

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 546 - L2 Version 4
Chandra X-Ray Center

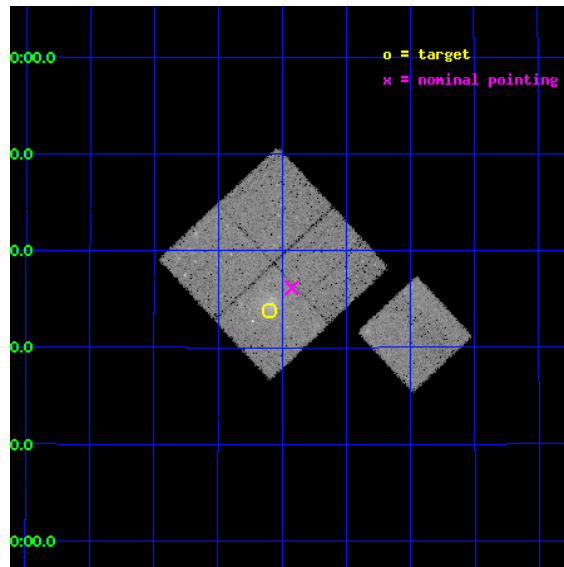
L2 Processing Date : Aug 25 2012

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1 Front

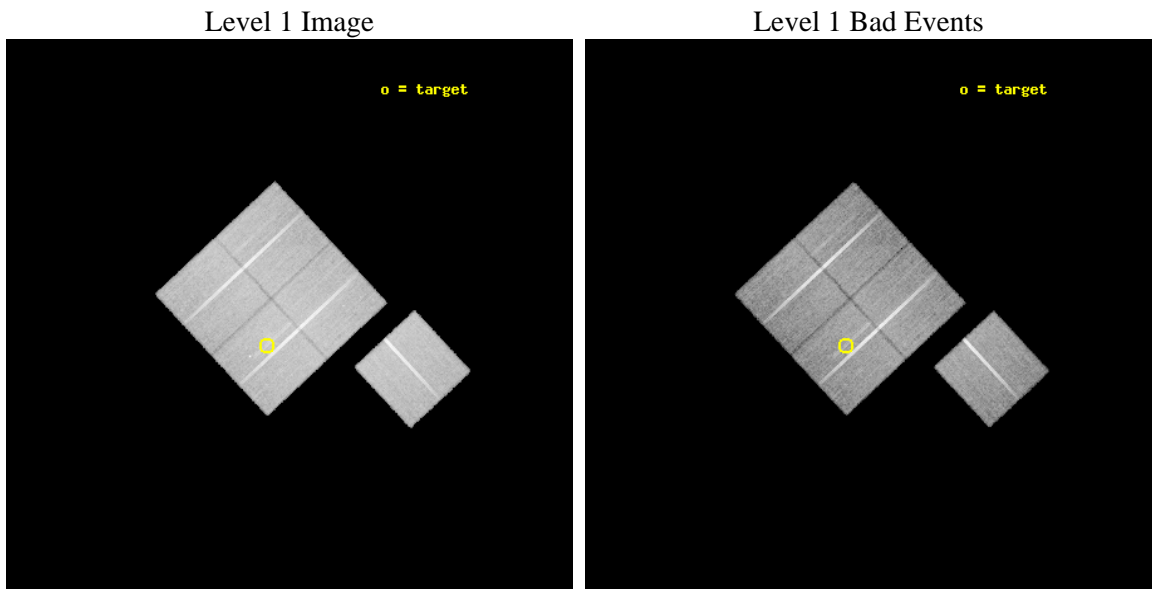
| | | |
|----------|------------------------|--|
| seq_num | 800054 | Sequence number |
| obs_id | 546 | Observation id |
| title | DETERMINATION OF H0/Q0 | Proposal title |
| observer | DR. LEON VANSPEYBROECK | Principal investigator |
| object | MS 1621.5+2640 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 245.899167 | Observer's specified target RA [deg] |
| dec_targ | 26.564 | Observer's specified target Dec [deg] |
| ra_nom | 245.85615478682 | Nominal RA [deg] |
| dec_nom | 26.602808300007 | Nominal Dec [deg] |
| roll_nom | 137.00214336577 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 30448.000028342 | Sum of GTIs [s] |
| livetime | 30062.449118399 | Livetime [s] |
| ontime0 | 30448.000028342 | Sum of GTIs [s] |
| ontime1 | 30448.000028342 | Sum of GTIs [s] |
| ontime2 | 30444.759068102 | Sum of GTIs [s] |
| ontime3 | 30448.000028342 | Sum of GTIs [s] |
| ontime6 | 30448.000028342 | Sum of GTIs [s] |
| l2events | 103222 | Number of level 2 events |



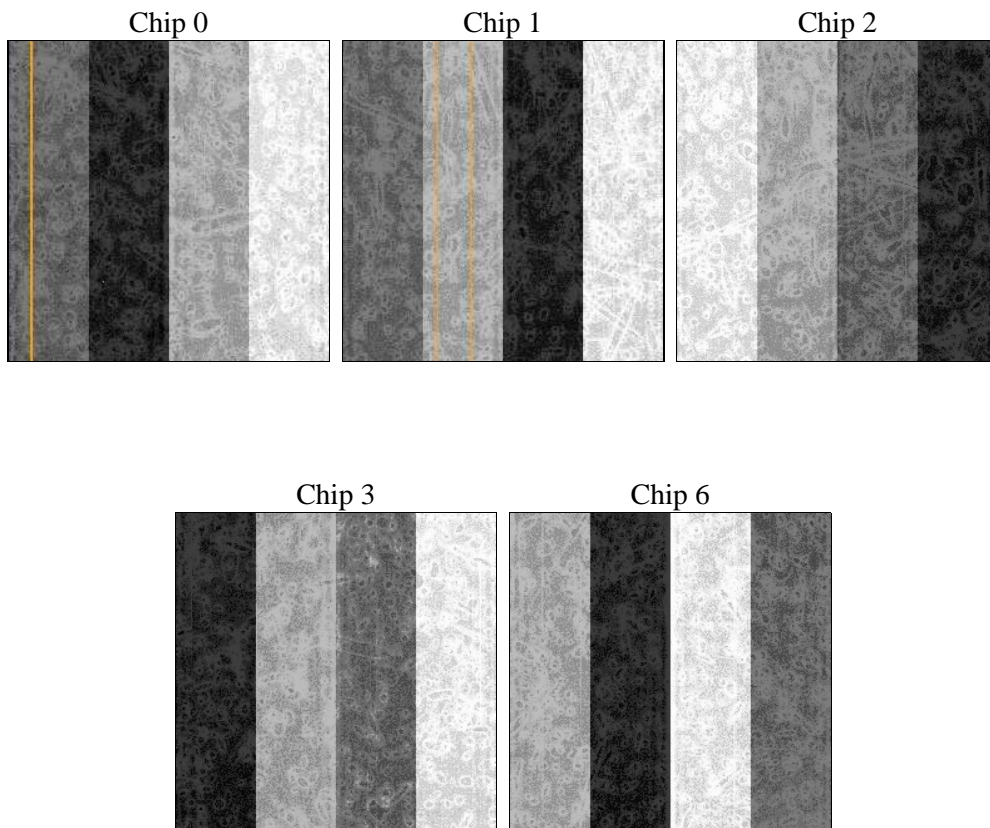
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 30000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 30448.000028342 | Sum of GTIs [s] |
| caldbver | 4.5.1.1 | | ontime0 | 30448.000028342 | Sum of GTIs [s] |
| date | 2012-08-25T21:34:28 | Date and time of file creation | ontime1 | 30448.000028342 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime2 | 30444.759068102 | Sum of GTIs [s] |
| | | | ontime3 | 30448.000028342 | Sum of GTIs [s] |
| | | | ontime6 | 30448.000028342 | Sum of GTIs [s] |
| | | | l1events | 1074150 | Number of level 1 events |

