

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2697 - L2 Version 4
Chandra X-Ray Center

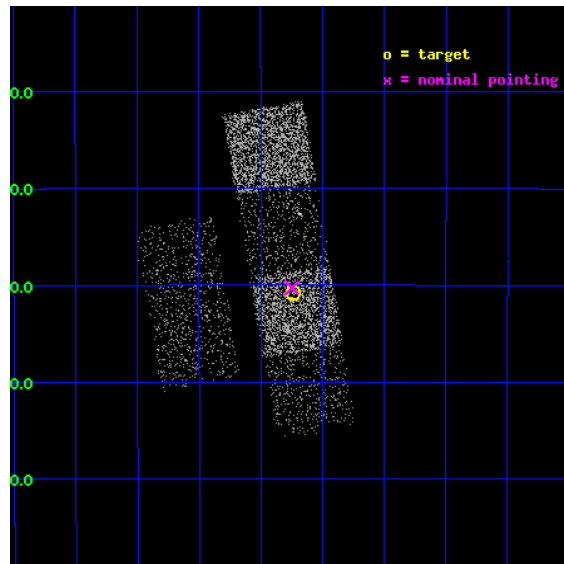
L2 Processing Date : May 3 2013

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1 Front

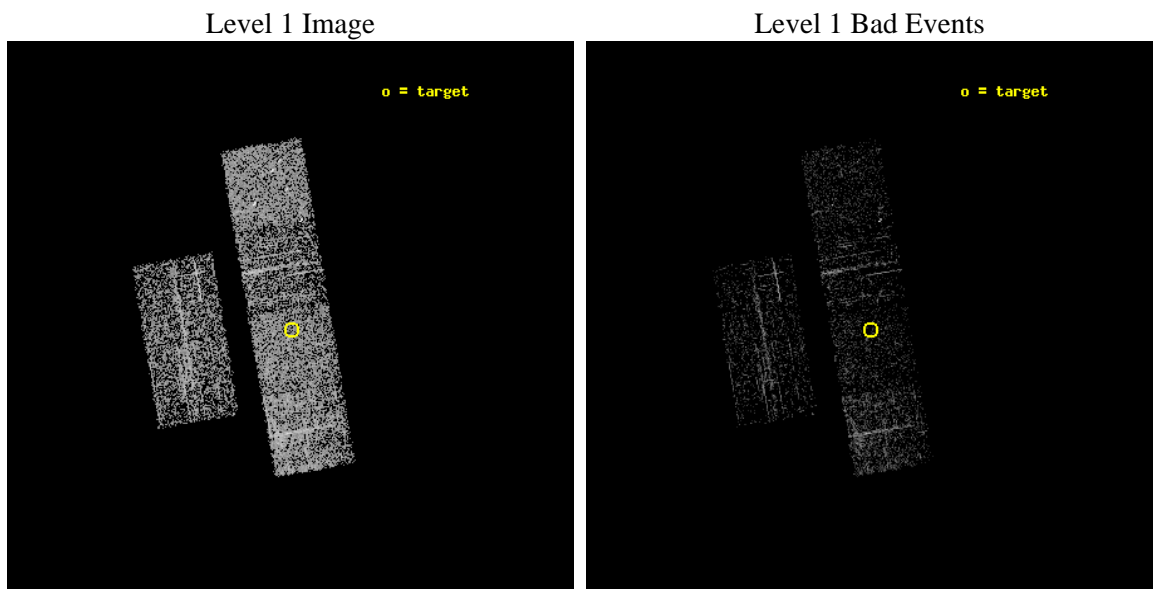
| | | |
|----------|--|---|
| seq_num | 400177 | Sequence number |
| obs_id | 2697 | Observation id |
| title | THE FAINTEST 'FIELD' LOW-MASS X-RAY BINARIES | Proposal title |
| observer | PROF MICHIEL VAN DER KLIS | Principal investigator |
| object | 1739-304 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 265.683333 | Observer's specified target RA [deg] |
| dec_targ | -30.514306 | Observer's specified target Dec [deg] |
| ra_nom | 265.68688038594 | Nominal RA [deg] |
| dec_nom | -30.504762195492 | Nominal Dec [deg] |
| roll_nom | 80.378197085776 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 646.39999759197 | Sum of GTIs [s] |
| livetime | 638.21489160711 | Livetime [s] |
| ontime2 | 646.39999759197 | Sum of GTIs [s] |
| ontime3 | 646.39999759197 | Sum of GTIs [s] |
| ontime5 | 646.39999759197 | Sum of GTIs [s] |
| ontime6 | 646.39999759197 | Sum of GTIs [s] |
| ontime7 | 646.39999759197 | Sum of GTIs [s] |
| ontime8 | 643.15902733803 | Sum of GTIs [s] |
| l2events | 6974 | Number of level 2 events |



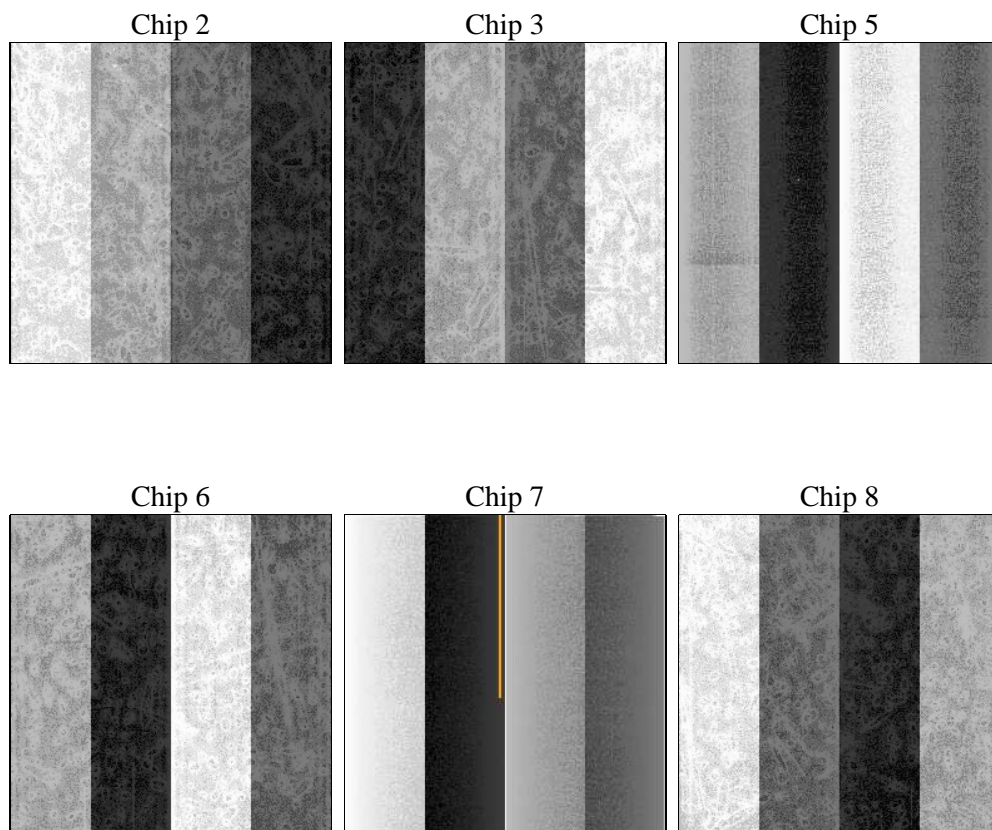
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 646.39999759197 | Sum of GTIs [s] |
| caldsver | 4.5.6 | | ontime2 | 646.39999759197 | Sum of GTIs [s] |
| date | 2013-05-03T17:37:28 | Date and time of file creation | ontime3 | 646.39999759197 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime5 | 646.39999759197 | Sum of GTIs [s] |
| | | | ontime6 | 646.39999759197 | Sum of GTIs [s] |
| | | | ontime7 | 646.39999759197 | Sum of GTIs [s] |
| | | | ontime8 | 643.15902733803 | Sum of GTIs [s] |
| | | | l1events | 38622 | Number of level 1 events |

