

V&V Reference Report

L2 ASCDS Version : 7.6.7.2

Observation 4467 - L2 Version 001
Chandra X-Ray Center

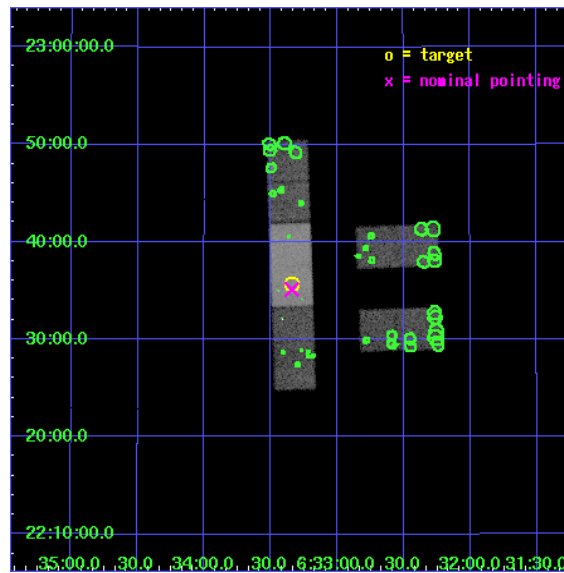
L2 Processing Date : Jun 7 2006

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| 3 | Point Sources | 17 |
| A | Summary | 18 |
| A.1 | Status | 18 |
| A.2 | Comments | 18 |

1 Front

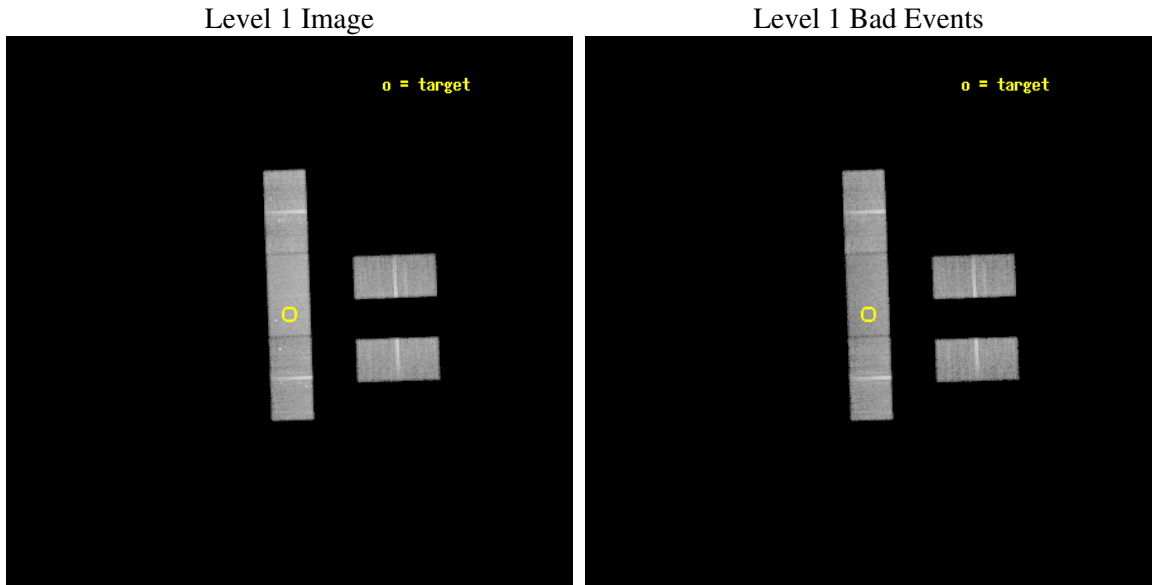
| | |
|----------|---|
| seq_num | 100050 |
| obs_id | 4467 |
| title | SEARCH FOR X-RAYS FROM SATURNIAN SYSTEM |
| observer | DR. J WAITE |
| object | SATURN |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 98.33575 |
| dec_targ | 22.59524 |
| ra_nom | 98.33539276647 |
| dec_nom | 22.585802390376 |
| roll_nom | 268.03009469244 |
| revision | 2 |
| ontime | 37180.699739277 |
| livetime | 36304.271904592 |
| ontime2 | 37180.699739277 |
| ontime3 | 37180.699739277 |
| ontime6 | 37178.958719164 |
| ontime7 | 37180.699739277 |
| ontime8 | 37180.699739277 |
| l2events | 109582 |



2 OBI

2.1 OBI

2.1.1 Images

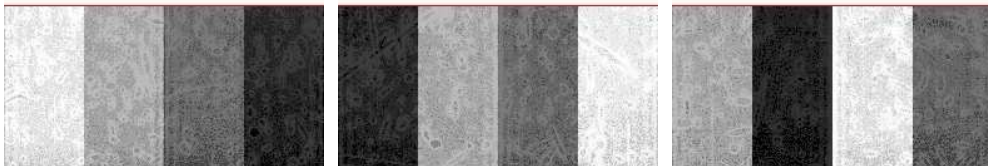


2.1.2 Bias

Chip 2

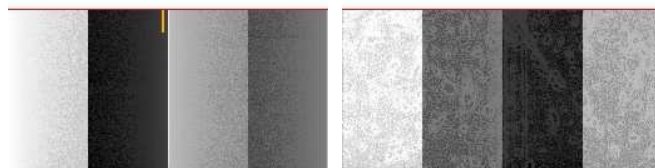
Chip 3

Chip 6



Chip 7

Chip 8



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.7.2 |
| caldsver | 3.2.2 |
| date | 2006-06-07T04:51:26 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 37000.000000 |
| ontime | 37748.886208296 |
| ontime2 | 37748.886208296 |
| ontime3 | 37748.886208296 |
| ontime6 | 37747.145188183 |
| ontime7 | 37748.886208296 |
| ontime8 | 37748.886208296 |
| l1events | 657824 |

2.1.4 Events

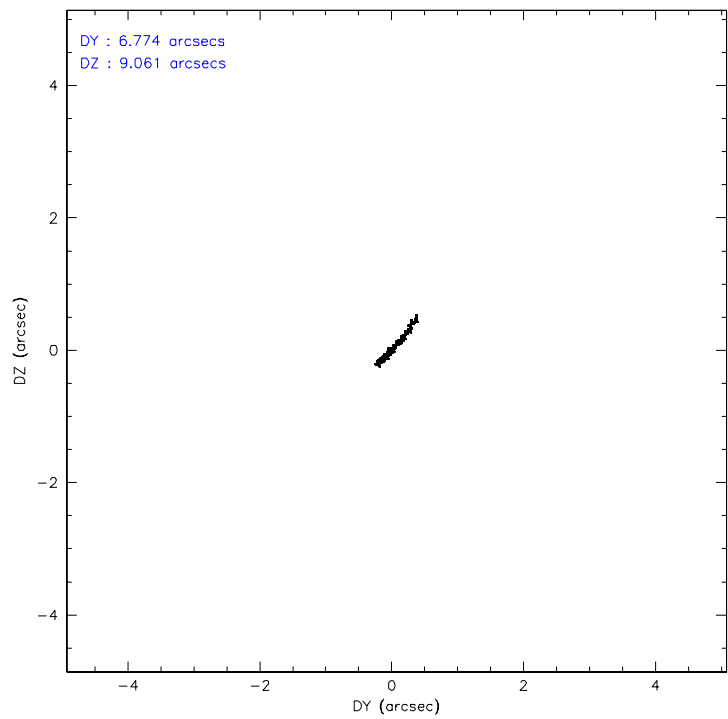
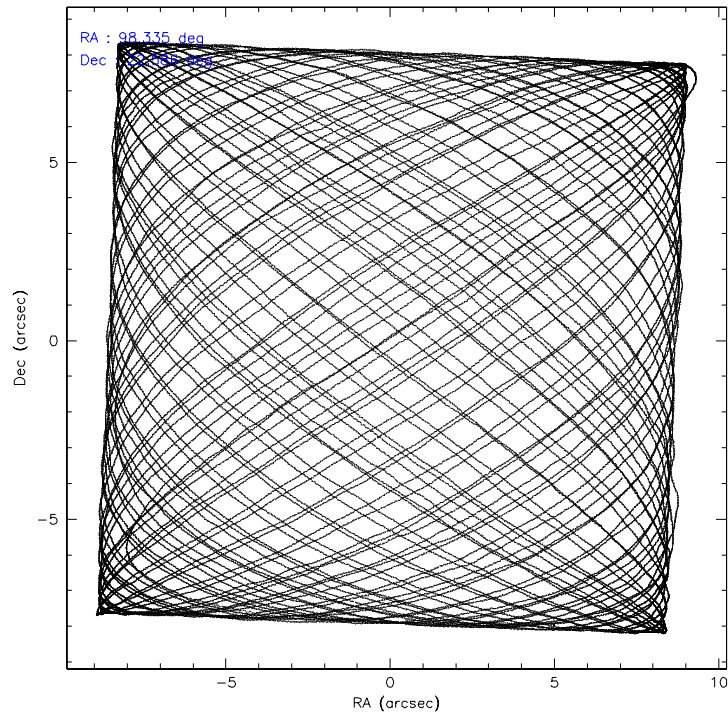
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 114695 | 112456 | 124953 | 154651 | 151069 |
| rejected events | 100830 | 98787 | 108778 | 95606 | 120736 |
| rejected % | 87% | 87% | 87% | 61% | 79% |

