

# V&V Reference Report

## L2 ASCDS Version : 7.6.8.1

Observation 4190 - L2 Version 001  
Chandra X-Ray Center

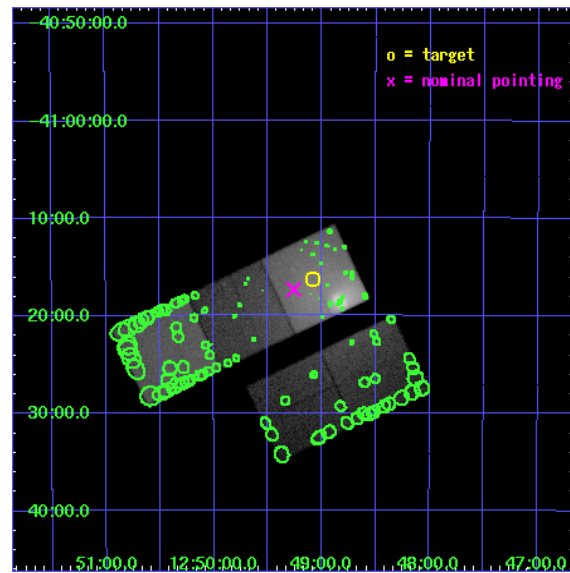
L2 Processing Date : Aug 4 2006

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# 1 Front

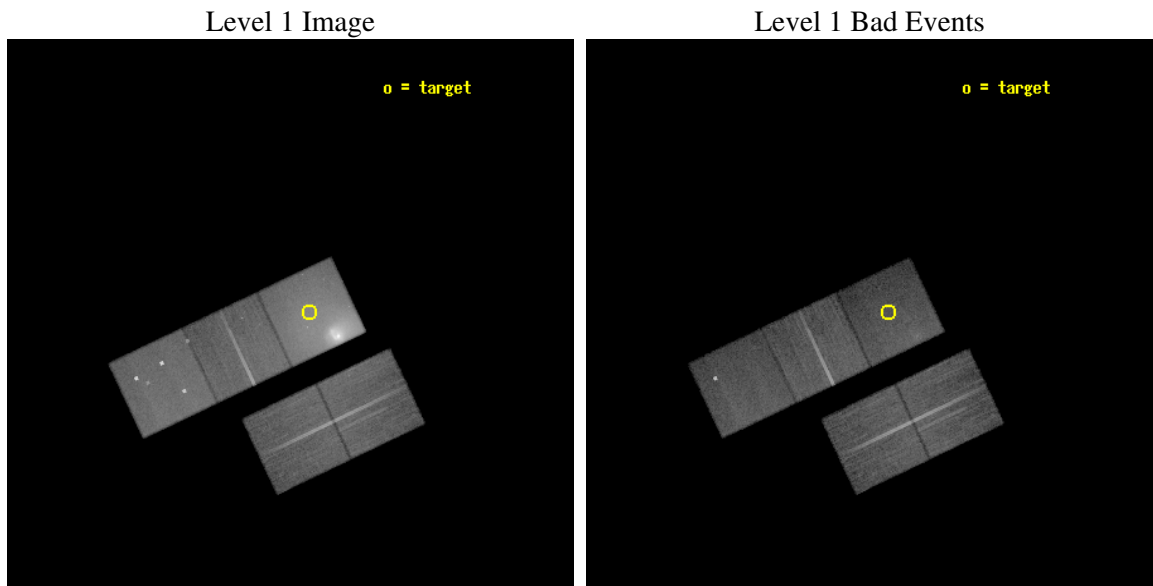
|          |   |
|----------|---|
| seq_num  | 800346  |
| obs_id   | 4190  |
| title    | INTRACLUSTER GAS BULK VELOCITIES IN THE CENTAURUS CLUSTER |
| observer | Dr Renato Dupke   |
| object   | ABELL 3526  |
| dtcycle  | 0   |
| cycle    | P   |
| ra_targ  | 192.270833  |
| dec_targ | -41.271389  |
| ra_nom   | 192.31472157315   |
| dec_nom  | -41.288965009406  |
| roll_nom | 334.66359058174   |
| revision | 2   |
| ontime   | 34719.999933243   |
| livetime | 34266.357573623   |
| ontime2  | 34713.717962801   |
| ontime3  | 34719.999933243   |
| ontime5  | 34719.999933243   |
| ontime6  | 34716.858943045   |
| ontime7  | 34719.999933243   |
| l2events | 726527  |



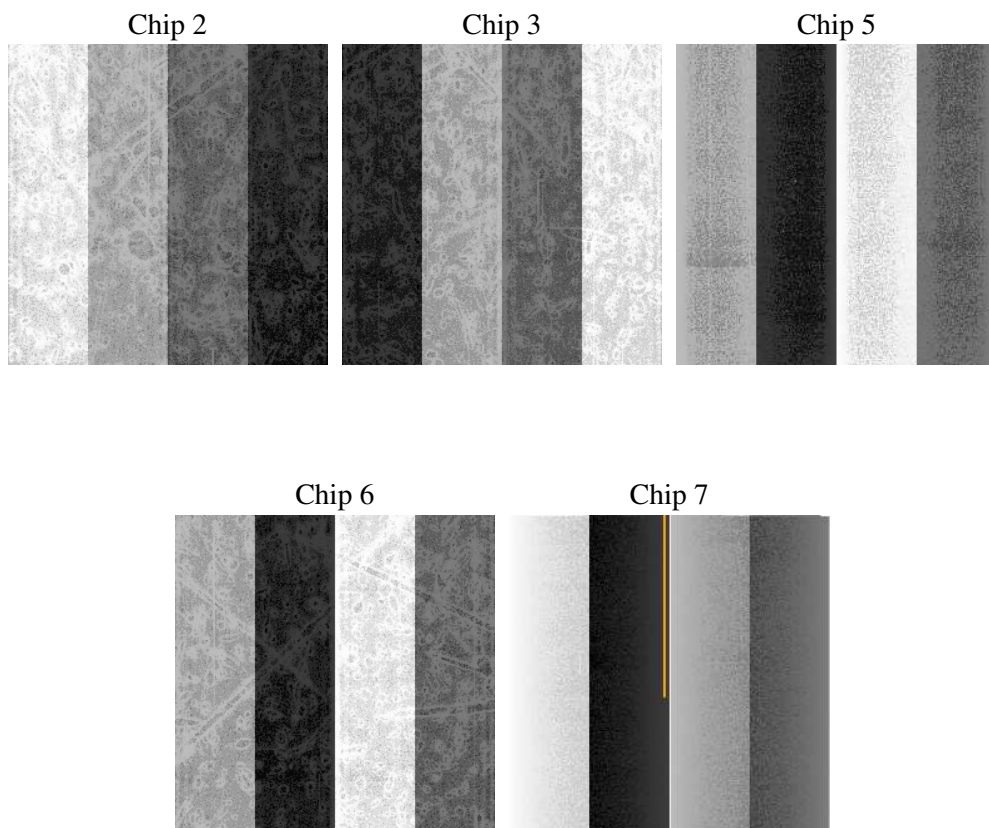
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 1                   |
| ascdsver | 7.6.8.1             |
| caldbver | 3.2.2               |
| date     | 2006-08-04T21:48:58 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 34700.000000    |
| ontime         | 35286.073741943 |
| ontime2        | 35216.97259739  |
| ontime3        | 35242.10029915  |
| ontime5        | 35286.073741943 |
| ontime6        | 35242.100448698 |
| ontime7        | 35286.073741943 |
| l1events       | 1548941         |

