

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20165 - L2 Version 2
Chandra X-Ray Center

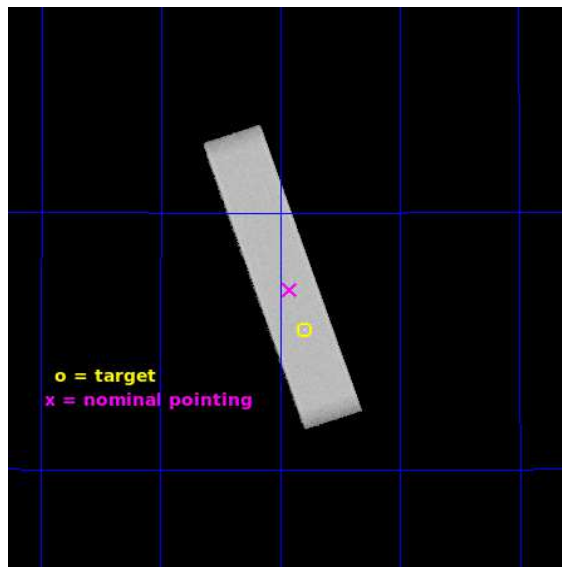
L2 Processing Date : Oct 25 2020

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1 Front

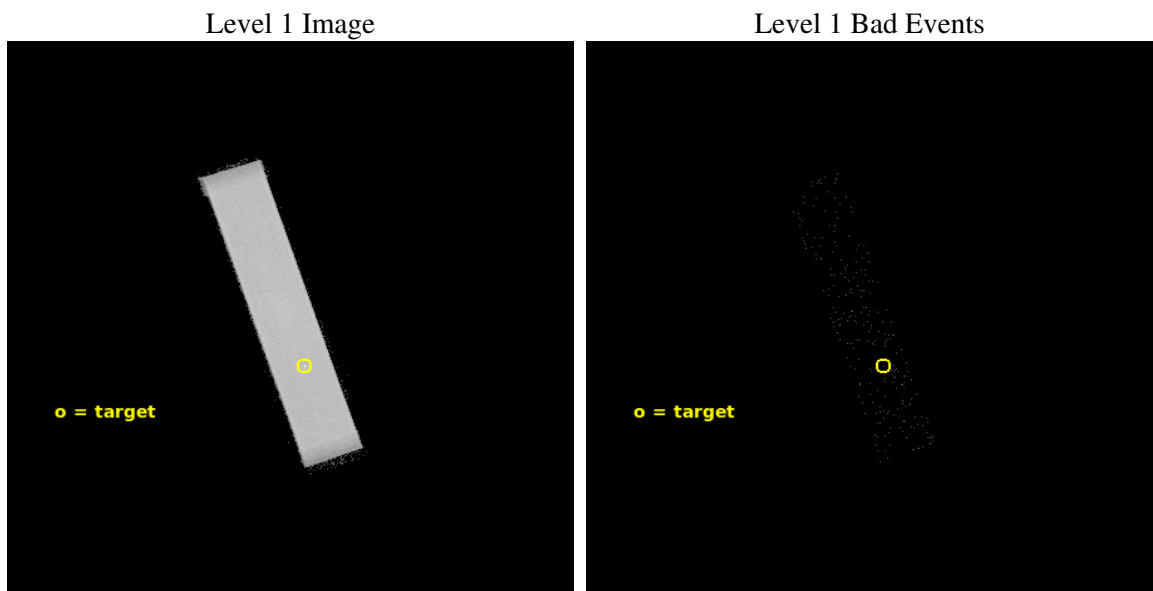
| | | |
|-----------|---|---------------------------------------|
| seq_num | 201182 | Sequence number |
| obs_id | 20165 | Observation id |
| title | THE EXTREME ULTRAVIOLET FLUX OF VERY LOW MASS STARS | Proposal title |
| observer | Jeremy Drake | Principal investigator |
| object | LHS 248 | Source name |
| ra_targ | 127.449328 | Observer's specified target RA [deg] |
| dec_targ | 26.77295 | Observer's specified target Dec [deg] |
| ra_nom | 127.47959385311 | Nominal RA [deg] |
| dec_nom | 26.850533249852 | Nominal Dec [deg] |
| roll_nom | 251.04633558881 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 10146.219349742 | [s] |
| liveltime | 10065.55823462 | Ontime multiplied by DTCOR |
| l2events | 602426 | 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 | 10000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.2 | Processing system revision | ontime | 10146.219349742 | [s] |
| caldsver | 4.9.3 | | l1events | 766136 | Number of level 1 events |
| date | 2020-10-26T00:16:55 | Date and time of file creation | | | |
| revision | 2 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

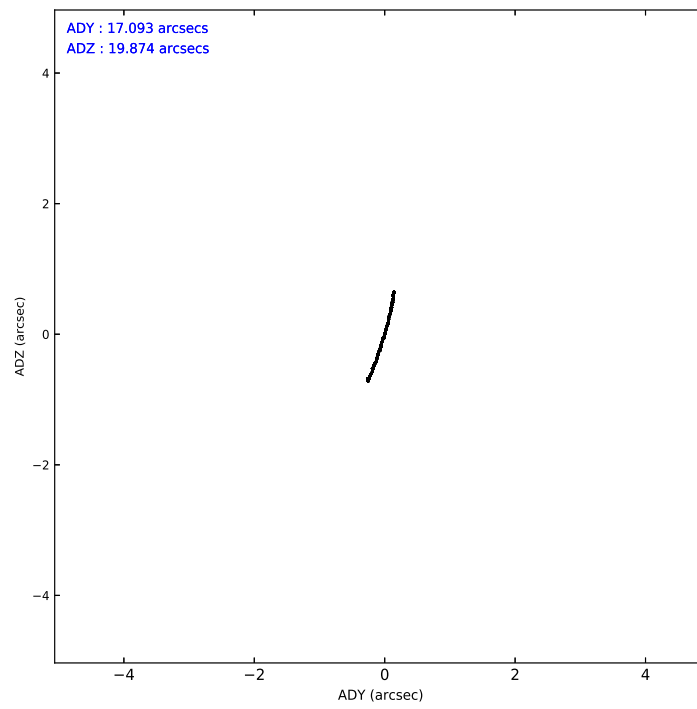
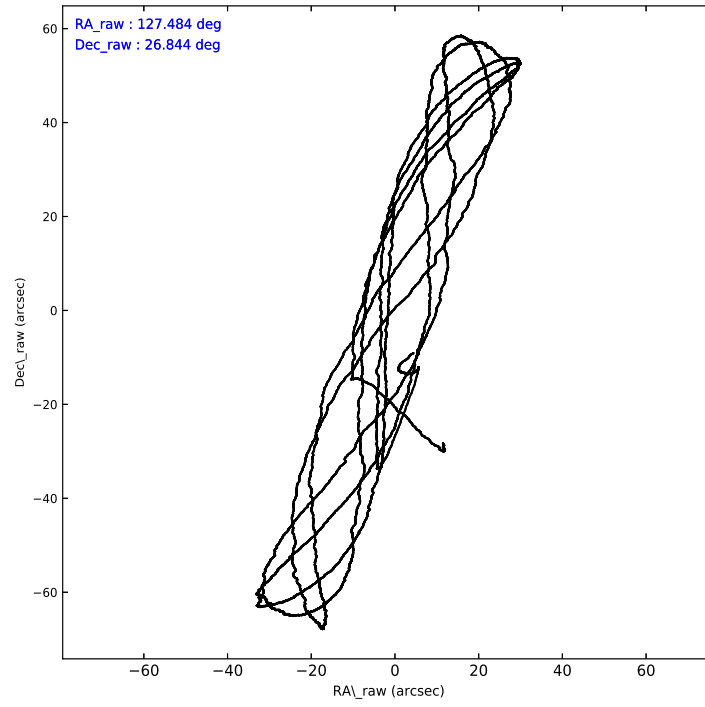
| | segment 1 | segment 2 | segment 3 |
|-----------------|--------------|--------------|--------------|
| level 1 events | 0 | 766136 | 0 |
| rejected events | 0 | 55853 | 0 |
| rejected % | 0% | 7% | 0% |

