

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3192 - L2 Version 4
Chandra X-Ray Center

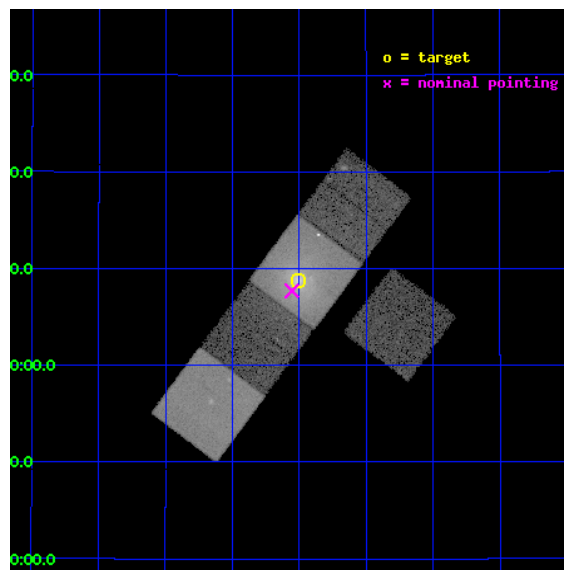
L2 Processing Date : Oct 22 2012

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1 Front

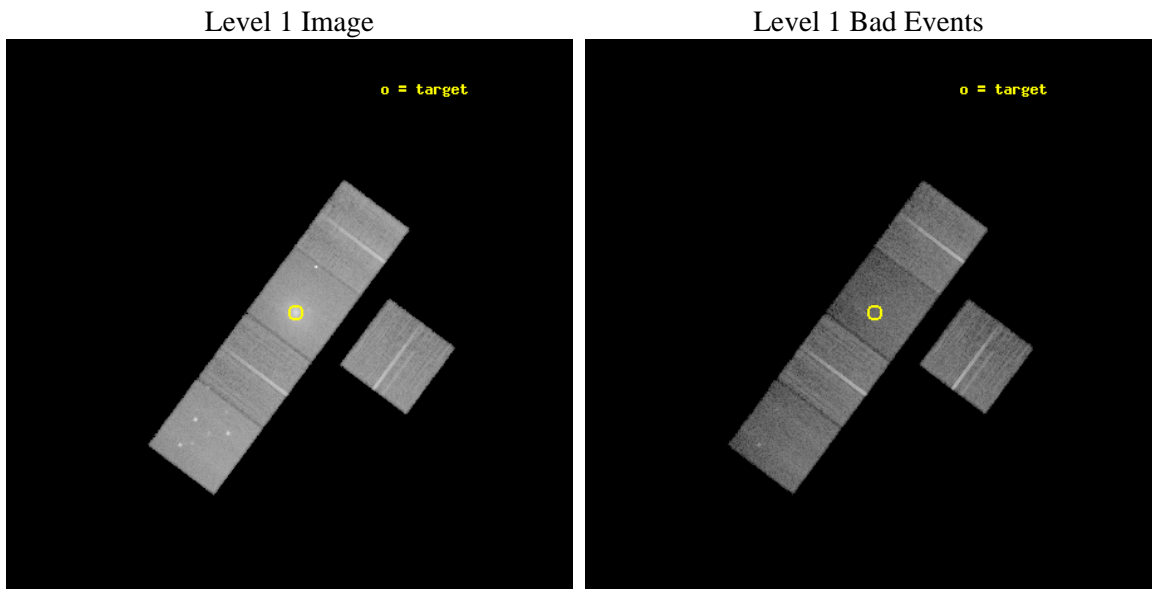
| | | |
|----------|---|---|
| seq_num | 800192 | Sequence number |
| obs_id | 3192 | Observation id |
| title | THE INTERACTION BETWEEN CLUSTER CENTRAL RADIO SOURCES AND COOLING FLOWS | Proposal title |
| observer | Dr. CRAIG SARAZIN | Principal investigator |
| object | A2626 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 354.127083 | Observer's specified target RA [deg] |
| dec_targ | 21.145972 | Observer's specified target Dec [deg] |
| ra_nom | 354.13882936489 | Nominal RA [deg] |
| dec_nom | 21.128382843797 | Nominal Dec [deg] |
| roll_nom | 306.68334499197 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 25100.699951708 | Sum of GTIs [s] |
| liveness | 24772.740827973 | Livetime [s] |
| ontime3 | 25100.699951708 | Sum of GTIs [s] |
| ontime5 | 25100.699951708 | Sum of GTIs [s] |
| ontime6 | 25100.699951708 | Sum of GTIs [s] |
| ontime7 | 25100.699951708 | Sum of GTIs [s] |
| ontime8 | 25097.558981448 | Sum of GTIs [s] |
| l2events | 245894 | Number of level 2 events |



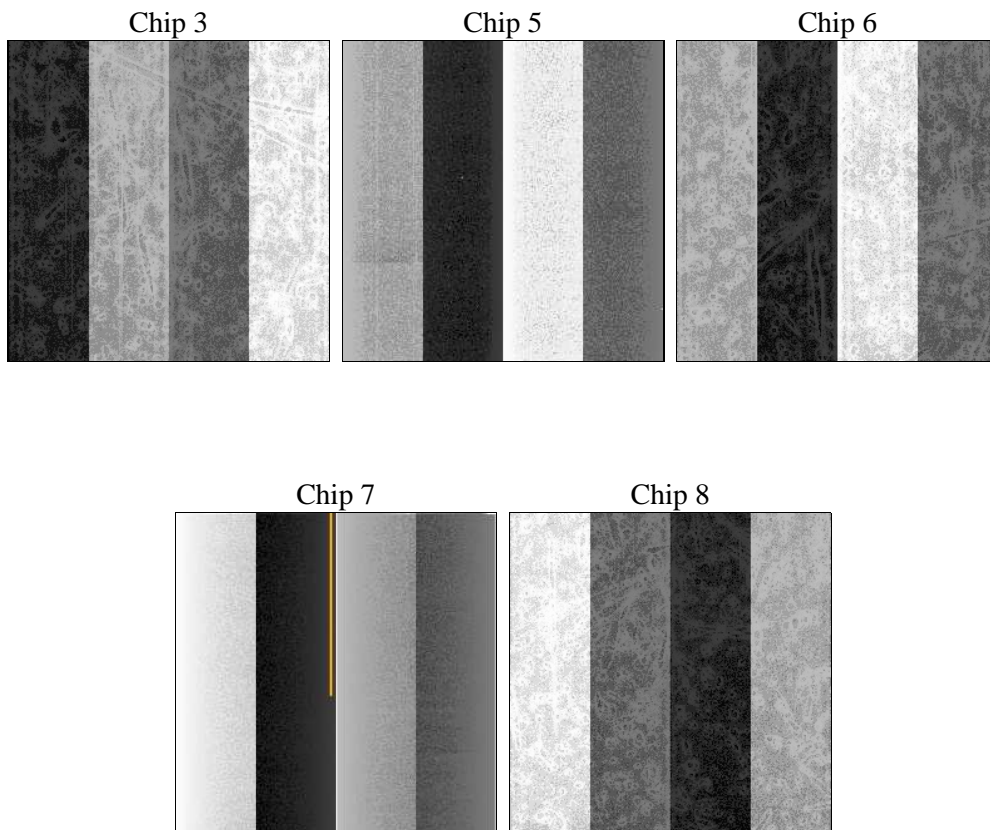
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 25000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 25100.699951708 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime3 | 25100.699951708 | Sum of GTIs [s] |
| date | 2012-10-22T14:01:48 | Date and time of file creation | ontime5 | 25100.699951708 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime6 | 25100.699951708 | Sum of GTIs [s] |
| | | | ontime7 | 25100.699951708 | Sum of GTIs [s] |
| | | | ontime8 | 25097.558981448 | Sum of GTIs [s] |
| | | | l1events | 818324 | Number of level 1 events |

