

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5922 - L2 Version 3
Chandra X-Ray Center

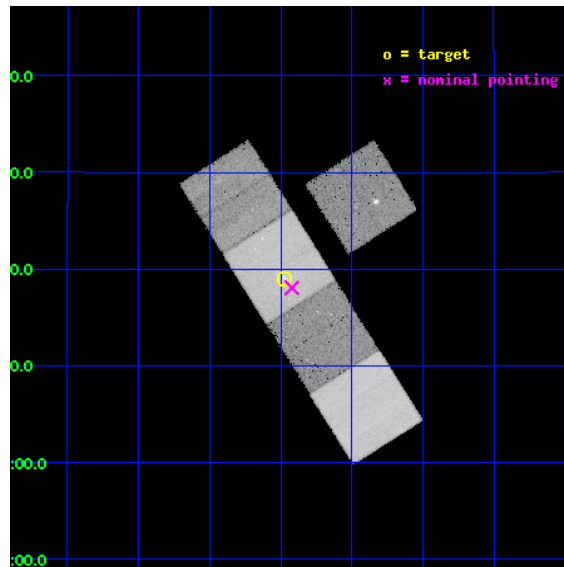
L2 Processing Date : Dec 23 2012

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1 Front

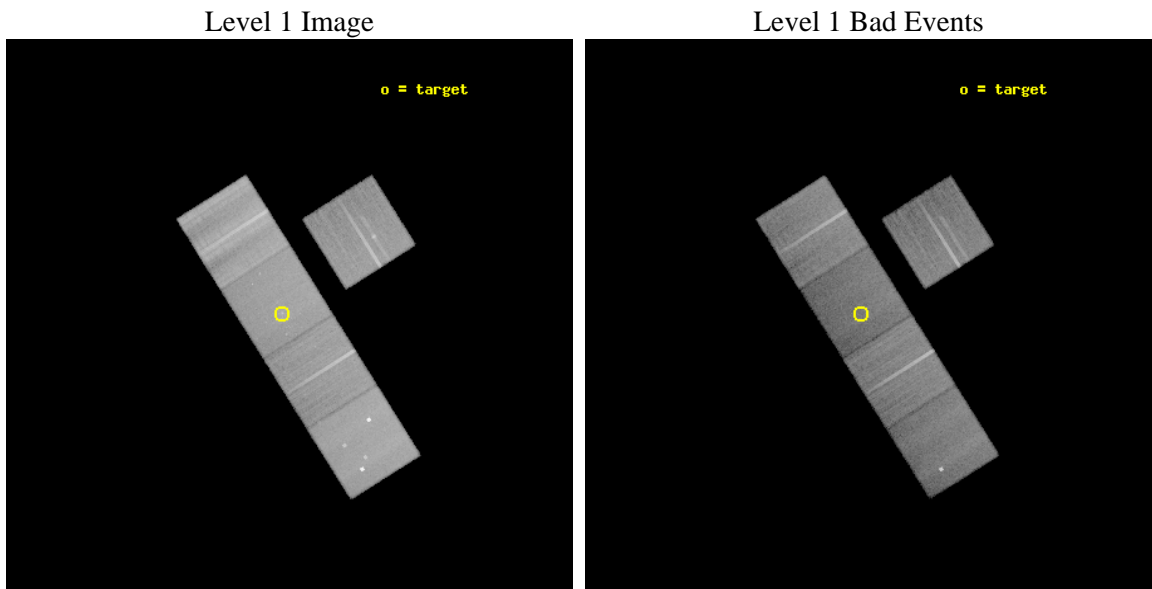
| | | |
|----------|---|---|
| seq_num | 600441 | Sequence number |
| obs_id | 5922 | Observation id |
| title | Low Mass X-ray Binaries and Globular Clusters in the Early-Type Galaxy NGC 4365 | Proposal title |
| observer | Prof. Gregory Sivakoff | Principal investigator |
| object | NGC4365 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 186.117917 | Observer's specified target RA [deg] |
| dec_targ | 7.317722 | Observer's specified target Dec [deg] |
| ra_nom | 186.10531654563 | Nominal RA [deg] |
| dec_nom | 7.3011295200875 | Nominal Dec [deg] |
| roll_nom | 237.78564410213 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 40036.499922991 | Sum of GTIs [s] |
| livetime | 39513.393577054 | Livetime [s] |
| ontime3 | 40033.358932763 | Sum of GTIs [s] |
| ontime5 | 40036.499922991 | Sum of GTIs [s] |
| ontime6 | 40036.499922991 | Sum of GTIs [s] |
| ontime7 | 40036.499922991 | Sum of GTIs [s] |
| ontime8 | 40030.217992365 | Sum of GTIs [s] |
| l2events | 354878 | Number of level 2 events |



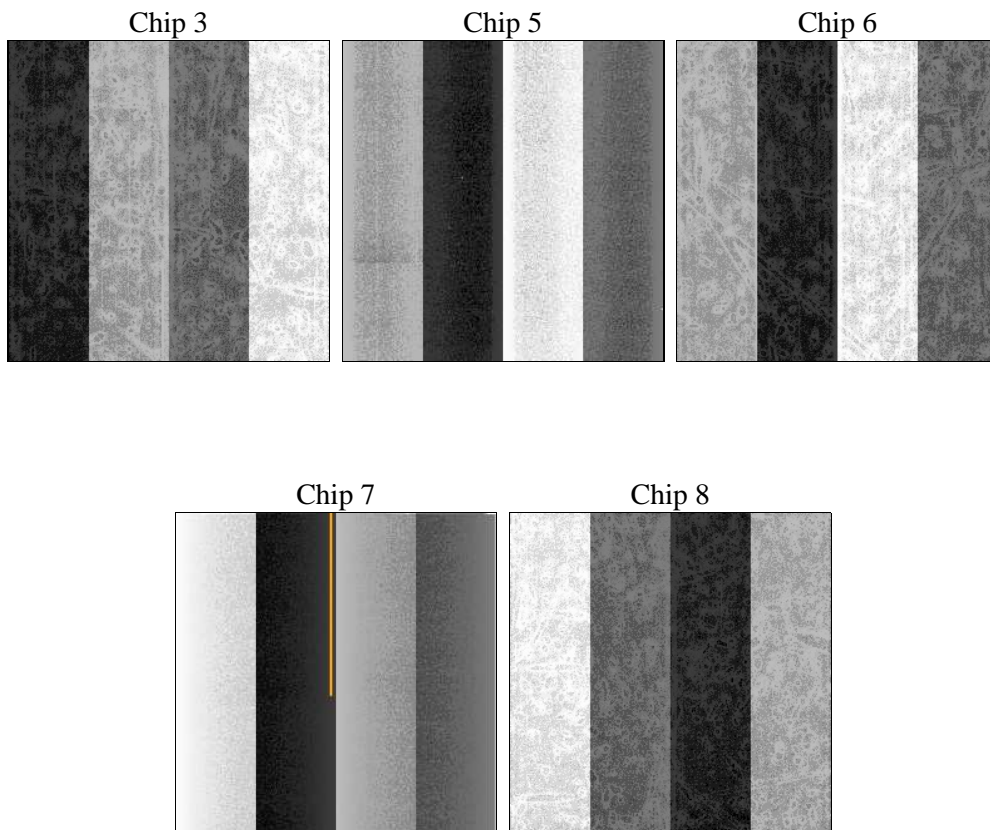
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 40000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 40036.499922991 | Sum of GTIs [s] |
| caldbver | 4.5.5 | | ontime3 | 40033.358932763 | Sum of GTIs [s] |
| date | 2012-12-23T04:43:02 | Date and time of file creation | ontime5 | 40036.499922991 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 40036.499922991 | Sum of GTIs [s] |
| | | | ontime7 | 40036.499922991 | Sum of GTIs [s] |
| | | | ontime8 | 40030.217992365 | Sum of GTIs [s] |
| | | | l1events | 1433018 | Number of level 1 events |