### 2.1.4 Events

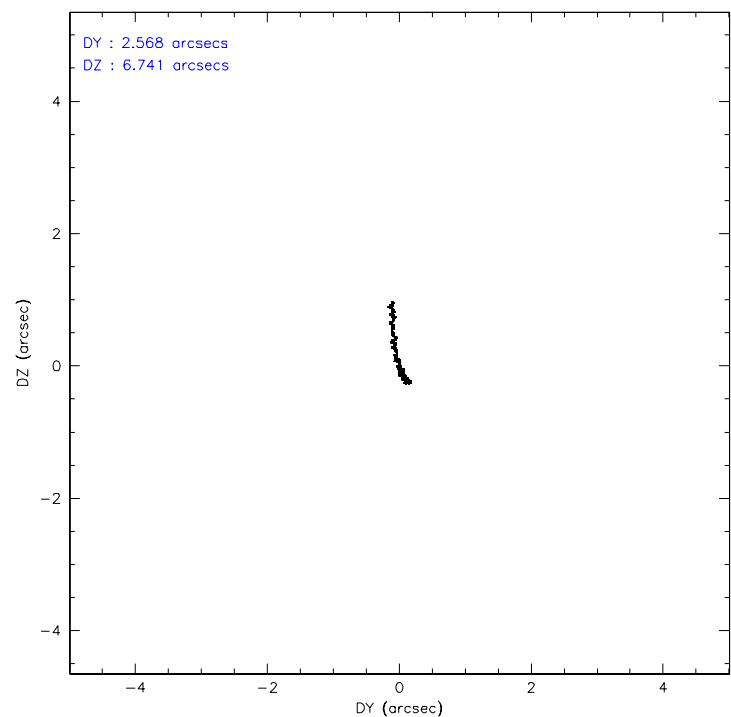
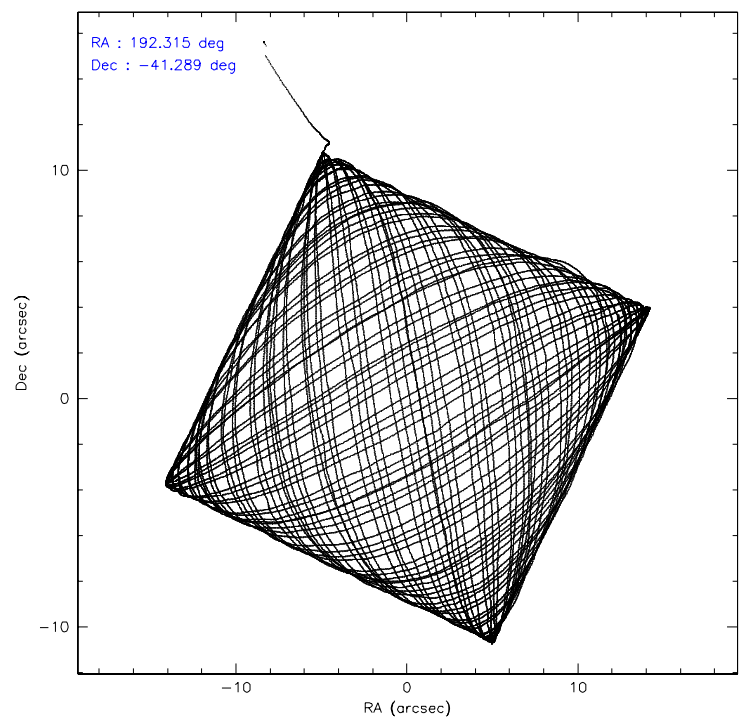
|                 | ccd 2  | ccd 3  | ccd 5  | ccd 6  | ccd 7  |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events  | 213194 | 224848 | 288162 | 247687 | 575050 |
| rejected events | 172133 | 172245 | 138385 | 172811 | 128911 |
| rejected %      | 80%    | 76%    | 48%    | 69%    | 22%    |

