

V&V Reference Report

L2 ASCDS Version : 10.3.1

Observation 16973 - L2 Version 1
Chandra X-Ray Center

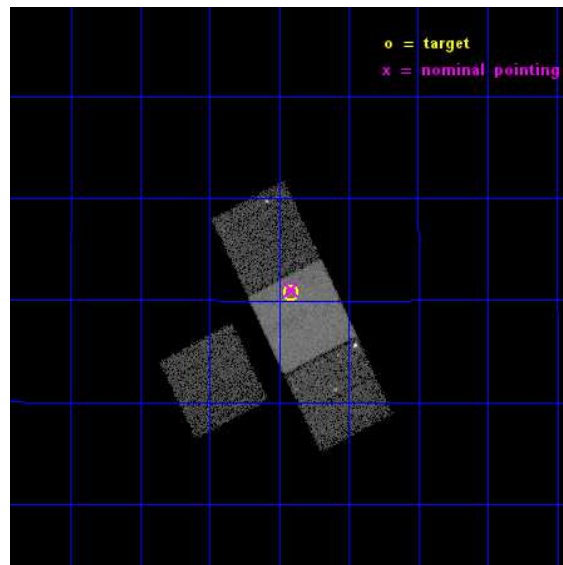
L2 Processing Date : Dec 31 2014

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1 Front

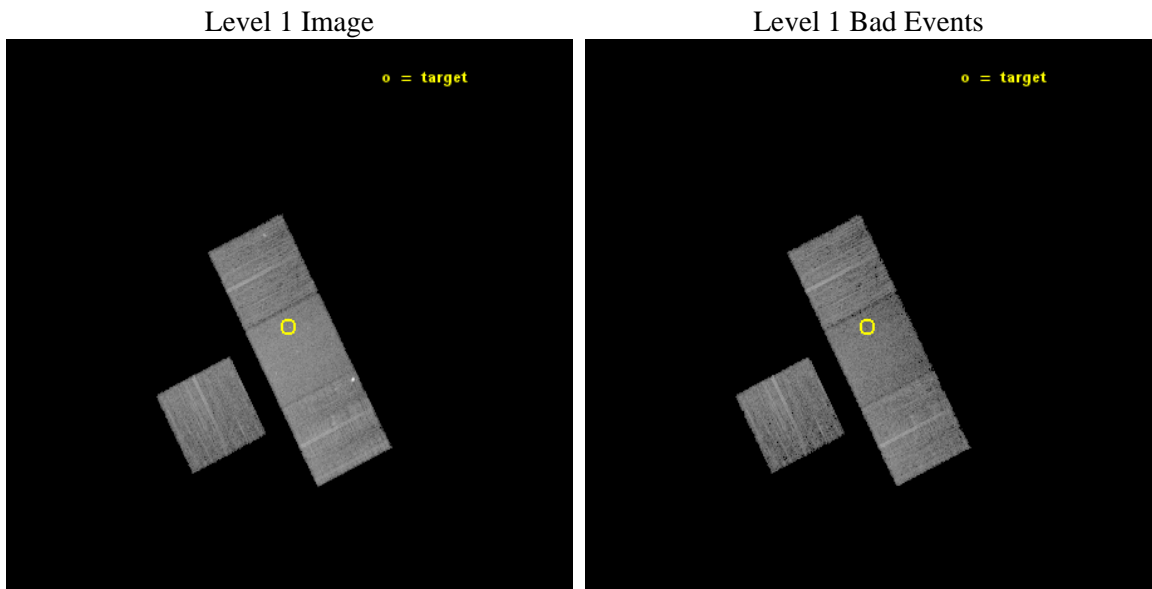
| | | |
|----------|---|---|
| seq_num | 601166 | Sequence number |
| obs_id | 16973 | Observation id |
| title | Searching for Accreting Black Holes in Lyman Continuum Emitters | Pr |
| observer | Prof. Philip Kaaret | Principal investigator |
| object | GALEX J080754.6+141045 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 121.979167 | Observer's specified target RA [deg] |
| dec_targ | 14.178889 | Observer's specified target Dec [deg] |
| ra_nom | 121.97794125377 | Nominal RA [deg] |
| dec_nom | 14.184233713874 | Nominal Dec [deg] |
| roll_nom | 63.427214899781 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 16374.200125933 | Sum of GTIs [s] |
| livetime | 16160.259146777 | Livetime [s] |
| ontime3 | 16374.200125933 | Sum of GTIs [s] |
| ontime6 | 16371.059095562 | Sum of GTIs [s] |
| ontime7 | 16374.200125933 | Sum of GTIs [s] |
| ontime8 | 16374.200125933 | Sum of GTIs [s] |
| l2events | 71629 | Number of level 2 events |



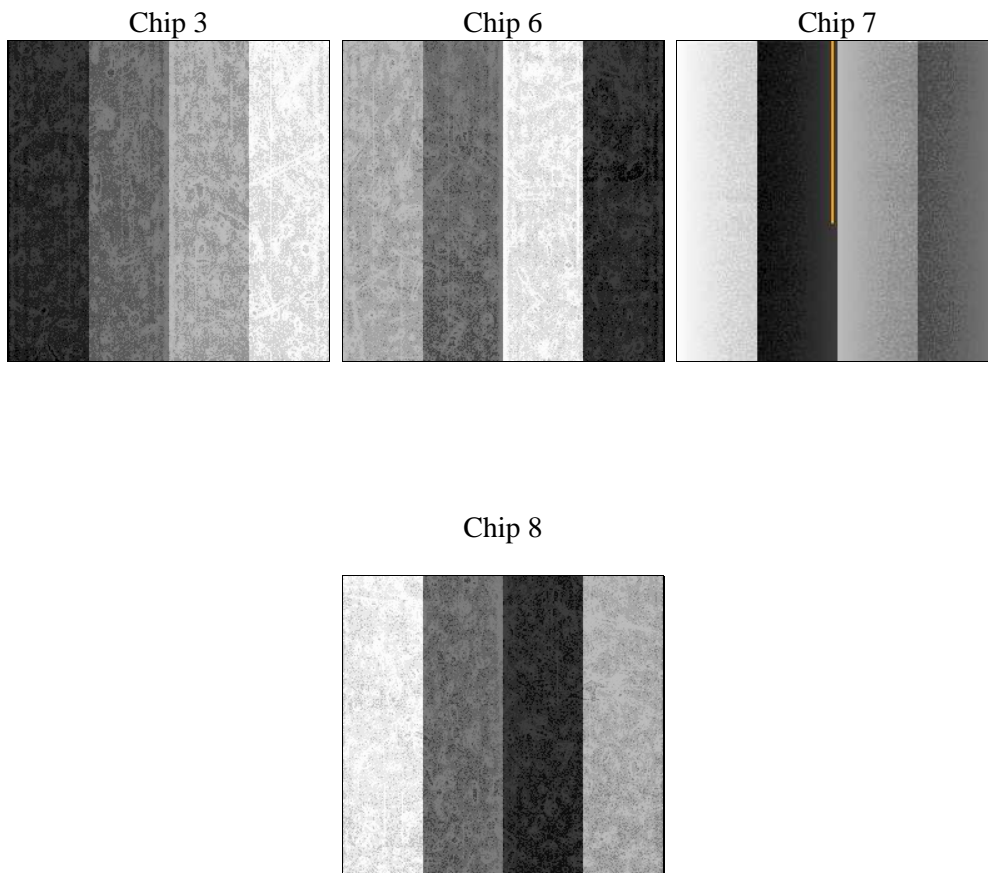
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 16300.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.3.1 | Processing system revision | ontime | 16374.200125933 | Sum of GTIs [s] |
| caldsver | 4.6.5 | | ontime3 | 16374.200125933 | Sum of GTIs [s] |
| date | 2015-01-01T03:28:36 | Date and time of file creation | ontime6 | 16371.059095562 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime7 | 16374.200125933 | Sum of GTIs [s] |
| | | | ontime8 | 16374.200125933 | Sum of GTIs [s] |
| | | | l1events | 349500 | Number of level 1 events |

