

V&V Reference Report

L2 ASCDS Version : 7.6.8.1

Observation 1935 - L2 Version 001
Chandra X-Ray Center

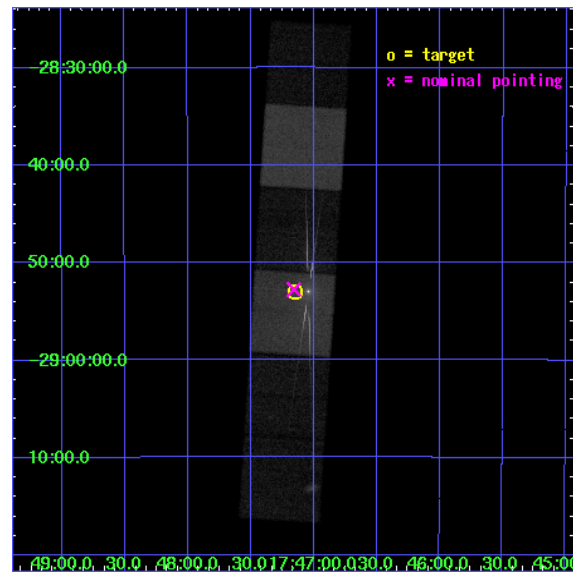
L2 Processing Date : Aug 31 2006

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1 Front

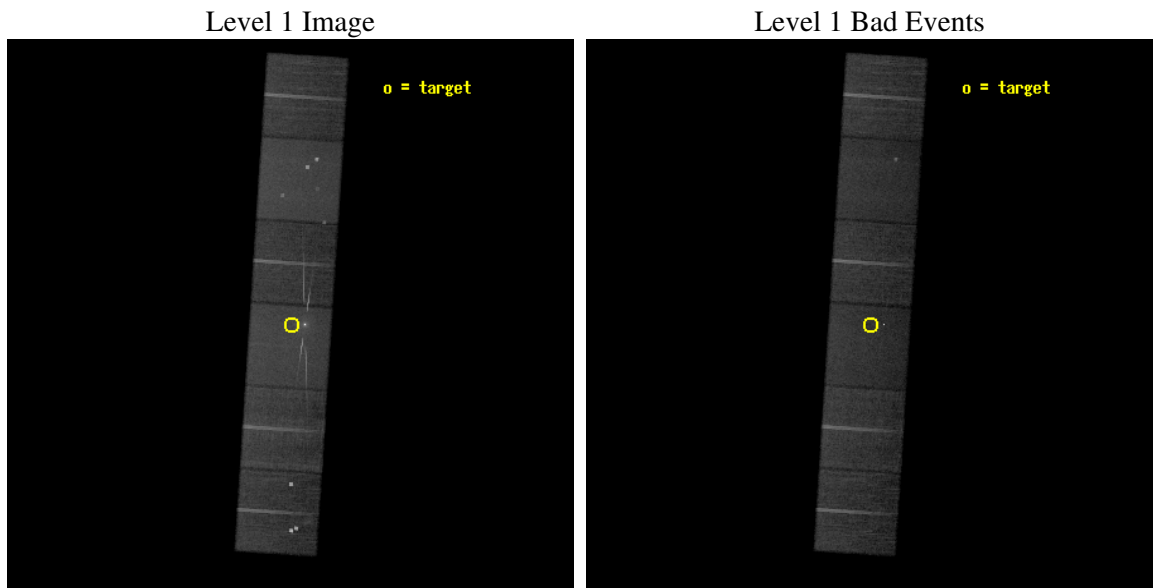
| | |
|----------|---|
| seq_num | 400148 |
| obs_id | 1935 |
| title | QUIESCENT AND LOW LUMINOSITY X-RAY BINARIES |
| observer | DR CRAIG MARKWARDT |
| object | SAX J1747.0-2853 |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 266.787917 |
| dec_targ | -28.883611 |
| ra_nom | 266.7895572424 |
| dec_nom | -28.879466138439 |
| roll_nom | 93.734906948484 |
| revision | 2 |
| ontime | 28956.800026968 |
| livetime | 28590.131589335 |
| ontime4 | 28956.800026968 |
| ontime5 | 28956.800026968 |
| ontime6 | 28956.800026968 |
| ontime7 | 28956.800026968 |
| ontime8 | 28956.800026968 |
| ontime9 | 28956.800026968 |
| l2events | 330516 |



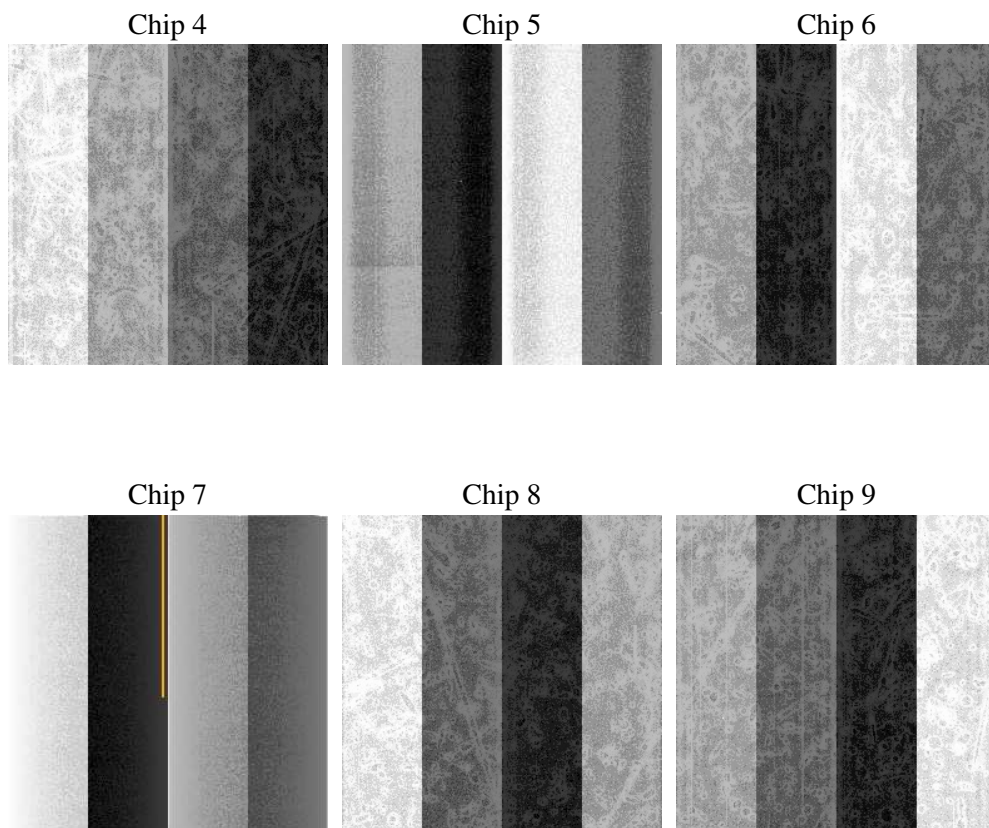
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 2 |
| ascdsver | 7.6.8.1 |
| caldsver | 3.2.3 |
| date | 2006-08-31T03:40:37 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 29000.000000 |
| ontime | 28961.555658013 |
| ontime4 | 28961.555628106 |
| ontime5 | 28961.555658013 |
| ontime6 | 28961.555628106 |
| ontime7 | 28961.555658013 |
| ontime8 | 28961.555628106 |
| ontime9 | 28961.555628106 |
| l1events | 1379003 |

