

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 3050 - L2 Version 001  
Chandra X-Ray Center

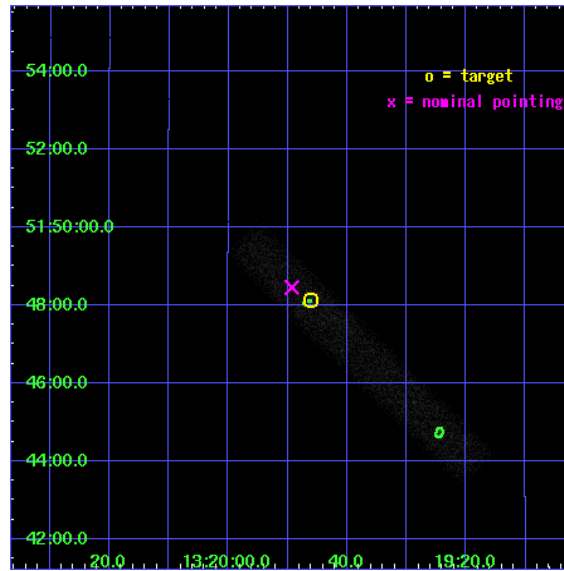
L2 Processing Date : Oct 13 2006

## 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 3 . . . . .              | 9         |
| 2.4.2    | Slot 4 . . . . .              | 10        |
| 2.4.3    | Slot 5 . . . . .              | 11        |
| 2.4.4    | Slot 6 . . . . .              | 12        |
| 2.4.5    | Slot 7 . . . . .              | 13        |
| 2.5      | FID Slots . . . . .           | 14        |
| 2.5.1    | Slot 0 . . . . .              | 14        |
| 2.5.2    | Slot 1 . . . . .              | 15        |
| 2.5.3    | Slot 2 . . . . .              | 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

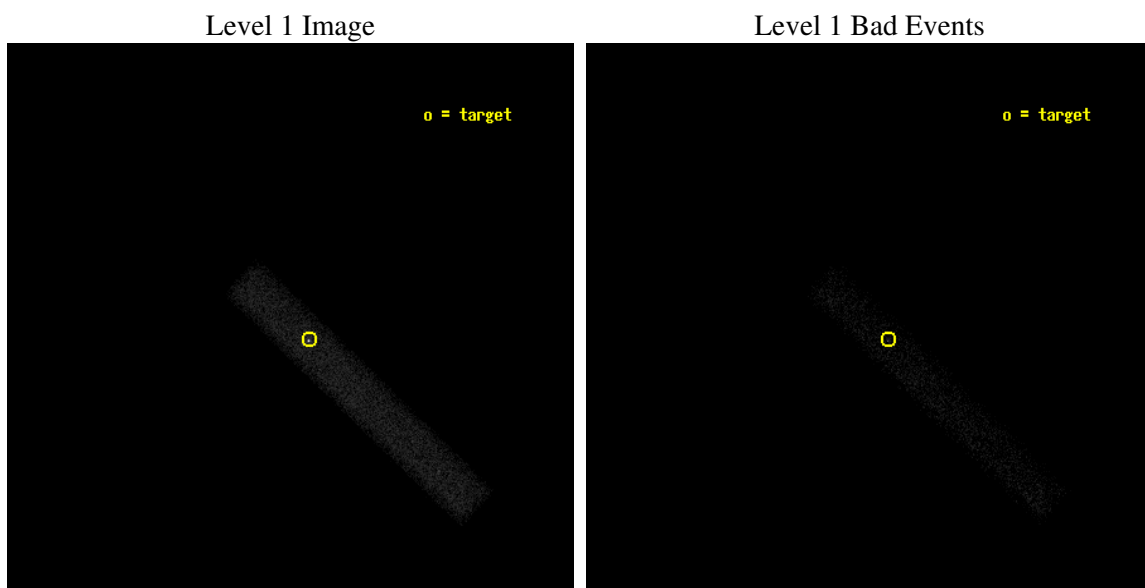
|          |                              |
|----------|------------------------------|
| seq_num  | 700489                       |
| obs_id   | 3050                         |
| title    | X-RAY IMAGING OF QUASAR JETS |
| observer | Professor Alan Marscher      |
| object   | 1317+520                     |
| dtcycle  | 0                            |
| cycle    | P                            |
| ra_targ  | 199.9425                     |
| dec_targ | 51.802278                    |
| ra_nom   | 199.95544127161              |
| dec_nom  | 51.807657274124              |
| roll_nom | 43.986639860462              |
| revision | 2                            |
| ontime   | 20140.800300121              |
| livetime | 18266.642753602              |
| ontime7  | 20140.800300121              |
| l2events | 14663                        |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 1                   |
| ascdsver | 7.6.9               |
| caldbver | 3.2.3               |
| date     | 2006-10-13T17:26:44 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 20000.000000    |
| ontime         | 21058.962548107 |
| ontime7        | 21058.962548107 |
| l1events       | 29671           |

### 2.1.4 Events

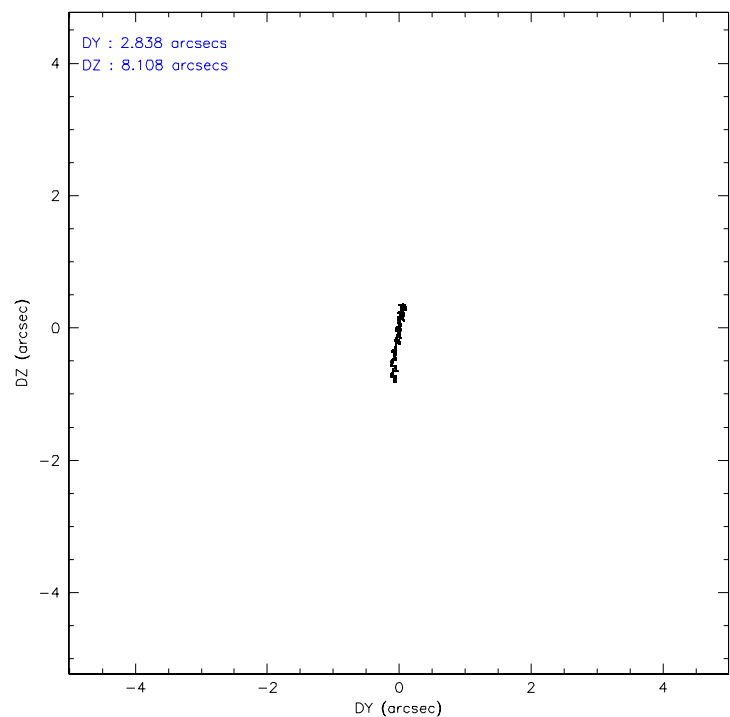
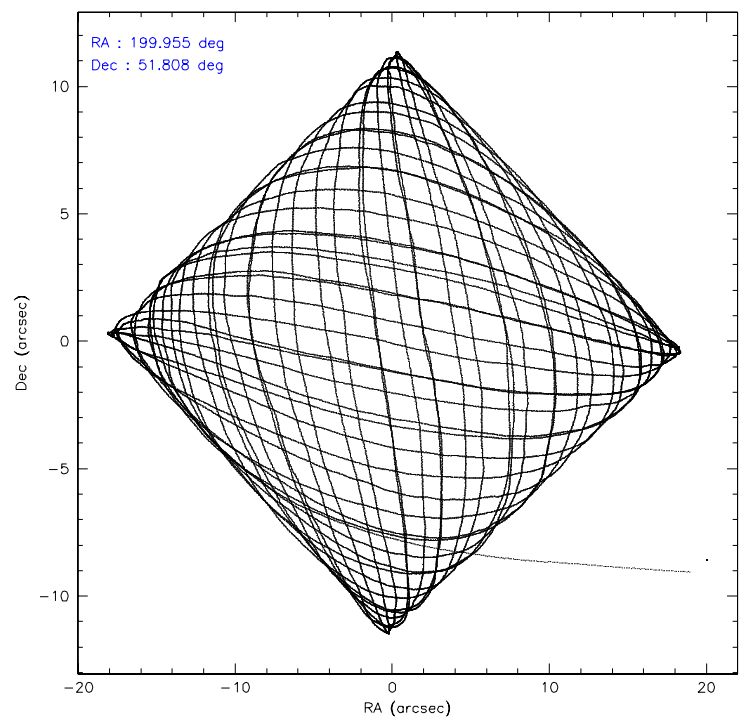
|                 |              |
|-----------------|--------------|
|                 | <b>ccd 7</b> |
| level 1 events  | 29671        |
| rejected events | 14550        |
| rejected %      | 49%          |