2.1.4 Events

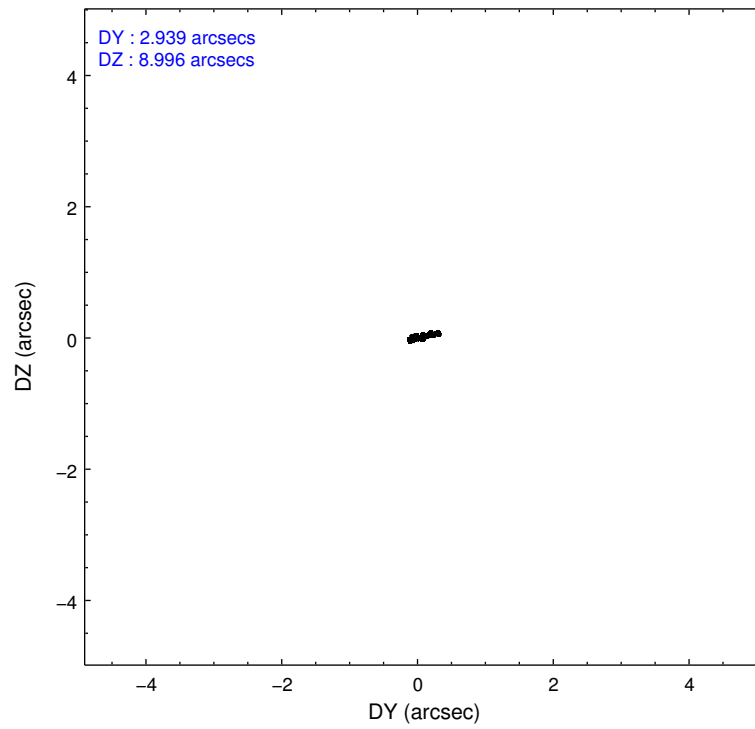
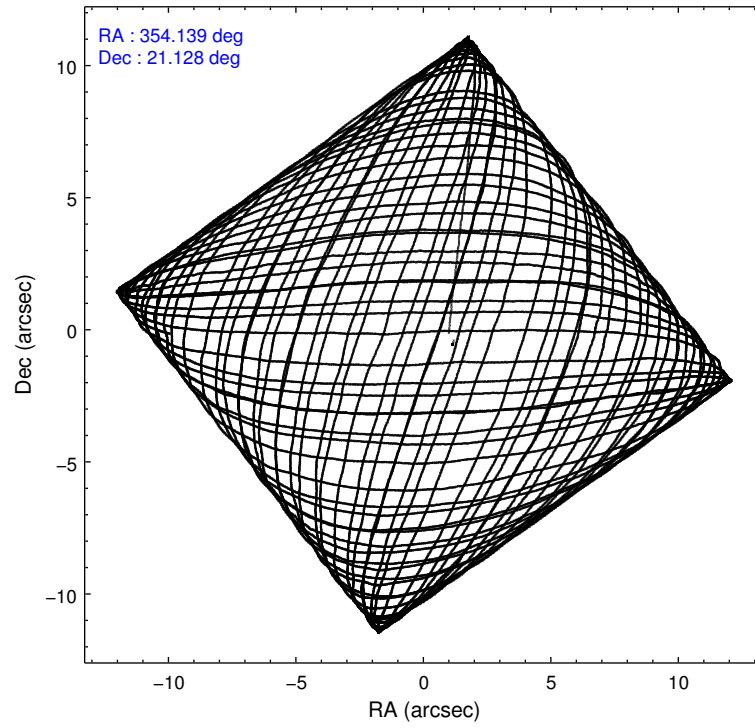
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 130861 | 175731 | 138380 | 205493 | 167859 |
| rejected events | 118573 | 87829 | 122364 | 79045 | 128967 |
| rejected % | 90% | 49% | 88% | 38% | 76% |

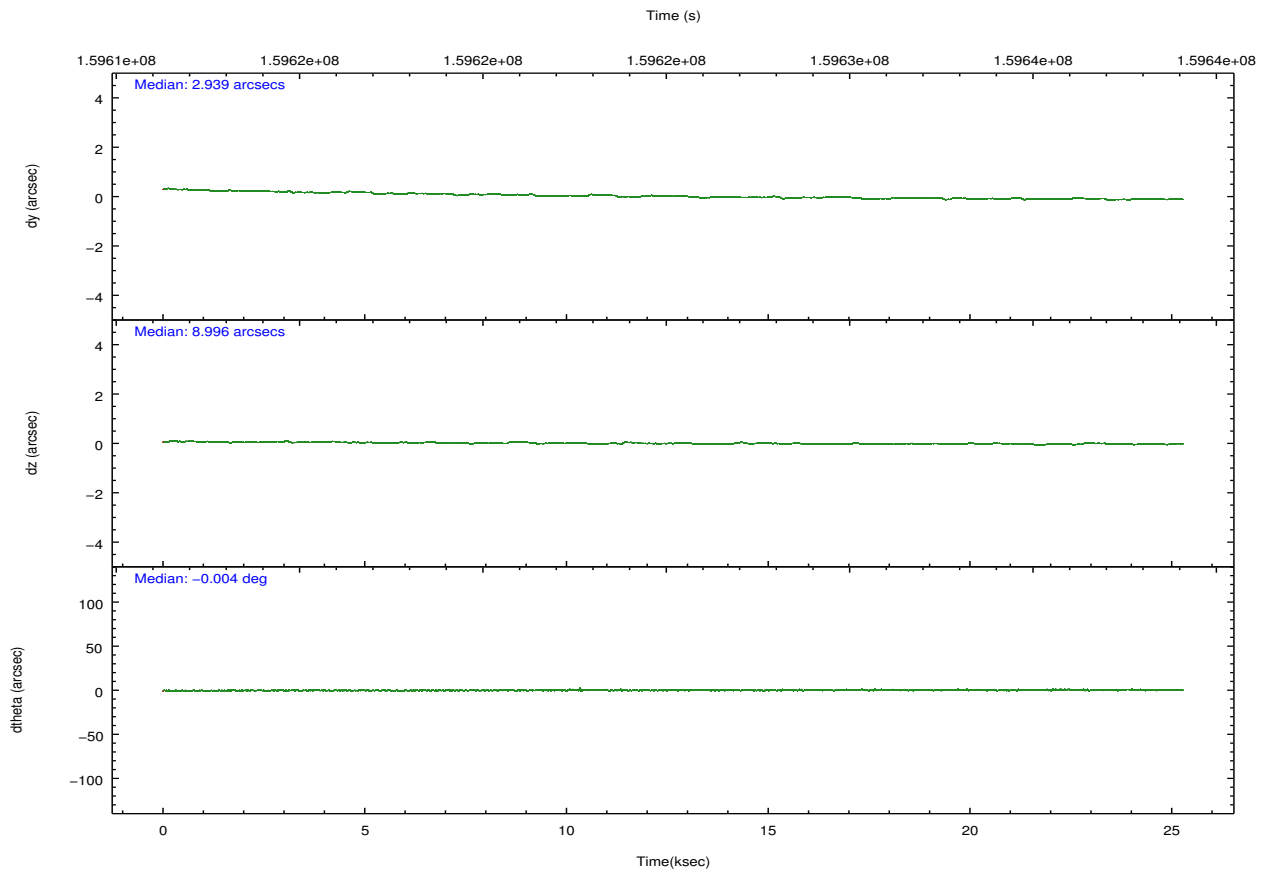
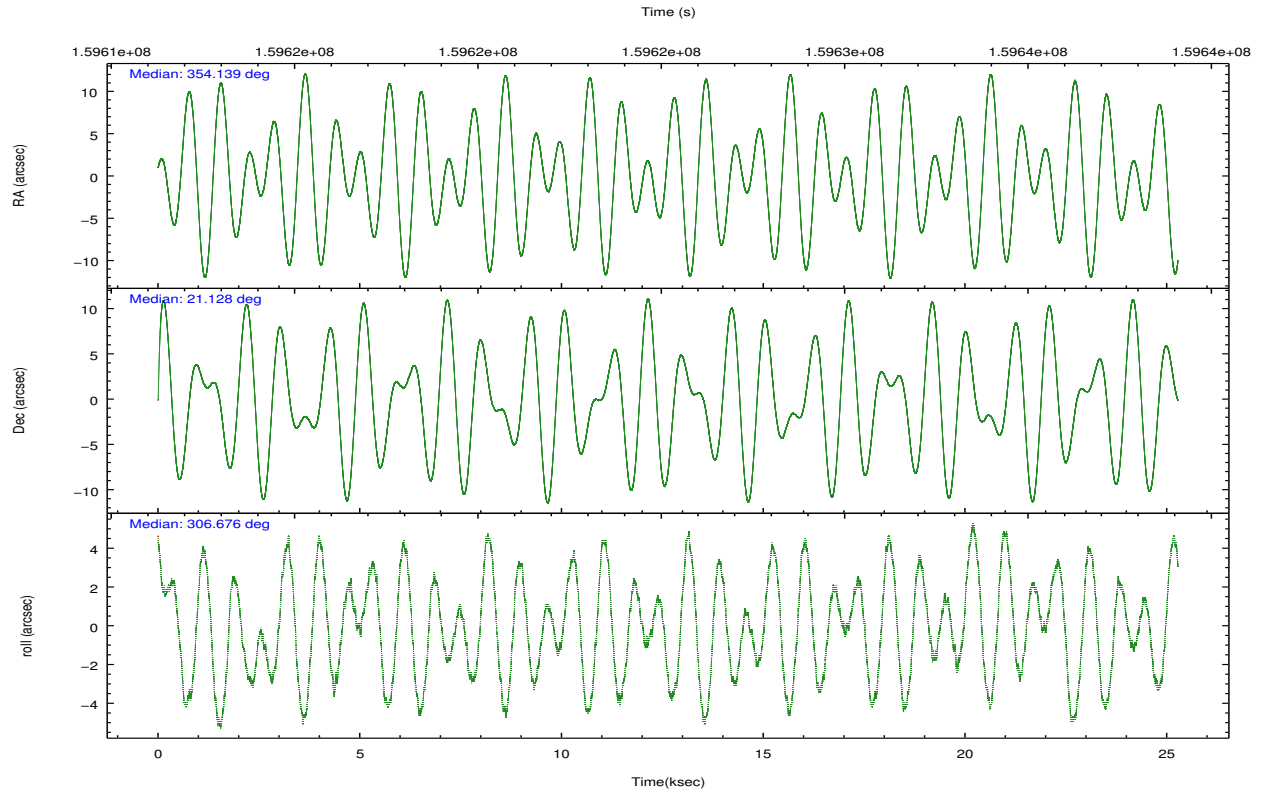
| | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|-------|--------|-------|--------|
| grade 0 events | 4568 | 10244 | 6835 | 24955 | 12590 |
| | 3% | 5% | 4% | 12% | 7% |
| grade 1 events | 54 | 187 | 64 | 158 | 115 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 2493 | 24709 | 3090 | 29455 | 8176 |
| | 1% | 14% | 2% | 14% | 4% |
| grade 3 events | 1461 | 4280 | 1590 | 13369 | 4234 |
| | 1% | 2% | 1% | 6% | 2% |
| grade 4 events | 1379 | 3991 | 1652 | 13530 | 4043 |
| | 1% | 2% | 1% | 6% | 2% |
| grade 5 events | 5028 | 14559 | 5097 | 15473 | 7198 |
| | 3% | 8% | 3% | 7% | 4% |
| grade 6 events | 2387 | 44685 | 2853 | 45151 | 9851 |
| | 1% | 25% | 2% | 21% | 5% |
| grade 7 events | 113491 | 73076 | 117199 | 63402 | 121652 |
| | 86% | 41% | 84% | 30% | 72% |

