

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10899 - L2 Version 2
Chandra X-Ray Center

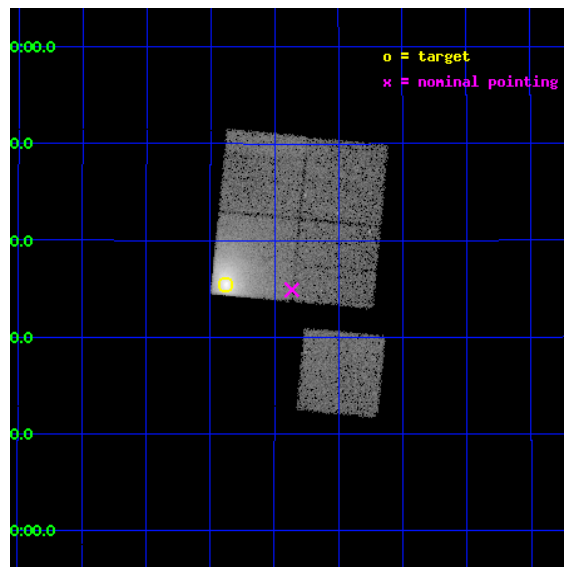
L2 Processing Date : Jun 4 2012

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1 Front

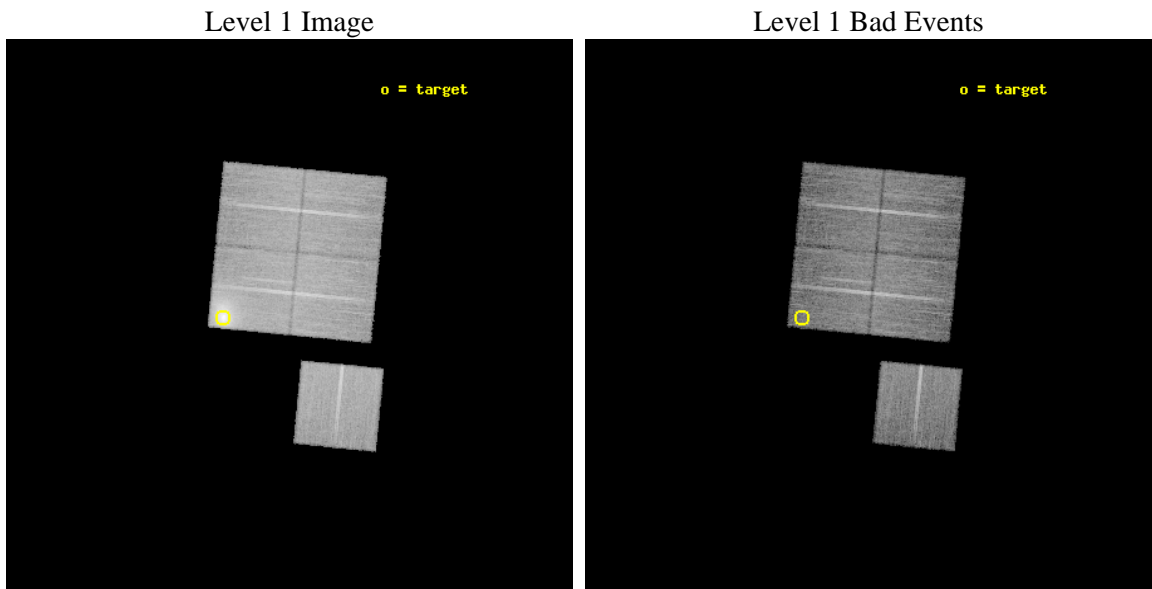
| | | |
|----------|--|---|
| seq_num | 890039 | Sequence number |
| obs_id | 10899 | Observation id |
| title | Mapping the Contamination on the ACIS Filter with Abell 1795 | Propo |
| observer | Dr. CXC Calibration | Principal investigator |
| object | Abell 1795 | Source name |
| dtycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 207.219583 | Observer's specified target RA [deg] |
| dec_targ | 26.590833 | Observer's specified target Dec [deg] |
| ra_nom | 207.09091743036 | Nominal RA [deg] |
| dec_nom | 26.581833048904 | Nominal Dec [deg] |
| roll_nom | 185.55745695208 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 15118.659145951 | Sum of GTIs [s] |
| livetime | 14921.122734014 | Livetime [s] |
| ontime0 | 15118.659135938 | Sum of GTIs [s] |
| ontime1 | 15121.800116301 | Sum of GTIs [s] |
| ontime2 | 15121.800116301 | Sum of GTIs [s] |
| ontime3 | 15118.659145951 | Sum of GTIs [s] |
| ontime6 | 15121.800116301 | Sum of GTIs [s] |
| l2events | 131632 | Number of level 2 events |



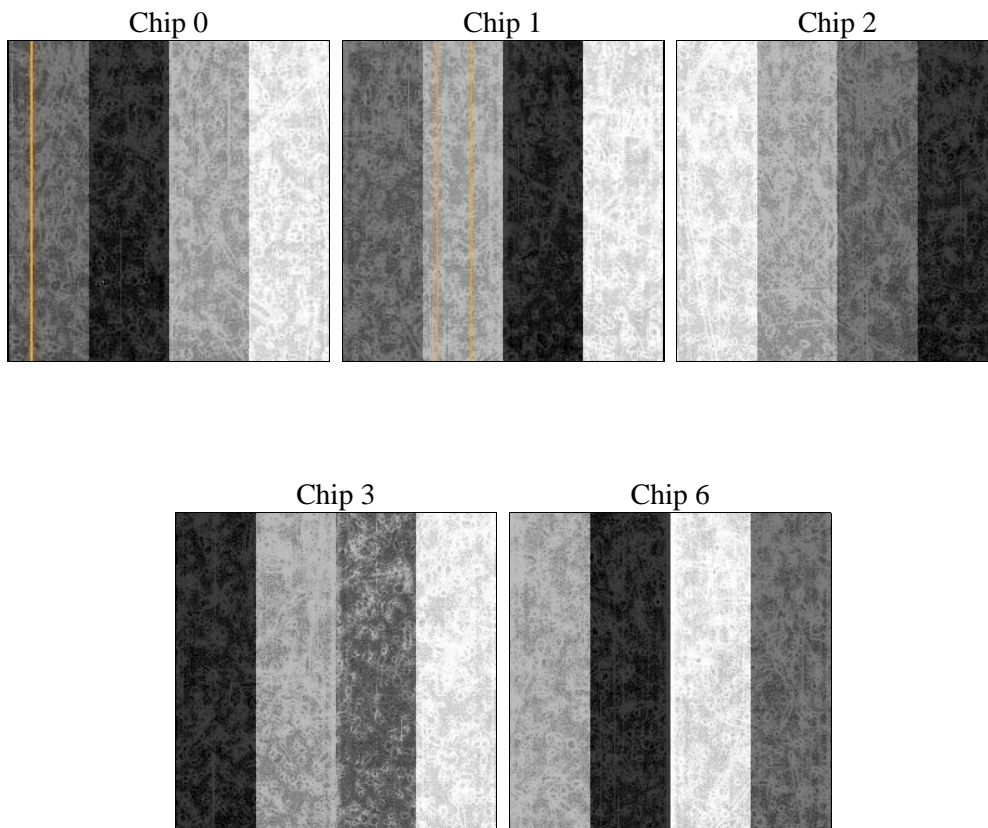
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 15000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.4 | Processing system revision | ontime | 15118.659145951 | Sum of GTIs [s] |
| caldbver | 4.4.9 | | ontime0 | 15118.659135938 | Sum of GTIs [s] |
| date | 2012-06-04T16:49:26 | Date and time of file creation | ontime1 | 15121.800116301 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 15121.800116301 | Sum of GTIs [s] |
| | | | ontime3 | 15118.659145951 | Sum of GTIs [s] |
| | | | ontime6 | 15121.800116301 | Sum of GTIs [s] |
| | | | l1events | 735774 | Number of level 1 events |

