

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4755 - L2 Version 6
Chandra X-Ray Center

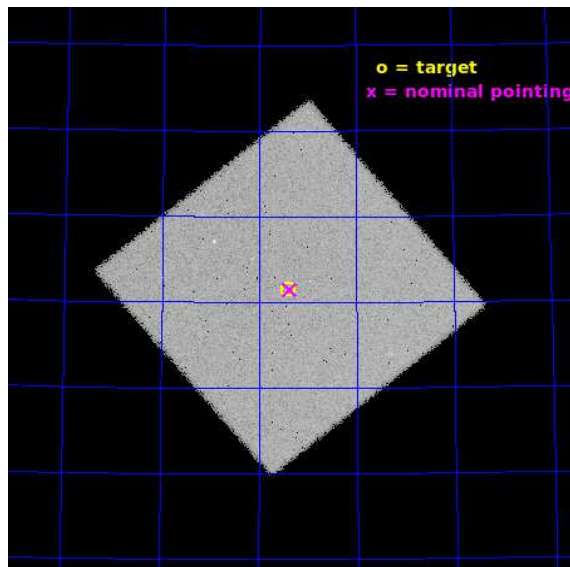
L2 Processing Date : Sep 26 2020

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1 Front

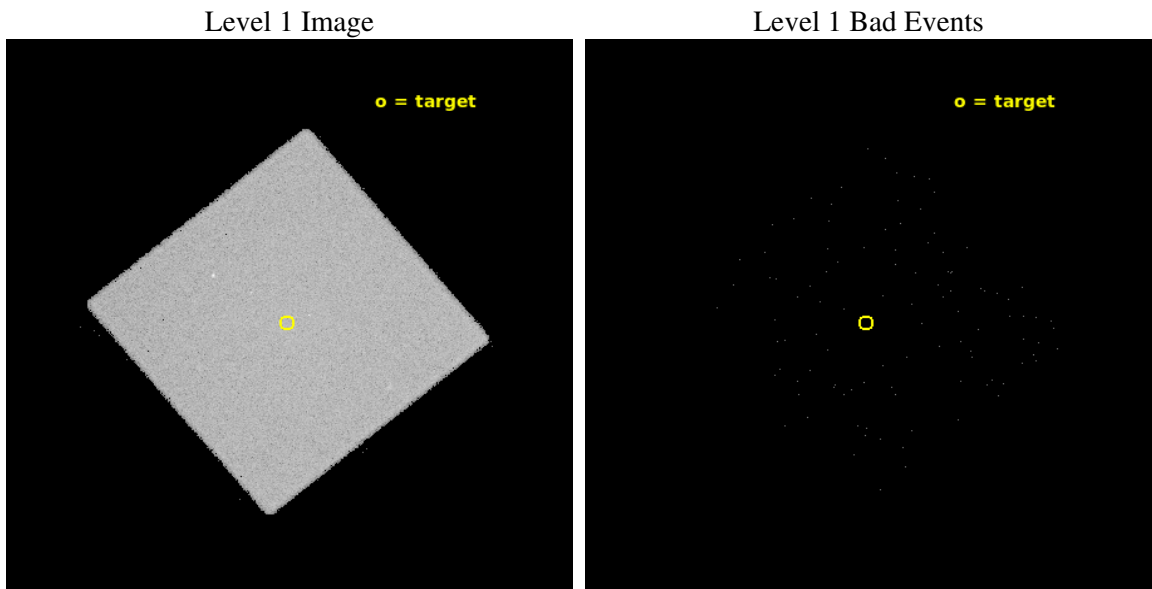
| | | |
|----------|--|---------------------------------------|
| seq_num | 600410 | Sequence number |
| obs_id | 4755 | Observation id |
| title | DISCRETE X-RAY SOURCES BETWEEN M 81 AND NGC 3077 | Proposal title |
| observer | Prof. Martin Ward | Principal investigator |
| object | NGC3077/M81 FIELD | Source name |
| ra_targ | 150.352917 | Observer's specified target RA [deg] |
| dec_targ | 68.693722 | Observer's specified target Dec [deg] |
| ra_nom | 150.34178645876 | Nominal RA [deg] |
| dec_nom | 68.691382427836 | Nominal Dec [deg] |
| roll_nom | 275.33502391484 | Nominal Roll [deg] |
| revision | 6 | Processing version of data |
| ontime | 9843.3316852748 | [s] |
| livetime | 9779.615625807 | Ontime multiplied by DTCOR |
| l2events | 332722 | 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 | 9657.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 9843.3316852748 | [s] |
| caldsver | 4.9.2 | | l1events | 523772 | Number of level 1 events |
| date | 2020-09-26T10:31:41 | Date and time of file creation | | | |
| revision | 6 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

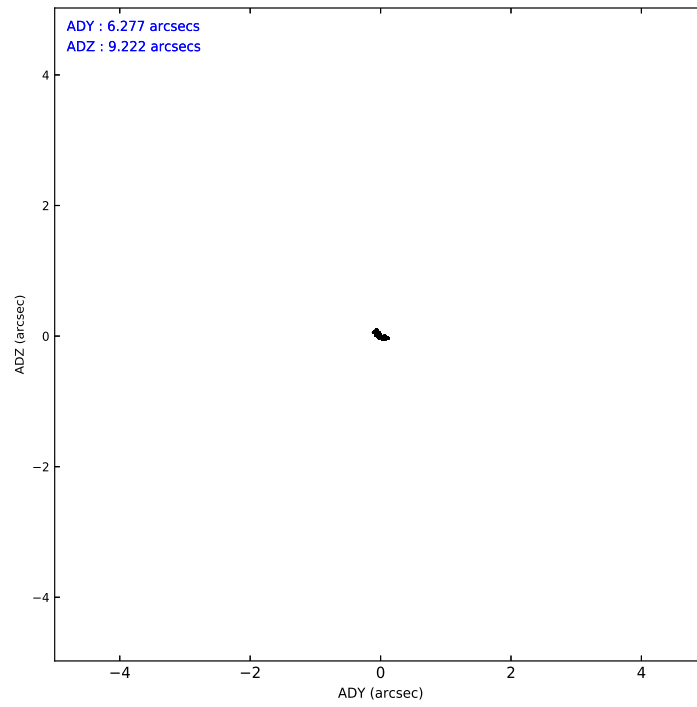
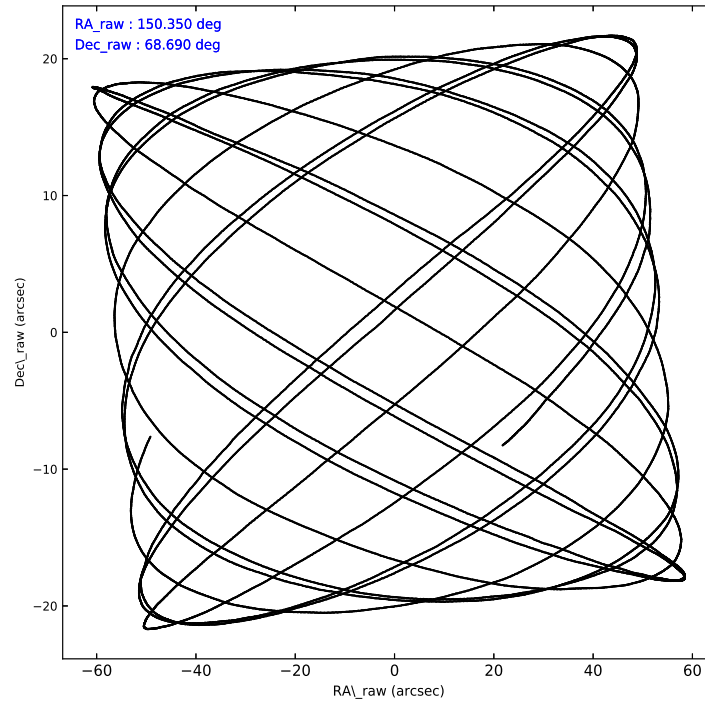
| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 523772 |
| rejected events | 25719 |
| rejected % | 4% |