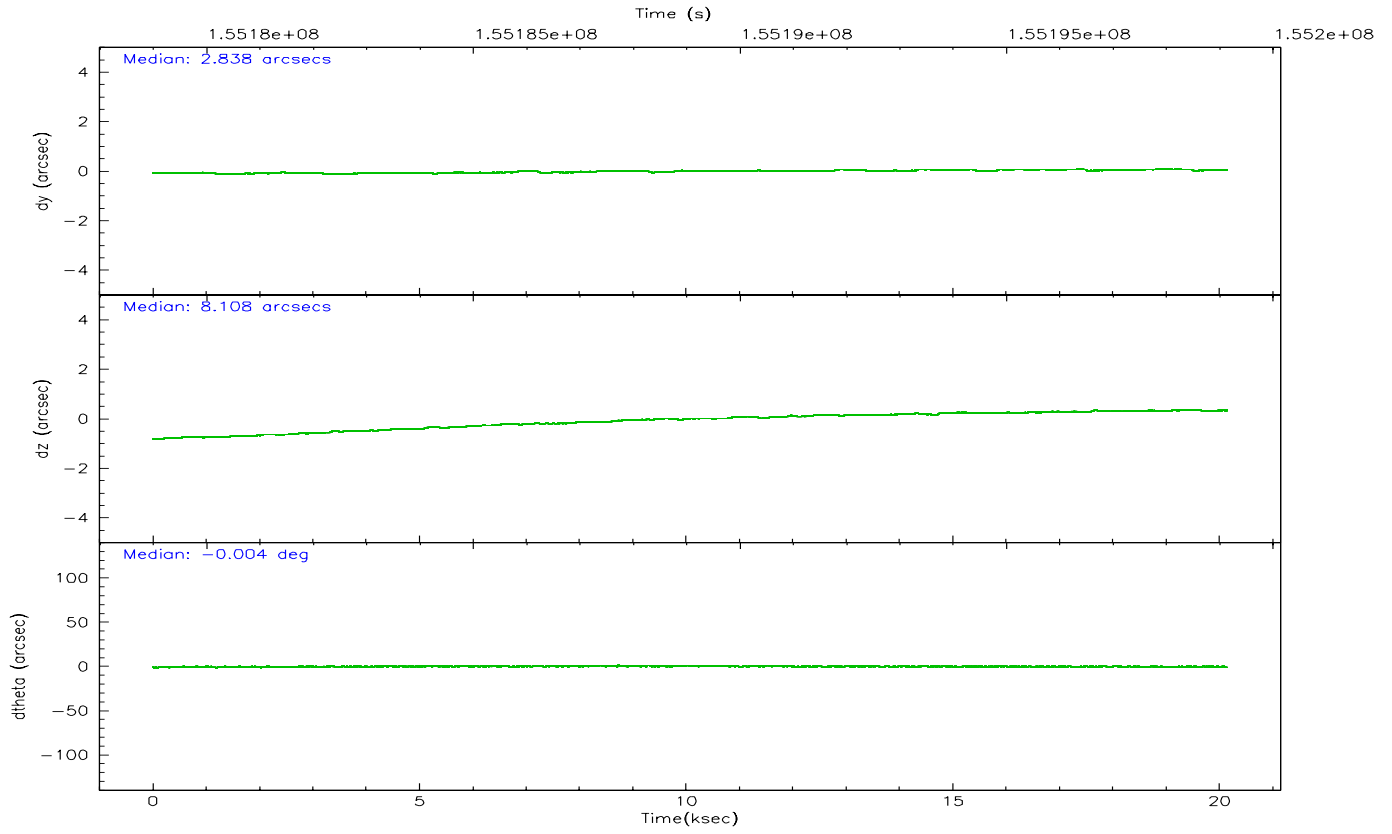
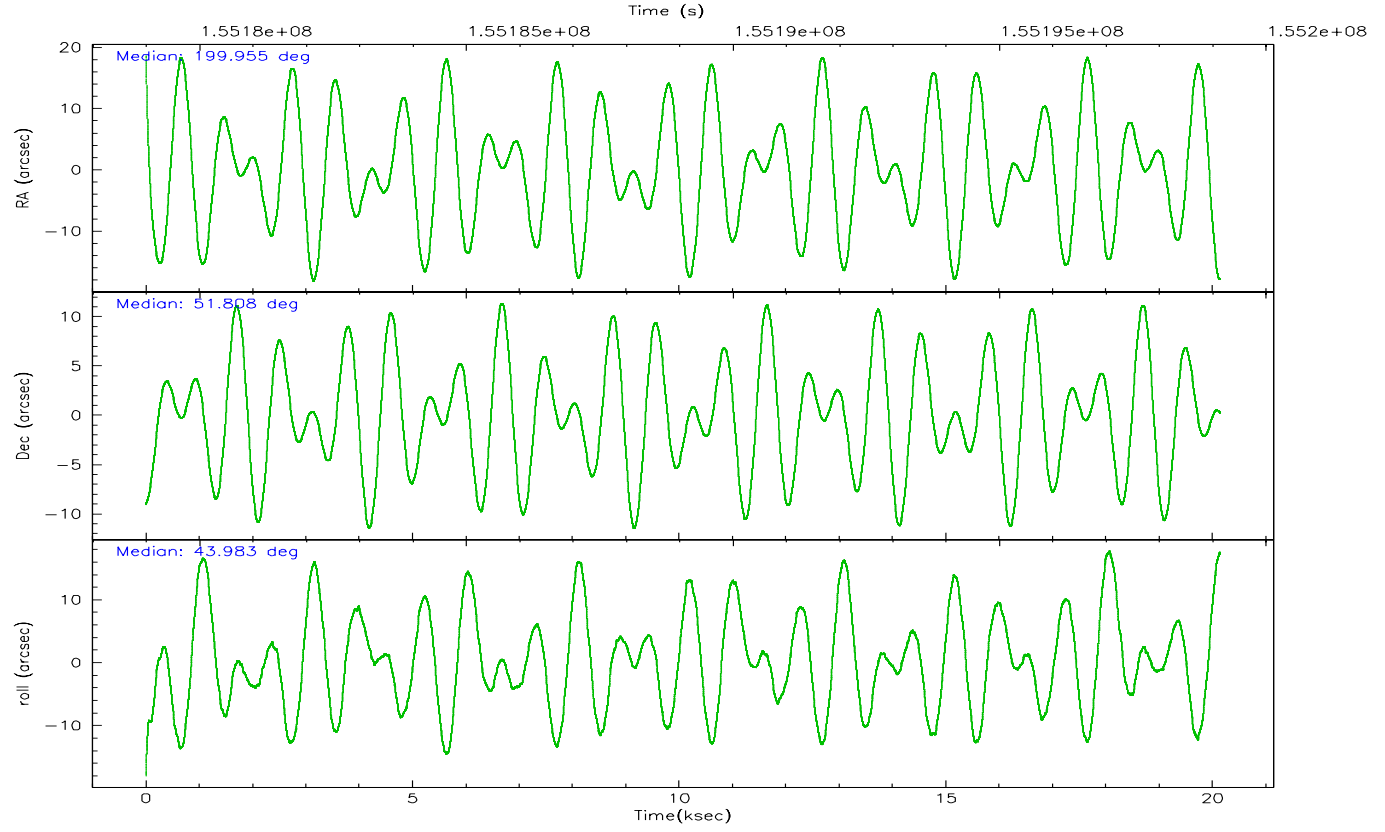
|                |              |
|----------------|--------------|
|                | <b>ccd 7</b> |
| grade 0 events | 2364         |
|                | 7%           |
| grade 1 events | 25           |
|                | 0%           |
| grade 2 events | 3629         |
|                | 12%          |
| grade 3 events | 1598         |
|                | 5%           |
| grade 4 events | 1560         |
|                | 5%           |
| grade 5 events | 1769         |
|                | 5%           |
| grade 6 events | 7120         |
|                | 23%          |
| grade 7 events | 11606        |
|                | 39%          |