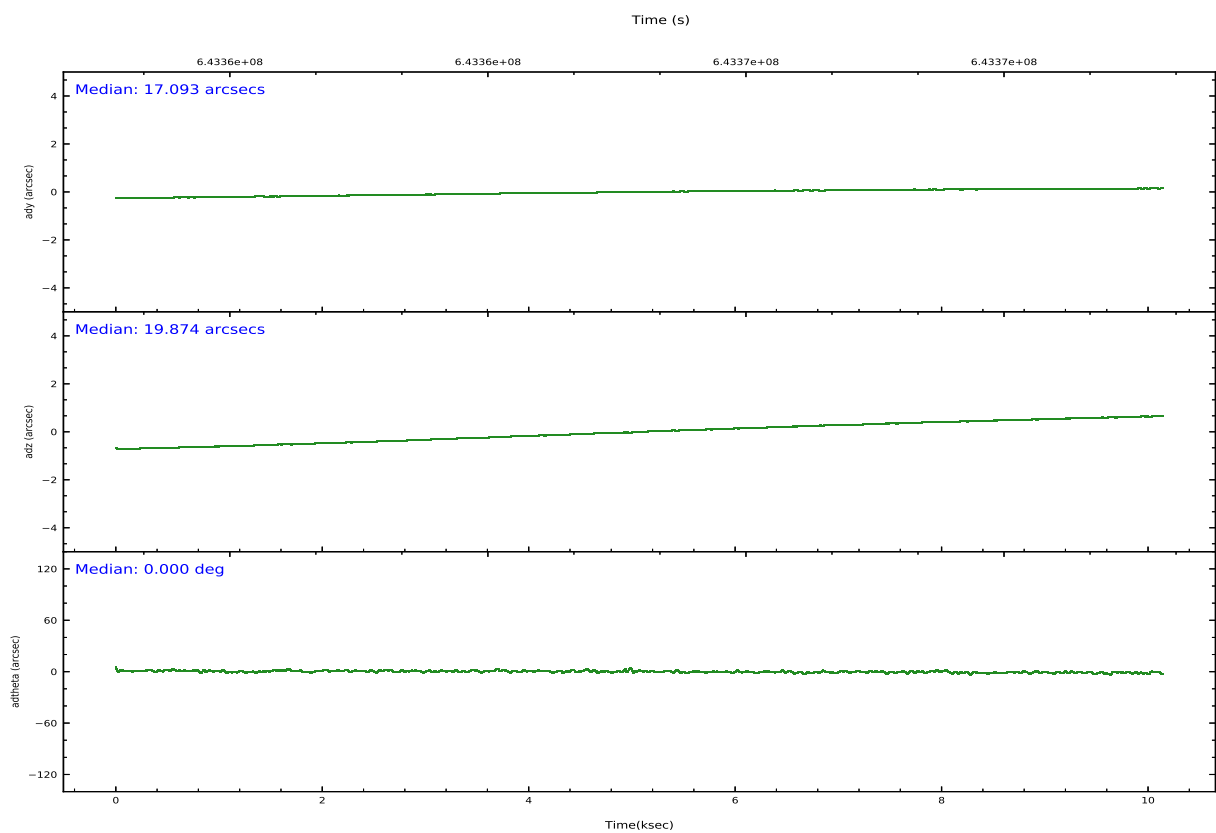
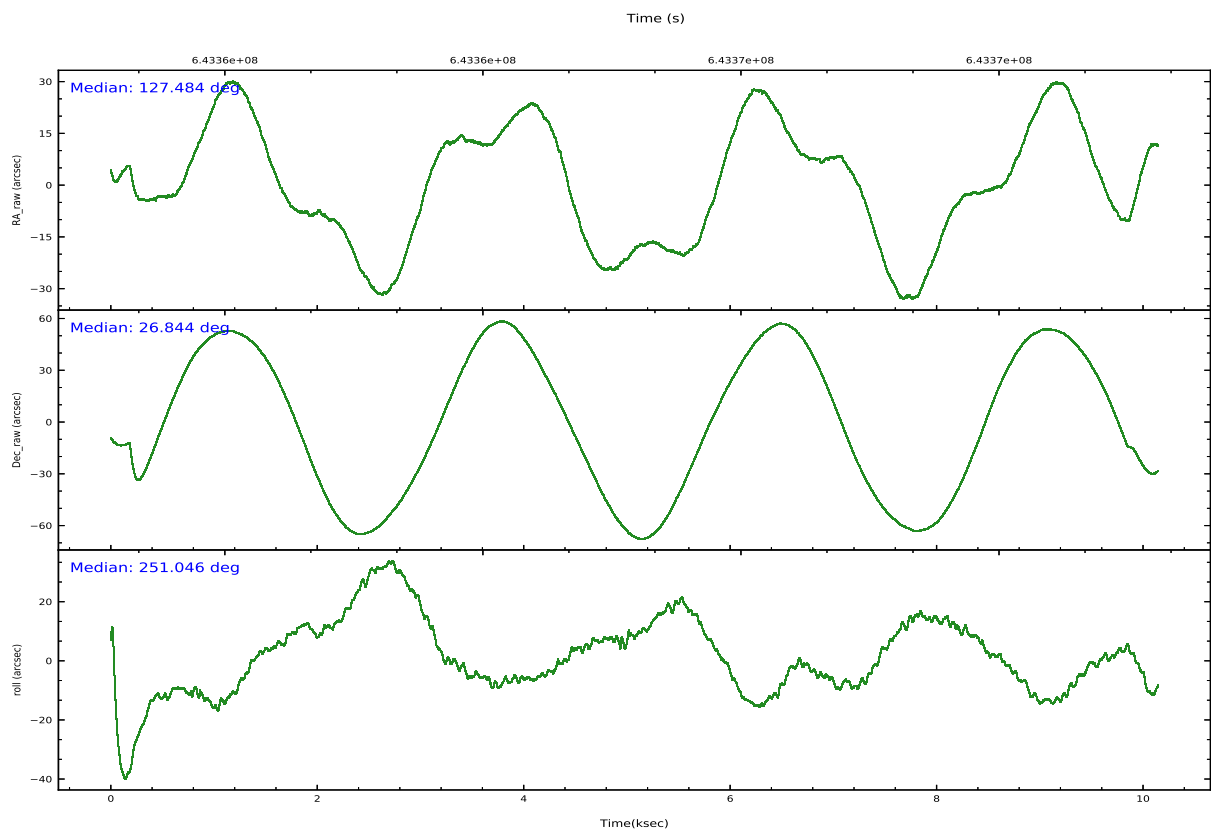
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|-----------------------|----------------------|
| Instrument | HRC | HRC |
| Detector | HRC-S | HRC-S |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 127.475624 | 127.47959385311 |
| [deg] Pointing Dec | 26.870965 | 26.850533249852 |
| [deg] Pointing Roll | 250.988152 | 251.04633558881 |
| [mm] SIM focus pos | -1.533336 | -1.526339935833849 |
| [mm] SIM defocus | 7.710433287538843e-07 | 0.006996703570447904 |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 |
| [s] Observation start time (MET) | 643361542.184000 | 643360624.8719 |
| Observation start date | 2018-05-22T07:31:13 | 2018-05-22T07:17:04 |
| [s] Observation end time (MET) | 643371542.184000 | 643372212.4975899 |
| Observation end date | 2018-05-22T10:17:53 | 2018-05-22T10:30:12 |

