

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6554 - L2 Version 5
Chandra X-Ray Center

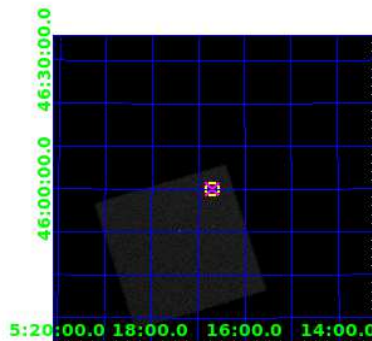
L2 Processing Date : Oct 12 2020

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1 Front

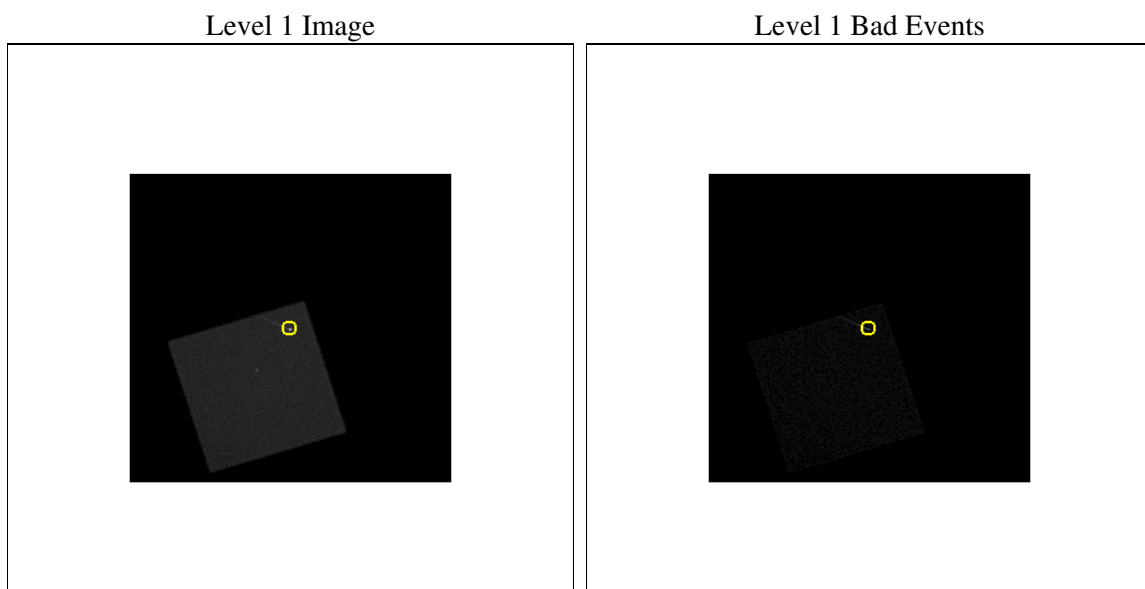
| | | |
|-----------|--|---------------------------------------|
| seq_num | 290647 | Sequence number |
| obs_id | 6554 | Observation id |
| title | Improving the De-Gap Corrections for the HRC-I | Proposal title |
| observer | CXC Calibration | Principal investigator |
| object | Capella | Source name |
| ra_targ | 79.1725 | Observer's specified target RA [deg] |
| dec_targ | 45.998 | Observer's specified target Dec [deg] |
| ra_nom | 79.169340301648 | Nominal RA [deg] |
| dec_nom | 46.001789786473 | Nominal Dec [deg] |
| roll_nom | 207.71071168058 | Nominal Roll [deg] |
| revision | 5 | Processing version of data |
| ontime | 5185.7314900756 | [s] |
| liveltime | 5139.7950638394 | Ontime multiplied by DTCOR |
| l2events | 309803 | 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 | 5000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 5185.7314900756 | [s] |
| caldbver | 4.9.2 | | l1events | 509576 | Number of level 1 events |
| date | 2020-10-12T06:30:10 | Date and time of file creation | | | |
| revision | 5 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

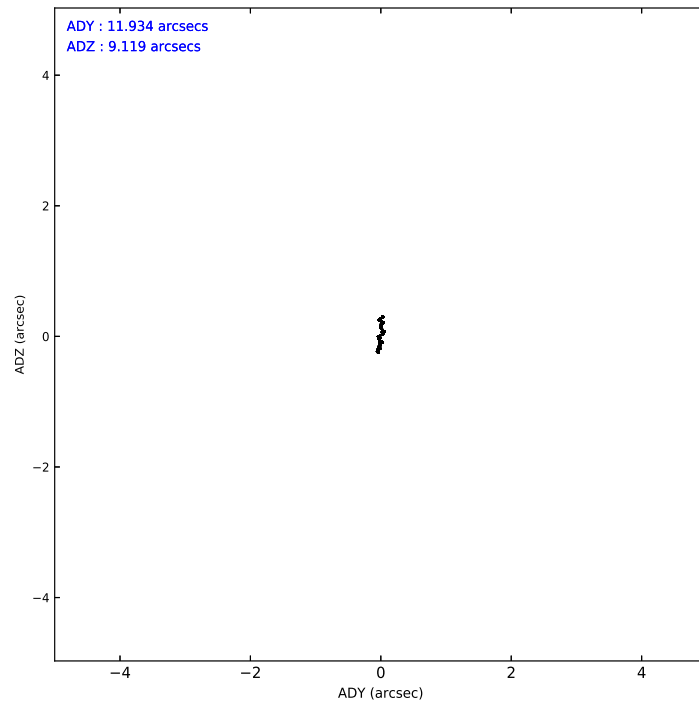
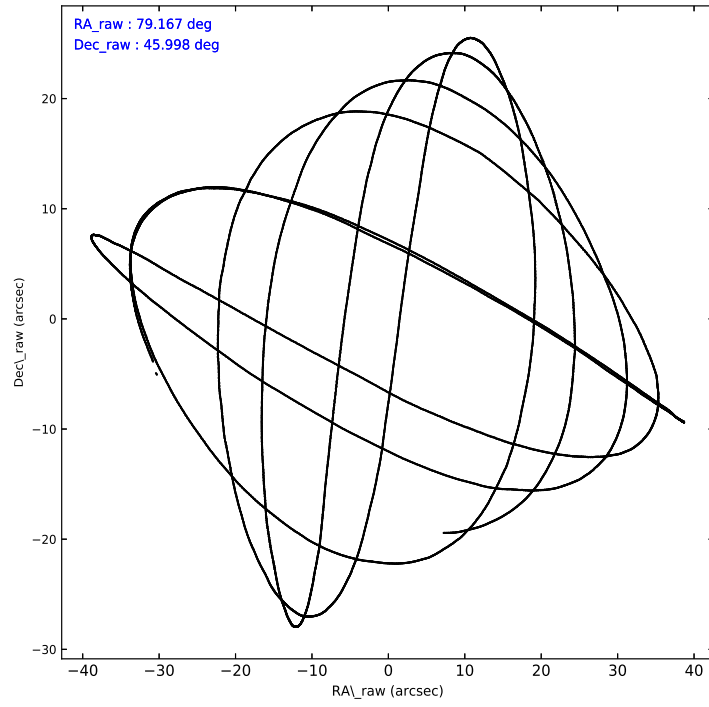
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 509576 |
| rejected events | 93545 |
| rejected % | 18% |