2.1.4 Events

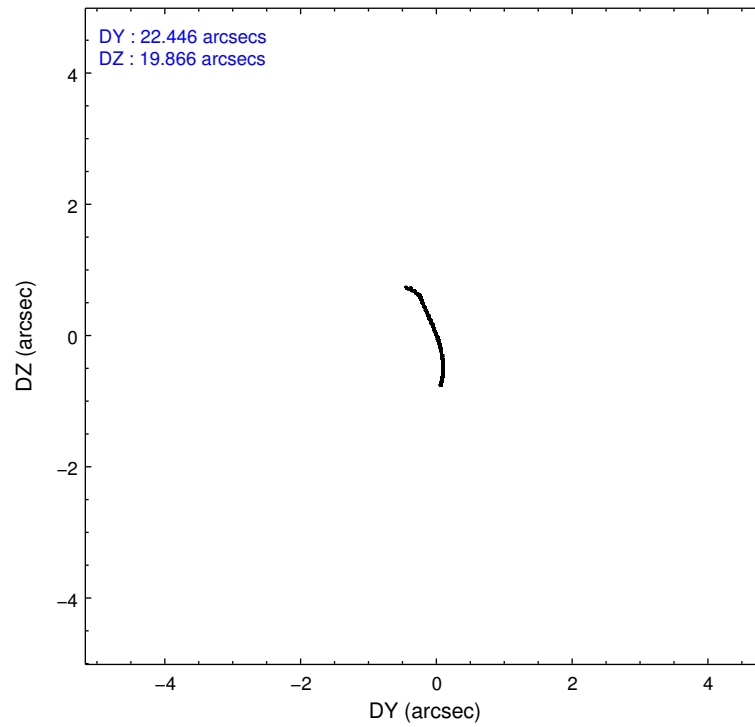
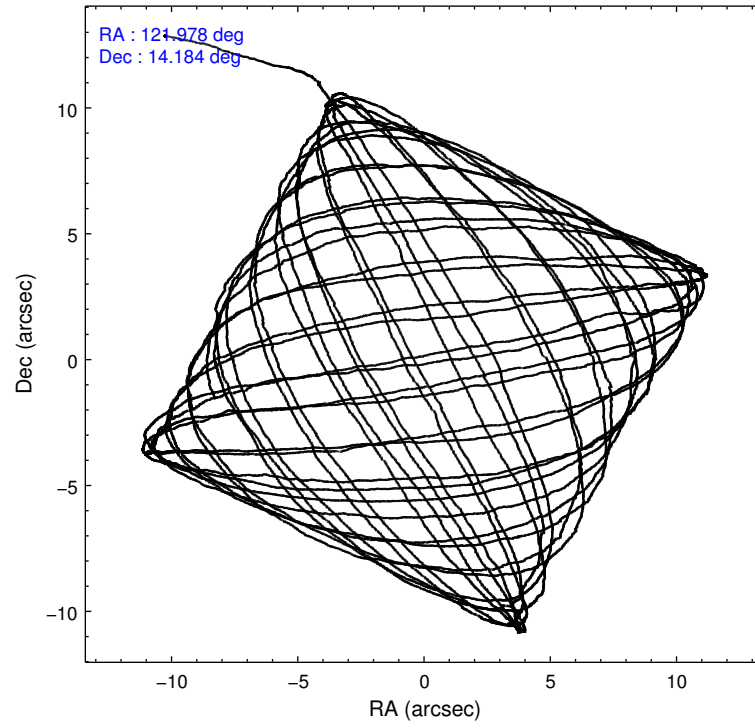
| | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|--------|--------|
| level 1 events | 68326 | 75535 | 100371 | 105268 |
| rejected events | 60286 | 66074 | 56437 | 74094 |
| rejected % | 88% | 87% | 56% | 70% |

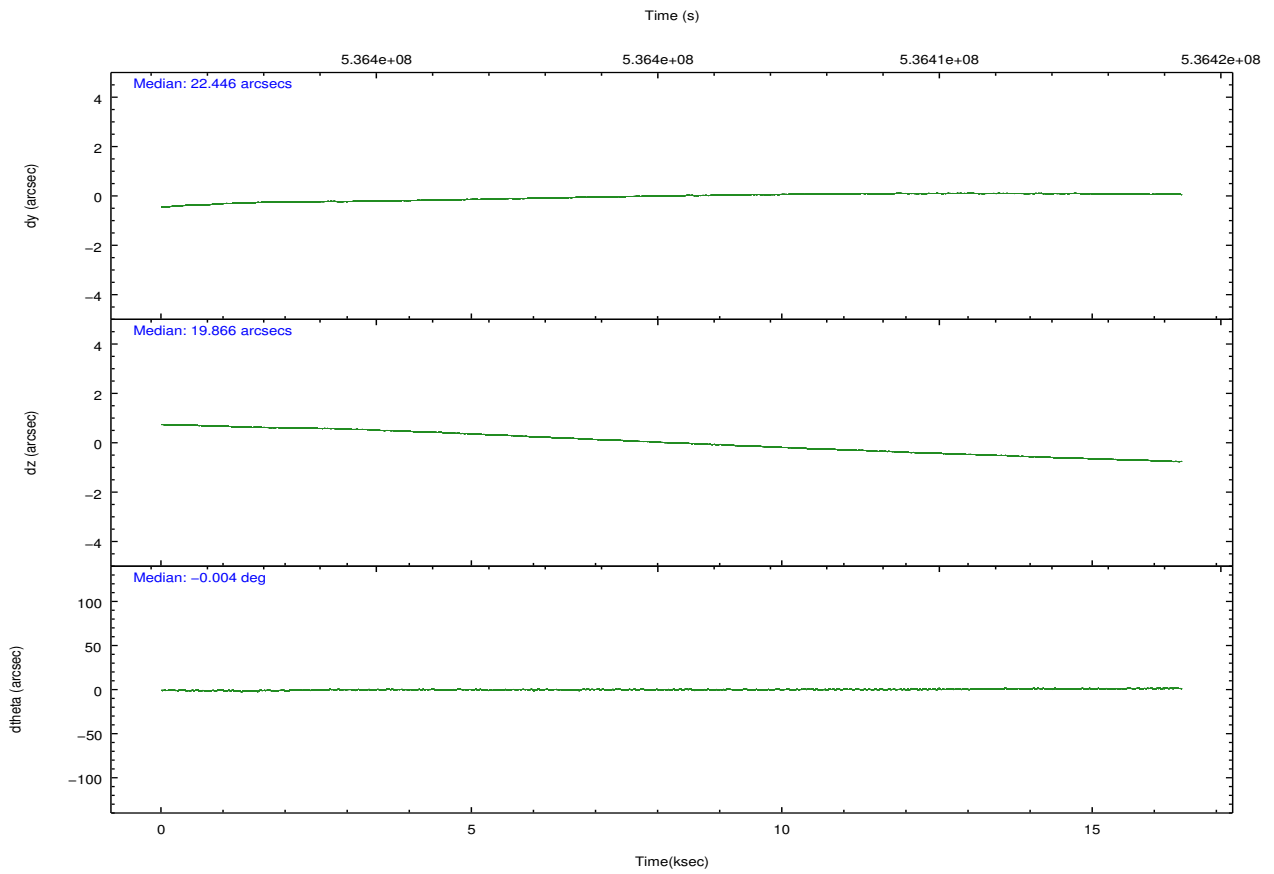
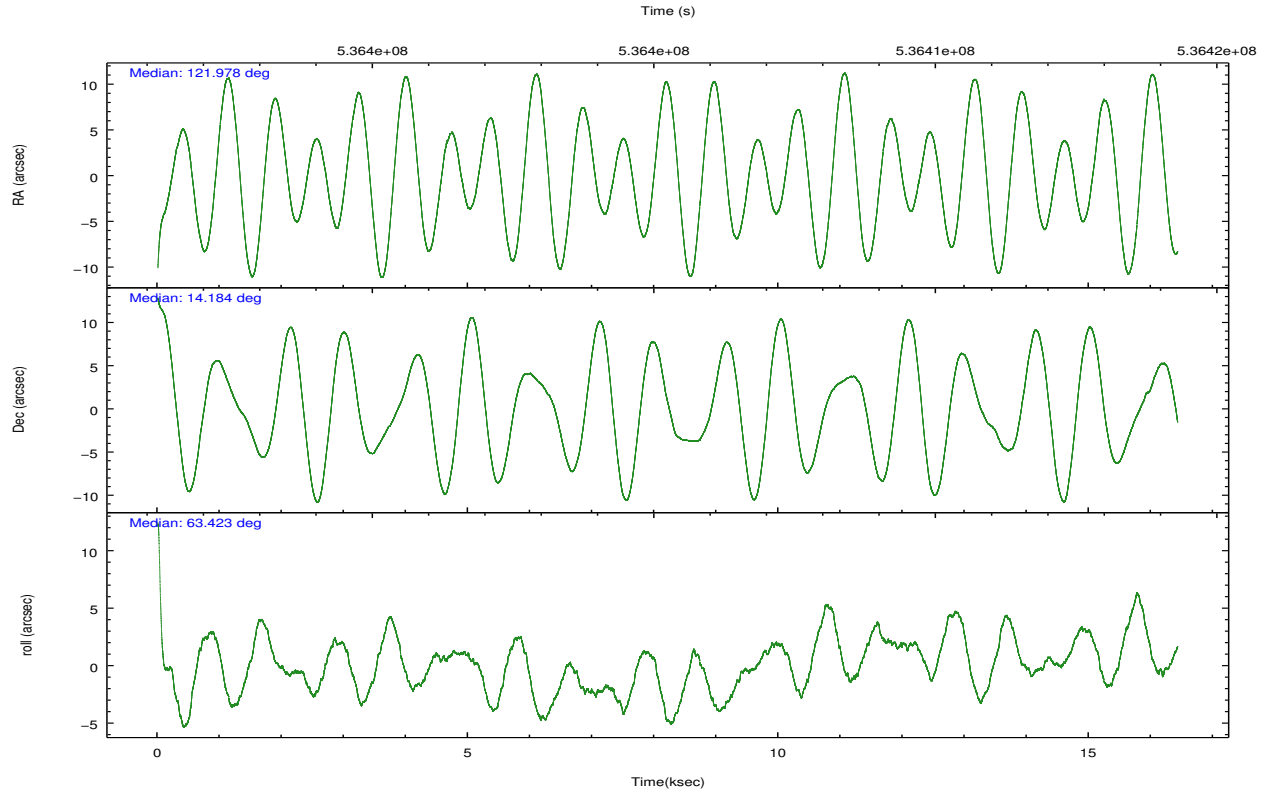
| | ccd 3 | ccd 6 | ccd 7 | ccd 8 |
|----------------|-------|-------|-------|-------|
| grade 0 events | 2793 | 3273 | 3779 | 10798 |
| | 4% | 4% | 3% | 10% |
| grade 1 events | 49 | 38 | 124 | 84 |
| | 0% | 0% | 0% | 0% |
| grade 2 events | 1855 | 2087 | 9096 | 6846 |
| | 2% | 2% | 9% | 6% |
| grade 3 events | 832 | 984 | 3796 | 3014 |
| | 1% | 1% | 3% | 2% |
| grade 4 events | 842 | 965 | 3749 | 2938 |
| | 1% | 1% | 3% | 2% |
| grade 5 events | 3909 | 3856 | 10355 | 5687 |
| | 5% | 5% | 10% | 5% |
| grade 6 events | 1721 | 2153 | 23533 | 7591 |
| | 2% | 2% | 23% | 7% |
| grade 7 events | 56325 | 62179 | 45939 | 68310 |
| | 82% | 82% | 45% | 64% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-3678 | ACIS-3678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 121.980028 | 121.9779412537655 | CCD I2 on | N | N |
| [deg] Pointing Dec | 14.156824 | 14.18423371387434 | CCD I3 on | O1 | Y |
| [deg] Pointing Roll | 63.270066 | 63.42721489978089 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | O2 | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | CCD S4 on | O3 | Y |
| [s] Observation start time (MET) | 536397165.184000 | 536395859.44852 | CCD S5 on | N | N |
| Observation start date | 2014-12-31T07:11:38 | 2014-12-31T06:50:59 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 536413465.184000 | 536413916.87453 | On-chip summing requested | N | N |
| Observation end date | 2014-12-31T11:43:18 | 2014-12-31T11:51:56 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect





