

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5522 - L2 Version 5
Chandra X-Ray Center

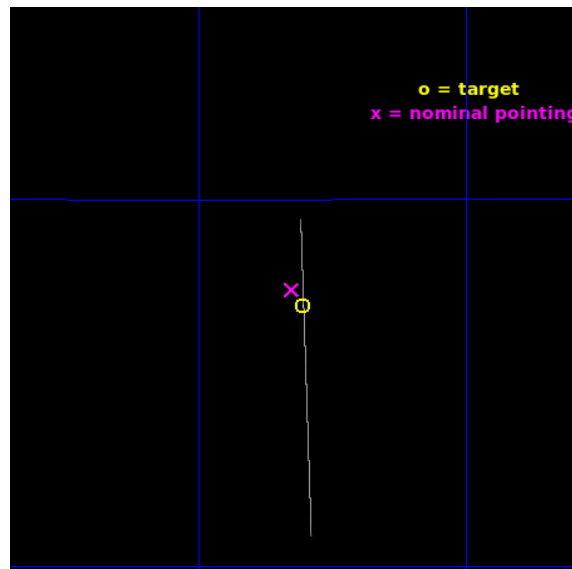
L2 Processing Date : Oct 6 2020

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1 Front

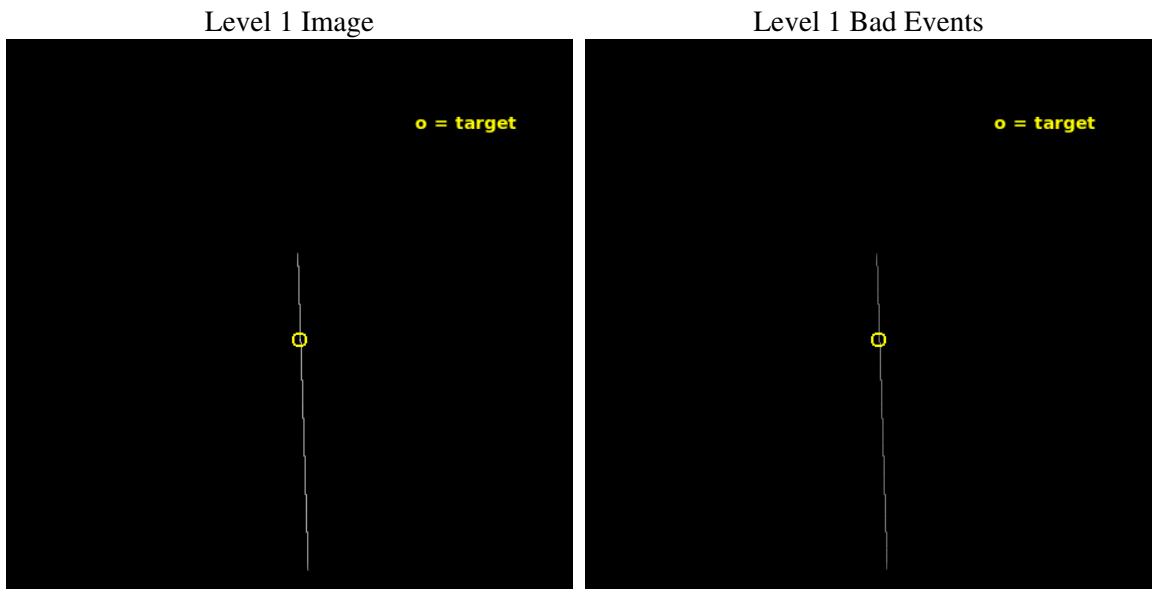
| | | |
|----------|----------------------------------------------------------|---------------------------------------|
| seq_num | 500516 | Sequence number |
| obs_id | 5522 | Observation id |
| title | Timing the Enigmatic Nearby Neutron Star RX J1308.8+2127 | Proposal |
| observer | Prof. David Kaplan | Principal investigator |
| object | RX J1308.8+2127 | Source name |
| ra_targ | 197.20125 | Observer's specified target RA [deg] |
| dec_targ | 21.451889 | Observer's specified target Dec [deg] |
| ra_nom | 197.20649845488 | Nominal RA [deg] |
| dec_nom | 21.459014621473 | Nominal Dec [deg] |
| roll_nom | 88.153216424434 | Nominal Roll [deg] |
| revision | 5 | Processing version of data |
| ontime | 15951.75 | Sum of GTIs [s] |
| livetime | 15889.438476562 | Livetime [s] |
| ontime7 | 15951.75 | Sum of GTIs [s] |
| l2events | 69657 | Number of level 2 events |



2 OBI

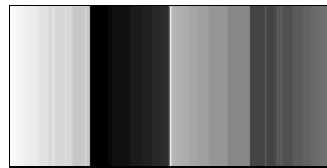
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|--------------|-----------------------------------------|
| obi_num | 0 | Obi number | sched_exp_time | 15770.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 15951.75 | Sum of GTIs [s] |
| caldbver | 4.9.2 | | ontime7 | 15951.75 | Sum of GTIs [s] |
| date | 2020-10-06T21:04:50 | Date and time of file creation | l1events | 88436 | Number of level 1 events |
| revision | 5 | Processing version of data | | | |

2.1.4 Events

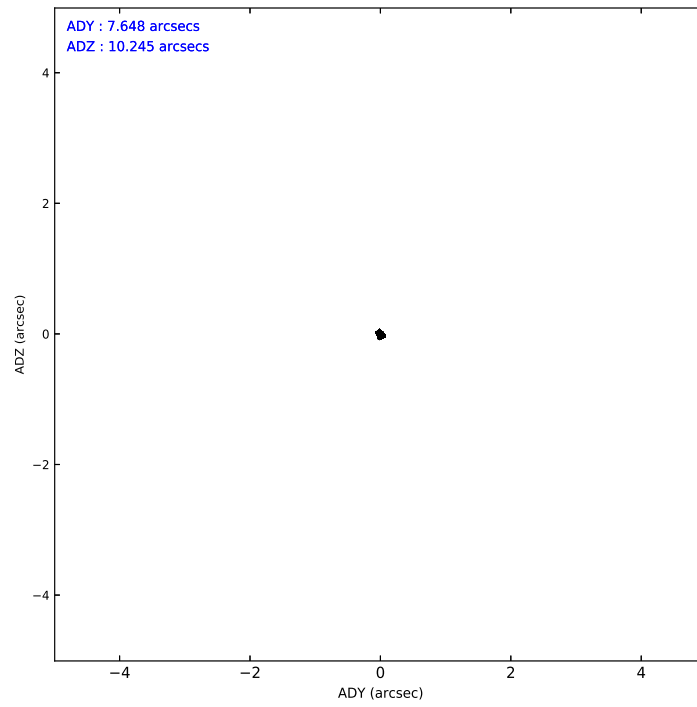
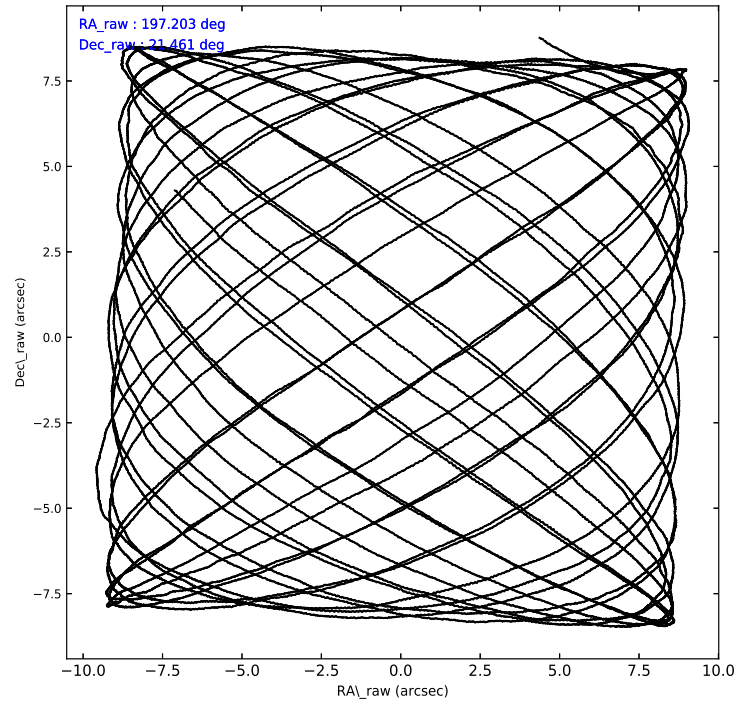
| | ccd 7 |
|-----------------|--------------|
| level 1 events | 88436 |
| rejected events | 15960 |
| rejected % | 18% |

