

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 5937 - L2 Version 002
Chandra X-Ray Center

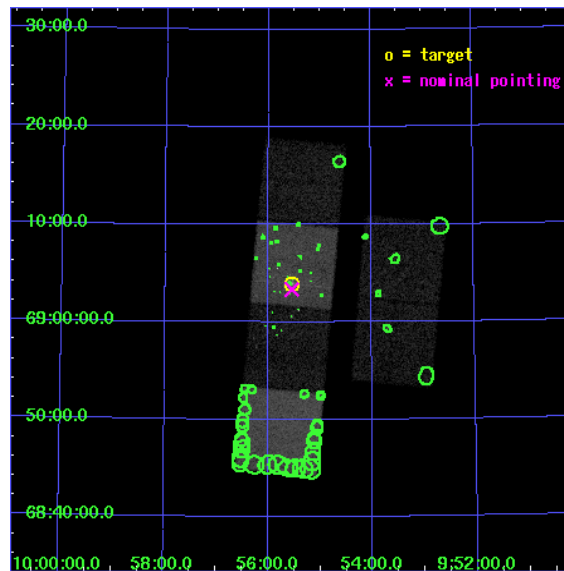
L2 Processing Date : Mar 8 2006

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1 Front

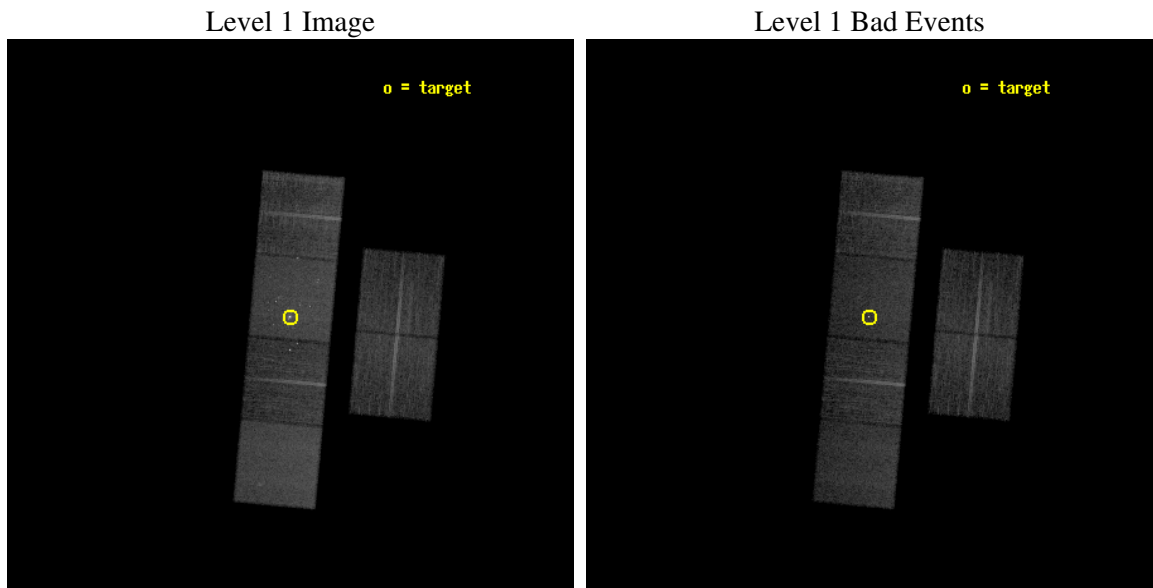
| | |
|----------|---|
| seq_num | 600456 |
| obs_id | 5937 |
| title | An Unprecedented View of a Galaxy's Dynamic X-ray Source Population |
| observer | Dr. David Pooley |
| object | M81 |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 148.888333 |
| dec_targ | 69.065306 |
| ra_nom | 148.88606567087 |
| dec_nom | 69.055708783188 |
| roll_nom | 275.15875813164 |
| revision | 2 |
| ontime | 12159.9999547 |
| livetime | 12006.022713401 |
| ontime2 | 12159.9999547 |
| ontime3 | 12159.9999547 |
| ontime5 | 12159.9999547 |
| ontime6 | 12159.9999547 |
| ontime7 | 12159.9999547 |
| ontime8 | 12159.9999547 |
| l2events | 148000 |



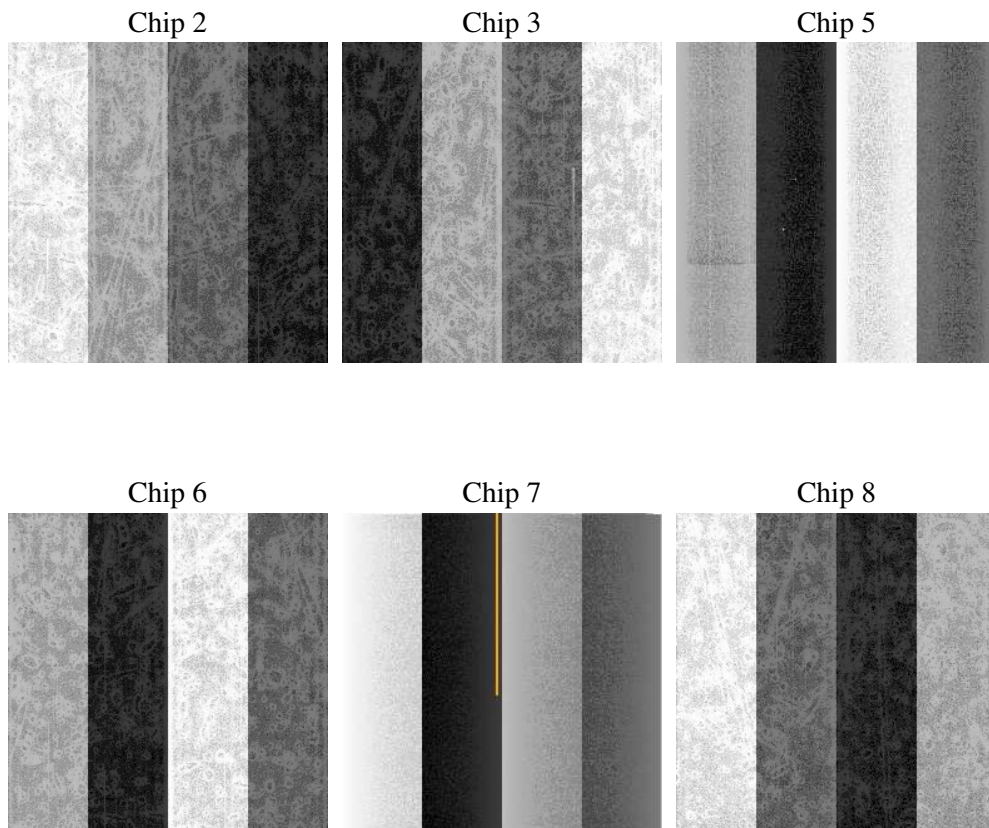
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.7.1 |
| caldsver | 3.2.1 |
| date | 2006-03-08T15:50:55 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 12000.000000 |
| ontime | 12383.876695096 |
| ontime2 | 12383.876675218 |
| ontime3 | 12387.11771521 |
| ontime5 | 12383.876695096 |
| ontime6 | 12383.876675218 |
| ontime7 | 12383.876695096 |
| ontime8 | 12387.117685288 |
| l1events | 654626 |