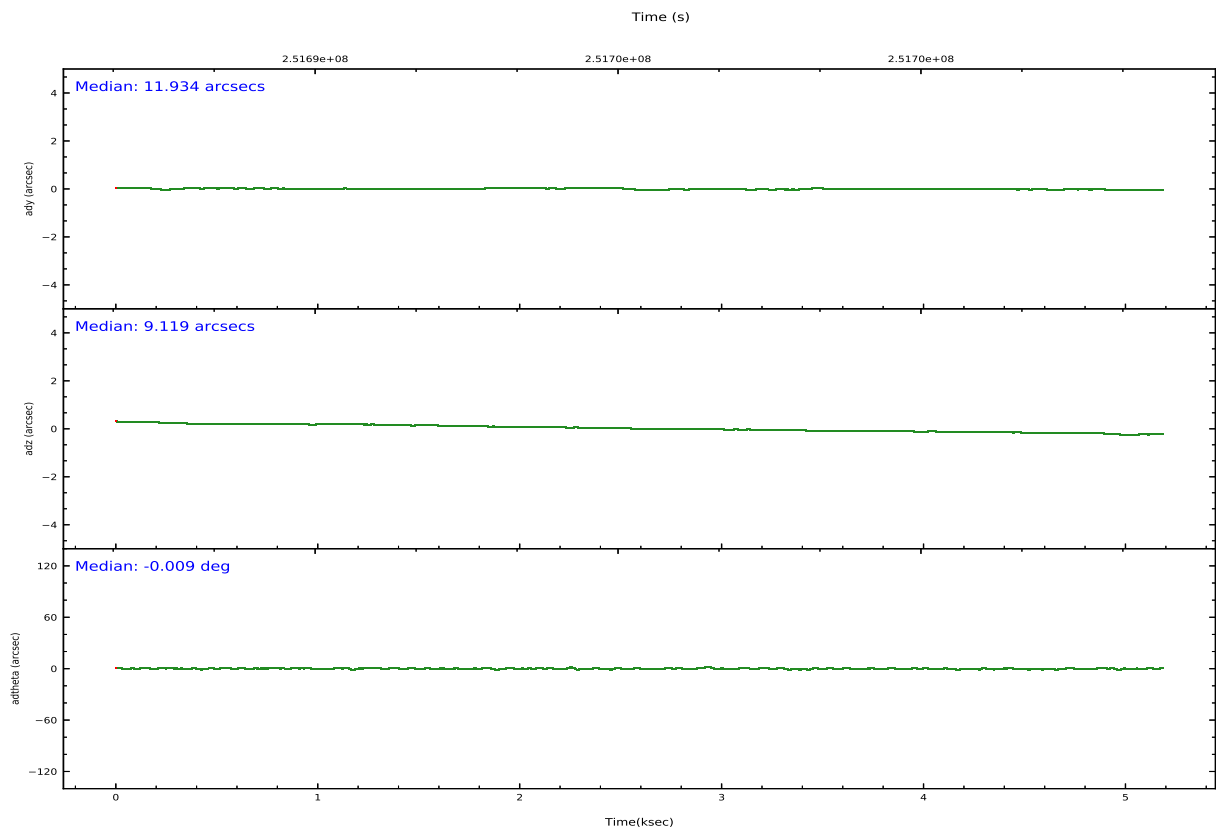
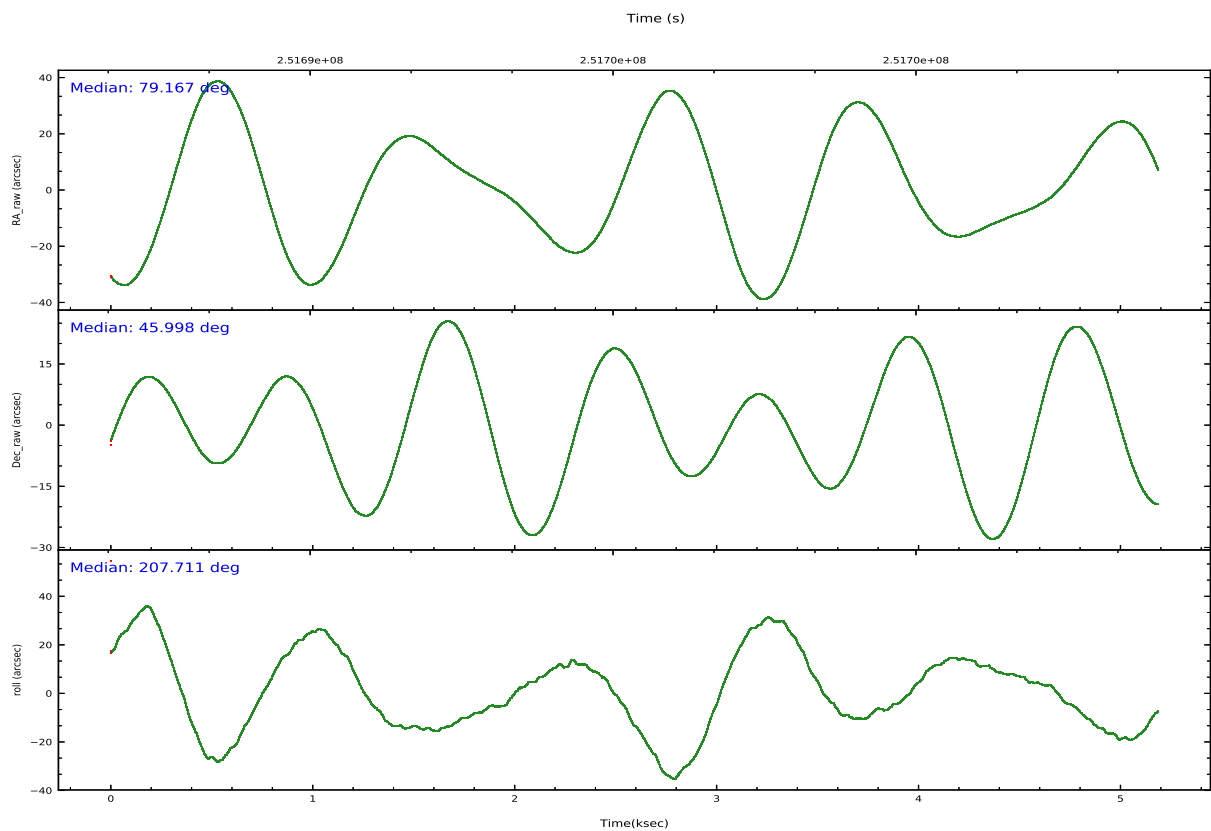
2.2 Compared Parameters

| 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 | 79.186600 | 79.16934030164801 |
| [deg] Pointing Dec | 46.020865 | 46.001789786473 |
| [deg] Pointing Roll | 207.792079 | 207.71071168058 |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 |
| [mm] SIM defocus | 0 | 0.001426264420575141 |
| [mm] SIM translation stage pos | 81.985494 | 81.98930766857005 |
| [mm] SIM translation stage offset | 45 | 44.99618122303151 |
| [s] Observation start time (MET) | 251692701.184000 | 251692324.90537 |
| Observation start date | 2005-12-23T02:37:17 | 2005-12-23T02:32:04 |
| [s] Observation end time (MET) | 251697701.184000 | 251698968.44317 |
| Observation end date | 2005-12-23T04:00:37 | 2005-12-23T04:22:48 |