2.1.4 Events

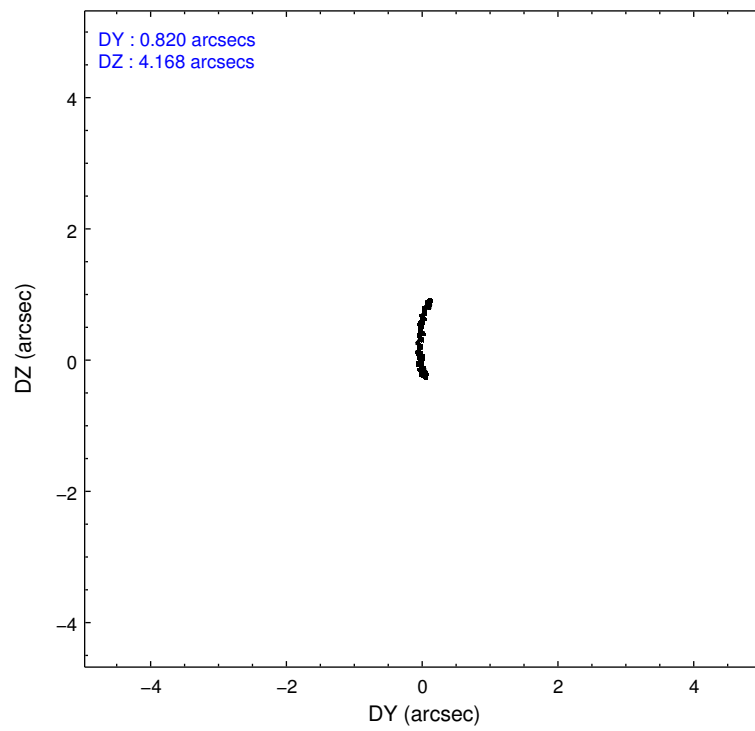
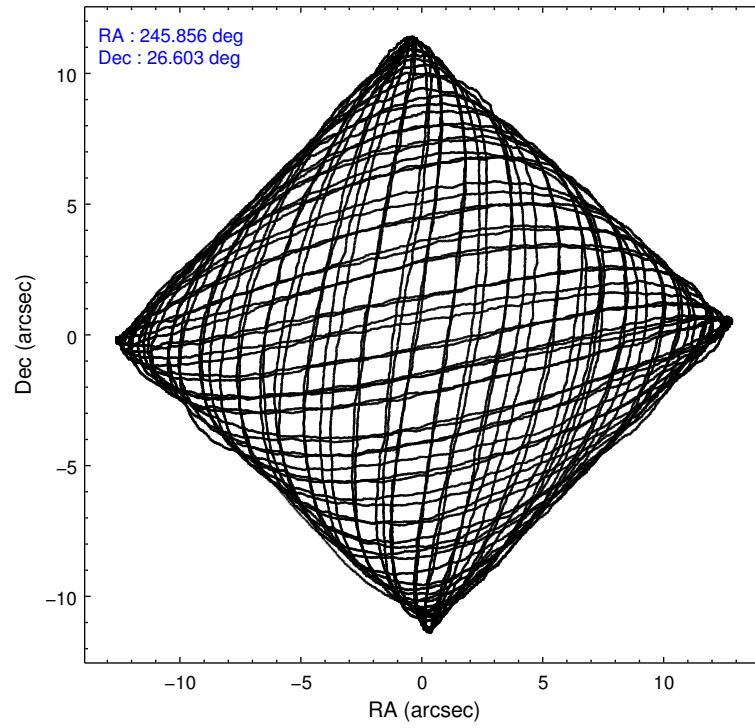
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 201474 | 205718 | 223176 | 225410 | 218372 |
| rejected events | 177998 | 180575 | 200719 | 197833 | 195459 |
| rejected % | 88% | 87% | 89% | 87% | 89% |

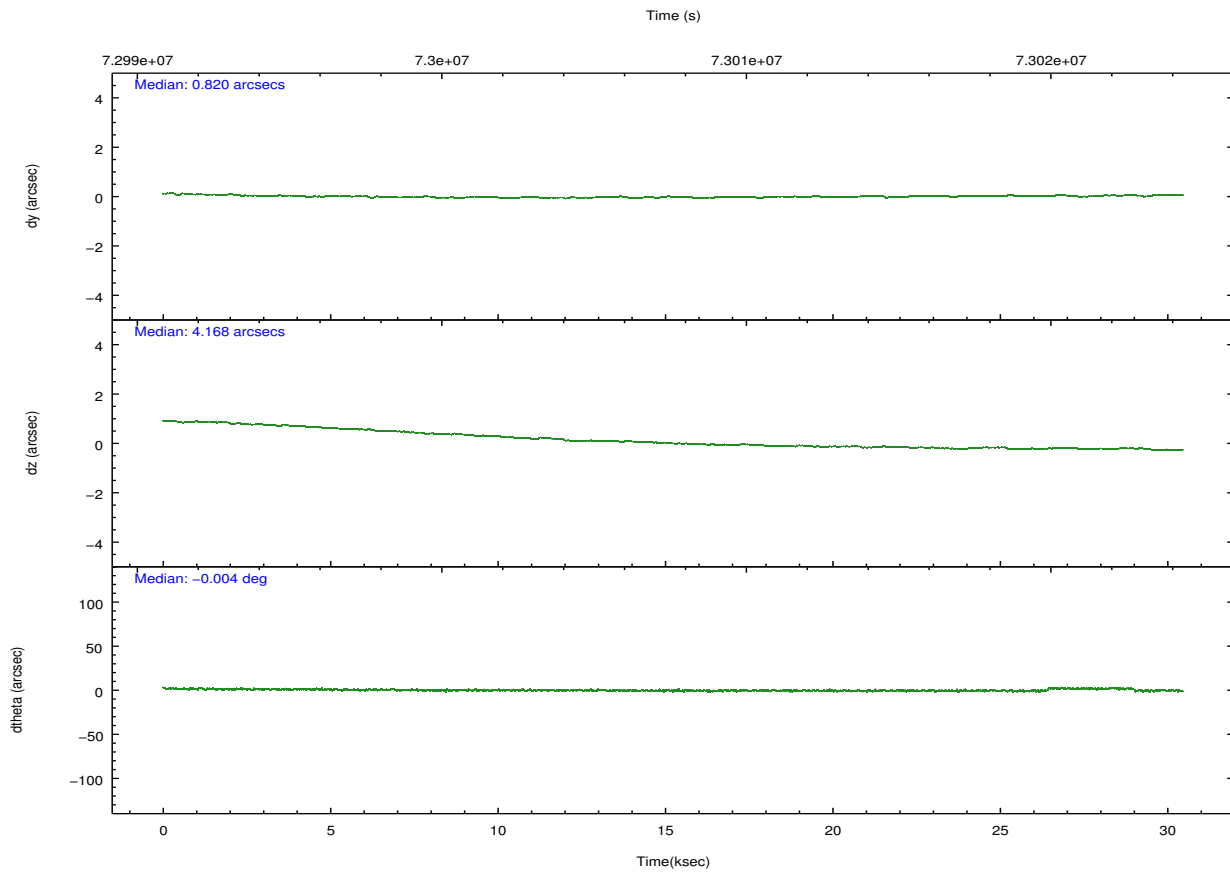
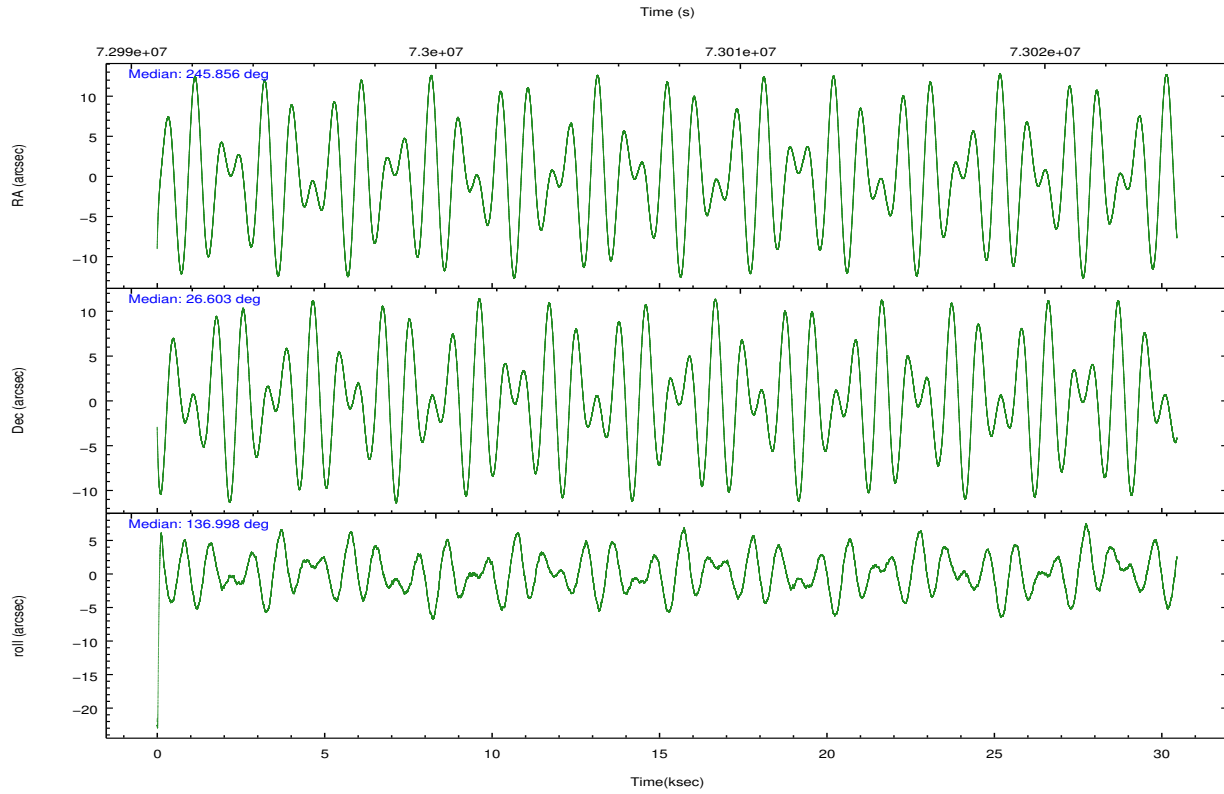
| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 |
|----------------|--------|--------|--------|--------|--------|
| grade 0 events | 10138 | 10534 | 9560 | 13920 | 9221 |
| | 5% | 5% | 4% | 6% | 4% |
| grade 1 events | 85 | 99 | 95 | 125 | 79 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 4749 | 4829 | 4717 | 4820 | 4414 |
| | 2% | 2% | 2% | 2% | 2% |
| grade 3 events | 2442 | 2675 | 2129 | 2472 | 2489 |
| | 1% | 1% | 0% | 1% | 1% |
| grade 4 events | 2308 | 2733 | 2265 | 2352 | 2367 |
| | 1% | 1% | 1% | 1% | 1% |
| grade 5 events | 6661 | 7282 | 6677 | 7432 | 7784 |
| | 3% | 3% | 2% | 3% | 3% |
| grade 6 events | 3863 | 4416 | 3825 | 4060 | 4457 |
| | 1% | 2% | 1% | 1% | 2% |
| grade 7 events | 171228 | 173150 | 193908 | 190229 | 187561 |
| | 84% | 84% | 86% | 84% | 85% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-01236 | ACIS-01236 | 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 | 245.886177 | 245.85615478682 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 26.596423 | 26.60280830000684 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 136.780028 | 137.0021433657708 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.782348 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.001439871863259334 | | | |
| [mm] SIM translation stage pos | -225.840463 | -225.8433433320239 | | | |
| [mm] SIM translation stage offset | -7.752 | -7.749109670905796 | | | |
| [s] Observation start time (MET) | 72992819.184000 | 72991497.838718 | | | |
| Observation start date | 2000-04-24T19:45:55 | 2000-04-24T19:24:57 | | | |
| [s] Observation end time (MET) | 73022819.184000 | 73023384.564888 | | | |
| Observation end date | 2000-04-25T04:05:55 | 2000-04-25T04:16:24 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



