

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2785 - L2 Version 001  
Chandra X-Ray Center

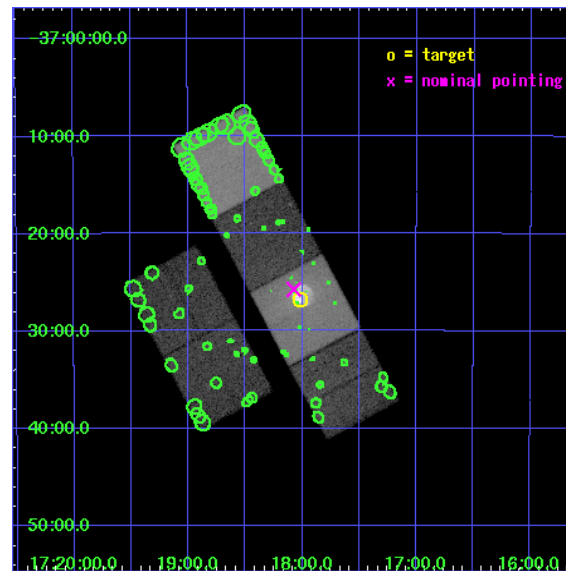
L2 Processing Date : Sep 16 2006

## 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

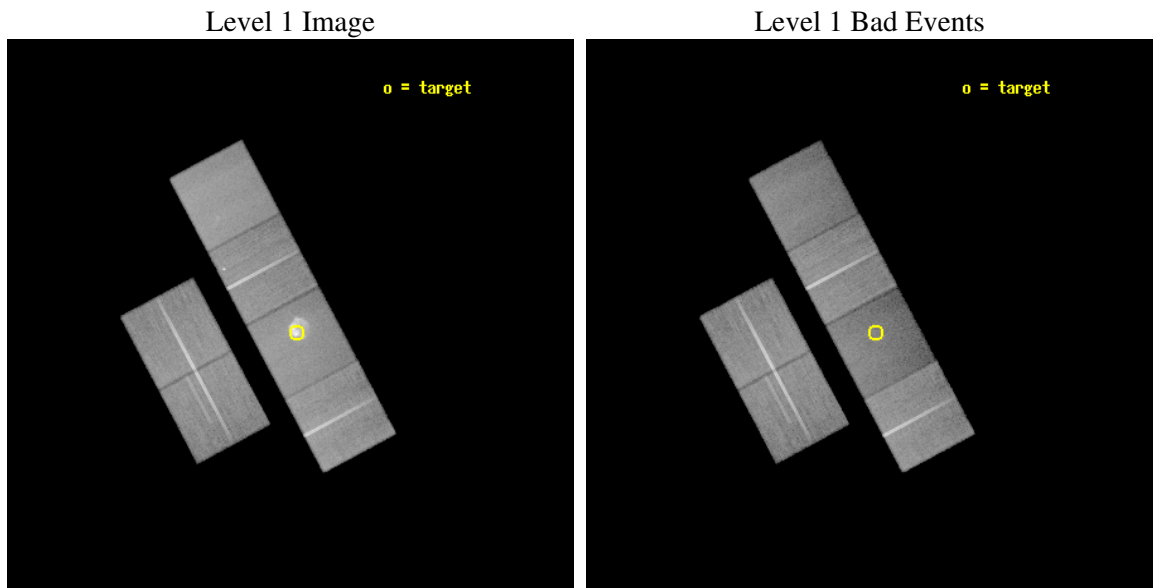
|          |   |
|----------|---|
| seq_num  | 500235  |
| obs_id   | 2785  |
| title    | AN ACIS STUDY OF THE HIGH LUMINOSITY SNR G349.7+0.2 |
| observer | Dr. Patrick Slane                                   |
| object   | G349.7+0.2  |
| dtcycle  | 0   |
| cycle    | P   |
| ra_targ  | 259.504167  |
| dec_targ | -37.446944  |
| ra_nom   | 259.51837528834                                     |
| dec_nom  | -37.429472469724                                    |
| roll_nom | 61.963467556655                                     |
| revision | 2   |
| ontime   | 56454.358809412                                     |
| livetime | 55739.499725433                                     |
| ontime2  | 56451.117938727                                     |
| ontime3  | 56457.599789679                                     |
| ontime5  | 56451.117809206                                     |
| ontime6  | 56444.63594833                                      |
| ontime7  | 56454.358809412                                     |
| ontime8  | 56451.117789328                                     |
| l2events | 438335  |



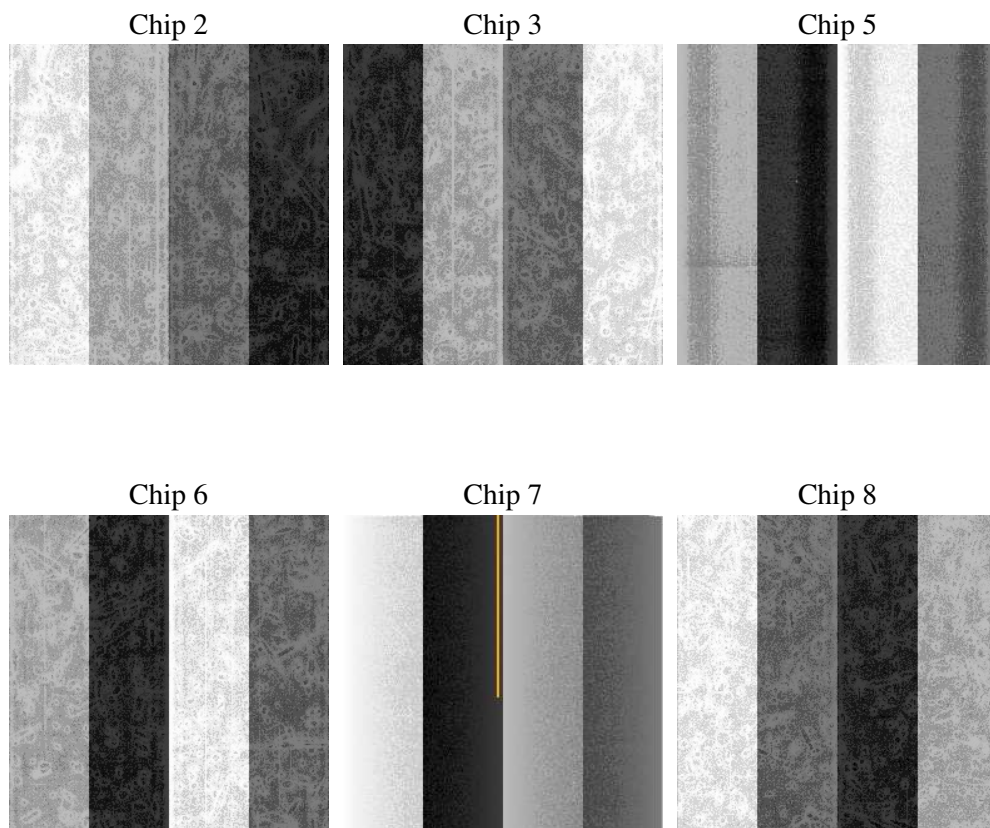
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.9               |
| caldsver | 3.2.3               |
| date     | 2006-09-16T11:35:41 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 56500.000000    |
| ontime         | 56461.589682788 |
| ontime2        | 56458.348812103 |
| ontime3        | 56468.071663231 |
| ontime5        | 56458.348682582 |
| ontime6        | 56451.866821706 |
| ontime7        | 56461.589682788 |
| ontime8        | 56461.589682788 |
| l1events       | 1852257         |

