

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6251 - L2 Version 5
Chandra X-Ray Center

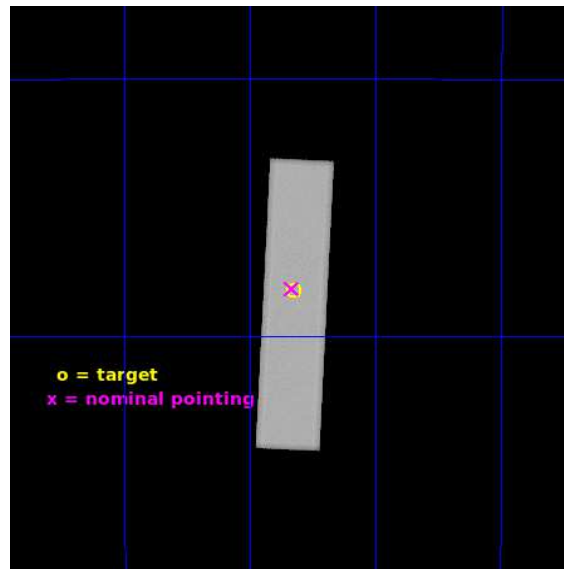
L2 Processing Date : Oct 7 2020

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1 Front

| | | |
|----------|--|---------------------------------------|
| seq_num | 500599 | Sequence number |
| obs_id | 6251 | Observation id |
| title | Resolving an X-ray Jet from the Magnetar SGR 1806-20 | Proposal titl |
| observer | Chryssa Kouveliotou | Principal investigator |
| object | SGR 1806-20 | Source name |
| ra_targ | 272.16375 | Observer's specified target RA [deg] |
| dec_targ | -20.411056 | Observer's specified target Dec [deg] |
| ra_nom | 272.16642548755 | Nominal RA [deg] |
| dec_nom | -20.408133951193 | Nominal Dec [deg] |
| roll_nom | 92.677521311721 | Nominal Roll [deg] |
| revision | 5 | Processing version of data |
| ontime | 27149.176234901 | [s] |
| livetime | 27046.948243912 | Ontime multiplied by DTCOR |
| l2events | 993972 | Number of level 2 events |

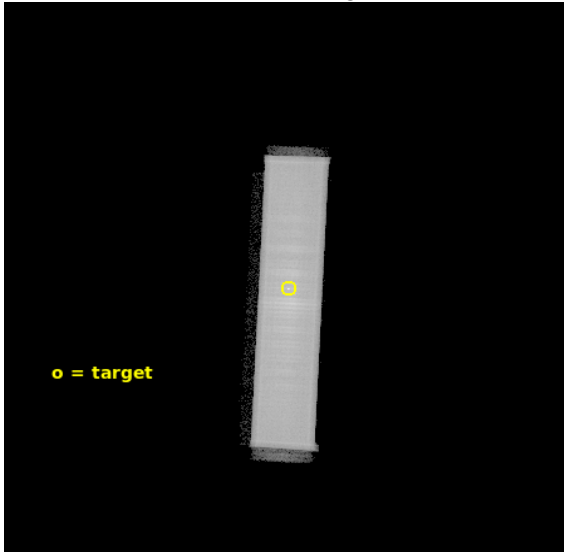


2 OBI

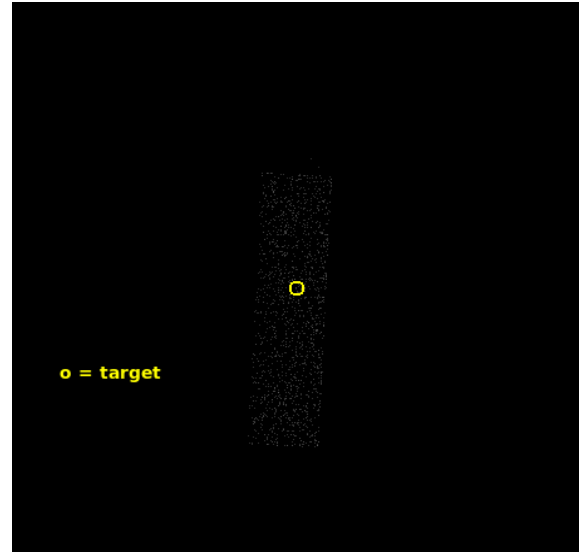
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 27000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 27149.176234901 | [s] |
| caldsver | 4.9.2 | | l1events | 1605557 | Number of level 1 events |
| date | 2020-10-07T23:49:27 | Date and time of file creation | | | |
| revision | 5 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

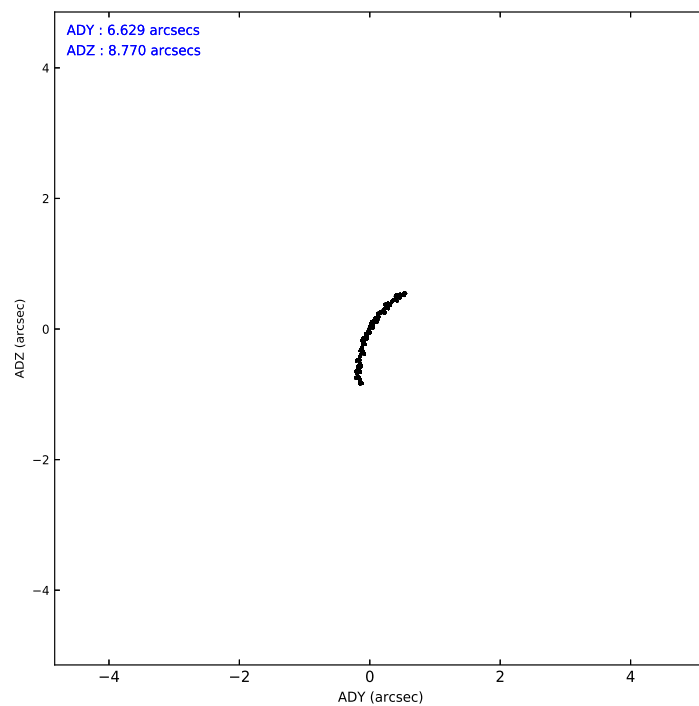
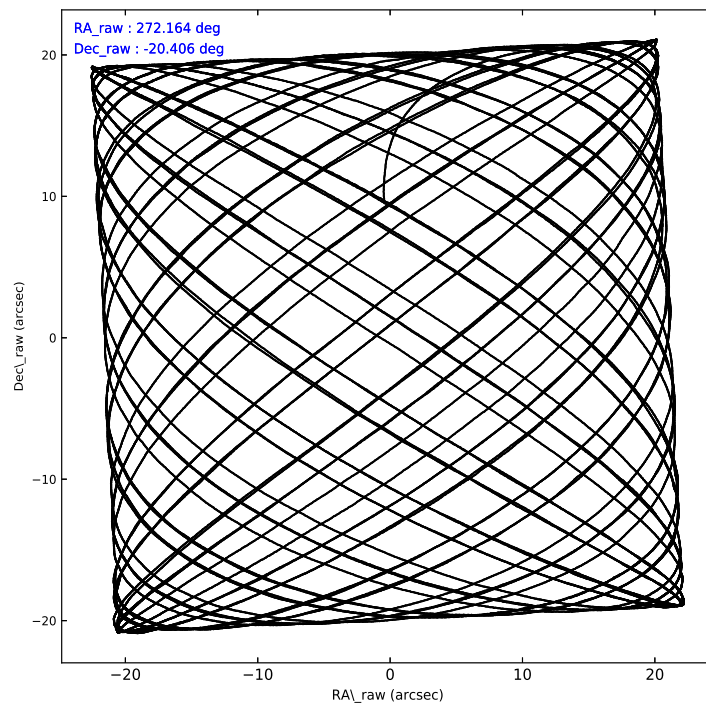
| | segment 1 | segment 2 | segment 3 |
|-----------------|----------------------|----------------------|----------------------|
| level 1 events | 2569 | 1602199 | 789 |
| rejected events | 187 | 113208 | 54 |
| rejected % | 7% | 7% | 6% |