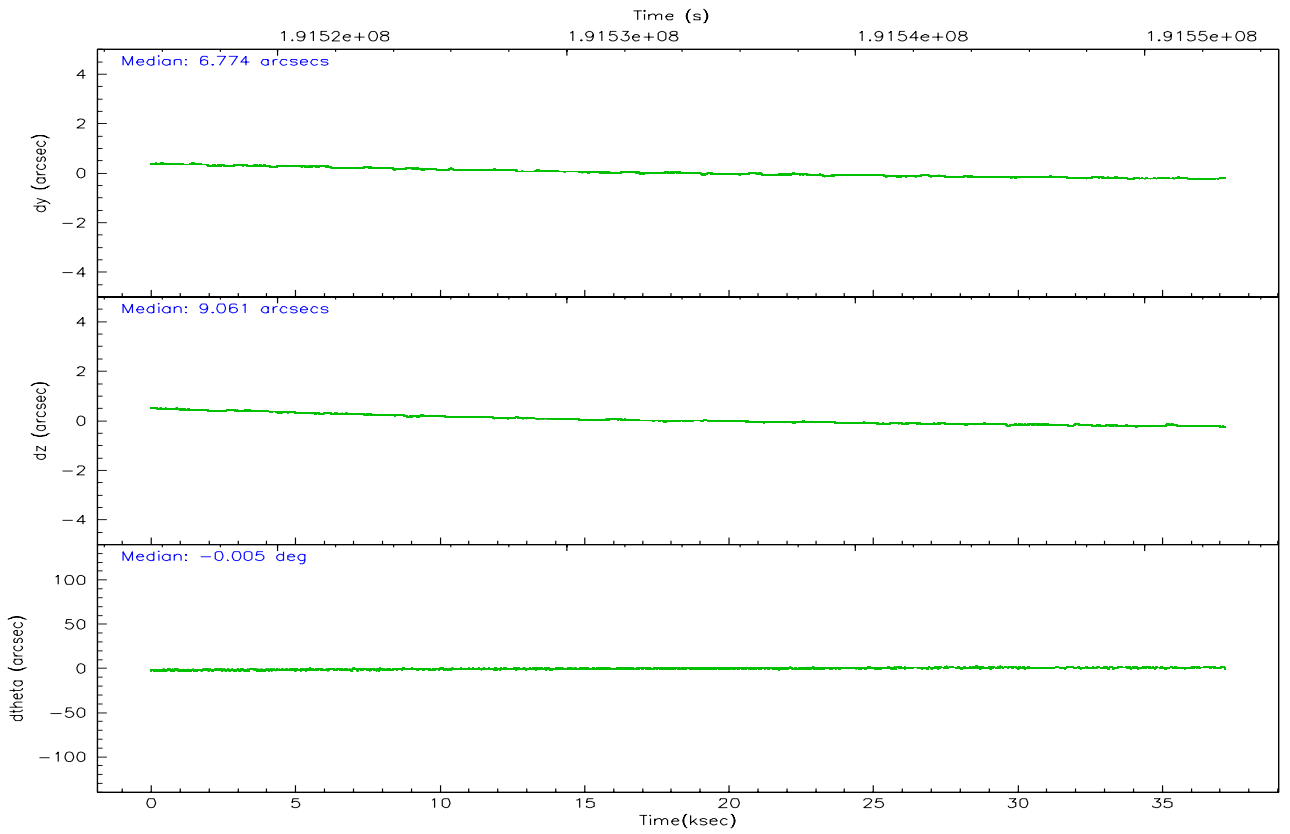
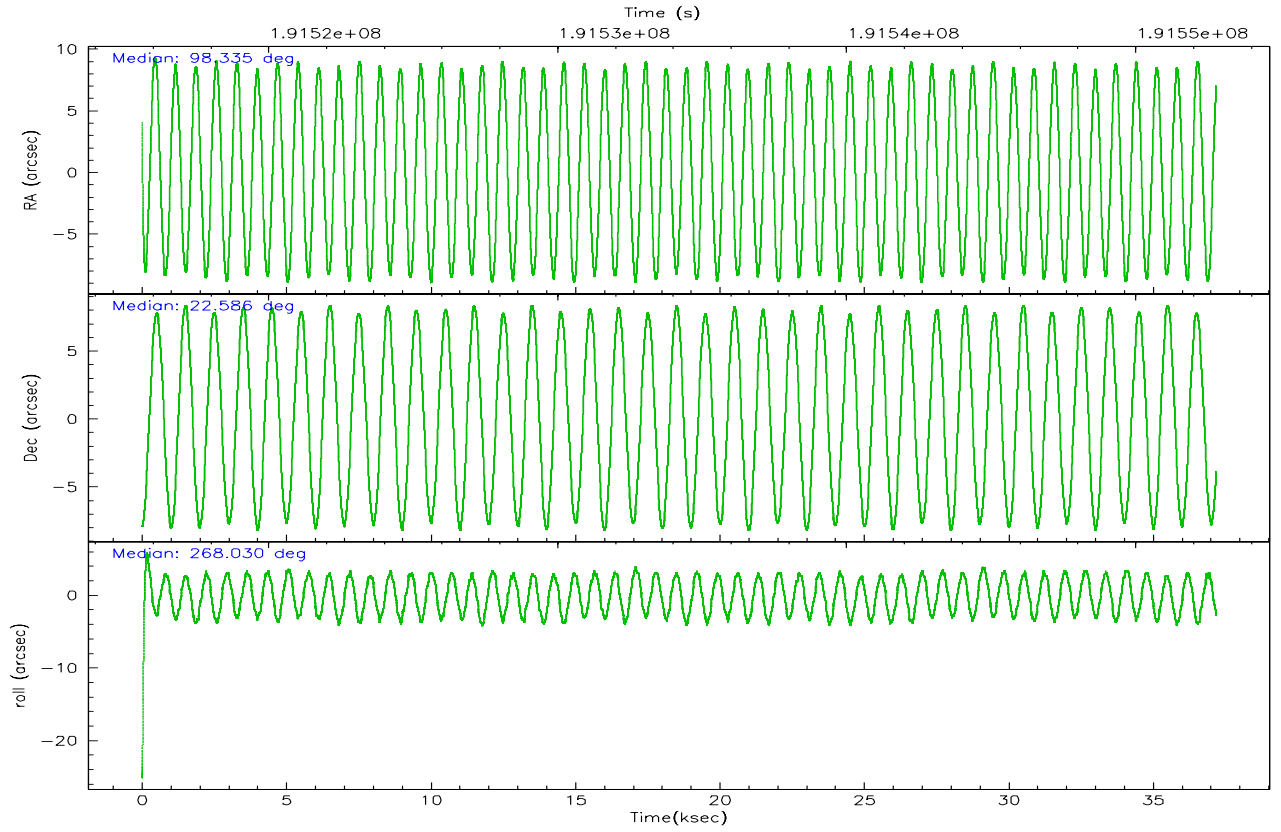
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|--------|-------|--------|
| grade 0 events | 6028 | 5783 | 7274 | 3885 | 10150 |
| | 5% | 5% | 5% | 2% | 6% |
| grade 1 events | 43 | 55 | 49 | 99 | 76 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2689 | 2614 | 2882 | 14794 | 6441 |
| | 2% | 2% | 2% | 9% | 4% |
| grade 3 events | 1617 | 1638 | 1776 | 3681 | 3385 |
| | 1% | 1% | 1% | 2% | 2% |
| grade 4 events | 1623 | 1585 | 1657 | 3638 | 3047 |
| | 1% | 1% | 1% | 2% | 2% |
| grade 5 events | 4238 | 4949 | 5410 | 10727 | 6740 |
| | 3% | 4% | 4% | 6% | 4% |
| grade 6 events | 2148 | 2260 | 2836 | 33962 | 7733 |
| | 1% | 2% | 2% | 21% | 5% |
| grade 7 events | 96309 | 93572 | 103069 | 83865 | 113497 |
| | 83% | 83% | 82% | 54% | 75% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-23678 | ACIS-23678 | 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 | 1/2 | 1/2 |
| Pointing RA | 98.321182 | 98.33539276647011 | Subarray start row | 0 | 257 |
| Pointing Dec | 22.609648 | 22.58580239037562 | Subarray row count | 1024 | 512 |
| Pointing Roll | 267.878936 | 268.0300946924363 | Alternating exposures requested | N | N |
| Window start time | 191462464.184000 | 191462464.184000 | Primary exposure time | 0.000000 | 1.7 |
| Window stop time | 191894464.184000 | 191894464.184000 | | | |
| 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 | 191515792.184000 | 191514698.26935 | | | |
| Observation start date | 2004-01-26T14:48:48 | 2004-01-26T14:31:38 | | | |
| Observation end time | 191552792.184000 | 191553167.54603 | | | |
| Observation end date | 2004-01-27T01:05:28 | 2004-01-27T01:12:47 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



