

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4806 - L2 Version 4
Chandra X-Ray Center

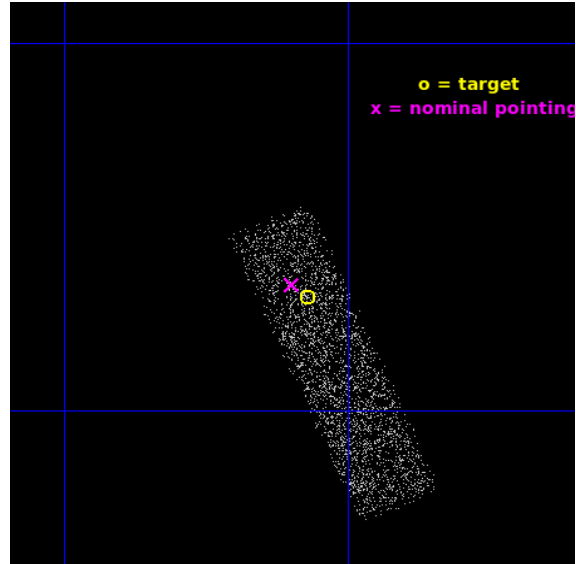
L2 Processing Date : Sep 21 2020

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1 Front

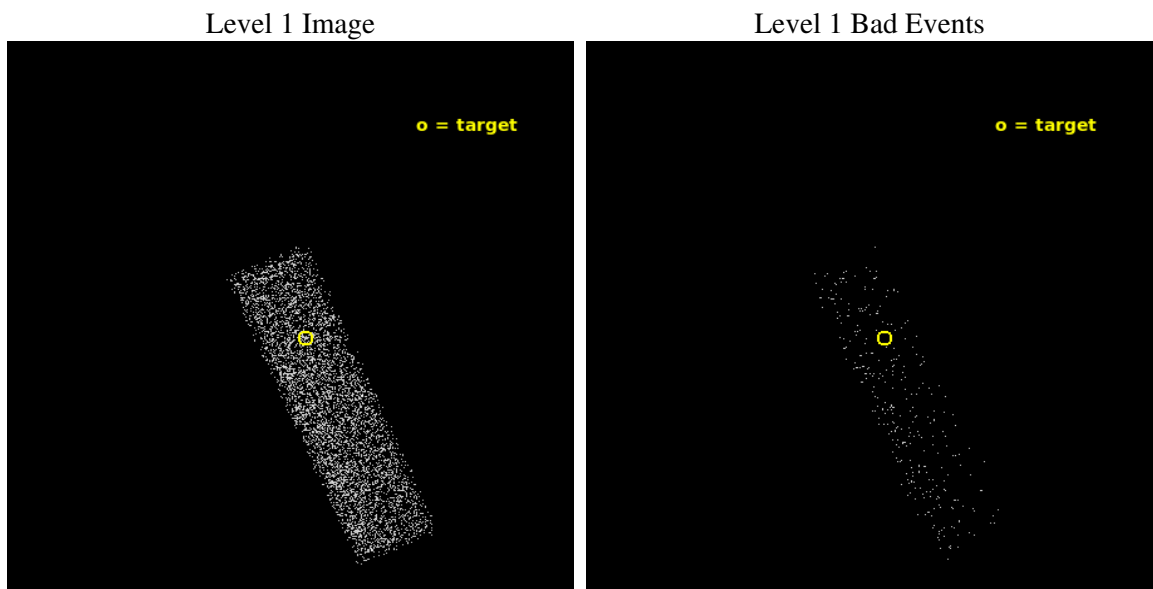
| | | |
|----------|---|---|
| seq_num | 700889 | Sequence number |
| obs_id | 4806 | Observation id |
| title | Unveiling the engine powering OH Gigamaser sources through X-rays. A well-defined Chandra survey | Proposal title |
| observer | Cristian Vignali | Principal investigator |
| object | IRAS FSC 09539+0857 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 149.142917 | Observer's specified target RA [deg] |
| dec_targ | 8.718361 | Observer's specified target Dec [deg] |
| ra_nom | 149.14984197018 | Nominal RA [deg] |
| dec_nom | 8.7239716798881 | Nominal Dec [deg] |
| roll_nom | 66.250158027703 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 5053.6000753045 | Sum of GTIs [s] |
| livetime | 4807.0009277129 | Livetime [s] |
| ontime7 | 5053.6000753045 | Sum of GTIs [s] |
| l2events | 3059 | Number of level 2 events |



2 OBI

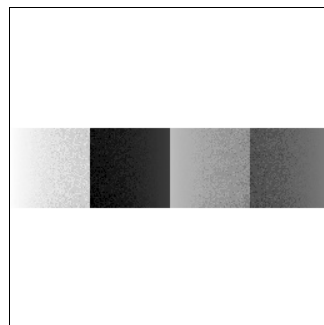
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 4500.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 5053.6000753045 | Sum of GTIs [s] |
| caldsver | 4.9.2 | | ontime7 | 5053.6000753045 | Sum of GTIs [s] |
| date | 2020-09-22T00:26:28 | Date and time of file creation | l1events | 6320 | Number of level 1 events |
| revision | 4 | Processing version of data | | | |

2.1.4 Events

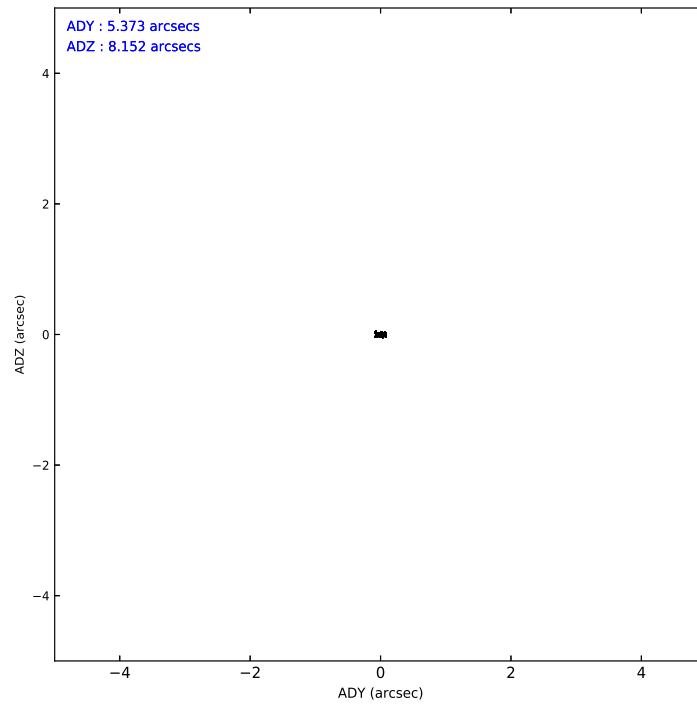
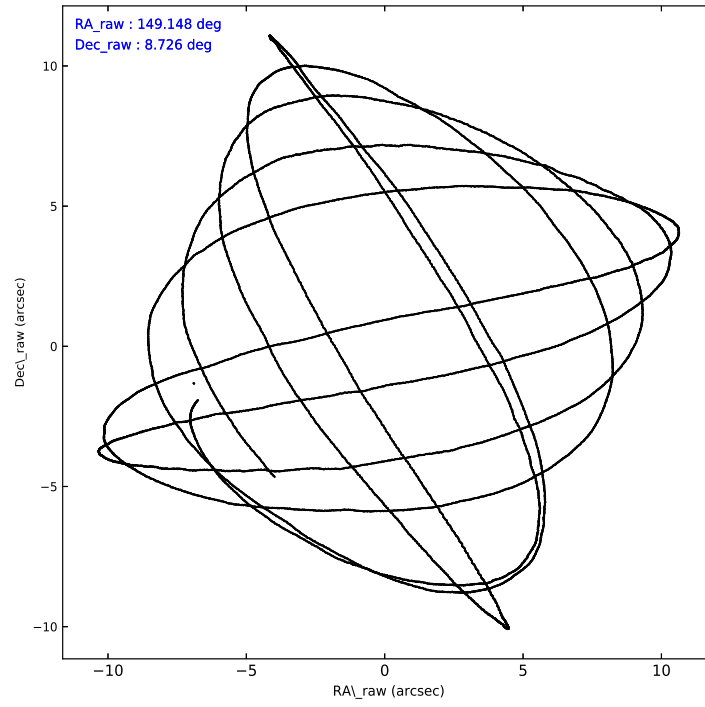
| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 6320 |
| rejected events | 3147 |
| rejected % | 49% |

