

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6259 - L2 Version 4
Chandra X-Ray Center

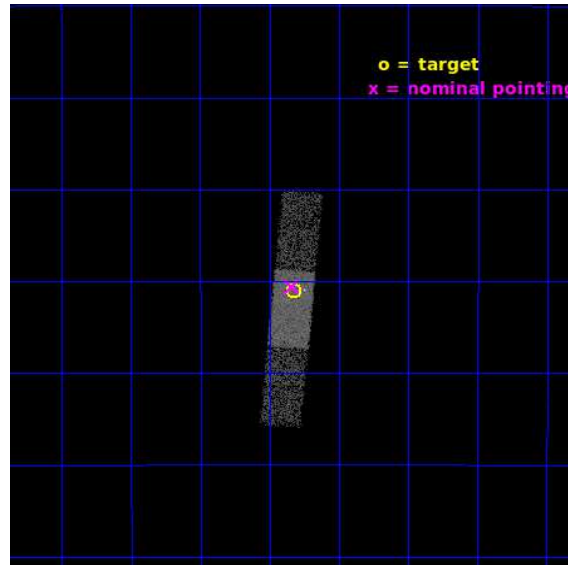
L2 Processing Date : Oct 7 2020

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1 Front

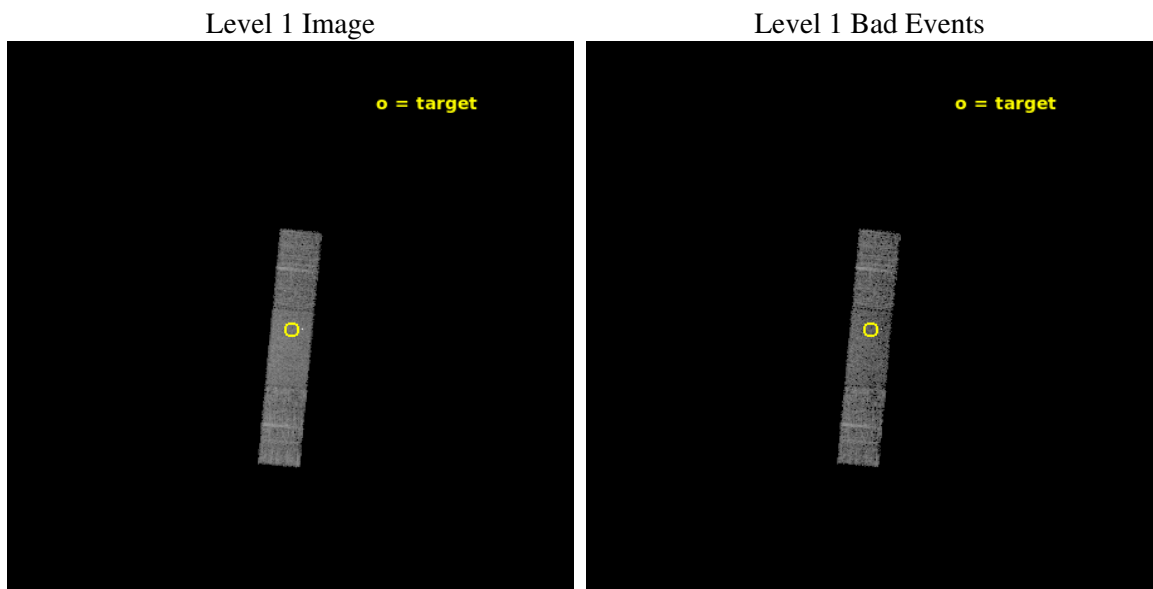
| | | |
|----------|---|---|
| seq_num | 400467 | Sequence number |
| obs_id | 6259 | Observation id |
| title | The nature of the gamma-ray source HESS J1826-148 | Proposal title |
| observer | Dr. Stefan Funk | Principal investigator |
| object | HESS J1826-148 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 276.58125 | Observer's specified target RA [deg] |
| dec_targ | -14.851222 | Observer's specified target Dec [deg] |
| ra_nom | 276.584814093 | Nominal RA [deg] |
| dec_nom | -14.84326123371 | Nominal Dec [deg] |
| roll_nom | 95.283224407335 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 5169.5999807119 | Sum of GTIs [s] |
| livetime | 5040.3158784302 | Livetime [s] |
| ontime6 | 5169.5999807119 | Sum of GTIs [s] |
| ontime7 | 5169.5999807119 | Sum of GTIs [s] |
| ontime8 | 5169.5999807119 | Sum of GTIs [s] |
| l2events | 17791 | Number of level 2 events |



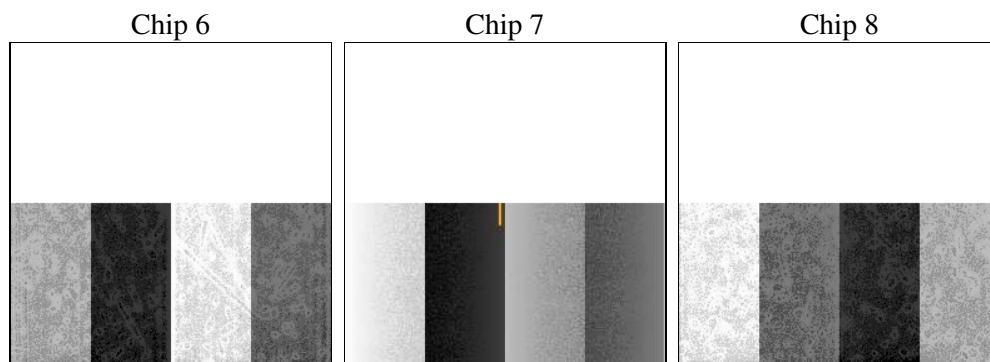
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 5000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 5169.5999807119 | Sum of GTIs [s] |
| caldsver | 4.9.2 | | ontime6 | 5169.5999807119 | Sum of GTIs [s] |
| date | 2020-10-07T18:18:49 | Date and time of file creation | ontime7 | 5169.5999807119 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime8 | 5169.5999807119 | Sum of GTIs [s] |
| | | | l1events | 80870 | Number of level 1 events |

2.1.4 Events

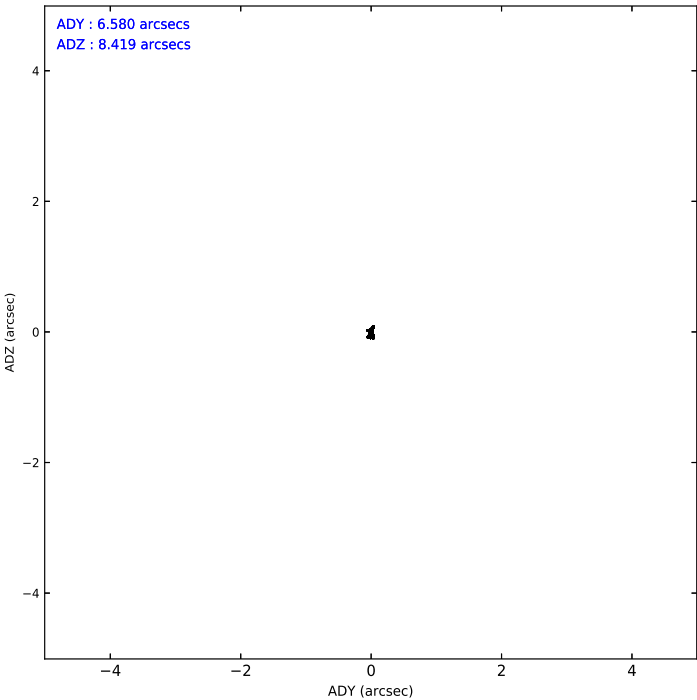
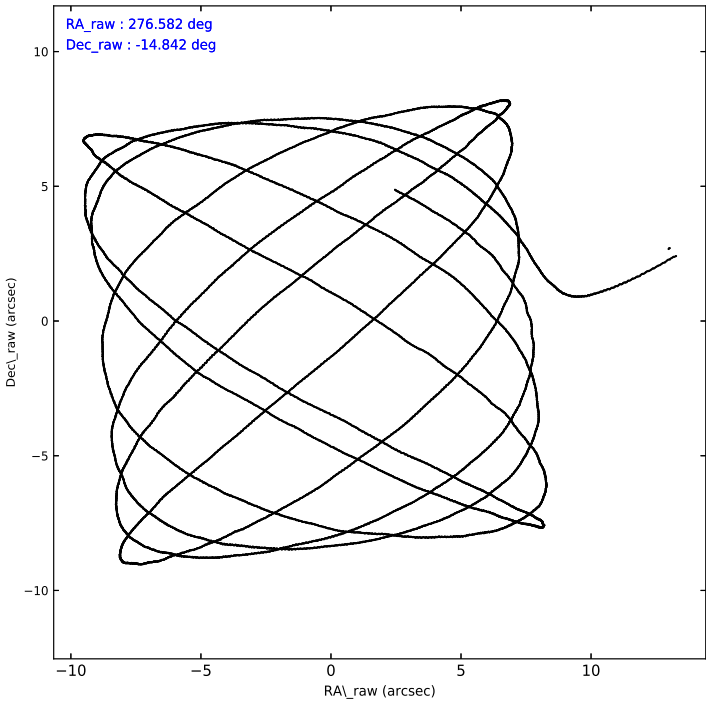
| | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------------|--------------|--------------|
| level 1 events | 22083 | 30269 | 28518 |
| rejected events | 19388 | 16811 | 22347 |
| rejected % | 87% | 55% | 78% |