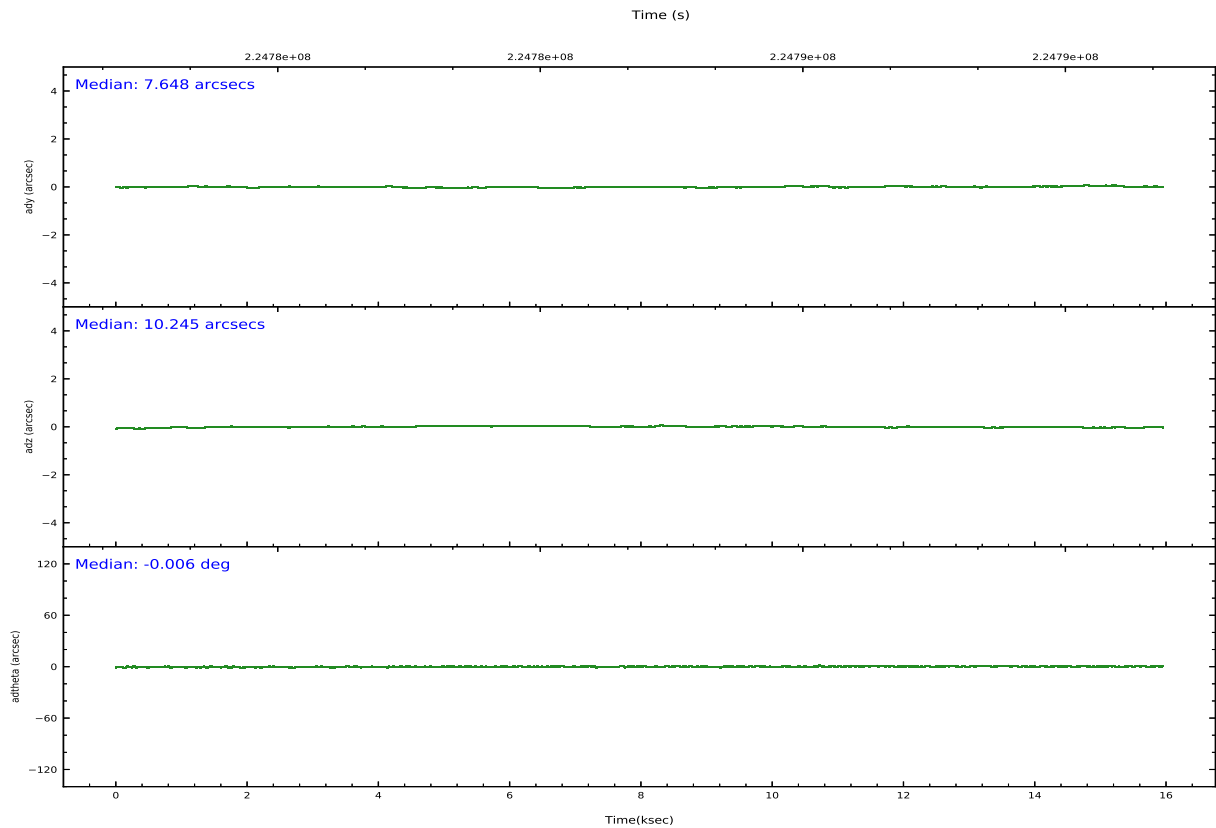
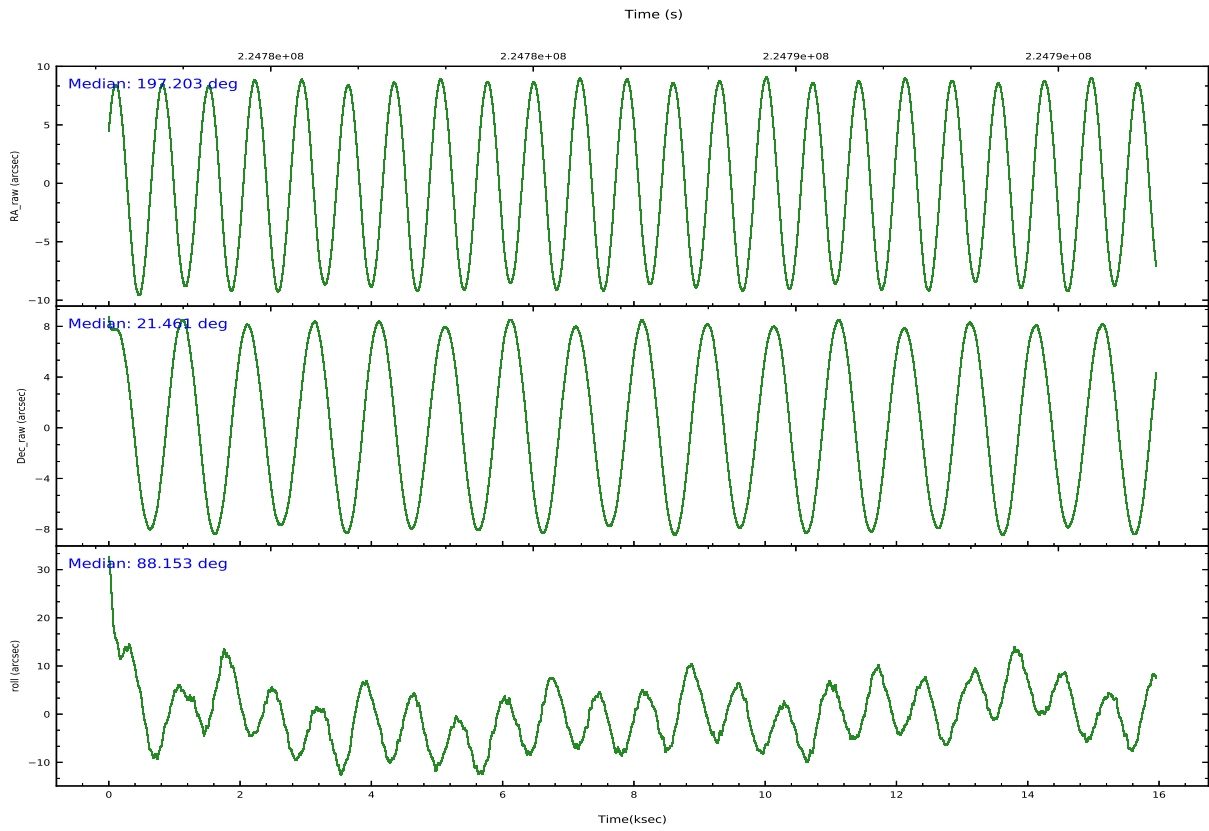
| | ccd 7 |
|----------------|--------------|
| grade 0 events | 10459 |
| | 11% |
| grade 1 events | 223 |
| | 0% |
| grade 2 events | 18181 |
| | 20% |
| grade 3 events | 5544 |
| | 6% |
| grade 4 events | 5414 |
| | 6% |
| grade 5 events | 13876 |
| | 15% |
| grade 6 events | 34739 |
| | 39% |
| grade 7 events | 0 |
| | 0% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar version number | 8 | 8 |
| Detector | ACIS-7 | ACIS-7 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | CC33_FAINT | CC33_FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 197.217552 | 197.20649845488 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 21.437519 | 21.459014621473 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 87.994044 | 88.15321642443401 | [s] Primary exposure time | 0.000000 | 0 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 224777719.184000 | 224777031.63594 | | | |
| Observation start date | 2005-02-14T14:14:15 | 2005-02-14T14:03:51 | | | |
| [s] Observation end time (MET) | 224793489.184000 | 224793869.8242 | | | |
| Observation end date | 2005-02-14T18:37:05 | 2005-02-14T18:44:29 | | | |
| Read mode | CONTINUOUS | CONTINUOUS | | | |