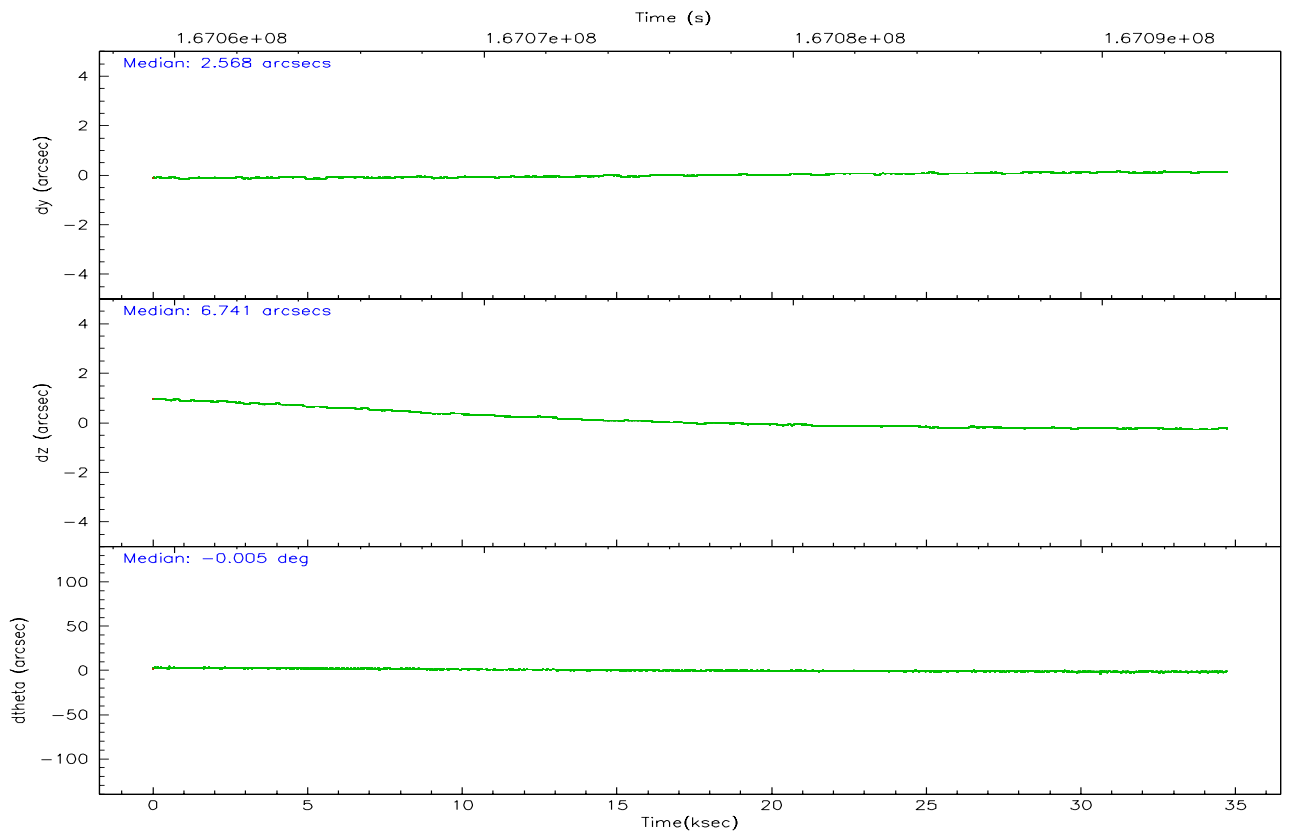
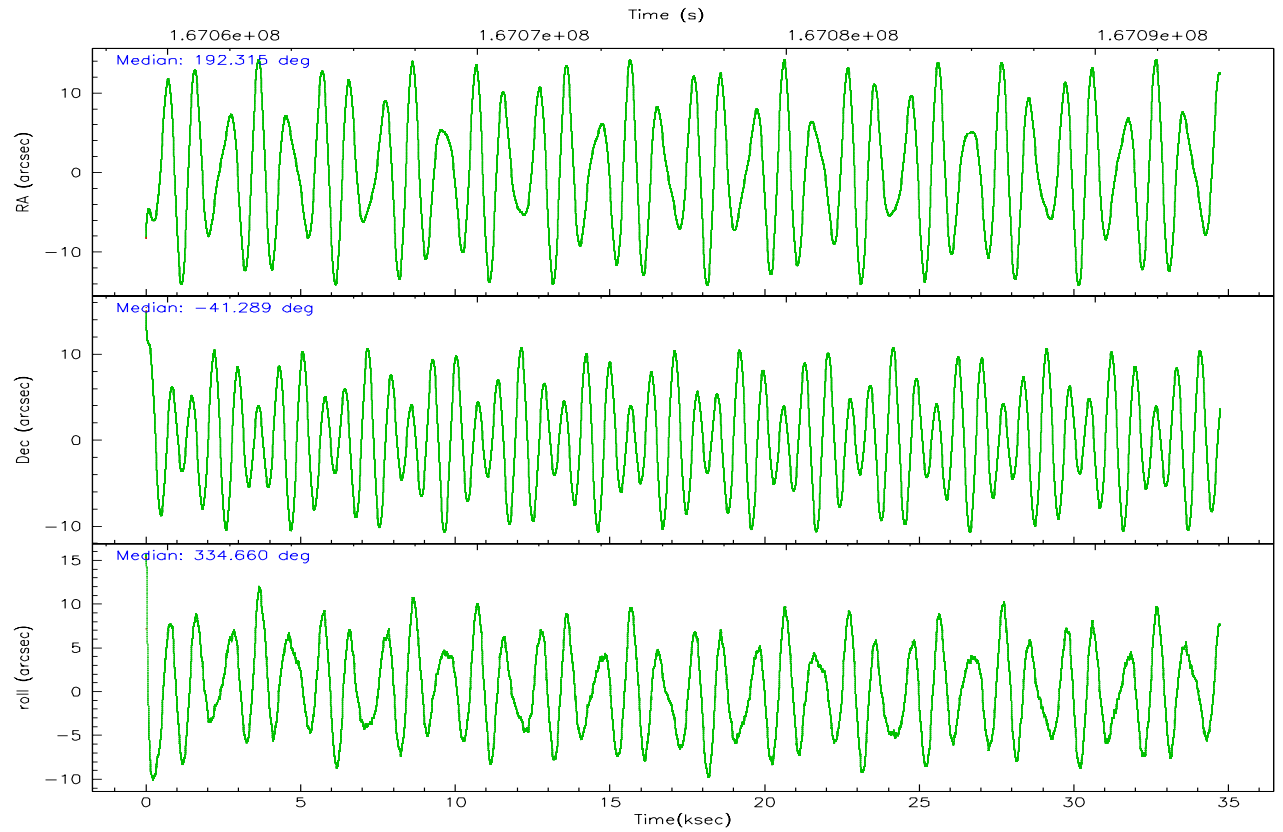
|                | ccd 2  | ccd 3  | ccd 5  | ccd 6  | ccd 7  |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 28210  | 38469  | 25811  | 54879  | 99400  |
|                | 13%    | 17%    | 8%     | 22%    | 17%    |
| grade 1 events | 202    | 216    | 110    | 250    | 186    |
|                | 0%     | 0%     | 0%     | 0%     | 0%     |
| grade 2 events | 6876   | 7572   | 48453  | 10079  | 133206 |
|                | 3%     | 3%     | 16%    | 4%     | 23%    |
| grade 3 events | 3025   | 3367   | 5107   | 4048   | 43920  |
|                | 1%     | 1%     | 1%     | 1%     | 7%     |
| grade 4 events | 3085   | 3353   | 4505   | 3979   | 43280  |
|                | 1%     | 1%     | 1%     | 1%     | 7%     |
| grade 5 events | 6117   | 6926   | 16258  | 7413   | 18024  |
|                | 2%     | 3%     | 5%     | 2%     | 3%     |
| grade 6 events | 4212   | 4528   | 70751  | 6045   | 132894 |
|                | 1%     | 2%     | 24%    | 2%     | 23%    |
| grade 7 events | 161467 | 160417 | 117167 | 160994 | 104140 |
|                | 75%    | 71%    | 40%    | 64%    | 18%    |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                       | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument                        | ACIS                | ACIS                 | Obspar format version number    | 6         | 6       |
| Detector                          | ACIS-23567          | ACIS-23567           | 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              | NONE      | NONE    |
| Pointing RA                       | 192.278666          | 192.3147215731509    | Alternating exposures requested | N         | N       |
| Pointing Dec                      | -41.291550          | -41.2889650094062    | Primary exposure time           | 0.000000  | 3.1     |
| Pointing Roll                     | 334.483166          | 334.6635905817368    |                                 |           |         |
| 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            | 167059326.184000    | 167058177.74534      |                                 |           |         |
| Observation start date            | 2003-04-18T13:21:02 | 2003-04-18T13:02:57  |                                 |           |         |
| Observation end time              | 167094026.184000    | 167094160.37187      |                                 |           |         |
| Observation end date              | 2003-04-18T22:59:22 | 2003-04-18T23:02:40  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