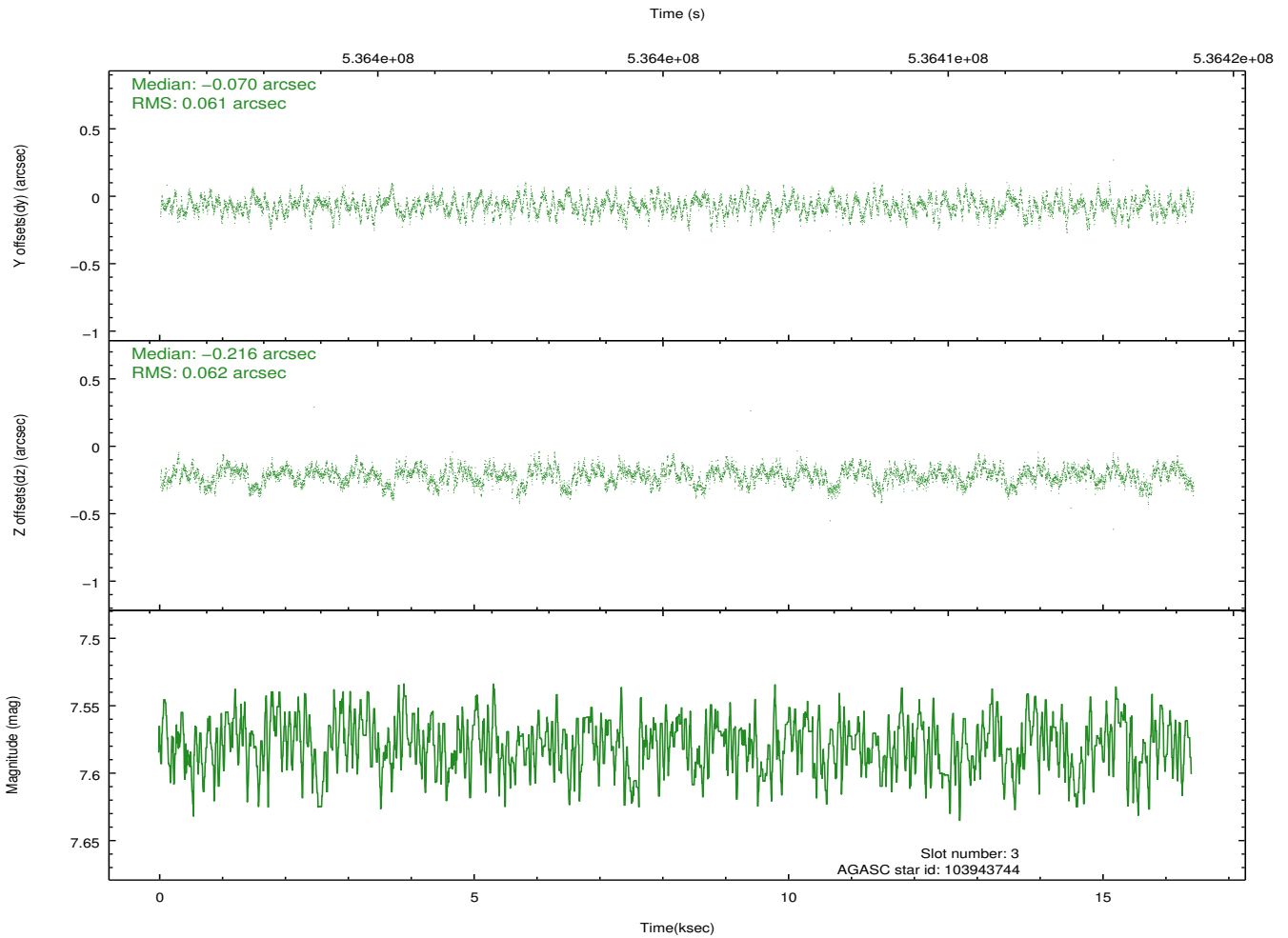
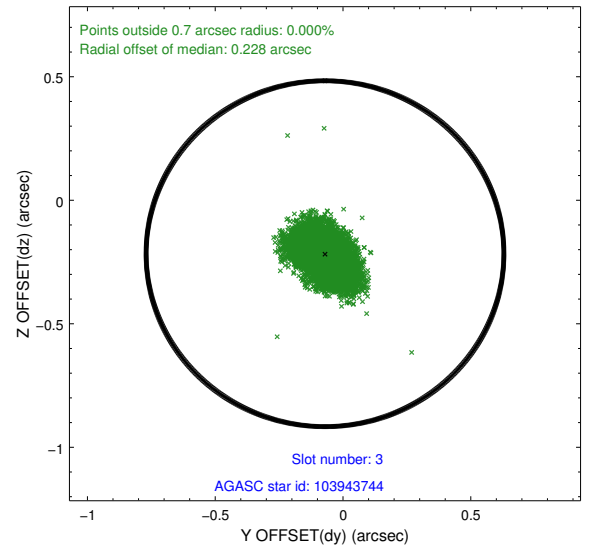
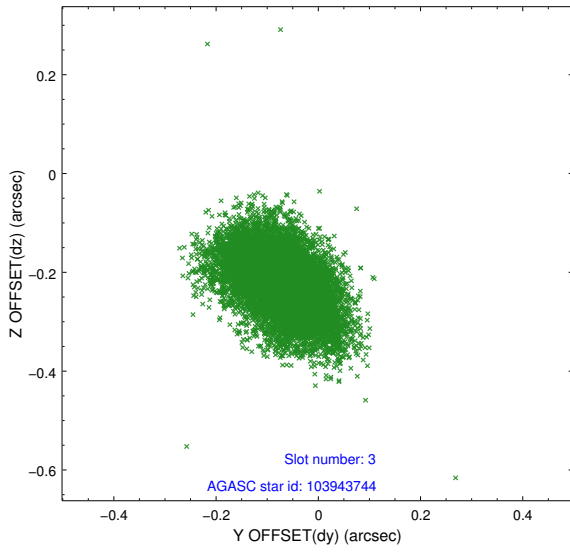
Slot Statistics

| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | | ACIS-S-2 | 6.94 | 4007 | -0.110 | -0.032 | 0.016 | 0.024 | 0.000000 | 0.000000 | -775.68 | -1741.41 |
| 1 | FID | | ACIS-S-4 | 7.03 | 4007 | 0.263 | 0.062 | 0.014 | 0.027 | 0.000000 | 0.000000 | 2137.85 | 166.89 |
| 2 | FID | | ACIS-S-5 | 7.04 | 4007 | -0.184 | -0.022 | 0.016 | 0.024 | 0.000000 | 0.000000 | -1828.25 | 160.78 |
| 3 | GUIDE | used | 103943744 | 7.58 | 8013 | -0.070 | -0.216 | 0.093 | 0.152 | 122.015624 | 14.350488 | 678.29 | 202.35 |
| 4 | GUIDE | used | 103944720 | 9.27 | 8007 | 0.135 | -0.125 | 0.131 | 0.212 | 121.483839 | 14.427016 | 92.74 | 1983.33 |
| 5 | GUIDE | used | 103946624 | 7.75 | 8012 | 0.018 | 0.139 | 0.079 | 0.128 | 122.527335 | 14.507989 | 1987.72 | -1133.11 |
| 6 | GUIDE | used | 103956184 | 8.51 | 8009 | -0.151 | -0.185 | 0.094 | 0.151 | 122.093586 | 14.853591 | 2418.23 | 775.45 |
| 7 | GUIDE | used | 105648120 | 8.81 | 8011 | 0.067 | 0.392 | 0.104 | 0.172 | 122.690278 | 14.042715 | 752.98 | -2398.17 |

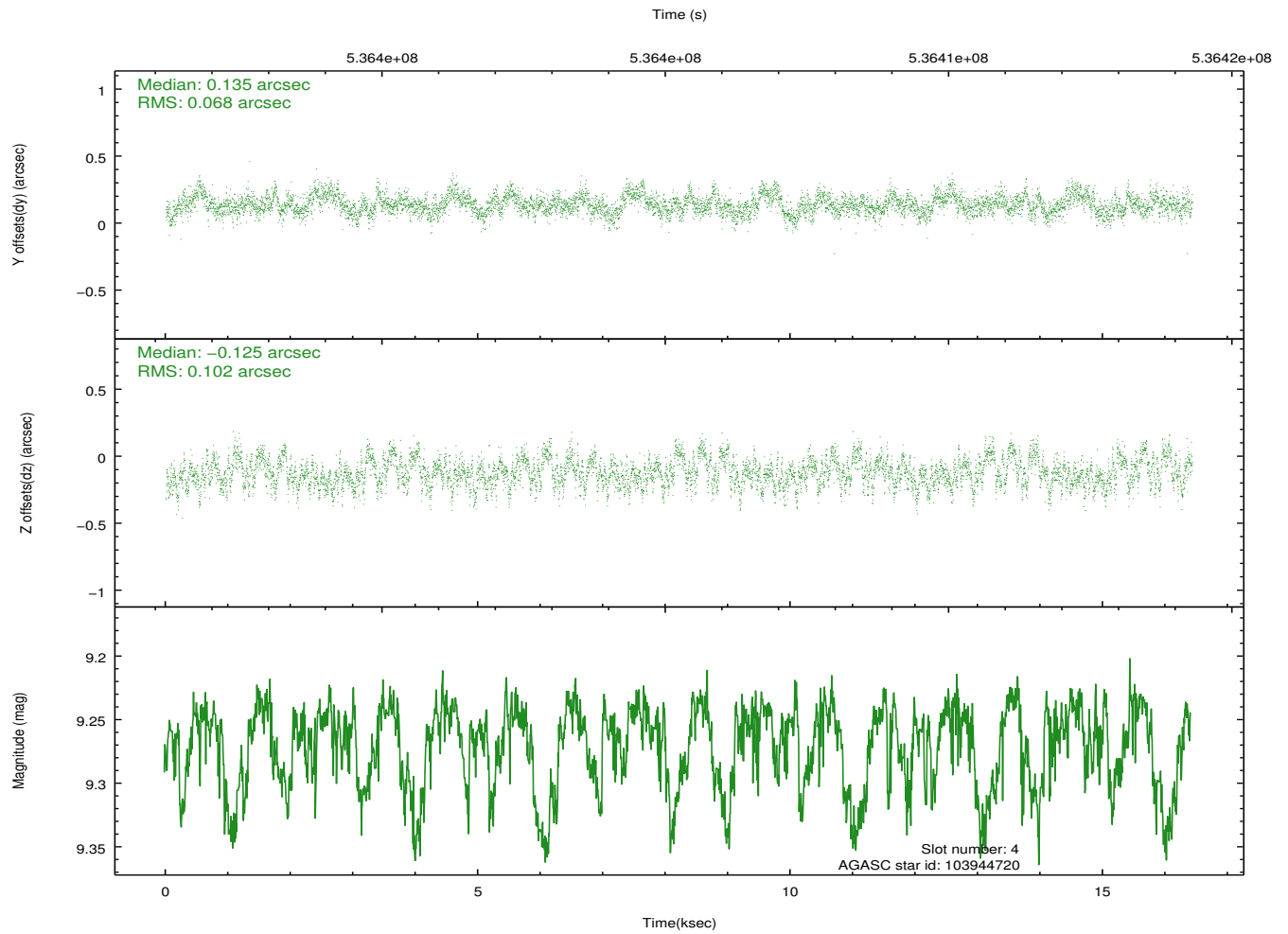
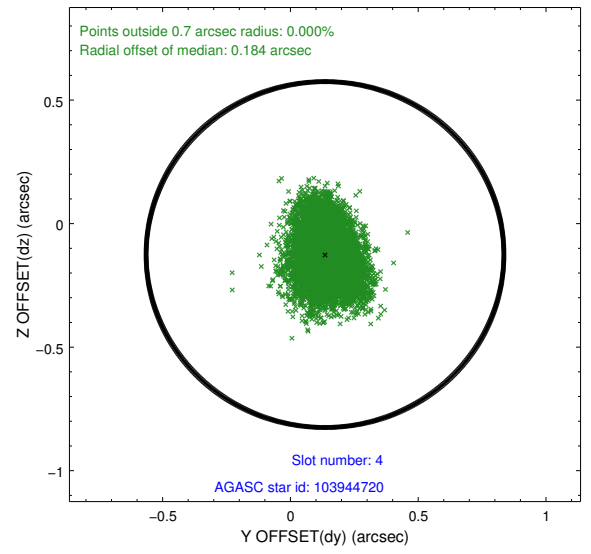
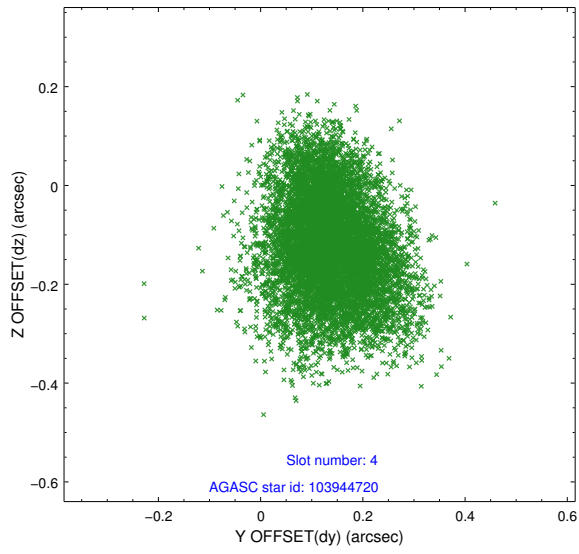
∞

