

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2486 - L2 Version 3
Chandra X-Ray Center

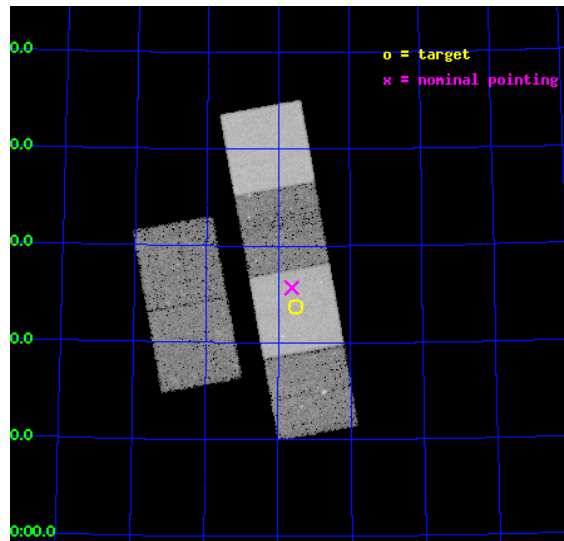
L2 Processing Date : Sep 29 2012

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1 Front

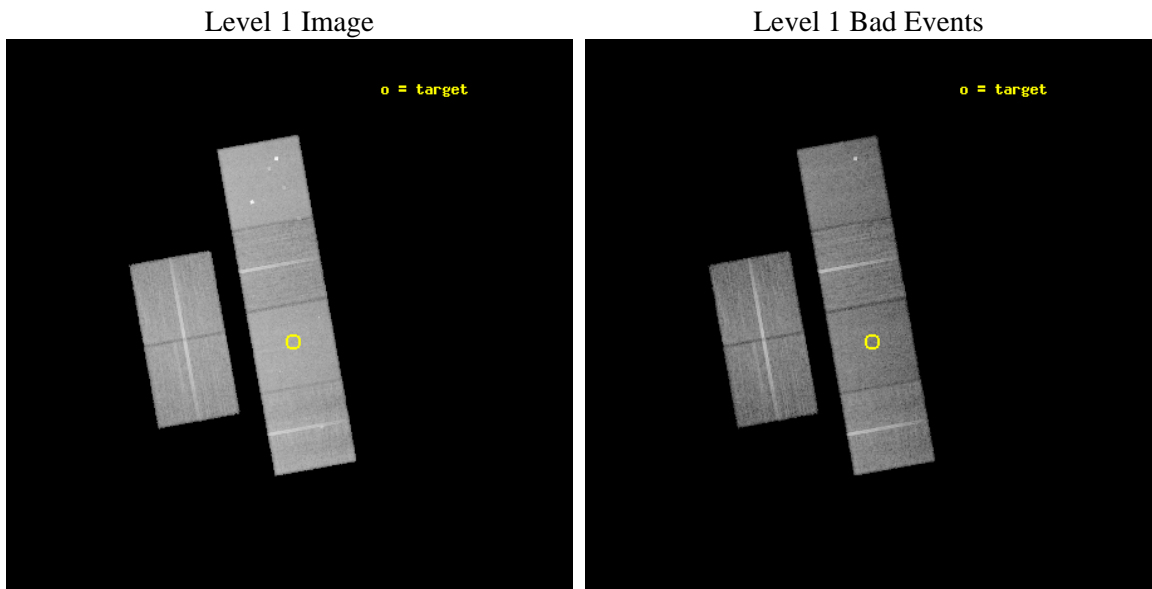
| | | |
|----------|---|---|
| seq_num | 900080 | Sequence number |
| obs_id | 2486 | Observation id |
| title | DIFFUSE X-RAY EMISSION FROM THE MISSING BARYONS IN THE UNIVERSE | Pr |
| observer | Dr. Joel Bregman | Principal investigator |
| object | CHVC125 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 186.875 | Observer's specified target RA [deg] |
| dec_targ | 75.395833 | Observer's specified target Dec [deg] |
| ra_nom | 186.90534296869 | Nominal RA [deg] |
| dec_nom | 75.428209544579 | Nominal Dec [deg] |
| roll_nom | 79.7699189883 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 22960.000021368 | Sum of GTIs [s] |
| livetime | 22669.266676245 | Livetime [s] |
| ontime2 | 22960.000021368 | Sum of GTIs [s] |
| ontime3 | 22960.000021368 | Sum of GTIs [s] |
| ontime5 | 22960.000021368 | Sum of GTIs [s] |
| ontime6 | 22956.759071022 | Sum of GTIs [s] |
| ontime7 | 22960.000021368 | Sum of GTIs [s] |
| ontime8 | 22960.000021368 | Sum of GTIs [s] |
| l2events | 236732 | Number of level 2 events |



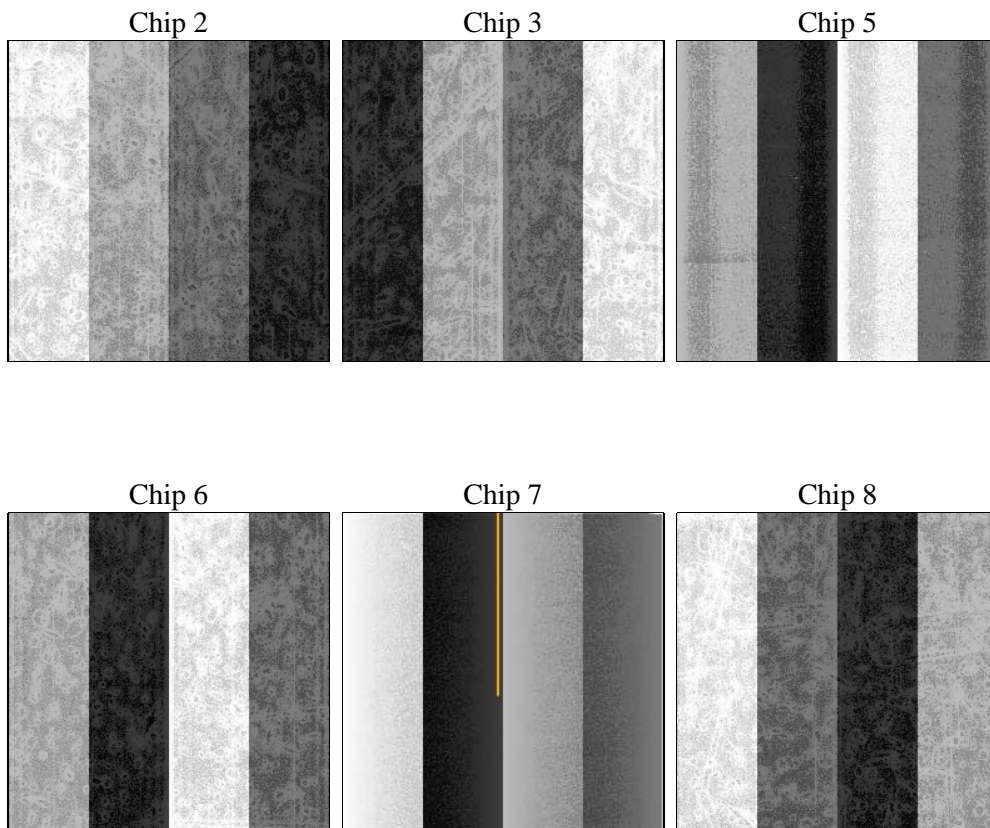
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 2 | Obi number | sched_exp_time | 23000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 22960.000021368 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime2 | 22960.000021368 | Sum of GTIs [s] |
| date | 2012-09-29T14:38:50 | Date and time of file creation | ontime3 | 22960.000021368 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime5 | 22960.000021368 | Sum of GTIs [s] |
| | | | ontime6 | 22956.759071022 | Sum of GTIs [s] |
| | | | ontime7 | 22960.000021368 | Sum of GTIs [s] |
| | | | ontime8 | 22960.000021368 | Sum of GTIs [s] |
| | | | l1events | 1068450 | Number of level 1 events |

