

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 3898 - L2 Version 001  
Chandra X-Ray Center

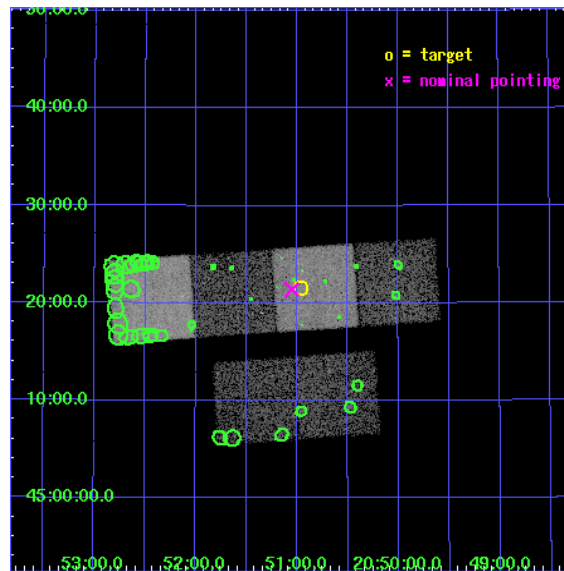
L2 Processing Date : Jul 19 2006

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# 1 Front

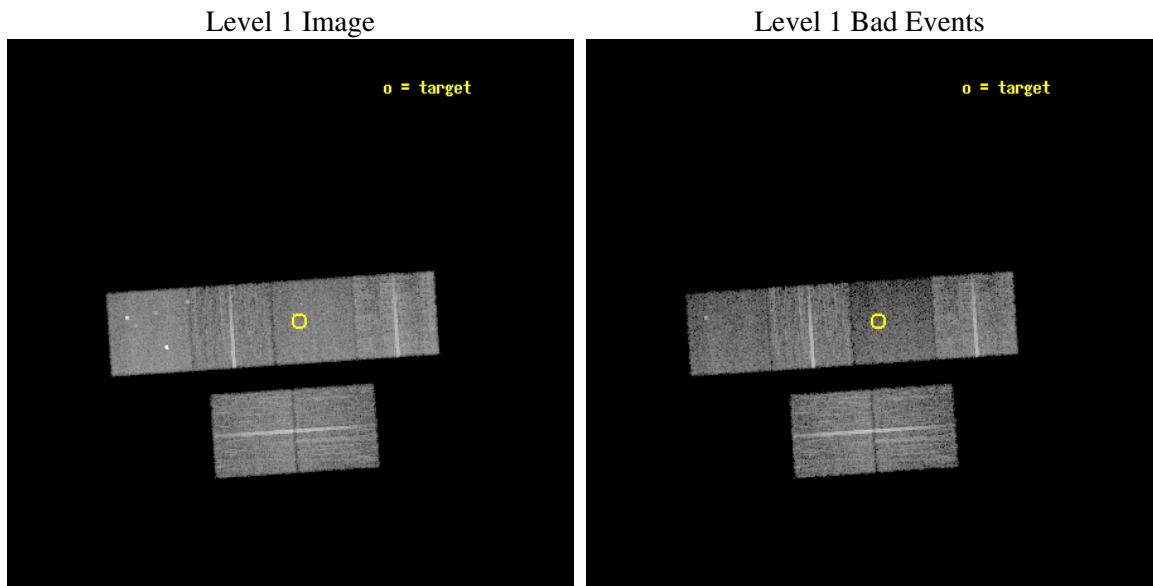
|          |  |
|----------|--|
| seq_num  | 500377   |
| obs_id   | 3898   |
| title    | EXPLORING THE ZOO OF NEUTRON STARS: HUNTING CGPS SNRS WITH CHANDRA |
| observer | Prof. Samar Safi-Harb  |
| object   | G85.4+0.7  |
| dtcycle  | 0  |
| cycle    | P  |
| ra_targ  | 312.741667   |
| dec_targ | 45.359722  |
| ra_nom   | 312.76279168084  |
| dec_nom  | 45.357017795478  |
| roll_nom | 356.1502556907   |
| revision | 2  |
| ontime   | 14460.799946129  |
| livetime | 14277.688589963  |
| ontime2  | 14460.799946129  |
| ontime3  | 14457.558985889  |
| ontime5  | 14460.799946129  |
| ontime6  | 14457.559005797  |
| ontime7  | 14460.799946129  |
| ontime8  | 14454.318015605  |
| l2events | 94751  |



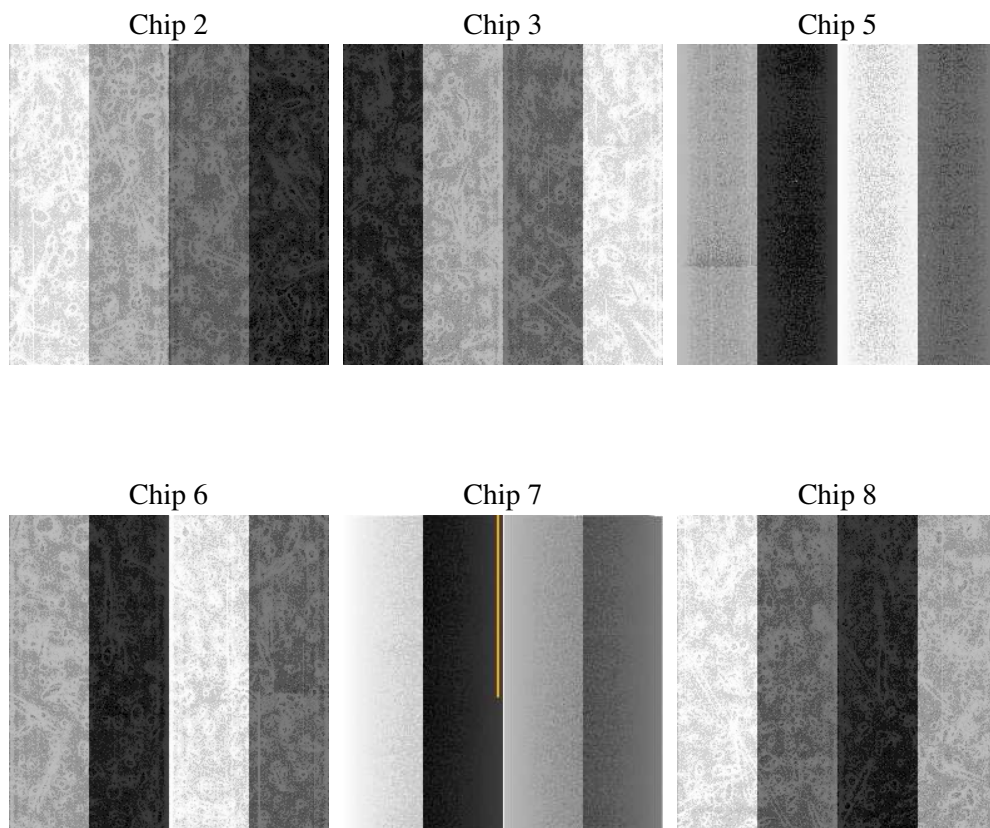
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.8               |
| caldbver | 3.2.2               |
| date     | 2006-07-19T12:46:19 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 14500.000000    |
| ontime         | 14464.581536591 |
| ontime2        | 14464.581536591 |
| ontime3        | 14461.340576351 |
| ontime5        | 14464.581536591 |
| ontime6        | 14461.340596259 |
| ontime7        | 14464.581536591 |
| ontime8        | 14458.099606067 |
| l1events       | 440010          |