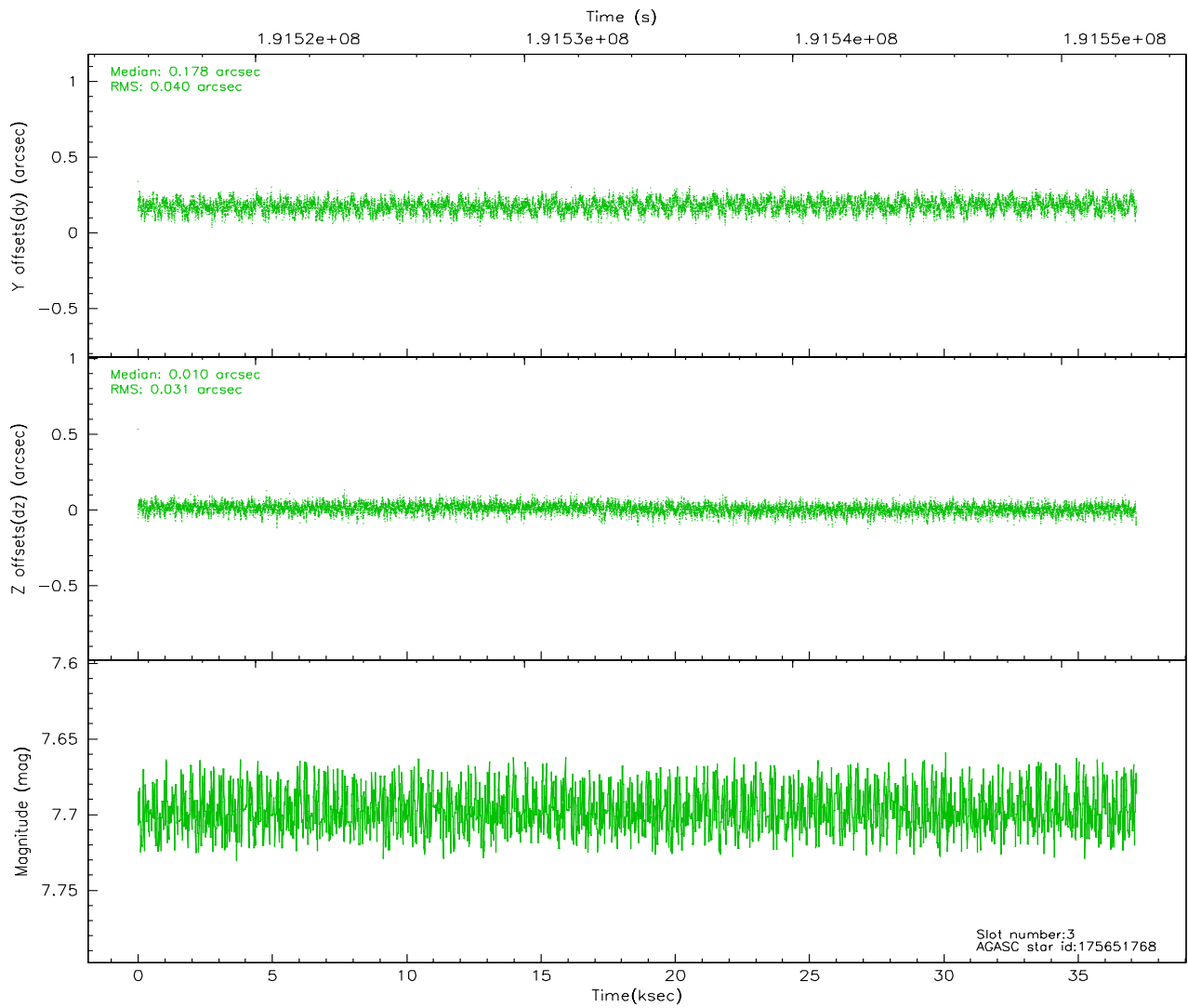
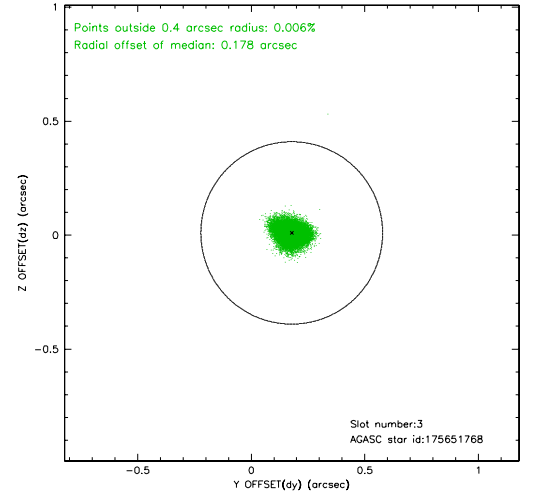
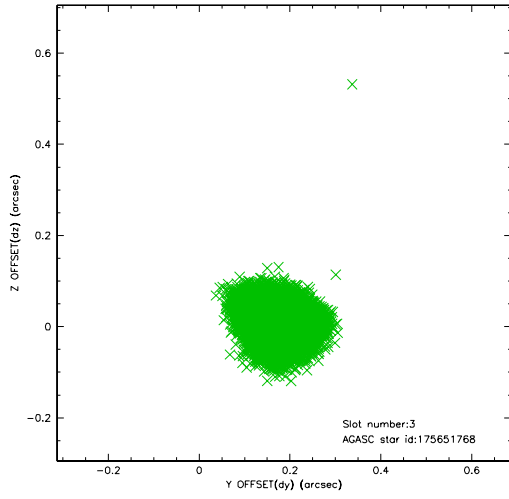