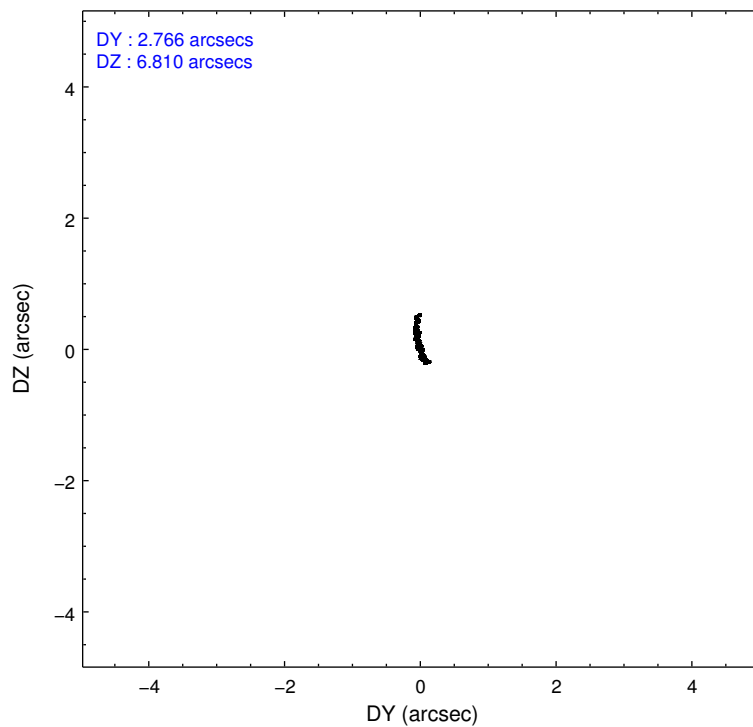
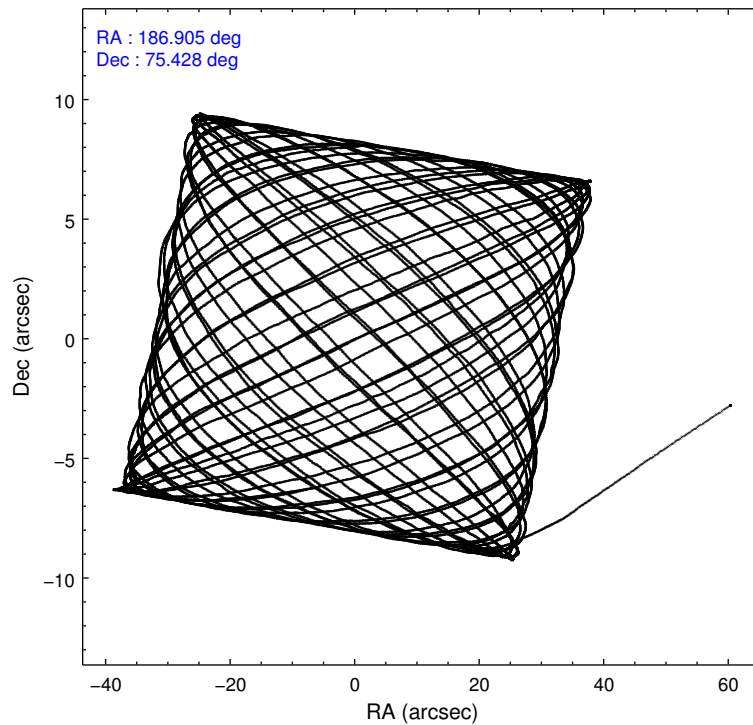
2.1.4 Events

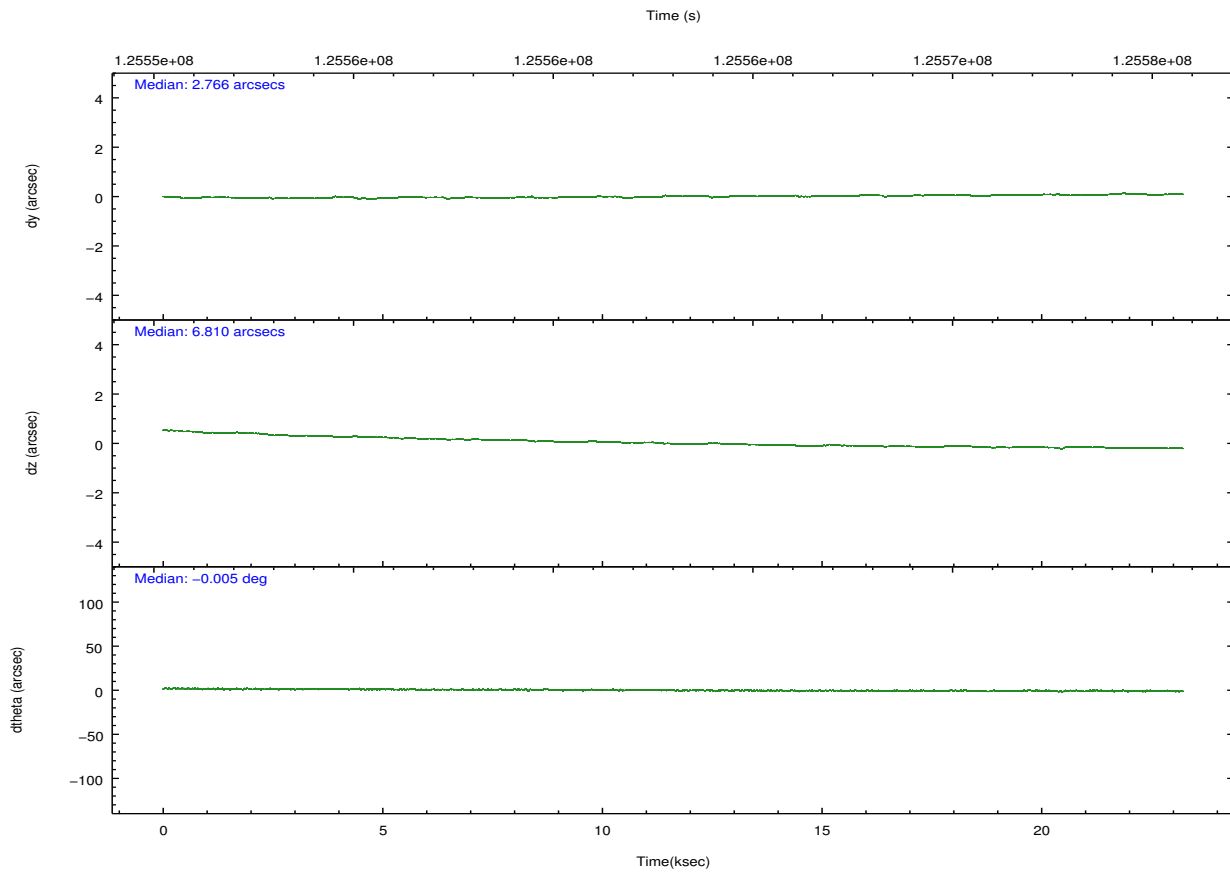
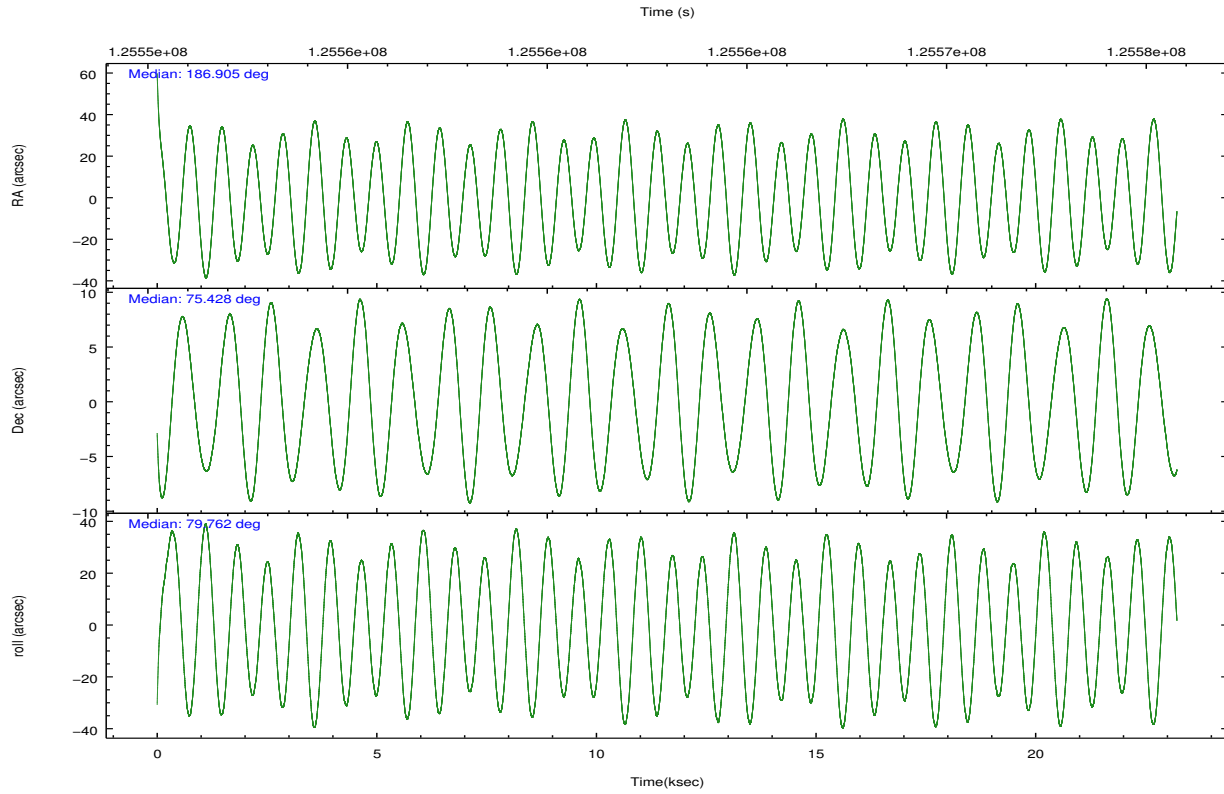
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|-------|--------|-------|--------|
| level 1 events | 157650 | 149505 | 222660 | 152027 | 198379 | 188229 | grade 0 events | 7235 | 7239 | 14296 | 7130 | 7957 | 12536 |
| rejected events | 140272 | 132648 | 118149 | 134502 | 115538 | 149897 | | 4% | 4% | 6% | 4% | 4% | 6% |
| rejected % | 88% | 88% | 53% | 88% | 58% | 79% | grade 1 events | 82 | 69 | 1829 | 78 | 179 | 113 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3830 | 3369 | 30289 | 3545 | 16199 | 8306 |
| | | | | | | | | 2% | 2% | 13% | 2% | 8% | 4% |
| | | | | | | | grade 3 events | 1669 | 1568 | 4357 | 1781 | 7562 | 4101 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 1614 | 1583 | 4295 | 1690 | 7355 | 3829 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 5 events | 5526 | 6051 | 16517 | 6609 | 18919 | 8376 |
| | | | | | | | | 3% | 4% | 7% | 4% | 9% | 4% |
| | | | | | | | grade 6 events | 3035 | 3099 | 51284 | 3382 | 43785 | 9566 |
| | | | | | | | | 1% | 2% | 23% | 2% | 22% | 5% |
| | | | | | | | grade 7 events | 134659 | 126527 | 99793 | 127812 | 96423 | 141402 |
| | | | | | | | | 85% | 84% | 44% | 84% | 48% | 75% |

