

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22090 - L2 Version 1
Chandra X-Ray Center

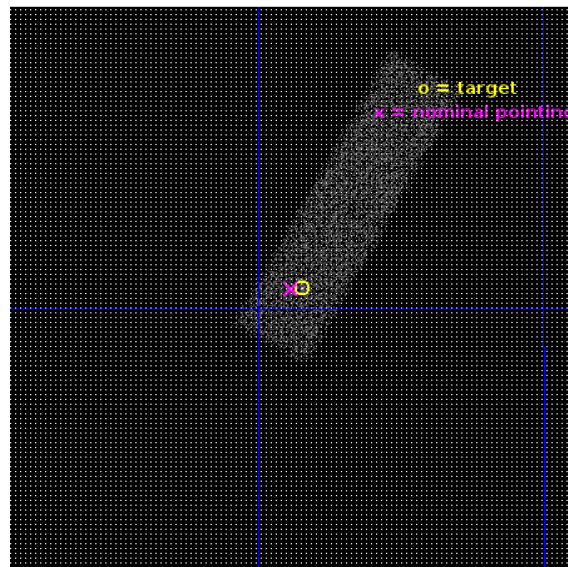
L2 Processing Date : Feb 10 2019

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1 Front

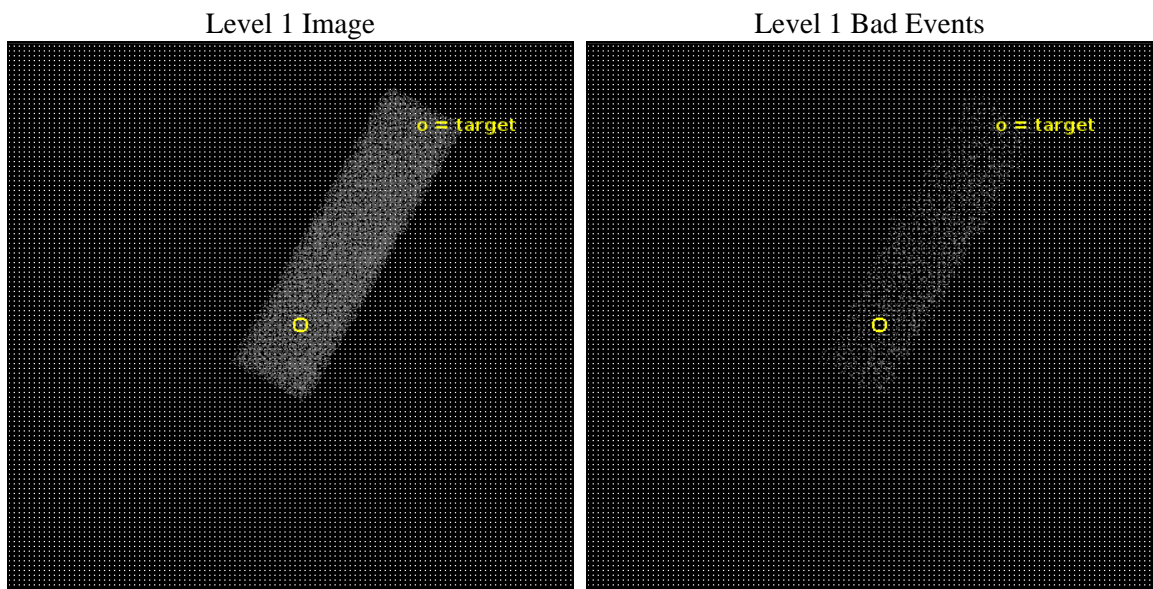
| | | |
|----------|---|---|
| seq_num | 703861 | Sequence number |
| obs_id | 22090 | Observation id |
| title | C-BASS: A Chandra Legacy Survey of AGN at the Highest Spatial Resolutions | Proposal title |
| observer | Michael Koss | Principal investigator |
| object | Z31-72 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 123.60556 | Observer's specified target RA [deg] |
| dec_targ | 4.342468 | Observer's specified target Dec [deg] |
| ra_nom | 123.61019148706 | Nominal RA [deg] |
| dec_nom | 4.3421241360336 | Nominal Dec [deg] |
| roll_nom | 298.71532573254 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 10060.79940033 | Sum of GTIs [s] |
| livetime | 9569.8653099302 | Livetime [s] |
| ontime7 | 10060.79940033 | Sum of GTIs [s] |
| l2events | 12689 | Number of level 2 events |



2 OBI

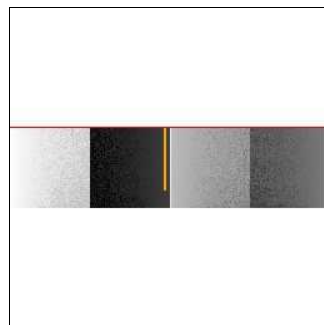
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 10000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.7.1 | Processing system revision | ontime | 10060.79940033 | Sum of GTIs [s] |
| caldsver | 4.8.2 | | ontime7 | 10060.79940033 | Sum of GTIs [s] |
| date | 2019-02-10T22:18:25 | Date and time of file creation | l1events | 25986 | Number of level 1 events |
| revision | 1 | Processing version of data | | | |

2.1.4 Events

| | |
|-----------------|--------------|
| | ccd 7 |
| level 1 events | 25986 |
| rejected events | 12929 |
| rejected % | 49% |

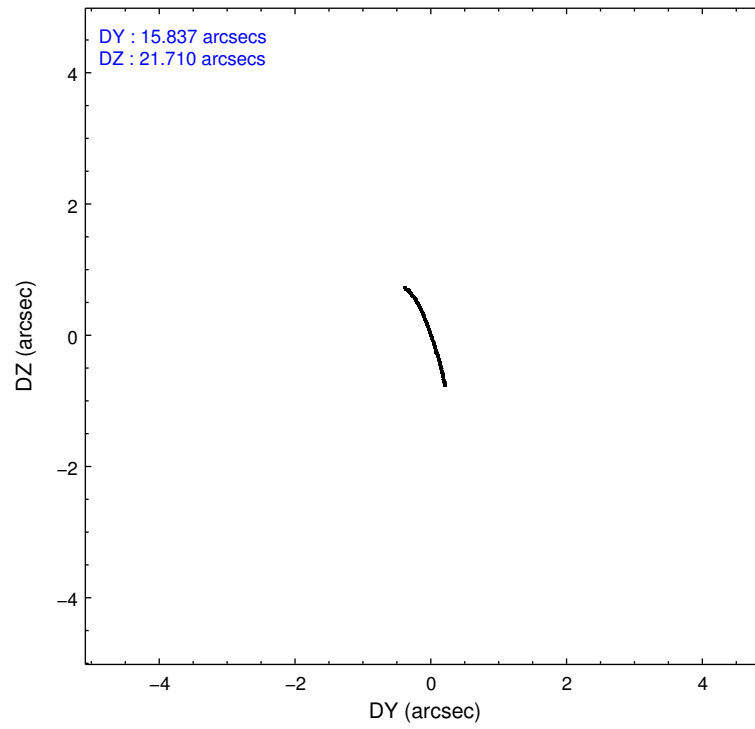
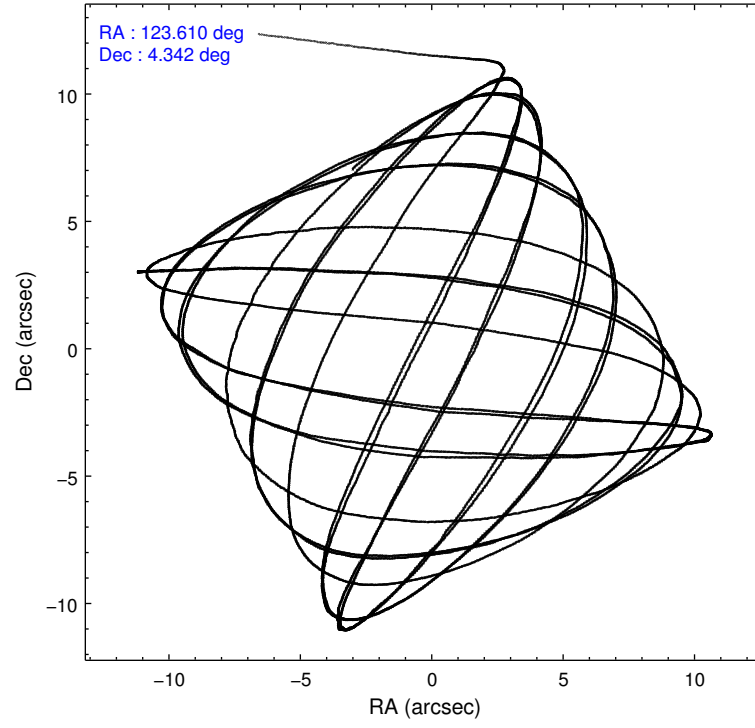
| | |
|----------------|--------------|
| | ccd 7 |
| grade 0 events | 1375 |
| | 5% |
| grade 1 events | 53 |
| | 0% |
| grade 2 events | 2821 |
| | 10% |
| grade 3 events | 1366 |
| | 5% |
| grade 4 events | 1415 |
| | 5% |
| grade 5 events | 2597 |
| | 9% |
| grade 6 events | 6080 |
| | 23% |
| grade 7 events | 10279 |
| | 39% |

