

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19607 - L2 Version 1
Chandra X-Ray Center

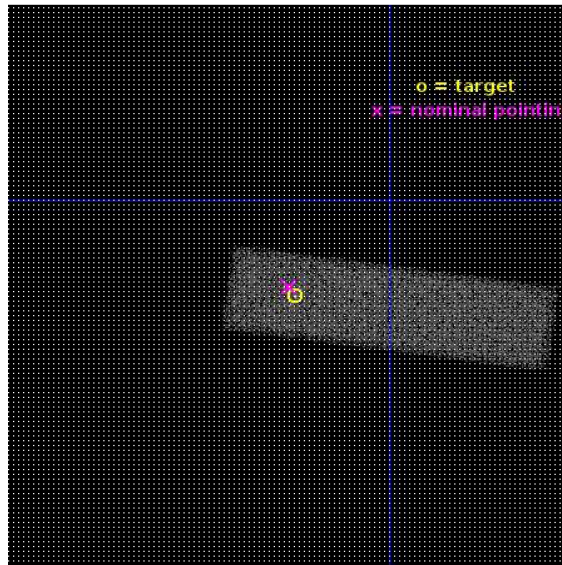
L2 Processing Date : Feb 1 2017

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1 Front

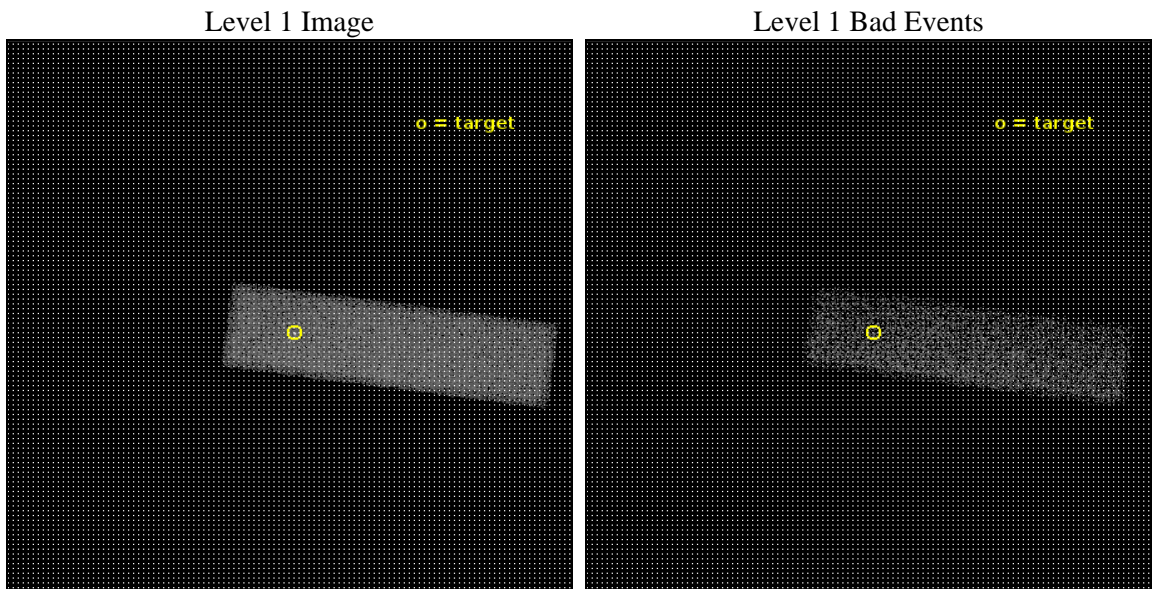
| | | |
|----------|--|---|
| seq_num | 502955 | Sequence number |
| obs_id | 19607 | Observation id |
| title | PSR J2032+4127: A Be/Gamma-ray Pulsar Binary Heading Toward Periastron | Proposal title |
| observer | Jules Halpern | Principal investigator |
| object | PSR J2032+4127 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 308.054583 | Observer's specified target RA [deg] |
| dec_targ | 41.456806 | Observer's specified target Dec [deg] |
| ra_nom | 308.05791875623 | Nominal RA [deg] |
| dec_nom | 41.461065849438 | Nominal Dec [deg] |
| roll_nom | 7.6440813390312 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 28210.824508786 | Sum of GTIs [s] |
| livetime | 26834.228582504 | Livetime [s] |
| ontime7 | 28210.824508786 | Sum of GTIs [s] |
| l2events | 34400 | Number of level 2 events |



2 OBI

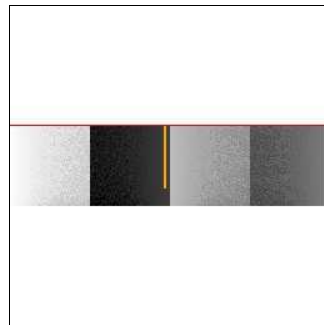
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 28150.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.5.2 | Processing system revision | ontime | 28210.824508786 | Sum of GTIs [s] |
| caldbver | 4.7.3 | | ontime7 | 28210.824508786 | Sum of GTIs [s] |
| date | 2017-02-02T01:19:23 | Date and time of file creation | l1events | 69167 | Number of level 1 events |
| revision | 1 | Processing version of data | | | |

2.1.4 Events

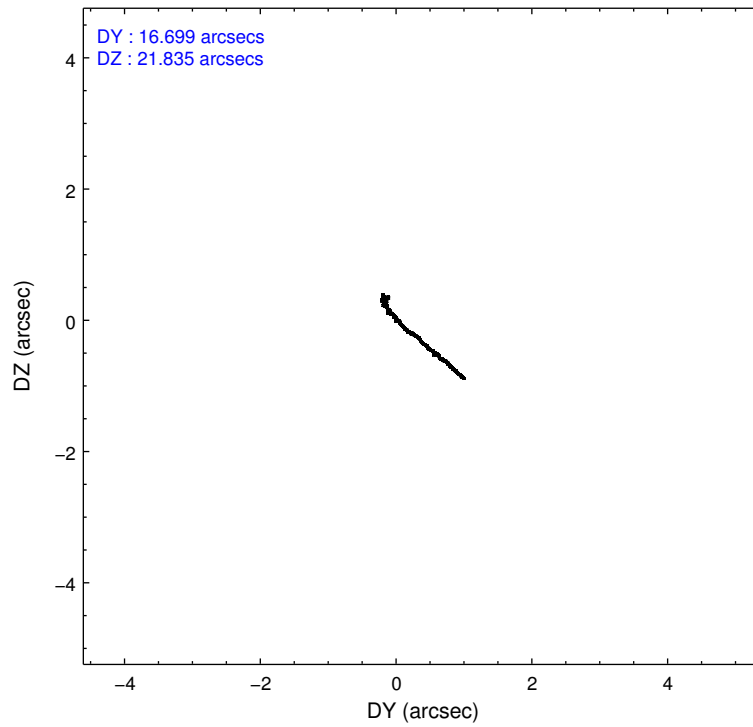
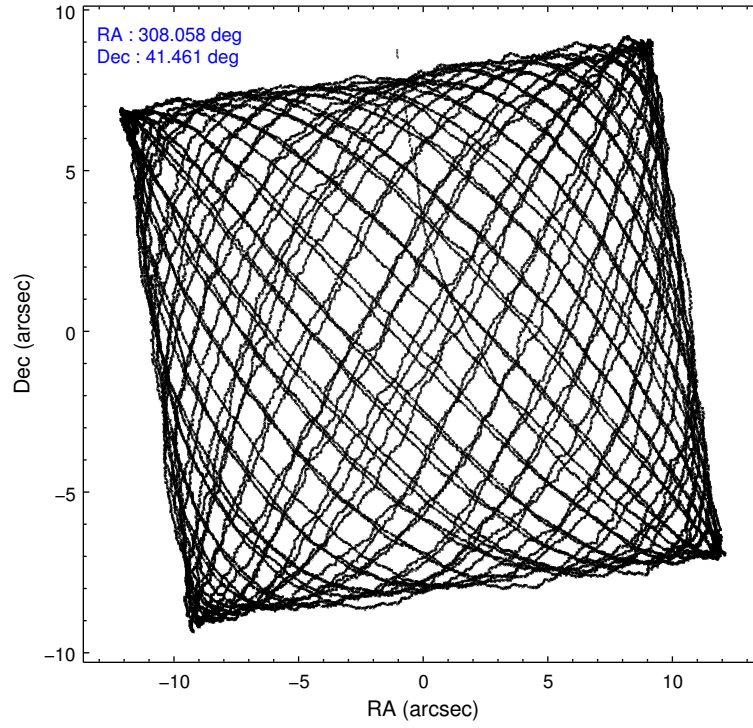
| | ccd 7 |
|-----------------|--------------|
| level 1 events | 69167 |
| rejected events | 33715 |
| rejected % | 48% |