Slot Statistics

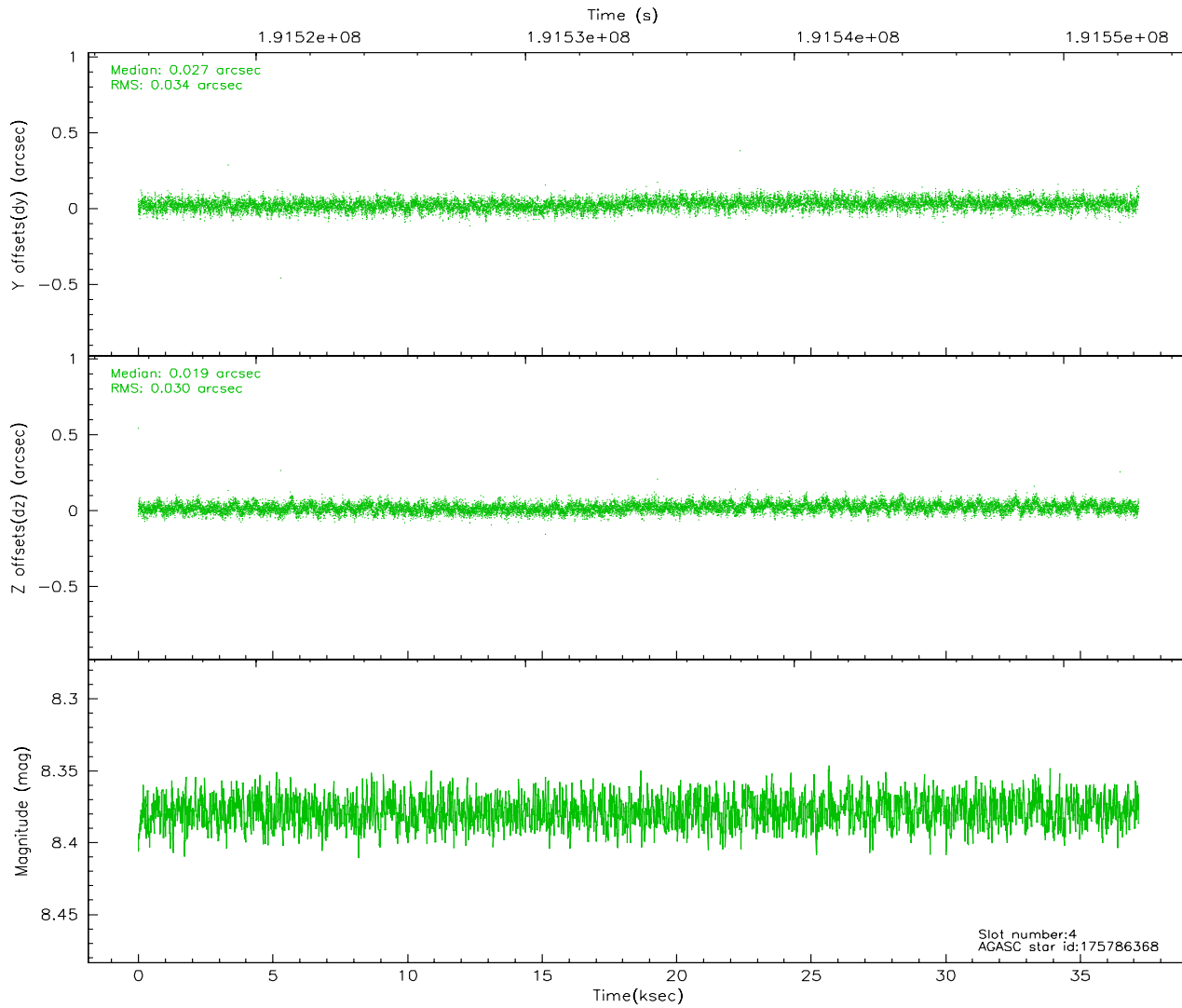
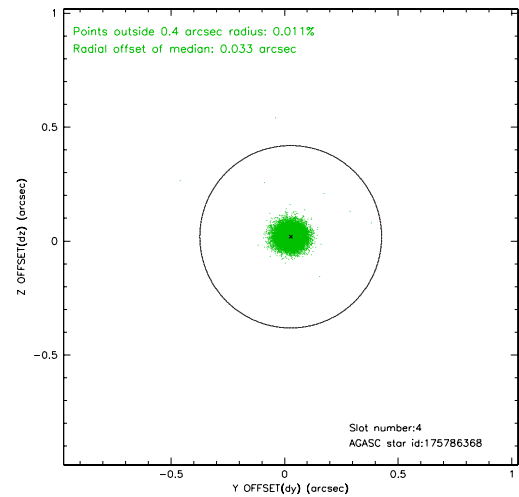
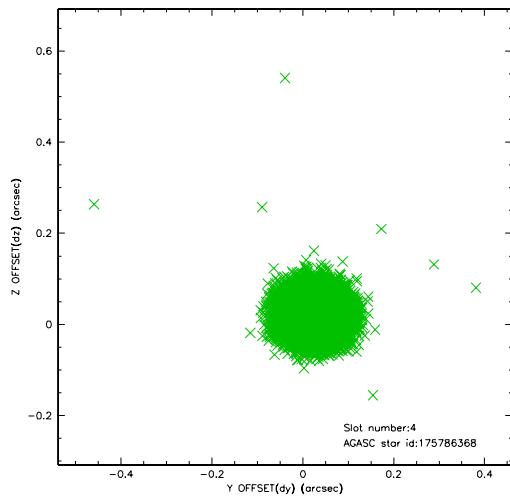
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.18 | 9068 | 0.031 | 0.001 | 0.012 | 0.017 | 0.000000 | 0.000000 | 936.50 | -1725.97 |
| 1 | FID | ACIS-S-2 | 7.10 | 9069 | -0.035 | -0.014 | 0.011 | 0.017 | 0.000000 | 0.000000 | -759.45 | -1730.55 |
| 2 | FID | ACIS-S-5 | 7.23 | 9070 | -0.019 | 0.020 | 0.014 | 0.021 | 0.000000 | 0.000000 | -1812.69 | 171.60 |
| 3 | GUIDE | 175651768 | 7.70 | 18137 | 0.178 | 0.010 | 0.054 | 0.086 | 97.997709 | 22.185726 | 1564.22 | -1020.92 |
| 4 | GUIDE | 175786368 | 8.38 | 18137 | 0.027 | 0.019 | 0.048 | 0.078 | 98.615171 | 22.043265 | 2000.65 | 1055.98 |
| 5 | GUIDE | 246297664 | 8.10 | 18138 | -0.090 | -0.099 | 0.056 | 0.089 | 98.363620 | 23.178719 | -2052.24 | 64.70 |
| 6 | GUIDE | 175780728 | 7.52 | 18136 | 0.114 | -0.019 | 0.051 | 0.081 | 98.529568 | 22.124139 | 1720.80 | 759.34 |
| 7 | GUIDE | 246298968 | 7.28 | 18138 | -0.230 | 0.094 | 0.053 | 0.085 | 98.169451 | 23.118407 | -1811.79 | -569.45 |