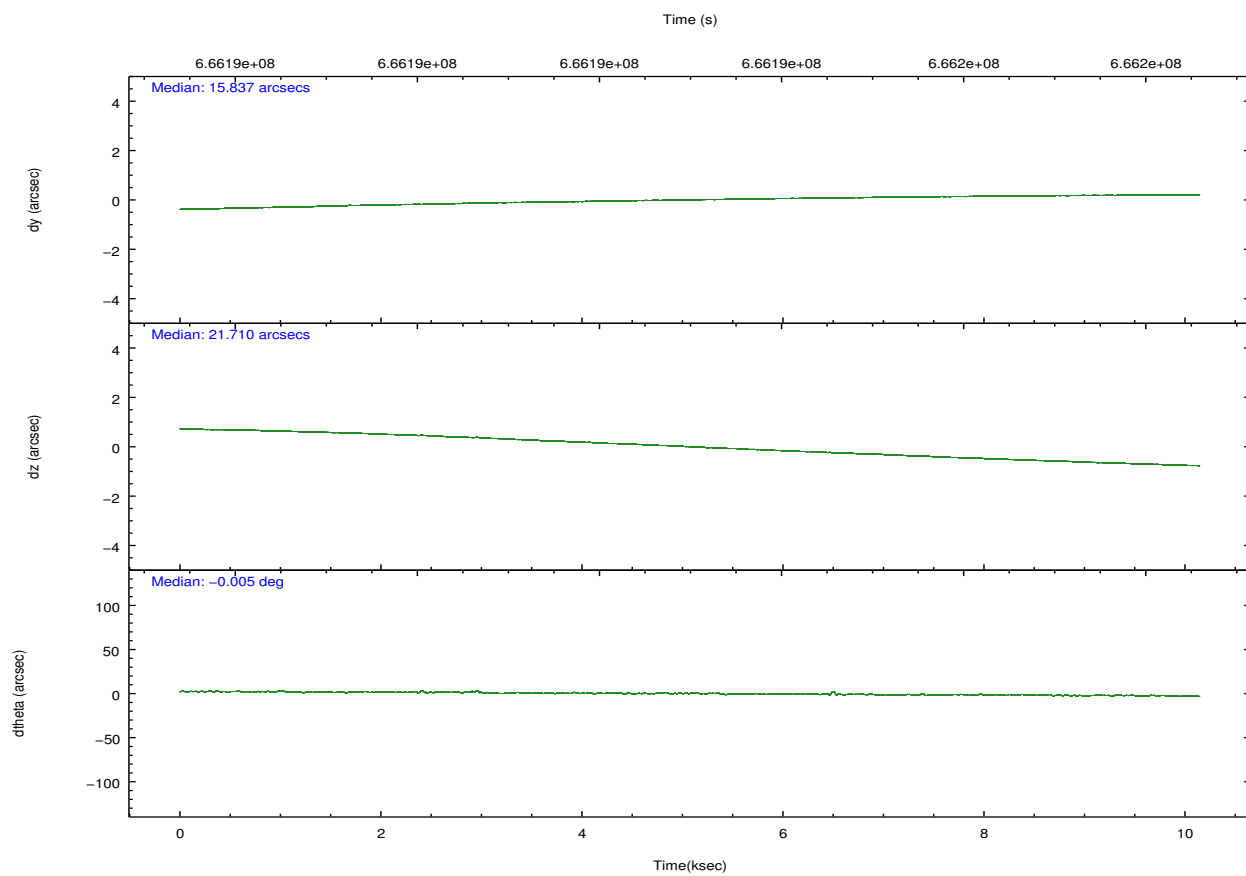
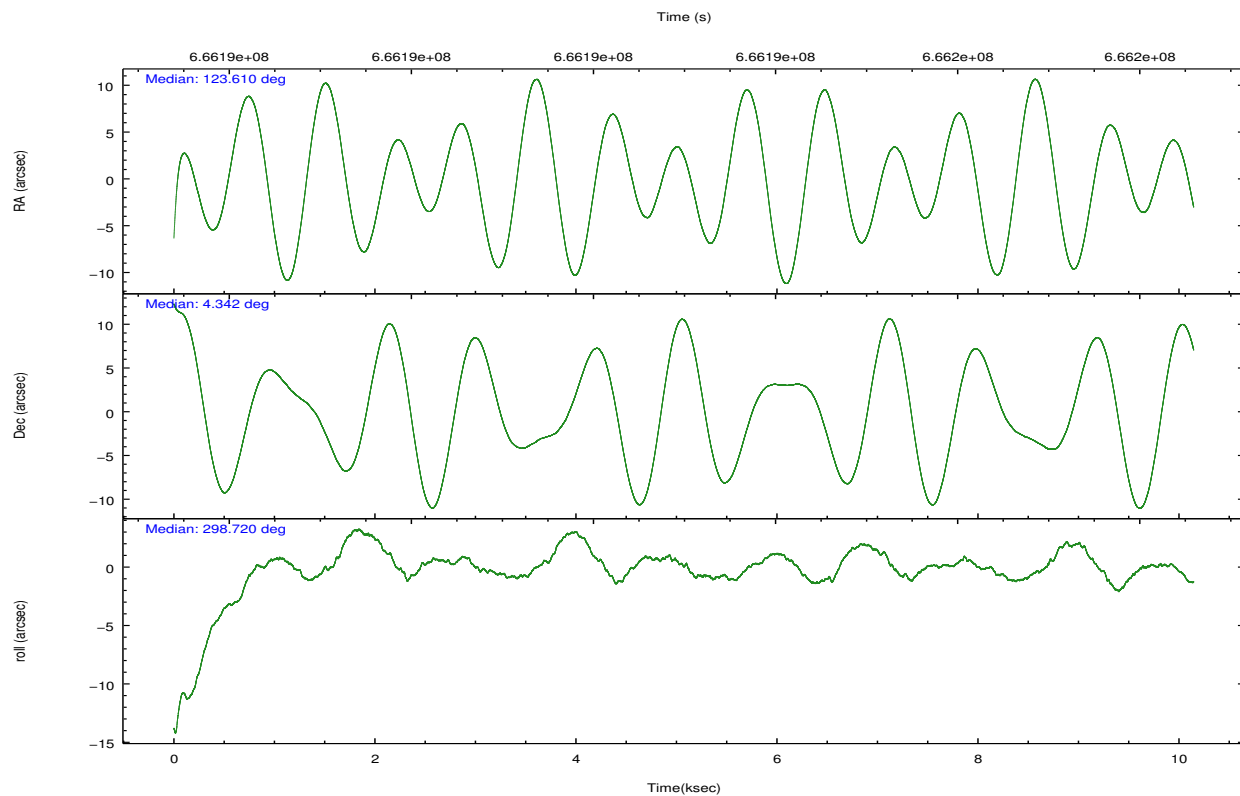
2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-7 | ACIS-7 |
| Grating | NONE | NONE |
| Data mode | VFAINT | VFAINT |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 123.586458 | 123.610191487063 |
| [deg] Pointing Dec | 4.356002 | 4.342124136033587 |
| [deg] Pointing Roll | 298.560500 | 298.7153257325432 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 |
| [mm] SIM defocus | 0 | 0.001444936568705701 |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 |
| [s] Observation start time (MET) | 666188057.184000 | 666186737.7336 |
| Observation start date | 2019-02-10T12:13:08 | 2019-02-10T11:52:17 |
| [s] Observation end time (MET) | 666198057.184000 | 666198352.5218 |
| Observation end date | 2019-02-10T14:59:48 | 2019-02-10T15:05:52 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | CUSTOM | 1/4 |
| Subarray start row | 385 | 385 |
| Subarray row count | 256 | 256 |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 0.000000 | 0.8 |

