

# V&V Reference Report

## L2 ASCDS Version : 7.6.8.1

Observation 3235 - L2 Version 001  
Chandra X-Ray Center

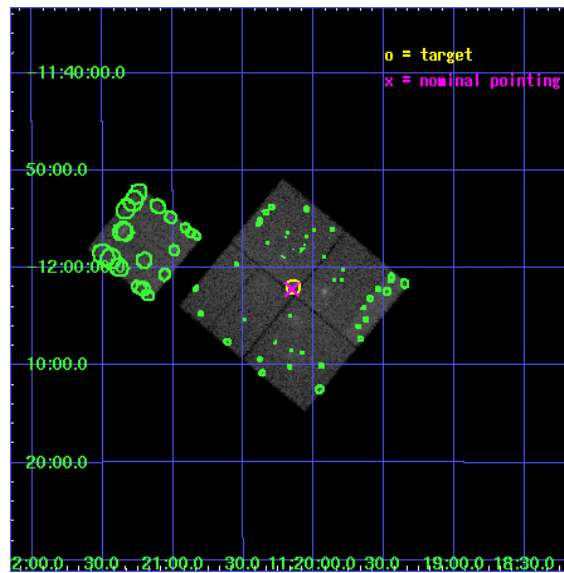
L2 Processing Date : Sep 8 2006

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# 1 Front

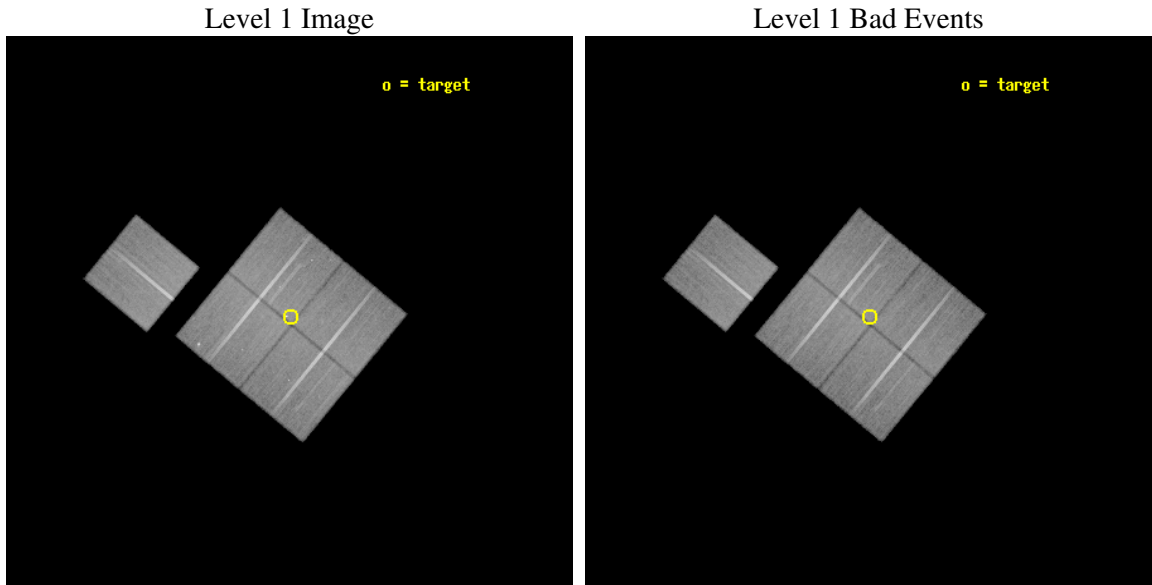
|          |  |
|----------|--|
| seq_num  | 800235   |
| obs_id   | 3235   |
| title    | A DETAILED STUDY OF THE SUPERCLUSTER SC1120-1202 AT $z=0.43$ |
| observer | DR. ANTHONY GONZALEZ   |
| object   | SC 1120-1202   |
| dtcycle  | 0  |
| cycle    | P  |
| ra_targ  | 170.0375   |
| dec_targ | -12.032778   |
| ra_nom   | 170.03886311476  |
| dec_nom  | -12.037257607081   |
| roll_nom | 309.54247730117  |
| revision | 2  |
| ontime   | 70131.13597402   |
| livetime | 69214.821052728  |
| ontime0  | 70134.276924446  |
| ontime1  | 70140.558894888  |
| ontime2  | 70124.853953913  |
| ontime3  | 70131.13597402   |
| ontime6  | 70137.417864799  |
| l2events | 170268   |



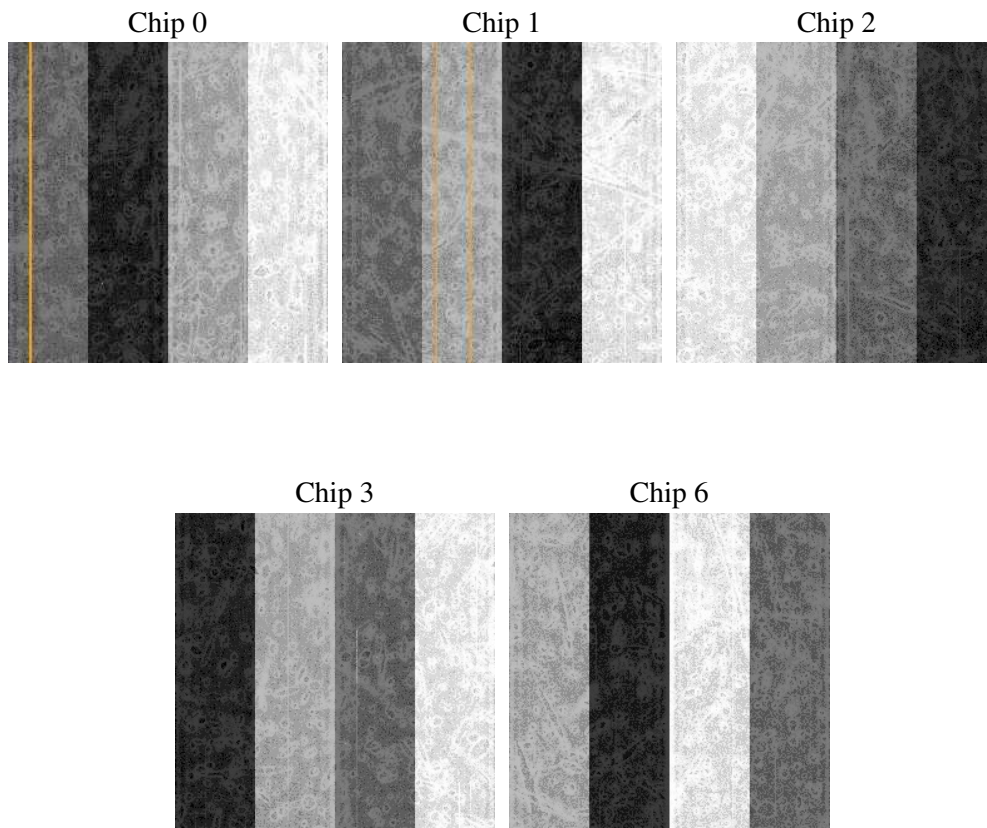
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 1                   |
| ascdsver | 7.6.8.1             |
| caldbver | 3.2.3               |
| date     | 2006-09-08T11:40:38 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 70000.000000    |
| ontime         | 71728.024649218 |
| ontime0        | 71746.870829582 |
| ontime1        | 71740.588640034 |
| ontime2        | 71718.60161905  |
| ontime3        | 71728.024649218 |
| ontime6        | 71753.152809948 |
| l1events       | 1832304         |