2.1.4 Events

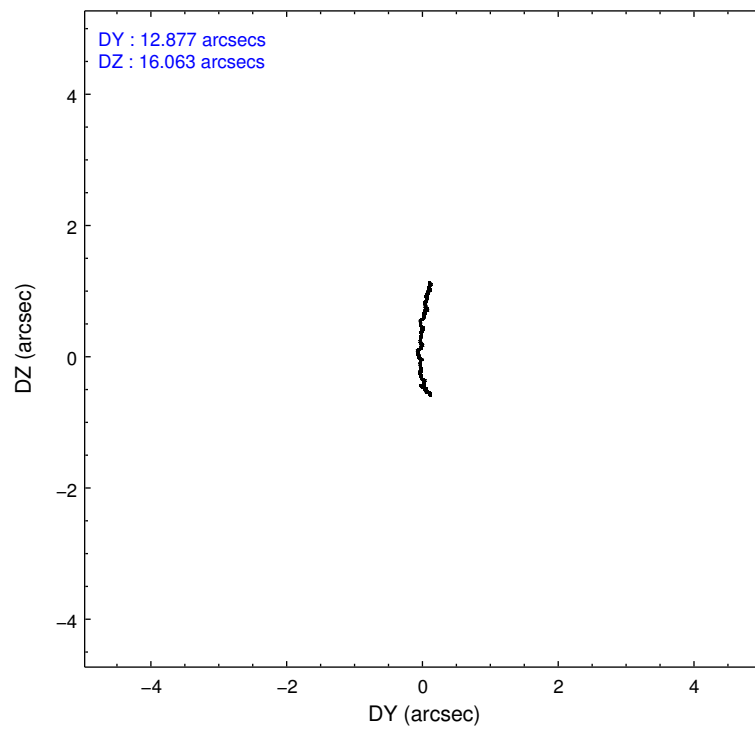
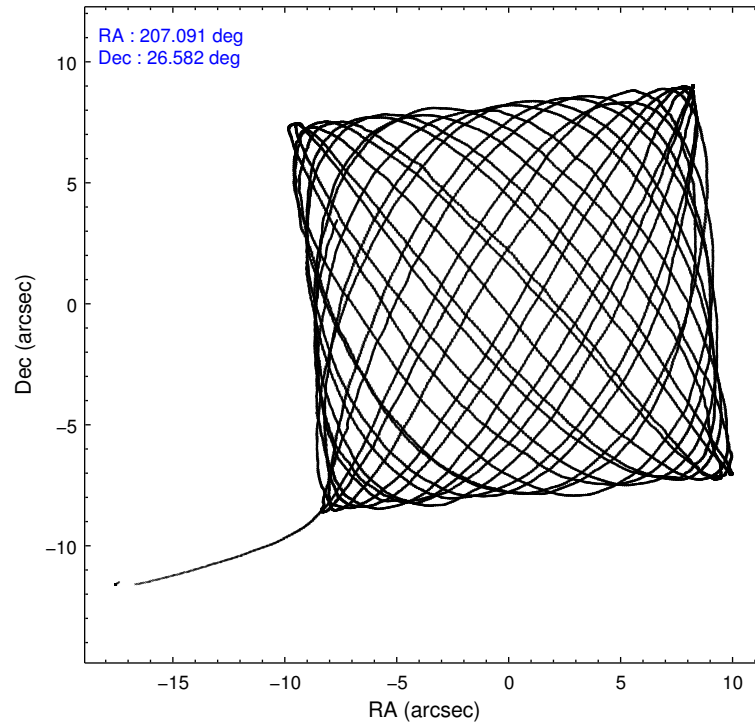
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 124312 | 124740 | 142978 | 207102 | 136642 |
| rejected events | 110641 | 108613 | 128486 | 121164 | 122494 |
| rejected % | 89% | 87% | 89% | 58% | 89% |

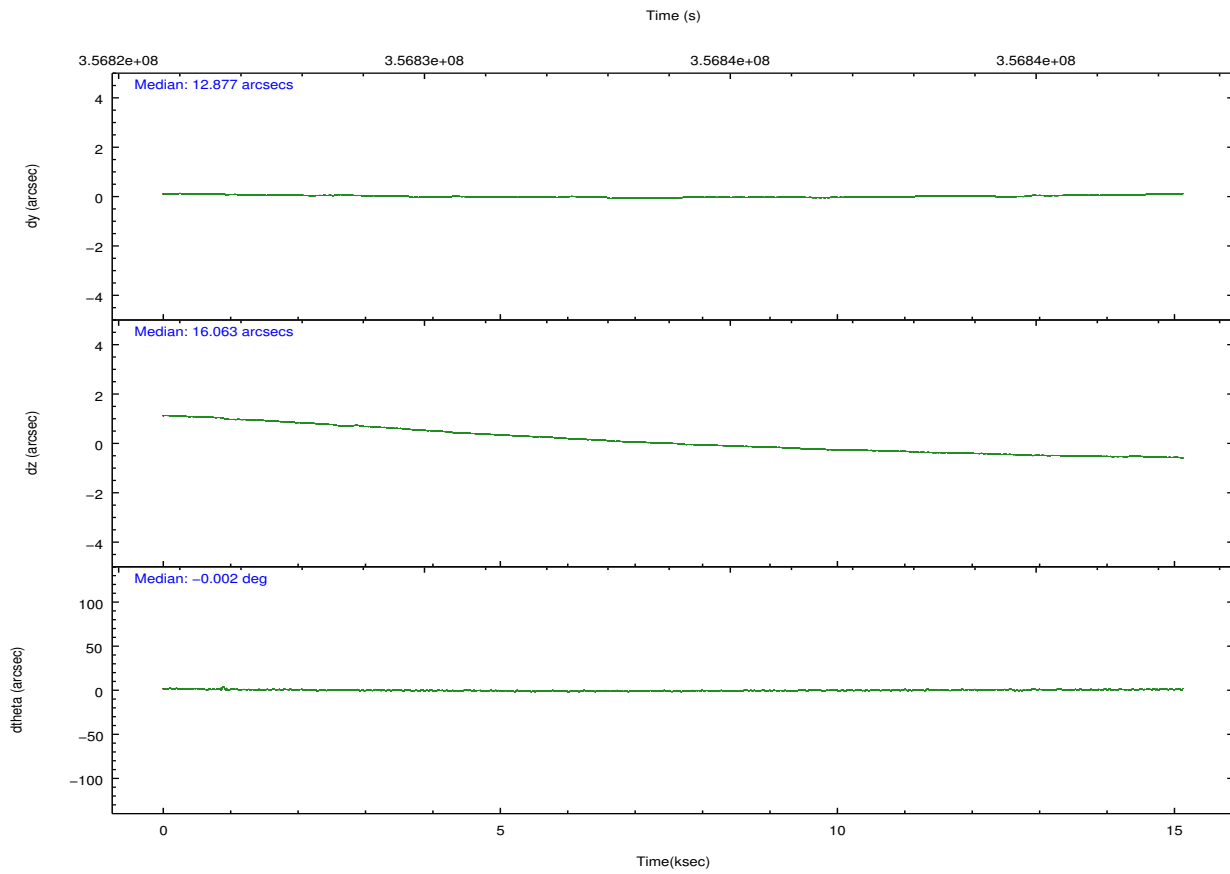
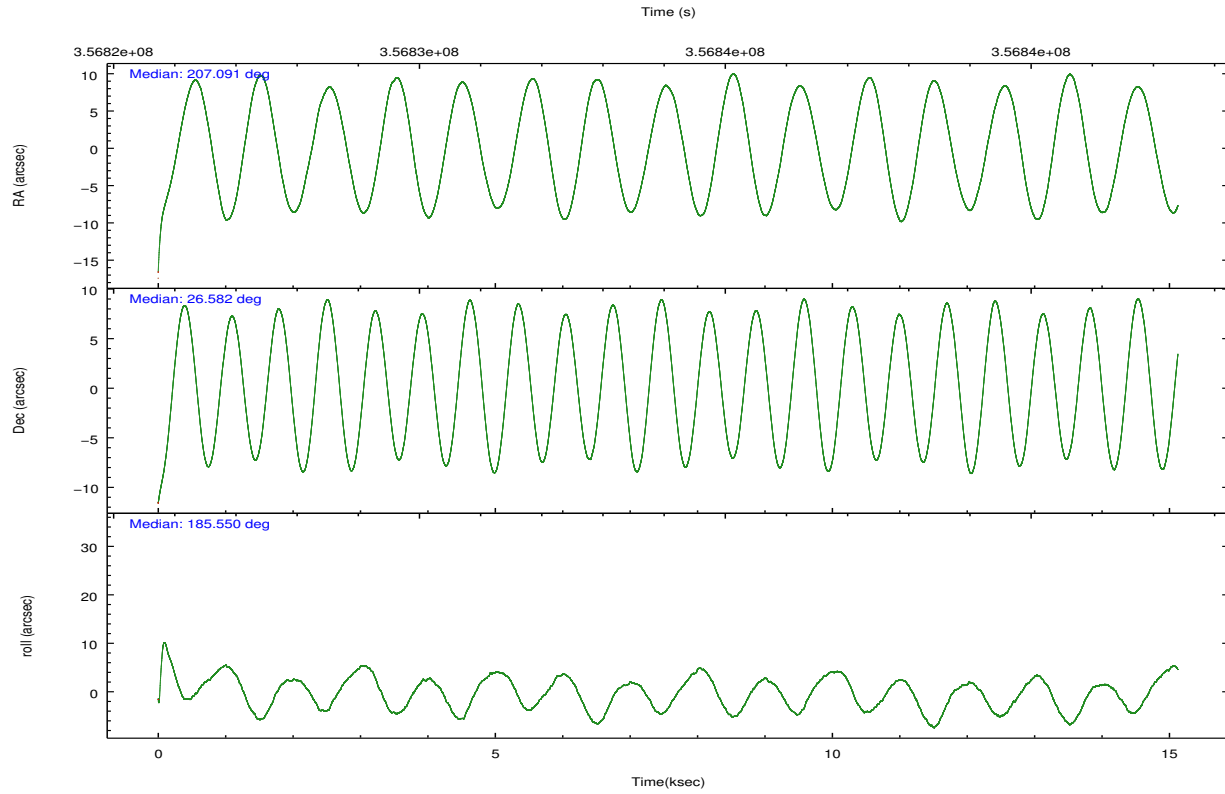
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 4947 | 6429 | 5963 | 63811 | 5136 |
| | 3% | 5% | 4% | 30% | 3% |
| grade 1 events | 76 | 85 | 90 | 432 | 74 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 3347 | 3594 | 3319 | 10635 | 3198 |
| | 2% | 2% | 2% | 5% | 2% |
| grade 3 events | 1517 | 1605 | 1458 | 3899 | 1505 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 4 events | 1422 | 1627 | 1450 | 3755 | 1482 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 5016 | 5360 | 4600 | 5759 | 5554 |
| | 4% | 4% | 3% | 2% | 4% |
| grade 6 events | 2619 | 3088 | 2512 | 4735 | 2996 |
| | 2% | 2% | 1% | 2% | 2% |
| grade 7 events | 105368 | 102952 | 123586 | 114076 | 116697 |
| | 84% | 82% | 86% | 55% | 85% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01236 | ACIS-01236 | 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 | 207.115886 | 207.0909174303622 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 26.597941 | 26.58183304890378 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 185.337607 | 185.5574569520794 | [s] Primary exposure time | 0.000000 | 3.1 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -214.092463 | -214.0964622431356 | | | |
| [mm] SIM translation stage offset | -19.5 | -19.49599075979413 | | | |
| [s] Observation start time (MET) | 356826622.184000 | 356825412.25256 | | | |
| Observation start date | 2009-04-22T22:29:16 | 2009-04-22T22:10:12 | | | |
| [s] Observation end time (MET) | 356841622.184000 | 356842513.86591 | | | |
| Observation end date | 2009-04-23T02:39:16 | 2009-04-23T02:55:13 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