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 | 354.111878 | 354.1388293648881 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 21.138788 | 21.12838284379675 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 306.536441 | 306.6833449919674 | [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 | -190.1425803651734 | | | |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | | | |
| [s] Observation start time (MET) | 159612823.184000 | 159611819.95697 | | | |
| Observation start date | 2003-01-22T08:52:39 | 2003-01-22T08:36:59 | | | |
| [s] Observation end time (MET) | 159637823.184000 | 159638240.35808 | | | |
| Observation end date | 2003-01-22T15:49:19 | 2003-01-22T15:57:20 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





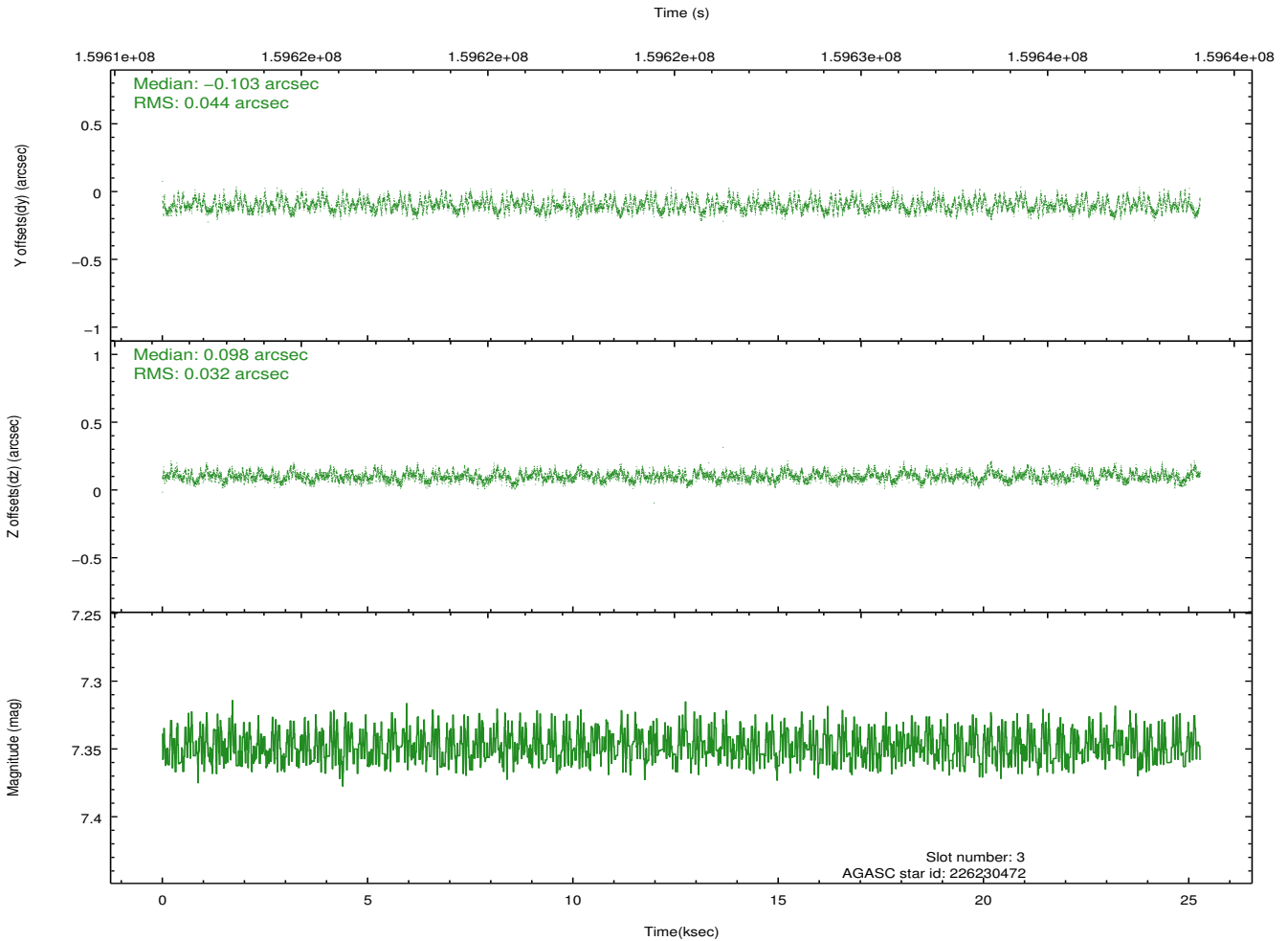
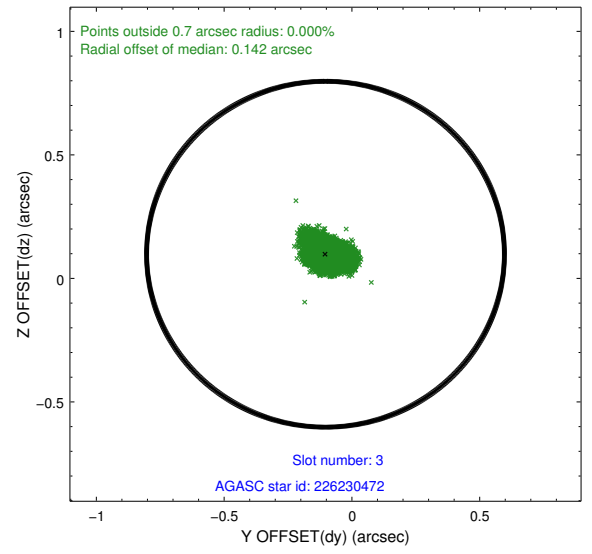
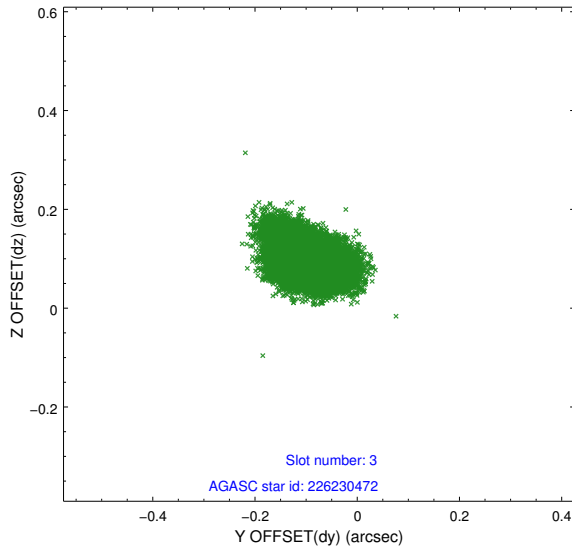
Slot Statistics