2.1.4 Events

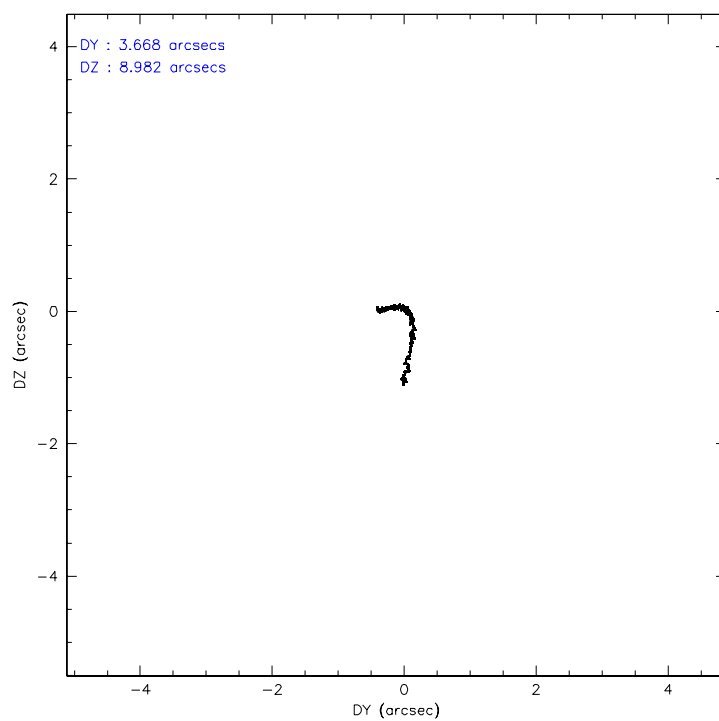
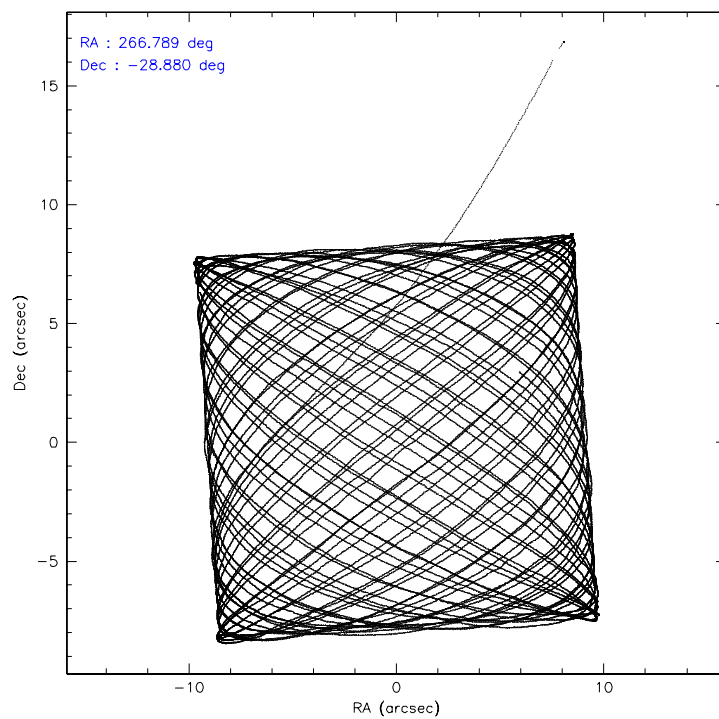
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 203143 | 264914 | 201438 | 274766 | 230423 | 204319 |
| rejected events | 179331 | 144861 | 163748 | 151179 | 180338 | 158148 |
| rejected % | 88% | 54% | 81% | 55% | 78% | 77% |

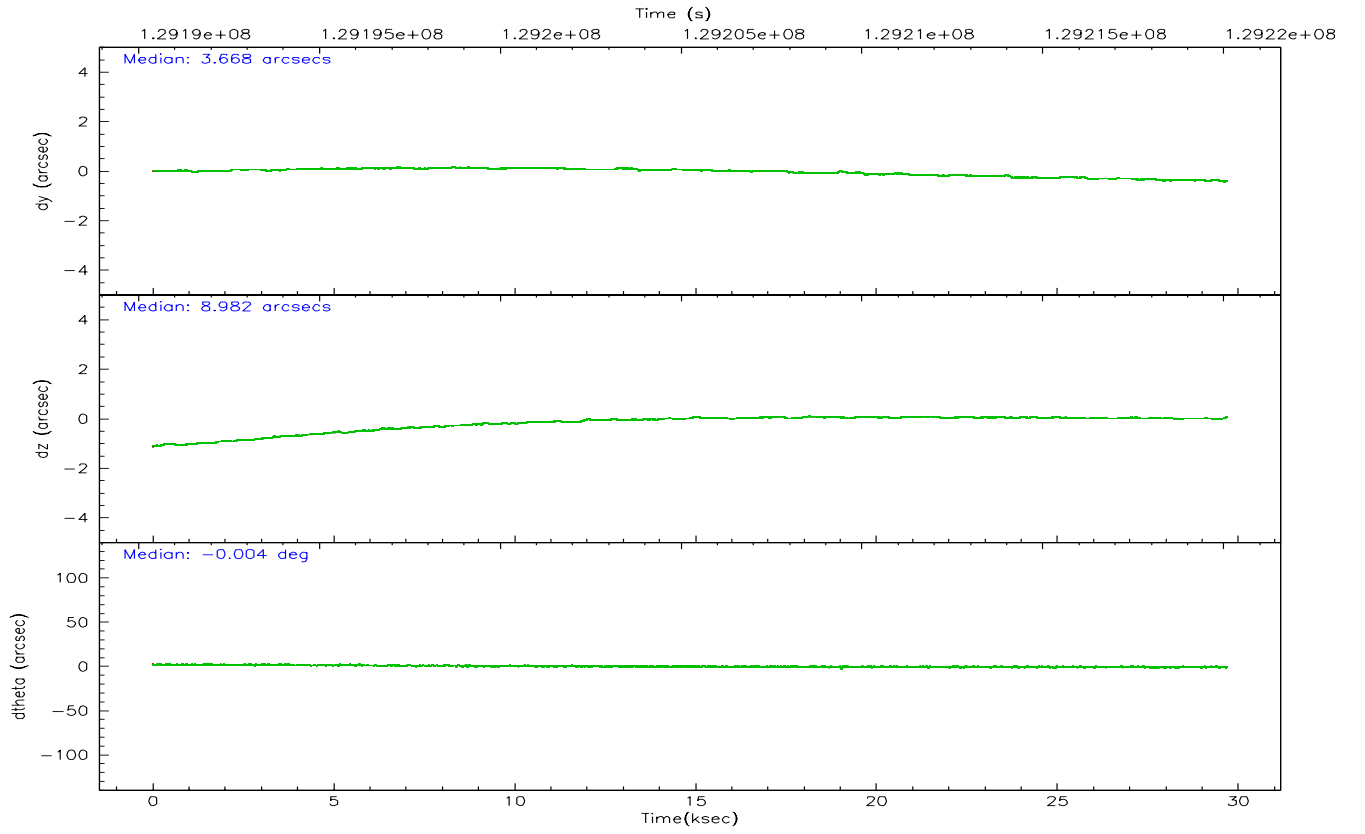
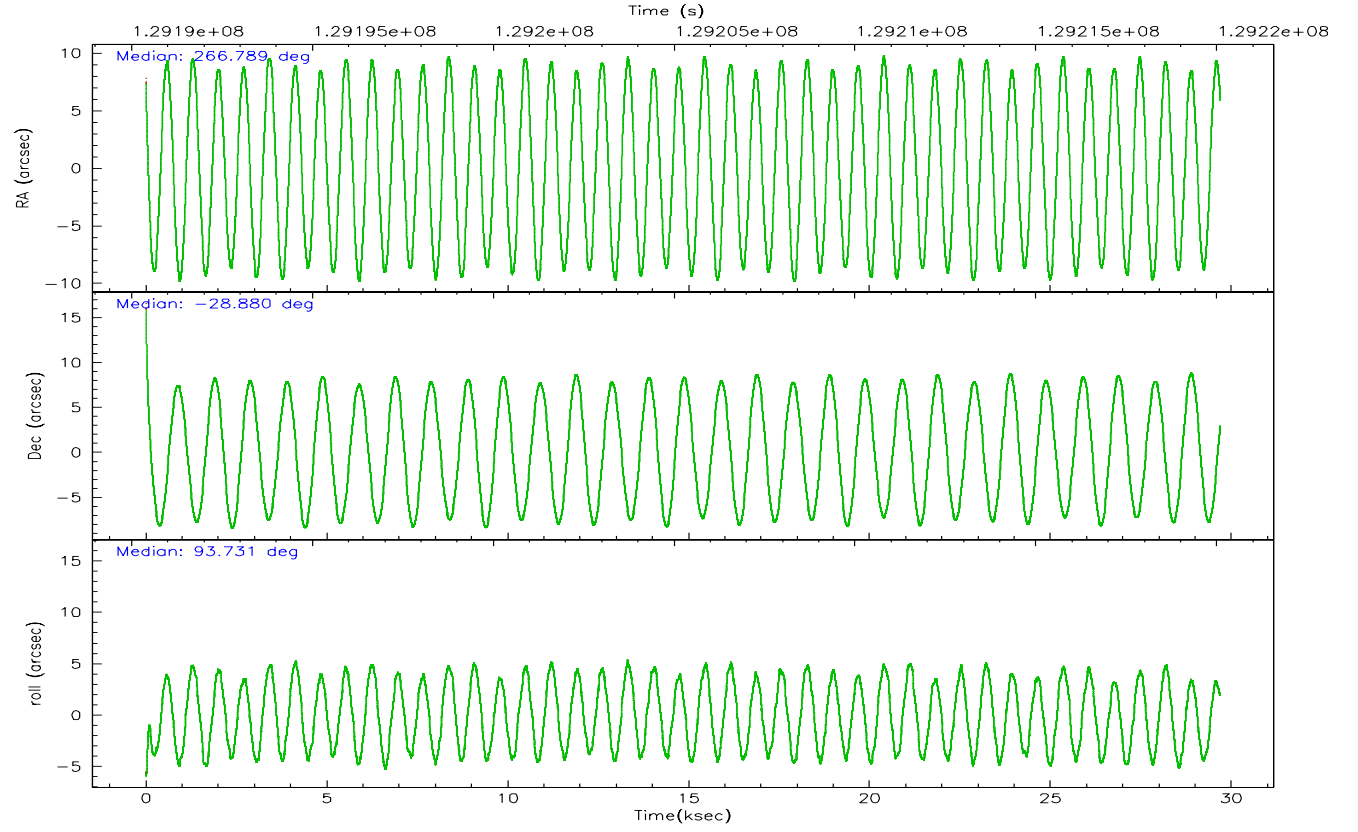
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|--------|--------|--------|--------|--------|--------|
| grade 0 events | 10016 | 13177 | 19157 | 10297 | 17500 | 31836 |
| | 4% | 4% | 9% | 3% | 7% | 15% |
| grade 1 events | 99 | 959 | 147 | 360 | 146 | 169 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 5456 | 35714 | 6799 | 31023 | 10473 | 5140 |
| | 2% | 13% | 3% | 11% | 4% | 2% |
| grade 3 events | 2166 | 2907 | 2999 | 7521 | 5153 | 2334 |
| | 1% | 1% | 1% | 2% | 2% | 1% |
| grade 4 events | 2065 | 2741 | 2924 | 7496 | 4806 | 2185 |
| | 1% | 1% | 1% | 2% | 2% | 1% |
| grade 5 events | 6971 | 12676 | 8041 | 17254 | 10188 | 8101 |
| | 3% | 4% | 3% | 6% | 4% | 3% |
| grade 6 events | 4111 | 65523 | 5814 | 67262 | 12156 | 4680 |
| | 2% | 24% | 2% | 24% | 5% | 2% |
| grade 7 events | 172259 | 131217 | 155557 | 133553 | 170001 | 149874 |
| | 84% | 49% | 77% | 48% | 73% | 73% |