2.1.4 Events

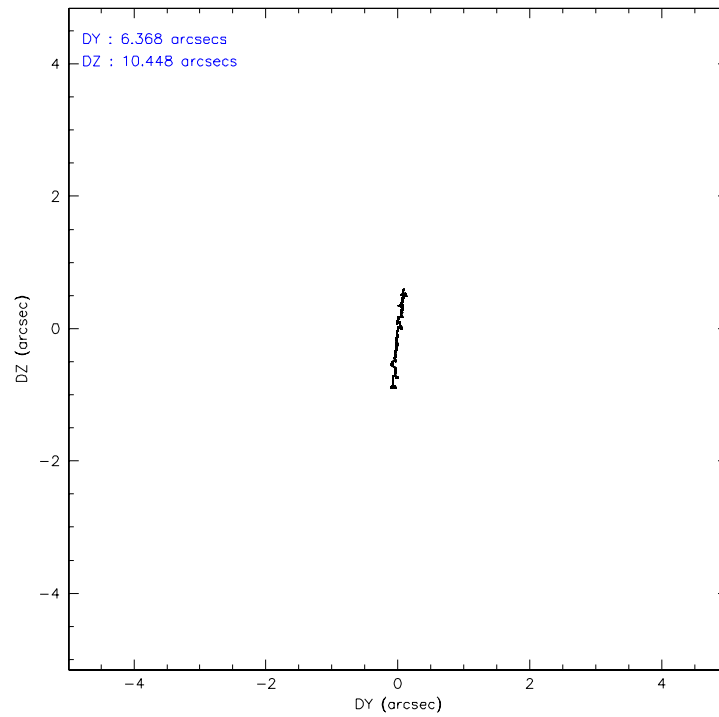
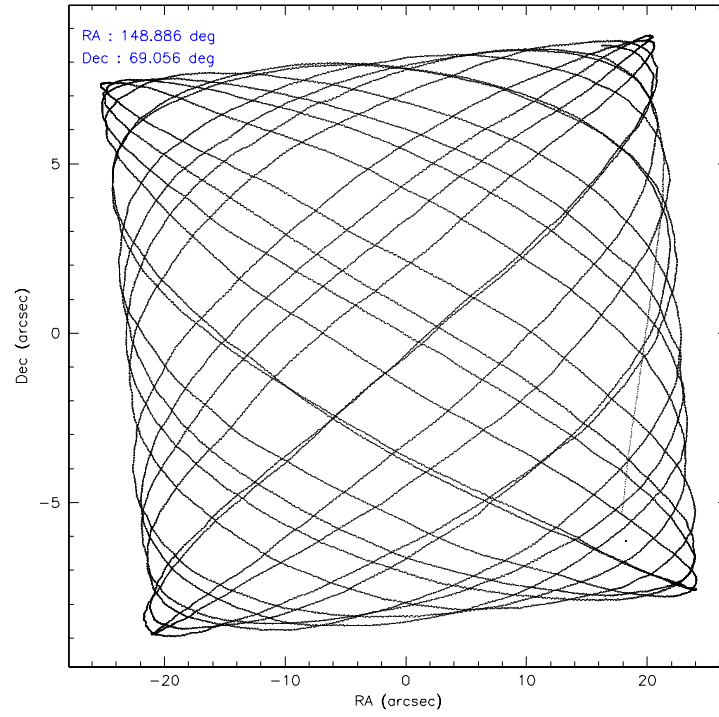
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|--------|-------|--------|--------|
| level 1 events | 93603 | 85911 | 133460 | 92571 | 135810 | 113271 |
| rejected events | 83033 | 75672 | 77429 | 79723 | 81728 | 89909 |
| rejected % | 88% | 88% | 58% | 86% | 60% | 79% |

