

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8562 - L2 Version 2
Chandra X-Ray Center

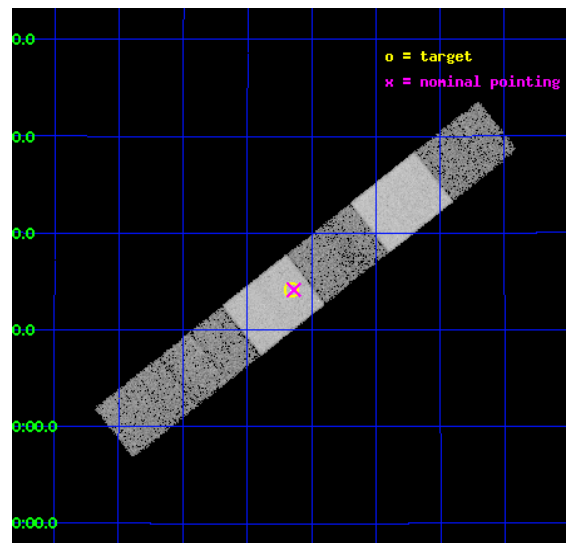
L2 Processing Date : Apr 26 2012

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1 Front

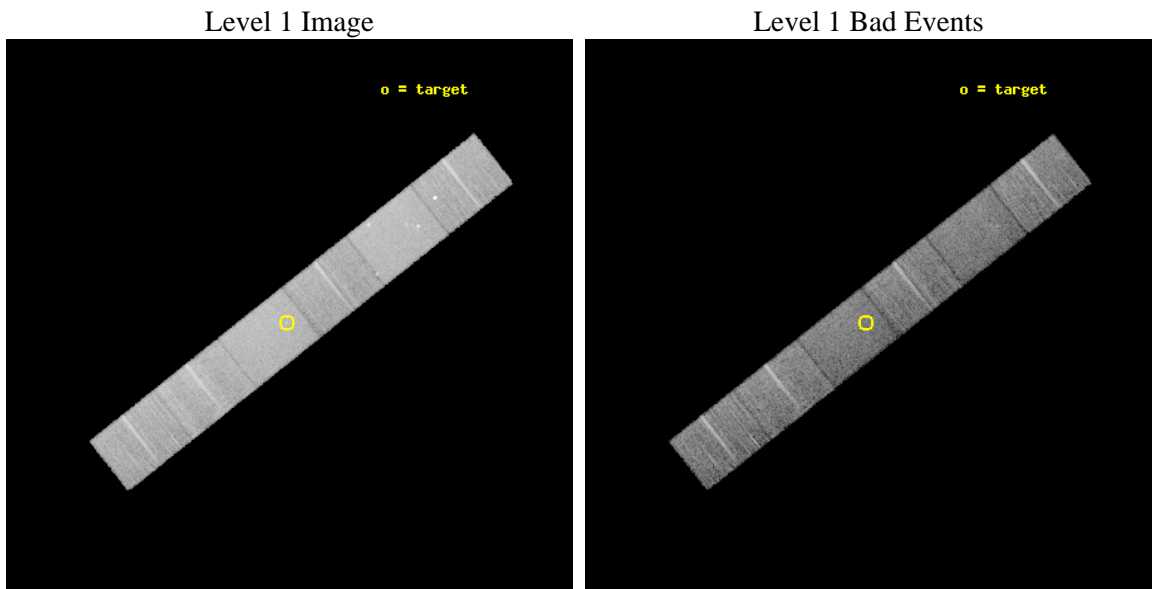
| | | |
|----------|---|---|
| seq_num | 400690 | Sequence number |
| obs_id | 8562 | Observation id |
| title | Observing flaring activity in the new source SWIFT J195509.6+261406 | |
| observer | Dr. GOTTFRIED KANBACH | Principal investigator |
| object | Swift J195509.6+261407 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 298.79 | Observer's specified target RA [deg] |
| dec_targ | 26.235278 | Observer's specified target Dec [deg] |
| ra_nom | 298.78461937067 | Nominal RA [deg] |
| dec_nom | 26.235791994969 | Nominal Dec [deg] |
| roll_nom | 141.60735789217 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 10152.5 | Sum of GTIs [s] |
| livetime | 9988.5283191134 | Livetime [s] |
| ontime4 | 10152.5 | Sum of GTIs [s] |
| ontime5 | 10152.5 | Sum of GTIs [s] |
| ontime6 | 10152.5 | Sum of GTIs [s] |
| ontime7 | 10152.5 | Sum of GTIs [s] |
| ontime8 | 10152.5 | Sum of GTIs [s] |
| ontime9 | 10152.5 | Sum of GTIs [s] |
| l2events | 122508 | Number of level 2 events |



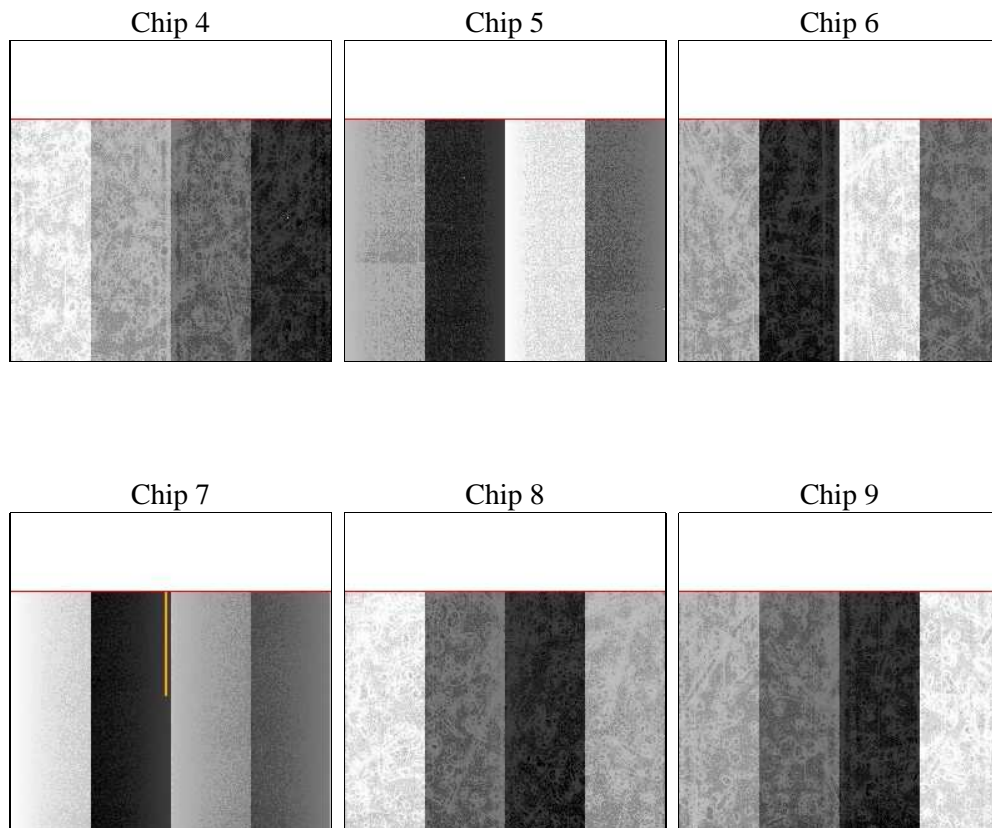
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|--------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 10000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 10152.5 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime4 | 10152.5 | Sum of GTIs [s] |
| date | 2012-04-26T11:54:55 | Date and time of file creation | ontime5 | 10152.5 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime6 | 10152.5 | Sum of GTIs [s] |
| | | | ontime7 | 10152.5 | Sum of GTIs [s] |
| | | | ontime8 | 10152.5 | Sum of GTIs [s] |
| | | | ontime9 | 10152.5 | Sum of GTIs [s] |
| | | | l1events | 549601 | Number of level 1 events |

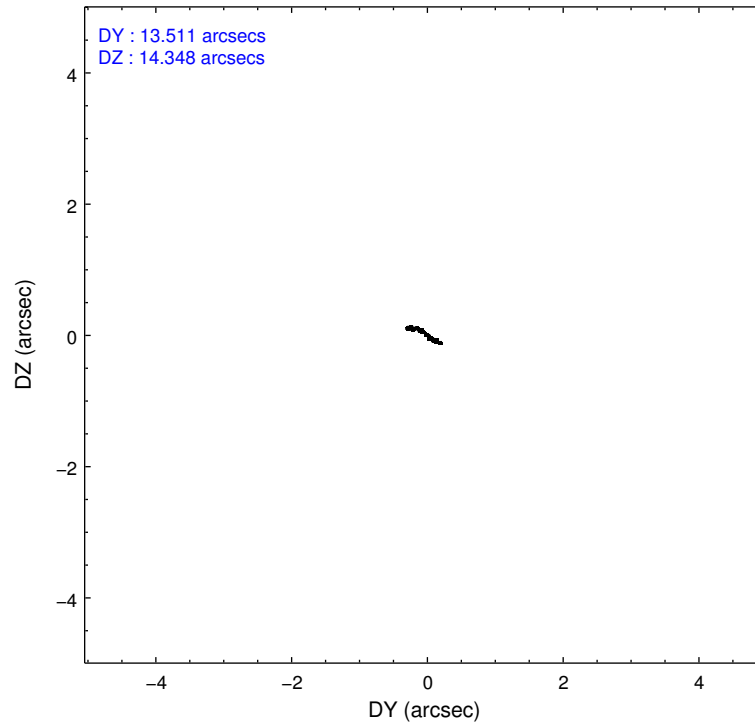
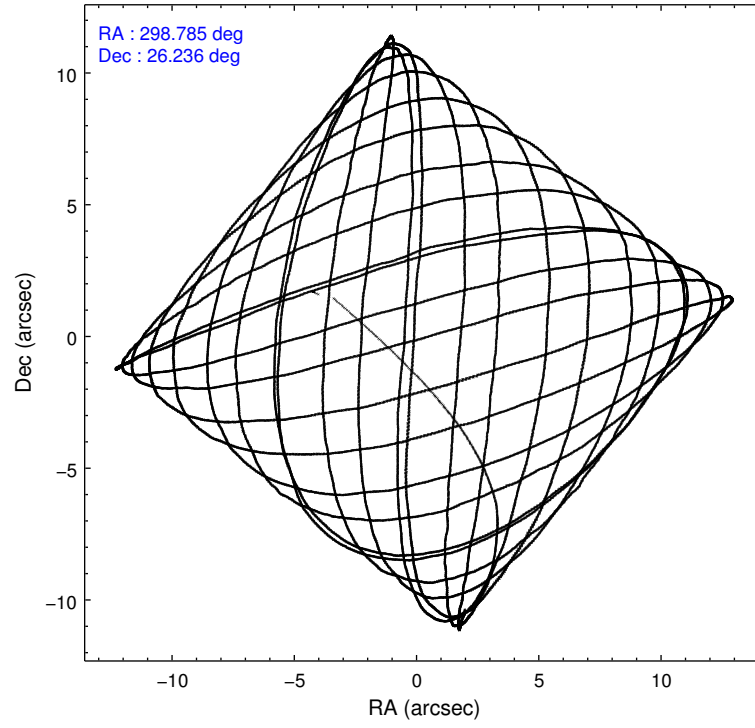
2.1.4 Events