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

2.3 Aspect



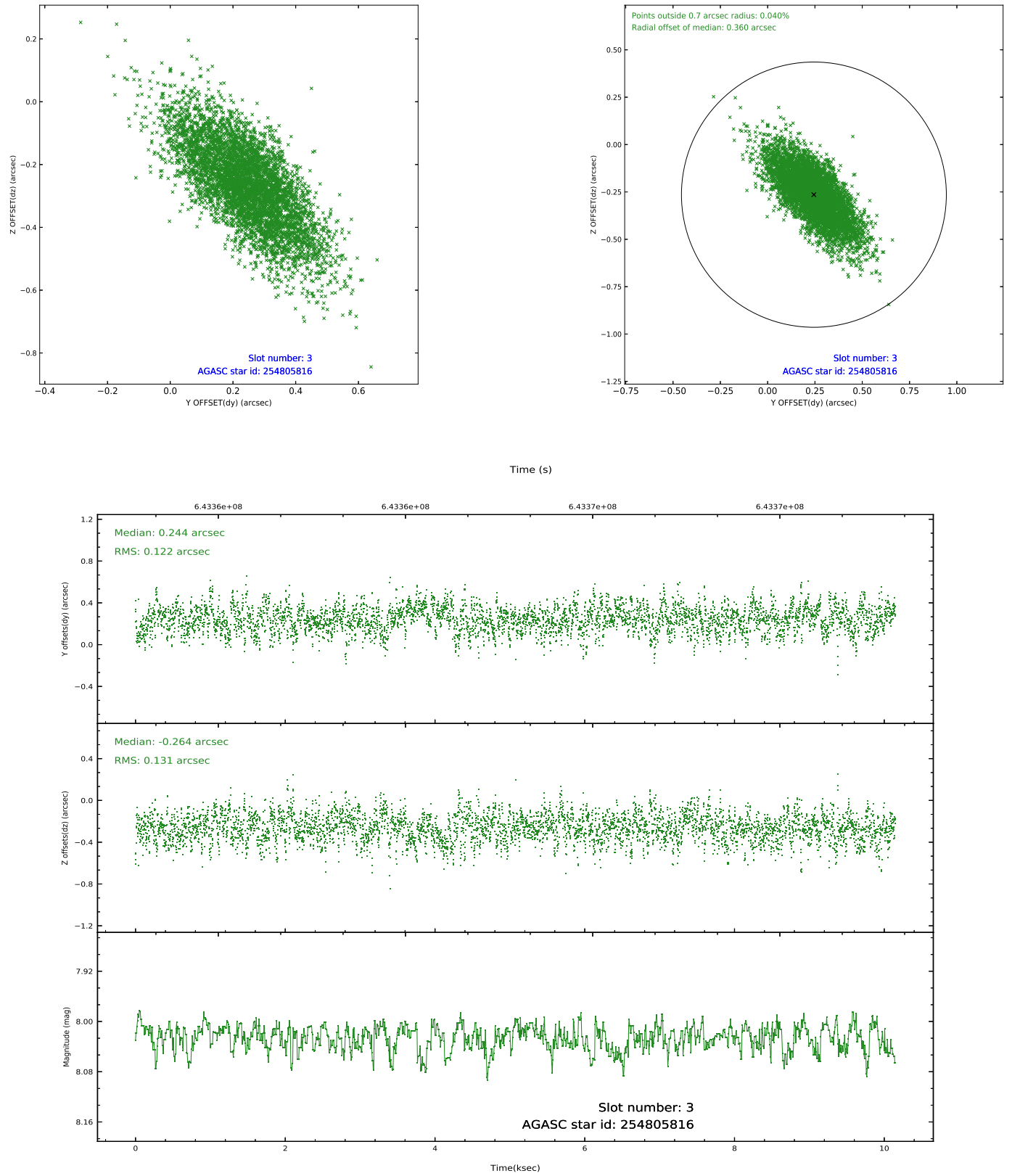


Slot Statistics

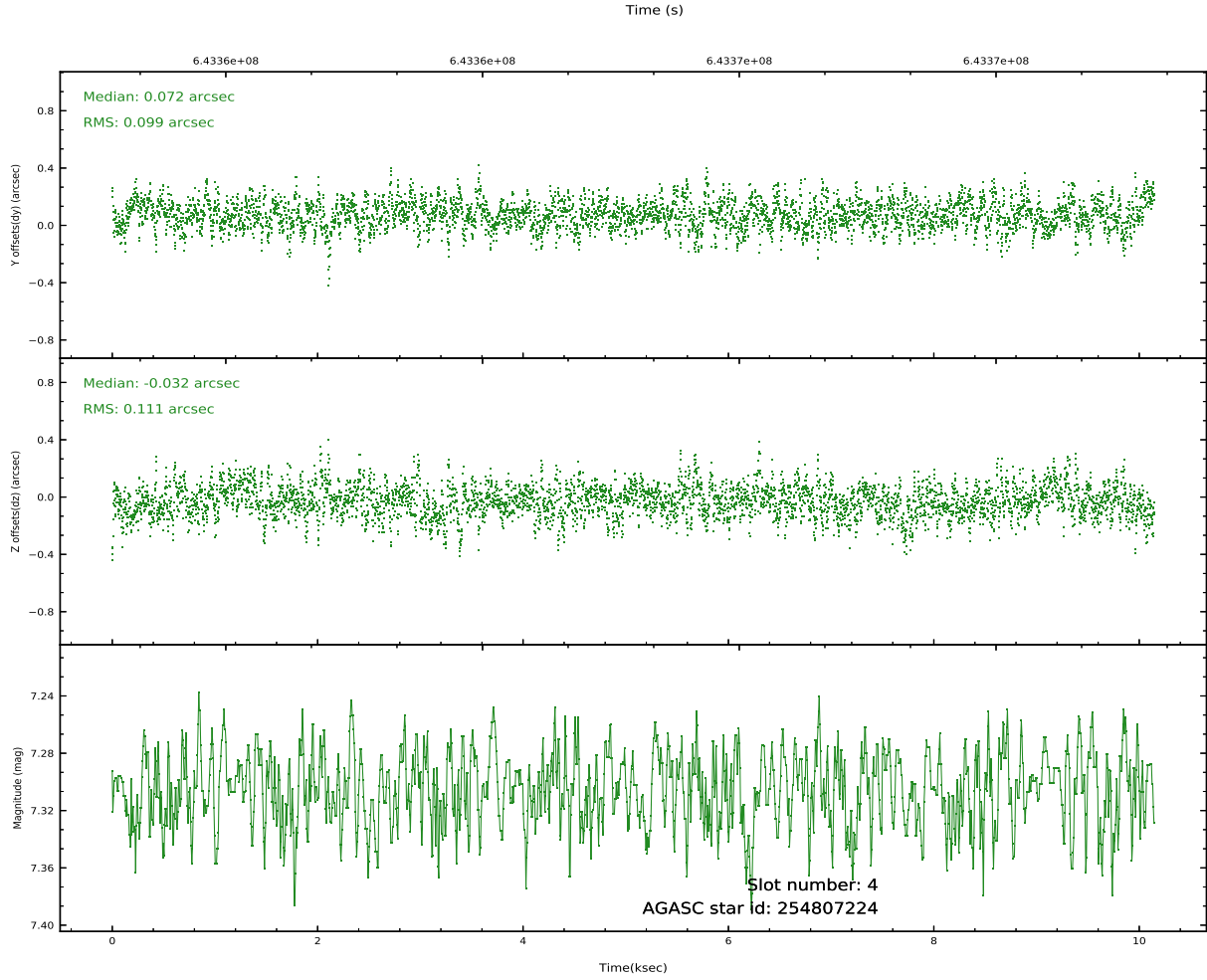
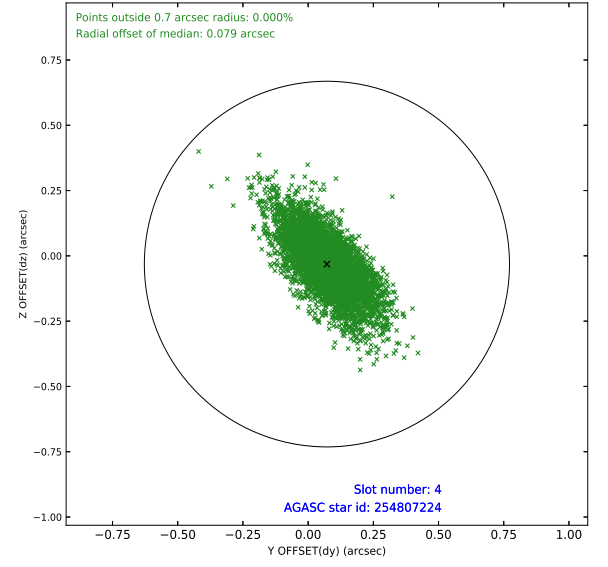
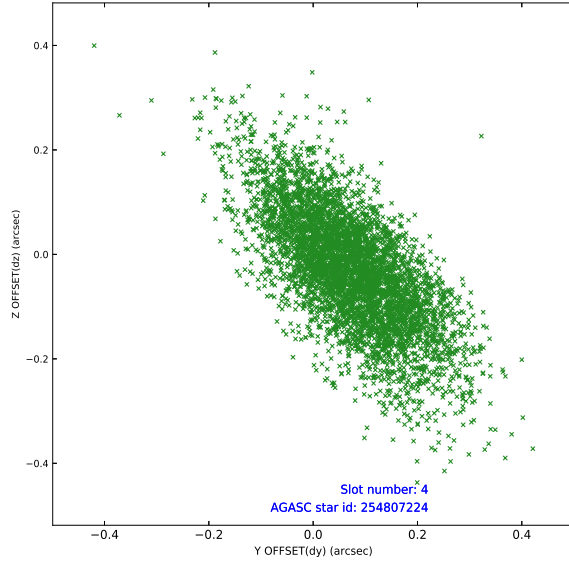
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|-------|
| 0 | FID | | HRC-S-1 | 7.03 | 2475 | 1.000 | 0.012 | -0.115 | 0.005 | 0.008 | 0.000000 | 0.000000 | -1171.60 | -468 |
| 1 | FID | | HRC-S-2 | 7.00 | 2475 | 1.000 | 0.227 | -0.205 | 0.014 | 0.024 | 0.000000 | 0.000000 | 1227.80 | -461 |
| 2 | FID | | HRC-S-4 | 6.99 | 2475 | 1.000 | 0.164 | 0.017 | 0.014 | 0.025 | 0.000000 | 0.000000 | 1227.35 | 563 |
| 3 | GUIDE | used | 254805816 | 8.02 | 4945 | 1.000 | 0.244 | -0.264 | 0.181 | 0.328 | 126.563956 | 26.511747 | 2174.50 | -2359 |
| 4 | GUIDE | used | 254807224 | 7.30 | 4950 | 1.000 | 0.072 | -0.032 | 0.151 | 0.275 | 127.456386 | 26.192855 | 2333.52 | 735 |
| 5 | GUIDE | used | 254813320 | 8.78 | 4937 | 1.000 | 0.052 | 0.202 | 0.158 | 0.284 | 127.794083 | 26.162499 | 2080.50 | 1803 |
| 6 | GUIDE | used | 254820640 | 9.25 | 4947 | 1.000 | -0.232 | 0.136 | 0.203 | 0.346 | 127.947298 | 27.148403 | -1434.65 | 1102 |
| 7 | GUIDE | used | 254820784 | 8.69 | 4948 | 1.000 | -0.133 | -0.041 | 0.162 | 0.291 | 126.880741 | 26.846192 | 706.93 | -1778 |