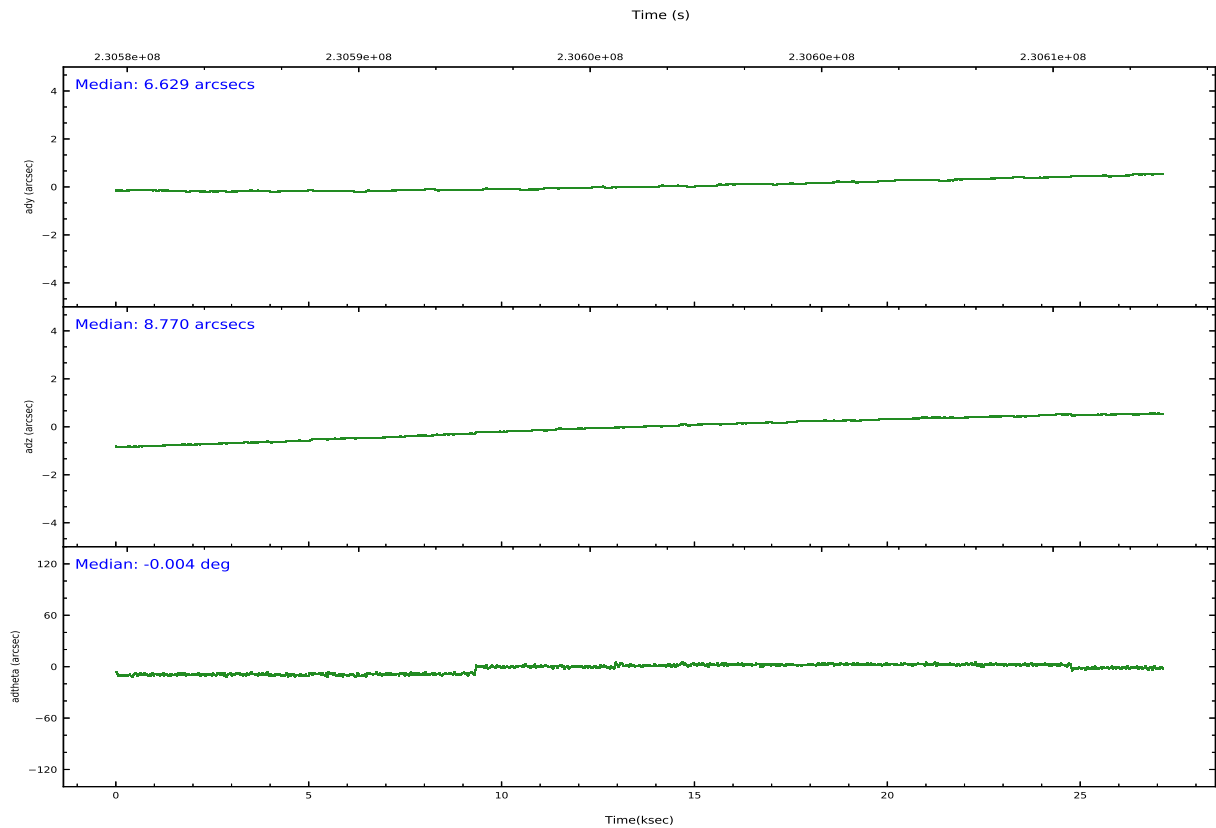
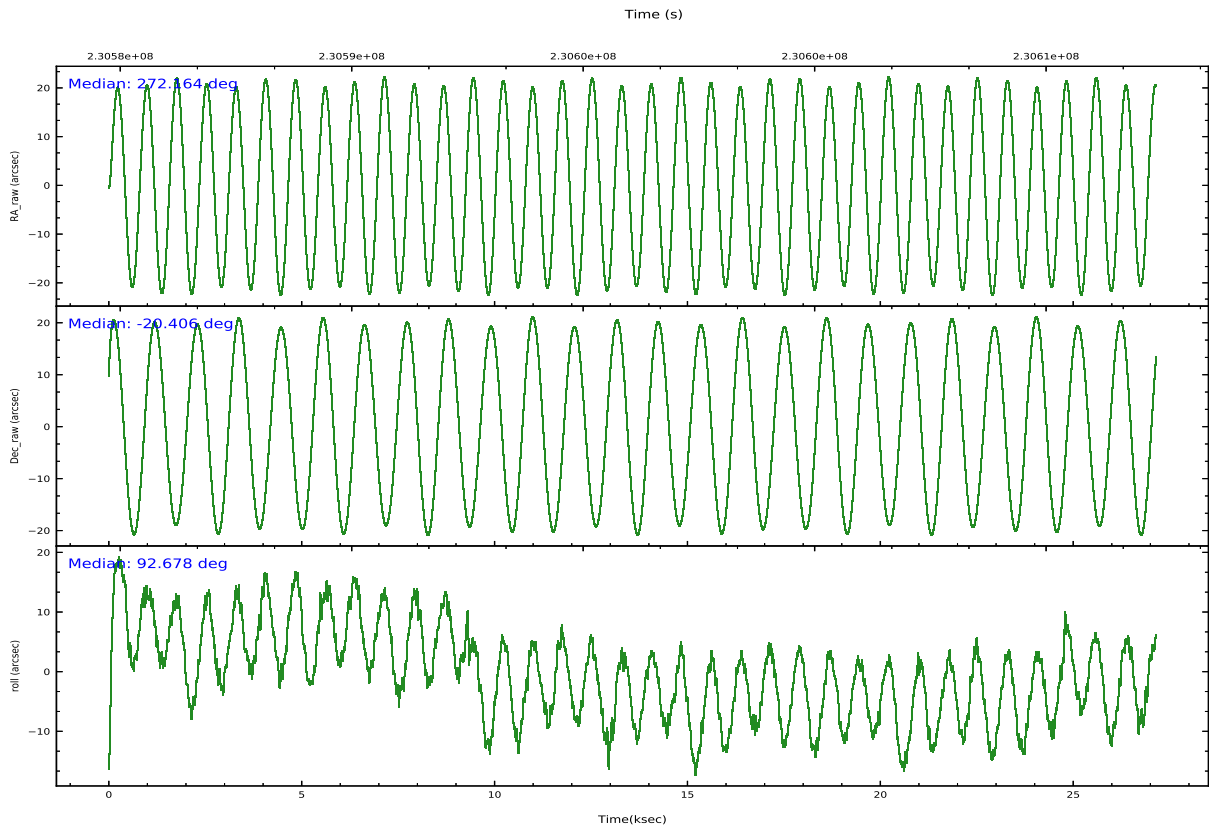
2.2 Compared Parameters

| 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 | 272.181383 | 272.16642548755 |
| [deg] Pointing Dec | -20.429658 | -20.408133951193 |
| [deg] Pointing Roll | 92.614380 | 92.67752131172099 |
| [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) | 230583852.184000 | 230581771.92425 |
| Observation start date | 2005-04-22T19:03:08 | 2005-04-22T18:29:31 |
| [s] Observation end time (MET) | 230610852.184000 | 230611567.13811 |
| Observation end date | 2005-04-23T02:33:08 | 2005-04-23T02:46:07 |

