

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 1751 - L2 Version 001
Chandra X-Ray Center

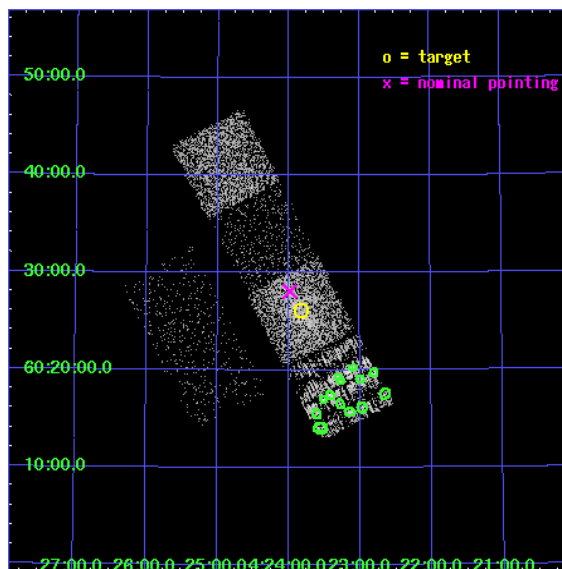
L2 Processing Date : May 30 2007

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

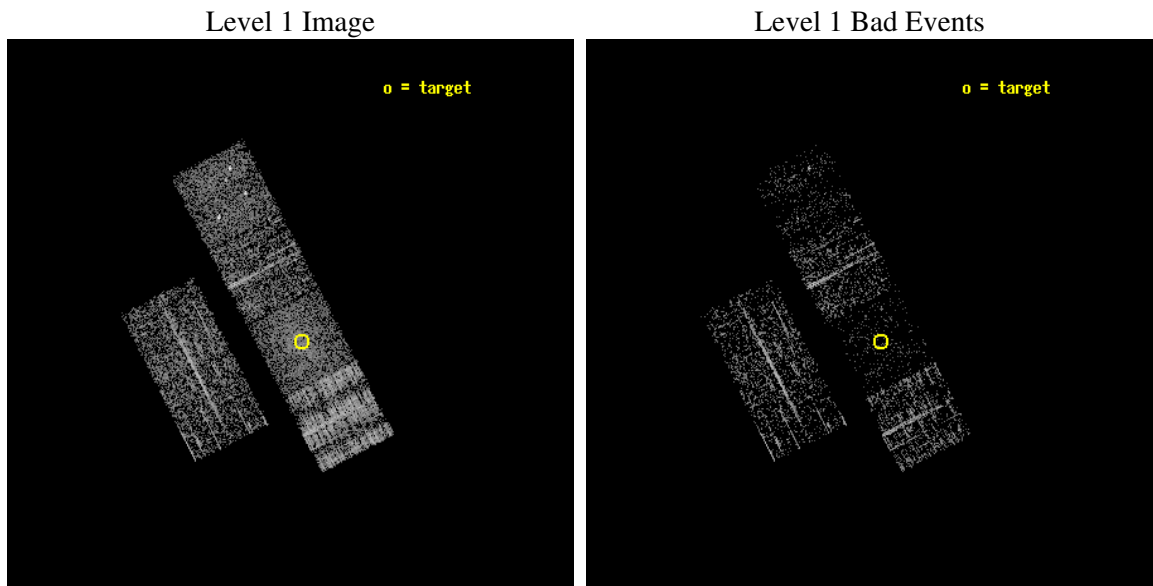
| | |
|----------|---|
| seq_num | 100002 |
| obs_id | 1751 |
| title | AXAF LOW ENERGY SPECTROSCOPY AND PHOTOMETRIC IMAGING OF COMETARY X-RAY EMISSION FROM COMET P/TEMPEL 2 |
| observer | Dr. Carey Lisse |
| object | LINEAR 1999 S4 |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 65.9572 |
| dec_targ | 60.43589 |
| ra_nom | 65.995912058936 |
| dec_nom | 60.467997158564 |
| roll_nom | 62.568741612763 |
| revision | 3 |
| ontime | 1190.4000011086 |
| livetime | 1175.3264395218 |
| ontime2 | 1190.4000011086 |
| ontime3 | 1190.4000011086 |
| ontime5 | 1190.4000011086 |
| ontime6 | 1190.4000011086 |
| ontime7 | 1190.4000011086 |
| ontime8 | 1190.4000011086 |
| l2events | 11525 |



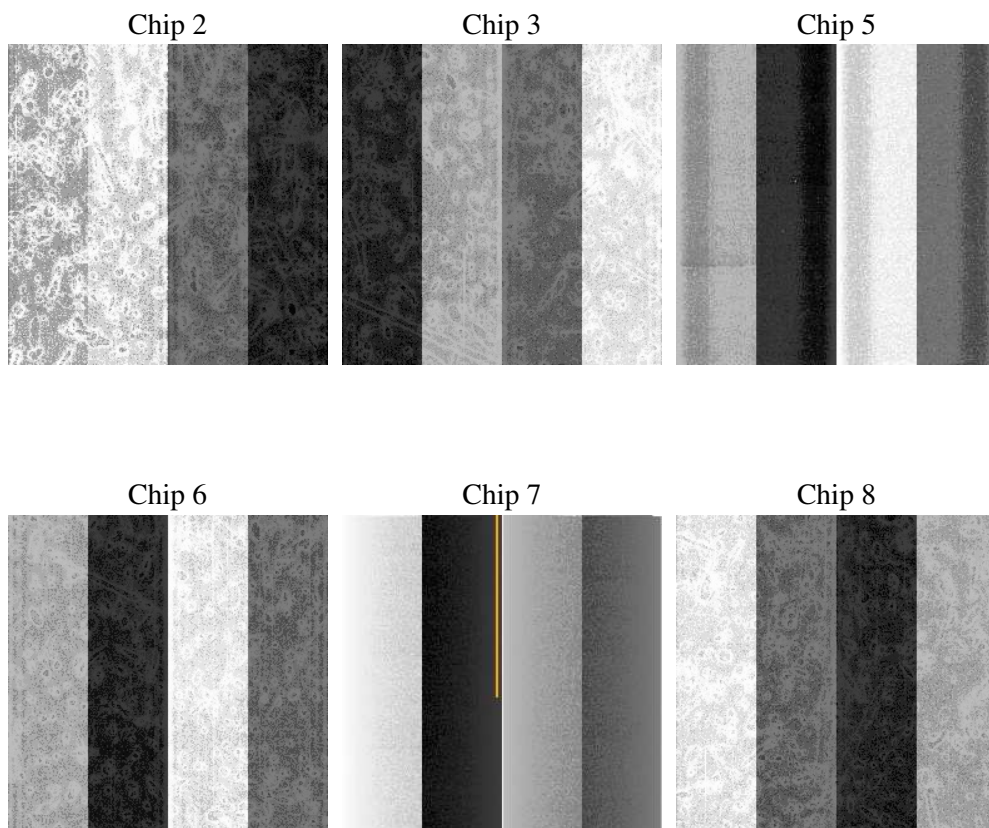
2 OBI

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 | 2007-05-30T19:04:48 |
| revision | 3 |

| | |
|----------------|-----------------|
| sched_exp_time | 1000.000000 |
| ontime | 1190.4000011086 |
| ontime2 | 1190.4000011086 |
| ontime3 | 1190.4000011086 |
| ontime5 | 1190.4000011086 |
| ontime6 | 1190.4000011086 |
| ontime7 | 1190.4000011086 |
| ontime8 | 1190.4000011086 |
| l1events | 47062 |

