

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20664 - L2 Version 2
Chandra X-Ray Center

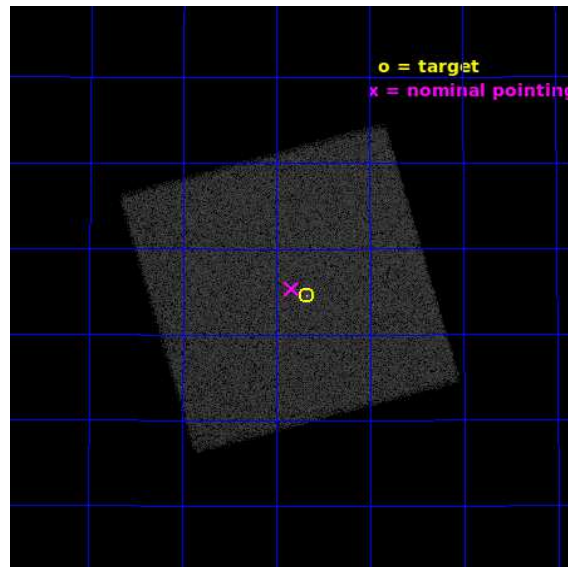
L2 Processing Date : Oct 27 2020

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1 Front

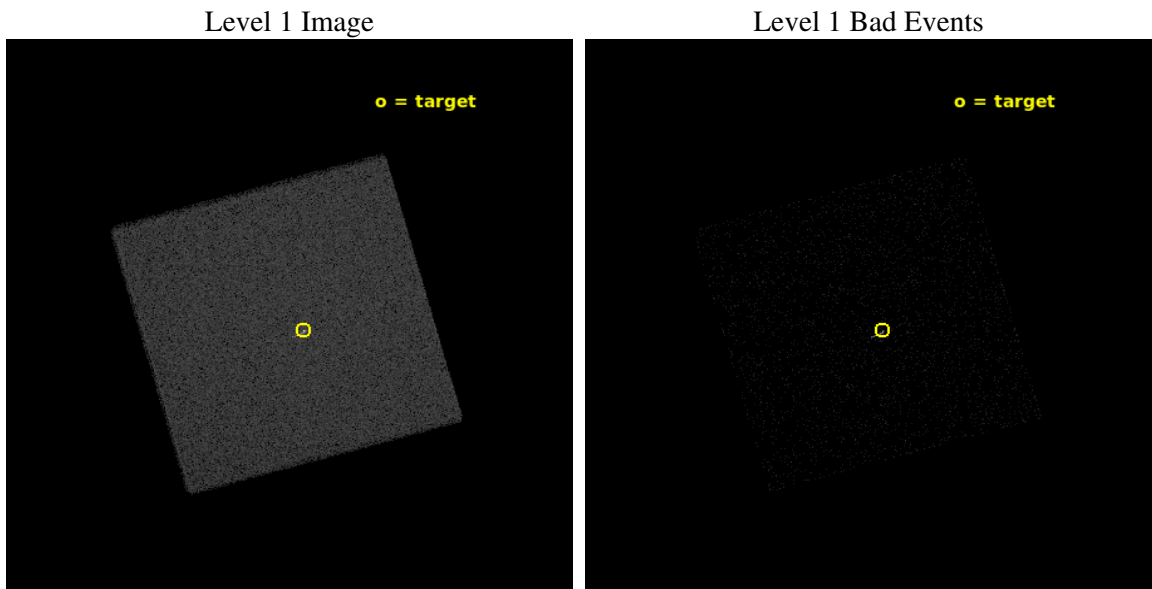
| | | |
|----------|--|---------------------------------------|
| seq_num | 291375 | Sequence number |
| obs_id | 20664 | Observation id |
| title | AO-19 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain | Proposal title |
| observer | CXC Calibration | Principal investigator |
| 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 | 332.2084410055 | Nominal RA [deg] |
| dec_nom | 45.756137546859 | Nominal Dec [deg] |
| roll_nom | 209.26307646946 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 1173.8813195229 | [s] |
| livetime | 1157.1210960425 | Ontime multiplied by DTCOR |
| l2events | 146259 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 1000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.2 | Processing system revision | ontime | 1173.8813195229 | [s] |
| caldsver | 4.9.3 | | l1events | 253535 | Number of level 1 events |
| date | 2020-10-27T19:07:23 | Date and time of file creation | | | |
| revision | 2 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

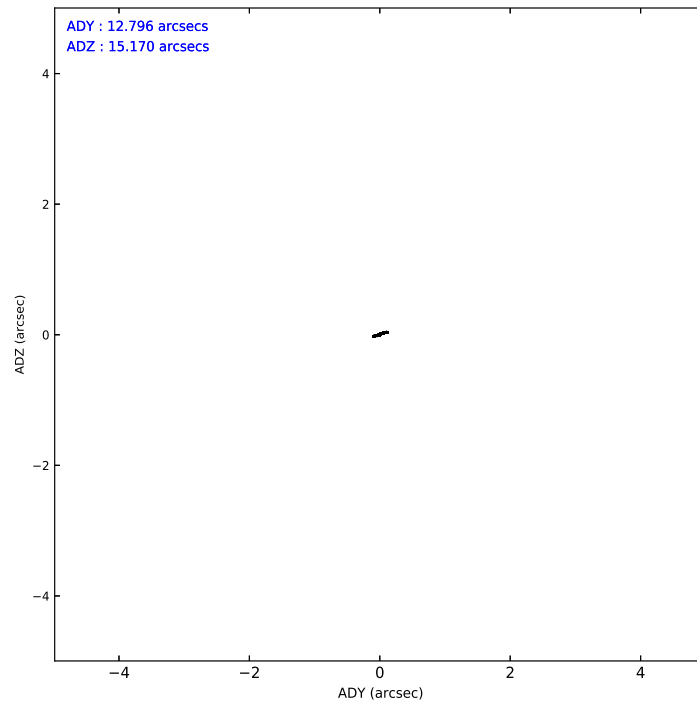
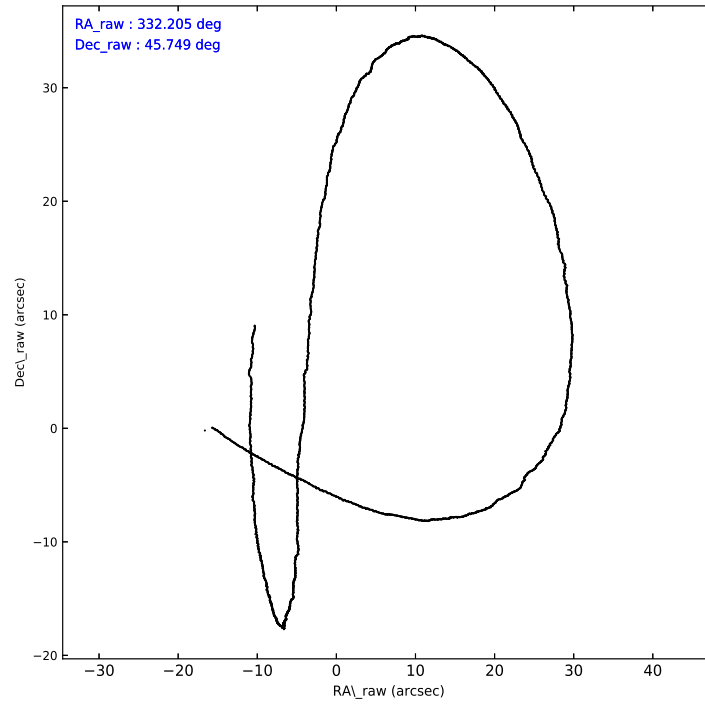
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 253535 |
| rejected events | 62685 |
| rejected % | 24% |