2.4 Star Slots

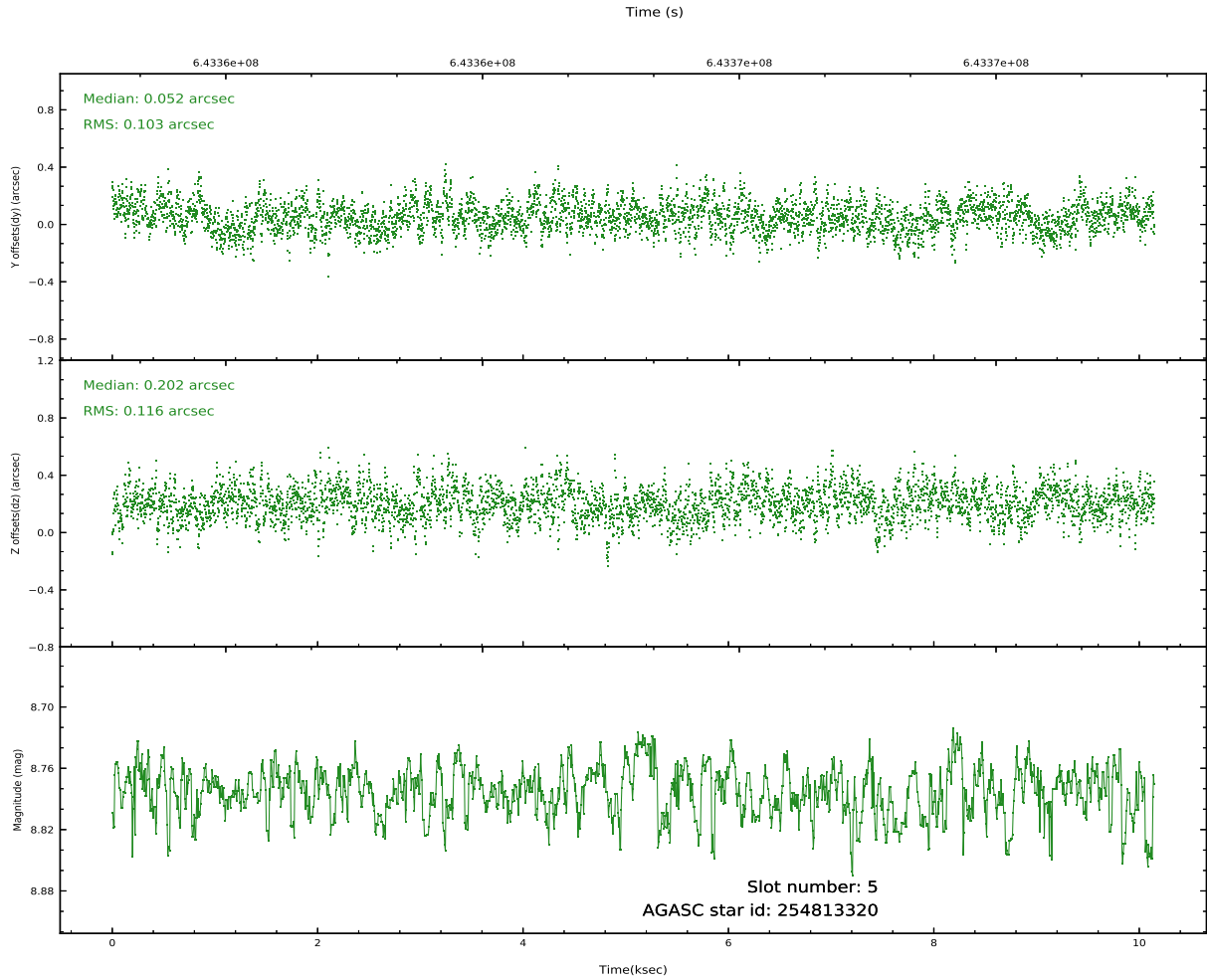
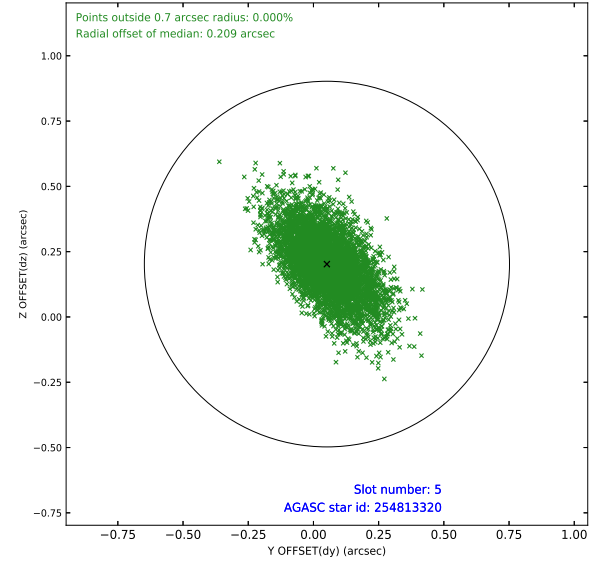
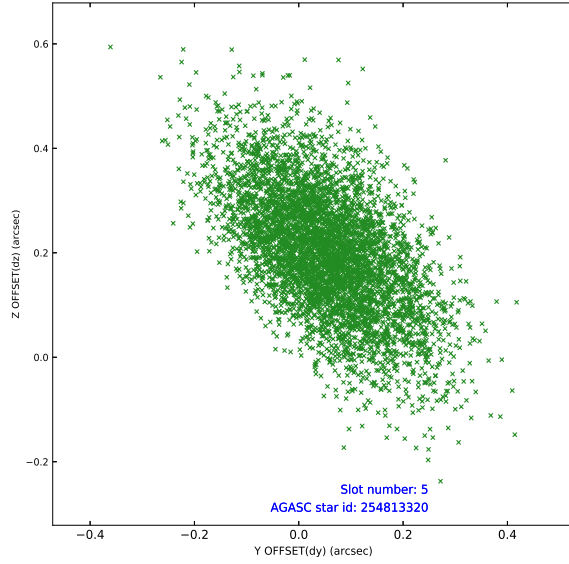
2.4.1 Slot 3