2.3 Aspect



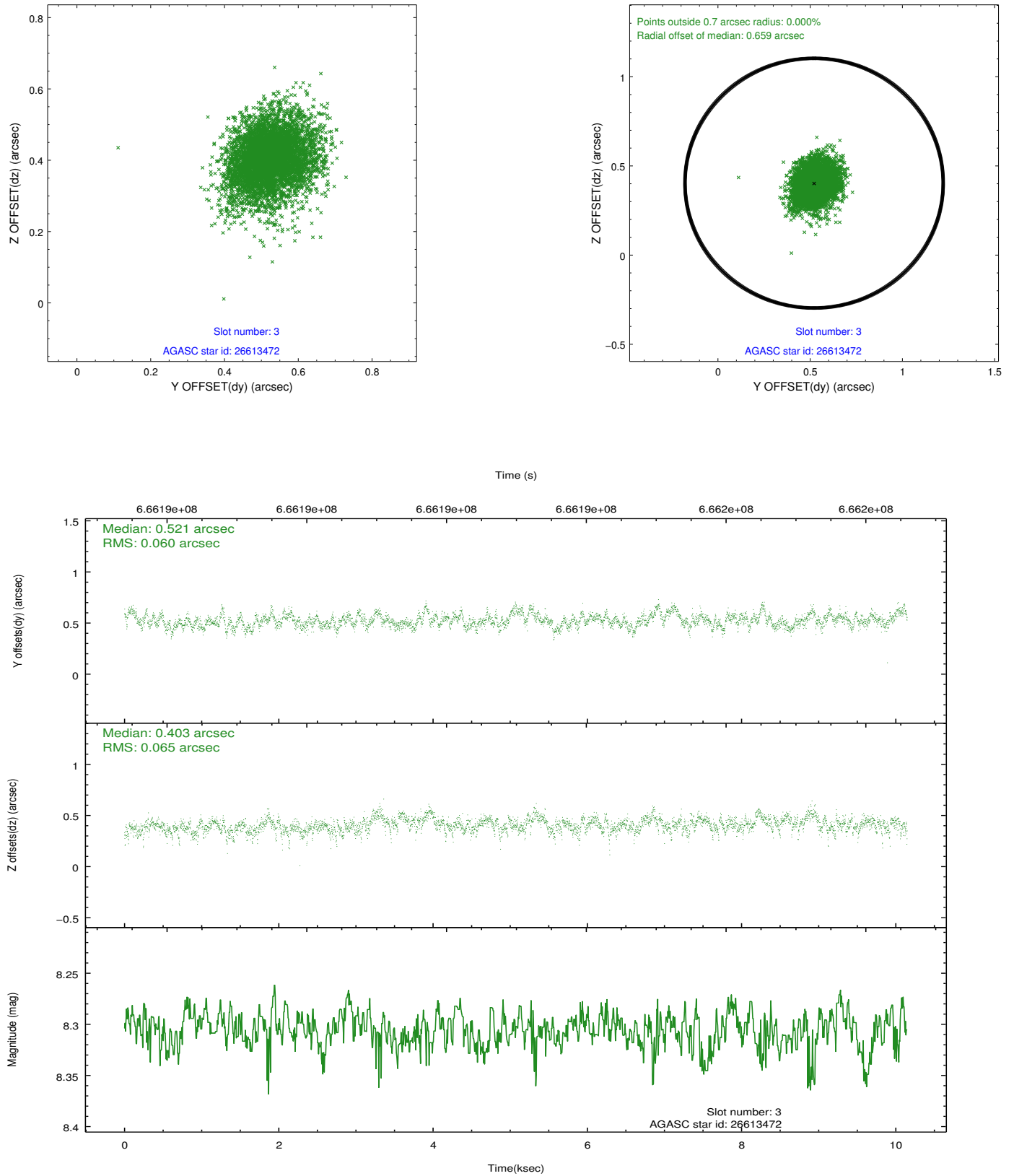


Slot Statistics

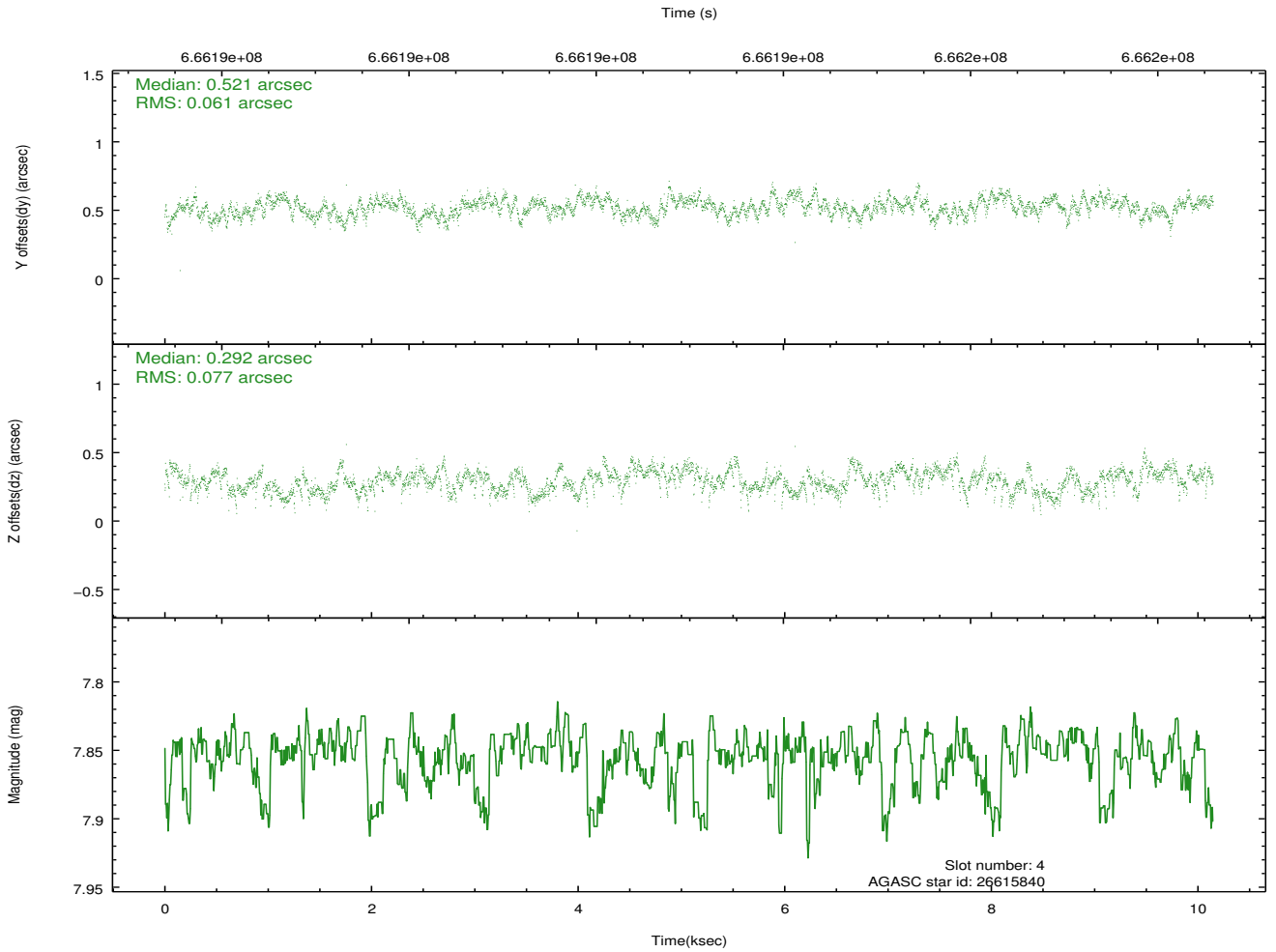
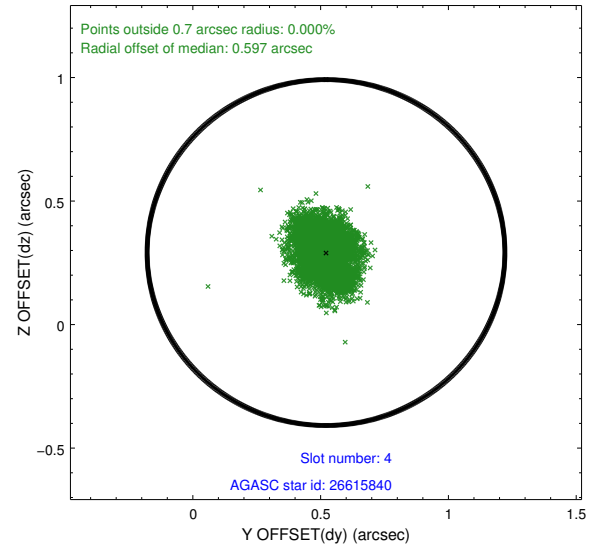
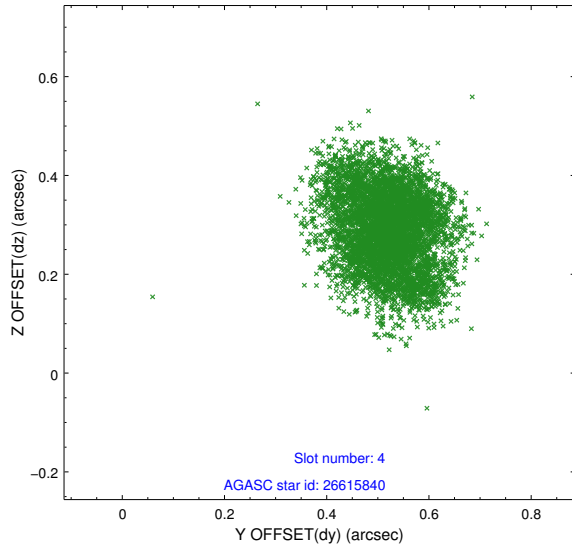
| pt | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mea |
|----|--------|------|----------|------|-------|----------|--------|--------|-------|-------|------------|----------|----------|-------|
| 0 | FID | | ACIS-S-2 | 7.02 | 2475 | 1.000 | -0.340 | -0.221 | 0.016 | 0.022 | 0.000000 | 0.000000 | -769.10 | -1743 |
| 1 | FID | | ACIS-S-4 | 7.14 | 2474 | 1.000 | 0.755 | 0.222 | 0.014 | 0.023 | 0.000000 | 0.000000 | 2144.99 | 164 |
| 2 | FID | | ACIS-S-5 | 7.11 | 2475 | 1.000 | -0.447 | 0.007 | 0.014 | 0.021 | 0.000000 | 0.000000 | -1821.43 | 158 |
| 3 | GUIDE | used | 26613472 | 8.31 | 4947 | 1.000 | 0.521 | 0.403 | 0.092 | 0.155 | 122.862504 | 4.380468 | -1319.98 | -2239 |
| 4 | GUIDE | used | 26615840 | 7.85 | 4946 | 1.000 | 0.521 | 0.292 | 0.106 | 0.165 | 122.956620 | 4.274537 | -824.48 | -2125 |
| 5 | GUIDE | used | 26745624 | 7.51 | 4948 | 1.000 | -0.438 | -0.482 | 0.105 | 0.158 | 124.084860 | 4.043681 | 1842.90 | 1033 |
| 6 | GUIDE | used | 26754264 | 6.60 | 4951 | 1.000 | -0.643 | -0.723 | 0.104 | 0.163 | 124.326929 | 4.219168 | 1702.98 | 2099 |
| 7 | GUIDE | used | 26615512 | 8.25 | 4947 | 1.000 | 0.040 | 0.520 | 0.105 | 0.163 | 123.239729 | 4.887359 | -2274.01 | -176 |