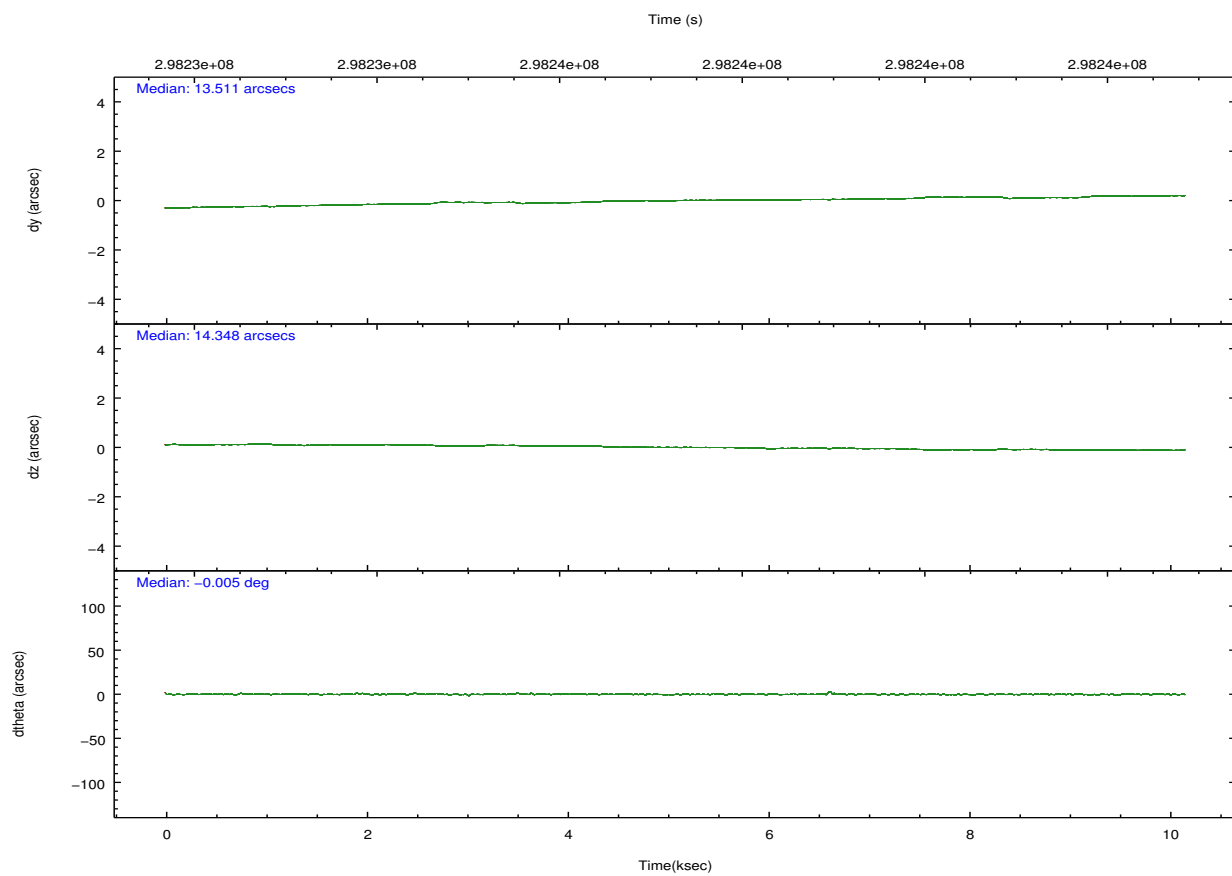
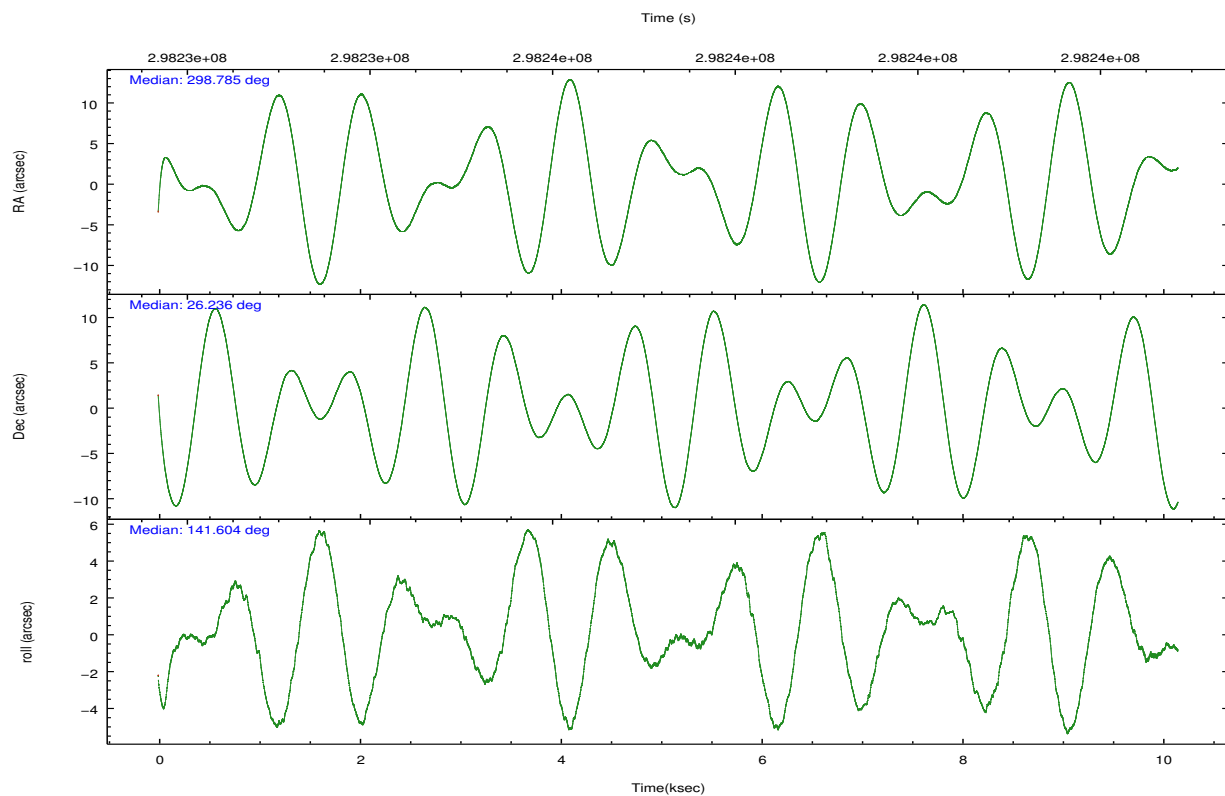
| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 | | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|-------|--------|-------|--------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 86101 | 112689 | 75875 | 102424 | 96448 | 76064 | grade 0 events | 6205 | 4275 | 3413 | 3674 | 6702 | 3806 |
| rejected events | 74429 | 61739 | 67042 | 59541 | 74579 | 66698 | | 7% | 3% | 4% | 3% | 6% | 5% |
| rejected % | 86% | 54% | 88% | 58% | 77% | 87% | grade 1 events | 79 | 204 | 25 | 100 | 80 | 50 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2123 | 15399 | 1939 | 8926 | 5056 | 1938 |
| | | | | | | | | 2% | 13% | 2% | 8% | 5% | 2% |
| | | | | | | | grade 3 events | 1035 | 2265 | 935 | 3891 | 2328 | 965 |
| | | | | | | | | 1% | 2% | 1% | 3% | 2% | 1% |
| | | | | | | | grade 4 events | 970 | 1978 | 892 | 3876 | 2196 | 929 |
| | | | | | | | | 1% | 1% | 1% | 3% | 2% | 1% |
| | | | | | | | grade 5 events | 3289 | 8305 | 3475 | 9652 | 4547 | 3724 |
| | | | | | | | | 3% | 7% | 4% | 9% | 4% | 4% |
| | | | | | | | grade 6 events | 1511 | 27708 | 1767 | 23093 | 5940 | 1845 |
| | | | | | | | | 1% | 24% | 2% | 22% | 6% | 2% |
| | | | | | | | grade 7 events | 70889 | 52555 | 63429 | 49212 | 69599 | 62807 |
| | | | | | | | | 82% | 46% | 83% | 48% | 72% | 82% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| 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 |
| [deg] Pointing RA | 298.814847 | 298.7846193706686 | Subarray requested | CUSTOM | CUSTOM |
| [deg] Pointing Dec | 26.232221 | 26.23579199496851 | Subarray start row | 1 | 1 |
| [deg] Pointing Roll | 141.437372 | 141.6073578921674 | Subarray row count | 774 | 774 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | [s] Primary exposure time | 0.000000 | 2.5 |
| [mm] SIM translation stage pos | -187.132523 | -187.1254020033014 | | | |
| [mm] SIM translation stage offset | -3 | -3.007120579706367 | | | |
| [s] Observation start time (MET) | 298232332.184000 | 298231163.15763 | | | |
| Observation start date | 2007-06-14T18:17:47 | 2007-06-14T17:59:23 | | | |
| [s] Observation end time (MET) | 298242332.184000 | 298243814.73324 | | | |
| Observation end date | 2007-06-14T21:04:27 | 2007-06-14T21:30:14 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



