

# V&V Reference Report

## L2 ASCDS Version : 7.6.8.1

Observation 4139 - L2 Version 001  
Chandra X-Ray Center

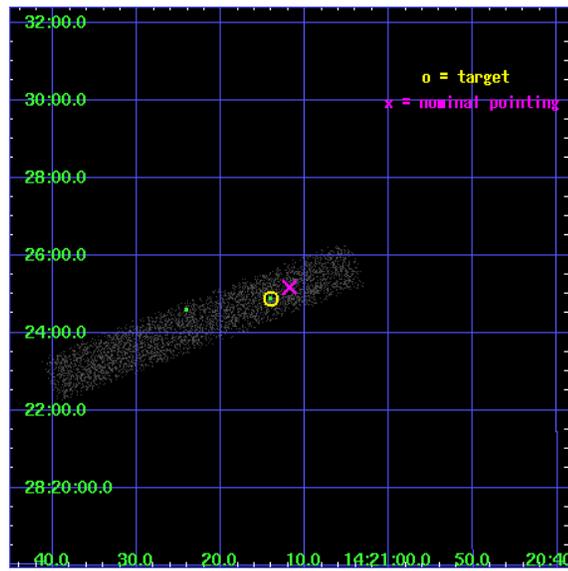
L2 Processing Date : Aug 4 2006

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# 1 Front

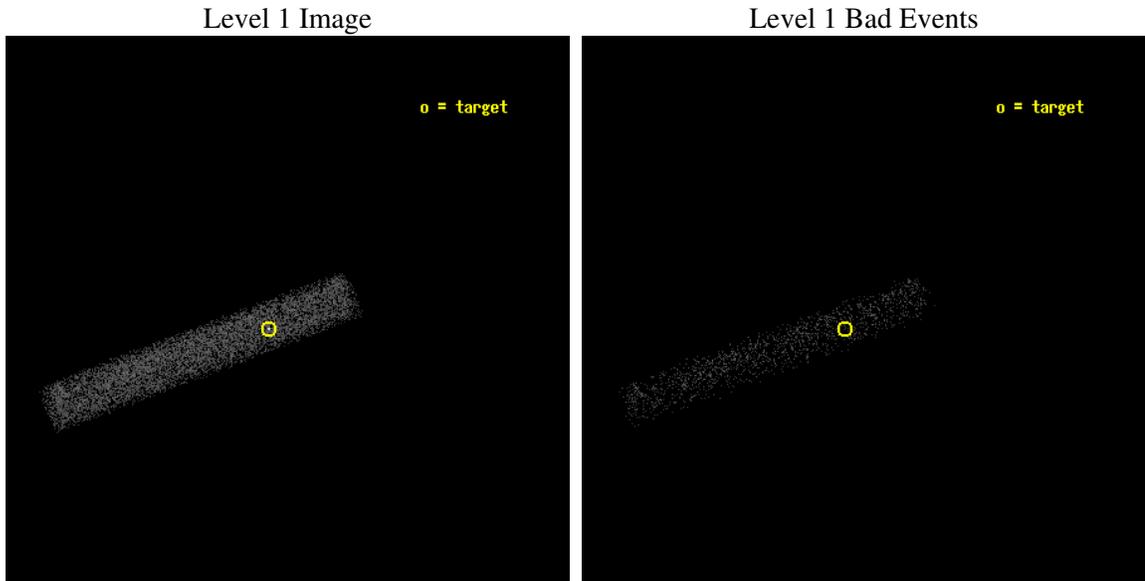
|          |   |
|----------|---|
| seq_num  | 700818  |
| obs_id   | 4139  |
| title    | CHANDRA OBSERVATIONS OF THE FIRST SAMPLE OF RADIO-LOUD NARROW LINE SEYFERT I GALAXIES |
| observer | Dr. Sally Laurent-Muehleisen  |
| object   | FIRST J142114+282452  |
| dtcycle  | 0   |
| cycle    | P   |
| ra_targ  | 215.30875   |
| dec_targ | 28.4145   |
| ra_nom   | 215.29936821356   |
| dec_nom  | 28.419439133277   |
| roll_nom | 159.26413569241   |
| revision | 2   |
| ontime   | 10362.000154406   |
| livetime | 9397.7871888317   |
| ontime7  | 10362.000154406   |
| l2events | 4951  |



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.8.1             |
| caldbver | 3.2.2               |
| date     | 2006-08-04T18:09:19 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 10200.000000    |
| ontime         | 11178.471812308 |
| ontime7        | 11178.471812308 |
| l1events       | 12497           |

### 2.1.4 Events

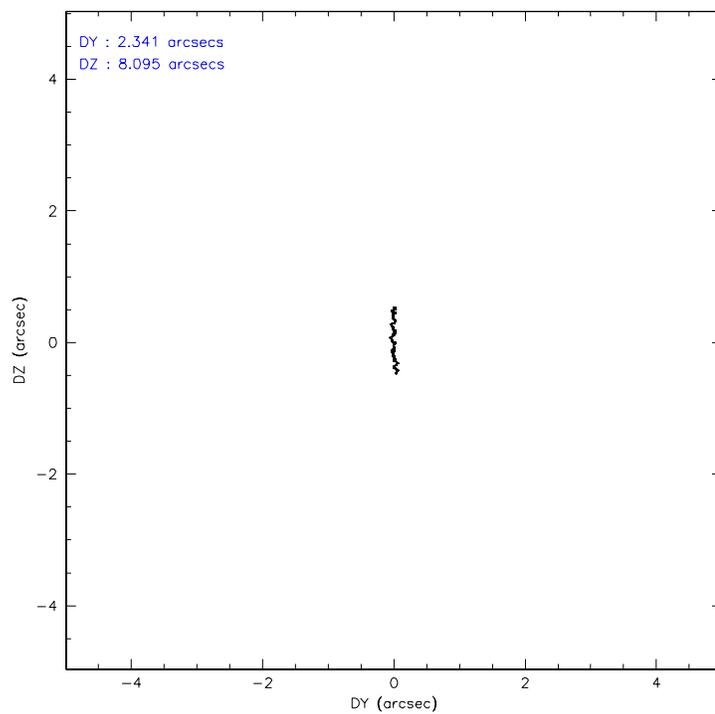
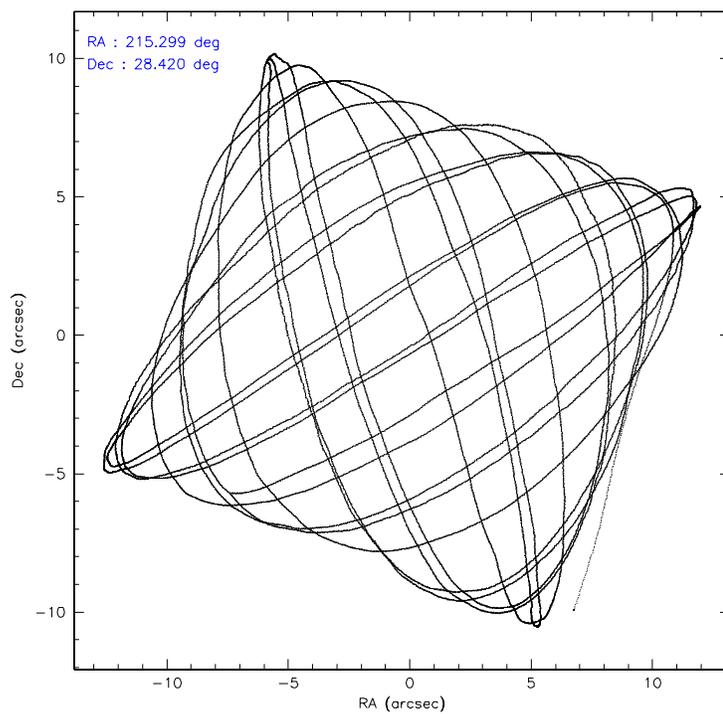
|                 | <b>ccd 7</b> |
|-----------------|--------------|
| level 1 events  | 12497        |
| rejected events | 7345         |
| rejected %      | 58%          |

