

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9135 - L2 Version 2
Chandra X-Ray Center

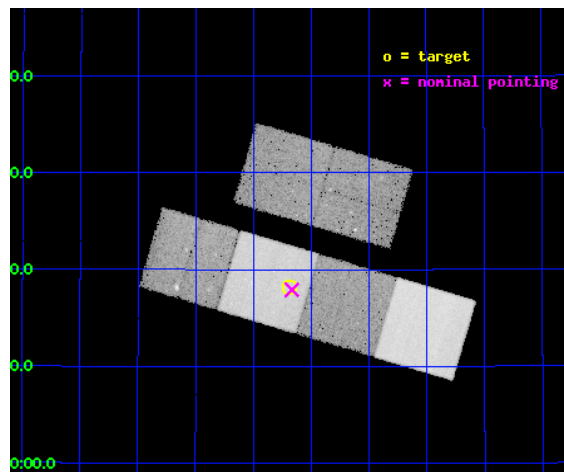
L2 Processing Date : May 15 2012

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1 Front

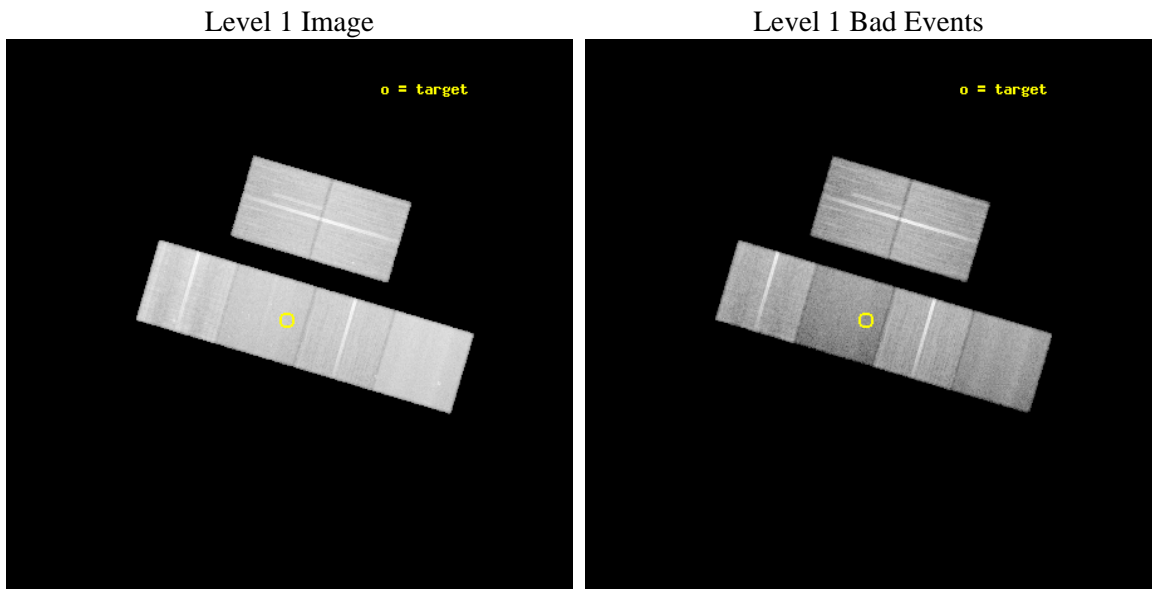
| | | |
|----------|---|---|
| seq_num | 500996 | Sequence number |
| obs_id | 9135 | Observation id |
| title | Constraining GRB physics through their afterglow light curves | Prop |
| observer | Dr Evert Rol | Principal investigator |
| object | GRB080319B | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 217.920708 | Observer's specified target RA [deg] |
| dec_targ | 36.302194 | Observer's specified target Dec [deg] |
| ra_nom | 217.91669506719 | Nominal RA [deg] |
| dec_nom | 36.29857677704 | Nominal Dec [deg] |
| roll_nom | 196.42964690404 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 36223.999865115 | Sum of GTIs [s] |
| livetime | 35765.309767349 | Livetime [s] |
| ontime2 | 36217.517864645 | Sum of GTIs [s] |
| ontime3 | 36223.999865115 | Sum of GTIs [s] |
| ontime5 | 36223.999865115 | Sum of GTIs [s] |
| ontime6 | 36214.276953876 | Sum of GTIs [s] |
| ontime7 | 36223.999865115 | Sum of GTIs [s] |
| ontime8 | 36220.758874774 | Sum of GTIs [s] |
| l2events | 384479 | Number of level 2 events |



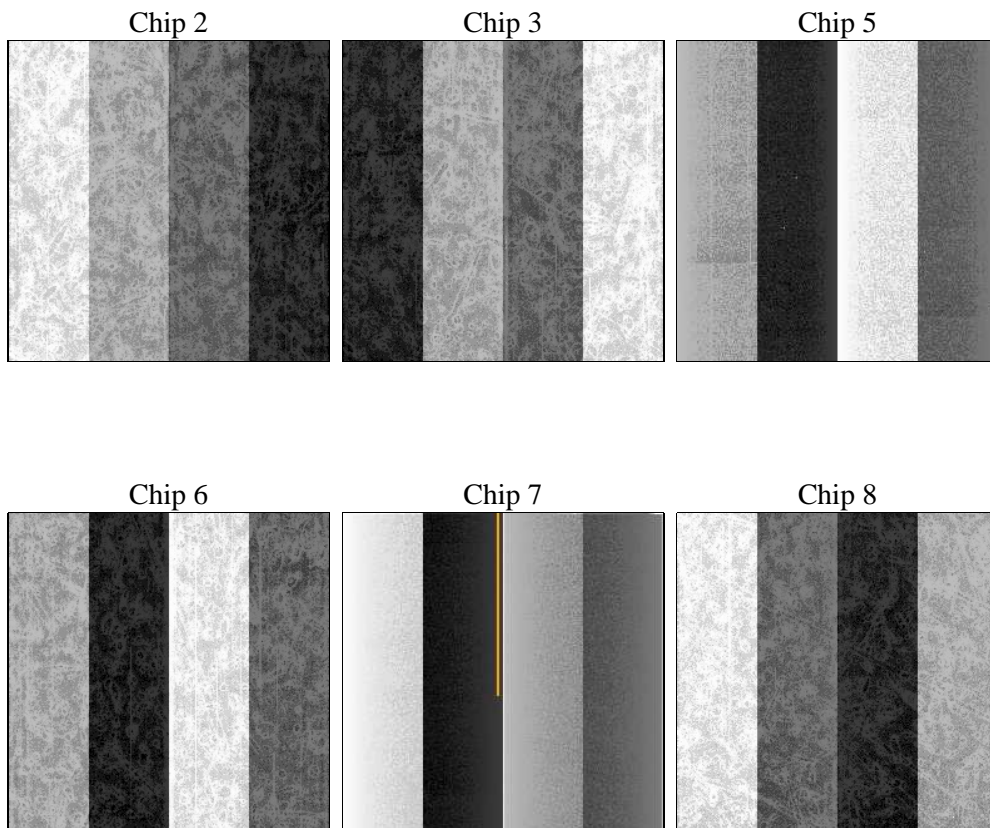
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 36185.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 36223.999865115 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime2 | 36217.517864645 | Sum of GTIs [s] |
| date | 2012-05-14T23:53:56 | Date and time of file creation | ontime3 | 36223.999865115 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 36223.999865115 | Sum of GTIs [s] |
| | | | ontime6 | 36214.276953876 | Sum of GTIs [s] |
| | | | ontime7 | 36223.999865115 | Sum of GTIs [s] |
| | | | ontime8 | 36220.758874774 | Sum of GTIs [s] |
| | | | l1events | 1757288 | Number of level 1 events |

