

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 774 - L2 Version 001
Chandra X-Ray Center

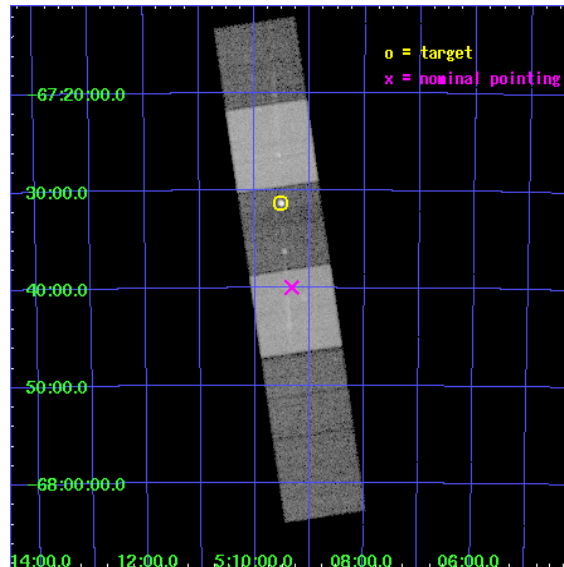
L2 Processing Date : Jun 8 2007

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1 Front

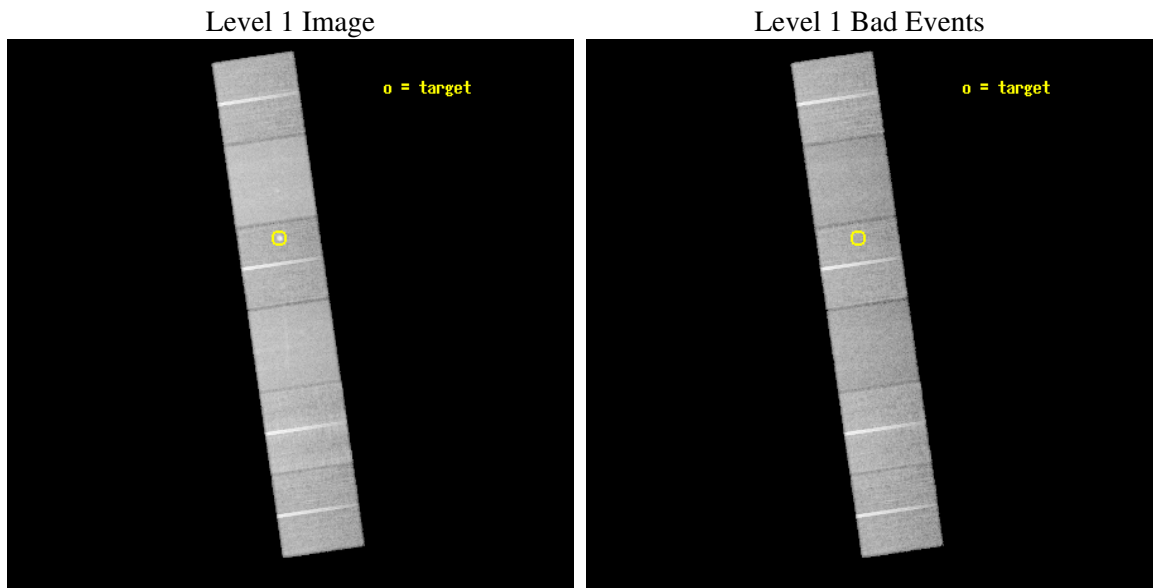
| | |
|----------|---|
| seq_num | 500070 |
| obs_id | 774 |
| title | HIGH RESOLUTION LINE SPECTROSCOPY OF THREE YOUNG SUPERNOVA REMNANTS IN THE LARGE MAGELLANIC CLOUD |
| observer | PROF. STEVEN KAHN |
| object | 0509-67.5 |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 77.382917 |
| dec_targ | -67.521417 |
| ra_nom | 77.331192275085 |
| dec_nom | -67.665837362896 |
| roll_nom | 81.663803823185 |
| revision | 2 |
| ontime | 40019.159077033 |
| livetime | 39512.412388155 |
| ontime4 | 40022.400037274 |
| ontime5 | 40022.400037274 |
| ontime6 | 40019.159077033 |
| ontime7 | 40019.159077018 |
| ontime8 | 40019.159206659 |
| ontime9 | 40022.400037274 |
| l2events | 335396 |



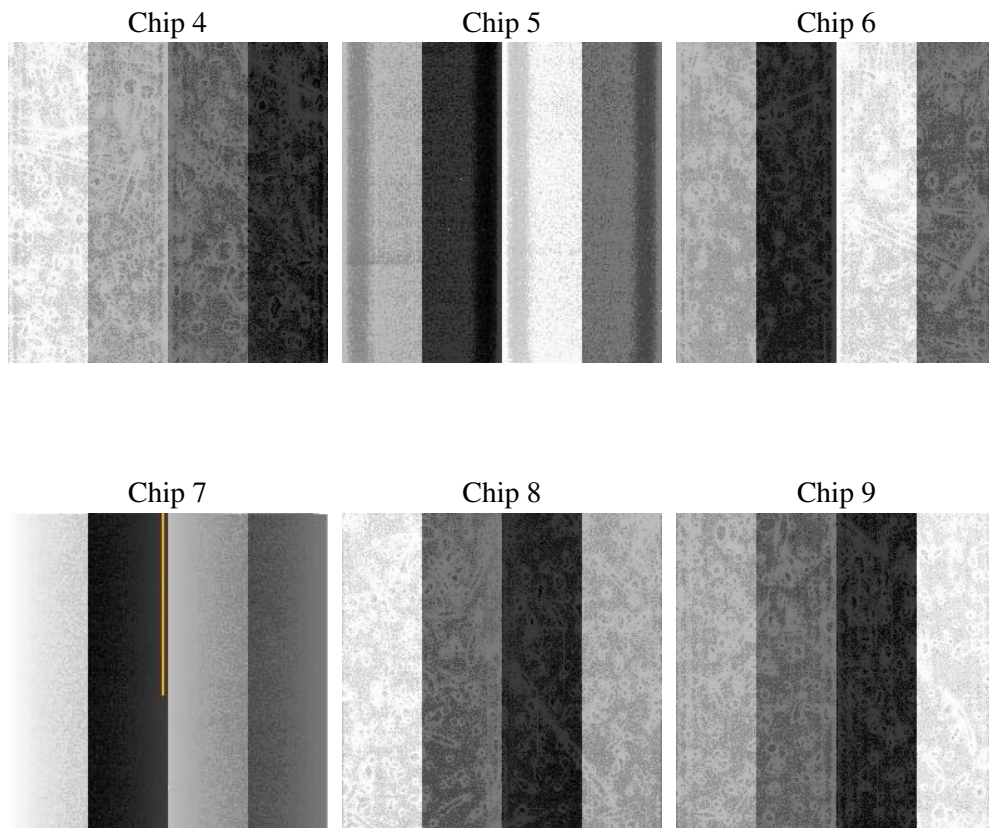
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.10 |
| caldsver | 3.4.0 |
| date | 2007-06-08T09:20:22 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 40000.000000 |
| ontime | 40019.159077033 |
| ontime4 | 40022.400037274 |
| ontime5 | 40022.400037274 |
| ontime6 | 40019.159077033 |
| ontime7 | 40019.159077018 |
| ontime8 | 40019.159206659 |
| ontime9 | 40022.400037274 |
| l1events | 1514188 |

2.1.4 Events

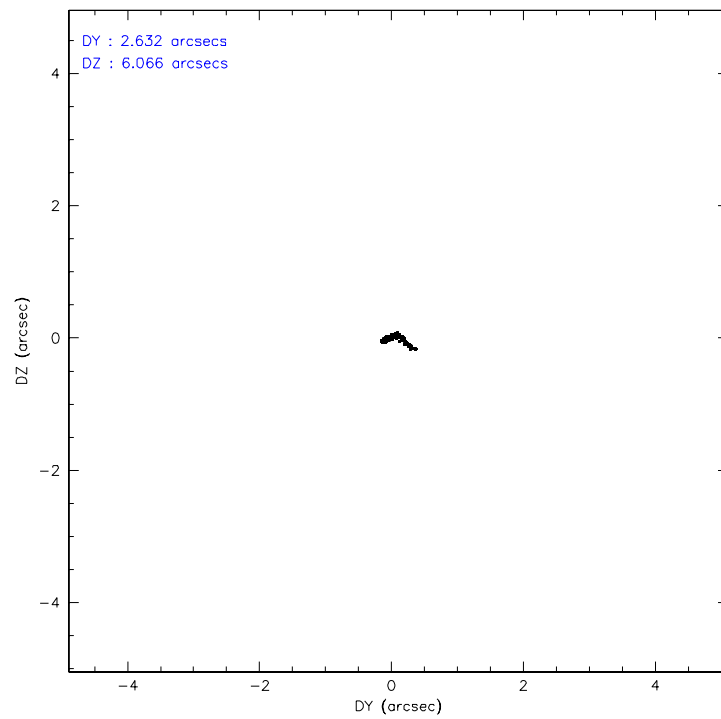
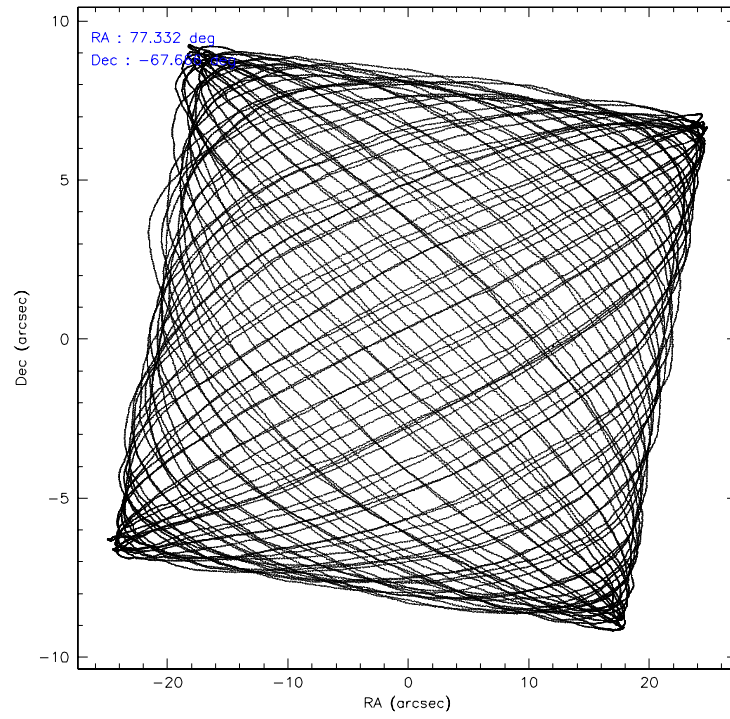
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 239884 | 289304 | 225089 | 267961 | 277613 | 214337 |
| rejected events | 212000 | 158691 | 196203 | 155420 | 219829 | 187798 |
| rejected % | 88% | 54% | 87% | 58% | 79% | 87% |

