

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 644 - L2 Version 001
Chandra X-Ray Center

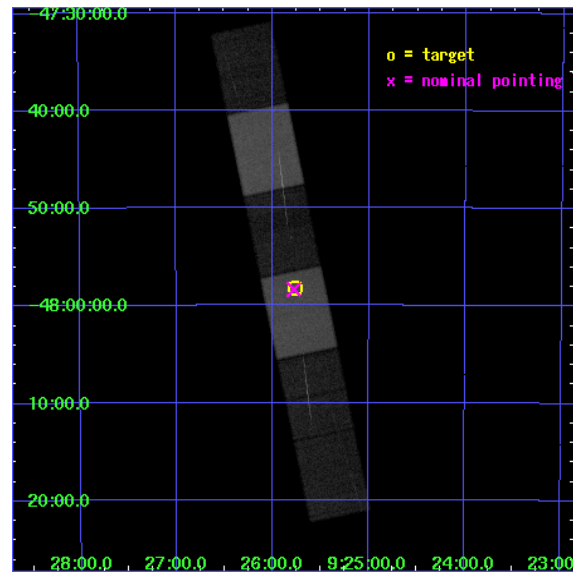
L2 Processing Date : Jun 16 2007

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1 Front

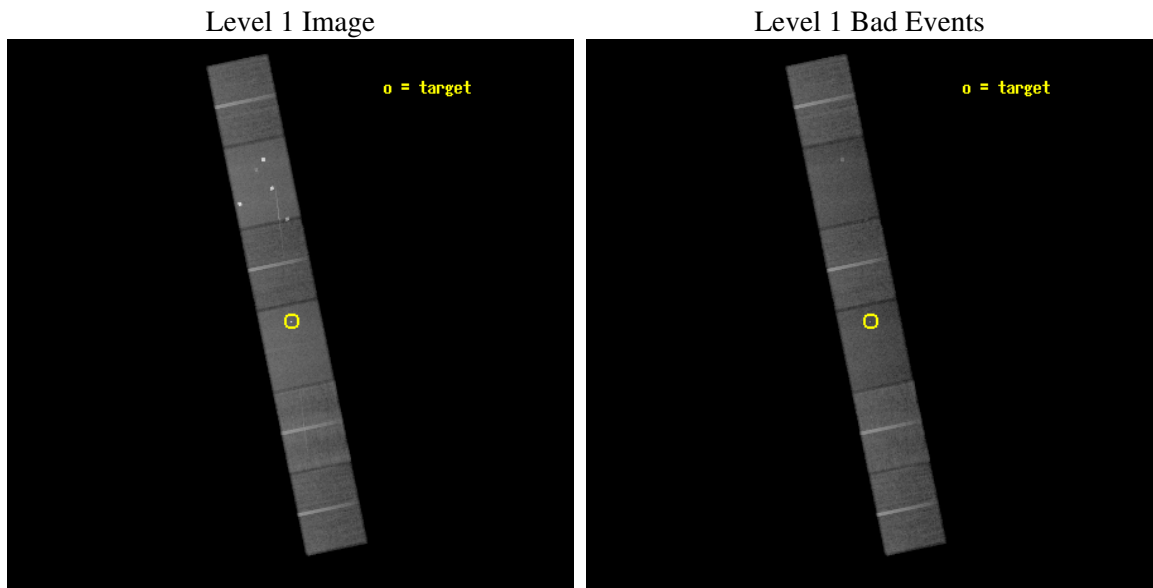
| | |
|----------|---|
| seq_num | 300013 |
| obs_id | 644 |
| title | ESTABLISHING THE TRUE NATURE OF RX J0925.7-4758 WITH AXAF |
| observer | Hendrik Hartmann |
| object | RX J0925.7-4758 |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 141.4425 |
| dec_targ | -47.971278 |
| ra_nom | 141.44465051611 |
| dec_nom | -47.972959565856 |
| roll_nom | 78.269947132821 |
| revision | 2 |
| ontime | 57400.0 |
| livetime | 56472.940213456 |
| ontime4 | 57400.0 |
| ontime5 | 57400.0 |
| ontime6 | 57400.0 |
| ontime7 | 57400.0 |
| ontime8 | 57397.459009841 |
| ontime9 | 57397.459009841 |
| l2events | 427206 |



2 OBI

2.1 OBI

2.1.1 Images

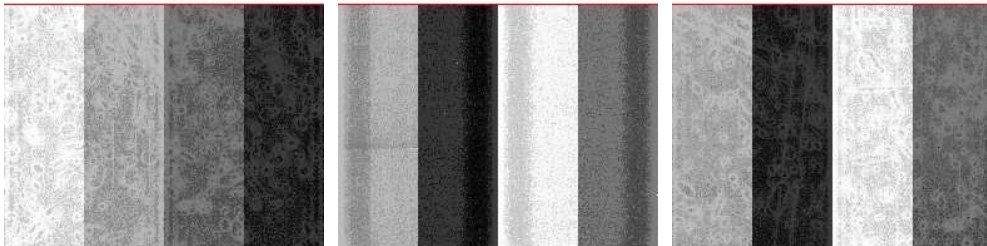


2.1.2 Bias

Chip 4

Chip 5

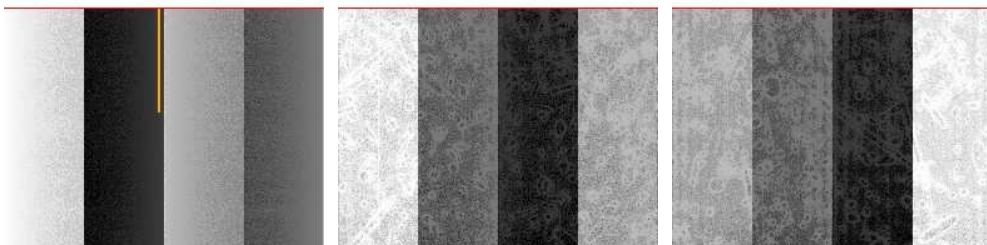
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.10 |
| caldsver | 3.4.0 |
| date | 2007-06-16T14:56:00 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 57247.231000 |
| ontime | 57400.0 |
| ontime4 | 57400.0 |
| ontime5 | 57400.0 |
| ontime6 | 57400.0 |
| ontime7 | 57400.0 |
| ontime8 | 57397.459009841 |
| ontime9 | 57397.459009841 |
| l1events | 1910749 |

2.1.4 Events

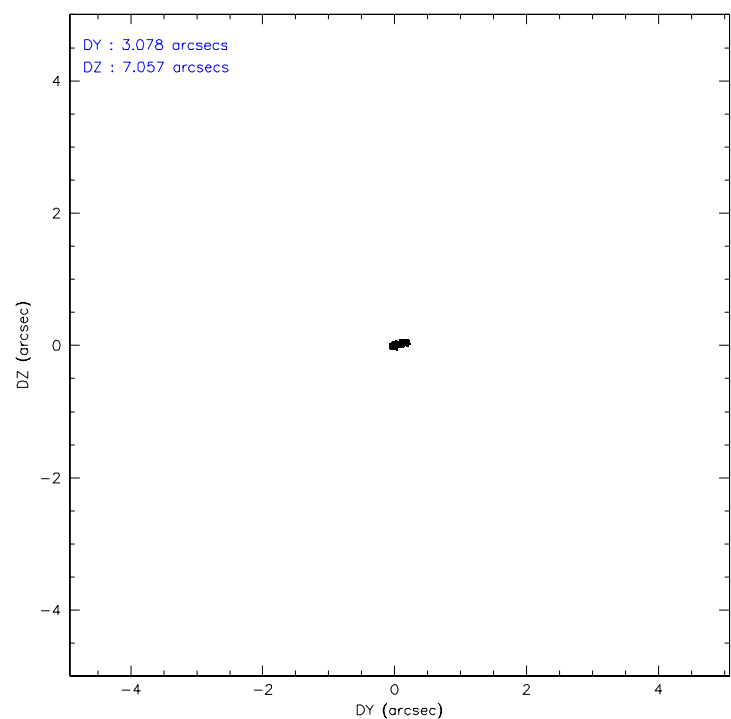
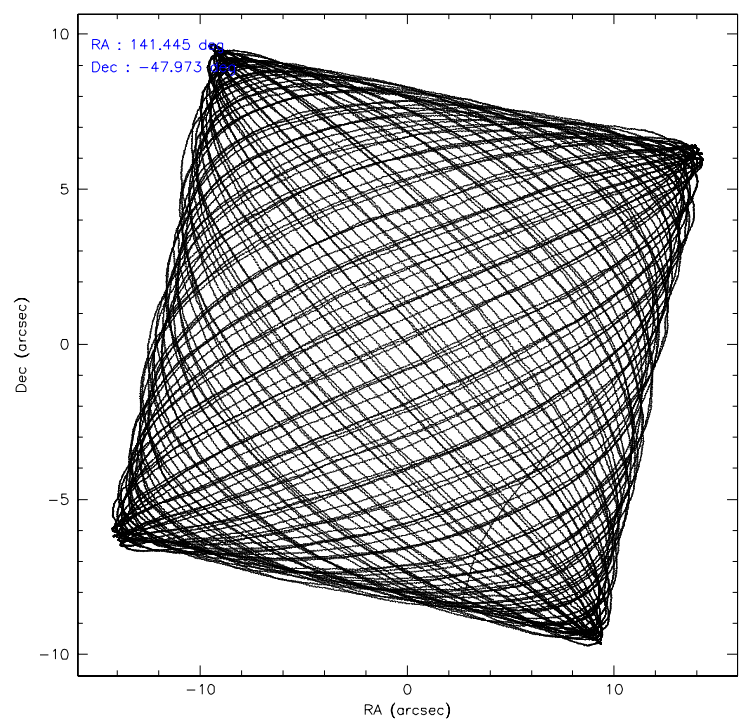
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 294840 | 412426 | 264844 | 335277 | 340294 | 263068 |
| rejected events | 260253 | 192466 | 231275 | 187133 | 264752 | 229540 |
| rejected % | 88% | 46% | 87% | 55% | 77% | 87% |