2.1.4 Events

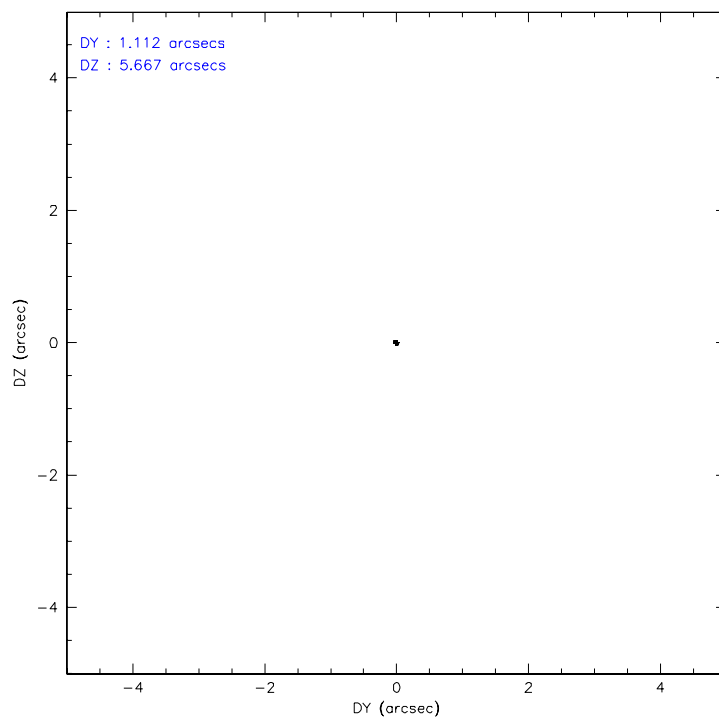
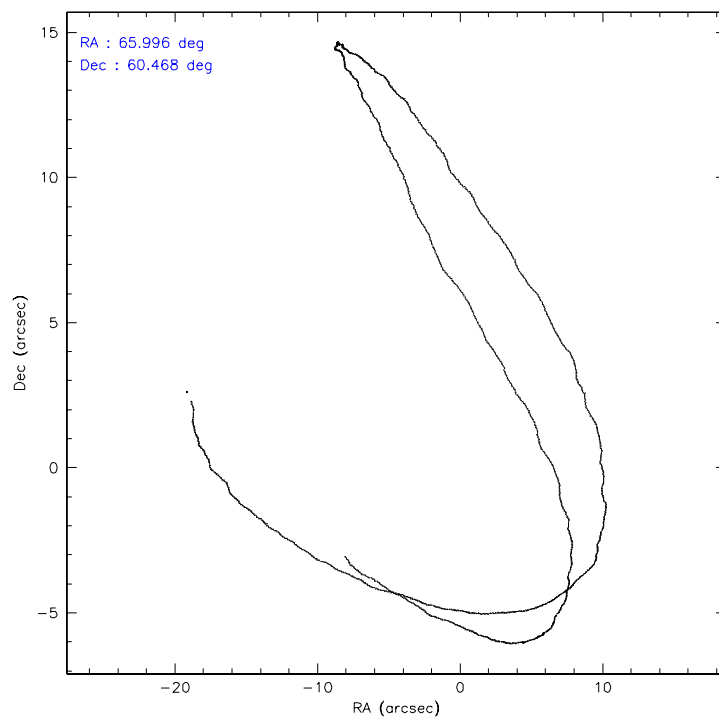
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 6535 | 6068 | 6220 | 6672 | 6156 | 15411 |
| rejected events | 5924 | 5770 | 2554 | 5984 | 2088 | 7747 |
| rejected % | 90% | 95% | 41% | 89% | 33% | 50% |