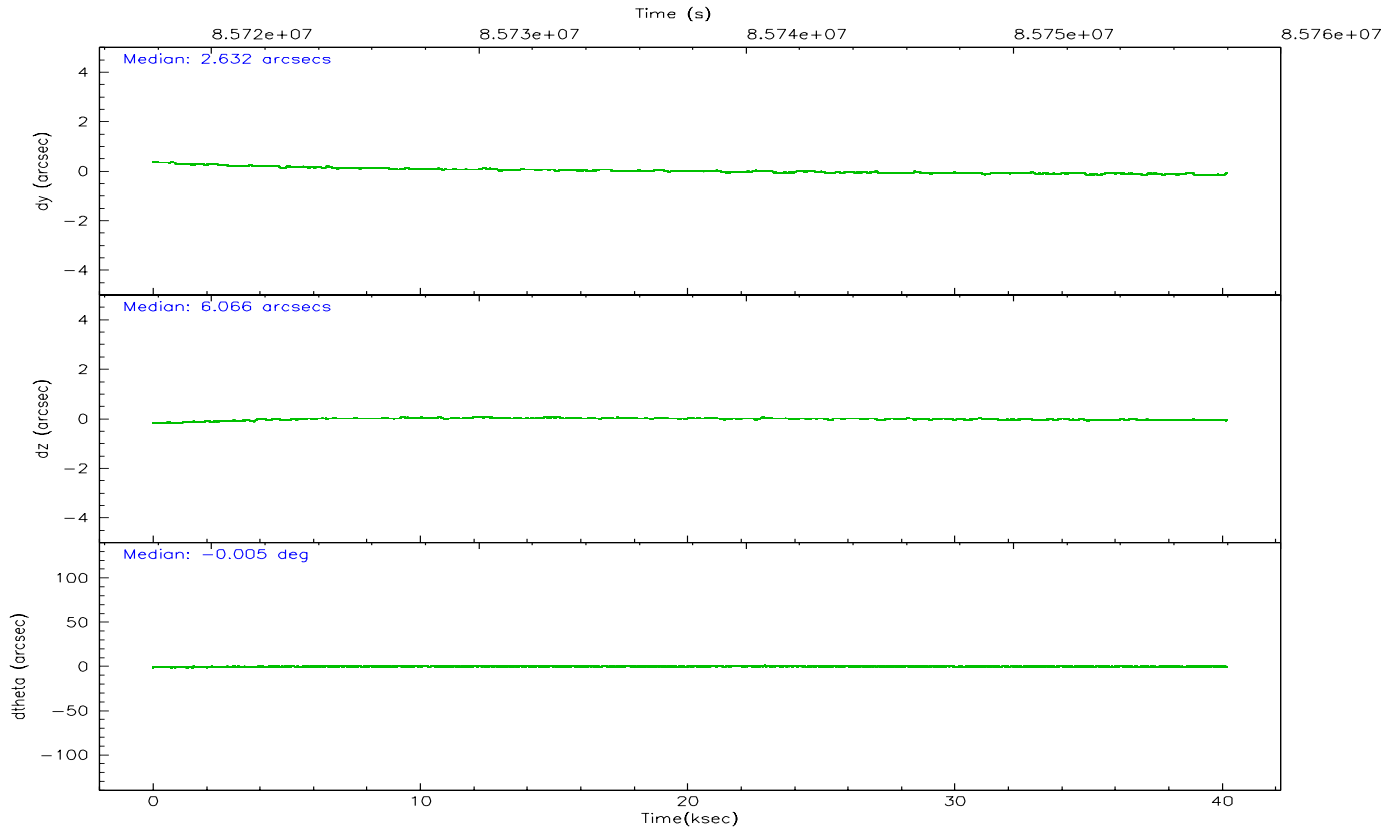
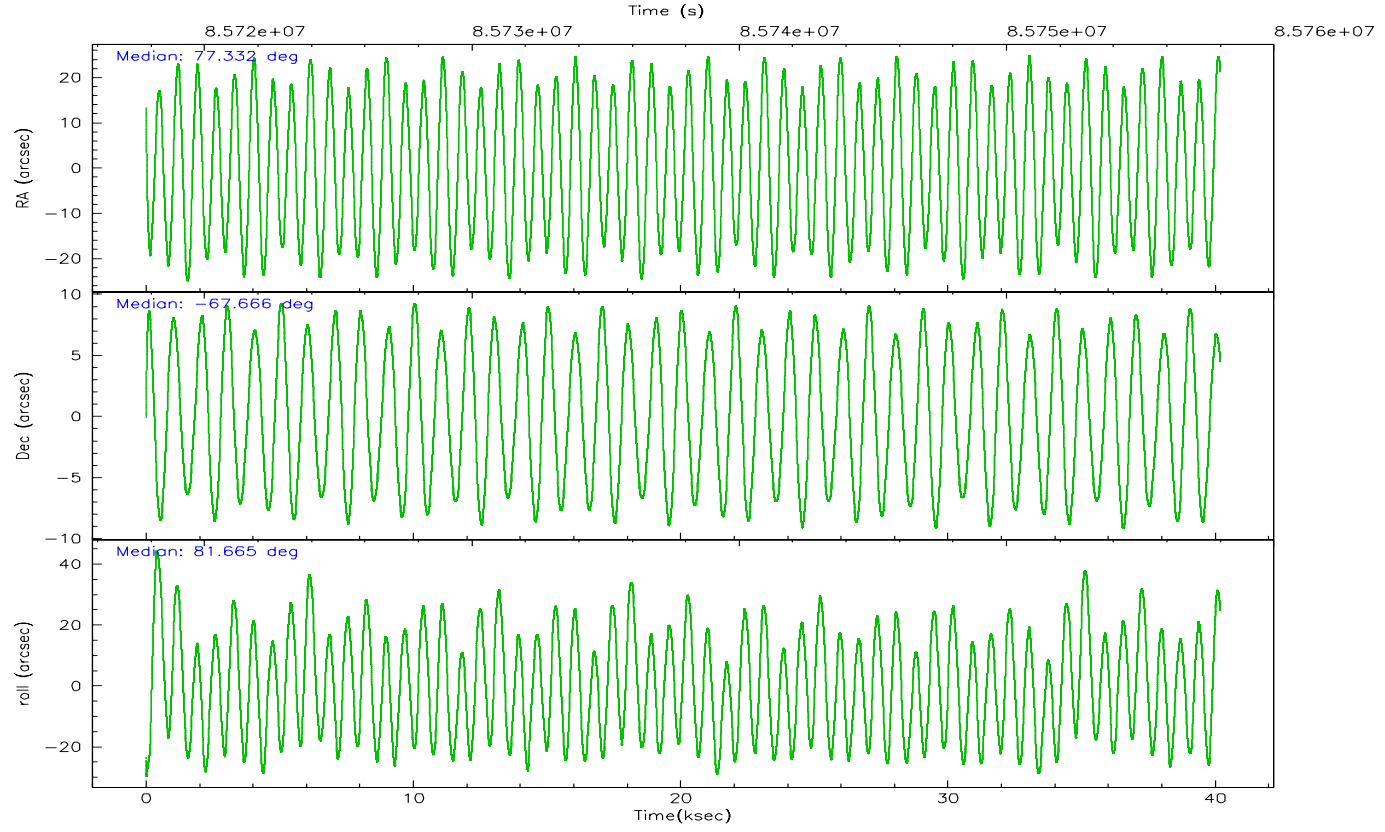
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|--------|--------|--------|--------|--------|--------|
| grade 0 events | 11814 | 9458 | 12973 | 11063 | 18813 | 11080 |
| | 4% | 3% | 5% | 4% | 6% | 5% |
| grade 1 events | 118 | 329 | 104 | 251 | 155 | 102 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 6601 | 38444 | 5477 | 21949 | 11930 | 5177 |
| | 2% | 13% | 2% | 8% | 4% | 2% |
| grade 3 events | 2452 | 6186 | 2675 | 10482 | 6563 | 2629 |
| | 1% | 2% | 1% | 3% | 2% | 1% |
| grade 4 events | 2328 | 5940 | 2559 | 10358 | 6181 | 2549 |
| | 0% | 2% | 1% | 3% | 2% | 1% |
| grade 5 events | 7525 | 22734 | 8872 | 25903 | 11205 | 8884 |
| | 3% | 7% | 3% | 9% | 4% | 4% |
| grade 6 events | 4691 | 70602 | 5206 | 58708 | 14300 | 5109 |
| | 1% | 24% | 2% | 21% | 5% | 2% |
| grade 7 events | 204355 | 135611 | 187223 | 129247 | 208466 | 178807 |
| | 85% | 46% | 83% | 48% | 75% | 83% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-456789 | ACIS-456789 | Obspar file type | PREDICTED | ACTUAL |
| Grating | HETG | HETG | 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 | 77.358232 | 77.33119227508531 | Subarray requested | NONE | NONE |
| Pointing Dec | -67.691223 | -67.66583736289645 | Alternating exposures requested | N | N |
| Pointing Roll | 81.532200 | 81.66380382318502 | 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 | 85717992.184000 | 85716999.385335 | | | |
| Observation start date | 2000-09-19T02:32:08 | 2000-09-19T02:16:39 | | | |
| Observation end time | 85757992.184000 | 85758890.624411 | | | |
| Observation end date | 2000-09-19T13:38:48 | 2000-09-19T13:54:50 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