2.3 Aspect





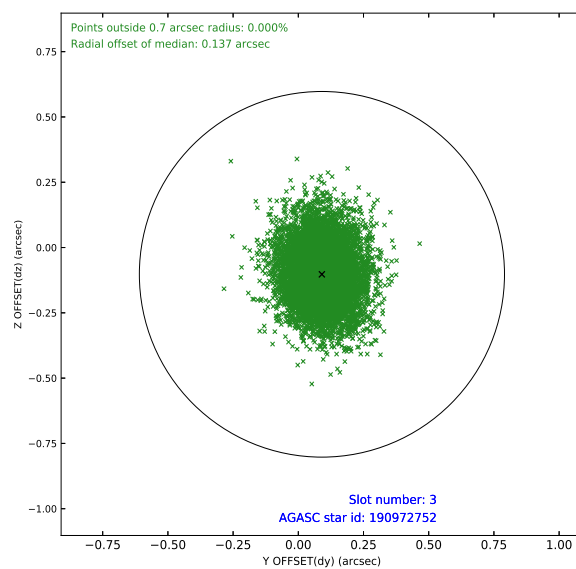
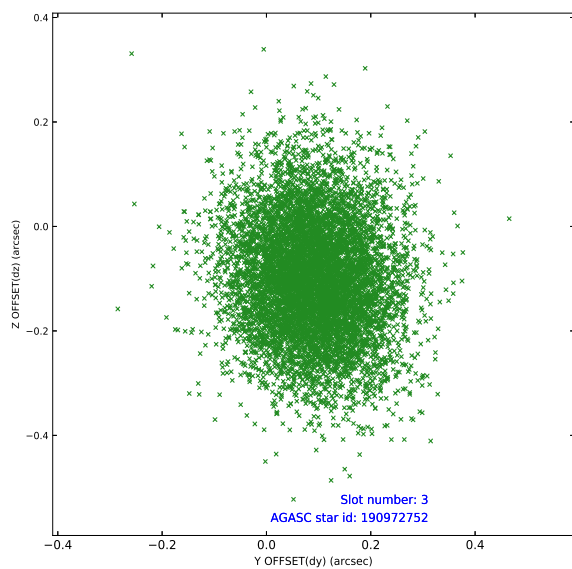
Slot Statistics

| slot | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|------|--------|------|-----------|-------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|-------|
| 0 | FID | | ACIS-S-2 | 7.11 | 3892 | 1.000 | -0.076 | -0.060 | 0.008 | 0.013 | 0.000000 | 0.000000 | -760.42 | -1731 |
| 1 | FID | | ACIS-S-4 | 7.21 | 3890 | 1.000 | 0.159 | 0.053 | 0.008 | 0.014 | 0.000000 | 0.000000 | 2152.89 | 176 |
| 2 | FID | | ACIS-S-5 | 7.23 | 3892 | 1.000 | -0.114 | 0.015 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1813.02 | 170 |
| 3 | GUIDE | used | 190972752 | 10.34 | 7774 | 1.000 | 0.091 | -0.103 | 0.145 | 0.240 | 197.567107 | 21.351082 | -268.07 | -1181 |
| 4 | GUIDE | used | 190973928 | 9.83 | 7774 | 1.000 | -0.175 | 0.055 | 0.148 | 0.235 | 197.904188 | 21.564389 | 542.48 | -2280 |
| 5 | GUIDE | used | 190974376 | 6.81 | 7784 | 1.000 | -0.224 | 0.138 | 0.088 | 0.139 | 197.884749 | 21.918670 | 1814.26 | -2165 |
| 6 | GUIDE | used | 190979840 | 10.35 | 7777 | 1.000 | 0.132 | -0.029 | 0.289 | 0.441 | 197.337465 | 20.846267 | -2112.29 | -478 |
| 7 | GUIDE | used | 190971944 | 10.06 | 7779 | 1.000 | 0.179 | -0.047 | 0.147 | 0.259 | 197.963793 | 22.064478 | 2349.51 | -2408 |

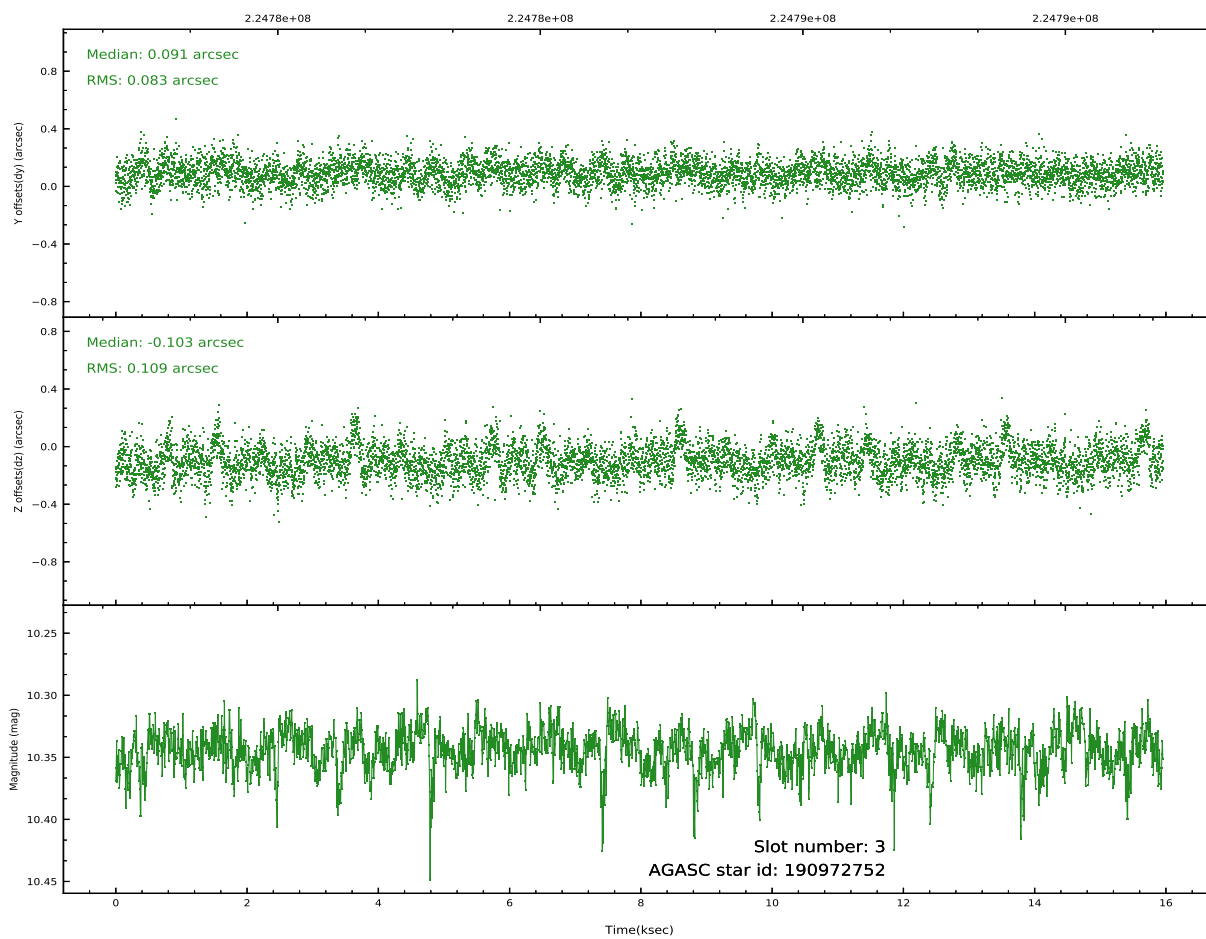
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2.4 Star Slots