### 2.1.4 Events

|                 | ccd 2  | ccd 3  | ccd 5  | ccd 6  | ccd 7  | ccd 8  |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events  | 298684 | 278979 | 327415 | 289985 | 333592 | 323602 |
| rejected events | 271757 | 251953 | 171332 | 257301 | 154189 | 272276 |
| rejected %      | 90%    | 90%    | 52%    | 88%    | 46%    | 84%    |

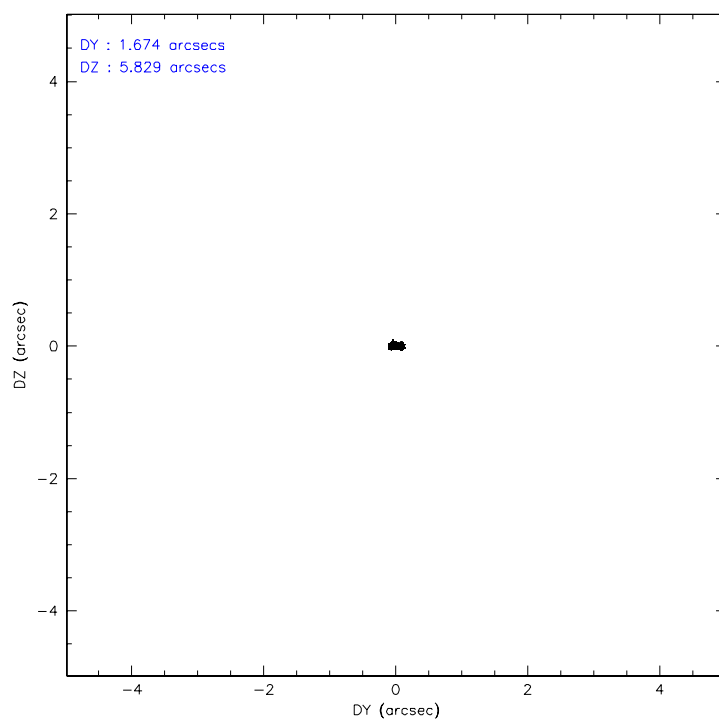
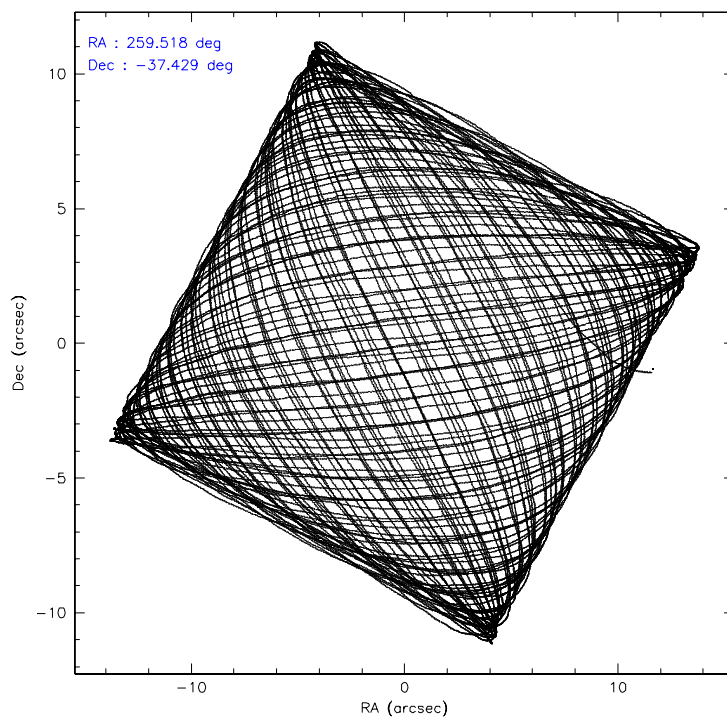
|                | ccd 2  | ccd 3  | ccd 5  | ccd 6  | ccd 7  | ccd 8  |
|----------------|--------|--------|--------|--------|--------|--------|
| grade 0 events | 11112  | 11017  | 5173   | 14458  | 17607  | 13152  |
|                | 3%     | 3%     | 1%     | 4%     | 5%     | 4%     |
| grade 1 events | 119    | 125    | 82     | 125    | 154    | 144    |
|                | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     |
| grade 2 events | 5363   | 5472   | 48906  | 6218   | 44950  | 10782  |
|                | 1%     | 1%     | 14%    | 2%     | 13%    | 3%     |
| grade 3 events | 2691   | 2714   | 2917   | 3061   | 13146  | 4892   |
|                | 0%     | 0%     | 0%     | 1%     | 3%     | 1%     |
| grade 4 events | 2662   | 2666   | 2786   | 3071   | 12480  | 4427   |
|                | 0%     | 0%     | 0%     | 1%     | 3%     | 1%     |
| grade 5 events | 8273   | 8955   | 18159  | 9933   | 22742  | 13907  |
|                | 2%     | 3%     | 5%     | 3%     | 6%     | 4%     |
| grade 6 events | 5100   | 5161   | 96325  | 5877   | 91238  | 18080  |
|                | 1%     | 1%     | 29%    | 2%     | 27%    | 5%     |
| grade 7 events | 263364 | 242869 | 153067 | 247242 | 131275 | 258218 |
|                | 88%    | 87%    | 46%    | 85%    | 39%    | 79%    |