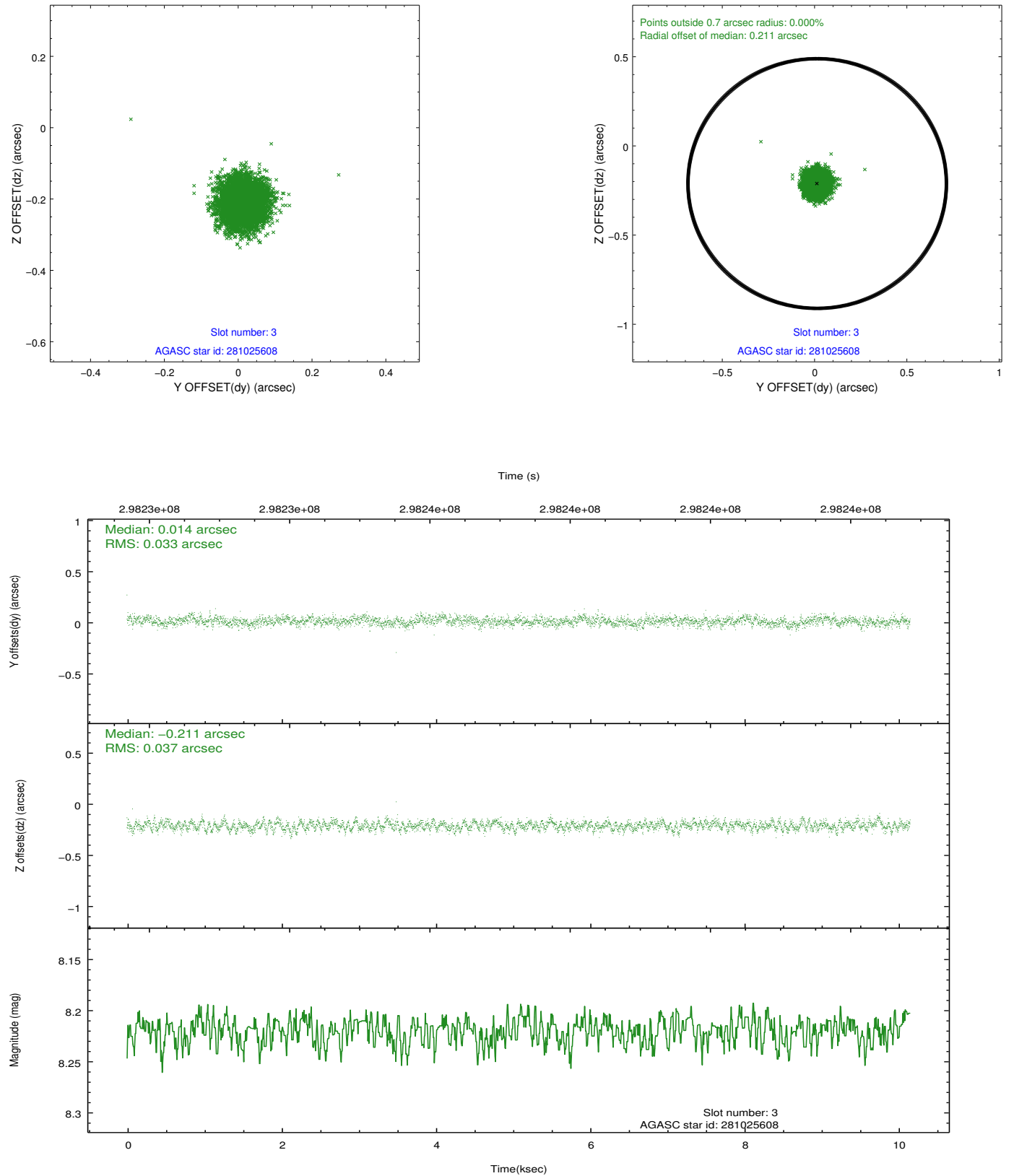


Slot Statistics

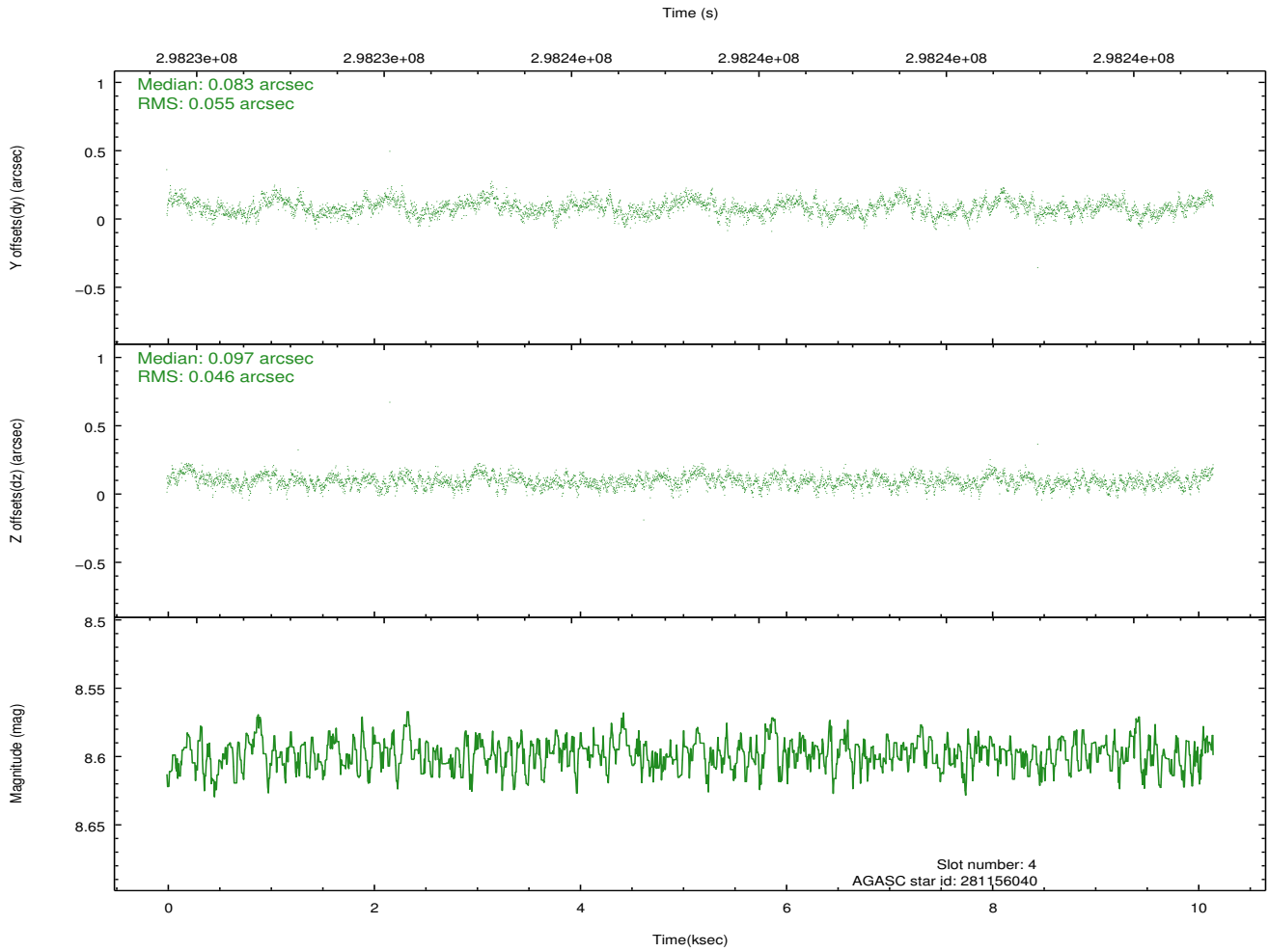
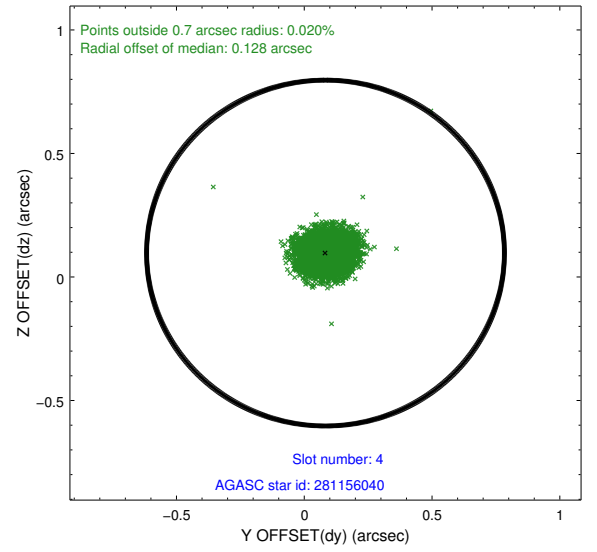
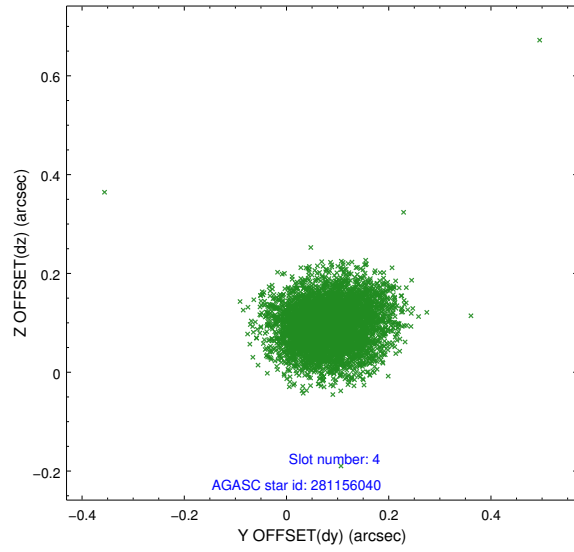
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.18 | 2478 | 0.097 | -0.060 | 0.007 | 0.012 | 0.000000 | 0.000000 | 929.91 | -1793.50 |
| 1 | FID | ACIS-S-5 | 7.23 | 2478 | -0.169 | 0.061 | 0.011 | 0.017 | 0.000000 | 0.000000 | -1819.05 | 103.64 |
| 2 | FID | ACIS-S-6 | 7.35 | 2478 | 0.050 | 0.010 | 0.011 | 0.017 | 0.000000 | 0.000000 | 394.88 | 748.12 |
| 3 | GUIDE | 281025608 | 8.22 | 4953 | 0.014 | -0.211 | 0.053 | 0.083 | 298.897724 | 26.066778 | -580.43 | 298.47 |
| 4 | GUIDE | 281156040 | 8.60 | 4954 | 0.083 | 0.097 | 0.076 | 0.122 | 299.619002 | 26.161071 | -2186.02 | -1425.74 |
| 5 | GUIDE | 281575128 | 7.30 | 4954 | -0.025 | 0.052 | 0.072 | 0.109 | 298.469531 | 26.593432 | 1680.53 | -325.06 |
| 6 | GUIDE | 281679656 | 8.46 | 4953 | 0.039 | 0.181 | 0.062 | 0.099 | 299.369190 | 26.556461 | -664.96 | -2028.36 |
| 7 | GUIDE | 281018616 | 7.94 | 4953 | -0.112 | -0.119 | 0.066 | 0.113 | 297.905021 | 26.225639 | 2289.18 | 1841.76 |