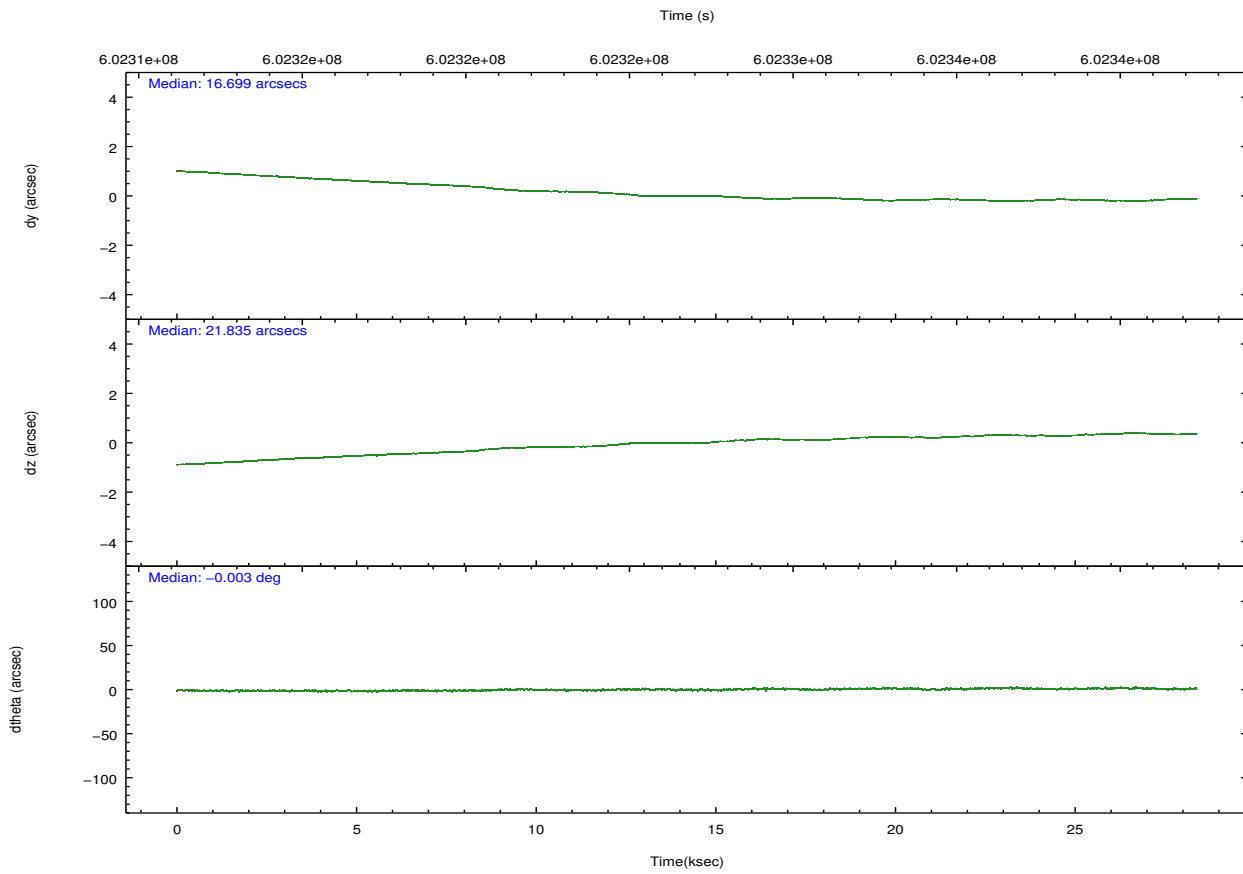
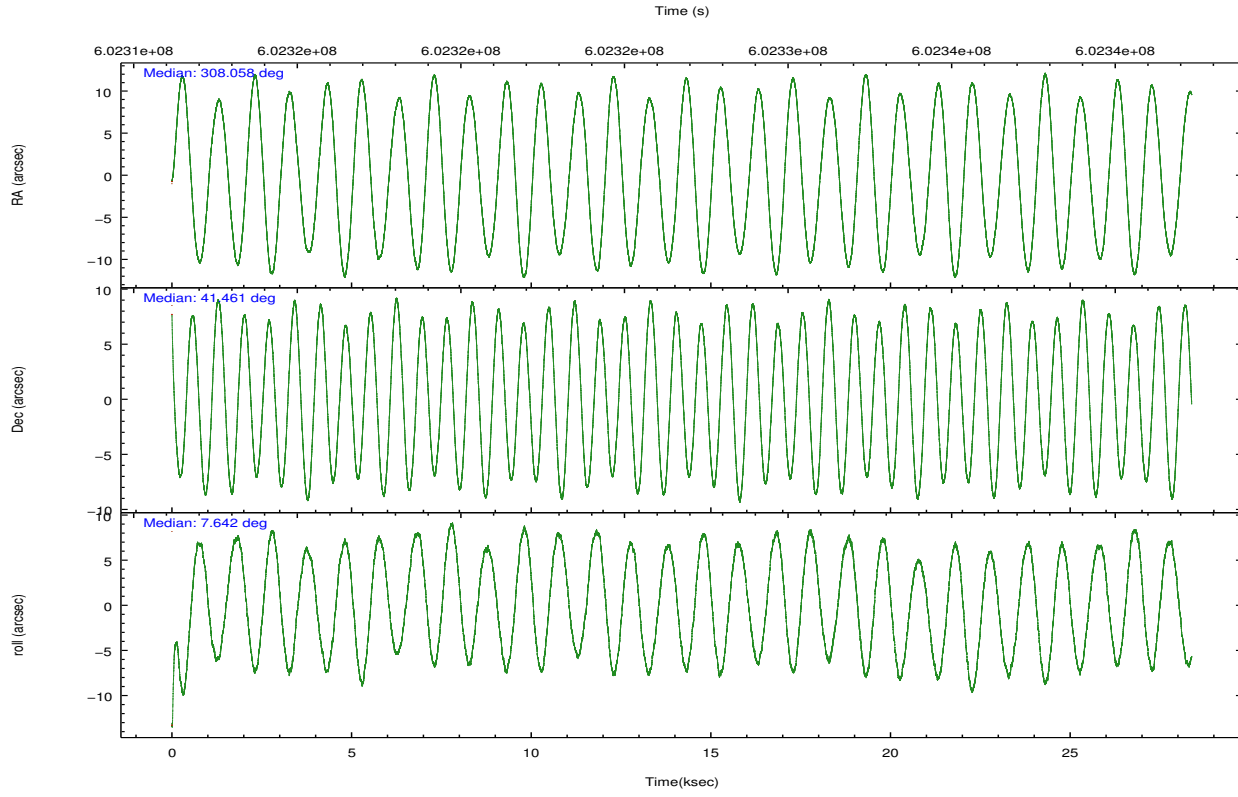
| | ccd 7 |
|----------------|--------------|
| grade 0 events | 4065 |
| | 5% |
| grade 1 events | 101 |
| | 0% |
| grade 2 events | 7318 |
| | 10% |
| grade 3 events | 3914 |
| | 5% |
| grade 4 events | 3855 |
| | 5% |
| grade 5 events | 7028 |
| | 10% |
| grade 6 events | 16302 |
| | 23% |
| grade 7 events | 26584 |
| | 38% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-7 | ACIS-7 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 308.029199 | 308.0579187562261 | Subarray requested | CUSTOM | 1/4 |
| [deg] Pointing Dec | 41.444013 | 41.4610658494378 | Subarray start row | 385 | 385 |
| [deg] Pointing Roll | 7.506473 | 7.644081339031197 | Subarray row count | 256 | 256 |
| [s] Window start time (MET) | 597110468.184000 | 597110468.184000 | Alternating exposures requested | N | N |
| [s] Window stop time (MET) | 602467269.184000 | 602467269.184000 | [s] Primary exposure time | 0.000000 | 0.8 |
| [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) | 602312794.184000 | 602311977.50697 | | | |
| Observation start date | 2017-02-01T05:05:25 | 2017-02-01T04:52:57 | | | |
| [s] Observation end time (MET) | 602340944.184000 | 602341678.42119 | | | |
| Observation end date | 2017-02-01T12:54:35 | 2017-02-01T13:07:58 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