2.4 Star Slots

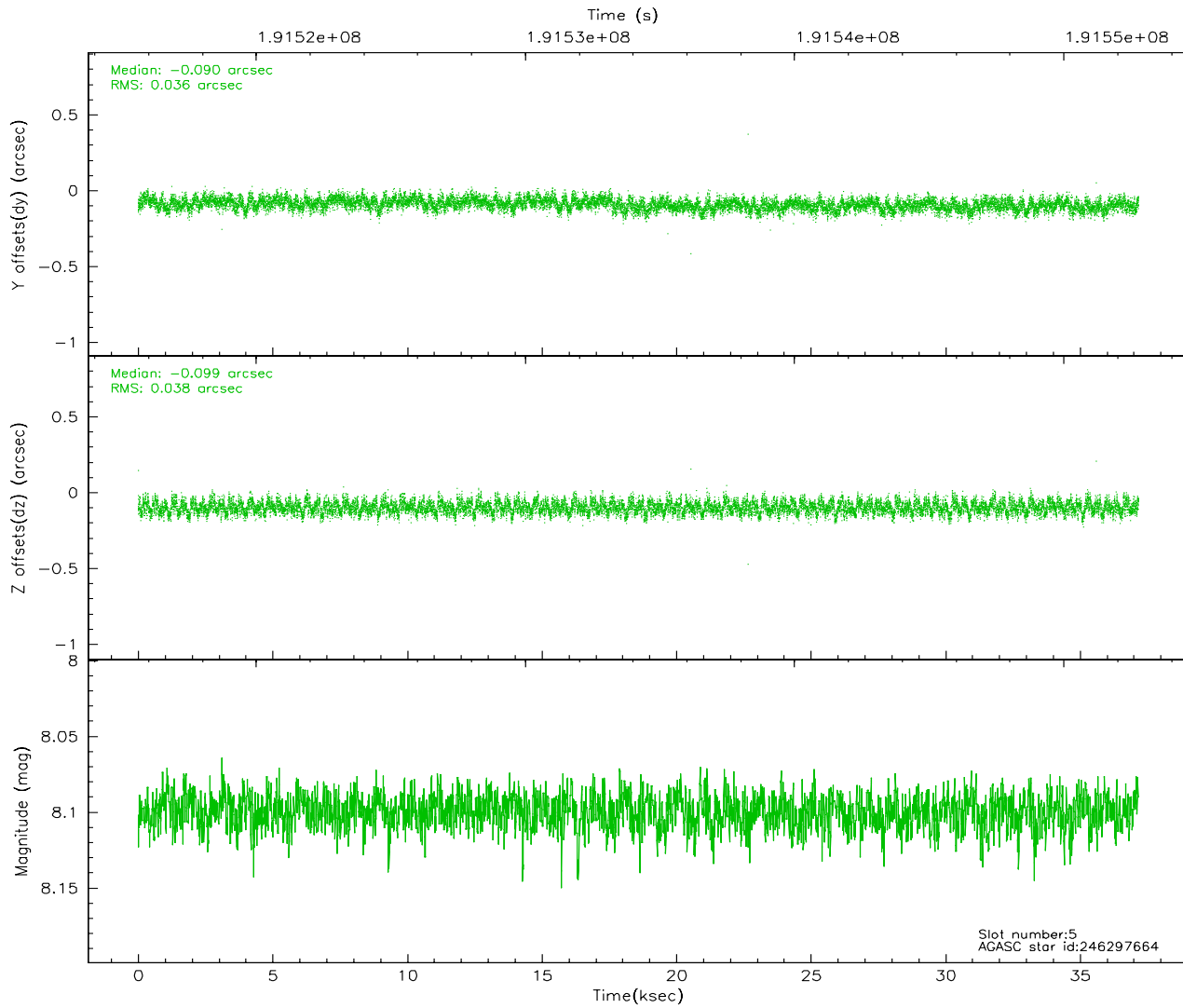
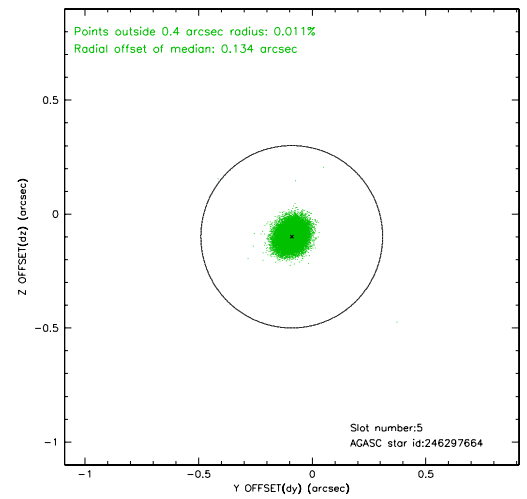
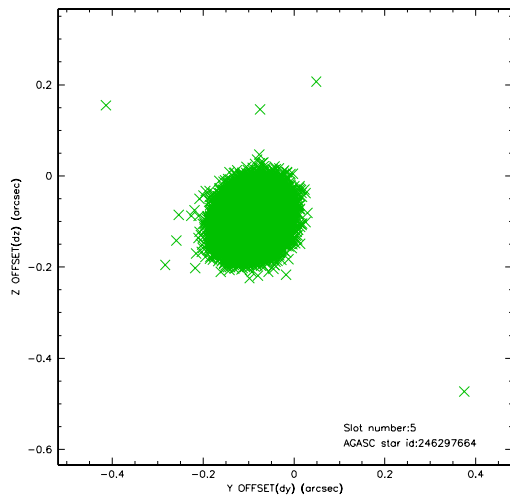
2.4.1 Slot 3



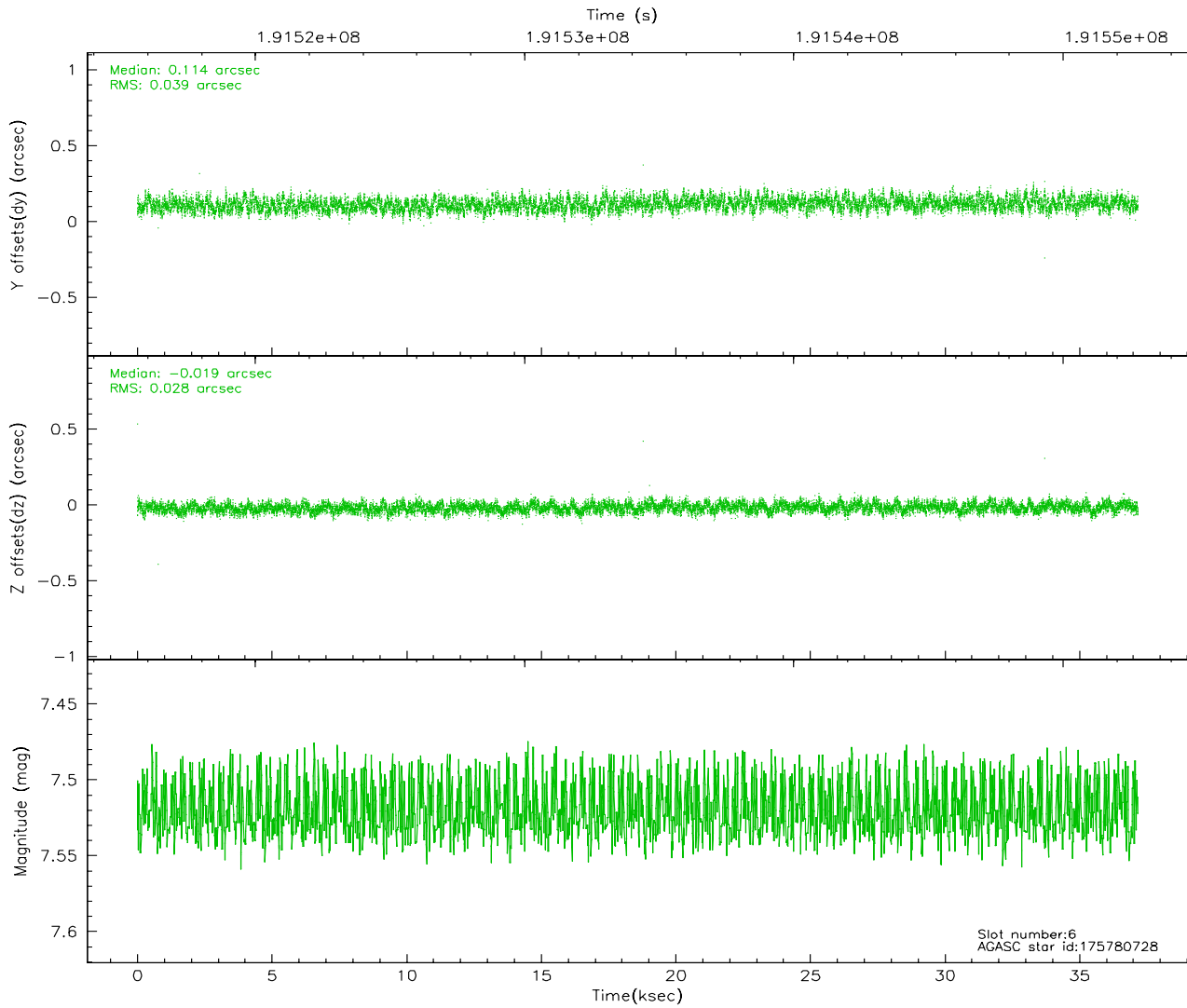
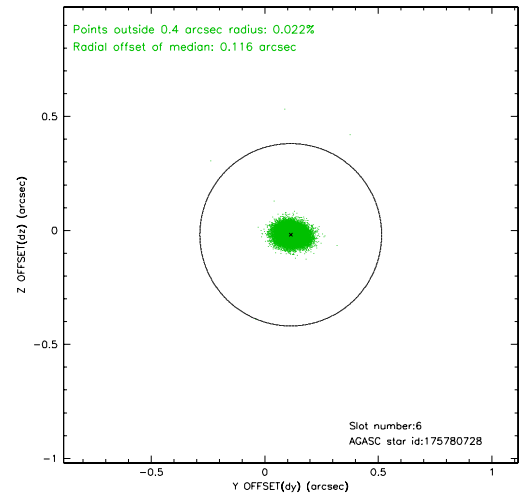
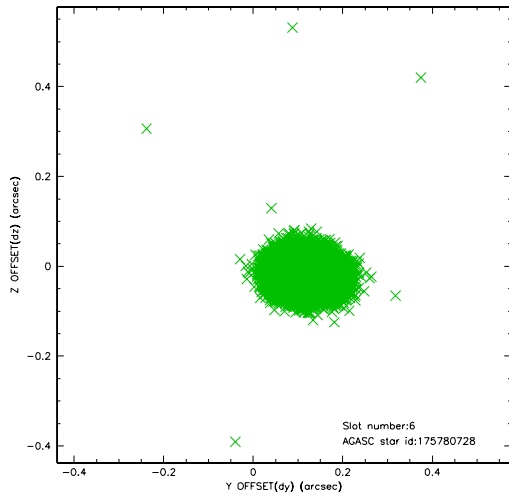
2.4.2 Slot 4



