

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5507 - L2 Version 6
Chandra X-Ray Center

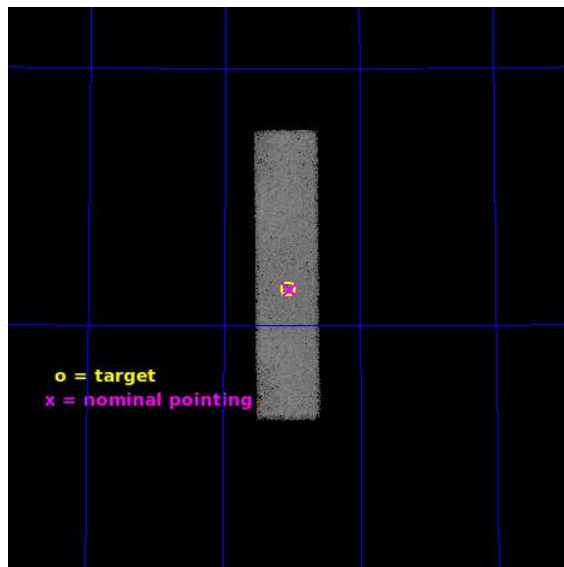
L2 Processing Date : Oct 5 2020

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1 Front

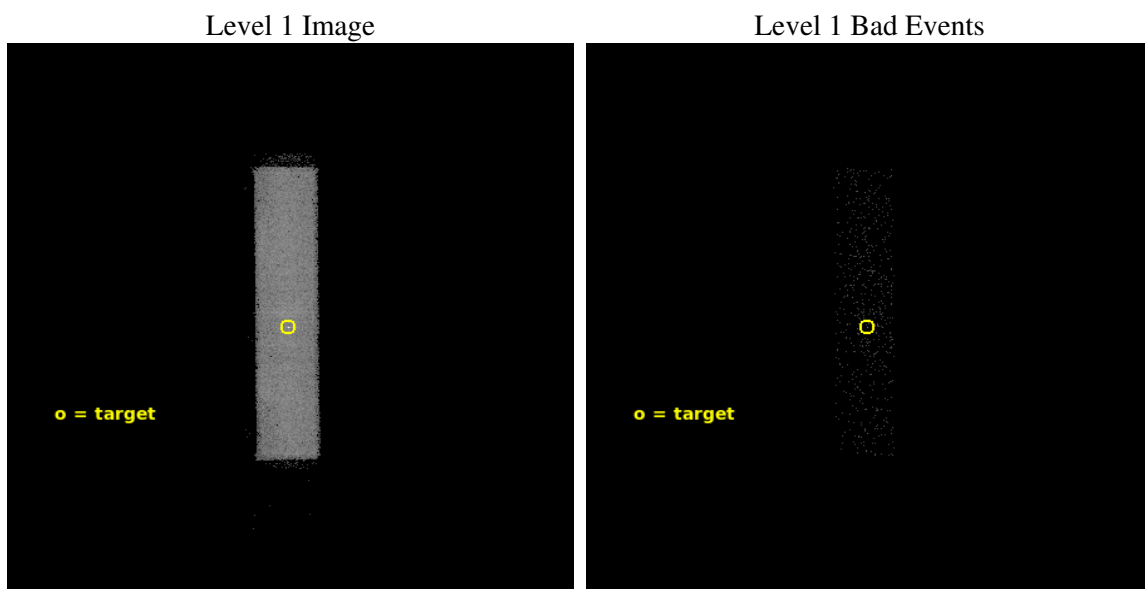
| | | |
|----------|--|---------------------------------------|
| seq_num | 400437 | Sequence number |
| obs_id | 5507 | Observation id |
| title | Precise Localization of Neutron Star Soft X-ray Transients | Proposa |
| observer | Deepto Chakrabarty | Principal investigator |
| object | IGR J00291+5934 | Source name |
| ra_targ | 7.26275 | Observer's specified target RA [deg] |
| dec_targ | 59.571944 | Observer's specified target Dec [deg] |
| ra_nom | 7.2570951610301 | Nominal RA [deg] |
| dec_nom | 59.570486185075 | Nominal Dec [deg] |
| roll_nom | 269.48932556665 | Nominal Roll [deg] |
| revision | 6 | Processing version of data |
| ontime | 1042.6812969446 | [s] |
| livetime | 1032.4481592995 | Ontime multiplied by DTCOR |
| l2events | 67646 | 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 | 10.9.1 | Processing system revision | ontime | 1042.6812969446 | [s] |
| caldsver | 4.9.2 | | l1events | 90927 | Number of level 1 events |
| date | 2020-10-05T12:54:05 | Date and time of file creation | | | |
| revision | 6 | Processing version of data | | | |

2.1.3 Events

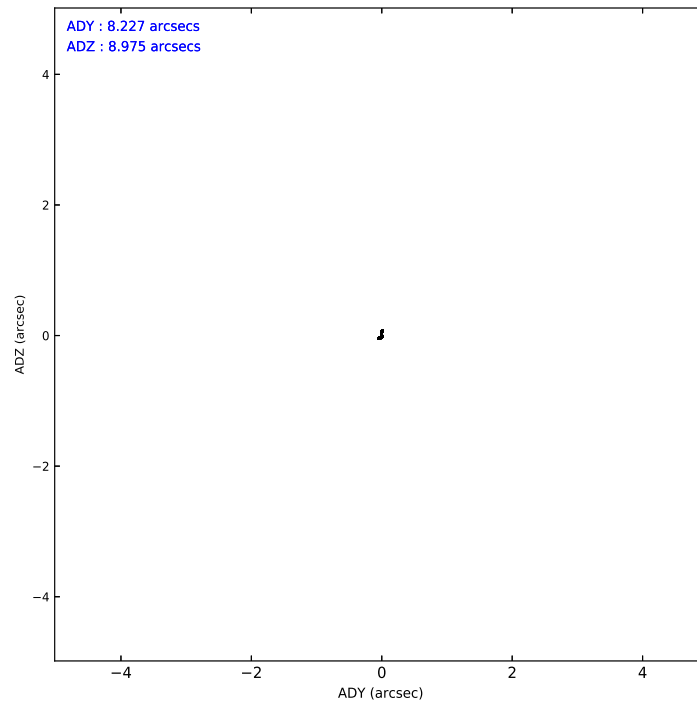
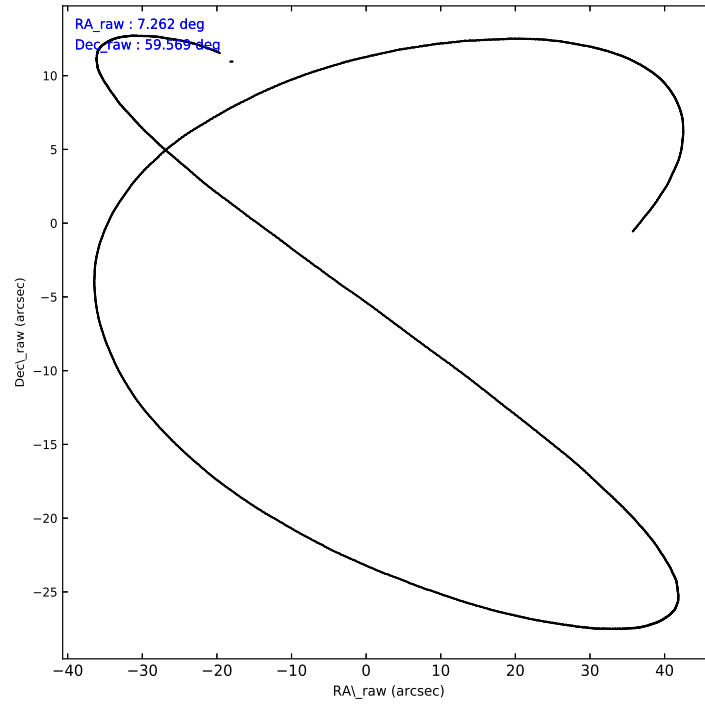
Level 1 Events

