

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 6345 - L2 Version 002  
Chandra X-Ray Center

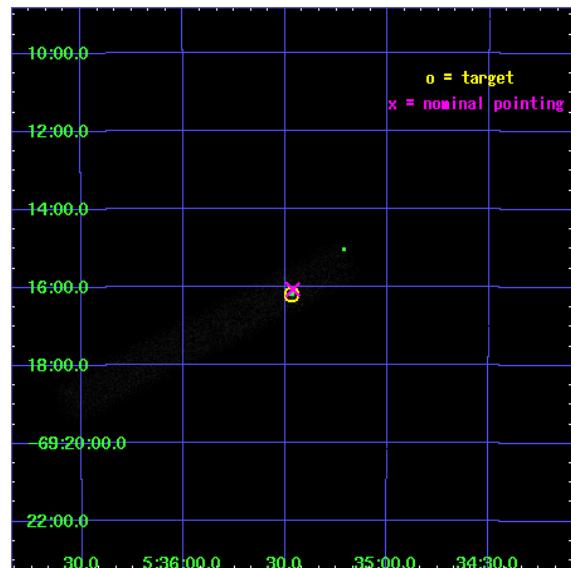
L2 Processing Date : Mar 14 2006

## 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

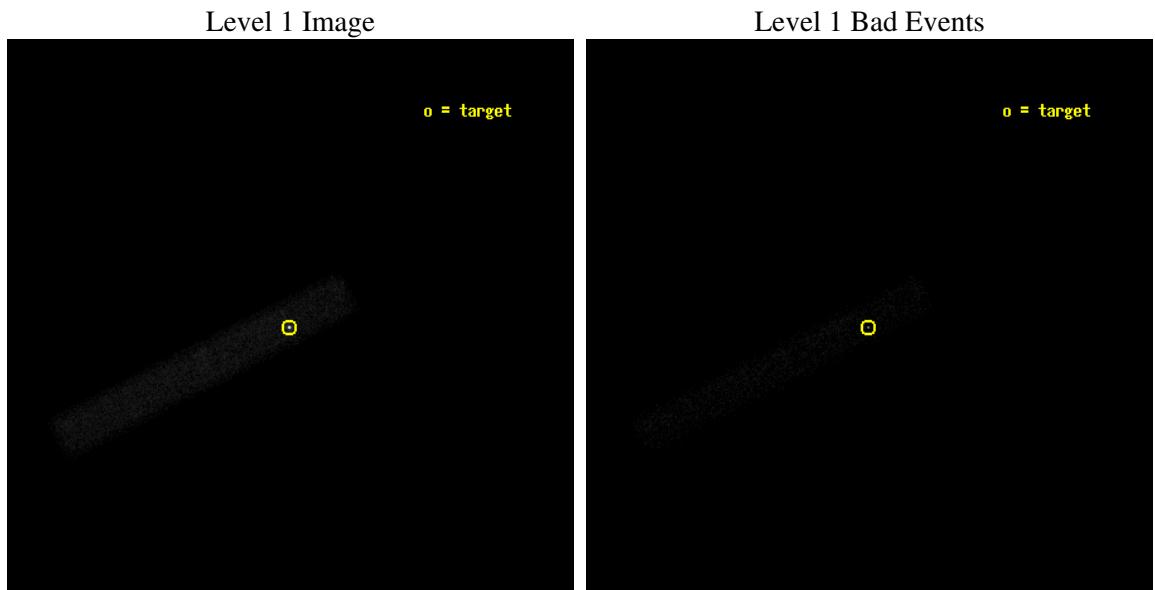
|          |   |
|----------|---|
| seq_num  | 500569                                    |
| obs_id   | 6345                                      |
| title    | Chandra AO6 Monitoring Images of SNR1987A |
| observer | Dr. David Burrows                         |
| object   | SNR1987A                                  |
| dtycycle | 0   |
| cycle    | P   |
| ra_targ  | 83.866667                                 |
| dec_targ | -69.26975                                 |
| ra_nom   | 83.865682107947                           |
| dec_nom  | -69.267722302546                          |
| roll_nom | 153.1557000069                            |
| revision | 2   |
| ontime   | 23145.600344896                           |
| livetime | 20991.837787862                           |
| ontime7  | 23145.600344896                           |
| l2events | 28777                                     |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 1                   |
| ascdsver | 7.6.7.1             |
| caldbver | 3.2.1               |
| date     | 2006-03-14T19:18:23 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 23000.000000    |
| ontime         | 23786.794348985 |
| ontime7        | 23786.794348985 |
| l1events       | 48390           |