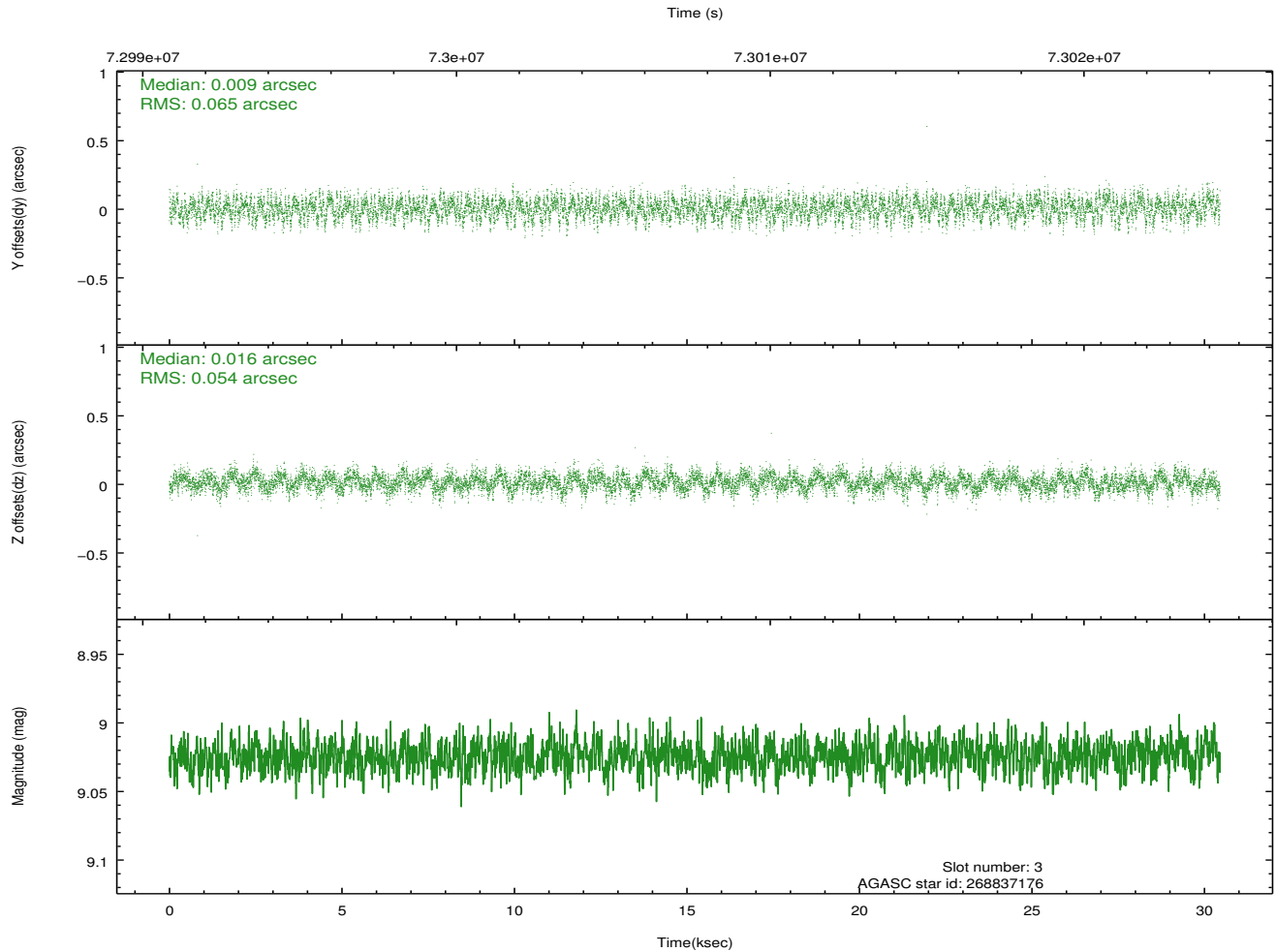
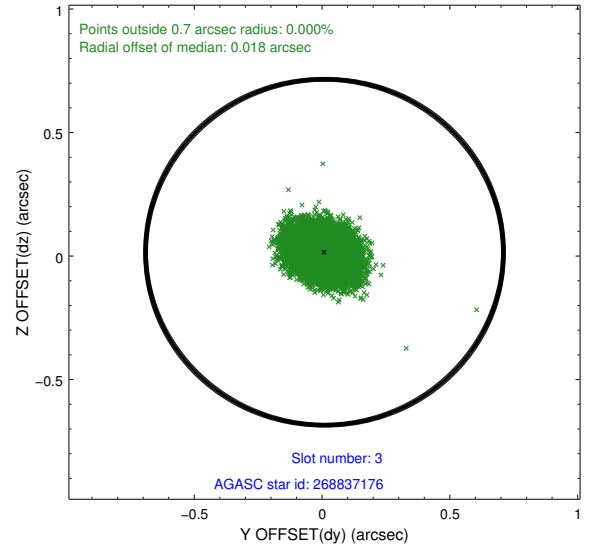
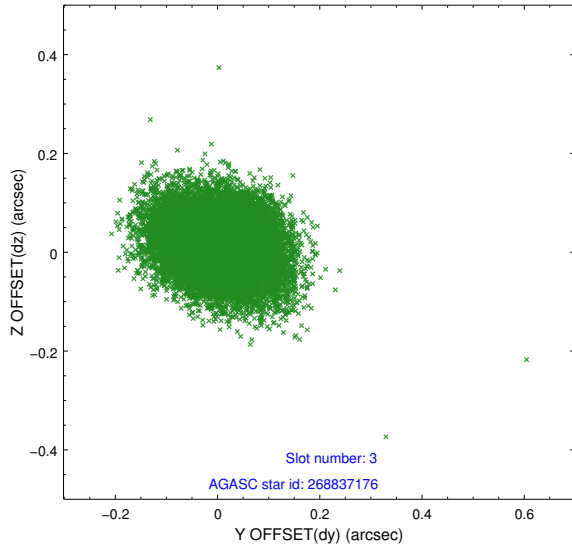


