

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 17249 - L2 Version 1
Chandra X-Ray Center

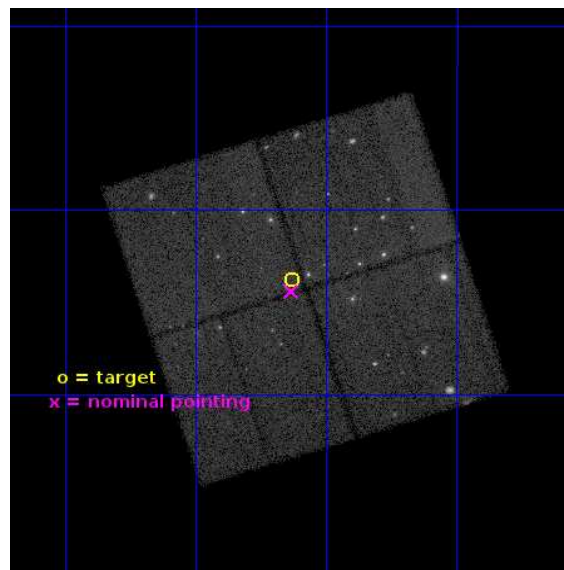
L2 Processing Date : Oct 7 2014

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1 Front

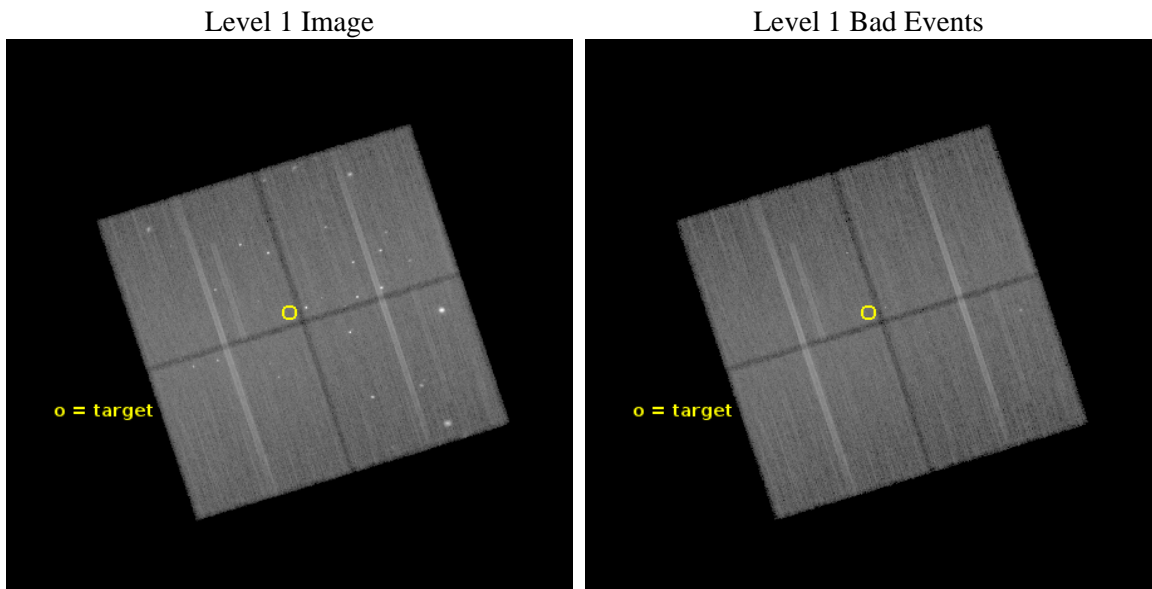
| | | |
|----------|---------------------------------|--|
| seq_num | 201006 | Sequence number |
| obs_id | 17249 | Observation id |
| title | The Chandra-Kepler Flare Survey | Proposal title |
| observer | Jeremy Drake | Principal investigator |
| object | Rho Oph Cloud A | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 246.658 | Observer's specified target RA [deg] |
| dec_targ | -24.396833 | Observer's specified target Dec [deg] |
| ra_nom | 246.65823635723 | Nominal RA [deg] |
| dec_nom | -24.406857203418 | Nominal Dec [deg] |
| roll_nom | 252.20878492367 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 100085.54827148 | Sum of GTIs [s] |
| livetime | 98777.856901402 | Livetime [s] |
| ontime0 | 100088.56614172 | Sum of GTIs [s] |
| ontime1 | 100088.60716188 | Sum of GTIs [s] |
| ontime2 | 100088.64822179 | Sum of GTIs [s] |
| ontime3 | 100085.54827148 | Sum of GTIs [s] |
| l2events | 259698 | Number of level 2 events |