### 2.1.4 Events

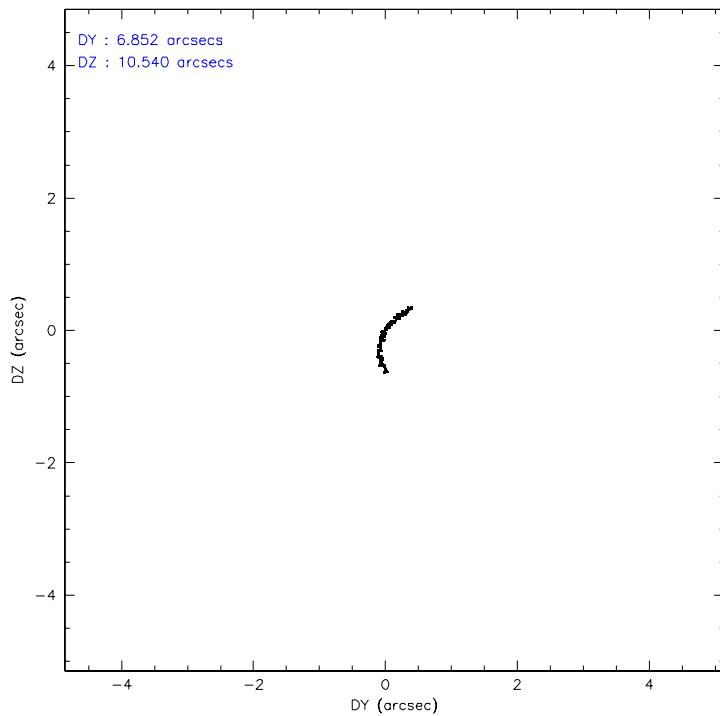
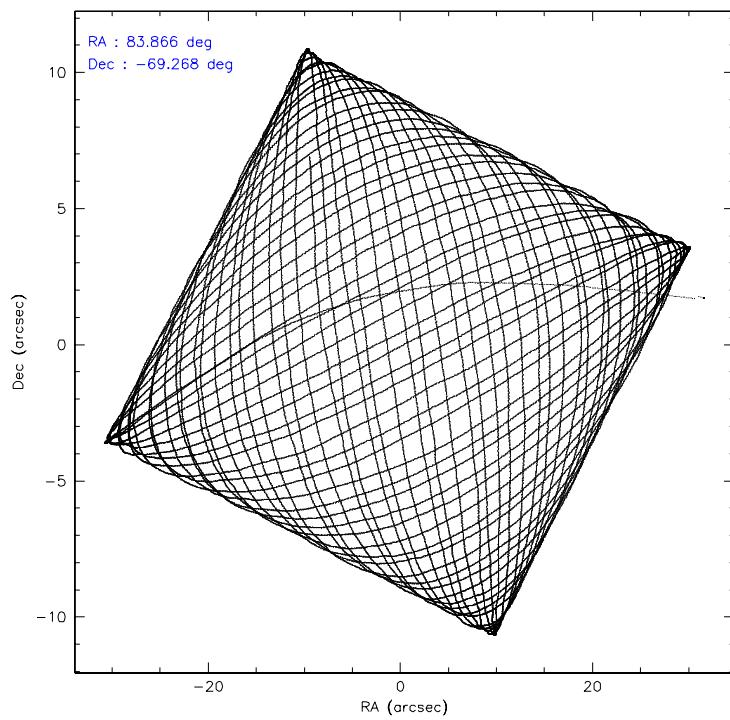
| ccd 7           |       |
|-----------------|-------|
| level 1 events  | 48390 |
| rejected events | 19034 |
| rejected %      | 39%   |

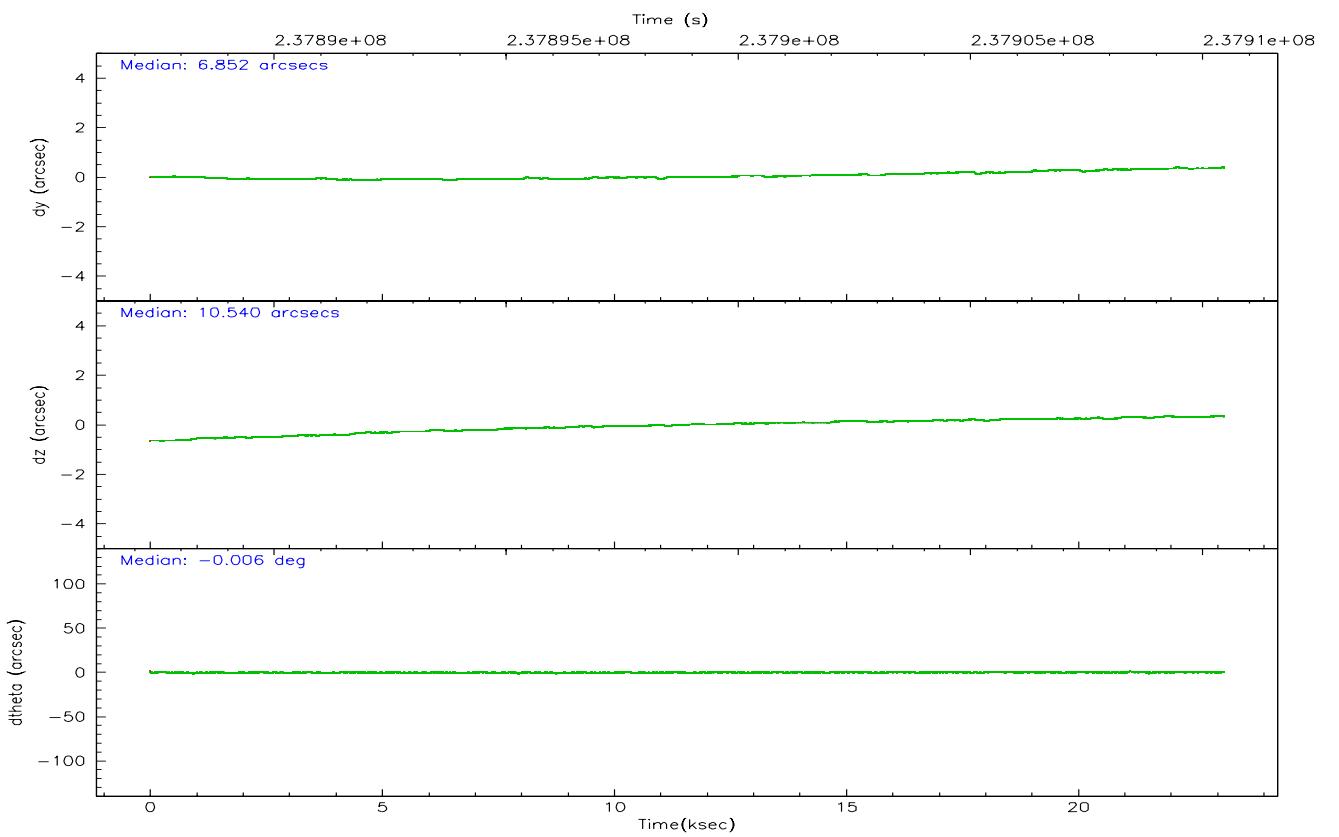
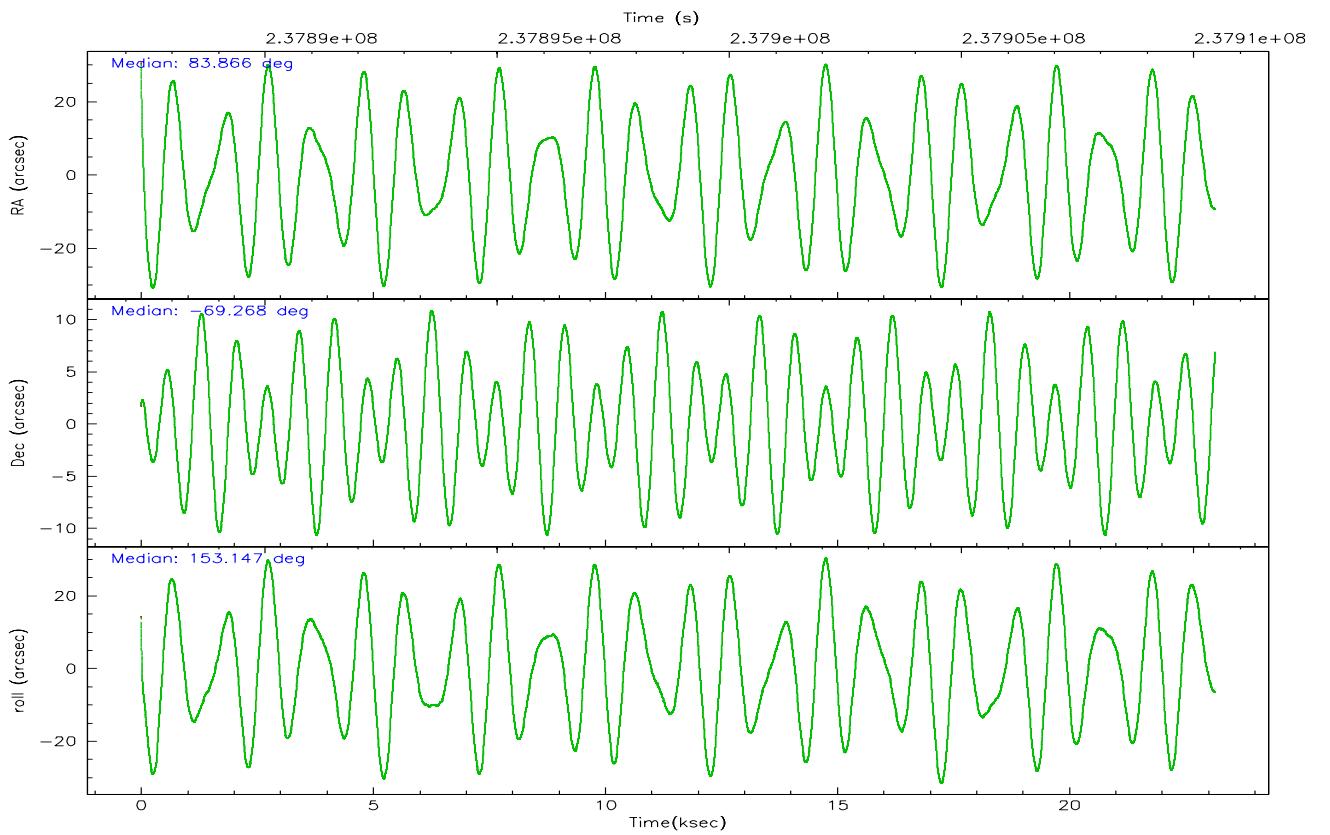
| ccd 7          |       |
|----------------|-------|
| grade 0 events | 5683  |
|                | 11%   |
| grade 1 events | 116   |
|                | 0%    |
| grade 2 events | 7647  |
|                | 15%   |
| grade 3 events | 3163  |
|                | 6%    |
| grade 4 events | 3218  |
|                | 6%    |
| grade 5 events | 2519  |
|                | 5%    |
| grade 6 events | 10131 |
|                | 20%   |
| grade 7 events | 15913 |
|                | 32%   |