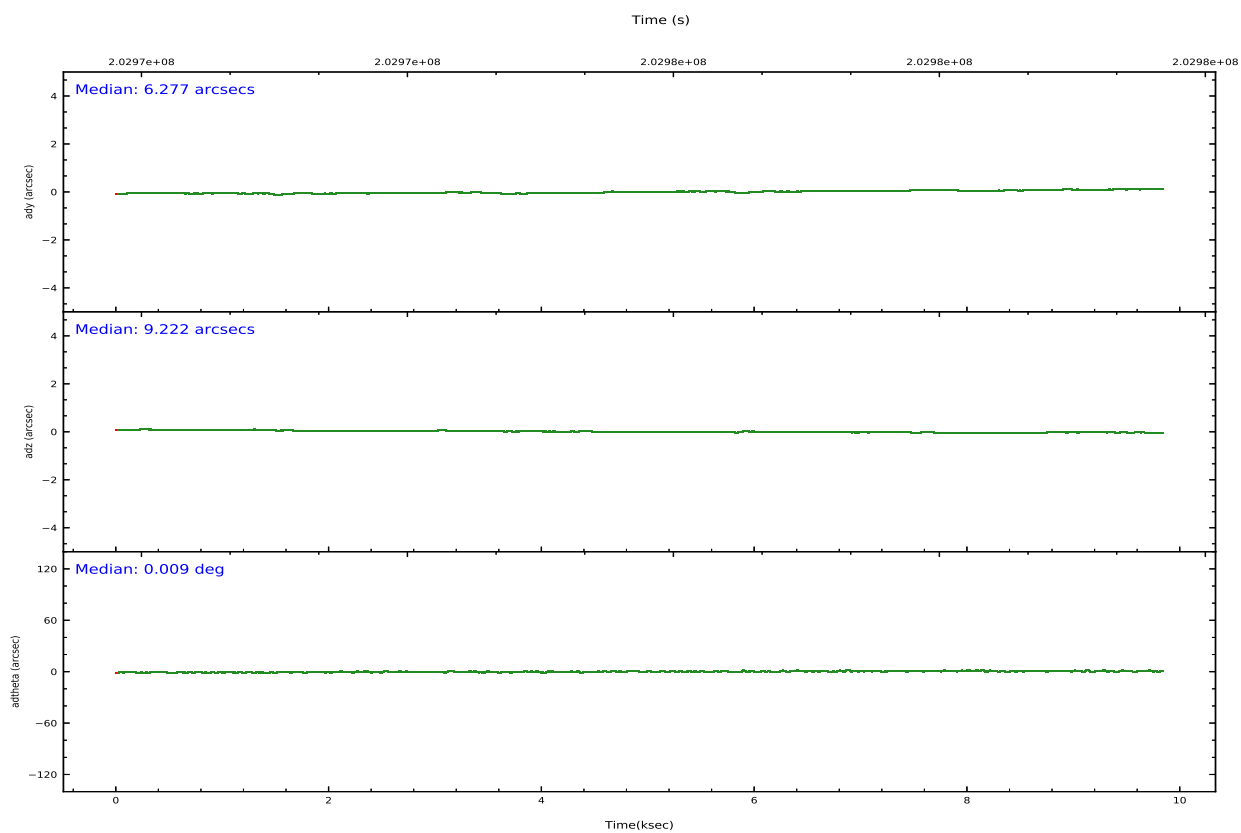
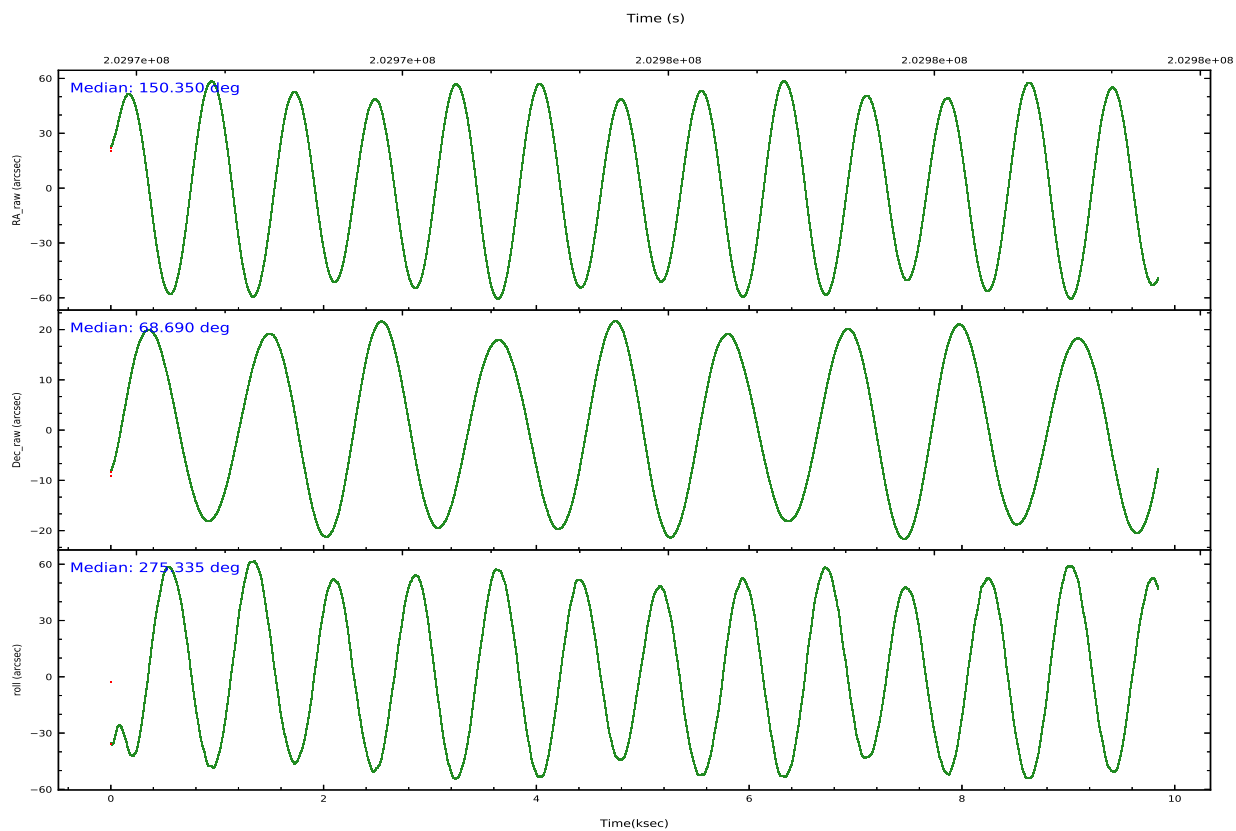
2.2 Compared Parameters

| 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 | 150.304899 | 150.34178645876 |
| [deg] Pointing Dec | 68.711475 | 68.691382427836 |
| [deg] Pointing Roll | 275.485191 | 275.33502391484 |
| [mm] SIM focus pos | -1.040293 | -1.038866356238299 |
| [mm] SIM defocus | 0 | 0.001426264420575141 |
| [mm] SIM translation stage pos | 126.985494 | 126.9829799899862 |
| [mm] SIM translation stage offset | 0 | 0.002508901615314585 |
| [s] Observation start time (MET) | 202969946.184000 | 202969302.86033 |
| Observation start date | 2004-06-07T04:31:22 | 2004-06-07T04:21:42 |
| [s] Observation end time (MET) | 202979603.184000 | 202980448.71082 |
| Observation end date | 2004-06-07T07:12:19 | 2004-06-07T07:27:28 |