| 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 | 6165 | -0.027 | -0.015 | 0.007 | 0.011 | 0.000000 | 0.000000 | -755.62 | -1730.19 |
| 1 | FID | ACIS-S-4 | 7.20 | 6163 | 0.004 | 0.017 | 0.008 | 0.014 | 0.000000 | 0.000000 | 2157.62 | 178.23 |
| 2 | FID | ACIS-S-5 | 7.24 | 6163 | -0.008 | 0.007 | 0.008 | 0.015 | 0.000000 | 0.000000 | -1808.31 | 171.99 |
| 3 | GUIDE | 226230472 | 7.35 | 12328 | -0.103 | 0.098 | 0.058 | 0.094 | 354.235456 | 21.723100 | -1444.26 | 1584.65 |
| 4 | GUIDE | 226237568 | 8.30 | 12329 | -0.104 | 0.141 | 0.065 | 0.105 | 354.127376 | 21.883597 | -2123.72 | 1638.26 |
| 5 | GUIDE | 226246888 | 7.85 | 12327 | 0.151 | -0.016 | 0.057 | 0.087 | 354.116209 | 20.665264 | 1378.93 | -1002.66 |
| 6 | GUIDE | 226249024 | 9.11 | 12325 | -0.142 | -0.023 | 0.084 | 0.135 | 353.402926 | 21.423985 | -2243.22 | -1294.75 |
| 7 | GUIDE | 226246288 | 9.19 | 12321 | 0.192 | -0.200 | 0.117 | 0.190 | 353.845579 | 20.365683 | 1701.30 | -2378.33 |

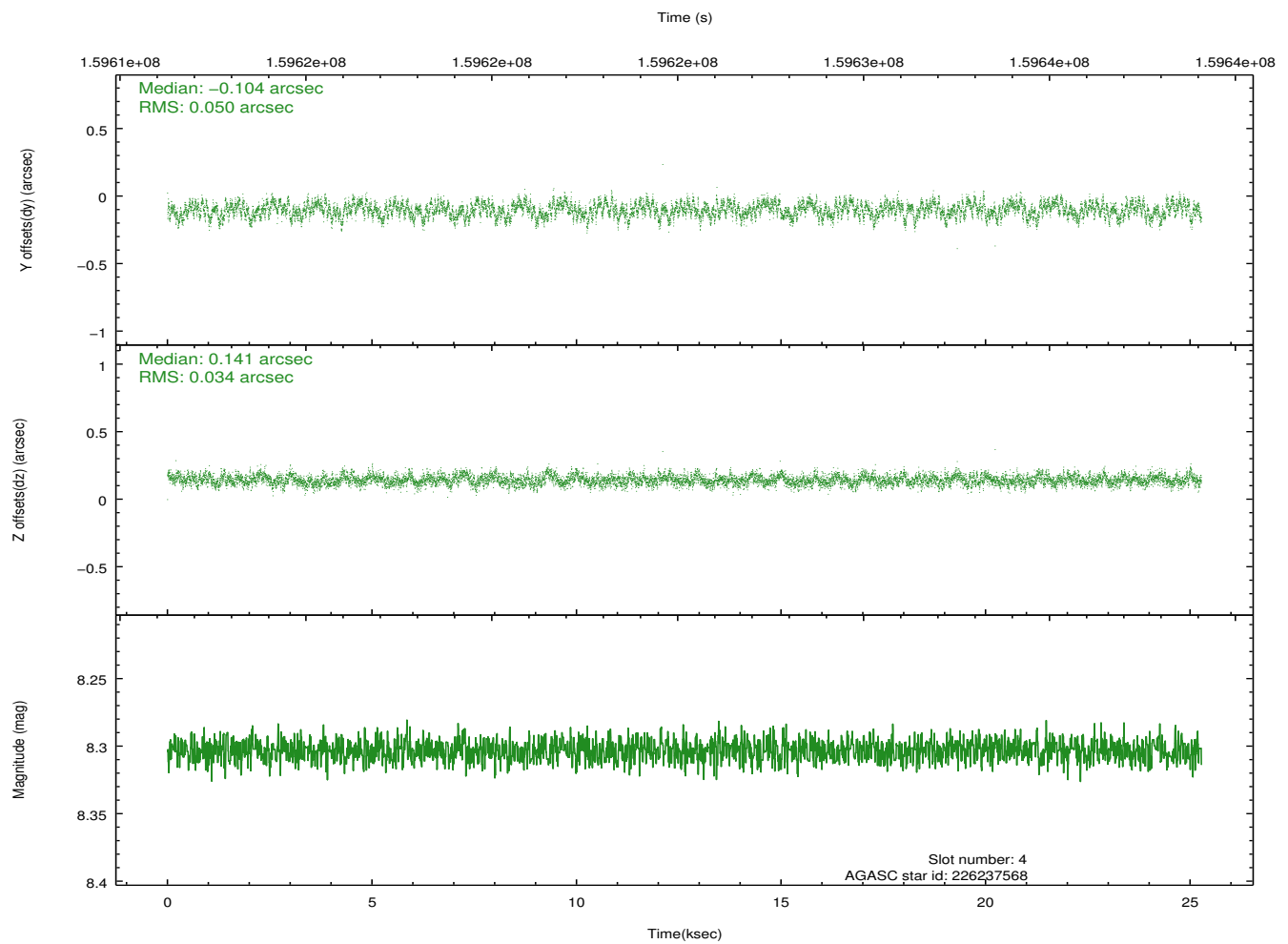
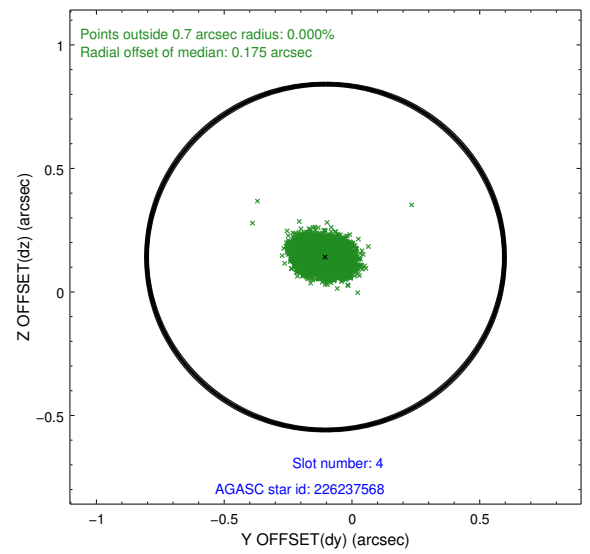
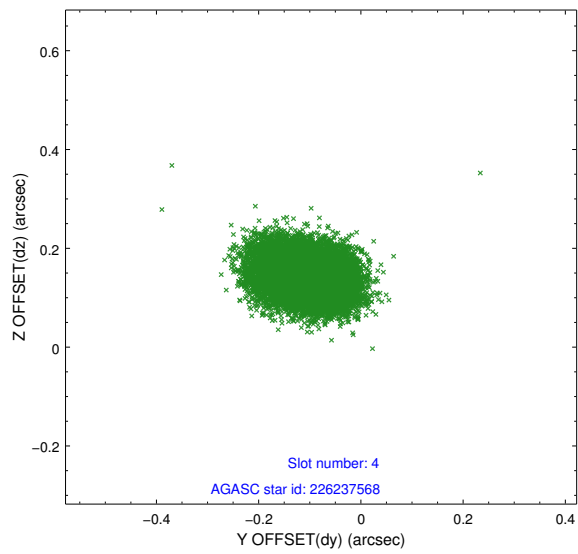
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2.4 Star Slots