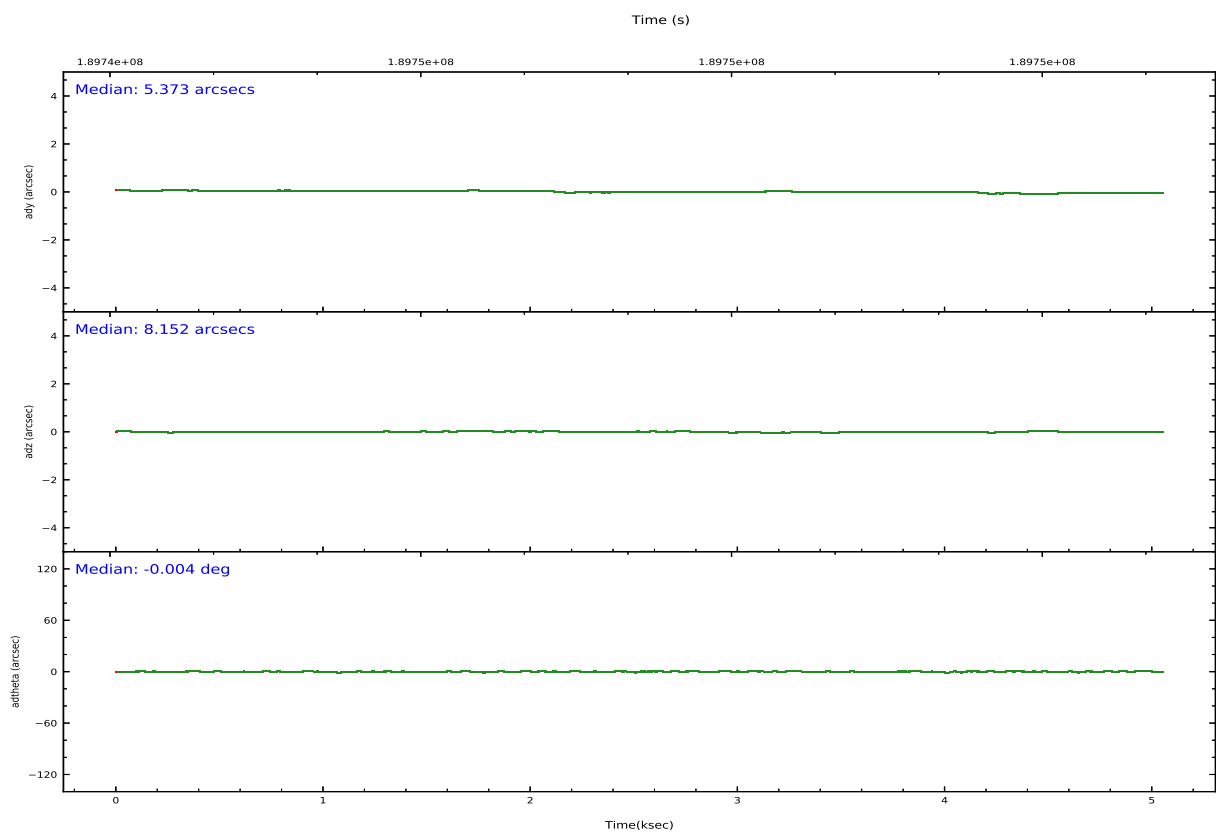
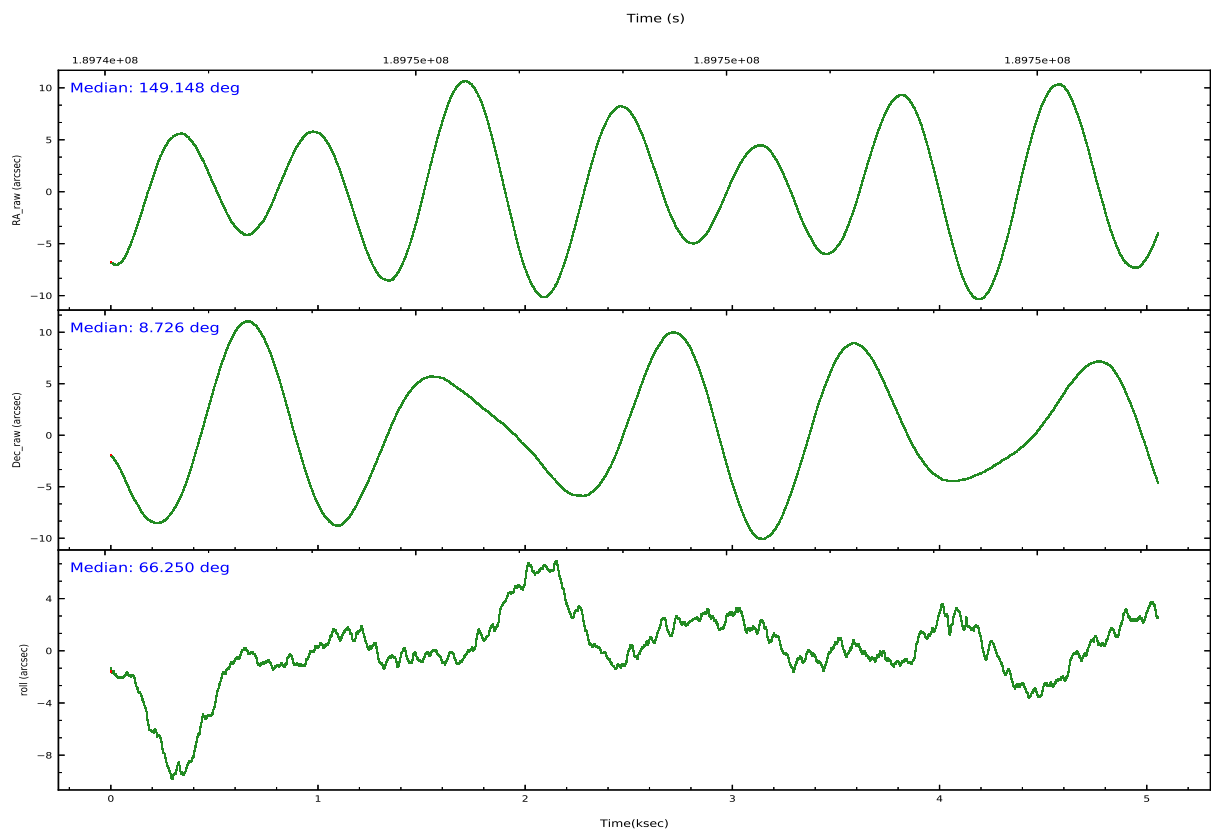
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 344 |
| | 5% |
| grade 1 events | 10 |
| | 0% |
| grade 2 events | 673 |
| | 10% |
| grade 3 events | 423 |
| | 6% |
| grade 4 events | 417 |
| | 6% |
| grade 5 events | 682 |
| | 10% |
| grade 6 events | 1461 |
| | 23% |
| grade 7 events | 2310 |
| | 36% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar version number | 8 | 8 |
| Detector | ACIS-7 | ACIS-7 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 149.151732 | 149.14984197018 | Subarray requested | CUSTOM | 1/4 |
| [deg] Pointing Dec | 8.699366 | 8.7239716798881 | Subarray start row | 385 | 385 |
| [deg] Pointing Roll | 66.095461 | 66.25015802770299 | Subarray row count | 256 | 256 |
| [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 | 0.8 |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 189745583.184000 | 189744435.55468 | | | |
| Observation start date | 2004-01-06T03:05:19 | 2004-01-06T02:47:15 | | | |
| [s] Observation end time (MET) | 189750083.184000 | 189750927.39246 | | | |
| Observation end date | 2004-01-06T04:20:19 | 2004-01-06T04:35:27 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