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

2.3 Aspect



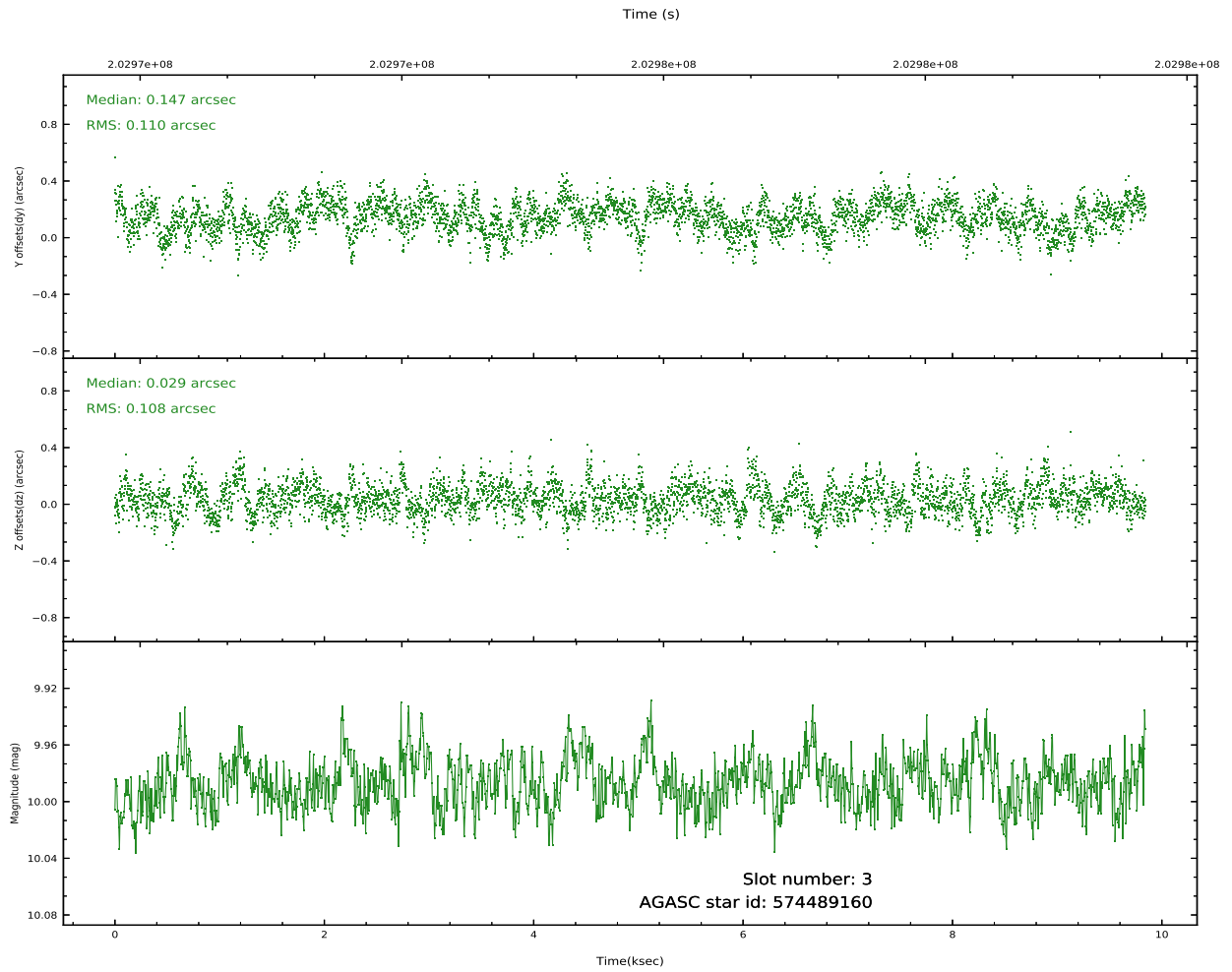
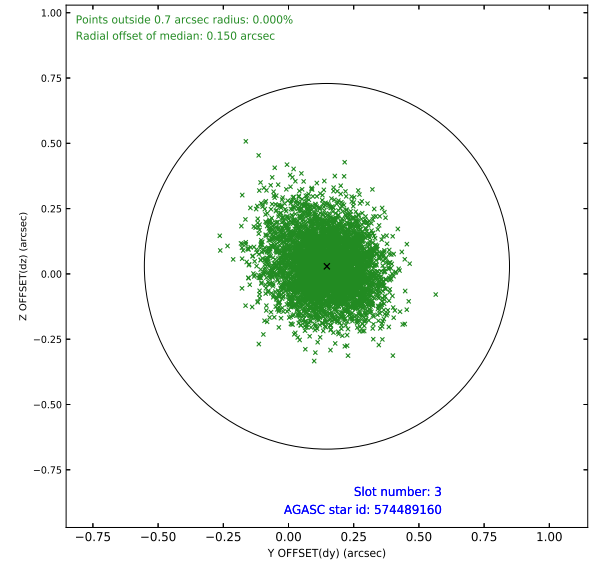
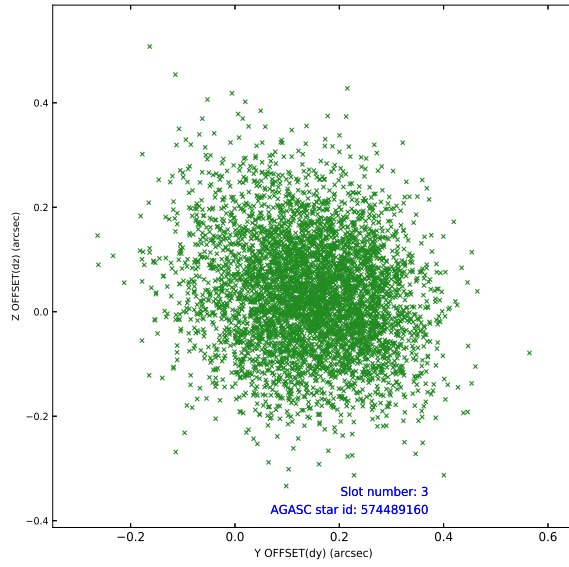