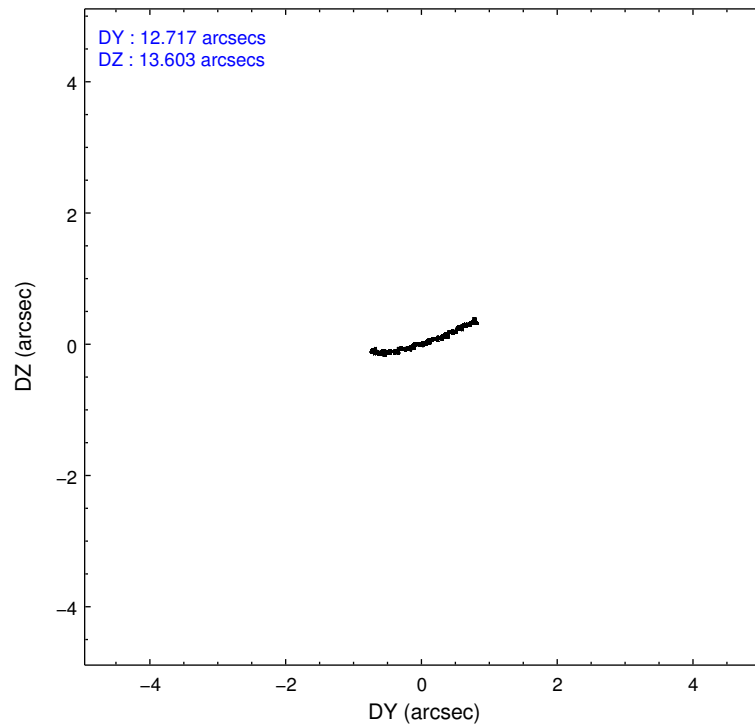
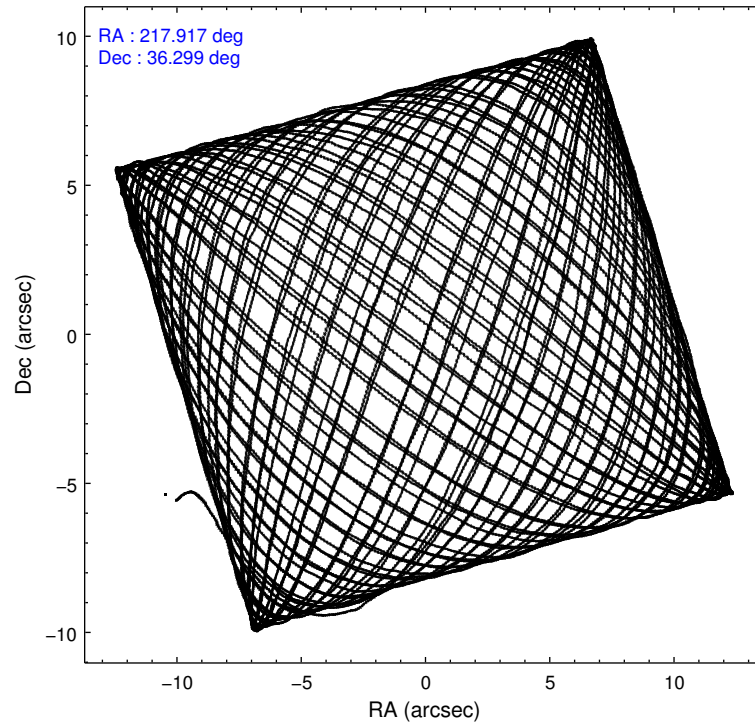
2.1.4 Events

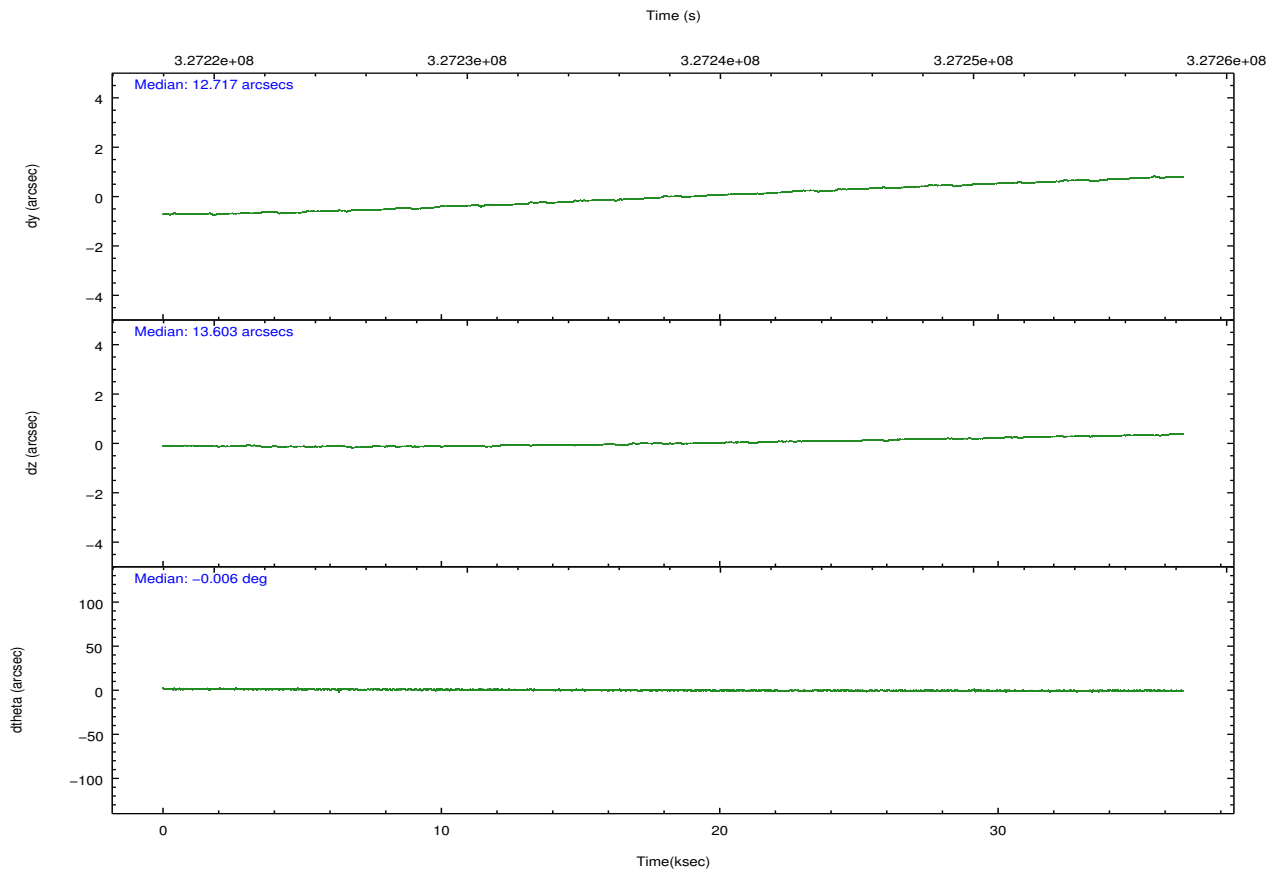
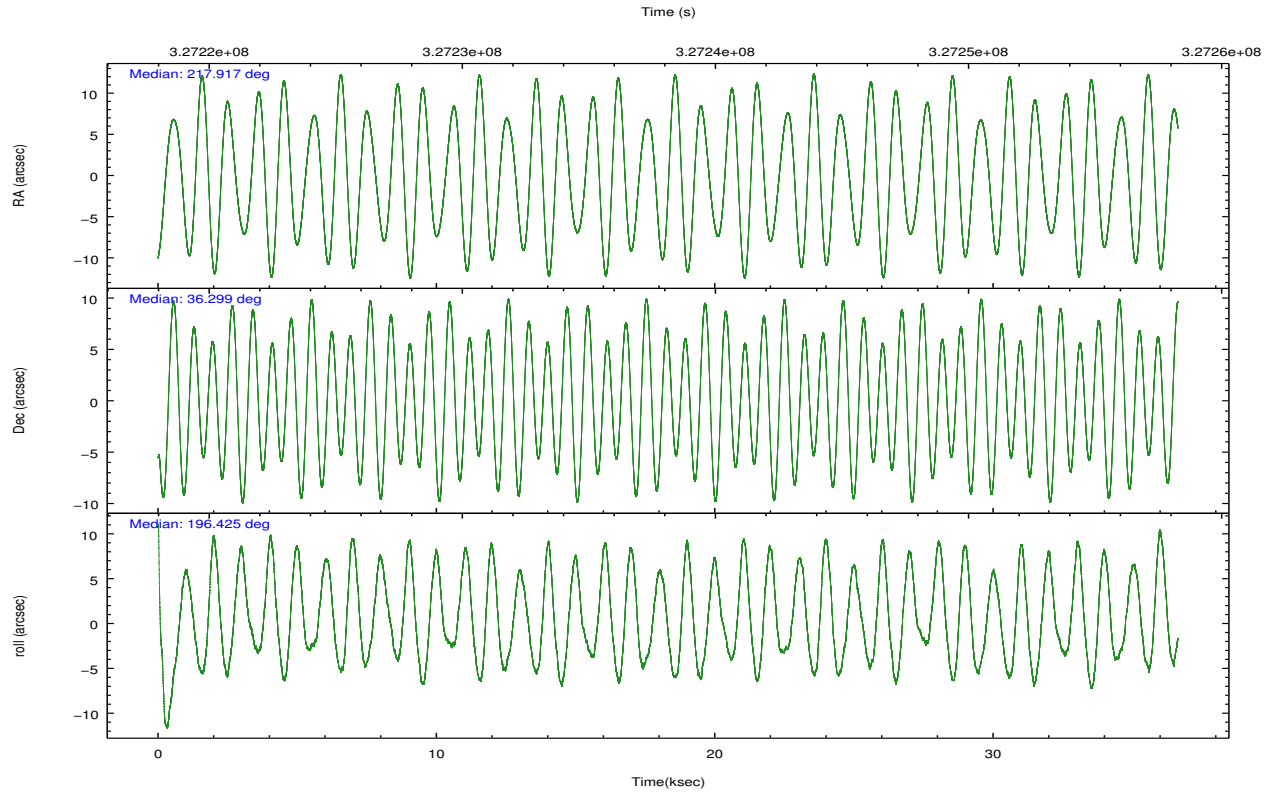
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 293979 | 263286 | 334994 | 270878 | 260344 | 333807 | grade 0 events | 10128 | 8813 | 12449 | 9911 | 13075 | 24053 |
| rejected events | 267230 | 238637 | 162064 | 243535 | 132702 | 248837 | | 3% | 3% | 3% | 3% | 5% | 7% |
| rejected % | 90% | 90% | 48% | 89% | 50% | 74% | grade 1 events | 164 | 139 | 765 | 133 | 410 | 287 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 6485 | 5442 | 54178 | 6026 | 27243 | 19839 |
| | | | | | | | | 2% | 2% | 16% | 2% | 10% | 5% |
| | | | | | | | grade 3 events | 2745 | 2945 | 7694 | 3046 | 12013 | 9457 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 4 events | 2790 | 2757 | 7223 | 2813 | 11835 | 8745 |
| | | | | | | | | 0% | 1% | 2% | 1% | 4% | 2% |
| | | | | | | | grade 5 events | 7748 | 9210 | 27667 | 9343 | 28213 | 14152 |
| | | | | | | | | 2% | 3% | 8% | 3% | 10% | 4% |
| | | | | | | | grade 6 events | 4604 | 4700 | 91410 | 5548 | 63497 | 22885 |
| | | | | | | | | 1% | 1% | 27% | 2% | 24% | 6% |
| | | | | | | | grade 7 events | 259315 | 229280 | 133608 | 234058 | 104058 | 234389 |
| | | | | | | | | 88% | 87% | 39% | 86% | 39% | 70% |