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

2.3 Aspect



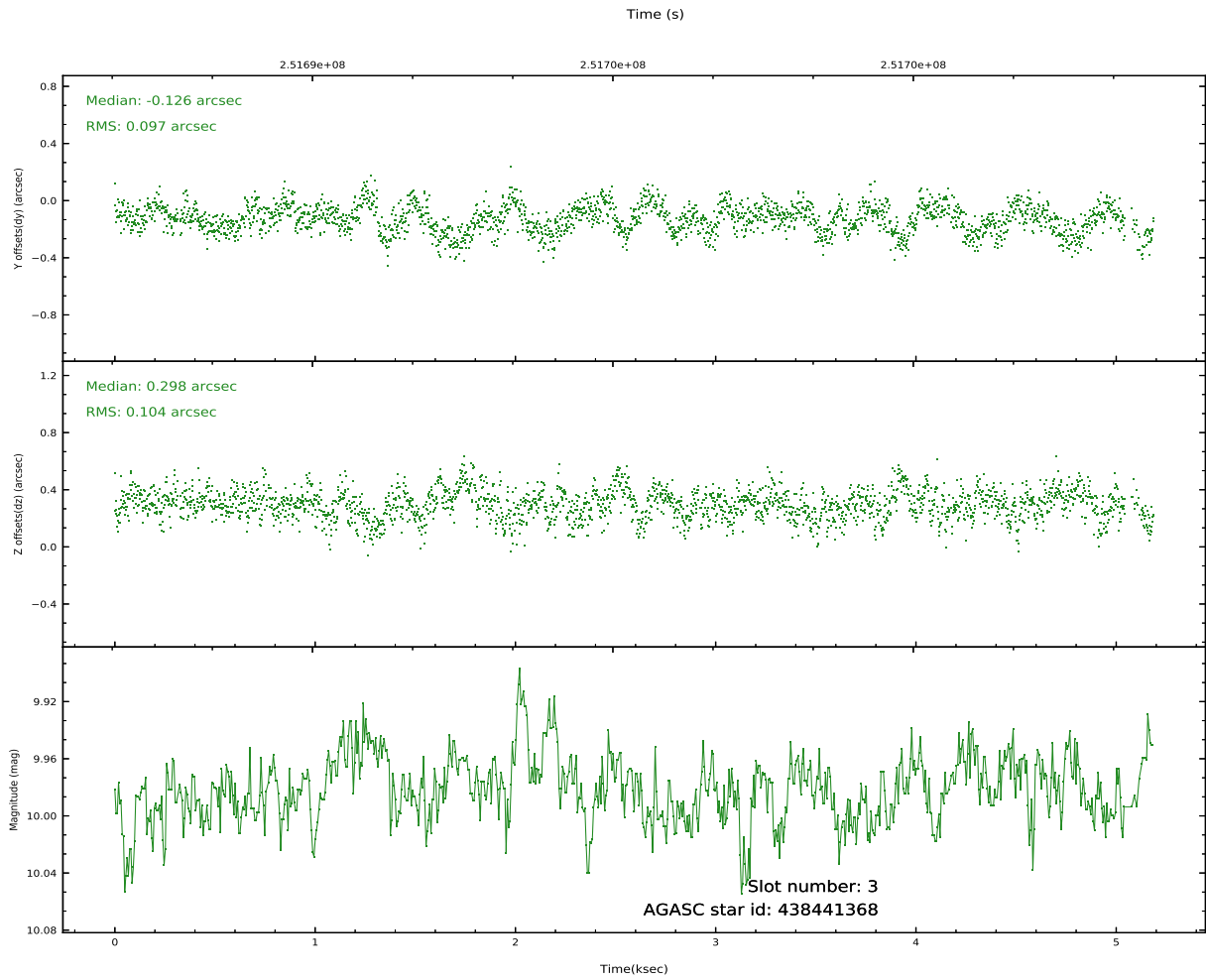
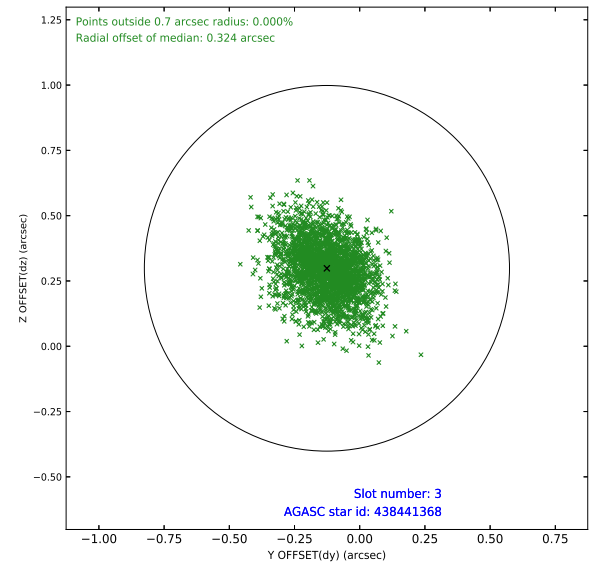
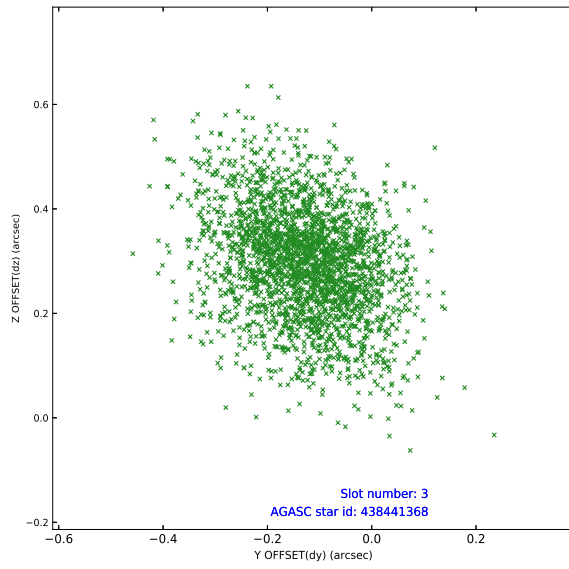