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

2.3 Aspect





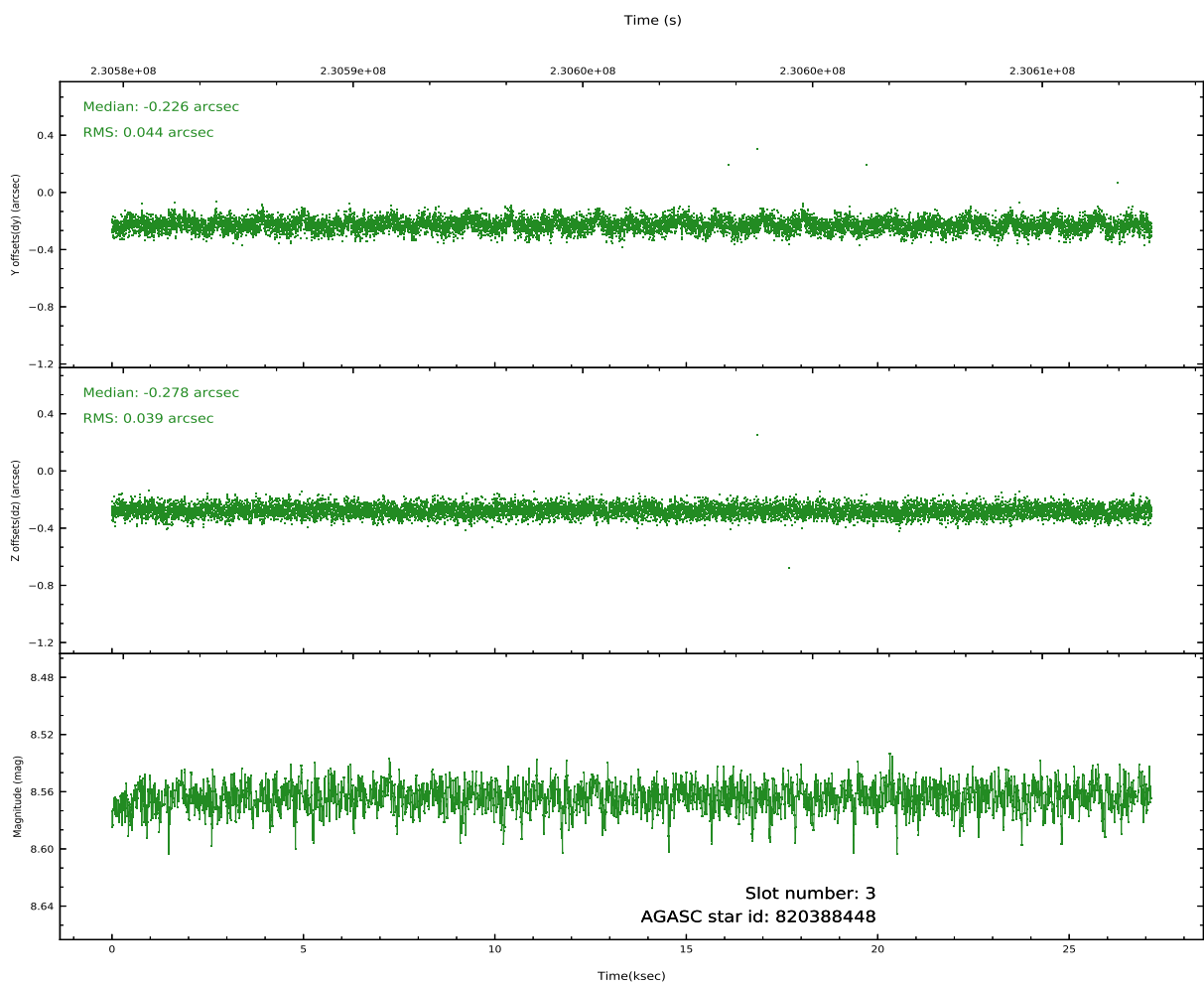
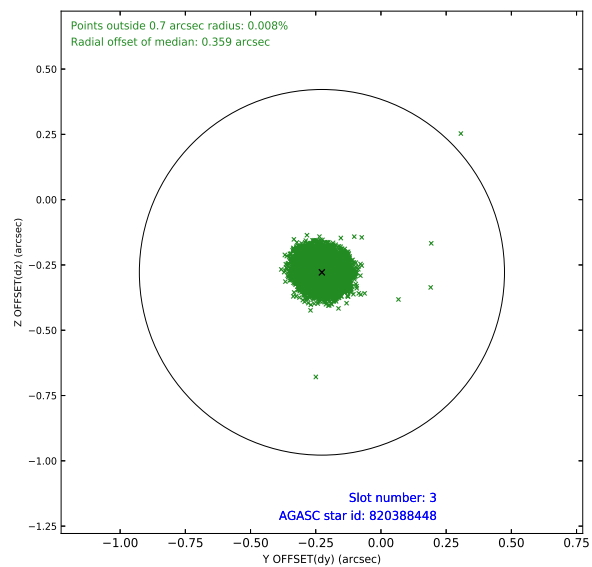
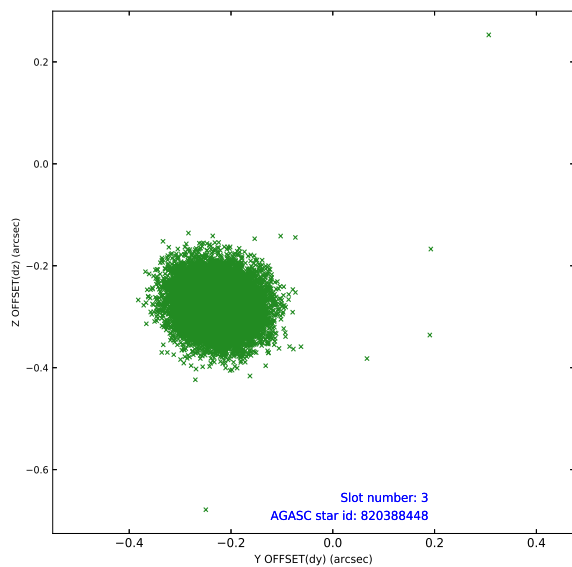
Slot Statistics

| slot | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|------|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|------------|----------|------|
| 0 | FID | | HRC-S-1 | 7.00 | 6622 | 1.000 | 0.071 | -0.176 | 0.025 | 0.038 | 0.000000 | 0.000000 | -1160.89 | -457 |
| 1 | FID | | HRC-S-3 | 7.02 | 6621 | 1.000 | 0.078 | -0.046 | 0.037 | 0.057 | 0.000000 | 0.000000 | -1163.79 | 572 |
| 2 | FID | | HRC-S-4 | 6.97 | 6620 | 1.000 | 0.237 | -0.075 | 0.012 | 0.020 | 0.000000 | 0.000000 | 1237.34 | 574 |
| 3 | GUIDE | used | 820388448 | 8.56 | 13240 | 1.000 | -0.226 | -0.278 | 0.062 | 0.101 | 271.630569 | -19.882892 | 2048.15 | 1773 |
| 4 | GUIDE | used | 820399496 | 8.34 | 13242 | 1.000 | -0.044 | -0.116 | 0.075 | 0.115 | 271.495152 | -19.953854 | 1812.44 | 2242 |
| 5 | GUIDE | used | 822617304 | 8.98 | 13243 | 1.000 | 0.213 | 0.221 | 0.081 | 0.130 | 272.421826 | -20.831304 | -1481.53 | -741 |
| 6 | GUIDE | used | 822098736 | 8.51 | 13241 | 1.000 | -0.006 | 0.215 | 0.072 | 0.117 | 272.269355 | -19.875225 | 1980.22 | -388 |
| 7 | GUIDE | used | 822614704 | 7.86 | 13239 | 1.000 | 0.068 | -0.039 | 0.064 | 0.101 | 272.076243 | -20.843493 | -1471.90 | 421 |

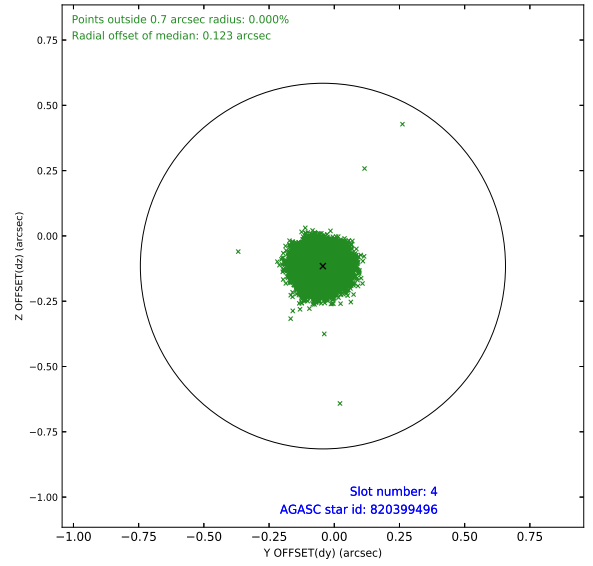
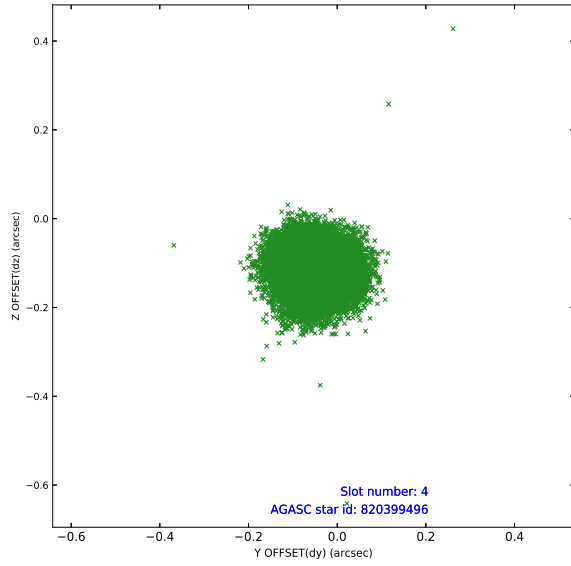
∞