## 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              | 1/8       | 1/8     |
| Pointing RA                       | 83.942415           | 83.86568210794724    | Subarray start row              | 0         | 449     |
| Pointing Dec                      | -69.265824          | -69.2677223025463    | Subarray row count              | 1024      | 128     |
| Pointing Roll                     | 153.070847          | 153.1557000068961    | 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         | -190.1400660498719   |                                 |           |         |
| SIM translation stage offset (mm) | 0                   | 0.00754346686406393  |                                 |           |         |
| Observation start time            | 237887467.184000    | 237886488.0575       |                                 |           |         |
| Observation start date            | 2005-07-16T07:50:03 | 2005-07-16T07:34:48  |                                 |           |         |
| Observation end time              | 237910467.184000    | 237911412.47114      |                                 |           |         |
| Observation end date              | 2005-07-16T14:13:23 | 2005-07-16T14:30:12  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

## 2.3 Aspect





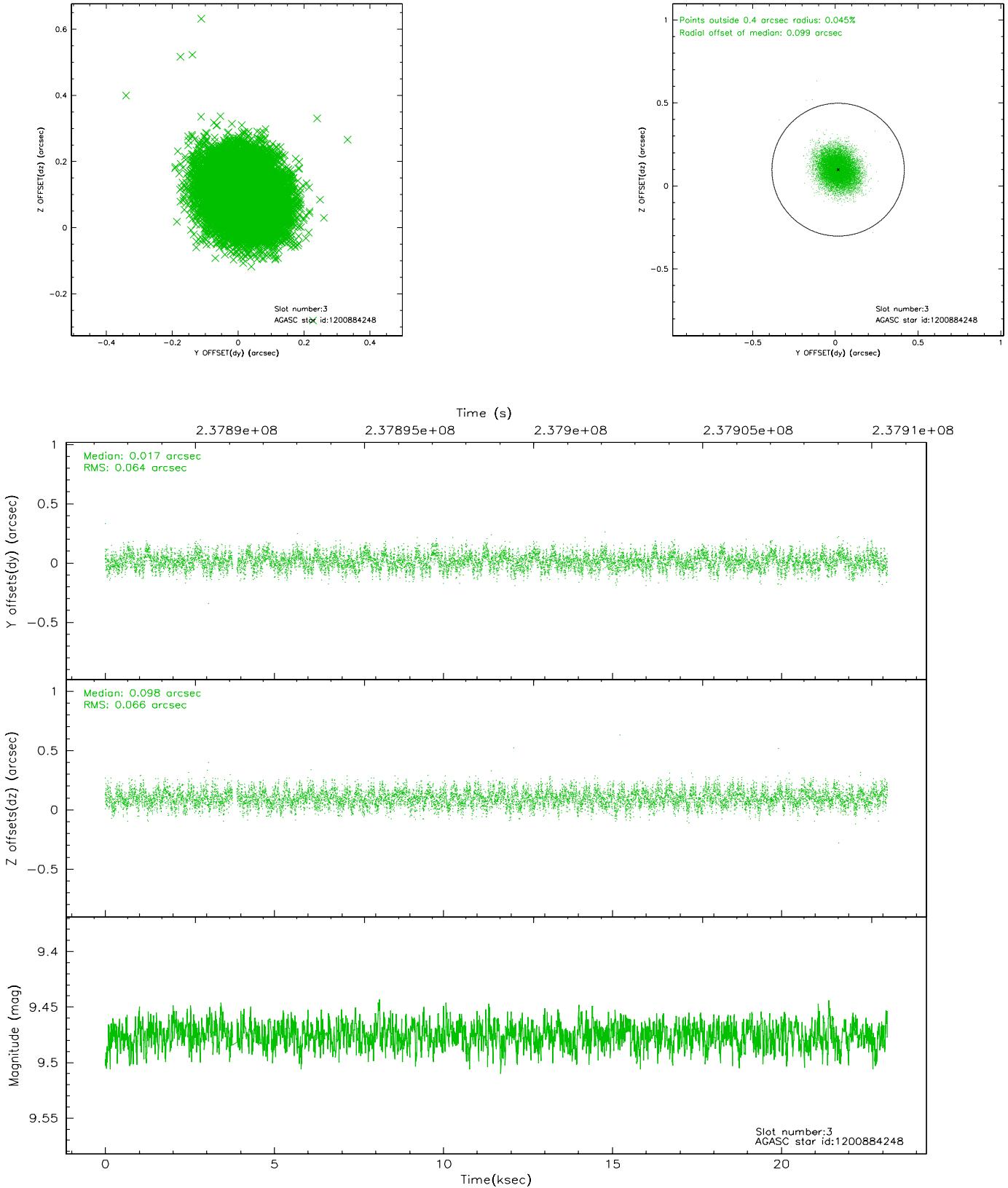
### Slot Statistics

| slot | status | id         | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra        | dec        | mean_y   | mean_z   |
|------|--------|------------|------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0    | FID    | ACIS-S-1   | 7.18 | 5646  | -0.009 | -0.031 | 0.020 | 0.033 | 0.000000  | 0.000000   | 936.37   | -1727.40 |
| 1    | FID    | ACIS-S-4   | 7.21 | 5645  | 0.043  | 0.031  | 0.012 | 0.023 | 0.000000  | 0.000000   | 2153.89  | 176.68   |
| 2    | FID    | ACIS-S-5   | 7.23 | 5646  | -0.061 | 0.013  | 0.010 | 0.017 | 0.000000  | 0.000000   | -1812.39 | 170.38   |
| 3    | GUIDE  | 1200884248 | 9.48 | 11227 | 0.017  | 0.098  | 0.099 | 0.155 | 83.880915 | -68.565170 | 1214.93  | -2211.60 |
| 4    | GUIDE  | 1201020040 | 8.59 | 11290 | -0.024 | 0.100  | 0.071 | 0.112 | 85.379163 | -68.879396 | -1040.82 | -2064.68 |
| 5    | GUIDE  | 1201542672 | 8.20 | 11289 | 0.030  | -0.137 | 0.065 | 0.109 | 84.492488 | -69.957531 | -1734.32 | 1914.40  |
| 6    | GUIDE  | 1201019672 | 6.83 | 11292 | -0.096 | 0.007  | 0.044 | 0.070 | 85.312192 | -68.770187 | -792.57  | -2381.21 |
| 7    | GUIDE  | 1201540776 | 9.59 | 11256 | 0.071  | -0.067 | 0.103 | 0.170 | 85.107945 | -69.858480 | -2260.64 | 1260.03  |