Slot Statistics

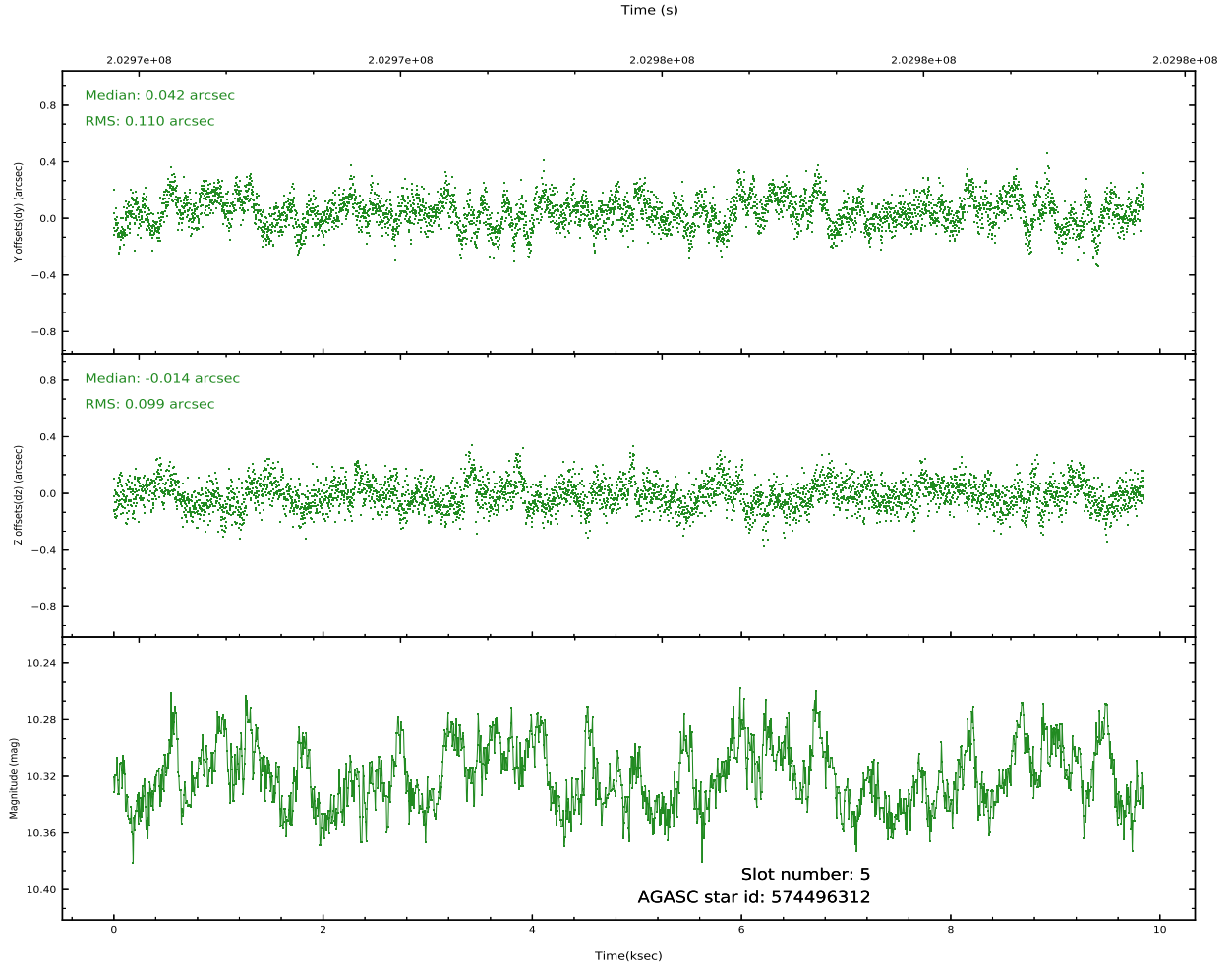
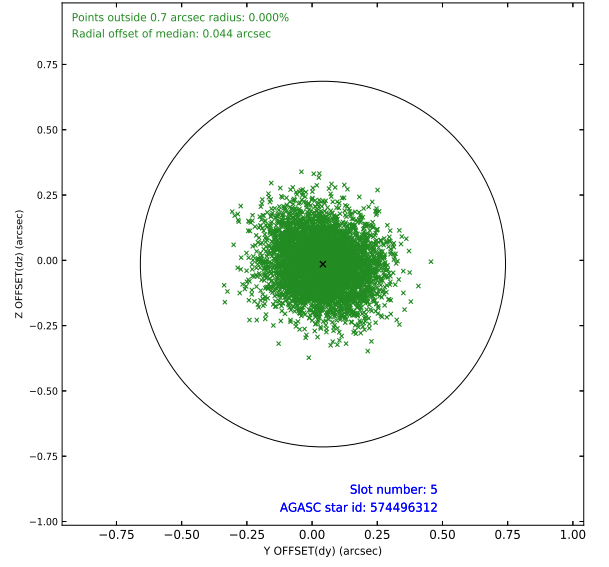
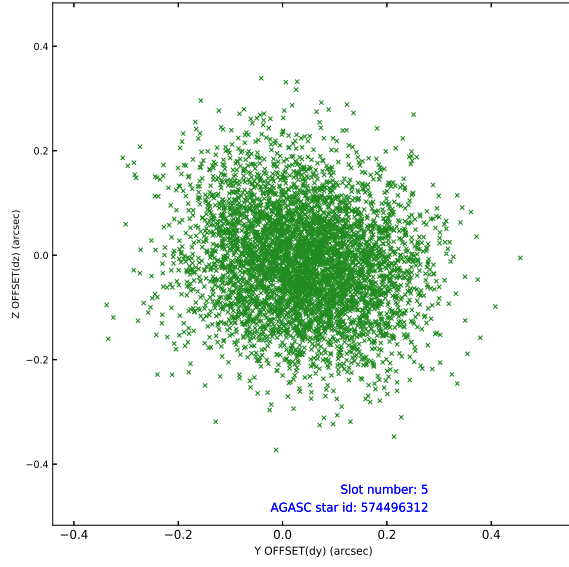
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|---------|------|-----------|-------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|-------|
| 0 | FID | | HRC-I-1 | 6.98 | 2402 | 1.000 | 0.002 | 0.029 | 0.007 | 0.011 | 0.000000 | 0.000000 | -761.84 | -1297 |
| 1 | FID | | HRC-I-2 | 7.02 | 2402 | 1.000 | 0.108 | -0.078 | 0.006 | 0.009 | 0.000000 | 0.000000 | 850.58 | -1299 |
| 2 | FID | | HRC-I-3 | 7.07 | 2402 | 1.000 | 0.009 | -0.040 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1189.96 | 1006 |
| 3 | GUIDE | used | 574489160 | 9.99 | 4799 | 1.000 | 0.147 | 0.029 | 0.163 | 0.266 | 149.677320 | 68.172146 | 1848.86 | -1021 |
| 4 | OMITTED | | | 0.00 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000 | 0.000000 | 0.00 | 0 |
| 5 | GUIDE | used | 574496312 | 10.32 | 4797 | 1.000 | 0.042 | -0.014 | 0.158 | 0.258 | 149.547505 | 68.718299 | -124.10 | -982 |
| 6 | GUIDE | used | 574496360 | 9.46 | 4796 | 1.000 | -0.089 | -0.044 | 0.106 | 0.172 | 150.806604 | 68.529829 | 711.71 | 595 |
| 7 | GUIDE | used | 574489776 | 10.16 | 4789 | 1.000 | -0.100 | 0.021 | 0.163 | 0.262 | 148.323662 | 69.046710 | -1485.44 | -2419 |