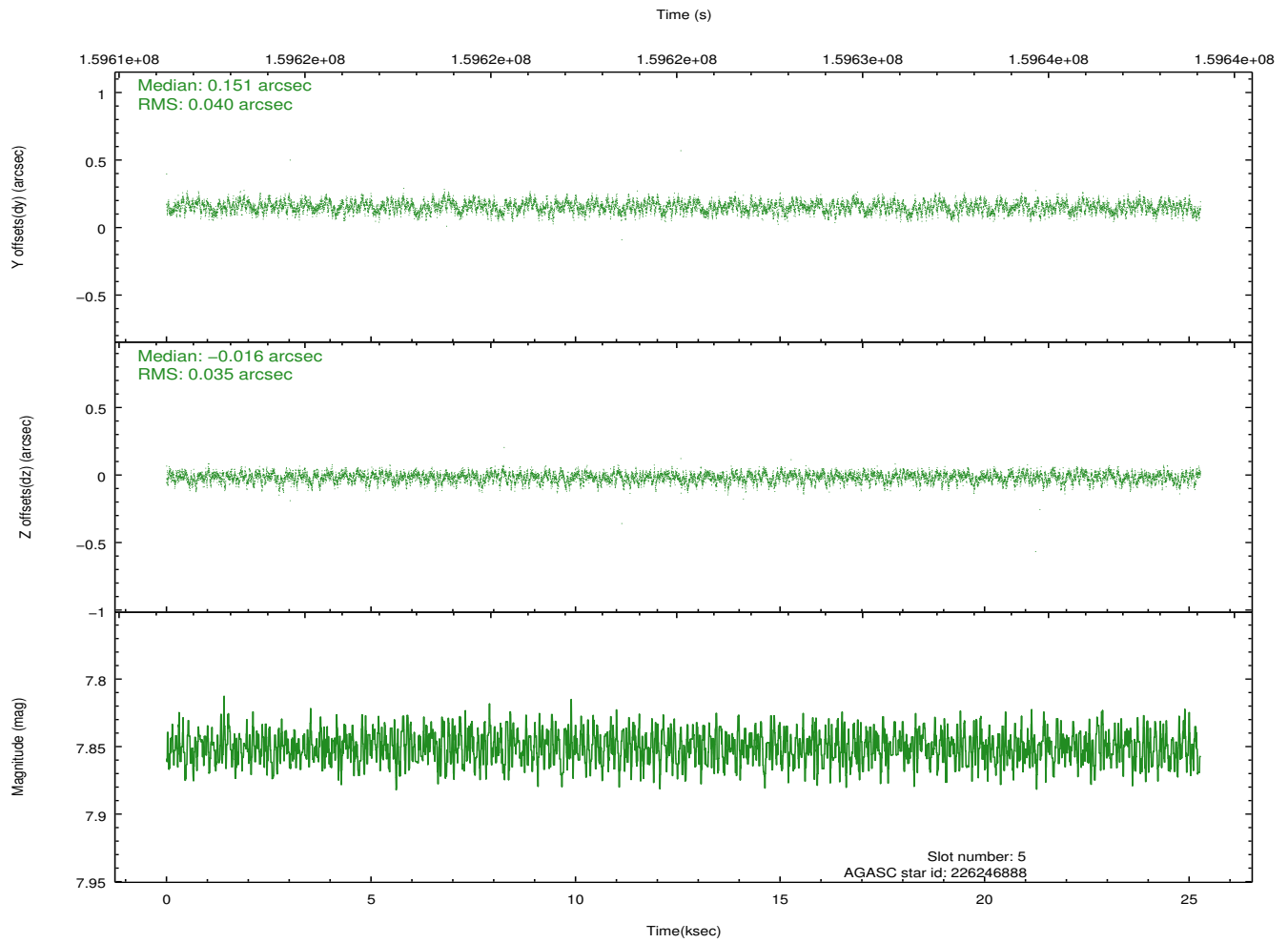
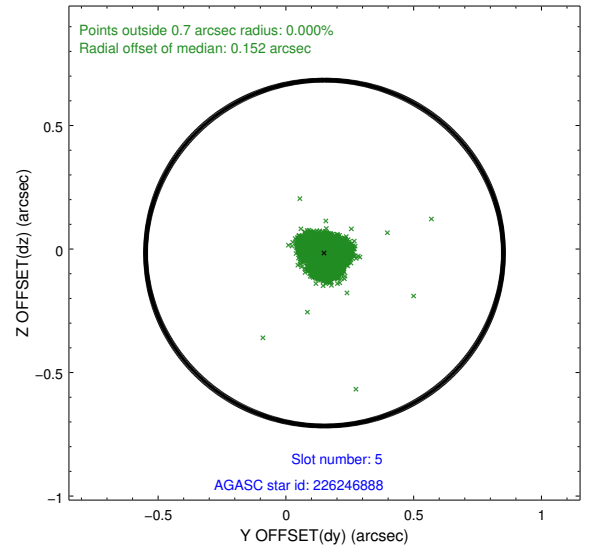
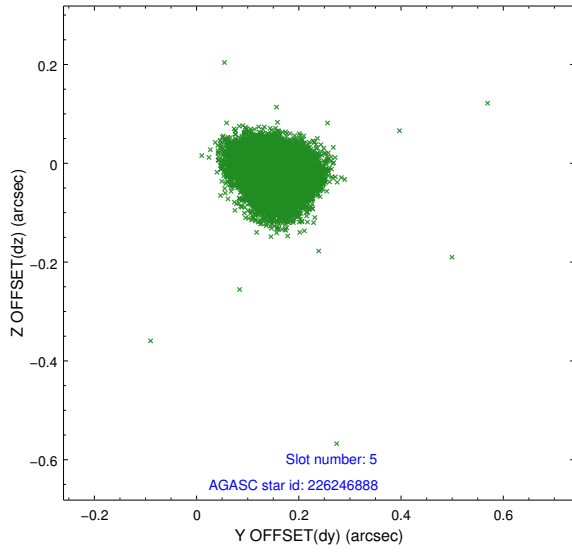
2.4.1 Slot 3



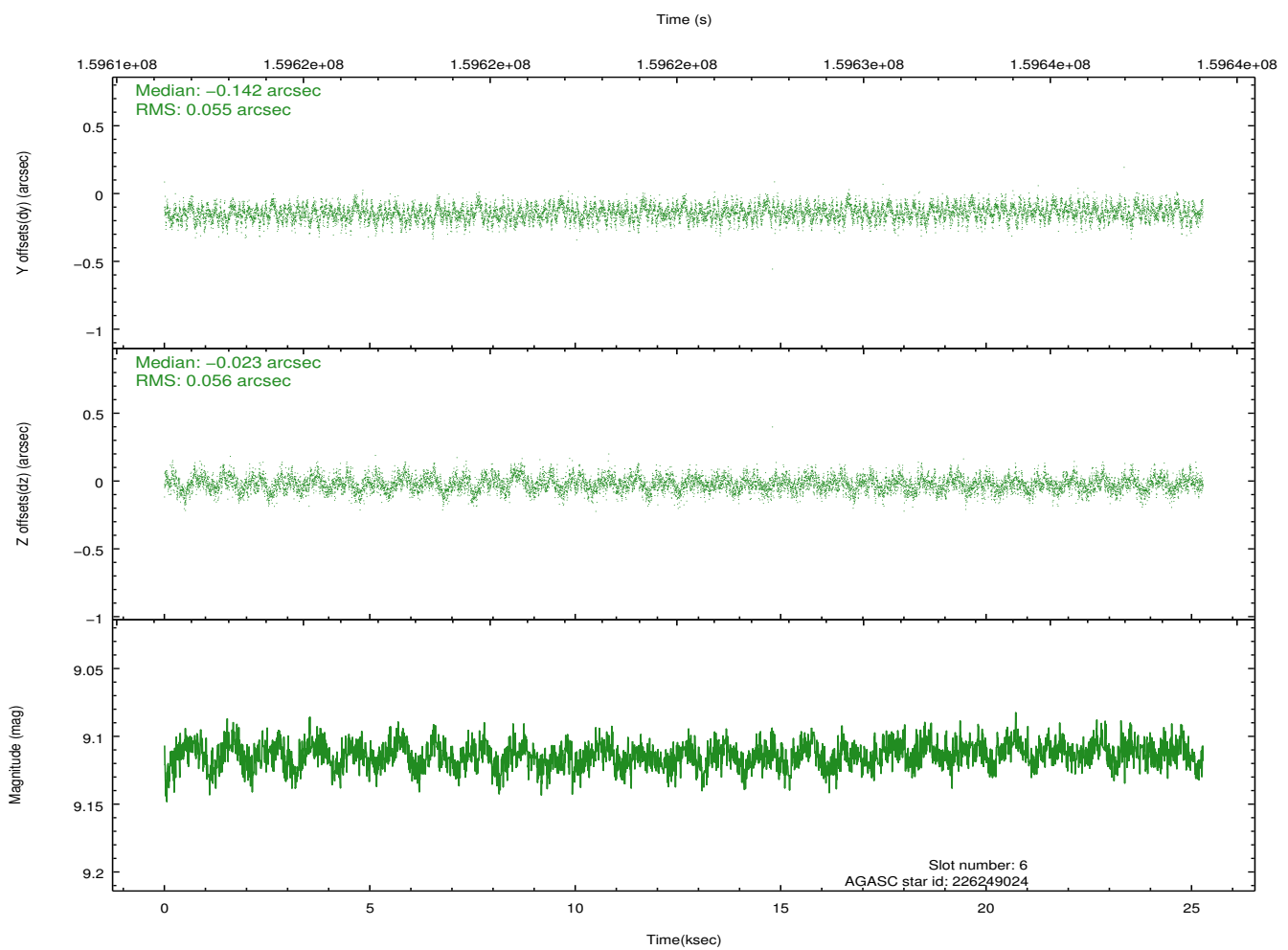
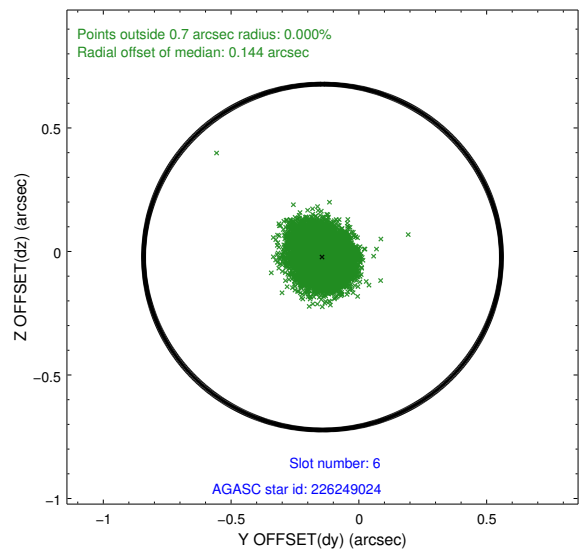
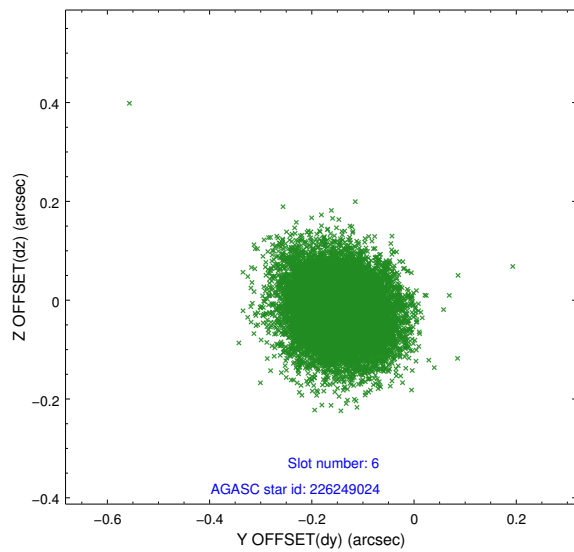
2.4.2 Slot 4