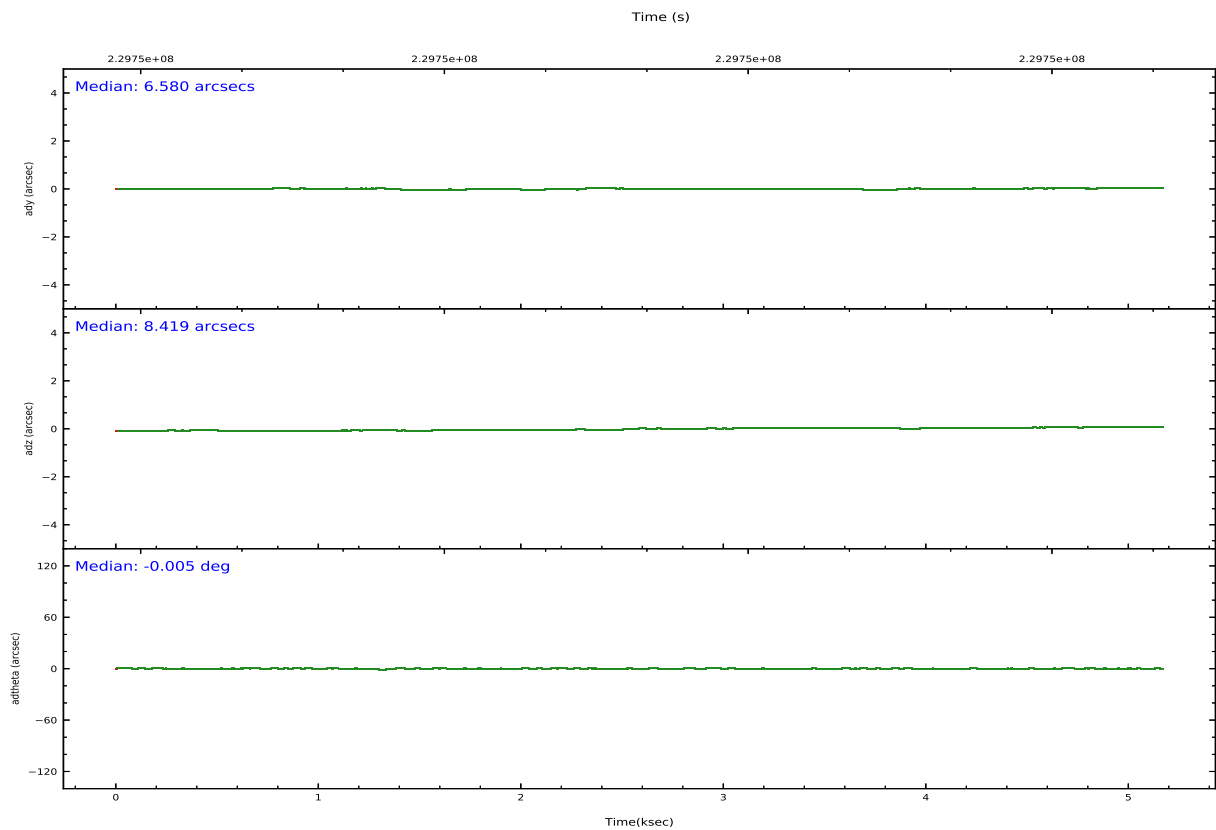
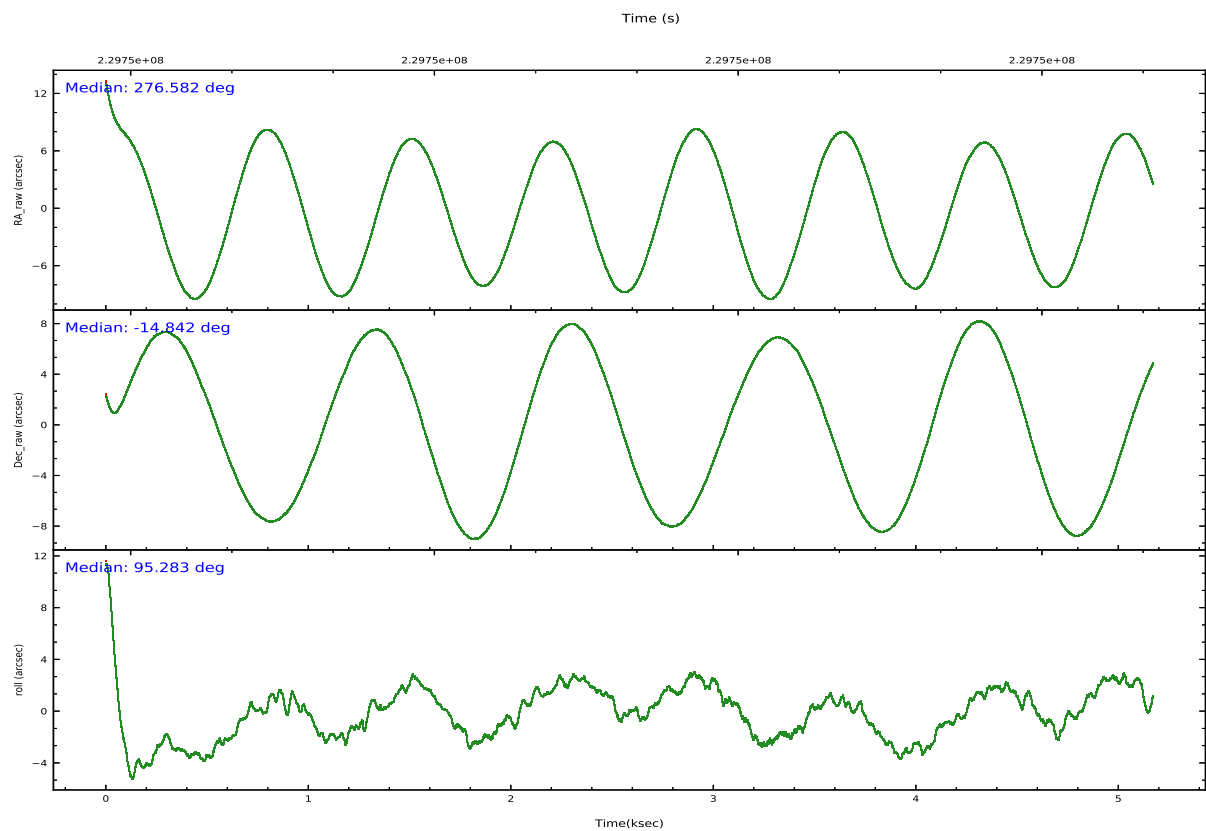
| | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------------|--------------|--------------|
| grade 0 events | 1113 | 1464 | 1989 |
| | 5% | 4% | 6% |
| grade 1 events | 9 | 48 | 21 |
| | 0% | 0% | 0% |
| grade 2 events | 557 | 2949 | 1431 |
| | 2% | 9% | 5% |
| grade 3 events | 291 | 1322 | 670 |
| | 1% | 4% | 2% |
| grade 4 events | 322 | 1324 | 583 |
| | 1% | 4% | 2% |
| grade 5 events | 892 | 2764 | 1197 |
| | 4% | 9% | 4% |
| grade 6 events | 521 | 6917 | 1771 |
| | 2% | 22% | 6% |
| grade 7 events | 18378 | 13481 | 20856 |
| | 83% | 44% | 73% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar version number | 8 | 8 |
| Detector | ACIS-678 | ACIS-678 | 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 | 276.598672 | 276.584814093 | Subarray requested | CUSTOM | 1/2 |
| [deg] Pointing Dec | -14.863595 | -14.84326123371 | Subarray start row | 1 | 1 |
| [deg] Pointing Roll | 95.132238 | 95.283224407335 | Subarray row count | 512 | 512 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | [s] Primary exposure time | 0.000000 | 1.6 |
| [mm] SIM translation stage pos | -183.992523 | -183.9875365069546 | | | |
| [mm] SIM translation stage offset | -6.14 | -6.144986076053243 | | | |
| [s] Observation start time (MET) | 229748551.184000 | 229747702.73634 | | | |
| Observation start date | 2005-04-13T03:01:27 | 2005-04-13T02:48:22 | | | |
| [s] Observation end time (MET) | 229753551.184000 | 229754309.37414 | | | |
| Observation end date | 2005-04-13T04:24:47 | 2005-04-13T04:38:29 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