## 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                         | FAINT               | FAINT                | Number of optional ACIS chips dropped | 0         | 0       |
| Observation mode                  | POINTING            | POINTING             | On-chip summing requested             | N         | N       |
| Pointing RA                       | 199.943916          | 199.9554412716057    | Subarray requested                    | 1/8       | 1/8     |
| Pointing Dec                      | 51.781403           | 51.80765727412381    | Subarray start row                    | 0         | 449     |
| Pointing Roll                     | 43.839071           | 43.98663986046166    | Subarray row count                    | 1024      | 128     |
| SIM focus pos (mm)                | -0.684267           | -0.6828225247311905  | Alternating exposures requested       | N         | N       |
| SIM defocus (mm)                  | 0                   | 0.001444936568705701 | Primary exposure time                 | 0.000000  | 0.4     |
| SIM translation stage pos (mm)    | -190.132523         | -190.1400660498719   |                                       |           |         |
| SIM translation stage offset (mm) | 0                   | 0.00754346686406393  |                                       |           |         |
| Observation start time            | 155179137.184000    | 155178076.69675      |                                       |           |         |
| Observation start date            | 2002-12-02T01:17:53 | 2002-12-02T01:01:16  |                                       |           |         |
| Observation end time              | 155199137.184000    | 155199867.68515      |                                       |           |         |
| Observation end date              | 2002-12-02T06:51:13 | 2002-12-02T07:04:27  |                                       |           |         |
| Read mode                         | TIMED               | TIMED                |                                       |           |         |