2.4 Star Slots

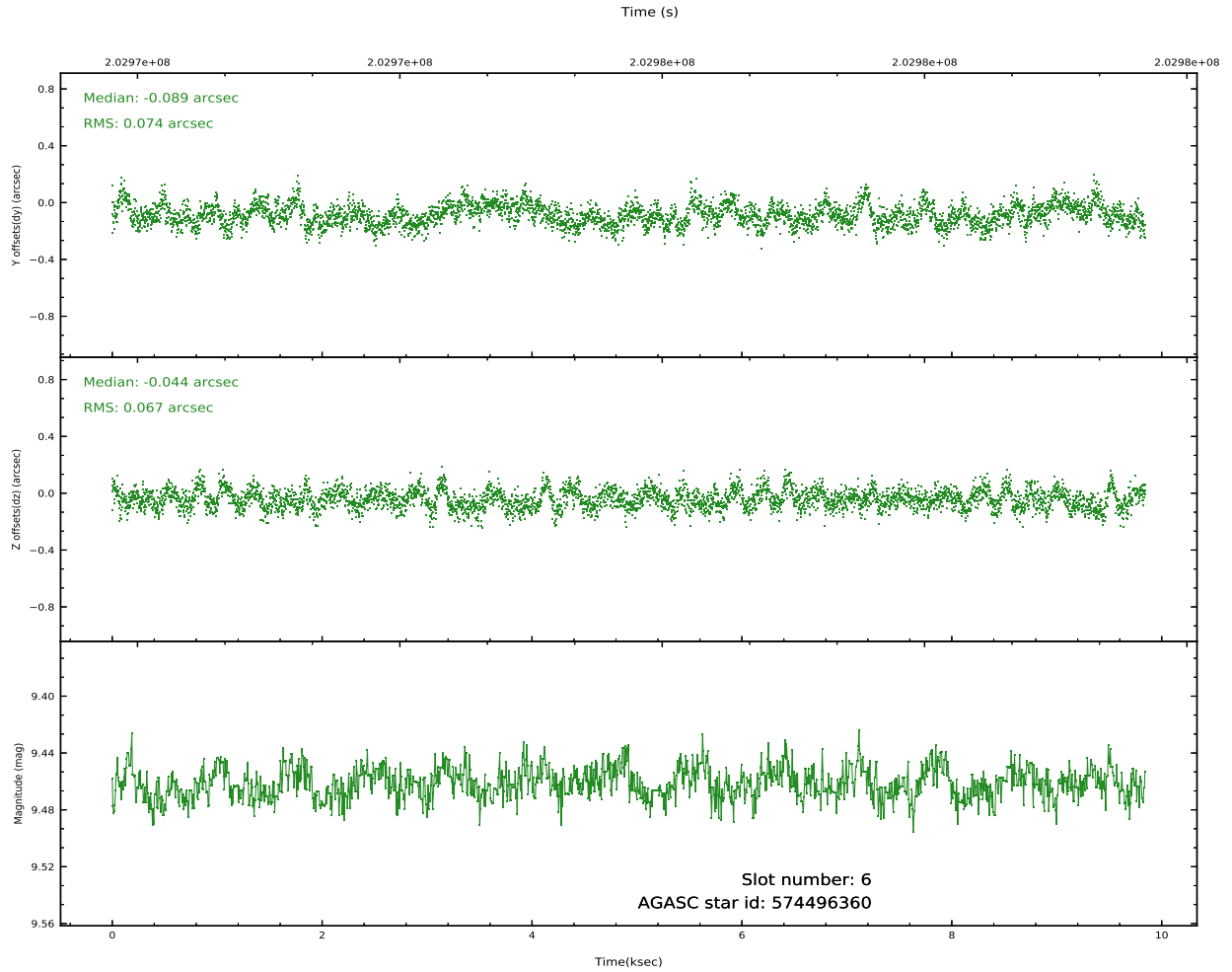
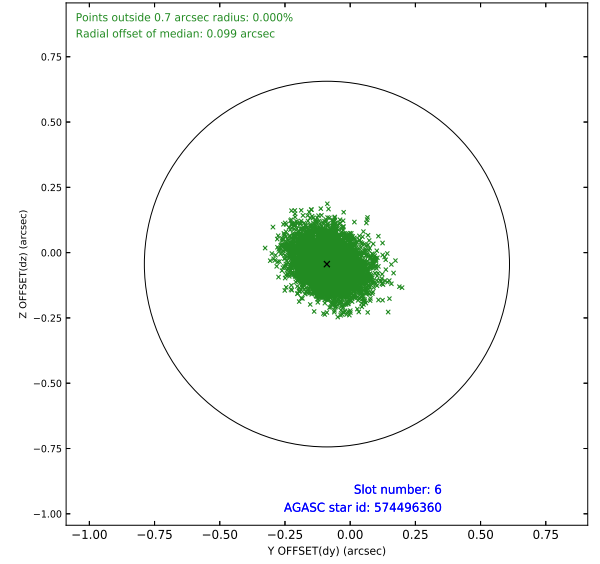
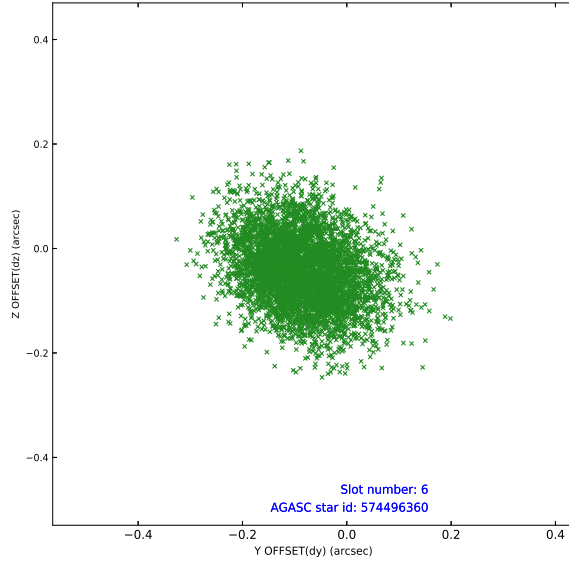
2.4.1 Slot 3