2.4 Star Slots

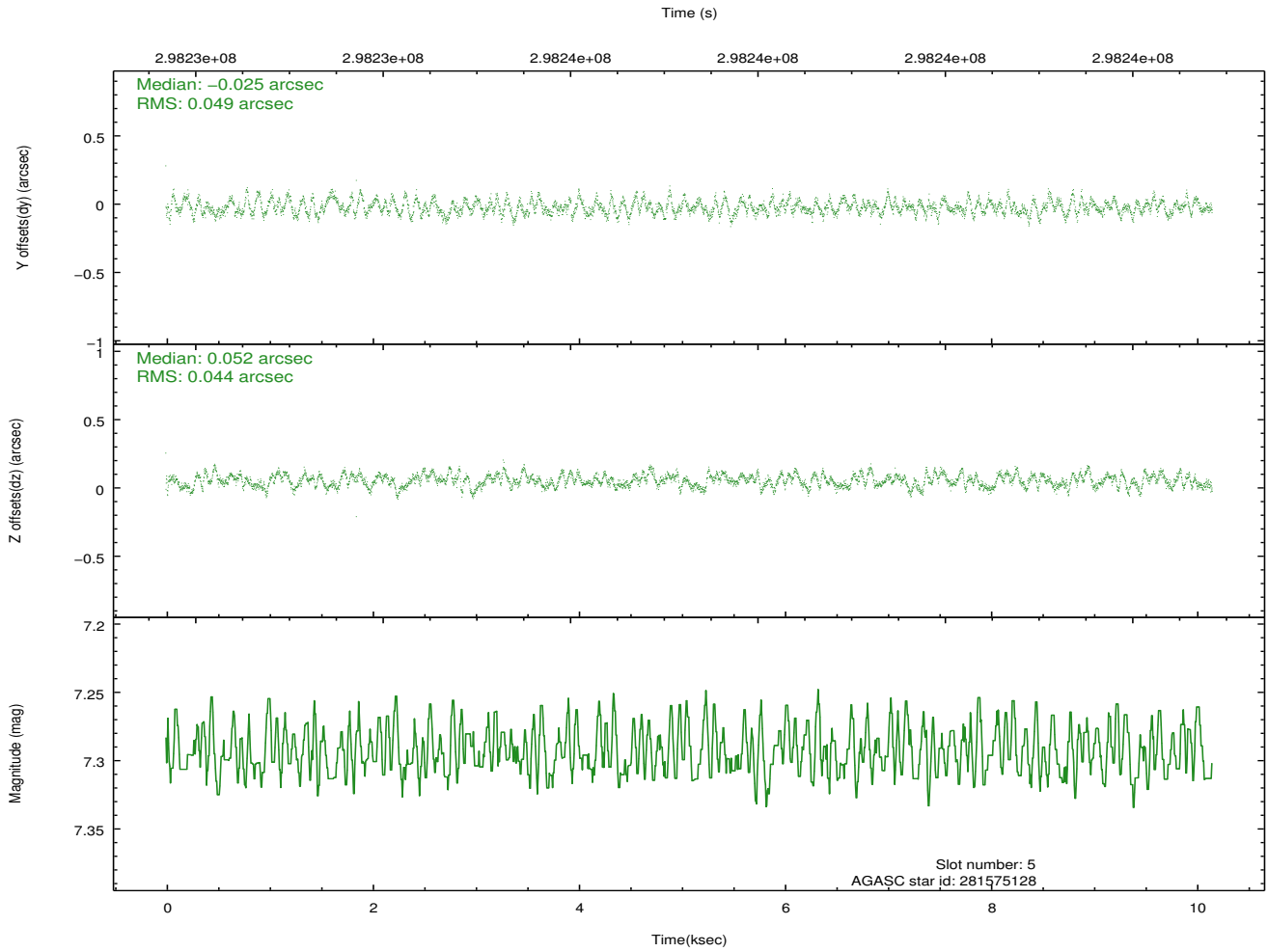
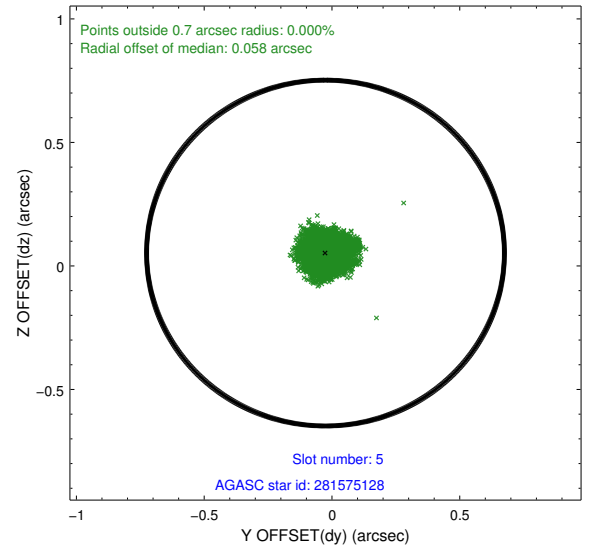
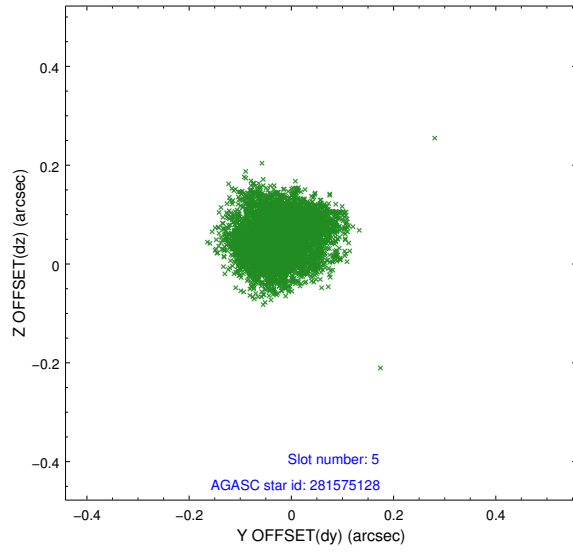
2.4.1 Slot 3



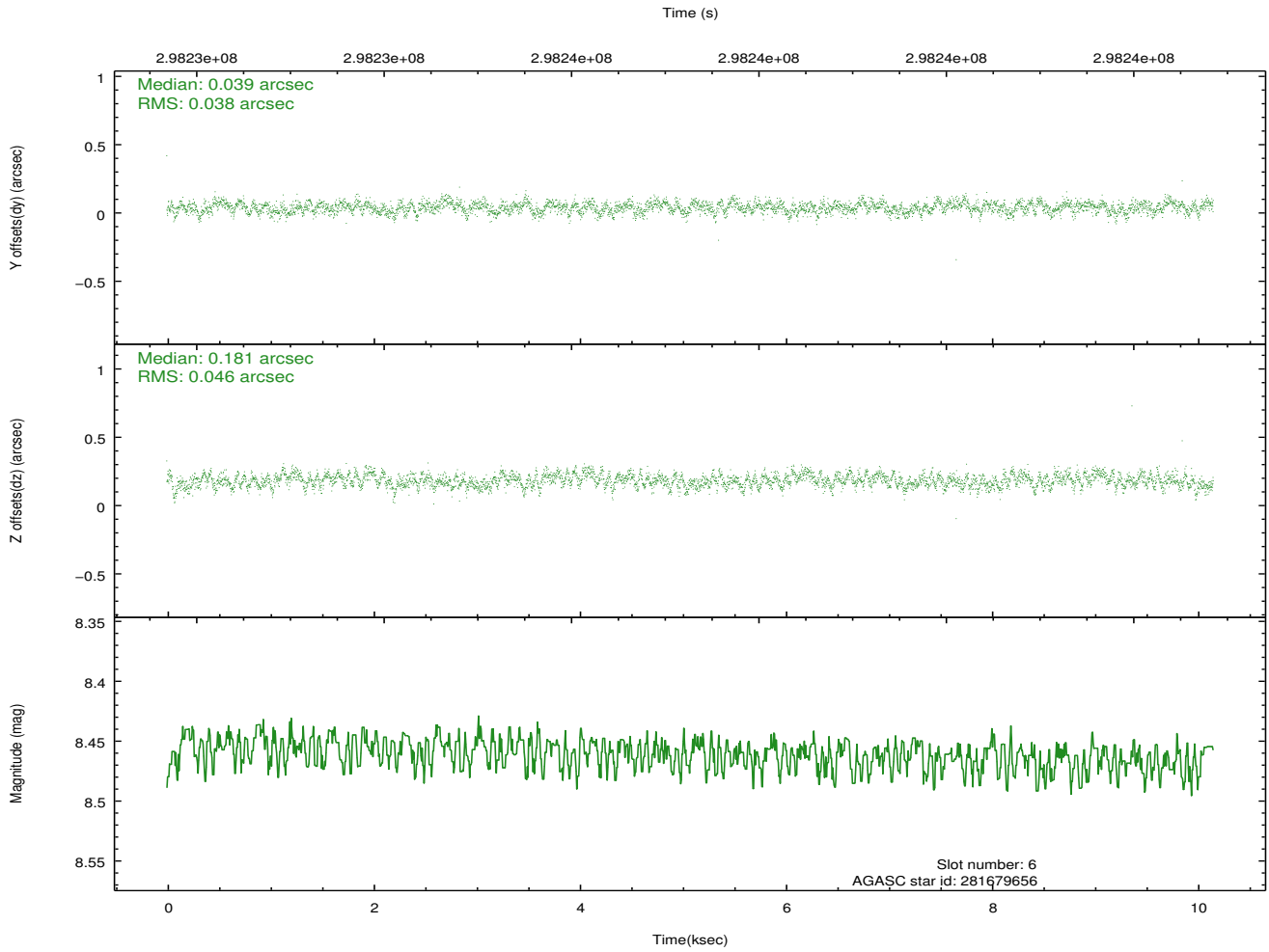
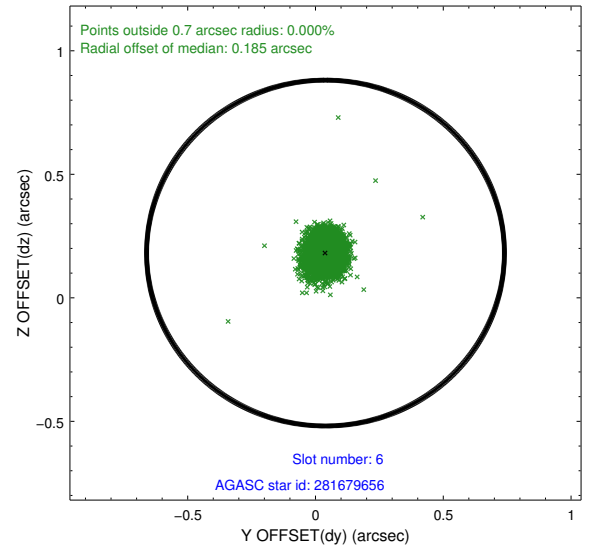
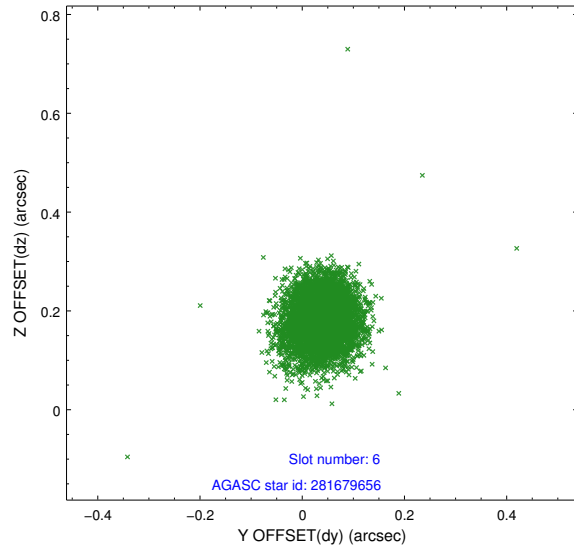
2.4.2 Slot 4