2.1.4 Events

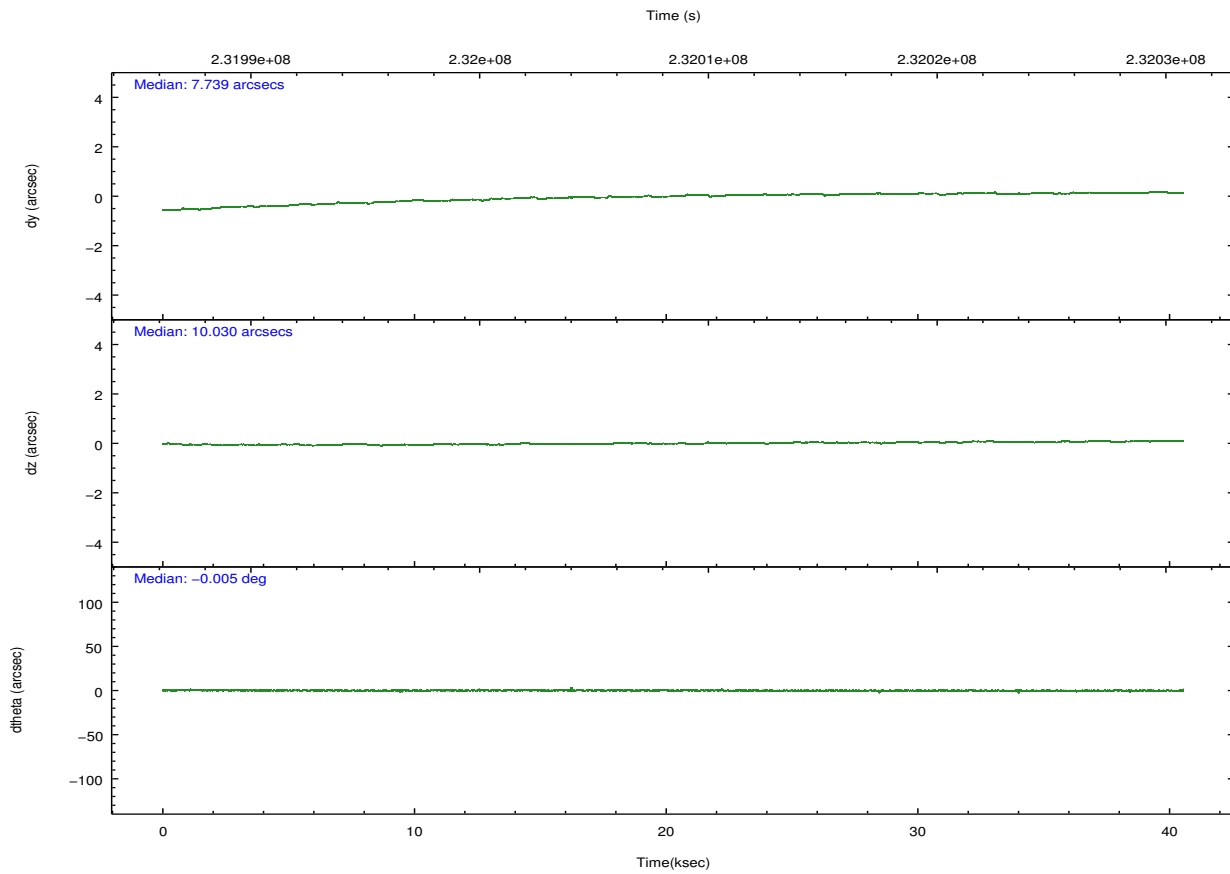
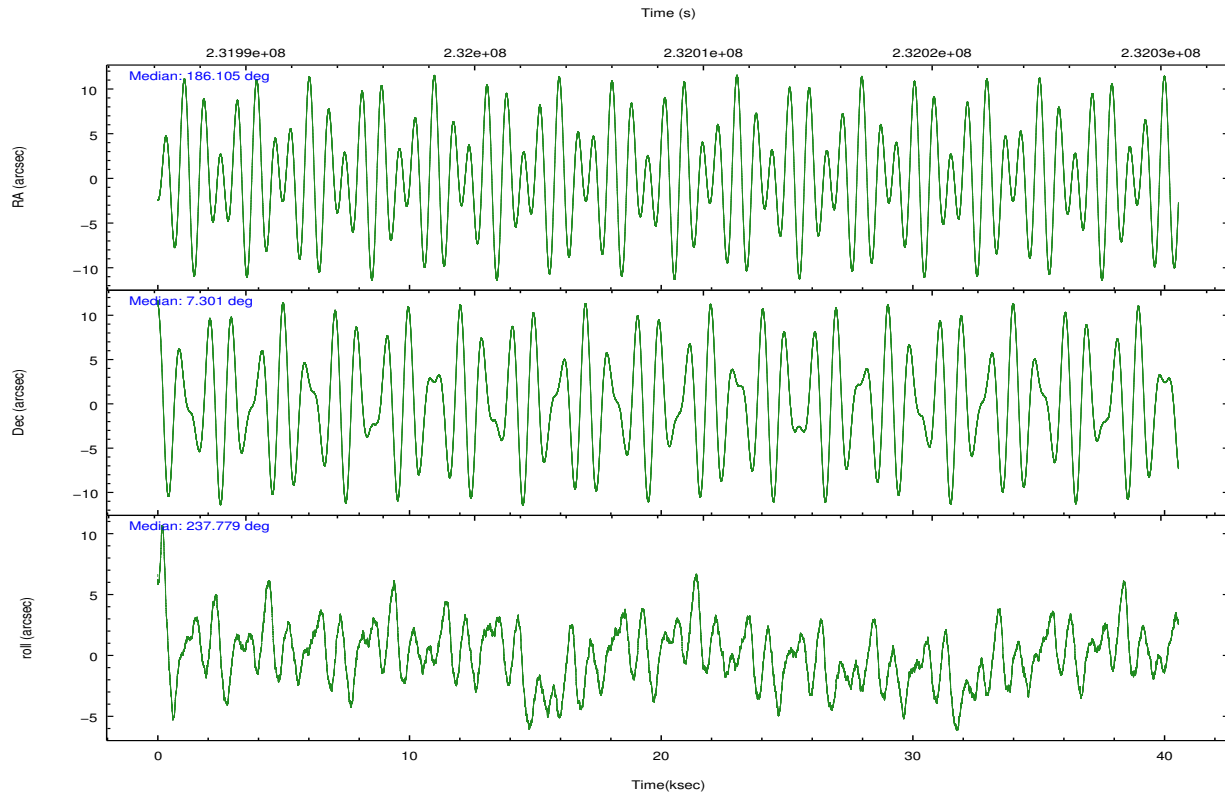
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 223776 | 338430 | 243757 | 268267 | 358788 |
| rejected events | 198738 | 165223 | 215268 | 140526 | 226062 |
| rejected % | 88% | 48% | 88% | 52% | 63% |

| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 10775 | 26197 | 12205 | 13413 | 52312 |
| | 4% | 7% | 5% | 4% | 14% |
| grade 1 events | 122 | 3554 | 120 | 275 | 487 |
| | 0% | 1% | 0% | 0% | 0% |
| grade 2 events | 4837 | 49114 | 5665 | 26414 | 18552 |
| | 2% | 14% | 2% | 9% | 5% |
| grade 3 events | 2631 | 8254 | 2720 | 12063 | 21176 |
| | 1% | 2% | 1% | 4% | 5% |
| grade 4 events | 2569 | 8018 | 2717 | 12181 | 18855 |
| | 1% | 2% | 1% | 4% | 5% |
| grade 5 events | 9042 | 25714 | 9314 | 27456 | 13453 |
| | 4% | 7% | 3% | 10% | 3% |
| grade 6 events | 4226 | 81636 | 5187 | 63681 | 21833 |
| | 1% | 24% | 2% | 23% | 6% |
| grade 7 events | 189574 | 135943 | 205829 | 112784 | 212120 |
| | 84% | 40% | 84% | 42% | 59% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-35678 | ACIS-35678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 186.106016 | 186.1053165456294 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 7.328359 | 7.301129520087548 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 237.628920 | 237.785644102134 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 231988729.184000 | 231987610.73825 | | | |
| Observation start date | 2005-05-09T01:17:45 | 2005-05-09T01:00:10 | | | |
| [s] Observation end time (MET) | 232028729.184000 | 232029829.97767 | | | |
| Observation end date | 2005-05-09T12:24:25 | 2005-05-09T12:43:49 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect