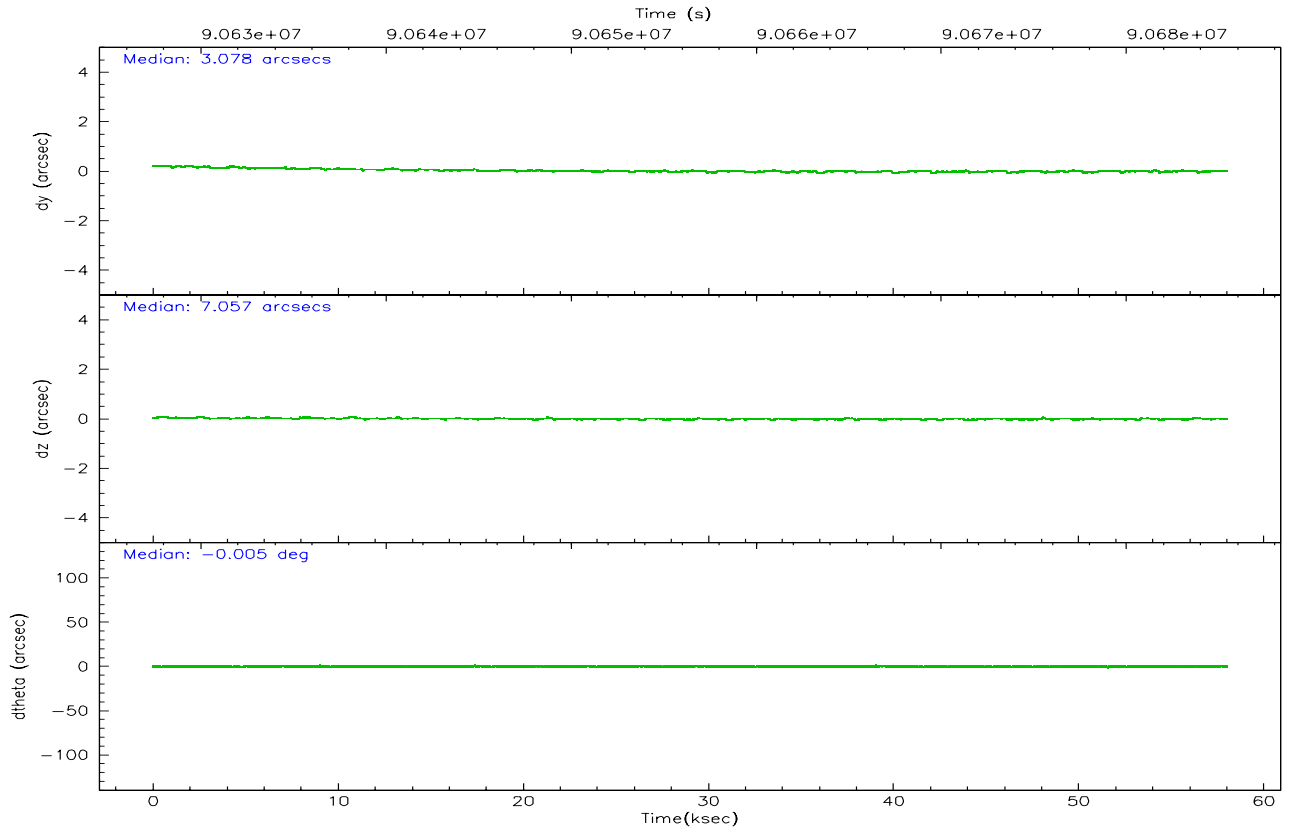
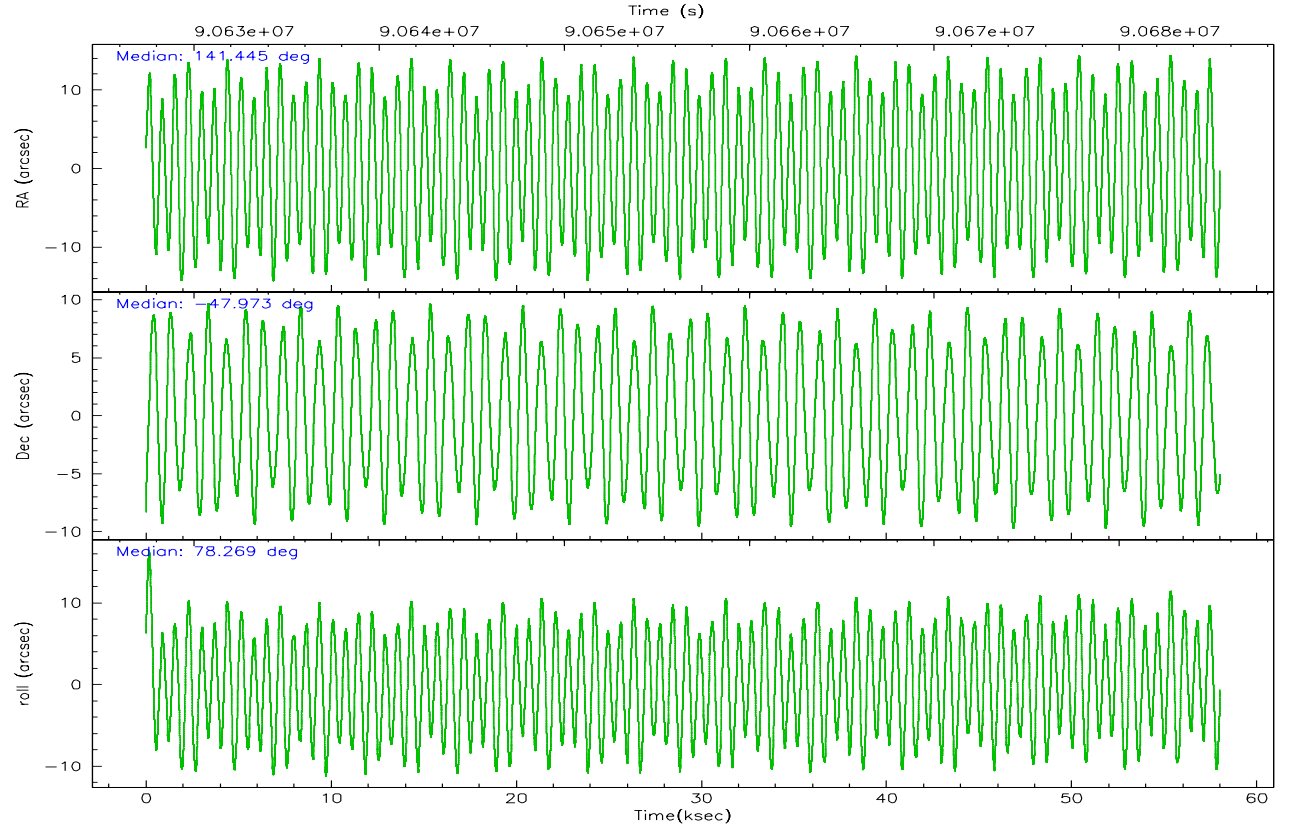
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|--------|--------|--------|--------|--------|--------|
| grade 0 events | 14780 | 54386 | 14370 | 15286 | 25453 | 14177 |
| | 5% | 13% | 5% | 4% | 7% | 5% |
| grade 1 events | 138 | 1362 | 94 | 324 | 190 | 99 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 7769 | 62157 | 6247 | 30066 | 15307 | 6348 |
| | 2% | 15% | 2% | 8% | 4% | 2% |
| grade 3 events | 3309 | 8792 | 3396 | 13979 | 8406 | 3478 |
| | 1% | 2% | 1% | 4% | 2% | 1% |
| grade 4 events | 3199 | 8789 | 3393 | 14166 | 7788 | 3259 |
| | 1% | 2% | 1% | 4% | 2% | 1% |
| grade 5 events | 9041 | 28459 | 10467 | 31062 | 13668 | 10967 |
| | 3% | 6% | 3% | 9% | 4% | 4% |
| grade 6 events | 5532 | 85854 | 6166 | 74665 | 18589 | 6268 |
| | 1% | 20% | 2% | 22% | 5% | 2% |
| grade 7 events | 251072 | 162627 | 220711 | 155729 | 250893 | 218472 |
| | 85% | 39% | 83% | 46% | 73% | 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 | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| Pointing RA | 141.457744 | 141.4446505161138 | Subarray requested | CUSTOM | CUSTOM |
| Pointing Dec | -47.998847 | -47.97295956585631 | Subarray start row | 1 | 1 |
| Pointing Roll | 78.123052 | 78.26994713282073 | Subarray row count | 774 | 774 |
| SIM focus pos (mm) | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| SIM defocus (mm) | 0 | 0.001444936568705701 | Primary exposure time | 3.200000 | 2.5 |
| SIM translation stage pos (mm) | -187.132523 | -187.1254020033014 | | | |
| SIM translation stage offset (mm) | -3 | -3.007120579706367 | | | |
| Observation start time | 90628193.184000 | 90626933.558304 | | | |
| Observation start date | 2000-11-14T22:28:49 | 2000-11-14T22:08:53 | | | |
| Observation end time | 90685440.184000 | 90685754.723048 | | | |
| Observation end date | 2000-11-15T14:22:56 | 2000-11-15T14:29:14 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