2.1.4 Events

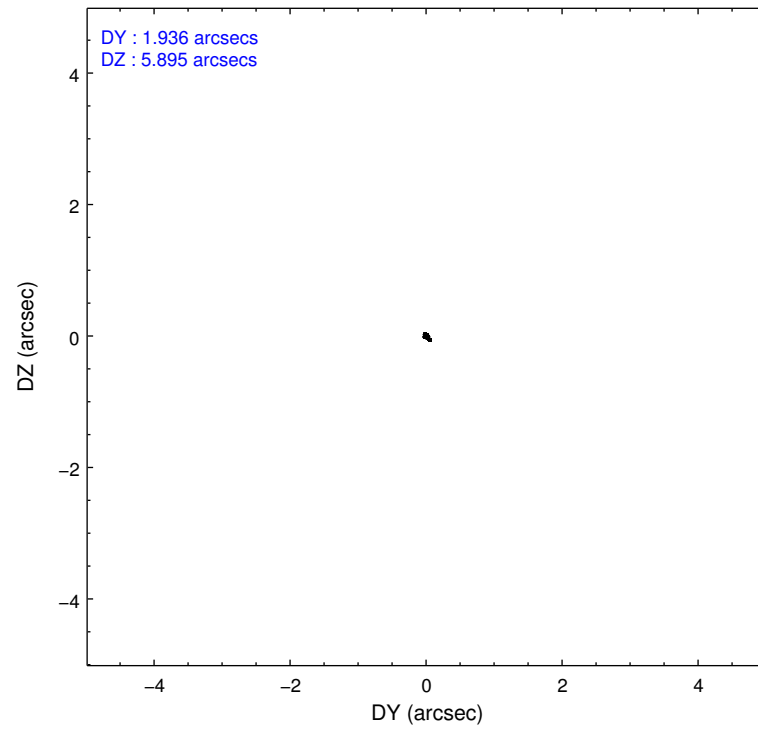
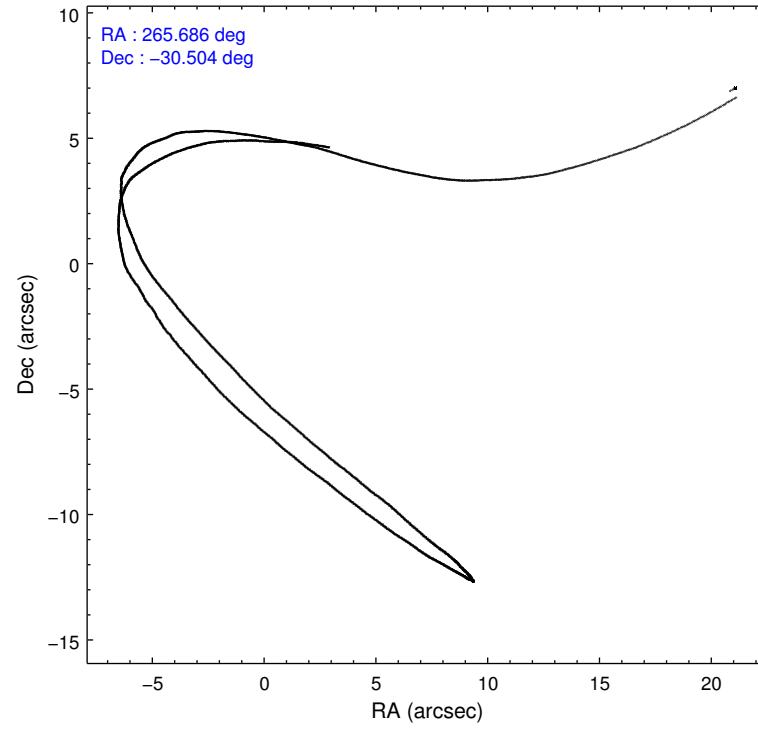
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 5019 | 5148 | 7799 | 5435 | 6610 | 8611 |
| rejected events | 4509 | 4609 | 4535 | 4822 | 4132 | 7717 |
| rejected % | 89% | 89% | 58% | 88% | 62% | 89% |

