

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5072 - L2 Version 5
Chandra X-Ray Center

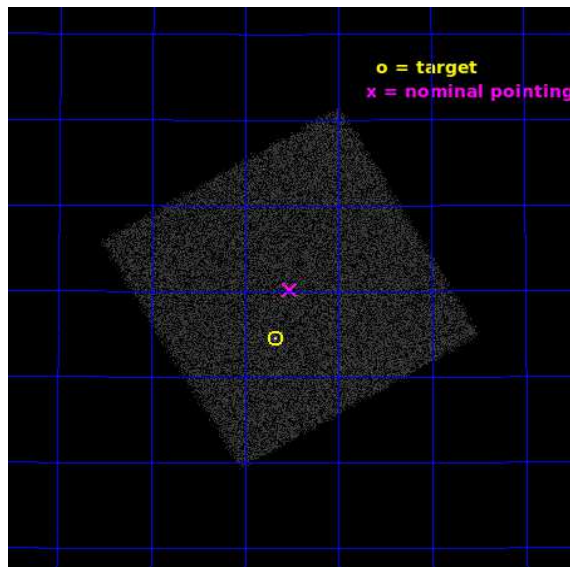
L2 Processing Date : Oct 5 2020

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1 Front

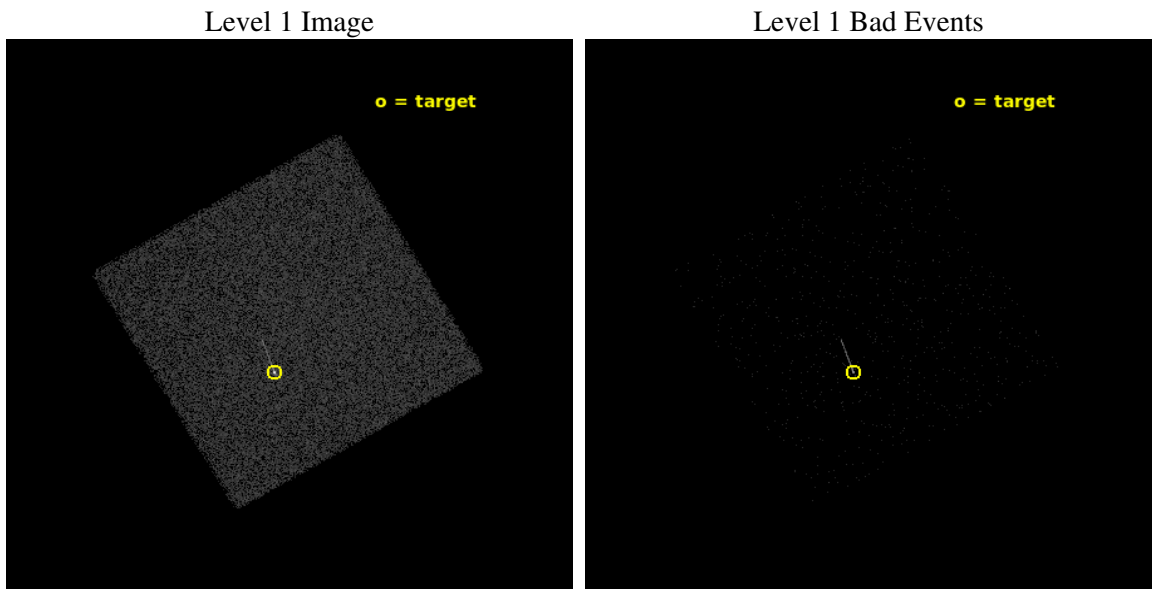
| | | |
|----------|--|---------------------------------------|
| seq_num | 290345 | Sequence number |
| obs_id | 5072 | Observation id |
| title | AO5 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain | Proposal title |
| observer | CXC Calibration | Principal investigator |
| object | ArLac | Source name |
| ra_targ | 332.17 | Observer's specified target RA [deg] |
| dec_targ | 45.742306 | Observer's specified target Dec [deg] |
| ra_nom | 332.13001673119 | Nominal RA [deg] |
| dec_nom | 45.836661555667 | Nominal Dec [deg] |
| roll_nom | 284.54076442666 | Nominal Roll [deg] |
| revision | 5 | Processing version of data |
| ontime | 1079.5812985003 | [s] |
| livetime | 1070.9271259983 | Ontime multiplied by DTCOR |
| l2events | 53359 | 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 | 900.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 1079.5812985003 | [s] |
| caldbver | 4.9.2 | | l1events | 105026 | Number of level 1 events |
| date | 2020-10-05T06:24:30 | Date and time of file creation | | | |
| revision | 5 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

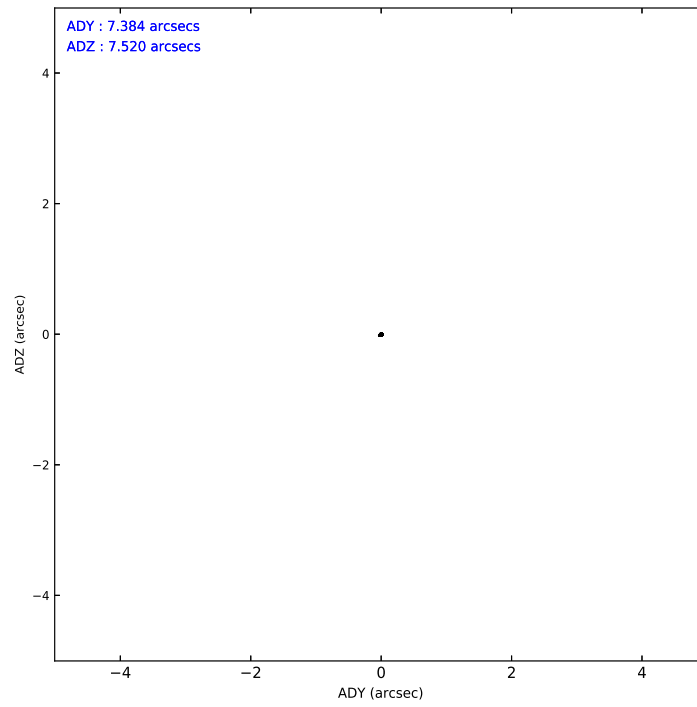
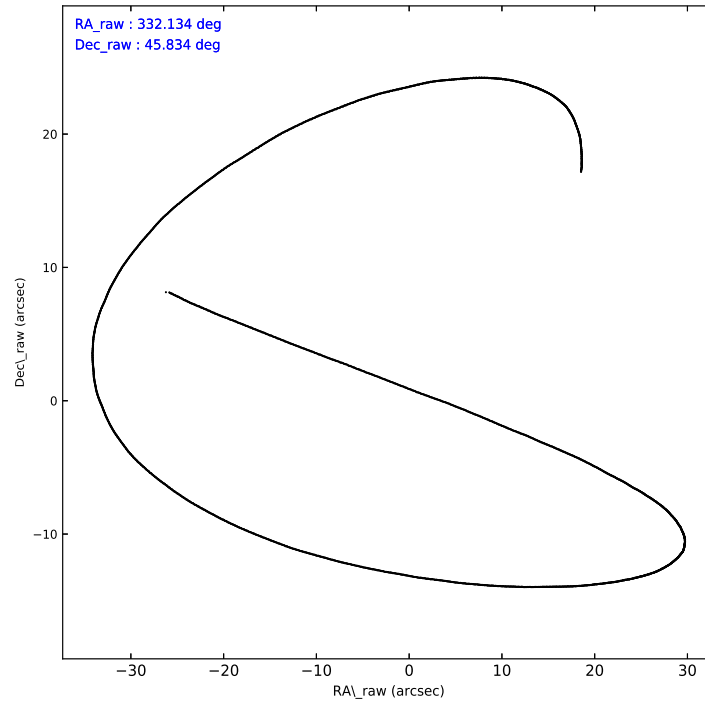
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 105026 |
| rejected events | 29361 |
| rejected % | 27% |