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 | VFAINT | VFAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 217.939749 | 217.9166950671912 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | 36.318651 | 36.2985767770397 | CCD I3 on | O3 | Y |
| [deg] Pointing Roll | 196.259368 | 196.4296469040391 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | O2 | Y |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | O5 | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | CCD S4 on | O4 | Y |
| [s] Observation start time (MET) | 327220264.184000 | 327219124.98331 | CCD S5 on | N | N |
| Observation start date | 2008-05-15T06:29:59 | 2008-05-15T06:12:04 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 327256449.184000 | 327257004.88516 | On-chip summing requested | N | N |
| Observation end date | 2008-05-15T16:33:04 | 2008-05-15T16:43:24 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.2 |

2.3 Aspect



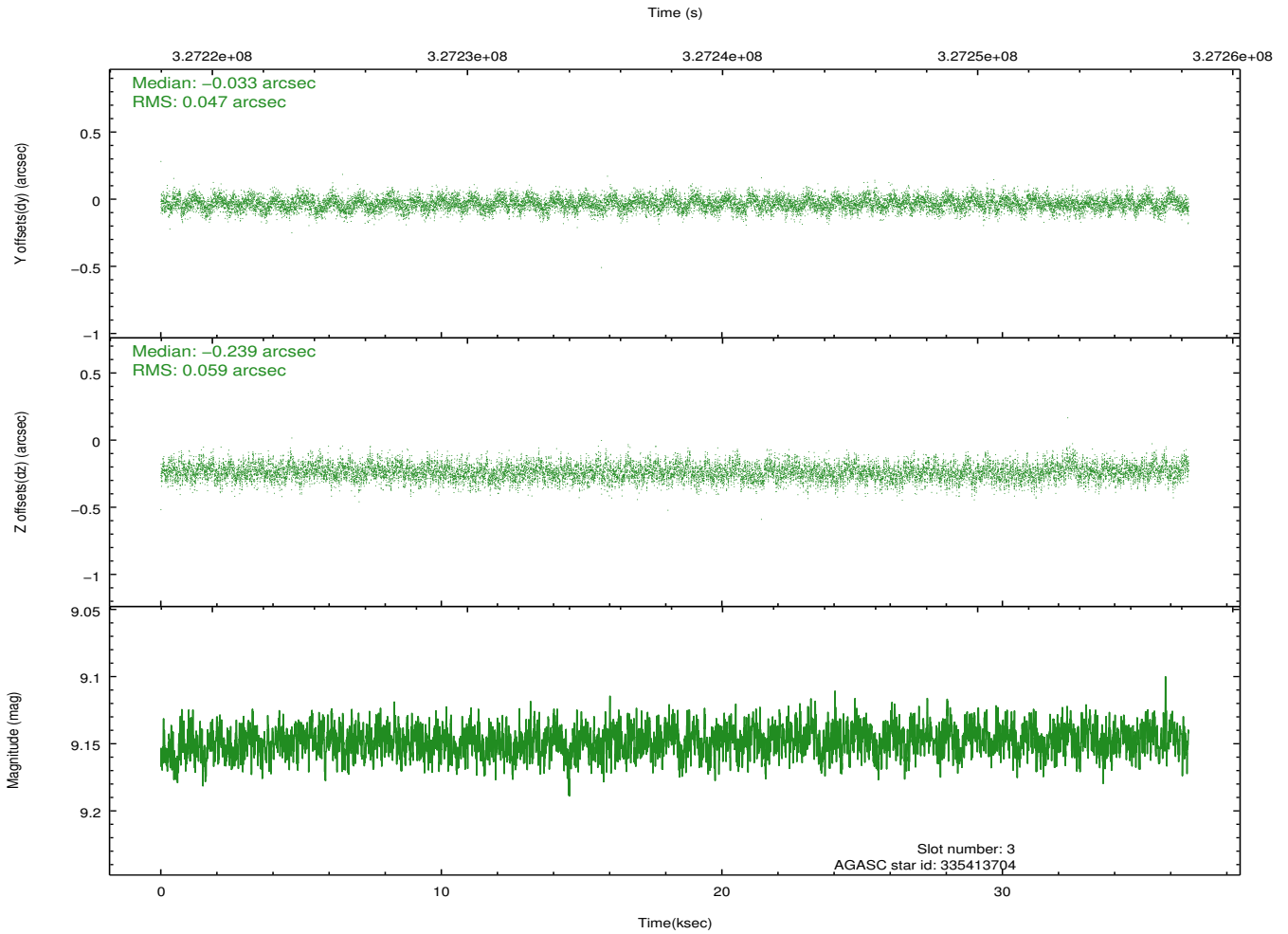
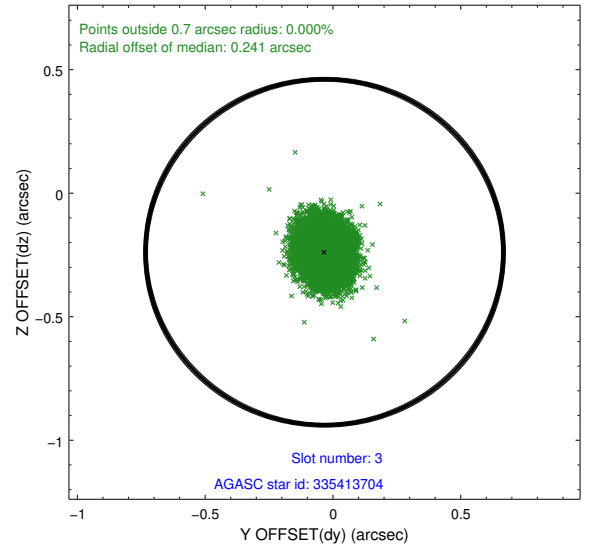
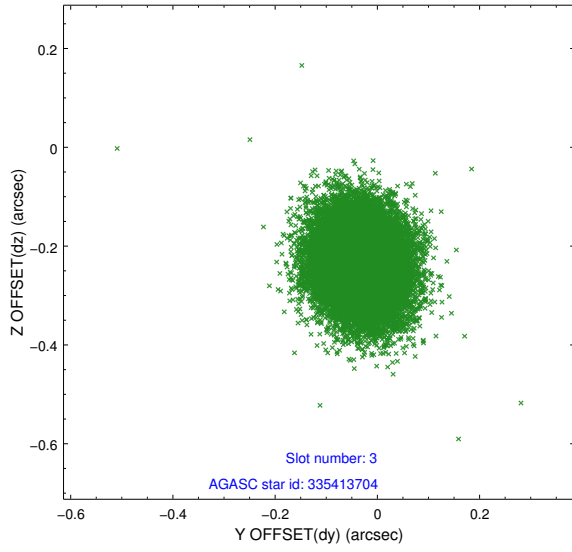


