

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17377 - L2 Version 2
Chandra X-Ray Center

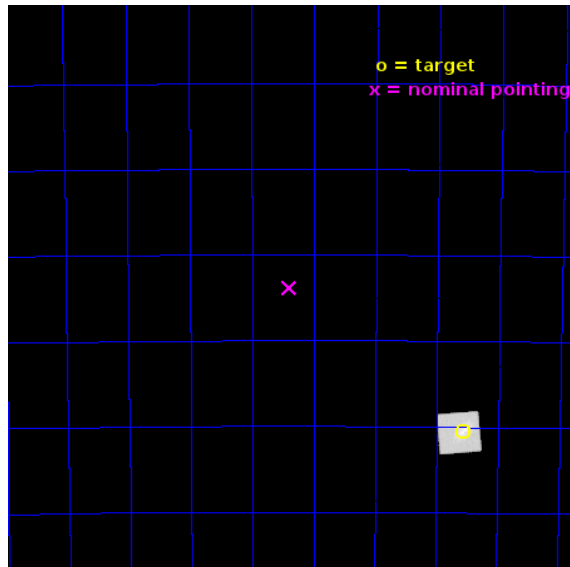
L2 Processing Date : Dec 14 2015

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1 Front

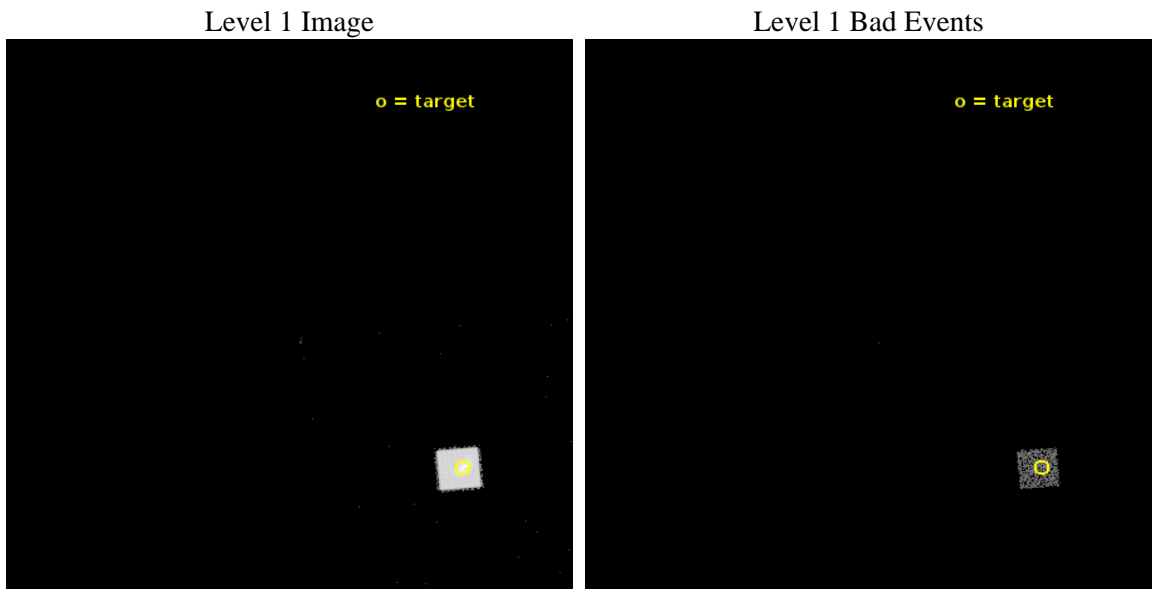
| | | |
|----------|--|---------------------------------------|
| seq_num | 291250 | Sequence number |
| obs_id | 17377 | Observation id |
| title | AO-16 Calibration Observations of the ACIS charged particle background | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | Proxima Cen | Source name |
| ra_targ | 217.39353 | Observer's specified target RA [deg] |
| dec_targ | -62.676193 | Observer's specified target Dec [deg] |
| ra_nom | 218.0992339445 | Nominal RA [deg] |
| dec_nom | -62.397384564499 | Nominal Dec [deg] |
| roll_nom | 130.26392258851 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 49692.259056807 | [s] |
| livetime | 43878.288810736 | Ontime multiplied by DTCOR |
| l2events | 114568 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 50000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.4.2.1 | Processing system revision | ontime | 49725.059066892 | [s] |
| caldbver | 4.6.10a | | l1events | 146187 | Number of level 1 events |
| date | 2015-12-14T18:00:55 | Date and time of file creation | | | |
| revision | 2 | Processing version of data | | | |

2.1.3 Events

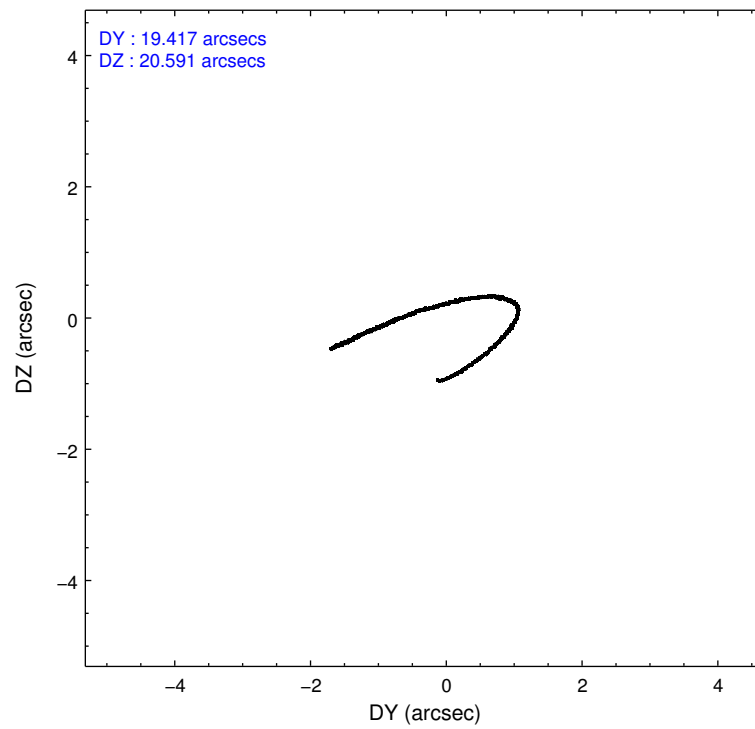
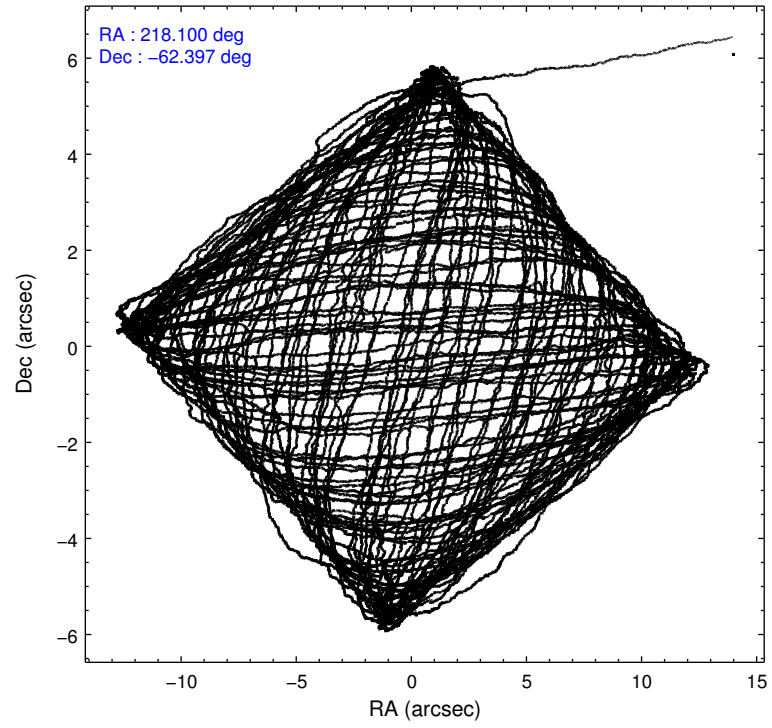
Level 1 Events