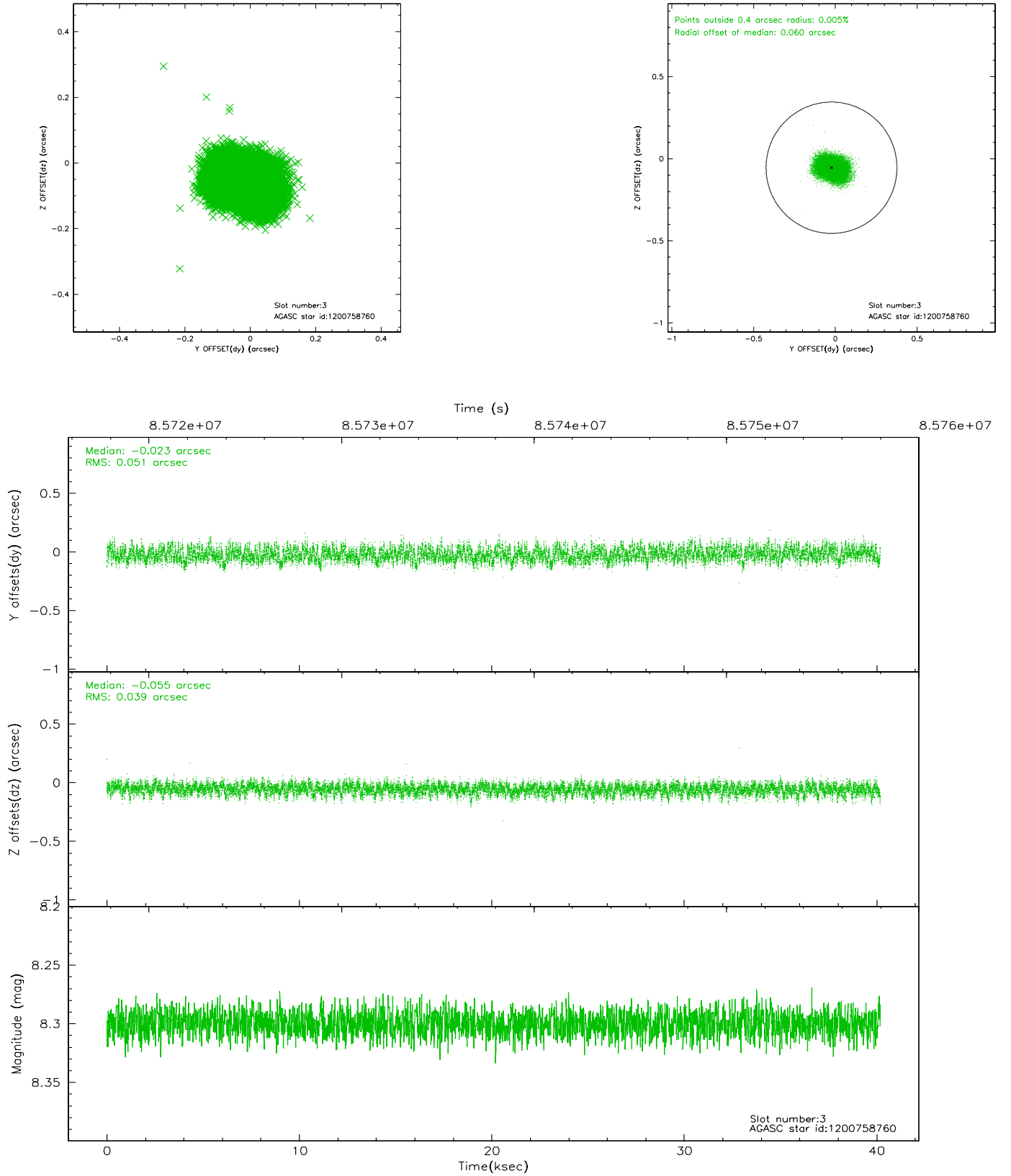


Slot Statistics

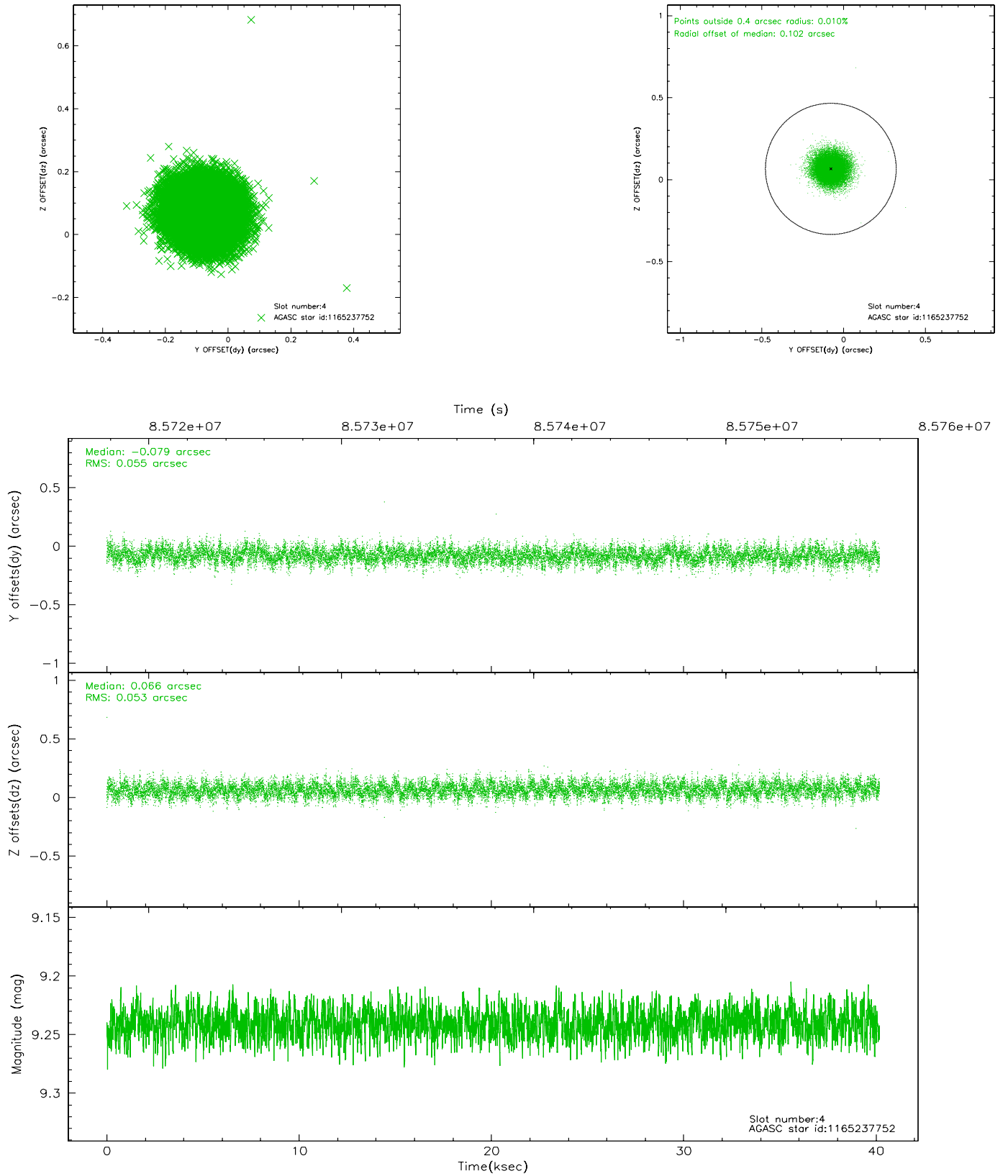
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|-------|-------|--------|--------|-------|-------|-----------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 9802 | -0.021 | 0.033 | 0.007 | 0.011 | 0.000000 | 0.000000 | -755.29 | -1727.17 |
| 1 | FID | ACIS-S-4 | 7.20 | 9801 | -0.060 | 0.001 | 0.006 | 0.012 | 0.000000 | 0.000000 | 2157.92 | 181.30 |
| 2 | FID | ACIS-S-5 | 7.23 | 9801 | 0.051 | -0.025 | 0.008 | 0.014 | 0.000000 | 0.000000 | -1808.06 | 174.91 |
| 3 | GUIDE | 1200758760 | 8.30 | 19600 | -0.023 | -0.055 | 0.069 | 0.110 | 76.277764 | -68.086435 | -1634.08 | 1225.06 |
| 4 | GUIDE | 1165237752 | 9.24 | 19596 | -0.079 | 0.066 | 0.082 | 0.131 | 78.075114 | -67.094879 | 2264.95 | -677.45 |
| 5 | GUIDE | 1200883632 | 9.14 | 19531 | -0.055 | 0.028 | 0.088 | 0.147 | 79.186141 | -67.543567 | 858.74 | -2412.41 |
| 6 | GUIDE | 1165101864 | 10.36 | 19576 | 0.091 | -0.010 | 0.145 | 0.240 | 76.577750 | -67.383636 | 929.06 | 1231.31 |
| 7 | GUIDE | 1200759696 | 10.34 | 18977 | 0.062 | -0.028 | 0.167 | 0.279 | 76.376940 | -68.256077 | -2214.88 | 994.38 |