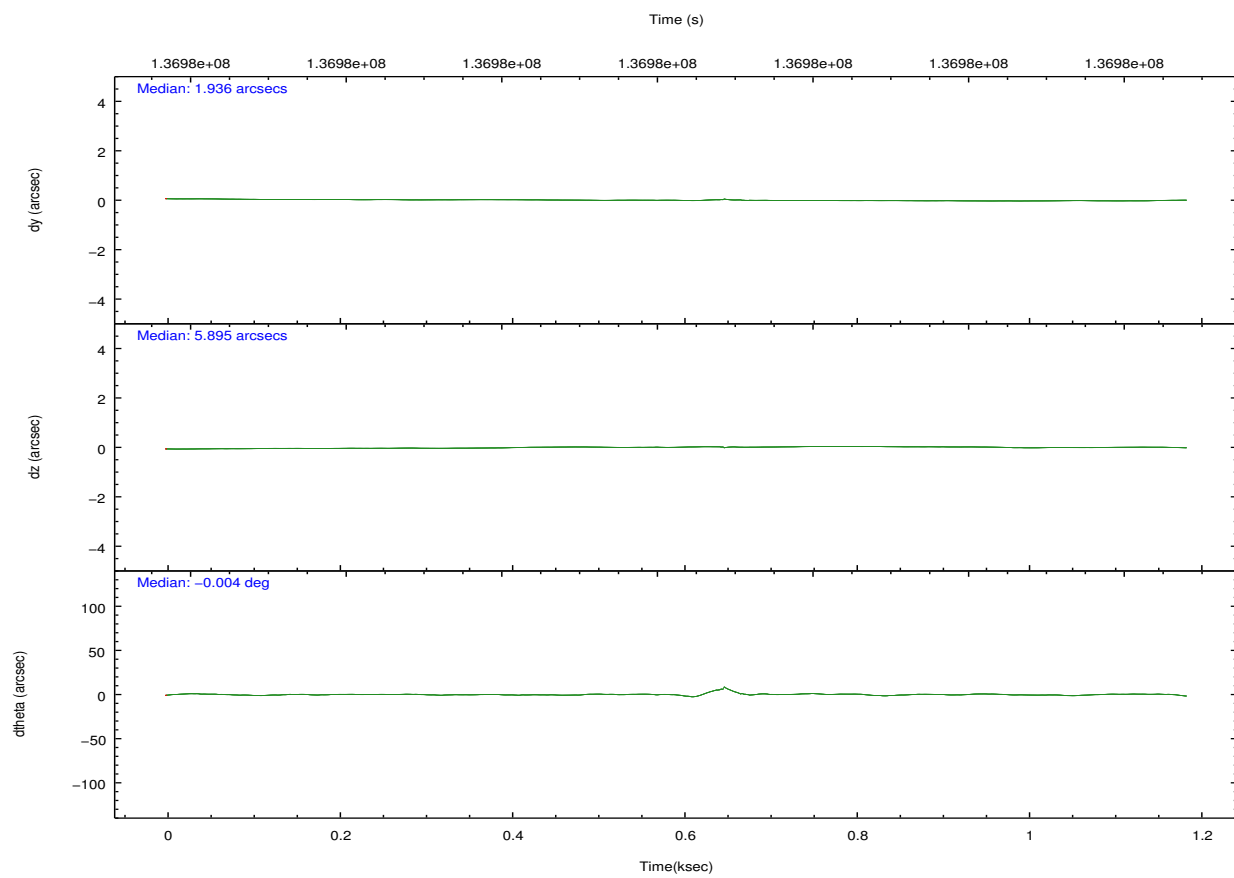
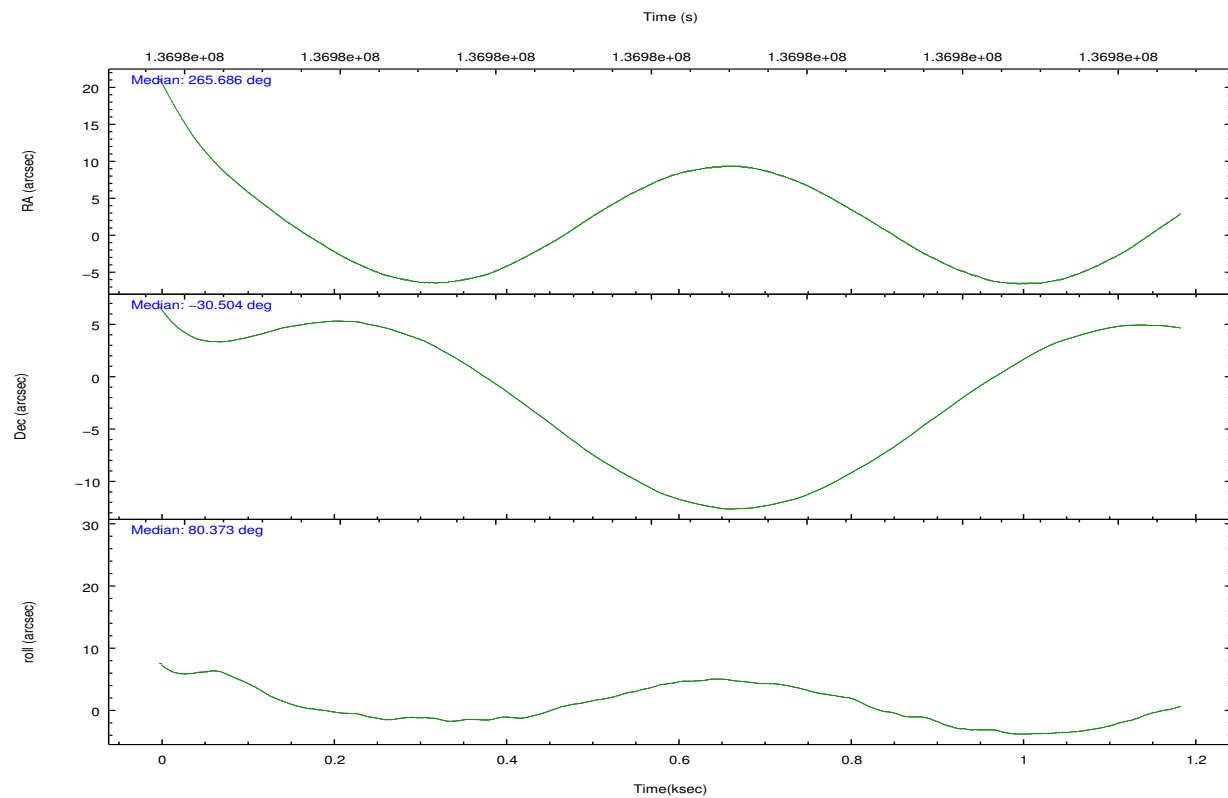
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|-------|-------|
| grade 0 events | 240 | 266 | 623 | 324 | 251 | 407 |
| | 4% | 5% | 7% | 5% | 3% | 4% |
| grade 1 events | 4 | 4 | 17 | 3 | 5 | 3 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 117 | 132 | 1053 | 134 | 525 | 227 |
| | 2% | 2% | 13% | 2% | 7% | 2% |
| grade 3 events | 52 | 59 | 169 | 53 | 269 | 124 |
| | 1% | 1% | 2% | 0% | 4% | 1% |
| grade 4 events | 54 | 55 | 139 | 74 | 288 | 105 |
| | 1% | 1% | 1% | 1% | 4% | 1% |
| grade 5 events | 159 | 197 | 586 | 203 | 592 | 235 |
| | 3% | 3% | 7% | 3% | 8% | 2% |
| grade 6 events | 117 | 114 | 1864 | 137 | 1539 | 267 |
| | 2% | 2% | 23% | 2% | 23% | 3% |
| grade 7 events | 4276 | 4321 | 3348 | 4507 | 3141 | 7243 |
| | 85% | 83% | 42% | 82% | 47% | 84% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | 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 | 265.698532 | 265.6868803859401 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -30.530601 | -30.50476219549204 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 80.227496 | 80.37819708577554 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 136979015.184000 | 136978141.09663 | | | |
| Observation start date | 2002-05-05T09:42:31 | 2002-05-05T09:29:01 | | | |
| [s] Observation end time (MET) | 136980015.184000 | 136980953.18425 | | | |
| Observation end date | 2002-05-05T09:59:11 | 2002-05-05T10:15:53 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



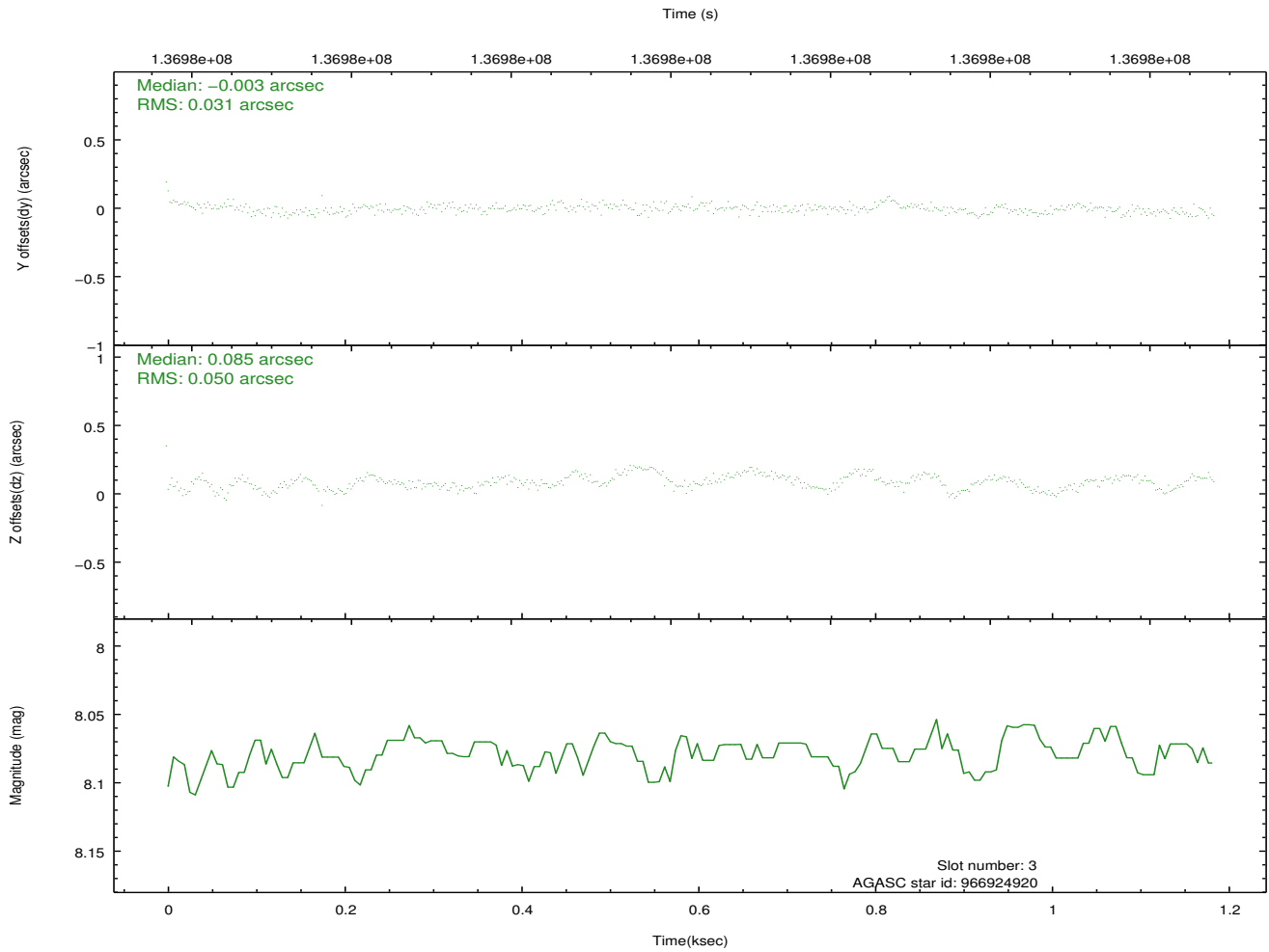
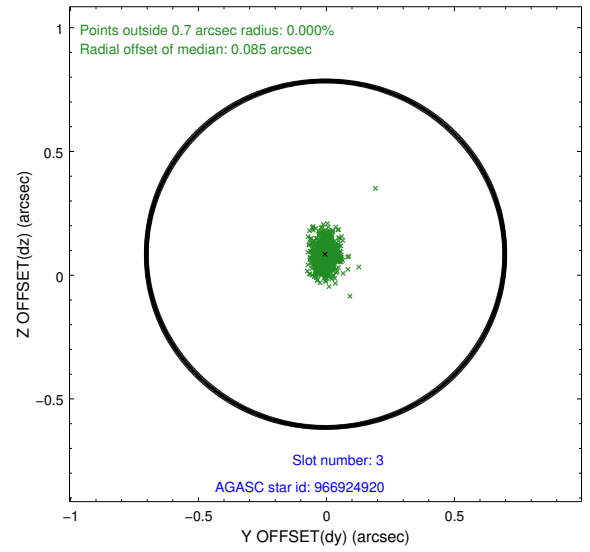
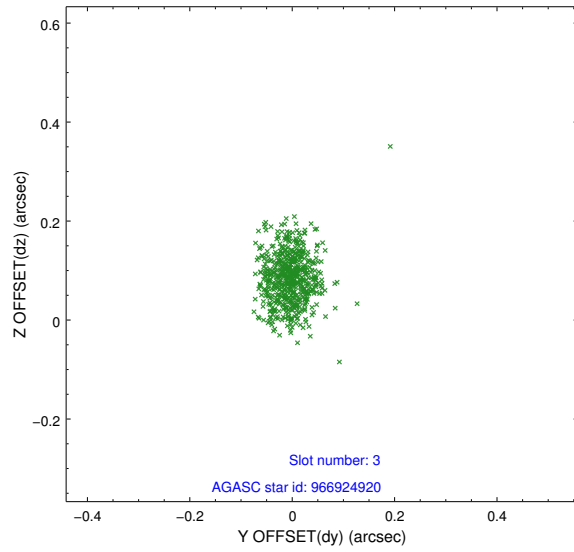