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 | On-chip summing requested | N | N |
| Observation mode | POINTING | POINTING | Subarray requested | NONE | NONE |
| Pointing RA | 266.807157 | 266.7895572424005 | Alternating exposures requested | N | N |
| Pointing Dec | -28.901929 | -28.87946613843931 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 93.586798 | 93.73490694848419 | | | |
| 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 | 129191096.184000 | 129189873.54344 | | | |
| Observation start date | 2002-02-04T06:23:52 | 2002-02-04T06:04:33 | | | |
| Observation end time | 129220096.184000 | 129220609.70718 | | | |
| Observation end date | 2002-02-04T14:27:12 | 2002-02-04T14:36:49 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



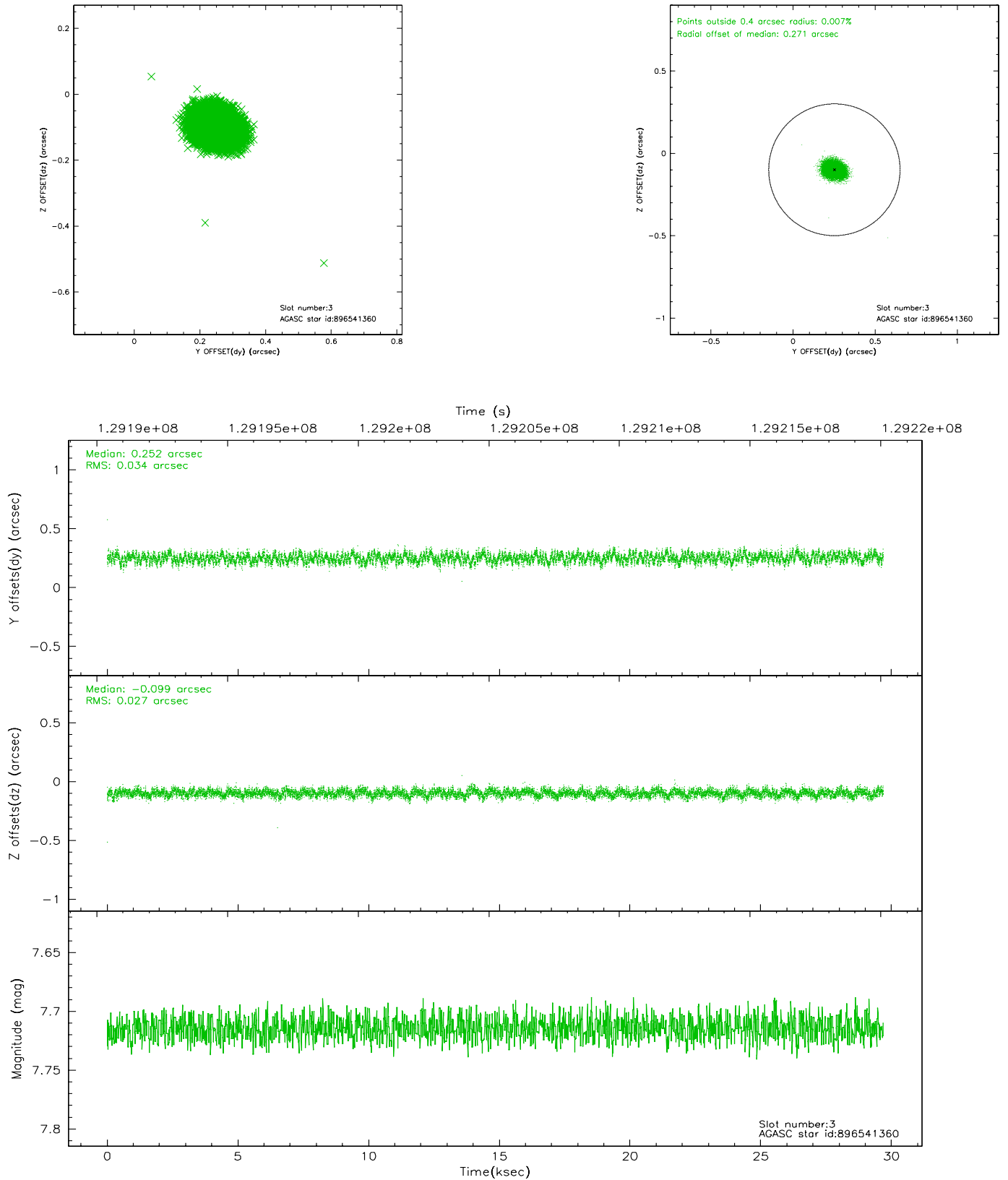


Slot Statistics

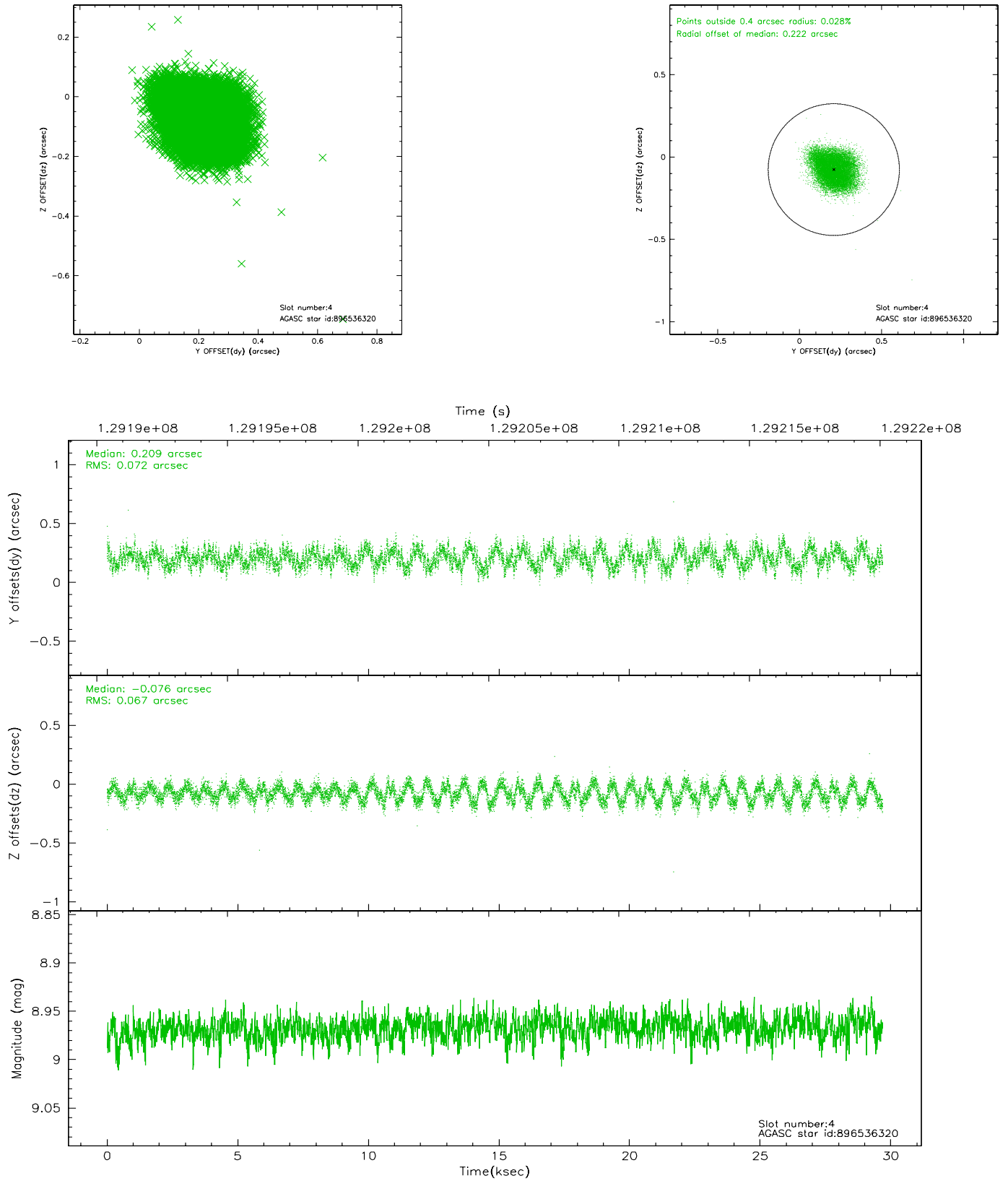
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 7243 | 0.002 | 0.020 | 0.009 | 0.015 | 0.000000 | 0.000000 | -756.27 | -1729.99 |
| 1 | FID | ACIS-S-4 | 7.20 | 7241 | -0.032 | 0.010 | 0.007 | 0.012 | 0.000000 | 0.000000 | 2156.93 | 178.42 |
| 2 | FID | ACIS-S-6 | 7.36 | 7240 | 0.002 | -0.023 | 0.007 | 0.012 | 0.000000 | 0.000000 | 405.80 | 815.86 |
| 3 | GUIDE | 896541360 | 7.71 | 14481 | 0.252 | -0.099 | 0.047 | 0.073 | 266.684478 | -29.453744 | -1958.43 | 507.44 |
| 4 | GUIDE | 896536320 | 8.97 | 14475 | 0.209 | -0.076 | 0.106 | 0.162 | 266.369048 | -29.307026 | -1371.90 | 1463.47 |
| 5 | GUIDE | 896540888 | 7.92 | 14480 | -0.172 | 0.227 | 0.068 | 0.106 | 267.212234 | -28.246138 | 2273.68 | -1429.74 |
| 6 | GUIDE | 896540528 | 8.26 | 14483 | 0.082 | 0.187 | 0.067 | 0.103 | 267.368305 | -29.314773 | -1597.29 | -1665.35 |
| 7 | GUIDE | 896538696 | 6.76 | 14483 | -0.367 | -0.236 | 0.047 | 0.078 | 266.298470 | -28.325572 | 2167.84 | 1478.66 |