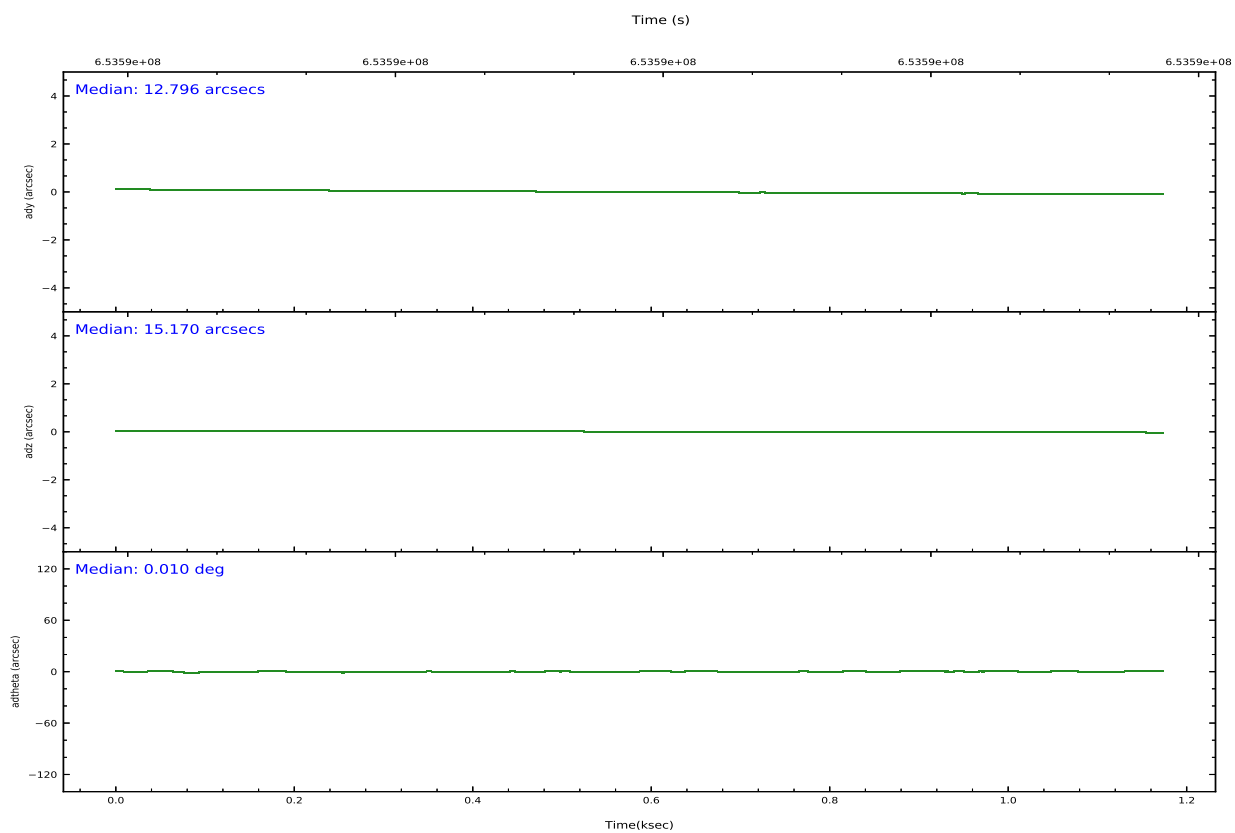
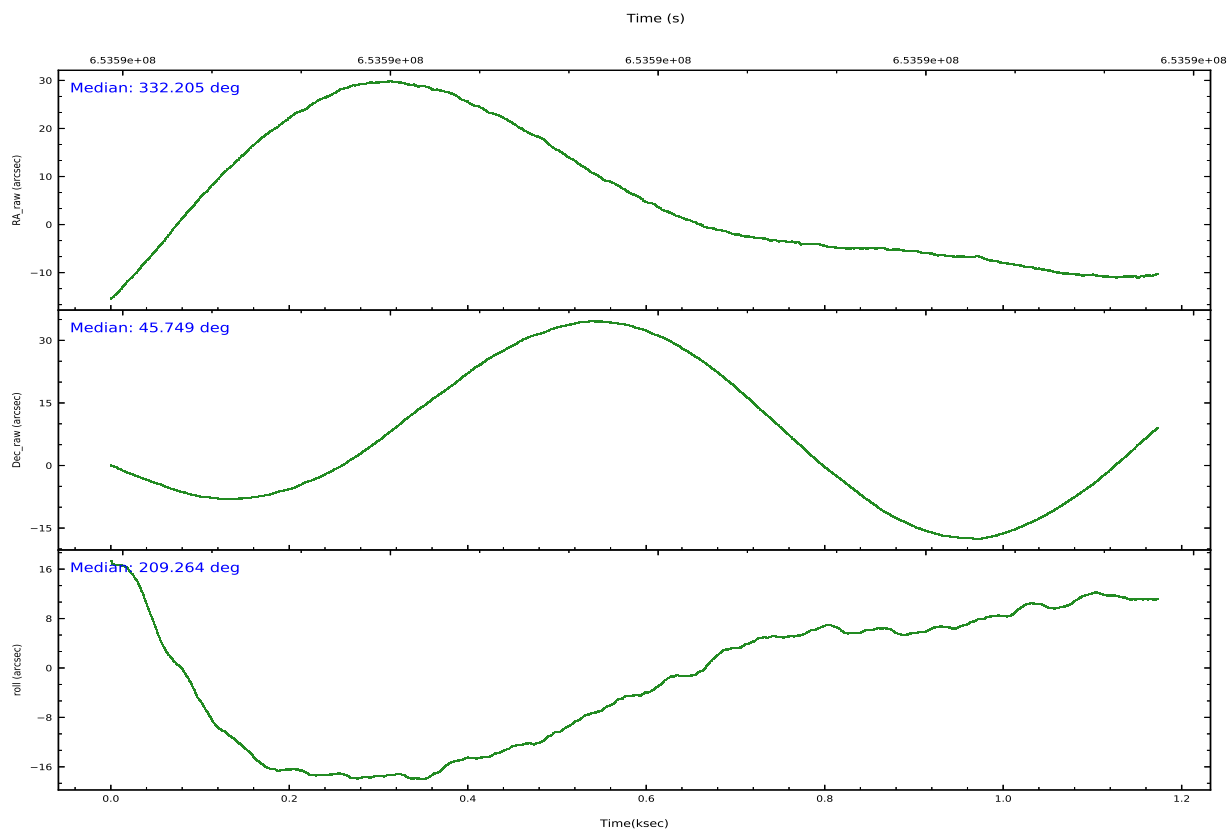
2.2 Compared Parameters

| 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 | 332.225549 | 332.2084410055 |
| [deg] Pointing Dec | 45.775460 | 45.756137546859 |
| [deg] Pointing Roll | 209.359329 | 209.26307646946 |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 |
| [mm] SIM defocus | 0 | 0.001426264420575141 |
| [mm] SIM translation stage pos | 126.985494 | 126.9829799899862 |
| [mm] SIM translation stage offset | 0 | 0.002508901615314585 |
| [s] Observation start time (MET) | 653593160.184000 | 653592732.5658 |
| Observation start date | 2018-09-17T17:38:11 | 2018-09-17T17:32:12 |
| [s] Observation end time (MET) | 653594160.184000 | 653594294.15339 |
| Observation end date | 2018-09-17T17:54:51 | 2018-09-17T17:58:14 |