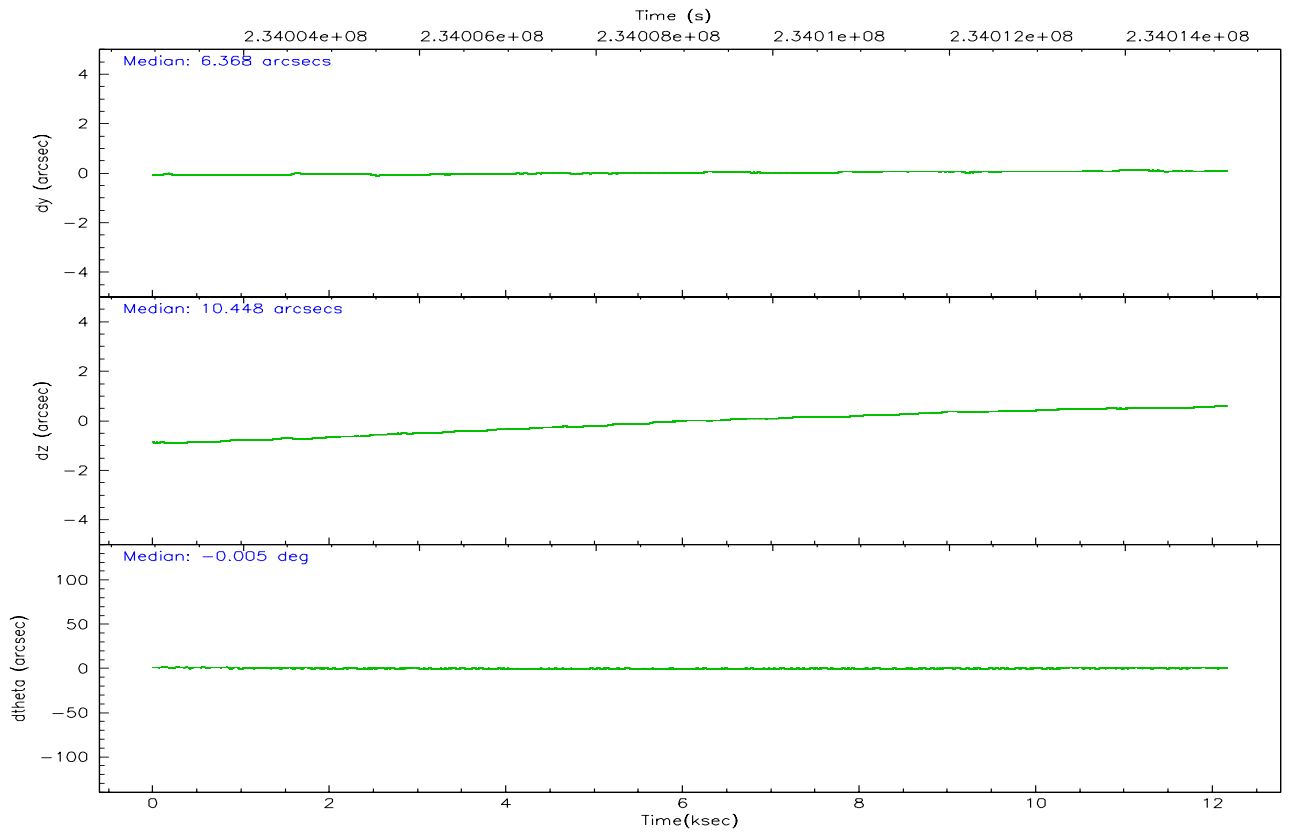
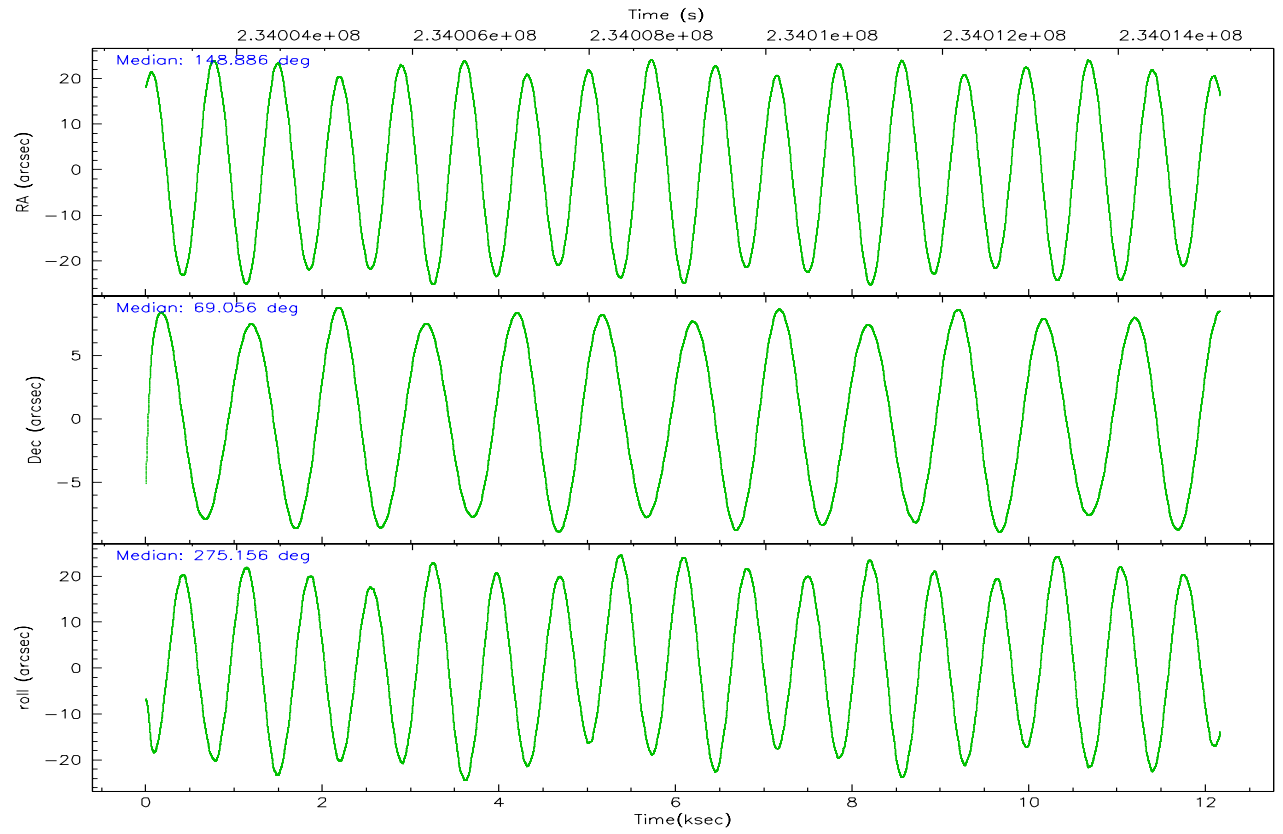
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 4672 | 4628 | 2336 | 5952 | 4686 | 7445 |
| | 4% | 5% | 1% | 6% | 3% | 6% |
| grade 1 events | 51 | 49 | 117 | 95 | 151 | 80 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2193 | 2026 | 17553 | 2614 | 13926 | 5128 |
| | 2% | 2% | 13% | 2% | 10% | 4% |
| grade 3 events | 1004 | 1030 | 1246 | 1069 | 3088 | 2574 |
| | 1% | 1% | 0% | 1% | 2% | 2% |
| grade 4 events | 1038 | 1027 | 1197 | 1027 | 3007 | 2340 |
| | 1% | 1% | 0% | 1% | 2% | 2% |
| grade 5 events | 3668 | 4069 | 6286 | 4121 | 8366 | 5480 |
| | 3% | 4% | 4% | 4% | 6% | 4% |
| grade 6 events | 1834 | 1776 | 34772 | 2389 | 30416 | 6297 |
| | 1% | 2% | 26% | 2% | 22% | 5% |
| grade 7 events | 79143 | 71306 | 69953 | 75304 | 72170 | 83927 |
| | 84% | 82% | 52% | 81% | 53% | 74% |

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 | FAINT | FAINT | On-chip summing requested | N | N |
| Observation mode | POINTING | POINTING | Subarray requested | NONE | NONE |
| Pointing RA | 148.841248 | 148.8860656708745 | Alternating exposures requested | N | N |
| Pointing Dec | 69.077716 | 69.0557087831877 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 275.043974 | 275.1587581316425 | | | |
| 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 | 234003145.184000 | 234001972.60503 | | | |
| Observation start date | 2005-06-01T08:51:21 | 2005-06-01T08:32:52 | | | |
| Observation end time | 234015145.184000 | 234016298.51818 | | | |
| Observation end date | 2005-06-01T12:11:21 | 2005-06-01T12:31:38 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