2.4 Star Slots

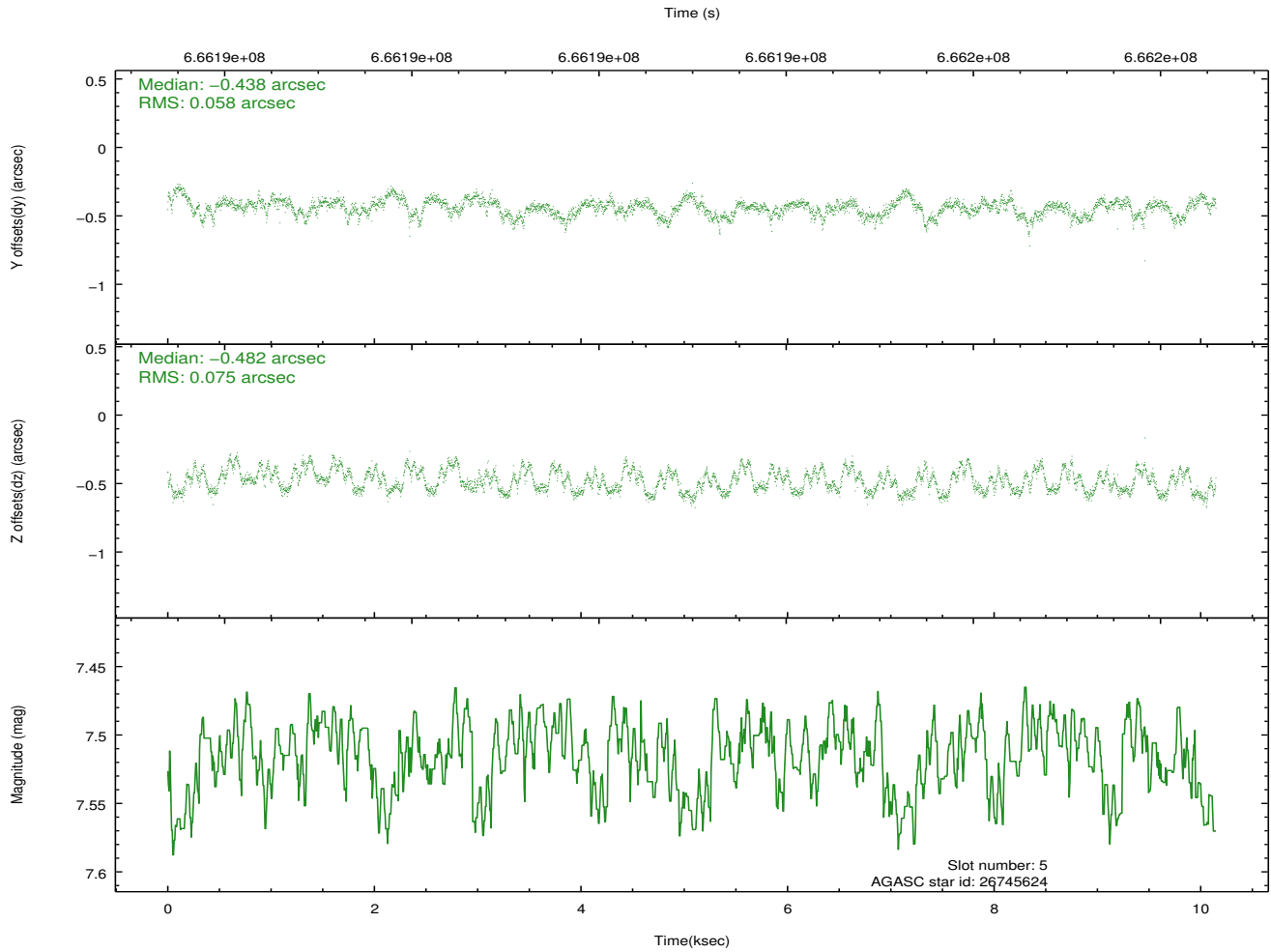
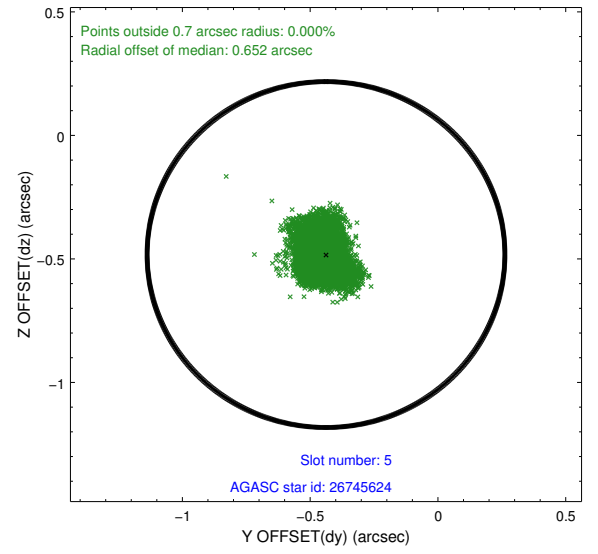
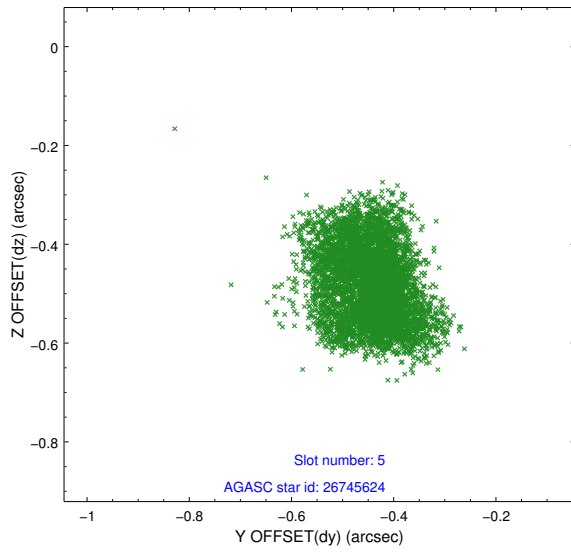