Slot Statistics

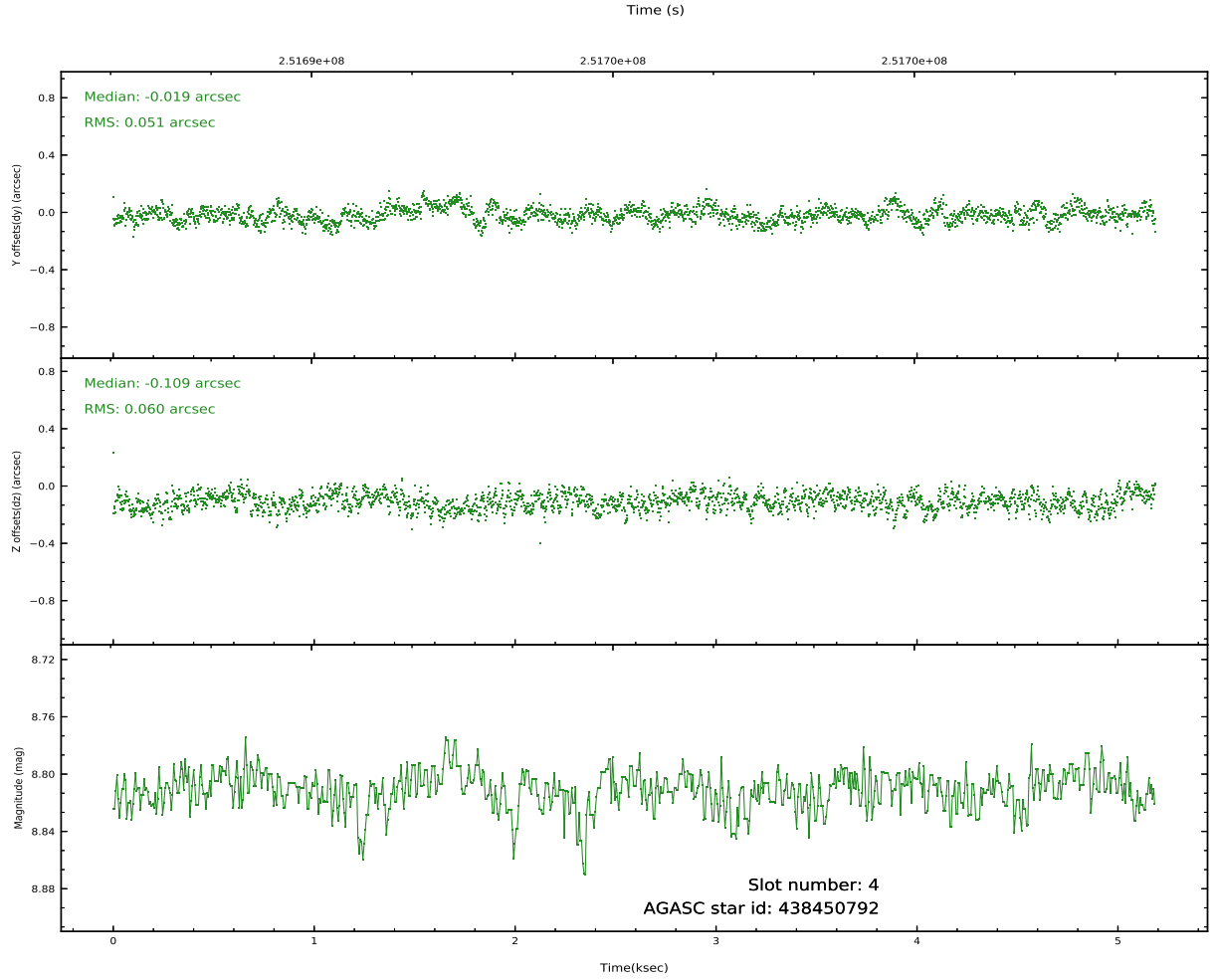
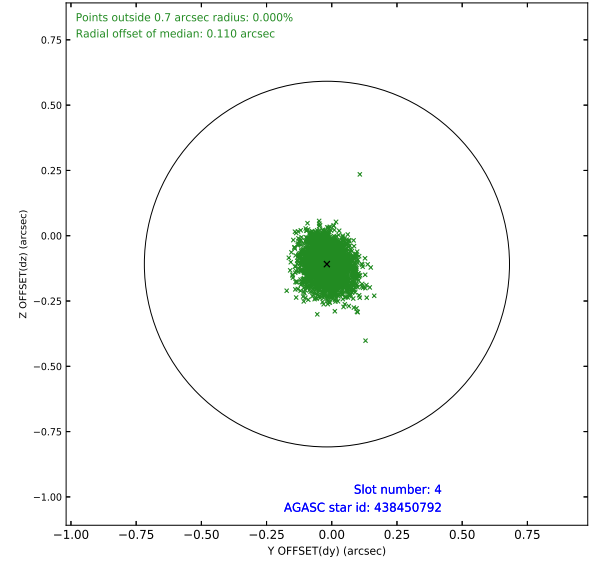
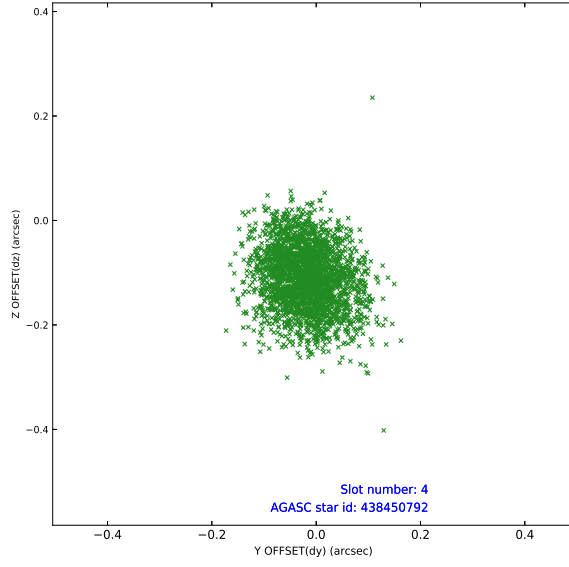
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|-----------|-----------|----------|-------|
| 0 | FID | | HRC-I-1 | 7.02 | 1266 | 1.000 | -0.409 | -0.248 | 0.008 | 0.014 | 0.000000 | 0.000000 | -766.16 | -377 |
| 1 | FID | | HRC-I-3 | 7.05 | 1265 | 1.000 | 0.187 | -0.266 | 0.008 | 0.015 | 0.000000 | 0.000000 | -1197.98 | 1931 |
| 2 | FID | | HRC-I-4 | 6.95 | 1266 | 1.000 | 0.337 | 0.421 | 0.006 | 0.010 | 0.000000 | 0.000000 | 1273.11 | 1932 |
| 3 | GUIDE | used | 438441368 | 9.98 | 2487 | 1.000 | -0.126 | 0.298 | 0.149 | 0.248 | 78.646413 | 46.420494 | 514.15 | -1900 |
| 4 | GUIDE | used | 438450792 | 8.81 | 2531 | 1.000 | -0.019 | -0.109 | 0.084 | 0.134 | 78.654240 | 46.382628 | 562.01 | -1771 |
| 5 | GUIDE | used | 440150048 | 7.14 | 2531 | 1.000 | 0.018 | -0.150 | 0.068 | 0.109 | 79.112838 | 46.416060 | -499.96 | -1344 |
| 6 | GUIDE | used | 440164960 | 8.31 | 2529 | 1.000 | 0.123 | -0.018 | 0.077 | 0.120 | 79.132526 | 46.140947 | -81.13 | -445 |
| 7 | GUIDE | used | 440145016 | 9.55 | 2530 | 1.000 | 0.004 | -0.016 | 0.117 | 0.192 | 80.238026 | 45.801940 | -1974.18 | 1912 |

2.4 Star Slots

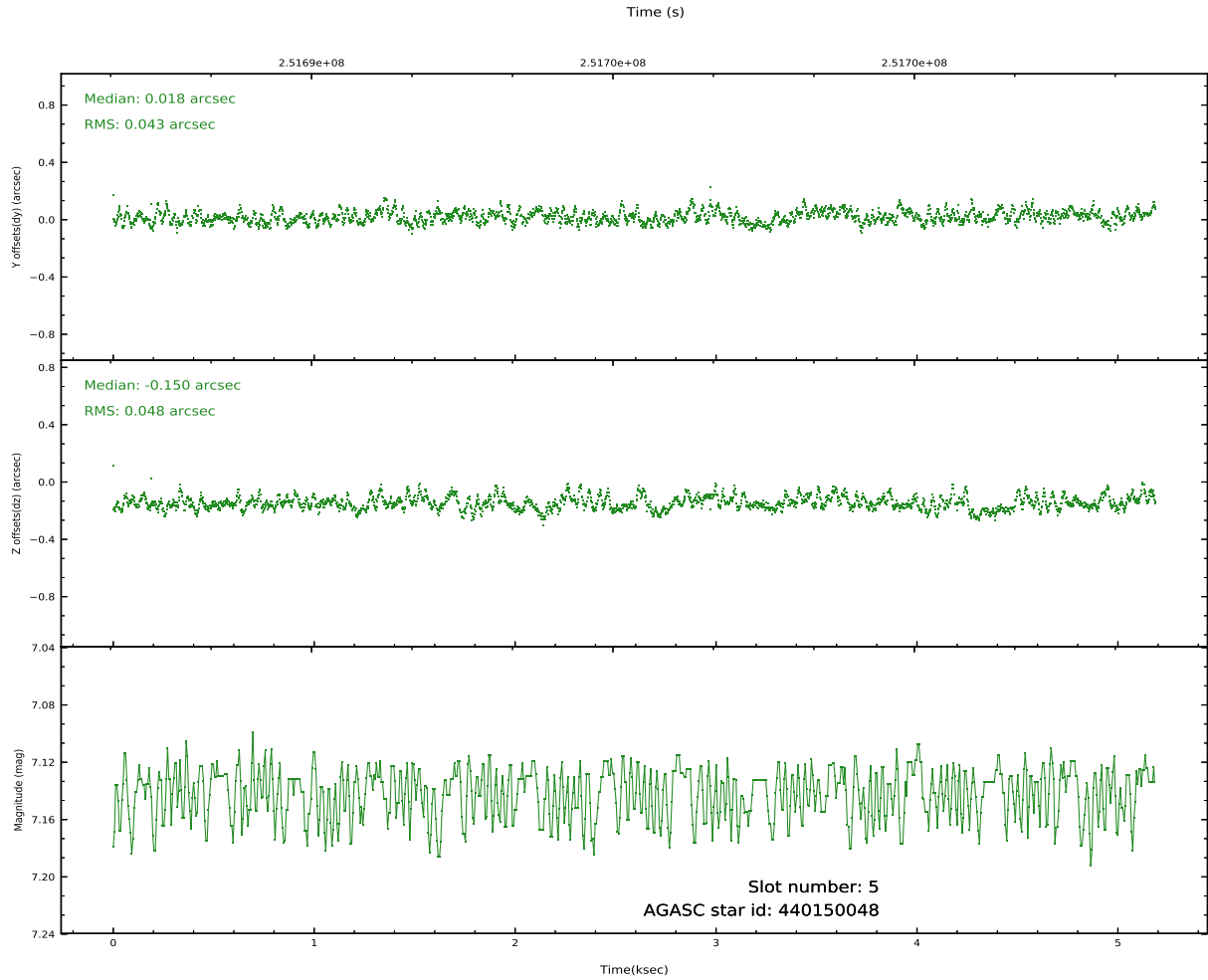
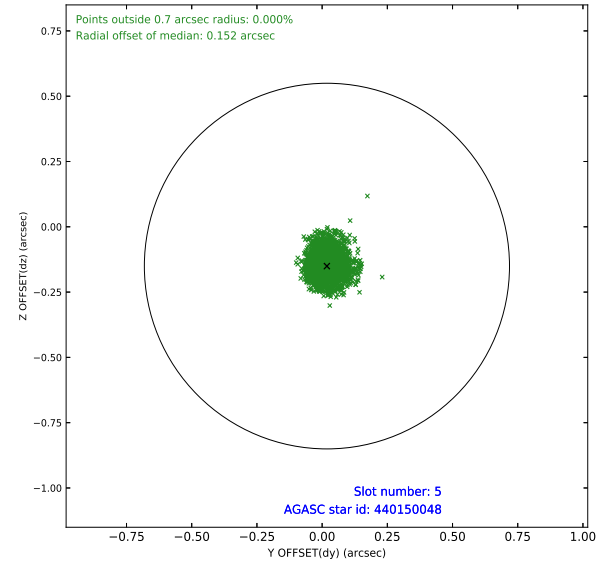
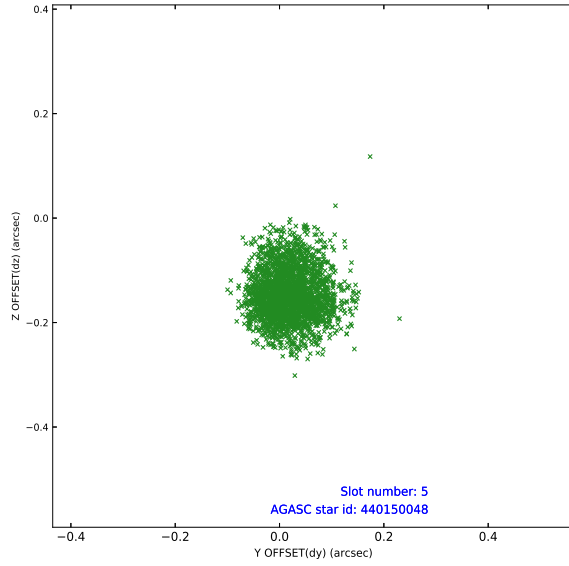
2.4.1 Slot 3