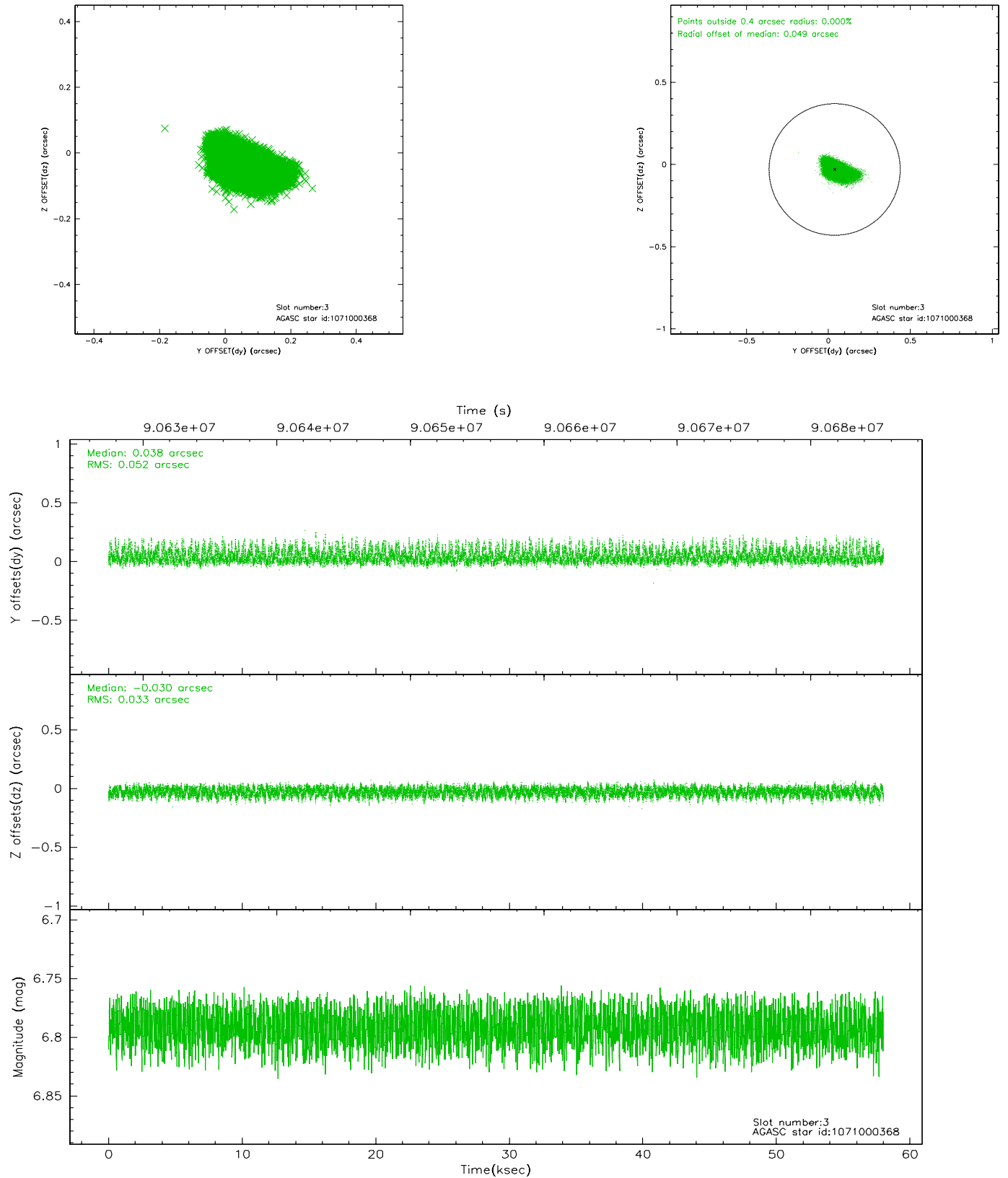


Slot Statistics

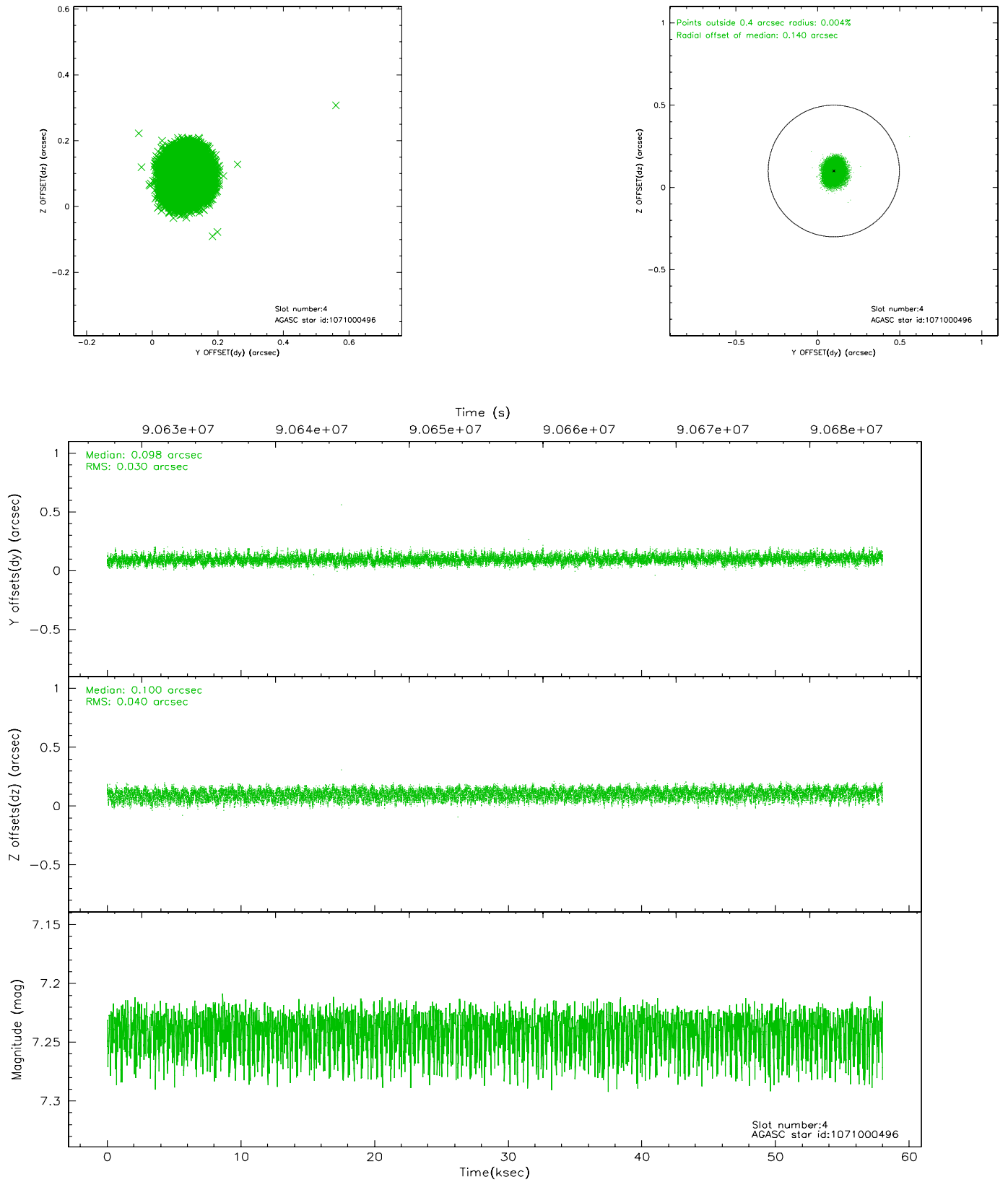
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 14151 | -0.005 | 0.008 | 0.005 | 0.009 | 0.000000 | 0.000000 | -755.52 | -1790.31 |
| 1 | FID | ACIS-S-4 | 7.19 | 14148 | -0.024 | 0.010 | 0.006 | 0.009 | 0.000000 | 0.000000 | 2157.73 | 118.24 |
| 2 | FID | ACIS-S-6 | 7.38 | 14149 | 0.001 | -0.010 | 0.007 | 0.011 | 0.000000 | 0.000000 | 406.39 | 755.55 |
| 3 | GUIDE | 1071000368 | 6.79 | 28301 | 0.038 | -0.030 | 0.062 | 0.116 | 140.855687 | -48.286946 | -1317.52 | 1197.24 |
| 4 | GUIDE | 1071000496 | 7.24 | 28303 | 0.098 | 0.100 | 0.054 | 0.085 | 141.745514 | -48.694069 | -2309.91 | -1183.93 |
| 5 | GUIDE | 1070996440 | 8.19 | 28297 | -0.151 | -0.205 | 0.065 | 0.105 | 140.656127 | -47.748431 | 472.51 | 2082.67 |
| 6 | GUIDE | 1070998952 | 8.31 | 28304 | 0.059 | 0.151 | 0.057 | 0.092 | 141.634323 | -48.452676 | -1512.65 | -748.17 |
| 7 | GUIDE | 1070993208 | 8.43 | 28301 | -0.049 | -0.014 | 0.053 | 0.086 | 140.743266 | -47.316981 | 2035.09 | 2210.67 |

