

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7368 - L2 Version 2
Chandra X-Ray Center

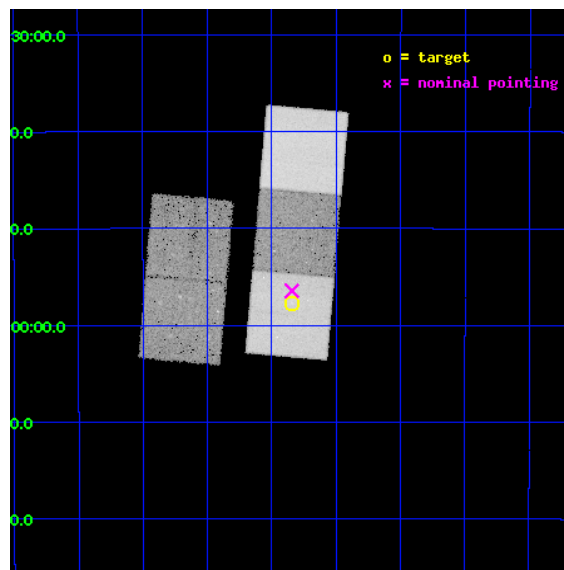
L2 Processing Date : Apr 5 2012

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1 Front

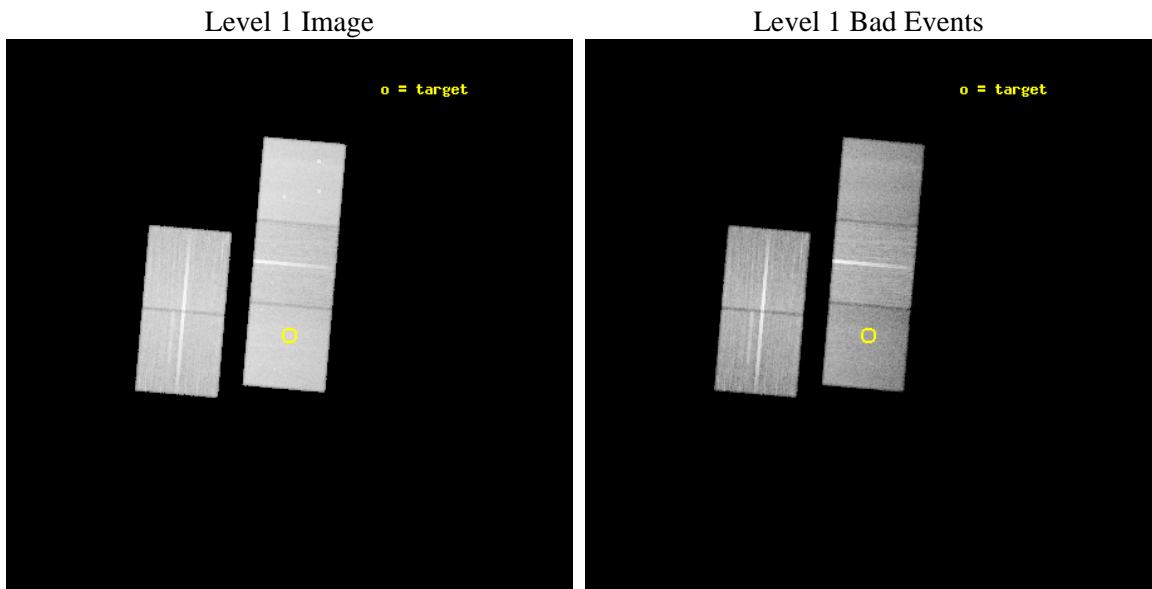
| | | |
|----------|---|---|
| seq_num | 800608 | Sequence number |
| obs_id | 7368 | Observation id |
| title | MEASURING THE PHYSICAL PROPERTIES OF THE MOST DISTANT X-RAY MASSIVE GALAXY CLUSTER AT $z=1.4$ | Proposal title |
| observer | Dr. Christopher Mullis | Principal investigator |
| object | XMMU J2235.3-2557 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 338.835833 | Observer's specified target RA [deg] |
| dec_targ | -25.961667 | Observer's specified target Dec [deg] |
| ra_nom | 338.83574454138 | Nominal RA [deg] |
| dec_nom | -25.940893743501 | Nominal Dec [deg] |
| roll_nom | 94.956593661375 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 33281.600255966 | Sum of GTIs [s] |
| livetime | 32846.751647064 | Livetime [s] |
| ontime2 | 33278.459245741 | Sum of GTIs [s] |
| ontime3 | 33281.600255966 | Sum of GTIs [s] |
| ontime5 | 33281.600255966 | Sum of GTIs [s] |
| ontime6 | 33278.459265649 | Sum of GTIs [s] |
| ontime7 | 33281.600255966 | Sum of GTIs [s] |
| l2events | 343452 | Number of level 2 events |



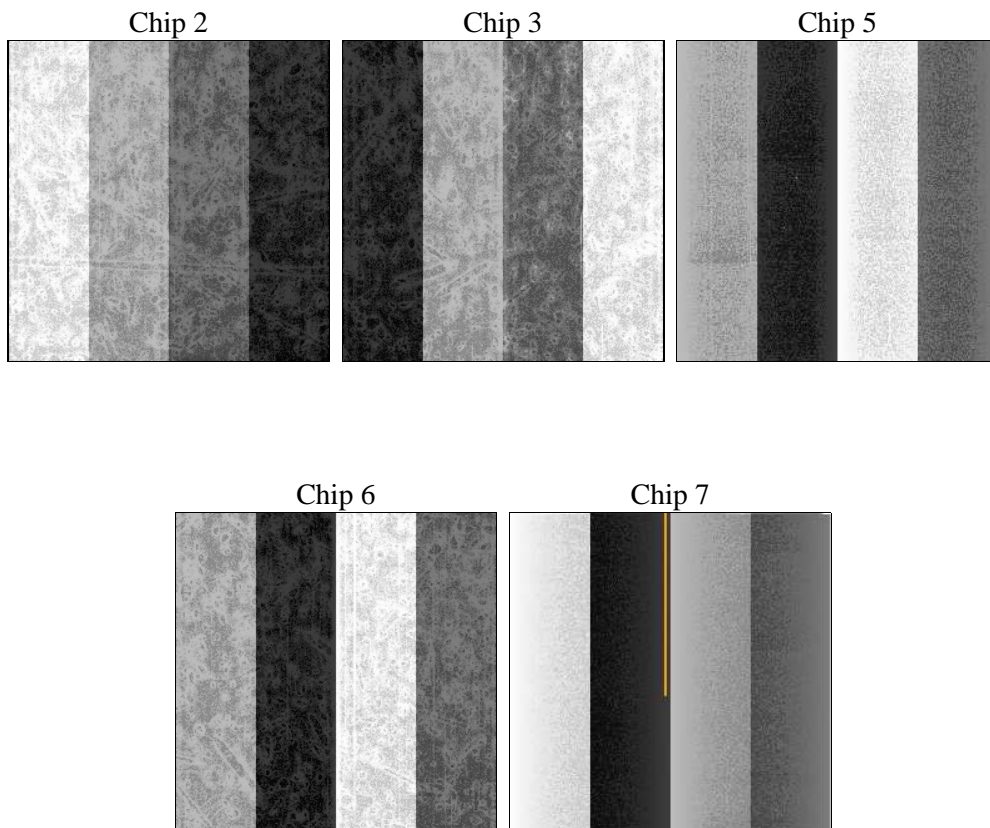
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 33245.645000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 33281.600255966 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime2 | 33278.459245741 | Sum of GTIs [s] |
| date | 2012-04-05T11:38:57 | Date and time of file creation | ontime3 | 33281.600255966 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 33281.600255966 | Sum of GTIs [s] |
| | | | ontime6 | 33278.459265649 | Sum of GTIs [s] |
| | | | ontime7 | 33281.600255966 | Sum of GTIs [s] |
| | | | l1events | 1357354 | Number of level 1 events |