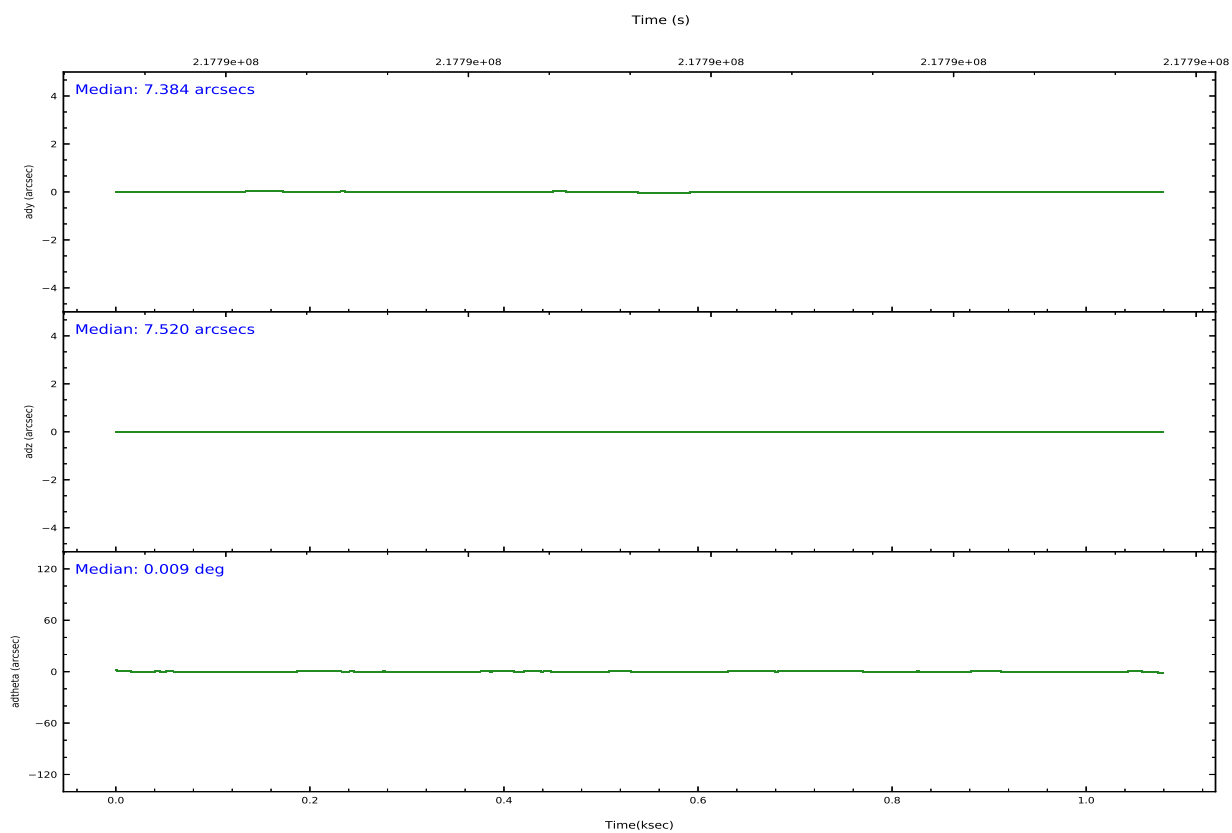
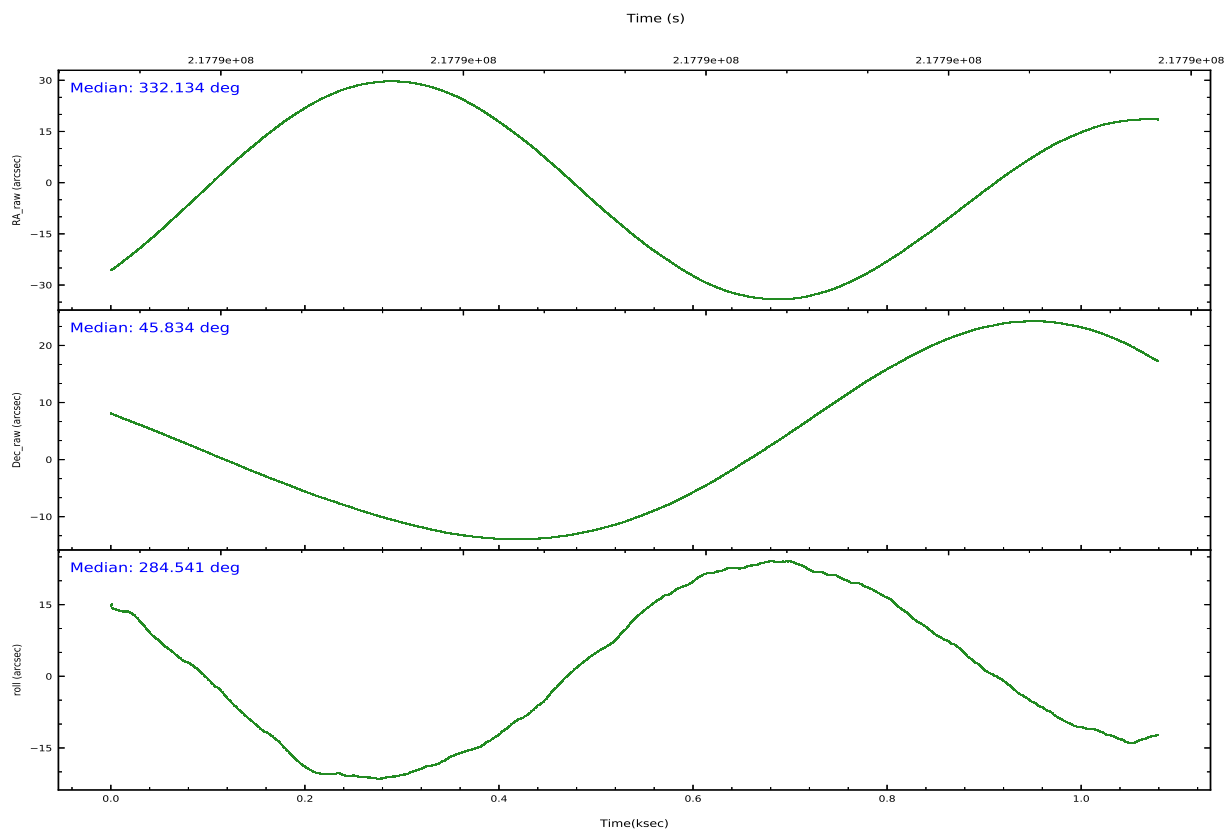
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|------------------------|
| Instrument | HRC | HRC |
| Detector | HRC-I | HRC-I |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 332.104970 | 332.13001673119 |
| [deg] Pointing Dec | 45.853789 | 45.836661555667 |
| [deg] Pointing Roll | 284.673469 | 284.54076442666 |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 |
| [mm] SIM defocus | 0 | 0.001426264420575141 |
| [mm] SIM translation stage pos | 126.985494 | 126.9854943052878 |
| [mm] SIM translation stage offset | 0 | -5.413686238853188e-06 |
| [s] Observation start time (MET) | 217791567.184000 | 217791191.48347 |
| Observation start date | 2004-11-25T17:38:23 | 2004-11-25T17:33:11 |
| [s] Observation end time (MET) | 217792467.184000 | 217792600.85853 |
| Observation end date | 2004-11-25T17:53:23 | 2004-11-25T17:56:40 |

| Parameter | Planned | Actual |
|-----------------------|-----------|---------|
| Obspar version number | 8 | 8 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |