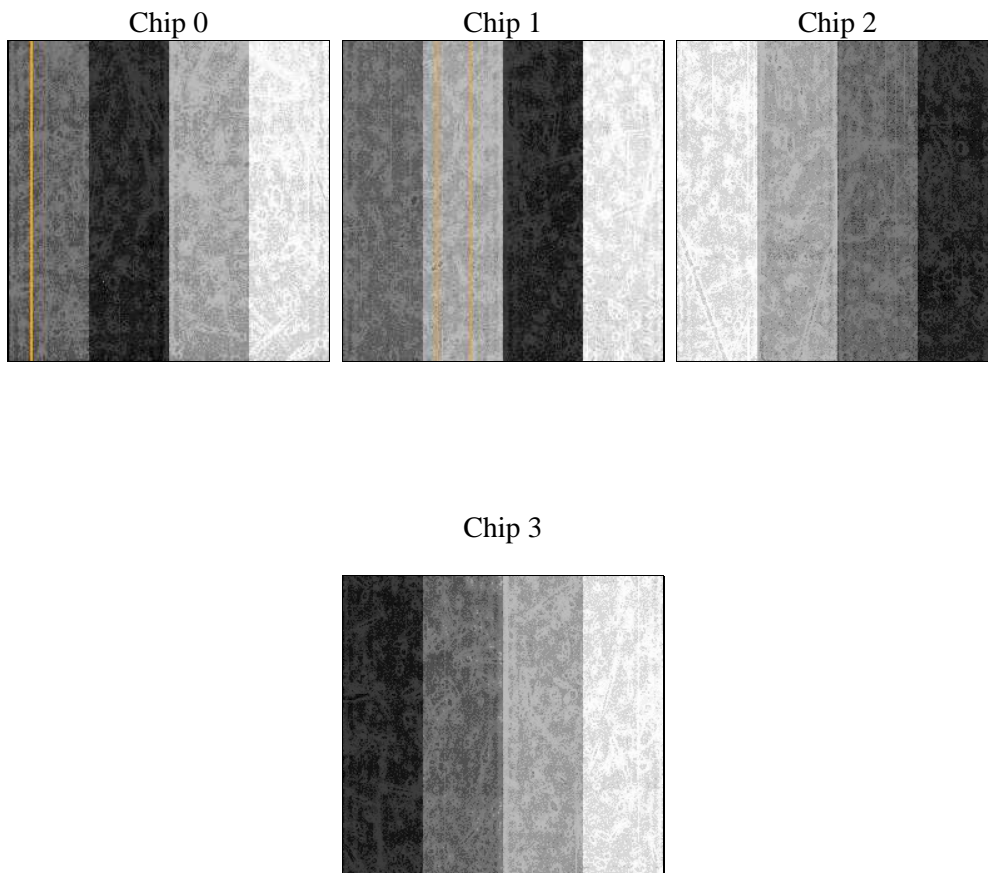
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 100000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.2.4 | Processing system revision | ontime | 100085.54827148 | Sum of GTIs [s] |
| caldsver | 4.6.3 | | ontime0 | 100088.56614172 | Sum of GTIs [s] |
| date | 2014-10-07T18:38:18 | Date and time of file creation | ontime1 | 100088.60716188 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime2 | 100088.64822179 | Sum of GTIs [s] |
| | | | ontime3 | 100085.54827148 | Sum of GTIs [s] |
| | | | l1events | 1899084 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 |
|-----------------|--------|--------|--------|--------|
| level 1 events | 469976 | 475800 | 475844 | 477464 |
| rejected events | 376132 | 389701 | 417823 | 413828 |
| rejected % | 80% | 81% | 87% | 86% |

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 |
|----------------|--------|--------|--------|--------|
| grade 0 events | 47545 | 38905 | 20805 | 26140 |
| | 10% | 8% | 4% | 5% |
| grade 1 events | 427 | 354 | 308 | 470 |
| | 0% | 0% | 0% | 0% |
| grade 2 events | 18822 | 18697 | 14398 | 13251 |
| | 4% | 3% | 3% | 2% |
| grade 3 events | 7261 | 7045 | 5675 | 5996 |
| | 1% | 1% | 1% | 1% |
| grade 4 events | 7049 | 6992 | 6032 | 6179 |
| | 1% | 1% | 1% | 1% |
| grade 5 events | 23212 | 24838 | 21757 | 25783 |
| | 4% | 5% | 4% | 5% |
| grade 6 events | 13169 | 14464 | 11113 | 12072 |
| | 2% | 3% | 2% | 2% |
| grade 7 events | 352491 | 364505 | 395756 | 387573 |
| | 75% | 76% | 83% | 81% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-0123 | ACIS-0123 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 246.651729 | 246.6582363572309 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | -24.379903 | -24.40685720341835 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 251.997408 | 252.2087849236699 | [s] Primary exposure time | 0.000000 | 3.1 |
| [s] Window start time (MET) | 525139267.184000 | 525139267.184000 | | | |
| [s] Window stop time (MET) | 532396867.184000 | 532396867.184000 | | | |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -233.592463 | -233.5874344608287 | | | |
| [mm] SIM translation stage offset | 0 | -0.005018542100998502 | | | |
| [s] Observation start time (MET) | 528961783.184000 | 528960558.23465 | | | |
| Observation start date | 2014-10-06T05:48:36 | 2014-10-06T05:29:18 | | | |
| [s] Observation end time (MET) | 529061783.184000 | 529062673.86532 | | | |
| Observation end date | 2014-10-07T09:35:16 | 2014-10-07T09:51:13 | | | |
| Read mode | TIMED | TIMED | | | |

