

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 2406 - L2 Version 001  
Chandra X-Ray Center

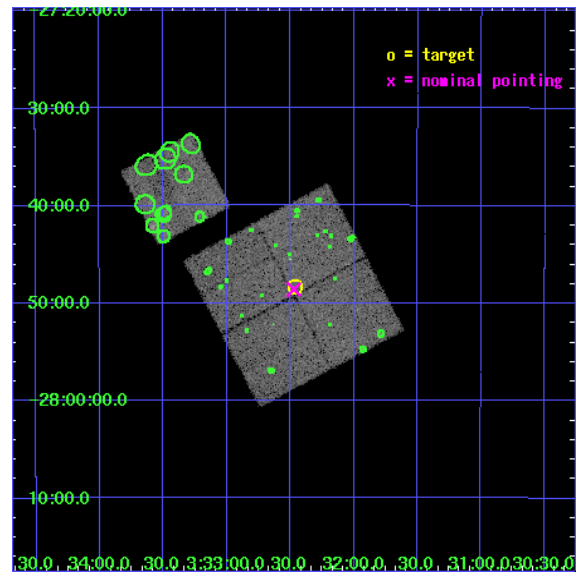
L2 Processing Date : Jun 20 2007

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# 1 Front

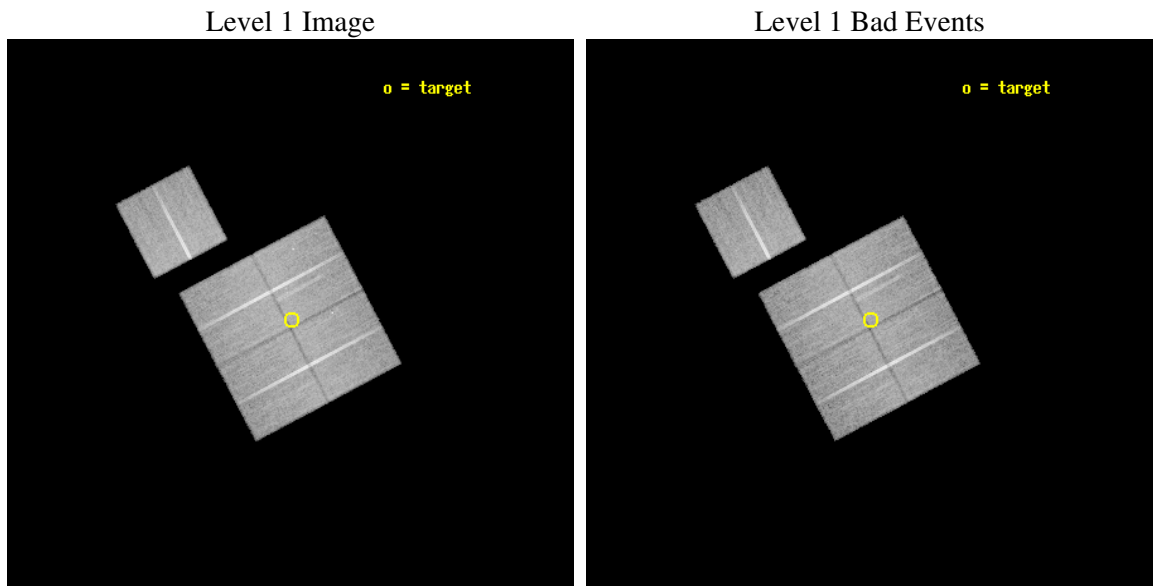
|          |   |
|----------|---|
| seq_num  | 900066  |
| obs_id   | 2406  |
| title    | AN ULTRADEEP SURVEY IN THE CHANDRA DEEP FIELD SOUTH |
| observer | PROF. RICCARDO GIACCONI                             |
| object   | CDFS  |
| dtcycle  | 0   |
| cycle    | P   |
| ra_targ  | 53.114583   |
| dec_targ | -27.806389  |
| ra_nom   | 53.118054317323                                     |
| dec_nom  | -27.810127857528                                    |
| roll_nom | 332.17993216312                                     |
| revision | 2   |
| ontime   | 30076.199942172                                     |
| livetime | 29683.232248151                                     |
| ontime0  | 30076.199942172                                     |
| ontime1  | 30076.199942172                                     |
| ontime2  | 30076.199942172                                     |
| ontime3  | 30076.199942172                                     |
| ontime6  | 30076.199942172                                     |
| l2events | 89665   |



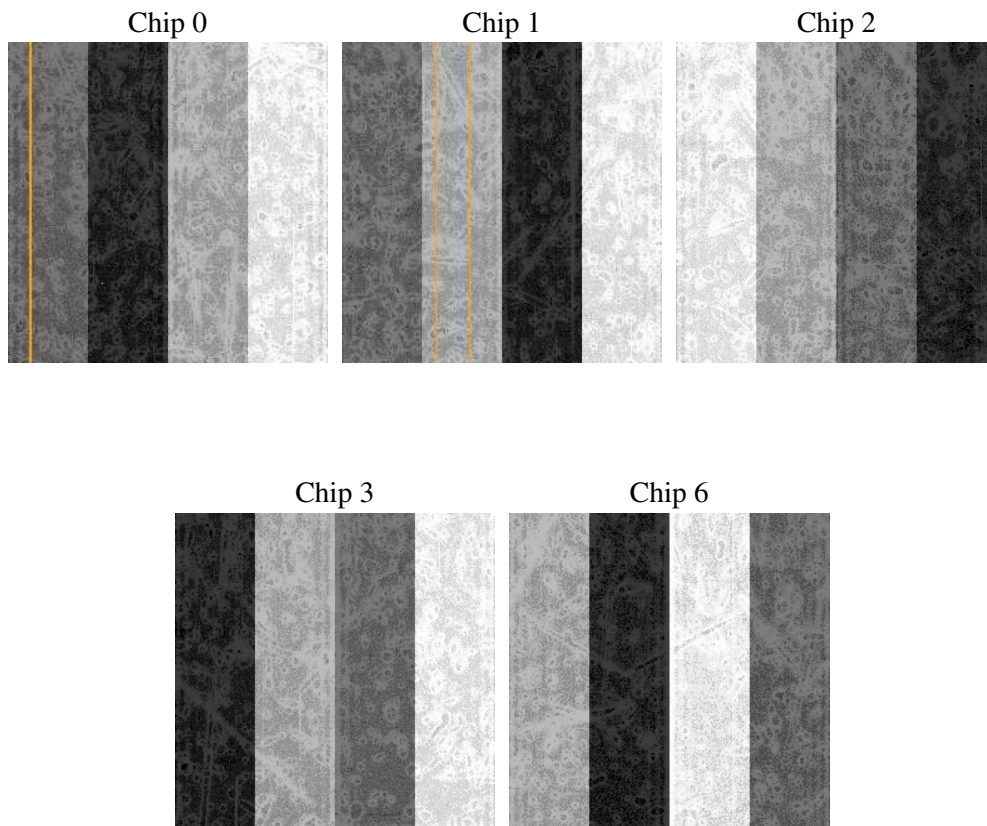
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.10              |
| caldbver | 3.4.0               |
| date     | 2007-06-20T03:24:11 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 30000.000000    |
| ontime         | 30076.199942172 |
| ontime0        | 30076.199942172 |
| ontime1        | 30076.199942172 |
| ontime2        | 30076.199942172 |
| ontime3        | 30076.199942172 |
| ontime6        | 30076.199942172 |
| l1events       | 873252          |