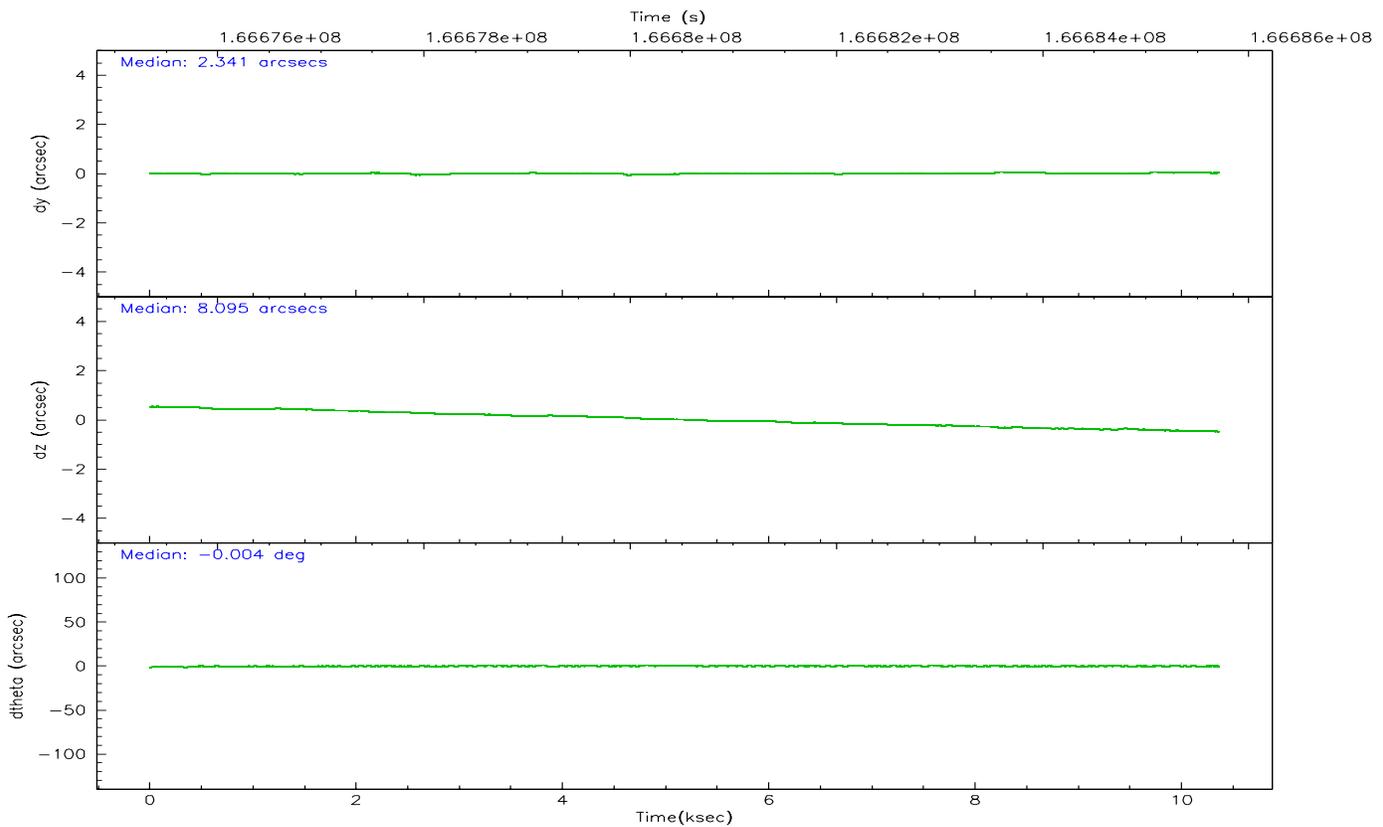
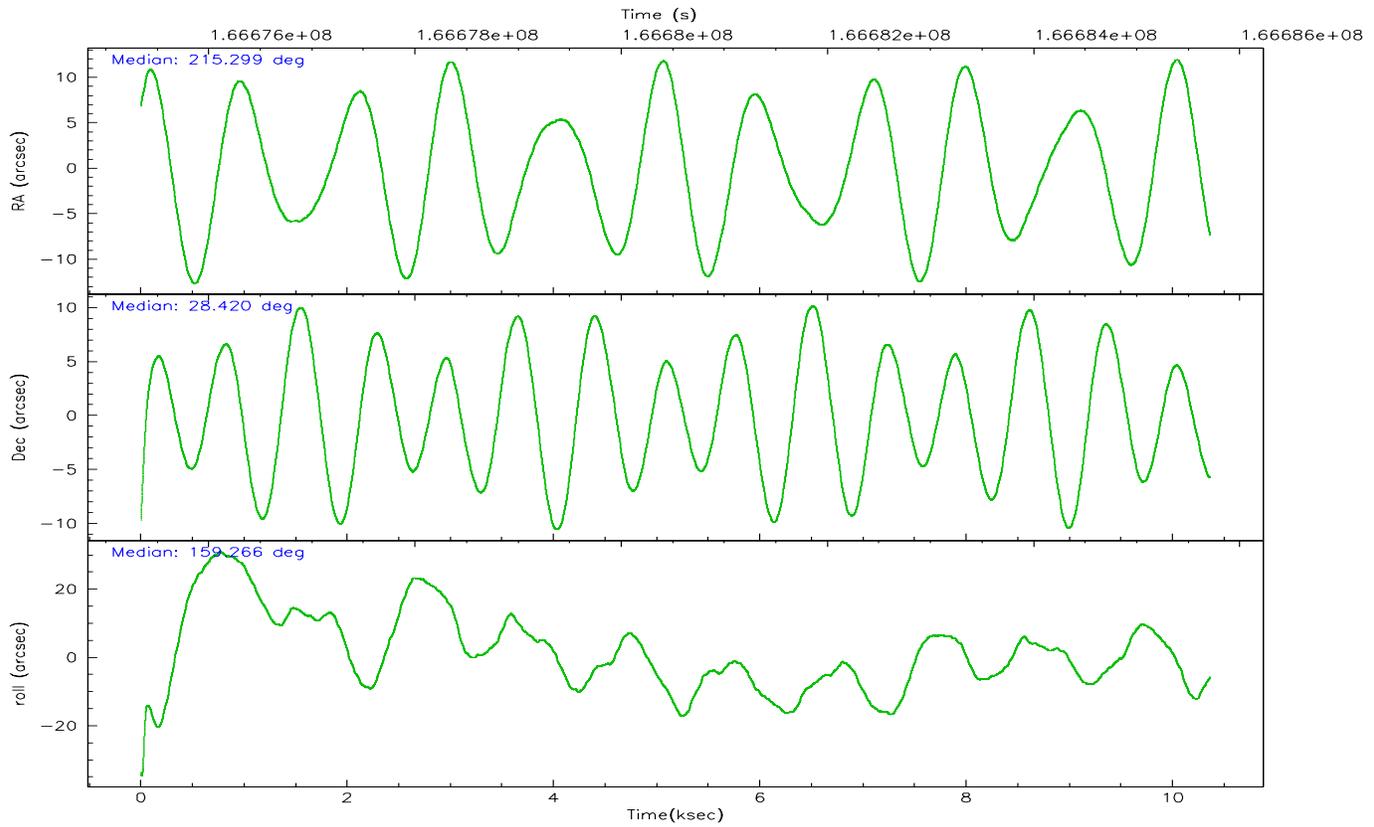
|                | <b>ccd 7</b> |
|----------------|--------------|
| grade 0 events | 552          |
|                | 4%           |
| grade 1 events | 8            |
|                | 0%           |
| grade 2 events | 1209         |
|                | 9%           |
| grade 3 events | 608          |
|                | 4%           |
| grade 4 events | 524          |
|                | 4%           |
| grade 5 events | 885          |
|                | 7%           |
| grade 6 events | 2618         |
|                | 20%          |
| grade 7 events | 6093         |
|                | 48%          |

