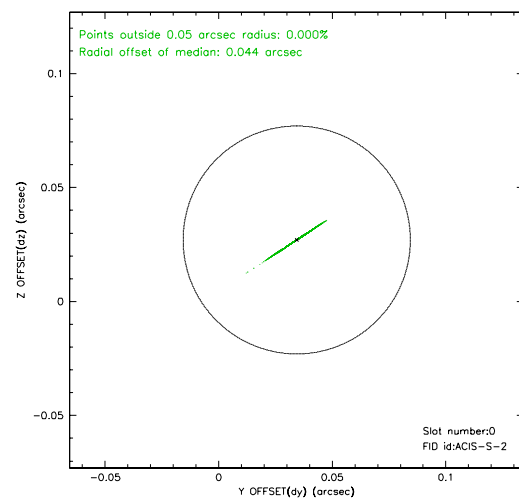
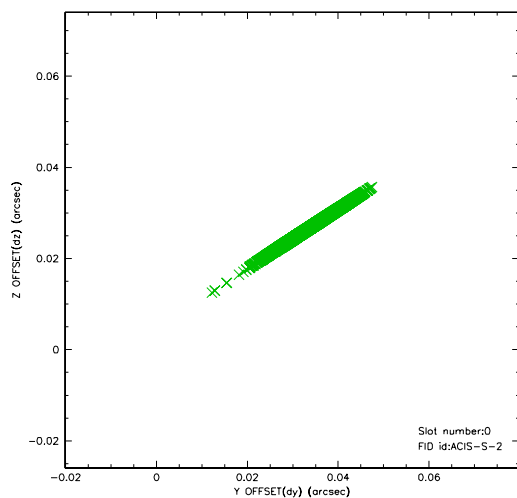