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 | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 186.943164 | 186.9053429686937 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 75.402652 | 75.42820954457929 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 79.576684 | 79.76991898829986 | [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 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 125551608.184000 | 125550624.22206 | | | |
| Observation start date | 2001-12-24T03:25:44 | 2001-12-24T03:10:24 | | | |
| [s] Observation end time (MET) | 125574608.184000 | 125575000.77303 | | | |
| Observation end date | 2001-12-24T09:49:04 | 2001-12-24T09:56:40 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



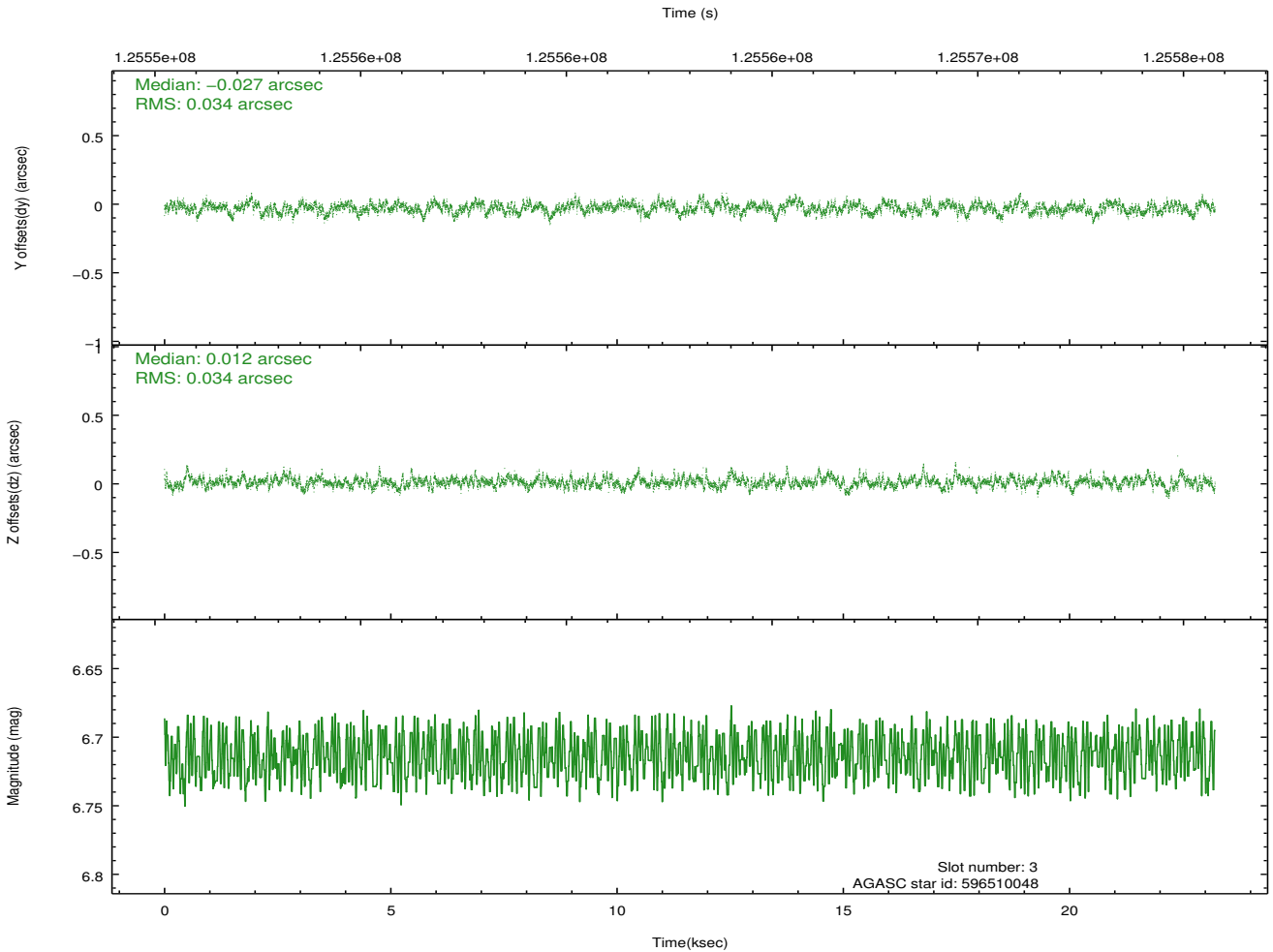
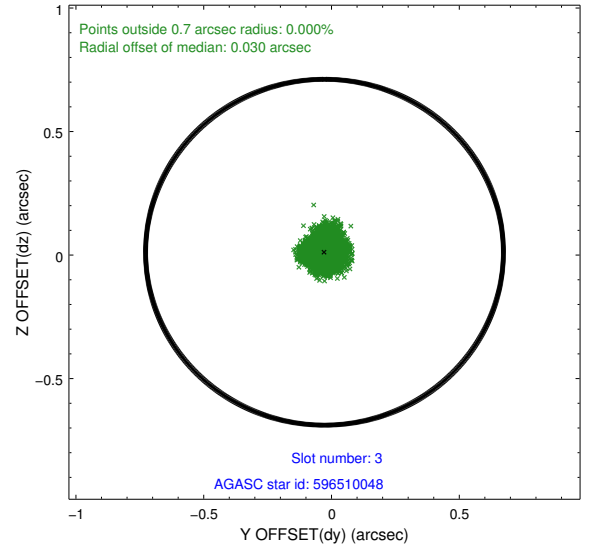
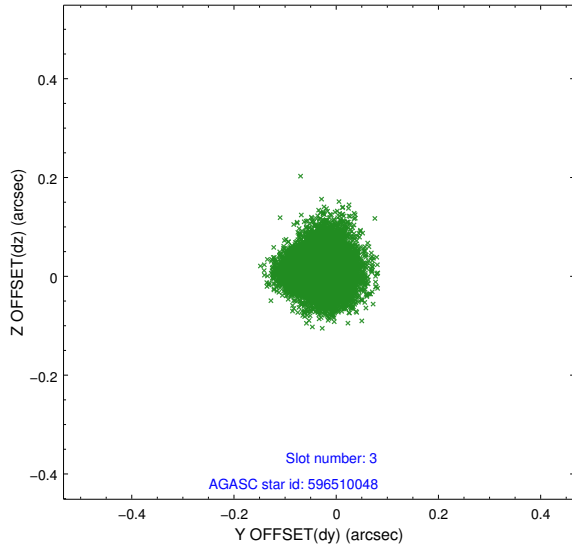