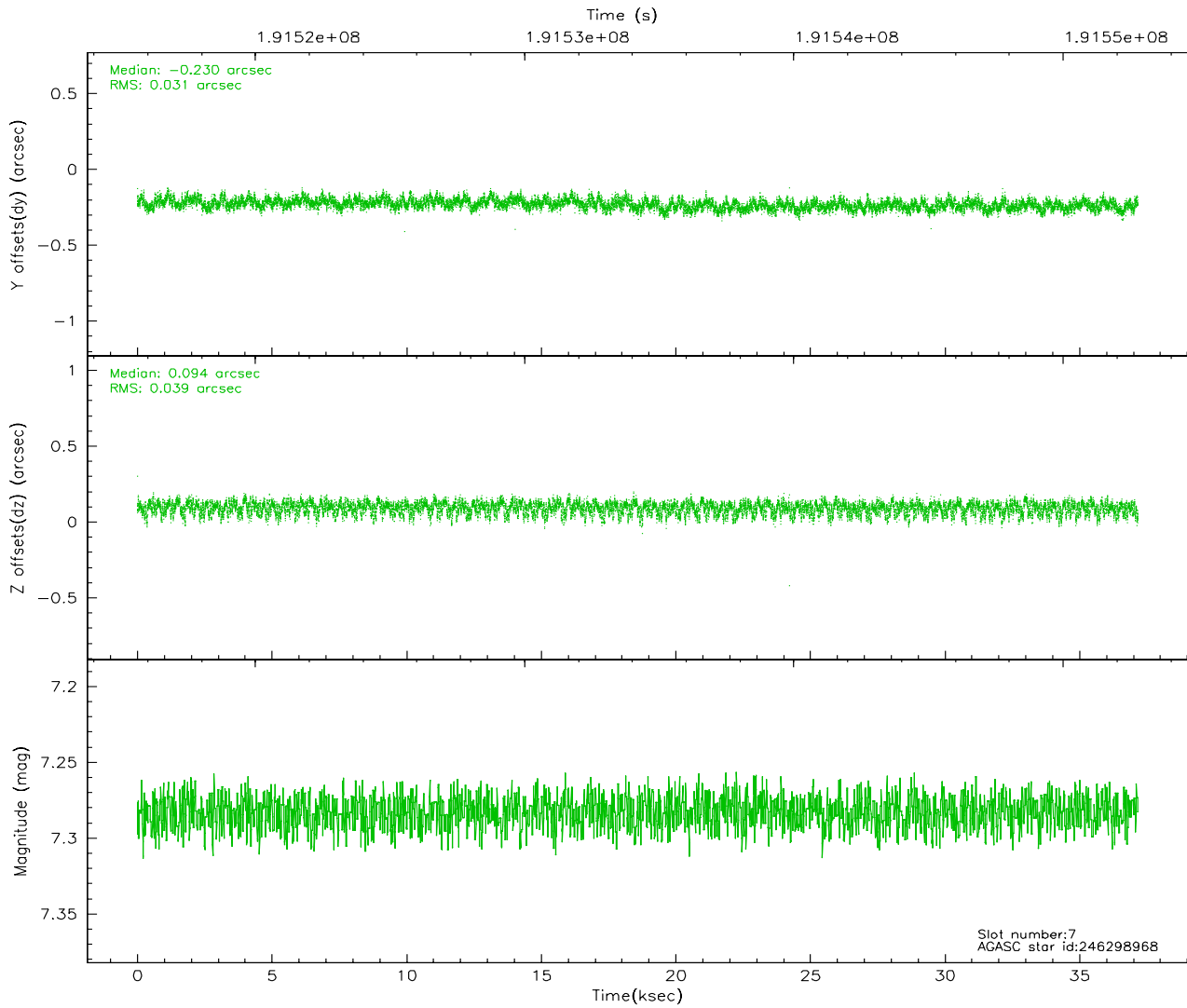
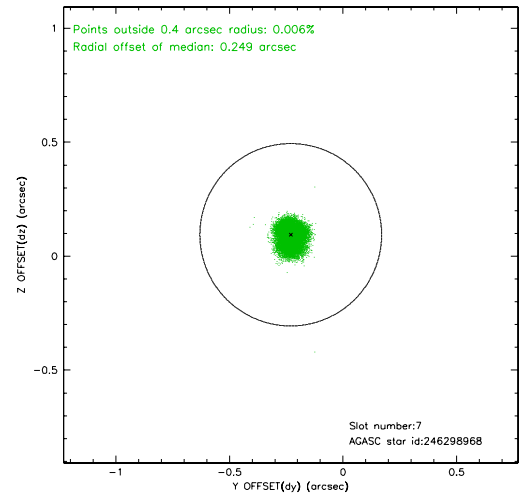
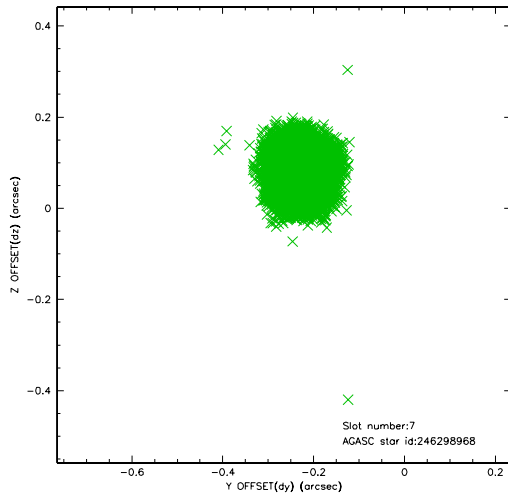
2.4.3 Slot 5