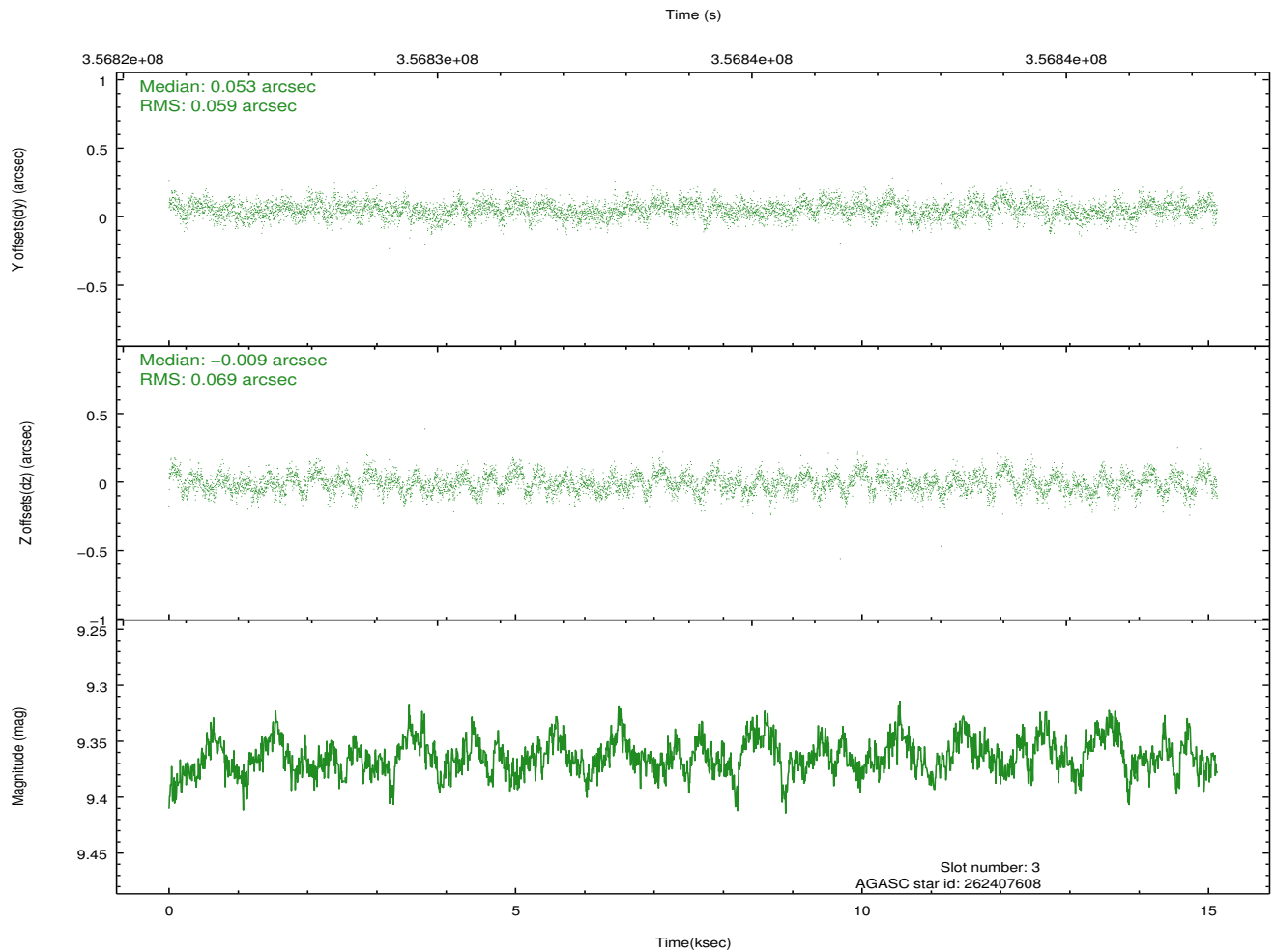
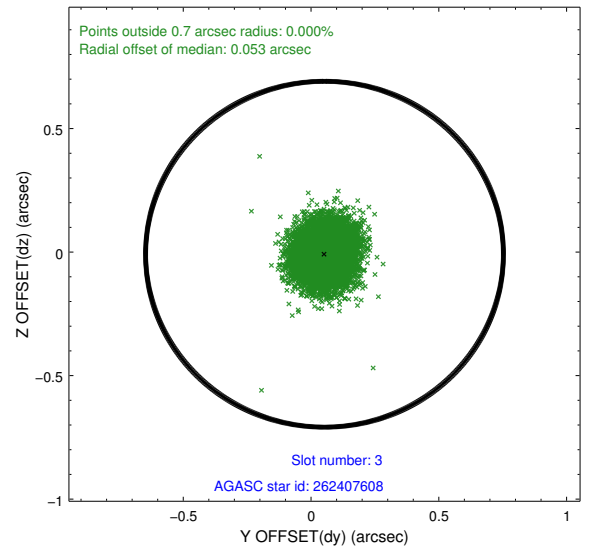
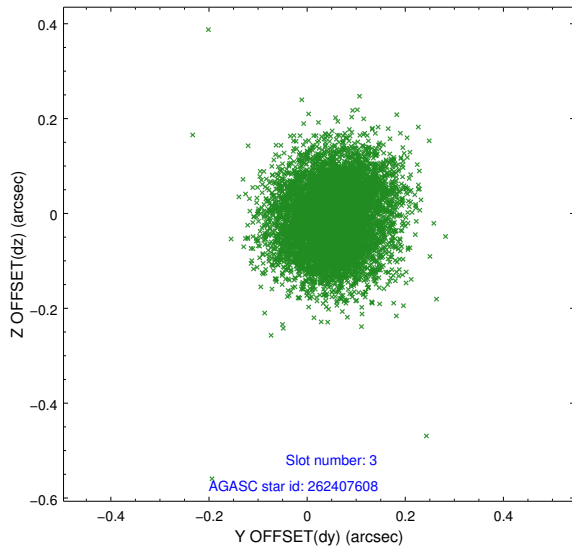