2.4 Star Slots

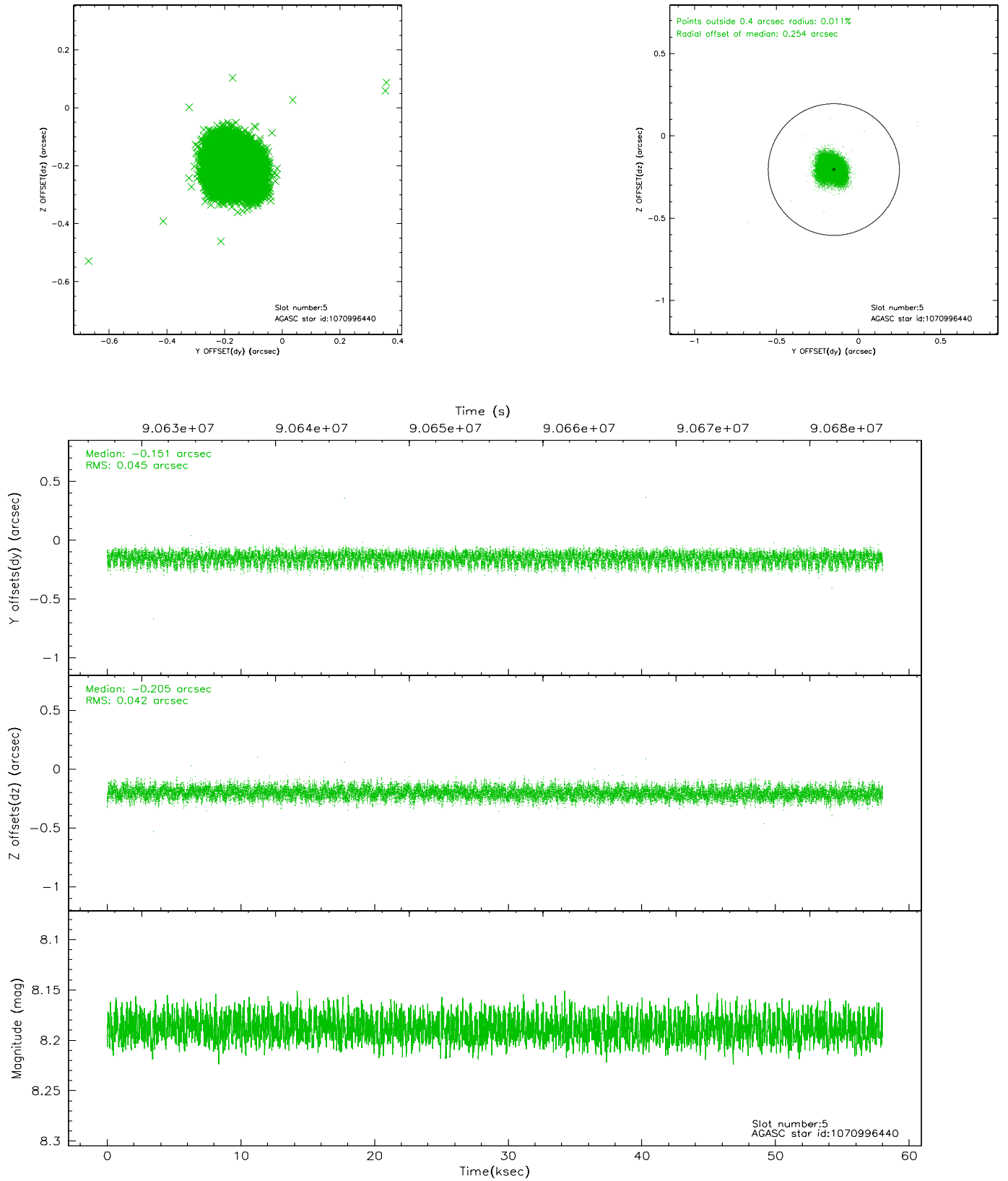
2.4.1 Slot 3



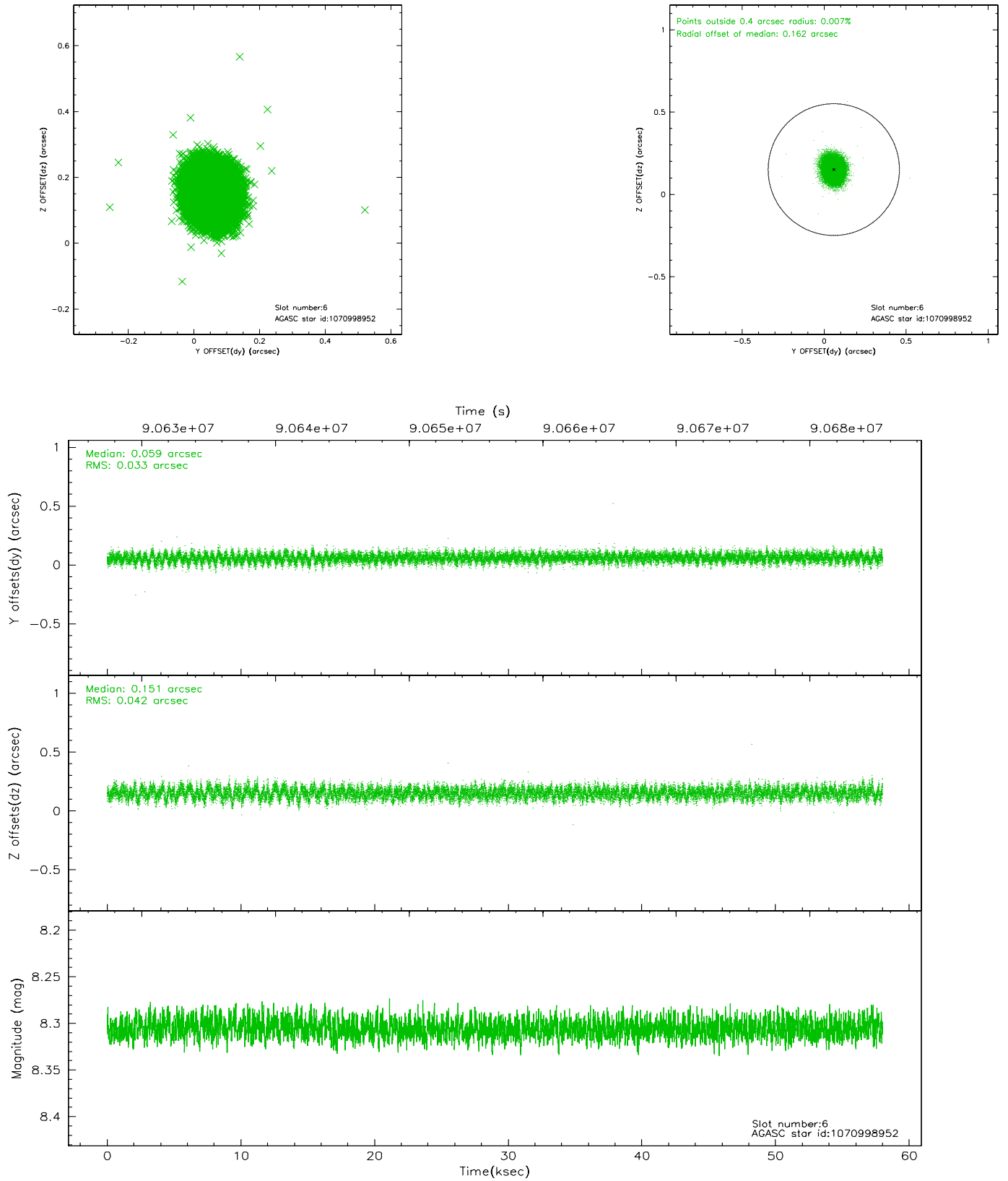
2.4.2 Slot 4



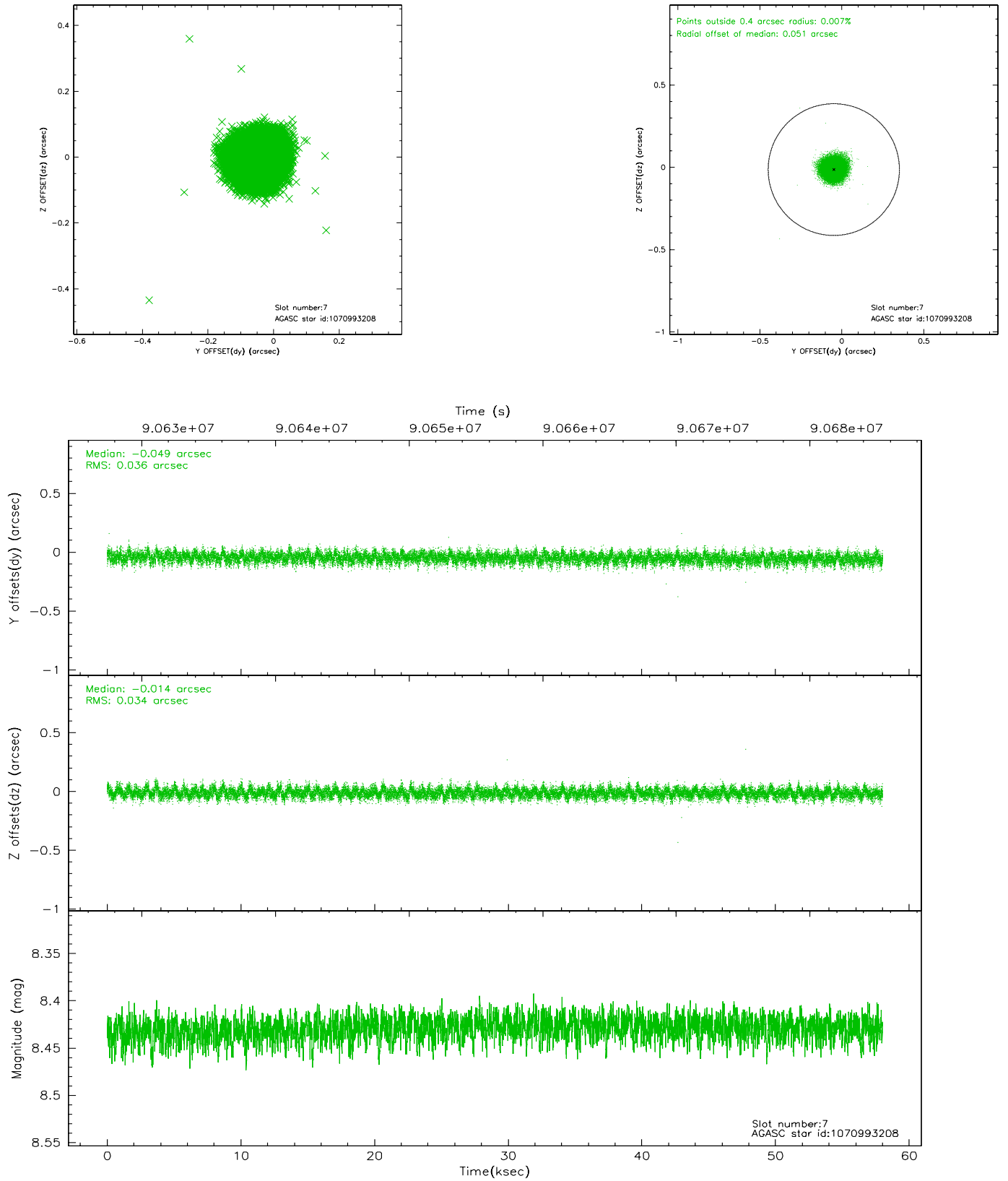