## 2.3 Aspect





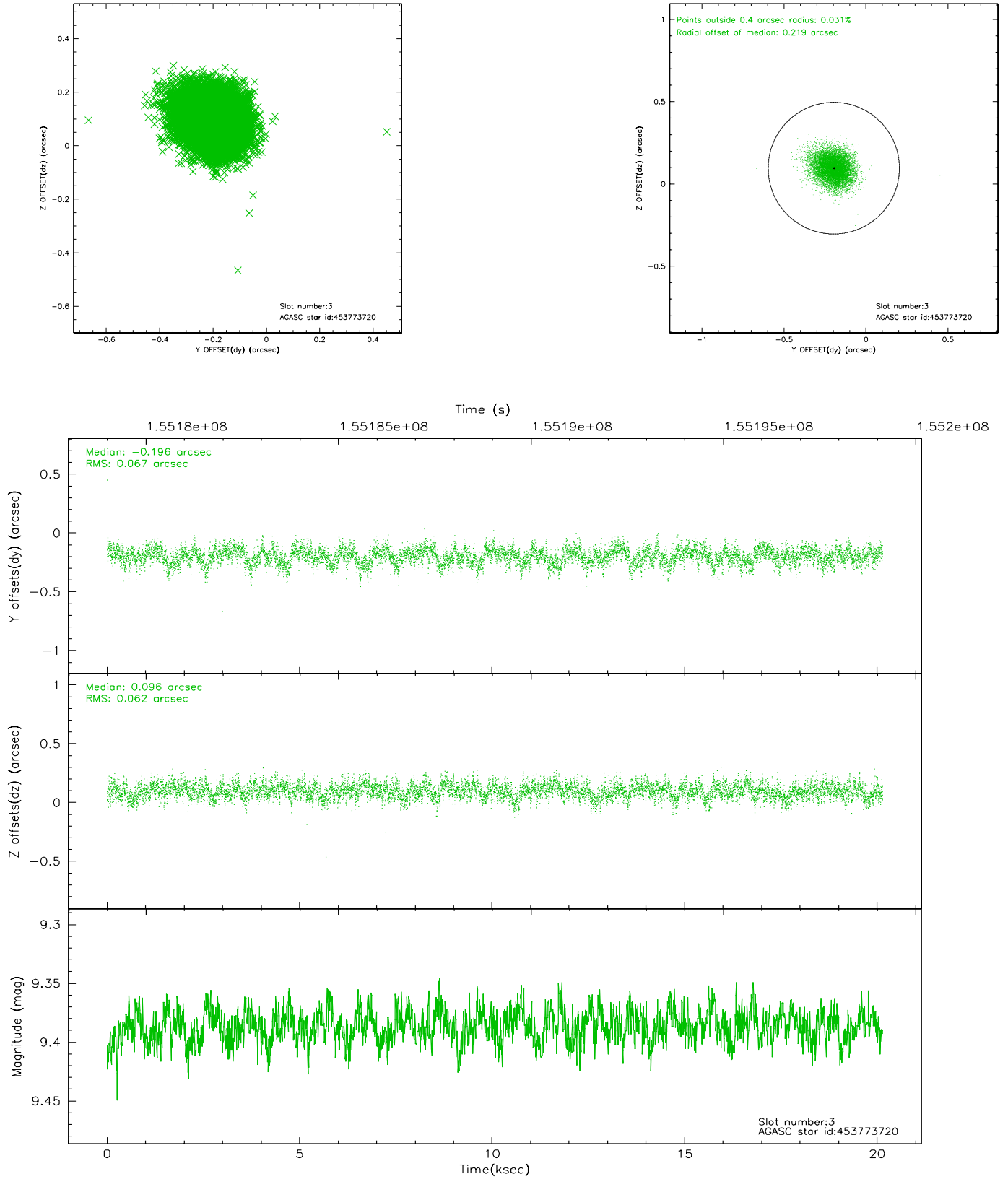
### Slot Statistics

| slot | status | id        | mag   | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | ACIS-S-2  | 7.11  | 4913  | 0.001  | 0.017  | 0.008 | 0.014 | 0.000000   | 0.000000  | -755.48  | -1729.19 |
| 1    | FID    | ACIS-S-4  | 7.20  | 4913  | -0.048 | -0.005 | 0.007 | 0.012 | 0.000000   | 0.000000  | 2157.68  | 179.06   |
| 2    | FID    | ACIS-S-5  | 7.24  | 4913  | 0.015  | -0.004 | 0.008 | 0.015 | 0.000000   | 0.000000  | -1808.05 | 172.97   |
| 3    | GUIDE  | 453773720 | 9.39  | 9818  | -0.196 | 0.096  | 0.096 | 0.155 | 200.875622 | 51.857392 | 1694.22  | -1228.33 |
| 4    | GUIDE  | 453777616 | 9.98  | 9811  | -0.010 | -0.048 | 0.150 | 0.243 | 201.080458 | 51.822928 | 1942.94  | -1629.98 |
| 5    | GUIDE  | 453782192 | 9.38  | 9825  | 0.118  | -0.081 | 0.083 | 0.133 | 199.534740 | 51.497959 | -1364.75 | -99.61   |
| 6    | GUIDE  | 453782416 | 9.41  | 9798  | 0.192  | -0.073 | 0.077 | 0.124 | 199.391215 | 51.406077 | -1826.32 | -112.30  |
| 7    | GUIDE  | 453777144 | 10.01 | 9818  | -0.100 | 0.103  | 0.153 | 0.243 | 201.163217 | 51.578639 | 1479.07  | -2399.77 |