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

2.3 Aspect



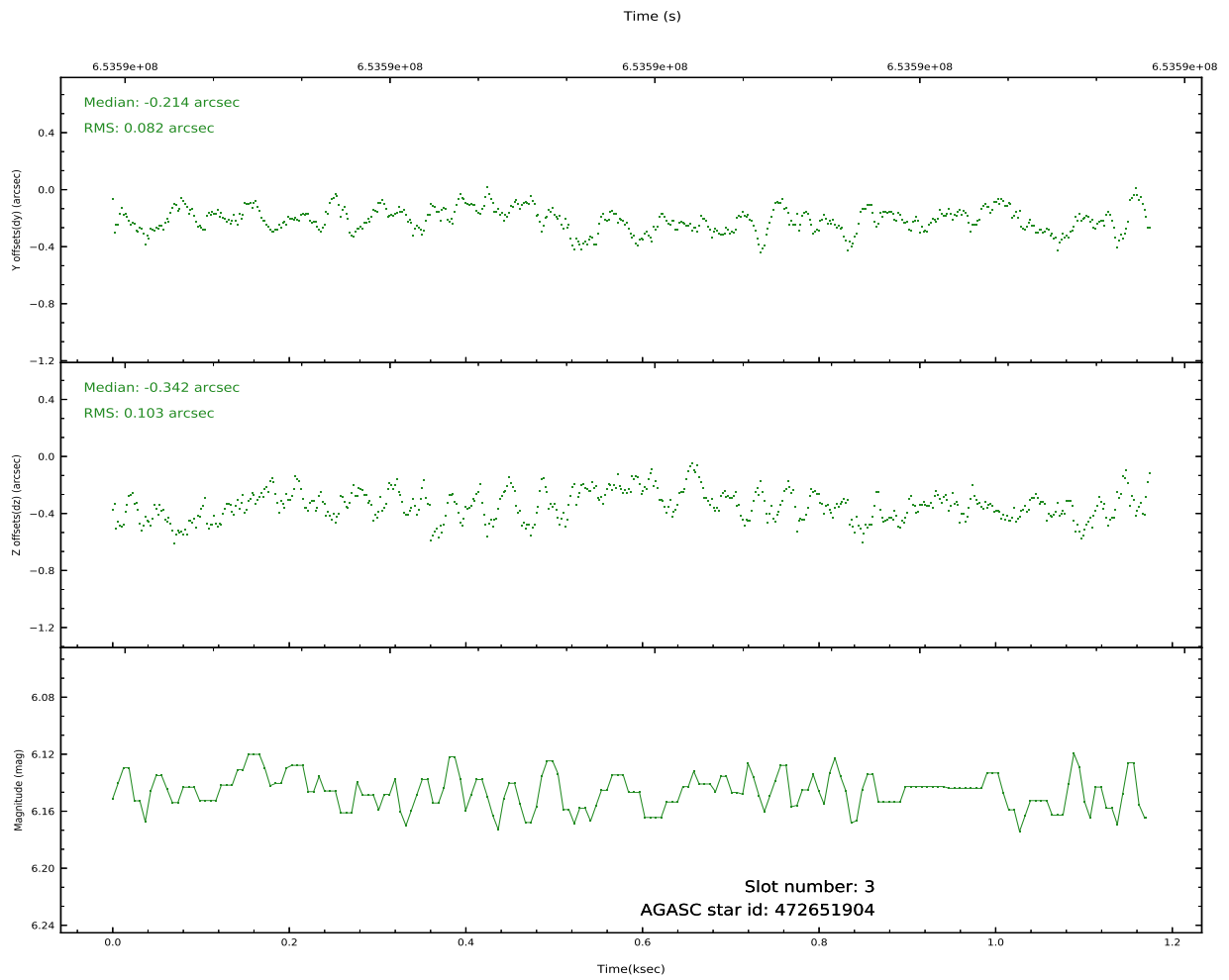
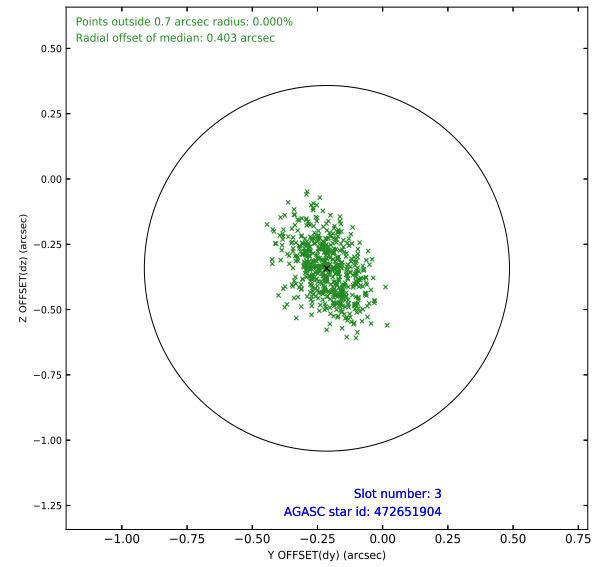
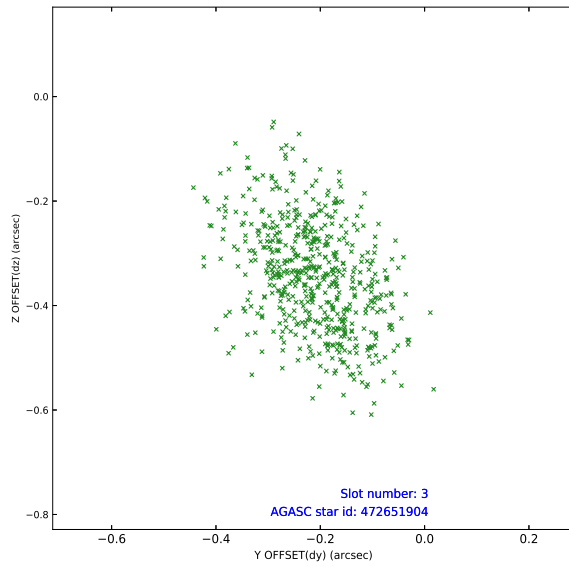