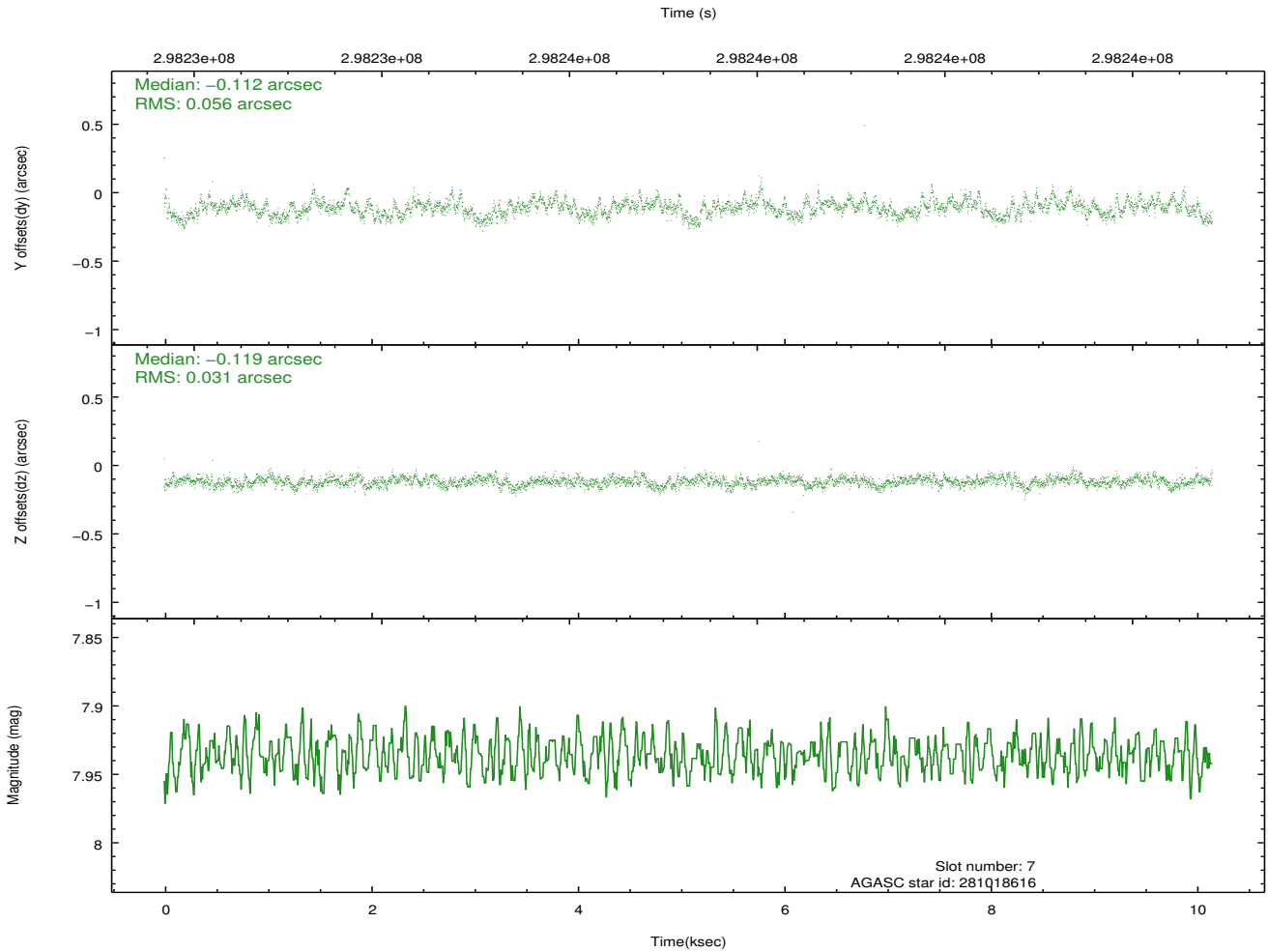
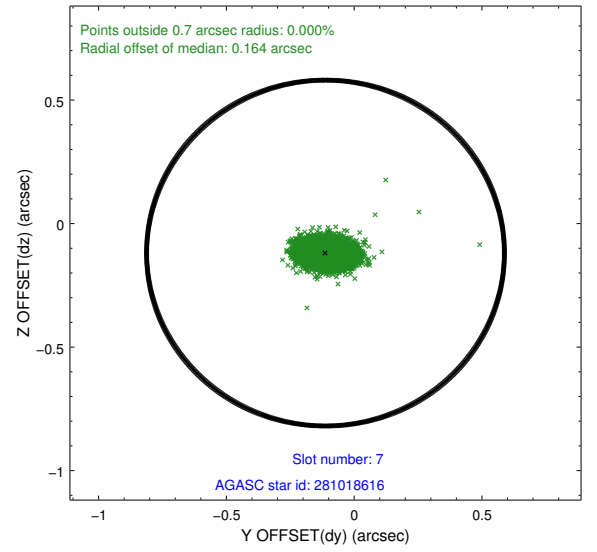
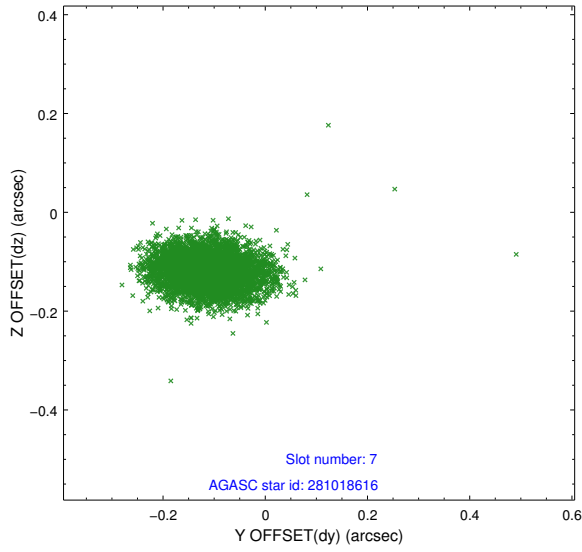
2.4.3 Slot 5