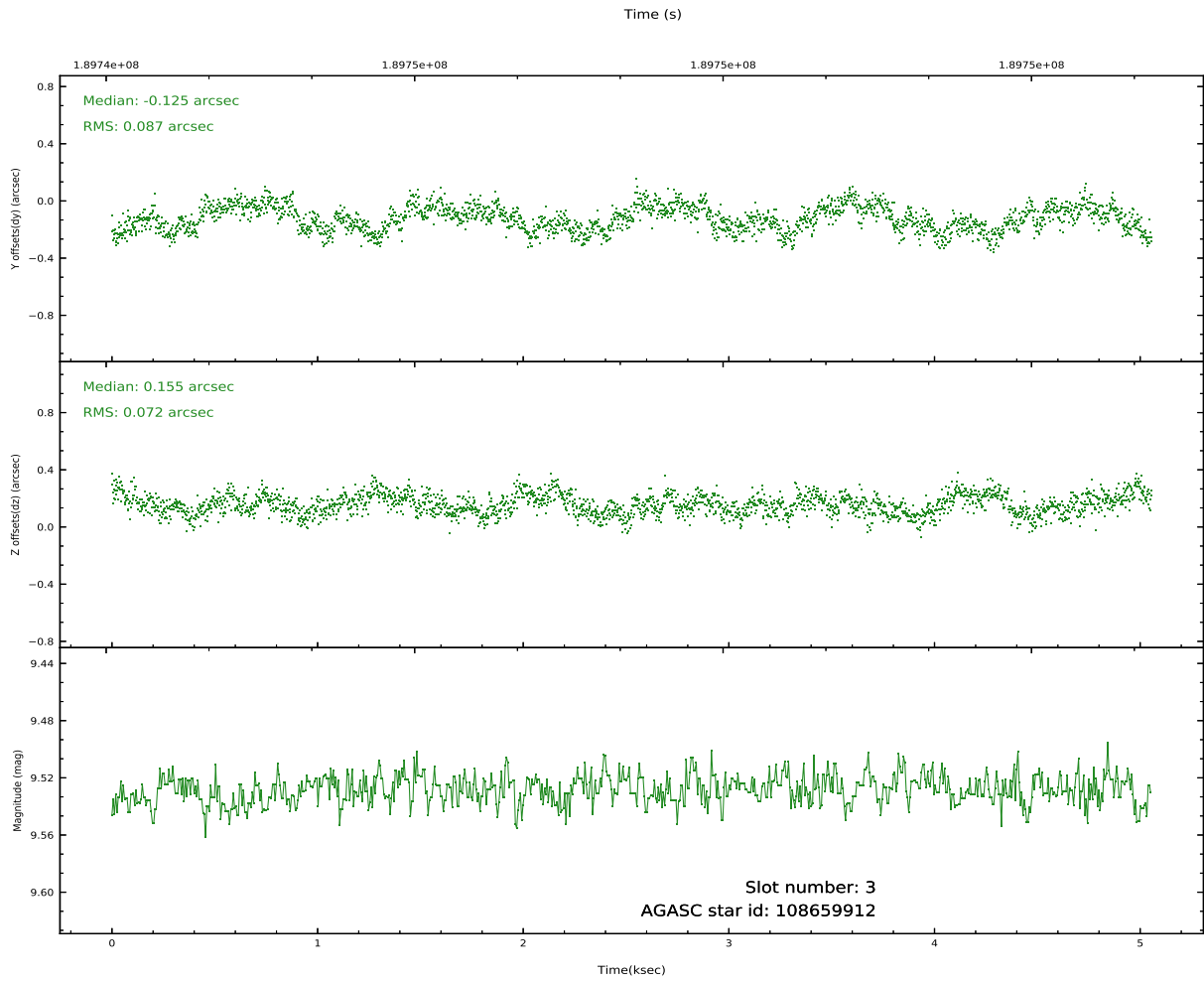
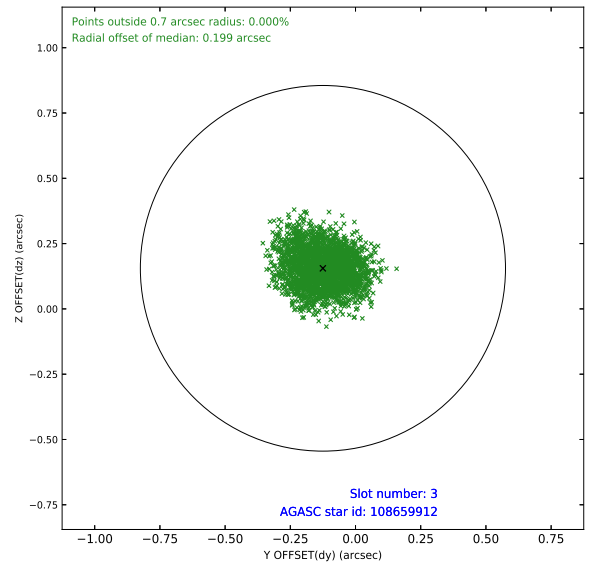
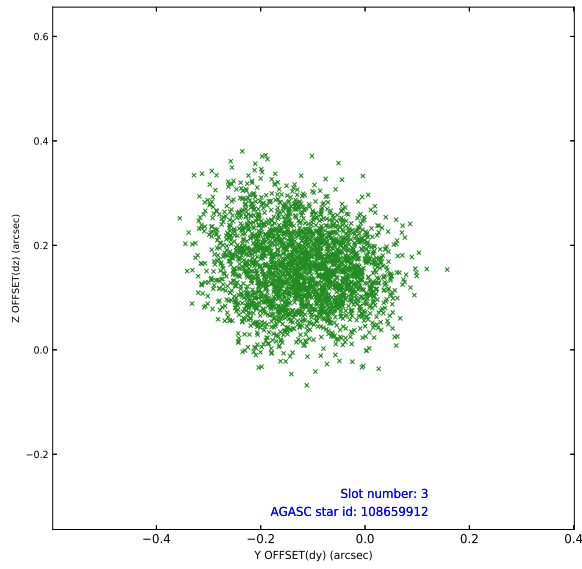