2.4 Star Slots

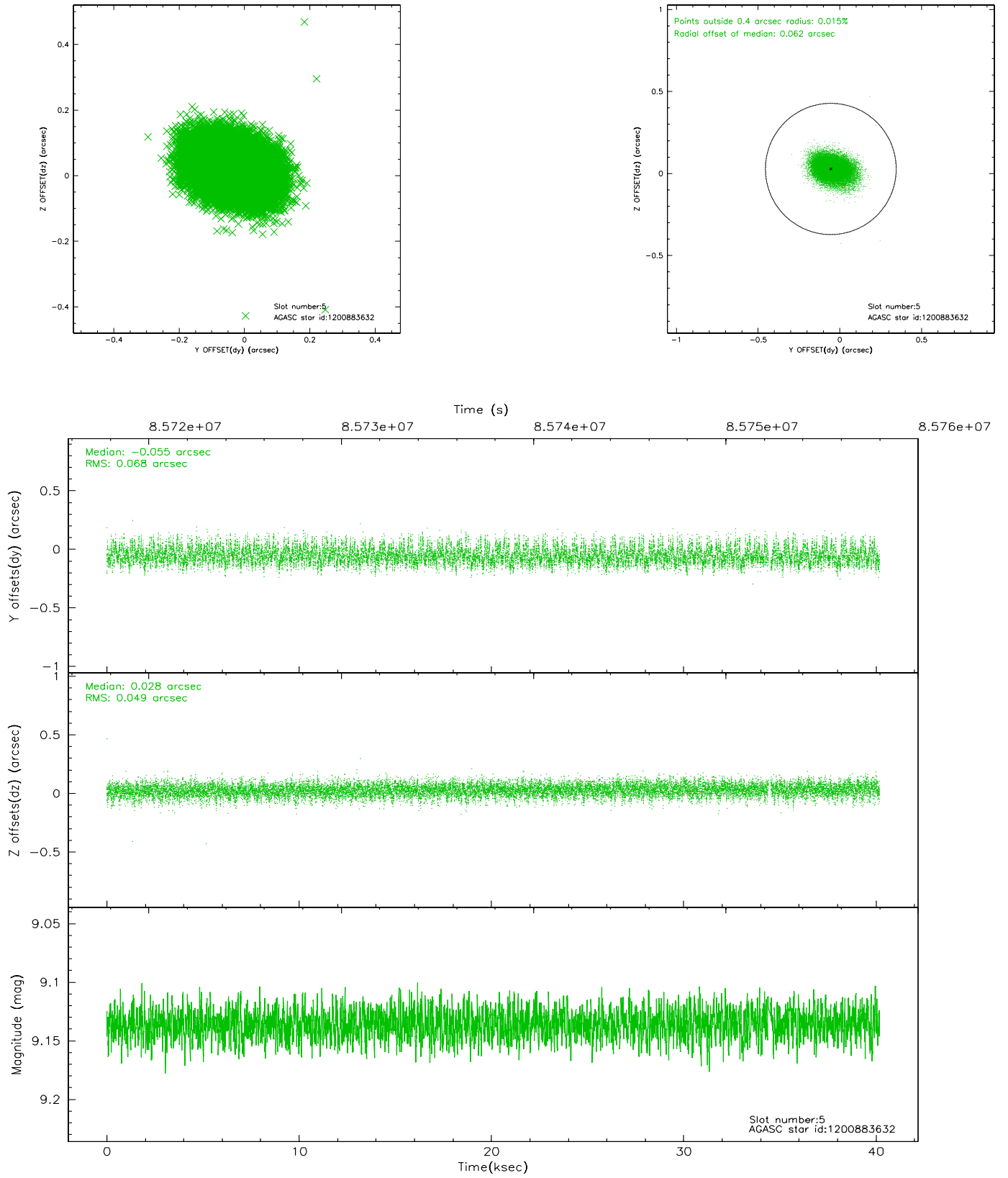
2.4.1 Slot 3



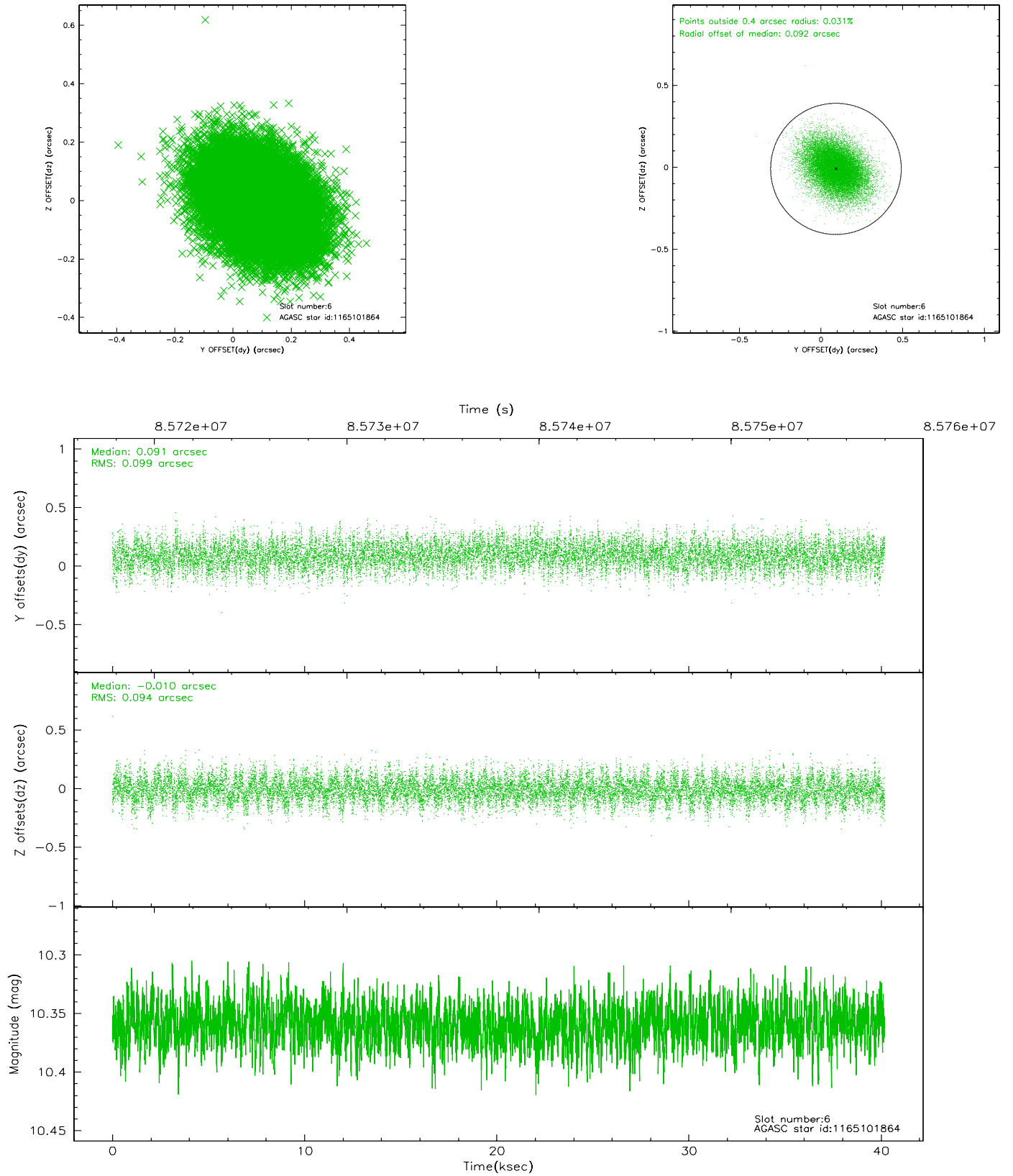
2.4.2 Slot 4



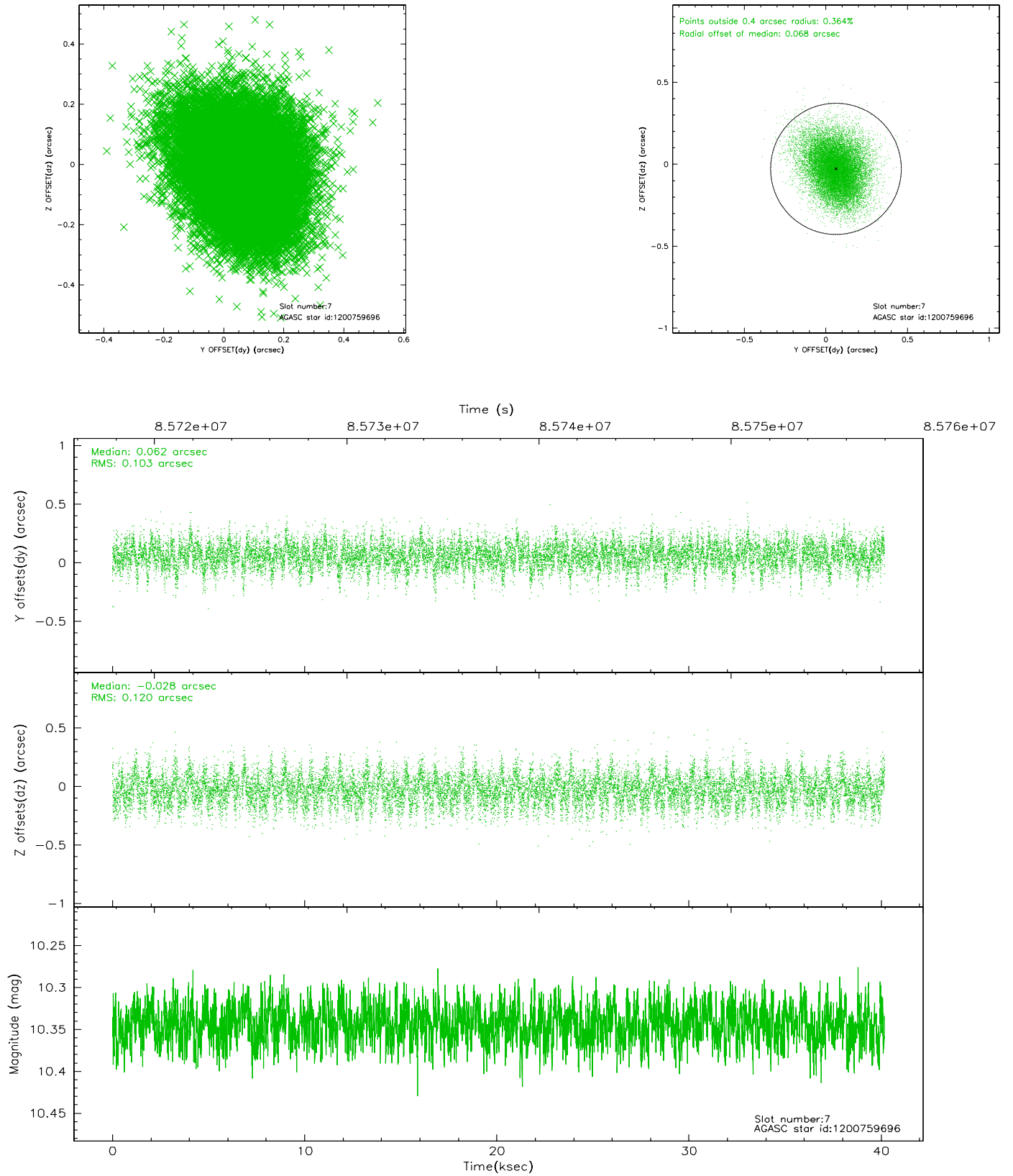