2.4.4 Slot 6

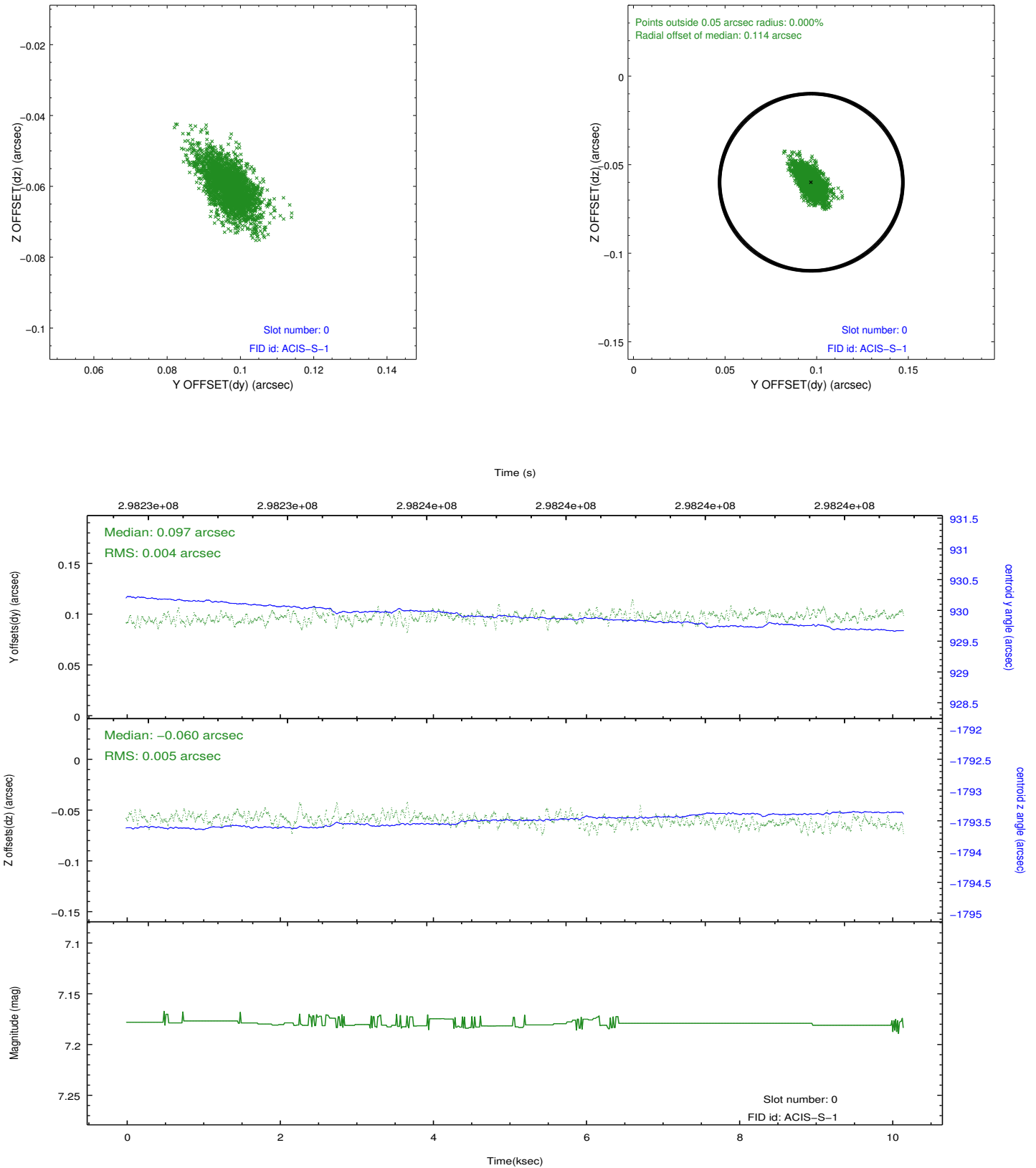


2.4.5 Slot 7

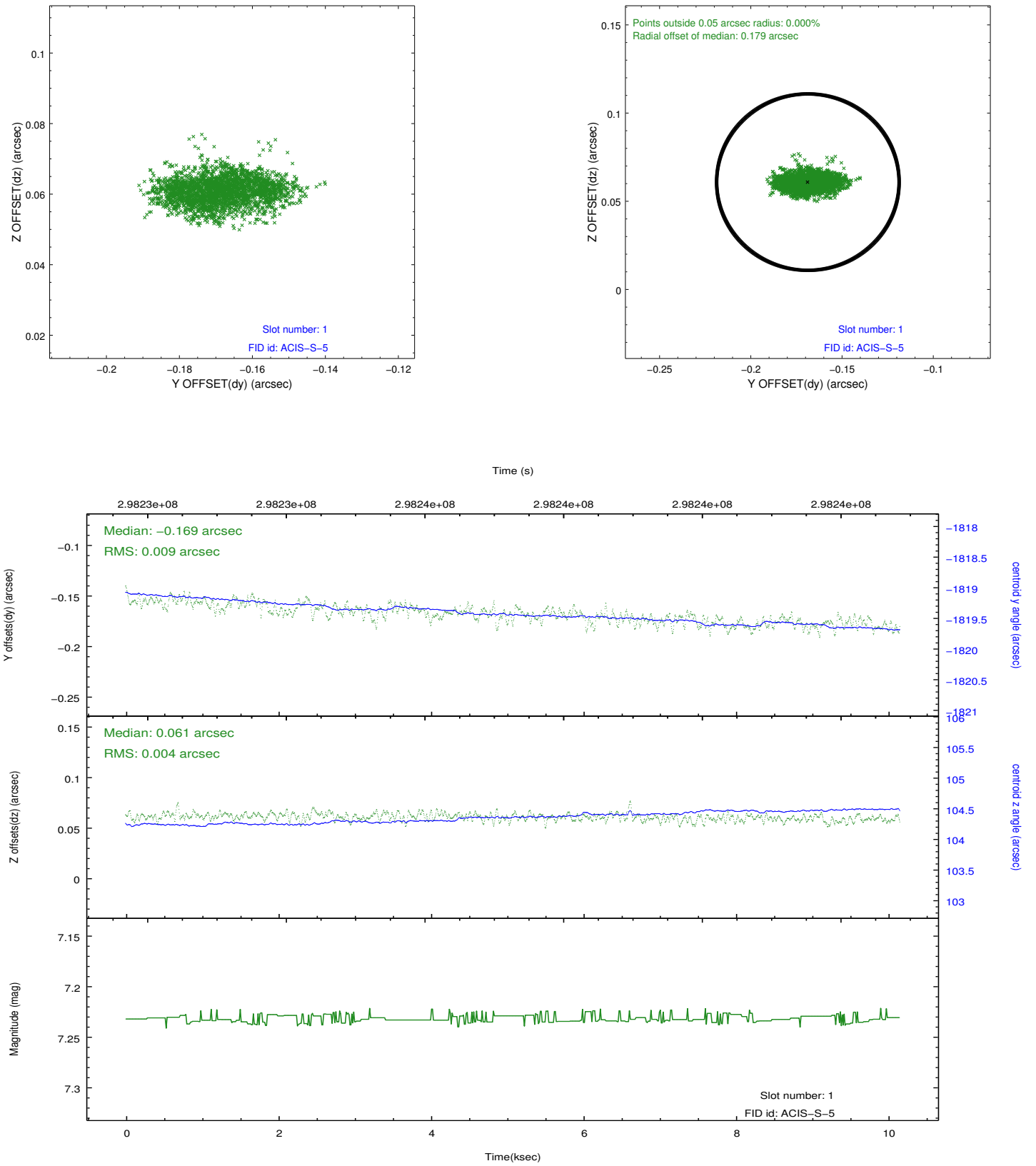


2.5 FID Slots

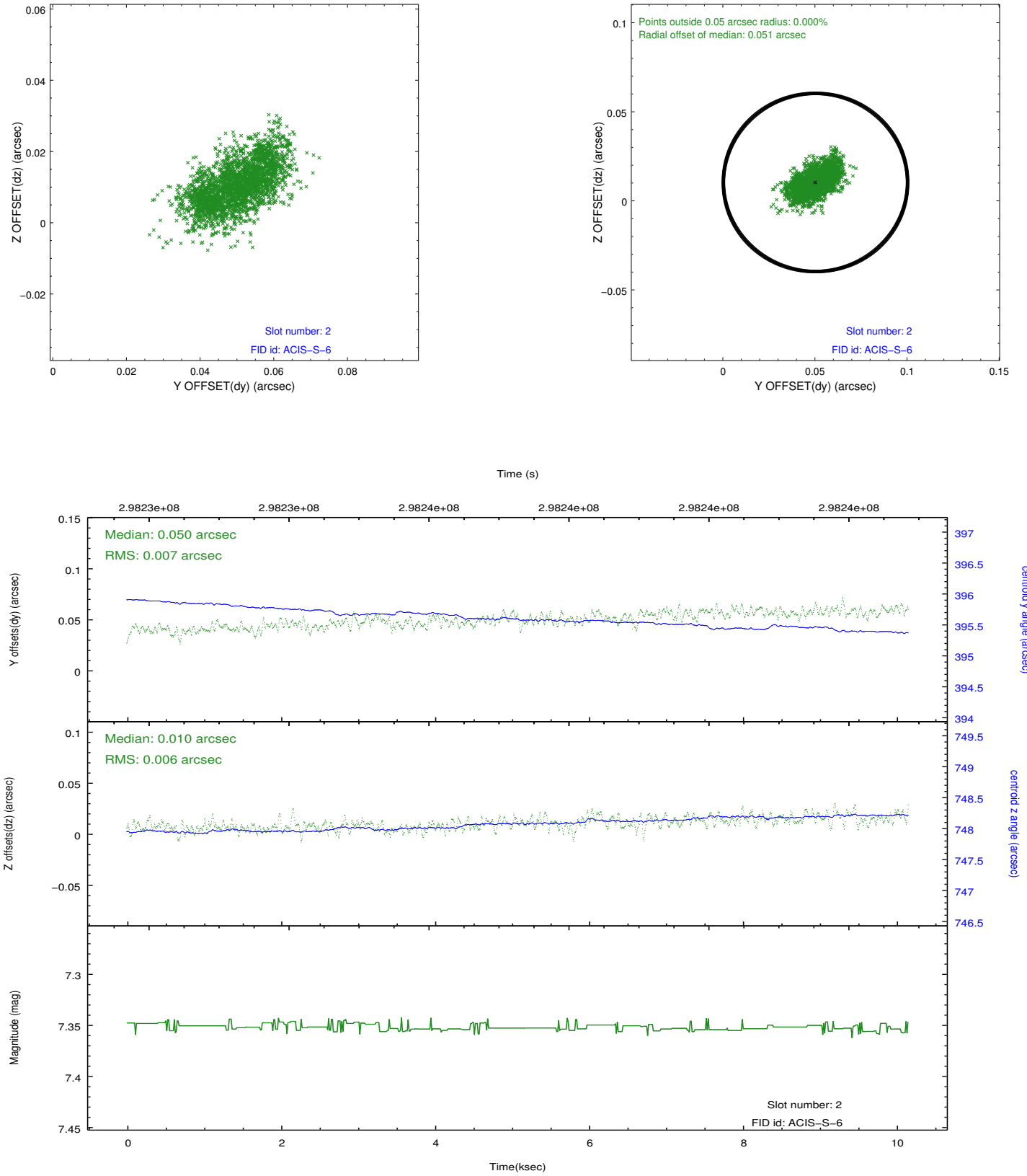
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