Slot Statistics

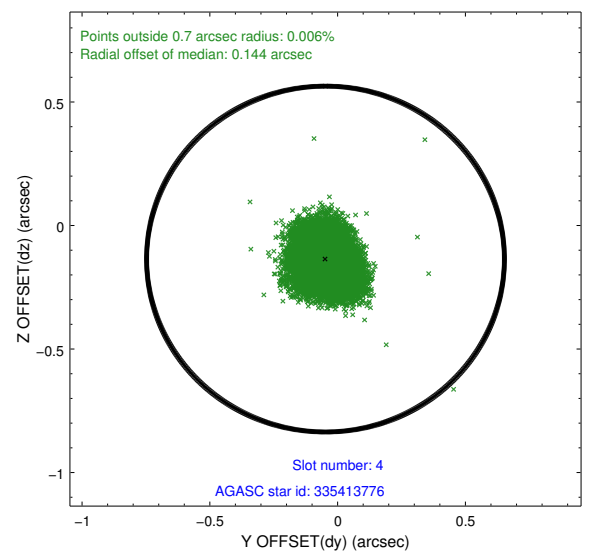
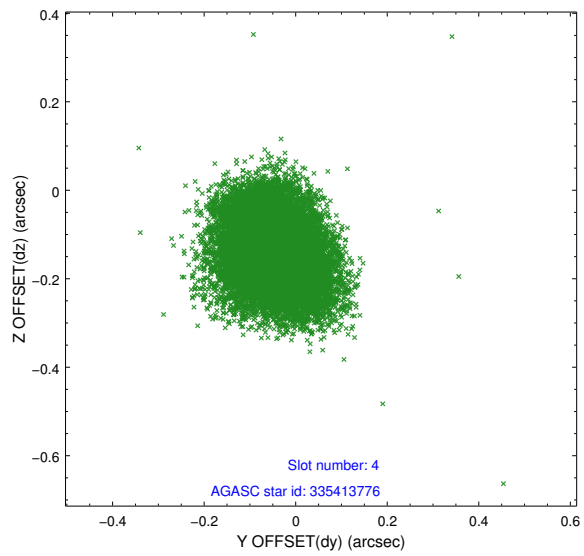
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 6.99 | 8936 | 0.077 | -0.028 | 0.008 | 0.026 | 0.000000 | 0.000000 | 930.51 | -1730.63 |
| 1 | FID | ACIS-S-5 | 7.02 | 8936 | -0.107 | 0.064 | 0.018 | 0.026 | 0.000000 | 0.000000 | -1818.66 | 166.96 |
| 2 | FID | ACIS-S-6 | 7.12 | 8935 | 0.006 | -0.024 | 0.017 | 0.033 | 0.000000 | 0.000000 | 395.95 | 810.88 |
| 3 | GUIDE | 335413704 | 9.15 | 17851 | -0.033 | -0.239 | 0.080 | 0.132 | 217.443182 | 36.847921 | 839.31 | -2233.17 |
| 4 | GUIDE | 335413776 | 8.91 | 17789 | -0.047 | -0.136 | 0.096 | 0.154 | 218.421411 | 36.051962 | -1077.47 | 1310.54 |
| 5 | GUIDE | 335421608 | 9.17 | 17862 | 0.137 | 0.018 | 0.088 | 0.141 | 217.691874 | 36.359353 | 649.45 | -342.69 |
| 6 | GUIDE | 335421696 | 8.95 | 17858 | -0.216 | -0.051 | 0.089 | 0.143 | 218.045699 | 35.772449 | 253.09 | 1974.80 |
| 7 | GUIDE | 335422624 | 6.56 | 17866 | 0.157 | 0.405 | 0.059 | 0.094 | 218.334455 | 36.959020 | -1735.54 | -1896.88 |