Slot Statistics

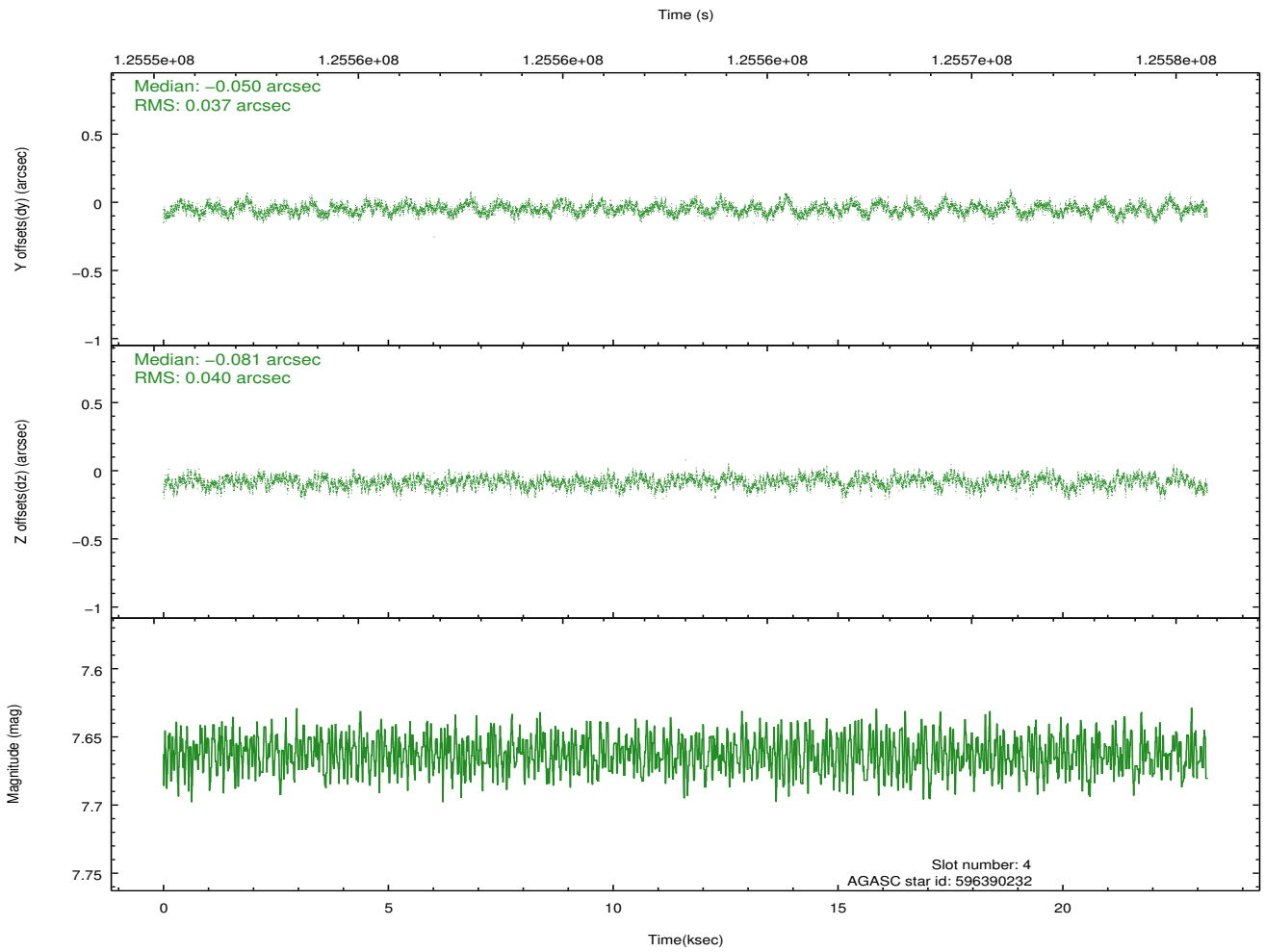
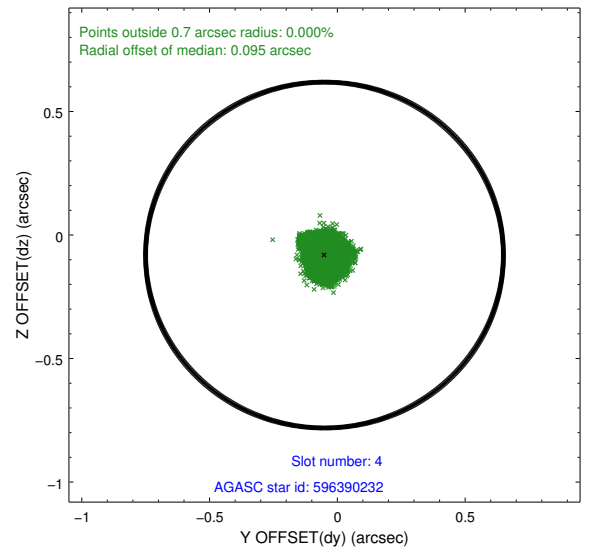
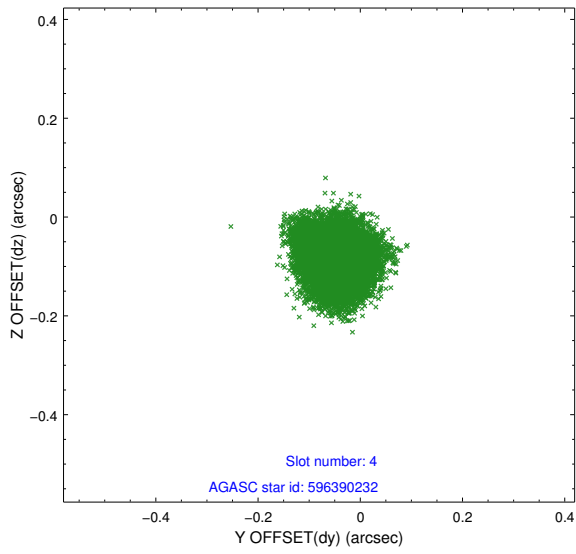
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.12 | 5663 | -0.018 | 0.011 | 0.008 | 0.014 | 0.000000 | 0.000000 | -755.41 | -1728.02 |
| 1 | FID | ACIS-S-4 | 7.20 | 5663 | -0.044 | 0.006 | 0.009 | 0.015 | 0.000000 | 0.000000 | 2157.76 | 180.34 |
| 2 | FID | ACIS-S-5 | 7.24 | 5663 | 0.030 | -0.007 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1808.04 | 174.12 |
| 3 | GUIDE | 596510048 | 6.71 | 11327 | -0.027 | 0.012 | 0.052 | 0.082 | 188.427937 | 75.212520 | -408.49 | -1462.49 |
| 4 | GUIDE | 596390232 | 7.66 | 11326 | -0.050 | -0.081 | 0.059 | 0.092 | 186.553365 | 75.719145 | 1059.78 | 546.59 |
| 5 | GUIDE | 596518224 | 9.54 | 11320 | 0.165 | 0.025 | 0.115 | 0.190 | 187.743001 | 75.202429 | -569.73 | -852.98 |
| 6 | GUIDE | 596378936 | 9.33 | 11325 | -0.010 | 0.009 | 0.095 | 0.152 | 185.905753 | 75.866397 | 1485.46 | 1200.36 |
| 7 | GUIDE | 596518520 | 9.76 | 11320 | -0.074 | 0.058 | 0.132 | 0.230 | 188.587021 | 75.641341 | 1131.76 | -1283.89 |