### 2.1.4 Events

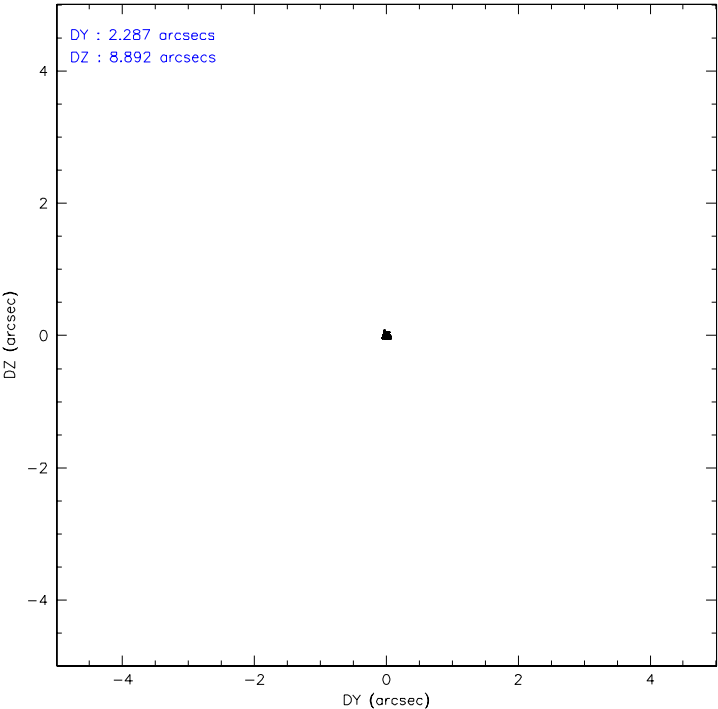
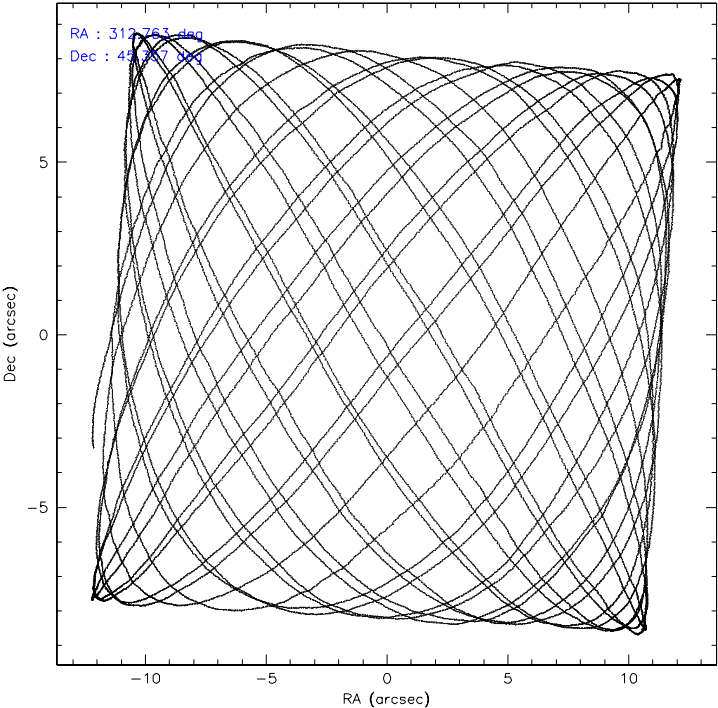
|                 | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events  | 72777 | 65661 | 83957 | 68899 | 64868 | 83848 |
| rejected events | 65712 | 59074 | 40179 | 60970 | 33334 | 64727 |
| rejected %      | 90%   | 89%   | 47%   | 88%   | 51%   | 77%   |