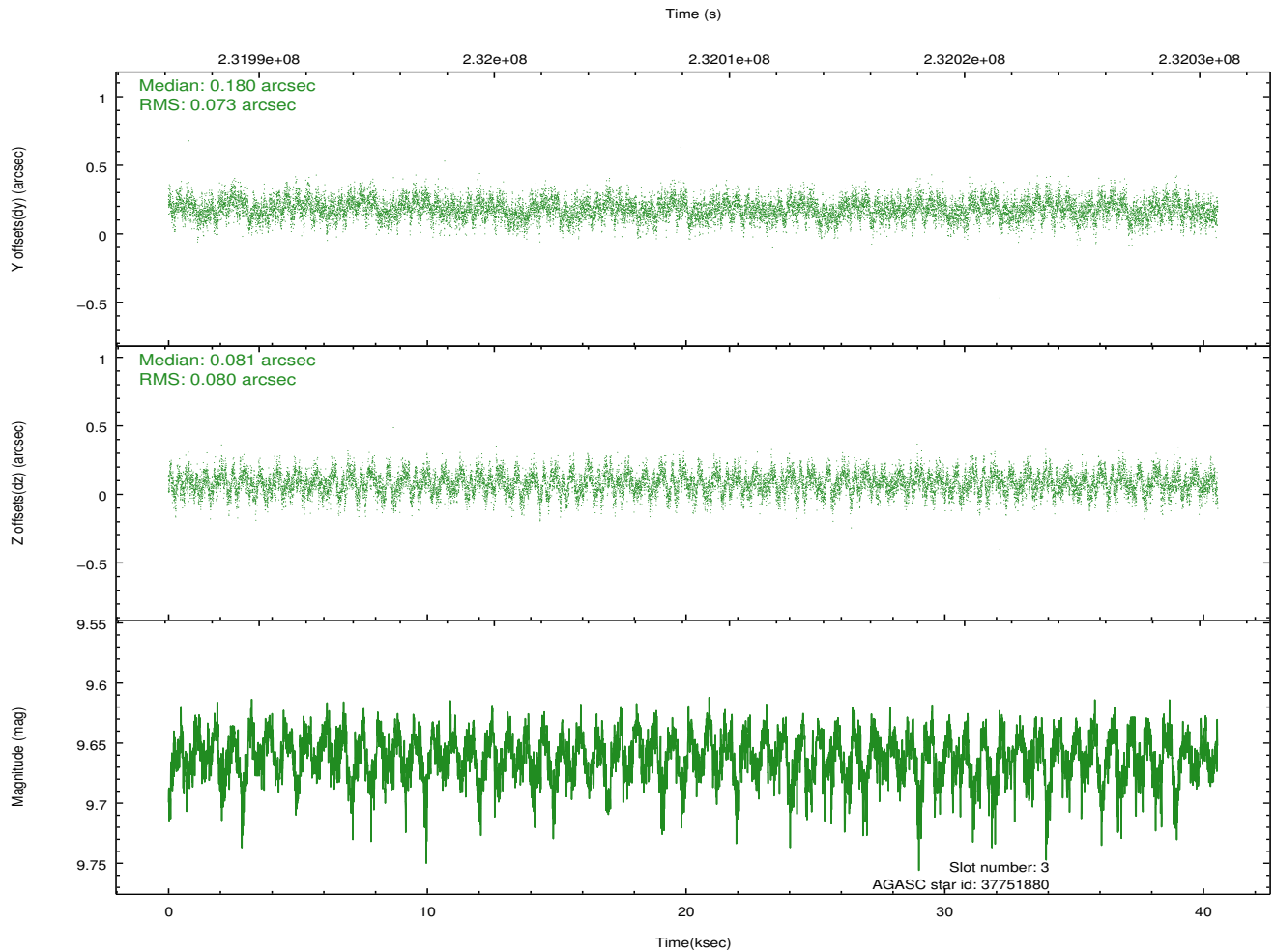
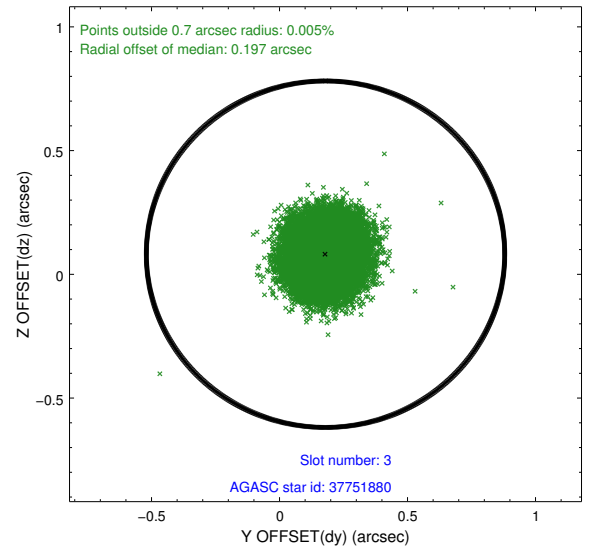
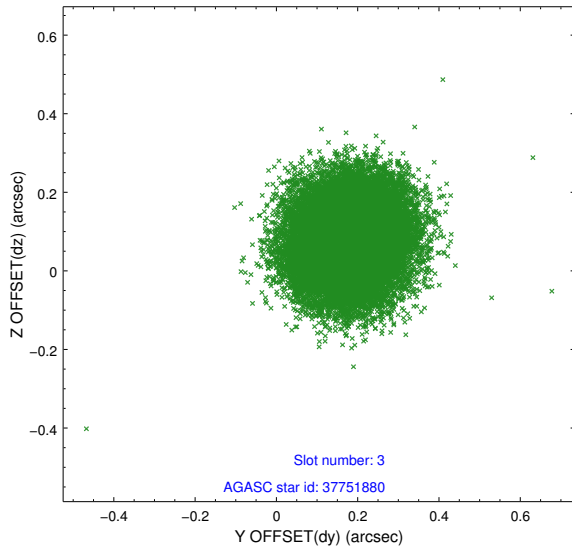