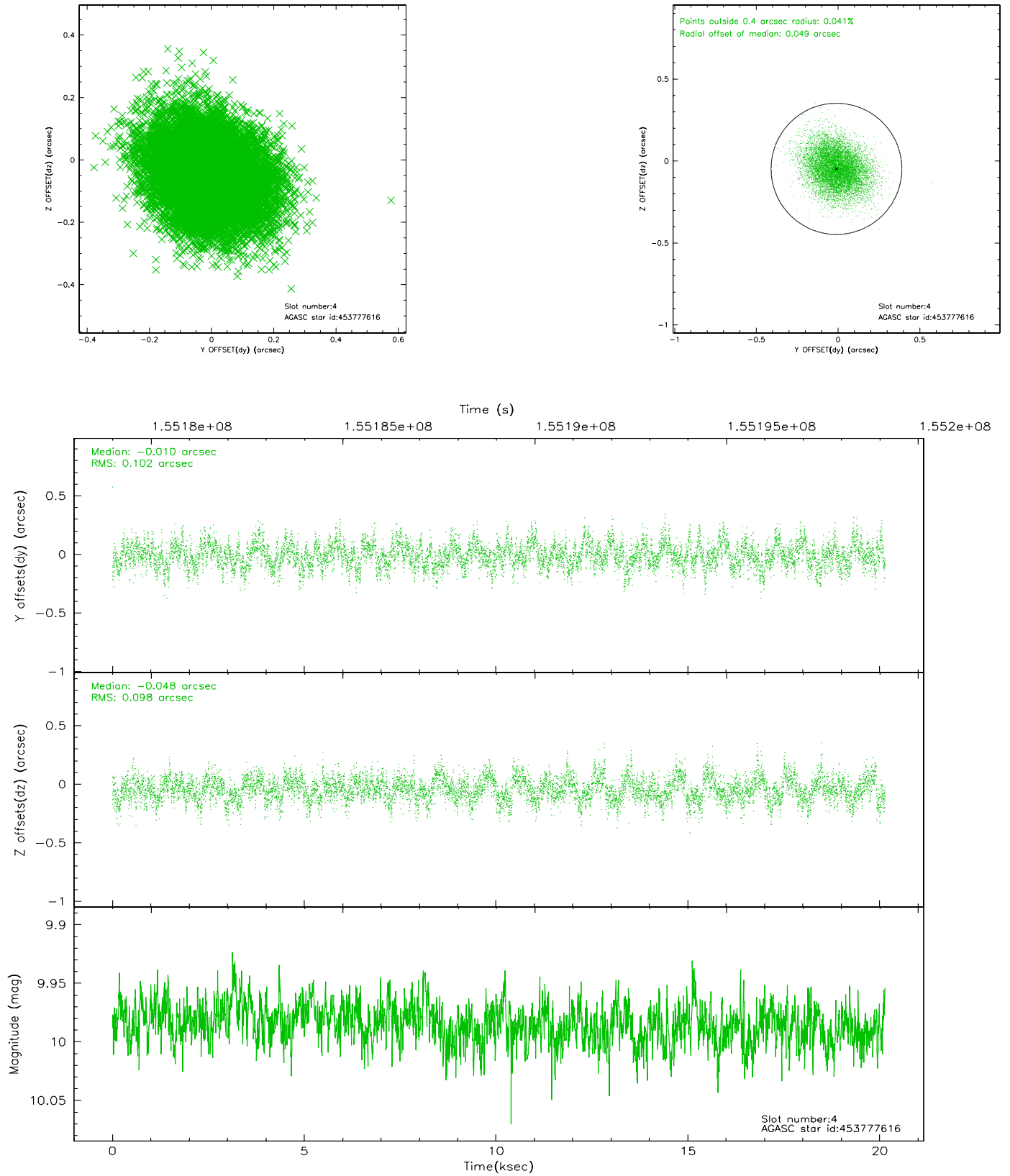


## 2.4 Star Slots

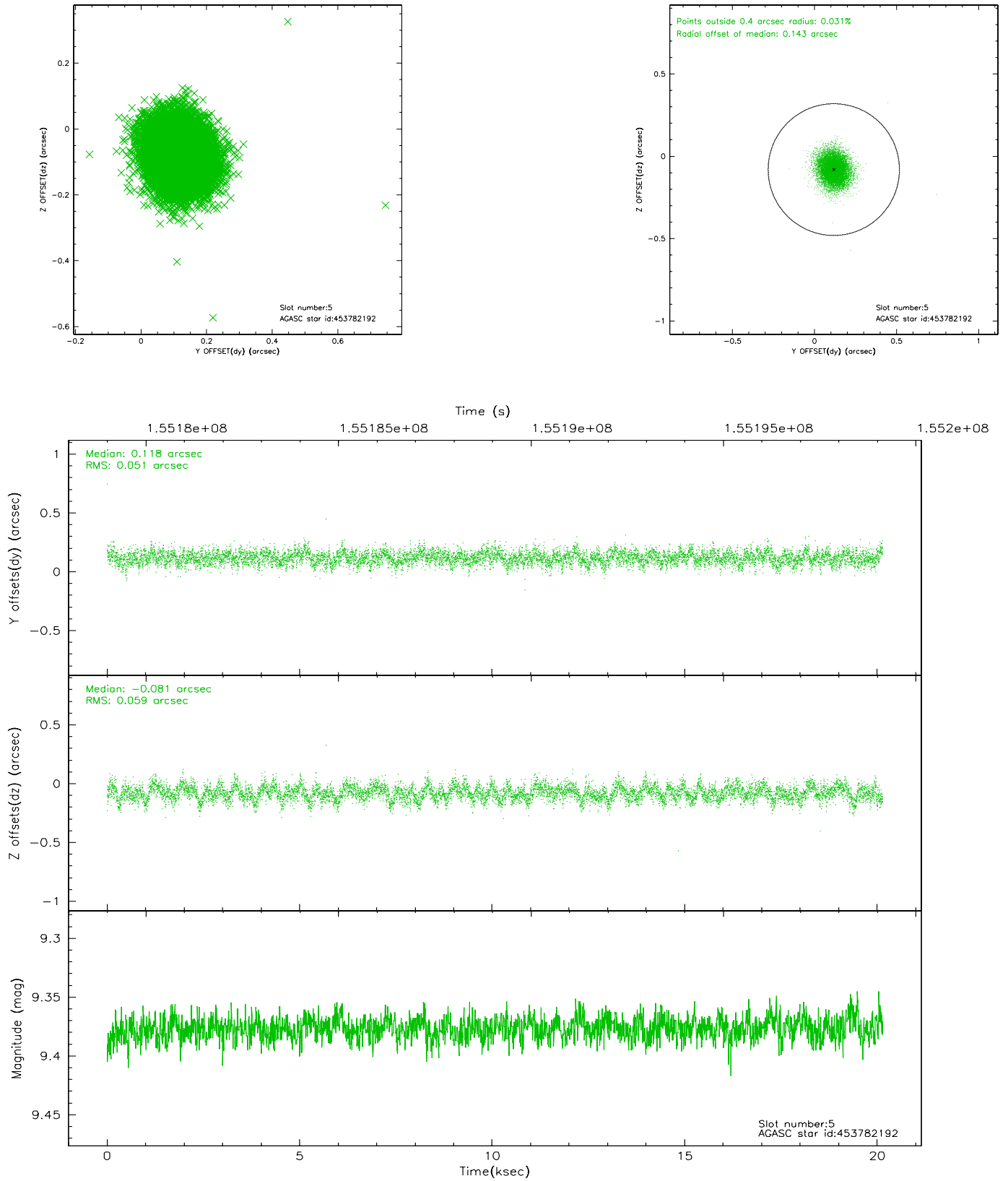
### 2.4.1 Slot 3



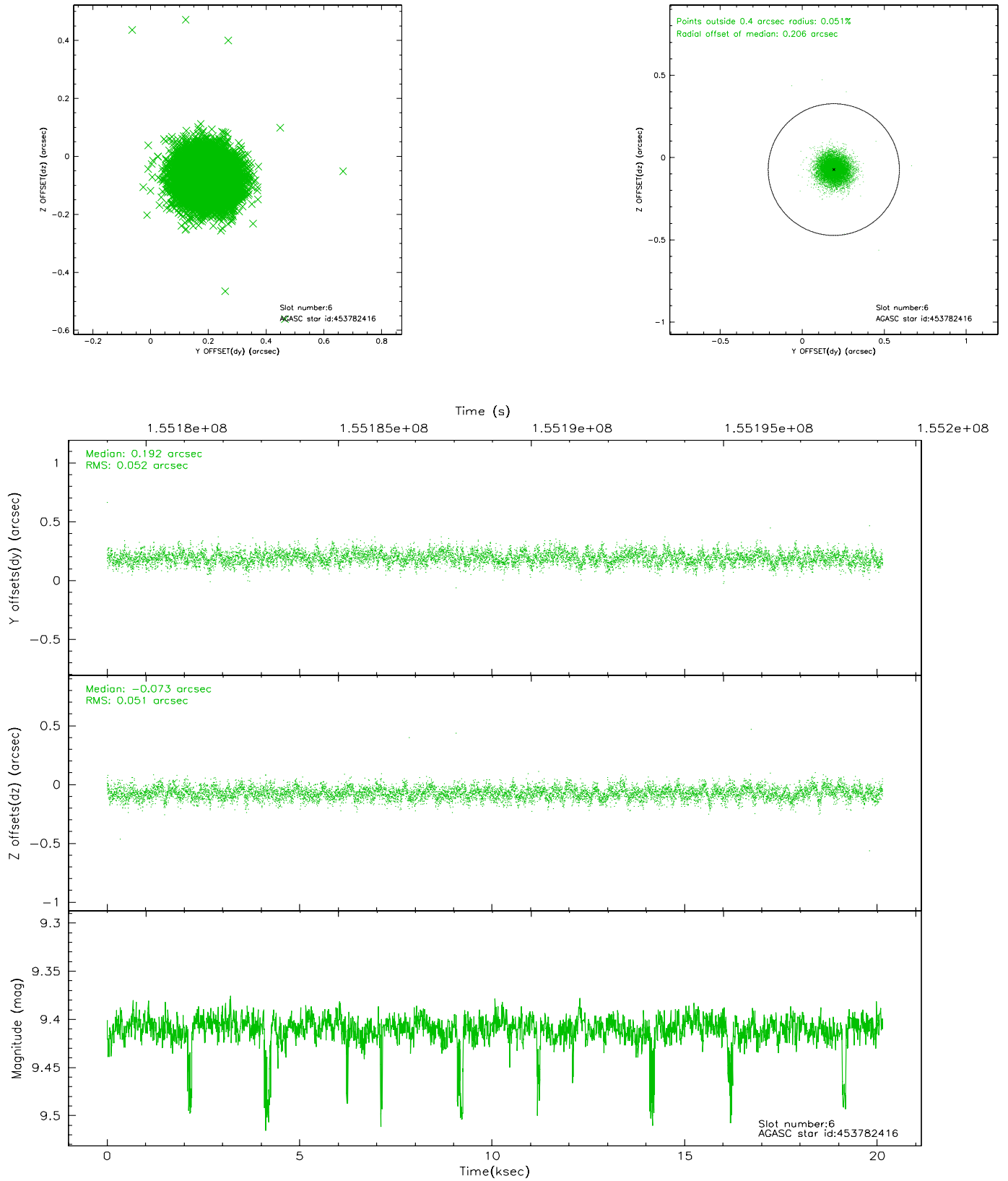