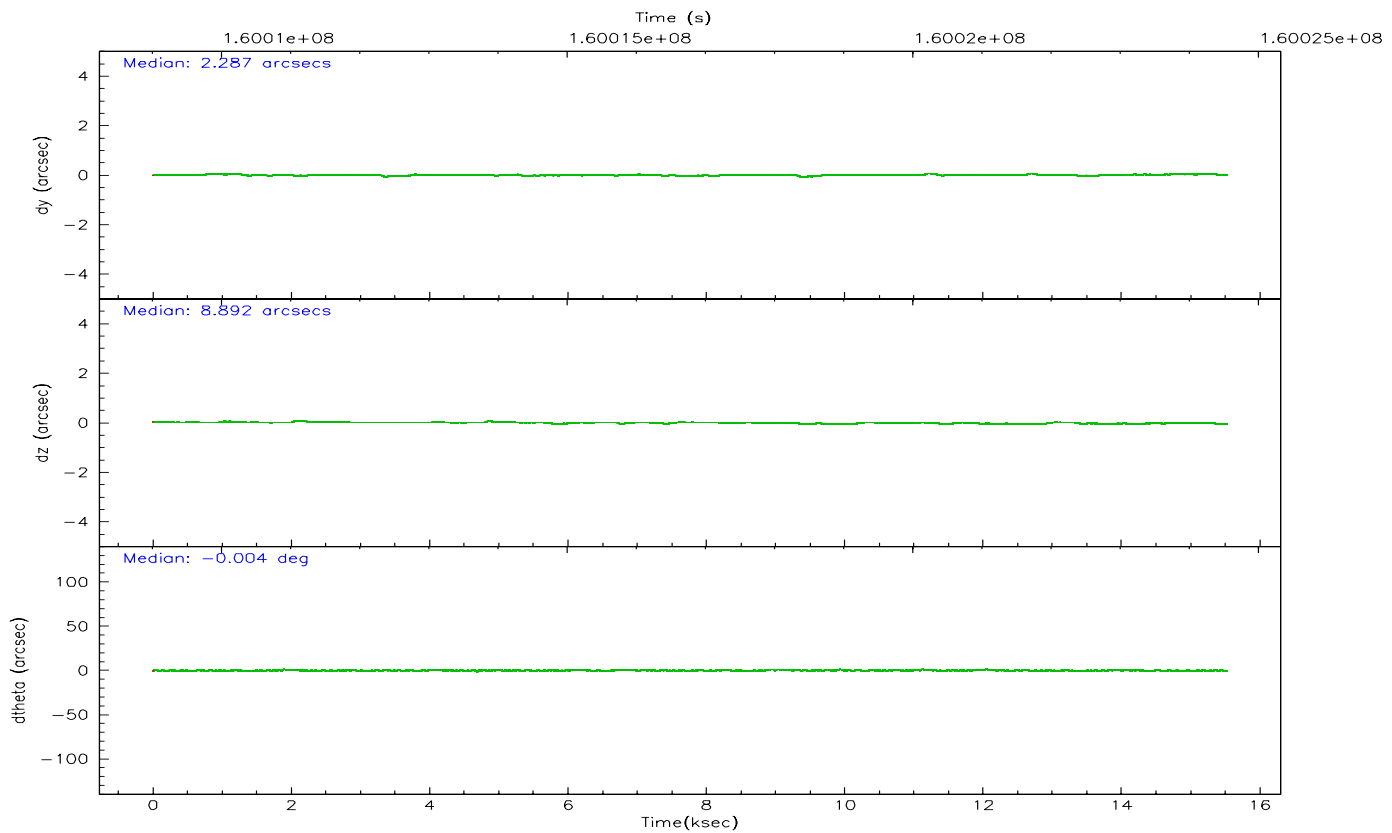
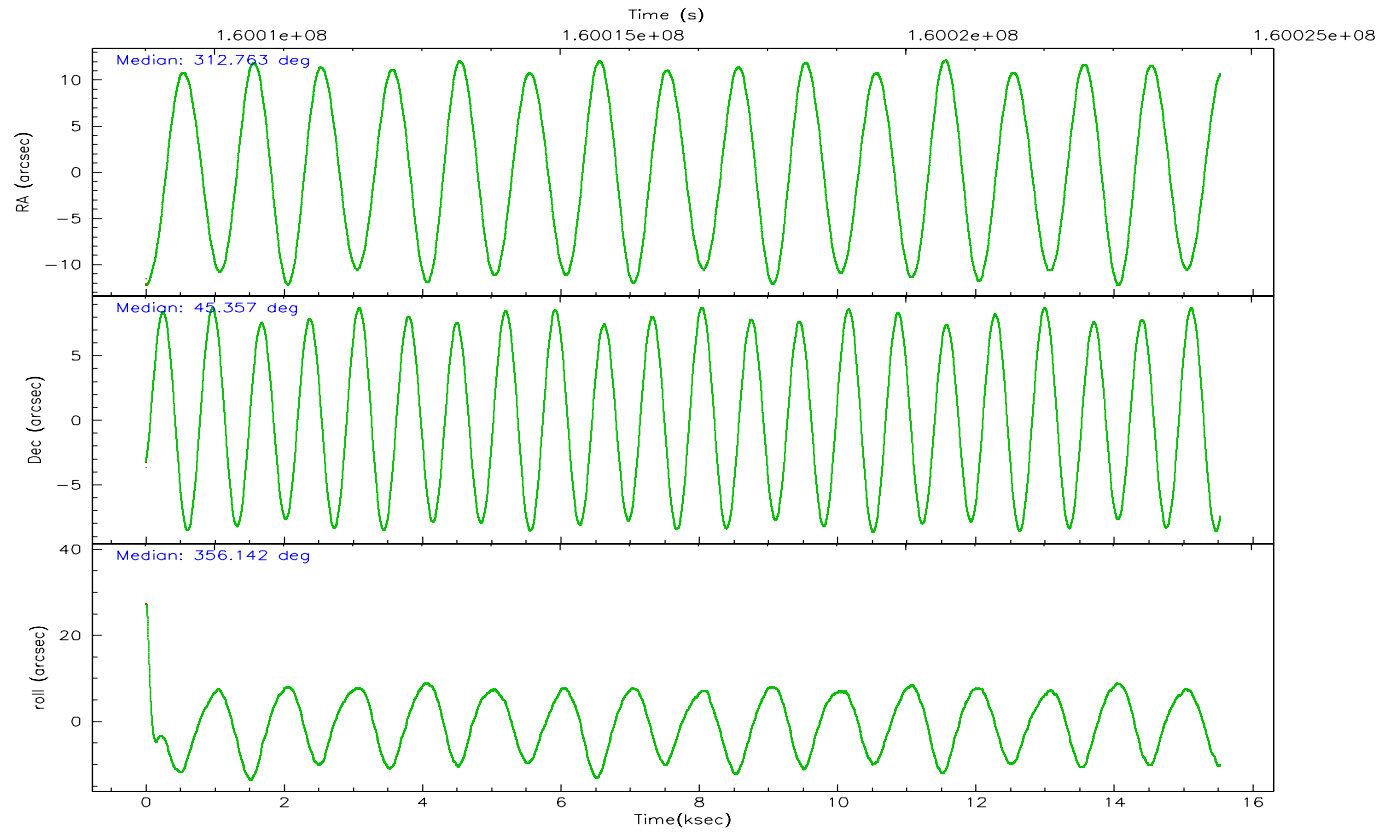
|                | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 2781  | 2672  | 5110  | 3490  | 2780  | 5764  |
|                | 3%    | 4%    | 6%    | 5%    | 4%    | 6%    |
| grade 1 events | 43    | 29    | 39    | 40    | 47    | 50    |
|                | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    |
| grade 2 events | 1537  | 1345  | 13687 | 1550  | 8034  | 4369  |
|                | 2%    | 2%    | 16%   | 2%    | 12%   | 5%    |
| grade 3 events | 769   | 762   | 1250  | 792   | 2216  | 2008  |
|                | 1%    | 1%    | 1%    | 1%    | 3%    | 2%    |
| grade 4 events | 790   | 672   | 1196  | 780   | 2185  | 1901  |
|                | 1%    | 1%    | 1%    | 1%    | 3%    | 2%    |
| grade 5 events | 1922  | 2116  | 4568  | 2248  | 5082  | 3427  |
|                | 2%    | 3%    | 5%    | 3%    | 7%    | 4%    |
| grade 6 events | 1189  | 1137  | 22547 | 1319  | 16324 | 5087  |
|                | 1%    | 1%    | 26%   | 1%    | 25%   | 6%    |
| grade 7 events | 63746 | 56928 | 35560 | 58680 | 28200 | 61242 |
|                | 87%   | 86%   | 42%   | 85%   | 43%   | 73%   |

## 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               | On-chip summing requested       | N         | N       |
| Observation mode                  | POINTING            | POINTING             | Subarray requested              | NONE      | NONE    |
| Pointing RA                       | 312.728291          | 312.7627916808444    | Alternating exposures requested | N         | N       |
| Pointing Dec                      | 45.344670           | 45.35701779547797    | Primary exposure time           | 0.000000  | 3.2     |
| Pointing Roll                     | 356.018147          | 356.1502556906962    |                                 |           |         |
| 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            | 160010037.184000    | 160008655.3861       |                                 |           |         |
| Observation start date            | 2003-01-26T23:12:53 | 2003-01-26T22:50:55  |                                 |           |         |
| Observation end time              | 160024537.184000    | 160025060.51179      |                                 |           |         |
| Observation end date              | 2003-01-27T03:14:33 | 2003-01-27T03:24:20  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