2.4.4 Slot 6

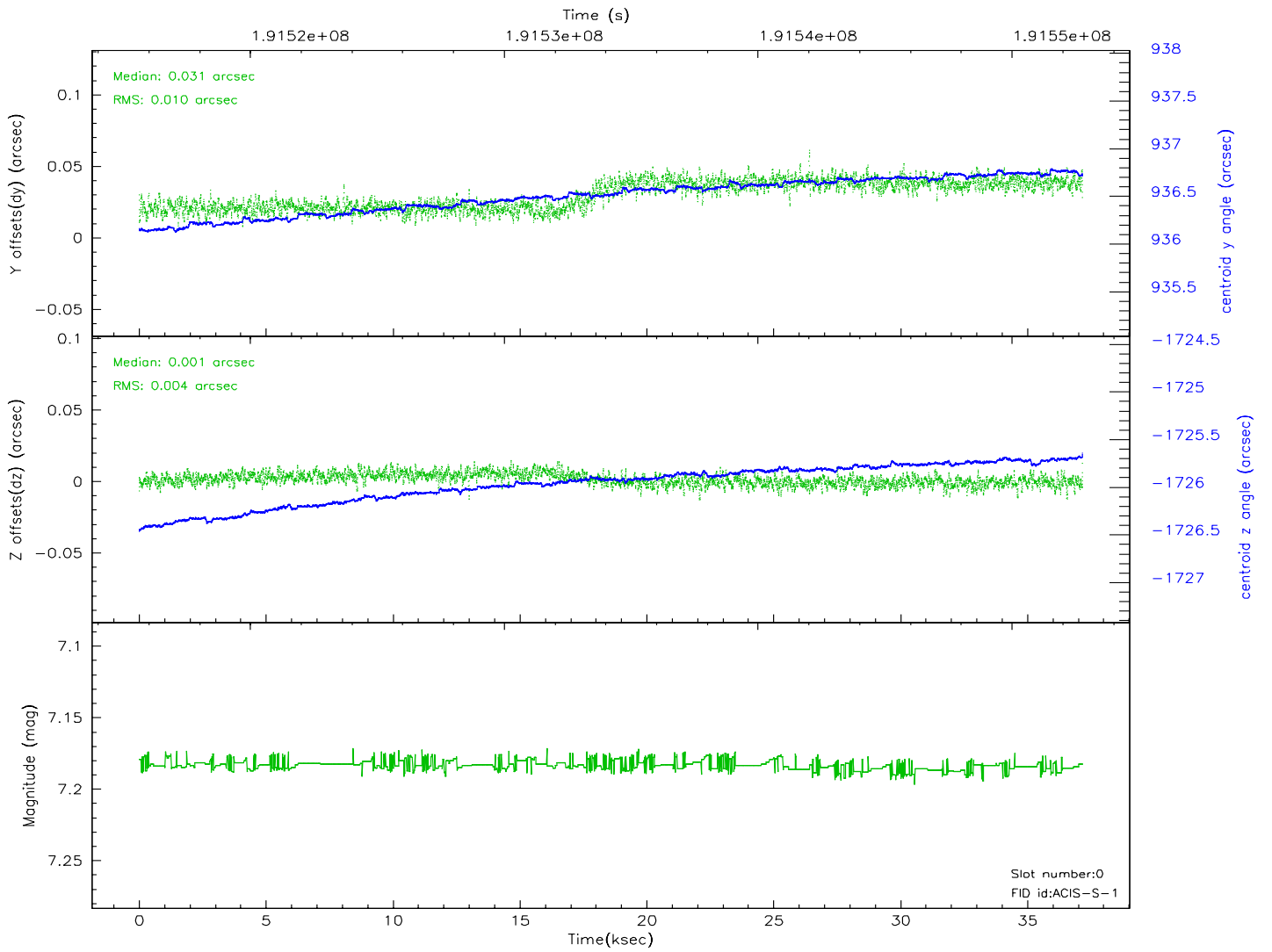
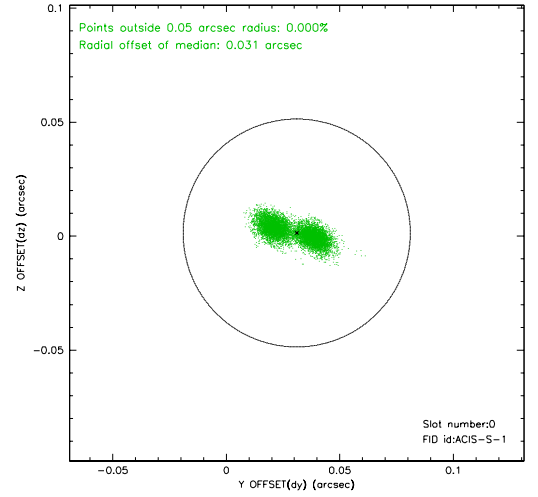
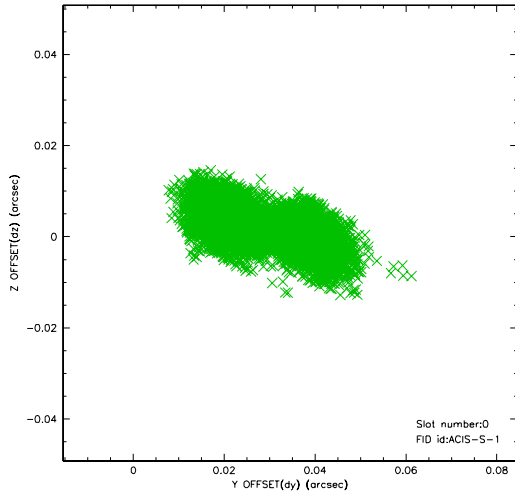


2.4.5 Slot 7

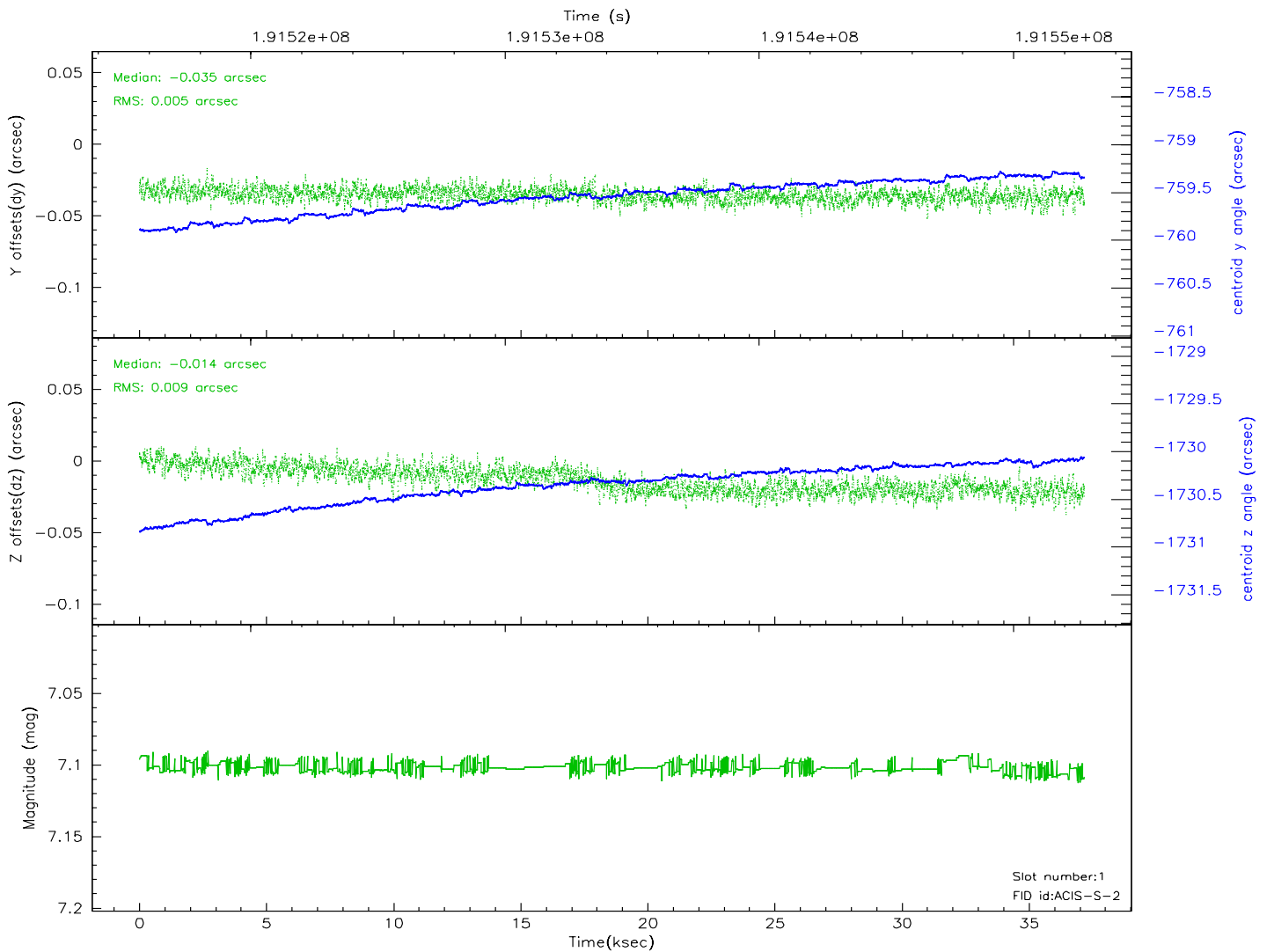
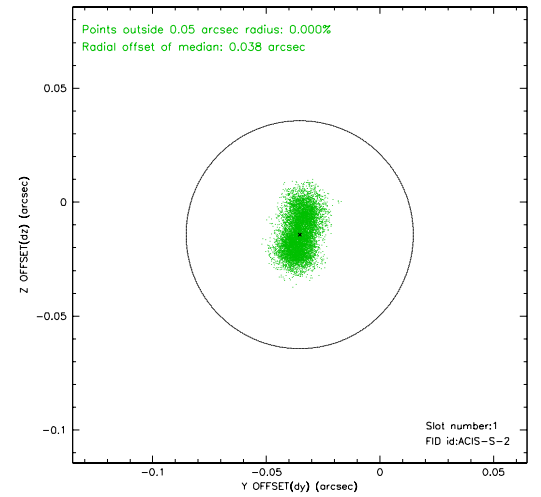
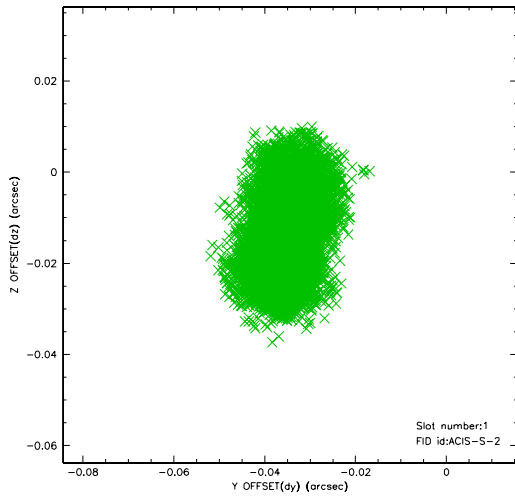