Slot Statistics

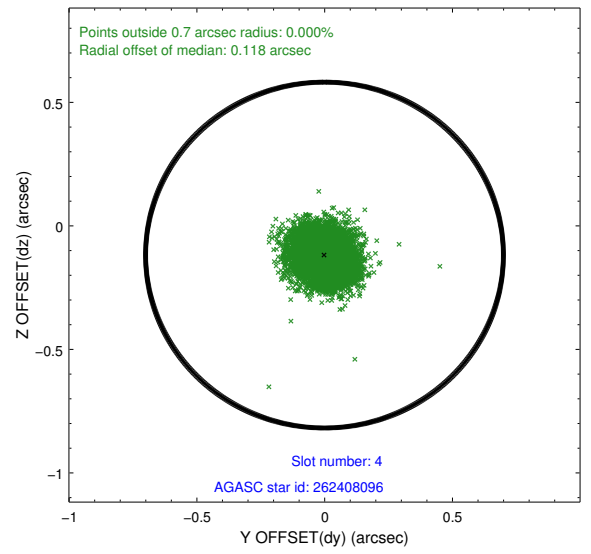
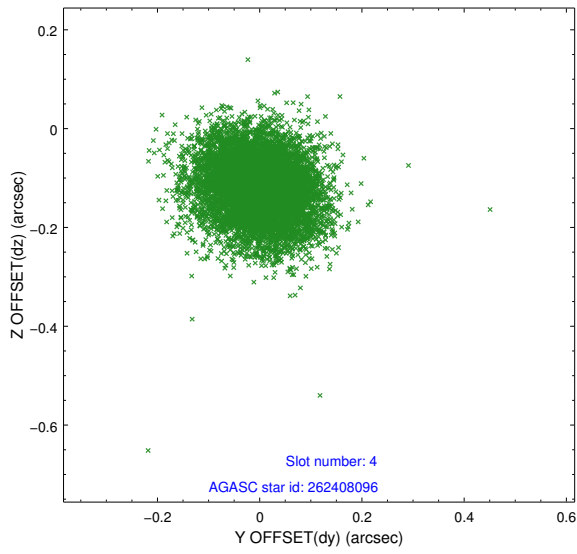
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-1 | 6.96 | 3688 | 0.235 | -0.193 | 0.013 | 0.029 | 0.000000 | 0.000000 | 926.50 | -1240.38 |
| 1 | FID | ACIS-I-5 | 6.96 | 3690 | -0.386 | 0.173 | 0.008 | 0.012 | 0.000000 | 0.000000 | -1822.07 | 657.21 |
| 2 | FID | ACIS-I-6 | 7.00 | 3690 | 0.059 | 0.092 | 0.017 | 0.025 | 0.000000 | 0.000000 | 391.54 | 1301.99 |
| 3 | GUIDE | 262407608 | 9.36 | 7374 | 0.053 | -0.009 | 0.097 | 0.155 | 207.378401 | 26.435507 | -788.22 | 660.20 |
| 4 | GUIDE | 262408096 | 9.35 | 7371 | -0.001 | -0.118 | 0.091 | 0.146 | 207.011678 | 26.515421 | 362.21 | 264.44 |
| 5 | GUIDE | 262409552 | 8.17 | 7377 | 0.067 | 0.099 | 0.089 | 0.141 | 206.584269 | 27.192805 | 1496.17 | -2293.53 |
| 6 | GUIDE | 262275256 | 7.72 | 7377 | 0.061 | -0.002 | 0.084 | 0.140 | 206.467522 | 27.226414 | 1856.46 | -2451.01 |
| 7 | GUIDE | 262408512 | 7.99 | 7375 | -0.179 | 0.034 | 0.066 | 0.110 | 207.800210 | 27.128796 | -2360.93 | -1705.24 |