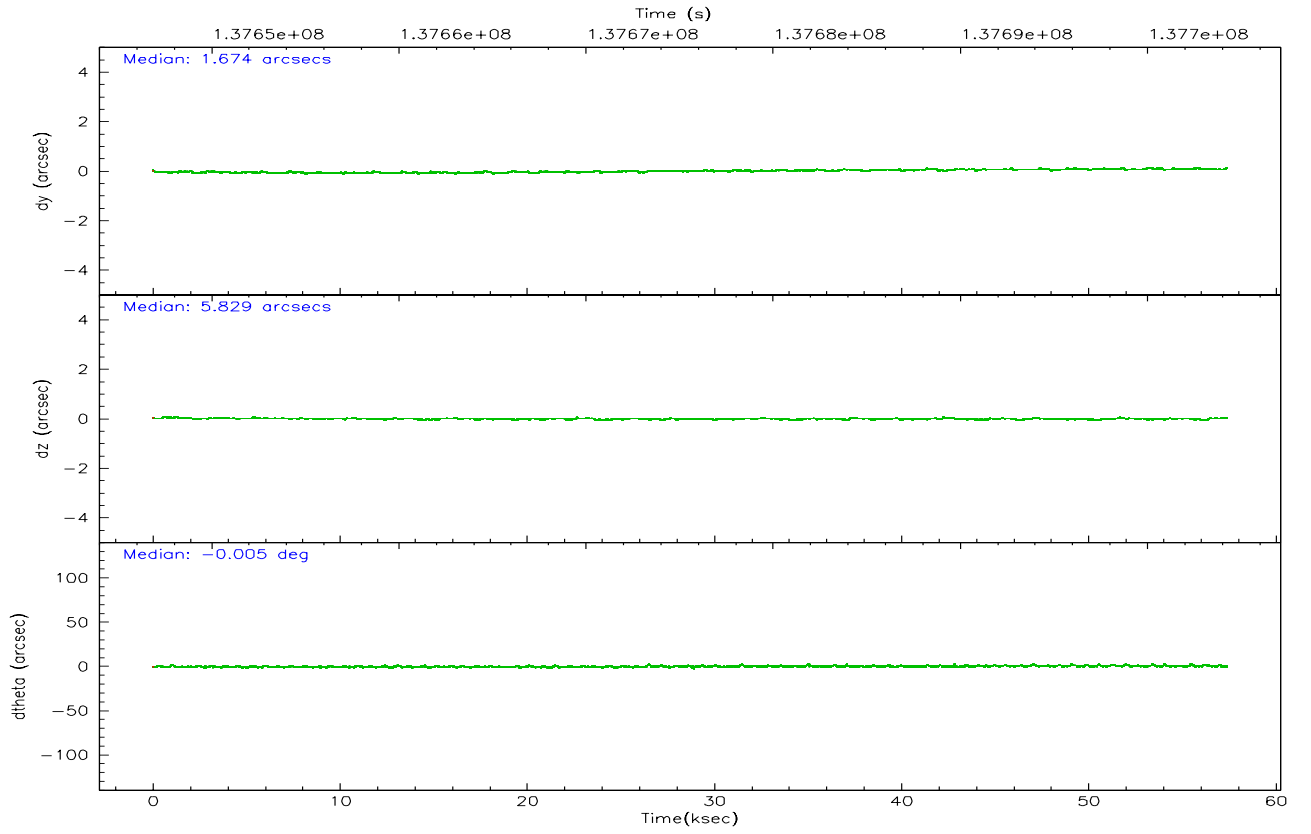
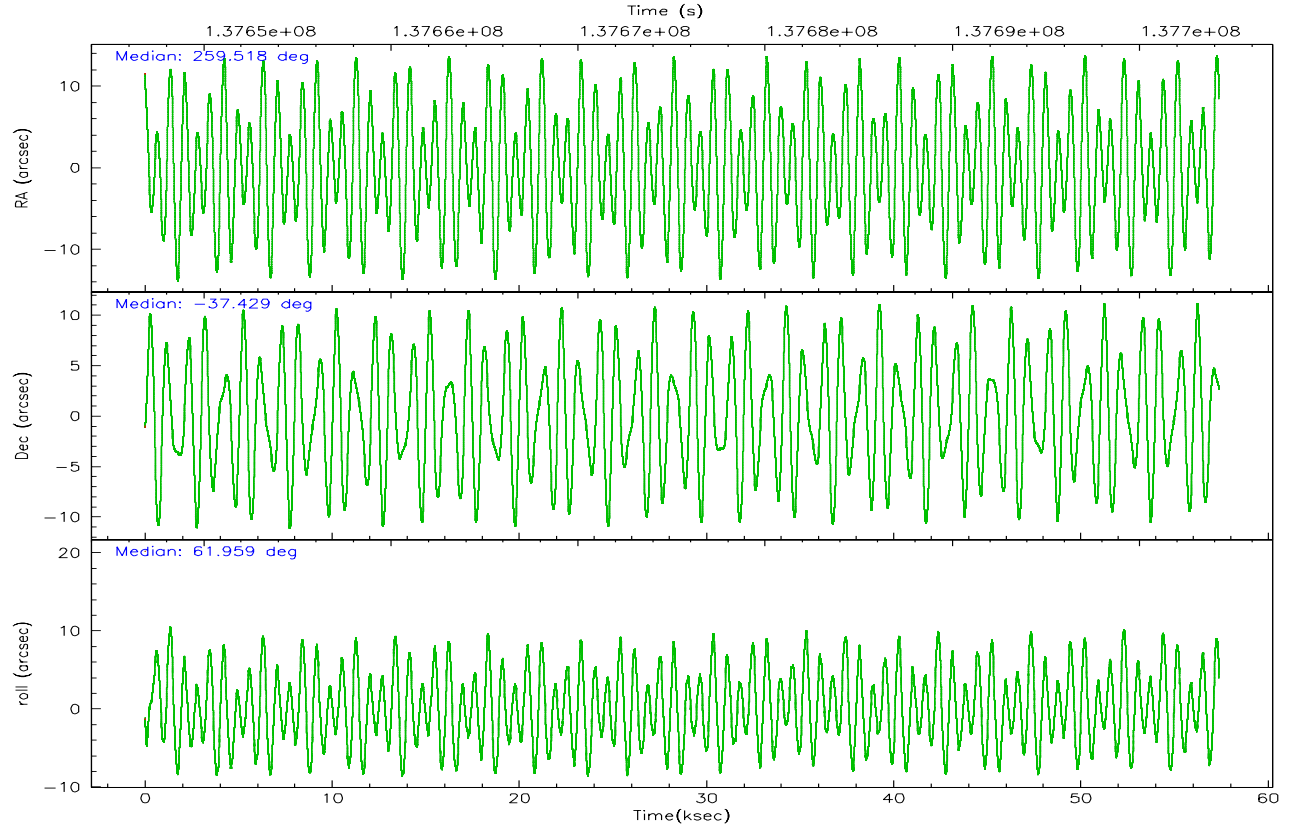


## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                             | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument                        | ACIS                | ACIS                 | Obspar format version number          | 6         | 6       |
| Detector                          | ACIS-235678         | ACIS-235678          | Obspar file type                      | PREDICTED | ACTUAL  |
| Grating                           | NONE                | NONE                 | Obspar update status                  | NONE      | UPDATED |
| Data mode                         | VFAINT              | VFAINT               | Number of optional ACIS chips dropped | 0         | 0       |
| Observation mode                  | POINTING            | POINTING             | On-chip summing requested             | N         | N       |
| Pointing RA                       | 259.519974          | 259.5183752883412    | Subarray requested                    | NONE      | NONE    |
| Pointing Dec                      | -37.456701          | -37.42947246972363   | Alternating exposures requested       | N         | N       |
| Pointing Roll                     | 61.807817           | 61.96346755665492    | Primary exposure time                 | 0.000000  | 3.2     |
| SIM focus pos (mm)                | -0.684267           | -0.6828225247311905  |                                       |           |         |
| 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            | 137647756.184000    | 137646441.12387      |                                       |           |         |
| Observation start date            | 2002-05-13T03:28:12 | 2002-05-13T03:07:21  |                                       |           |         |
| Observation end time              | 137704256.184000    | 137704724.67625      |                                       |           |         |
| Observation end date              | 2002-05-13T19:09:52 | 2002-05-13T19:18:44  |                                       |           |         |
| Read mode                         | TIMED               | TIMED                |                                       |           |         |