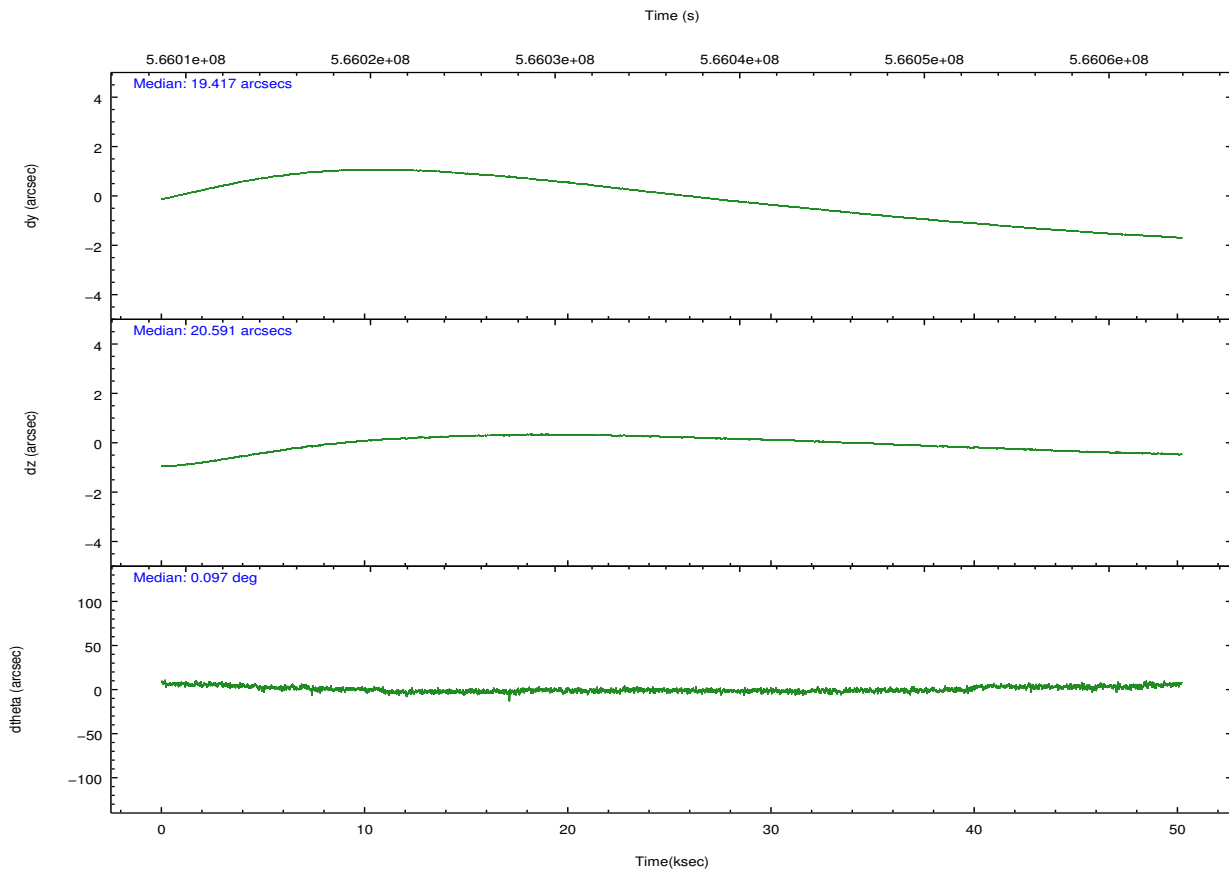
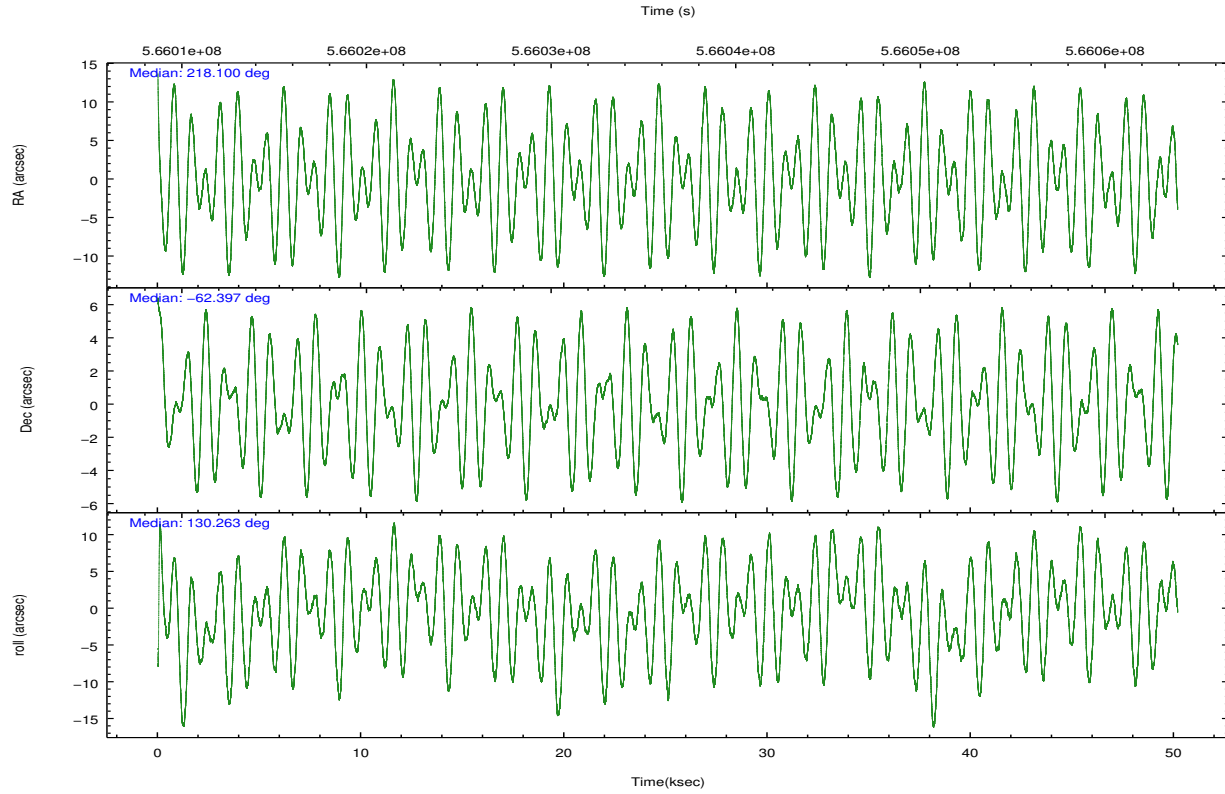
| | segment 0 |
|-----------------|----------------------|
| level 1 events | 146187 |
| rejected events | 5151 |
| rejected % | 3% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|---------------------|------------------------------|-----------|----------|
| Instrument | HRC | HRC | Obspar format version number | 7 | 7 |
| Detector | HRC-I | HRC-I | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | OVERRIDE | OVERRIDE |
| Data mode | NEXT_IN_LINE | NEXT_IN_LINE | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 218.155155 | 218.0992339445012 | | | |
| [deg] Pointing Dec | -62.406015 | -62.39738456449858 | | | |
| [deg] Pointing Roll | 130.408986 | 130.2639225885094 | | | |
| [mm] SIM focus pos | -1.038866356238299 | -1.038866356238299 | | | |
| [mm] SIM defocus | 0.00142623211714632 | 0.00142623211714632 | | | |
| [mm] SIM translation stage pos | 51.9960404362608 | 51.9960404362608 | | | |
| [mm] SIM translation stage offset | 74.989453869027 | 74.989453869027 | | | |
| [s] Observation start time (MET) | 566010519.62738 | 566010519.62738 | | | |
| Observation start date | 2015-12-09T01:08:39 | 2015-12-09T01:08:39 | | | |
| [s] Observation end time (MET) | 566062056.1178 | 566062056.1178 | | | |
| Observation end date | 2015-12-09T15:27:36 | 2015-12-09T15:27:36 | | | |