2.1.4 Events

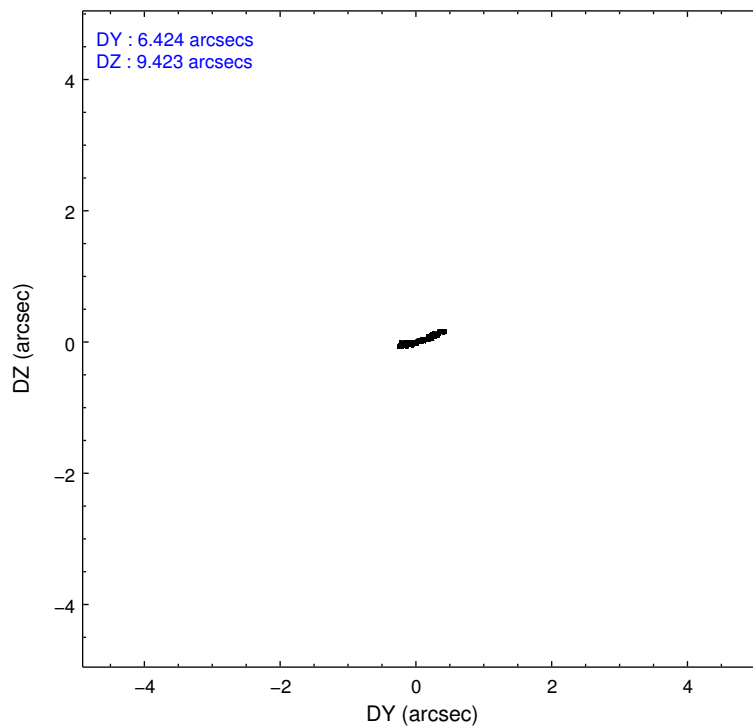
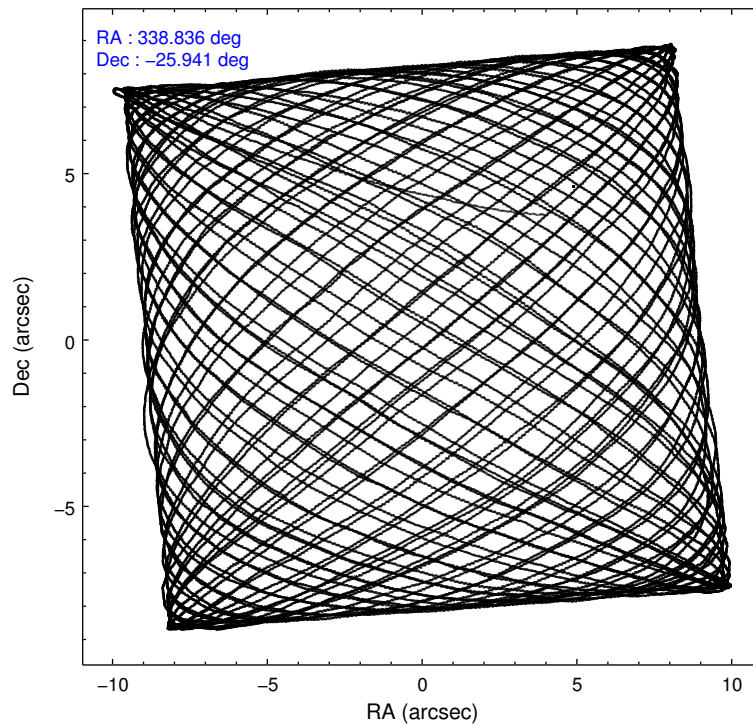
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 261204 | 239594 | 332078 | 248536 | 275942 |
| rejected events | 237618 | 216075 | 168940 | 222813 | 149186 |
| rejected % | 90% | 90% | 50% | 89% | 54% |

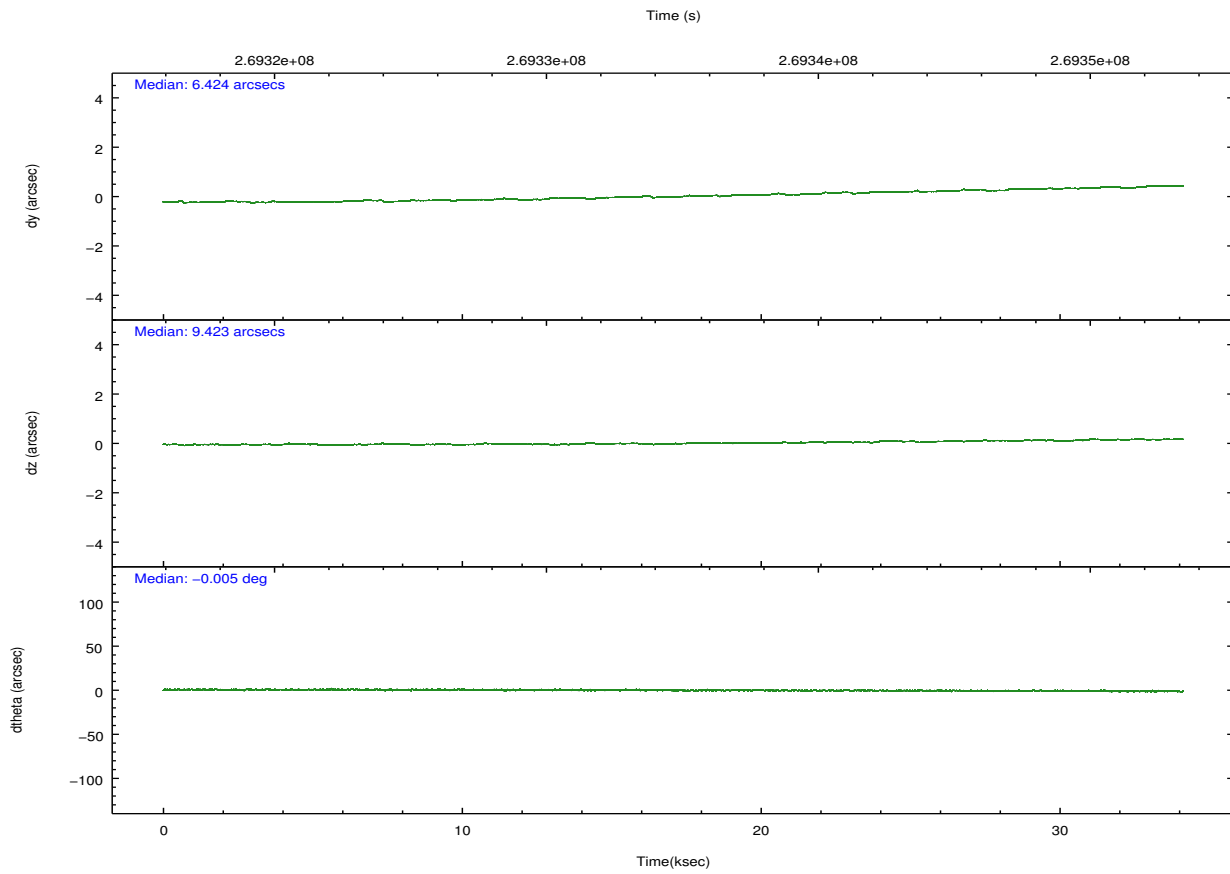
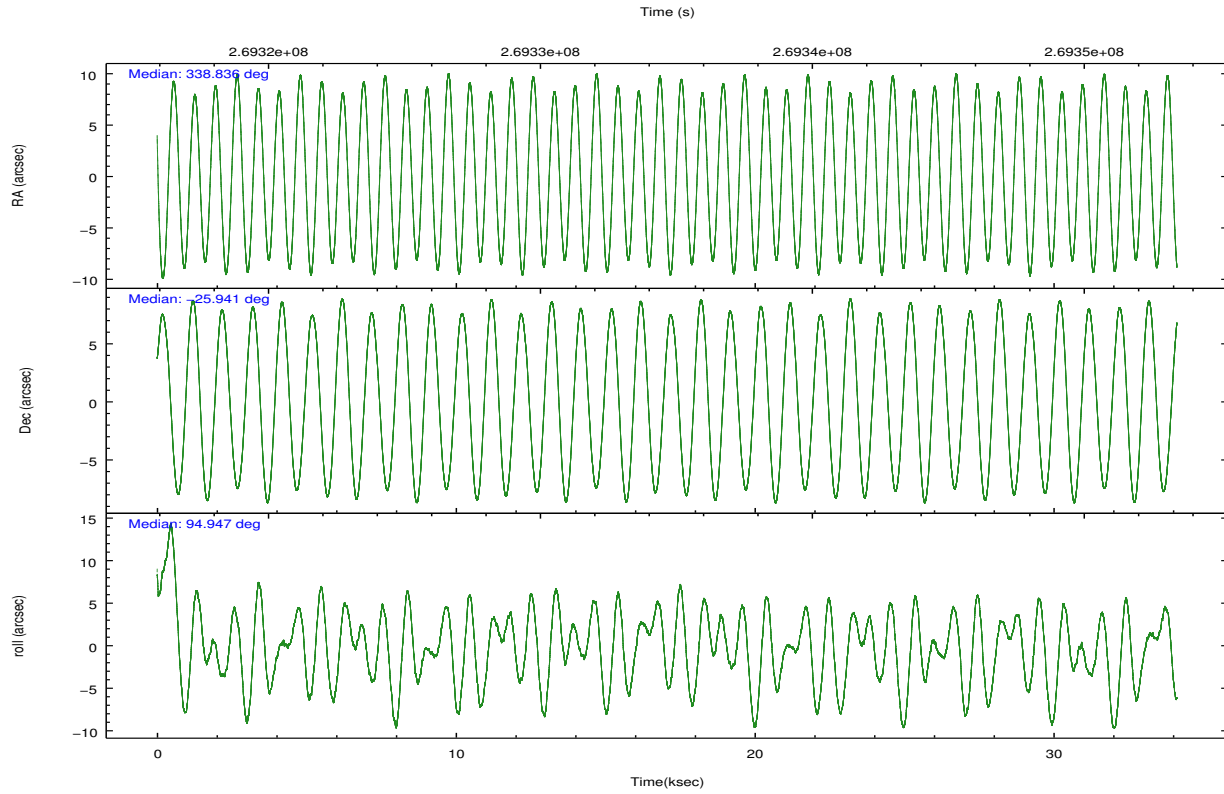
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 8634 | 8806 | 12510 | 9221 | 11598 |
| | 3% | 3% | 3% | 3% | 4% |
| grade 1 events | 130 | 132 | 342 | 107 | 241 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 5451 | 4848 | 48581 | 5576 | 25741 |
| | 2% | 2% | 14% | 2% | 9% |
| grade 3 events | 2598 | 2727 | 7316 | 2829 | 11588 |
| | 0% | 1% | 2% | 1% | 4% |
| grade 4 events | 2657 | 2642 | 7093 | 2771 | 11511 |
| | 1% | 1% | 2% | 1% | 4% |
| grade 5 events | 7571 | 9757 | 26649 | 9883 | 28983 |
| | 2% | 4% | 8% | 3% | 10% |
| grade 6 events | 4251 | 4497 | 87668 | 5329 | 66338 |
| | 1% | 1% | 26% | 2% | 24% |
| grade 7 events | 229912 | 206185 | 141919 | 212820 | 119942 |
| | 88% | 86% | 42% | 85% | 43% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-23567 | ACIS-23567 | 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 | 338.853443 | 338.8357445413848 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -25.963008 | -25.94089374350062 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 94.807710 | 94.95659366137538 | [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) | 269318466.184000 | 269317192.01362 | | | |
| Observation start date | 2006-07-15T02:40:01 | 2006-07-15T02:19:52 | | | |
| [s] Observation end time (MET) | 269351712.184000 | 269351923.62774 | | | |
| Observation end date | 2006-07-15T11:54:07 | 2006-07-15T11:58:43 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