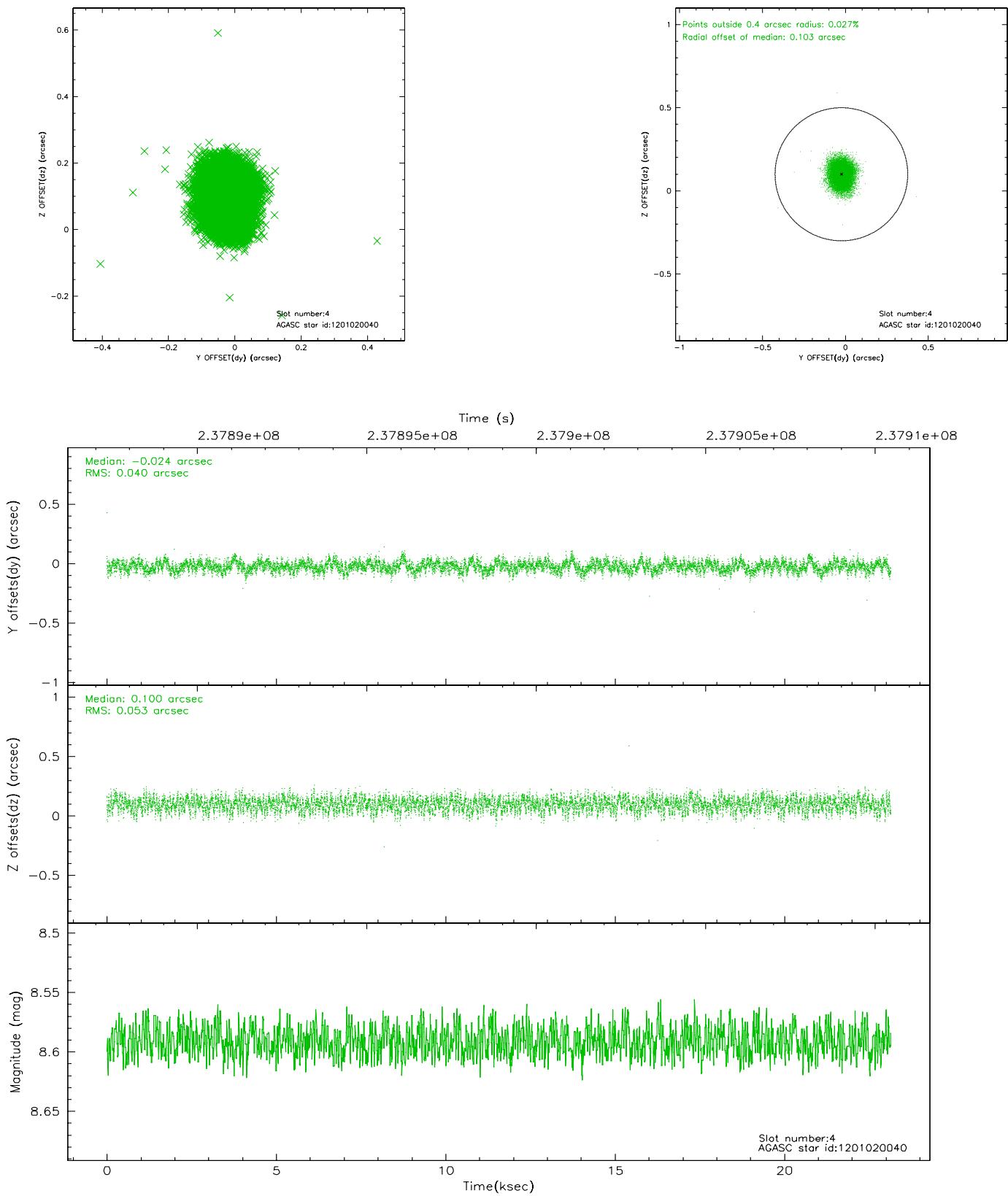
∞

## 2.4 Star Slots

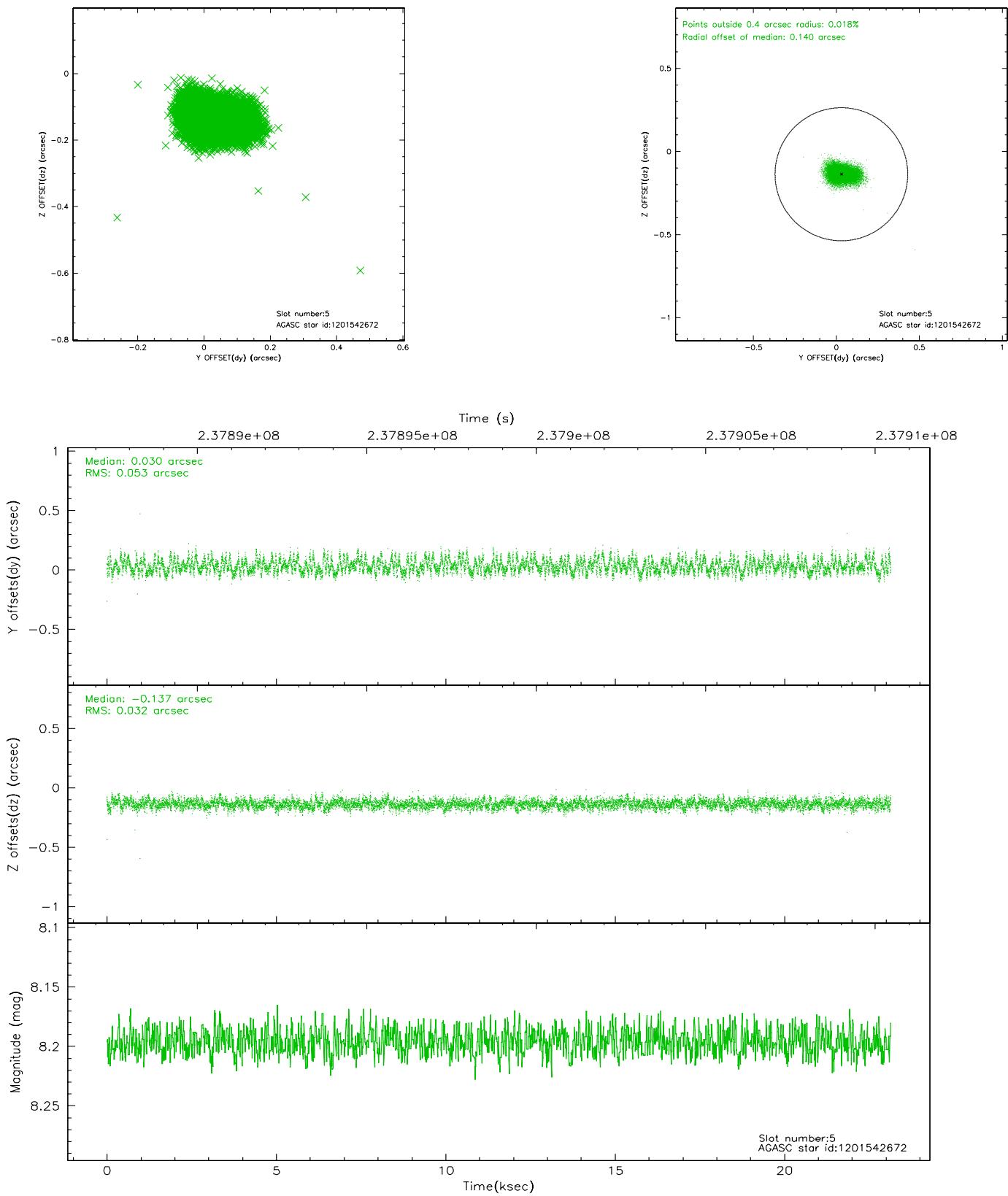
### 2.4.1 Slot 3



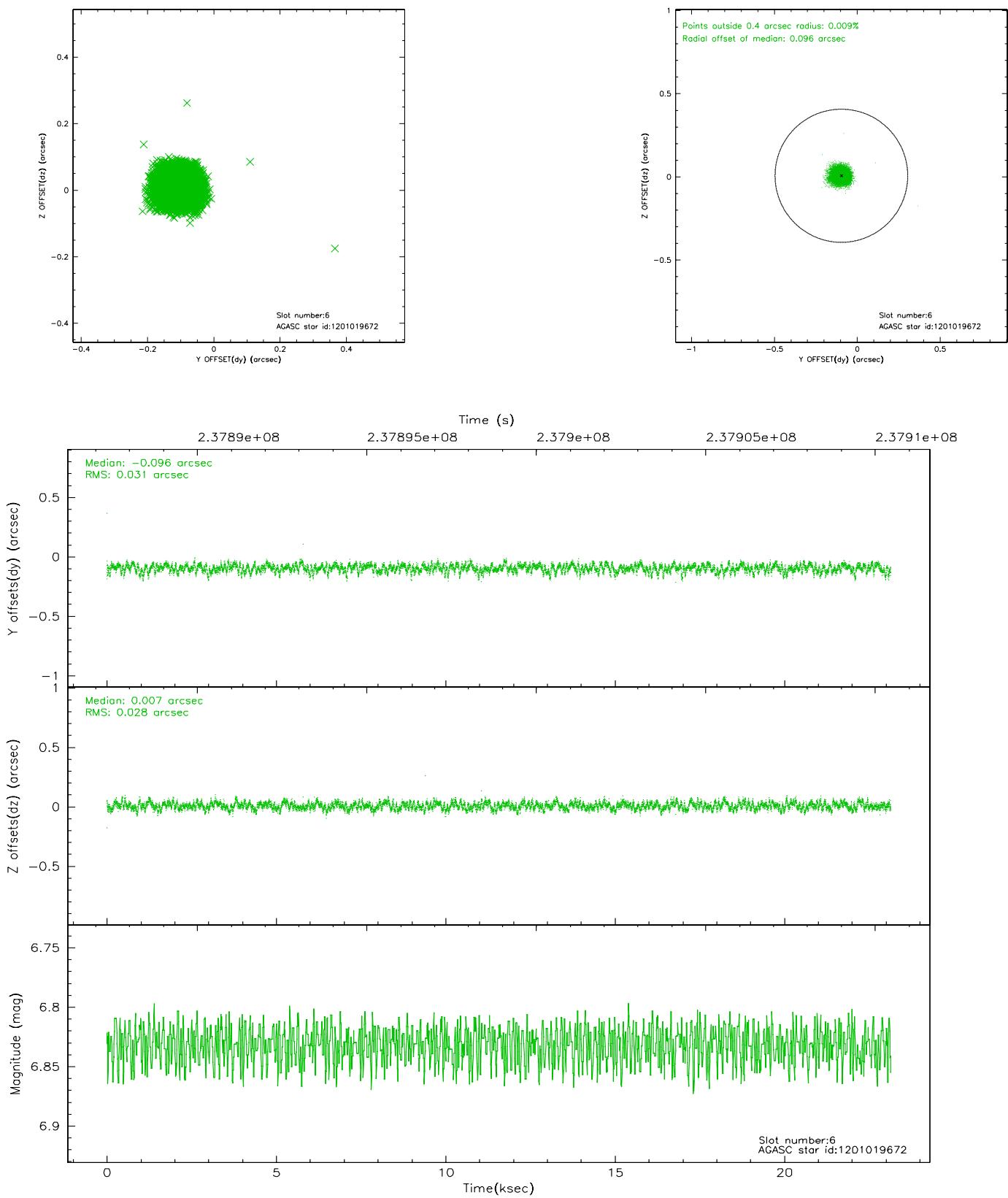