2.4 Star Slots

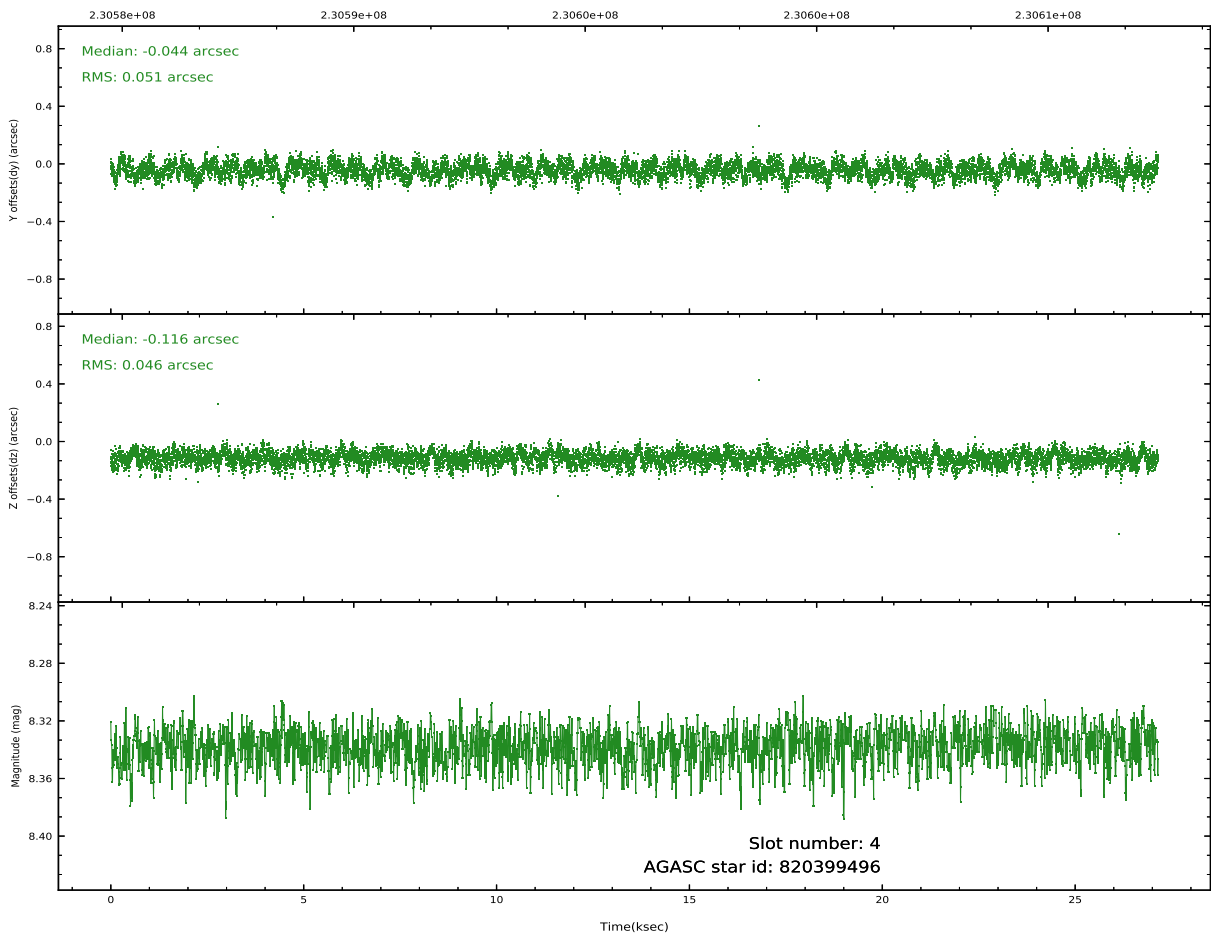
2.4.1 Slot 3



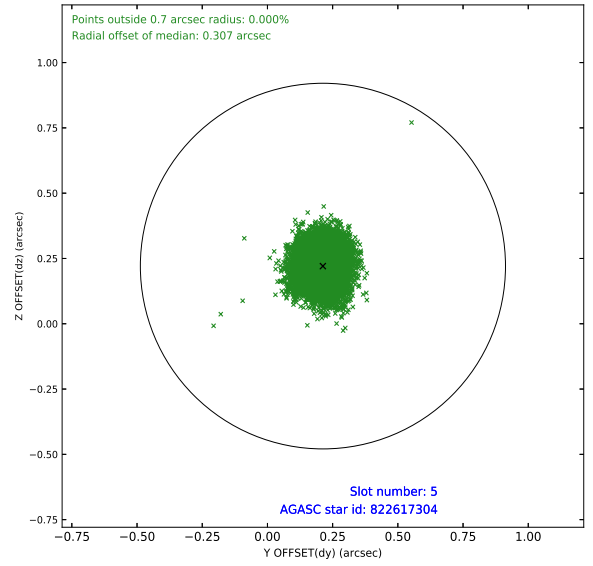
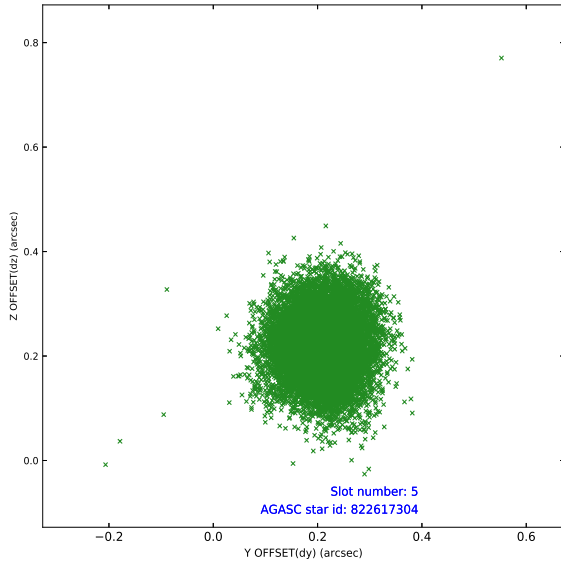
2.4.2 Slot 4