### 2.1.4 Events

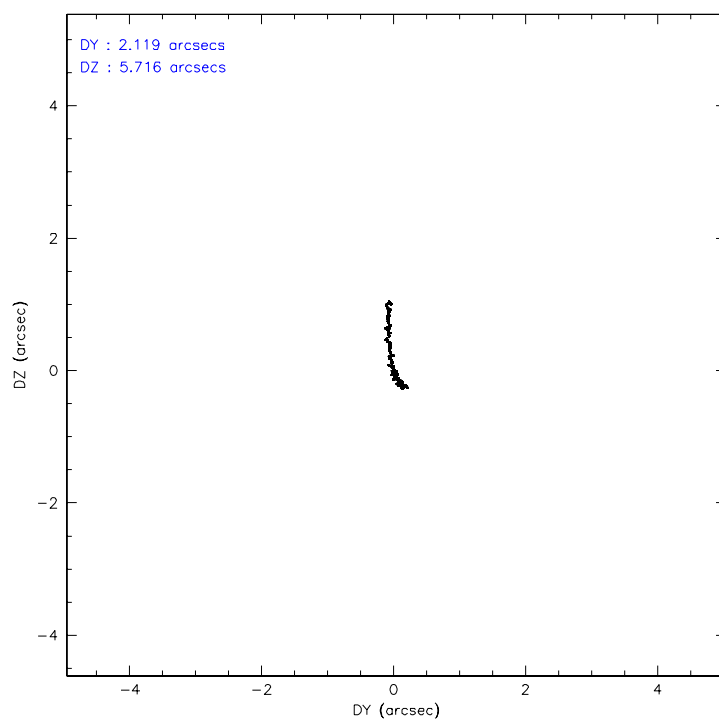
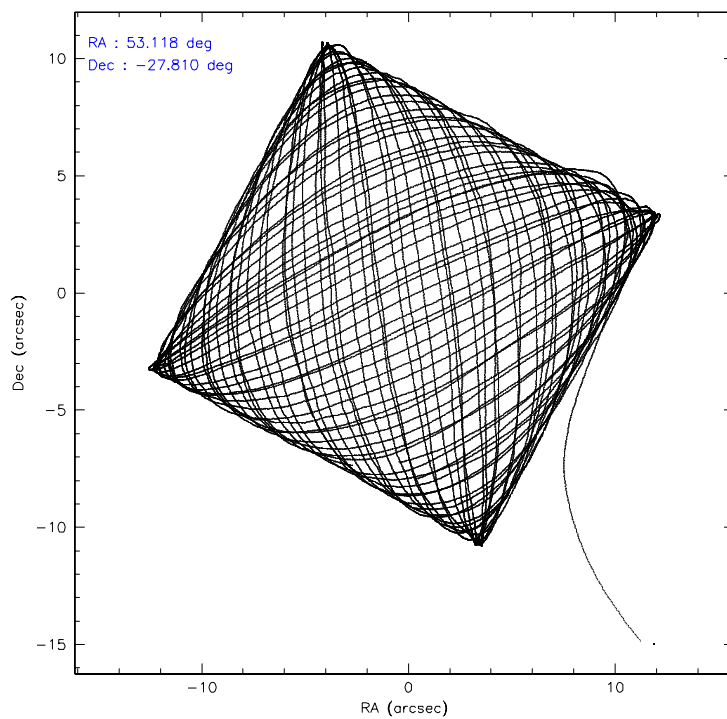
|                 | ccd 0  | ccd 1  | ccd 2  | ccd 3  | ccd 6  |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events  | 165048 | 168795 | 178972 | 180677 | 179760 |
| rejected events | 144537 | 146807 | 158737 | 159898 | 158711 |
| rejected %      | 87%    | 86%    | 88%    | 88%    | 88%    |