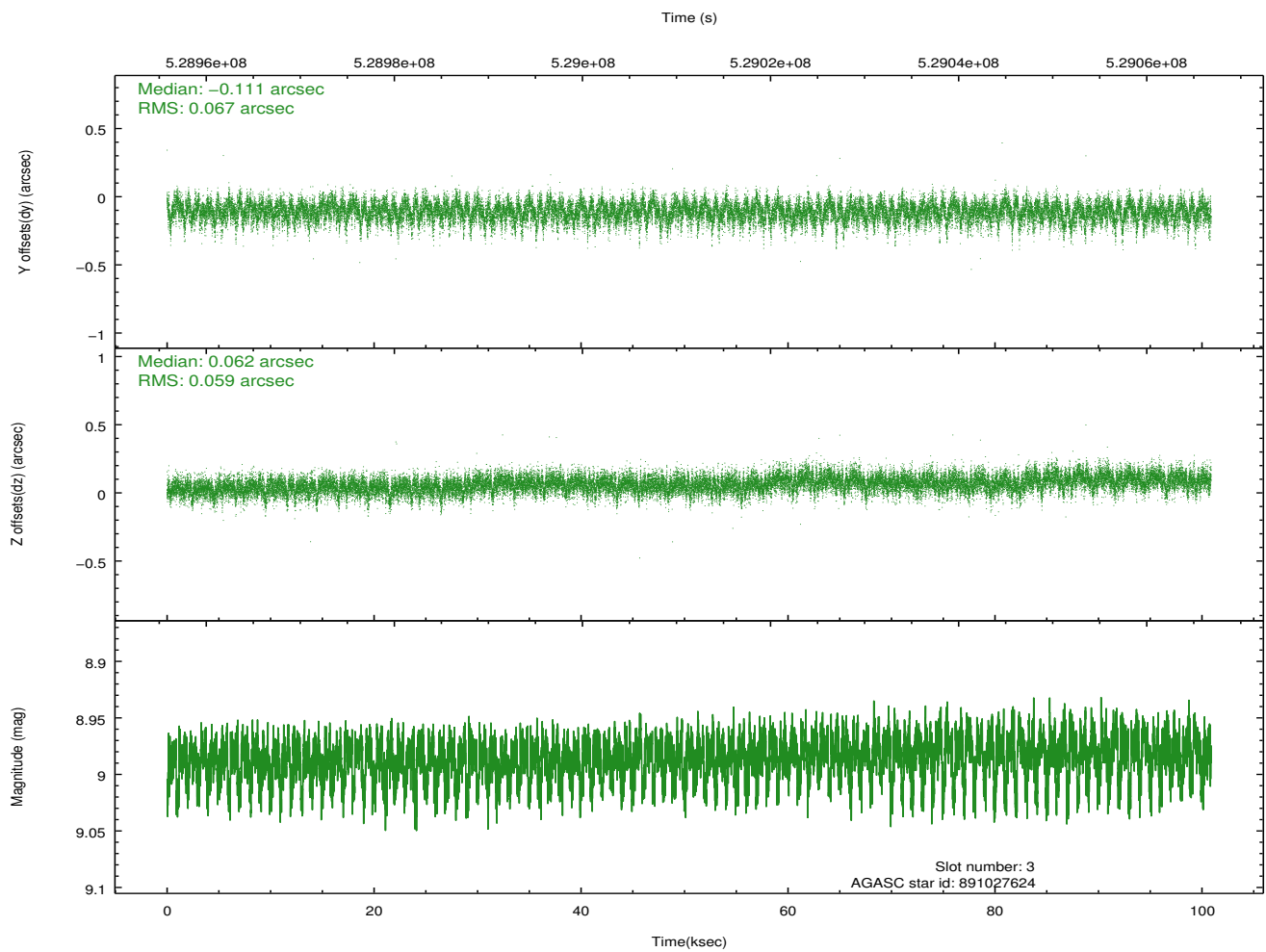
2.3 Aspect

Slot Statistics

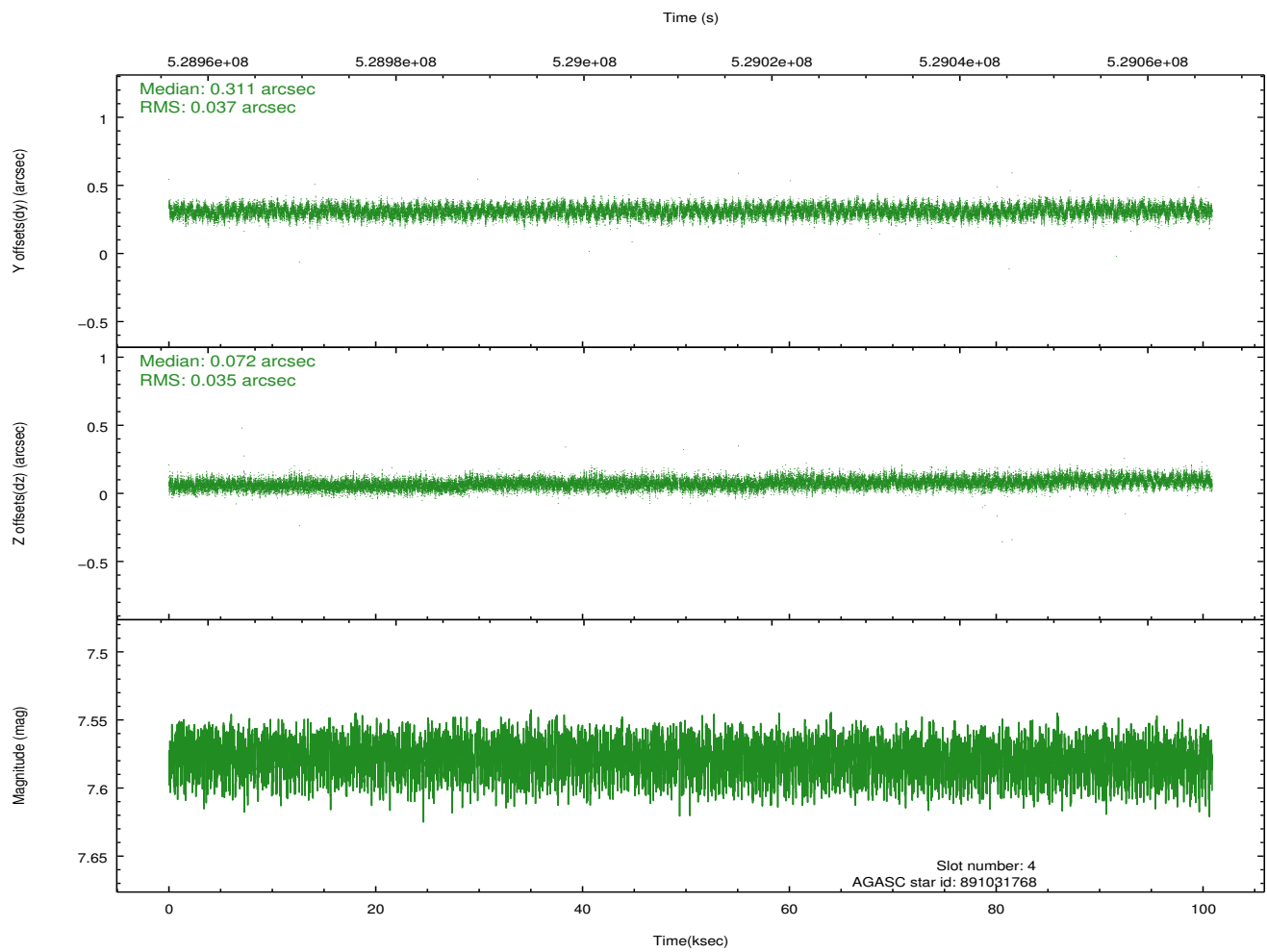
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|------------|----------|----------|
| 0 | FID | ACIS-I-1 | 7.04 | 24605 | 0.042 | 0.041 | 0.051 | 0.082 | 0.000000 | 0.000000 | 925.21 | -841.75 |
| 1 | FID | ACIS-I-5 | 7.05 | 24607 | -0.193 | 0.060 | 0.020 | 0.034 | 0.000000 | 0.000000 | -1823.19 | 1055.79 |
| 2 | FID | ACIS-I-6 | 7.04 | 24604 | 0.065 | -0.029 | 0.034 | 0.079 | 0.000000 | 0.000000 | 390.86 | 1700.13 |
| 3 | GUIDE | 891027624 | 8.98 | 49193 | -0.111 | 0.062 | 0.094 | 0.156 | 245.808309 | -24.655846 | 1806.45 | -2314.40 |
| 4 | GUIDE | 891031768 | 7.58 | 49136 | 0.311 | 0.072 | 0.054 | 0.087 | 246.351325 | -24.465712 | 599.93 | -840.24 |
| 5 | GUIDE | 891165960 | 7.62 | 49209 | 0.052 | -0.050 | 0.075 | 0.124 | 247.245842 | -24.537990 | -53.01 | 2027.29 |
| 6 | GUIDE | 891165968 | 7.71 | 49142 | -0.075 | 0.067 | 0.072 | 0.113 | 247.104842 | -24.750274 | 813.57 | 1821.53 |
| 7 | GUIDE | 891028104 | 9.35 | 49180 | -0.183 | -0.153 | 0.123 | 0.207 | 246.615701 | -25.040208 | 2297.14 | 623.30 |