2.3 Aspect



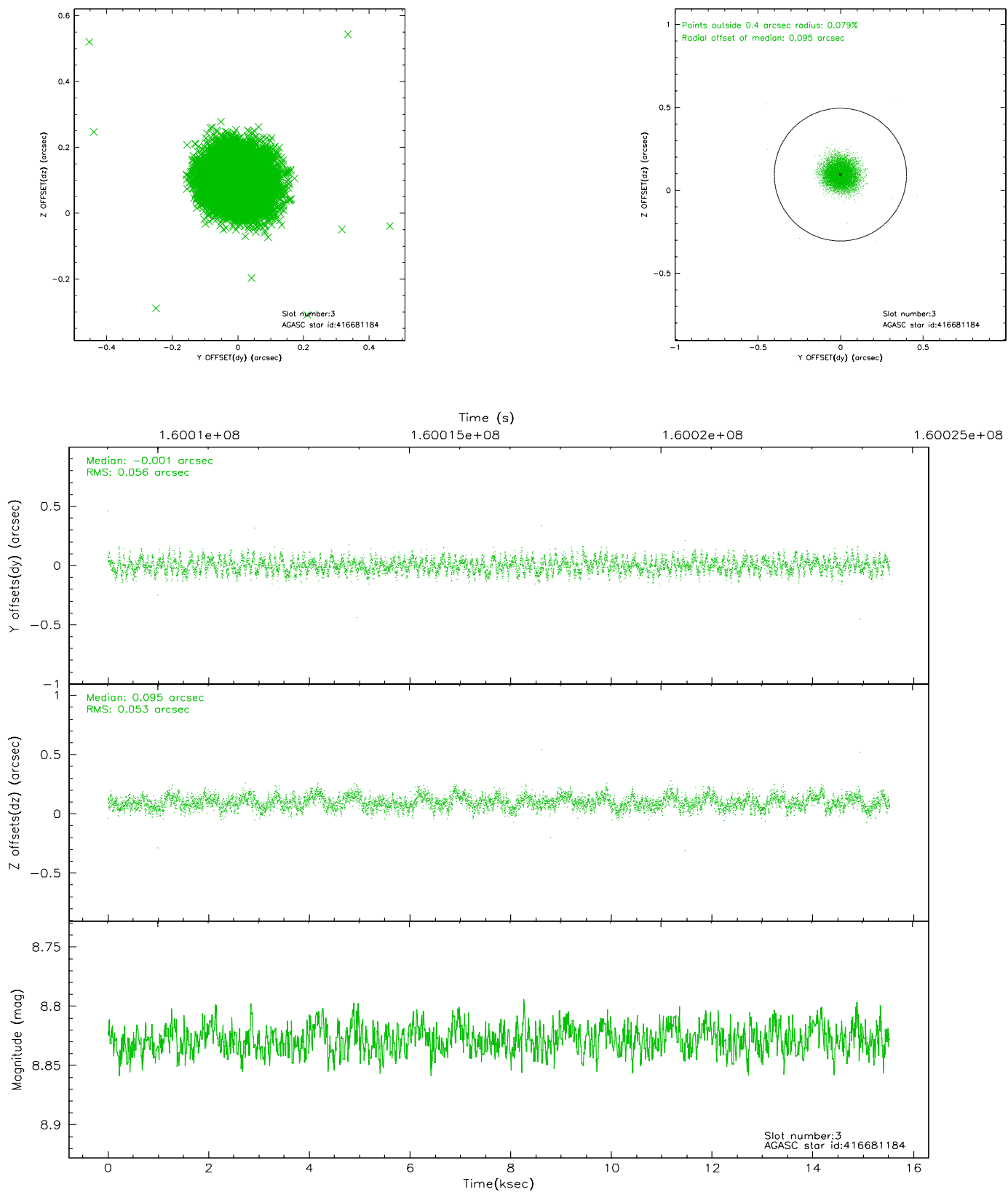


### Slot Statistics

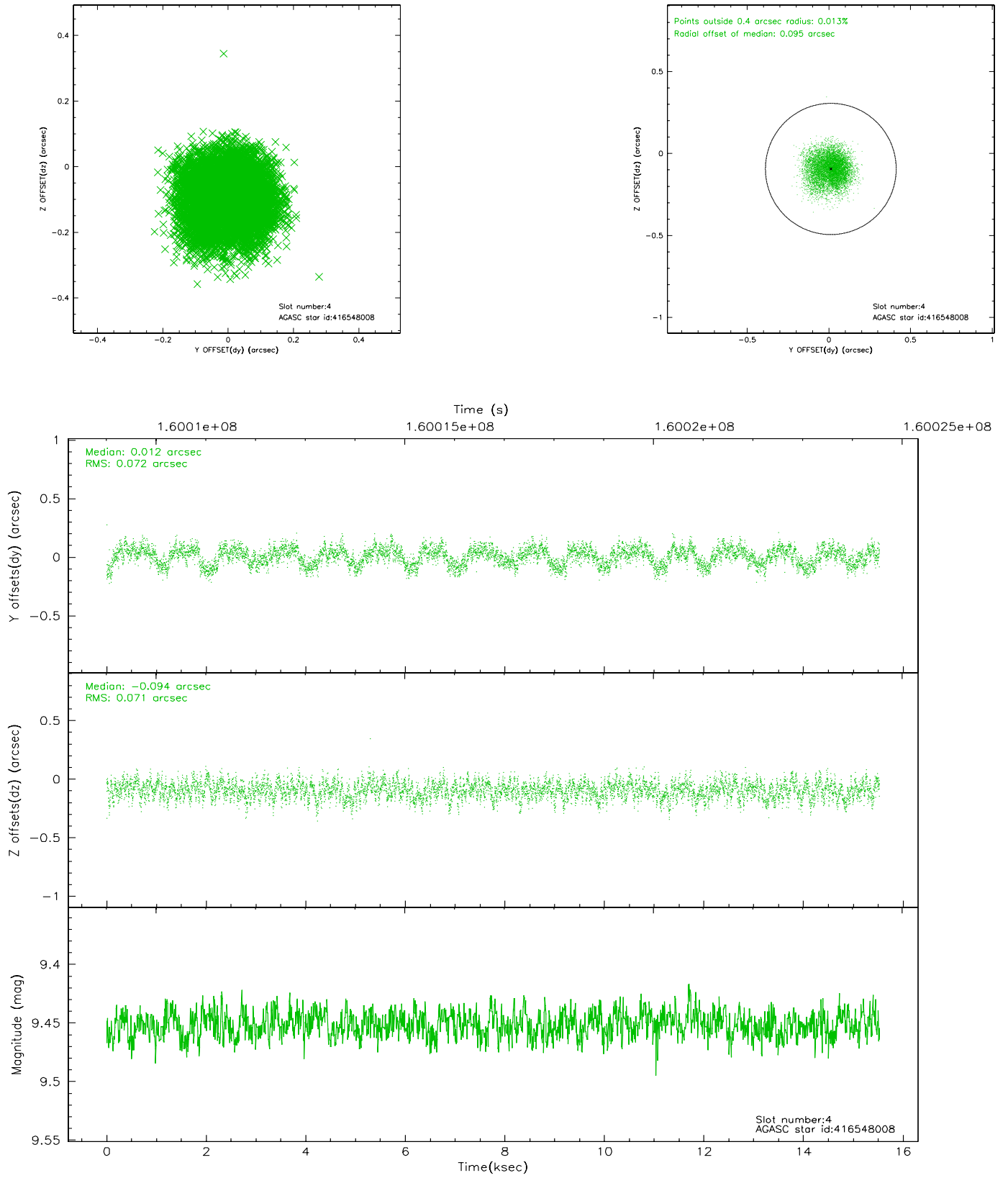
| slot | status | id        | mag  | n_pts | med_dy | med_dz | dr1   | dr2   | ra         | dec       | mean_y   | mean_z   |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0    | FID    | ACIS-S-2  | 7.10 | 3787  | -0.015 | 0.020  | 0.007 | 0.011 | 0.000000   | 0.000000  | -754.92  | -1730.09 |
| 1    | FID    | ACIS-S-4  | 7.20 | 3786  | -0.064 | 0.002  | 0.005 | 0.010 | 0.000000   | 0.000000  | 2158.17  | 178.09   |
| 2    | FID    | ACIS-S-5  | 7.24 | 3786  | 0.048  | -0.013 | 0.006 | 0.010 | 0.000000   | 0.000000  | -1807.34 | 172.05   |
| 3    | GUIDE  | 416681184 | 8.83 | 7571  | -0.001 | 0.095  | 0.082 | 0.127 | 313.182612 | 44.714809 | 1317.15  | -2177.69 |
| 4    | GUIDE  | 416548008 | 9.45 | 7566  | 0.012  | -0.094 | 0.110 | 0.171 | 311.932961 | 44.866575 | -1905.02 | -1848.50 |
| 5    | GUIDE  | 416547880 | 9.39 | 7567  | -0.114 | -0.025 | 0.103 | 0.157 | 312.003203 | 44.699637 | -1690.25 | -2437.50 |
| 6    | GUIDE  | 468620728 | 9.86 | 7570  | -0.021 | 0.014  | 0.106 | 0.172 | 312.272299 | 45.763465 | -1247.74 | 1427.40  |
| 7    | GUIDE  | 468585016 | 9.58 | 7564  | 0.128  | 0.012  | 0.088 | 0.146 | 313.504874 | 45.555122 | 1899.53  | 901.82   |