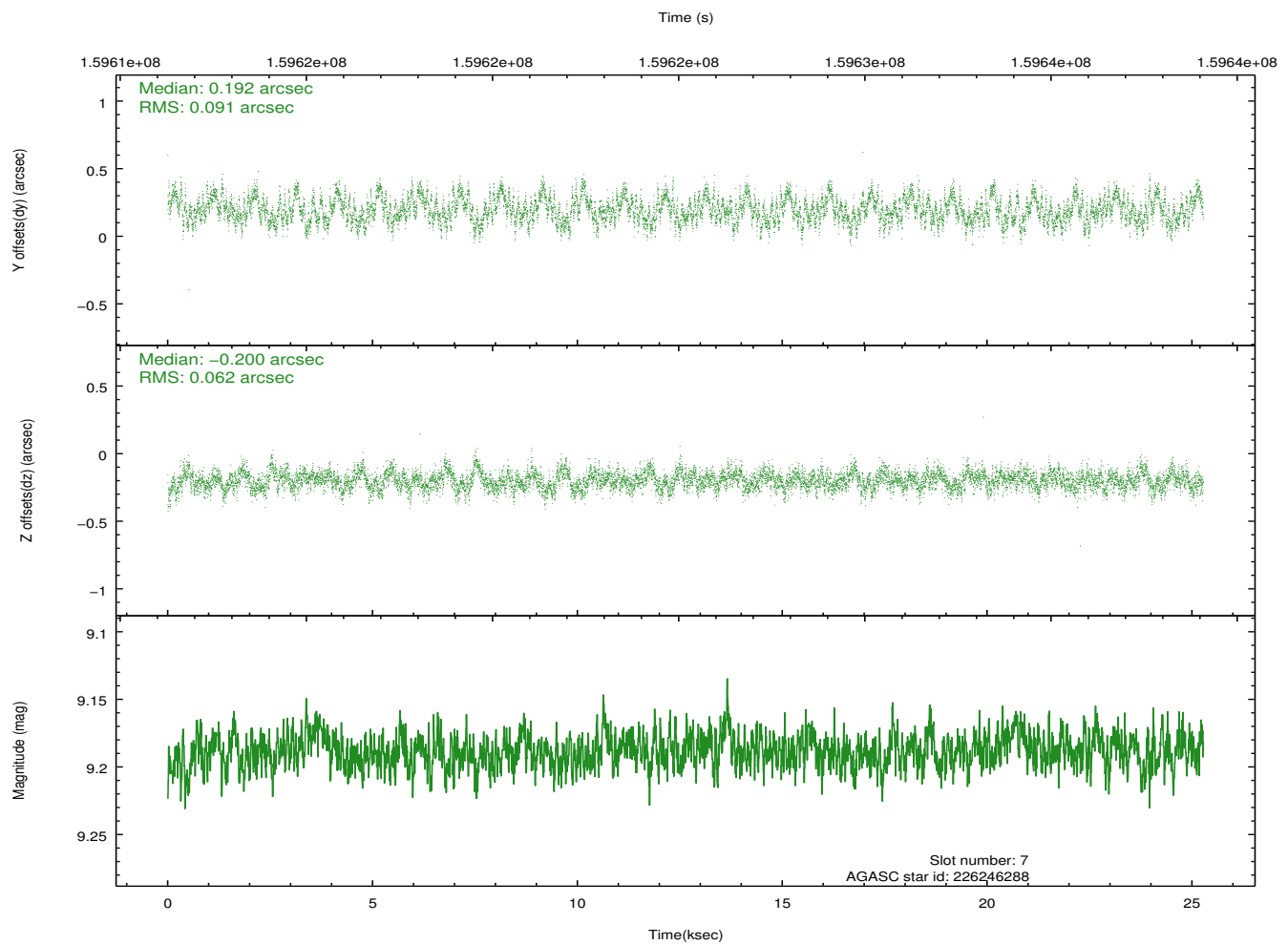
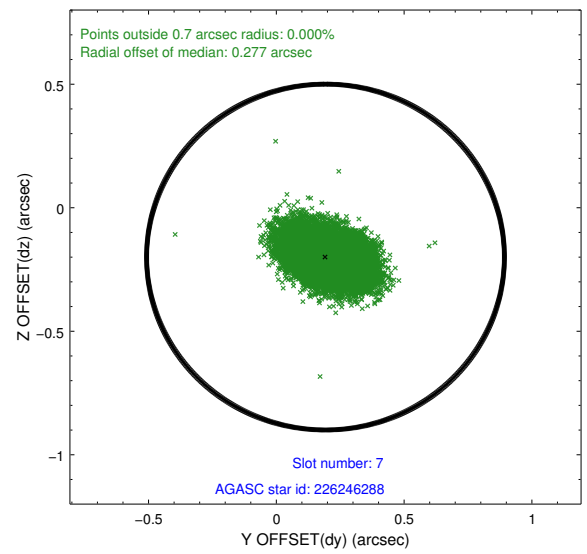
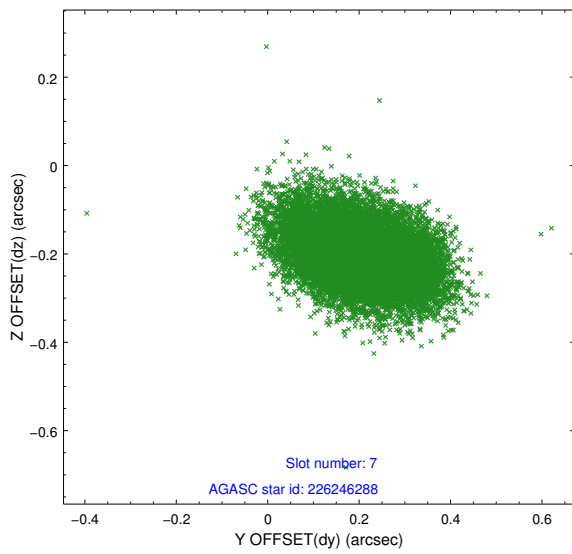
2.4.3 Slot 5