2.4 Star Slots

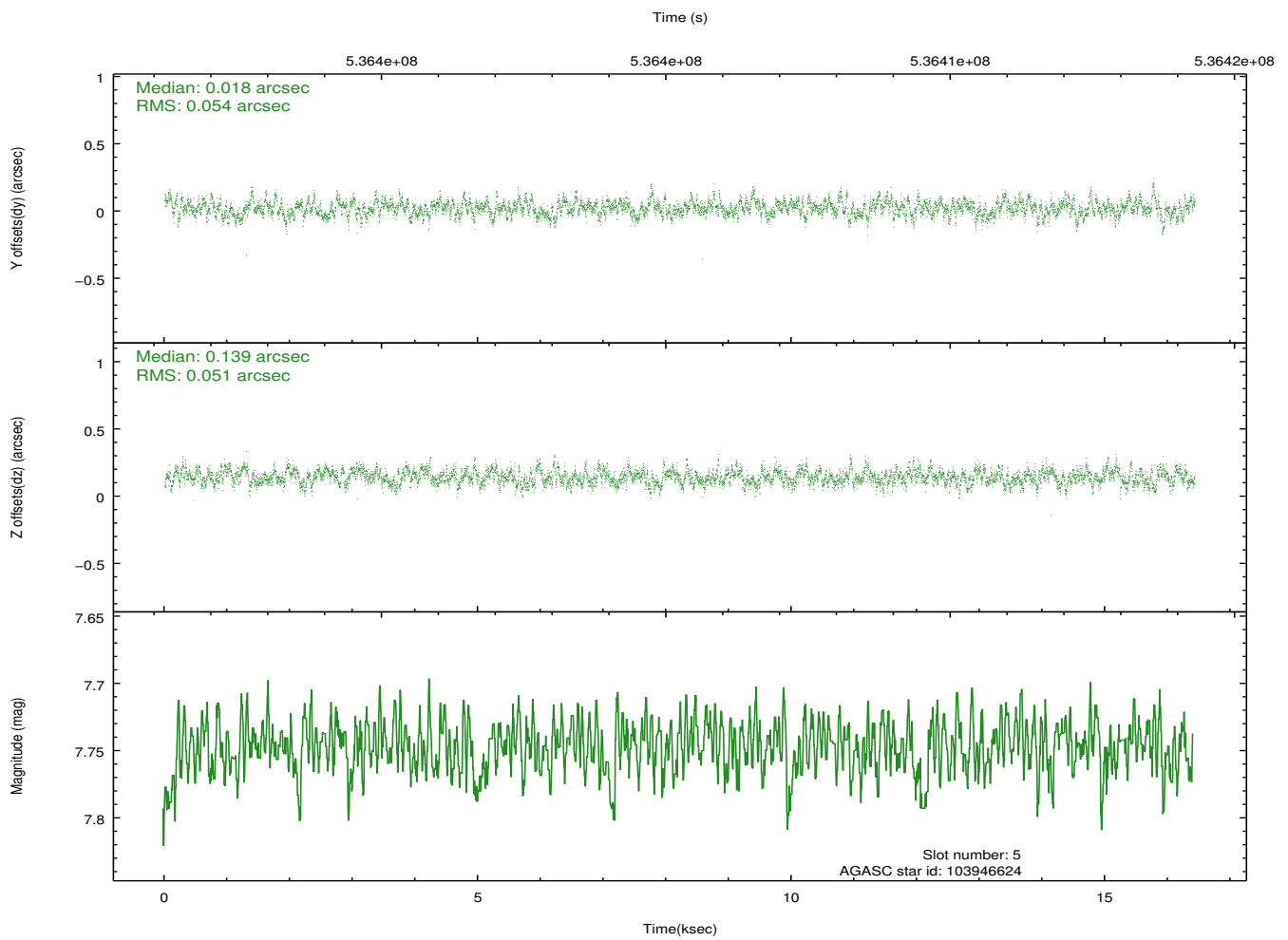
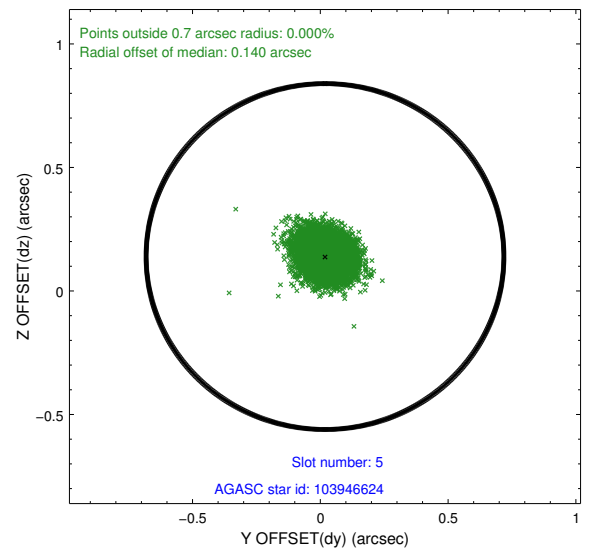
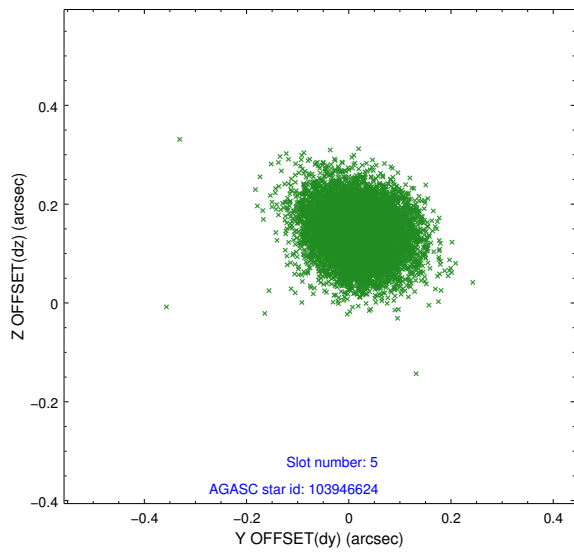
2.4.1 Slot 3



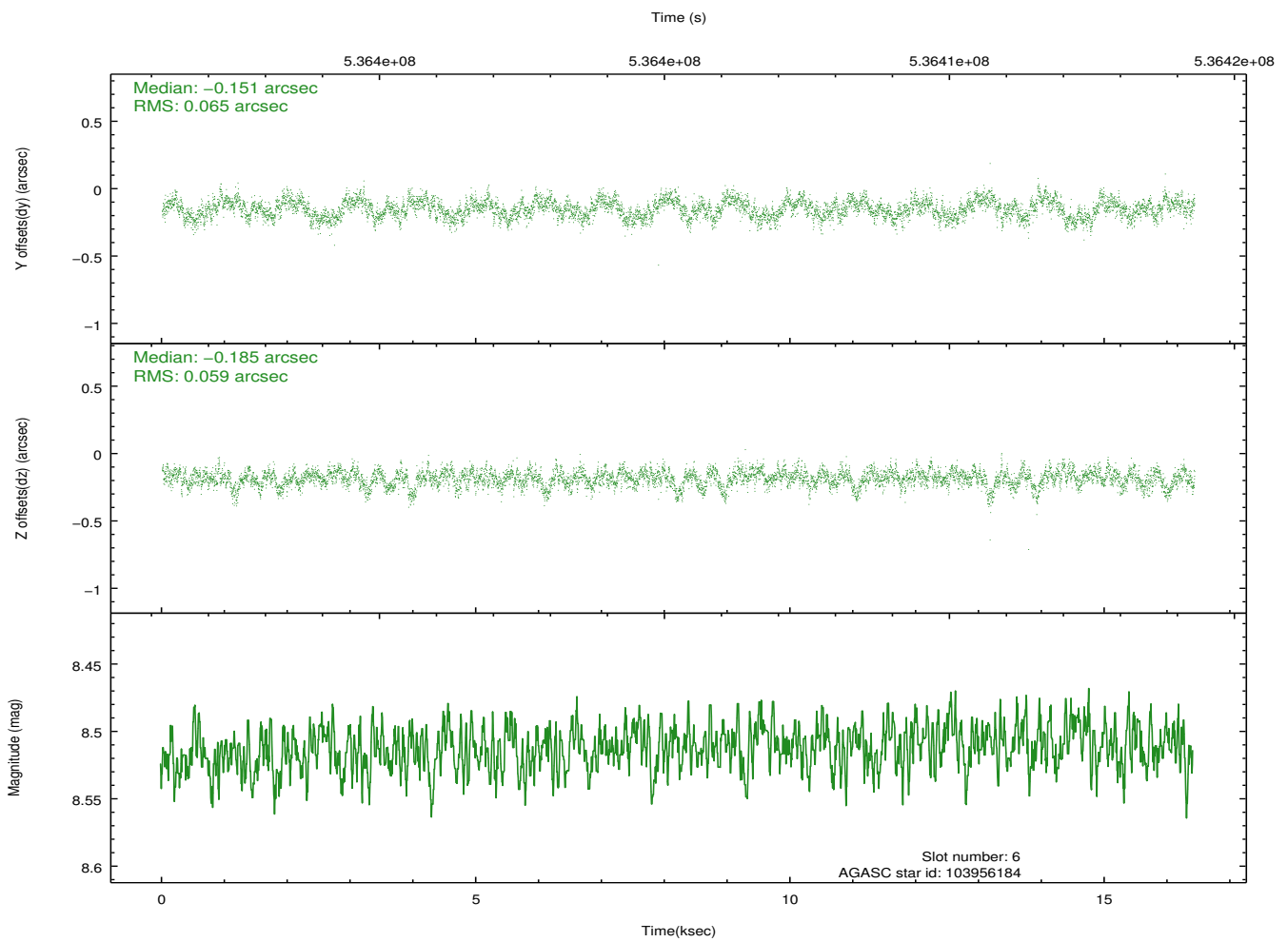
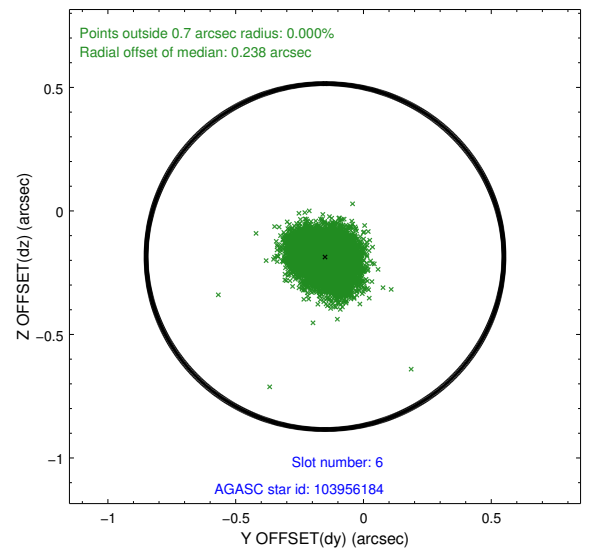
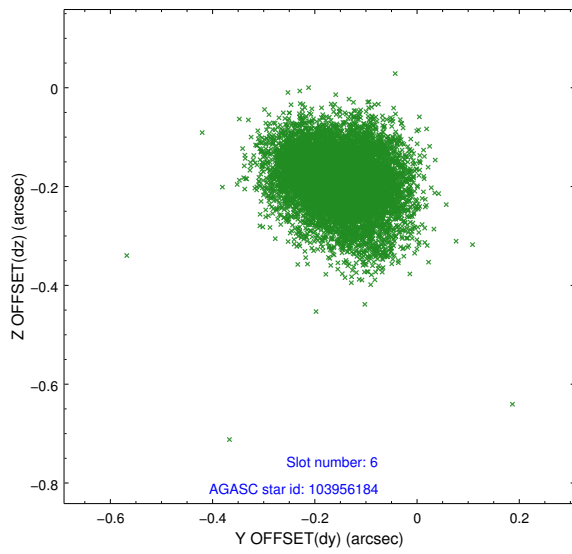
2.4.2 Slot 4