## 2.4 Star Slots

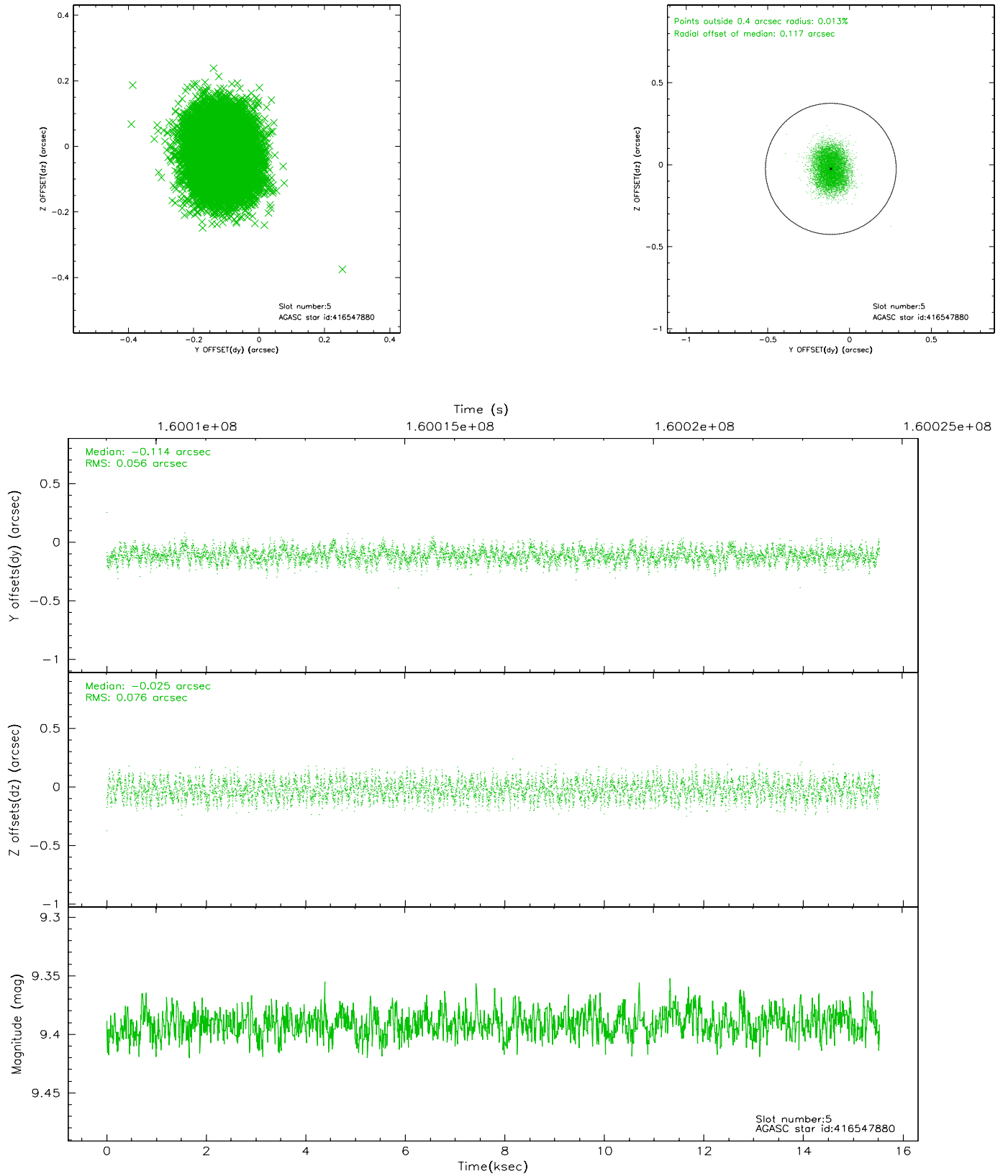
### 2.4.1 Slot 3



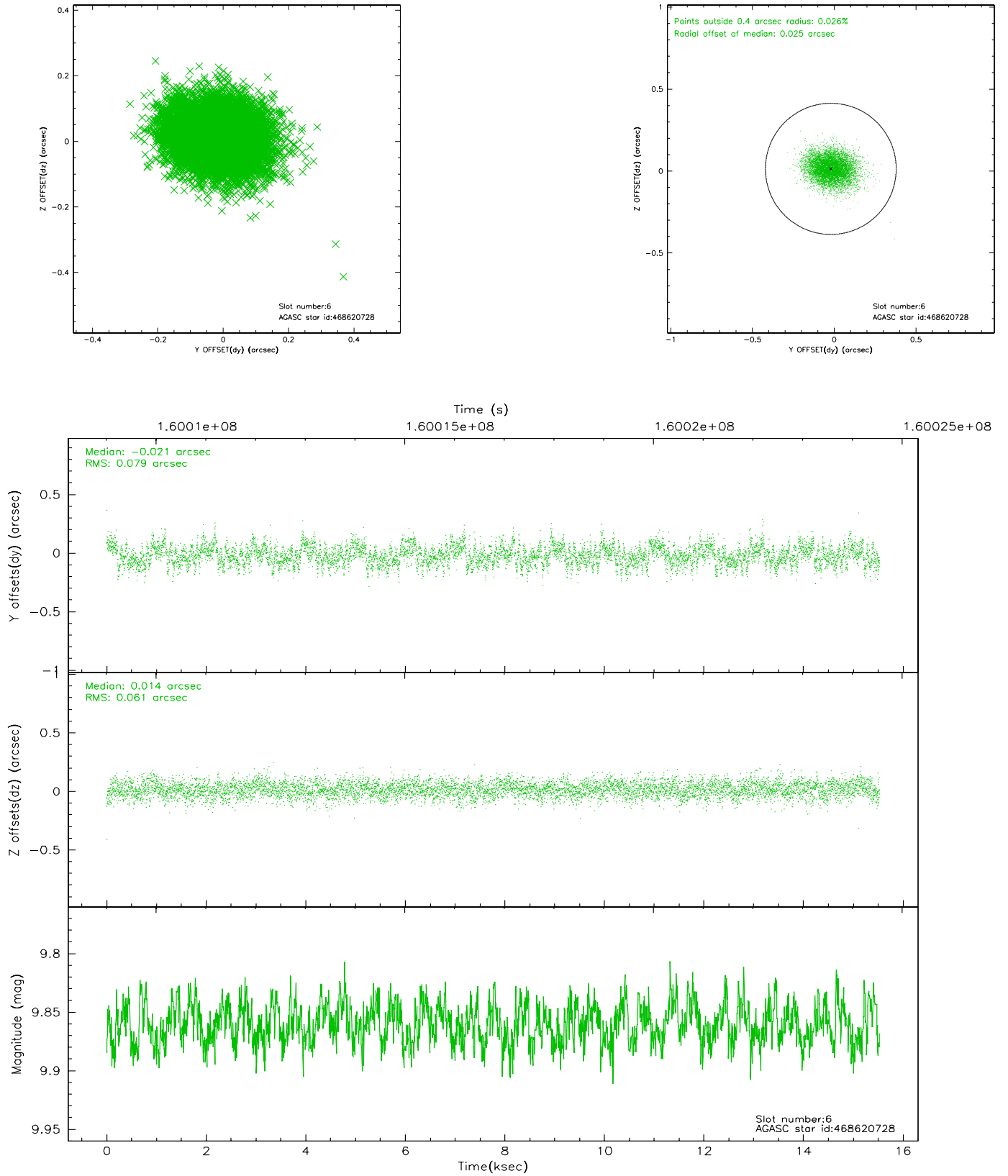
## 2.4.2 Slot 4



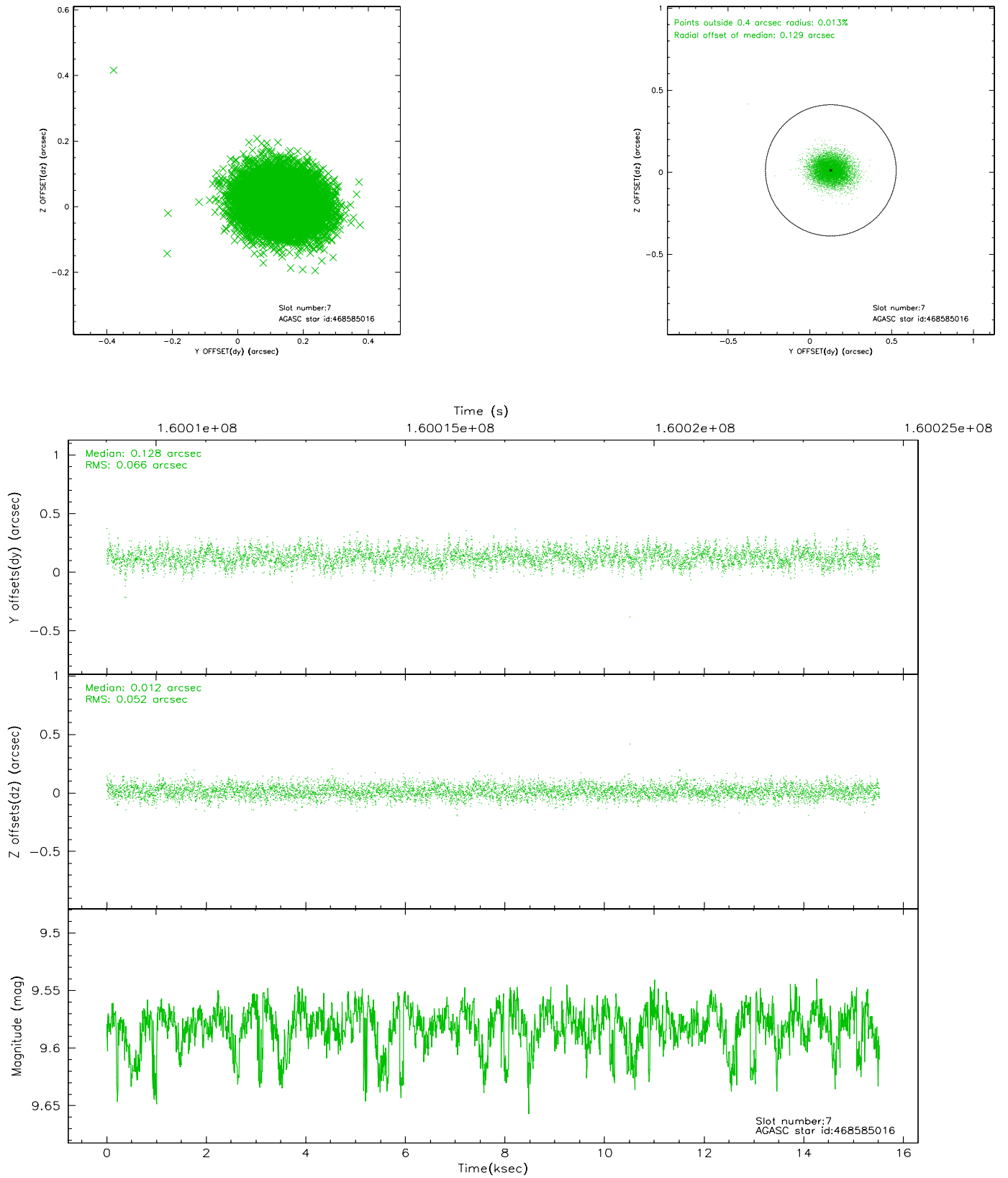
### 2.4.3 Slot 5



## 2.4.4 Slot 6