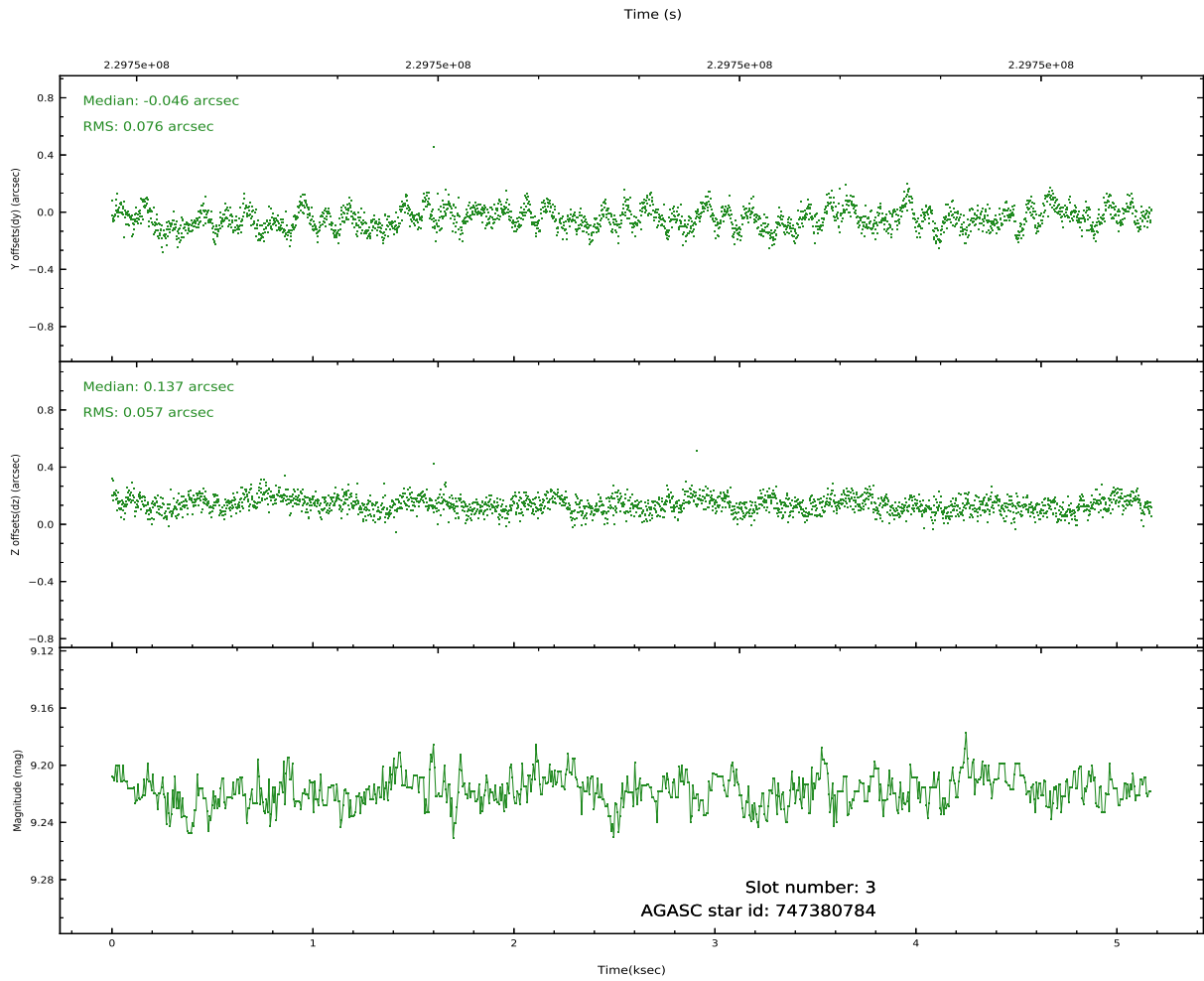
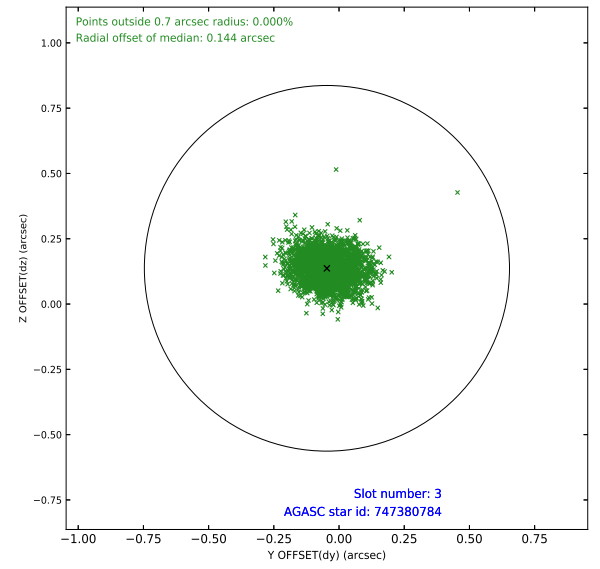
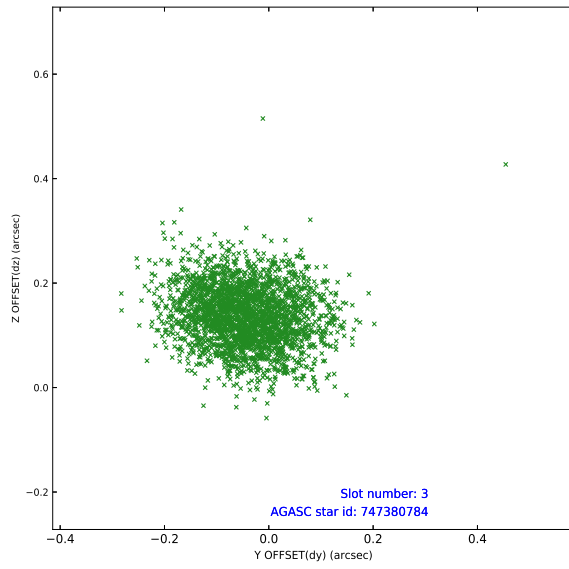