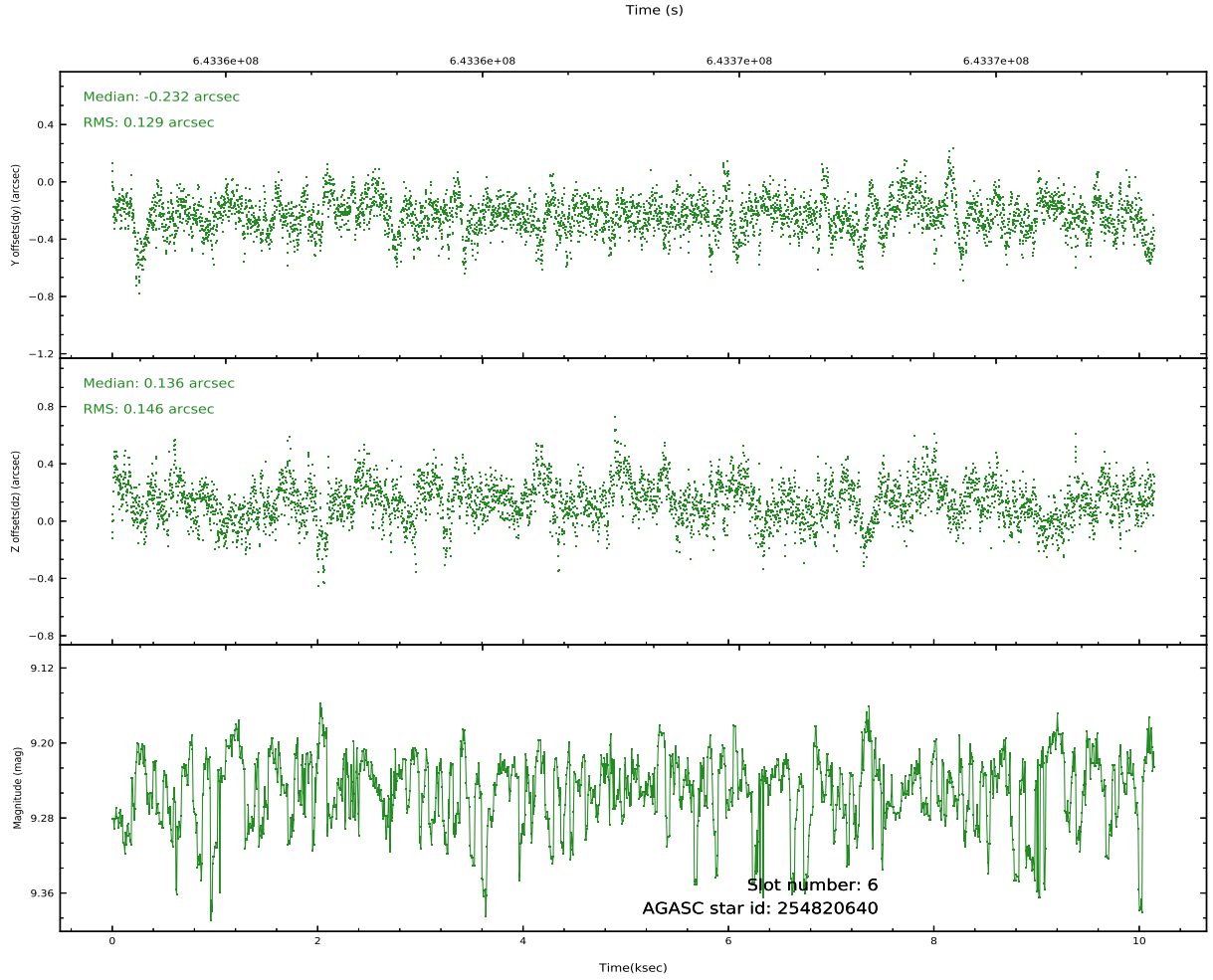
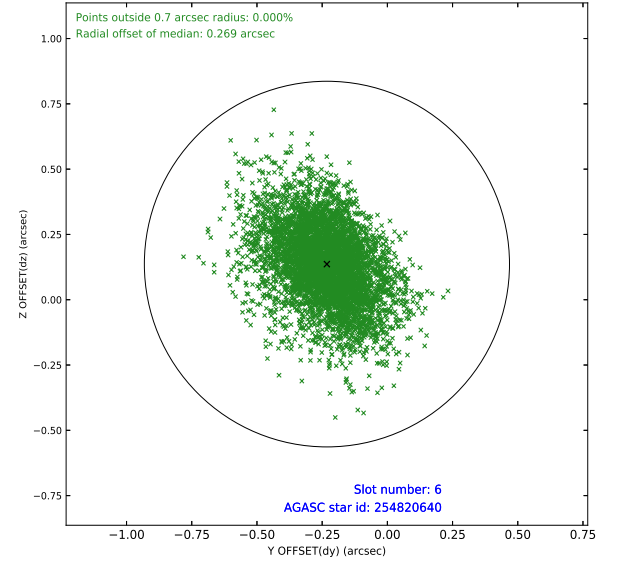
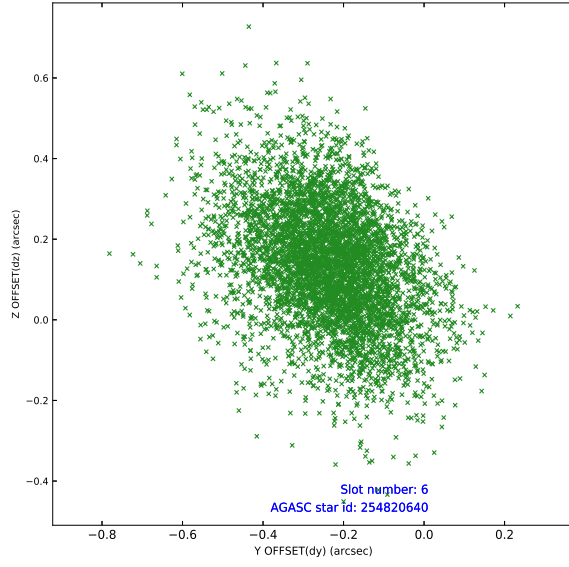
2.4.2 Slot 4