2.4 Star Slots

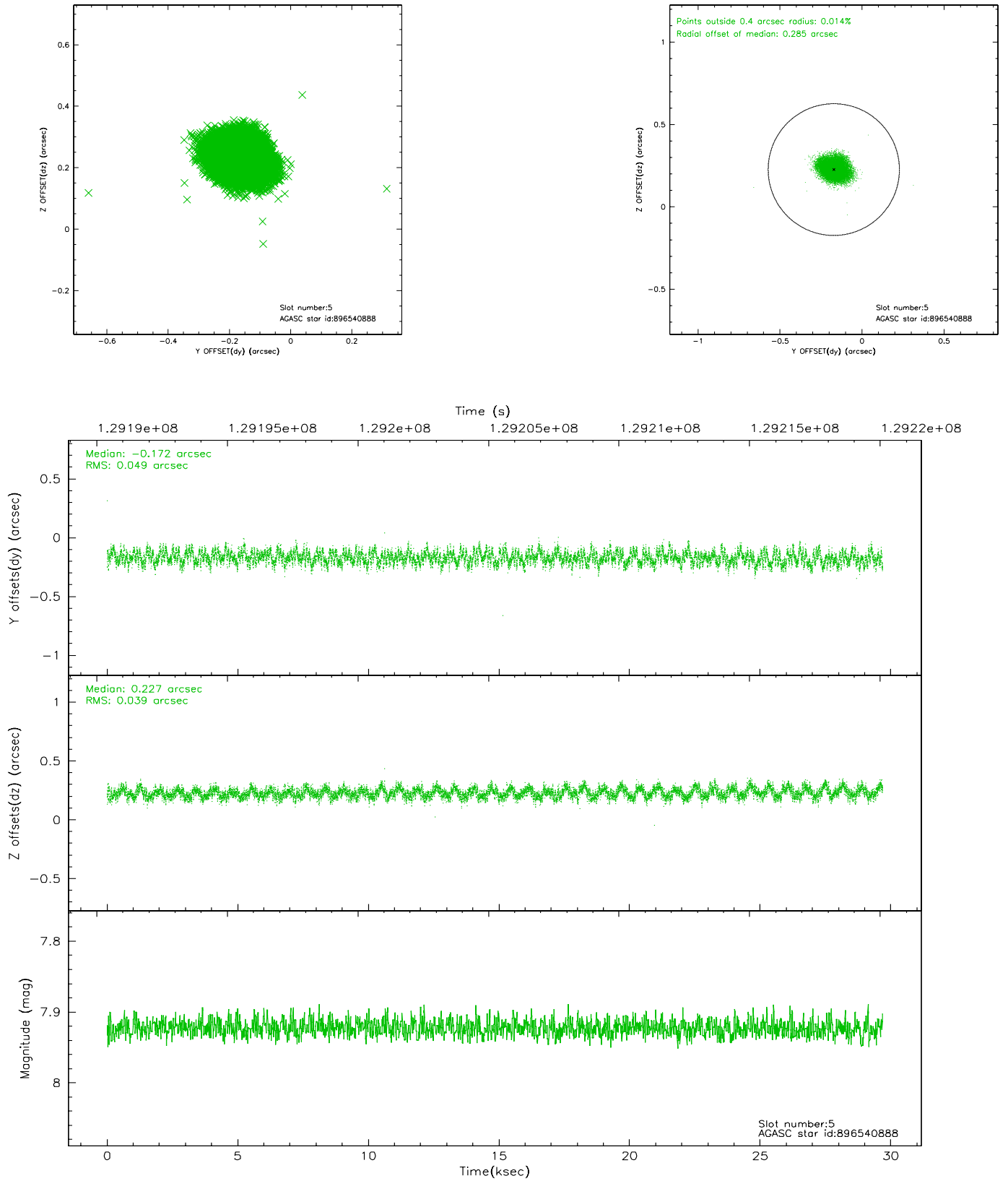
2.4.1 Slot 3



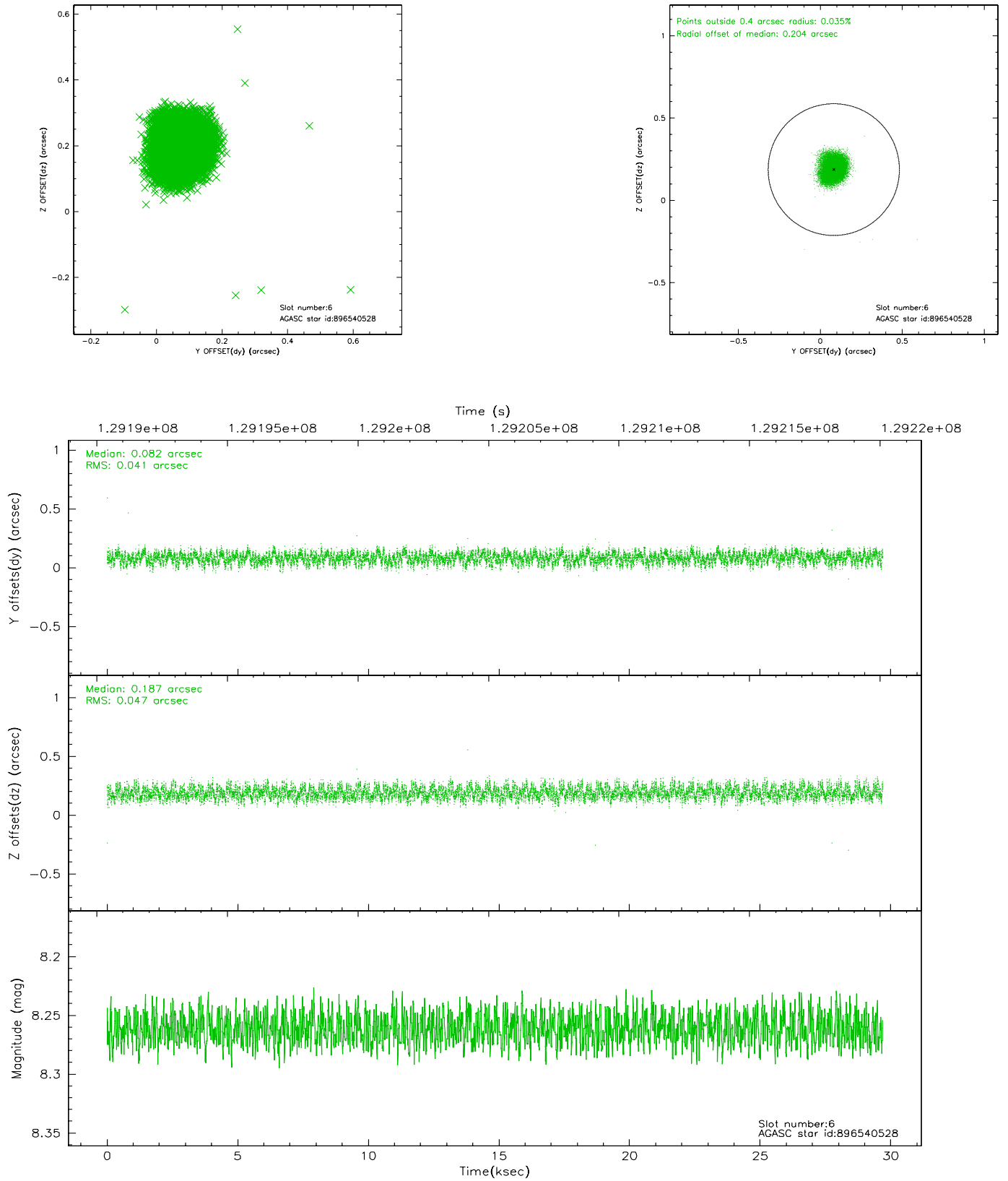
2.4.2 Slot 4