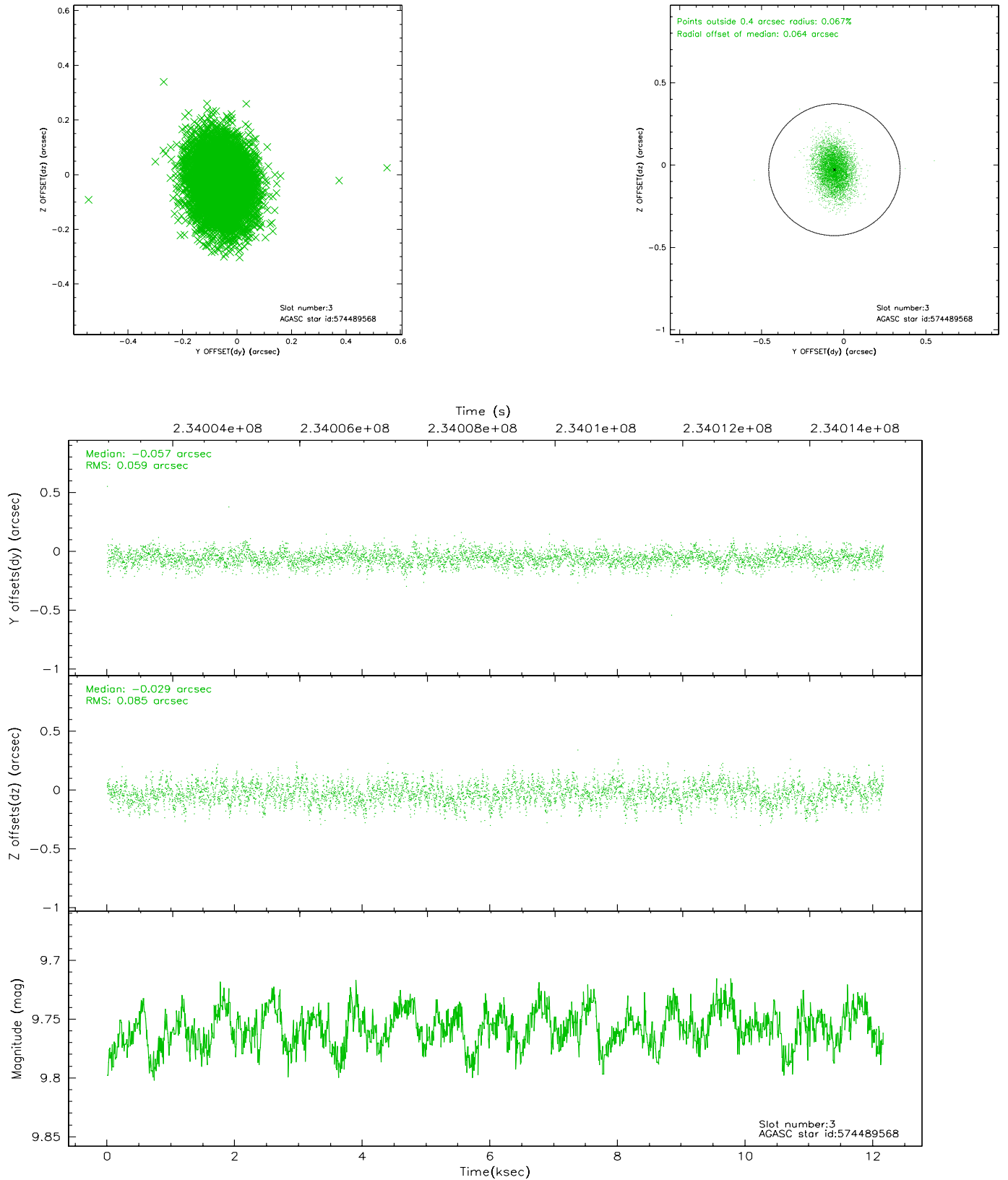


Slot Statistics

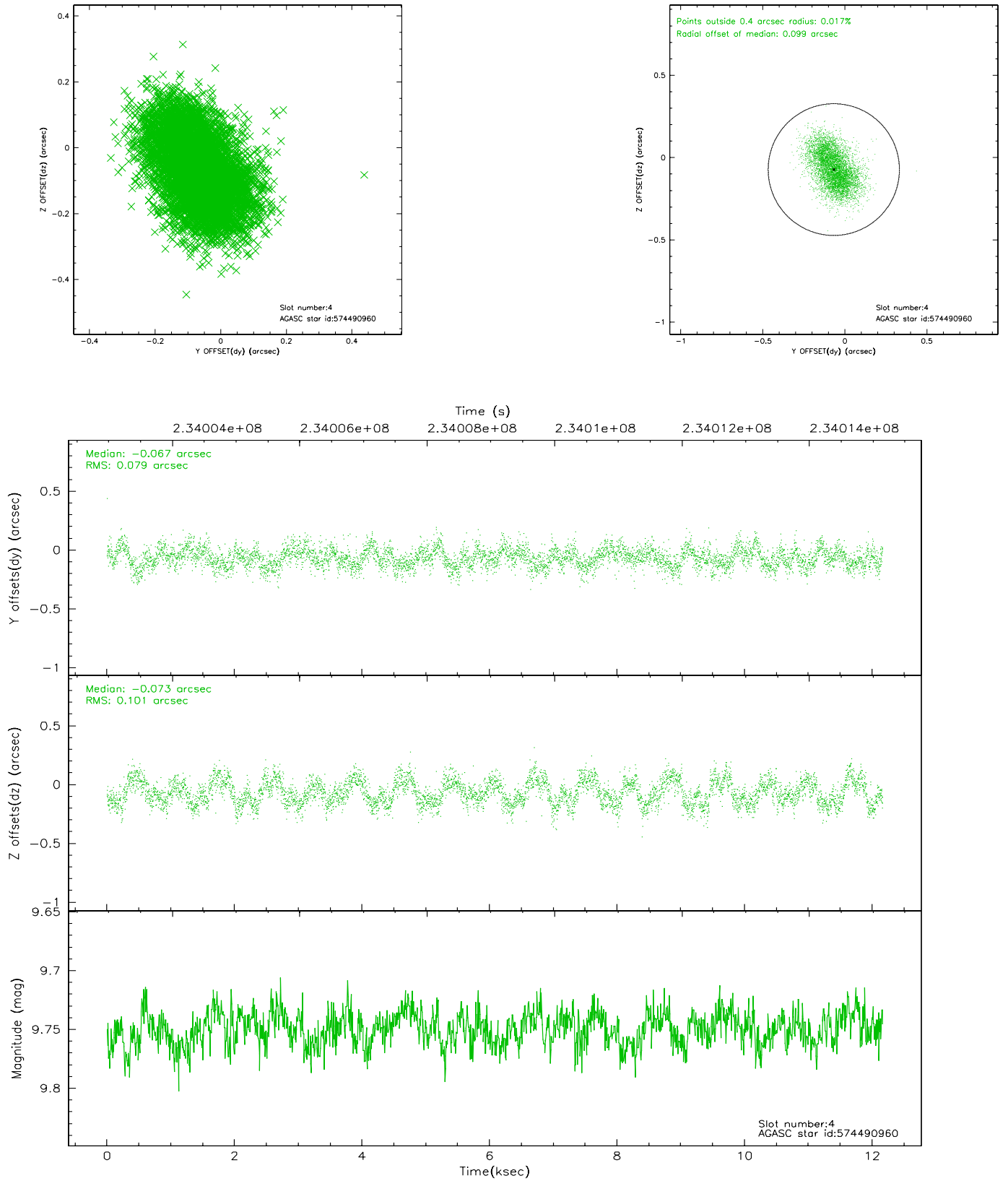
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 2968 | -0.054 | 0.003 | 0.010 | 0.019 | 0.000000 | 0.000000 | -759.13 | -1731.63 |
| 1 | FID | ACIS-S-4 | 7.21 | 2968 | 0.053 | 0.026 | 0.008 | 0.014 | 0.000000 | 0.000000 | 2154.03 | 176.50 |
| 2 | FID | ACIS-S-5 | 7.23 | 2968 | -0.029 | -0.019 | 0.009 | 0.018 | 0.000000 | 0.000000 | -1811.46 | 170.53 |
| 3 | GUIDE | 574489568 | 9.76 | 5931 | -0.057 | -0.029 | 0.109 | 0.181 | 147.223974 | 69.438157 | -1498.81 | -1920.32 |
| 4 | GUIDE | 574490960 | 9.75 | 5932 | -0.067 | -0.073 | 0.139 | 0.219 | 148.185918 | 69.658768 | -2159.92 | -633.19 |
| 5 | GUIDE | 574491280 | 9.36 | 5935 | -0.054 | 0.007 | 0.094 | 0.164 | 148.611567 | 69.450135 | -1361.12 | -172.00 |
| 6 | GUIDE | 574497600 | 10.44 | 5934 | 0.063 | -0.010 | 0.189 | 0.309 | 147.824120 | 68.451903 | 2115.26 | -1536.79 |
| 7 | GUIDE | 574496360 | 9.46 | 5931 | 0.116 | 0.105 | 0.119 | 0.192 | 150.806604 | 68.529829 | 2151.95 | 2409.60 |