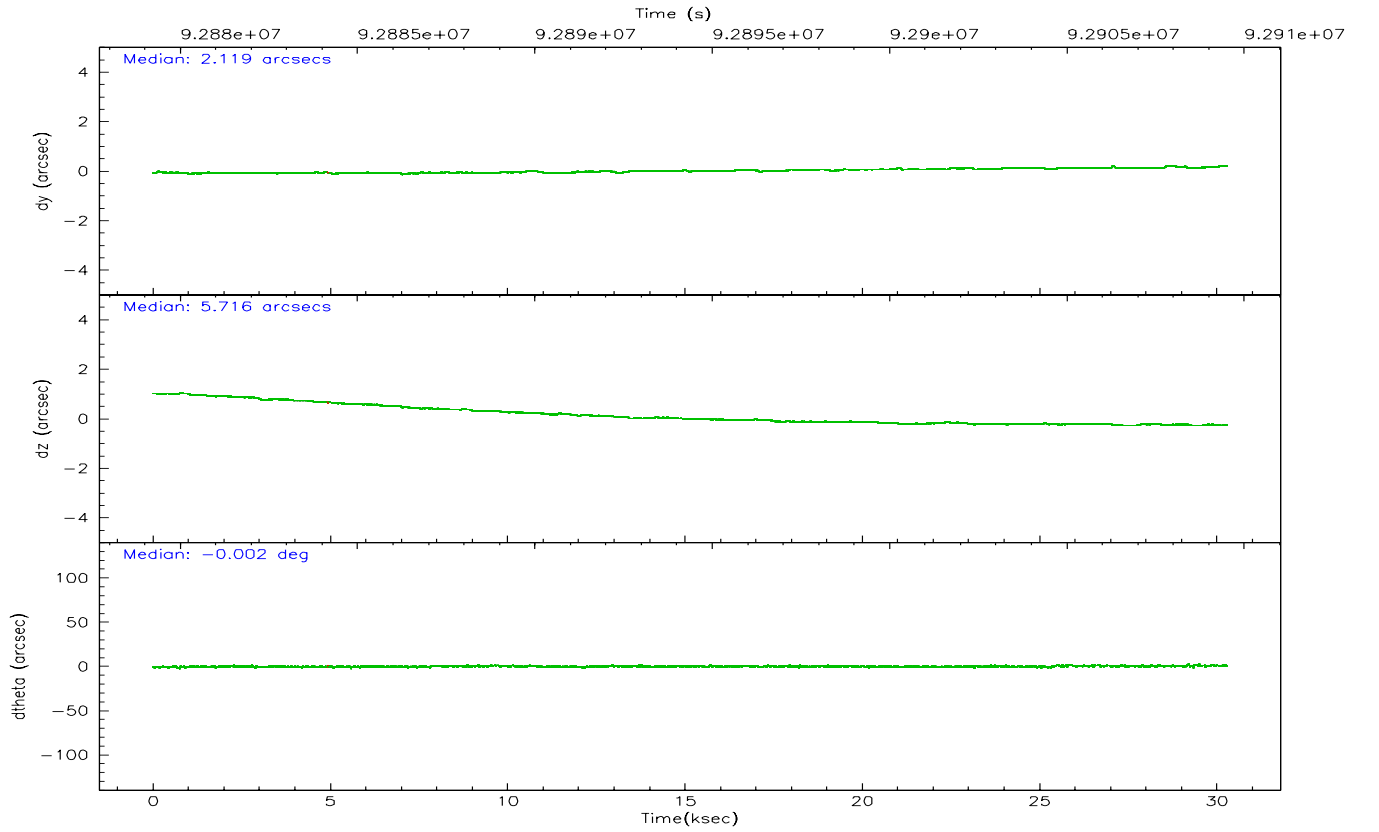
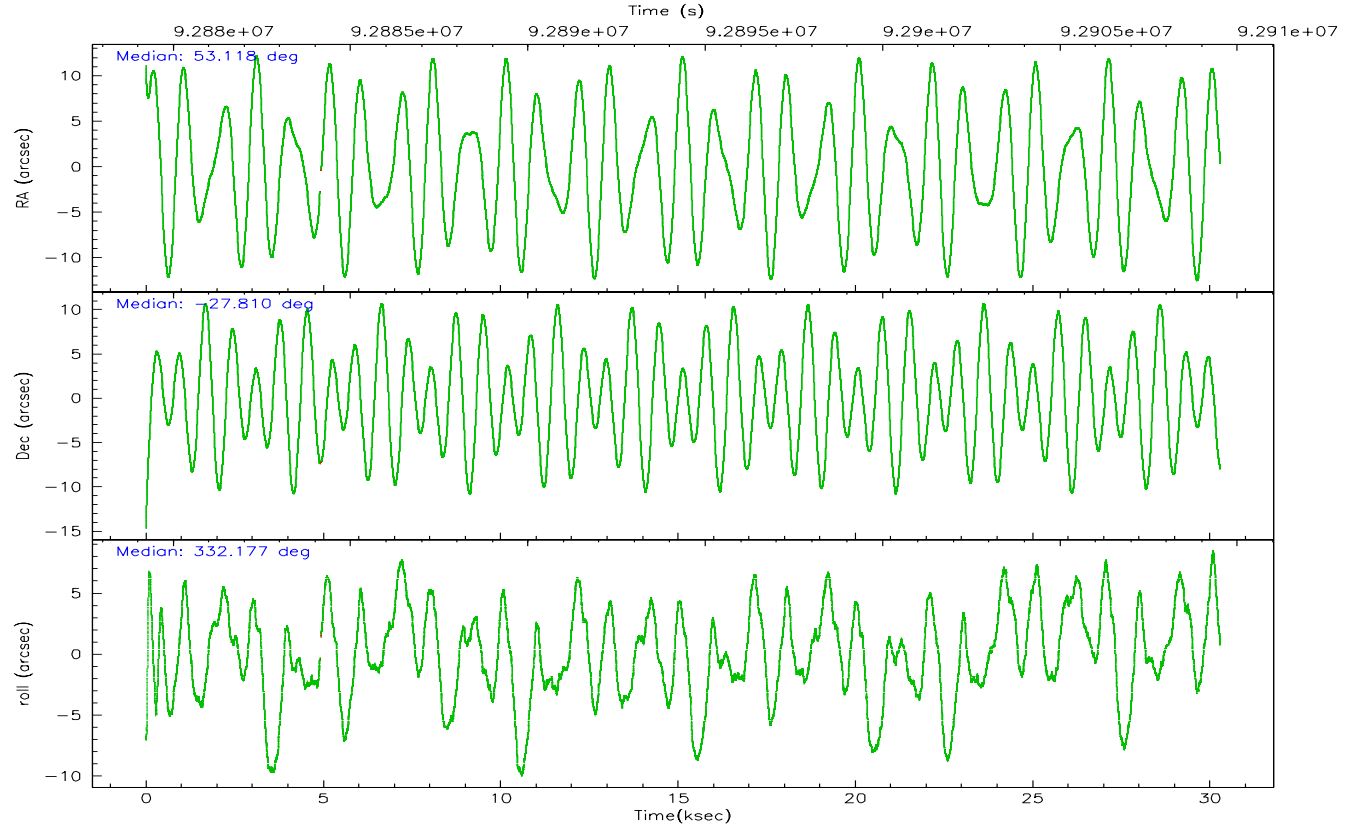
|                | ccd 0  | ccd 1  | ccd 2  | ccd 3  | ccd 6  |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 8599   | 8964   | 8786   | 9218   | 8830   |
|                | 5%     | 5%     | 4%     | 5%     | 4%     |
| grade 1 events | 68     | 90     | 79     | 73     | 94     |
|                | 0%     | 0%     | 0%     | 0%     | 0%     |
| grade 2 events | 4302   | 4390   | 4250   | 4104   | 4031   |
|                | 2%     | 2%     | 2%     | 2%     | 2%     |
| grade 3 events | 2116   | 2372   | 1917   | 1938   | 2078   |
|                | 1%     | 1%     | 1%     | 1%     | 1%     |
| grade 4 events | 1969   | 2265   | 1883   | 1935   | 2103   |
|                | 1%     | 1%     | 1%     | 1%     | 1%     |
| grade 5 events | 6305   | 6914   | 6174   | 6910   | 7507   |
|                | 3%     | 4%     | 3%     | 3%     | 4%     |
| grade 6 events | 3550   | 4024   | 3424   | 3609   | 4024   |
|                | 2%     | 2%     | 1%     | 1%     | 2%     |
| grade 7 events | 138139 | 139776 | 152459 | 152890 | 151093 |
|                | 83%    | 82%    | 85%    | 84%    | 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                         | FAINT               | FAINT                 | Number of optional ACIS chips dropped | 0         | 0       |
| Observation mode                  | POINTING            | POINTING              | On-chip summing requested             | N         | N       |
| Pointing RA                       | 53.086970           | 53.11805431732298     | Subarray requested                    | NONE      | NONE    |
| Pointing Dec                      | -27.811127          | -27.81012785752791    | Alternating exposures requested       | N         | N       |
| Pointing Roll                     | 331.956746          | 332.1799321631198     | Primary exposure time                 | 0.000000  | 3.1     |
| 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            | 92879524.184000     | 92878512.70679399     |                                       |           |         |
| Observation start date            | 2000-12-10T23:51:00 | 2000-12-10T23:35:12   |                                       |           |         |
| Observation end time              | 92909524.184000     | 92909657.332985       |                                       |           |         |
| Observation end date              | 2000-12-11T08:11:00 | 2000-12-11T08:14:17   |                                       |           |         |
| Read mode                         | TIMED               | TIMED                 |                                       |           |         |