2.4.4 Slot 6

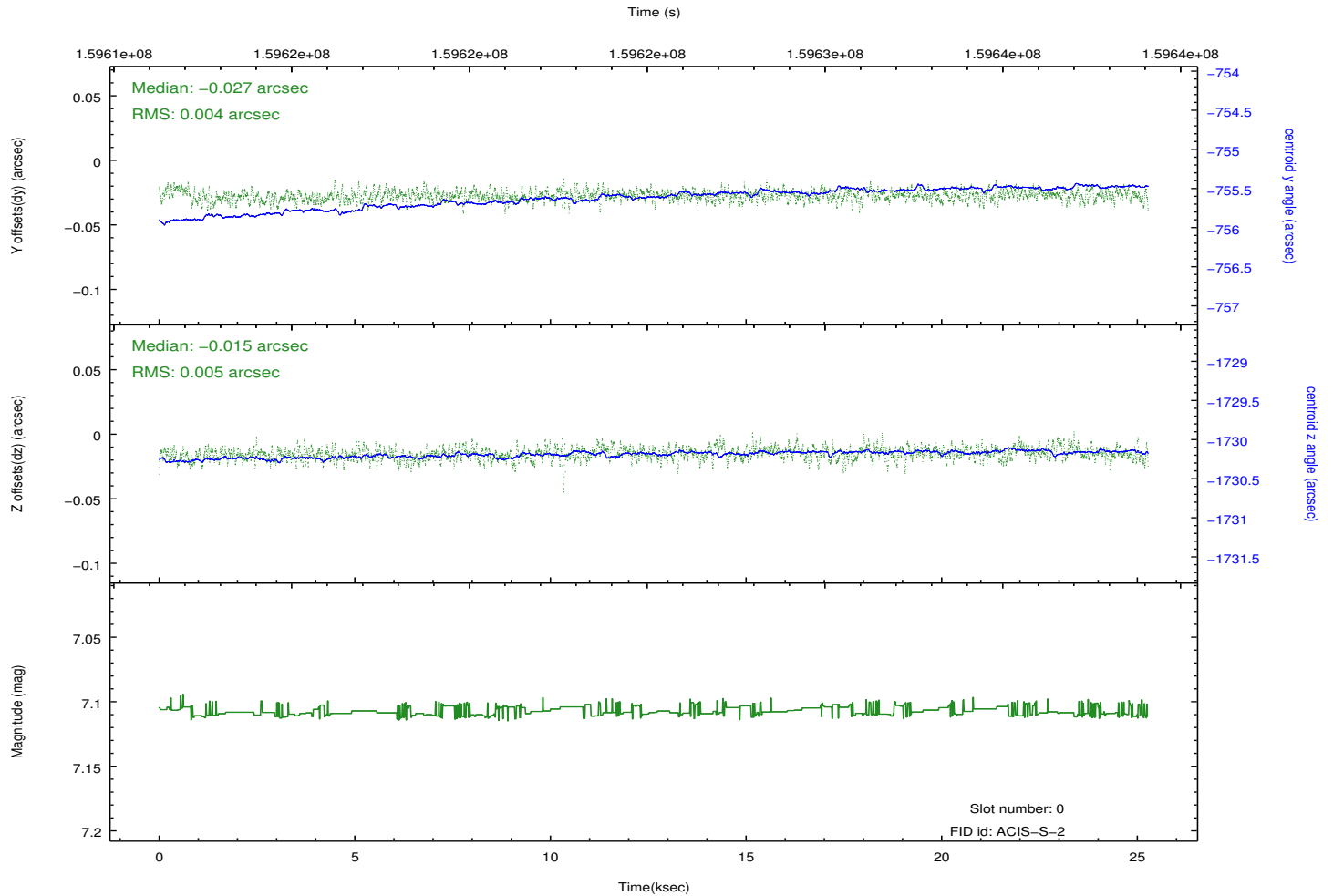
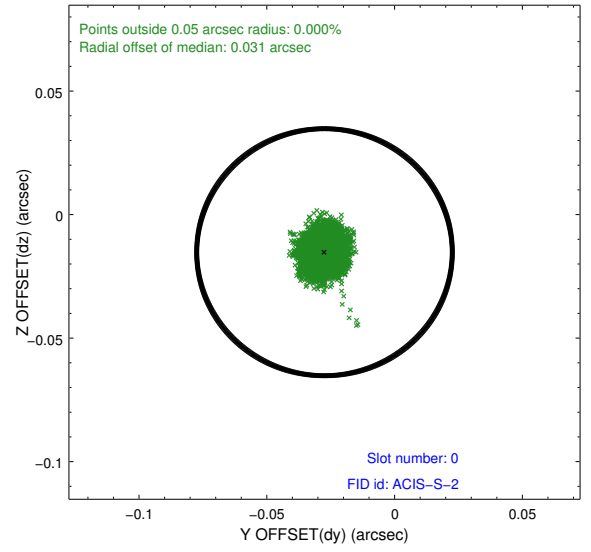
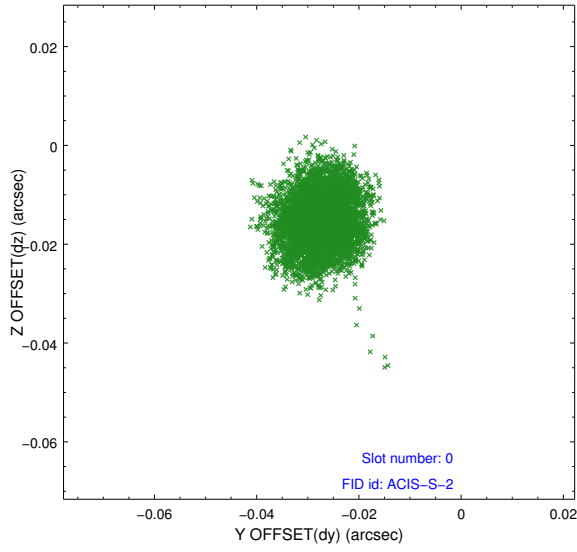


2.4.5 Slot 7

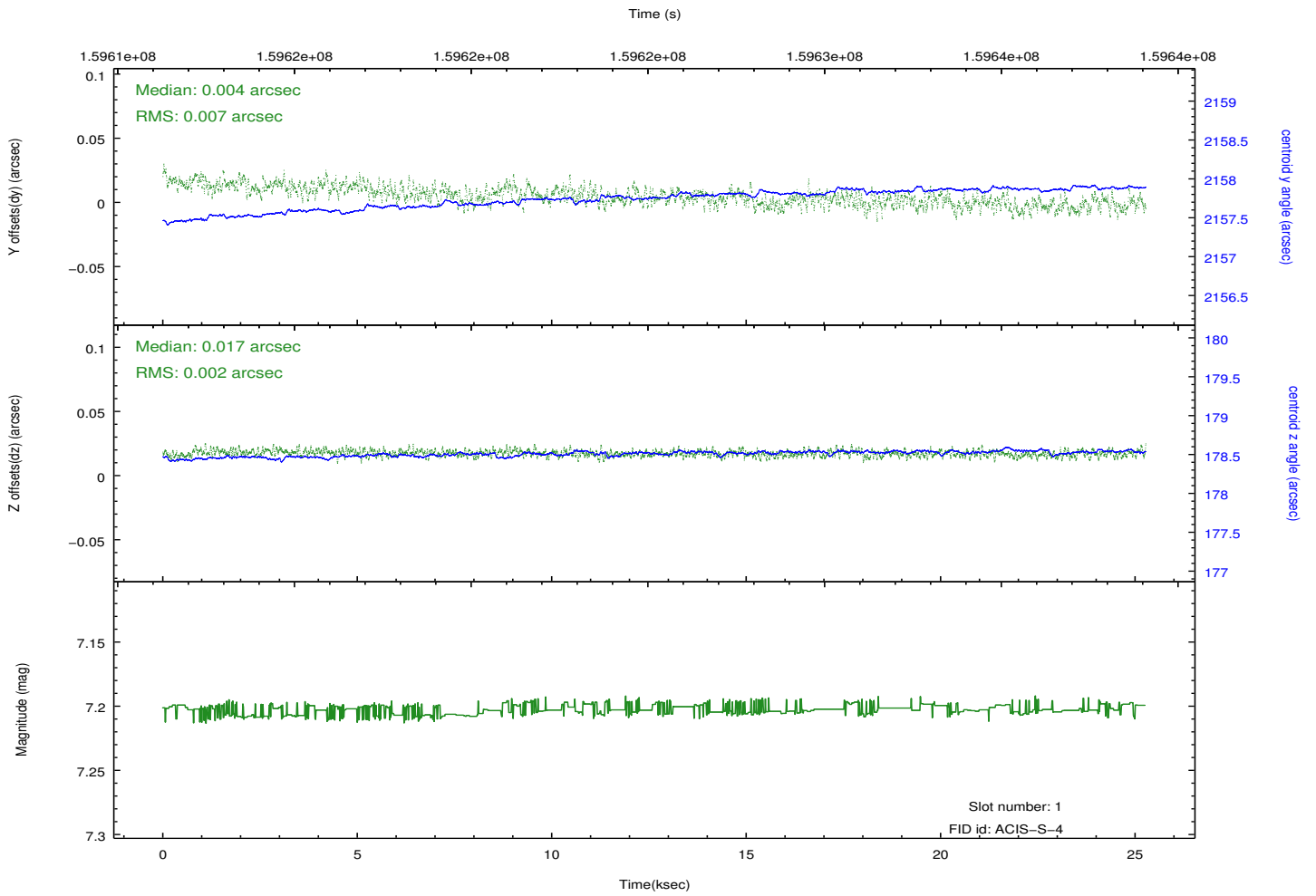
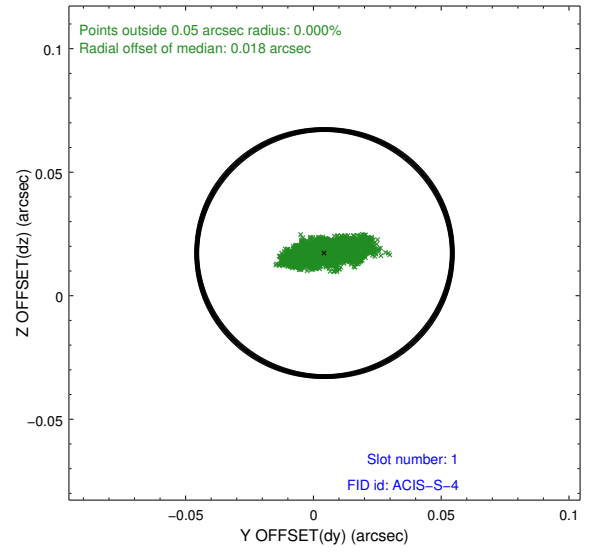
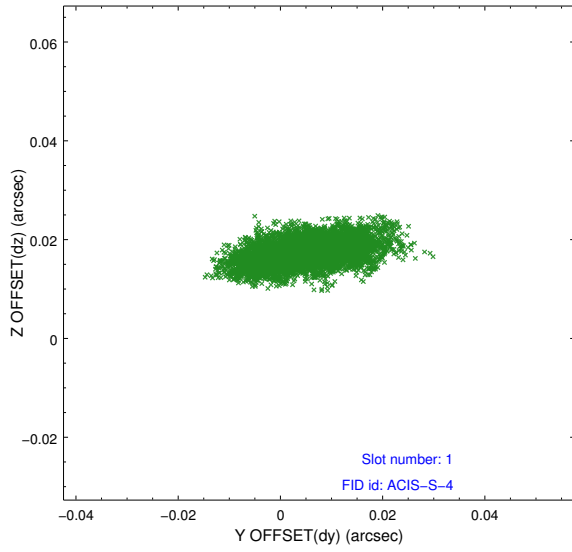