Slot Statistics

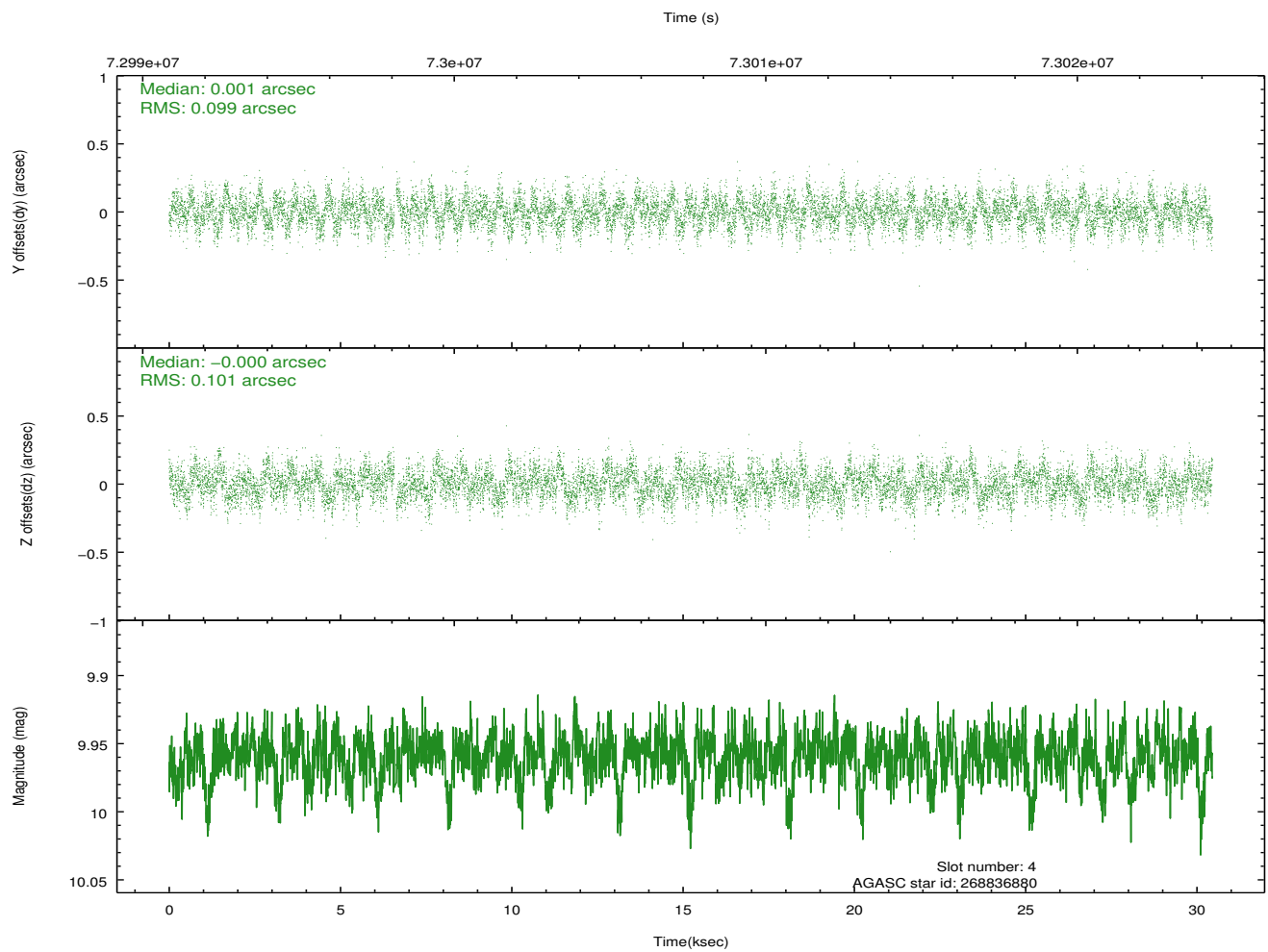
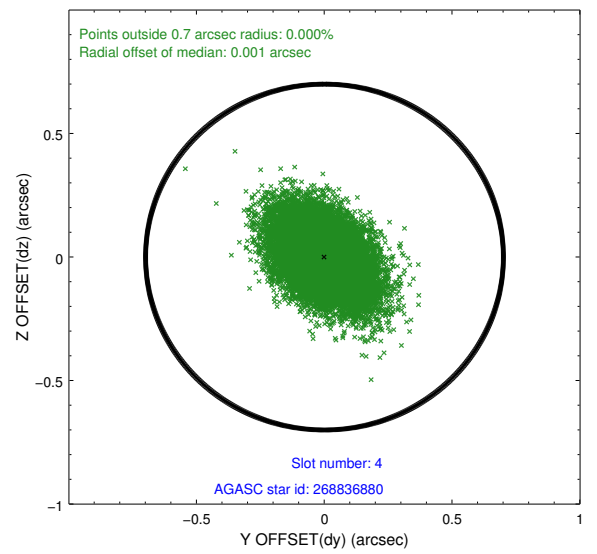
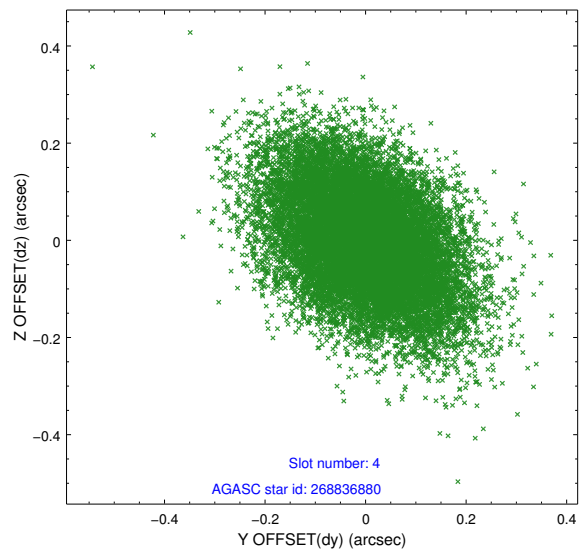
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-I-2 | 7.17 | 7425 | -0.051 | -0.060 | 0.012 | 0.021 | 0.000000 | 0.000000 | -755.72 | -992.13 |
| 1 | FID | ACIS-I-4 | 7.16 | 7423 | -0.032 | 0.053 | 0.011 | 0.021 | 0.000000 | 0.000000 | 2158.25 | 914.12 |
| 2 | FID | ACIS-I-5 | 7.22 | 7426 | -0.017 | 0.076 | 0.011 | 0.022 | 0.000000 | 0.000000 | -1809.06 | 910.99 |
| 3 | GUIDE | 268837176 | 9.02 | 14843 | 0.009 | 0.016 | 0.091 | 0.144 | 245.989278 | 27.339092 | 1591.18 | -2174.31 |
| 4 | GUIDE | 268836880 | 9.96 | 14813 | 0.001 | -0.000 | 0.148 | 0.249 | 245.759585 | 27.465577 | 2438.13 | -2003.63 |
| 5 | GUIDE | 268834744 | 9.66 | 14790 | -0.073 | 0.017 | 0.091 | 0.149 | 245.873676 | 27.134270 | 1355.63 | -1383.77 |
| 6 | GUIDE | 268836760 | 9.81 | 14843 | 0.041 | -0.008 | 0.107 | 0.170 | 245.660388 | 26.896773 | 1269.56 | -292.18 |
| 7 | GUIDE | 268829560 | 9.80 | 14843 | 0.024 | -0.025 | 0.098 | 0.160 | 246.222842 | 26.449060 | -1152.70 | -357.87 |