2.4 Star Slots

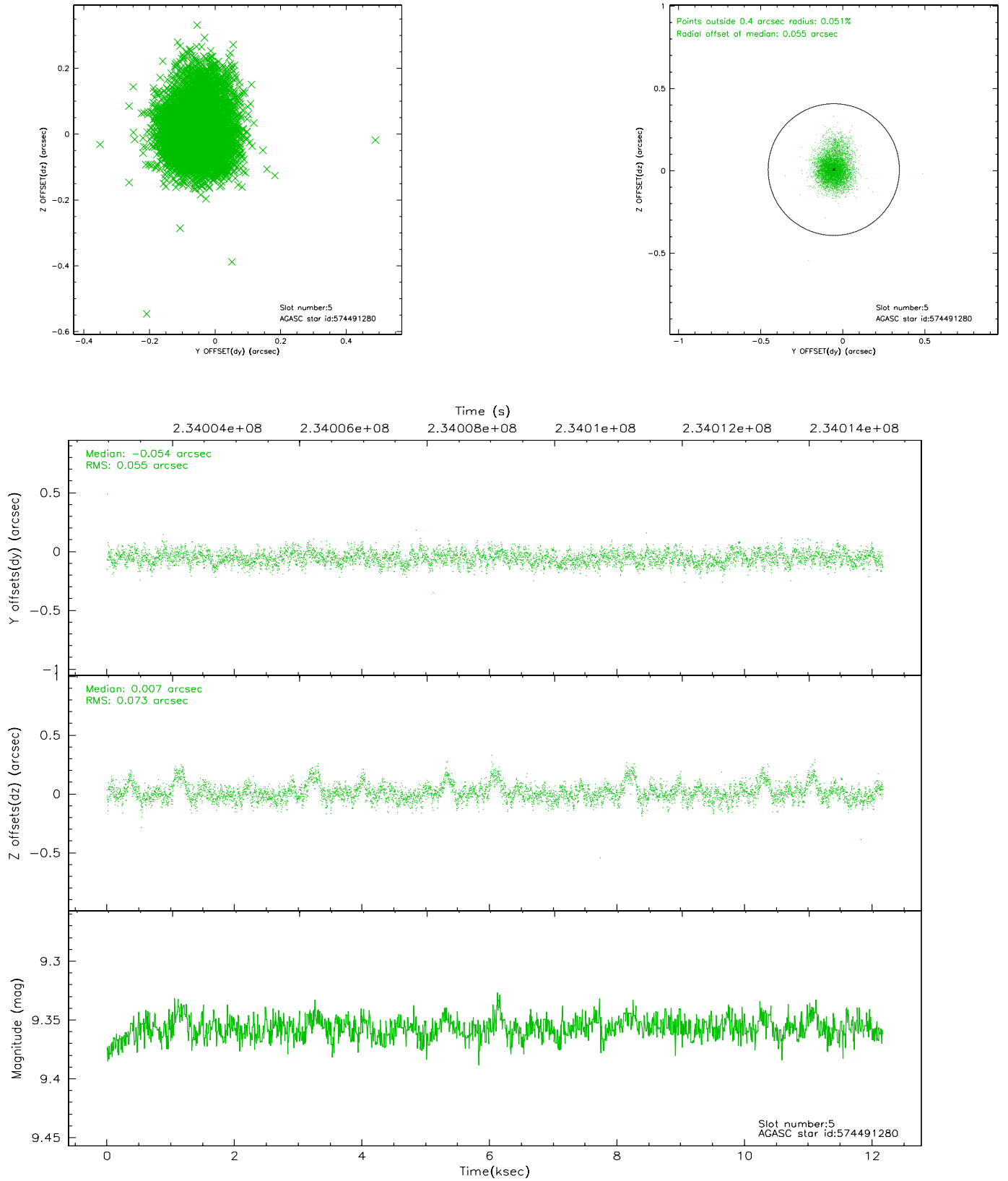
2.4.1 Slot 3



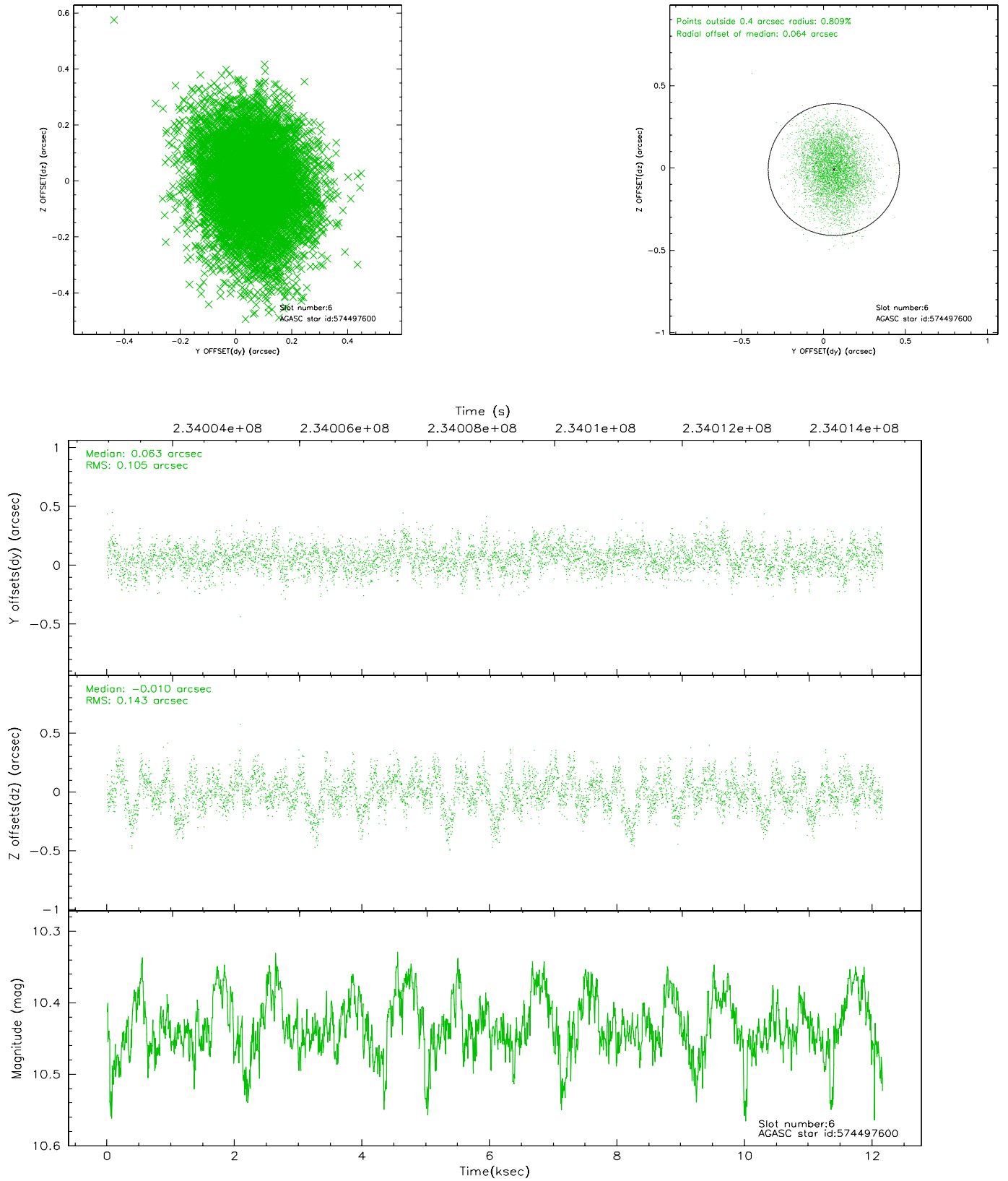
2.4.2 Slot 4



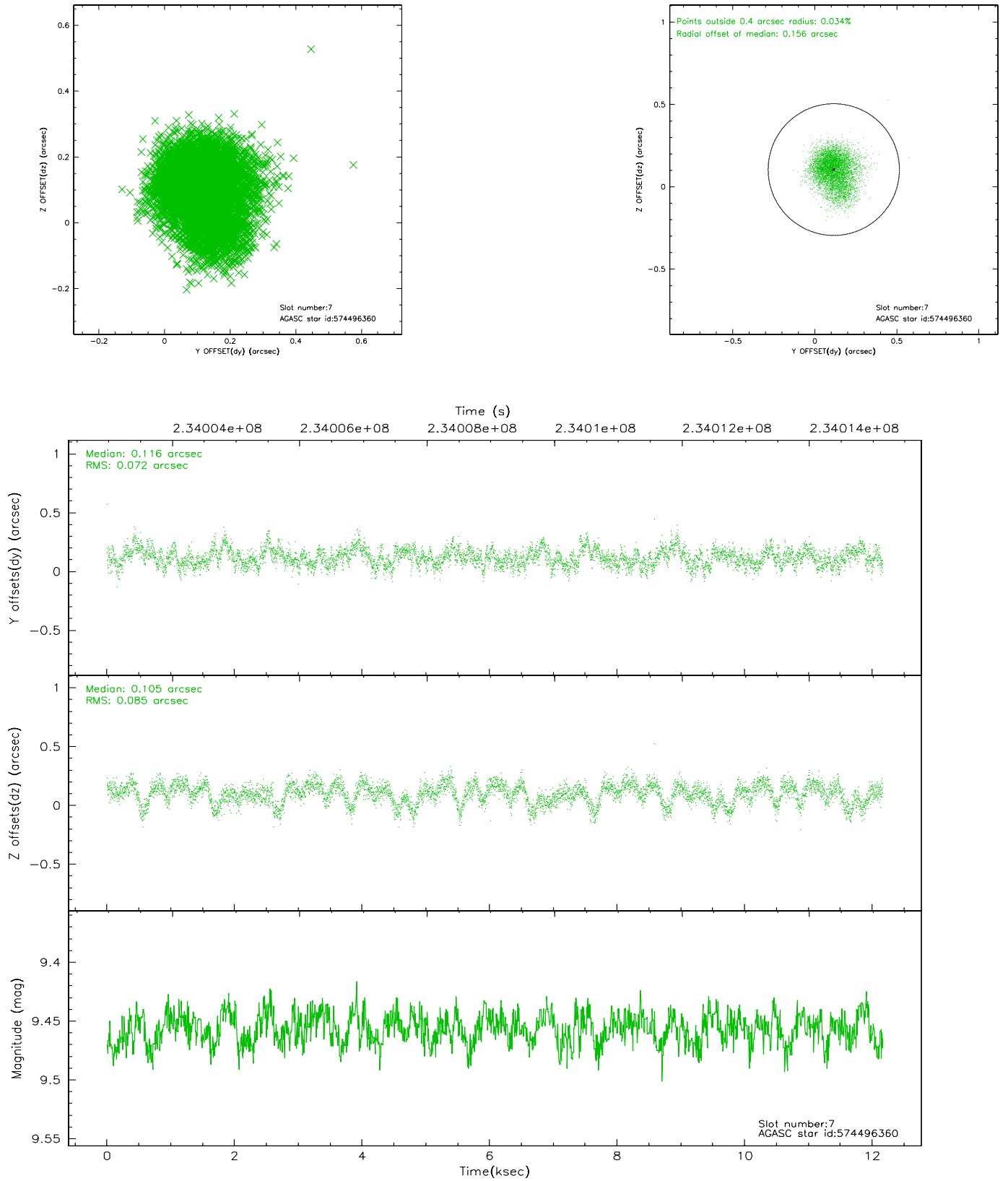