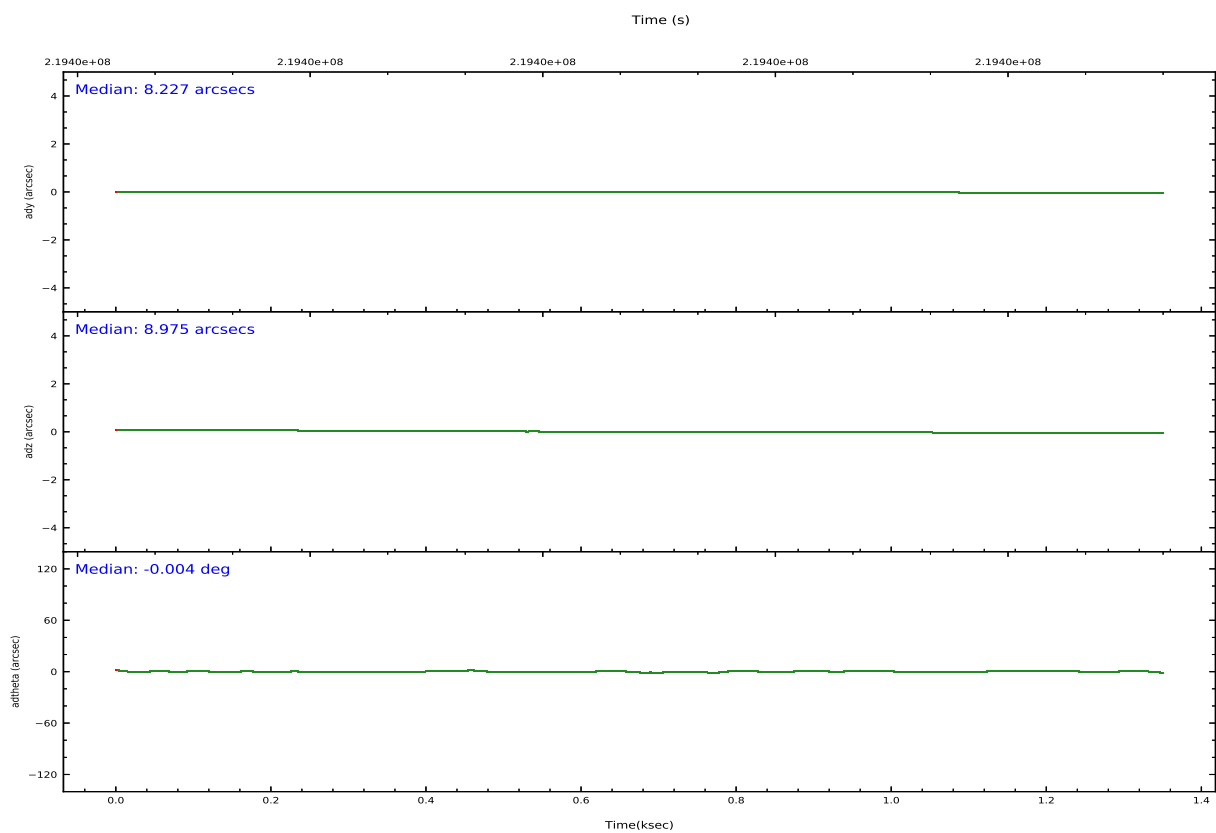
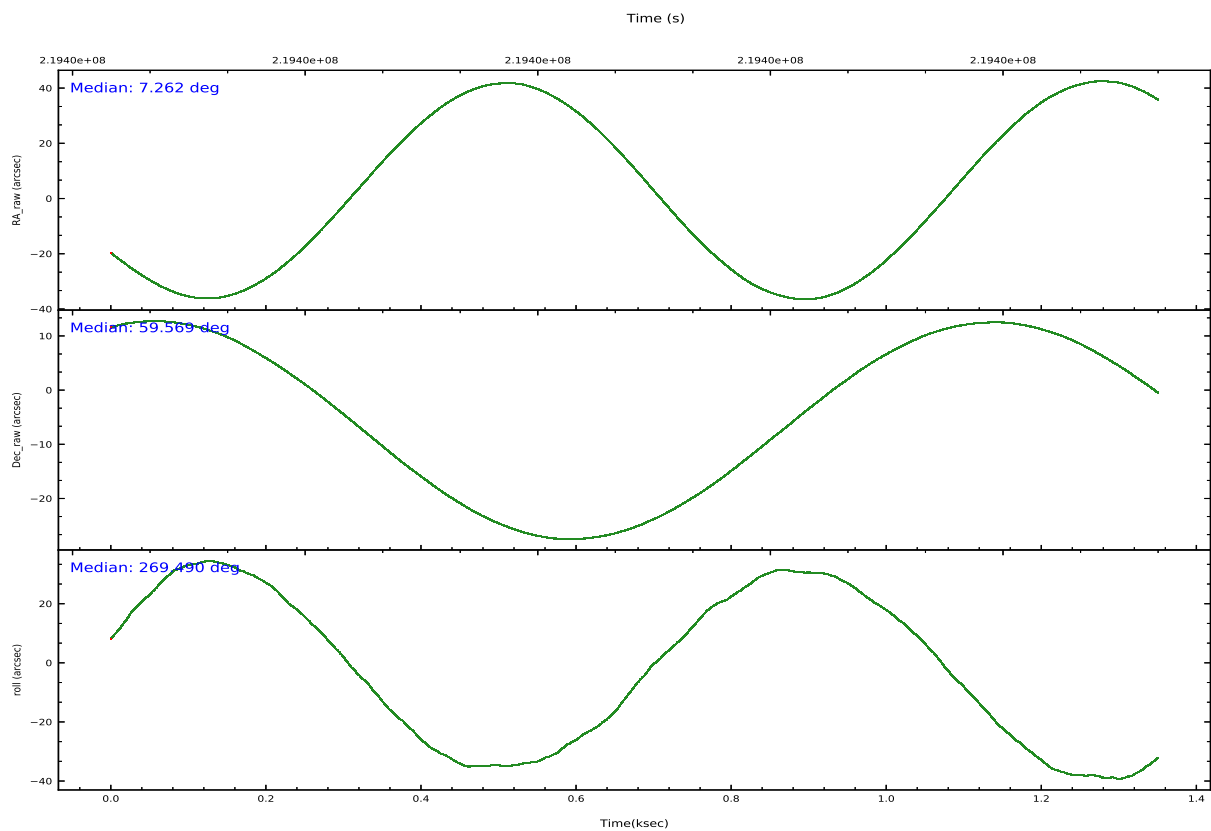
| | segment 1 | segment 2 | segment 3 |
|-----------------|--------------|--------------|--------------|
| level 1 events | 102 | 90787 | 38 |
| rejected events | 5 | 3858 | 14 |
| rejected % | 4% | 4% | 36% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|-----------------------|-----------|---------|
| Instrument | HRC | HRC | Obspar version number | 8 | 8 |
| Detector | HRC-S | HRC-S | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | OBSERVING | OBSERVING | | | |
| Observation mode | POINTING | POINTING | | | |
| [deg] Pointing RA | 7.232184 | 7.2570951610301 | | | |
| [deg] Pointing Dec | 59.591426 | 59.570486185075 | | | |
| [deg] Pointing Roll | 269.447855 | 269.48932556665 | | | |
| [mm] SIM focus pos | -1.429586 | -1.428180813131781 | | | |
| [mm] SIM defocus | 0.1037507710433287 | 0.1051558262725154 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 219399200.184000 | 219398558.63076 | | | |
| Observation start date | 2004-12-14T08:12:16 | 2004-12-14T08:02:38 | | | |
| [s] Observation end time (MET) | 219400200.184000 | 219400864.36836 | | | |
| Observation end date | 2004-12-14T08:28:56 | 2004-12-14T08:41:04 | | | |