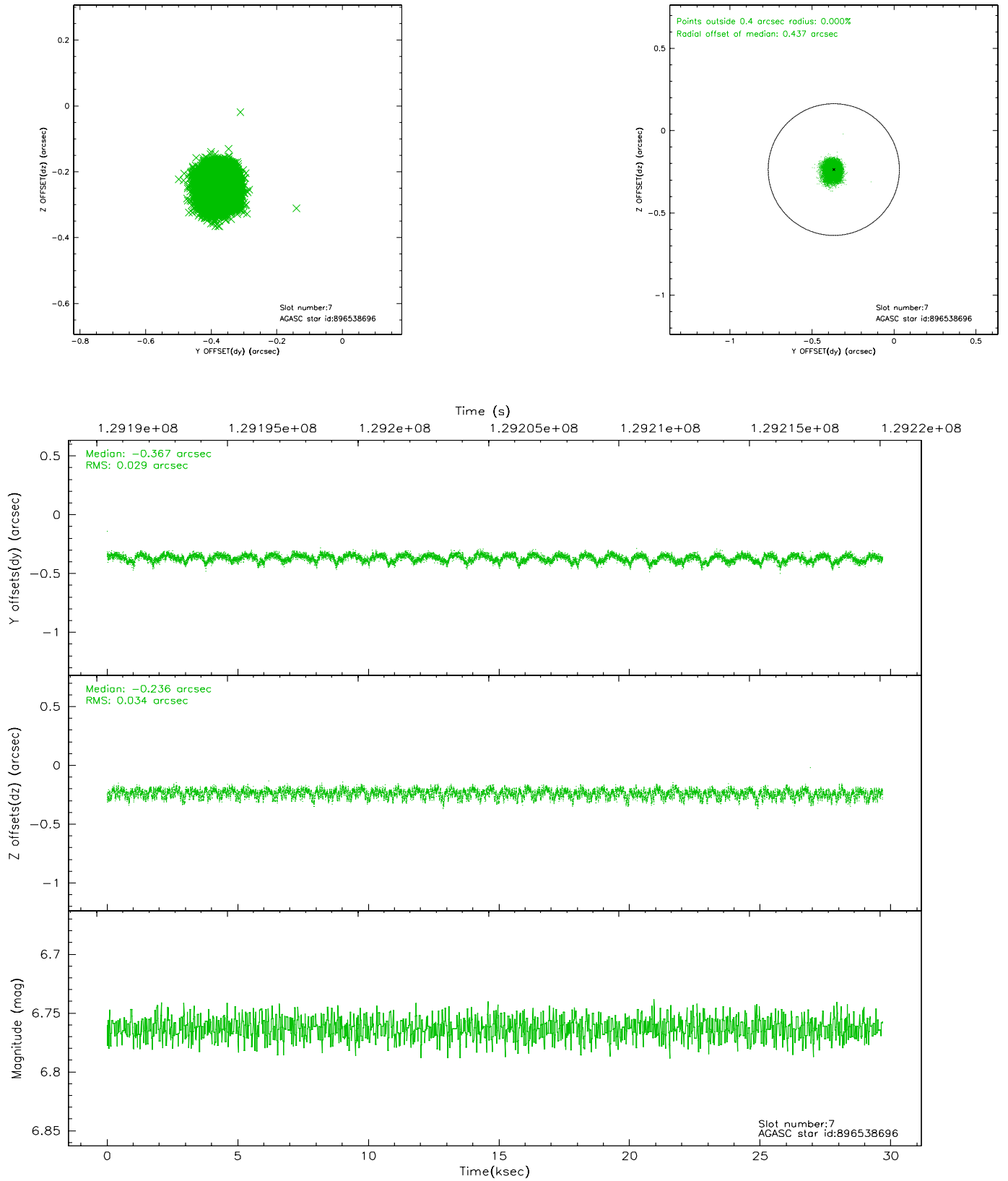
2.4.3 Slot 5



2.4.4 Slot 6

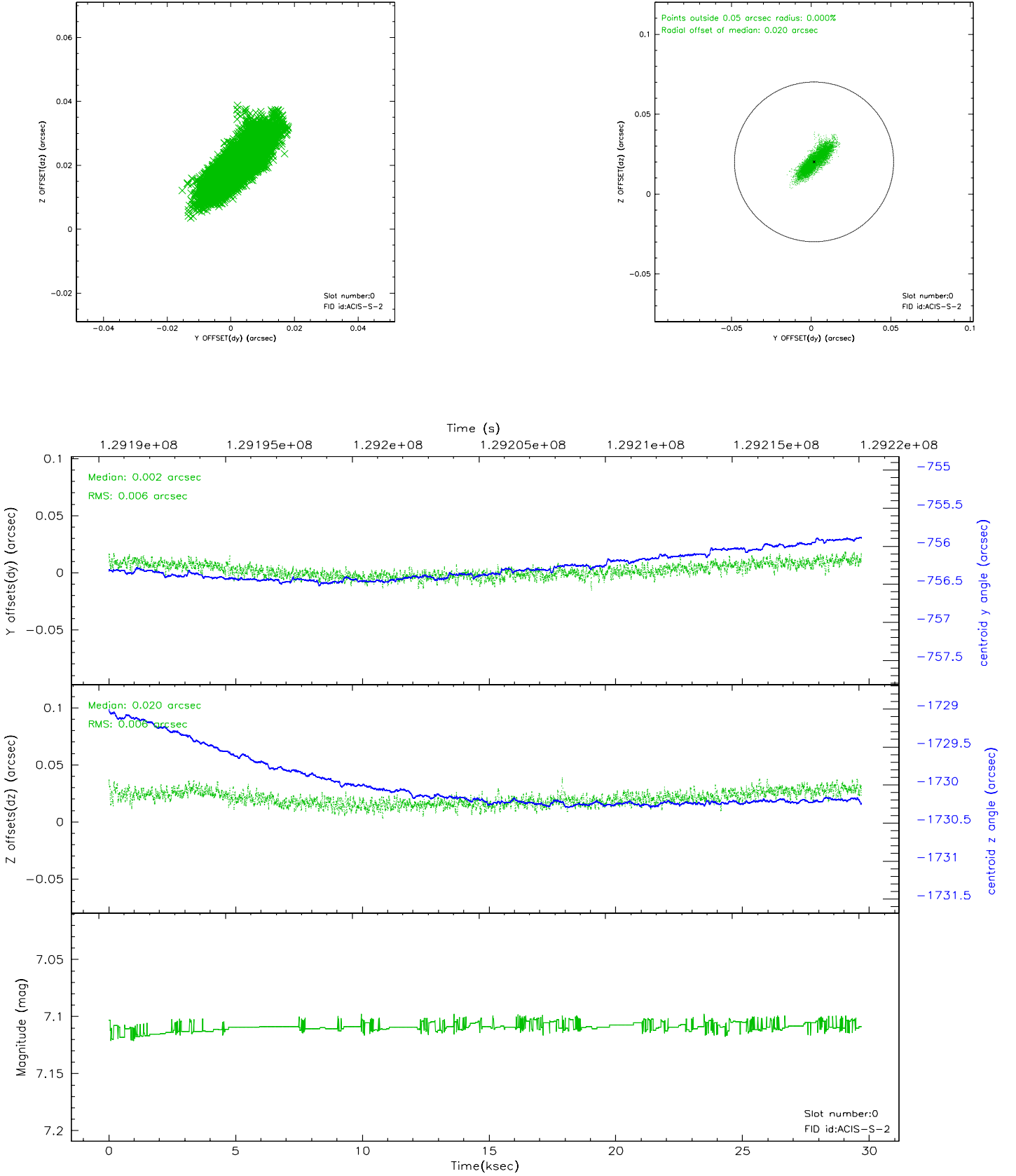


2.4.5 Slot 7