## 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                | On-chip summing requested       | N         | N       |
| Observation mode                  | POINTING            | POINTING             | Subarray requested              | 1/8       | 1/8     |
| Pointing RA                       | 215.329797          | 215.2993682135597    | Subarray start row              | 0         | 449     |
| Pointing Dec                      | 28.424205           | 28.41943913327734    | Subarray row count              | 1024      | 128     |
| Pointing Roll                     | 159.093044          | 159.2641356924055    | 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            | 166675511.184000    | 166674489.99163      |                                 |           |         |
| Observation start date            | 2003-04-14T02:44:07 | 2003-04-14T02:28:09  |                                 |           |         |
| Observation end time              | 166685711.184000    | 166686414.32963      |                                 |           |         |
| Observation end date              | 2003-04-14T05:34:07 | 2003-04-14T05:46:54  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

## 2.3 Aspect



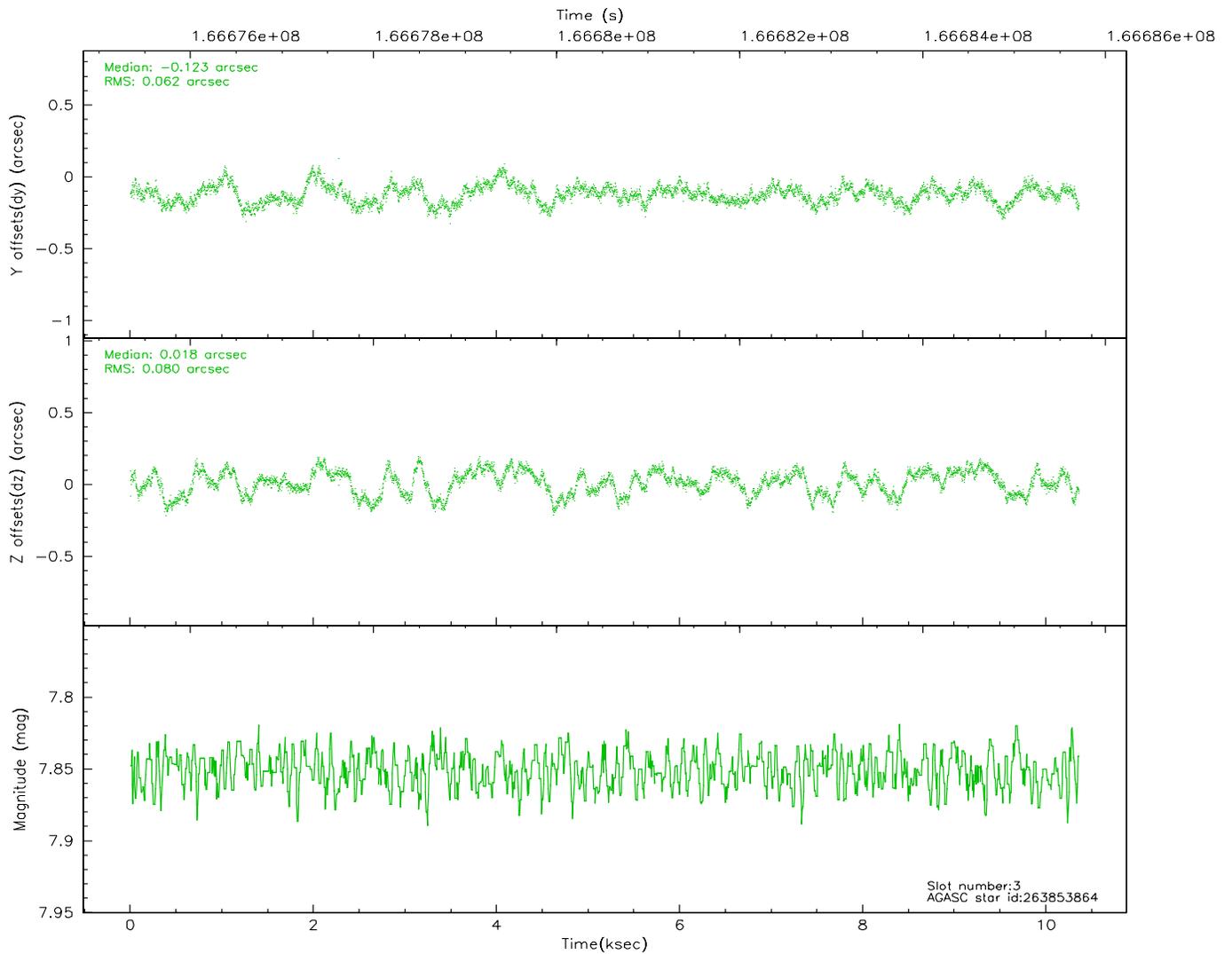
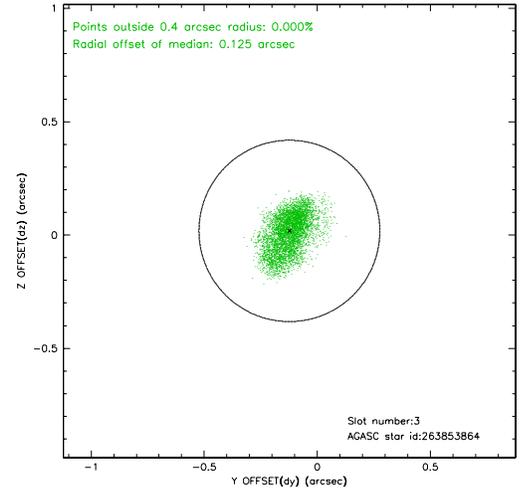
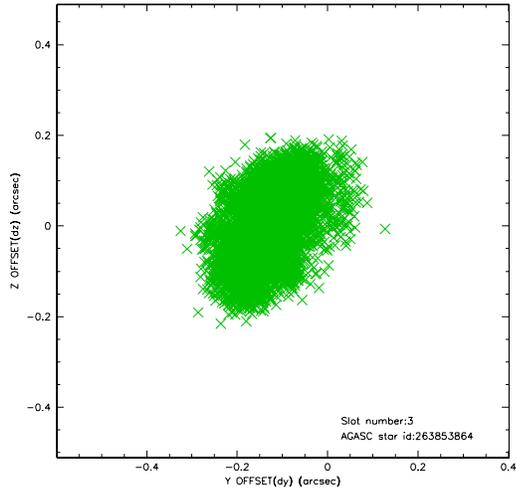