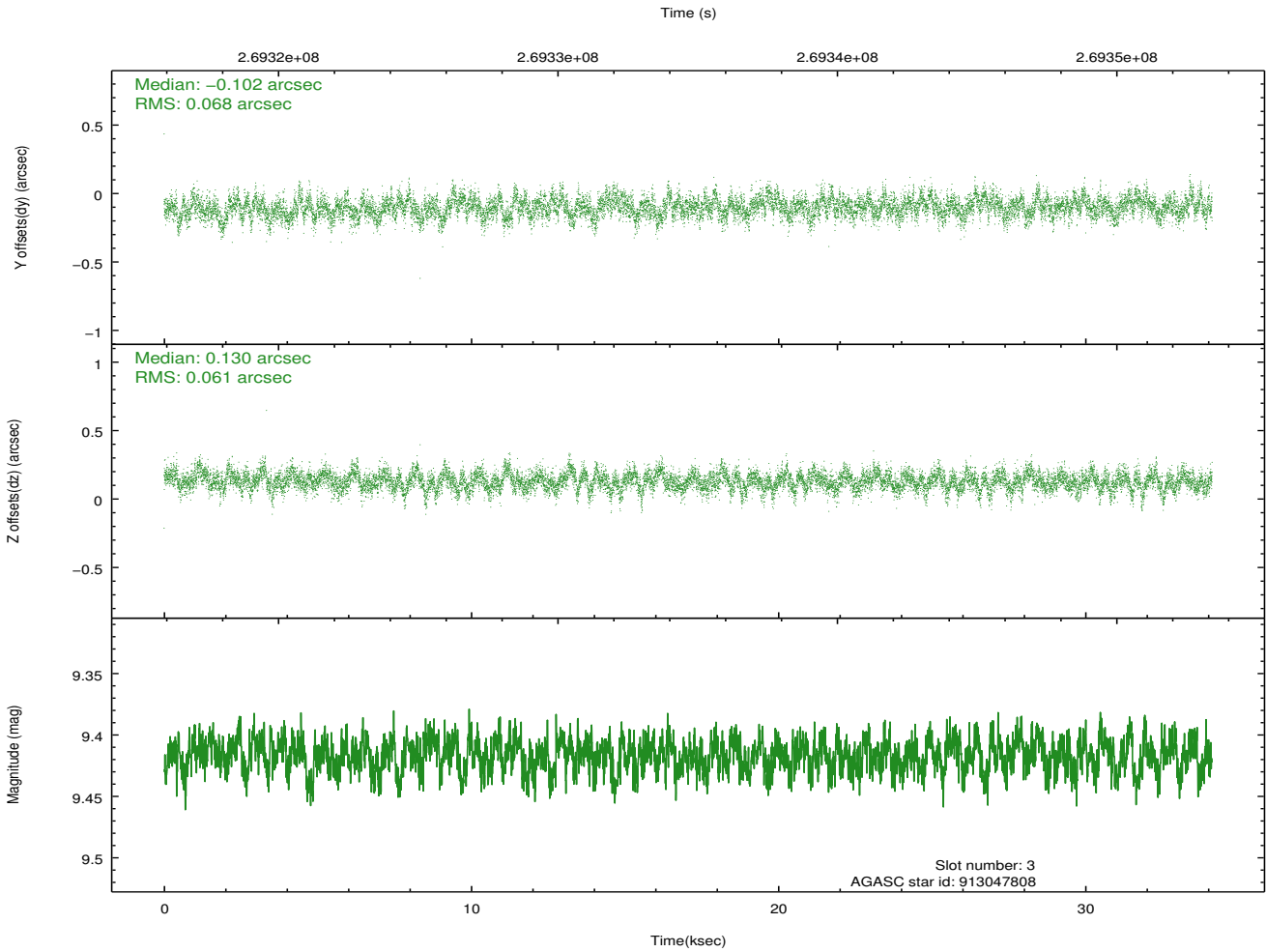
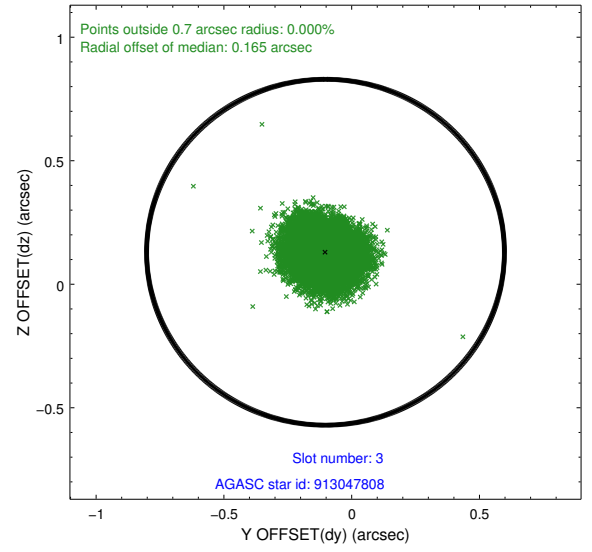
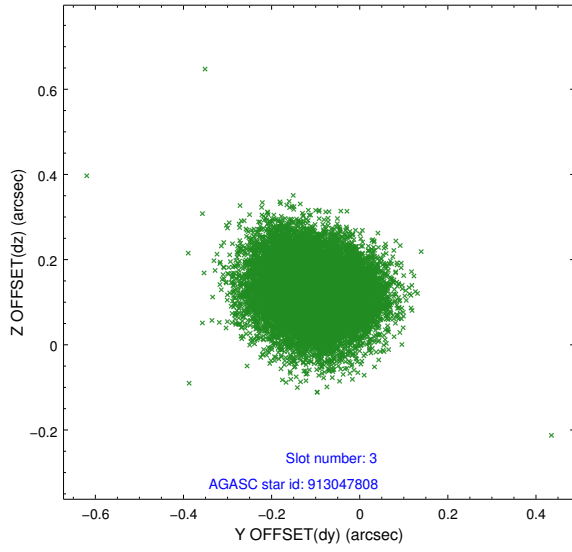