### 2.1.4 Events

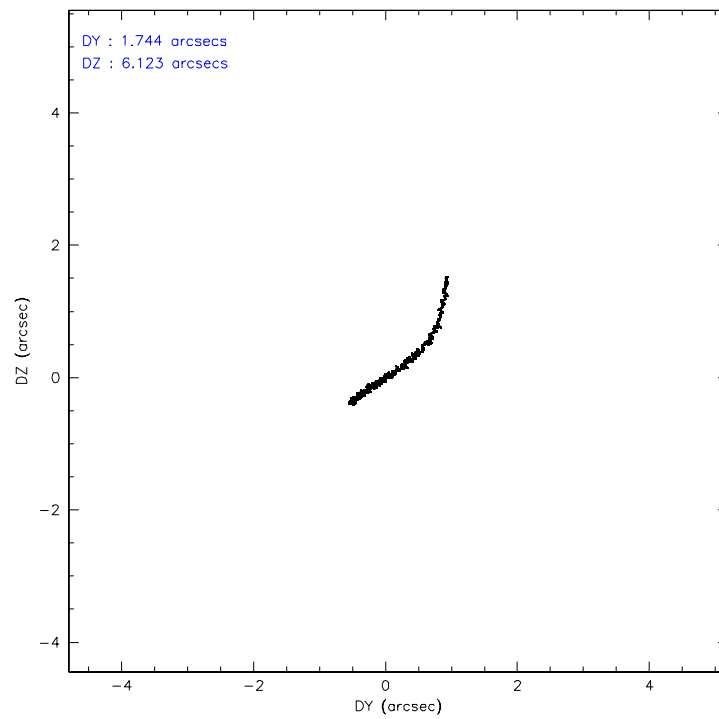
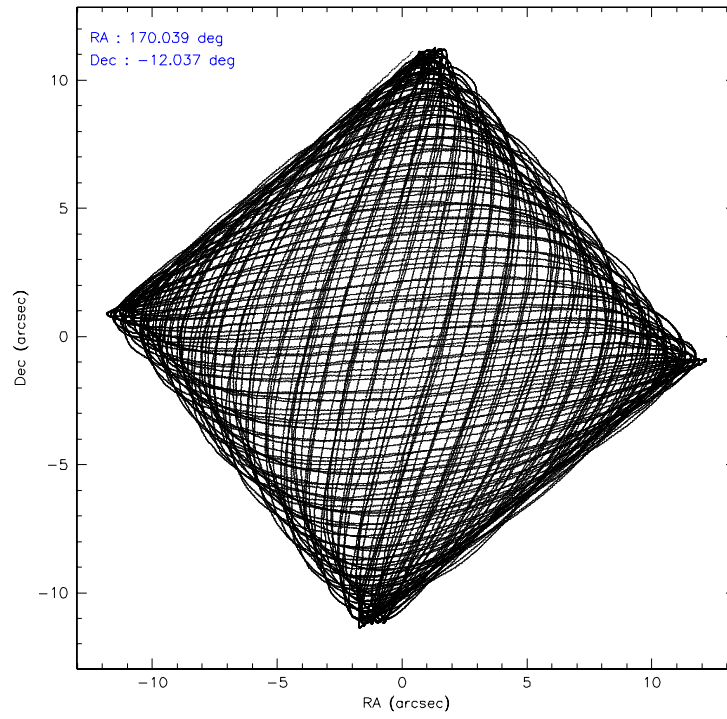
|                 | ccd 0  | ccd 1  | ccd 2  | ccd 3  | ccd 6  |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events  | 345014 | 349506 | 386138 | 373772 | 377874 |
| rejected events | 304002 | 304747 | 343425 | 334969 | 335189 |
| rejected %      | 88%    | 87%    | 88%    | 89%    | 88%    |

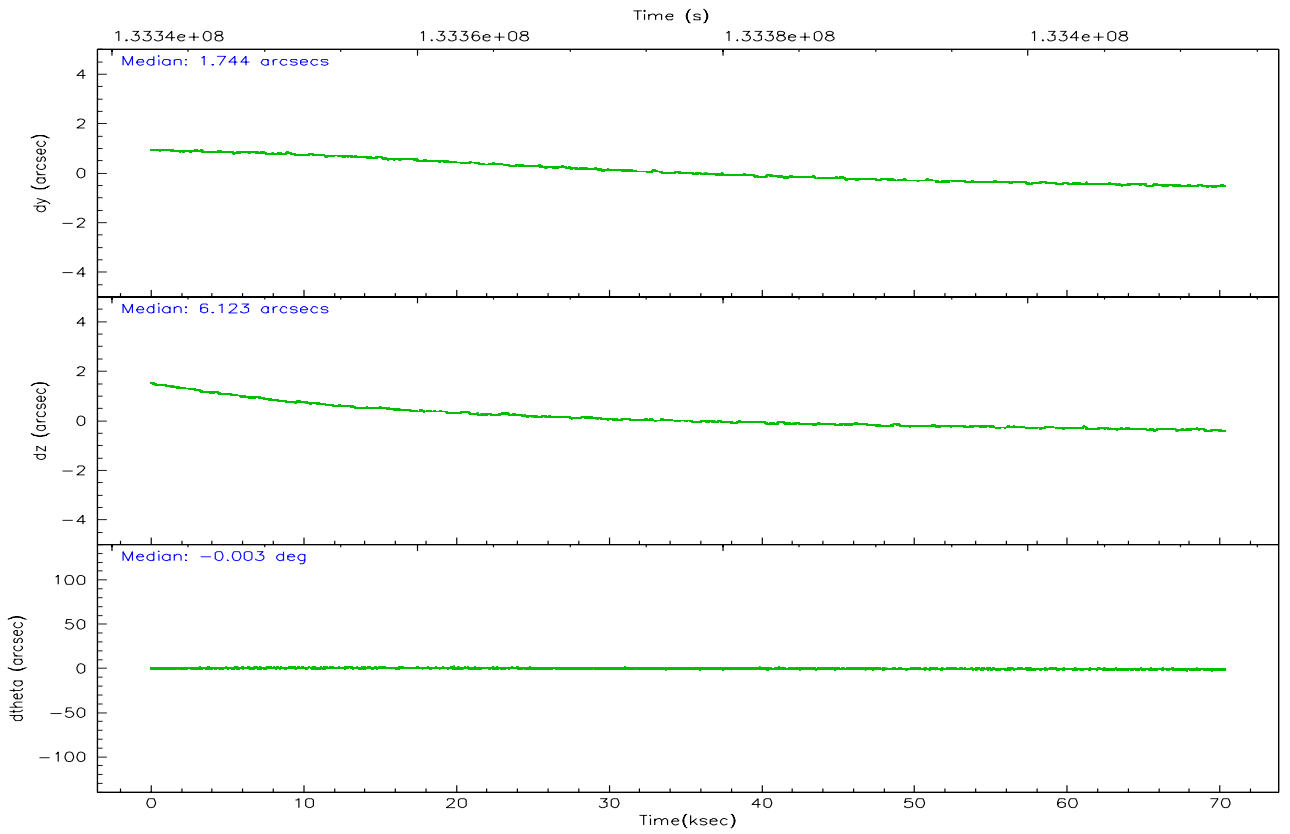
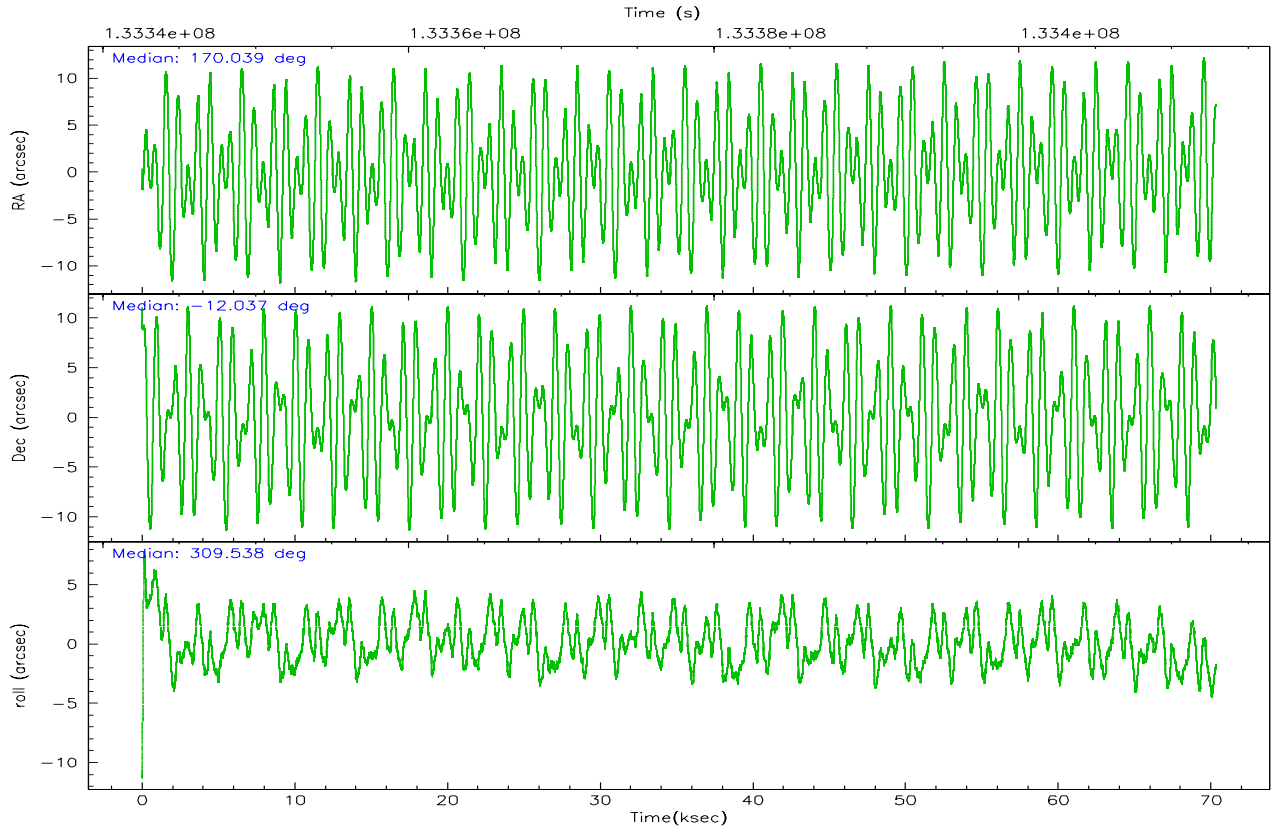
|                | ccd 0  | ccd 1  | ccd 2  | ccd 3  | ccd 6  |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 17339  | 18673  | 18735  | 17099  | 18473  |
|                | 5%     | 5%     | 4%     | 4%     | 4%     |
| grade 1 events | 197    | 176    | 168    | 175    | 169    |
|                | 0%     | 0%     | 0%     | 0%     | 0%     |
| grade 2 events | 9439   | 9332   | 9679   | 7779   | 8847   |
|                | 2%     | 2%     | 2%     | 2%     | 2%     |
| grade 3 events | 4217   | 4812   | 3902   | 3934   | 4412   |
|                | 1%     | 1%     | 1%     | 1%     | 1%     |
| grade 4 events | 3970   | 4494   | 4255   | 3872   | 4104   |
|                | 1%     | 1%     | 1%     | 1%     | 1%     |
| grade 5 events | 11508  | 12619  | 10931  | 12834  | 13141  |
|                | 3%     | 3%     | 2%     | 3%     | 3%     |
| grade 6 events | 6859   | 8301   | 6995   | 6882   | 7704   |
|                | 1%     | 2%     | 1%     | 1%     | 2%     |
| grade 7 events | 291485 | 291099 | 331473 | 321197 | 321024 |
|                | 84%    | 83%    | 85%    | 85%    | 84%    |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual                | Parameter                       | Planned   | Actual  |
|-----------------------------------|---------------------|-----------------------|---------------------------------|-----------|---------|
| Instrument                        | ACIS                | ACIS                  | Obspar format version number    | 6         | 6       |
| Detector                          | ACIS-01236          | ACIS-01236            | 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                       | 170.012580          | 170.03886311476       | Alternating exposures requested | N         | N       |
| Pointing Dec                      | -12.027747          | -12.03725760708058    | Primary exposure time           | 0.000000  | 3.1     |
| Pointing Roll                     | 309.328318          | 309.5424773011717     |                                 |           |         |
| SIM focus pos (mm)                | -0.782348           | -0.7809083437167272   |                                 |           |         |
| SIM defocus (mm)                  | 0                   | 0.001439871863259334  |                                 |           |         |
| SIM translation stage pos (mm)    | -233.592463         | -233.5874344608287    |                                 |           |         |
| SIM translation stage offset (mm) | 0                   | -0.005018542100998502 |                                 |           |         |
| Observation start time            | 133342707.184000    | 133340868.48626       |                                 |           |         |
| Observation start date            | 2002-03-24T07:37:23 | 2002-03-24T07:07:48   |                                 |           |         |
| Observation end time              | 133412707.184000    | 133413218.11419       |                                 |           |         |
| Observation end date              | 2002-03-25T03:04:03 | 2002-03-25T03:13:38   |                                 |           |         |
| Read mode                         | TIMED               | TIMED                 |                                 |           |         |