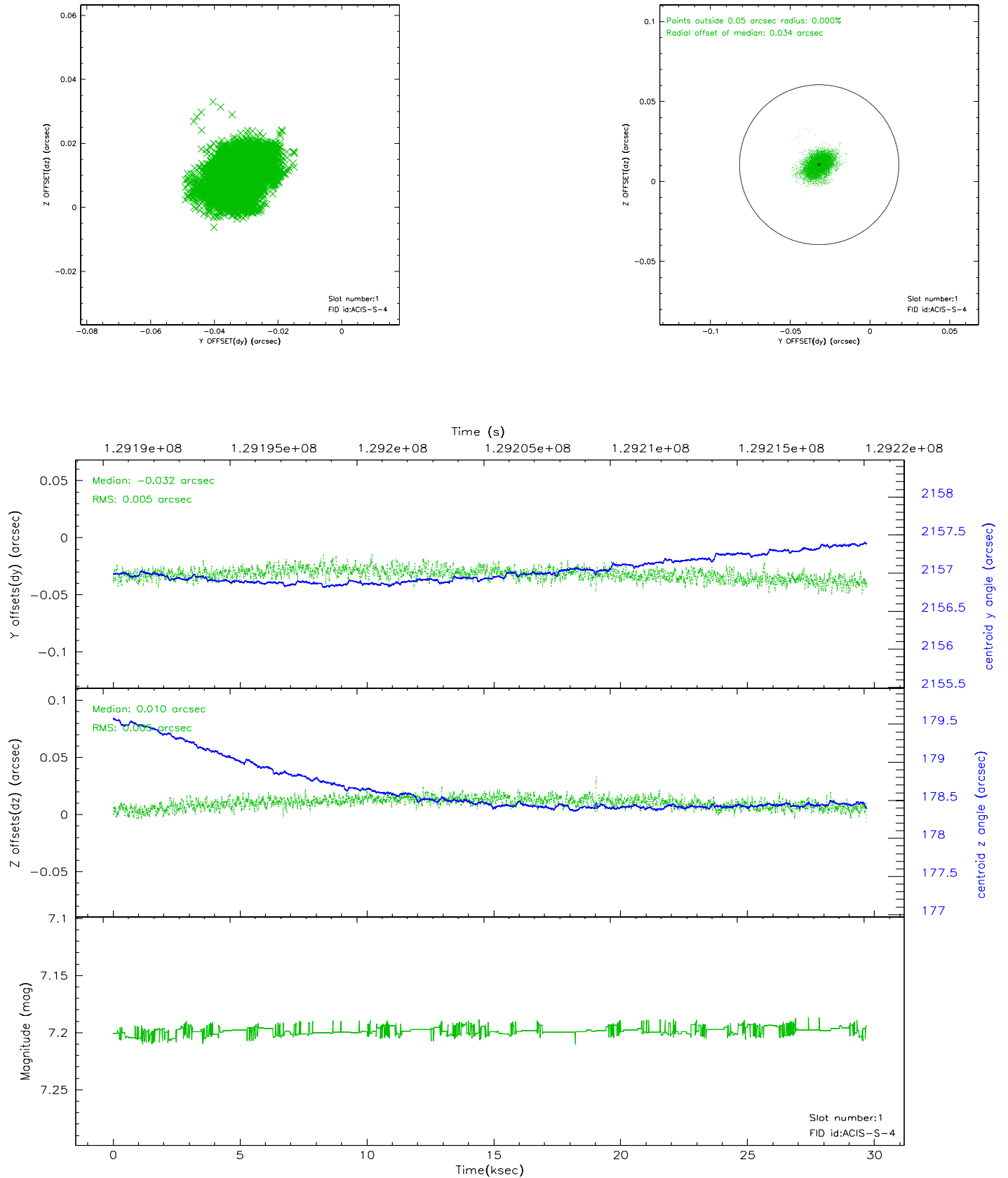


2.5 FID Slots

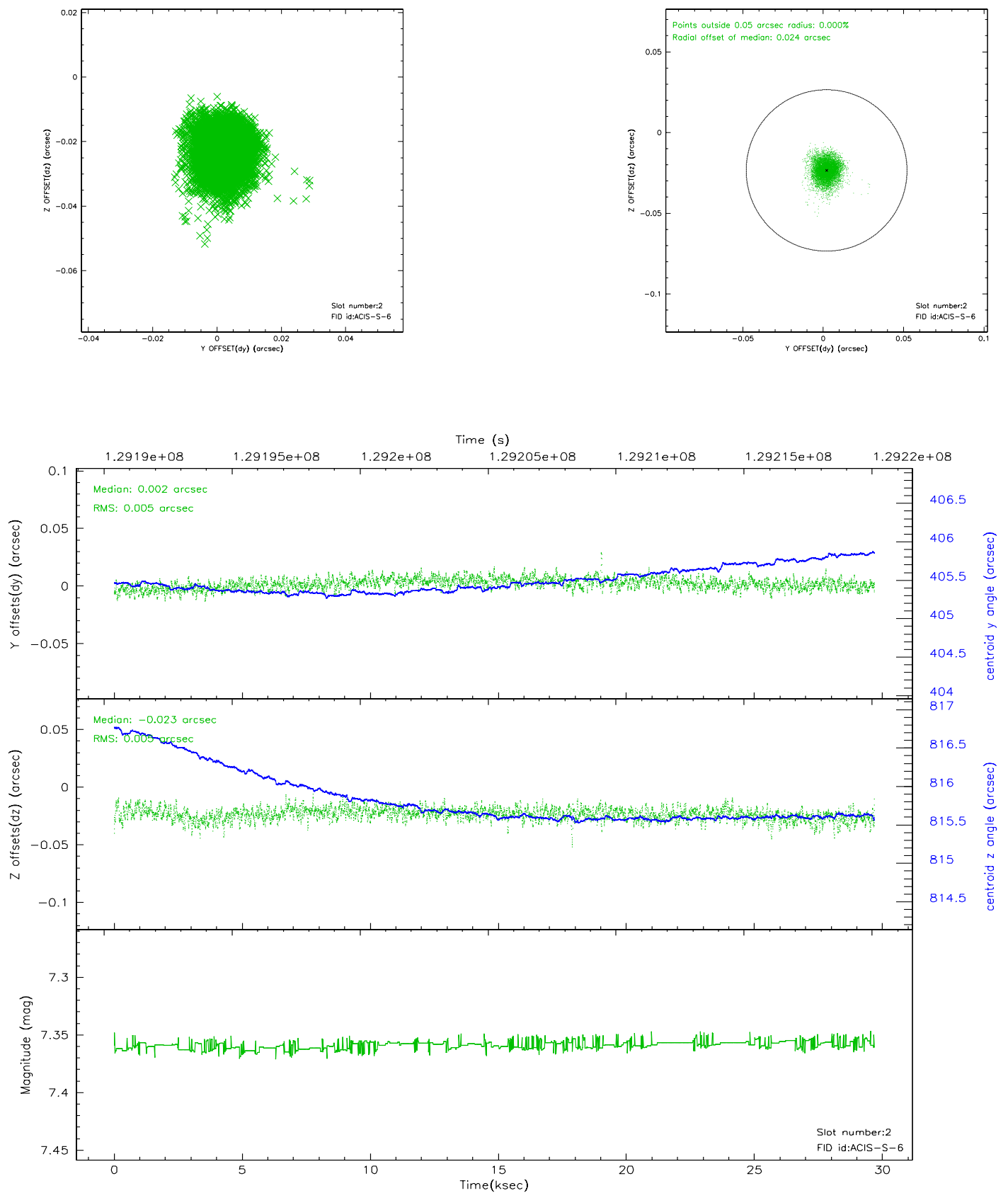
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