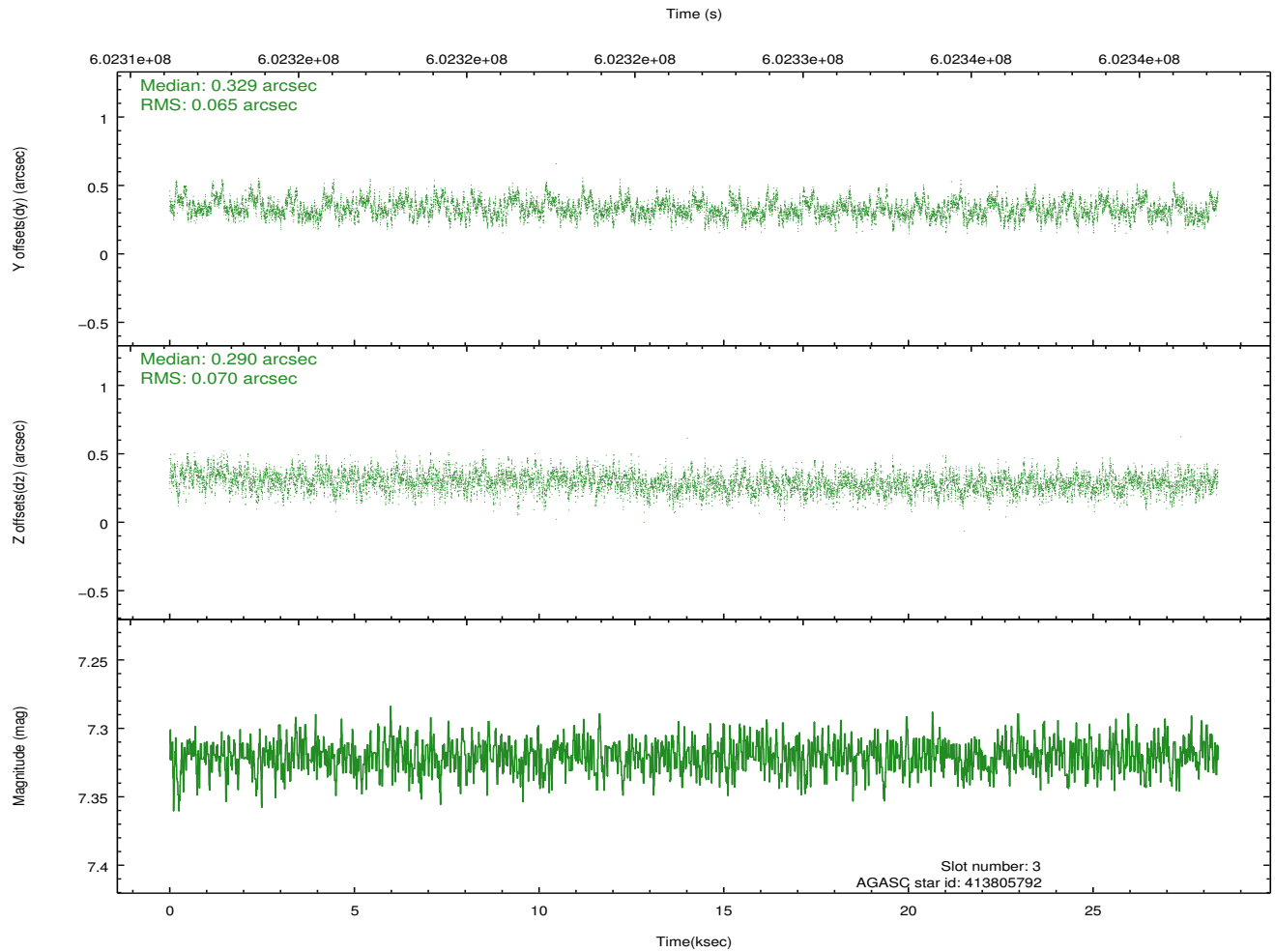
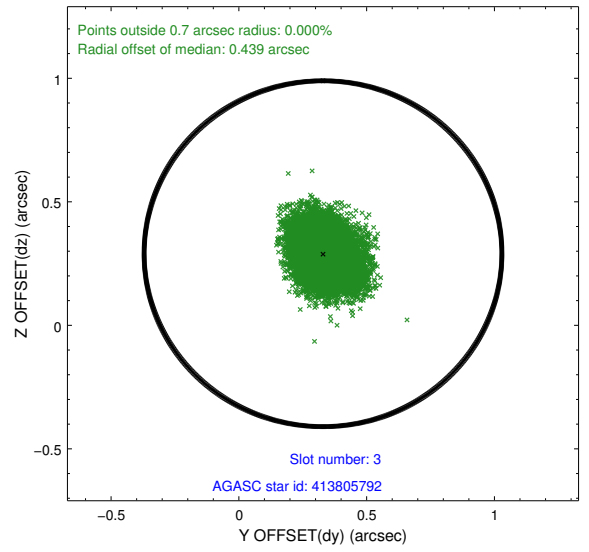
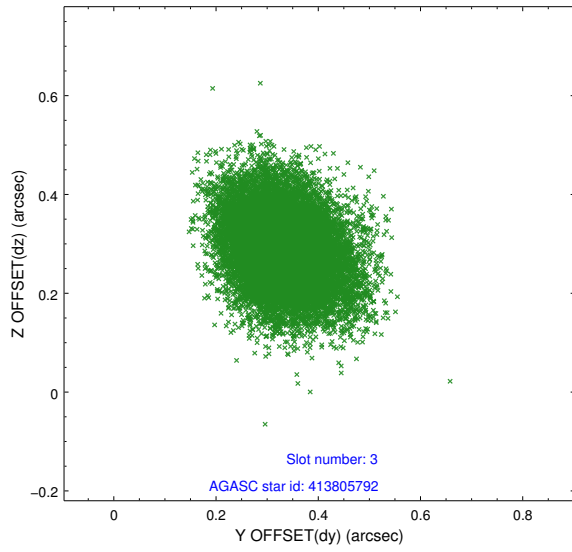
Slot Statistics

| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | | ACIS-S-1 | 7.09 | 6923 | 0.085 | -0.011 | 0.019 | 0.033 | 0.000000 | 0.000000 | 926.15 | -1739.00 |
| 1 | FID | | ACIS-S-2 | 7.01 | 6923 | -0.317 | -0.141 | 0.012 | 0.036 | 0.000000 | 0.000000 | -770.12 | -1743.68 |
| 2 | FID | | ACIS-S-4 | 7.10 | 6923 | 0.208 | 0.156 | 0.015 | 0.041 | 0.000000 | 0.000000 | 2143.57 | 165.19 |
| 3 | GUIDE | used | 413805792 | 7.32 | 13845 | 0.329 | 0.290 | 0.101 | 0.166 | 307.778748 | 40.858024 | -950.98 | -2000.25 |
| 4 | GUIDE | used | 414326136 | 7.35 | 13839 | 0.009 | -0.344 | 0.104 | 0.170 | 308.256176 | 41.473642 | 621.28 | 26.90 |
| 5 | GUIDE | used | 414199536 | 8.56 | 13837 | 0.010 | 0.413 | 0.112 | 0.193 | 307.117380 | 41.957142 | -2177.24 | 2163.78 |
| 6 | GUIDE | used | 414200552 | 8.01 | 13842 | -0.149 | -0.176 | 0.113 | 0.205 | 307.125971 | 42.009807 | -2128.12 | 2347.82 |
| 7 | GUIDE | used | 414324232 | 8.29 | 13837 | -0.196 | -0.184 | 0.112 | 0.182 | 308.637806 | 41.996627 | 1874.47 | 1765.59 |