## 2.4.2 Slot 4



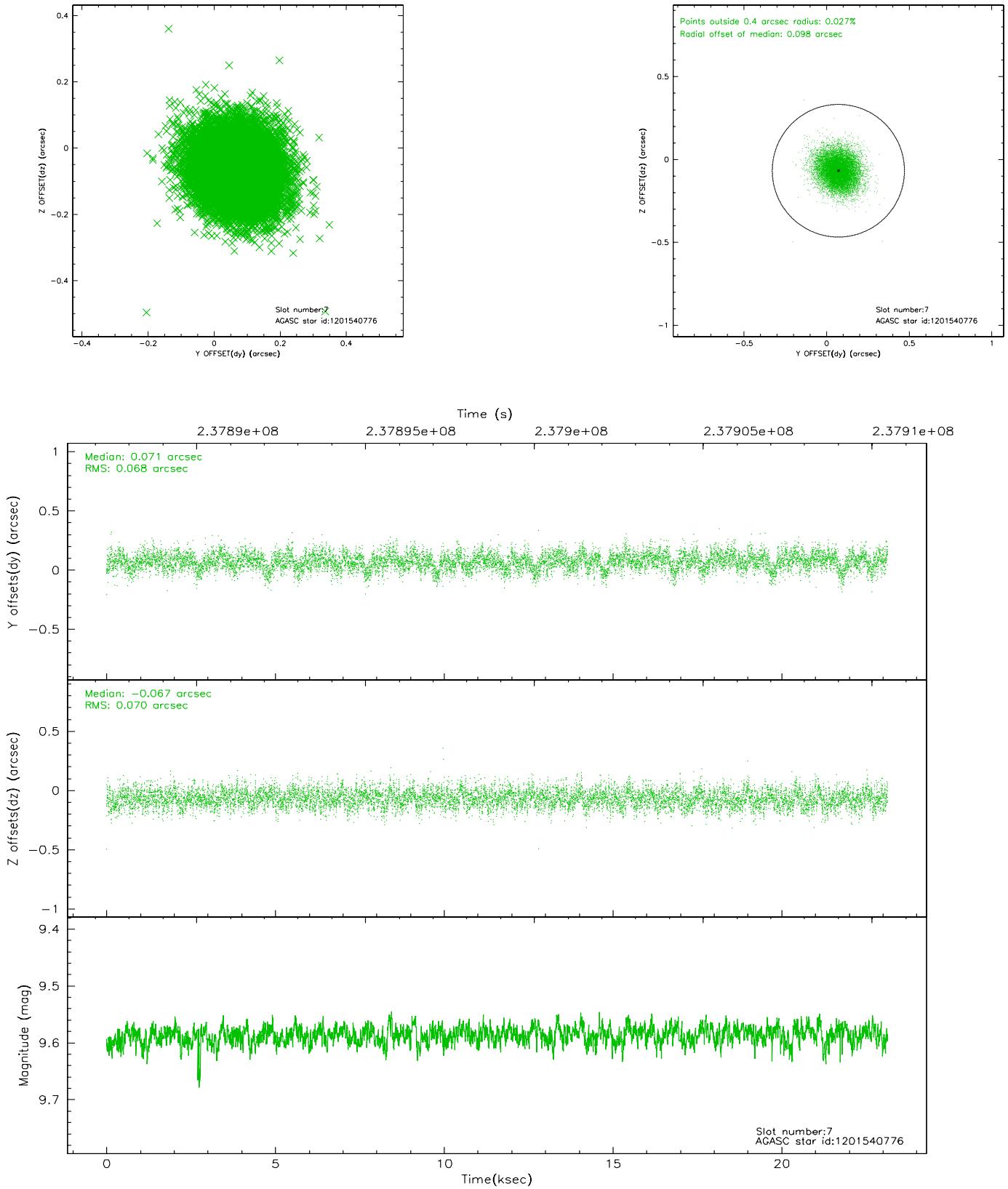
### 2.4.3 Slot 5



#### 2.4.4 Slot 6

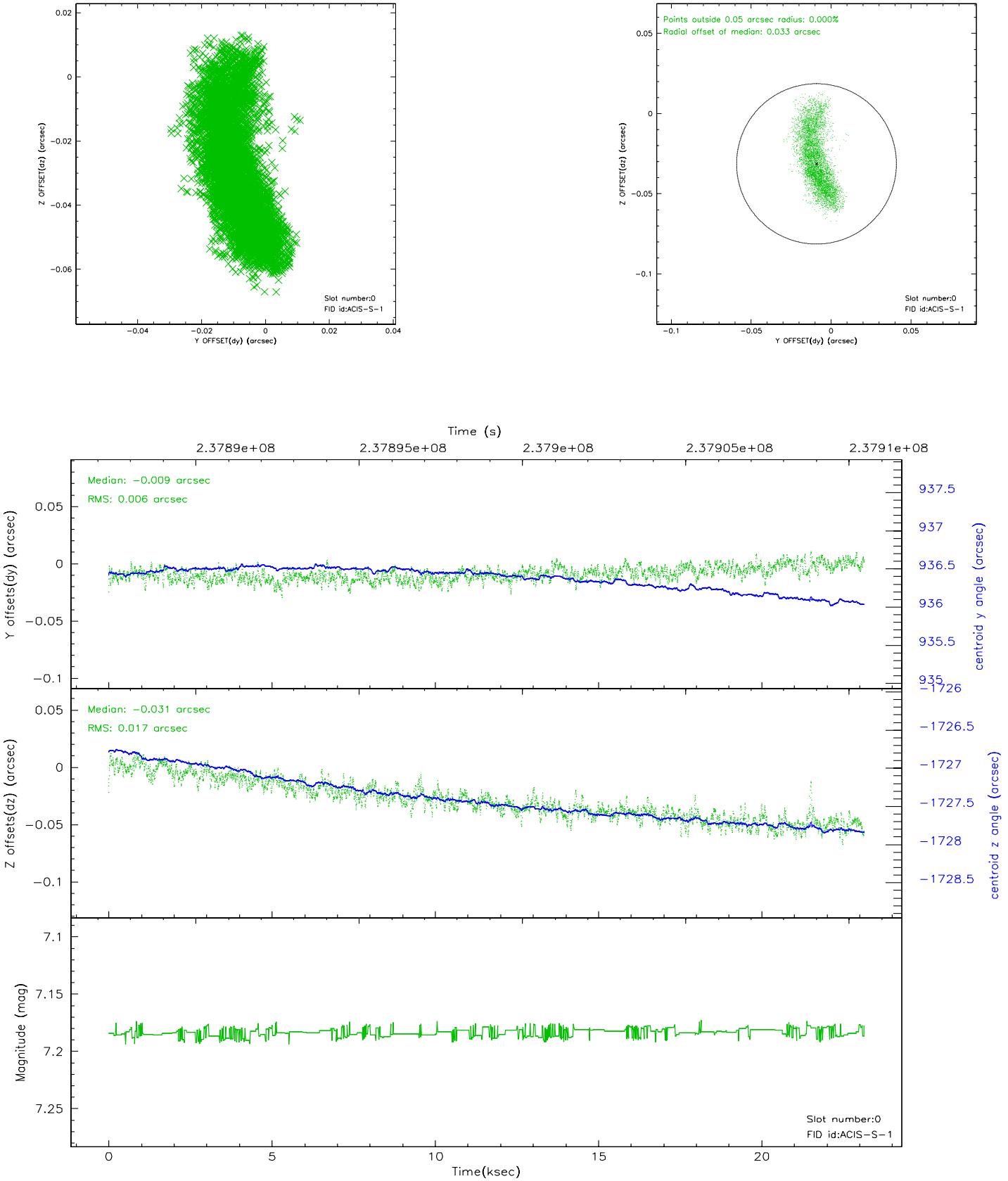