Slot Statistics

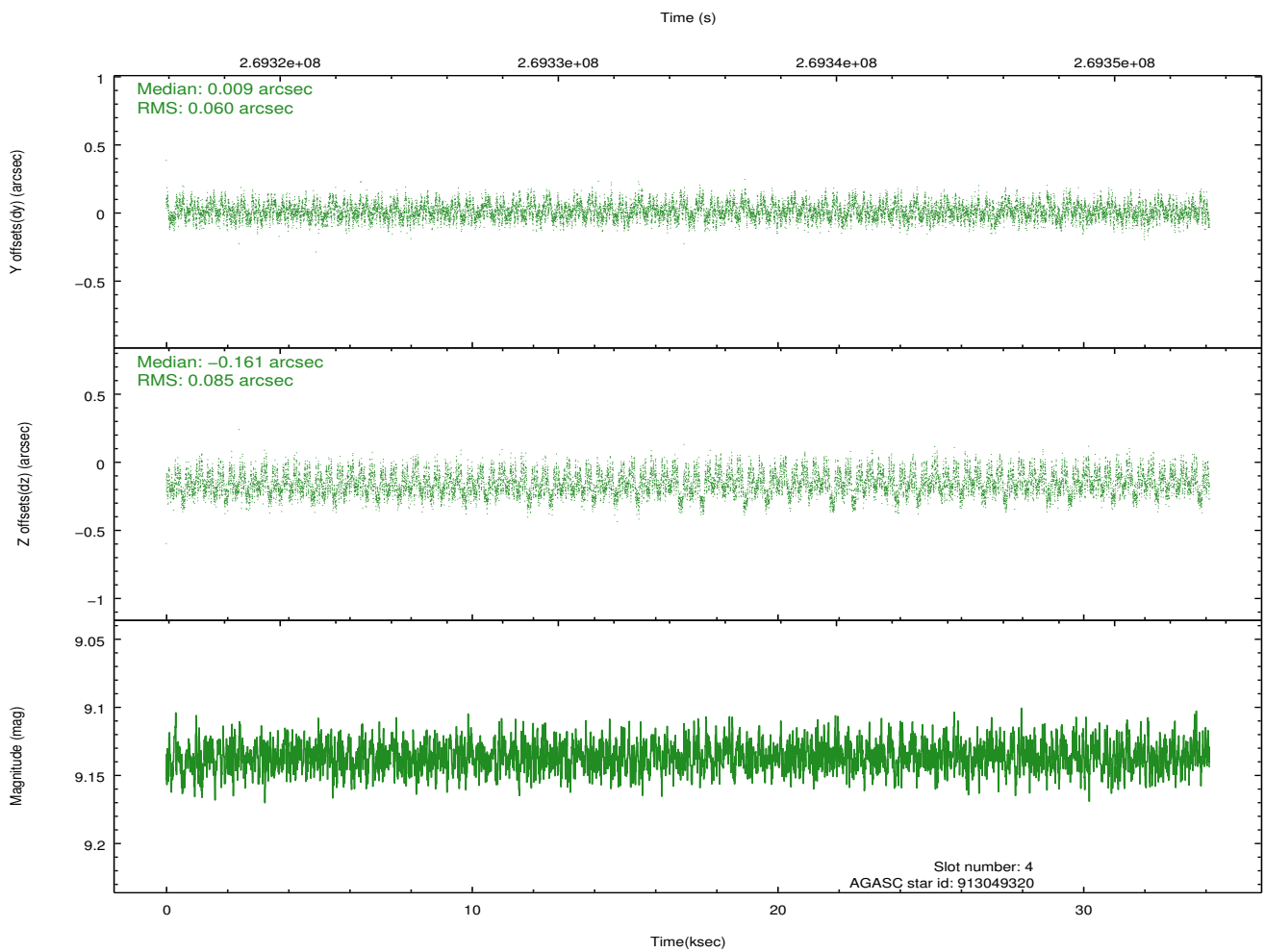
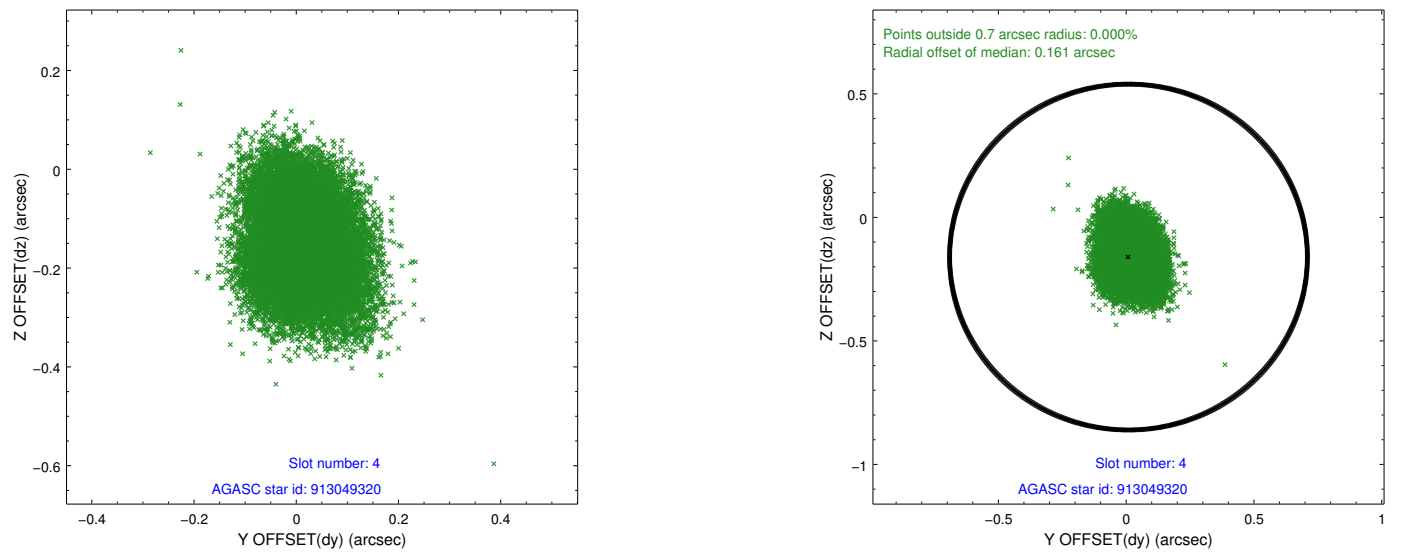
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 8323 | -0.066 | -0.053 | 0.007 | 0.011 | 0.000000 | 0.000000 | -759.24 | -1730.74 |
| 1 | FID | ACIS-S-4 | 7.22 | 8323 | 0.122 | 0.046 | 0.005 | 0.010 | 0.000000 | 0.000000 | 2154.18 | 177.83 |
| 2 | FID | ACIS-S-5 | 7.24 | 8323 | -0.088 | 0.016 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1812.07 | 171.48 |
| 3 | GUIDE | 913047808 | 9.42 | 16627 | -0.102 | 0.130 | 0.097 | 0.160 | 338.934868 | -25.449672 | 1819.35 | -418.27 |
| 4 | GUIDE | 913049320 | 9.14 | 16628 | 0.009 | -0.161 | 0.112 | 0.177 | 338.191374 | -25.848811 | 583.79 | 2103.11 |
| 5 | GUIDE | 913050576 | 9.77 | 16621 | -0.184 | 0.313 | 0.127 | 0.207 | 339.398805 | -25.857774 | 226.14 | -1791.66 |
| 6 | GUIDE | 913051032 | 9.01 | 16635 | 0.137 | -0.255 | 0.104 | 0.175 | 338.178721 | -26.464177 | -1621.39 | 2317.89 |
| 7 | GUIDE | 913055744 | 9.71 | 16625 | 0.135 | -0.030 | 0.112 | 0.187 | 339.034663 | -26.334108 | -1380.42 | -470.80 |