2.3 Aspect



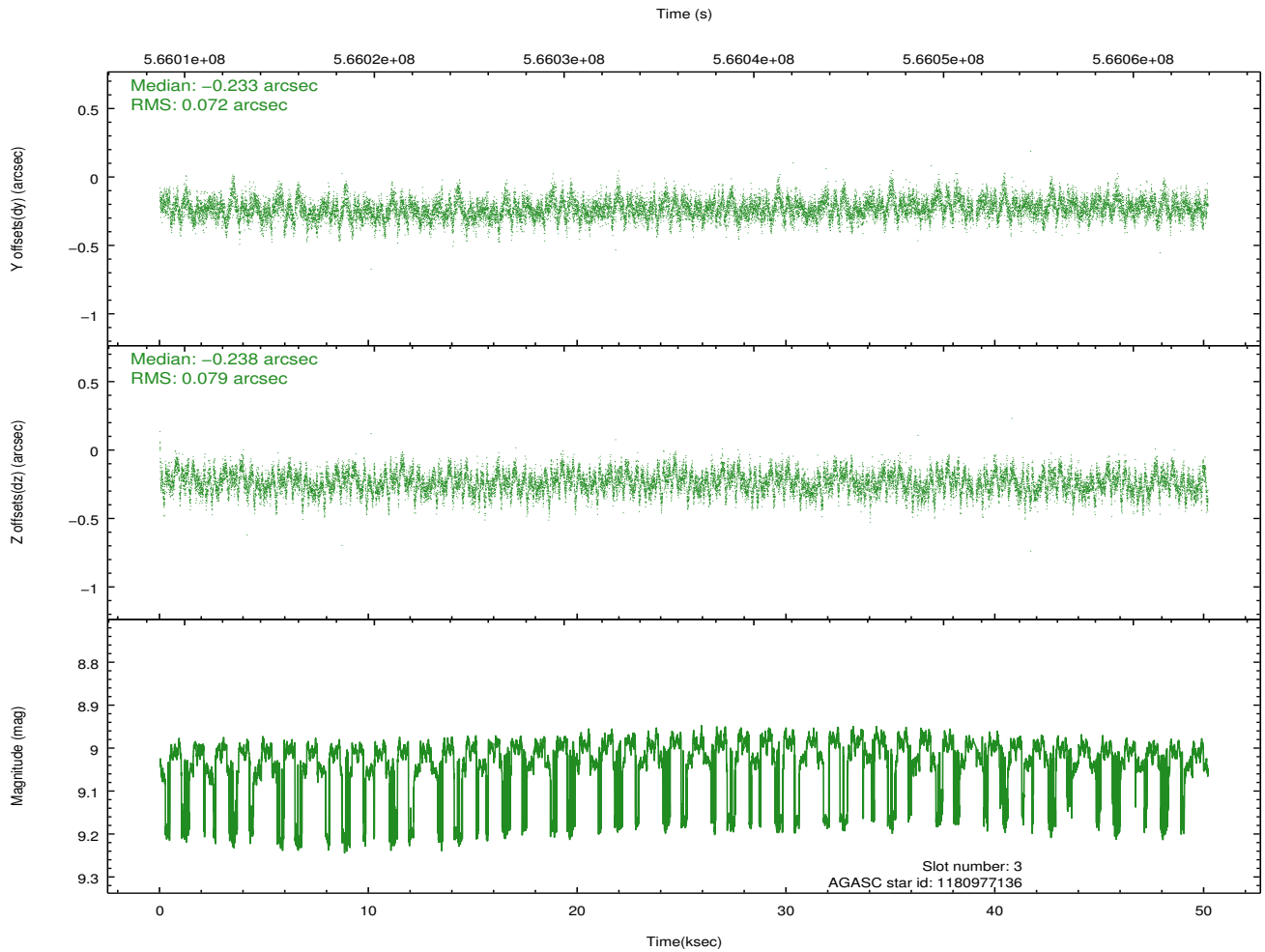
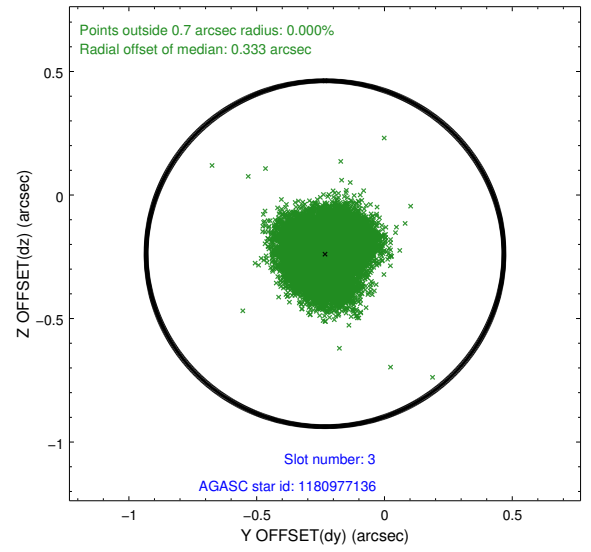
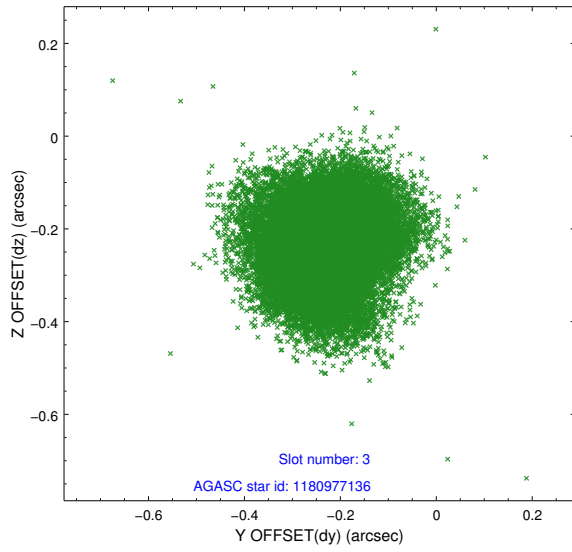