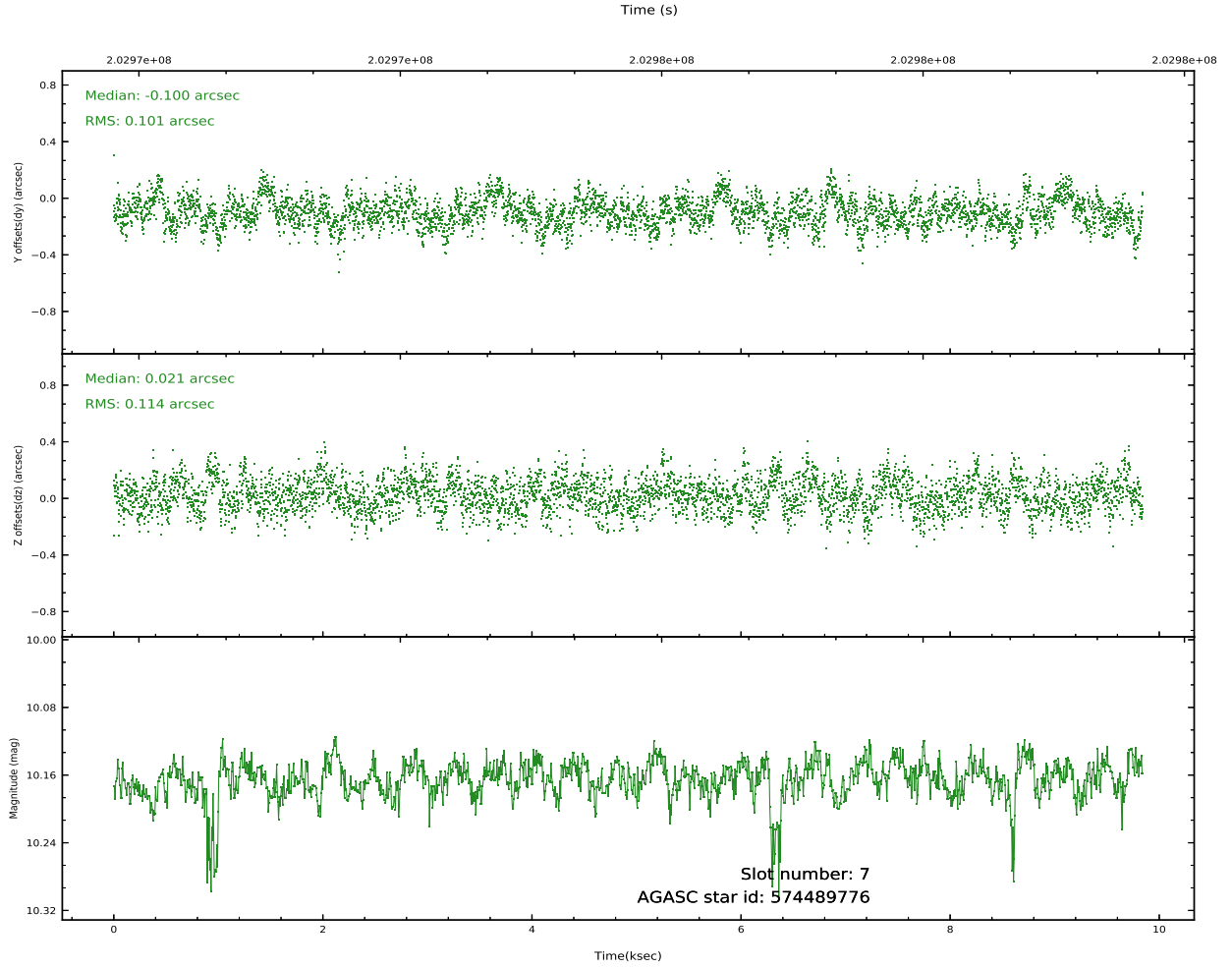
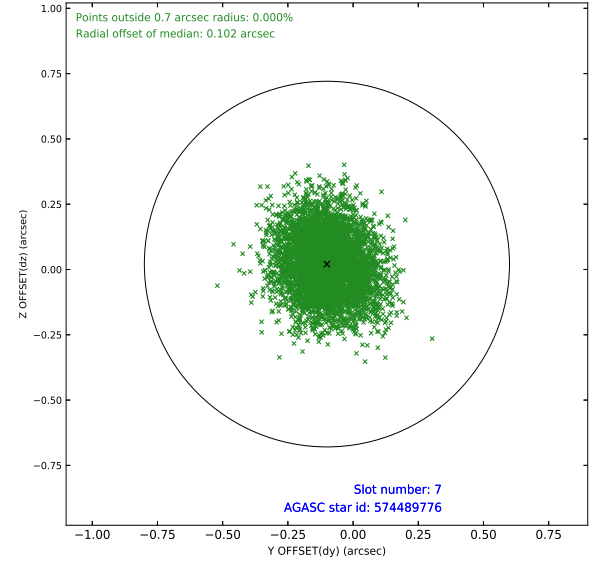
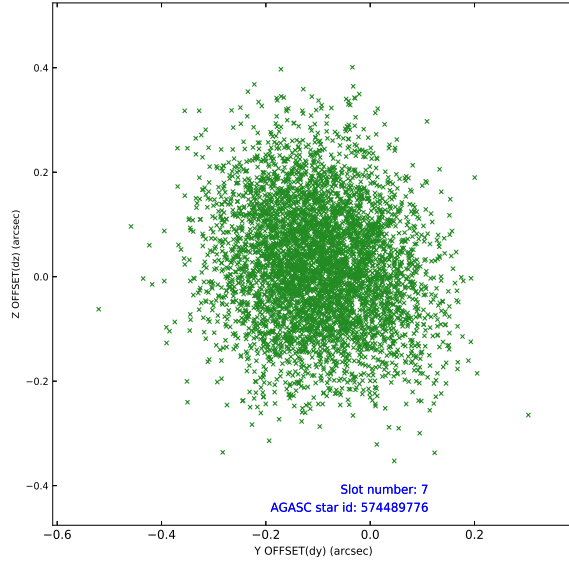
2.4.2 Slot 5



2.4.3 Slot 6

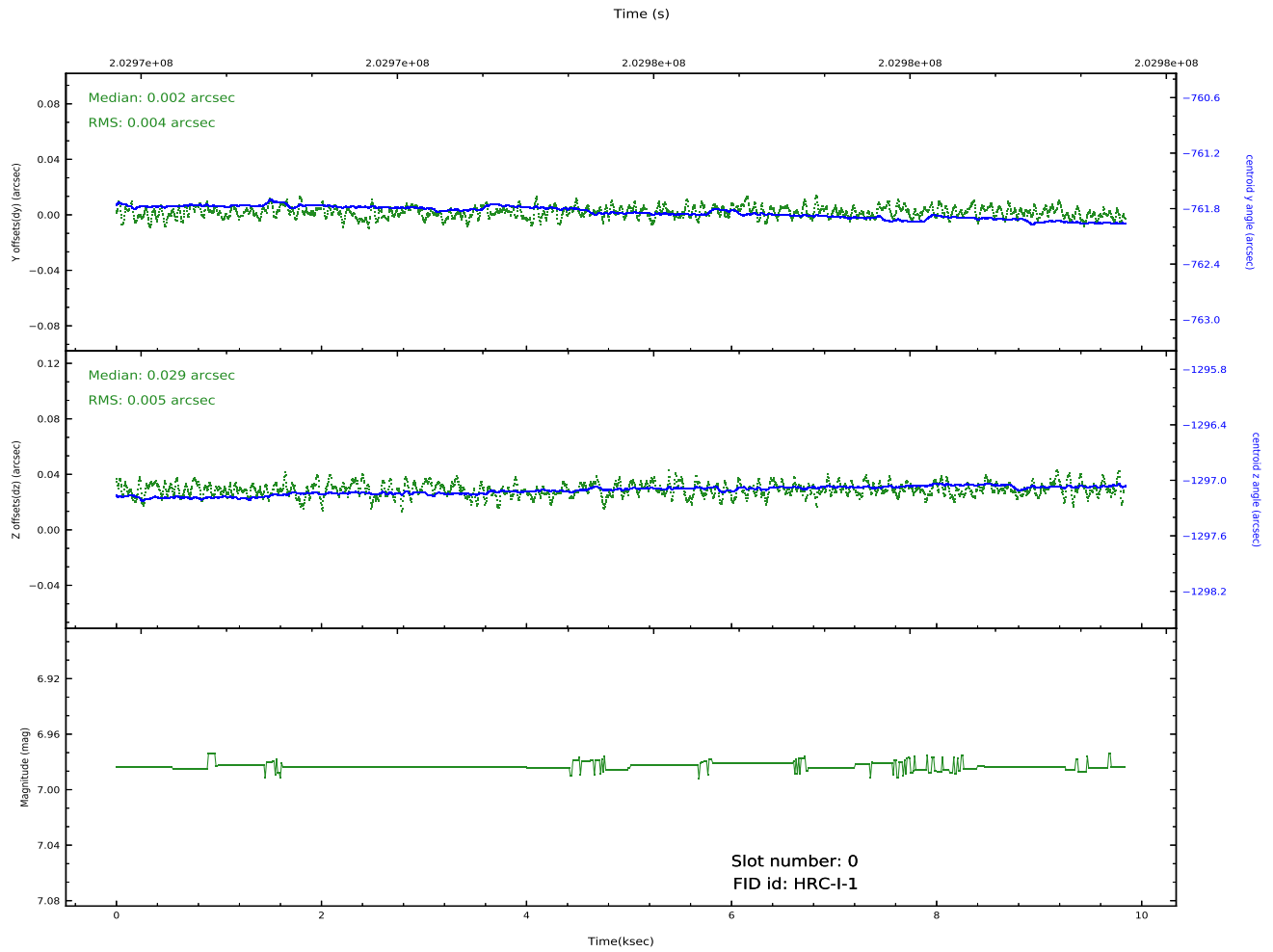
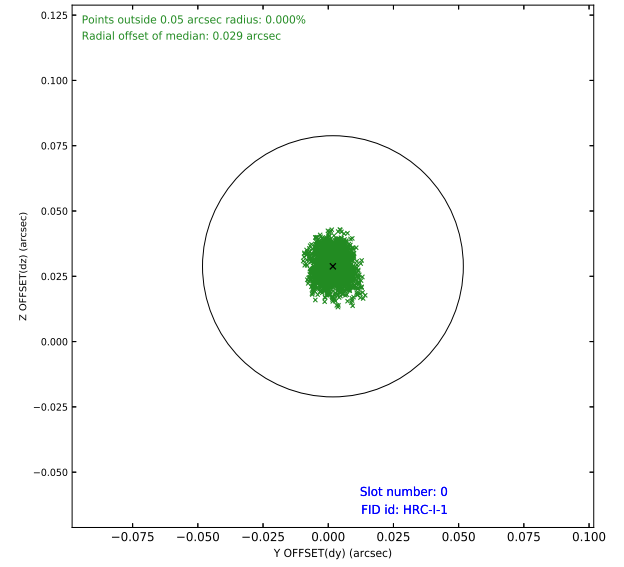
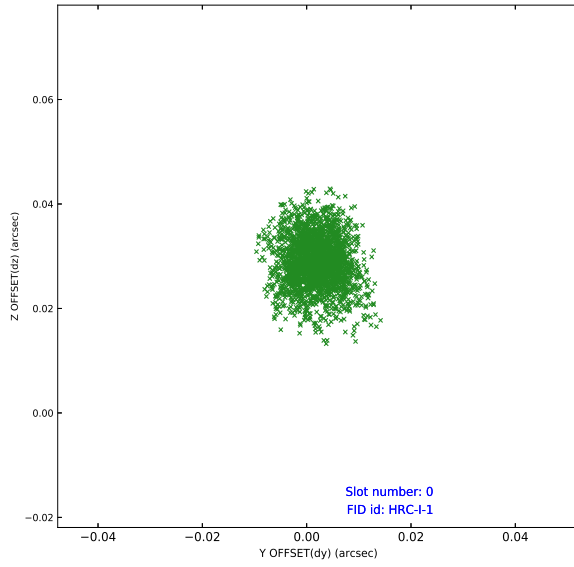