Slot Statistics

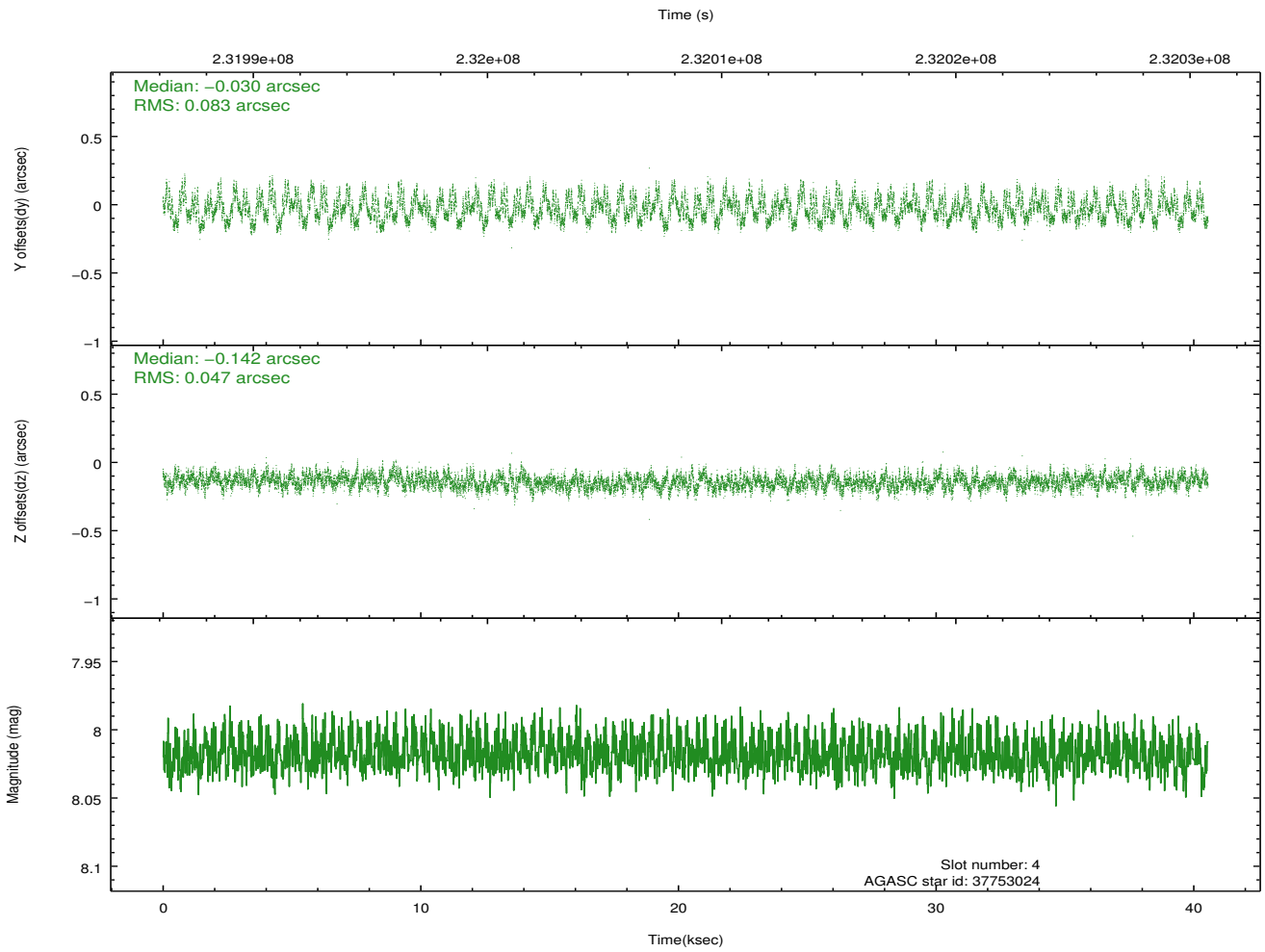
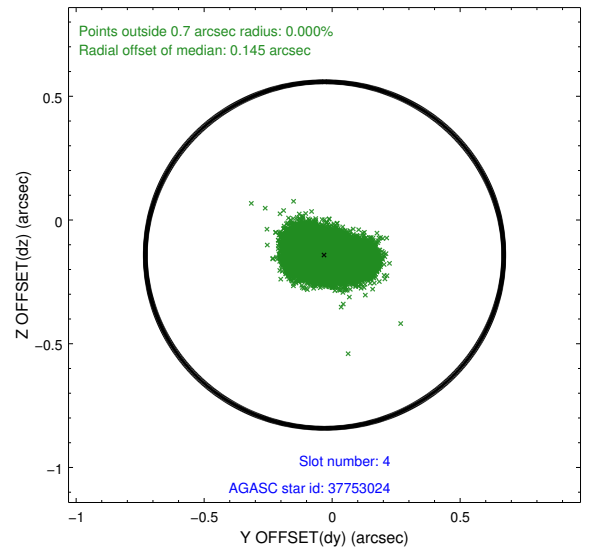
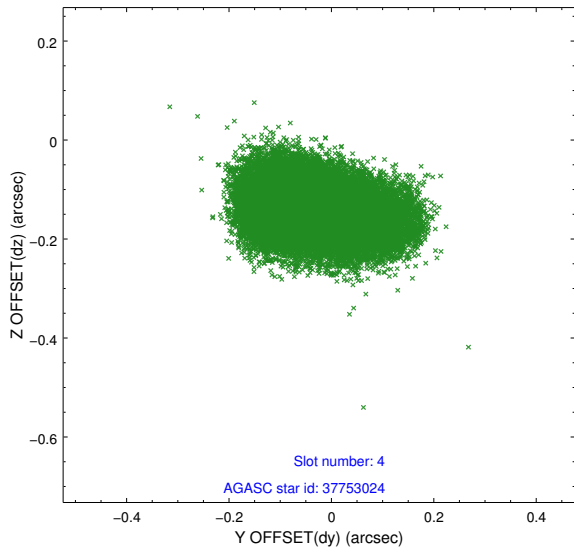
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|-------|-------|--------|--------|-------|-------|------------|----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.10 | 9893 | -0.046 | -0.025 | 0.010 | 0.018 | 0.000000 | 0.000000 | -760.45 | -1731.32 |
| 1 | FID | ACIS-S-4 | 7.21 | 9891 | 0.107 | 0.028 | 0.009 | 0.017 | 0.000000 | 0.000000 | 2152.93 | 177.27 |
| 2 | FID | ACIS-S-5 | 7.23 | 9892 | -0.092 | 0.005 | 0.009 | 0.014 | 0.000000 | 0.000000 | -1813.36 | 170.84 |
| 3 | GUIDE | 37751880 | 9.66 | 19774 | 0.180 | 0.081 | 0.117 | 0.184 | 185.771871 | 6.844190 | 2111.87 | -75.20 |
| 4 | GUIDE | 37753024 | 8.02 | 19780 | -0.030 | -0.142 | 0.103 | 0.162 | 186.830113 | 7.241612 | -1122.35 | 2349.92 |
| 5 | GUIDE | 114434008 | 8.76 | 19778 | -0.073 | -0.040 | 0.105 | 0.163 | 185.534773 | 7.569663 | 357.27 | -2187.29 |
| 6 | GUIDE | 114565080 | 10.15 | 19765 | -0.074 | 0.115 | 0.249 | 0.405 | 186.537681 | 7.759404 | -2135.42 | 469.32 |
| 7 | GUIDE | 37753088 | 10.07 | 19768 | 0.015 | -0.023 | 0.174 | 0.275 | 186.819295 | 7.254633 | -1141.36 | 2291.75 |

2.4 Star Slots

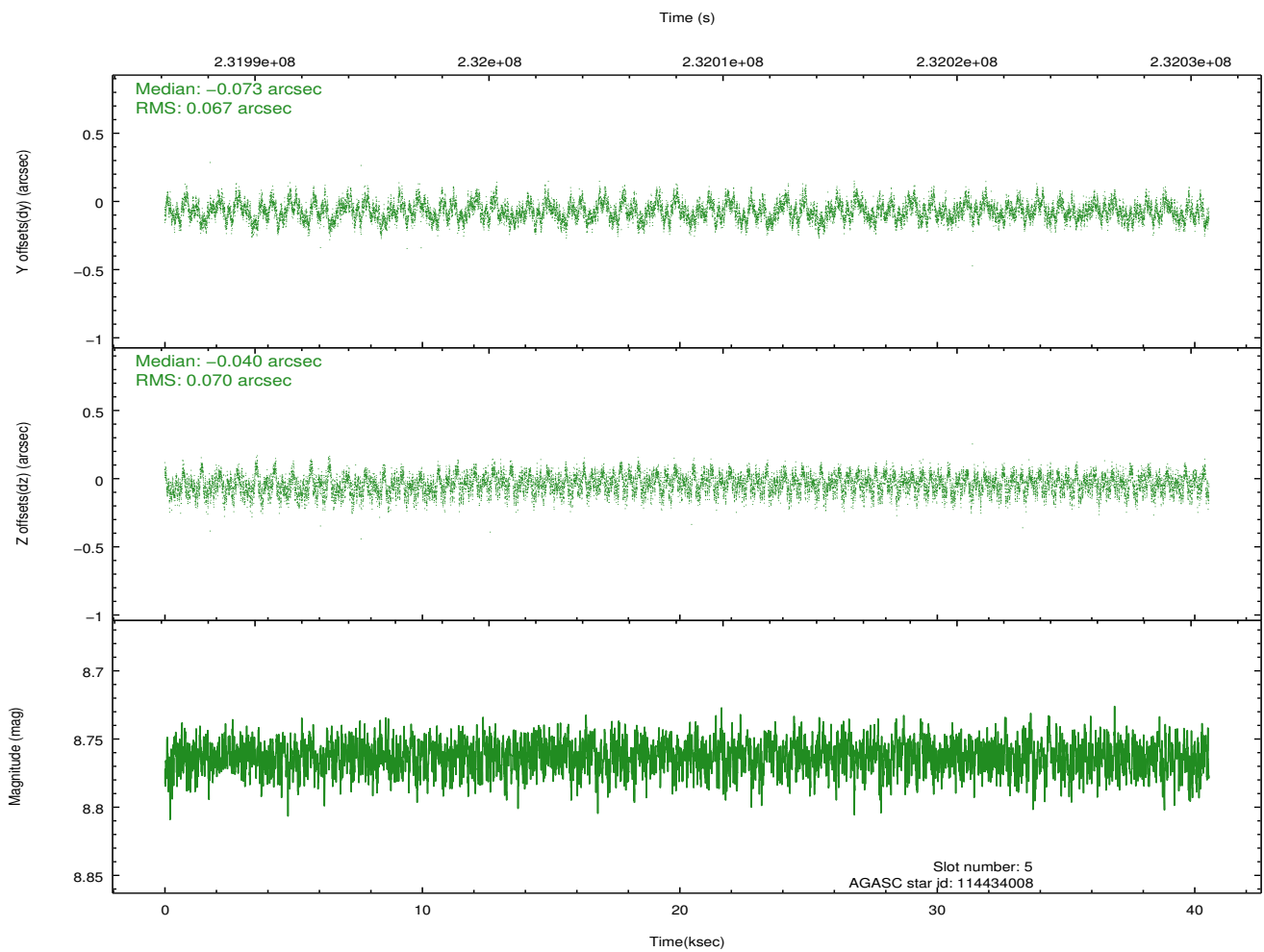
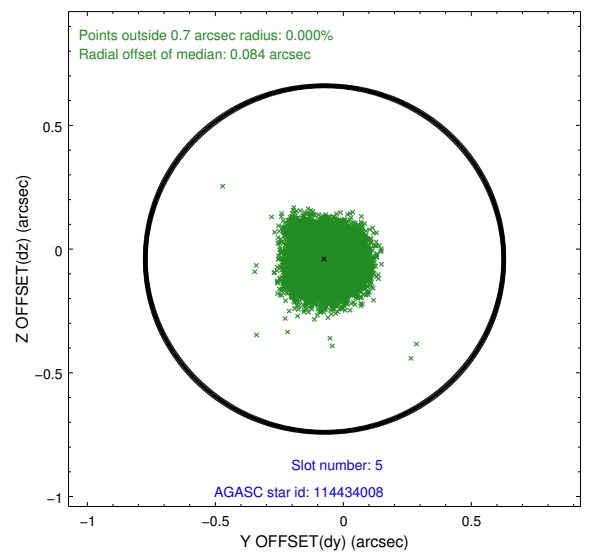
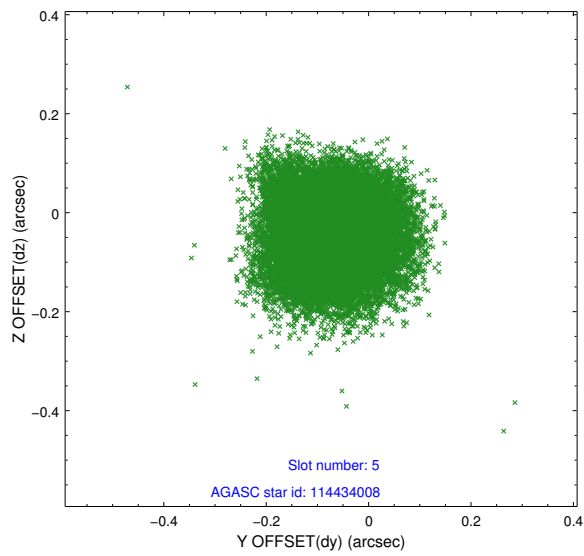
2.4.1 Slot 3