2.4 Star Slots

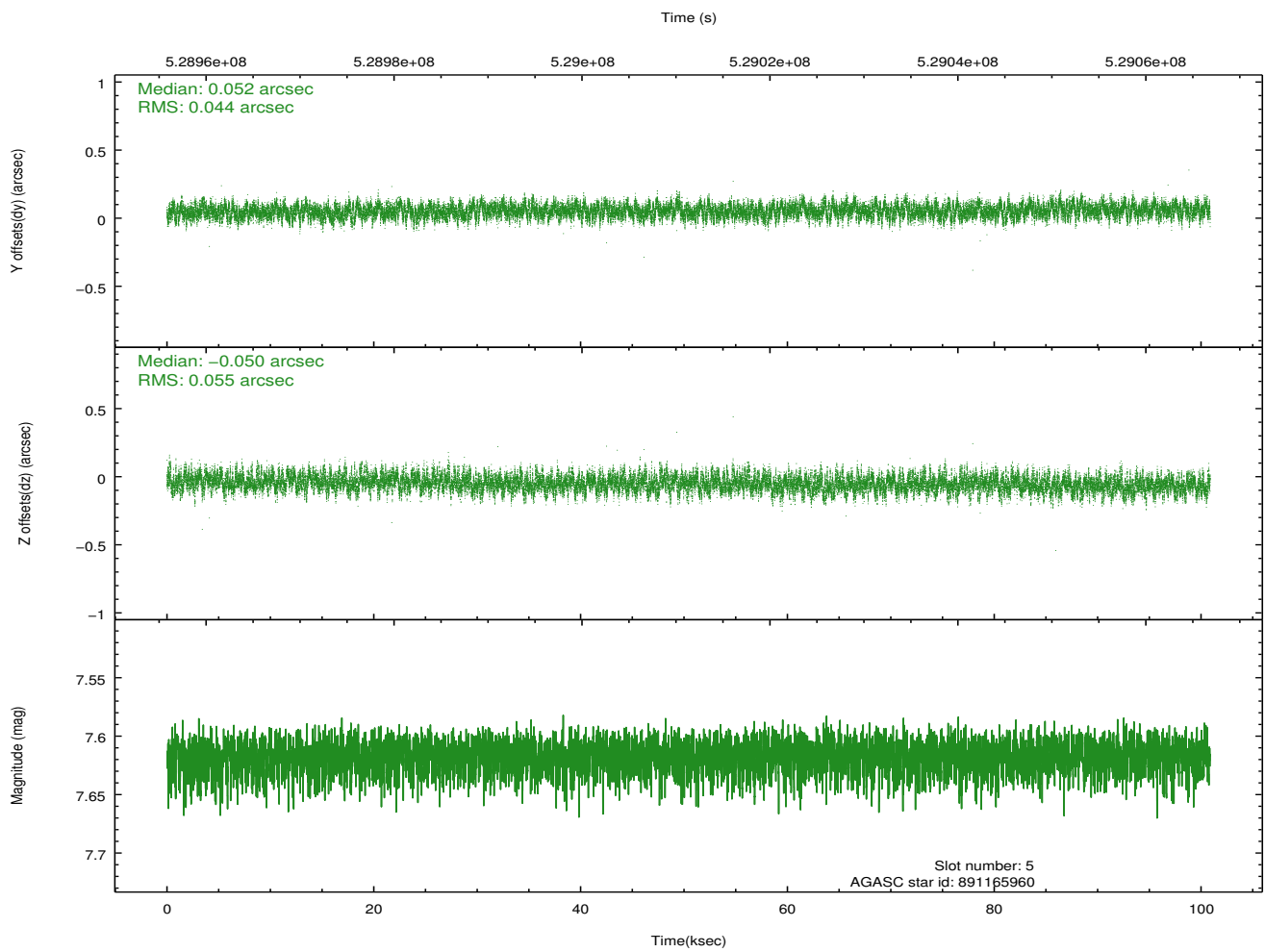
2.4.1 Slot 3



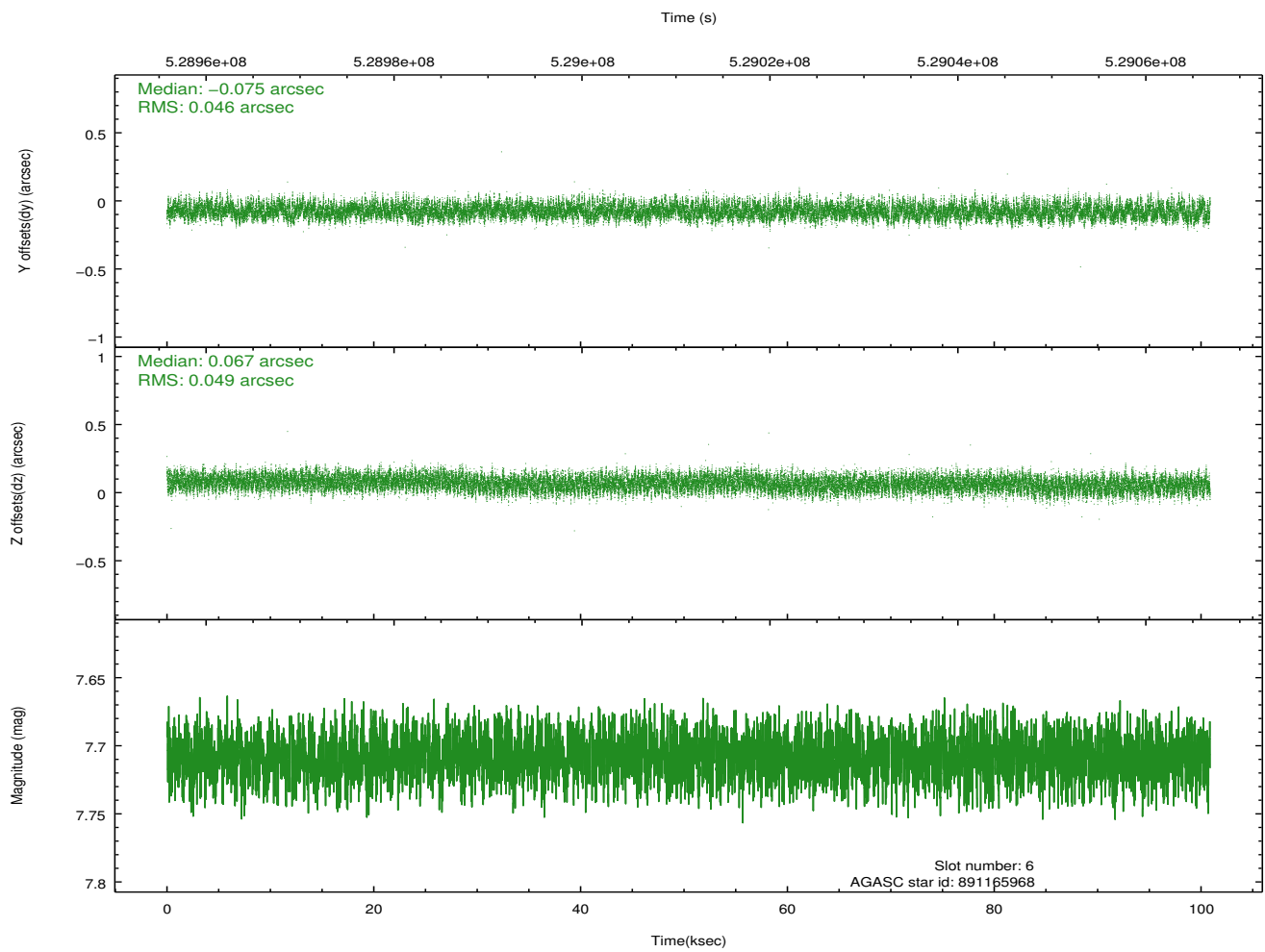