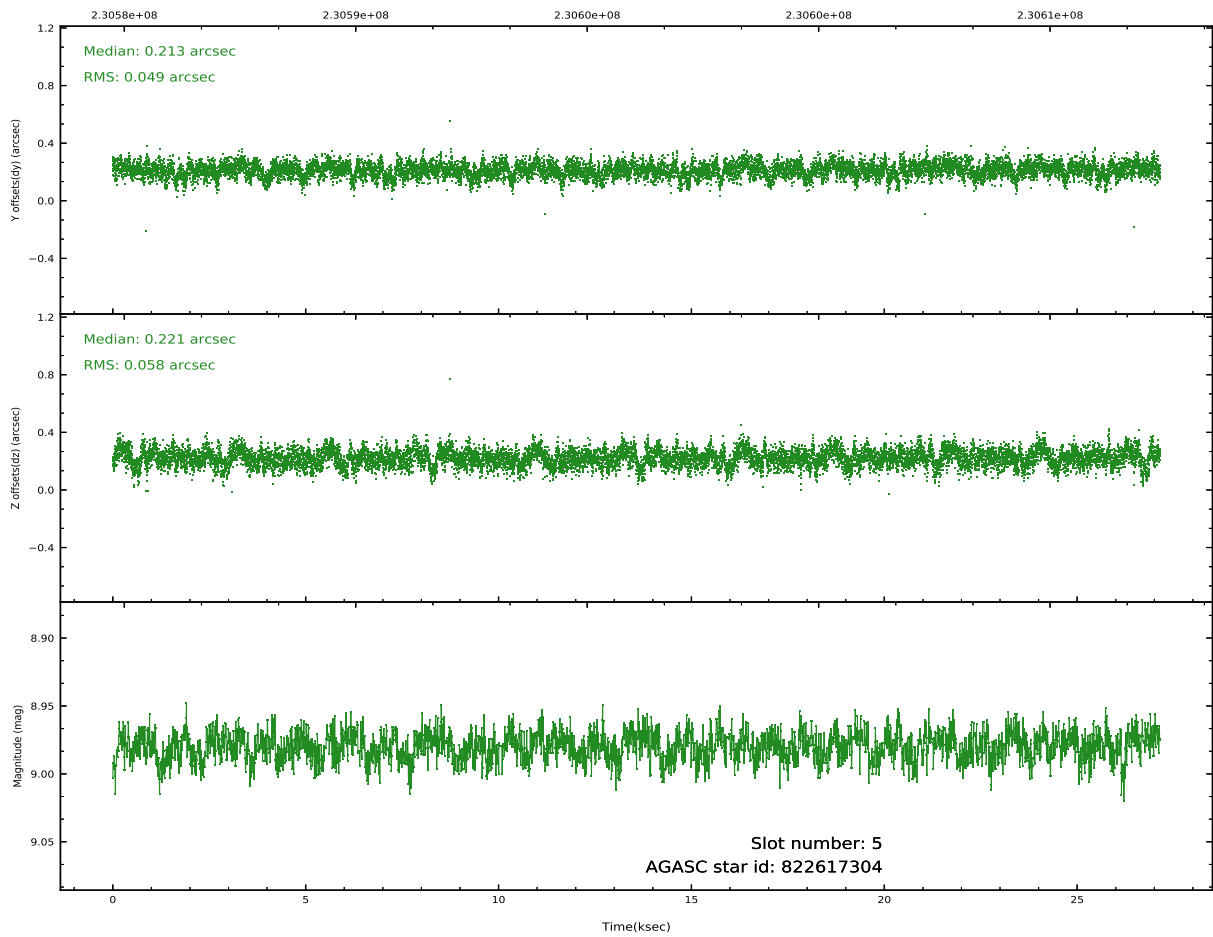
Time (s)



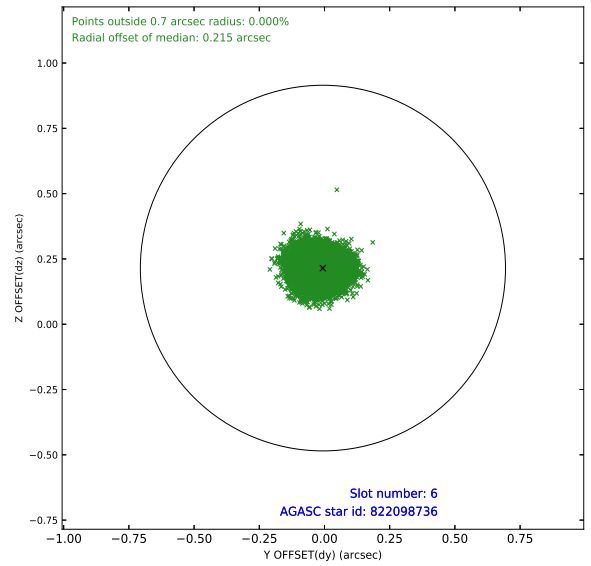
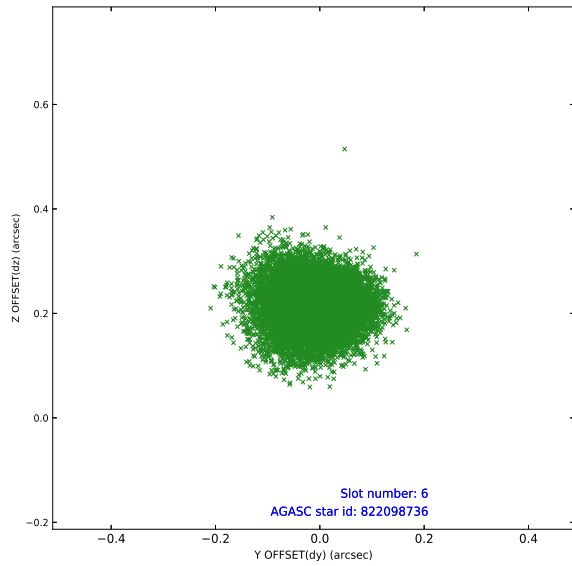
2.4.3 Slot 5



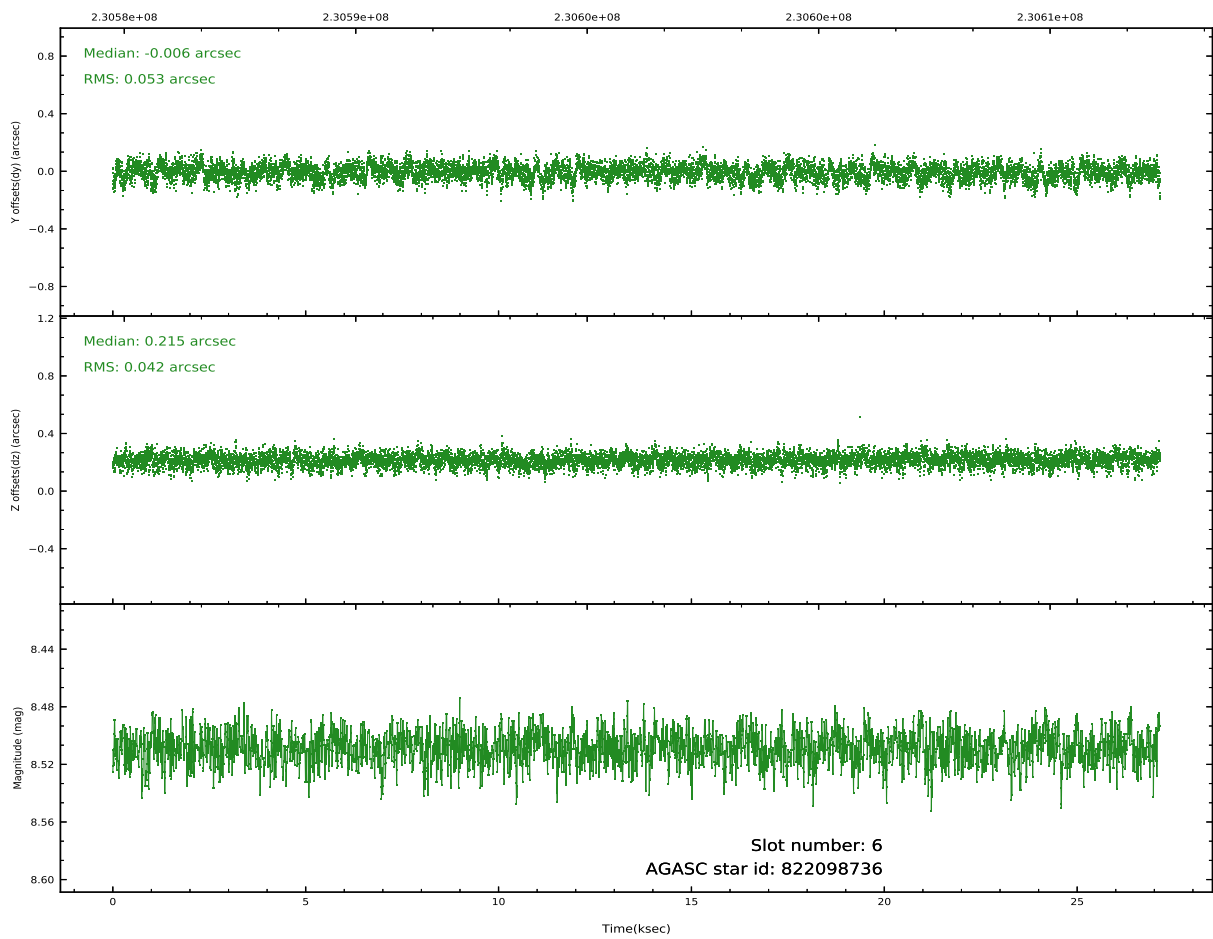
Time (s)