Slot Statistics

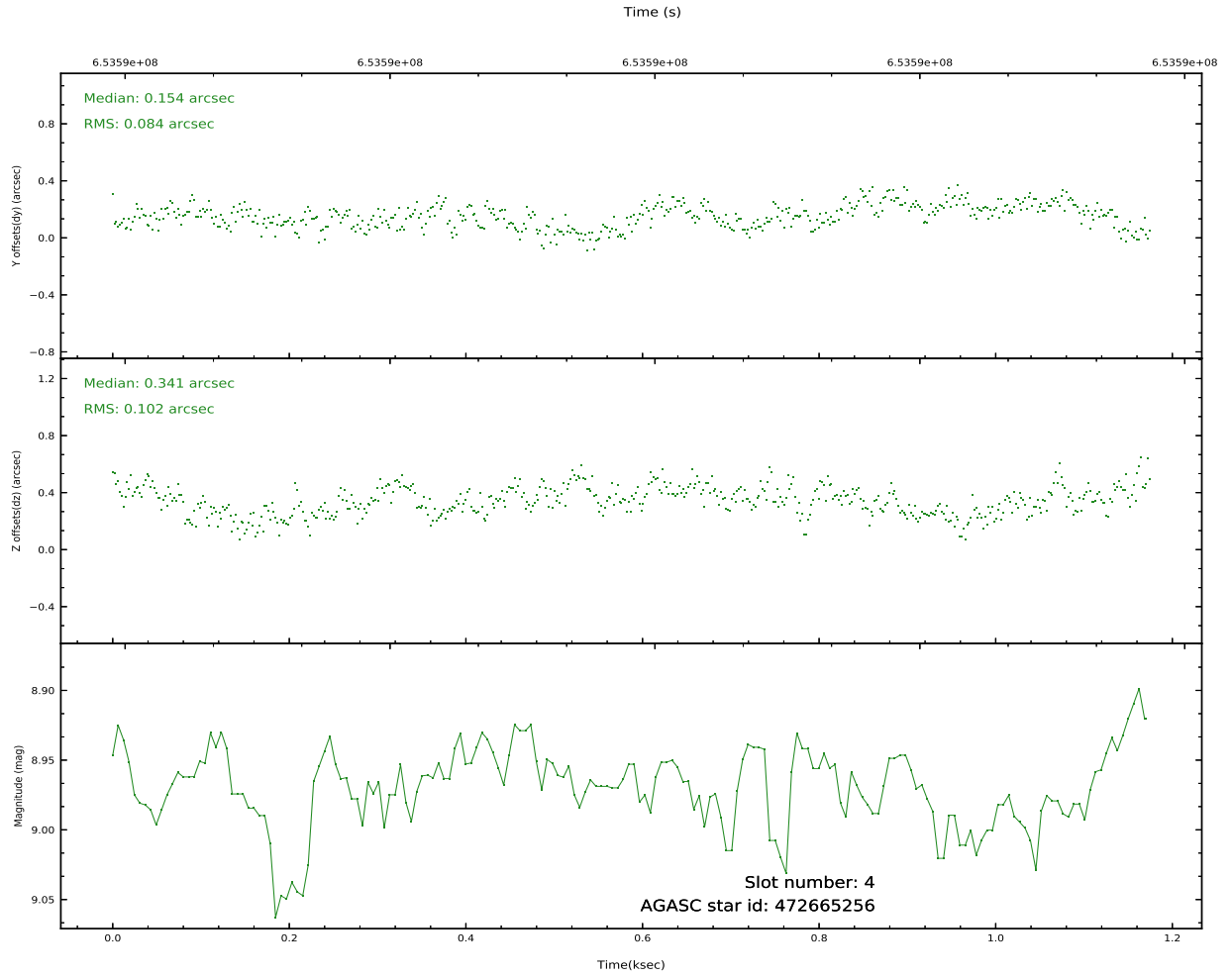
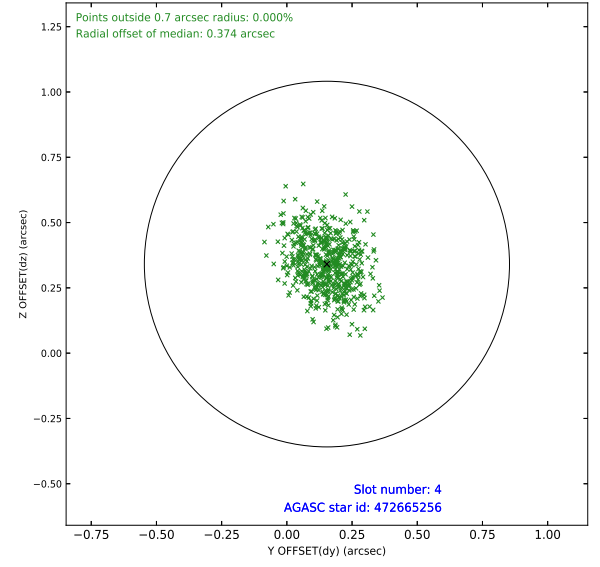
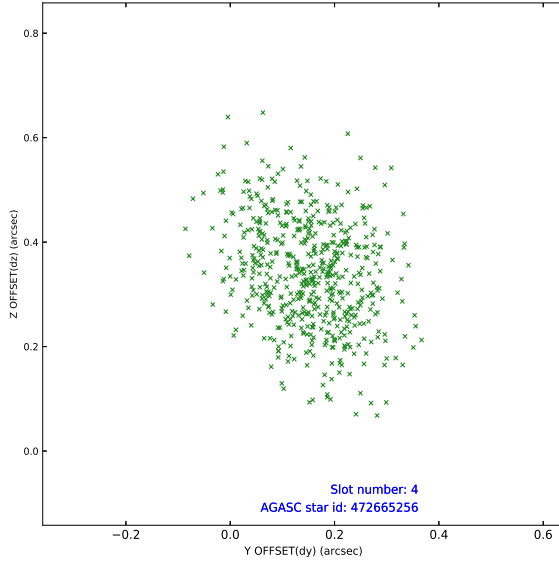
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|-------|
| 0 | FID | | HRC-I-1 | 6.99 | 287 | 1.000 | -0.086 | 0.024 | 0.008 | 0.013 | 0.000000 | 0.000000 | -768.65 | -1303 |
| 1 | FID | | HRC-I-2 | 7.03 | 287 | 1.000 | 0.304 | -0.200 | 0.007 | 0.015 | 0.000000 | 0.000000 | 841.70 | -1309 |
| 2 | FID | | HRC-I-3 | 7.08 | 287 | 1.000 | -0.100 | 0.087 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1194.17 | 996 |
| 3 | GUIDE | used | 472651904 | 6.15 | 574 | 1.000 | -0.214 | -0.342 | 0.140 | 0.230 | 332.170077 | 45.742257 | 179.63 | 30 |
| 4 | GUIDE | used | 472665256 | 8.97 | 574 | 1.000 | 0.154 | 0.341 | 0.138 | 0.234 | 332.808125 | 46.195041 | -2008.55 | -613 |
| 5 | GUIDE | used | 472533912 | 9.12 | 574 | 1.000 | 0.197 | 0.114 | 0.161 | 0.264 | 331.791136 | 46.368695 | -111.72 | -2398 |
| 6 | GUIDE | used | 472655152 | 9.40 | 574 | 1.000 | 0.054 | -0.092 | 0.245 | 0.385 | 332.504239 | 45.862991 | -764.78 | 58 |
| 7 | GUIDE | used | 472525528 | 6.63 | 573 | 1.000 | -0.198 | -0.009 | 0.124 | 0.210 | 331.551102 | 45.248694 | 2413.54 | 804 |