Slot Statistics

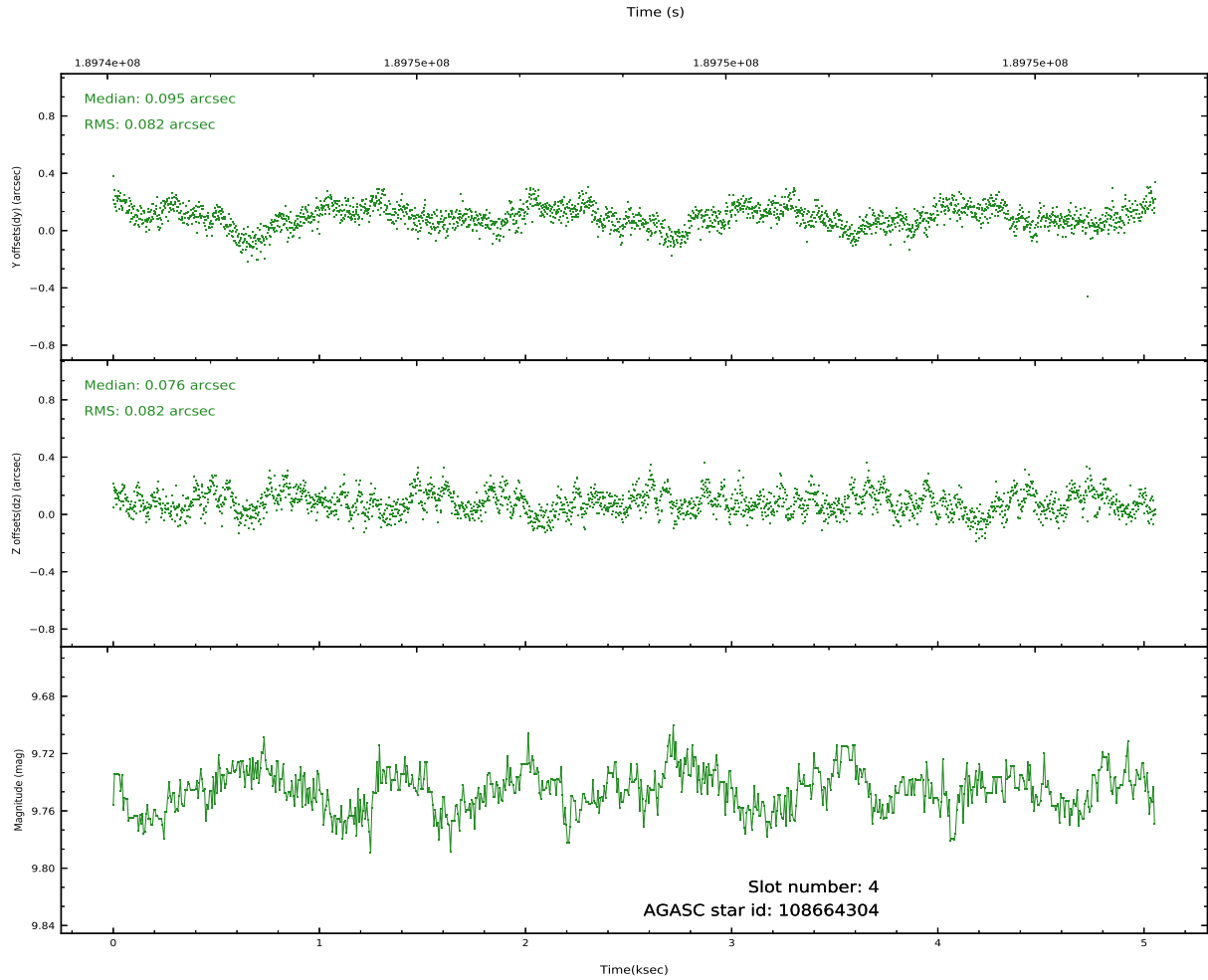
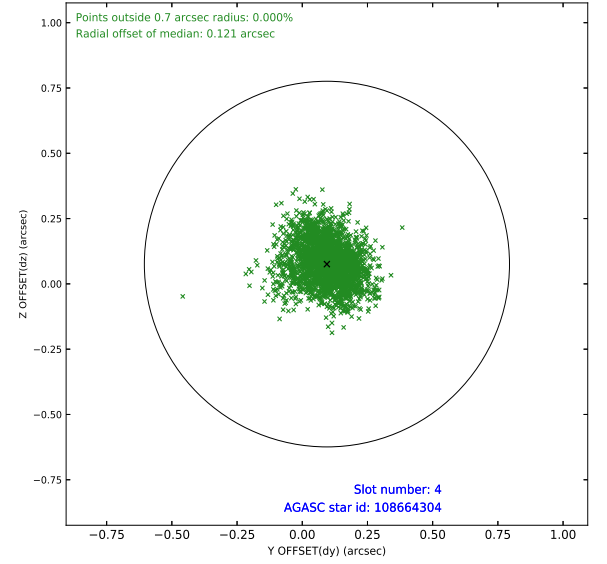
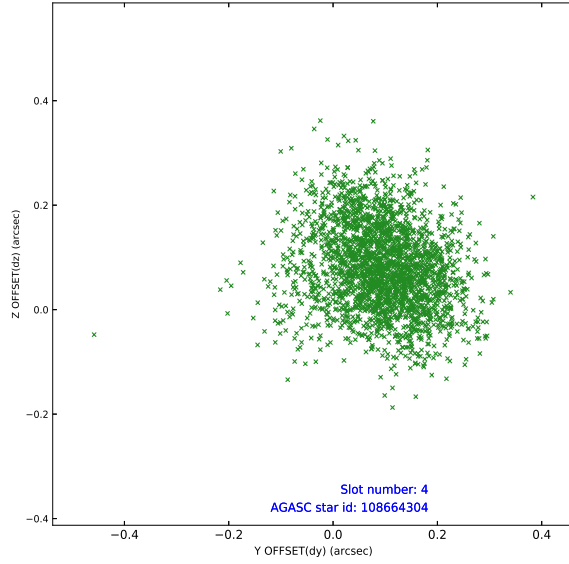
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|----------|----------|-------|
| 0 | FID | | ACIS-S-2 | 7.10 | 1233 | 1.000 | -0.111 | -0.082 | 0.007 | 0.012 | 0.000000 | 0.000000 | -758.21 | -1729 |
| 1 | FID | | ACIS-S-4 | 7.21 | 1234 | 1.000 | 0.078 | 0.066 | 0.006 | 0.011 | 0.000000 | 0.000000 | 2154.73 | 177 |
| 2 | FID | | ACIS-S-6 | 7.35 | 1233 | 1.000 | 0.006 | 0.023 | 0.007 | 0.012 | 0.000000 | 0.000000 | 405.46 | 816 |
| 3 | GUIDE | used | 108659912 | 9.53 | 2466 | 1.000 | -0.125 | 0.155 | 0.123 | 0.189 | 149.837569 | 8.833912 | 1433.53 | -2032 |
| 4 | GUIDE | used | 108664304 | 9.75 | 2463 | 1.000 | 0.095 | 0.076 | 0.123 | 0.202 | 149.423023 | 8.300628 | -919.28 | -1465 |
| 5 | GUIDE | used | 108667856 | 9.41 | 2466 | 1.000 | 0.102 | -0.163 | 0.111 | 0.180 | 148.333883 | 8.486940 | -1876.50 | 2352 |
| 6 | GUIDE | used | 108658792 | 9.92 | 2443 | 1.000 | -0.080 | -0.131 | 0.132 | 0.208 | 149.195508 | 9.417749 | 2426.73 | 907 |
| 7 | GUIDE | used | 108662208 | 9.75 | 2459 | 1.000 | 0.002 | 0.055 | 0.137 | 0.223 | 149.939142 | 9.089046 | 2420.92 | -1988 |

2.4 Star Slots

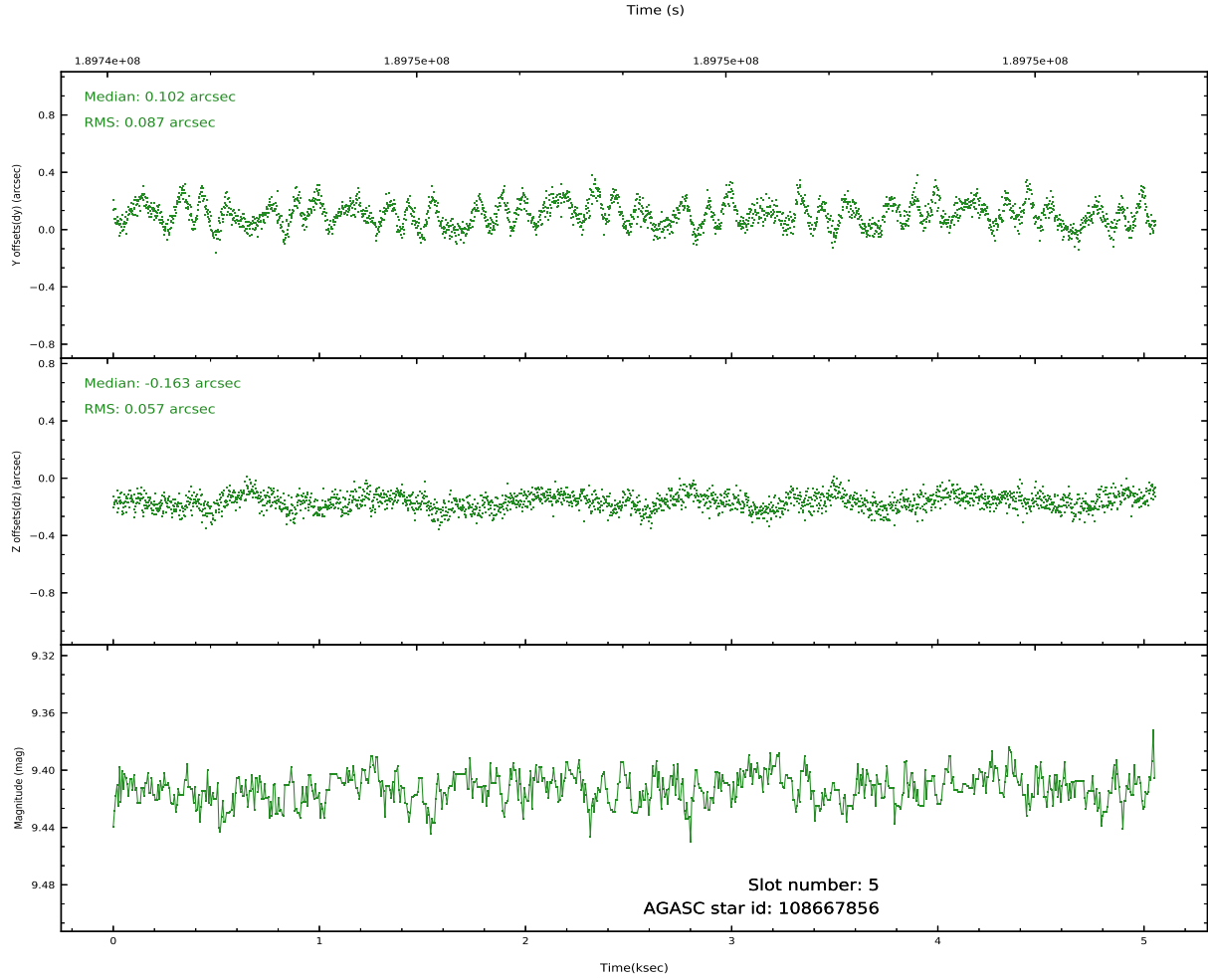
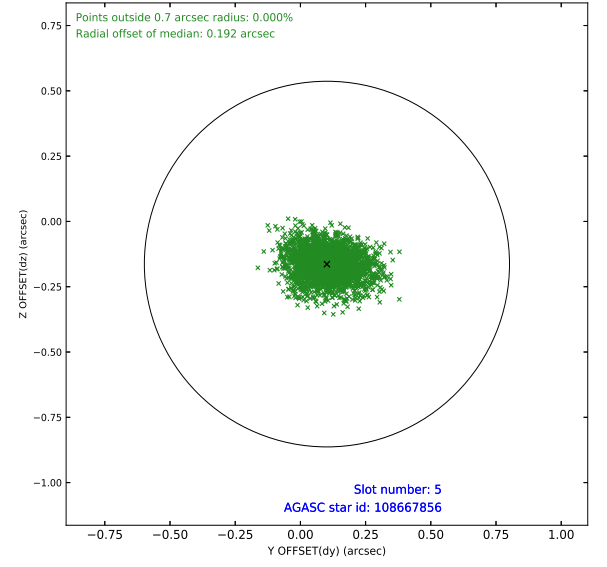
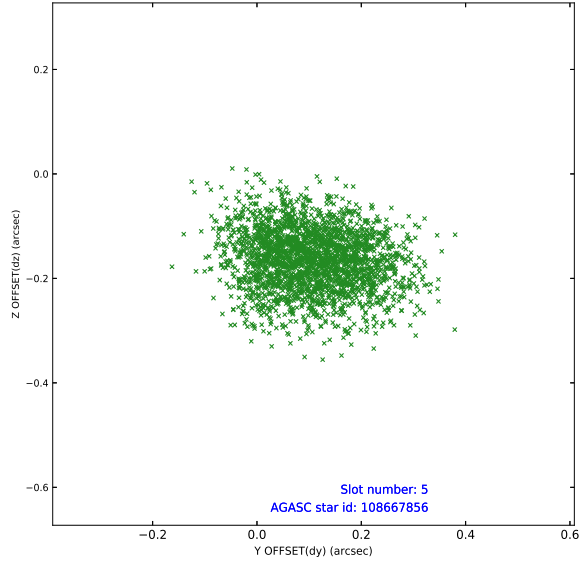
2.4.1 Slot 3