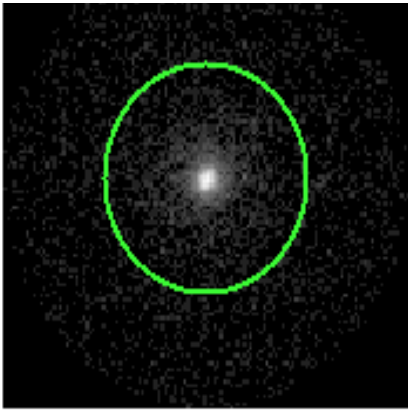


3 Gratings

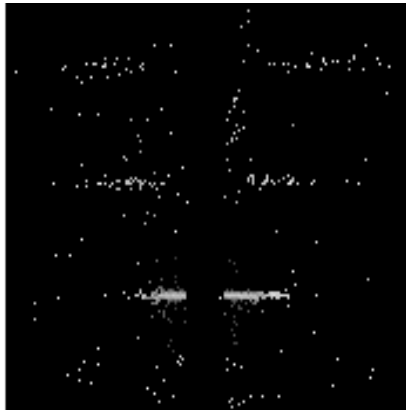
3.1 HEG Arm



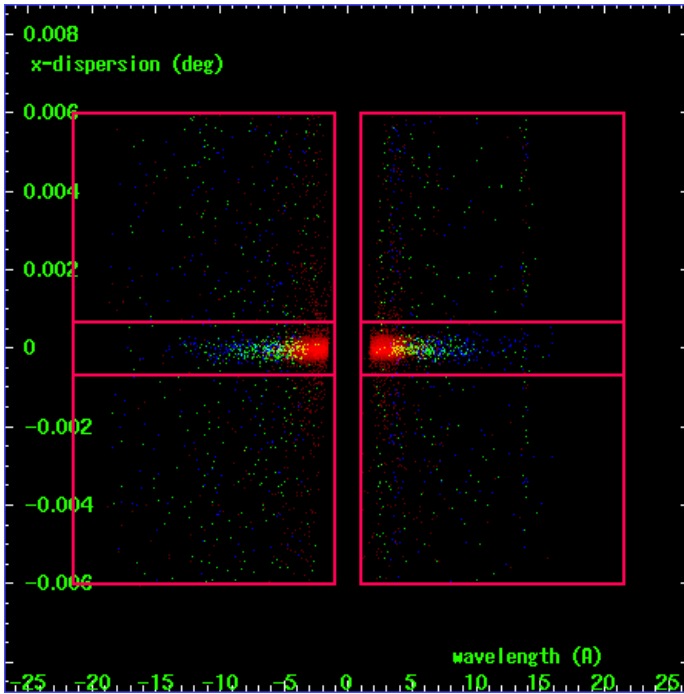
HEG Order Sort 123



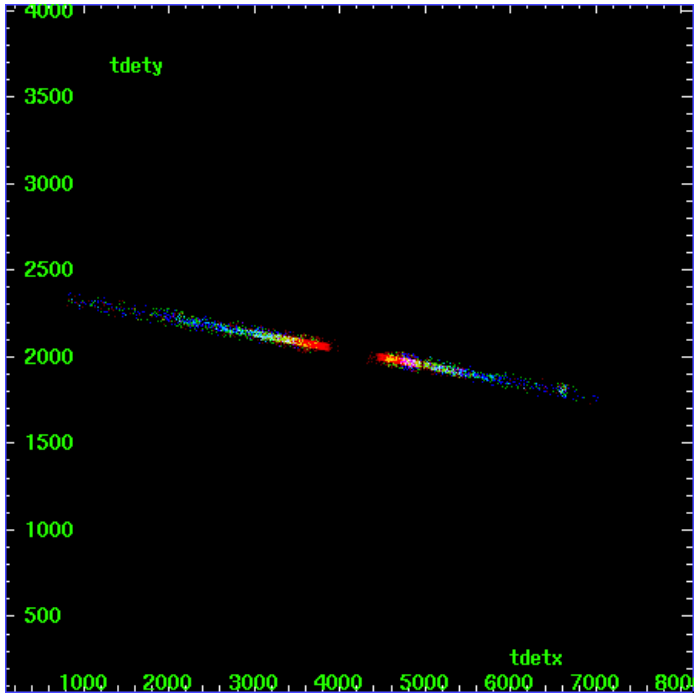
HEG Zero Order



HEG Order Sort ALL

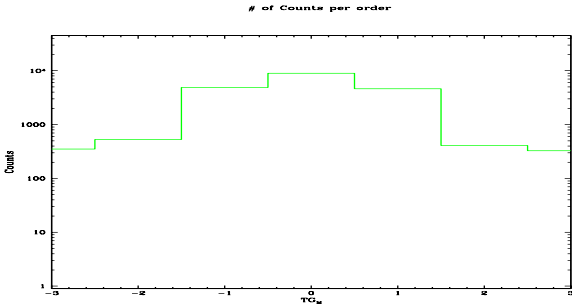


Spot Image HEG

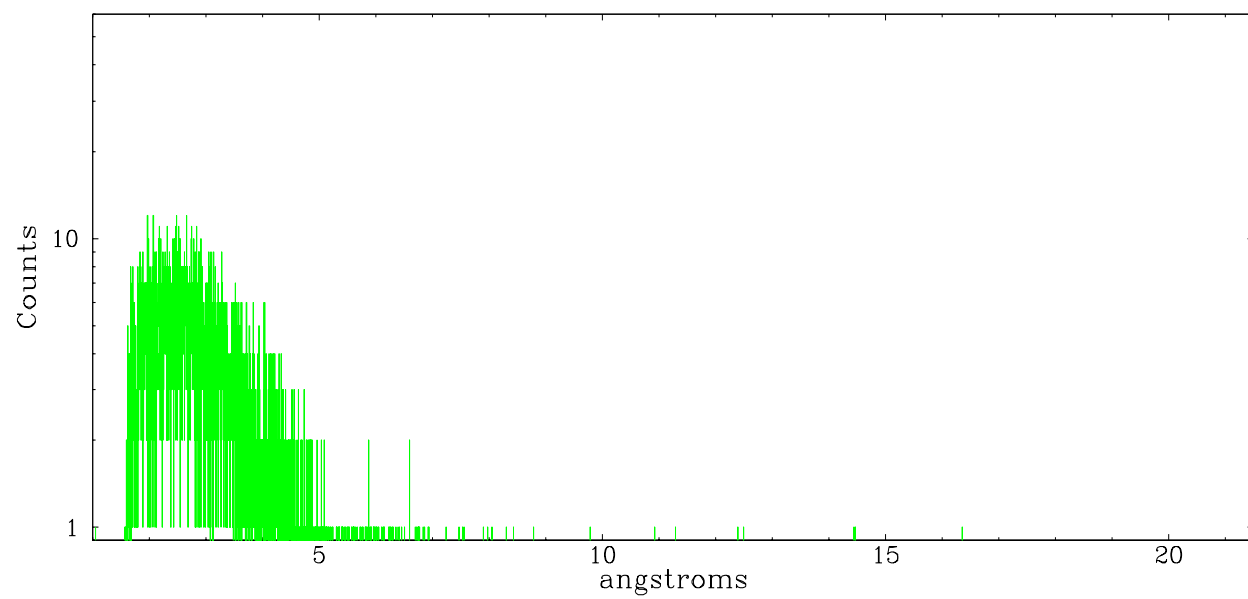


Full Detector HEG

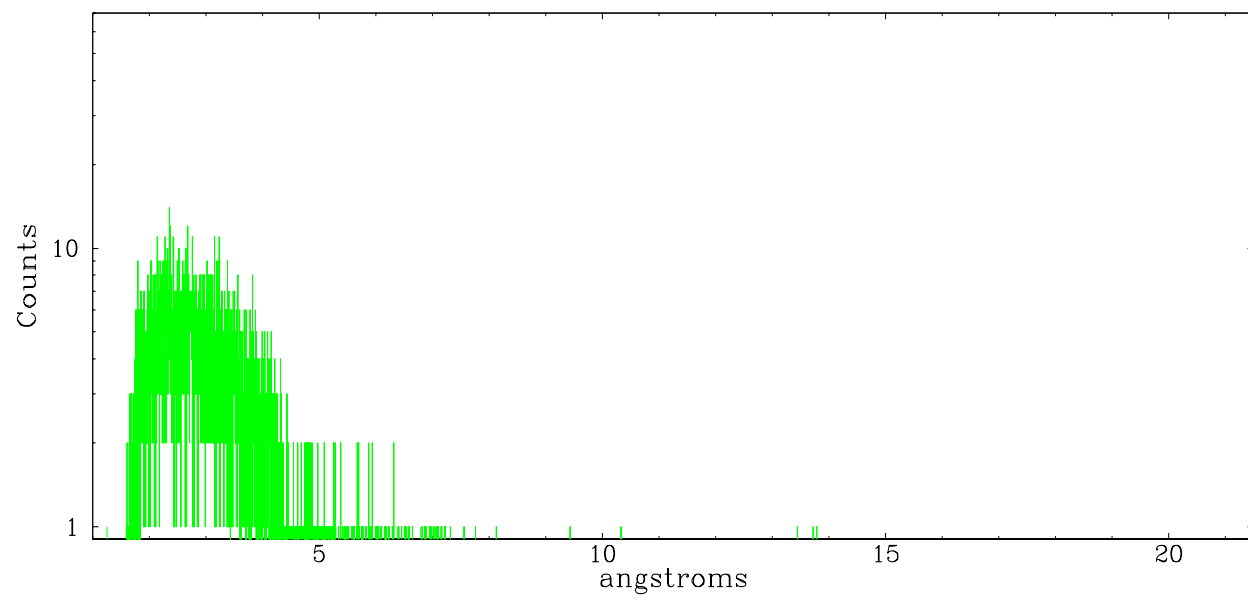
| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 351 | 527 | 4895 | 8968 | 4611 | 409 | 328 |