2.4.2 Slot 4



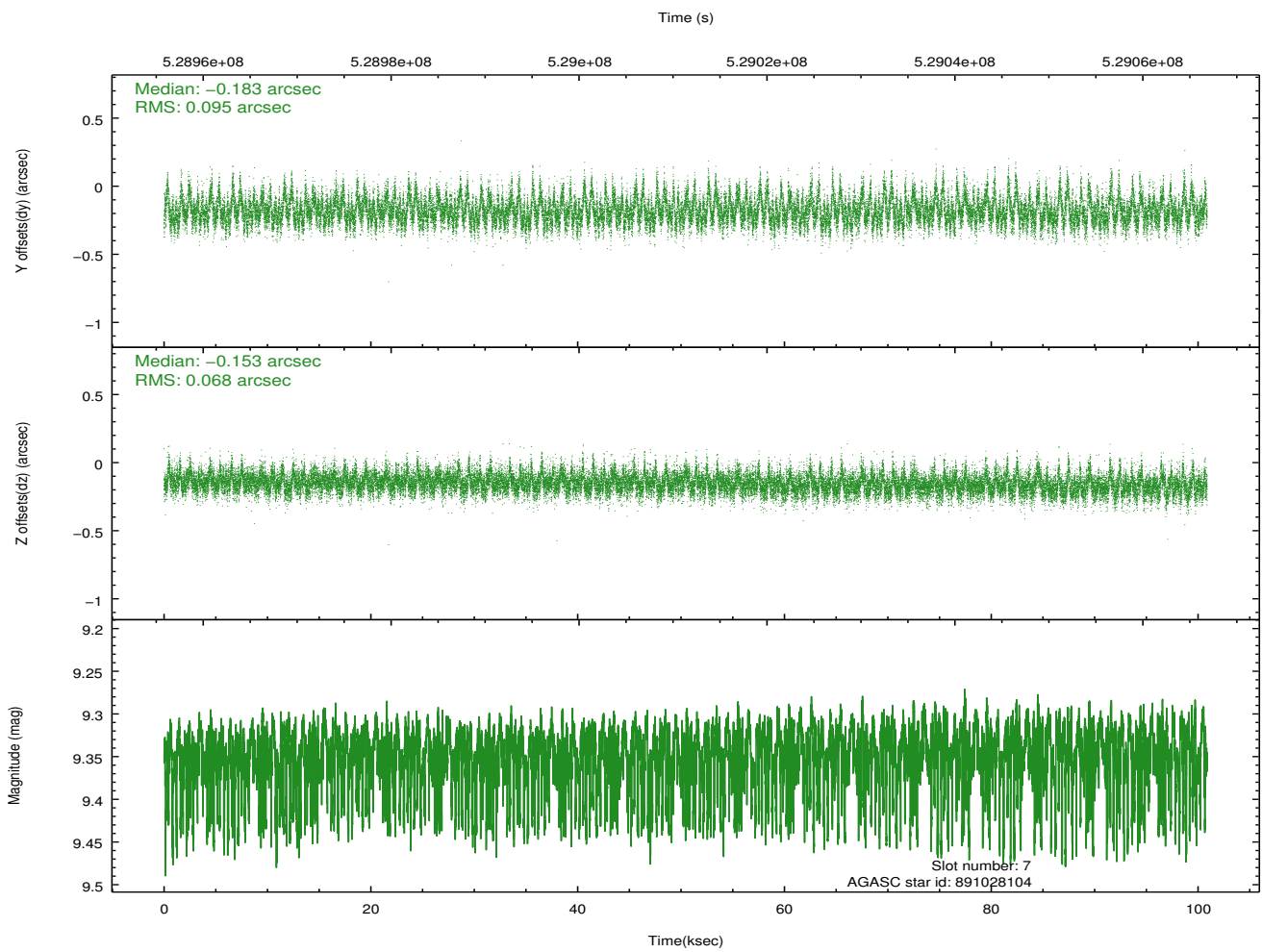
2.4.3 Slot 5



2.4.4 Slot 6