## 2.4.5 Slot 7

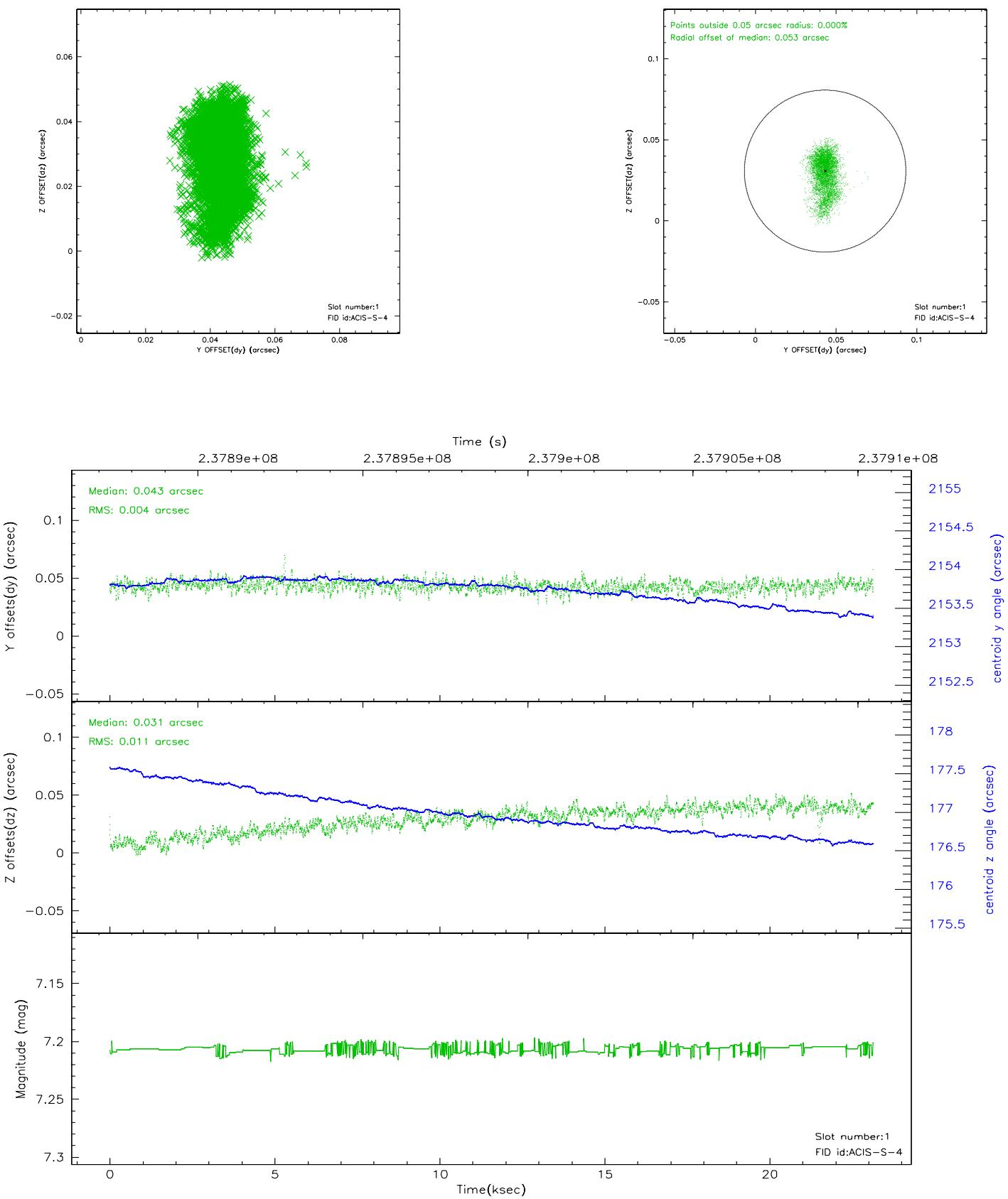


## 2.5 FID Slots

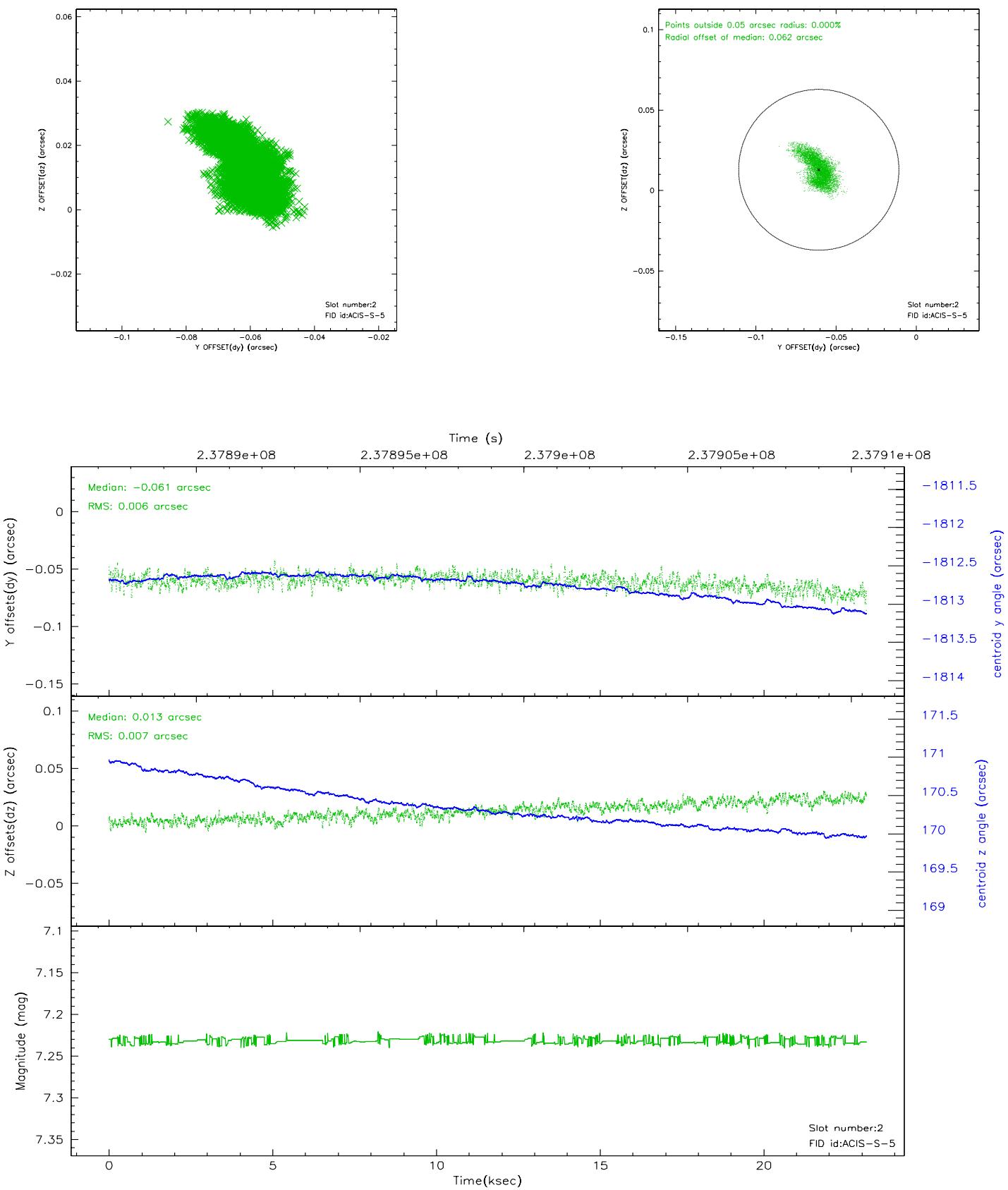
### 2.5.1 Slot 0



## 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)      | 2006.03.14    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 23.1456       |

## A.2 Comments