2.4.3 Slot 5



2.4.4 Slot 6

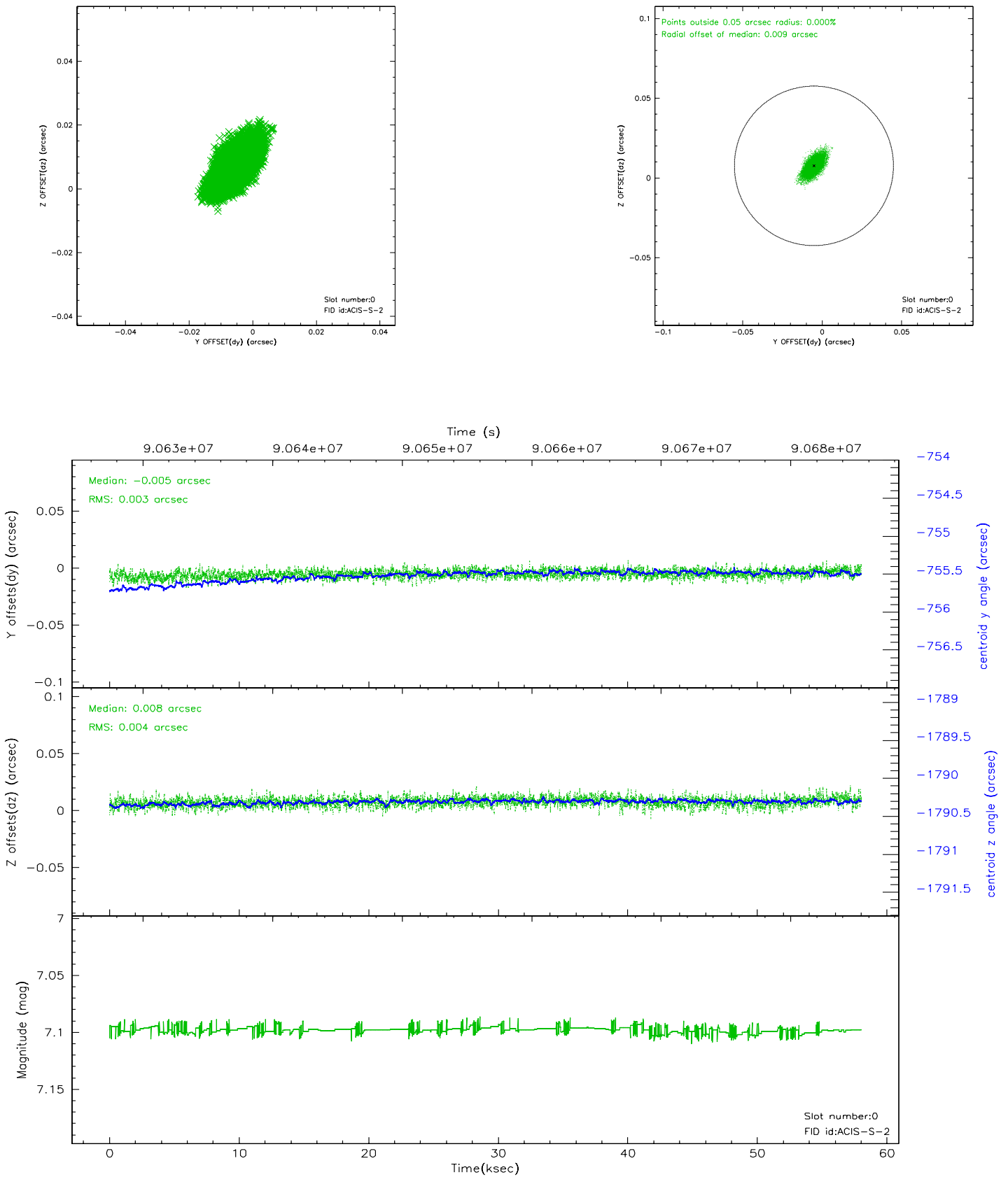


2.4.5 Slot 7

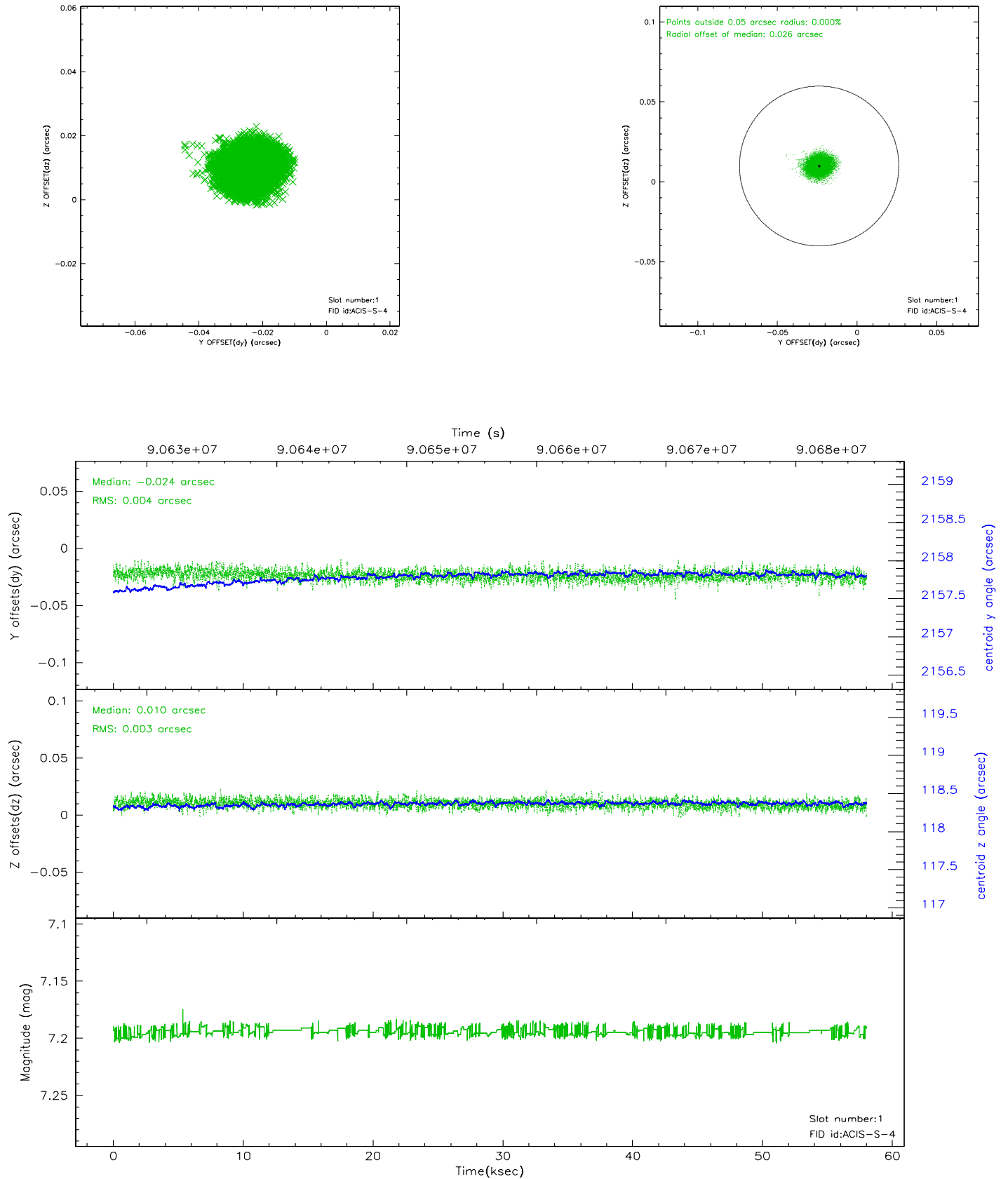


2.5 FID Slots