2.4.3 Slot 5



2.4.4 Slot 6

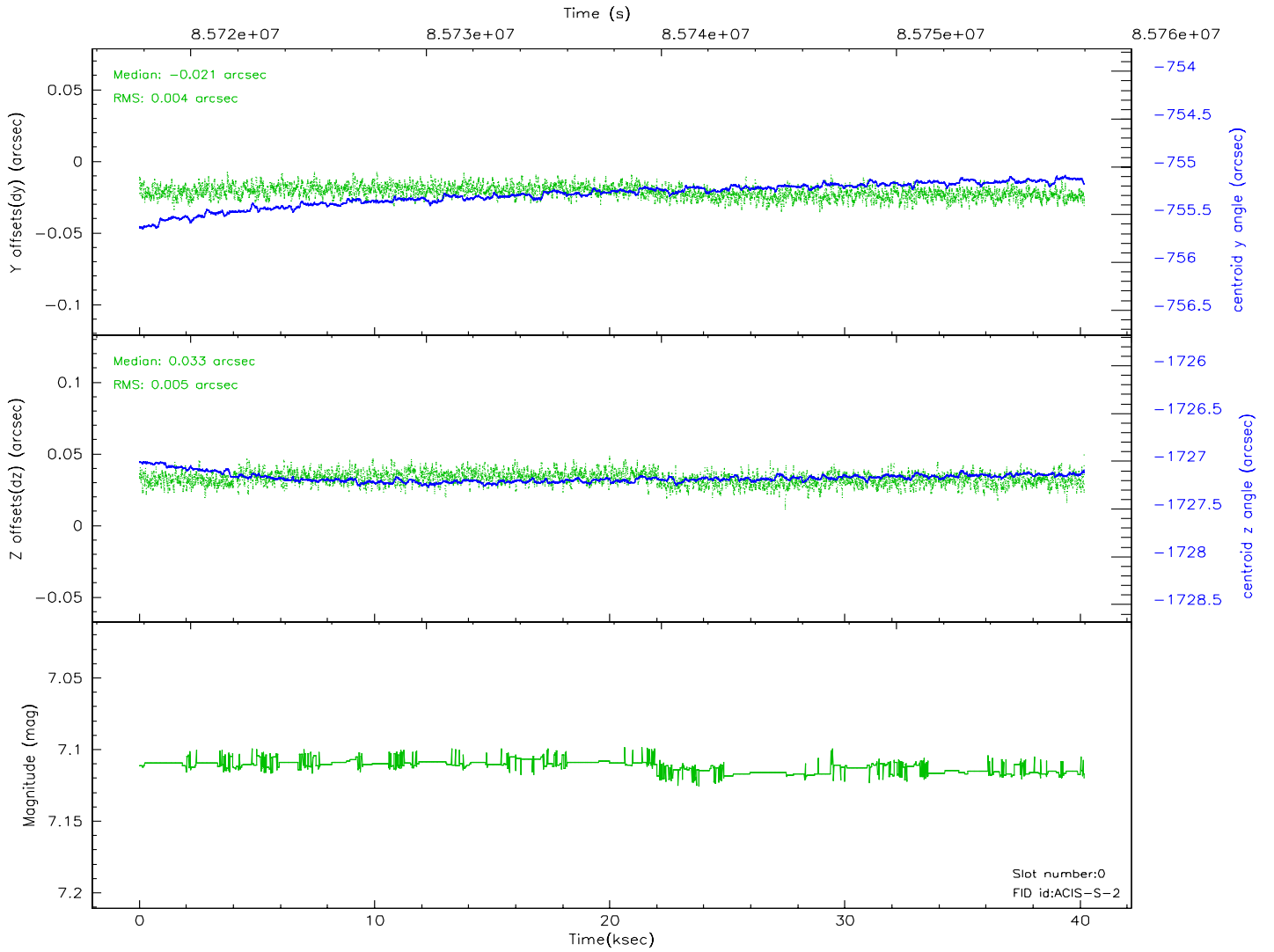
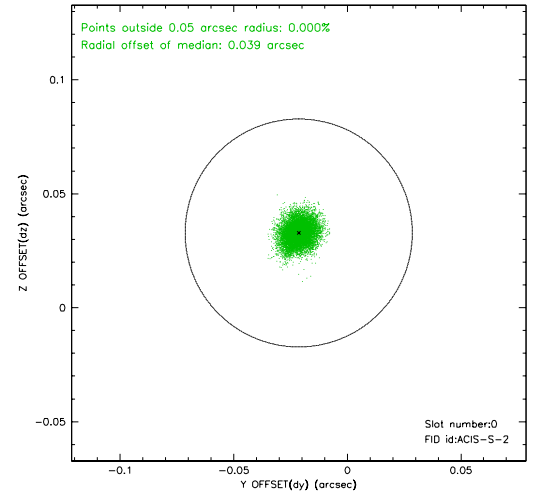
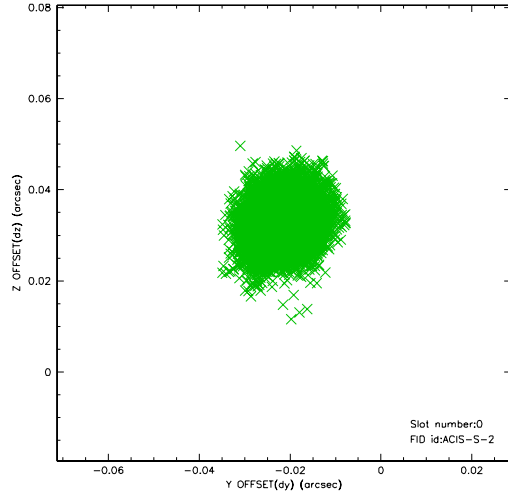