2.4 Star Slots

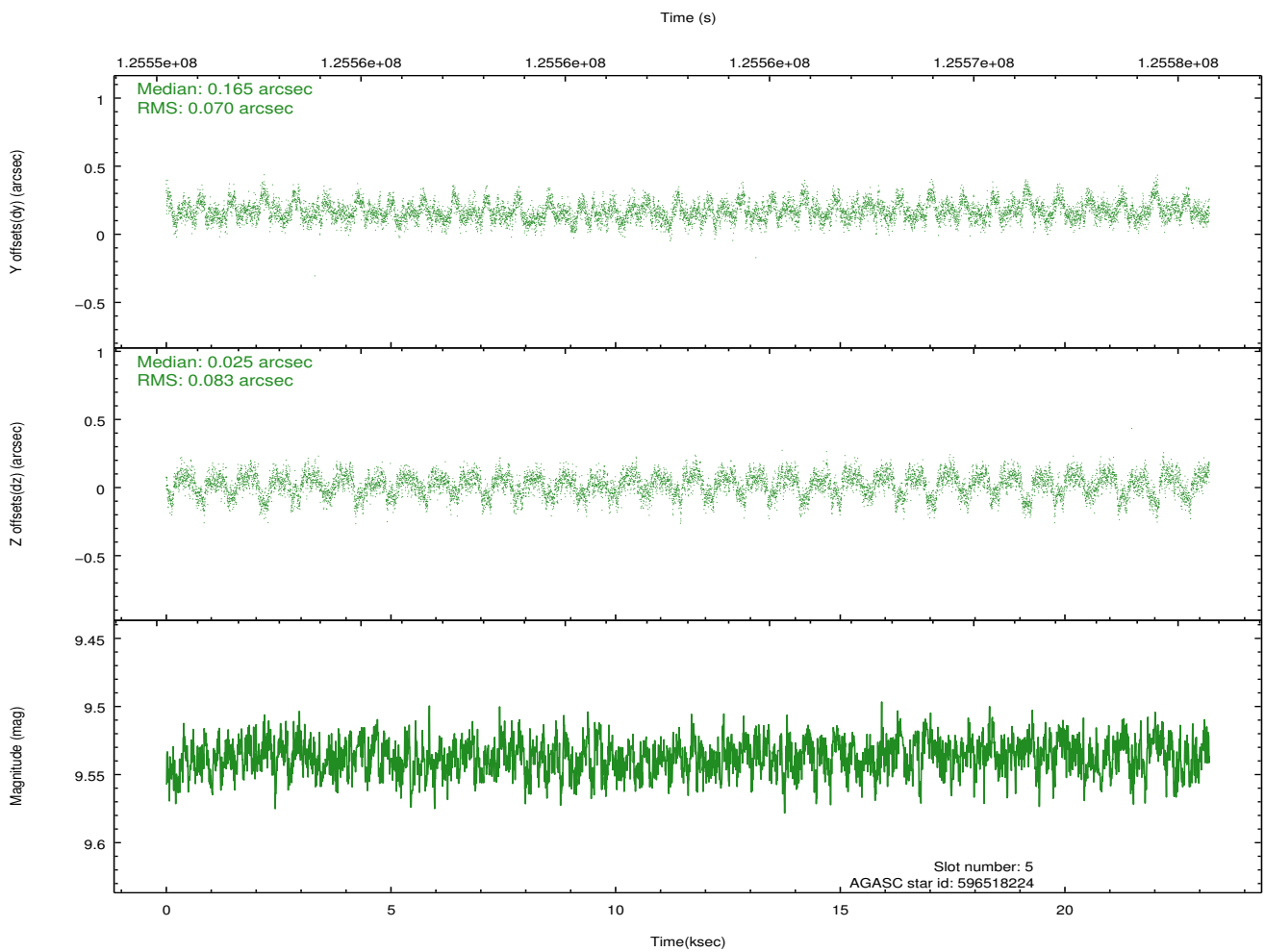
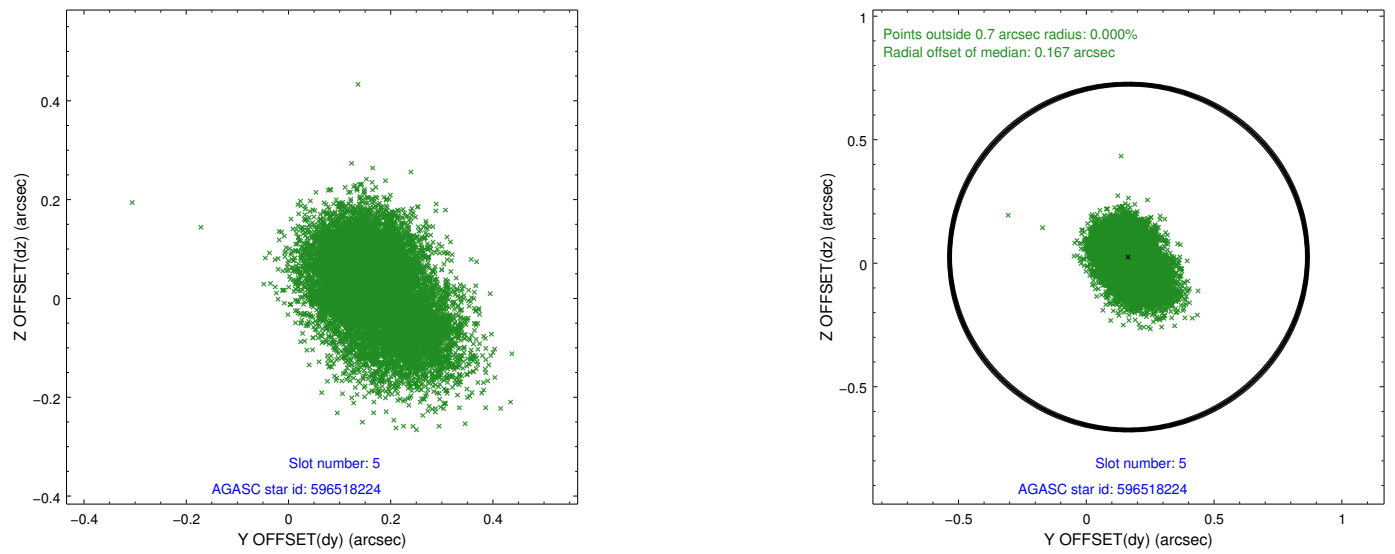
2.4.1 Slot 3