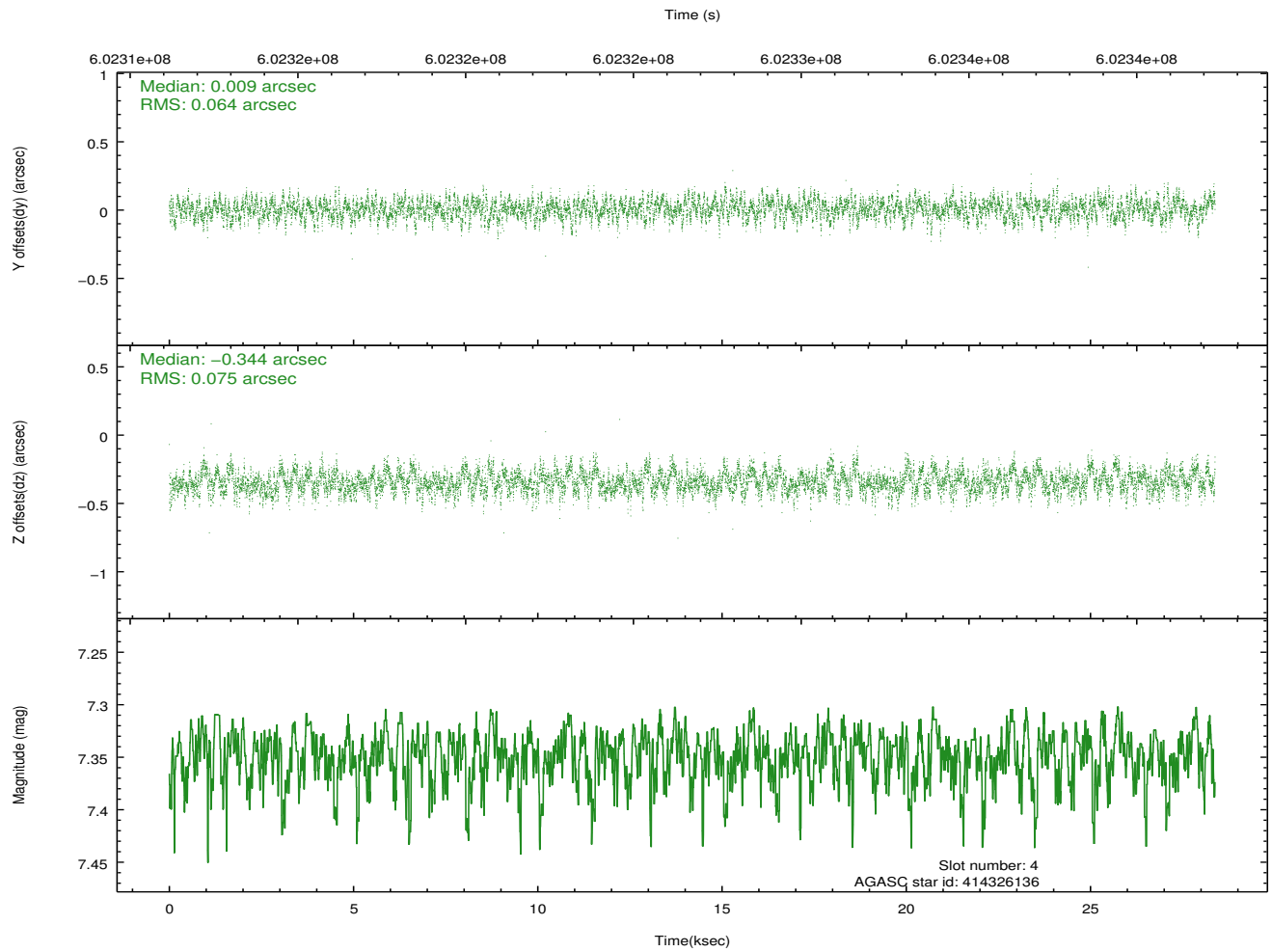
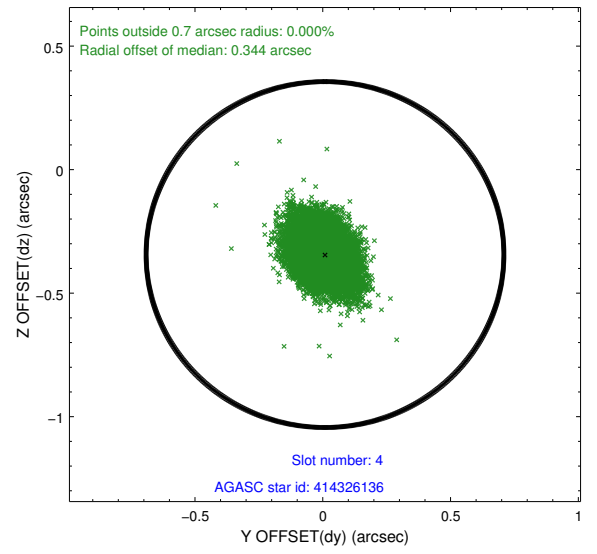
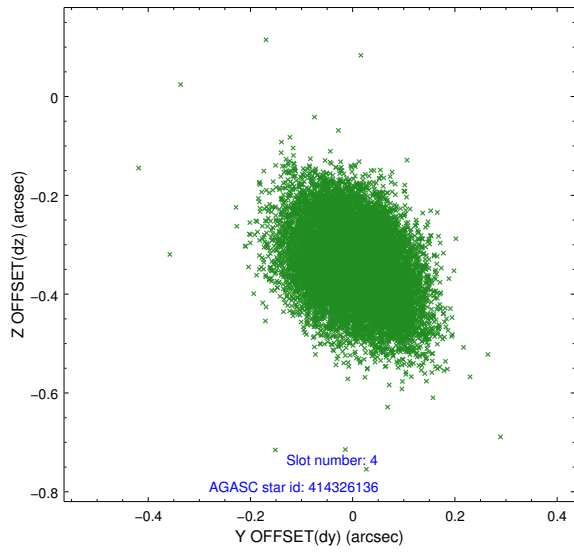
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2.4 Star Slots