Slot Statistics

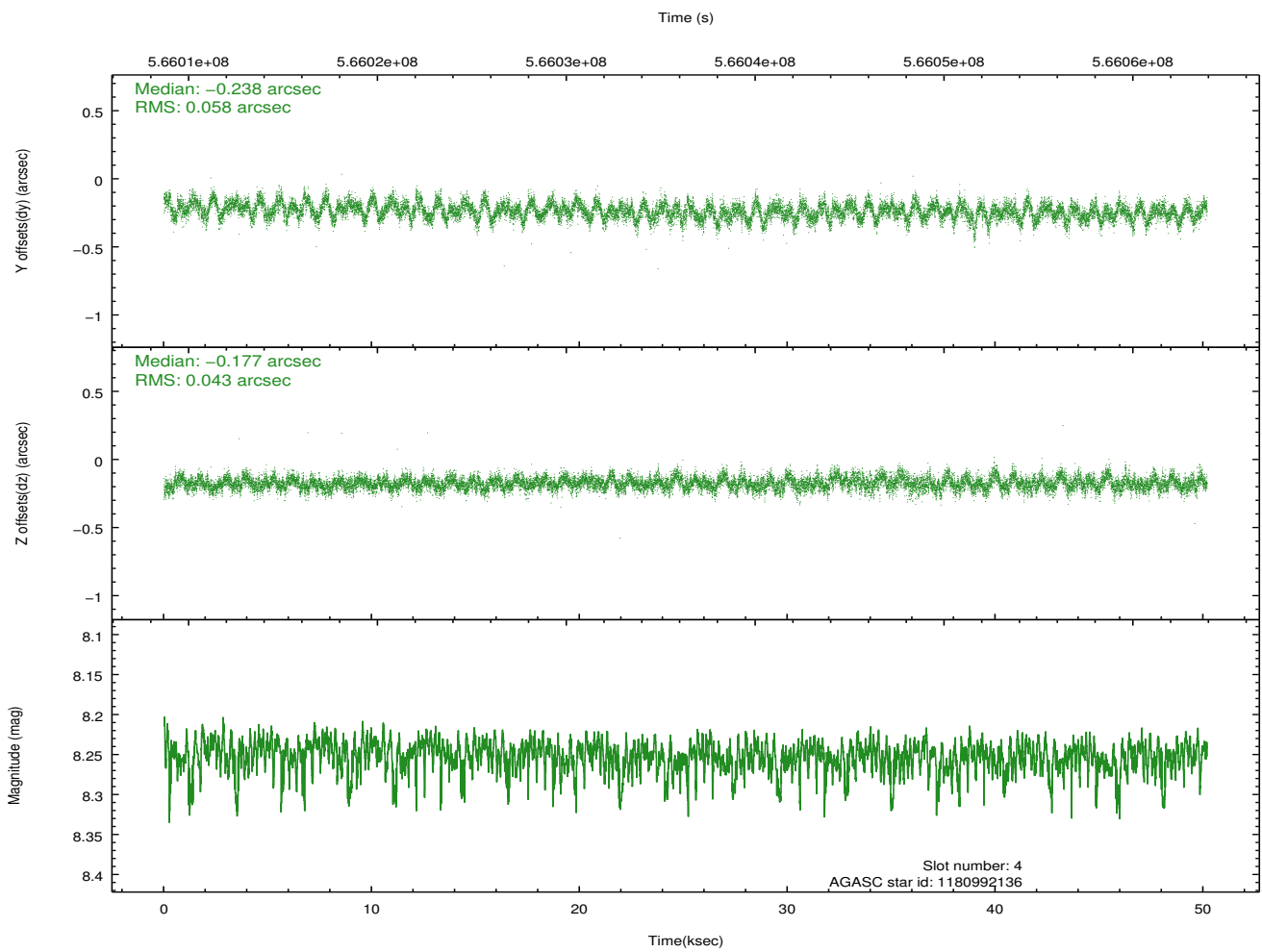
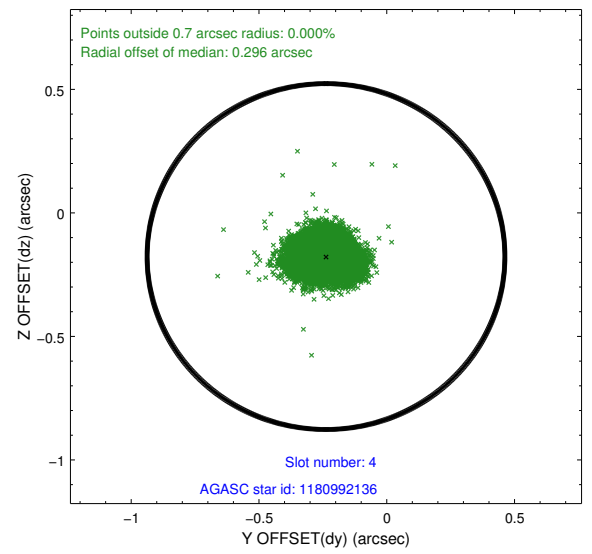
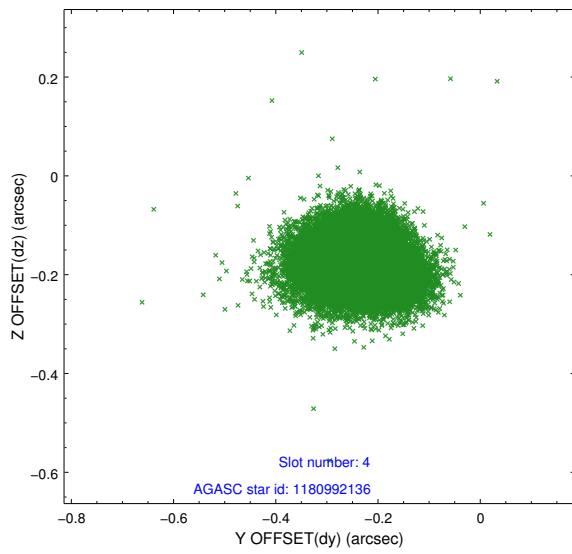
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|------------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | | HRC-I-1 | 6.90 | 12240 | -0.758 | -0.029 | 0.007 | 0.013 | 0.000000 | 0.000000 | -774.02 | 229.07 |
| 1 | FID | | HRC-I-2 | 7.01 | 12237 | 0.837 | -0.025 | 0.007 | 0.013 | 0.000000 | 0.000000 | 837.06 | 230.16 |
| 2 | UNUSED | | | 0.00 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000 | 0.000000 | 0.00 | 0.00 |
| 3 | GUIDE | used | 1180977136 | 9.02 | 24398 | -0.233 | -0.238 | 0.114 | 0.182 | 217.148159 | -62.209003 | 1625.80 | 836.04 |
| 4 | GUIDE | used | 1180992136 | 8.25 | 24471 | -0.238 | -0.177 | 0.077 | 0.125 | 217.334663 | -62.071437 | 1807.46 | 278.53 |
| 5 | GUIDE | used | 1181104896 | 6.53 | 24480 | 0.313 | 0.387 | 0.088 | 0.139 | 219.299869 | -62.010896 | -182.74 | -2382.81 |
| 6 | GUIDE | used | 1181107448 | 9.23 | 24466 | 0.473 | 0.209 | 0.153 | 0.257 | 219.084809 | -62.741785 | -1921.56 | -376.00 |
| 7 | GUIDE | used | 1180985824 | 8.80 | 24460 | -0.313 | -0.184 | 0.107 | 0.169 | 216.565550 | -62.139830 | 2437.99 | 1436.70 |