## 2.3 Aspect



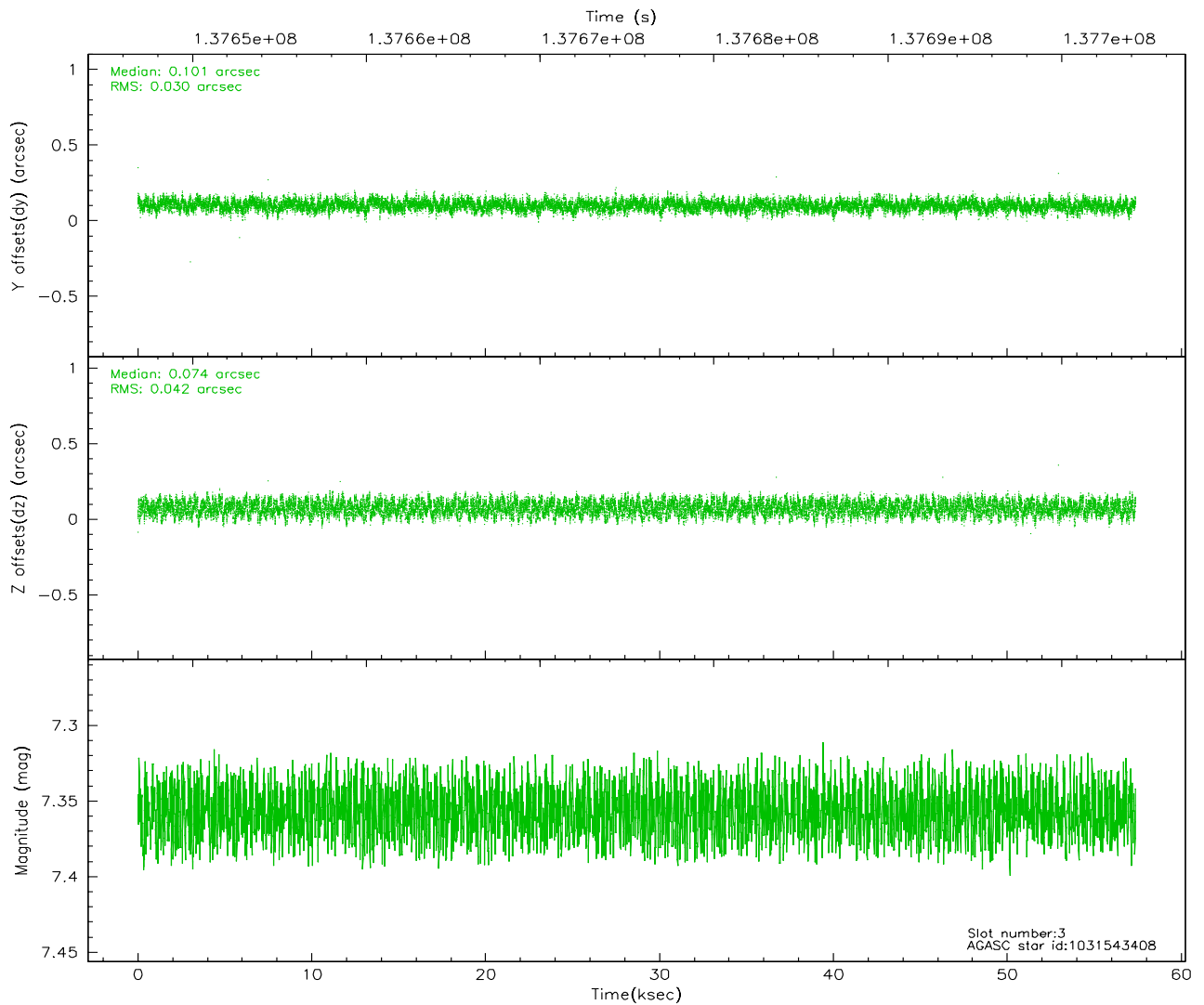
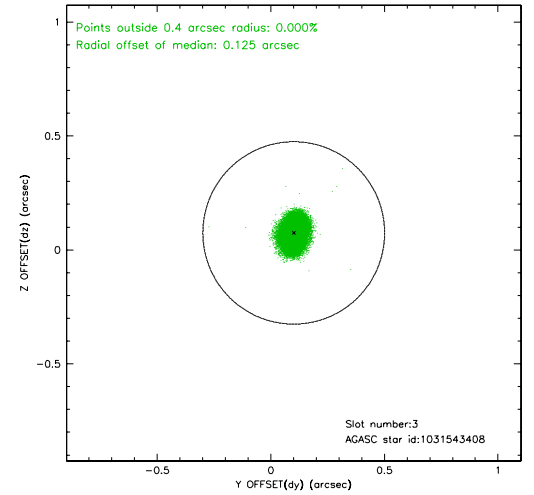
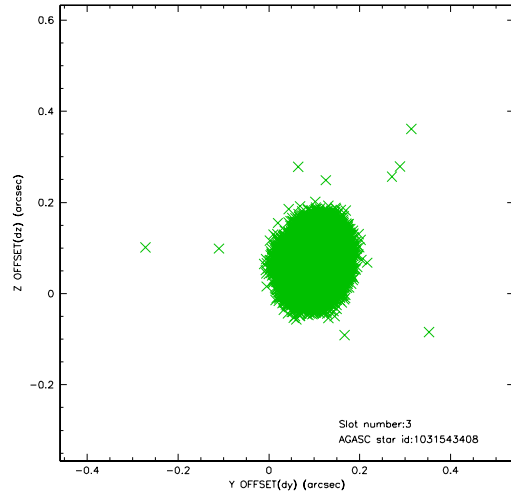