## 2.3 Aspect



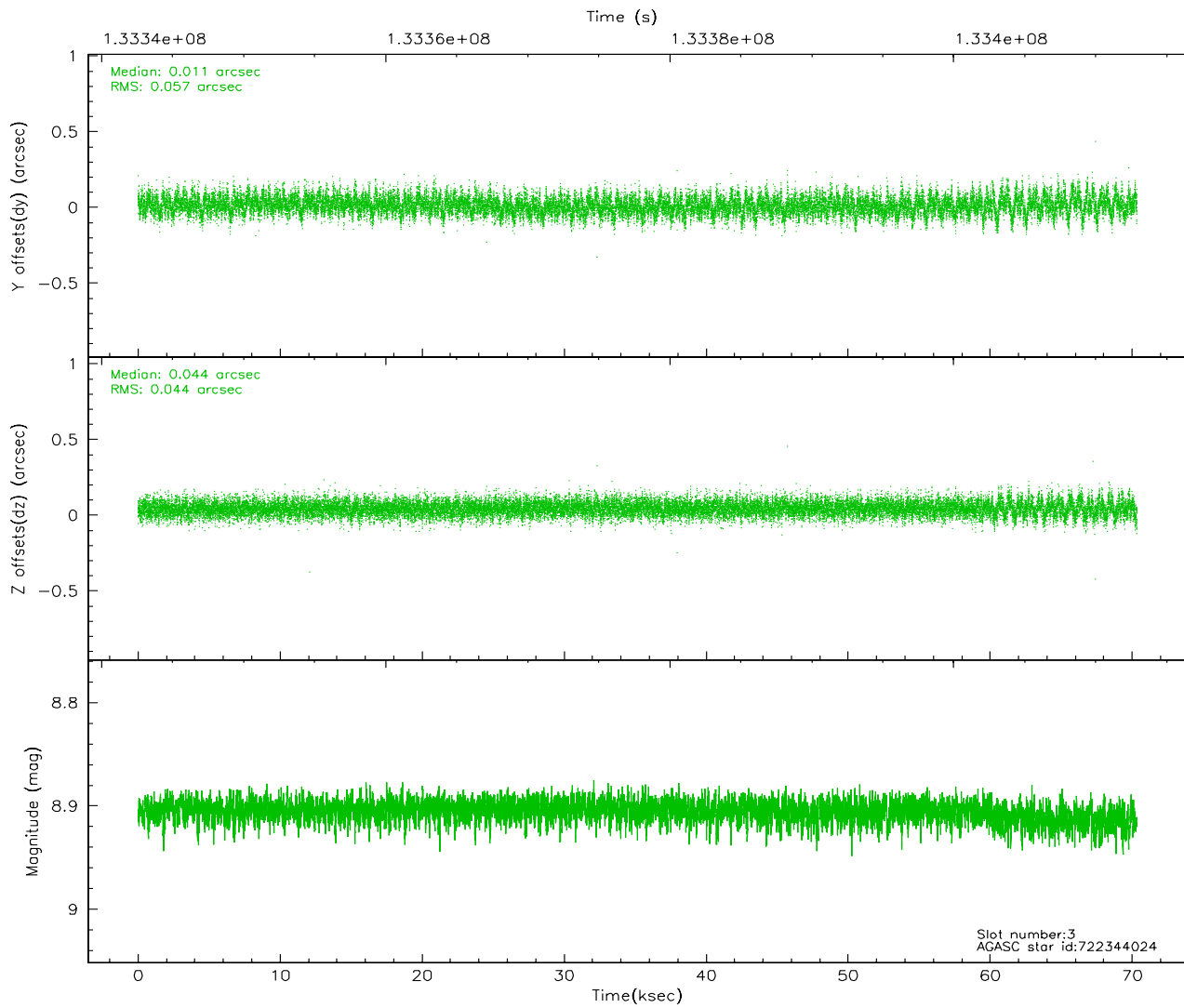
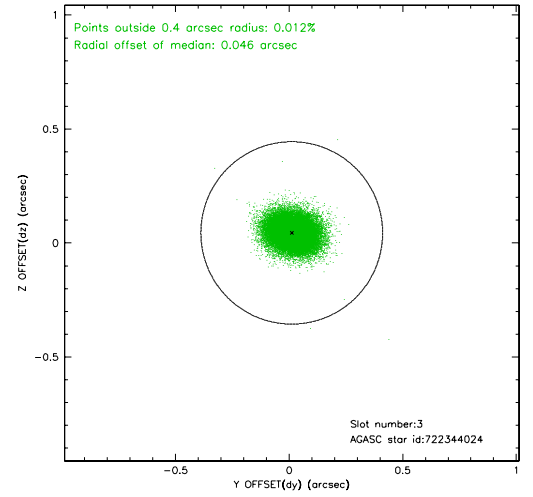
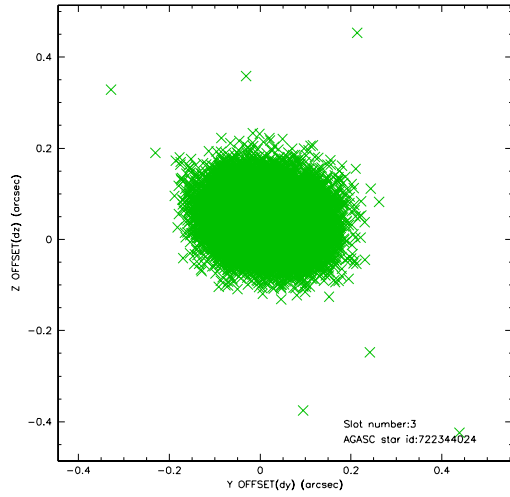