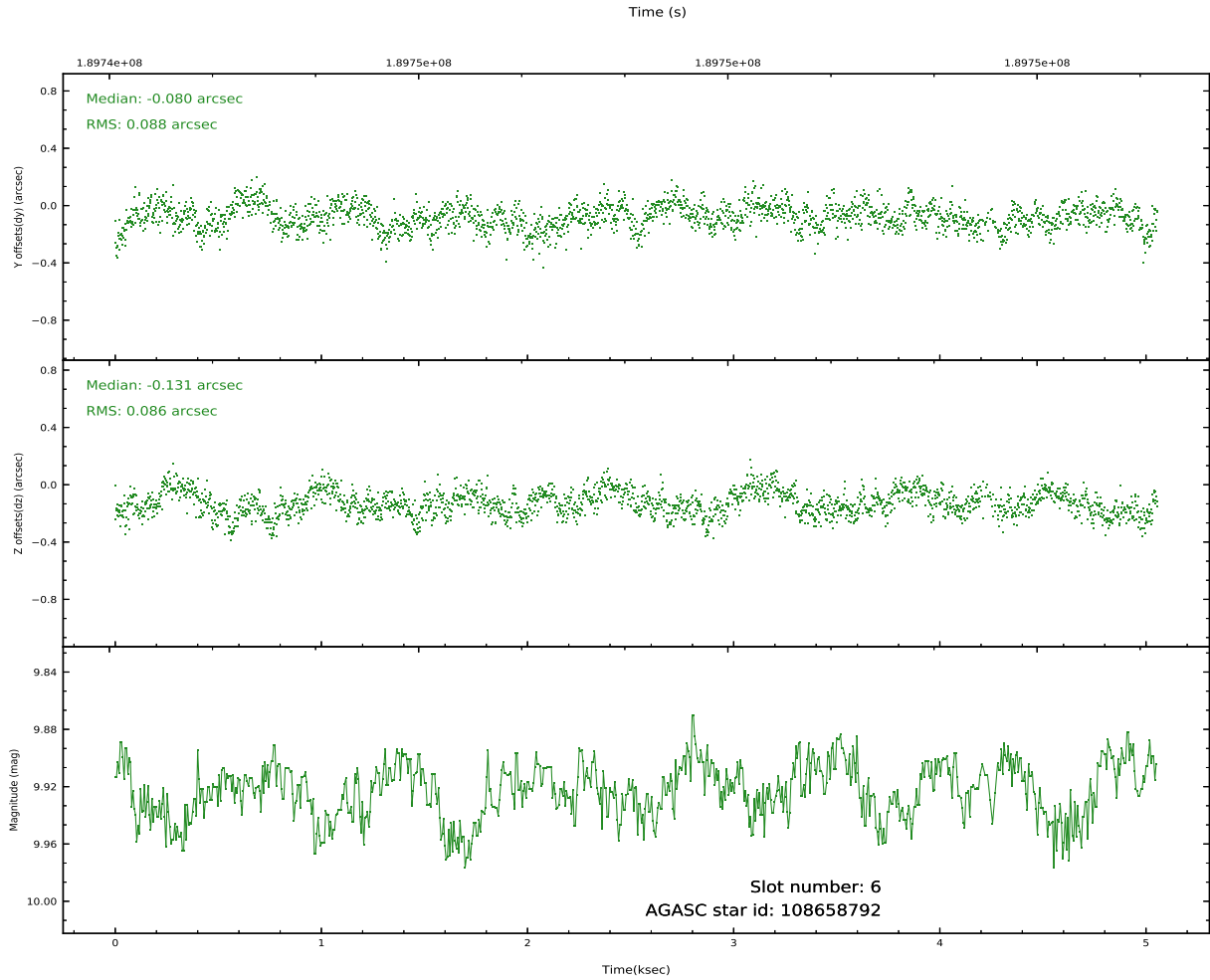
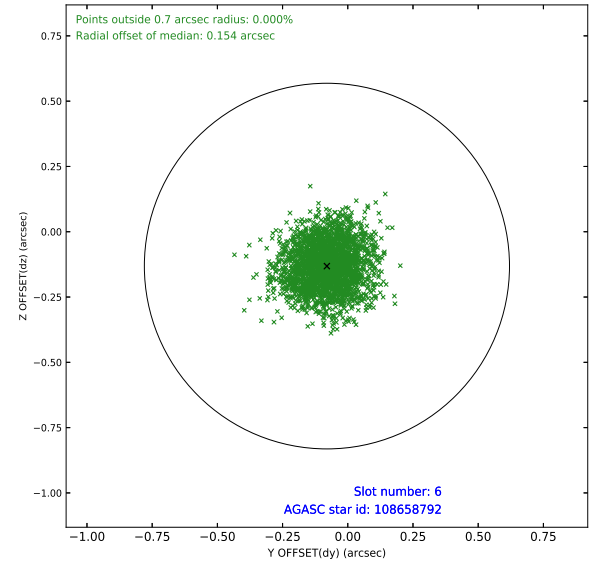
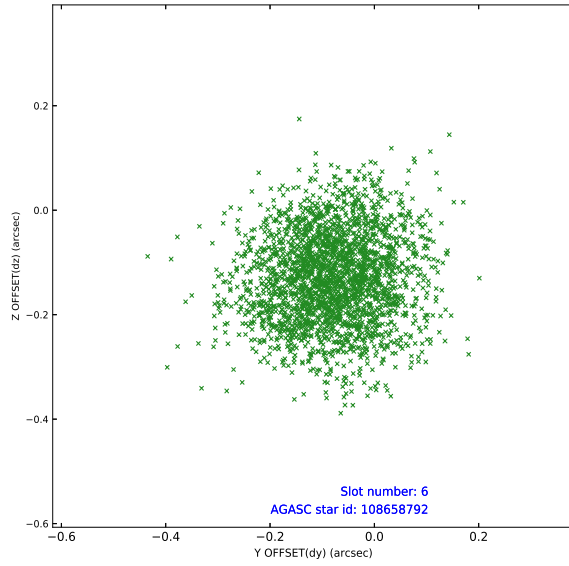
2.4.2 Slot 4