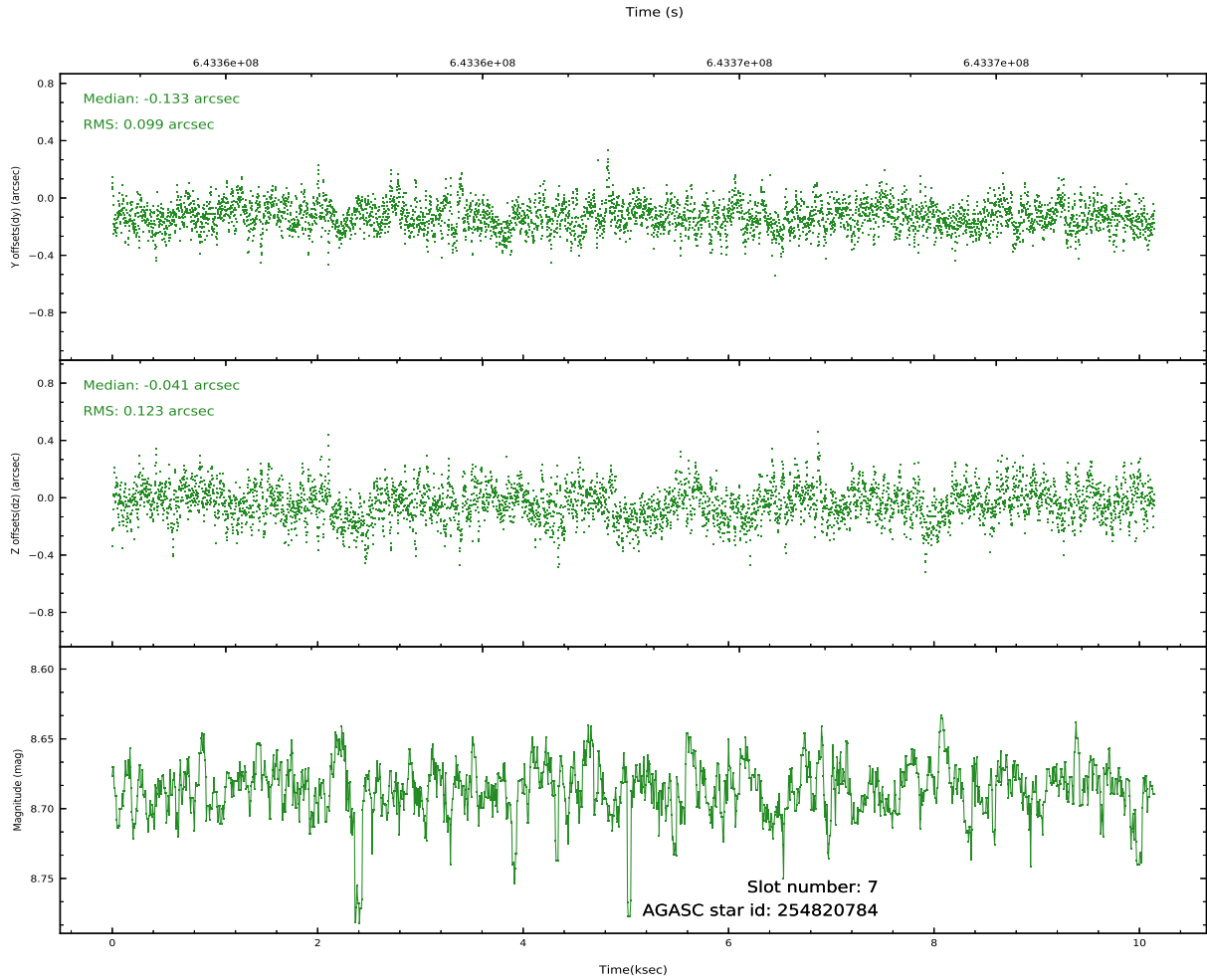
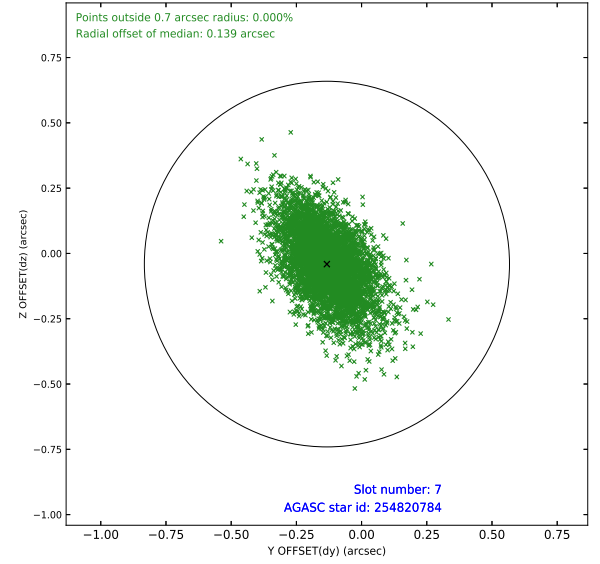
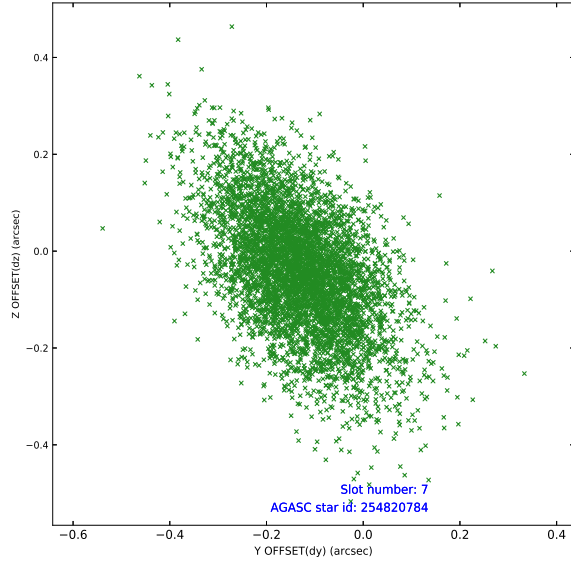
2.4.3 Slot 5