2.4.4 Slot 7

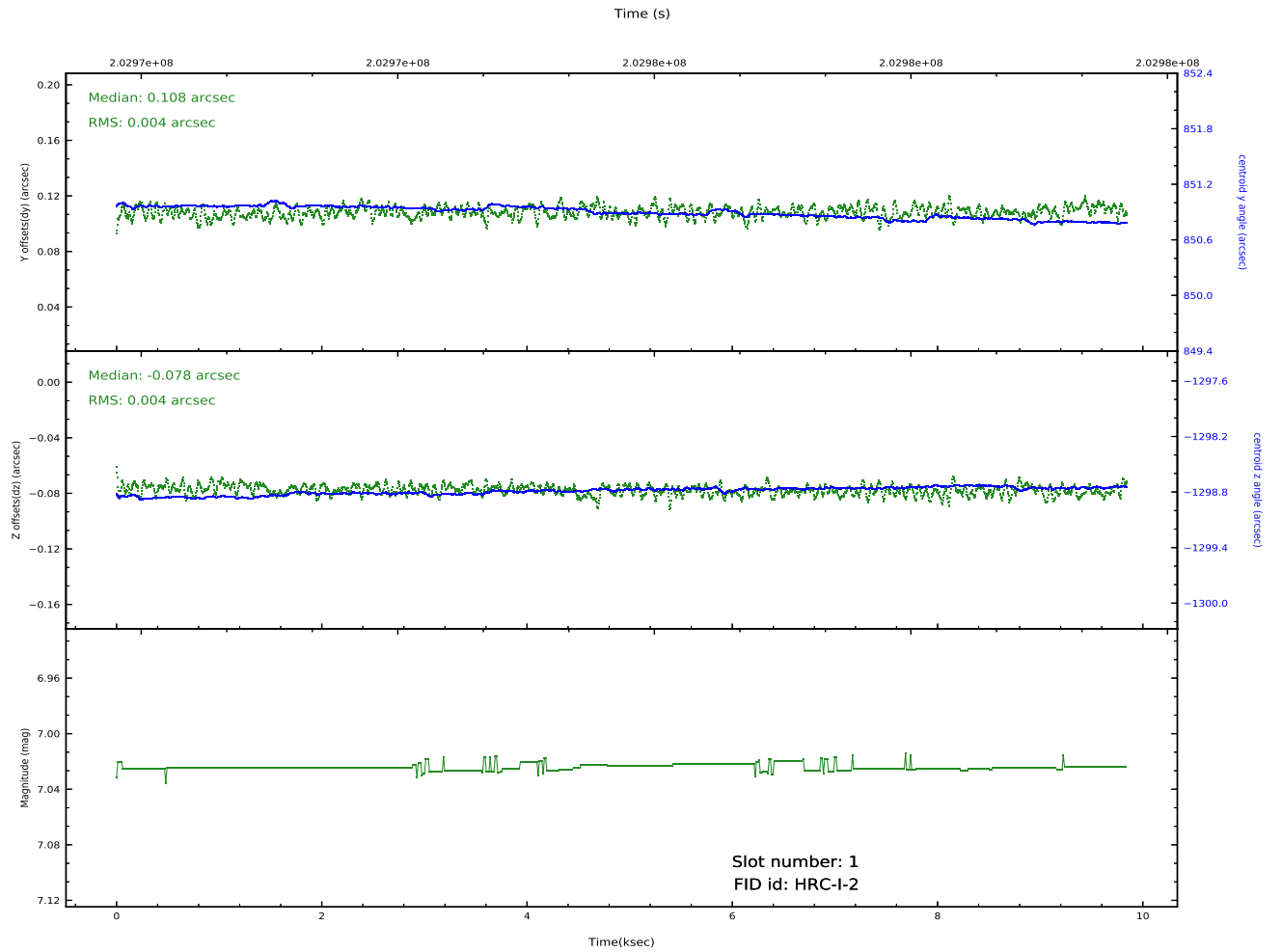
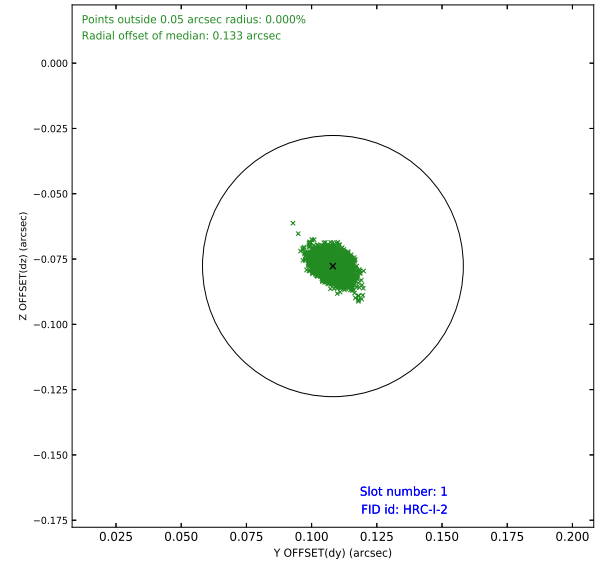
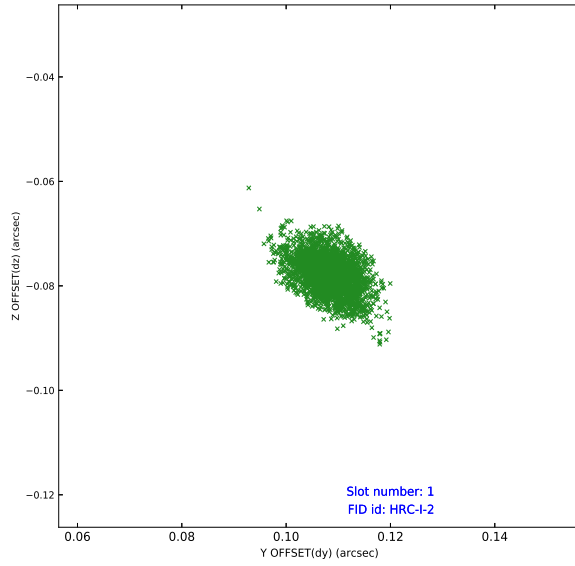