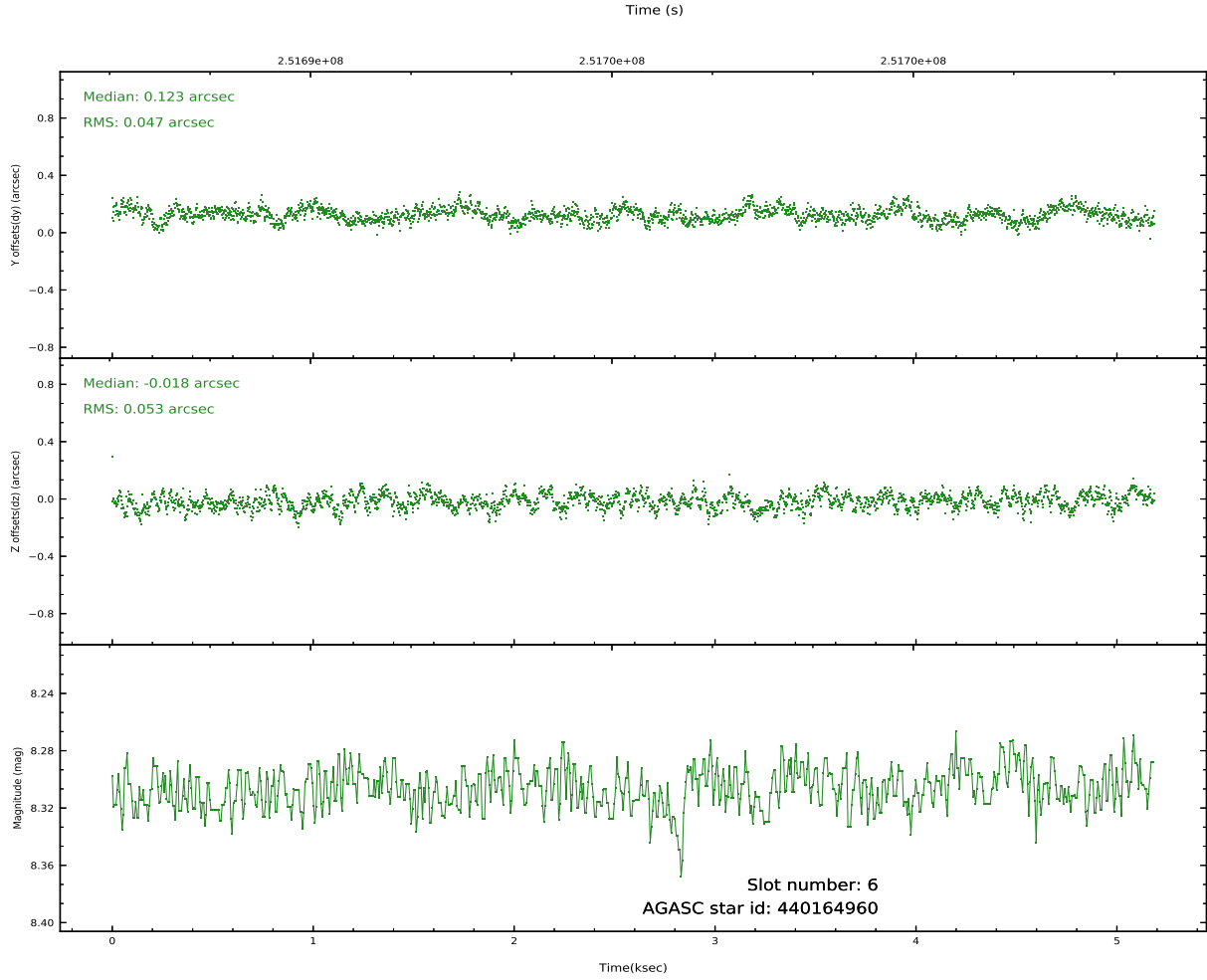
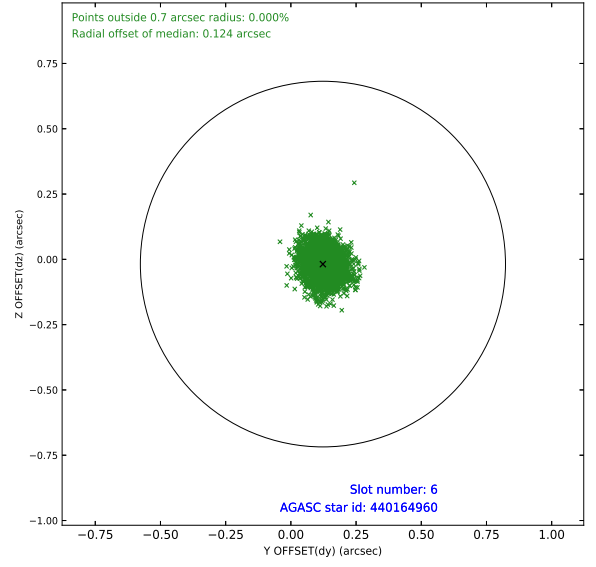
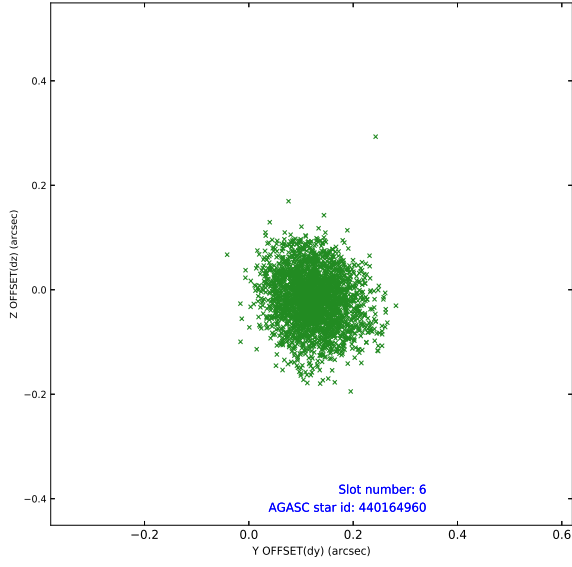
2.4.2 Slot 4