2.4.4 Slot 6

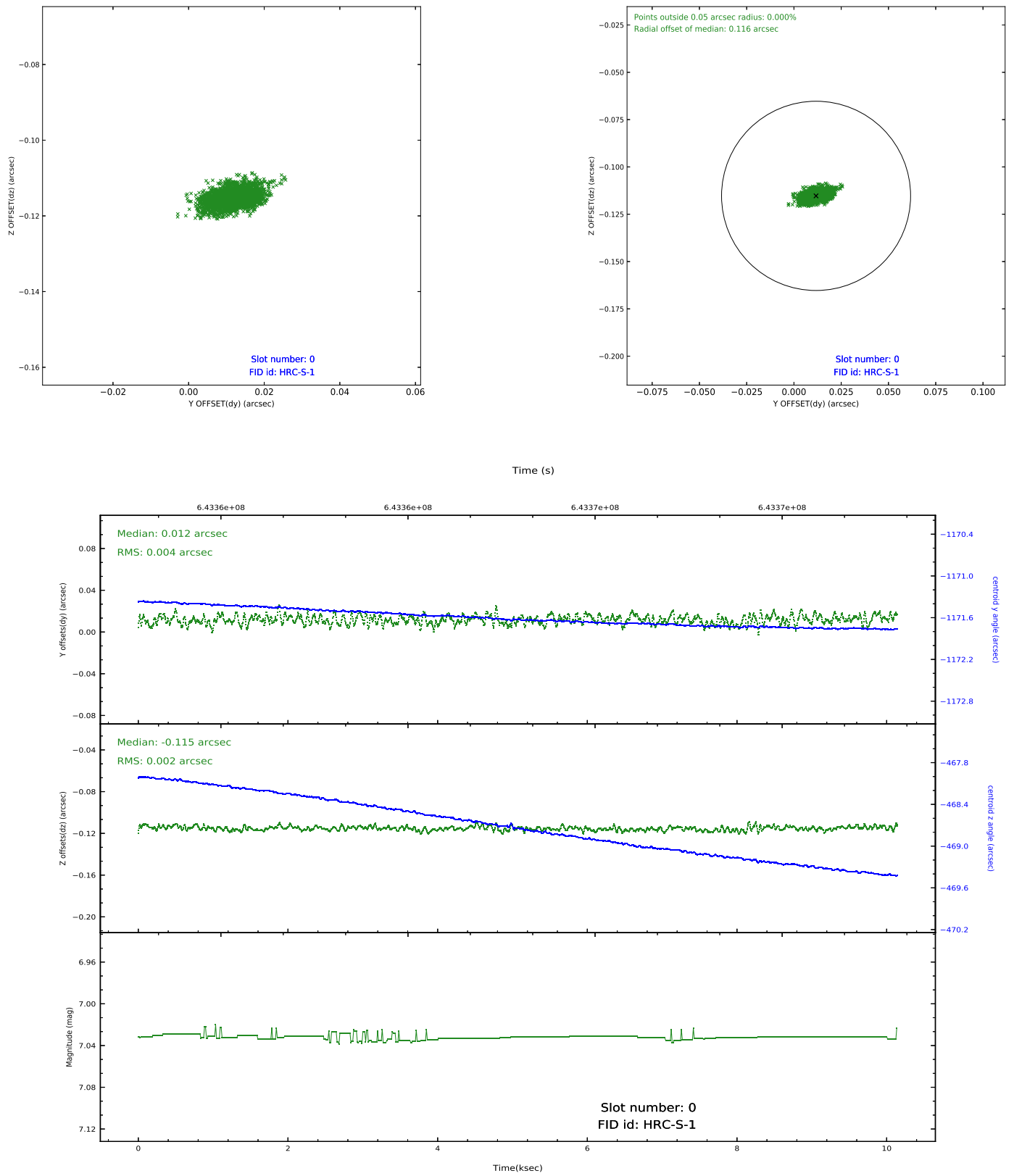


2.4.5 Slot 7

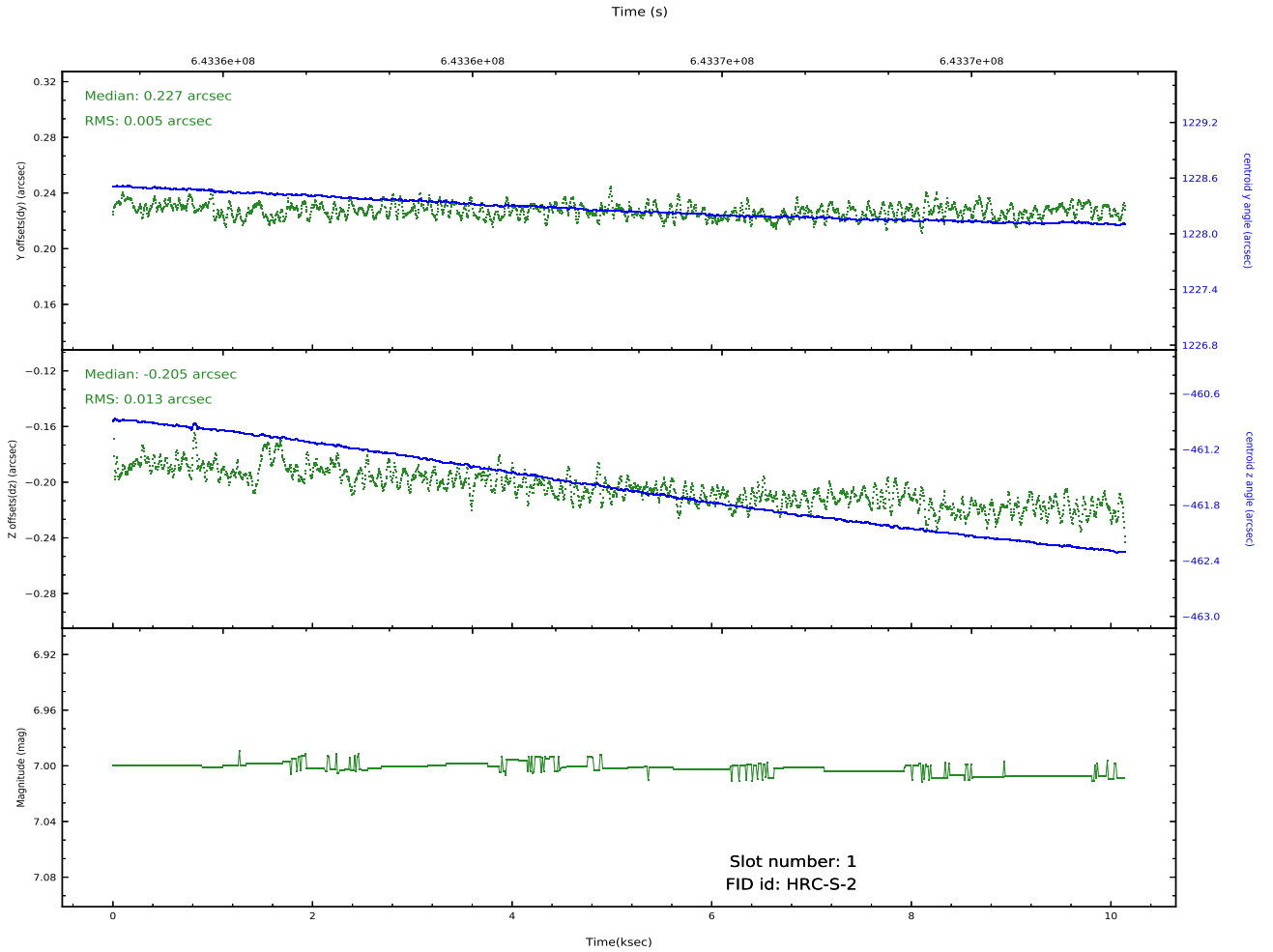
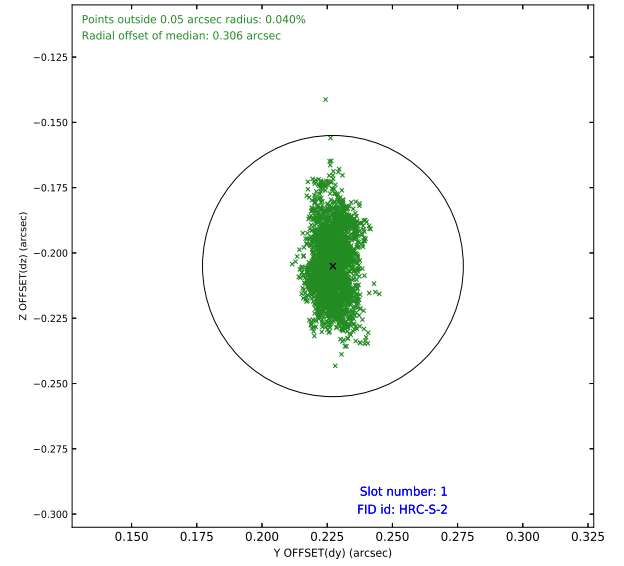
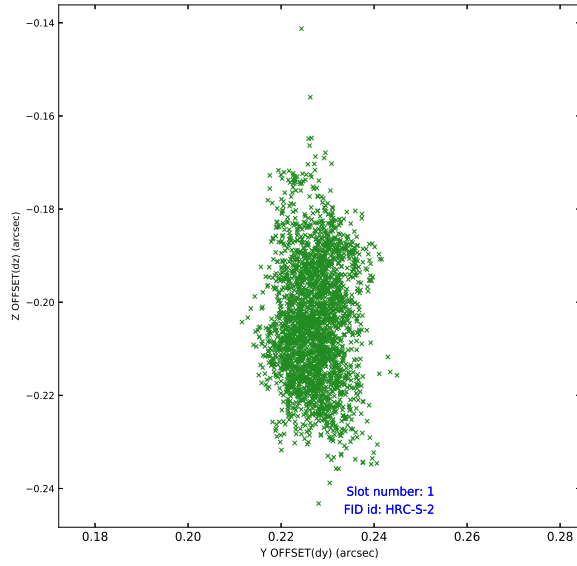