## 2.4.6 Slot 7

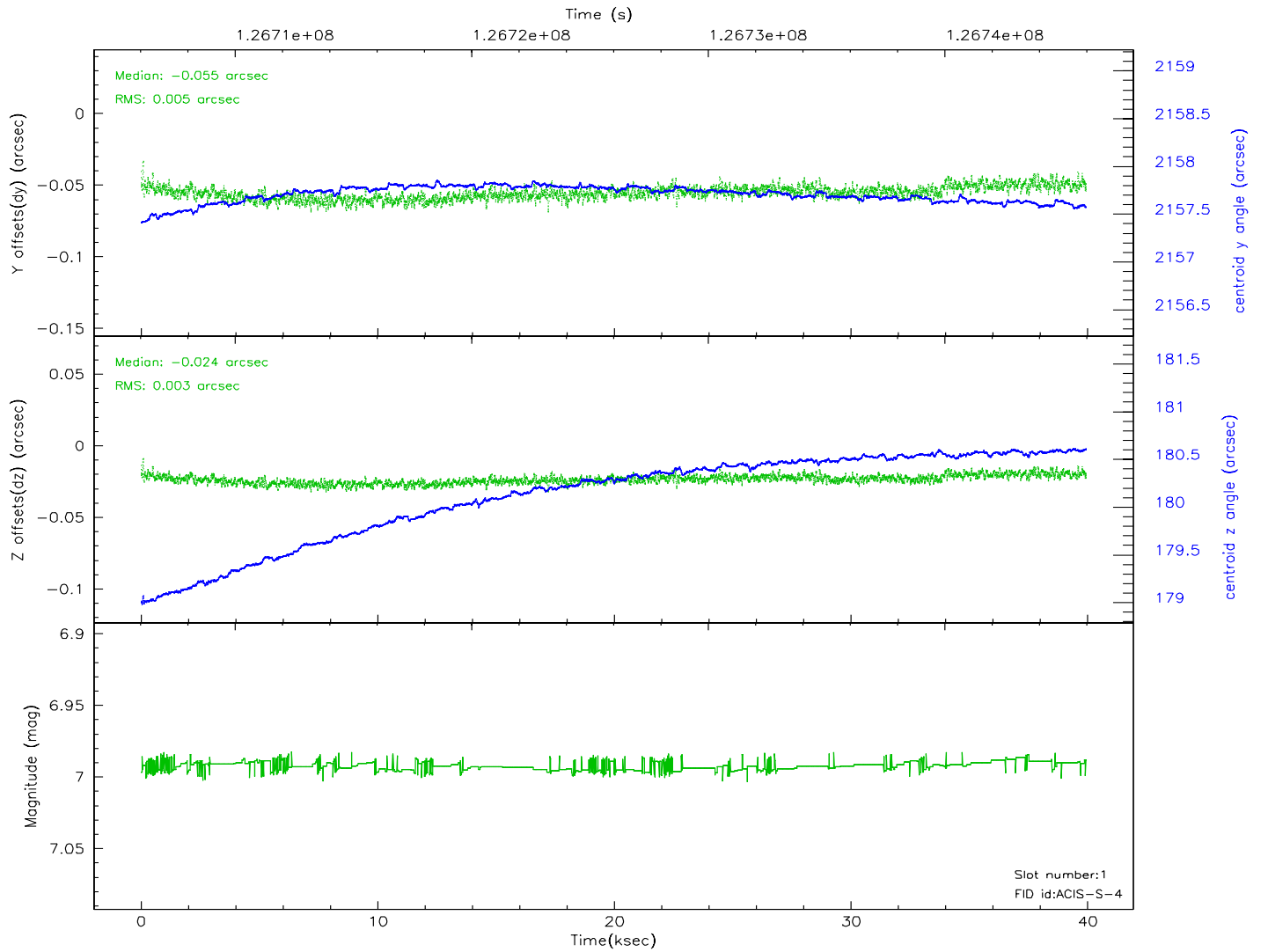
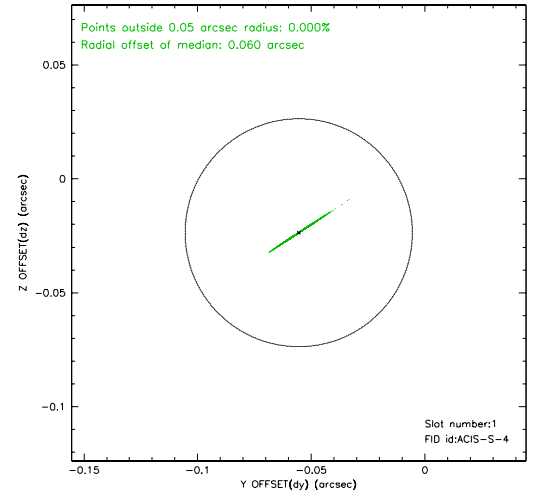
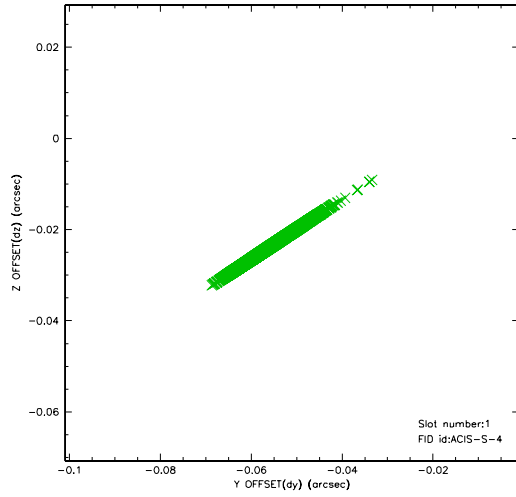


## 2.5 FID Slots

### 2.5.1 Slot 0



## 2.5.2 Slot 1





### 3 Point Sources

## A Summary

### A.1 Status

|                            |            |
|----------------------------|------------|
| V&V Scientist              | Jen Lauer  |
| V&V Date (YYYY-MM-DD)      | 2006.08.28 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 39.929     |

### A.2 Comments

There are six guide stars and two fidlights for this observation instead of the usual five stars and three fids.