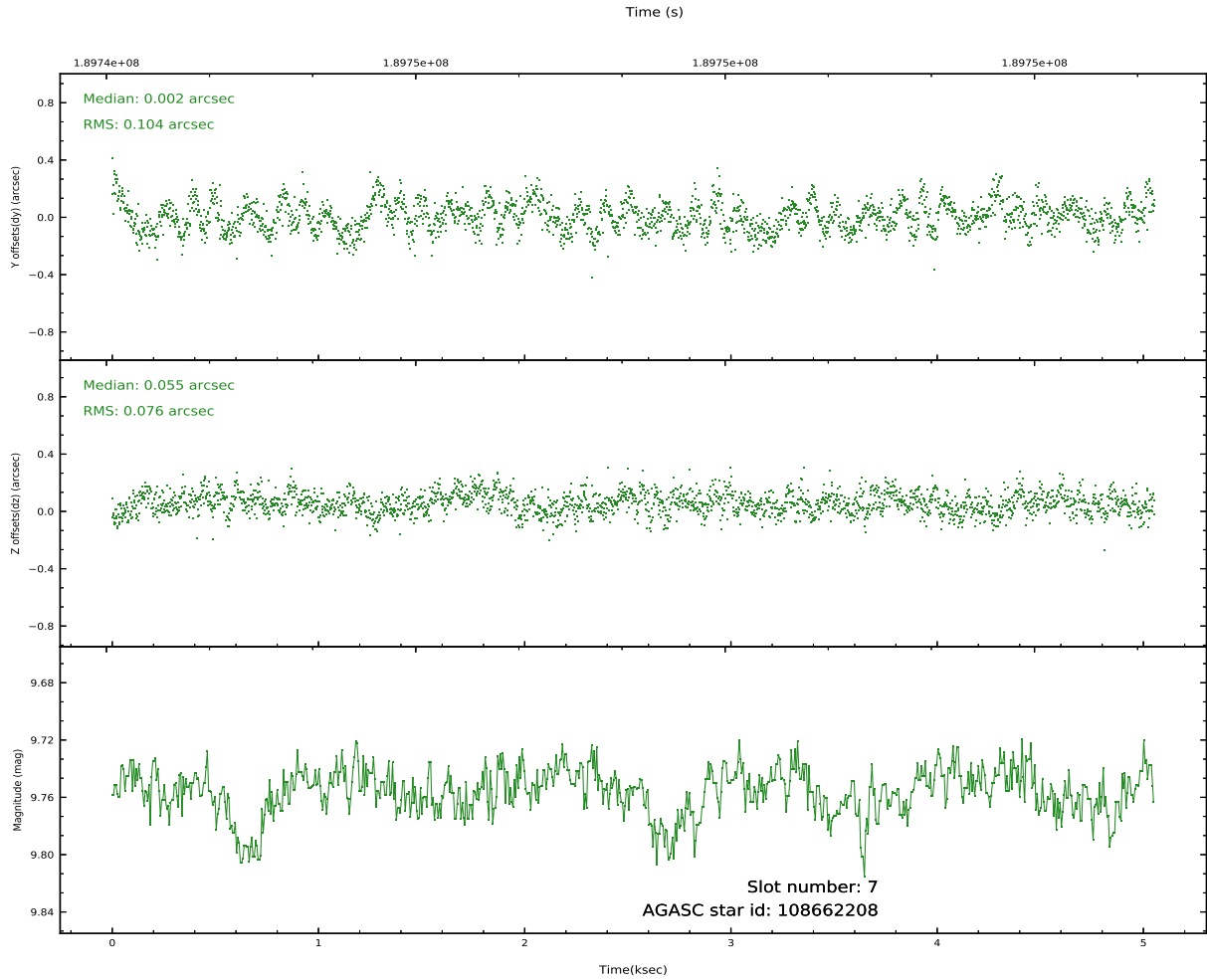
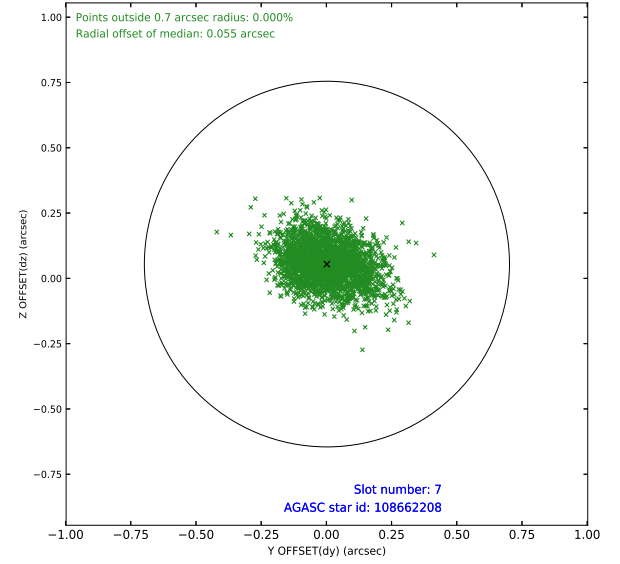
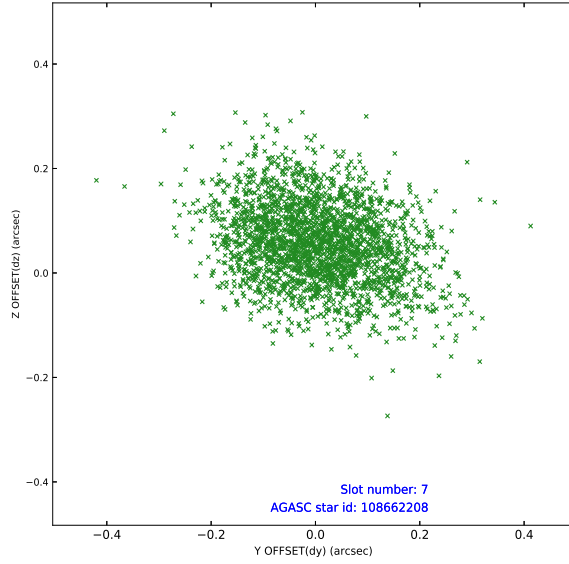
2.4.3 Slot 5