2.4 Star Slots

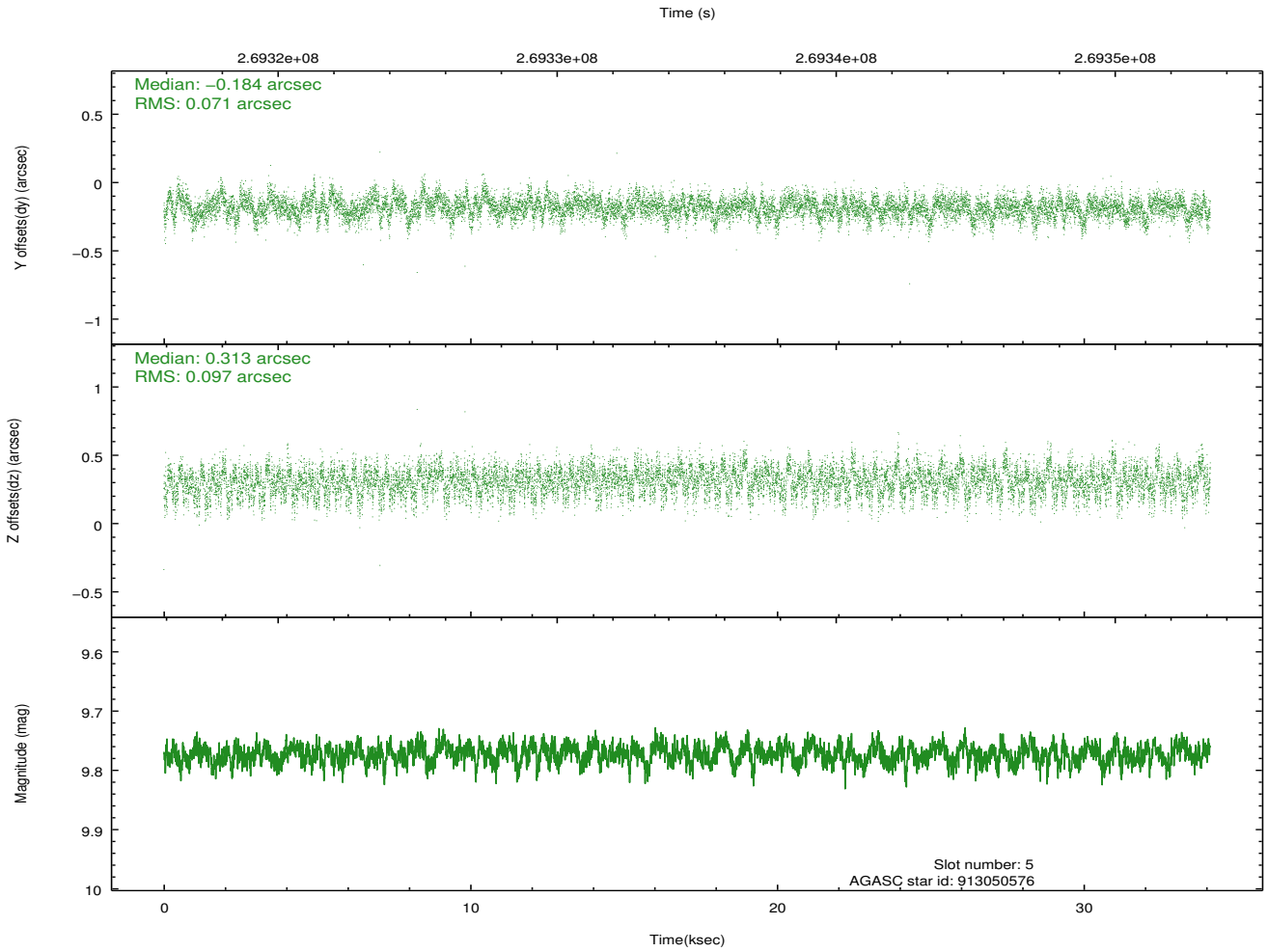
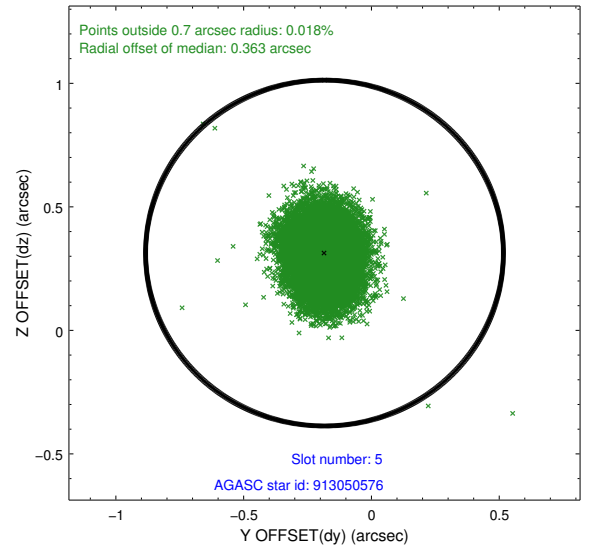
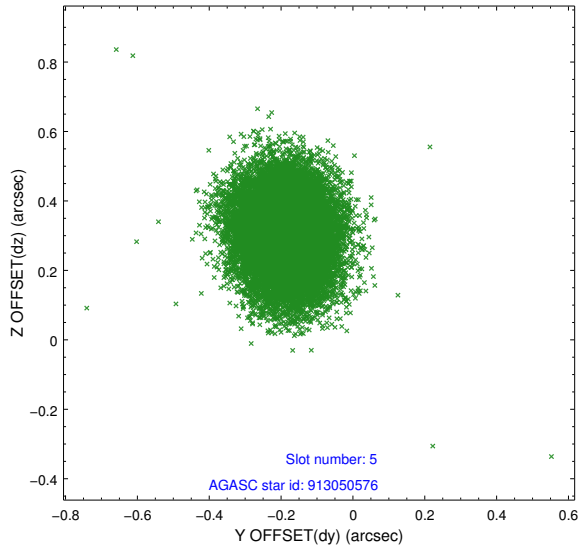
2.4.1 Slot 3