2.4 Star Slots

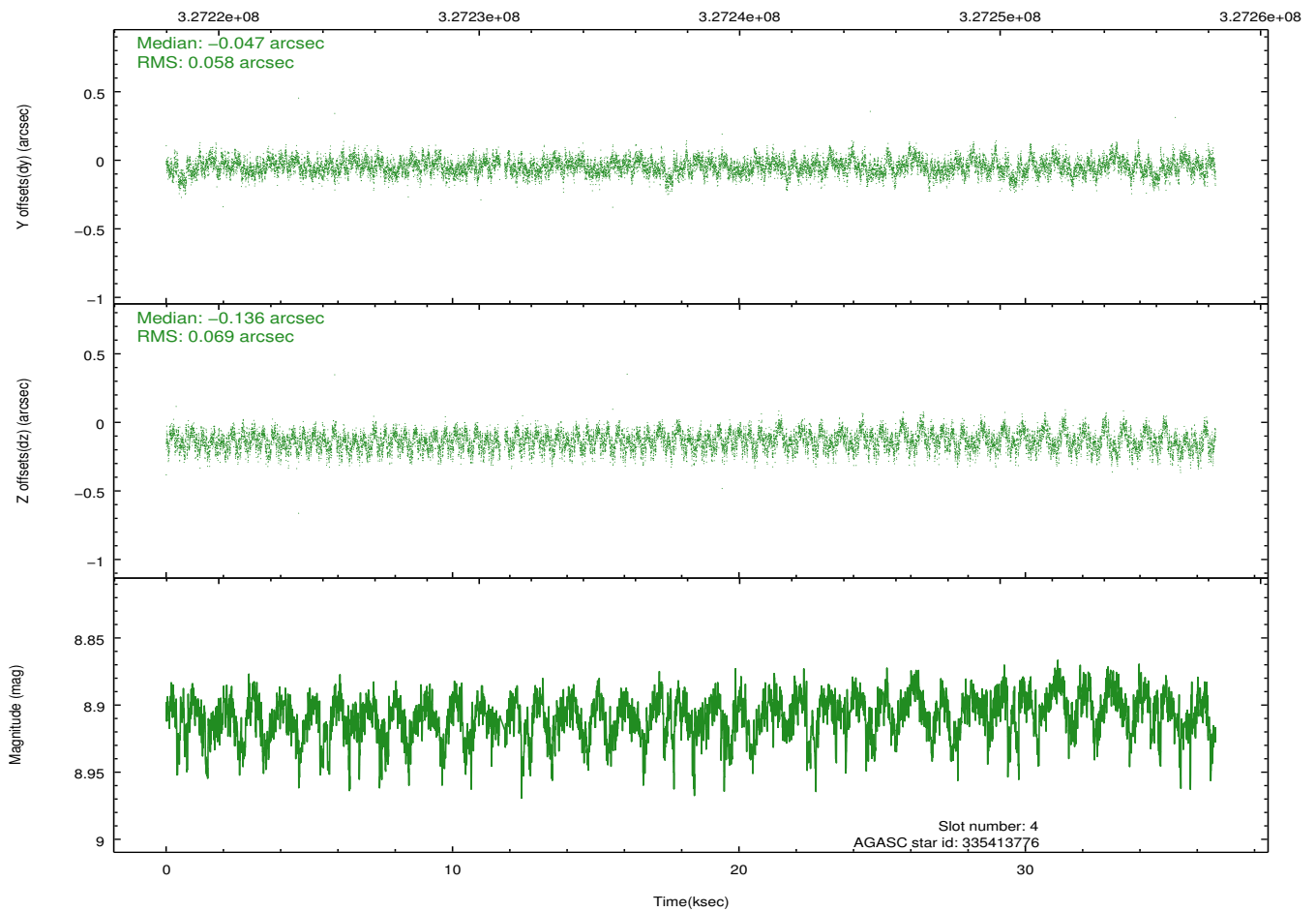
2.4.1 Slot 3



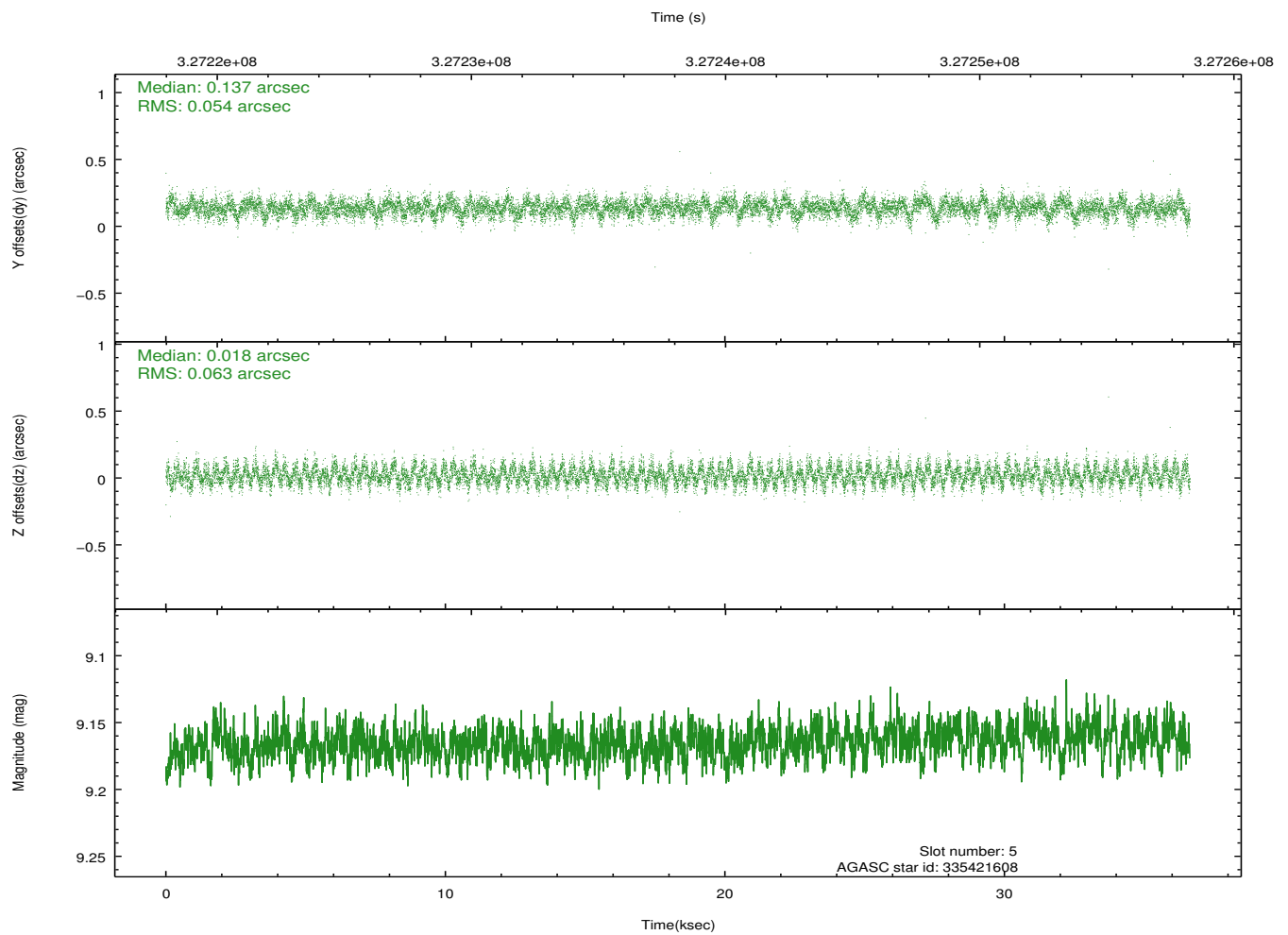
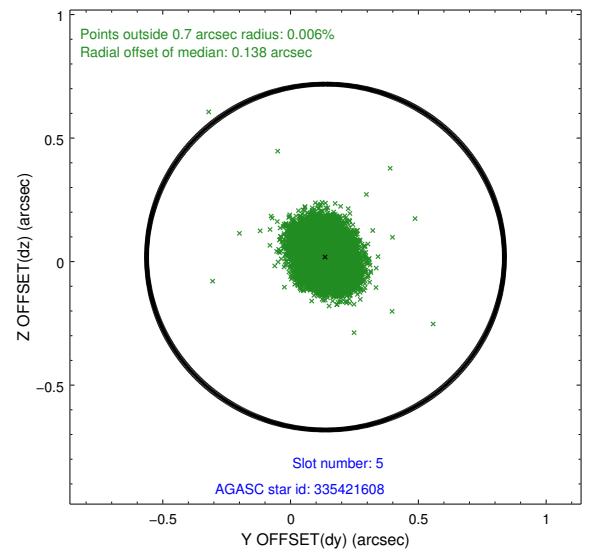
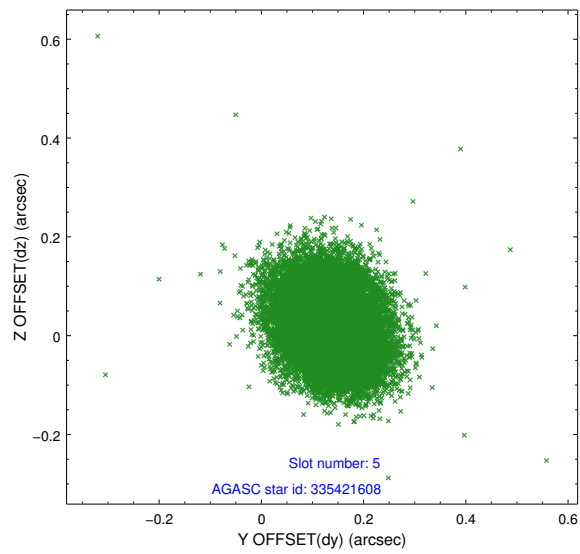
2.4.2 Slot 4