### Slot Statistics

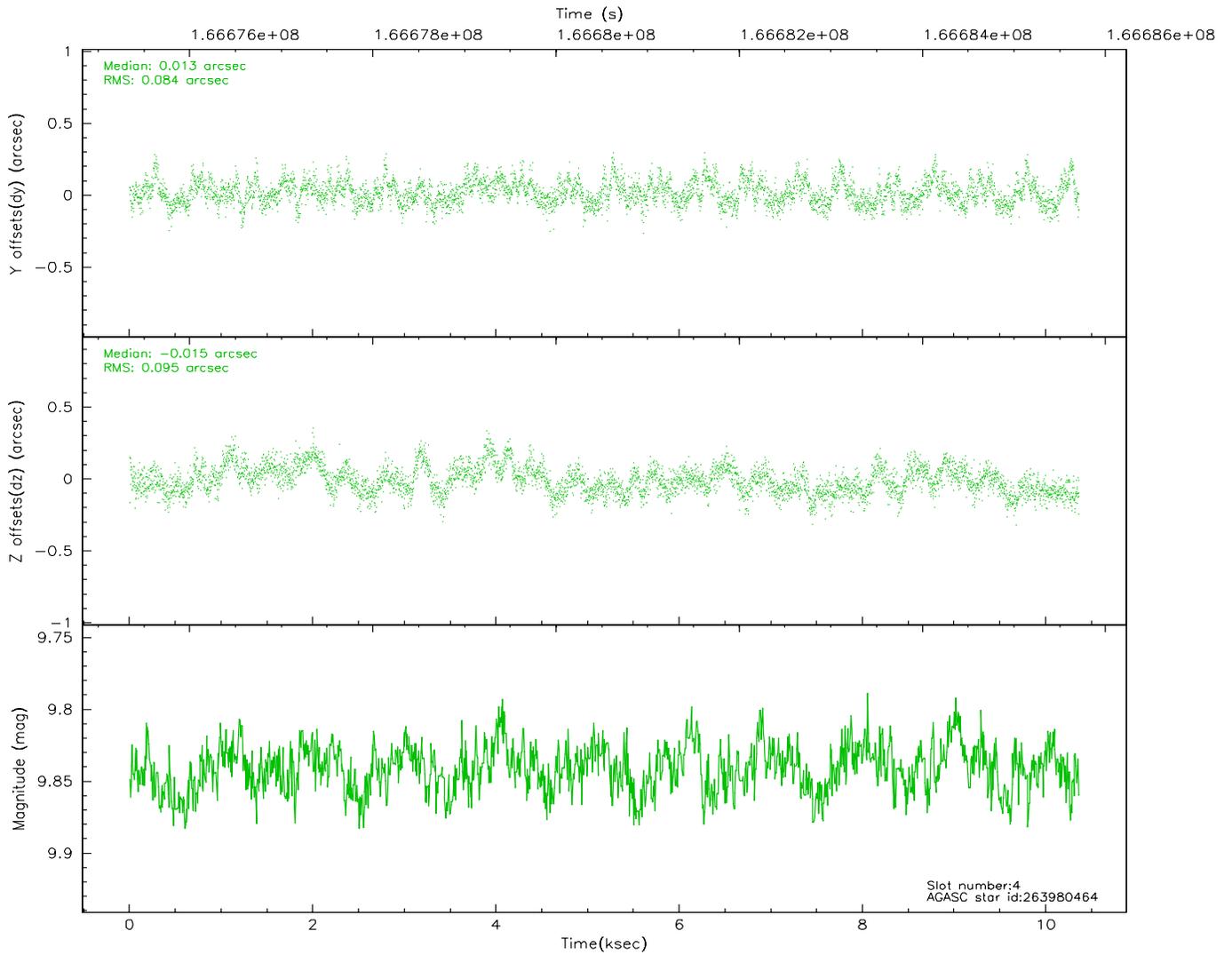
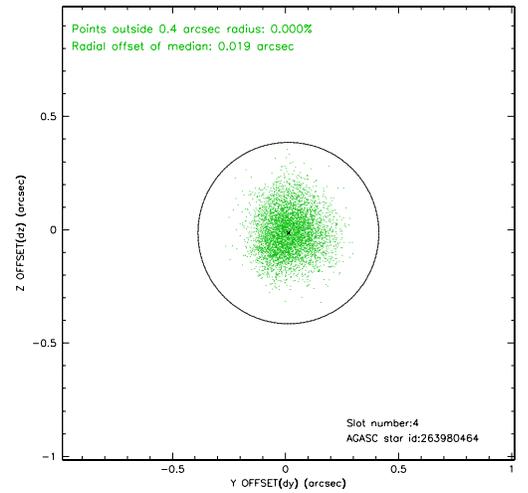
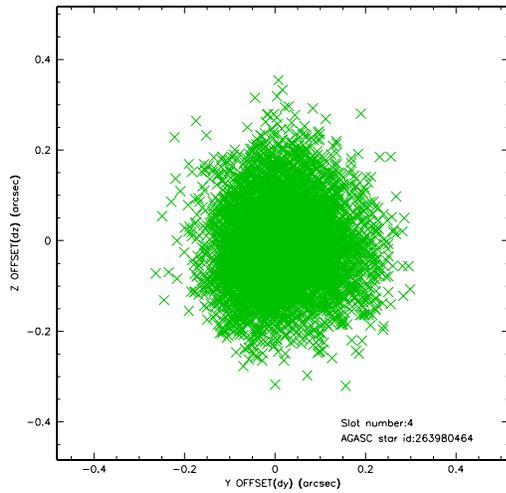
| slot | status | id        | mag   | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | ACIS-S-2  | 7.11  | 2528  | -0.010 | 0.014  | 0.007 | 0.010 | 0.000000   | 0.000000  | -754.98  | -1729.30 |
| 1    | FID    | ACIS-S-4  | 7.21  | 2528  | -0.061 | 0.001  | 0.005 | 0.010 | 0.000000   | 0.000000  | 2158.02  | 178.65   |
| 2    | FID    | ACIS-S-5  | 7.24  | 2528  | 0.040  | -0.006 | 0.006 | 0.010 | 0.000000   | 0.000000  | -1807.12 | 172.89   |
| 3    | GUIDE  | 263853864 | 7.85  | 5055  | -0.123 | 0.018  | 0.110 | 0.173 | 214.640696 | 28.439377 | 2059.96  | 721.71   |
| 4    | GUIDE  | 263980464 | 9.84  | 5045  | 0.013  | -0.015 | 0.136 | 0.218 | 215.549780 | 28.128620 | -1030.76 | 744.73   |
| 5    | GUIDE  | 263982872 | 11.46 | 4961  | 0.076  | 0.048  | 0.463 | 0.718 | 216.026641 | 28.783920 | -1589.45 | -1999.59 |
| 6    | GUIDE  | 263984360 | 9.67  | 5056  | 0.016  | 0.046  | 0.130 | 0.214 | 216.041078 | 28.506456 | -1994.01 | -1085.74 |
| 7    | GUIDE  | 263985384 | 9.34  | 5044  | 0.006  | -0.108 | 0.175 | 0.245 | 215.066586 | 28.496503 | 871.02   | 53.15    |