2.4 Star Slots

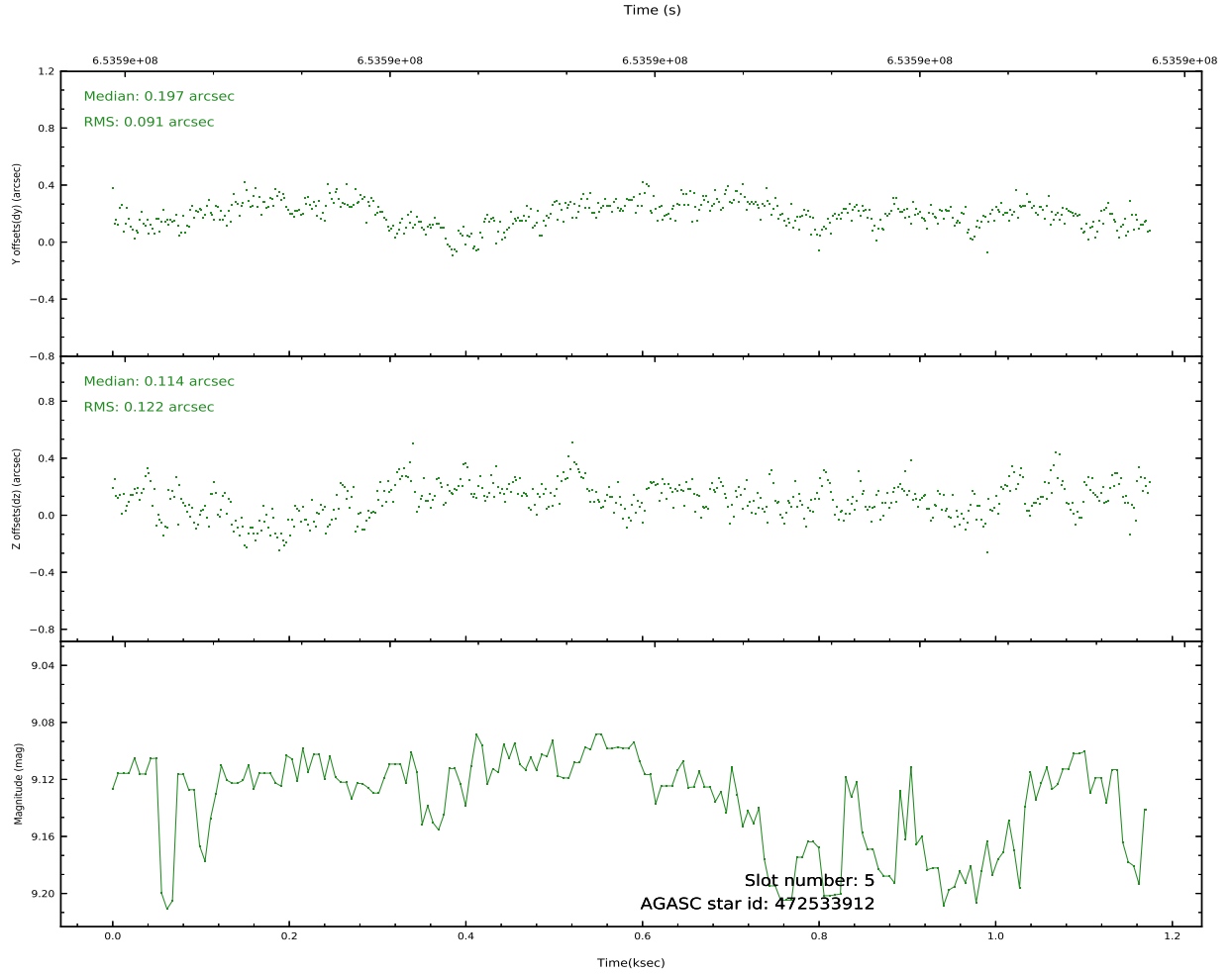
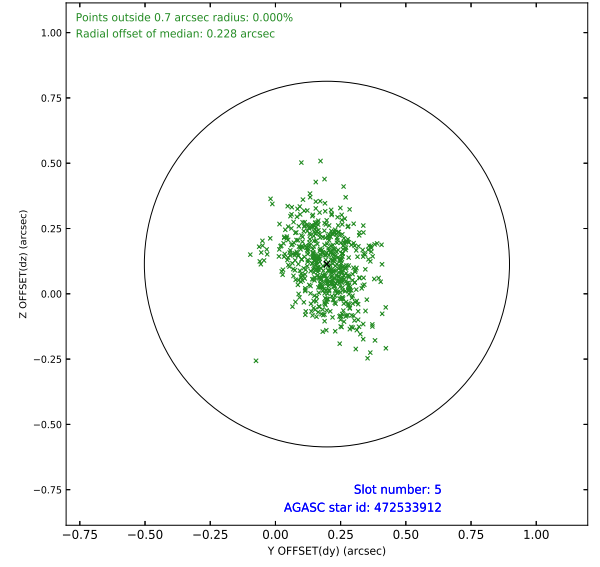
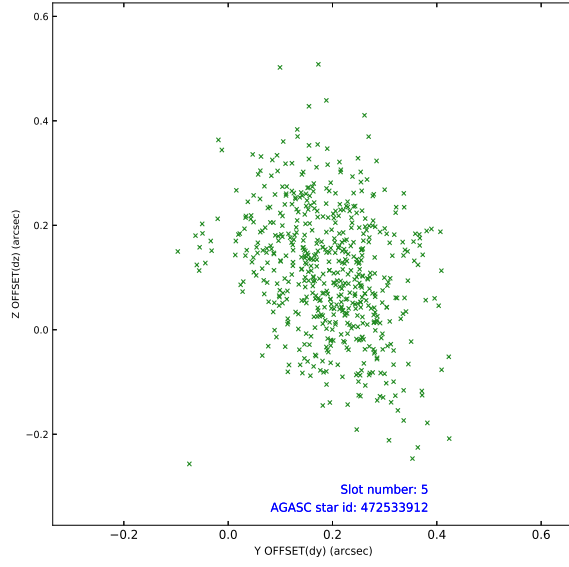
2.4.1 Slot 3



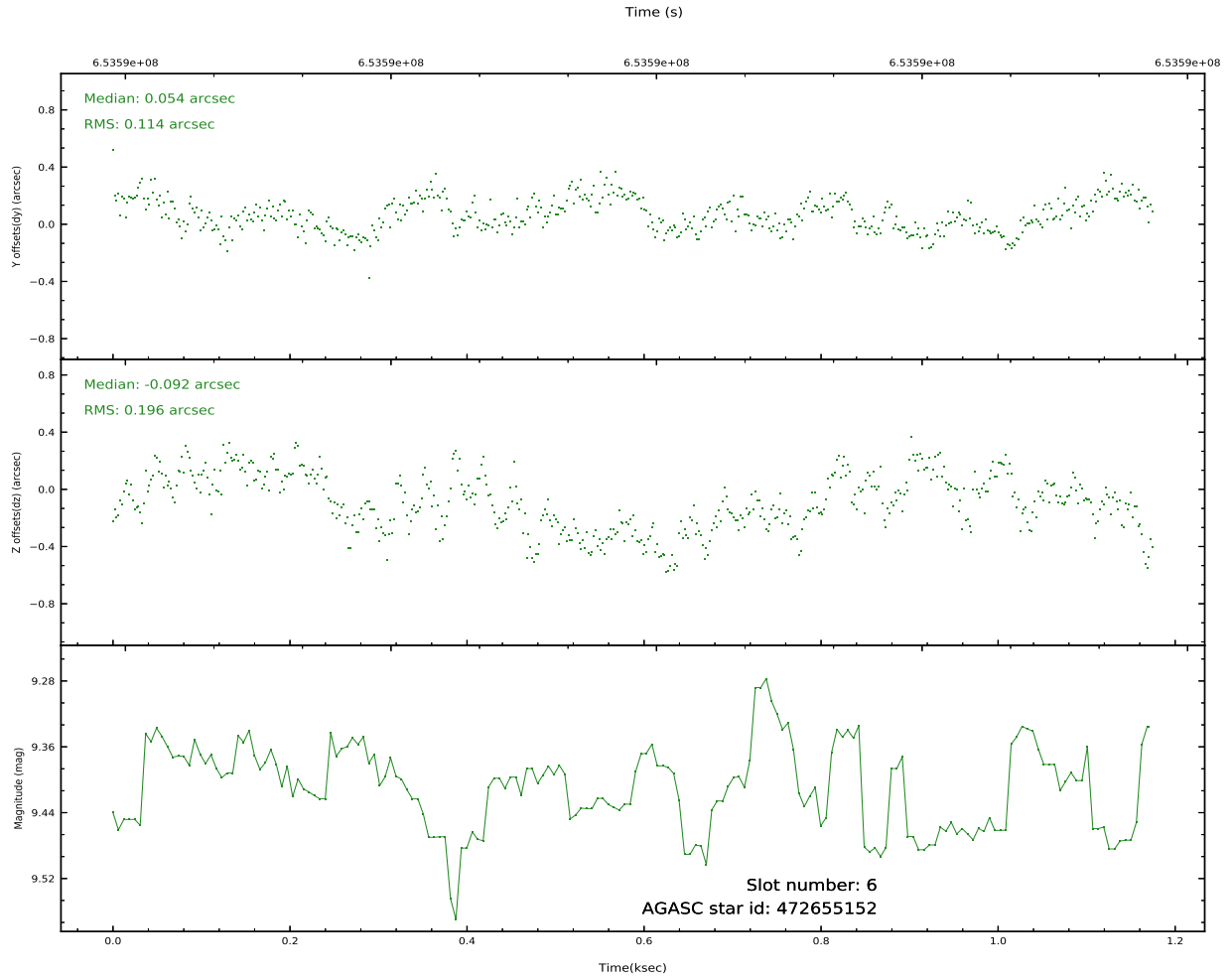
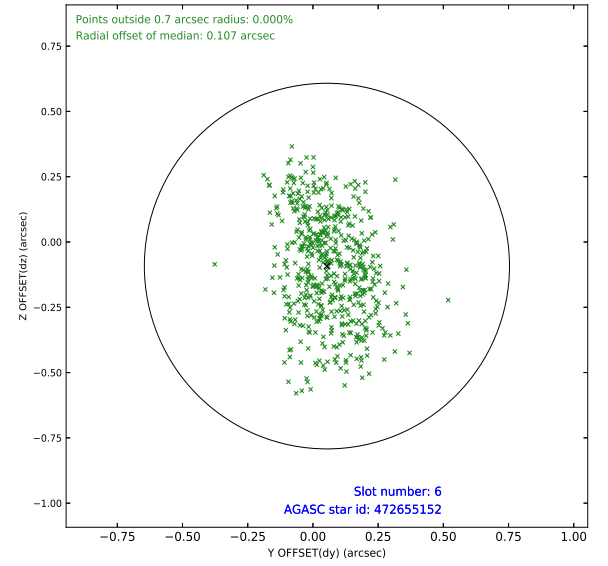
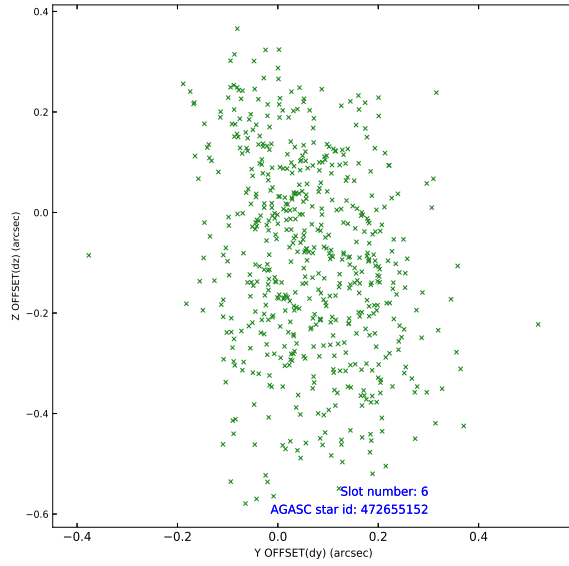
2.4.2 Slot 4