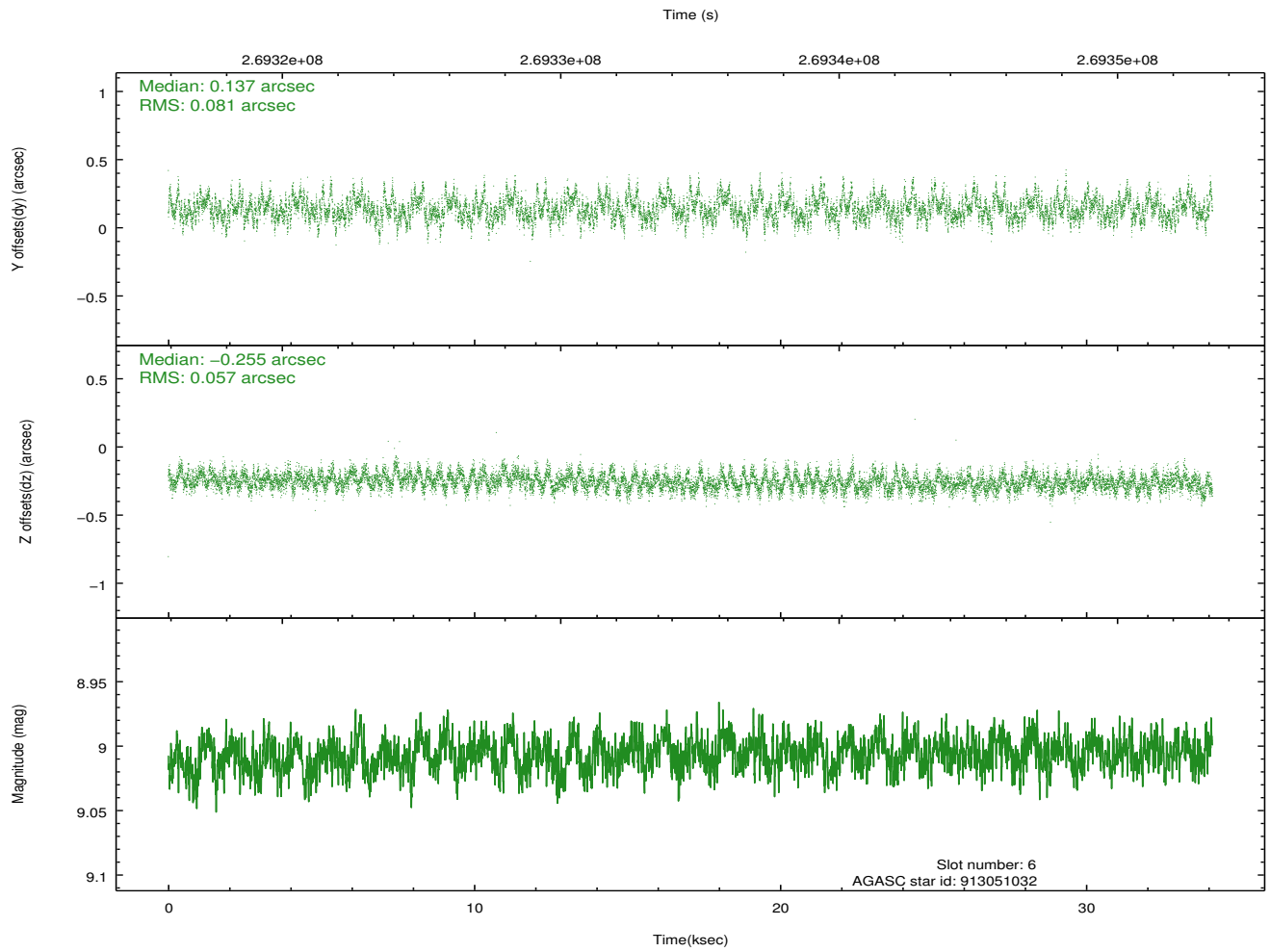
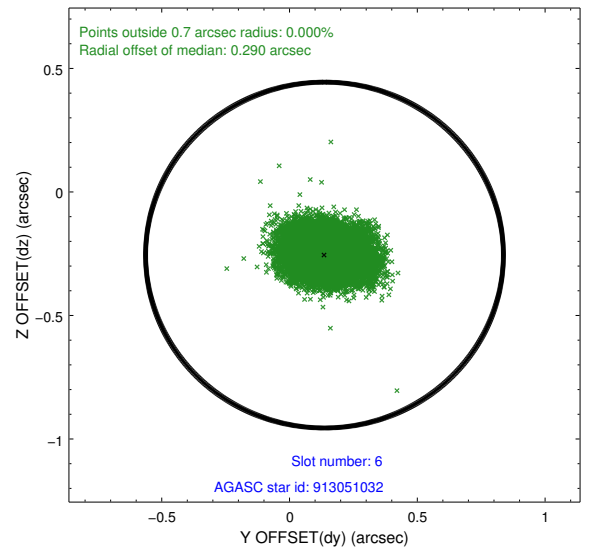
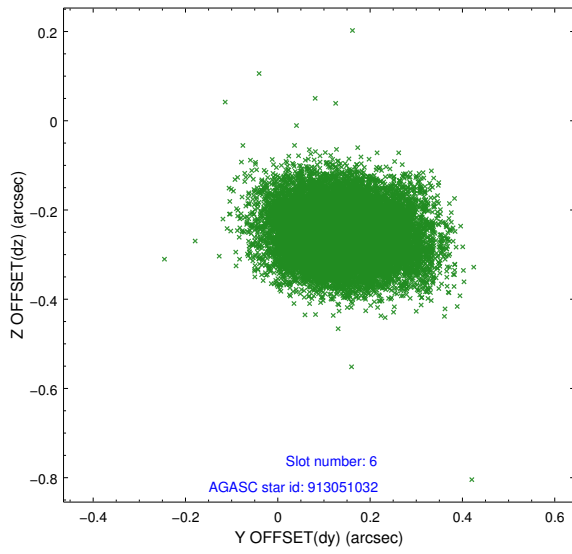
2.4.2 Slot 4



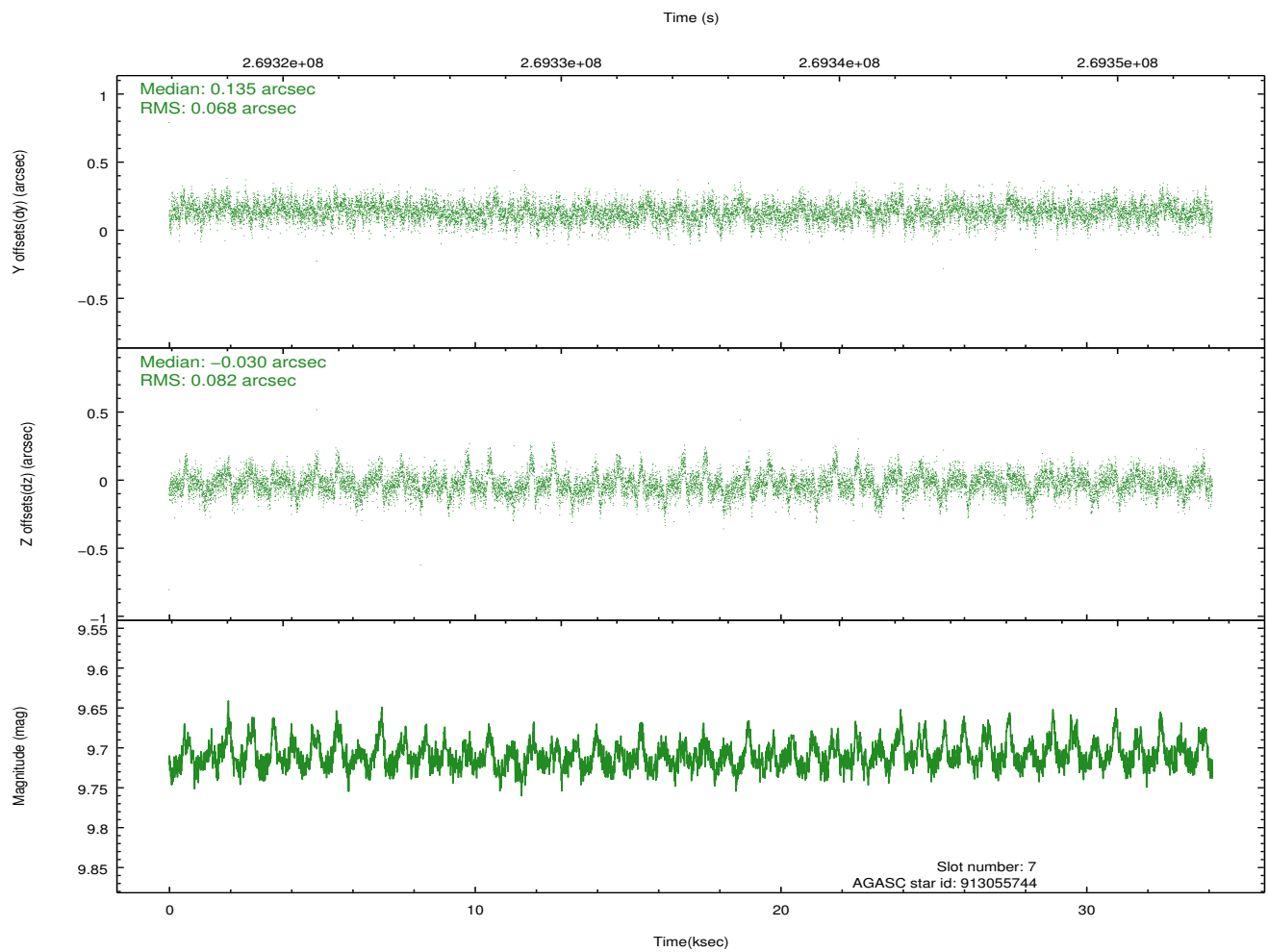
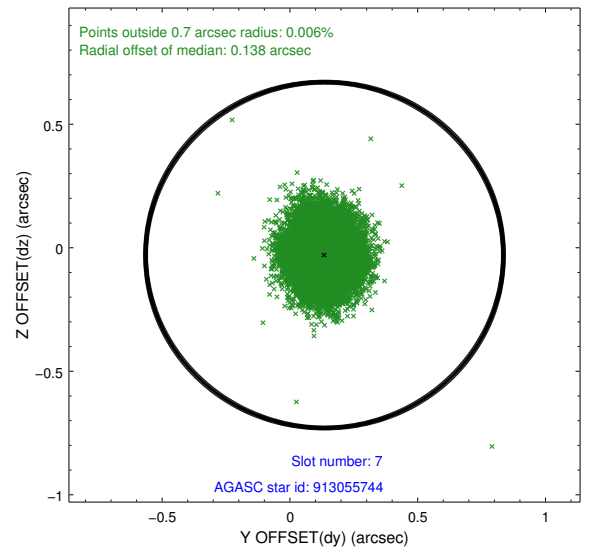
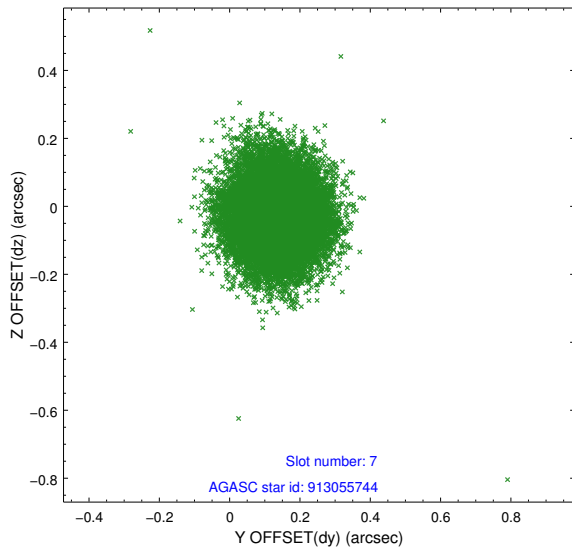
2.4.3 Slot 5