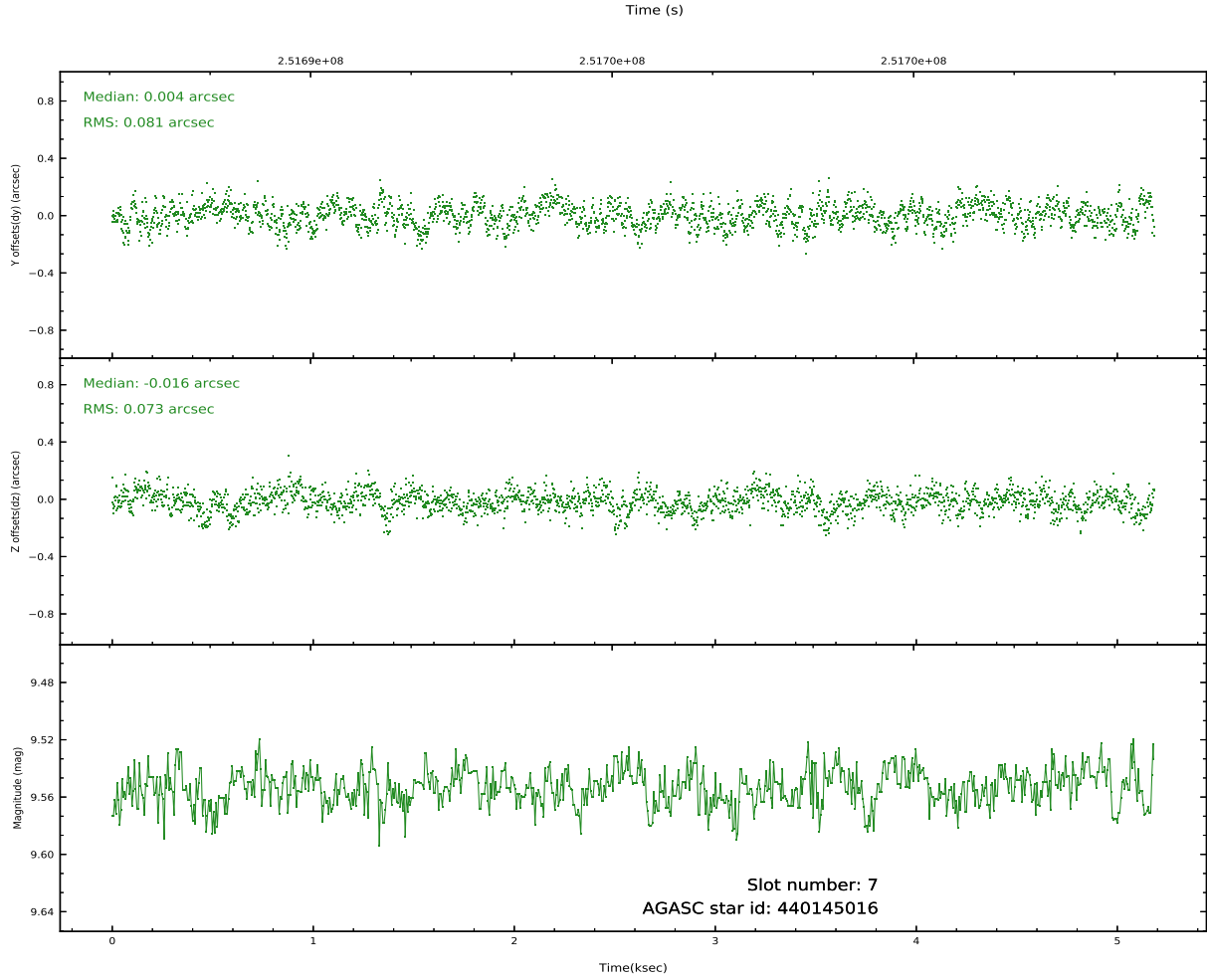
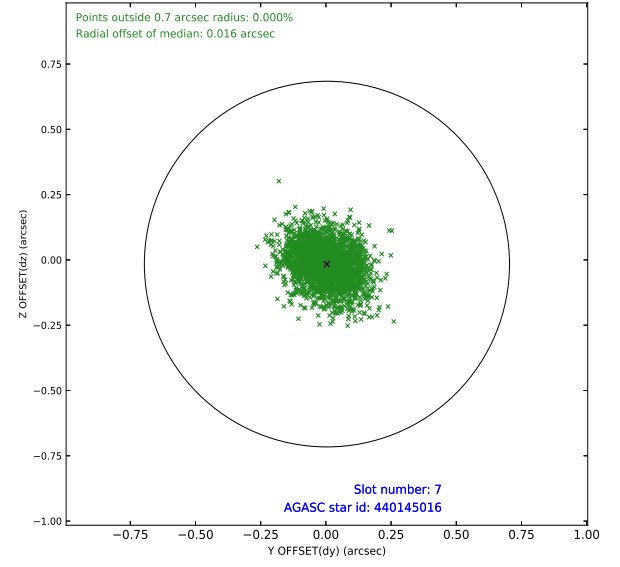
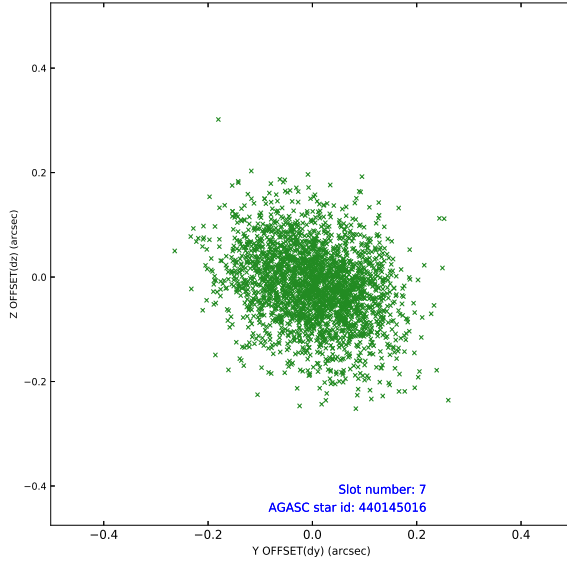
2.4.3 Slot 5