2.5 FID Slots

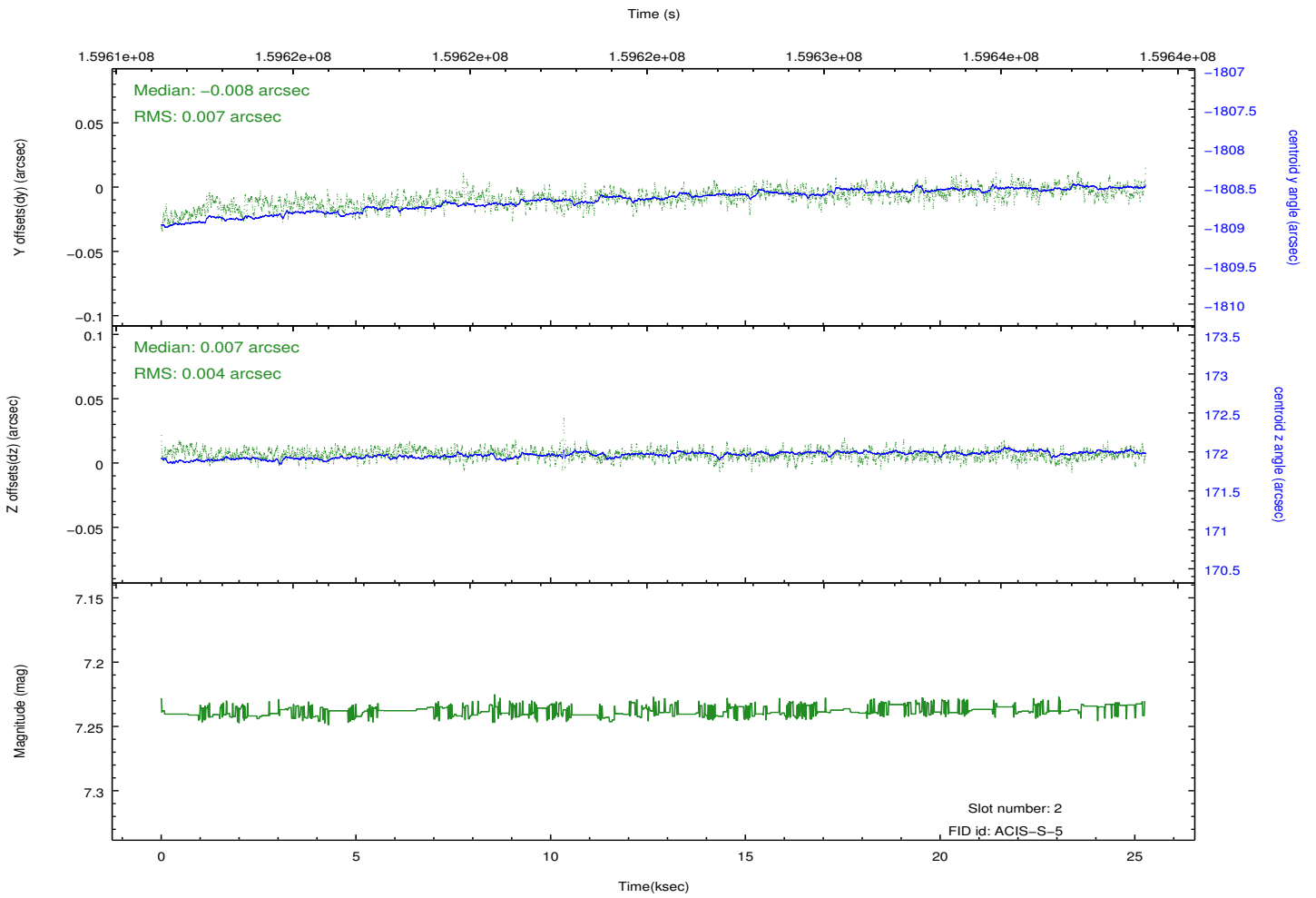
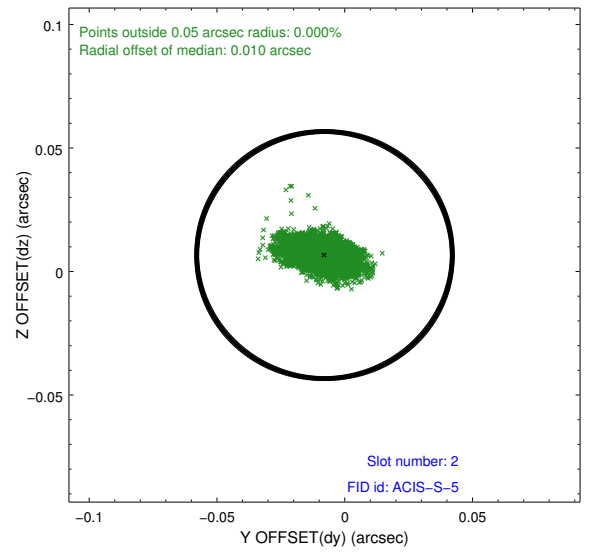
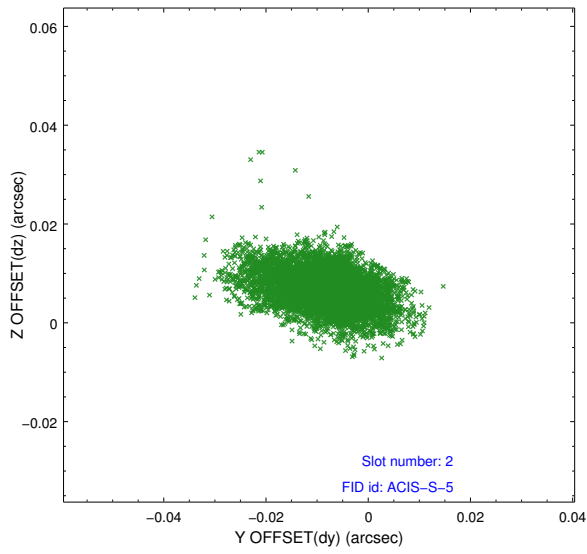
2.5.1 Slot 0



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) | 2012.11.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 25.103 |

A.2 Comments

The bias file for CCD 7 was incomplete because of data gaps in telemetry. The bias map for CCD 7 was reconstructed using scaled data from a comparable bias map for another observation to fill the data gaps. Data affected are bounded by the sky coords:
(354.17257,21.11550), (354.08304,21.22741), (354.08081,21.22586), (354.17034,21.11395)