### Slot Statistics

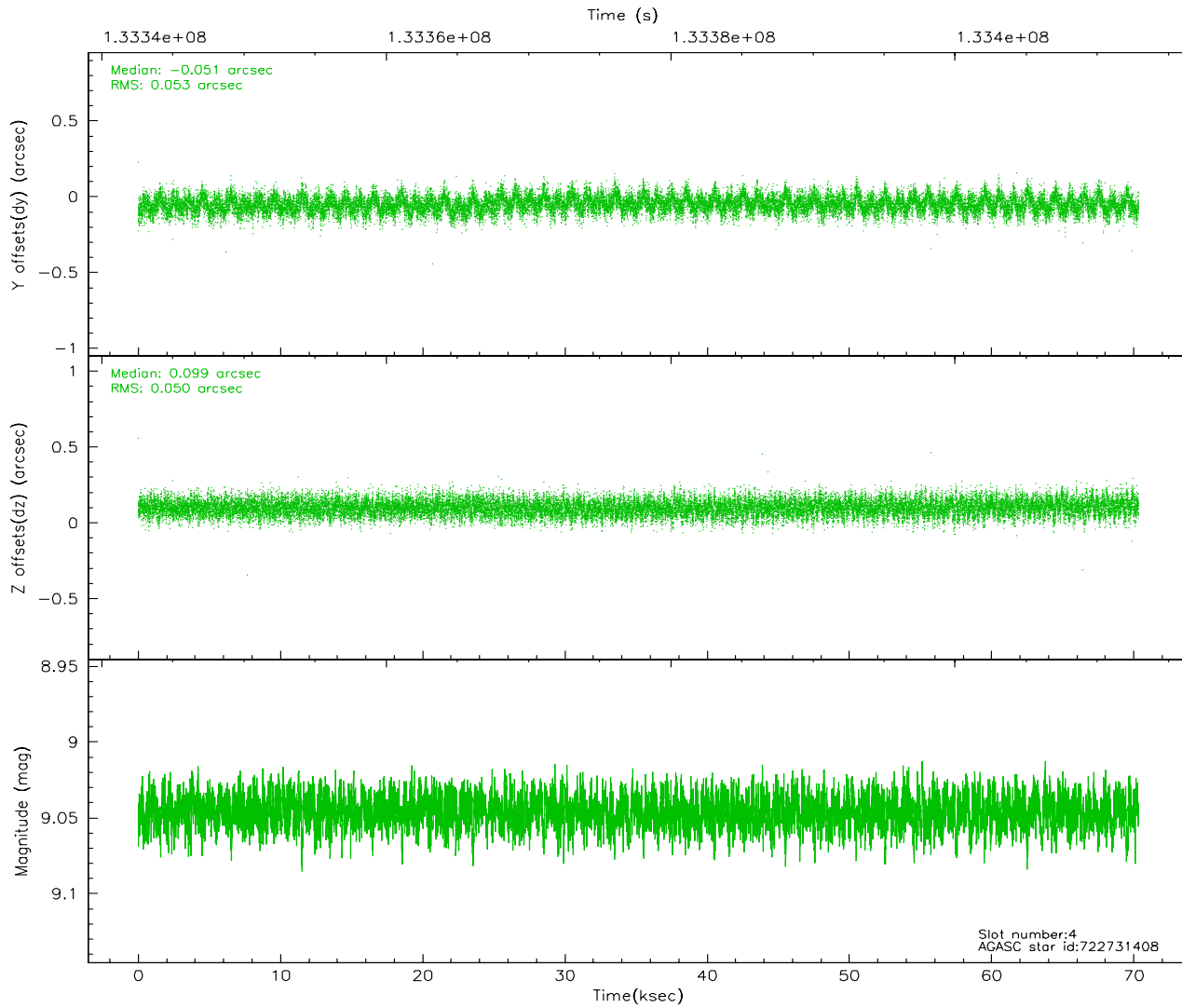
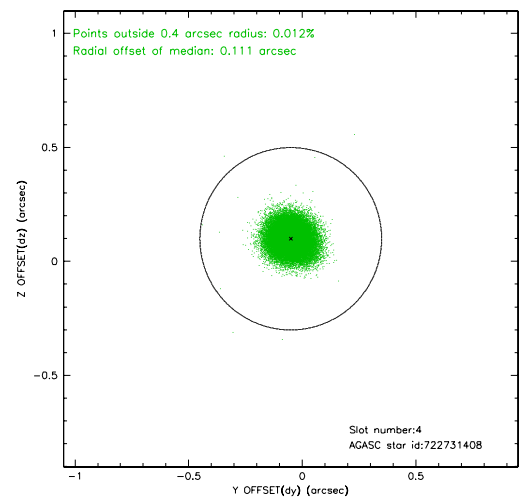
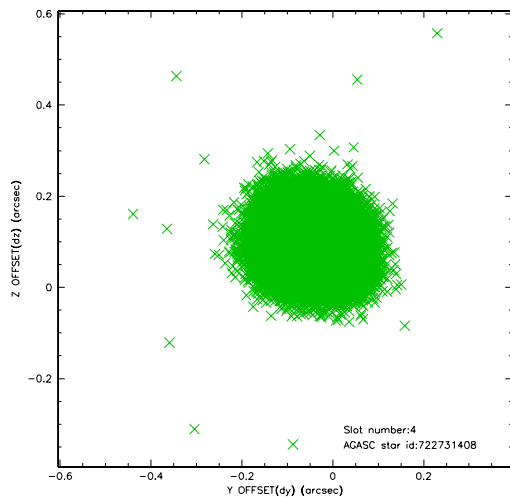
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec        | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0    | FID    | ACIS-I-3  | 7.45 | 17154 | -0.040 | 0.181  | 0.012 | 0.029 | 0.000000   | 0.000000   | 55.37    | -962.70  |
| 1    | FID    | ACIS-I-5  | 7.24 | 17156 | -0.026 | -0.009 | 0.013 | 0.018 | 0.000000   | 0.000000   | -1810.25 | 1067.83  |
| 2    | FID    | ACIS-I-6  | 7.27 | 17157 | -0.024 | -0.098 | 0.020 | 0.046 | 0.000000   | 0.000000   | 403.54   | 1712.20  |
| 3    | GUIDE  | 722344024 | 8.91 | 34304 | 0.011  | 0.044  | 0.075 | 0.127 | 169.755384 | -11.417763 | -2273.16 | 688.55   |
| 4    | GUIDE  | 722731408 | 9.05 | 34306 | -0.051 | 0.099  | 0.078 | 0.126 | 170.135206 | -12.674302 | 2073.84  | -1142.58 |
| 5    | GUIDE  | 722346384 | 8.76 | 34295 | -0.048 | -0.019 | 0.064 | 0.104 | 169.920149 | -11.764801 | -938.26  | 347.04   |
| 6    | GUIDE  | 722339808 | 9.36 | 34301 | 0.069  | -0.079 | 0.087 | 0.140 | 170.228918 | -12.169141 | 876.88   | 265.37   |
| 7    | GUIDE  | 722340624 | 9.31 | 34239 | 0.017  | -0.044 | 0.080 | 0.132 | 169.850762 | -12.146776 | -28.84   | -712.99  |