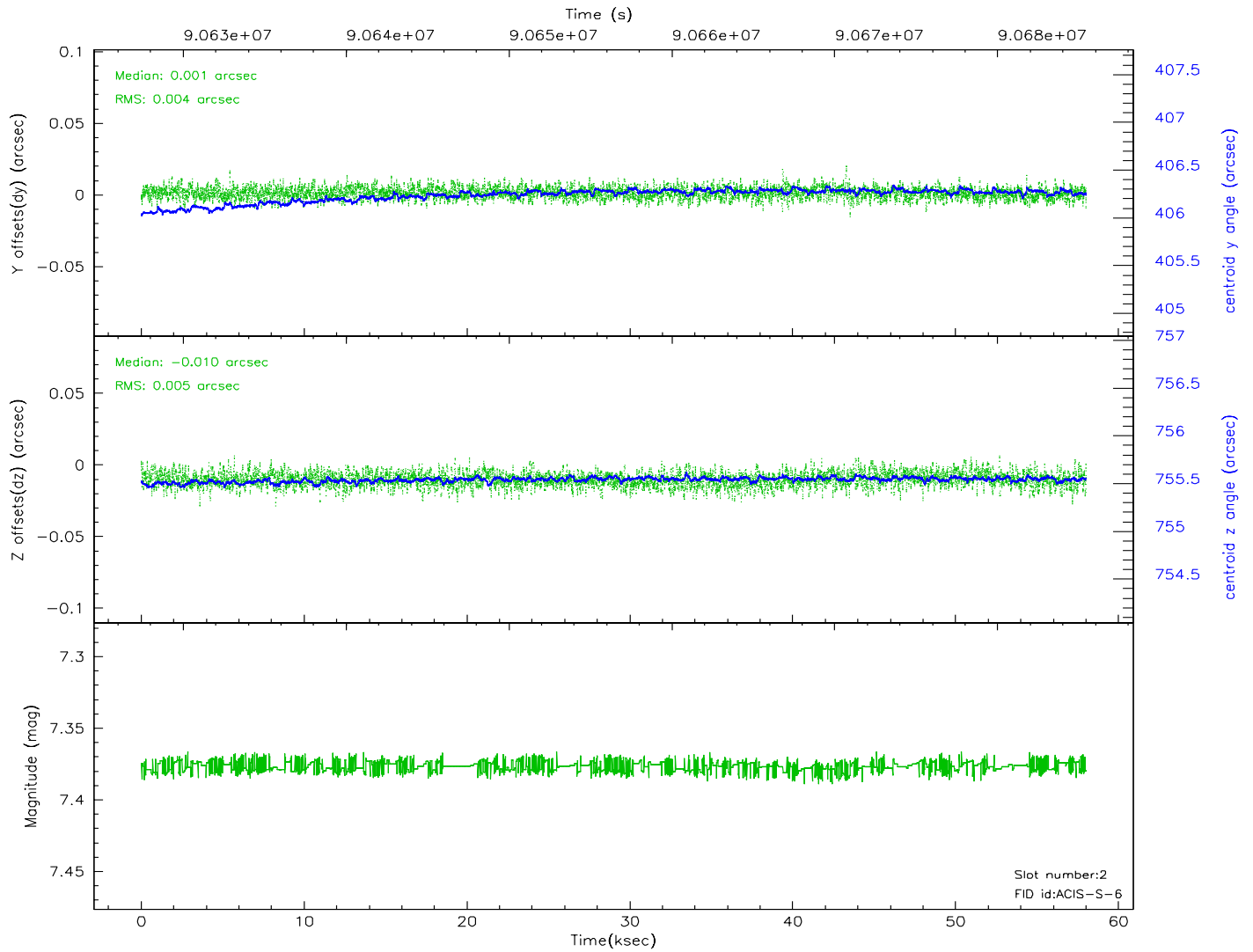
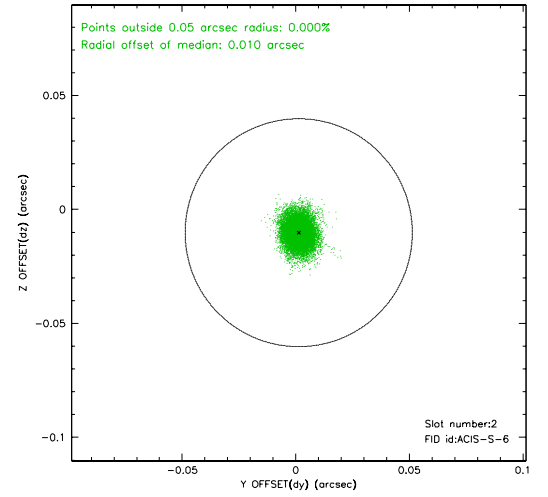
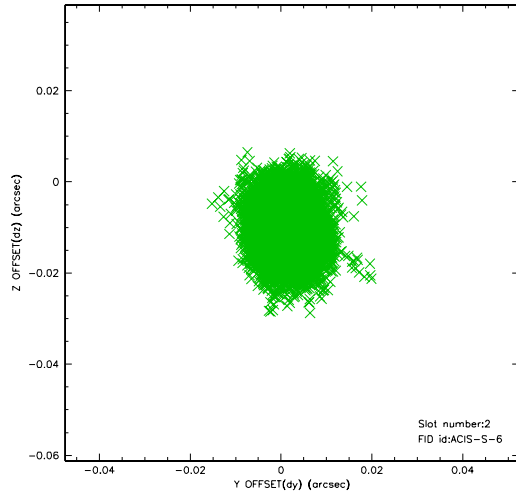
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