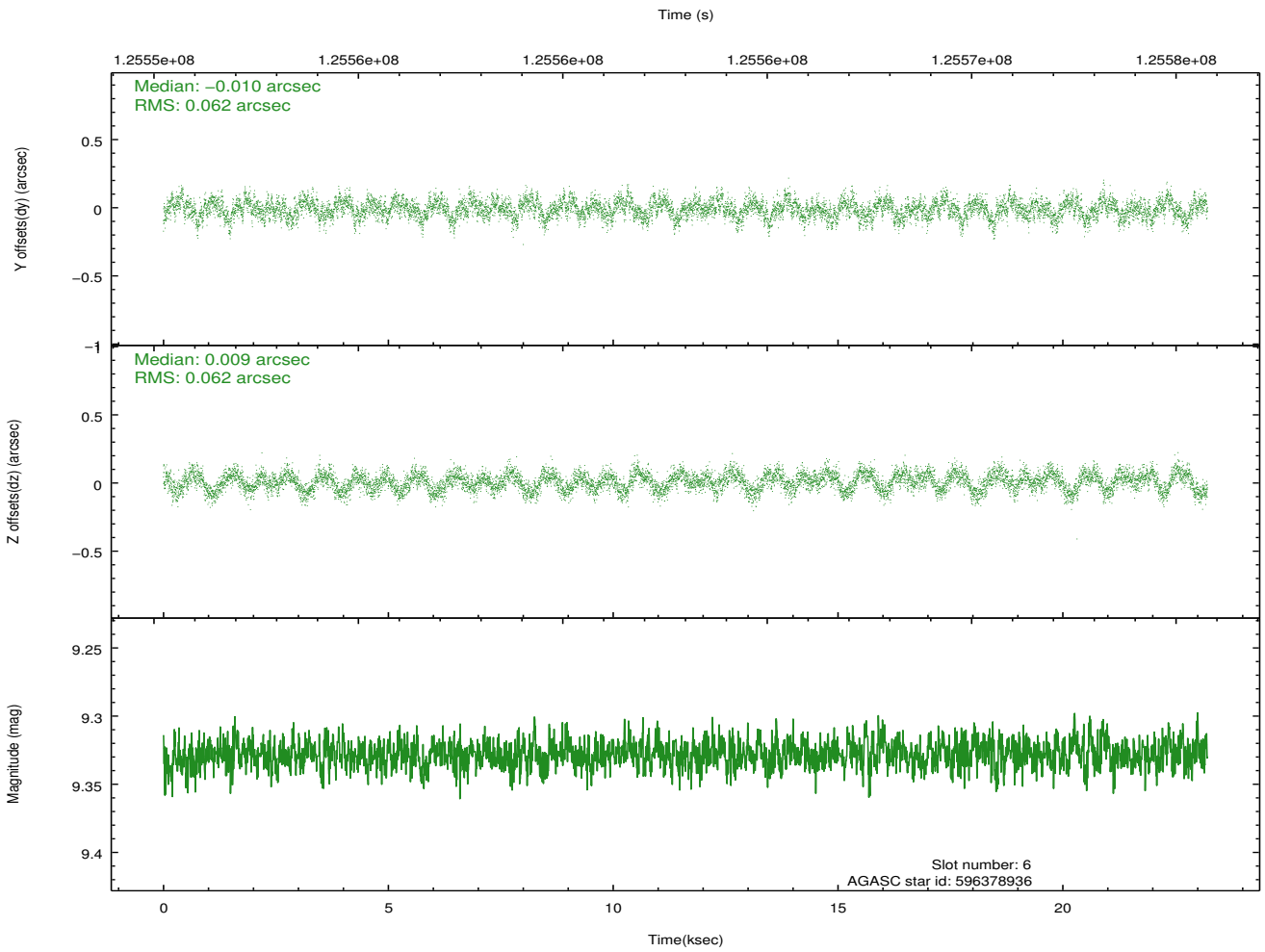
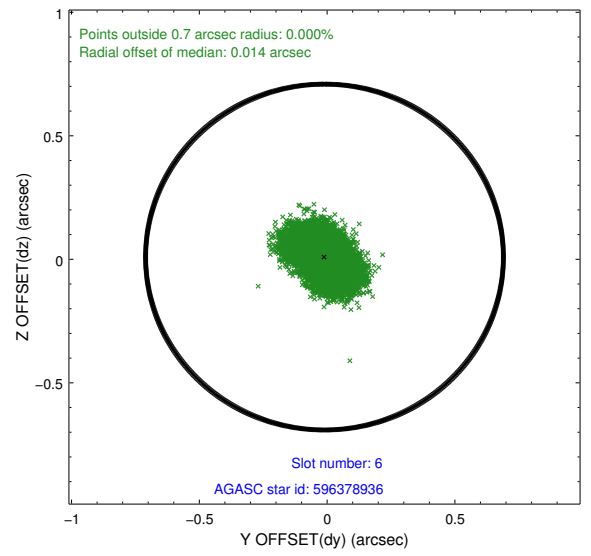
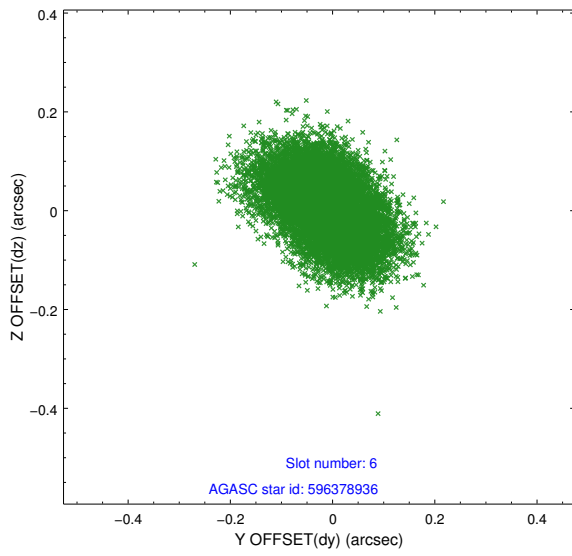
2.4.2 Slot 4