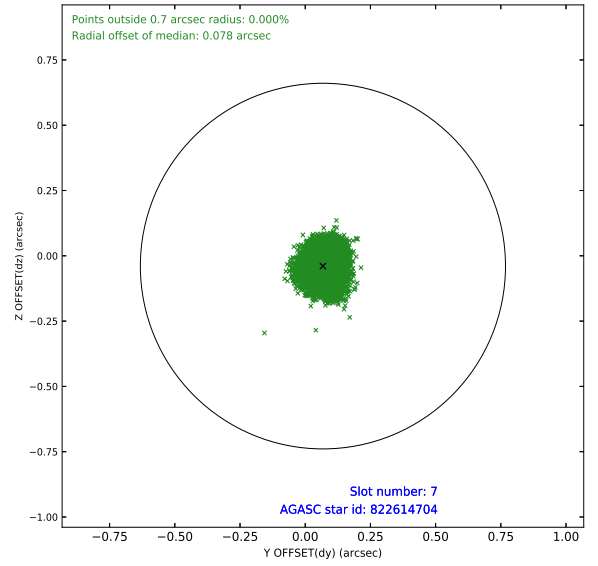
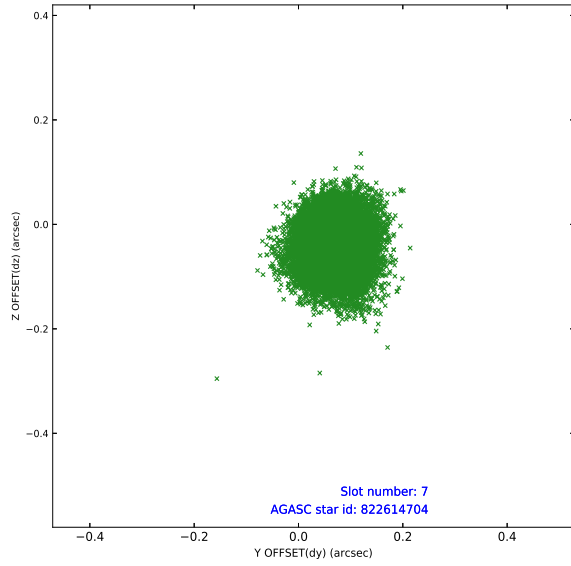
2.4.4 Slot 6



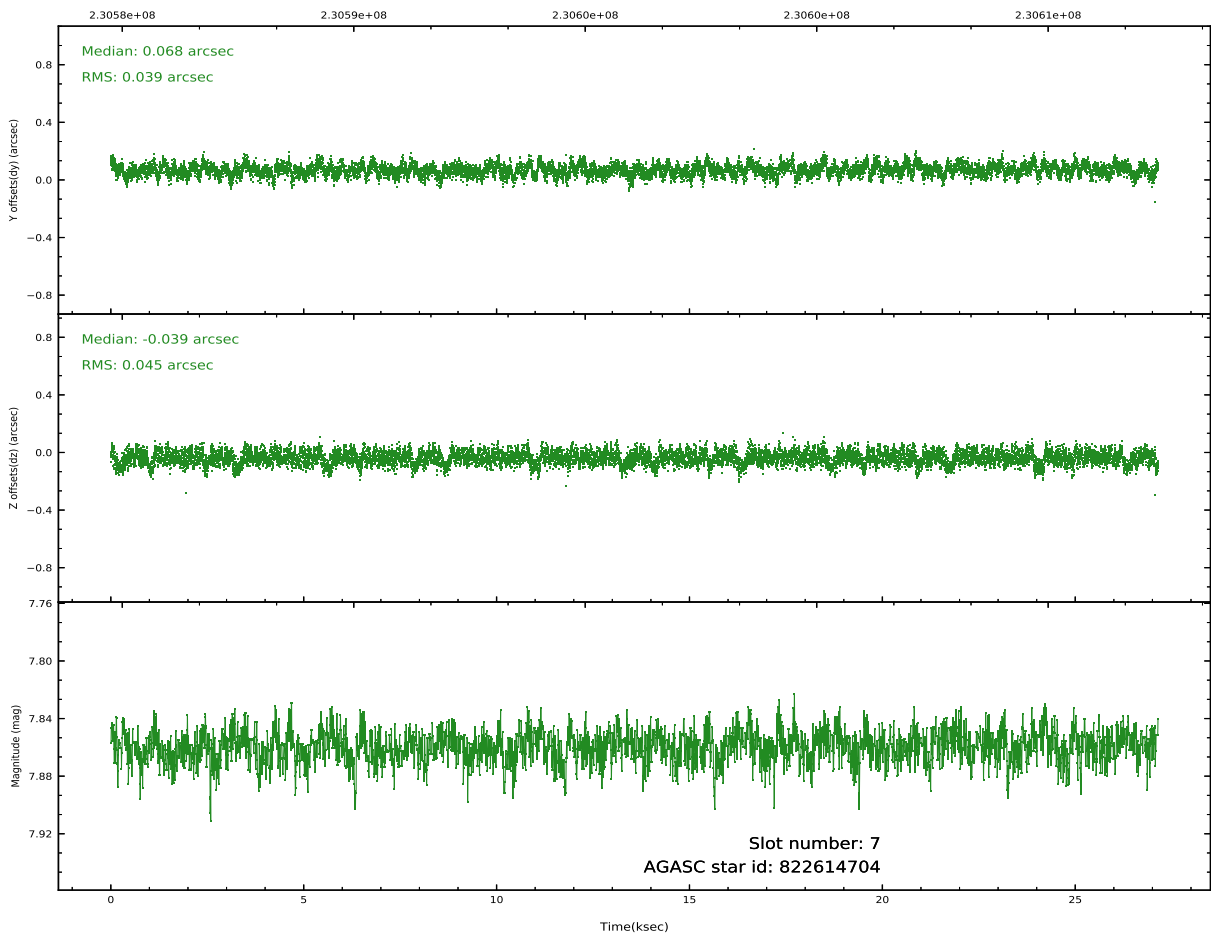
Time (s)