## 2.4 Star Slots

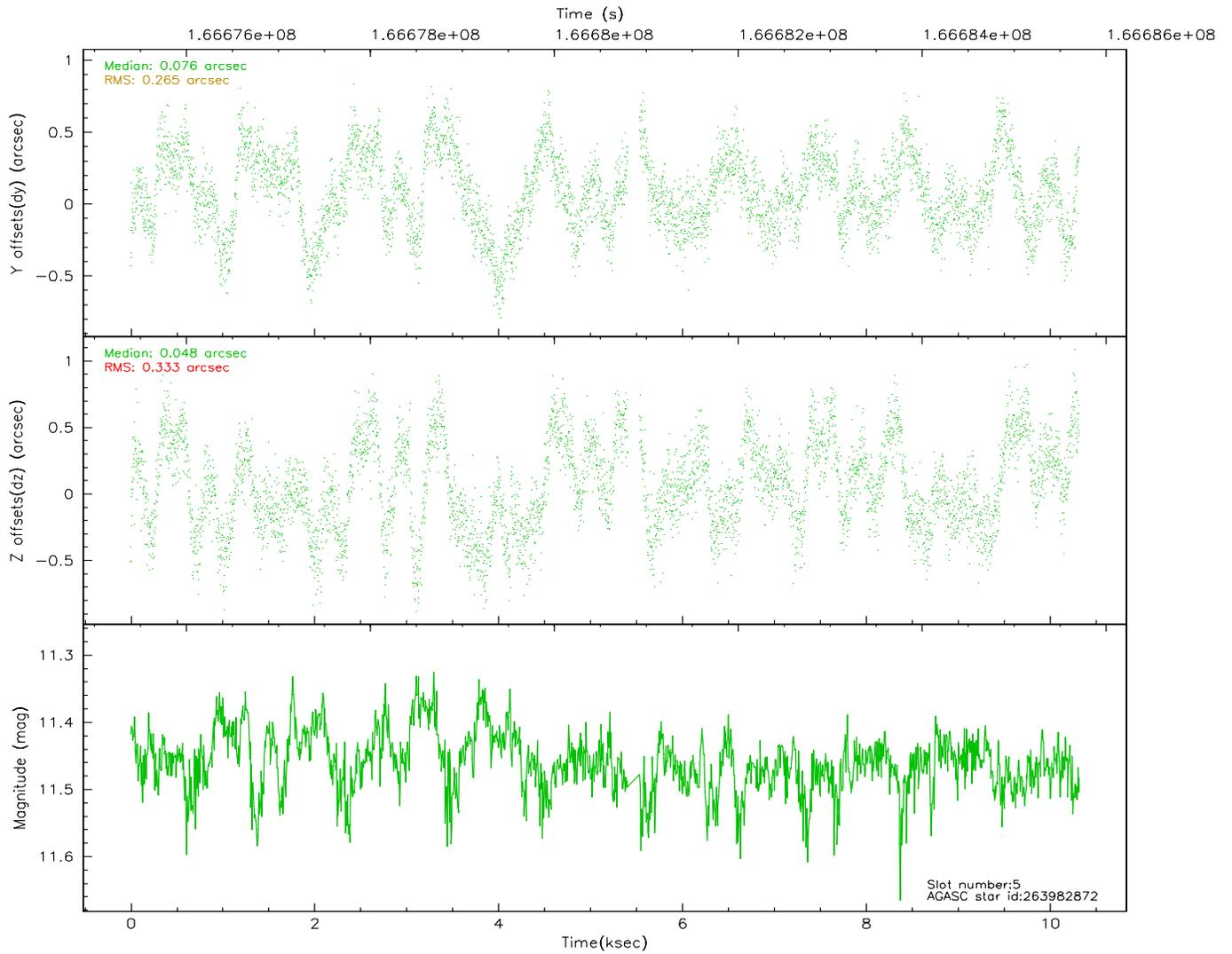
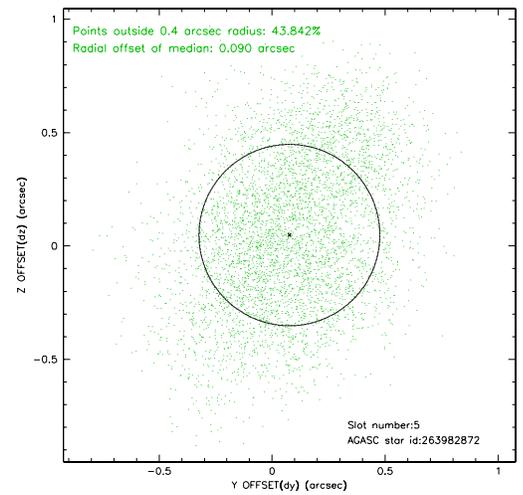
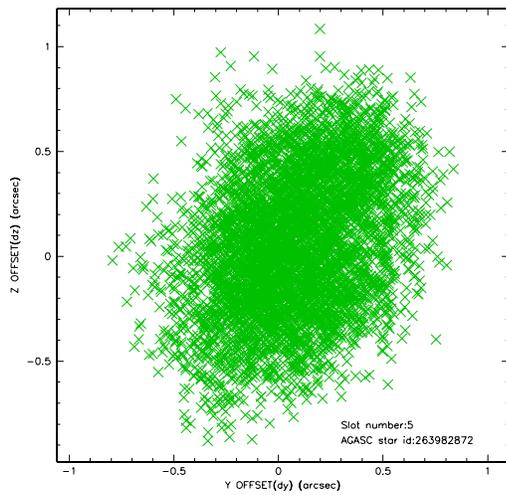
### 2.4.1 Slot 3



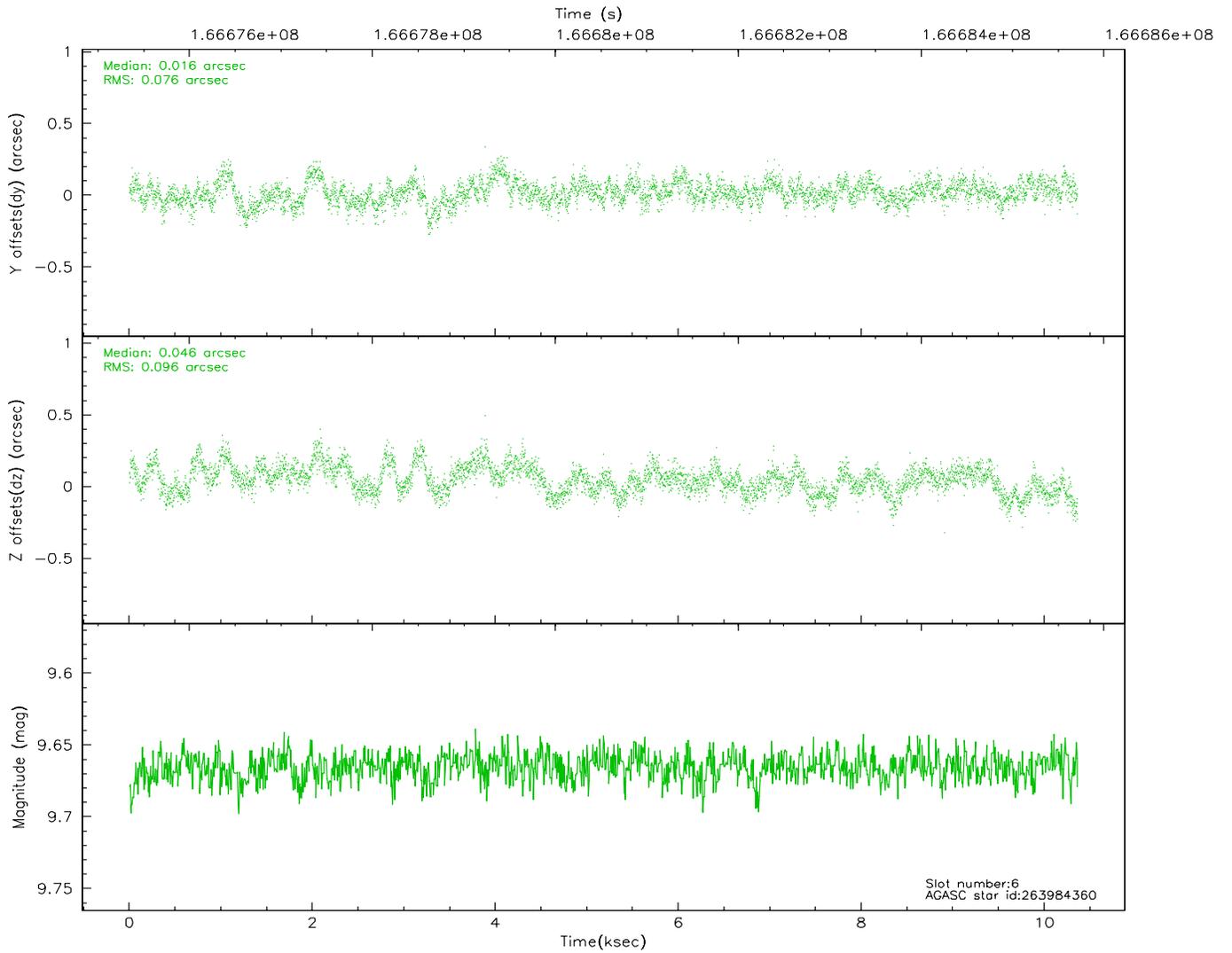
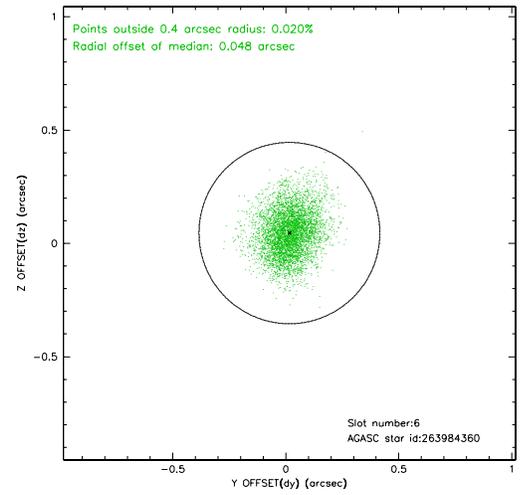
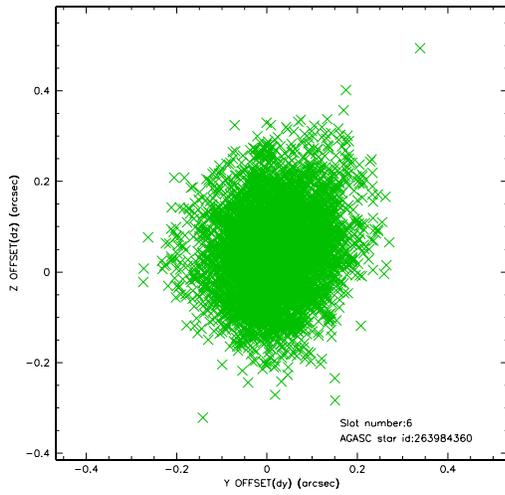
### 2.4.2 Slot 4