2.3 Aspect



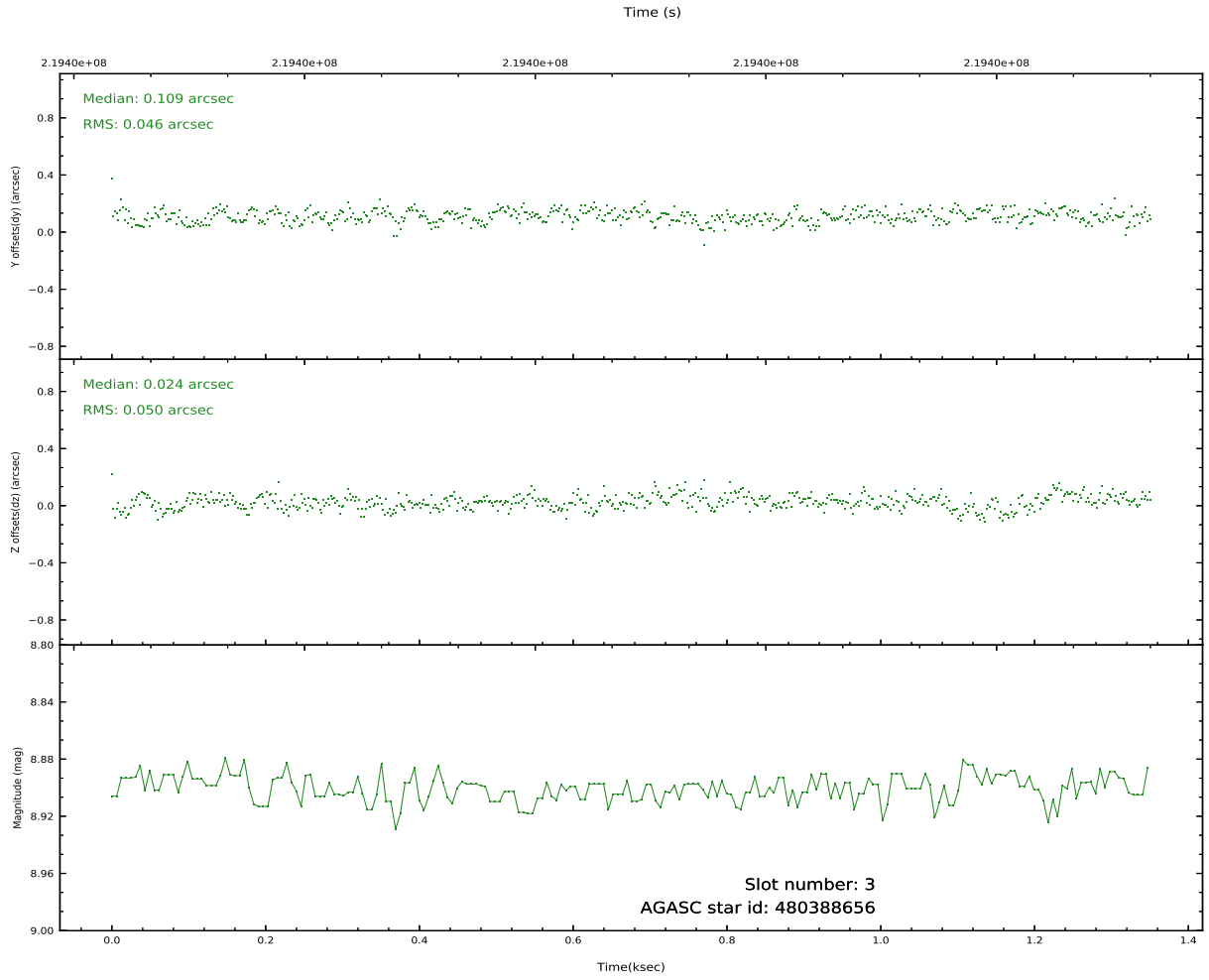
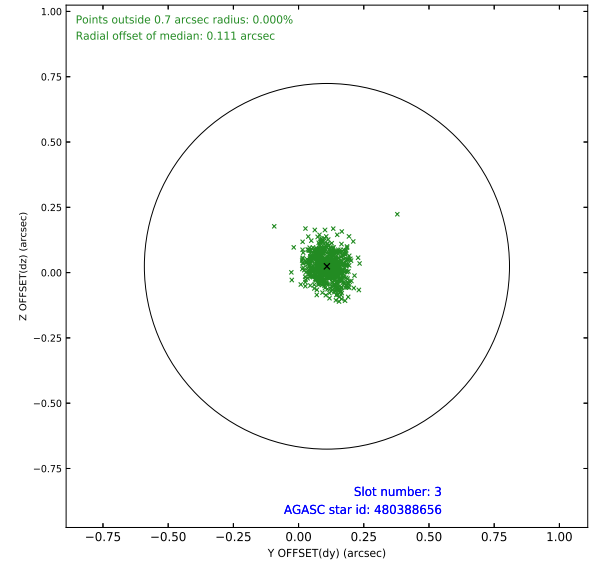
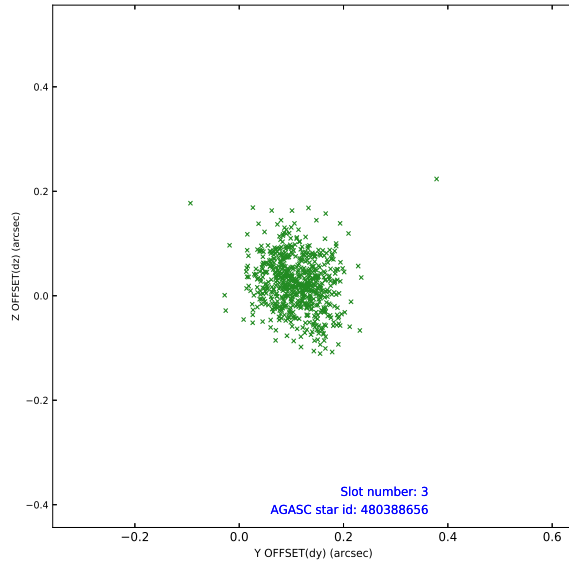