2.4.1 Slot 3



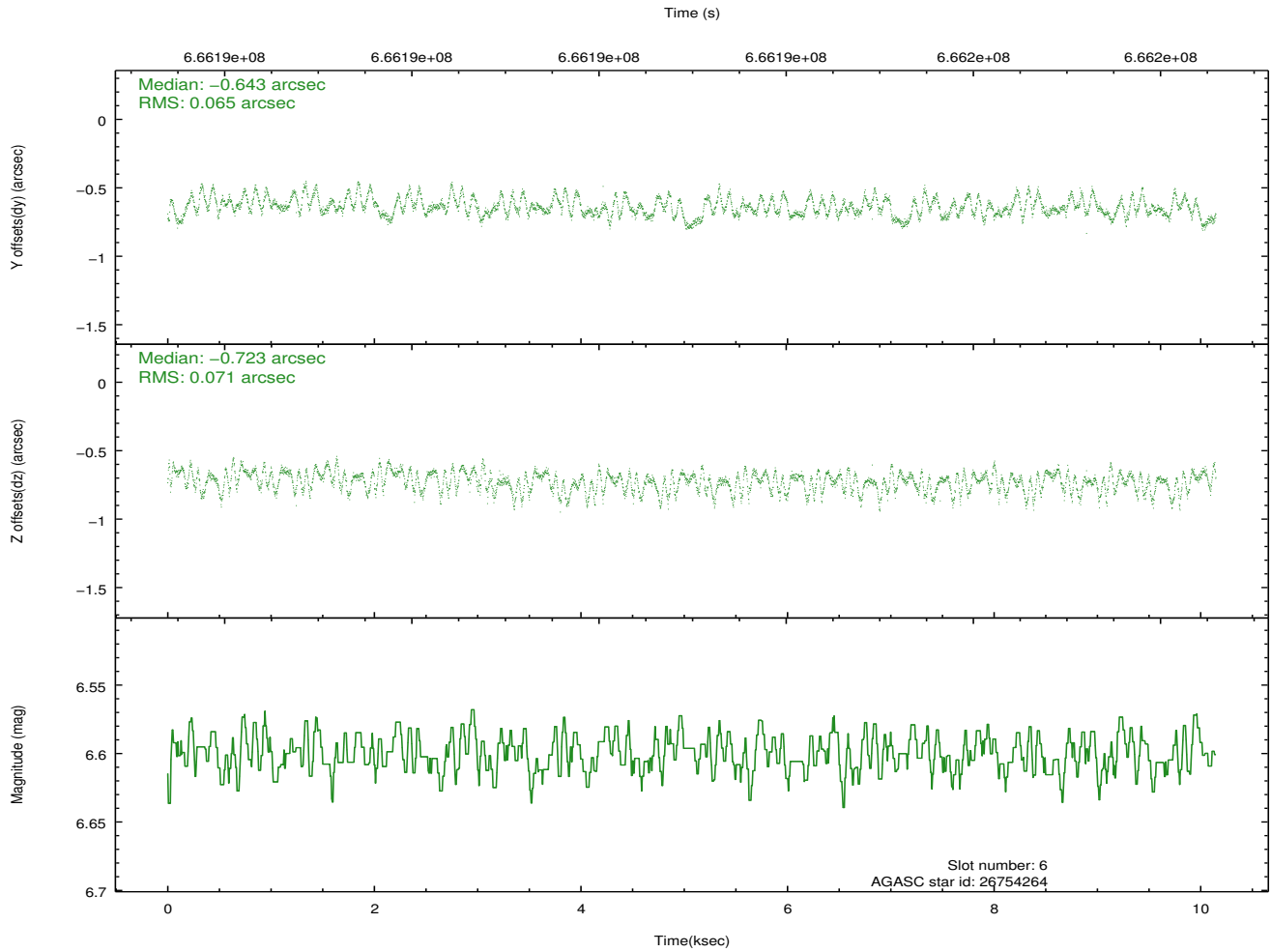
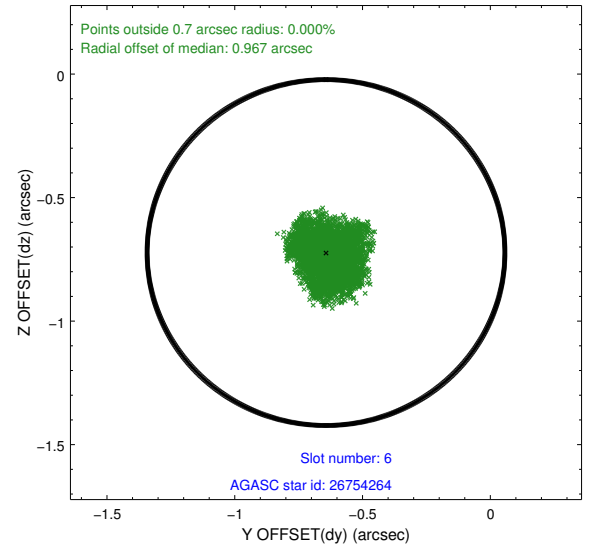
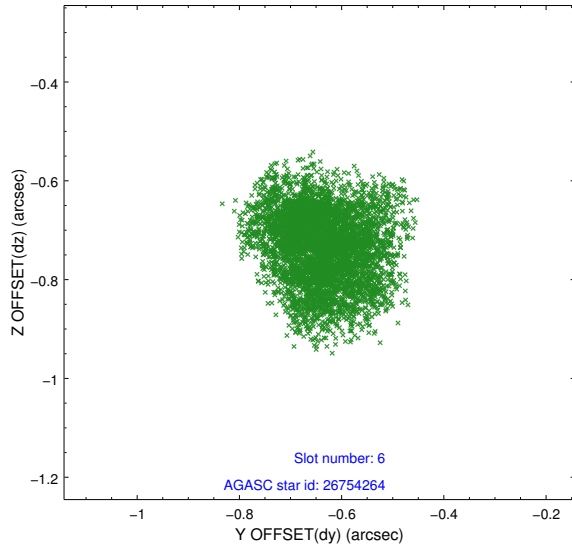
2.4.2 Slot 4