2.4 Star Slots

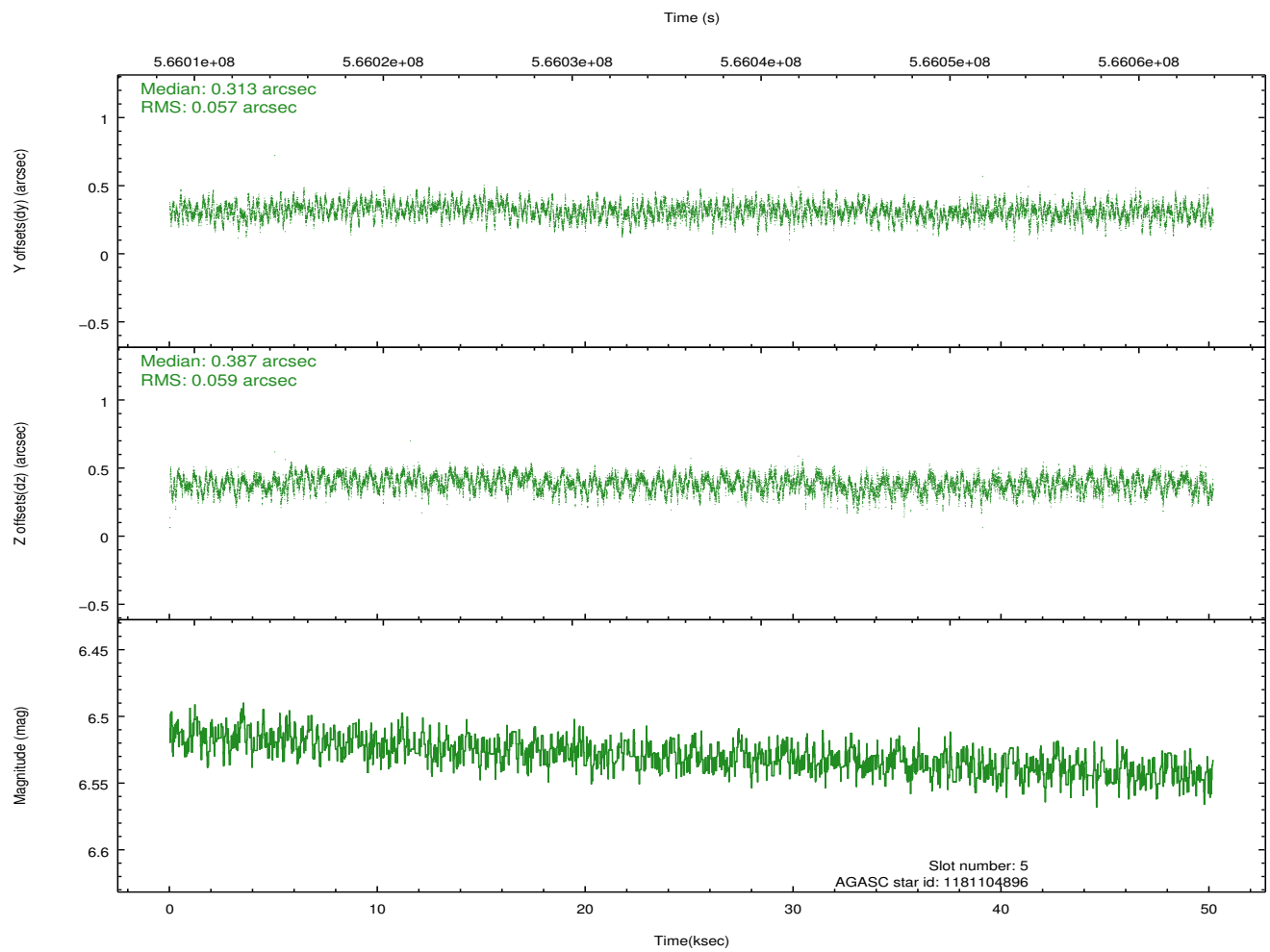
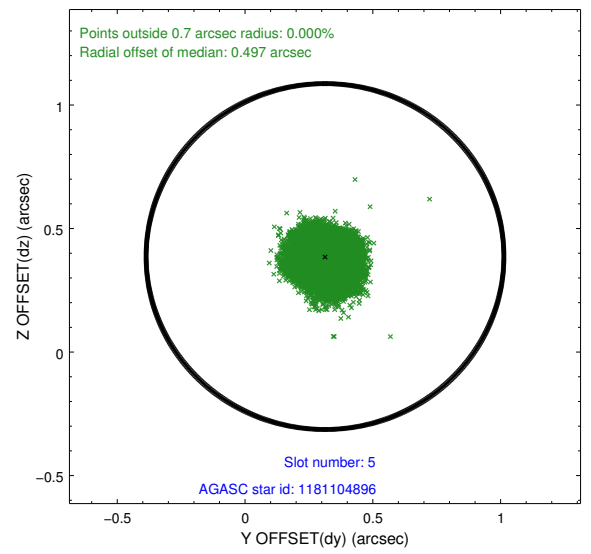
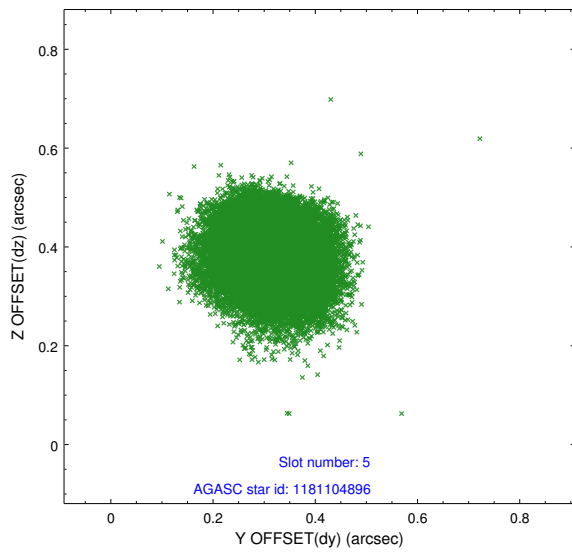
2.4.1 Slot 3