2.4 Star Slots

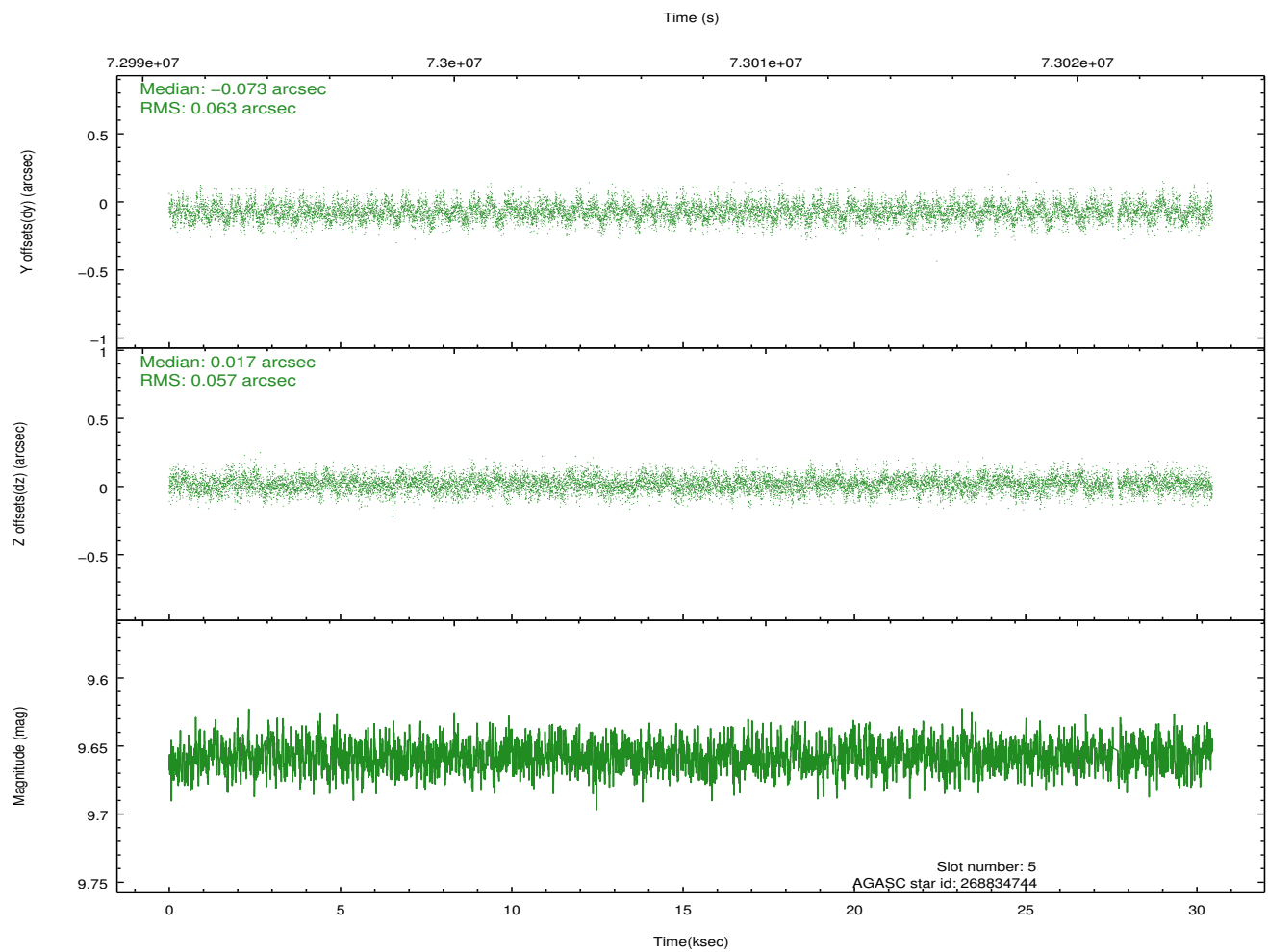
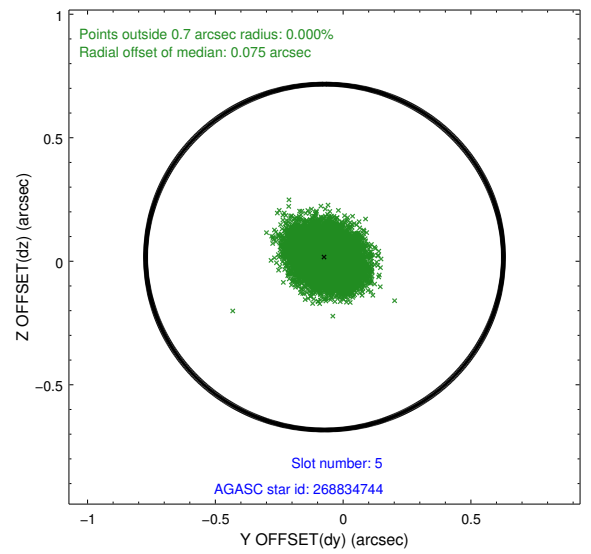
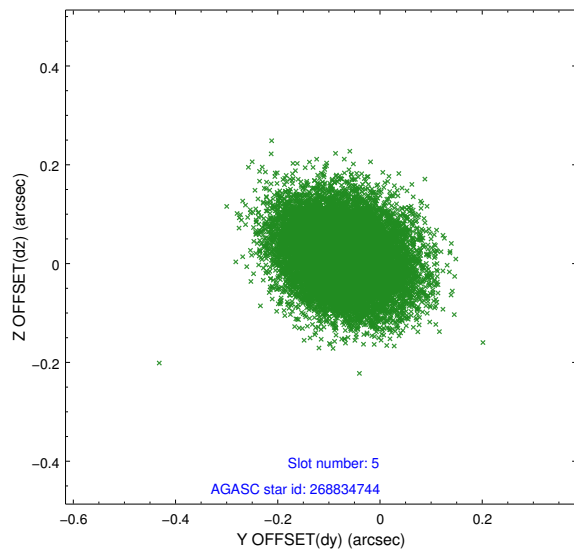
2.4.1 Slot 3