2.4 Star Slots

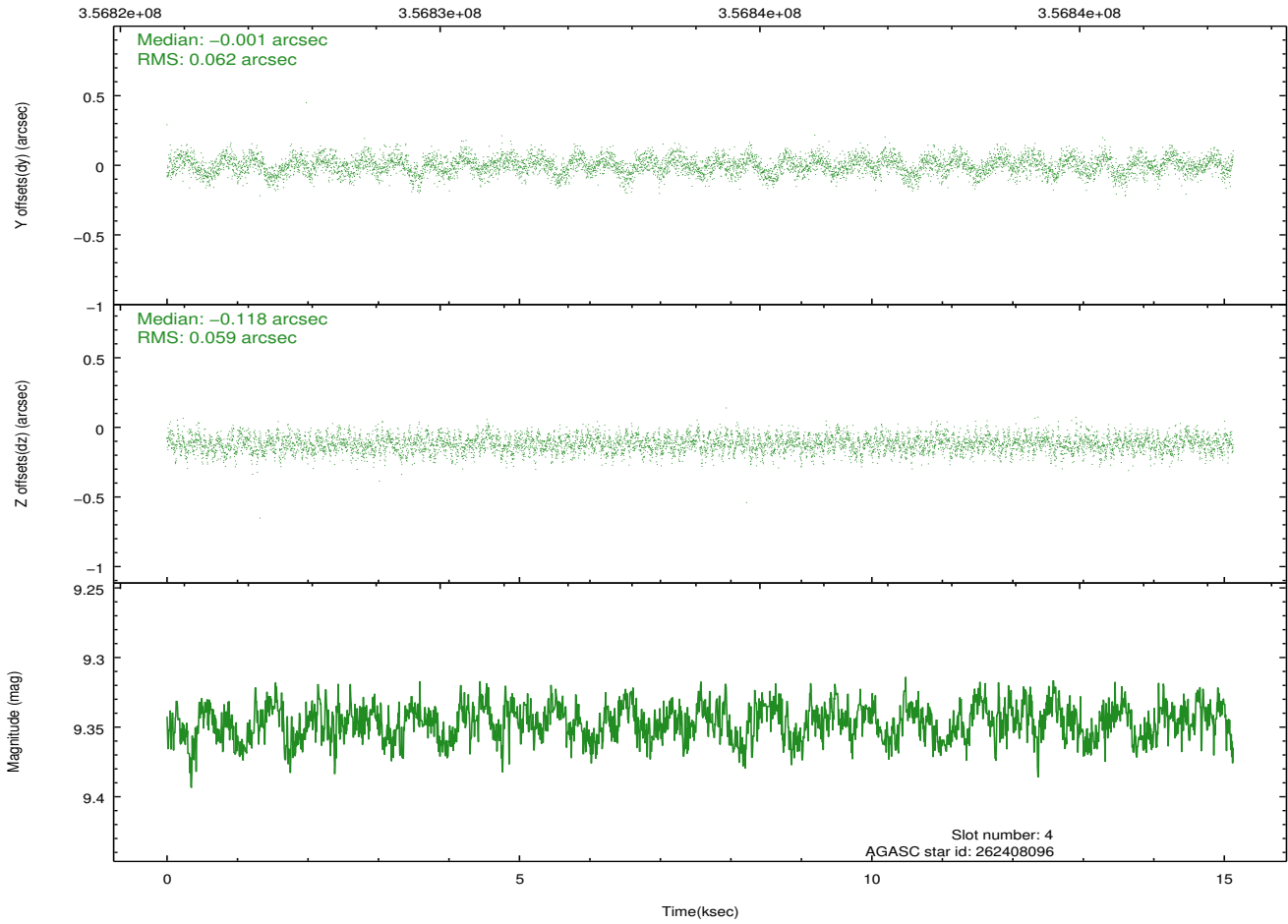
2.4.1 Slot 3



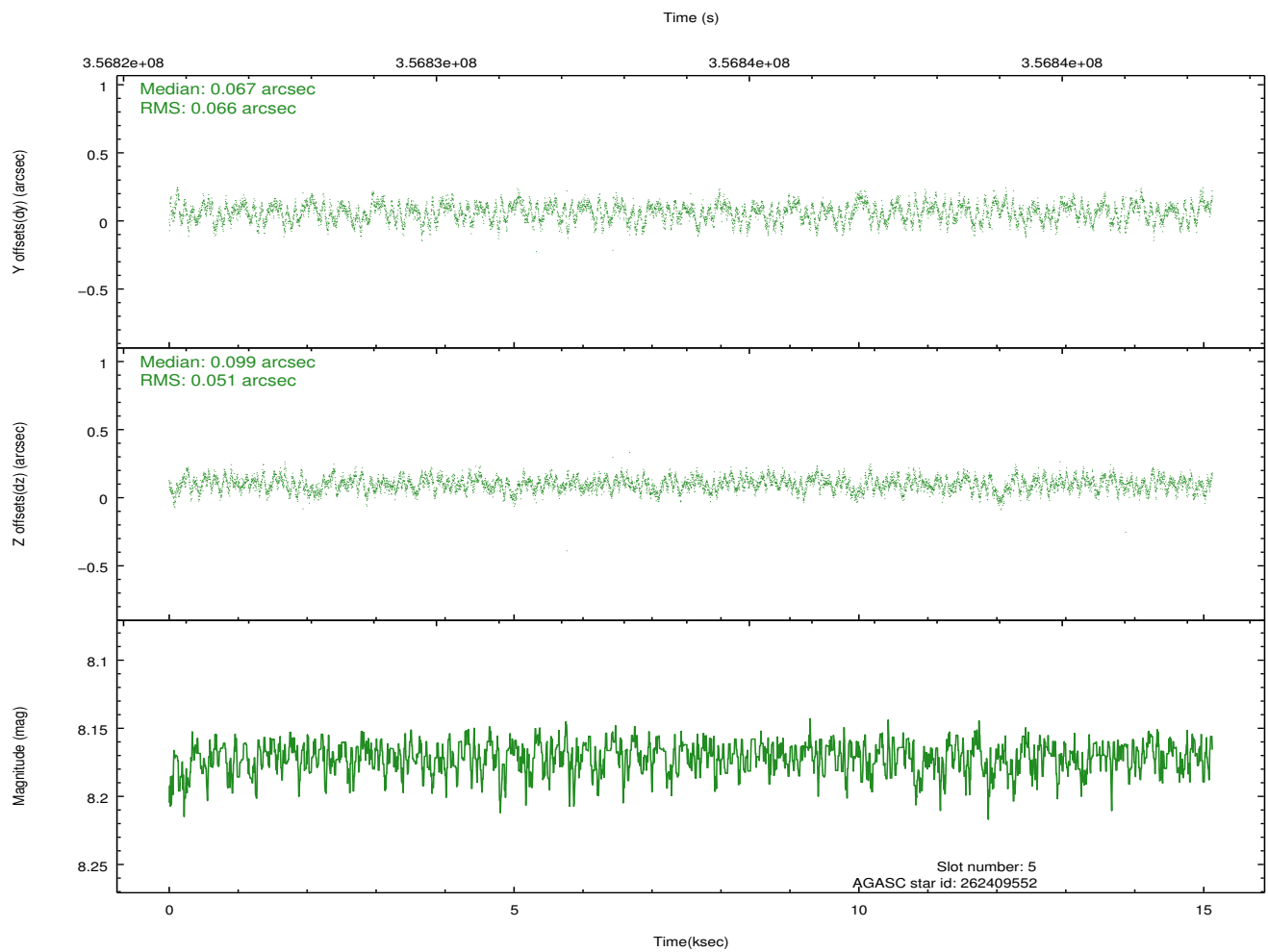
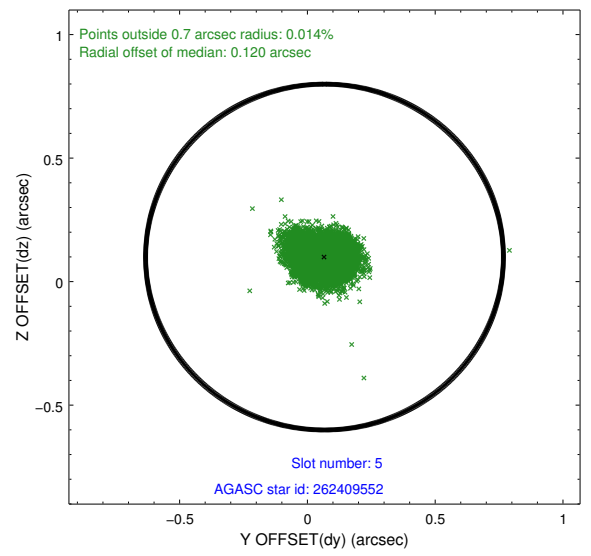
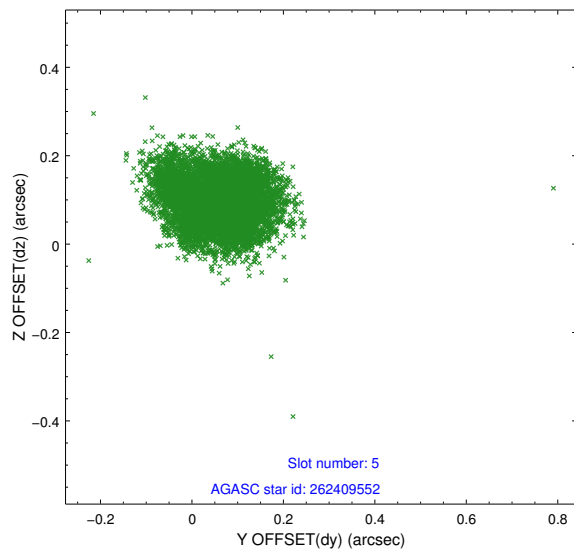
2.4.2 Slot 4



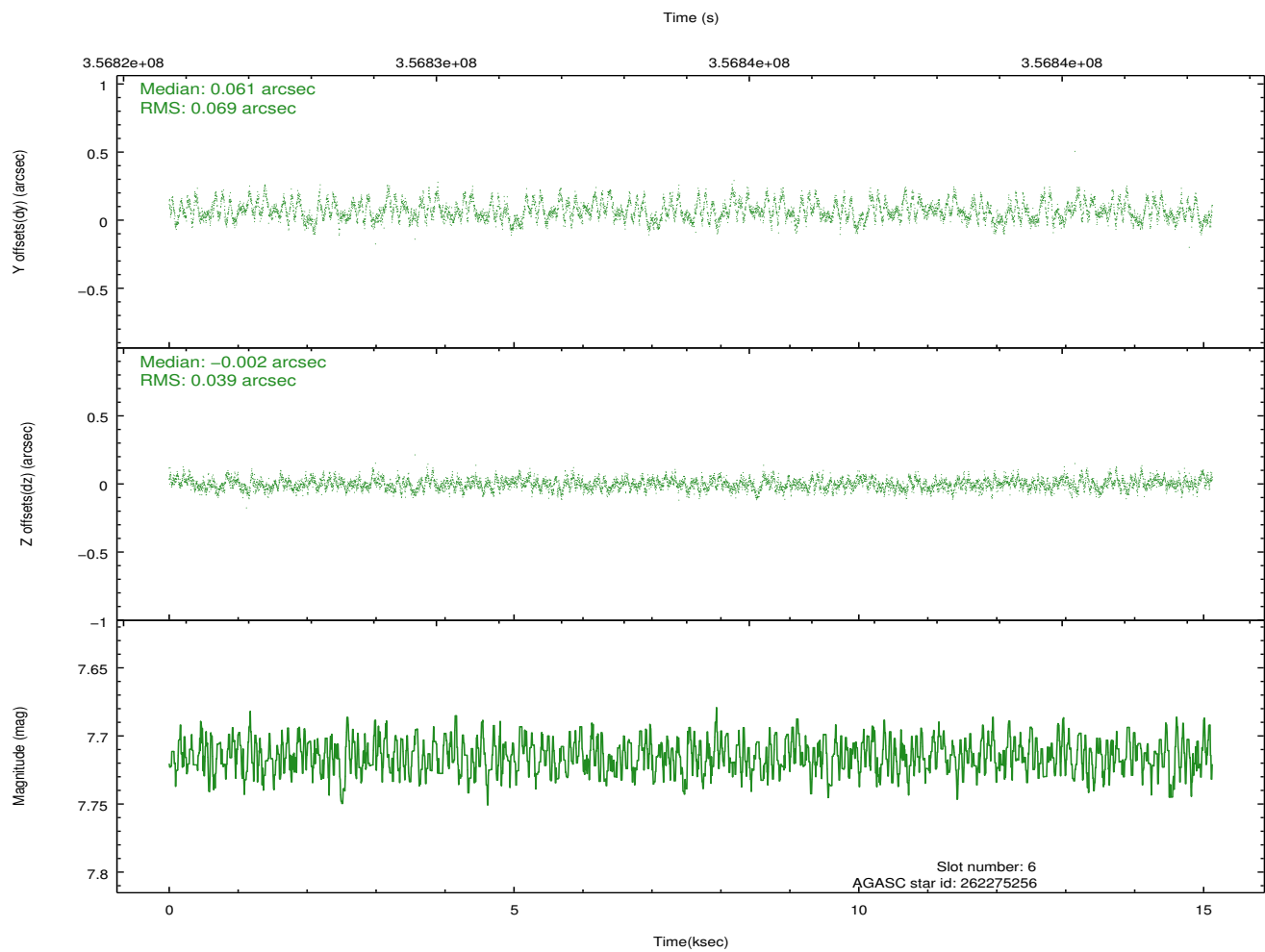
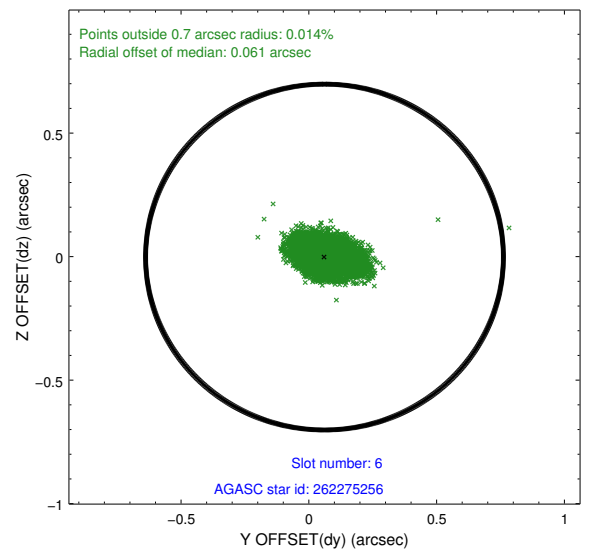
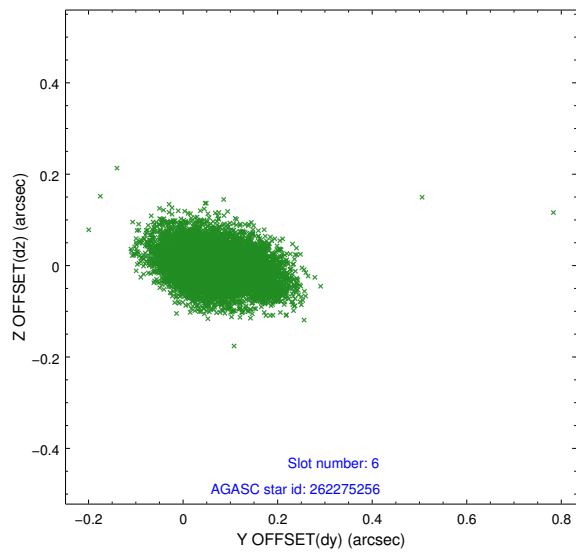
Time (s)