2.3 Aspect





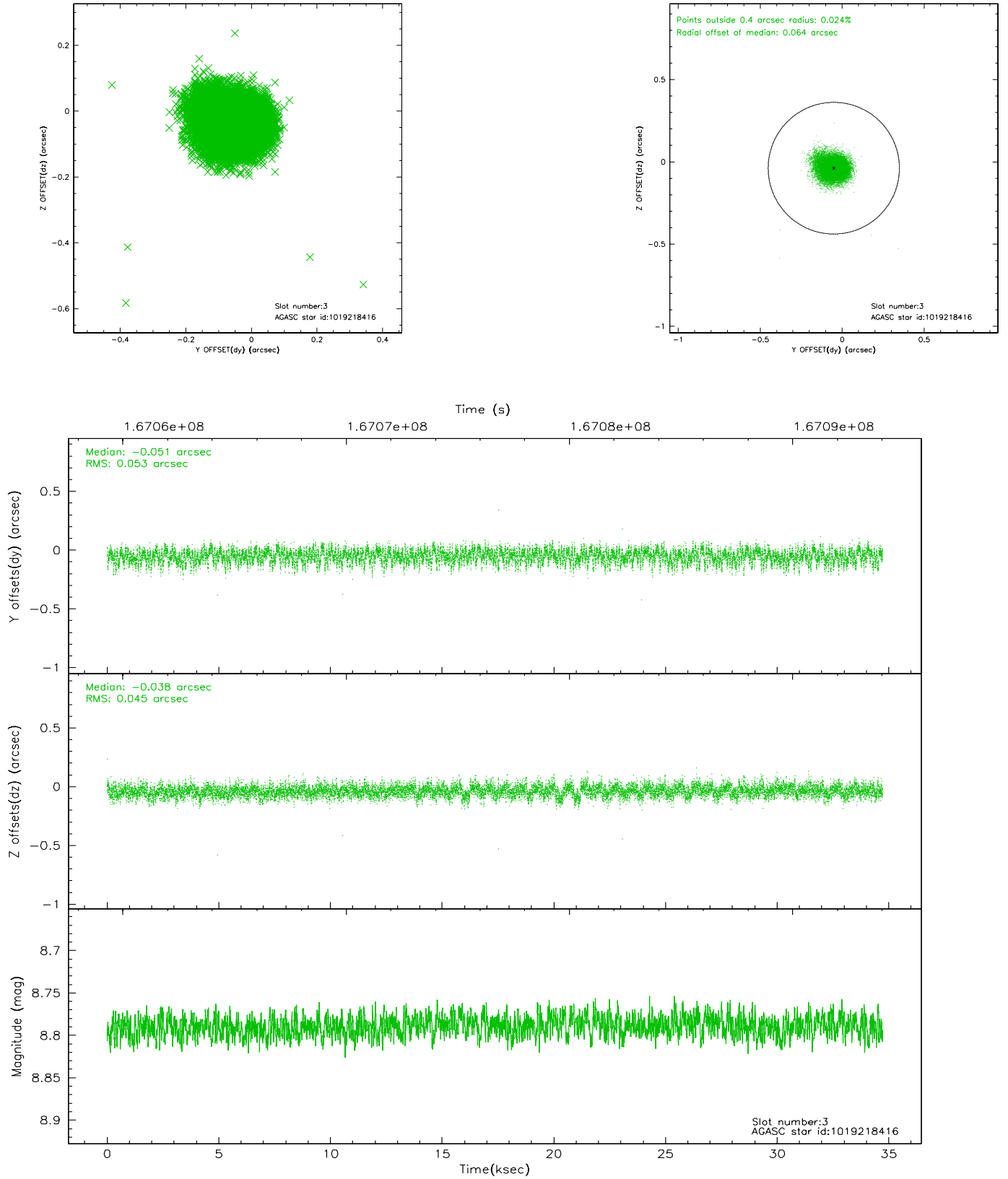
### Slot Statistics

| 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 | 8469  | -0.022 | 0.023  | 0.010 | 0.021 | 0.000000   | 0.000000   | -755.20  | -1728.04 |
| 1    | FID    | ACIS-S-4   | 7.20 | 8467  | -0.046 | 0.004  | 0.014 | 0.026 | 0.000000   | 0.000000   | 2158.01  | 180.42   |
| 2    | FID    | ACIS-S-5   | 7.24 | 8469  | 0.037  | -0.018 | 0.008 | 0.013 | 0.000000   | 0.000000   | -1807.95 | 174.07   |
| 3    | GUIDE  | 1019218416 | 8.79 | 16939 | -0.051 | -0.038 | 0.073 | 0.120 | 193.142850 | -40.941016 | 1582.32  | 2140.65  |
| 4    | GUIDE  | 1019221952 | 9.59 | 16911 | 0.007  | -0.008 | 0.155 | 0.260 | 192.906873 | -41.032646 | 1140.96  | 1570.66  |
| 5    | GUIDE  | 1019615024 | 8.47 | 16927 | -0.008 | 0.015  | 0.066 | 0.103 | 191.349086 | -41.365736 | -2145.33 | -1335.14 |
| 6    | GUIDE  | 1019740808 | 8.79 | 16932 | 0.073  | -0.078 | 0.106 | 0.164 | 192.766173 | -41.251253 | 1129.95  | 695.83   |
| 7    | GUIDE  | 1019743536 | 8.65 | 16933 | -0.010 | 0.101  | 0.077 | 0.135 | 192.632057 | -41.696442 | 1486.41  | -907.83  |