2.3 Aspect



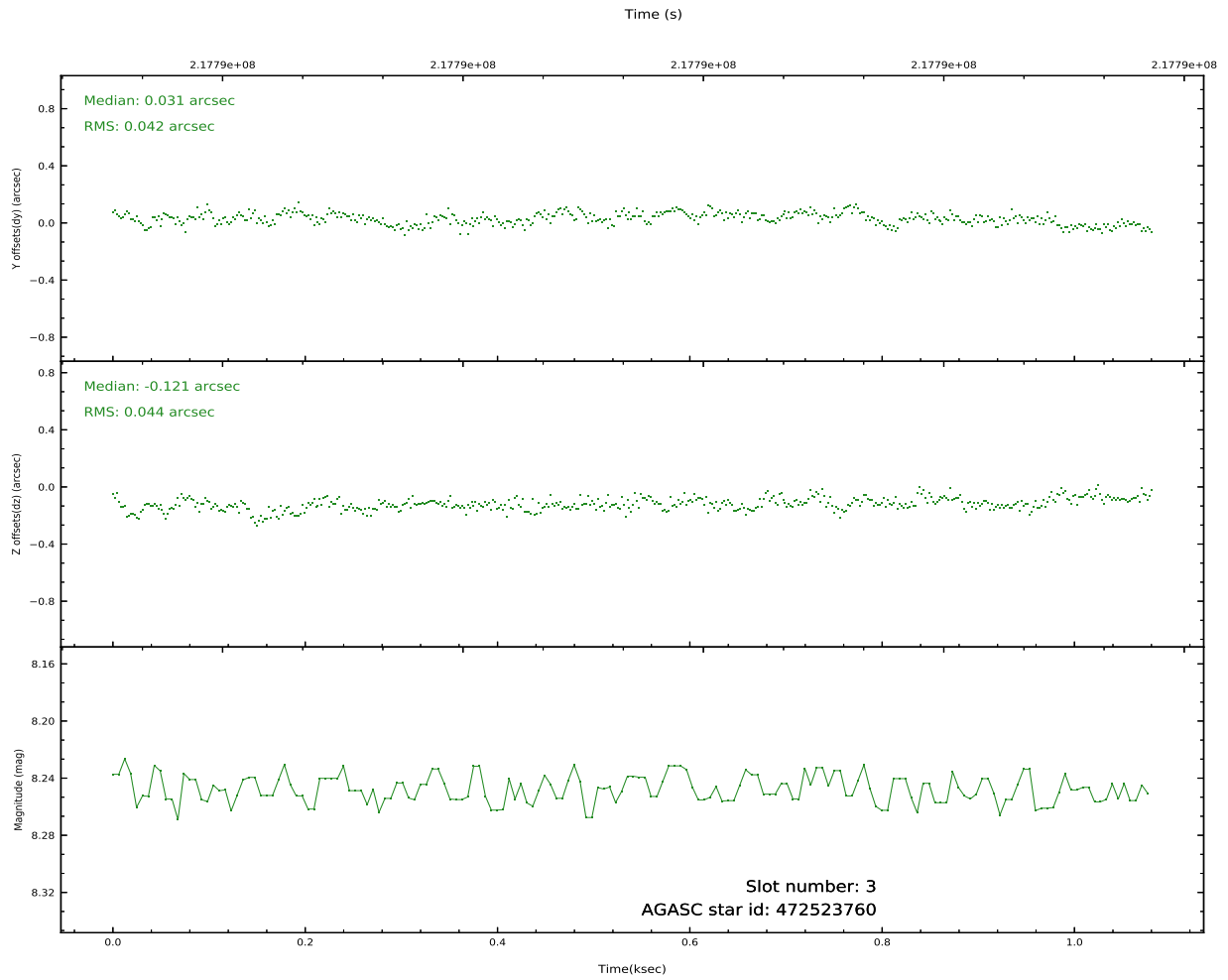
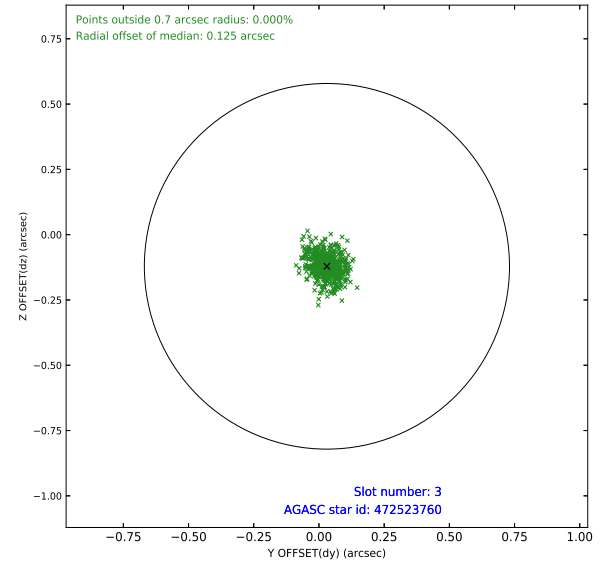
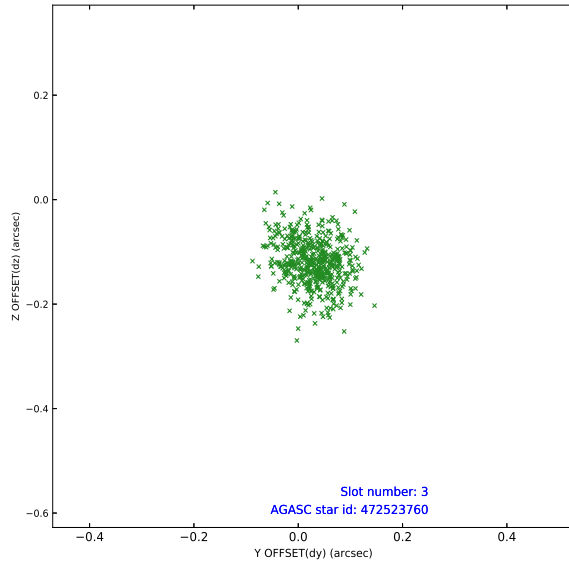