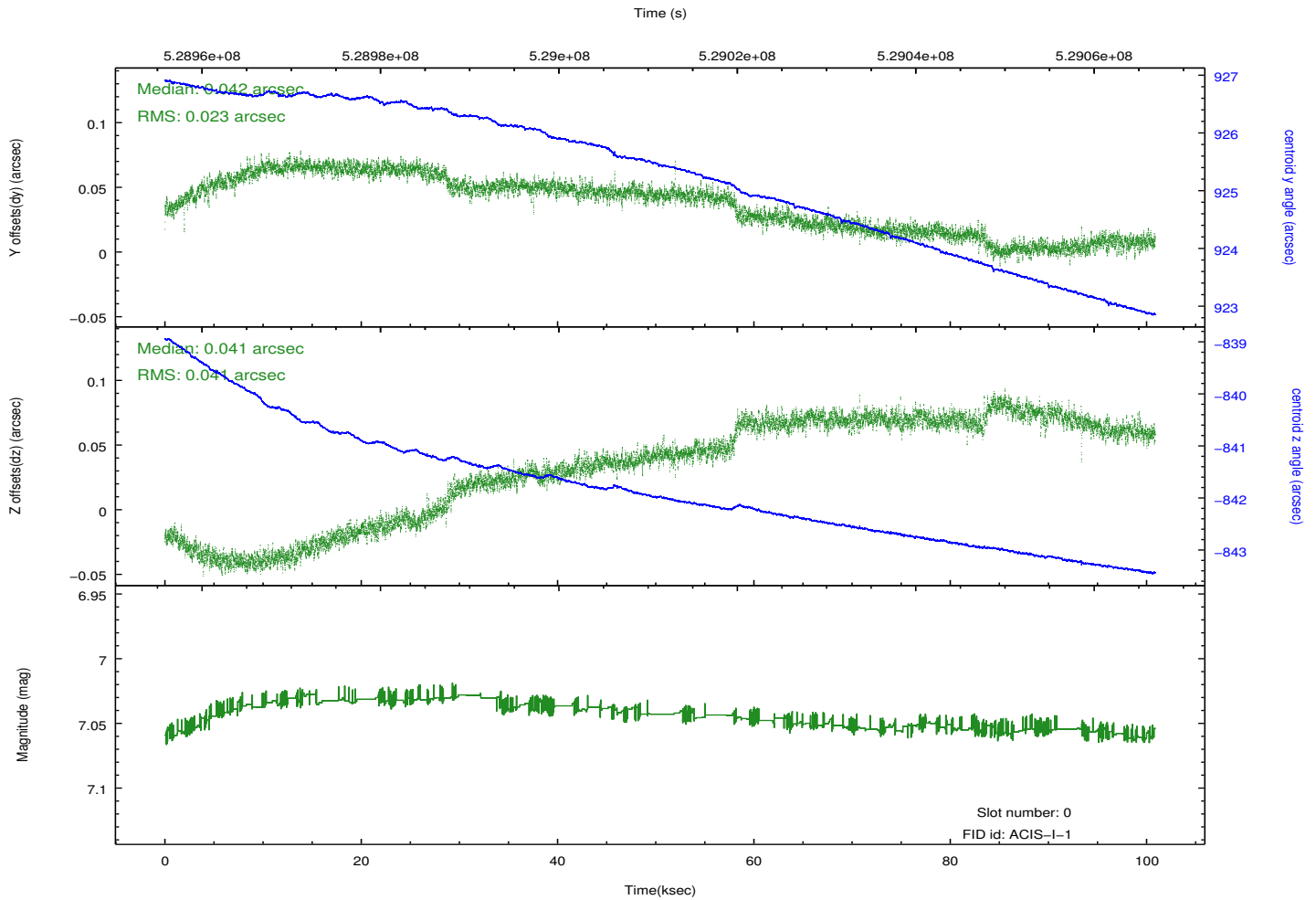
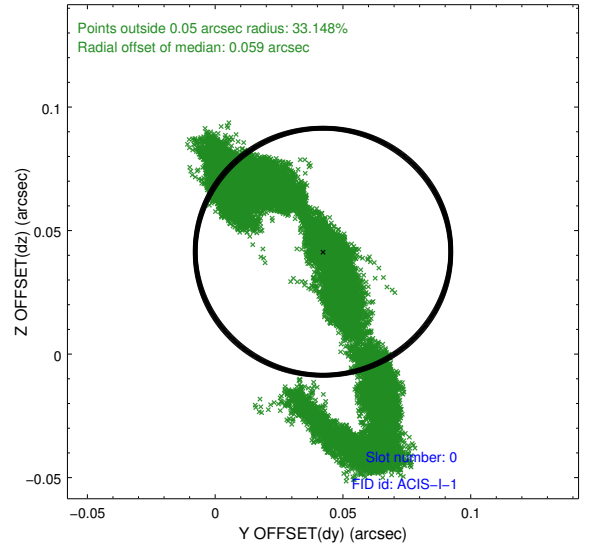
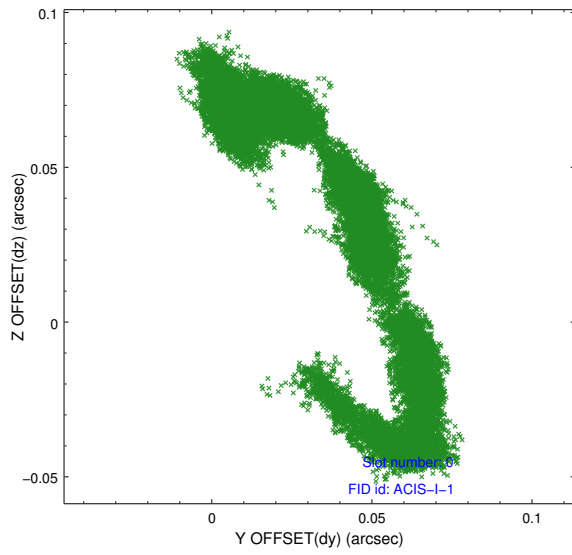