## 2.3 Aspect





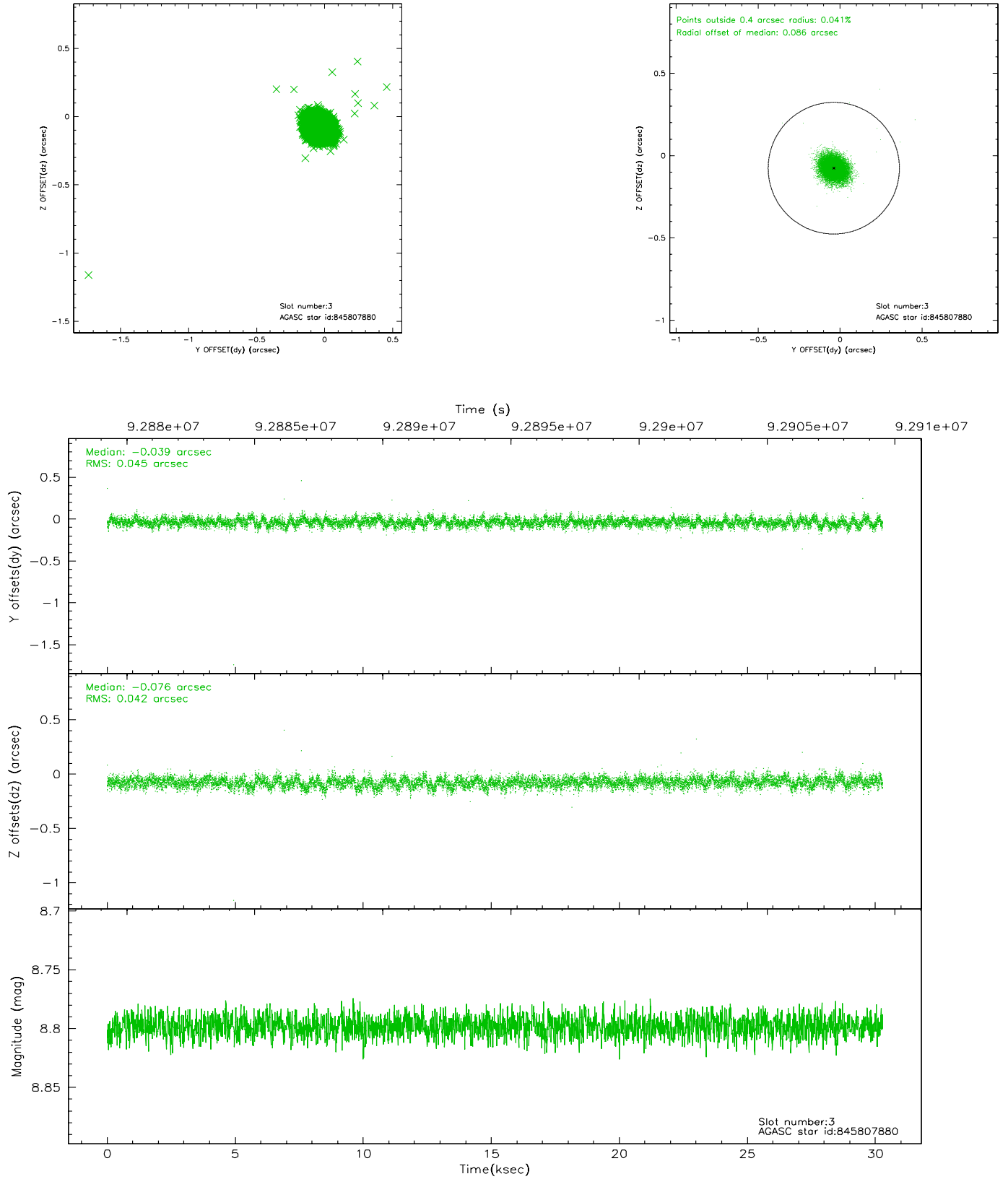
### Slot Statistics

| slot | status | id        | mag   | n_pts | med_dy | med_dz | dr1   | dr2   | ra        | dec        | mean_y   | mean_z  |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|---------|
| 0    | FID    | ACIS-I-2  | 7.16  | 7379  | -0.021 | -0.037 | 0.016 | 0.030 | 0.000000  | 0.000000   | -756.51  | -835.64 |
| 1    | FID    | ACIS-I-4  | 7.19  | 7380  | -0.063 | 0.031  | 0.010 | 0.024 | 0.000000  | 0.000000   | 2157.46  | 1070.58 |
| 2    | FID    | ACIS-I-5  | 7.23  | 7380  | -0.015 | 0.074  | 0.013 | 0.020 | 0.000000  | 0.000000   | -1810.25 | 1068.54 |
| 3    | GUIDE  | 845807880 | 8.80  | 14753 | -0.039 | -0.076 | 0.062 | 0.103 | 53.382027 | -27.886093 | 955.87   | 202.14  |
| 4    | GUIDE  | 845676728 | 9.33  | 14753 | -0.119 | -0.053 | 0.075 | 0.120 | 52.877179 | -27.664318 | -838.77  | 151.36  |
| 5    | GUIDE  | 845676936 | 9.50  | 14744 | -0.054 | -0.039 | 0.078 | 0.130 | 52.843773 | -27.880153 | -566.03  | -583.90 |
| 6    | GUIDE  | 845808520 | 10.20 | 14746 | 0.101  | 0.028  | 0.153 | 0.263 | 53.575292 | -27.720766 | 1221.95  | 1016.04 |
| 7    | GUIDE  | 845808968 | 9.96  | 14743 | 0.111  | 0.136  | 0.140 | 0.230 | 54.016598 | -27.589085 | 2247.35  | 2090.45 |