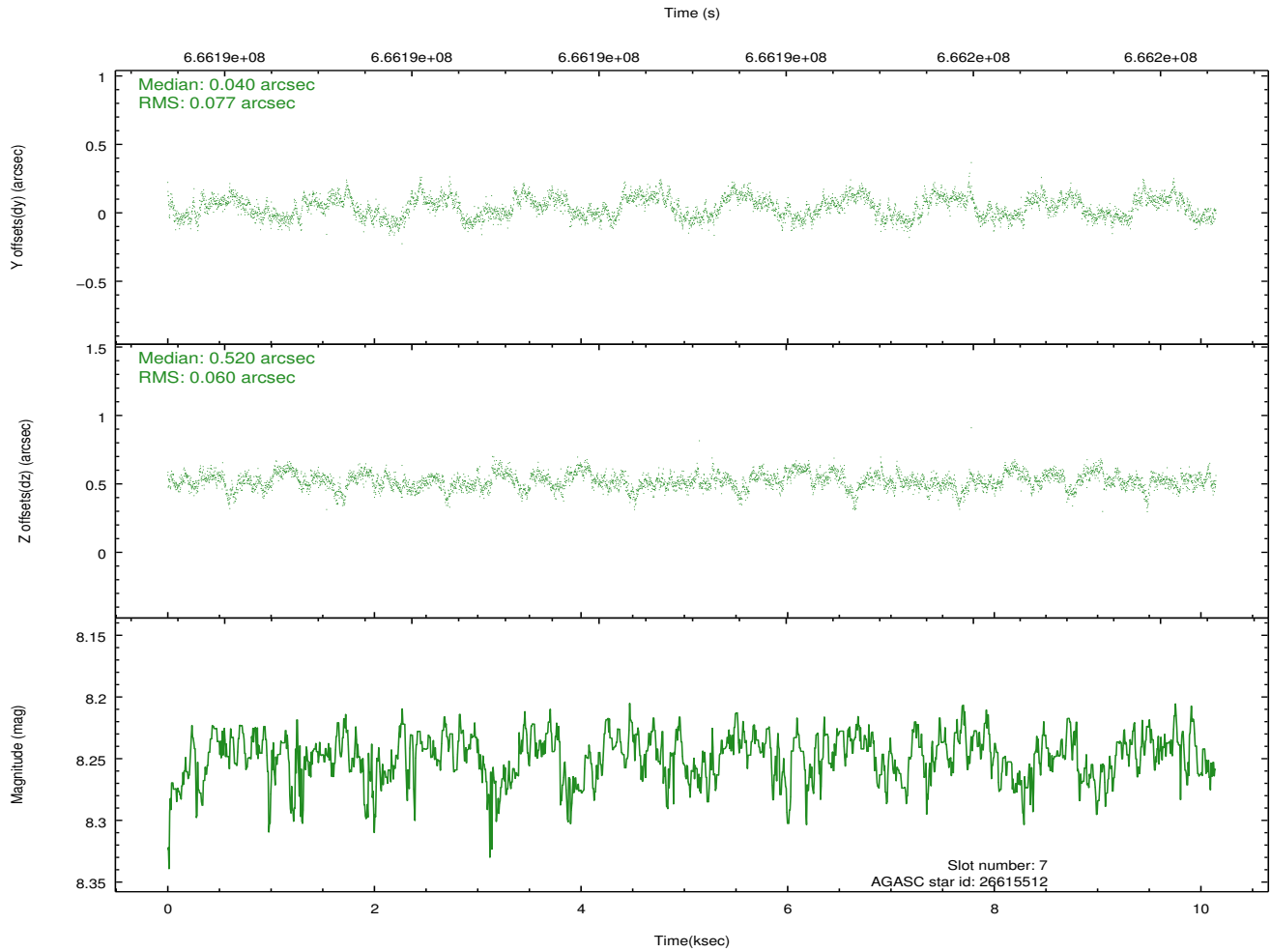
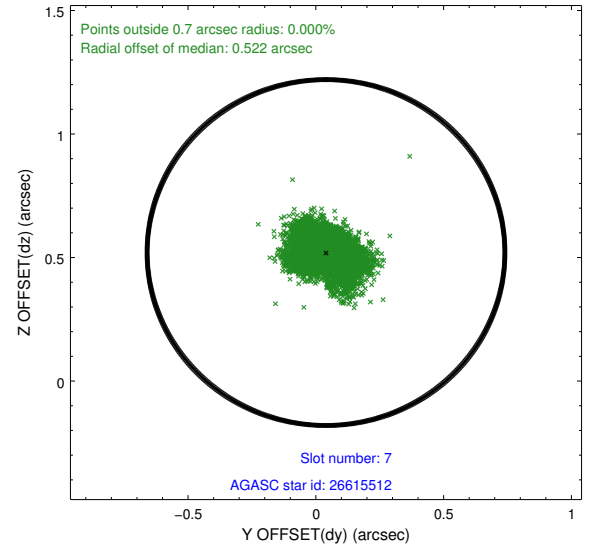
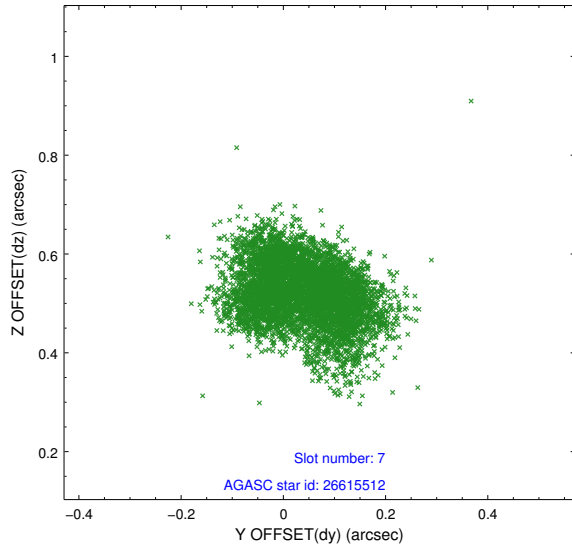
2.4.3 Slot 5