Slot Statistics

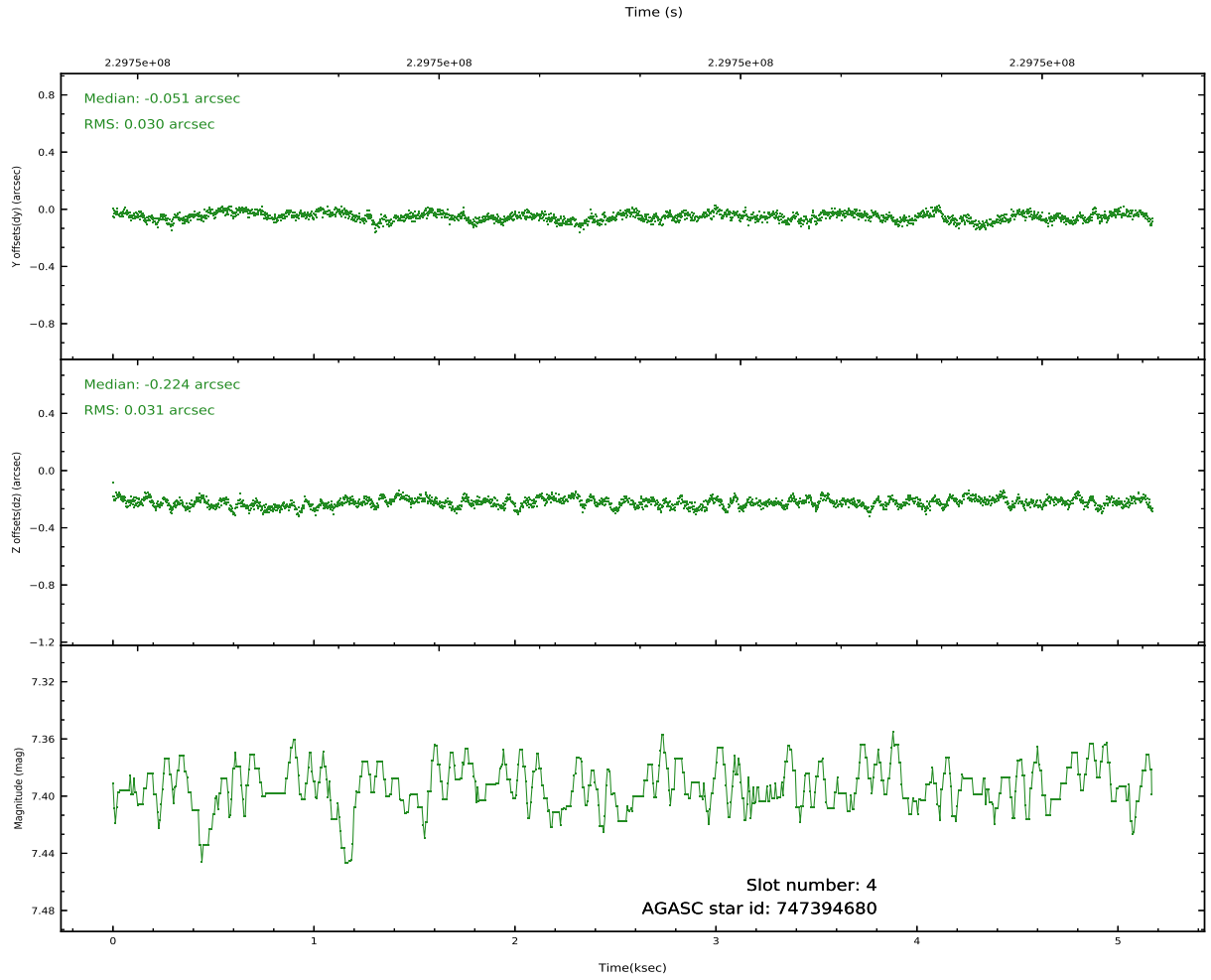
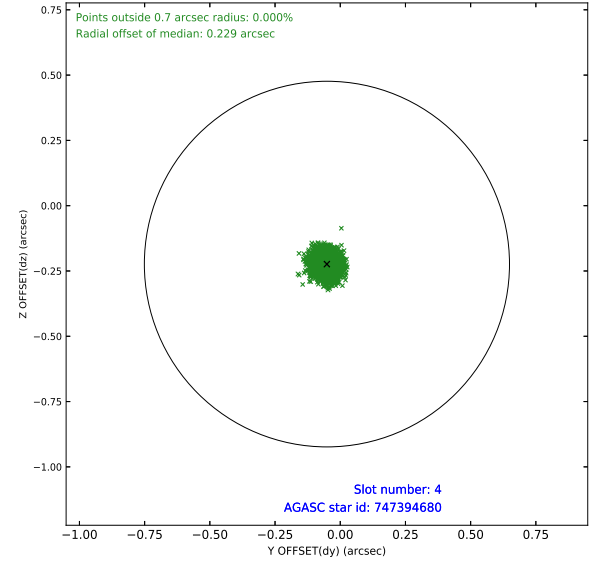
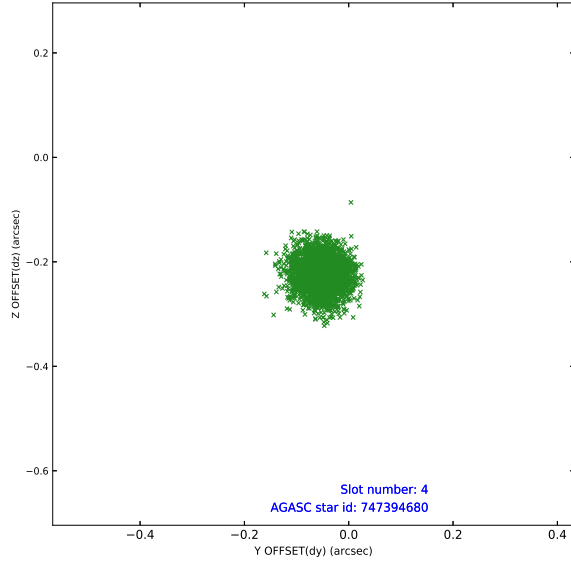
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|------------|----------|-------|
| 0 | FID | | ACIS-S-2 | 7.08 | 1262 | 1.000 | -0.125 | -0.112 | 0.007 | 0.012 | 0.000000 | 0.000000 | -758.97 | -1856 |
| 1 | FID | | ACIS-S-4 | 7.19 | 1262 | 1.000 | 0.200 | 0.090 | 0.006 | 0.010 | 0.000000 | 0.000000 | 2154.06 | 51 |
| 2 | FID | | ACIS-S-5 | 7.22 | 1262 | 1.000 | -0.106 | 0.030 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1810.33 | 45 |
| 3 | GUIDE | used | 747380784 | 9.22 | 2524 | 1.000 | -0.046 | 0.137 | 0.100 | 0.163 | 277.188264 | -14.189338 | 2231.32 | -2265 |
| 4 | GUIDE | used | 747394680 | 7.39 | 2524 | 1.000 | -0.051 | -0.224 | 0.047 | 0.071 | 276.275759 | -14.649373 | 868.82 | 1050 |
| 5 | GUIDE | used | 747395024 | 7.90 | 2524 | 1.000 | -0.036 | 0.141 | 0.052 | 0.085 | 277.013372 | -14.660681 | 597.71 | -1502 |
| 6 | GUIDE | used | 821313912 | 7.15 | 2524 | 1.000 | 0.172 | 0.115 | 0.053 | 0.083 | 276.880488 | -15.373623 | -1916.04 | -810 |
| 7 | GUIDE | used | 747380456 | 8.59 | 2523 | 1.000 | -0.039 | -0.166 | 0.077 | 0.124 | 276.136187 | -14.775528 | 457.35 | 1575 |