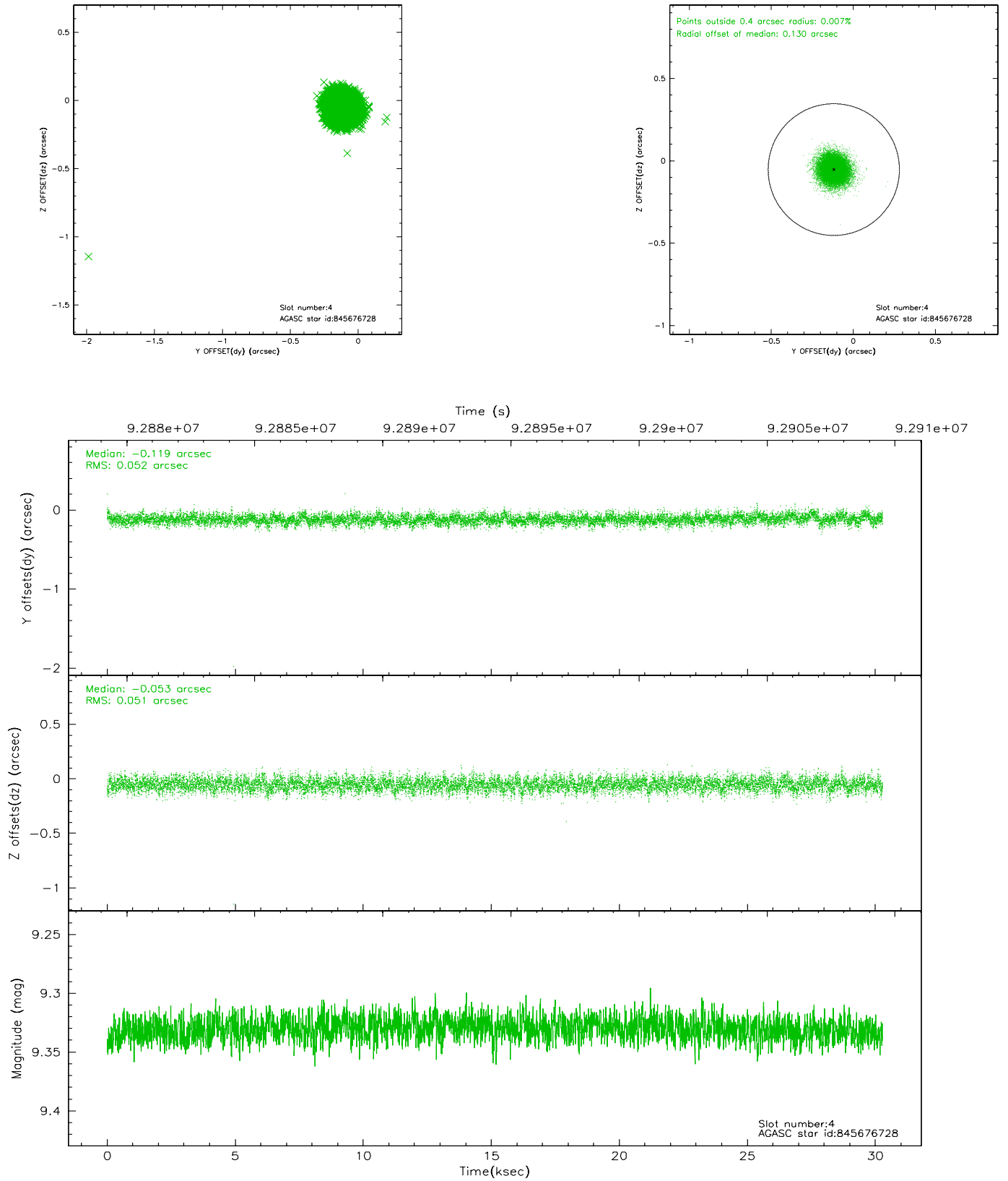


## 2.4 Star Slots

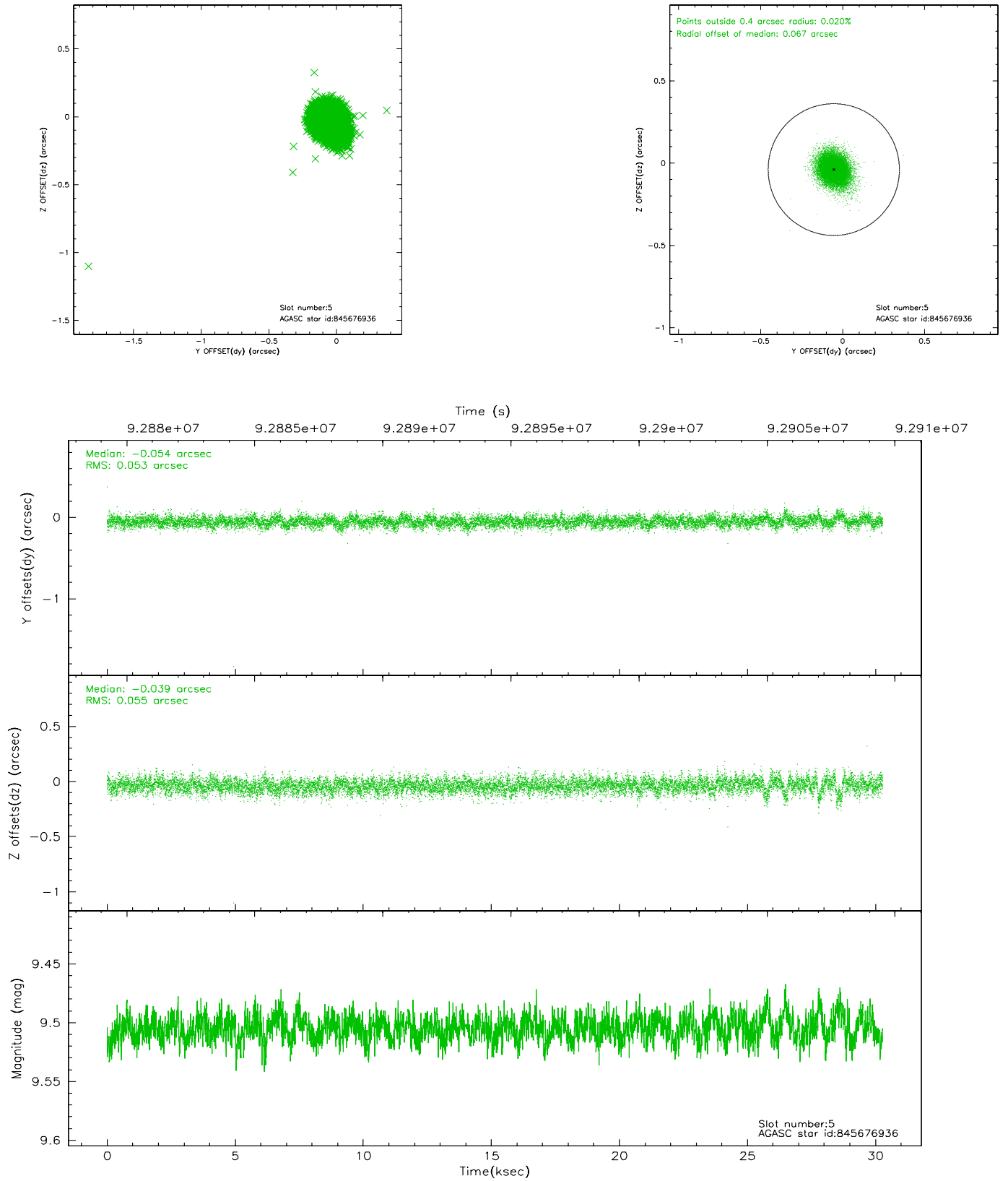
### 2.4.1 Slot 3



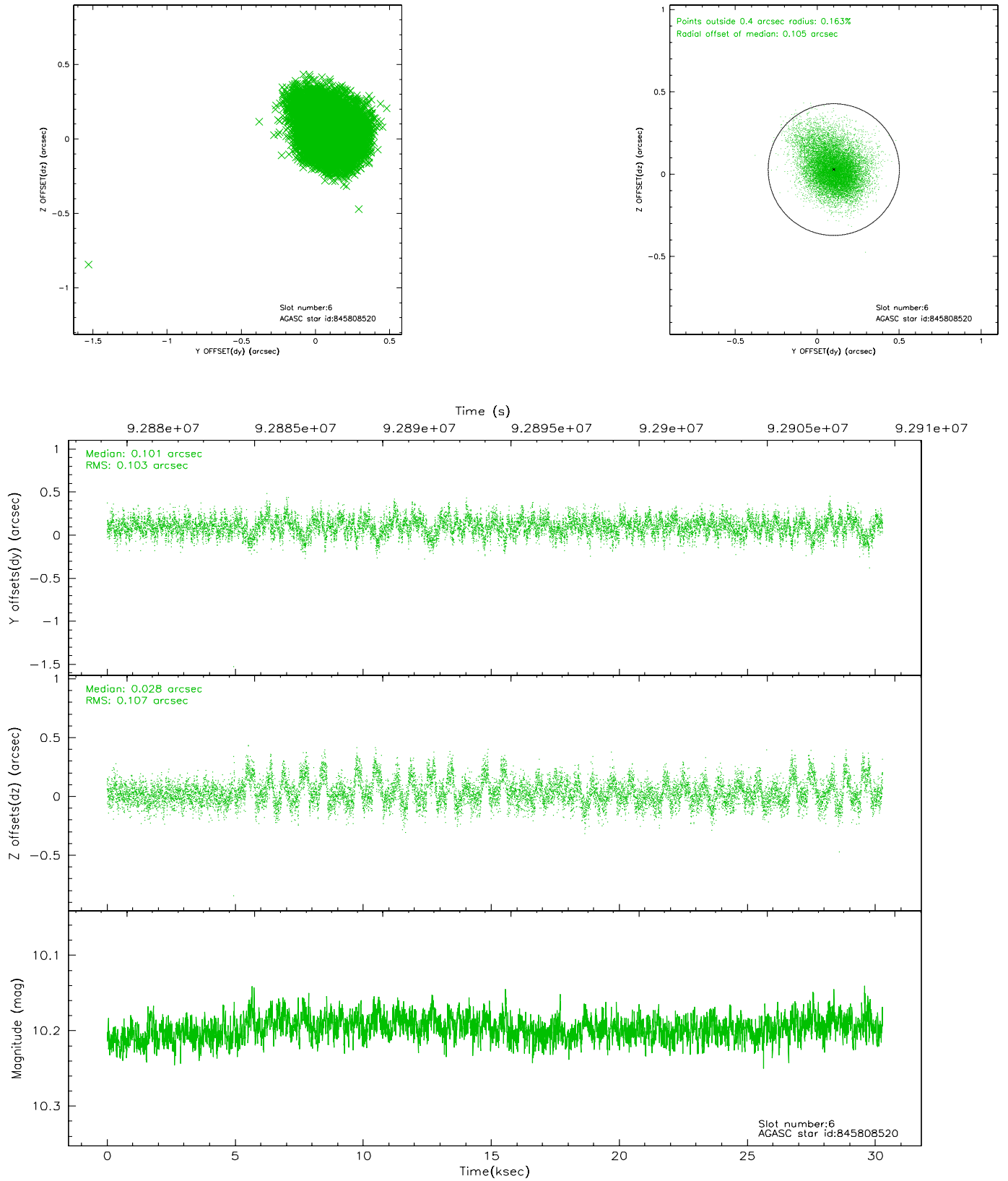