Slot Statistics

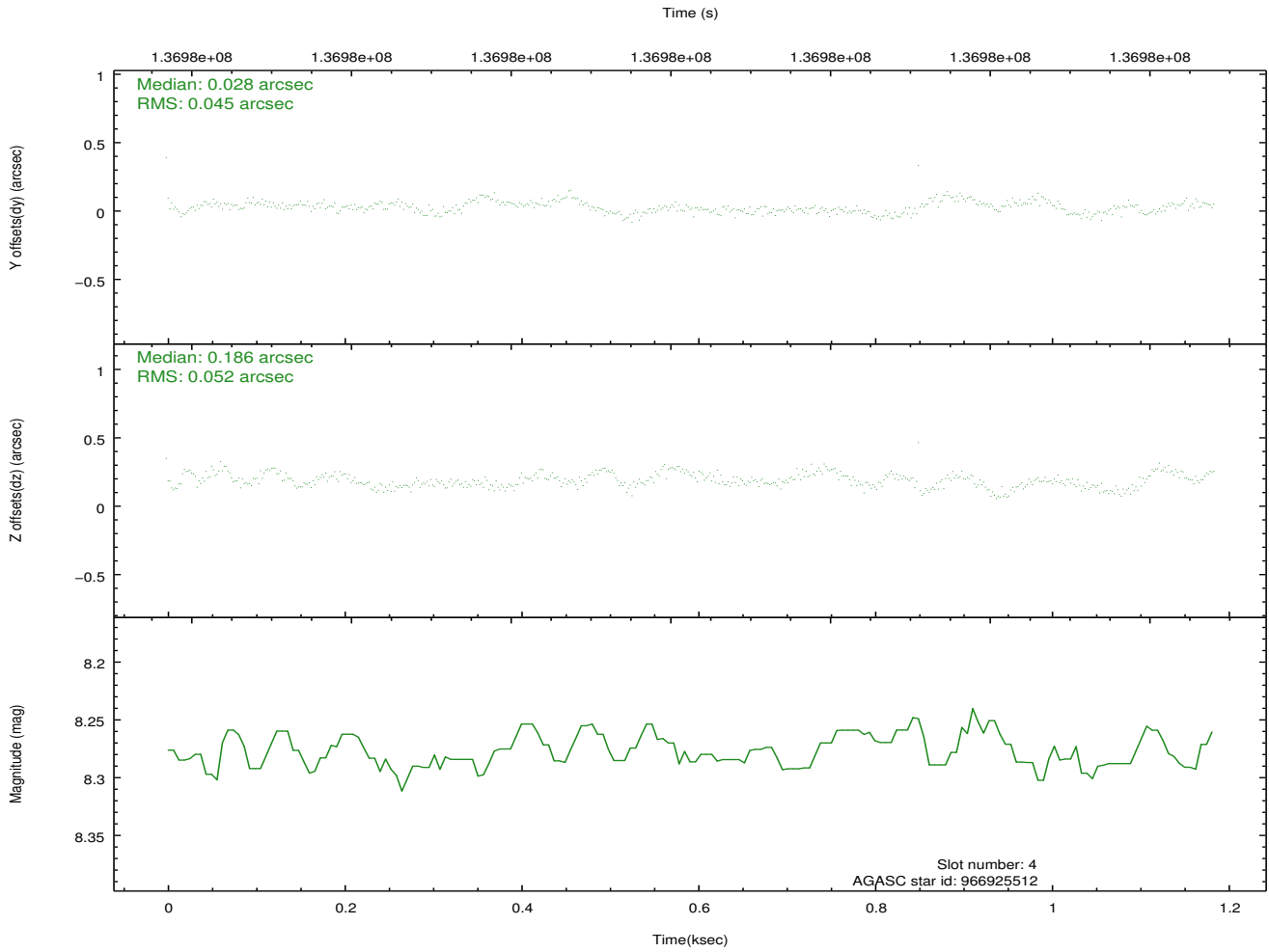
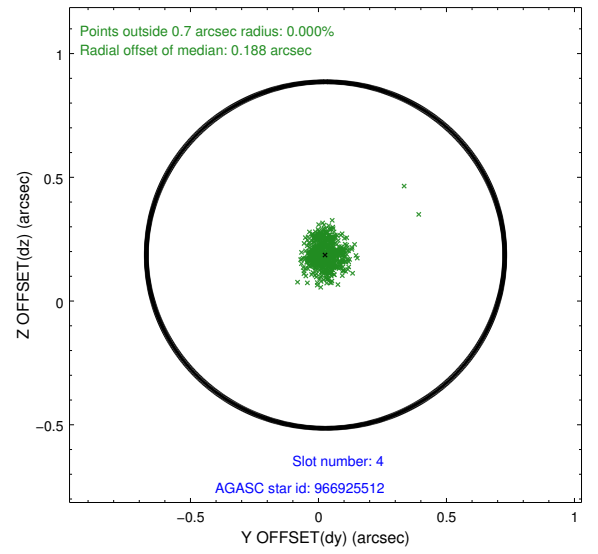
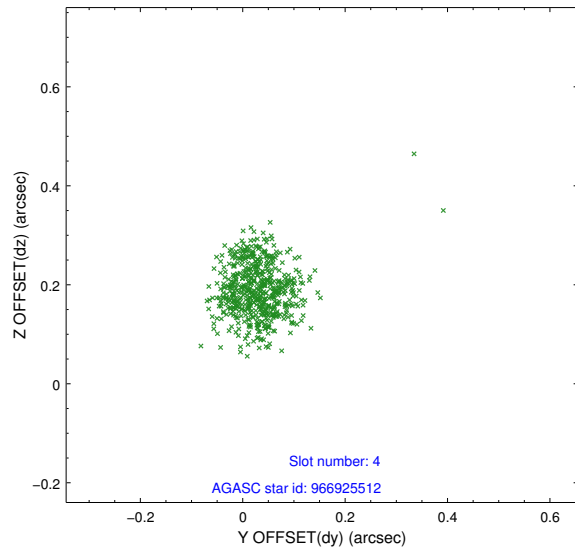
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-3 | 7.36 | 285 | -0.049 | -0.055 | 0.007 | 0.014 | 0.000000 | 0.000000 | 58.59 | -1856.09 |
| 1 | FID | ACIS-S-5 | 7.25 | 290 | 0.031 | -0.026 | 0.007 | 0.013 | 0.000000 | 0.000000 | -1807.36 | 168.75 |
| 2 | FID | ACIS-S-6 | 7.36 | 283 | -0.004 | 0.091 | 0.006 | 0.014 | 0.000000 | 0.000000 | 400.84 | 819.58 |
| 3 | GUIDE | 966924920 | 8.08 | 578 | -0.003 | 0.085 | 0.060 | 0.102 | 265.875401 | -30.176961 | 1346.51 | -327.85 |
| 4 | GUIDE | 966925512 | 8.28 | 579 | 0.028 | 0.186 | 0.071 | 0.108 | 266.373606 | -31.056700 | -1517.97 | -2376.42 |
| 5 | GUIDE | 966923376 | 8.73 | 579 | 0.023 | 0.184 | 0.075 | 0.122 | 266.333558 | -31.111316 | -1737.10 | -2290.44 |
| 6 | GUIDE | 966787648 | 8.88 | 578 | -0.129 | -0.136 | 0.090 | 0.152 | 265.297931 | -30.077843 | 1387.88 | 1500.56 |
| 7 | GUIDE | 966793072 | 9.12 | 578 | 0.086 | -0.322 | 0.087 | 0.149 | 264.914127 | -30.893007 | -1704.31 | 2165.72 |