### Slot Statistics

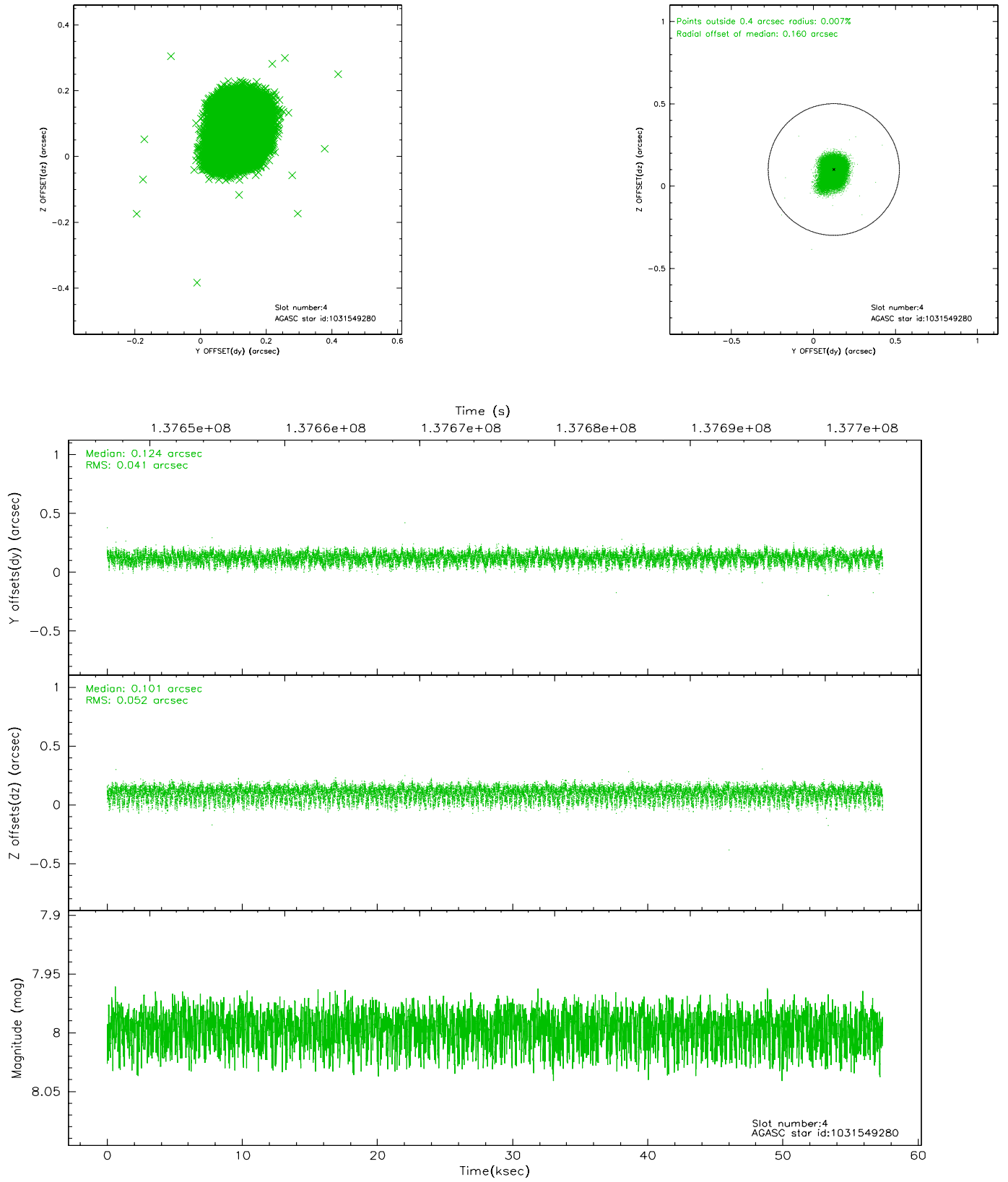
| slot | status | id         | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec        | mean_y   | mean_z   |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0    | FID    | ACIS-S-3   | 7.35 | 13997 | -0.094 | -0.007 | 0.017 | 0.031 | 0.000000   | 0.000000   | 58.84    | -1856.03 |
| 1    | FID    | ACIS-S-4   | 7.21 | 13996 | -0.020 | 0.053  | 0.007 | 0.013 | 0.000000   | 0.000000   | 2159.04  | 181.62   |
| 2    | FID    | ACIS-S-5   | 7.24 | 13996 | 0.087  | -0.036 | 0.015 | 0.027 | 0.000000   | 0.000000   | -1807.09 | 175.13   |
| 3    | GUIDE  | 1031543408 | 7.36 | 27994 | 0.101  | 0.074  | 0.056 | 0.087 | 259.522758 | -38.164024 | -2240.22 | -1210.64 |
| 4    | GUIDE  | 1031549280 | 8.00 | 27991 | 0.124  | 0.101  | 0.069 | 0.117 | 259.850615 | -38.003687 | -1293.53 | -1758.39 |
| 5    | GUIDE  | 966526320  | 8.11 | 27995 | -0.208 | -0.157 | 0.053 | 0.084 | 259.539071 | -37.049179 | 1318.89  | 644.01   |
| 6    | GUIDE  | 966525880  | 9.10 | 27990 | -0.164 | 0.117  | 0.093 | 0.146 | 260.250454 | -37.024776 | 2355.36  | -1120.02 |
| 7    | GUIDE  | 1031544936 | 9.08 | 27980 | 0.153  | -0.130 | 0.103 | 0.163 | 258.550668 | -37.628655 | -1863.49 | 2135.73  |