Slot Statistics

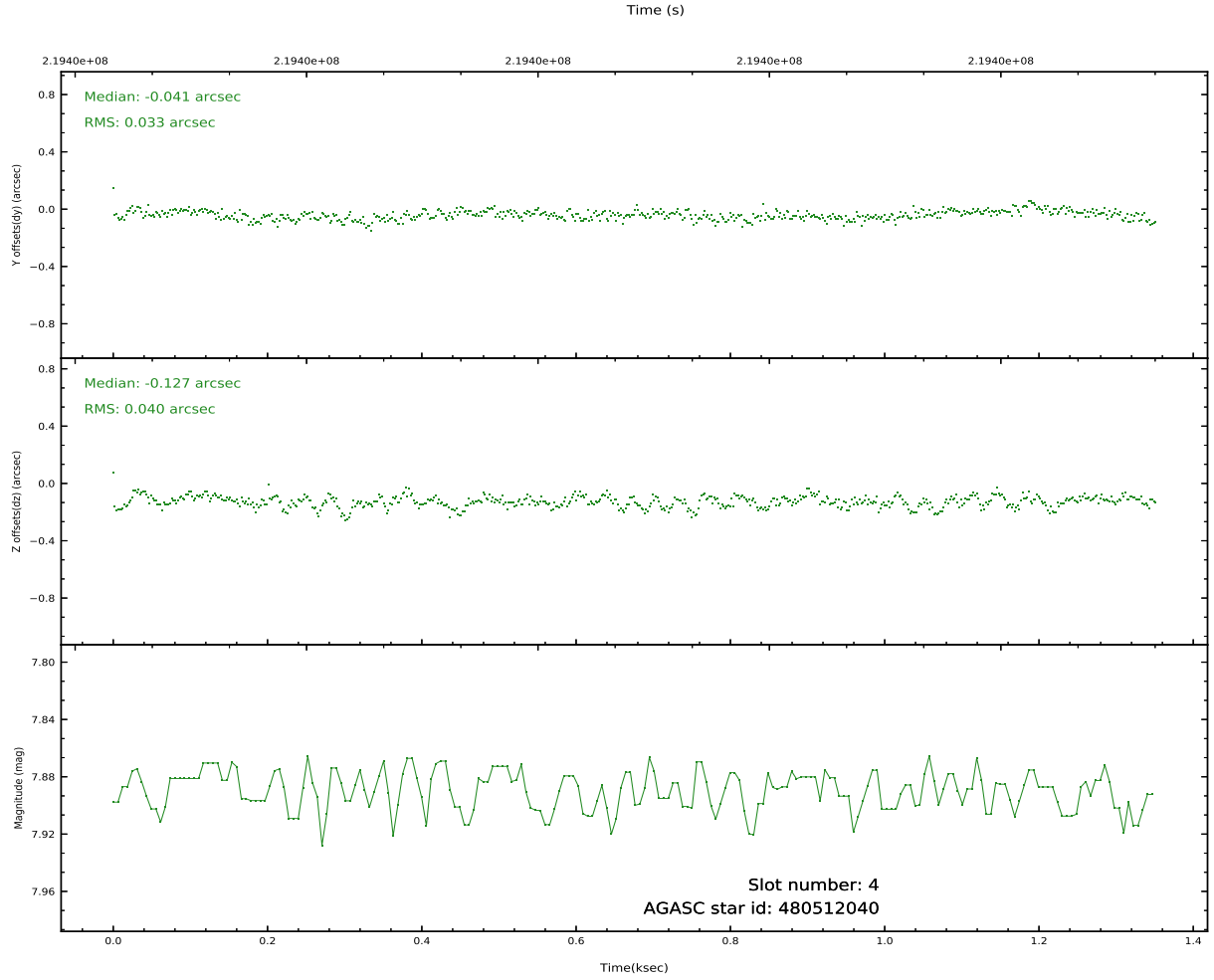
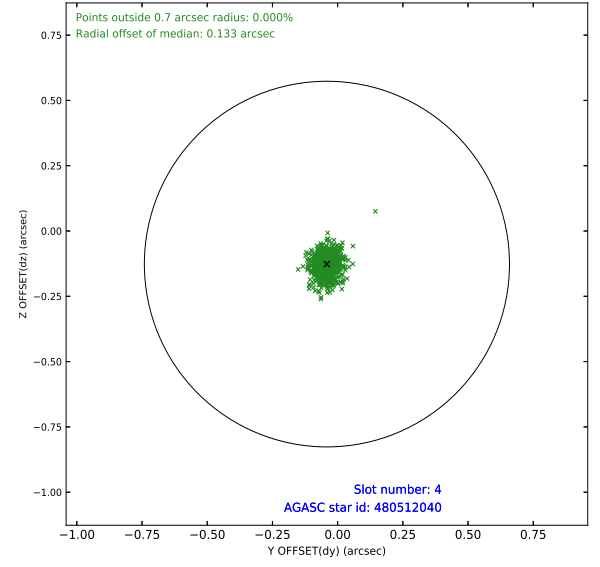
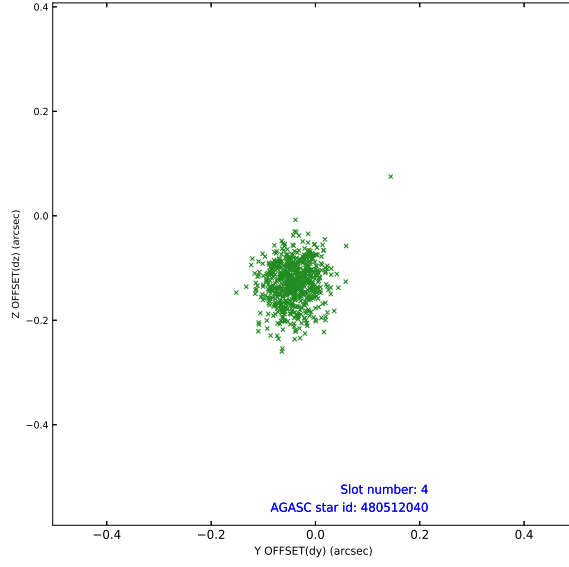
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|----------|-----------|----------|-------|
| 0 | FID | | HRC-S-1 | 7.02 | 330 | 1.000 | 0.122 | -0.175 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1162.41 | -457 |
| 1 | FID | | HRC-S-2 | 7.01 | 330 | 1.000 | 0.172 | -0.115 | 0.005 | 0.008 | 0.000000 | 0.000000 | 1233.80 | -451 |
| 2 | FID | | HRC-S-3 | 7.03 | 330 | 1.000 | 0.097 | -0.013 | 0.007 | 0.011 | 0.000000 | 0.000000 | -1161.43 | 570 |
| 3 | GUIDE | used | 480388656 | 8.90 | 660 | 1.000 | 0.109 | 0.024 | 0.072 | 0.116 | 6.593066 | 59.181927 | 1483.38 | -1163 |
| 4 | GUIDE | used | 480512040 | 7.89 | 660 | 1.000 | -0.041 | -0.127 | 0.053 | 0.090 | 7.309429 | 59.469475 | 443.10 | 144 |
| 5 | GUIDE | used | 480513376 | 8.59 | 660 | 1.000 | 0.101 | -0.023 | 0.062 | 0.099 | 7.508901 | 59.105688 | 1746.84 | 529 |
| 6 | GUIDE | used | 480518776 | 8.14 | 660 | 1.000 | -0.072 | 0.036 | 0.072 | 0.118 | 8.537557 | 59.899306 | -1148.42 | 2346 |
| 7 | GUIDE | used | 526276608 | 8.59 | 659 | 1.000 | -0.095 | 0.092 | 0.060 | 0.111 | 7.524994 | 60.151139 | -2019.63 | 509 |

2.4 Star Slots

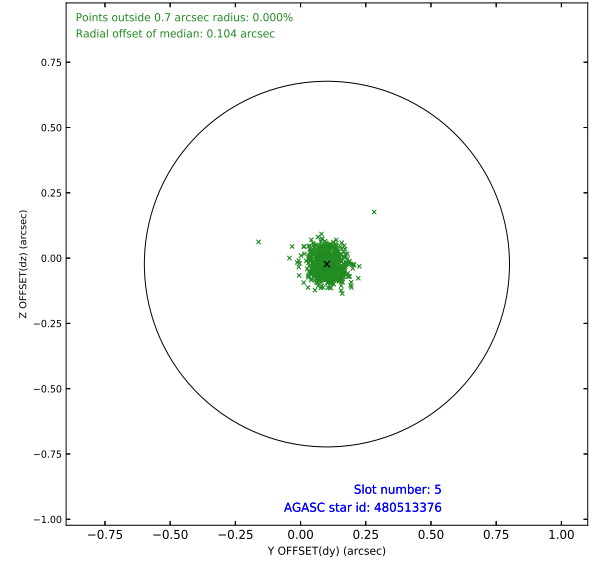
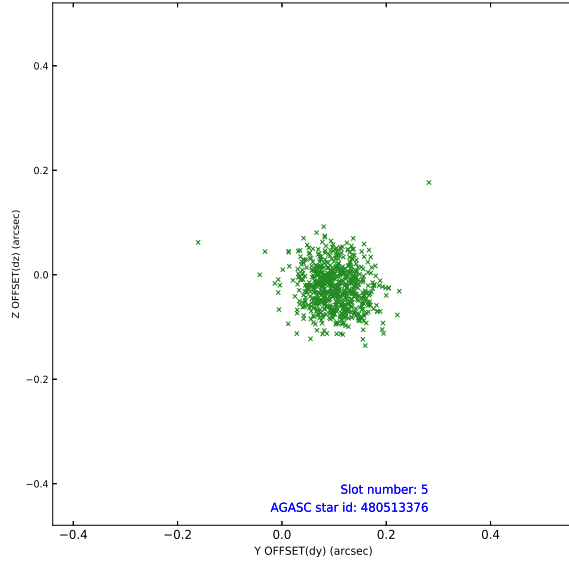
2.4.1 Slot 3