2.4.5 Slot 7

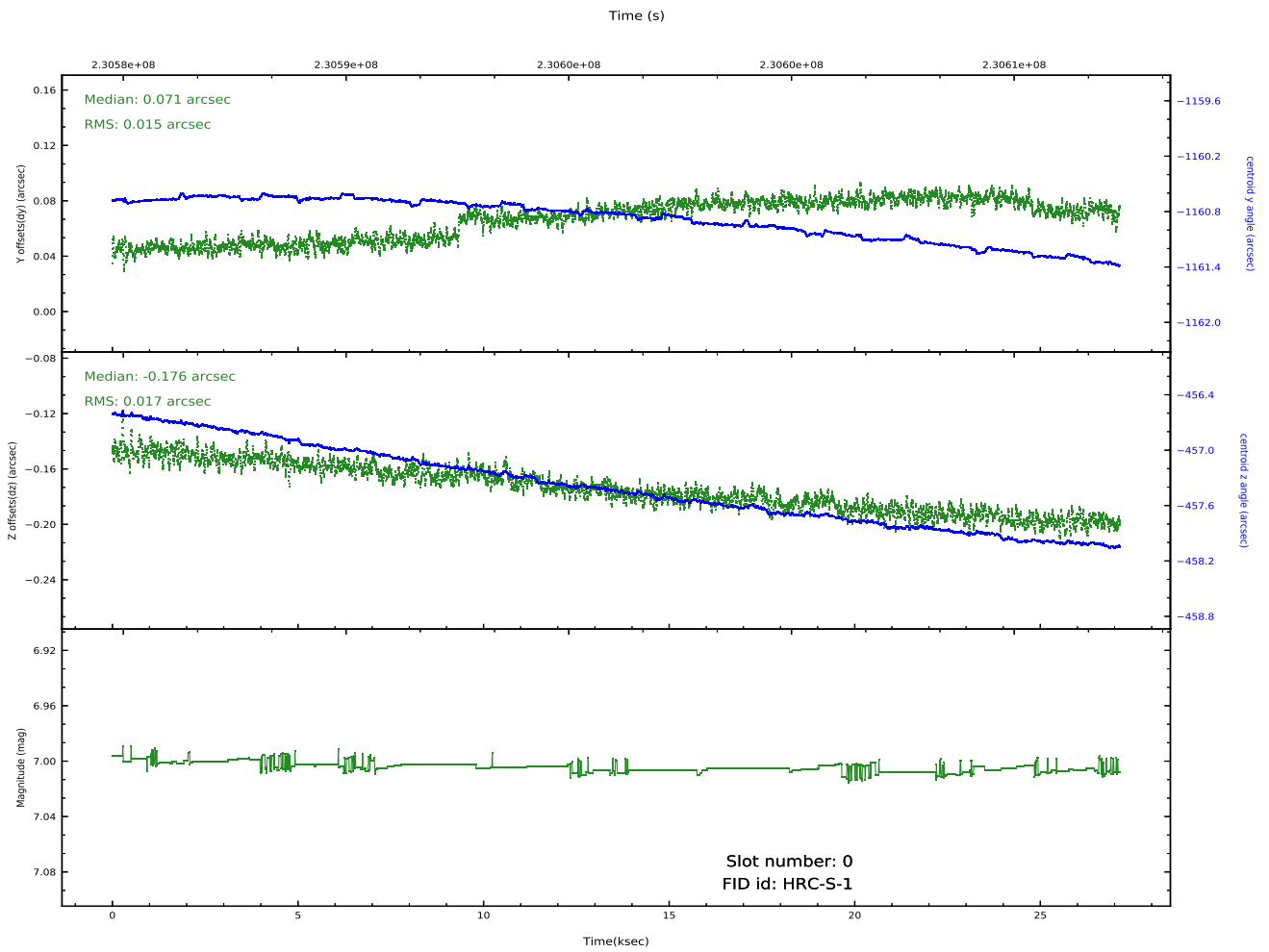
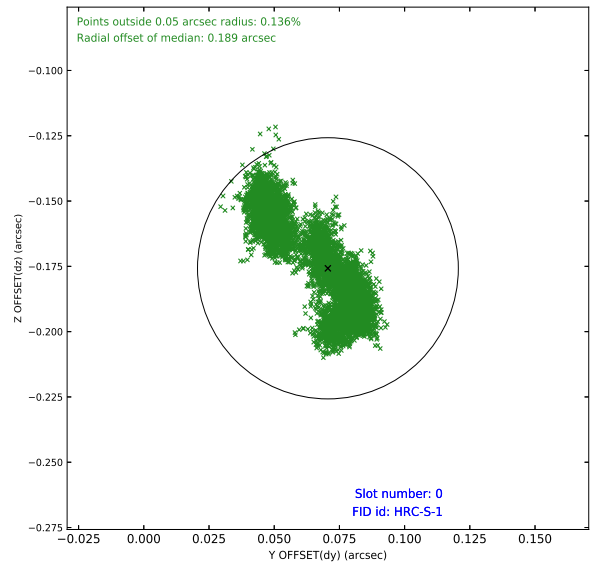
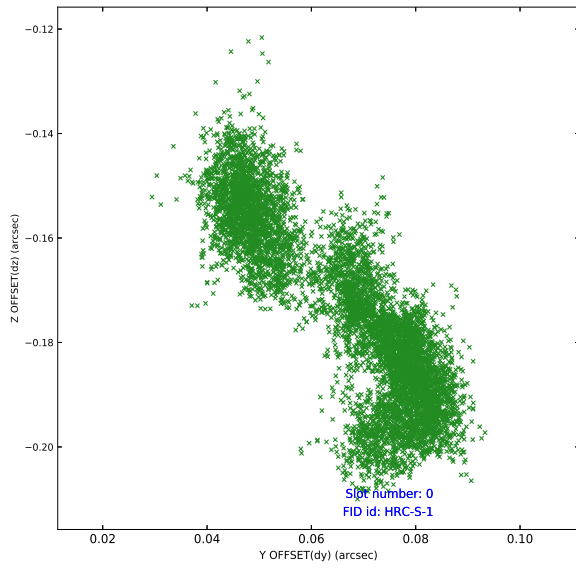


Time (s)

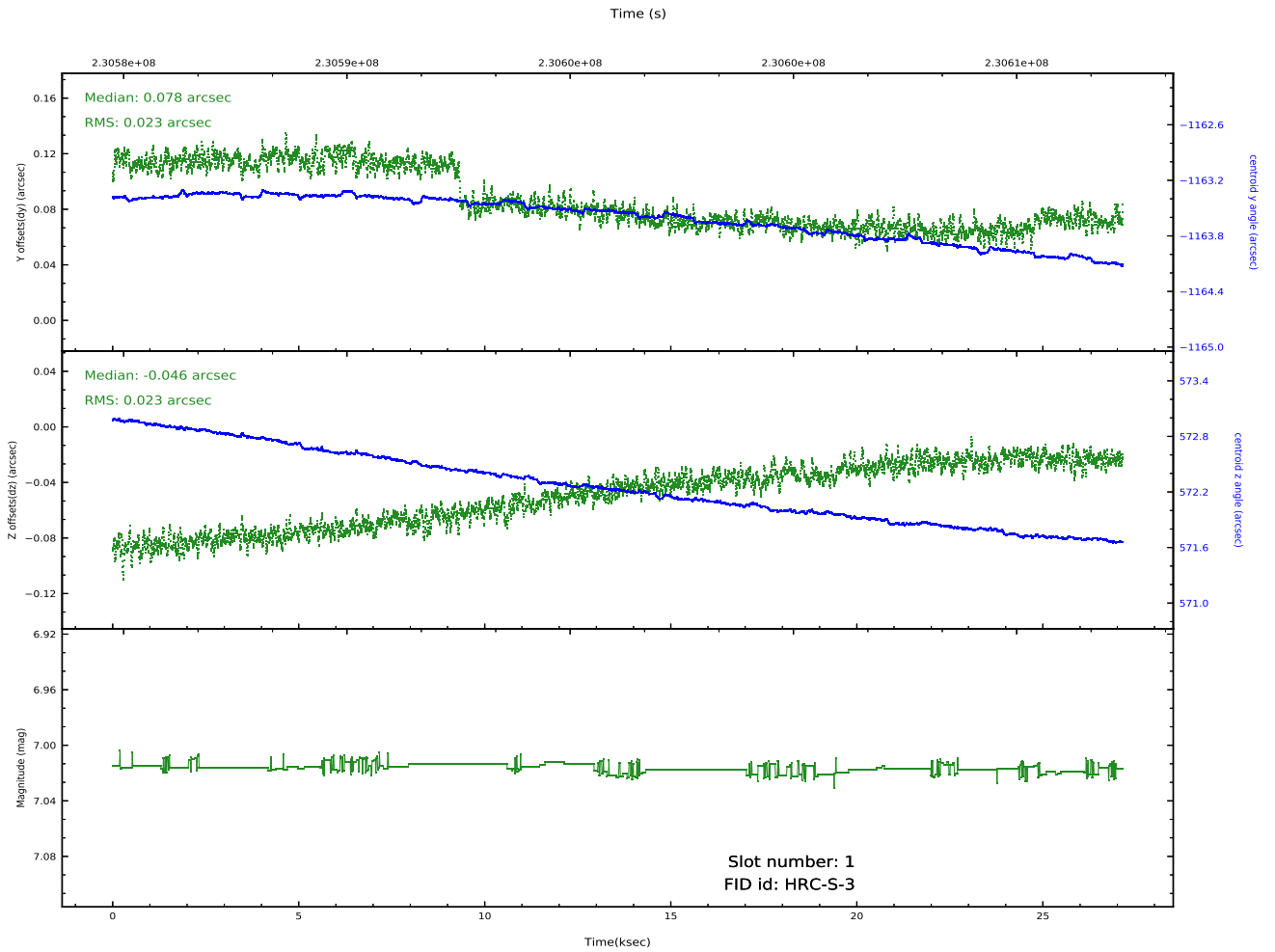
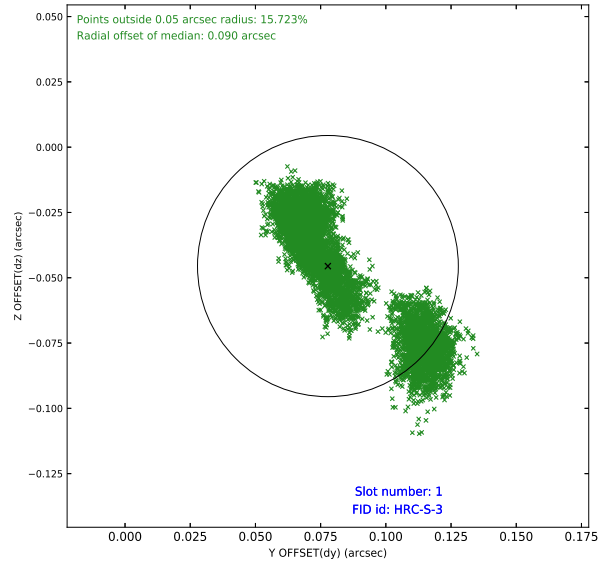
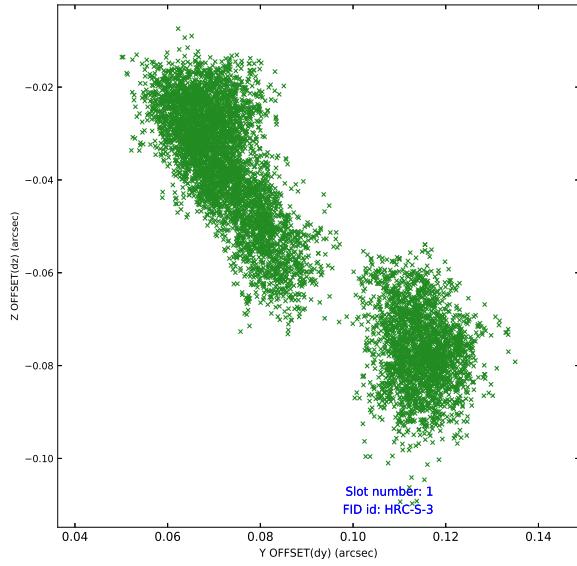