## 2.4 Star Slots

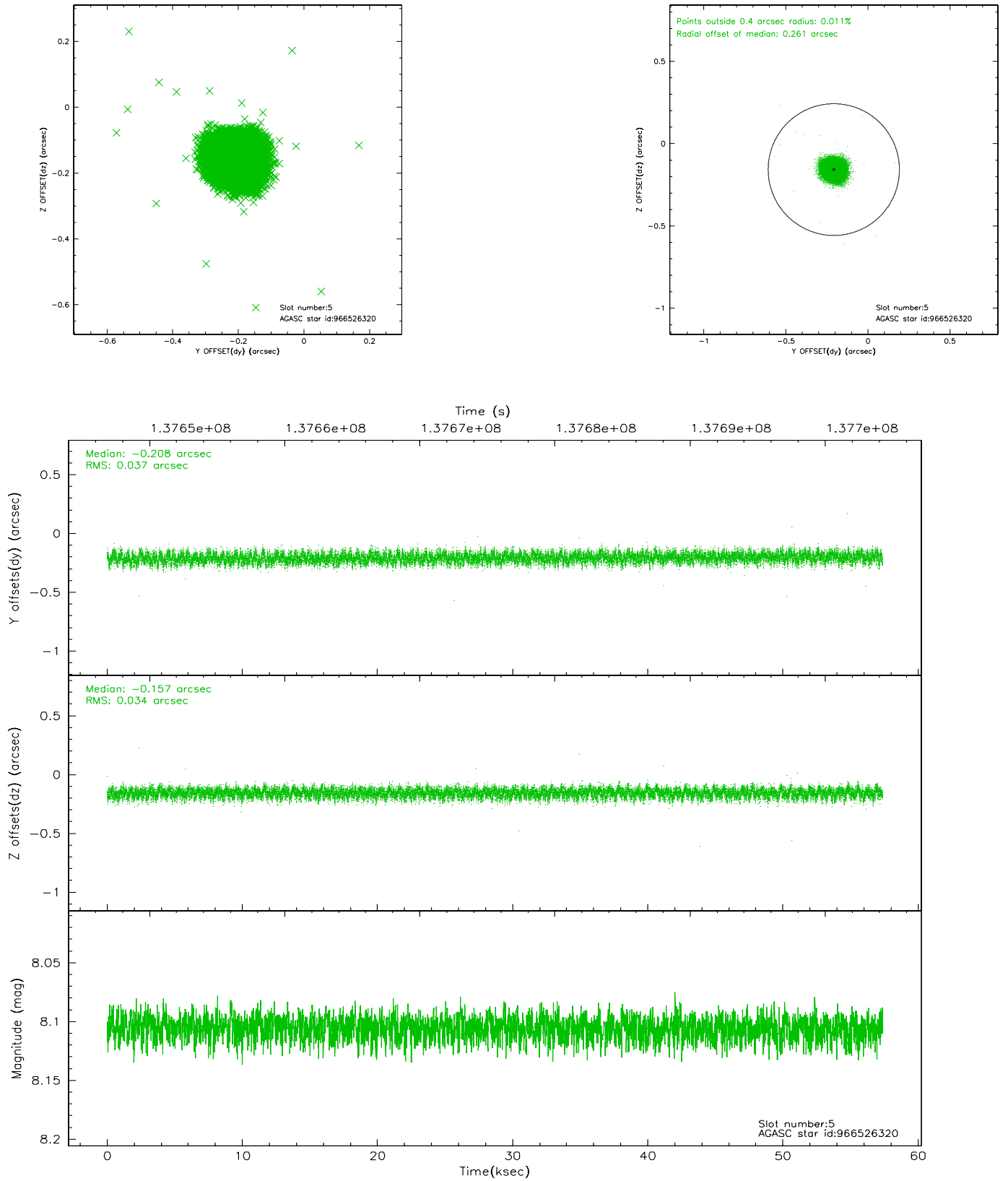
### 2.4.1 Slot 3



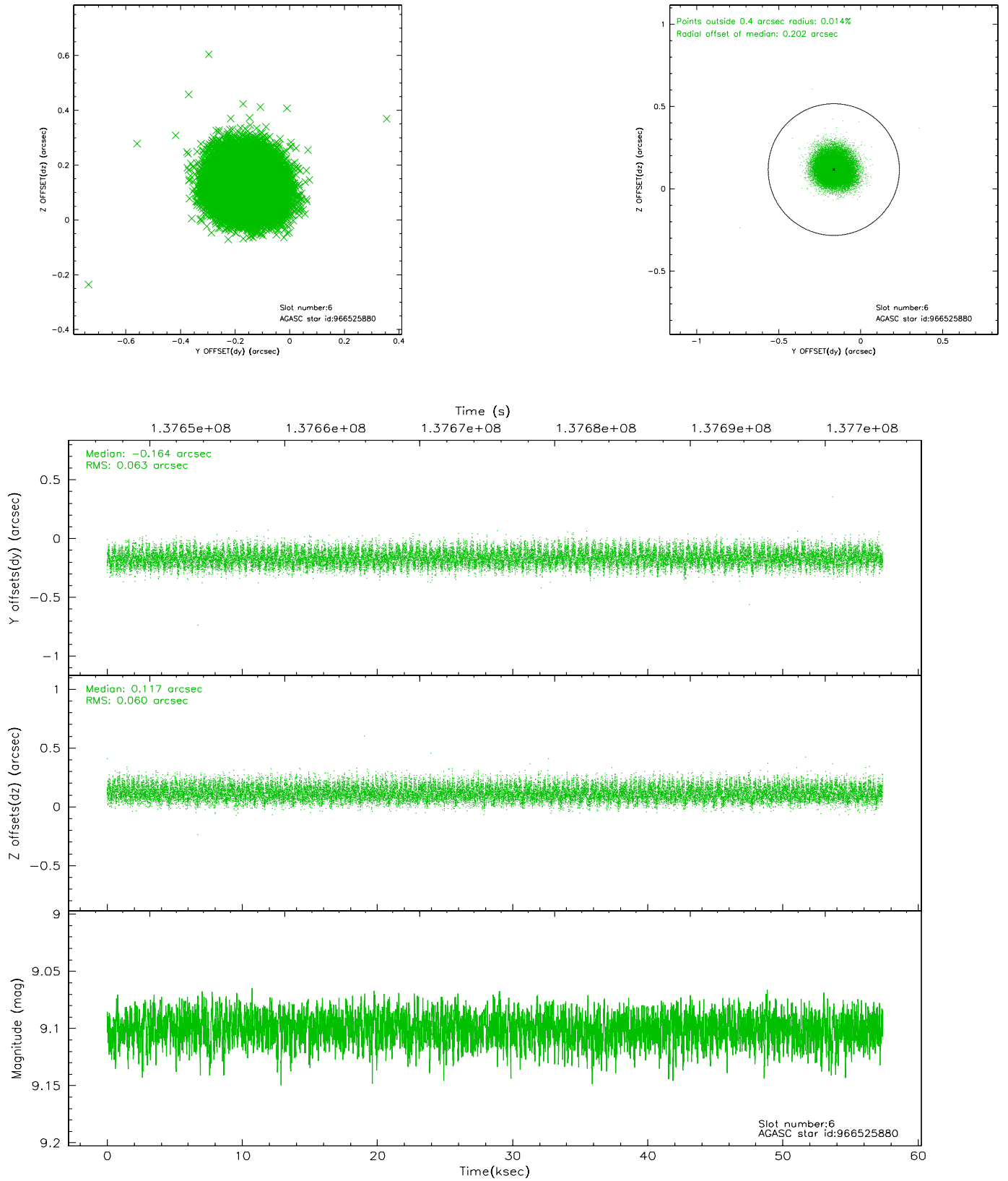
## 2.4.2 Slot 4



### 2.4.3 Slot 5

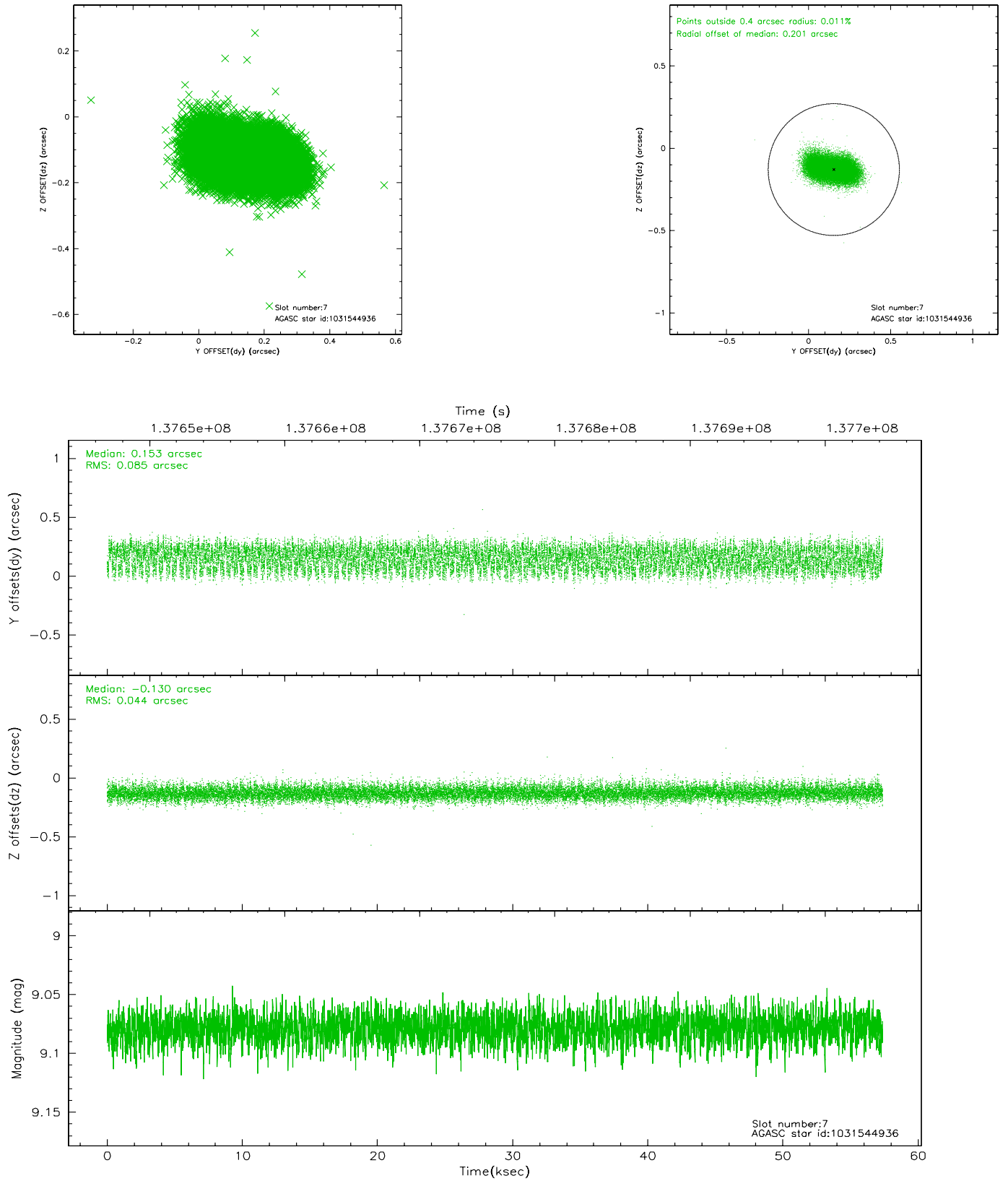


## 2.4.4 Slot 6



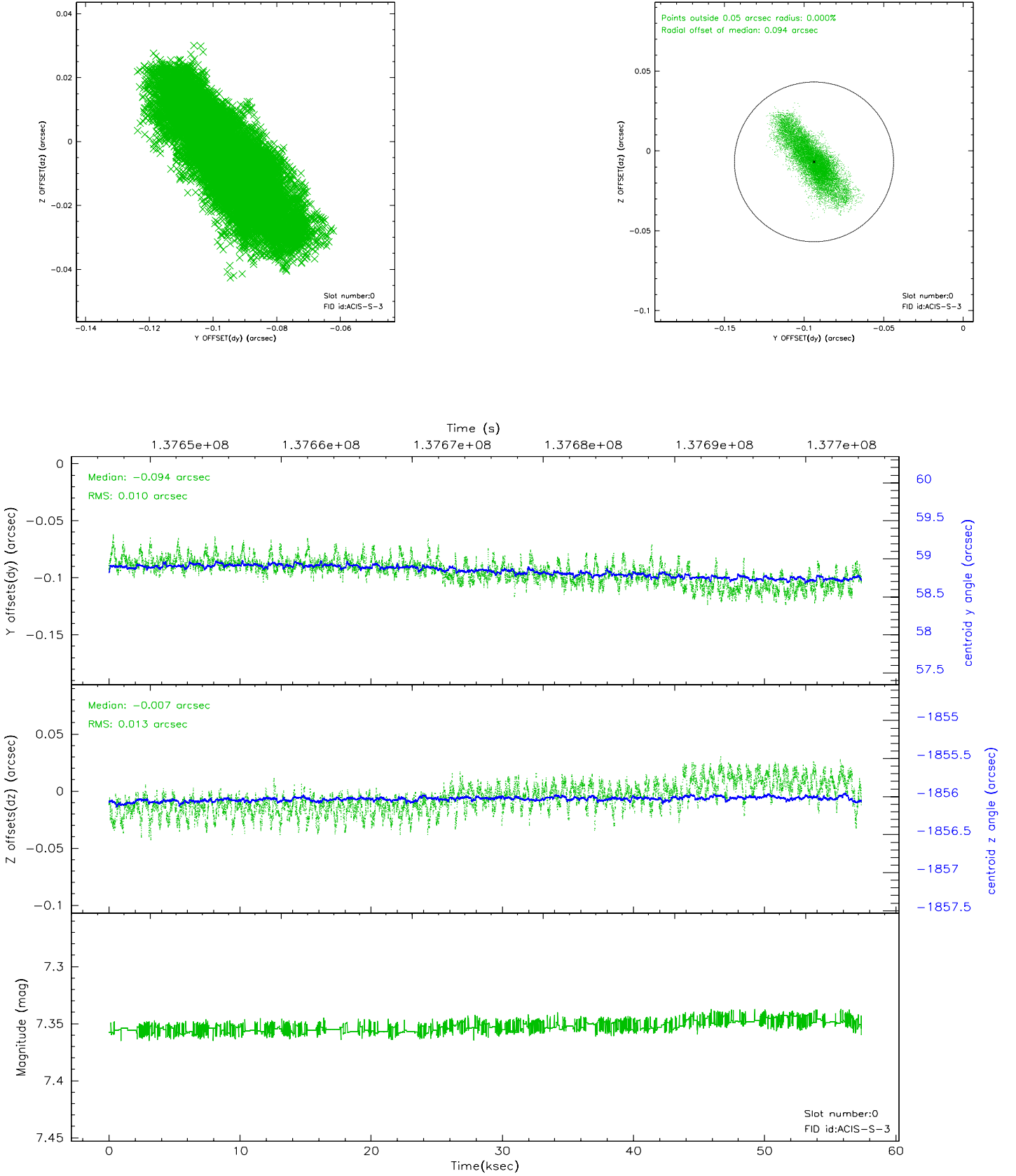