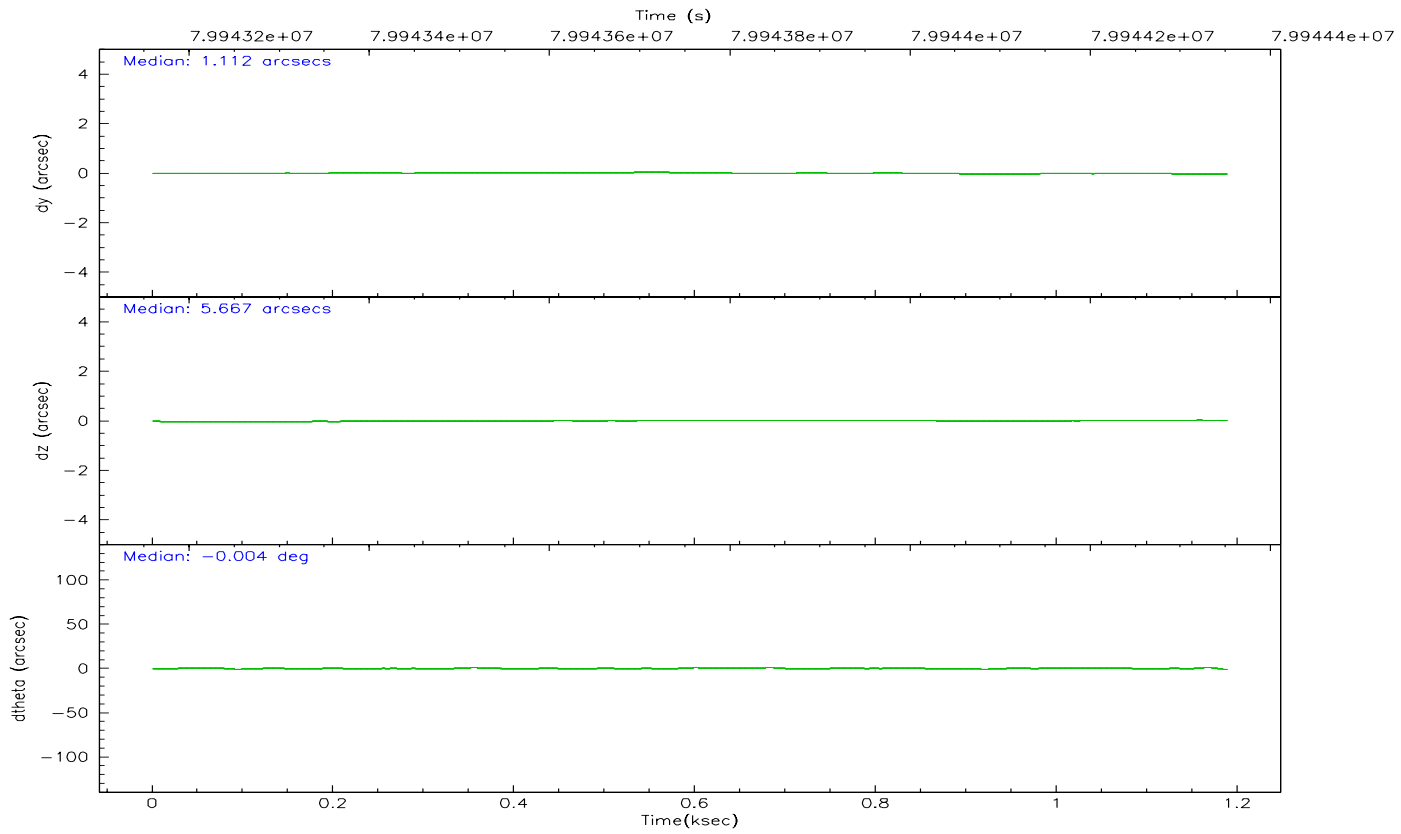
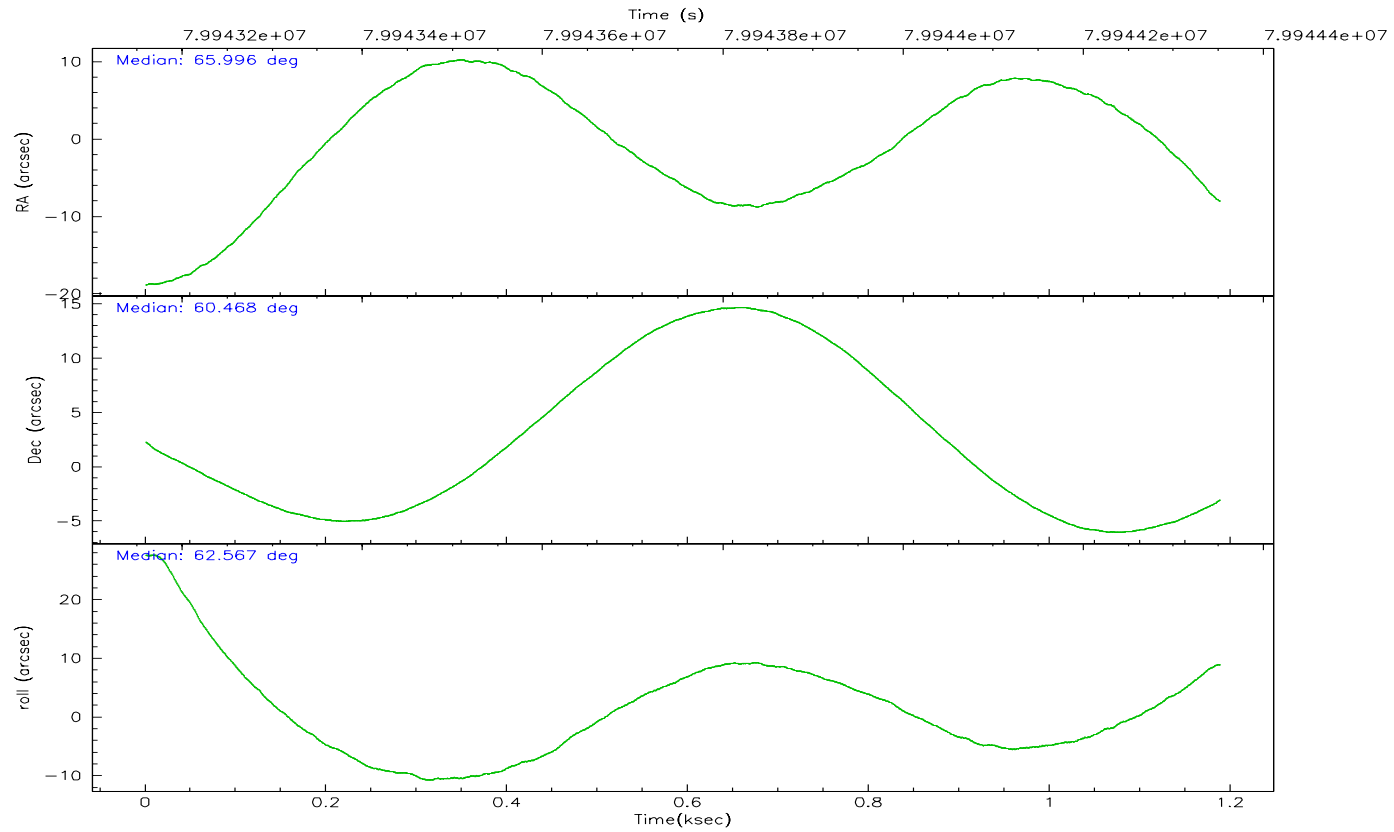
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 477 | 259 | 2052 | 734 | 2030 | 3892 |
| | 7% | 4% | 32% | 11% | 32% | 25% |
| grade 1 events | 5 | 4 | 14 | 11 | 8 | 36 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 131 | 58 | 1521 | 130 | 1496 | 916 |
| | 2% | 0% | 24% | 1% | 24% | 5% |
| grade 3 events | 54 | 20 | 461 | 40 | 685 | 1948 |
| | 0% | 0% | 7% | 0% | 11% | 12% |
| grade 4 events | 68 | 21 | 479 | 43 | 654 | 1744 |
| | 1% | 0% | 7% | 0% | 10% | 11% |
| grade 5 events | 11 | 7 | 184 | 6 | 81 | 100 |
| | 0% | 0% | 2% | 0% | 1% | 0% |
| grade 6 events | 26 | 32 | 646 | 18 | 945 | 1374 |
| | 0% | 0% | 10% | 0% | 15% | 8% |
| grade 7 events | 5763 | 5667 | 863 | 5690 | 257 | 5401 |
| | 88% | 93% | 13% | 85% | 4% | 35% |

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 | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| Pointing RA | 65.998474 | 65.99591205893604 | Subarray requested | NONE | NONE |
| Pointing Dec | 60.441057 | 60.46799715856435 | Alternating exposures requested | N | N |
| Pointing Roll | 62.409884 | 62.56874161276313 | Primary exposure time | 3.200000 | 3.2 |
| 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 | 79943349.184000 | 79942973.26949599 | | | |
| Observation start date | 2000-07-14T06:28:05 | 2000-07-14T06:22:53 | | | |
| Observation end time | 79944349.184000 | 79944483.094552 | | | |
| Observation end date | 2000-07-14T06:44:45 | 2000-07-14T06:48:03 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