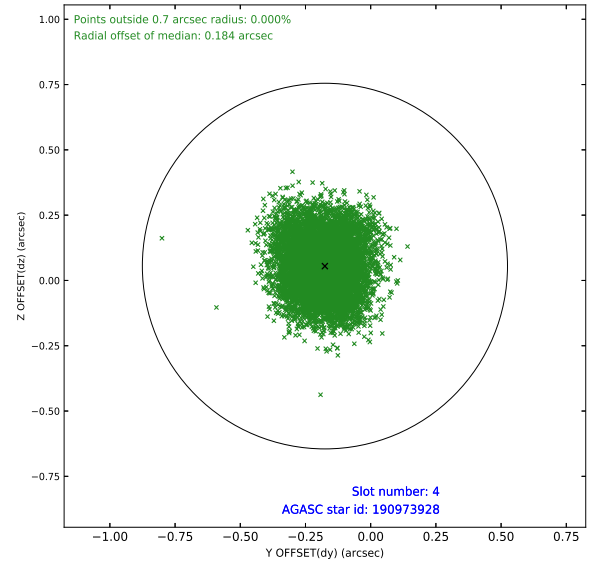
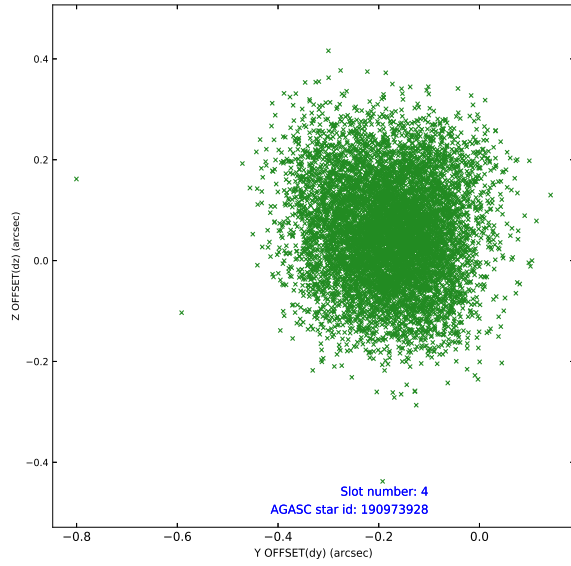
2.4.1 Slot 3



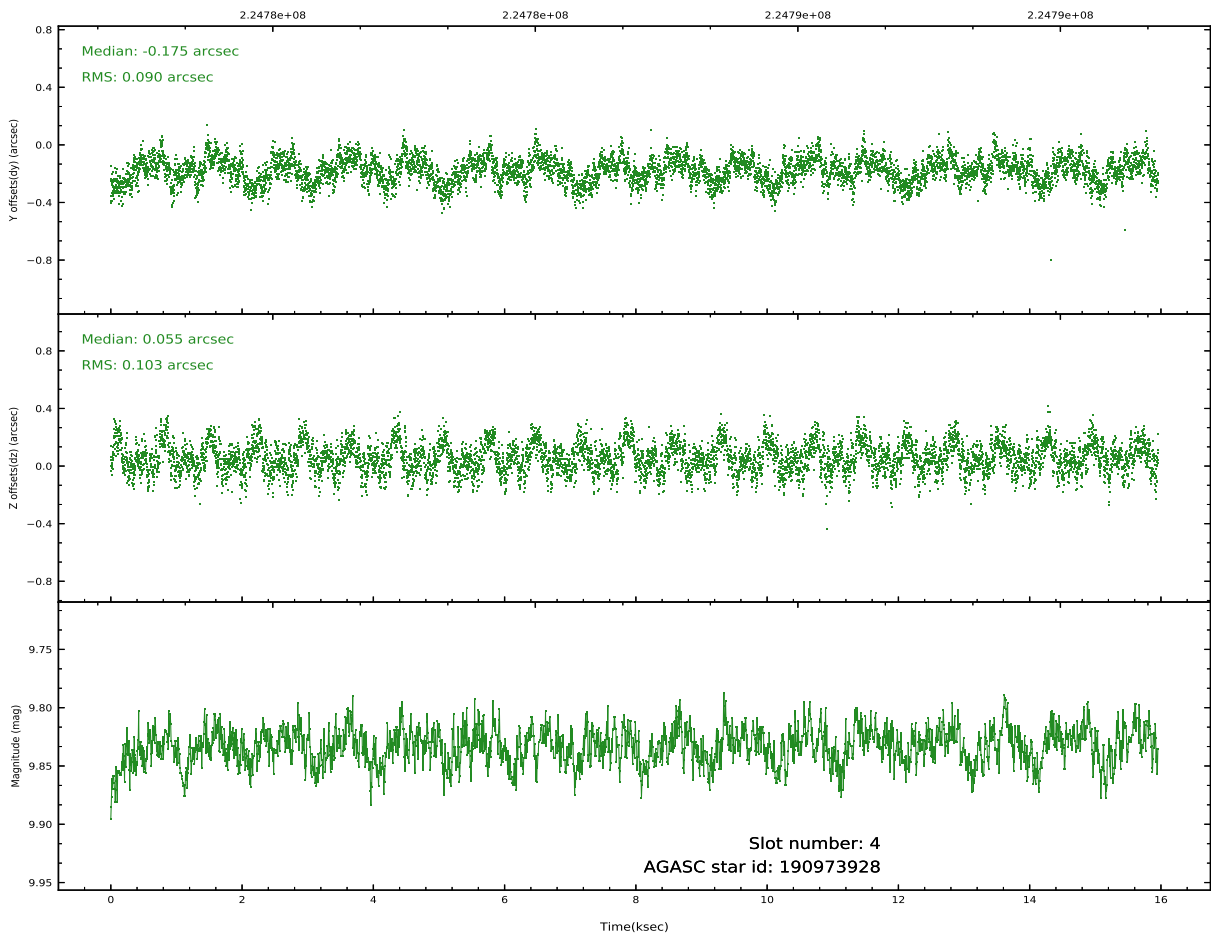
Time (s)



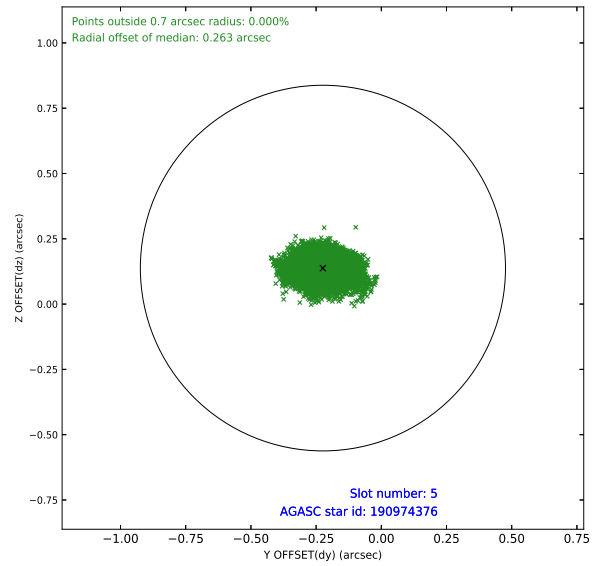
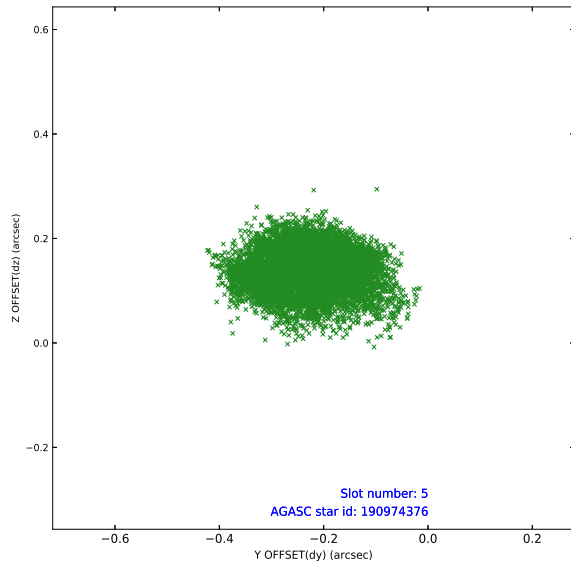
2.4.2 Slot 4