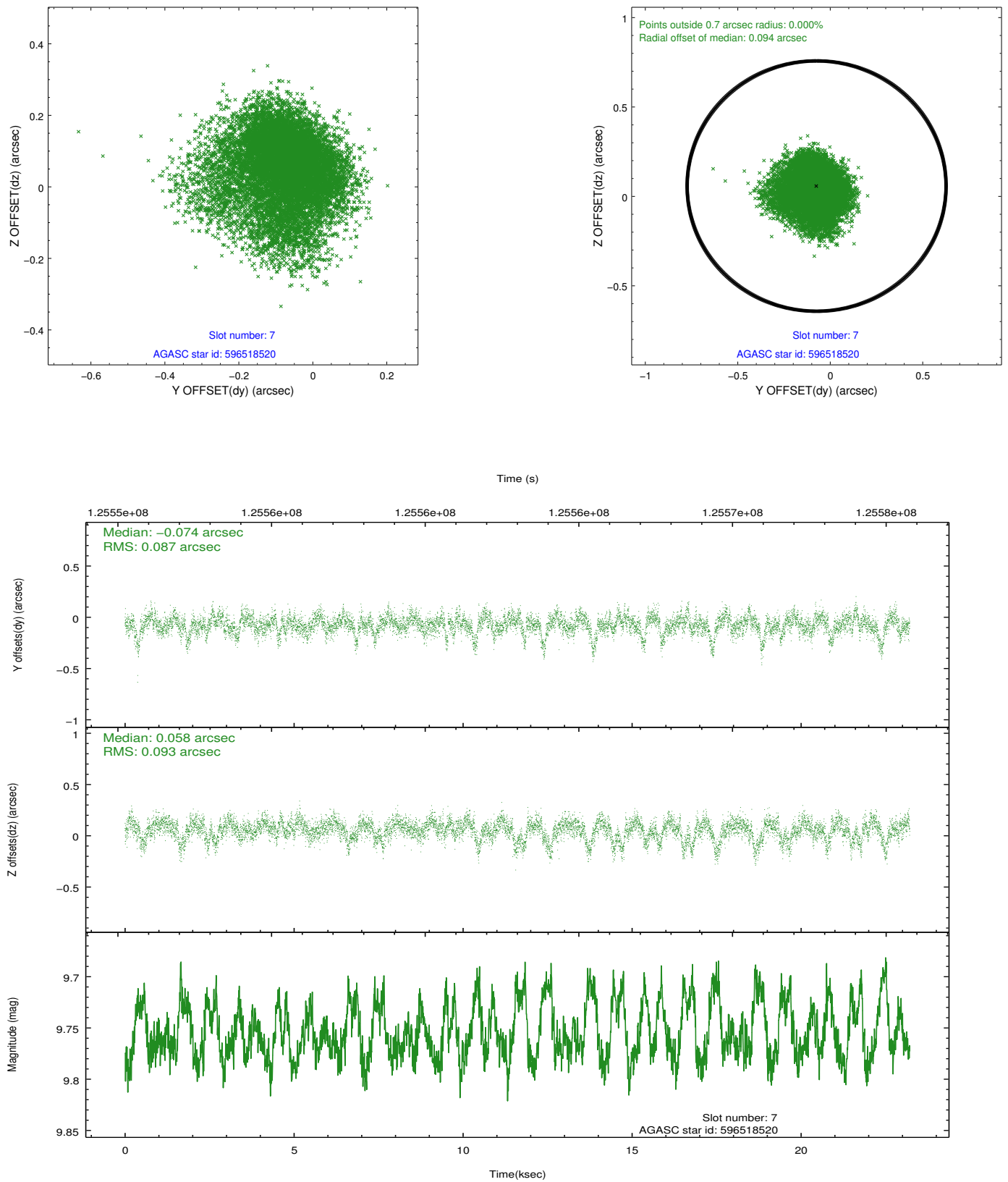
2.4.3 Slot 5



2.4.4 Slot 6

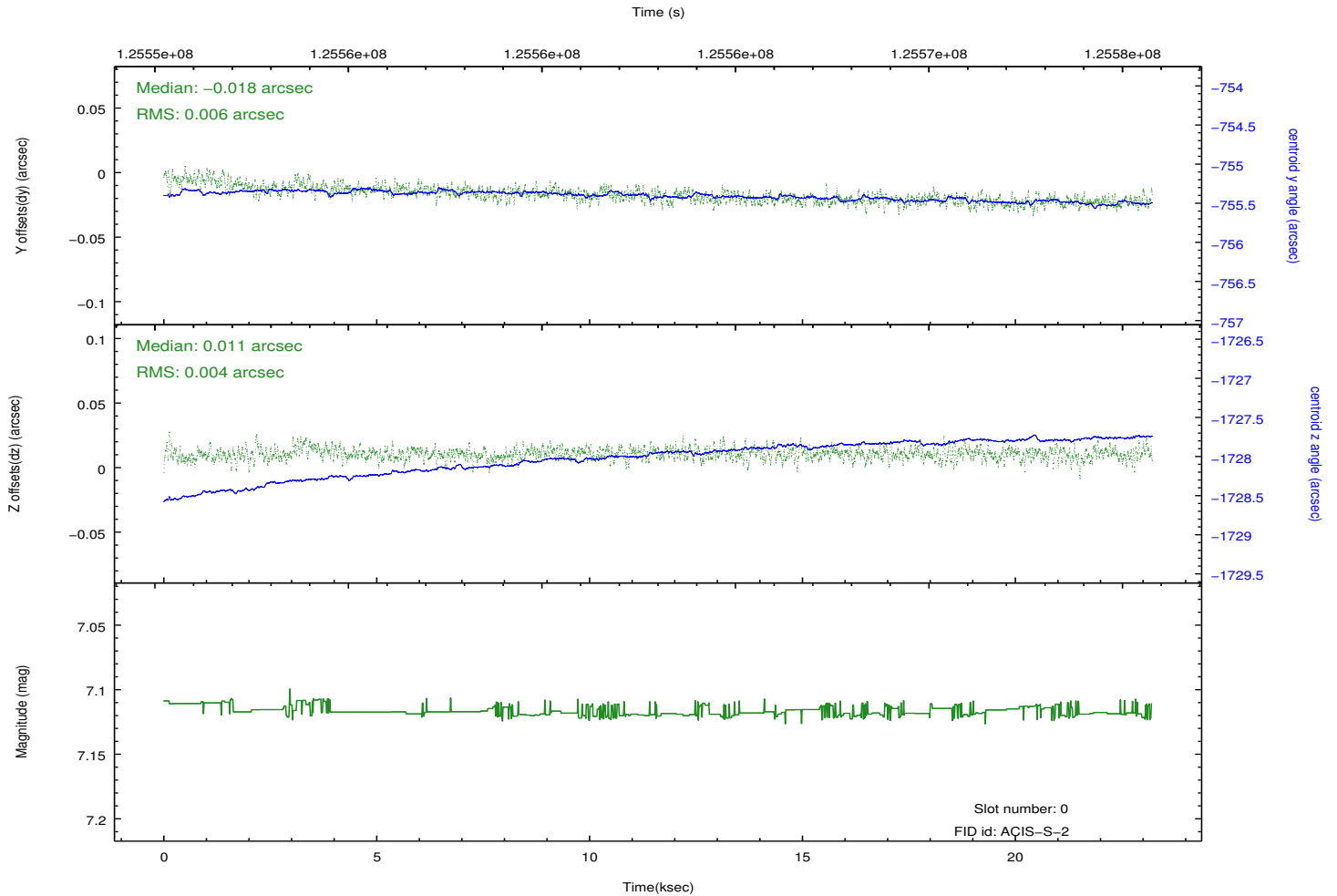
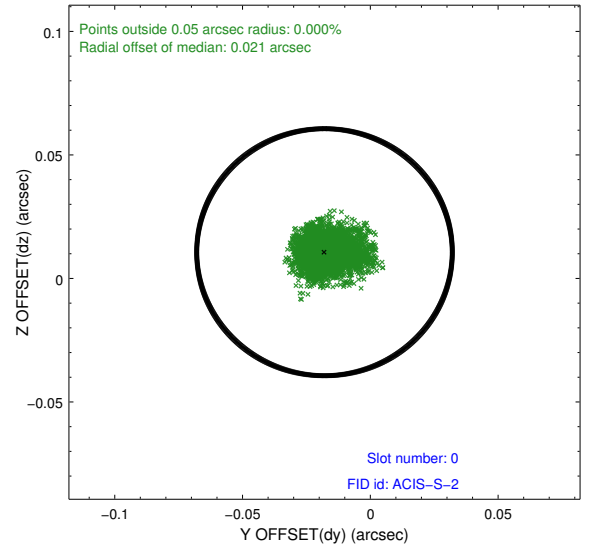
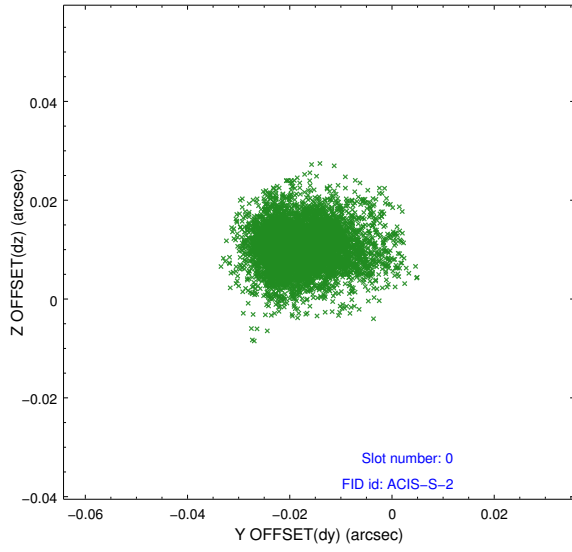


2.4.5 Slot 7

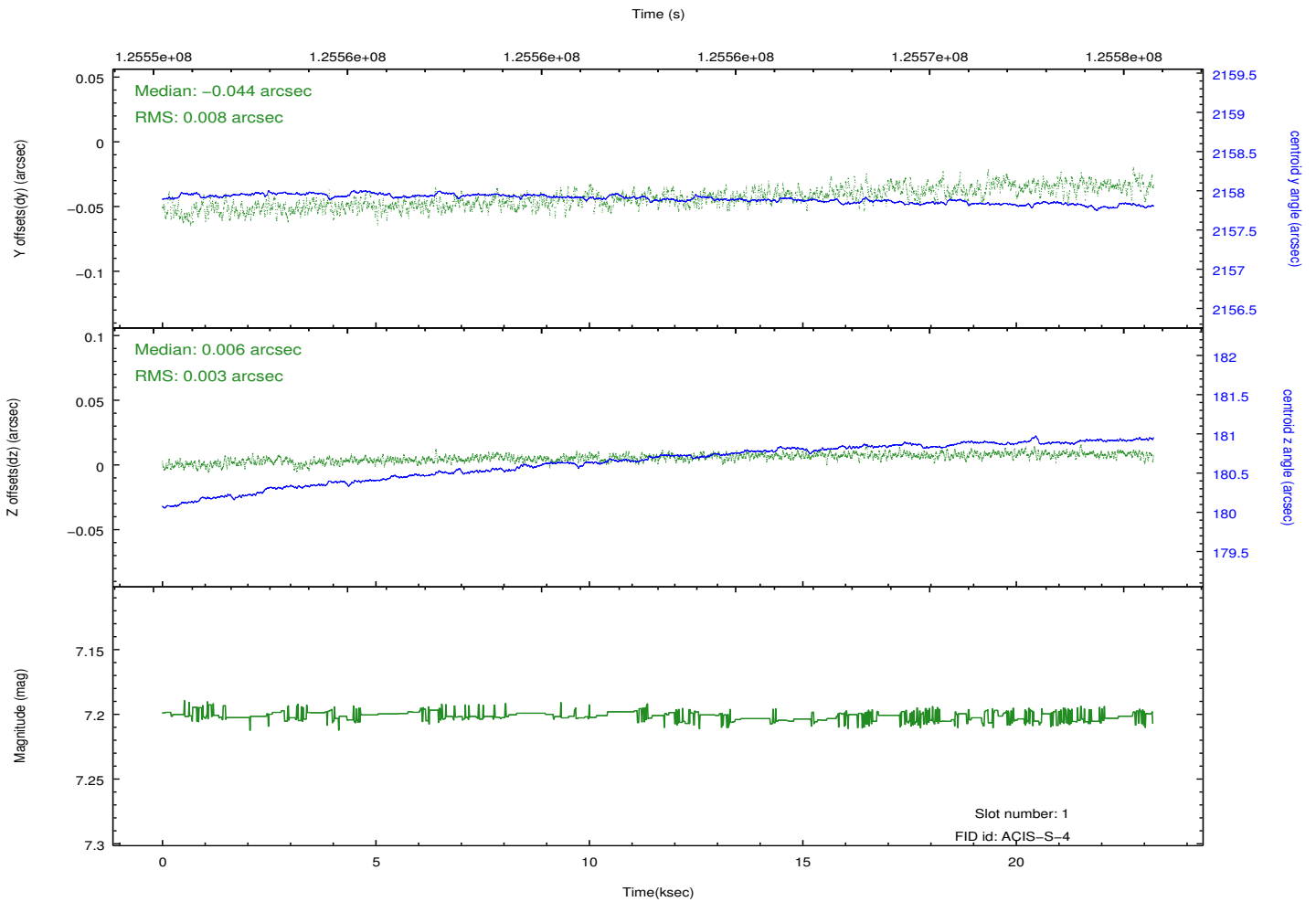
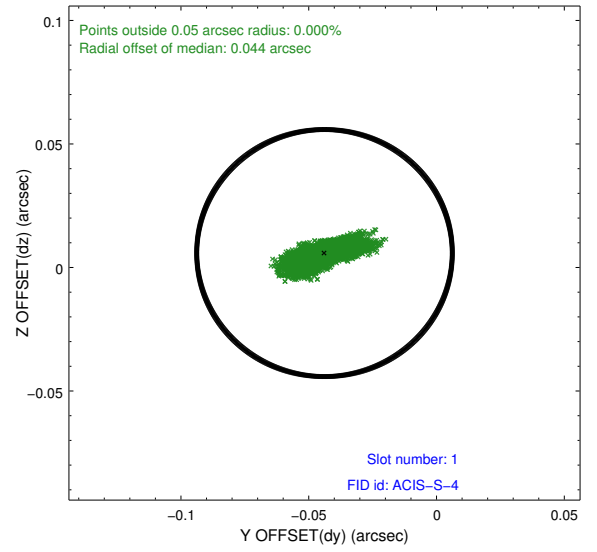
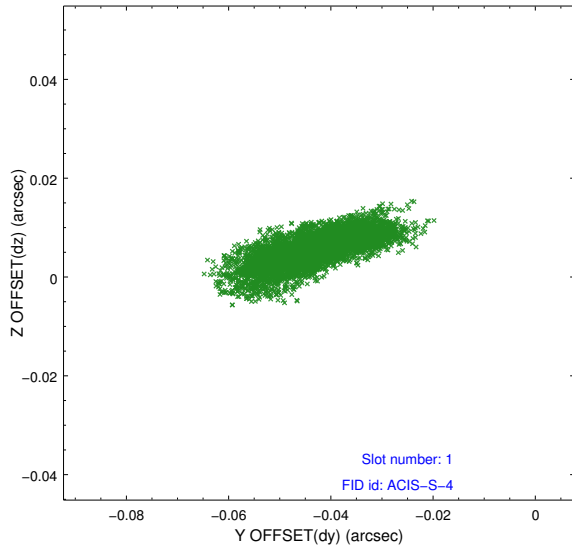