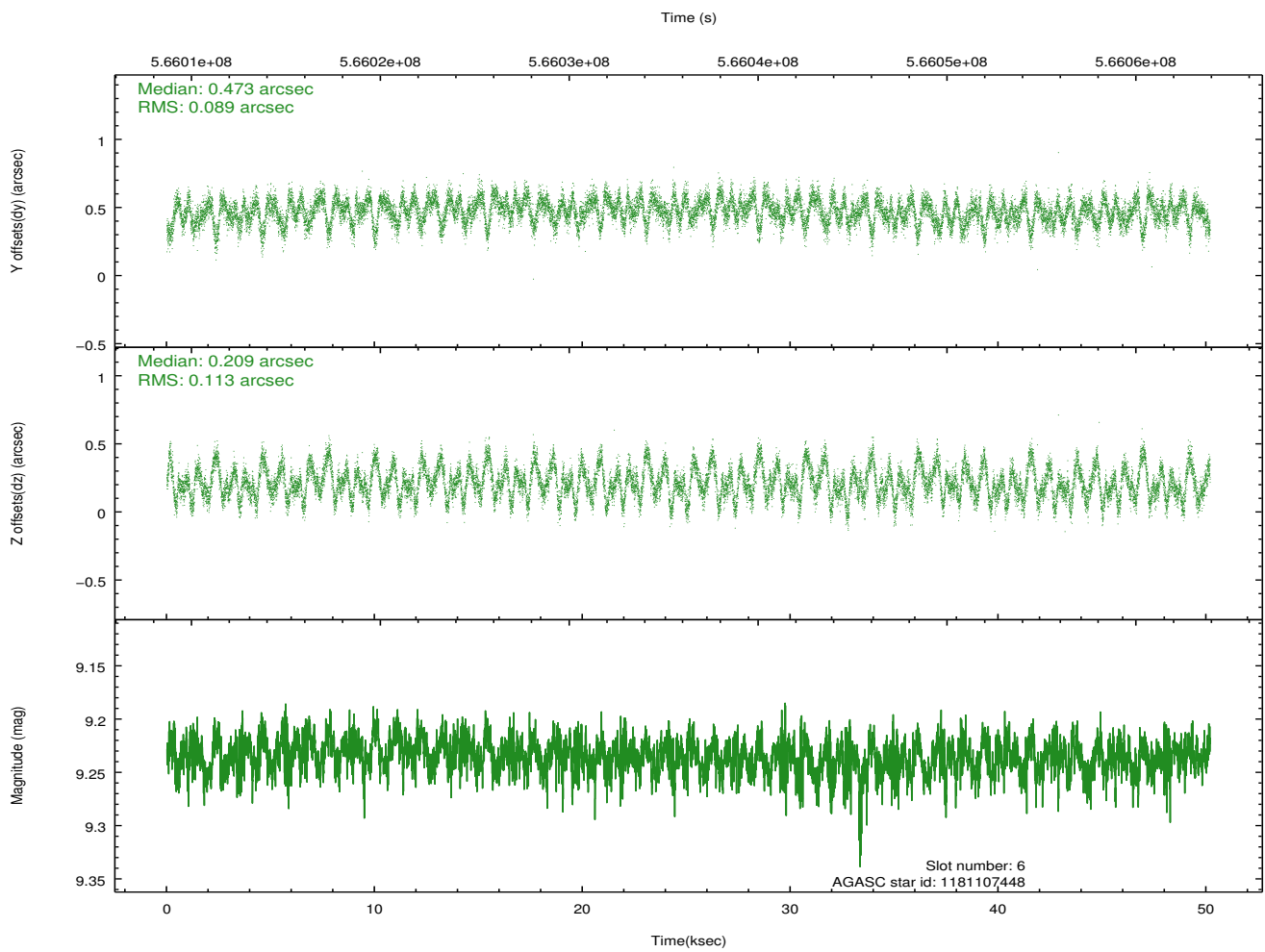
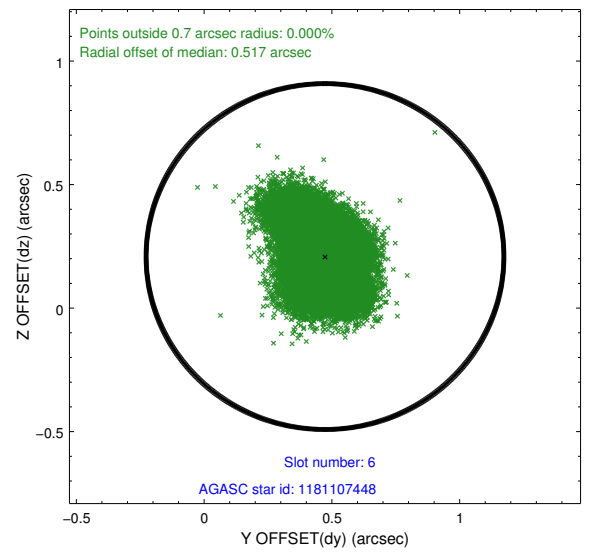
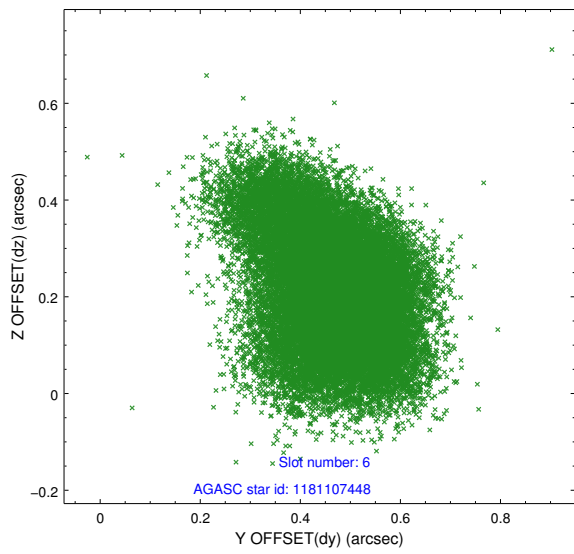
2.4.2 Slot 4



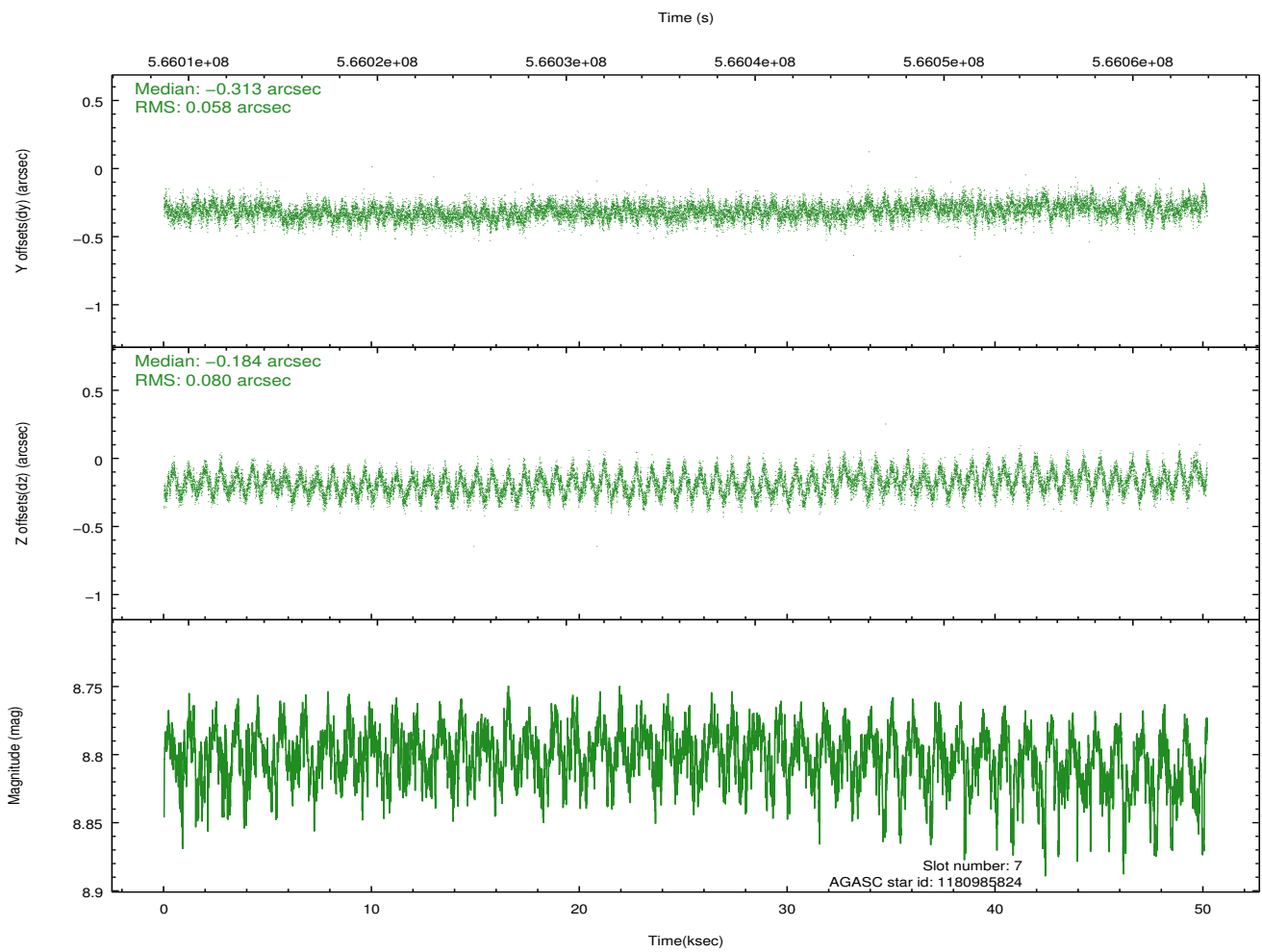
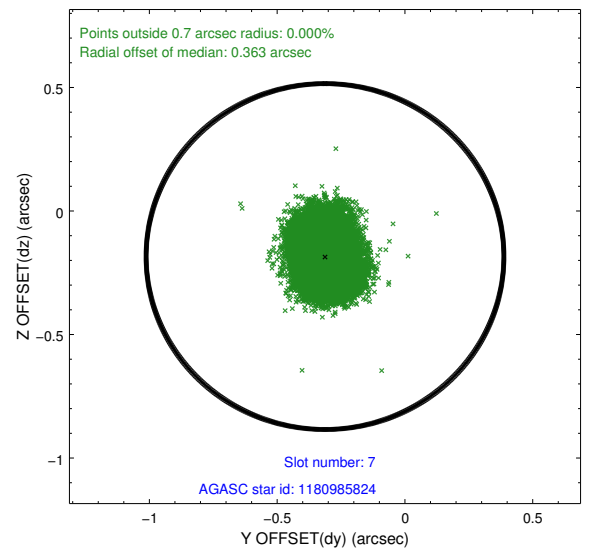
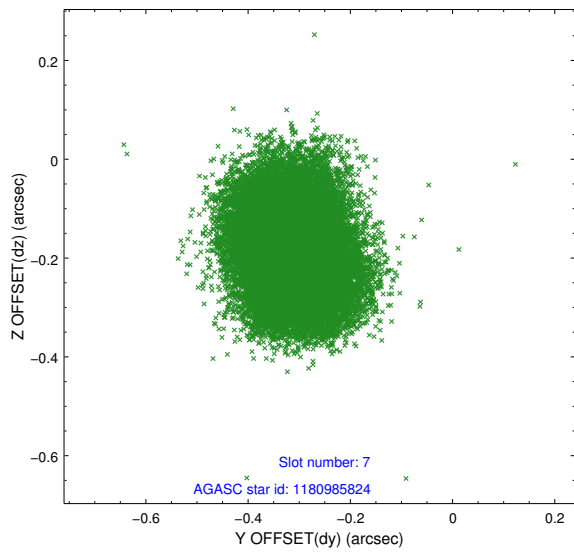
2.4.3 Slot 5