2.4.5 Slot 7

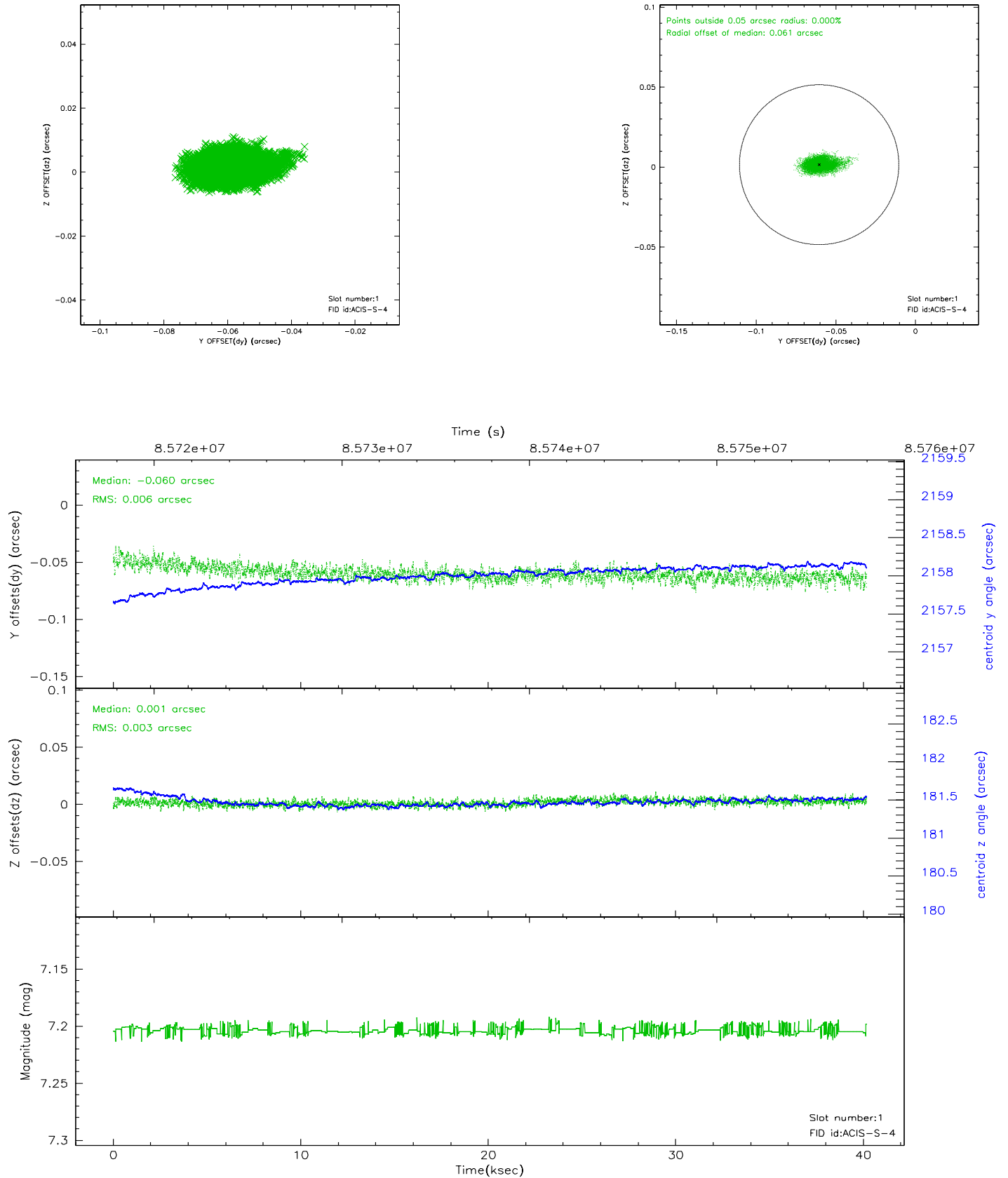


2.5 FID Slots

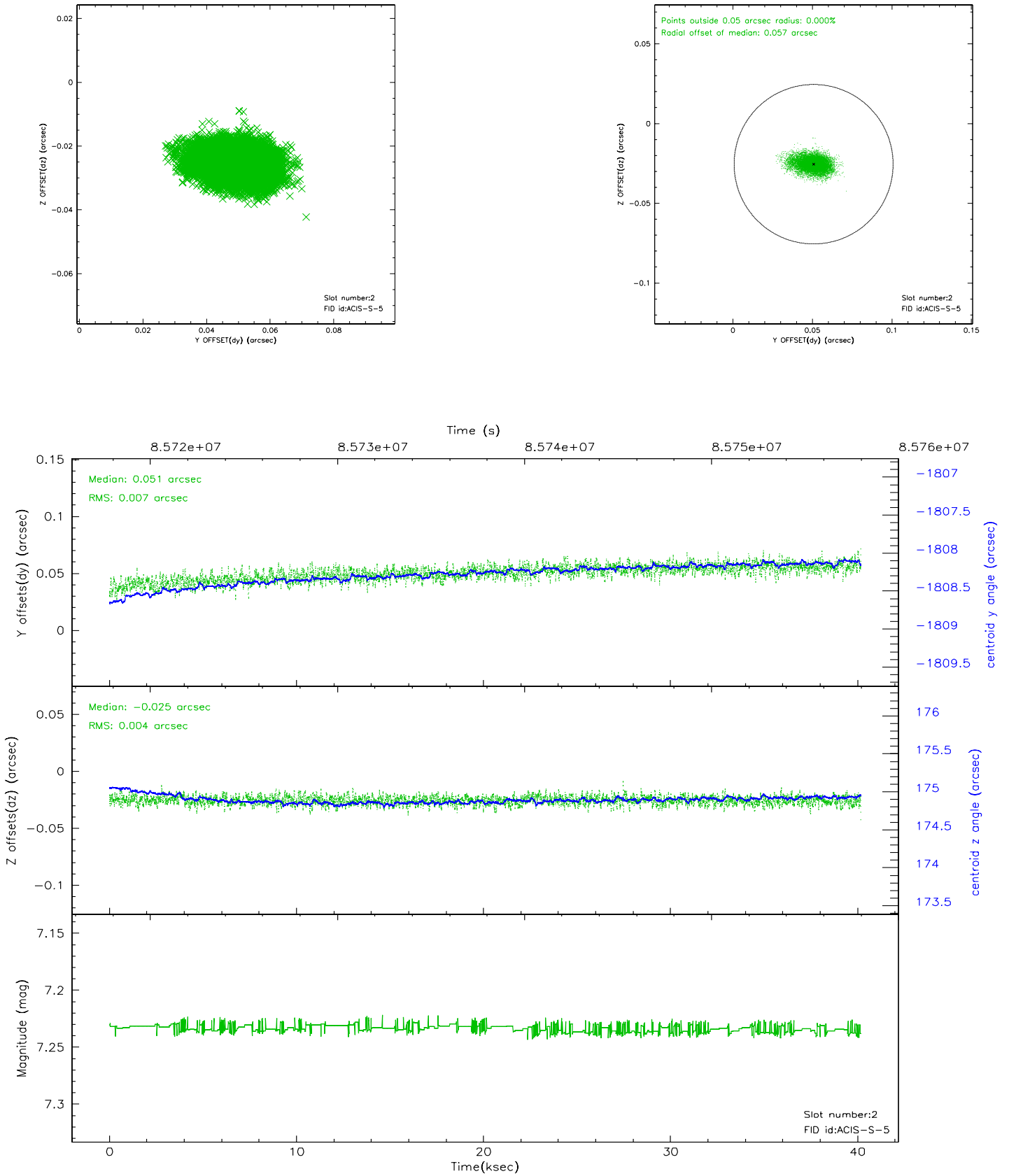
2.5.1 Slot 0



2.5.2 Slot 1

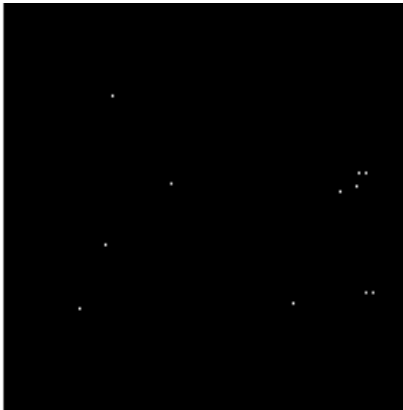


2.5.3 Slot 2

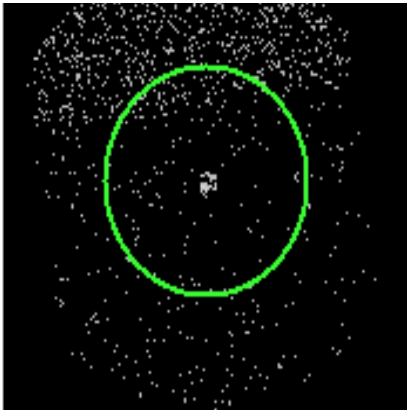


3 Gratings

3.1 HEG Arm



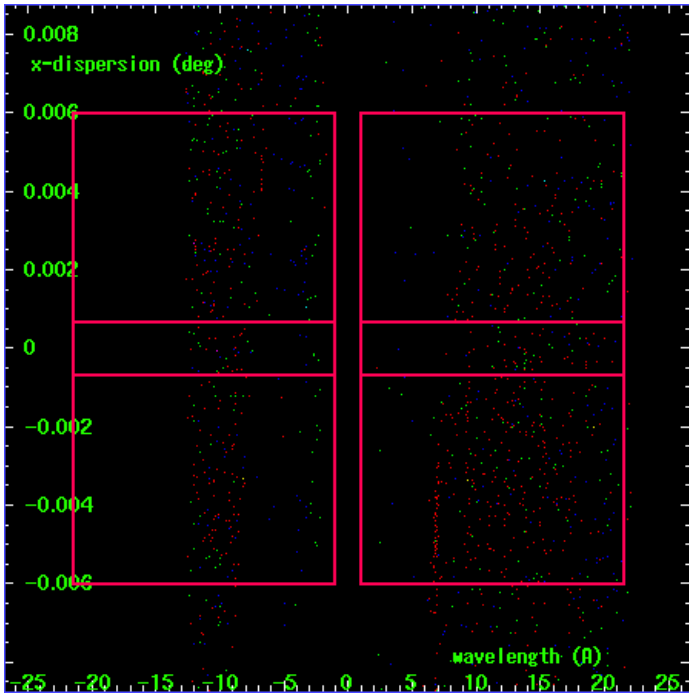
HEG Order Sort 123