## 2.4.2 Slot 4



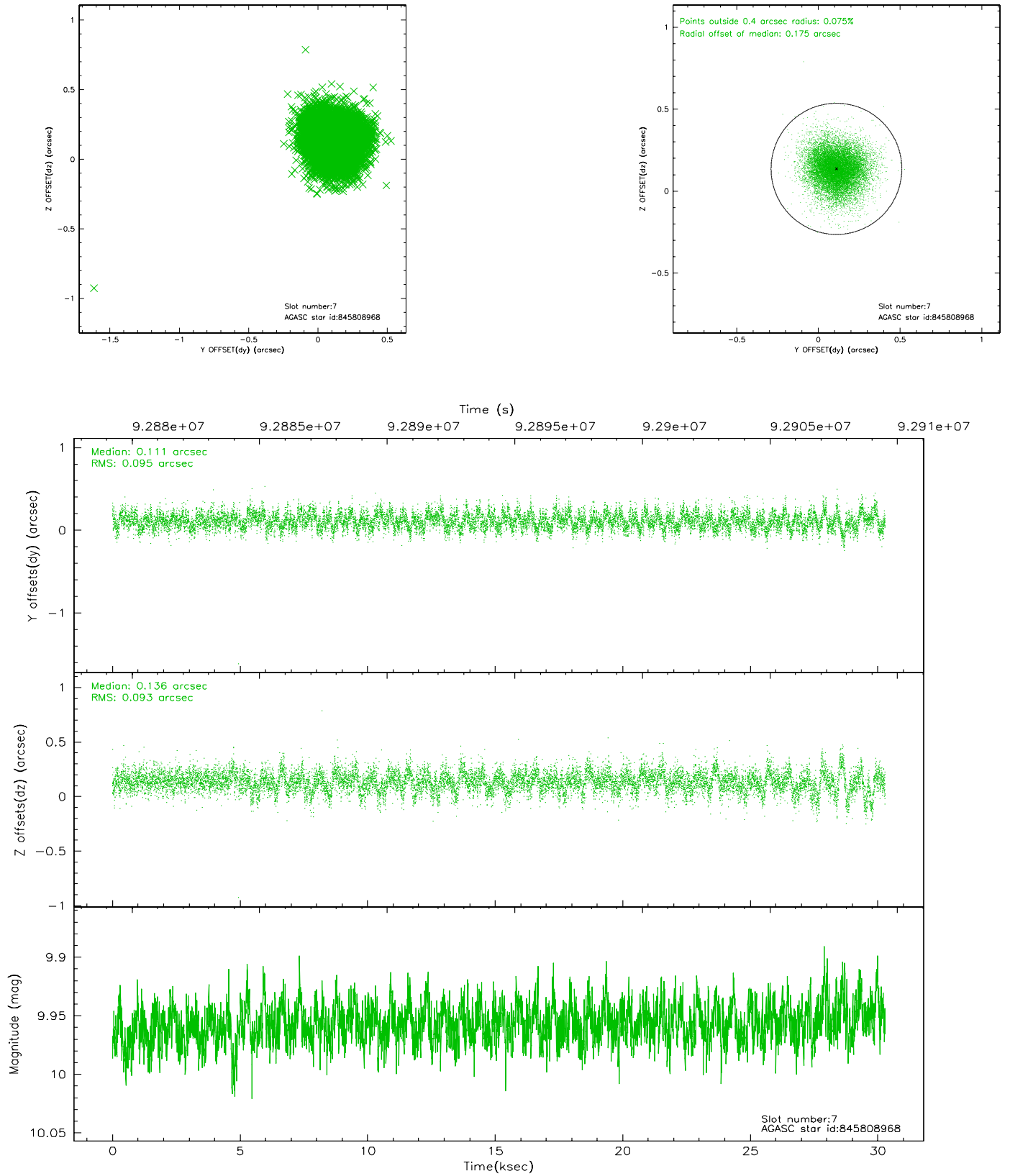
### 2.4.3 Slot 5



## 2.4.4 Slot 6

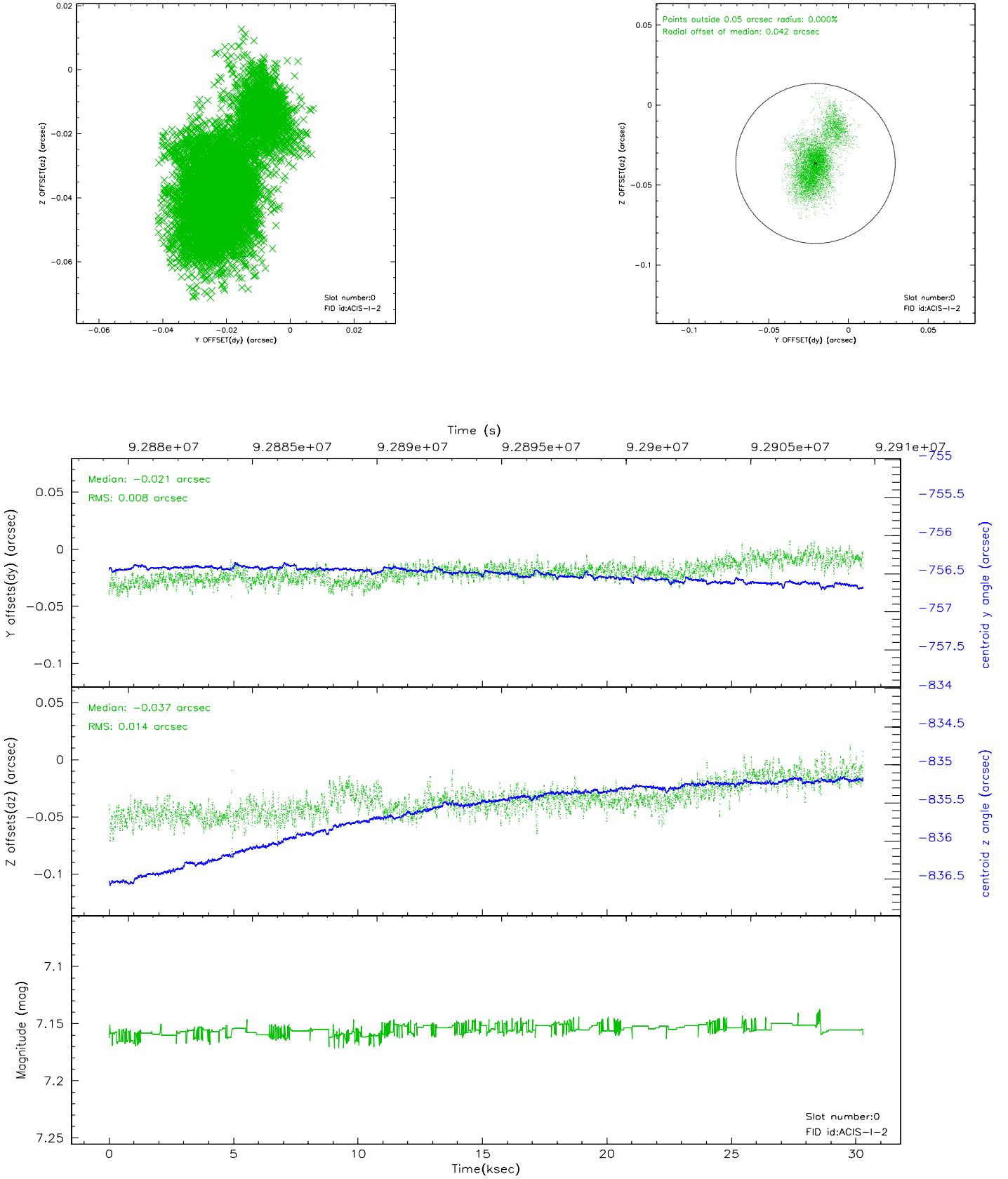