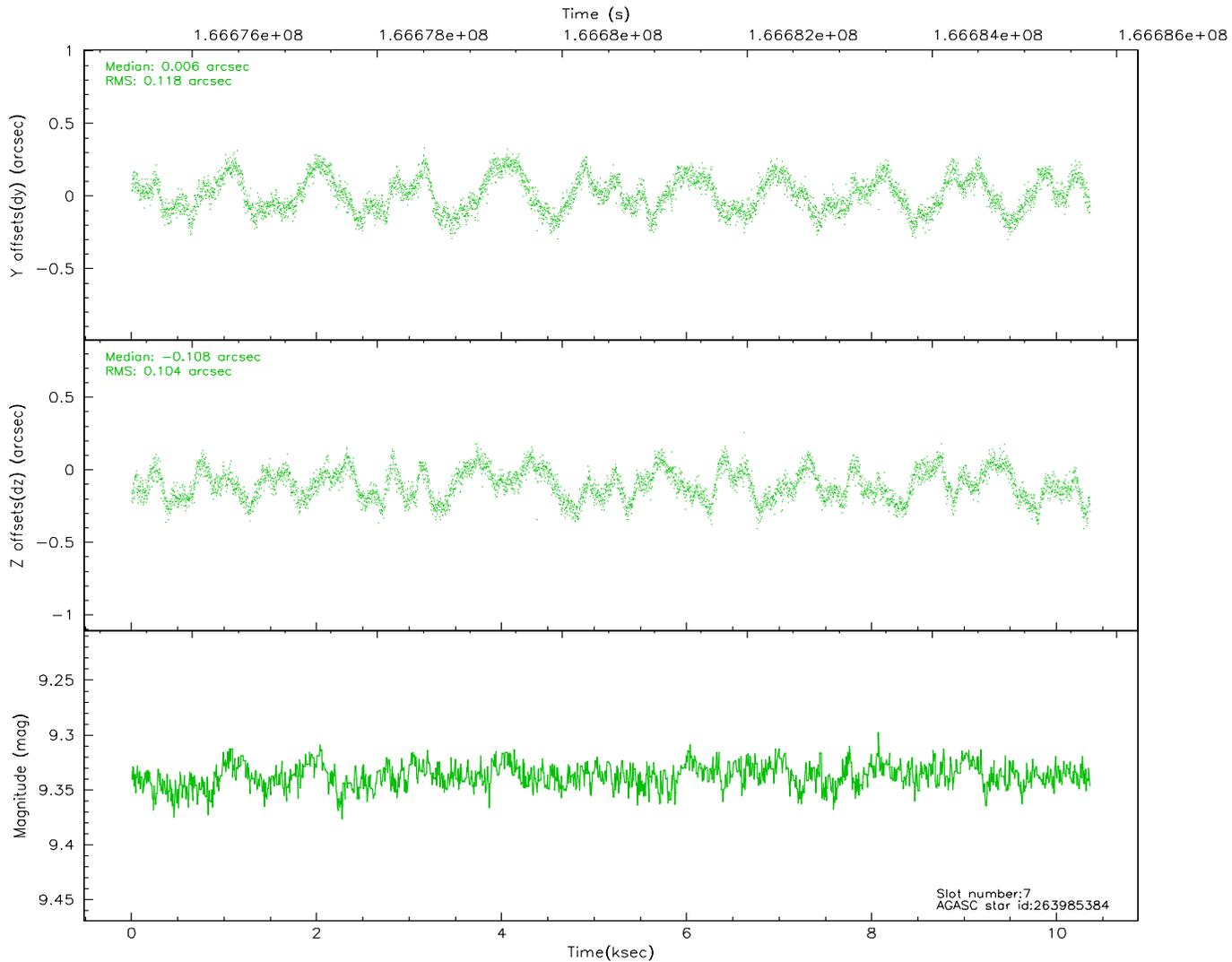
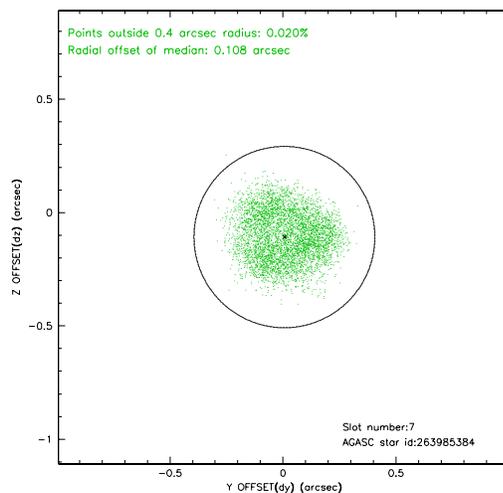
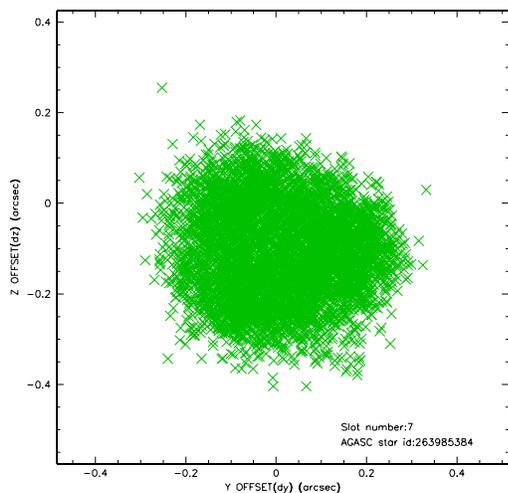
### 2.4.3 Slot 5