2.5 FID Slots

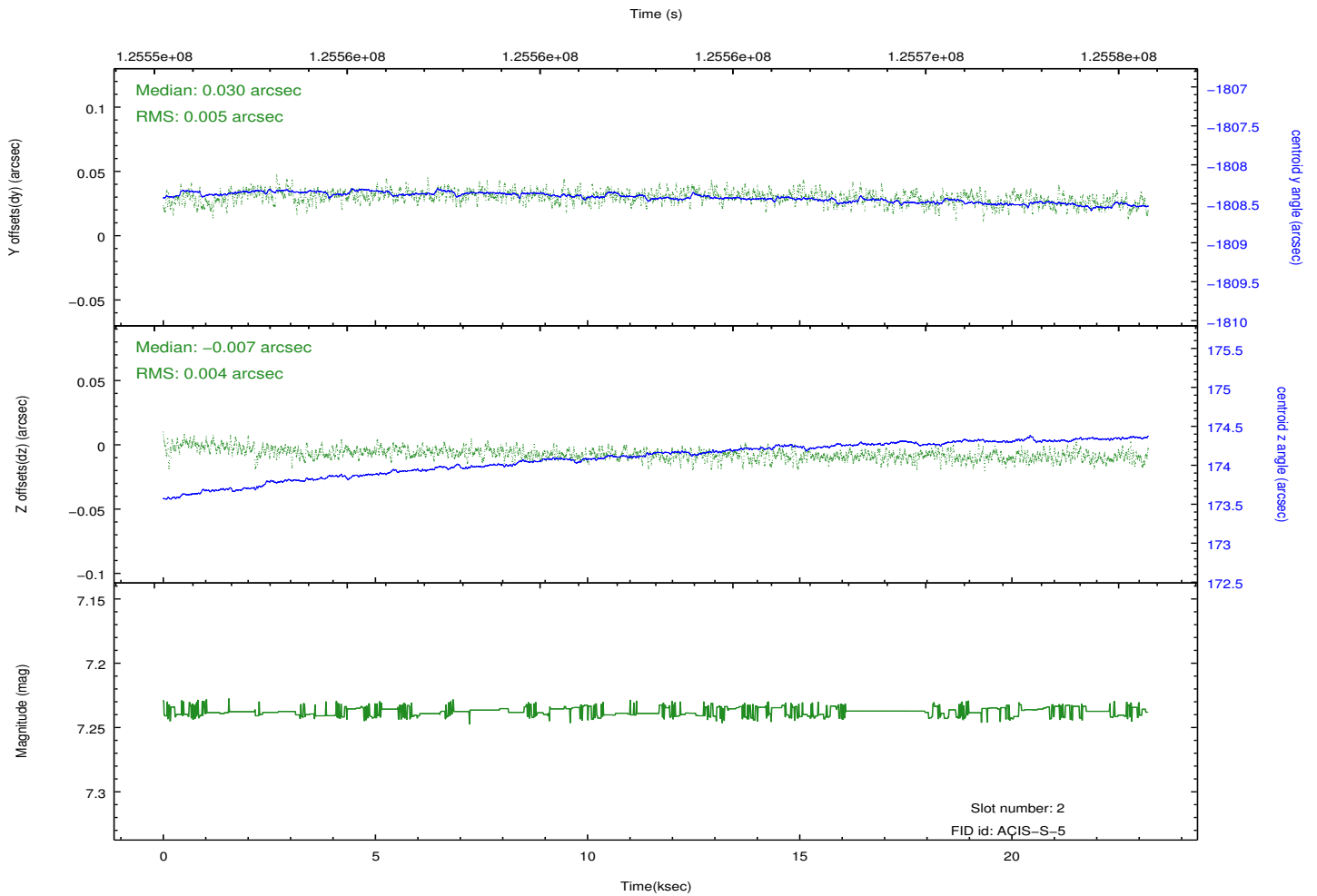
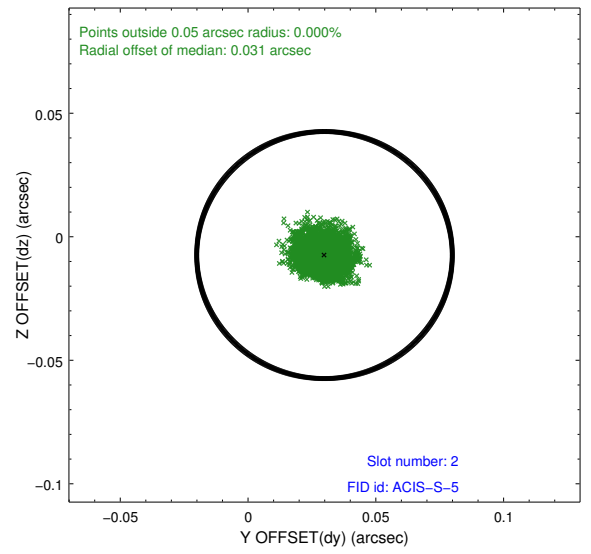
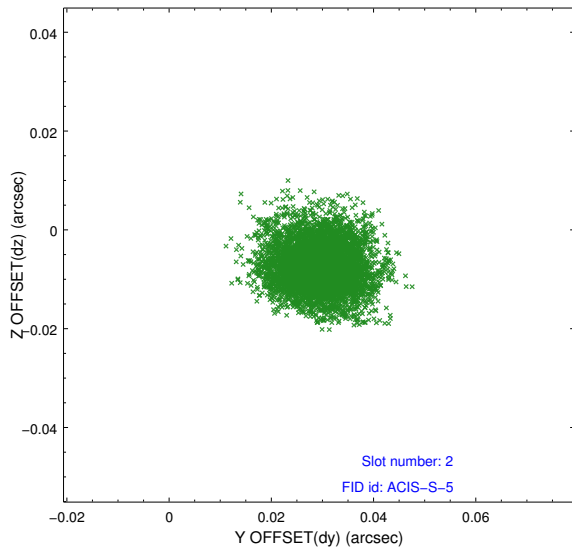
2.5.1 Slot 0



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) | 2012.10.01 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 22.963 |

A.2 Comments