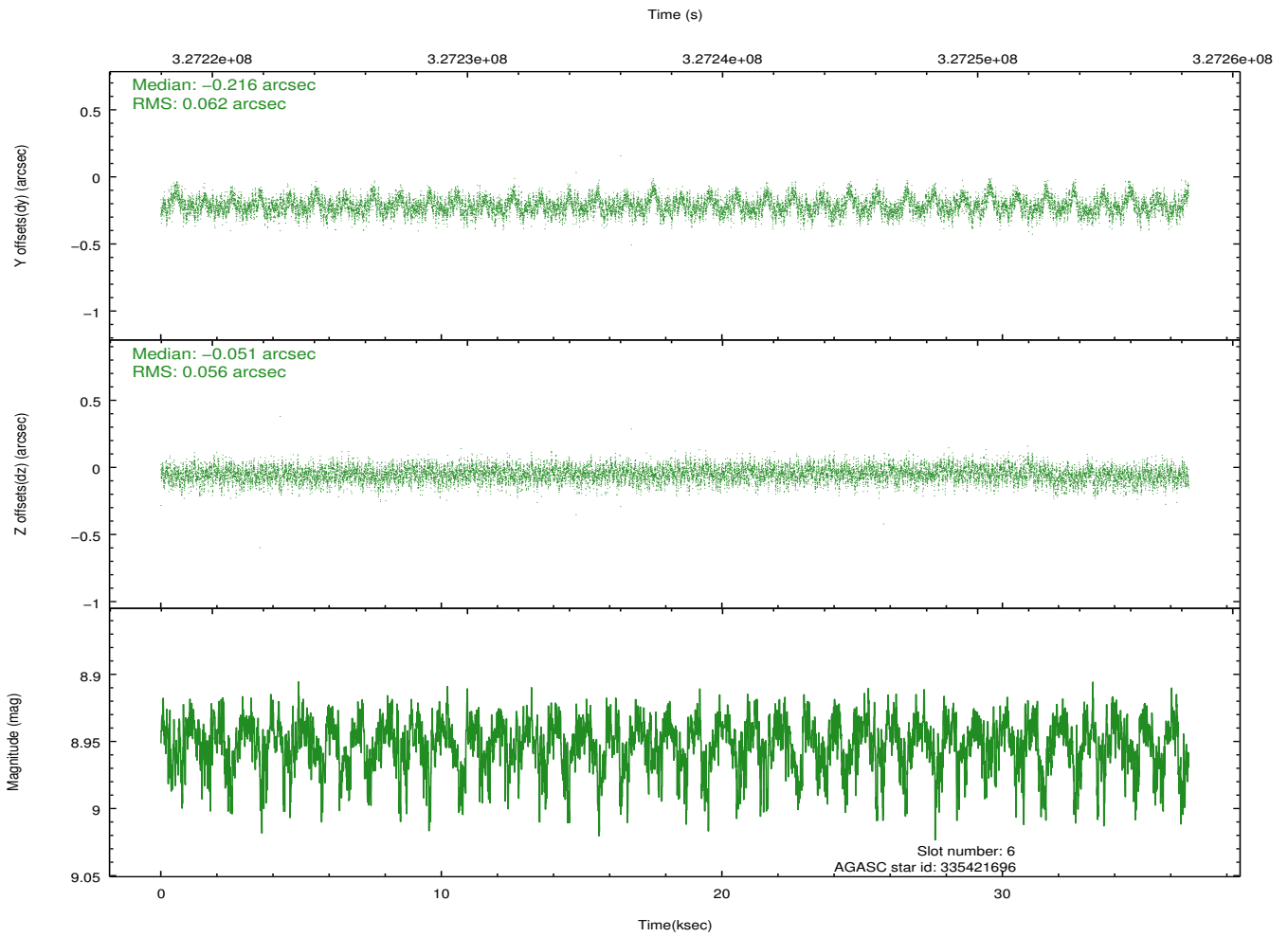
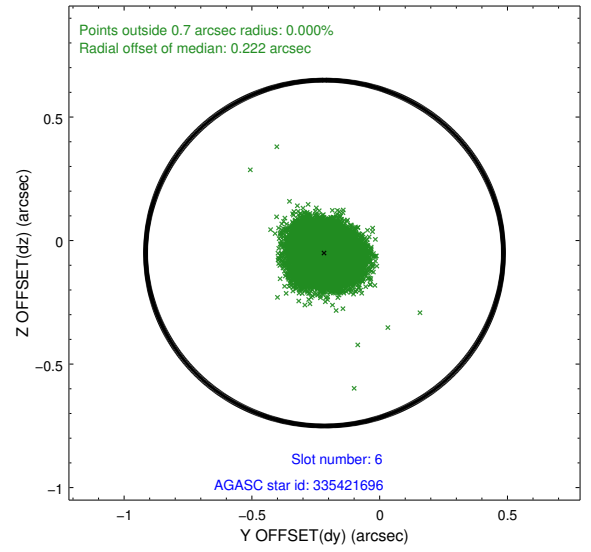
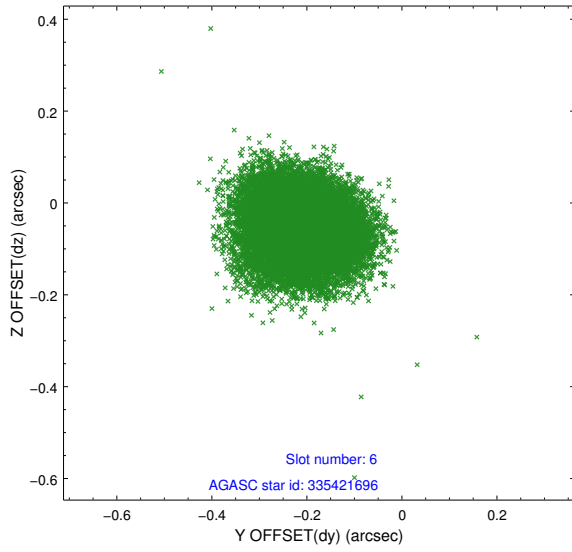
Time (s)