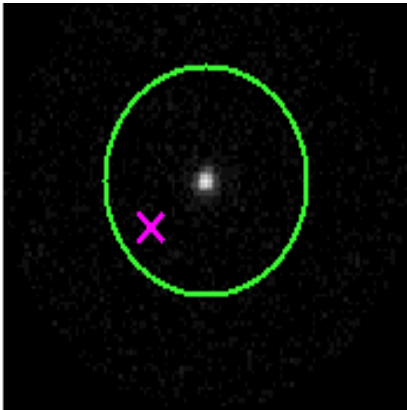


3 Gratings

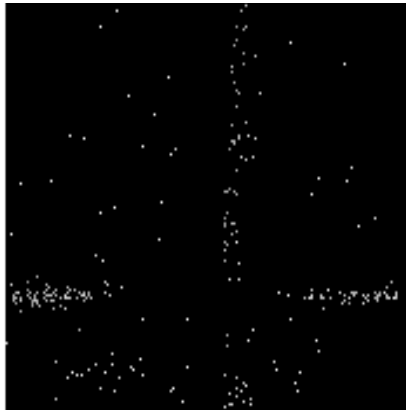
3.1 HEG Arm



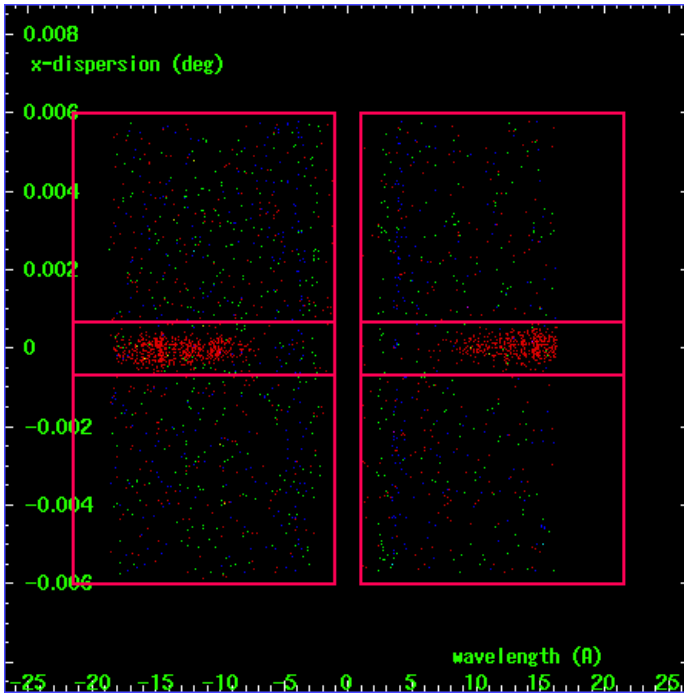
HEG Order Sort 123



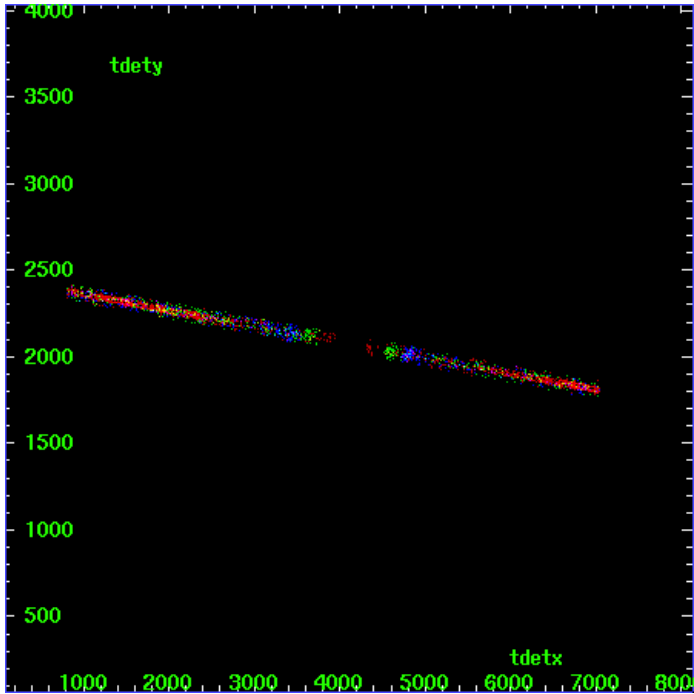
HEG Zero Order



HEG Order Sort ALL

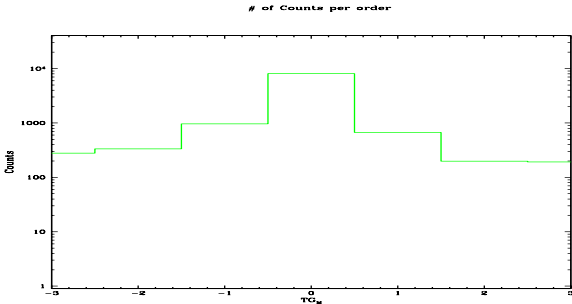


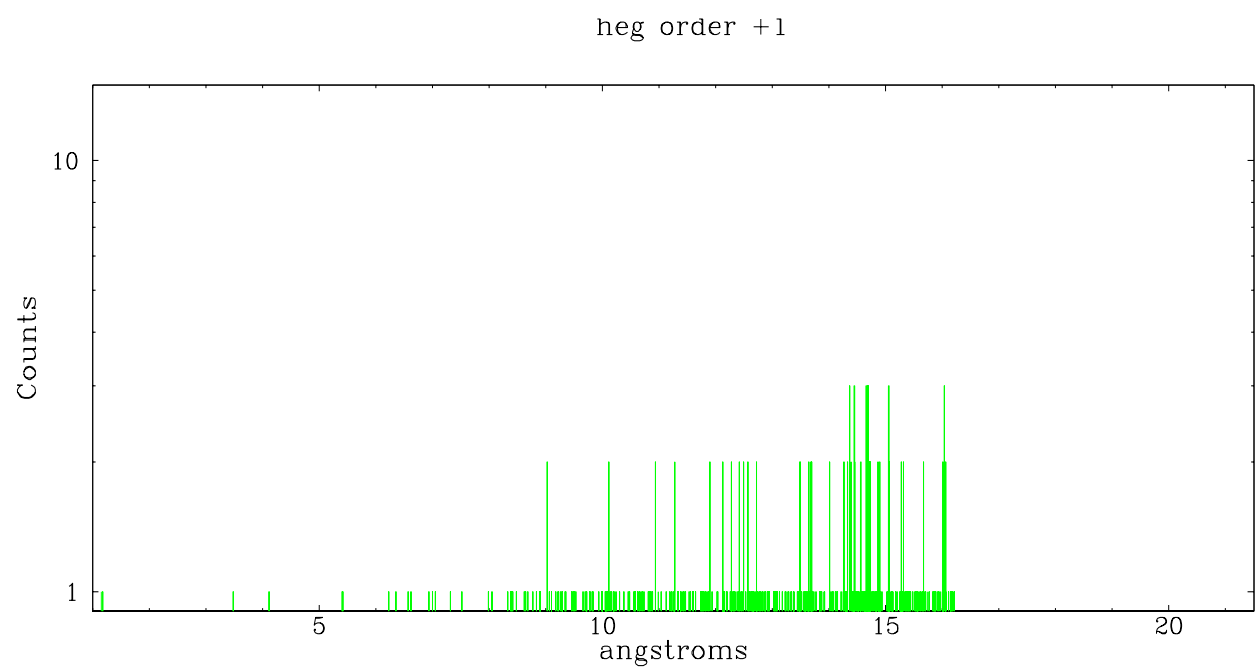
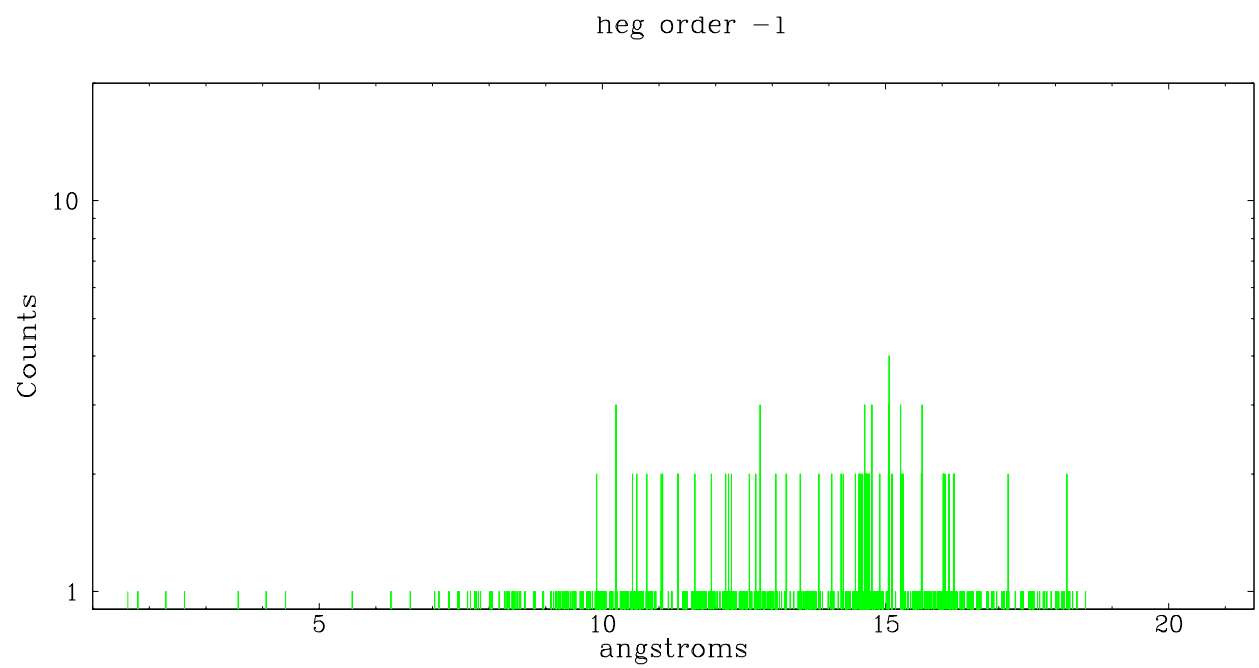
Spot Image HEG



Full Detector HEG

| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 278 | 334 | 963 | 8084 | 672 | 198 | 192 |