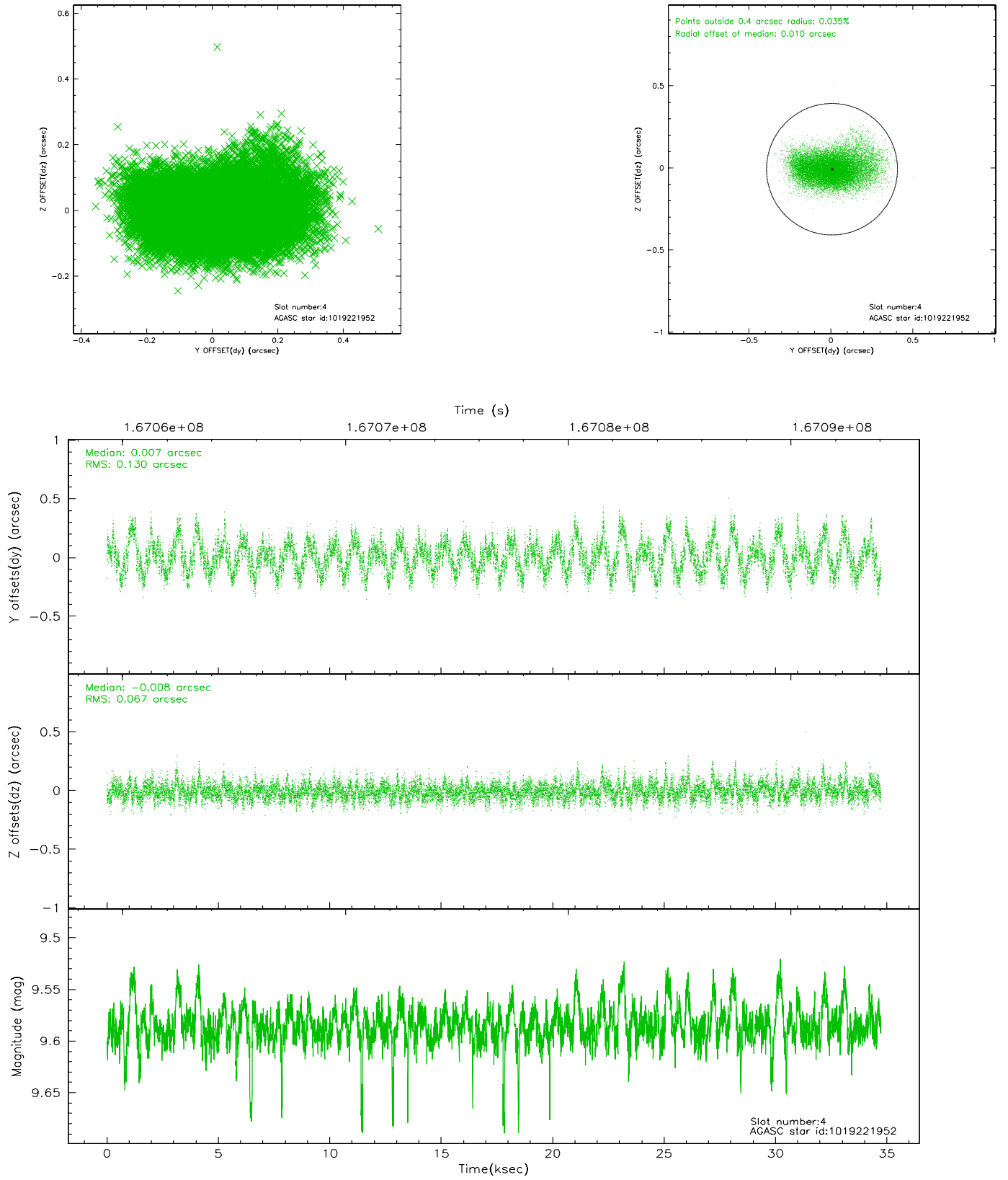


## 2.4 Star Slots

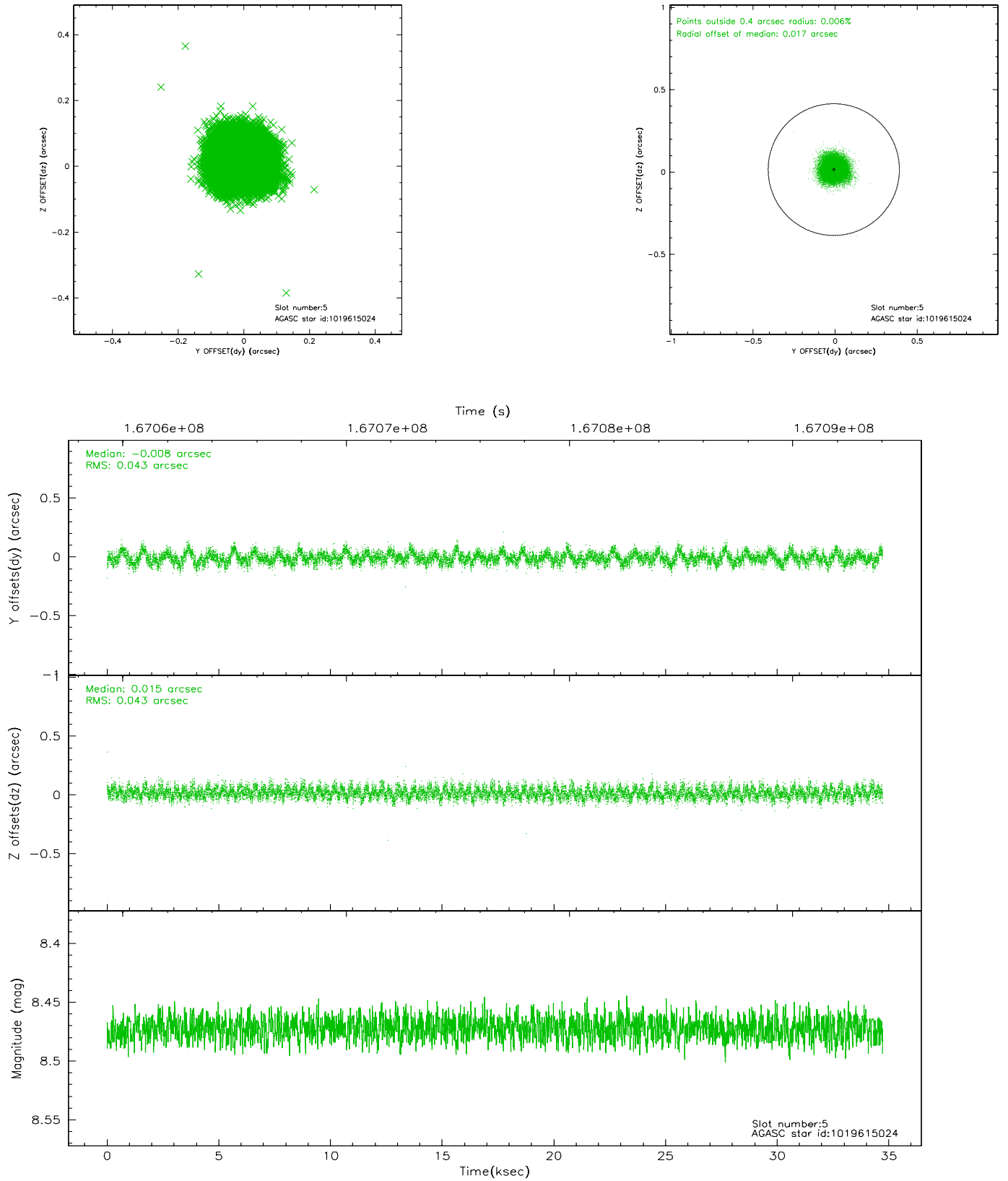
### 2.4.1 Slot 3



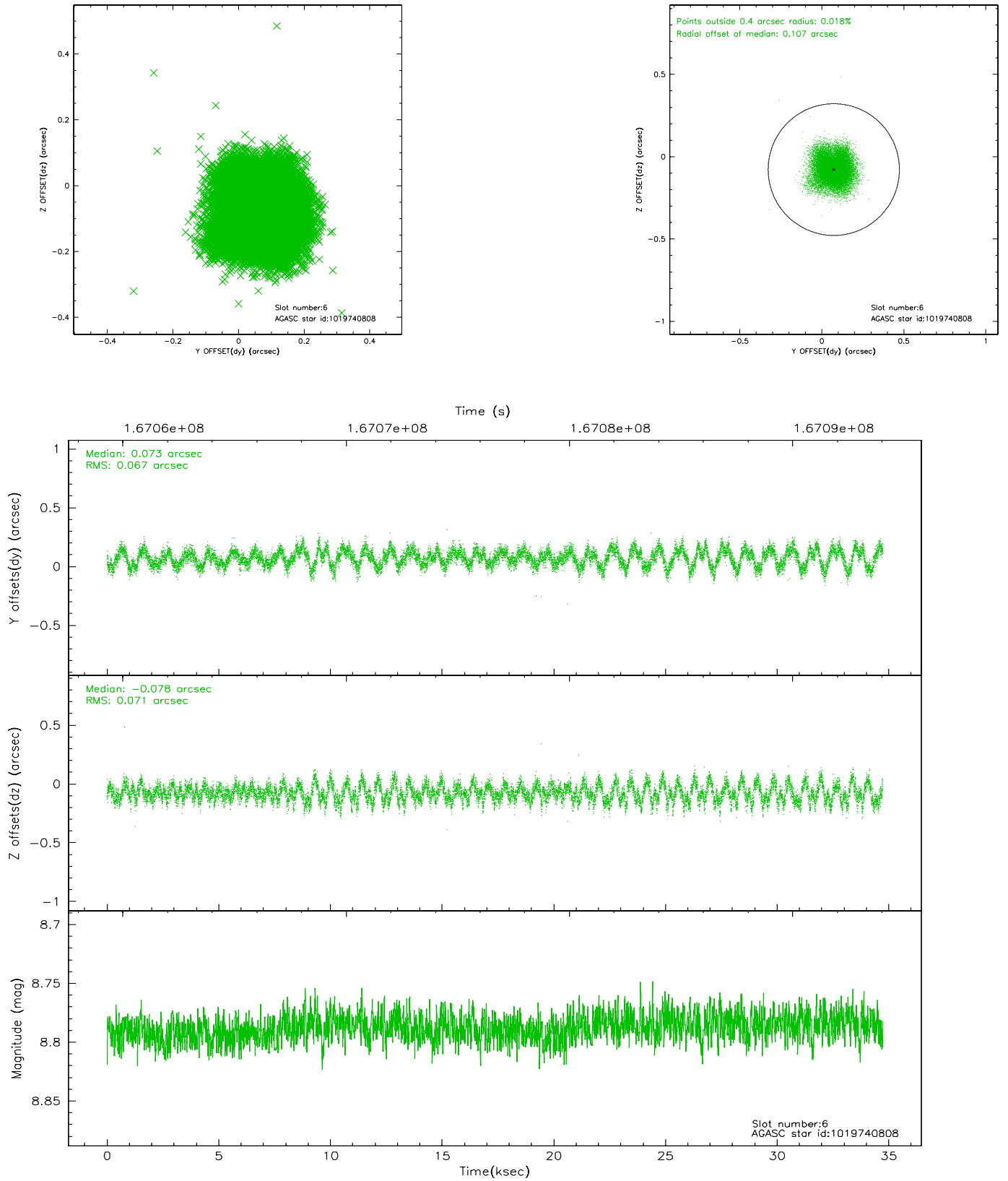