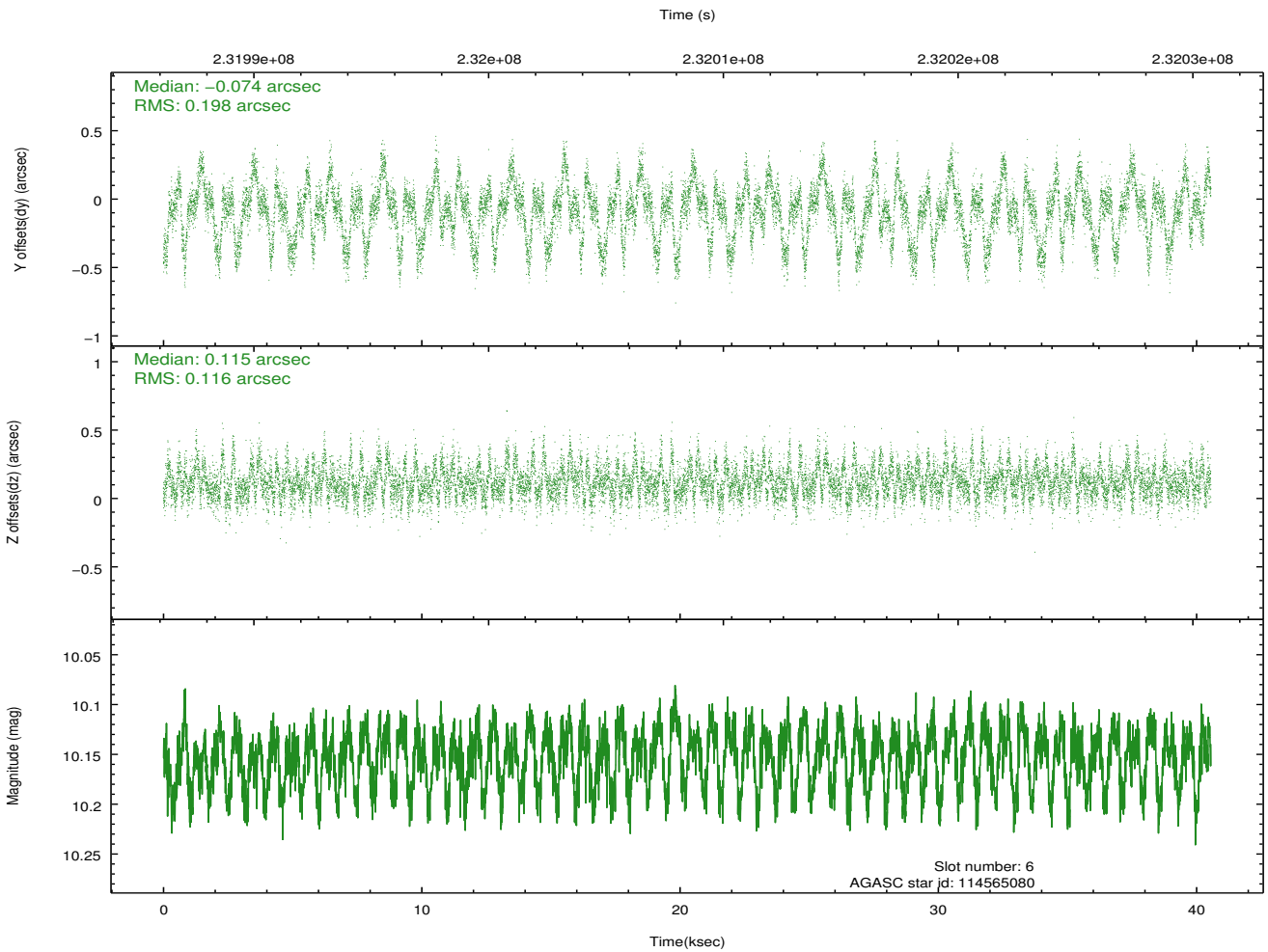
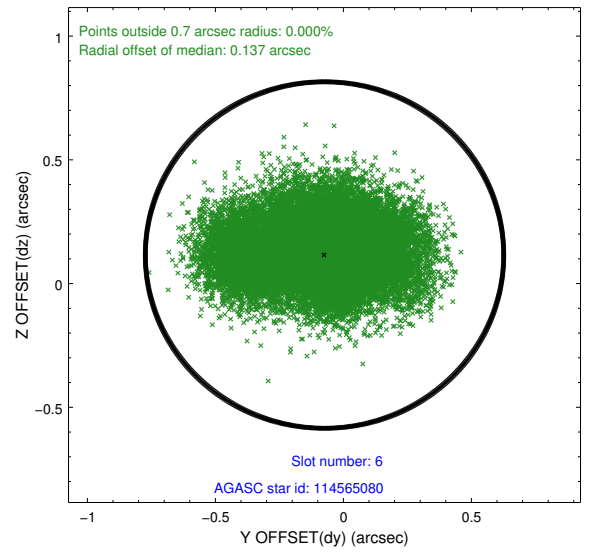
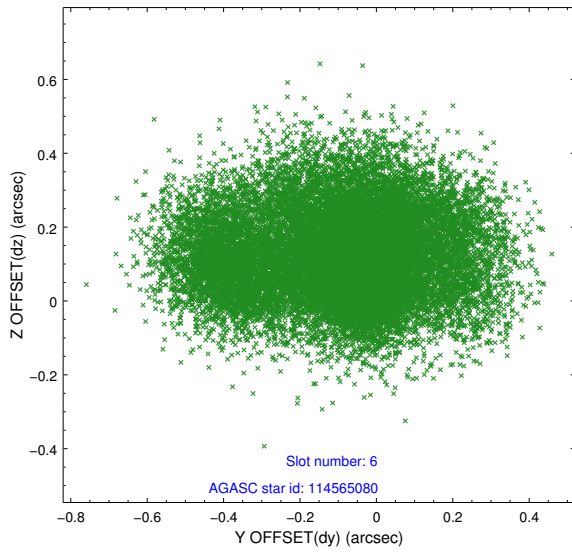
2.4.2 Slot 4