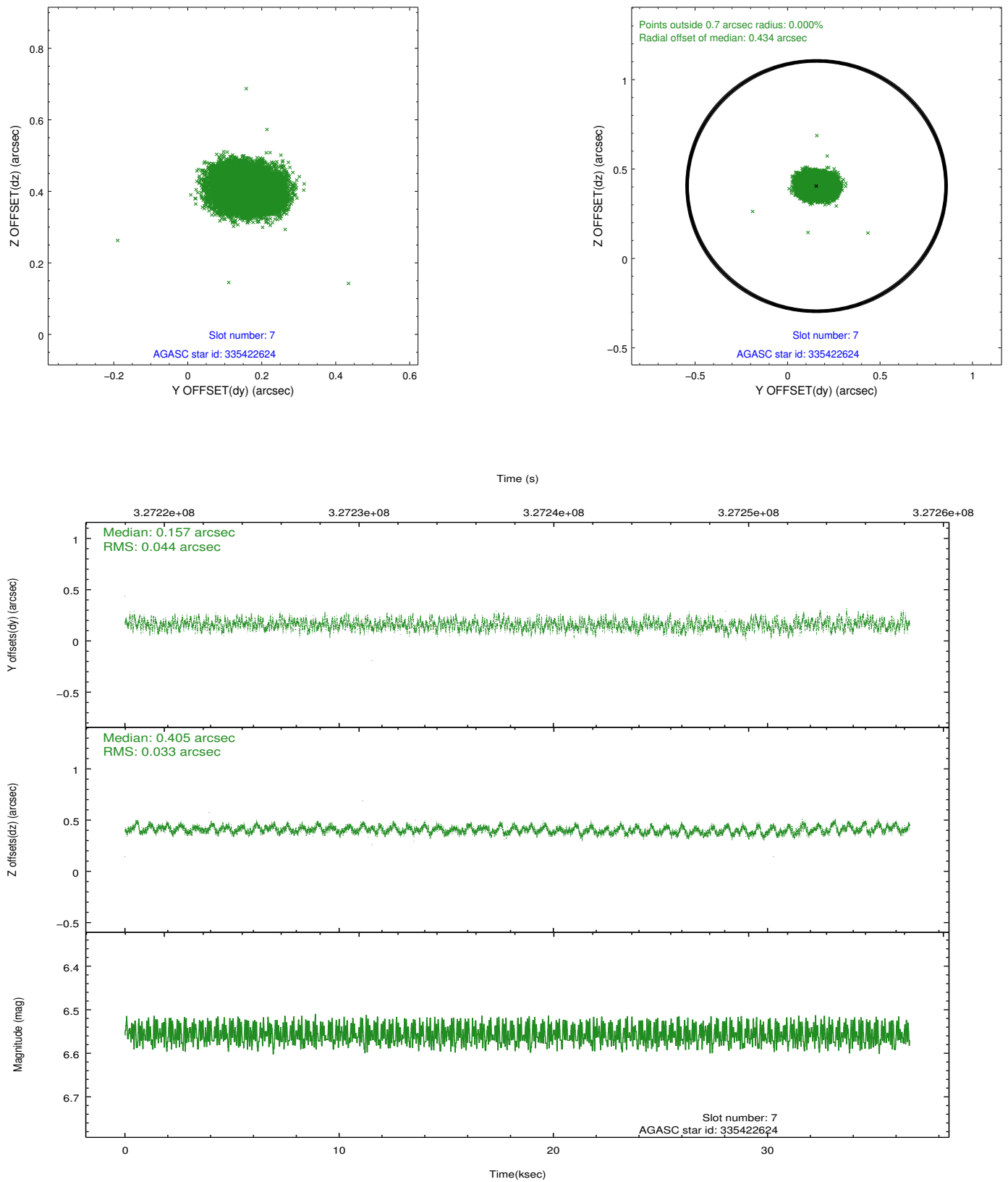
2.4.3 Slot 5



2.4.4 Slot 6

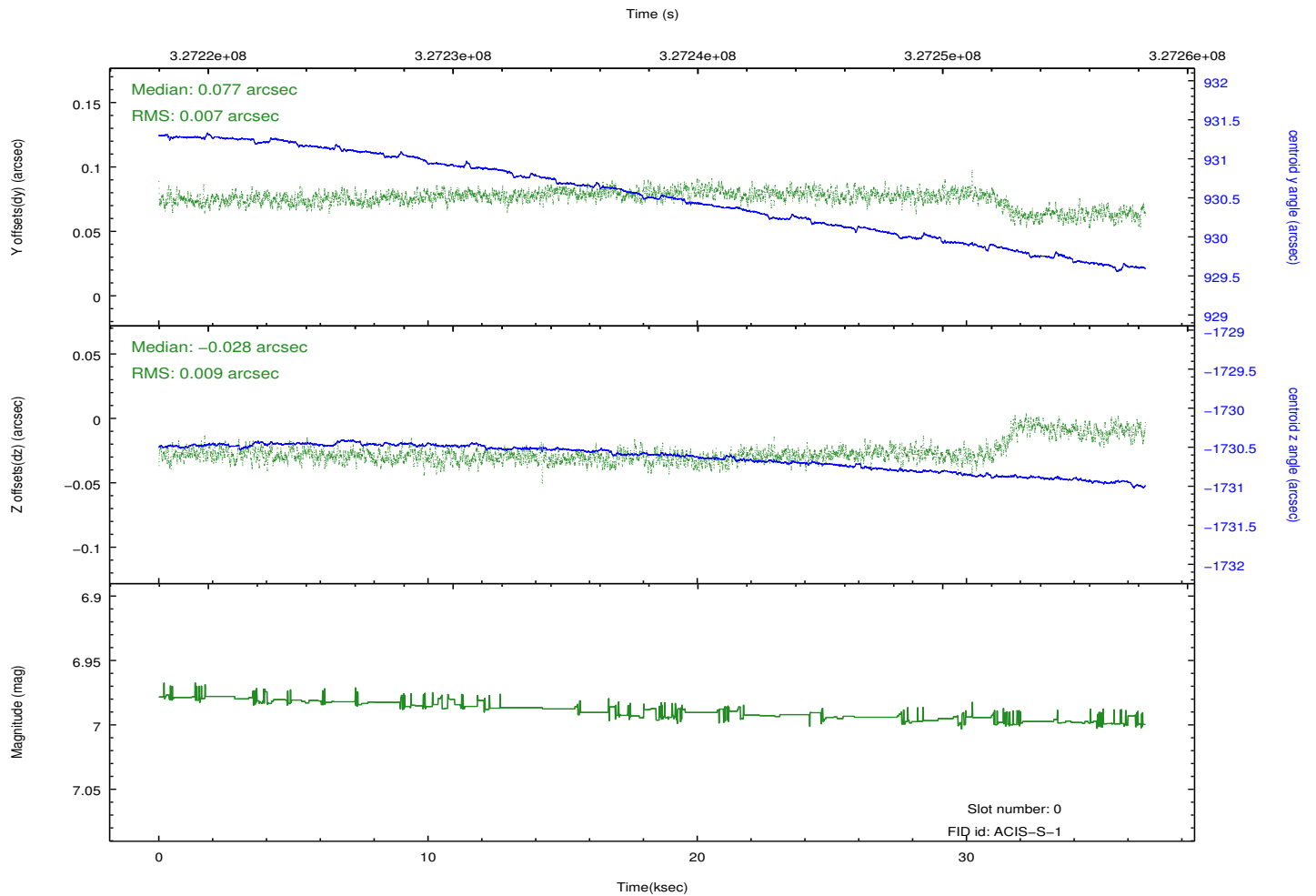
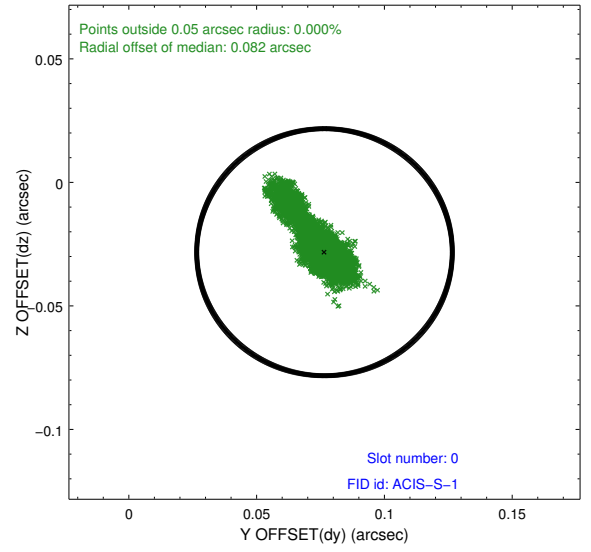
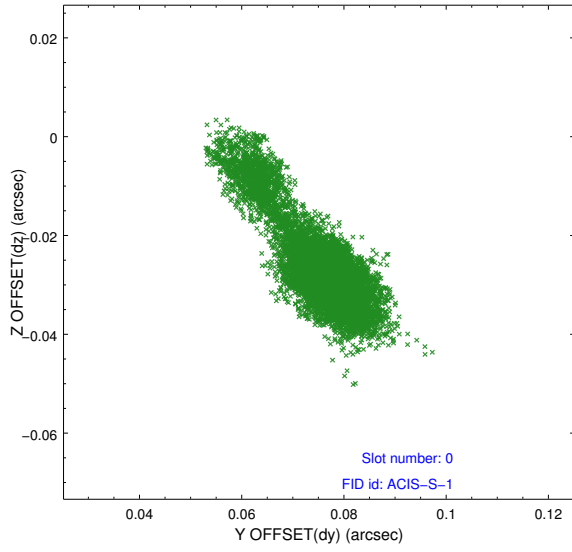


2.4.5 Slot 7

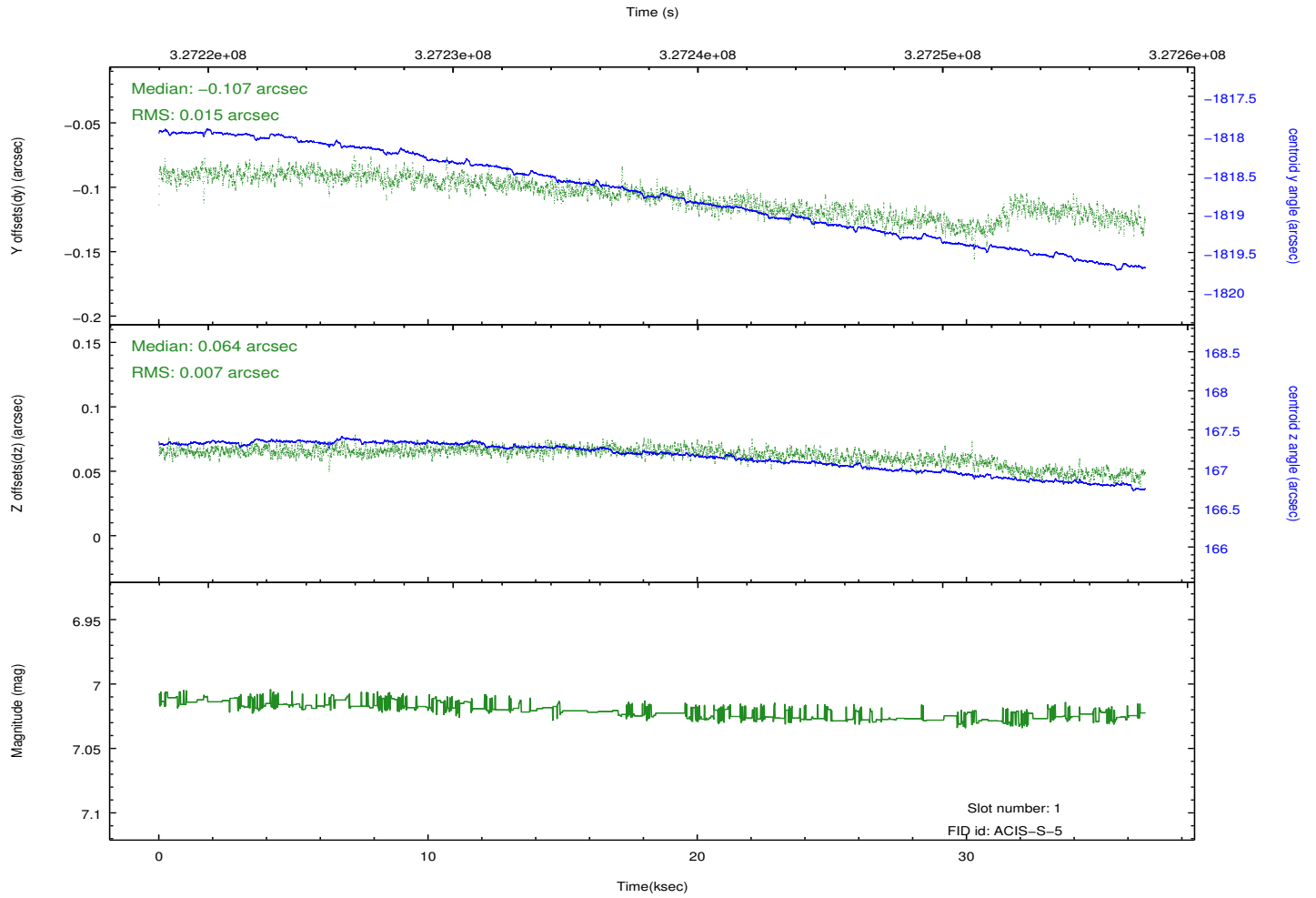
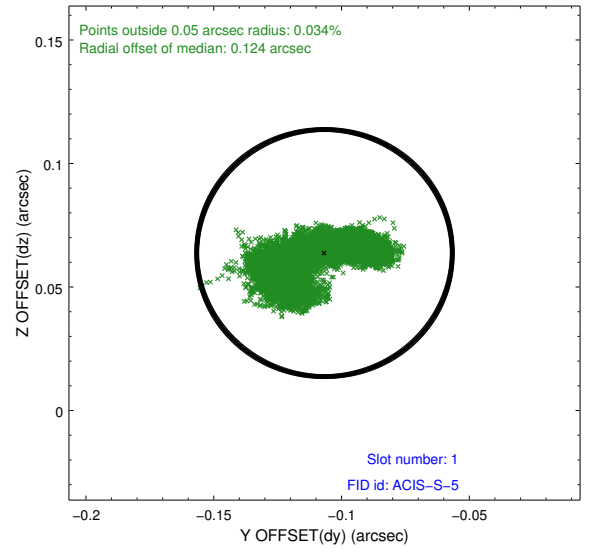
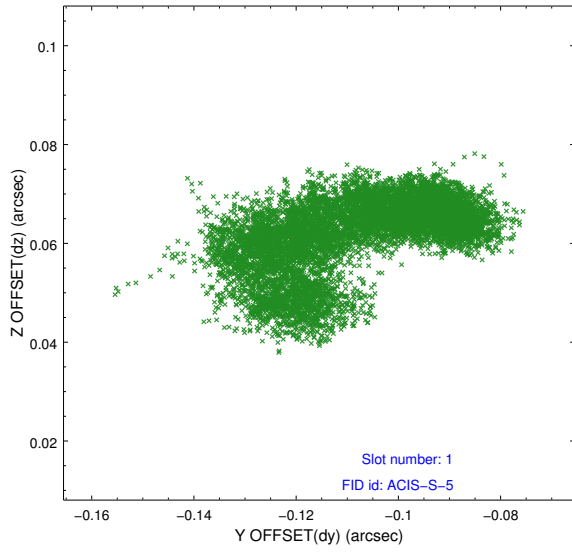