2.4.4 Slot 6

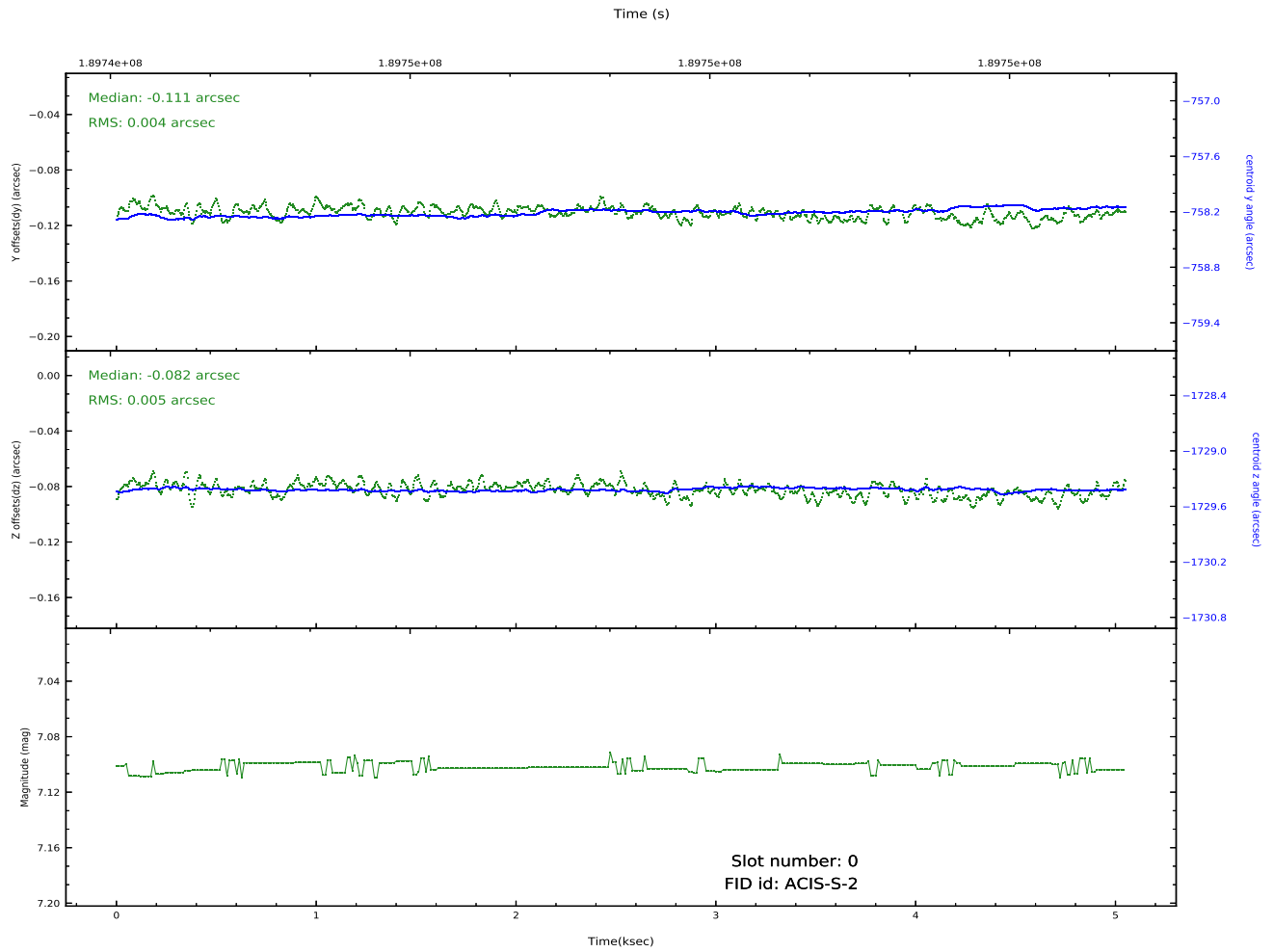
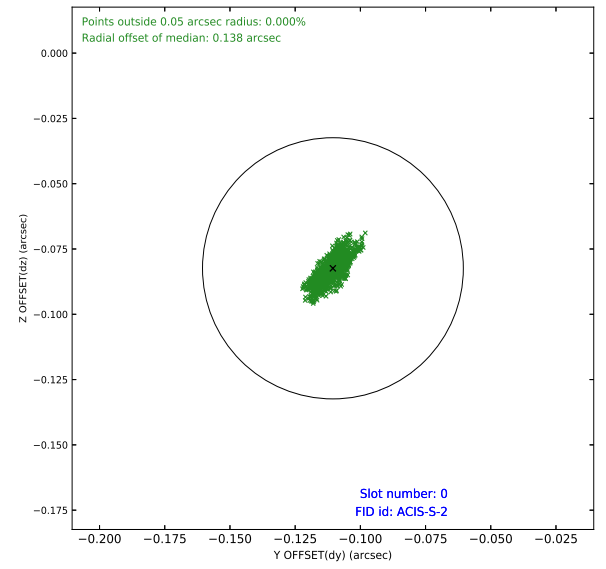
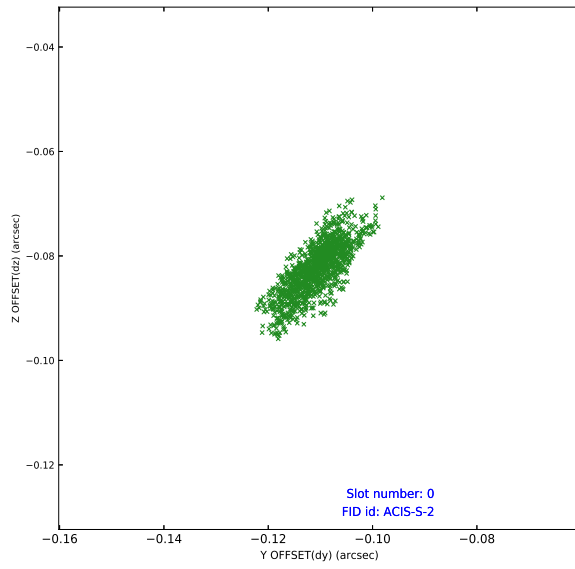


2.4.5 Slot 7

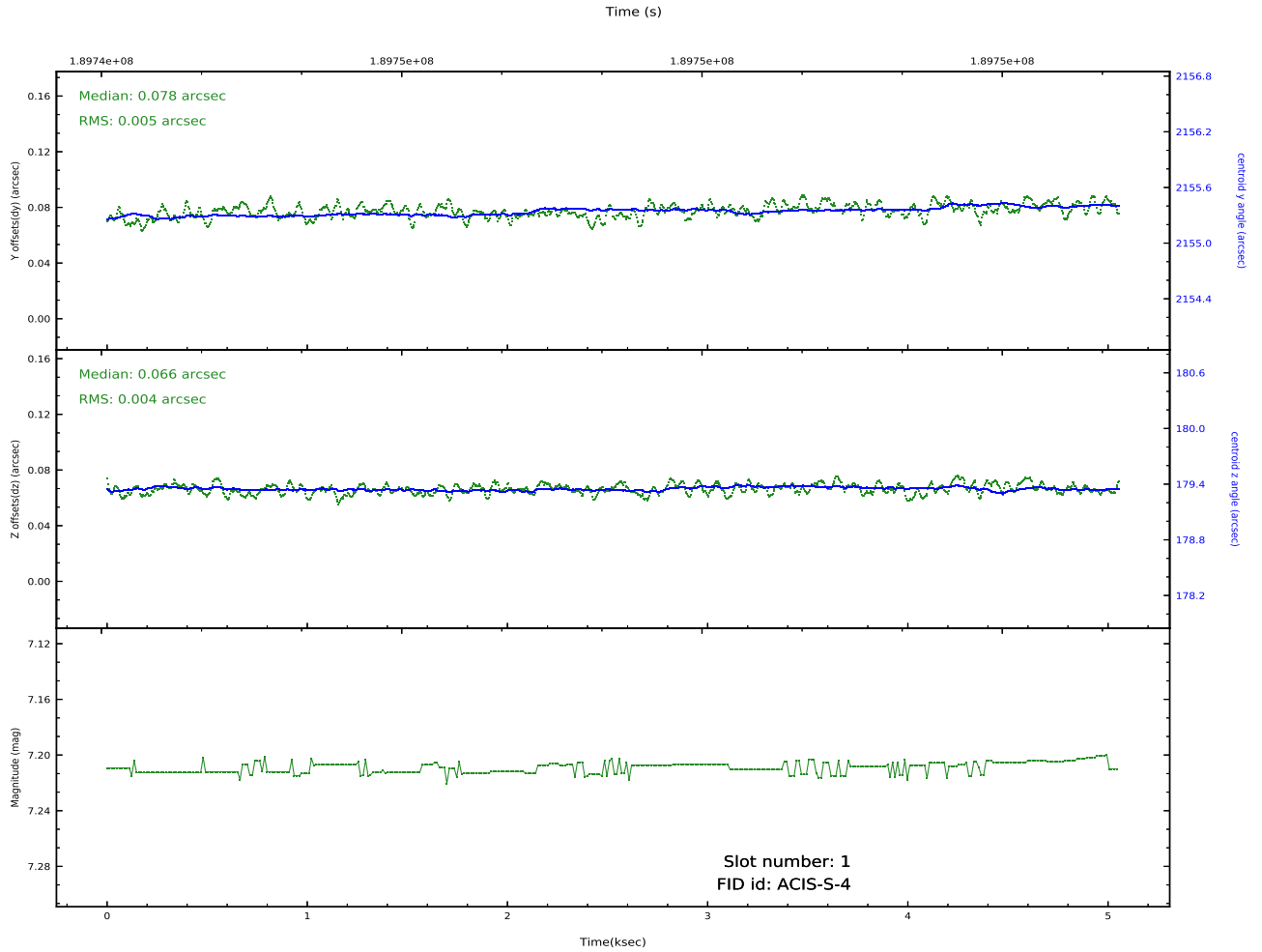
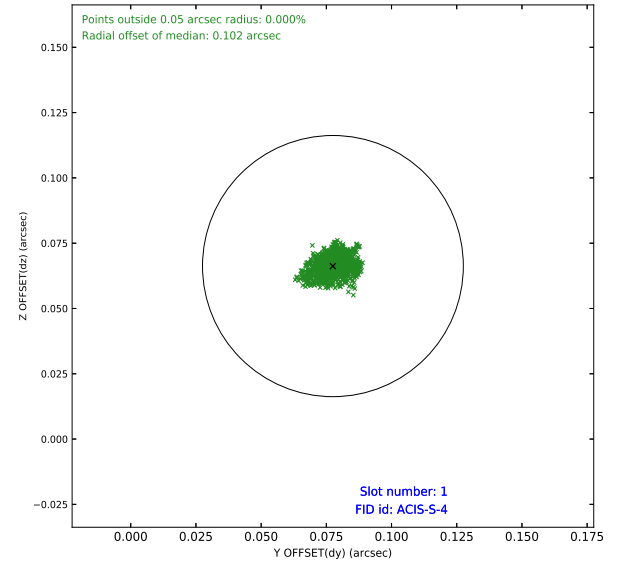
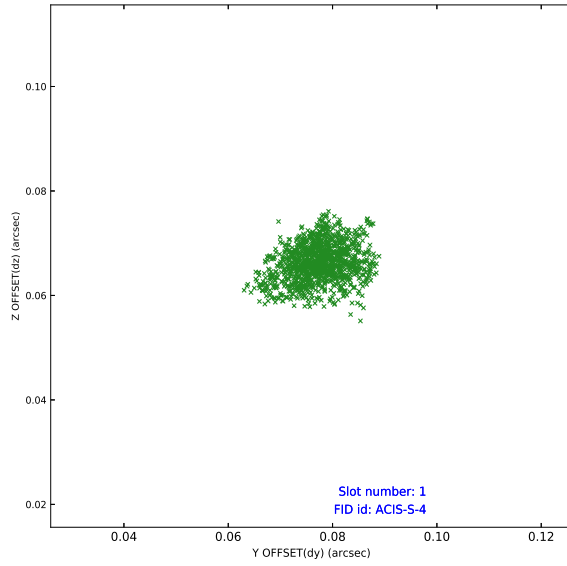