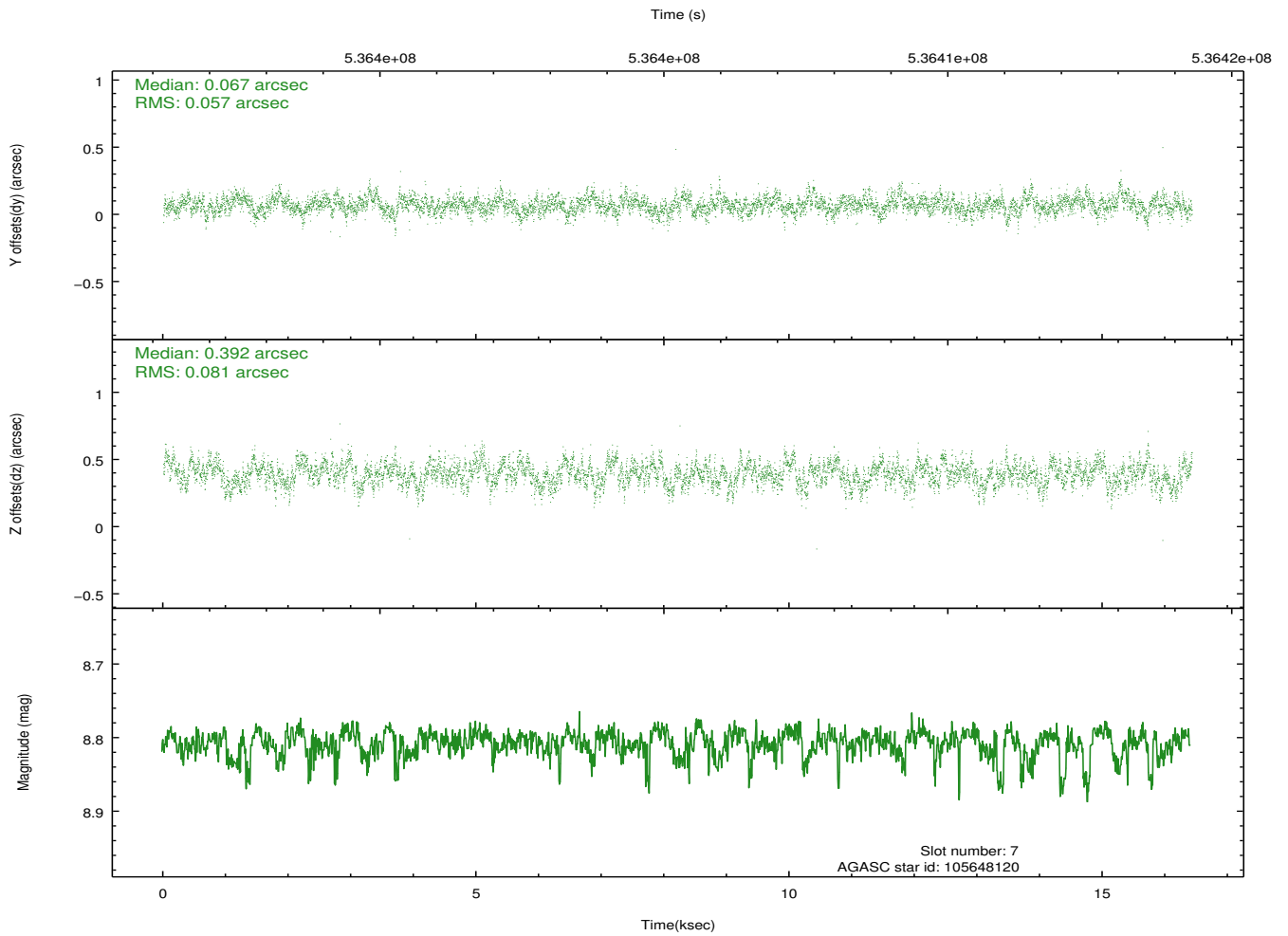
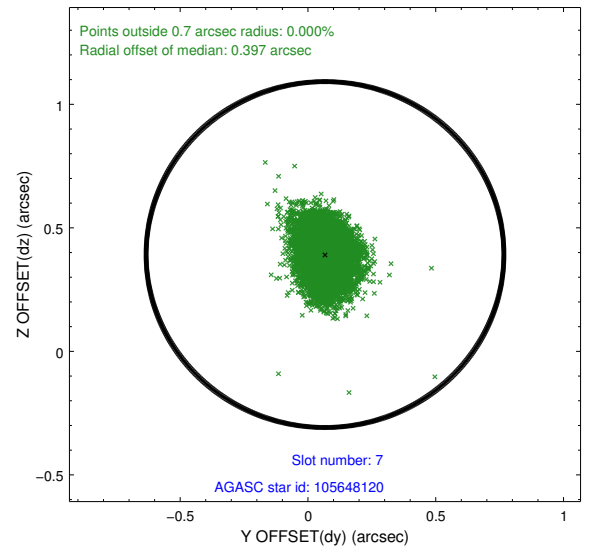
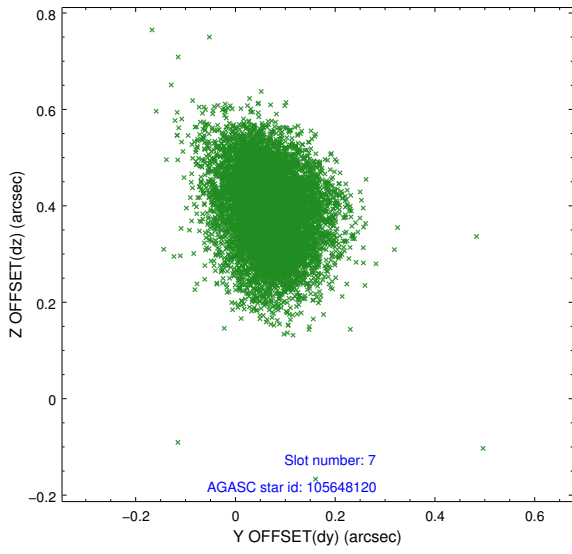
2.4.3 Slot 5