Slot Statistics

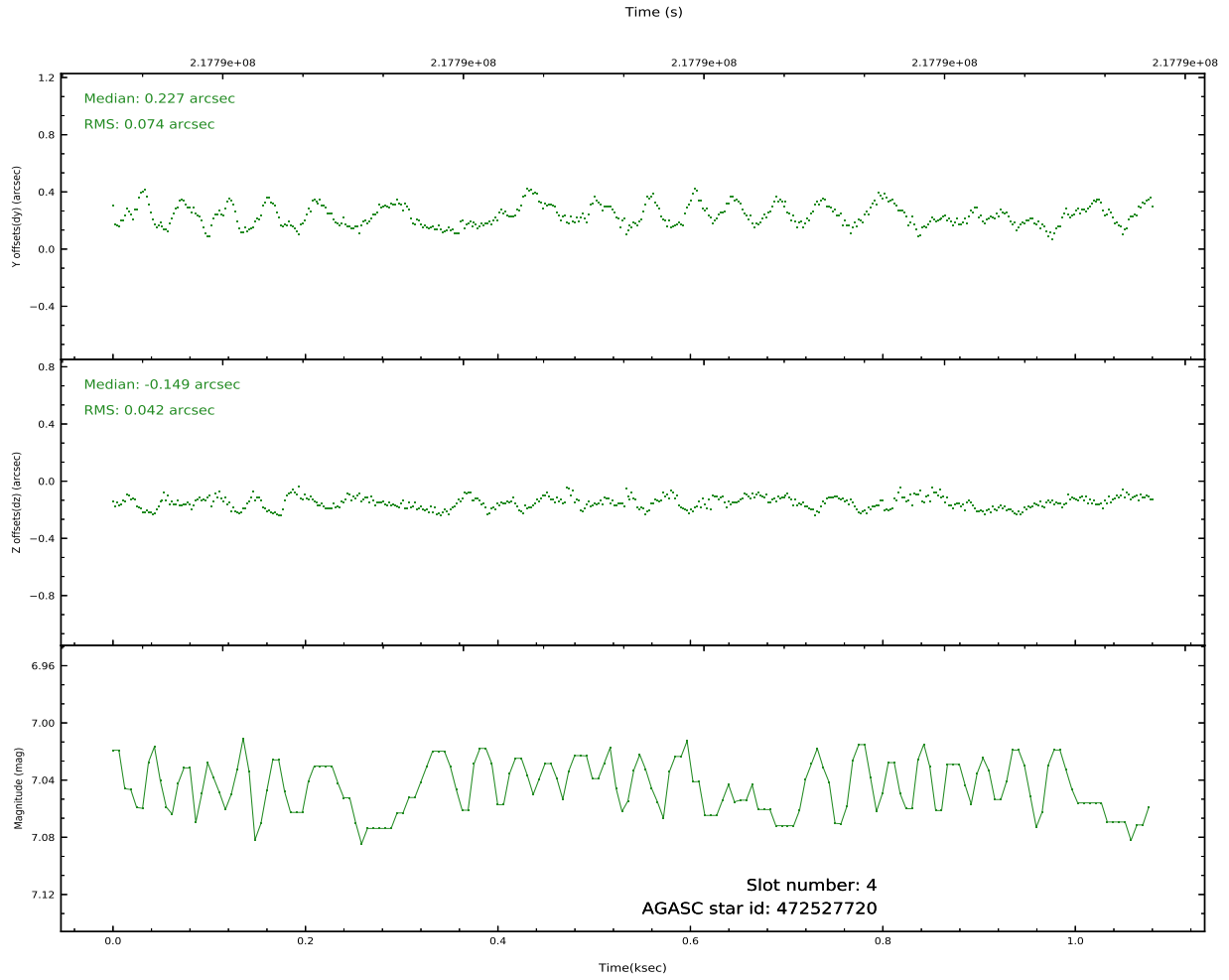
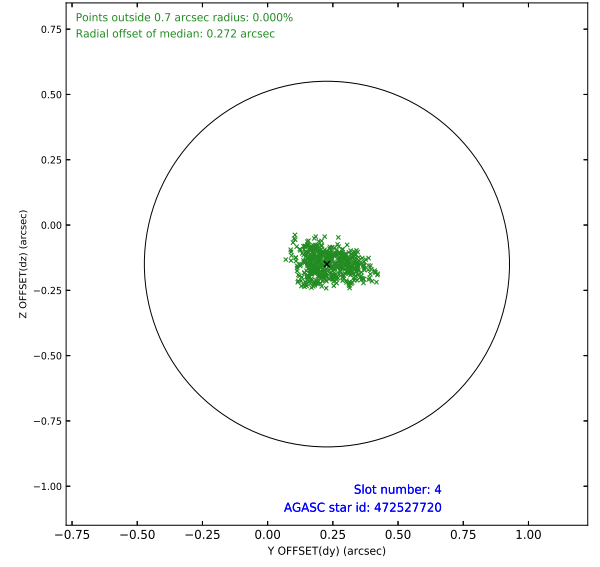
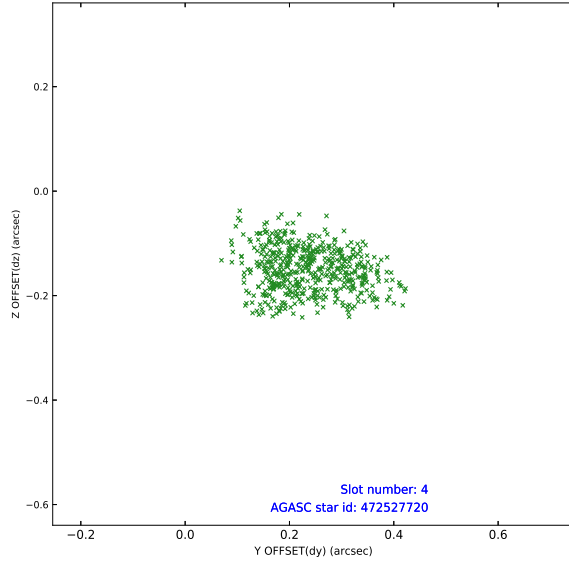
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|-------|
| 0 | FID | | HRC-I-1 | 7.01 | 264 | 1.000 | -0.008 | 0.007 | 0.007 | 0.011 | 0.000000 | 0.000000 | -762.99 | -1295 |
| 1 | FID | | HRC-I-2 | 7.05 | 264 | 1.000 | 0.158 | -0.120 | 0.006 | 0.009 | 0.000000 | 0.000000 | 846.91 | -1302 |
| 2 | FID | | HRC-I-3 | 7.10 | 264 | 1.000 | -0.032 | 0.023 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1188.29 | 1004 |
| 3 | GUIDE | used | 472523760 | 8.25 | 528 | 1.000 | 0.031 | -0.121 | 0.066 | 0.105 | 331.645363 | 45.403260 | 1272.14 | -1536 |
| 4 | GUIDE | used | 472527720 | 7.05 | 528 | 1.000 | 0.227 | -0.149 | 0.090 | 0.146 | 331.460205 | 45.112509 | 2163.66 | -2264 |
| 5 | GUIDE | used | 472533912 | 9.17 | 528 | 1.000 | -0.138 | 0.118 | 0.074 | 0.116 | 331.791136 | 46.368695 | -1987.82 | -290 |
| 6 | GUIDE | used | 472655152 | 9.43 | 528 | 1.000 | -0.058 | 0.075 | 0.106 | 0.164 | 332.504239 | 45.862991 | 215.54 | 974 |
| 7 | GUIDE | used | 472659832 | 9.47 | 526 | 1.000 | -0.070 | 0.077 | 0.108 | 0.168 | 332.780399 | 46.098139 | -430.33 | 1855 |