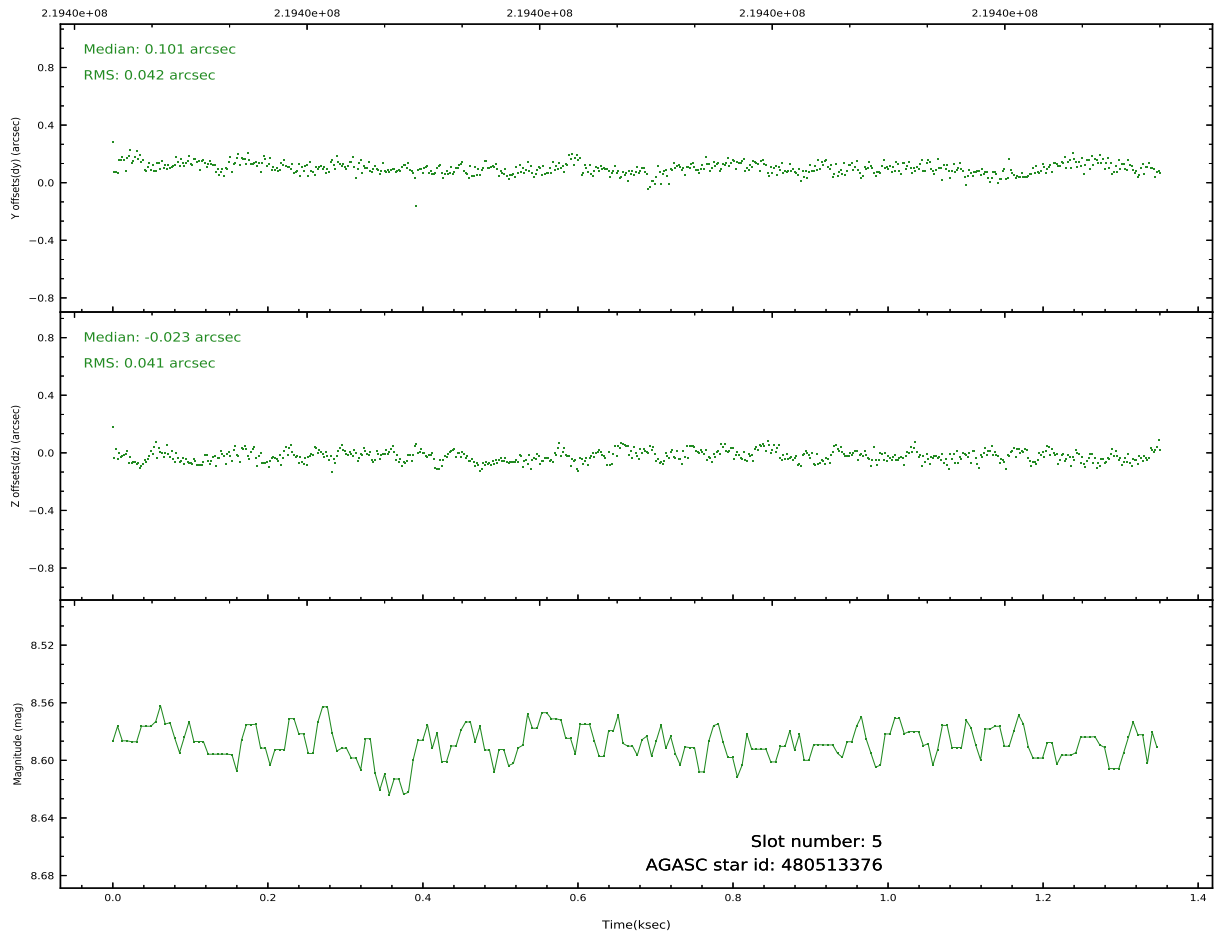
2.4.2 Slot 4



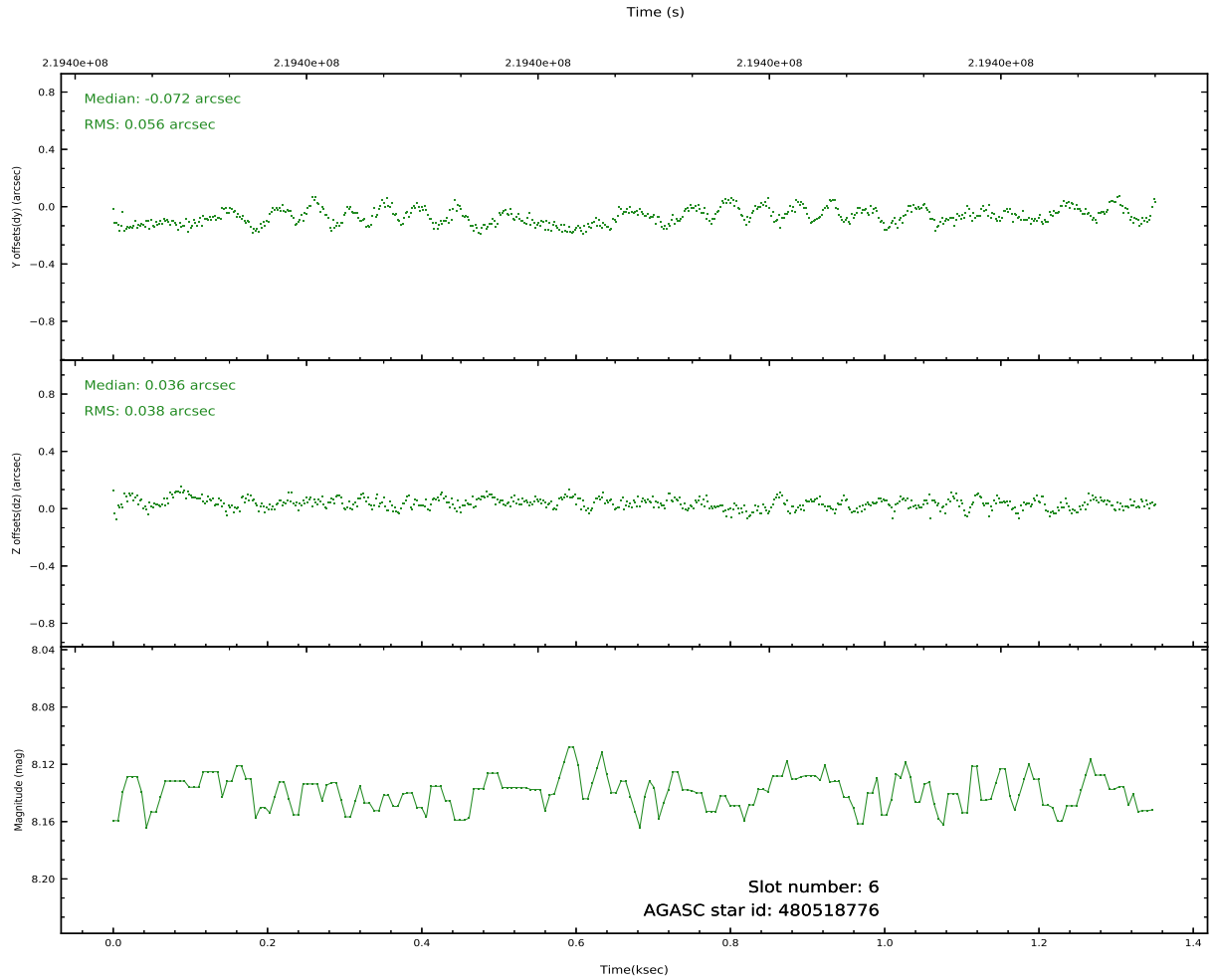
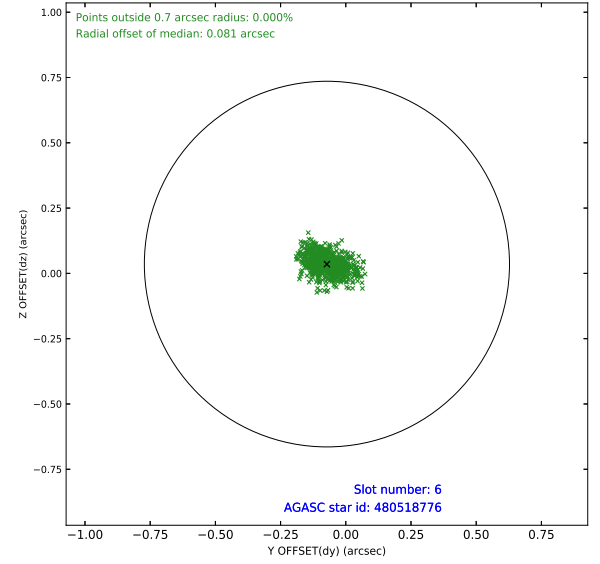
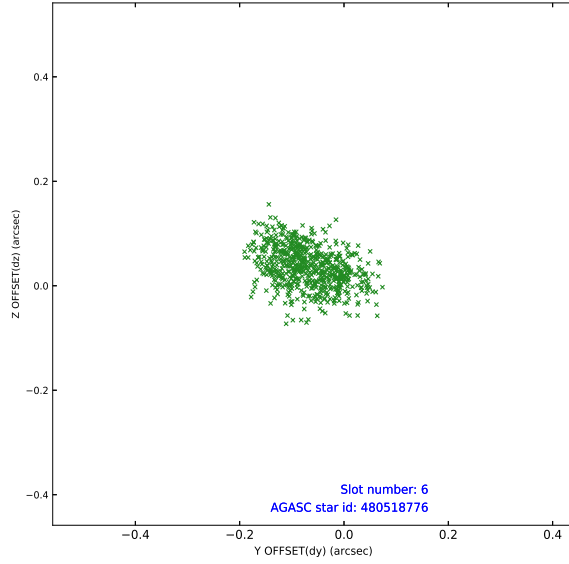
2.4.3 Slot 5