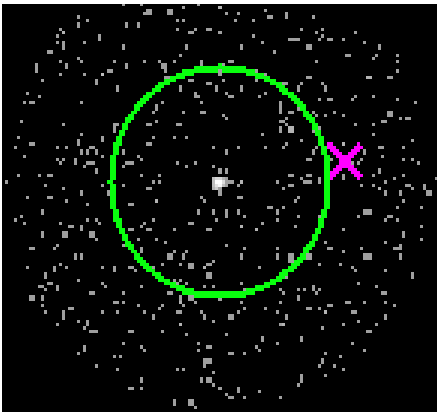


3 Gratings

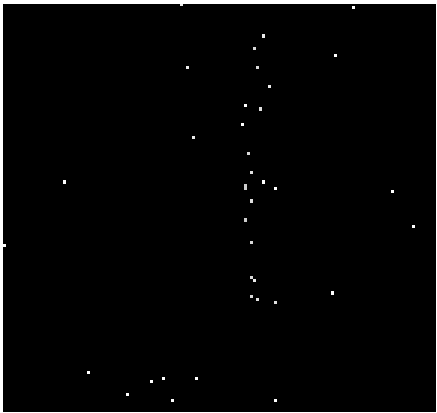
3.1 HEG Arm



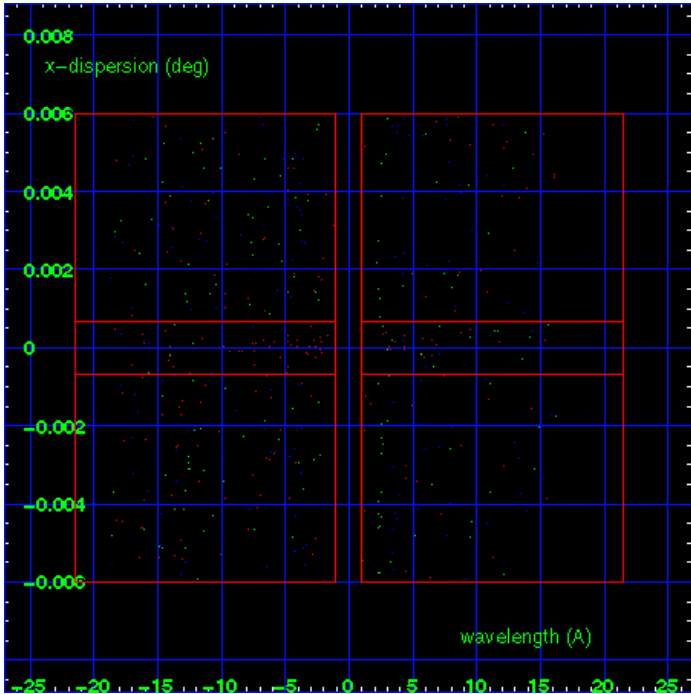
HEG Order Sort 123



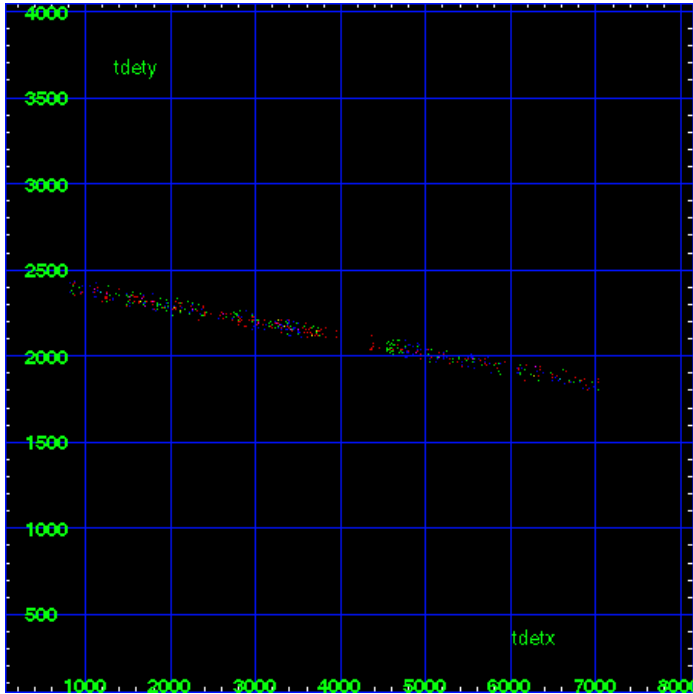
HEG Zero Order



HEG Order Sort ALL

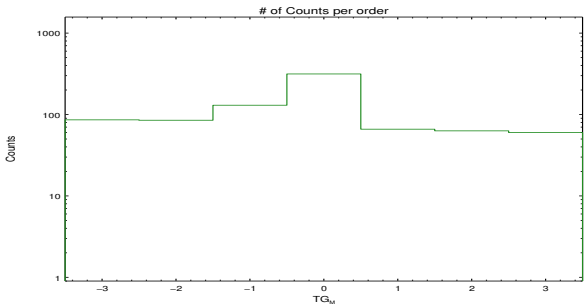


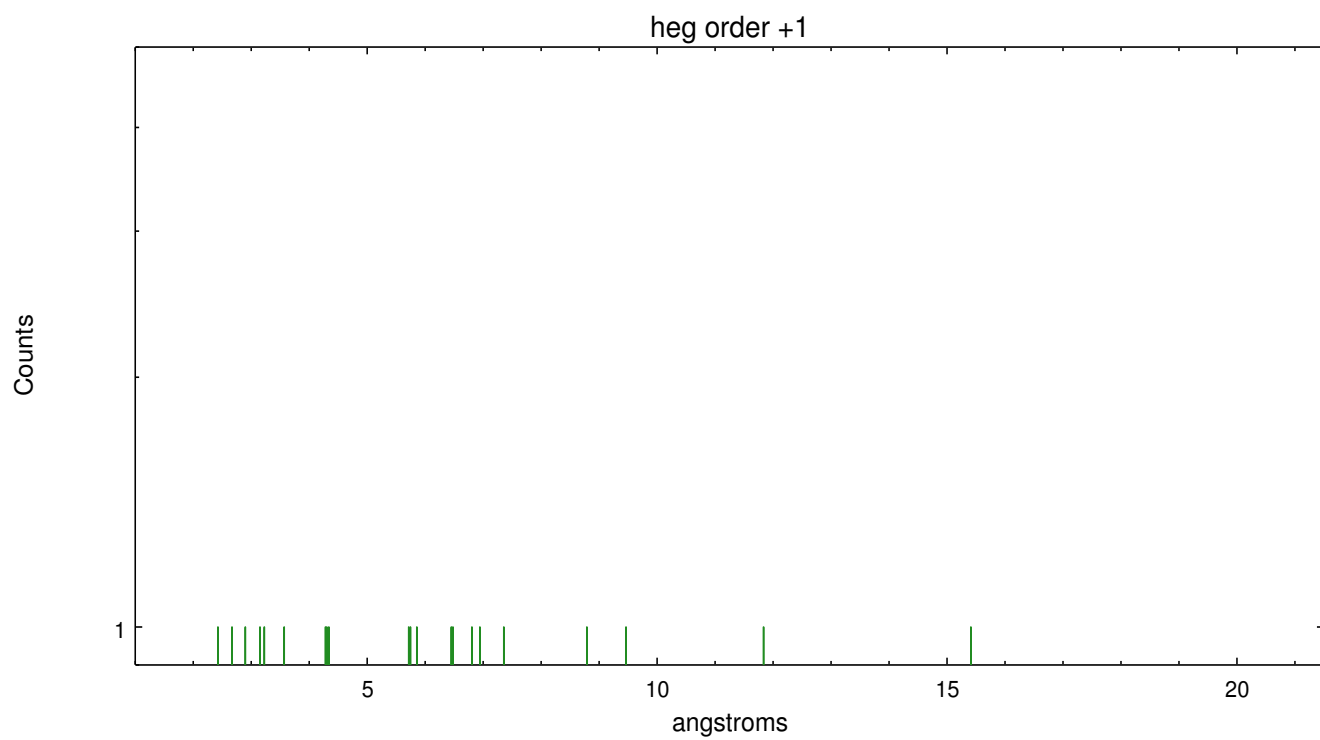
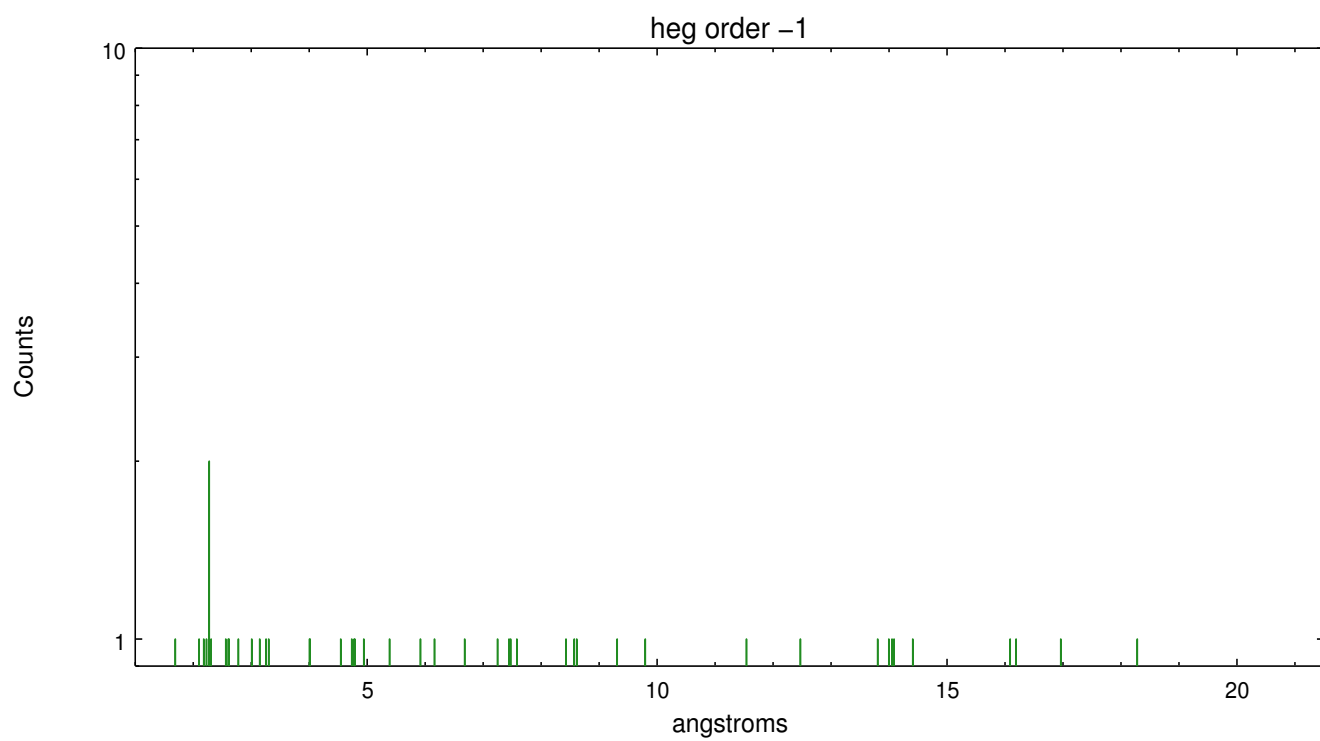
Spot Image HEG



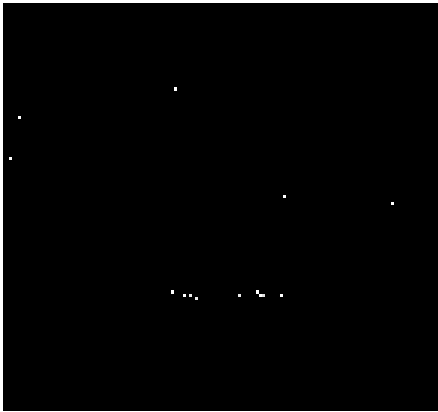
Full Detector HEG

| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 86 | 85 | 130 | 315 | 66 | 63 | 60 |