2.4 Star Slots

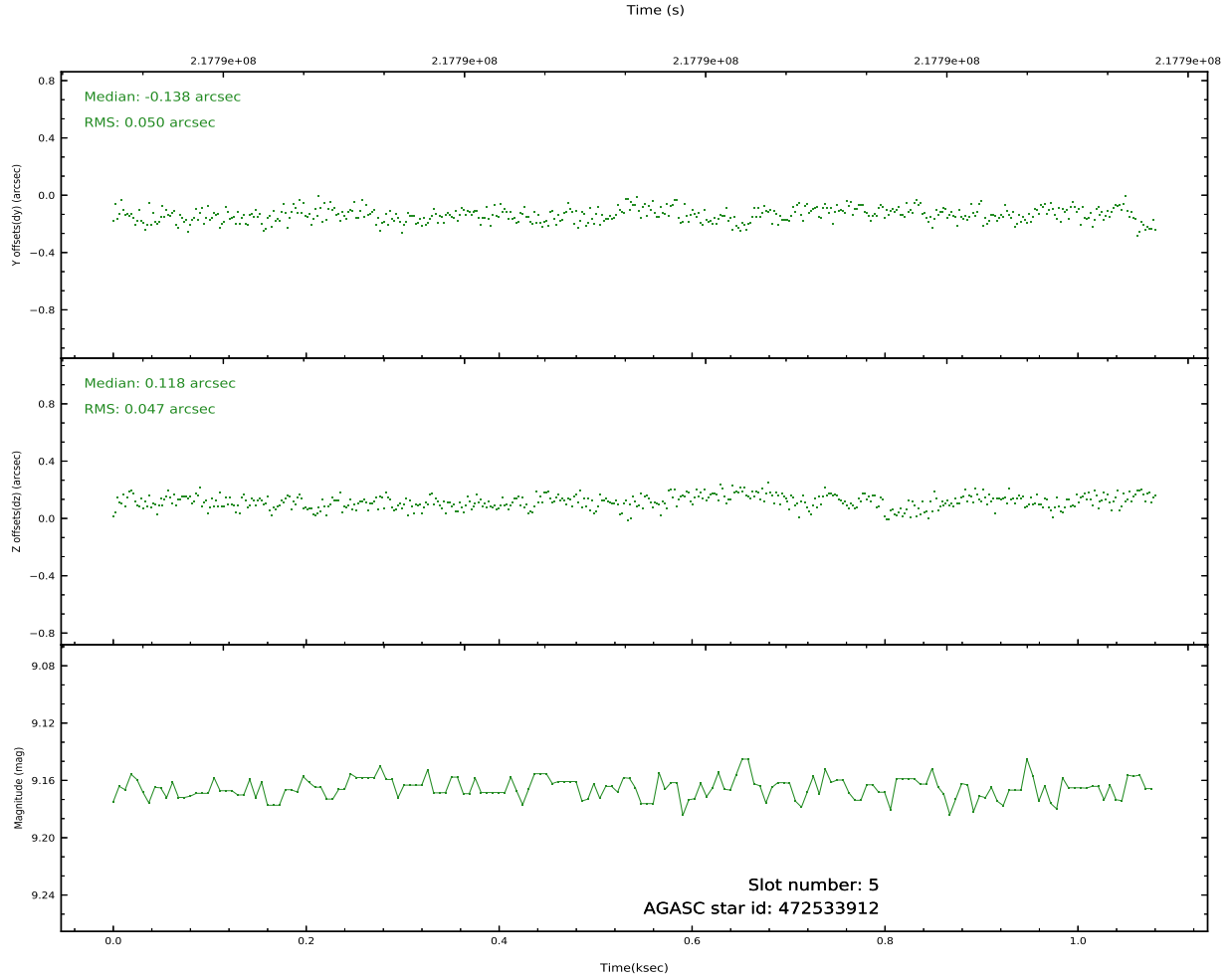
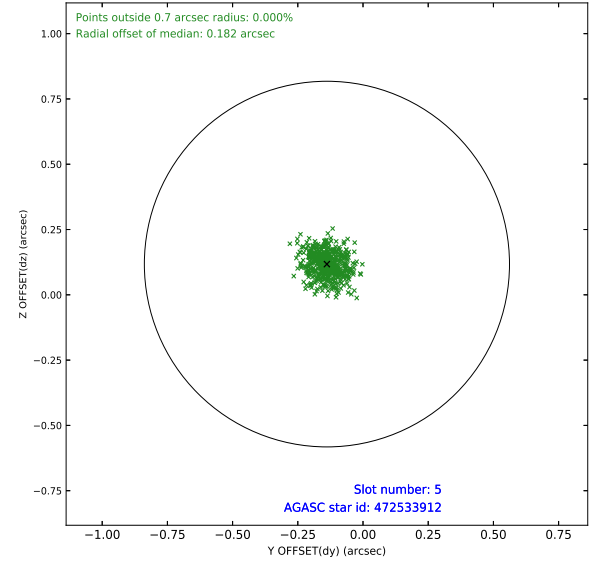
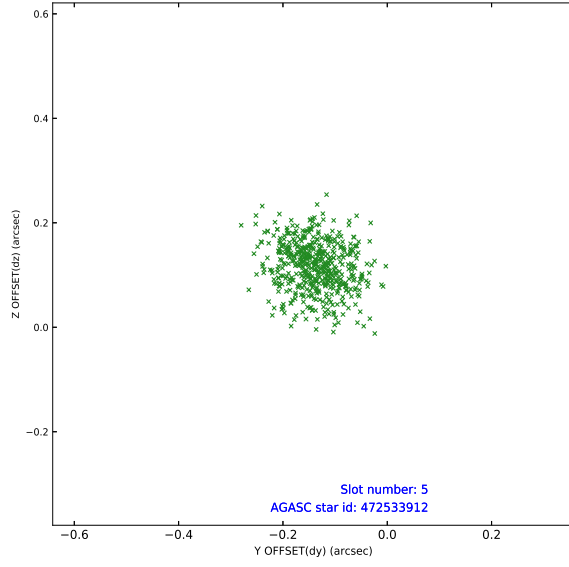
2.4.1 Slot 3



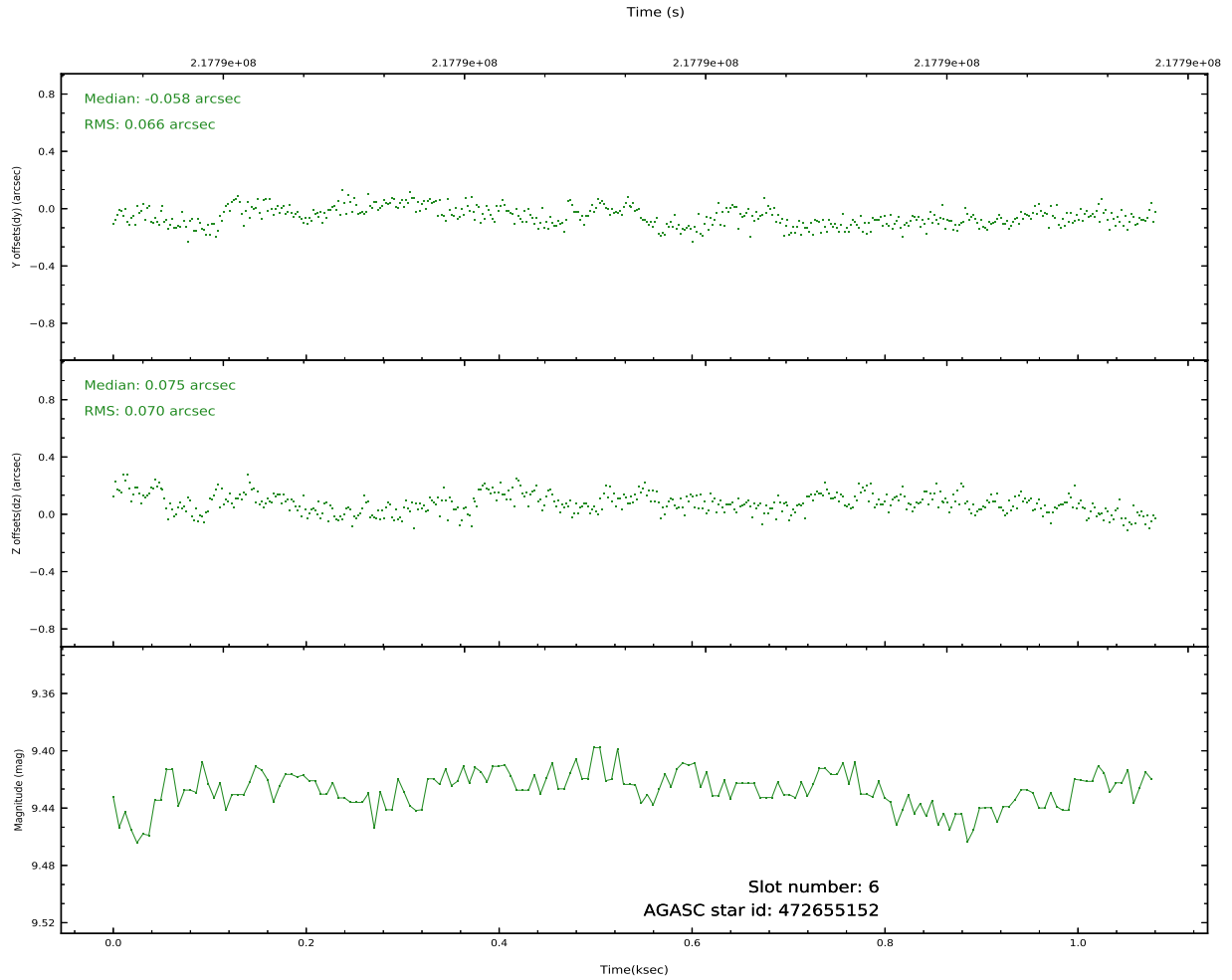
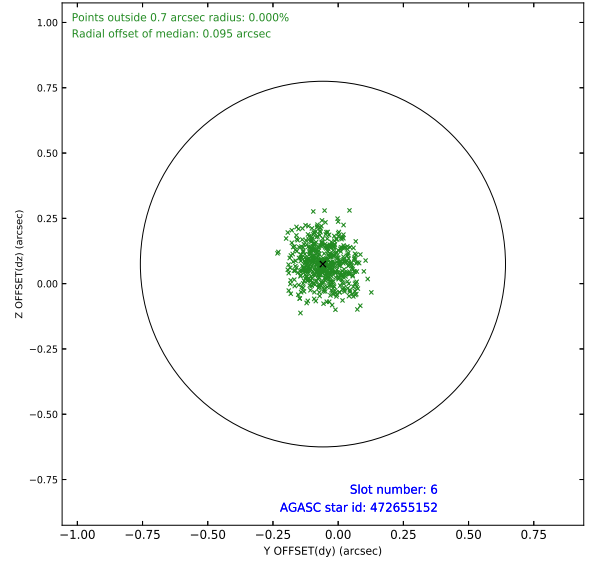
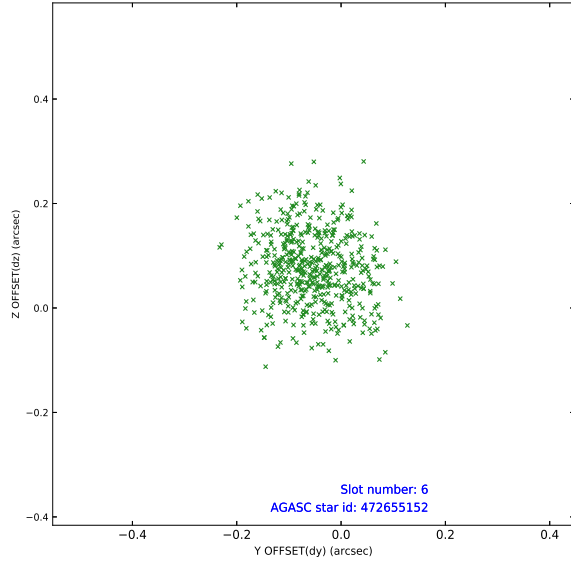
2.4.2 Slot 4