2.4.4 Slot 6

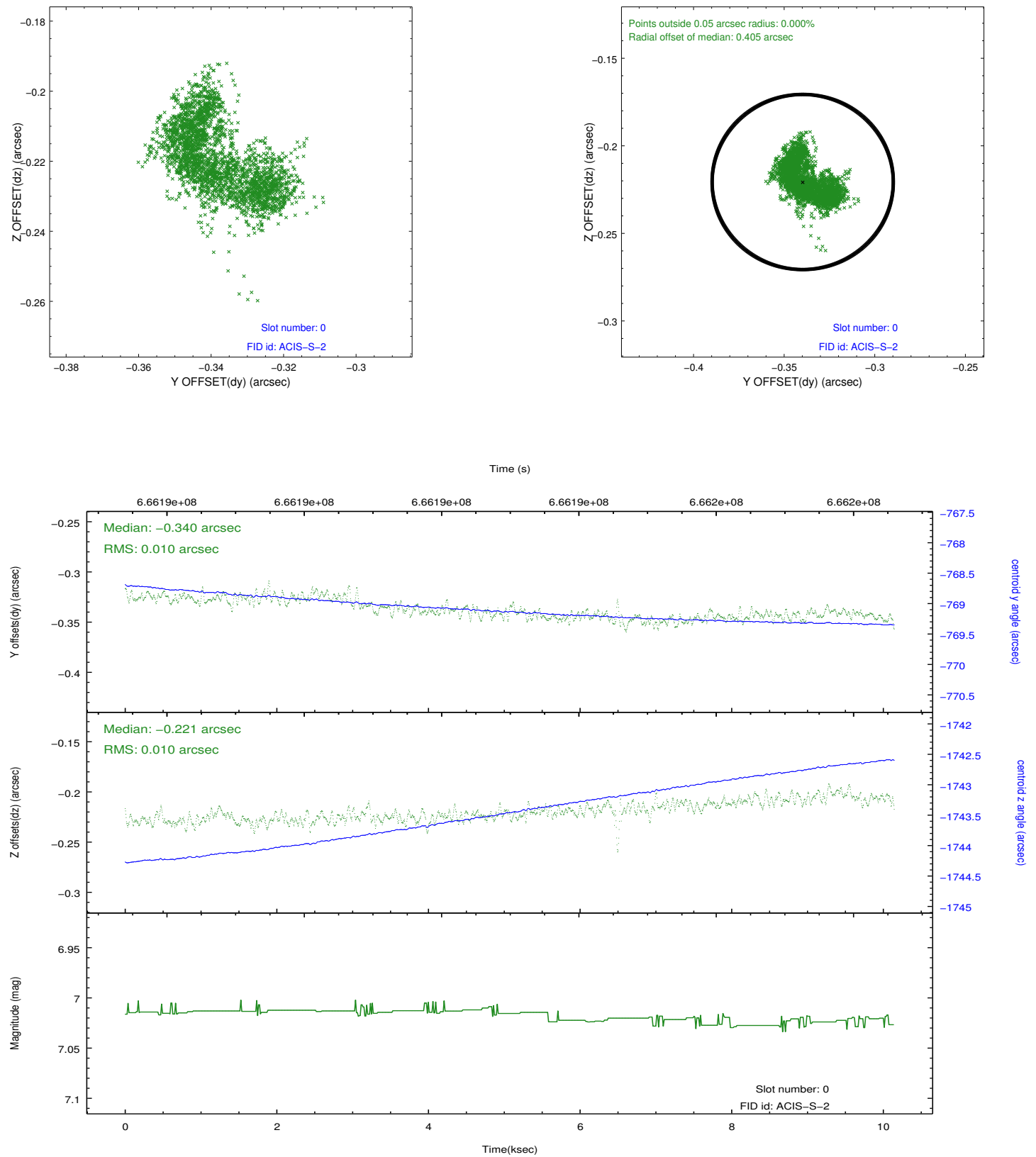


2.4.5 Slot 7

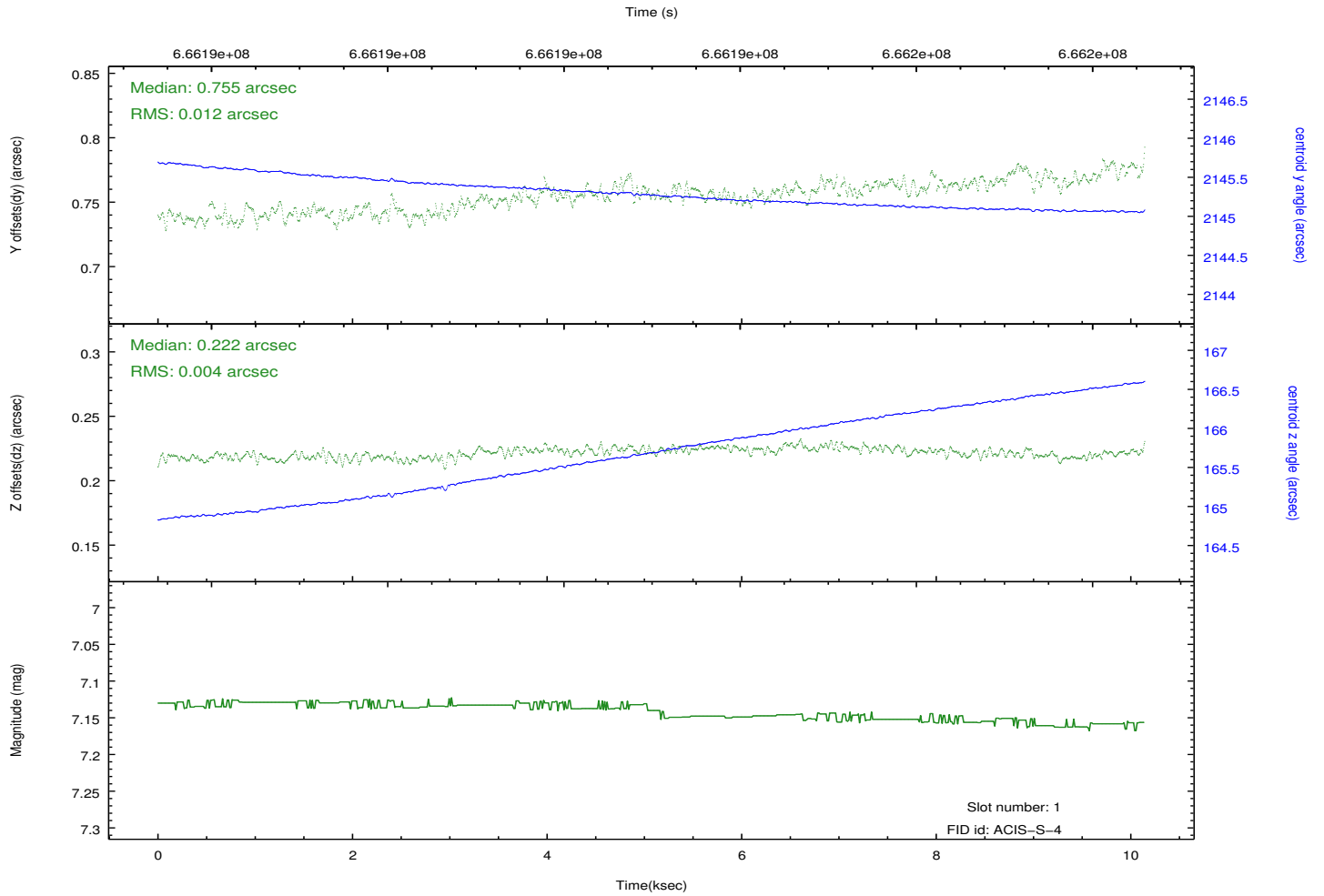
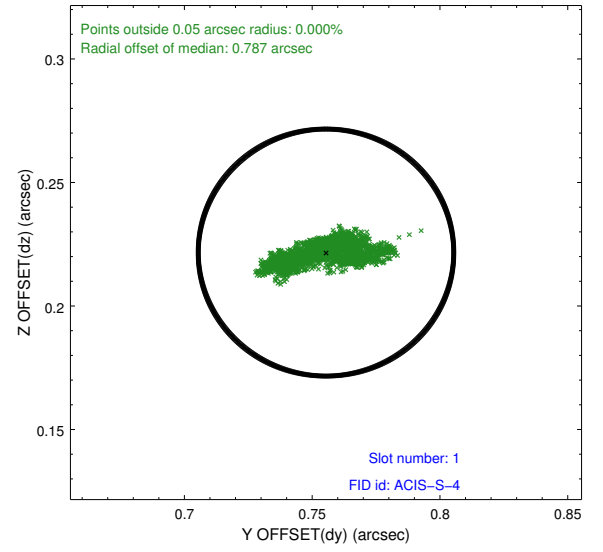
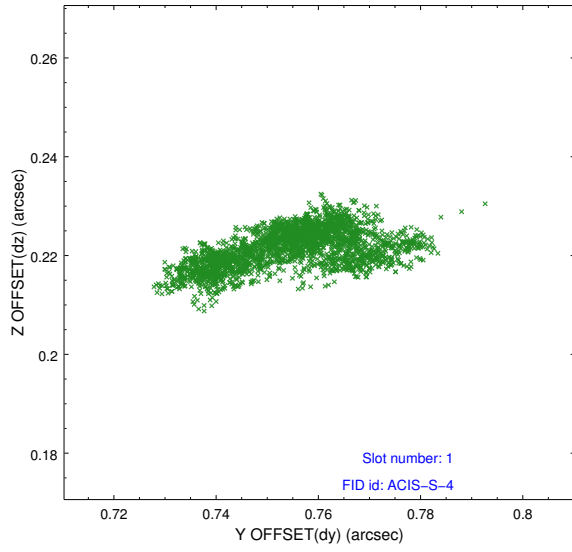