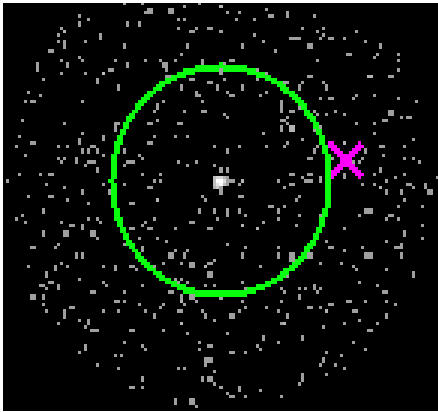




3.2 MEG Arm



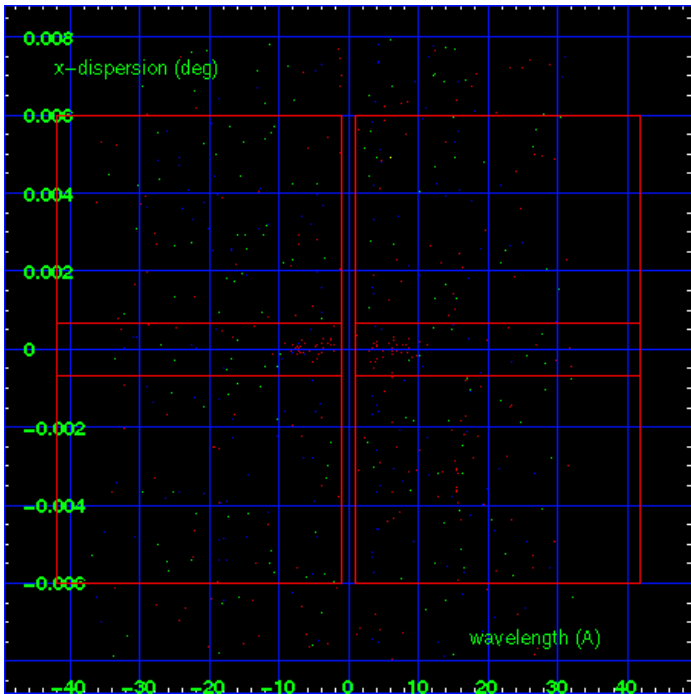
MEG Order Sort 123



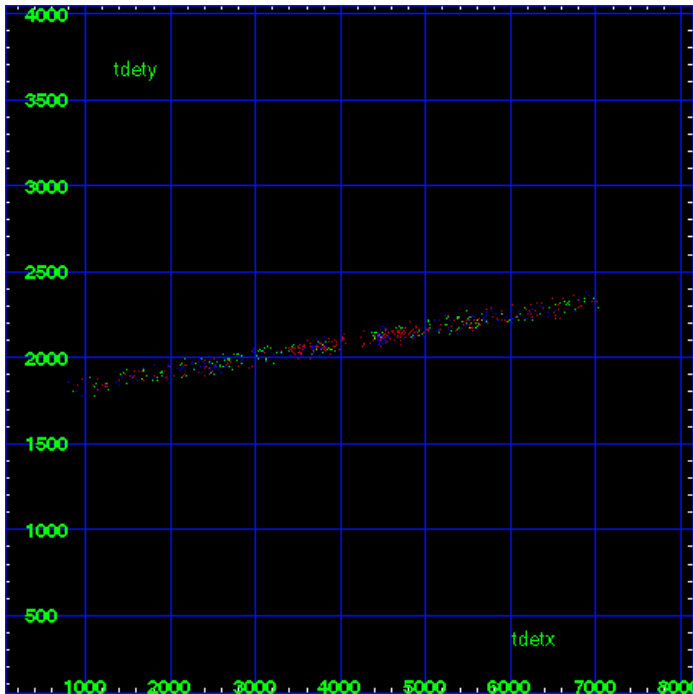
MEG Zero Order



MEG Order Sort ALL

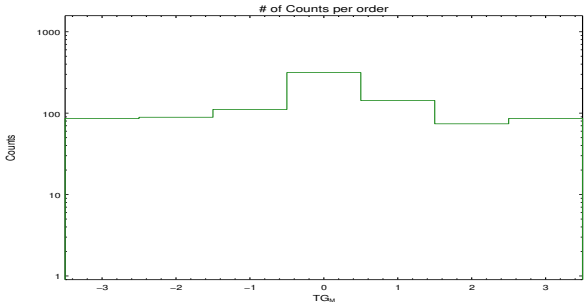


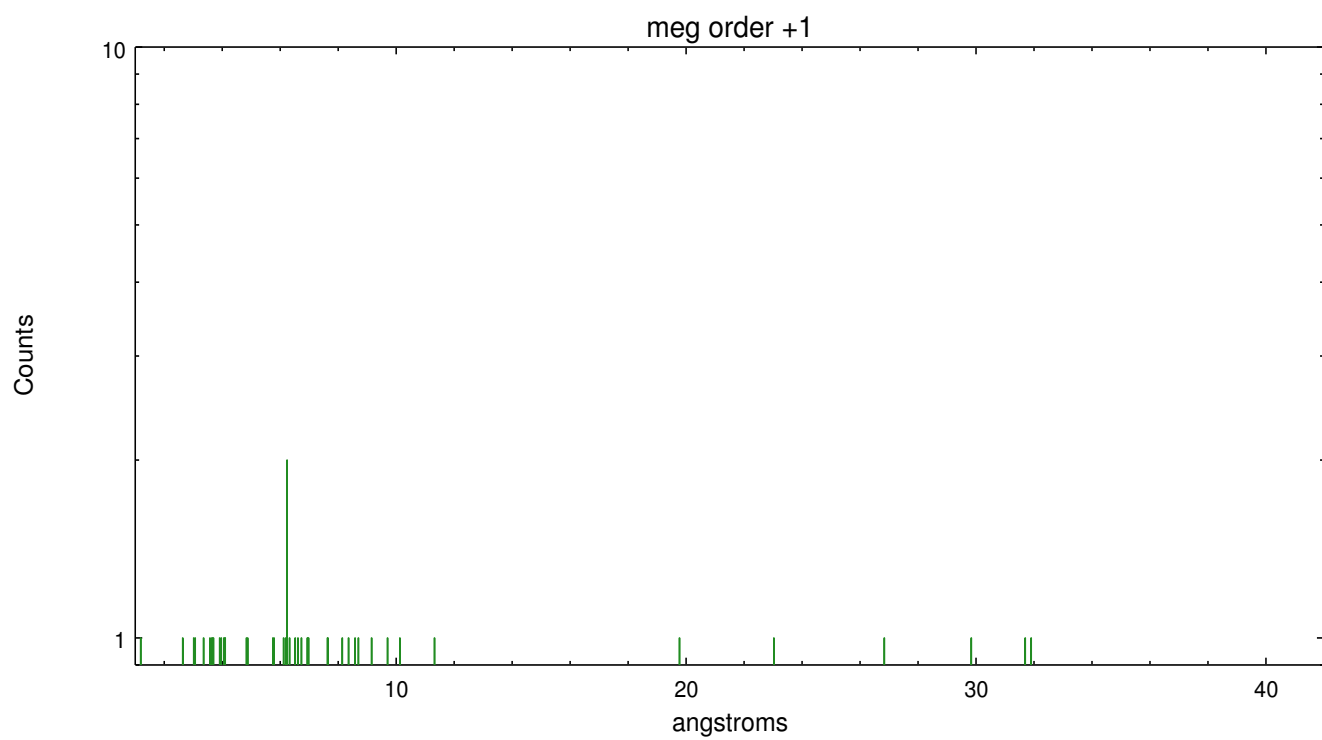
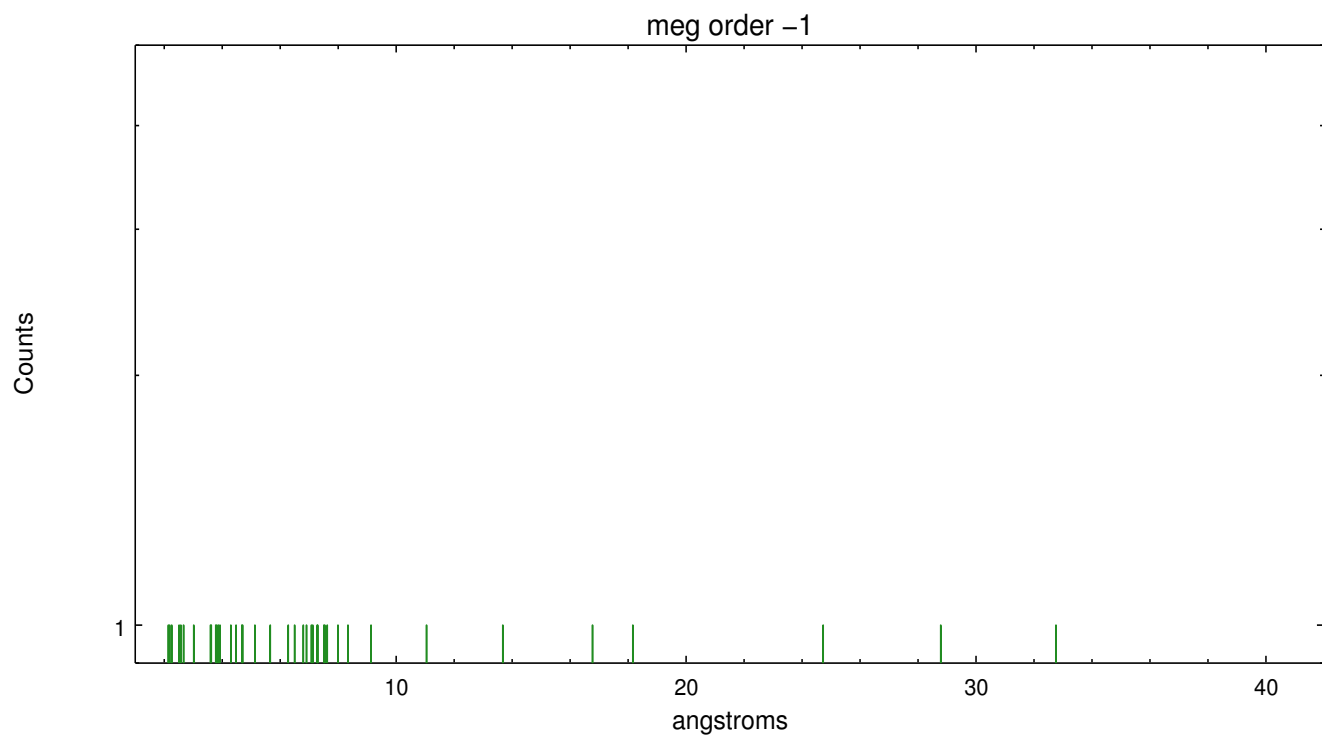
Spot Image MEG



Full Detector MEG

| | order -3 | order -2 | order -1 | order 0 | order 1 | order 2 | order 3 |
|--------|-------------|-------------|-------------|------------|------------|------------|------------|
| Events | 86 | 89 | 111 | 315 | 143 | 74 | 86 |





A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.04.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 10.1525 |

A.2 Comments

Dispersed spectrum very faint and hard.