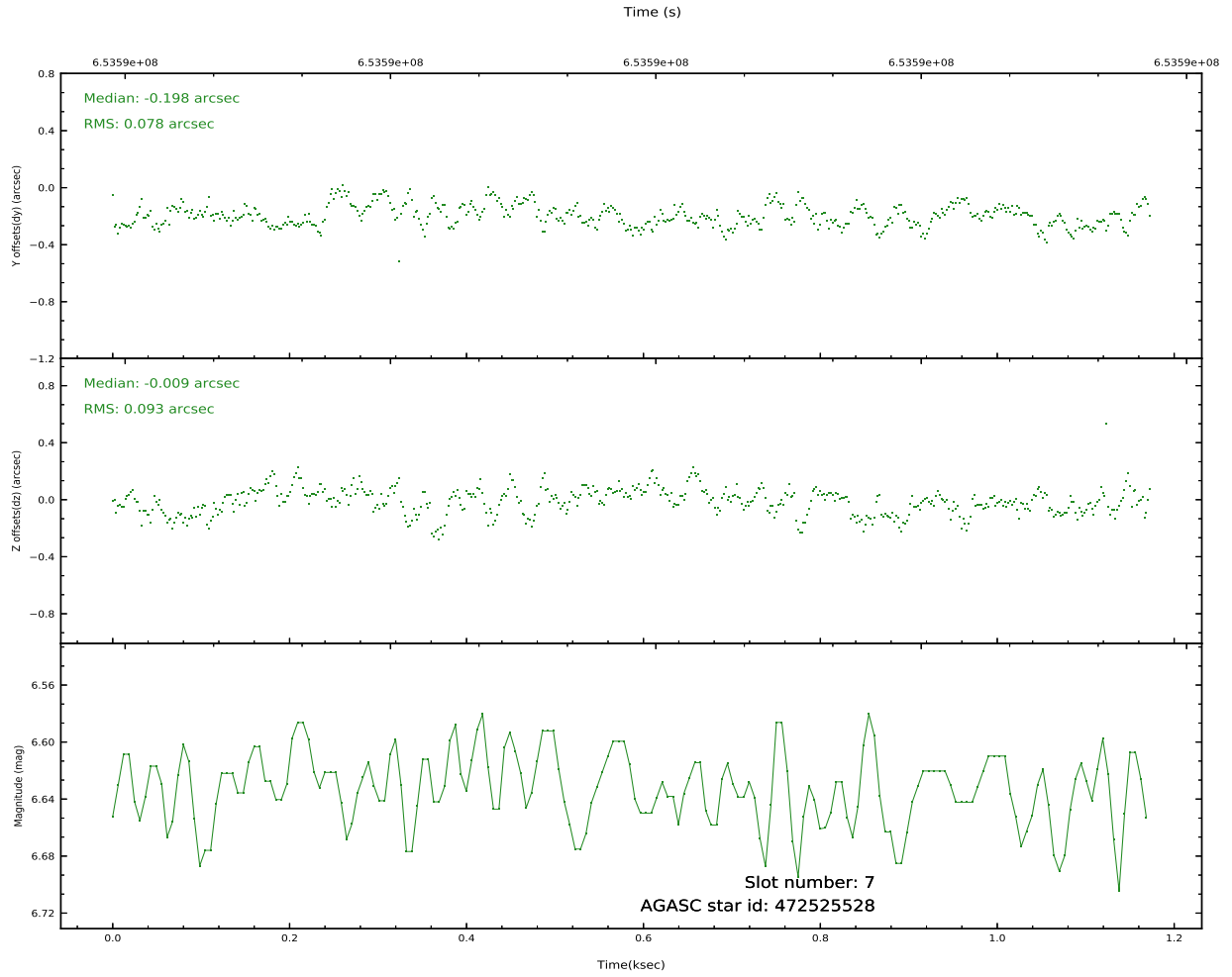
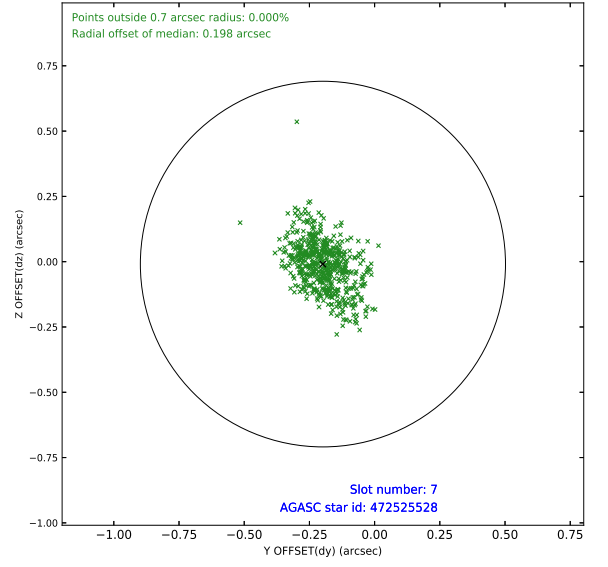
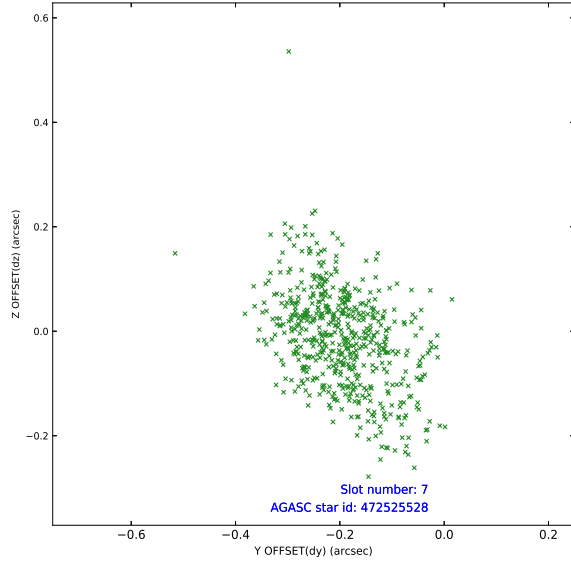
2.4.3 Slot 5