2.4.4 Slot 6

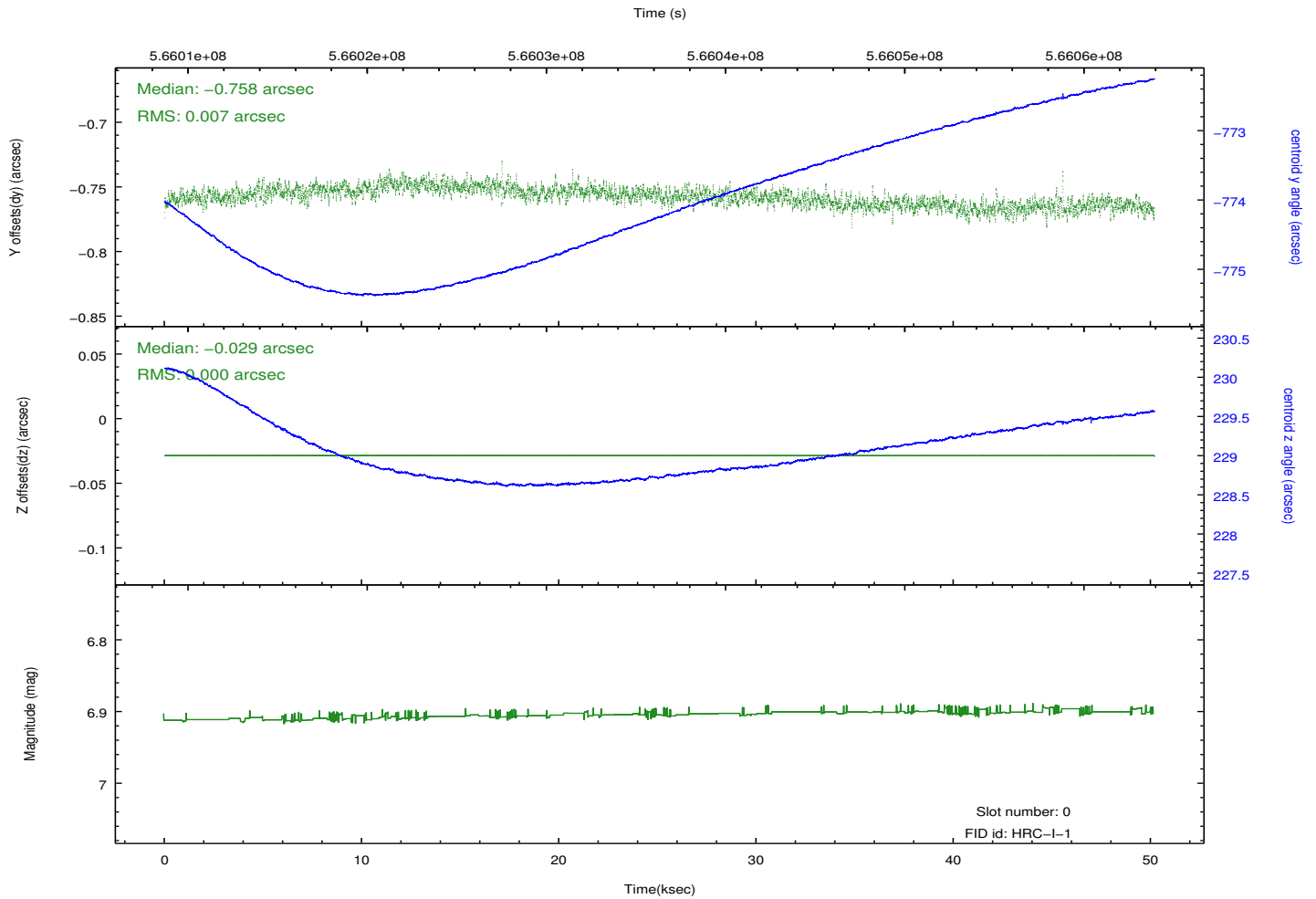
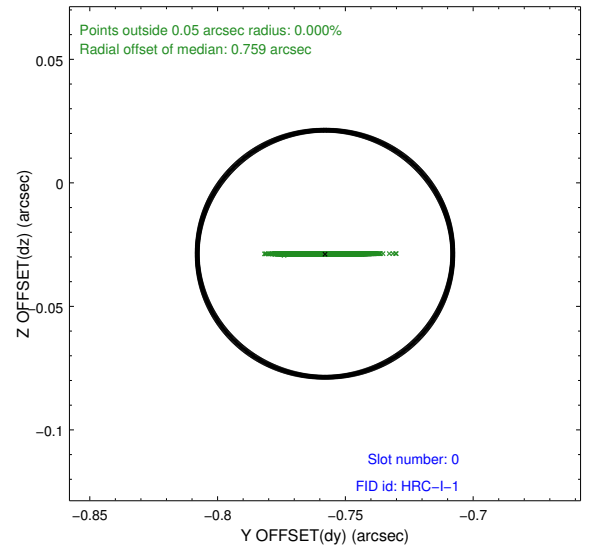
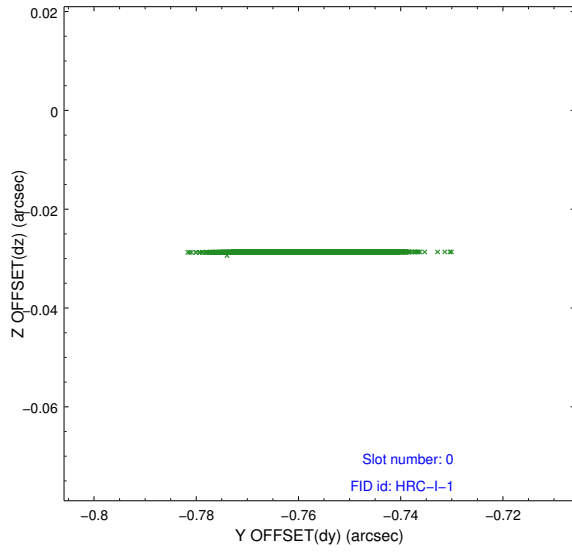