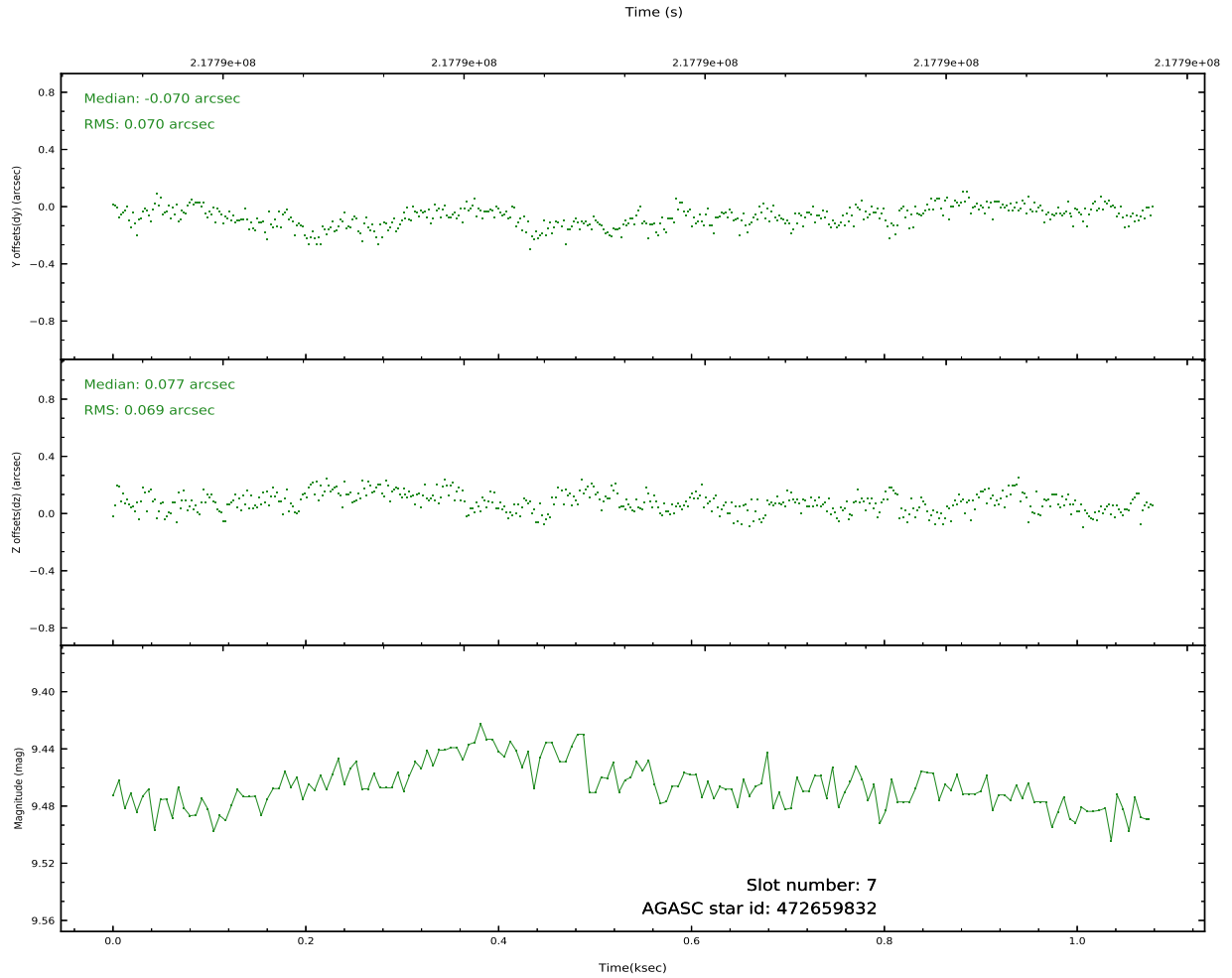
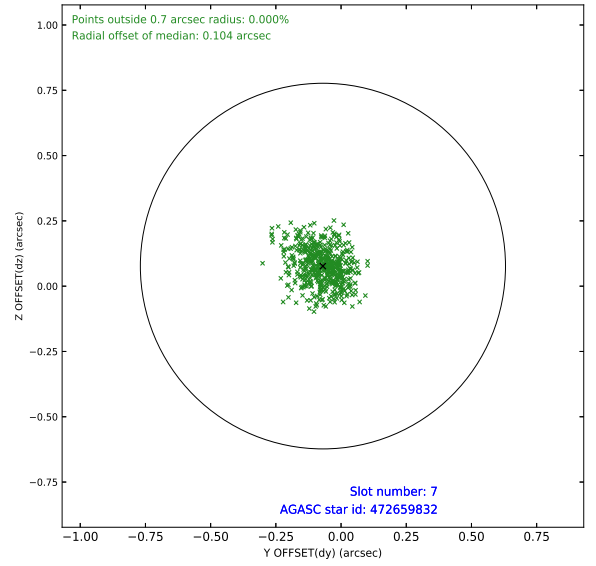
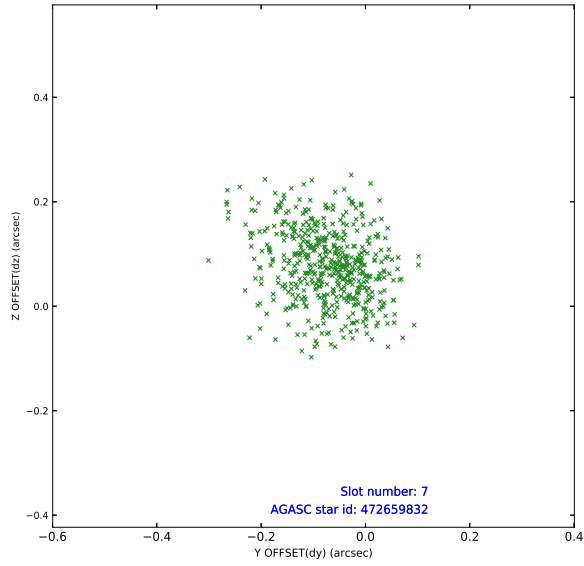
2.4.3 Slot 5