2.4.4 Slot 6

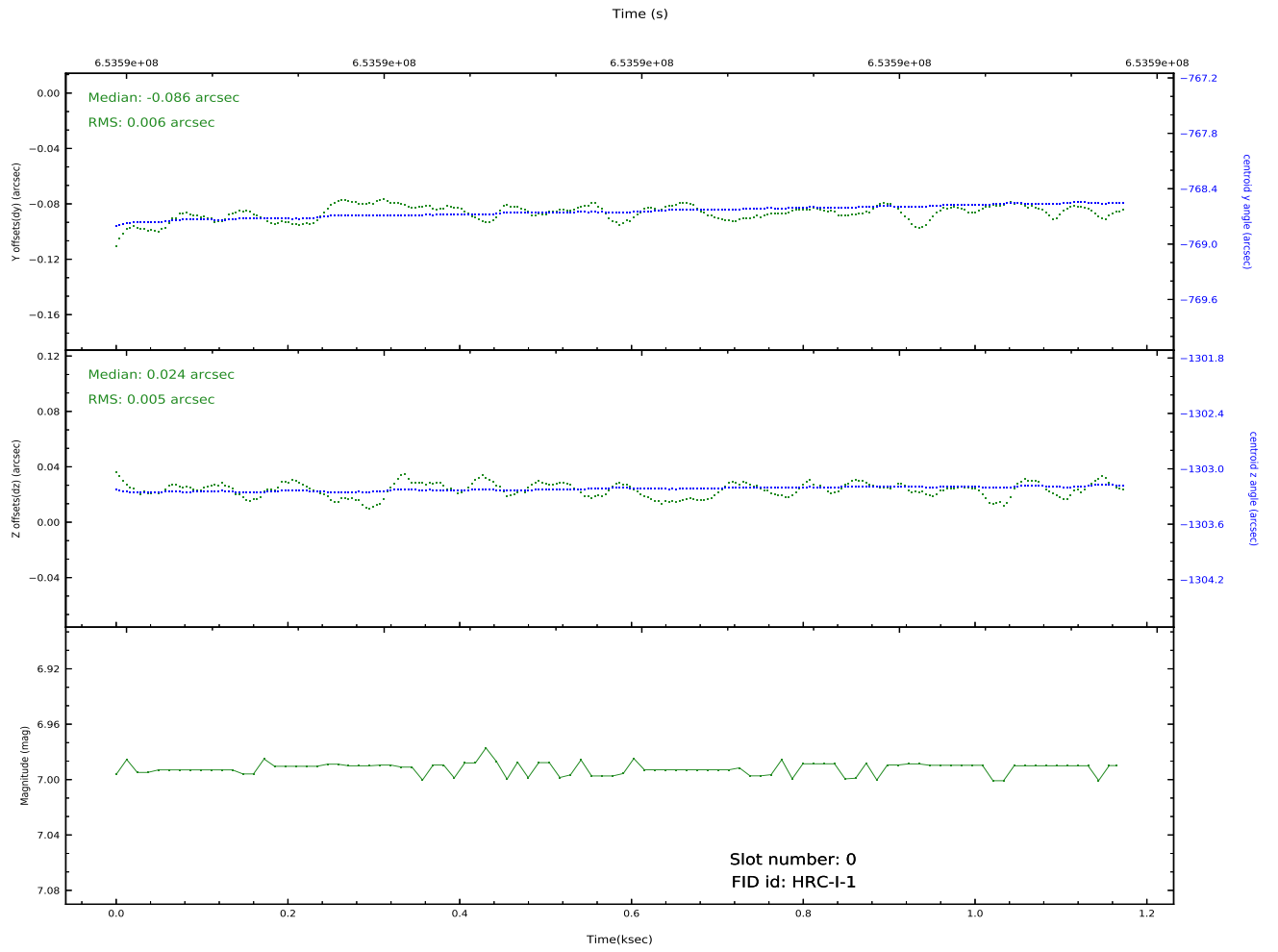
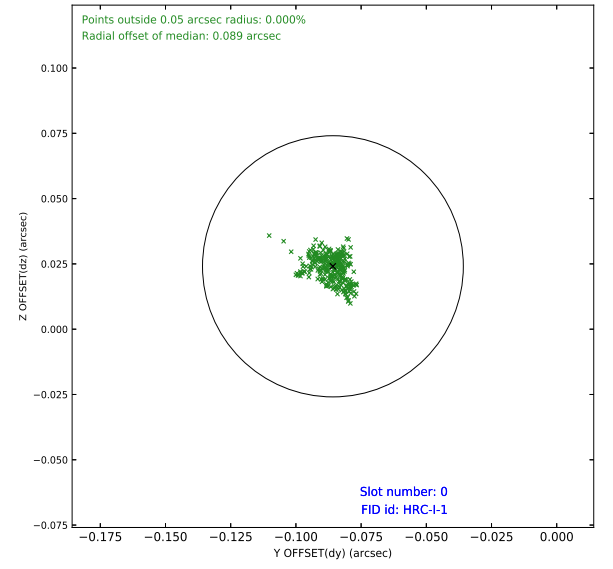
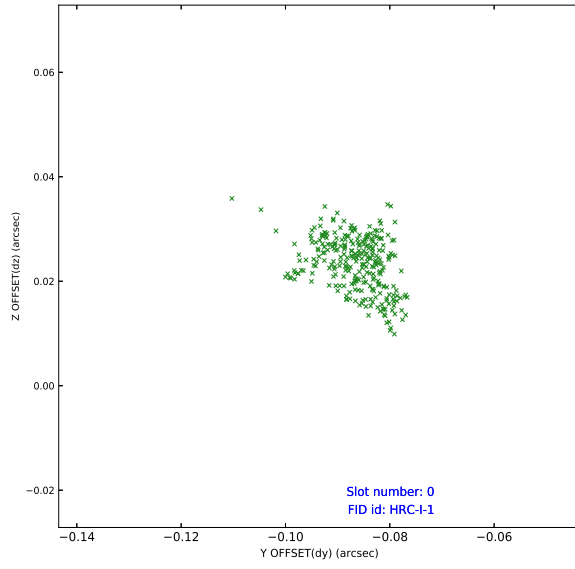