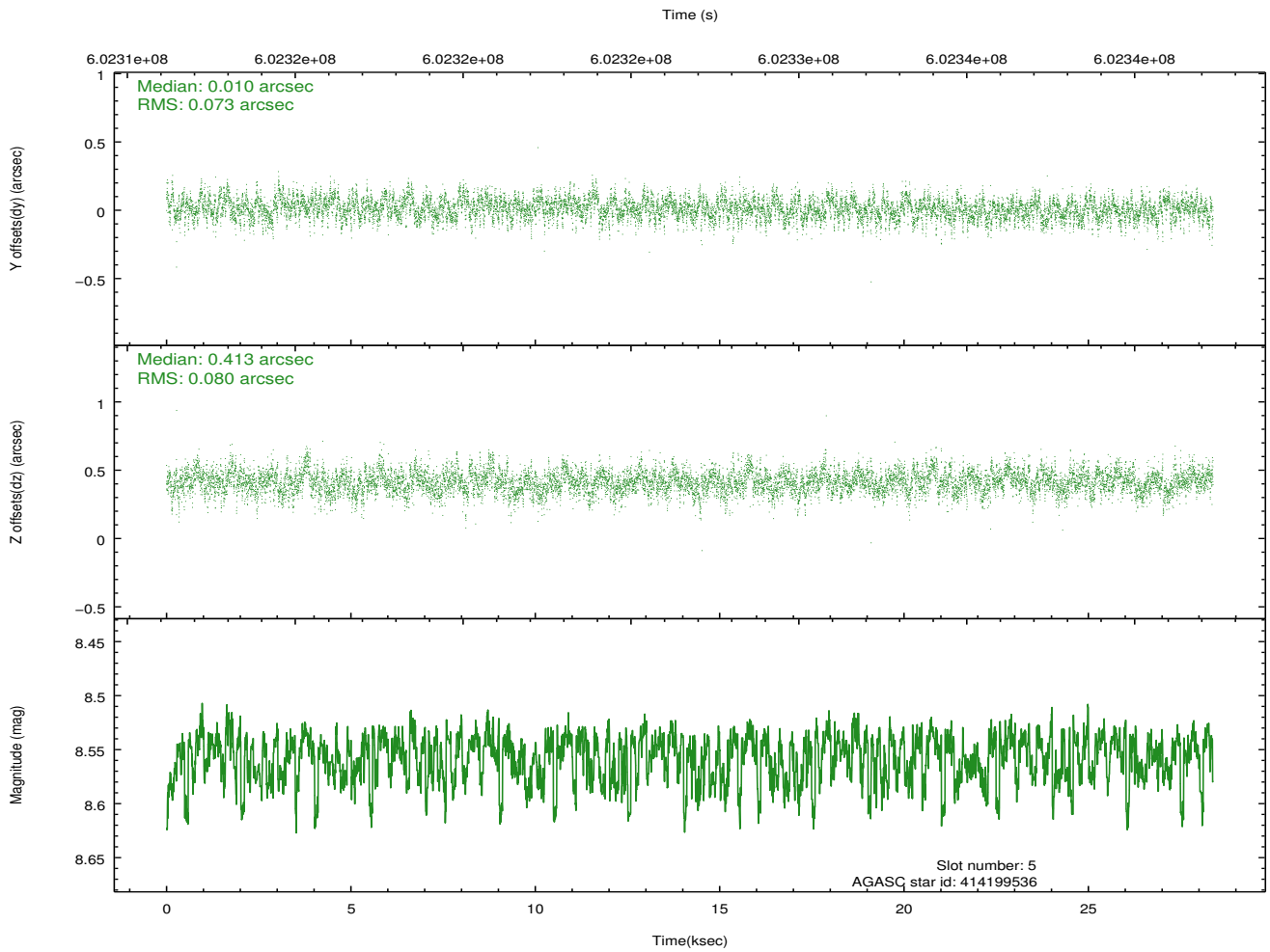
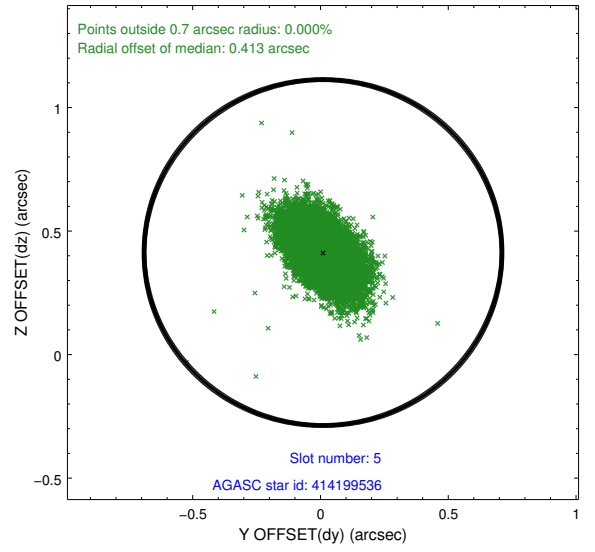
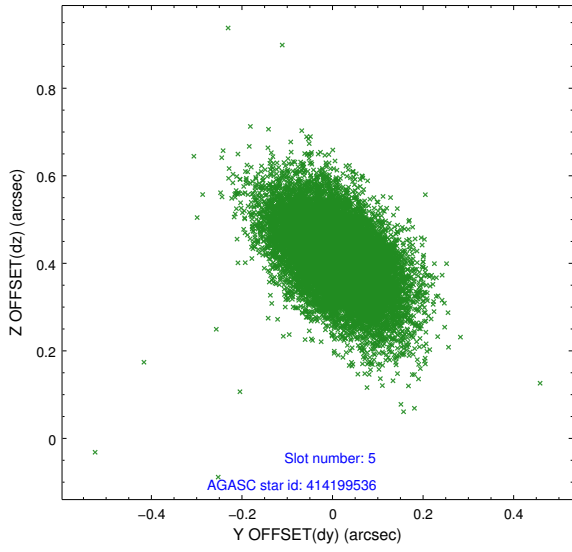
2.4.1 Slot 3



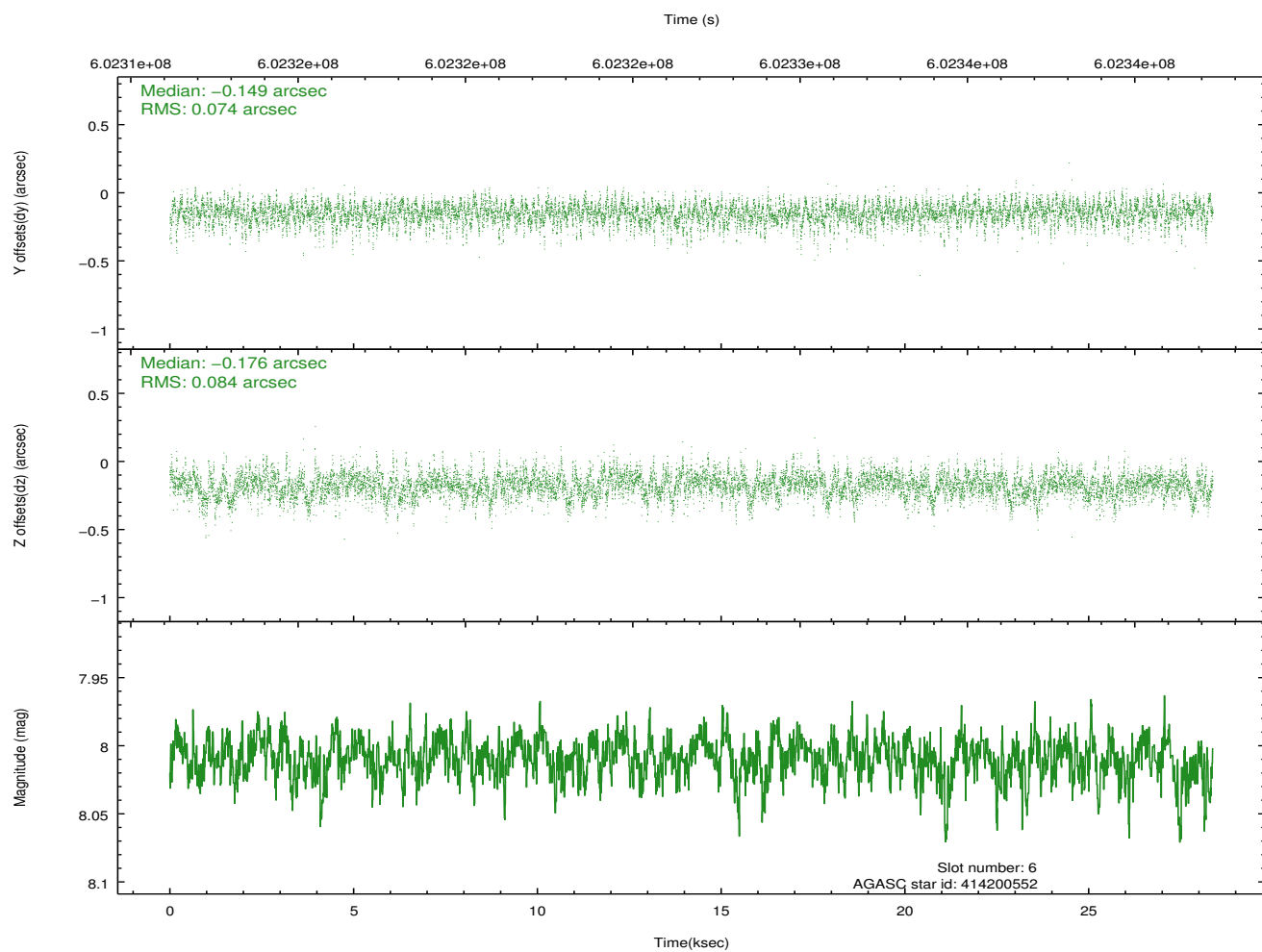
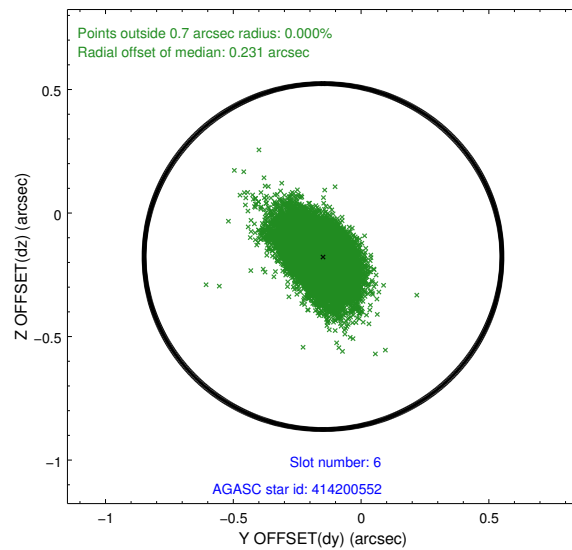
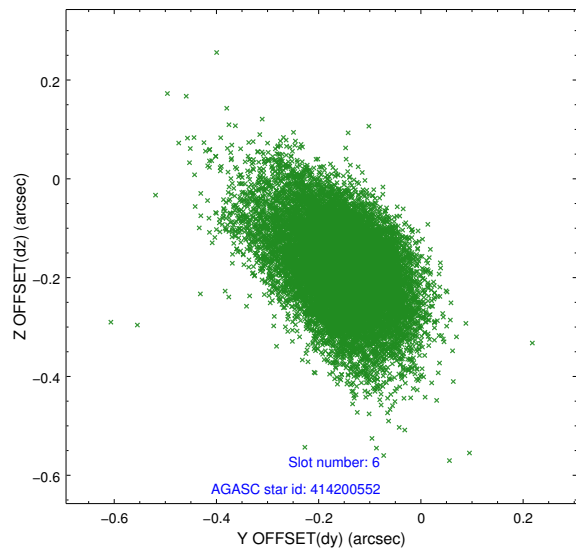
2.4.2 Slot 4