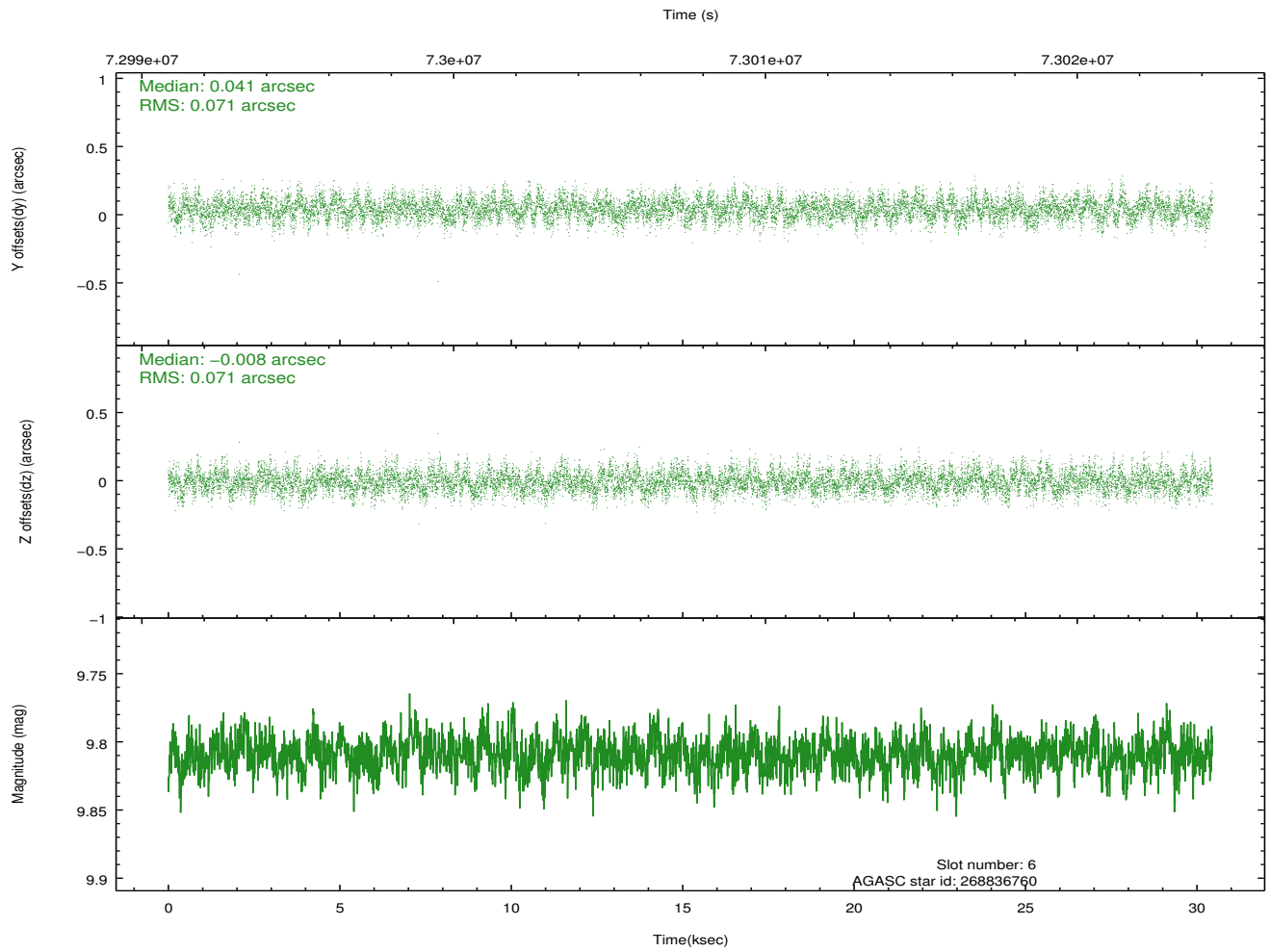
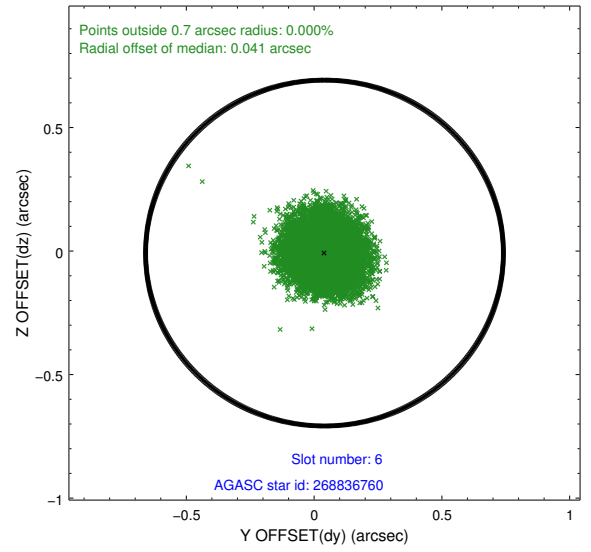
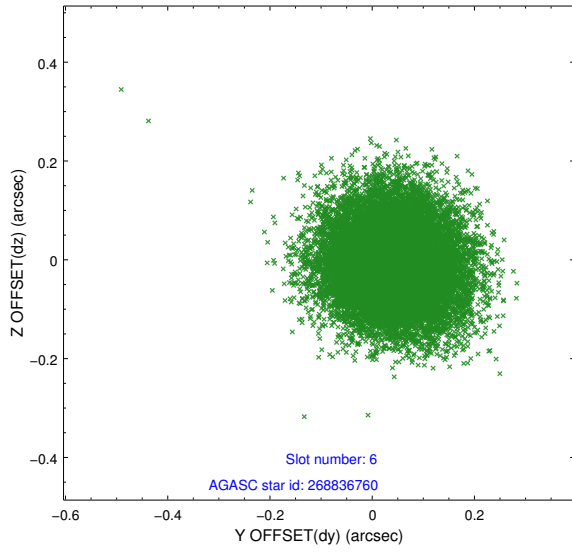
2.4.2 Slot 4



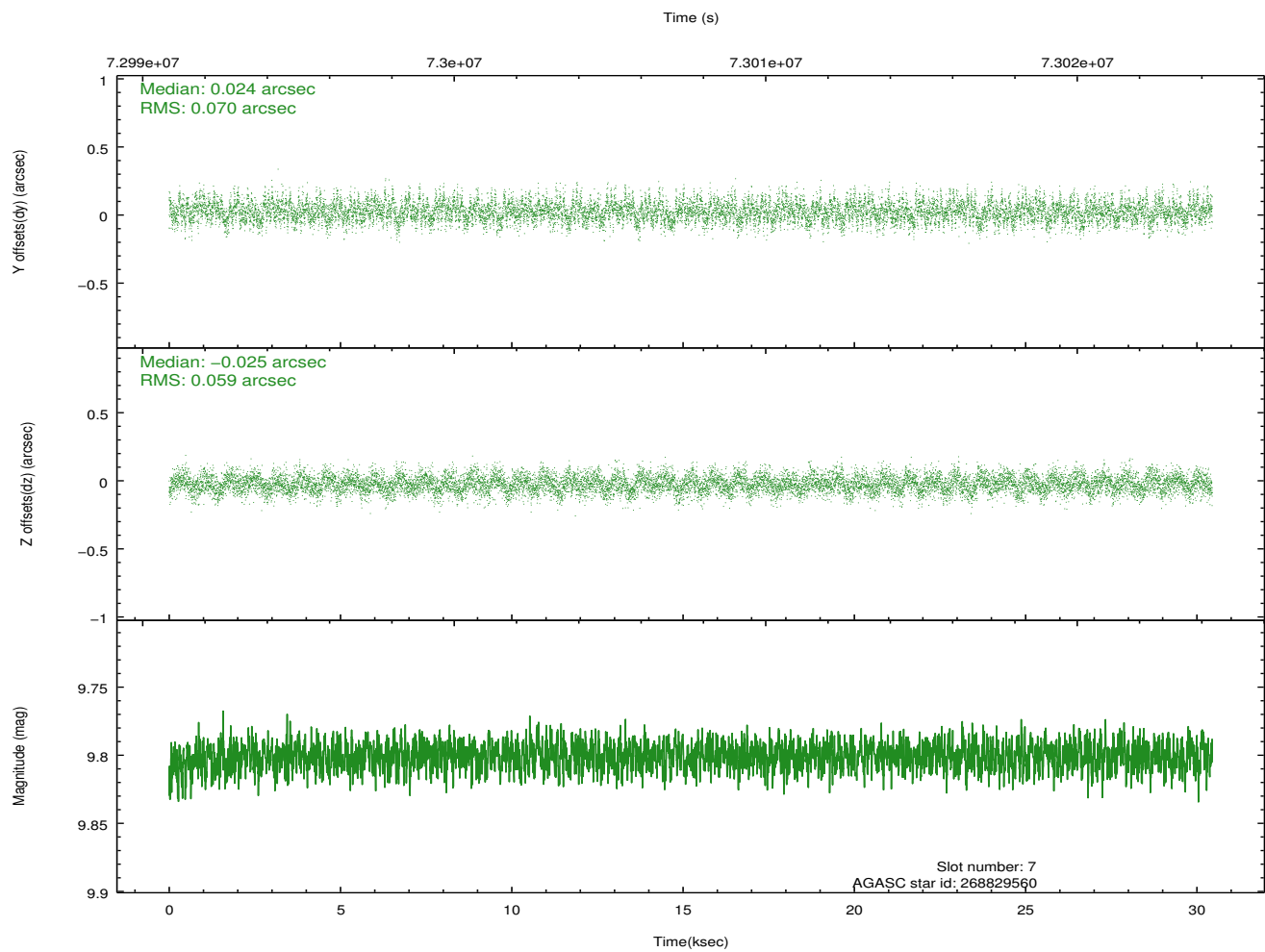
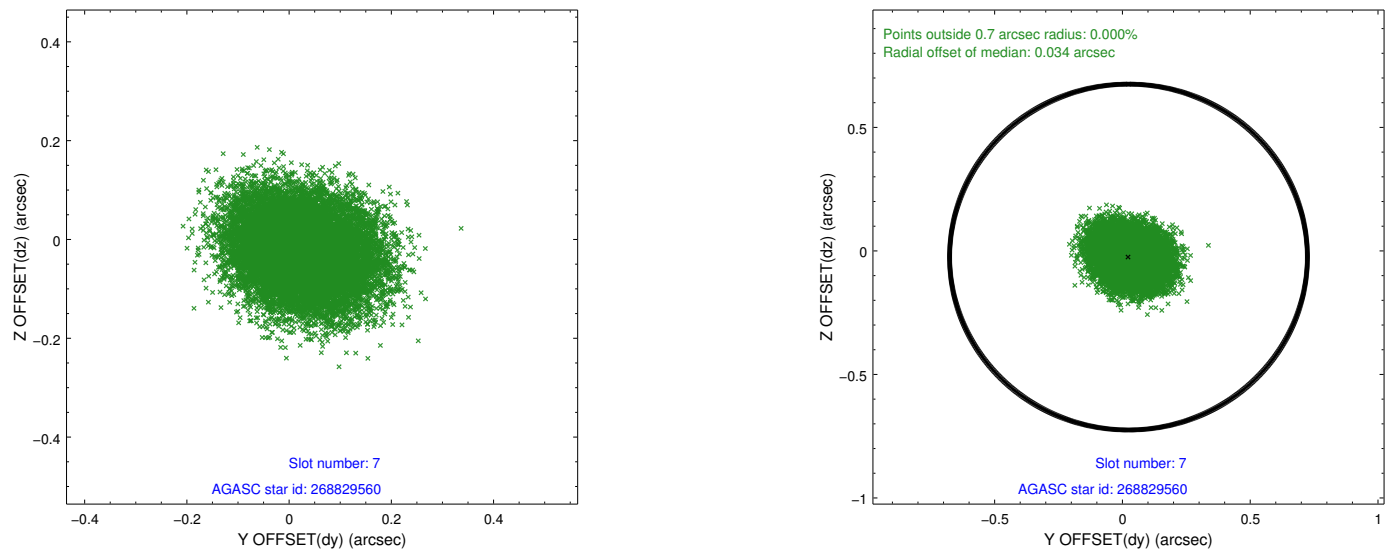
2.4.3 Slot 5