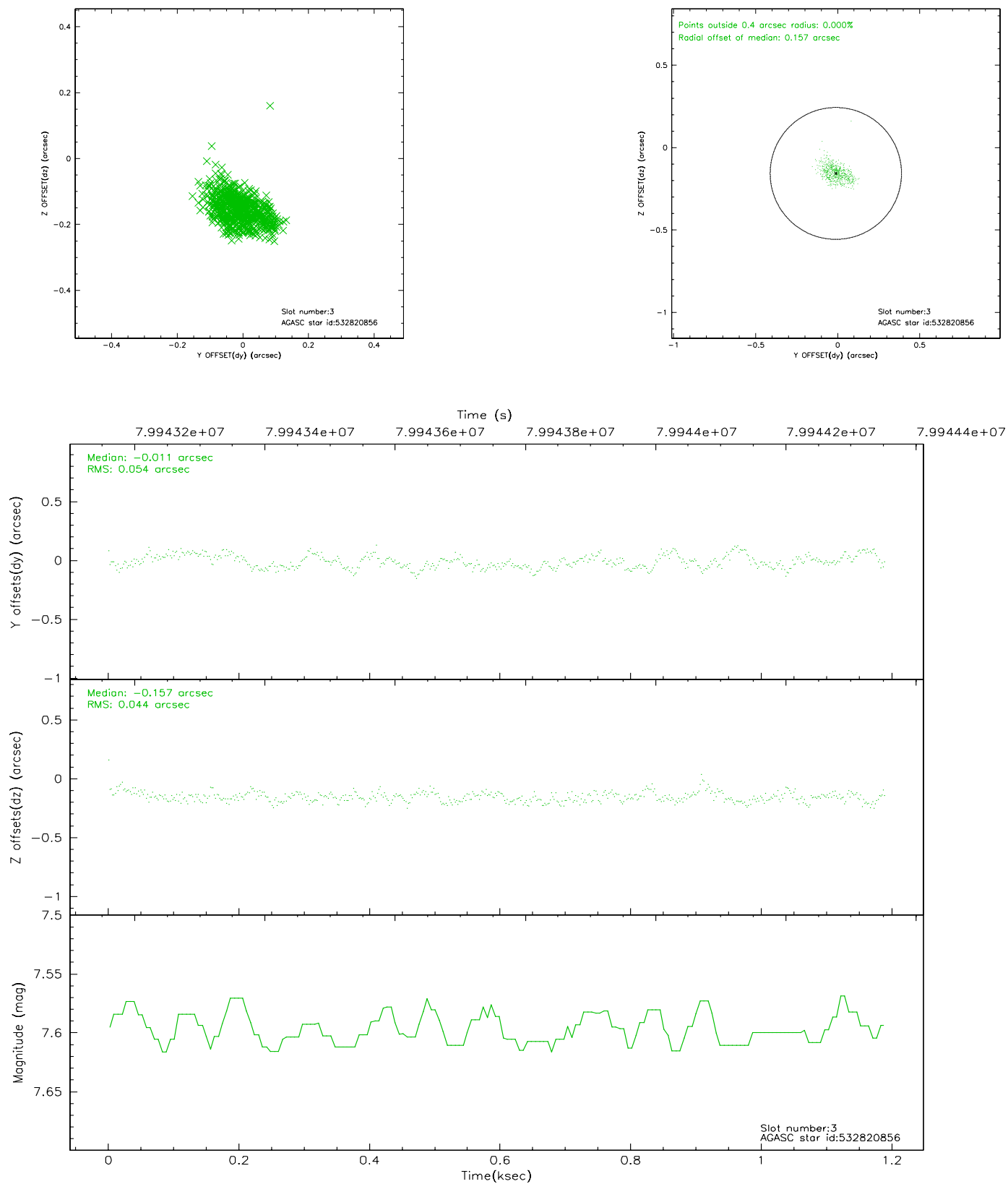


Slot Statistics

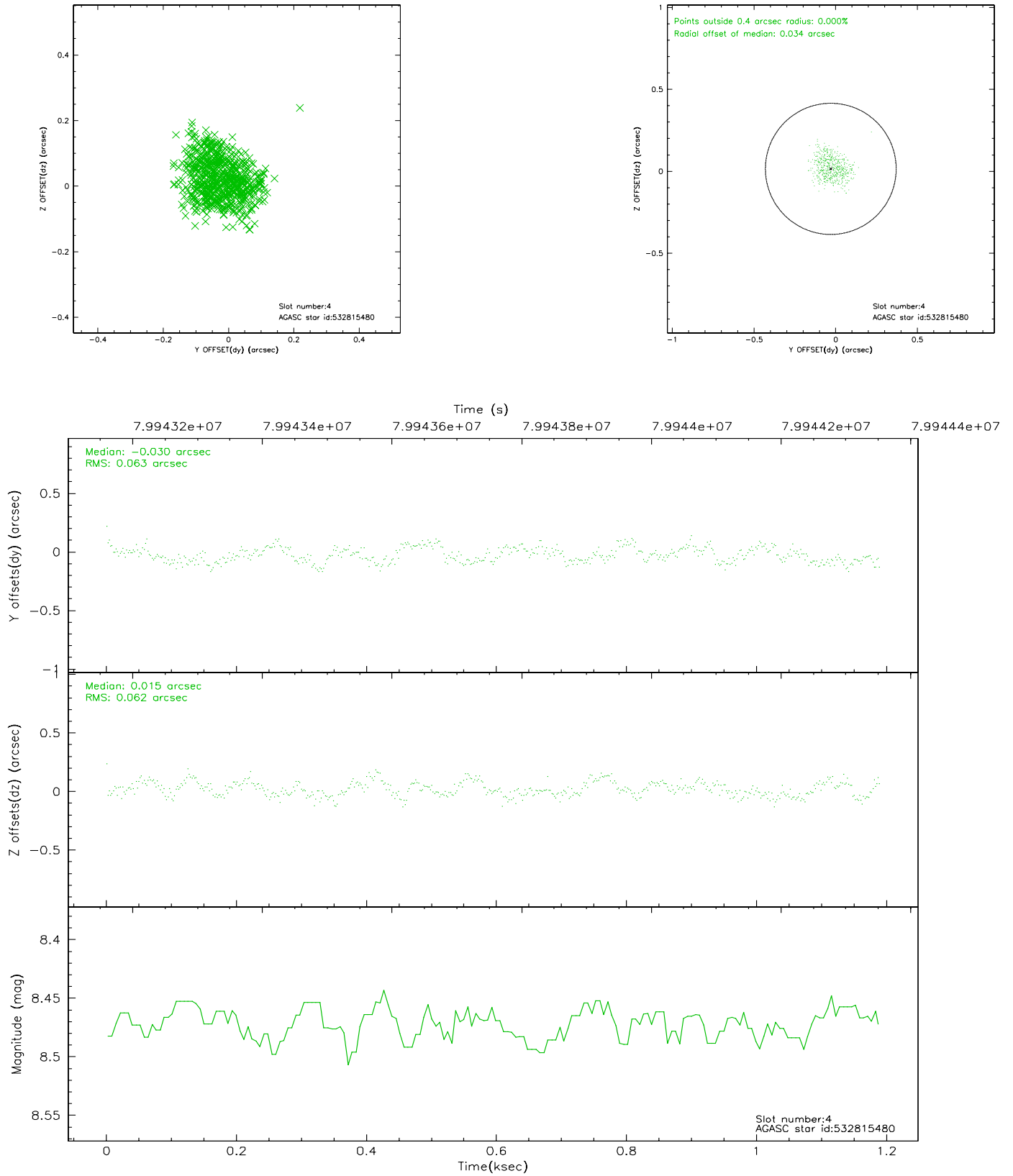
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|-----------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 290 | -0.028 | 0.029 | 0.007 | 0.015 | 0.000000 | 0.000000 | -753.72 | -1726.77 |
| 1 | FID | ACIS-S-4 | 7.21 | 290 | -0.045 | 0.006 | 0.009 | 0.018 | 0.000000 | 0.000000 | 2157.00 | 175.92 |
| 2 | FID | ACIS-S-5 | 7.23 | 290 | 0.042 | -0.026 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1799.27 | 175.91 |
| 3 | GUIDE | 532820856 | 7.60 | 581 | -0.011 | -0.157 | 0.073 | 0.119 | 64.649307 | 60.493798 | -917.50 | 2219.18 |
| 4 | GUIDE | 532815480 | 8.47 | 581 | -0.030 | 0.015 | 0.094 | 0.142 | 65.380825 | 60.792672 | 622.69 | 1554.21 |
| 5 | GUIDE | 532808640 | 9.51 | 581 | 0.108 | -0.024 | 0.081 | 0.136 | 65.235766 | 60.163854 | -1508.52 | 754.83 |
| 6 | GUIDE | 532813176 | 9.34 | 581 | -0.167 | -0.015 | 0.084 | 0.134 | 66.050304 | 61.096768 | 2131.61 | 1014.86 |
| 7 | GUIDE | 489033640 | 7.80 | 580 | 0.090 | 0.175 | 0.062 | 0.105 | 65.894533 | 59.732568 | -2343.49 | -1012.16 |