2.4.4 Slot 6

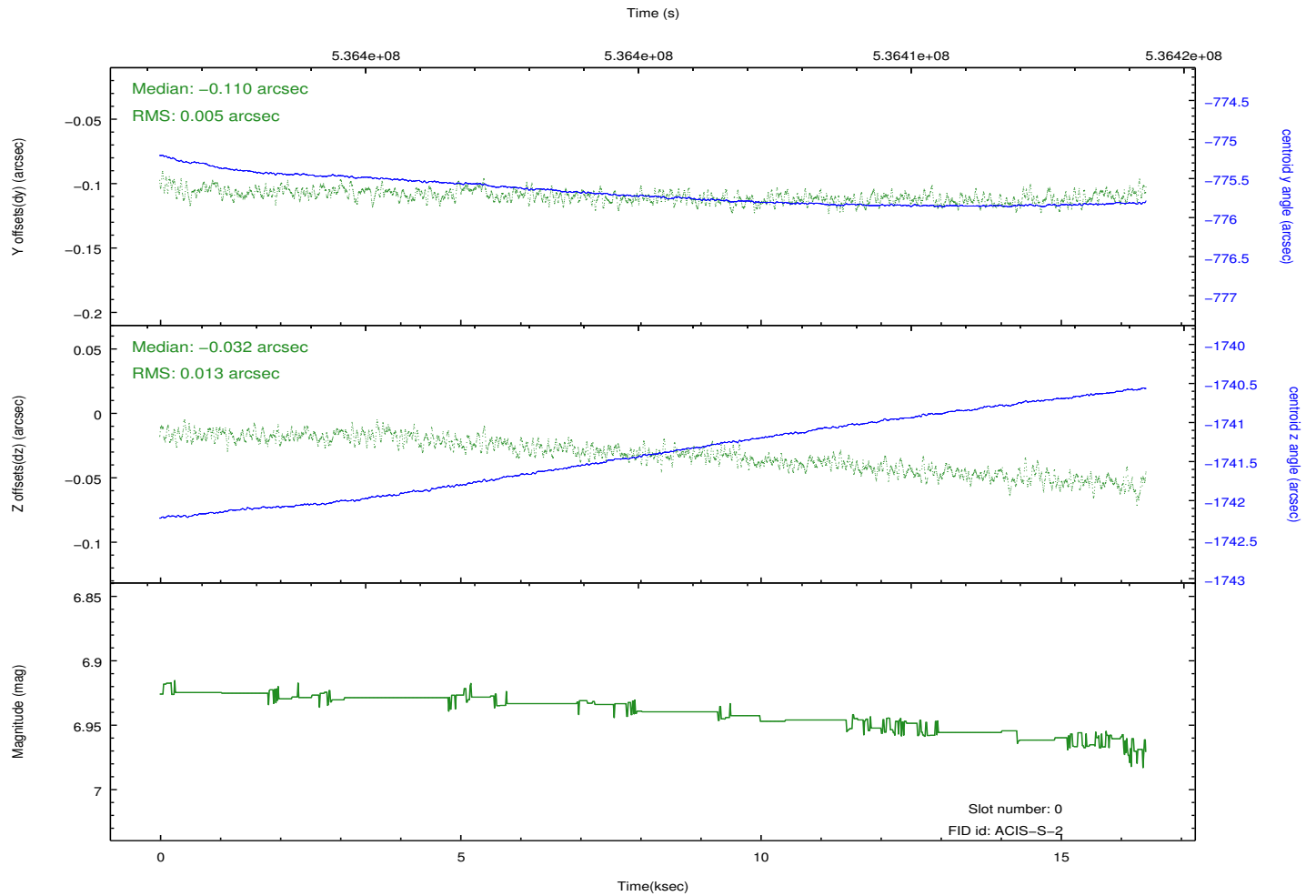
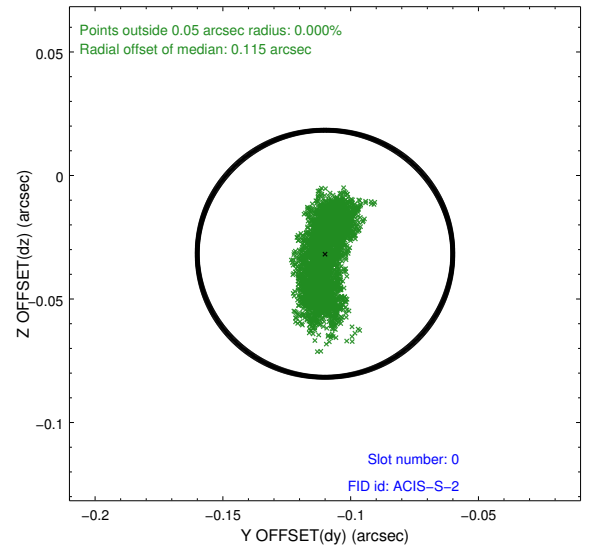
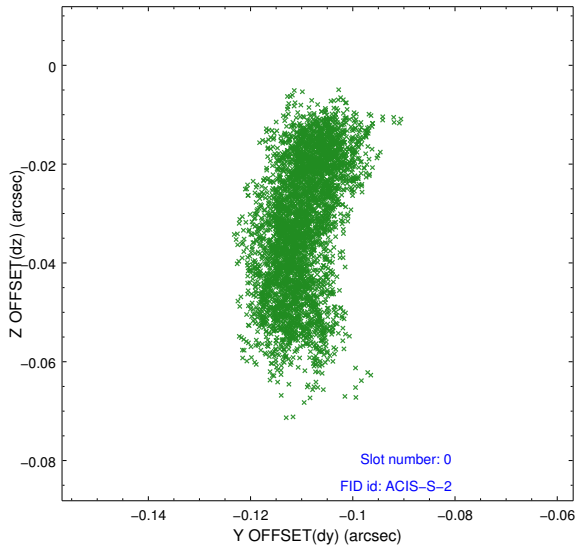


2.4.5 Slot 7

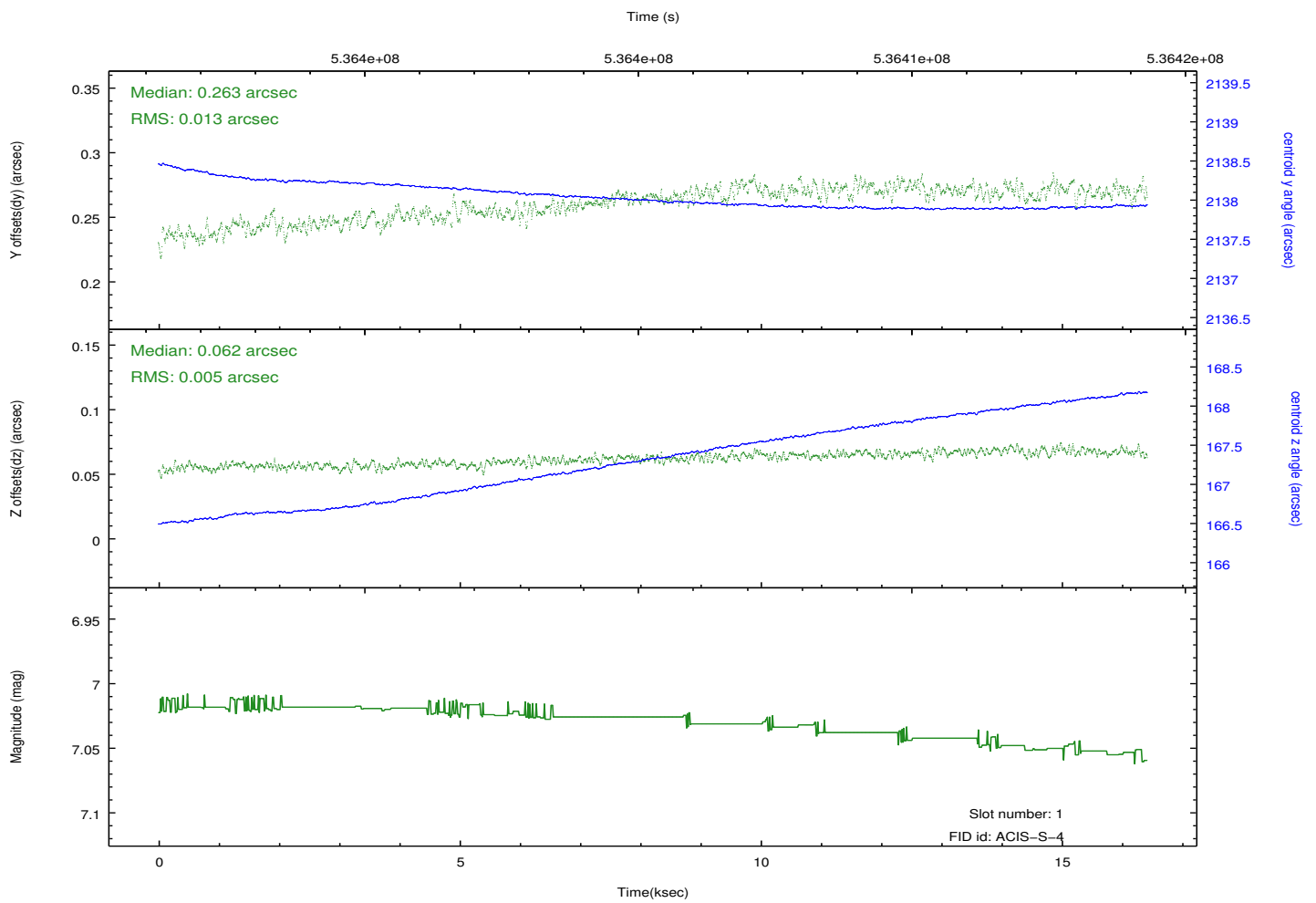
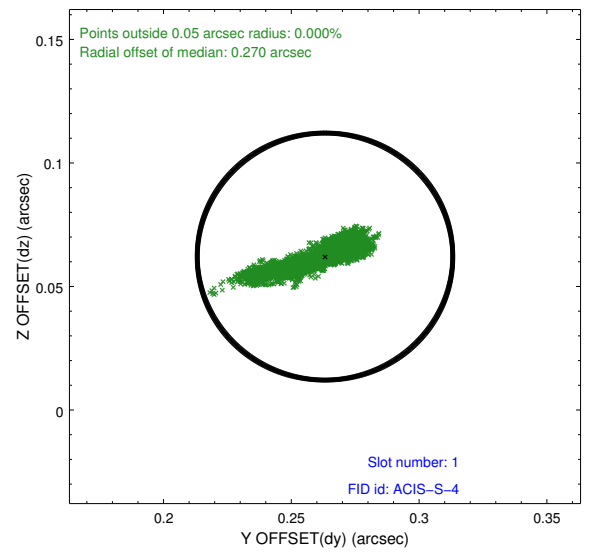
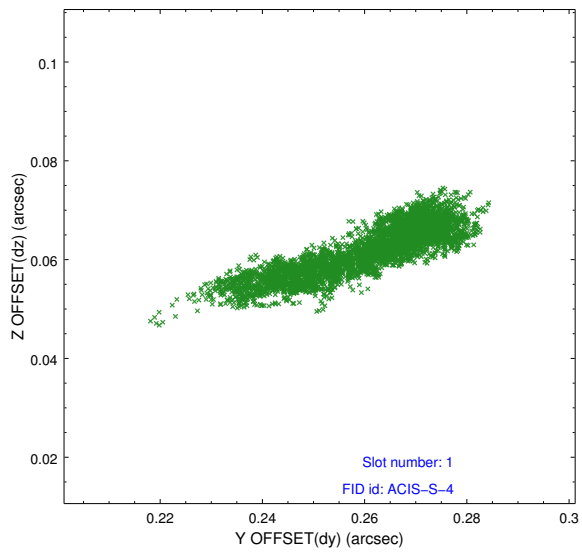