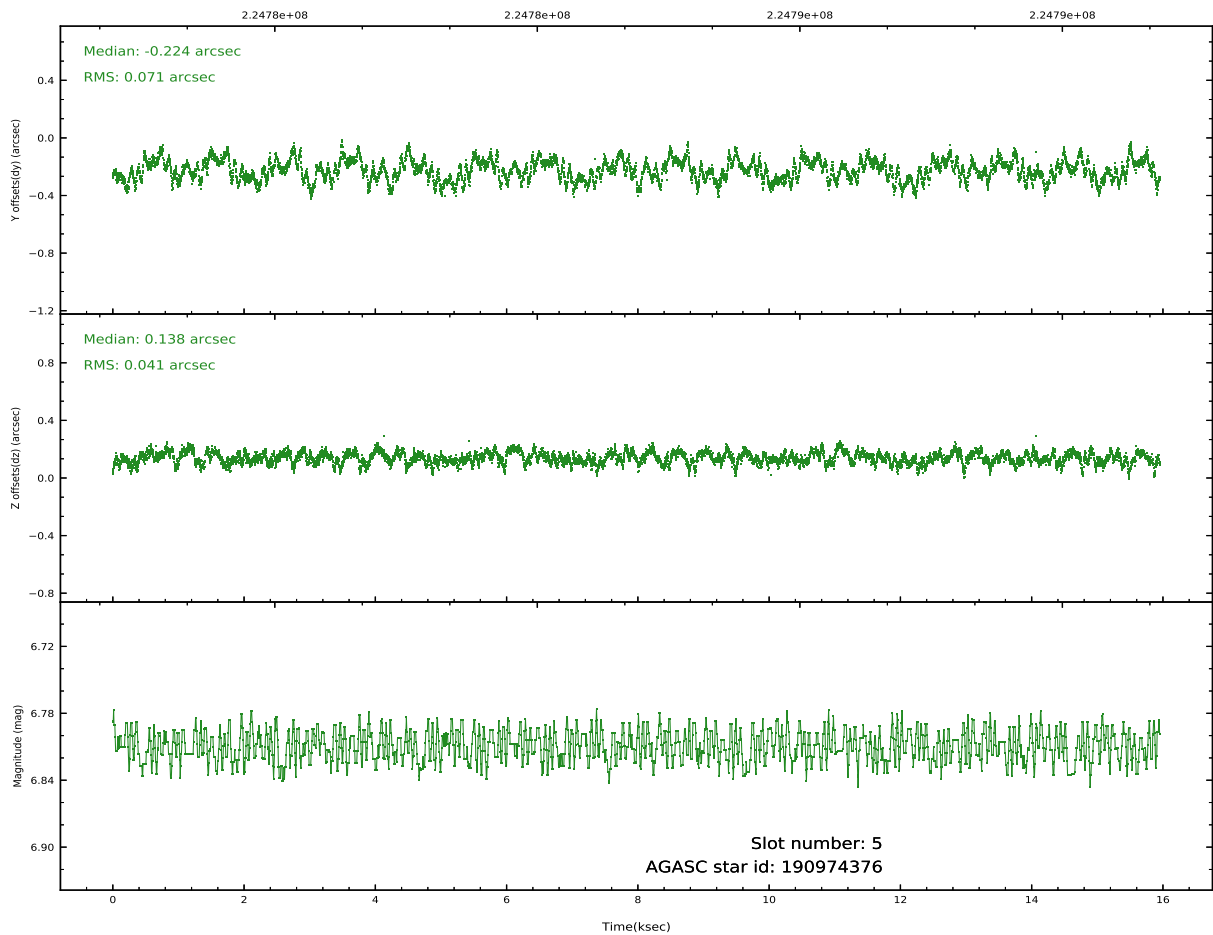
Time (s)



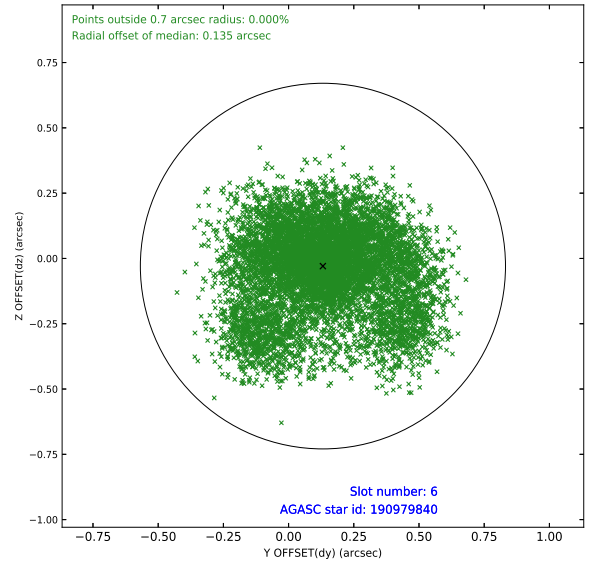
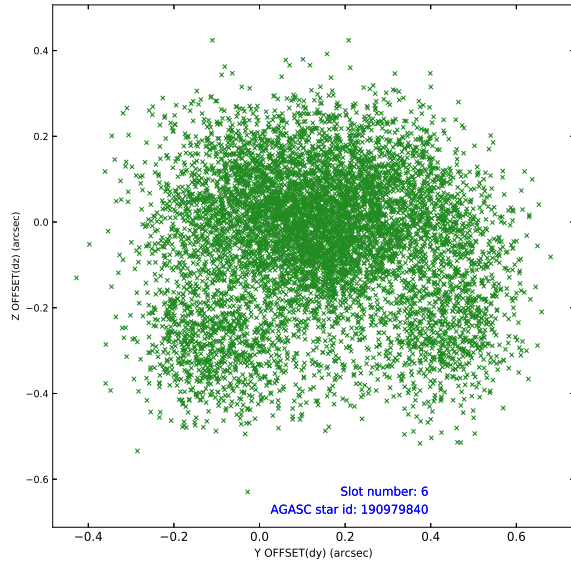
2.4.3 Slot 5



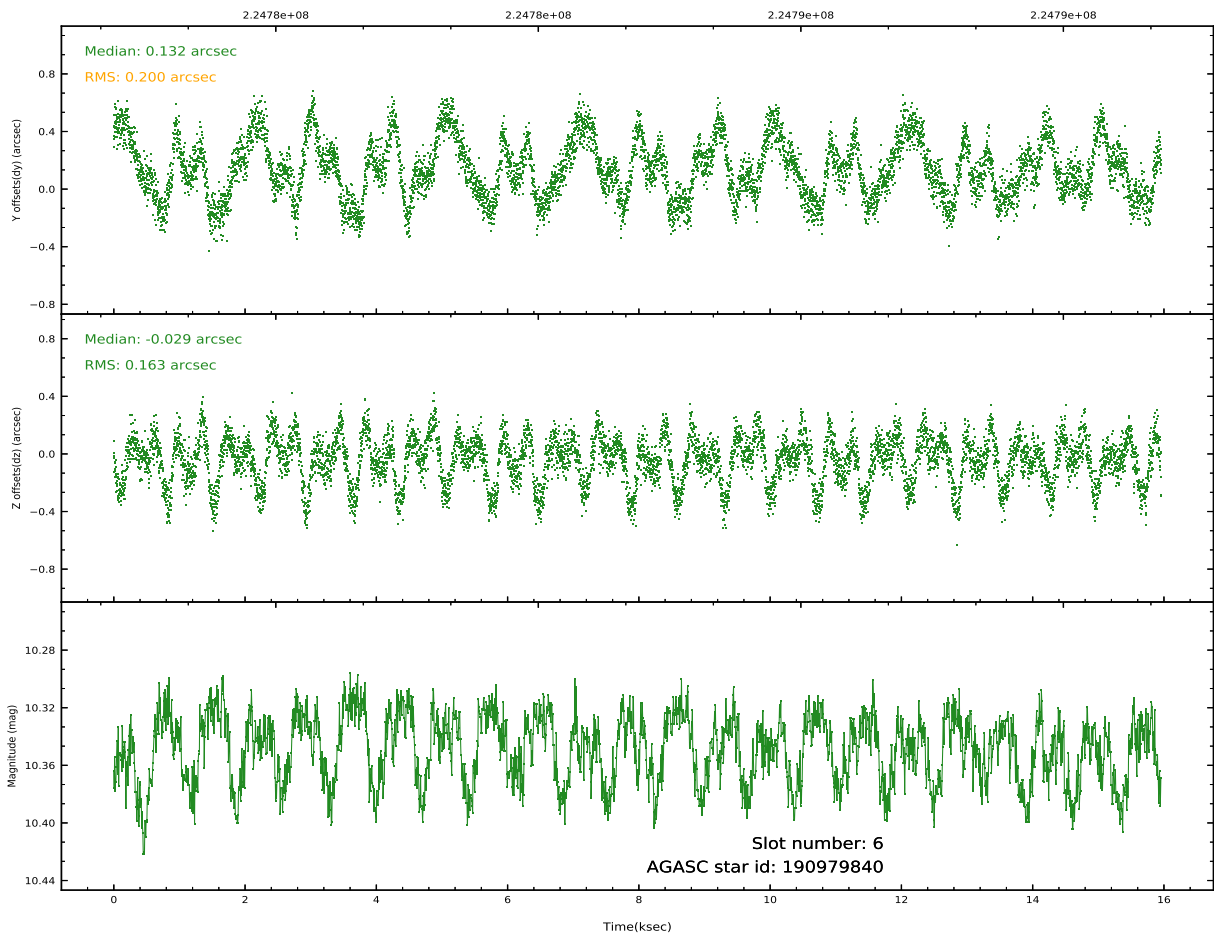
Time (s)