2.4.5 Slot 7

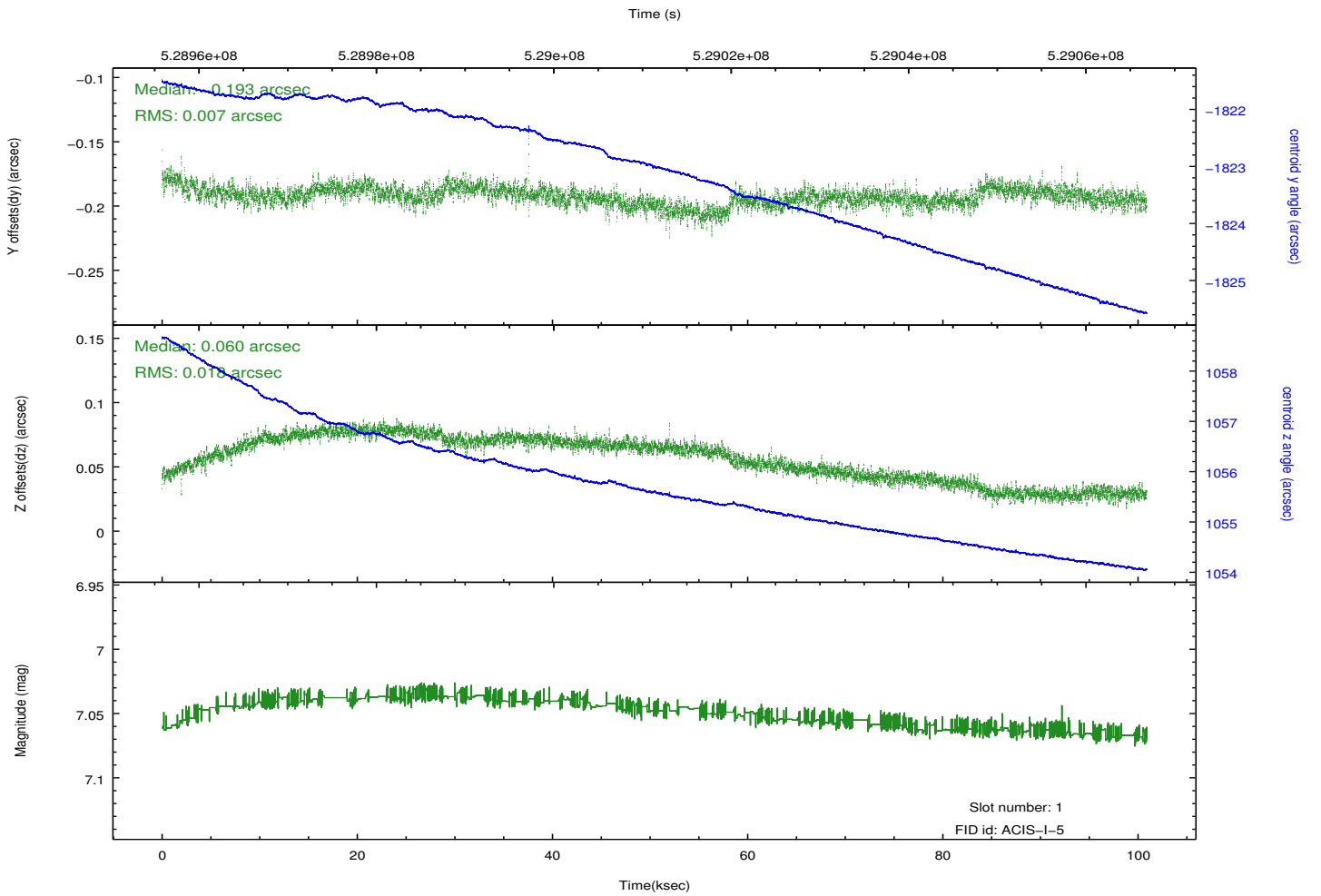
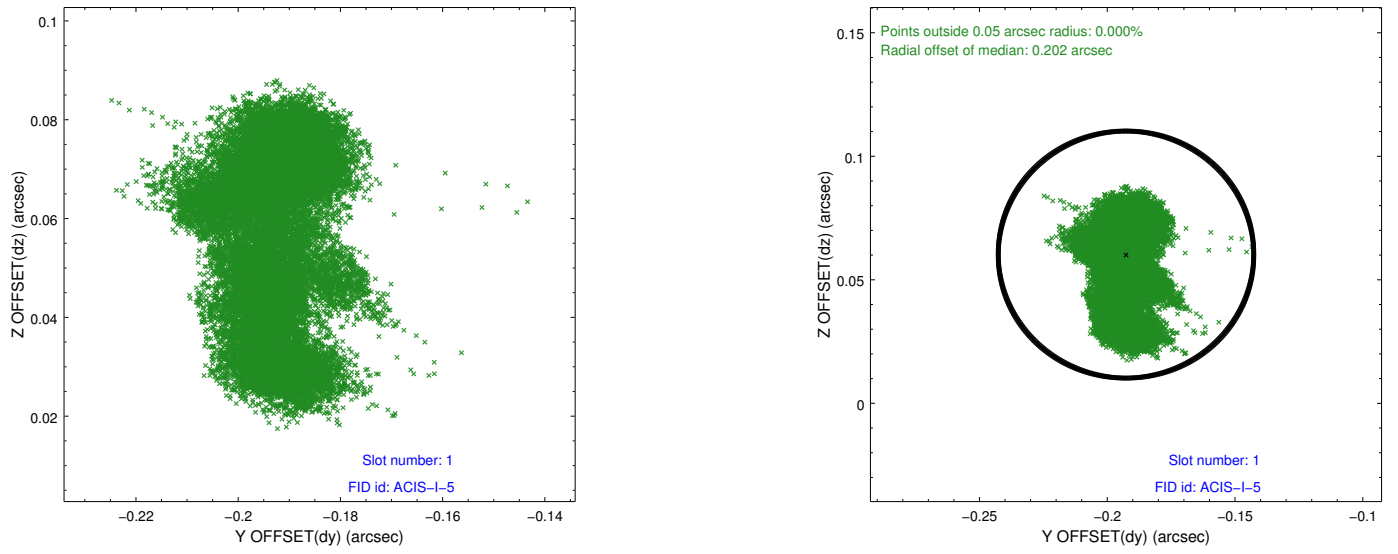