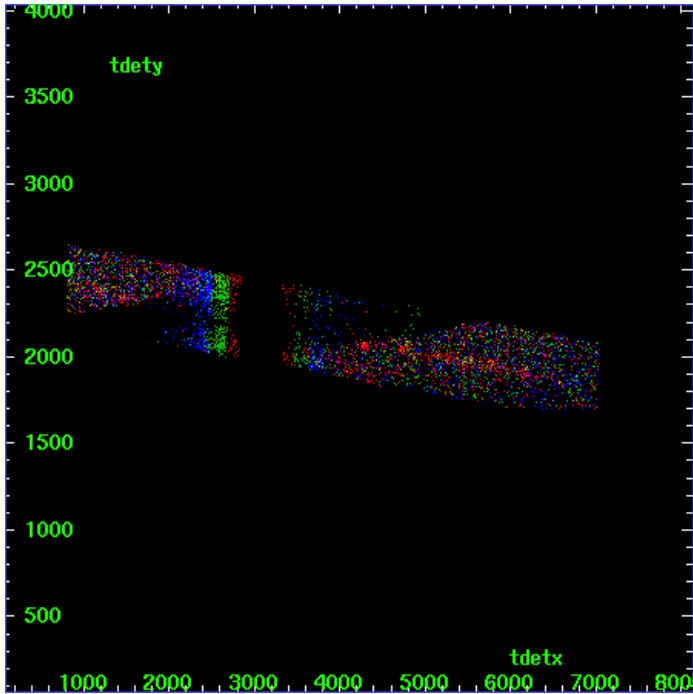
HEG Zero Order



HEG Order Sort ALL

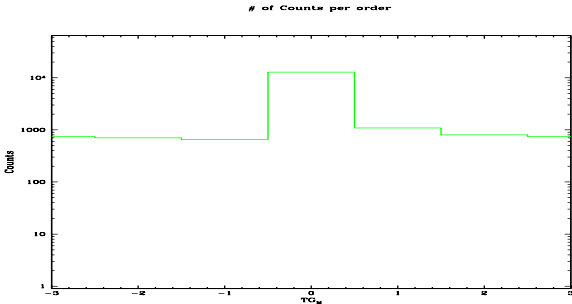


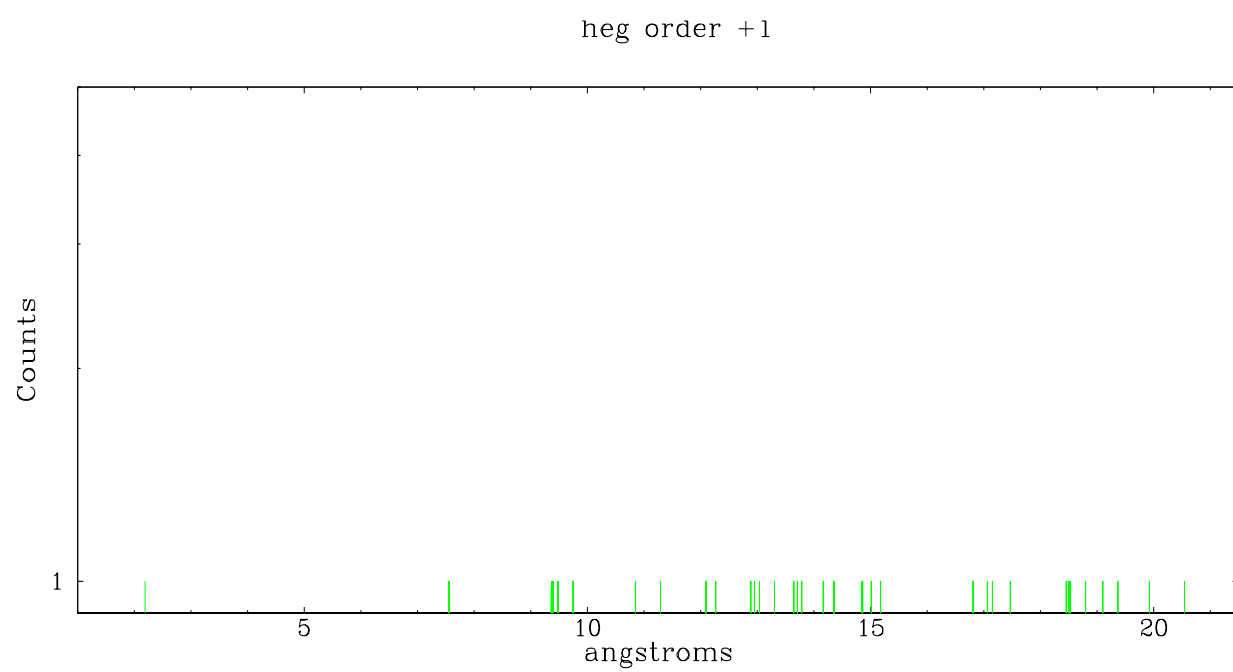
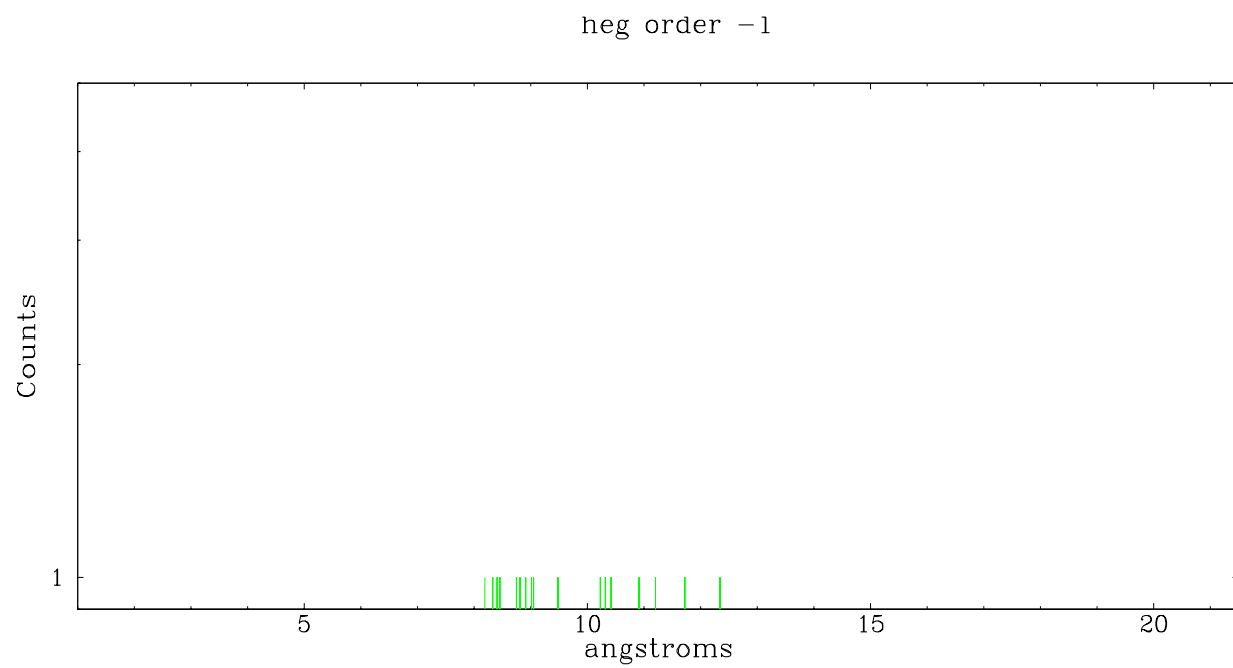
Spot Image HEG



Full Detector HEG

| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 745 | 705 | 652 | 12826 | 1087 | 802 | 744 |