2.4 Star Slots

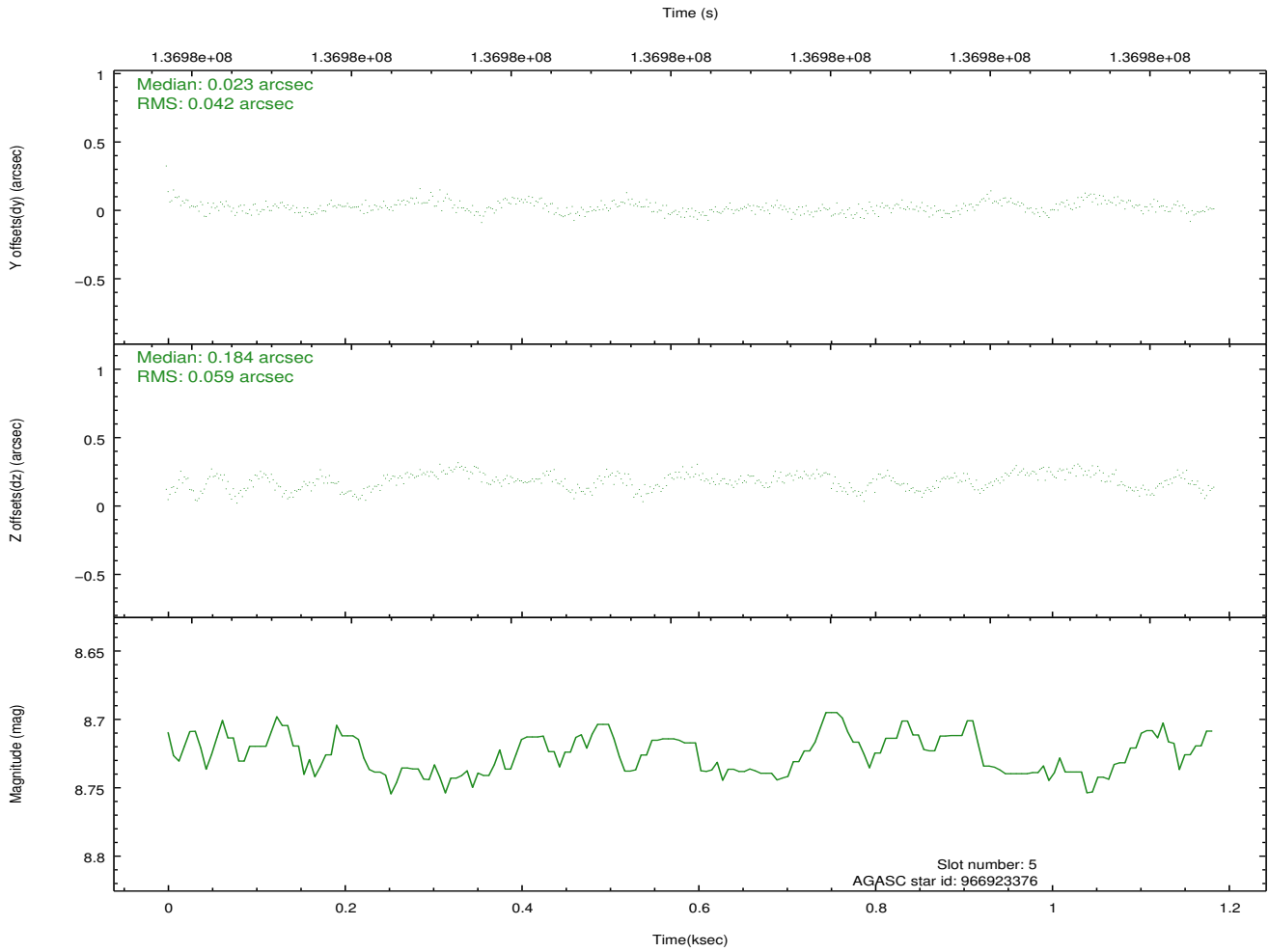
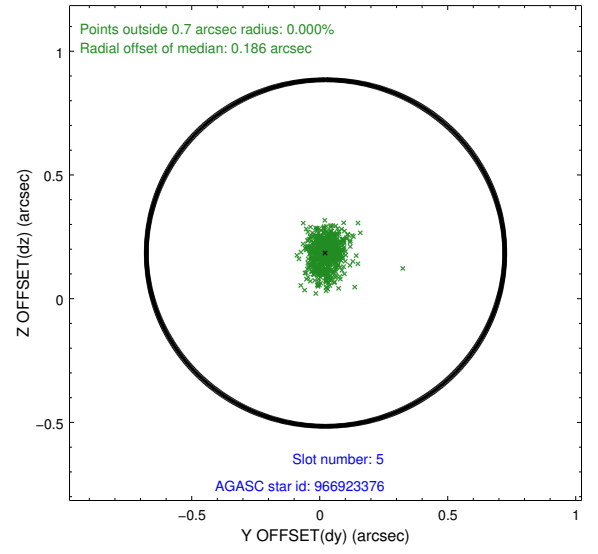
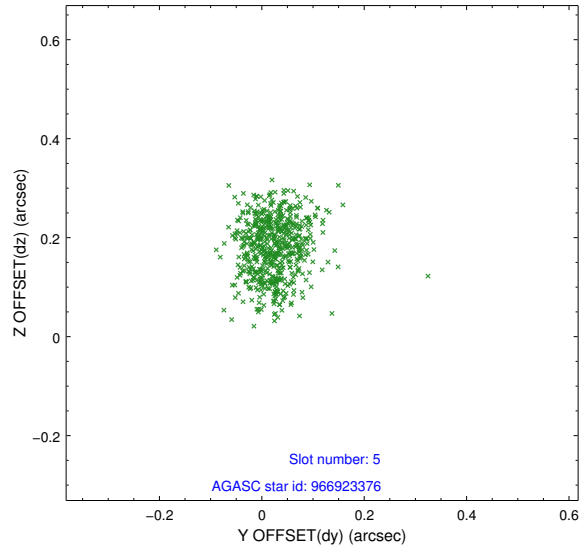
2.4.1 Slot 3