2.4.4 Slot 6

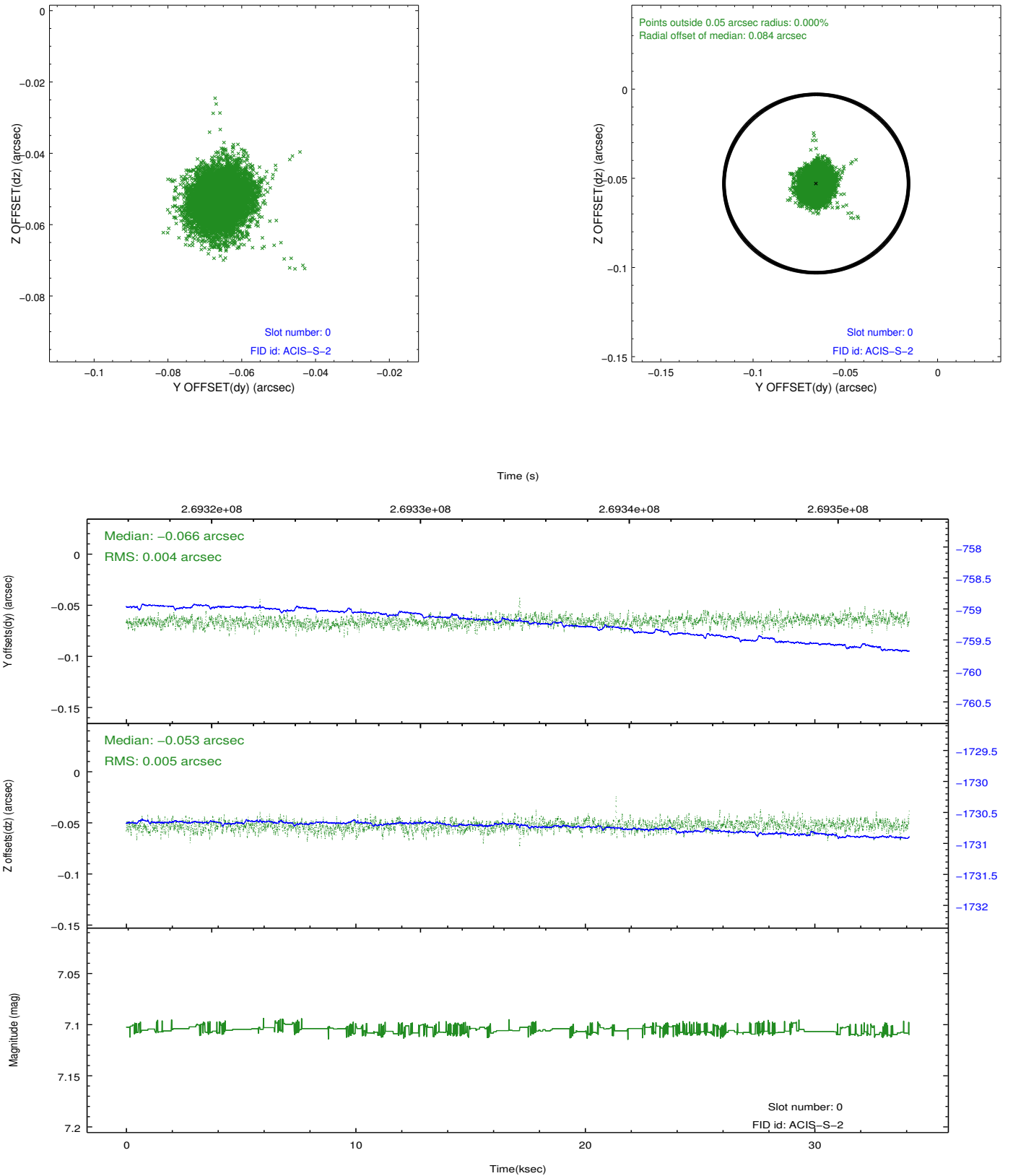


2.4.5 Slot 7

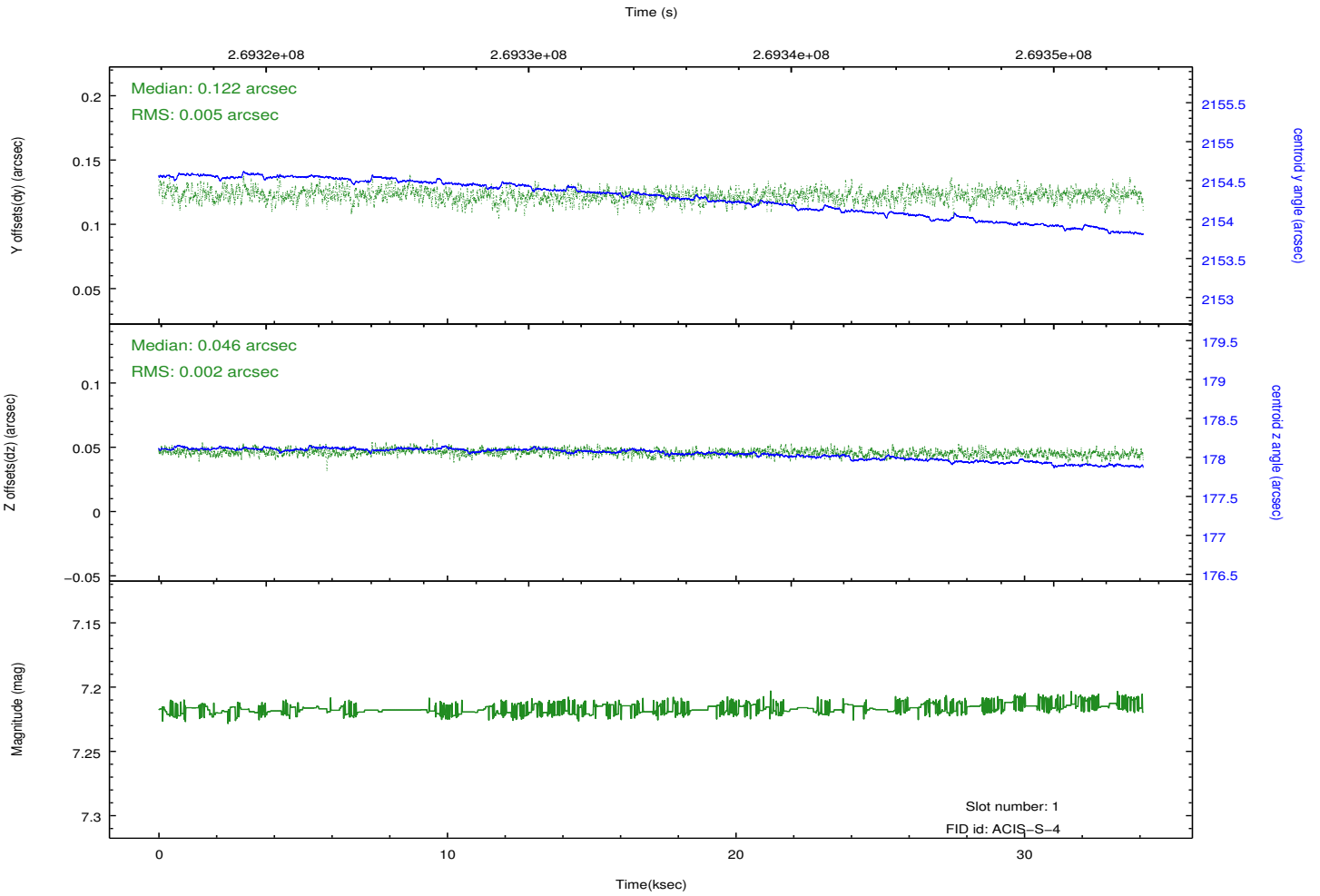
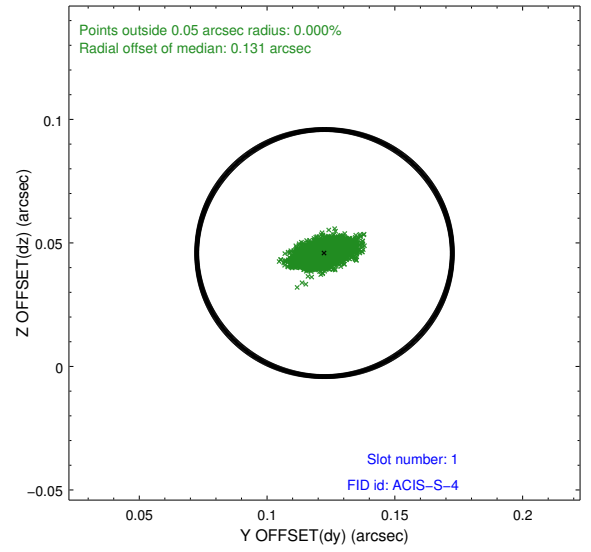
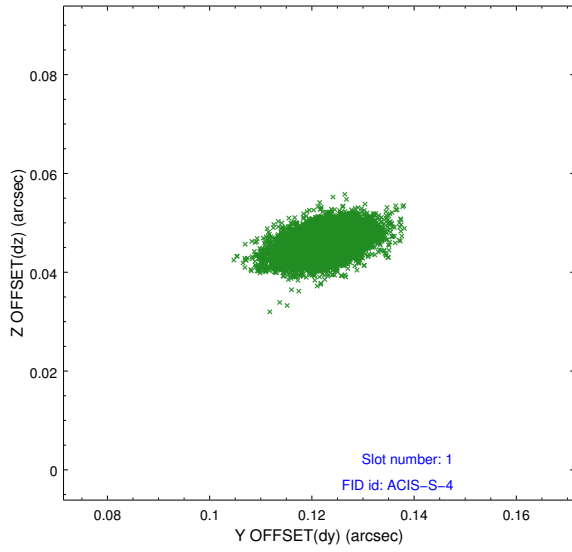