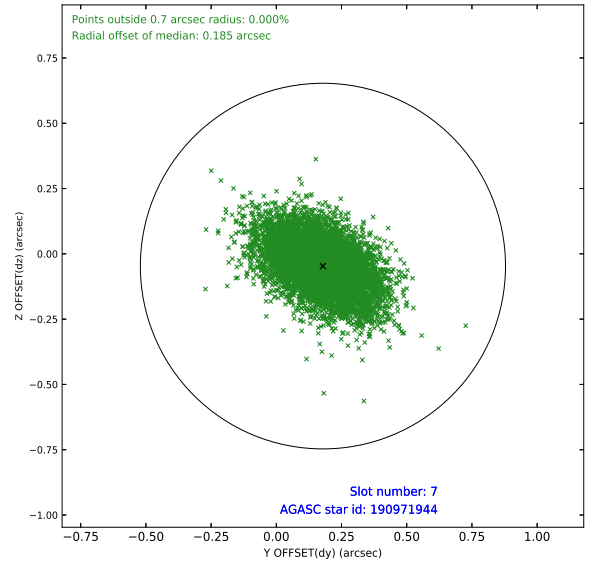
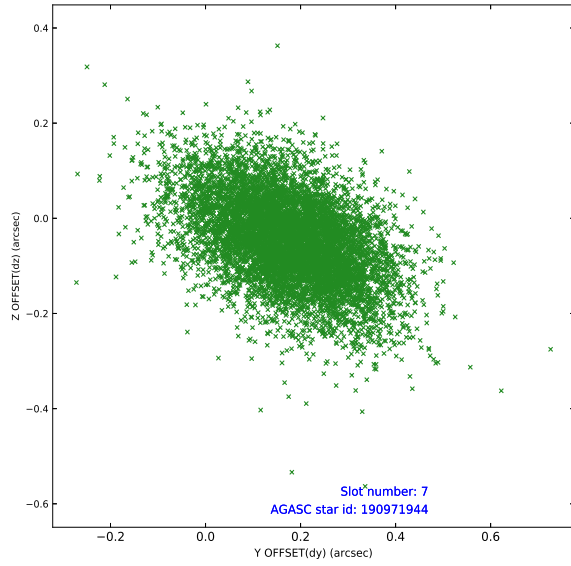
2.4.4 Slot 6



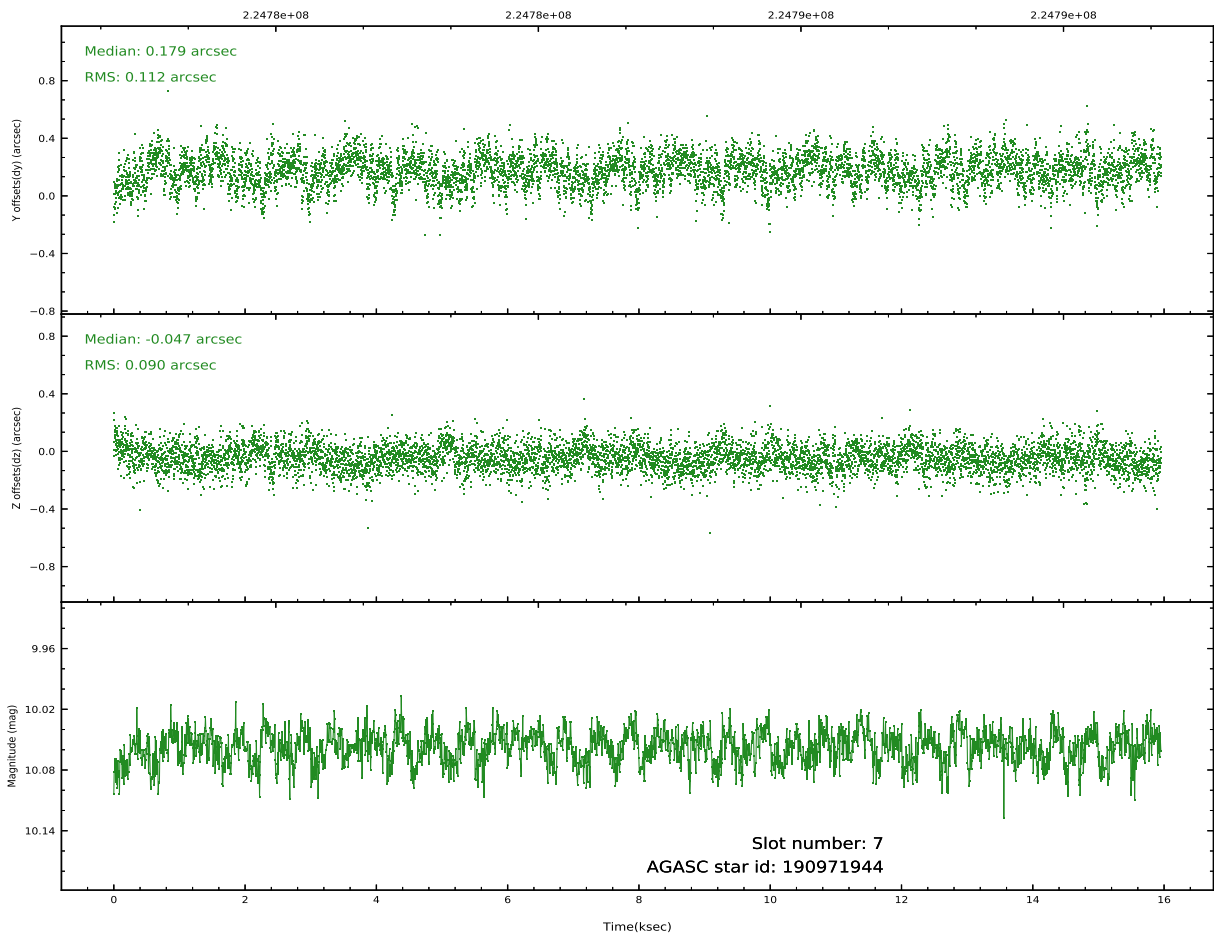
Time (s)