## 2.4 Star Slots

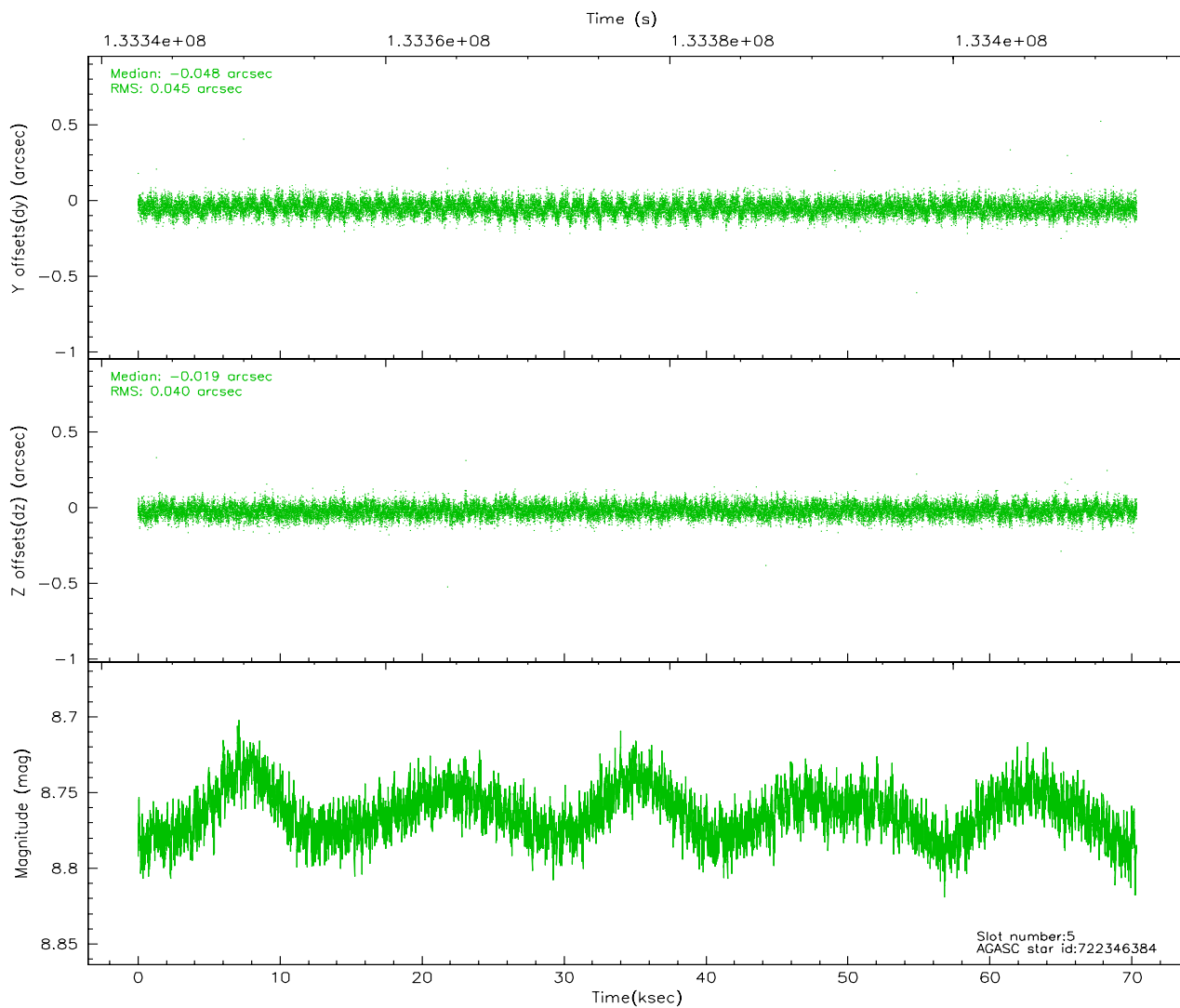
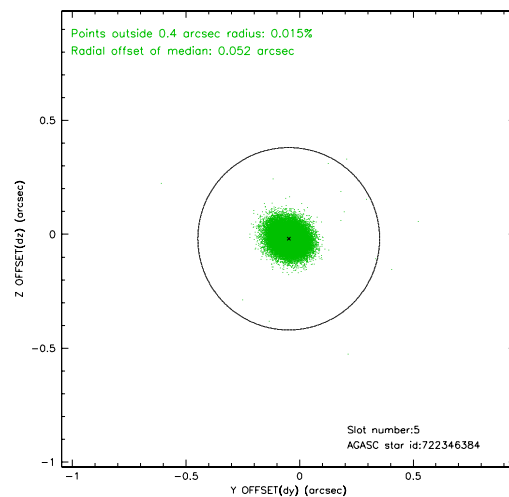
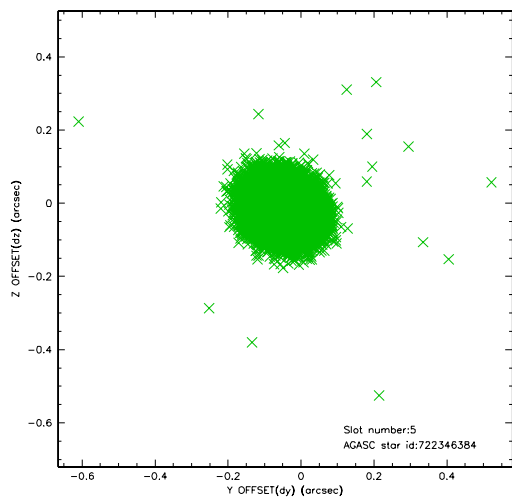
### 2.4.1 Slot 3



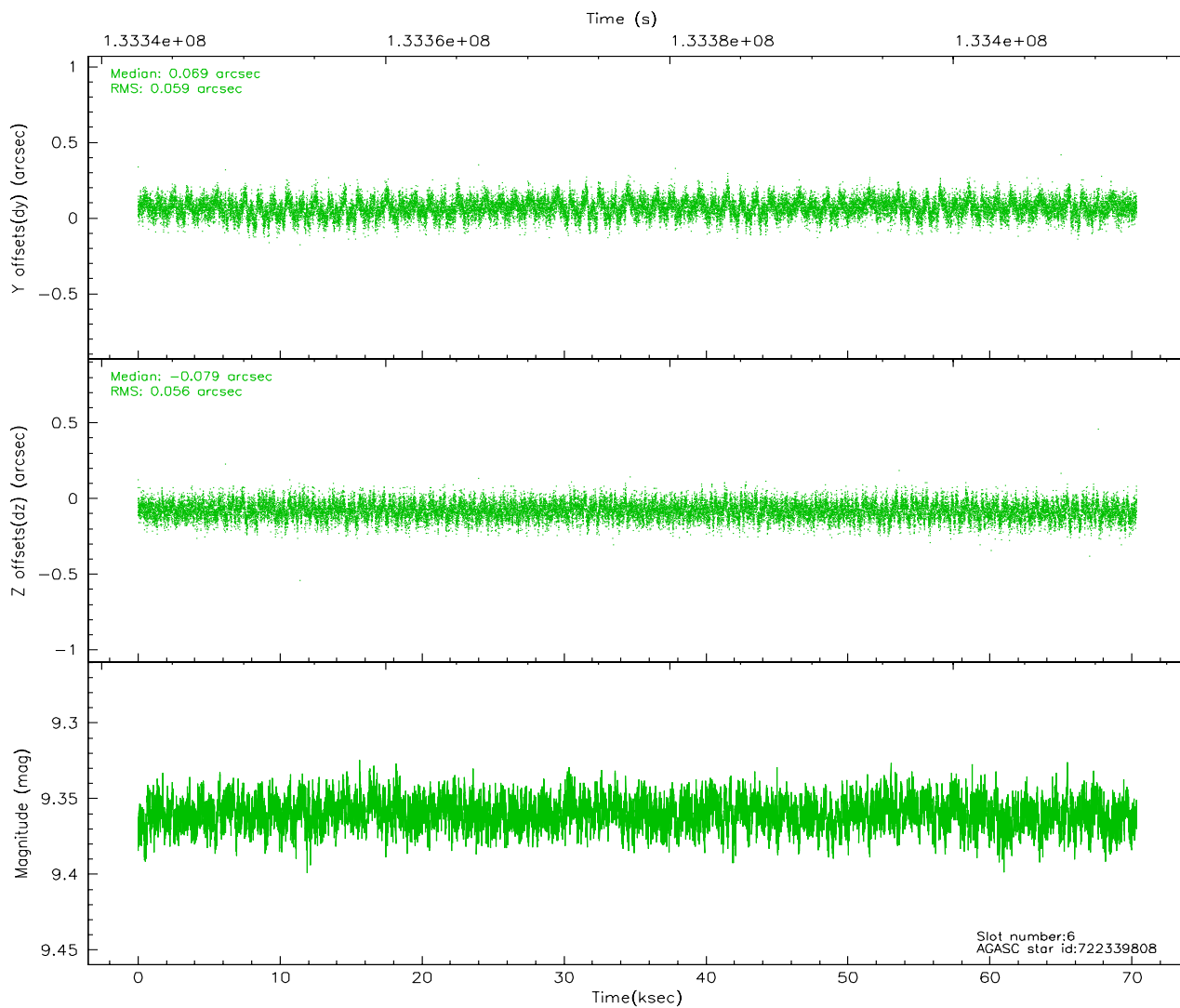
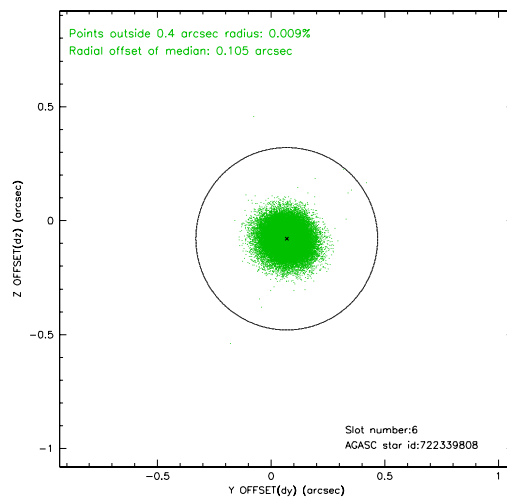
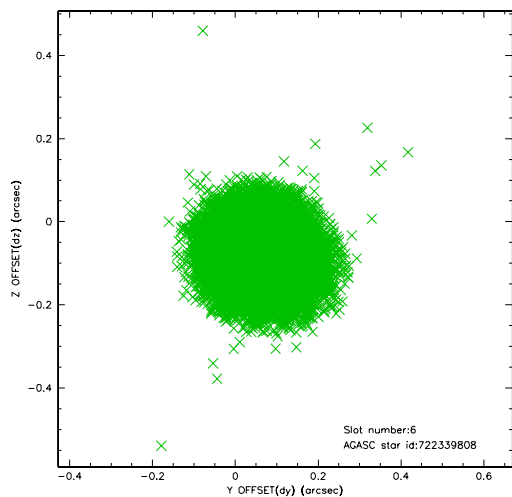
## 2.4.2 Slot 4