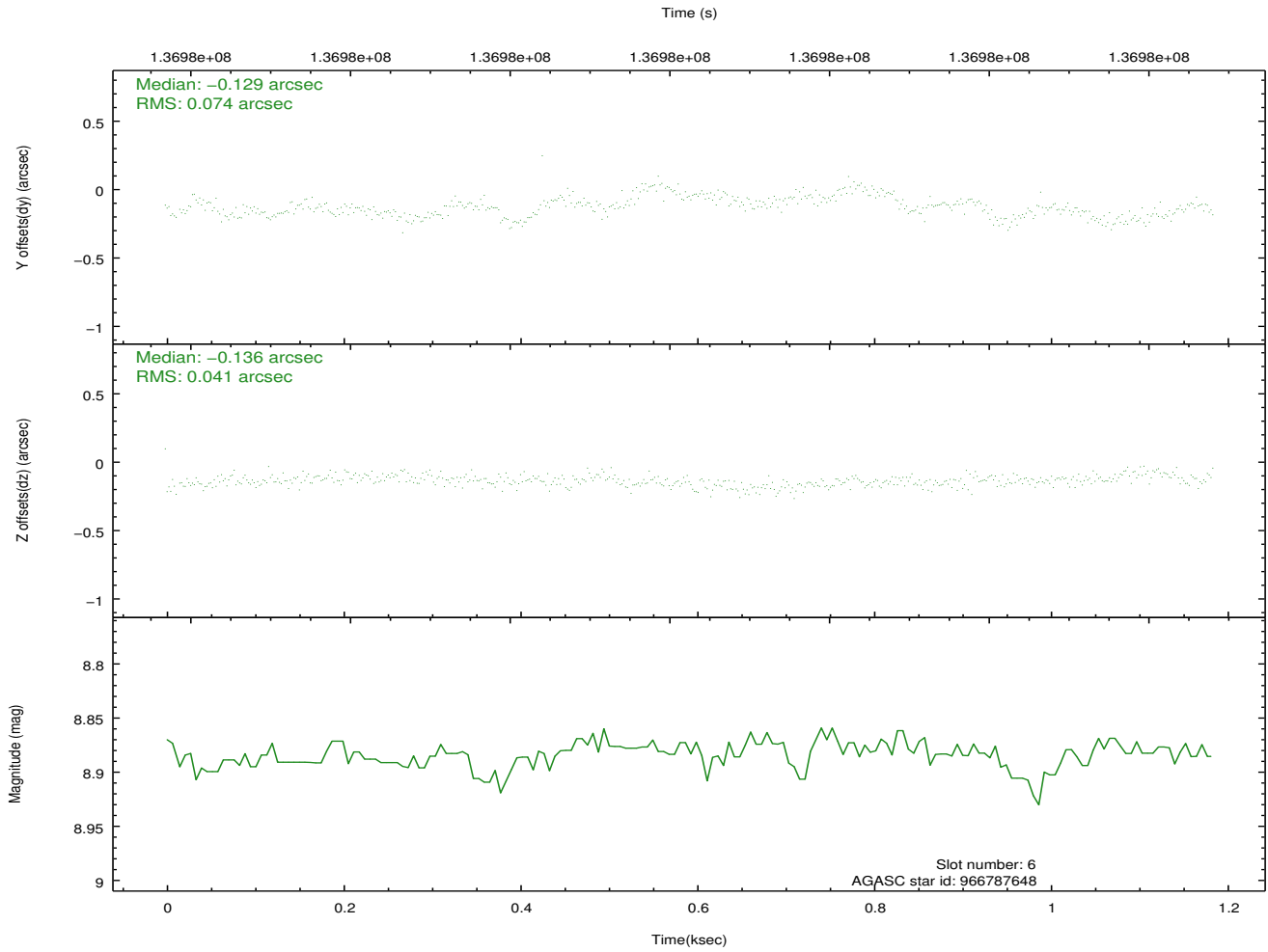
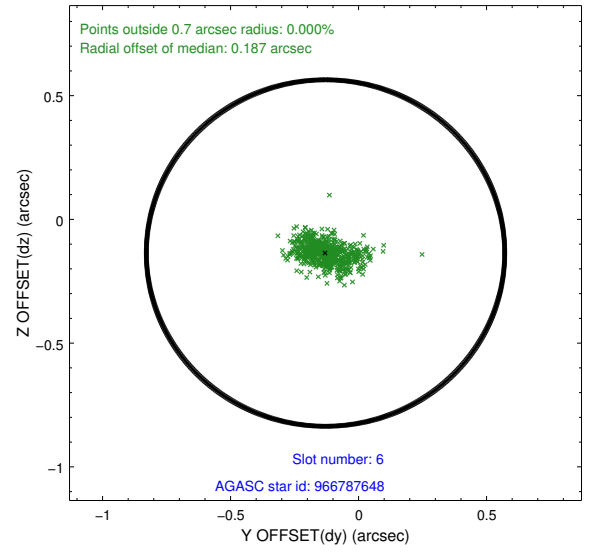
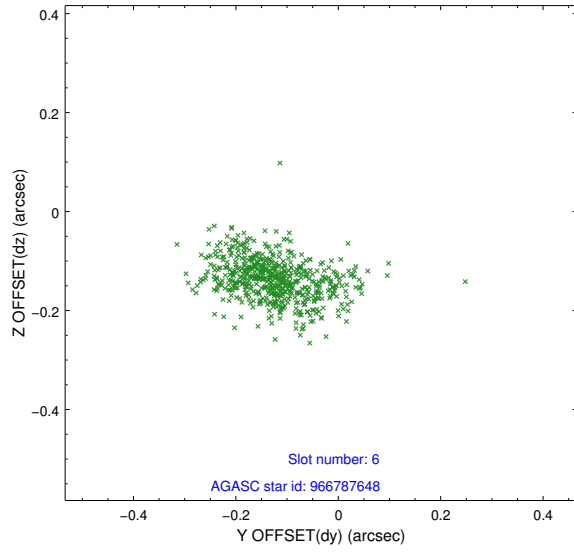
2.4.2 Slot 4