2.4.4 Slot 6

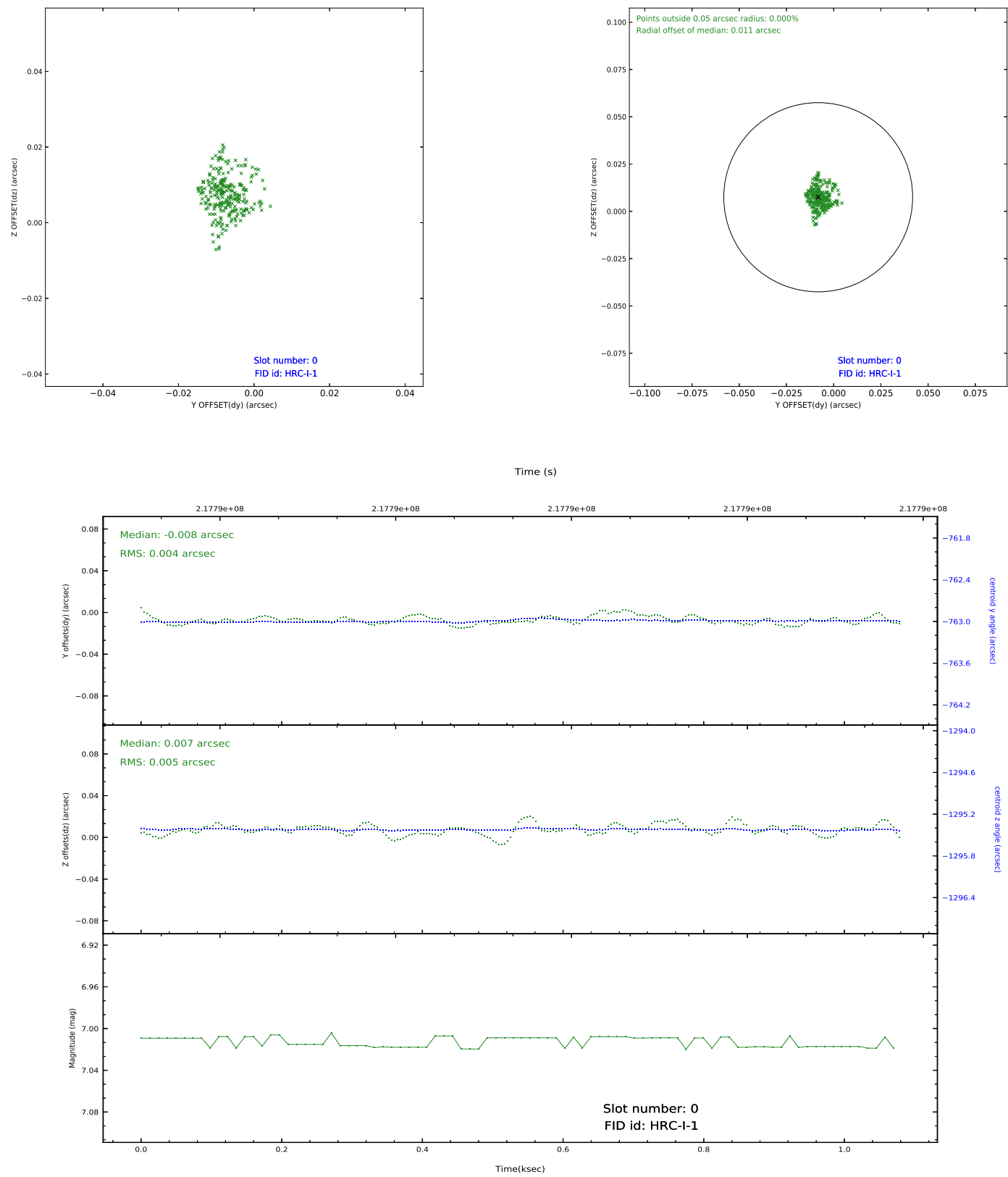


2.4.5 Slot 7

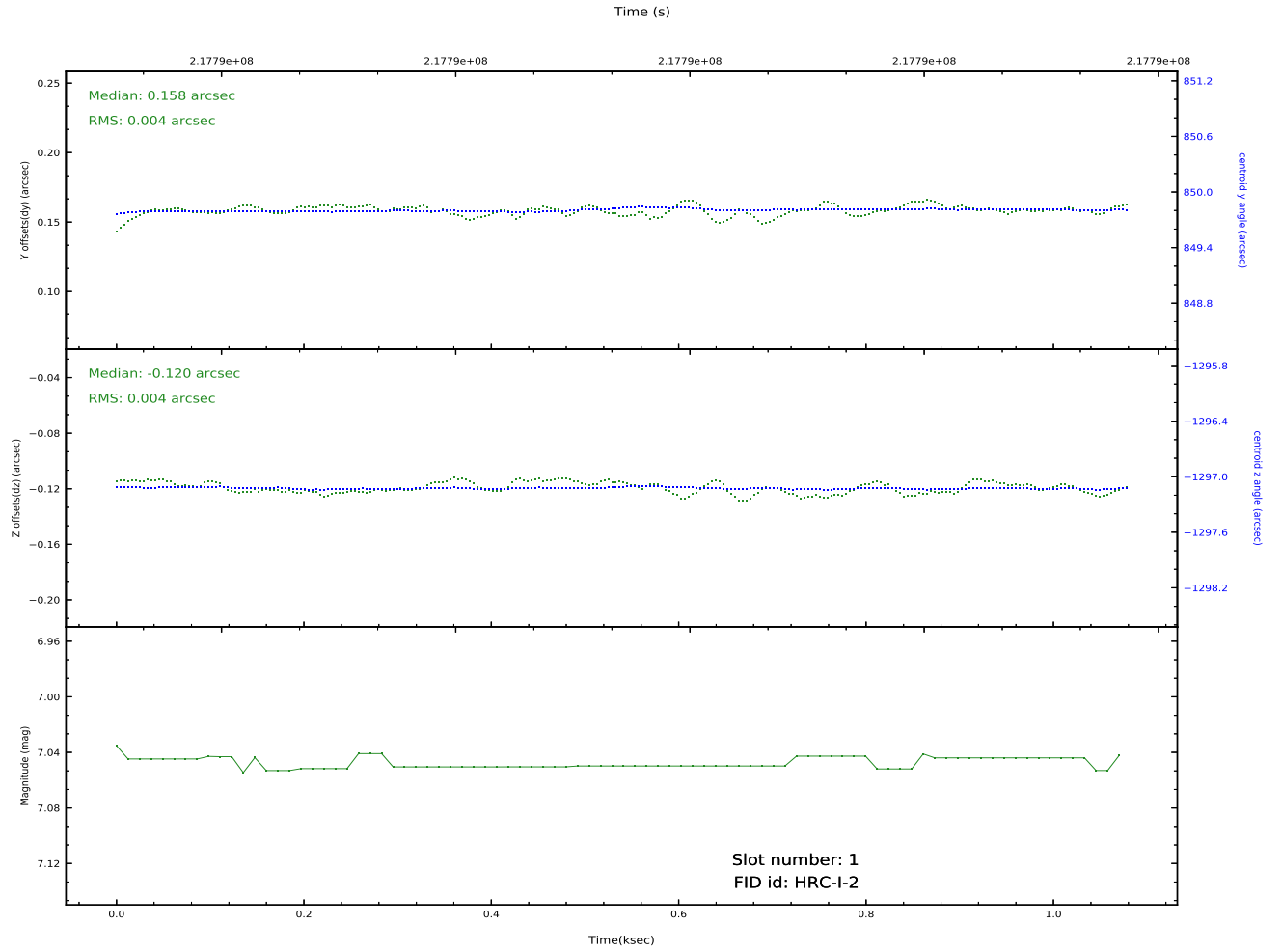
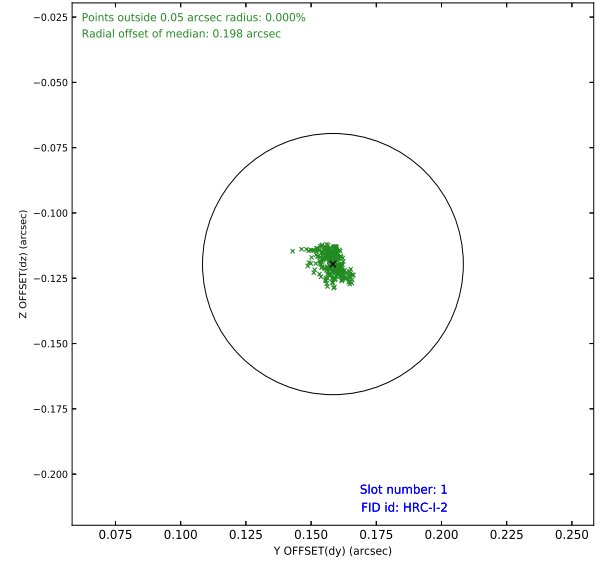
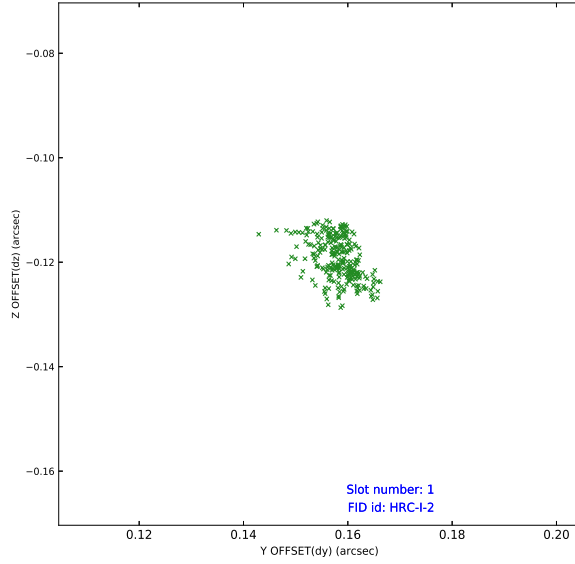