2.5 FID Slots

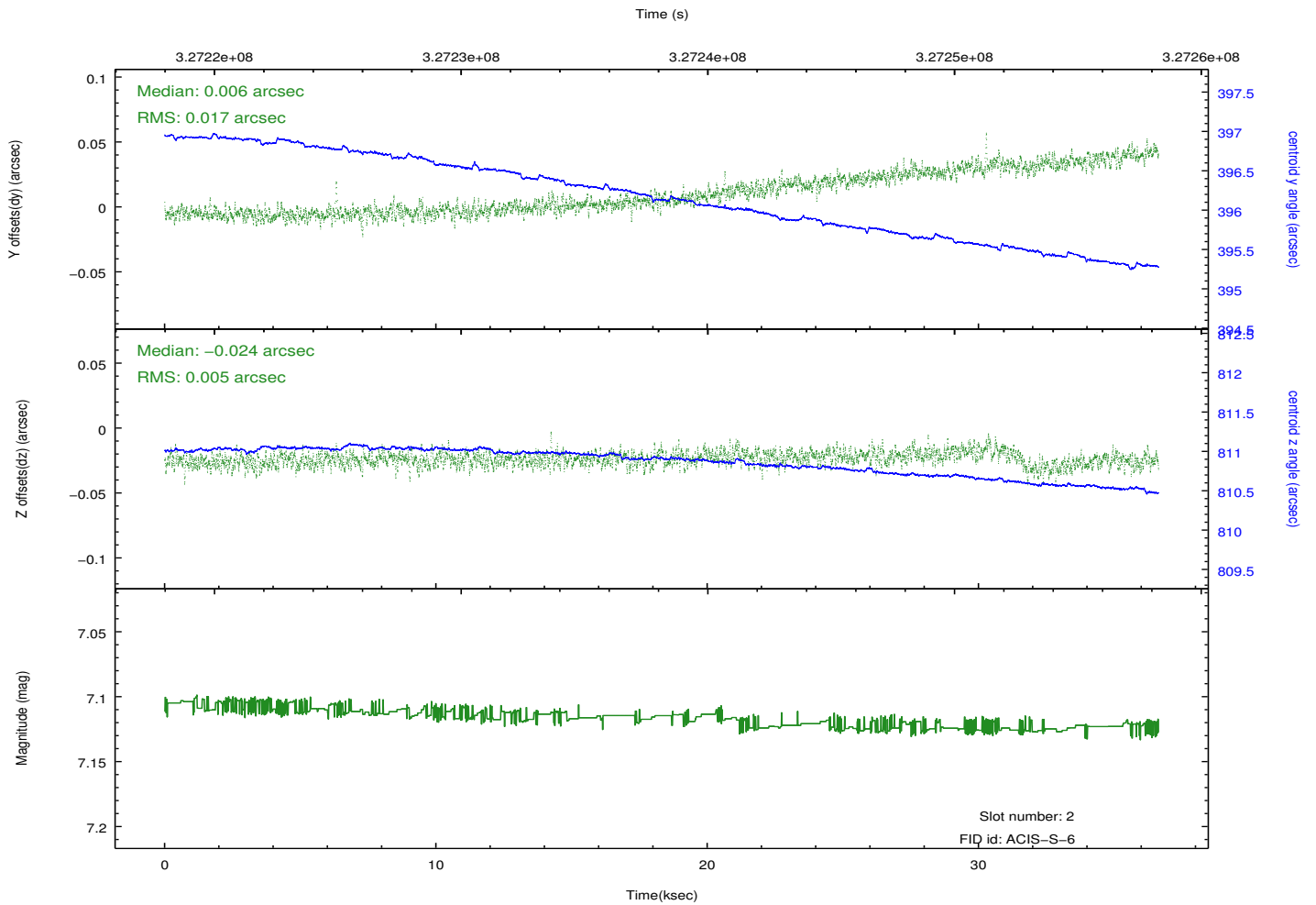
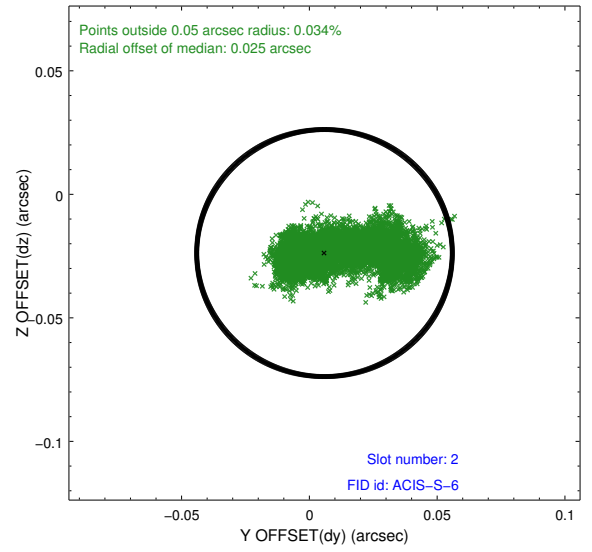
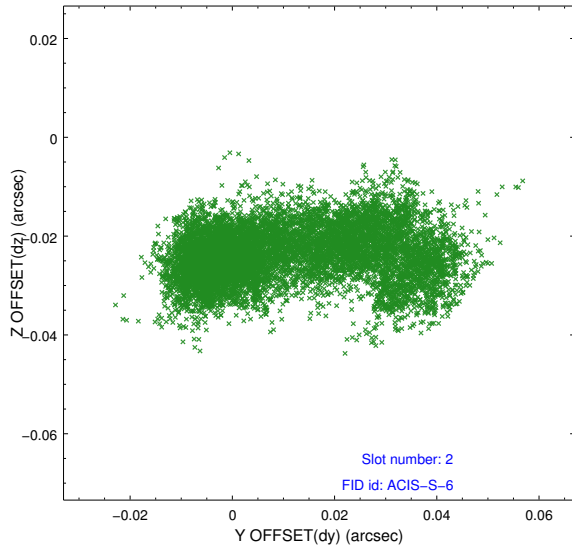
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.05.21 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 36.2239998 |

A.2 Comments

Monitor constraint met.