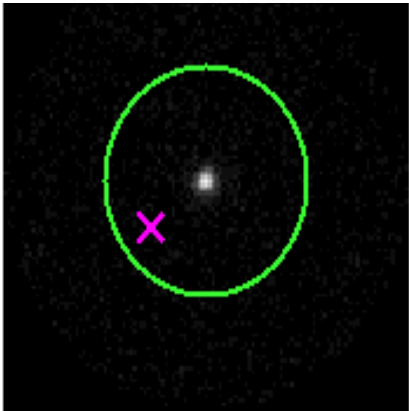




3.2 MEG Arm



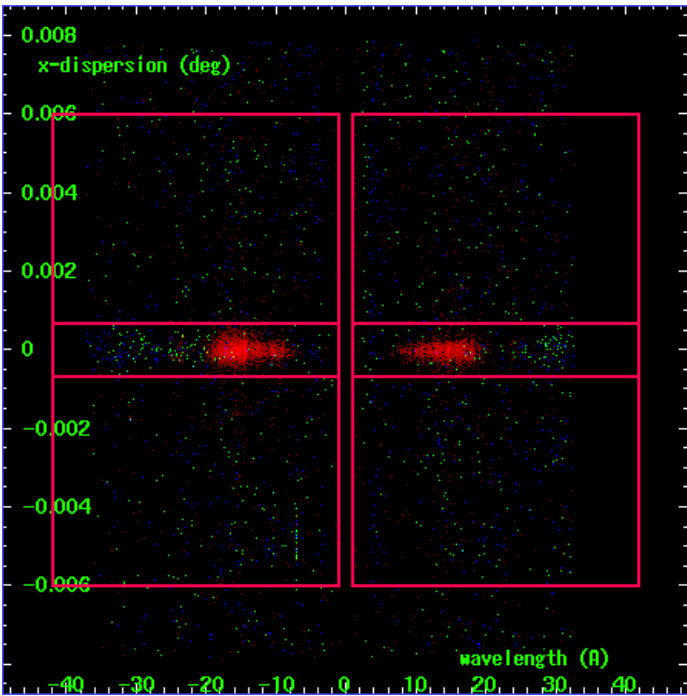
MEG Order Sort 123



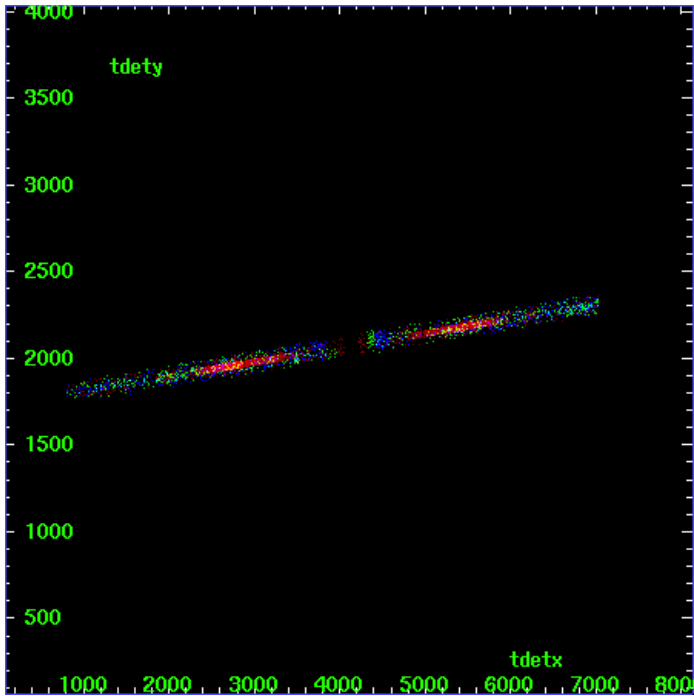
MEG Zero Order



MEG Order Sort ALL

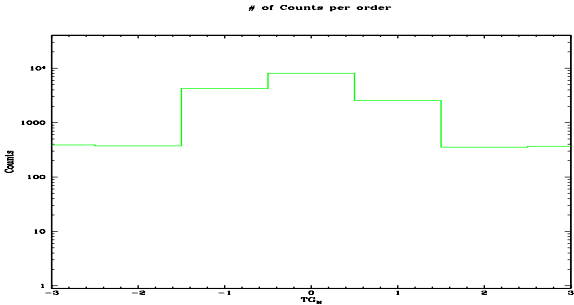


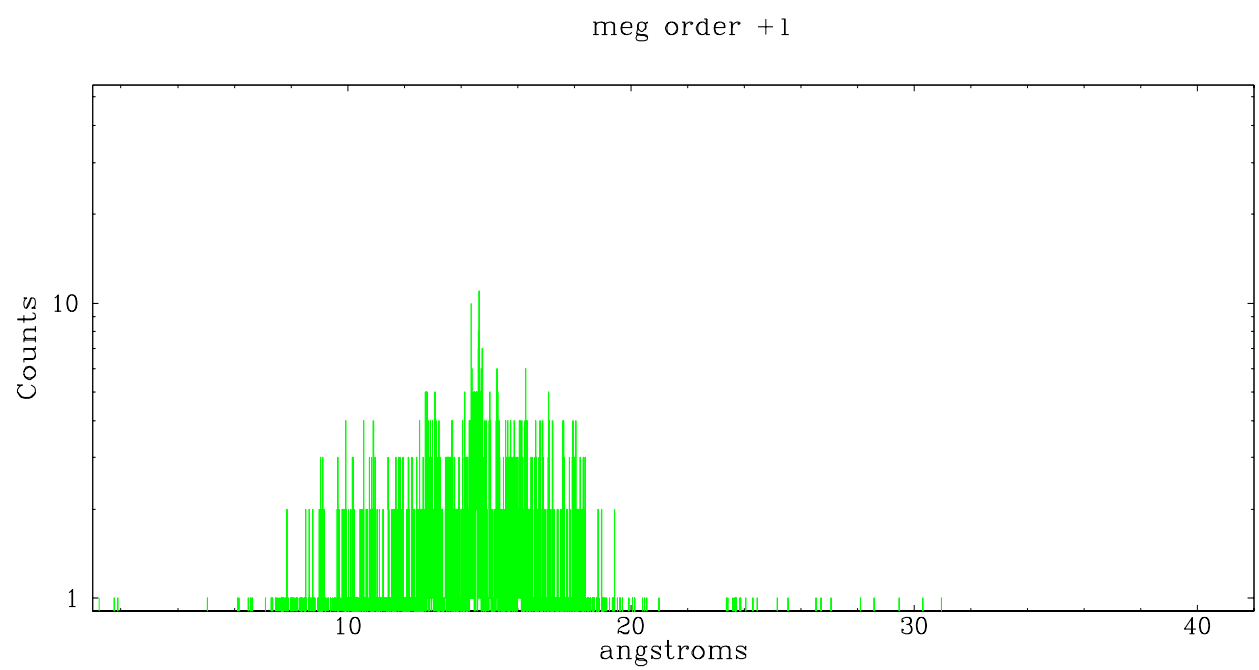
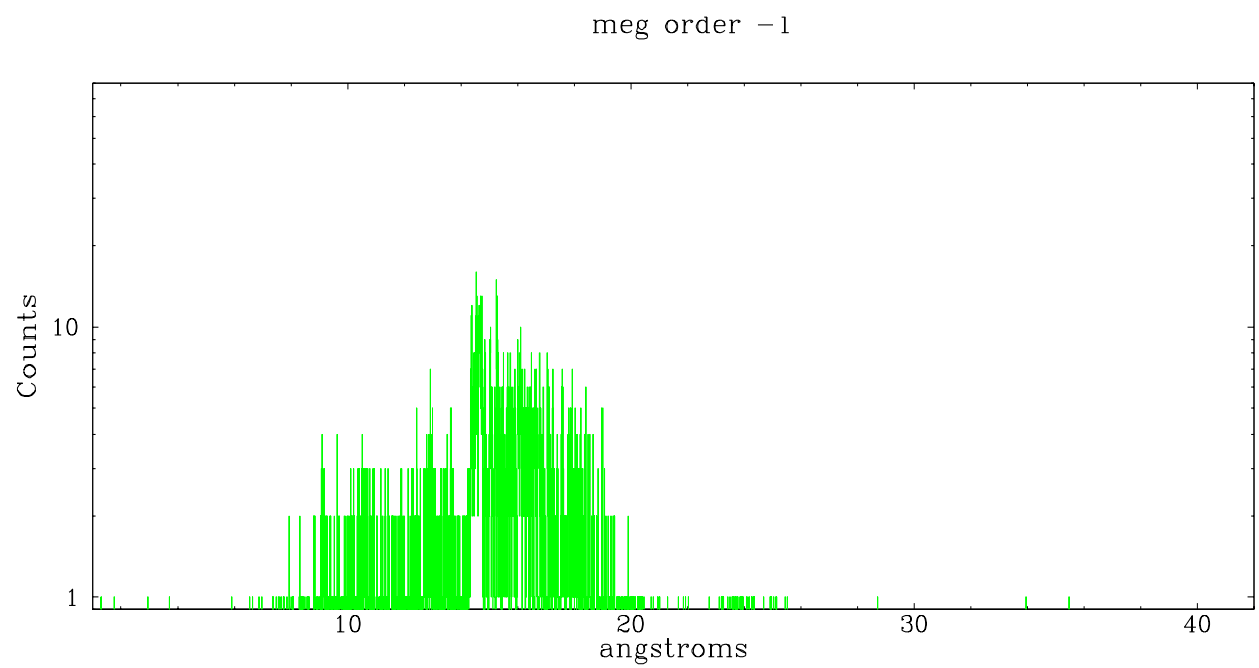
Spot Image MEG



Full Detector MEG

| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 388 | 374 | 4221 | 8084 | 2546 | 354 | 367 |





A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2007.06.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 57.402 |

A.2 Comments