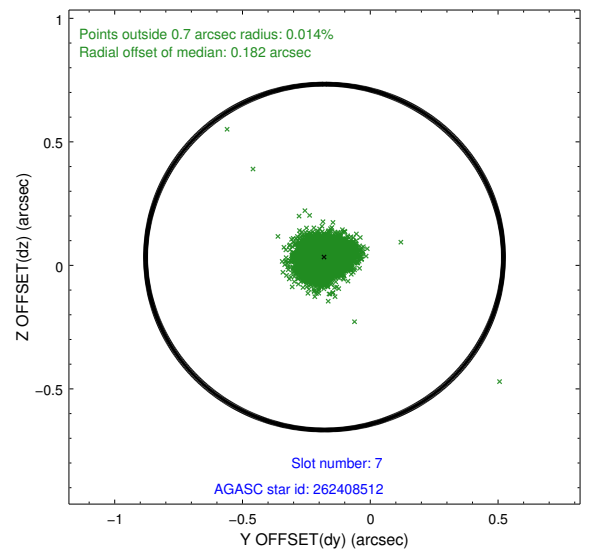
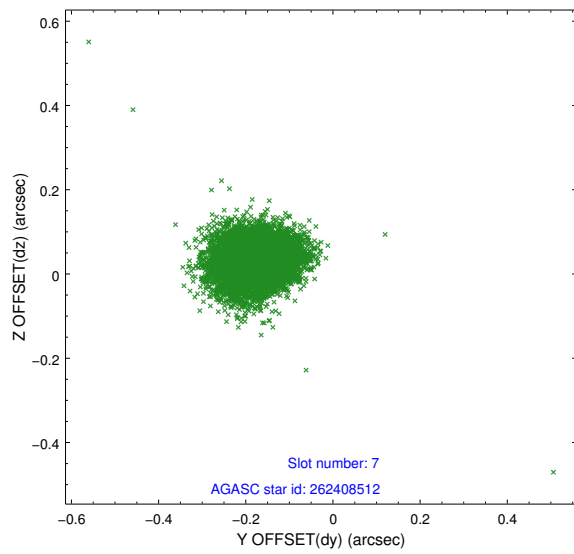
2.4.3 Slot 5