2.5 FID Slots

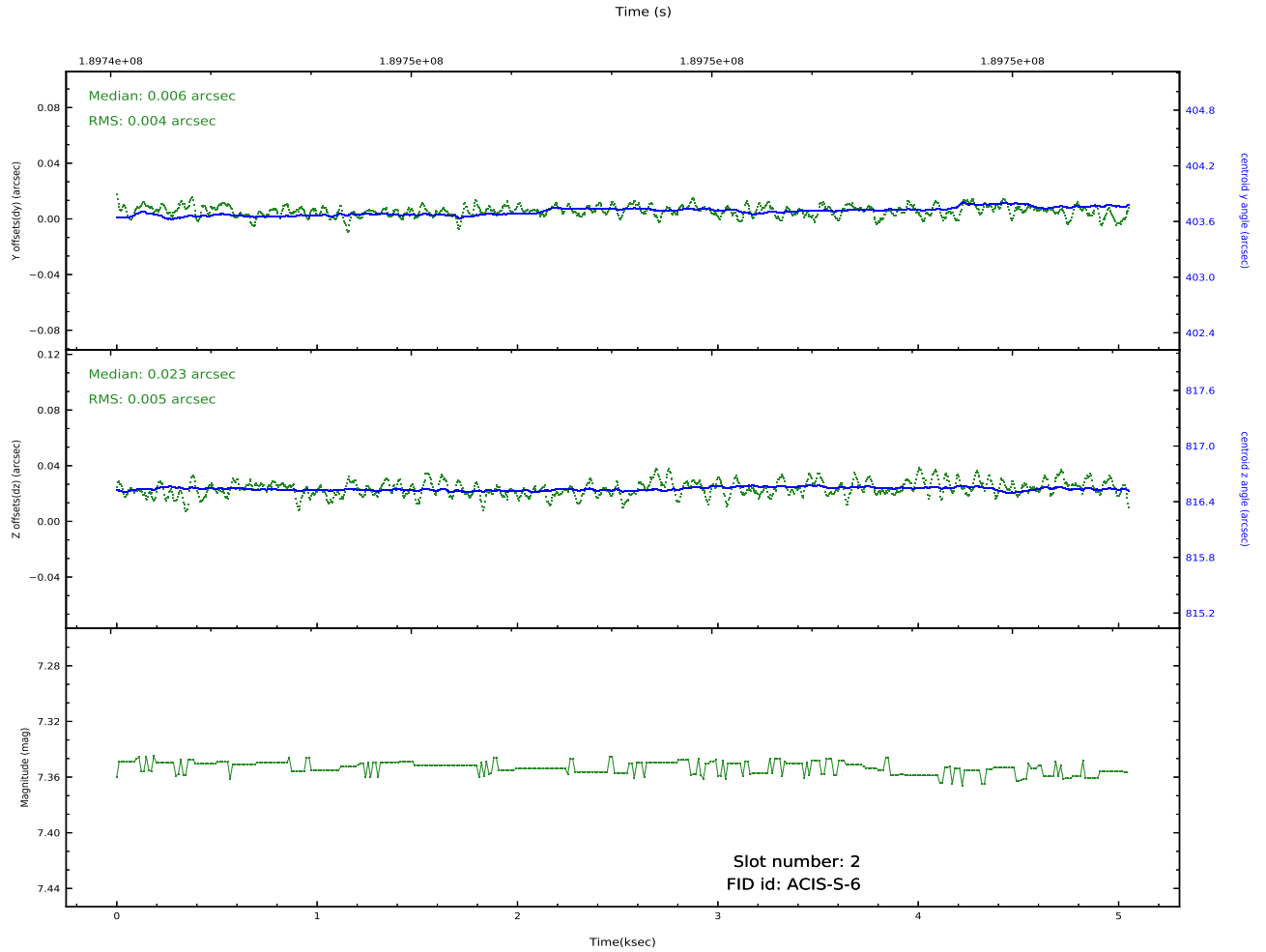
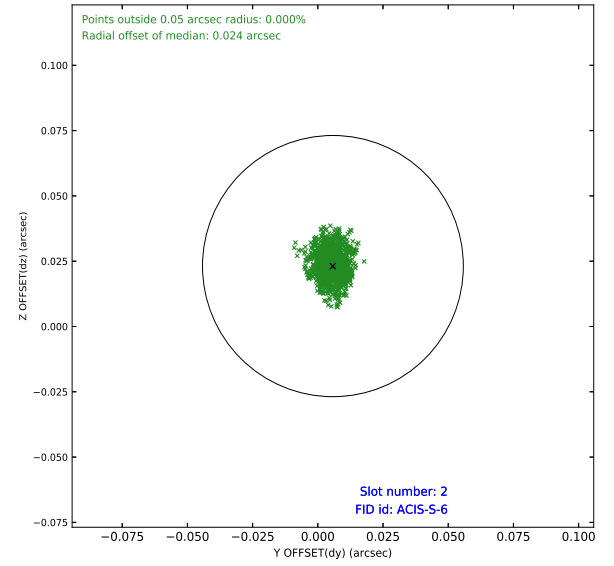
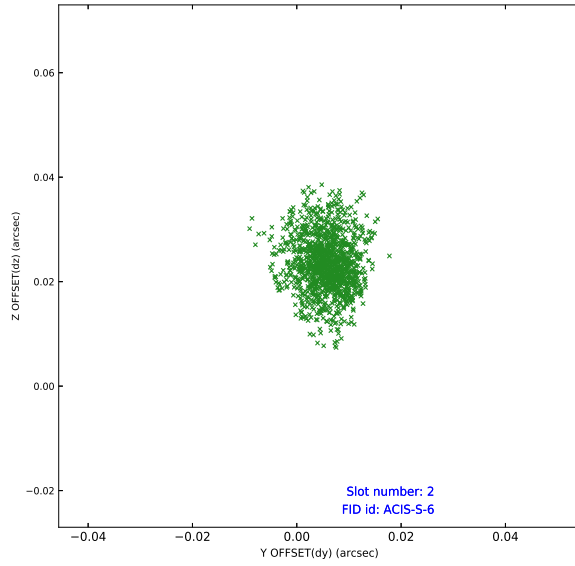
2.5.1 Slot 0



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) | 2020.09.22 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.053 |

A.2 Comments

Analysis should use Level 1 event file with care in removing bad grades.
The only potential source near the target position has been marked as
bad data.