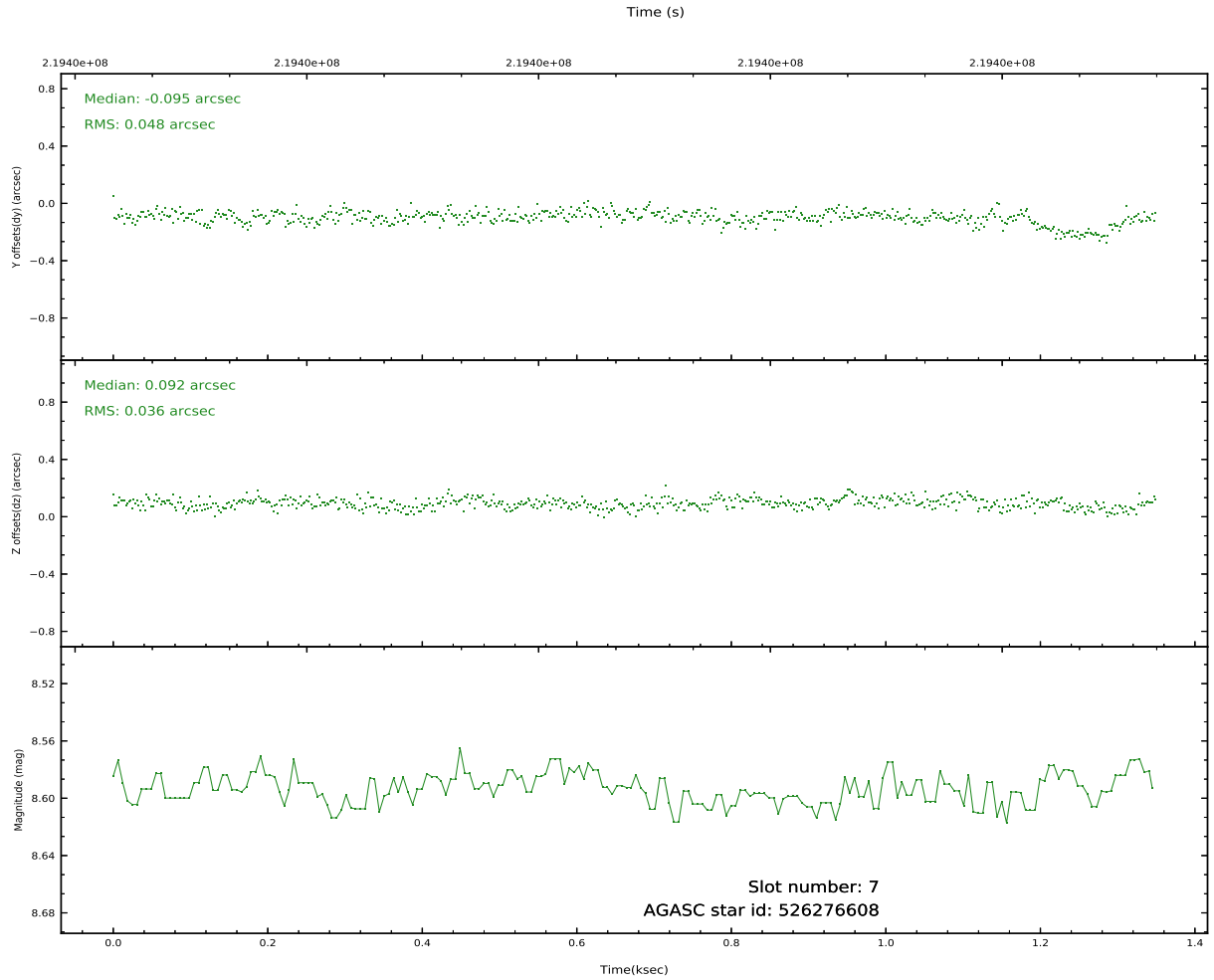
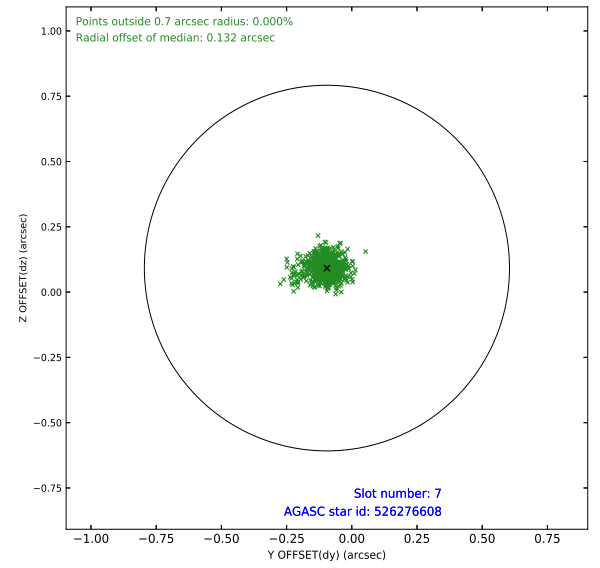
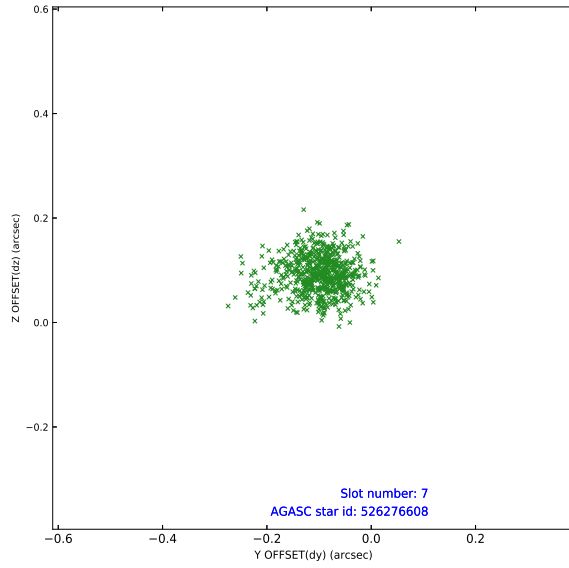
Time (s)