2.5 FID Slots

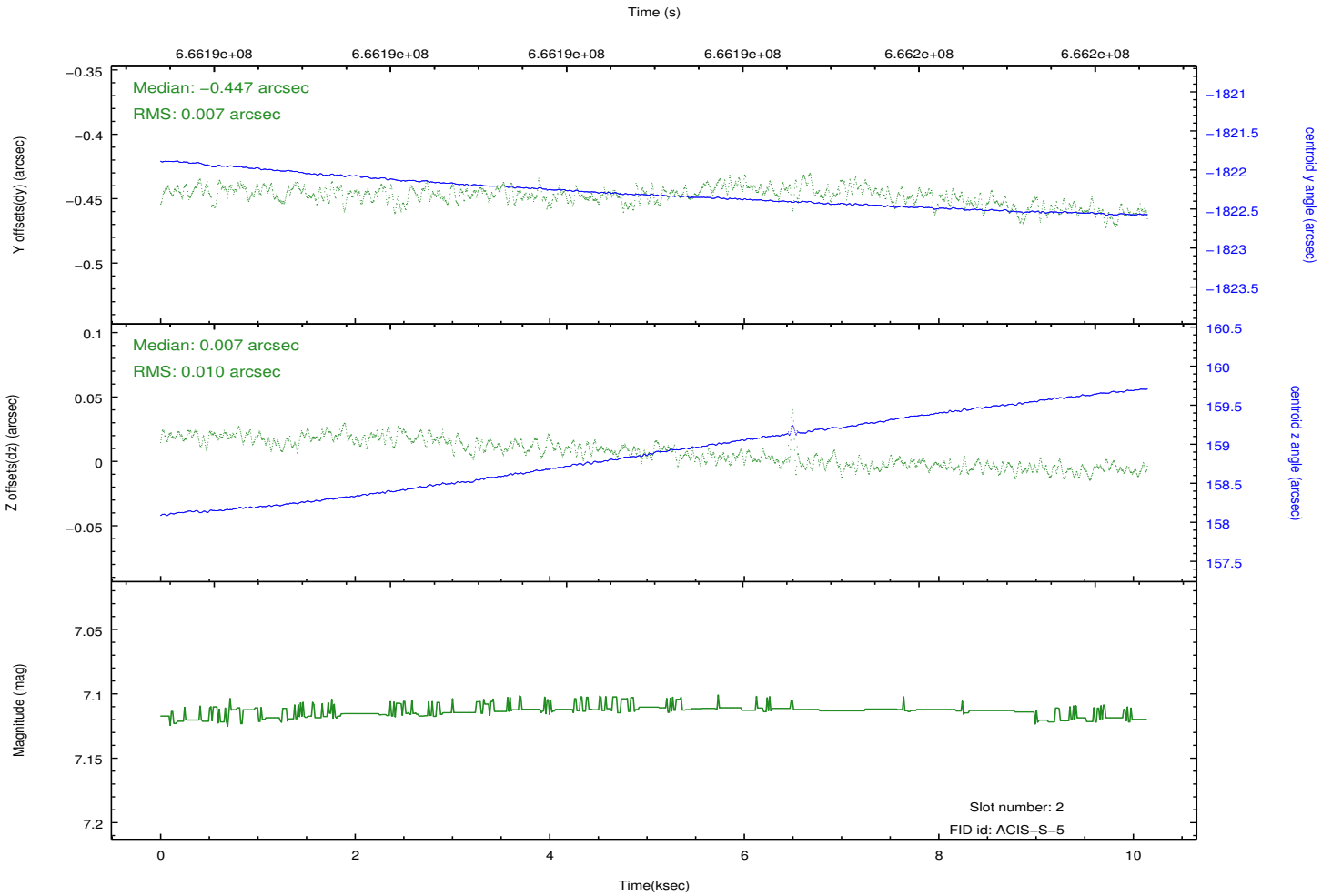
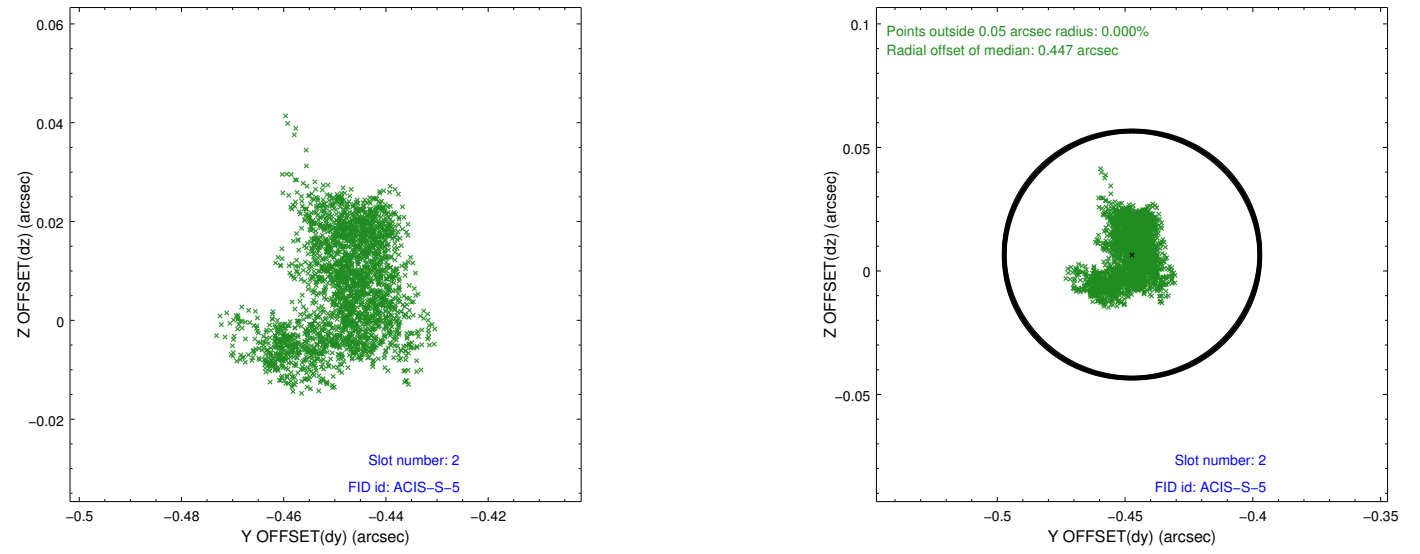
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|----------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2019.02.10 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 10.06079940033 |

A.2 Comments