2.5 FID Slots

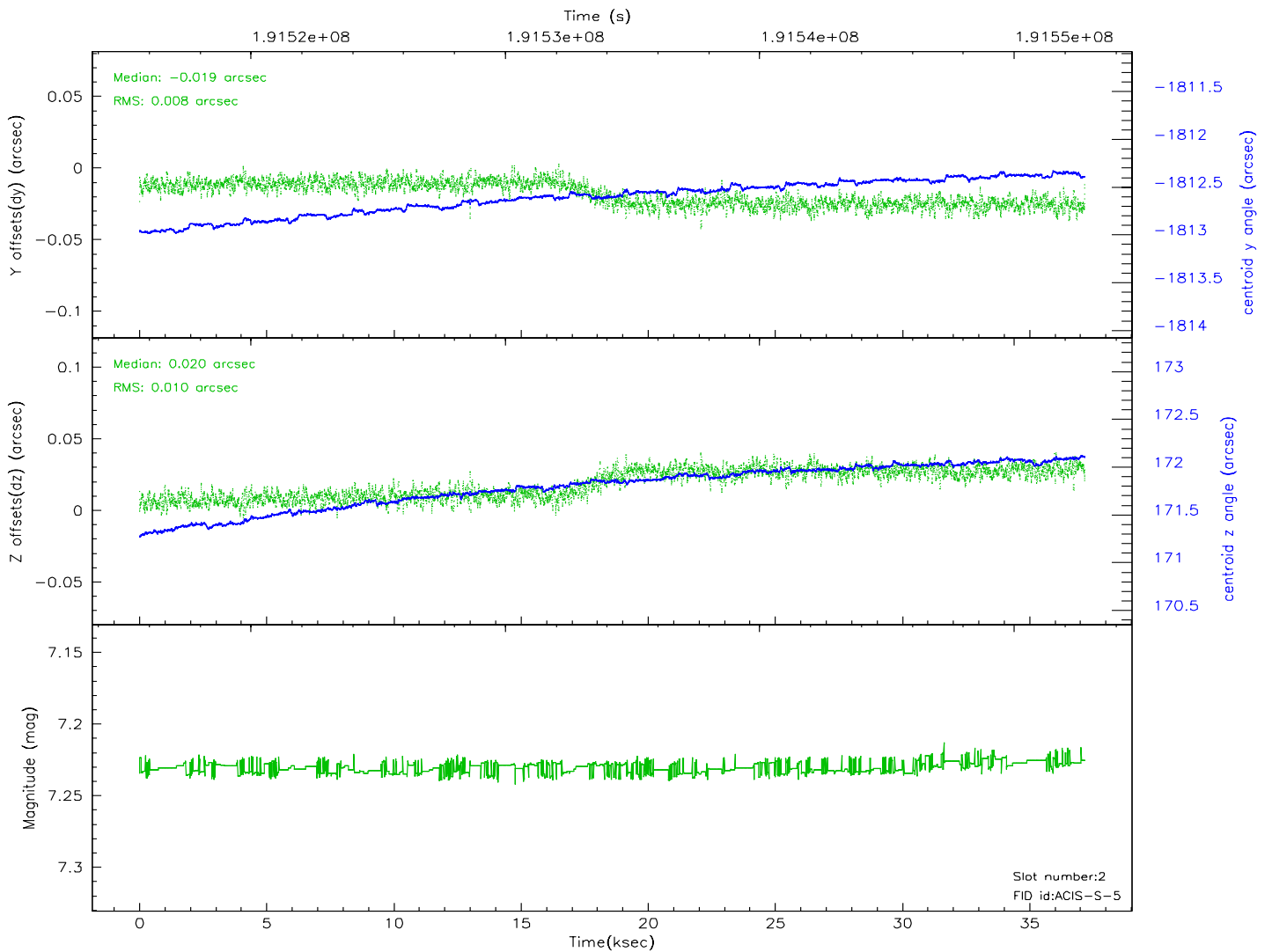
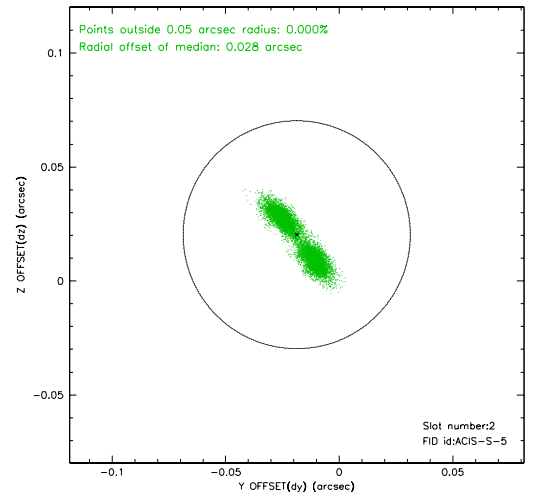
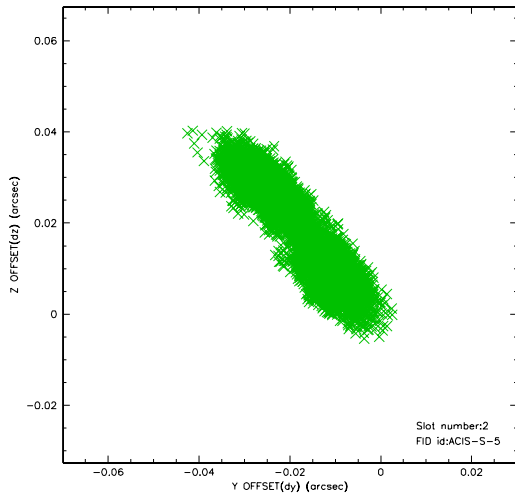
2.5.1 Slot 0



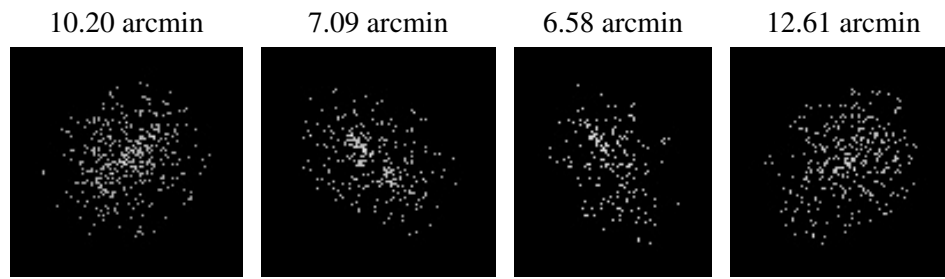
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2006.06.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 37.18 |

A.2 Comments

Window constraint satisfied.