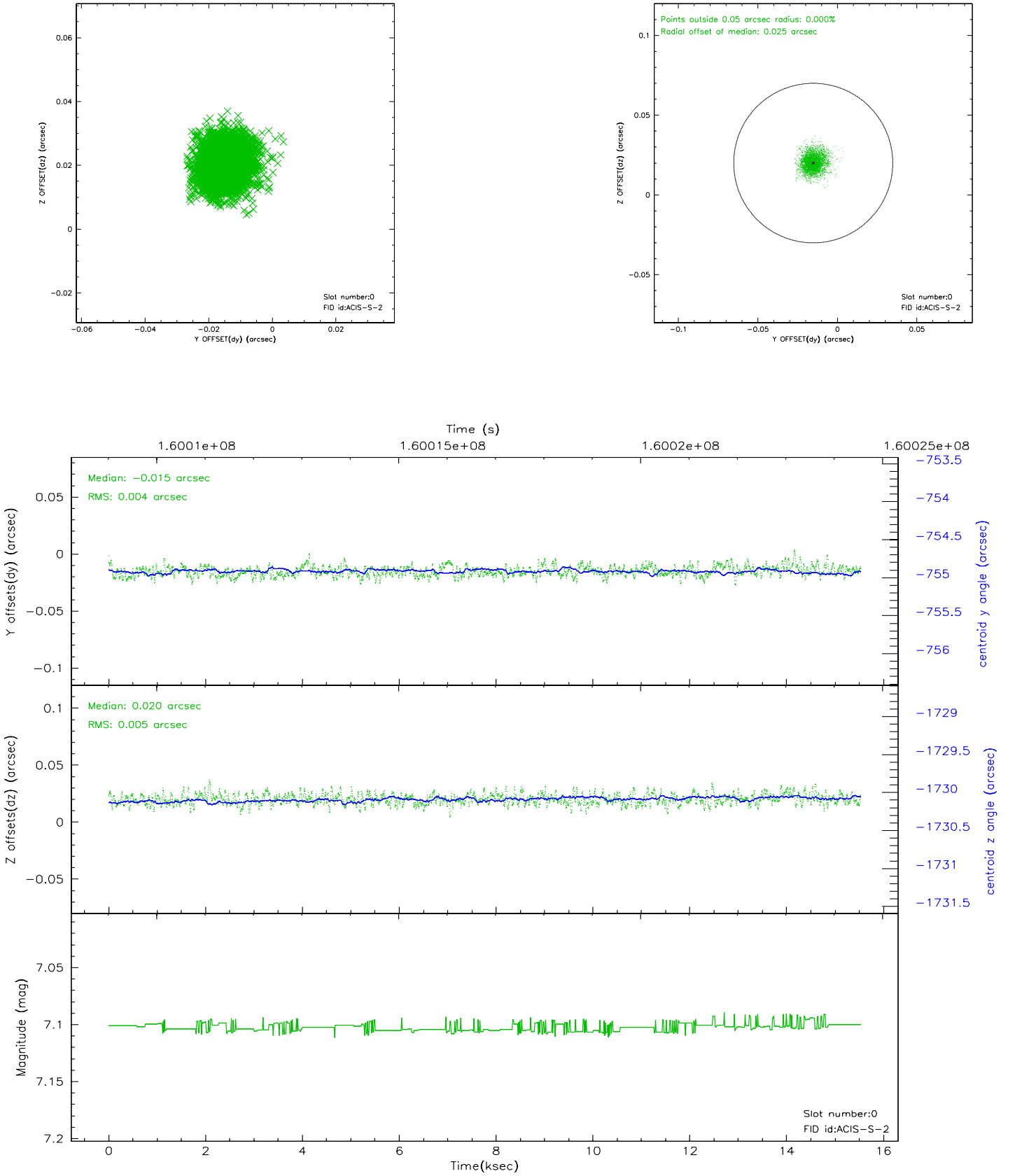


## 2.4.5 Slot 7

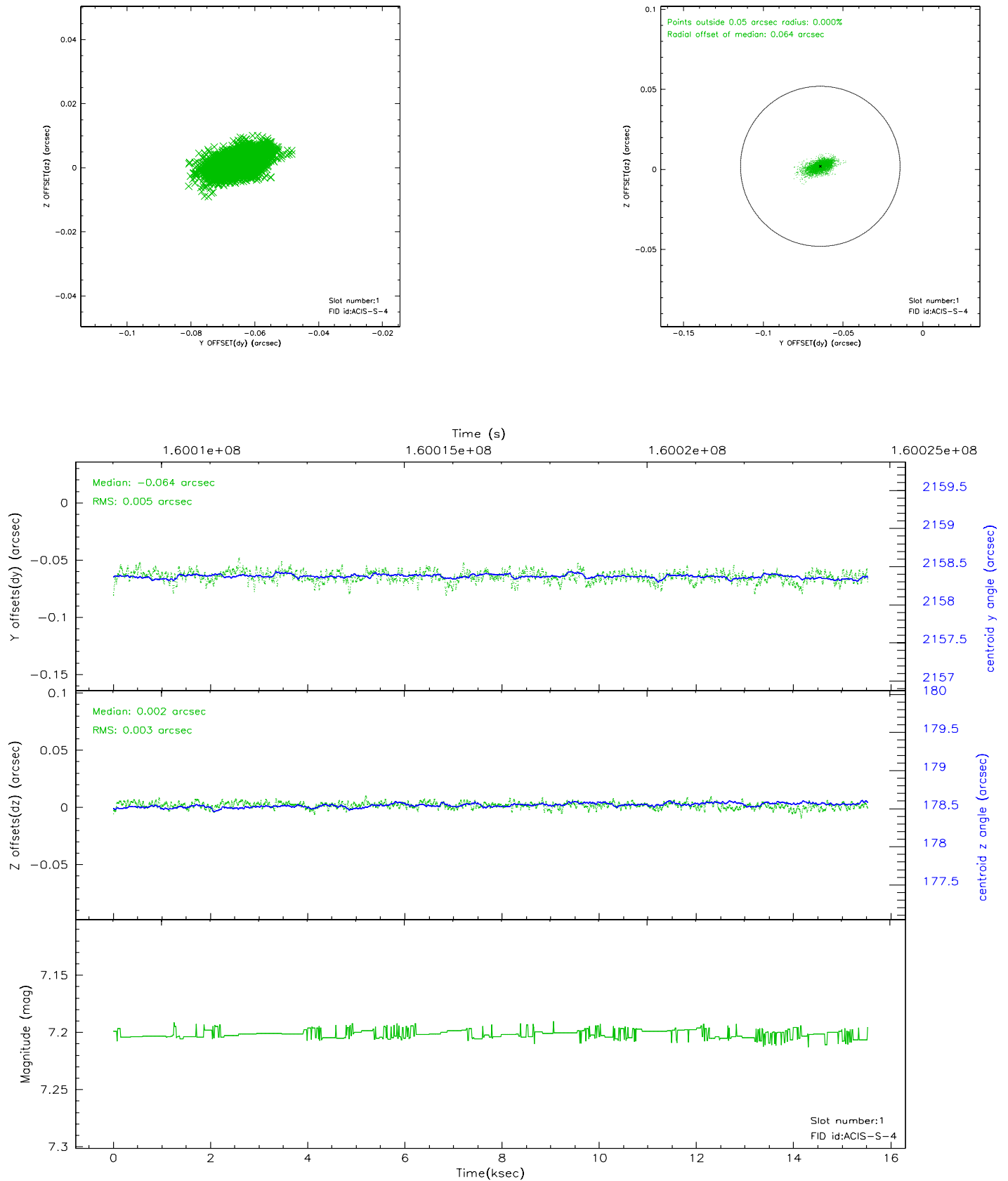


## 2.5 FID Slots

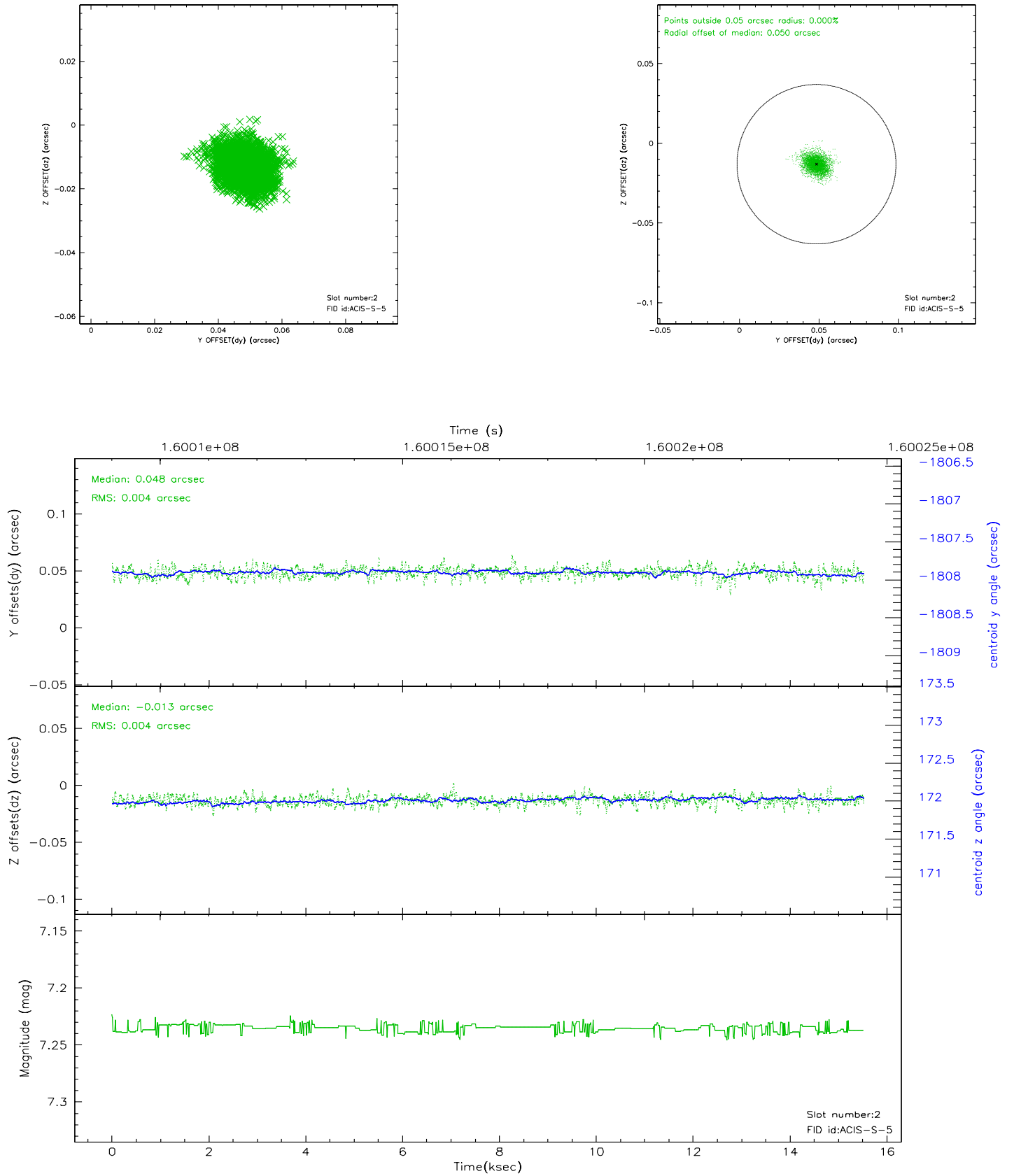
### 2.5.1 Slot 0



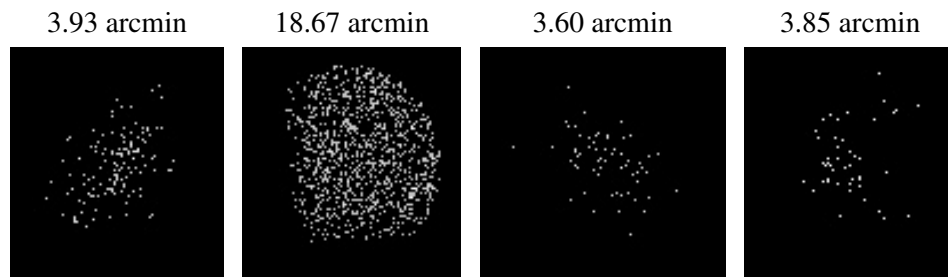
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



## A Summary

### A.1 Status

|                            |               |
|----------------------------|---------------|
| V&V Scientist              | Beth Sundheim |
| V&V Date (YYYY-MM-DD)      | 2006.07.19    |
| V&V Edition                | 1             |
| V&V Disposition and Status | OK            |
| V&V Charge Time            | 14.46         |

### A.2 Comments