2.4.4 Slot 6

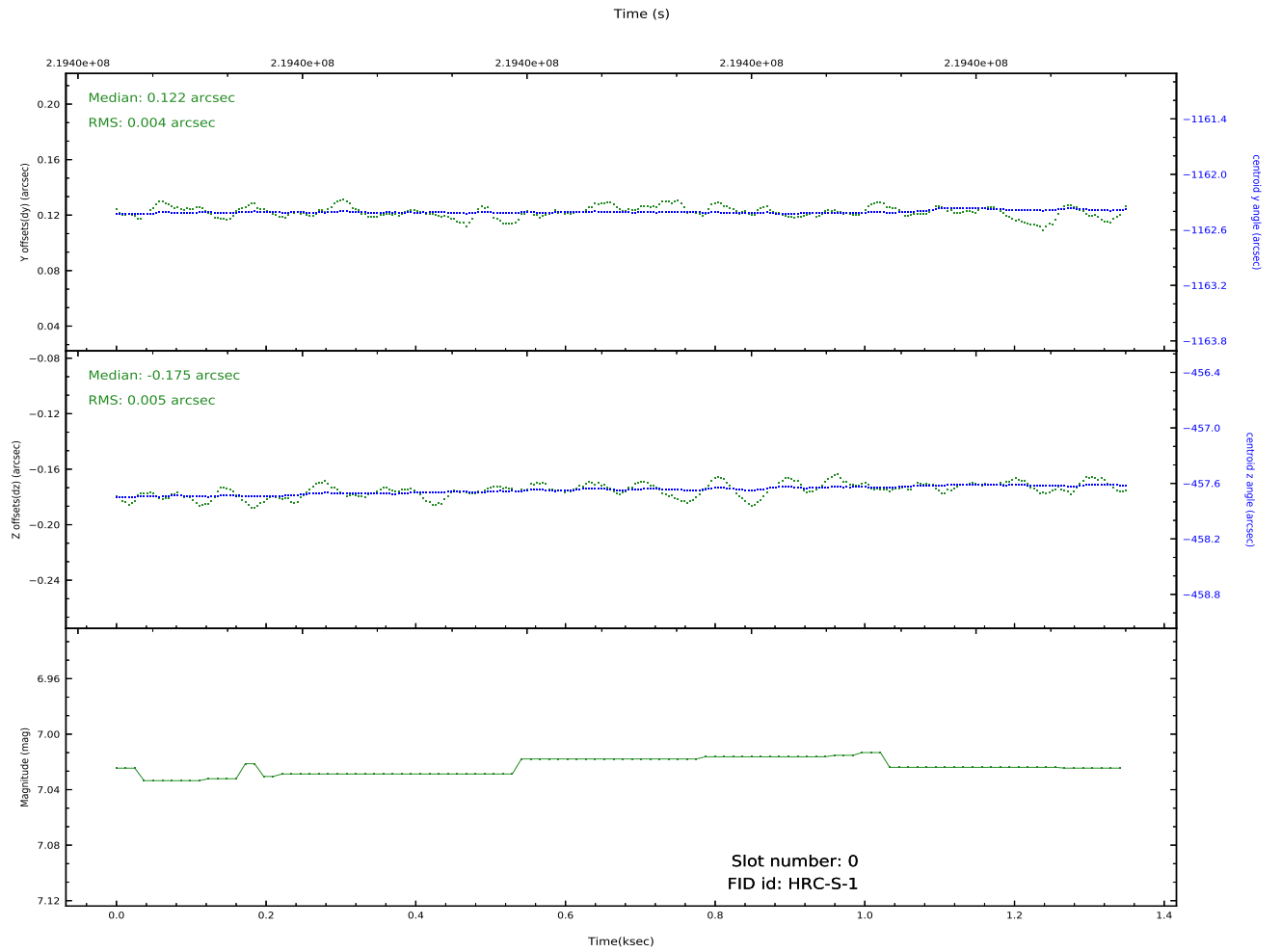
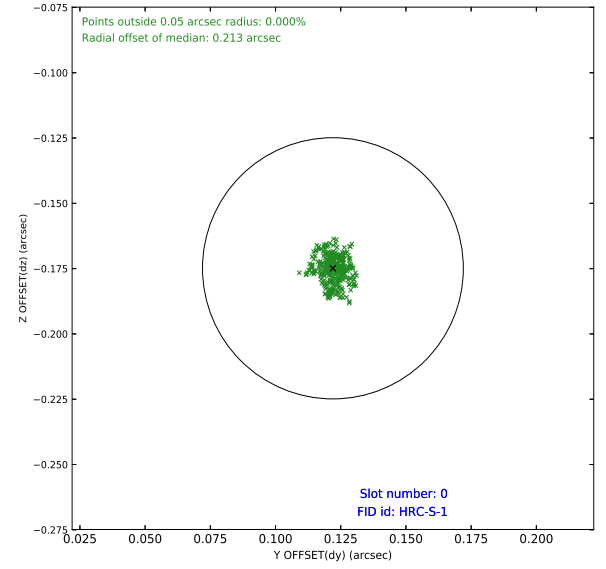
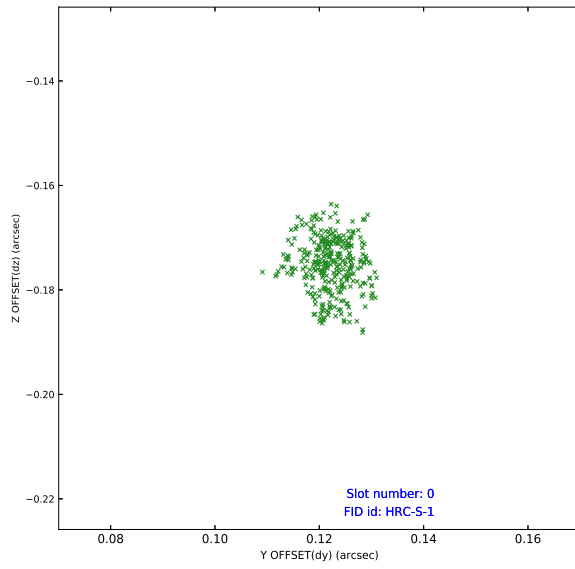


2.4.5 Slot 7

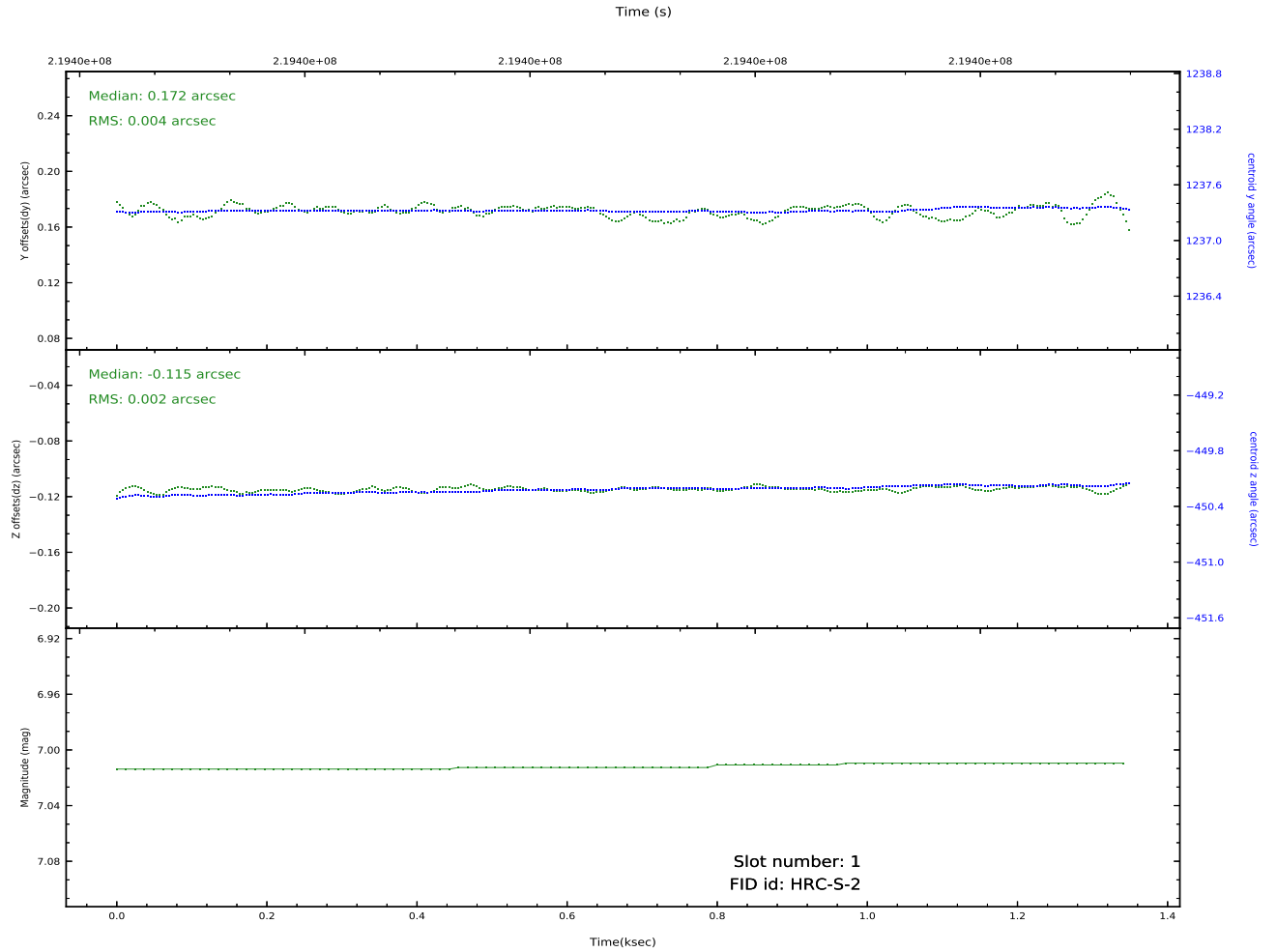
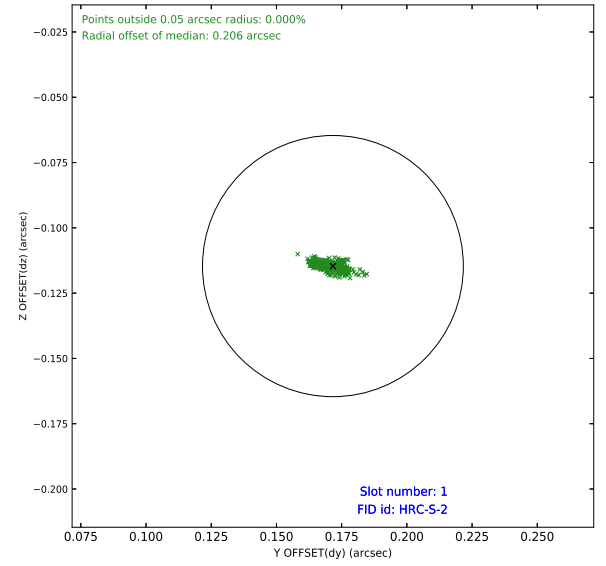
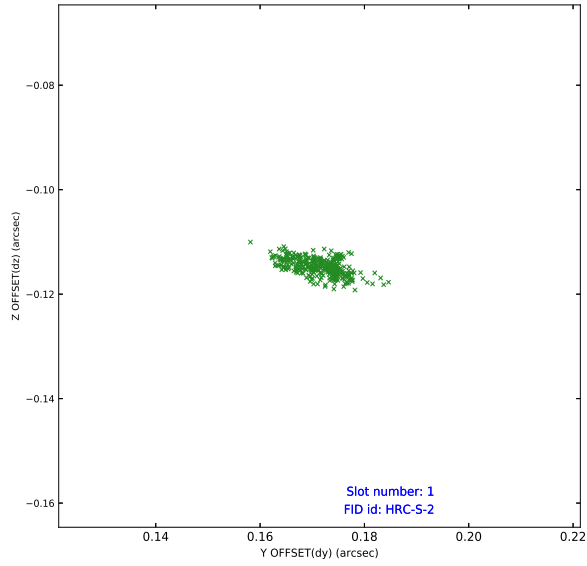