## 2.4.5 Slot 7

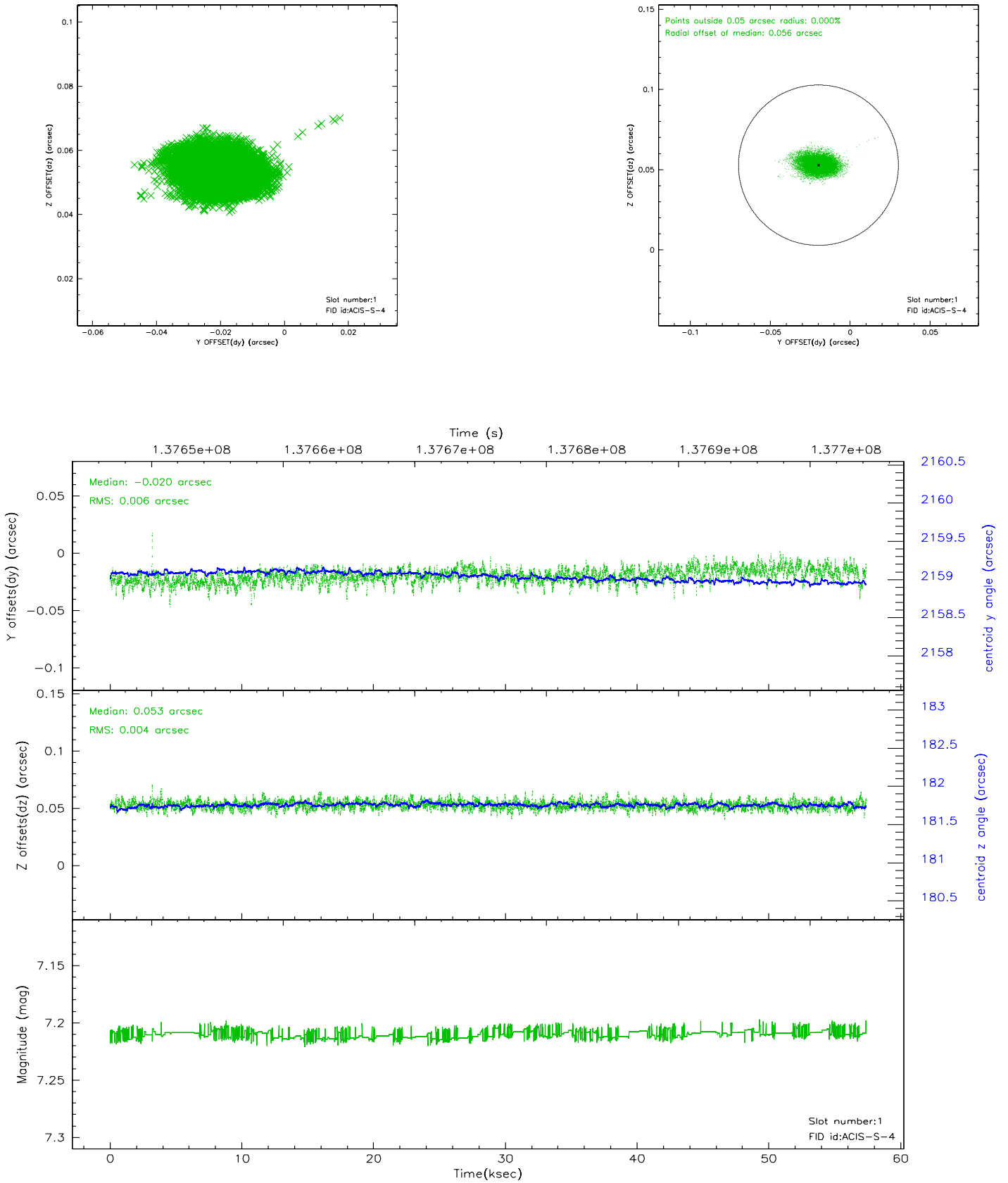


## 2.5 FID Slots

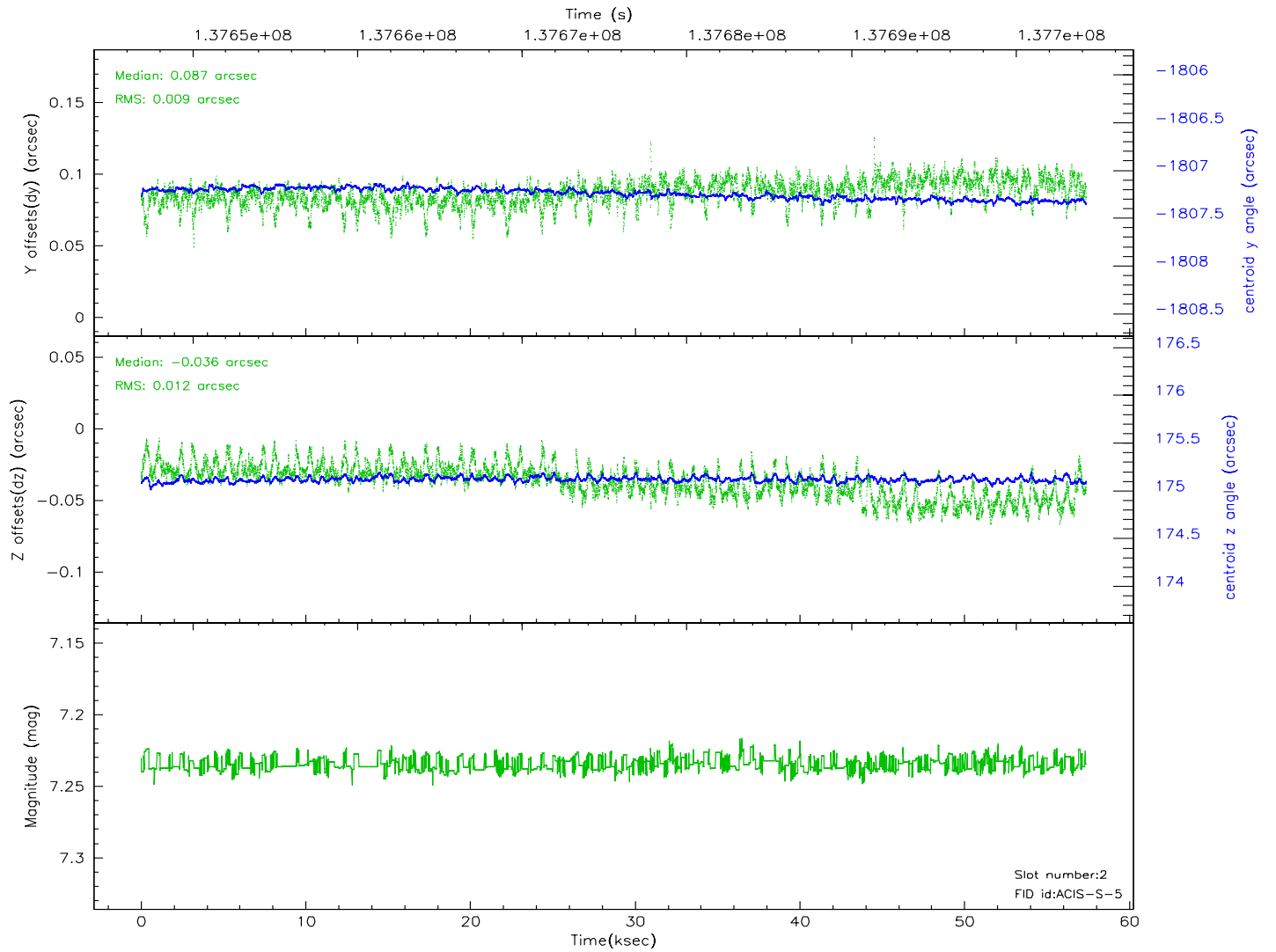
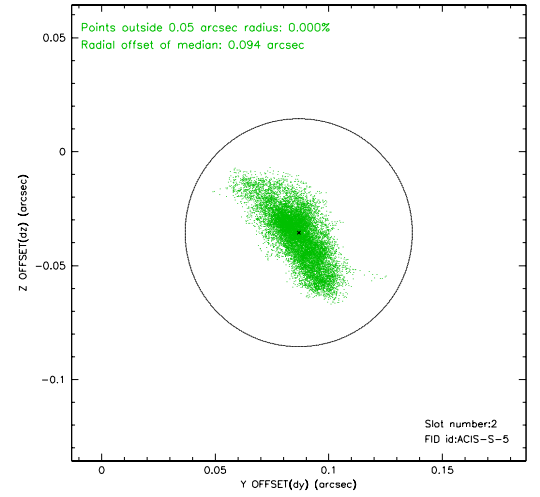
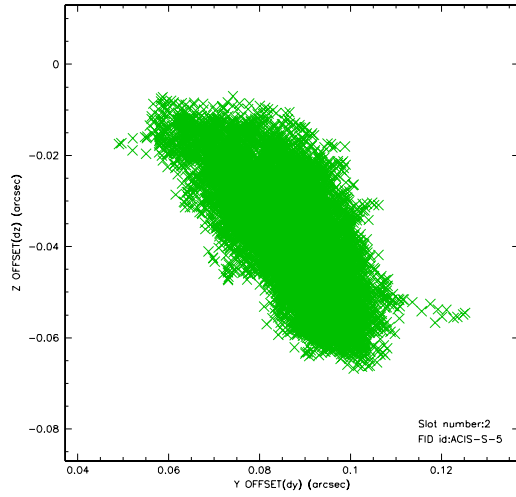
### 2.5.1 Slot 0



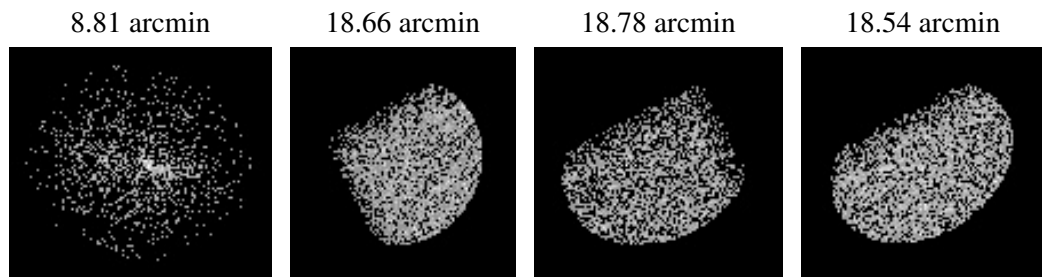
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



## A Summary

### A.1 Status

|                            |            |
|----------------------------|------------|
| V&V Scientist              | Jen Lauer  |
| V&V Date (YYYY-MM-DD)      | 2006.09.18 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 56.457     |

### A.2 Comments