2.4 Star Slots

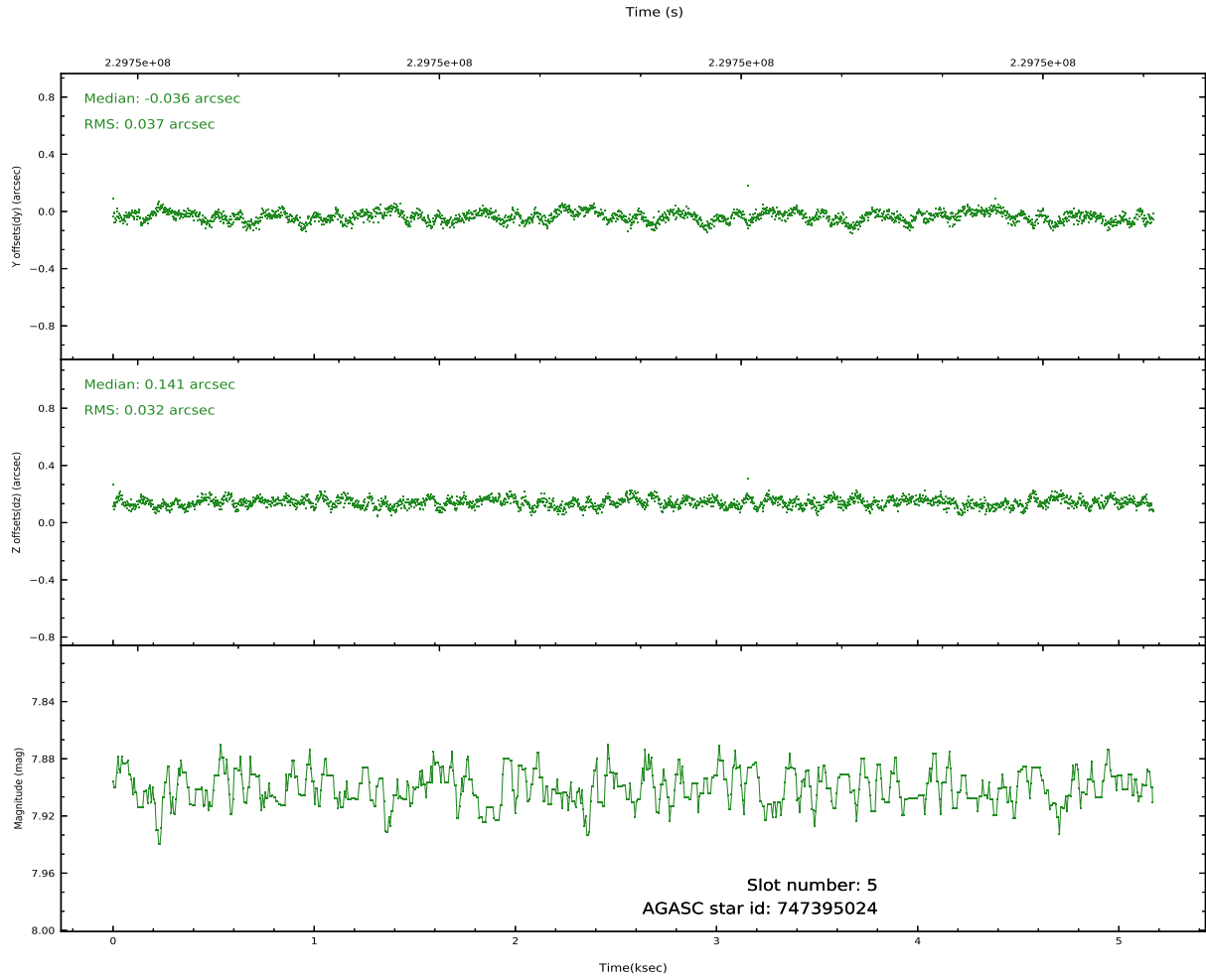
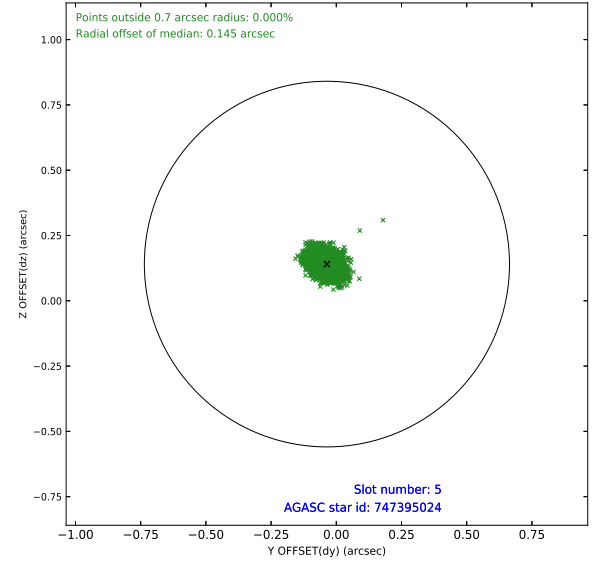
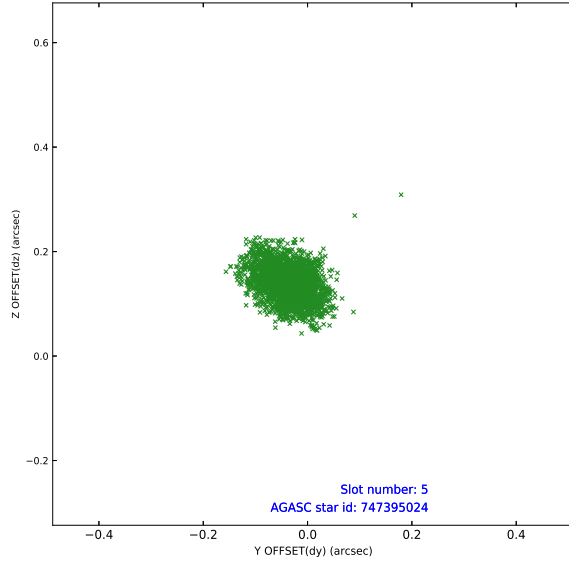
2.4.1 Slot 3



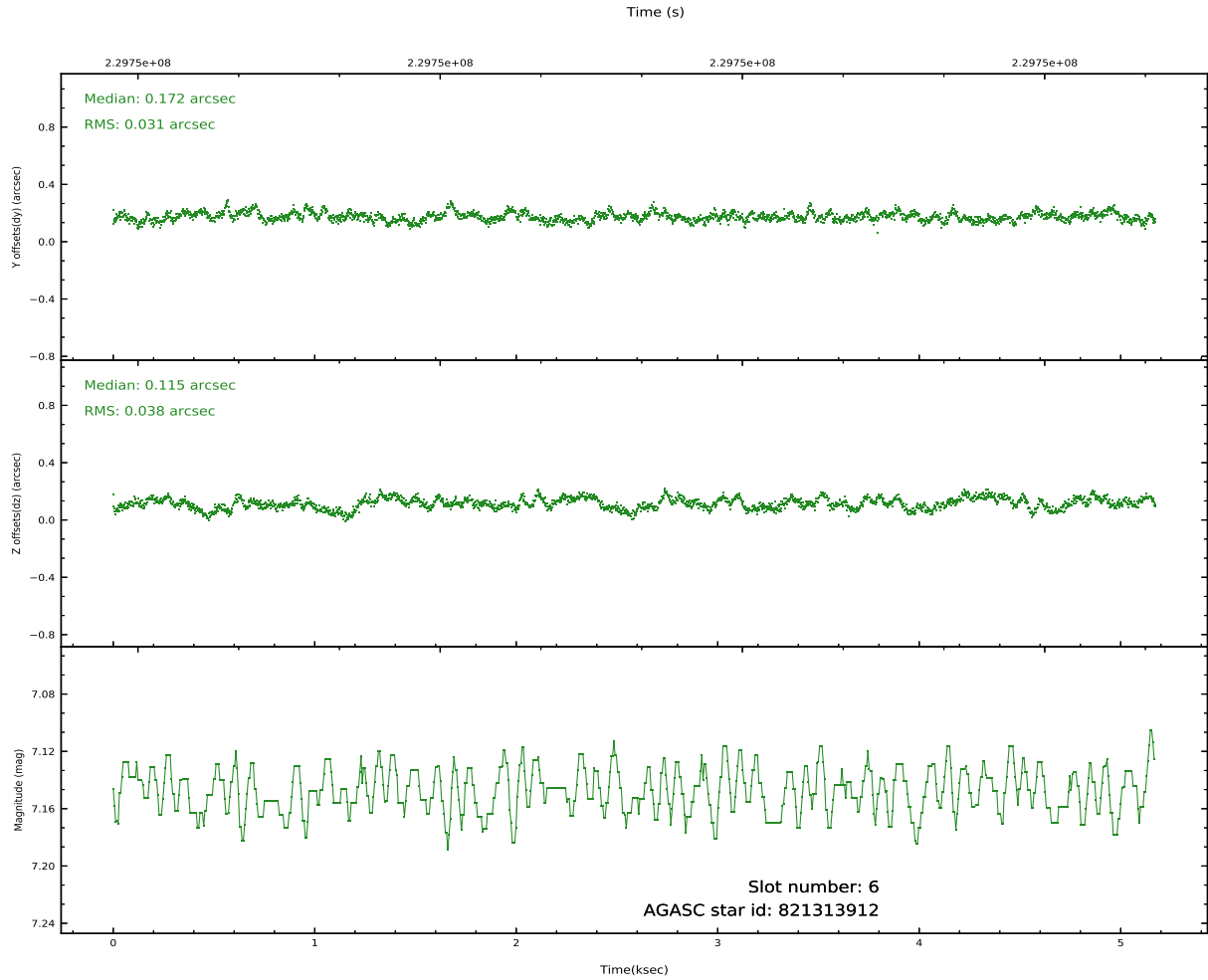
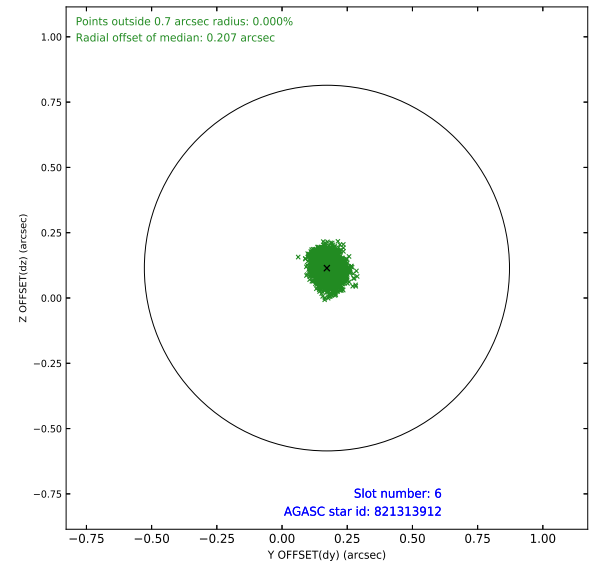
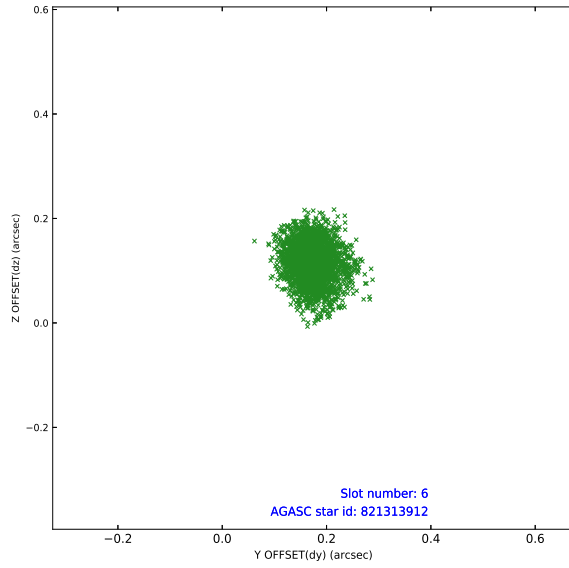
2.4.2 Slot 4