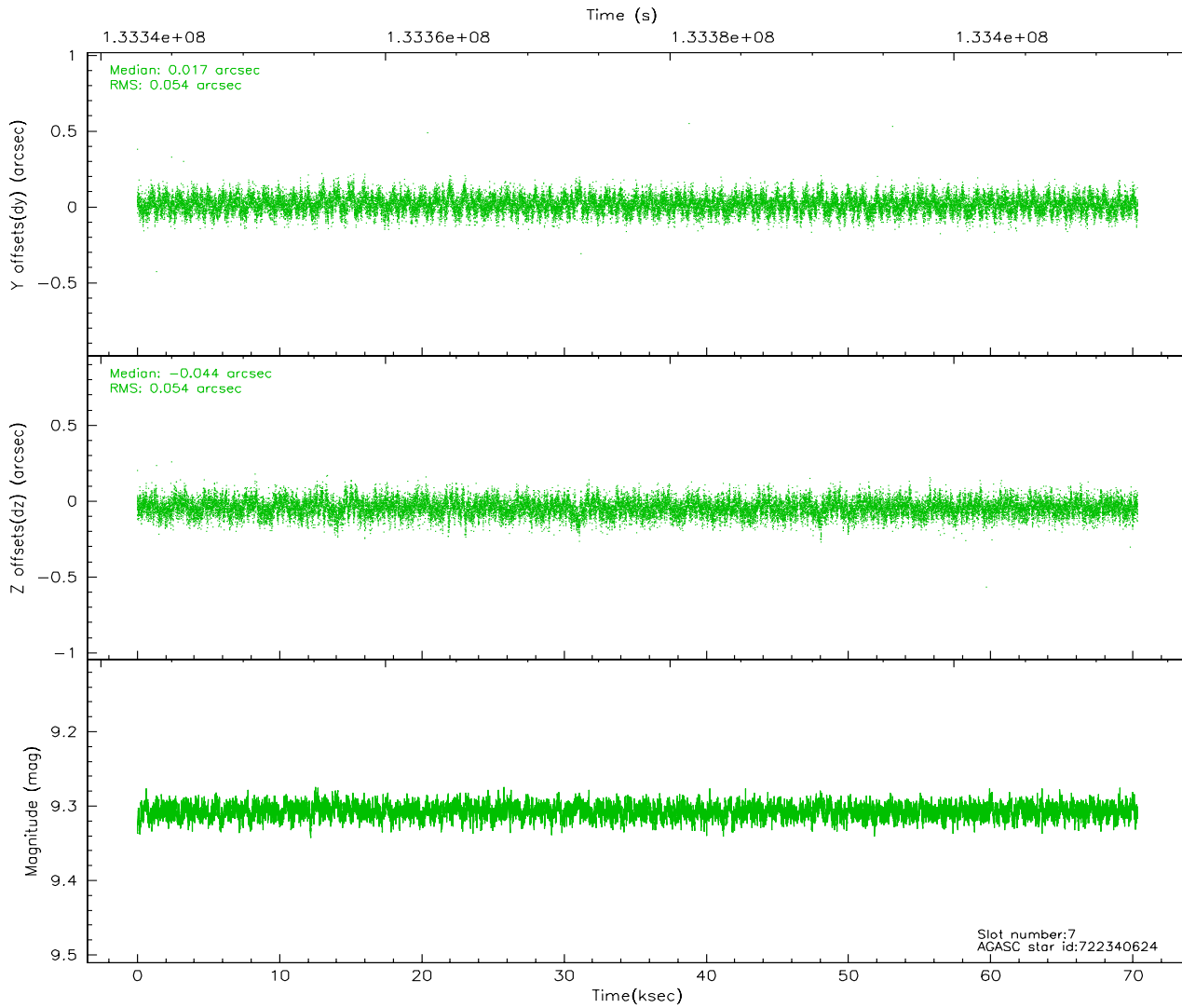
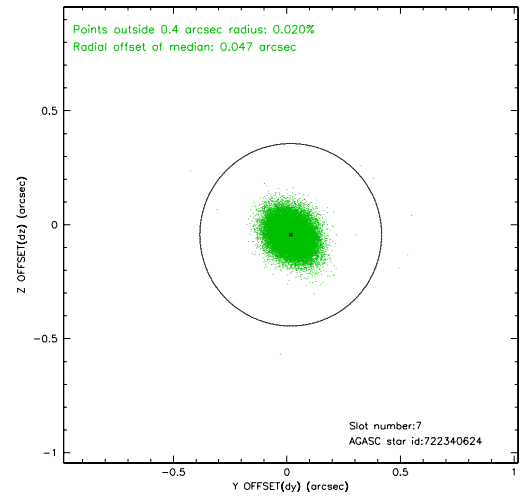
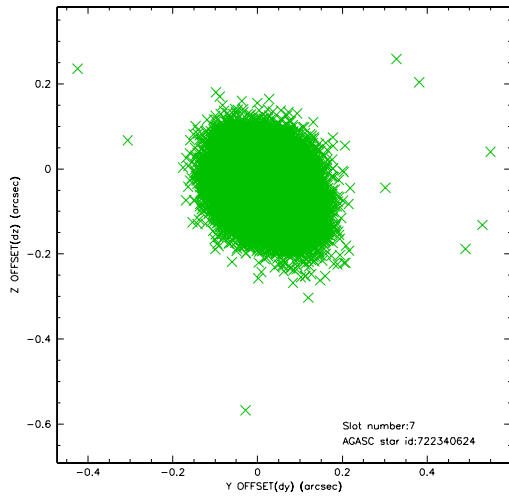
### 2.4.3 Slot 5