2.4.3 Slot 5



2.4.4 Slot 6

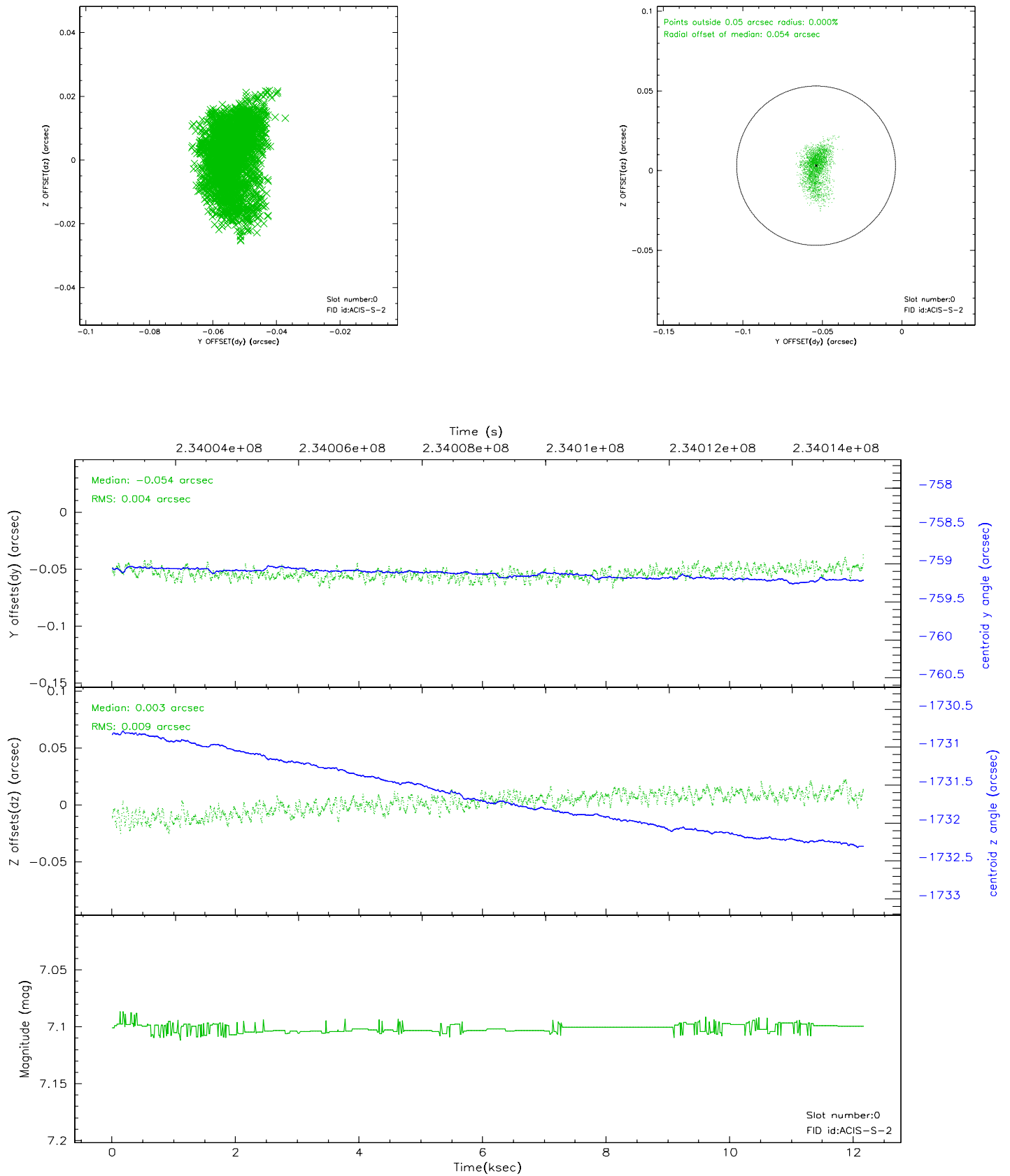


2.4.5 Slot 7

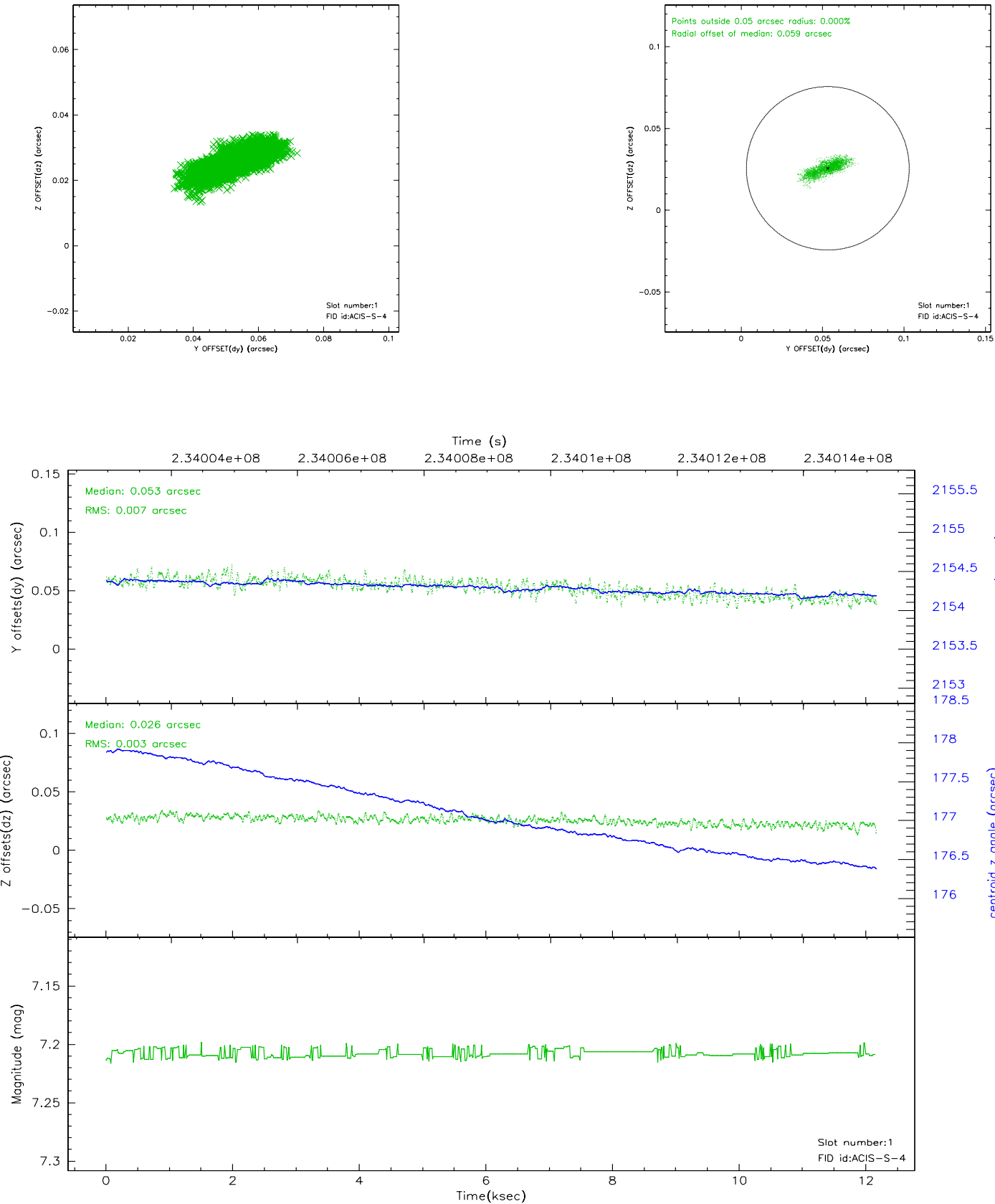


2.5 FID Slots