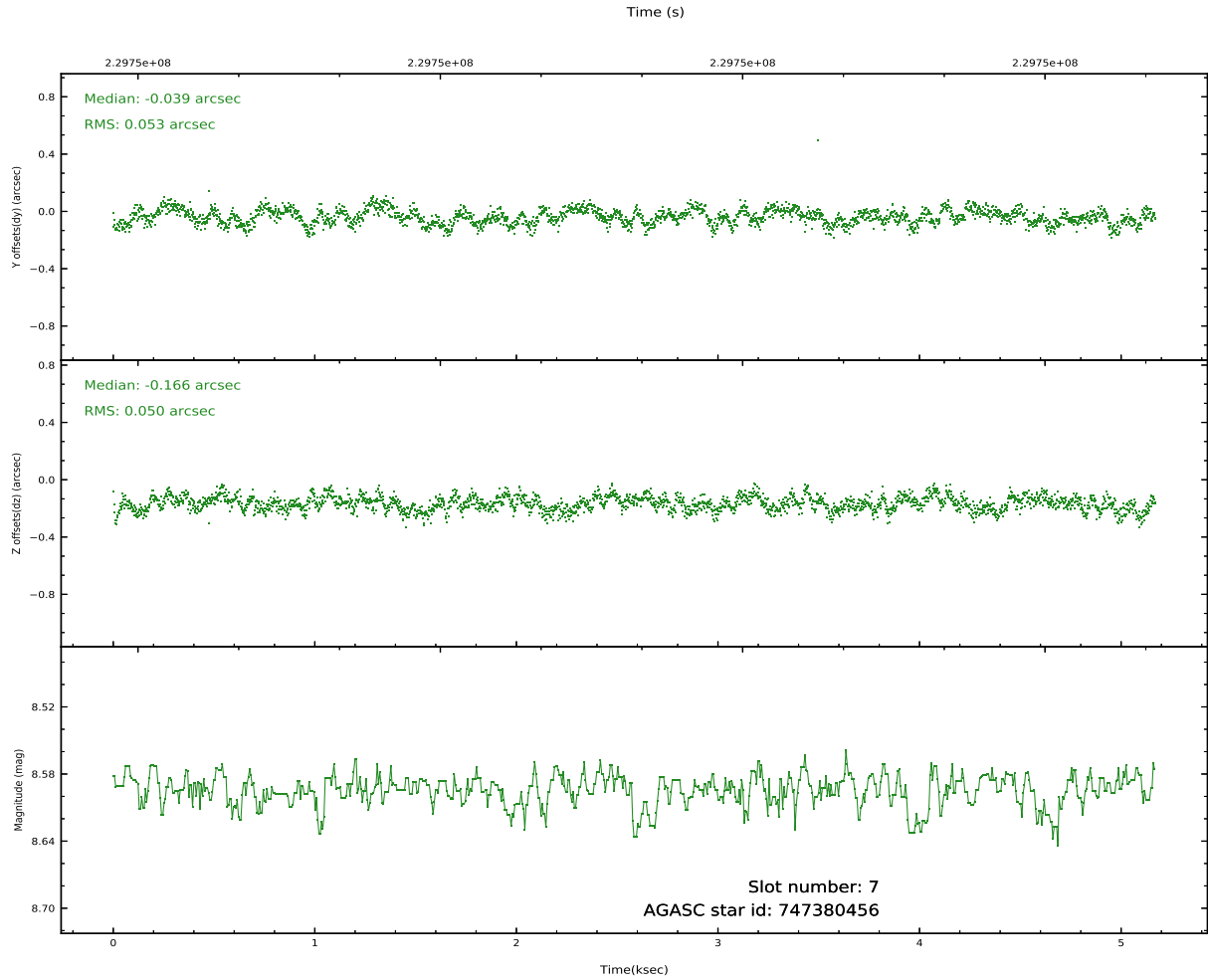
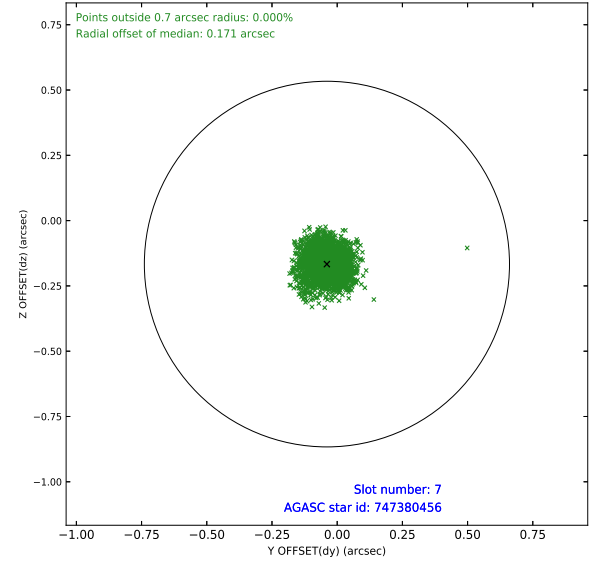
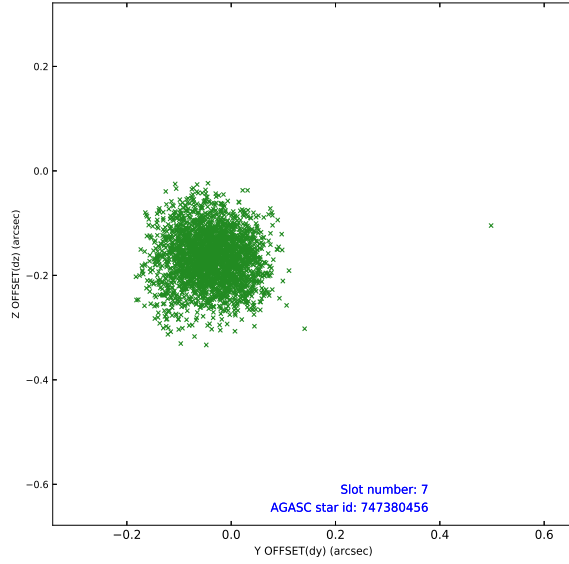
2.4.3 Slot 5