### 2.4.4 Slot 6

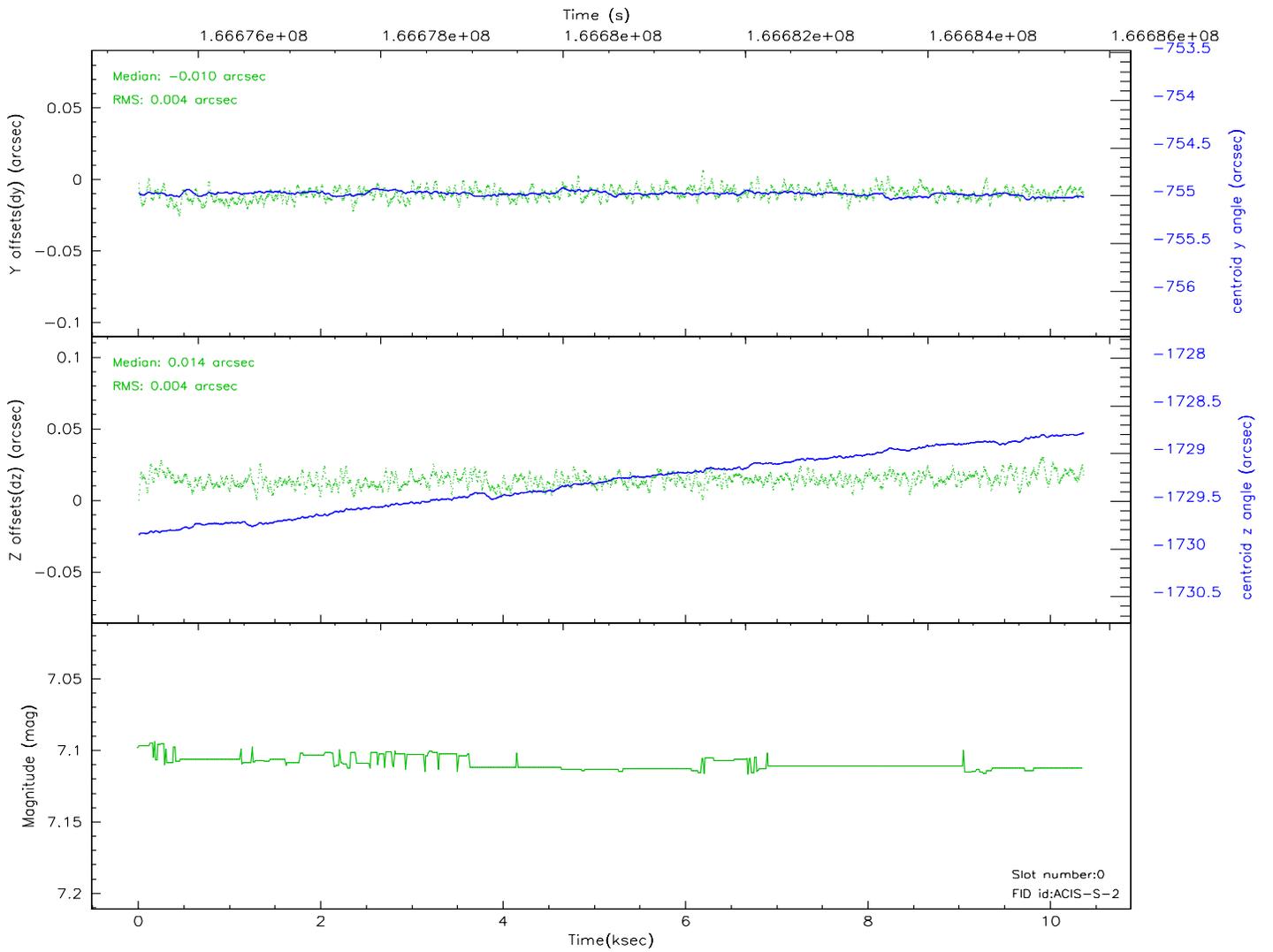
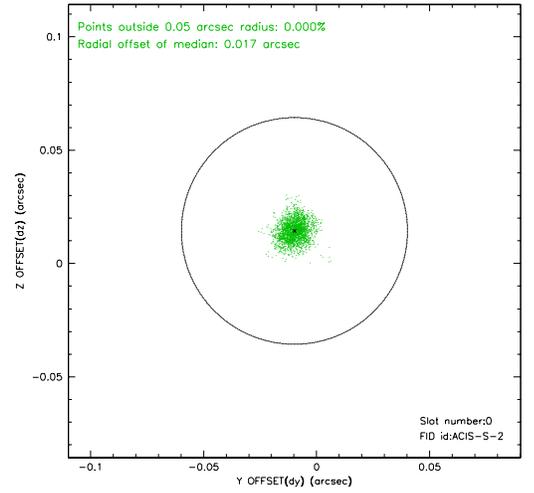
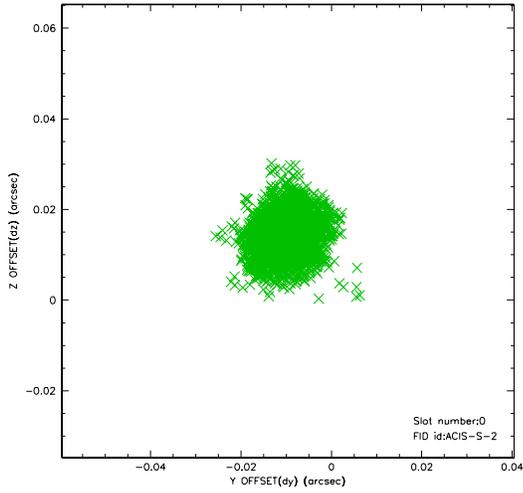


## 2.4.5 Slot 7

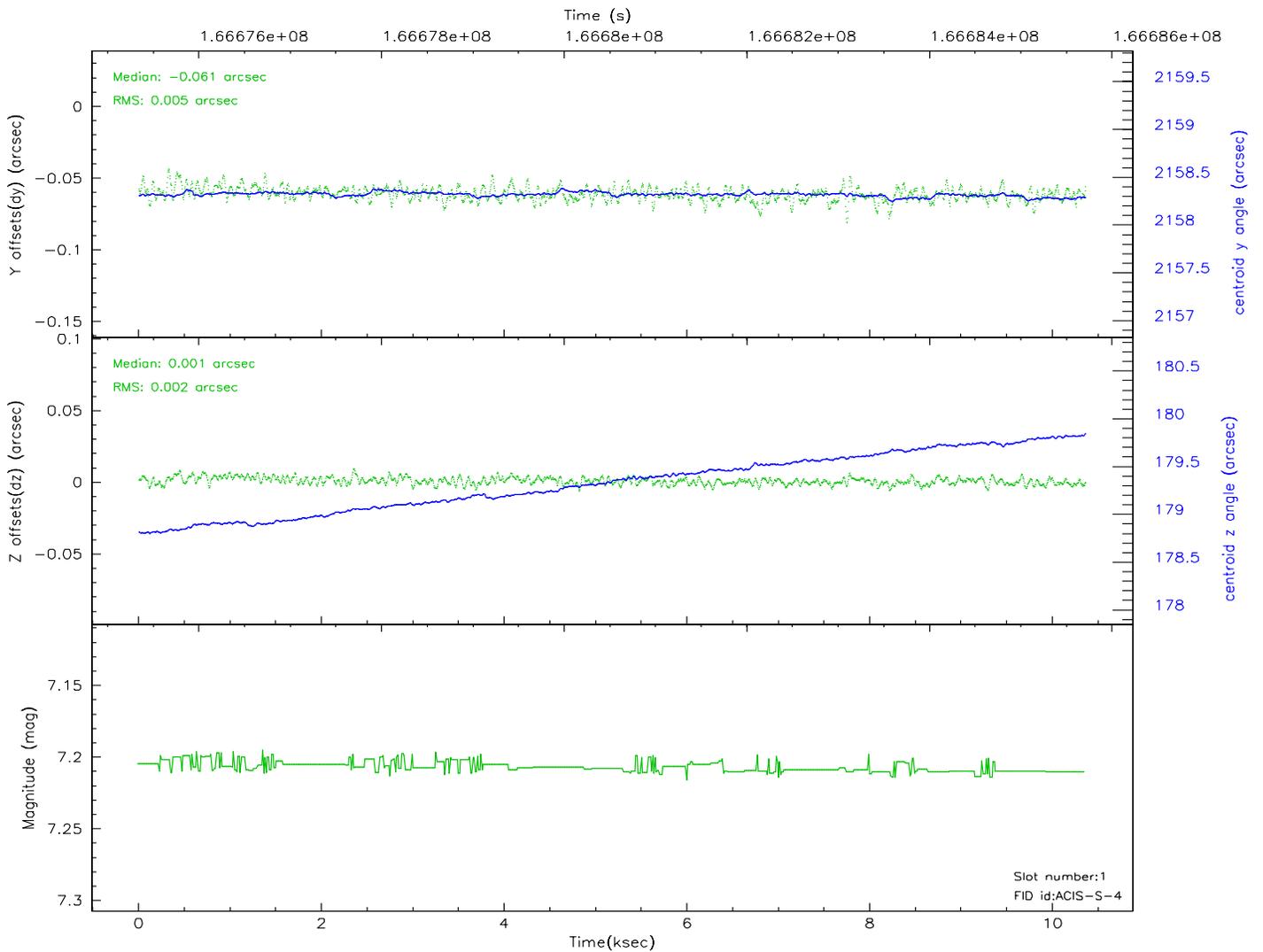
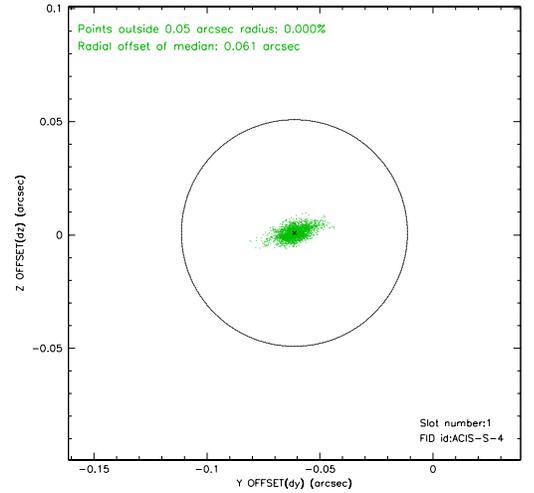
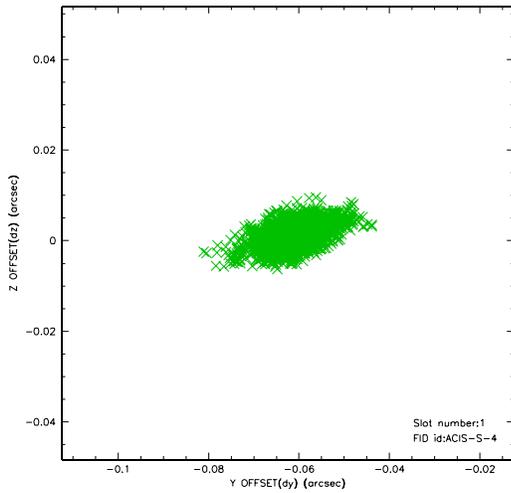