## 2.4.5 Slot 7

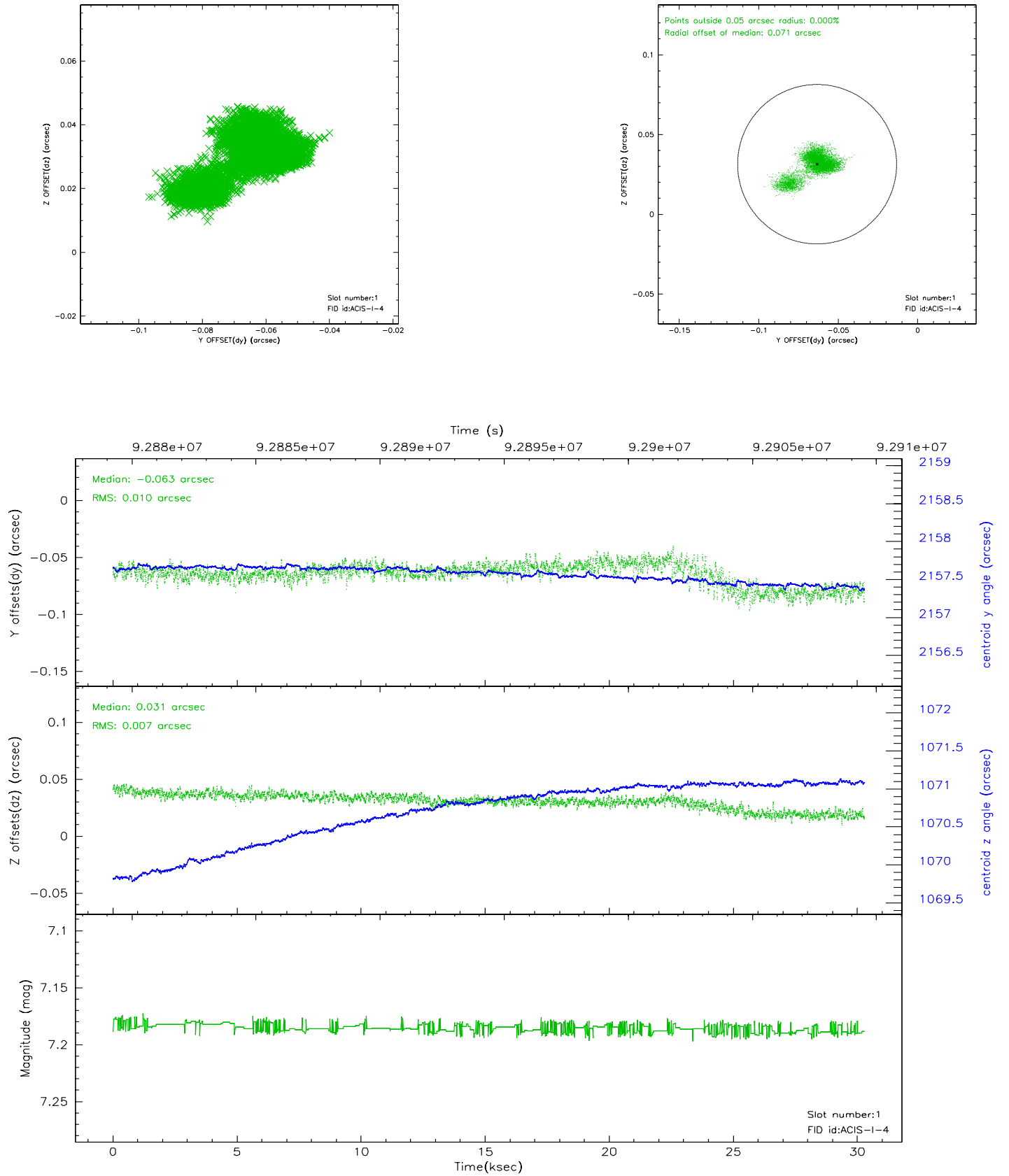


## 2.5 FID Slots

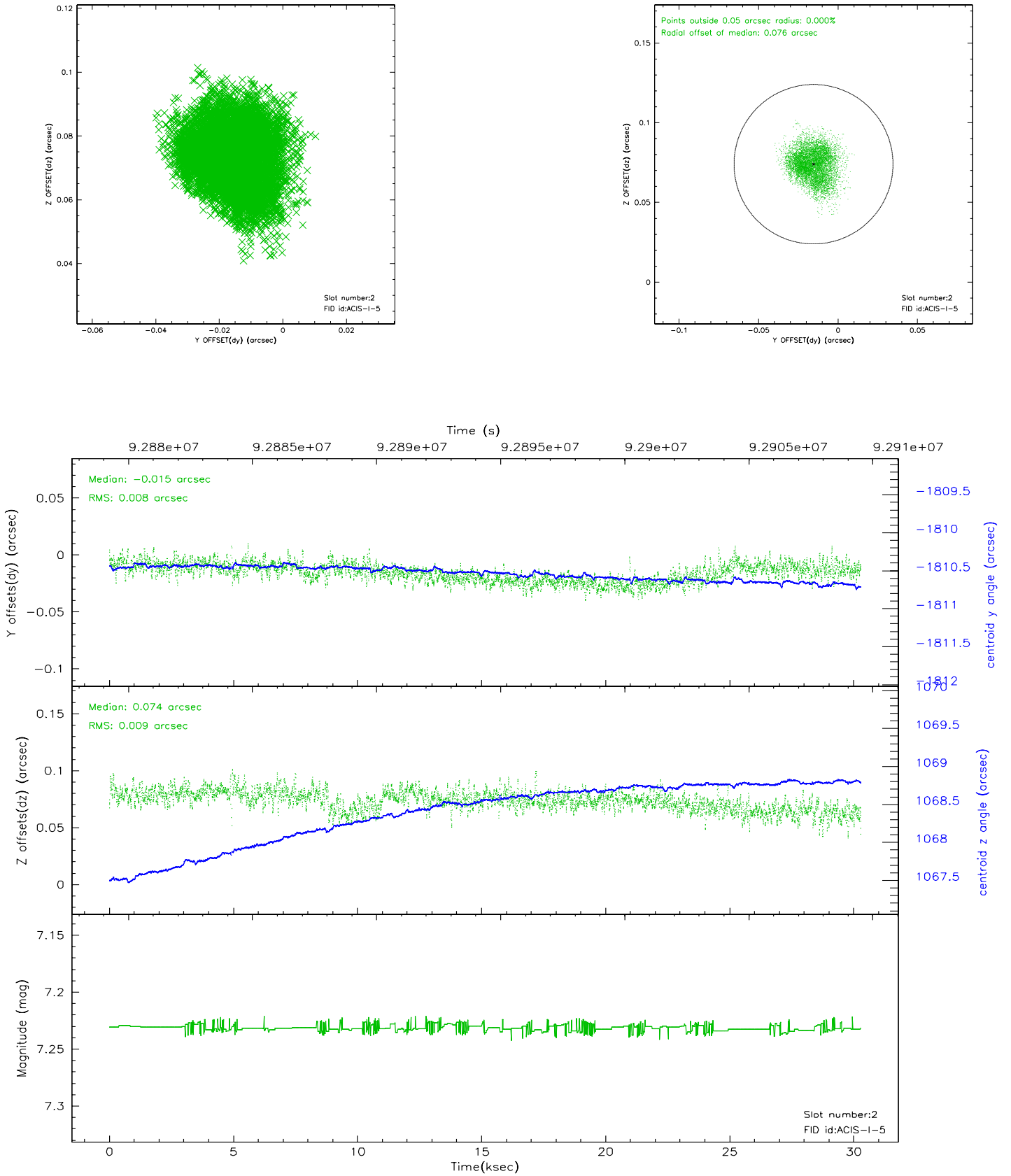
### 2.5.1 Slot 0



## 2.5.2 Slot 1

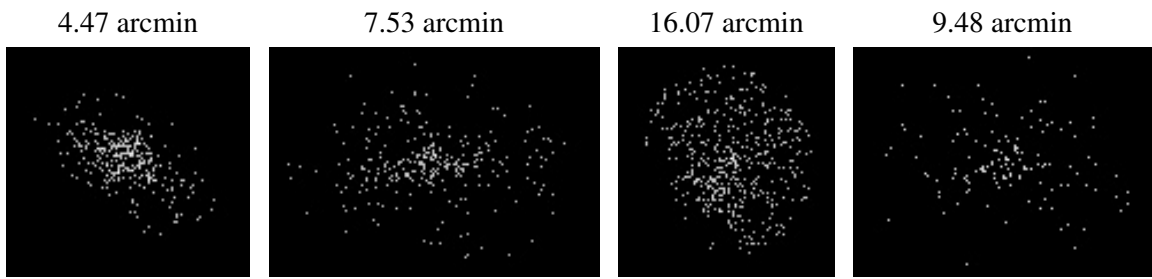


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2007.06.20    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 30.079        |

### A.2 Comments