## 2.4.2 Slot 4



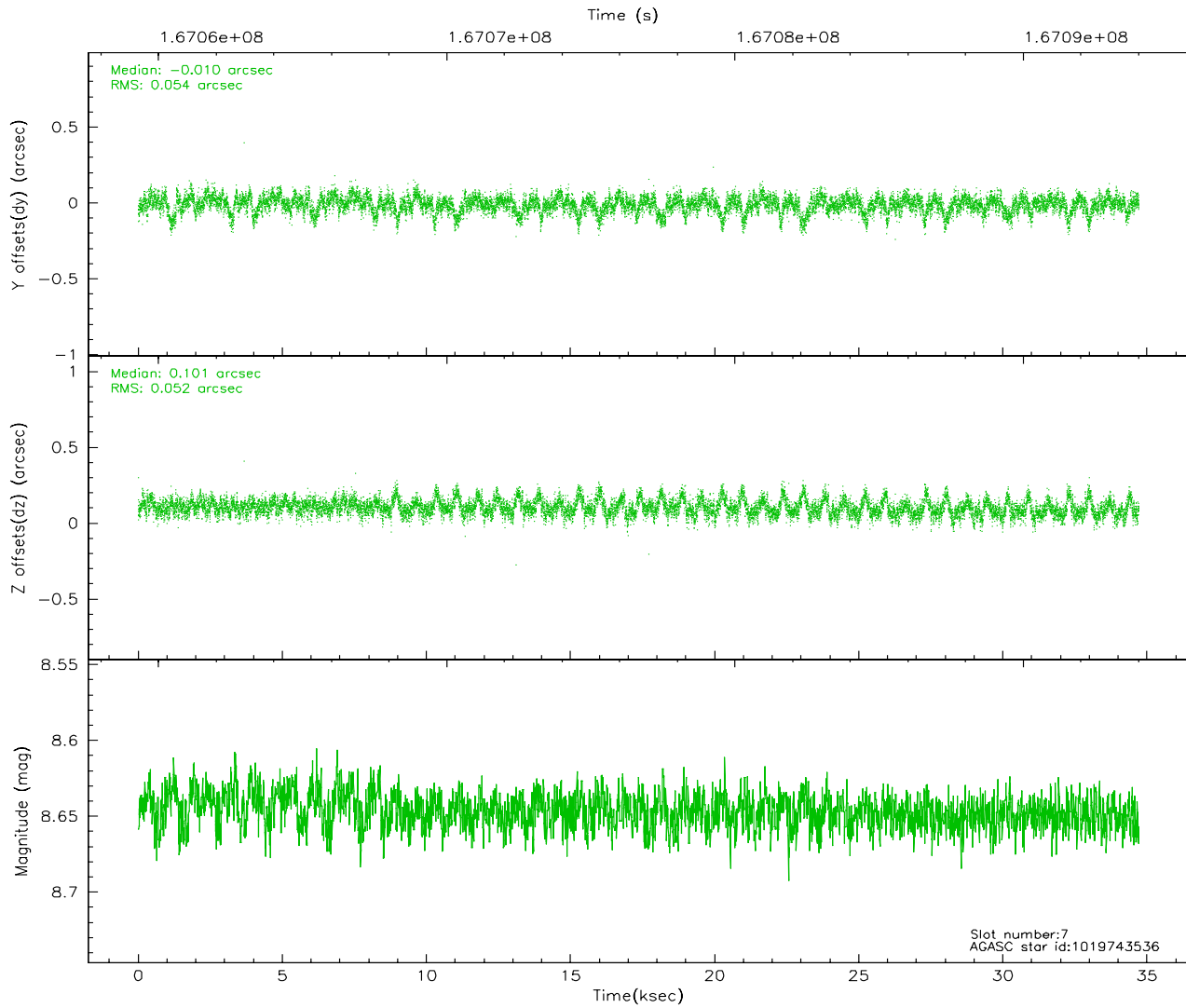
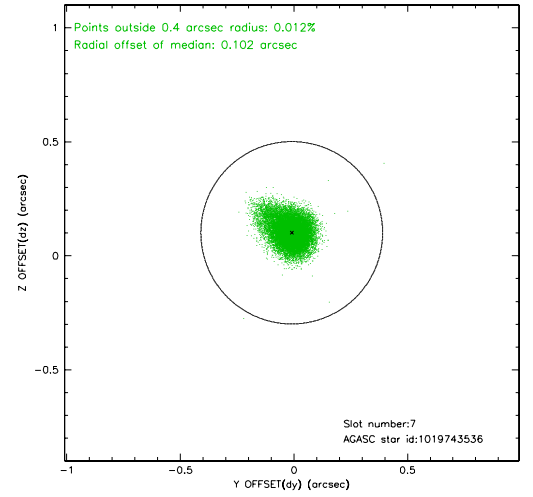
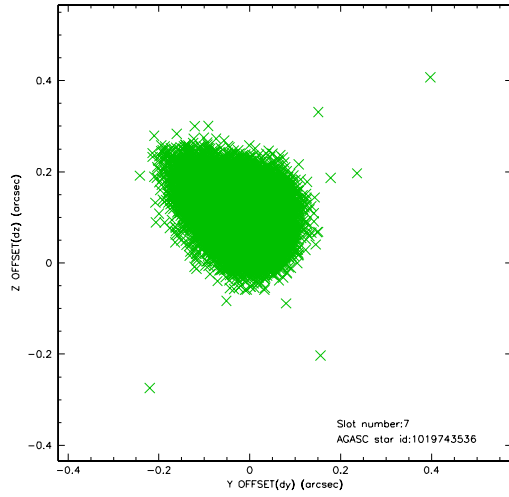
### 2.4.3 Slot 5