2.4.5 Slot 7

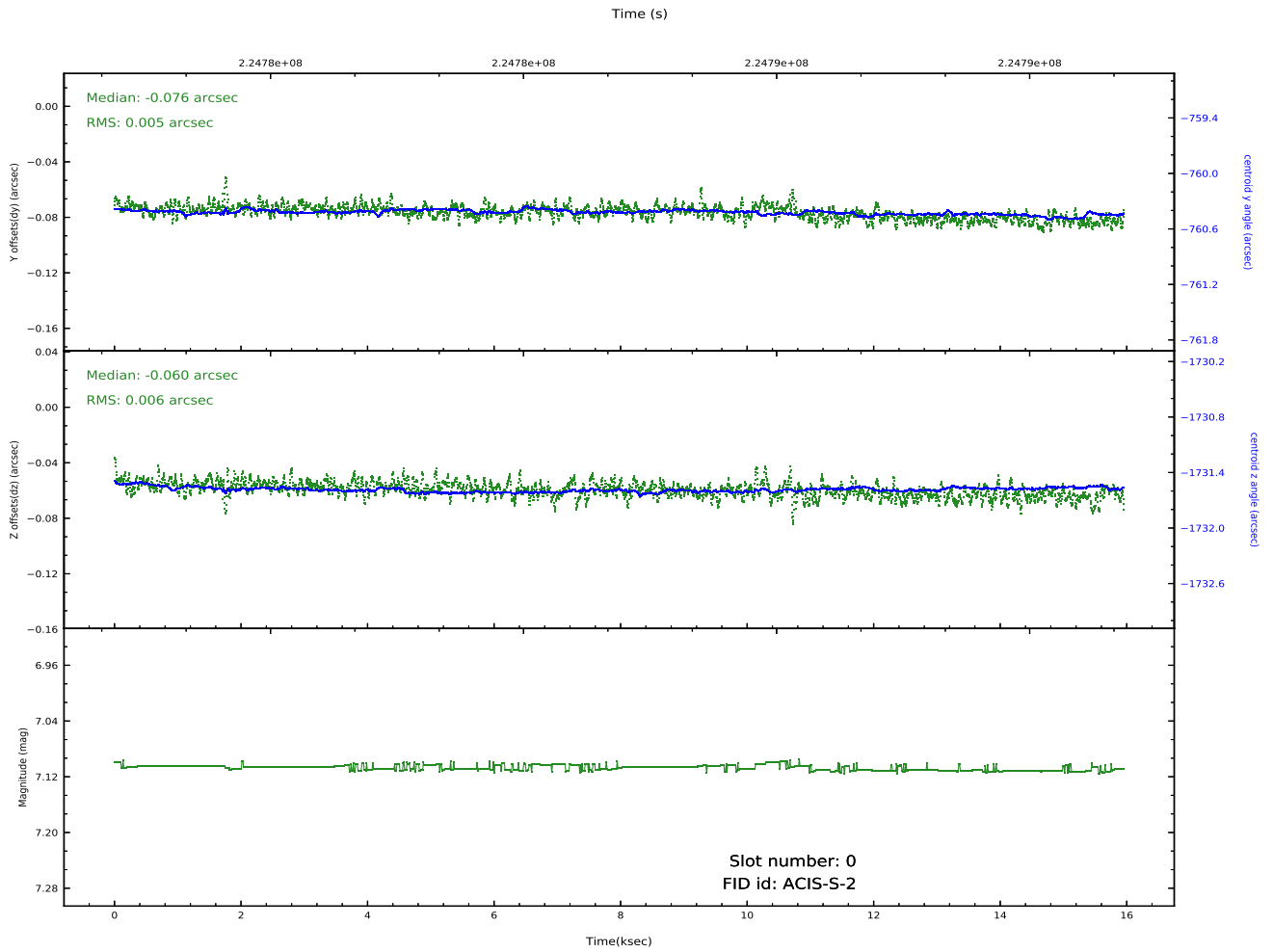
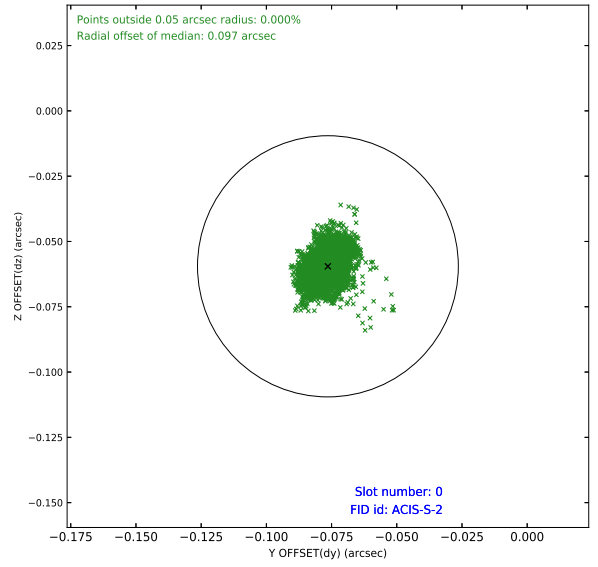
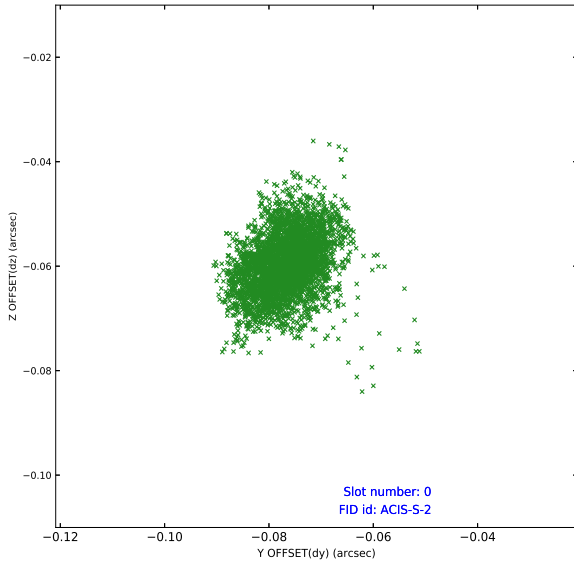


Time (s)

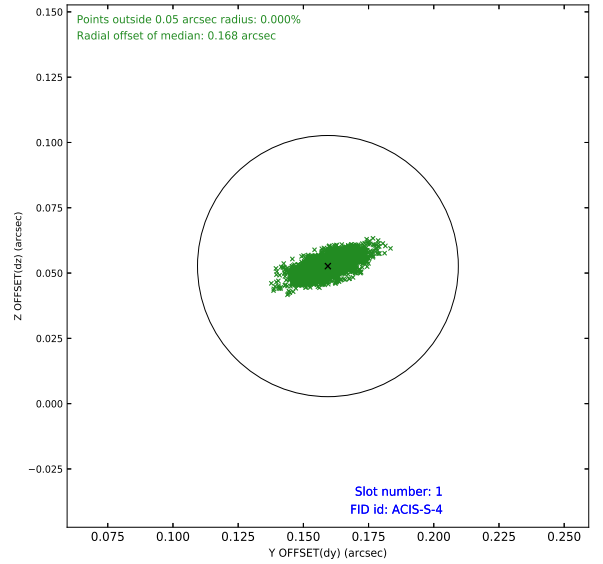
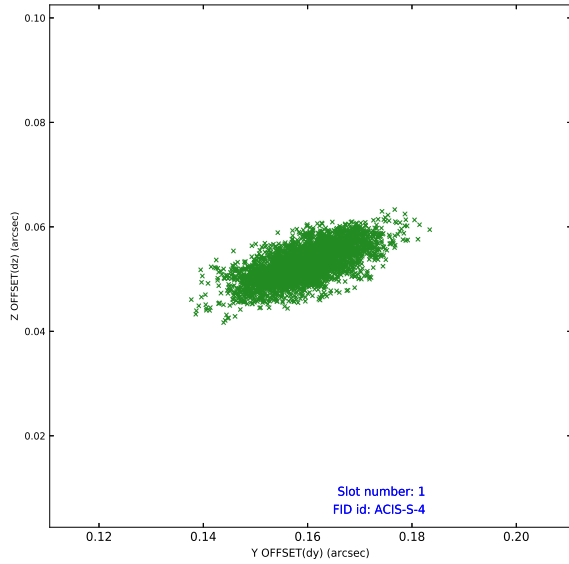