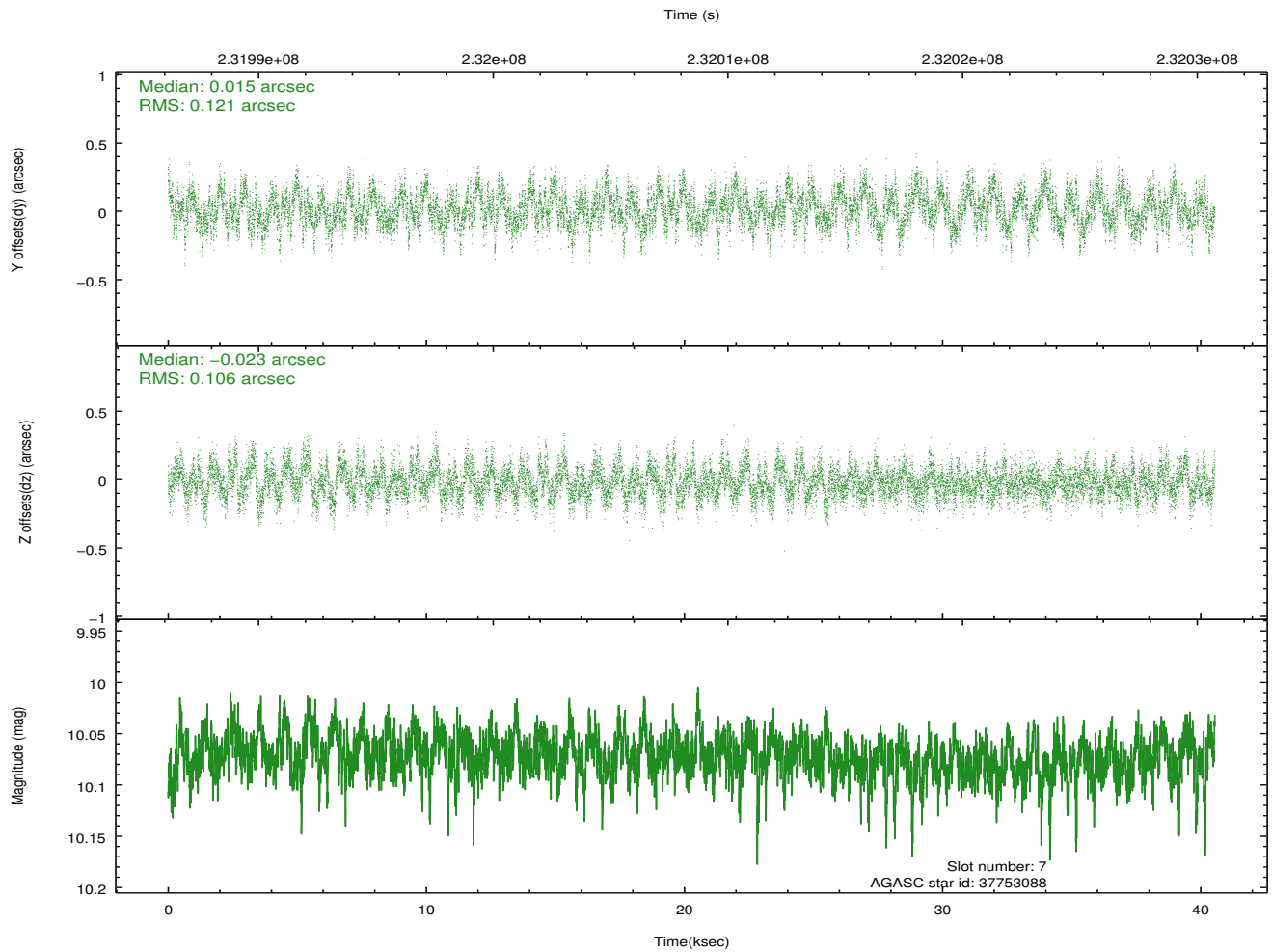
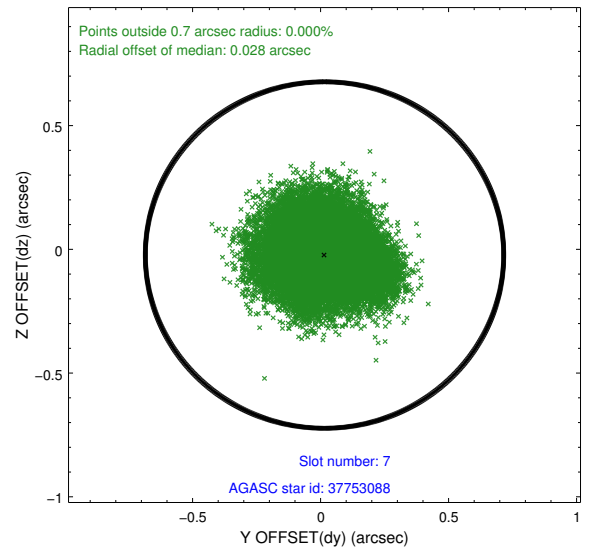
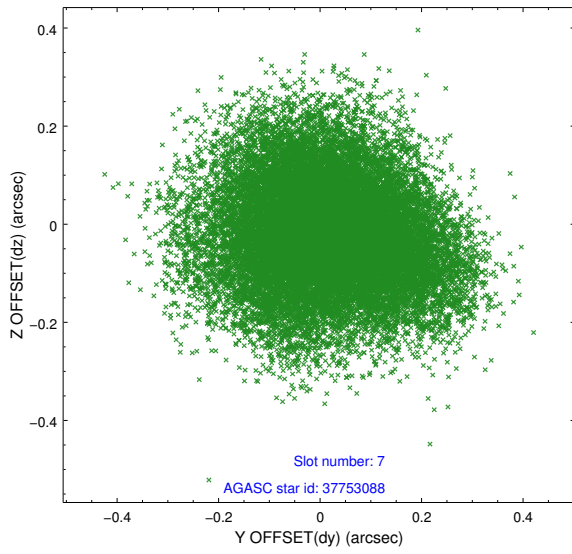
2.4.3 Slot 5