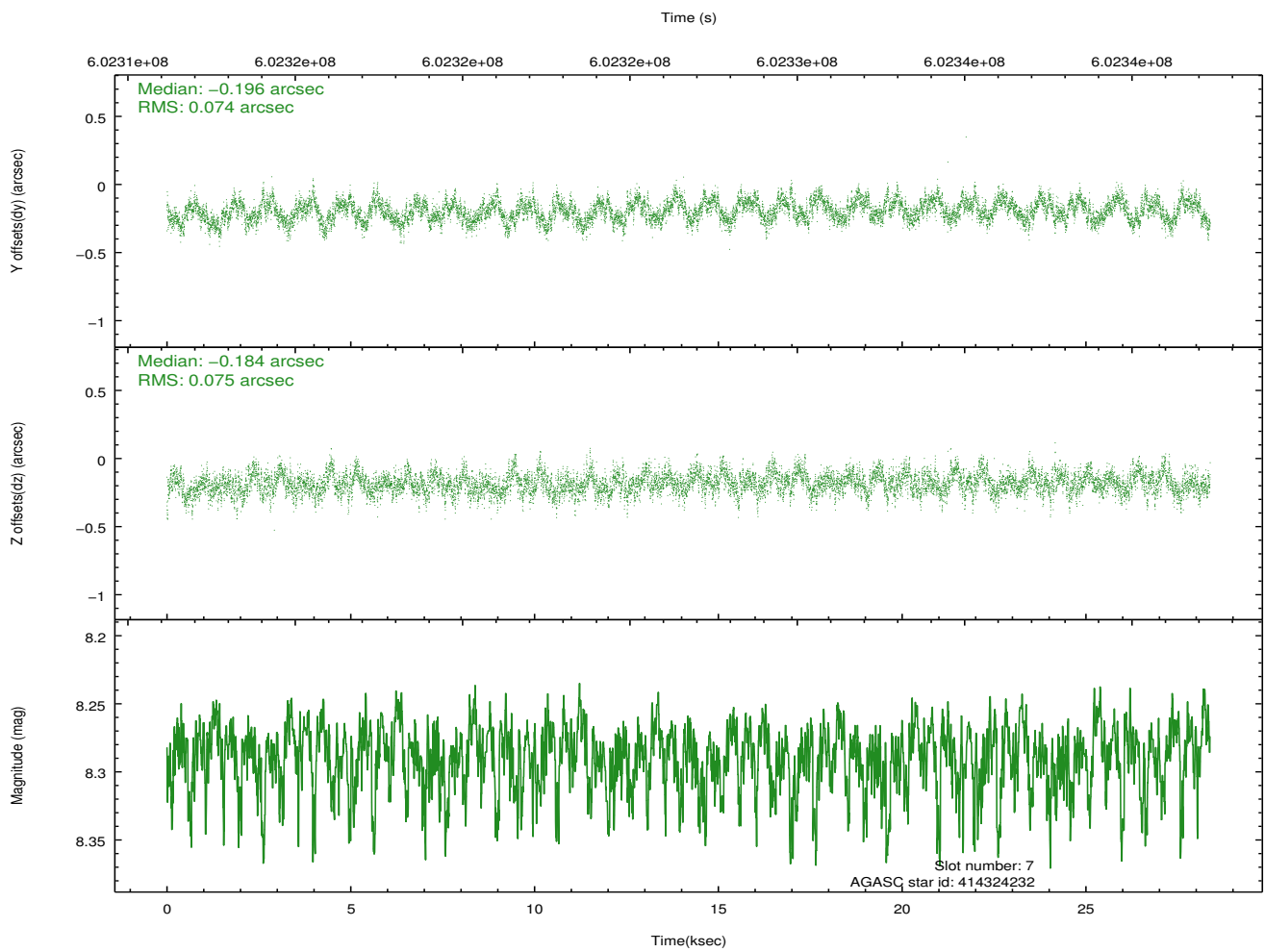
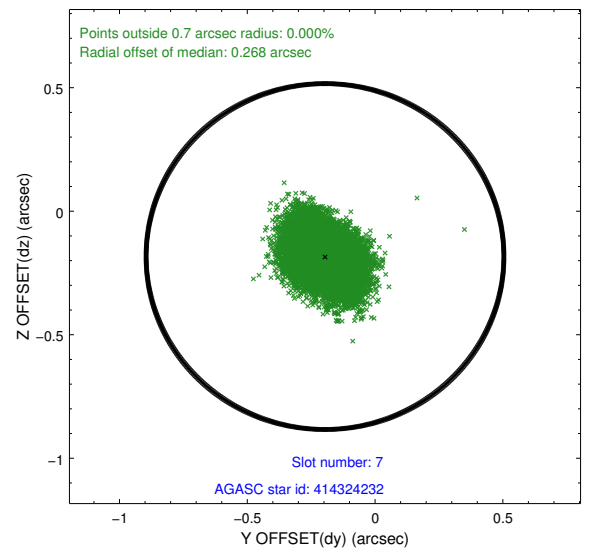
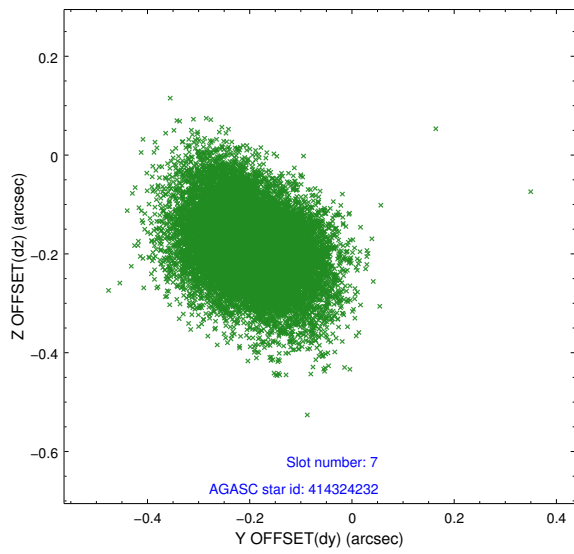
2.4.3 Slot 5