2.5 FID Slots

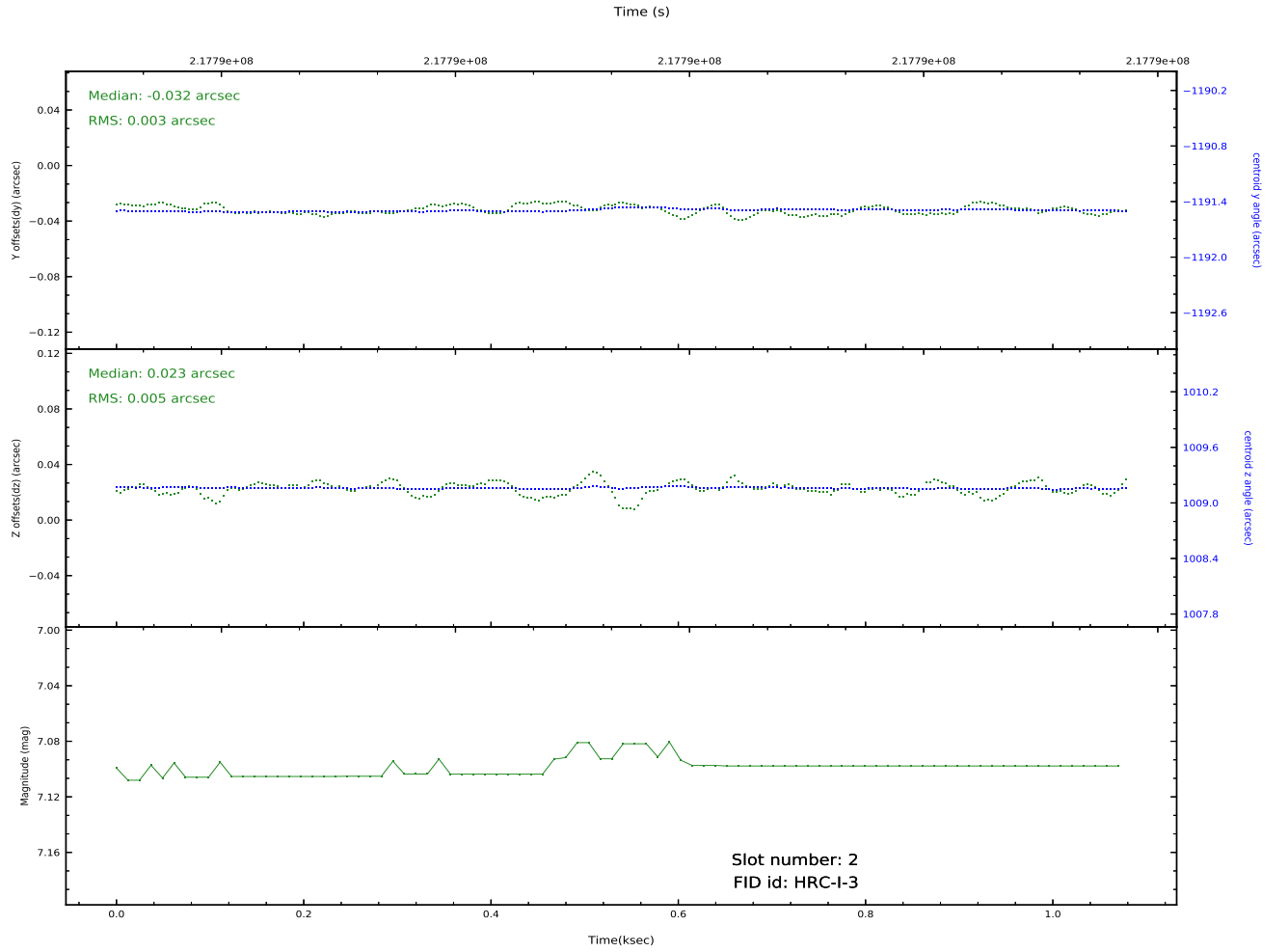
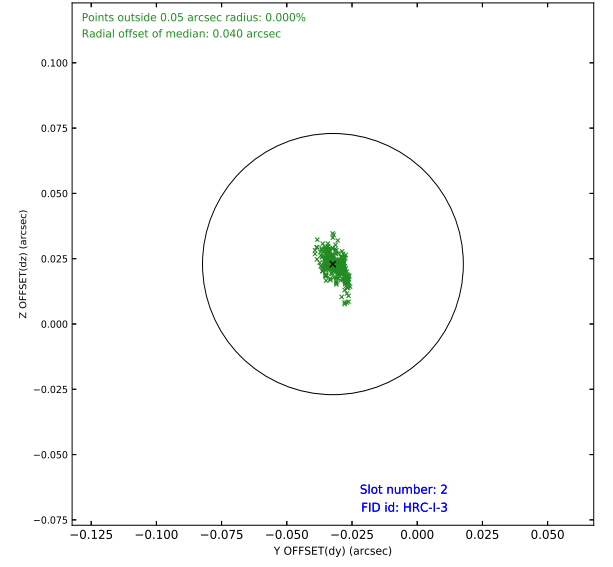
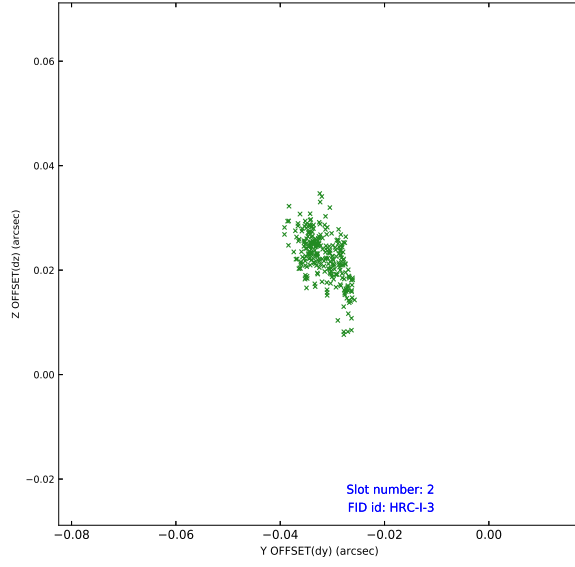
2.5.1 Slot 0



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) | 2020.10.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.079325 |

A.2 Comments