2.4.4 Slot 6

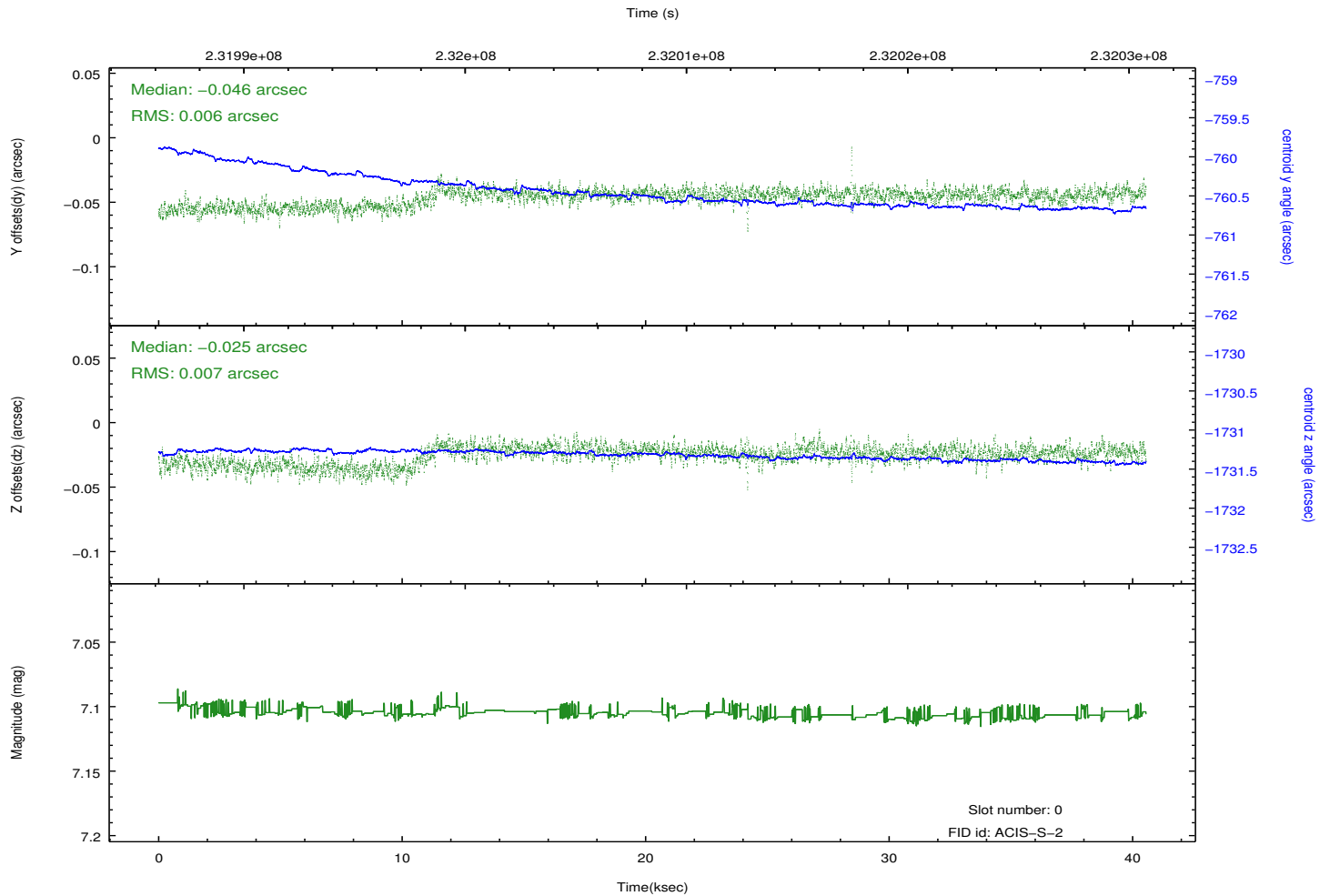
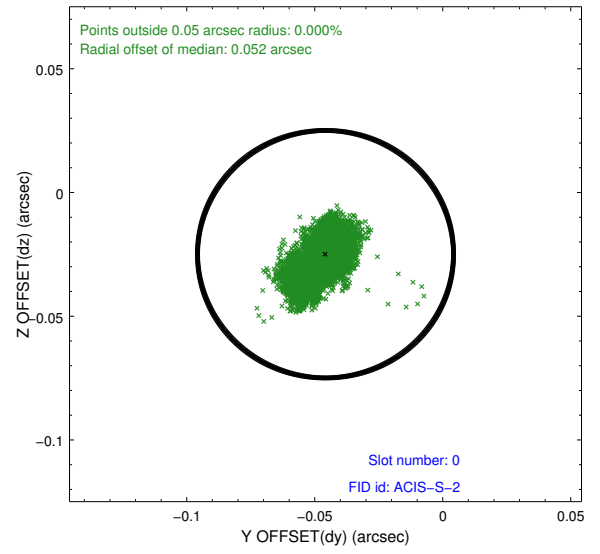
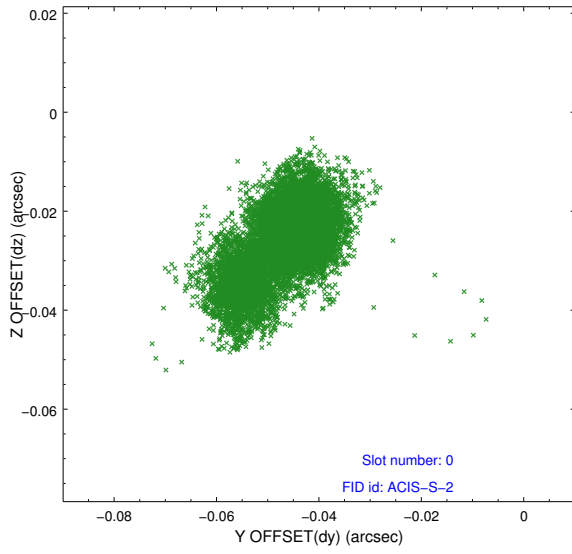


2.4.5 Slot 7

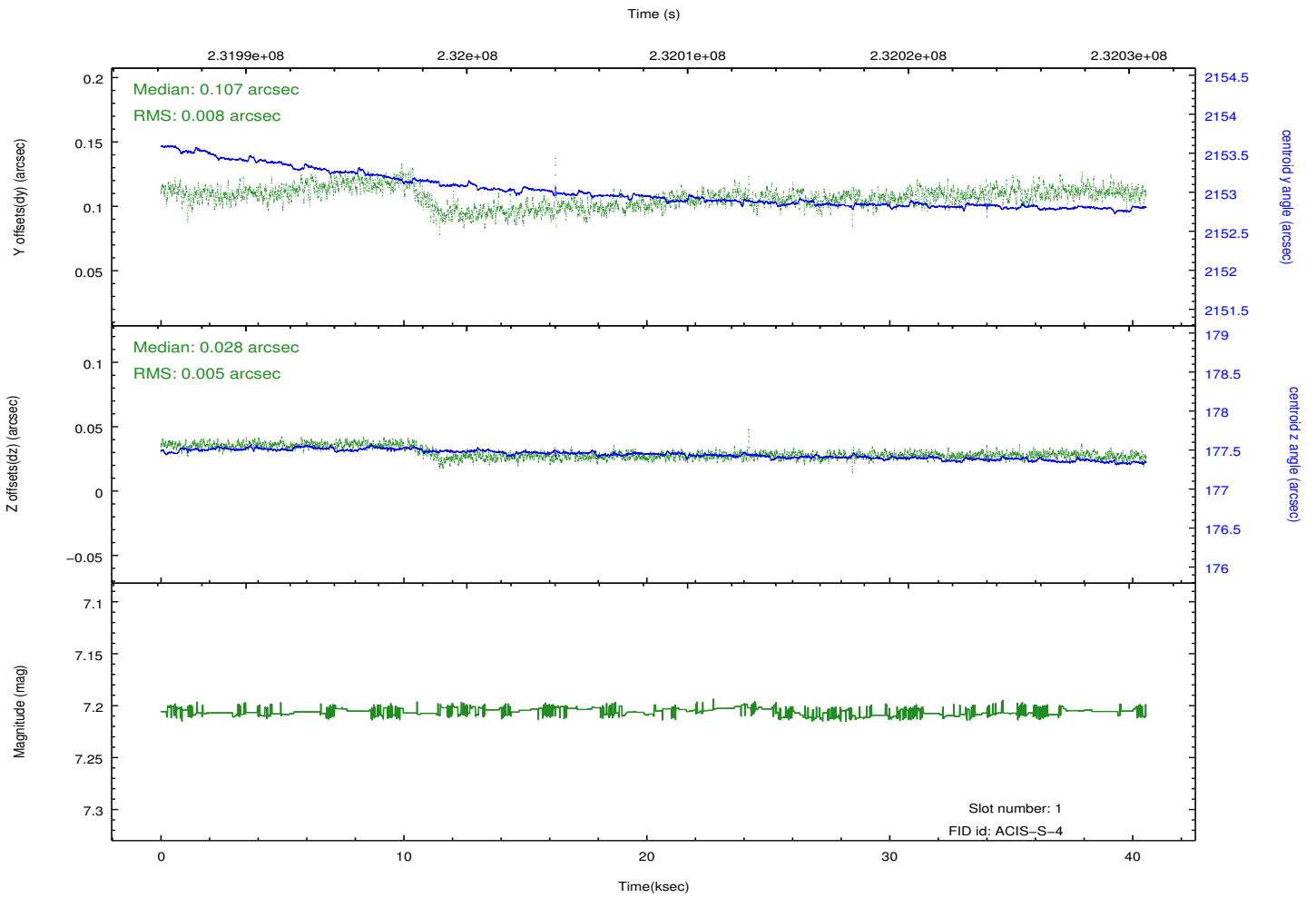
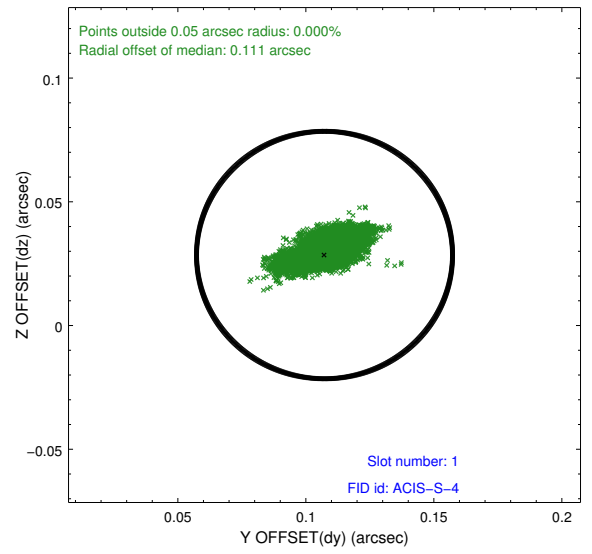
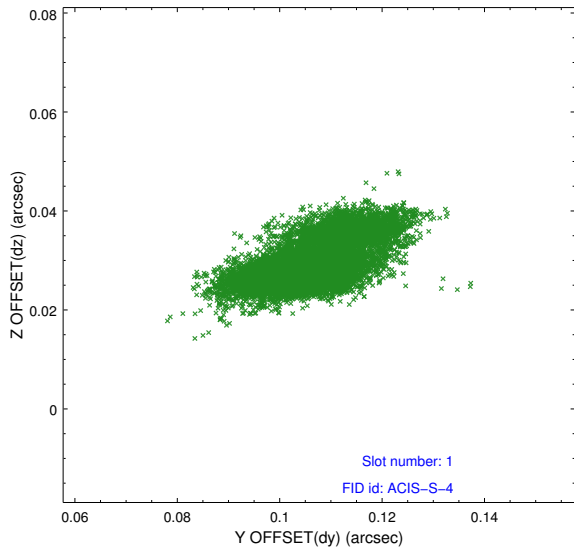