2.5 FID Slots

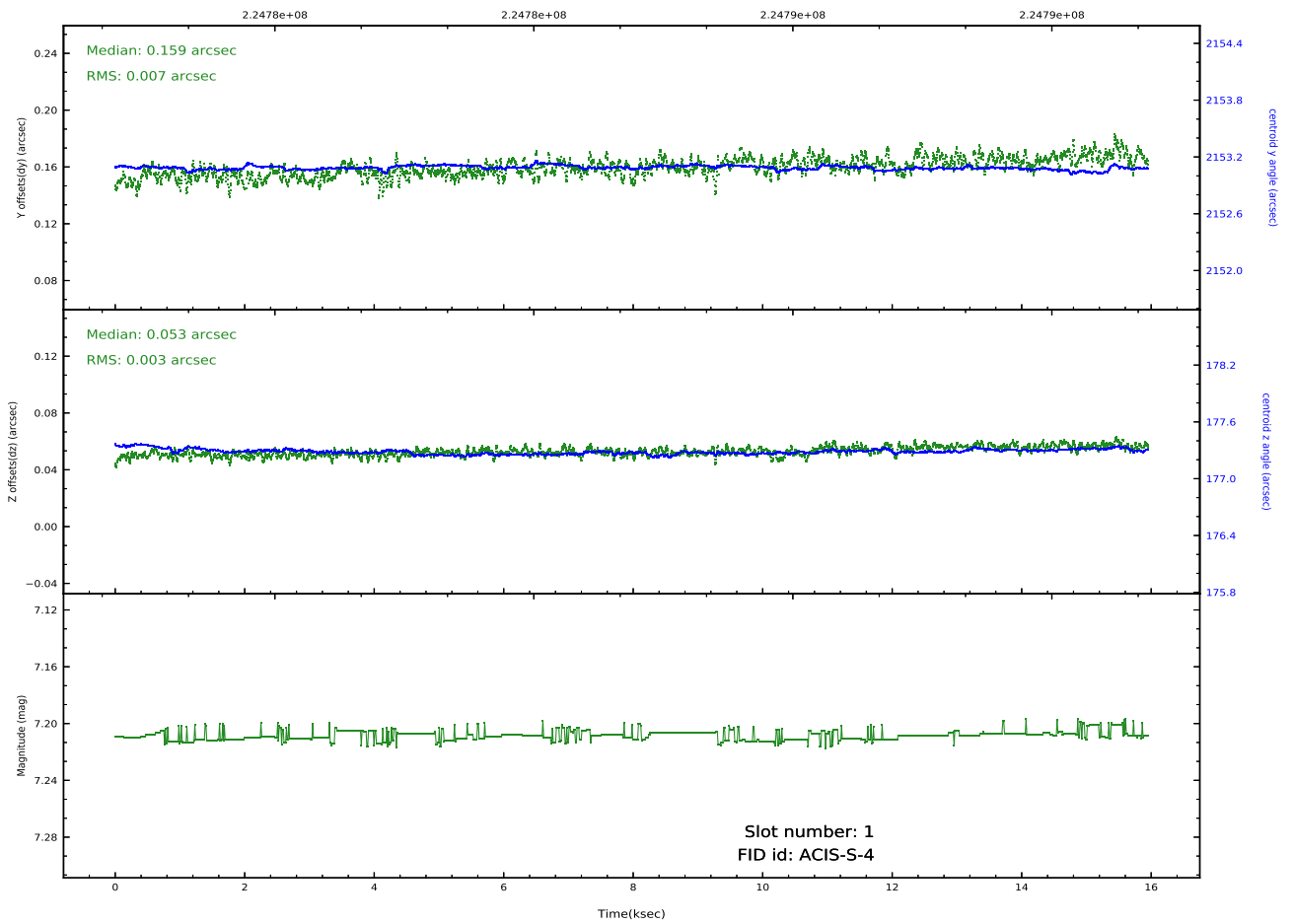
2.5.1 Slot 0



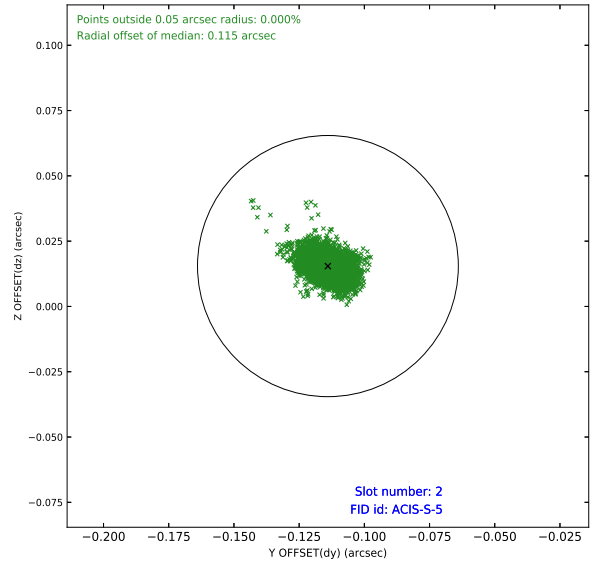
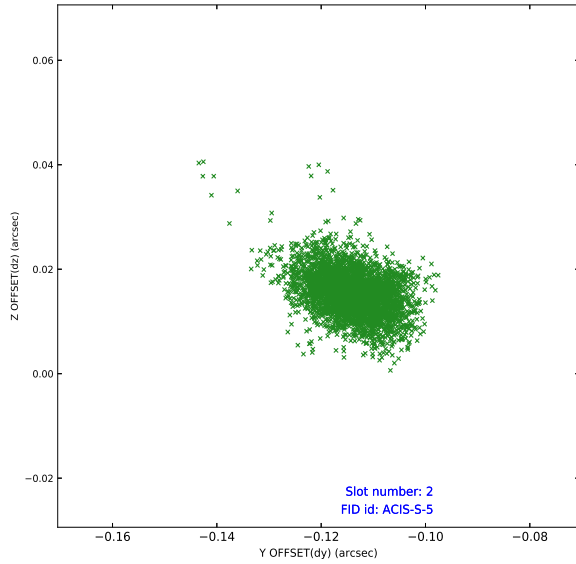
2.5.2 Slot 1



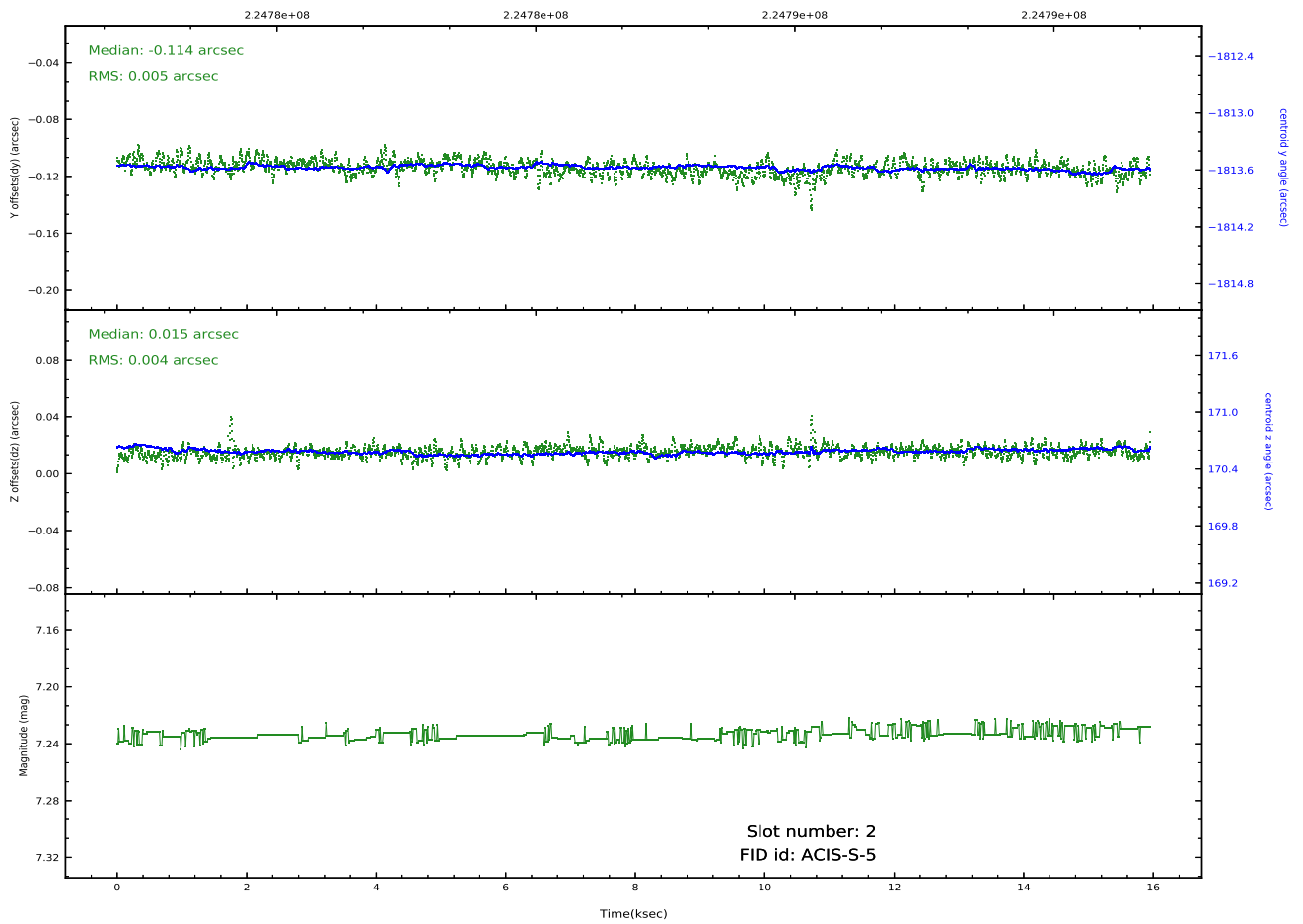
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

| | |
|----------------------------|--------------------|
| V&V Scientist | David Huenemoerder |
| V&V Date (YYYY-MM-DD) | 2020.10.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 15.95525 |

A.2 Comments