2.4.5 Slot 7

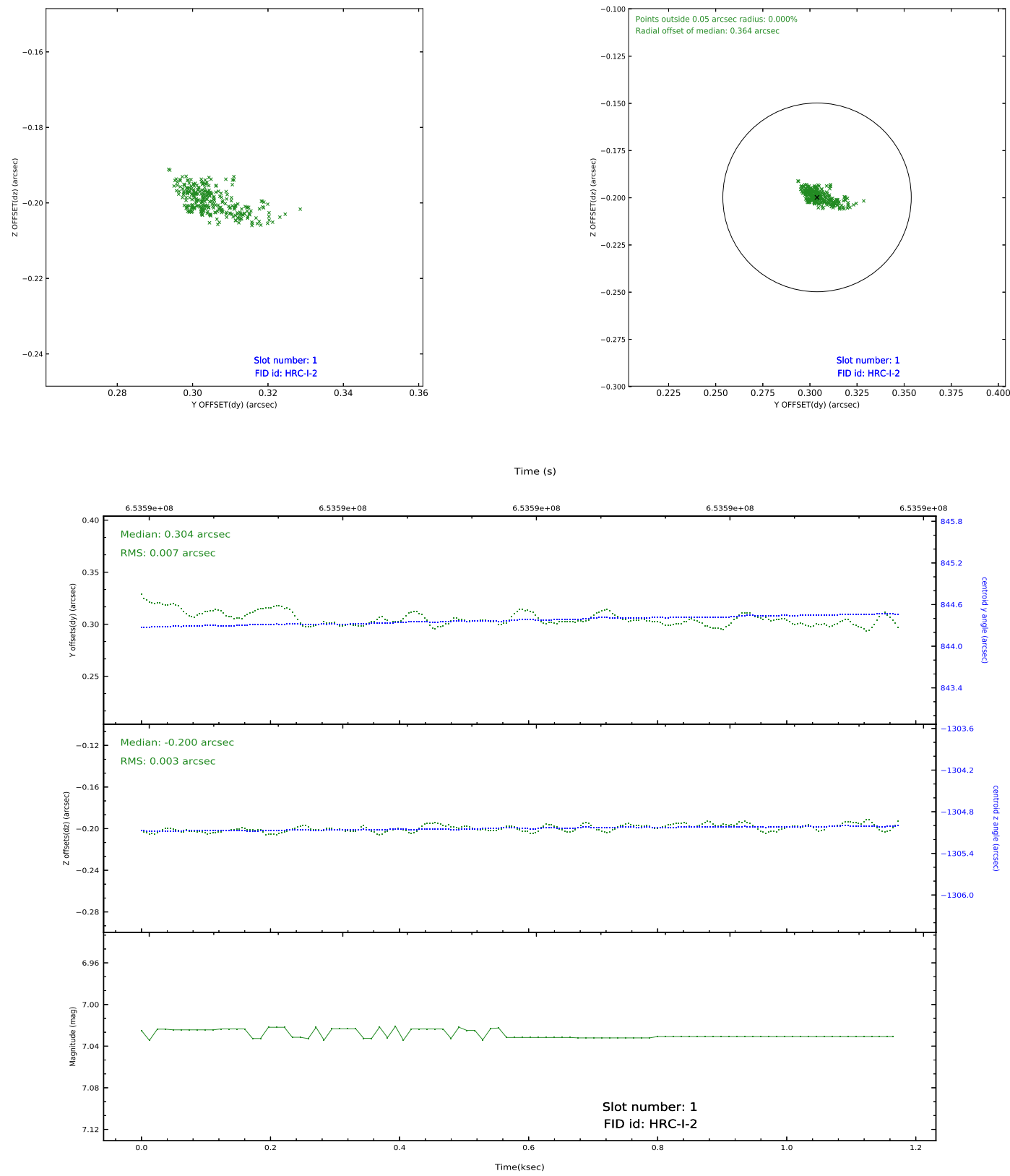


2.5 FID Slots

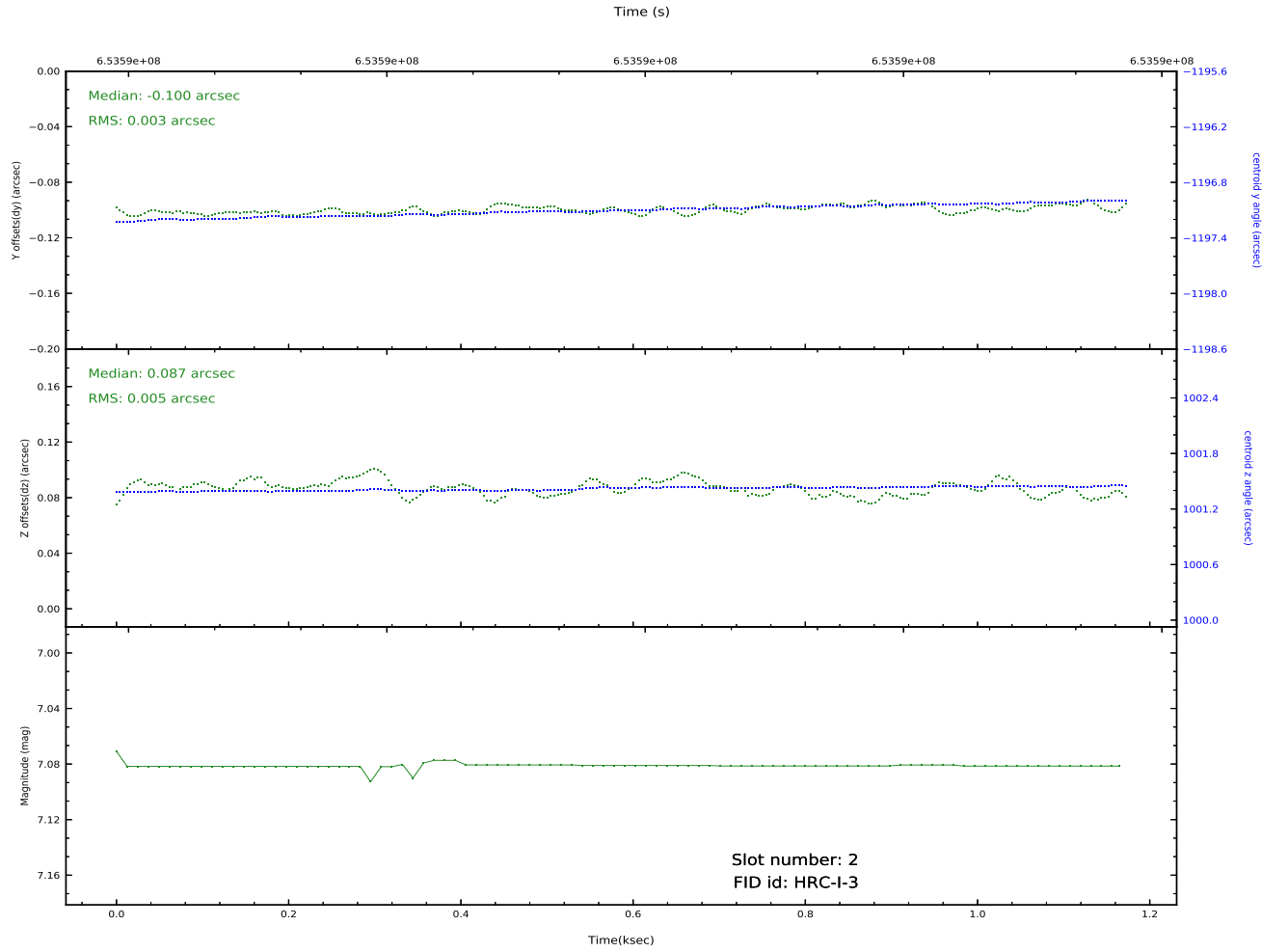
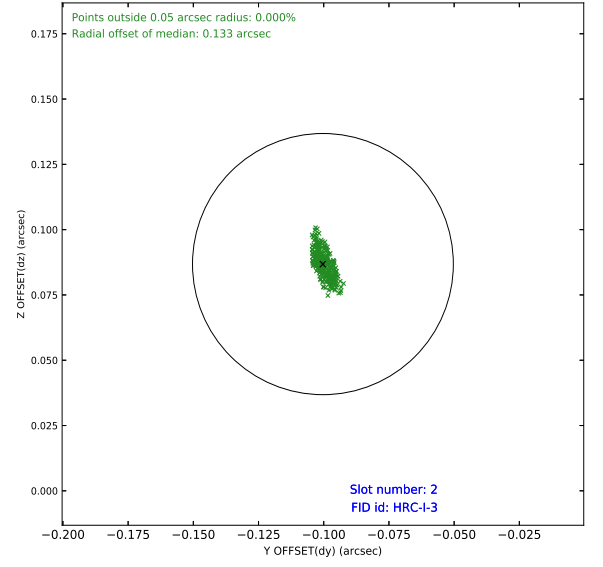
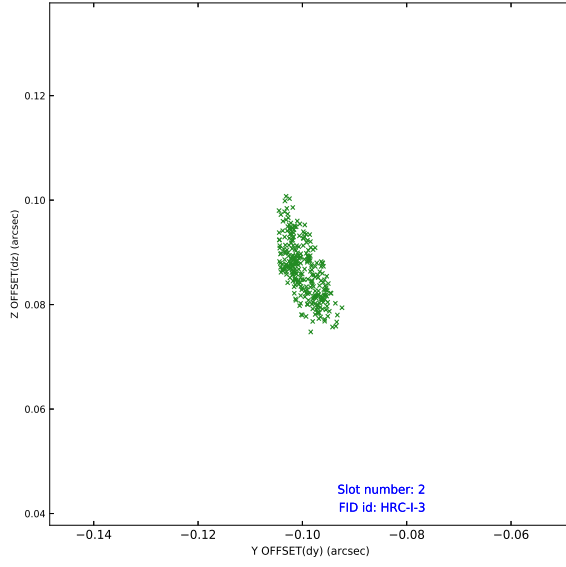
2.5.1 Slot 0



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) | 2020.10.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.1738813198805 |

A.2 Comments