2.5 FID Slots

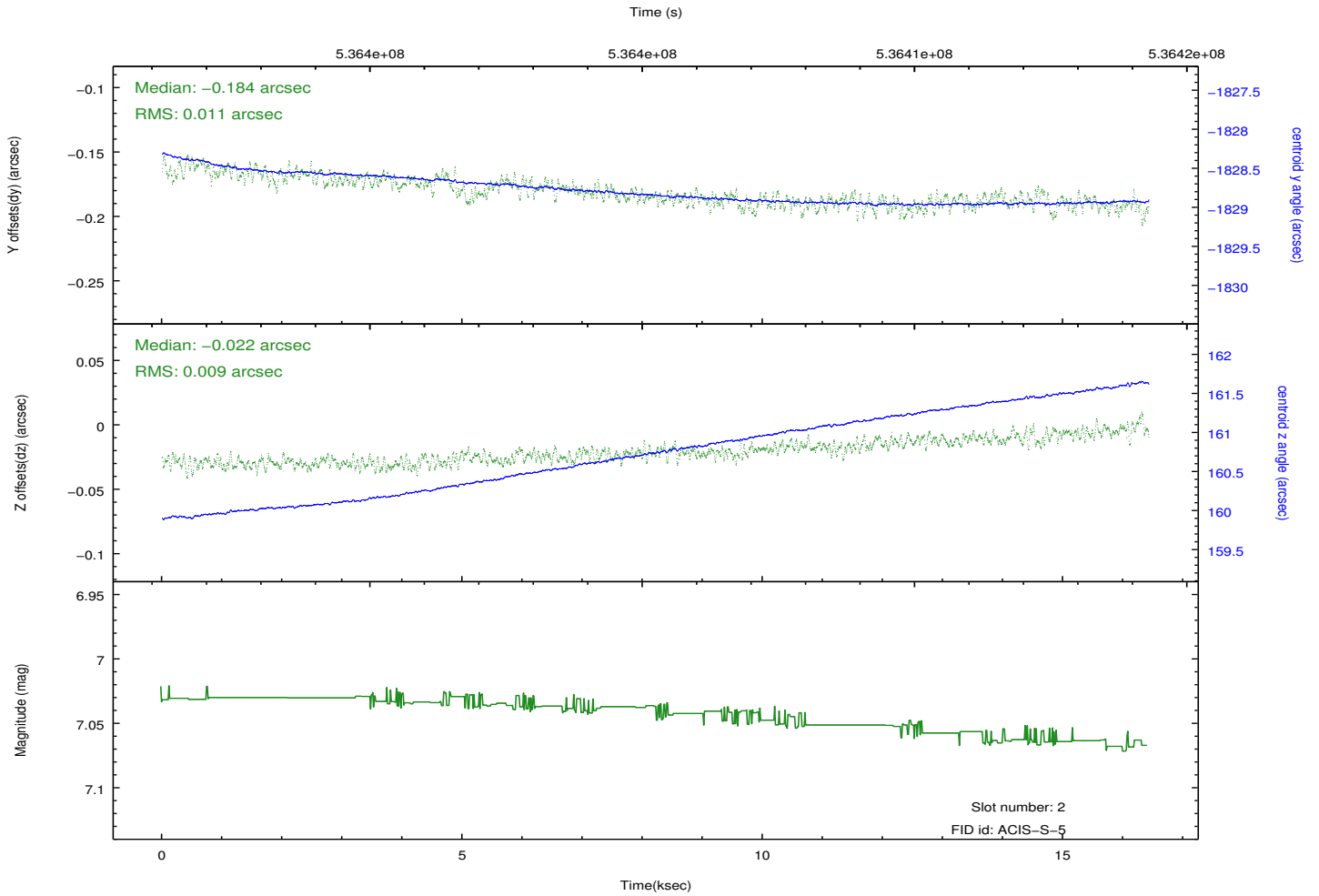
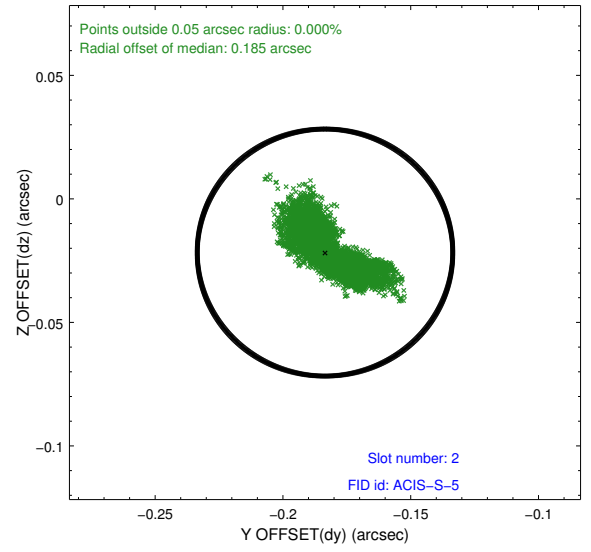
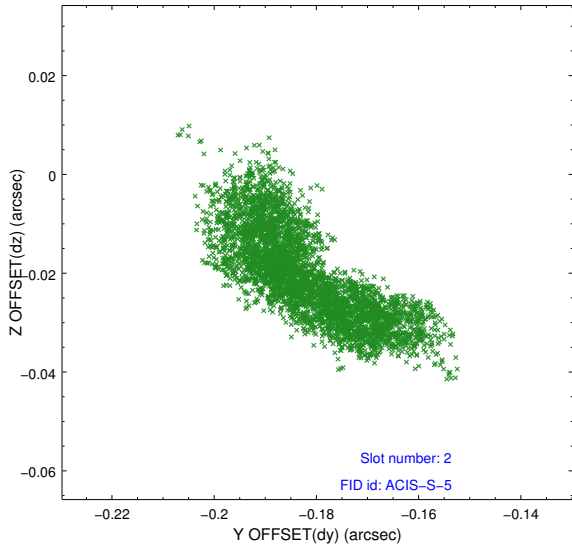
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2015.01.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 16.374200125933 |

A.2 Comments