### 2.4.4 Slot 6

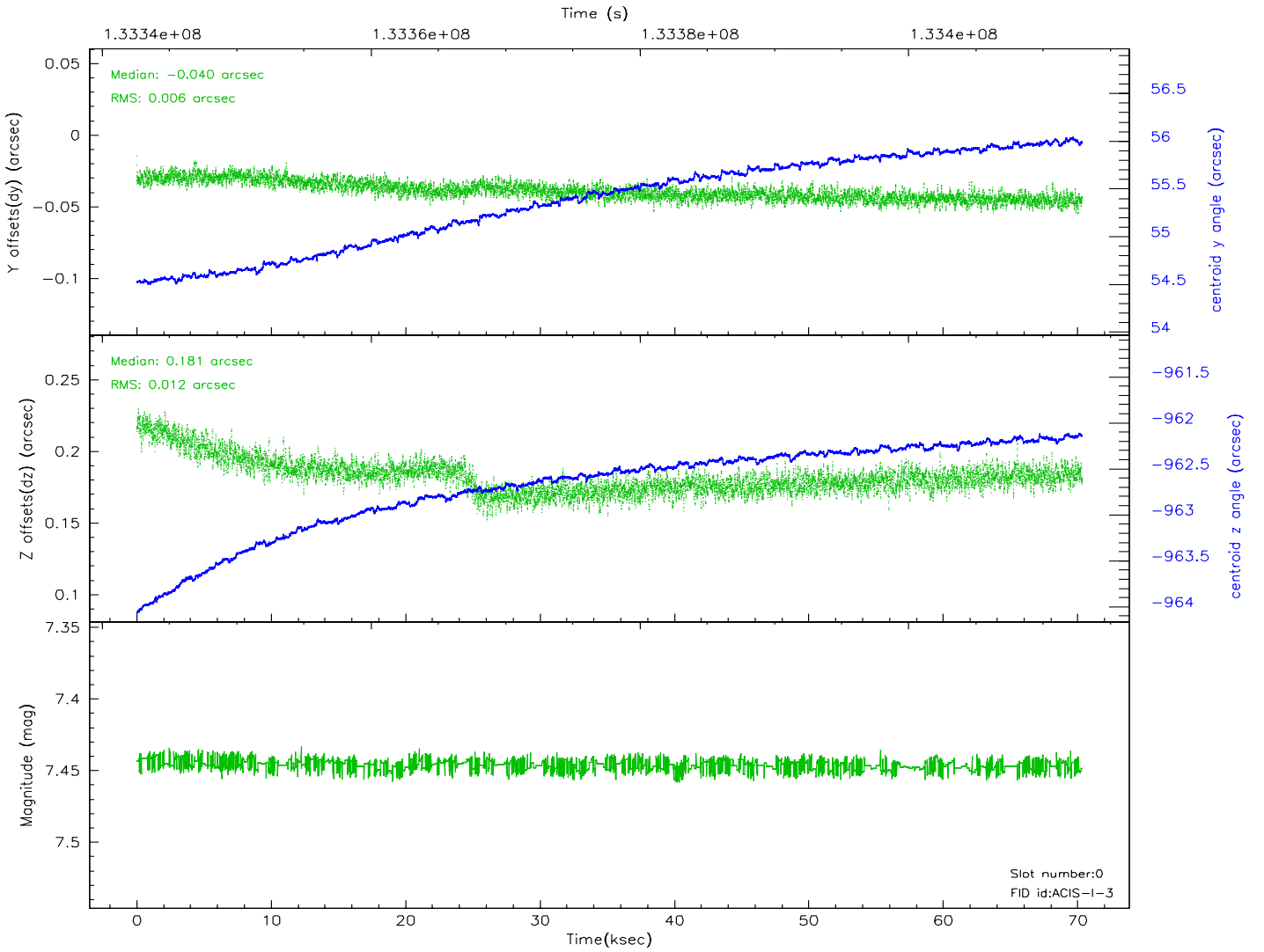
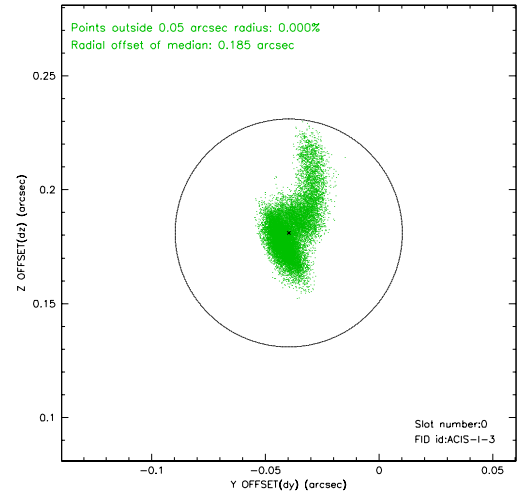
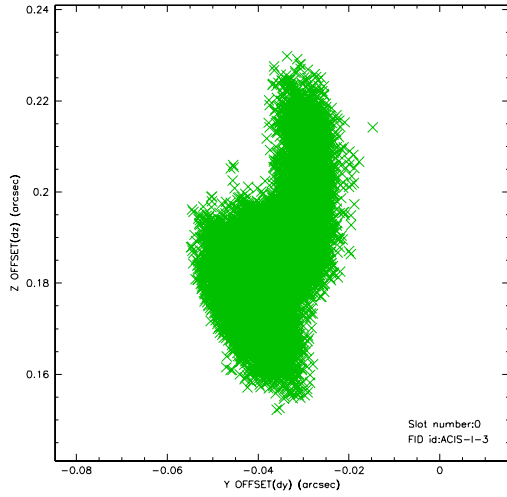


### 2.4.5 Slot 7

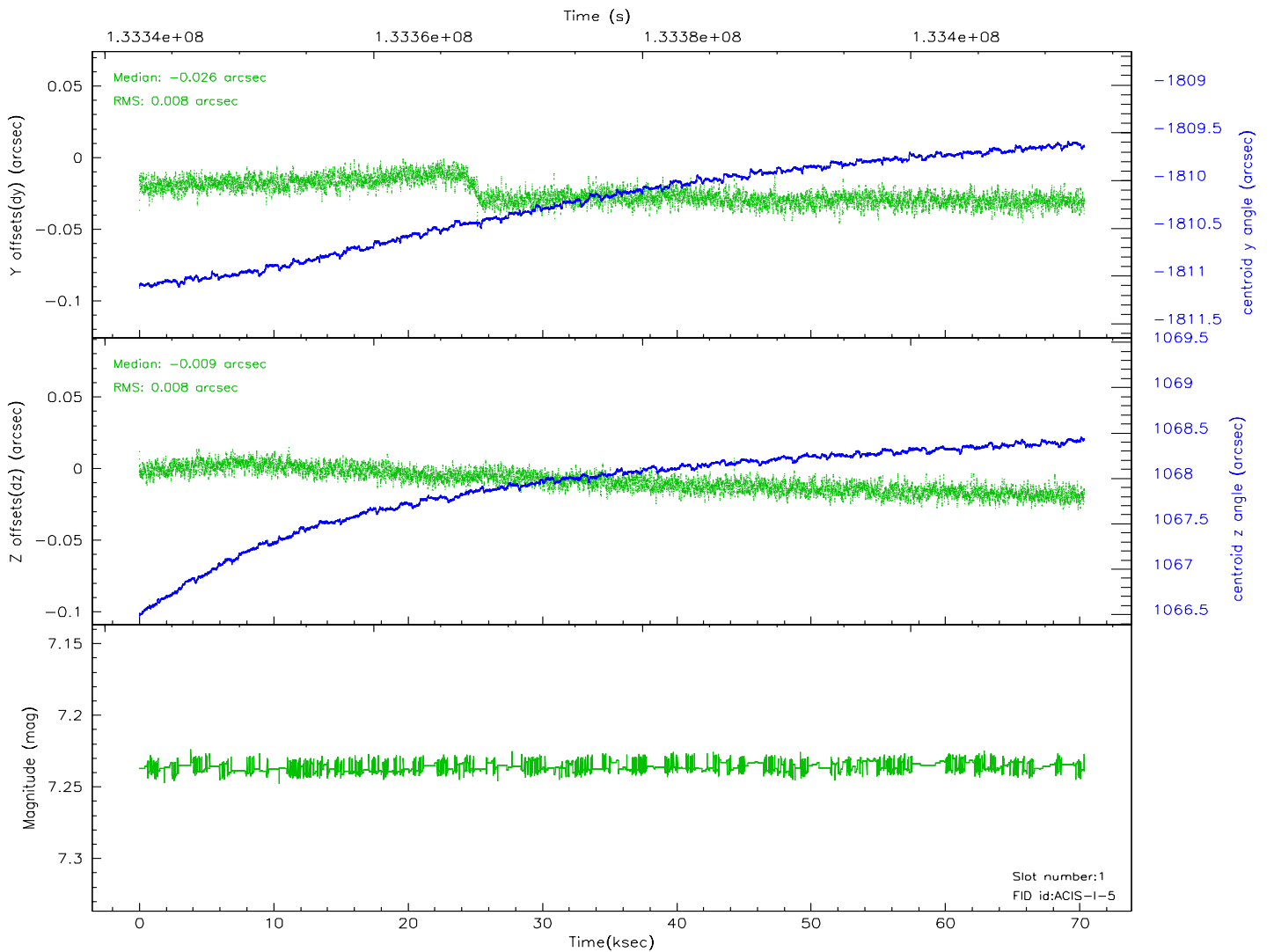
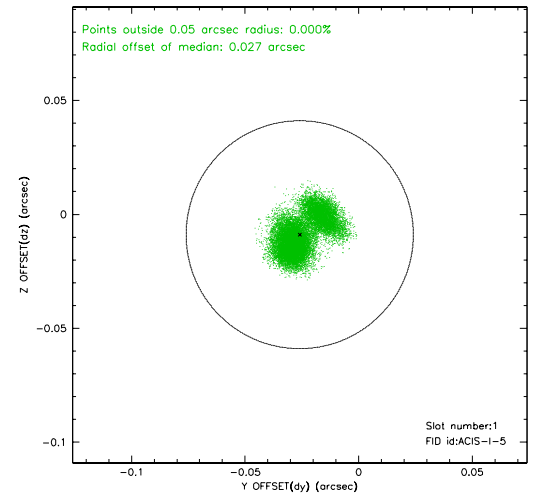
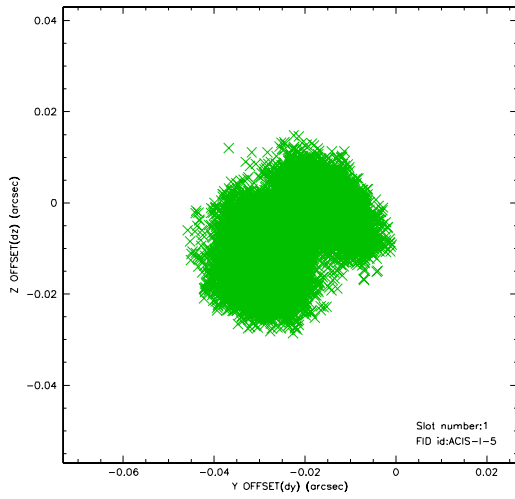