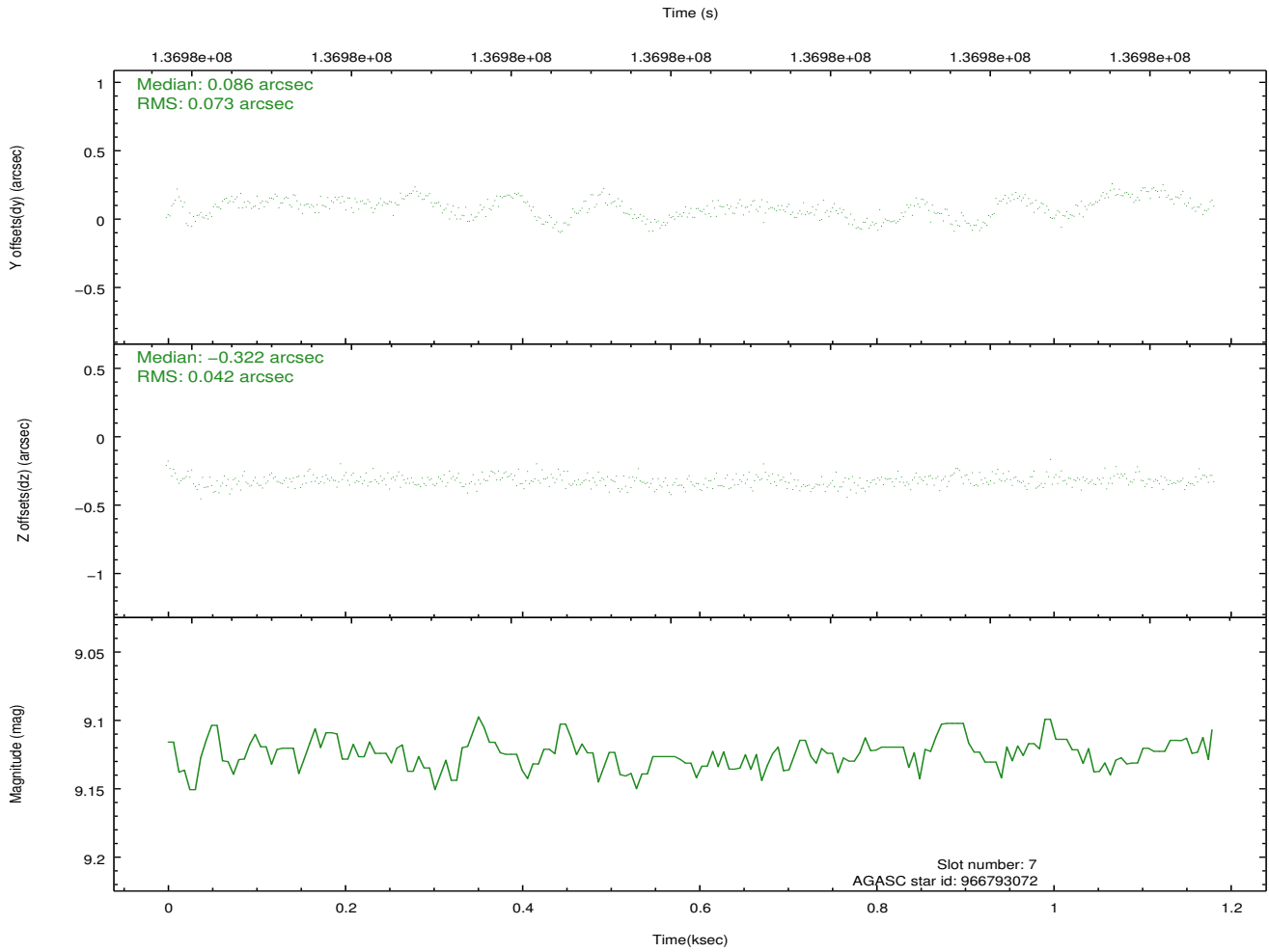
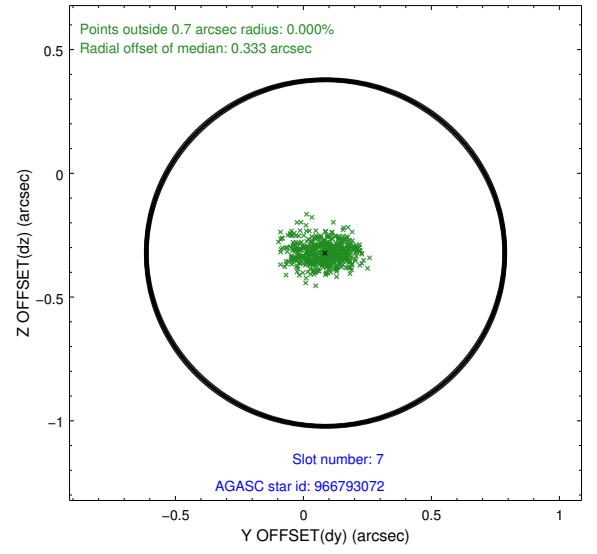
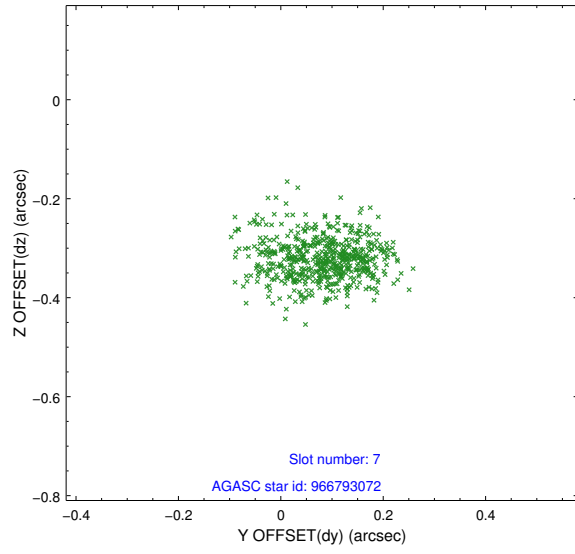
2.4.3 Slot 5