## 2.4.2 Slot 4



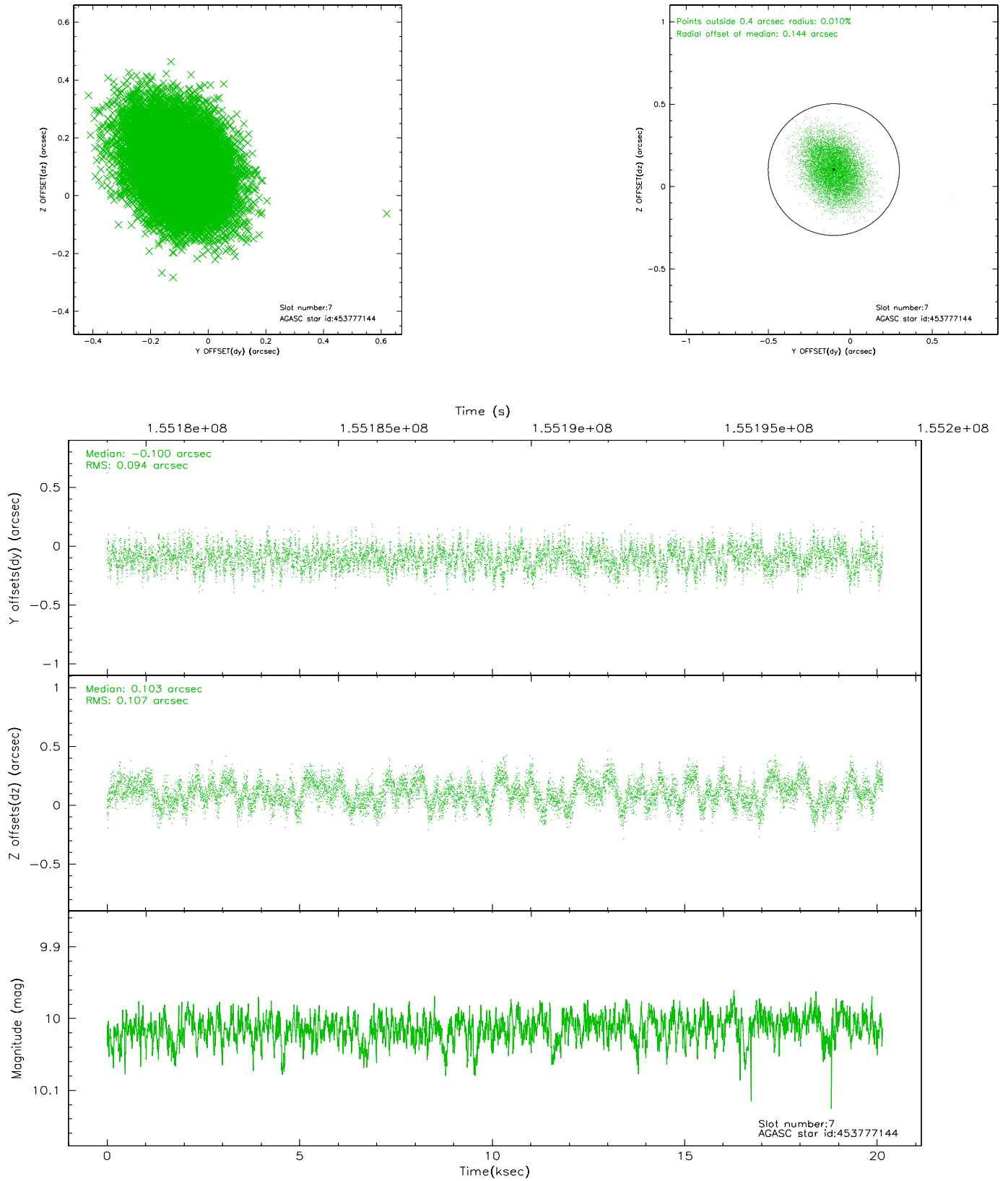
### 2.4.3 Slot 5



## 2.4.4 Slot 6

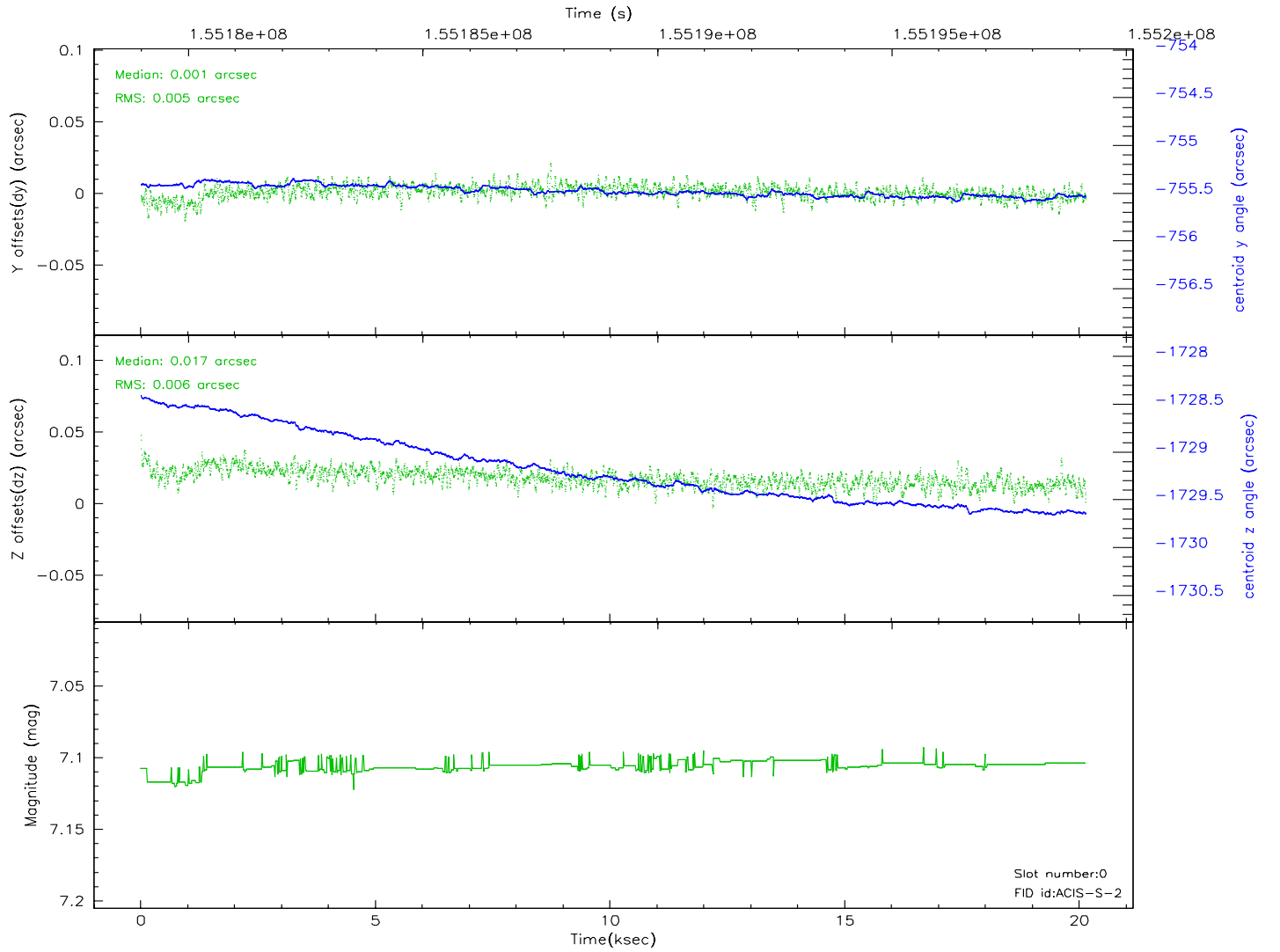
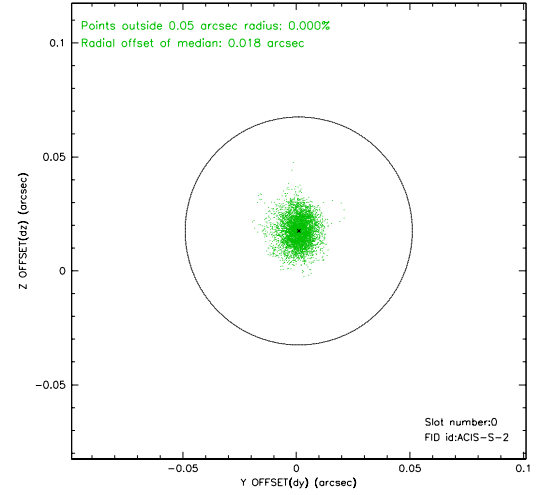