2.4.4 Slot 6

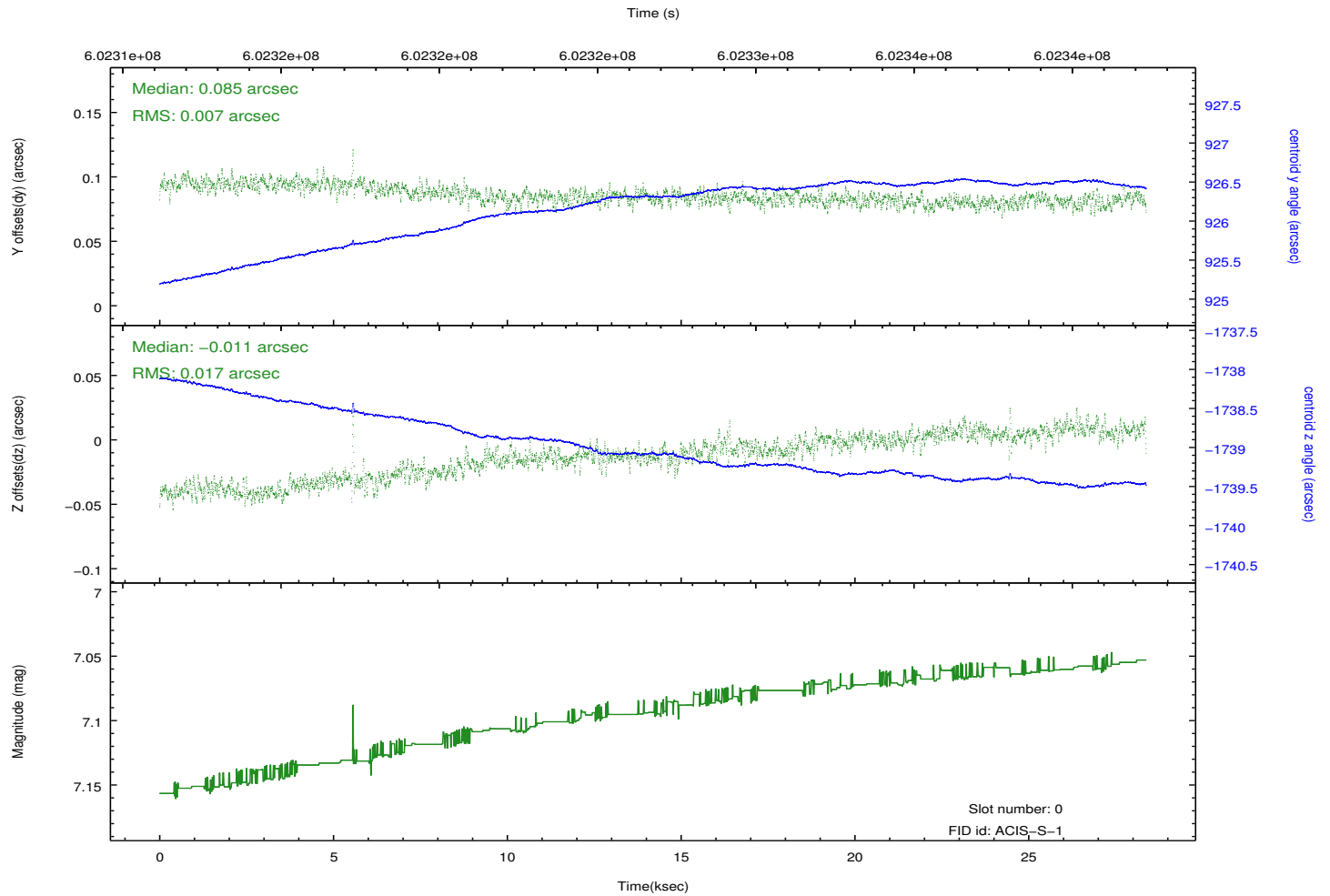
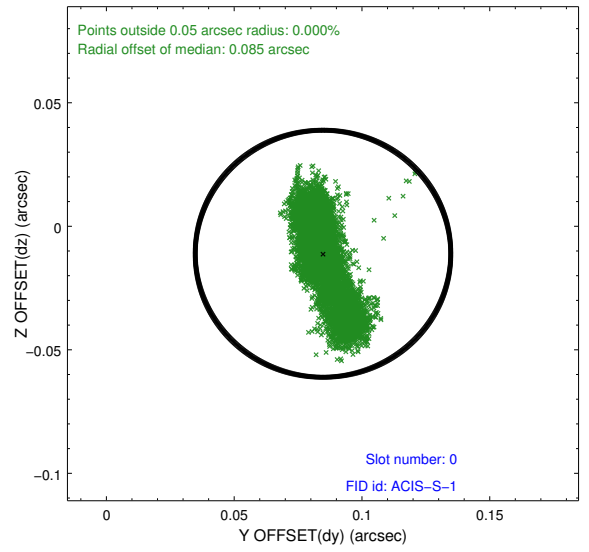
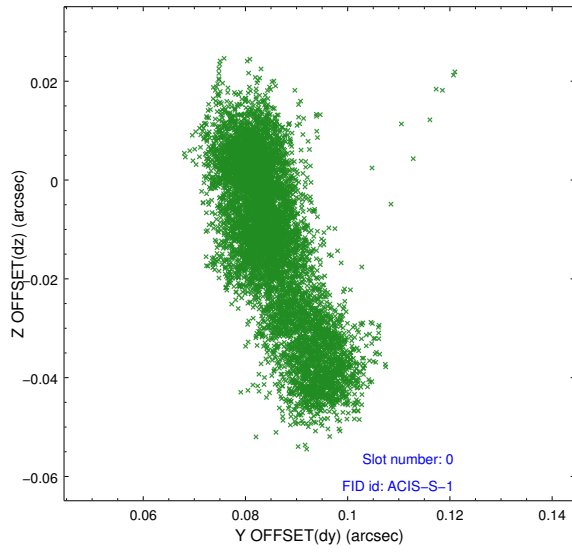


2.4.5 Slot 7

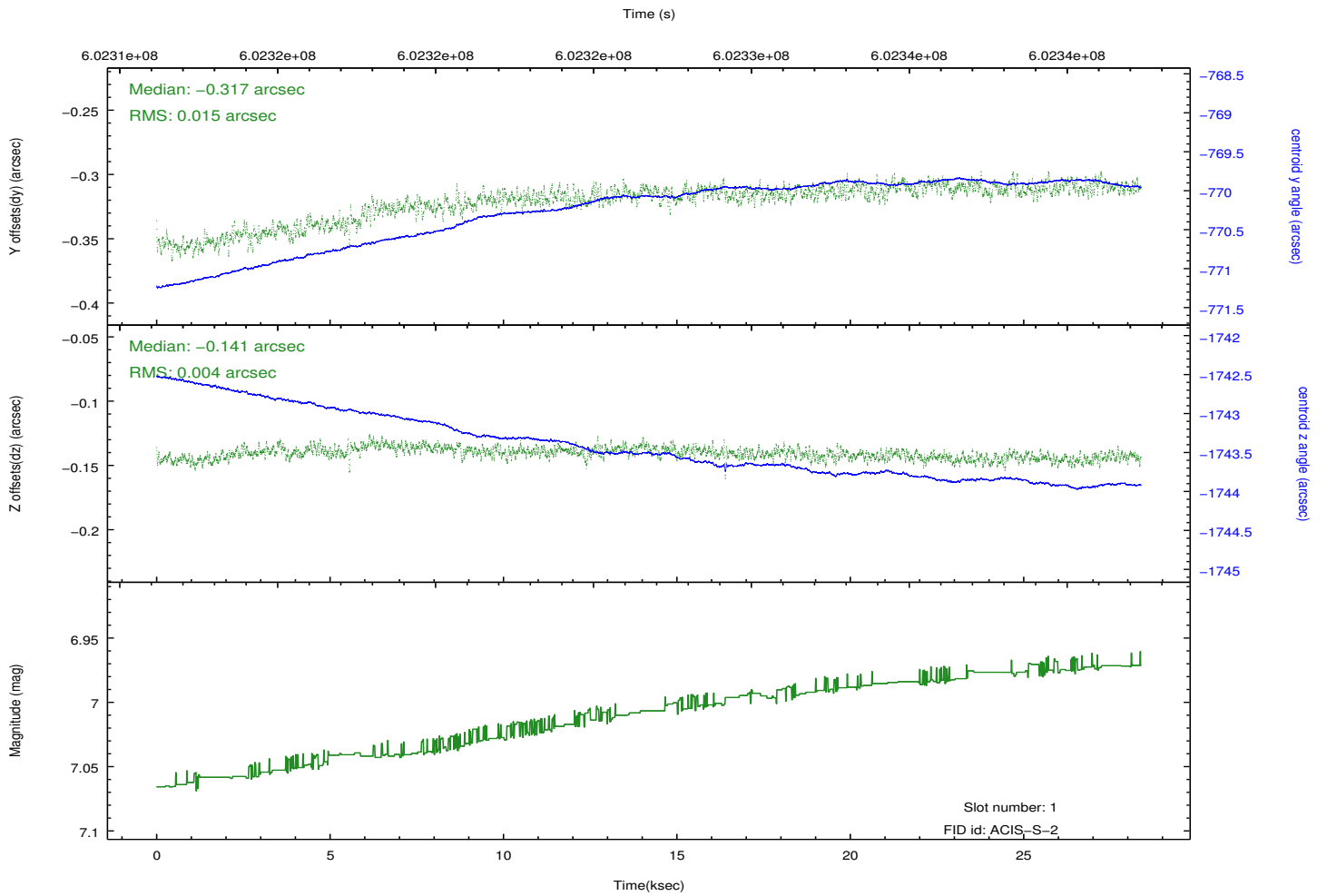
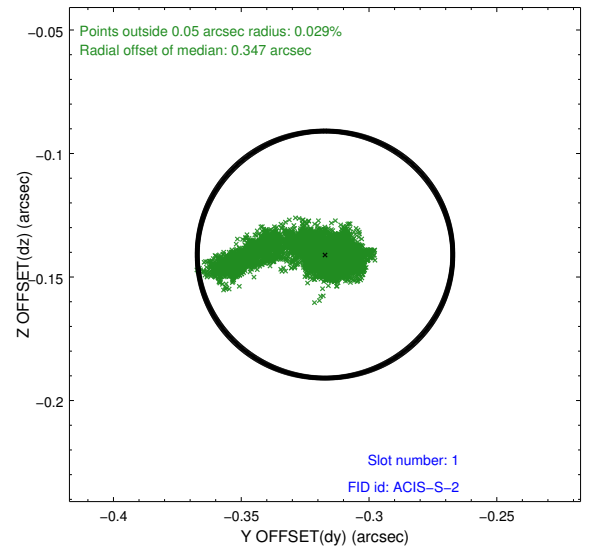
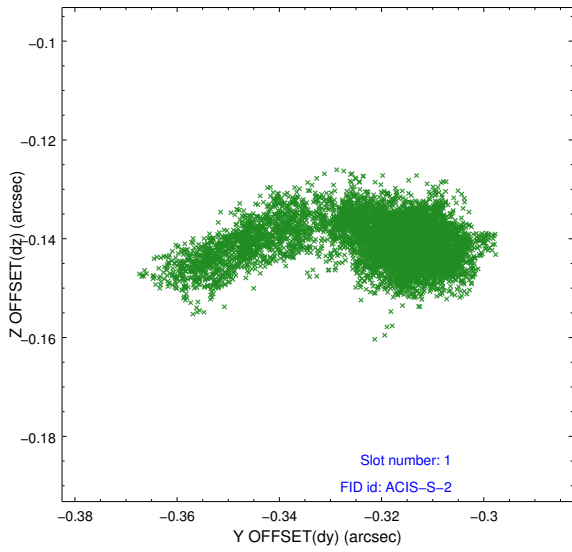