2.4 Star Slots

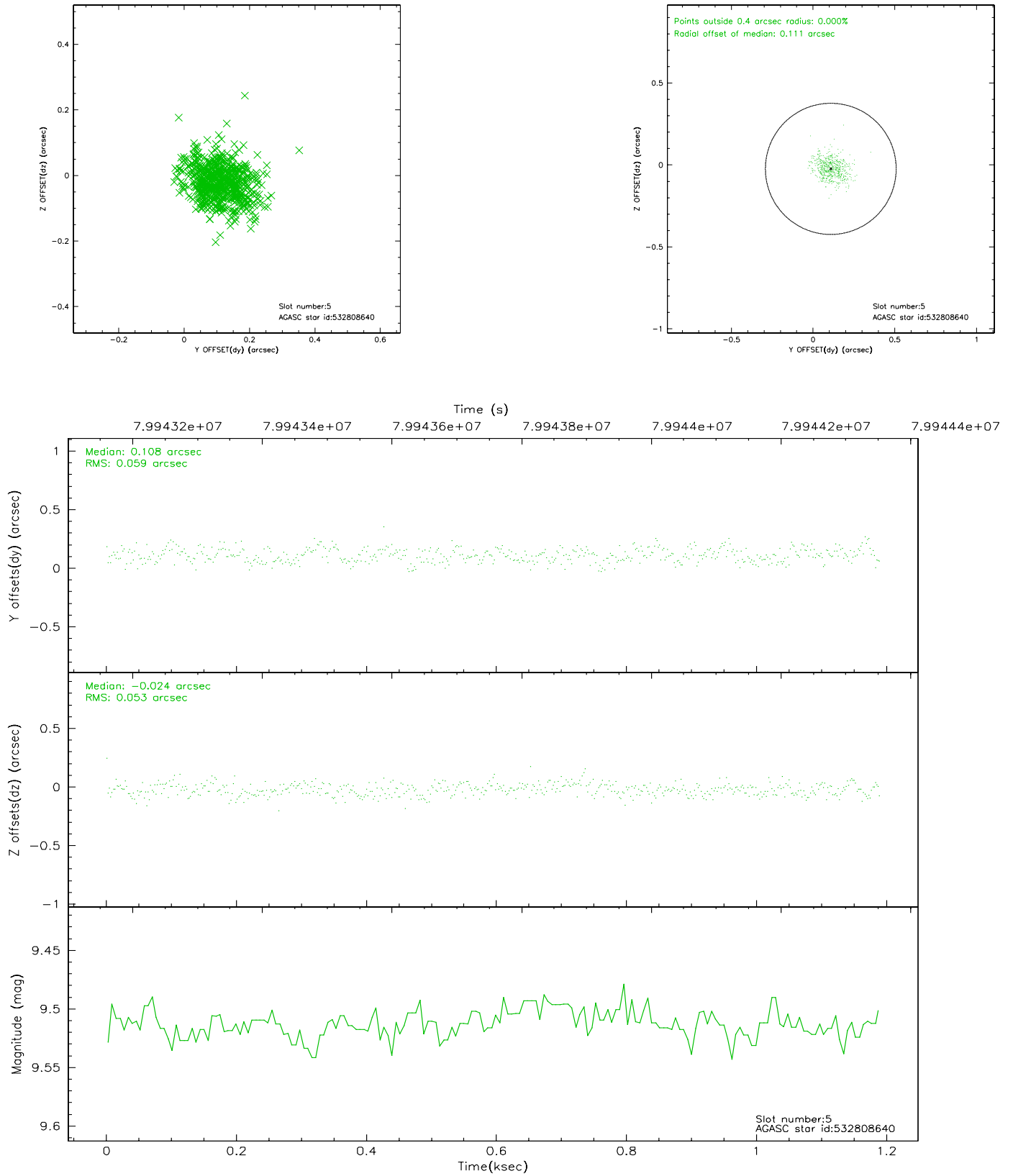
2.4.1 Slot 3



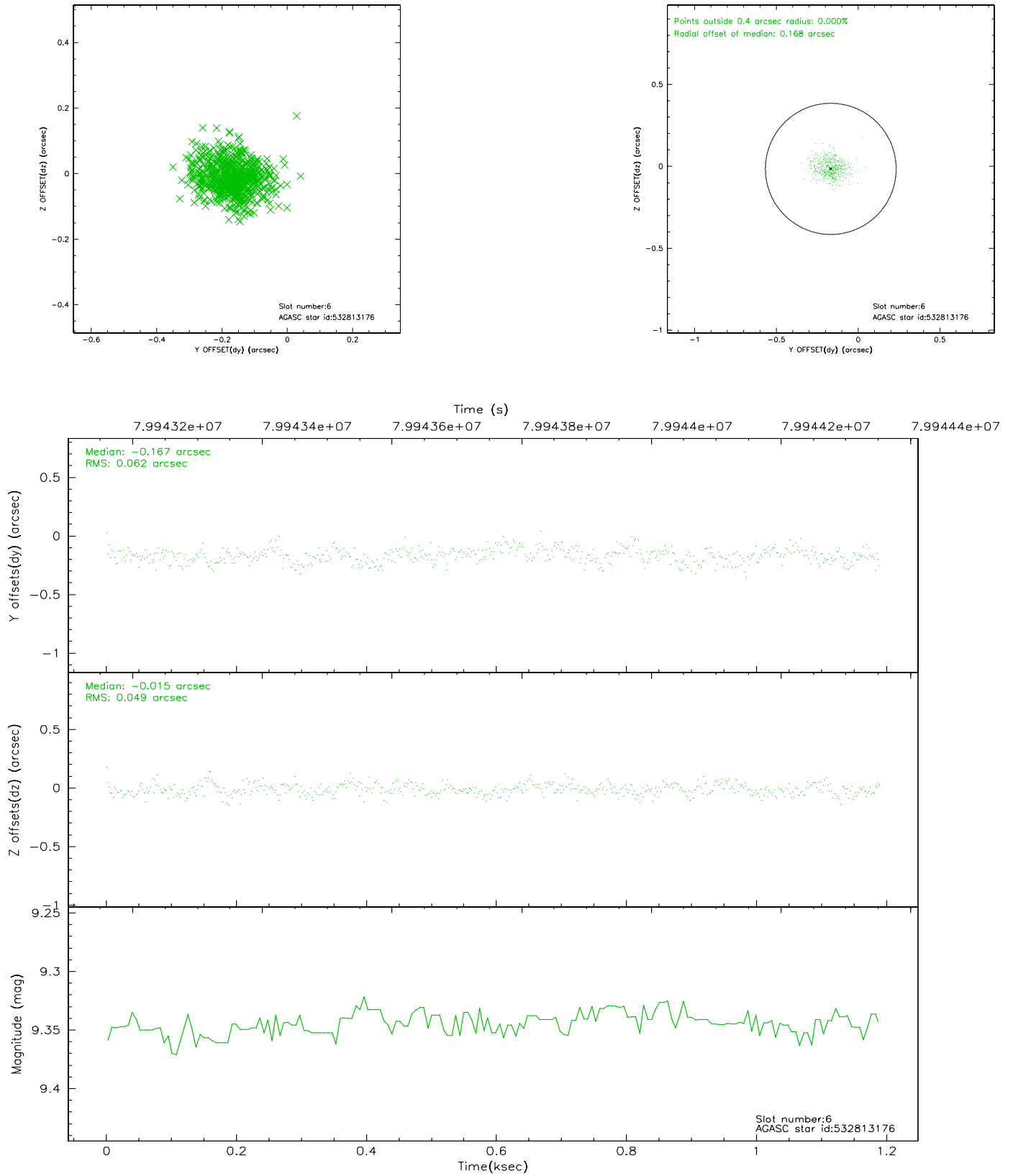
2.4.2 Slot 4



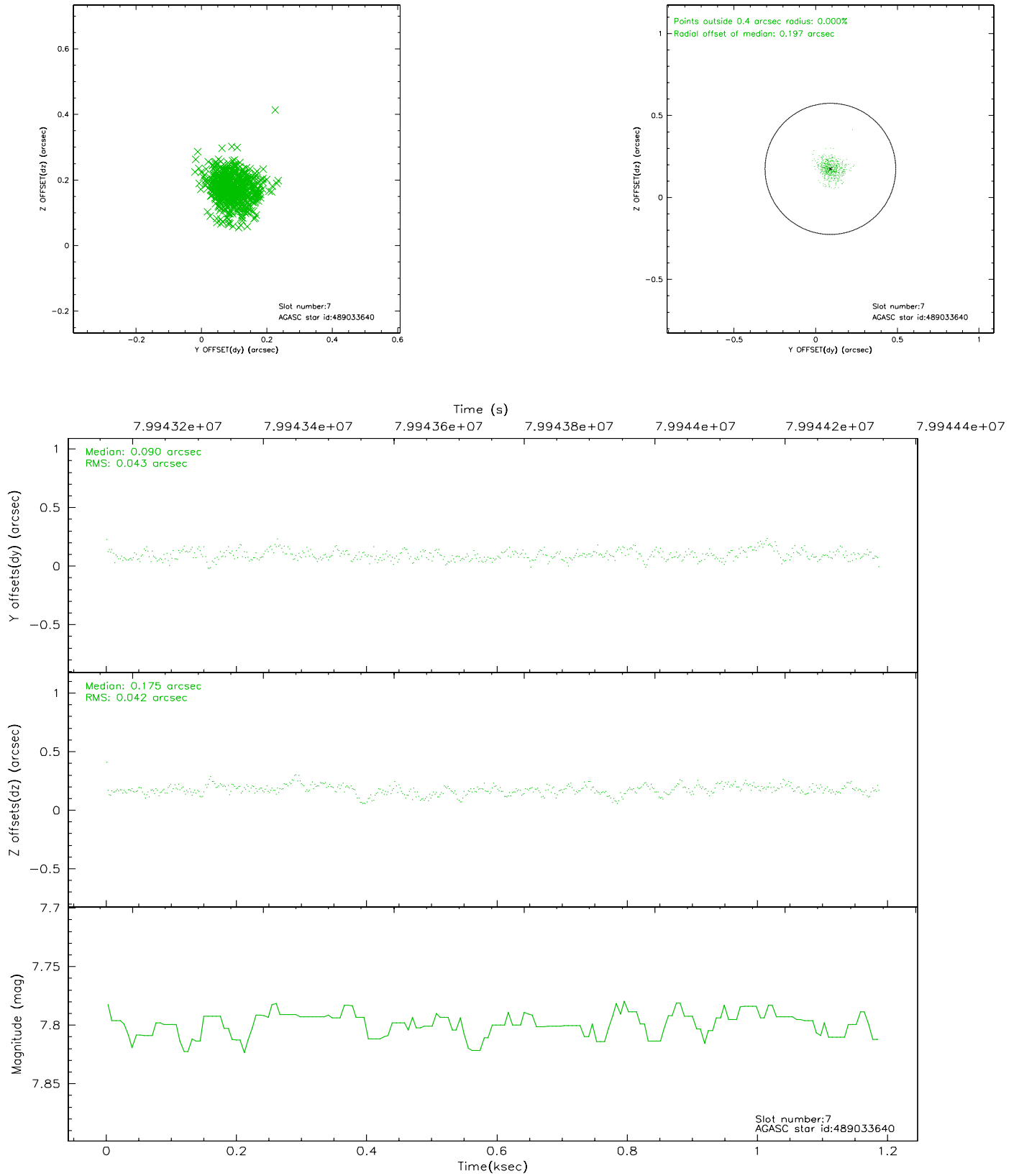