2.5 FID Slots

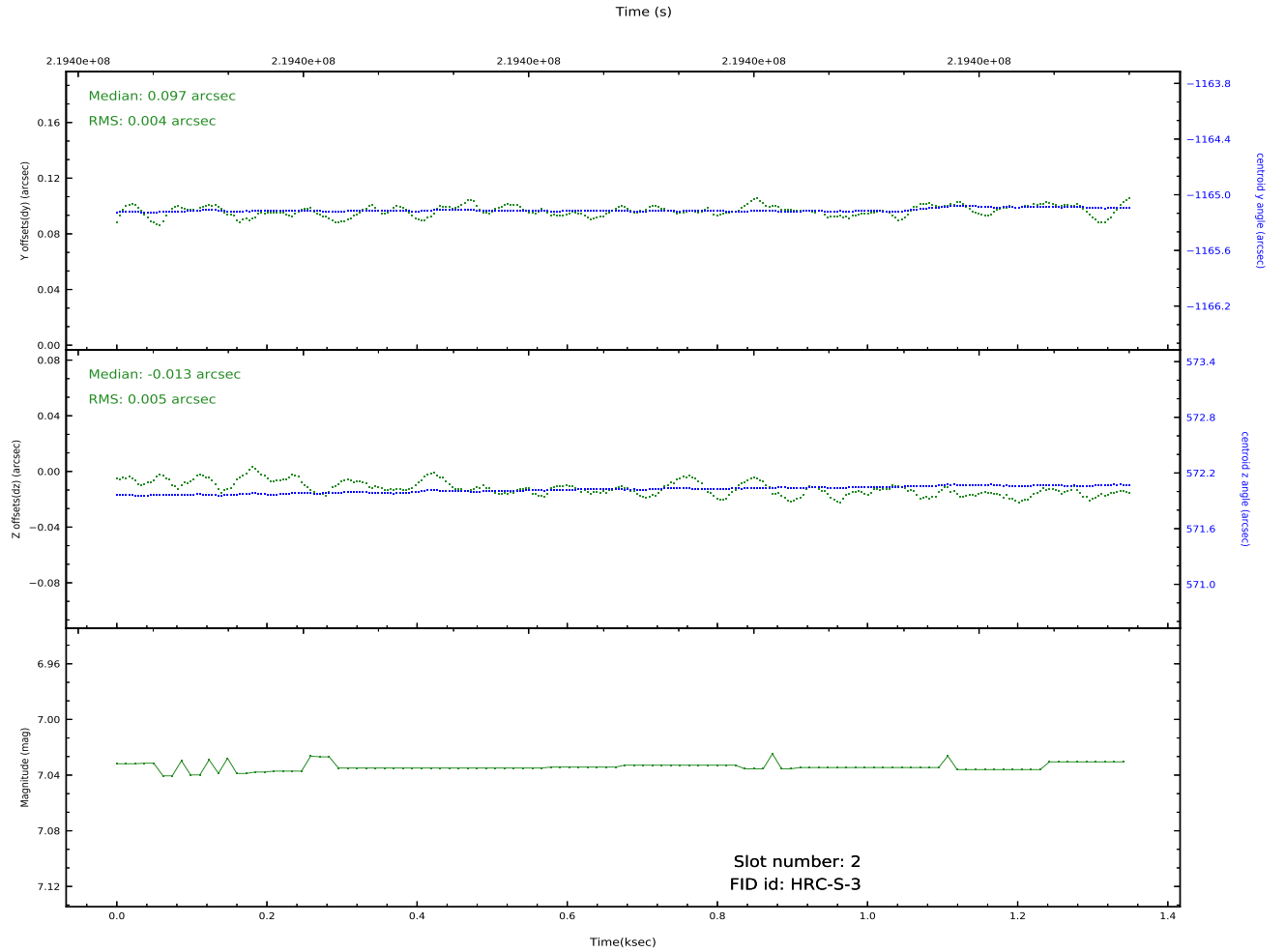
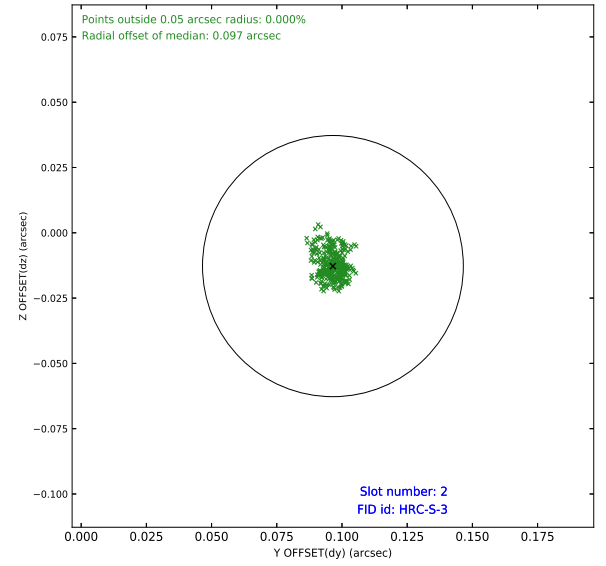
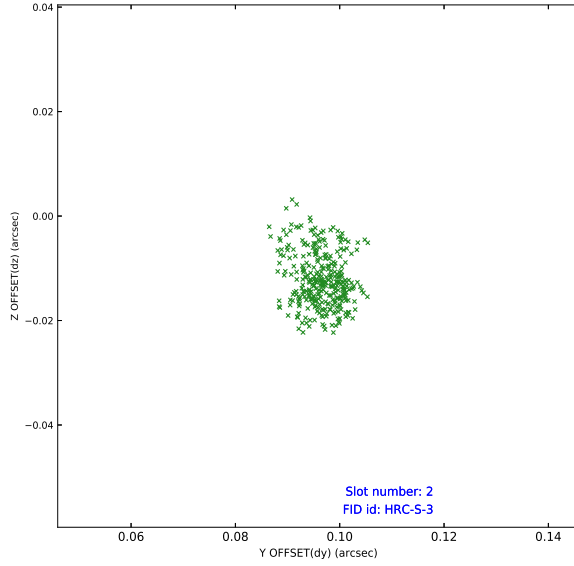
2.5.1 Slot 0



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) | 2020.10.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.042681 |

A.2 Comments