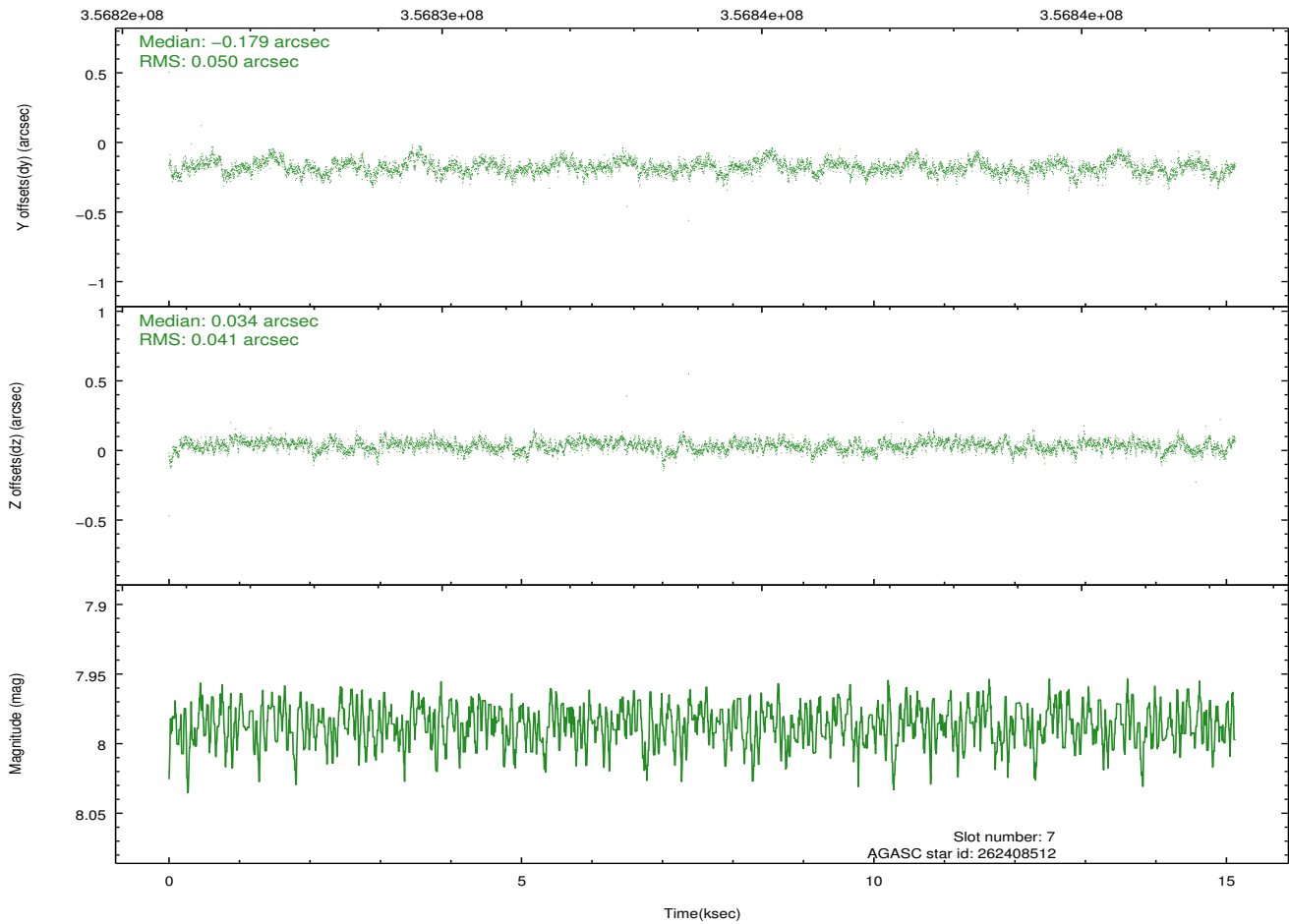
2.4.4 Slot 6



2.4.5 Slot 7

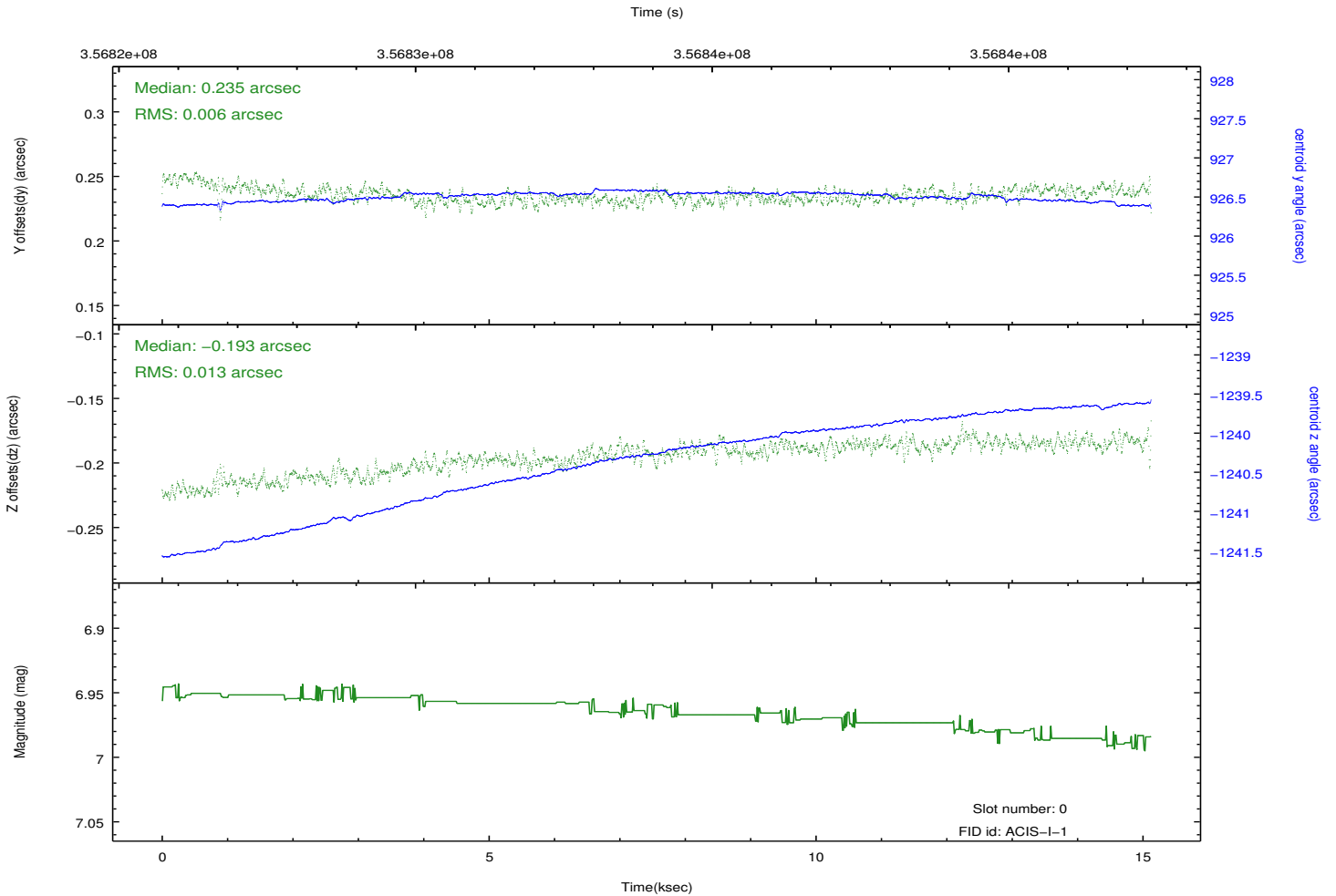
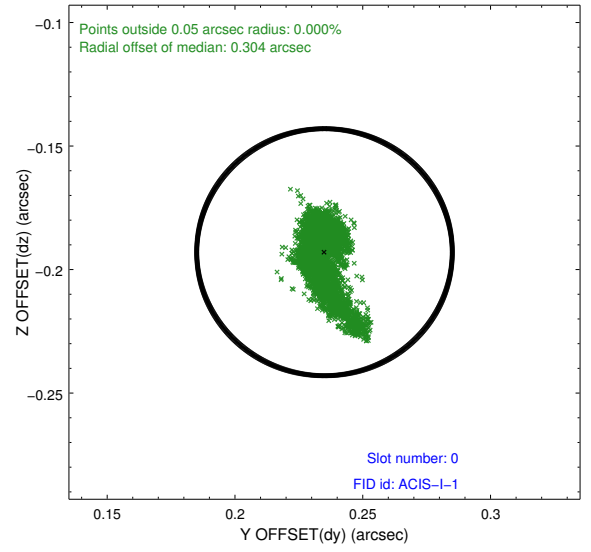
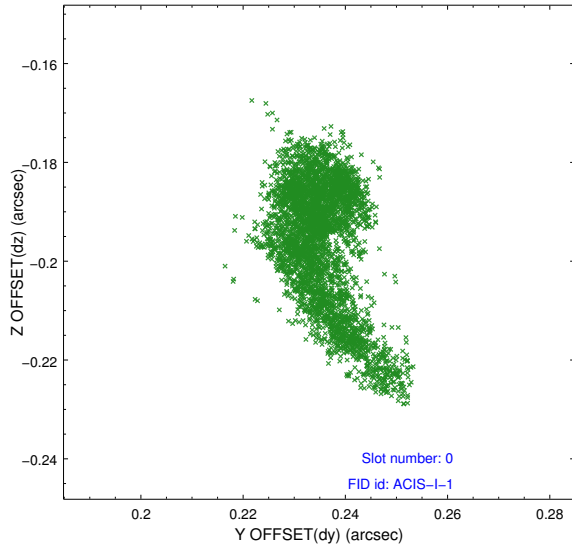


Time (s)

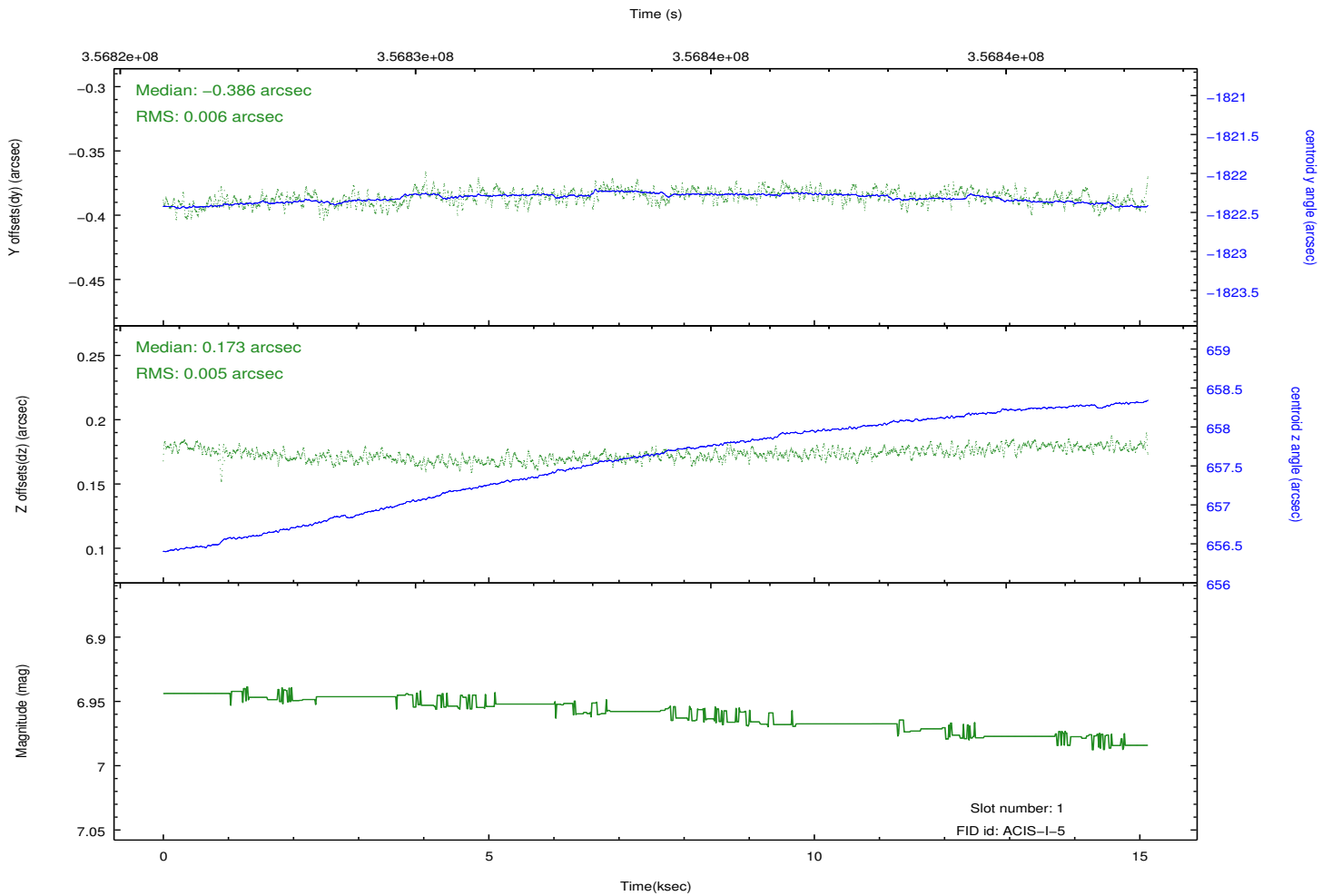
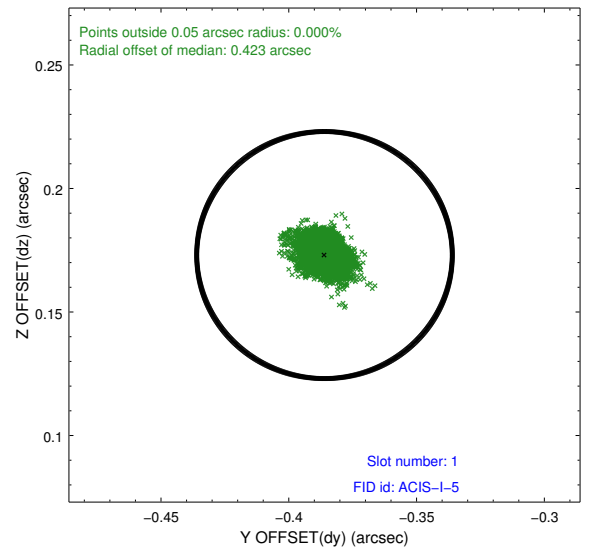
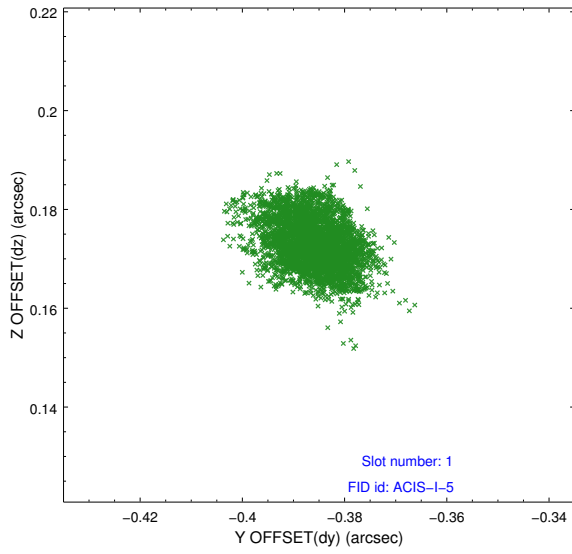