2.5 FID Slots

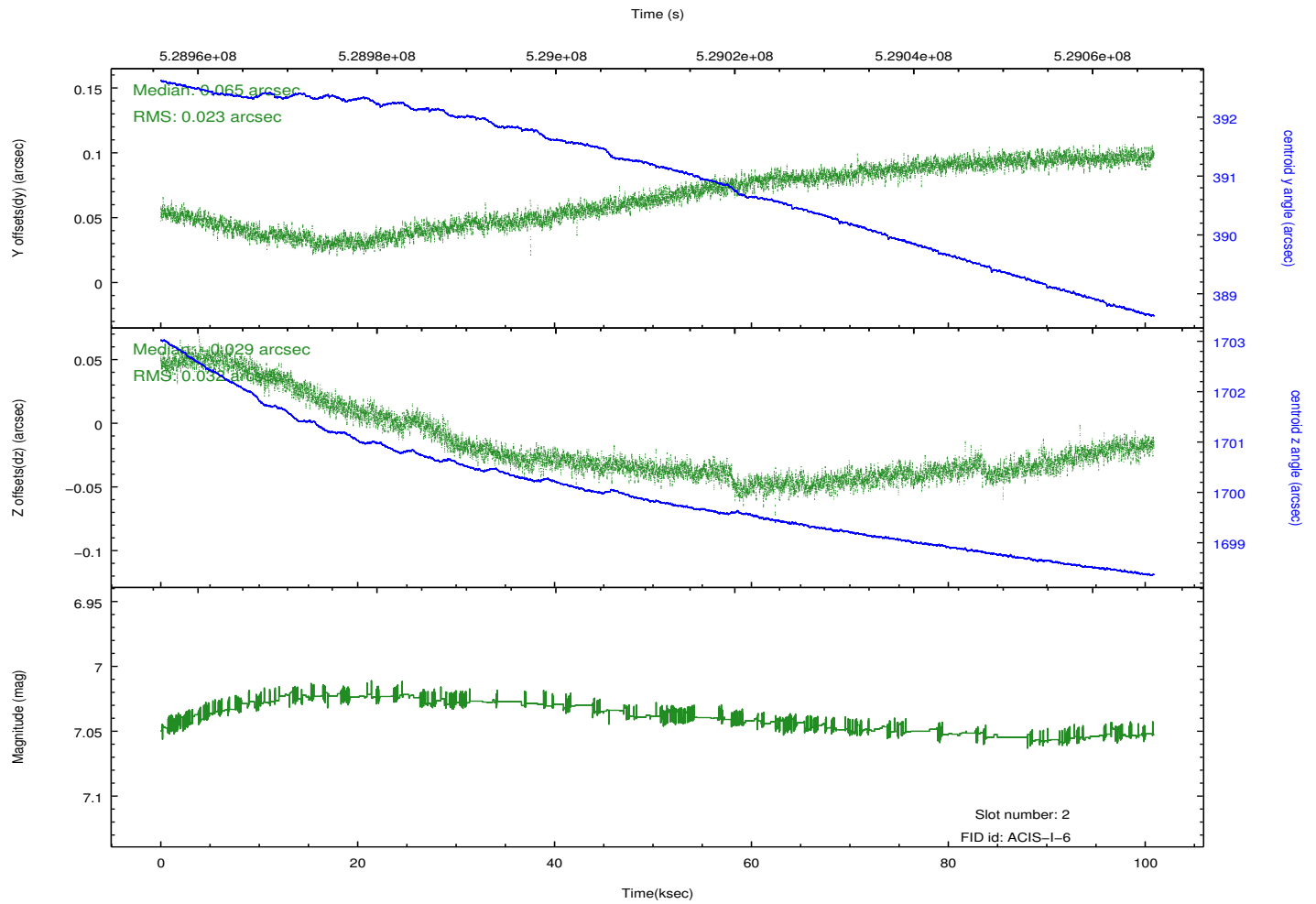
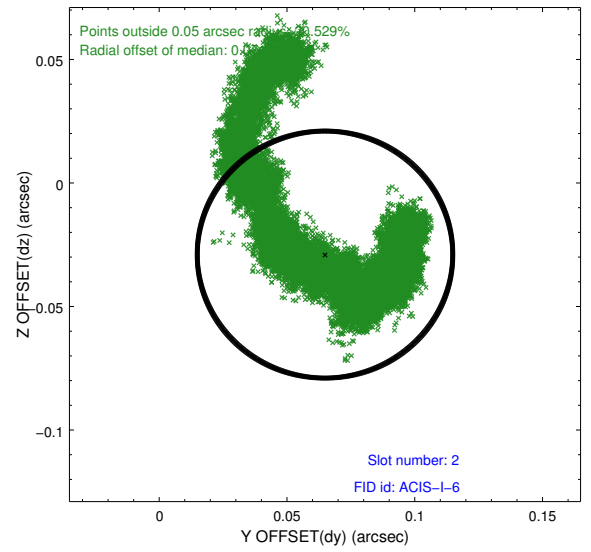
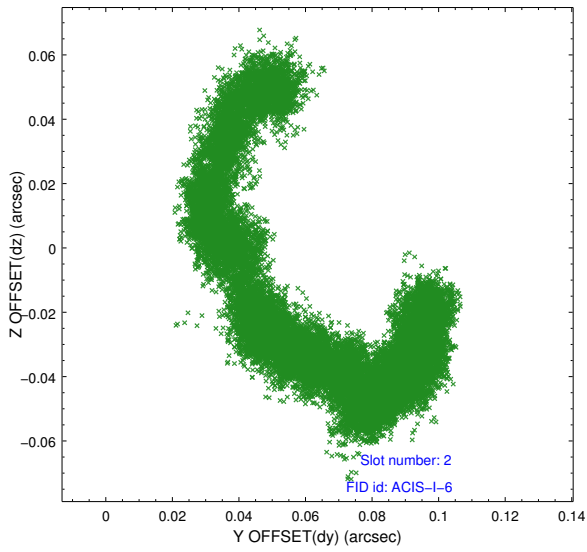
2.5.1 Slot 0



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) | 2014.10.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 100.08554827148 |

A.2 Comments

Observation coordinated with Kepler.

Window preference met.