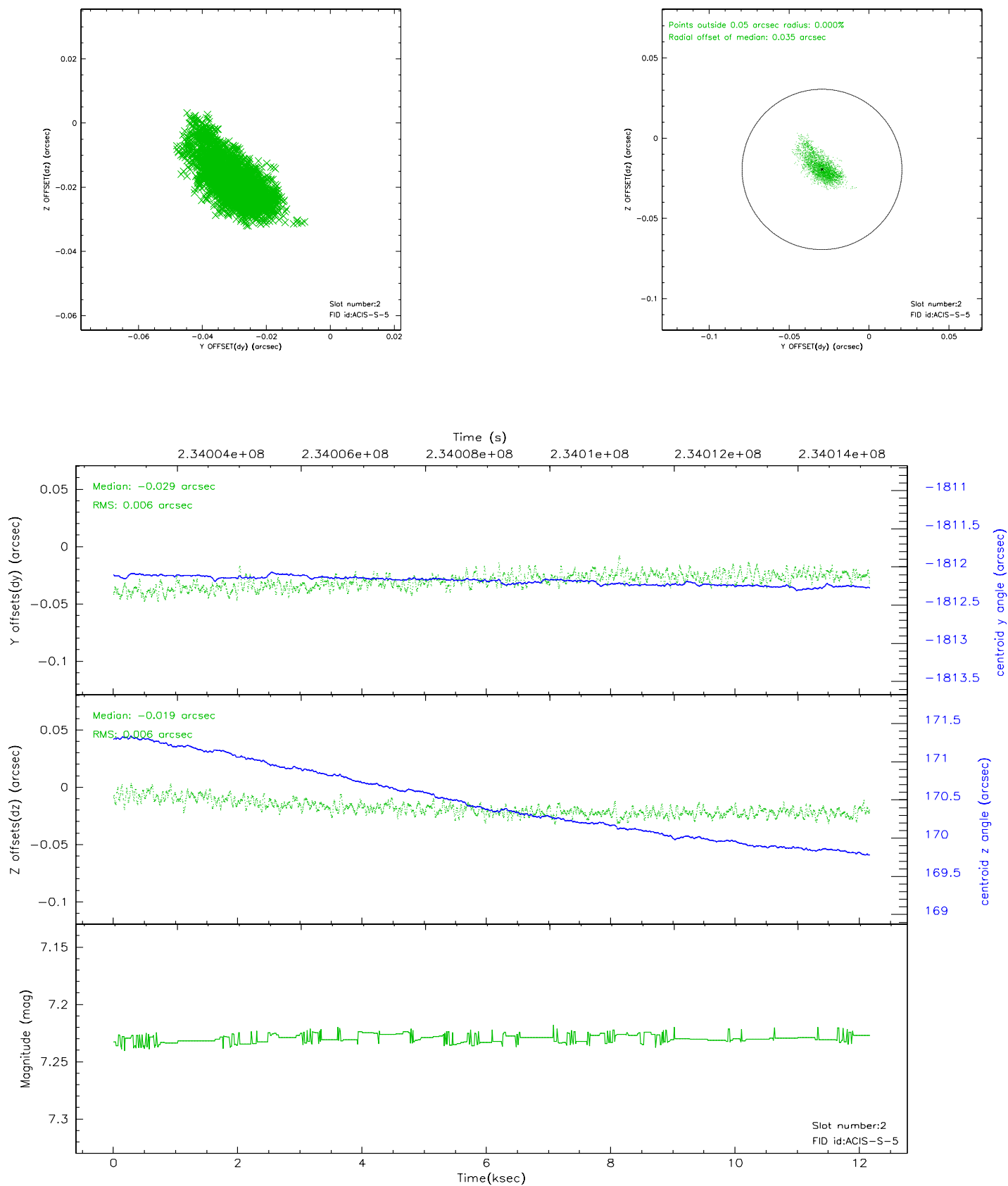
2.5.1 Slot 0



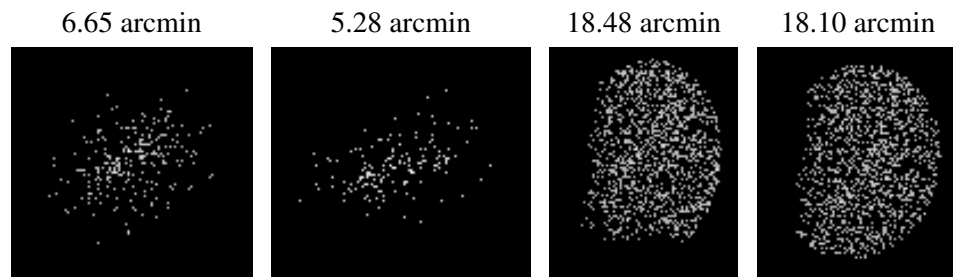
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2006.03.08 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 12.15999 |

A.2 Comments

Focal plane temperature is elevated during initial ~5 ksec of observation.