2.5 FID Slots

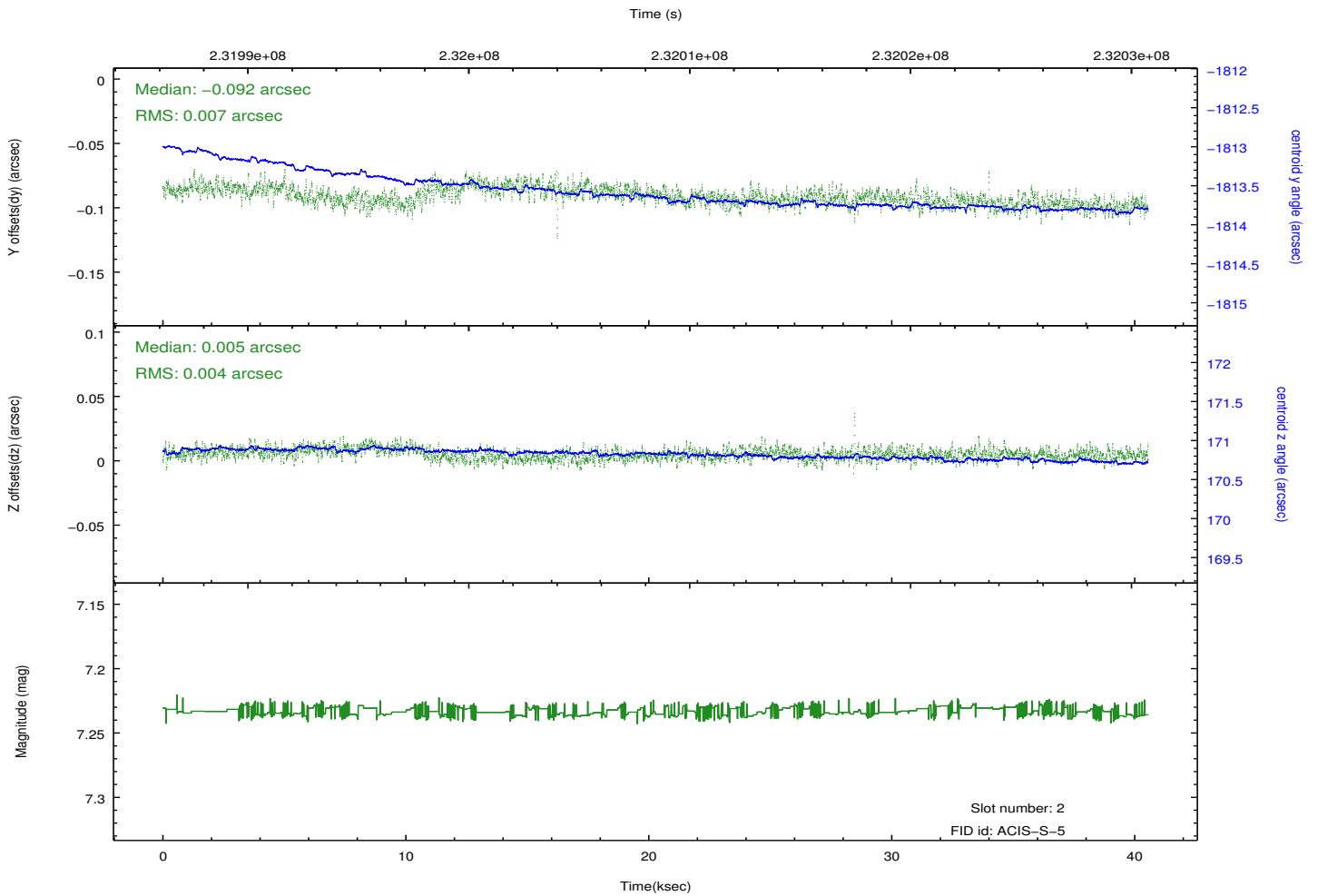
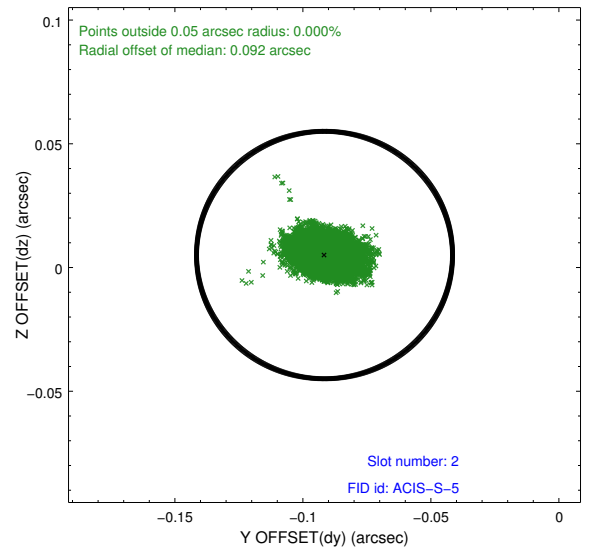
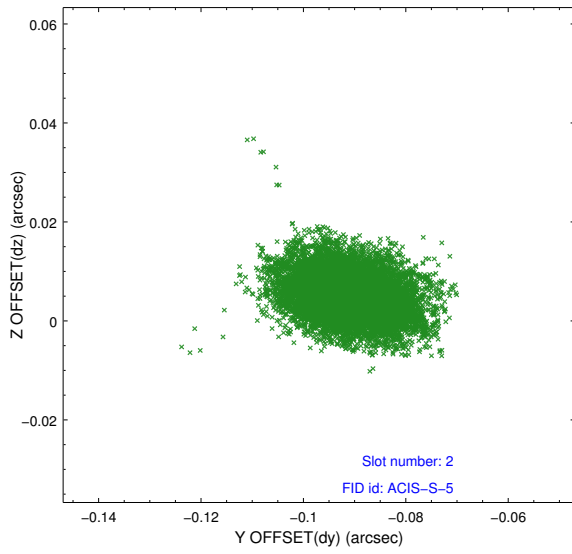
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2013.01.15 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 40.03649 |

A.2 Comments