2.5 FID Slots

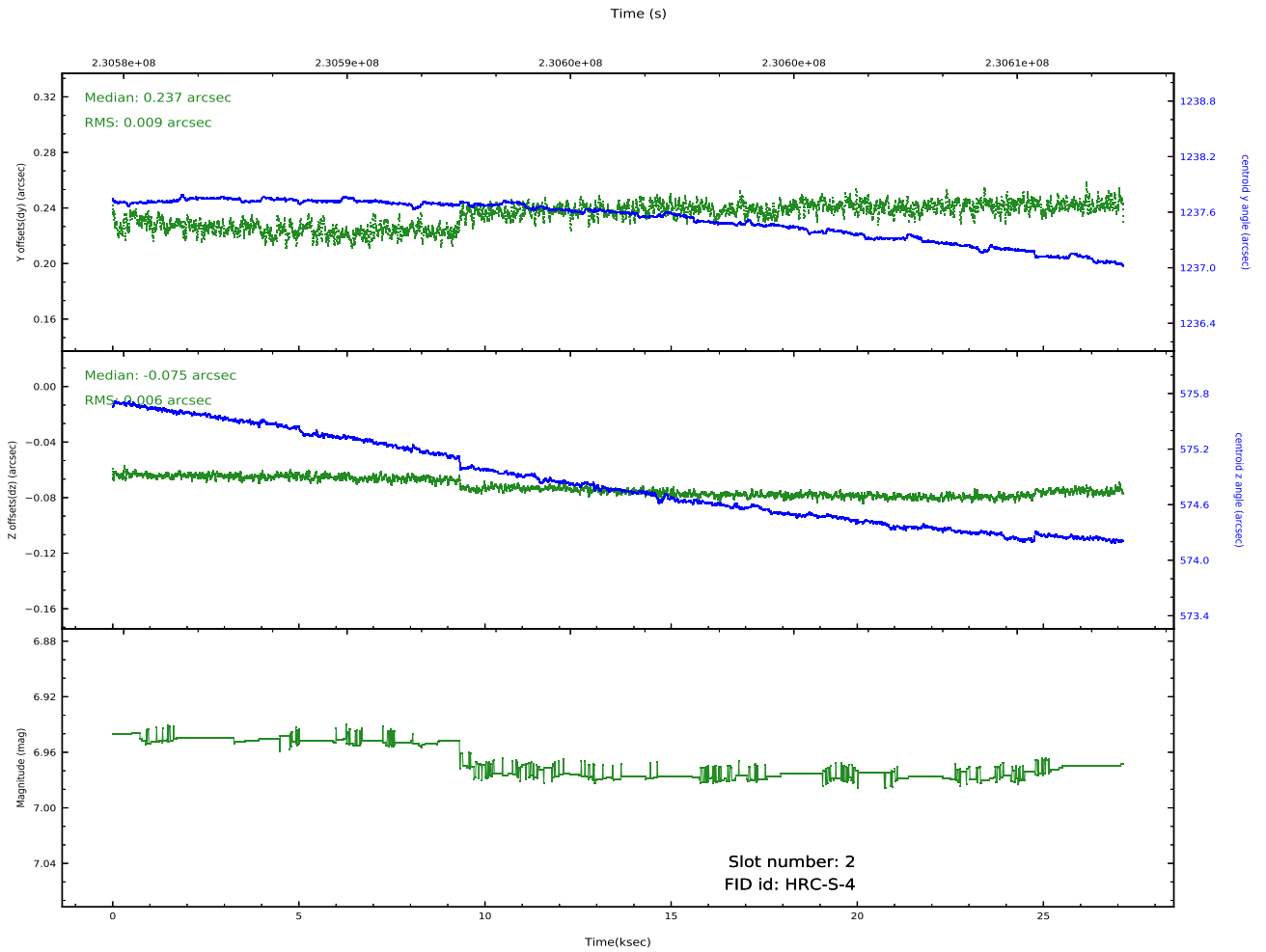
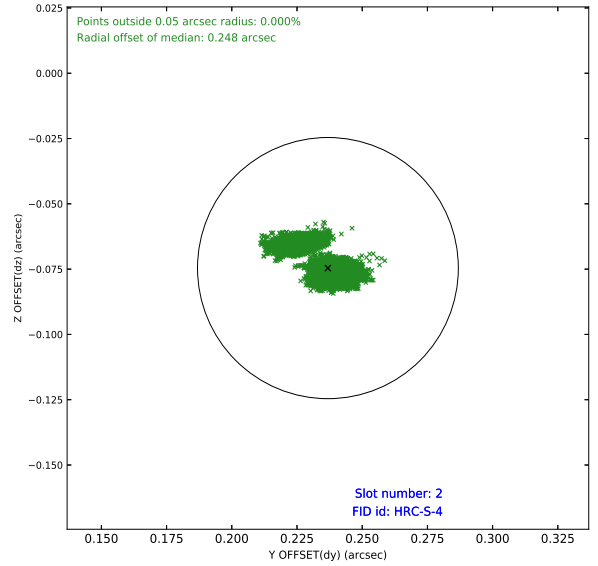
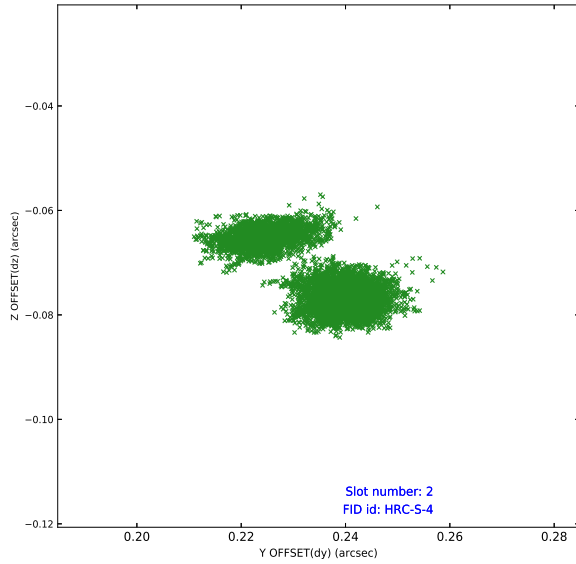
2.5.1 Slot 0



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) | 2020.10.09 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 27.14943 |

A.2 Comments