2.4.4 Slot 6

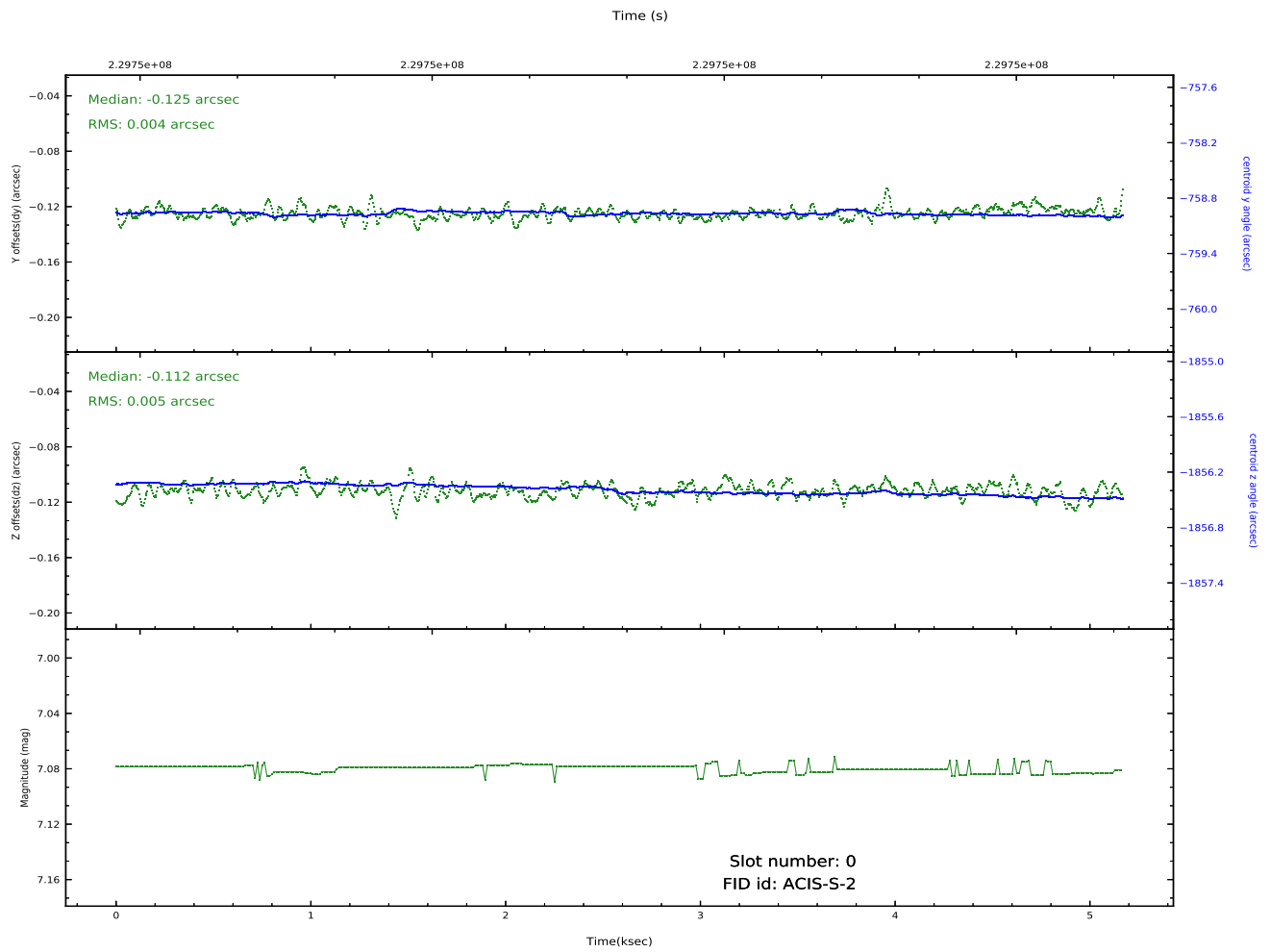
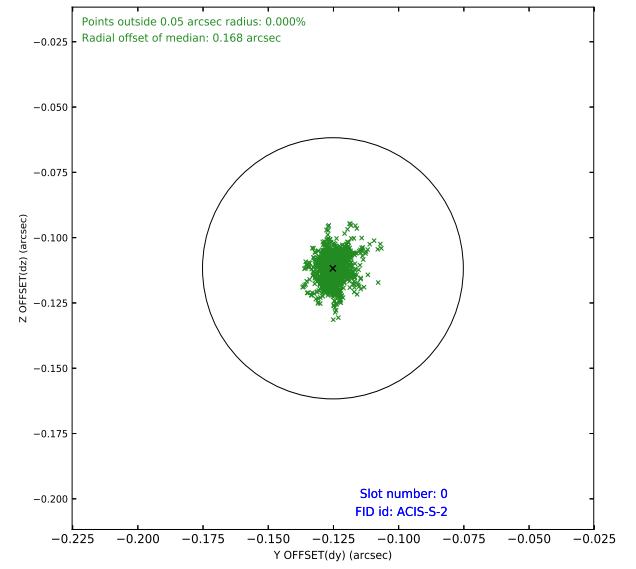
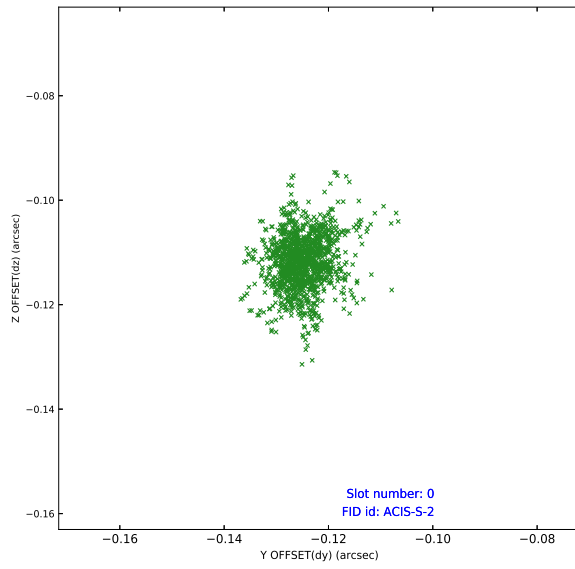


2.4.5 Slot 7

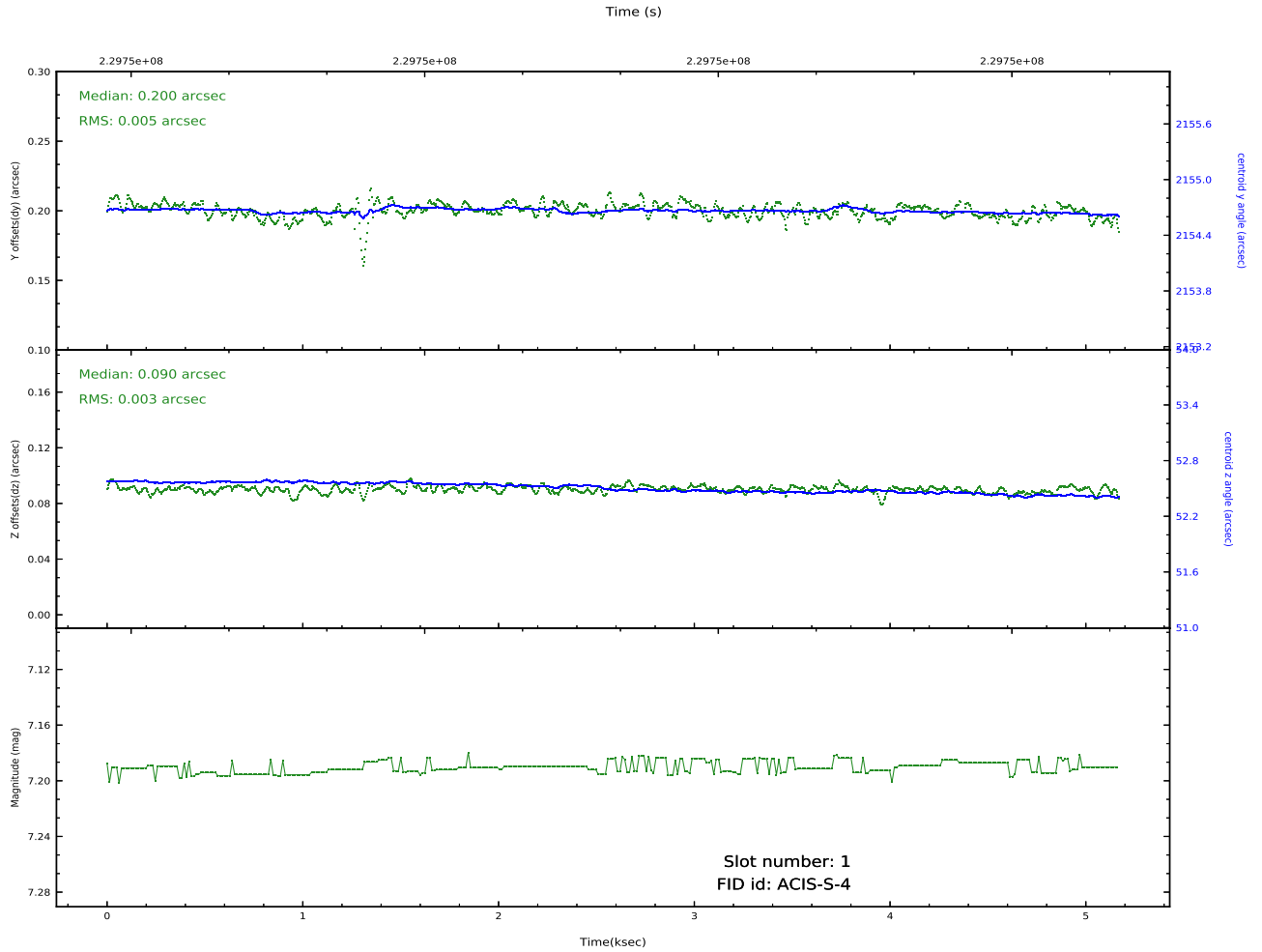
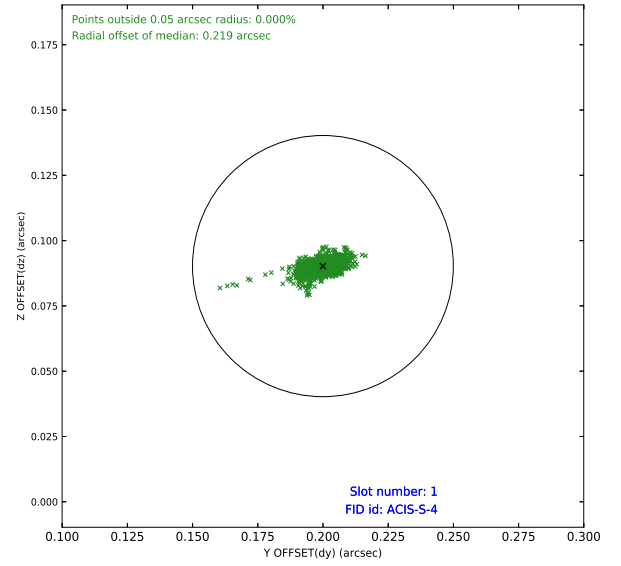
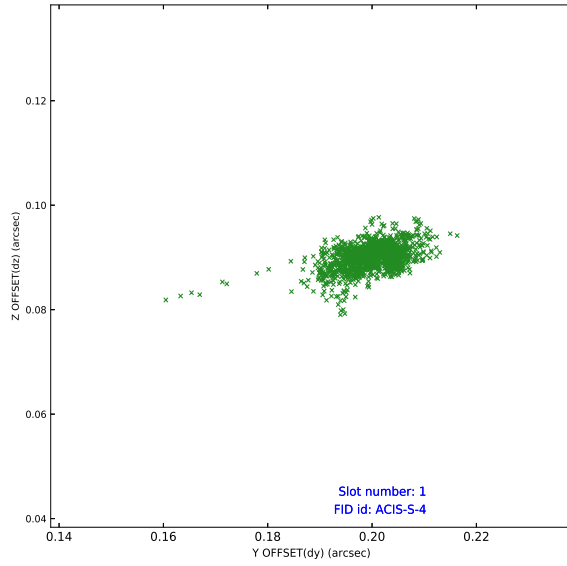