2.5 FID Slots

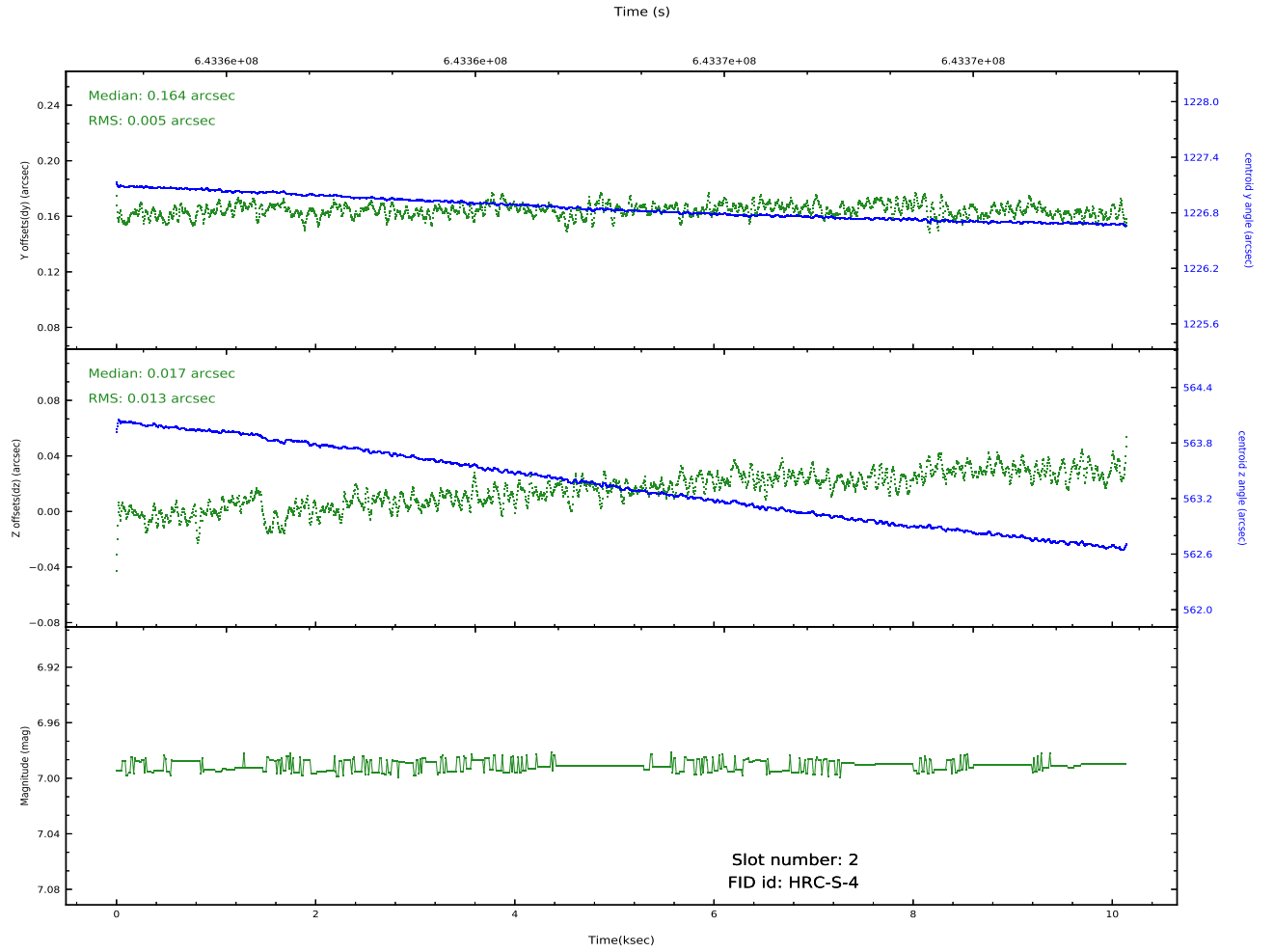
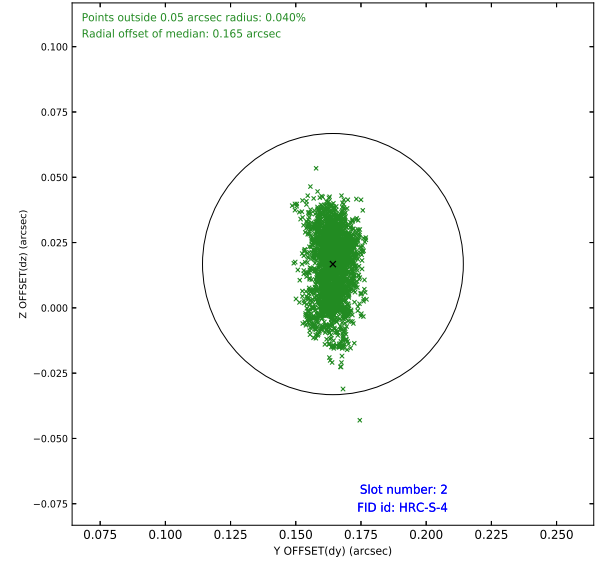
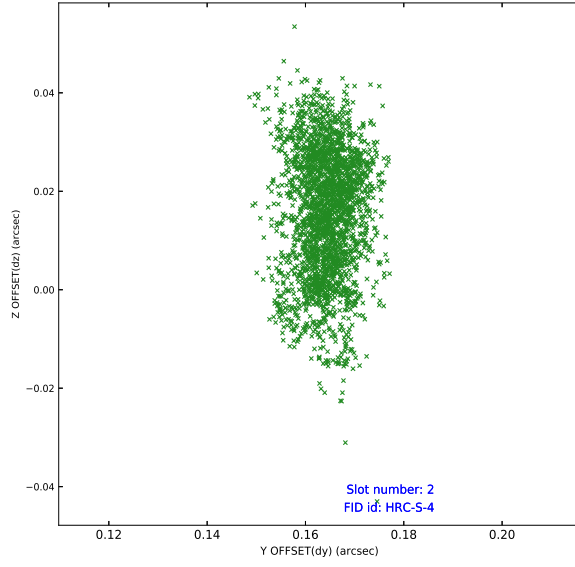
2.5.1 Slot 0



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) | 2020.10.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 10.146219349742 |

A.2 Comments

Target placed on the thick edge of the filter, at Yoffset=+5.03 arcmin, and dithered across. Dither parameters have been set similar to ObsID 18356, with y_amp inflated to 64 arcsec and y_period inflated to 2647 sec, and z_amp reduced from normal HRC to ACIS-like 8 arcsec so that max rate constraints are met the same way as in 18356.