2.4.3 Slot 5



2.4.4 Slot 6

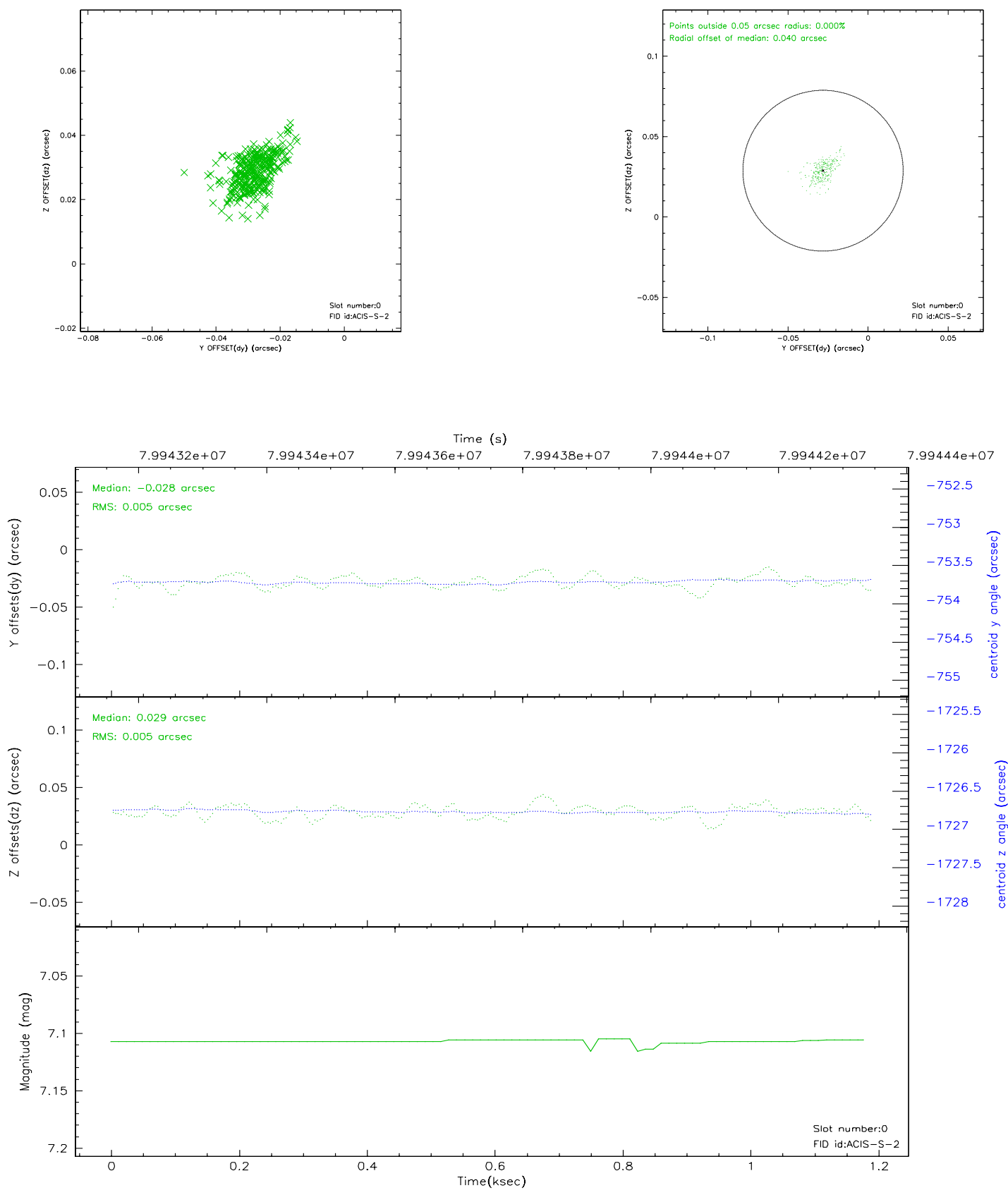


2.4.5 Slot 7

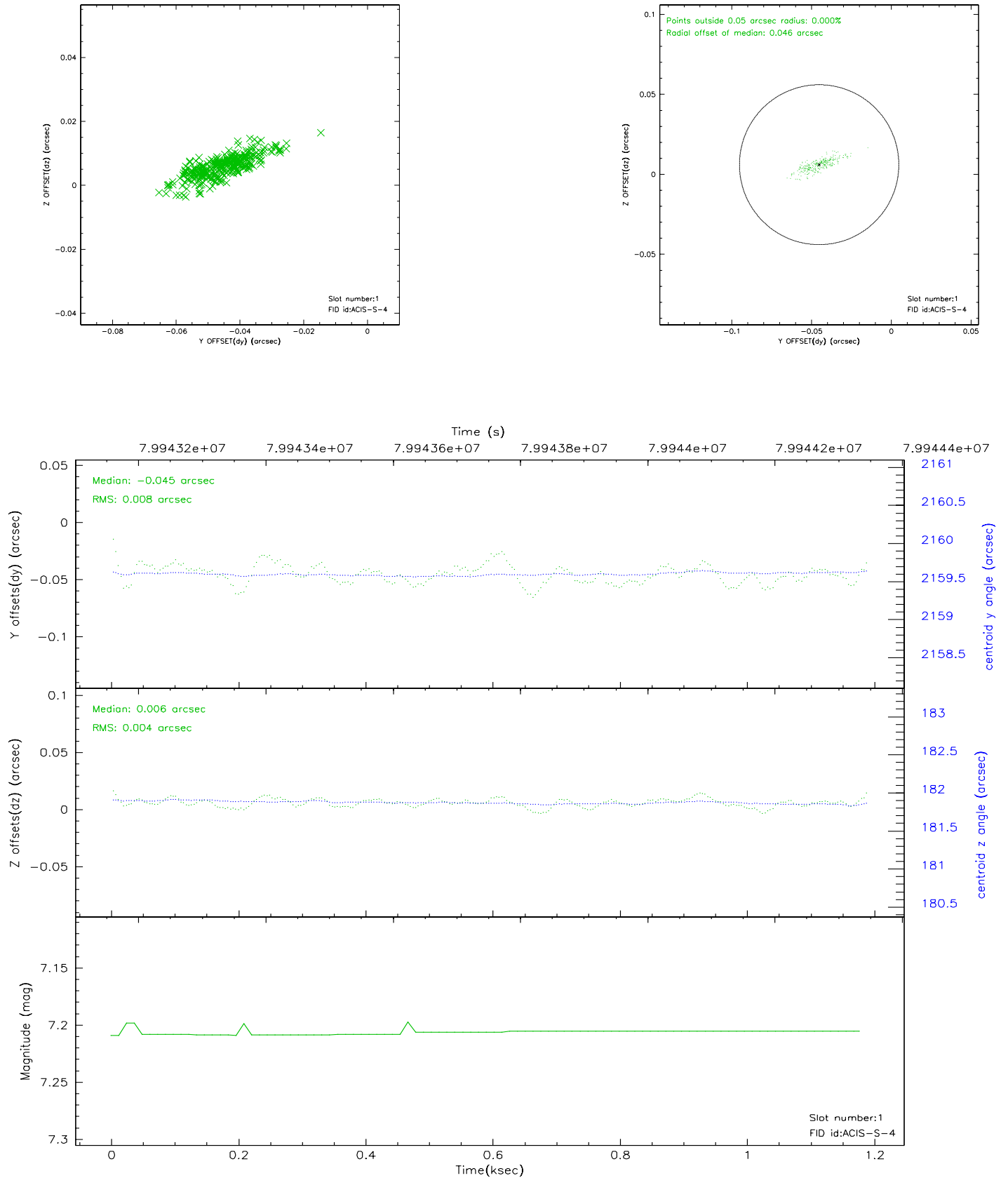


2.5 FID Slots