## 2.5 FID Slots

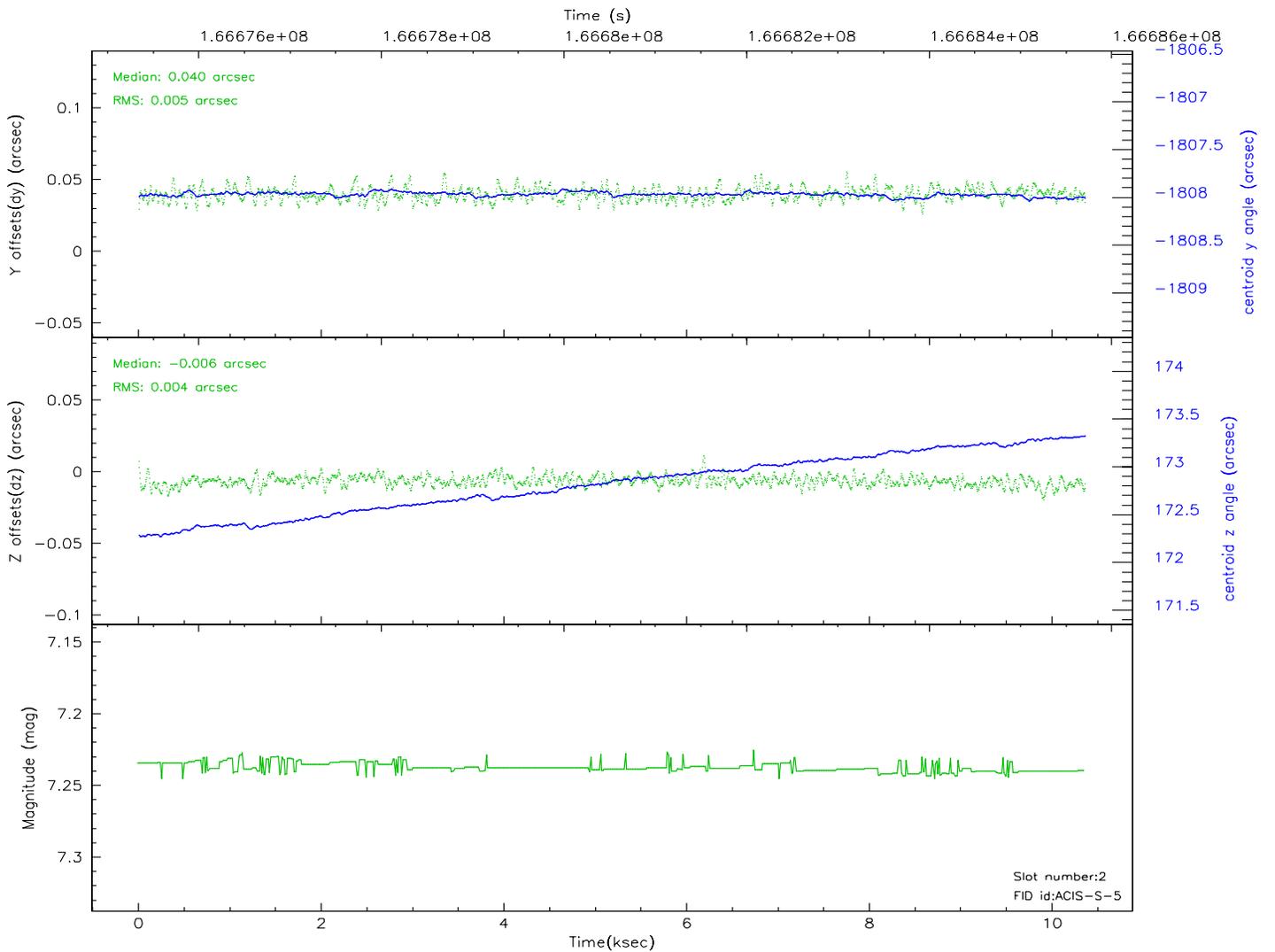
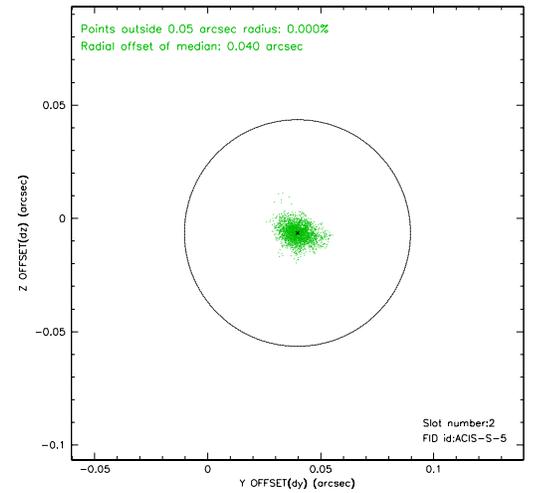
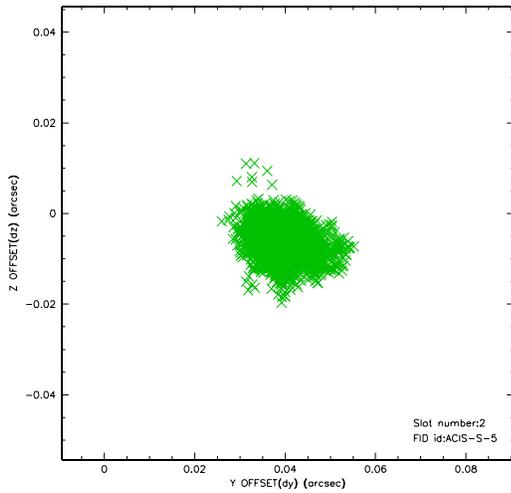
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources

2.74 arcmin



# A Summary

## A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2006.08.04    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 10.362        |

## A.2 Comments

Star in slot 5 has a high RMS deviation, but is within current spec.