## 2.4.4 Slot 6

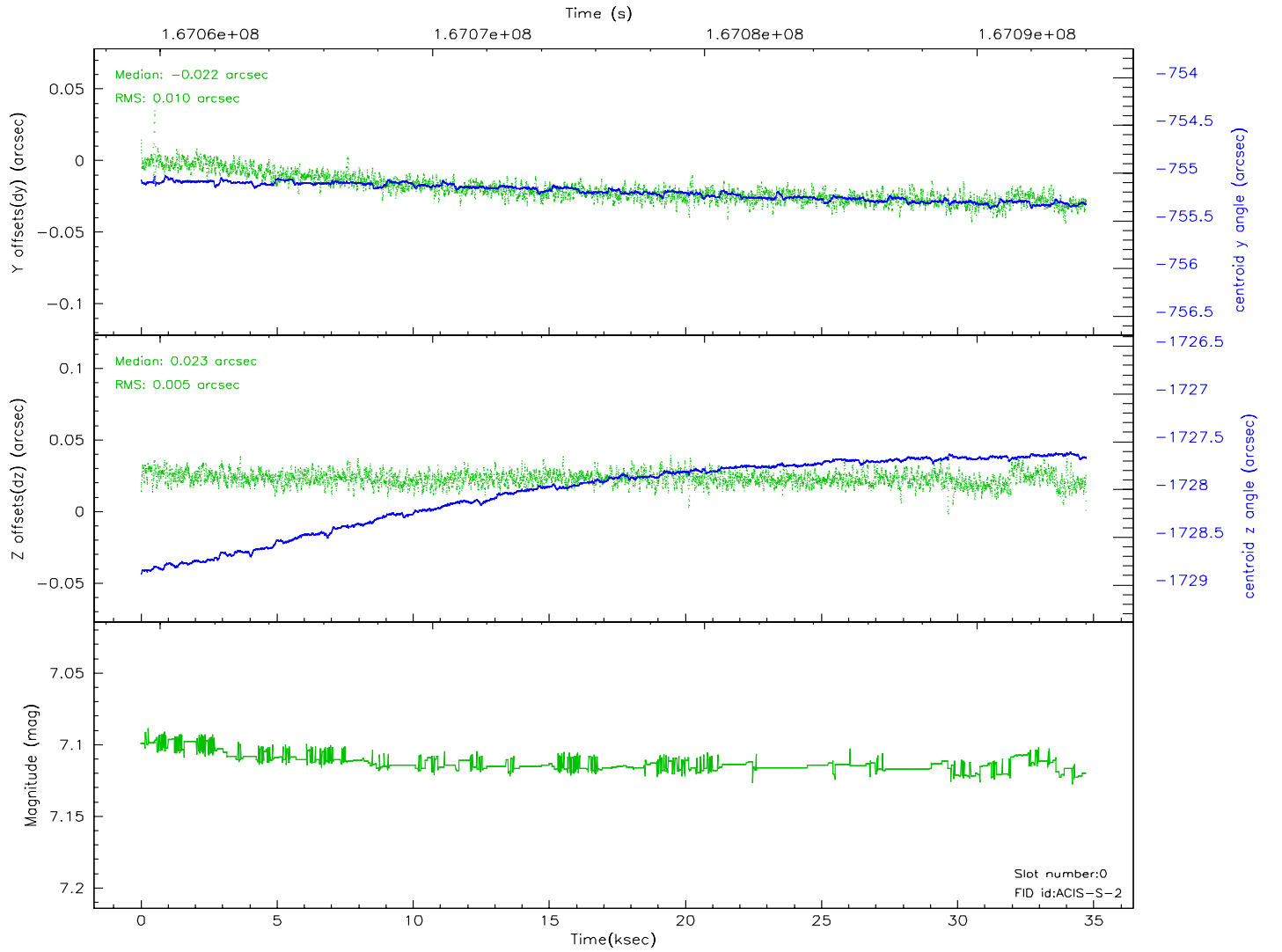
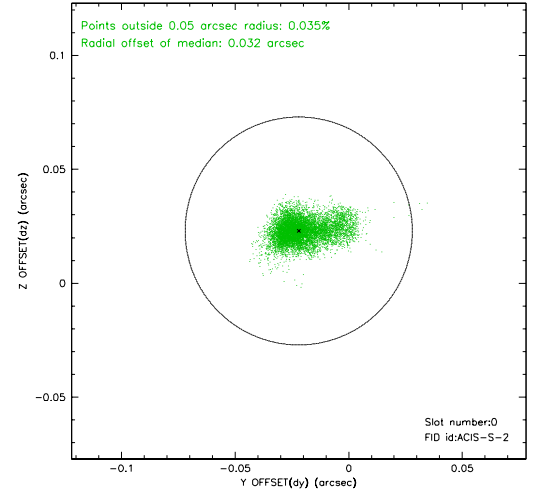
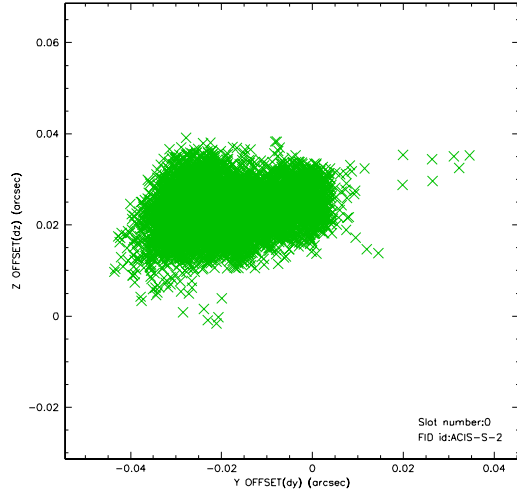