2.5 FID Slots

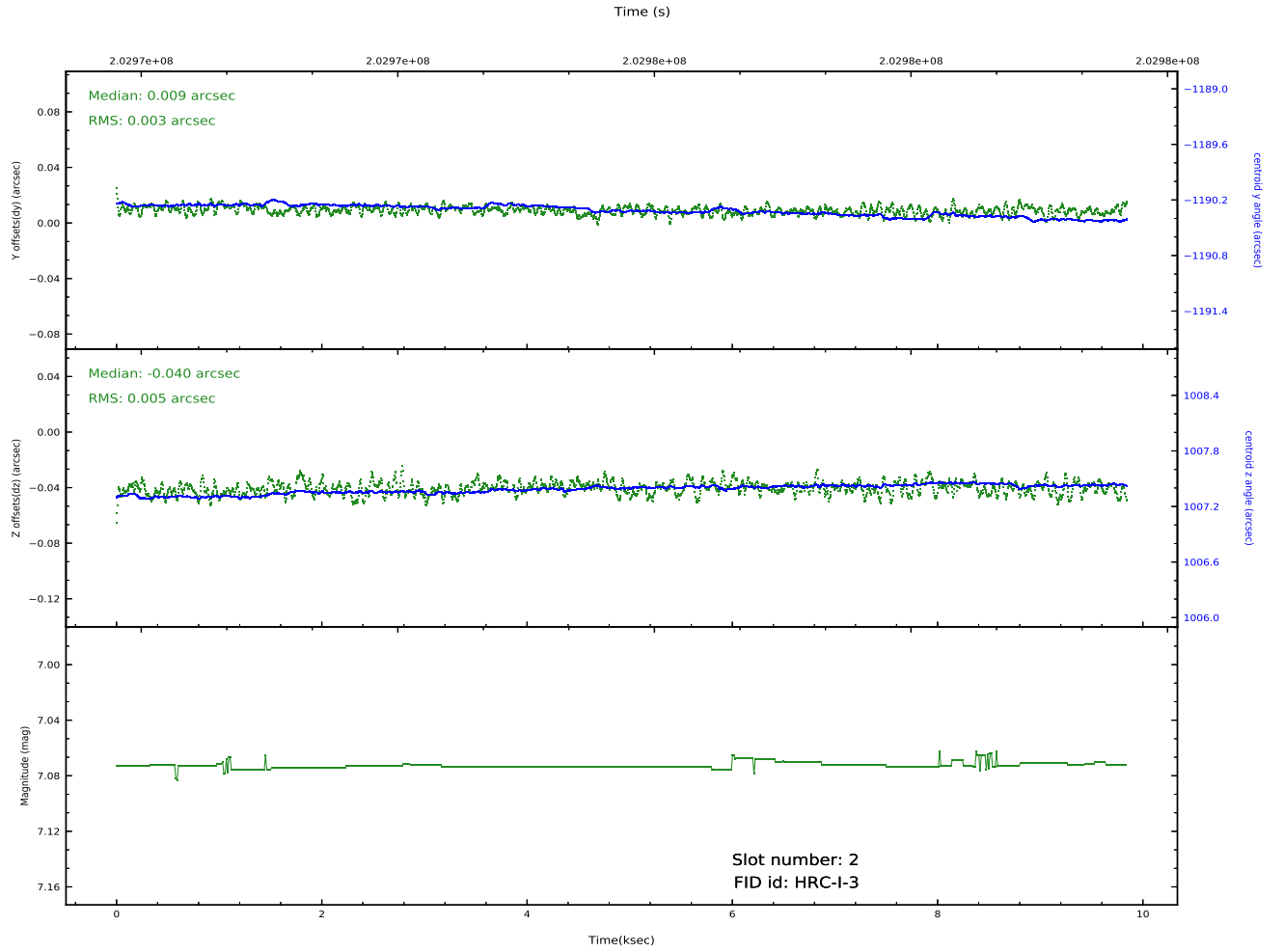
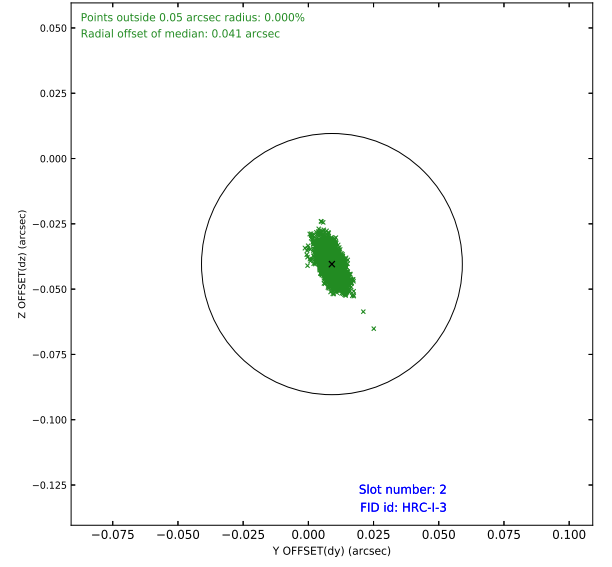
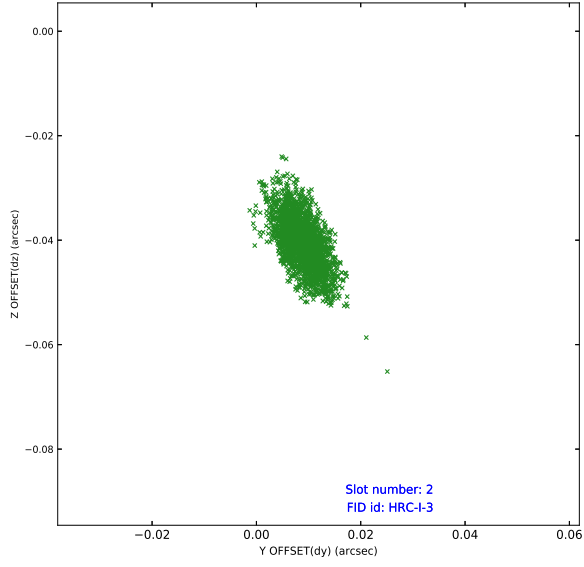
2.5.1 Slot 0



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) | 2020.09.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 9.843 |

A.2 Comments

Joint proposal with XMM.

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The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.