2.5 FID Slots

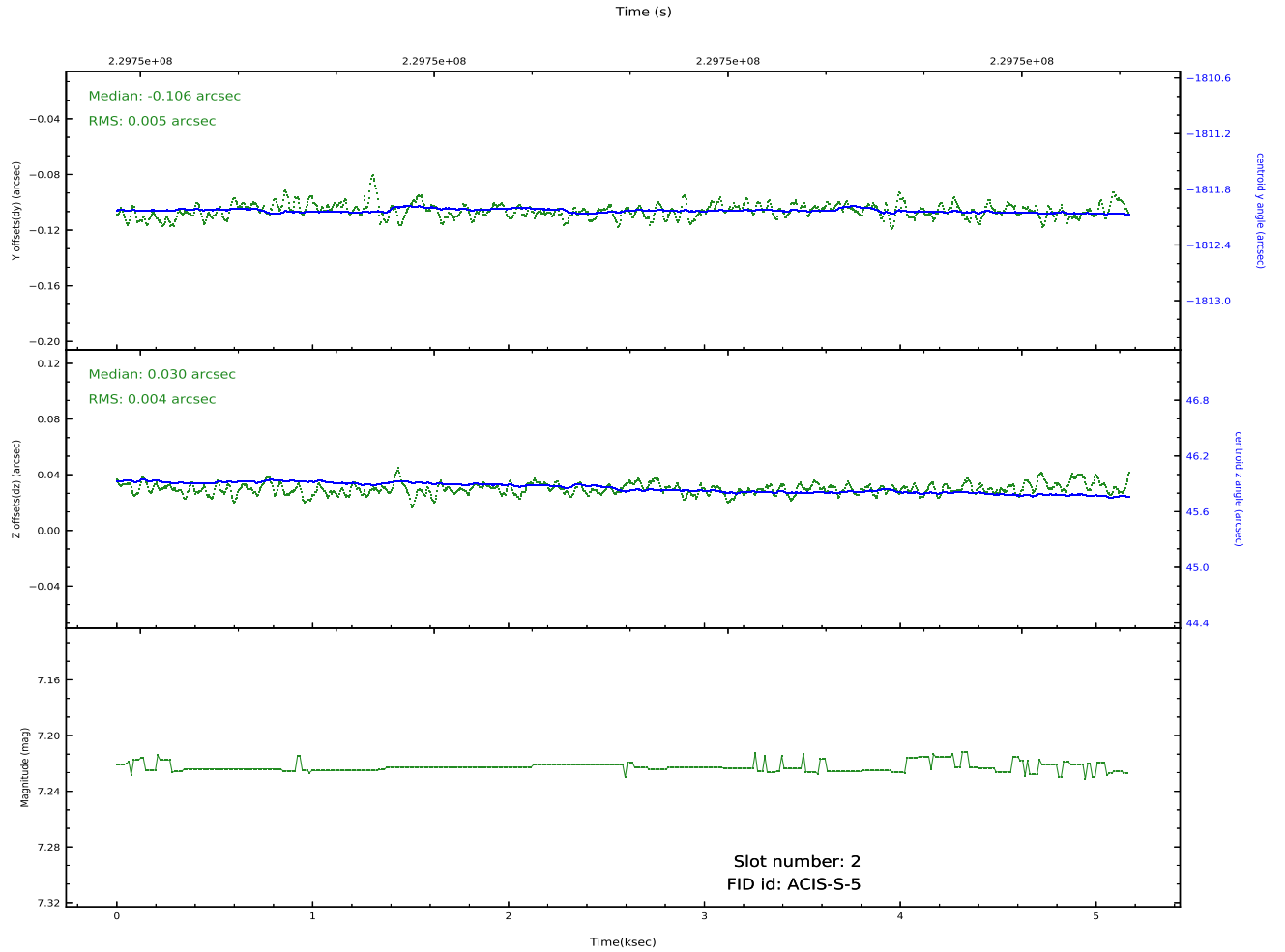
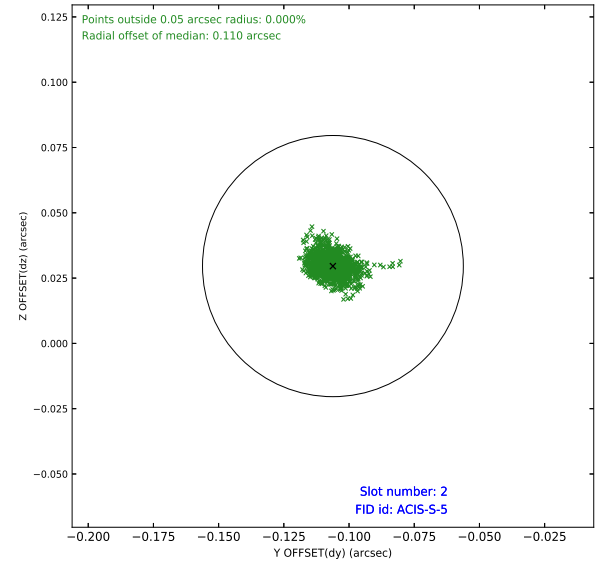
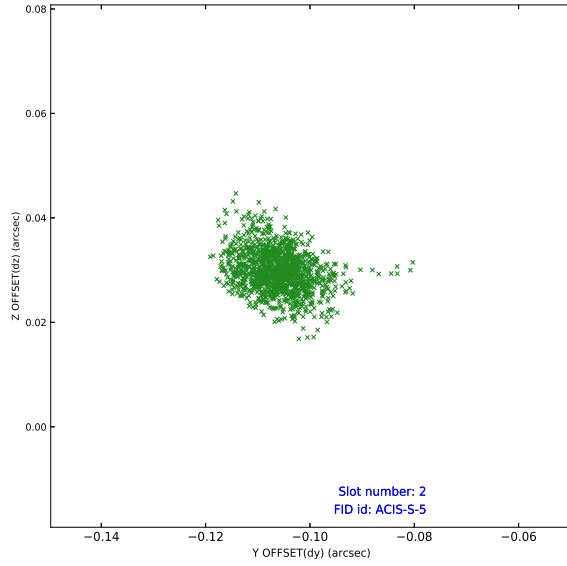
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2020.10.08 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.169599 |

A.2 Comments