## 2.4.5 Slot 7

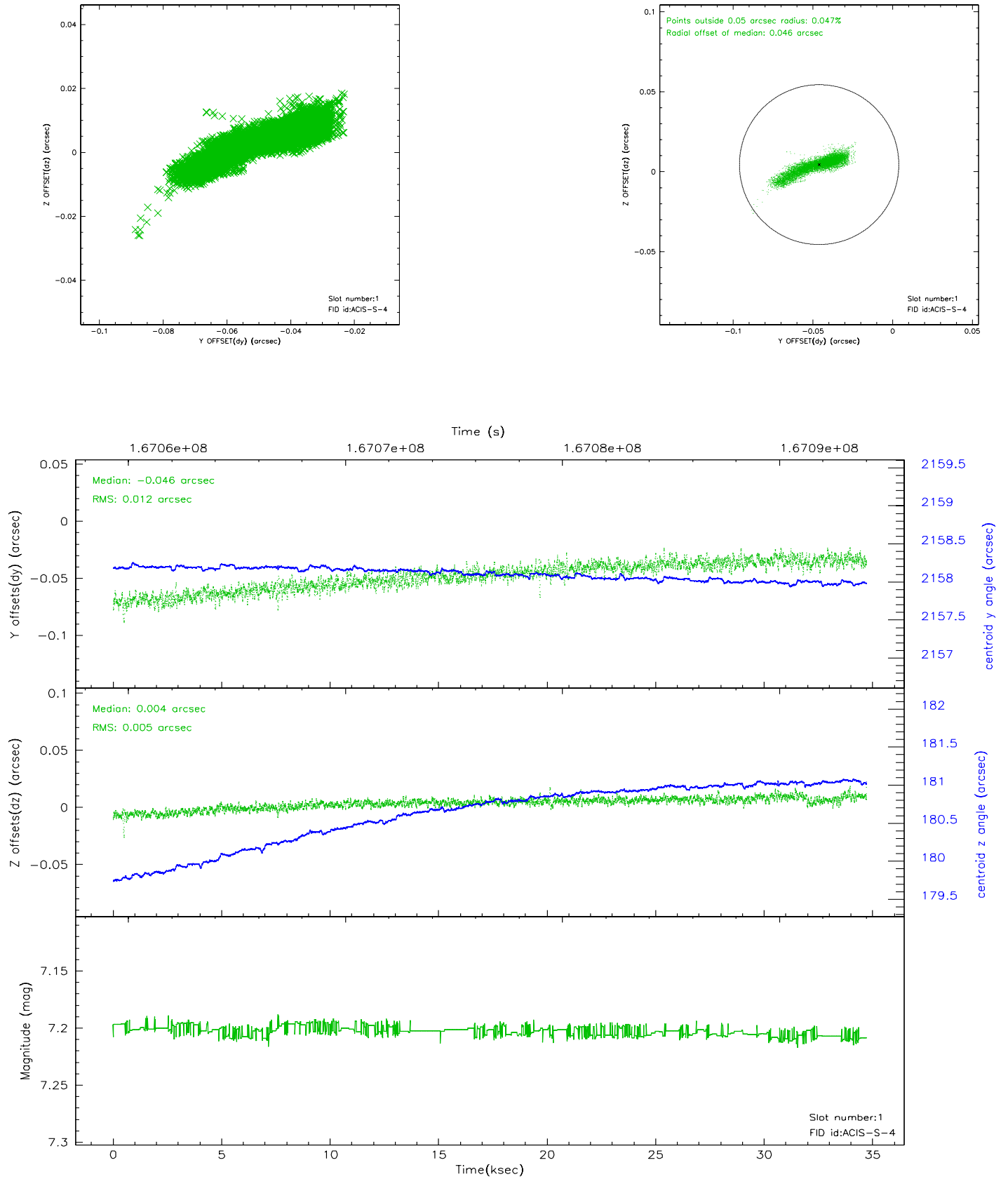


## 2.5 FID Slots

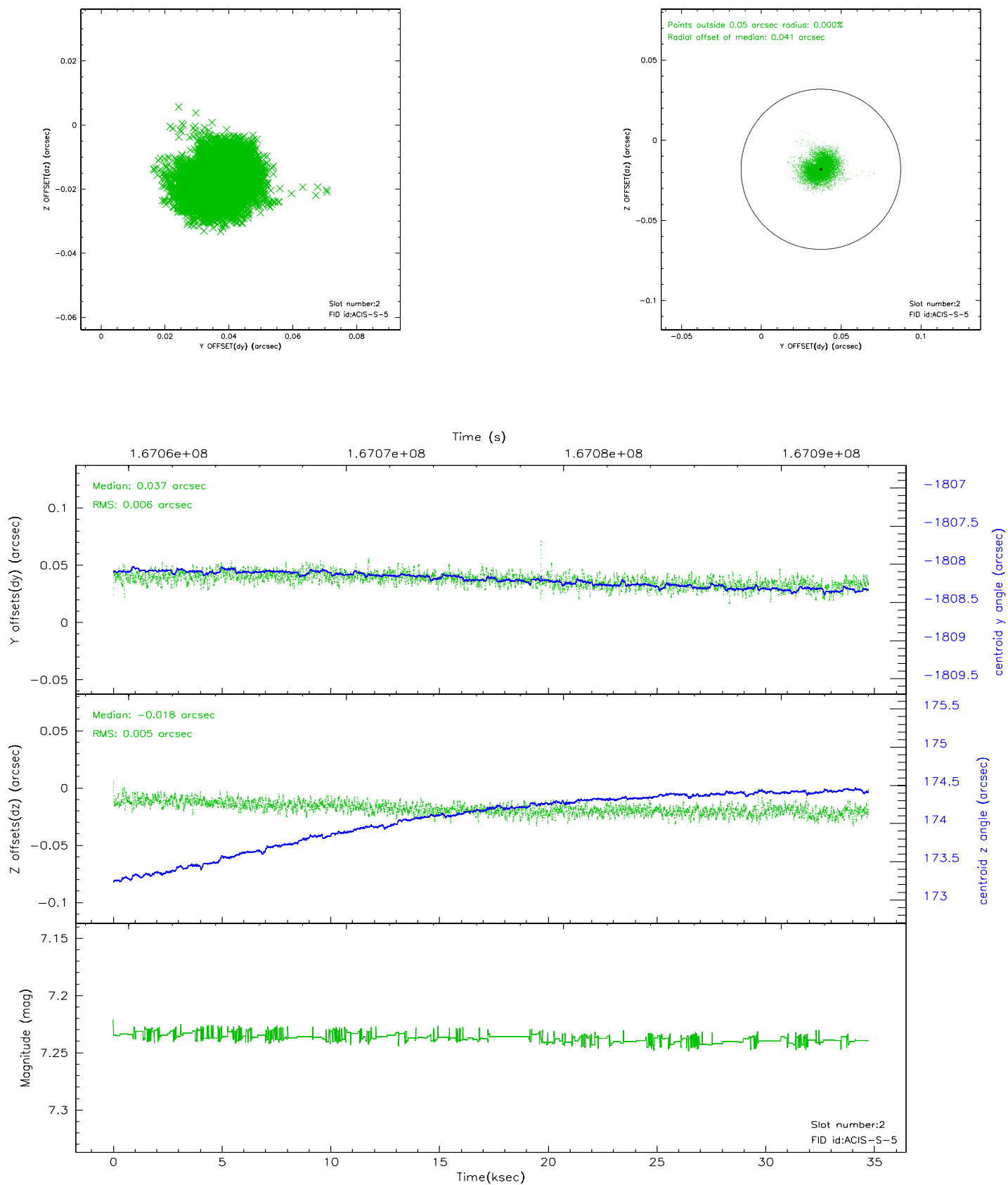
### 2.5.1 Slot 0



## 2.5.2 Slot 1

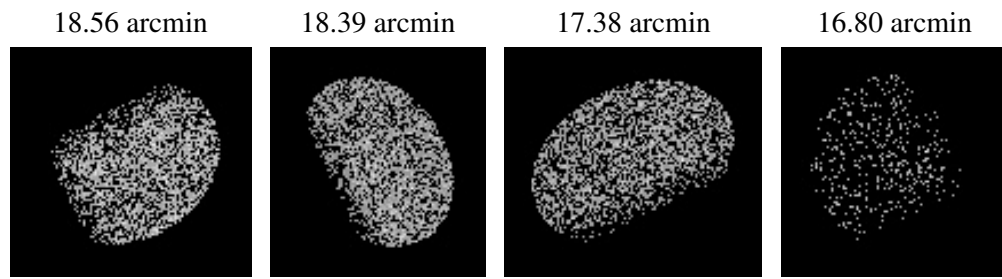


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2006.08.06    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 34.719        |

### A.2 Comments