2.5 FID Slots

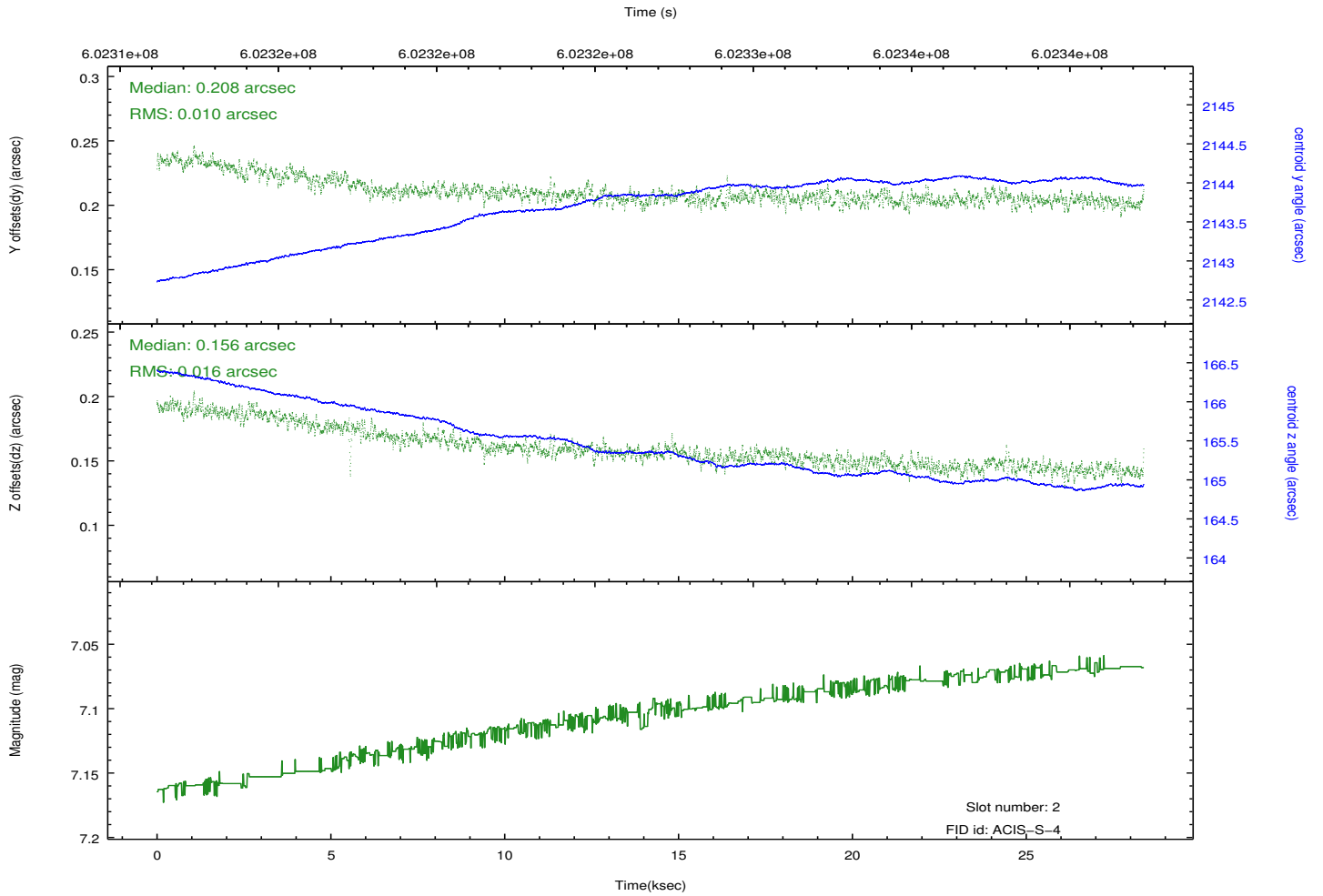
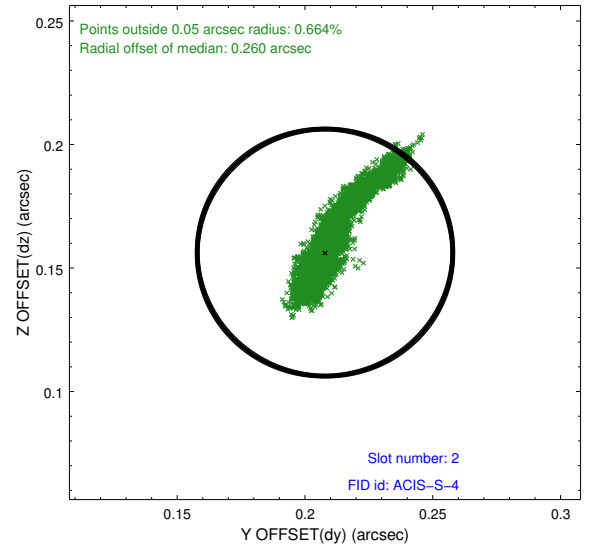
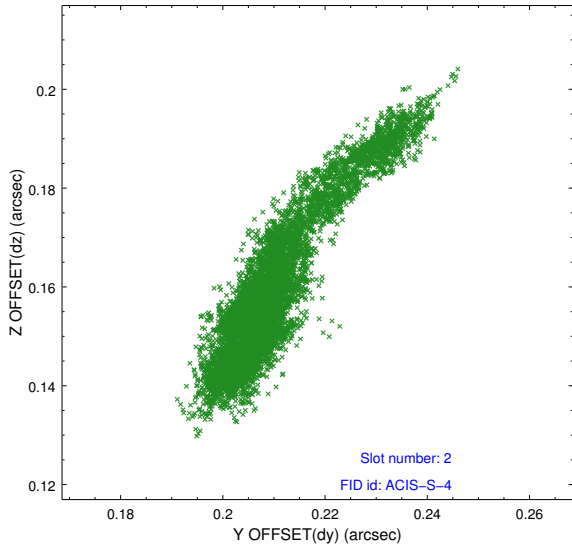
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2017.02.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 28.210824508786 |

A.2 Comments