2.4.5 Slot 7

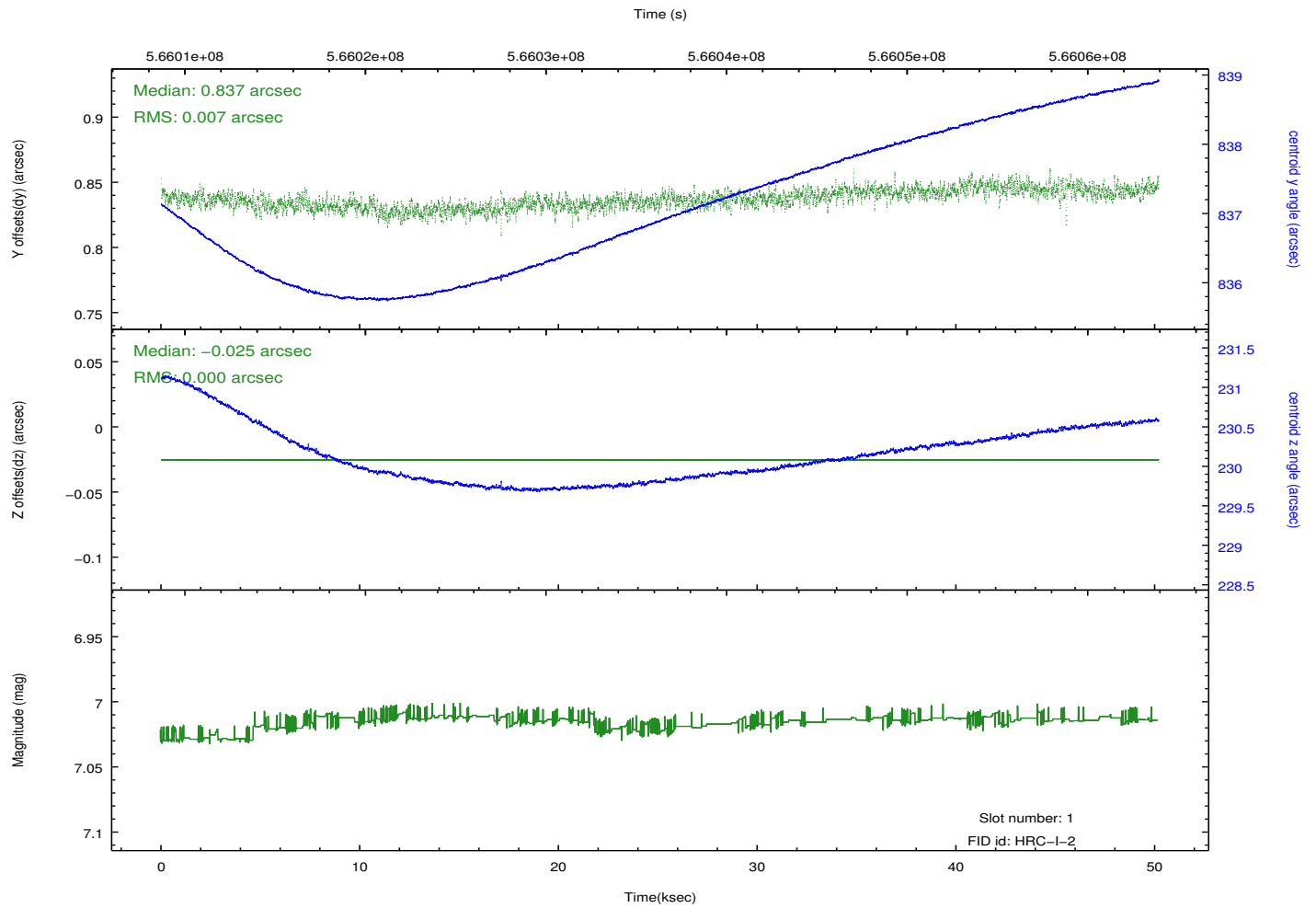
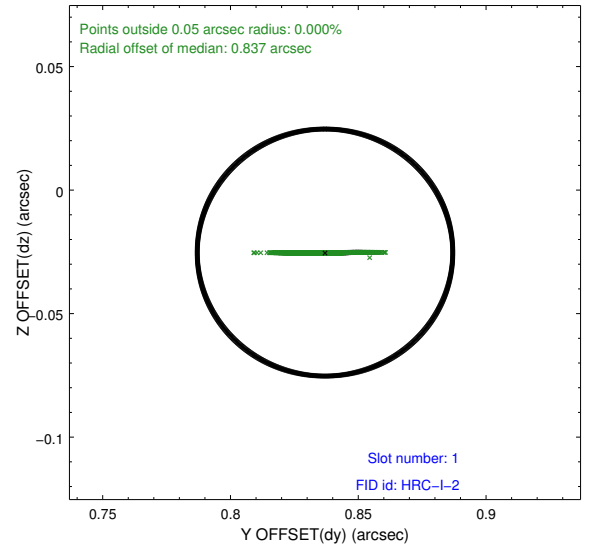
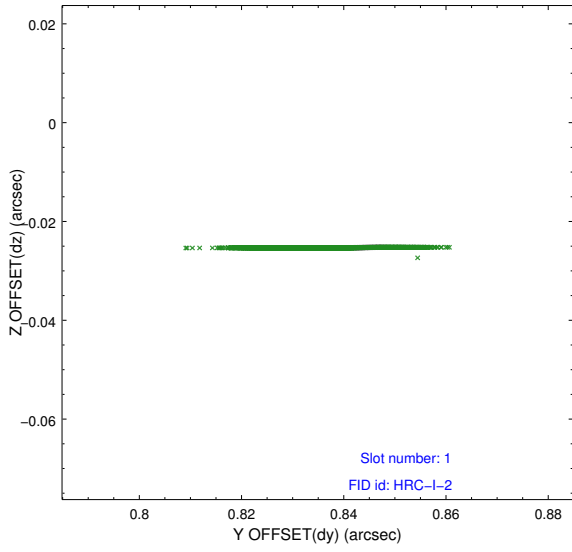


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2016.01.07 |
| V&V Edition | 2 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 49.692259056807 |

A.2 Comments

Due to telemetry saturation, the event times reported in this processing may not be correct. Thus the sky coordinates may be wrong. Contact the Chandra Project for assistance. =====

The slot 0 radial offset of 0.759 arcsec and the slot 1 radial offset of 0.837 arcsec are acceptable for the HRC observation in this undercover pair with large SIM offset. This missing fid light is expected.