heg order -1



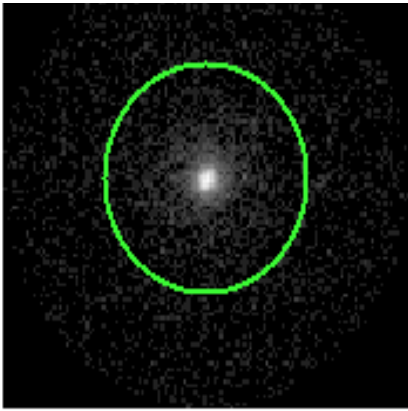
heg order +1



3.2 MEG Arm



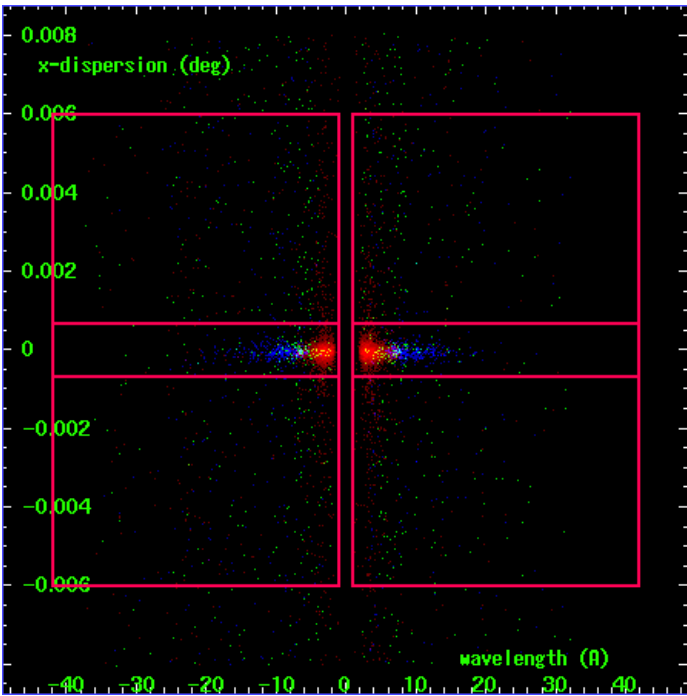
MEG Order Sort 123



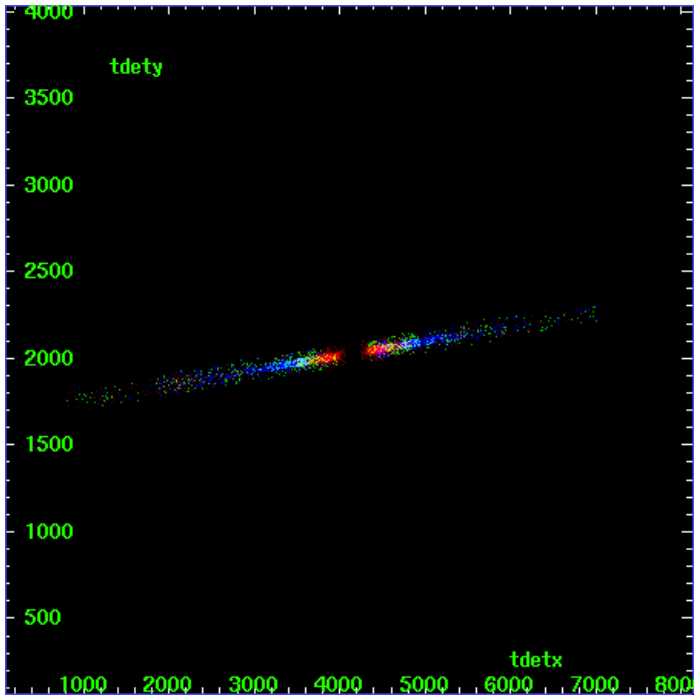
MEG Zero Order



MEG Order Sort ALL

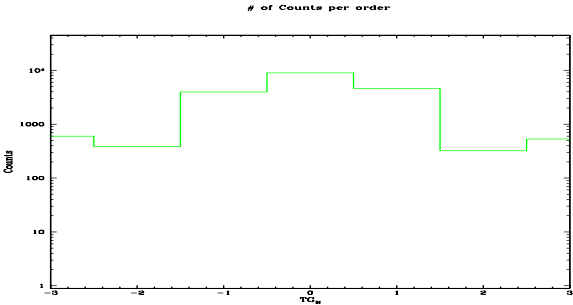


Spot Image MEG

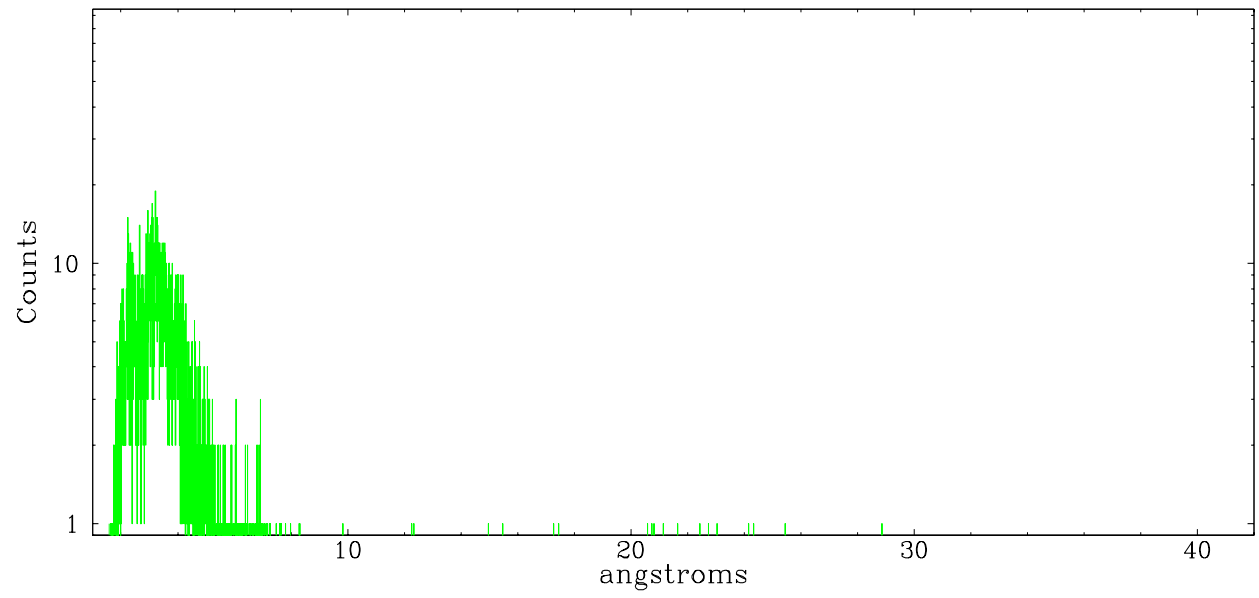


Full Detector MEG

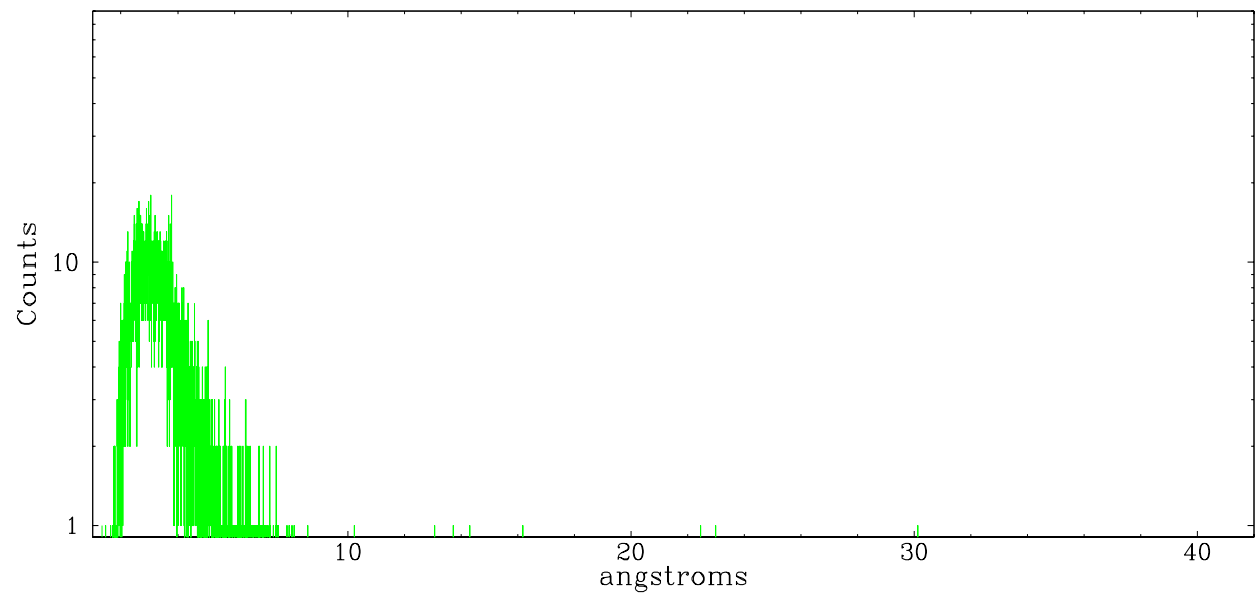
| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 602 | 383 | 3983 | 8968 | 4624 | 323 | 531 |



meg order -1



meg order +1



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2006.09.01 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 28.956 |

A.2 Comments

Target is displaced about 1 arcmin toward edge of chip. Coordinates were not sufficiently accurate. The source identified is the target intended by the observer.