2.5 FID Slots

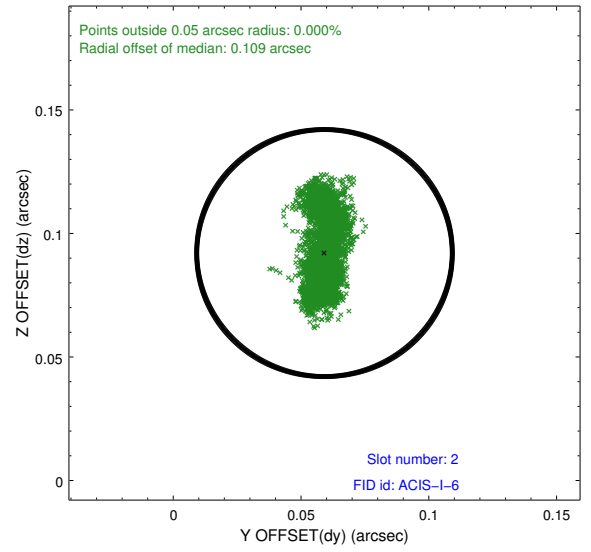
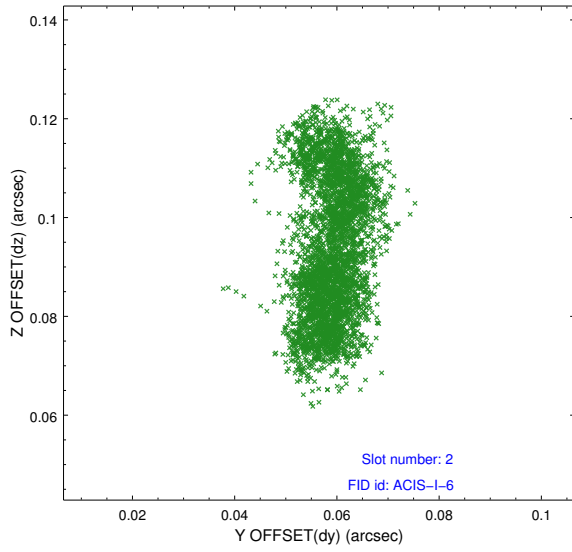
2.5.1 Slot 0



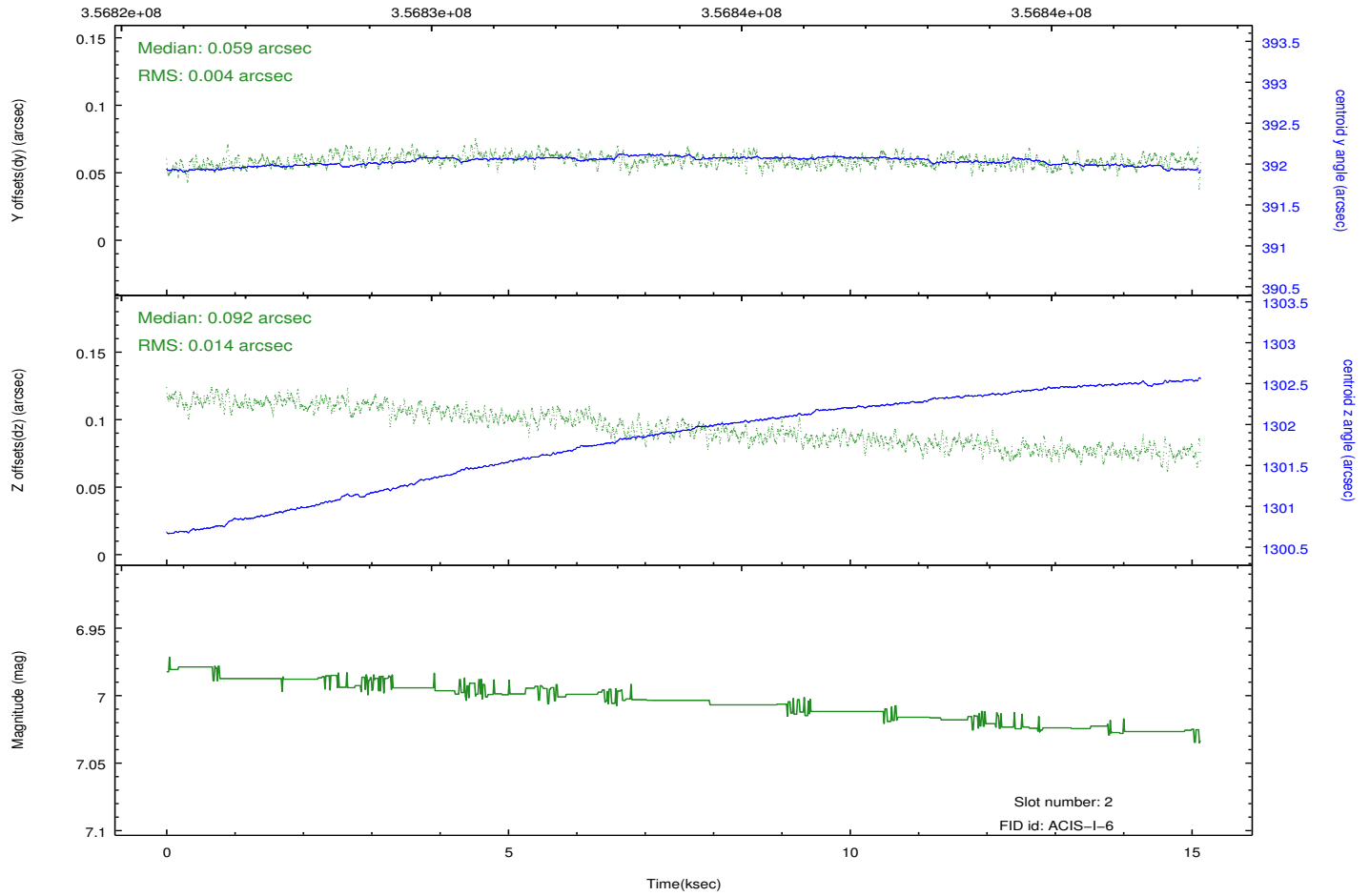
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.06.14 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 15.1186591 |

A.2 Comments

This observation was performed with a large SIM offset, per PI request. As a result, the fid light positions are offset beyond normally expected ranges, but the fid light position correction has compensated for this offset.