2.4.4 Slot 6

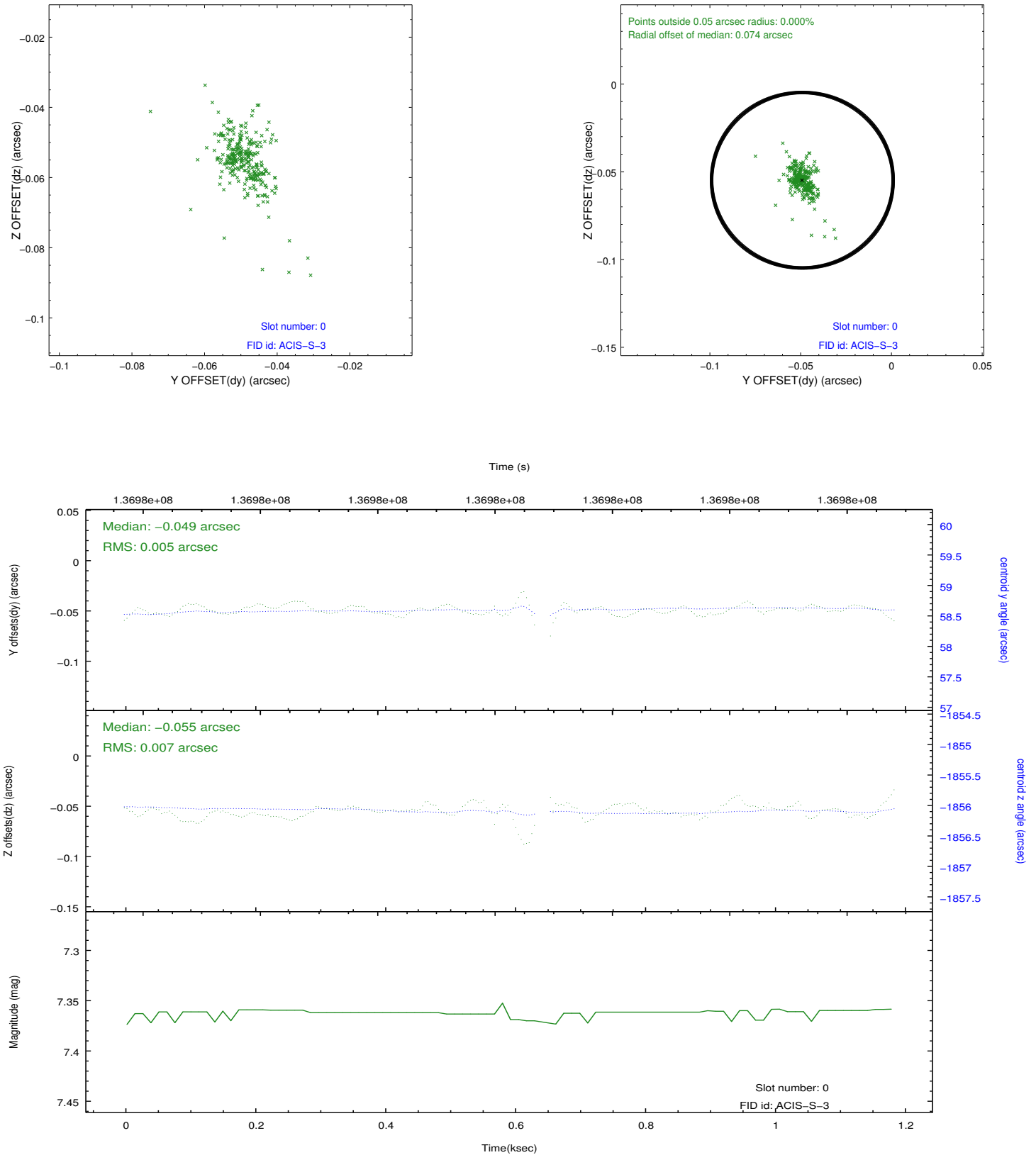


2.4.5 Slot 7

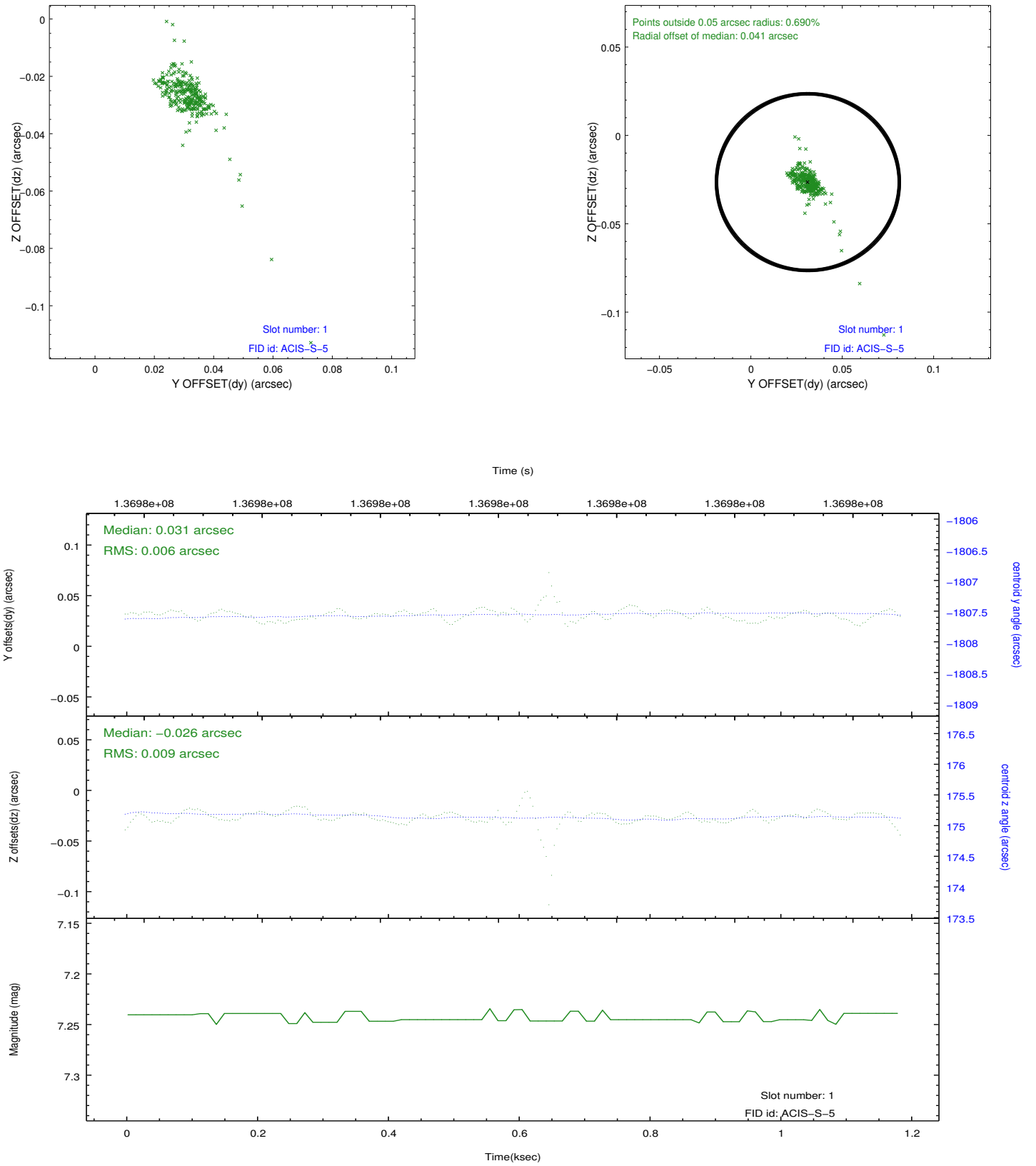


2.5 FID Slots

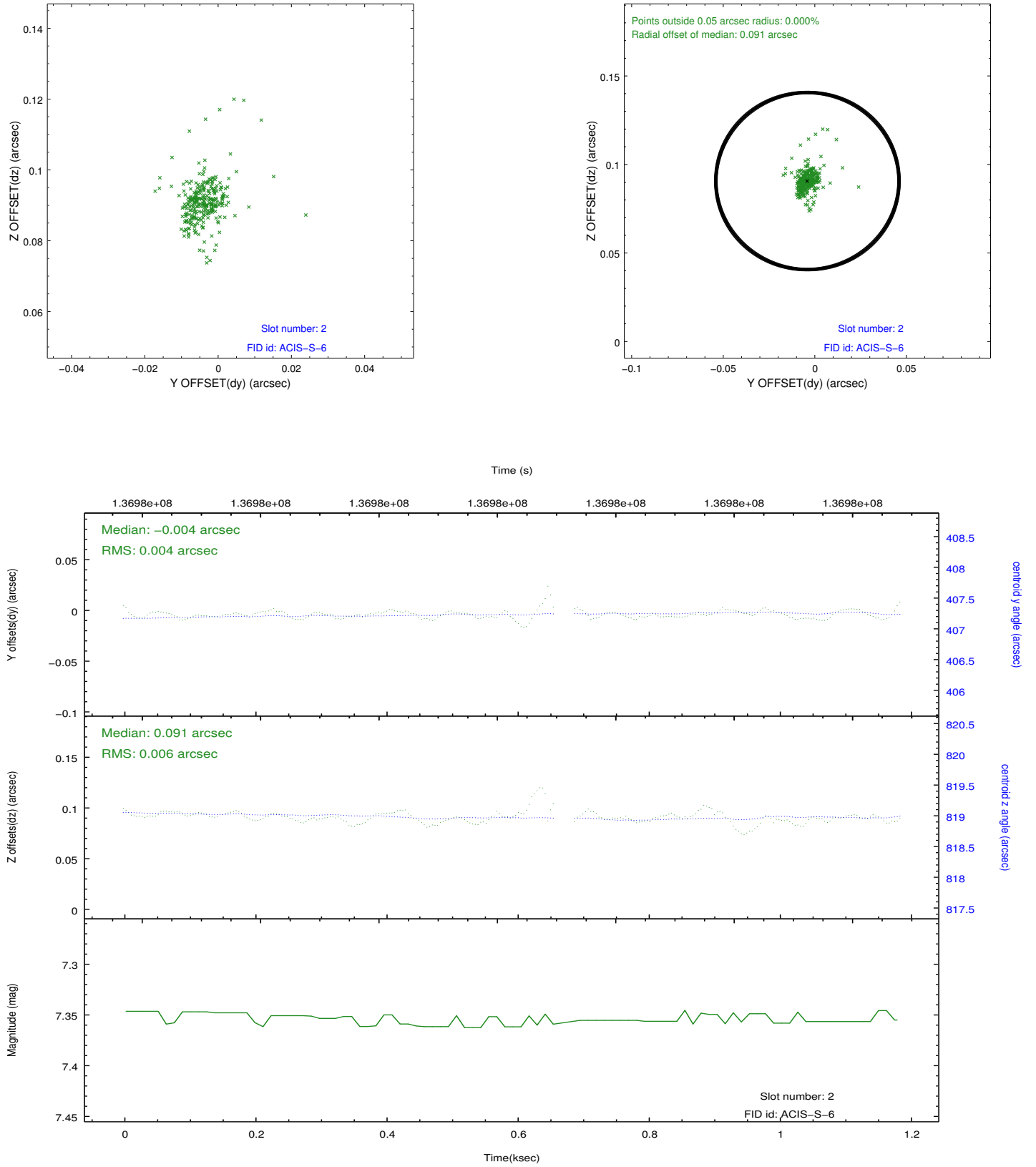
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2013.05.16 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 0.755 |

A.2 Comments

A bad aspect interval of 136979412s to 136979519s MET was excluded from this processing after review by the Aspect Team. This accounts for the approximately 100 sec difference in ONTIME between this processing and previous versions.

Previous ontime was 0.755 s, but with the current processing the ontime is 0.646 s.