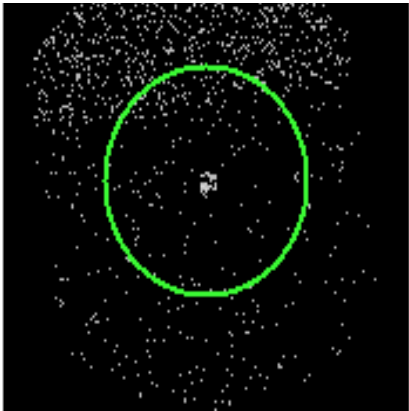




3.2 MEG Arm



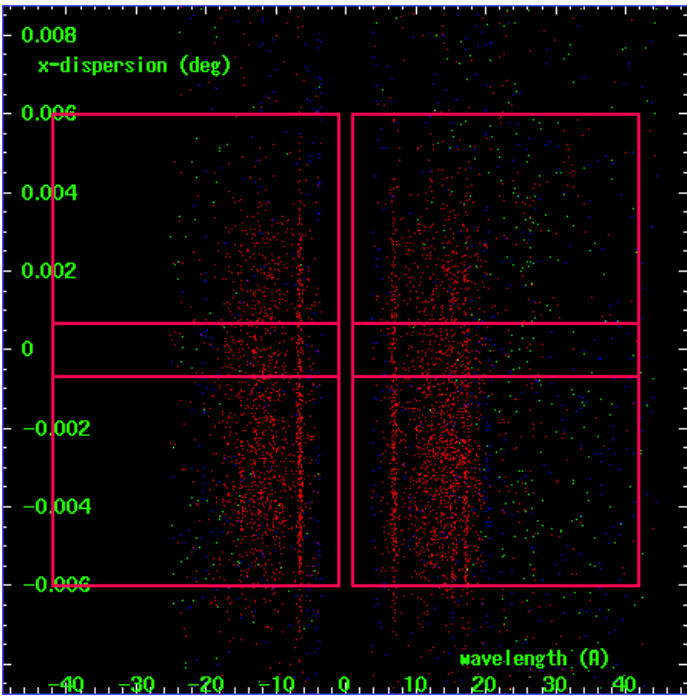
MEG Order Sort 123



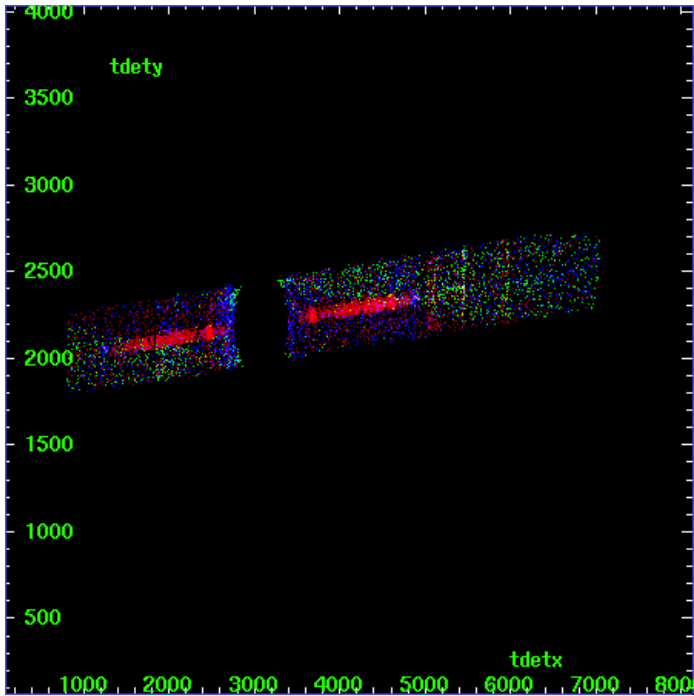
MEG Zero Order



MEG Order Sort ALL

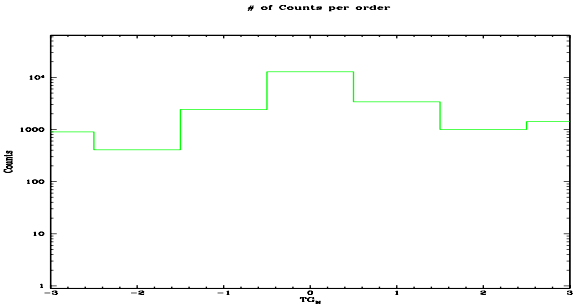


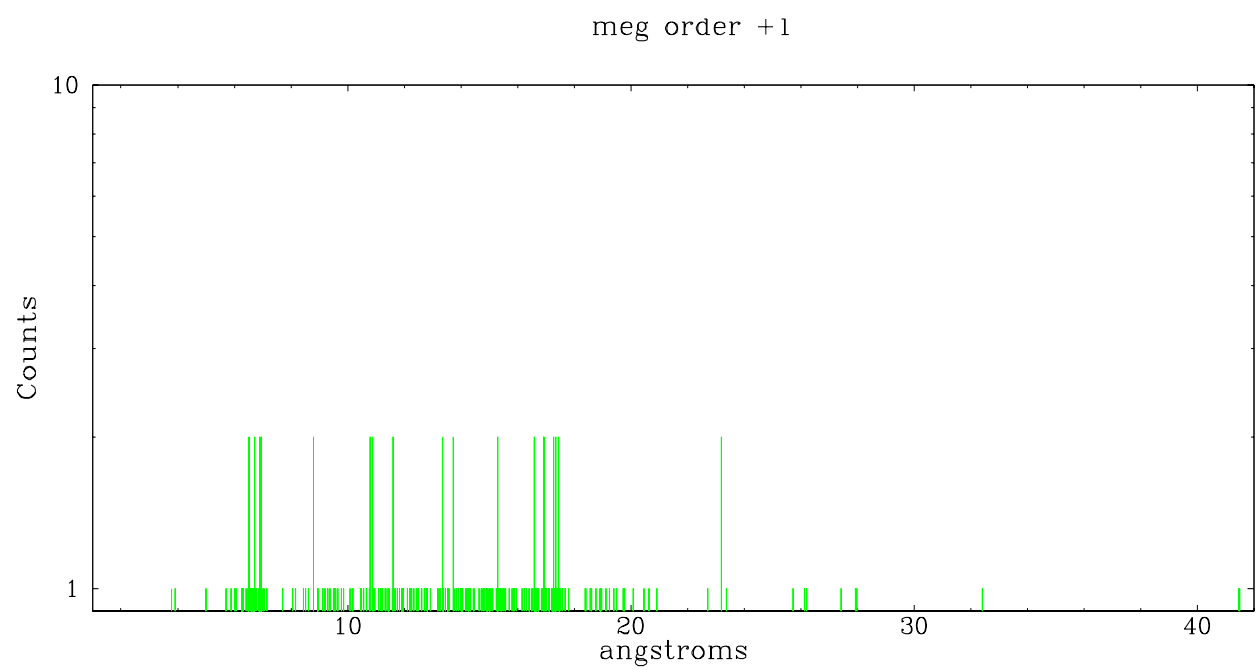
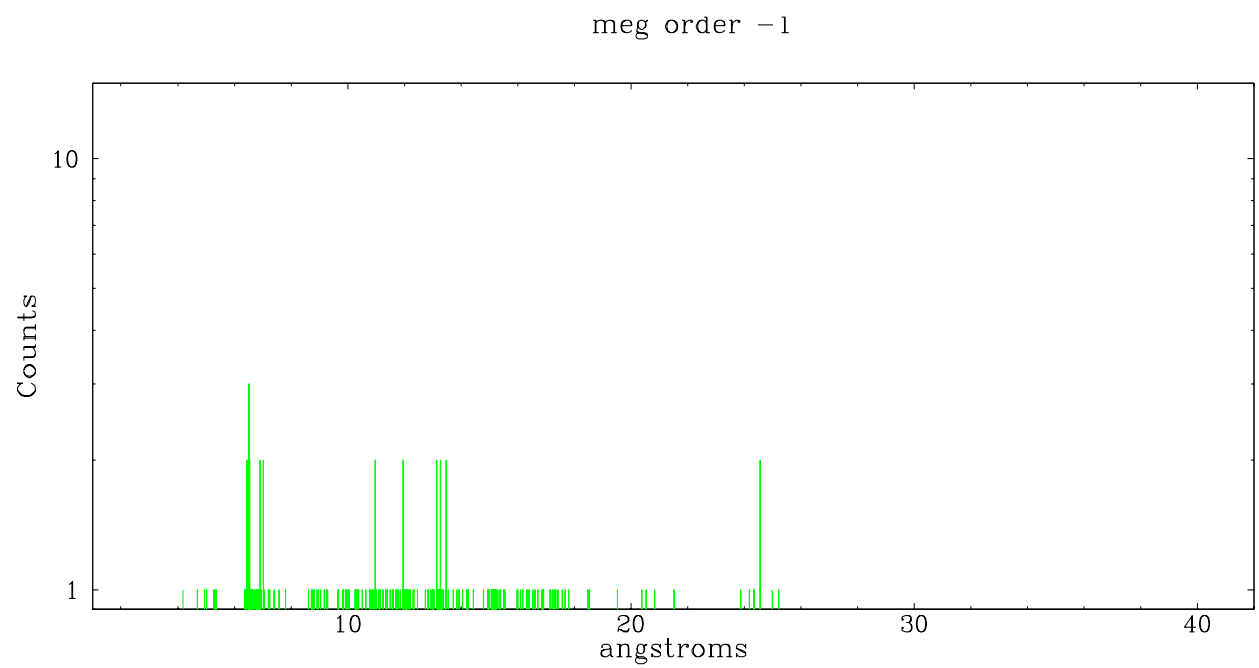
Spot Image MEG



Full Detector MEG

| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 900 | 408 | 2412 | 12826 | 3400 | 1001 | 1411 |





A Summary

A.1 Status

| | |
|----------------------------|--------------------|
| V&V Scientist | David Huenemoerder |
| V&V Date (YYYY-MM-DD) | 2007.06.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 39.913 |

A.2 Comments

Charge time:

Charge time for this ObsId remains at previous value of 39.913 ks.

NOTE: off-axis, extended source, may require customization of spectral extraction regions by the user.