2.5 FID Slots

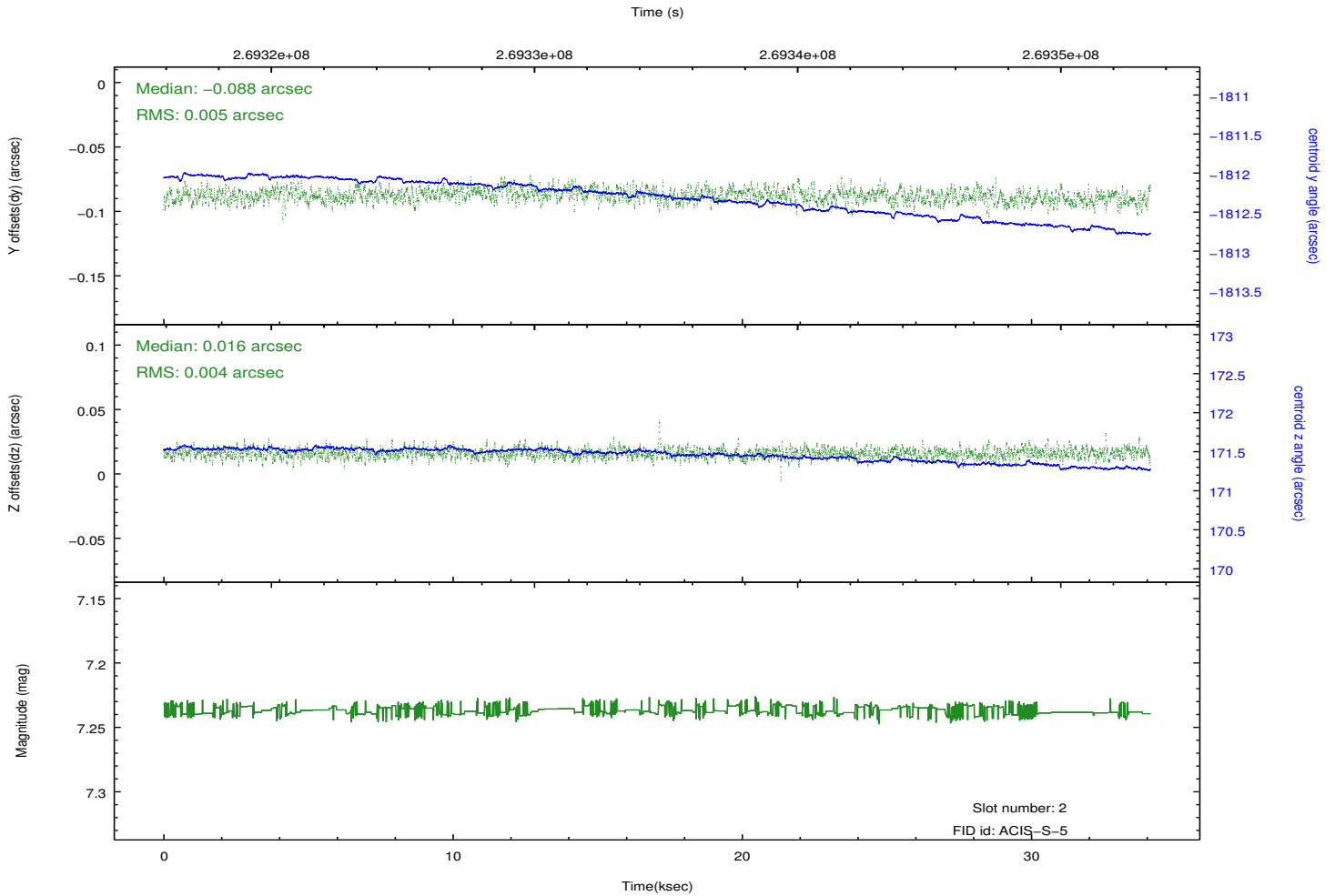
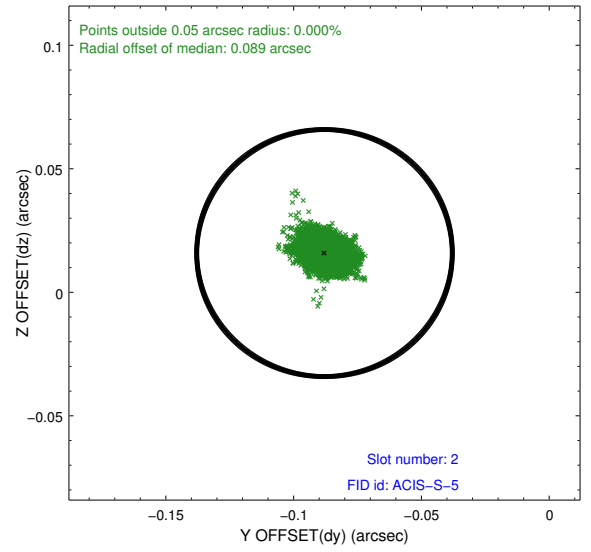
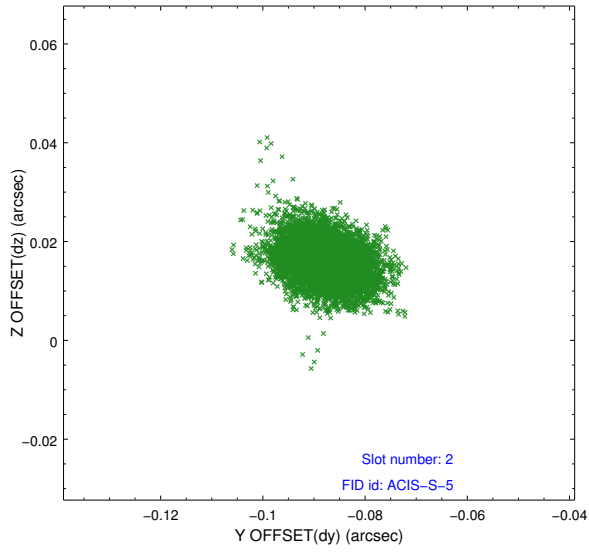
2.5.1 Slot 0



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) | 2012.04.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 33.2816002 |

A.2 Comments

Joint Proposal: XMM