2.4.4 Slot 6

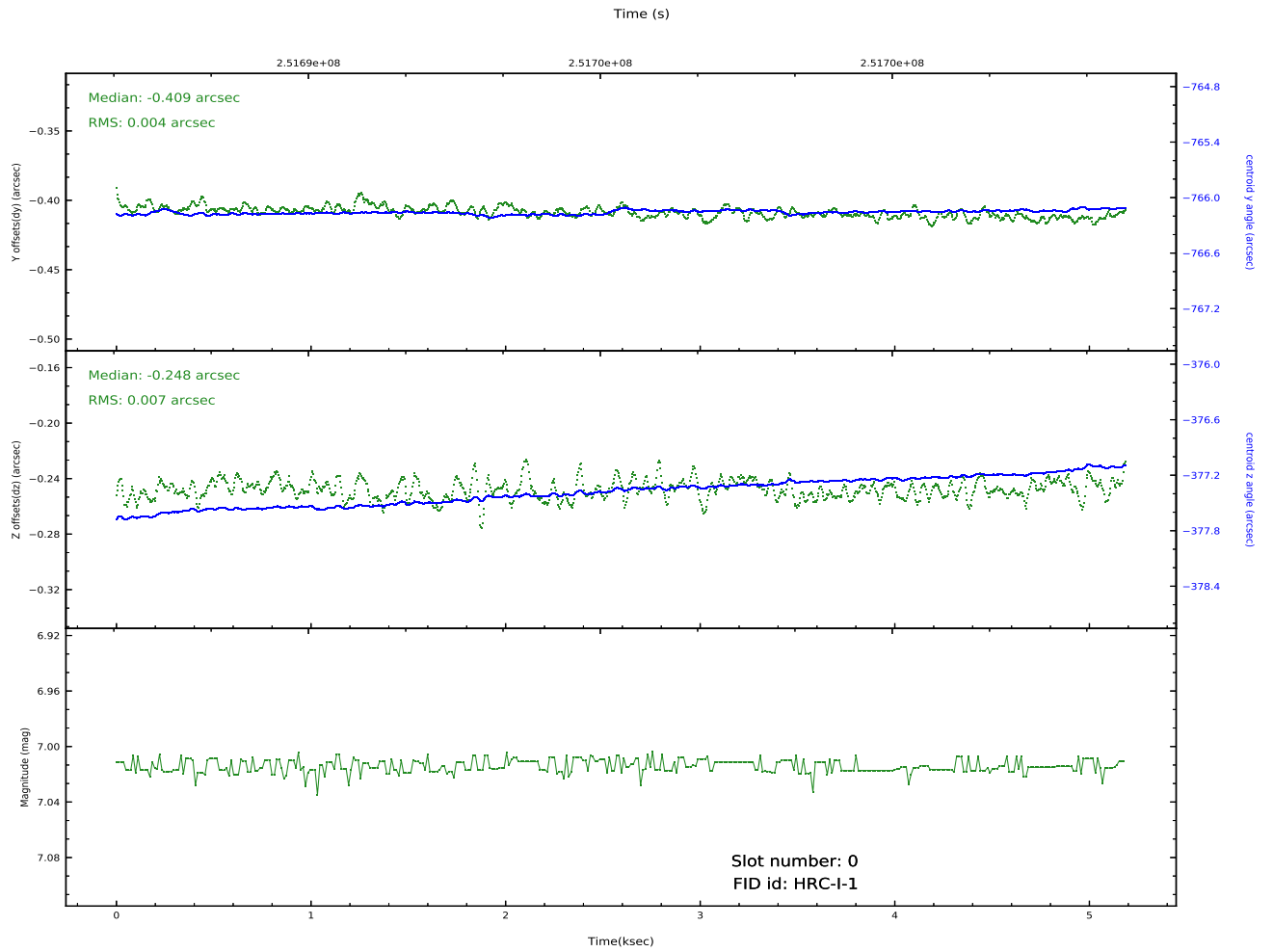
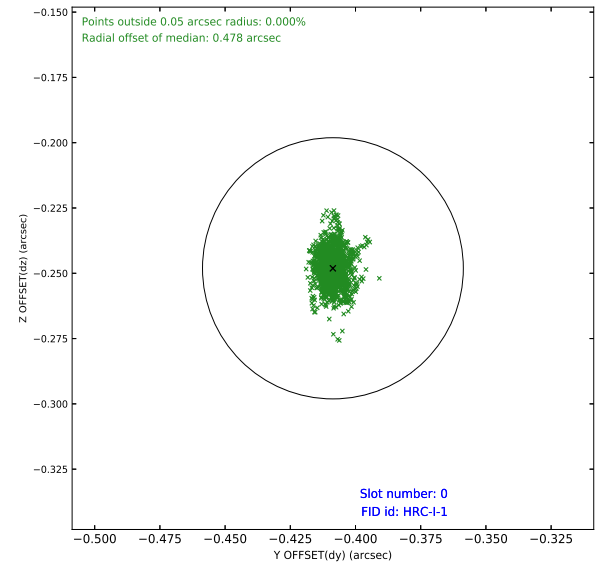
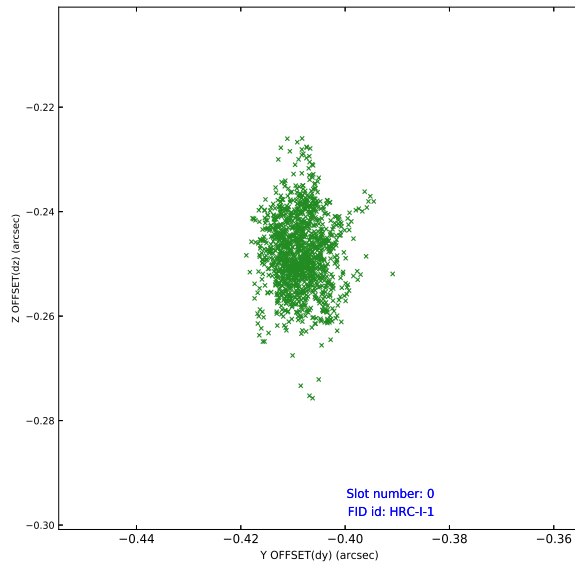


2.4.5 Slot 7

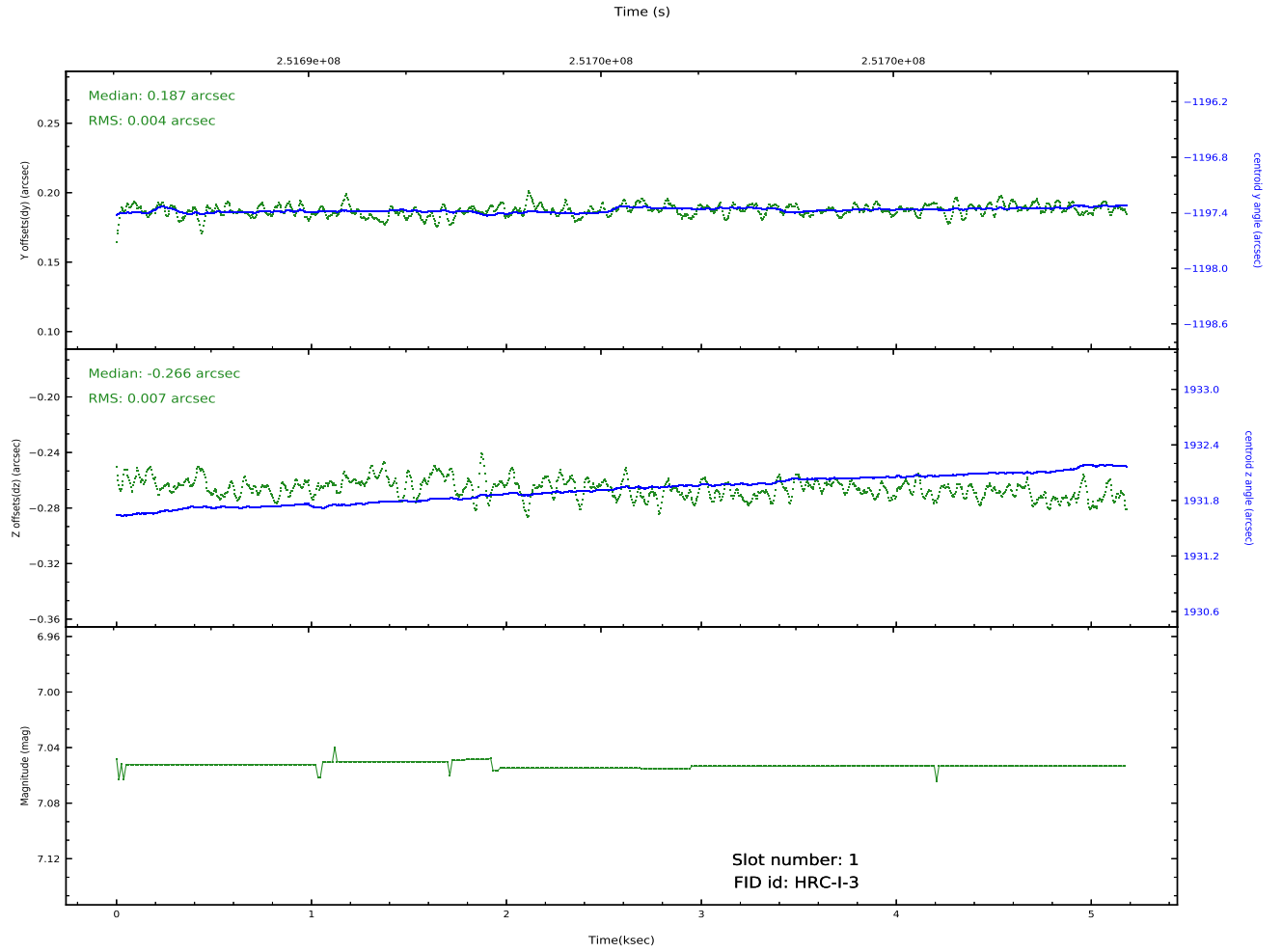
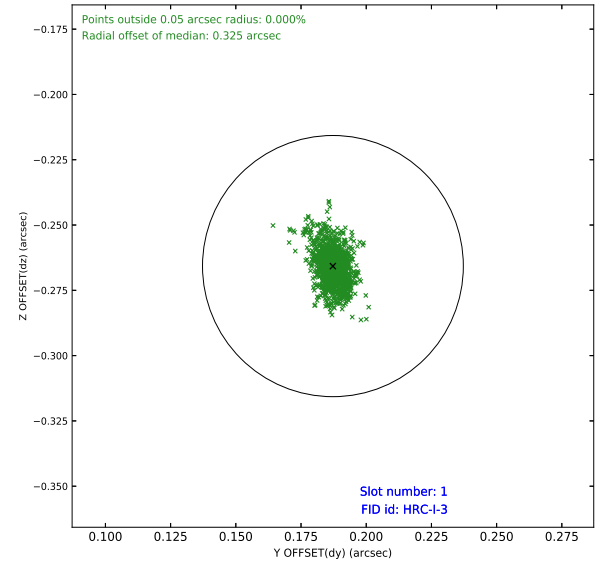
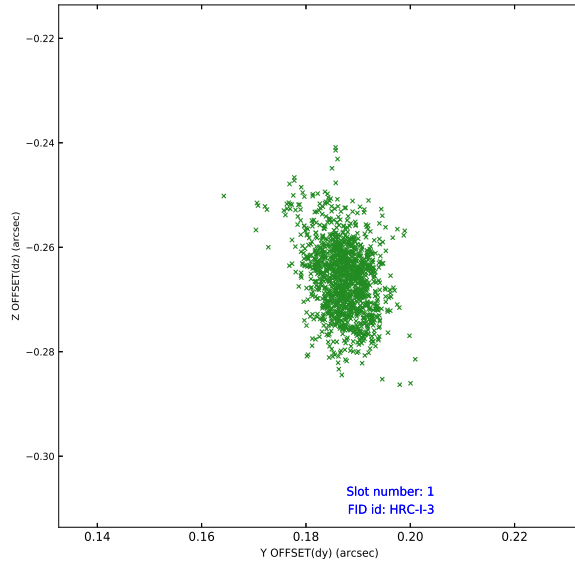