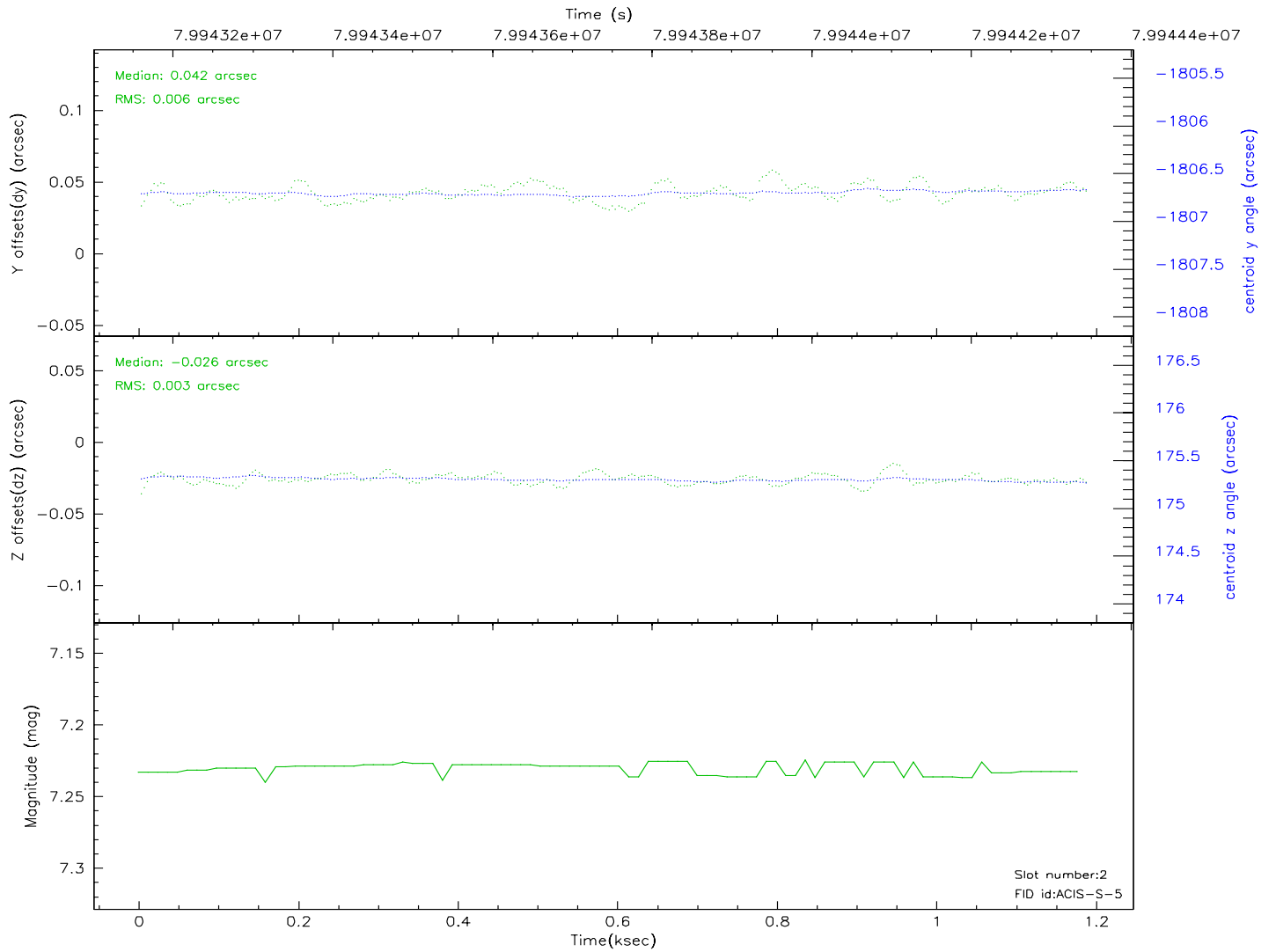
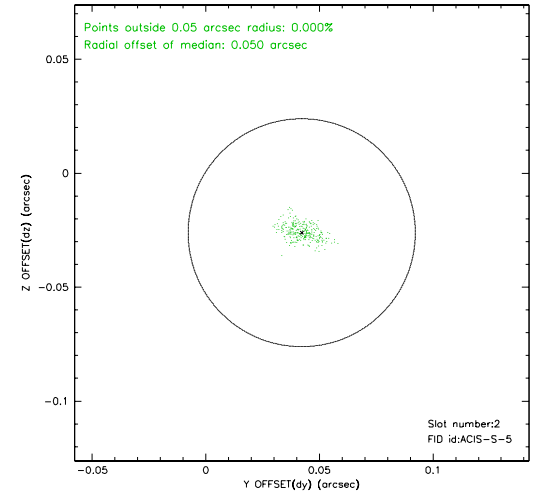
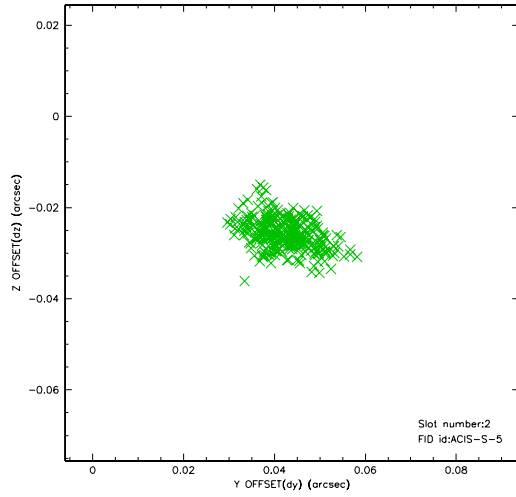
2.5.1 Slot 0



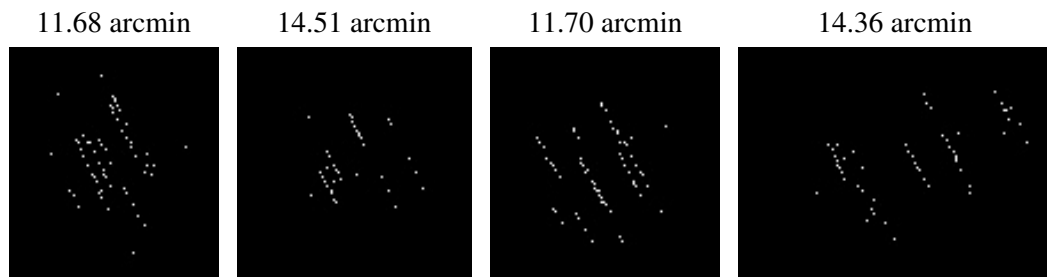
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2007.05.31 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.19 |

A.2 Comments