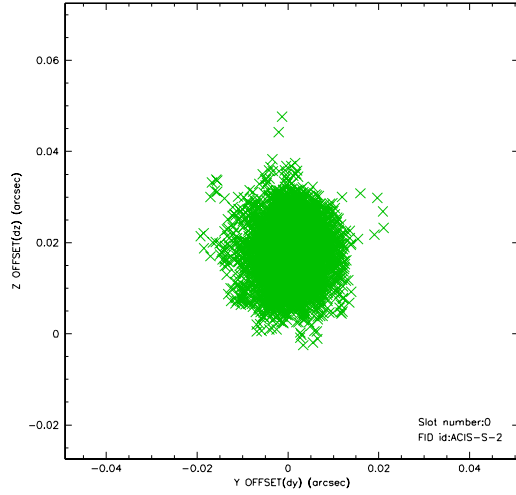


## 2.4.5 Slot 7

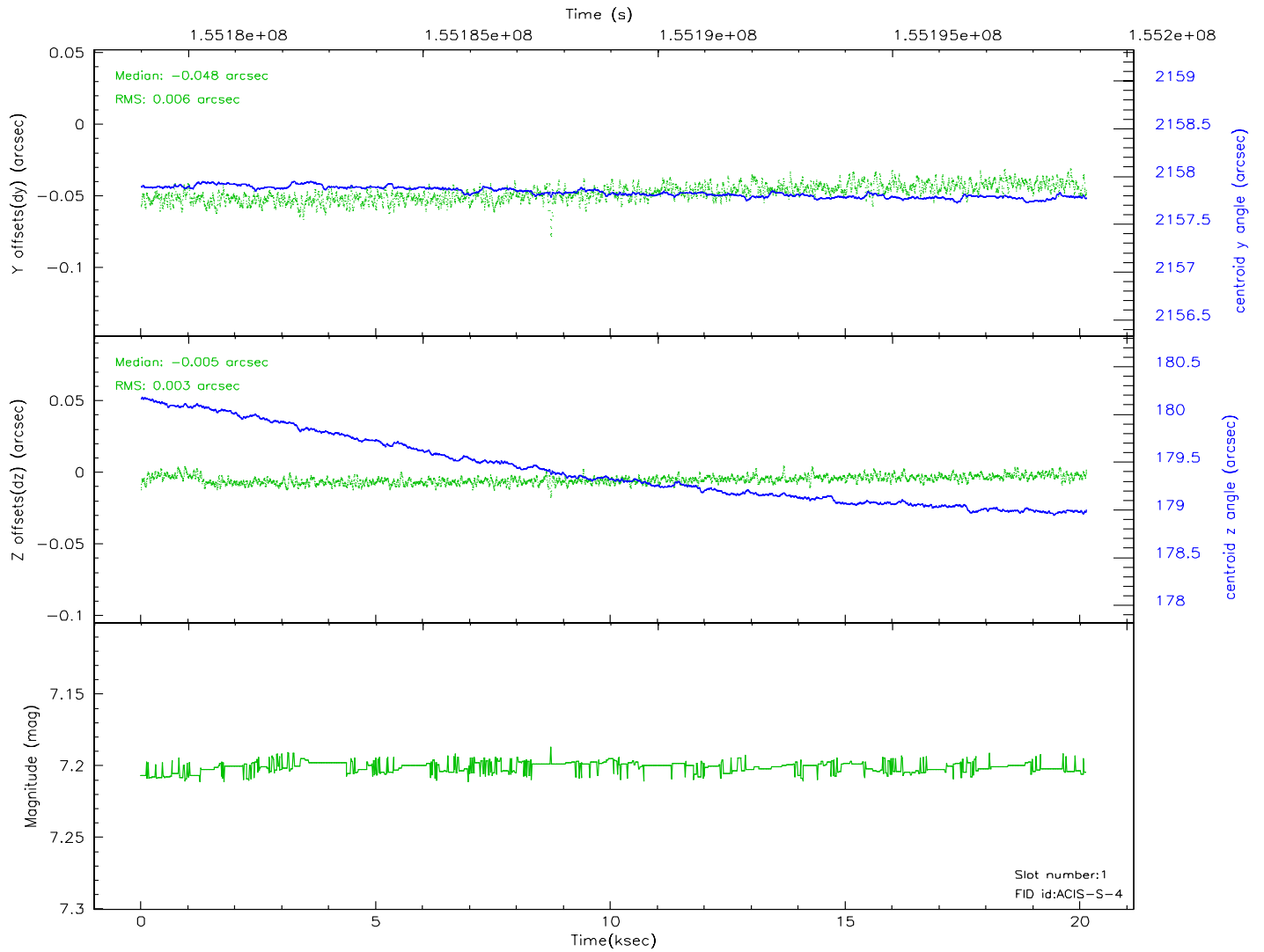
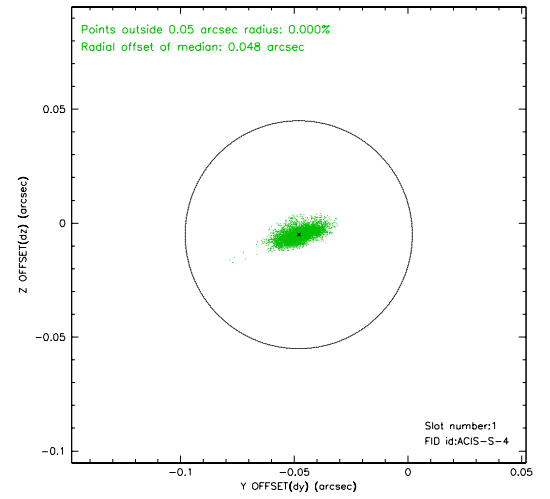
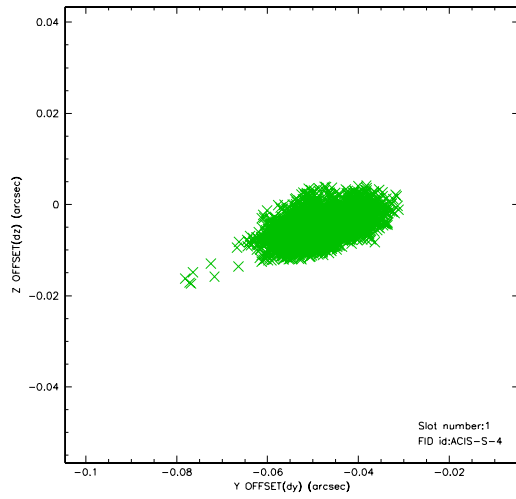