2.4.4 Slot 6

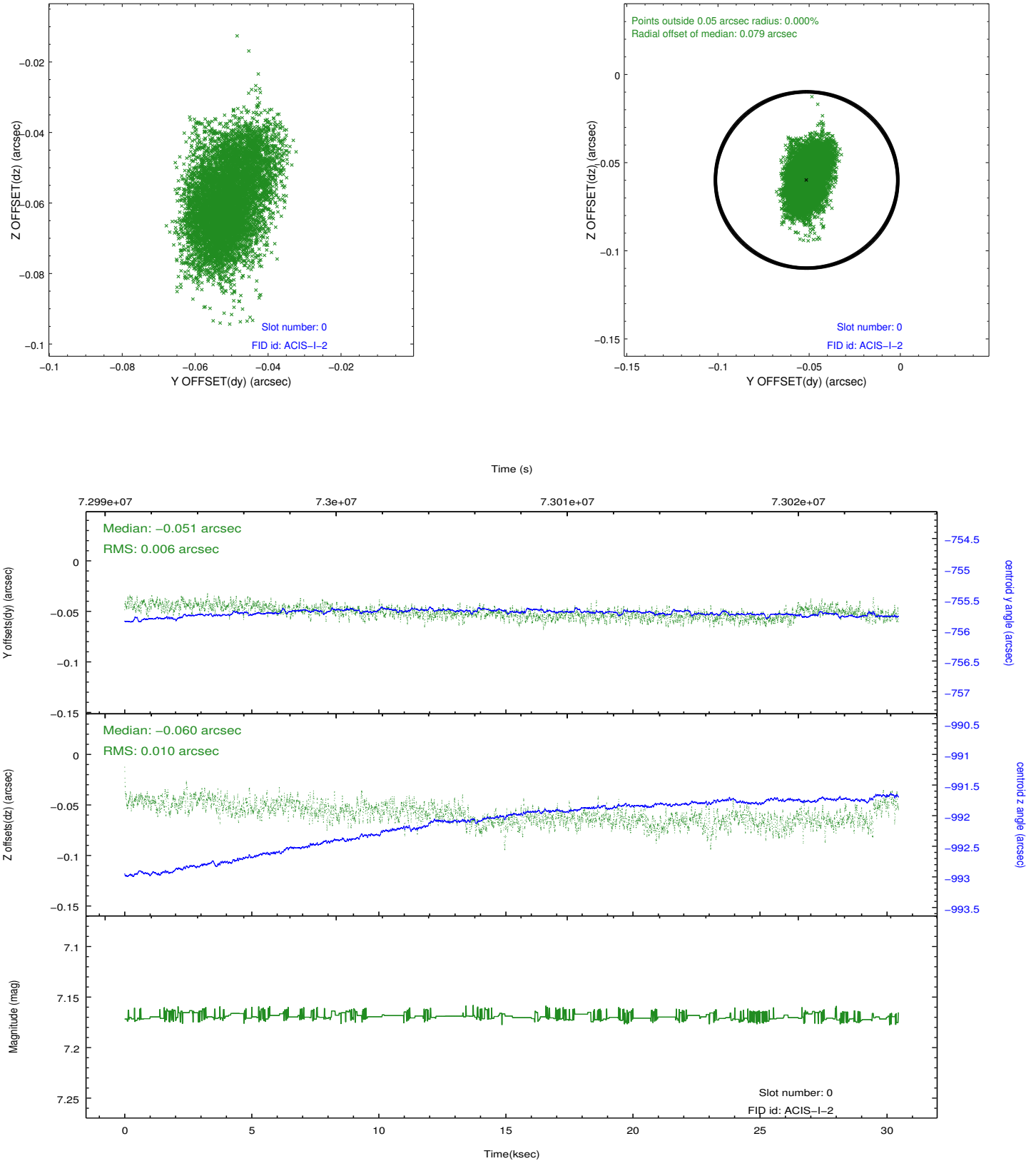


2.4.5 Slot 7

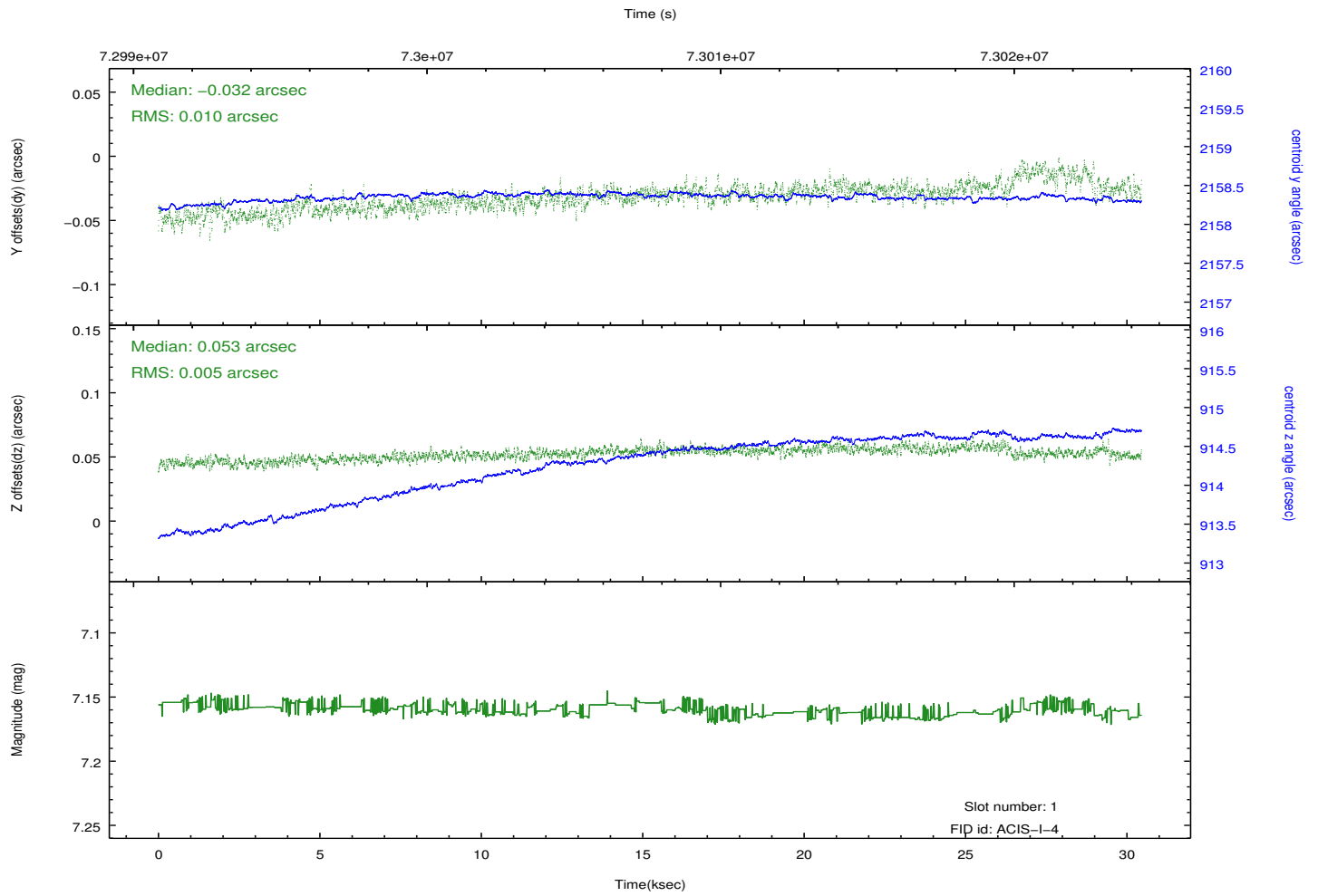
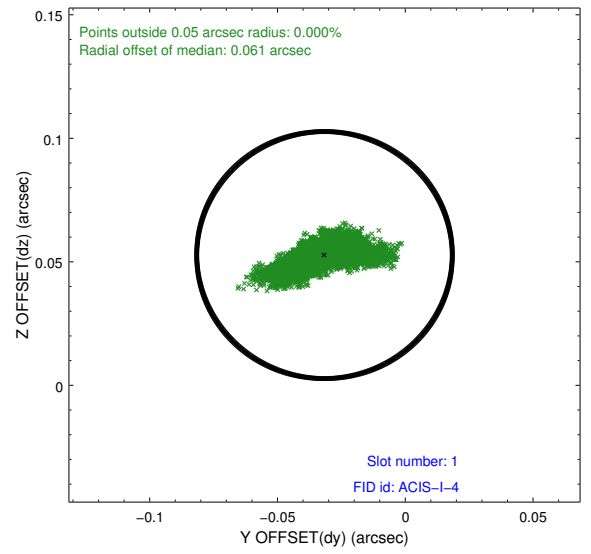
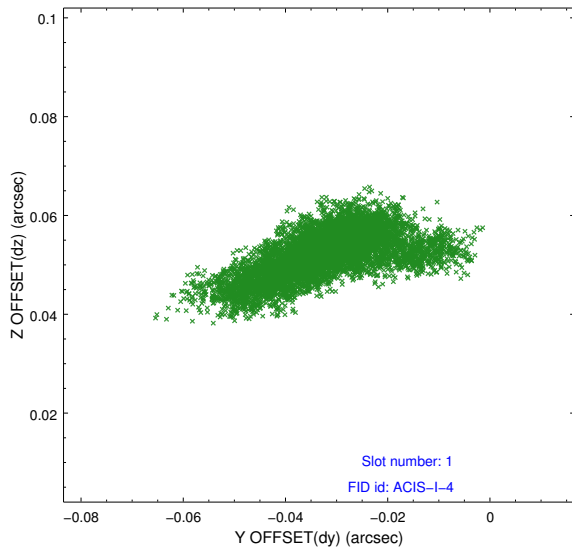