2.5 FID Slots

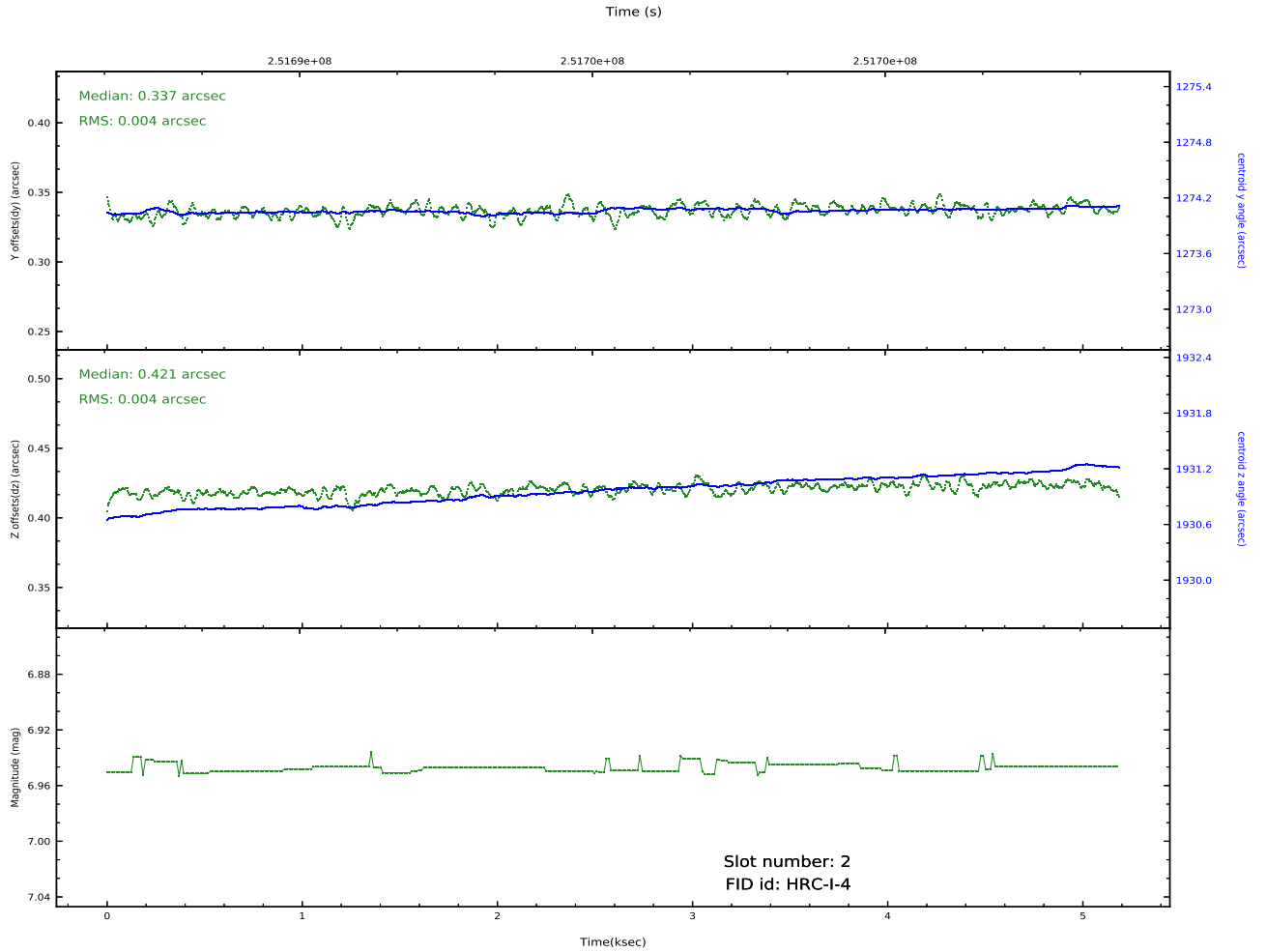
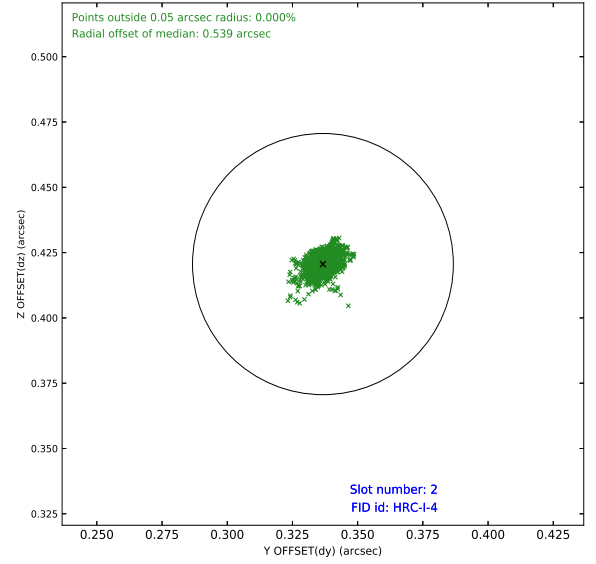
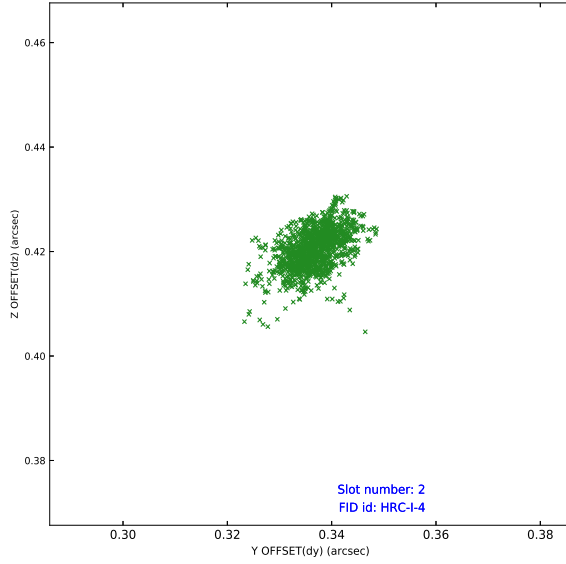
2.5.1 Slot 0



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) | 2020.10.13 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.185731 |

A.2 Comments