## 2.5 FID Slots

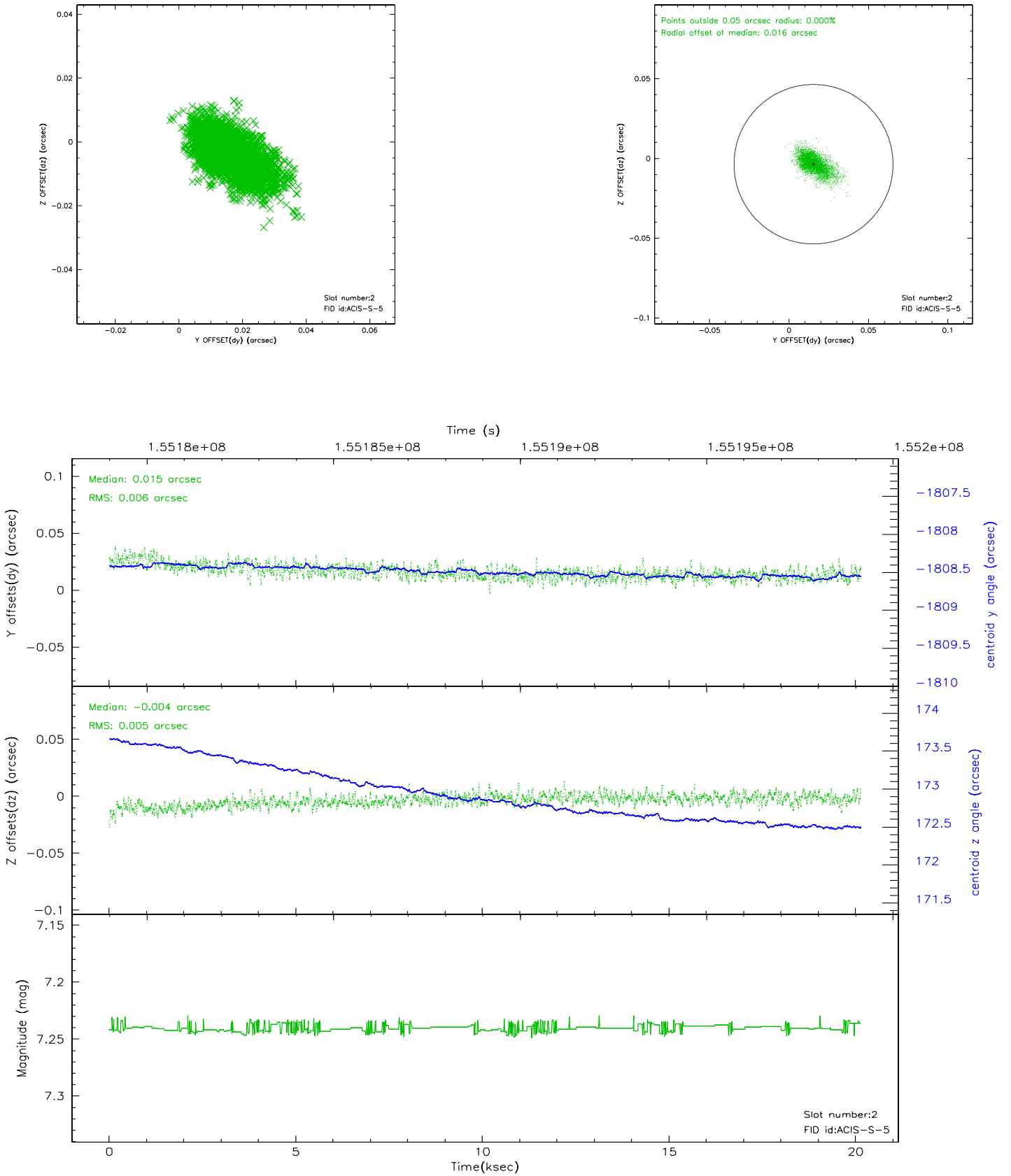
### 2.5.1 Slot 0



## 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)      | 2006.10.13    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 20.14         |

### A.2 Comments