2.5 FID Slots

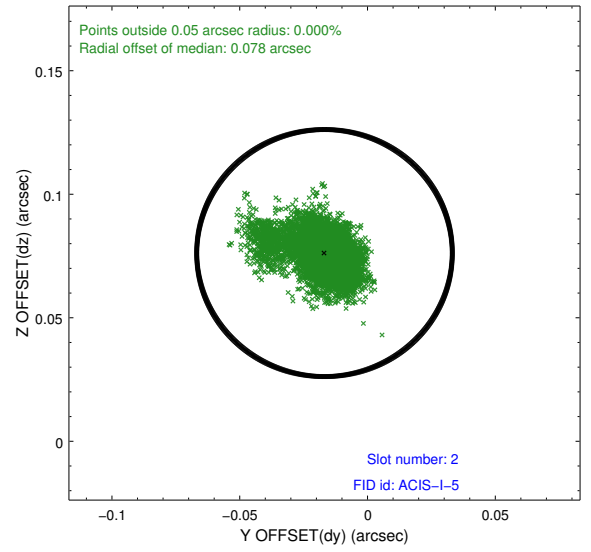
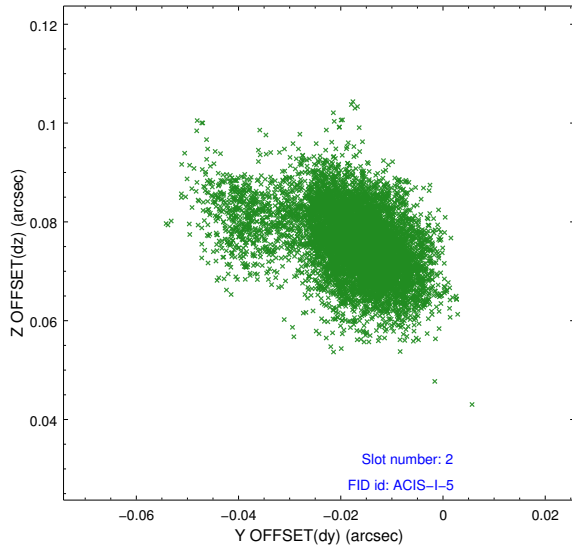
2.5.1 Slot 0



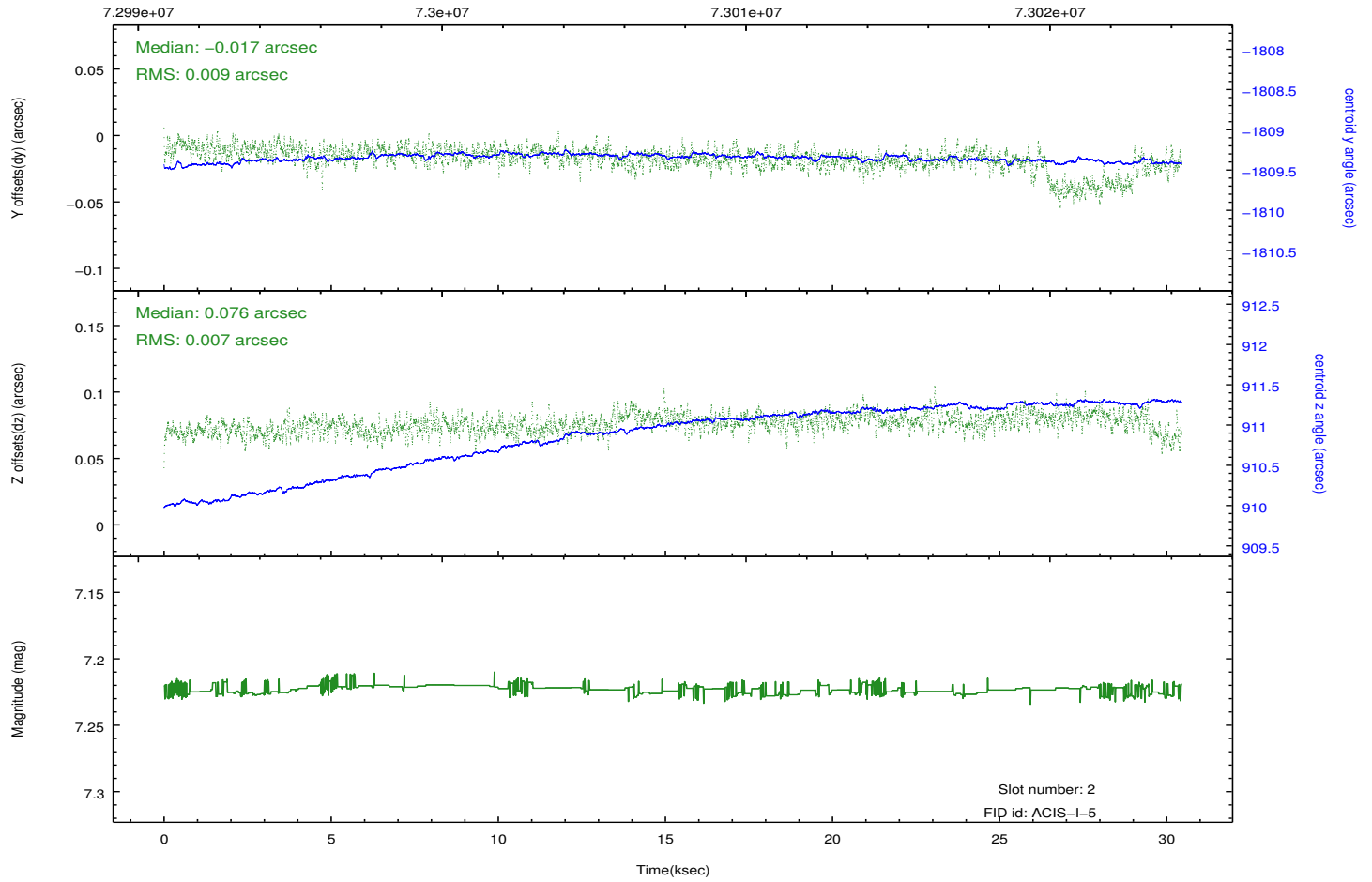
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.08.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 30.448 |

A.2 Comments