## 2.5 FID Slots

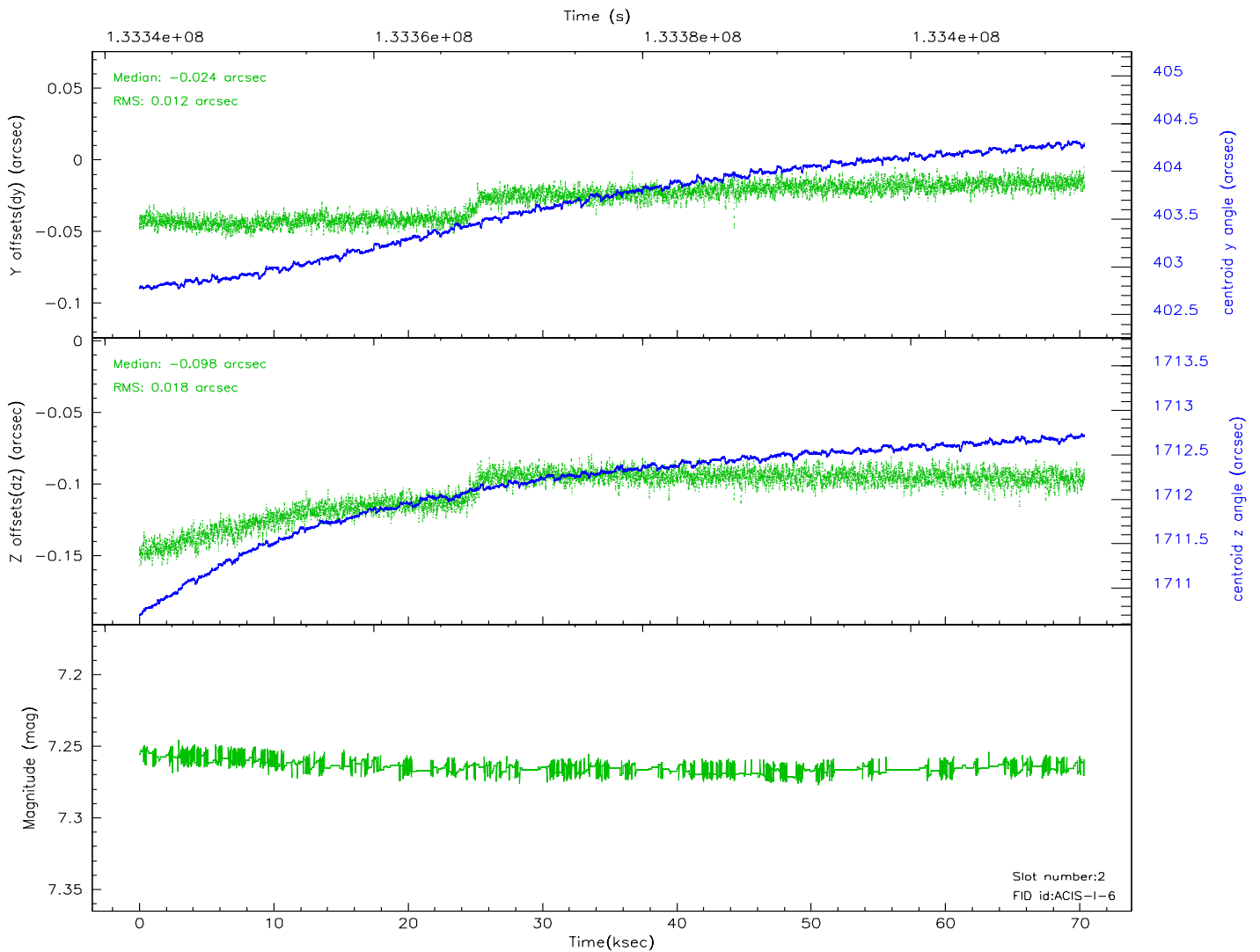
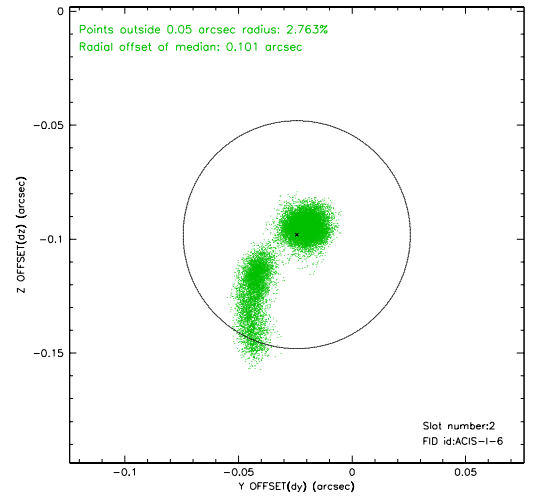
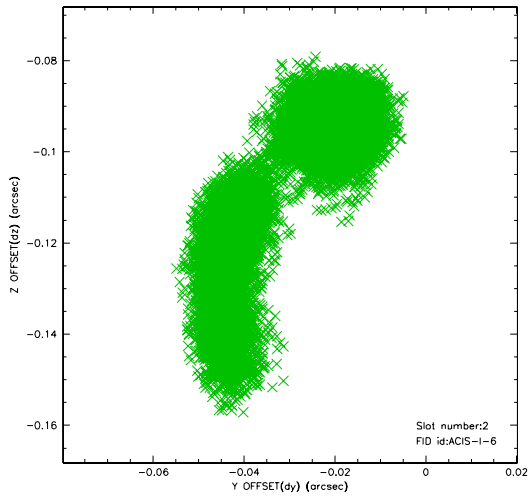
### 2.5.1 Slot 0



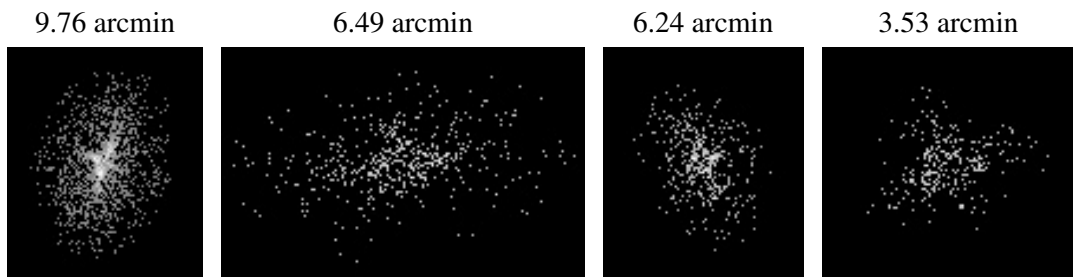
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2006.09.08    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 70.131        |

## A.2 Comments